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Los Alamos Site Office, MS A316
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Los Alamos, New Mexico 87544
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ENTERED

Date: July 20, 2006
Refer to: EP2006-0703

Mr. James Bearzi
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Road, Building 1
Santa Fe, NM 87505-6303

RECEIVED
JUL 2006
Hazardous

SUBJECT: TRANSMITTAL OF 1,4-DIOXANE DATA SETS

Reference: E-mail, Behr-Andres to Bearzi, dated July 6, 2006

Dear Mr. Bearzi:

Per your request, enclosed are two electronic copies of data packages containing data and supporting documentation for 1,4-dioxane in two perched intermediate zone wells in Mortandad Canyon, MCOI-4 and MCOI-6. The laboratory began analyzing for 1,4-dioxane in early 2005 from unfiltered groundwater samples, in accordance with U.S. Environmental Protection Agency standard method SW-846: 8260B. During the past year, the Laboratory has found 1,4-dioxane above the method detection level in five samples of perched groundwater from these wells. MCOI-4 was sampled on 6/23/05, 9/13/05, and 1/24/06. MCOI-6 was sampled on 6/15/05, 9/1/05, and 1/31/06. The enclosed data are from the Los Alamos National Laboratory (LANL) Water Quality Database.

Folders on the CD contain information, as follows:

Folder 138851	Well MCOI-6	Sample GU05050GMC601
		Sample GU05050GMC690
Folder 139405	Well MCOI-4	Sample GU05050GMC401
Folder 143122	Well MCOI-4	Sample GU05050GMC401
	Well MCOI-6	Sample GU05050GMC601
		Sample GU05050GMC690
Folder 145579	Well MCOI-4	Sample GU05090GMC401
Folder 154614	Well MCOI-4	Sample GU06010GMC401

2854

As noted previously (ref: Behr-Andres to Bearzi, 7/6/06), these results will be formally transmitted to you in the upcoming periodic monitoring reports. If you have any questions, please contact Ardyth Simmons (asimmons@lanl.gov) at 665-3935.

Sincerely,

Andrew Phelps
Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

David Gregory
Federal Project Director
Department of Energy
Los Alamos Site Office

AP/DG/AS/tml

Enclosure: 2 Data CD's

Cy: (with enc.)
IRM-RMMSO, MS A150
RPF, MS M707
EP-WSP File, MS M992

Cy: (w/o enc.)
T. Behr-Andres, EP-WSP, MS M992
K. Birdsall, EP-WSP, MS M992
J. Dewart, EP-WSP, MS M992
A. Dorries, EP-ERSS, MS M992
D. Gregory, DOE-LASO, MS A316
A. Groffman, EP-WSP, MS M992
W. Hardesty, EP-WSP, MS M992
M. Johansen, DOE-LASO, MS A316
D. Katzman, EP-WSP, MS M992
P. Longmire, EES-HGG, MS D469
C. Mangeng, ADEP, MS J591
D. Pepe, NMED-OB, Santa Fe, NM
A. Phelps, ADEP, MS J591
P. Reneau, EP-ERSS, MS K490
B. Rich, ADESHQ, MS K491
M. Riggs, EP-WSP, MS M992
D. Rogers, EP-WSP, MS M992
A. Simmons, EP-WSP, MS M992

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Memorandum

Date: 07/26/05

To: William Turney

From: Ellen McEntee

Subject: GC/MS Organic Data Review and Validation – LANL ESH
COC: WG-02542-GE
SDG: 138851
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

All Samples	The results for acetonitrile; propionitrile; isobutyl alcohol; and acrolein should be **qualified UJ, V7b** due to an RF or slope <0.05 but >0.01.
Sample GU05050GMC601-FTB	The result for 1,4-dioxane should be **qualified R, V7b** due to an RF <0.01.
Samples GU05050GMC601 GU05050GMC690	The results for 1,4-dioxane should be **qualified J, V7b** due to an RF <0.01.

Summary/General Comments

All samples were prepared and analyzed with accepted procedures using method EPA 8260B VOCs. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This data validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times.

Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration acceptance criteria were met except for the following. The RF or slope for acetonitrile; propionitrile; isobutyl alcohol; and acrolein were <0.05 but >0.01. Associated results were non-detect and should be **qualified UJ**. The RF for 1,4-dioxane was <0.01. Associated detected results should be **qualified J** and non-detected results should be **qualified R**.

The ICV percent differences for dichlorodifluoromethane and 1,2-dibromo-3-chloropropane were >20% with a positive bias. Associated sample results were non-detect and should not be qualified. The CCV percent differences for chloroethane; vinyl acetate; bromoform; and 1,1,2,2-tetrachloroethane were >20% with a positive bias (see Organic worksheets). Associated sample results were non-detect and should not be qualified.

Initial calibration y-intercept values for target analytes quantified using a linear regression were not evaluated. No sample data should be qualified as a result.

Blanks

Trichloroethylene was detected in the trip blank. Trichloroethylene was not detected in the associated samples; therefore, data should not be qualified.

Surrogates

All surrogate acceptance criteria were met.

Internal Standards

All internal standard acceptance criteria were met.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

All MS and MSD acceptance criteria were met. The MS/MSD was performed on a sample of similar matrix from another LANL SDG. No data should be qualified.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met.

Detection Limits/Dilutions

MDLs were not reported in this data package. No samples were diluted.

Tentatively Identified Compounds

TICs were requested and reported, but not assessed for validation.

Other QC

No other specific issues which affect data quality were identified.

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Memorandum

Date: 07/27/05

To: William Turney

From: Ellen McEntee

Subject: GC/MS Organic Data Review and Validation – LANL ESH
COC: WG-02542-GE
SDG: 138851
Laboratory: GEL
Analysis: SVOCs

Data Qualifiers (see following sections for detailed explanations)

All Samples	The results for benzidine and 3,3-dichlorobenzidine should be **qualified R, SWQ4** due to MS and MSD recoveries <10%. The results for o-nitroaniline and p-nitroaniline should be **qualified UJ, SWQ3** due to MS and MSD recoveries < the lower control limit but >10%.

Summary/General Comments

All samples were prepared and analyzed with accepted procedures using method EPA 8270C SVOCs. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This data validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times.

Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration acceptance criteria were met except for the following. The ICV %D for 4-bromophenylphenylether was >20% with a positive bias. Associated sample results were non-

detect; therefore, data should not be qualified. The CCV %Ds for benzidine; 2,4-dinitrophenol; and 2-methyl-4,6-dinitrophenol were >20% with a positive bias. The associated results were non-detect; therefore, data should not be qualified.

Initial calibration y-intercept values for target analytes quantified using a linear regression were not evaluated. No sample data should be qualified as a result.

Blanks

No target analytes were detected in the method blank.

Surrogates

All surrogate acceptance criteria were met.

Internal Standards

All internal standard acceptance criteria were met.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

All MS/MSD acceptance criteria were met except for the following. The MS and MSD recoveries for o-nitroaniline and p-nitroaniline were < the lower control limit but >10%. Associated sample results were non-detect and should be **qualified UJ**. The MS and MSD recoveries for benzidine and 3,3'-dichlorobenzidine were <10%. Associated sample results were non-detect and should be **qualified R**.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met except for the following. The recovery for 2,4-dimethylphenol was > the upper control limit. Associated sample results were non-detect and should not be qualified.

Detection Limits/Dilutions

MDLs were not reported in this data package. No samples were diluted.

Tentatively Identified Compounds

TICs were requested and reported, but not assessed for validation.

Other QC

No other specific issues which affect data quality were identified.

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Memorandum

Date: 08/02/05

To: William Turney

From: Ellen McEntee

Subject: Radiometric Data Review and Validation
COC: WG-02542-GE
SDG: 138851
Laboratory: GEL
Analysis: Isotopic-Am, -Pu, -U; gamma spec; gross alpha/beta; Sr-90; Tc-99; tritium; and Ra-226

Data Qualifiers (see following sections for detailed explanations)

All Samples — See Other QC section for information regarding data rejected by the laboratory. All sample results for which rejection was recommended by the laboratory should be **qualified R, RWQ7**.

Sample GF05050GMC601 — The results for alpha spectroscopy analytes Am-241, Pu-238, Pu-239/240, and U-235/236; gross alpha; gross beta; Sr-90; and all gamma spectroscopy analytes should be **qualified BD, R5** because the reported values were < the MDC or 2-sigma TPU.
The result for alpha spectroscopy analyte U-238 should be **qualified J, RWQ2** because the reported value was < 3 times the MDC.

Sample GF05050GMC690 — The results for alpha spectroscopy analytes Am-241, Pu-238, Pu-239/240, and U-235/236; gross alpha; Sr-90; and all gamma spectroscopy analytes except K-40 should be **qualified BD, R5** because the reported values were < the MDC or 2-sigma TPU.
The results for gross beta and Ra-226 should be **qualified J, RWQ2** because the reported values were < 3 times the MDC.

Sample GU05050GMC601 — The results for alpha spectroscopy analytes Am-241, Pu-238, Pu-239/240, and U-235/236; gross alpha; gross beta; Sr-90; and all gamma spectroscopy analytes should be **qualified BD, R5** because the reported values were < the MDC or 2-sigma TPU.
The result for Tc-99 should be **qualified J, RWQ2** because the reported value was < 3 times the MDC.
The result for Ra-226 should be **qualified J, RWQ2, R14b, R7** because the reported value was < 3 times the MDC and due to lack of QC information.

Sample GU05050GMC690 — The results for alpha spectroscopy analytes Am-241, Pu-238, Pu-239/240, and U-235/236; Sr-90; Ra-226; and all gamma spectroscopy analytes should be **qualified BD, R5** because the reported values were < the MDC or 2-sigma TPU.

The results for gross alpha; gross beta; and Tc-99 should be **qualified J, RWQ2** because the reported values were < 3 times the MDC.

Summary/General Comments

All samples were prepared and analyzed with approved procedures using methods HASL 300 Iso-Am, -Pu, -U; EPA 901.1 gamma spec; EPA 900.0 gross alpha/beta; EPA 905.0M Sr-90; HASL 300 Tc-99; EPA 906.0M tritium; and EPA 903.1 Ra-226.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This data validation was performed according to DOE-AL Model Data Validation Procedure, Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the required holding times.

Quantification

All sample results which were either < the associated 2-sigma uncertainty or < the associated MDC should be **qualified BD**. All sample results which were <3x the MDC should be **qualified J**.

Blanks

Gamma spectroscopy analyte K-40 was detected in the method blank. This analyte was rejected by the laboratory; therefore, data should not be qualified.

Tracer/Carrier Recovery

All tracer/carrier recoveries met QC acceptance criteria.

Laboratory Control Sample Analyses

All LCS recoveries met QC acceptance criteria.

Matrix Spike Analysis

Client sample identification numbers beginning with GU and GF indicate samples that are unfiltered and filtered, respectively. For the purposes of data validation, these sample types are considered to be separate matrices.

The MS analyses met all QC acceptance criteria except for the following. Matrix spikes were not analyzed with the unfiltered samples for Ra-226. Associated results in which qualification has not already been recommended (see Data Qualifiers section above) should be **qualified J**. Matrix spikes were not analyzed with the filtered analysis for gross alpha/beta and Sr-90. Matrix spikes were analyzed with the unfiltered samples; therefore, based on professional judgment, data should not be qualified.

The matrix spikes for the unfiltered analysis of gross alpha/beta and Sr-90; Tc-99 and tritium were analyzed on samples of similar matrix from other LANL SDGs. No data should be qualified.

Replicate Sample Analysis

The replicate analyses met all QC acceptance criteria except for the following. Replicates were not analyzed with the unfiltered samples for gamma spectroscopy and Ra-226. Associated results in which qualification has not already been recommended (see Data Qualifiers section above) should be **qualified J**. Replicates were not analyzed with the filtered analysis for isotopic Am, isotopic Pu, isotopic U, gross alpha/beta, and Sr-90. Replicates were analyzed with the unfiltered samples; therefore, based on professional judgment, data should not be qualified.

The replicates for the unfiltered analysis of isotopic Am, isotopic Pu, isotopic U, gross alpha/beta, and Sr-90; the filtered gamma spectroscopy analysis; Tc-99; and tritium were analyzed on samples of similar matrix from other LANL SDGs. No data should be qualified.

Other QC

The following gamma spectroscopy data were rejected by the laboratory due to low abundance.

Sample GF05050GMC690 K-40

No other specific issues which affect data quality were identified.

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Memorandum

Date: 07/28/05

To: William Turney

From: Ellen McEntee

Subject: LC/MS/MS Organic Data Review and Validation – LANL ESH
COC: WG-02542-GE
SDG: 138851
Laboratory: GEL
Analysis: Perchlorate

Data Qualifiers (see following sections for detailed explanations)

No data qualifiers should be applied to perchlorate sample results.

Summary/General Comments

All samples were prepared and analyzed with approved procedures using method EPA 8321A Modified for perchlorate. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This data validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times.

Calibration

All initial calibration and continuing calibration acceptance criteria were met.

Blanks

No target analytes were detected in the method blank.

CRI

The CRI result met QC acceptance criteria. It should be noted that the CRI spiked concentration was at the MDL, not 2X the MDL as stated in the Model Data Validation Procedure. No data should be qualified.

Internal Standard

The internal standard RT acceptance criteria were met for perchlorate-O(18). Recovery of perchlorate-O(18) met matrix spike recovery acceptance criteria.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

The MS/MSD analyses met all QC acceptance criteria. The MS/MSD was analyzed on a sample of similar matrix from another LANL SDG. No data should be qualified.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met.

Detection Limits/Dilutions

Method detection limits were reported and are acceptable. Both samples were diluted 200x due to over-range analytes.

Perchlorate Chlorine Ratios

Chlorine isotope ratio acceptance criteria were met for all samples.

Interference Check Standard (ICS)

The ICS recoveries met QC acceptance criteria.

Other QC

No other specific issues which affect data quality were identified.

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Memorandum

Date: 07/28/05

To: William Turney

From: Ellen McEntee

Subject: Inorganic Data Review and Validation – LANL ESH
COC: WG-02542-GE
SDG: 138851
Laboratory: GEL
Analysis: Metals

Data Qualifiers (see following sections for detailed explanations)

Samples GF05050GMC601 GU05050GMC690	The results for SiO_2 and Fe should be **qualified U, I4a** due to blank contamination.
Samples GF05050GMC690 GU05050GMC601	The results for SiO_2 should be **qualified U, I4a** due to blank contamination.

Summary/General Comments

All samples were prepared and analyzed with approved procedures using methods EPA 6010 ICP-AES metals, EPA 6020 ICP-MS metals, and EPA 7470A CVAA-Hg. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times.

ICP-MS Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration acceptance criteria were met.

Blanks

Several analytes were detected in one or more of the blanks. Associated detected results <5x the blank concentration should be **qualified U**. Zn and Na were detected in one or more of the blanks at negative concentrations. Associated results were >5x the MDL; therefore, data should not be qualified. No other target analytes were detected in the blanks.

ICP Interference Check Sample (ICS) Analysis

The ICS analyses met all QC acceptance criteria.

Matrix Spike (MS) Analysis

The MS analyses met all QC acceptance criteria.

Laboratory Replicate Analysis

The replicate analyses met all QC acceptance criteria.

Laboratory Control Sample

The LCS analyses met all QC acceptance criteria.

Serial Dilution

The serial dilution analyses met all QC acceptance criteria.

Internal Standards

All internal standards met QC acceptance criteria.

Reporting Limit Verification

All CRA/CRI recoveries met QC acceptance criteria except for the following. The recovery for Sn was >130%. Associated sample results were non-detect; therefore, data should not be qualified.

Detection Limits/Dilutions

All detection limits were properly reported. No samples were diluted.

Other QC

No other specific issues which affect data quality were identified.

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Memorandum

Date: 07/29/05

To: William Turney

From: Ellen McEntee

Subject: Inorganic Data Review and Validation – LANL ESH
COC: WG-02542-GE
SDG: 138851
Laboratory: GEL
Analysis: General Chemistry

Data Qualifiers (see following sections for detailed explanations)

All Samples	The results for pH should be **qualified J, I9** due to analysis beyond the recommended hold time.
Samples GF05050GMC601 GU05050GMC601 GU05050GMC690	The results for total phosphorus should be **qualified U, I4a** due to blank contamination.
Samples GU05050GMC601 GU05050GMC690	The results for TOC should be **qualified J-, IWQ6** due to a negative y-intercept with an absolute value >3x the MDL. The results for alkalinity should be **qualified J, I13b, I14b** due to lack of QC information. The results for carbonate should be **qualified UJ, I13b, I14b** due to lack of QC information.

Summary/General Comments

All samples were prepared and analyzed with approved procedures using methods EPA 9060 TOC; EPA 9050A conductivity; EPA 150.1 pH; EPA 9012A total cyanide; SM2340B hardness; EPA 300.0 bromide, fluoride, sulfate, and chloride; EPA 314.0 perchlorate; EPA 351.2 TKN; EPA 353.1 nitrate + nitrite; EPA 365.4 total phosphorus; EPA 160.1 TDS; EPA 160.2 TSS; and EPA 310.1 alkalinity/carbonate.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times except for the following. The hold time for pH was exceeded in all samples. The associated results should be **qualified J**.

Calibration

All initial and continuing calibration acceptance criteria were met except for the following.
The absolute value of the negative y-intercept for TOC was >3x the MDL. The associated results were <3x the absolute value of the y-intercept and should be **qualified J-**. The y-intercept for sulfate was >3x the MDL. Associated sample results were >3x the y-intercept and should not be qualified.

Blanks

All blank acceptance criteria were met except for the following. TOC and total phosphorus were detected in one or more of the blanks. Associated detected results <5x the blank concentration should be **qualified U**.

Matrix Spike

Client sample identification numbers beginning with GU and GF indicate samples that are unfiltered and filtered, respectively. For the purposes of data validation, these sample types are considered to be separate matrices.

The MS analyses met all QC acceptance criteria except for the following. A matrix spike was not analyzed with the unfiltered samples for alkalinity/carbonate. Associated detected results for unfiltered samples should be **qualified J**, and non-detected results should be **qualified UJ**.

The filtered matrix spikes for bromide, fluoride, sulfate, and chloride were analyzed on a sample of similar matrix from another LANL SDG. No data should be qualified.

Laboratory Replicate Analysis

The replicate analyses met all QC acceptance criteria except for the following. A replicate was not analyzed with the unfiltered samples for alkalinity/carbonate. Associated detected results for unfiltered samples should be **qualified J**, and non-detected results should be **qualified UJ**.

The filtered replicates for bromide, fluoride, sulfate, and chloride were analyzed on a sample of similar matrix from another LANL SDG. No data should be qualified.

Laboratory Control Sample

The LCS analyses met all QC acceptance criteria.

Detection Limits/Dilutions

All detection limits were properly reported. Samples GF05050GMC601 and GF05050GMC690 were diluted 2x for chloride by EPA 300.0; 5x for perchlorate by EPA 314.0; and 10x for nitrate/nitrite by EPA 353.1. Samples GU05050GMC601 and GU05050GMC690 were diluted 2x for chloride by EPA 300.0 and 10x for nitrate/nitrite by EPA 353.1.

Other QC

No other specific issues which affect data quality were identified.

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Cyanide, Total 1093
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GENERAL NARRATIVE

CASE NARRATIVE
for
Los Alamos National Laboratory
ESH-18
SDG 138851
Chain of Custody WG-02542-GE

July 13, 2005

Laboratory Identification:

General Engineering Laboratories, LLC

Mailing Address:

P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:

2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:

(843) 556-8171

Summary:

Sample receipt

The samples for Los Alamos National Laboratory for ESH-18 arrived at General Engineering Laboratories, LLC, (GEL) Charleston, South Carolina on June 17, 2005 for environmental analyses. All sample containers arrived without any visible signs of tampering. The sample containers were delivered with chain of custody documentation and signatures. The sample containers were received at 2.0°C and 23°C temperature.

The laboratory received the following samples:

Laboratory Identification	Sample Description
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
138851005	GU05050GMC601-FTB

Internal Chain of Custody:

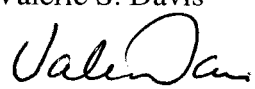
Custody was maintained for the samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Review Qualifier Flag Sheet, Volatiles, Semi-Volatiles, Perchlorate by LC-MS/MS, Metals, General Chemistry, and Radiochemistry Analysis.

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

Valerie S. Davis



Project Manager

CHAIN OF CUSTODY

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02542-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/15/05 @ 9:07	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Turney Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:turney@lanl.gov

138851

Analysis Request

001 Sample Id: **GF05050GMC601** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
GW: CN	250 ml poly	1	NAOH and <4C				
GW: Rad w/MS	1.0 gal poly	4	HN03				
GenInorg II Order WG	1.0 L poly	1	<4C				
P+N	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
Total Containers:	10						

002 Sample Id: **GF05050GMC690** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
GW: CN	250 ml poly	1	NAOH and <4C				
GW: Rad w/MS	1.0 gal poly	4	HN03				
GenInorg II Order WG	1.0 L poly	1	<4C				
P+N	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
Total Containers:	10						

003 Sample Id: **GU05050GMC601** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW, SW, RO: H-3 w/ MS	1.0 L amber glass	1	Not Preserved				
GW, SW, RO: SSC	500 ml poly	1	<4C				
GW: Rad w/MS	1.0 gal poly	4	HN03				
GW: SVOA w/MS+TICs	1.0 L amber glass	3	<4C				
GenInorg II Order WG	1.0 L poly	1	<4C				
TC99	1.0 L poly	1	HCL				
TKN+TOC	1.0 L glass	1	H2SO4 and <4C				

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02542-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/15/05 @ 9:07	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Turney Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:turney@lanl.gov

1388517

Analysis Request

Sample Id: **GU05050GMC601** **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
WG VOA w/MS+TICs	40 ml amber glass	6	HCl and <4C				
Total Containers:	20						

Sample Id: **GU05050GMC601-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW: VOA FTB	40 ml amber glass	1	HCl and <4C				
Total Containers:	1						

Sample Id: **GU05050GMC690** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW, SW, RO: H-3 w/ MS	1.0 L amber glass	1	Not Preserved				
GW, SW, RO: SSC	500 ml poly	1	<4C				
GW: Rad w/MS	1.0 gal poly	4	HN03				
GW: SVOA w/MS+TICs	1.0 L amber glass	3	<4C				
GenInorg II Order WG	1.0 L poly	1	<4C				
TC99	1.0 L poly	1	HCL				
TKN+TOC	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
WG VOA w/MS+TICs	40 ml amber glass	6	HCl and <4C				
Total Containers:	20						

Grand Total: **61**

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02542-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/15/05 9:07	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Turney Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:turney@lanl.gov

Analysis Request

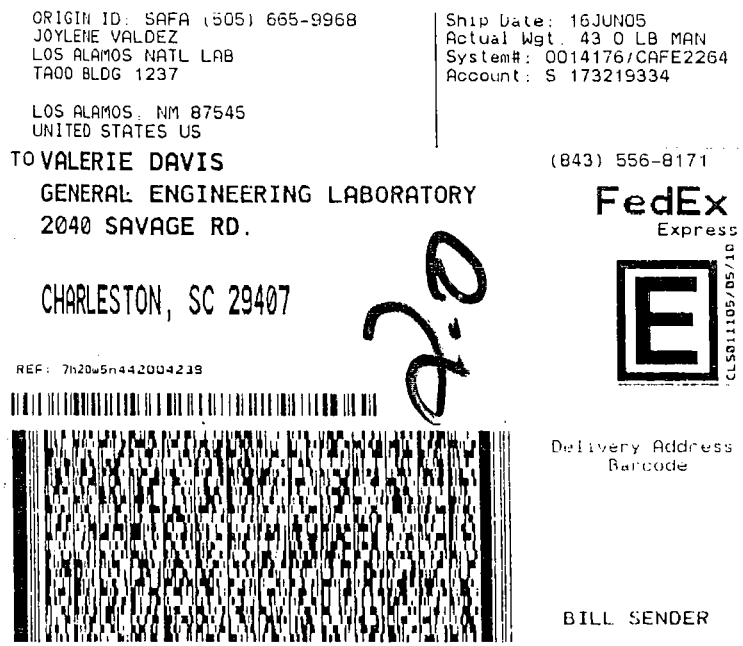
Technique:

Comments:

Chain of Custody

Sampling Team: Max Moon, Melissa Sandoval, Jim Jordan, Mike Trujillo

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
(sampler)	6/15/05	12:30				
				6/15/05	12:30	
				6-19-05	9:15	



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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 43.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS (843) 556-8171
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

REF: 7h20w5n442004239

FedEx Express

CLS011105/05/10

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

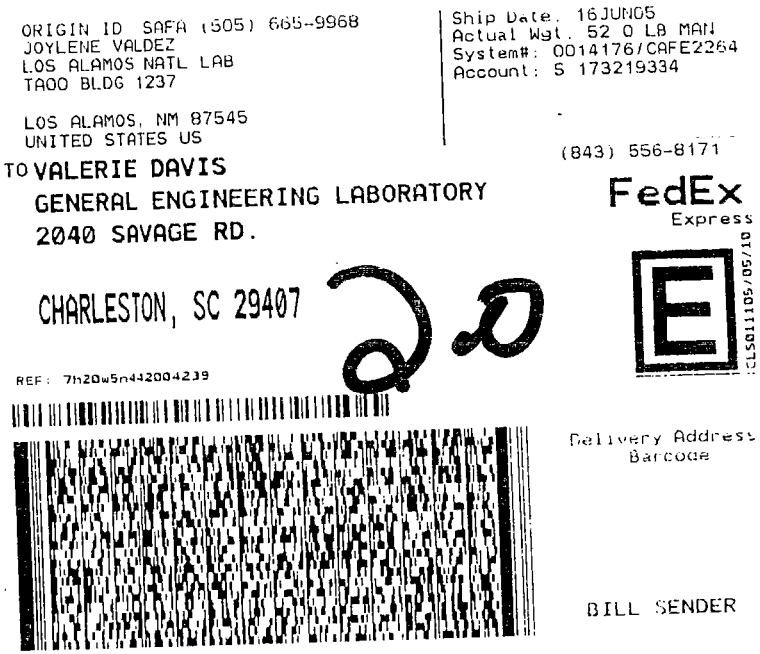
FRI
Deliver By:
17JUN05

TRK# 6954 7789 6875 Form 0201

CHS A1

29407 -SC-US XX CHSA

Part # 150148-434 RRD 10/04



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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 52.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS (843) 556-8171
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

REF: 7h20w5n442004239

FedEx Express

CLS011105/05/10

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

FRI
Deliver By:
17JUN05

TRK# 6954 7789 6842 Form 0201

CHS A1

29407 -SC-US XX CHSA

Part # 150148-434 RRD 10/04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 50.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

FedEx
Express

CLS011105/05/10

REF: 7n20w5n442004239

Delivery Address Barcode

BILL SENDER

2.0

PRIORITY OVERNIGHT

FRI
Deliver By
17JUN05

TRK# 6954 7789 6831

Form 0201

CHS A1

29407 -SC-US

XX CHSA

Part # 150188-434 MMT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 94.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx Express

CLS011105/05/10

23.0

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

FRI
Deliver By:
17JUN05

TRK# 6954 7789 6864

Form 0201

CHS A1

29407 -SC-US XX CHSA

Part # 156148-434 MAR 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 95.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

23.0

PRIORITY OVERNIGHT

FRI
Deliver By:
17JUN05

TRK# 6954 7789 6853

Form 0201

CHS A1

29407 -SC-US XX CHSA

Part # 156148-434 MAR 10-04

COOLER RECEIPT CHECKLIST

SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: Los Alamos	SDG/ARCOC/Work Order: 138851
Date Received: 6.17.05	PM(A) Review (ensure non-conforming items are resolved prior to signing): Valerie Dai
Received By:	

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓	✓ 23°C		Circle Coolant # ice bags (blue ice) dry ice (none) other(describe) VSO 6/17/05 2.0 23.0
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	✓			Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?	✓			Sample ID's and containers affected:
7	Samples received within holding time?	✓			Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?			✓	Sample ID's affected: no date + time on sample
10	Number of containers received match number indicated on COC?			✓	Sample ID's affected: Did not Receieve 4 liter Amber 50615 4 liter cubes 50616
11	COC form is properly signed in relinquished/received sections?	✓			
12	Air Bill ,Tracking #'s, & Additional Comments	6954 7789			6864 - 23.0 6853 - 23.0 6842 - 2.0 6831 - 2.0 / 6875 - 2.0

Radiological Information	Non-RAD	RAD	RADII	RSO RAD Receipt #
What is the radiological classification of the samples?	✓			Comments:
Radioactivity Screening Results (maximum observed CPM)	50 cpm			*If > x2 area background is observed on a non-radioactive sample, contact the RSO to investigate.

PM (or PMA) review of Receiving Rad classification: VSO Initials 6/17/05 Date:

DATA REVIEW QUALIFIER FLAG DEFINITION SHEET

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR ORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
A	The TIC is suspected aldol-condensation product.	COA, Form 1, and EDD
B	Analyte was detected in the associated method blank as well as in the sample.	COA, Form 1, and EDD
C	Pesticide analyte has been confirmed by GC/MS.	COA, Form 1, and EDD
D	Analyte(s) quantified in an analysis performed at a secondary dilution factor.	COA, Form 1, and EDD
E	Identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.	COA, Form 1, and EDD
J	This flag indicates an estimated value concerning either, (1) estimating a concentration for tentatively identified compounds (TICs), or (2) analyte detected at a level less than the RDL or PQL and greater than or equal to the MDL.	COA, Form 1, and EDD
N	Presumptive evidence based upon a mass spectral library search to make a tentative identification of the analyte.	COA, Form 1, and EDD
NJ	Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard.	COA, Form 1, and EDD
P	- Pesticide/PCB target analyte that is greater than 25% difference for the detected concentrations between the two GC columns. - HPLC target analyte that is greater than 40% difference for the detected concentrations between detectors or columns.	Form 1 and EDD
U	Compound analyzed for but not detected (sample quantitation limit has been adjusted to reflect dilutions and percent moisture).	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	COA, Form 1, and EDD
**	Laboratory Control Sample recovery outside of acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR INORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
E	The qualifier that is used when the percent difference between the parent sample and its serial dilution's concentration exceeds 10%. The sample's concentration must be greater than 50 times the IDL/MDL for ICP or 100 times the absolute value of the preparation blank's concentration for ICP-MS. However, if analyzing ILMO 4.0 (ICP-MS), the parent sample's concentration must be 20 times the CRDL before the "E" flag is applied.	Form 1 and EDD
*	The qualifier that is used to indicate the duplicate sample analysis for an analyte is out of control.	Form 1 and EDD
J	The qualifier is used to indicate that the reported result fell above the IDL/MDL but below the CRDL.	Form 1 and EDD
N	This qualifier is used to indicate that the matrix or pre-digested spike sample recovery for an analyte is not within the specified control limit.	Form 1 and EDD
U	Analyte analyzed for but not detected above the PQL/CRDL.	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	Form 1 and EDD
**	Laboratory Control Sample (LCS) recovery for an analyte is outside of specified acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.
Any recoveries falling outside the acceptance range will be flagged with a **.
All flags do not apply to QC Summary and Certificate of Analysis packages.

GC/MS VOLATILE ANALYSIS

GC/MS Volatile Organics
Los Alamos National Laboratory (ESHL)
SDG 138851

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometer
Analytical Method:	SW846 8260B DOE-AL
Prep Method:	SW846 5030B
Analytical Batch Number:	438041

Sample Analysis

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

Sample ID	Client ID
138851003	GU05050GMC601
138851004	GU05050GMC690
138851005	GU05050GMC601-FTB
1200876942	Method Blank (MB)
1200876945	Laboratory Control Sample (LCS)
1200876946	Laboratory Control Sample (LCS)
1200876943	139136017(GU05060GSCP01) Matrix Spike (MS)
1200876944	139136017(GU05060GSCP01) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 9.

Calibration Information

Due to the limited capacity of software all of the current initial calibration files are not displayed here. If necessary, a calibration history will be inserted in the package prior to the appropriate Form 6.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

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

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 139136017(GU05060GSCP01) was designated for spike analysis.

Matrix Spike (MS) Recovery Statement
The MS did not pass recoveries for all spiking compounds. The failures are less than 5% of the requested analyte list. This satisfies the client criteria. See NCR 216234.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD did not pass recoveries for all spiking compounds. The failures are less than 5% of the requested analyte list. This satisfies the client criteria. See NCR 216234.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

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

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG except for dilutions and/or confirmations.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 216234 was generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may have required manual integrations due to software limitations.

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

The laboratory is in the process of adding an additional surrogate compound. Currently the compound appears as a tentatively identified compound (TIC) in the sample library search at 10 minutes. The laboratory eliminated this peak as a TIC from the Form 1.

Additional Comments
Additional comments were not required for this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on a HP Mass Spectrometer.

Instrument ID	System Configuration	Column ID	Column Description	P & T Trap
VOA2.I	HP6890/HP5973	J&W1	DB-624, 60m x 0.25mm, 1.4um	Trap 10

Certification Statement

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

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Erin Lambert Date: 7/14/05

Roadmap for ESHL 138851 VOA

This roadmap was analyzed by Crystal Stacey on 07-06-2005, 08:46.
This roadmap was reviewed by Erin Haubert on 07-06-2005, 11:39.
This roadmap was packaged by LySandra Gathers on 07-08-2005, 11:56.
This roadmap was validated by Erin Haubert on 07-14-2005, 10:00.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA2.i/062905v2.b/2q337.d	138851003	GU05050GMC601	29-JUN-2005	22:29	138851.sub	1	
☐	N	/chem/VOA2.i/062905v2.b/2q338.d	138851004	GU05050GMC690	29-JUN-2005	22:55	138851.sub	1	
☐	N	/chem/VOA2.i/062905v2.b/2q339.d	138851005	GU05050GMC601-FTB	29-JUN-2005	23:22	138851.sub	1	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA2.i/062905v2.b/2q329llcs1.d	1200876945	VBLK01LCS	lcs	29-JUN-2005	18:58	138851.sub	1	
☐	N	/chem/VOA2.i/062905v2.b/2q331shlcs1.d	1200876946	VBLK01SLCS	lcs	29-JUN-2005	19:50	138851.sub	1	
☐	N	/chem/VOA2.i/062905v2.b/2q333B1.d	1200876942	VBLK01	mb	29-JUN-2005	20:43	138851.sub	1	

SAMPLE DATA SUMMARY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	3.7	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	2.0	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	52.2	

1E

EPA SAMPLE NO.

GU05050GMC601

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	0.26	J
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05050G
MC601-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM I VOA-TIC OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	4.1	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	10.6	
108-88-3	Toluene	1.7	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	56.4	

1E

EPA SAMPLE NO.

GU05050GMC690

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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FORM I VOA-TIC OLM03.0

QUALITY CONTROL SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

	EPA SAMPLE NO.	SMC1 (DBF)#	SMC2 (TOL)#	SMC3 (BFB)#	OTHER	TOT OUT
01	VBLK01LCS	100	99	98		0
02	VBLK01SLCS	102	101	102		0
03	VBLK01	101	100	97		0
04	GU05050GMC601	99	96	94		0
05	GU05050GMC690	101	98	93		0
06	GU05050GMC601-FTB	102	94	92		0
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	QC LIMITS
SMC1 (DBF) = Dibromofluoromethane	(85-120)
SMC2 (TOL) = Toluene-d8	(79-122)
SMC3 (BFB) = Bromofluorobenzene	(75-119)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	56.5	113	50-142
Chloromethane	50.0	0.0	57.8	116	52-134
Vinyl chloride	50.0	0.0	53.4	107	60-128
Bromomethane	50.0	0.0	55.8	112	60-120
Chloroethane	50.0	0.0	60.4	121	68-129
Trichlorofluoromethane	50.0	0.0	50.8	102	66-136
1,1-Dichloroethylene	50.0	0.0	50.8	102	71-125
Acetone	250	0.0	275	110	62-134
Iodomethane	250	0.0	269	108	77-134
Carbon disulfide	250	0.0	256	102	74-142
Acetonitrile	1250	0.0	1450	116	58-136
Methylene chloride	50.0	0.0	57.0	114	71-120
trans-1,2-Dichloroethyl	50.0	0.0	51.6	103	77-128
1,1-Dichloroethane	50.0	0.0	52.6	105	72-120
Vinyl acetate	250	0.0	340	136	66-142
2-Butanone	250	0.0	242	97	62-138
cis-1,2-Dichloroethylen	50.0	0.0	52.6	105	79-120
2,2-Dichloropropane	50.0	0.0	52.0	104	78-135
Bromochloromethane	50.0	0.0	53.4	107	78-124
Chloroform	50.0	0.0	50.8	102	80-121
1,1,1-Trichloroethane	50.0	0.0	50.4	101	71-123
1,1-Dichloropropene	50.0	0.0	47.0	94	78-123
Carbon tetrachloride	50.0	0.0	49.8	100	77-132
1,2-Dichloroethane	50.0	0.0	49.4	99	76-128
Benzene	50.0	0.0	56.3	113	69-120
Trichloroethylene	50.0	0.0	47.3	95	78-118
1,2-Dichloropropane	50.0	0.0	48.4	97	73-119
Dibromomethane	50.0	0.0	50.9	102	82-123

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	51.6	103	87-134
cis-1,3-Dichloropropyle	50.0	0.0	47.5	95	79-125
4-Methyl-2-pentanone	250	0.0	242	97	64-135
Toluene	50.0	0.0	52.0	104	75-120
trans-1,3-Dichloropropy	50.0	0.0	50.0	100	73-126
1,1,2-Trichloroethane	50.0	0.0	53.4	107	78-120
1,3-Dichloropropane	50.0	0.0	51.0	102	78-115
2-Hexanone	250	0.0	257	103	66-141
Tetrachloroethylene	50.0	0.0	52.6	105	69-124
Dibromochloromethane	50.0	0.0	57.9	116	78-133
1,2-Dibromoethane	50.0	0.0	52.2	104	80-120
Chlorobenzene	50.0	0.0	51.0	102	80-118
1,1,1,2-Tetrachloroetha	50.0	0.0	51.4	103	82-122
Ethylbenzene	50.0	0.0	53.6	107	79-120
o-Xylene	50.0	0.0	54.2	108	80-119
m,p-Xylenes	100	0.0	108	108	78-116
Styrene	50.0	0.0	53.9	108	78-117
Bromoform	50.0	0.0	62.7	125	74-136
Isopropylbenzene	50.0	0.0	49.2	98	75-120
1,1,2,2-Tetrachloroetha	50.0	0.0	63.6	127	72-129
1,2,3-Trichloropropane	50.0	0.0	53.1	106	72-127
Bromobenzene	50.0	0.0	58.0	116	79-118
n-Propylbenzene	50.0	0.0	54.6	109	74-122
2-Chlorotoluene	50.0	0.0	55.8	112	76-118
1,3,5-Trimethylbenzene	50.0	0.0	47.7	95	73-117
1,2,4-Trimethylbenzene	50.0	0.0	49.4	99	75-117
4-Chlorotoluene	50.0	0.0	50.7	101	76-118
tert-Butylbenzene	50.0	0.0	49.2	98	72-121

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50.0	0.0	49.0	98	72-124
4-Isopropyltoluene	50.0	0.0	47.8	96	75-124
1,3-Dichlorobenzene	50.0	0.0	56.5	113	75-118
1,4-Dichlorobenzene	50.0	0.0	51.2	102	75-120
n-Butylbenzene	50.0	0.0	47.6	95	71-130
1,2-Dichlorobenzene	50.0	0.0	53.4	107	78-116
1,2-Dibromo-3-chloropro	50.0	0.0	60.0	120	63-139
1,2,4-Trichlorobenzene	50.0	0.0	49.8	100	71-135
Hexachlorobutadiene	50.0	0.0	44.9	90	65-128
Naphthalene	50.0	0.0	50.7	101	63-138
1,2,3-Trichlorobenzene	50.0	0.0	51.2	102	70-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 67 outside limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Acrolein	250	0.0	270	108	56-148
Trichlorotrifluoroethan	250	0.0	279	112	66-131
Isobutyl alcohol	2500	0.0	2440	98	57-137
Allyl chloride	250	0.0	240	96	65-126
Acrylonitrile	250	0.0	281	112	57-126
2-Chloro-1,3-butadiene	50.0	0.0	57.1	114	50-148
Methacrylonitrile	250	0.0	232	93	64-118
Propionitrile	250	0.0	269	108	58-129
Methyl methacrylate	250	0.0	243	97	68-122
Ethyl methacrylate	250	0.0	233	93	68-120
1,4-Dioxane	2500	0.0	2520	101	60-131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 11 outside limits

COMMENTS: _____
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FORM III VOA-1 OLM03.0

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139136

Matrix Spike - EPA Sample No.: GU05060GSCP0

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	55.3	111	47-138
Chloromethane	50.0	0.0	57.1	114	43-140
Vinyl chloride	50.0	0.0	53.1	106	53-119
Bromomethane	50.0	0.0	52.4	105	57-120
Chloroethane	50.0	0.0	56.8	114	63-122
Trichlorofluoromethane	50.0	0.0	54.0	108	57-127
1,1-Dichloroethylene	50.0	0.0	51.2	102	60-122
Acetone	250	0.0	245	98	56-128
Iodomethane	250	0.0	263	105	72-126
Carbon disulfide	250	0.0	248	99	66-136
Acetonitrile	1250	0.0	1340	107	58-128
Methylene chloride	50.0	0.0	52.9	106	69-120
trans-1,2-Dichloroethyl	50.0	0.0	52.1	104	72-120
1,1-Dichloroethane	50.0	0.0	52.8	106	67-120
Vinyl acetate	250	0.0	300	120	55-133
2-Butanone	250	0.0	224	90	62-126
cis-1,2-Dichloroethylen	50.0	0.0	52.9	106	75-116
2,2-Dichloropropane	50.0	0.0	53.9	108	62-126
Bromochloromethane	50.0	0.0	52.5	105	79-122
Chloroform	50.0	0.0	52.6	105	73-121
1,1,1-Trichloroethane	50.0	0.0	53.5	107	61-122
1,1-Dichloropropene	50.0	0.0	47.5	95	67-116
Carbon tetrachloride	50.0	0.0	53.4	107	66-131
1,2-Dichloroethane	50.0	0.0	52.6	105	71-127
Benzene	50.0	0.0	54.3	109	64-120
Trichloroethylene	50.0	0.0	47.5	95	71-120
1,2-Dichloropropane	50.0	0.0	49.1	98	70-130
Dibromomethane	50.0	0.0	52.6	105	78-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139136

Matrix Spike - EPA Sample No.: GU05060GSCP0

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	54.1	108	85-133
cis-1,3-Dichloropropyle	50.0	0.0	49.6	99	72-120
4-Methyl-2-pentanone	250	0.0	228	91	62-133
Toluene	50.0	0.0	50.0	100	68-120
trans-1,3-Dichloropropy	50.0	0.0	50.4	101	67-121
1,1,2-Trichloroethane	50.0	0.0	52.6	105	74-120
1,3-Dichloropropane	50.0	0.0	50.9	102	74-117
2-Hexanone	250	0.0	238	95	58-140
Tetrachloroethylene	50.0	0.0	52.2	104	60-120
Dibromochloromethane	50.0	0.0	58.4	117	77-133
1,2-Dibromoethane	50.0	0.0	52.9	106	74-121
Chlorobenzene	50.0	0.0	50.8	102	72-116
1,1,1,2-Tetrachloroetha	50.0	0.0	54.2	108	72-127
Ethylbenzene	50.0	0.0	55.2	110	70-120
o-Xylene	50.0	0.0	53.4	107	72-117
m,p-Xylenes	100	0.0	108	108	69-120
Styrene	50.0	0.0	53.5	107	68-116
Bromoform	50.0	0.0	61.3	123	70-134
Isopropylbenzene	50.0	0.0	48.6	97	64-120
1,1,2,2-Tetrachloroetha	50.0	0.0	59.9	120	63-130
1,2,3-Trichloropropane	50.0	0.0	51.0	102	66-126
Bromobenzene	50.0	0.0	57.7	115*	74-115
n-Propylbenzene	50.0	0.0	55.2	110	64-116
2-Chlorotoluene	50.0	0.0	56.4	113	67-115
1,3,5-Trimethylbenzene	50.0	0.0	48.1	96	66-120
1,2,4-Trimethylbenzene	50.0	0.0	49.4	99	65-120
4-Chlorotoluene	50.0	0.0	51.6	103	66-120
tert-Butylbenzene	50.0	0.0	49.2	98	65-116

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139136

Matrix Spike - EPA Sample No.: GU05060GSCP0

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50.0	0.0	49.1	98	64-118
4-Isopropyltoluene	50.0	0.0	49.0	98	65-118
1,3-Dichlorobenzene	50.0	0.0	56.3	113	66-115
1,4-Dichlorobenzene	50.0	0.0	51.3	103	67-116
n-Butylbenzene	50.0	0.0	48.7	97	60-121
1,2-Dichlorobenzene	50.0	0.0	53.2	106	72-115
1,2-Dibromo-3-chloropro	50.0	0.0	59.1	118	55-138
1,2,4-Trichlorobenzene	50.0	0.0	53.6	107	60-130
Hexachlorobutadiene	50.0	0.0	48.8	98	57-119
Naphthalene	50.0	0.0	51.3	103	62-132
1,2,3-Trichlorobenzene	50.0	0.0	53.0	106	66-129

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139136

Matrix Spike - EPA Sample No.: GU05060GSCP0

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0	56.0	112	1	30	47-138
Chloromethane	50.0	58.3	117	2	30	43-140
Vinyl chloride	50.0	55.2	110	4	30	53-119
Bromomethane	50.0	52.3	105	0	30	57-120
Chloroethane	50.0	55.1	110	4	30	63-122
Trichlorofluoromethane	50.0	55.4	111	3	30	57-127
1,1-Dichloroethylene	50.0	52.2	104	2	30	60-122
Acetone	250	257	103	5	30	56-128
Iodomethane	250	263	105	0	30	72-126
Carbon disulfide	250	248	99	0	30	66-136
Acetonitrile	1250	1390	111	4	30	58-128
Methylene chloride	50.0	52.2	104	2	30	69-120
trans-1,2-Dichloroethyl	50.0	52.7	105	1	30	72-120
1,1-Dichloroethane	50.0	53.6	107	1	30	67-120
Vinyl acetate	250	303	121	1	30	55-133
2-Butanone	250	234	94	4	30	62-126
cis-1,2-Dichloroethylen	50.0	53.5	107	1	30	75-116
2,2-Dichloropropane	50.0	55.2	110	2	30	62-126
Bromochloromethane	50.0	53.5	107	2	30	79-122
Chloroform	50.0	53.8	108	3	30	73-121
1,1,1-Trichloroethane	50.0	55.1	110	3	30	61-122
1,1-Dichloropropene	50.0	49.0	98	3	30	67-116
Carbon tetrachloride	50.0	55.2	110	3	30	66-131
1,2-Dichloroethane	50.0	54.8	110	5	30	71-127
Benzene	50.0	55.3	111	2	30	64-120
Trichloroethylene	50.0	49.1	98	3	30	71-120
1,2-Dichloropropane	50.0	49.0	98	0	30	70-130
Dibromomethane	50.0	53.9	108	3	30	78-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139136

Matrix Spike - EPA Sample No.: GU05060GSCP0

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Bromodichloromethane	50.0	54.9	110	2	30	85-133
cis-1,3-Dichloropropyle	50.0	49.5	99	0	30	72-120
4-Methyl-2-pentanone	250	238	95	4	30	62-133
Toluene	50.0	50.8	102	2	30	68-120
trans-1,3-Dichloropropy	50.0	51.8	104	3	30	67-121
1,1,2-Trichloroethane	50.0	53.3	107	2	30	74-120
1,3-Dichloropropane	50.0	51.3	103	1	30	74-117
2-Hexanone	250	247	99	4	30	58-140
Tetrachloroethylene	50.0	52.9	106	2	30	60-120
Dibromochloromethane	50.0	60.4	121	3	30	77-133
1,2-Dibromoethane	50.0	53.2	106	0	30	74-121
Chlorobenzene	50.0	50.7	101	1	30	72-116
1,1,1,2-Tetrachloroetha	50.0	55.0	110	2	30	72-127
Ethylbenzene	50.0	55.6	111	1	30	70-120
o-Xylene	50.0	54.8	110	3	30	72-117
m,p-Xylenes	100	110	110	2	30	69-120
Styrene	50.0	54.9	110	3	30	68-116
Bromoform	50.0	61.8	124	1	30	70-134
Isopropylbenzene	50.0	48.7	97	0	30	64-120
1,1,2,2-Tetrachloroetha	50.0	60.1	120	0	30	63-130
1,2,3-Trichloropropane	50.0	53.0	106	4	30	66-126
Bromobenzene	50.0	57.3	115*	0	30	74-115
n-Propylbenzene	50.0	54.8	110	0	30	64-116
2-Chlorotoluene	50.0	56.5	113	0	30	67-115
1,3,5-Trimethylbenzene	50.0	48.2	96	0	30	66-120
1,2,4-Trimethylbenzene	50.0	49.6	99	0	30	65-120
4-Chlorotoluene	50.0	51.4	103	0	30	66-120
tert-Butylbenzene	50.0	49.0	98	0	30	65-116

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139136

Matrix Spike - EPA Sample No.: GU05060GSCP0

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
sec-Butylbenzene	50.0	49.3	99	1	30	64-118
4-Isopropyltoluene	50.0	49.0	98	0	30	65-118
1,3-Dichlorobenzene	50.0	56.8	114	1	30	66-115
1,4-Dichlorobenzene	50.0	51.3	103	0	30	67-116
n-Butylbenzene	50.0	49.2	98	1	30	60-121
1,2-Dichlorobenzene	50.0	53.1	106	0	30	72-115
1,2-Dibromo-3-chloropro	50.0	60.8	122	3	30	55-138
1,2,4-Trichlorobenzene	50.0	54.2	108	1	30	60-130
Hexachlorobutadiene	50.0	48.4	97	1	30	57-119
Naphthalene	50.0	52.1	104	1	30	62-132
1,2,3-Trichlorobenzene	50.0	53.8	108	2	30	66-129

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 67 outside limits
Spike Recovery: 2 out of 134 outside limits

COMMENTS: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID: 2Q333B1 Lab Sample ID: 1200876942

Date Analyzed: 06/29/05 Time Analyzed: 2043

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK01LCS	1200876945	2Q329LLCS1	1858
02	VBLK01SLCS	1200876946	2Q331SHLCS1	1950
03	GU05050GMC601	138851003	2Q337	2229
04	GU05050GMC690	138851004	2Q338	2255
05	GU05050GMC601-FTB	138851005	2Q339	2322
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID: 2P201 BFB Injection Date: 06/21/05

Instrument ID: VOA2 BFB Injection Time: 1658

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	46.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	72.4
175	5.0 - 9.0% of mass 174	5.3 (7.4)1
176	95.0 - 101.0% of mass 174	70.4 (97.3)1
177	5.0 - 9.0% of mass 176	4.7 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD001	W2V050621-01	2P204	06/21/05	1808
02	VSTD002	W2V050621-02	2P205	06/21/05	1834
03	VSTD005	W2V050621-03	2P206	06/21/05	1901
04	VSTD010	W2V050621-04	2P207	06/21/05	1927
05	VSTD020	W2V050621-05	2P208	06/21/05	1954
06	VSTD050	W2V050621-06	2P209	06/21/05	2020
07	VSTD100	W2V050621-07	2P210	06/21/05	2046
08	VSTD0005	W2V050621-08	2P212	06/21/05	2139
09	SECOND_SOURCE_ICV	UVM050605-01C	2P213	06/21/05	2205
10	VSTD005S	UVM050615-01A	2P215	06/21/05	2258
11	VSTD005S	UVM050615-02A	2P216	06/21/05	2325
12	VSTD010S	UVM050615-03A	2P217	06/21/05	2351
13	VSTD025S	UVM050615-04A	2P218	06/22/05	0017
14	VSTD050S	UVM050615-05A	2P219	06/22/05	0044
15	VSTD100S	UVM050615-06A	2P220	06/22/05	0110
16	VSTD250S	UVM050615-07A	2P221	06/22/05	0137
17					
18					
19					
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21					
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID: 2Q328 BFB Injection Date: 06/29/05

Instrument ID: VOA2 BFB Injection Time: 1831

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	45.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.1 (0.1)1
174	50.0 - 100.0% of mass 95	77.6
175	5.0 - 9.0% of mass 174	5.6 (7.2)1
176	95.0 - 101.0% of mass 174	75.6 (97.4)1
177	5.0 - 9.0% of mass 176	4.9 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	UVM050605-01D	2Q329	06/29/05	1858
02	VBLK01LCS	1200876945	2Q329LLCS1	06/29/05	1858
03	VSTD250S	UVM050531-01A	2Q331	06/29/05	1950
04	VBLK01SLCS	1200876946	2Q331SHLCS1	06/29/05	1950
05	VBLK01	1200876942	2Q333B1	06/29/05	2043
06	GU05050GMC601	138851003	2Q337	06/29/05	2229
07	GU05050GMC690	138851004	2Q338	06/29/05	2255
08	GU05050GMC601-FTB	138851005	2Q339	06/29/05	2322
09					
10					
11					
12					
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8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID (Standard): 2Q329 Date Analyzed: 06/29/05

Instrument ID: VOA2 Time Analyzed: 1858

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2041065	10.69	1296001	14.00	642131	16.48
	UPPER LIMIT	4082130	11.19	2592002	14.50	1284262	16.98
	LOWER LIMIT	1020532	10.19	648000	13.50	321066	15.98
	EPA SAMPLE NO.						
01	VBLK01LCS	2041065	10.69	1296001	14.00	642131	16.48
02	VBLK01SLCS	1799786	10.69	1154363	14.00	572871	16.48
03	VBLK01	1866017	10.69	1210285	14.00	608433	16.48
04	GU05050GMC601	2158353	10.69	1429697	14.00	719834	16.48
05	GU05050GMC690	2174333	10.69	1428414	14.00	721343	16.48
06	GU05050GMC601-FTB	2138180	10.69	1459601	14.00	734589	16.48
07							
08							
09							
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22							

IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	3.7	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	2.0	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	52.2	

1E

EPA SAMPLE NO.

GU05050GMC601

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q337

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q337.d
Lab Smp Id: 138851003 Client Smp ID: GU05050GMC601
Inj Date : 29-JUN-2005 22:29
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |138851003|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.693	(1.000)	2158353	50.0000	
* 61 Chlorobenzene-d5	117	14.002	13.996	(1.000)	1429697	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	719834	50.0000	
$ 35 Dibromofluoromethane	113	9.908	9.908	(0.927)	573255	49.7104	49.7
$ 47 Toluene-d8	98	12.408	12.409	(0.886)	2024723	48.1867	48.2
$ 71 Bromofluorobenzene	95	15.224	15.225	(0.924)	792288	47.1976	47.2
30 2-Butanone	43	9.342	9.336	(0.874)	23448	3.66221	3.7(a)
97 1,4-Dioxane	88	11.434	11.435	(1.069)	6473	52.2082	52.2
50 Toluene	92	12.481	12.482	(0.891)	58430	1.99999	2.0

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q337.d
Lab Smp Id: 138851003 Client Smp ID: GU05050GMC601
Inj Date : 29-JUN-2005 22:29
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |138851003|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/062905v2.b/2q337.d

Page 1

Date : 29-JUN-2005 22:29

Client ID: GU05050GMC601

Instrument: VOA2.i

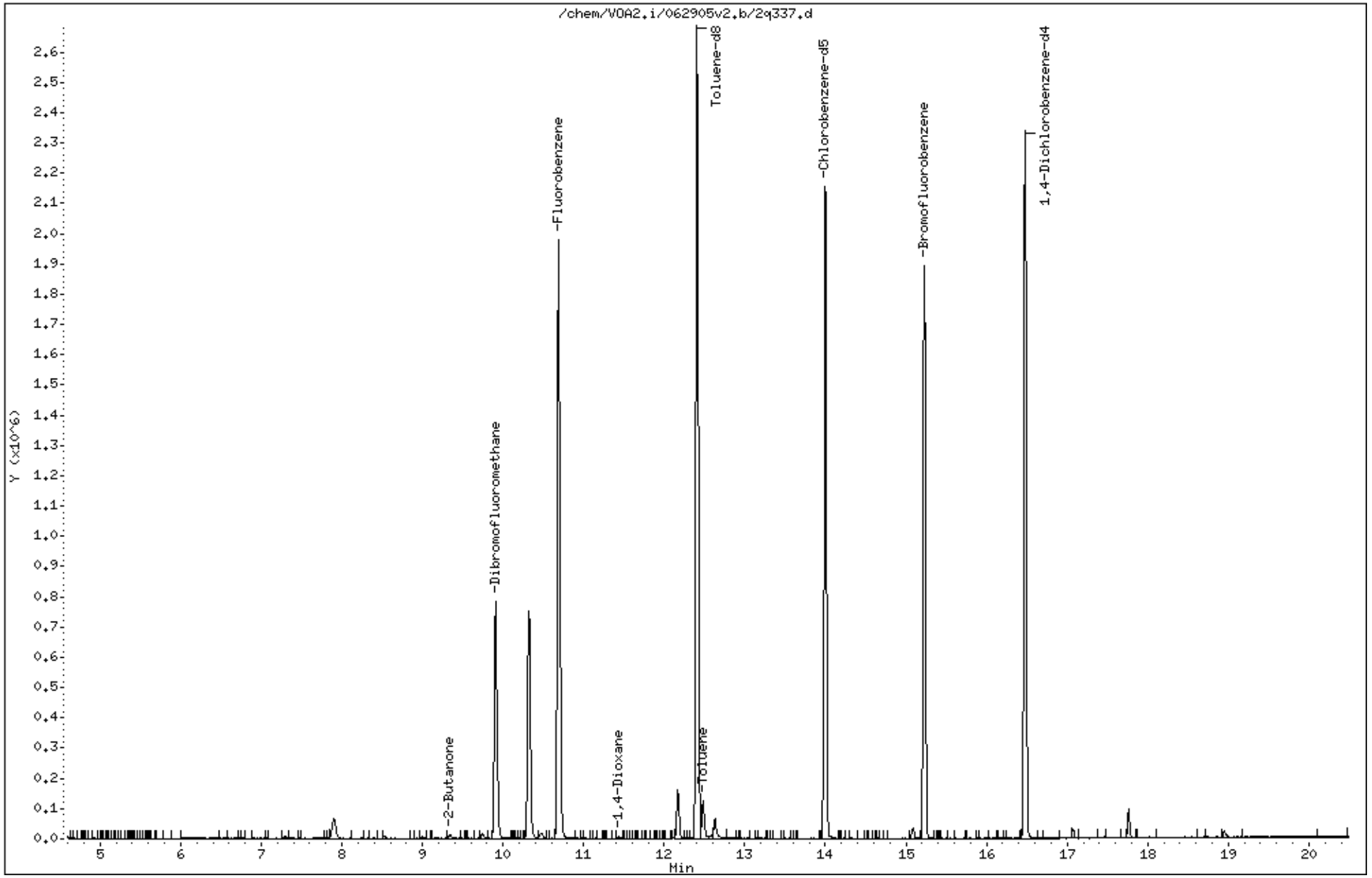
Sample Info: |1388510031438041|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA2.i/062905v2.b/2q337.d

Date : 29-JUN-2005 22:29

Client ID: GU05050GMC601

Instrument: VOA2.i

Sample Info: |13885100|438041|1|VOAF|1|

Purge Volume: 5.0

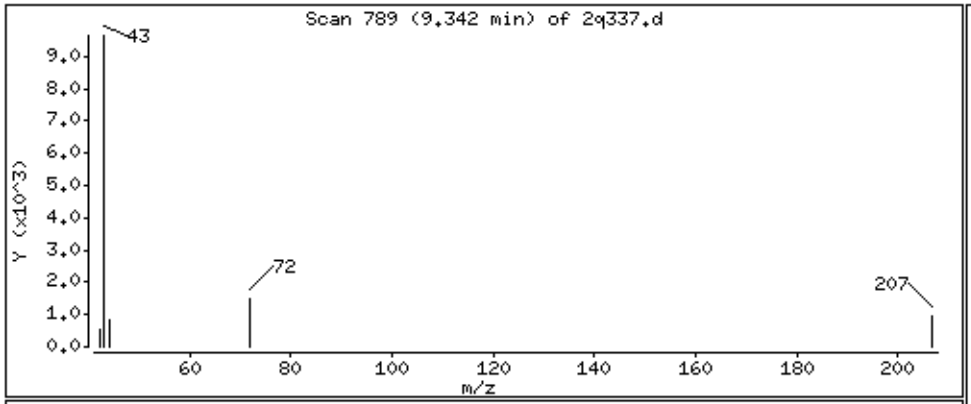
Operator: CDS1

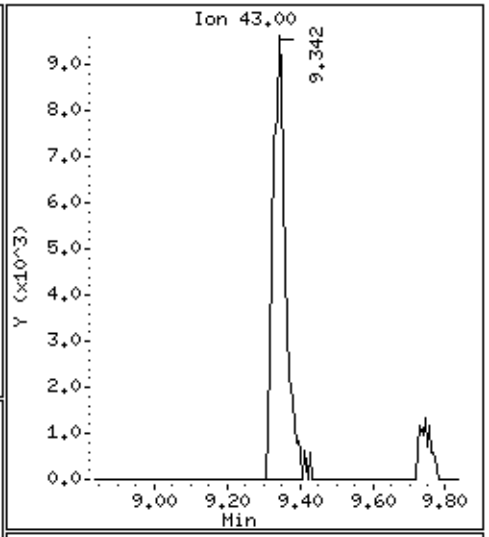
Column phase: DB-624

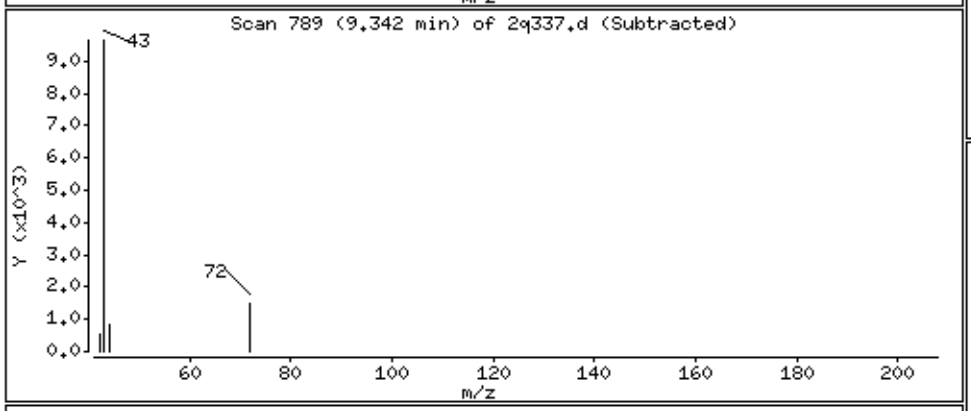
Column diameter: 0.25

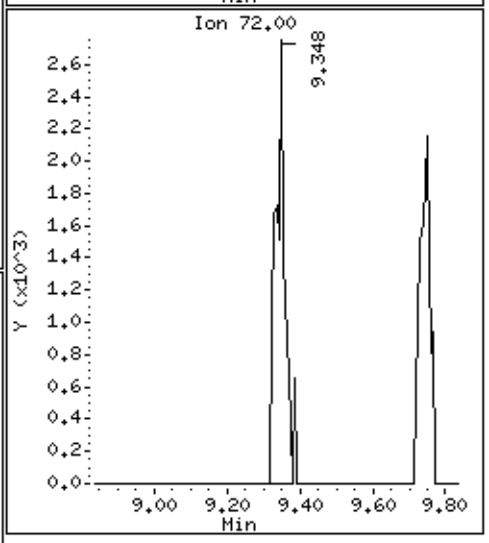
30 2-Butanone

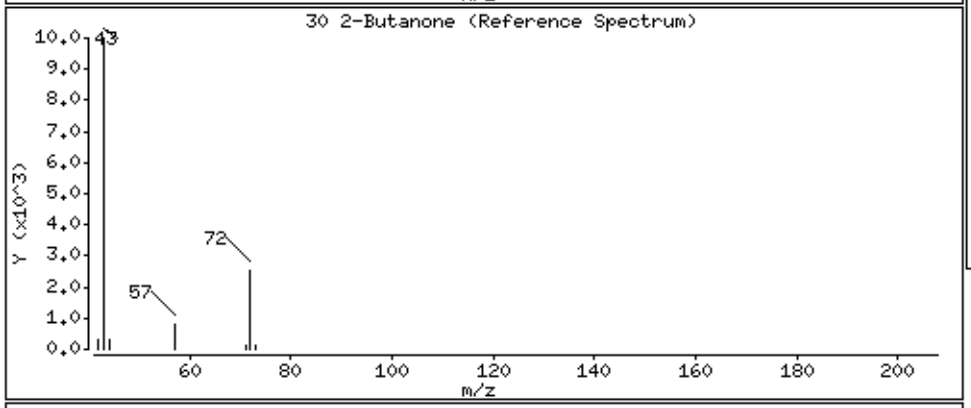
Concentration: 3.7 ug/l

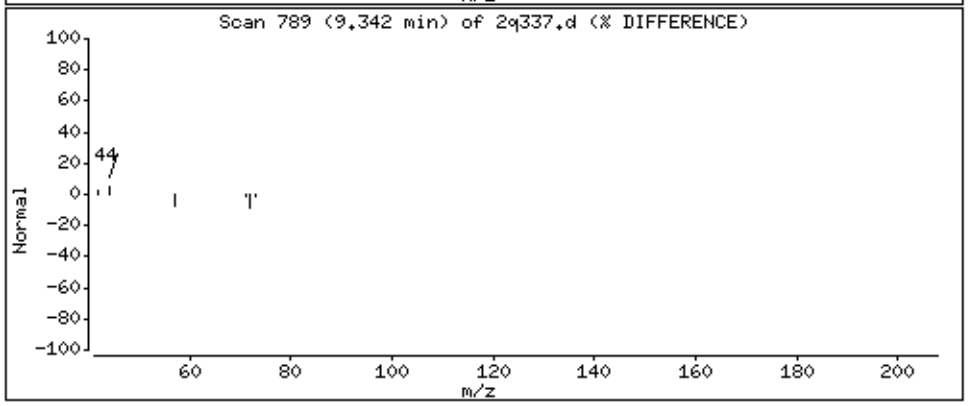












Data File: /chem/VOA2.i/062905v2.b/2q337.d

Date : 29-JUN-2005 22:29

Client ID: GU05050GMC601

Instrument: VOA2.i

Sample Info: |13885100|43804|1|VOAF|1|

Purge Volume: 5.0

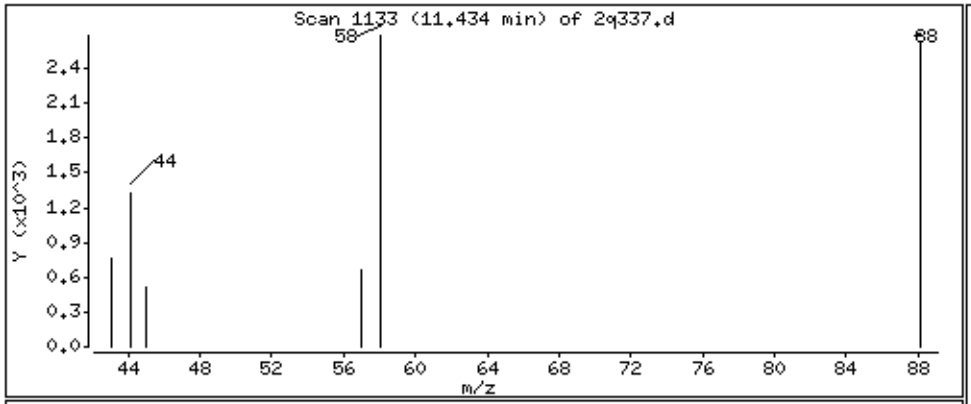
Operator: CDS1

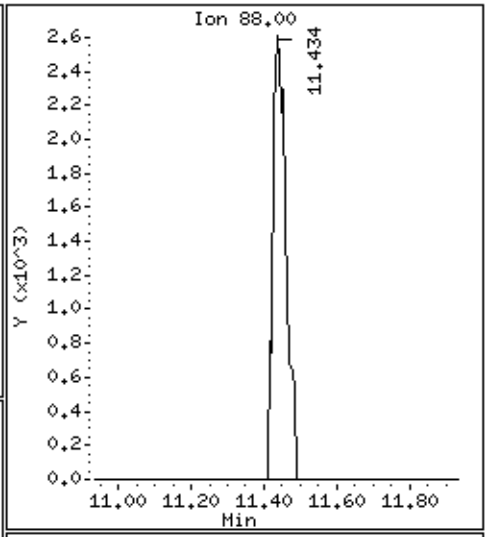
Column phase: DB-624

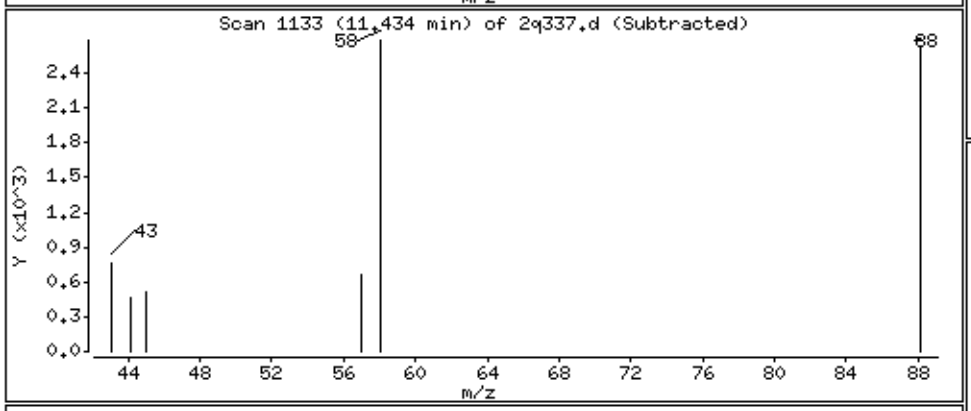
Column diameter: 0.25

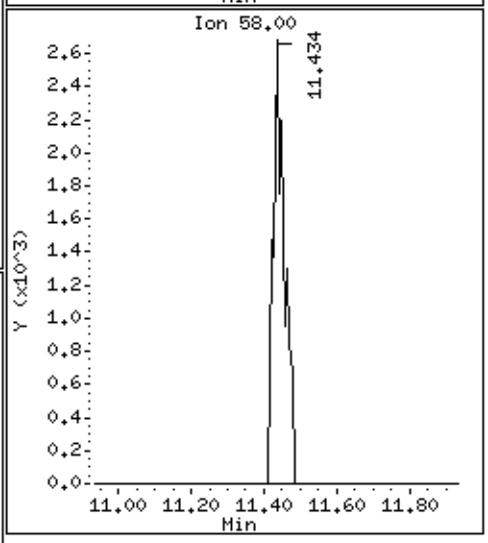
97 1,4-Dioxane

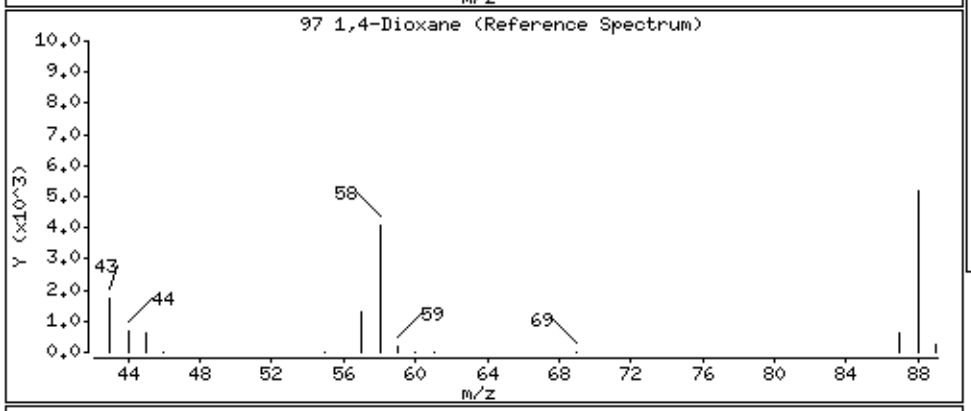
Concentration: 52.2 ug/l

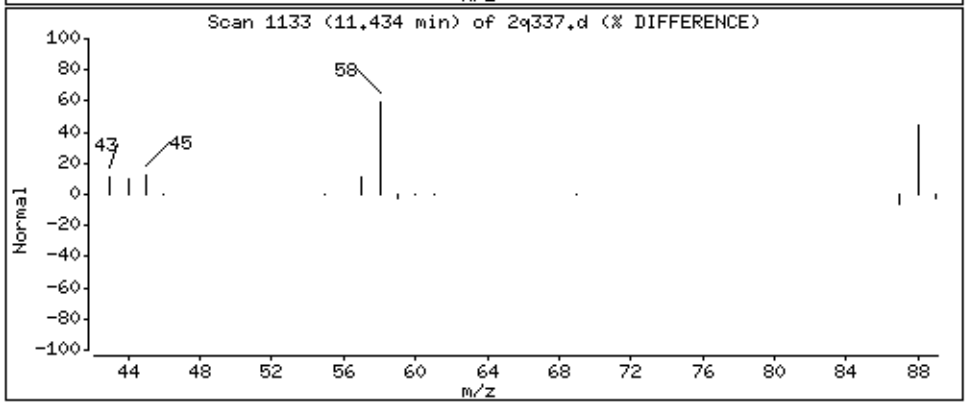












Data File: /chem/VOA2.i/062905v2.b/2q337.d

Date : 29-JUN-2005 22:29

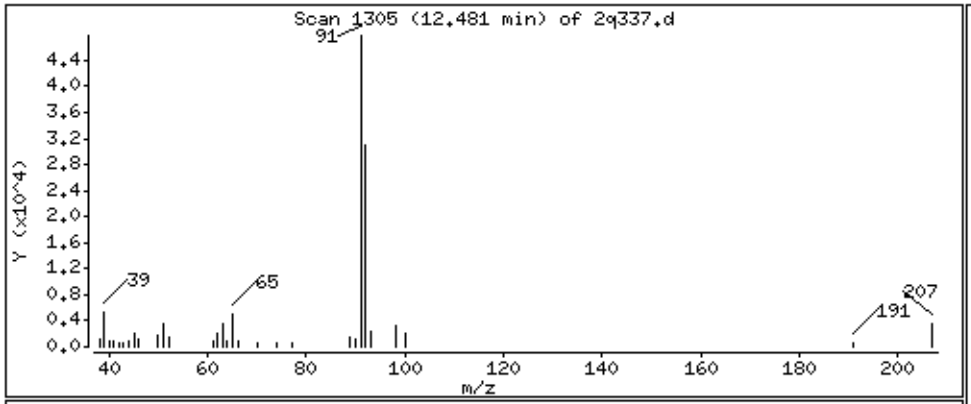
Client ID: GU05050GMC601 Instrument: VOA2.i

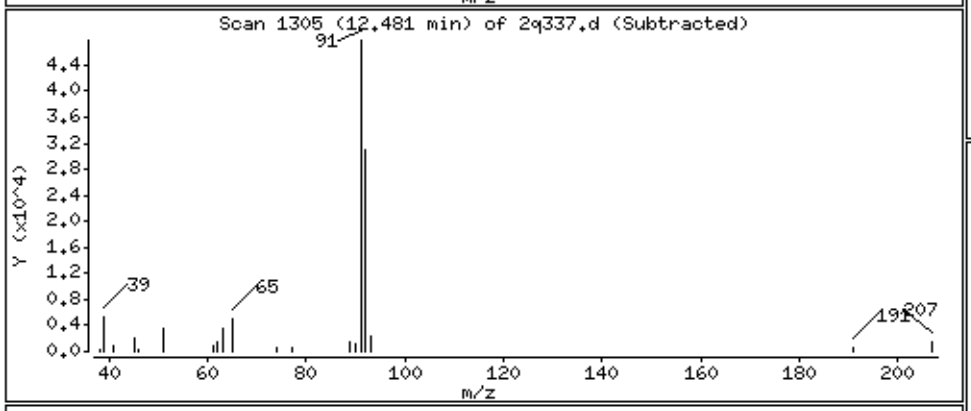
Sample Info: |13885100|43804|1|VOAF|1|

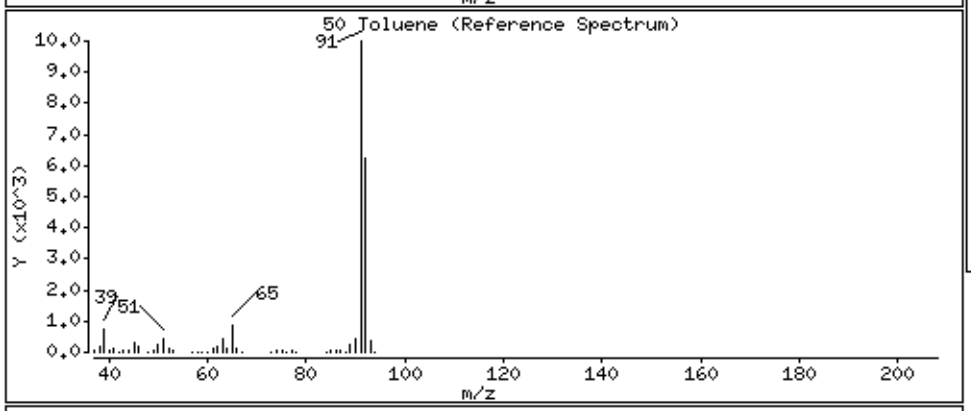
Purge Volume: 5.0 Operator: CDS1

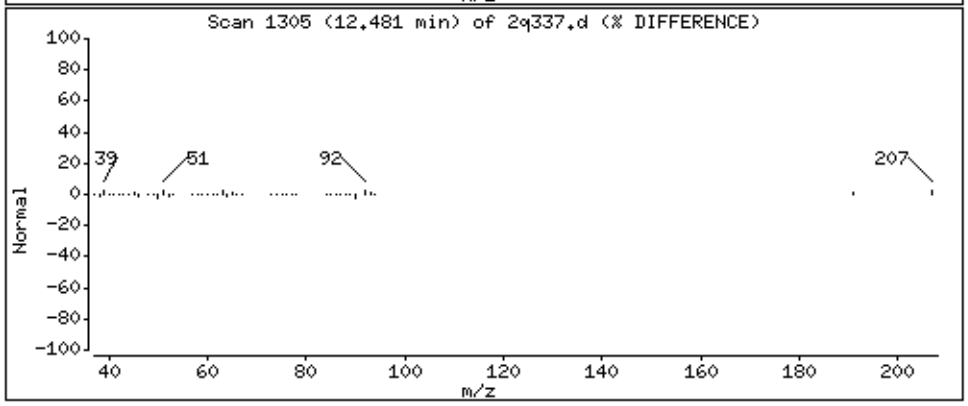
Column phase: DB-624 Column diameter: 0.25

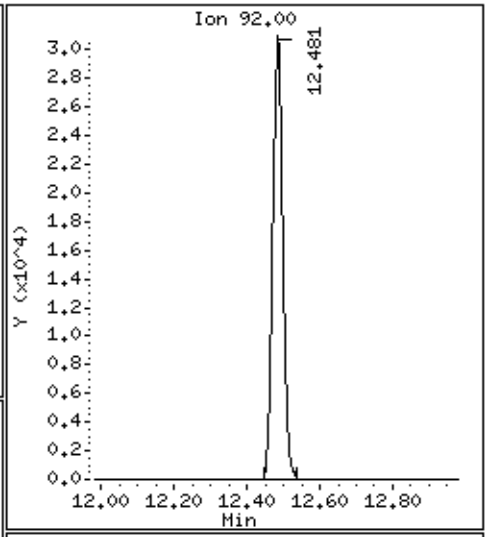
50 Toluene Concentration: 2.0 ug/l

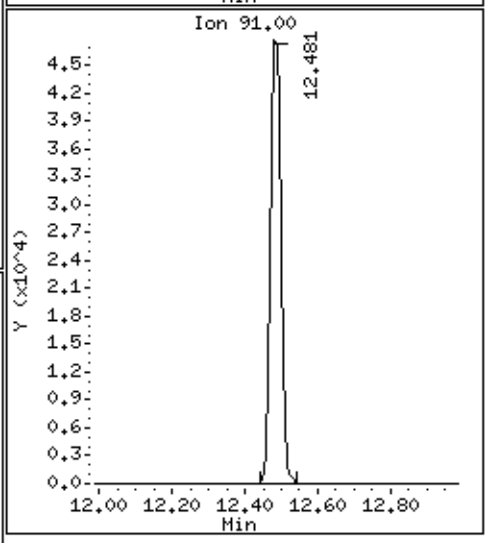












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	0.26	J
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05050G
MC601-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q339

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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FORM I VOA-TIC OLM03.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q339.d
Lab Smp Id: 138851005 Client Smp ID: GU05050GMC601-FTB
Inj Date : 29-JUN-2005 23:22
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |138851005|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.691	10.693	(1.000)	2138180	50.0000	
* 61 Chlorobenzene-d5	117	14.001	13.996	(1.000)	1459601	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.483	16.478	(1.000)	734589	50.0000	
$ 35 Dibromofluoromethane	113	9.907	9.908	(0.927)	583438	51.0708	51.1
$ 47 Toluene-d8	98	12.407	12.409	(0.886)	2013841	46.9457	46.9
$ 71 Bromofluorobenzene	95	15.230	15.225	(0.924)	790582	46.1500	46.2
39 Trichloroethylene	95	11.099	11.101	(1.038)	3230	0.25743	0.26(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q339.d
Lab Smp Id: 138851005 Client Smp ID: GU05050GMC601-FTB
Inj Date : 29-JUN-2005 23:22
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |138851005|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/062905v2.b/2q339.d

Page 1

Date : 29-JUN-2005 23:22

Client ID: GU05050GMC601-FTB

Instrument: VOA2.i

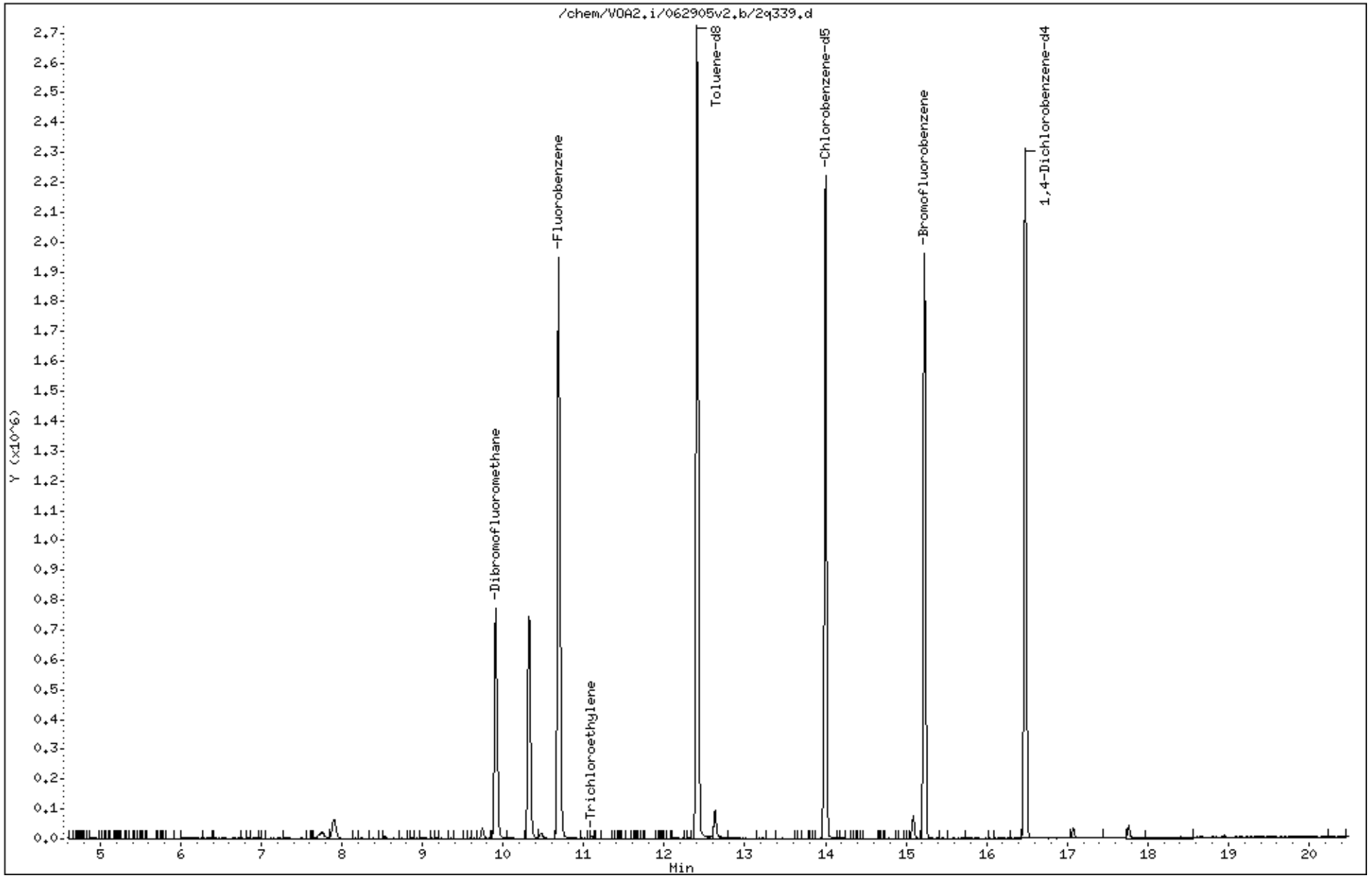
Sample Info: |1388510051438041|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA2.i/062905v2.b/2q339.d

Date : 29-JUN-2005 23:22

Client ID: GU05050GMC601-FTB

Instrument: VOA2.i

Sample Info: |13885100|43804|1|VOAF|1|

Purge Volume: 5.0

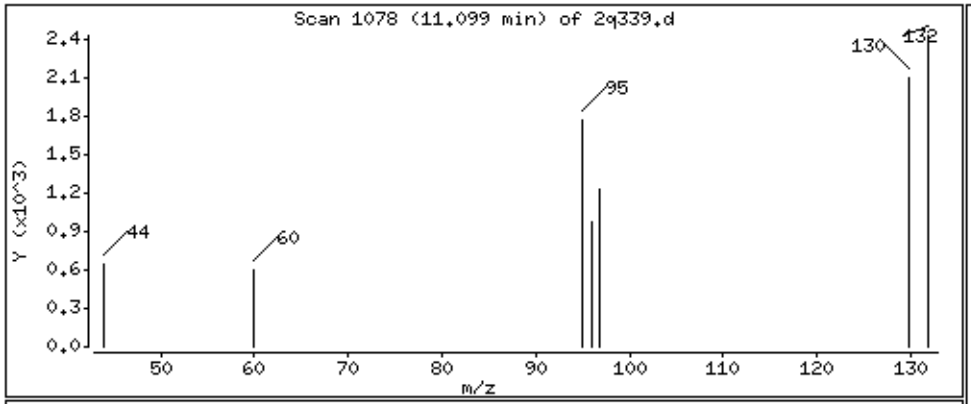
Operator: CDS1

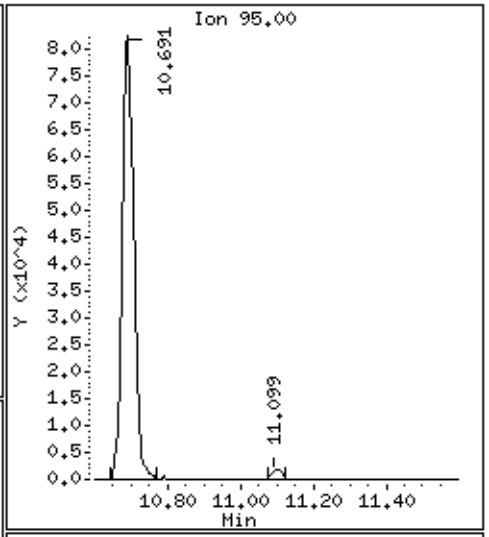
Column phase: DB-624

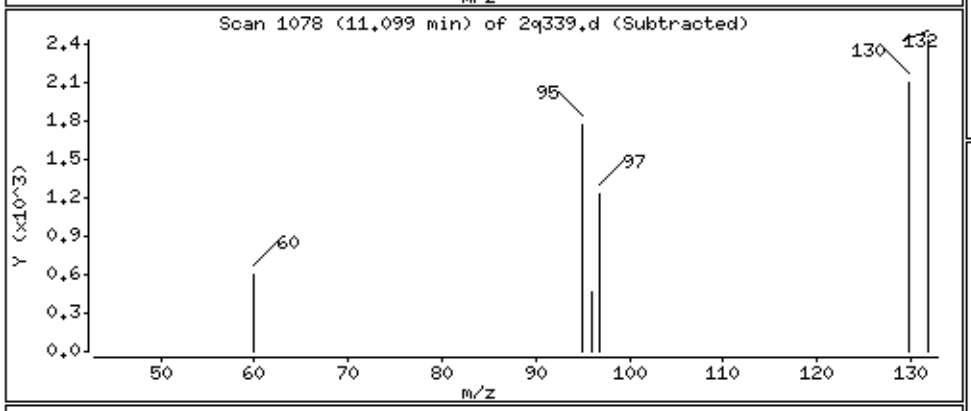
Column diameter: 0.25

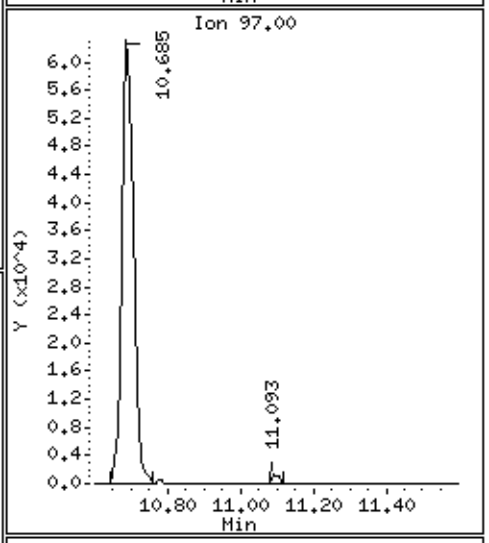
39 Trichloroethylene

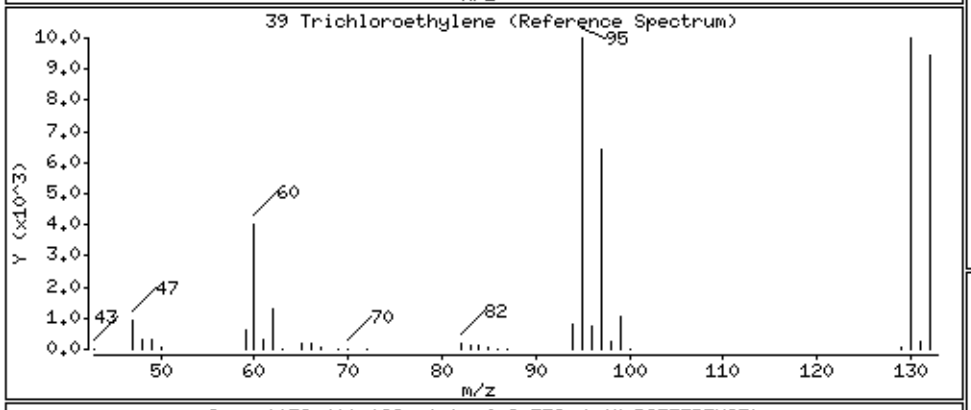
Concentration: 0.26 ug/l

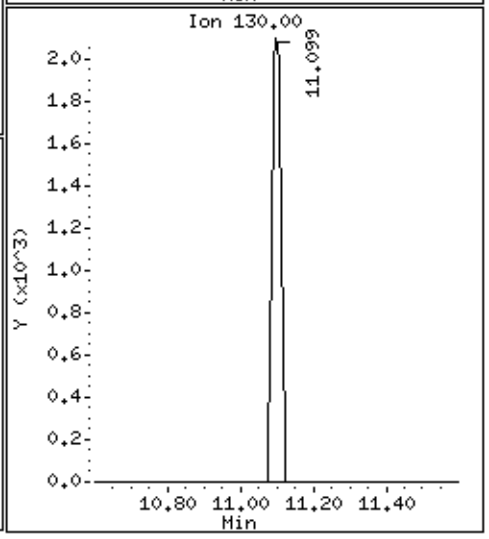


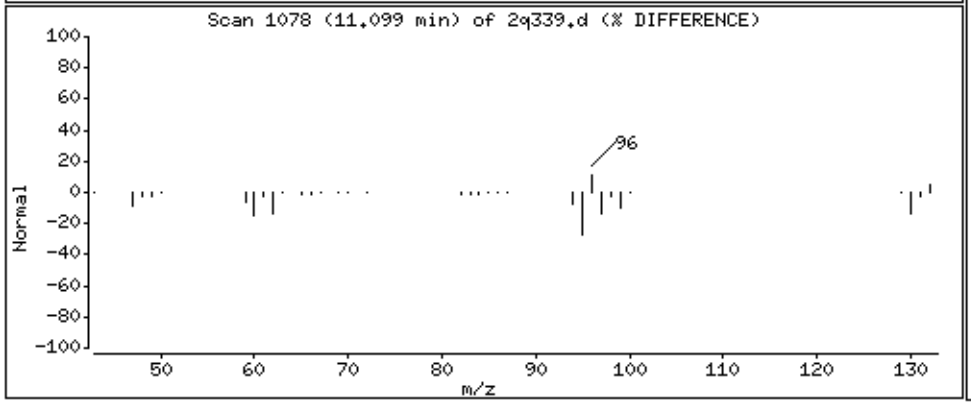












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	4.1	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	10.6	
108-88-3	Toluene	1.7	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	56.4	

1E

EPA SAMPLE NO.

GU05050GMC690

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 138851004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q338

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
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7.					
8.					
9.					
10.					
11.					
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30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q338.d
Lab Smp Id: 138851004 Client Smp ID: GU05050GMC690
Inj Date : 29-JUN-2005 22:55
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |138851004|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.693	(1.000)	2174333	50.0000	
* 61 Chlorobenzene-d5	117	14.002	13.996	(1.000)	1428414	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	721343	50.0000	
$ 35 Dibromofluoromethane	113	9.908	9.908	(0.927)	588378	50.6468	50.6
$ 47 Toluene-d8	98	12.408	12.409	(0.886)	2049932	48.8304	48.8
$ 71 Bromofluorobenzene	95	15.231	15.225	(0.924)	784312	46.6248	46.6
30 2-Butanone	43	9.336	9.336	(0.873)	26696	4.13885	4.1(a)
97 1,4-Dioxane	88	11.441	11.435	(1.070)	7039	56.3561	56.4
49 4-Methyl-2-pentanone	58	12.171	12.171	(0.869)	53535	10.6550	10.6
50 Toluene	92	12.481	12.482	(0.891)	49591	1.69896	1.7

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q338.d
Lab Smp Id: 138851004 Client Smp ID: GU05050GMC690
Inj Date : 29-JUN-2005 22:55
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |138851004|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 37
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/062905v2.b/2q338.d

Date : 29-JUN-2005 22:55

Client ID: GU05050GMC690

Instrument: VOA2.i

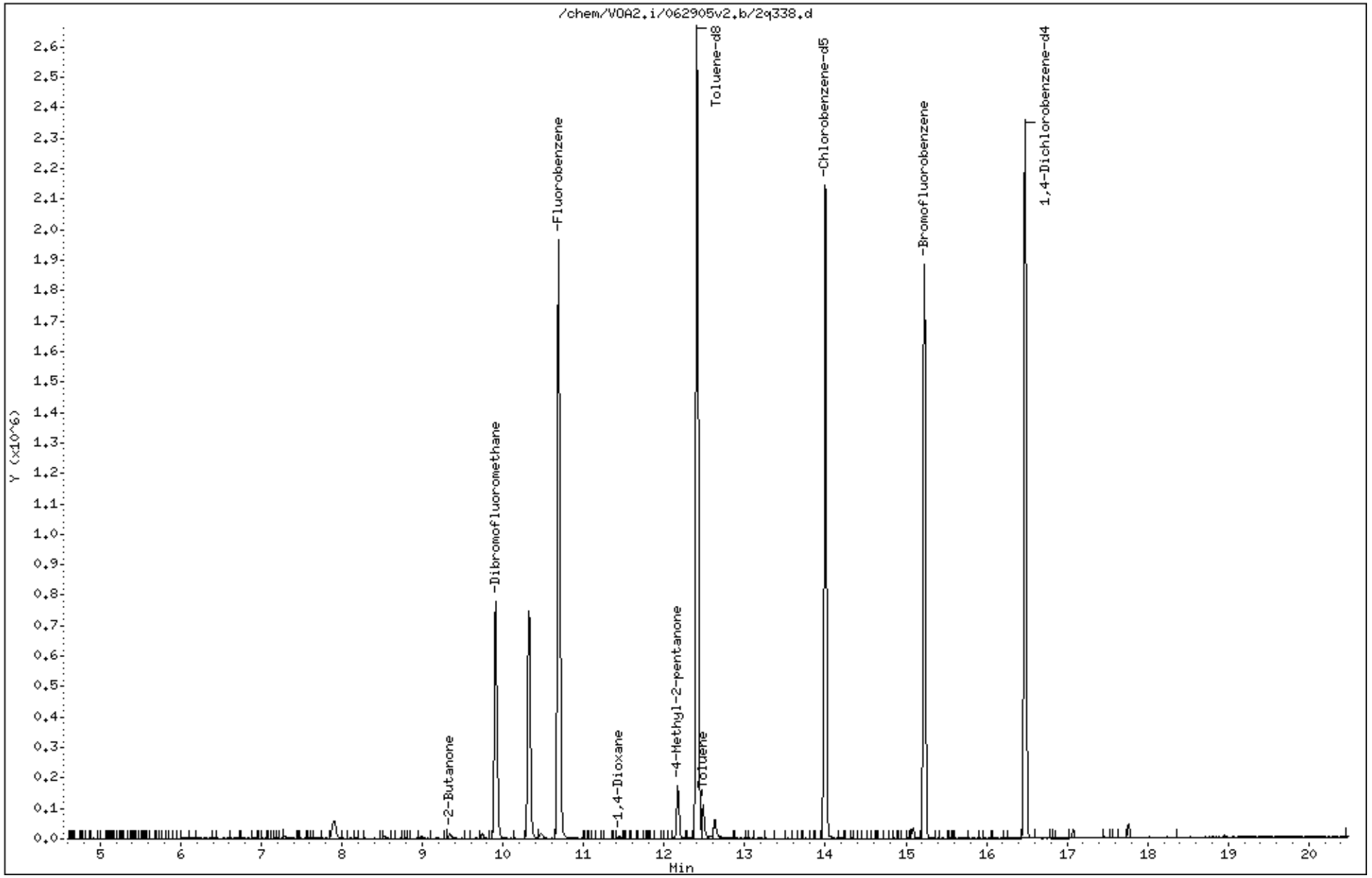
Sample Info: |13885100|43804|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA2.i/062905v2.b/2q338.d

Date : 29-JUN-2005 22:55

Client ID: GU05050GMC690

Instrument: VOA2.i

Sample Info: |13885100|438041|1|VOAF|1|

Purge Volume: 5.0

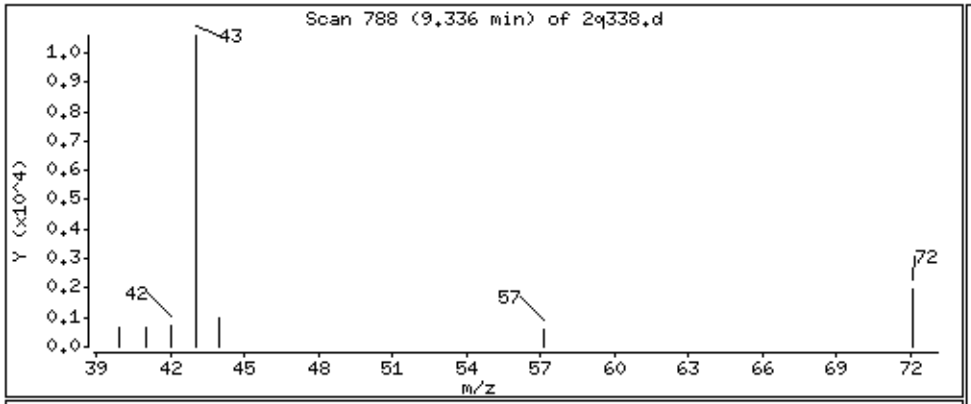
Operator: CDS1

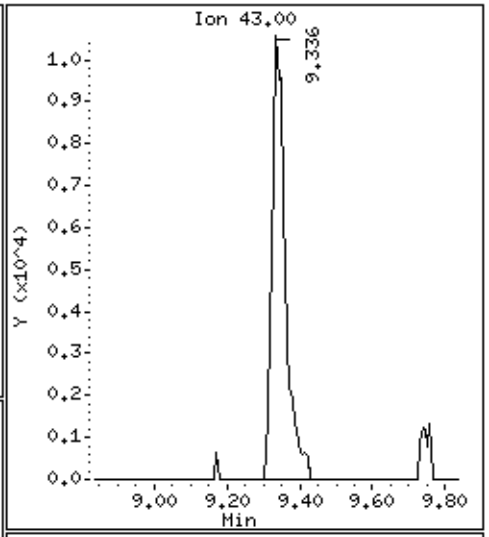
Column phase: DB-624

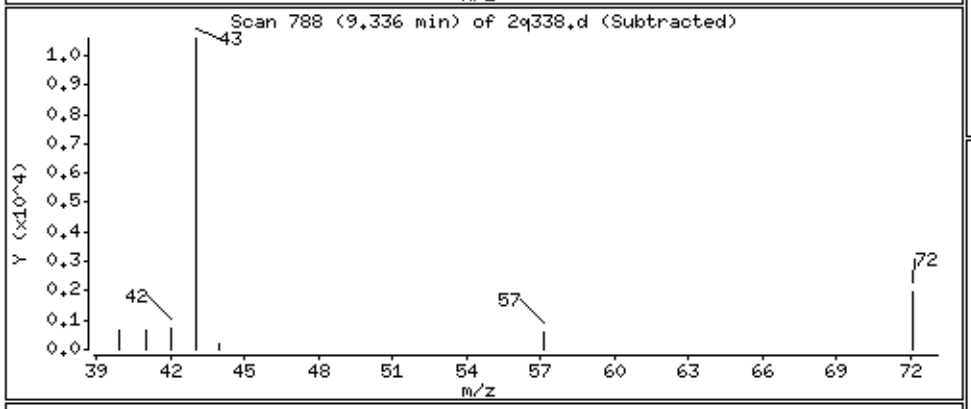
Column diameter: 0.25

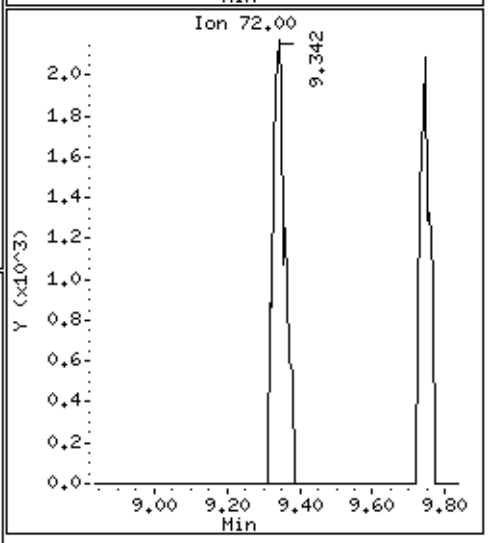
30 2-Butanone

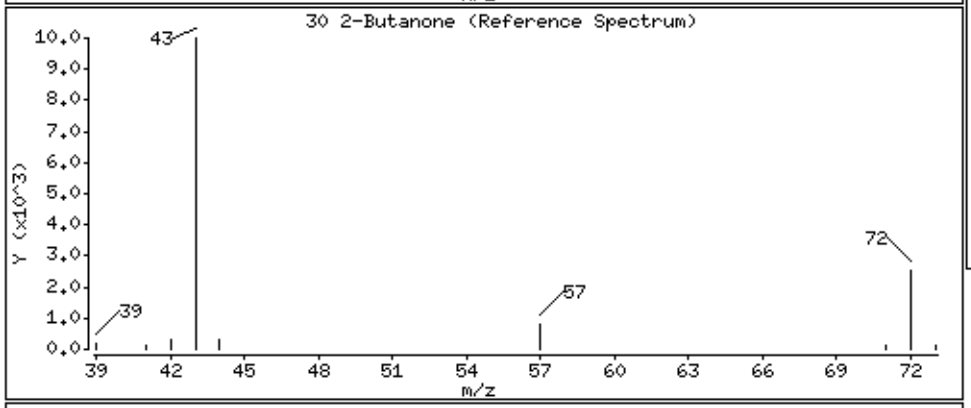
Concentration: 4.1 ug/l

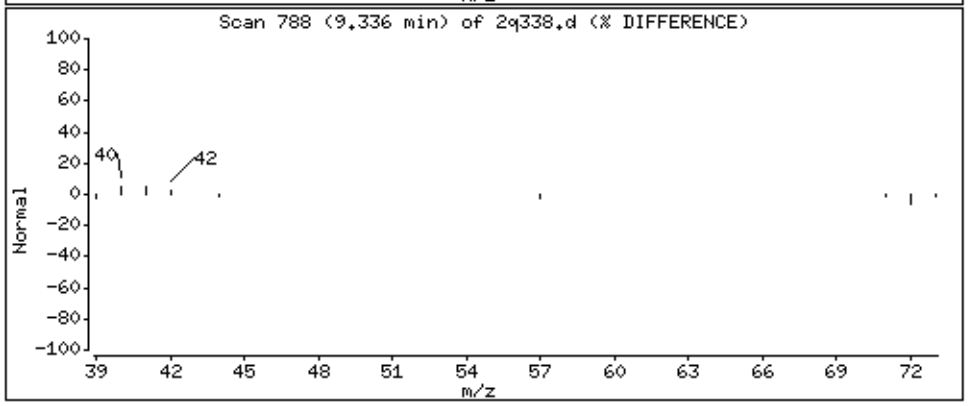












Data File: /chem/VOA2.i/062905v2.b/2q338.d

Date : 29-JUN-2005 22:55

Client ID: GU05050GMC690

Instrument: VOA2.i

Sample Info: |138851004|438041|1|VOAF|1|

Purge Volume: 5.0

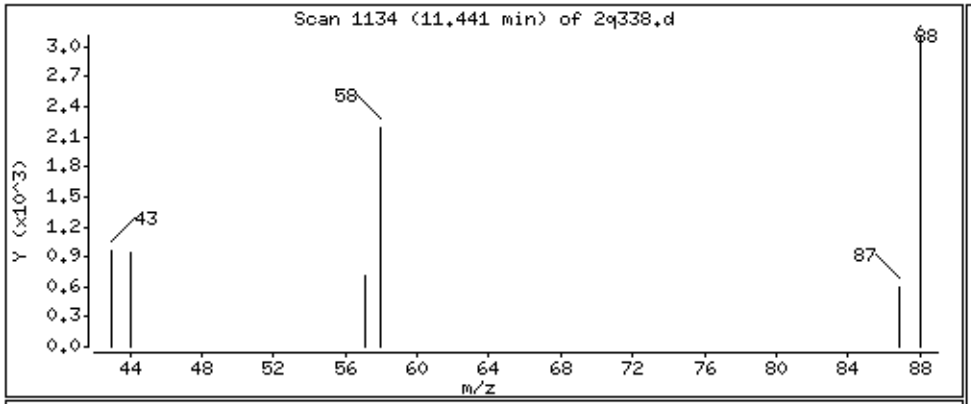
Operator: CDS1

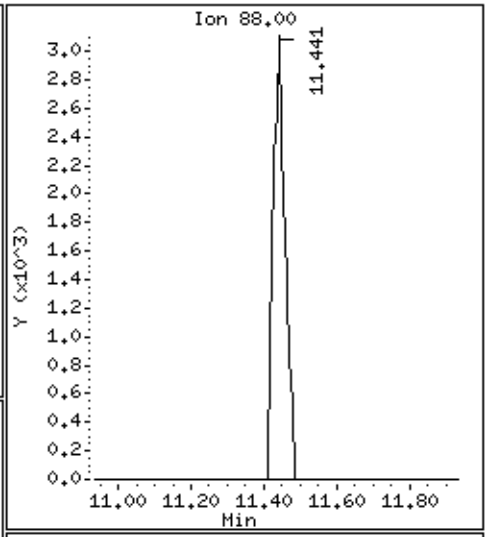
Column phase: DB-624

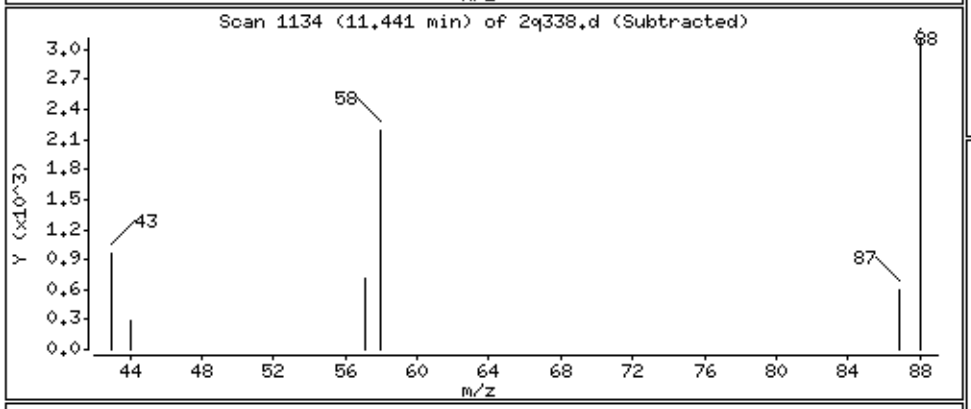
Column diameter: 0.25

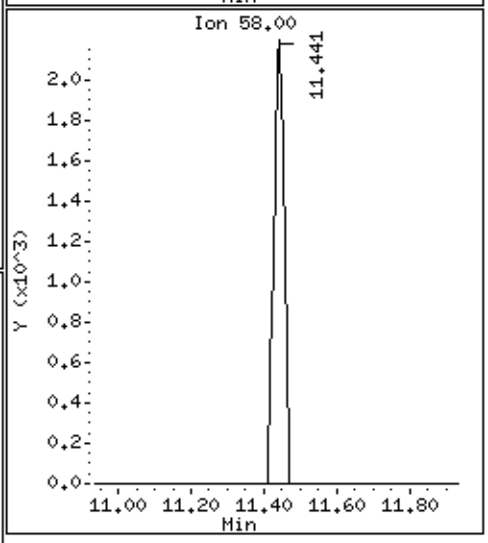
97 1,4-Dioxane

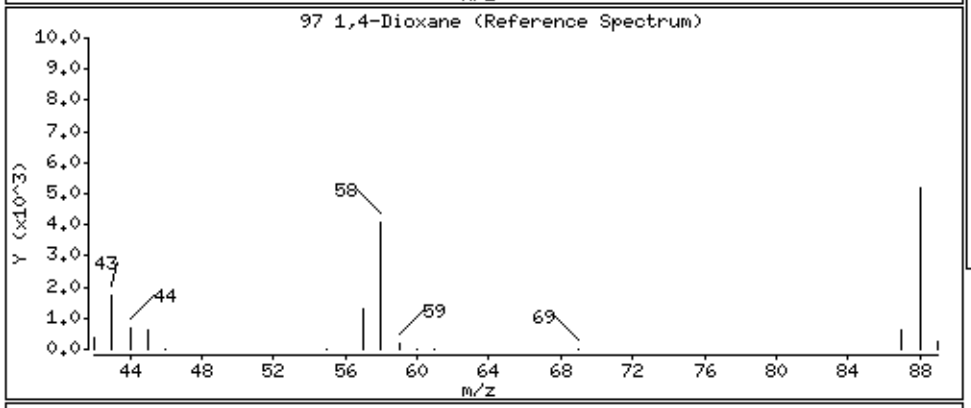
Concentration: 56.4 ug/l

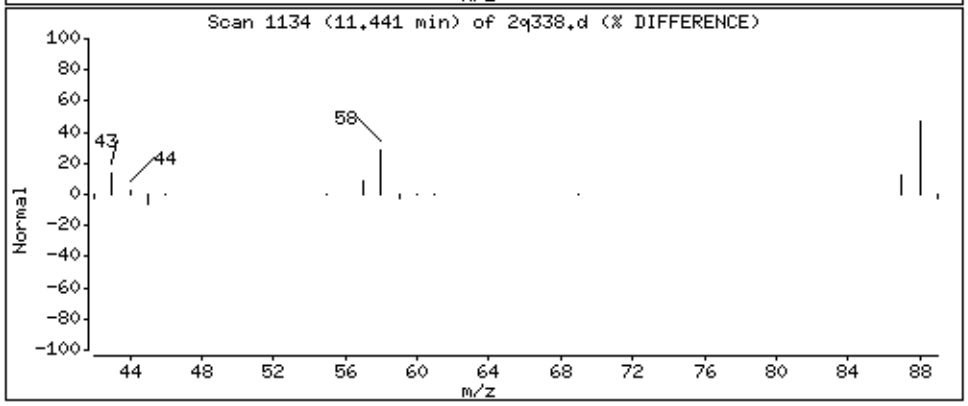












Data File: /chem/VOA2.i/062905v2.b/2q338.d

Date : 29-JUN-2005 22:55

Client ID: GU05050GMC690

Instrument: VOA2.i

Sample Info: |1388510041438041|1|VOAF|1|

Purge Volume: 5.0

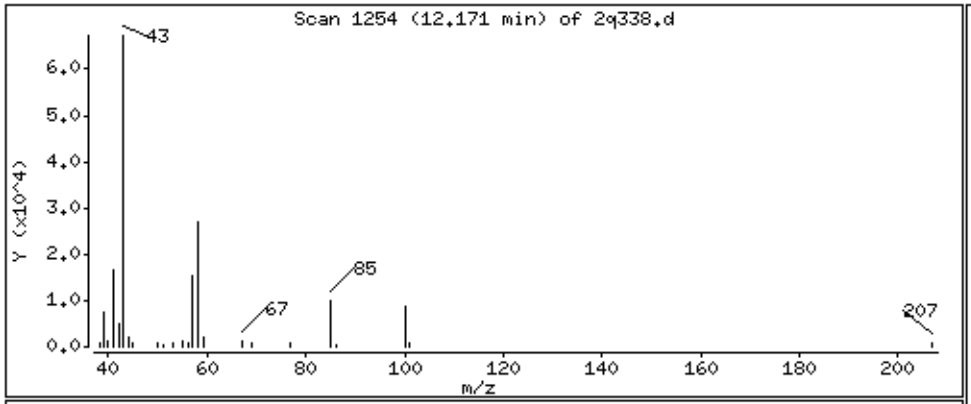
Operator: CDS1

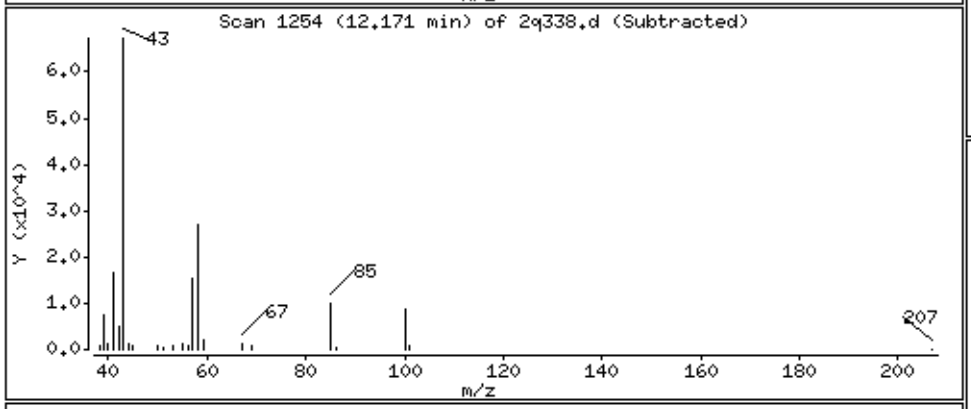
Column phase: DB-624

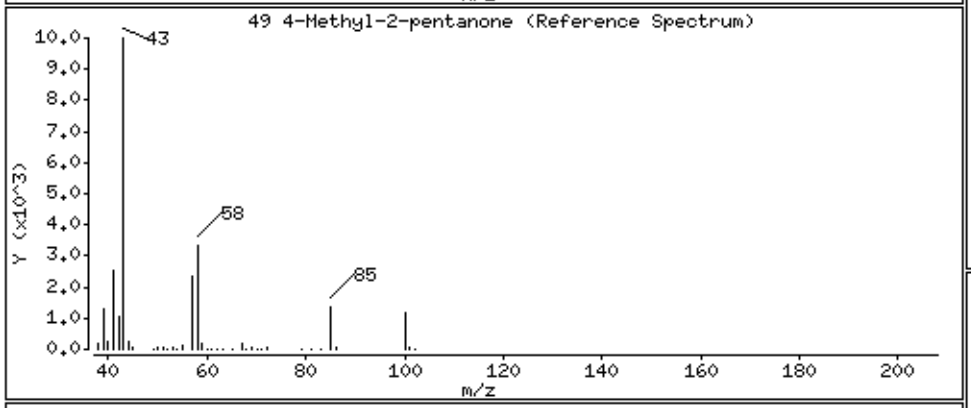
Column diameter: 0.25

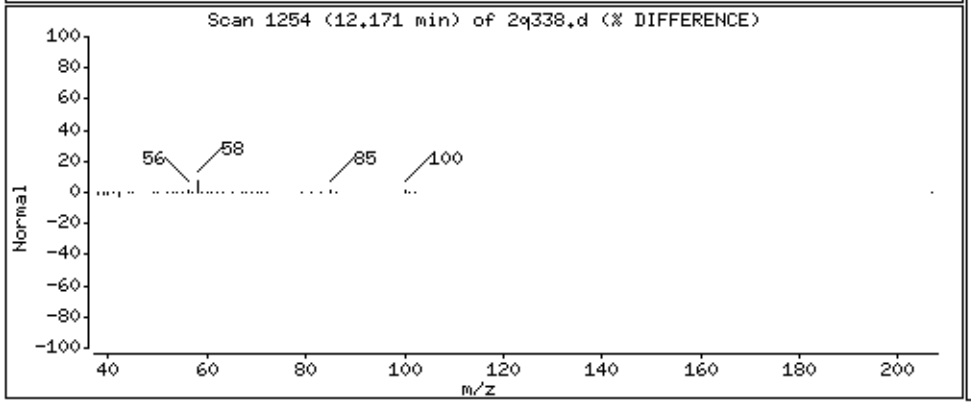
49 4-Methyl-2-pentanone

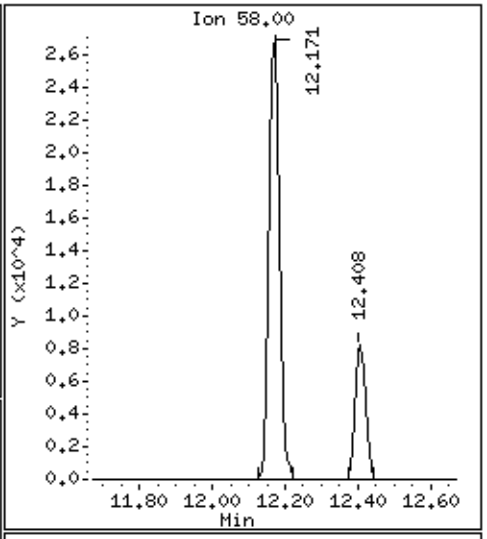
Concentration: 10.6 ug/l

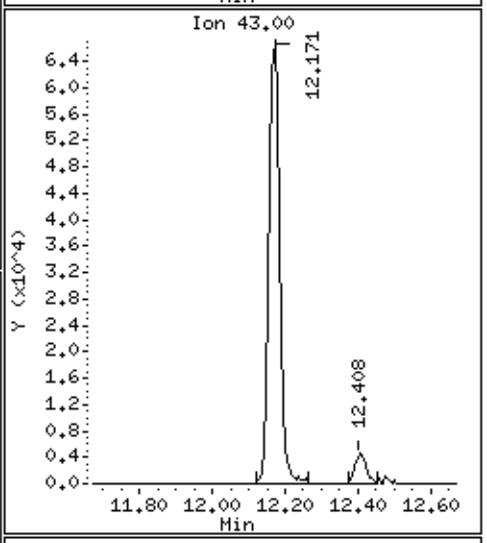


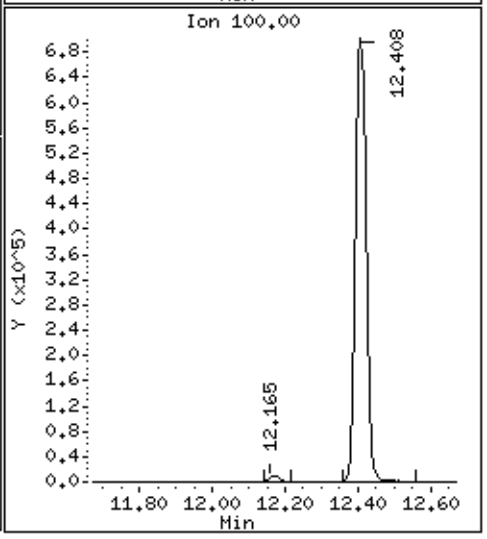












Data File: /chem/VOA2.i/062905v2.b/2q338.d

Date : 29-JUN-2005 22:55

Client ID: GU05050GMC690

Instrument: VOA2.i

Sample Info: |138851004|438041|1|VOAF|1|

Purge Volume: 5.0

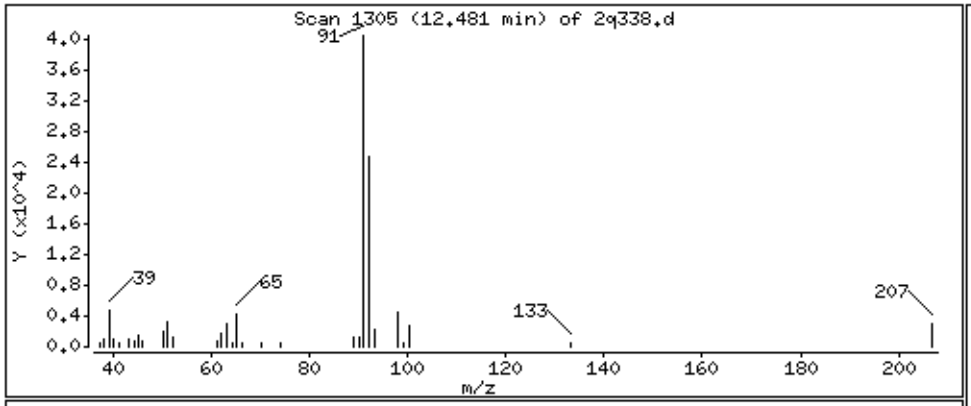
Operator: CDS1

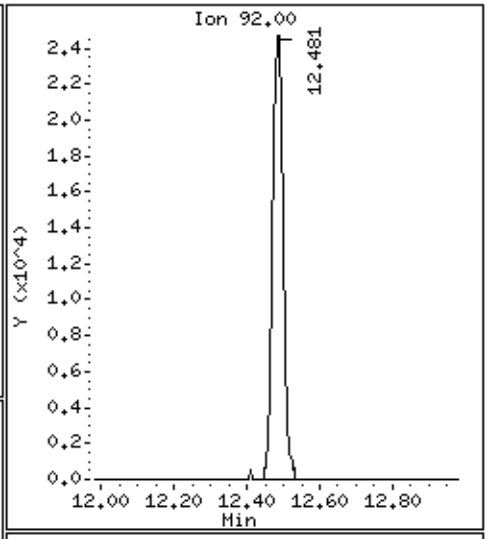
Column phase: DB-624

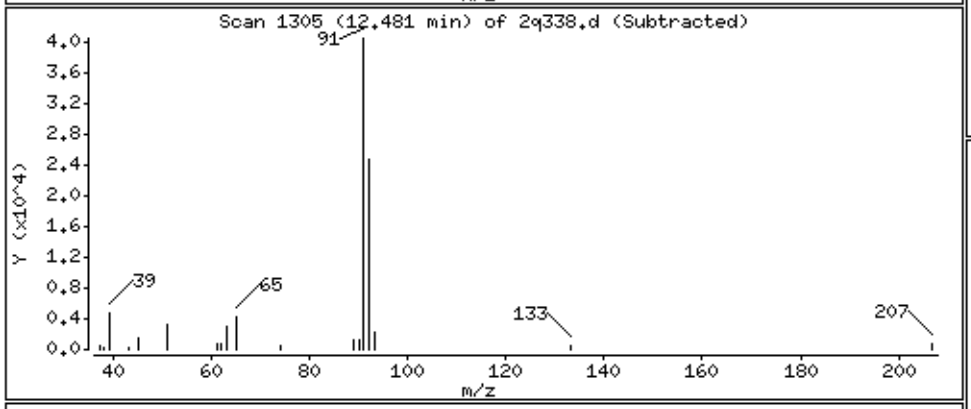
Column diameter: 0.25

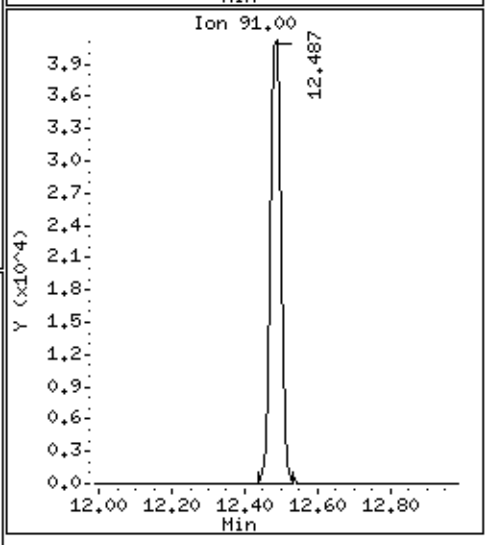
50 Toluene

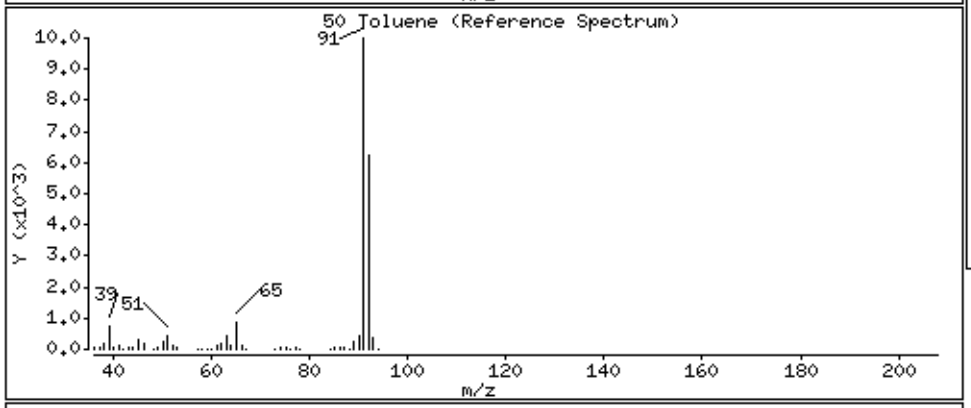
Concentration: 1.7 ug/l

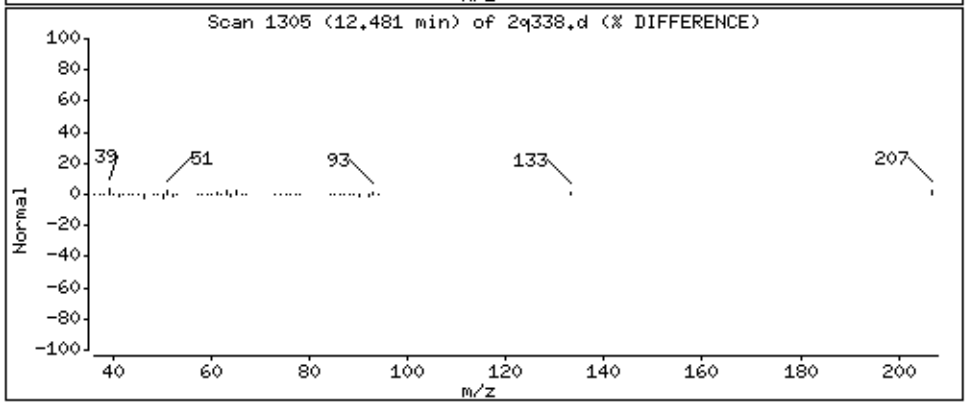












STANDARDS DATA

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
Dibromofluoromethane (surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropane		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Report Date: 22-Jun-2005 07:32

Calibration History

Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Start Cal Date: 21-JUN-2005 18:08
End Cal Date : 22-JUN-2005 01:37

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
21-JUN-2005 22:58	ICALsubS	/chem/VOA2.i/062105v2.b/2p215.d
21-JUN-2005 18:08	CALsubL+	/chem/VOA2.i/062105v2.b/2p204.d
Cal Level: 2 , Cal Amount: 2.00000		
21-JUN-2005 23:25	ICALsubS	/chem/VOA2.i/062105v2.b/2p216.d
21-JUN-2005 18:34	CALsubL+	/chem/VOA2.i/062105v2.b/2p205.d
Cal Level: 3 , Cal Amount: 5.00000		
21-JUN-2005 23:51	ICALsubS	/chem/VOA2.i/062105v2.b/2p217.d
21-JUN-2005 19:01	CALsubL+	/chem/VOA2.i/062105v2.b/2p206.d
Cal Level: 4 , Cal Amount: 10.00000		
22-JUN-2005 00:17	ICALsubS	/chem/VOA2.i/062105v2.b/2p218.d
21-JUN-2005 19:27	CALsubL+	/chem/VOA2.i/062105v2.b/2p207.d
Cal Level: 5 , Cal Amount: 20.00000		
22-JUN-2005 00:44	ICALsubS	/chem/VOA2.i/062105v2.b/2p219.d
21-JUN-2005 19:54	CALsubL+	/chem/VOA2.i/062105v2.b/2p208.d
Cal Level: 6 , Cal Amount: 50.00000		
22-JUN-2005 01:10	ICALsubS	/chem/VOA2.i/062105v2.b/2p220.d
21-JUN-2005 20:20	CALsubL+	/chem/VOA2.i/062105v2.b/2p209.d
Cal Level: 7 , Cal Amount: 100.00000		
22-JUN-2005 01:37	ICALsubS	/chem/VOA2.i/062105v2.b/2p221.d
21-JUN-2005 20:46	CALsubL+	/chem/VOA2.i/062105v2.b/2p210.d
Cal Level: 8 , Cal Amount: 200.00000		
21-JUN-2005 21:39	BENZENE+	/chem/VOA2.i/062105v2.b/2p212.d

```
+------------------+-----------------+-----------------------------------------+
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Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

```
+------------------+-----------------+-----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 50.0                                            |
+==============================================================================+
|21-JUN-2005 20:20 |CALsubL+         |/chem/VOA2.i/062105v2.b/2p209.d          |
+------------------+-----------------+-----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 50.0                                            |
+==============================================================================+
|22-JUN-2005 01:10 |ICALsubS         |/chem/VOA2.i/062105v2.b/2p220.d          |
+------------------+-----------------+-----------------------------------------+
| Ccal Level: 6 , Ccal Amount: 50.0                                            |
+==============================================================================+
|21-JUN-2005 22:05 |CALsubL+         |/chem/VOA2.i/062105v2.b/2p213.d          |
+------------------+-----------------+-----------------------------------------+
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General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 18:08
End Cal Date : 22-JUN-2005 01:37
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Cal Date : 22-Jun-2005 07:31 cry00643

Calibration File Names:
Level 1: /chem/VOA2.i/062105v2.b/2p215.d
Level 2: /chem/VOA2.i/062105v2.b/2p216.d
Level 3: /chem/VOA2.i/062105v2.b/2p217.d
Level 4: /chem/VOA2.i/062105v2.b/2p218.d
Level 5: /chem/VOA2.i/062105v2.b/2p219.d
Level 6: /chem/VOA2.i/062105v2.b/2p220.d
Level 7: /chem/VOA2.i/062105v2.b/2p221.d
Level 8: /chem/VOA2.i/062105v2.b/2p212.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	54639	125552	229541	416672	969520	2399672					
	4220736	+++++					LINR	-0.06591	0.59817		0.99713
M 2 1,2-Dichloroethylene (total)	0.44506	0.55459	0.40892	0.37138	0.45323	0.44931					
	0.42958	+++++					AVRG		0.44458		12.67542
M 135 1,3-Dichloropropylene	0.38192	0.47354	0.35582	0.33571	0.40444	0.41468					
	0.38774	+++++					AVRG		0.39341		11.32055
3 Dichlorodifluoromethane	0.40317	0.39073	0.36970	0.36143	0.36576	0.37365					
	0.34500	+++++					AVRG		0.37278		5.14425
4 Chloromethane	0.37499	0.33563	0.32374	0.31387	0.31387	0.32124					
	0.29409	+++++					AVRG		0.32535		7.76781

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 18:08
End Cal Date : 22-JUN-2005 01:37
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Cal Date : 22-Jun-2005 07:31 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
5 Vinyl chloride	0.31073	0.26485	0.26223	0.27323	0.27623	0.27852					
	0.25676	+++++					AVRG		0.27466		6.46845
6 Bromomethane	0.27178	0.26251	0.26787	0.27643	0.27707	0.29049					
	0.26050	+++++					AVRG		0.27238		3.74889
7 Chloroethane	0.22637	0.19729	0.20935	0.21517	0.21756	0.22385					
	0.20517	+++++					AVRG		0.21354		4.84330
8 Trichlorofluoromethane	0.41392	0.39824	0.42869	0.43113	0.44354	0.45001					
	0.41952	+++++					AVRG		0.42644		4.14420
134 Ethyl Ether	0.27513	0.26466	0.25761	0.28270	0.27334	0.27885					
	0.24903	+++++					AVRG		0.26876		4.52659
9 Acrolein	0.04876	0.04399	0.04485	0.04790	0.05123	0.05220					
	0.05536	+++++					AVRG		0.04918		8.25791
12 Trichlorotrifluoroethane	0.11234	0.10082	0.09828	0.10063	0.10468	0.09398					
	0.08508	+++++					AVRG		0.09940		8.56088
10 Acetone	25071	50398	85739	156075	327462	848596					
	1516642	+++++					LINR	-0.13961	0.08302		0.99738
11 1,1-Dichloroethylene	0.48639	0.57731	0.40627	0.38194	0.46722	0.46445					
	0.45611	+++++					AVRG		0.46281		13.51352

General Engineering Laboratories, LLC

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Integrator : HP RTE
Method file : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Cal Date : 22-Jun-2005 07:31 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
13 Iodomethane	0.48780	0.57628	0.42340	0.38431	0.45968	0.43764					
	0.40510	+++++					AVRG		0.45346		14.11379
15 Acetonitrile	35235	93221	164049	331732	683385	1742859					
	3035846	+++++					LINR	-0.74148	0.03347		0.99557
128 Methyl acetate	0.24660	0.29309	0.21987	0.21553	0.22717	0.22022					
	0.18997	+++++					AVRG		0.23035		14.03739
14 Carbon disulfide	174840	395828	720337	1319057	3084643	7517292					
	13753592	+++++					LINR	-0.10400	0.75326		0.99780
16 Allyl chloride	0.17839	0.14235	0.13580	0.13439	0.14097	0.12632					
	+++++	+++++					AVRG		0.14304		12.74481
17 Methylene chloride	37760	53756	73297	117325	226456	539512					
	1013495	+++++					LINR	-0.06117	0.26880		0.99957
18 Acrylonitrile	0.10715	0.09214	0.09918	0.09681	0.09927	0.09470					
	0.09263	+++++					AVRG		0.09741		5.29944
20 tert-Butyl methyl ether	0.80081	1.01421	0.75566	0.70318	0.81869	0.82432					
	0.76675	+++++					AVRG		0.81195		12.13761
21 trans-1,2-Dichloroethylene	0.42571	0.52340	0.38946	0.35702	0.43855	0.43342					
	0.41519	+++++					AVRG		0.42611		12.08427

General Engineering Laboratories, LLC

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Method file : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Cal Date : 22-Jun-2005 07:31 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
23 Vinyl acetate	0.37052	0.34792	0.37838	0.40588	0.41660	0.44676					
	0.40390	+++++					AVRG		0.39571		8.27364
22 1,1-Dichloroethane	0.55425	0.62991	0.48432	0.43521	0.52959	0.52602					
	0.51133	+++++					AVRG		0.52438		11.49143
24 2-Chloro-1,3-butadiene	0.43792	0.38172	0.42148	0.41616	0.43866	0.40702					
	0.38748	+++++					AVRG		0.41292		5.43912
26 Ethyl acetate	0.32976	0.27448	0.28777	0.27875	0.28571	0.26333					
	0.24678	+++++					AVRG		0.28094		9.16284
30 2-Butanone	0.16184	0.18551	0.14080	0.13357	0.14245	0.14570					
	0.12838	+++++					AVRG		0.14832		13.14011
31 cis-1,2-Dichloroethylene	0.46441	0.58578	0.42839	0.38574	0.46792	0.46519					
	0.44397	+++++					AVRG		0.46306		13.26429
28 Propionitrile	0.04176	0.03603	0.04035	0.03976	0.04189	0.03957					
	0.03947	+++++					AVRG		0.03983		4.90762
25 2,2-Dichloropropane	0.39569	0.43883	0.32828	0.30145	0.38354	0.38638					
	0.37552	+++++					AVRG		0.37281		12.12705
27 Methacrylonitrile	0.21234	0.18361	0.18285	0.18125	0.18342	0.16864					
	0.15873	+++++					AVRG		0.18155		9.12001

General Engineering Laboratories, LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	200 Level 8									
29 Bromochloromethane	0.13840	0.16169	0.11922	0.11414	0.13806	0.13547					
	0.12901	+++++					AVRG		0.13372		11.59326
32 Chloroform	0.49421	0.59840	0.43582	0.40271	0.48931	0.48978					
	0.46298	+++++					AVRG		0.48189		12.73388
72 Tetrahydrofuran	40973	51703	101136	183413	334620	756547					
	+++++	+++++					LINR	-0.21028	0.23128		0.99896
36 1,1,1-Trichloroethane	0.44520	0.50863	0.38070	0.35943	0.44458	0.44628					
	0.42672	+++++					AVRG		0.43022		11.35227
19 Isobutyl alcohol	0.01347	0.01036	0.01106	0.01076	0.01078	0.01017					
	0.00961	+++++					AVRG		0.01089		11.33851
34 1,1-Dichloropropene	0.37550	0.45169	0.32076	0.30266	0.36766	0.35977					
	0.34111	+++++					AVRG		0.35988		13.36980
129 Cyclohexane	0.60240	0.66992	0.50486	0.46797	0.56159	0.55408					
	0.52336	+++++					AVRG		0.55489		11.99674
33 Carbon tetrachloride	0.36787	0.43979	0.32686	0.30392	0.37628	0.38142					
	0.36981	+++++					AVRG		0.36657		11.78135
37 1,2-Dichloroethane	0.40856	0.51713	0.37931	0.34056	0.41036	0.41519					
	0.39127	+++++					AVRG		0.40891		13.24976

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Cal Date : 22-Jun-2005 07:31 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
38 Benzene	54192	105682	184127	330424	751540	1878549					
	3443616	+++++					LINR	-0.02168	0.94104		0.99818
131 n-Butyl alcohol	35290	88781	164190	347176	720571	1865915					
	3212417	25696					LINR	-2.22706	0.00892		0.99492
39 Trichloroethylene	0.32132	0.37023	0.27120	0.24276	0.29146	0.28709					
	0.26980	+++++					AVRG		0.29341		14.14925
42 Methyl methacrylate	0.19325	0.16586	0.17735	0.17155	0.17604	0.16180					
	0.14814	+++++					AVRG		0.17057		8.26885
41 1,2-Dichloropropane	0.29535	0.35347	0.26176	0.23893	0.29205	0.28029					
	0.25569	+++++					AVRG		0.28251		13.20162
130 Methylcyclohexane	20607	46709	81151	158589	378658	929972					
	1682170	+++++					LINR	-0.01825	0.46267		0.99713
97 1,4-Dioxane	0.00270	0.00283	0.00297	0.00297	0.00296	0.00287					
	0.00280	+++++					AVRG		0.00287		3.62301
43 Dibromomethane	0.15069	0.20479	0.15605	0.14183	0.16833	0.16836					
	0.15744	+++++					AVRG		0.16393		12.39167
45 Bromodichloromethane	0.37105	0.44295	0.33111	0.30680	0.37243	0.37780					
	0.36316	+++++					AVRG		0.36647		11.60655

General Engineering Laboratories, LLC

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Method file : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Cal Date : 22-Jun-2005 07:31 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
48 2-Nitropropane	9673	18029	49738	109377	250552	701746					
	1522732	+++++					LINR	0.18238	0.08278		0.99900
44 2-Chloroethylvinyl ether	0.08228	0.08521	0.08836	0.09559	0.09472	0.09711					
	0.08604	+++++					AVRG		0.08990		6.50110
46 cis-1,3-Dichloropropylene	0.39415	0.49152	0.37050	0.35025	0.42774	0.43175					
	0.40360	+++++					AVRG		0.40993		11.29130
49 4-Methyl-2-pentanone	0.17096	0.22360	0.17204	0.16035	0.17502	0.17387					
	0.15525	+++++					AVRG		0.17587		12.68833
50 Toluene	1.10433	1.30385	0.95110	0.85435	1.00298	0.99688					
	0.93858	+++++					AVRG		1.02173		14.25651
51 Ethyl methacrylate	0.55186	0.47401	0.51245	0.49435	0.51292	0.44562					
	0.39240	+++++					AVRG		0.48337		10.78908
53 trans-1,3-Dichloropropylene	0.55489	0.68283	0.51777	0.48499	0.57547	0.60152					
	0.57566	+++++					AVRG		0.57045		11.07958
54 1,1,2-Trichloroethane	0.29205	0.33048	0.26455	0.24177	0.28259	0.27622					
	0.26571	+++++					AVRG		0.27906		9.93761
55 2-Hexanone	0.31248	0.37739	0.29043	0.28089	0.30224	0.29860					
	0.26220	+++++					AVRG		0.30346		11.99726

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Cal Date : 22-Jun-2005 07:31 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
52 1,3-Dichloropropane	0.56642	0.68762	0.52427	0.48119	0.54762	0.54215					
	0.50061	+++++					AVRG		0.54998		12.22299
56 Tetrachloroethylene	8876	20137	33895	63832	152045	387284					
	700582	+++++					LINR	-0.01033	0.29760		0.99834
57 Dibromochloromethane	0.34563	0.44093	0.34622	0.32483	0.39253	0.40898					
	0.39945	+++++					AVRG		0.37980		10.98910
59 1,2-Dibromoethane	0.34529	0.41837	0.31458	0.28567	0.34340	0.34877					
	0.32760	+++++					AVRG		0.34053		11.99353
62 Chlorobenzene	1.16666	1.33025	0.97367	0.85653	1.03976	1.02431					
	0.96183	+++++					AVRG		1.05043		14.74558
58 Ethylbenzene	50034	112925	203941	373851	893432	2205462					
	3874328	+++++					LINR	-0.02030	1.64965		0.99692
60 1,1,1,2-Tetrachloroethane	0.35904	0.46964	0.34647	0.31868	0.38812	0.38502					
	0.36630	+++++					AVRG		0.37619		12.62514
63 m,p-Xylenes	35838	84277	153285	280355	648321	1602990					
	2814803	+++++					LINR	-0.04523	0.59843		0.99705
64 o-Xylene	18800	41275	76256	136317	321199	796682					
	1405933	+++++					LINR	-0.02068	0.59764		0.99728

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	29139	71428	125707	230200	543321	1349562					
	2344018	+++++					LINR	-0.02263	0.99945		0.99635
66 Bromoform	0.40267	0.51497	0.41358	0.39354	0.47327	0.51359					
	0.50225	+++++					AVRG		0.45913		11.83091
67 Isopropylbenzene	3.53558	3.97321	3.00087	2.70637	3.26564	3.19029					
	2.93816	+++++					AVRG		3.23003		13.01579
68 cis-1,4-Dichloro-2-butene	0.26782	0.25065	0.27165	0.27667	0.29670	0.28231					
	0.27513	+++++					AVRG		0.27442		5.11128
70 Cyclohexanone	0.02263	0.01933	0.02112	0.02165	0.02805	+++++					
	+++++	+++++					AVRG		0.02256		14.61502
73 1,1,2,2-Tetrachloroethane	0.72244	0.84431	0.67482	0.66299	0.72123	0.78215					
	0.73816	+++++					AVRG		0.73517		8.48278
69 trans-1,4-Dichloro-2-butene	0.18895	0.17342	0.19557	0.19223	0.21002	0.19923					
	0.19652	+++++					AVRG		0.19370		5.75024
74 1,2,3-Trichloropropane	0.24947	0.29707	0.23312	0.21301	0.23893	0.25008					
	0.23300	+++++					AVRG		0.24496		10.67438
75 Bromobenzene	12151	28435	49781	93321	214154	532861					
	950456	+++++					LINR	-0.01751	0.76830		0.99784

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
76 n-Propylbenzene	59371	138098	243246	449223	1059211	2590439					
	4496145	+++++					LINR	-0.02377	3.64872		0.99619
78 1,3,5-Trimethylbenzene	3.23248	3.63214	2.71987	2.44892	2.89663	2.80048					
	2.51999	+++++					AVRG		2.89293		14.36703
77 2-Chlorotoluene	40213	92673	159921	309179	707395	1738683					
	3075823	+++++					LINR	-0.02032	2.48841		0.99738
80 4-Chlorotoluene	3.00312	3.26353	2.46581	2.21988	2.63115	2.58326					
	2.40705	+++++					AVRG		2.65341		13.62177
81 tert-Butylbenzene	3.21516	3.69405	2.66044	2.45067	2.98435	2.90874					
	2.66938	+++++					AVRG		2.94040		14.14607
79 1,2,4-Trimethylbenzene	3.34166	3.57951	2.73102	2.51196	2.95985	2.89745					
	2.65376	+++++					AVRG		2.95361		12.96668
82 Pentachloroethane	0.47706	0.45281	0.48703	0.50308	0.53225	0.48089					
	0.41724	+++++					AVRG		0.47862		7.62247
83 sec-Butylbenzene	4.26636	4.76039	3.44255	3.17363	3.91282	3.77296					
	3.35431	+++++					AVRG		3.81186		14.64986
84 4-Isopropyltoluene	3.54993	3.93833	2.90733	2.63882	3.20550	3.14563					
	2.84047	+++++					AVRG		3.17515		14.06215

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	23076	53861	93865	174438	403508	1018957					
	1831387	+++++					LINR	-0.01360	1.48044		0.99817
87 1,4-Dichlorobenzene	1.88788	2.01203	1.54132	1.36492	1.61110	1.58735					
	1.47471	+++++					AVRG		1.63990		13.99847
88 Benzyl chloride	1.17428	1.09311	1.30193	1.33475	1.45519	1.30993					
	1.15642	+++++					AVRG		1.26080		9.92027
89 n-Butylbenzene	3.45549	3.83649	2.78265	2.55227	3.11063	3.05162					
	2.75305	+++++					AVRG		3.07746		14.46381
90 1,2-Dichlorobenzene	1.62165	1.96025	1.41675	1.30880	1.52543	1.51387					
	1.39613	+++++					AVRG		1.53470		13.90716
91 bis(2-Chloroisopropyl)ether	0.59810	0.49702	0.54016	0.54484	0.54137	0.50882					
	0.48533	+++++					AVRG		0.53081		7.13972
92 1,2-Dibromo-3-chloropropane	0.18542	0.16061	0.13784	0.12772	0.14491	0.16932					
	0.16725	+++++					AVRG		0.15616		12.92679
93 1,2,4-Trichlorobenzene	1.15477	1.29535	0.95238	0.86668	1.04421	1.07565					
	1.00109	+++++					AVRG		1.05573		13.23622
94 Hexachlorobutadiene	0.78994	0.85294	0.66325	0.59457	0.77574	0.78468					
	0.72556	+++++					AVRG		0.74096		11.78742

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 18:08
End Cal Date : 22-JUN-2005 01:37
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Cal Date : 22-Jun-2005 07:31 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	2.86821	3.12031	2.36238	2.25926	2.61289	2.67603					
	2.52228	+++++					AVRG		2.63162		11.18910
96 1,2,3-Trichlorobenzene	1.03941	1.21829	0.92508	0.85481	1.04065	1.05209					
	0.98351	+++++					AVRG		1.01627		11.26841
$ 35 Dibromofluoromethane	+++++	+++++	0.29033	0.24018	0.27598	0.27093					
	0.25831	+++++					AVRG		0.26715		7.08897
$ 47 Toluene-d8	+++++	+++++	1.61082	1.32389	1.50557	1.43765					
	+++++	+++++					AVRG		1.46948		8.19334
$ 71 Bromofluorobenzene	+++++	+++++	1.33537	1.06228	1.19315	1.14718					
	1.09205	+++++					AVRG		1.16601		9.19745

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 18:08
End Cal Date : 22-JUN-2005 01:37
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Cal Date : 22-Jun-2005 07:31 cry00643

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p204.d
Lab Smp Id: W2V050621-01 Client Smp ID: VSTD001
Inj Date : 21-JUN-2005 18:08
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-01|ICAL|1|VOAF|1|
Misc Info : VSTD001
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:32 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				54639	3.00000	0.53(a)
M 2 1,2-Dichloroethylene (total)	96				31874	2.00000	2.0
M 135 1,3-Dichloropropylene	75				27352	2.00000	1.9(a)
3 Dichlorodifluoromethane	85	4.916	4.916	(0.460)	14437	1.00000	1.1
4 Chloromethane	50	5.243	5.243	(0.490)	13428	1.00000	1.2
5 Vinyl chloride	62	5.472	5.472	(0.512)	11127	1.00000	1.1
6 Bromomethane	94	6.032	6.032	(0.564)	9732	1.00000	1.00
7 Chloroethane	64	6.190	6.190	(0.579)	8106	1.00000	1.1
8 Trichlorofluoromethane	101	6.634	6.634	(0.620)	14822	1.00000	0.97(a)
134 Ethyl Ether	59	6.914	6.914	(0.647)	9852	1.00000	1.0
11 1,1-Dichloroethylene	61	7.340	7.340	(0.686)	17417	1.00000	1.0
128 Methyl acetate	43	7.692	7.692	(0.719)	44152	5.00000	5.4
13 Iodomethane	142	7.577	7.577	(0.709)	87338	5.00000	5.4
20 tert-Butyl methyl ether	73	8.191	8.191	(0.766)	28676	1.00000	0.99(a)
21 trans-1,2-Dichloroethylene	61	8.240	8.240	(0.771)	15244	1.00000	1.00
23 Vinyl acetate	43	8.690	8.690	(0.813)	66340	5.00000	4.7(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
22	1,1-Dichloroethane	63	8.739	8.739	(0.817)	19847	1.00000	1.0
30	2-Butanone	43	9.341	9.341	(0.874)	28977	5.00000	5.4
31	cis-1,2-Dichloroethylene	61	9.402	9.402	(0.879)	16630	1.00000	1.0
25	2,2-Dichloropropane	77	9.432	9.432	(0.882)	14169	1.00000	1.1
32	Chloroform	83	9.724	9.724	(0.910)	17697	1.00000	1.0
29	Bromochloromethane	128	9.688	9.688	(0.906)	4956	1.00000	1.0
$ 35	Dibromofluoromethane	113	9.913	9.913	(0.927)	28419	1.00000	3.0
36	1,1,1-Trichloroethane	97	10.010	10.010	(0.936)	15942	1.00000	1.0
129	Cyclohexane	56	10.114	10.114	(0.946)	21571	1.00000	1.1
34	1,1-Dichloropropene	75	10.174	10.174	(0.952)	13446	1.00000	1.0
33	Carbon tetrachloride	117	10.223	10.223	(0.956)	13173	1.00000	1.0
37	1,2-Dichloroethane	62	10.412	10.412	(0.974)	14630	1.00000	1.00
38	Benzene	78	10.430	10.430	(0.976)	54192	1.00000	0.52(a)
* 40	Fluorobenzene	96	10.692	10.692	(1.000)	1790436	50.0000	
39	Trichloroethylene	95	11.099	11.099	(1.038)	11506	1.00000	1.1
41	1,2-Dichloropropane	63	11.355	11.355	(1.062)	10576	1.00000	1.0
45	Bromodichloromethane	83	11.610	11.610	(1.086)	13287	1.00000	1.0
43	Dibromomethane	93	11.495	11.495	(1.075)	5396	1.00000	0.92(a)
44	2-Chloroethylvinyl ether	63	11.841	11.841	(1.108)	14732	5.00000	4.6(a)
49	4-Methyl-2-pentanone	58	12.170	12.170	(0.869)	20392	5.00000	4.9(a)
46	cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	14114	1.00000	0.96(aQ)
$ 47	Toluene-d8	98	12.407	12.407	(0.886)	95958	1.00000	2.7
50	Toluene	92	12.480	12.480	(0.891)	26344	1.00000	1.1
53	trans-1,3-Dichloropropylene	75	12.644	12.644	(0.903)	13237	1.00000	0.97(a)
54	1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	6967	1.00000	1.0
55	2-Hexanone	43	13.058	13.058	(0.933)	37271	5.00000	5.1
52	1,3-Dichloropropane	76	13.076	13.076	(0.934)	13512	1.00000	1.0
56	Tetrachloroethylene	164	13.107	13.107	(0.936)	8876	1.00000	0.73(a)
57	Dibromochloromethane	129	13.356	13.356	(0.954)	8245	1.00000	0.91(a)
59	1,2-Dibromoethane	107	13.526	13.526	(0.966)	8237	1.00000	1.0
* 61	Chlorobenzene-d5	117	14.001	14.001	(1.000)	1192760	50.0000	
62	Chlorobenzene	112	14.037	14.037	(1.003)	27831	1.00000	1.1(Q)
60	1,1,1,2-Tetrachloroethane	131	14.086	14.086	(1.006)	8565	1.00000	0.95(a)
58	Ethylbenzene	91	14.092	14.092	(1.007)	50034	1.00000	0.26(a)
64	o-Xylene	106	14.658	14.658	(1.047)	18800	1.00000	0.28(a)
66	Bromoform	173	14.926	14.926	(0.906)	5023	1.00000	0.88(a)
67	Isopropylbenzene	105	15.023	15.023	(0.912)	44104	1.00000	1.1
73	1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	9012	1.00000	0.98(a)
$ 71	Bromofluorobenzene	95	15.230	15.230	(0.924)	44319	1.00000	3.0
74	1,2,3-Trichloropropane	110	15.400	15.400	(0.935)	3112	1.00000	1.0
75	Bromobenzene	156	15.449	15.449	(0.938)	12151	1.00000	0.39(a)
78	1,3,5-Trimethylbenzene	105	15.613	15.613	(0.948)	40323	1.00000	1.1
80	4-Chlorotoluene	91	15.717	15.717	(0.954)	37462	1.00000	1.1
81	tert-Butylbenzene	119	15.996	15.996	(0.971)	40107	1.00000	1.1
79	1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	41685	1.00000	1.1
83	sec-Butylbenzene	105	16.221	16.221	(0.984)	53220	1.00000	1.1
84	4-Isopropyltoluene	119	16.349	16.349	(0.992)	44283	1.00000	1.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
85	1,3-Dichlorobenzene	146	16.422	16.422	(0.997)	23076	1.00000	0.57(a)
* 86	1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	623717	50.0000	
87	1,4-Dichlorobenzene	146	16.507	16.507	(1.002)	23550	1.00000	1.2
89	n-Butylbenzene	91	16.805	16.805	(1.020)	43105	1.00000	1.1
90	1,2-Dichlorobenzene	146	16.951	16.951	(1.029)	20229	1.00000	1.0
92	1,2-Dibromo-3-chloropropane	75	17.840	17.840	(1.083)	2313	1.00000	1.2(Q)
93	1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	14405	1.00000	1.1(M)
94	Hexachlorobutadiene	225	19.123	19.123	(1.161)	9854	1.00000	1.1
95	Naphthalene	128	19.336	19.336	(1.174)	35779	1.00000	1.1
96	1,2,3-Trichlorobenzene	180	19.695	19.695	(1.195)	12966	1.00000	1.0

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: /chem/VOA2.i/062105v2.b/2p204.d

Date : 21-JUN-2005 18:08

Client ID: VSTD001

Instrument: VOA2.i

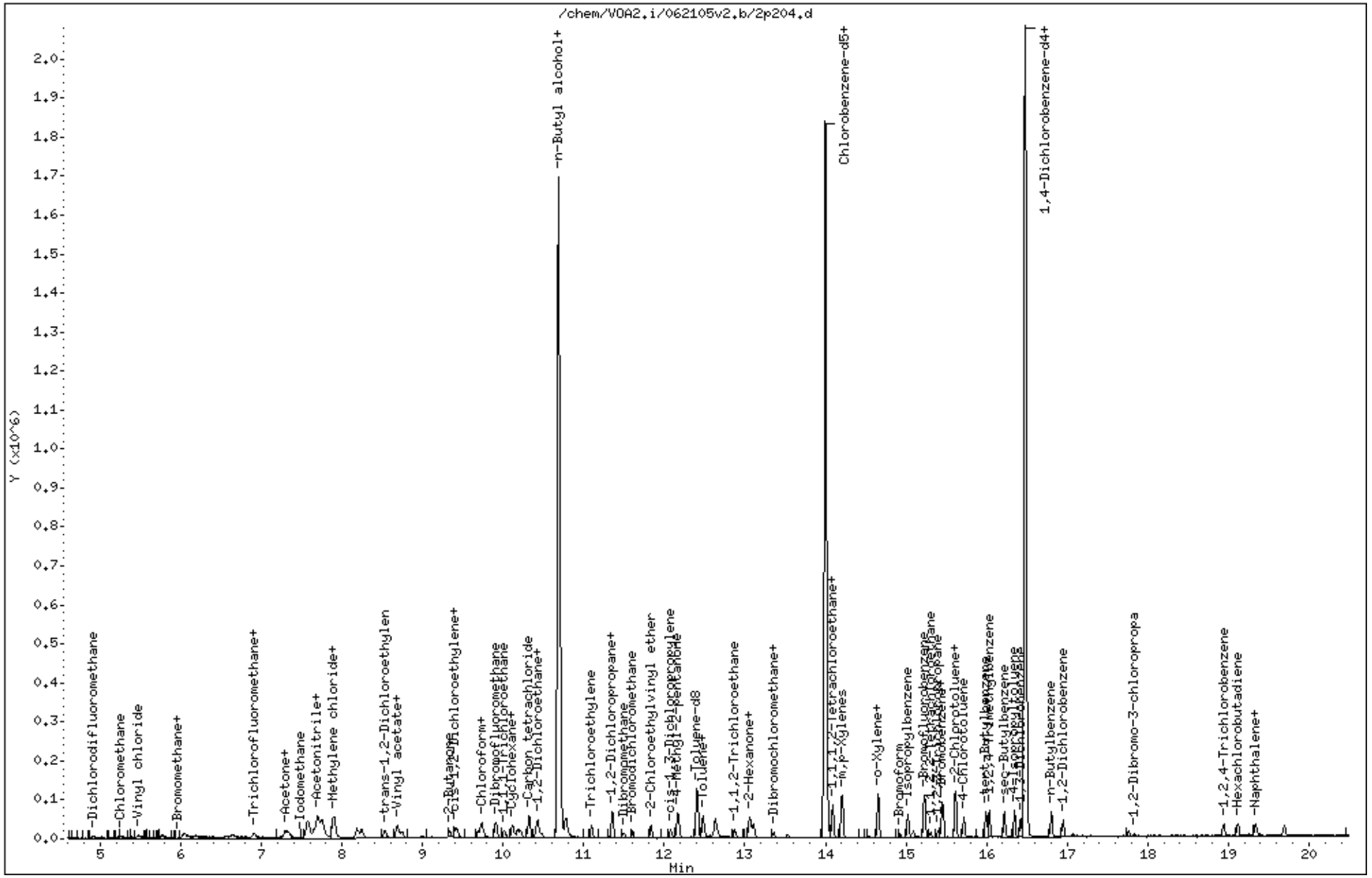
Sample Info: |W2V050621-01|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p205.d
Lab Smp Id: W2V050621-02 Client Smp ID: VSTD002
Inj Date : 21-JUN-2005 18:34
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-02|ICAL|1|VOAF|1|
Misc Info : VSTD002
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 23:25 Cal File: 2p216.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				125552	6.00000	5.5
M 2 1,2-Dichloroethylene (total)	96				79152	4.00000	5.0
M 135 1,3-Dichloropropylene	75				67584	4.00000	4.8
3 Dichlorodifluoromethane	85	4.918	4.918	(0.460)	27883	2.00000	2.1
4 Chloromethane	50	5.216	5.216	(0.488)	23951	2.00000	2.1
5 Vinyl chloride	62	5.480	5.480	(0.513)	18900	2.00000	1.9
6 Bromomethane	94	6.039	6.039	(0.565)	18733	2.00000	1.9
7 Chloroethane	64	6.203	6.203	(0.580)	14079	2.00000	1.8
8 Trichlorofluoromethane	101	6.623	6.623	(0.620)	28419	2.00000	1.9
134 Ethyl Ether	59	6.915	6.915	(0.647)	18886	2.00000	2.0
10 Acetone	43	7.292	7.292	(0.682)	50398	10.0000	10.0
15 Acetonitrile	41	7.657	7.657	(0.716)	93221	50.0000	41.0
11 1,1-Dichloroethylene	61	7.335	7.335	(0.686)	41197	2.00000	2.5
128 Methyl acetate	43	7.688	7.688	(0.719)	104577	10.0000	12.7
13 Iodomethane	142	7.572	7.572	(0.709)	205619	10.0000	12.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	7.901	7.901	(0.739)	53756	2.00000	2.5(a)
	14 Carbon disulfide	76	7.755	7.755	(0.726)	395828	10.0000	9.5
	20 tert-Butyl methyl ether	73	8.193	8.193	(0.767)	72375	2.00000	2.5
	21 trans-1,2-Dichloroethylene	61	8.247	8.247	(0.772)	37350	2.00000	2.4
	23 Vinyl acetate	43	8.685	8.685	(0.813)	124140	10.0000	8.8
	22 1,1-Dichloroethane	63	8.740	8.740	(0.818)	44951	2.00000	2.4
	30 2-Butanone	43	9.342	9.342	(0.874)	66192	10.0000	12.5
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.880)	41802	2.00000	2.5
	25 2,2-Dichloropropane	77	9.434	9.434	(0.883)	31315	2.00000	2.4
	32 Chloroform	83	9.726	9.726	(0.910)	42702	2.00000	2.5
	29 Bromochloromethane	128	9.689	9.689	(0.907)	11538	2.00000	2.4
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	33817	2.00000	3.5
	36 1,1,1-Trichloroethane	97	10.018	10.018	(0.937)	36296	2.00000	2.4
	129 Cyclohexane	56	10.115	10.115	(0.946)	47806	2.00000	2.4
	34 1,1-Dichloropropene	75	10.182	10.182	(0.953)	32233	2.00000	2.5
	131 n-Butyl alcohol	56	10.778	10.778	(1.009)	88781	200.000	167
	33 Carbon tetrachloride	117	10.218	10.218	(0.956)	31384	2.00000	2.4
	37 1,2-Dichloroethane	62	10.407	10.407	(0.974)	36903	2.00000	2.5
	38 Benzene	78	10.431	10.431	(0.976)	105682	2.00000	2.1
*	40 Fluorobenzene	96	10.687	10.687	(1.000)	1784020	50.0000	
	39 Trichloroethylene	95	11.094	11.094	(1.038)	26420	2.00000	2.5
	41 1,2-Dichloropropane	63	11.350	11.350	(1.062)	25224	2.00000	2.5
	130 Methylcyclohexane	83	11.356	11.356	(1.063)	46709	2.00000	1.9
	45 Bromodichloromethane	83	11.611	11.611	(1.087)	31609	2.00000	2.4
	43 Dibromomethane	93	11.496	11.496	(1.076)	14614	2.00000	2.5
	44 2-Chloroethylvinyl ether	63	11.837	11.837	(1.108)	30405	10.0000	9.5
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	53228	10.0000	12.7
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	35075	2.00000	2.4
$	47 Toluene-d8	98	12.408	12.408	(0.887)	124574	2.00000	3.6
	50 Toluene	92	12.487	12.487	(0.892)	62075	2.00000	2.6
	53 trans-1,3-Dichloropropylene	75	12.646	12.646	(0.904)	32509	2.00000	2.4
	54 1,1,2-Trichloroethane	83	12.877	12.877	(0.920)	15734	2.00000	2.4
	55 2-Hexanone	43	13.053	13.053	(0.933)	89835	10.0000	12.4
	52 1,3-Dichloropropane	76	13.078	13.078	(0.934)	32737	2.00000	2.5
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	20137	2.00000	2.3
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	20992	2.00000	2.3
	59 1,2-Dibromoethane	107	13.534	13.534	(0.967)	19918	2.00000	2.4
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1190224	50.0000	
	62 Chlorobenzene	112	14.033	14.033	(1.003)	63332	2.00000	2.5
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	22359	2.00000	2.5
	58 Ethylbenzene	91	14.093	14.093	(1.007)	112925	2.00000	1.9
	63 m,p-Xylenes	106	14.209	14.209	(1.015)	84277	4.00000	3.6
	64 o-Xylene	106	14.653	14.653	(1.047)	41275	2.00000	1.9
	65 Styrene	104	14.653	14.653	(1.047)	71428	2.00000	1.9
	66 Bromoform	173	14.927	14.927	(0.906)	13258	2.00000	2.2
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	102291	2.00000	2.5
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	21737	2.00000	2.3

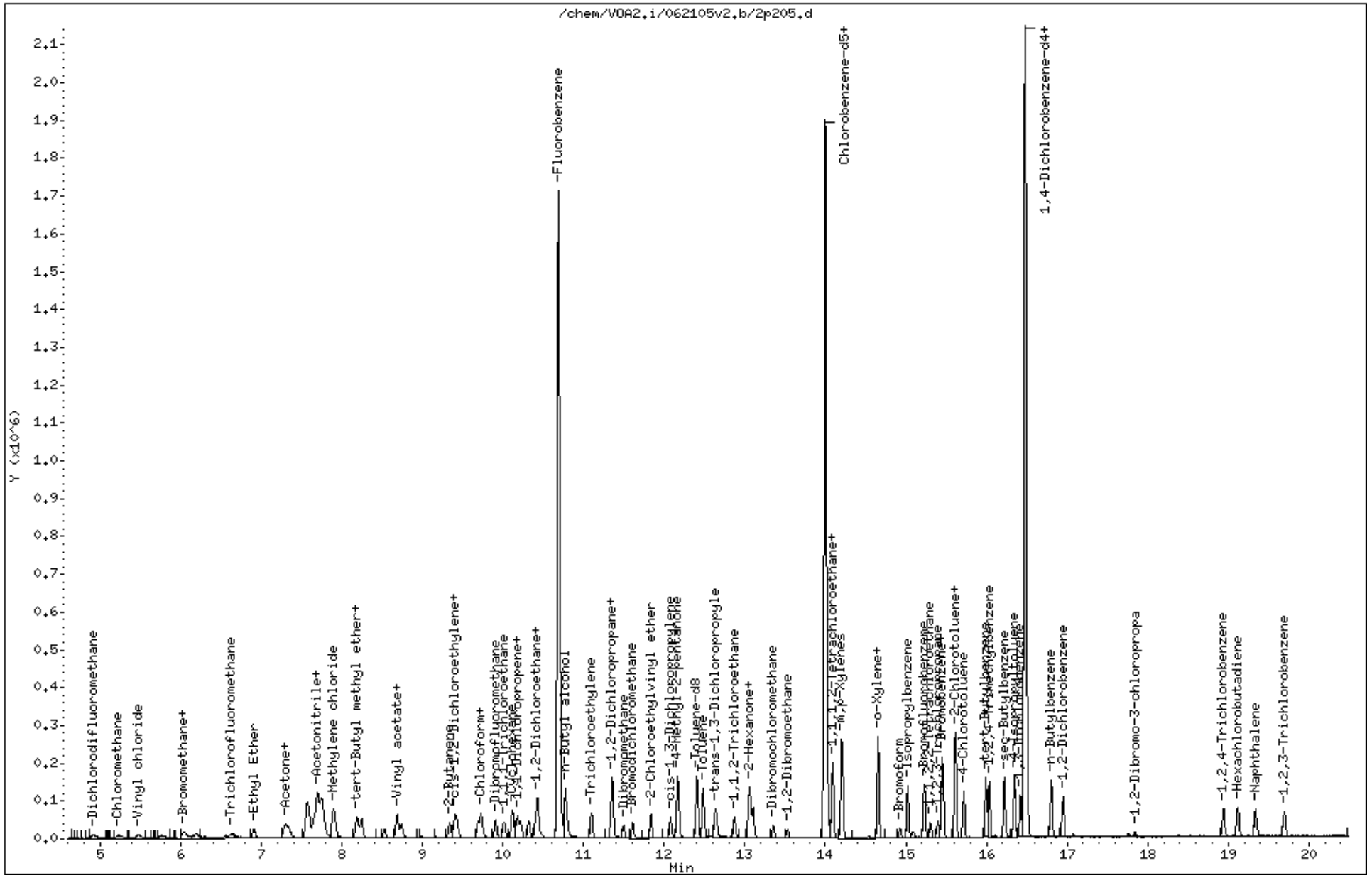
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.225	15.225	(0.924)	56422	2.00000	3.8
	74 1,2,3-Trichloropropane	110	15.401	15.401	(0.935)	7648	2.00000	2.4(Q)
	75 Bromobenzene	156	15.444	15.444	(0.937)	28435	2.00000	2.0
	76 n-Propylbenzene	91	15.456	15.456	(0.938)	138098	2.00000	1.8
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	92673	2.00000	1.9
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	93510	2.00000	2.5
	80 4-Chlorotoluene	91	15.718	15.718	(0.954)	84020	2.00000	2.4
	81 tert-Butylbenzene	119	15.992	15.992	(0.970)	95104	2.00000	2.5
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	92155	2.00000	2.4
	83 sec-Butylbenzene	105	16.223	16.223	(0.984)	122557	2.00000	2.5
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	101393	2.00000	2.5
	85 1,3-Dichlorobenzene	146	16.423	16.423	(0.997)	53861	2.00000	2.1
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	643629	50.0000	
	87 1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	51800	2.00000	2.4
	89 n-Butylbenzene	91	16.807	16.807	(1.020)	98771	2.00000	2.5
	90 1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	50467	2.00000	2.6
	92 1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	4135	2.00000	2.0
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	33349	2.00000	2.4
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	21959	2.00000	2.3
	95 Naphthalene	128	19.344	19.344	(1.174)	80333	2.00000	2.4
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	31365	2.00000	2.4

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/062105v2.b/2p205.d
Date : 21-JUN-2005 18:34
Client ID: VSTD002
Sample Info: |W2V050621-02|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p206.d
Lab Smp Id: W2V050621-03 Client Smp ID: VSTD005
Inj Date : 21-JUN-2005 19:01
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-03|ICAL|1|VOAF|1|
Misc Info : VSTD005
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 23:51 Cal File: 2p217.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

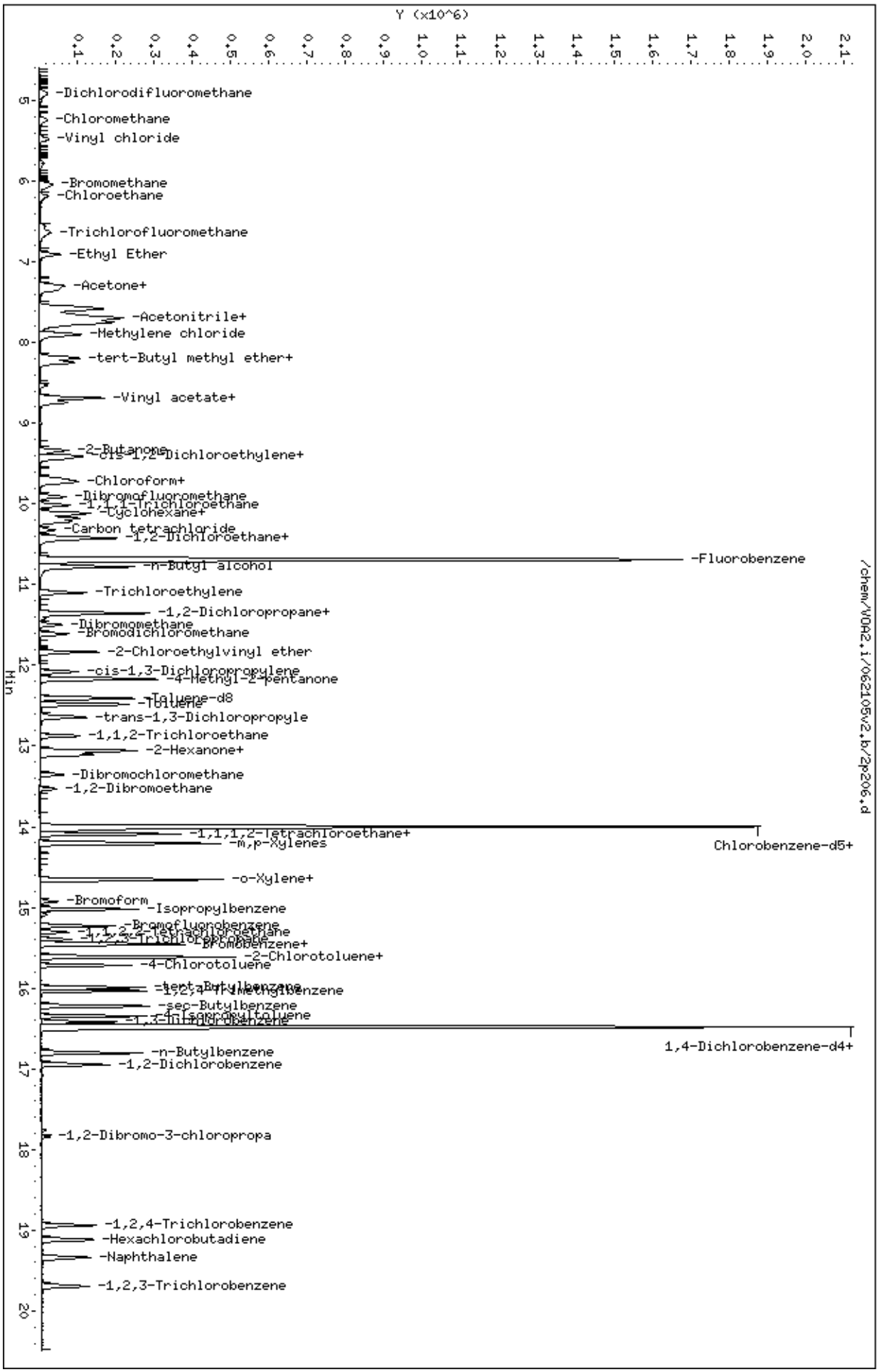
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1	Xylenes (total)	106				229541	15.0000	13.2
M 2	1,2-Dichloroethylene (total)	96				144735	10.0000	9.2
M 135	1,3-Dichloropropylene	75				125939	10.0000	9.0
3	Dichlorodifluoromethane	85	4.915	4.915	(0.460)	65425	5.00000	5.0
4	Chloromethane	50	5.242	5.242	(0.490)	57293	5.00000	5.0
5	Vinyl chloride	62	5.488	5.488	(0.513)	46407	5.00000	4.8
6	Bromomethane	94	6.039	6.039	(0.565)	47405	5.00000	4.9
7	Chloroethane	64	6.191	6.191	(0.579)	37048	5.00000	4.9
8	Trichlorofluoromethane	101	6.641	6.641	(0.621)	75865	5.00000	5.0
134	Ethyl Ether	59	6.908	6.908	(0.646)	45590	5.00000	4.8
10	Acetone	43	7.298	7.298	(0.683)	85739	25.0000	22.2
15	Acetonitrile	41	7.651	7.651	(0.716)	164049	125.000	101
11	1,1-Dichloroethylene	61	7.340	7.340	(0.686)	71898	5.00000	4.4
128	Methyl acetate	43	7.687	7.687	(0.719)	194548	25.0000	23.9
13	Iodomethane	142	7.584	7.584	(0.709)	374647	25.0000	23.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	7.894	7.894	(0.738)	73297	5.00000	4.6(a)
	14 Carbon disulfide	76	7.748	7.748	(0.725)	720337	25.0000	21.8
	20 tert-Butyl methyl ether	73	8.192	8.192	(0.766)	133730	5.00000	4.6
	21 trans-1,2-Dichloroethylene	61	8.247	8.247	(0.771)	68922	5.00000	4.6
	23 Vinyl acetate	43	8.685	8.685	(0.812)	334810	25.0000	23.9
	22 1,1-Dichloroethane	63	8.740	8.740	(0.817)	85711	5.00000	4.6
	30 2-Butanone	43	9.336	9.336	(0.873)	124590	25.0000	23.7
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.879)	75813	5.00000	4.6
	25 2,2-Dichloropropane	77	9.427	9.427	(0.882)	58095	5.00000	4.4
	32 Chloroform	83	9.725	9.725	(0.910)	77127	5.00000	4.5
	29 Bromochloromethane	128	9.695	9.695	(0.907)	21098	5.00000	4.4
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	51379	5.00000	5.4
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	67373	5.00000	4.4
	129 Cyclohexane	56	10.114	10.114	(0.946)	89345	5.00000	4.5
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	56765	5.00000	4.4
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	164190	500.000	408
	33 Carbon tetrachloride	117	10.218	10.218	(0.956)	57845	5.00000	4.4
	37 1,2-Dichloroethane	62	10.406	10.406	(0.973)	67126	5.00000	4.6
	38 Benzene	78	10.431	10.431	(0.976)	184127	5.00000	4.4
*	40 Fluorobenzene	96	10.692	10.692	(1.000)	1769702	50.0000	
	39 Trichloroethylene	95	11.094	11.094	(1.038)	47995	5.00000	4.6
	41 1,2-Dichloropropane	63	11.349	11.349	(1.061)	46324	5.00000	4.6
	130 Methylcyclohexane	83	11.355	11.355	(1.062)	81151	5.00000	4.0
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	58597	5.00000	4.5
	43 Dibromomethane	93	11.502	11.502	(1.076)	27617	5.00000	4.8
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	78184	25.0000	24.6
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.869)	100299	25.0000	24.4
	46 cis-1,3-Dichloropropylene	75	12.086	12.086	(1.130)	65568	5.00000	4.5
$	47 Toluene-d8	98	12.408	12.408	(0.886)	187819	5.00000	5.5
	50 Toluene	92	12.481	12.481	(0.891)	110897	5.00000	4.6
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.903)	60371	5.00000	4.5
	54 1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	30846	5.00000	4.7
	55 2-Hexanone	43	13.053	13.053	(0.932)	169321	25.0000	23.9
	52 1,3-Dichloropropane	76	13.077	13.077	(0.934)	61129	5.00000	4.8
	56 Tetrachloroethylene	164	13.108	13.108	(0.936)	33895	5.00000	4.4
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	40369	5.00000	4.6
	59 1,2-Dibromoethane	107	13.527	13.527	(0.966)	36679	5.00000	4.6
*	61 Chlorobenzene-d5	117	14.002	14.002	(1.000)	1165983	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.002)	113528	5.00000	4.6
	60 1,1,1,2-Tetrachloroethane	131	14.081	14.081	(1.006)	40398	5.00000	4.6
	58 Ethylbenzene	91	14.093	14.093	(1.007)	203941	5.00000	4.3
	63 m,p-Xylenes	106	14.209	14.209	(1.015)	153285	10.0000	8.7
	64 o-Xylene	106	14.653	14.653	(1.046)	76256	5.00000	4.4
	65 Styrene	104	14.659	14.659	(1.047)	125707	5.00000	4.3
	66 Bromoform	173	14.933	14.933	(0.906)	25620	5.00000	4.5
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	185894	5.00000	4.6
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	41803	5.00000	4.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.231	15.231	(0.924)	82722	5.00000	5.7
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	14441	5.00000	4.8
	75 Bromobenzene	156	15.444	15.444	(0.937)	49781	5.00000	4.4
	76 n-Propylbenzene	91	15.456	15.456	(0.938)	243246	5.00000	4.2
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	159921	5.00000	4.2
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	168487	5.00000	4.7
	80 4-Chlorotoluene	91	15.717	15.717	(0.954)	152749	5.00000	4.6
	81 tert-Butylbenzene	119	15.997	15.997	(0.971)	164806	5.00000	4.5
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	169178	5.00000	4.6
	83 sec-Butylbenzene	105	16.222	16.222	(0.984)	213255	5.00000	4.5
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	180100	5.00000	4.6
	85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	93865	5.00000	4.4
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	619468	50.0000	
	87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	95480	5.00000	4.7
	89 n-Butylbenzene	91	16.800	16.800	(1.020)	172376	5.00000	4.5
	90 1,2-Dichlorobenzene	146	16.952	16.952	(1.029)	87763	5.00000	4.6
	92 1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	8539	5.00000	4.4
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	58997	5.00000	4.5
	94 Hexachlorobutadiene	225	19.124	19.124	(1.161)	41086	5.00000	4.5
	95 Naphthalene	128	19.343	19.343	(1.174)	146342	5.00000	4.5
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	57306	5.00000	4.6

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).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Date : 21-JUN-2005 19:01
Client ID: VSTD005
Sample Info: IW2V050621-03|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25
/chem/VOA2.i/062105v2.b/2p206.d
Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane
-Vinyl chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Ethyl Ether
-Acetone+
-Acetonitrile+
-Methylene chloride
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone
cis-1,2-Dichloroethylene+
-Chloroform+
-Dibromofluoromethane
-1,1,1-Trichloroethane
-Cyclohexane+
-Carbon tetrachloride
-1,2-Dichloroethane+
-Fluorobenzene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Dibromomethane
-Bromodichloromethane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
Chlorobenzene-d5+
-o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
-1,2,3-Trichloropropane
-Bromobenzene+
-2-Chlorotoluene+
-4-Chlorotoluene
-tert-Butylbenzene
1,2,4-Trimethylbenzene
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

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General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p207.d
Lab Smp Id: W2V050621-04 Client Smp ID: VSTD010
Inj Date : 21-JUN-2005 19:27
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-04|ICAL|1|VOAF|1|
Misc Info : VSTD010
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 00:17 Cal File: 2p218.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1	Xylenes (total)	106				416672	30.0000	25.5
M 2	1,2-Dichloroethylene (total)	96				271007	20.0000	16.7
M 135	1,3-Dichloropropylene	75				244979	20.0000	17.1
3	Dichlorodifluoromethane	85	4.910	4.910	(0.459)	131871	10.0000	9.7
4	Chloromethane	50	5.244	5.244	(0.490)	114520	10.0000	9.6
5	Vinyl chloride	62	5.484	5.484	(0.513)	99693	10.0000	9.9
6	Bromomethane	94	6.045	6.045	(0.565)	100860	10.0000	10.1
7	Chloroethane	64	6.191	6.191	(0.579)	78508	10.0000	10.1
8	Trichlorofluoromethane	101	6.635	6.635	(0.621)	157304	10.0000	10.1
134	Ethyl Ether	59	6.909	6.909	(0.646)	103148	10.0000	10.5
10	Acetone	43	7.292	7.292	(0.682)	156075	50.0000	44.5
15	Acetonitrile	41	7.657	7.657	(0.716)	331732	250.000	234
11	1,1-Dichloroethylene	61	7.347	7.347	(0.687)	139355	10.0000	8.2
128	Methyl acetate	43	7.688	7.688	(0.719)	393199	50.0000	46.8
13	Iodomethane	142	7.578	7.578	(0.709)	701108	50.0000	42.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	7.901	7.901	(0.739)	117325	10.0000	8.9
	14 Carbon disulfide	76	7.755	7.755	(0.725)	1319057	50.0000	42.8
	20 tert-Butyl methyl ether	73	8.193	8.193	(0.766)	256565	10.0000	8.7
	21 trans-1,2-Dichloroethylene	61	8.247	8.247	(0.771)	130265	10.0000	8.4
	23 Vinyl acetate	43	8.685	8.685	(0.812)	740451	50.0000	51.3
	22 1,1-Dichloroethane	63	8.740	8.740	(0.817)	158791	10.0000	8.3
	30 2-Butanone	43	9.336	9.336	(0.873)	243681	50.0000	45.0
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.879)	140742	10.0000	8.3
	25 2,2-Dichloropropane	77	9.428	9.428	(0.882)	109988	10.0000	8.1
	32 Chloroform	83	9.720	9.720	(0.909)	146934	10.0000	8.4
	29 Bromochloromethane	128	9.689	9.689	(0.906)	41646	10.0000	8.5
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	87634	10.0000	9.0
	36 1,1,1-Trichloroethane	97	10.018	10.018	(0.937)	131143	10.0000	8.4
	129 Cyclohexane	56	10.115	10.115	(0.946)	170746	10.0000	8.4
	34 1,1-Dichloropropene	75	10.182	10.182	(0.952)	110430	10.0000	8.4
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	347176	1000.00	955
	33 Carbon tetrachloride	117	10.218	10.218	(0.956)	110889	10.0000	8.3
	37 1,2-Dichloroethane	62	10.407	10.407	(0.973)	124258	10.0000	8.3
	38 Benzene	78	10.431	10.431	(0.976)	330424	10.0000	8.5
*	40 Fluorobenzene	96	10.693	10.693	(1.000)	1824315	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	88573	10.0000	8.3
	41 1,2-Dichloropropane	63	11.350	11.350	(1.061)	87178	10.0000	8.4
	130 Methylcyclohexane	83	11.356	11.356	(1.062)	158589	10.0000	8.5
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	111940	10.0000	8.4
	43 Dibromomethane	93	11.496	11.496	(1.075)	51748	10.0000	8.6
	44 2-Chloroethylvinyl ether	63	11.837	11.837	(1.107)	174387	50.0000	53.2
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	193731	50.0000	45.6
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	127793	10.0000	8.5
$	47 Toluene-d8	98	12.408	12.408	(0.887)	319890	10.0000	9.0
	50 Toluene	92	12.481	12.481	(0.892)	206435	10.0000	8.4
	53 trans-1,3-Dichloropropylene	75	12.646	12.646	(0.904)	117186	10.0000	8.5
	54 1,1,2-Trichloroethane	83	12.877	12.877	(0.920)	58418	10.0000	8.7
	55 2-Hexanone	43	13.053	13.053	(0.933)	339351	50.0000	46.3
	52 1,3-Dichloropropane	76	13.078	13.078	(0.934)	116268	10.0000	8.7
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	63832	10.0000	8.4
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	78487	10.0000	8.6
	59 1,2-Dibromoethane	107	13.528	13.528	(0.967)	69026	10.0000	8.4
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1208140	50.0000	
	62 Chlorobenzene	112	14.033	14.033	(1.003)	206962	10.0000	8.2
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	77002	10.0000	8.5
	58 Ethylbenzene	91	14.094	14.094	(1.007)	373851	10.0000	8.4
	63 m,p-Xylenes	106	14.209	14.209	(1.015)	280355	20.0000	17.1
	64 o-Xylene	106	14.653	14.653	(1.047)	136317	10.0000	8.4
	65 Styrene	104	14.653	14.653	(1.047)	230200	10.0000	8.4
	66 Bromoform	173	14.927	14.927	(0.906)	50139	10.0000	8.6
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	344807	10.0000	8.4
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	84469	10.0000	9.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.231	15.231	(0.924)	135341	10.0000	9.1
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	27139	10.0000	8.7
	75 Bromobenzene	156	15.450	15.450	(0.938)	93321	10.0000	8.6
	76 n-Propylbenzene	91	15.456	15.456	(0.938)	449223	10.0000	8.5
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	309179	10.0000	8.7
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	312006	10.0000	8.5
	80 4-Chlorotoluene	91	15.718	15.718	(0.954)	282825	10.0000	8.4
	81 tert-Butylbenzene	119	15.992	15.992	(0.970)	312229	10.0000	8.3
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	320038	10.0000	8.5
	83 sec-Butylbenzene	105	16.223	16.223	(0.984)	404338	10.0000	8.3
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	336200	10.0000	8.3
	85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	174438	10.0000	8.6
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	637028	50.0000	
	87 1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	173898	10.0000	8.3
	89 n-Butylbenzene	91	16.807	16.807	(1.020)	325174	10.0000	8.3
	90 1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	166748	10.0000	8.5
	92 1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	16272	10.0000	8.2
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	110420	10.0000	8.2
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	75751	10.0000	8.0
	95 Naphthalene	128	19.337	19.337	(1.174)	287842	10.0000	8.6
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	108907	10.0000	8.4

Data File: /chem/VOA2.i/062105v2.b/2p207.d

Date : 21-JUN-2005 19:27

Client ID: VSTD010

Instrument: VOA2.i

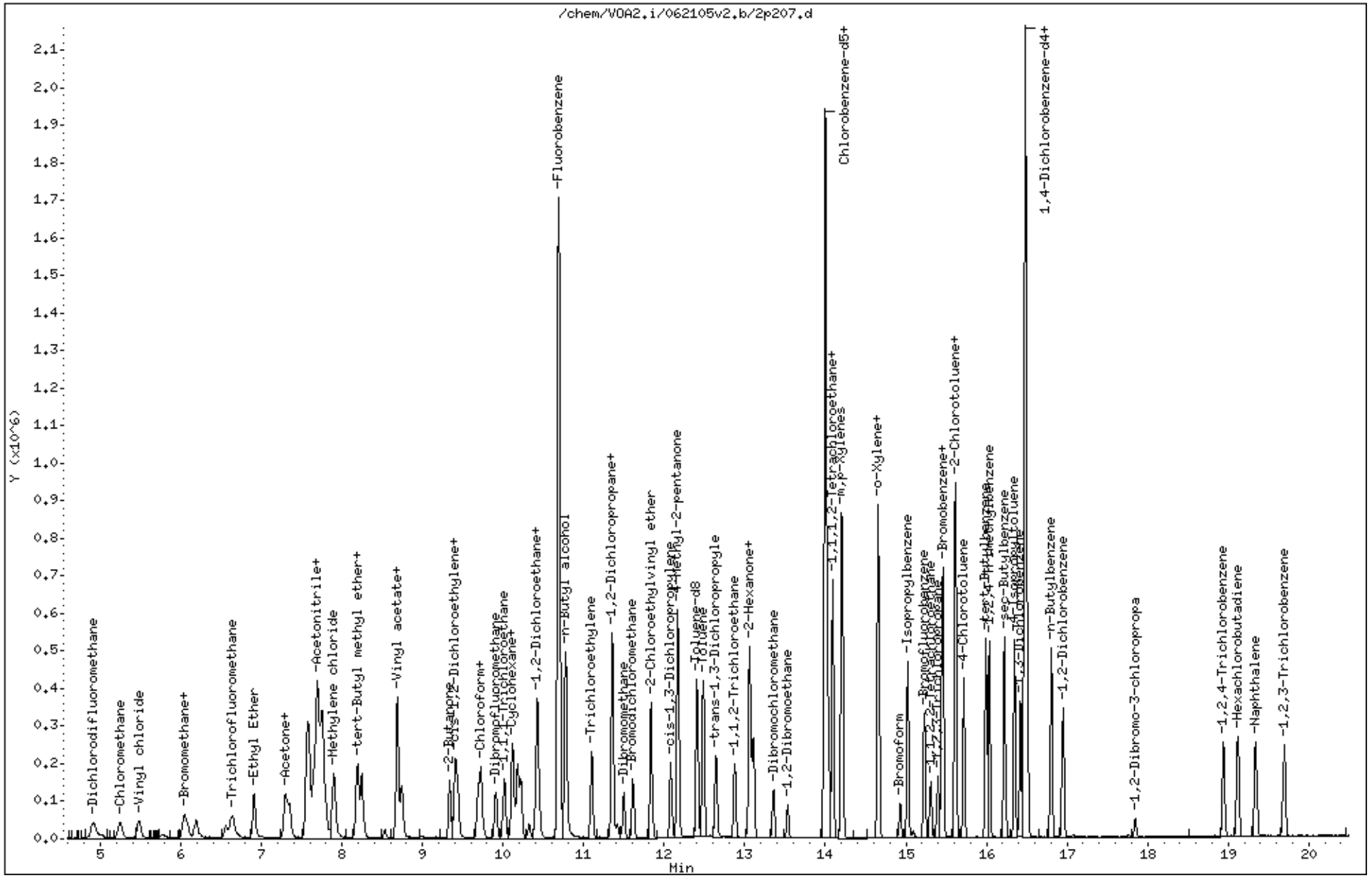
Sample Info: IW2V050621-04|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p208.d
Lab Smp Id: W2V050621-05 Client Smp ID: VSTD020
Inj Date : 21-JUN-2005 19:54
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-05|ICAL|1|VOAF|1|
Misc Info : VSTD020
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 00:44 Cal File: 2p219.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

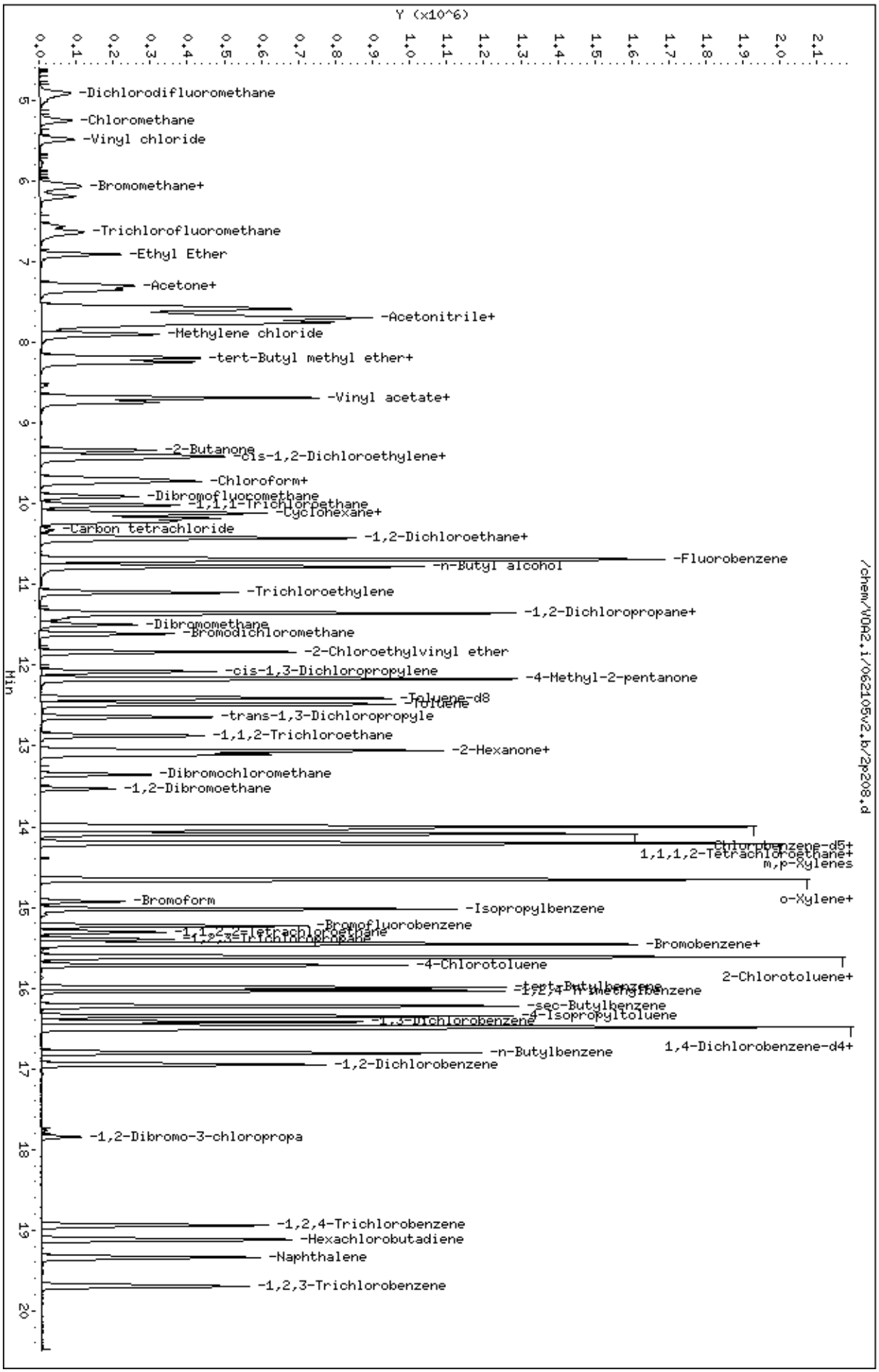
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
M	1 Xylenes (total)	106				969520	60.0000	65.2
M	2 1,2-Dichloroethylene (total)	96				647884	40.0000	40.8
M	135 1,3-Dichloropropylene	75				578133	40.0000	41.1
	3 Dichlorodifluoromethane	85	4.909	4.909	(0.459)	261421	20.0000	19.6
	4 Chloromethane	50	5.249	5.249	(0.491)	224337	20.0000	19.3
	5 Vinyl chloride	62	5.483	5.483	(0.513)	197428	20.0000	20.1
	6 Bromomethane	94	6.057	6.057	(0.567)	198035	20.0000	20.3
	7 Chloroethane	64	6.191	6.191	(0.579)	155501	20.0000	20.4
	8 Trichlorofluoromethane	101	6.629	6.629	(0.620)	317011	20.0000	20.8
	134 Ethyl Ether	59	6.909	6.909	(0.646)	195369	20.0000	20.3
	10 Acetone	43	7.286	7.286	(0.682)	327462	100.000	103
	15 Acetonitrile	41	7.651	7.651	(0.716)	683385	500.000	534
	11 1,1-Dichloroethylene	61	7.341	7.341	(0.687)	333939	20.0000	20.2
	128 Methyl acetate	43	7.688	7.688	(0.719)	811834	100.000	98.6
	13 Iodomethane	142	7.584	7.584	(0.710)	1642743	100.000	101

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	7.894	7.894	(0.739)	226456	20.0000	20.5
	14 Carbon disulfide	76	7.748	7.748	(0.725)	3084643	100.000	109
	20 tert-Butyl methyl ether	73	8.193	8.193	(0.767)	585149	20.0000	20.2
	21 trans-1,2-Dichloroethylene	61	8.247	8.247	(0.772)	313447	20.0000	20.6
	23 Vinyl acetate	43	8.685	8.685	(0.813)	1488794	100.000	105
	22 1,1-Dichloroethane	63	8.740	8.740	(0.818)	378519	20.0000	20.2
	30 2-Butanone	43	9.336	9.336	(0.874)	509084	100.000	96.0
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.880)	334437	20.0000	20.2
	25 2,2-Dichloropropane	77	9.434	9.434	(0.883)	274128	20.0000	20.6
	32 Chloroform	83	9.726	9.726	(0.910)	349730	20.0000	20.3
	29 Bromochloromethane	128	9.689	9.689	(0.907)	98674	20.0000	20.6
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	197250	20.0000	20.7
	36 1,1,1-Trichloroethane	97	10.011	10.011	(0.937)	317760	20.0000	20.7
	129 Cyclohexane	56	10.115	10.115	(0.946)	401389	20.0000	20.2
	34 1,1-Dichloropropene	75	10.176	10.176	(0.952)	262783	20.0000	20.4
	131 n-Butyl alcohol	56	10.778	10.778	(1.009)	720571	2000.00	2150
	33 Carbon tetrachloride	117	10.218	10.218	(0.956)	268938	20.0000	20.5
	37 1,2-Dichloroethane	62	10.407	10.407	(0.974)	293301	20.0000	20.1
	38 Benzene	78	10.431	10.431	(0.976)	751540	20.0000	21.3
*	40 Fluorobenzene	96	10.687	10.687	(1.000)	1786839	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.039)	208316	20.0000	19.9
	41 1,2-Dichloropropane	63	11.350	11.350	(1.062)	208736	20.0000	20.7
	130 Methylcyclohexane	83	11.356	11.356	(1.063)	378658	20.0000	22.0
	45 Bromodichloromethane	83	11.611	11.611	(1.087)	266189	20.0000	20.3
	43 Dibromomethane	93	11.496	11.496	(1.076)	120311	20.0000	20.5
	44 2-Chloroethylvinyl ether	63	11.837	11.837	(1.108)	338515	100.000	105
	49 4-Methyl-2-pentanone	58	12.165	12.165	(0.869)	414260	100.000	99.5
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	305720	20.0000	20.9
$	47 Toluene-d8	98	12.408	12.408	(0.887)	712701	20.0000	20.5
	50 Toluene	92	12.481	12.481	(0.892)	474785	20.0000	19.6
	53 trans-1,3-Dichloropropylene	75	12.646	12.646	(0.904)	272413	20.0000	20.2
	54 1,1,2-Trichloroethane	83	12.877	12.877	(0.920)	133769	20.0000	20.2
	55 2-Hexanone	43	13.053	13.053	(0.933)	715371	100.000	99.6
	52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	259228	20.0000	19.9
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	152045	20.0000	21.1
	57 Dibromochloromethane	129	13.351	13.351	(0.954)	185815	20.0000	20.7
	59 1,2-Dibromoethane	107	13.528	13.528	(0.967)	162558	20.0000	20.2
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1183439	50.0000	
	62 Chlorobenzene	112	14.033	14.033	(1.003)	492195	20.0000	19.8
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	183726	20.0000	20.6
	58 Ethylbenzene	91	14.094	14.094	(1.007)	893432	20.0000	21.9
	63 m,p-Xylenes	106	14.203	14.203	(1.015)	648321	40.0000	43.5
	64 o-Xylene	106	14.653	14.653	(1.047)	321199	20.0000	21.7
	65 Styrene	104	14.653	14.653	(1.047)	543321	20.0000	21.8
	66 Bromoform	173	14.927	14.927	(0.906)	118974	20.0000	20.6
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	820942	20.0000	20.2
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	181308	20.0000	19.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.225	15.225	(0.924)	299942	20.0000	20.5
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	60065	20.0000	19.5
	75 Bromobenzene	156	15.444	15.444	(0.937)	214154	20.0000	21.3
	76 n-Propylbenzene	91	15.456	15.456	(0.938)	1059211	20.0000	21.9
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	707395	20.0000	21.6
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	728176	20.0000	20.0
	80 4-Chlorotoluene	91	15.718	15.718	(0.954)	661438	20.0000	19.8
	81 tert-Butylbenzene	119	15.992	15.992	(0.970)	750229	20.0000	20.3
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	744069	20.0000	20.0
	83 sec-Butylbenzene	105	16.223	16.223	(0.984)	983634	20.0000	20.5
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	805822	20.0000	20.2
	85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	403508	20.0000	21.0
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	628469	50.0000	
	87 1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	405011	20.0000	19.6
	89 n-Butylbenzene	91	16.801	16.801	(1.020)	781974	20.0000	20.2
	90 1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	383474	20.0000	19.9
	92 1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	36428	20.0000	18.6
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	262502	20.0000	19.8
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	195012	20.0000	20.9
	95 Naphthalene	128	19.344	19.344	(1.174)	656848	20.0000	19.8
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	261607	20.0000	20.5



Data File: /chem/VOA2.i/062105v2.b/2p208.d
Date : 21-JUN-2005 19:54
Client ID: VSTD020
Sample Info: IW2V050621-05|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p209.d
Lab Smp Id: W2V050621-06 Client Smp ID: VSTD050
Inj Date : 21-JUN-2005 20:20
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-06|ICAL|1|VOAF|1|
Misc Info : VSTD050
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 01:10 Cal File: 2p220.d
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

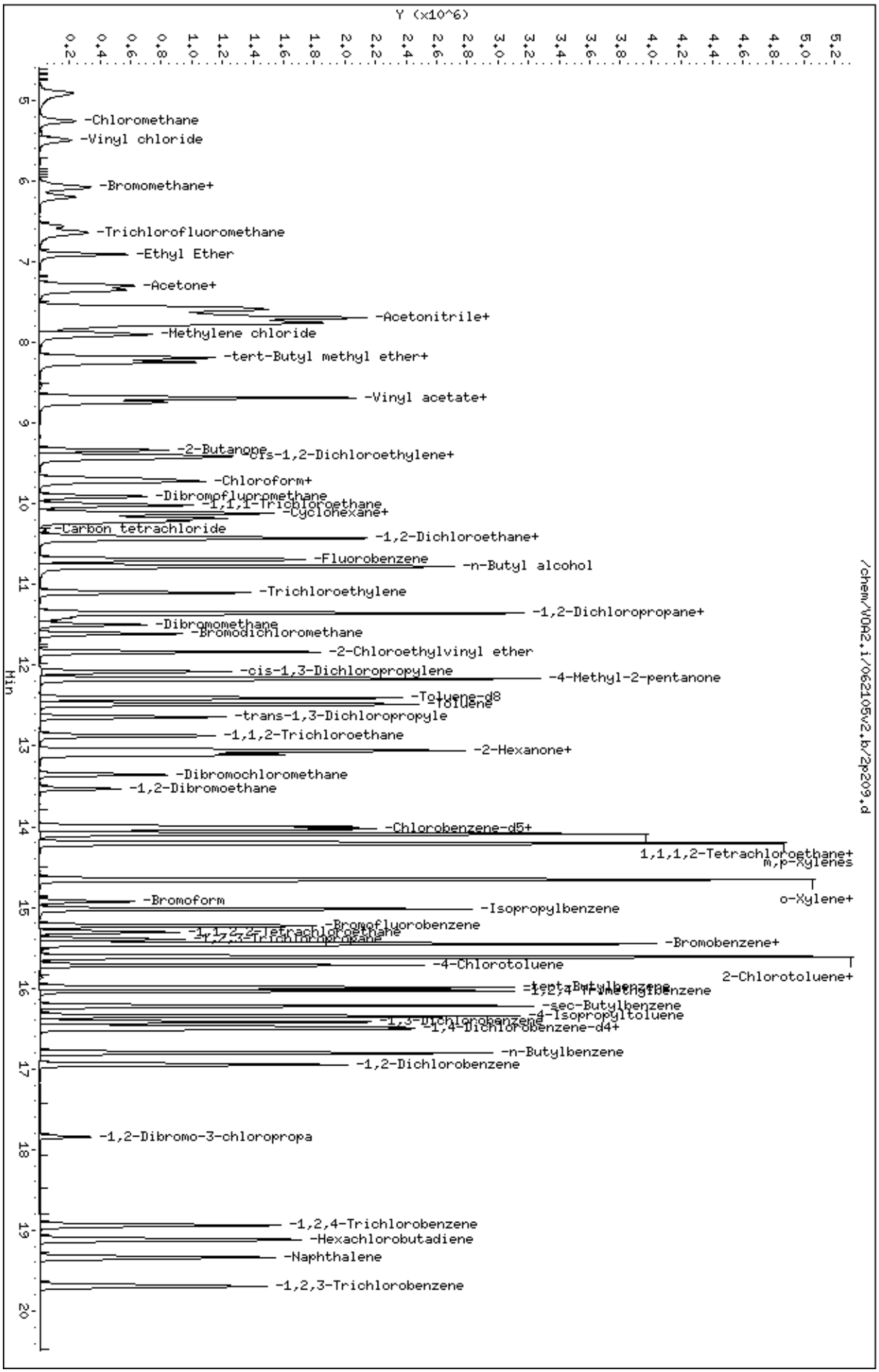
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
M 1 Xylenes (total)	106				2399672	150.000	160
M 2 1,2-Dichloroethylene (total)	96				1665408	100.000	101
M 135 1,3-Dichloropropylene	75				1537076	100.000	105
3 Dichlorodifluoromethane	85	4.910	4.910	(0.459)	692487	50.0000	50.1
4 Chloromethane	50	5.255	5.255	(0.492)	595350	50.0000	49.4
5 Vinyl chloride	62	5.489	5.489	(0.513)	516187	50.0000	50.7
6 Bromomethane	94	6.075	6.075	(0.568)	538366	50.0000	53.3
7 Chloroethane	64	6.203	6.203	(0.580)	414856	50.0000	52.4
8 Trichlorofluoromethane	101	6.641	6.641	(0.621)	834003	50.0000	52.8
134 Ethyl Ether	59	6.909	6.909	(0.646)	516787	50.0000	51.9
10 Acetone	43	7.286	7.286	(0.681)	848596	250.000	269
15 Acetonitrile	41	7.651	7.651	(0.716)	1742859	1250.00	1370
11 1,1-Dichloroethylene	61	7.353	7.353	(0.688)	860766	50.0000	50.2
128 Methyl acetate	43	7.687	7.687	(0.719)	2040661	250.000	239
13 Iodomethane	142	7.590	7.590	(0.710)	4055456	250.000	241

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	7.900	7.900	(0.739)	539512	50.0000	51.1
	14 Carbon disulfide	76	7.754	7.754	(0.725)	7517292	250.000	264
	20 tert-Butyl methyl ether	73	8.192	8.192	(0.766)	1527727	50.0000	50.8
	21 trans-1,2-Dichloroethylene	61	8.247	8.247	(0.771)	803265	50.0000	50.8
	23 Vinyl acetate	43	8.685	8.685	(0.812)	4139953	250.000	282
	22 1,1-Dichloroethane	63	8.740	8.740	(0.817)	974885	50.0000	50.2
	30 2-Butanone	43	9.336	9.336	(0.873)	1350121	250.000	246
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.879)	862143	50.0000	50.2
	25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	716077	50.0000	51.8
	32 Chloroform	83	9.725	9.725	(0.910)	907705	50.0000	50.8
	29 Bromochloromethane	128	9.689	9.689	(0.906)	251075	50.0000	50.6
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	502115	50.0000	50.7
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	827102	50.0000	51.9
	129 Cyclohexane	56	10.115	10.115	(0.946)	1026888	50.0000	49.9
	34 1,1-Dichloropropene	75	10.175	10.175	(0.952)	666773	50.0000	50.0
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	1865915	5000.00	5530
	33 Carbon tetrachloride	117	10.218	10.218	(0.956)	706894	50.0000	52.0
	37 1,2-Dichloroethane	62	10.407	10.407	(0.973)	769474	50.0000	50.8
	38 Benzene	78	10.431	10.431	(0.976)	1878549	50.0000	52.8
*	40 Fluorobenzene	96	10.693	10.693	(1.000)	1853310	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	532058	50.0000	48.9
	41 1,2-Dichloropropane	63	11.350	11.350	(1.061)	519466	50.0000	49.6
	130 Methylcyclohexane	83	11.356	11.356	(1.062)	929972	50.0000	53.3
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	700188	50.0000	51.5
	43 Dibromomethane	93	11.496	11.496	(1.075)	312030	50.0000	51.4
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	899912	250.000	270
	49 4-Methyl-2-pentanone	58	12.165	12.165	(0.869)	1065039	250.000	247
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	800162	50.0000	52.7
$	47 Toluene-d8	98	12.408	12.408	(0.886)	1761251	50.0000	48.9
	50 Toluene	92	12.481	12.481	(0.891)	1221268	50.0000	48.8
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.903)	736914	50.0000	52.7
	54 1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	338395	50.0000	49.5
	55 2-Hexanone	43	13.053	13.053	(0.932)	1829090	250.000	246
	52 1,3-Dichloropropane	76	13.077	13.077	(0.934)	664178	50.0000	49.3
	56 Tetrachloroethylene	164	13.108	13.108	(0.936)	387284	50.0000	52.6
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	501044	50.0000	53.8
	59 1,2-Dibromoethane	107	13.533	13.533	(0.967)	427280	50.0000	51.2
*	61 Chlorobenzene-d5	117	14.002	14.002	(1.000)	1225092	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.002)	1254877	50.0000	48.8
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.006)	471680	50.0000	51.2
	58 Ethylbenzene	91	14.093	14.093	(1.007)	2205462	50.0000	53.5
	63 m,p-Xylenes	106	14.209	14.209	(1.015)	1602990	100.000	107
	64 o-Xylene	106	14.653	14.653	(1.046)	796682	50.0000	53.4
	65 Styrene	104	14.659	14.659	(1.047)	1349562	50.0000	54.0
	66 Bromoform	173	14.927	14.927	(0.906)	329898	50.0000	55.9
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	2049253	50.0000	49.4
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	502407	50.0000	53.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.225	15.225	(0.924)	736880	50.0000	49.2
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	160636	50.0000	51.0
	75 Bromobenzene	156	15.444	15.444	(0.937)	532861	50.0000	53.1
	76 n-Propylbenzene	91	15.462	15.462	(0.938)	2590439	50.0000	54.1
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1738683	50.0000	53.4
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1798863	50.0000	48.4
	80 4-Chlorotoluene	91	15.717	15.717	(0.954)	1659335	50.0000	48.7
	81 tert-Butylbenzene	119	15.991	15.991	(0.970)	1868401	50.0000	49.5
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	1861148	50.0000	49.0
	83 sec-Butylbenzene	105	16.222	16.222	(0.984)	2423526	50.0000	49.5
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	2020568	50.0000	49.5
	85 1,3-Dichlorobenzene	146	16.423	16.423	(0.997)	1018957	50.0000	52.9
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	642341	50.0000	
	87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	1019620	50.0000	48.4
	89 n-Butylbenzene	91	16.800	16.800	(1.020)	1960183	50.0000	49.6
	90 1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	972422	50.0000	49.3
	92 1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	108761	50.0000	54.2
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	690936	50.0000	50.9
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	504032	50.0000	53.0
	95 Naphthalene	128	19.337	19.337	(1.174)	1718922	50.0000	50.8
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	675803	50.0000	51.8


Data File: /chem/VOA2.i/062105v2.b/2p209.d
Date : 21-JUN-2005 20:20
Client ID: VSTD050
Sample Info: IW2V050621-06|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25
/chem/VOA2.i/062105v2.b/2p209.d
Y (x10^6)
Min
-Chloromethane
-Vinyl chloride
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether
-Acetone+
-Acetonitrile+
-Methylene chloride
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone
cis-1,2-Dichloroethylene+
-Chloroform+
-Dibromofluoromethane
-1,1,1-Trichloroethane
-Cyclohexane+
-Carbon tetrachloride
-1,2-Dichloroethane+
-Fluorobenzene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Dibromomethane
-Bromodichloromethane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
-1,2,3-Trichloropropane
-Bromobenzene+
-4-Chlorotoluene
2-Chlorotoluene+
-tert-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

Page 1

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p210.d
Lab Smp Id: W2V050621-07 Client Smp ID: VSTD100
Inj Date : 21-JUN-2005 20:46
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-07|ICAL|1|VOAF|1|
Misc Info : VSTD100
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 01:37 Cal File: 2p221.d
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
M 1 Xylenes (total)	106				4220736	300.000	294
M 2 1,2-Dichloroethylene (total)	96				3160541	200.000	193
M 135 1,3-Dichloropropylene	75				2852701	200.000	197
3 Dichlorodifluoromethane	85	4.915	4.915	(0.460)	1269121	100.000	92.5
4 Chloromethane	50	5.260	5.260	(0.492)	1081844	100.000	90.4
5 Vinyl chloride	62	5.494	5.494	(0.514)	944532	100.000	93.5
6 Bromomethane	94	6.082	6.082	(0.569)	958280	100.000	95.6
7 Chloroethane	64	6.197	6.197	(0.580)	754731	100.000	96.1
8 Trichlorofluoromethane	101	6.635	6.635	(0.621)	1543260	100.000	98.4
134 Ethyl Ether	59	6.903	6.903	(0.646)	916092	100.000	92.6
10 Acetone	43	7.286	7.286	(0.682)	1516642	500.000	490
15 Acetonitrile	41	7.651	7.651	(0.716)	3035846	2500.00	2430
11 1,1-Dichloroethylene	61	7.347	7.347	(0.687)	1677867	100.000	98.6
128 Methyl acetate	43	7.688	7.688	(0.719)	3494204	500.000	412
13 Iodomethane	142	7.590	7.590	(0.710)	7451101	500.000	447

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	7.894	7.894	(0.739)	1013495	100.000	99.4
	14 Carbon disulfide	76	7.755	7.755	(0.726)	13753592	500.000	491
	20 tert-Butyl methyl ether	73	8.193	8.193	(0.767)	2820571	100.000	94.4
	21 trans-1,2-Dichloroethylene	61	8.241	8.241	(0.771)	1527340	100.000	97.4
	23 Vinyl acetate	43	8.685	8.685	(0.813)	7428897	500.000	510(A)
	22 1,1-Dichloroethane	63	8.740	8.740	(0.818)	1880979	100.000	97.5
	30 2-Butanone	43	9.330	9.330	(0.873)	2361284	500.000	433
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.880)	1633201	100.000	95.9
	25 2,2-Dichloropropane	77	9.434	9.434	(0.883)	1381404	100.000	101(A)
	32 Chloroform	83	9.719	9.719	(0.909)	1703123	100.000	96.1
	29 Bromochloromethane	128	9.689	9.689	(0.907)	474579	100.000	96.5
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	950238	100.000	96.7
	36 1,1,1-Trichloroethane	97	10.018	10.018	(0.937)	1569727	100.000	99.2
	129 Cyclohexane	56	10.115	10.115	(0.946)	1925251	100.000	94.3
	34 1,1-Dichloropropene	75	10.176	10.176	(0.952)	1254810	100.000	94.8
	131 n-Butyl alcohol	56	10.778	10.778	(1.009)	3212417	10000.0	9670
	33 Carbon tetrachloride	117	10.218	10.218	(0.956)	1360407	100.000	101(A)
	37 1,2-Dichloroethane	62	10.407	10.407	(0.974)	1439331	100.000	95.7
	38 Benzene	78	10.431	10.431	(0.976)	3443616	100.000	98.4
*	40 Fluorobenzene	96	10.687	10.687	(1.000)	1839308	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.039)	992480	100.000	92.0
	41 1,2-Dichloropropane	63	11.350	11.350	(1.062)	940568	100.000	90.5
	130 Methylcyclohexane	83	11.356	11.356	(1.063)	1682170	100.000	97.9
	45 Bromodichloromethane	83	11.611	11.611	(1.087)	1335922	100.000	99.1
	43 Dibromomethane	93	11.496	11.496	(1.076)	579179	100.000	96.0
	44 2-Chloroethylvinyl ether	63	11.837	11.837	(1.108)	1582518	500.000	478
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	1844688	500.000	441
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	1484704	100.000	98.4
$	47 Toluene-d8	98	12.408	12.408	(0.887)	3198263	100.000	91.6
	50 Toluene	92	12.481	12.481	(0.892)	2230419	100.000	91.9
	53 trans-1,3-Dichloropropylene	75	12.640	12.640	(0.903)	1367997	100.000	101(A)
	54 1,1,2-Trichloroethane	83	12.877	12.877	(0.920)	631417	100.000	95.2
	55 2-Hexanone	43	13.053	13.053	(0.933)	3115481	500.000	432
	52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	1189633	100.000	91.0
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	700582	100.000	98.5
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	949246	100.000	105(A)
	59 1,2-Dibromoethane	107	13.534	13.534	(0.967)	778493	100.000	96.2
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1188190	50.0000	
	62 Chlorobenzene	112	14.033	14.033	(1.003)	2285667	100.000	91.6
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	870472	100.000	97.4
	58 Ethylbenzene	91	14.093	14.093	(1.007)	3874328	100.000	97.8
	63 m,p-Xylenes	106	14.203	14.203	(1.015)	2814803	200.000	196
	64 o-Xylene	106	14.653	14.653	(1.047)	1405933	100.000	98.0
	65 Styrene	104	14.659	14.659	(1.047)	2344018	100.000	97.6
	66 Bromoform	173	14.927	14.927	(0.906)	627218	100.000	109(A)
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	3669253	100.000	91.0
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	921836	100.000	100(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.231	15.231	(0.924)	1363775	100.000	93.6
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	290971	100.000	95.1
	75 Bromobenzene	156	15.444	15.444	(0.937)	950456	100.000	98.2
	76 n-Propylbenzene	91	15.462	15.462	(0.938)	4496145	100.000	97.5
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	3075823	100.000	98.0
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	3147028	100.000	87.1
	80 4-Chlorotoluene	91	15.718	15.718	(0.954)	3005991	100.000	90.7
	81 tert-Butylbenzene	119	15.992	15.992	(0.970)	3333586	100.000	90.8
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	3314085	100.000	89.8
	83 sec-Butylbenzene	105	16.223	16.223	(0.984)	4188949	100.000	88.0
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	3547248	100.000	89.4
	85 1,3-Dichlorobenzene	146	16.423	16.423	(0.997)	1831387	100.000	98.4
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	624413	50.0000	
	87 1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	1841652	100.000	89.9
	89 n-Butylbenzene	91	16.801	16.801	(1.020)	3438077	100.000	89.4
	90 1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	1743526	100.000	91.0
	92 1,2-Dibromo-3-chloropropane	75	17.841	17.841	(1.083)	208863	100.000	107(A)
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	1250187	100.000	94.8
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	906095	100.000	97.9
	95 Naphthalene	128	19.337	19.337	(1.174)	3149884	100.000	95.8
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	1228232	100.000	96.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA2.i/062105v2.b/2p210.d

Date : 21-JUN-2005 20:46

Client ID: VSTD100

Instrument: VOA2.i

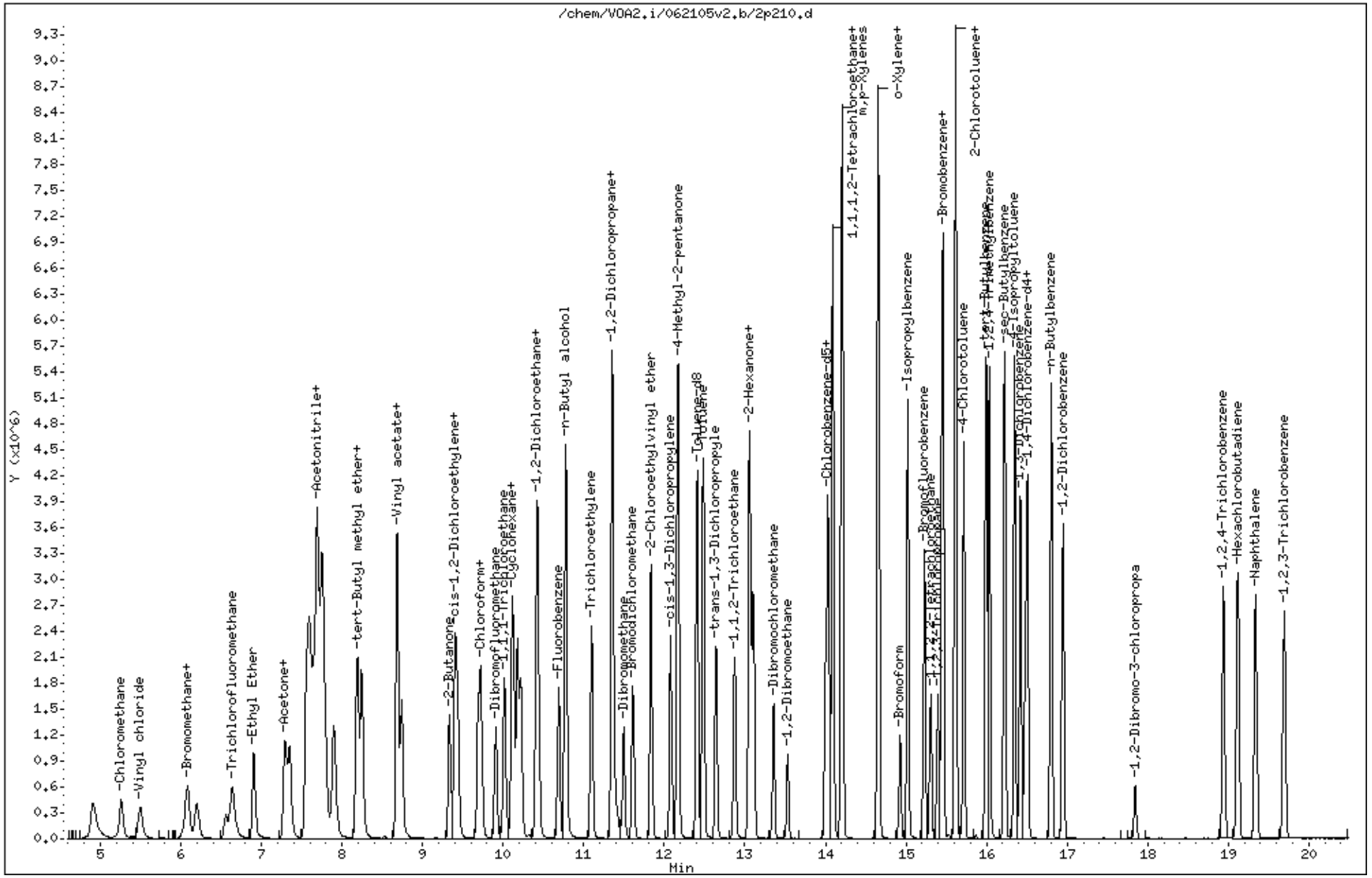
Sample Info: |W2V050621-07|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p212.d
Lab Smp Id: W2V050621-08 Client Smp ID: VSTD0005
Inj Date : 21-JUN-2005 21:39
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050621-08|ICAL|1|VOAF|1|
Misc Info : VSTD0005
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 21:39 Cal File: 2p212.d
Als bottle: 11 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BENZENE+.sub
Target Version: 3.50
Processing Host: prdsvr07

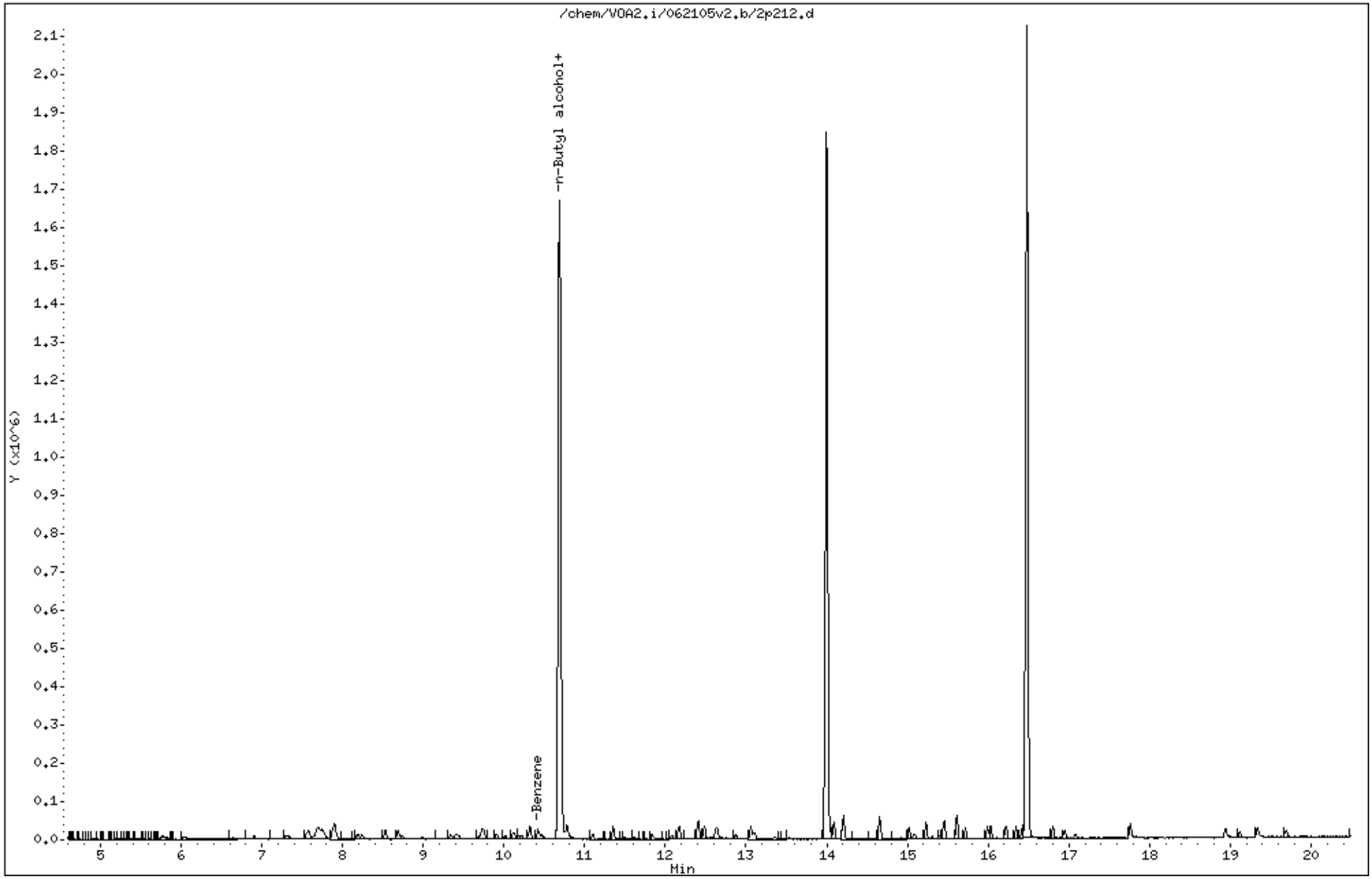
Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 40 Fluorobenzene	96	10.686	10.686	(1.000)	1771893	50.0000	

Data File: /chem/VOA2.i/062105v2.b/2p212.d
Date : 21-JUN-2005 21:39
Client ID: VSTD0005
Instrument: VOA2.i
Sample Info: |W2V050621-08|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: CDS1
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p215.d
Lab Smp Id: UVM050615-01A Client Smp ID: VSTD005S
Inj Date : 21-JUN-2005 22:58
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050615-01A|ICAL|1|VOAF|1|
Misc Info : VSTD005S
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:35 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 14 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.115	7.115	(0.665)	8695	5.00000	5.0(a)
12	Trichlorotrifluoroethane	85	7.303	7.303	(0.683)	20032	5.00000	5.6
16	Allyl chloride	76	7.747	7.747	(0.725)	31811	5.00000	6.2
18	Acrylonitrile	53	8.155	8.155	(0.763)	19107	5.00000	5.5(a)
24	2-Chloro-1,3-butadiene	53	8.848	8.848	(0.828)	15618	1.00000	1.1
28	Propionitrile	54	9.414	9.414	(0.880)	7447	5.00000	5.2
26	Ethyl acetate	43	9.347	9.347	(0.874)	58802	5.00000	5.9
27	Methacrylonitrile	41	9.603	9.603	(0.898)	37864	5.00000	5.8
19	Isobutyl alcohol	41	10.059	10.059	(0.941)	24017	50.0000	61.8
72	Tetrahydrofuran	42	9.737	9.737	(0.591)	40973	5.00000	3.4(a)
* 40	Fluorobenzene	96	10.692	10.692	(1.000)	1783192	50.0000	
42	Methyl methacrylate	69	11.318	11.318	(1.059)	34461	5.00000	5.7
97	1,4-Dioxane	88	11.440	11.440	(1.070)	4809	50.0000	46.9(a)
48	2-Nitropropane	43	11.811	11.811	(1.105)	9673	5.00000	12.4
51	Ethyl methacrylate	69	12.638	12.638	(0.903)	66291	5.00000	5.7

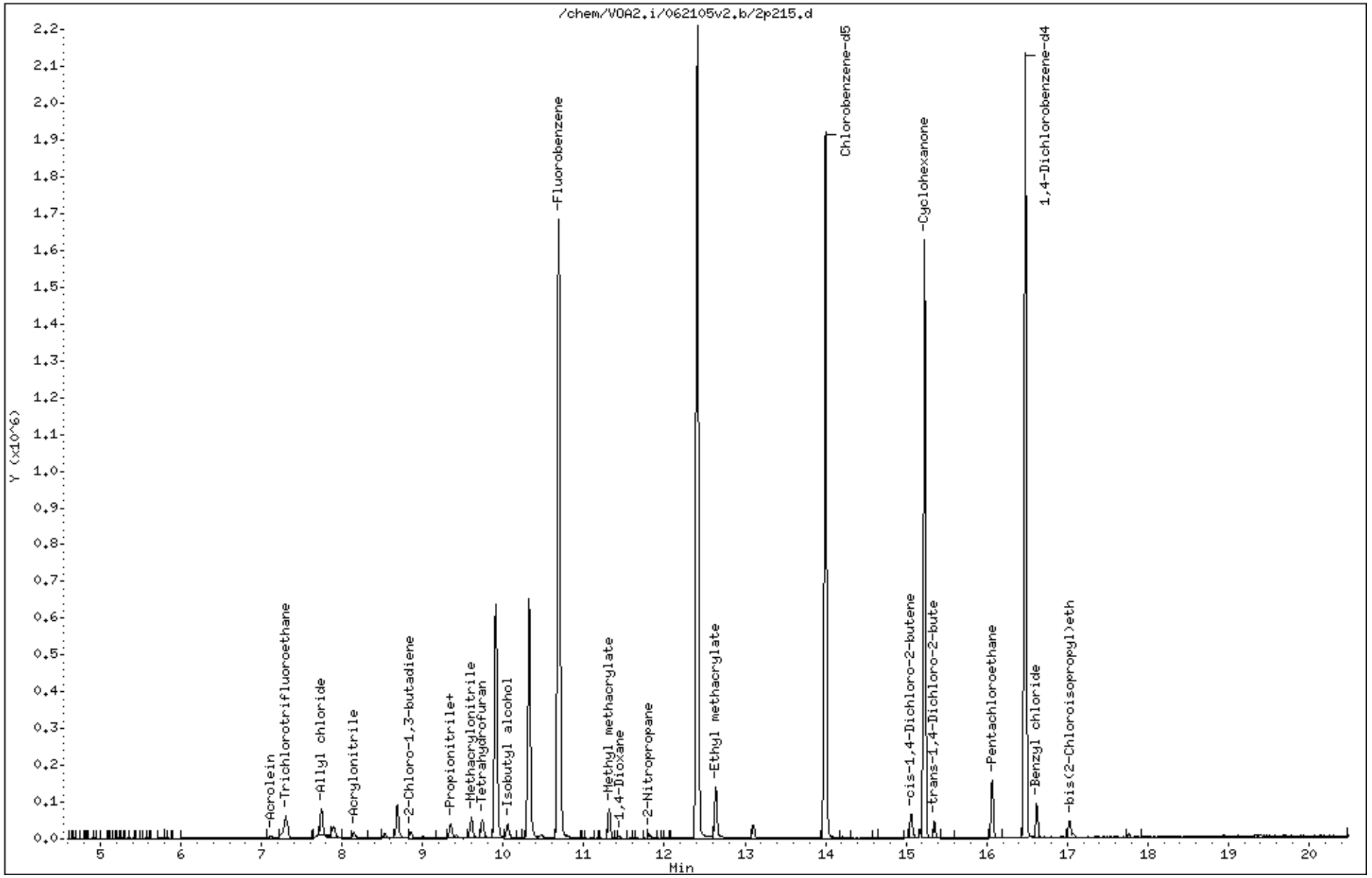
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	14.001	14.001	(1.000)	1201221	50.0000	
70 Cyclohexanone	55	15.181	15.181	(1.084)	13592	25.0000	25.1
68 cis-1,4-Dichloro-2-butene	53	15.066	15.066	(0.914)	17073	5.00000	4.9(a)
69 trans-1,4-Dichloro-2-butene	53	15.358	15.358	(0.932)	12045	5.00000	4.9(a)
82 Pentachloroethane	167	16.070	16.070	(0.975)	30411	5.00000	5.0
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	637471	50.0000	
88 Benzyl chloride	91	16.623	16.623	(1.009)	74857	5.00000	4.6(a)
91 bis(2-Chloroisopropyl)ether	45	17.025	17.025	(1.033)	38127	5.00000	5.6

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA2.i/062105v2.b/2p215.d
Date : 21-JUN-2005 22:58
Client ID: VSTD005S
Sample Info: |UVM050615-01A|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p216.d
Lab Smp Id: UVM050615-02A Client Smp ID: VSTD005S
Inj Date : 21-JUN-2005 23:25
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050615-02A|ICAL|1|VOAF|1|
Misc Info : VSTD005S
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:36 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 23:25 Cal File: 2p216.d
Als bottle: 15 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

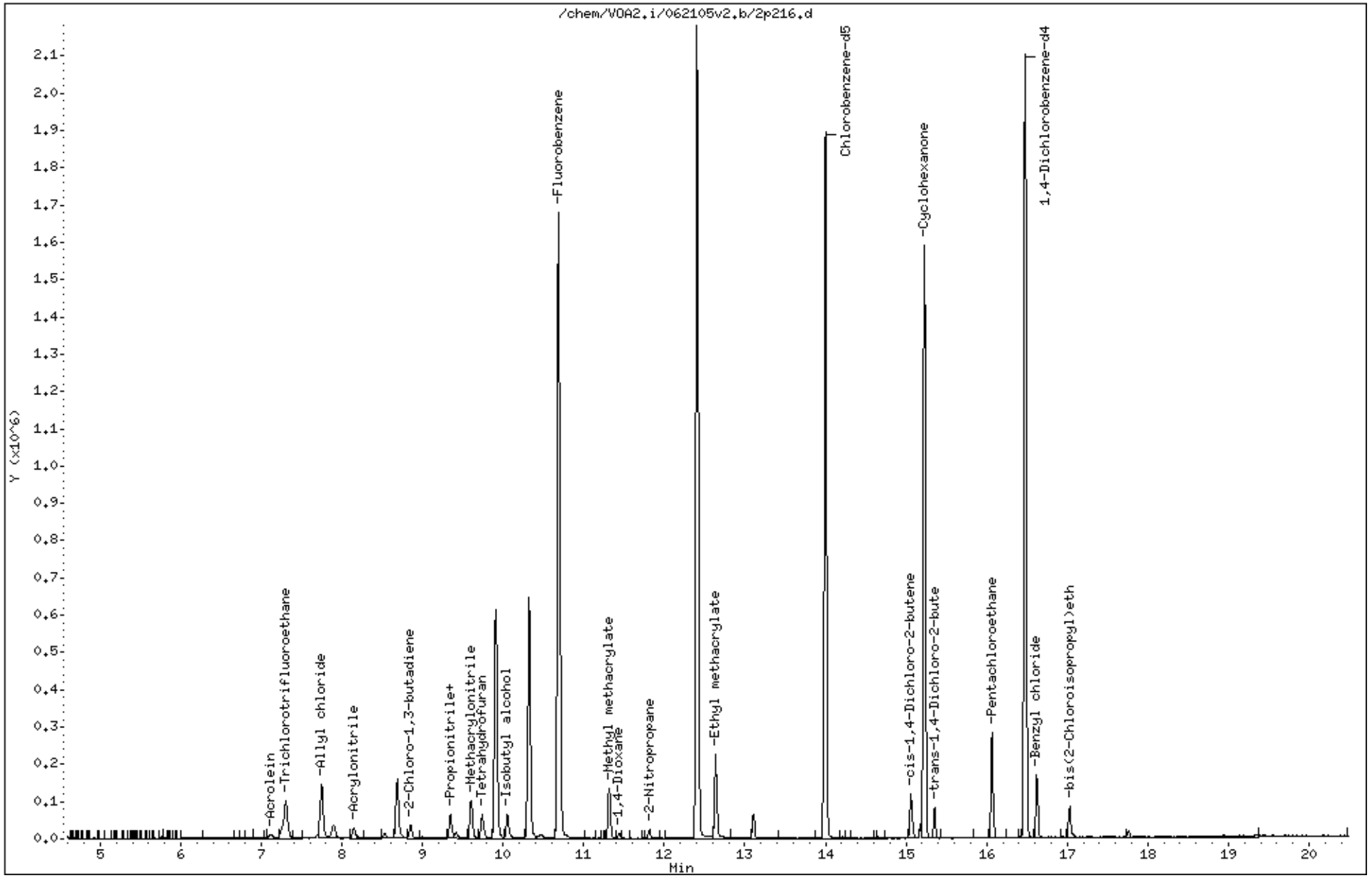
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.114	7.114	(0.665)	15915	10.0000	8.9(a)
12	Trichlorotrifluoroethane	85	7.303	7.303	(0.683)	36477	10.0000	10.1
16	Allyl chloride	76	7.747	7.747	(0.725)	51505	10.0000	10
18	Acrylonitrile	53	8.142	8.142	(0.762)	33336	10.0000	9.4(a)
24	2-Chloro-1,3-butadiene	53	8.854	8.854	(0.828)	27622	2.00000	1.8
28	Propionitrile	54	9.420	9.420	(0.881)	13035	10.0000	9.0
26	Ethyl acetate	43	9.347	9.347	(0.874)	99310	10.0000	9.8
27	Methacrylonitrile	41	9.602	9.602	(0.898)	66431	10.0000	10.1
19	Isobutyl alcohol	41	10.053	10.053	(0.940)	37500	100.000	95.2
72	Tetrahydrofuran	42	9.742	9.742	(0.591)	51703	10.0000	7.1
* 40	Fluorobenzene	96	10.691	10.691	(1.000)	1809039	50.0000	
42	Methyl methacrylate	69	11.318	11.318	(1.059)	60010	10.0000	9.7
97	1,4-Dioxane	88	11.446	11.446	(1.071)	10252	100.000	98.6
48	2-Nitropropane	43	11.817	11.817	(1.105)	18029	10.0000	15.1
51	Ethyl methacrylate	69	12.638	12.638	(0.903)	113734	10.0000	9.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	14.001	14.001	(1.000)	1199710	50.0000	
70 Cyclohexanone	55	15.187	15.187	(1.085)	23193	50.0000	42.8
68 cis-1,4-Dichloro-2-butene	53	15.059	15.059	(0.914)	31740	10.0000	9.1
69 trans-1,4-Dichloro-2-butene	53	15.357	15.357	(0.932)	21960	10.0000	9.0
82 Pentachloroethane	167	16.069	16.069	(0.975)	57339	10.0000	9.5
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	633149	50.0000	
88 Benzyl chloride	91	16.623	16.623	(1.009)	138420	10.0000	8.7
91 bis(2-Chloroisopropyl)ether	45	17.030	17.030	(1.034)	62937	10.0000	9.4

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA2.i/062105v2.b/2p216.d
Date : 21-JUN-2005 23:25
Client ID: VSTD005S
Instrument: VOA2.i
Sample Info: |UVM050615-02A|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: CDS1
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p217.d
Lab Smp Id: UVM050615-03A Client Smp ID: VSTD010S
Inj Date : 21-JUN-2005 23:51
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050615-03A|ICAL|1|VOAF|1|
Misc Info : VSTD010S
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:36 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 23:51 Cal File: 2p217.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.121	7.121	(0.666)	40183	25.0000	22.8
12	Trichlorotrifluoroethane	85	7.310	7.310	(0.684)	88061	25.0000	24.7
16	Allyl chloride	76	7.742	7.742	(0.724)	121672	25.0000	23.7
18	Acrylonitrile	53	8.150	8.150	(0.762)	88867	25.0000	25.4
24	2-Chloro-1,3-butadiene	53	8.849	8.849	(0.828)	75527	5.00000	5.1
28	Propionitrile	54	9.415	9.415	(0.881)	36155	25.0000	25.3
26	Ethyl acetate	43	9.348	9.348	(0.874)	257838	25.0000	25.6
27	Methacrylonitrile	41	9.603	9.603	(0.898)	163830	25.0000	25.2
19	Isobutyl alcohol	41	10.054	10.054	(0.940)	99074	250.000	254
72	Tetrahydrofuran	42	9.737	9.737	(0.591)	101136	25.0000	24.8
* 40	Fluorobenzene	96	10.692	10.692	(1.000)	1791961	50.0000	
42	Methyl methacrylate	69	11.313	11.313	(1.058)	158903	25.0000	26.0
97	1,4-Dioxane	88	11.441	11.441	(1.070)	26588	250.000	258
48	2-Nitropropane	43	11.812	11.812	(1.105)	49738	25.0000	25.9
51	Ethyl methacrylate	69	12.639	12.639	(0.903)	304580	25.0000	26.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1188713	50.0000	
70 Cyclohexanone	55	15.182	15.182	(1.085)	62766	125.000	117
68 cis-1,4-Dichloro-2-butene	53	15.060	15.060	(0.914)	83972	25.0000	24.7
69 trans-1,4-Dichloro-2-butene	53	15.352	15.352	(0.932)	60454	25.0000	25.2
82 Pentachloroethane	167	16.070	16.070	(0.975)	150549	25.0000	25.4
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	618227	50.0000	
88 Benzyl chloride	91	16.624	16.624	(1.009)	402445	25.0000	25.8
91 bis(2-Chloroisopropyl)ether	45	17.025	17.025	(1.033)	166972	25.0000	25.4

Data File: /chem/VOA2.i/062105v2.b/2p217.d

Date : 21-JUN-2005 23:51

Client ID: VSTD010S

Instrument: VOA2.i

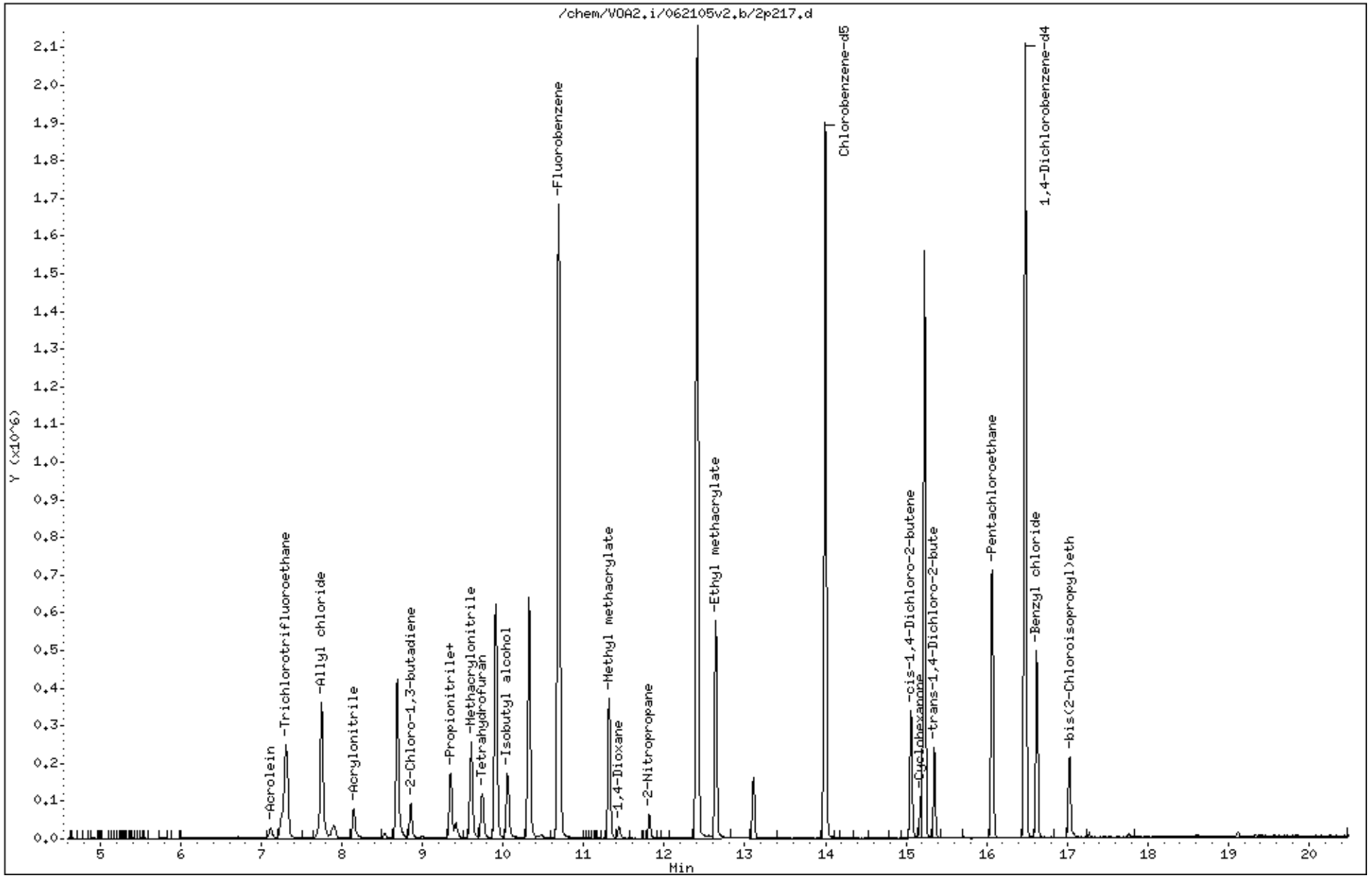
Sample Info: |UVM050615-03A|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p218.d
Lab Smp Id: UVM050615-04A Client Smp ID: VSTD025S
Inj Date : 22-JUN-2005 00:17
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050615-04A|ICAL|1|VOAF|1|
Misc Info : VSTD025S
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:36 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 00:17 Cal File: 2p218.d
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.115	7.115	(0.666)	88007	50.0000	48.7
12	Trichlorotrifluoroethane	85	7.297	7.297	(0.683)	184876	50.0000	50.6
16	Allyl chloride	76	7.748	7.748	(0.725)	246901	50.0000	47.0
18	Acrylonitrile	53	8.143	8.143	(0.762)	177872	50.0000	49.7
24	2-Chloro-1,3-butadiene	53	8.849	8.849	(0.828)	152919	10.0000	10.1
28	Propionitrile	54	9.414	9.414	(0.881)	73047	50.0000	49.9
26	Ethyl acetate	43	9.347	9.347	(0.875)	512132	50.0000	49.6
27	Methacrylonitrile	41	9.603	9.603	(0.899)	333002	50.0000	49.9
19	Isobutyl alcohol	41	10.053	10.053	(0.941)	197742	500.000	494
72	Tetrahydrofuran	42	9.737	9.737	(0.591)	183413	50.0000	52.1
* 40	Fluorobenzene	96	10.686	10.686	(1.000)	1837266	50.0000	
42	Methyl methacrylate	69	11.312	11.312	(1.059)	315181	50.0000	50.3
97	1,4-Dioxane	88	11.440	11.440	(1.071)	54629	500.000	518
48	2-Nitropropane	43	11.817	11.817	(1.106)	109377	50.0000	45.1
51	Ethyl methacrylate	69	12.639	12.639	(0.903)	598537	50.0000	51.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1210758	50.0000	
70 Cyclohexanone	55	15.182	15.182	(1.085)	131044	250.000	240
68 cis-1,4-Dichloro-2-butene	53	15.060	15.060	(0.914)	175129	50.0000	50.4
69 trans-1,4-Dichloro-2-butene	53	15.352	15.352	(0.932)	121677	50.0000	49.6
82 Pentachloroethane	167	16.070	16.070	(0.975)	318441	50.0000	52.6
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	632988	50.0000	
88 Benzyl chloride	91	16.623	16.623	(1.009)	844883	50.0000	52.9
91 bis(2-Chloroisopropyl)ether	45	17.031	17.031	(1.034)	344877	50.0000	51.3

Data File: /chem/VOA2.i/062105v2.b/2p218.d

Page 1

Date : 22-JUN-2005 00:17

Client ID: VSTD025S

Instrument: VOA2.i

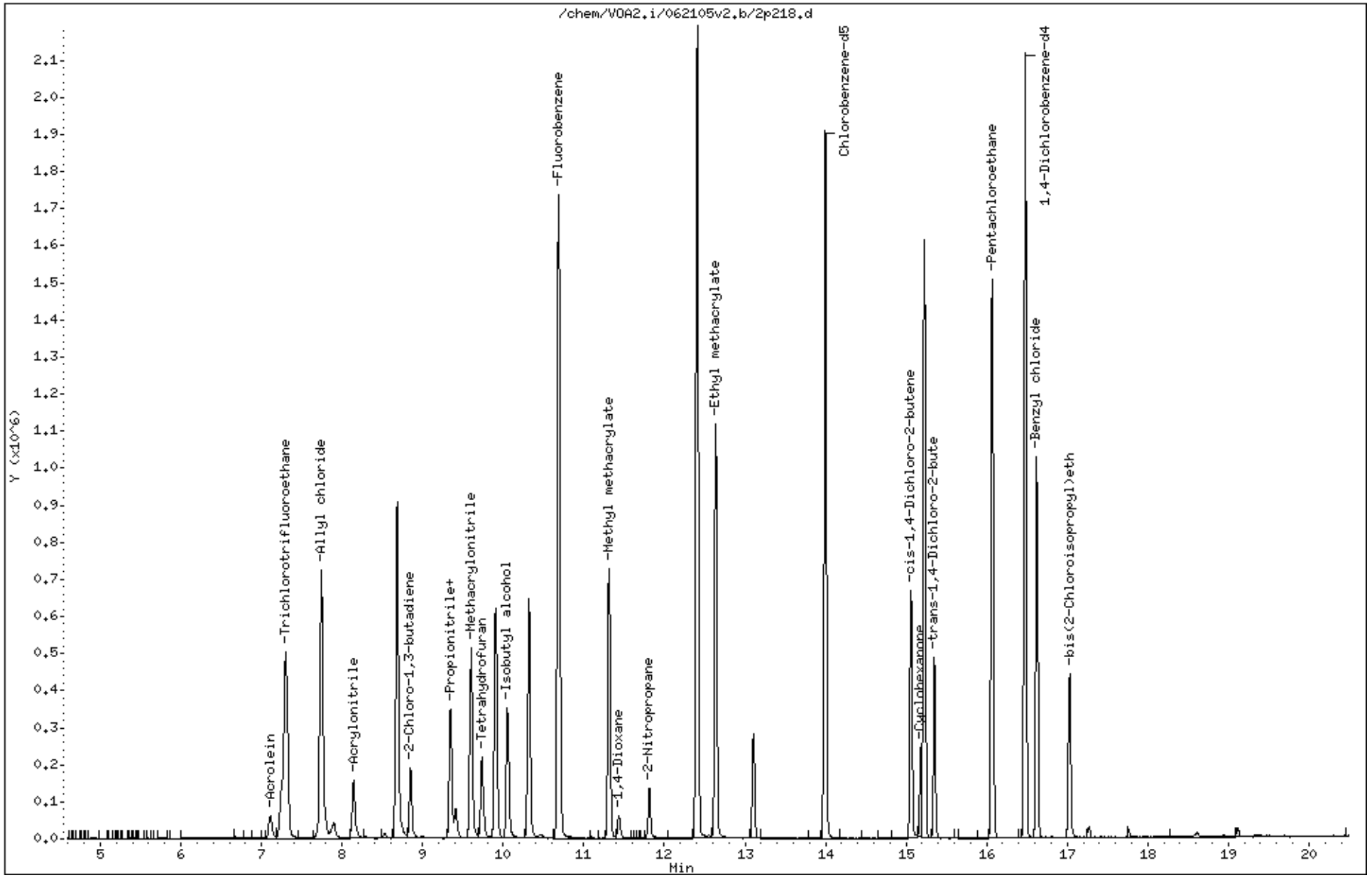
Sample Info: |UVM050615-04A|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p219.d
Lab Smp Id: UVM050615-05A Client Smp ID: VSTD050S
Inj Date : 22-JUN-2005 00:44
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050615-05A|ICAL|1|VOAF|1|
Misc Info : VSTD050S
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:36 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 00:44 Cal File: 2p219.d
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.115	7.115	(0.665)	185399	100.000	104
12	Trichlorotrifluoroethane	85	7.303	7.303	(0.683)	378849	100.000	105
16	Allyl chloride	76	7.748	7.748	(0.725)	510201	100.000	98.6
18	Acrylonitrile	53	8.143	8.143	(0.762)	359289	100.000	102
24	2-Chloro-1,3-butadiene	53	8.855	8.855	(0.828)	317527	20.0000	21.2
28	Propionitrile	54	9.414	9.414	(0.880)	151627	100.000	105
26	Ethyl acetate	43	9.341	9.341	(0.874)	1034070	100.000	102
27	Methacrylonitrile	41	9.603	9.603	(0.898)	663837	100.000	101
19	Isobutyl alcohol	41	10.053	10.053	(0.940)	390034	1000.00	990
72	Tetrahydrofuran	42	9.737	9.737	(0.591)	334620	100.000	105
* 40	Fluorobenzene	96	10.692	10.692	(1.000)	1809639	50.0000	
42	Methyl methacrylate	69	11.313	11.313	(1.058)	637131	100.000	103
97	1,4-Dioxane	88	11.434	11.434	(1.069)	107297	1000.00	1030
48	2-Nitropropane	43	11.811	11.811	(1.105)	250552	100.000	92.7
51	Ethyl methacrylate	69	12.639	12.639	(0.903)	1226406	100.000	106

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	14.001	14.001	(1.000)	1195518	50.0000	
70 Cyclohexanone	55	15.182	15.182	(1.084)	335342	500.000	622
68 cis-1,4-Dichloro-2-butene	53	15.060	15.060	(0.914)	371928	100.000	108
69 trans-1,4-Dichloro-2-butene	53	15.352	15.352	(0.932)	263267	100.000	108
82 Pentachloroethane	167	16.070	16.070	(0.975)	667191	100.000	111
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	626765	50.0000	
88 Benzyl chloride	91	16.623	16.623	(1.009)	1824119	100.000	115
91 bis(2-Chloroisopropyl)ether	45	17.031	17.031	(1.034)	678627	100.000	102

Data File: /chem/VOA2.i/062105v2.b/2p219.d

Page 1

Date : 22-JUN-2005 00:44

Client ID: VSTD050S

Instrument: VOA2.i

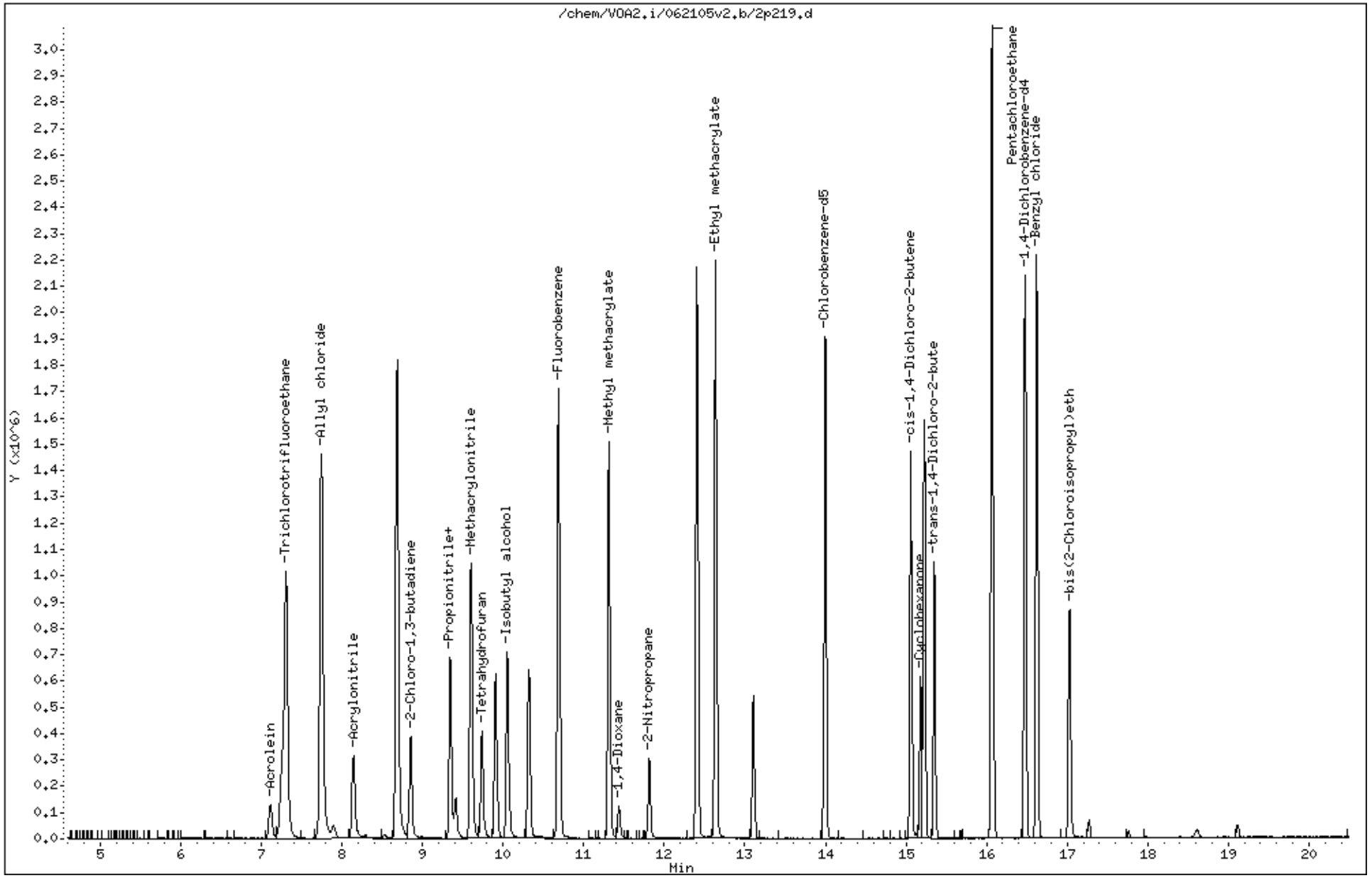
Sample Info: |UVM050615-05A|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p220.d
Lab Smp Id: UVM050615-06A Client Smp ID: VSTD100S
Inj Date : 22-JUN-2005 01:10
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050615-06A|ICAL|1|VOAF|1|
Misc Info : VSTD100S
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:36 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 01:10 Cal File: 2p220.d
Als bottle: 18 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.110	7.110	(0.665)	469219	250.000	265
12	Trichlorotrifluoroethane	85	7.304	7.304	(0.683)	844827	250.000	236
16	Allyl chloride	76	7.742	7.742	(0.724)	1135566	250.000	221
18	Acrylonitrile	53	8.138	8.138	(0.761)	851300	250.000	243
24	2-Chloro-1,3-butadiene	53	8.856	8.856	(0.829)	731799	50.0000	49.3
28	Propionitrile	54	9.415	9.415	(0.881)	355708	250.000	248
26	Ethyl acetate	43	9.342	9.342	(0.874)	2367245	250.000	234
27	Methacrylonitrile	41	9.604	9.604	(0.899)	1515983	250.000	232
19	Isobutyl alcohol	41	10.054	10.054	(0.941)	913936	2500.00	2330
72	Tetrahydrofuran	42	9.738	9.738	(0.591)	756547	250.000	248
* 40	Fluorobenzene	96	10.687	10.687	(1.000)	1797940	50.0000	
42	Methyl methacrylate	69	11.313	11.313	(1.059)	1454541	250.000	237
97	1,4-Dioxane	88	11.435	11.435	(1.070)	257731	2500.00	2500
48	2-Nitropropane	43	11.812	11.812	(1.105)	701746	250.000	245
51	Ethyl methacrylate	69	12.640	12.640	(0.903)	2681105	250.000	230

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1203310	50.0000	
	70 Cyclohexanone	55	15.182	15.182	(1.085)	1192148	1250.00	2200
	68 cis-1,4-Dichloro-2-butene	53	15.061	15.061	(0.914)	894457	250.000	257
	69 trans-1,4-Dichloro-2-butene	53	15.353	15.353	(0.932)	631225	250.000	257
	82 Pentachloroethane	167	16.071	16.071	(0.975)	1523636	250.000	251
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	633679	50.0000	
	88 Benzyl chloride	91	16.624	16.624	(1.009)	4150382	250.000	260
	91 bis(2-Chloroisopropyl)ether	45	17.026	17.026	(1.033)	1612148	250.000	240

Data File: /chem/VOA2.i/062105v2.b/2p220.d

Date : 22-JUN-2005 01:10

Client ID: VSTD100S

Instrument: VOA2.i

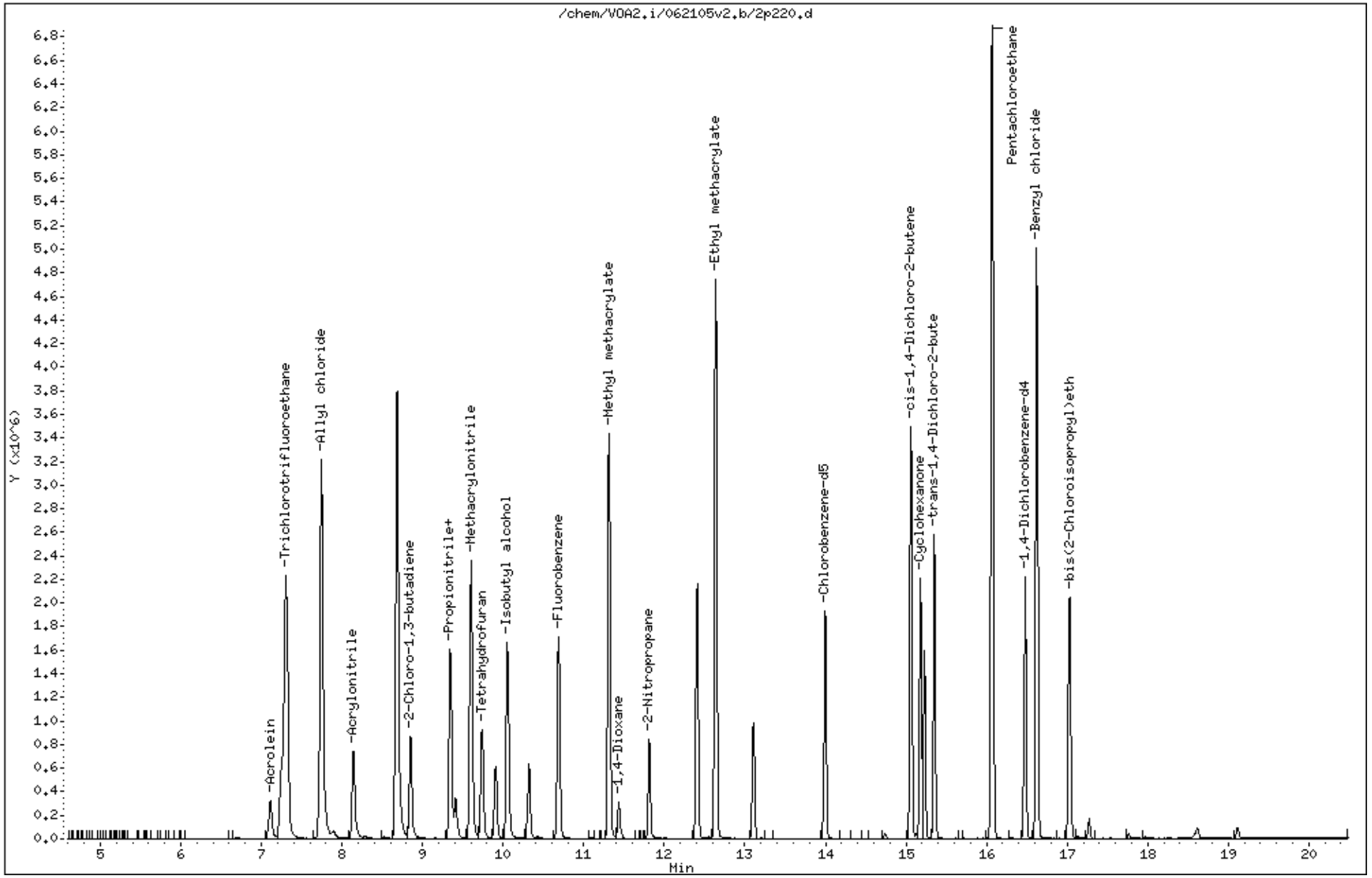
Sample Info: |UVM050615-06A|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p221.d
Lab Smp Id: UVM050615-07A Client Smp ID: VSTD250S
Inj Date : 22-JUN-2005 01:37
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050615-07A|ICAL|1|VOAF|1|
Misc Info : VSTD250S
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:36 cry00643 Quant Type: ISTD
Cal Date : 22-JUN-2005 01:37 Cal File: 2p221.d
Als bottle: 19 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.109	7.109	(0.665)	1029073	500.000	563(A)
12	Trichlorotrifluoroethane	85	7.303	7.303	(0.683)	1581599	500.000	428
16	Allyl chloride	76	7.747	7.747	(0.725)	2116446	500.000	398
18	Acrylonitrile	53	8.143	8.143	(0.762)	1721889	500.000	475
24	2-Chloro-1,3-butadiene	53	8.855	8.855	(0.828)	1440646	100.000	93.8
28	Propionitrile	54	9.414	9.414	(0.880)	733760	500.000	495
26	Ethyl acetate	43	9.341	9.341	(0.874)	4587623	500.000	439
27	Methacrylonitrile	41	9.603	9.603	(0.898)	2950801	500.000	437
19	Isobutyl alcohol	41	10.053	10.053	(0.940)	1786580	5000.00	4410
72	Tetrahydrofuran	42	9.737	9.737	(0.591)	1496984	500.000	491
* 40	Fluorobenzene	96	10.692	10.692	(1.000)	1858973	50.0000	
42	Methyl methacrylate	69	11.312	11.312	(1.058)	2753893	500.000	434
97	1,4-Dioxane	88	11.434	11.434	(1.069)	520990	5000.00	4880
48	2-Nitropropane	43	11.811	11.811	(1.105)	1522732	500.000	504(A)
51	Ethyl methacrylate	69	12.639	12.639	(0.903)	4830884	500.000	406

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	14.001	14.001	(1.000)	1231107	50.0000	
70 Cyclohexanone	55	15.181	15.181	(1.084)	2547364	2500.00	4590
68 cis-1,4-Dichloro-2-butene	53	15.060	15.060	(0.914)	1774299	500.000	501(A)
69 trans-1,4-Dichloro-2-butene	53	15.352	15.352	(0.932)	1267316	500.000	507(A)
82 Pentachloroethane	167	16.070	16.070	(0.975)	2690743	500.000	436
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	644886	50.0000	
88 Benzyl chloride	91	16.623	16.623	(1.009)	7457585	500.000	459
91 bis(2-Chloroisopropyl)ether	45	17.031	17.031	(1.034)	3129822	500.000	457

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA2.i/062105v2.b/2p221.d

Date : 22-JUN-2005 01:37

Client ID: VSTD250S

Sample Info: |UVM050615-07A|ICAL|1|VOAF|1|

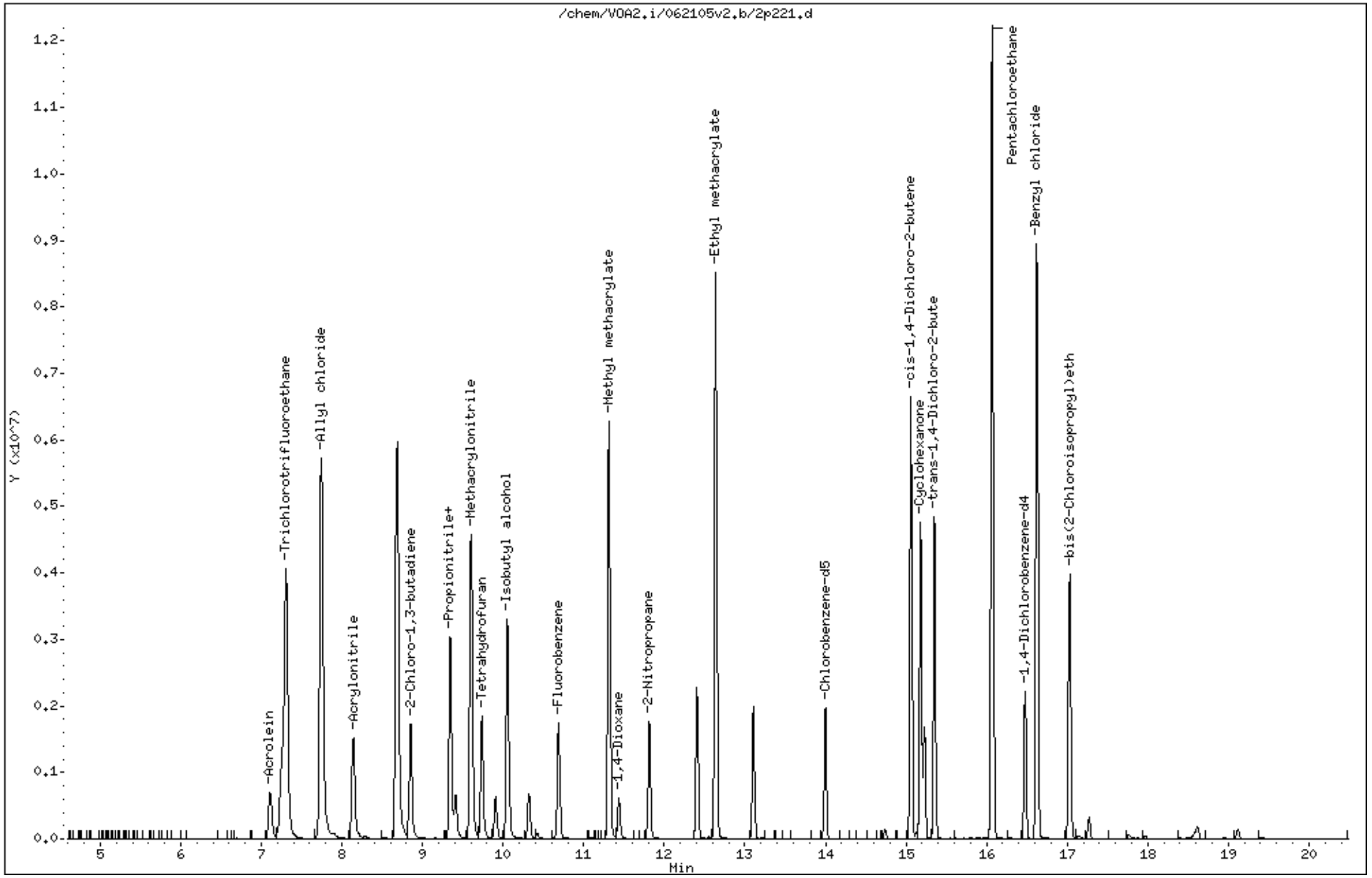
Purge Volume: 5.0

Column phase: DB-624

Instrument: VOA2.i

Operator: CDS1

Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 21-JUN-2005 22:05
Lab File ID: 2p213.d Init. Cal. Date(s): 21-JUN-2005 21-JUN-2005
Analysis Type: WATER Init. Cal. Times: 18:08 21:39
Lab Sample ID: UVM050605-01C Quant Type: ISTD
Method: /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	163	150	0.66171	0.050	8.42586	40.00000	Linear
M 2 1,2-Dichloroethylene (total	0.44458	0.47887	0.47887	0.050	7.71335	40.00000	Averaged
M 135 1,3-Dichloropropylene	0.39341	0.39052	0.39052	0.050	-0.73272	40.00000	Averaged
3 Dichlorodifluoromethane	0.37278	0.46104	0.46104	0.050	23.67739	40.00000	Averaged
4 Chloromethane	0.32535	0.35607	0.35607	0.100	9.44329	40.00000	Averaged|spcc
5 Vinyl chloride	0.27465	0.29130	0.29130	0.050	6.06154	20.00000	Averaged|ccc
6 Bromomethane	0.27238	0.26671	0.26671	0.050	-2.08158	40.00000	Averaged
7 Chloroethane	0.21354	0.23806	0.23806	0.050	11.48266	40.00000	Averaged
8 Trichlorofluoromethane	0.42644	0.48196	0.48196	0.050	13.02006	40.00000	Averaged
134 Ethyl Ether	0.26876	0.25895	0.25895	0.010	-3.65150	40.00000	Averaged
10 Acetone	283	250	0.09632	0.050	13.22145	40.00000	Linear
15 Acetonitrile	1426	1250	0.03916	0.010	14.04179	40.00000	Linear
11 1,1-Dichloroethylene	0.46281	0.49240	0.49240	0.050	6.39316	20.00000	Averaged|ccc
128 Methyl acetate	0.23035	0.26191	0.26191	0.010	13.69941	40.00000	Averaged
13 Iodomethane	0.45346	0.46699	0.46699	0.050	2.98396	40.00000	Averaged
17 Methylene chloride	51.89177	50.00000	0.29542	0.050	3.78354	40.00000	Linear
14 Carbon disulfide	251	250	0.77114	0.050	0.29367	40.00000	Linear
20 tert-Butyl methyl ether	0.81195	0.82551	0.82551	0.050	1.67023	40.00000	Averaged
21 trans-1,2-Dichloroethylene	0.42611	0.45625	0.45625	0.050	7.07329	40.00000	Averaged
23 Vinyl acetate	0.39571	0.46540	0.46540	0.010	17.61064	40.00000	Averaged
22 1,1-Dichloroethane	0.52438	0.56006	0.56006	0.100	6.80487	40.00000	Averaged|spcc
30 2-Butanone	0.14832	0.15208	0.15208	0.030	2.53251	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.46306	0.50150	0.50150	0.050	8.30233	40.00000	Averaged
25 2,2-Dichloropropane	0.37281	0.41636	0.41636	0.050	11.68125	40.00000	Averaged
32 Chloroform	0.48189	0.50458	0.50458	0.010	4.70843	20.00000	Averaged|ccc
29 Bromochloromethane	0.13371	0.14105	0.14105	0.010	5.48444	40.00000	Averaged
$ 35 Dibromofluoromethane	0.26715	0.25332	0.25332	0.010	-5.17535	40.00000	Averaged
36 1,1,1-Trichloroethane	0.43022	0.47212	0.47212	0.010	9.73911	40.00000	Averaged
129 Cyclohexane	0.55488	0.54352	0.54352	0.010	-2.04799	40.00000	Averaged
34 1,1-Dichloropropene	0.35988	0.36067	0.36067	0.010	0.22031	40.00000	Averaged
131 n-Butyl alcohol	3057	2500	0.01131	0.001	22.29953	40.00000	Linear
33 Carbon tetrachloride	0.36657	0.39828	0.39828	0.010	8.65055	40.00000	Averaged
37 1,2-Dichloroethane	0.40891	0.42820	0.42820	0.010	4.71750	40.00000	Averaged
38 Benzene	55.32187	50.00000	1.06160	0.010	10.64374	40.00000	Linear
39 Trichloroethylene	0.29341	0.29717	0.29717	0.010	1.28074	40.00000	Averaged
41 1,2-Dichloropropane	0.28251	0.28573	0.28573	0.010	1.14233	20.00000	Averaged|ccc

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 21-JUN-2005 22:05
Lab File ID: 2p213.d Init. Cal. Date(s): 21-JUN-2005 21-JUN-2005
Analysis Type: WATER Init. Cal. Times: 18:08 21:39
Lab Sample ID: UVM050605-01C Quant Type: ISTD
Method: /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.51601	0.48118	0.48118	0.010	-6.75119	40.00000	Averaged
45 Bromodichloromethane	0.36647	0.38688	0.38688	0.010	5.56871	40.00000	Averaged
43 Dibromomethane	0.16393	0.17246	0.17246	0.010	5.20527	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.08990	0.09878	0.09878	0.010	9.87128	40.00000	Averaged
49 4-Methyl-2-pentanone	0.17587	0.17806	0.17806	0.010	1.24407	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.40993	0.40392	0.40392	0.010	-1.46586	40.00000	Averaged
$ 47 Toluene-d8	1.46948	1.34970	1.34970	0.010	-8.15132	40.00000	Averaged
50 Toluene	1.02172	1.04105	1.04105	0.010	1.89114	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.57045	0.56528	0.56528	0.010	-0.90625	40.00000	Averaged
54 1,1,2-Trichloroethane	0.27905	0.28580	0.28580	0.010	2.41690	40.00000	Averaged
55 2-Hexanone	0.30346	0.31400	0.31400	0.010	3.47150	40.00000	Averaged
52 1,3-Dichloropropane	0.54998	0.54611	0.54611	0.010	-0.70451	40.00000	Averaged
56 Tetrachloroethylene	52.94142	50.00000	0.31818	0.010	5.88284	40.00000	Linear
57 Dibromochloromethane	0.37980	0.43185	0.43185	0.010	13.70592	40.00000	Averaged
59 1,2-Dibromoethane	0.34053	0.35589	0.35589	0.010	4.51149	40.00000	Averaged
62 Chlorobenzene	1.05043	1.06399	1.06399	0.300	1.29092	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.37618	0.39330	0.39330	0.010	4.55075	40.00000	Averaged
58 Ethylbenzene	55.38172	50.00000	1.86069	0.010	10.76344	20.00000	Linear ccc
63 m,p-Xylenes	108	100	0.66145	0.010	8.26894	40.00000	Linear
64 o-Xylene	54.36985	50.00000	0.66223	0.010	8.73970	40.00000	Linear
65 Styrene	54.94472	50.00000	1.12091	0.010	9.88944	40.00000	Linear
66 Bromoform	0.45912	0.52884	0.52884	0.100	15.18594	40.00000	Averaged spcc
67 Isopropylbenzene	3.23002	3.07603	3.07603	0.010	-4.76737	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.73516	0.82178	0.82178	0.300	11.78298	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	1.16601	1.01298	1.01298	0.010	-13.12385	40.00000	Averaged
74 1,2,3-Trichloropropane	0.24495	0.25118	0.25118	0.010	2.54360	40.00000	Averaged
75 Bromobenzene	53.27669	50.00000	0.83211	0.010	6.55337	40.00000	Linear
76 n-Propylbenzene	53.53590	50.00000	3.99350	0.010	7.07179	40.00000	Linear
77 2-Chlorotoluene	54.77844	50.00000	2.77677	0.010	9.55687	40.00000	Linear
78 1,3,5-Trimethylbenzene	2.89293	2.72293	2.72293	0.010	-5.87636	40.00000	Averaged
80 4-Chlorotoluene	2.65340	2.61426	2.61426	0.010	-1.47495	40.00000	Averaged
81 tert-Butylbenzene	2.94040	2.86400	2.86400	0.010	-2.59819	40.00000	Averaged
79 1,2,4-Trimethylbenzene	2.95360	2.82357	2.82357	0.010	-4.40229	40.00000	Averaged
83 sec-Butylbenzene	3.81186	3.67021	3.67021	0.010	-3.71614	40.00000	Averaged
84 4-Isopropyltoluene	3.17514	3.09875	3.09875	0.010	-2.40595	40.00000	Averaged

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 21-JUN-2005 22:05
Lab File ID: 2p213.d Init. Cal. Date(s): 21-JUN-2005 21-JUN-2005
Analysis Type: WATER Init. Cal. Times: 18:08 21:39
Lab Sample ID: UVM050605-01C Quant Type: ISTD
Method: /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	53.22495	50.00000	1.59606	0.010	6.44989	40.00000	Linear
87 1,4-Dichlorobenzene	1.63990	1.60441	1.60441	0.010	-2.16443	40.00000	Averaged
89 n-Butylbenzene	3.07746	2.98644	2.98644	0.010	-2.95761	40.00000	Averaged
90 1,2-Dichlorobenzene	1.53470	1.53429	1.53429	0.010	-0.02627	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.15615	0.19107	0.19107	0.010	22.36023	40.00000	Averaged
93 1,2,4-Trichlorobenzene	1.03923	1.08687	1.08687	0.010	4.58429	40.00000	Averaged
94 Hexachlorobutadiene	0.74095	0.73031	0.73031	0.010	-1.43600	40.00000	Averaged
95 Naphthalene	2.63162	2.72856	2.72856	0.010	3.68339	40.00000	Averaged
96 1,2,3-Trichlorobenzene	1.01626	1.05679	1.05679	0.010	3.98805	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.58067
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062105v2.b/2p213.d
Lab Smp Id: UVM050605-01C Client Smp ID: SECOND_SOURCE_ICV
Inj Date : 21-JUN-2005 22:05
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050605-01C|ICV|1|VOAF|1|
Misc Info : VBLK01LCS
Comment :
Method : /chem/VOA2.i/062105v2.b/VOA2-8260B-062105.m
Meth Date : 22-Jun-2005 07:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 21:39 Cal File: 2p212.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

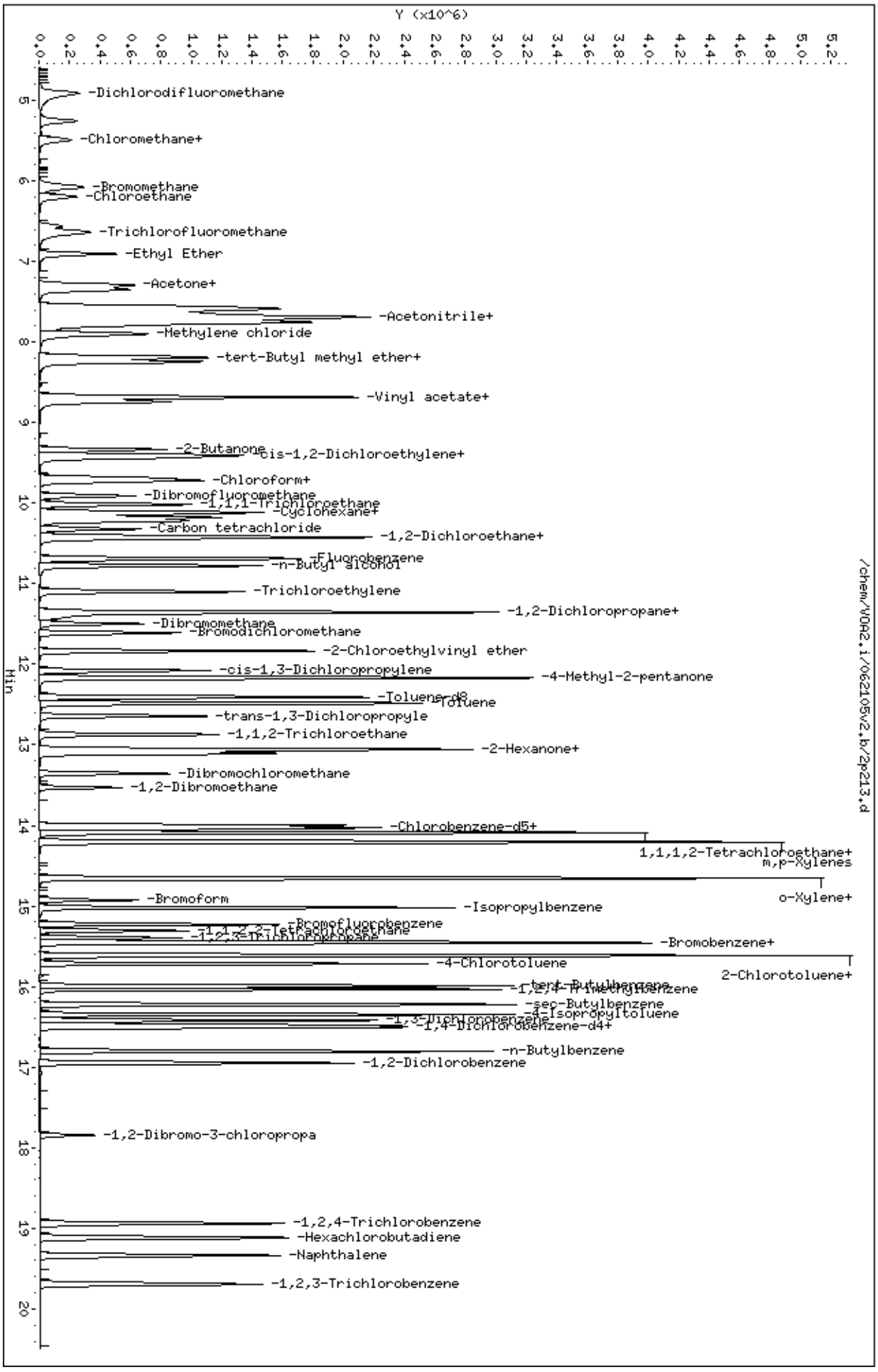
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2383868	150.000	163
M 2 1,2-Dichloroethylene (total)	96				1723939	100.000	108
M 135 1,3-Dichloropropylene	75				1405874	100.000	99.3
3 Dichlorodifluoromethane	85	4.915	4.915	(0.460)	829866	50.0000	61.8
4 Chloromethane	50	5.254	5.254	(0.492)	640926	50.0000	54.7
5 Vinyl chloride	62	5.488	5.488	(0.514)	524336	50.0000	53.0
6 Bromomethane	94	6.075	6.075	(0.568)	480074	50.0000	49.0
7 Chloroethane	64	6.197	6.197	(0.580)	428499	50.0000	55.7
8 Trichlorofluoromethane	101	6.635	6.635	(0.621)	867519	50.0000	56.5
134 Ethyl Ether	59	6.909	6.909	(0.646)	466101	50.0000	48.2
10 Acetone	43	7.286	7.286	(0.682)	866858	250.000	283
15 Acetonitrile	41	7.651	7.651	(0.716)	1762282	1250.00	1420
11 1,1-Dichloroethylene	61	7.347	7.347	(0.687)	886316	50.0000	53.2
128 Methyl acetate	43	7.687	7.687	(0.719)	2357149	250.000	284
13 Iodomethane	142	7.584	7.584	(0.710)	4202899	250.000	257
17 Methylene chloride	84	7.894	7.894	(0.739)	531751	50.0000	51.9

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	14	Carbon disulfide	76	7.754	7.754	(0.726)	6940210	250.000	251
	20	tert-Butyl methyl ether	73	8.192	8.192	(0.767)	1485907	50.0000	50.8
	21	trans-1,2-Dichloroethylene	61	8.241	8.241	(0.771)	821239	50.0000	53.5
	23	Vinyl acetate	43	8.685	8.685	(0.813)	4188540	250.000	294
	22	1,1-Dichloroethane	63	8.740	8.740	(0.818)	1008102	50.0000	53.4
	30	2-Butanone	43	9.336	9.336	(0.874)	1368711	250.000	256
	31	cis-1,2-Dichloroethylene	61	9.403	9.403	(0.880)	902700	50.0000	54.2
	25	2,2-Dichloropropane	77	9.433	9.433	(0.883)	749443	50.0000	55.8
	32	Chloroform	83	9.725	9.725	(0.910)	908230	50.0000	52.4
	29	Bromochloromethane	128	9.689	9.689	(0.907)	253881	50.0000	52.7
$	35	Dibromofluoromethane	113	9.908	9.908	(0.927)	455973	50.0000	47.4
	36	1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	849811	50.0000	54.9
	129	Cyclohexane	56	10.115	10.115	(0.946)	978329	50.0000	49.0
	34	1,1-Dichloropropene	75	10.176	10.176	(0.952)	649206	50.0000	50.1
	131	n-Butyl alcohol	56	10.772	10.772	(1.008)	1018121	2500.00	3060
	33	Carbon tetrachloride	117	10.218	10.218	(0.956)	716892	50.0000	54.3
	37	1,2-Dichloroethane	62	10.407	10.407	(0.974)	770759	50.0000	52.4
	38	Benzene	78	10.431	10.431	(0.976)	1910872	50.0000	55.3
*	40	Fluorobenzene	96	10.687	10.687	(1.000)	1799989	50.0000	
	39	Trichloroethylene	95	11.100	11.100	(1.039)	534894	50.0000	50.6
	41	1,2-Dichloropropane	63	11.350	11.350	(1.062)	514315	50.0000	50.6
	130	Methylcyclohexane	83	11.356	11.356	(1.063)	866112	50.0000	46.6
	45	Bromodichloromethane	83	11.611	11.611	(1.087)	696380	50.0000	52.8
	43	Dibromomethane	93	11.496	11.496	(1.076)	310429	50.0000	52.6
	44	2-Chloroethylvinyl ether	63	11.836	11.836	(1.108)	888995	250.000	275
	49	4-Methyl-2-pentanone	58	12.165	12.165	(0.869)	1069137	250.000	253
	46	cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	727053	50.0000	49.3
$	47	Toluene-d8	98	12.408	12.408	(0.887)	1620808	50.0000	45.9
	50	Toluene	92	12.481	12.481	(0.892)	1250155	50.0000	50.9
	53	trans-1,3-Dichloropropylene	75	12.639	12.639	(0.903)	678821	50.0000	49.5
	54	1,1,2-Trichloroethane	83	12.871	12.871	(0.920)	343203	50.0000	51.2
	55	2-Hexanone	43	13.053	13.053	(0.933)	1885339	250.000	259
	52	1,3-Dichloropropane	76	13.071	13.071	(0.934)	655799	50.0000	49.6
	56	Tetrachloroethylene	164	13.108	13.108	(0.937)	382090	50.0000	52.9
	57	Dibromochloromethane	129	13.357	13.357	(0.954)	518593	50.0000	56.8
	59	1,2-Dibromoethane	107	13.534	13.534	(0.967)	427373	50.0000	52.2
*	61	Chlorobenzene-d5	117	13.996	13.996	(1.000)	1200864	50.0000	
	62	Chlorobenzene	112	14.032	14.032	(1.003)	1277708	50.0000	50.6
	60	1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	472300	50.0000	52.3
	58	Ethylbenzene	91	14.093	14.093	(1.007)	2234438	50.0000	55.4
	63	m,p-Xylenes	106	14.209	14.209	(1.015)	1588616	100.000	108
	64	o-Xylene	106	14.653	14.653	(1.047)	795252	50.0000	54.4
	65	Styrene	104	14.659	14.659	(1.047)	1346059	50.0000	54.9
	66	Bromoform	173	14.927	14.927	(0.906)	340273	50.0000	57.6
	67	Isopropylbenzene	105	15.024	15.024	(0.912)	1979201	50.0000	47.6
	73	1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	528757	50.0000	55.9
$	71	Bromofluorobenzene	95	15.225	15.225	(0.924)	651779	50.0000	43.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	161619	50.0000	51.3
75	Bromobenzene	156	15.444	15.444	(0.937)	535399	50.0000	53.3
76	n-Propylbenzene	91	15.456	15.456	(0.938)	2569523	50.0000	53.5
77	2-Chlorotoluene	91	15.614	15.614	(0.948)	1786651	50.0000	54.8
78	1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1752006	50.0000	47.1
80	4-Chlorotoluene	91	15.718	15.718	(0.954)	1682088	50.0000	49.3
81	tert-Butylbenzene	119	15.991	15.991	(0.970)	1842776	50.0000	48.7
79	1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	1816764	50.0000	47.8
83	sec-Butylbenzene	105	16.223	16.223	(0.984)	2361509	50.0000	48.1
84	4-Isopropyltoluene	119	16.344	16.344	(0.992)	1993820	50.0000	48.8
85	1,3-Dichlorobenzene	146	16.423	16.423	(0.997)	1026946	50.0000	53.2
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	643427	50.0000	
87	1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	1032318	50.0000	48.9
89	n-Butylbenzene	91	16.800	16.800	(1.020)	1921555	50.0000	48.5
90	1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	987206	50.0000	50.0
92	1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	122939	50.0000	61.2
93	1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	699321	50.0000	52.3
94	Hexachlorobutadiene	225	19.118	19.118	(1.160)	469903	50.0000	49.3
95	Naphthalene	128	19.337	19.337	(1.174)	1755626	50.0000	51.8
96	1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	679969	50.0000	52.0


Data File: /chem/VOA2.i/062105v2.b/2p213.d
Date : 21-JUN-2005 22:05
Client ID: SECOND_SOURCE_ICV
Sample Info: IUWM050605-01C|ICV|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25
/chem/VOA2.i/062105v2.b/2p213.d
Y (x10^6)
Min
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Ethyl Ether
-Acetone+
-Acetonitrile+
-Methylene chloride
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone
cis-1,2-Dichloroethylene+
-Chloroform+
-Dibromofluoromethane
-1,1,1-Trichloroethane
-Cyclohexane+
-Carbon tetrachloride
-1,2-Dichloroethane+
-Fluorobenzene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Dibromomethane
-Bromodichloromethane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
-1,2,3-Trichloropropane
-Bromobenzene+
-4-Chlorotoluene
2-Chlorotoluene+
-tert-Butylbenzene
-1,2,4-Trimethylbenzene
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 29-JUN-2005 18:58
Lab File ID: 2q329.d Init. Cal. Date(s): 21-JUN-2005 22-JUN-2005
Analysis Type: WATER Init. Cal. Times: 18:08 01:37
Lab Sample ID: UVM050605-01D Quant Type: ISTD
Method: /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	163	150	0.66188	0.050	8.45421	40.00000	Linear
M 2 1,2-Dichloroethylene (total	0.44458	0.46369	0.46369	0.050	4.29644	40.00000	Averaged
M 135 1,3-Dichloropropylene	0.39341	0.37584	0.37584	0.050	-4.46483	40.00000	Averaged
3 Dichlorodifluoromethane	0.37278	0.42153	0.42153	0.050	13.07826	40.00000	Averaged
4 Chloromethane	0.32535	0.37616	0.37616	0.100	15.61666	40.00000	Averaged|spcc
5 Vinyl chloride	0.27466	0.29332	0.29332	0.050	6.79614	20.00000	Averaged|ccc
6 Bromomethane	0.27238	0.30425	0.30425	0.050	11.70062	40.00000	Averaged
7 Chloroethane	0.21354	0.25792	0.25792	0.050	20.78188	40.00000	Averaged
8 Trichlorofluoromethane	0.42644	0.43303	0.43303	0.050	1.54547	40.00000	Averaged
134 Ethyl Ether	0.26876	0.26483	0.26483	0.010	-1.46421	40.00000	Averaged
10 Acetone	275	250	0.09379	0.050	10.17547	40.00000	Linear
15 Acetonitrile	1455	1250	0.03995	0.010	16.38716	40.00000	Linear
11 1,1-Dichloroethylene	0.46281	0.47013	0.47013	0.050	1.58158	20.00000	Averaged|ccc
128 Methyl acetate	0.23035	0.26357	0.26357	0.010	14.41993	40.00000	Averaged
13 Iodomethane	0.45346	0.48805	0.48805	0.050	7.62802	40.00000	Averaged
17 Methylene chloride	56.95409	50.00000	0.32263	0.050	13.90818	40.00000	Linear
14 Carbon disulfide	256	250	0.78848	0.050	2.59516	40.00000	Linear
20 tert-Butyl methyl ether	0.81195	0.80753	0.80753	0.050	-0.54461	40.00000	Averaged
21 trans-1,2-Dichloroethylene	0.42611	0.43996	0.43996	0.050	3.24972	40.00000	Averaged
23 Vinyl acetate	0.39571	0.53785	0.53785	0.010	35.92005	40.00000	Averaged
22 1,1-Dichloroethane	0.52438	0.55135	0.55135	0.100	5.14324	40.00000	Averaged|spcc
30 2-Butanone	0.14832	0.14365	0.14365	0.030	-3.14923	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.46306	0.48742	0.48742	0.050	5.25963	40.00000	Averaged
25 2,2-Dichloropropane	0.37281	0.38751	0.38751	0.050	3.94284	40.00000	Averaged
32 Chloroform	0.48189	0.48949	0.48949	0.010	1.57815	20.00000	Averaged|ccc
29 Bromochloromethane	0.13372	0.14287	0.14287	0.010	6.84791	40.00000	Averaged
$ 35 Dibromofluoromethane	0.26715	0.26866	0.26866	0.010	0.56514	40.00000	Averaged
36 1,1,1-Trichloroethane	0.43022	0.43331	0.43331	0.010	0.71703	40.00000	Averaged
129 Cyclohexane	0.55489	0.51242	0.51242	0.010	-7.65408	40.00000	Averaged
34 1,1-Dichloropropene	0.35988	0.33817	0.33817	0.010	-6.03209	40.00000	Averaged
131 n-Butyl alcohol	2602	2500	0.00969	0.001	4.06371	40.00000	Linear
33 Carbon tetrachloride	0.36657	0.36494	0.36494	0.010	-0.44337	40.00000	Averaged
37 1,2-Dichloroethane	0.40891	0.40377	0.40377	0.010	-1.25753	40.00000	Averaged
38 Benzene	56.26491	50.00000	1.07935	0.010	12.52982	40.00000	Linear
39 Trichloroethylene	0.29341	0.27746	0.27746	0.010	-5.43388	40.00000	Averaged
41 1,2-Dichloropropane	0.28251	0.27337	0.27337	0.010	-3.23547	20.00000	Averaged|ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 29-JUN-2005 18:58
Lab File ID: 2q329.d Init. Cal. Date(s): 21-JUN-2005 22-JUN-2005
Analysis Type: WATER Init. Cal. Times: 18:08 01:37
Lab Sample ID: UVM050605-01D Quant Type: ISTD
Method: /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	46.25357	50.00000	0.43645	0.010	-7.49286	40.00000	Linear
45 Bromodichloromethane	0.36647	0.37831	0.37831	0.010	3.22975	40.00000	Averaged
43 Dibromomethane	0.16393	0.16703	0.16703	0.010	1.88949	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.08990	0.08008	0.08008	0.010	-10.93063	40.00000	Averaged
49 4-Methyl-2-pentanone	0.17587	0.17050	0.17050	0.010	-3.05681	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.40993	0.38973	0.38973	0.010	-4.92806	40.00000	Averaged
$ 47 Toluene-d8	1.46948	1.46070	1.46070	0.010	-0.59794	40.00000	Averaged
50 Toluene	1.02173	1.06186	1.06186	0.010	3.92788	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.57045	0.57004	0.57004	0.010	-0.07169	40.00000	Averaged
54 1,1,2-Trichloroethane	0.27906	0.29795	0.29795	0.010	6.76891	40.00000	Averaged
55 2-Hexanone	0.30346	0.31174	0.31174	0.010	2.72734	40.00000	Averaged
52 1,3-Dichloropropane	0.54998	0.56134	0.56134	0.010	2.06506	40.00000	Averaged
56 Tetrachloroethylene	52.55942	50.00000	0.31591	0.010	5.11885	40.00000	Linear
57 Dibromochloromethane	0.37980	0.43967	0.43967	0.010	15.76370	40.00000	Averaged
59 1,2-Dibromoethane	0.34053	0.35541	0.35541	0.010	4.36949	40.00000	Averaged
62 Chlorobenzene	1.05043	1.07146	1.07146	0.300	2.00148	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.37619	0.38694	0.38694	0.010	2.85815	40.00000	Averaged
58 Ethylbenzene	53.64125	50.00000	1.80327	0.010	7.28250	20.00000	Linear ccc
63 m,p-Xylenes	108	100	0.66238	0.010	8.42468	40.00000	Linear
64 o-Xylene	54.25663	50.00000	0.66088	0.010	8.51326	40.00000	Linear
65 Styrene	53.90727	50.00000	1.10017	0.010	7.81454	40.00000	Linear
66 Bromoform	0.45913	0.57615	0.57615	0.100	25.48789	40.00000	Averaged spcc
67 Isopropylbenzene	3.23003	3.17977	3.17977	0.010	-1.55573	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.73517	0.93539	0.93539	0.300	27.23521	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	1.16601	1.14513	1.14513	0.010	-1.78998	40.00000	Averaged
74 1,2,3-Trichloropropane	0.24496	0.26021	0.26021	0.010	6.22270	40.00000	Averaged
75 Bromobenzene	57.98099	50.00000	0.90439	0.010	15.96197	40.00000	Linear
76 n-Propylbenzene	54.58606	50.00000	4.07013	0.010	9.17211	40.00000	Linear
77 2-Chlorotoluene	55.81858	50.00000	2.82854	0.010	11.63717	40.00000	Linear
78 1,3,5-Trimethylbenzene	2.89293	2.76115	2.76115	0.010	-4.55540	40.00000	Averaged
80 4-Chlorotoluene	2.65341	2.69122	2.69122	0.010	1.42492	40.00000	Averaged
81 tert-Butylbenzene	2.94040	2.89248	2.89248	0.010	-1.62988	40.00000	Averaged
79 1,2,4-Trimethylbenzene	2.95361	2.91607	2.91607	0.010	-1.27075	40.00000	Averaged
83 sec-Butylbenzene	3.81186	3.73304	3.73304	0.010	-2.06770	40.00000	Averaged
84 4-Isopropyltoluene	3.17515	3.03625	3.03625	0.010	-4.37478	40.00000	Averaged

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 29-JUN-2005 18:58
Lab File ID: 2q329.d Init. Cal. Date(s): 21-JUN-2005 22-JUN-2005
Analysis Type: WATER Init. Cal. Times: 18:08 01:37
Lab Sample ID: UVM050605-01D Quant Type: ISTD
Method: /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	56.52603	50.00000	1.69380	0.010	13.05206	40.00000	Linear
87 1,4-Dichlorobenzene	1.63990	1.67766	1.67766	0.010	2.30252	40.00000	Averaged
89 n-Butylbenzene	3.07746	2.92928	2.92928	0.010	-4.81495	40.00000	Averaged
90 1,2-Dichlorobenzene	1.53470	1.64003	1.64003	0.010	6.86338	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.15616	0.18743	0.18743	0.010	20.02394	40.00000	Averaged
93 1,2,4-Trichlorobenzene	1.05573	1.05073	1.05073	0.010	-0.47433	40.00000	Averaged
94 Hexachlorobutadiene	0.74096	0.66575	0.66575	0.010	-10.15020	40.00000	Averaged
95 Naphthalene	2.63162	2.66708	2.66708	0.010	1.34735	40.00000	Averaged
96 1,2,3-Trichlorobenzene	1.01627	1.04098	1.04098	0.010	2.43130	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 6.85176
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q329.d
Lab Smp Id: UVM050605-01D Client Smp ID: VSTD050
Inj Date : 29-JUN-2005 18:58
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050605-01D|CCV|1|VOAF|1|
Misc Info : VSTD050 VBLK01LCS
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

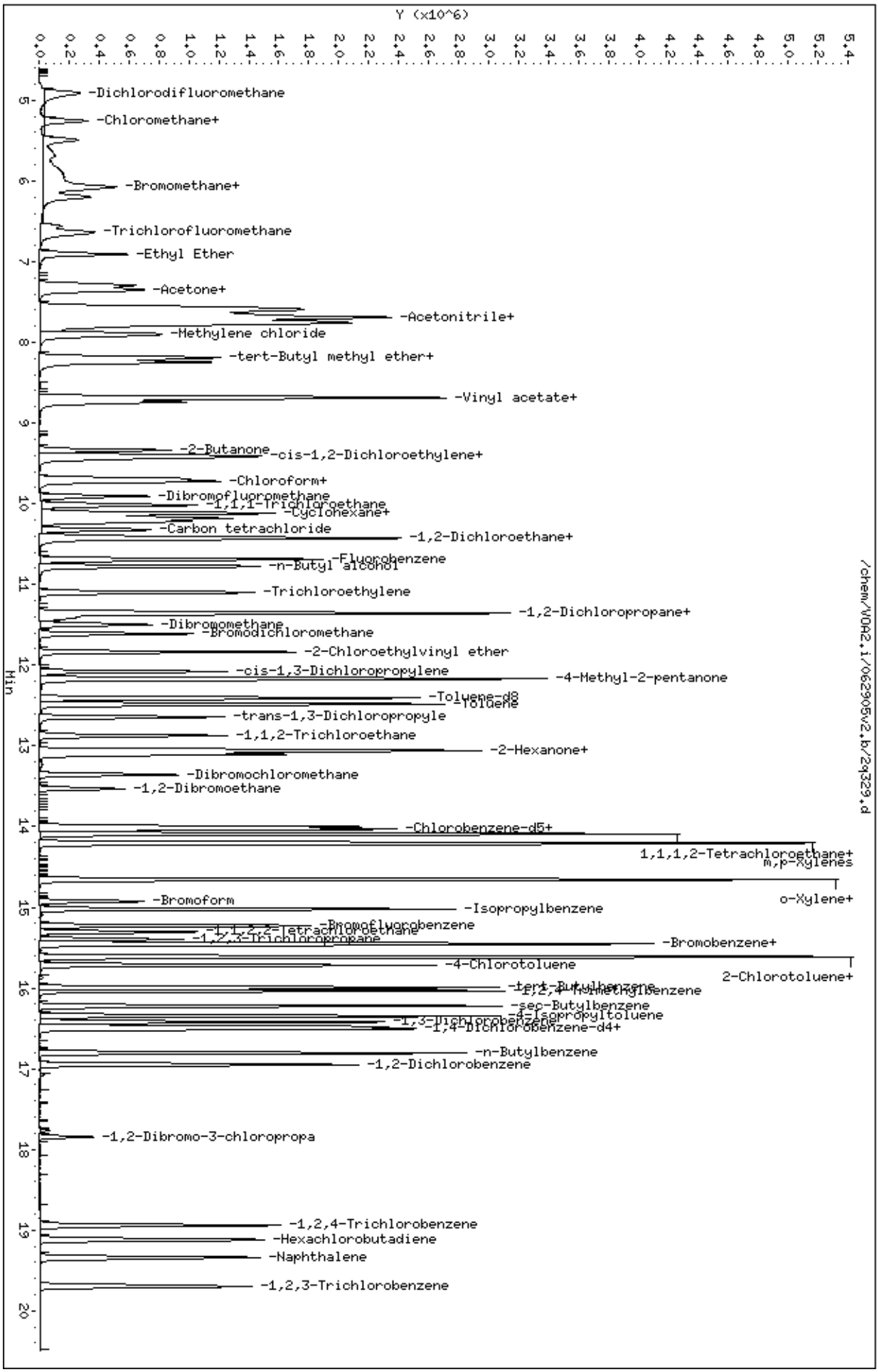
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2573389	150.000	163
M 2 1,2-Dichloroethylene (total)	96				1892823	100.000	104
M 135 1,3-Dichloropropylene	75				1534238	100.000	95.5
3 Dichlorodifluoromethane	85	4.912	4.912	(0.459)	860369	50.0000	56.5
4 Chloromethane	50	5.257	5.257	(0.492)	767768	50.0000	57.8
5 Vinyl chloride	62	5.485	5.485	(0.513)	598688	50.0000	53.4
6 Bromomethane	94	6.076	6.076	(0.568)	620995	50.0000	55.8
7 Chloroethane	64	6.197	6.197	(0.580)	526425	50.0000	60.4
8 Trichlorofluoromethane	101	6.635	6.635	(0.621)	883840	50.0000	50.8
134 Ethyl Ether	59	6.909	6.909	(0.646)	540526	50.0000	49.3
10 Acetone	43	7.286	7.286	(0.681)	957150	250.000	275
15 Acetonitrile	41	7.651	7.651	(0.716)	2038363	1250.00	1450
11 1,1-Dichloroethylene	61	7.347	7.347	(0.687)	959571	50.0000	50.8
128 Methyl acetate	43	7.688	7.688	(0.719)	2689790	250.000	286
13 Iodomethane	142	7.590	7.590	(0.710)	4980721	250.000	269

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	17 Methylene chloride	84	7.901	7.901	(0.739)	658518	50.0000	57.0
	14 Carbon disulfide	76	7.755	7.755	(0.725)	8046647	250.000	256
	20 tert-Butyl methyl ether	73	8.193	8.193	(0.766)	1648217	50.0000	49.7
	21 trans-1,2-Dichloroethylene	61	8.248	8.248	(0.771)	897977	50.0000	51.6
	23 Vinyl acetate	43	8.685	8.685	(0.812)	5488926	250.000	340
	22 1,1-Dichloroethane	63	8.740	8.740	(0.817)	1125340	50.0000	52.6
	30 2-Butanone	43	9.336	9.336	(0.873)	1466022	250.000	242
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.879)	994846	50.0000	52.6
	25 2,2-Dichloropropane	77	9.434	9.434	(0.882)	790939	50.0000	52.0
	32 Chloroform	83	9.726	9.726	(0.910)	999086	50.0000	50.8
	29 Bromochloromethane	128	9.689	9.689	(0.906)	291611	50.0000	53.4
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	548343	50.0000	50.3
	36 1,1,1-Trichloroethane	97	10.018	10.018	(0.937)	884408	50.0000	50.4
	129 Cyclohexane	56	10.115	10.115	(0.946)	1045873	50.0000	46.2
	34 1,1-Dichloropropene	75	10.176	10.176	(0.952)	690231	50.0000	47.0
	131 n-Butyl alcohol	56	10.772	10.772	(1.007)	988387	2500.00	2600
	33 Carbon tetrachloride	117	10.219	10.219	(0.956)	744868	50.0000	49.8
	37 1,2-Dichloroethane	62	10.407	10.407	(0.973)	824125	50.0000	49.4
	38 Benzene	78	10.431	10.431	(0.976)	2203025	50.0000	56.3
*	40 Fluorobenzene	96	10.693	10.693	(1.000)	2041065	50.0000	
	39 Trichloroethylene	95	11.101	11.101	(1.038)	566324	50.0000	47.3
	41 1,2-Dichloropropane	63	11.350	11.350	(1.061)	557963	50.0000	48.4
	130 Methylcyclohexane	83	11.356	11.356	(1.062)	890816	50.0000	46.2
	45 Bromodichloromethane	83	11.612	11.612	(1.086)	772153	50.0000	51.6
	43 Dibromomethane	93	11.496	11.496	(1.075)	340917	50.0000	50.9
	44 2-Chloroethylvinyl ether	63	11.837	11.837	(1.107)	817205	250.000	223
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	1104824	250.000	242
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	795462	50.0000	47.5
$	47 Toluene-d8	98	12.409	12.409	(0.887)	1893065	50.0000	49.7
	50 Toluene	92	12.482	12.482	(0.892)	1376170	50.0000	52.0
	53 trans-1,3-Dichloropropylene	75	12.646	12.646	(0.904)	738776	50.0000	50.0
	54 1,1,2-Trichloroethane	83	12.877	12.877	(0.920)	386139	50.0000	53.4
	55 2-Hexanone	43	13.053	13.053	(0.933)	2020077	250.000	257
	52 1,3-Dichloropropane	76	13.078	13.078	(0.934)	727500	50.0000	51.0
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	409414	50.0000	52.6
	57 Dibromochloromethane	129	13.358	13.358	(0.954)	569813	50.0000	57.9
	59 1,2-Dibromoethane	107	13.534	13.534	(0.967)	460610	50.0000	52.2
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1296001	50.0000	
	62 Chlorobenzene	112	14.033	14.033	(1.003)	1388608	50.0000	51.0
	60 1,1,1,2-Tetrachloroethane	131	14.088	14.088	(1.007)	501472	50.0000	51.4
	58 Ethylbenzene	91	14.094	14.094	(1.007)	2337038	50.0000	53.6
	63 m,p-Xylenes	106	14.203	14.203	(1.015)	1716888	100.000	108
	64 o-Xylene	106	14.653	14.653	(1.047)	856501	50.0000	54.2
	65 Styrene	104	14.659	14.659	(1.047)	1425823	50.0000	53.9
	66 Bromoform	173	14.927	14.927	(0.906)	369964	50.0000	62.7
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	2041832	50.0000	49.2
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	600645	50.0000	63.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.225	15.225	(0.924)	735326	50.0000	49.1
	74 1,2,3-Trichloropropane	110	15.396	15.396	(0.934)	167086	50.0000	53.1
	75 Bromobenzene	156	15.444	15.444	(0.937)	580738	50.0000	58.0
	76 n-Propylbenzene	91	15.462	15.462	(0.938)	2613557	50.0000	54.6
	77 2-Chlorotoluene	91	15.615	15.615	(0.948)	1816293	50.0000	55.8
	78 1,3,5-Trimethylbenzene	105	15.615	15.615	(0.948)	1773018	50.0000	47.7
	80 4-Chlorotoluene	91	15.718	15.718	(0.954)	1728115	50.0000	50.7
	81 tert-Butylbenzene	119	15.992	15.992	(0.970)	1857348	50.0000	49.2
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	1872501	50.0000	49.4
	83 sec-Butylbenzene	105	16.223	16.223	(0.984)	2397103	50.0000	49.0
	84 4-Isopropyltoluene	119	16.345	16.345	(0.992)	1949669	50.0000	47.8
	85 1,3-Dichlorobenzene	146	16.418	16.418	(0.996)	1087640	50.0000	56.5
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	642131	50.0000	
	87 1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	1077278	50.0000	51.2
	89 n-Butylbenzene	91	16.801	16.801	(1.020)	1880981	50.0000	47.6
	90 1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	1053114	50.0000	53.4
	92 1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	120352	50.0000	60.0
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	674704	50.0000	49.8
	94 Hexachlorobutadiene	225	19.119	19.119	(1.160)	427497	50.0000	44.9
	95 Naphthalene	128	19.344	19.344	(1.174)	1712615	50.0000	50.7
	96 1,2,3-Trichlorobenzene	180	19.697	19.697	(1.195)	668445	50.0000	51.2


Data File: /chem/VOA2.i/062905v2.b/2q329.d
Date : 29-JUN-2005 18:58
Client ID: VSTD050
Sample Info: IUWM050605-01DICCV|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25
Page 1
Y (x10^6)
Min
/chem/VOA2.i/062905v2.b/2q329.d
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether
-Acetone+
-Acetonitrile+
-Methylene chloride
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone
-cis-1,2-Dichloroethylene+
-Chloroform+
-Dibromofluoromethane
-1,1,1-Trichloroethane
-Cyclohexane+
-Carbon tetrachloride
-1,2-Dichloroethane+
-Fluorobenzene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Dibromomethane
-Bromodichloromethane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
-1,2,3-Trichloropropane
-Bromobenzene+
-4-Chlorotoluene
2-Chlorotoluene+
-tert-Butylbenzene
1,2,4-Trimethylbenzene
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 29-JUN-2005 19:50
Lab File ID: 2q331.d Init. Cal. Date(s): 21-JUN-2005 22-JUN-2005
Analysis Type: WATER Init. Cal. Times: 18:08 01:37
Lab Sample ID: UVM050531-01A Quant Type: ISTD
Method: /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	9 Acrolein	0.04918	0.05313	0.05313	0.001	8.02141	40.00000	Averaged	
	12 Trichlorotrifluoroethane	0.09940	0.11081	0.11081	0.050	11.48103	40.00000	Averaged	
	16 Allyl chloride	0.14304	0.13715	0.13715	0.010	-4.11754	40.00000	Averaged	
	18 Acrylonitrile	0.09741	0.10961	0.10961	0.010	12.52535	40.00000	Averaged	
	24 2-Chloro-1,3-butadiene	0.41292	0.47141	0.47141	0.010	14.16514	40.00000	Averaged	
	28 Propionitrile	0.03983	0.04285	0.04285	0.010	7.56350	40.00000	Averaged	
	26 Ethyl acetate	0.28094	0.26919	0.26919	0.010	-4.18342	40.00000	Averaged	
	27 Methacrylonitrile	0.18155	0.16840	0.16840	0.010	-7.24213	40.00000	Averaged	
	19 Isobutyl alcohol	0.01089	0.01063	0.01063	0.005	-2.34122	40.00000	Averaged	
	72 Tetrahydrofuran	294	250	0.28217	0.010	17.79730	40.00000	Linear	
	42 Methyl methacrylate	0.17057	0.16597	0.16597	0.010	-2.69878	40.00000	Averaged	
	51 Ethyl methacrylate	0.48337	0.45012	0.45012	0.010	-6.87943	40.00000	Averaged	
	97 1,4-Dioxane	0.00287	0.00289	0.00289	0.002	0.65961	40.00000	Averaged	
	48 2-Nitropropane	273	250	0.08748	0.010	9.32579	40.00000	Linear	
	70 Cyclohexanone	0.02256	0.01857	0.01857	0.010	-17.68589	40.00000	Averaged	
	68 cis-1,4-Dichloro-2-butene	0.27442	0.33892	0.33892	0.010	23.50201	40.00000	Averaged	
	69 trans-1,4-Dichloro-2-butene	0.19370	0.31688	0.31688	0.010	63.58692	40.00000	Averaged	<-
	82 Pentachloroethane	0.47862	0.43674	0.43674	0.010	-8.75084	40.00000	Averaged	
	88 Benzyl chloride	1.26080	1.44300	1.44300	0.010	14.45077	40.00000	Averaged	
	91 bis(2-Chloroisopropyl)ether	0.53081	0.45954	0.45954	0.010	-13.42682	40.00000	Averaged	
$	35 Dibromofluoromethane	0.26715	0.27179	0.27179	0.010	1.73957	40.00000	Averaged	
$	47 Toluene-d8	1.46948	1.48172	1.48172	0.010	0.83279	40.00000	Averaged	
$	71 Bromofluorobenzene	1.16601	1.18394	1.18394	0.010	1.53777	40.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 11.06587
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q331.d
Lab Smp Id: UVM050531-01A Client Smp ID: VSTD250S
Inj Date : 29-JUN-2005 19:50
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050531-01A|SHORT|1|VOAF|1|
Misc Info : VSTD250S
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:18 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.110	7.110	(0.665)	478088	250.000	270
12	Trichlorotrifluoroethane	85	7.304	7.304	(0.683)	997188	250.000	279
16	Allyl chloride	76	7.748	7.748	(0.725)	1234172	250.000	240
18	Acrylonitrile	53	8.144	8.144	(0.762)	986395	250.000	281
24	2-Chloro-1,3-butadiene	53	8.850	8.850	(0.828)	848440	50.0000	57.1
28	Propionitrile	54	9.415	9.415	(0.881)	385571	250.000	269
26	Ethyl acetate	43	9.342	9.342	(0.874)	2422398	250.000	240
27	Methacrylonitrile	41	9.604	9.604	(0.899)	1515414	250.000	232
19	Isobutyl alcohol	41	10.054	10.054	(0.941)	956754	2500.00	2440
72	Tetrahydrofuran	42	9.738	9.738	(0.591)	808228	250.000	294
42	Methyl methacrylate	69	11.313	11.313	(1.059)	1493529	250.000	243
* 40	Fluorobenzene	96	10.687	10.687	(1.000)	1799786	50.0000	
51	Ethyl methacrylate	69	12.640	12.640	(0.903)	2598010	250.000	233
97	1,4-Dioxane	88	11.435	11.435	(1.070)	260172	2500.00	2520
48	2-Nitropropane	43	11.812	11.812	(1.105)	787219	250.000	273
* 61	Chlorobenzene-d5	117	13.996	13.996	(1.000)	1154363	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	70 Cyclohexanone	55	15.182	15.182	(1.085)	535818	1250.00	1030
	68 cis-1,4-Dichloro-2-butene	53	15.061	15.061	(0.914)	970773	250.000	309
	69 trans-1,4-Dichloro-2-butene	53	15.353	15.353	(0.932)	907643	250.000	409
	82 Pentachloroethane	167	16.071	16.071	(0.975)	1250974	250.000	228
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	572871	50.0000	
	88 Benzyl chloride	91	16.624	16.624	(1.009)	4133257	250.000	286
	91 bis(2-Chloroisopropyl)ether	45	17.032	17.032	(1.034)	1316273	250.000	216
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	489168	50.0000	50.9
$	47 Toluene-d8	98	12.408	12.408	(0.887)	1710445	50.0000	50.4
$	71 Bromofluorobenzene	95	15.231	15.231	(0.924)	678242	50.0000	50.8

Data File: /chem/VOA2.i/062905v2.b/2q331.d

Page 1

Date : 29-JUN-2005 19:50

Client ID: VSTD250S

Instrument: VOA2.i

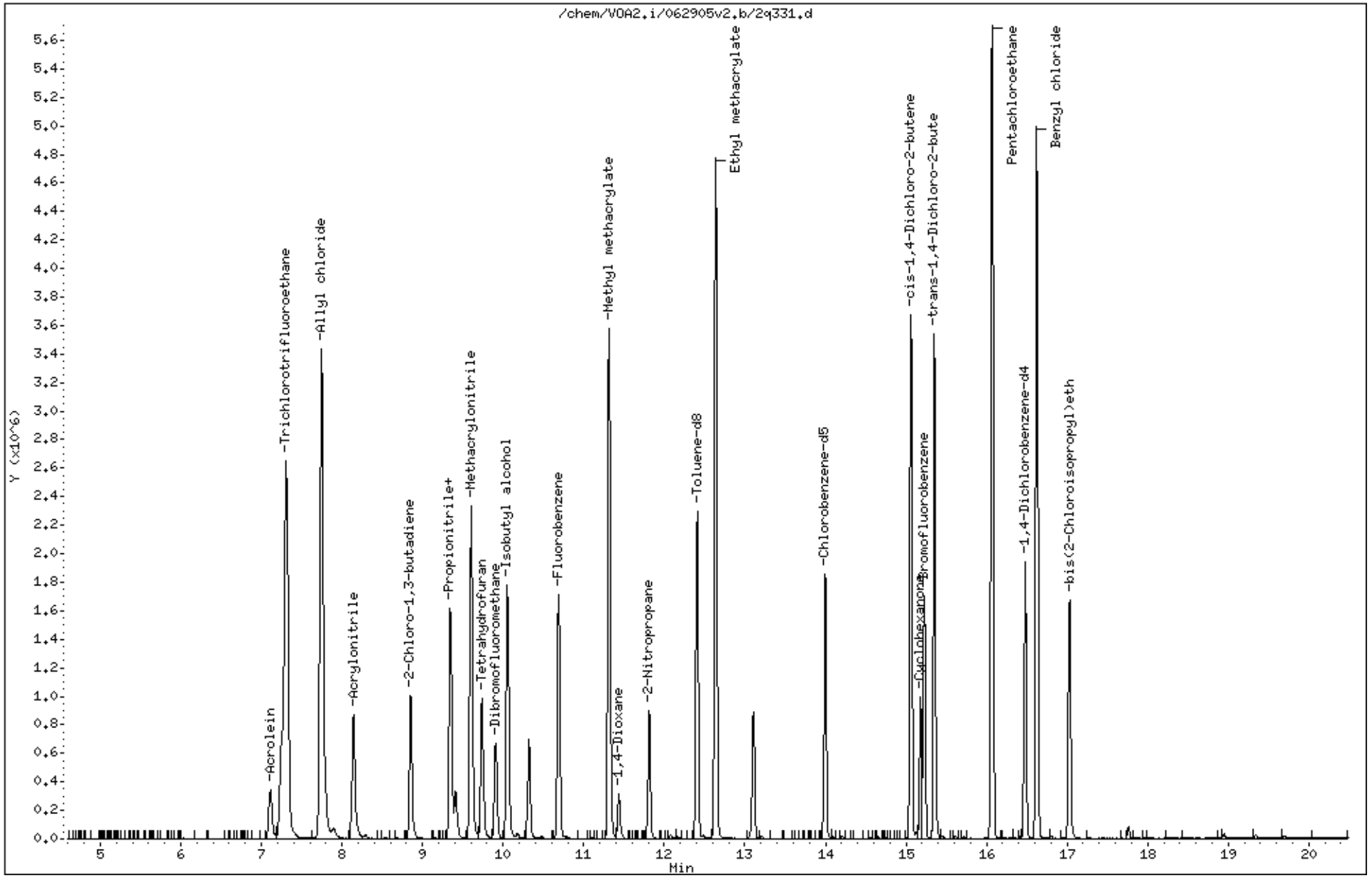
Sample Info: |UVM050531-01A|SHORT|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



QUALITY CONTROL DATA

Data File: /chem/VOA2.i/062105v2.b/2p201.d

Page 1

Date : 21-JUN-2005 16:58

Client ID: BFB01

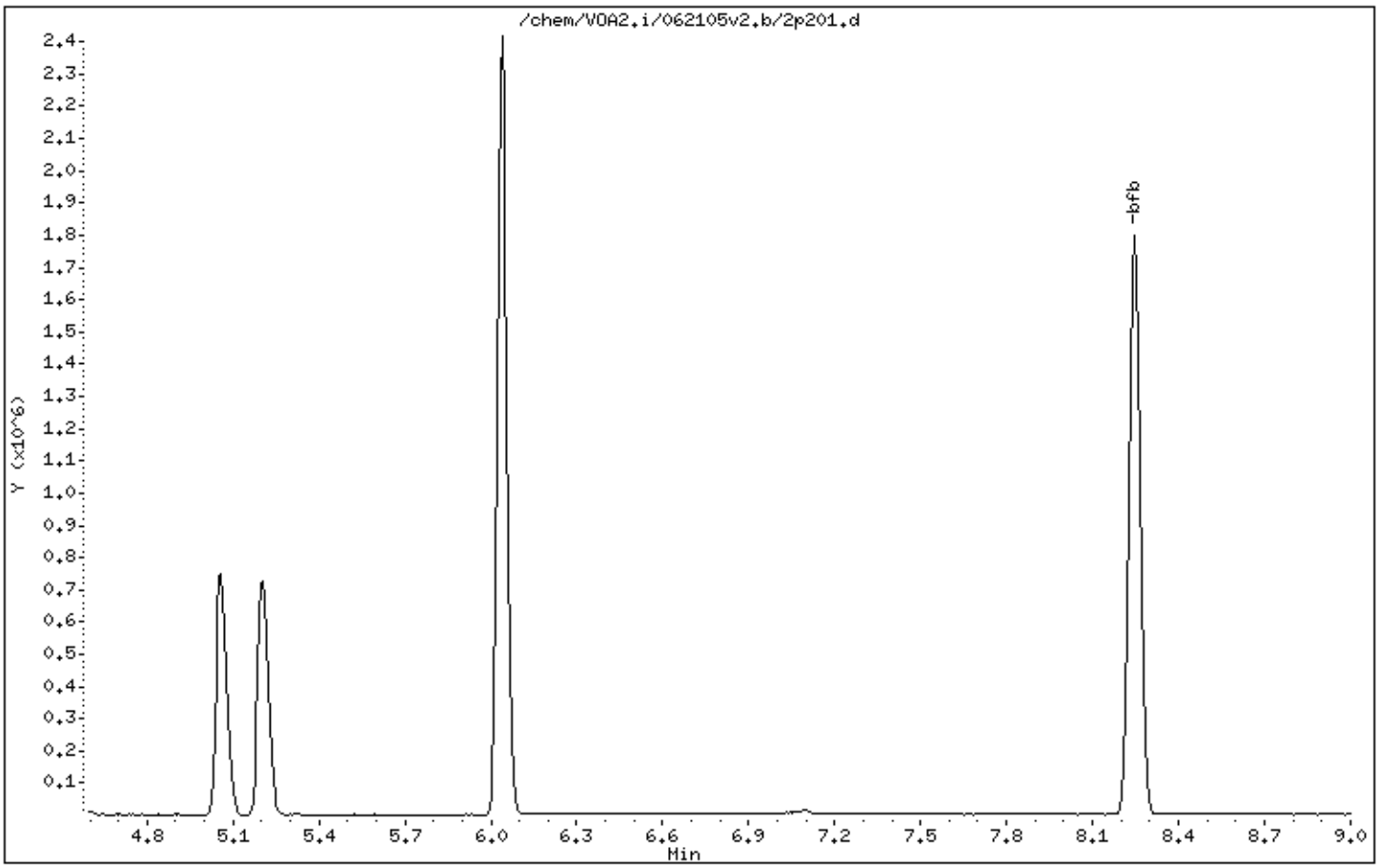
Instrument: VOA2.i

Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA2.i/062105v2.b/2p201.d

Date : 21-JUN-2005 16:58

Client ID: BFB01

Instrument: VOA2.i

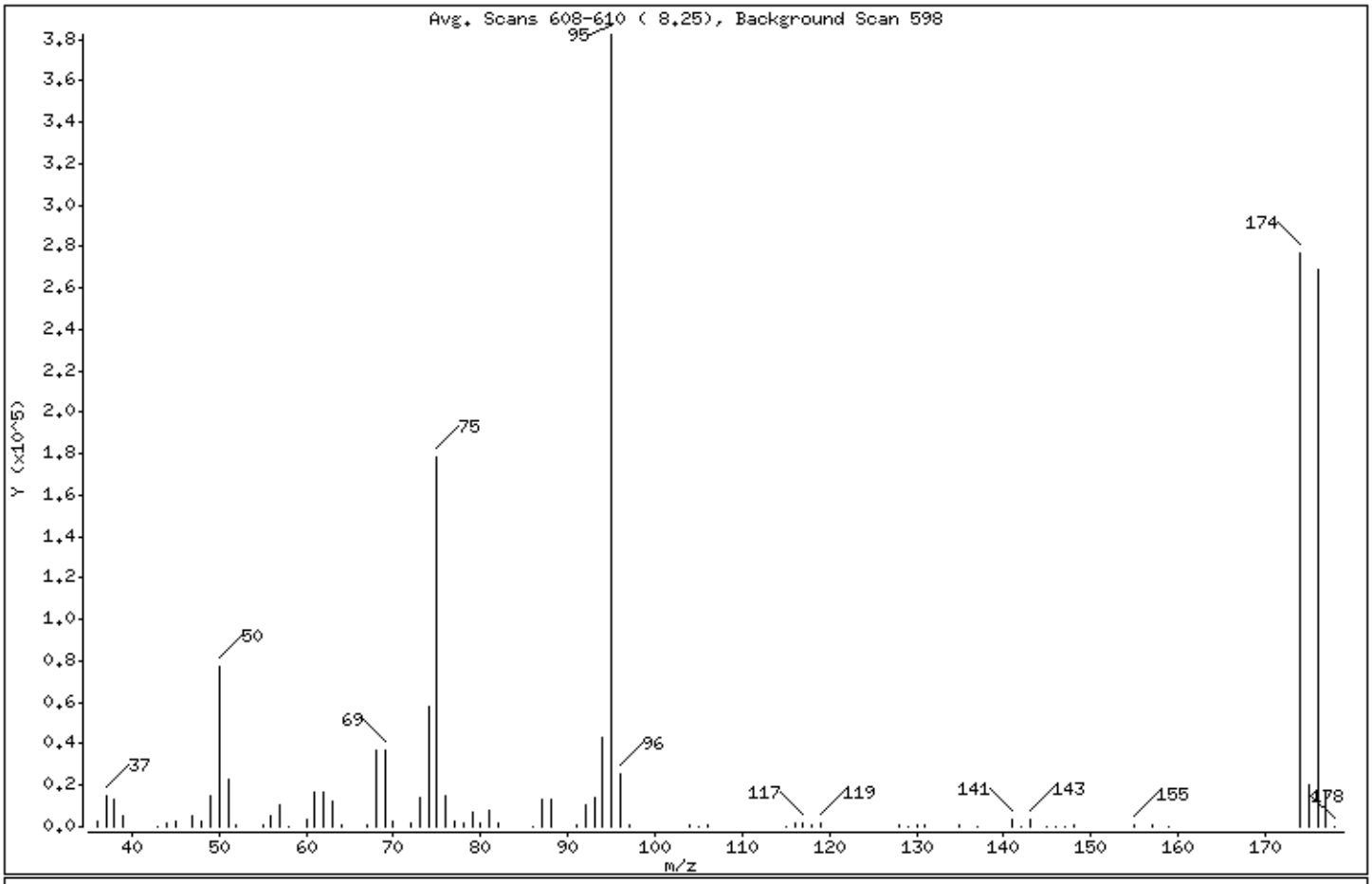
Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.18
75	30.00 - 60.00% of mass 95	46.67
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	72.39
175	5.00 - 9.00% of mass 174	5.35 (7.39)
176	95.00 - 101.00% of mass 174	70.41 (97.27)
177	5.00 - 9.00% of mass 176	4.69 (6.66)

Date : 21-JUN-2005 16:58

Client ID: BFB01 Instrument: VOA2.i

Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624 Column diameter: 0.25

Data File: 2p201.d
Spectrum: Avg. Scans 608-610 (8.25), Background Scan 598
Location of Maximum: 95.00
Number of points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2668	63.00	12041	91.00	1195	137.00	237
37.00	14821	64.00	1057	92.00	10606	141.00	3156
38.00	13616	67.00	1136	93.00	14343	142.00	175
39.00	4881	68.00	36632	94.00	43152	143.00	3721
43.00	360	69.00	37144	95.00	382208	145.00	193
44.00	1541	70.00	2929	96.00	25912	146.00	404
45.00	3011	72.00	2034	97.00	822	147.00	180
47.00	5511	73.00	14456	104.00	1196	148.00	836
48.00	2358	74.00	58072	105.00	341	155.00	929
49.00	15275	75.00	178368	106.00	1279	157.00	605
50.00	77144	76.00	14943	115.00	204	159.00	183
51.00	23040	77.00	2222	116.00	1361	174.00	276672
52.00	1033	78.00	1362	117.00	1916	175.00	20448
55.00	1291	79.00	7377	118.00	1158	176.00	269120
56.00	5478	80.00	2093	119.00	1545	177.00	17928
57.00	10551	81.00	7850	128.00	1110	178.00	382
58.00	393	82.00	1346	129.00	374		
60.00	3746	86.00	180	130.00	1122		
61.00	16342	87.00	13547	131.00	459		
62.00	16720	88.00	13202	135.00	821		

Data File: /chem/VOA2.i/062905v2.b/2q328.d

Page 1

Date : 29-JUN-2005 18:31

Client ID: BFB01

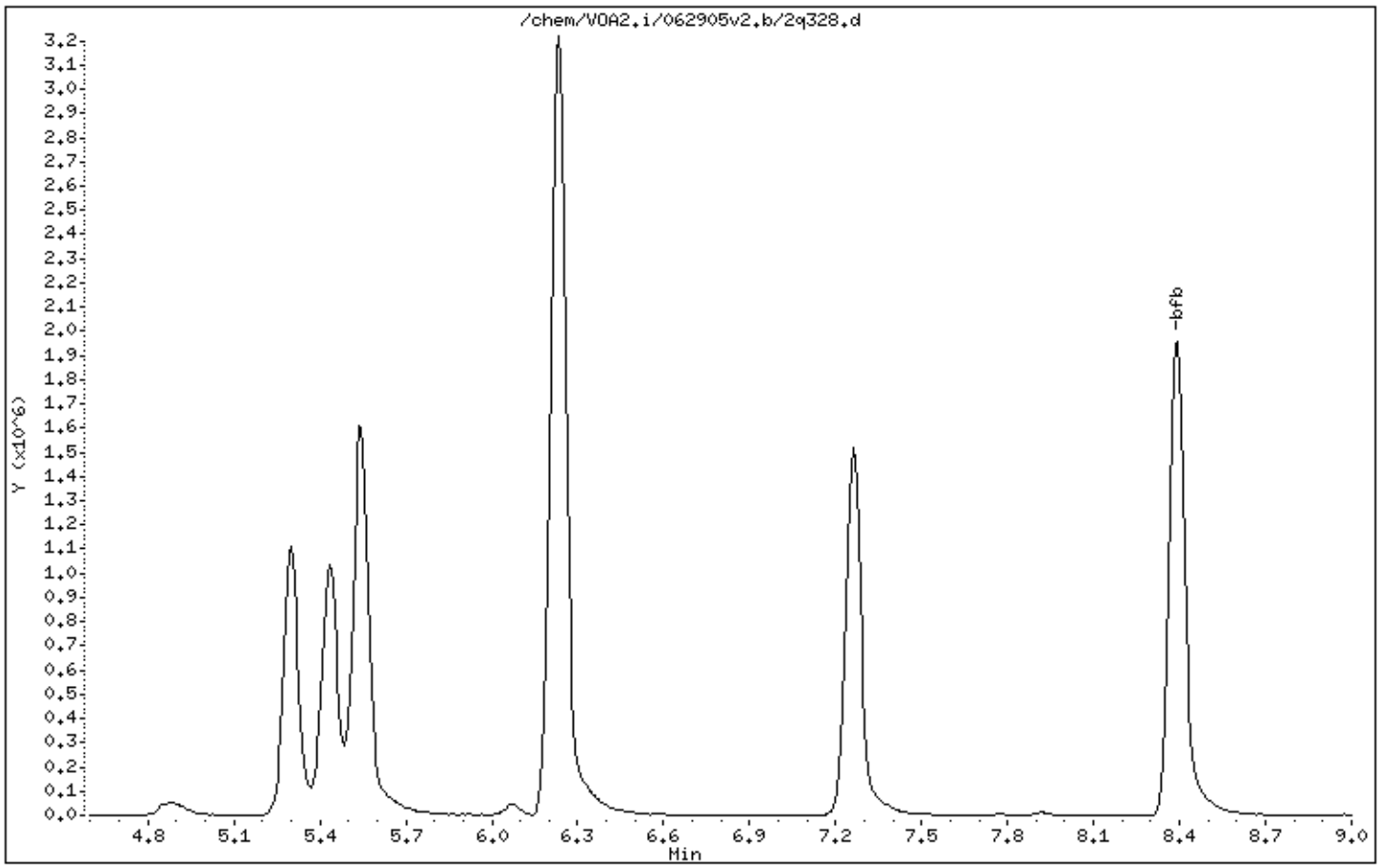
Instrument: VOA2.i

Sample Info: |UVM050622-02|BFB2|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA2.i/062905v2.b/2q328.d

Date : 29-JUN-2005 18:31

Client ID: BFB01

Instrument: VOA2.i

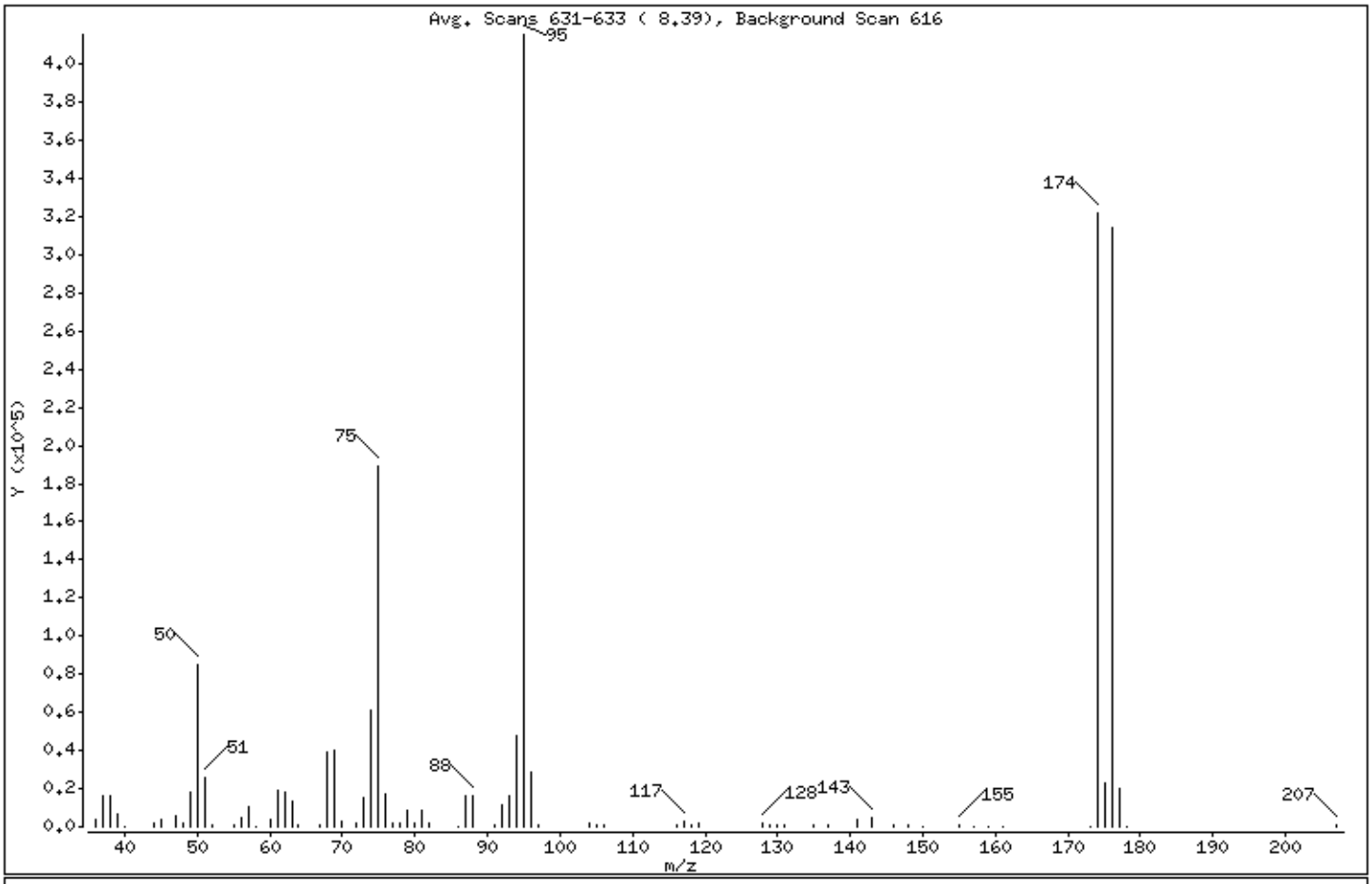
Sample Info: |UVM050622-02|BFB2|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.41
75	30.00 - 60.00% of mass 95	45.46
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.10 (0.12)
174	50.00 - 100.00% of mass 95	77.58
175	5.00 - 9.00% of mass 174	5.57 (7.18)
176	95.00 - 101.00% of mass 174	75.58 (97.42)
177	5.00 - 9.00% of mass 176	4.89 (6.47)

Data File: /chem/VOA2.i/062905v2.b/2q328.d

Date : 29-JUN-2005 18:31

Client ID: BFB01 Instrument: VOA2.i

Sample Info: |UVM050622-02|BFB2|1|VOAF|1|

Operator: CDS1

Column phase: db624 Column diameter: 0.25

Data File: 2q328.d
Spectrum: Avg. Scans 631-633 (8.39), Background Scan 616
Location of Maximum: 95.00
Number of points: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3474	63.00	13670	91.00	1071	141.00	3870
37.00	16464	64.00	1291	92.00	10992	143.00	4298
38.00	15856	67.00	956	93.00	16131	146.00	587
39.00	6299	68.00	39152	94.00	47320	148.00	920
40.00	399	69.00	40352	95.00	415424	150.00	224
44.00	1848	70.00	2439	96.00	28352	155.00	877
45.00	3490	72.00	2044	97.00	1101	157.00	427
47.00	5709	73.00	15168	104.00	1765	159.00	232
48.00	2309	74.00	60680	105.00	701	161.00	393
49.00	18144	75.00	188864	106.00	1343	173.00	400
50.00	84768	76.00	16736	116.00	1269	174.00	322304
51.00	26056	77.00	2150	117.00	2439	175.00	23144
52.00	1074	78.00	1892	118.00	1235	176.00	313984
55.00	1147	79.00	8803	119.00	2005	177.00	20312
56.00	5220	80.00	2297	128.00	1613	178.00	411
57.00	10483	81.00	8452	129.00	792	207.00	619
58.00	170	82.00	1933	130.00	1215		
60.00	3483	86.00	282	131.00	647		
61.00	18912	87.00	15828	135.00	541		
62.00	18592	88.00	16400	137.00	611		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876942

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q333B1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876942

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q333B1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876942

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q333B1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK01

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876942

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q333B1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	10.32	19.8	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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17.					
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19.					
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21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC OLM03.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q333B1.d
Lab Smp Id: 1200876942 Client Smp ID: VBLK01
Inj Date : 29-JUN-2005 20:43
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200876942|438041|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 32 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.693	(1.000)	1866017	50.0000	
* 61 Chlorobenzene-d5	117	14.001	13.996	(1.000)	1210285	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.478	(1.000)	608433	50.0000	
$ 35 Dibromofluoromethane	113	9.907	9.908	(0.927)	503097	50.4613	50.5
$ 47 Toluene-d8	98	12.407	12.409	(0.886)	1773303	49.8541	49.8
$ 71 Bromofluorobenzene	95	15.230	15.225	(0.924)	690773	48.6847	48.7

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q333B1.d
Lab Smp Id: 1200876942 Client Smp ID: VBLK01
Inj Date : 29-JUN-2005 20:43
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200876942|438041|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 32 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	10.692	3932086	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
10.321	1557989	19.8112264	19.8	0		0	40

Data File: /chem/VOA2.i/062905v2.b/2q333B1.d

Date : 29-JUN-2005 20:43

Client ID: VBLK01

Instrument: VOA2.i

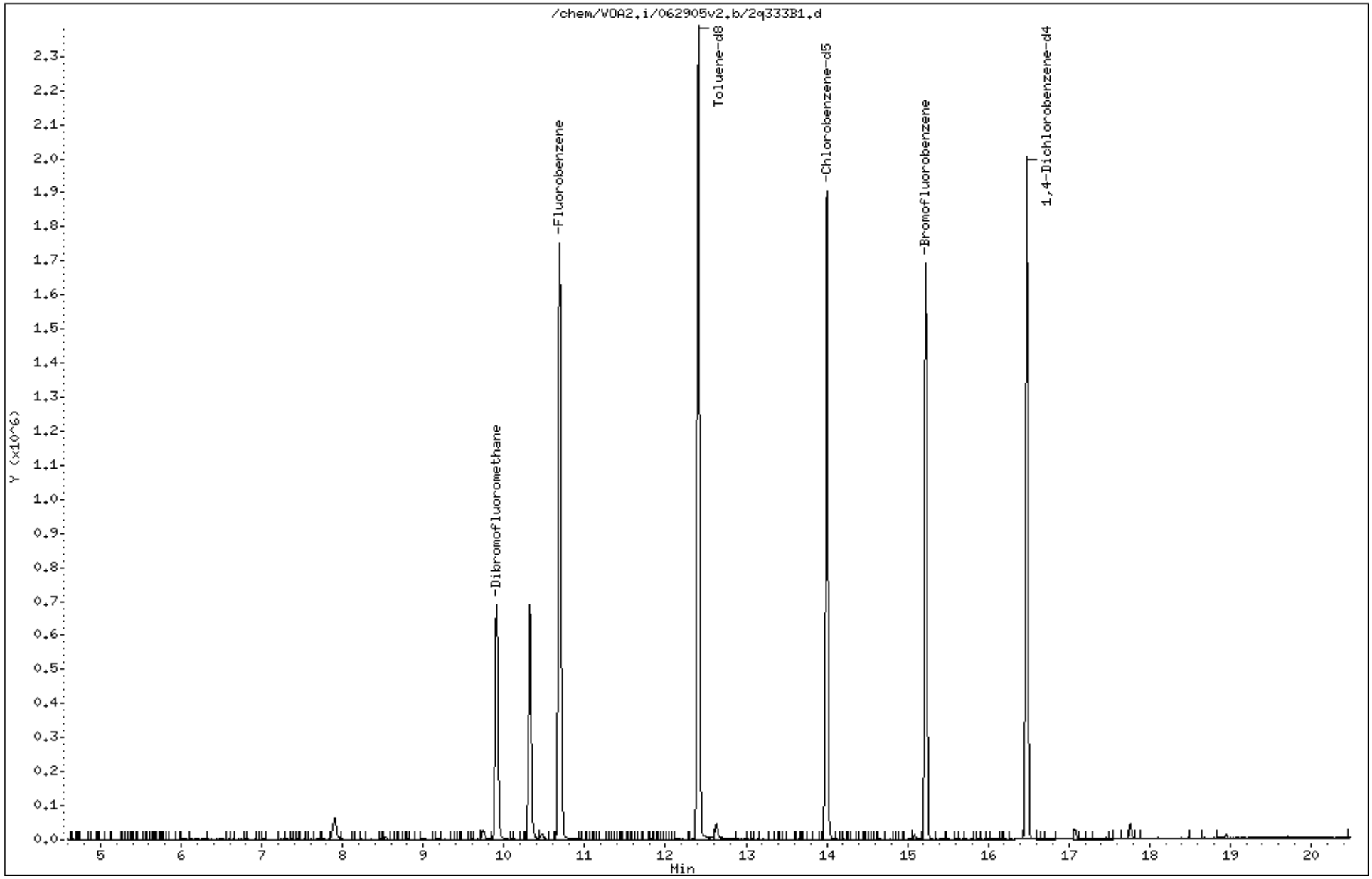
Sample Info: |1200876942|438041|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA2.i/062905v2.b/2q333B1.d

Date : 29-JUN-2005 20:43

Client ID: VBLK01

Instrument: VOA2.i

Sample Info: |1200876942|438041|1|VOAF|1|

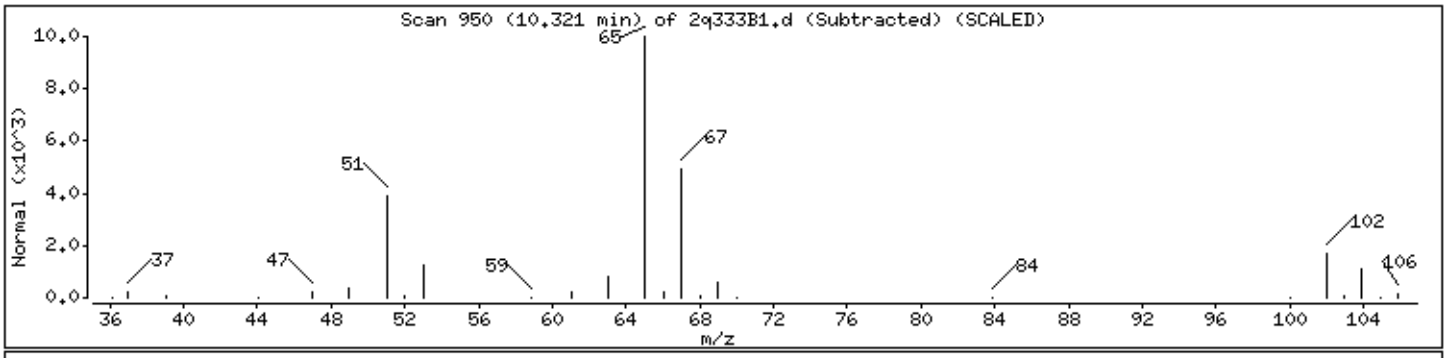
Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876945

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q329LLCS1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	56.5	
74-87-3	Chloromethane	57.8	
75-01-4	Vinyl chloride	53.4	
74-83-9	Bromomethane	55.8	
75-00-3	Chloroethane	60.4	
75-69-4	Trichlorofluoromethane	50.8	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	50.8	
67-64-1	Acetone	275	
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	269	
75-15-0	Carbon disulfide	256	
75-05-8	Acetonitrile	1450	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	57.0	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	51.6	
75-34-3	1,1-Dichloroethane	52.6	
108-05-4	Vinyl acetate	340	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	242	
156-59-2	cis-1,2-Dichloroethylene	52.6	
594-20-7	2,2-Dichloropropane	52.0	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	53.4	
67-66-3	Chloroform	50.8	
71-55-6	1,1,1-Trichloroethane	50.4	
563-58-6	1,1-Dichloropropene	47.0	
56-23-5	Carbon tetrachloride	49.8	
107-06-2	1,2-Dichloroethane	49.4	
71-43-2	Benzene	56.3	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876945

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q329LLCS1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	47.3	
78-87-5	1,2-Dichloropropane	48.4	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	50.9	
75-27-4	Bromodichloromethane	51.6	
10061-01-5	cis-1,3-Dichloropropylene	47.5	
108-10-1	4-Methyl-2-pentanone	242	
108-88-3	Toluene	52.0	
10061-02-6	trans-1,3-Dichloropropylene	50.0	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	53.4	
142-28-9	1,3-Dichloropropane	51.0	
591-78-6	2-Hexanone	257	
127-18-4	Tetrachloroethylene	52.6	
124-48-1	Dibromochloromethane	57.9	
106-93-4	1,2-Dibromoethane	52.2	
108-90-7	Chlorobenzene	51.0	
630-20-6	1,1,1,2-Tetrachloroethane	51.4	
100-41-4	Ethylbenzene	53.6	
95-47-6	o-Xylene	54.2	
----------	m,p-Xylenes	108	
100-42-5	Styrene	53.9	
75-25-2	Bromoform	62.7	
98-82-8	Isopropylbenzene	49.2	
79-34-5	1,1,2,2-Tetrachloroethane	63.6	
96-18-4	1,2,3-Trichloropropane	53.1	
108-86-1	Bromobenzene	58.0	
103-65-1	n-Propylbenzene	54.6	
95-49-8	2-Chlorotoluene	55.8	
108-67-8	1,3,5-Trimethylbenzene	47.7	
95-63-6	1,2,4-Trimethylbenzene	49.4	
106-43-4	4-Chlorotoluene	50.7	
98-06-6	tert-Butylbenzene	49.2	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876945

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q329LLCS1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	49.0	
99-87-6	4-Isopropyltoluene	47.8	
541-73-1	1,3-Dichlorobenzene	56.5	
106-46-7	1,4-Dichlorobenzene	51.2	
104-51-8	n-Butylbenzene	47.6	
95-50-1	1,2-Dichlorobenzene	53.4	
96-12-8	1,2-Dibromo-3-chloropropane	60.0	
120-82-1	1,2,4-Trichlorobenzene	49.8	
87-68-3	Hexachlorobutadiene	44.9	
91-20-3	Naphthalene	50.7	
87-61-6	1,2,3-Trichlorobenzene	51.2	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q329llcs1.d
Lab Smp Id: 1200876945 Client Smp ID: VBLK01LCS
Inj Date : 29-JUN-2005 18:58
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200876945|438041|1|VOAF|1|
Misc Info : VSTD050 VBLK01LCS
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 28 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.693	(1.000)	2041065	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1296001	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	642131	50.0000	
$ 35 Dibromofluoromethane	113	9.908	9.908	(0.927)	548343	50.2826	50.3
$ 47 Toluene-d8	98	12.409	12.409	(0.887)	1893065	49.7010	49.7
$ 71 Bromofluorobenzene	95	15.225	15.225	(0.924)	735326	49.1050	49.1
3 Dichlorodifluoromethane	85	4.912	4.912	(0.459)	860369	56.5391	56.5
4 Chloromethane	50	5.257	5.257	(0.492)	767768	57.8083	57.8
5 Vinyl chloride	62	5.485	5.485	(0.513)	598688	53.3981	53.4
6 Bromomethane	94	6.076	6.076	(0.568)	620995	55.8503	55.8
7 Chloroethane	64	6.197	6.197	(0.580)	526425	60.3909	60.4
8 Trichlorofluoromethane	101	6.635	6.635	(0.621)	883840	50.7727	50.8
11 1,1-Dichloroethylene	61	7.347	7.347	(0.687)	959571	50.7908	50.8
10 Acetone	43	7.286	7.286	(0.681)	957150	275.439	275
14 Carbon disulfide	76	7.755	7.755	(0.725)	8046647	256.488	256

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17 Methylene chloride	84	7.901	7.901	(0.739)	658518	56.9541	57.0
21 trans-1,2-Dichloroethylene	61	8.248	8.248	(0.771)	897977	51.6249	51.6
22 1,1-Dichloroethane	63	8.740	8.740	(0.817)	1125340	52.5716	52.6
31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.879)	994846	52.6298	52.6
32 Chloroform	83	9.726	9.726	(0.910)	999086	50.7891	50.8
37 1,2-Dichloroethane	62	10.407	10.407	(0.973)	824125	49.3712	49.4
30 2-Butanone	43	9.336	9.336	(0.873)	1466022	242.127	242
36 1,1,1-Trichloroethane	97	10.018	10.018	(0.937)	884408	50.3585	50.4
87 1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	1077278	51.1513	51.2
93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	674704	49.7628	49.8
85 1,3-Dichlorobenzene	146	16.418	16.418	(0.996)	1087640	56.5260	56.5
90 1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	1053114	53.4317	53.4
95 Naphthalene	128	19.344	19.344	(1.174)	1712615	50.6737	50.7
94 Hexachlorobutadiene	225	19.119	19.119	(1.160)	427497	44.9249	44.9
33 Carbon tetrachloride	117	10.219	10.219	(0.956)	744868	49.7783	49.8
38 Benzene	78	10.431	10.431	(0.976)	2203025	56.2649	56.3
39 Trichloroethylene	95	11.101	11.101	(1.038)	566324	47.2831	47.3
41 1,2-Dichloropropane	63	11.350	11.350	(1.061)	557963	48.3823	48.4
45 Bromodichloromethane	83	11.612	11.612	(1.086)	772153	51.6149	51.6
46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	795462	47.5360	47.5
53 trans-1,3-Dichloropropylene	75	12.646	12.646	(0.904)	738776	49.9642	50.0
54 1,1,2-Trichloroethane	83	12.877	12.877	(0.920)	386139	53.3845	53.4
57 Dibromochloromethane	129	13.358	13.358	(0.954)	569813	57.8818	57.9
49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	1104824	242.358	242
50 Toluene	92	12.482	12.482	(0.892)	1376170	51.9639	52.0
56 Tetrachloroethylene	164	13.108	13.108	(0.937)	409414	52.5594	52.6
55 2-Hexanone	43	13.053	13.053	(0.933)	2020077	256.818	257
59 1,2-Dibromoethane	107	13.534	13.534	(0.967)	460610	52.1847	52.2
62 Chlorobenzene	112	14.033	14.033	(1.003)	1388608	51.0007	51.0
58 Ethylbenzene	91	14.094	14.094	(1.007)	2337038	53.6413	53.6
63 m,p-Xylenes	106	14.203	14.203	(1.015)	1716888	108.425	108
65 Styrene	104	14.659	14.659	(1.047)	1425823	53.9073	53.9
64 o-Xylene	106	14.653	14.653	(1.047)	856501	54.2566	54.2
67 Isopropylbenzene	105	15.024	15.024	(0.912)	2041832	49.2221	49.2
66 Bromoform	173	14.927	14.927	(0.906)	369964	62.7439	62.7
73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	600645	63.6176	63.6
92 1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	120352	60.0120	60.0
60 1,1,1,2-Tetrachloroethane	131	14.088	14.088	(1.007)	501472	51.4291	51.4
34 1,1-Dichloropropene	75	10.176	10.176	(0.952)	690231	46.9840	47.0
52 1,3-Dichloropropane	76	13.078	13.078	(0.934)	727500	51.0325	51.0
80 4-Chlorotoluene	91	15.718	15.718	(0.954)	1728115	50.7125	50.7
15 Acetonitrile	41	7.651	7.651	(0.716)	2038363	1454.84	1450
13 Iodomethane	142	7.590	7.590	(0.710)	4980721	269.070	269
43 Dibromomethane	93	11.496	11.496	(1.075)	340917	50.9447	50.9
29 Bromochloromethane	128	9.689	9.689	(0.906)	291611	53.4240	53.4
75 Bromobenzene	156	15.444	15.444	(0.937)	580738	57.9810	58.0
81 tert-Butylbenzene	119	15.992	15.992	(0.970)	1857348	49.1851	49.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	16.223	16.223	(0.984)	2397103	48.9661	49.0
76 n-Propylbenzene	91	15.462	15.462	(0.938)	2613557	54.5861	54.6
89 n-Butylbenzene	91	16.801	16.801	(1.020)	1880981	47.5925	47.6
23 Vinyl acetate	43	8.685	8.685	(0.812)	5488926	339.800	340
84 4-Isopropyltoluene	119	16.345	16.345	(0.992)	1949669	47.8126	47.8
77 2-Chlorotoluene	91	15.615	15.615	(0.948)	1816293	55.8186	55.8
25 2,2-Dichloropropane	77	9.434	9.434	(0.882)	790939	51.9714	52.0
78 1,3,5-Trimethylbenzene	105	15.615	15.615	(0.948)	1773018	47.7223	47.7
96 1,2,3-Trichlorobenzene	180	19.697	19.697	(1.195)	668445	51.2156	51.2
79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	1872501	49.3646	49.4
74 1,2,3-Trichloropropane	110	15.396	15.396	(0.934)	167086	53.1113	53.1

Data File: /chem/VOA2.i/062905v2.b/2q3291lcs1.d

Page 1

Date : 29-JUN-2005 18:58

Client ID: VBLK01LCS

Instrument: VOA2.i

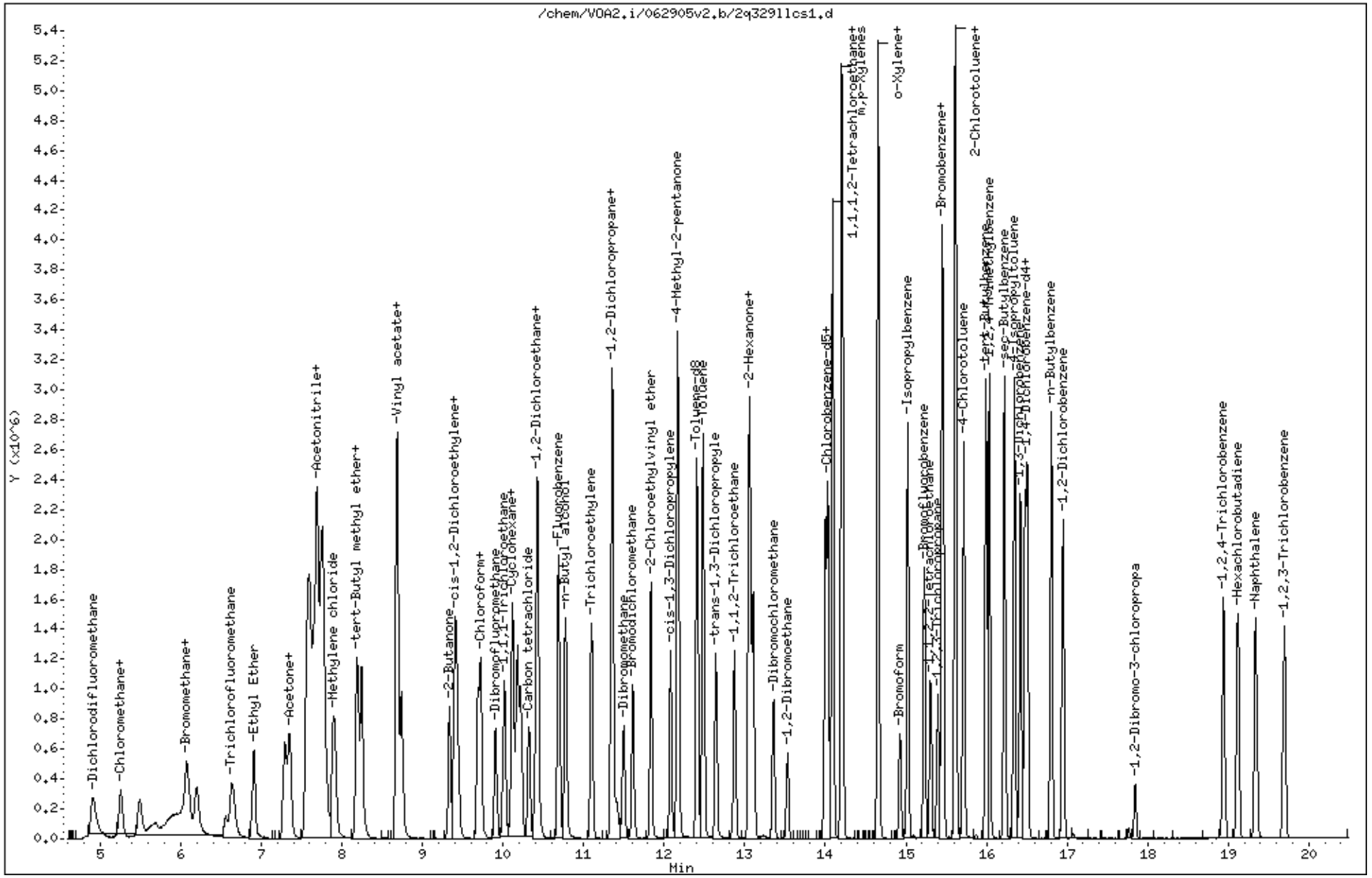
Sample Info: |1200876945|438041|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876946

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q331SHLCS1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	270	
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	279	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	2440	
107-05-1	Allyl chloride	240	
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	281	
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	57.1	
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	232	
107-12-0	Propionitrile	269	
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876946

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q331SHLCS1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	243	
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	233	
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) WATER Lab Sample ID: 1200876946

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Q331SHLCS1

Level: (low/med) LOW Date Received: 06/29/05

% Moisture: not dec. _____ Date Analyzed: 06/29/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	2520	

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/062905v2.b/2q331shlcs1.d
Lab Smp Id: 1200876946 Client Smp ID: VBLK01SLCS
Inj Date : 29-JUN-2005 19:50
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200876946|438041|1|VOAF|1|
Misc Info : VSTD250S
Comment :
Method : /chem/VOA2.i/062905v2.b/VOA2-8260B-062105pm.m
Meth Date : 29-Jun-2005 20:19 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 30 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.687	10.693	(1.000)	1799786	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1154363	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	572871	50.0000	
$ 35 Dibromofluoromethane	113	9.908	9.908	(0.927)	489168	50.8697	50.9
$ 47 Toluene-d8	98	12.408	12.409	(0.887)	1710445	50.4164	50.4
$ 71 Bromofluorobenzene	95	15.231	15.225	(0.924)	678242	50.7689	50.8
12 Trichlorotrifluoroethane	85	7.304	7.304	(0.683)	997188	278.702	279
97 1,4-Dioxane	88	11.435	11.435	(1.070)	260172	2516.49	2520
42 Methyl methacrylate	69	11.313	11.313	(1.059)	1493529	243.253	243
51 Ethyl methacrylate	69	12.640	12.640	(0.903)	2598010	232.801	233
24 2-Chloro-1,3-butadiene	53	8.850	8.850	(0.828)	848440	57.0826	57.1
27 Methacrylonitrile	41	9.604	9.604	(0.899)	1515414	231.895	232
19 Isobutyl alcohol	41	10.054	10.054	(0.941)	956754	2441.47	2440
16 Allyl chloride	76	7.748	7.748	(0.725)	1234172	239.706	240
18 Acrylonitrile	53	8.144	8.144	(0.762)	986395	281.313	281

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
9 Acrolein	56	7.110	7.110	(0.665)	478088	270.053	270
28 Propionitrile	54	9.415	9.415	(0.881)	385571	268.909	269

Data File: /chem/VOA2.i/062905v2.b/2q331shlcs1.d

Page 1

Date : 29-JUN-2005 19:50

Client ID: VBLK01SLCS

Instrument: VOA2.i

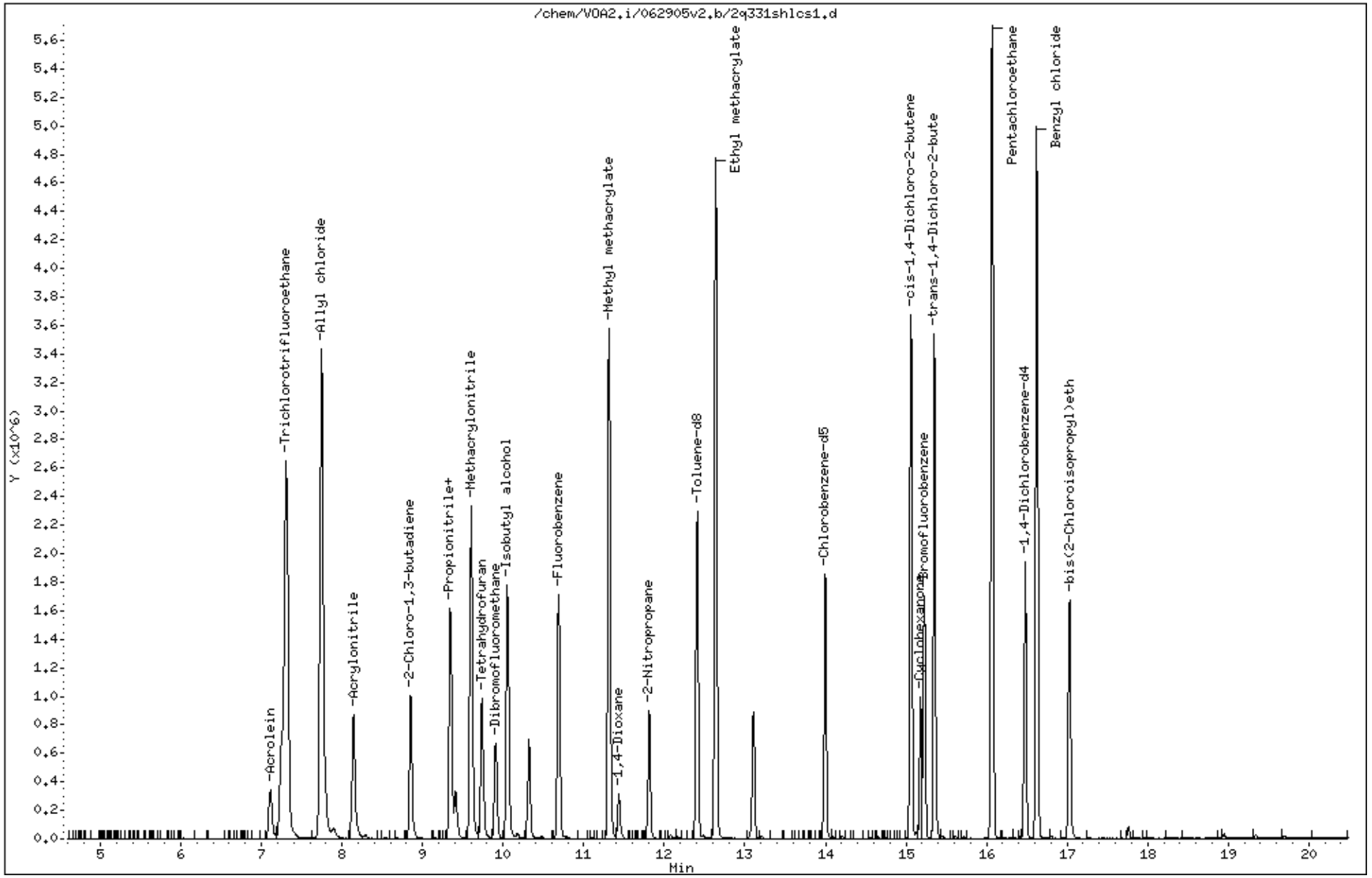
Sample Info: |1200876946|438041|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



MISCELLANEOUS DATA

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/063005v2.b/2q419.d
Lab Smp Id: 139136017 Client Smp ID: GU05060GSCP01
Inj Date : 30-JUN-2005 14:14
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |139136017|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/063005v2.b/VOA2-8260B-062105.m
Meth Date : 30-Jun-2005 09:20 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139136.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.687	(1.000)	1868289	50.0000	
* 61 Chlorobenzene-d5	117	14.002	14.002	(1.000)	1244030	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	638099	50.0000	
$ 35 Dibromofluoromethane	113	9.908	9.908	(0.927)	516212	51.7137	51.7
$ 47 Toluene-d8	98	12.408	12.408	(0.886)	1780334	48.6940	48.7
$ 71 Bromofluorobenzene	95	15.225	15.225	(0.924)	709201	47.6596	47.6

Data File: /chem/VOA2.i/063005v2.b/2q419.d

Date : 30-JUN-2005 14:14

Client ID: GU05060GSCP01

Instrument: VOA2.i

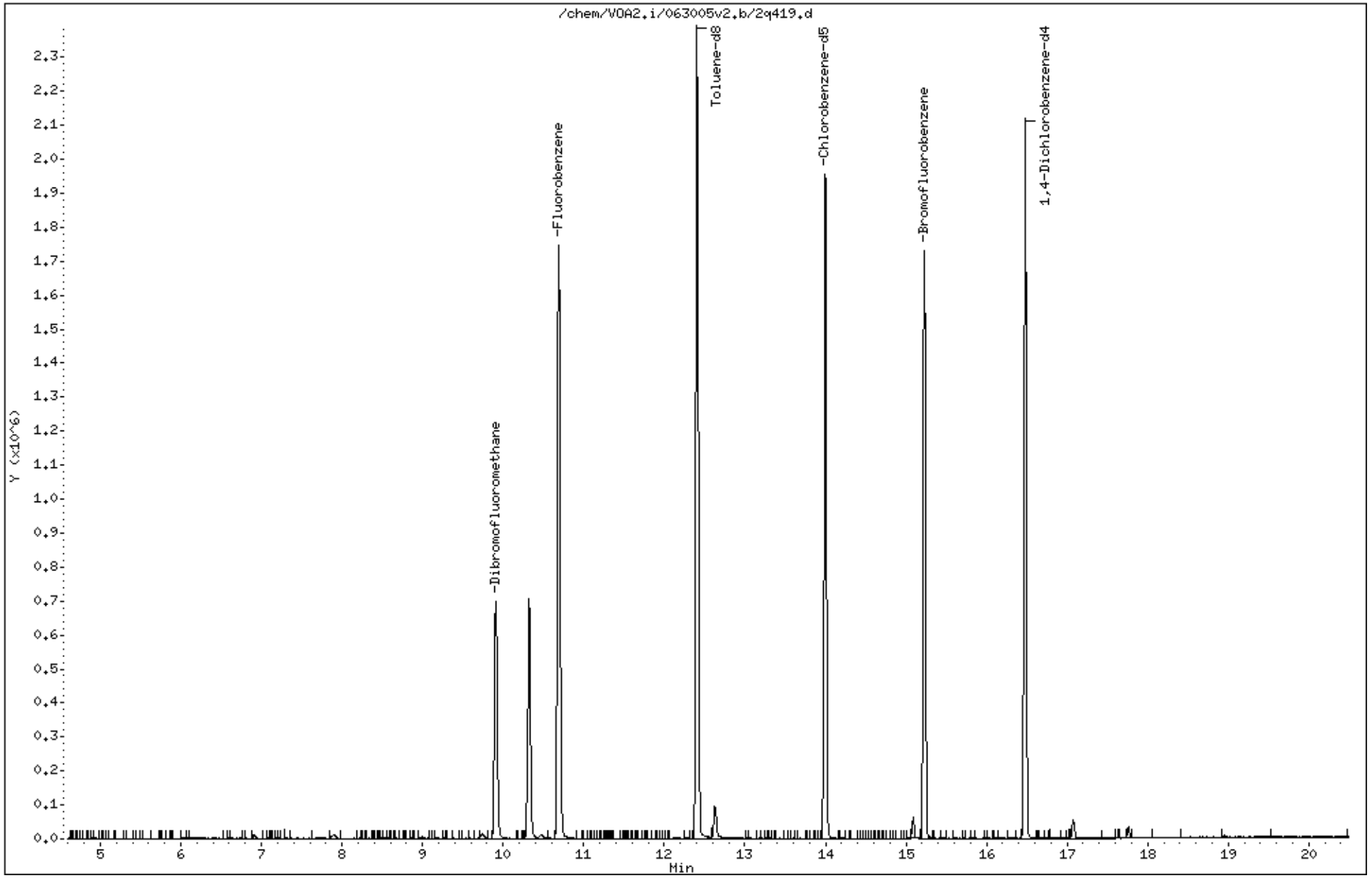
Sample Info: |13913601|43804|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/063005v2.b/2q414.d
Lab Smp Id: 1200876943 Client Smp ID: GU05060GSCP01MS
Inj Date : 30-JUN-2005 12:01
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200876943|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MS 139136017
Comment :
Method : /chem/VOA2.i/063005v2.b/VOA2-8260B-062105.m
Meth Date : 30-Jun-2005 09:20 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139136.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

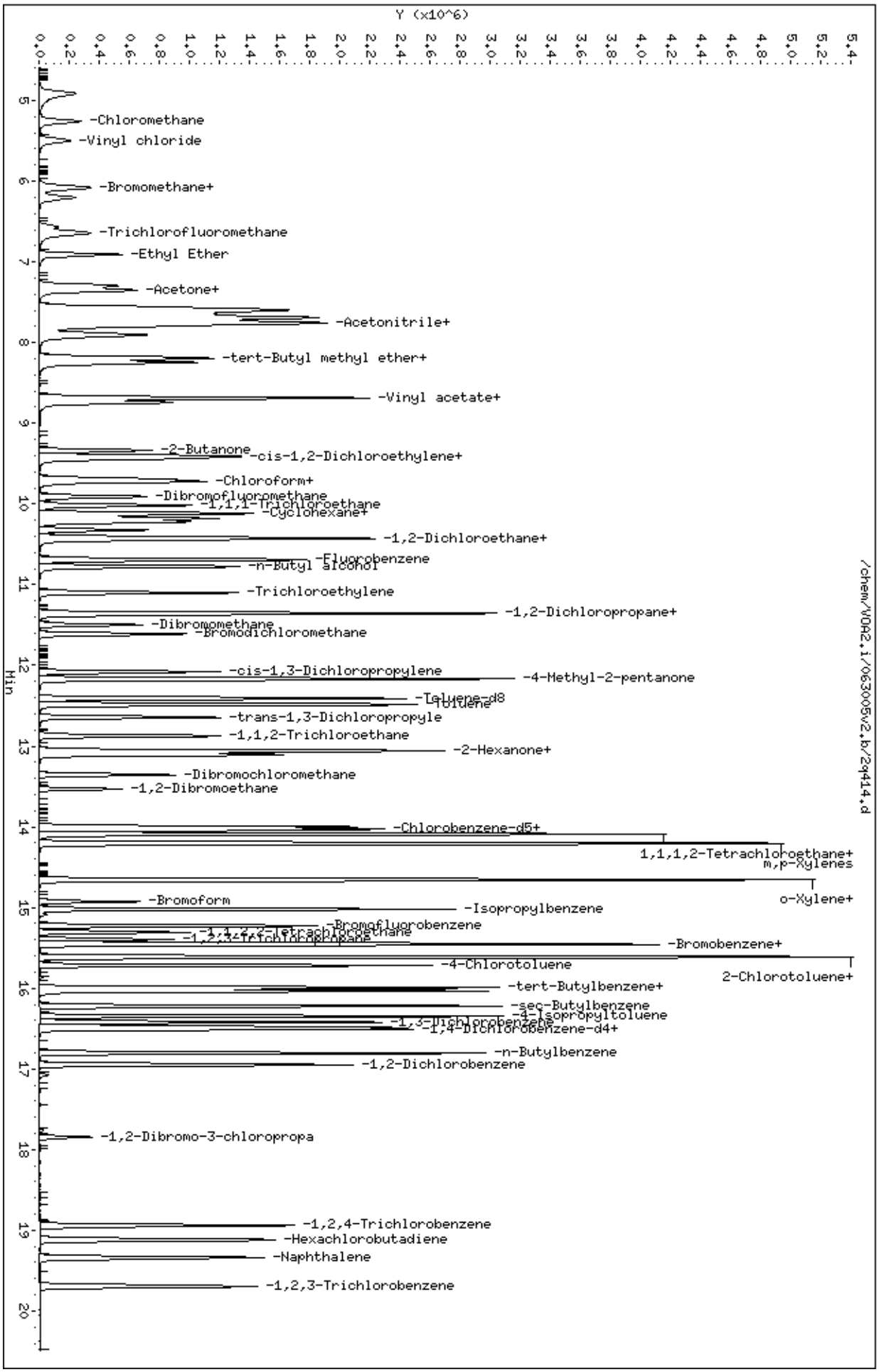
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.687	(1.000)	1857381	50.0000	
* 61 Chlorobenzene-d5	117	14.001	14.002	(1.000)	1225888	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.483	16.478	(1.000)	632224	50.0000	
$ 35 Dibromofluoromethane	113	9.907	9.908	(0.927)	527806	53.1858	53.2
$ 47 Toluene-d8	98	12.407	12.408	(0.886)	1815812	50.3994	50.4
$ 71 Bromofluorobenzene	95	15.230	15.225	(0.924)	739058	50.1276	50.1
3 Dichlorodifluoromethane	85	4.909	4.915	(0.459)	765473	55.2777	55.3
4 Chloromethane	50	5.260	5.260	(0.492)	689779	57.0724	57.1
5 Vinyl chloride	62	5.500	5.494	(0.514)	541487	53.0724	53.1
6 Bromomethane	94	6.081	6.082	(0.569)	529877	52.3683	52.4
7 Chloroethane	64	6.202	6.203	(0.580)	450299	56.7665	56.8
8 Trichlorofluoromethane	101	6.640	6.635	(0.621)	856054	54.0398	54.0
11 1,1-Dichloroethylene	61	7.352	7.353	(0.688)	880231	51.1989	51.2
10 Acetone	43	7.285	7.286	(0.681)	776503	244.795	245
14 Carbon disulfide	76	7.760	7.755	(0.726)	7079258	247.795	248

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17 Methylene chloride	84	7.899	7.901	(0.739)	558924	52.9151	52.9
21 trans-1,2-Dichloroethylene	61	8.246	8.241	(0.771)	824114	52.0639	52.1
22 1,1-Dichloroethane	63	8.745	8.740	(0.818)	1029489	52.8500	52.8
31 cis-1,2-Dichloroethylene	61	9.402	9.403	(0.879)	909620	52.8800	52.9
32 Chloroform	83	9.725	9.726	(0.910)	941091	52.5720	52.6
37 1,2-Dichloroethane	62	10.406	10.407	(0.973)	798552	52.5702	52.6
30 2-Butanone	43	9.335	9.336	(0.873)	1233077	223.794	224
36 1,1,1-Trichloroethane	97	10.017	10.011	(0.937)	855526	53.5315	53.5
87 1,4-Dichlorobenzene	146	16.508	16.509	(1.001)	1063108	51.2694	51.3
93 1,2,4-Trichlorobenzene	180	18.941	18.942	(1.149)	714943	53.5570	53.6
85 1,3-Dichlorobenzene	146	16.422	16.417	(0.996)	1067120	56.3263	56.3
90 1,2-Dichlorobenzene	146	16.952	16.947	(1.028)	1032676	53.2158	53.2
95 Naphthalene	128	19.342	19.337	(1.173)	1706168	51.2740	51.3
94 Hexachlorobutadiene	225	19.123	19.118	(1.160)	456748	48.7510	48.8
33 Carbon tetrachloride	117	10.217	10.218	(0.956)	727218	53.4049	53.4
38 Benzene	78	10.430	10.431	(0.976)	1937037	54.3274	54.3
39 Trichloroethylene	95	11.099	11.100	(1.038)	517668	47.4950	47.5
41 1,2-Dichloropropane	63	11.349	11.350	(1.061)	515308	49.1025	49.1
45 Bromodichloromethane	83	11.610	11.611	(1.086)	736707	54.1156	54.1
46 cis-1,3-Dichloropropylene	75	12.079	12.080	(1.130)	756111	49.6529	49.6
53 trans-1,3-Dichloropropylene	75	12.645	12.646	(0.903)	705376	50.4337	50.4
54 1,1,2-Trichloroethane	83	12.876	12.871	(0.920)	360106	52.6327	52.6
57 Dibromochloromethane	129	13.356	13.357	(0.954)	543464	58.3627	58.4
49 4-Methyl-2-pentanone	58	12.170	12.165	(0.869)	981118	227.531	228
50 Toluene	92	12.486	12.481	(0.892)	1251418	49.9559	50.0
56 Tetrachloroethylene	164	13.107	13.108	(0.936)	385004	52.2496	52.2
55 2-Hexanone	43	13.052	13.053	(0.932)	1770289	237.934	238
59 1,2-Dibromoethane	107	13.533	13.534	(0.967)	441821	52.9189	52.9
62 Chlorobenzene	112	14.032	14.033	(1.002)	1308180	50.7948	50.8
58 Ethylbenzene	91	14.092	14.093	(1.007)	2275201	55.2383	55.2
63 m,p-Xylenes	106	14.208	14.203	(1.015)	1623963	108.422	108
65 Styrene	104	14.658	14.659	(1.047)	1338468	53.4903	53.5
64 o-Xylene	106	14.658	14.653	(1.047)	797237	53.3744	53.4
67 Isopropylbenzene	105	15.023	15.024	(0.911)	1984212	48.5826	48.6
66 Bromoform	173	14.926	14.927	(0.906)	356148	61.3473	61.3
73 1,1,2,2-Tetrachloroethane	83	15.309	15.304	(0.929)	556480	59.8634	59.9
92 1,2-Dibromo-3-chloropropane	75	17.846	17.841	(1.083)	116701	59.1033	59.1
60 1,1,1,2-Tetrachloroethane	131	14.086	14.087	(1.006)	500066	54.2180	54.2
34 1,1-Dichloropropene	75	10.181	10.176	(0.952)	634671	47.4744	47.5
52 1,3-Dichloropropane	76	13.077	13.071	(0.934)	686165	50.8859	50.9
80 4-Chlorotoluene	91	15.717	15.718	(0.953)	1729782	51.5568	51.6
15 Acetonitrile	41	7.650	7.651	(0.716)	1708623	1337.17	1340
13 Iodomethane	142	7.595	7.596	(0.710)	4437642	263.440	263
43 Dibromomethane	93	11.501	11.496	(1.076)	320023	52.5518	52.6
29 Bromochloromethane	128	9.688	9.689	(0.906)	260748	52.4939	52.5
75 Bromobenzene	156	15.443	15.444	(0.937)	569292	57.7251	57.7(R)
81 tert-Butylbenzene	119	15.997	15.992	(0.970)	1828159	49.1707	49.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	16.222	16.223	(0.984)	2365167	49.0709	49.1
76 n-Propylbenzene	91	15.461	15.456	(0.938)	2599311	55.1513	55.2
89 n-Butylbenzene	91	16.806	16.801	(1.020)	1895337	48.7072	48.7
23 Vinyl acetate	43	8.684	8.685	(0.812)	4402941	299.526	300
84 4-Isopropyltoluene	119	16.349	16.344	(0.992)	1966073	48.9704	49.0
77 2-Chlorotoluene	91	15.613	15.614	(0.947)	1805536	56.3673	56.4
25 2,2-Dichloropropane	77	9.433	9.434	(0.882)	746760	53.9211	53.9
78 1,3,5-Trimethylbenzene	105	15.613	15.614	(0.947)	1760402	48.1252	48.1
96 1,2,3-Trichlorobenzene	180	19.695	19.696	(1.195)	680963	52.9923	53.0
79 1,2,4-Trimethylbenzene	105	16.033	16.034	(0.973)	1845343	49.4110	49.4
74 1,2,3-Trichloropropane	110	15.394	15.395	(0.934)	158011	51.0137	51.0(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.


Data File: /chem/VOA2.i/063005v2.b/2q414.d
Date : 30-JUN-2005 12:01
Client ID: GU0506OGSCP01MS
Sample Info: 1120087694314380411|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25
Page 1
Y (x10^6)
Min
/chem/VOA2.i/063005v2.b/2q414.d
-Chloromethane
-Vinyl chloride
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether
-Acetone+
-Acetonitrile+
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone
-cis-1,2-Dichloroethylene+
-Chloroform+
-Dibromofluoromethane
-1,1,1-Trichloroethane
-Cyclohexane+
-1,2-Dichloroethane+
-Fluorobenzene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Dibromomethane
-Bromodichloromethane
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
1,1,1,2-Tetrachloroethane+
m,p-Xylenes
o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
-1,2,3-Trichloropropane
-Bromobenzene+
-4-Chlorotoluene
2-Chlorotoluene+
-tert-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/063005v2.b/2q415.d
Lab Smp Id: 1200876944 Client Smp ID: GU05060GSCP01MSD
Inj Date : 30-JUN-2005 12:28
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200876944|438041|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MSD 139136017
Comment :
Method : /chem/VOA2.i/063005v2.b/VOA2-8260B-062105.m
Meth Date : 30-Jun-2005 09:20 cry00643 Quant Type: ISTD
Cal Date : 21-JUN-2005 22:58 Cal File: 2p215.d
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139136.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

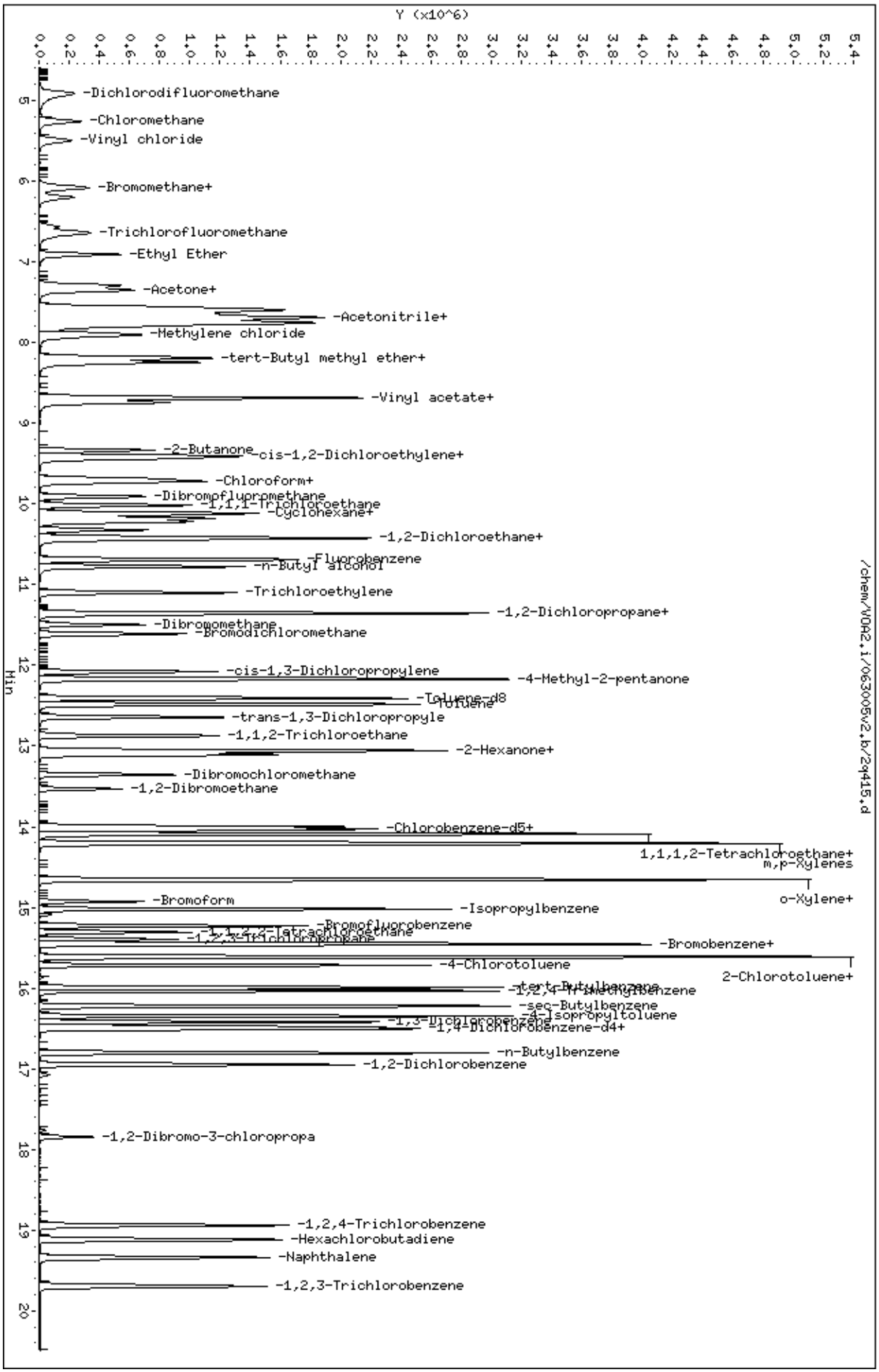
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.687	10.687	(1.000)	1813684	50.0000	
* 61 Chlorobenzene-d5	117	13.996	14.002	(1.000)	1198418	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	628160	50.0000	
$ 35 Dibromofluoromethane	113	9.908	9.908	(0.927)	516054	53.2544	53.2
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1774889	50.3927	50.4
$ 71 Bromofluorobenzene	95	15.225	15.225	(0.924)	724567	49.4627	49.5
3 Dichlorodifluoromethane	85	4.915	4.915	(0.460)	757265	56.0025	56.0
4 Chloromethane	50	5.261	5.260	(0.492)	688238	58.3169	58.3
5 Vinyl chloride	62	5.495	5.494	(0.514)	549804	55.1859	55.2
6 Bromomethane	94	6.088	6.082	(0.570)	516819	52.3084	52.3
7 Chloroethane	64	6.197	6.203	(0.580)	426953	55.1202	55.1
8 Trichlorofluoromethane	101	6.641	6.635	(0.621)	856626	55.3788	55.4
11 1,1-Dichloroethylene	61	7.353	7.353	(0.688)	876620	52.2173	52.2
10 Acetone	43	7.292	7.286	(0.682)	795350	257.119	257
14 Carbon disulfide	76	7.755	7.755	(0.726)	6909454	247.676	248

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
17 Methylene chloride	84	7.907	7.901	(0.740)	539382	52.2595	52.2
21 trans-1,2-Dichloroethylene	61	8.247	8.241	(0.772)	814094	52.6700	52.7
22 1,1-Dichloroethane	63	8.740	8.740	(0.818)	1020049	53.6270	53.6
31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.880)	898669	53.5021	53.5
32 Chloroform	83	9.726	9.726	(0.910)	940454	53.8022	53.8
37 1,2-Dichloroethane	62	10.407	10.407	(0.974)	812163	54.7544	54.8
30 2-Butanone	43	9.336	9.336	(0.874)	1259152	234.032	234
36 1,1,1-Trichloroethane	97	10.018	10.011	(0.937)	860407	55.1340	55.1
87 1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	1057552	51.3315	51.3
93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	719038	54.2122	54.2
85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	1070070	56.8537	56.8
90 1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	1023402	53.0790	53.1
95 Naphthalene	128	19.337	19.337	(1.174)	1722540	52.1009	52.1
94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	450584	48.4042	48.4
33 Carbon tetrachloride	117	10.218	10.218	(0.956)	734169	55.2144	55.2
38 Benzene	78	10.431	10.431	(0.976)	1925215	55.3161	55.3
39 Trichloroethylene	95	11.100	11.100	(1.039)	522160	49.0613	49.1
41 1,2-Dichloropropane	63	11.350	11.350	(1.062)	502314	49.0175	49.0
45 Bromodichloromethane	83	11.611	11.611	(1.087)	730386	54.9439	54.9
46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	735907	49.4904	49.5
53 trans-1,3-Dichloropropylene	75	12.646	12.646	(0.904)	708423	51.8126	51.8
54 1,1,2-Trichloroethane	83	12.871	12.871	(0.920)	356454	53.2932	53.3
57 Dibromochloromethane	129	13.357	13.357	(0.954)	549459	60.3590	60.4
49 4-Methyl-2-pentanone	58	12.171	12.165	(0.870)	1003217	237.989	238
50 Toluene	92	12.481	12.481	(0.892)	1245006	50.8392	50.8
56 Tetrachloroethylene	164	13.108	13.108	(0.937)	380932	52.8882	52.9
55 2-Hexanone	43	13.053	13.053	(0.933)	1799317	247.379	247
59 1,2-Dibromoethane	107	13.534	13.534	(0.967)	434585	53.2454	53.2
62 Chlorobenzene	112	14.033	14.033	(1.003)	1275646	50.6669	50.7
58 Ethylbenzene	91	14.093	14.093	(1.007)	2236758	55.5555	55.6
63 m,p-Xylenes	106	14.209	14.203	(1.015)	1605959	109.704	110
65 Styrene	104	14.659	14.659	(1.047)	1341790	54.8810	54.9
64 o-Xylene	106	14.653	14.653	(1.047)	800285	54.8343	54.8
67 Isopropylbenzene	105	15.024	15.024	(0.912)	1975733	48.6880	48.7
66 Bromoform	173	14.927	14.927	(0.906)	356506	61.8063	61.8
73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	554989	60.0893	60.1
92 1,2-Dibromo-3-chloropropane	75	17.841	17.841	(1.083)	119351	60.8365	60.8
60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	496134	55.0247	55.0
34 1,1-Dichloropropene	75	10.176	10.176	(0.952)	639660	49.0004	49.0
52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	676511	51.3199	51.3
80 4-Chlorotoluene	91	15.718	15.718	(0.954)	1713198	51.3929	51.4
15 Acetonitrile	41	7.651	7.651	(0.716)	1733436	1390.72	1390
13 Iodomethane	142	7.596	7.596	(0.711)	4333134	263.433	263
43 Dibromomethane	93	11.496	11.496	(1.076)	320471	53.8933	53.9
29 Bromochloromethane	128	9.689	9.689	(0.907)	259414	53.4836	53.5
75 Bromobenzene	156	15.444	15.444	(0.937)	561430	57.2897	57.3
81 tert-Butylbenzene	119	15.992	15.992	(0.970)	1811753	49.0447	49.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	16.223	16.223	(0.984)	2362102	49.3243	49.3
76 n-Propylbenzene	91	15.456	15.456	(0.938)	2566000	54.7891	54.8
89 n-Butylbenzene	91	16.801	16.801	(1.020)	1900635	49.1594	49.2
23 Vinyl acetate	43	8.685	8.685	(0.813)	4347025	302.847	303
84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	1954906	49.0073	49.0
77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1797569	56.4837	56.5
25 2,2-Dichloropropane	77	9.434	9.434	(0.883)	746799	55.2231	55.2
78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1753622	48.2500	48.2
96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	687133	53.8184	53.8
79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	1841476	49.6264	49.6
74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	163077	52.9899	53.0



Data File: /chem/VOA2.i/063005v2.b/2q415.d
Date : 30-JUN-2005 12:28
Client ID: GU0506QSCP01MSD
Sample Info: 1120087694414380411|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25

General Engineering Laboratories
Form GEL–NCR
Rev. 06/05

NCR Report No.: 216234
Revision No.: 2

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30–JUN–05	Federal	Client Contract	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	8260	Liquid	ESHL001
Batch ID:	**Sample Numbers:**		
438041	SDG 138851, 138905, 139136		

Potentially affected work order(s)(SDG): 138831,138851,138905,139034,139136,139193

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The recovery for bromobenzene was high and outside of acceptance limits in the MS performed on sample 139136017. The recovery of this compound was high and barely within limits in the MSD. The RPD was acceptable. The recoveries and RPD's of all other monitored compounds were within acceptance limits. in MS: bromobenzene 115% limits: 74–114.9% in MSD: bromobenzene 114.5% limits: 74–114.9%	1. Narrate and report data. The client's allowable 5% failure limit was not exceeded.

Originator's Name:
Crystal Stacey 30–JUN–05

Data Validator/Group Leader:
Erin Haubert 30–JUN–05

Quality Review:

Director:

General Engineering Laboratories, Inc

ORGANIC RUN LOG - INSTRUMENT ID# VOA 2

Revision No: 02/16/00

DATE: 6/21/05 METHOD: 8260/1001 OPERATOR: CDS

REVIEWED BY: EW

DATE: 6/22/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 on pg. 1

Daily Instrument Readings:

Multiplier Voltage: _____

CALIBRATION & QC INFORMATION:

Initial Calibration Date: 1 1

(see pg. ____ for ICAL Std. Sol. IDs)

VOA2183

Sequence Number: 062105V2

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/Smpl	CCV	MS/LCS	BFB
CCV:					
LCS	LWM050513-01	1	1	1	
SS	LWM050513-02	1	—	1	
LCS/MS				—	
BFB	LWM050513-02				1
SHORT			—	—	
DHEC					

Purge Amount

✓ Water Purge Volume: 5 mL

✓ Soil Purge Weight: 5 g.

___ Med level ext. MeOH vol.: ____ uL

(Methanol Lot #: _____)

✓ Heated Purge ___ Ambient Purge

Analysis Date	Time	Data File	Lab Sample Id#	Client	Batch #	Wt(g) or vol(mL/uL)	Dil. Factor	pH	AS Slot#	Matrix w or s	Analyst	Acceptable(Y/N)	Comments
06/21/05	1658	2P201	DFB tune	N/A	N/A	—	N/A	N/A	—	W	CDS	✓	RC Rev'd EW 6/22/05
	1715	02	CBLANK			5mL			1			✓	
	1741	03	W2V050621-01			5mL ea → 5mL			2			X	LWM050216-02E @ LWM050525-02E = VSTD001L
	1808	04	-01						3			✓	-02E -02E = 001L
	1834	05	-02						4			✓	-03E -03E 002L
	1901	06	-03						5			✓	-04E -04E 005L
	1927	07	-04						6			✓	-05E -05E 010L
	1954	08	-05						7			✓	-06E -06E 020L
	2020	09	-06						8			✓	-07E -07E 050L
	2046	10	✓ -07			✓			9			✓	✓ -08E ✓ 20E ✓ 100L
	2112	11	BLANK			5mL			10			X	
	2139	12	W2V050601-08			5mL ea → 5mL			11			✓	LWM050216-01E @ LWM050525-01E = VSTD005
	2205	13	LCS/ICV			5mL			12			✓	LWM050605-01C
	2232	14	VSTD005S			5mL → 5mL			13			X	LWM050615-01A
	2258	15	005S						14			✓	-01A
✓	2325	16	010S						15			✓	-02A
06/22/05	0351	17	025S						16			✓	-03A
	0617	18	050S						17			✓	-04A
	0644	19	100S						18			✓	-05A
✓	0710	20	✓ 250S	✓	✓	✓	✓	✓	19	✓	✓	✓	✓ -06A

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General Engineering Laboratories, Inc

ORGANIC RUN LOG - INSTRUMENT ID# VOA 2

Revision No: 02/16/00

Sequence Number 06210502 (Continuation)

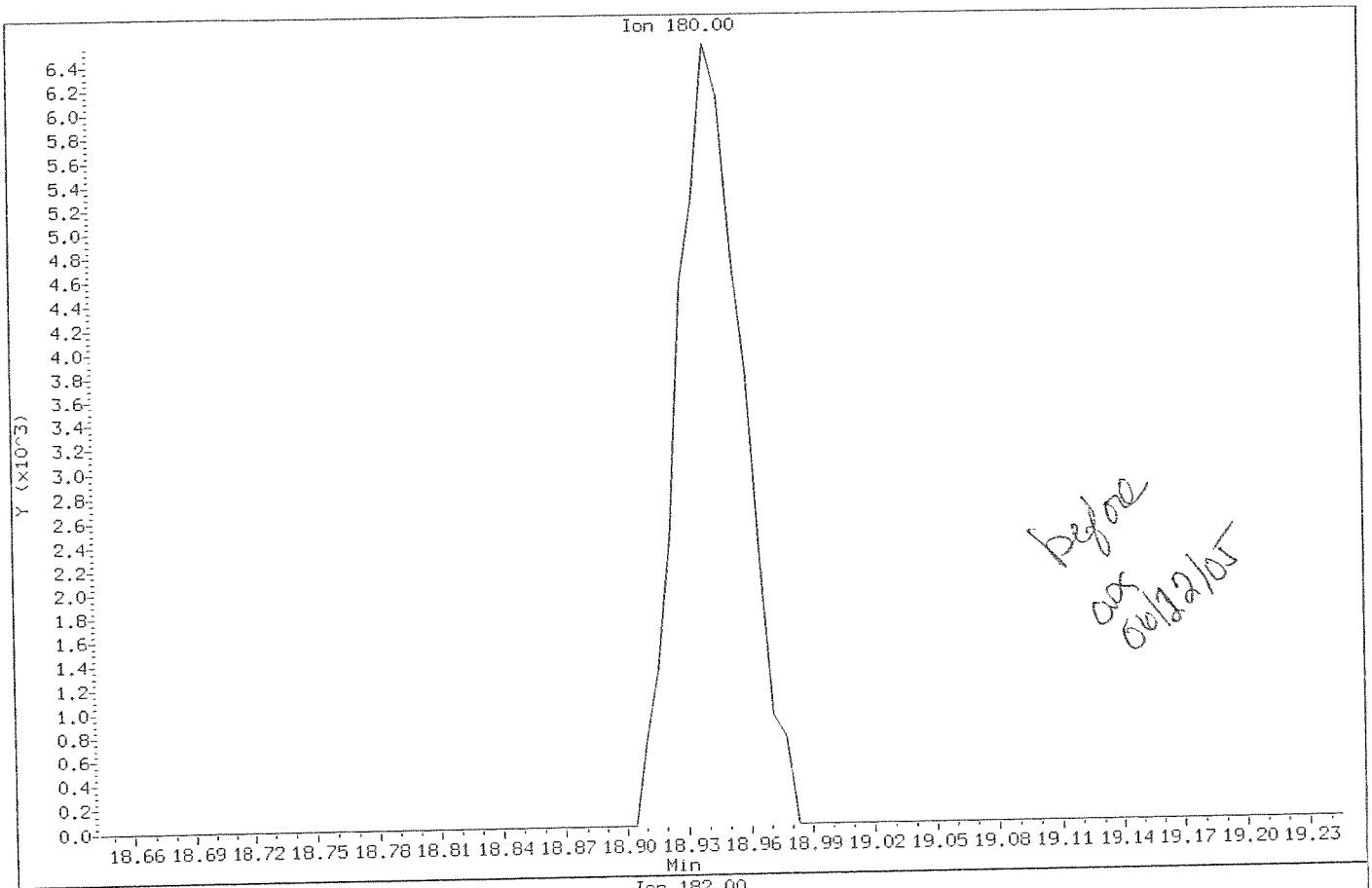
Analysis Date	Time	Data File	Lab Sample #	Client	Batch #	Wt(g) or vol(mL/uL)	Dil. Factor	pH	AS Slot#	Matrix w or s	Analyst	Acceptable(✓/X)	Comments
06/22/05	0137	2P221	VSTD500S	N/A	N/A	5uL->5mL	N/A	NA	20	W/S	ODS	✓	
↓	0203	↓ 22	BLANK	↓	↓	5mL	↓	↓	21	↓	↓	X	
↓	0230	↓ 23	SHORT ICV	↓	↓	5mL	↓	↓	22	↓	↓	✓	LUM050531-01A

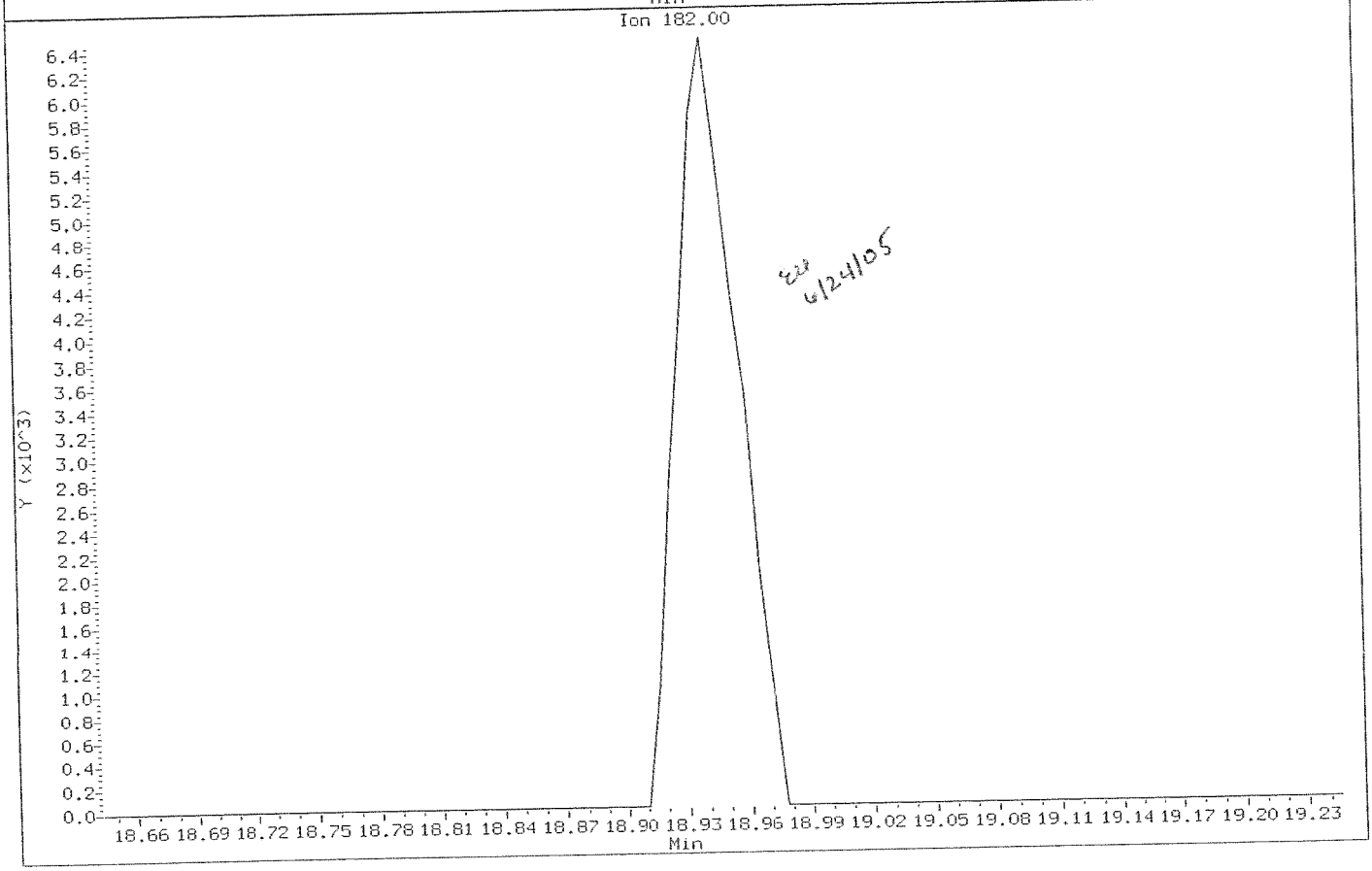
ODS 06/22/05

(✓=OK / X = Rerun)

Data File: /chem/VOA2.i/062105v2.b/2p204.d
Injection Date: 21-JUN-2005 18:08
Instrument: VOA2.i
Client Sample ID: VSTD001

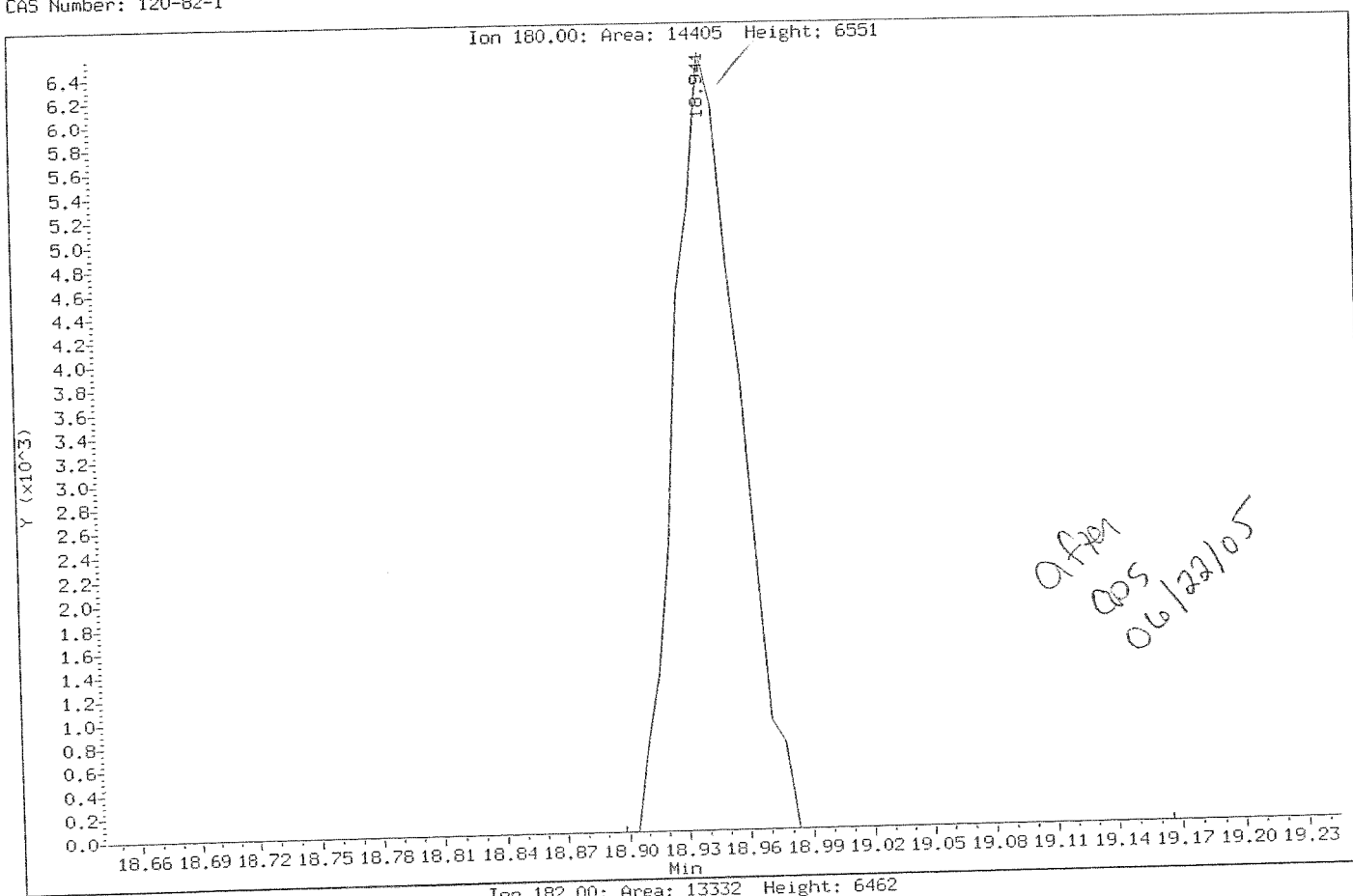
Compound: 1,2,4-Trichlorobenzene
CAS Number: 120-82-1



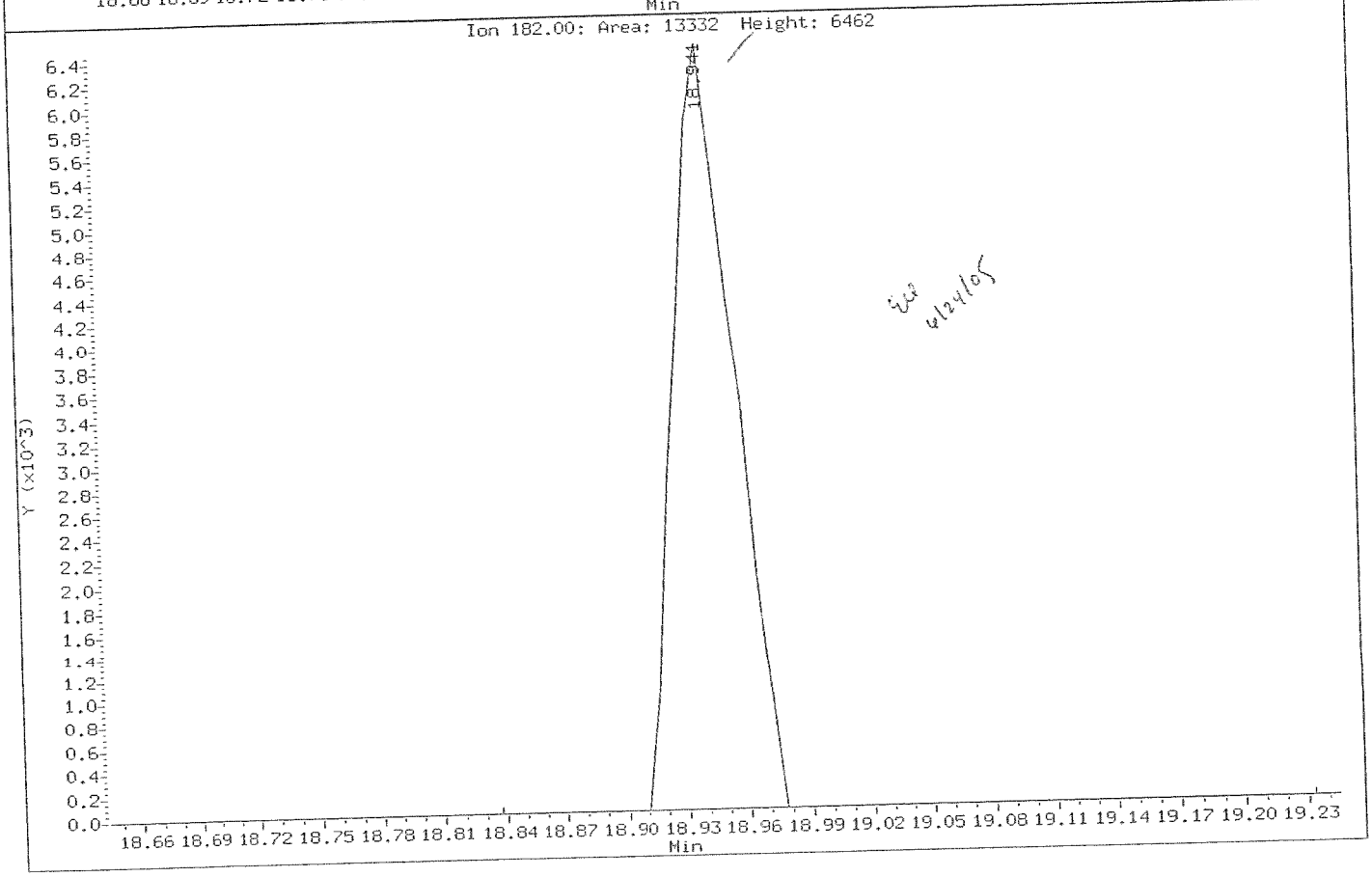


Data File: /chem/VOA2.i/062105v2.b/2p204.d
Injection Date: 21-JUN-2005 18:08
Instrument: VOA2.i
Client Sample ID: VSTD001

Compound: 1,2,4-Trichlorobenzene
CAS Number: 120-82-1



aft
QC
06/22/05



ic
6/24/05

ORGANIC RUN LOG - INSTRUMENT ID# VOA 2

General Engineering Laboratories, Inc

Revision No: 02/16/00

REVIEWED BY: ACS
DATE: 06/30/05
Daily Instrument Readings:
Multiplier Voltage: 1694

DATE 6/29/05 METHOD 8260 OPERATOR: CDS

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1 on pg. 1

CALIBRATION & QC INFORMATION:

Initial Calibration Date 06/21/05

(see pg. 267 for ICAL Std. Sol. IDs)

VOA 188

	Daily Standard Solution ID#	Volume Added for Purge (ul) Blk/Smpl	CCV	MS/LCS	SFS
CCV	LUM050605-01		5		
LCS	LUM050622-01	1	1	1	
SS	LUM050622-02	1	1	1	
MS/MSD	LUM050605-01D			5	1
SFS	LUM050622-02		5	—	
SHORT	LUM050531-01A				
DHEC					

Purge Amount
- ✓ Water Purge Volume: 5 ml.
- ___ Soil Purge Weight ___ g.
- ___ Med level ext. MeOH vol.: ___ ul.
- ✓ Methanol Lot #: ___
- ___ Heated Purge ___ Ambient Purge

Sequence Number: 062905O2 (pm)

Analysis Date	Time	Data File	Lab Sample Id#	Client	Batch #	Wt(g) or vol(mL/uL)	Dil. Factor	pH	AS Slot#	Matrix w or s	Analyst	Acceptable(Y/X)	Comments
06/29/05	831	20328	BFB tune	—	—	5mL	—	—	27	W	CDS	✓	12L Rev'd ACS 06/30/05
	1858	29	CCV/LCS						28			✓	
	1924	30	LCSD						29			X	not needed
	1950	31	short CCV						30			✓	
	2017	32	BLANK						31			X	re-run-up
	2043	33	BLANK						32			✓	
	2110	34	13883601	[redacted]	438041	5mL	1	2	33			✓	
	2136	35	↓ 002					2	34			✓	
	2202	36	↓ 003					2	35			✓	
	2229	37	13885003	TEST				2	36			✓	
	2255	38	↓ 004					2	37			✓	
	2322	39	↓ 005					2	38			✓	
	2348	40	13890505	TEST				2	39			✓	
06/30/05	0014	41	↓ 006					2	40			✓	
	0041	42	13896004	[redacted]	437792	5mL	1	2	41			✓	
	0107	43	13883304					2	42			✓	
	0133	44	002					2	43			✓	
	0200	45	005					2	44			✓	
	0226	46	006					2	45			✓	
	0253	47	↓ 011					2	46			✓	

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General Engineering Laboratories, Inc

ORGANIC RUN LOG - INSTRUMENT ID# VOA 2

Revision No: 02/16/00

Sequence Number 0602905Z (Continuation)

Resequence

Analysis Date	Time	Data File	Lab Sample	Client	Batch #	Wt(g) or vol(mL/uL)	Dil. Factor	pH	AS Slot#	Matrix w or s	Analyst	Acceptable(✓/X)	Comments
06/30/05		2Q348	138833012	[redacted]	437792	5mL	1:1	2	47	W	OUS		
		44	013					2	48				
		49	1205763777					2	49				MS-138853005
		51	378					2	50				MSD-11
06/30/05		2Q348	138833011										
		49	012										
		52	013										
		51	06/30/05										
		52											
06/30/05	0219	2Q348	138833012	[redacted]	437792	5mL	1:1	2	47	W	OS	✓	
	0345	46	013					2	48			✓	
	0412	50	138737005	[redacted]	437585	5mL	1:1	2	49			✓	
	0438	51	1205763777	[redacted]	437712	5mL	1:1	2	50			✓	MS-138823005
	0504	52	378					2	51			✓	MSD-11

(✓=OK / X=Rerun)

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GC/MS SEMIVOLATILE ANALYSIS

Semi-Volatile Case Narrative
Los Alamos National Laboratory (ESHL)
SDG 138851

Method/Analysis Information

Procedure:	**Semi-volatile Analysis by Gas Chromatograph/Mass Spectrometer**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3510C
Analytical Batch Number:	435528
Prep Batch Number:	435481

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
138851003	GU05050GMC601
138851004	GU05050GMC690
1200871172	Method Blank (MB)
1200871173	Laboratory Control Sample (LCS)
1200871174	138851003(GU05050GMC601) Matrix Spike (MS)
1200871175	138851003(GU05050GMC601) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

Procedures for preparation, analysis, and reporting of analytical data are documented by General Engineering Laboratories, LLC (GEL) as Standard Operating Procedure (SOP) GL-OA-E-009, Rev. 14.

Calibration Information

Due to software limitations, the files displayed at the beginning of the Form 6 are only the last files uploaded for each individual level. A complete listing of all files used in the current ICAL are shown on the Calibration History that is included with each Level 4 or higher package. The last file by date in each level is the one currently uploaded for that level.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section

1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

When calibrations are performed for Appendix IX compounds some of the compounds may not be calibrated exactly according to the criteria in Method 8270C. If the %RSD is greater than 15% or the correlation coefficient is less that 0.99 then the analyte is quantitated using the response factor. If the analyte is detected then the sample is re-analyzed for that analyte on an instrument that is compliant with the criteria in the method.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS failed recovery for 2,4-Dimethylphenol at 96.33% (limits 40.6-95.3%). The failure is less than 5% of all target analytes, and the data were reported. 1200871173 (LCS).

QC Sample Designation
Sample 138851003 (GU05050GMC601) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were not within the acceptance limits. The failures confirm in the matrix spike duplicate (MSD) and are attributed to matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the acceptance limits. The failures confirm in the MS and are attributed to matrix interference.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information:

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

day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information:

Nonconformance (NCR) Documentation
Nonconformance report 218201 was generated for this SDG.

The LCS recovered 2,4-Dimethylphenol at 96.3% (limits 40.6-95.3%). The recovery was above the control limits and represented less than 5% of requested spike analyte list. That satisfied the acceptance criteria for the client and the results were reported.

The MS (1200871174) failed recovery for multiple compounds. Because the MSD confirmed the spike failures, they were attributed to matrix interference and the results were reported.

The MSD (1200871175) failed recovery for multiple compounds. Because the MS confirmed the spike failures, they were attributed to matrix interference and the results were reported.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The laboratory utilizes a HP 6890 Series gas chromatograph and a HP 5973 Mass Selective Detector. The configuration is equipped with the electronic pressure control. All MS interfaces are capillary direct.

Chromatographic Columns

Chromatographic separation of semi-volatile components is accomplished through analysis on one or more of the following columns (all with dimensions of 30 meters x 0.25 millimeters ID and 0.25 micron film except J&W DB-5MS2 which is 25 meters x 0.20 mm ID and 0.33 micron film):

Column ID	Column Description
J&W	DB-5.625(5% Phenyl)-methylpolysiloxane (identified by a DB-5.625 designation on quantitation reports and reconstructed ion chromatograms)
J&W DB-5MS	Similar to the J&W DB-5.625 with low bleed characteristics (identified by a DB-5MS designation)
Alltech	EC-5 (SE-54) 5% Phenyl, 95% Methylpolysiloxane (identified by a HP-5MS designation)
HP	HP-5MS 5% Phenylmethylsiloxane (identified by a HP-5MS designation)
Phenomenex	ZB-5 5% Phenyl Polysiloxane (identified by a ZB-5 designation)
J&W DB-5MS2	Similar to the J&W DB-5.625 with low bleed characteristics (identified by a DB-5MS2 designation)

Instrument Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

The Semi-Volatiles-GC/MS analysis was performed on a HP Mass Spectrometer.

Instrument ID	System Configuration	Column ID	Column Description
MSD4.I	HP6890/HP5973	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ **Date:** 07-14-05

Roadmap for ESHL 138851 SVOA

This roadmap was analyzed by Erin Dobson on 07-08-2005, 04:24.
This roadmap was reviewed by Cameron Bearden on 07-11-2005, 11:04.
This roadmap was packaged by Sherri Brown on 07-13-2005, 10:37.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/MSD4.i/s070505.b/s4g0517.d	138851003	06-JUL-2005	01:05	138851.sub	GU05050GMC601	1	
☐	N	/chem/MSD4.i/s070505.b/s4g0520.d	138851004	06-JUL-2005	02:08	138851.sub	GU05050GMC690	1	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/MSD4.i/s070505.b/s4g0507-3.d	1200871172	mb	05-JUL-2005	21:37	138851.sub	SBLK01	1	
☐	N	/chem/MSD4.i/s070505.b/s4g0508-3.d	1200871173	lcs	05-JUL-2005	21:58	138851.sub	SBLK01LCS	1	
☐	N	/chem/MSD4.i/s070505.b/s4g0518.d	1200871174	ms	06-JUL-2005	01:26	138851.sub	GU05050GMC601MS	1	Fail 4 - comfirmed by MSD
☐	N	/chem/MSD4.i/s070505.b/s4g0519.d	1200871175	msd	06-JUL-2005	01:47	138851.sub	GU05050GMC601MSD	1	Fail 4 - comfirmed by MS

SAMPLE DATA SUMMARY

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.3	U
111-44-4	bis(2-Chloroethyl) ether	10.3	U
95-57-8	2-Chlorophenol	10.3	U
541-73-1	1,3-Dichlorobenzene	10.3	U
106-46-7	1,4-Dichlorobenzene	10.3	U
100-51-6	Benzyl alcohol	10.3	U
95-50-1	1,2-Dichlorobenzene	10.3	U
108-60-1	bis(2-Chloroisopropyl)ether	10.3	U
95-48-7	o-Cresol	10.3	U
98-86-2	Acetophenone	10.3	U
621-64-7	N-Nitrosodipropylamine	10.3	U
106-44-5	m,p-Cresols	10.3	U
67-72-1	Hexachloroethane	10.3	U
98-95-3	Nitrobenzene	10.3	U
78-59-1	Isophorone	10.3	U
88-75-5	2-Nitrophenol	10.3	U
105-67-9	2,4-Dimethylphenol	10.3	U
111-91-1	bis(2-Chloroethoxy)methane	10.3	U
120-83-2	2,4-Dichlorophenol	10.3	U
65-85-0	Benzoic acid	20.6	U
120-82-1	1,2,4-Trichlorobenzene	10.3	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.3	U
87-68-3	Hexachlorobutadiene	10.3	U
59-50-7	4-Chloro-3-methylphenol	10.3	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.3	U
88-06-2	2,4,6-Trichlorophenol	10.3	U
95-95-4	2,4,5-Trichlorophenol	10.3	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.3	U
99-09-2	m-Nitroaniline	10.3	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.3	U
606-20-2	2,6-Dinitrotoluene	10.3	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.6	U
132-64-9	Dibenzofuran	10.3	U
121-14-2	2,4-Dinitrotoluene	10.3	U
84-66-2	Diethylphthalate	10.3	U
100-02-7	4-Nitrophenol	10.3	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.3	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.3	U
100-01-6	p-Nitroaniline	10.3	U
122-39-4	Diphenylamine	10.3	U
122-66-7	1,2-Diphenylhydrazine	10.3	U
101-55-3	4-Bromophenylphenylether	10.3	U
118-74-1	Hexachlorobenzene	10.3	U
1912-24-9	Atrazine	10.3	U
87-86-5	Pentachlorophenol	10.3	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.3	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	51.5	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.3	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.3	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	4.6	J
117-84-0	Di-n-octylphthalate	10.3	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

FORM I SV-2 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.3	U
86-74-8	Carbazole	10.3	U

1F

EPA SAMPLE NO.

GU05050GMC601

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WATER Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-82-7	CYCLOHEXANE	2.10	28.7	NJB
2.	123-91-1	1,4-DIOXANE	2.33	5.1	NJ
3.					
4.					
5.					
6.					
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FORM I SV-TIC OLM03.0

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.2	U
111-44-4	bis(2-Chloroethyl) ether	10.2	U
95-57-8	2-Chlorophenol	10.2	U
541-73-1	1,3-Dichlorobenzene	10.2	U
106-46-7	1,4-Dichlorobenzene	10.2	U
100-51-6	Benzyl alcohol	10.2	U
95-50-1	1,2-Dichlorobenzene	10.2	U
108-60-1	bis(2-Chloroisopropyl)ether	10.2	U
95-48-7	o-Cresol	10.2	U
98-86-2	Acetophenone	10.2	U
621-64-7	N-Nitrosodipropylamine	10.2	U
106-44-5	m,p-Cresols	10.2	U
67-72-1	Hexachloroethane	10.2	U
98-95-3	Nitrobenzene	10.2	U
78-59-1	Isophorone	10.2	U
88-75-5	2-Nitrophenol	10.2	U
105-67-9	2,4-Dimethylphenol	10.2	U
111-91-1	bis(2-Chloroethoxy)methane	10.2	U
120-83-2	2,4-Dichlorophenol	10.2	U
65-85-0	Benzoic acid	9.3	J
120-82-1	1,2,4-Trichlorobenzene	10.2	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.2	U
87-68-3	Hexachlorobutadiene	10.2	U
59-50-7	4-Chloro-3-methylphenol	10.2	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.2	U
88-06-2	2,4,6-Trichlorophenol	10.2	U
95-95-4	2,4,5-Trichlorophenol	10.2	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.2	U
99-09-2	m-Nitroaniline	10.2	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.2	U
606-20-2	2,6-Dinitrotoluene	10.2	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.4	U
132-64-9	Dibenzofuran	10.2	U
121-14-2	2,4-Dinitrotoluene	10.2	U
84-66-2	Diethylphthalate	10.2	U
100-02-7	4-Nitrophenol	10.2	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.2	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.2	U
100-01-6	p-Nitroaniline	10.2	U
122-39-4	Diphenylamine	10.2	U
122-66-7	1,2-Diphenylhydrazine	10.2	U
101-55-3	4-Bromophenylphenylether	10.2	U
118-74-1	Hexachlorobenzene	10.2	U
1912-24-9	Atrazine	10.2	U
87-86-5	Pentachlorophenol	10.2	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.2	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	51.0	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.2	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.2	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	3.5	J
117-84-0	Di-n-octylphthalate	10.2	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

FORM I SV-2 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.2	U
86-74-8	Carbazole	10.2	U

1F

EPA SAMPLE NO.

GU05050GMC690

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WATER Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-82-7	CYCLOHEXANE	2.10	26.4	NJB
2.	123-91-1	1,4-DIOXANE	2.33	4.4	NJ
3.	111-76-2	ETHANOL, 2-BUTOXY-	3.39	4.7	NJ
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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FORM I SV-TIC OLM03.0

QUALITY CONTROL SUMMARY

2C

GROUND WATER SVOA SURROGATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

	EPA SAMPLE NO.	S1 (2FP)#	S2 (PHL)#	S3 (NBZ)#	S4 (FBP)#	S5 (TBP)#	S6 (TPH)#	TOT OUT
01	SBLK01	43	31	74	80	73	74	0
02	SBLK01LCS	46	33	83	86	87	85	0
03	GU05050GMC601	40	30	71	76	82	71	0
04	GU05050GMC601MS	52	48	74	83	88	78	0
05	GU05050GMC601MSD	50	45	70	75	80	75	0
06	GU05050GMC690	38	28	68	69	76	86	0
07								
08								
09								
10								
11								
12								
13								
14								
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16								
17								
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19								
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29								
30								

	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(13- 67)
S2 (PHL) = Phenol-d5	(10- 70)
S3 (NBZ) = Nitrobenzene-d5	(43-100)
S4 (FBP) = 2-Fluorobiphenyl	(36- 97)
S5 (TBP) = 2,4,6-Tribromophenol	(33-111)
S6 (TPH) = p-Terphenyl-d14	(50-126)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: GU05050GMC60

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	200	0.0	94.4	47	23- 64
bis(2-Chloroethyl) ethe	100	0.0	64.4	64	35- 99
2-Chlorophenol	200	0.0	138	69	46- 93
1,3-Dichlorobenzene	100	0.0	57.9	58	39- 86
1,4-Dichlorobenzene	100	0.0	60.7	61	42- 88
Benzyl alcohol	100	0.0	67.0	67	40-101
1,2-Dichlorobenzene	100	0.0	60.1	60	39- 93
bis(2-Chloroisopropyl)e	100	0.0	78.3	78	53- 96
o-Cresol	200	0.0	141	70	31- 98
Acetophenone	100	0.0	80.3	80	55-100
N-Nitrosodipropylamine	100	0.0	80.7	81	58- 98
m,p-Cresols	200	0.0	148	74	27- 90
Hexachloroethane	100	0.0	58.4	58	27- 92
Nitrobenzene	100	0.0	78.9	79	47-109
Isophorone	100	0.0	78.9	79	52-100
2-Nitrophenol	200	0.0	173	86	47-107
2,4-Dimethylphenol	200	0.0	165	82	49- 96
bis(2-Chloroethoxy)meth	100	0.0	83.6	84	51- 97
2,4-Dichlorophenol	200	0.0	151	76	48-104
Benzoic acid	200	0.0	113	56	20- 86
1,2,4-Trichlorobenzene	100	0.0	66.4	66	36- 96
Naphthalene	100	0.0	66.2	66	43- 92
4-Chloroaniline	100	0.0	73.2	73	41-115
Hexachlorobutadiene	100	0.0	56.8	57	31- 97
4-Chloro-3-methylphenol	200	0.0	178	89	43-116
2-Methylnaphthalene	100	0.0	74.0	74	52- 94
1-Methylnaphthalene	100	0.0	77.5	78	48- 98
Hexachlorocyclopentadie	100	0.0	62.1	62	31- 84

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

_____

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: GU05050GMC60

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
2,4,6-Trichlorophenol	200	0.0	156	78	40-105
2,4,5-Trichlorophenol	200	0.0	177	88	49-102
2-Chloronaphthalene	100	0.0	77.6	78	48- 97
o-Nitroaniline	100	0.0	47.6	48*	62-112
m-Nitroaniline	100	0.0	69.3	69	58-111
Dimethylphthalate	100	0.0	85.8	86	69-103
2,6-Dinitrotoluene	100	0.0	98.2	98	66-127
Acenaphthylene	100	0.0	83.4	83	54-100
Acenaphthene	100	0.0	89.2	89	56-109
2,4-Dinitrophenol	200	0.0	230	115	30-133
Dibenzofuran	100	0.0	83.4	83	59- 99
2,4-Dinitrotoluene	100	0.0	107	107	53-118
Diethylphthalate	100	0.0	87.3	87	63-111
4-Nitrophenol	200	0.0	138	69	21- 88
Fluorene	100	0.0	83.2	83	27-135
4-Chlorophenylphenyleth	100	0.0	86.9	87	59-100
2-Methyl-4,6-dinitrophe	200	0.0	230	115	45-130
p-Nitroaniline	100	0.0	41.9	42*	50-121
Diphenylamine	100	0.0	75.2	75	62-104
1,2-Diphenylhydrazine	100	0.0	86.9	87	63-108
4-Bromophenylphenylethe	100	0.0	97.2	97	59-114
Hexachlorobenzene	100	0.0	80.1	80	61-109
Atrazine	100	0.0	77.5	78	10-150
Pentachlorophenol	200	0.0	201	100	34-117
Phenanthrene	100	0.0	83.7	84	65-105
Anthracene	100	0.0	84.0	84	64-105
Di-n-butylphthalate	100	0.0	92.6	93	61-119
Fluoranthene	100	0.0	79.1	79	55-115

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: GU05050GMC60

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzidine	100	0.0	0.0	0*	10- 60
Pyrene	100	0.0	79.7	80	50-130
Butylbenzylphthalate	100	0.0	76.6	77	58-123
Benzo(a)anthracene	100	0.0	85.2	85	68-105
3,3'-Dichlorobenzidine	100	0.0	0.0	0*	46-109
Chrysene	100	0.0	87.3	87	61-107
bis(2-Ethylhexyl)phthal	100	4.6	81.9	77	54-131
Di-n-octylphthalate	100	0.0	67.7	68	46-137
Benzo(b)fluoranthene	100	0.0	79.3	79	47-121
Benzo(k)fluoranthene	100	0.0	92.5	92	63-124
Benzo(a)pyrene	100	0.0	89.8	90	52-114
Indeno(1,2,3-cd)pyrene	100	0.0	90.9	91	43-110
Dibenzo(a,h)anthracene	100	0.0	83.7	84	41-109
Benzo(ghi)perylene	100	0.0	86.2	86	41-126
Carbazole	100	0.0	77.6	78	51-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: GU05050GMC60

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	200	88.5	44	6	23	23- 64
bis(2-Chloroethyl) ethe	100	62.8	63	2	30	35- 99
2-Chlorophenol	200	128	64	8	26	46- 93
1,3-Dichlorobenzene	100	52.4	52	11	24	39- 86
1,4-Dichlorobenzene	100	55.0	55	10	27	42- 88
Benzyl alcohol	100	63.2	63	6	30	40-101
1,2-Dichlorobenzene	100	55.0	55	9	22	39- 93
bis(2-Chloroisopropyl)e	100	71.6	72	8	24	53- 96
o-Cresol	200	128	64	9	25	31- 98
Acetophenone	100	73.5	74	8	16	55-100
N-Nitrosodipropylamine	100	72.8	73	10	28	58- 98
m,p-Cresols	200	138	69	7	24	27- 90
Hexachloroethane	100	51.1	51	13	28	27- 92
Nitrobenzene	100	74.5	74	6	20	47-109
Isophorone	100	73.0	73	8	24	52-100
2-Nitrophenol	200	162	81	6	19	47-107
2,4-Dimethylphenol	200	158	79	4	23	49- 96
bis(2-Chloroethoxy)meth	100	78.9	79	6	20	51- 97
2,4-Dichlorophenol	200	137	68	11	29	48-104
Benzoic acid	200	92.9	46	20	35	20- 86
1,2,4-Trichlorobenzene	100	60.4	60	10	21	36- 96
Naphthalene	100	60.8	61	8	20	43- 92
4-Chloroaniline	100	78.2	78	7	18	41-115
Hexachlorobutadiene	100	50.8	51	11	26	31- 97
4-Chloro-3-methylphenol	200	166	83	7	22	43-116
2-Methylnaphthalene	100	68.4	68	8	17	52- 94
1-Methylnaphthalene	100	71.2	71	9	18	48- 98
Hexachlorocyclopentadie	100	50.3	50	21	31	31- 84

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: GU05050GMC60

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2,4,6-Trichlorophenol	200	143	72	8	24	40-105
2,4,5-Trichlorophenol	200	162	81	8	24	49-102
2-Chloronaphthalene	100	68.0	68	14	22	48- 97
o-Nitroaniline	100	41.6	42*	13	19	62-112
m-Nitroaniline	100	68.1	68	1	16	58-111
Dimethylphthalate	100	76.6	77	11	19	69-103
2,6-Dinitrotoluene	100	86.8	87	12	17	66-127
Acenaphthylene	100	74.5	74	11	22	54-100
Acenaphthene	100	78.5	78	13	23	56-109
2,4-Dinitrophenol	200	200	100	14	35	30-133
Dibenzofuran	100	75.8	76	9	20	59- 99
2,4-Dinitrotoluene	100	96.3	96	11	19	53-118
Diethylphthalate	100	79.1	79	10	20	63-111
4-Nitrophenol	200	123	62	11	26	21- 88
Fluorene	100	74.2	74	11	21	27-135
4-Chlorophenylphenyleth	100	78.7	79	10	21	59-100
2-Methyl-4,6-dinitrophe	200	204	102	12	28	45-130
p-Nitroaniline	100	39.2	39*	7	20	50-121
Diphenylamine	100	75.1	75	0	19	62-104
1,2-Diphenylhydrazine	100	79.8	80	8	14	63-108
4-Bromophenylphenylethe	100	88.4	88	10	15	59-114
Hexachlorobenzene	100	74.5	74	8	27	61-109
Atrazine	100	73.5	74	5	30	10-150
Pentachlorophenol	200	181	90	10	26	34-117
Phenanthrene	100	79.3	79	6	21	65-105
Anthracene	100	79.8	80	5	21	64-105
Di-n-butylphthalate	100	84.5	84	10	16	61-119
Fluoranthene	100	73.2	73	8	24	55-115

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: GU05050GMC60

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzidine	100	0.0	0*	0	23	10- 60
Pyrene	100	75.9	76	5	31	50-130
Butylbenzylphthalate	100	71.2	71	8	23	58-123
Benzo(a)anthracene	100	79.8	80	6	28	68-105
3,3'-Dichlorobenzidine	100	0.0	0*	0	27	46-109
Chrysene	100	81.7	82	6	19	61-107
bis(2-Ethylhexyl)phthal	100	73.0	68	12	21	54-131
Di-n-octylphthalate	100	61.5	62	9	28	46-137
Benzo(b)fluoranthene	100	74.2	74	6	23	47-121
Benzo(k)fluoranthene	100	84.9	85	8	20	63-124
Benzo(a)pyrene	100	82.3	82	9	22	52-114
Indeno(1,2,3-cd)pyrene	100	86.5	86	6	23	43-110
Dibenzo(a,h)anthracene	100	79.7	80	5	23	41-109
Benzo(ghi)perylene	100	83.2	83	4	32	41-126
Carbazole	100	71.6	72	8	16	51-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 71 outside limits
Spike Recovery: 8 out of 142 outside limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: SBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Phenol	100	0.0	31.5	32	18- 42
bis(2-Chloroethyl) ethe	50.0	0.0	45.7	91	37- 97
2-Chlorophenol	100	0.0	73.3	73	45- 90
1,3-Dichlorobenzene	50.0	0.0	34.0	68	35- 84
1,4-Dichlorobenzene	50.0	0.0	35.4	71	38- 85
Benzyl alcohol	50.0	0.0	36.0	72	38- 87
1,2-Dichlorobenzene	50.0	0.0	34.4	69	36- 88
bis(2-Chloroisopropyl)e	50.0	0.0	42.9	86	40-106
o-Cresol	100	0.0	69.1	69	42- 79
Acetophenone	50.0	0.0	43.5	87	50- 95
N-Nitrosodipropylamine	50.0	0.0	42.4	85	48-104
m,p-Cresols	100	0.0	61.0	61	34- 75
Hexachloroethane	50.0	0.0	33.5	67	30- 86
Nitrobenzene	50.0	0.0	41.7	83	46-101
Isophorone	50.0	0.0	40.6	81	52- 94
2-Nitrophenol	100	0.0	89.7	90	54- 92
2,4-Dimethylphenol	100	0.0	96.3	96*	41- 95
bis(2-Chloroethoxy)meth	50.0	0.0	44.4	89	50- 94
2,4-Dichlorophenol	100	0.0	72.8	73	50- 95
Benzoic acid	100	0.0	24.0	24	10- 37
1,2,4-Trichlorobenzene	50.0	0.0	36.4	73	37- 87
Naphthalene	50.0	0.0	35.6	71	41- 87
4-Chloroaniline	50.0	0.0	40.7	81	44-110
Hexachlorobutadiene	50.0	0.0	31.0	62	26- 91
4-Chloro-3-methylphenol	100	0.0	77.2	77	53-102
2-Methylnaphthalene	50.0	0.0	38.3	77	45- 91
1-Methylnaphthalene	50.0	0.0	39.4	79	45- 92
Hexachlorocyclopentadie	50.0	0.0	31.2	62	27- 72

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: SBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2,4,6-Trichlorophenol	100	0.0	81.3	81	44-105
2,4,5-Trichlorophenol	100	0.0	88.2	88	50-102
2-Chloronaphthalene	50.0	0.0	39.9	80	50- 92
o-Nitroaniline	50.0	0.0	40.2	80	55-121
m-Nitroaniline	50.0	0.0	41.1	82	50-118
Dimethylphthalate	50.0	0.0	43.3	87	63-106
2,6-Dinitrotoluene	50.0	0.0	50.1	100	72-115
Acenaphthylene	50.0	0.0	42.9	86	52- 99
Acenaphthene	50.0	0.0	45.0	90	50-109
2,4-Dinitrophenol	100	0.0	103	103	28-126
Dibenzofuran	50.0	0.0	42.8	86	55- 98
2,4-Dinitrotoluene	50.0	0.0	52.4	105	51-116
Diethylphthalate	50.0	0.0	44.4	89	62-109
4-Nitrophenol	100	0.0	34.5	34	13- 53
Fluorene	50.0	0.0	41.8	84	54-108
4-Chlorophenylphenyleth	50.0	0.0	43.6	87	57- 98
2-Methyl-4,6-dinitrophe	100	0.0	114	114	48-124
p-Nitroaniline	50.0	0.0	41.5	83	40-127
Diphenylamine	50.0	0.0	43.3	87	57-110
1,2-Diphenylhydrazine	50.0	0.0	45.3	91	65-113
4-Bromophenylphenylethe	50.0	0.0	48.4	97	51-115
Hexachlorobenzene	50.0	0.0	41.2	82	58-108
Atrazine	50.0	0.0	39.7	79	10-150
Pentachlorophenol	100	0.0	95.4	95	41-111
Phenanthrene	50.0	0.0	43.0	86	58-105
Anthracene	50.0	0.0	43.4	87	62-106
Di-n-butylphthalate	50.0	0.0	46.1	92	59-120
Fluoranthene	50.0	0.0	39.5	79	55-114

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix Spike - EPA Sample No.: SBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Benzidine	50.0	0.0	28.0	56	10- 76
Pyrene	50.0	0.0	43.9	88	56-122
Butylbenzylphthalate	50.0	0.0	38.9	78	55-126
Benzo(a)anthracene	50.0	0.0	42.6	85	61-110
3,3'-Dichlorobenzidine	50.0	0.0	47.0	94	41-121
Chrysene	50.0	0.0	45.5	91	62-106
bis(2-Ethylhexyl)phthal	50.0	0.0	35.7	71	53-130
Di-n-octylphthalate	50.0	0.0	33.2	66	52-133
Benzo(b)fluoranthene	50.0	0.0	42.0	84	59-116
Benzo(k)fluoranthene	50.0	0.0	47.9	96	66-116
Benzo(a)pyrene	50.0	0.0	45.2	90	55-119
Indeno(1,2,3-cd)pyrene	50.0	0.0	44.8	90	45-122
Dibenzo(a,h)anthracene	50.0	0.0	41.3	83	47-120
Benzo(ghi)perylene	50.0	0.0	44.7	89	50-124
Carbazole	50.0	0.0	39.5	79	54-106

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 71 outside limits

COMMENTS: _____

4B

SVOA METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID: S4G0507-3 Lab Sample ID: 1200871172

Instrument ID: MSD4 Date Extracted: 06/20/05

Matrix: (soil/water) GROUND WATER Date Analyzed: 07/05/05

Level:(low/med) LOW Time Analyzed: 2137

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK01LCS	1200871173	S4G0508-3	07/05/05
02	GU05050GMC601	138851003	S4G0517	07/06/05
03	GU05050GMC601MS	1200871174	S4G0518	07/06/05
04	GU05050GMC601MSD	1200871175	S4G0519	07/06/05
05	GU05050GMC690	138851004	S4G0520	07/06/05
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5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID: S4F2901 DFTPP Injection Date: 06/29/05

Instrument ID: MSD4 DFTPP Injection Time: 1144

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.5
68	Less than 2.0% of mass 69	0.5 (1.5)1
69	Mass 69 relative abundance	35.2
70	Less than 2.0% of mass 69	0.3 (0.8)1
127	40.0 - 60.0% of mass 198	44.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	24.3
365	Greater than 1.0% of mass 198	2.68
441	Present, but less than mass 443	9.0
442	Greater than 40.0% of mass 198	61.1
443	17.0 - 23.0% of mass 442	11.8 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNAICAL001	UBN050610-01	S4F2903	06/29/05	1223
02	BNAICAL010	UBN050610-02	S4F2904	06/29/05	1245
03	BNAICAL020	UBN050610-03	S4F2905	06/29/05	1307
04	BNAICAL040	UBN050610-04	S4F2906	06/29/05	1329
05	BNAICAL080	UBN050610-06	S4F2908	06/29/05	1413
06	BNAICAL100	UBN050610-07	S4F2909	06/29/05	1436
07	BNAICAL120	UBN050610-08	S4F2910	06/29/05	1458
08	BNAICV	UBN050603-04	S4F2912	06/29/05	1541
09	ANBZICAL001	UBN050607-01	S4F2914	06/29/05	1623
10	ANBZICAL010	UBN050607-02	S4F2915	06/29/05	1646
11	ANBZICAL020	UBN050607-03	S4F2916	06/29/05	1708
12	ANBZICAL040	UBN050607-04	S4F2917	06/29/05	1729
13	ANBZICAL050	UBN050607-05	S4F2918	06/29/05	1751
14	ANBZICAL080	UBN050607-06	S4F2919	06/29/05	1813
15	ANBZICAL100	UBN050607-07	S4F2920	06/29/05	1835
16	ANBZICAL120	UBN050607-08	S4F2921	06/29/05	1857
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5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID: S4F2933 DFTPP Injection Date: 06/29/05

Instrument ID: MSD4 DFTPP Injection Time: 2308

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.6
68	Less than 2.0% of mass 69	0.6 (1.9)1
69	Mass 69 relative abundance	34.5
70	Less than 2.0% of mass 69	0.2 (0.7)1
127	40.0 - 60.0% of mass 198	43.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	23.5
365	Greater than 1.0% of mass 198	3.17
441	Present, but less than mass 443	9.9
442	Greater than 40.0% of mass 198	65.8
443	17.0 - 23.0% of mass 442	12.5 (19.1)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	168 ICAL010	UBN050520-05	S4F2935	06/29/05	2344
02	168 ICAL020	UBN050520-06	S4F2936	06/30/05	0005
03	168 ICAL040	UBN050520-07	S4F2937	06/30/05	0026
04	168 ICAL050	UBN050520-08	S4F2938	06/30/05	0046
05	168 ICAL080	UBN050520-09	S4F2939	06/30/05	0107
06	168 ICAL100	UBN050520-10	S4F2940	06/30/05	0128
07	168 ICAL120	UBN050520-11	S4F2941	06/30/05	0148
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5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID: S4G0501 DFTPP Injection Date: 07/05/05

Instrument ID: MSD4 DFTPP Injection Time: 1935

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	34.5
68	Less than 2.0% of mass 69	0.1 (0.4)1
69	Mass 69 relative abundance	33.3
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	43.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	23.4
365	Greater than 1.0% of mass 198	2.73
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	63.7
443	17.0 - 23.0% of mass 442	12.3 (19.3)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACVS	UBN050610-04.3	S4G0502	07/05/05	1951
02	ANBZCVS	UBN050623-02.1	S4G0503	07/05/05	2011
03	168CVS	UBN050610-01	S4G0505	07/05/05	2054
04	SBLK01	1200871172	S4G0507-3	07/05/05	2137
05	SBLK01LCS	1200871173	S4G0508-3	07/05/05	2158
06	GU05050GMC601	138851003	S4G0517	07/06/05	0105
07	GU05050GMC601MS	1200871174	S4G0518	07/06/05	0126
08	GU05050GMC601MSD	1200871175	S4G0519	07/06/05	0147
09	GU05050GMC690	138851004	S4G0520	07/06/05	0208
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8B
SVOA INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID (Standard): S4G0502 Date Analyzed: 07/05/05

Instrument ID: MSD4 Time Analyzed: 1951

		IS1(DCB)		IS2(NPT)		IS3(ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	302182	4.04	1260606	4.92	696761	6.17
	UPPER LIMIT	604364	4.54	2521212	5.42	1393522	6.67
	LOWER LIMIT	151091	3.54	630303	4.42	348380	5.67
	EPA SAMPLE NO.						
01	SBLK01	311236	4.04	1208332	4.92	703460	6.16
02	SBLK01LCS	311307	4.05	1308196	4.92	707182	6.17
03	GU05050GMC601	331415	4.05	1257530	4.92	751032	6.17
04	GU05050GMC601MS	336613	4.05	1402558	4.92	762832	6.17
05	GU05050GMC601MSD	300671	4.04	1233697	4.92	692967	6.17
06	GU05050GMC690	334843	4.04	1292241	4.91	763623	6.16
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SVOA INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Lab File ID (Standard): S4G0502 Date Analyzed: 07/05/05

Instrument ID: MSD4 Time Analyzed: 1951

		IS4(PHN)		IS5(CRY)		IS6(PRY)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1107220	7.18	773040	8.96	489726	10.59
	UPPER LIMIT	2214440	7.68	1546080	9.46	979452	11.09
	LOWER LIMIT	553610	6.68	386520	8.46	244863	10.09
	EPA SAMPLE NO.						
01	SBLK01	1095452	7.18	841207	8.96	664630	10.59
02	SBLK01LCS	1116233	7.18	744834	8.96	517016	10.59
03	GU05050GMC601	1186339	7.17	996509	8.96	826157	10.60
04	GU05050GMC601MS	1229010	7.18	907100	8.96	724492	10.60
05	GU05050GMC601MSD	1099788	7.18	801852	8.96	627046	10.60
06	GU05050GMC690	1159269	7.18	723808	8.96	486629	10.59
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

1B
SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.3	U
111-44-4	bis(2-Chloroethyl) ether	10.3	U
95-57-8	2-Chlorophenol	10.3	U
541-73-1	1,3-Dichlorobenzene	10.3	U
106-46-7	1,4-Dichlorobenzene	10.3	U
100-51-6	Benzyl alcohol	10.3	U
95-50-1	1,2-Dichlorobenzene	10.3	U
108-60-1	bis(2-Chloroisopropyl)ether	10.3	U
95-48-7	o-Cresol	10.3	U
98-86-2	Acetophenone	10.3	U
621-64-7	N-Nitrosodipropylamine	10.3	U
106-44-5	m,p-Cresols	10.3	U
67-72-1	Hexachloroethane	10.3	U
98-95-3	Nitrobenzene	10.3	U
78-59-1	Isophorone	10.3	U
88-75-5	2-Nitrophenol	10.3	U
105-67-9	2,4-Dimethylphenol	10.3	U
111-91-1	bis(2-Chloroethoxy)methane	10.3	U
120-83-2	2,4-Dichlorophenol	10.3	U
65-85-0	Benzoic acid	20.6	U
120-82-1	1,2,4-Trichlorobenzene	10.3	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.3	U
87-68-3	Hexachlorobutadiene	10.3	U
59-50-7	4-Chloro-3-methylphenol	10.3	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.3	U
88-06-2	2,4,6-Trichlorophenol	10.3	U
95-95-4	2,4,5-Trichlorophenol	10.3	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.3	U
99-09-2	m-Nitroaniline	10.3	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.3	U
606-20-2	2,6-Dinitrotoluene	10.3	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.6	U
132-64-9	Dibenzofuran	10.3	U
121-14-2	2,4-Dinitrotoluene	10.3	U
84-66-2	Diethylphthalate	10.3	U
100-02-7	4-Nitrophenol	10.3	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.3	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.3	U
100-01-6	p-Nitroaniline	10.3	U
122-39-4	Diphenylamine	10.3	U
122-66-7	1,2-Diphenylhydrazine	10.3	U
101-55-3	4-Bromophenylphenylether	10.3	U
118-74-1	Hexachlorobenzene	10.3	U
1912-24-9	Atrazine	10.3	U
87-86-5	Pentachlorophenol	10.3	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.3	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	51.5	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.3	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.3	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	4.6	J
117-84-0	Di-n-octylphthalate	10.3	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.3	U
86-74-8	Carbazole	10.3	U

1F

EPA SAMPLE NO.

GU05050GMC601

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WATER Lab Sample ID: 138851003

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: S4G0517

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-82-7	CYCLOHEXANE	2.10	28.7	NJB
2.	123-91-1	1,4-DIOXANE	2.33	5.1	NJ
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General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0517.d
Lab Smp Id: 138851003 Client Smp ID: GU05050GMC601
Inj Date : 06-JUL-2005 01:05
Operator : EED Inst ID: MSD4.i
Smp Info : |138851003|435528|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 12:17 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	970.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	4.047	4.044	(1.000)	331415	40.0000	
* 29 Naphthalene-d8	136	4.916	4.919	(1.000)	1257530	40.0000	
* 46 Acenaphthene-d10	164	6.168	6.170	(1.000)	751032	40.0000	
* 67 Phenanthrene-d10	188	7.172	7.175	(1.000)	1186339	40.0000	
* 91 Chrysene-d12	240	8.958	8.961	(1.000)	996509	40.0000	
* 98 Perylene-d12	264	10.598	10.595	(1.000)	826157	40.0000	
$ 3 2-Fluorophenol	112	3.212	3.215	(0.794)	368966	39.7635	41.0
$ 5 Phenol-d5	99	3.741	3.744	(0.924)	317893	29.7145	30.6
$ 20 Nitrobenzene-d5	82	4.405	4.408	(0.896)	332811	35.4638	36.6
$ 39 2-Fluorobiphenyl	172	5.656	5.659	(0.917)	742233	37.9764	39.2
$ 60 2,4,6-Tribromophenol	329	6.708	6.705	(1.088)	205297	82.0729	84.6
$ 81 p-Terphenyl-d14	244	8.136	8.139	(0.908)	857814	35.7350	36.8
93 bis(2-Ethylhexyl)phthalate	149	8.823	8.826	(0.985)	83252	4.43325	4.6(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0517.d
Lab Smp Id: 138851003 Client Smp ID: GU05050GMC601
Inj Date : 06-JUL-2005 01:05
Operator : EED Inst ID: MSD4.i
Smp Info : |138851003|435528|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 12:17 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	970.00000	volume of sample ext
Vi	0.50000	volume injected

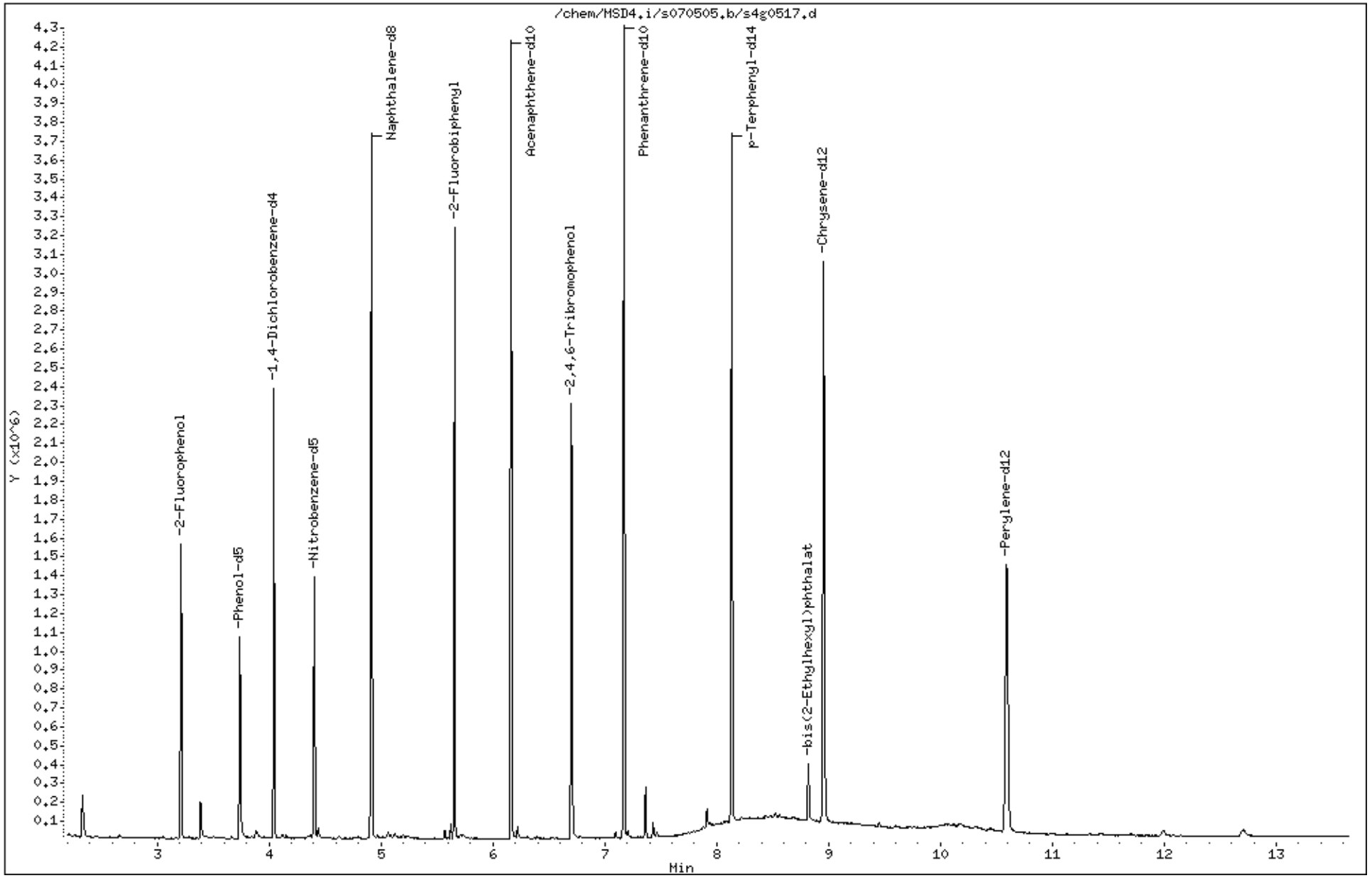
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.047	2002489	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclohexane				CAS #: 110-82-7			
2.102	1394111	27.8475579	28.7	94	Nist98.l	111957	10
1,4-Dioxane				CAS #: 123-91-1			
2.331	247388	4.94160537	5.1	91	Nist98.l	107978	10

Data File: /chem/MSD4.i/s070505.b/s4g0517.d
Date : 06-JUL-2005 01:05
Client ID: GU05050GMC601
Sample Info: |13885100314355281|SVMF|1|ESHL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD4.i
Operator: EED
Column diameter: 0.20



Data File: /chem/MSD4.i/s070505.b/s4g0517.d

Date : 06-JUL-2005 01:05

Client ID: GU05050GMC601

Instrument: MSD4.i

Sample Info: |13885100|435528|1|SVMF|1|ESHL

Volume Injected (uL): 0.5

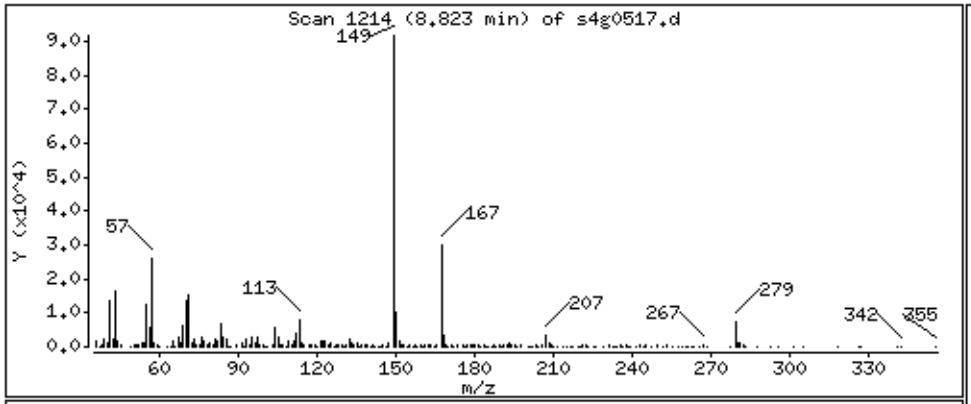
Operator: EED

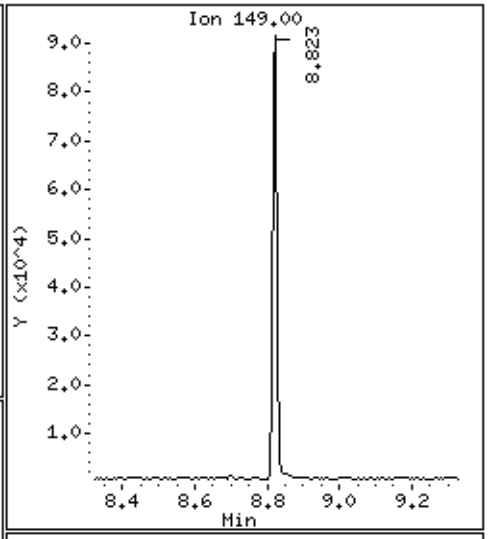
Column phase: J & W DB-5MS

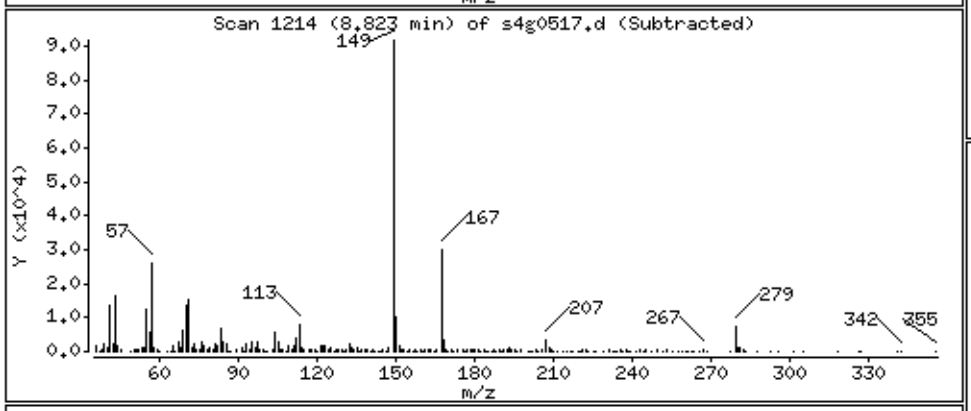
Column diameter: 0.20

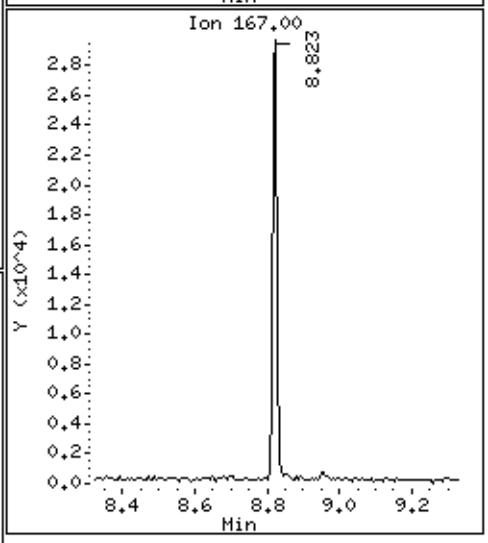
93 bis(2-Ethylhexyl)phthalate

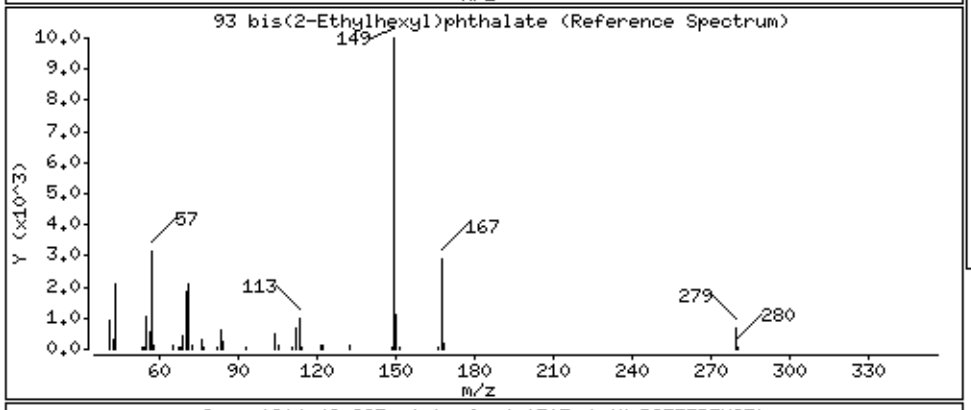
Concentration: 4.6 ug/L

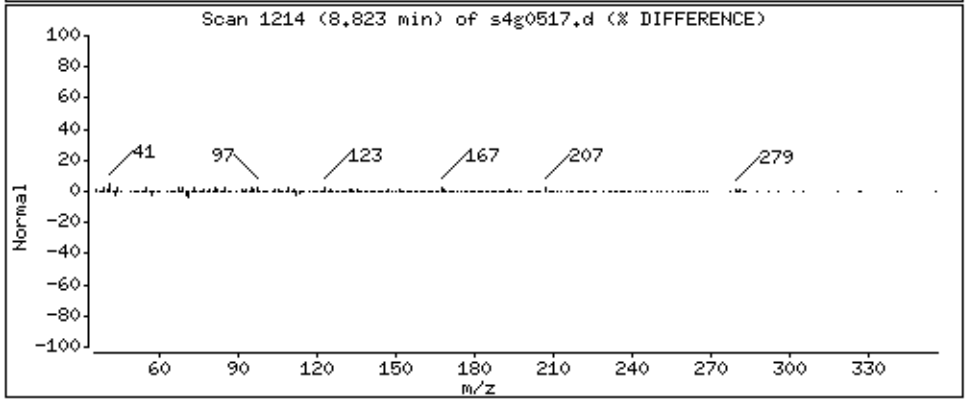












Data File: /chem/MSD4.i/s070505.b/s4g0517.d

Date : 06-JUL-2005 01:05

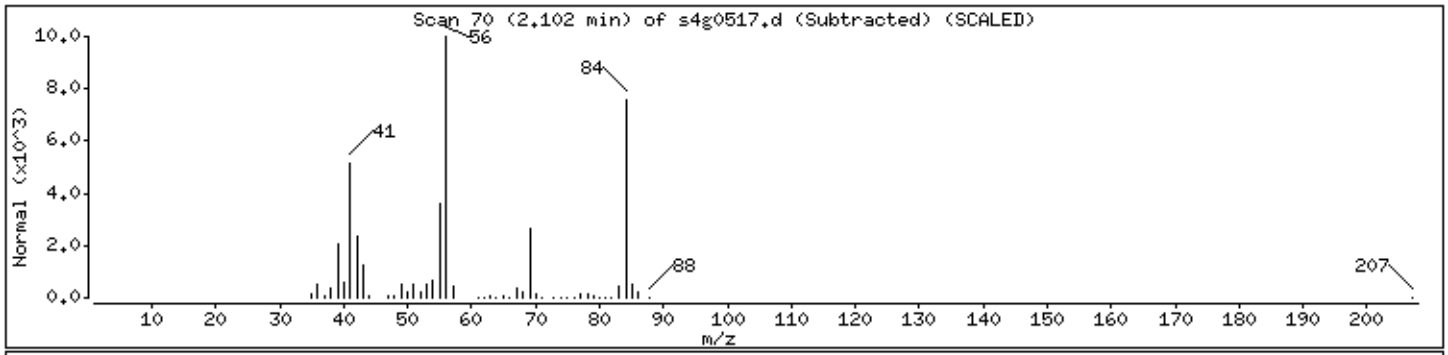
Client ID: GU05050GMC601 Instrument: MSD4.i

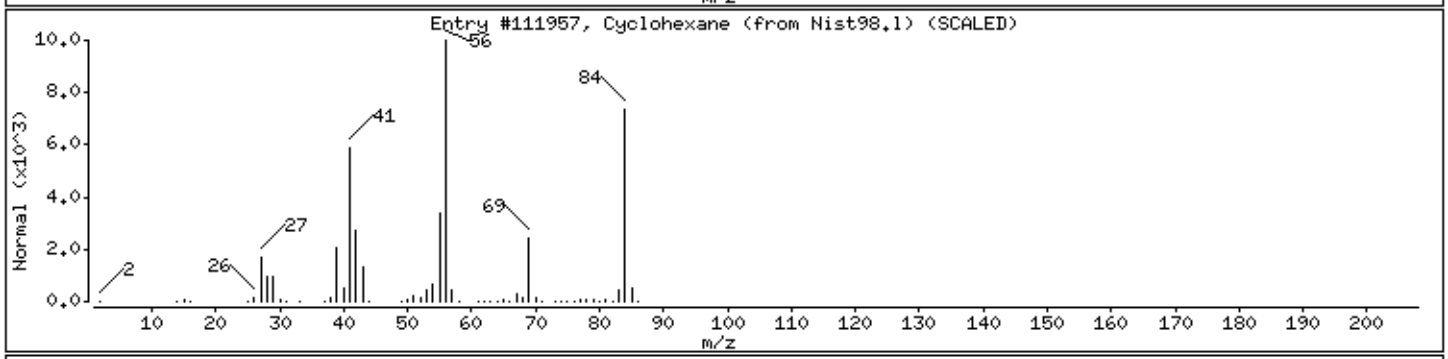
Sample Info: |13885100|435528|1|SVMF|1|ESHL

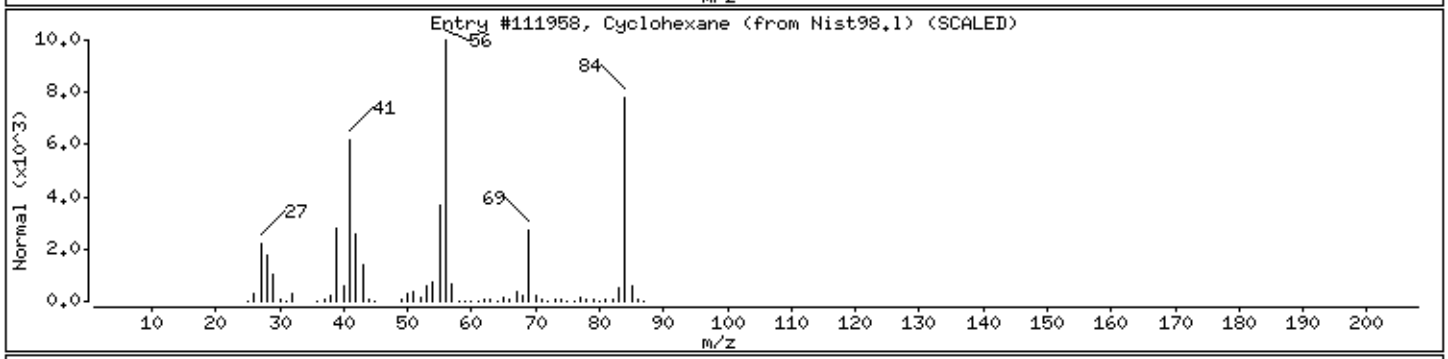
Volume Injected (uL): 0.5 Operator: EED

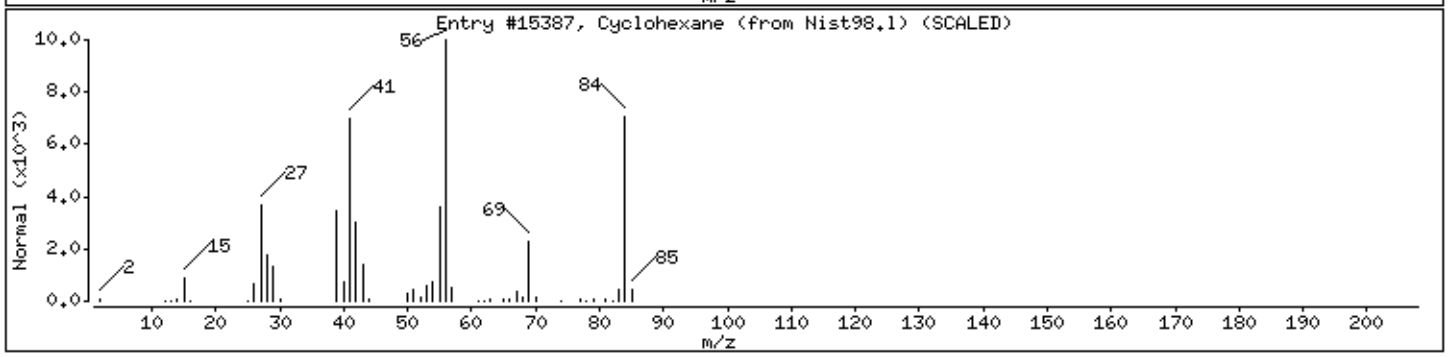
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane	110-82-7	Nist98.l	111957	94	C6H12	84
Cyclohexane	110-82-7	Nist98.l	111958	93	C6H12	84
Cyclohexane	110-82-7	Nist98.l	15387	90	C6H12	84









Data File: /chem/MSD4.i/s070505.b/s4g0517.d

Date : 06-JUL-2005 01:05

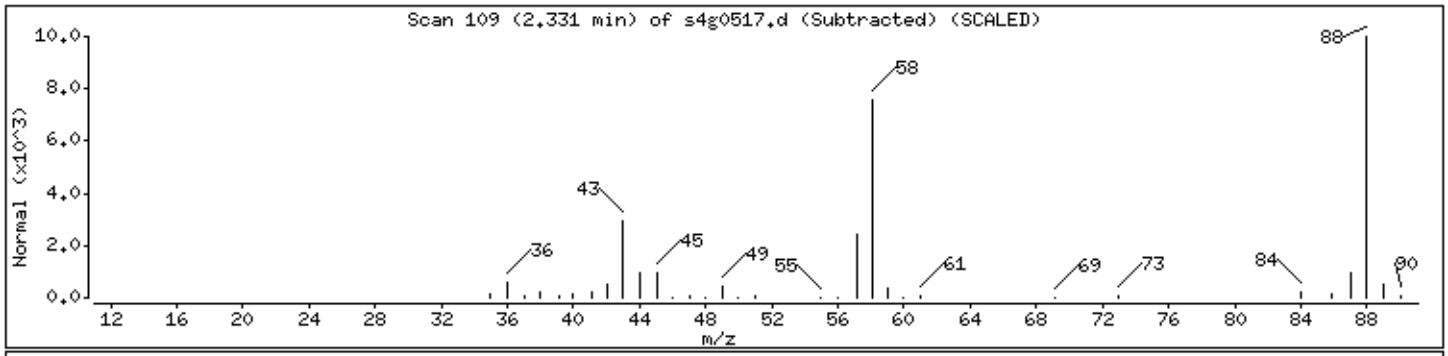
Client ID: GU05050GMC601 Instrument: MSD4.i

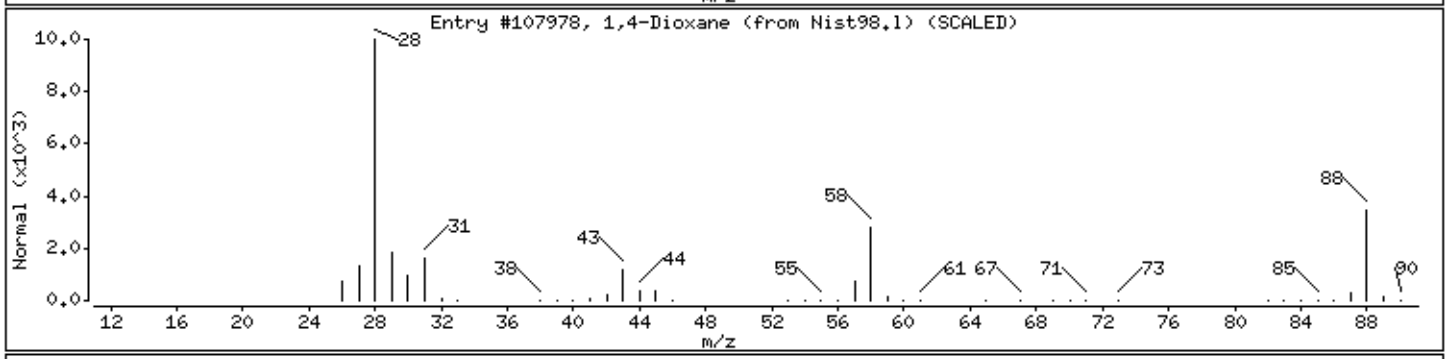
Sample Info: |1388510031435528|1|SVMF|1|ESHL

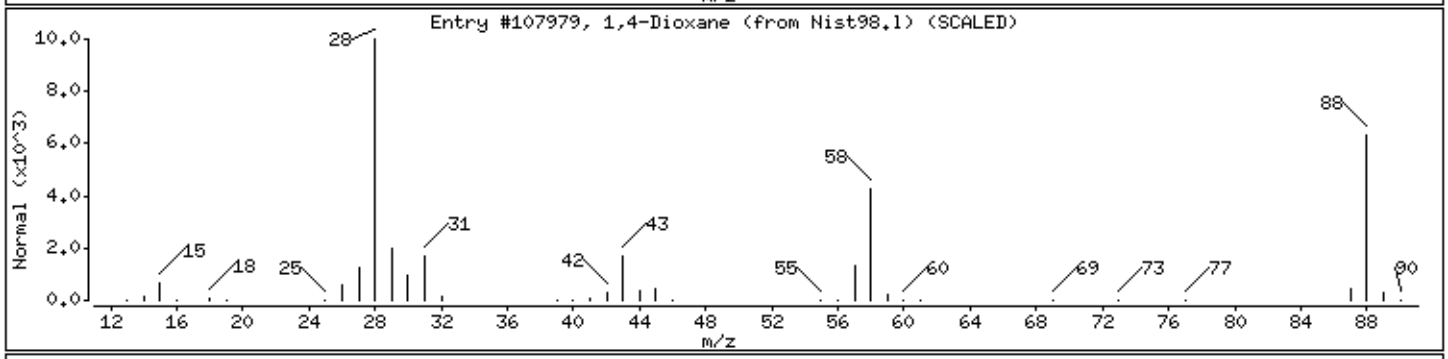
Volume Injected (uL): 0.5 Operator: EED

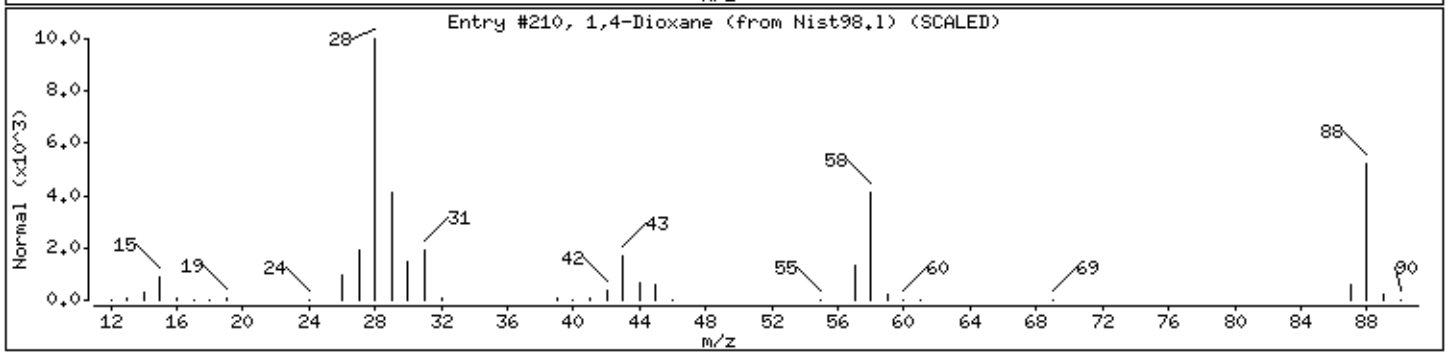
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Dioxane	123-91-1	Nist98.l	107978	91	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	107979	91	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	210	91	C4H8O2	88









1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.2	U
111-44-4	bis(2-Chloroethyl) ether	10.2	U
95-57-8	2-Chlorophenol	10.2	U
541-73-1	1,3-Dichlorobenzene	10.2	U
106-46-7	1,4-Dichlorobenzene	10.2	U
100-51-6	Benzyl alcohol	10.2	U
95-50-1	1,2-Dichlorobenzene	10.2	U
108-60-1	bis(2-Chloroisopropyl)ether	10.2	U
95-48-7	o-Cresol	10.2	U
98-86-2	Acetophenone	10.2	U
621-64-7	N-Nitrosodipropylamine	10.2	U
106-44-5	m,p-Cresols	10.2	U
67-72-1	Hexachloroethane	10.2	U
98-95-3	Nitrobenzene	10.2	U
78-59-1	Isophorone	10.2	U
88-75-5	2-Nitrophenol	10.2	U
105-67-9	2,4-Dimethylphenol	10.2	U
111-91-1	bis(2-Chloroethoxy)methane	10.2	U
120-83-2	2,4-Dichlorophenol	10.2	U
65-85-0	Benzoic acid	9.3	J
120-82-1	1,2,4-Trichlorobenzene	10.2	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.2	U
87-68-3	Hexachlorobutadiene	10.2	U
59-50-7	4-Chloro-3-methylphenol	10.2	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.2	U
88-06-2	2,4,6-Trichlorophenol	10.2	U
95-95-4	2,4,5-Trichlorophenol	10.2	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.2	U
99-09-2	m-Nitroaniline	10.2	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.2	U
606-20-2	2,6-Dinitrotoluene	10.2	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.4	U
132-64-9	Dibenzofuran	10.2	U
121-14-2	2,4-Dinitrotoluene	10.2	U
84-66-2	Diethylphthalate	10.2	U
100-02-7	4-Nitrophenol	10.2	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.2	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.2	U
100-01-6	p-Nitroaniline	10.2	U
122-39-4	Diphenylamine	10.2	U
122-66-7	1,2-Diphenylhydrazine	10.2	U
101-55-3	4-Bromophenylphenylether	10.2	U
118-74-1	Hexachlorobenzene	10.2	U
1912-24-9	Atrazine	10.2	U
87-86-5	Pentachlorophenol	10.2	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.2	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	51.0	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.2	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.2	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	3.5	J
117-84-0	Di-n-octylphthalate	10.2	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

FORM I SV-2 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.2	U
86-74-8	Carbazole	10.2	U

1F

EPA SAMPLE NO.

GU05050GMC690

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WATER Lab Sample ID: 138851004

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: S4G0520

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-82-7	CYCLOHEXANE	2.10	26.4	NJB
2.	123-91-1	1,4-DIOXANE	2.33	4.4	NJ
3.	111-76-2	ETHANOL, 2-BUTOXY-	3.39	4.7	NJ
4.					
5.					
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0520.d
Lab Smp Id: 138851004 Client Smp ID: GU05050GMC690
Inj Date : 06-JUL-2005 02:08
Operator : EED Inst ID: MSD4.i
Smp Info : |138851004|435528|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 12:17 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	980.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	334843	40.0000	
* 29 Naphthalene-d8	136	4.914	4.919	(1.000)	1292241	40.0000	
* 46 Acenaphthene-d10	164	6.165	6.170	(1.000)	763623	40.0000	
* 67 Phenanthrene-d10	188	7.176	7.175	(1.000)	1159269	40.0000	
* 91 Chrysene-d12	240	8.956	8.961	(1.000)	723808	40.0000	
* 98 Perylene-d12	264	10.589	10.595	(1.000)	486629	40.0000	
$ 3 2-Fluorophenol	112	3.210	3.215	(0.794)	358034	38.1903	39.0
$ 5 Phenol-d5	99	3.744	3.744	(0.926)	306387	28.3458	28.9
$ 20 Nitrobenzene-d5	82	4.408	4.408	(0.897)	327238	33.9333	34.6
$ 39 2-Fluorobiphenyl	172	5.660	5.659	(0.918)	686651	34.5533	35.2
$ 60 2,4,6-Tribromophenol	329	6.706	6.705	(1.088)	192363	75.6342	77.2
$ 81 p-Terphenyl-d14	244	8.139	8.139	(0.909)	747158	42.8520	43.7
27 Benzoic acid	105	4.626	4.655	(0.941)	4605	9.15948	9.3(aQH)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
93 bis(2-Ethylhexyl)phthalate	149	8.821	8.826	(0.985)	47314	3.46877	3.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0520.d
Lab Smp Id: 138851004 Client Smp ID: GU05050GMC690
Inj Date : 06-JUL-2005 02:08
Operator : EED Inst ID: MSD4.i
Smp Info : |138851004|435528|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 12:17 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	980.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

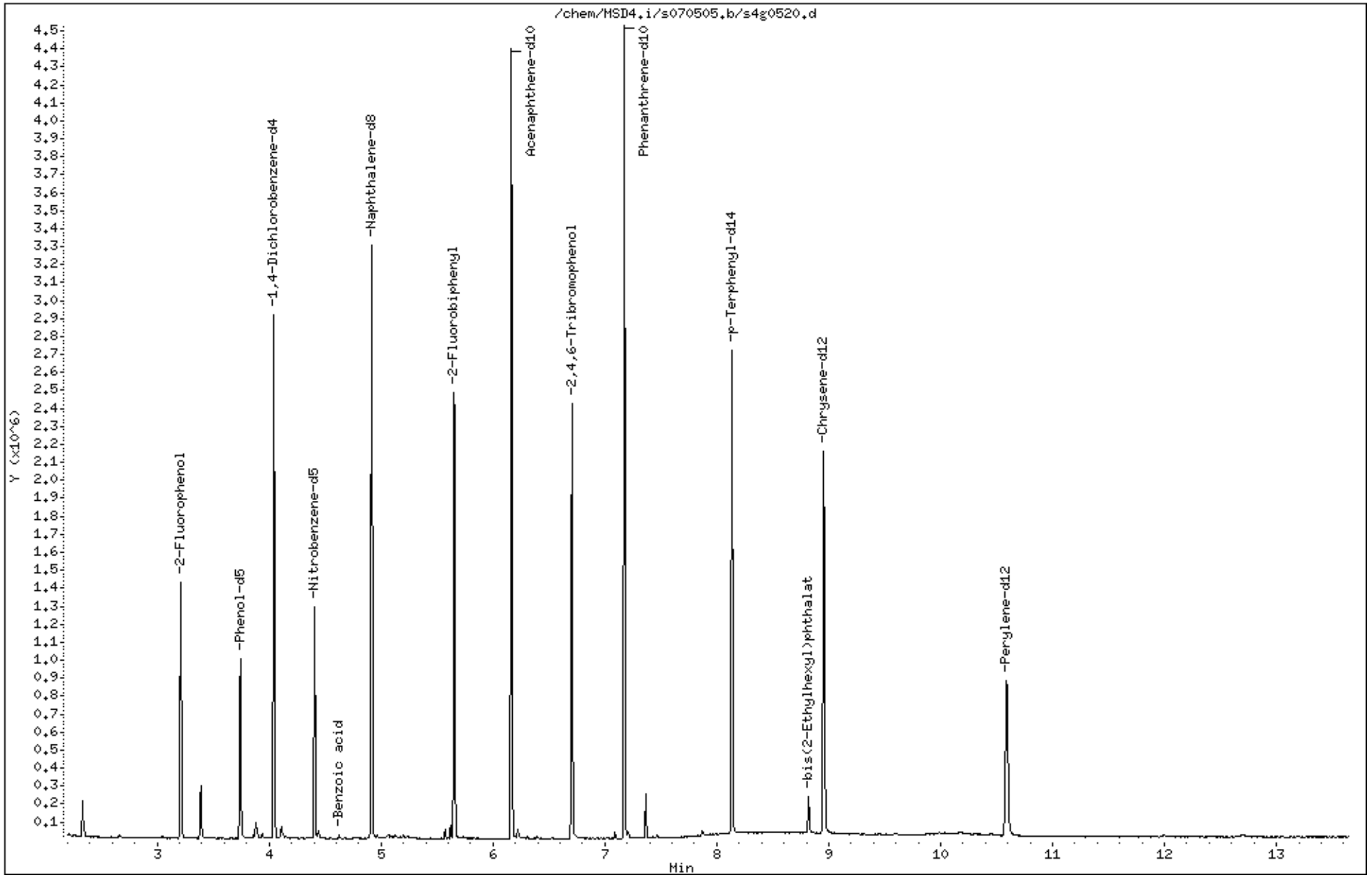
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.044	2008599	40.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclohexane				CAS #: 110-82-7			
2.099	1299322	25.8751754	26.4	95	Nist98.l	111957	10
1,4-Dioxane				CAS #: 123-91-1			
2.334	214958	4.28074615	4.4	90	Nist98.l	107978	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Ethanol, 2-butoxy-				CAS #: 111-76-2			
3.392	231082	4.60185446	4.7	91	Nist98.l	112448	10

Data File: /chem/MSD4.i/s070505.b/s4g0520.d
Date : 06-JUL-2005 02:08
Client ID: GU05050GMC690
Sample Info: |13885100|435528|1|SVMF|1|ESHL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD4.i
Operator: EED
Column diameter: 0.20



Data File: /chem/MSD4.i/s070505.b/s4g0520.d

Date : 06-JUL-2005 02:08

Client ID: GU05050GMC690

Instrument: MSD4.i

Sample Info: |138851004|435528|1|SVMF|1|ESHL

Volume Injected (uL): 0.5

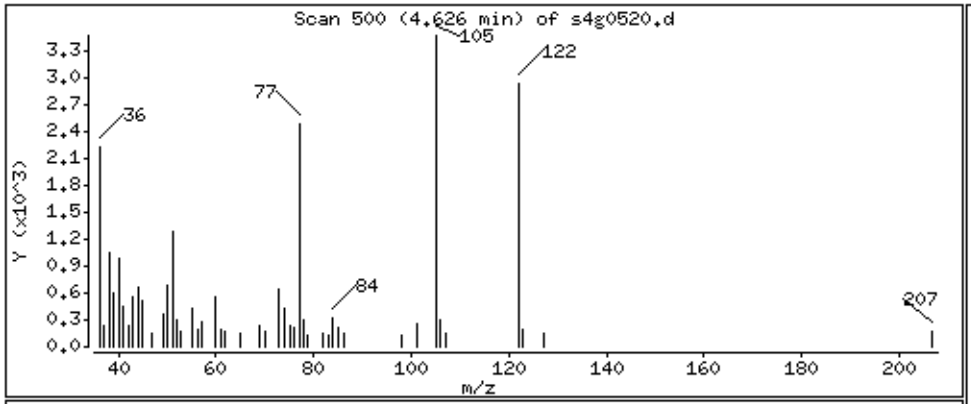
Operator: EED

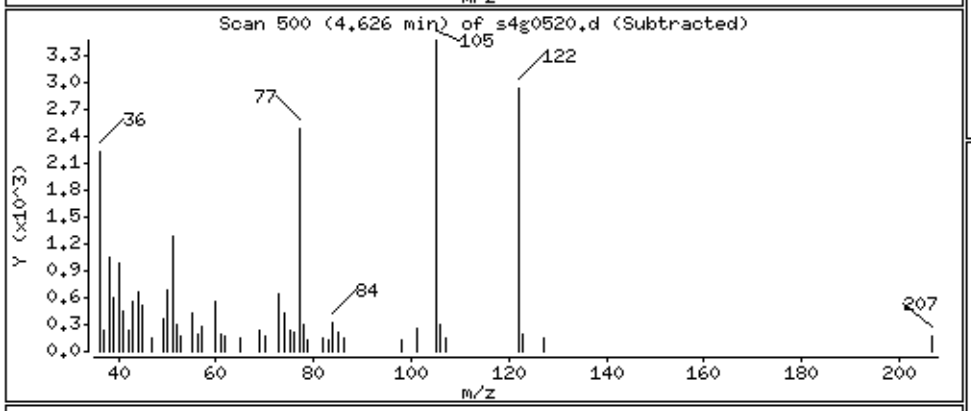
Column phase: J & W DB-5MS

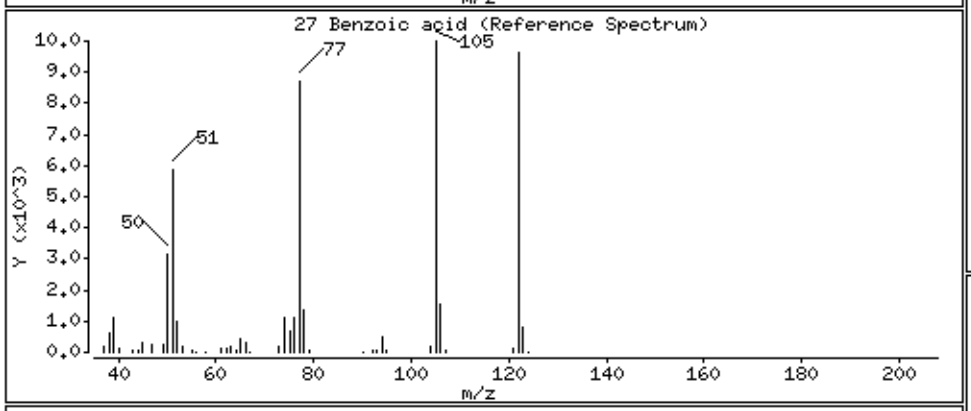
Column diameter: 0.20

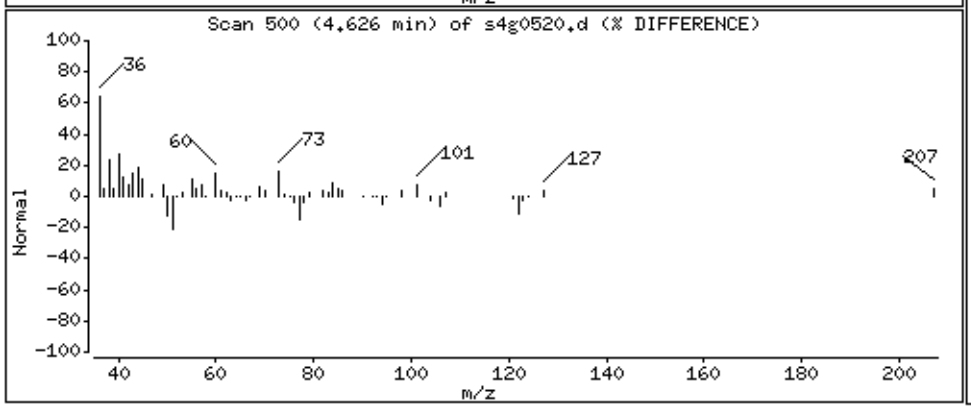
27 Benzoic acid

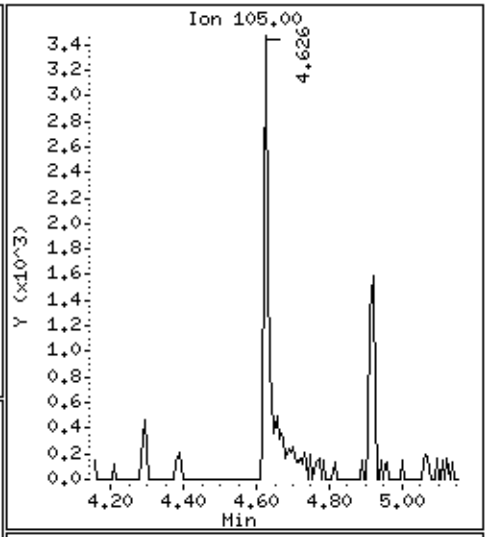
Concentration: 9.3 ug/L

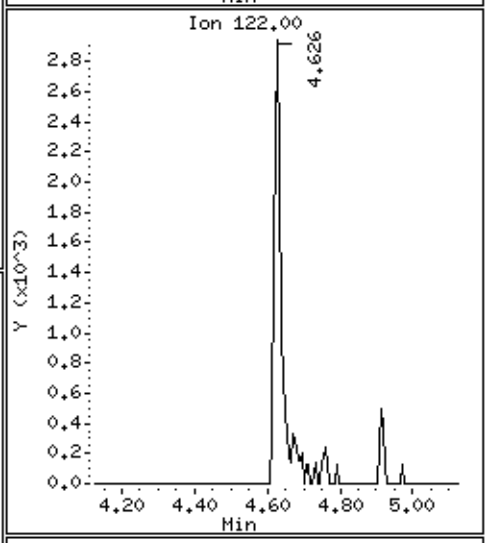


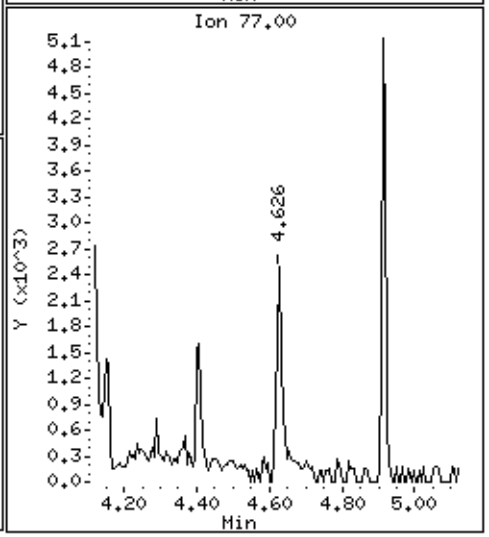












Data File: /chem/MSD4.i/s070505.b/s4g0520.d

Date : 06-JUL-2005 02:08

Client ID: GU05050GMC690

Instrument: MSD4.i

Sample Info: |13885100|435528|1|SVMF|1|ESHL

Volume Injected (uL): 0.5

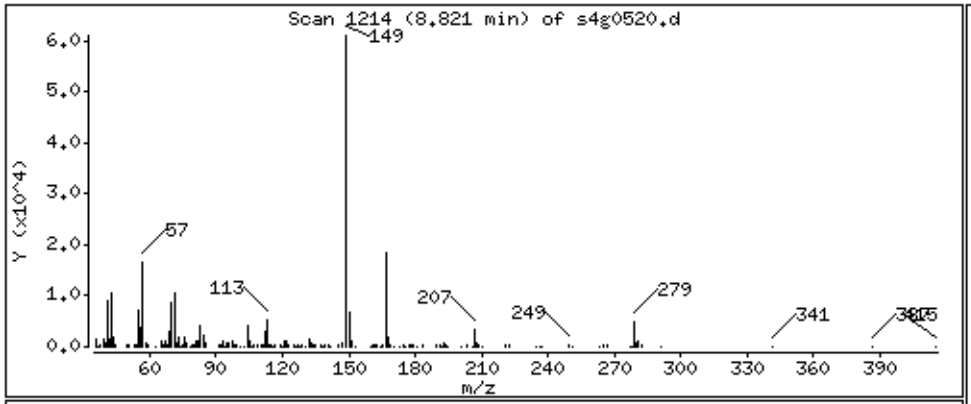
Operator: EED

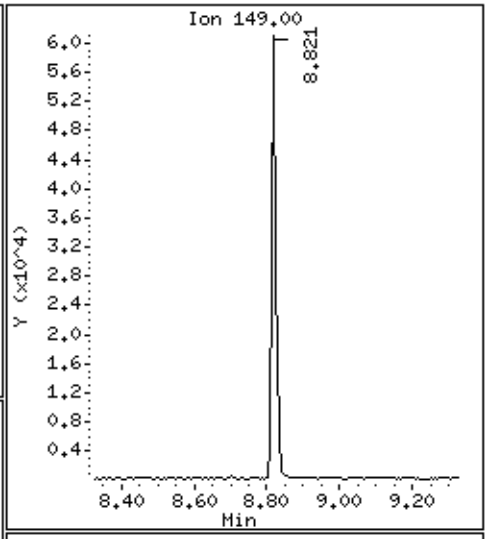
Column phase: J & W DB-5MS

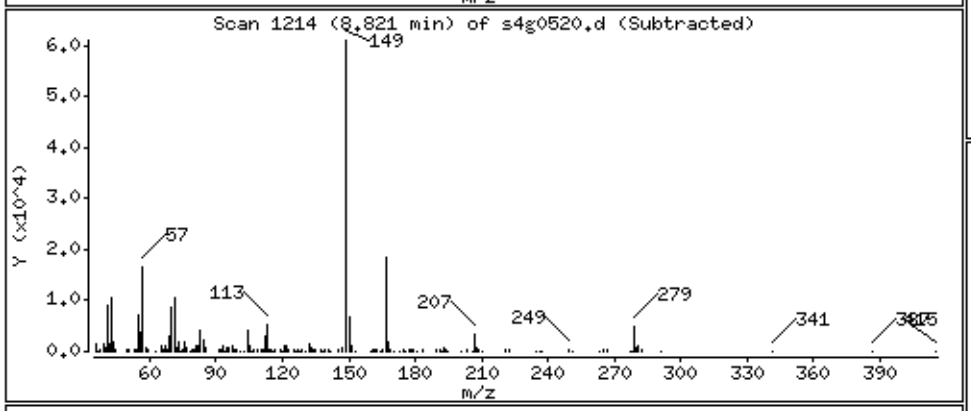
Column diameter: 0.20

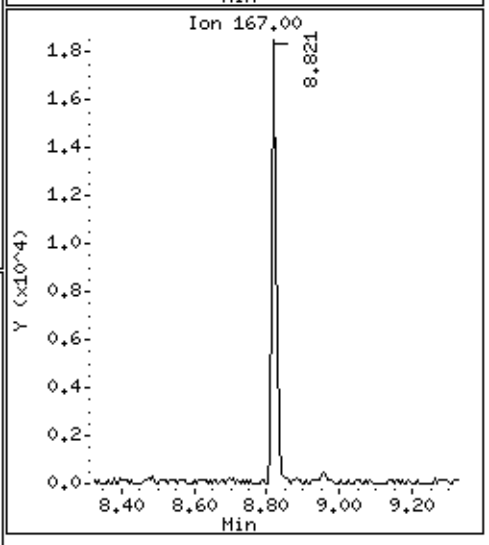
93 bis(2-Ethylhexyl)phthalate

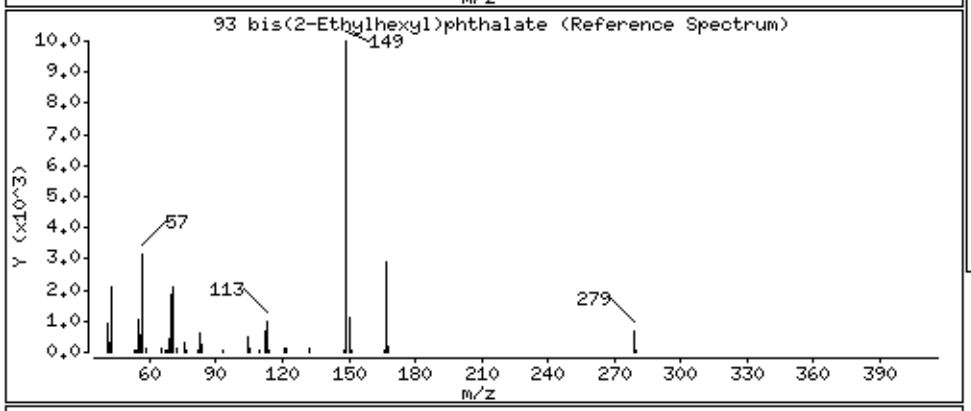
Concentration: 3.5 ug/L

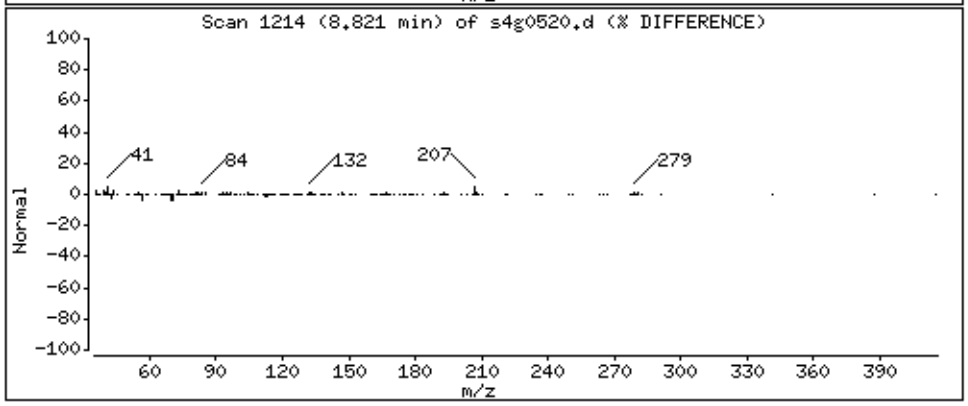












Data File: /chem/MSD4.i/s070505.b/s4g0520.d

Date : 06-JUL-2005 02:08

Client ID: GU05050GMC690

Instrument: MSD4.i

Sample Info: |13885100|435528|1|SVMF|1|ESHL

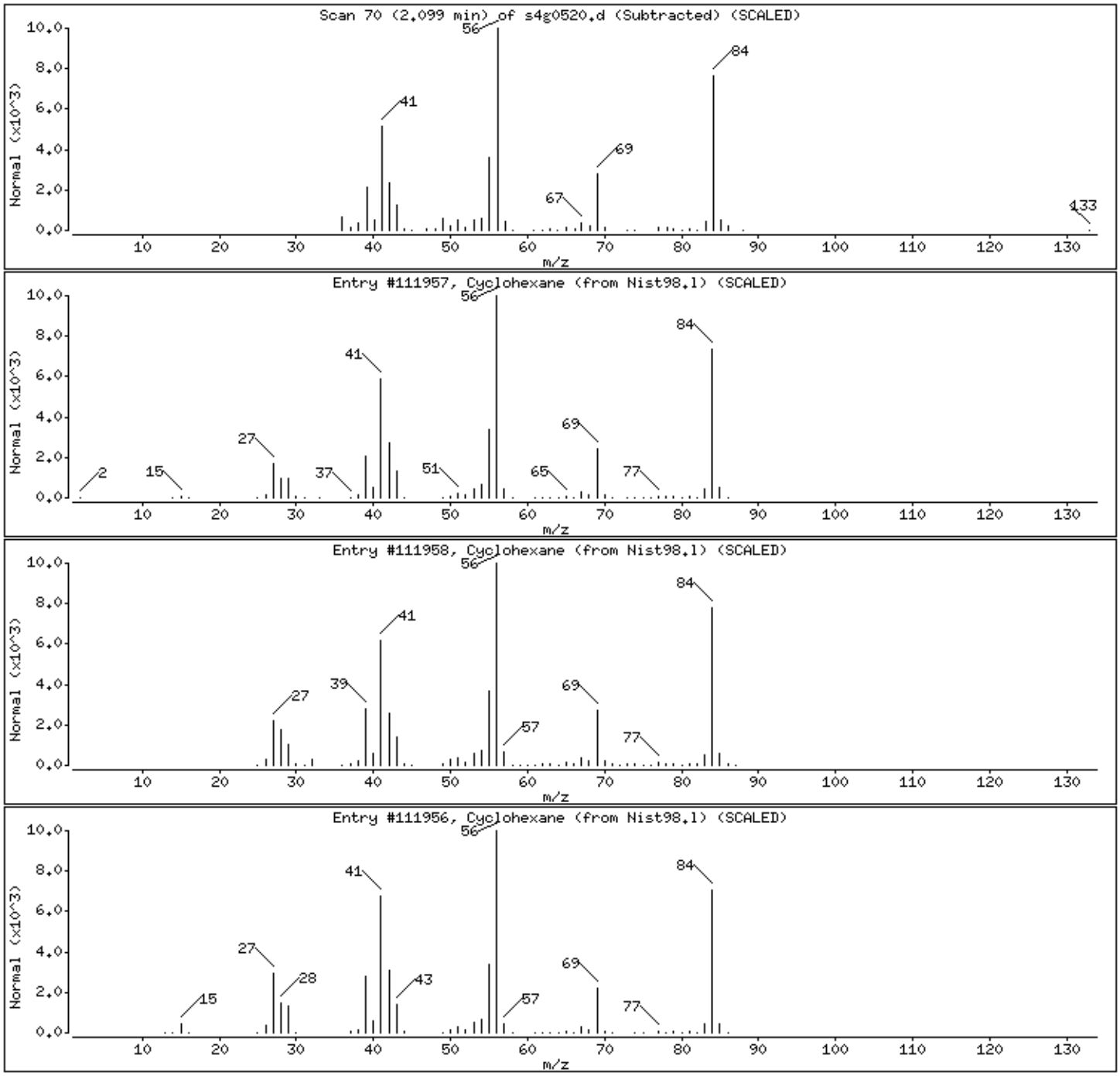
Volume Injected (uL): 0.5

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane	110-82-7	Nist98.l	111957	95	C6H12	84
Cyclohexane	110-82-7	Nist98.l	111958	94	C6H12	84
Cyclohexane	110-82-7	Nist98.l	111956	91	C6H12	84



Data File: /chem/MSD4.i/s070505.b/s4g0520.d

Date : 06-JUL-2005 02:08

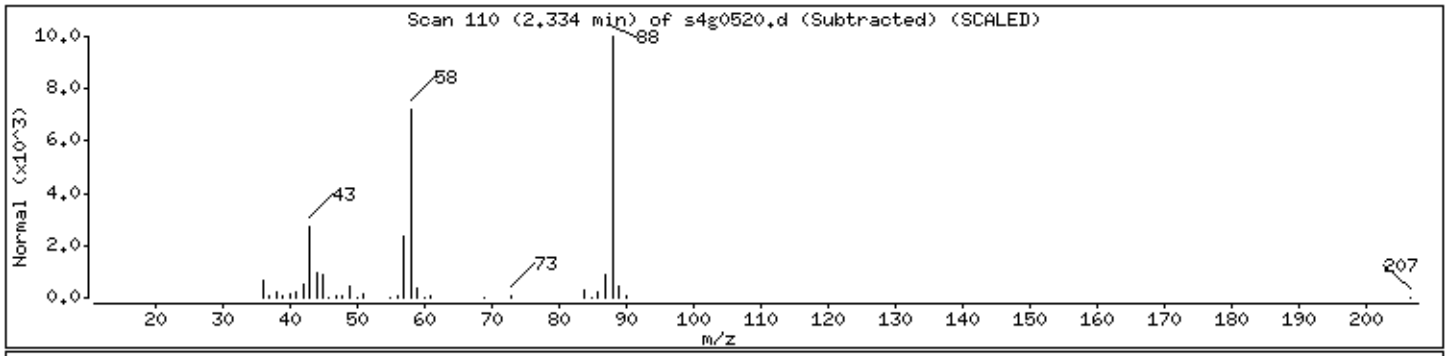
Client ID: GU05050GMC690 Instrument: MSD4.i

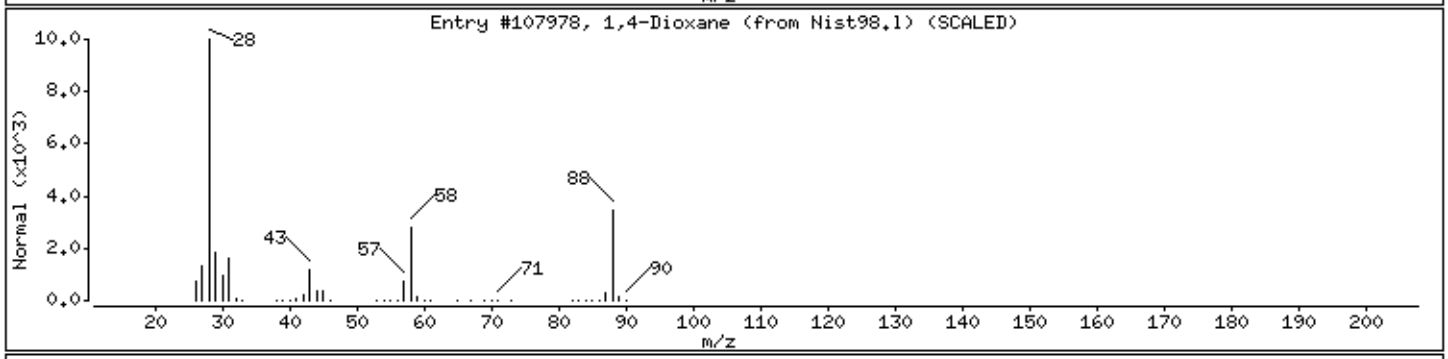
Sample Info: |138851004|435528|1|SVMF|1|ESHL

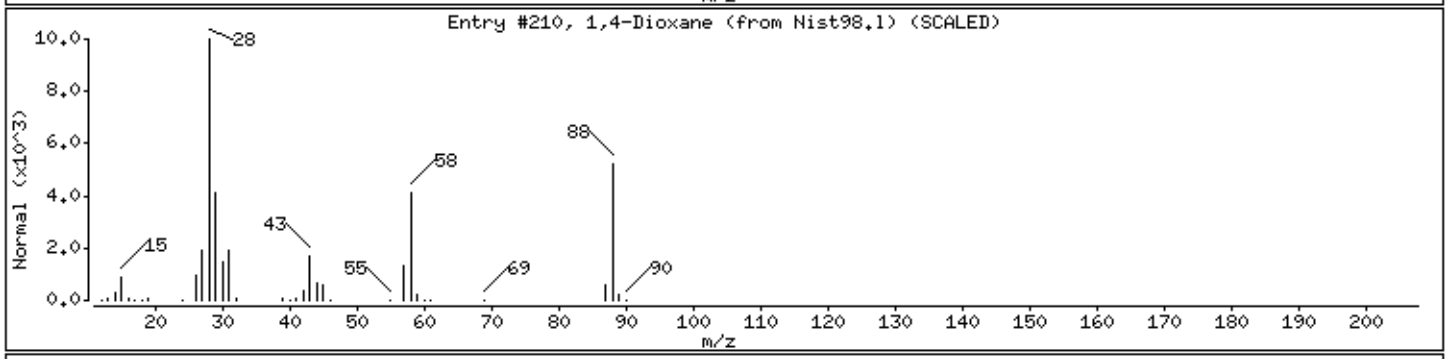
Volume Injected (uL): 0.5 Operator: EED

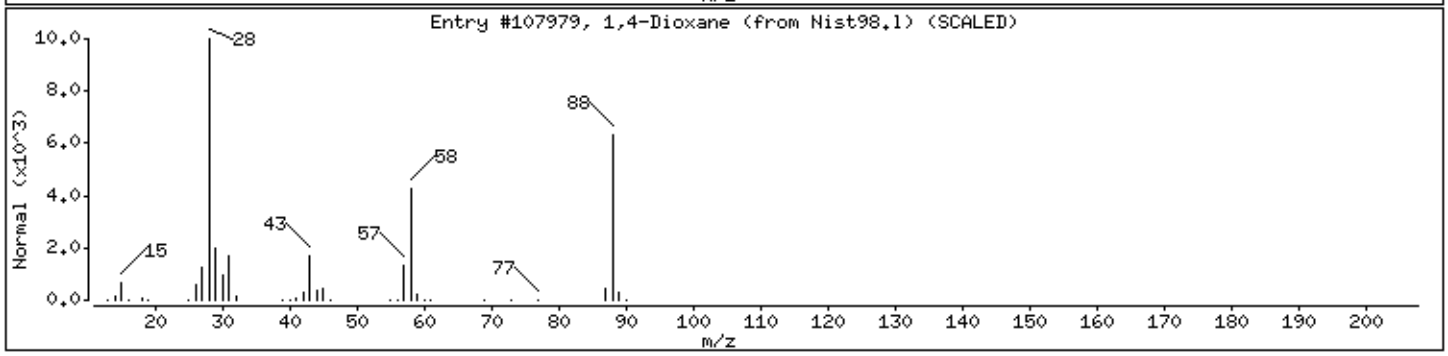
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Dioxane	123-91-1	Nist98.l	107978	90	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	210	87	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	107979	87	C4H8O2	88









Data File: /chem/MSD4.i/s070505.b/s4g0520.d

Date : 06-JUL-2005 02:08

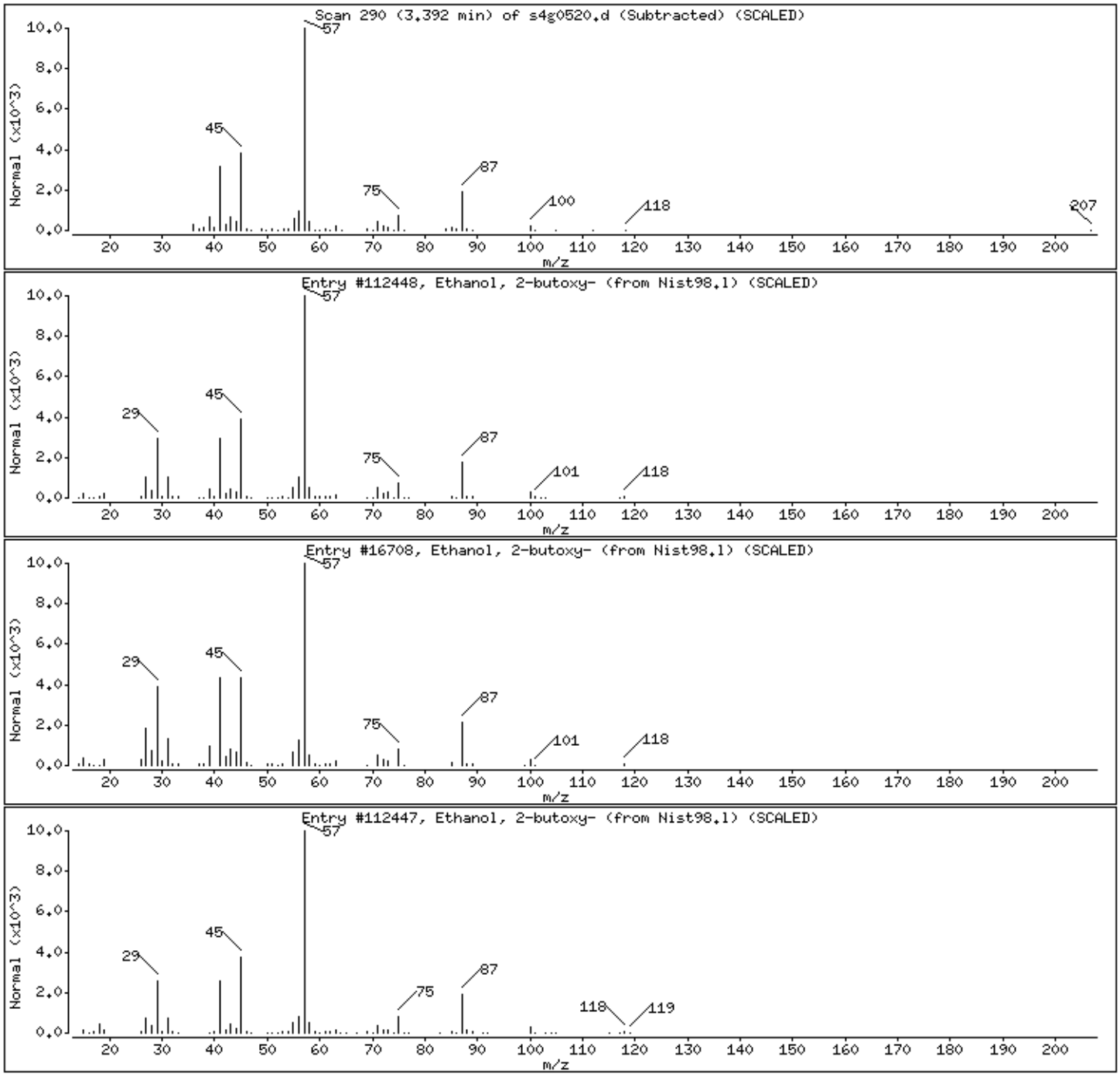
Client ID: GU05050GMC690 Instrument: MSD4.i

Sample Info: |13885100|435528|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: EED

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-butoxy-	111-76-2	Nist98.l	112448	91	C6H14O2	118
Ethanol, 2-butoxy-	111-76-2	Nist98.l	16708	90	C6H14O2	118
Ethanol, 2-butoxy-	111-76-2	Nist98.l	112447	52	C6H14O2	118



STANDARDS DATA

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine		10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

Caprolactam		10	20	40	50	80	100	120

SW846 8270C/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate		10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate		10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate		10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine	10	20	50	100	150	200	250	300
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate		10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene	10	20	50	100	150	200	250	300

Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120

Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	2000	2500		
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology

(04/04)

Report Date: 30-Jun-2005 19:41

Calibration History

Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Start Cal Date: 29-JUN-2005 12:23
End Cal Date : 30-JUN-2005 10:23

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
29-JUN-2005 16:23	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2914.d
29-JUN-2005 12:23	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2903.d
Cal Level: 2 , Cal Amount: 10.00000		
30-JUN-2005 07:32	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2957.d
30-JUN-2005 05:21	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2951.d
30-JUN-2005 02:30	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2943.d
29-JUN-2005 23:44	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2935.d
29-JUN-2005 20:23	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2925.d
29-JUN-2005 16:46	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2915.d
29-JUN-2005 12:45	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2904.d
Cal Level: 3 , Cal Amount: 20.00000		
30-JUN-2005 08:01	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2958.d
30-JUN-2005 05:43	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2952.d
30-JUN-2005 02:51	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2944.d
30-JUN-2005 00:05	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2936.d
29-JUN-2005 20:44	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2926.d
29-JUN-2005 17:08	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2916.d
29-JUN-2005 13:07	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2905.d
Cal Level: 4 , Cal Amount: 40.00000		
30-JUN-2005 08:29	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2959.d
30-JUN-2005 06:05	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2953.d
30-JUN-2005 03:12	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2945.d
30-JUN-2005 00:26	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2937.d
29-JUN-2005 21:04	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2927.d
29-JUN-2005 17:29	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2917.d
29-JUN-2005 13:29	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2906.d
Cal Level: 5 , Cal Amount: 50.00000		
30-JUN-2005 08:57	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2960.d
30-JUN-2005 06:27	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2954.d
30-JUN-2005 03:34	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2946.d
30-JUN-2005 00:46	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2938.d
29-JUN-2005 21:26	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2928.d
29-JUN-2005 17:51	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2918.d
29-JUN-2005 13:51	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2907.d

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Cal Level: 6 , Cal Amount: 80.00000		
30-JUN-2005 09:26	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2961.d
30-JUN-2005 06:49	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2955.d
30-JUN-2005 03:55	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2947.d
30-JUN-2005 01:07	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2939.d
29-JUN-2005 21:47	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2929.d
29-JUN-2005 18:13	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2919.d
29-JUN-2005 14:13	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2908.d

Cal Level: 7 , Cal Amount: 100.00000		
30-JUN-2005 09:55	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2962.d
30-JUN-2005 04:17	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2948.d
30-JUN-2005 01:28	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2940.d
29-JUN-2005 22:09	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2930.d
29-JUN-2005 18:35	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2920.d
29-JUN-2005 14:36	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2909.d

Cal Level: 8 , Cal Amount: 120.00000		
30-JUN-2005 10:23	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2963.d
30-JUN-2005 06:49	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2955.d
30-JUN-2005 04:39	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2949.d
30-JUN-2005 01:48	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2941.d
29-JUN-2005 22:30	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2931.d
29-JUN-2005 18:57	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2921.d
29-JUN-2005 14:58	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2910.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
30-JUN-2005 06:05	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2953.d

Ccal Level: 4 , Ccal Amount: 40.0		
30-JUN-2005 08:29	ECAREICAL	/chem/MSD4.i/s062905.b/s4f2959.d

Ccal Level: 4 , Ccal Amount: 40.0		
30-JUN-2005 05:43	HEXMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2952.d

Ccal Level: 4 , Ccal Amount: 40.0		
30-JUN-2005 03:12	AP9MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2945.d

Ccal Level: 4 , Ccal Amount: 40.0		
30-JUN-2005 00:26	168MIX-O2SI	/chem/MSD4.i/s062905.b/s4f2937.d

Ccal Level: 4 , Ccal Amount: 40.0		
29-JUN-2005 21:04	167xMIX-O2SI	/chem/MSD4.i/s062905.b/s4f2927.d

Ccal Level: 4 , Ccal Amount: 40.0		
29-JUN-2005 19:39	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2923.d

Ccal Level: 4 , Ccal Amount: 40.0		
29-JUN-2005 17:29	ANIL+BNZ+AT	/chem/MSD4.i/s062905.b/s4f2917.d

Ccal Level: 4 , Ccal Amount: 40.0		
29-JUN-2005 15:41	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2912.d
Ccal Level: 4 , Ccal Amount: 40.0		
29-JUN-2005 13:29	BNAICAL-NAB	/chem/MSD4.i/s062905.b/s4f2906.d

General Engineering Laboratories, LLC

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Start Cal Date : 29-JUN-2005 12:23
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Cal Date : 01-Jul-2005 08:56 hnm

Calibration File Names:
Level 1: /chem/MSD4.i/s062905.b/s4f2914.d
Level 2: /chem/MSD4.i/s062905.b/s4f2957.d
Level 3: /chem/MSD4.i/s062905.b/s4f2958.d
Level 4: /chem/MSD4.i/s062905.b/s4f2959.d
Level 5: /chem/MSD4.i/s062905.b/s4f2960.d
Level 6: /chem/MSD4.i/s062905.b/s4f2961.d
Level 7: /chem/MSD4.i/s062905.b/s4f2962.d
Level 8: /chem/MSD4.i/s062905.b/s4f2963.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.55016	0.52124	0.55136	+++++	0.58010					
	0.59590	0.58289					AVRG		0.56361		4.89959
2 Pyridine	+++++	1.11226	1.10218	1.12535	+++++	1.16086					
	1.18928	1.17083					AVRG		1.14346		3.06907
4 Aniline	+++++	2.00268	2.00549	1.98306	1.92792	1.87846					
	1.86954	1.76651					AVRG		1.91909		4.56296
209 Benzaldehyde	+++++	1.08410	1.11697	1.08637	1.08383	1.06517					
	1.05786	0.98728					AVRG		1.06880		3.79414
6 Phenol	+++++	1.38203	1.37655	1.34847	+++++	1.28745					
	1.24617	1.20386					AVRG		1.30742		5.61080

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	+++++	1.26482	1.44815	1.37896	+++++	1.28342					
	1.50010	1.07446					AVRG		1.32498		11.53796
8 2-Chlorophenol	+++++	1.13143	1.11339	1.11219	+++++	1.06435					
	1.05031	1.05485					AVRG		1.08775		3.23578
203 n-Decane	+++++	1.45768	1.41485	1.35572	+++++	1.24309					
	1.18813	1.14667					AVRG		1.30102		9.74770
9 1,3-Dichlorobenzene	+++++	1.36144	1.30056	1.29610	+++++	1.21778					
	1.18918	1.15589					AVRG		1.25349		6.24319
11 1,4-Dichlorobenzene	+++++	1.29246	1.29107	1.25150	+++++	1.16820					
	1.14444	1.12251					AVRG		1.21170		6.26090
12 Benzyl alcohol	+++++	0.70266	0.70554	0.72553	+++++	0.69547					
	0.67843	0.66901					AVRG		0.69611		2.90504
13 1,2-Dichlorobenzene	+++++	1.27934	1.22766	1.18322	+++++	1.07948					
	1.04771	1.00937					AVRG		1.13780		9.48067
14 bis(2-Chloroisopropyl)ether	+++++	1.87440	1.81210	1.79364	+++++	1.70625					
	1.69155	1.65589					AVRG		1.75564		4.78124
15 o-Cresol	+++++	0.93551	0.88406	0.87468	+++++	0.82223					
	0.79814	0.78941					AVRG		0.85067		6.69324

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.48250	1.44953	1.46528	+++++	1.39633					
	1.35297	1.35352					AVRG		1.41669		4.02226
17 N-Nitrosodipropylamine	+++++	0.81186	0.81168	0.84301	+++++	0.82133					
	0.82179	0.81170					AVRG		0.82023		1.48152
18 m,p-Cresols	+++++	1.23439	1.24916	1.26466	+++++	1.21295					
	1.28847	1.18688					AVRG		1.23942		2.93661
19 Hexachloroethane	+++++	0.47267	0.46675	0.47937	+++++	0.46561					
	0.46874	0.46032					AVRG		0.46891		1.39153
21 Nitrobenzene	+++++	0.28726	0.28522	0.27962	+++++	0.25385					
	0.24700	0.23284					AVRG		0.26430		8.62348
22 Isophorone	+++++	0.57309	0.57570	0.55576	+++++	0.50341					
	0.48116	0.46407					AVRG		0.52553		9.29422
23 2-Nitrophenol	+++++	0.12515	0.12987	0.14162	+++++	0.12448					
	0.11912	0.11738					AVRG		0.12627		6.93226
24 2,4-Dimethylphenol	+++++	96358	193427	289476	+++++	544258					
	695421	799707					LINR	-0.32553	0.19322		0.99400
25 bis(2-Chloroethoxy)methane	+++++	0.36404	0.35769	0.33740	+++++	0.29774					
	0.27815	0.26545					AVRG		0.31674		13.26200

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.23930	0.23808	0.23579	+++++	0.21376					
	0.20530	0.19842					AVRG		0.22178		8.19139
27 Benzoic acid	+++++	+++++	52075	151241	+++++	354473					
	497789	600957					LINR	0.20796	0.16948		0.99937
28 1,2,4-Trichlorobenzene	+++++	0.28587	0.27471	0.26164	+++++	0.22996					
	0.21946	0.20558					AVRG		0.24620		13.16535
30 Naphthalene	0.90187	0.93192	0.87155	0.81543	+++++	0.68865					
	+++++	+++++					AVRG		0.84188		11.38786
204 alpha-Terpineol	+++++	0.27220	0.26501	0.25346	+++++	0.22360					
	0.20967	0.19922					AVRG		0.23719		12.85448
31 4-Chloroaniline	+++++	0.40525	0.40717	0.40302	0.39901	0.37340					
	0.38276	0.35965					AVRG		0.39004		4.71251
189 Caprolactam	+++++	0.08135	0.08275	0.08889	+++++	0.08375					
	0.07797	0.07745					AVRG		0.08203		5.12810
32 Hexachlorobutadiene	+++++	0.18915	0.18085	0.17337	+++++	0.15188					
	0.14558	0.13696					AVRG		0.16296		12.91642
33 4-Chloro-3-methylphenol	+++++	0.23995	0.23503	0.22912	+++++	0.20245					
	0.18486	0.17623					AVRG		0.21127		12.89122

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.57153	0.60919	0.57407	0.54932	+++++	0.46871					
	0.42552	+++++					AVRG		0.53306		13.24610
35 1-Methylnaphthalene	0.53901	0.55814	0.54034	0.50662	+++++	0.42995					
	0.39719	+++++					AVRG		0.49521		13.36778
36 Hexachlorocyclopentadiene	+++++	0.28269	0.26769	0.30139	+++++	0.29591					
	0.29212	0.30658					AVRG		0.29106		4.83126
208 1,1'-Biphenyl	+++++	1.34062	1.29387	1.23842	+++++	1.10658					
	1.07319	1.02165					AVRG		1.17906		10.99607
205 2,3-Dichloroaniline	+++++	0.56168	0.56562	0.54328	0.52369	0.51231					
	0.50674	0.48213					AVRG		0.52792		5.78903
37 2,4,6-Trichlorophenol	+++++	0.29792	0.30825	0.30055	+++++	0.29137					
	0.29311	0.28451					AVRG		0.29595		2.77081
38 2,4,5-Trichlorophenol	+++++	0.32530	0.32726	0.31388	+++++	0.32109					
	0.29118	0.28237					AVRG		0.31018		6.09552
40 2-Chloronaphthalene	0.94805	0.96171	0.93981	0.92319	+++++	0.84593					
	0.83598	0.79280					AVRG		0.89250		7.42634
42 o-Nitroaniline	+++++	0.25311	0.28365	0.29256	0.30068	0.30008					
	0.30615	0.29917					AVRG		0.29077		6.22320

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
41 m-Nitroaniline	+++++	0.22650	0.26190	0.25831	0.27306	0.26264						
	0.27362	0.26774					AVRG		0.26054		6.16911	
43 Dimethylphthalate	+++++	1.17253	1.15693	1.12720	+++++	1.04339						
	1.00021	0.97458					AVRG		1.07914		7.81067	
44 2,6-Dinitrotoluene	+++++	0.17941	0.19955	0.22407	+++++	0.22976						
	0.22807	0.23146					AVRG		0.21539		9.83997	
45 Acenaphthylene	1.35524	1.60960	1.56346	1.52958	+++++	1.36878						
	1.28786	1.24010					AVRG		1.42209		10.15569	
47 Acenaphthene	0.93826	0.98171	0.94821	0.94134	+++++	0.83078						
	0.82513	0.78722					AVRG		0.89324		8.54726	
48 2,4-Dinitrophenol	+++++	+++++	10996	36029	+++++	96419						
	127658	168932					LINR	0.38901	0.10038		0.99214	<-
49 Dibenzofuran	+++++	1.38052	1.33243	1.30466	+++++	1.16800						
	1.12122	1.07554					AVRG		1.23039		10.16783	
50 2,4-Dinitrotoluene	+++++	0.20115	0.22881	0.27600	+++++	0.29298						
	0.27642	0.29228					AVRG		0.26127		14.40377	
51 Diethylphthalate	+++++	1.12655	1.10001	1.09978	+++++	1.00979						
	0.94045	0.92917					AVRG		1.03429		8.38150	

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
52 4-Nitrophenol	+++++	0.11141	0.11272	0.14369	+++++	0.14538						
	0.12733	0.14474					AVRG		0.13088		12.26090	
53 Fluorene	1.12976	1.15818	1.12483	1.06405	+++++	0.92496						
	0.86774	0.83078					AVRG		1.01433		13.46142	
54 4-Chlorophenylphenylether	+++++	0.58170	0.56213	0.55864	+++++	0.50835						
	0.48846	0.48358					AVRG		0.53048		7.94080	
55 2-Methyl-4,6-dinitrophenol	+++++	10676	22456	67057	+++++	168082						
	206289	279741					LINR	0.25341	0.10090		0.99455	
56 p-Nitroaniline	+++++	0.18685	0.22655	0.21264	0.24215	0.21317						
	0.23004	0.23106					AVRG		0.22035		8.19290	
57 N-Nitroso-diphenylamine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
133 Diphenylamine	+++++	0.62902	0.59731	0.57355	+++++	0.52304						
	0.53841	0.49963					AVRG		0.56016		8.67806	
58 1,2-Diphenylhydrazine	+++++	0.66197	0.68333	0.66132	+++++	0.61031						
	0.63839	0.58654					AVRG		0.64031		5.65510	
59 Tributylphosphate	+++++	1.21764	1.29233	1.24585	+++++	1.13796						
	1.01063	1.00225					AVRG		1.15111		10.66887	

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Method file : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Cal Date : 01-Jul-2005 08:56 hnm

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
61 4-Bromophenylphenylether	+++++	0.19938	0.19078	0.18608	+++++	0.17101						
	0.17810	0.16511					AVRG		0.18174		7.03251	
62 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
63 Hexachlorobenzene	+++++	0.23826	0.22005	0.20827	+++++	0.19070						
	0.19231	0.18394					AVRG		0.20559		10.08778	
207 Atrazine	+++++	0.05586	0.05730	0.05799	0.05728	0.05564						
	0.05871	0.05534					AVRG		0.05687		2.25467	
64 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
65 Pentachlorophenol	+++++	0.08631	0.08952	0.10385	+++++	0.11071						
	0.10849	0.10145					AVRG		0.10006		10.00270	
206 n-Octadecane	+++++	0.53061	0.51209	0.47532	+++++	0.42741						
	0.44222	0.38966					AVRG		0.46288		11.51703	
66 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
68 Phenanthrene	1.03216	1.04564	0.97981	0.94399	+++++	0.82696						
	0.79099	0.76190					AVRG		0.91163		12.84893	

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	100 Level 7	120 Level 8										
69 Anthracene	0.93369	1.02884	0.97316	0.96548	+++++	0.83269						
	0.80107	0.76766					AVRG		0.90037		11.03263	
70 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
71 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
72 Di-n-butylphthalate	+++++	301643	549207	1088186	+++++	1868139						
	2000825	2442011					LINR	-0.23894	0.79744		0.99024	
73 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
74 Heptachlor epoxide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
75 Endrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
76 Fluoranthene	1.03538	1.12063	1.03674	1.05091	+++++	0.85176						
	+++++	+++++					AVRG		1.01909		9.80035	
77 Benzidine	0.37575	0.48835	0.53617	0.53279	0.53154	0.52770						
	0.51254	0.44420					AVRG		0.49363		11.52739	

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
78 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
79 Pyrene	1.18952	1.37891	1.51579	1.20315	+++++	1.23715						
	1.64816	1.50383					AVRG		1.38236		12.99468	
80 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
82 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
83 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
84 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
85 Butylbenzylphthalate	+++++	0.56383	0.64105	0.57540	+++++	0.58243						
	0.63582	0.64715					AVRG		0.60761		6.18669	
86 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
87 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
88 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
89 Benzo(a)anthracene	1.01715	1.03673	0.98433	1.00336	+++++	0.95458						
	0.95638	0.93664					AVRG		0.98417		3.73934	
90 3,3'-Dichlorobenzidine	0.22635	0.27386	0.29424	0.27246	0.29611	0.24648						
	0.26980	0.25156					AVRG		0.26636		8.95471	
92 Chrysene	0.98323	0.98607	0.94511	0.96074	+++++	0.88788						
	0.89717	0.87074					AVRG		0.93299		5.07516	
93 bis(2-Ethylhexyl)phthalate	0.52000	0.75057	0.79774	0.79199	+++++	0.77949						
	0.80944	0.82730					AVRG		0.75379		14.04165	
94 Di-n-octylphthalate	+++++	1.33194	1.77522	1.38780	+++++	1.59791						
	1.52444	1.74585					AVRG		1.56053		11.64868	
95 Benzo(b)fluoranthene	0.99262	1.11611	1.16094	1.08996	+++++	1.04633						
	1.10231	1.05396					AVRG		1.08032		5.05576	
96 Benzo(k)fluoranthene	0.97887	1.09259	1.18898	1.04059	+++++	1.11570						
	1.06087	1.12786					AVRG		1.08650		6.22554	
97 Benzo(a)pyrene	0.78906	0.82485	0.81432	0.87564	+++++	0.86553						
	0.87581	0.87875					AVRG		0.84628		4.29150	

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	100 Level 7	120 Level 8									
99 Indeno(1,2,3-cd)pyrene	0.58295	0.65960	0.56501	0.75824	+++++	0.70806					
	0.82845	0.77278					AVRG		0.69644		14.20462
100 Dibenzo(a,h)anthracene	8035	85752	79704	477042	+++++	583585					
	445862	545716					LINR	0.08172	0.66833		0.99142
101 Benzo(ghi)perylene	0.61619	0.66726	0.56957	0.75824	+++++	0.71329					
	0.83674	0.78119					AVRG		0.70607		13.39978
102 1,4-Dioxane	+++++	0.48470	0.49207	0.48246	0.47897	0.46620					
	0.46571	0.46878					AVRG		0.47698		2.15137
103 Methyl methacrylate	+++++	0.26118	0.27142	0.26242	0.25387	0.26400					
	0.26065	0.25604					AVRG		0.26137		2.17701
104 Ethyl methacrylate	+++++	1.13073	1.15270	1.09800	1.07533	1.08578					
	1.06740	1.03725					AVRG		1.09246		3.57215
105 2-Picoline	+++++	1.50858	1.52778	1.46936	1.40479	1.42031					
	1.38297	1.33380					AVRG		1.43537		4.86686
106 N-Nitrosomethylethylamine	+++++	0.60195	0.63212	0.60726	0.59760	0.61564					
	0.60271	0.59000					AVRG		0.60675		2.25829
107 Methyl methanesulfonate	+++++	0.67115	0.68523	0.66304	0.63013	0.65594					
	0.63196	0.59197					AVRG		0.64706		4.85498

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	100 Level 7	120 Level 8									
108 N-Nitrosodiethylamine	+++++	0.59064	0.63392	0.59433	0.58487	0.59280					
	0.58166	0.55969					AVRG		0.59113		3.75813
109 Ethyl Methanesulfonate	+++++	0.95123	0.97270	0.93784	0.90254	0.92056					
	0.90532	0.87826					AVRG		0.92406		3.48392
110 Pentachloroethane	+++++	0.53217	0.53971	0.51670	0.49801	0.50208					
	0.48477	0.46699					AVRG		0.50578		5.09673
111 N-Nitrosopyrrolidine	+++++	0.63465	0.67693	0.67041	0.65596	0.67607					
	0.67079	0.65063					AVRG		0.66221		2.37370
113 N-Nitrosomorpholine	+++++	0.76562	0.79762	0.76970	0.74999	0.76267					
	0.73516	0.71932					AVRG		0.75715		3.35109
114 o-Toluidine	+++++	2.08593	2.09657	1.98912	1.88655	1.86687					
	1.79463	1.73217					AVRG		1.92169		7.31018
115 N-Nitrosopiperidine	+++++	0.14955	0.15551	0.15483	0.15252	0.14913					
	0.14709	0.14689					AVRG		0.15079		2.34221
116 a,a-Dimethylphenethylamine	+++++	0.72907	0.87147	0.93234	0.91349	0.93562					
	0.93262	0.90152					AVRG		0.88802		8.29911
117 Triethylphosphorothioate	+++++	0.17988	0.18274	0.17585	0.17064	0.15962					
	0.16048	0.15340					AVRG		0.16894		6.66417

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	100 Level 7	120 Level 8									
118 2,6-Dichlorophenol	+++++	0.25629	0.26819	0.26271	0.25600	0.25249					
	0.24496	0.23508					AVRG		0.25367		4.34109
119 Hexachloropropene	+++++	0.20882	0.22425	0.22294	0.21828	0.21179					
	0.21141	0.19640					AVRG		0.21341		4.48222
120 p-Phenylenediamine	+++++	0.26969	0.26750	0.29005	0.28875	0.30412					
	0.28791	0.29760					AVRG		0.28652		4.71912
121 N-Nitrosodi-n-butylamine	+++++	0.23584	0.25109	0.24738	0.24107	0.24003					
	0.23451	0.22647					AVRG		0.23948		3.44018
122 Safrole	+++++	0.27575	0.28357	0.27392	0.26265	0.25569					
	0.24911	0.23918					AVRG		0.26284		6.05207
123 1,2,4,5-Tetrachlorobenzene	+++++	0.59848	0.59105	0.56024	0.54145	0.50341					
	0.47700	0.47011					AVRG		0.53453		9.78723
124 Isosafrole	+++++	0.50233	0.50997	0.49182	0.48687	0.46379					
	0.44519	0.43050					AVRG		0.47578		6.29603
125 1,4-Naphthoquinone	+++++	0.38539	0.44027	0.44323	0.44039	0.41937					
	0.41225	0.39735					AVRG		0.41975		5.44781
126 m-Dinitrobenzene	+++++	0.13998	0.16566	0.17070	0.18039	0.17969					
	0.17864	0.16972					AVRG		0.16925		8.33239

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	100 Level 7	120 Level 8									
127 Pentachlorobenzene	+++++	0.53068	0.52180	0.49727	0.47332	0.44728					
	0.43497	0.41861					AVRG		0.47485		9.15545
128 1-Naphthylamine	+++++	1.11970	1.15772	1.09034	1.07043	0.97745					
	0.93386	0.87648					AVRG		1.03228		10.09602
129 2-Naphthylamine	+++++	1.09459	1.11914	1.01866	1.02731	0.96128					
	0.92293	0.86441					AVRG		1.00119		9.12229
130 2,3,4,6-Tetrachlorophenol	+++++	0.21916	0.25707	0.26084	0.26312	0.25212					
	0.24582	0.22982					AVRG		0.24685		6.71888
131 5-Nitro-o-toluidine	+++++	0.26949	0.31824	0.31663	0.32965	0.31955					
	0.31534	0.29629					AVRG		0.30931		6.52337
132 Thionazin	+++++	0.20010	0.19923	0.20530	0.20148	0.19605					
	0.19267	0.18652					AVRG		0.19734		3.15376
134 Sulfotepp	+++++	0.12421	0.12235	0.12033	0.11652	0.10561					
	0.10924	0.10218					AVRG		0.11435		7.59450
135 Phorate	+++++	0.49437	0.49449	0.49605	0.47980	0.42930					
	0.42678	0.39125					AVRG		0.45886		9.25754
136 1,3,5-Trinitrobenzene	+++++	19987	35466	97082	129960	256883					
	328679	426881					LINR	0.24190	0.13616		0.99458

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	100 Level 7	120 Level 8									
137 Phenacetin	+++++	0.28689	0.33982	0.34438	0.35827	0.34982					
	0.34565	0.32244					AVRG		0.33532		7.15818
138 Diallate	+++++	0.31498	0.30635	0.31453	0.30520	0.28004					
	0.28249	0.26017					AVRG		0.29482		7.06967
139 Dimethoate	+++++	0.25612	0.28022	0.30273	0.29807	0.28035					
	0.28498	0.26962					AVRG		0.28172		5.66007
140 4-Aminobiphenyl	+++++	0.66623	0.67238	0.63366	0.60196	0.57130					
	0.54480	0.52665					AVRG		0.60243		9.57730
141 Pentachloronitrobenzene	+++++	0.08325	0.08691	0.08720	0.08593	0.08267					
	0.07967	0.07753					AVRG		0.08331		4.43927
142 Pronamide	+++++	0.32942	0.34318	0.32431	0.30641	0.28614					
	0.27351	0.25903					AVRG		0.30314		10.31385
143 Dinoseb	+++++	15231	64910	141595	238959	342803					
	439454	453760					LINR	0.15023	0.15747		0.99595
144 Disulfoton	+++++	0.41156	0.41710	0.42143	0.41557	0.36898					
	0.37381	0.34032					AVRG		0.39268		8.02815
145 Methyl parathion	+++++	0.15430	0.18244	0.21155	0.21034	0.20890					
	0.21397	0.21438					AVRG		0.19941		11.42828

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	100 Level 7	120 Level 8										
146 4-Nitroquinoline-1-oxide	+++++	0.02966	0.04253	0.03655	0.03513	0.02935						
	0.02603	0.02044					AVRG		0.03138		23.28404	<-
147 Methapyrilene	+++++	0.44913	0.58323	0.57187	0.55577	0.49864						
	0.47264	0.39094					AVRG		0.50317		14.13820	
148 Isodrin	+++++	0.11776	0.11987	0.12005	0.11576	0.10578						
	0.10874	0.10309					AVRG		0.11301		6.21088	
149 Aramite	+++++	0.04283	0.05391	0.05509	0.05640	0.05224						
	0.05100	0.04481					AVRG		0.05090		10.17034	
150 Kepone	+++++	0.10664	0.11569	0.12059	0.10741	0.09771						
	0.09551	0.08518					AVRG		0.10410		11.73901	
151 p-(Dimethylamino)azobenzene	+++++	0.37240	0.38202	0.38314	0.38329	0.37343						
	0.36242	0.39475					AVRG		0.37878		2.73025	
152 Chlorobenzilate	+++++	0.38250	0.38188	0.42133	0.42476	0.35506						
	0.38676	0.31219					AVRG		0.38064		10.16583	
153 3,3'-Dimethylbenzidine	+++++	0.46761	0.61054	0.57777	0.57835	0.51450						
	0.49046	0.42471					AVRG		0.52342		12.95431	
154 Famphur	+++++	0.51864	0.53044	0.56693	0.56785	0.48999						
	0.52381	0.45357					AVRG		0.52160		7.79252	

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	100 Level 7	120 Level 8										
155 2-Acetylaminofluorene	+++++	27649	145339	301665	386443	584811						
	+++++	+++++					LINR	0.11130	0.33735		0.99463	
157 7,12Dimethylbenz(a)anthracene	+++++	0.61136	0.66440	0.62044	0.69469	0.64827						
	0.68478	0.67591					AVRG		0.65712		4.85242	
158 3-Methylcholanthrene	+++++	0.40032	0.49906	0.53453	0.51629	0.52920						
	0.53089	0.52140					AVRG		0.50453		9.40692	
166 Maleic anhydride	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
167 a,a,a-Trichlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
169 2,3-Dimethylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
170 2,6-Dimethylnapthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
171 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
172 1-Methyl fluorene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 12:23
End Cal Date : 30-JUN-2005 10:23
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Cal Date : 01-Jul-2005 08:56 hnm

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
173 Carbazole	0.94523	1.00097	1.00435	0.89504	0.89943	0.79151						
	0.78533	0.74803					AVRG		0.88374		11.23853	
174 Hexachlorophene	+++++	0.03778	0.04796	0.03829	0.04939	0.05343						
	+++++	+++++					AVRG		0.04537		15.41236	<-
175 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
176 Dibenz(a,h)acridine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
177 Dibenz(a,j)acridine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
178 Dibenzo(a,i)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
180 7-H-Dibenzo(c,g)carbazole	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
181 Dibenzo(a,h)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
182 4,6-Dinitro-2-cyclohexylpheno	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 12:23
End Cal Date : 30-JUN-2005 10:23
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Cal Date : 01-Jul-2005 08:56 hnm

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
184 p-Benzoquinone	+++++	0.72104	0.78024	0.80416	0.79710	0.74406					
	0.73920	0.71496					AVRG		0.75725		4.79688
185 (2,3-Dibromopropyl)phosphate	+++++	2360	7211	7514	12744	8257					
	16654	25588					LINR	0.62321	0.01103		0.99072
186 2,6-Toluene diisocyanate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00<-
191 Parathion	+++++	0.06304	0.07476	0.08354	0.08301	0.07977					
	0.08162	0.08154					AVRG		0.07818		9.32279
192 Methoxychlor	+++++	0.64146	0.72914	0.77415	0.73235	0.68308					
	0.65111	0.60209					AVRG		0.68762		8.80847
193 Hexamethyleneimine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00<-
195 4-Chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00<-
197 Anthraquinone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00<-
199 2-Aminoanthraquinone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00<-

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 12:23
End Cal Date : 30-JUN-2005 10:23
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Cal Date : 01-Jul-2005 08:56 hnm

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
200 2-Methyl anthracene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
201 N,N-Dimethyl formamide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
202 bis(2-Chloromethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
210 m-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
211 p-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
220 2-Ethoxyethanol	+++++	0.62481	0.61365	0.60458	0.60254	0.60404						
	0.57939	0.56596					AVRG		0.59928		3.35474	
221 Dibenzo(a,e)pyrene	+++++	0.23169	0.22180	0.23480	0.20467	0.23838						
	0.19357	0.20662					AVRG		0.21879		7.91397	
222 Phthalic anhydride	+++++	0.23687	0.23358	0.23416	0.23074	0.22595						
	0.21394	0.21563					AVRG		0.22727		4.04133	
223 1,4-Dinitrobenzene	+++++	0.16452	0.16729	0.17443	0.16943	0.16639						
	0.16443	0.16562					AVRG		0.16744		2.10920	

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 12:23
End Cal Date : 30-JUN-2005 10:23
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Cal Date : 01-Jul-2005 08:56 hnm

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
224 Cis Diallate	+++++	0.32437	0.33537	0.34815	0.35071	0.33413					
	0.34274	0.32874					AVRG		0.33774		2.91170
225 Trans Diallate	+++++	0.37056	0.36041	0.37003	0.35906	0.32901					
	0.33234	0.30608					AVRG		0.34679		7.08635
226 Methylenebis(2-chloroaniline)	+++++	0.15204	0.16108	0.15737	0.16458	0.15915					
	0.14765	0.14235					AVRG		0.15489		5.10032
$ 3 2-Fluorophenol	+++++	1.14241	1.12146	1.14302	+++++	1.11603					
	1.10986	1.08678					AVRG		1.11993		1.89679
$ 5 Phenol-d5	+++++	1.30974	1.32862	1.29742	+++++	1.29244					
	1.26746	1.25165					AVRG		1.29122		2.16629
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0.000e+00 <-
$ 20 Nitrobenzene-d5	+++++	0.31830	0.31833	0.31440	+++++	0.29054					
	0.28023	0.26923					AVRG		0.29851		7.17219
$ 39 2-Fluorobiphenyl	+++++	1.16861	1.14871	1.09014	+++++	0.98530					
	0.95054	0.90237					AVRG		1.04094		10.59390

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 12:23
End Cal Date : 30-JUN-2005 10:23
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Cal Date : 01-Jul-2005 08:56 hnm

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
$ 60 2,4,6-Tribromophenol	+++++	0.12473	0.13481	0.14309	+++++	0.13759					
	0.12768	0.13145					AVRG		0.13322		5.03390
$ 81 p-Terphenyl-d14	+++++	0.92438	1.04145	0.81589	+++++	0.85415					
	1.10308	1.04239					AVRG		0.96356		12.01877

Average %RSD Results.
Calculated Average %RSD = 7.58467626
Maximun Average %RSD = 15
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2903.d
Lab Smp Id: UBN050610-01 Client Smp ID: BNAICAL001
Inj Date : 29-JUN-2005 12:23
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-01|1 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 17:33 eri00936 Quant Type: ISTD
Cal Date : 29-JUN-2005 16:23 Cal File: s4f2914.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.047	4.047	(1.000)	277474	40.0000	
* 29 Naphthalene-d8	136	4.922	4.922	(1.000)	1040509	40.0000	
* 46 Acenaphthene-d10	164	6.174	6.174	(1.000)	605118	40.0000	
* 67 Phenanthrene-d10	188	7.179	7.179	(1.000)	944426	40.0000	
* 91 Chrysene-d12	240	8.971	8.971	(1.000)	824300	40.0000	
* 98 Perylene-d12	264	10.610	10.610	(1.000)	675184	40.0000	
$ 3 2-Fluorophenol	112	3.219	3.219	(0.795)	7064	1.00000	0.91
$ 5 Phenol-d5	99	3.747	3.747	(0.926)	8979	1.00000	1.0
$ 20 Nitrobenzene-d5	82	4.411	4.411	(0.896)	7173	1.00000	0.92
$ 39 2-Fluorobiphenyl	172	5.663	5.663	(0.917)	17750	1.00000	1.1
$ 60 2,4,6-Tribromophenol	329	6.709	6.709	(1.087)	1448	1.00000	0.72(Q)
$ 81 p-Terphenyl-d14	244	8.142	8.142	(0.908)	17100	1.00000	0.86
30 Naphthalene	128	4.934	4.934	(1.002)	23460	1.00000	1.1
34 2-Methylnaphthalene	142	5.416	5.416	(1.100)	14867	1.00000	1.1
35 1-Methylnaphthalene	142	5.492	5.492	(1.116)	14021	1.00000	1.1
40 2-Chloronaphthalene	162	5.774	5.774	(0.935)	14342	1.00000	1.1
45 Acenaphthylene	152	6.074	6.074	(0.984)	20502	1.00000	0.95(H)
47 Acenaphthene	154	6.191	6.191	(1.003)	14194	1.00000	1.0(H)
53 Fluorene	166	6.550	6.550	(1.061)	17091	1.00000	1.1
65 Pentachlorophenol	266	7.038	7.038	(0.980)	1398	1.00000	0.59
68 Phenanthrene	178	7.196	7.196	(1.002)	24370	1.00000	1.1
69 Anthracene	178	7.226	7.226	(1.007)	22045	1.00000	1.0
76 Fluoranthene	202	7.942	7.942	(1.106)	24446	1.00000	1.0
79 Pyrene	202	8.089	8.089	(0.902)	24513	1.00000	0.86
89 Benzo(a)anthracene	228	8.959	8.959	(0.999)	20961	1.00000	1.0
92 Chrysene	228	8.988	8.988	(1.002)	20262	1.00000	1.0

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
93 bis(2-Ethylhexyl)phthalate	149	8.830	8.830	(0.984)	10716	1.00000	0.69
95 Benzo(b)fluoranthene	252	10.081	10.081	(0.950)	16755	1.00000	0.92
96 Benzo(k)fluoranthene	252	10.110	10.110	(0.953)	16523	1.00000	0.90
97 Benzo(a)pyrene	252	10.528	10.528	(0.992)	13319	1.00000	0.93
99 Indeno(1,2,3-cd)pyrene	276	12.449	12.449	(1.173)	9840	1.00000	0.84(Q)
100 Dibenzo(a,h)anthracene	278	12.466	12.466	(1.175)	8035	1.00000	4.0
101 Benzo(ghi)perylene	276	13.031	13.031	(1.228)	10026	1.00000	0.99(TQM)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s062905.b/s4f2903.d

Date : 29-JUN-2005 12:23

Client ID: BNAICAL001

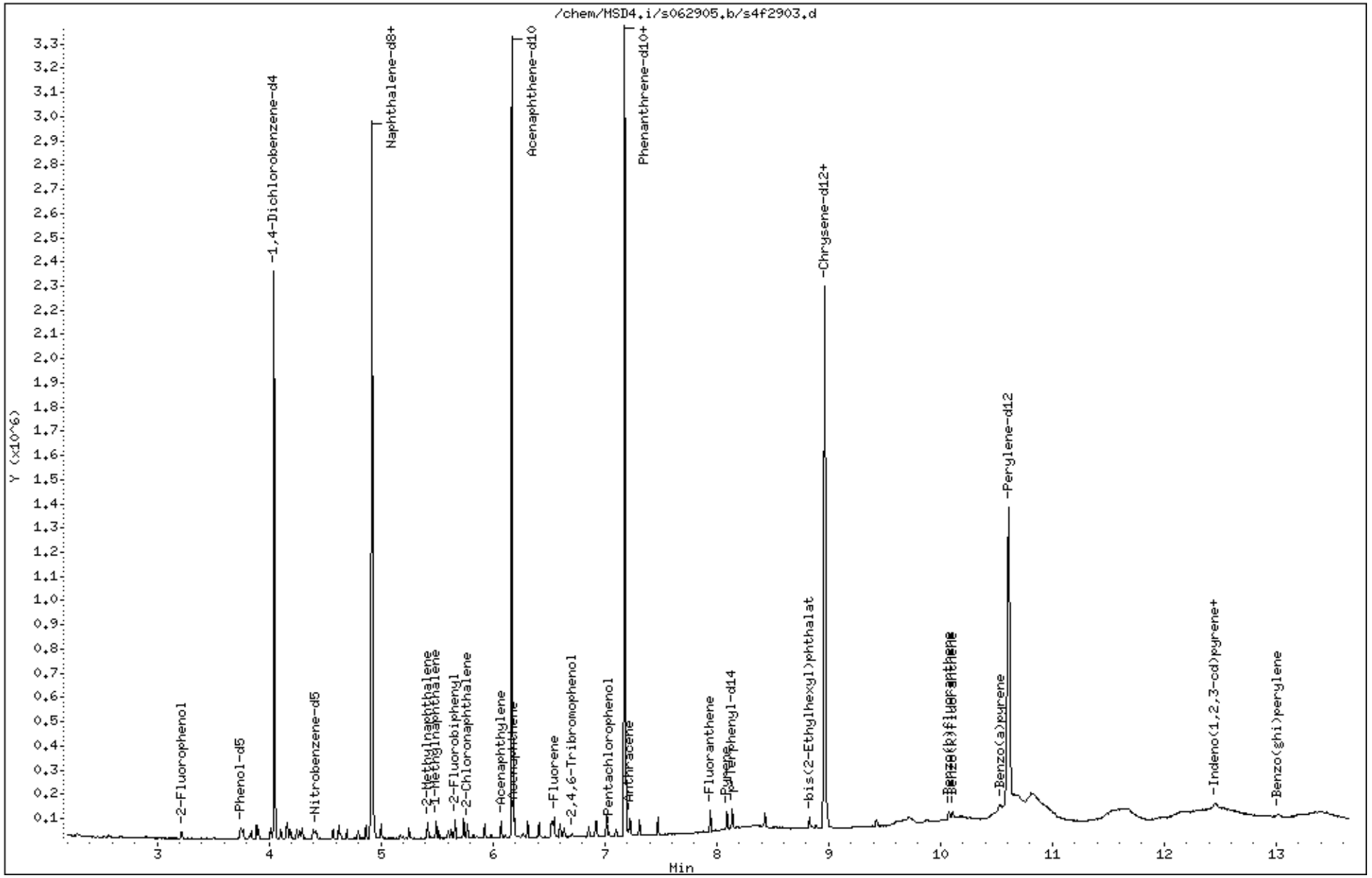
Sample Info: !UBN050610-01!1 PPM!1!SVMF!1!BNA ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2904.d
Lab Smp Id: UBN050610-02 Client Smp ID: BNAICAL010
Inj Date : 29-JUN-2005 12:45
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-02|10 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 17:33 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 07:32 Cal File: s4f2957.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.047	4.047 (1.000)	286908	40.0000	
*	29 Naphthalene-d8	136	4.922	4.922 (1.000)	1107556	40.0000	
*	46 Acenaphthene-d10	164	6.174	6.174 (1.000)	636360	40.0000	
*	67 Phenanthrene-d10	188	7.178	7.178 (1.000)	992788	40.0000	
*	91 Chrysene-d12	240	8.970	8.970 (1.000)	834639	40.0000	
*	98 Perylene-d12	264	10.610	10.610 (1.000)	653948	40.0000	
$	3 2-Fluorophenol	112	3.218	3.218 (0.795)	81942	10.0000	10.2
$	5 Phenol-d5	99	3.747	3.747 (0.926)	93944	10.0000	10.1
$	20 Nitrobenzene-d5	82	4.411	4.411 (0.896)	88134	10.0000	10.7
$	39 2-Fluorobiphenyl	172	5.662	5.662 (0.917)	185914	10.0000	11.2
$	60 2,4,6-Tribromophenol	329	6.708	6.708 (1.087)	19844	10.0000	9.4(Q)
$	81 p-Terphenyl-d14	244	8.142	8.142 (0.908)	192880	10.0000	9.6
	1 N-Methyl-N-nitrosomethylamine	74	2.502	2.502 (0.618)	39461	10.0000	9.8(Q)
	2 Pyridine	79	2.537	2.537 (0.627)	79779	10.0000	9.7
	6 Phenol	94	3.753	3.753 (0.927)	99129	10.0000	10.6
	7 bis(2-Chloroethyl) ether	93	3.841	3.841 (0.949)	90722	10.0000	9.5
	8 2-Chlorophenol	128	3.906	3.906 (0.965)	81154	10.0000	10.4
	203 n-Decane	43	3.888	3.888 (0.961)	104555	10.0000	11.2
	9 1,3-Dichlorobenzene	146	4.011	4.011 (0.991)	97652	10.0000	10.9
	11 1,4-Dichlorobenzene	146	4.059	4.059 (1.003)	92704	10.0000	10.7
	12 Benzyl alcohol	108	4.106	4.106 (1.015)	50400	10.0000	10.1
	13 1,2-Dichlorobenzene	146	4.164	4.164 (1.029)	91763	10.0000	11.2
	14 bis(2-Chloroisopropyl)ether	45	4.188	4.188 (1.035)	134445	10.0000	10.7
	15 o-Cresol	107	4.158	4.158 (1.028)	67101	10.0000	11.0
	16 Acetophenone	105	4.299	4.299 (1.062)	106335	10.0000	10.5
	17 N-Nitrosodipropylamine	70	4.276	4.276 (1.057)	58232	10.0000	9.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	4.252	4.252	(1.051)	88539	10.0000	10
19	Hexachloroethane	117	4.399	4.399	(1.087)	33903	10.0000	10.1
21	Nitrobenzene	77	4.423	4.423	(0.899)	79539	10.0000	10.9
22	Isophorone	82	4.576	4.576	(0.930)	158683	10.0000	10.9
23	2-Nitrophenol	139	4.640	4.640	(0.943)	34653	10.0000	9.9
24	2,4-Dimethylphenol	122	4.628	4.628	(0.940)	96358	10.0000	5.0(Q)
25	bis(2-Chloroethoxy)methane	93	4.693	4.693	(0.953)	100800	10.0000	11.5
26	2,4-Dichlorophenol	162	4.799	4.799	(0.975)	66260	10.0000	10.8
27	Benzoic acid	105	4.634	4.634	(0.942)	20515	10.0000	12.7(Q)
28	1,2,4-Trichlorobenzene	180	4.869	4.869	(0.989)	79154	10.0000	11.6
30	Naphthalene	128	4.934	4.934	(1.002)	258038	10.0000	11.1
204	alpha-Terpineol	59	4.905	4.905	(0.996)	75369	10.0000	11.5
189	Caprolactam	113	5.181	5.181	(1.053)	22524	10.0000	9.9
32	Hexachlorobutadiene	225	4.999	4.999	(1.016)	52374	10.0000	11.6
33	4-Chloro-3-methylphenol	107	5.251	5.251	(1.067)	66440	10.0000	11.4
34	2-Methylnaphthalene	142	5.416	5.416	(1.100)	168678	10.0000	11.4
35	1-Methylnaphthalene	142	5.492	5.492	(1.116)	154544	10.0000	11.3
36	Hexachlorocyclopentadiene	237	5.521	5.521	(0.894)	44973	10.0000	9.7
208	1,1'-Biphenyl	154	5.739	5.739	(0.930)	213279	10.0000	11.4
37	2,4,6-Trichlorophenol	196	5.604	5.604	(0.908)	47396	10.0000	10.1
38	2,4,5-Trichlorophenol	196	5.627	5.627	(0.911)	51752	10.0000	10.5
40	2-Chloronaphthalene	162	5.774	5.774	(0.935)	152998	10.0000	10.8
43	Dimethylphthalate	163	5.927	5.927	(0.960)	186538	10.0000	10.9
44	2,6-Dinitrotoluene	165	5.986	5.986	(0.970)	28543	10.0000	8.3
45	Acenaphthylene	152	6.074	6.074	(0.984)	256072	10.0000	11.3
47	Acenaphthene	154	6.197	6.197	(1.004)	156181	10.0000	11.0
48	2,4-Dinitrophenol	184	6.180	6.180	(1.001)	5326	10.0000	18.9(Q)
49	Dibenzofuran	168	6.309	6.309	(1.022)	219627	10.0000	11.2
50	2,4-Dinitrotoluene	165	6.268	6.268	(1.015)	32001	10.0000	7.7
51	Diethylphthalate	149	6.415	6.415	(1.039)	179223	10.0000	10.9
52	4-Nitrophenol	139	6.191	6.191	(1.003)	17725	10.0000	8.5
53	Fluorene	166	6.550	6.550	(1.061)	184255	10.0000	11.4
54	4-Chlorophenylphenylether	204	6.526	6.526	(1.057)	92542	10.0000	11.0
55	2-Methyl-4,6-dinitrophenol	198	6.556	6.556	(0.913)	10676	10.0000	14.4
133	Diphenylamine	169	6.603	6.603	(0.920)	156120	10.0000	11.2
58	1,2-Diphenylhydrazine	77	6.632	6.632	(0.924)	164298	10.0000	10.3
59	Tributylphosphate	99	6.538	6.538	(1.059)	193714	10.0000	10.6
61	4-Bromophenylphenylether	248	6.861	6.861	(0.956)	49486	10.0000	11.0
63	Hexachlorobenzene	284	6.920	6.920	(0.964)	59136	10.0000	11.6(Q)
65	Pentachlorophenol	266	7.037	7.037	(0.980)	21423	10.0000	8.6
206	n-Octadecane	57	7.020	7.020	(0.978)	131696	10.0000	11.5
68	Phenanthrene	178	7.196	7.196	(1.002)	259524	10.0000	11.5
69	Anthracene	178	7.225	7.225	(1.007)	255354	10.0000	11.4
72	Di-n-butylphthalate	149	7.478	7.478	(1.042)	301643	10.0000	5.7
76	Fluoranthene	202	7.942	7.942	(1.106)	278137	10.0000	11.0
79	Pyrene	202	8.089	8.089	(0.902)	287723	10.0000	10
85	Butylbenzylphthalate	149	8.430	8.430	(0.940)	117649	10.0000	9.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
89	Benzo(a)anthracene	228	8.959	8.959	(0.999)	216324	10.0000	10.5
92	Chrysene	228	8.988	8.988	(1.002)	205753	10.0000	10.6
93	bis(2-Ethylhexyl)phthalate	149	8.829	8.829	(0.984)	156614	10.0000	10
94	Di-n-octylphthalate	149	9.429	9.429	(0.889)	217755	10.0000	8.5
95	Benzo(b)fluoranthene	252	10.081	10.081	(0.950)	182469	10.0000	10.3
96	Benzo(k)fluoranthene	252	10.110	10.110	(0.953)	178625	10.0000	10.0
97	Benzo(a)pyrene	252	10.527	10.527	(0.992)	134852	10.0000	9.7
99	Indeno(1,2,3-cd)pyrene	276	12.449	12.449	(1.173)	107836	10.0000	9.5(Q)
100	Dibenzo(a,h)anthracene	278	12.460	12.460	(1.174)	85752	10.0000	11.1
101	Benzo(ghi)perylene	276	13.024	13.024	(1.228)	91759	10.0000	9.4(TM)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: /chem/MSD4.i/s062905.b/s4f2904.d

Date : 29-JUN-2005 12:45

Client ID: BNAICAL010

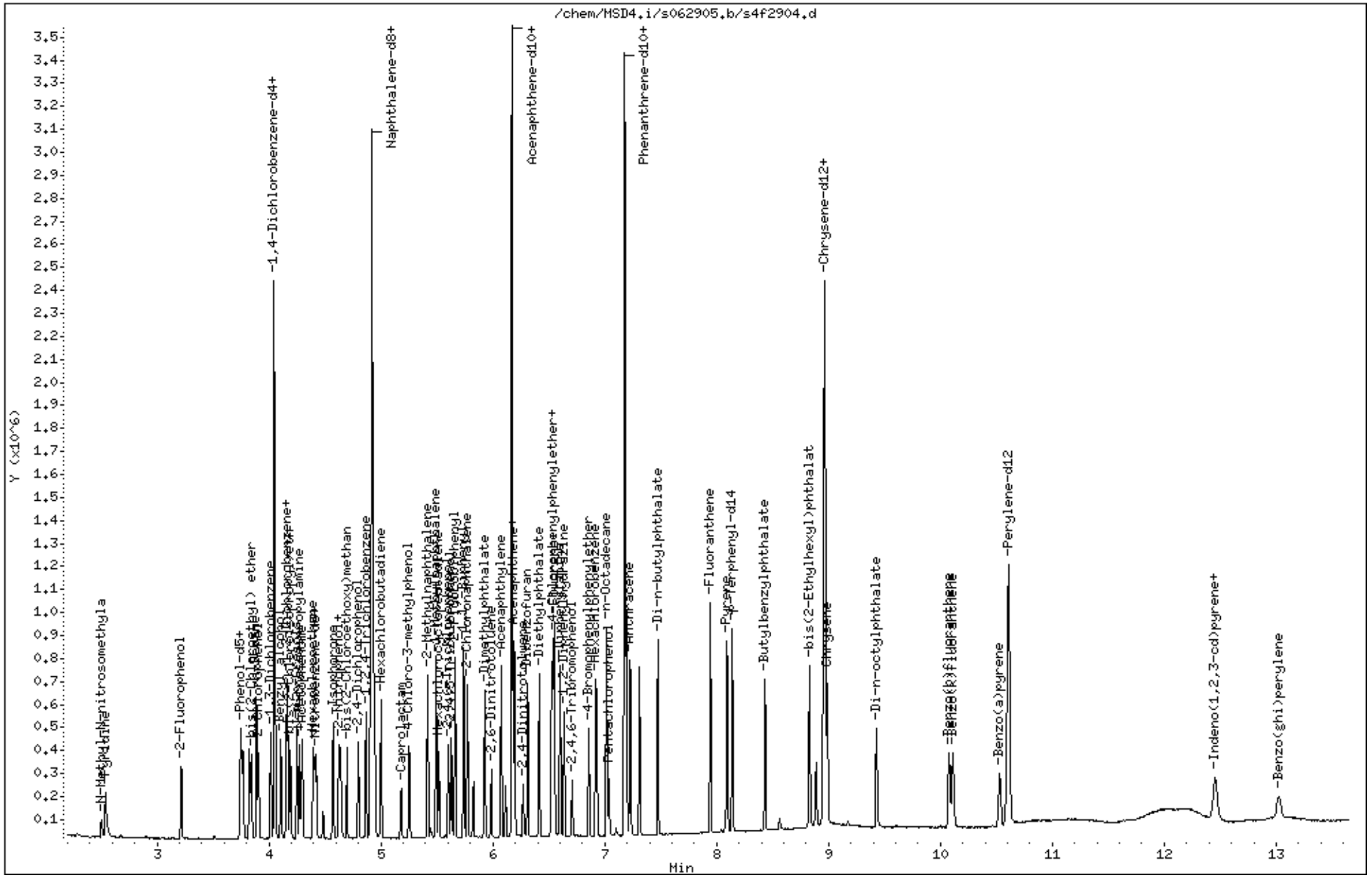
Sample Info: !UBN050610-02!10 PPM!1!SVMF!1!BNA ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2905.d
Lab Smp Id: UBN050610-03 Client Smp ID: BNAICAL020
Inj Date : 29-JUN-2005 13:07
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-03|20 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 17:33 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:01 Cal File: s4f2958.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.050	4.050	(1.000)	279197	40.0000	
*	29 Naphthalene-d8	136	4.920	4.920	(1.000)	1085804	40.0000	
*	46 Acenaphthene-d10	164	6.172	6.172	(1.000)	609419	40.0000	
*	67 Phenanthrene-d10	188	7.182	7.182	(1.000)	952498	40.0000	
*	91 Chrysene-d12	240	8.968	8.968	(1.000)	643533	40.0000	
*	98 Perylene-d12	264	10.607	10.607	(1.000)	354484	40.0000	
$	3 2-Fluorophenol	112	3.216	3.216	(0.794)	156554	20.0000	20.0
$	5 Phenol-d5	99	3.745	3.745	(0.925)	185473	20.0000	20.6
$	20 Nitrobenzene-d5	82	4.409	4.409	(0.896)	172822	20.0000	21.3
$	39 2-Fluorobiphenyl	172	5.660	5.660	(0.917)	350023	20.0000	22.1
$	60 2,4,6-Tribromophenol	329	6.712	6.712	(1.088)	41077	20.0000	20.2(Q)
$	81 p-Terphenyl-d14	244	8.146	8.146	(0.908)	335105	20.0000	21.6
	1 N-Methyl-N-nitrosomethylamine	74	2.499	2.499	(0.617)	72764	20.0000	18.5(Q)
	2 Pyridine	79	2.535	2.535	(0.626)	153862	20.0000	19.3
	6 Phenol	94	3.757	3.757	(0.927)	192165	20.0000	21.0
	7 bis(2-Chloroethyl) ether	93	3.839	3.839	(0.948)	202159	20.0000	21.8
	8 2-Chlorophenol	128	3.909	3.909	(0.965)	155427	20.0000	20.5
	203 n-Decane	43	3.892	3.892	(0.961)	197511	20.0000	21.7
	9 1,3-Dichlorobenzene	146	4.015	4.015	(0.991)	181556	20.0000	20.8
	11 1,4-Dichlorobenzene	146	4.062	4.062	(1.003)	180232	20.0000	21.3
	12 Benzyl alcohol	108	4.109	4.109	(1.014)	98492	20.0000	20.3
	13 1,2-Dichlorobenzene	146	4.162	4.162	(1.028)	171379	20.0000	21.6
	14 bis(2-Chloroisopropyl)ether	45	4.191	4.191	(1.035)	252966	20.0000	20.6
	15 o-Cresol	107	4.156	4.156	(1.026)	123414	20.0000	20.8
	16 Acetophenone	105	4.297	4.297	(1.061)	202352	20.0000	20.5
	17 N-Nitrosodipropylamine	70	4.280	4.280	(1.057)	113310	20.0000	19.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	4.256	4.256	(1.051)	174381	20.0000	20.2
19	Hexachloroethane	117	4.397	4.397	(1.086)	65158	20.0000	19.9
21	Nitrobenzene	77	4.426	4.426	(0.900)	154844	20.0000	21.6
22	Isophorone	82	4.573	4.573	(0.930)	312549	20.0000	21.9
23	2-Nitrophenol	139	4.638	4.638	(0.943)	70506	20.0000	20.6
24	2,4-Dimethylphenol	122	4.626	4.626	(0.940)	193427	20.0000	23.8(Q)
25	bis(2-Chloroethoxy)methane	93	4.697	4.697	(0.955)	194190	20.0000	22.6
26	2,4-Dichlorophenol	162	4.797	4.797	(0.975)	129252	20.0000	21.5
27	Benzoic acid	105	4.650	4.650	(0.945)	52075	20.0000	19.6(Q)
28	1,2,4-Trichlorobenzene	180	4.867	4.867	(0.989)	149138	20.0000	22.3
30	Naphthalene	128	4.938	4.938	(1.004)	473167	20.0000	20.7
204	alpha-Terpineol	59	4.902	4.902	(0.996)	143877	20.0000	22.3
189	Caprolactam	113	5.184	5.184	(1.054)	44925	20.0000	20.2
32	Hexachlorobutadiene	225	5.002	5.002	(1.017)	98185	20.0000	22.2
33	4-Chloro-3-methylphenol	107	5.255	5.255	(1.068)	127599	20.0000	22.2
34	2-Methylnaphthalene	142	5.419	5.419	(1.101)	311662	20.0000	21.5
35	1-Methylnaphthalene	142	5.490	5.490	(1.116)	293350	20.0000	21.8
36	Hexachlorocyclopentadiene	237	5.519	5.519	(0.894)	81567	20.0000	18.4
208	1,1'-Biphenyl	154	5.743	5.743	(0.930)	394256	20.0000	21.9
37	2,4,6-Trichlorophenol	196	5.602	5.602	(0.908)	93928	20.0000	20.8
38	2,4,5-Trichlorophenol	196	5.631	5.631	(0.912)	99720	20.0000	21.1
40	2-Chloronaphthalene	162	5.772	5.772	(0.935)	286370	20.0000	21.1
43	Dimethylphthalate	163	5.931	5.931	(0.961)	352527	20.0000	21.4
44	2,6-Dinitrotoluene	165	5.984	5.984	(0.970)	60805	20.0000	18.5
45	Acenaphthylene	152	6.077	6.077	(0.985)	476401	20.0000	22.0
47	Acenaphthene	154	6.195	6.195	(1.004)	288930	20.0000	21.2
48	2,4-Dinitrophenol	184	6.183	6.183	(1.002)	10996	20.0000	22.8(Q)
49	Dibenzofuran	168	6.313	6.313	(1.023)	406003	20.0000	21.6
50	2,4-Dinitrotoluene	165	6.271	6.271	(1.016)	69722	20.0000	17.5
51	Diethylphthalate	149	6.412	6.412	(1.039)	335185	20.0000	21.3
52	4-Nitrophenol	139	6.189	6.189	(1.003)	34348	20.0000	17.2
53	Fluorene	166	6.548	6.548	(1.061)	342747	20.0000	22.2
54	4-Chlorophenylphenylether	204	6.524	6.524	(1.057)	171285	20.0000	21.2
55	2-Methyl-4,6-dinitrophenol	198	6.553	6.553	(0.912)	22456	20.0000	19.5
133	Diphenylamine	169	6.600	6.600	(0.919)	284468	20.0000	21.3
58	1,2-Diphenylhydrazine	77	6.636	6.636	(0.924)	325436	20.0000	21.3
59	Tributylphosphate	99	6.536	6.536	(1.059)	393786	20.0000	22.4
61	4-Bromophenylphenylether	248	6.859	6.859	(0.955)	90861	20.0000	21.0
63	Hexachlorobenzene	284	6.918	6.918	(0.963)	104800	20.0000	21.4(Q)
65	Pentachlorophenol	266	7.041	7.041	(0.980)	42634	20.0000	17.9
206	n-Octadecane	57	7.018	7.018	(0.977)	243881	20.0000	22.1
68	Phenanthrene	178	7.194	7.194	(1.002)	466634	20.0000	21.5
69	Anthracene	178	7.229	7.229	(1.007)	463468	20.0000	21.6
72	Di-n-butylphthalate	149	7.476	7.476	(1.041)	549207	20.0000	19.4
76	Fluoranthene	202	7.940	7.940	(1.106)	493748	20.0000	20.3
79	Pyrene	202	8.093	8.093	(0.902)	487730	20.0000	21.9
85	Butylbenzylphthalate	149	8.434	8.434	(0.940)	206270	20.0000	21.1

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
89 Benzo(a)anthracene	228	8.956	8.956	(0.999)	316725	20.0000	20.0
92 Chrysene	228	8.992	8.992	(1.003)	304105	20.0000	20.2
93 bis(2-Ethylhexyl)phthalate	149	8.833	8.833	(0.985)	256687	20.0000	21.2
94 Di-n-octylphthalate	149	9.432	9.432	(0.889)	314643	20.0000	22.8
95 Benzo(b)fluoranthene	252	10.079	10.079	(0.950)	205768	20.0000	21.5
96 Benzo(k)fluoranthene	252	10.114	10.114	(0.953)	210738	20.0000	21.9
97 Benzo(a)pyrene	252	10.531	10.531	(0.993)	144332	20.0000	19.2
99 Indeno(1,2,3-cd)pyrene	276	12.447	12.447	(1.173)	100143	20.0000	16.2
100 Dibenzo(a,h)anthracene	278	12.464	12.464	(1.175)	79704	20.0000	16.7
101 Benzo(ghi)perylene	276	13.028	13.028	(1.228)	86607	20.0000	16.4(TM)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: /chem/MSD4.i/s062905.b/s4f2905.d

Date : 29-JUN-2005 13:07

Client ID: BNAICAL020

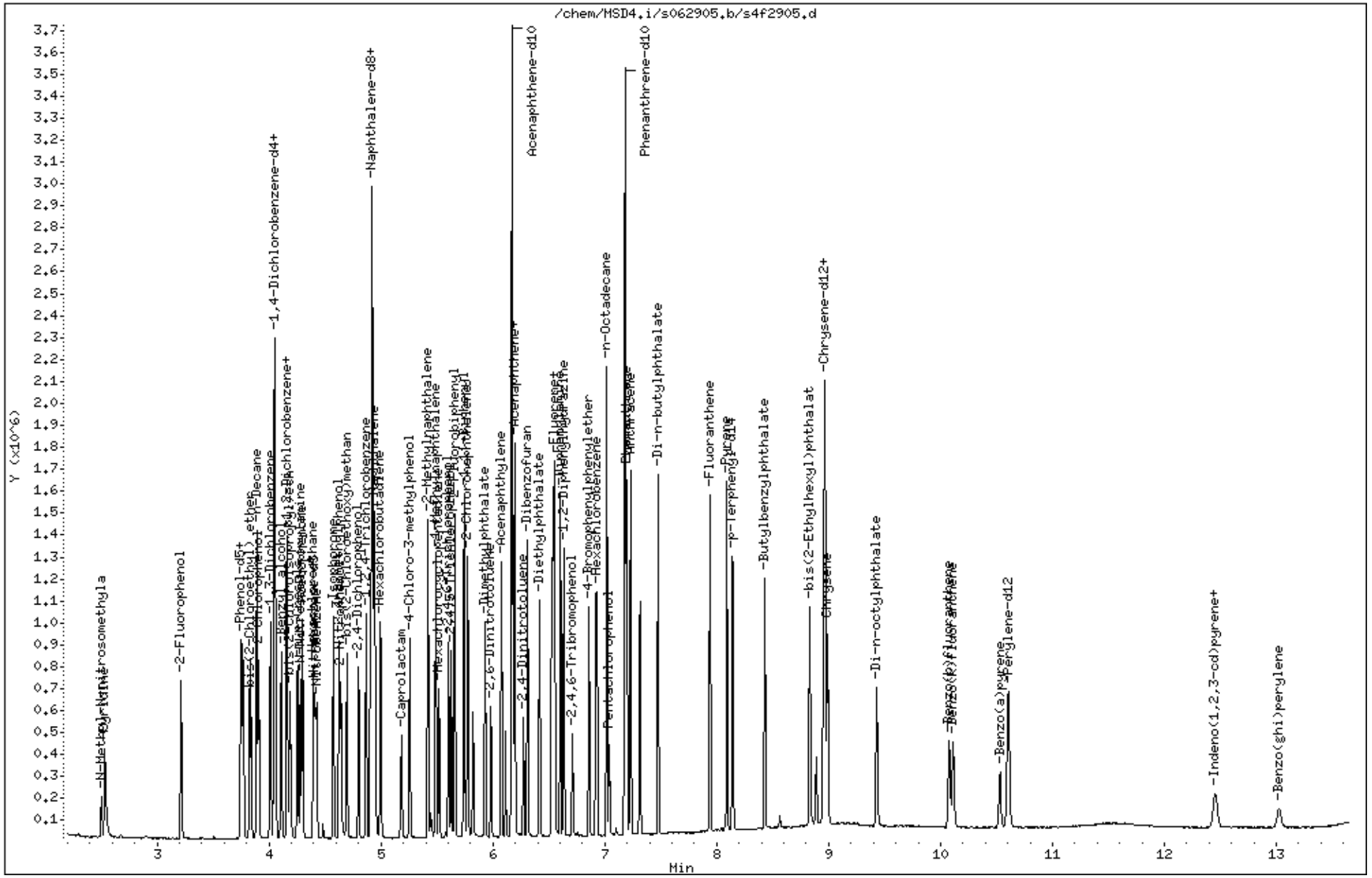
Sample Info: !UBN050610-03!20 PPM!1!SVMF!1!BNA ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2906.d
Lab Smp Id: UBN050610-04 Client Smp ID: BNAICAL040
Inj Date : 29-JUN-2005 13:29
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-04|40 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 17:33 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:29 Cal File: s4f2959.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.047	4.047 (1.000)	265002	40.0000	
*	29 Naphthalene-d8	136	4.922	4.922 (1.000)	1091360	40.0000	
*	46 Acenaphthene-d10	164	6.174	6.174 (1.000)	604449	40.0000	
*	67 Phenanthrene-d10	188	7.179	7.179 (1.000)	981747	40.0000	
*	91 Chrysene-d12	240	8.971	8.971 (1.000)	874688	40.0000	
*	98 Perylene-d12	264	10.610	10.610 (1.000)	766274	40.0000	
$	3 2-Fluorophenol	112	3.219	3.219 (0.795)	302902	40.0000	40.8
$	5 Phenol-d5	99	3.747	3.747 (0.926)	343819	40.0000	40.2
$	20 Nitrobenzene-d5	82	4.411	4.411 (0.896)	343127	40.0000	42.1
$	39 2-Fluorobiphenyl	172	5.663	5.663 (0.917)	658936	40.0000	41.9
$	60 2,4,6-Tribromophenol	329	6.714	6.714 (1.088)	86491	40.0000	43.0(Q)
$	81 p-Terphenyl-d14	244	8.142	8.142 (0.908)	713653	40.0000	33.9
	1 N-Methyl-N-nitrosomethylamine	74	2.496	2.496 (0.617)	146111	40.0000	39.1(Q)
	2 Pyridine	79	2.531	2.531 (0.625)	298220	40.0000	39.4
	6 Phenol	94	3.759	3.759 (0.929)	357347	40.0000	41.2
	7 bis(2-Chloroethyl) ether	93	3.841	3.841 (0.949)	365426	40.0000	41.6
	8 2-Chlorophenol	128	3.912	3.912 (0.967)	294732	40.0000	40.9
	203 n-Decane	43	3.894	3.894 (0.962)	359268	40.0000	41.7
	9 1,3-Dichlorobenzene	146	4.018	4.018 (0.993)	343469	40.0000	41.4
	11 1,4-Dichlorobenzene	146	4.059	4.059 (1.003)	331649	40.0000	41.3
	12 Benzyl alcohol	108	4.112	4.112 (1.016)	192266	40.0000	41.7
	13 1,2-Dichlorobenzene	146	4.165	4.165 (1.029)	313556	40.0000	41.6
	14 bis(2-Chloroisopropyl)ether	45	4.188	4.188 (1.035)	475317	40.0000	40.9
	15 o-Cresol	107	4.159	4.159 (1.028)	231791	40.0000	41.1
	16 Acetophenone	105	4.300	4.300 (1.062)	388302	40.0000	41.4
	17 N-Nitrosodipropylamine	70	4.282	4.282 (1.058)	223399	40.0000	41.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	4.259	4.259	(1.052)	335138	40.0000	40.8
19	Hexachloroethane	117	4.400	4.400	(1.087)	127033	40.0000	40.9
21	Nitrobenzene	77	4.429	4.429	(0.900)	305171	40.0000	42.3
22	Isophorone	82	4.576	4.576	(0.930)	606533	40.0000	42.3
23	2-Nitrophenol	139	4.640	4.640	(0.943)	154554	40.0000	44.9
24	2,4-Dimethylphenol	122	4.629	4.629	(0.940)	289476	40.0000	41.9(Q)
25	bis(2-Chloroethoxy)methane	93	4.699	4.699	(0.955)	368227	40.0000	42.6
26	2,4-Dichlorophenol	162	4.799	4.799	(0.975)	257329	40.0000	42.5
27	Benzoic acid	105	4.664	4.664	(0.947)	151241	40.0000	41.0
28	1,2,4-Trichlorobenzene	180	4.870	4.870	(0.989)	285544	40.0000	42.5
30	Naphthalene	128	4.940	4.940	(1.004)	889923	40.0000	38.7
204	alpha-Terpineol	59	4.905	4.905	(0.996)	276617	40.0000	42.7
189	Caprolactam	113	5.199	5.199	(1.056)	97014	40.0000	43.3
32	Hexachlorobutadiene	225	4.999	4.999	(1.016)	189205	40.0000	42.6
33	4-Chloro-3-methylphenol	107	5.257	5.257	(1.068)	250052	40.0000	43.4
34	2-Methylnaphthalene	142	5.422	5.422	(1.101)	599508	40.0000	41.2
35	1-Methylnaphthalene	142	5.492	5.492	(1.116)	552903	40.0000	40.9
36	Hexachlorocyclopentadiene	237	5.522	5.522	(0.894)	182175	40.0000	41.4
208	1,1'-Biphenyl	154	5.745	5.745	(0.931)	748561	40.0000	42.0
37	2,4,6-Trichlorophenol	196	5.604	5.604	(0.908)	181667	40.0000	40.6
38	2,4,5-Trichlorophenol	196	5.633	5.633	(0.912)	189723	40.0000	40.5
40	2-Chloronaphthalene	162	5.774	5.774	(0.935)	558024	40.0000	41.4
43	Dimethylphthalate	163	5.933	5.933	(0.961)	681333	40.0000	41.8
44	2,6-Dinitrotoluene	165	5.986	5.986	(0.970)	135436	40.0000	41.6
45	Acenaphthylene	152	6.074	6.074	(0.984)	924553	40.0000	43.0
47	Acenaphthene	154	6.197	6.197	(1.004)	568994	40.0000	42.2
48	2,4-Dinitrophenol	184	6.186	6.186	(1.002)	36029	40.0000	39.3
49	Dibenzofuran	168	6.315	6.315	(1.023)	788601	40.0000	42.4
50	2,4-Dinitrotoluene	165	6.274	6.274	(1.016)	166829	40.0000	42.2
51	Diethylphthalate	149	6.415	6.415	(1.039)	664758	40.0000	42.5
52	4-Nitrophenol	139	6.192	6.192	(1.003)	86855	40.0000	43.9
53	Fluorene	166	6.550	6.550	(1.061)	643161	40.0000	42.0
54	4-Chlorophenylphenylether	204	6.526	6.526	(1.057)	337669	40.0000	42.1
55	2-Methyl-4,6-dinitrophenol	198	6.556	6.556	(0.913)	67057	40.0000	37.2
133	Diphenylamine	169	6.603	6.603	(0.920)	563078	40.0000	41.0
58	1,2-Diphenylhydrazine	77	6.638	6.638	(0.925)	649246	40.0000	41.3
59	Tributylphosphate	99	6.538	6.538	(1.059)	753054	40.0000	43.3
61	4-Bromophenylphenylether	248	6.861	6.861	(0.956)	182680	40.0000	41.0
63	Hexachlorobenzene	284	6.920	6.920	(0.964)	204466	40.0000	40.5(Q)
65	Pentachlorophenol	266	7.043	7.043	(0.981)	101951	40.0000	41.5
206	n-Octadecane	57	7.020	7.020	(0.978)	466648	40.0000	41.1
68	Phenanthrene	178	7.196	7.196	(1.002)	926755	40.0000	41.4
69	Anthracene	178	7.232	7.232	(1.007)	947858	40.0000	42.9
72	Di-n-butylphthalate	149	7.478	7.478	(1.042)	1088186	40.0000	46.0
76	Fluoranthene	202	7.942	7.942	(1.106)	1031730	40.0000	41.2
79	Pyrene	202	8.095	8.095	(0.902)	1052381	40.0000	34.8
85	Butylbenzylphthalate	149	8.430	8.430	(0.940)	503296	40.0000	37.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
89	Benzo(a)anthracene	228	8.959	8.959	(0.999)	877629	40.0000	40.8
92	Chrysene	228	8.994	8.994	(1.003)	840349	40.0000	41.2
93	bis(2-Ethylhexyl)phthalate	149	8.830	8.830	(0.984)	692743	40.0000	42.0
94	Di-n-octylphthalate	149	9.435	9.435	(0.889)	1063436	40.0000	35.6
95	Benzo(b)fluoranthene	252	10.087	10.087	(0.951)	835208	40.0000	40.4
96	Benzo(k)fluoranthene	252	10.122	10.122	(0.954)	797379	40.0000	38.3
97	Benzo(a)pyrene	252	10.534	10.534	(0.993)	670983	40.0000	41.4
99	Indeno(1,2,3-cd)pyrene	276	12.467	12.467	(1.175)	581023	40.0000	43.5(Q)
100	Dibenzo(a,h)anthracene	278	12.472	12.472	(1.176)	477042	40.0000	40.5
101	Benzo(ghi)perylene	276	13.042	13.042	(1.229)	479810	40.0000	41.9(TM)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: /chem/MSD4.i/s062905.b/s4f2906.d

Date : 29-JUN-2005 13:29

Client ID: BNAICAL040

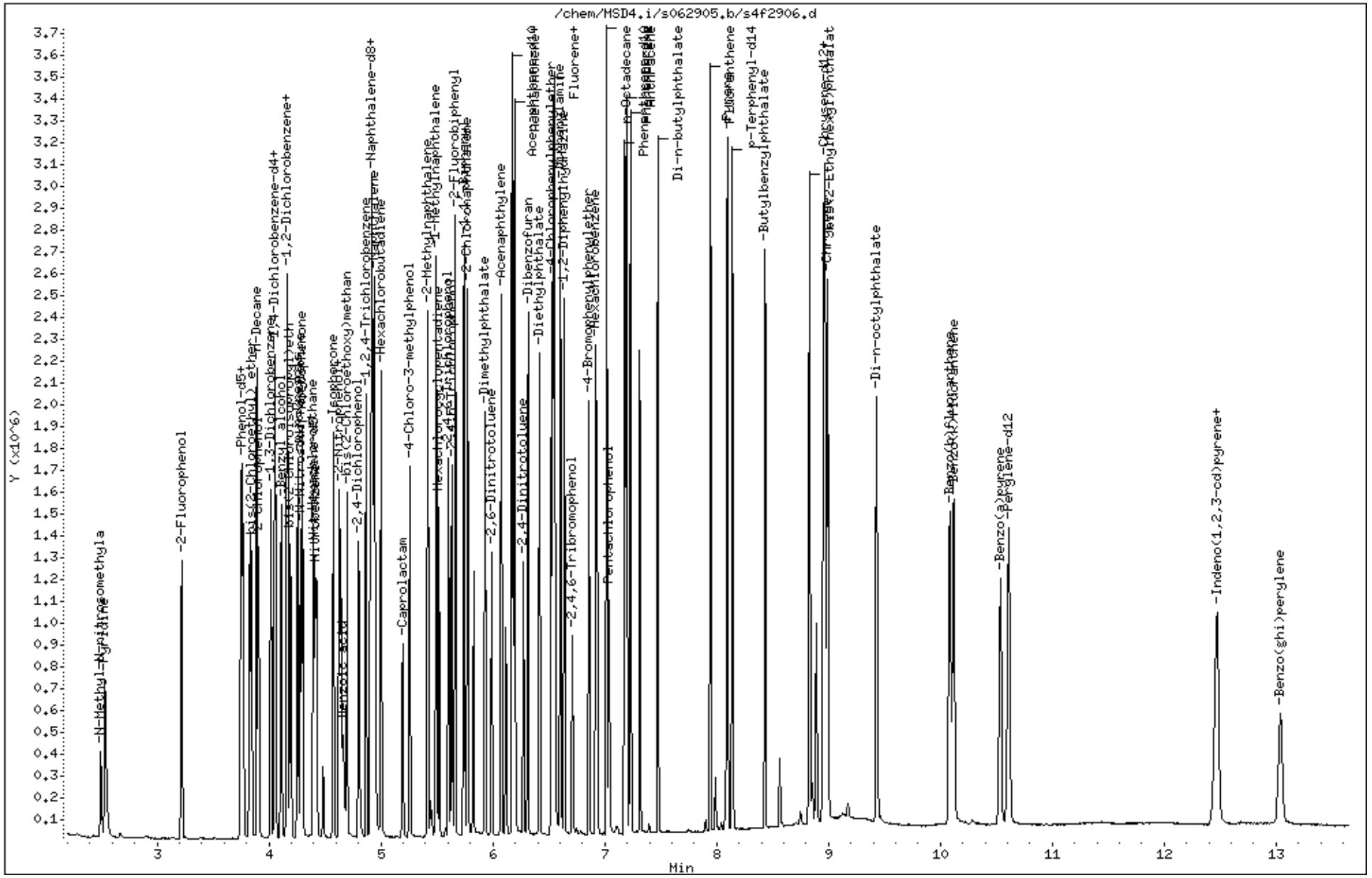
Sample Info: !UBN050610-04!40 PPM!1!SVMF!1!BNA ICAL

Instrument: MSD4.i

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2908.d
Lab Smp Id: UBN050610-06 Client Smp ID: BNAICAL080
Inj Date : 29-JUN-2005 14:13
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-06|80 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 17:34 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 09:26 Cal File: s4f2961.d
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

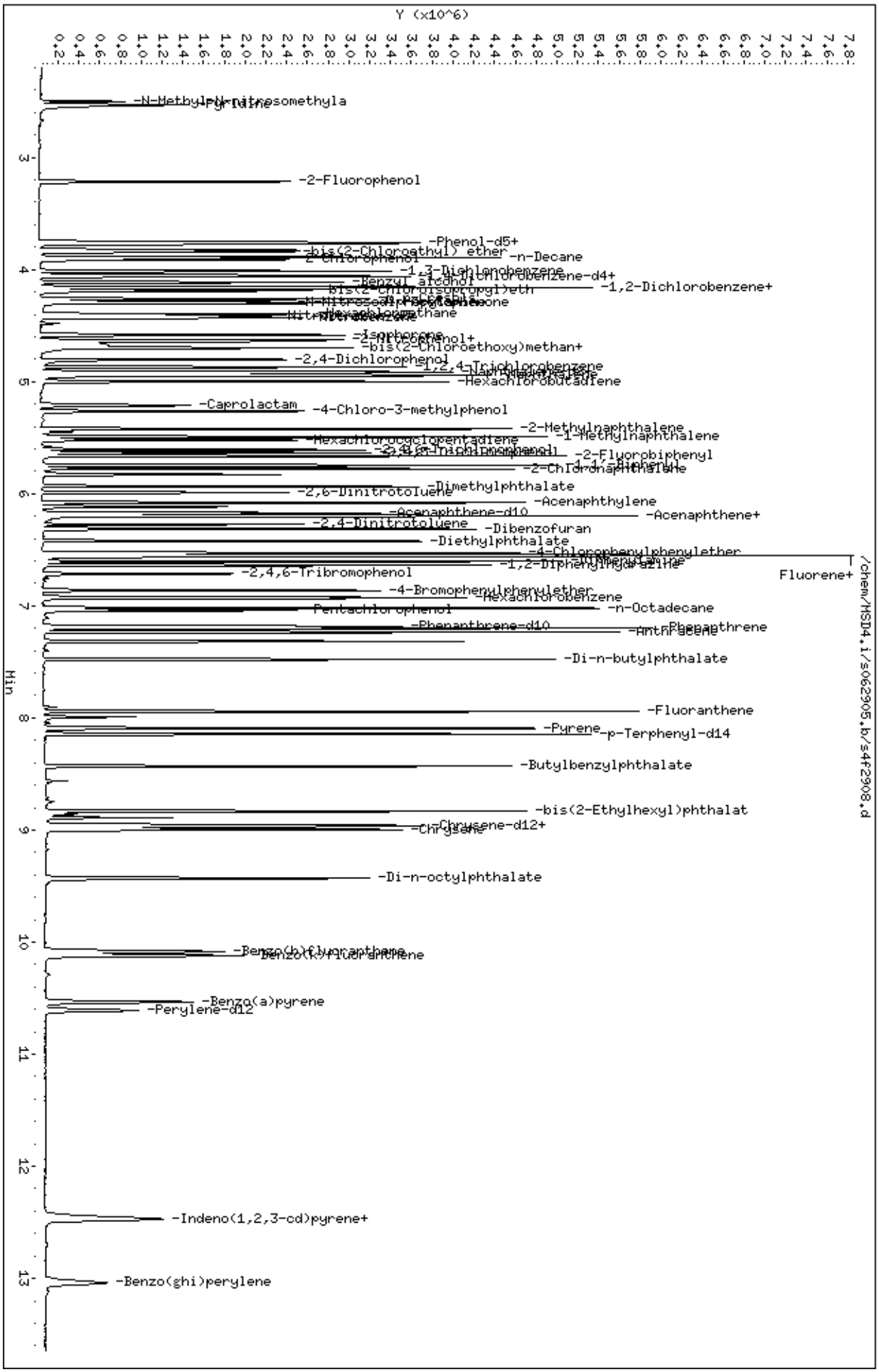
		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.050	4.050	(1.000)	264292	40.0000	
*	29 Naphthalene-d8	136	4.925	4.925	(1.000)	1172817	40.0000	
*	46 Acenaphthene-d10	164	6.171	6.171	(1.000)	612932	40.0000	
*	67 Phenanthrene-d10	188	7.181	7.181	(1.000)	992616	40.0000	
*	91 Chrysene-d12	240	8.973	8.973	(1.000)	695320	40.0000	
*	98 Perylene-d12	264	10.613	10.613	(1.000)	490944	40.0000	
$	3 2-Fluorophenol	112	3.215	3.215	(0.794)	589915	80.0000	79.7
$	5 Phenol-d5	99	3.756	3.756	(0.927)	683163	80.0000	80.1
$	20 Nitrobenzene-d5	82	4.414	4.414	(0.896)	681498	80.0000	77.9
$	39 2-Fluorobiphenyl	172	5.665	5.665	(0.918)	1207840	80.0000	75.7
$	60 2,4,6-Tribromophenol	329	6.717	6.717	(1.089)	168664	80.0000	82.6
$	81 p-Terphenyl-d14	244	8.145	8.145	(0.908)	1187822	80.0000	70.9
	1 N-Methyl-N-nitrosomethylamine	74	2.499	2.499	(0.617)	306634	80.0000	82.3
	2 Pyridine	79	2.534	2.534	(0.626)	613612	80.0000	81.2
	6 Phenol	94	3.762	3.762	(0.929)	680527	80.0000	78.8
	7 bis(2-Chloroethyl) ether	93	3.844	3.844	(0.949)	678395	80.0000	77.5
	8 2-Chlorophenol	128	3.915	3.915	(0.967)	562596	80.0000	78.3
	203 n-Decane	43	3.891	3.891	(0.961)	657079	80.0000	76.4
	9 1,3-Dichlorobenzene	146	4.014	4.014	(0.991)	643699	80.0000	77.7
	11 1,4-Dichlorobenzene	146	4.061	4.061	(1.003)	617494	80.0000	77.1
	12 Benzyl alcohol	108	4.114	4.114	(1.016)	367613	80.0000	79.9
	13 1,2-Dichlorobenzene	146	4.167	4.167	(1.029)	570598	80.0000	75.9
	14 bis(2-Chloroisopropyl)ether	45	4.191	4.191	(1.035)	901898	80.0000	77.7
	15 o-Cresol	107	4.161	4.161	(1.028)	434617	80.0000	77.3
	16 Acetophenone	105	4.302	4.302	(1.062)	738076	80.0000	78.8
	17 N-Nitrosodipropylamine	70	4.291	4.291	(1.059)	434143	80.0000	80.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	4.261	4.261	(1.052)	641146	80.0000	78.3
19	Hexachloroethane	117	4.396	4.396	(1.086)	246112	80.0000	79.4
21	Nitrobenzene	77	4.432	4.432	(0.900)	595434	80.0000	76.8
22	Isophorone	82	4.584	4.584	(0.931)	1180817	80.0000	76.6
23	2-Nitrophenol	139	4.643	4.643	(0.943)	291982	80.0000	78.9
24	2,4-Dimethylphenol	122	4.631	4.631	(0.940)	544258	80.0000	83.0
25	bis(2-Chloroethoxy)methane	93	4.702	4.702	(0.955)	698381	80.0000	75.2
26	2,4-Dichlorophenol	162	4.808	4.808	(0.976)	501397	80.0000	77.1
27	Benzoic acid	105	4.684	4.684	(0.951)	354473	80.0000	79.6
28	1,2,4-Trichlorobenzene	180	4.872	4.872	(0.989)	539399	80.0000	74.7
30	Naphthalene	128	4.937	4.937	(1.002)	1615313	80.0000	65.4
204	alpha-Terpineol	59	4.913	4.913	(0.998)	524478	80.0000	75.4
189	Caprolactam	113	5.213	5.213	(1.058)	196448	80.0000	81.7
32	Hexachlorobutadiene	225	5.002	5.002	(1.016)	356249	80.0000	74.6
33	4-Chloro-3-methylphenol	107	5.260	5.260	(1.068)	474865	80.0000	76.6
34	2-Methylnaphthalene	142	5.419	5.419	(1.100)	1099424	80.0000	70.3
35	1-Methylnaphthalene	142	5.495	5.495	(1.116)	1008509	80.0000	69.4
36	Hexachlorocyclopentadiene	237	5.524	5.524	(0.895)	362744	80.0000	81.3
208	1,1'-Biphenyl	154	5.748	5.748	(0.931)	1356517	80.0000	75.1
37	2,4,6-Trichlorophenol	196	5.607	5.607	(0.909)	357185	80.0000	78.8
38	2,4,5-Trichlorophenol	196	5.636	5.636	(0.913)	393609	80.0000	82.8
40	2-Chloronaphthalene	162	5.777	5.777	(0.936)	1036996	80.0000	75.8
43	Dimethylphthalate	163	5.936	5.936	(0.962)	1279059	80.0000	77.4
44	2,6-Dinitrotoluene	165	5.995	5.995	(0.971)	281654	80.0000	85.3
45	Acenaphthylene	152	6.077	6.077	(0.985)	1677941	80.0000	77.0
47	Acenaphthene	154	6.200	6.200	(1.005)	1018419	80.0000	74.4
48	2,4-Dinitrophenol	184	6.188	6.188	(1.003)	96419	80.0000	78.2
49	Dibenzofuran	168	6.318	6.318	(1.024)	1431804	80.0000	75.9
50	2,4-Dinitrotoluene	165	6.277	6.277	(1.017)	359151	80.0000	89.7
51	Diethylphthalate	149	6.423	6.423	(1.041)	1237871	80.0000	78.1
52	4-Nitrophenol	139	6.200	6.200	(1.005)	178212	80.0000	88.9
53	Fluorene	166	6.553	6.553	(1.062)	1133873	80.0000	73.0
54	4-Chlorophenylphenylether	204	6.529	6.529	(1.058)	623166	80.0000	76.7
55	2-Methyl-4,6-dinitrophenol	198	6.564	6.564	(0.914)	168082	80.0000	77.3
133	Diphenylamine	169	6.606	6.606	(0.920)	1038358	80.0000	74.7
58	1,2-Diphenylhydrazine	77	6.641	6.641	(0.925)	1211609	80.0000	76.2
59	Tributylphosphate	99	6.547	6.547	(1.061)	1394981	80.0000	79.1
61	4-Bromophenylphenylether	248	6.864	6.864	(0.956)	339493	80.0000	75.3
63	Hexachlorobenzene	284	6.923	6.923	(0.964)	378580	80.0000	74.2
65	Pentachlorophenol	266	7.040	7.040	(0.980)	219786	80.0000	88.5
206	n-Octadecane	57	7.017	7.017	(0.977)	848504	80.0000	73.9
68	Phenanthrene	178	7.199	7.199	(1.002)	1641701	80.0000	72.6
69	Anthracene	178	7.234	7.234	(1.007)	1653078	80.0000	74.0
72	Di-n-butylphthalate	149	7.481	7.481	(1.042)	1868139	80.0000	84.8
76	Fluoranthene	202	7.945	7.945	(1.106)	1690942	80.0000	66.9
79	Pyrene	202	8.098	8.098	(0.902)	1720433	80.0000	71.6
85	Butylbenzylphthalate	149	8.433	8.433	(0.940)	809955	80.0000	76.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
89 Benzo(a)anthracene	228	8.962	8.962	(0.999)	1327479	80.0000	77.6
92 Chrysene	228	8.997	8.997	(1.003)	1234724	80.0000	76.1
93 bis(2-Ethylhexyl)phthalate	149	8.832	8.832	(0.984)	1083984	80.0000	82.7
94 Di-n-octylphthalate	149	9.432	9.432	(0.889)	1568968	80.0000	81.9
95 Benzo(b)fluoranthene	252	10.084	10.084	(0.950)	1027380	80.0000	77.5
96 Benzo(k)fluoranthene	252	10.119	10.119	(0.953)	1095494	80.0000	82.2
97 Benzo(a)pyrene	252	10.536	10.536	(0.993)	849849	80.0000	81.8
99 Indeno(1,2,3-cd)pyrene	276	12.463	12.463	(1.174)	695234	80.0000	81.3
100 Dibenzo(a,h)anthracene	278	12.475	12.475	(1.175)	583585	80.0000	74.4
101 Benzo(ghi)perylene	276	13.045	13.045	(1.229)	586453	80.0000	79.9(TM)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: /chem/MSD4.i/s062905.b/s4f2908.d
Date : 29-JUN-2005 14:13
Client ID: BNAICAL080
Sample Info: IUBN050610-06180 PPM11SWMF11BNA ICAL
Column phase: J & W DB-5MS

Instrument: MSD4.i
Operator: EED
Column diameter: 0.20

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2909.d
Lab Smp Id: UBN050610-07 Client Smp ID: BNAICAL100
Inj Date : 29-JUN-2005 14:36
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-07|100 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 17:34 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 09:55 Cal File: s4f2962.d
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

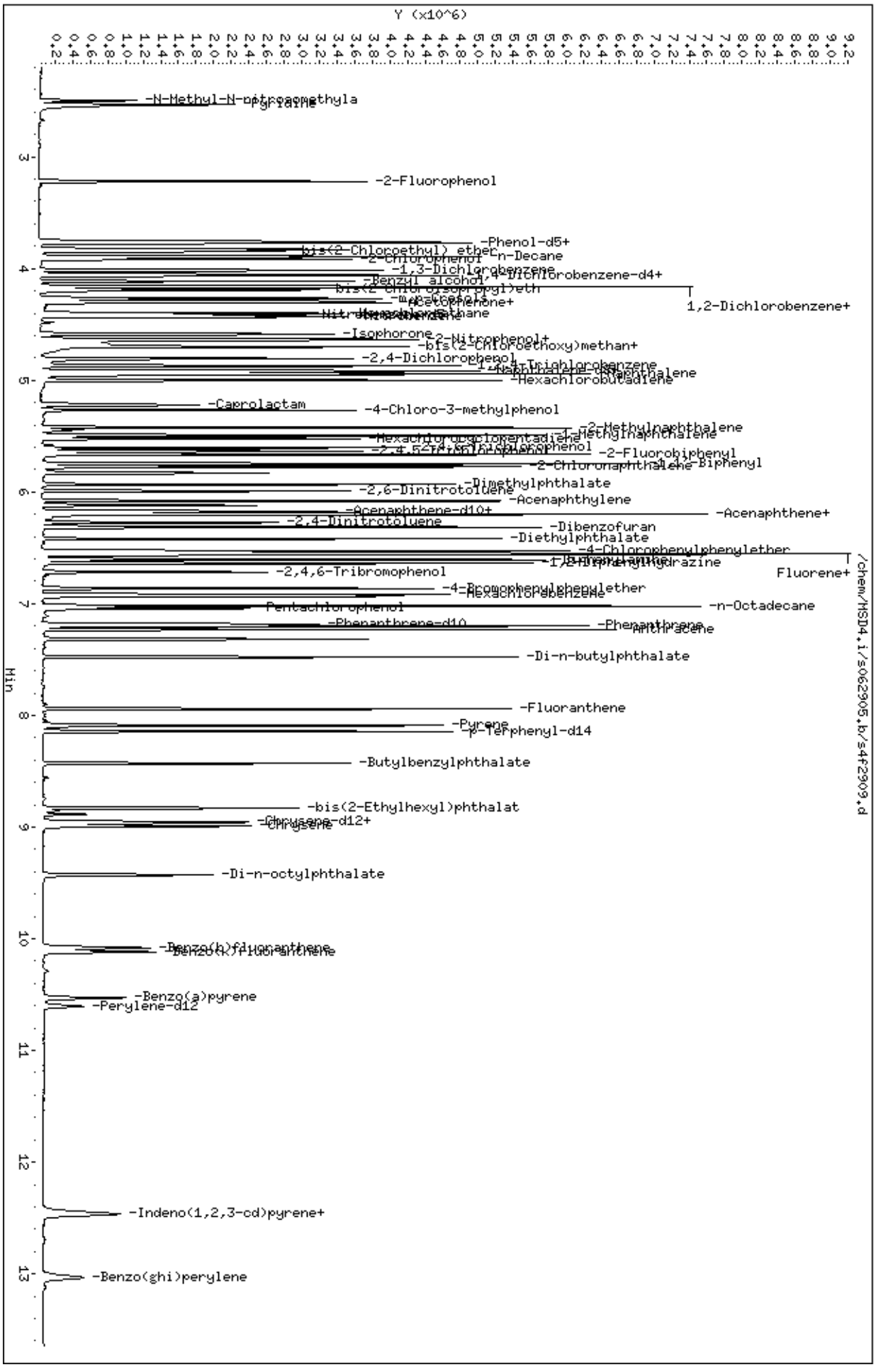
						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.049	4.049 (1.000)	282428	40.0000	
*	29 Naphthalene-d8	136	4.924	4.924 (1.000)	1300984	40.0000	
*	46 Acenaphthene-d10	164	6.176	6.176 (1.000)	638653	40.0000	
*	67 Phenanthrene-d10	188	7.180	7.180 (1.000)	933278	40.0000	
*	91 Chrysene-d12	240	8.967	8.967 (1.000)	372950	40.0000	
*	98 Perylene-d12	264	10.606	10.606 (1.000)	256677	40.0000	
$	3 2-Fluorophenol	112	3.220	3.220 (0.795)	783642	100.000	99.1
$	5 Phenol-d5	99	3.755	3.755 (0.927)	894919	100.000	98.2
$	20 Nitrobenzene-d5	82	4.419	4.419 (0.897)	911451	100.000	93.9
$	39 2-Fluorobiphenyl	172	5.665	5.665 (0.917)	1517663	100.000	91.3
$	60 2,4,6-Tribromophenol	329	6.716	6.716 (1.088)	203855	100.000	95.8
$	81 p-Terphenyl-d14	244	8.144	8.144 (0.908)	1028481	100.000	114
	1 N-Methyl-N-nitrosomethylamine	74	2.498	2.498 (0.617)	420746	100.000	106
	2 Pyridine	79	2.533	2.533 (0.626)	839718	100.000	104
	6 Phenol	94	3.767	3.767 (0.930)	879884	100.000	95.3
	7 bis(2-Chloroethyl) ether	93	3.849	3.849 (0.951)	1059177	100.000	113
	8 2-Chlorophenol	128	3.914	3.914 (0.967)	741589	100.000	96.6
	203 n-Decane	43	3.890	3.890 (0.961)	838902	100.000	91.3
	9 1,3-Dichlorobenzene	146	4.019	4.019 (0.993)	839641	100.000	94.9
	11 1,4-Dichlorobenzene	146	4.061	4.061 (1.003)	808055	100.000	94.4
	12 Benzyl alcohol	108	4.113	4.113 (1.016)	479018	100.000	97.5
	13 1,2-Dichlorobenzene	146	4.166	4.166 (1.029)	739760	100.000	92.1
	14 bis(2-Chloroisopropyl)ether	45	4.190	4.190 (1.035)	1194355	100.000	96.3
	15 o-Cresol	107	4.166	4.166 (1.029)	563543	100.000	93.8
	16 Acetophenone	105	4.307	4.307 (1.064)	955292	100.000	95.5
	17 N-Nitrosodipropylamine	70	4.290	4.290 (1.059)	580243	100.000	100

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	4.266	4.266	(1.054)	909748	100.000	104
19	Hexachloroethane	117	4.401	4.401	(1.087)	330962	100.000	100
21	Nitrobenzene	77	4.431	4.431	(0.900)	803369	100.000	93.4
22	Isophorone	82	4.583	4.583	(0.931)	1564938	100.000	91.6
23	2-Nitrophenol	139	4.642	4.642	(0.943)	387428	100.000	94.3
24	2,4-Dimethylphenol	122	4.636	4.636	(0.942)	695421	100.000	97.6
25	bis(2-Chloroethoxy)methane	93	4.701	4.701	(0.955)	904671	100.000	87.8
26	2,4-Dichlorophenol	162	4.807	4.807	(0.976)	667744	100.000	92.6
27	Benzoic acid	105	4.695	4.695	(0.953)	497789	100.000	98.6
28	1,2,4-Trichlorobenzene	180	4.871	4.871	(0.989)	713782	100.000	89.1
30	Naphthalene	128	4.942	4.942	(1.004)	2030459	100.000	74.2
204	alpha-Terpineol	59	4.913	4.913	(0.998)	681954	100.000	88.4
189	Caprolactam	113	5.224	5.224	(1.061)	253603	100.000	95.0
32	Hexachlorobutadiene	225	5.001	5.001	(1.016)	473507	100.000	89.3
33	4-Chloro-3-methylphenol	107	5.265	5.265	(1.069)	601242	100.000	87.5
34	2-Methylnaphthalene	142	5.424	5.424	(1.101)	1383972	100.000	79.8
35	1-Methylnaphthalene	142	5.494	5.494	(1.116)	1291858	100.000	80.2
36	Hexachlorocyclopentadiene	237	5.524	5.524	(0.894)	466408	100.000	100
208	1,1'-Biphenyl	154	5.747	5.747	(0.931)	1713491	100.000	91.0
37	2,4,6-Trichlorophenol	196	5.606	5.606	(0.908)	467986	100.000	99.0
38	2,4,5-Trichlorophenol	196	5.635	5.635	(0.912)	464910	100.000	93.9
40	2-Chloronaphthalene	162	5.776	5.776	(0.935)	1334757	100.000	93.7
43	Dimethylphthalate	163	5.935	5.935	(0.961)	1596965	100.000	92.7
44	2,6-Dinitrotoluene	165	5.994	5.994	(0.970)	364138	100.000	106
45	Acenaphthylene	152	6.082	6.082	(0.985)	2056243	100.000	90.6
47	Acenaphthene	154	6.199	6.199	(1.004)	1317423	100.000	92.4
48	2,4-Dinitrophenol	184	6.187	6.187	(1.002)	127658	100.000	95.2(Q)
49	Dibenzofuran	168	6.317	6.317	(1.023)	1790178	100.000	91.1
50	2,4-Dinitrotoluene	165	6.282	6.282	(1.017)	441338	100.000	106
51	Diethylphthalate	149	6.423	6.423	(1.040)	1501558	100.000	90.9
52	4-Nitrophenol	139	6.199	6.199	(1.004)	203303	100.000	97.3
53	Fluorene	166	6.552	6.552	(1.061)	1385467	100.000	85.5
54	4-Chlorophenylphenylether	204	6.528	6.528	(1.057)	779893	100.000	92.1
55	2-Methyl-4,6-dinitrophenol	198	6.564	6.564	(0.914)	206289	100.000	97.8
133	Diphenylamine	169	6.611	6.611	(0.921)	1256211	100.000	96.1
58	1,2-Diphenylhydrazine	77	6.640	6.640	(0.925)	1489480	100.000	99.7
59	Tributylphosphate	99	6.546	6.546	(1.060)	1613605	100.000	87.8
61	4-Bromophenylphenylether	248	6.863	6.863	(0.956)	415532	100.000	98.0
63	Hexachlorobenzene	284	6.922	6.922	(0.964)	448702	100.000	93.5
65	Pentachlorophenol	266	7.045	7.045	(0.981)	253134	100.000	108
206	n-Octadecane	57	7.022	7.022	(0.978)	1031781	100.000	95.5
68	Phenanthrene	178	7.198	7.198	(1.002)	1845540	100.000	86.8
69	Anthracene	178	7.233	7.233	(1.007)	1869061	100.000	89.0
72	Di-n-butylphthalate	149	7.480	7.480	(1.042)	2000825	100.000	98.0
76	Fluoranthene	202	7.944	7.944	(1.106)	1586128	100.000	66.7
79	Pyrene	202	8.091	8.091	(0.902)	1536703	100.000	119
85	Butylbenzylphthalate	149	8.432	8.432	(0.940)	592823	100.000	105

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
89 Benzo(a)anthracene	228	8.955	8.955	(0.999)	891701	100.000	97.2
92 Chrysene	228	8.990	8.990	(1.003)	836495	100.000	96.2
93 bis(2-Ethylhexyl)phthalate	149	8.831	8.831	(0.985)	754704	100.000	107
94 Di-n-octylphthalate	149	9.431	9.431	(0.889)	978223	100.000	97.7
95 Benzo(b)fluoranthene	252	10.083	10.083	(0.951)	707346	100.000	102
96 Benzo(k)fluoranthene	252	10.118	10.118	(0.954)	680754	100.000	97.6
97 Benzo(a)pyrene	252	10.529	10.529	(0.993)	562002	100.000	103
99 Indeno(1,2,3-cd)pyrene	276	12.457	12.457	(1.175)	531607	100.000	119
100 Dibenzo(a,h)anthracene	278	12.468	12.468	(1.176)	445862	100.000	107
101 Benzo(ghi)perylene	276	13.038	13.038	(1.229)	423332	100.000	110(TM)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.



Data File: /chem/MSD4.i/s062905.b/s4f2909.d
Date : 29-JUN-2005 14:36
Client ID: BNAICAL100
Sample Info: IUBN050610-071100 PPM11ISWMF1i1BNA ICAL
Column phase: J & W DB-5MS

Instrument: MSD4.i
Operator: EED
Column diameter: 0.20

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Data file : /chem/MSD4.i/s062905.b/s4f2910.d
Lab Smp Id: UBN050610-08 Client Smp ID: BNAICAL120
Inj Date : 29-JUN-2005 14:58
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-08|120 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 17:34 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.049	4.049	(1.000)	262949	40.0000	
*	29 Naphthalene-d8	136	4.924	4.924	(1.000)	1258028	40.0000	
*	46 Acenaphthene-d10	164	6.176	6.176	(1.000)	618042	40.0000	
*	67 Phenanthrene-d10	188	7.180	7.180	(1.000)	974947	40.0000	
*	91 Chrysene-d12	240	8.972	8.972	(1.000)	482740	40.0000	
*	98 Perylene-d12	264	10.606	10.606	(1.000)	287176	40.0000	
$	3 2-Fluorophenol	112	3.220	3.220	(0.795)	857305	120.000	116
$	5 Phenol-d5	99	3.755	3.755	(0.927)	987357	120.000	116
$	20 Nitrobenzene-d5	82	4.419	4.419	(0.897)	1016105	120.000	108
$	39 2-Fluorobiphenyl	172	5.665	5.665	(0.917)	1673108	120.000	104
$	60 2,4,6-Tribromophenol	329	6.716	6.716	(1.088)	243724	120.000	118
$	81 p-Terphenyl-d14	244	8.144	8.144	(0.908)	1509617	120.000	130(A)
	1 N-Methyl-N-nitrosomethylamine	74	2.498	2.498	(0.617)	459809	120.000	124(A)
	2 Pyridine	79	2.533	2.533	(0.626)	923608	120.000	123(A)
	6 Phenol	94	3.767	3.767	(0.930)	949662	120.000	110
	7 bis(2-Chloroethyl) ether	93	3.849	3.849	(0.951)	847587	120.000	97.3
	8 2-Chlorophenol	128	3.914	3.914	(0.967)	832119	120.000	116
	203 n-Decane	43	3.890	3.890	(0.961)	904545	120.000	106
	9 1,3-Dichlorobenzene	146	4.019	4.019	(0.993)	911821	120.000	111
	11 1,4-Dichlorobenzene	146	4.061	4.061	(1.003)	885489	120.000	111
	12 Benzyl alcohol	108	4.119	4.119	(1.017)	527746	120.000	115
	13 1,2-Dichlorobenzene	146	4.166	4.166	(1.029)	796238	120.000	106
	14 bis(2-Chloroisopropyl)ether	45	4.190	4.190	(1.035)	1306245	120.000	113
	15 o-Cresol	107	4.166	4.166	(1.029)	622725	120.000	111
	16 Acetophenone	105	4.307	4.307	(1.064)	1067719	120.000	115
	17 N-Nitrosodipropylamine	70	4.296	4.296	(1.061)	640311	120.000	119

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	4.266	4.266	(1.054)	936270	120.000	115
19	Hexachloroethane	117	4.401	4.401	(1.087)	363120	120.000	118
21	Nitrobenzene	77	4.431	4.431	(0.900)	878773	120.000	106
22	Isophorone	82	4.589	4.589	(0.932)	1751442	120.000	106
23	2-Nitrophenol	139	4.648	4.648	(0.944)	442999	120.000	112
24	2,4-Dimethylphenol	122	4.630	4.630	(0.940)	799707	120.000	118
25	bis(2-Chloroethoxy)methane	93	4.701	4.701	(0.955)	1001818	120.000	100
26	2,4-Dichlorophenol	162	4.807	4.807	(0.976)	748868	120.000	107
27	Benzoic acid	105	4.701	4.701	(0.955)	600957	120.000	121(AQ)
28	1,2,4-Trichlorobenzene	180	4.871	4.871	(0.989)	775889	120.000	100
30	Naphthalene	128	4.942	4.942	(1.004)	2219365	120.000	83.8(A)
204	alpha-Terpineol	59	4.913	4.913	(0.998)	751874	120.000	101
189	Caprolactam	113	5.230	5.230	(1.062)	292307	120.000	113
32	Hexachlorobutadiene	225	5.001	5.001	(1.016)	516885	120.000	101
33	4-Chloro-3-methylphenol	107	5.265	5.265	(1.069)	665118	120.000	100
34	2-Methylnaphthalene	142	5.424	5.424	(1.101)	1531521	120.000	91.4
35	1-Methylnaphthalene	142	5.494	5.494	(1.116)	1426819	120.000	91.6
36	Hexachlorocyclopentadiene	237	5.524	5.524	(0.894)	568447	120.000	126(A)
208	1,1'-Biphenyl	154	5.747	5.747	(0.931)	1894275	120.000	104
37	2,4,6-Trichlorophenol	196	5.606	5.606	(0.908)	527525	120.000	115
38	2,4,5-Trichlorophenol	196	5.641	5.641	(0.913)	523550	120.000	109
40	2-Chloronaphthalene	162	5.776	5.776	(0.935)	1469957	120.000	106
43	Dimethylphthalate	163	5.935	5.935	(0.961)	1807001	120.000	108
44	2,6-Dinitrotoluene	165	5.994	5.994	(0.970)	429162	120.000	129(A)
45	Acenaphthylene	152	6.082	6.082	(0.985)	2299307	120.000	105
47	Acenaphthene	154	6.199	6.199	(1.004)	1459597	120.000	106
48	2,4-Dinitrophenol	184	6.193	6.193	(1.003)	168932	120.000	124(AQ)
49	Dibenzofuran	168	6.317	6.317	(1.023)	1994190	120.000	105
50	2,4-Dinitrotoluene	165	6.282	6.282	(1.017)	541927	120.000	134(A)
51	Diethylphthalate	149	6.423	6.423	(1.040)	1722803	120.000	108
52	4-Nitrophenol	139	6.205	6.205	(1.005)	268366	120.000	133(A)
53	Fluorene	166	6.558	6.558	(1.062)	1540379	120.000	98.3
54	4-Chlorophenylphenylether	204	6.528	6.528	(1.057)	896624	120.000	109
55	2-Methyl-4,6-dinitrophenol	198	6.569	6.569	(0.915)	279741	120.000	124(A)
133	Diphenylamine	169	6.611	6.611	(0.921)	1461344	120.000	107
58	1,2-Diphenylhydrazine	77	6.640	6.640	(0.925)	1715540	120.000	110
59	Tributylphosphate	99	6.552	6.552	(1.061)	1858302	120.000	104
61	4-Bromophenylphenylether	248	6.863	6.863	(0.956)	482925	120.000	109
63	Hexachlorobenzene	284	6.922	6.922	(0.964)	537996	120.000	107
65	Pentachlorophenol	266	7.045	7.045	(0.981)	296717	120.000	122(A)
206	n-Octadecane	57	7.022	7.022	(0.978)	1139692	120.000	101
68	Phenanthrene	178	7.204	7.204	(1.003)	2228429	120.000	100
69	Anthracene	178	7.233	7.233	(1.007)	2245289	120.000	102
72	Di-n-butylphthalate	149	7.480	7.480	(1.042)	2442011	120.000	116
76	Fluoranthene	202	7.944	7.944	(1.106)	2177248	120.000	87.6(A)
79	Pyrene	202	8.097	8.097	(0.902)	2177871	120.000	130(A)
85	Butylbenzylphthalate	149	8.432	8.432	(0.940)	937213	120.000	128(A)

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
89 Benzo(a)anthracene	228	8.961	8.961	(0.999)	1356461	120.000	114
92 Chrysene	228	8.996	8.996	(1.003)	1261018	120.000	112
93 bis(2-Ethylhexyl)phthalate	149	8.831	8.831	(0.984)	1198119	120.000	132(A)
94 Di-n-octylphthalate	149	9.431	9.431	(0.889)	1504097	120.000	134(A)
95 Benzo(b)fluoranthene	252	10.083	10.083	(0.951)	908020	120.000	117
96 Benzo(k)fluoranthene	252	10.118	10.118	(0.954)	971683	120.000	124(A)
97 Benzo(a)pyrene	252	10.535	10.535	(0.993)	757069	120.000	125(A)
99 Indeno(1,2,3-cd)pyrene	276	12.462	12.462	(1.175)	665771	120.000	133(A)
100 Dibenzo(a,h)anthracene	278	12.474	12.474	(1.176)	545716	120.000	117
101 Benzo(ghi)perylene	276	13.038	13.038	(1.229)	565644	120.000	132(TAM)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: /chem/MSD4.i/s062905.b/s4f2910.d

Date : 29-JUN-2005 14:58

Client ID: BNAICAL120

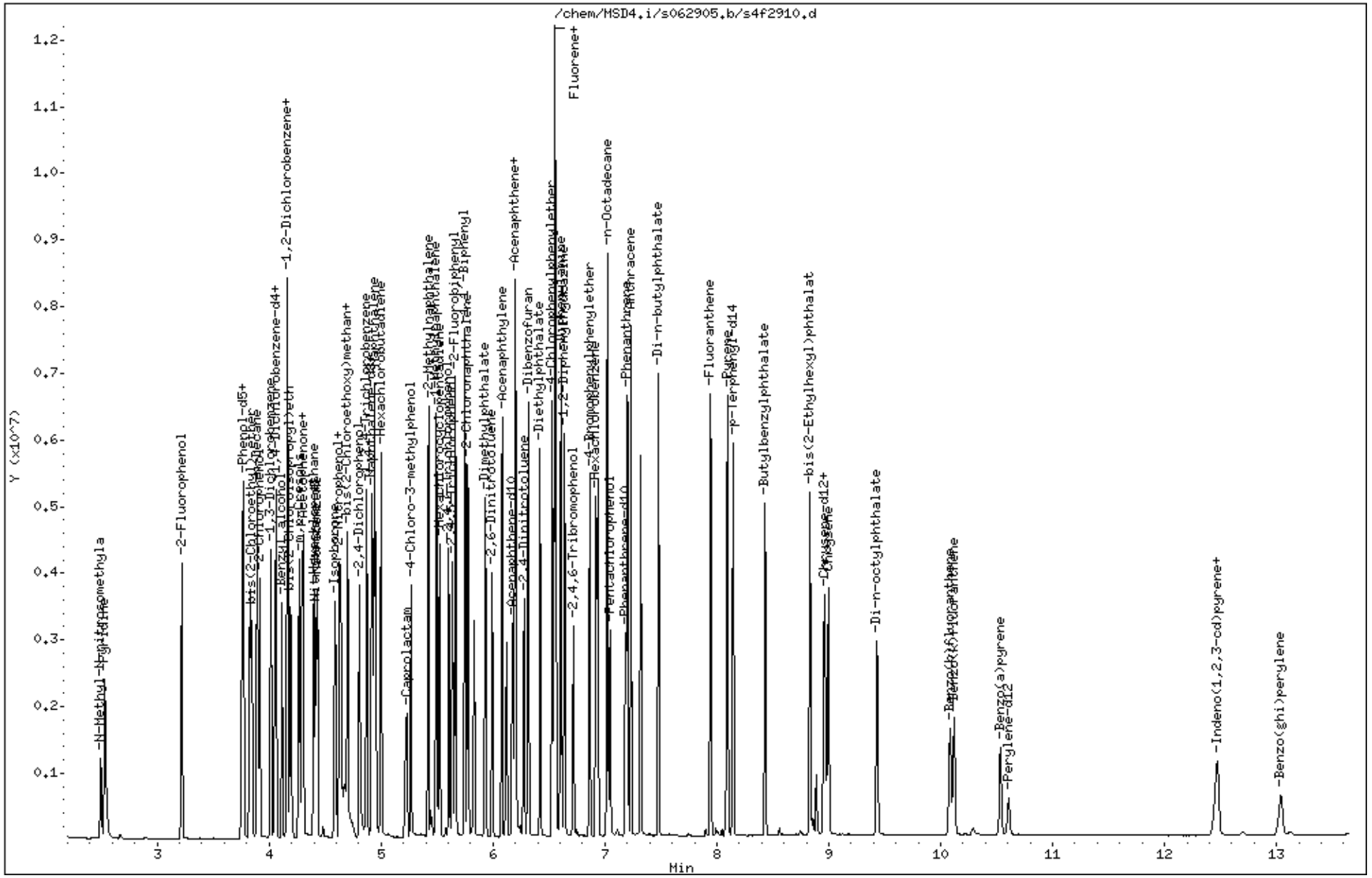
Instrument: MSD4.i

Sample Info: !UBN050610-08!120 PPM!1!SVMF!1!BNA ICAL

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



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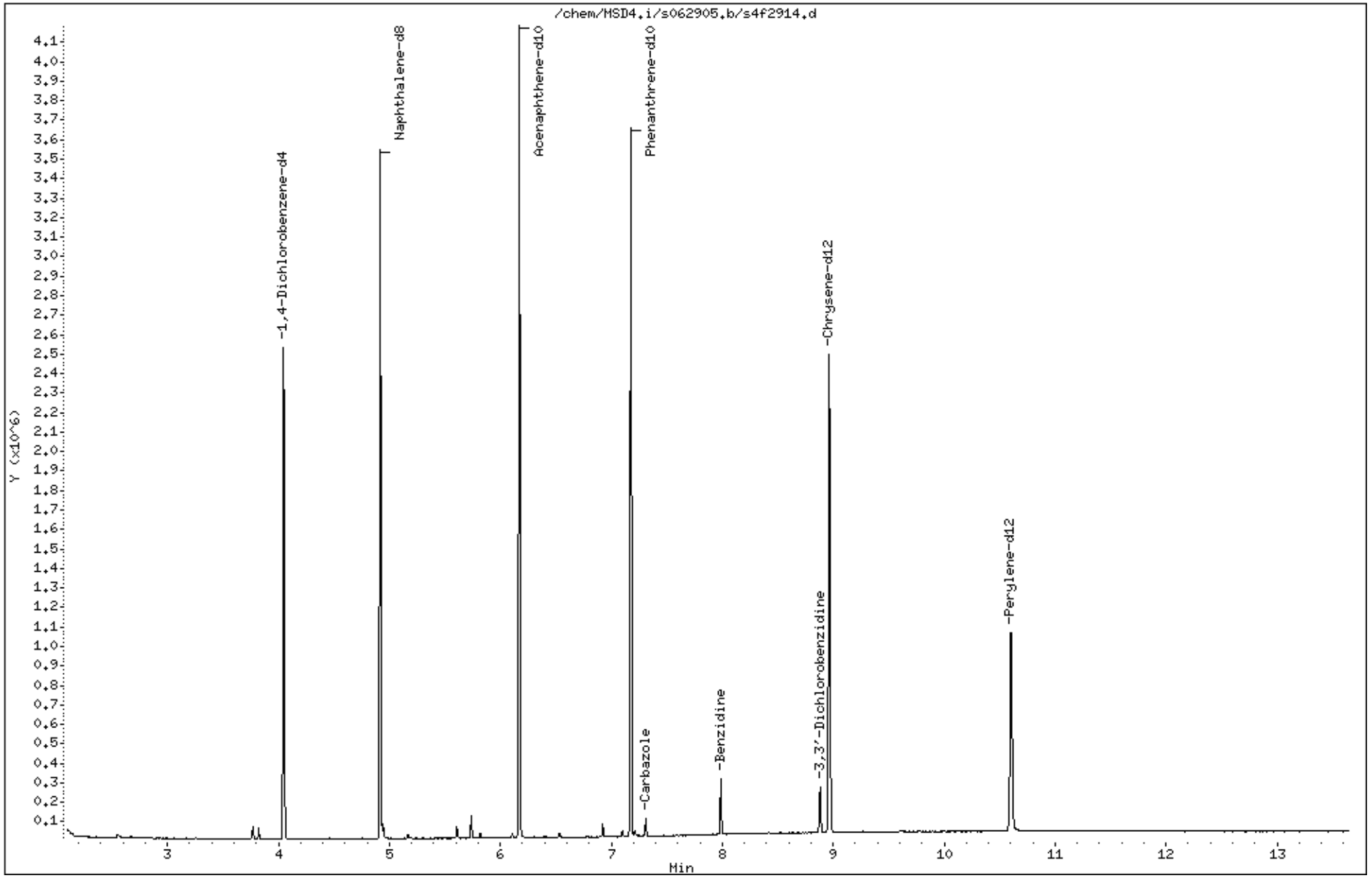
Data file : /chem/MSD4.i/s062905.b/s4f2914.d
Lab Smp Id: UBN050607-01 Client Smp ID: ANBZICAL001
Inj Date : 29-JUN-2005 16:23
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-01|1 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 01-Jul-2005 09:05 hnm Quant Type: ISTD
Cal Date : 29-JUN-2005 16:23 Cal File: s4f2914.d
Als bottle: 12 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.050	(1.000)	325512	40.0000	
* 29 Naphthalene-d8	136	4.920	4.920	(1.000)	1193529	40.0000	
* 46 Acenaphthene-d10	164	6.171	6.171	(1.000)	697445	40.0000	
* 67 Phenanthrene-d10	188	7.176	7.182	(1.000)	1069458	40.0000	
* 91 Chrysene-d12	240	8.962	8.968	(1.000)	823382	40.0000	
* 98 Perylene-d12	264	10.607	10.607	(1.000)	574564	40.0000	
77 Benzidine	184	7.987	7.989	(0.891)	77347	10.0000	7.6
90 3,3'-Dichlorobenzidine	252	8.886	8.888	(0.991)	46594	10.0000	8.5
173 Carbazole	167	7.311	7.313	(1.019)	25272	1.00000	1.1

Data File: /chem/MSD4.i/s062905.b/s4f2914.d
Date : 29-JUN-2005 16:23
Client ID: ANBZICAL001
Sample Info: !UBN050607-01!1 PPM!1!SVMF!1!ANBZ ICAL

Instrument: MSD4.i
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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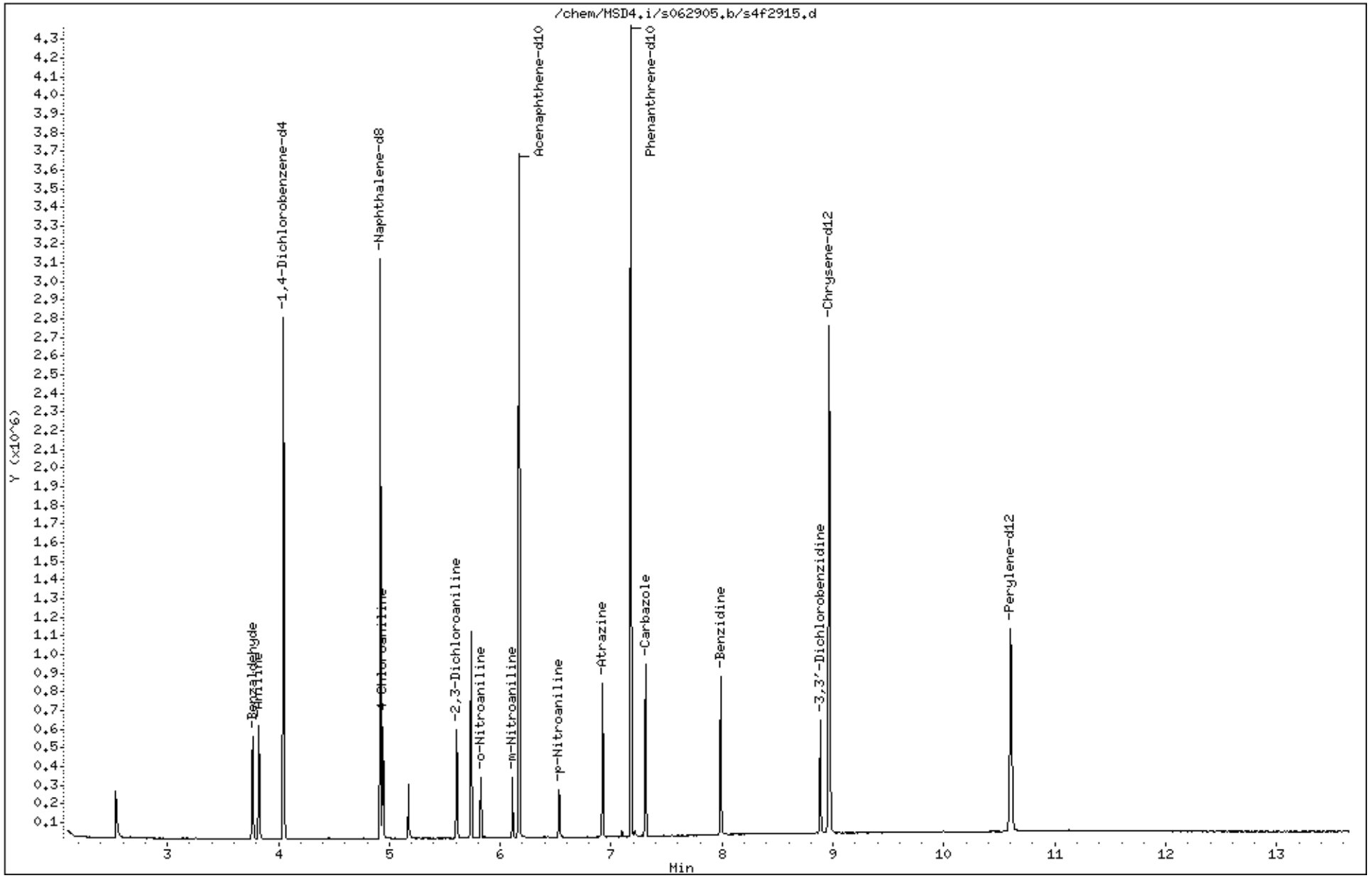
Data file : /chem/MSD4.i/s062905.b/s4f2915.d
Lab Smp Id: UBN050607-02 Client Smp ID: ANBZICAL010
Inj Date : 29-JUN-2005 16:46
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-02|10 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:45 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 07:32 Cal File: s4f2957.d
Als bottle: 13 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.046	4.046	(1.000)	317774	40.0000	
* 29 Naphthalene-d8	136	4.922	4.922	(1.000)	1193579	40.0000	
* 46 Acenaphthene-d10	164	6.167	6.167	(1.000)	705775	40.0000	
* 67 Phenanthrene-d10	188	7.178	7.178	(1.000)	1110126	40.0000	
* 91 Chrysene-d12	240	8.964	8.964	(1.000)	928069	40.0000	
* 98 Perylene-d12	264	10.603	10.603	(1.000)	596702	40.0000	
4 Aniline	93	3.823	3.823	(0.945)	159100	10.0000	10.4
209 Benzaldehyde	77	3.770	3.770	(0.932)	86125	10.0000	10.1
31 4-Chloroaniline	127	4.945	4.945	(1.005)	120924	10.0000	10.4
205 2,3-Dichloroaniline	161	5.609	5.609	(0.909)	99105	10.0000	10.6
42 o-Nitroaniline	65	5.821	5.821	(0.944)	44659	10.0000	8.7
41 m-Nitroaniline	138	6.109	6.109	(0.990)	39964	10.0000	8.7
56 p-Nitroaniline	138	6.532	6.532	(1.059)	32969	10.0000	8.5
207 Atrazine	173	6.925	6.925	(0.965)	15503	10.0000	9.8
77 Benzidine	184	7.989	7.989	(0.891)	226611	20.0000	19.8
90 3,3'-Dichlorobenzidine	252	8.888	8.888	(0.991)	127081	20.0000	20.6
173 Carbazole	167	7.313	7.313	(1.019)	277801	10.0000	11.3

Data File: /chem/MSD4.i/s062905.b/s4f2915.d
Date : 29-JUN-2005 16:46
Client ID: ANBZICAL010
Sample Info: !UBN050607-02!10 PPM!1!SVMF!1!ANBZ ICAL

Instrument: MSD4.i
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD4.i/s062905.b/s4f2916.d
Lab Smp Id: UBN050607-03 Client Smp ID: ANBZICAL020
Inj Date : 29-JUN-2005 17:08
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-03|20 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:46 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:01 Cal File: s4f2958.d
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.049	4.049	(1.000)	329904	40.0000	
* 29 Naphthalene-d8	136	4.919	4.919	(1.000)	1254051	40.0000	
* 46 Acenaphthene-d10	164	6.170	6.170	(1.000)	725919	40.0000	
* 67 Phenanthrene-d10	188	7.181	7.181	(1.000)	1177428	40.0000	
* 91 Chrysene-d12	240	8.967	8.967	(1.000)	1027390	40.0000	
* 98 Perylene-d12	264	10.606	10.606	(1.000)	693955	40.0000	
4 Aniline	93	3.826	3.826	(0.945)	330809	20.0000	20.9
209 Benzaldehyde	77	3.767	3.767	(0.930)	184246	20.0000	20.9
31 4-Chloroaniline	127	4.948	4.948	(1.006)	255308	20.0000	20.9
205 2,3-Dichloroaniline	161	5.612	5.612	(0.910)	205296	20.0000	21.4
42 o-Nitroaniline	65	5.824	5.824	(0.944)	102955	20.0000	19.5
41 m-Nitroaniline	138	6.111	6.111	(0.990)	95059	20.0000	20.1
56 p-Nitroaniline	138	6.535	6.535	(1.059)	82227	20.0000	20.6
207 Atrazine	173	6.928	6.928	(0.965)	33733	20.0000	20.1
77 Benzidine	184	7.992	7.992	(0.891)	688565	50.0000	54.3
90 3,3'-Dichlorobenzidine	252	8.885	8.885	(0.991)	377877	50.0000	55.2
173 Carbazole	167	7.316	7.316	(1.019)	591273	20.0000	22.7

Data File: /chem/MSD4.i/s062905.b/s4f2916.d

Page 1

Date : 29-JUN-2005 17:08

Client ID: ANBZICAL020

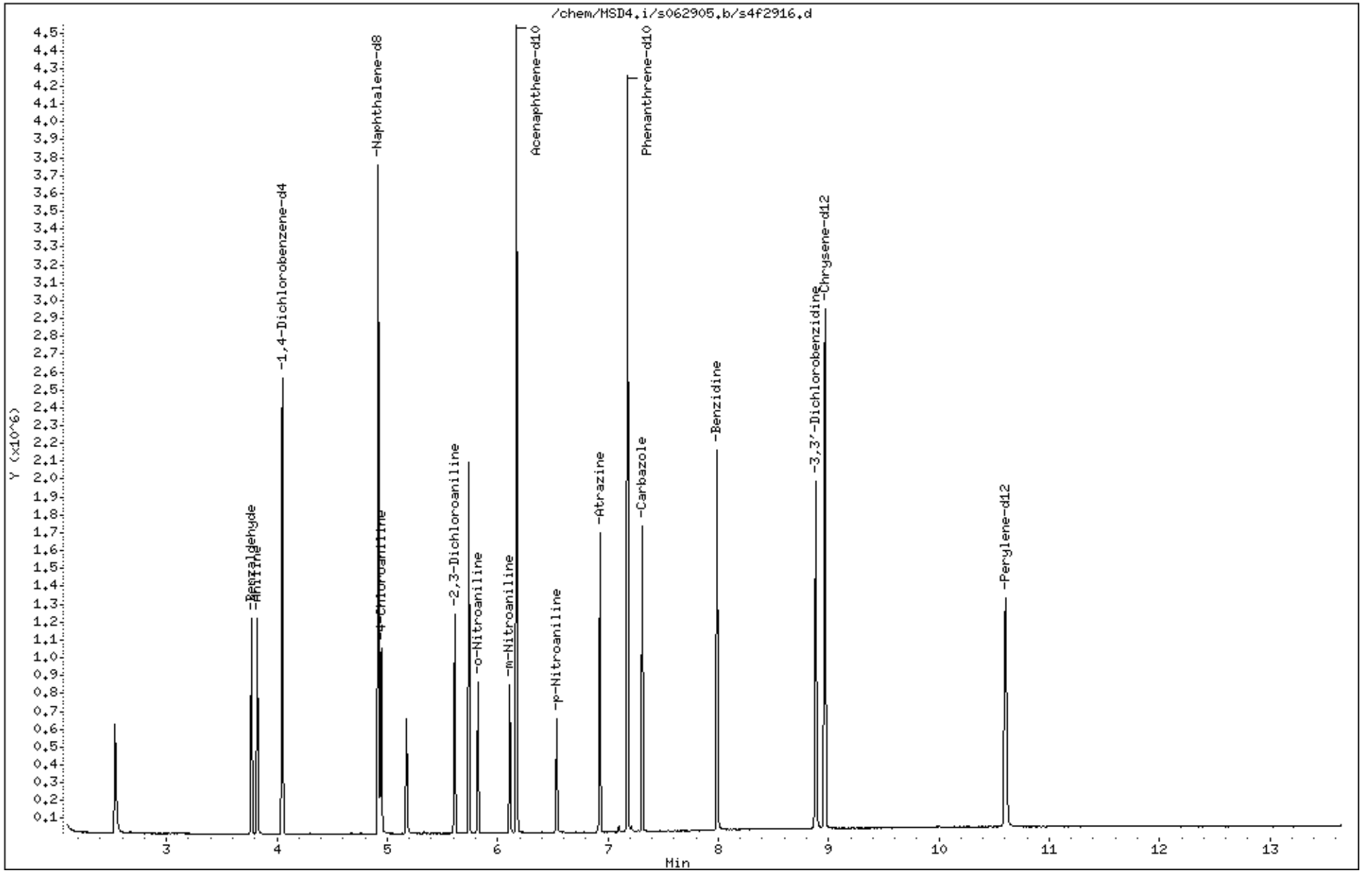
Instrument: MSD4.i

Sample Info: !UBN050607-03!20 PPM!1!SVMF!1!ANBZ ICAL

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2917.d
Lab Smp Id: UBN050607-04 Client Smp ID: ANBZICAL040
Inj Date : 29-JUN-2005 17:29
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-04|40 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:46 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:29 Cal File: s4f2959.d
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	322821	40.0000	
* 29 Naphthalene-d8	136	4.920	4.920	(1.000)	1208752	40.0000	
* 46 Acenaphthene-d10	164	6.171	6.171	(1.000)	706707	40.0000	
* 67 Phenanthrene-d10	188	7.176	7.176	(1.000)	1121199	40.0000	
* 91 Chrysene-d12	240	8.968	8.968	(1.000)	810850	40.0000	
* 98 Perylene-d12	264	10.601	10.601	(1.000)	474458	40.0000	
4 Aniline	93	3.827	3.827	(0.946)	640172	40.0000	41.3
209 Benzaldehyde	77	3.768	3.768	(0.932)	350702	40.0000	40.6
31 4-Chloroaniline	127	4.949	4.949	(1.006)	487150	40.0000	41.3
205 2,3-Dichloroaniline	161	5.613	5.613	(0.910)	383943	40.0000	41.2
42 o-Nitroaniline	65	5.825	5.825	(0.944)	206752	40.0000	40.2
41 m-Nitroaniline	138	6.112	6.112	(0.990)	182547	40.0000	39.6
56 p-Nitroaniline	138	6.535	6.535	(1.059)	150276	40.0000	38.6
207 Atrazine	173	6.929	6.929	(0.966)	65020	40.0000	40.8
77 Benzidine	184	7.993	7.993	(0.891)	1080040	100.000	108
90 3,3'-Dichlorobenzidine	252	8.886	8.886	(0.991)	552301	100.000	102
173 Carbazole	167	7.317	7.317	(1.020)	1003514	40.0000	40.5

Data File: /chem/MSD4.i/s062905.b/s4f2917.d

Date : 29-JUN-2005 17:29

Client ID: ANBZICAL040

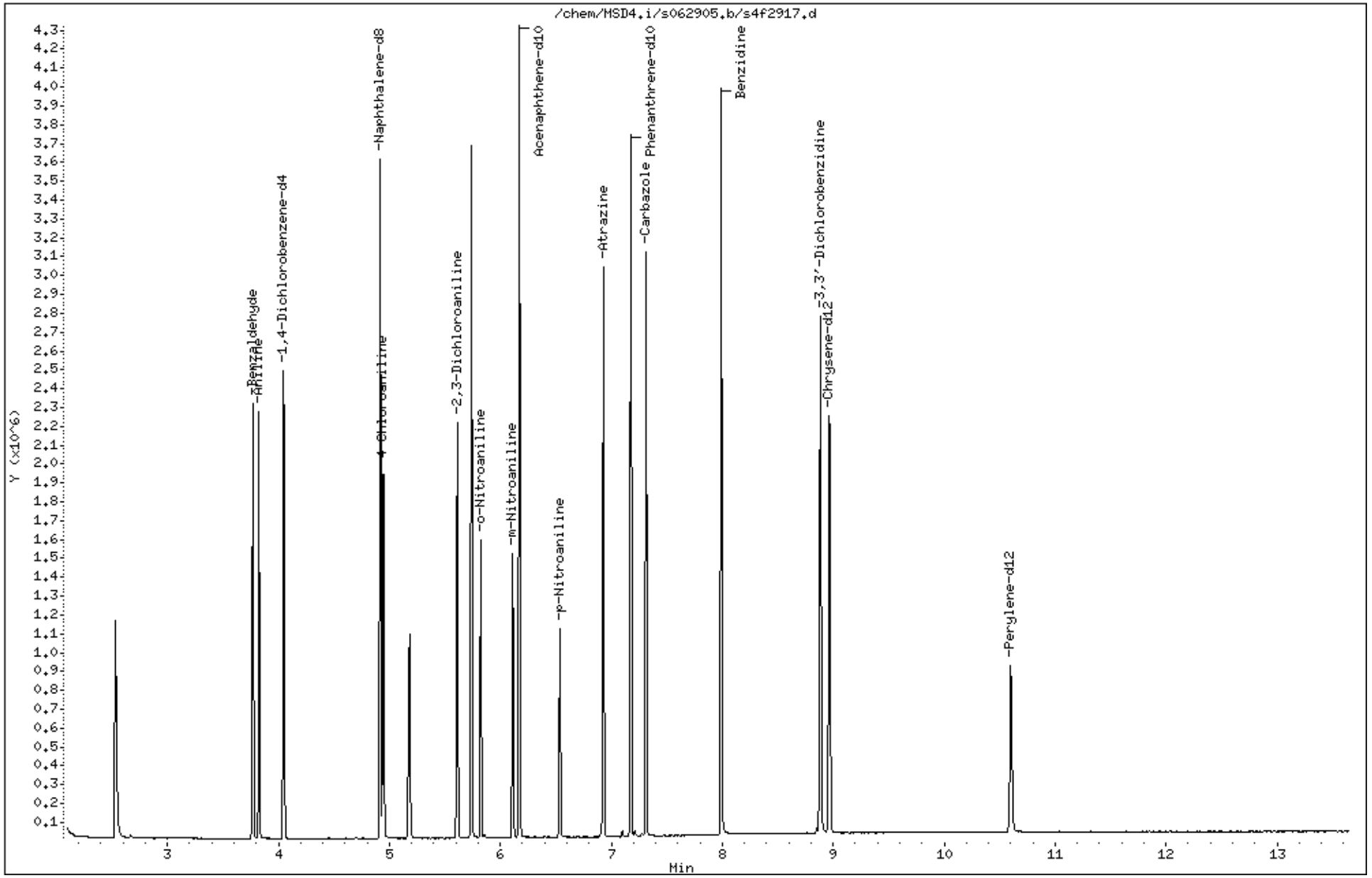
Sample Info: !UBN050607-04!40 PPM!1!SVMF!1!ANBZ ICAL

Instrument: MSD4.i

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



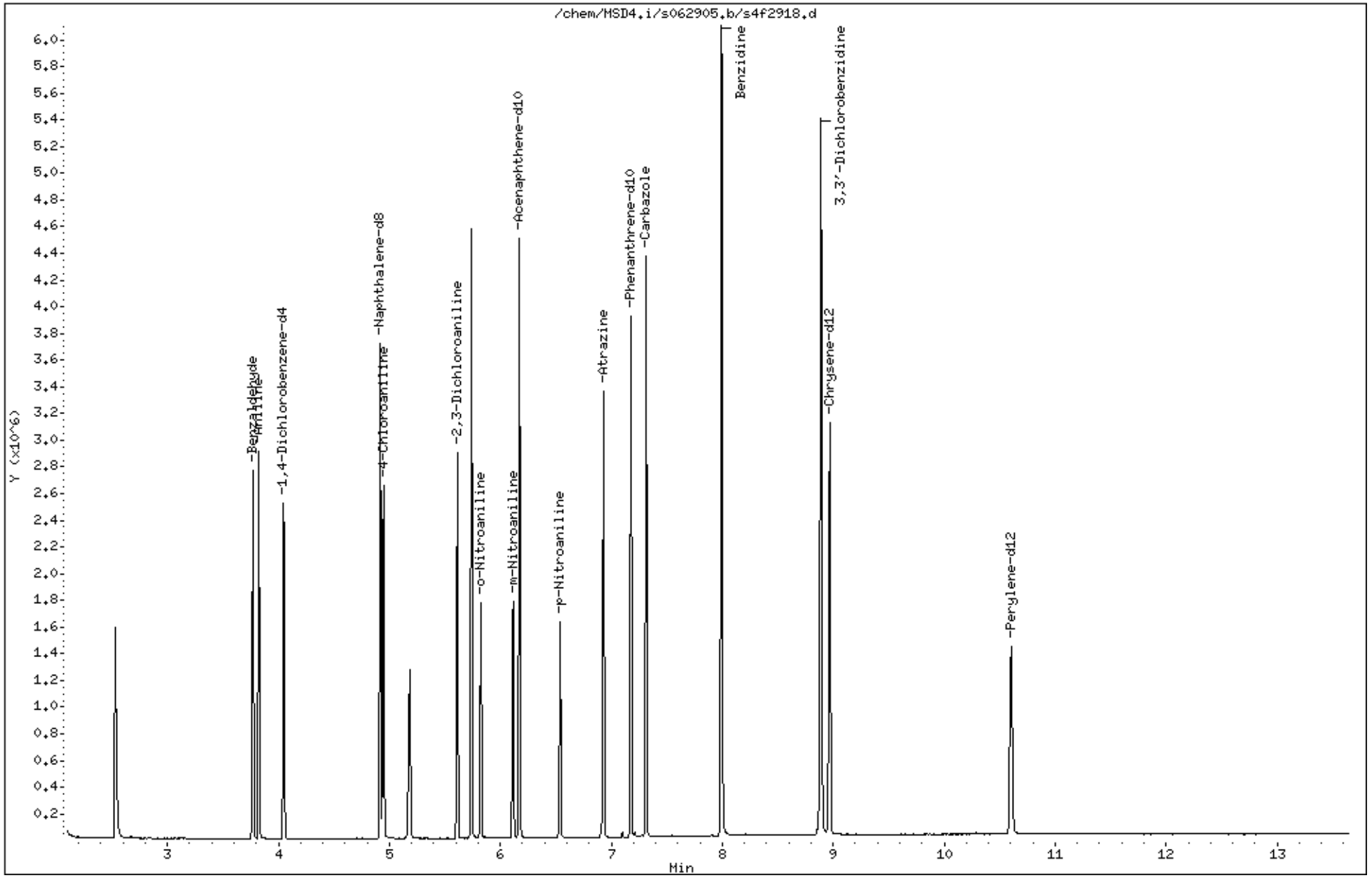
General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2918.d
Lab Smp Id: UBN050607-05 Client Smp ID: ANBZICAL050
Inj Date : 29-JUN-2005 17:51
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-05|50 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:46 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:57 Cal File: s4f2960.d
Als bottle: 16 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	329263	40.0000	
* 29 Naphthalene-d8	136	4.919	4.919	(1.000)	1234434	40.0000	
* 46 Acenaphthene-d10	164	6.171	6.171	(1.000)	732323	40.0000	
* 67 Phenanthrene-d10	188	7.182	7.182	(1.000)	1185785	40.0000	
* 91 Chrysene-d12	240	8.968	8.968	(1.000)	1061930	40.0000	
* 98 Perylene-d12	264	10.607	10.607	(1.000)	772402	40.0000	
4 Aniline	93	3.827	3.827	(0.946)	793489	50.0000	50.2
209 Benzaldehyde	77	3.768	3.768	(0.932)	446080	50.0000	50.7
31 4-Chloroaniline	127	4.949	4.949	(1.006)	615691	50.0000	51.2
205 2,3-Dichloroaniline	161	5.613	5.613	(0.910)	479389	50.0000	49.6
42 o-Nitroaniline	65	5.824	5.824	(0.944)	275248	50.0000	51.7
41 m-Nitroaniline	138	6.118	6.118	(0.991)	249962	50.0000	52.4
56 p-Nitroaniline	138	6.541	6.541	(1.060)	221669	50.0000	54.9
207 Atrazine	173	6.929	6.929	(0.965)	84903	50.0000	50.4
77 Benzidine	184	7.998	7.998	(0.892)	2116722	150.000	162
90 3,3'-Dichlorobenzidine	252	8.891	8.891	(0.991)	1179186	150.000	167
173 Carbazole	167	7.317	7.317	(1.019)	1333168	50.0000	50.9

Data File: /chem/MSD4.i/s062905.b/s4f2918.d
Date : 29-JUN-2005 17:51
Client ID: ANBZICAL050
Sample Info: !UBN050607-05!50 PPM!1!SVMF!1!ANBZ ICAL

Instrument: MSD4.i
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



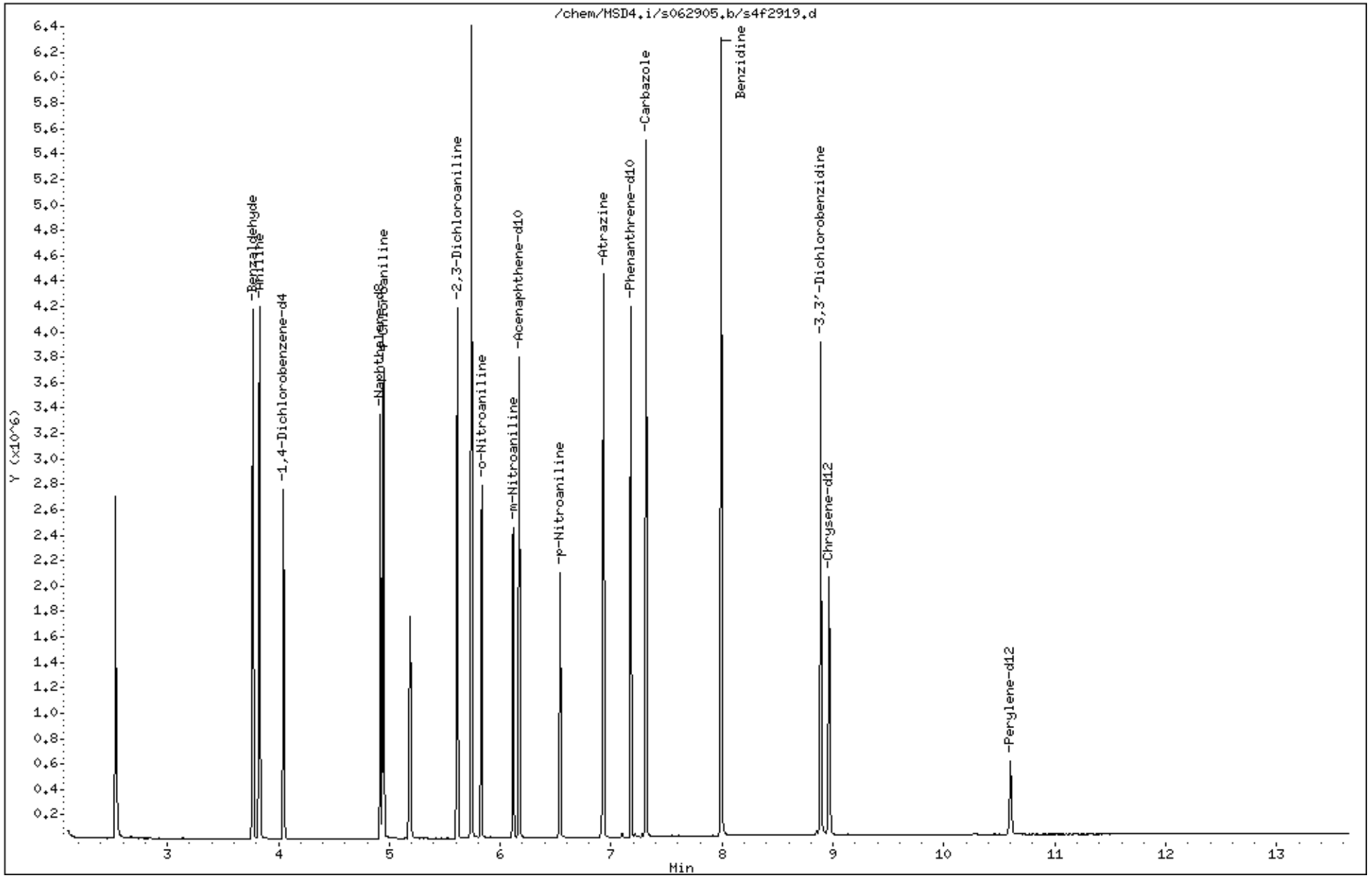
General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2919.d
Lab Smp Id: UBN050607-06 Client Smp ID: ANBZICAL080
Inj Date : 29-JUN-2005 18:13
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-06|80 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:46 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 09:26 Cal File: s4f2961.d
Als bottle: 17 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.046	4.046	(1.000)	313453	40.0000	
* 29 Naphthalene-d8	136	4.922	4.922	(1.000)	1206529	40.0000	
* 46 Acenaphthene-d10	164	6.173	6.173	(1.000)	689770	40.0000	
* 67 Phenanthrene-d10	188	7.178	7.178	(1.000)	1092459	40.0000	
* 91 Chrysene-d12	240	8.964	8.964	(1.000)	681087	40.0000	
* 98 Perylene-d12	264	10.603	10.603	(1.000)	308518	40.0000	
4 Aniline	93	3.829	3.829	(0.946)	1177619	80.0000	78.3
209 Benzaldehyde	77	3.770	3.770	(0.932)	667761	80.0000	79.7
31 4-Chloroaniline	127	4.951	4.951	(1.006)	901043	80.0000	76.6
205 2,3-Dichloroaniline	161	5.615	5.615	(0.910)	706753	80.0000	77.6
42 o-Nitroaniline	65	5.832	5.832	(0.945)	413972	80.0000	82.6
41 m-Nitroaniline	138	6.120	6.120	(0.991)	362327	80.0000	80.6
56 p-Nitroaniline	138	6.543	6.543	(1.060)	294074	80.0000	77.4
207 Atrazine	173	6.931	6.931	(0.966)	121568	80.0000	78.3
77 Benzidine	184	7.995	7.995	(0.892)	1797053	200.000	214
90 3,3'-Dichlorobenzidine	252	8.888	8.888	(0.991)	839381	200.000	185
173 Carbazole	167	7.319	7.319	(1.020)	1729392	80.0000	71.6

Data File: /chem/MSD4.i/s062905.b/s4f2919.d
Date : 29-JUN-2005 18:13
Client ID: ANBZICAL080
Sample Info: !UBN050607-06!80 PPM!1!SVMF!1!ANBZ ICAL

Instrument: MSD4.i
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2920.d
Lab Smp Id: UBN050607-07 Client Smp ID: ANBZICAL100
Inj Date : 29-JUN-2005 18:35
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-07|100 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:46 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 09:55 Cal File: s4f2962.d
Als bottle: 18 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.048	4.048	(1.000)	311958	40.0000	
* 29 Naphthalene-d8	136	4.917	4.917	(1.000)	1190685	40.0000	
* 46 Acenaphthene-d10	164	6.169	6.169	(1.000)	700312	40.0000	
* 67 Phenanthrene-d10	188	7.179	7.179	(1.000)	1116299	40.0000	
* 91 Chrysene-d12	240	8.965	8.965	(1.000)	803464	40.0000	
* 98 Perylene-d12	264	10.605	10.605	(1.000)	476728	40.0000	
4 Aniline	93	3.830	3.830	(0.946)	1458046	100.000	97.4
209 Benzaldehyde	77	3.771	3.771	(0.932)	825017	100.000	99.0
31 4-Chloroaniline	127	4.952	4.952	(1.007)	1139376	100.000	98.1
205 2,3-Dichloroaniline	161	5.616	5.616	(0.910)	887190	100.000	96.0
42 o-Nitroaniline	65	5.834	5.834	(0.946)	536010	100.000	105
41 m-Nitroaniline	138	6.122	6.122	(0.992)	479057	100.000	105
56 p-Nitroaniline	138	6.545	6.545	(1.061)	402752	100.000	104
207 Atrazine	173	6.938	6.938	(0.966)	163838	100.000	103
77 Benzidine	184	7.996	7.996	(0.892)	2573803	250.000	260
90 3,3'-Dichlorobenzidine	252	8.895	8.895	(0.992)	1354866	250.000	253
173 Carbazole	167	7.320	7.320	(1.020)	2191668	100.000	88.9

Data File: /chem/MSD4.i/s062905.b/s4f2920.d

Date : 29-JUN-2005 18:35

Client ID: ANBZICAL100

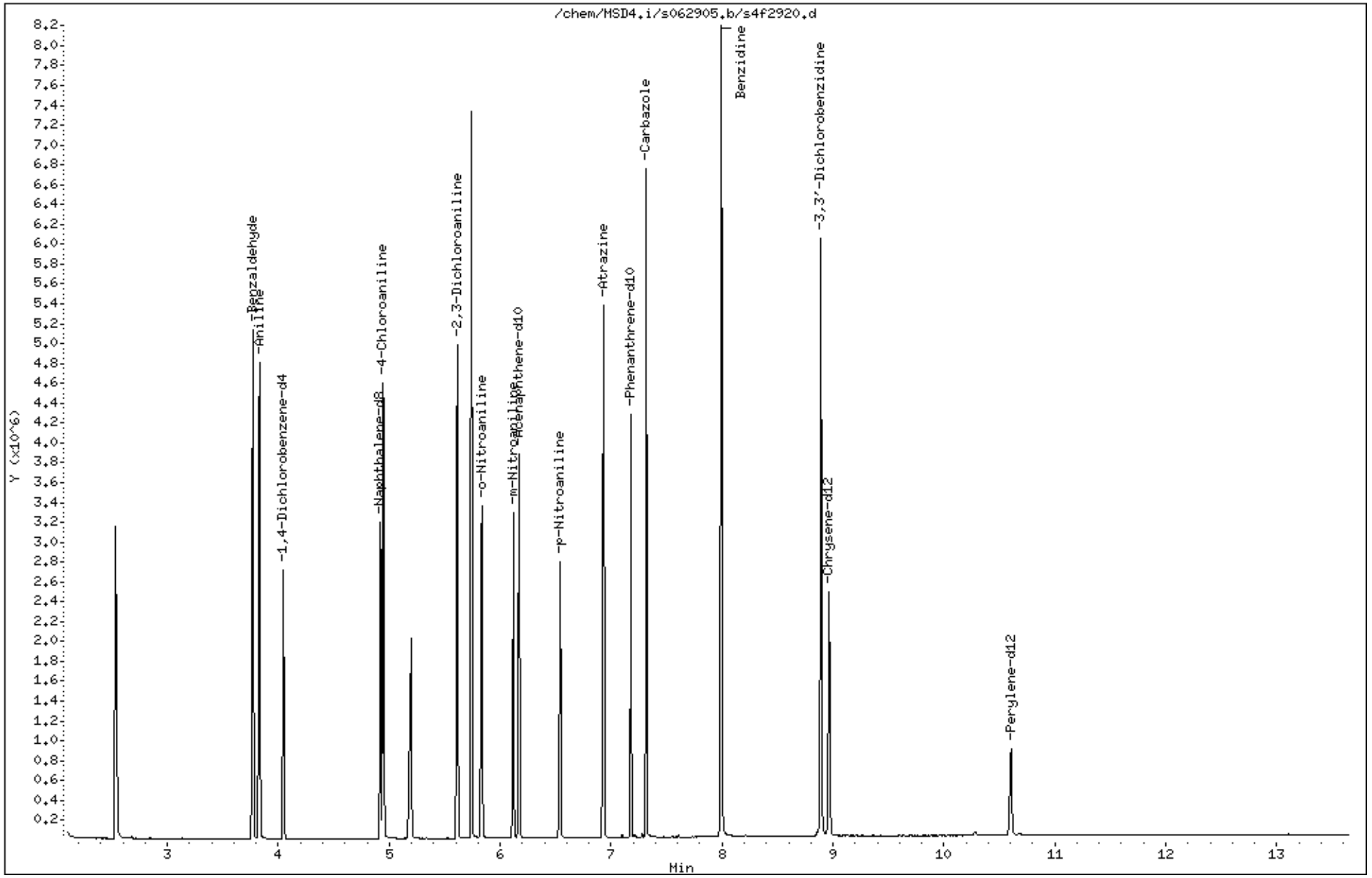
Sample Info: IUBN050607-07I100 PPMI1ISVMFI1IANBZ ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



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Data file : /chem/MSD4.i/s062905.b/s4f2921.d
Lab Smp Id: UBN050607-08 Client Smp ID: ANBZICAL120
Inj Date : 29-JUN-2005 18:57
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050607-08|120 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:47 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 19 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

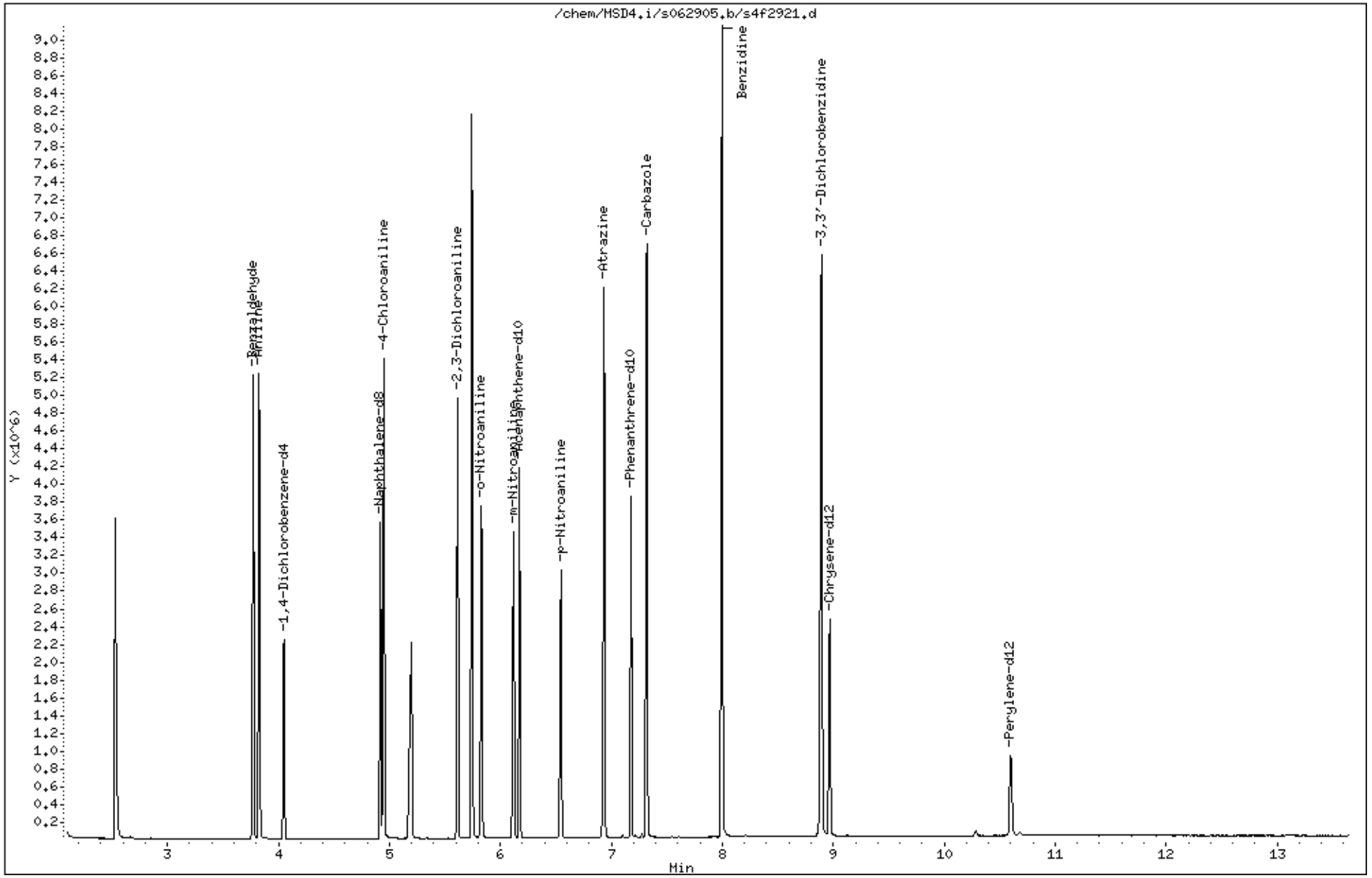
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.050	4.050	(1.000)	305192	40.0000	
* 29 Naphthalene-d8	136	4.919	4.919	(1.000)	1164993	40.0000	
* 46 Acenaphthene-d10	164	6.171	6.171	(1.000)	677006	40.0000	
* 67 Phenanthrene-d10	188	7.181	7.181	(1.000)	1089543	40.0000	
* 91 Chrysene-d12	240	8.968	8.968	(1.000)	848281	40.0000	
* 98 Perylene-d12	264	10.601	10.601	(1.000)	503409	40.0000	
4 Aniline	93	3.826	3.826	(0.945)	1617372	120.000	110
209 Benzaldehyde	77	3.774	3.774	(0.932)	903933	120.000	111
31 4-Chloroaniline	127	4.949	4.949	(1.006)	1256969	120.000	111
205 2,3-Dichloroaniline	161	5.619	5.619	(0.910)	979208	120.000	110
42 o-Nitroaniline	65	5.830	5.830	(0.945)	607623	120.000	123(A)
41 m-Nitroaniline	138	6.124	6.124	(0.992)	543785	120.000	123(A)
56 p-Nitroaniline	138	6.547	6.547	(1.061)	469289	120.000	126(A)
207 Atrazine	173	6.935	6.935	(0.966)	180881	120.000	117
77 Benzidine	184	7.998	7.998	(0.892)	2826032	300.000	270
90 3,3'-Dichlorobenzidine	252	8.897	8.897	(0.992)	1600479	300.000	283
173 Carbazole	167	7.322	7.322	(1.020)	2445038	120.000	102

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD4.i/s062905.b/s4f2921.d
Date : 29-JUN-2005 18:57
Client ID: ANBZICAL120
Sample Info: !UBN050607-08!120 PPM!1!SVMF!1!ANBZ ICAL

Instrument: MSD4.i
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2935.d
Lab Smp Id: UBN050520-05 Client Smp ID: 168 ICAL010
Inj Date : 29-JUN-2005 23:44
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050520-05|10 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:49 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 07:32 Cal File: s4f2957.d
Als bottle: 30 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.043	4.043	(1.000)	304010	40.0000	
* 29 Naphthalene-d8	136	4.919	4.919	(1.000)	1147028	40.0000	
* 46 Acenaphthene-d10	164	6.170	6.170	(1.000)	670371	40.0000	
* 67 Phenanthrene-d10	188	7.175	7.175	(1.000)	1026641	40.0000	
* 91 Chrysene-d12	240	8.961	8.961	(1.000)	727083	40.0000	
* 98 Perylene-d12	264	10.594	10.594	(1.000)	407320	40.0000	
103 Methyl methacrylate	100	2.328	2.328	(0.576)	19850	10.0000	10
104 Ethyl methacrylate	69	2.721	2.721	(0.673)	85938	10.0000	10.4
105 2-Picoline	93	2.927	2.927	(0.724)	114656	10.0000	10.5
106 N-Nitrosomethylethylamine	88	2.968	2.968	(0.734)	45750	10.0000	9.9
107 Methyl methanesulfonate	80	3.121	3.121	(0.772)	51009	10.0000	10.4
108 N-Nitrosodiethylamine	102	3.362	3.362	(0.831)	44890	10.0000	10
109 Ethyl Methanesulfonate	79	3.520	3.520	(0.871)	72296	10.0000	10.3
110 Pentachloroethane	167	3.867	3.867	(0.956)	40446	10.0000	10.5
111 N-Nitrosopyrrolidine	100	4.278	4.278	(1.058)	48235	10.0000	9.6(Q)
113 N-Nitrosomorpholine	56	4.302	4.302	(1.064)	58189	10.0000	10.1
114 o-Toluidine	106	4.319	4.319	(1.068)	158536	10.0000	10.8
116 a,a-Dimethylphenethylamine	58	4.772	4.772	(0.970)	209067	10.0000	8.2
118 2,6-Dichlorophenol	162	4.954	4.954	(1.007)	73493	10.0000	10.1
119 Hexachloropropene	213	4.989	4.989	(1.014)	59880	10.0000	9.8
121 N-Nitrosodi-n-butylamine	84	5.154	5.154	(1.048)	67628	10.0000	9.8
122 Safrole	162	5.324	5.324	(1.082)	79073	10.0000	10.5
123 1,2,4,5-Tetrachlorobenzene	216	5.530	5.530	(0.896)	100301	10.0000	11.2
124 Isosafrole	162	5.694	5.694	(0.923)	84187	10.0000	10.6
125 1,4-Naphthoquinone	158	5.888	5.888	(0.954)	64588	10.0000	9.2
126 m-Dinitrobenzene	168	5.965	5.965	(0.967)	23459	10.0000	8.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
127 Pentachlorobenzene	250	6.276	6.276	(1.017)	88938	10.0000	11.2
128 1-Naphthylamine	143	6.358	6.358	(1.030)	187653	10.0000	10.8
129 2-Naphthylamine	143	6.411	6.411	(1.039)	183445	10.0000	10.9
130 2,3,4,6-Tetrachlorophenol	232	6.376	6.376	(1.033)	36730	10.0000	8.9
131 5-Nitro-o-toluidine	152	6.529	6.529	(1.058)	45165	10.0000	8.7
137 Phenacetin	108	6.775	6.775	(0.944)	73634	10.0000	8.6
140 4-Aminobiphenyl	169	6.593	6.593	(0.919)	170996	10.0000	11.0
141 Pentachloronitrobenzene	237	7.046	7.046	(0.982)	21368	10.0000	10
142 Pronamide	173	7.028	7.028	(0.980)	84550	10.0000	10.9
143 Dinoseb	211	7.122	7.122	(0.993)	15231	10.0000	9.8
146 4-Nitroquinoline-1-oxide	101	7.663	7.663	(1.068)	7613	10.0000	9.4
147 Methapyrilene	58	7.674	7.674	(1.070)	115273	10.0000	8.9
149 Aramite	185	8.086	8.086	(1.127)	10993	10.0000	8.4
151 p-(Dimethylamino)azobenzene	120	8.221	8.221	(0.917)	67691	10.0000	9.8
153 3,3'-Dimethylbenzidine	212	8.450	8.450	(0.943)	84998	10.0000	8.9
155 2-Acetylaminofluorene	181	8.644	8.644	(0.965)	27649	10.0000	9.0
157 7,12Dimethylbenz(a)anthracene	256	10.042	10.042	(0.948)	62255	10.0000	9.3
158 3-Methylcholanthrene	268	11.000	11.000	(1.038)	40765	10.0000	7.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD4.i/s062905.b/s4f2935.d

Date : 29-JUN-2005 23:44

Client ID: 168 ICAL010

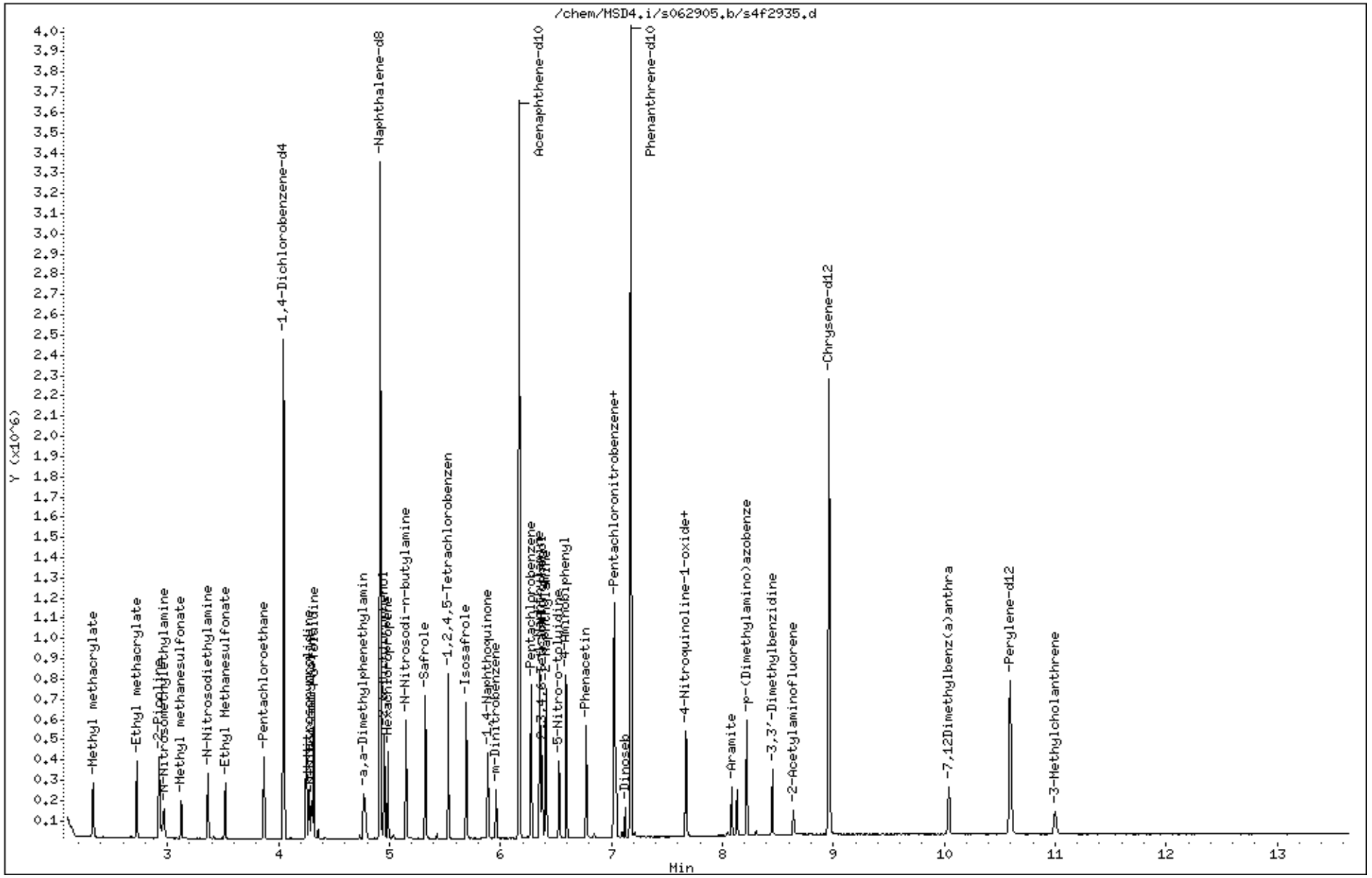
Sample Info: !UBN050520-05!10 PPM!1!SVMF!1!168 ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2936.d
Lab Smp Id: UBN050520-06 Client Smp ID: 168 ICAL020
Inj Date : 30-JUN-2005 00:05
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050520-06|20 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:49 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:01 Cal File: s4f2958.d
Als bottle: 31 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.045	4.045	(1.000)	342661	40.0000	
* 29 Naphthalene-d8	136	4.921	4.921	(1.000)	1301288	40.0000	
* 46 Acenaphthene-d10	164	6.166	6.166	(1.000)	770712	40.0000	
* 67 Phenanthrene-d10	188	7.177	7.177	(1.000)	1210829	40.0000	
* 91 Chrysene-d12	240	8.963	8.963	(1.000)	1033051	40.0000	
* 98 Perylene-d12	264	10.602	10.602	(1.000)	684796	40.0000	
103 Methyl methacrylate	100	2.324	2.324	(0.574)	46503	20.0000	20.8
104 Ethyl methacrylate	69	2.717	2.717	(0.672)	197492	20.0000	21.1
105 2-Picoline	93	2.923	2.923	(0.723)	261756	20.0000	21.3
106 N-Nitrosomethylethylamine	88	2.964	2.964	(0.733)	108302	20.0000	20.8
107 Methyl methanesulfonate	80	3.123	3.123	(0.772)	117401	20.0000	21.2
108 N-Nitrosodiethylamine	102	3.364	3.364	(0.832)	108609	20.0000	21.4
109 Ethyl Methanesulfonate	79	3.522	3.522	(0.871)	166653	20.0000	21.0
110 Pentachloroethane	167	3.869	3.869	(0.956)	92469	20.0000	21.3
111 N-Nitrosopyrrolidine	100	4.280	4.280	(1.058)	115979	20.0000	20.4(Q)
113 N-Nitrosomorpholine	56	4.304	4.304	(1.064)	136656	20.0000	21.1
114 o-Toluidine	106	4.321	4.321	(1.068)	359206	20.0000	21.8
116 a,a-Dimethylphenethylamine	58	4.768	4.768	(0.969)	567016	20.0000	19.6
118 2,6-Dichlorophenol	162	4.956	4.956	(1.007)	174496	20.0000	21.1
119 Hexachloropropene	213	4.985	4.985	(1.013)	145906	20.0000	21.0
121 N-Nitrosodi-n-butylamine	84	5.156	5.156	(1.048)	163370	20.0000	21.0
122 Safrole	162	5.326	5.326	(1.082)	184501	20.0000	21.6
123 1,2,4,5-Tetrachlorobenzene	216	5.532	5.532	(0.897)	227763	20.0000	22.1
124 Isosafrole	162	5.696	5.696	(0.924)	196520	20.0000	21.4
125 1,4-Naphthoquinone	158	5.884	5.884	(0.954)	169662	20.0000	21.0
126 m-Dinitrobenzene	168	5.966	5.966	(0.968)	63837	20.0000	19.6

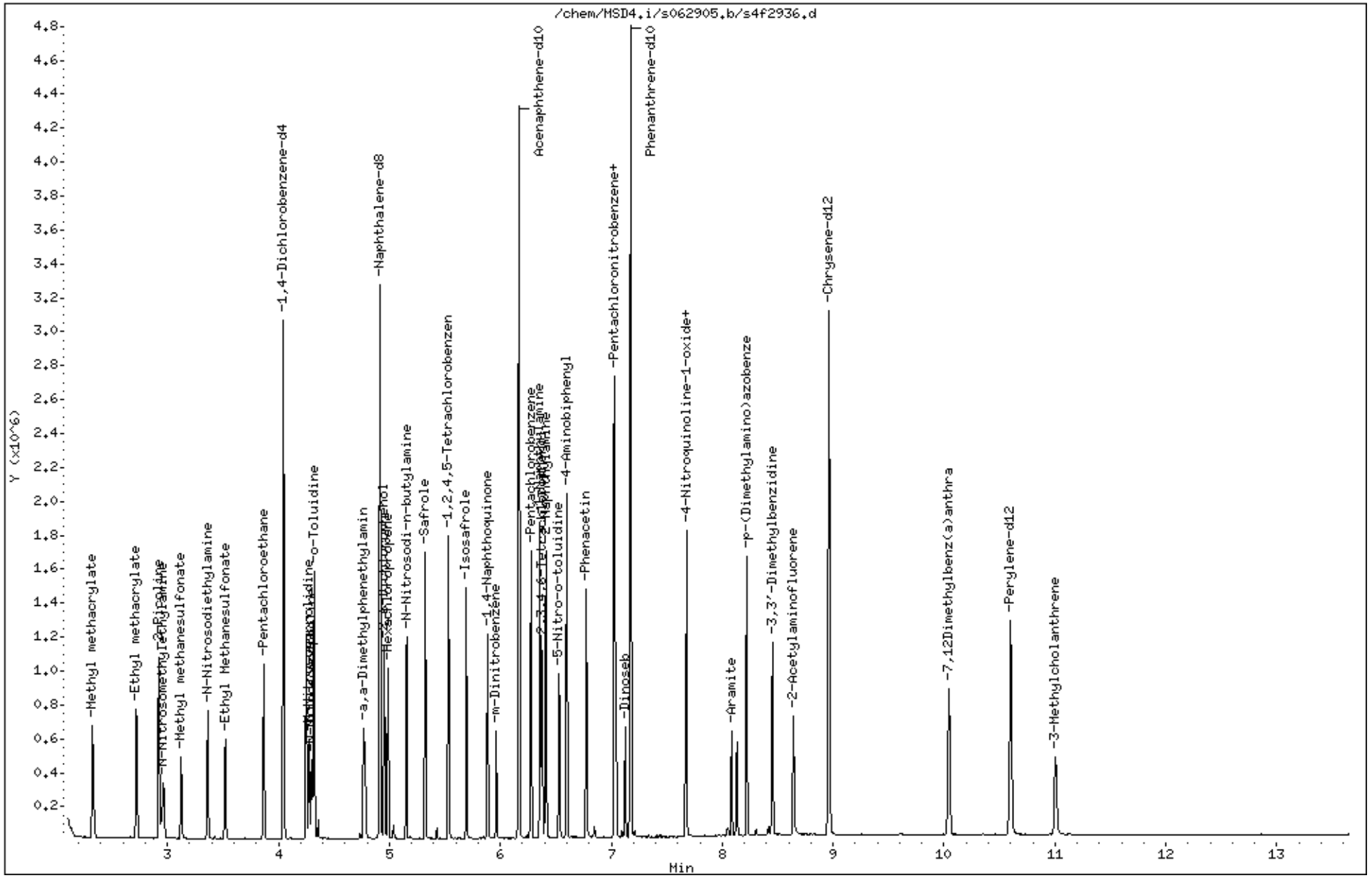
						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
127 Pentachlorobenzene	250	6.278	6.278	(1.018)	201080	20.0000	22.0
128 1-Naphthylamine	143	6.360	6.360	(1.031)	446136	20.0000	22.4
129 2-Naphthylamine	143	6.413	6.413	(1.040)	431268	20.0000	22.4
130 2,3,4,6-Tetrachlorophenol	232	6.378	6.378	(1.034)	99063	20.0000	20.8
131 5-Nitro-o-toluidine	152	6.531	6.531	(1.059)	122634	20.0000	20.6
137 Phenacetin	108	6.777	6.777	(0.944)	205733	20.0000	20.3
140 4-Aminobiphenyl	169	6.595	6.595	(0.919)	407068	20.0000	22.3
141 Pentachloronitrobenzene	237	7.042	7.042	(0.981)	52618	20.0000	20.9
142 Pronamide	173	7.030	7.030	(0.980)	207765	20.0000	22.6
143 Dinoseb	211	7.124	7.124	(0.993)	64910	20.0000	19.6
146 4-Nitroquinoline-1-oxide	101	7.665	7.665	(1.068)	25747	20.0000	27.1
147 Methapyrilene	58	7.676	7.676	(1.070)	353094	20.0000	23.2
149 Aramite	185	8.088	8.088	(1.127)	32635	20.0000	21.2
151 p-(Dimethylamino)azobenzene	120	8.223	8.223	(0.917)	197325	20.0000	20.2
153 3,3'-Dimethylbenzidine	212	8.452	8.452	(0.943)	315360	20.0000	23.3
155 2-Acetylaminofluorene	181	8.646	8.646	(0.965)	145339	20.0000	21.1
157 7,12Dimethylbenz(a)anthracene	256	10.044	10.044	(0.947)	227489	20.0000	20.2
158 3-Methylcholanthrene	268	11.008	11.008	(1.038)	170876	20.0000	19.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD4.i/s062905.b/s4f2936.d
Date : 30-JUN-2005 00:05
Client ID: 168 ICAL020
Sample Info: !UBN050520-06!20 PPM!1!SVMF!1!168 ICAL

Instrument: MSD4.i
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2937.d
Lab Smp Id: UBN050520-07 Client Smp ID: 168 ICAL040
Inj Date : 30-JUN-2005 00:26
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050520-07|40 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:49 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:29 Cal File: s4f2959.d
Als bottle: 32 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.043	4.043	(1.000)	328712	40.0000	
* 29 Naphthalene-d8	136	4.918	4.918	(1.000)	1224761	40.0000	
* 46 Acenaphthene-d10	164	6.170	6.170	(1.000)	729840	40.0000	
* 67 Phenanthrene-d10	188	7.175	7.175	(1.000)	1144260	40.0000	
* 91 Chrysene-d12	240	8.961	8.961	(1.000)	939043	40.0000	
* 98 Perylene-d12	264	10.600	10.600	(1.000)	682404	40.0000	
103 Methyl methacrylate	100	2.327	2.327	(0.576)	86259	40.0000	40.2
104 Ethyl methacrylate	69	2.721	2.721	(0.673)	360927	40.0000	40.2
105 2-Picoline	93	2.921	2.921	(0.722)	482996	40.0000	40.9
106 N-Nitrosomethylethylamine	88	2.968	2.968	(0.734)	199614	40.0000	40.0
107 Methyl methanesulfonate	80	3.126	3.126	(0.773)	217950	40.0000	41.0
108 N-Nitrosodiethylamine	102	3.367	3.367	(0.833)	195364	40.0000	40.2
109 Ethyl Methanesulfonate	79	3.520	3.520	(0.871)	308279	40.0000	40.6
110 Pentachloroethane	167	3.873	3.873	(0.958)	169847	40.0000	40.9
111 N-Nitrosopyrrolidine	100	4.284	4.284	(1.060)	220373	40.0000	40.5(Q)
113 N-Nitrosomorpholine	56	4.307	4.307	(1.065)	253010	40.0000	40.7
114 o-Toluidine	106	4.319	4.319	(1.068)	653849	40.0000	41.4
116 a,a-Dimethylphenethylamine	58	4.771	4.771	(0.970)	1141888	40.0000	42.0
118 2,6-Dichlorophenol	162	4.959	4.959	(1.008)	321753	40.0000	41.4
119 Hexachloropropene	213	4.989	4.989	(1.014)	273049	40.0000	41.8
121 N-Nitrosodi-n-butylamine	84	5.153	5.153	(1.048)	302982	40.0000	41.3
122 Safrole	162	5.330	5.330	(1.084)	335482	40.0000	41.7
123 1,2,4,5-Tetrachlorobenzene	216	5.529	5.529	(0.896)	408889	40.0000	41.9
124 Isosafrole	162	5.694	5.694	(0.923)	358948	40.0000	41.3
125 1,4-Naphthoquinone	158	5.888	5.888	(0.954)	323485	40.0000	42.2
126 m-Dinitrobenzene	168	5.964	5.964	(0.967)	124582	40.0000	40.3

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
127	Pentachlorobenzene	250	6.281	6.281 (1.018)	362926	40.0000	41.9
128	1-Naphthylamine	143	6.364	6.364 (1.031)	795773	40.0000	42.2
129	2-Naphthylamine	143	6.411	6.411 (1.039)	743458	40.0000	40.7
130	2,3,4,6-Tetrachlorophenol	232	6.381	6.381 (1.034)	190375	40.0000	42.3
131	5-Nitro-o-toluidine	152	6.534	6.534 (1.059)	231087	40.0000	40.9
137	Phenacetin	108	6.781	6.781 (0.945)	394055	40.0000	41.1
140	4-Aminobiphenyl	169	6.599	6.599 (0.920)	725075	40.0000	42.1
141	Pentachloronitrobenzene	237	7.045	7.045 (0.982)	99781	40.0000	41.9
142	Pronamide	173	7.034	7.034 (0.980)	371097	40.0000	42.8
143	Dinoseb	211	7.128	7.128 (0.993)	141595	40.0000	37.4
146	4-Nitroquinoline-1-oxide	101	7.668	7.668 (1.069)	41825	40.0000	46.6
147	Methapyrilene	58	7.680	7.680 (1.070)	654368	40.0000	45.5
149	Aramite	185	8.085	8.085 (1.127)	63035	40.0000	43.3
151	p-(Dimethylamino)azobenzene	120	8.226	8.226 (0.918)	359781	40.0000	40.5
153	3,3'-Dimethylbenzidine	212	8.450	8.450 (0.943)	542547	40.0000	44.2
155	2-Acetylaminofluorene	181	8.643	8.643 (0.965)	301665	40.0000	42.5
157	7,12Dimethylbenz(a)anthracene	256	10.042	10.042 (0.947)	423390	40.0000	37.8
158	3-Methylcholanthrene	268	11.011	11.011 (1.039)	364764	40.0000	42.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD4.i/s062905.b/s4f2937.d

Date : 30-JUN-2005 00:26

Client ID: 168 ICAL040

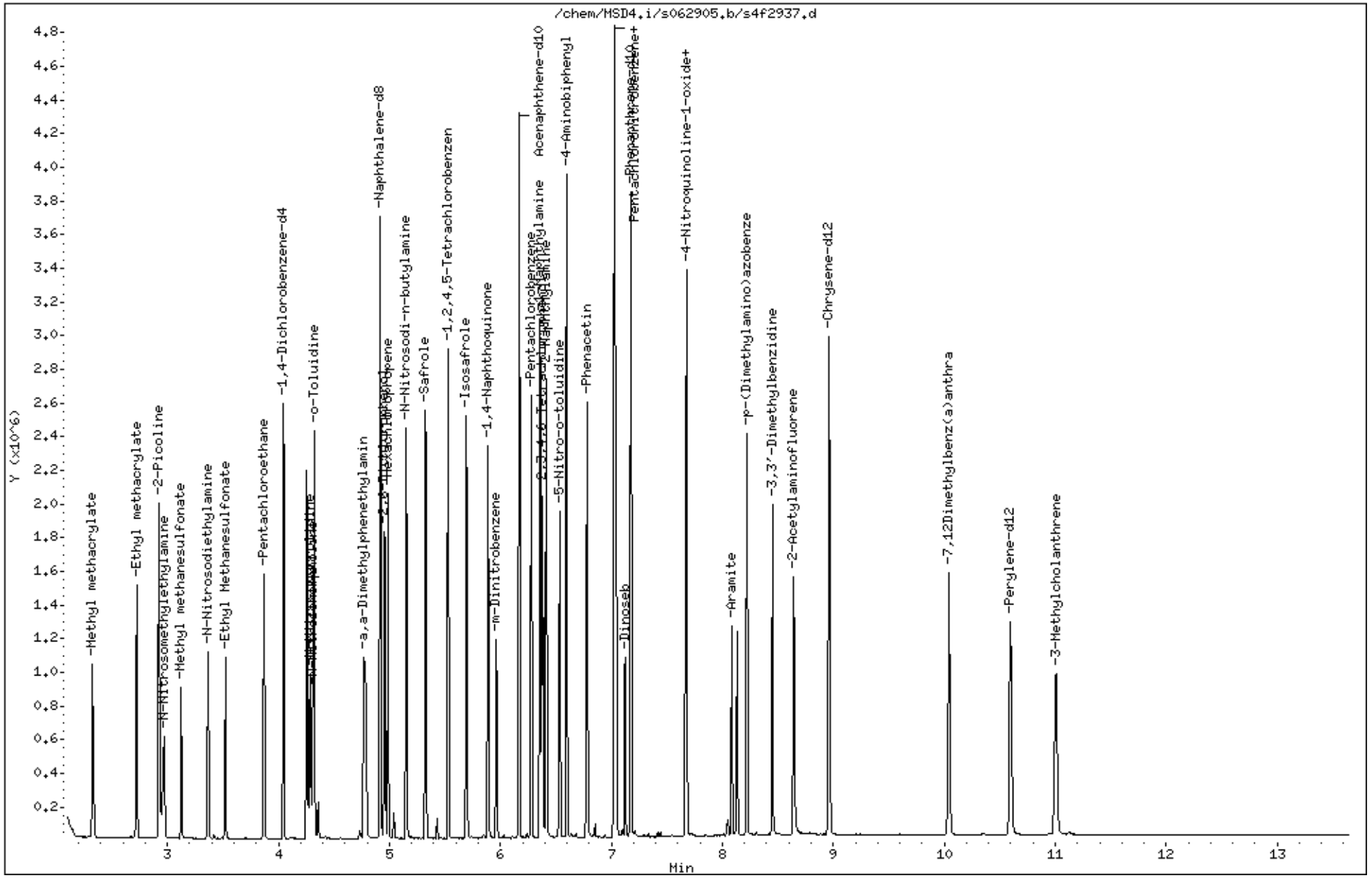
Sample Info: IUBN050520-07|40 PPM|1|SVMF|1|168 ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2938.d
Lab Smp Id: UBN050520-08 Client Smp ID: 168 ICAL050
Inj Date : 30-JUN-2005 00:46
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050520-08|50 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:49 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 08:57 Cal File: s4f2960.d
Als bottle: 33 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	370176	40.0000	
* 29 Naphthalene-d8	136	4.920	4.920	(1.000)	1377713	40.0000	
* 46 Acenaphthene-d10	164	6.171	6.171	(1.000)	808058	40.0000	
* 67 Phenanthrene-d10	188	7.176	7.176	(1.000)	1283590	40.0000	
* 91 Chrysene-d12	240	8.962	8.962	(1.000)	1069284	40.0000	
* 98 Perylene-d12	264	10.601	10.601	(1.000)	616094	40.0000	
103 Methyl methacrylate	100	2.323	2.323	(0.574)	117472	50.0000	48.6
104 Ethyl methacrylate	69	2.722	2.722	(0.673)	497578	50.0000	49.2
105 2-Picoline	93	2.922	2.922	(0.722)	650025	50.0000	48.9
106 N-Nitrosomethylethylamine	88	2.969	2.969	(0.734)	276521	50.0000	49.2
107 Methyl methanesulfonate	80	3.128	3.128	(0.773)	291576	50.0000	48.7
108 N-Nitrosodiethylamine	102	3.368	3.368	(0.833)	270630	50.0000	49.5
109 Ethyl Methanesulfonate	79	3.521	3.521	(0.871)	417623	50.0000	48.8
110 Pentachloroethane	167	3.868	3.868	(0.956)	230438	50.0000	49.2
111 N-Nitrosopyrrolidine	100	4.285	4.285	(1.060)	303525	50.0000	49.5(Q)
113 N-Nitrosomorpholine	56	4.309	4.309	(1.065)	347037	50.0000	49.5
114 o-Toluidine	106	4.326	4.326	(1.070)	872945	50.0000	49.1
116 a,a-Dimethylphenethylamine	58	4.773	4.773	(0.970)	1573165	50.0000	51.4
118 2,6-Dichlorophenol	162	4.961	4.961	(1.008)	440860	50.0000	50.4
119 Hexachloropropene	213	4.990	4.990	(1.014)	375907	50.0000	51.1
121 N-Nitrosodi-n-butylamine	84	5.155	5.155	(1.048)	415153	50.0000	50.3
122 Safrole	162	5.325	5.325	(1.082)	452329	50.0000	50.0
123 1,2,4,5-Tetrachlorobenzene	216	5.531	5.531	(0.896)	546904	50.0000	50.6
124 Isosafrole	162	5.695	5.695	(0.923)	491772	50.0000	51.2
125 1,4-Naphthoquinone	158	5.889	5.889	(0.954)	444827	50.0000	52.4
126 m-Dinitrobenzene	168	5.965	5.965	(0.967)	182205	50.0000	53.3

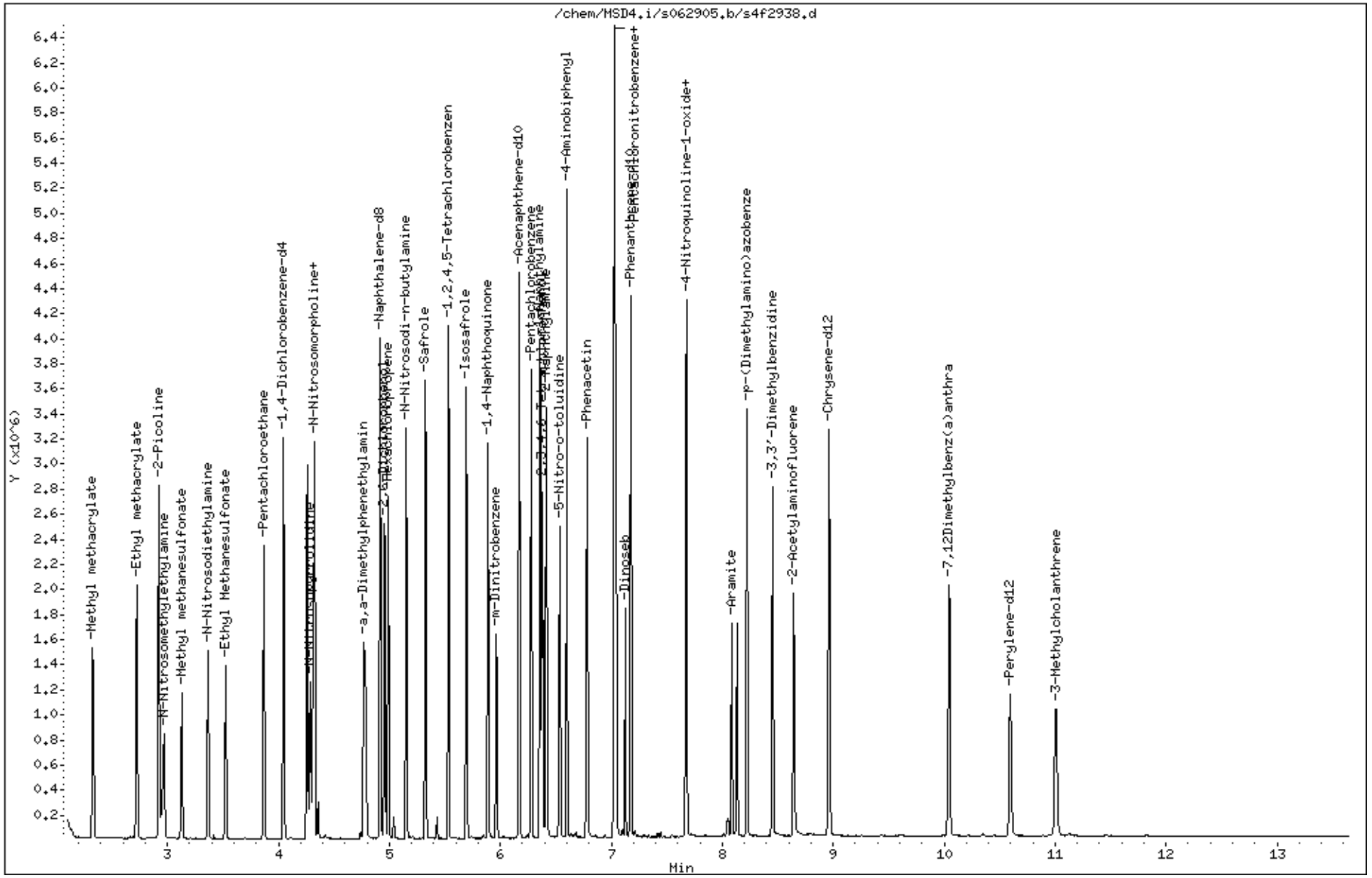
						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
127 Pentachlorobenzene	250	6.277	6.277	(1.017)	478088	50.0000	49.8
128 1-Naphthylamine	143	6.365	6.365	(1.031)	1081208	50.0000	51.8
129 2-Naphthylamine	143	6.418	6.418	(1.040)	1037661	50.0000	51.3
130 2,3,4,6-Tetrachlorophenol	232	6.383	6.383	(1.034)	265767	50.0000	53.3
131 5-Nitro-o-toluidine	152	6.535	6.535	(1.059)	332966	50.0000	53.3
137 Phenacetin	108	6.782	6.782	(0.945)	574838	50.0000	53.4
140 4-Aminobiphenyl	169	6.600	6.600	(0.920)	965845	50.0000	50.0
141 Pentachloronitrobenzene	237	7.046	7.046	(0.982)	137868	50.0000	51.6
142 Pronamide	173	7.035	7.035	(0.980)	491630	50.0000	50.5
143 Dinoseb	211	7.129	7.129	(0.993)	238959	50.0000	53.3
146 4-Nitroquinoline-1-oxide	101	7.669	7.669	(1.069)	56363	50.0000	56.0
147 Methapyrilene	58	7.681	7.681	(1.070)	891725	50.0000	55.2
149 Aramite	185	8.086	8.086	(1.127)	90487	50.0000	55.4
151 p-(Dimethylamino)azobenzene	120	8.227	8.227	(0.918)	512304	50.0000	50.6
153 3,3'-Dimethylbenzidine	212	8.451	8.451	(0.943)	773031	50.0000	55.2
155 2-Acetylaminofluorene	181	8.645	8.645	(0.965)	386443	50.0000	47.3
157 7,12Dimethylbenz(a)anthracene	256	10.043	10.043	(0.947)	534994	50.0000	52.8
158 3-Methylcholanthrene	268	11.012	11.012	(1.039)	397605	50.0000	51.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD4.i/s062905.b/s4f2938.d
Date : 30-JUN-2005 00:46
Client ID: 168 ICAL050
Sample Info: !UBN050520-08!50 PPM!1!SVMF!1!168 ICAL

Instrument: MSD4.i
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2939.d
Lab Smp Id: UBN050520-09 Client Smp ID: 168 ICAL080
Inj Date : 30-JUN-2005 01:07
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050520-09|80 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:50 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 09:26 Cal File: s4f2961.d
Als bottle: 34 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	326012	40.0000	
* 29 Naphthalene-d8	136	4.920	4.920	(1.000)	1242563	40.0000	
* 46 Acenaphthene-d10	164	6.171	6.171	(1.000)	745883	40.0000	
* 67 Phenanthrene-d10	188	7.176	7.176	(1.000)	1171532	40.0000	
* 91 Chrysene-d12	240	8.962	8.962	(1.000)	917124	40.0000	
* 98 Perylene-d12	264	10.601	10.601	(1.000)	574794	40.0000	
103 Methyl methacrylate	100	2.323	2.323	(0.574)	172134	80.0000	80.8
104 Ethyl methacrylate	69	2.722	2.722	(0.673)	707954	80.0000	79.5
105 2-Picoline	93	2.922	2.922	(0.723)	926079	80.0000	79.2
106 N-Nitrosomethylethylamine	88	2.969	2.969	(0.734)	401409	80.0000	81.2
107 Methyl methanesulfonate	80	3.128	3.128	(0.773)	427689	80.0000	81.1
108 N-Nitrosodiethylamine	102	3.369	3.369	(0.833)	386520	80.0000	80.2
109 Ethyl Methanesulfonate	79	3.527	3.527	(0.872)	600228	80.0000	79.7
110 Pentachloroethane	167	3.868	3.868	(0.956)	327367	80.0000	79.4
111 N-Nitrosopyrrolidine	100	4.291	4.291	(1.061)	440813	80.0000	81.7
113 N-Nitrosomorpholine	56	4.309	4.309	(1.065)	497278	80.0000	80.6
114 o-Toluidine	106	4.326	4.326	(1.070)	1217245	80.0000	77.7
116 a,a-Dimethylphenethylamine	58	4.785	4.785	(0.973)	2325135	80.0000	84.3
118 2,6-Dichlorophenol	162	4.961	4.961	(1.008)	627473	80.0000	79.6
119 Hexachloropropene	213	4.990	4.990	(1.014)	526320	80.0000	79.4
121 N-Nitrosodi-n-butylamine	84	5.161	5.161	(1.049)	596506	80.0000	80.2
122 Safrole	162	5.331	5.331	(1.084)	635413	80.0000	77.8
123 1,2,4,5-Tetrachlorobenzene	216	5.531	5.531	(0.896)	750963	80.0000	75.3
124 Isosafrole	162	5.701	5.701	(0.924)	691860	80.0000	78.0
125 1,4-Naphthoquinone	158	5.889	5.889	(0.954)	625597	80.0000	79.9
126 m-Dinitrobenzene	168	5.971	5.971	(0.968)	268055	80.0000	84.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
127	Pentachlorobenzene	250	6.283	6.283	(1.018)	667238	80.0000	75.4
128	1-Naphthylamine	143	6.365	6.365	(1.031)	1458131	80.0000	75.8
129	2-Naphthylamine	143	6.418	6.418	(1.040)	1434006	80.0000	76.8
130	2,3,4,6-Tetrachlorophenol	232	6.383	6.383	(1.034)	376107	80.0000	81.7
131	5-Nitro-o-toluidine	152	6.541	6.541	(1.060)	476693	80.0000	82.6
137	Phenacetin	108	6.788	6.788	(0.946)	819646	80.0000	83.4
140	4-Aminobiphenyl	169	6.600	6.600	(0.920)	1338584	80.0000	75.9
141	Pentachloronitrobenzene	237	7.047	7.047	(0.982)	193693	80.0000	79.4
142	Pronamide	173	7.035	7.035	(0.980)	670454	80.0000	75.5
143	Dinoseb	211	7.129	7.129	(0.993)	342803	80.0000	80.3
146	4-Nitroquinoline-1-oxide	101	7.669	7.669	(1.069)	68779	80.0000	74.8
147	Methapyrilene	58	7.681	7.681	(1.070)	1168339	80.0000	79.3
149	Aramite	185	8.087	8.087	(1.127)	122401	80.0000	82.1
151	p-(Dimethylamino)azobenzene	120	8.228	8.228	(0.918)	684956	80.0000	78.9
153	3,3'-Dimethylbenzidine	212	8.451	8.451	(0.943)	943721	80.0000	78.6
155	2-Acetylaminofluorene	181	8.651	8.651	(0.965)	584811	80.0000	80.0
157	7,12Dimethylbenz(a)anthracene	256	10.049	10.049	(0.948)	745247	80.0000	78.9
158	3-Methylcholanthrene	268	11.013	11.013	(1.039)	608362	80.0000	83.9

Data File: /chem/MSD4.i/s062905.b/s4f2939.d

Date : 30-JUN-2005 01:07

Client ID: 168 ICAL080

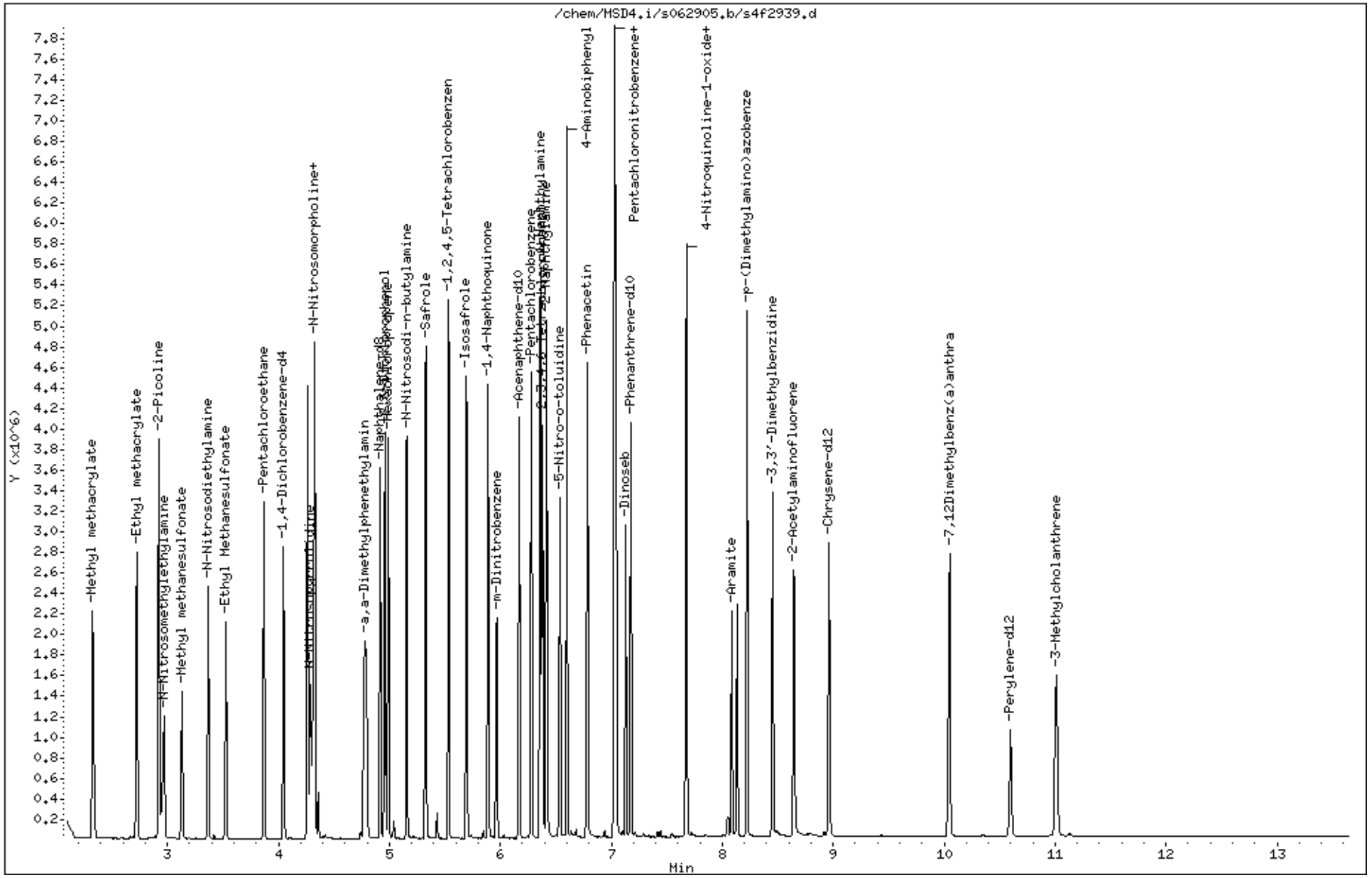
Sample Info: !UBN050520-09!80 PPM!1!SVMF!1!168 ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2940.d
Lab Smp Id: UBN050520-10 Client Smp ID: 168 ICAL100
Inj Date : 30-JUN-2005 01:28
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050520-10|100 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:50 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 09:55 Cal File: s4f2962.d
Als bottle: 35 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	319166	40.0000	
* 29 Naphthalene-d8	136	4.919	4.919	(1.000)	1203059	40.0000	
* 46 Acenaphthene-d10	164	6.171	6.171	(1.000)	728909	40.0000	
* 67 Phenanthrene-d10	188	7.181	7.181	(1.000)	1148667	40.0000	
* 91 Chrysene-d12	240	8.962	8.962	(1.000)	921718	40.0000	
* 98 Perylene-d12	264	10.595	10.595	(1.000)	509340	40.0000	
103 Methyl methacrylate	100	2.322	2.322	(0.574)	207975	100.000	99.7
104 Ethyl methacrylate	69	2.722	2.722	(0.673)	851695	100.000	97.7
105 2-Picoline	93	2.922	2.922	(0.722)	1103489	100.000	96.3
106 N-Nitrosomethylethylamine	88	2.969	2.969	(0.734)	480908	100.000	99.3
107 Methyl methanesulfonate	80	3.133	3.133	(0.775)	504247	100.000	97.7
108 N-Nitrosodiethylamine	102	3.368	3.368	(0.833)	464114	100.000	98.4
109 Ethyl Methanesulfonate	79	3.527	3.527	(0.872)	722366	100.000	98.0
110 Pentachloroethane	167	3.874	3.874	(0.958)	386806	100.000	95.8
111 N-Nitrosopyrrolidine	100	4.291	4.291	(1.061)	535236	100.000	101
113 N-Nitrosomorpholine	56	4.314	4.314	(1.067)	586596	100.000	97.1
114 o-Toluidine	106	4.326	4.326	(1.070)	1431963	100.000	93.4
116 a,a-Dimethylphenethylamine	58	4.790	4.790	(0.974)	2804999	100.000	105
118 2,6-Dichlorophenol	162	4.961	4.961	(1.008)	736744	100.000	96.6
119 Hexachloropropene	213	4.990	4.990	(1.014)	635832	100.000	99.0
121 N-Nitrosodi-n-butylamine	84	5.160	5.160	(1.049)	705328	100.000	97.9
122 Safrole	162	5.331	5.331	(1.084)	749247	100.000	94.8
123 1,2,4,5-Tetrachlorobenzene	216	5.536	5.536	(0.897)	869216	100.000	89.2
124 Isosafrole	162	5.701	5.701	(0.924)	811251	100.000	93.6
125 1,4-Naphthoquinone	158	5.895	5.895	(0.955)	751230	100.000	98.2
126 m-Dinitrobenzene	168	5.971	5.971	(0.968)	325524	100.000	106

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
127	Pentachlorobenzene	250	6.282	6.282	(1.018)	792633	100.000	91.6
128	1-Naphthylamine	143	6.365	6.365	(1.031)	1701753	100.000	90.5
129	2-Naphthylamine	143	6.418	6.418	(1.040)	1681835	100.000	92.2
130	2,3,4,6-Tetrachlorophenol	232	6.382	6.382	(1.034)	447948	100.000	99.6
131	5-Nitro-o-toluidine	152	6.541	6.541	(1.060)	574643	100.000	102
137	Phenacetin	108	6.788	6.788	(0.945)	992588	100.000	103
140	4-Aminobiphenyl	169	6.600	6.600	(0.919)	1564488	100.000	90.4
141	Pentachloronitrobenzene	237	7.046	7.046	(0.981)	228797	100.000	95.6
142	Pronamide	173	7.040	7.040	(0.980)	785435	100.000	90.2
143	Dinoseb	211	7.129	7.129	(0.993)	439454	100.000	103
146	4-Nitroquinoline-1-oxide	101	7.669	7.669	(1.068)	74736	100.000	82.9
147	Methapyrilene	58	7.681	7.681	(1.070)	1357258	100.000	93.9
149	Aramite	185	8.086	8.086	(1.126)	146458	100.000	100
151	p-(Dimethylamino)azobenzene	120	8.227	8.227	(0.918)	835134	100.000	95.7
153	3,3'-Dimethylbenzidine	212	8.451	8.451	(0.943)	1130167	100.000	93.7
155	2-Acetylaminofluorene	181	8.650	8.650	(0.965)	652150	100.000	88.3
157	7,12Dimethylbenz(a)anthracene	256	10.049	10.049	(0.948)	871968	100.000	104
158	3-Methylcholanthrene	268	11.012	11.012	(1.039)	676006	100.000	105

Data File: /chem/MSD4.i/s062905.b/s4f2940.d

Date : 30-JUN-2005 01:28

Client ID: 168 ICAL100

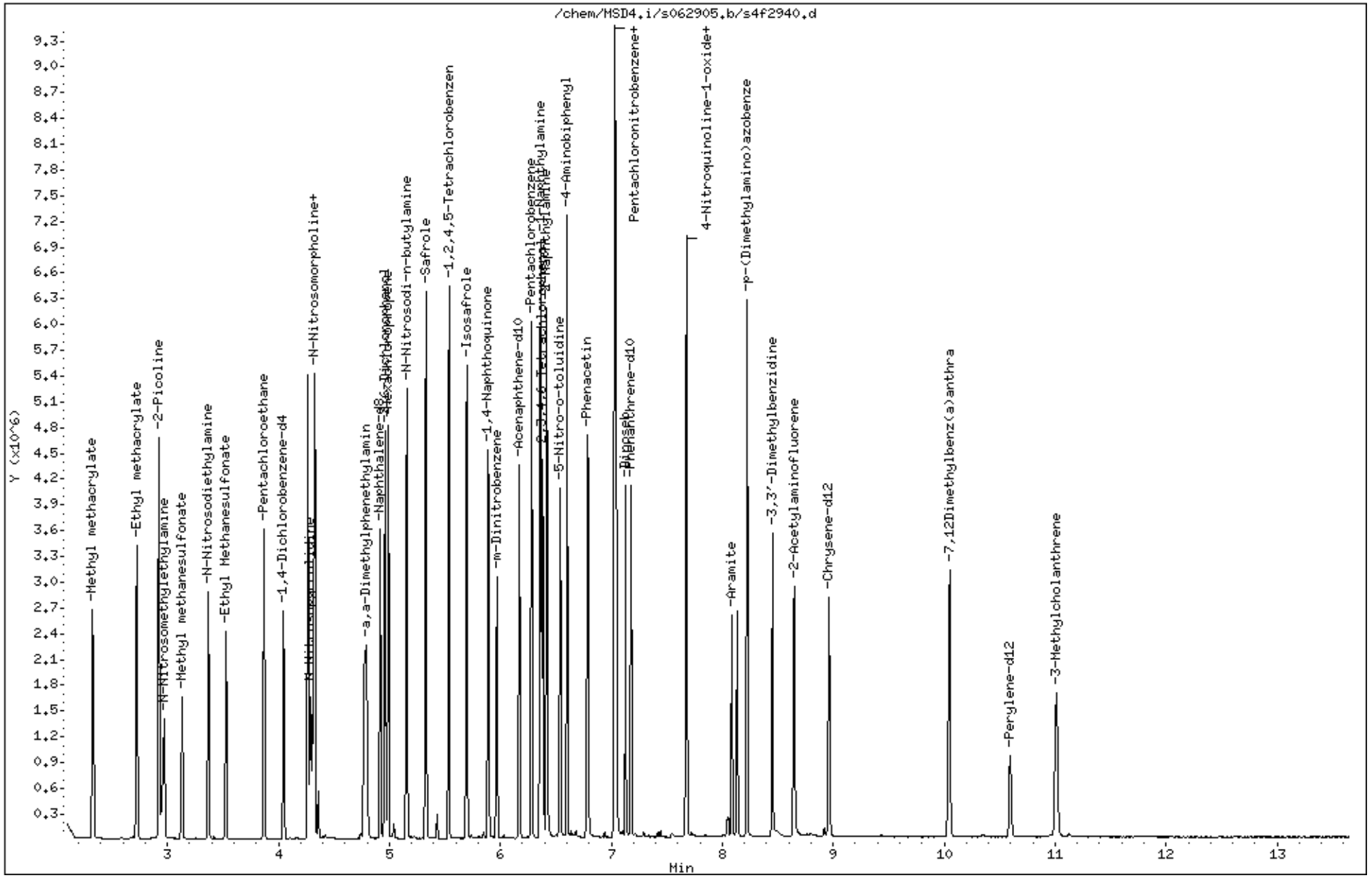
Sample Info: !UBN050520-10!100 PPM!1!SVMF!1!168 ICAL

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2941.d
Lab Smp Id: UBN050520-11 Client Smp ID: 168 ICAL120
Inj Date : 30-JUN-2005 01:48
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050520-11|120 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 30-Jun-2005 19:50 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 36 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.048	4.048	(1.000)	301784	40.0000	
* 29 Naphthalene-d8	136	4.917	4.917	(1.000)	1134004	40.0000	
* 46 Acenaphthene-d10	164	6.169	6.169	(1.000)	675381	40.0000	
* 67 Phenanthrene-d10	188	7.179	7.179	(1.000)	1044697	40.0000	
* 91 Chrysene-d12	240	8.959	8.959	(1.000)	648060	40.0000	
* 98 Perylene-d12	264	10.593	10.593	(1.000)	336315	40.0000	
103 Methyl methacrylate	100	2.326	2.326	(0.575)	231805	120.000	118
104 Ethyl methacrylate	69	2.720	2.720	(0.672)	939078	120.000	114
105 2-Picoline	93	2.925	2.925	(0.723)	1207557	120.000	112
106 N-Nitrosomethylethylamine	88	2.972	2.972	(0.734)	534162	120.000	117
107 Methyl methanesulfonate	80	3.131	3.131	(0.774)	535940	120.000	110
108 N-Nitrosodiethylamine	102	3.372	3.372	(0.833)	506718	120.000	114
109 Ethyl Methanesulfonate	79	3.531	3.531	(0.872)	795131	120.000	114
110 Pentachloroethane	167	3.871	3.871	(0.956)	422791	120.000	111
111 N-Nitrosopyrrolidine	100	4.294	4.294	(1.061)	589049	120.000	118
113 N-Nitrosomorpholine	56	4.318	4.318	(1.067)	651242	120.000	114
114 o-Toluidine	106	4.330	4.330	(1.070)	1568224	120.000	108
116 a,a-Dimethylphenethylamine	58	4.788	4.788	(0.974)	3066994	120.000	122(A)
118 2,6-Dichlorophenol	162	4.964	4.964	(1.010)	799749	120.000	111
119 Hexachloropropene	213	4.988	4.988	(1.014)	668164	120.000	110
121 N-Nitrosodi-n-butylamine	84	5.158	5.158	(1.049)	770452	120.000	113
122 Safrole	162	5.328	5.328	(1.084)	813701	120.000	109
123 1,2,4,5-Tetrachlorobenzene	216	5.534	5.534	(0.897)	952509	120.000	106
124 Isosafrole	162	5.699	5.699	(0.924)	872260	120.000	108
125 1,4-Naphthoquinone	158	5.893	5.893	(0.955)	805089	120.000	114
126 m-Dinitrobenzene	168	5.969	5.969	(0.968)	343877	120.000	120(A)

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
127 Pentachlorobenzene	250	6.280	6.280	(1.018)	848159	120.000	106
128 1-Naphthylamine	143	6.363	6.363	(1.031)	1775869	120.000	102
129 2-Naphthylamine	143	6.421	6.421	(1.041)	1751422	120.000	104
130 2,3,4,6-Tetrachlorophenol	232	6.386	6.386	(1.035)	465642	120.000	112
131 5-Nitro-o-toluidine	152	6.545	6.545	(1.061)	600336	120.000	115
137 Phenacetin	108	6.791	6.791	(0.946)	1010555	120.000	115
140 4-Aminobiphenyl	169	6.603	6.603	(0.920)	1650559	120.000	105
141 Pentachloronitrobenzene	237	7.050	7.050	(0.982)	242972	120.000	112
142 Pronamide	173	7.038	7.038	(0.980)	811820	120.000	102
143 Dinoseb	211	7.126	7.126	(0.993)	453760	120.000	116
146 4-Nitroquinoline-1-oxide	101	7.667	7.667	(1.068)	64072	120.000	78.2
147 Methapyrilene	58	7.679	7.679	(1.070)	1225235	120.000	93.2
149 Aramite	185	8.090	8.090	(1.127)	140443	120.000	106
151 p-(Dimethylamino)azobenzene	120	8.225	8.225	(0.918)	767462	120.000	125(A)
153 3,3'-Dimethylbenzidine	212	8.454	8.454	(0.944)	825712	120.000	97.4
155 2-Acetylaminofluorene	181	8.648	8.648	(0.965)	507097	120.000	97.2
157 7,12Dimethylbenz(a)anthracene	256	10.046	10.046	(0.948)	681956	120.000	123(A)
158 3-Methylcholanthrene	268	11.010	11.010	(1.039)	526063	120.000	124(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD4.i/s062905.b/s4f2941.d

Page 1

Date : 30-JUN-2005 01:48

Client ID: 168 ICAL120

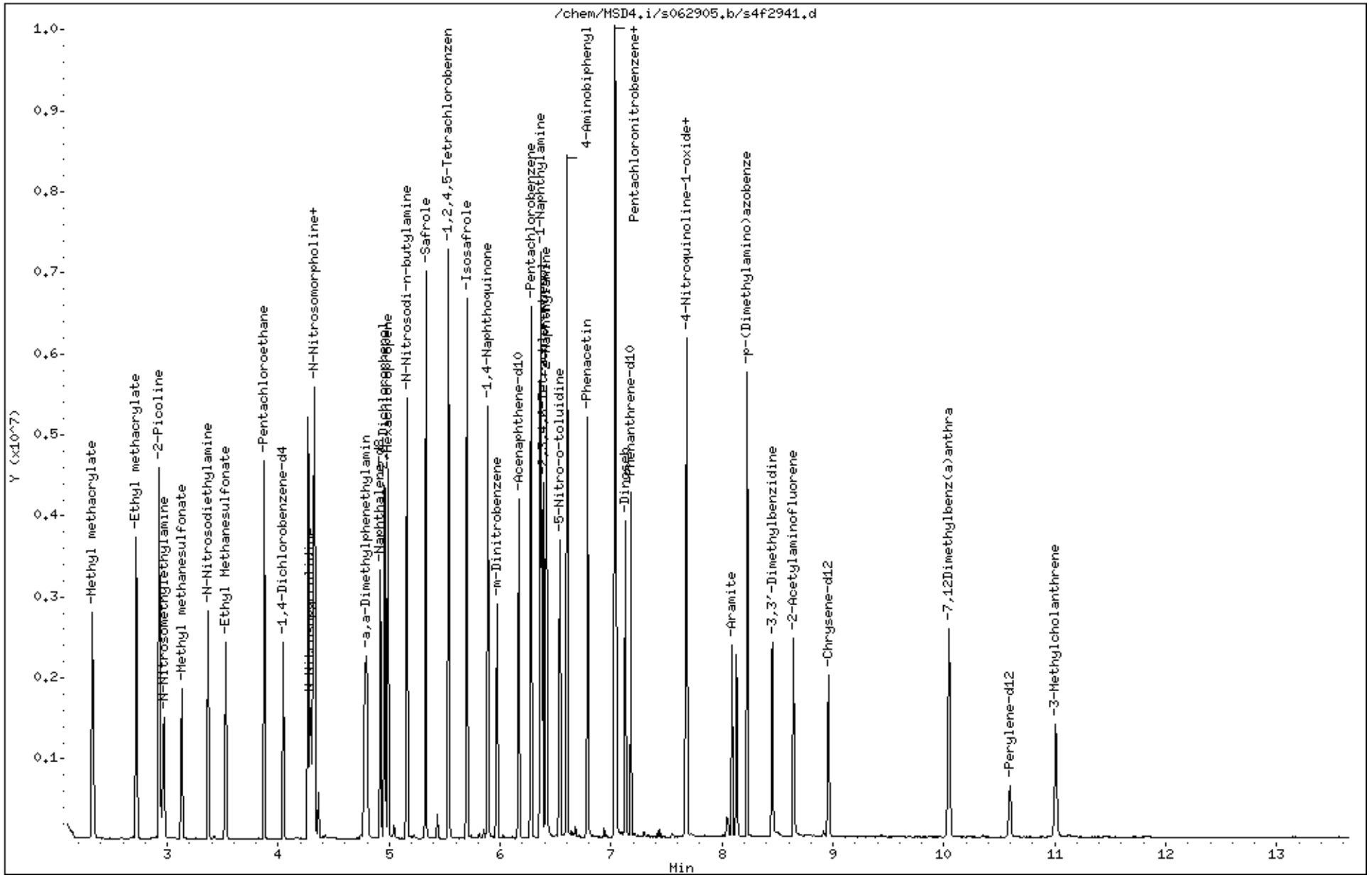
Instrument: MSD4.i

Sample Info: |UBN050520-11|120 PPM|1|SVMF|1|168 ICAL

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 29-JUN-2005 15:41
Lab File ID: s4f2912.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050603-04 Quant Type: ISTD
Method: /chem/MSD4.i/s062905.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.11993	1.07025	1.07025	0.000	-4.43564	60.00000	Averaged	
$ 5 Phenol-d5	1.29122	1.32829	1.32829	0.000	2.87062	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.29851	0.31898	0.31898	0.000	6.85791	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	1.04094	1.13571	1.13571	0.000	9.10420	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.13322	0.14245	0.14245	0.000	6.92526	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.96356	1.01427	1.01427	0.000	5.26322	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.56361	0.65896	0.65896	0.000	16.91868	60.00000	Averaged	
2 Pyridine	1.14346	1.26558	1.26558	0.000	10.67977	60.00000	Averaged	
6 Phenol	1.30742	1.35829	1.35829	0.001	3.89060	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	1.32498	1.19219	1.19219	0.000	-10.02266	60.00000	Averaged	
8 2-Chlorophenol	1.08775	1.09808	1.09808	0.000	0.94965	60.00000	Averaged	
203 n-Decane	1.30102	1.39791	1.39791	0.000	7.44683	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.25349	1.28428	1.28428	0.000	2.45615	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.21170	1.28827	1.28827	0.001	6.31931	20.00000	Averaged	ccc
12 Benzyl alcohol	0.69611	0.67460	0.67460	0.000	-3.08895	60.00000	Averaged	
13 1,2-Dichlorobenzene	1.13780	1.15883	1.15883	0.000	1.84830	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	1.75564	2.01591	2.01591	0.000	14.82516	60.00000	Averaged	
15 o-Cresol	0.85067	0.84243	0.84243	0.000	-0.96831	60.00000	Averaged	
16 Acetophenone	1.41669	1.51455	1.51455	0.000	6.90756	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.82023	0.86167	0.86167	0.050	5.05253	60.00000	Averaged	spcc
18 m,p-Cresols	1.23942	1.26731	1.26731	0.000	2.25001	60.00000	Averaged	
19 Hexachloroethane	0.46891	0.49384	0.49384	0.000	5.31765	60.00000	Averaged	
21 Nitrobenzene	0.26430	0.28999	0.28999	0.000	9.71854	60.00000	Averaged	
22 Isophorone	0.52553	0.54019	0.54019	0.000	2.78937	60.00000	Averaged	
23 2-Nitrophenol	0.12627	0.14564	0.14564	0.001	15.33785	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	38.05663	40.00000	0.24673	0.000	-4.85843	60.00000	Linear	
25 bis(2-Chloroethoxy)methane	0.31674	0.35539	0.35539	0.000	12.20153	60.00000	Averaged	
26 2,4-Dichlorophenol	0.22178	0.21815	0.21815	0.001	-1.63570	20.00000	Averaged	ccc
27 Benzoic acid	36.36476	40.00000	0.11883	0.000	-9.08811	60.00000	Linear	
28 1,2,4-Trichlorobenzene	0.24620	0.26743	0.26743	0.000	8.62119	60.00000	Averaged	
30 Naphthalene	0.84188	0.81048	0.81048	0.000	-3.72975	60.00000	Averaged	
204 alpha-Terpineol	0.23719	0.24846	0.24846	0.000	4.75153	60.00000	Averaged	
189 Caprolactam	0.08203	0.00709	0.00709	0.000	-91.35363	60.00000	Averaged	<-
32 Hexachlorobutadiene	0.16296	0.16083	0.16083	0.001	-1.30996	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.21127	0.22609	0.22609	0.001	7.01209	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.53306	0.56170	0.56170	0.000	5.37374	60.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 29-JUN-2005 15:41
Lab File ID: s4f2912.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050603-04 Quant Type: ISTD
Method: /chem/MSD4.i/s062905.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
35 1-Methylnaphthalene	0.49521	0.53260	0.53260	0.000	7.55063	60.00000	Averaged	
36 Hexachlorocyclopentadiene	0.29106	0.31620	0.31620	0.050	8.63766	60.00000	Averaged	spcc
208 1,1'-Biphenyl	1.17906	1.27992	1.27992	0.000	8.55488	60.00000	Averaged	
37 2,4,6-Trichlorophenol	0.29595	0.30486	0.30486	0.001	3.00854	20.00000	Averaged	ccc
38 2,4,5-Trichlorophenol	0.31018	0.33259	0.33259	0.000	7.22340	60.00000	Averaged	
40 2-Chloronaphthalene	0.89250	0.94573	0.94573	0.000	5.96404	60.00000	Averaged	
43 Dimethylphthalate	1.07914	1.12138	1.12138	0.000	3.91377	60.00000	Averaged	
44 2,6-Dinitrotoluene	0.21539	0.24100	0.24100	0.000	11.89216	60.00000	Averaged	
45 Acenaphthylene	1.42209	1.52299	1.52299	0.000	7.09511	60.00000	Averaged	
47 Acenaphthene	0.89324	0.95301	0.95301	0.001	6.69138	20.00000	Averaged	ccc
48 2,4-Dinitrophenol	46.89978	40.00000	0.07865	0.050	17.24945	60.00000	Linear	spcc
49 Dibenzofuran	1.23039	1.31844	1.31844	0.000	7.15620	60.00000	Averaged	
50 2,4-Dinitrotoluene	0.26127	0.29913	0.29913	0.000	14.48754	60.00000	Averaged	
51 Diethylphthalate	1.03429	1.11493	1.11493	0.000	7.79649	60.00000	Averaged	
52 4-Nitrophenol	0.13088	0.14571	0.14571	0.050	11.33114	60.00000	Averaged	spcc
53 Fluorene	1.01433	1.05692	1.05692	0.000	4.19869	60.00000	Averaged	
54 4-Chlorophenylphenylether	0.53048	0.60601	0.60601	0.000	14.23959	60.00000	Averaged	
55 2-Methyl-4,6-dinitrophenol	45.89509	40.00000	0.09020	0.000	14.73773	60.00000	Linear	
133 Diphenylamine	0.56016	0.57740	0.57740	0.001	3.07863	20.00000	Averaged	ccc
58 1,2-Diphenylhydrazine	0.64031	0.71194	0.71194	0.000	11.18709	60.00000	Averaged	
59 Tributylphosphate	1.15111	1.33116	1.33116	0.000	15.64133	60.00000	Averaged	
61 4-Bromophenylphenylether	0.18174	0.21876	0.21876	0.000	20.36509	60.00000	Averaged	
63 Hexachlorobenzene	0.20559	0.20890	0.20890	0.000	1.61224	60.00000	Averaged	
65 Pentachlorophenol	0.10006	0.10486	0.10486	0.001	4.79855	20.00000	Averaged	ccc
206 n-Octadecane	0.46288	0.50459	0.50459	0.000	9.01075	60.00000	Averaged	
68 Phenanthrene	0.91163	0.92111	0.92111	0.000	1.03955	60.00000	Averaged	
69 Anthracene	0.90037	0.92671	0.92671	0.000	2.92518	60.00000	Averaged	
72 Di-n-butylphthalate	45.23638	40.00000	1.09237	0.000	13.09095	60.00000	Linear	
76 Fluoranthene	1.01909	0.95681	0.95681	0.001	-6.11130	20.00000	Averaged	ccc
79 Pyrene	1.38236	1.43076	1.43076	0.000	3.50143	60.00000	Averaged	
85 Butylbenzylphthalate	0.60761	0.61905	0.61905	0.000	1.88234	60.00000	Averaged	
89 Benzo(a)anthracene	0.98417	0.99117	0.99117	0.000	0.71107	60.00000	Averaged	
92 Chrysene	0.93299	0.95215	0.95215	0.000	2.05316	60.00000	Averaged	
93 bis(2-Ethylhexyl)phthalate	0.75379	0.80739	0.80739	0.000	7.11094	60.00000	Averaged	
94 Di-n-octylphthalate	1.56053	1.67476	1.67476	0.001	7.32037	20.00000	Averaged	ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 29-JUN-2005 15:41
Lab File ID: s4f2912.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050603-04 Quant Type: ISTD
Method: /chem/MSD4.i/s062905.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
95 Benzo(b)fluoranthene	1.08032	1.08789	1.08789	0.000	0.70081	60.00000	Averaged	
96 Benzo(k)fluoranthene	1.08650	1.17251	1.17251	0.000	7.91682	60.00000	Averaged	
97 Benzo(a)pyrene	0.84628	0.89488	0.89488	0.001	5.74310	60.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	0.69644	0.62463	0.62463	0.000	-10.31162	60.00000	Averaged	
100 Dibenzo(a,h)anthracene	34.02300	40.00000	0.51385	0.000	-14.94251	60.00000	Linear	
101 Benzo(ghi)perylene	0.59765	0.50928	0.50928	0.000	-14.78633	60.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 8.30844
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s062905.b/s4f2912.d
Lab Smp Id: UBN050603-04 Client Smp ID: BNAICV
Inj Date : 29-JUN-2005 15:41
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050603-04|40 PPM|1|SVMF|1|BNA ICV
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s062905.b/MSD4-8270-062905.m
Meth Date : 08-Jul-2005 00:38 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

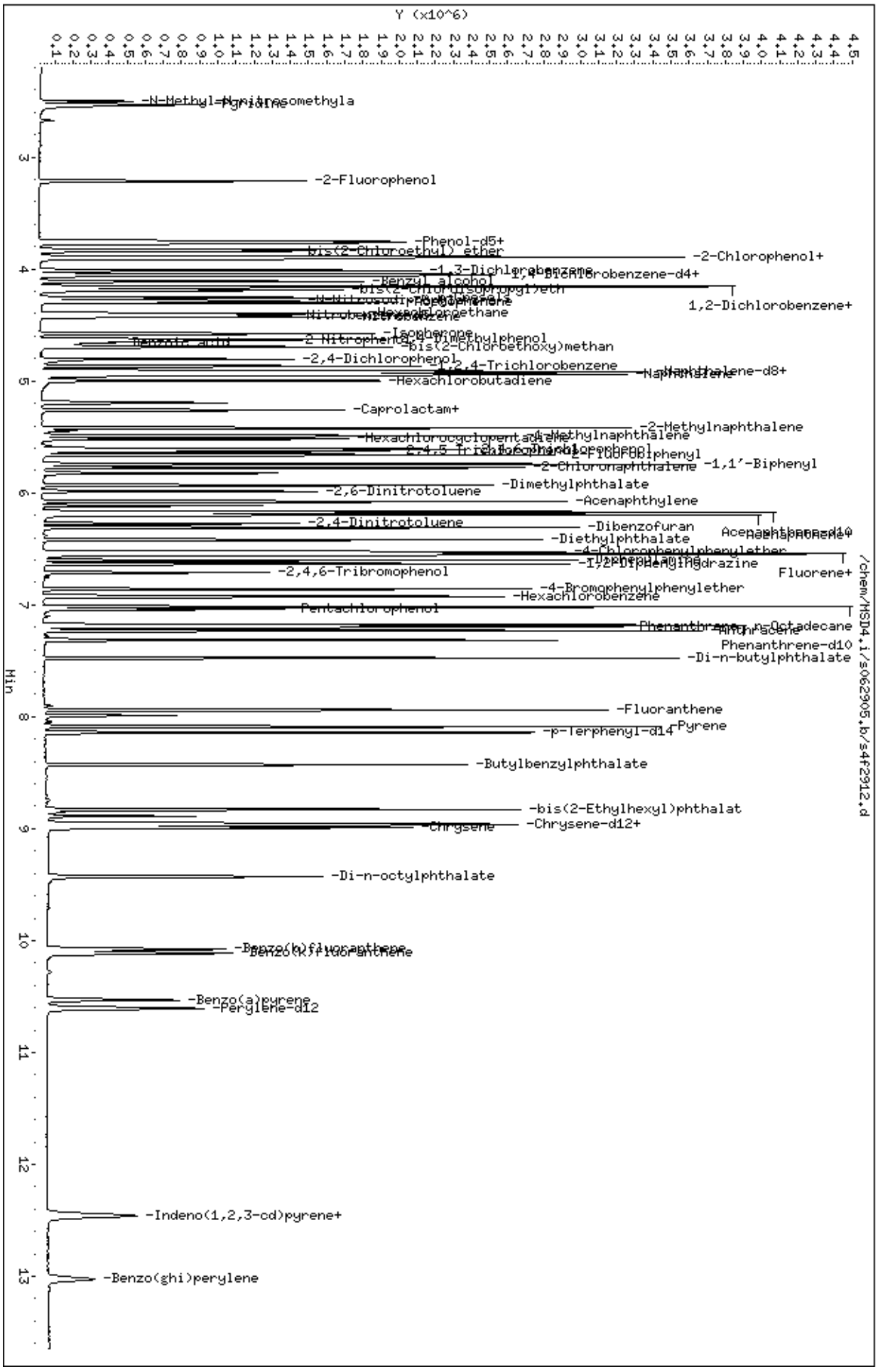
		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.050	4.050	(1.000)	300547	40.0000	
*	29 Naphthalene-d8	136	4.920	4.920	(1.000)	1232308	40.0000	
*	46 Acenaphthene-d10	164	6.171	6.171	(1.000)	672492	40.0000	
*	67 Phenanthrene-d10	188	7.182	7.182	(1.000)	1093390	40.0000	
*	91 Chrysene-d12	240	8.968	8.968	(1.000)	738411	40.0000	
*	98 Perylene-d12	264	10.607	10.607	(1.000)	477639	40.0000	
$	3 2-Fluorophenol	112	3.216	3.216	(0.794)	321661	40.0000	38.2
$	5 Phenol-d5	99	3.751	3.751	(0.926)	399213	40.0000	41.1
$	20 Nitrobenzene-d5	82	4.415	4.415	(0.897)	393079	40.0000	42.7
$	39 2-Fluorobiphenyl	172	5.660	5.660	(0.917)	763759	40.0000	43.6
$	60 2,4,6-Tribromophenol	329	6.712	6.712	(1.088)	95797	40.0000	42.8
$	81 p-Terphenyl-d14	244	8.145	8.145	(0.908)	748950	40.0000	42.1
	1 N-Methyl-N-nitrosomethylamine	74	2.499	2.499	(0.617)	198049	40.0000	46.8
	2 Pyridine	79	2.534	2.534	(0.626)	380366	40.0000	44.3
	6 Phenol	94	3.756	3.756	(0.927)	408230	40.0000	41.6
	7 bis(2-Chloroethyl) ether	93	3.845	3.845	(0.949)	358308	40.0000	36.0
	8 2-Chlorophenol	128	3.909	3.909	(0.965)	330025	40.0000	40.4
	203 n-Decane	43	3.892	3.892	(0.961)	420137	40.0000	43.0
	9 1,3-Dichlorobenzene	146	4.015	4.015	(0.991)	385986	40.0000	41.0
	11 1,4-Dichlorobenzene	146	4.062	4.062	(1.003)	387185	40.0000	42.5
	12 Benzyl alcohol	108	4.109	4.109	(1.014)	202750	40.0000	38.8
	13 1,2-Dichlorobenzene	146	4.168	4.168	(1.029)	348282	40.0000	40.7
	14 bis(2-Chloroisopropyl)ether	45	4.191	4.191	(1.035)	605877	40.0000	45.9
	15 o-Cresol	107	4.156	4.156	(1.026)	253191	40.0000	39.6
	16 Acetophenone	105	4.297	4.297	(1.061)	455192	40.0000	42.8
	17 N-Nitrosodipropylamine	70	4.279	4.279	(1.057)	258973	40.0000	42.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
18	m,p-Cresols	107	4.256	4.256	(1.051)	380885	40.0000	40.9
19	Hexachloroethane	117	4.397	4.397	(1.086)	148423	40.0000	42.1
21	Nitrobenzene	77	4.426	4.426	(0.900)	357351	40.0000	43.9
22	Isophorone	82	4.579	4.579	(0.931)	665681	40.0000	41.1
23	2-Nitrophenol	139	4.644	4.644	(0.944)	179468	40.0000	46.1
24	2,4-Dimethylphenol	122	4.626	4.626	(0.940)	304047	40.0000	38.0
25	bis(2-Chloroethoxy)methane	93	4.697	4.697	(0.955)	437953	40.0000	44.9
26	2,4-Dichlorophenol	162	4.802	4.802	(0.976)	268825	40.0000	39.3
27	Benzoic acid	105	4.661	4.661	(0.947)	146439	40.0000	36.4
28	1,2,4-Trichlorobenzene	180	4.867	4.867	(0.989)	329554	40.0000	43.4
30	Naphthalene	128	4.937	4.937	(1.004)	998763	40.0000	38.5
204	alpha-Terpineol	59	4.908	4.908	(0.998)	306185	40.0000	41.9
189	Caprolactam	113	5.261	5.261	(1.069)	8740	40.0000	3.4
32	Hexachlorobutadiene	225	5.002	5.002	(1.017)	198192	40.0000	39.5
33	4-Chloro-3-methylphenol	107	5.261	5.261	(1.069)	278610	40.0000	42.8
34	2-Methylnaphthalene	142	5.419	5.419	(1.101)	692188	40.0000	42.1
35	1-Methylnaphthalene	142	5.496	5.496	(1.117)	656327	40.0000	43.0
36	Hexachlorocyclopentadiene	237	5.519	5.519	(0.894)	212645	40.0000	43.4
208	1,1'-Biphenyl	154	5.742	5.742	(0.930)	860738	40.0000	43.4
37	2,4,6-Trichlorophenol	196	5.601	5.601	(0.908)	205014	40.0000	41.2
38	2,4,5-Trichlorophenol	196	5.631	5.631	(0.912)	223661	40.0000	42.9
40	2-Chloronaphthalene	162	5.772	5.772	(0.935)	635993	40.0000	42.4
43	Dimethylphthalate	163	5.930	5.930	(0.961)	754116	40.0000	41.6
44	2,6-Dinitrotoluene	165	5.989	5.989	(0.970)	162071	40.0000	44.8
45	Acenaphthylene	152	6.077	6.077	(0.985)	1024198	40.0000	42.8
47	Acenaphthene	154	6.195	6.195	(1.004)	640889	40.0000	42.7
48	2,4-Dinitrophenol	184	6.183	6.183	(1.002)	52889	40.0000	46.9
49	Dibenzofuran	168	6.312	6.312	(1.023)	886643	40.0000	42.9
50	2,4-Dinitrotoluene	165	6.271	6.271	(1.016)	201160	40.0000	45.8
51	Diethylphthalate	149	6.418	6.418	(1.040)	749783	40.0000	43.1
52	4-Nitrophenol	139	6.195	6.195	(1.004)	97989	40.0000	44.5
53	Fluorene	166	6.547	6.547	(1.061)	710769	40.0000	41.7
54	4-Chlorophenylphenylether	204	6.524	6.524	(1.057)	407539	40.0000	45.7
55	2-Methyl-4,6-dinitrophenol	198	6.559	6.559	(0.913)	98628	40.0000	45.9
133	Diphenylamine	169	6.600	6.600	(0.919)	631328	40.0000	41.2
58	1,2-Diphenylhydrazine	77	6.635	6.635	(0.924)	778429	40.0000	44.5
59	Tributylphosphate	99	6.541	6.541	(1.060)	895194	40.0000	46.2
61	4-Bromophenylphenylether	248	6.859	6.859	(0.955)	239185	40.0000	48.1
63	Hexachlorobenzene	284	6.917	6.917	(0.963)	228413	40.0000	40.6
65	Pentachlorophenol	266	7.041	7.041	(0.980)	114649	40.0000	41.9
206	n-Octadecane	57	7.017	7.017	(0.977)	551718	40.0000	43.6
68	Phenanthrene	178	7.200	7.200	(1.002)	1007134	40.0000	40.4
69	Anthracene	178	7.229	7.229	(1.007)	1013253	40.0000	41.2
72	Di-n-butylphthalate	149	7.476	7.476	(1.041)	1194382	40.0000	45.2
76	Fluoranthene	202	7.940	7.940	(1.106)	1046162	40.0000	37.6
79	Pyrene	202	8.093	8.093	(0.902)	1056489	40.0000	41.4
85	Butylbenzylphthalate	149	8.433	8.433	(0.940)	457115	40.0000	40.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
89 Benzo(a)anthracene	228	8.956	8.956	(0.999)	731888	40.0000	40.3
92 Chrysene	228	8.992	8.992	(1.003)	703076	40.0000	40.8
93 bis(2-Ethylhexyl)phthalate	149	8.827	8.827	(0.984)	596188	40.0000	42.8
94 Di-n-octylphthalate	149	9.432	9.432	(0.889)	799932	40.0000	42.9
95 Benzo(b)fluoranthene	252	10.078	10.078	(0.950)	519619	40.0000	40.3
96 Benzo(k)fluoranthene	252	10.114	10.114	(0.953)	560038	40.0000	43.2
97 Benzo(a)pyrene	252	10.531	10.531	(0.993)	427431	40.0000	42.3
99 Indeno(1,2,3-cd)pyrene	276	12.452	12.452	(1.174)	298346	40.0000	35.9
100 Dibenzo(a,h)anthracene	278	12.464	12.464	(1.175)	245435	40.0000	34.0
101 Benzo(ghi)perylene	276	13.028	13.028	(1.228)	243253	40.0000	34.1(T)

QC Flag Legend

T - Target compound detected outside RT window.



Data File: /chem/MSD4.i/s062905.b/s4f2912.d
Date : 29-JUN-2005 15:41
Client ID: BNAICV
Sample Info: IUBN050603-04140 PPMIISWMFIIIBNA ICV
Column phase: J & W DB-5MS

Instrument: MSD4.i
Operator: EED
Column diameter: 0.20

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 05-JUL-2005 19:51
Lab File ID: s4g0502.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050610-04.3 Quant Type: ISTD
Method: /chem/MSD4.i/s070505.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.11993	1.06184	1.06184	0.000	-5.18644	60.00000	Averaged	
$ 5 Phenol-d5	1.29122	1.28701	1.28701	0.000	-0.32627	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.29851	0.30427	0.30427	0.000	1.93139	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	1.04094	1.11279	1.11279	0.000	6.90168	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.13322	0.13721	0.13721	0.000	2.98871	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.96356	0.96971	0.96971	0.000	0.63808	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.56361	0.64172	0.64172	0.000	13.85994	60.00000	Averaged	
2 Pyridine	1.14346	1.18254	1.18254	0.000	3.41788	60.00000	Averaged	
6 Phenol	1.30742	1.33146	1.33146	0.001	1.83866	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	1.32498	1.39792	1.39792	0.000	5.50478	60.00000	Averaged	
8 2-Chlorophenol	1.08775	1.11319	1.11319	0.000	2.33896	60.00000	Averaged	
203 n-Decane	1.30102	1.40881	1.40881	0.000	8.28454	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.25349	1.34453	1.34453	0.000	7.26319	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.21170	1.31591	1.31591	0.001	8.60023	20.00000	Averaged	ccc
12 Benzyl alcohol	0.69611	0.64512	0.64512	0.000	-7.32472	60.00000	Averaged	
13 1,2-Dichlorobenzene	1.13780	1.19935	1.19935	0.000	5.40954	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	1.75564	1.93805	1.93805	0.000	10.39028	60.00000	Averaged	
15 o-Cresol	0.85067	0.87639	0.87639	0.000	3.02364	60.00000	Averaged	
16 Acetophenone	1.41669	1.54451	1.54451	0.000	9.02290	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.82023	0.86698	0.86698	0.050	5.70014	60.00000	Averaged	spcc
18 m,p-Cresols	1.23942	1.26685	1.26685	0.000	2.21342	60.00000	Averaged	
19 Hexachloroethane	0.46891	0.51077	0.51077	0.000	8.92861	60.00000	Averaged	
21 Nitrobenzene	0.26430	0.27572	0.27572	0.000	4.32171	60.00000	Averaged	
22 Isophorone	0.52553	0.52015	0.52015	0.000	-1.02372	60.00000	Averaged	
23 2-Nitrophenol	0.12627	0.14595	0.14595	0.001	15.58525	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	37.90588	40.00000	0.24600	0.000	-5.23530	60.00000	Linear	
25 bis(2-Chloroethoxy)methane	0.31674	0.35050	0.35050	0.000	10.65782	60.00000	Averaged	
26 2,4-Dichlorophenol	0.22178	0.22545	0.22545	0.001	1.65823	20.00000	Averaged	ccc
27 Benzoic acid	34.03575	40.00000	0.10897	0.000	-14.91062	60.00000	Linear	
28 1,2,4-Trichlorobenzene	0.24620	0.27621	0.27621	0.000	12.19000	60.00000	Averaged	
30 Naphthalene	0.84188	0.77393	0.77393	0.000	-8.07196	60.00000	Averaged	
204 alpha-Terpineol	0.23719	0.25298	0.25298	0.000	6.65580	60.00000	Averaged	
189 Caprolactam	0.08203	0.08737	0.08737	0.000	6.50842	60.00000	Averaged	
32 Hexachlorobutadiene	0.16296	0.16546	0.16546	0.001	1.53418	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.21127	0.19981	0.19981	0.001	-5.42794	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.53306	0.54150	0.54150	0.000	1.58474	60.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 05-JUL-2005 19:51
Lab File ID: s4g0502.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050610-04.3 Quant Type: ISTD
Method: /chem/MSD4.i/s070505.b/MSD4-8270-062905.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.49521	0.51425	0.51425	0.000	3.84522	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.29106	0.33174	0.33174	0.050	13.97590	60.00000	Averaged spcc
208 1,1'-Biphenyl	1.17906	1.20680	1.20680	0.000	2.35315	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.29595	0.28952	0.28952	0.001	-2.17242	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31018	0.33030	0.33030	0.000	6.48515	60.00000	Averaged
40 2-Chloronaphthalene	0.89250	0.96112	0.96112	0.000	7.68859	60.00000	Averaged
43 Dimethylphthalate	1.07914	1.10103	1.10103	0.000	2.02847	60.00000	Averaged
44 2,6-Dinitrotoluene	0.21539	0.24225	0.24225	0.000	12.47331	60.00000	Averaged
45 Acenaphthylene	1.42209	1.46423	1.46423	0.000	2.96319	60.00000	Averaged
47 Acenaphthene	0.89324	0.90280	0.90280	0.001	1.07023	20.00000	Averaged ccc
48 2,4-Dinitrophenol	48.40466	40.00000	0.08242	0.050	21.01166	60.00000	Linear spcc
49 Dibenzofuran	1.23039	1.35534	1.35534	0.000	10.15456	60.00000	Averaged
50 2,4-Dinitrotoluene	0.26127	0.30961	0.30961	0.000	18.50055	60.00000	Averaged
51 Diethylphthalate	1.03429	1.10485	1.10485	0.000	6.82123	60.00000	Averaged
52 4-Nitrophenol	0.13088	0.13326	0.13326	0.050	1.81909	60.00000	Averaged spcc
53 Fluorene	1.01433	1.00350	1.00350	0.000	-1.06719	60.00000	Averaged
54 4-Chlorophenylphenylether	0.53048	0.58220	0.58220	0.000	9.74996	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	52.69575	40.00000	0.10736	0.000	31.73939	60.00000	Linear
133 Diphenylamine	0.56016	0.57885	0.57885	0.001	3.33701	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.64031	0.67517	0.67517	0.000	5.44474	60.00000	Averaged
59 Tributylphosphate	1.15111	1.26996	1.26996	0.000	10.32521	60.00000	Averaged
61 4-Bromophenylphenylether	0.18174	0.21707	0.21707	0.000	19.43760	60.00000	Averaged
63 Hexachlorobenzene	0.20559	0.21341	0.21341	0.000	3.80300	60.00000	Averaged
65 Pentachlorophenol	0.10006	0.11196	0.11196	0.001	11.89514	20.00000	Averaged ccc
206 n-Octadecane	0.46288	0.51602	0.51602	0.000	11.47887	60.00000	Averaged
68 Phenanthrene	0.91163	0.90477	0.90477	0.000	-0.75254	60.00000	Averaged
69 Anthracene	0.90037	0.89231	0.89231	0.000	-0.89567	60.00000	Averaged
72 Di-n-butylphthalate	43.95364	40.00000	1.06679	0.000	9.88411	60.00000	Linear
76 Fluoranthene	1.01909	0.92173	0.92173	0.001	-9.55310	20.00000	Averaged ccc
79 Pyrene	1.38236	1.33475	1.33475	0.000	-3.44416	60.00000	Averaged
85 Butylbenzylphthalate	0.60761	0.56945	0.56945	0.000	-6.28038	60.00000	Averaged
89 Benzo(a)anthracene	0.98417	0.92634	0.92634	0.000	-5.87595	60.00000	Averaged
92 Chrysene	0.93299	0.91607	0.91607	0.000	-1.81406	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.75379	0.70766	0.70766	0.000	-6.11950	60.00000	Averaged
94 Di-n-octylphthalate	1.56053	1.46531	1.46531	0.001	-6.10161	20.00000	Averaged ccc

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 05-JUL-2005 19:51
Lab File ID: s4g0502.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050610-04.3 Quant Type: ISTD
Method: /chem/MSD4.i/s070505.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
95 Benzo(b)fluoranthene	1.08032	1.03935	1.03935	0.000	-3.79194	60.00000	Averaged	
96 Benzo(k)fluoranthene	1.08650	1.12915	1.12915	0.000	3.92608	60.00000	Averaged	
97 Benzo(a)pyrene	0.84628	0.85833	0.85833	0.001	1.42397	60.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	0.69644	0.65868	0.65868	0.000	-5.42161	60.00000	Averaged	
100 Dibenzo(a,h)anthracene	35.28106	40.00000	0.53487	0.000	-11.79734	60.00000	Linear	
101 Benzo(ghi)perylene	0.59765	0.57948	0.57948	0.000	-3.04157	60.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 6.73018
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0502.d
Lab Smp Id: UBN050610-04.3 Client Smp ID: BNACVS
Inj Date : 05-JUL-2005 19:51
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-04.3|40 PPM|1|SVMF|1|BNA CVS
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 07-Jul-2005 18:14 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	302182	40.0000	
*	29 Naphthalene-d8	136	4.919	4.919	(1.000)	1260606	40.0000	
*	46 Acenaphthene-d10	164	6.170	6.170	(1.000)	696761	40.0000	
*	67 Phenanthrene-d10	188	7.175	7.175	(1.000)	1107220	40.0000	
*	91 Chrysene-d12	240	8.961	8.961	(1.000)	773040	40.0000	
*	98 Perylene-d12	264	10.595	10.595	(1.000)	489726	40.0000	
$	3 2-Fluorophenol	112	3.215	3.215	(0.795)	320870	40.0000	37.9
$	5 Phenol-d5	99	3.744	3.744	(0.926)	388911	40.0000	39.9
$	20 Nitrobenzene-d5	82	4.408	4.408	(0.896)	383567	40.0000	40.8
$	39 2-Fluorobiphenyl	172	5.659	5.659	(0.917)	775347	40.0000	42.8
$	60 2,4,6-Tribromophenol	329	6.705	6.705	(1.087)	95600	40.0000	41.2
$	81 p-Terphenyl-d14	244	8.139	8.139	(0.908)	749622	40.0000	40.2
	1 N-Methyl-N-nitrosomethylamine	74	2.492	2.492	(0.616)	193917	40.0000	45.5
	2 Pyridine	79	2.528	2.528	(0.625)	357343	40.0000	41.4
	6 Phenol	94	3.756	3.756	(0.929)	402344	40.0000	40.7
	7 bis(2-Chloroethyl) ether	93	3.838	3.838	(0.949)	422427	40.0000	42.2
	8 2-Chlorophenol	128	3.908	3.908	(0.967)	336387	40.0000	40.9
	203 n-Decane	43	3.885	3.885	(0.961)	425716	40.0000	43.3
	9 1,3-Dichlorobenzene	146	4.014	4.014	(0.993)	406294	40.0000	42.9
	11 1,4-Dichlorobenzene	146	4.055	4.055	(1.003)	397643	40.0000	43.4
	12 Benzyl alcohol	108	4.108	4.108	(1.016)	194943	40.0000	37.1
	13 1,2-Dichlorobenzene	146	4.161	4.161	(1.029)	362421	40.0000	42.2
	14 bis(2-Chloroisopropyl)ether	45	4.185	4.185	(1.035)	585645	40.0000	44.2
	15 o-Cresol	107	4.155	4.155	(1.028)	264830	40.0000	41.2
	16 Acetophenone	105	4.296	4.296	(1.062)	466724	40.0000	43.6
	17 N-Nitrosodipropylamine	70	4.279	4.279	(1.058)	261987	40.0000	42.3

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
18 m,p-Cresols	107	4.255	4.255	(1.052)	382820	40.0000	40.9
19 Hexachloroethane	117	4.396	4.396	(1.087)	154347	40.0000	43.6
21 Nitrobenzene	77	4.420	4.420	(0.898)	347576	40.0000	41.7
22 Isophorone	82	4.572	4.572	(0.930)	655706	40.0000	39.6
23 2-Nitrophenol	139	4.637	4.637	(0.943)	183983	40.0000	46.2
24 2,4-Dimethylphenol	122	4.625	4.625	(0.940)	310111	40.0000	37.9
25 bis(2-Chloroethoxy)methane	93	4.696	4.696	(0.955)	441846	40.0000	44.3
26 2,4-Dichlorophenol	162	4.801	4.801	(0.976)	284207	40.0000	40.7
27 Benzoic acid	105	4.655	4.655	(0.946)	137362	40.0000	34.0
28 1,2,4-Trichlorobenzene	180	4.866	4.866	(0.989)	348198	40.0000	44.9
30 Naphthalene	128	4.931	4.931	(1.002)	975615	40.0000	36.8
204 alpha-Terpineol	59	4.907	4.907	(0.998)	318910	40.0000	42.7
189 Caprolactam	113	5.189	5.189	(1.055)	110134	40.0000	42.6(H)
32 Hexachlorobutadiene	225	4.995	4.995	(1.016)	208586	40.0000	40.6
33 4-Chloro-3-methylphenol	107	5.254	5.254	(1.068)	251876	40.0000	37.8
34 2-Methylnaphthalene	142	5.413	5.413	(1.100)	682622	40.0000	40.6
35 1-Methylnaphthalene	142	5.489	5.489	(1.116)	648267	40.0000	41.5
36 Hexachlorocyclopentadiene	237	5.518	5.518	(0.894)	231145	40.0000	45.6
208 1,1'-Biphenyl	154	5.736	5.736	(0.930)	840852	40.0000	40.9
37 2,4,6-Trichlorophenol	196	5.601	5.601	(0.908)	201729	40.0000	39.1
38 2,4,5-Trichlorophenol	196	5.630	5.630	(0.912)	230137	40.0000	42.6
40 2-Chloronaphthalene	162	5.771	5.771	(0.935)	669669	40.0000	43.1
43 Dimethylphthalate	163	5.924	5.924	(0.960)	767155	40.0000	40.8
44 2,6-Dinitrotoluene	165	5.982	5.982	(0.970)	168792	40.0000	45.0
45 Acenaphthylene	152	6.071	6.071	(0.984)	1020218	40.0000	41.2
47 Acenaphthene	154	6.194	6.194	(1.004)	629033	40.0000	40.4
48 2,4-Dinitrophenol	184	6.182	6.182	(1.002)	57429	40.0000	48.4
49 Dibenzofuran	168	6.306	6.306	(1.022)	944345	40.0000	44.1
50 2,4-Dinitrotoluene	165	6.270	6.270	(1.016)	215725	40.0000	47.4
51 Diethylphthalate	149	6.411	6.411	(1.039)	769813	40.0000	42.7
52 4-Nitrophenol	139	6.194	6.194	(1.004)	92851	40.0000	40.7
53 Fluorene	166	6.547	6.547	(1.061)	699203	40.0000	39.6
54 4-Chlorophenylphenylether	204	6.523	6.523	(1.057)	405652	40.0000	43.9
55 2-Methyl-4,6-dinitrophenol	198	6.552	6.552	(0.913)	118870	40.0000	52.7
133 Diphenylamine	169	6.599	6.599	(0.920)	640916	40.0000	41.3
58 1,2-Diphenylhydrazine	77	6.629	6.629	(0.924)	747564	40.0000	42.2
59 Tributylphosphate	99	6.535	6.535	(1.059)	884862	40.0000	44.1
61 4-Bromophenylphenylether	248	6.858	6.858	(0.956)	240344	40.0000	47.8
63 Hexachlorobenzene	284	6.917	6.917	(0.964)	236289	40.0000	41.5
65 Pentachlorophenol	266	7.034	7.034	(0.980)	123961	40.0000	44.8
206 n-Octadecane	57	7.011	7.011	(0.977)	571346	40.0000	44.6
68 Phenanthrene	178	7.193	7.193	(1.002)	1001784	40.0000	39.7
69 Anthracene	178	7.222	7.222	(1.007)	987979	40.0000	39.6
72 Di-n-butylphthalate	149	7.469	7.469	(1.041)	1181175	40.0000	44.0
76 Fluoranthene	202	7.939	7.939	(1.106)	1020559	40.0000	36.2
79 Pyrene	202	8.086	8.086	(0.902)	1031813	40.0000	38.6
85 Butylbenzylphthalate	149	8.427	8.427	(0.940)	440211	40.0000	37.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
89 Benzo(a)anthracene	228	8.950	8.950	(0.999)	716097	40.0000	37.6
92 Chrysene	228	8.985	8.985	(1.003)	708156	40.0000	39.3
93 bis(2-Ethylhexyl)phthalate	149	8.826	8.826	(0.985)	547052	40.0000	37.6
94 Di-n-octylphthalate	149	9.420	9.420	(0.889)	717600	40.0000	37.6
95 Benzo(b)fluoranthene	252	10.072	10.072	(0.951)	508999	40.0000	38.5
96 Benzo(k)fluoranthene	252	10.107	10.107	(0.954)	552976	40.0000	41.6
97 Benzo(a)pyrene	252	10.518	10.518	(0.993)	420347	40.0000	40.6
99 Indeno(1,2,3-cd)pyrene	276	12.440	12.440	(1.174)	322574	40.0000	37.8
100 Dibenzo(a,h)anthracene	278	12.451	12.451	(1.175)	261940	40.0000	35.3
101 Benzo(ghi)perylene	276	13.010	13.010	(1.228)	283784	40.0000	38.8(T)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD4.i/s070505.b/s4g0502.d

Date : 05-JUL-2005 19:51

Client ID: BNACVS

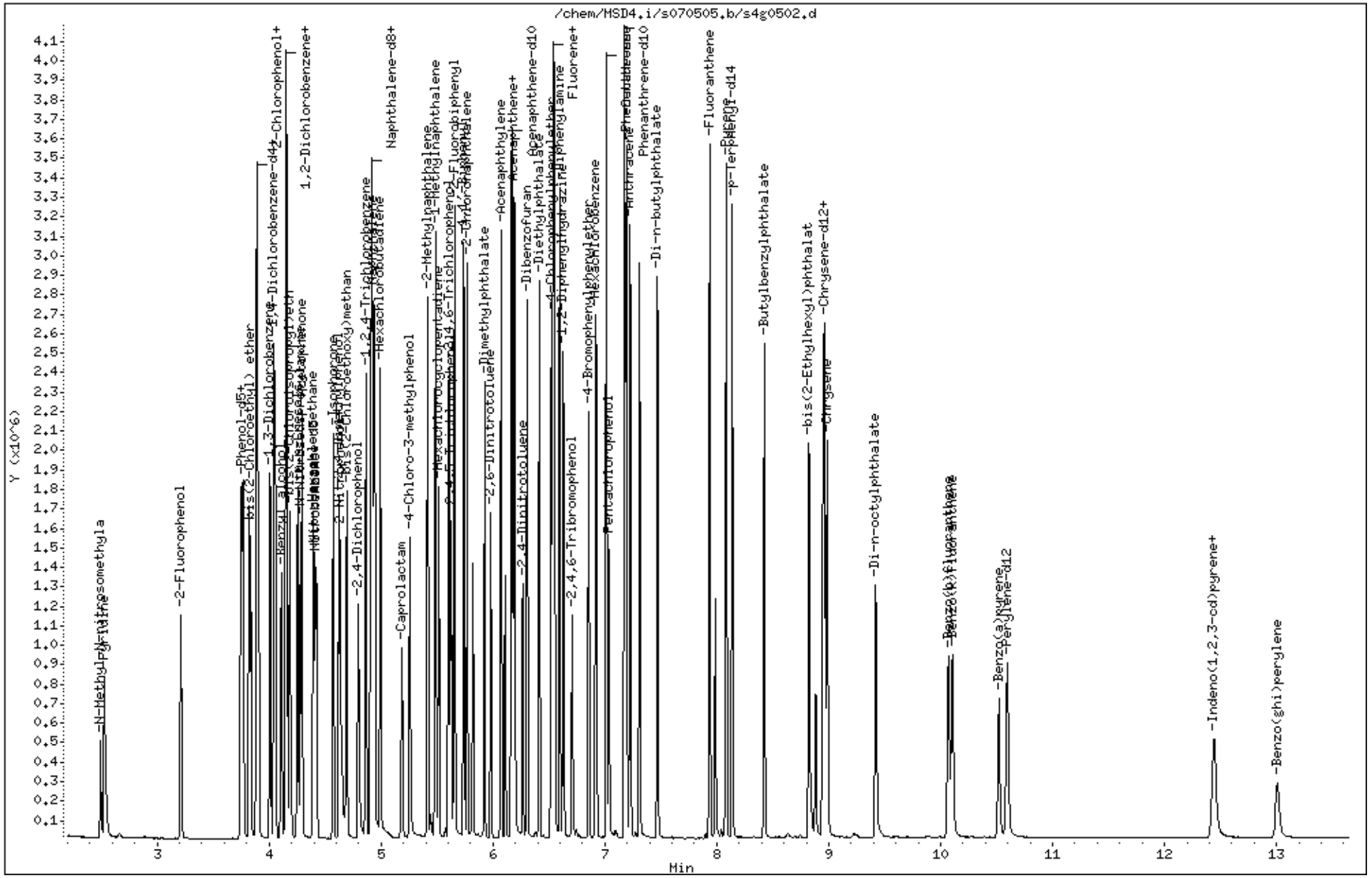
Sample Info: !UBN050610-04,3!40 PPM!1!SVMF!1!BNA CVS

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 05-JUL-2005 20:11
Lab File ID: s4g0503.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050623-02.1 Quant Type: ISTD
Method: /chem/MSD4.i/s070505.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Aniline	1.91909	1.66901	1.66901	0.000	-13.03108	60.00000	Averaged
209 Benzaldehyde	1.06880	0.91789	0.91789	0.000	-14.11940	60.00000	Averaged
31 4-Chloroaniline	0.39004	0.33924	0.33924	0.000	-13.02381	60.00000	Averaged
205 2,3-Dichloroaniline	0.52792	0.51519	0.51519	0.000	-2.41191	60.00000	Averaged
42 o-Nitroaniline	0.29077	0.24601	0.24601	0.000	-15.39455	60.00000	Averaged
41 m-Nitroaniline	0.26054	0.23180	0.23180	0.000	-11.03176	60.00000	Averaged
56 p-Nitroaniline	0.22035	0.19907	0.19907	0.000	-9.65839	60.00000	Averaged
207 Atrazine	0.05687	0.04990	0.04990	0.000	-12.25536	60.00000	Averaged
77 Benzidine	0.49363	0.59577	0.59577	0.000	20.69076	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.26636	0.31040	0.31040	0.000	16.53419	60.00000	Averaged
173 Carbazole	0.88374	0.81580	0.81580	0.000	-7.68778	60.00000	Averaged

Average %D / Drift Results.

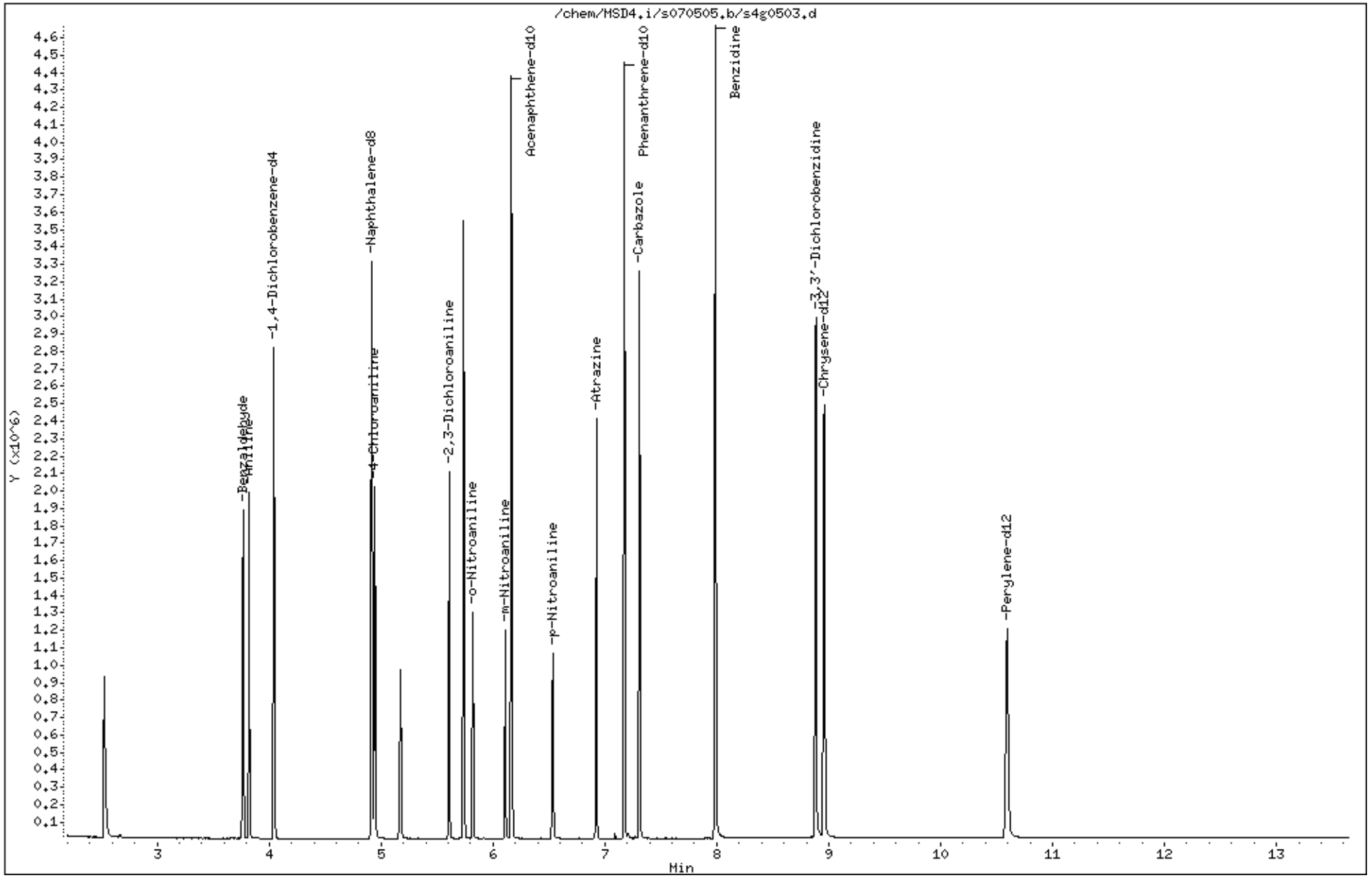
Calculated Average %D/Drift = 12.34900
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0503.d
Lab Smp Id: UBN050623-02.1 Client Smp ID: ANBZCVS
Inj Date : 05-JUL-2005 20:11
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050623-02.1|40 PPM|1|SVMF|1|ANBZ CVS
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 05-Jul-2005 20:52 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	327092	40.0000	
* 29 Naphthalene-d8	136	4.914	4.914	(1.000)	1263668	40.0000	
* 46 Acenaphthene-d10	164	6.165	6.165	(1.000)	743597	40.0000	
* 67 Phenanthrene-d10	188	7.176	7.176	(1.000)	1170379	40.0000	
* 91 Chrysene-d12	240	8.962	8.962	(1.000)	909633	40.0000	
* 98 Perylene-d12	264	10.595	10.595	(1.000)	670591	40.0000	
4 Aniline	93	3.821	3.821	(0.945)	545922	40.0000	34.8
209 Benzaldehyde	77	3.768	3.768	(0.932)	300234	40.0000	34.4
31 4-Chloroaniline	127	4.943	4.943	(1.006)	428687	40.0000	34.8
205 2,3-Dichloroaniline	161	5.607	5.607	(0.909)	383092	40.0000	39.0
42 o-Nitroaniline	65	5.824	5.824	(0.945)	182932	40.0000	33.8
41 m-Nitroaniline	138	6.112	6.112	(0.991)	172363	40.0000	35.6
56 p-Nitroaniline	138	6.535	6.535	(1.060)	148027	40.0000	36.1
207 Atrazine	173	6.923	6.923	(0.965)	58406	40.0000	35.1
77 Benzidine	184	7.987	7.987	(0.891)	1354822	100.000	121
90 3,3'-Dichlorobenzidine	252	8.885	8.885	(0.991)	705875	100.000	116
173 Carbazole	167	7.311	7.311	(1.019)	954792	40.0000	36.9

Data File: /chem/MSD4.i/s070505.b/s4g0503.d
Date : 05-JUL-2005 20:11
Client ID: ANBZCVS
Instrument: MSD4.i
Sample Info: IUBN050623-02.1|40 PPMI1|SVMFI1|ANBZ CVS
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 05-JUL-2005 20:54
Lab File ID: s4g0505.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050610-01 Quant Type: ISTD
Method: /chem/MSD4.i/s070505.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
103 Methyl methacrylate	0.26137	0.21692	0.21692	0.000	-17.00748	60.00000	Averaged
104 Ethyl methacrylate	1.09246	0.87206	0.87206	0.000	-20.17423	60.00000	Averaged
105 2-Picoline	1.43537	1.36821	1.36821	0.000	-4.67885	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.60675	0.57354	0.57354	0.000	-5.47347	60.00000	Averaged
107 Methyl methanesulfonate	0.64706	0.60242	0.60242	0.000	-6.89850	60.00000	Averaged
108 N-Nitrosodiethylamine	0.59113	0.57008	0.57008	0.000	-3.56156	60.00000	Averaged
109 Ethyl Methanesulfonate	0.92406	0.85188	0.85188	0.000	-7.81105	60.00000	Averaged
110 Pentachloroethane	0.50578	0.48916	0.48916	0.000	-3.28508	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.66221	0.63765	0.63765	0.000	-3.70887	60.00000	Averaged
113 N-Nitrosomorpholine	0.75715	0.72337	0.72337	0.000	-4.46192	60.00000	Averaged
114 o-Toluidine	1.92169	1.91082	1.91082	0.000	-0.56594	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.88802	0.74837	0.74837	0.000	-15.72566	60.00000	Averaged
118 2,6-Dichlorophenol	0.25367	0.23654	0.23654	0.000	-6.75536	60.00000	Averaged
119 Hexachloropropene	0.21341	0.20630	0.20630	0.000	-3.33437	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.23948	0.23559	0.23559	0.000	-1.62766	60.00000	Averaged
122 Safrole	0.26284	0.25050	0.25050	0.000	-4.69254	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.53453	0.54344	0.54344	0.000	1.66695	60.00000	Averaged
124 Isosafrole	0.47578	0.46916	0.46916	0.000	-1.39168	60.00000	Averaged
125 1,4-Naphthoquinone	0.41975	0.40139	0.40139	0.000	-4.37418	60.00000	Averaged
126 m-Dinitrobenzene	0.16925	0.17414	0.17414	0.000	2.89067	60.00000	Averaged
127 Pentachlorobenzene	0.47485	0.48518	0.48518	0.000	2.17506	60.00000	Averaged
128 1-Naphthylamine	1.03228	1.06330	1.06330	0.000	3.00511	60.00000	Averaged
129 2-Naphthylamine	1.00119	0.97723	0.97723	0.000	-2.39355	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.24685	0.23953	0.23953	0.000	-2.96429	60.00000	Averaged
131 5-Nitro-o-toluidine	0.30931	0.31194	0.31194	0.000	0.84965	60.00000	Averaged
137 Phenacetin	0.33532	0.32869	0.32869	0.000	-1.97961	60.00000	Averaged
140 4-Aminobiphenyl	0.60243	0.60478	0.60478	0.000	0.39115	60.00000	Averaged
141 Pentachloronitrobenzene	0.08331	0.08770	0.08770	0.000	5.27273	60.00000	Averaged
142 Pronamide	0.30314	0.30490	0.30490	0.000	0.57849	60.00000	Averaged
143 Dinoseb	38.41314	40.00000	0.12757	0.000	-3.96715	60.00000	Linear
146 4-Nitroquinoline-1-oxide	0.03138	0.03841	0.03841	0.000	22.38431	60.00000	Averaged
147 Methapyrilene	0.50317	0.51713	0.51713	0.000	2.77407	60.00000	Averaged
149 Aramite	0.05090	0.04526	0.04526	0.000	-11.08269	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.37878	0.35147	0.35147	0.000	-7.20930	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.52342	0.57378	0.57378	0.000	9.62216	60.00000	Averaged
155 2-Acetylaminofluorene	40.64987	40.00000	0.30529	0.000	1.62467	60.00000	Linear

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD4.i Injection Date: 05-JUL-2005 20:54
Lab File ID: s4g0505.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: Init. Cal. Times: 12:23 10:23
Lab Sample ID: UBN050610-01 Quant Type: ISTD
Method: /chem/MSD4.i/s070505.b/MSD4-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
157 7,12Dimethylbenz(a)anthrace	0.65712	0.59296	0.59296	0.000	-9.76439	60.00000	Averaged
158 3-Methylcholanthrene	0.50453	0.50616	0.50616	0.000	0.32350	60.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.48547
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0505.d
Lab Smp Id: UBN050610-01 Client Smp ID: 168CVS
Inj Date : 05-JUL-2005 20:54
Operator : EED Inst ID: MSD4.i
Smp Info : |UBN050610-01|40 PPM|1|SVMF|1|168 CVS
Misc Info : |MSD8270_LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 05-Jul-2005 21:25 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	4.043	4.043	(1.000)	331519	40.0000	
* 29 Naphthalene-d8	136	4.919	4.919	(1.000)	1269379	40.0000	
* 46 Acenaphthene-d10	164	6.165	6.165	(1.000)	751160	40.0000	
* 67 Phenanthrene-d10	188	7.175	7.175	(1.000)	1186376	40.0000	
* 91 Chrysene-d12	240	8.961	8.961	(1.000)	932468	40.0000	
* 98 Perylene-d12	264	10.595	10.595	(1.000)	681272	40.0000	
103 Methyl methacrylate	100	2.322	2.322	(0.574)	71911	40.0000	33.2
104 Ethyl methacrylate	69	2.721	2.721	(0.673)	289105	40.0000	31.9
105 2-Picoline	93	2.921	2.921	(0.722)	453588	40.0000	38.1
106 N-Nitrosomethylethylamine	88	2.968	2.968	(0.734)	190141	40.0000	37.8
107 Methyl methanesulfonate	80	3.127	3.127	(0.773)	199714	40.0000	37.2
108 N-Nitrosodiethylamine	102	3.362	3.362	(0.831)	188991	40.0000	38.6
109 Ethyl Methanesulfonate	79	3.521	3.521	(0.871)	282416	40.0000	36.9
110 Pentachloroethane	167	3.867	3.867	(0.956)	162166	40.0000	38.7
111 N-Nitrosopyrrolidine	100	4.284	4.284	(1.060)	211392	40.0000	38.5(Q)
113 N-Nitrosomorpholine	56	4.302	4.302	(1.064)	239811	40.0000	38.2
114 o-Toluidine	106	4.320	4.320	(1.068)	633473	40.0000	39.8
116 a,a-Dimethylphenethylamine	58	4.772	4.772	(0.970)	949969	40.0000	33.7
118 2,6-Dichlorophenol	162	4.954	4.954	(1.007)	300254	40.0000	37.3
119 Hexachloropropene	213	4.989	4.989	(1.014)	261867	40.0000	38.7
121 N-Nitrosodi-n-butylamine	84	5.154	5.154	(1.048)	299047	40.0000	39.3
122 Safrole	162	5.324	5.324	(1.082)	317985	40.0000	38.1
123 1,2,4,5-Tetrachlorobenzene	216	5.530	5.530	(0.897)	408213	40.0000	40.7
124 Isosafrole	162	5.694	5.694	(0.924)	352413	40.0000	39.4
125 1,4-Naphthoquinone	158	5.888	5.888	(0.955)	301507	40.0000	38.2
126 m-Dinitrobenzene	168	5.965	5.965	(0.968)	130810	40.0000	41.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
127 Pentachlorobenzene	250	6.276	6.276	(1.018)	364444	40.0000	40.9
128 1-Naphthylamine	143	6.358	6.358	(1.031)	798712	40.0000	41.2
129 2-Naphthylamine	143	6.411	6.411	(1.040)	734053	40.0000	39.0
130 2,3,4,6-Tetrachlorophenol	232	6.382	6.382	(1.035)	179927	40.0000	38.8
131 5-Nitro-o-toluidine	152	6.535	6.535	(1.060)	234317	40.0000	40.3
137 Phenacetin	108	6.781	6.781	(0.945)	389944	40.0000	39.2
140 4-Aminobiphenyl	169	6.599	6.599	(0.920)	717500	40.0000	40.2
141 Pentachloronitrobenzene	237	7.046	7.046	(0.982)	104046	40.0000	42.1
142 Pronamide	173	7.034	7.034	(0.980)	361723	40.0000	40.2
143 Dinoseb	211	7.122	7.122	(0.993)	151346	40.0000	38.4
146 4-Nitroquinoline-1-oxide	101	7.663	7.663	(1.068)	45568	40.0000	49.0
147 Methapyrilene	58	7.675	7.675	(1.070)	613511	40.0000	41.1
149 Aramite	185	8.086	8.086	(1.127)	53689	40.0000	35.6
151 p-(Dimethylamino)azobenzene	120	8.221	8.221	(0.917)	327735	40.0000	37.1
153 3,3'-Dimethylbenzidine	212	8.450	8.450	(0.943)	535036	40.0000	43.8
155 2-Acetylaminofluorene	181	8.644	8.644	(0.965)	284669	40.0000	40.6
157 7,12Dimethylbenz(a)anthracene	256	10.042	10.042	(0.948)	403966	40.0000	36.1
158 3-Methylcholanthrene	268	11.006	11.006	(1.039)	344832	40.0000	40.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD4.i/s070505.b/s4g0505.d

Date : 05-JUL-2005 20:54

Client ID: 168CVS

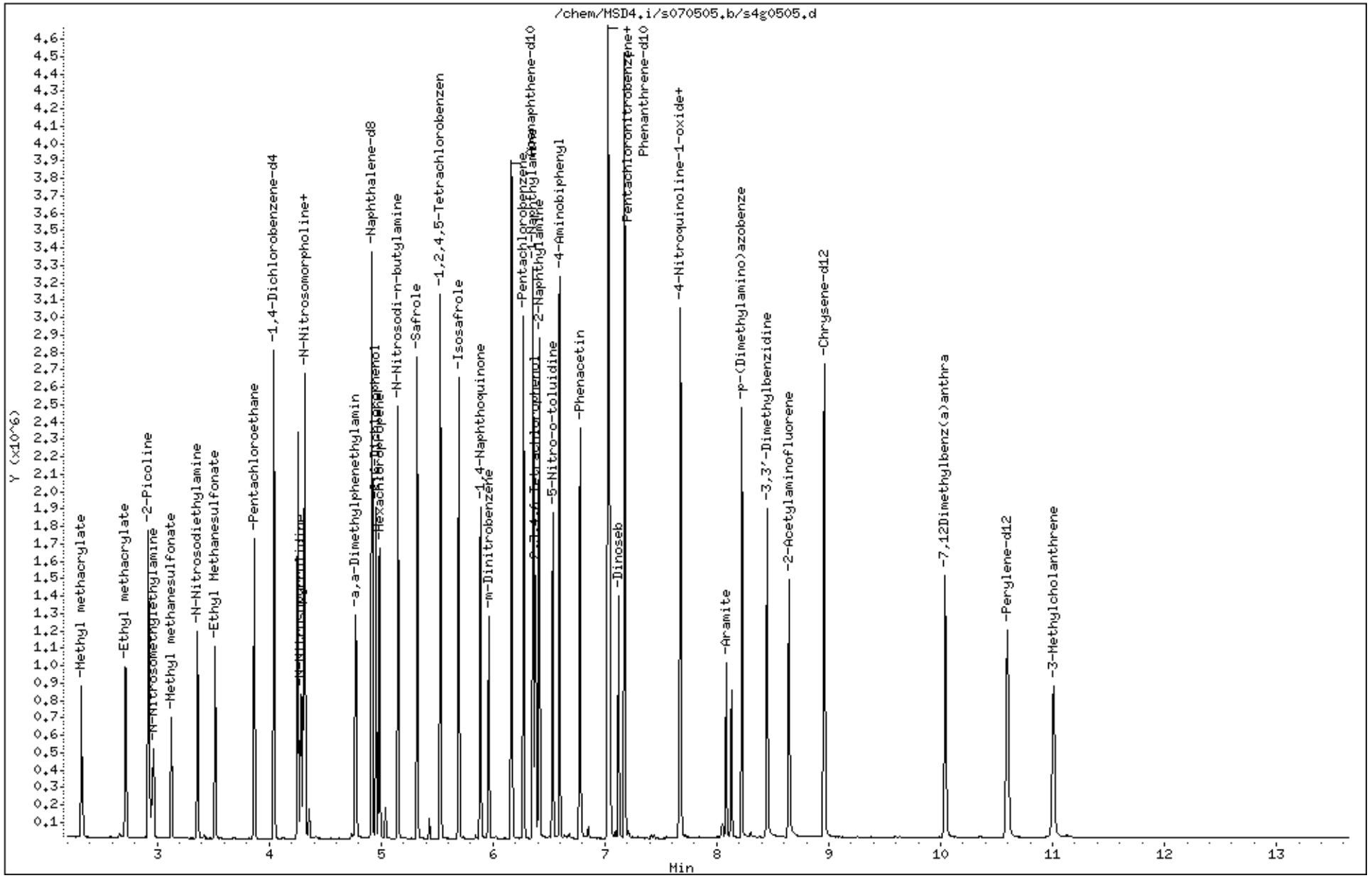
Sample Info: !UBN050610-01!40 PPM!1!SVMF!1!168 CVS

Column phase: J & W DB-5MS

Instrument: MSD4.i

Operator: EED

Column diameter: 0.20



QUALITY CONTROL DATA

Data File: /chem/MSD4.i/s062905.b/s4f2901.d

Date : 29-JUN-2005 11:44

Client ID: DFTPP

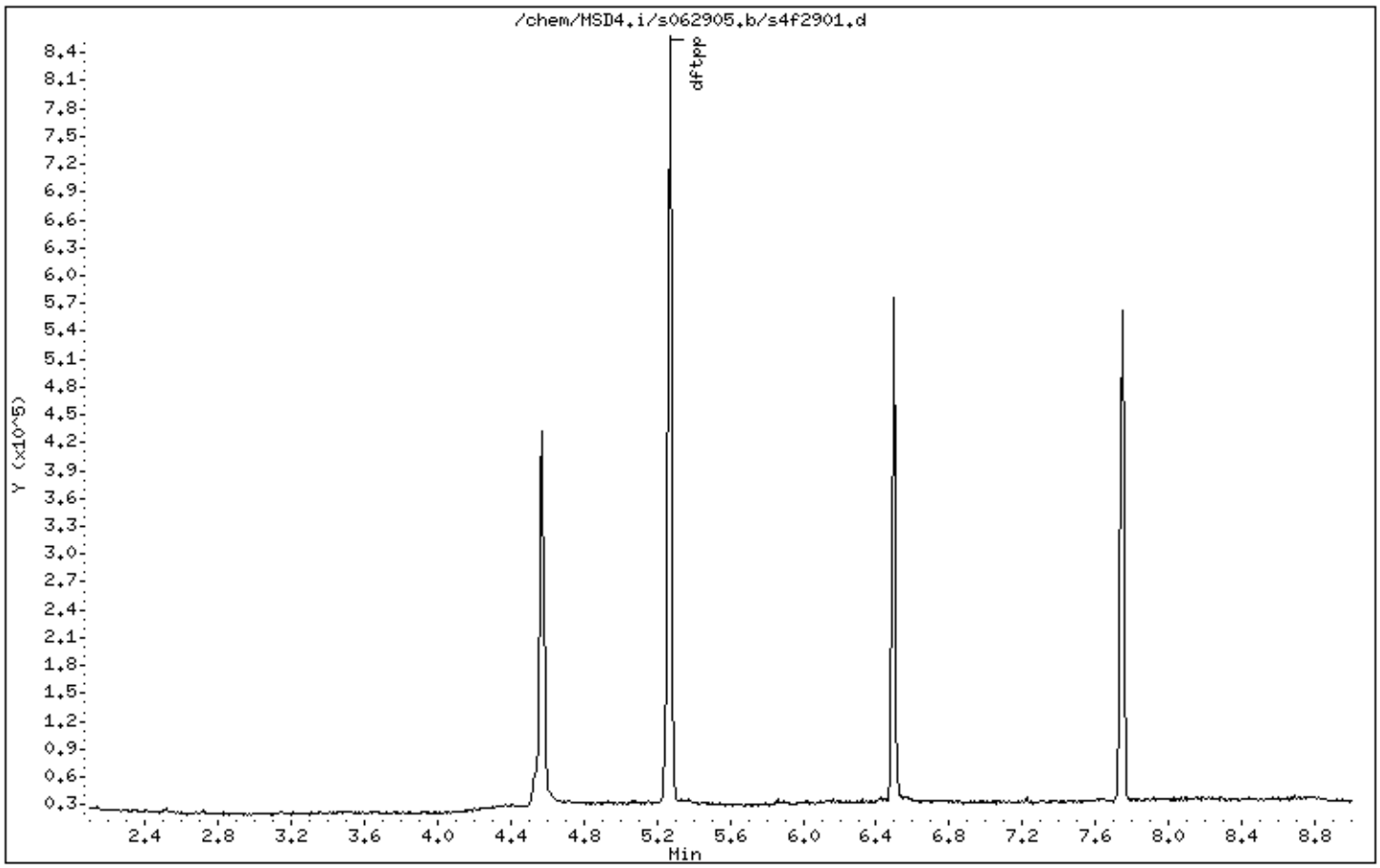
Instrument: MSD4.i

Sample Info: IWBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s062905.b/s4f2901.d

Date : 29-JUN-2005 11:44

Client ID: DFTPP

Instrument: MSD4.i

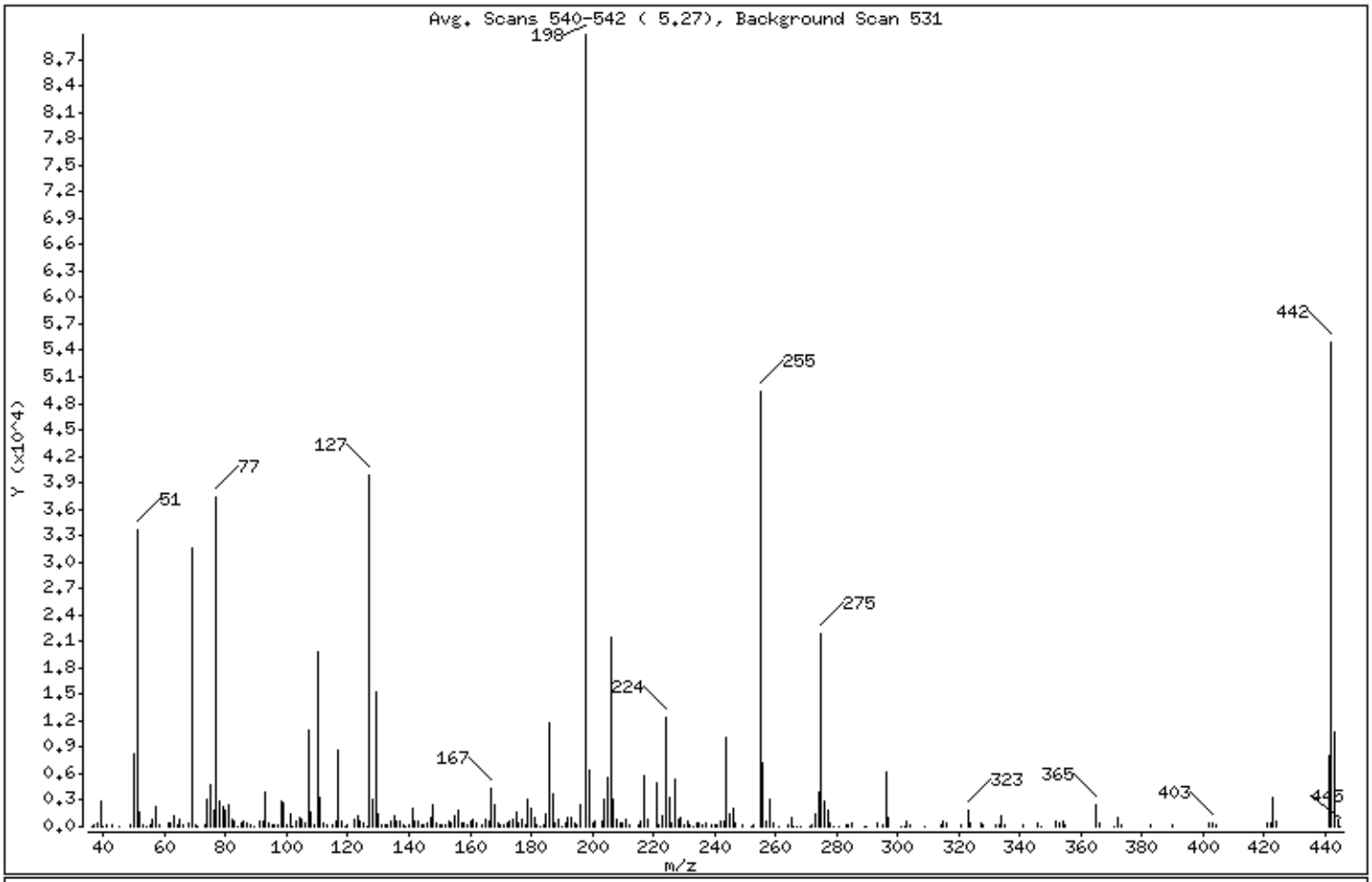
Sample Info: IWBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	37.50
68	Less than 2.00% of mass 69	0.53 (1.52)
69	Mass 69 relative abundance	35.17
70	Less than 2.00% of mass 69	0.29 (0.82)
127	40.00 - 60.00% of mass 198	44.36
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.22
275	10.00 - 30.00% of mass 198	24.28
365	Greater than 1.00% of mass 198	2.68
441	Present, but less than mass 443	9.04
442	Greater than 40.00% of mass 198	61.14
443	17.00 - 23.00% of mass 442	11.84 (19.37)

Date : 29-JUN-2005 11:44

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4f2901.d
Spectrum: Avg. Scans 540-542 (5.27), Background Scan 531
Location of Maximum: 198.00
Number of points: 268

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	97	115.00	129	185.00	1522	267.00	42
37.00	209	116.00	555	186.00	11750	268.00	54
38.00	404	117.00	8601	187.00	3730	271.00	42
39.00	2874	118.00	686	188.00	401	272.00	129
40.00	54	119.00	87	189.00	806	273.00	1534
41.00	207	120.00	251	190.00	98	274.00	4022
43.00	196	122.00	810	191.00	506	275.00	21808
45.00	94	123.00	1169	192.00	963	276.00	2866
49.00	148	124.00	553	193.00	1037	277.00	1834
50.00	8357	125.00	459	194.00	316	278.00	335
51.00	33680	126.00	56	195.00	122	279.00	42
52.00	1740	127.00	39840	196.00	2412	281.00	17
53.00	220	128.00	3082	198.00	89824	283.00	171
54.00	68	129.00	15217	199.00	6485	284.00	125
55.00	170	130.00	1447	200.00	463	285.00	332
56.00	818	131.00	264	201.00	517	289.00	46
57.00	2223	132.00	239	203.00	652	290.00	50
58.00	154	133.00	187	204.00	3138	293.00	410
61.00	487	134.00	572	205.00	5558	295.00	126
62.00	508	135.00	1226	206.00	21528	296.00	6252
63.00	1222	136.00	551	207.00	2996	297.00	991
64.00	230	137.00	712	208.00	746	301.00	45
65.00	869	138.00	129	209.00	419	302.00	59
66.00	111	139.00	47	210.00	437	303.00	568
68.00	479	140.00	135	211.00	887	304.00	183
69.00	31592	141.00	2165	212.00	150	309.00	43
70.00	259	142.00	646	215.00	220	314.00	299
71.00	54	143.00	526	216.00	526	315.00	688
73.00	291	144.00	117	217.00	5812	316.00	392
74.00	3180	145.00	144	218.00	849	321.00	187
75.00	4822	146.00	404	221.00	4933	323.00	1793
76.00	1845	147.00	978	222.00	203	324.00	335
77.00	37424	148.00	2467	223.00	1150	327.00	467
78.00	2807	149.00	488	224.00	12437	328.00	201
79.00	2359	150.00	160	225.00	3268	332.00	165

Date : 29-JUN-2005 11:44

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4f2901.d
Spectrum: Avg. Scans 540-542 (5.27), Background Scan 531
Location of Maximum: 198.00
Number of points: 268

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	1786	151.00	290	226.00	413	333.00	172
81.00	2532	152.00	167	227.00	5290	334.00	1329
82.00	800	153.00	621	228.00	750	335.00	286
83.00	555	154.00	473	229.00	1093	341.00	239
84.00	49	155.00	1294	230.00	184	346.00	487
85.00	396	156.00	1778	231.00	573	347.00	42
86.00	683	157.00	395	232.00	171	352.00	631
87.00	395	158.00	360	233.00	51	353.00	357
88.00	112	159.00	284	234.00	355	354.00	594
89.00	55	160.00	616	235.00	358	355.00	152
91.00	640	161.00	928	236.00	233	365.00	2410
92.00	585	162.00	367	237.00	482	366.00	425
93.00	3923	164.00	191	239.00	265	371.00	49
94.00	319	165.00	801	240.00	214	372.00	959
95.00	214	166.00	664	241.00	306	373.00	244
96.00	197	167.00	4426	242.00	666	383.00	220
97.00	194	168.00	2423	243.00	628	390.00	122
98.00	2920	169.00	426	244.00	10072	402.00	386
99.00	2700	170.00	161	245.00	1395	403.00	487
100.00	260	171.00	184	246.00	2028	404.00	138
101.00	1499	172.00	402	247.00	440	421.00	333
102.00	59	173.00	582	249.00	299	422.00	397
103.00	610	174.00	840	252.00	97	423.00	3209
104.00	1002	175.00	1736	253.00	267	424.00	661
105.00	911	176.00	469	255.00	49320	441.00	8117
106.00	363	177.00	790	256.00	7324	442.00	54920
107.00	10926	178.00	198	257.00	549	443.00	10638
108.00	1715	179.00	3164	258.00	3079	444.00	900
109.00	257	180.00	2100	259.00	485	445.00	95
110.00	19888	181.00	956	261.00	86		
111.00	3220	182.00	140	264.00	142		
112.00	510	183.00	71	265.00	1115		
113.00	213	184.00	270	266.00	87		

Data File: /chem/MSD4.i/s062905.b/s4f2933.d

Date : 29-JUN-2005 23:08

Client ID: DFTPP

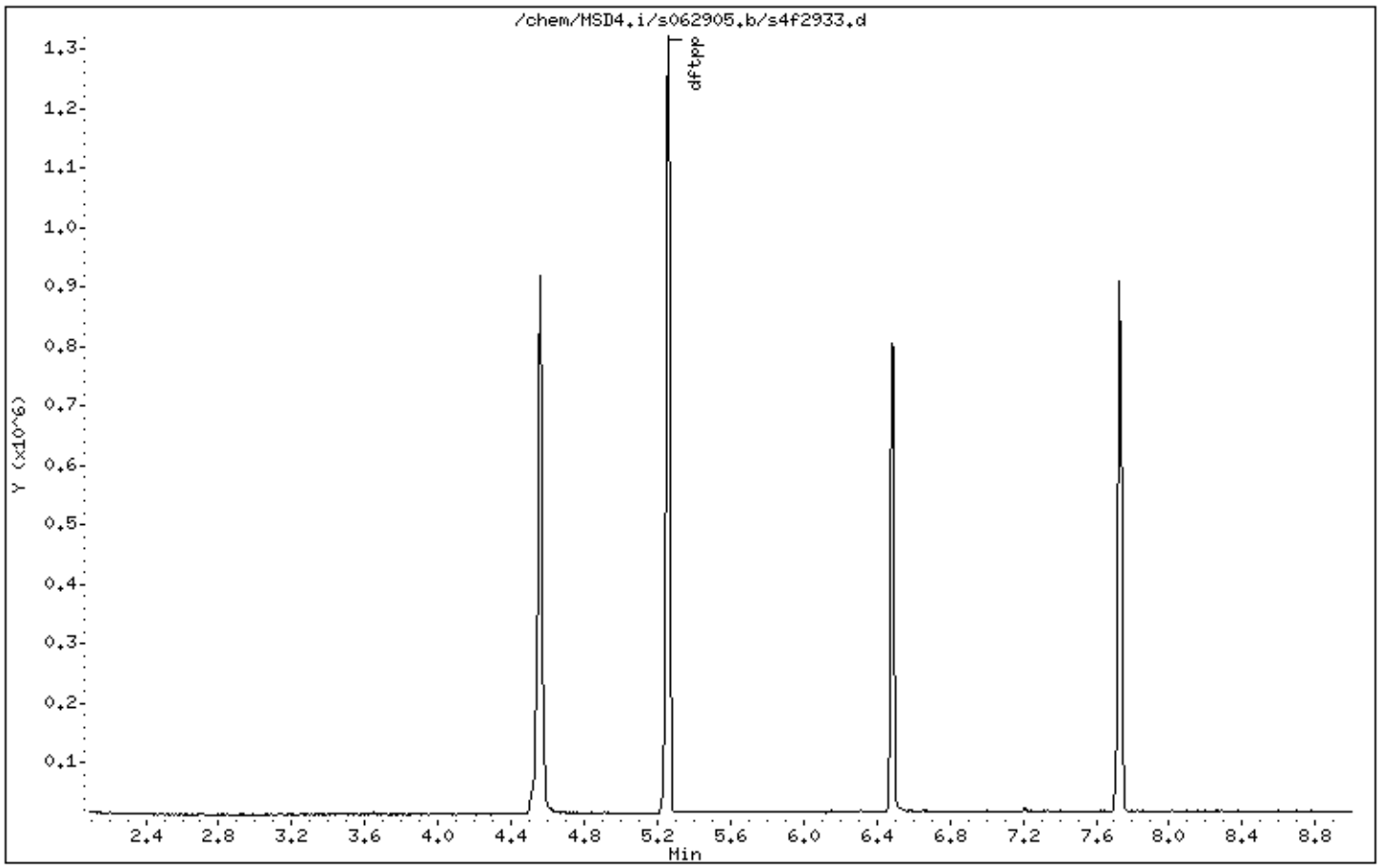
Instrument: MSD4.i

Sample Info: IWBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s062905.b/s4f2933.d

Date : 29-JUN-2005 23:08

Client ID: DFTPP

Instrument: MSD4.i

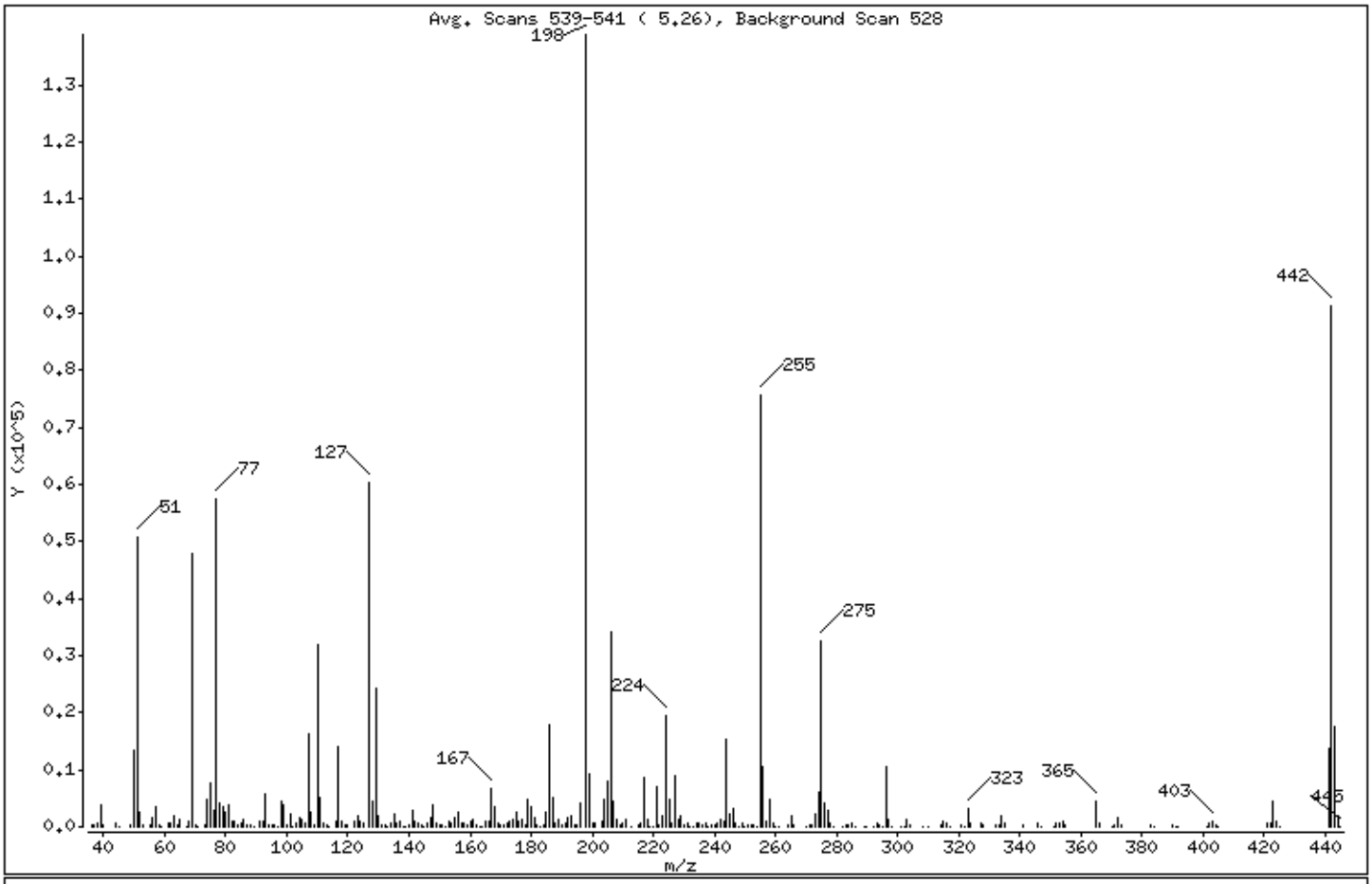
Sample Info: IWBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	36.60
68	Less than 2.00% of mass 69	0.64 (1.85)
69	Mass 69 relative abundance	34.48
70	Less than 2.00% of mass 69	0.23 (0.67)
127	40.00 - 60.00% of mass 198	43.42
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.74
275	10.00 - 30.00% of mass 198	23.47
365	Greater than 1.00% of mass 198	3.17
441	Present, but less than mass 443	9.88
442	Greater than 40.00% of mass 198	65.80
443	17.00 - 23.00% of mass 442	12.55 (19.07)

Date : 29-JUN-2005 23:08

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4f2933.d
Spectrum: Avg. Scans 539-541 (5.26), Background Scan 528
Location of Maximum: 198.00
Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	332	122.00	1034	196.00	4058	278.00	505
37.00	165	123.00	1865	198.00	138880	279.00	57
38.00	656	124.00	937	199.00	9364	282.00	44
39.00	3918	125.00	694	200.00	749	283.00	471
40.00	188	127.00	60312	201.00	689	284.00	240
44.00	676	128.00	4486	203.00	936	285.00	568
45.00	18	129.00	24264	204.00	4684	286.00	47
49.00	455	130.00	2016	205.00	7842	289.00	113
50.00	13347	131.00	362	206.00	34104	290.00	90
51.00	50832	132.00	239	207.00	4504	292.00	126
52.00	2583	133.00	94	208.00	1212	293.00	665
53.00	182	134.00	663	209.00	468	294.00	189
55.00	382	135.00	2110	210.00	526	295.00	140
56.00	1543	136.00	749	211.00	1435	296.00	10417
57.00	3516	137.00	1003	213.00	103	297.00	1285
58.00	163	138.00	152	215.00	375	298.00	56
59.00	43	139.00	46	216.00	669	301.00	125
61.00	658	140.00	251	217.00	8721	302.00	142
62.00	729	141.00	2915	218.00	1176	303.00	1225
63.00	2036	142.00	1083	219.00	65	304.00	312
64.00	302	143.00	676	220.00	45	308.00	53
65.00	1171	144.00	224	221.00	7017	310.00	106
67.00	57	145.00	147	222.00	350	314.00	477
68.00	888	146.00	541	223.00	1974	315.00	1090
69.00	47888	147.00	1651	224.00	19472	316.00	634
70.00	321	148.00	3743	225.00	4745	317.00	48
71.00	43	149.00	775	226.00	533	321.00	370
73.00	442	150.00	257	227.00	8998	322.00	45
74.00	4734	151.00	447	228.00	1155	323.00	3180
75.00	7729	152.00	149	229.00	1799	324.00	555
76.00	2737	153.00	925	230.00	306	327.00	505
77.00	57560	154.00	780	231.00	631	328.00	233
78.00	4029	155.00	1740	232.00	128	332.00	249
79.00	3405	156.00	2503	233.00	151	333.00	292
80.00	2530	157.00	524	234.00	535	334.00	1875

Date : 29-JUN-2005 23:08

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4f2933.d
Spectrum: Avg. Scans 539-541 (5.26), Background Scan 528
Location of Maximum: 198.00
Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	3728	158.00	692	235.00	571	335.00	518
82.00	1000	159.00	473	236.00	399	341.00	341
83.00	940	160.00	1048	237.00	693	346.00	648
84.00	243	161.00	1386	238.00	55	347.00	128
85.00	693	162.00	363	239.00	324	351.00	44
86.00	1148	163.00	152	240.00	230	352.00	797
87.00	472	164.00	127	241.00	555	353.00	547
88.00	254	165.00	1084	242.00	1131	354.00	973
89.00	120	166.00	974	243.00	1079	355.00	204
91.00	852	167.00	6639	244.00	15367	365.00	4407
92.00	950	168.00	3525	245.00	2145	366.00	596
93.00	5664	169.00	538	246.00	3305	370.00	43
94.00	386	170.00	218	247.00	545	371.00	182
95.00	235	171.00	293	248.00	112	372.00	1549
96.00	427	172.00	546	249.00	574	373.00	420
97.00	117	173.00	903	250.00	53	383.00	359
98.00	4522	174.00	1283	251.00	179	384.00	108
99.00	3980	175.00	2507	252.00	167	390.00	168
100.00	342	176.00	806	253.00	295	391.00	120
101.00	2291	177.00	1208	254.00	149	392.00	49
102.00	108	178.00	396	255.00	75752	401.00	46
103.00	731	179.00	4741	256.00	10528	402.00	586
104.00	1576	180.00	3366	257.00	848	403.00	799
105.00	1241	181.00	1553	258.00	4898	404.00	226
106.00	483	182.00	257	259.00	712	405.00	48
107.00	16305	183.00	48	260.00	93	421.00	653
108.00	2504	184.00	425	261.00	93	422.00	674
109.00	475	185.00	2414	264.00	207	423.00	4601
110.00	32024	186.00	17904	265.00	2053	424.00	964
111.00	4956	187.00	5211	266.00	312	425.00	65
112.00	603	188.00	602	270.00	102	441.00	13722
113.00	219	189.00	1177	271.00	209	442.00	91392
114.00	52	190.00	179	272.00	179	443.00	17432
116.00	830	191.00	604	273.00	2269	444.00	1480
117.00	14148	192.00	1625	274.00	6180	445.00	42

Date : 29-JUN-2005 23:08

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4f2933.d
Spectrum: Avg. Scans 539-541 (5.26), Background Scan 528
Location of Maximum: 198.00
Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	957	193.00	1927	275.00	32592		
119.00	211	194.00	390	276.00	4058		
120.00	228	195.00	214	277.00	2988		

Data File: /chem/MSD4.i/s070505.b/s4g0501.d

Date : 05-JUL-2005 19:35

Client ID: DFTPP

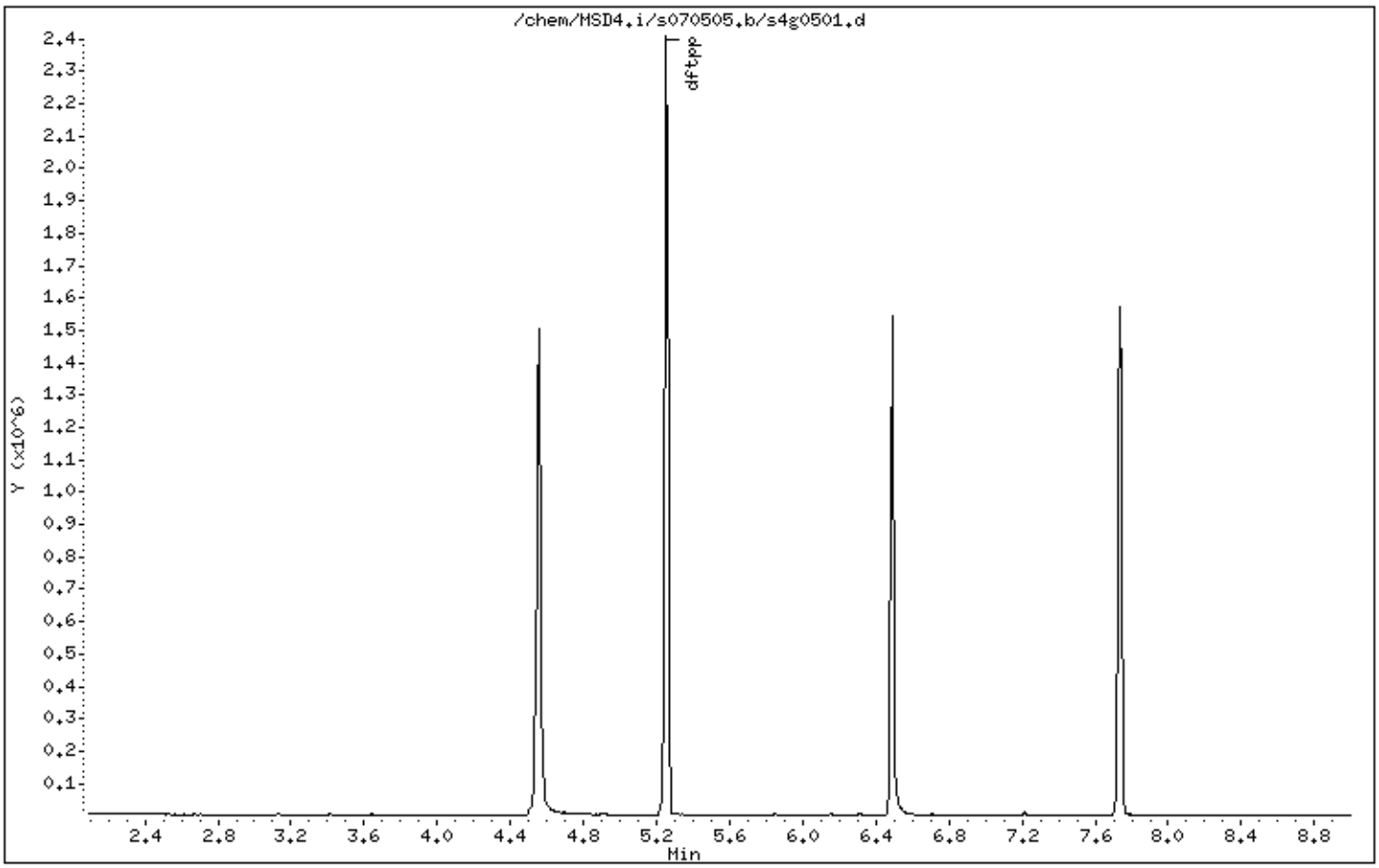
Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s070505.b/s4g0501.d

Date : 05-JUL-2005 19:35

Client ID: DFTPP

Instrument: MSD4.i

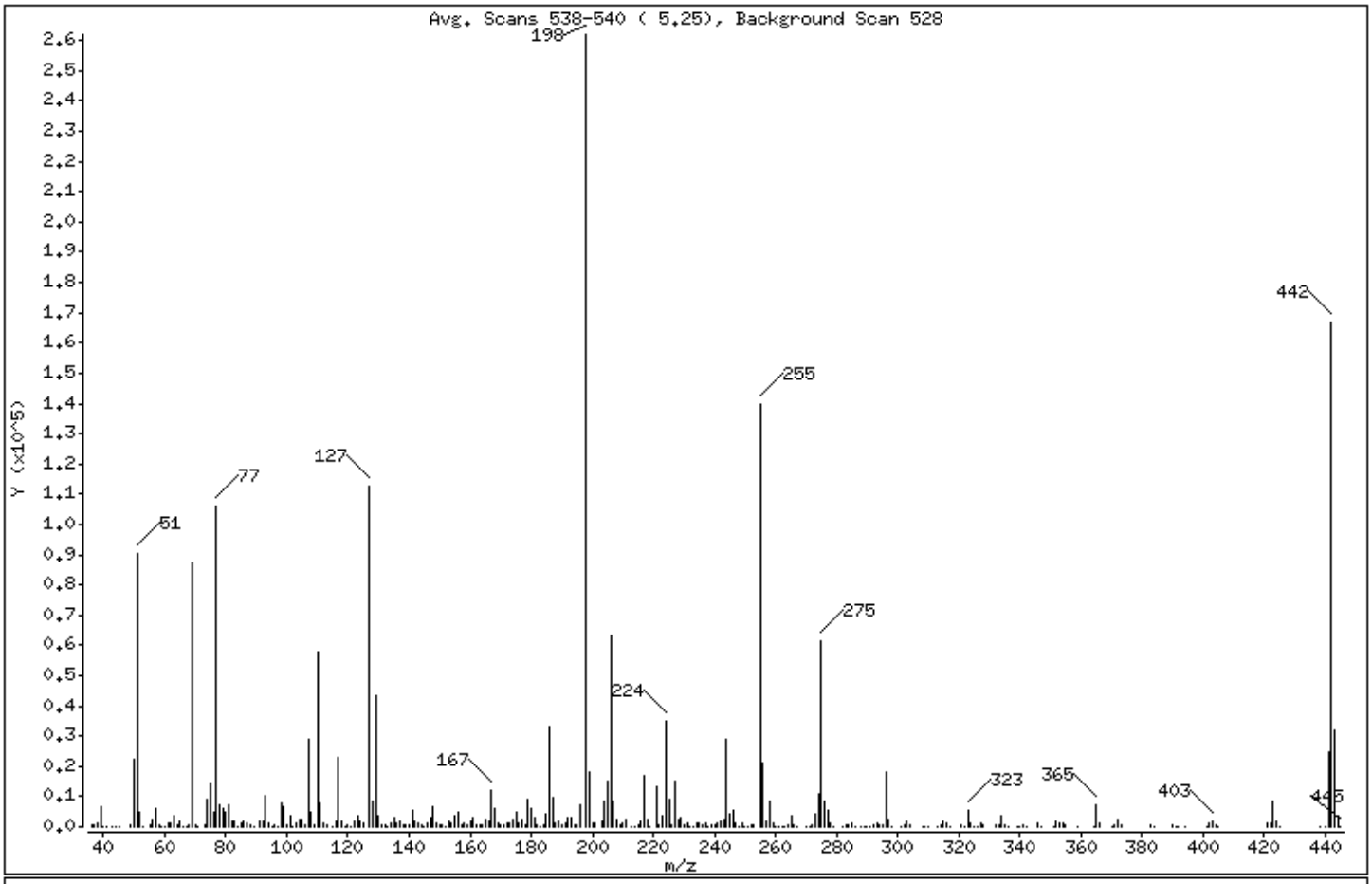
Sample Info: IWBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	34.46
68	Less than 2.00% of mass 69	0.13 (0.40)
69	Mass 69 relative abundance	33.25
70	Less than 2.00% of mass 69	0.17 (0.52)
127	40.00 - 60.00% of mass 198	43.09
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.84
275	10.00 - 30.00% of mass 198	23.42
365	Greater than 1.00% of mass 198	2.73
441	Present, but less than mass 443	9.40
442	Greater than 40.00% of mass 198	63.67
443	17.00 - 23.00% of mass 442	12.27 (19.27)

Date : 05-JUL-2005 19:35

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4g0501.d
Spectrum: Avg. Scans 538-540 (5.25), Background Scan 528
Location of Maximum: 198.00
Number of points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	358	122.00	1939	203.00	1726	289.00	211
37.00	410	123.00	3355	204.00	8533	290.00	210
38.00	981	124.00	1524	205.00	15032	291.00	150
39.00	6469	125.00	1395	206.00	63144	292.00	310
40.00	175	127.00	112888	207.00	8254	293.00	1264
41.00	136	128.00	8575	208.00	2292	294.00	322
43.00	109	129.00	43064	209.00	602	295.00	375
44.00	37	130.00	3851	210.00	1017	296.00	18344
45.00	126	131.00	714	211.00	2679	297.00	2479
49.00	709	132.00	428	213.00	124	298.00	120
50.00	22440	133.00	149	214.00	43	301.00	226
51.00	90288	134.00	1169	215.00	777	302.00	323
52.00	4536	135.00	3294	216.00	1543	303.00	1774
53.00	217	136.00	1389	217.00	17080	304.00	579
55.00	502	137.00	1780	218.00	2147	308.00	278
56.00	2658	138.00	397	219.00	242	309.00	67
57.00	5826	139.00	313	221.00	12956	310.00	228
58.00	327	140.00	470	222.00	865	313.00	106
59.00	42	141.00	5388	223.00	3713	314.00	790
60.00	55	142.00	1851	224.00	34712	315.00	1766
61.00	1142	143.00	1349	225.00	9293	316.00	1056
62.00	1243	144.00	333	226.00	893	317.00	232
63.00	3313	145.00	267	227.00	15181	321.00	553
64.00	493	146.00	943	228.00	2217	322.00	230
65.00	1836	147.00	2897	229.00	3113	323.00	5700
66.00	165	148.00	6480	230.00	445	324.00	1015
67.00	107	149.00	1230	231.00	1162	325.00	53
68.00	351	150.00	370	232.00	299	326.00	92
69.00	87112	151.00	758	233.00	279	327.00	1087
70.00	455	152.00	220	234.00	990	328.00	553
71.00	45	153.00	1885	235.00	1038	332.00	446
73.00	729	154.00	1459	236.00	695	333.00	609
74.00	9275	155.00	3314	237.00	1260	334.00	3688
75.00	14339	156.00	4861	238.00	109	335.00	850
76.00	4726	157.00	885	239.00	565	336.00	176

Date : 05-JUL-2005 19:35

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4g0501.d
Spectrum: Avg. Scans 538-540 (5.25), Background Scan 528
Location of Maximum: 198.00
Number of points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	106056	158.00	996	240.00	439	339.00	126
78.00	7120	159.00	780	241.00	906	340.00	48
79.00	6051	160.00	1865	242.00	1902	341.00	791
80.00	4850	161.00	2747	243.00	2117	342.00	193
81.00	7218	162.00	785	244.00	28704	346.00	1112
82.00	1820	163.00	325	245.00	4101	347.00	235
83.00	1857	164.00	409	246.00	5315	351.00	92
84.00	268	165.00	2177	247.00	1157	352.00	1649
85.00	1033	166.00	1850	248.00	204	353.00	1064
86.00	1878	167.00	11990	249.00	990	354.00	1495
87.00	1039	168.00	5748	250.00	134	355.00	306
88.00	544	169.00	949	251.00	261	359.00	96
89.00	174	170.00	440	252.00	308	364.00	63
91.00	1739	171.00	565	253.00	594	365.00	7140
92.00	1884	172.00	1126	255.00	139648	366.00	1062
93.00	10238	173.00	1385	256.00	20832	370.00	121
94.00	909	174.00	2253	257.00	1672	371.00	343
95.00	250	175.00	4527	258.00	8130	372.00	2629
96.00	550	176.00	1356	259.00	1325	373.00	721
97.00	261	177.00	2305	260.00	261	383.00	814
98.00	7682	178.00	870	261.00	250	384.00	198
99.00	6749	179.00	8903	262.00	42	390.00	339
100.00	586	180.00	6173	263.00	50	391.00	205
101.00	3679	181.00	2866	264.00	314	392.00	163
102.00	244	182.00	412	265.00	3350	394.00	41
103.00	1337	183.00	224	266.00	473	401.00	186
104.00	2411	184.00	806	267.00	53	402.00	962
105.00	2244	185.00	4137	270.00	155	403.00	1613
106.00	762	186.00	33320	271.00	252	404.00	496
107.00	29072	187.00	9509	272.00	378	405.00	43
108.00	4636	188.00	1062	273.00	4093	421.00	1287
109.00	562	189.00	2062	274.00	11082	422.00	1103
110.00	57912	190.00	526	275.00	61344	423.00	8492
111.00	8128	191.00	907	276.00	8351	424.00	1995
112.00	1137	192.00	2820	277.00	5420	425.00	120

Date : 05-JUL-2005 19:35

Client ID: DFTPP Instrument: MSD4.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s4g0501.d
Spectrum: Avg. Scans 538-540 (5.25), Background Scan 528
Location of Maximum: 198.00
Number of points: 311

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	316	193.00	3182	278.00	914	438.00	45
115.00	151	194.00	576	279.00	223	440.00	52
116.00	1566	195.00	311	282.00	122	441.00	24624
117.00	23032	196.00	7022	283.00	700	442.00	166784
118.00	1831	198.00	261952	284.00	449	443.00	32136
119.00	214	199.00	17912	285.00	968	444.00	3277
120.00	394	200.00	1372	286.00	205	445.00	109
121.00	101	201.00	1210	288.00	46		

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871172

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4G0507-3

Level: (low/med) LOW Date Received: 06/20/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/05/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.0	U
111-44-4	bis(2-Chloroethyl) ether	10.0	U
95-57-8	2-Chlorophenol	10.0	U
541-73-1	1,3-Dichlorobenzene	10.0	U
106-46-7	1,4-Dichlorobenzene	10.0	U
100-51-6	Benzyl alcohol	10.0	U
95-50-1	1,2-Dichlorobenzene	10.0	U
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U
95-48-7	o-Cresol	10.0	U
98-86-2	Acetophenone	10.0	U
621-64-7	N-Nitrosodipropylamine	10.0	U
106-44-5	m,p-Cresols	10.0	U
67-72-1	Hexachloroethane	10.0	U
98-95-3	Nitrobenzene	10.0	U
78-59-1	Isophorone	10.0	U
88-75-5	2-Nitrophenol	10.0	U
105-67-9	2,4-Dimethylphenol	10.0	U
111-91-1	bis(2-Chloroethoxy)methane	10.0	U
120-83-2	2,4-Dichlorophenol	10.0	U
65-85-0	Benzoic acid	20.0	U
120-82-1	1,2,4-Trichlorobenzene	10.0	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.0	U
87-68-3	Hexachlorobutadiene	10.0	U
59-50-7	4-Chloro-3-methylphenol	10.0	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.0	U
88-06-2	2,4,6-Trichlorophenol	10.0	U
95-95-4	2,4,5-Trichlorophenol	10.0	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.0	U
99-09-2	m-Nitroaniline	10.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871172

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4G0507-3

Level: (low/med) LOW Date Received: 06/20/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/05/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.0	U
606-20-2	2,6-Dinitrotoluene	10.0	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.0	U
132-64-9	Dibenzofuran	10.0	U
121-14-2	2,4-Dinitrotoluene	10.0	U
84-66-2	Diethylphthalate	10.0	U
100-02-7	4-Nitrophenol	10.0	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.0	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.0	U
100-01-6	p-Nitroaniline	10.0	U
122-39-4	Diphenylamine	10.0	U
122-66-7	1,2-Diphenylhydrazine	10.0	U
101-55-3	4-Bromophenylphenylether	10.0	U
118-74-1	Hexachlorobenzene	10.0	U
1912-24-9	Atrazine	10.0	U
87-86-5	Pentachlorophenol	10.0	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.0	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	50.0	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.0	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.0	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.0	U
117-84-0	Di-n-octylphthalate	10.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871172

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4G0507-3

Level: (low/med) LOW Date Received: 06/20/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/05/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.0	U
86-74-8	Carbazole	10.0	U

1F

EPA SAMPLE NO.

SBLK01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WATER Lab Sample ID: 1200871172

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4G0507-3

Level: (low/med) LOW Date Received: 06/20/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/05/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	110-82-7	CYCLOHEXANE	2.10	31.5	NJ
2.					
3.					
4.					
5.					
6.					
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9.					
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FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0507-3.d
Lab Smp Id: 1200871172 Client Smp ID: SBLK01
Inj Date : 05-JUL-2005 21:37
Operator : RMB Inst ID: MSD4.i
Smp Info : |1200871172|435528|1|SVMF|1|MB
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 12:17 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	4.044	4.044	(1.000)	311236	40.0000	
* 29 Naphthalene-d8	136	4.919	4.919	(1.000)	1208332	40.0000	
* 46 Acenaphthene-d10	164	6.165	6.170	(1.000)	703460	40.0000	
* 67 Phenanthrene-d10	188	7.175	7.175	(1.000)	1095452	40.0000	
* 91 Chrysene-d12	240	8.961	8.961	(1.000)	841207	40.0000	
* 98 Perylene-d12	264	10.595	10.595	(1.000)	664630	40.0000	
$ 3 2-Fluorophenol	112	3.215	3.215	(0.795)	377186	43.2848	43.3
$ 5 Phenol-d5	99	3.744	3.744	(0.926)	307138	30.5705	30.6
$ 20 Nitrobenzene-d5	82	4.408	4.408	(0.896)	334079	37.0484	37.0
$ 39 2-Fluorobiphenyl	172	5.659	5.659	(0.918)	728808	39.8113	39.8
$ 60 2,4,6-Tribromophenol	329	6.705	6.705	(1.088)	171427	73.1670	73.2
$ 81 p-Terphenyl-d14	244	8.139	8.139	(0.908)	748496	36.9376	36.9

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0507-3.d
Lab Smp Id: 1200871172 Client Smp ID: SBLK01
Inj Date : 05-JUL-2005 21:37
Operator : RMB Inst ID: MSD4.i
Smp Info : |1200871172|435528|1|SVMF|1|MB
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 06-Jul-2005 12:17 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	4.044	1863515	40.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclohexane				CAS #: 110-82-7			
2.099	1466394	31.4758676	31.5	94	Nist98.l	111957	10

Data File: /chem/MSD4.i/s070505.b/s4g0507-3.d

Date : 05-JUL-2005 21:37

Client ID: SBLK01

Instrument: MSD4.i

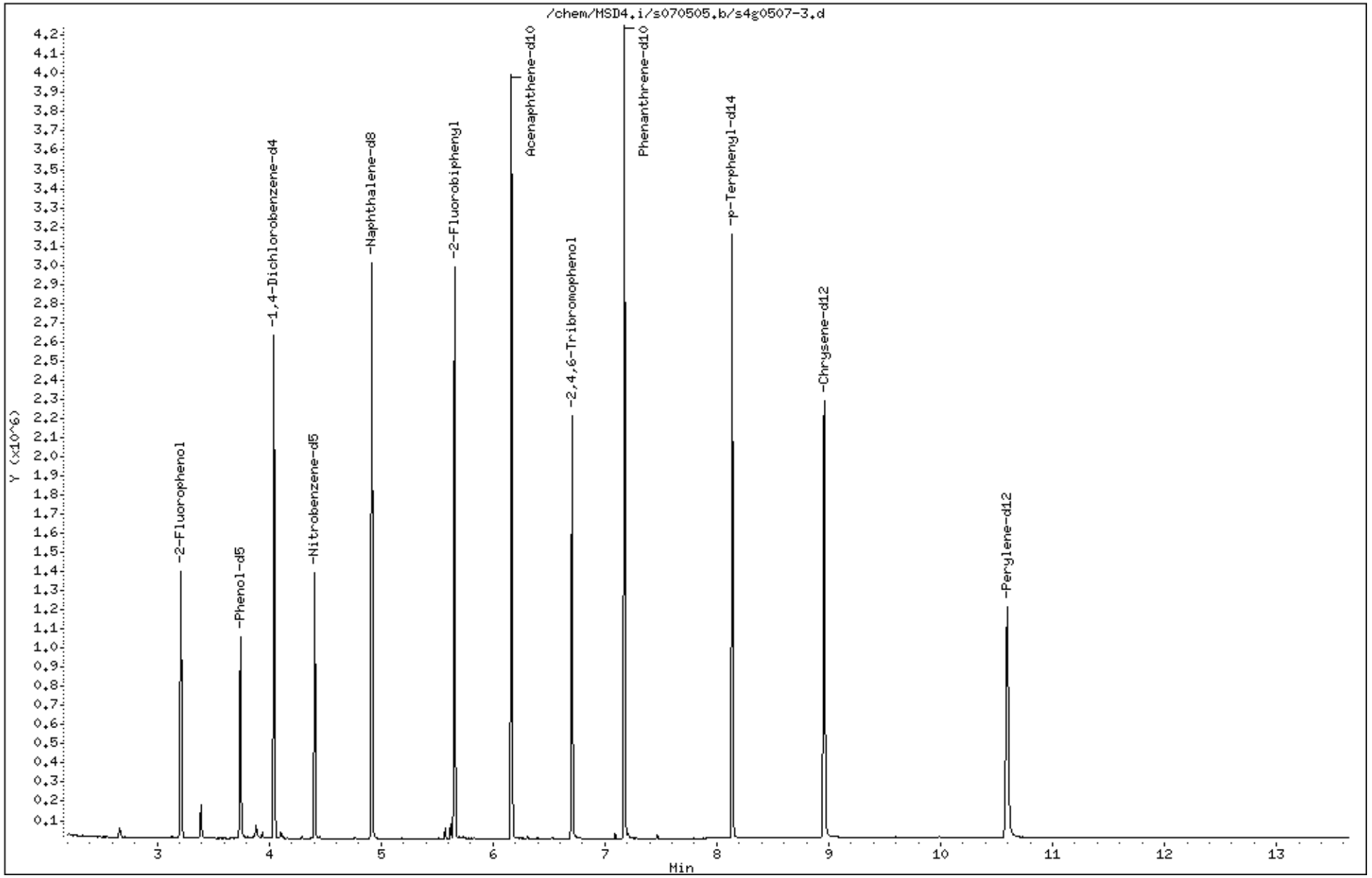
Sample Info: |1200871172|435528|1|SVMF|1|MB

Volume Injected (uL): 0.5

Operator: RMB

Column phase: J & W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD4.i/s070505.b/s4g0507-3.d

Date : 05-JUL-2005 21:37

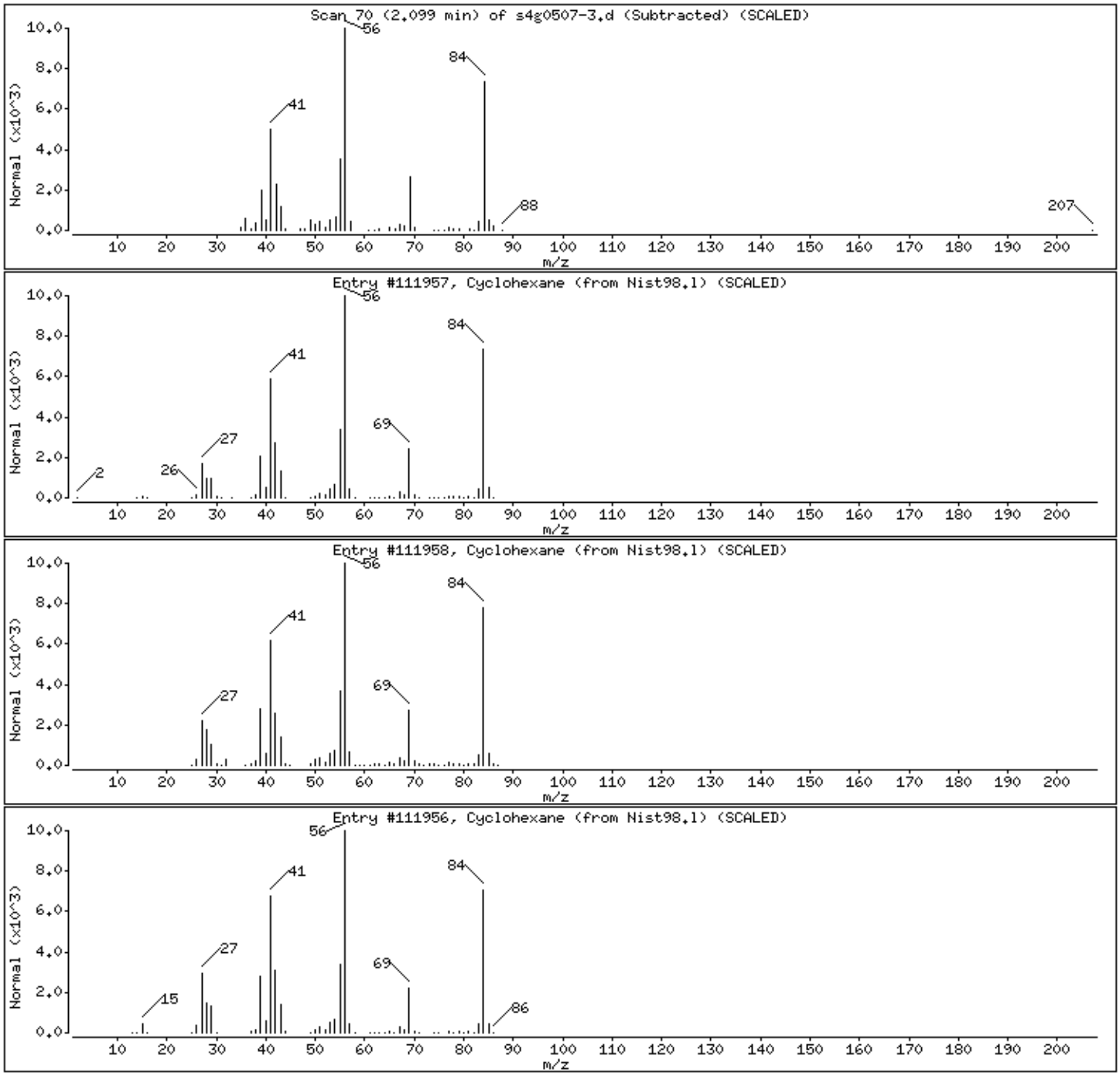
Client ID: SBLK01 Instrument: MSD4.i

Sample Info: |120087117214355281|1|SVMF|1|MB

Volume Injected (uL): 0.5 Operator: RMB

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclohexane	110-82-7	Nist98.l	111957	94	C6H12	84
Cyclohexane	110-82-7	Nist98.l	111958	93	C6H12	84
Cyclohexane	110-82-7	Nist98.l	111956	90	C6H12	84



1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871173

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4G0508-3

Level: (low/med) LOW Date Received: 06/20/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/05/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	31.5	
111-44-4	bis(2-Chloroethyl) ether	45.7	
95-57-8	2-Chlorophenol	73.3	
541-73-1	1,3-Dichlorobenzene	34.0	
106-46-7	1,4-Dichlorobenzene	35.4	
100-51-6	Benzyl alcohol	36.0	
95-50-1	1,2-Dichlorobenzene	34.4	
108-60-1	bis(2-Chloroisopropyl)ether	42.9	
95-48-7	o-Cresol	69.1	
98-86-2	Acetophenone	43.5	
621-64-7	N-Nitrosodipropylamine	42.4	
106-44-5	m,p-Cresols	61.0	
67-72-1	Hexachloroethane	33.5	
98-95-3	Nitrobenzene	41.7	
78-59-1	Isophorone	40.6	
88-75-5	2-Nitrophenol	89.7	
105-67-9	2,4-Dimethylphenol	96.3	
111-91-1	bis(2-Chloroethoxy)methane	44.4	
120-83-2	2,4-Dichlorophenol	72.8	
65-85-0	Benzoic acid	24.0	
120-82-1	1,2,4-Trichlorobenzene	36.4	
91-20-3	Naphthalene	35.6	
106-47-8	4-Chloroaniline	40.7	
87-68-3	Hexachlorobutadiene	31.0	
59-50-7	4-Chloro-3-methylphenol	77.2	
91-57-6	2-Methylnaphthalene	38.3	
90-12-0	1-Methylnaphthalene	39.4	
77-47-4	Hexachlorocyclopentadiene	31.2	
88-06-2	2,4,6-Trichlorophenol	81.3	
95-95-4	2,4,5-Trichlorophenol	88.2	
91-58-7	2-Chloronaphthalene	39.9	
88-74-4	o-Nitroaniline	40.2	
99-09-2	m-Nitroaniline	41.1	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871173

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4G0508-3

Level: (low/med) LOW Date Received: 06/20/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/05/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	43.3	
606-20-2	2,6-Dinitrotoluene	50.1	
208-96-8	Acenaphthylene	42.9	
83-32-9	Acenaphthene	45.0	
51-28-5	2,4-Dinitrophenol	103	
132-64-9	Dibenzofuran	42.8	
121-14-2	2,4-Dinitrotoluene	52.4	
84-66-2	Diethylphthalate	44.4	
100-02-7	4-Nitrophenol	34.5	
86-73-7	Fluorene	41.8	
7005-72-3	4-Chlorophenylphenylether	43.6	
534-52-1	2-Methyl-4,6-dinitrophenol	114	
100-01-6	p-Nitroaniline	41.5	
122-39-4	Diphenylamine	43.3	
122-66-7	1,2-Diphenylhydrazine	45.3	
101-55-3	4-Bromophenylphenylether	48.4	
118-74-1	Hexachlorobenzene	41.2	
1912-24-9	Atrazine	39.7	
87-86-5	Pentachlorophenol	95.4	
85-01-8	Phenanthrene	43.0	
120-12-7	Anthracene	43.4	
84-74-2	Di-n-butylphthalate	46.1	
206-44-0	Fluoranthene	39.5	
92-87-5	Benzidine	28.0	J
129-00-0	Pyrene	43.9	
85-68-7	Butylbenzylphthalate	38.9	
56-55-3	Benzo(a)anthracene	42.6	
91-94-1	3,3'-Dichlorobenzidine	47.0	
218-01-9	Chrysene	45.5	
117-81-7	bis(2-Ethylhexyl)phthalate	35.7	
117-84-0	Di-n-octylphthalate	33.2	
205-99-2	Benzo(b)fluoranthene	42.0	
207-08-9	Benzo(k)fluoranthene	47.9	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871173

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4G0508-3

Level: (low/med) LOW Date Received: 06/20/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/05/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	45.2	
193-39-5	Indeno(1,2,3-cd)pyrene	44.8	
53-70-3	Dibenzo(a,h)anthracene	41.3	
191-24-2	Benzo(ghi)perylene	44.7	
88-85-7	Dinoseb	6.8	J
86-74-8	Carbazole	39.5	

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0508-3.d
Lab Smp Id: 1200871173 Client Smp ID: SBLK01LCS
Inj Date : 05-JUL-2005 21:58
Operator : EED Inst ID: MSD4.i
Smp Info : |1200871173|435528|1|SVMF|1|LCS
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 07-Jul-2005 18:14 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

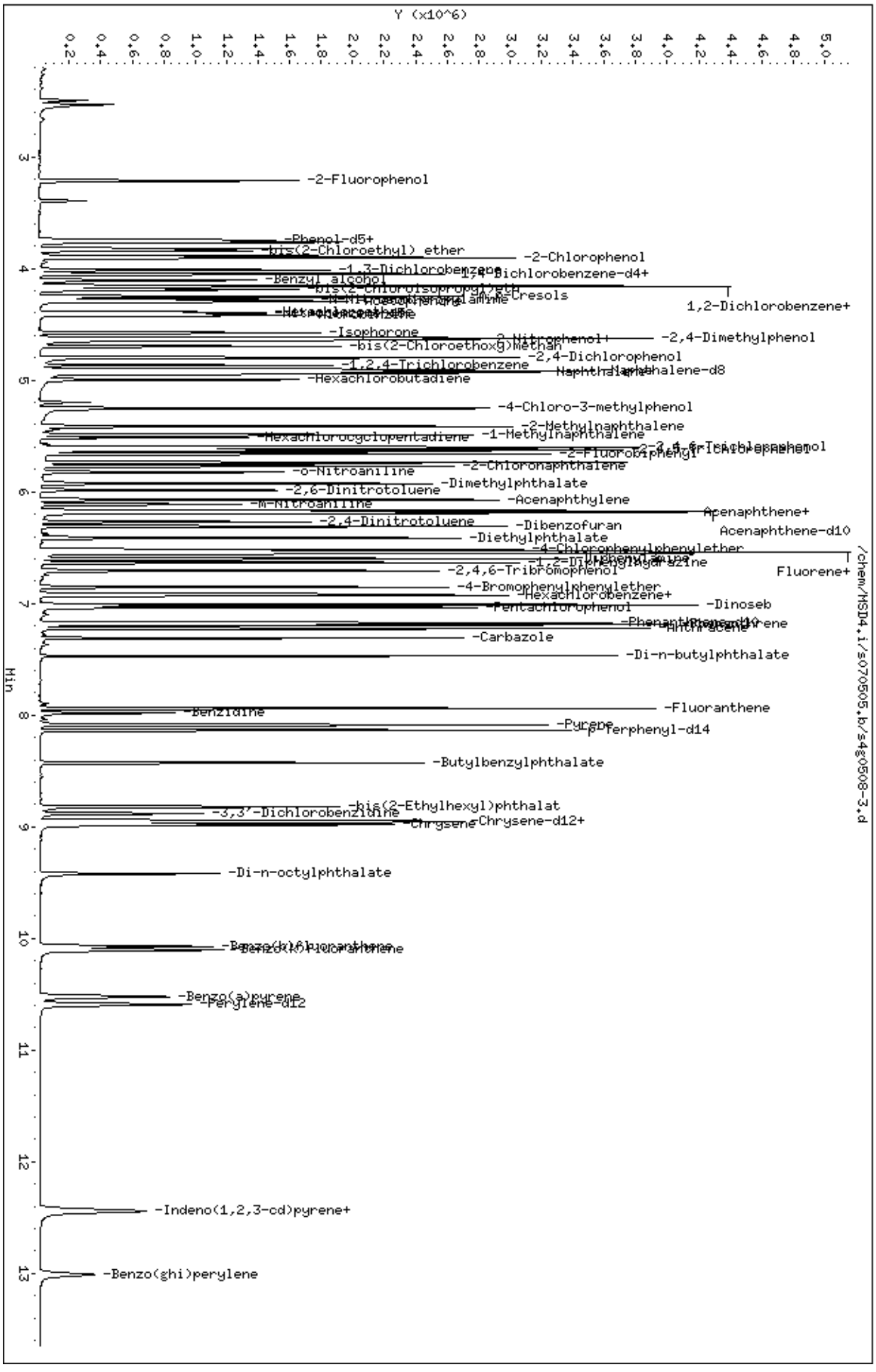
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	4.047	4.044	(1.000)	311307	40.0000	
* 29 Naphthalene-d8	136	4.917	4.919	(1.000)	1308196	40.0000	
* 46 Acenaphthene-d10	164	6.168	6.170	(1.000)	707182	40.0000	
* 67 Phenanthrene-d10	188	7.179	7.175	(1.000)	1116233	40.0000	
* 91 Chrysene-d12	240	8.959	8.961	(1.000)	744834	40.0000	
* 98 Perylene-d12	264	10.593	10.595	(1.000)	517016	40.0000	
$ 3 2-Fluorophenol	112	3.213	3.215	(0.794)	396571	45.4990	45.5
$ 5 Phenol-d5	99	3.748	3.744	(0.926)	328309	32.6703	32.7
$ 20 Nitrobenzene-d5	82	4.412	4.408	(0.897)	403481	41.3291	41.3
$ 39 2-Fluorobiphenyl	172	5.657	5.659	(0.917)	793610	43.1229	43.1
$ 60 2,4,6-Tribromophenol	329	6.709	6.705	(1.088)	203894	86.5663	86.6
$ 81 p-Terphenyl-d14	244	8.137	8.139	(0.908)	765280	42.6523	42.6
6 Phenol	94	3.754	3.756	(0.927)	320437	31.4918	31.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
8	2-Chlorophenol	128	3.906	3.908	(0.965)	620577	73.3056	73.3
11	1,4-Dichlorobenzene	146	4.059	4.055	(1.003)	333491	35.3640	35.4
17	N-Nitrosodipropylamine	70	4.282	4.279	(1.058)	270990	42.4511	42.4
28	1,2,4-Trichlorobenzene	180	4.864	4.866	(0.989)	293188	36.4117	36.4
33	4-Chloro-3-methylphenol	107	5.252	5.254	(1.068)	533600	77.2251	77.2
47	Acenaphthene	154	6.192	6.194	(1.004)	710707	45.0042	45.0
50	2,4-Dinitrotoluene	165	6.268	6.270	(1.016)	241957	52.3806	52.4
52	4-Nitrophenol	139	6.192	6.194	(1.004)	79818	34.4950	34.5
65	Pentachlorophenol	266	7.038	7.034	(0.980)	266430	95.4220	95.4
79	Pyrene	202	8.090	8.086	(0.903)	1130507	43.9191	43.9
7	bis(2-Chloroethyl) ether	93	3.842	3.838	(0.949)	470903	45.6659	45.7
9	1,3-Dichlorobenzene	146	4.012	4.014	(0.991)	332264	34.0591	34.0
12	Benzyl alcohol	108	4.106	4.108	(1.014)	194838	35.9641	36.0
13	1,2-Dichlorobenzene	146	4.159	4.161	(1.028)	305084	34.4529	34.4
14	bis(2-Chloroisopropyl)ether	45	4.188	4.185	(1.035)	586548	42.9279	42.9
15	o-Cresol	107	4.159	4.155	(1.028)	457509	69.1049	69.1
16	Acetophenone	105	4.300	4.296	(1.062)	479516	43.4911	43.5
18	m,p-Cresols	107	4.253	4.255	(1.051)	588949	61.0563	61.0
19	Hexachloroethane	117	4.394	4.396	(1.086)	122152	33.4722	33.5
21	Nitrobenzene	77	4.423	4.420	(0.900)	360479	41.7034	41.7
22	Isophorone	82	4.576	4.572	(0.931)	698112	40.6175	40.6
23	2-Nitrophenol	139	4.641	4.637	(0.944)	370296	89.6686	89.7
24	2,4-Dimethylphenol	122	4.623	4.625	(0.940)	691001	96.3283	96.3(R)
25	bis(2-Chloroethoxy)methane	93	4.694	4.696	(0.955)	460311	44.4354	44.4
26	2,4-Dichlorophenol	162	4.799	4.801	(0.976)	528257	72.8316	72.8
27	Benzoic acid	105	4.652	4.655	(0.946)	86907	23.9975	24.0(Q)
30	Naphthalene	128	4.934	4.931	(1.004)	981607	35.6512	35.6
31	4-Chloroaniline	127	4.946	4.943	(1.006)	519669	40.7387	40.7
32	Hexachlorobutadiene	225	4.999	4.995	(1.017)	165018	30.9617	31.0
34	2-Methylnaphthalene	142	5.416	5.413	(1.102)	668417	38.3409	38.3
35	1-Methylnaphthalene	142	5.487	5.489	(1.116)	637473	39.3605	39.4
36	Hexachlorocyclopentadiene	237	5.516	5.518	(0.894)	160560	31.2017	31.2
37	2,4,6-Trichlorophenol	196	5.598	5.601	(0.908)	425327	81.2884	81.3
38	2,4,5-Trichlorophenol	196	5.628	5.630	(0.912)	483692	88.2032	88.2
40	2-Chloronaphthalene	162	5.769	5.771	(0.935)	629384	39.8876	39.9
42	o-Nitroaniline	65	5.822	5.825	(0.944)	206602	40.1892	40.2
41	m-Nitroaniline	138	6.115	6.113	(0.991)	189219	41.0791	41.1
43	Dimethylphthalate	163	5.927	5.924	(0.961)	826932	43.3432	43.3
44	2,6-Dinitrotoluene	165	5.986	5.982	(0.970)	190861	50.1219	50.1
45	Acenaphthylene	152	6.074	6.071	(0.985)	1079313	42.9288	42.9
48	2,4-Dinitrophenol	184	6.180	6.182	(1.002)	155615	103.247	103(Q)
49	Dibenzofuran	168	6.309	6.306	(1.023)	931930	42.8418	42.8
51	Diethylphthalate	149	6.415	6.411	(1.040)	811002	44.3514	44.4
53	Fluorene	166	6.544	6.547	(1.061)	749576	41.7990	41.8
54	4-Chlorophenylphenylether	204	6.521	6.523	(1.057)	408639	43.5716	43.6
55	2-Methyl-4,6-dinitrophenol	198	6.556	6.552	(0.913)	291942	113.817	114
56	p-Nitroaniline	138	6.538	6.530	(1.060)	161565	41.4723	41.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
133	Diphenylamine	169	6.597	6.599	(0.919)	676992	43.3089	43.3
58	1,2-Diphenylhydrazine	77	6.633	6.629	(0.924)	809536	45.3056	45.3
61	4-Bromophenylphenylether	248	6.856	6.858	(0.955)	245431	48.3923	48.4
63	Hexachlorobenzene	284	6.915	6.917	(0.963)	236325	41.1922	41.2
207	Atrazine	173	6.926	6.923	(0.965)	63001	39.6953	39.7
68	Phenanthrene	178	7.191	7.193	(1.002)	1094998	43.0425	43.0
69	Anthracene	178	7.226	7.222	(1.007)	1089498	43.3621	43.4
72	Di-n-butylphthalate	149	7.473	7.469	(1.041)	1238035	46.0767	46.1
76	Fluoranthene	202	7.937	7.939	(1.106)	1124227	39.5320	39.5
77	Benzidine	184	7.984	7.987	(0.891)	257920	28.0597	28.0(a)
85	Butylbenzylphthalate	149	8.425	8.427	(0.940)	440541	38.9366	38.9
89	Benzo(a)anthracene	228	8.947	8.950	(0.999)	781317	42.6342	42.6
90	3,3'-Dichlorobenzidine	252	8.883	8.886	(0.991)	233085	46.9944	47.0
92	Chrysene	228	8.983	8.985	(1.003)	790904	45.5246	45.5
93	bis(2-Ethylhexyl)phthalate	149	8.824	8.826	(0.985)	500711	35.6727	35.7
94	Di-n-octylphthalate	149	9.423	9.420	(0.890)	670438	33.2387	33.2
95	Benzo(b)fluoranthene	252	10.070	10.072	(0.951)	585908	41.9598	42.0
96	Benzo(k)fluoranthene	252	10.105	10.107	(0.954)	672271	47.8709	47.9
97	Benzo(a)pyrene	252	10.522	10.518	(0.993)	494347	45.1933	45.2
99	Indeno(1,2,3-cd)pyrene	276	12.437	12.440	(1.174)	403747	44.8519	44.8
100	Dibenzo(a,h)anthracene	278	12.449	12.451	(1.175)	328312	41.2747	41.3
101	Benzo(ghi)perylene	276	13.013	13.010	(1.229)	345674	44.7480	44.7
173	Carbazole	167	7.314	7.311	(1.019)	973533	39.4760	39.5
143	Dinoseb	211	7.014	7.126	(0.977)	3438	6.79137	6.8(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.



Data File: /chem/MSD4.i/s070505.b/s4g0508-3.d
Date : 05-JUL-2005 21:58
Client ID: SBLK01LCS
Sample Info: 1120087117314355281|1|SVHF|1|LCS
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD4.i
Operator: EED
Column diameter: 0.20

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871174

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S4G0518

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	94.4	
111-44-4	bis(2-Chloroethyl) ether	64.4	
95-57-8	2-Chlorophenol	138	
541-73-1	1,3-Dichlorobenzene	57.9	
106-46-7	1,4-Dichlorobenzene	60.7	
100-51-6	Benzyl alcohol	67.0	
95-50-1	1,2-Dichlorobenzene	60.1	
108-60-1	bis(2-Chloroisopropyl)ether	78.3	
95-48-7	o-Cresol	141	
98-86-2	Acetophenone	80.3	
621-64-7	N-Nitrosodipropylamine	80.7	
106-44-5	m,p-Cresols	148	
67-72-1	Hexachloroethane	58.4	
98-95-3	Nitrobenzene	78.9	
78-59-1	Isophorone	78.9	
88-75-5	2-Nitrophenol	173	
105-67-9	2,4-Dimethylphenol	165	
111-91-1	bis(2-Chloroethoxy)methane	83.6	
120-83-2	2,4-Dichlorophenol	151	
65-85-0	Benzoic acid	113	
120-82-1	1,2,4-Trichlorobenzene	66.4	
91-20-3	Naphthalene	66.2	
106-47-8	4-Chloroaniline	73.2	
87-68-3	Hexachlorobutadiene	56.8	
59-50-7	4-Chloro-3-methylphenol	178	
91-57-6	2-Methylnaphthalene	74.0	
90-12-0	1-Methylnaphthalene	77.5	
77-47-4	Hexachlorocyclopentadiene	62.1	
88-06-2	2,4,6-Trichlorophenol	156	
95-95-4	2,4,5-Trichlorophenol	177	
91-58-7	2-Chloronaphthalene	77.6	
88-74-4	o-Nitroaniline	47.6	
99-09-2	m-Nitroaniline	69.3	

FORM I SV-1 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871174

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S4G0518

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	85.8	
606-20-2	2,6-Dinitrotoluene	98.2	
208-96-8	Acenaphthylene	83.4	
83-32-9	Acenaphthene	89.2	
51-28-5	2,4-Dinitrophenol	230	
132-64-9	Dibenzofuran	83.4	
121-14-2	2,4-Dinitrotoluene	107	
84-66-2	Diethylphthalate	87.3	
100-02-7	4-Nitrophenol	138	
86-73-7	Fluorene	83.2	
7005-72-3	4-Chlorophenylphenylether	86.9	
534-52-1	2-Methyl-4,6-dinitrophenol	230	
100-01-6	p-Nitroaniline	41.9	
122-39-4	Diphenylamine	75.2	
122-66-7	1,2-Diphenylhydrazine	86.9	
101-55-3	4-Bromophenylphenylether	97.2	
118-74-1	Hexachlorobenzene	80.1	
1912-24-9	Atrazine	77.5	
87-86-5	Pentachlorophenol	201	
85-01-8	Phenanthrene	83.7	
120-12-7	Anthracene	84.0	
84-74-2	Di-n-butylphthalate	92.6	
206-44-0	Fluoranthene	79.1	
92-87-5	Benzidine	100	U
129-00-0	Pyrene	79.7	
85-68-7	Butylbenzylphthalate	76.6	
56-55-3	Benzo(a)anthracene	85.2	
91-94-1	3,3'-Dichlorobenzidine	20.0	U
218-01-9	Chrysene	87.3	
117-81-7	bis(2-Ethylhexyl)phthalate	81.9	
117-84-0	Di-n-octylphthalate	67.7	
205-99-2	Benzo(b)fluoranthene	79.3	
207-08-9	Benzo(k)fluoranthene	92.5	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871174

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S4G0518

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	89.8	
193-39-5	Indeno(1,2,3-cd)pyrene	90.9	
53-70-3	Dibenzo(a,h)anthracene	83.7	
191-24-2	Benzo(ghi)perylene	86.2	
88-85-7	Dinoseb	13.6	J
86-74-8	Carbazole	77.6	

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0518.d
Lab Smp Id: 1200871174 Client Smp ID: GU05050GMC601MS
Inj Date : 06-JUL-2005 01:26
Operator : EED Inst ID: MSD4.i
Smp Info : |1200871174|435528|1|SVMF|1|1003MS
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 07-Jul-2005 18:14 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	500.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

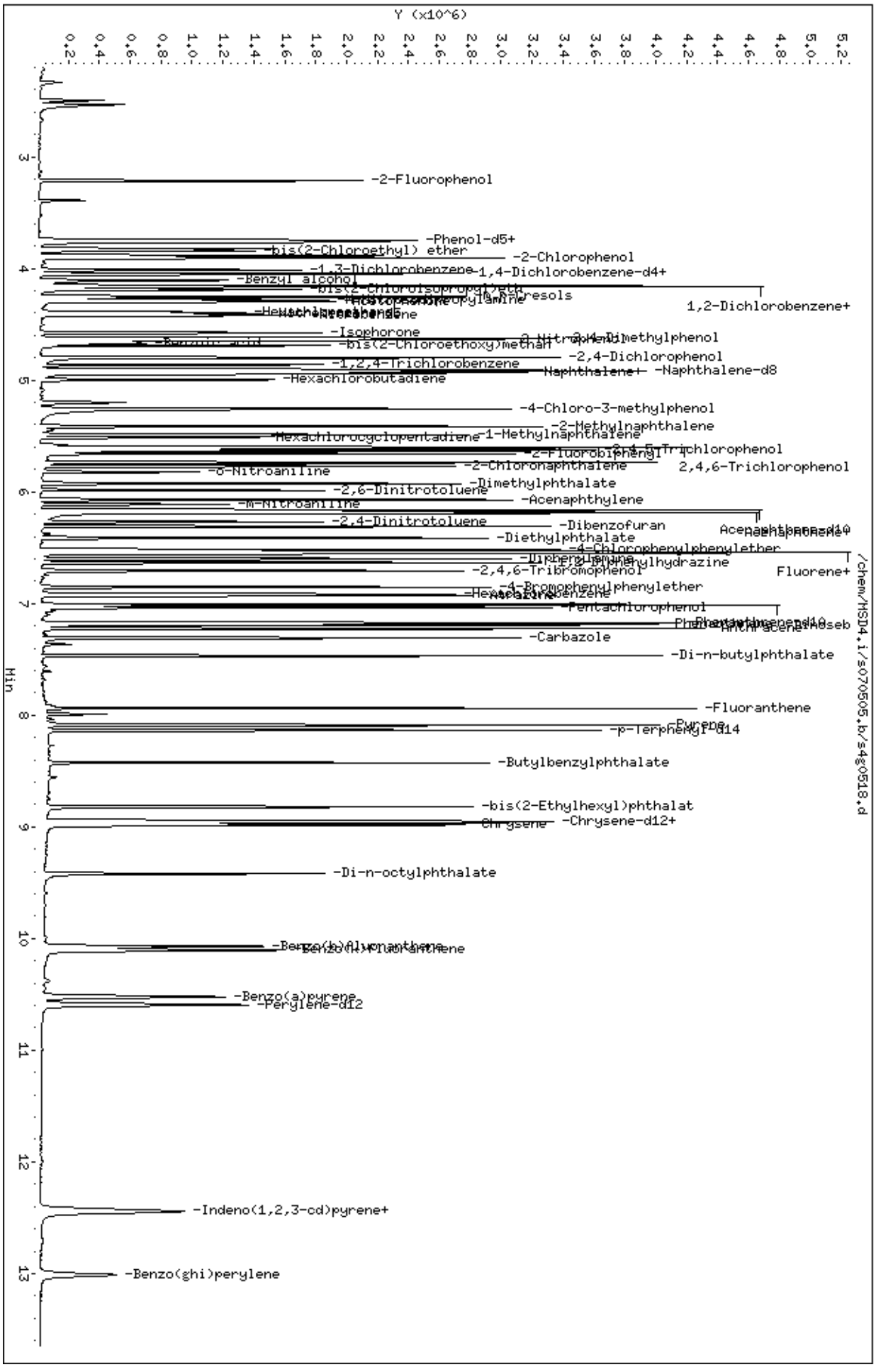
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	4.047	4.044	(1.000)	336613	40.0000	
* 29 Naphthalene-d8	136	4.916	4.919	(1.000)	1402558	40.0000	
* 46 Acenaphthene-d10	164	6.168	6.170	(1.000)	762832	40.0000	
* 67 Phenanthrene-d10	188	7.178	7.175	(1.000)	1229010	40.0000	
* 91 Chrysene-d12	240	8.964	8.961	(1.000)	907100	40.0000	
* 98 Perylene-d12	264	10.598	10.595	(1.000)	724492	40.0000	
$ 3 2-Fluorophenol	112	3.212	3.215	(0.794)	490792	52.0759	104
$ 5 Phenol-d5	99	3.747	3.744	(0.926)	522431	48.0792	96.2
$ 20 Nitrobenzene-d5	82	4.411	4.408	(0.897)	389498	37.2126	74.4
$ 39 2-Fluorobiphenyl	172	5.656	5.659	(0.917)	821201	41.3669	82.7
$ 60 2,4,6-Tribromophenol	329	6.708	6.705	(1.088)	222763	87.6778	175
$ 81 p-Terphenyl-d14	244	8.136	8.139	(0.908)	851701	38.9775	78.0
6 Phenol	94	3.753	3.756	(0.927)	519437	47.2113	94.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
8	2-Chlorophenol	128	3.906	3.908	(0.965)	630166	68.8422	138
11	1,4-Dichlorobenzene	146	4.058	4.055	(1.003)	309627	30.3650	60.7
17	N-Nitrosodipropylamine	70	4.282	4.279	(1.058)	278479	40.3447	80.7
28	1,2,4-Trichlorobenzene	180	4.863	4.866	(0.989)	286453	33.1818	66.4
33	4-Chloro-3-methylphenol	107	5.257	5.254	(1.069)	659221	88.9868	178
47	Acenaphthene	154	6.191	6.194	(1.004)	759987	44.6140	89.2
50	2,4-Dinitrotoluene	165	6.268	6.270	(1.016)	266081	53.4009	107
52	4-Nitrophenol	139	6.191	6.194	(1.004)	172867	69.2580	138
65	Pentachlorophenol	266	7.037	7.034	(0.980)	309626	100.717	201
79	Pyrene	202	8.089	8.086	(0.902)	1249027	39.8434	79.7
7	bis(2-Chloroethyl) ether	93	3.841	3.838	(0.949)	359228	32.2172	64.4
9	1,3-Dichlorobenzene	146	4.011	4.014	(0.991)	305611	28.9719	57.9
12	Benzyl alcohol	108	4.105	4.108	(1.015)	196164	33.4868	67.0
13	1,2-Dichlorobenzene	146	4.164	4.161	(1.029)	287606	30.0374	60.1
14	bis(2-Chloroisopropyl)ether	45	4.188	4.185	(1.035)	578211	39.1364	78.3
15	o-Cresol	107	4.158	4.155	(1.028)	503490	70.3329	141
16	Acetophenone	105	4.299	4.296	(1.062)	478712	40.1541	80.3
18	m,p-Cresols	107	4.258	4.255	(1.052)	771923	74.0091	148
19	Hexachloroethane	117	4.393	4.396	(1.086)	115266	29.2107	58.4
21	Nitrobenzene	77	4.423	4.420	(0.900)	365447	39.4337	78.9
22	Isophorone	82	4.575	4.572	(0.931)	727208	39.4638	78.9
23	2-Nitrophenol	139	4.640	4.637	(0.944)	382494	86.3909	173
24	2,4-Dimethylphenol	122	4.622	4.625	(0.940)	647205	82.5071	165
25	bis(2-Chloroethoxy)methane	93	4.693	4.696	(0.955)	464007	41.7786	83.6
26	2,4-Dichlorophenol	162	4.799	4.801	(0.976)	588951	75.7365	151
27	Benzoic acid	105	4.669	4.655	(0.950)	286525	56.5332	113
30	Naphthalene	128	4.934	4.931	(1.004)	976975	33.0957	66.2
31	4-Chloroaniline	127	4.946	4.943	(1.006)	500614	36.6045	73.2
32	Hexachlorobutadiene	225	4.998	4.995	(1.017)	162278	28.3991	56.8
34	2-Methylnaphthalene	142	5.416	5.413	(1.102)	691988	37.0225	74.0
35	1-Methylnaphthalene	142	5.492	5.489	(1.117)	673222	38.7712	77.5
36	Hexachlorocyclopentadiene	237	5.515	5.518	(0.894)	172403	31.0591	62.1
37	2,4,6-Trichlorophenol	196	5.604	5.601	(0.909)	441413	78.2083	156
38	2,4,5-Trichlorophenol	196	5.627	5.630	(0.912)	524380	88.6469	177
40	2-Chloronaphthalene	162	5.768	5.771	(0.935)	660329	38.7958	77.6
42	o-Nitroaniline	65	5.821	5.825	(0.944)	131999	23.8039	47.6(R)
41	m-Nitroaniline	138	6.109	6.113	(0.990)	172276	34.6723	69.3
43	Dimethylphthalate	163	5.927	5.924	(0.961)	882578	42.8851	85.8
44	2,6-Dinitrotoluene	165	5.985	5.982	(0.970)	201755	49.1176	98.2
45	Acenaphthylene	152	6.074	6.071	(0.985)	1131646	41.7267	83.4
48	2,4-Dinitrophenol	184	6.179	6.182	(1.002)	190792	115.225	230(Q)
49	Dibenzofuran	168	6.309	6.306	(1.023)	979067	41.7253	83.4
51	Diethylphthalate	149	6.414	6.411	(1.040)	861261	43.6639	87.3
53	Fluorene	166	6.544	6.547	(1.061)	804669	41.5977	83.2
54	4-Chlorophenylphenylether	204	6.520	6.523	(1.057)	439586	43.4520	86.9
55	2-Methyl-4,6-dinitrophenol	198	6.555	6.552	(0.913)	324510	114.808	230
56	p-Nitroaniline	138	6.538	6.530	(1.060)	88094	20.9633	41.9(R)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
133	Diphenylamine	169	6.597	6.599	(0.919)	647464	37.6191	75.2
58	1,2-Diphenylhydrazine	77	6.632	6.629	(0.924)	854795	43.4487	86.9
61	4-Bromophenylphenylether	248	6.855	6.858	(0.955)	271417	48.6053	97.2
63	Hexachlorobenzene	284	6.914	6.917	(0.963)	253112	40.0698	80.1
207	Atrazine	173	6.926	6.923	(0.965)	67712	38.7487	77.5
68	Phenanthrene	178	7.190	7.193	(1.002)	1171879	41.8376	83.7
69	Anthracene	178	7.225	7.222	(1.007)	1161913	42.0007	84.0
72	Di-n-butylphthalate	149	7.472	7.469	(1.041)	1368369	46.2910	92.6
76	Fluoranthene	202	7.936	7.939	(1.106)	1238160	39.5431	79.1
85	Butylbenzylphthalate	149	8.424	8.427	(0.940)	528061	38.3231	76.6
89	Benzo(a)anthracene	228	8.953	8.950	(0.999)	950507	42.5884	85.2
92	Chrysene	228	8.982	8.985	(1.002)	923735	43.6591	87.3
93	bis(2-Ethylhexyl)phthalate	149	8.823	8.826	(0.984)	699860	40.9416	81.9
94	Di-n-octylphthalate	149	9.423	9.420	(0.889)	957011	33.8589	67.7
95	Benzo(b)fluoranthene	252	10.075	10.072	(0.951)	775764	39.6464	79.3
96	Benzo(k)fluoranthene	252	10.104	10.107	(0.953)	910594	46.2725	92.5
97	Benzo(a)pyrene	252	10.521	10.518	(0.993)	688172	44.8962	89.8
99	Indeno(1,2,3-cd)pyrene	276	12.443	12.440	(1.174)	573253	45.4452	90.9
100	Dibenzo(a,h)anthracene	278	12.448	12.451	(1.175)	466849	41.8353	83.7
101	Benzo(ghi)perylene	276	13.013	13.010	(1.228)	466834	43.1261	86.2
173	Carbazole	167	7.313	7.311	(1.019)	1054194	38.8242	77.6
143	Dinoseb	211	7.014	7.126	(0.977)	3744	6.78282	13.6(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.



Data File: /chem/MSD4.i/s070505.b/s4g0518.d
Date : 06-JUL-2005 01:26
Client ID: GU0505GMC601MS
Sample Info: I120087117414355281!ISVHF!1!1003MS
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD4.i
Operator: EED
Column diameter: 0.20

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601MSD

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871175

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S4G0519

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	88.5	
111-44-4	bis(2-Chloroethyl) ether	62.8	
95-57-8	2-Chlorophenol	128	
541-73-1	1,3-Dichlorobenzene	52.4	
106-46-7	1,4-Dichlorobenzene	55.0	
100-51-6	Benzyl alcohol	63.2	
95-50-1	1,2-Dichlorobenzene	55.0	
108-60-1	bis(2-Chloroisopropyl)ether	71.6	
95-48-7	o-Cresol	128	
98-86-2	Acetophenone	73.5	
621-64-7	N-Nitrosodipropylamine	72.8	
106-44-5	m,p-Cresols	138	
67-72-1	Hexachloroethane	51.1	
98-95-3	Nitrobenzene	74.5	
78-59-1	Isophorone	73.0	
88-75-5	2-Nitrophenol	162	
105-67-9	2,4-Dimethylphenol	158	
111-91-1	bis(2-Chloroethoxy)methane	78.9	
120-83-2	2,4-Dichlorophenol	137	
65-85-0	Benzoic acid	92.9	
120-82-1	1,2,4-Trichlorobenzene	60.4	
91-20-3	Naphthalene	60.8	
106-47-8	4-Chloroaniline	78.2	
87-68-3	Hexachlorobutadiene	50.8	
59-50-7	4-Chloro-3-methylphenol	166	
91-57-6	2-Methylnaphthalene	68.4	
90-12-0	1-Methylnaphthalene	71.2	
77-47-4	Hexachlorocyclopentadiene	50.3	
88-06-2	2,4,6-Trichlorophenol	143	
95-95-4	2,4,5-Trichlorophenol	162	
91-58-7	2-Chloronaphthalene	68.0	
88-74-4	o-Nitroaniline	41.6	
99-09-2	m-Nitroaniline	68.1	

FORM I SV-1 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601MSD

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871175

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S4G0519

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	76.6	
606-20-2	2,6-Dinitrotoluene	86.8	
208-96-8	Acenaphthylene	74.5	
83-32-9	Acenaphthene	78.5	
51-28-5	2,4-Dinitrophenol	200	
132-64-9	Dibenzofuran	75.8	
121-14-2	2,4-Dinitrotoluene	96.3	
84-66-2	Diethylphthalate	79.1	
100-02-7	4-Nitrophenol	123	
86-73-7	Fluorene	74.2	
7005-72-3	4-Chlorophenylphenylether	78.7	
534-52-1	2-Methyl-4,6-dinitrophenol	204	
100-01-6	p-Nitroaniline	39.2	
122-39-4	Diphenylamine	75.1	
122-66-7	1,2-Diphenylhydrazine	79.8	
101-55-3	4-Bromophenylphenylether	88.4	
118-74-1	Hexachlorobenzene	74.5	
1912-24-9	Atrazine	73.5	
87-86-5	Pentachlorophenol	181	
85-01-8	Phenanthrene	79.3	
120-12-7	Anthracene	79.8	
84-74-2	Di-n-butylphthalate	84.5	
206-44-0	Fluoranthene	73.2	
92-87-5	Benzidine	100	U
129-00-0	Pyrene	75.9	
85-68-7	Butylbenzylphthalate	71.2	
56-55-3	Benzo(a)anthracene	79.8	
91-94-1	3,3'-Dichlorobenzidine	20.0	U
218-01-9	Chrysene	81.7	
117-81-7	bis(2-Ethylhexyl)phthalate	73.0	
117-84-0	Di-n-octylphthalate	61.5	
205-99-2	Benzo(b)fluoranthene	74.2	
207-08-9	Benzo(k)fluoranthene	84.9	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC601MSD

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 138851

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200871175

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S4G0519

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/20/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/06/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	82.3	
193-39-5	Indeno(1,2,3-cd)pyrene	86.5	
53-70-3	Dibenzo(a,h)anthracene	79.7	
191-24-2	Benzo(ghi)perylene	83.2	
88-85-7	Dinoseb	13.6	J
86-74-8	Carbazole	71.6	

General Engineering Laboratories, LLC

Data file : /chem/MSD4.i/s070505.b/s4g0519.d
Lab Smp Id: 1200871175 Client Smp ID: GU05050GMC601MSD
Inj Date : 06-JUL-2005 01:47
Operator : EED Inst ID: MSD4.i
Smp Info : |1200871175|435528|1|SVMF|1|1003MSD
Misc Info : |MSD82709LF|WBN050628-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD4.i/s070505.b/MSD4-8270-062905.m
Meth Date : 07-Jul-2005 18:14 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 10:23 Cal File: s4f2963.d
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 138851.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	500.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	4.045	4.044	(1.000)	300671	40.0000	
* 29 Naphthalene-d8	136	4.920	4.919	(1.000)	1233697	40.0000	
* 46 Acenaphthene-d10	164	6.166	6.170	(1.000)	692967	40.0000	
* 67 Phenanthrene-d10	188	7.176	7.175	(1.000)	1099788	40.0000	
* 91 Chrysene-d12	240	8.957	8.961	(1.000)	801852	40.0000	
* 98 Perylene-d12	264	10.596	10.595	(1.000)	627046	40.0000	
$ 3 2-Fluorophenol	112	3.210	3.215	(0.794)	422847	50.2298	100
$ 5 Phenol-d5	99	3.745	3.744	(0.926)	433096	44.6223	89.2
$ 20 Nitrobenzene-d5	82	4.409	4.408	(0.896)	319817	34.7375	69.5
$ 39 2-Fluorobiphenyl	172	5.661	5.659	(0.918)	673510	37.3477	74.7
$ 60 2,4,6-Tribromophenol	329	6.706	6.705	(1.088)	184282	79.8447	160
$ 81 p-Terphenyl-d14	244	8.134	8.139	(0.908)	726255	37.5991	75.2
6 Phenol	94	3.757	3.756	(0.929)	434765	44.2391	88.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
8	2-Chlorophenol	128	3.904	3.908	(0.965)	522731	63.9318	128
11	1,4-Dichlorobenzene	146	4.057	4.055	(1.003)	250623	27.5166	55.0
17	N-Nitrosodipropylamine	70	4.280	4.279	(1.058)	224504	36.4130	72.8
28	1,2,4-Trichlorobenzene	180	4.867	4.866	(0.989)	229247	30.1899	60.4
33	4-Chloro-3-methylphenol	107	5.255	5.254	(1.068)	539924	82.8590	166
47	Acenaphthene	154	6.189	6.194	(1.004)	607105	39.2324	78.5
50	2,4-Dinitrotoluene	165	6.266	6.270	(1.016)	217912	48.1429	96.3
52	4-Nitrophenol	139	6.189	6.194	(1.004)	139104	61.3499	123
65	Pentachlorophenol	266	7.035	7.034	(0.980)	249438	90.6721	181
79	Pyrene	202	8.087	8.086	(0.903)	1051324	37.9386	75.9
7	bis(2-Chloroethyl) ether	93	3.839	3.838	(0.949)	312770	31.4038	62.8
9	1,3-Dichlorobenzene	146	4.010	4.014	(0.991)	246693	26.1821	52.4
12	Benzyl alcohol	108	4.109	4.108	(1.016)	165343	31.5994	63.2
13	1,2-Dichlorobenzene	146	4.162	4.161	(1.029)	235147	27.4943	55.0
14	bis(2-Chloroisopropyl)ether	45	4.186	4.185	(1.035)	472746	35.8229	71.6
15	o-Cresol	107	4.156	4.155	(1.028)	408071	63.8179	128
16	Acetophenone	105	4.297	4.296	(1.062)	391268	36.7425	73.5
18	m,p-Cresols	107	4.256	4.255	(1.052)	643394	69.0601	138
19	Hexachloroethane	117	4.391	4.396	(1.086)	90017	25.5391	51.1
21	Nitrobenzene	77	4.421	4.420	(0.898)	303598	37.2439	74.5
22	Isophorone	82	4.574	4.572	(0.930)	591945	36.5203	73.0
23	2-Nitrophenol	139	4.638	4.637	(0.943)	314694	80.8061	162
24	2,4-Dimethylphenol	122	4.626	4.625	(0.940)	549412	79.1723	158
25	bis(2-Chloroethoxy)methane	93	4.697	4.696	(0.955)	385372	39.4477	78.9
26	2,4-Dichlorophenol	162	4.797	4.801	(0.975)	469638	68.6597	137
27	Benzoic acid	105	4.662	4.655	(0.947)	199394	46.4638	92.9
30	Naphthalene	128	4.932	4.931	(1.002)	790090	30.4282	60.8
31	4-Chloroaniline	127	4.944	4.943	(1.005)	470322	39.0967	78.2
32	Hexachlorobutadiene	225	4.997	4.995	(1.016)	127810	25.4286	50.8
34	2-Methylnaphthalene	142	5.414	5.413	(1.100)	561971	34.1816	68.4
35	1-Methylnaphthalene	142	5.490	5.489	(1.116)	543605	35.5915	71.2
36	Hexachlorocyclopentadiene	237	5.520	5.518	(0.895)	126792	25.1450	50.3
37	2,4,6-Trichlorophenol	196	5.602	5.601	(0.909)	367603	71.6974	143
38	2,4,5-Trichlorophenol	196	5.631	5.630	(0.913)	435134	80.9761	162
40	2-Chloronaphthalene	162	5.772	5.771	(0.936)	525536	33.9894	68.0
42	o-Nitroaniline	65	5.819	5.825	(0.944)	104796	20.8036	41.6(R)
41	m-Nitroaniline	138	6.113	6.113	(0.991)	153703	34.0531	68.1
43	Dimethylphthalate	163	5.925	5.924	(0.961)	716449	38.3226	76.6
44	2,6-Dinitrotoluene	165	5.984	5.982	(0.970)	161973	43.4082	86.8
45	Acenaphthylene	152	6.072	6.071	(0.985)	918253	37.2720	74.5
48	2,4-Dinitrophenol	184	6.183	6.182	(1.003)	146886	100.026	200(Q)
49	Dibenzofuran	168	6.307	6.306	(1.023)	808364	37.9236	75.8
51	Diethylphthalate	149	6.413	6.411	(1.040)	709095	39.5738	79.1
53	Fluorene	166	6.542	6.547	(1.061)	651511	37.0758	74.2
54	4-Chlorophenylphenylether	204	6.518	6.523	(1.057)	361778	39.3663	78.7
55	2-Methyl-4,6-dinitrophenol	198	6.554	6.552	(0.913)	255680	102.297	204
56	p-Nitroaniline	138	6.536	6.530	(1.060)	74867	19.6119	39.2(R)

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ug/L)
133 Diphenylamine	169	6.601	6.599	(0.920)	578244	37.5449	75.1
58 1,2-Diphenylhydrazine	77	6.630	6.629	(0.924)	702230	39.8879	79.8
61 4-Bromophenylphenylether	248	6.853	6.858	(0.955)	220767	44.1801	88.4
63 Hexachlorobenzene	284	6.918	6.917	(0.964)	210502	37.2398	74.5
207 Atrazine	173	6.930	6.923	(0.966)	57492	36.7659	73.5
68 Phenanthrene	178	7.194	7.193	(1.002)	993475	39.6358	79.3
69 Anthracene	178	7.223	7.222	(1.007)	987272	39.8811	79.8
72 Di-n-butylphthalate	149	7.470	7.469	(1.041)	1135959	42.2530	84.5
76 Fluoranthene	202	7.934	7.939	(1.106)	1026114	36.6215	73.2
85 Butylbenzylphthalate	149	8.428	8.427	(0.941)	433400	35.5817	71.2
89 Benzo(a)anthracene	228	8.945	8.950	(0.999)	787018	39.8916	79.8
92 Chrysene	228	8.980	8.985	(1.003)	763938	40.8457	81.7
93 bis(2-Ethylhexyl)phthalate	149	8.822	8.826	(0.985)	551535	36.4996	73.0
94 Di-n-octylphthalate	149	9.421	9.420	(0.889)	752010	30.7407	61.5
95 Benzo(b)fluoranthene	252	10.067	10.072	(0.950)	628311	37.1008	74.2
96 Benzo(k)fluoranthene	252	10.102	10.107	(0.953)	723134	42.4571	84.9
97 Benzo(a)pyrene	252	10.520	10.518	(0.993)	545657	41.1307	82.3
99 Indeno(1,2,3-cd)pyrene	276	12.435	12.440	(1.174)	471995	43.2328	86.5
100 Dibenzo(a,h)anthracene	278	12.447	12.451	(1.175)	383354	39.8593	79.7
101 Benzo(ghi)perylene	276	13.011	13.010	(1.228)	389584	41.5827	83.2
173 Carbazole	167	7.312	7.311	(1.019)	869585	35.7882	71.6
143 Dinoseb	211	7.012	7.126	(0.977)	3476	6.81184	13.6(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD4.i/s070505.b/s4g0519.d

Date : 06-JUL-2005 01:47

Client ID: GU05050GMC601MSD

Instrument: MSD4.i

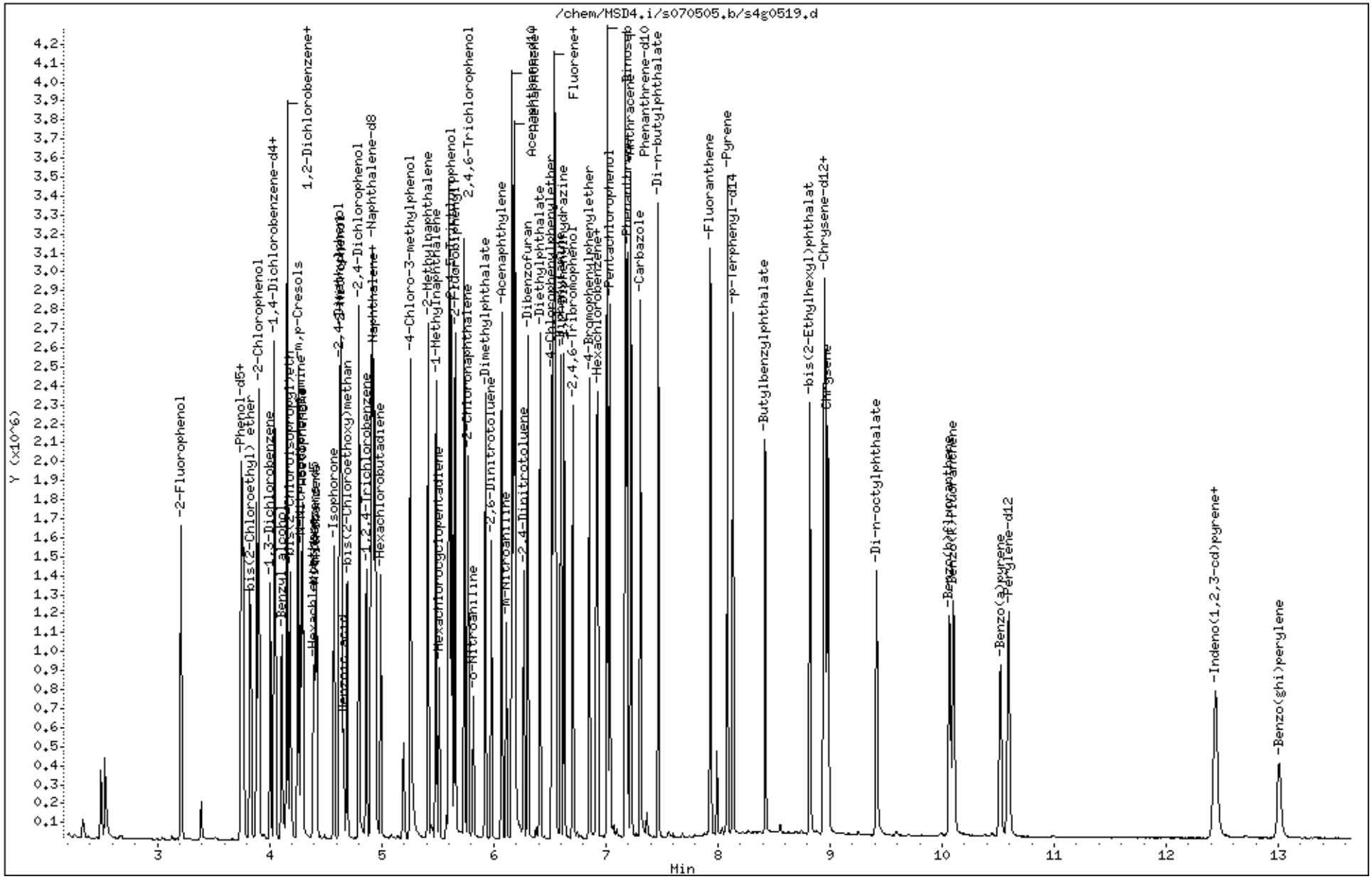
Sample Info: |1200871175|435528|1|SVMF|1|1003MSD

Volume Injected (uL): 0.5

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD 4

DATE:06/29/05 METHOD: 8270,625 OPERATOR:EED REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 4 on pg. 9
Multiplier Voltage: Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT LOT 309966
DFTPP Solution ID: WBN050605-01 Internal Std ID: WBN050609-01
Sequence Number:s062905 Initial Calibration Date(s):062905 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s4f2901.d	WBN050605-01	EED	29-JUN-2005 11:44		s062905	1.0	DFTPP	
s4f2902.d	INSTRUMENT BLANK	EED	29-JUN-2005 12:01		s062905	1.0		
s4f2903.d	UBN050610-01	EED	29-JUN-2005 12:23	1 PPM	s062905	1.0	BNA ICAL	
s4f2904.d	UBN050610-02	EED	29-JUN-2005 12:45	10 PPM	s062905	1.0	BNA ICAL	
s4f2905.d	UBN050610-03	EED	29-JUN-2005 13:07	20 PPM	s062905	1.0	BNA ICAL	
s4f2906.d	UBN050610-04	EED	29-JUN-2005 13:29	40 PPM	s062905	1.0	BNA ICAL	
s4f2907.d	UBN050610-05	EED	29-JUN-2005 13:51	50 PPM	s062905	1.0	BNA ICAL	DUSE
s4f2908.d	UBN050610-06	EED	29-JUN-2005 14:13	80 PPM	s062905	1.0	BNA ICAL	
s4f2909.d	UBN050610-07	EED	29-JUN-2005 14:36	100 PPM	s062905	1.0	BNA ICAL	
s4f2910.d	UBN050610-08	EED	29-JUN-2005 14:58	120 PPM	s062905	1.0	BNA ICAL	
s4f2911.d	INSTRUMENT BLANK	EED	29-JUN-2005 15:19		s062905	1.0		
s4f2912.d	UBN050603-04	EED	29-JUN-2005 15:41	40 PPM	s062905	1.0	BNA ICV	pass
s4f2913.d	INSTRUMENT BLANK	EED	29-JUN-2005 16:02		s062905	1.0		
s4f2914.d	UBN050607-01	EED	29-JUN-2005 16:23	1 PPM	s062905	1.0	ANBZ ICAL	
s4f2915.d	UBN050607-02	EED	29-JUN-2005 16:46	10 PPM	s062905	1.0	ANBZ ICAL	
s4f2916.d	UBN050607-03	EED	29-JUN-2005 17:08	20 PPM	s062905	1.0	ANBZ ICAL	
s4f2917.d	UBN050607-04	EED	29-JUN-2005 17:29	40 PPM	s062905	1.0	ANBZ ICAL	
s4f2918.d	UBN050607-05	EED	29-JUN-2005 17:51	50 PPM	s062905	1.0	ANBZ ICAL	
s4f2919.d	UBN050607-06	EED	29-JUN-2005 18:13	80 PPM	s062905	1.0	ANBZ ICAL	
s4f2920.d	UBN050607-07	EED	29-JUN-2005 18:35	100 PPM	s062905	1.0	ANBZ ICAL	
s4f2921.d	UBN050607-08	EED	29-JUN-2005 18:57	120 PPM	s062905	1.0	ANBZ ICAL	

s4f2922.d	INSTRUMENT BLANK	EED	29-JUN-2005 19:18		s062905		1.0		
s4f2923.d	UBN050527-03.1	EED	29-JUN-2005 19:39	40 PPM	s062905		1.0	ANBZ ICV	
s4f2924.d	INSTRUMENT BLANK	EED	29-JUN-2005 20:01		s062905		1.0		
s4f2925.d	UBN050516-01	EED	29-JUN-2005 20:23	10 PPM	s062905		1.0	167 ICAL	
s4f2926.d	UBN050516-02	EED	29-JUN-2005 20:44	20 PPM	s062905		1.0	167 ICAL	
s4f2927.d	UBN050516-03	EED	29-JUN-2005 21:04	40 PPM	s062905		1.0	167 ICAL	
s4f2928.d	UBN050516-04	EED	29-JUN-2005 21:26	50 PPM	s062905		1.0	167 ICAL	
s4f2929.d	UBN050516-05	EED	29-JUN-2005 21:47	80 PPM	s062905		1.0	167 ICAL	
s4f2930.d	UBN050516-06	EED	29-JUN-2005 22:09	100 PPM	s062905		1.0	167 ICAL	
s4f2931.d	UBN050516-07	EED	29-JUN-2005 22:30	120 PPM	s062905		1.0	167 ICAL	
s4f2932.d	INSTRUMENT BLANK	EED	29-JUN-2005 22:51		s062905		1.0		
s4f2933.d	WBN050605-01	EED	29-JUN-2005 23:08		s062905		1.0	DFTPP	
s4f2934.d	INSTRUMENT BLANK	EED	29-JUN-2005 23:24		s062905		1.0		
s4f2935.d	UBN050520-05	EED	29-JUN-2005 23:44	10 PPM	s062905		1.0	168 ICAL	c146 fails
s4f2936.d	UBN050520-06	EED	30-JUN-2005 00:05	20 PPM	s062905		1.0	168 ICAL	c146 fails
s4f2937.d	UBN050520-07	EED	30-JUN-2005 00:26	40 PPM	s062905		1.0	168 ICAL	c146 fails
s4f2938.d	UBN050520-08	EED	30-JUN-2005 00:46	50 PPM	s062905		1.0	168 ICAL	c146 fails
s4f2939.d	UBN050520-09	EED	30-JUN-2005 01:07	80 PPM	s062905		1.0	168 ICAL	c146 fails
s4f2940.d	UBN050520-10	EED	30-JUN-2005 01:28	100 PPM	s062905		1.0	168 ICAL	c146 fails
s4f2941.d	UBN050520-11	EED	30-JUN-2005 01:48	120 PPM	s062905		1.0	168 ICAL	c146 fails
s4f2942.d	INSTRUMENT BLANK	EED	30-JUN-2005 02:09		s062905		1.0		
s4f2943.d	UBN050606-06	EED	30-JUN-2005 02:30	10 PPM	s062905		1.0	AP9 ICAL	
s4f2944.d	UBN050606-07	EED	30-JUN-2005 02:51	20 PPM	s062905		1.0	AP9 ICAL	
s4f2945.d	UBN050606-08	EED	30-JUN-2005 03:12	40 PPM	s062905		1.0	AP9 ICAL	
s4f2946.d	UBN050606-09	EED	30-JUN-2005 03:34	50 PPM	s062905		1.0	AP9 ICAL	
s4f2947.d	UBN050606-10	EED	30-JUN-2005 03:55	80 PPM	s062905		1.0	AP9 ICAL	
s4f2948.d	UBN050606-11	EED	30-JUN-2005 04:17	100 PPM	s062905		1.0	AP9 ICAL	

s4f2949.d	UBN050606-12	EED	30-JUN-2005 04:39	120 PPM	s062905		1.0	AP9 ICAL	
s4f2950.d	INSTRUMENT BLANK	EED	30-JUN-2005 05:00		s062905		1.0		
s4f2951.d	UBN050606-01	EED	30-JUN-2005 05:21	500 PPM	s062905		1.0	HEX ICAL	c175 fails
s4f2952.d	UBN050606-02	EED	30-JUN-2005 05:43	1000 PPM	s062905		1.0	HEX ICAL	c175 fails
s4f2953.d	UBN050606-03	EED	30-JUN-2005 06:05	1250 PPM	s062905		1.0	HEX ICAL	c175 fails
s4f2954.d	UBN050606-04	EED	30-JUN-2005 06:27	2000 PPM	s062905		1.0	HEX ICAL	c175 fails
s4f2955.d	UBN050606-05	EED	30-JUN-2005 06:49	2500 PPM	s062905		1.0	HEX ICAL	c175 fails
s4f2956.d	INSTRUMENT BLANK	EED	30-JUN-2005 07:11		s062905		1.0		
s4f2957.d	UBN050506-16	EED	30-JUN-2005 07:32	50 PPM	s062905		1.0	CARE ICAL	
s4f2958.d	UBN050506-17	EED	30-JUN-2005 08:01	75 PPM	s062905		1.0	CARE ICAL	
s4f2959.d	UBN050506-18	EED	30-JUN-2005 08:29	100 PPM	s062905		1.0	CARE ICAL	
s4f2960.d	UBN050506-19	EED	30-JUN-2005 08:57	125 PPM	s062905		1.0	CARE ICAL	
s4f2961.d	UBN050506-20	EED	30-JUN-2005 09:26	150 PPM	s062905		1.0	CARE ICAL	
s4f2962.d	UBN050506-21	EED	30-JUN-2005 09:55	200 PPM	s062905		1.0	CARE ICAL	
s4f2963.d	UBN050506-22	EED	30-JUN-2005 10:23	250 PPM	s062905		1.0	CARE ICAL	

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD4

DATE:070505 METHOD: 8270 OPERATOR:eed,rmb REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 4 on pg. 9
Multiplier Voltage: 1447 Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT REF MAT 309966
DFTPP Solution ID: WBN050605-01 Internal Std ID: WBN050628-01
Sequence Number:s070505 Initial Calibration Date(s):062905 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s4g0501.d	WBN050605-01	EED	05-JUL-2005 19:35		s070505	1.0	dftpp	
s4g0502-625.d	UBN050610-04.3	EED	05-JUL-2005 19:51	40 PPM	s070505	1.0	BNA CVS	
s4g0502.d	UBN050610-04.3	EED	05-JUL-2005 19:51	40 PPM	s070505	1.0	BNA CVS	
s4g0503.d	UBN050623-02.1	EED	05-JUL-2005 20:11	40 PPM	s070505	1.0	ANBZ CVS	
s4g0504.d	UBN050610-01	EED	05-JUL-2005 20:33	40 PPM	s070505	1.0	167 CVS	
s4g0505.d	UBN050610-01	EED	05-JUL-2005 20:54	40 PPM	s070505	1.0	168 CVS	
s4g0506.d	UBN050610-01	EED	05-JUL-2005 21:15	40 PPM	s070505	1.0	AP9 CVS	
s4g0507-1.d	1200871172	RMB	05-JUL-2005 21:37	435528	138518-4	1.0	MB	
s4g0507-2.d	1200871172	RMB	05-JUL-2005 21:37	435528	138833	1.0	MB	
s4g0507-3.d	1200871172	RMB	05-JUL-2005 21:37	435528	138851	1.0	MB	
s4g0507-4.d	1200871172	RMB	05-JUL-2005 21:37	435528	138905	1.0	MB	
s4g0507.d	1200871172	RMB	05-JUL-2005 21:37	435528	s070605	1.0	MB	
s4g0508-1.d	1200871173	EED	05-JUL-2005 21:58	435528	138518-4	1.0	LCS	
s4g0508-2.d	1200871173	EED	05-JUL-2005 21:58	435528	138833	1.0	LCS	
s4g0508-3.d	1200871173	EED	05-JUL-2005 21:58	435528	138851	1.0	LCS	
s4g0508-4.d	1200871173	EED	05-JUL-2005 21:58	435528	138905	1.0	LCS	
s4g0508.d	1200871173	EED	05-JUL-2005 21:58	435528	s070505	1.0	LCS	
s4g0509.d	138420005	EED	05-JUL-2005 22:19	433671	3363S	1.0	LANL	Fail SS - Rx
s4g0510.d	138420006	EED	05-JUL-2005 22:40	433671	3363S	1.0	LANL	Fail SS - Rx
s4g0511.d	138737006	EED	05-JUL-2005 23:01	435528	138518-4	1.0	CAST	
s4g0512.d	138833003	EED	05-JUL-2005 23:22	435528	138833	1.0	ACET	

s4g0513.d	138833004	EED	05-JUL-2005 23:43	435528	138833	1.0	ACET	Fail SS - no more sample
s4g0514.d	138833008	EED	06-JUL-2005 00:03	435528	138833	1.0	ACET	Fail SS - no more sample
s4g0515.d	138833009	EED	06-JUL-2005 00:24	435528	138833	1.0	ACET	Fail SS
s4g0516.d	138833010	EED	06-JUL-2005 00:45	435528	138833	1.0	ACET	
s4g0517.d	138851003	EED	06-JUL-2005 01:05	435528	138851	1.0	ESHL	
s4g0518.d	1200871174	EED	06-JUL-2005 01:26	435528	138851	1.0	1003MS	Fail 4 - comfirmed by MSD
s4g0519.d	1200871175	EED	06-JUL-2005 01:47	435528	138851	1.0	1003MSD	Fail 4 - comfirmed by MS
s4g0520.d	138851004	EED	06-JUL-2005 02:08	435528	138851	1.0	ESHL	
s4g0521.d	138905004	EED	06-JUL-2005 02:29	435528	138905	1.0	ESHL	
s4g0522.d	1200871176	EED	06-JUL-2005 02:50	435528	138905	1.0	5004MS	Fail 3 - lab error
s4g0523.d	1200871177	EED	06-JUL-2005 03:11	435528	s070505	1.0	5004MSD	
s4g0524.d	1200868178	EED	06-JUL-2005 03:32	434282	138393-1	1.0	MB	Fail SS - NCR
s4g0525.d	1200868179	EED	06-JUL-2005 03:54	434282	138393-1	1.0	LCS	Fail 1 - <5%
s4g0526.d	1200868216	EED	06-JUL-2005 04:16	434282	138393-1	1.0	LCSD	Fail 2 - <5
s4g0527.d	138396005	EED	06-JUL-2005 04:37	434282	138393-1	1.0	CAST	Blank fail - NCR
s4g0528-1.d	1200877356	EED	06-JUL-2005 04:58	438251	139430	1.0	MB	
s4g0528-2.d	1200877356	EED	06-JUL-2005 04:58	438251	139588	1.0	MB	
s4g0528.d	1200877356	EED	06-JUL-2005 04:58	438251		1.0	MB	
s4g0529-1.d	1200877357	EED	06-JUL-2005 05:20	438251	139430	1.0	LCS	

Instrument Batch: /chem/MSD4.i/s070505.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s4g0529-2.d	1200877357	EED	06-JUL-2005 05:20	438251	139588	1.0	LCS	
s4g0529.d	1200877357	EED	06-JUL-2005 05:20	438251		1.0	LCS	
s4g0530.d	139430005	EED	06-JUL-2005 05:41	438251	139430	1.0	GTSD	
s4g0531.d	1200877358	EED	06-JUL-2005 06:03	438251	139430	1.0	0005MS	Fail 1 - confirmed by MSD
s4g0532.d	1200877359	EED	06-JUL-2005 06:24	438251	139430	1.0	0005MSD	Fail 1 - confirmed by MS
s4g0533.d	139588001	EED	06-JUL-2005 06:46	438251	139588	1.0	COMM	DUSE - useless data - rr 100x

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater and Other Aqueous Samples

Batch ID: 435481 **Verified by:** _____

Analyst: Joseph Boyd

Method: SW846 3510C

Lab SOP: GL−OA−E−013 REV# 14

Instrument: Semi−Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Sec Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1200871172 MB	20−JUN−2005 21:10:39	1000	7	<2	>11	1	0.001
1200871173 LCS	20−JUN−2005 21:10:39	1000	7	<2	>11	1	0.001
138737006	20−JUN−2005 21:10:39	980	7	<2	>11	1	0.00102
138833003	20−JUN−2005 21:10:39	1040	7	<2	>11	1	0.00096
138833004	20−JUN−2005 21:10:39	1030	7	<2	>11	1	0.00097
138833008	20−JUN−2005 21:10:39	1040	7	<2	>11	1	0.00096
138833009	20−JUN−2005 21:10:39	1030	7	<2	>11	1	0.00097
138833010	20−JUN−2005 21:10:39	1030	7	<2	>11	1	0.00097
138851003	20−JUN−2005 21:10:39	970	7	<2	>11	1	0.00103
1200871174 MS (138851003)	20−JUN−2005 21:10:39	500	7	<2	>11	1	0.002
1200871175 MSD (138851003)	20−JUN−2005 21:10:39	500	7	<2	>11	1	0.002
138851004	20−JUN−2005 21:10:39	980	7	<2	>11	1	0.00102
138905004	20−JUN−2005 21:10:39	950	7	<2	>11	1	0.00105
1200871176 MS (138905004)	20−JUN−2005 21:10:39	500	7	<2	>11	1	0.002
1200871177 MSD (138905004)	20−JUN−2005 21:10:39	500	7	<2	>11	1	0.002

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1200871173	BNA LCS for all spikes	UE050615−03	1	mL
MS	1200871174	BNA LCS for all spikes	UE050615−03	1	mL
MS	1200871176	BNA LCS for all spikes	UE050615−03	1	mL
MSD	1200871175	BNA LCS for all spikes	UE050615−03	1	mL
MSD	1200871177	BNA LCS for all spikes	UE050615−03	1	mL
SURR	All	BNA for all SurrogateS	UE050615−02	1	mL
REGNT	All	Methylene Chloride	313652−A	360	mL
SOURC	All	SODIUM SULFATE	243217	30	g

Comments:

The following samples were emulsive in both acid and base:
138833004
138833008

The following samples were emulsive in base only:
138833003
138833009

Final solvent: CH2Cl2

Verified by: HAJ

NCR Report No.: 218201
Revision No.: 2

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07–JUL–05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Liquid	ACET, CAST, ESHL
Batch ID:	**Sample Numbers:**		
435528	See Below		

Potentially affected work order(s)(SDG): 138737(138518–4),138833,138851,138905

Application Issues:

Failed Recovery for Surrogate or Tracer

Failed Recovery for MS/PS

Insufficient Sample

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS recovered 2,4–Dimethylphenol at 96.3% (limits 40.6–95.3%).	1. The recovery was above the control limits and represented less than 5% of requested spike analyte list. That satisfied the acceptance criteria for the client and the results were reported.
2. The MS (1200871174) failed recovery for multiple compounds.	2. Because the MSD confirmed the spike failures, they were attributed to matrix interference and the results were reported.
3. The MSD (1200871175) failed recovery for multiple compounds.	3. Because the MS confirmed the spike failures, they were attributed to matrix interference and the results were reported.
4. The MS (1200871176) failed recovery for Benzyl Alcohol at 39.9% (limits 40.2–101.3%), 2,4–Dimethylphenol at 100.38% (limits 41.5–95.8%) and Benzidine at 9.8% (limits 10–60%). The MSD (1200871177) failed recovery for 2,4–Dimethylphenol at 97.5% (limits 41.5–95.8%)	4. The failures represented less than 5% of requested spike analyte list. That satisfied the acceptance criteria for the client and the results were reported.
5. Samples 138833004, 138833008, and 138833009 failed surrogate recovery.	5. Sample 138833009 failed surrogate high. There were no target analytes detected, and the data were reported. There was insufficient sample for re–extraction for 138833004 and 138833008.

Originator's Name:

Erin Dobson 08–JUL–05

Data Validator/Group Leader:

Daniel Beacham 08–JUL–05

Quality Review:

Director:

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (ESHL)
SDG 138851

Method/Analysis Information

Procedure:	**Definitive Low Level Analysis Using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) By SW-846 Method 8321 Modified (8321M)**
Analytical Method:	SW846 8321A Modified
Prep Method:	SW846 8321A Modified
Analytical Batch Number:	436182
Prep Batch Number:	436181

Sample Analysis

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
1200872595	Interference Check Sample (ICS)
1200872589	Method Blank (MB)
1200872590	Laboratory Control Sample (LCS)
1200872591	138905001(GF0506G12R101) Matrix Spike (MS)
1200872592	138905001(GF0506G12R101) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 6.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

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CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards and may be based off of the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Client sample 138905001 (GF0506G12R101) from SDG 138905 was chosen for matrix spike analysis. Please see theraw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The matrix spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The matrix spike duplicate recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 138851001 (GF05050GMC601) and 138851002 (GF05050GMC690) were diluted due to over range target analytes.

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Sample Re-extraction/Re-analysis
The Interference Check Sample (ICS) failed acceptance criteria. It was re-analyzed and passed acceptance criteria. The re-analysis is reported.

Miscellaneous Information

Nonconformance (NCR) Documentation
A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The samples were originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

Due to software limitations, all initial calibration blanks must be designated as IPB001 in order for the forms to be correct.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards Prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a liquid chromatography (HPLC) instrument configuration for explosives analyses. The chromatographic hardware system consists of a Waters Model 2795 with programmable gradient pumping and a 50 ul loop injector. The HPLC is coupled to a Micromass Model Quattro Micro MS/MS. The MS/MS is fitted with a negative Electrospray (ES-) interface.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

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Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Heather M. Mauer **Date:** 02/18/07

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SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 436181

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05050GMC601

Date Received: 17-JUN-05

GEL Job No (SDG): 138851

GEL Sample ID: 138851001

Date Filtered: 27-JUN-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	10	40	185	ug/L		200	28-JUN-05 20:07	per06280015b
	Perchlorate Isotope Ratio			2.96			200	28-JUN-05 20:07	per06280015b
14797-73-0	Perchlorate-101	10	40	183	ug/L		200	28-JUN-05 20:07	per06280015b
	Perchlorate-O(18)	0	0	101	ug/L		200	28-JUN-05 20:07	per06280015b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 436181

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05050GMC690

Date Received: 17-JUN-05

GEL Job No (SDG): 138851

GEL Sample ID: 138851002

Date Filtered: 27-JUN-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	10	40	177	ug/L		200	28-JUN-05 20:13	per06280016b
	Perchlorate Isotope Ratio			2.88			200	28-JUN-05 20:13	per06280016b
14797-73-0	Perchlorate-101	10	40	180	ug/L		200	28-JUN-05 20:13	per06280016b
	Perchlorate-O(18)	0	0	94.6	ug/L		200	28-JUN-05 20:13	per06280016b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 138851

Extract Batch Code: 436181

Date Filtered: 27-JUN-05

Matrix: GROUND WATER

Sample ID: 1200872590

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.207	ug/L	104		85 - 115
Perchlorate Isotope Ratio		2.94				-
Perchlorate-101	0.200	.206	ug/L	103		85 - 115
Perchlorate-O(18)		.48	ug/L			-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 138851

Extract Batch Code: 436181

Date Filtered: 27-JUN-05

Matrix: GROUND WATER

Sample ID: 1200872595

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.216	ug/L	108		80 - 120
Perchlorate Isotope Ratio		2.81				
Perchlorate-101	0.200	.225	ug/L	113		80 - 120
Perchlorate-O(18)		.492	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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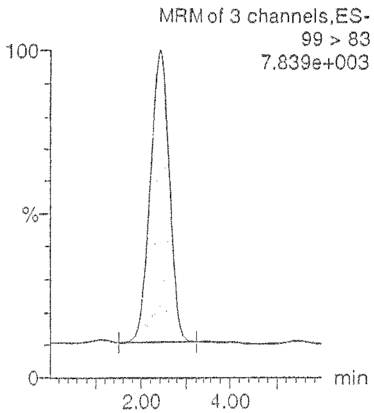
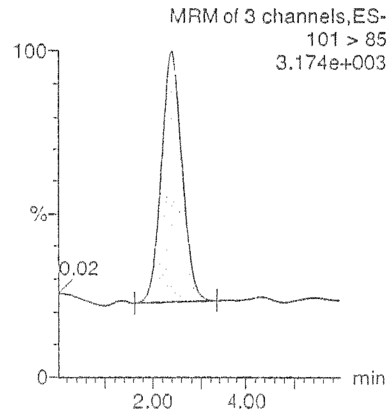
Dataset: C:\Masslynx\Perchlorate.PRO\per062805b1.qld, Time: Tue Jun 28 23:24:46 2005

Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280011b
Date: 28-Jun-2005
Time: 19:40:19
ID: 1200872595
Vial: 1:4,A

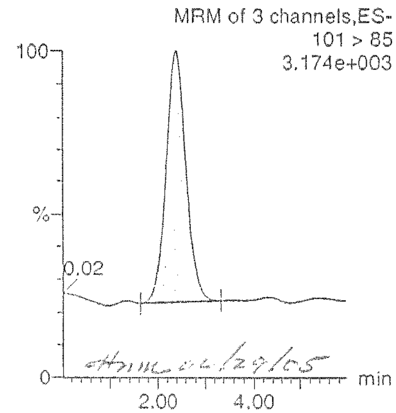
Perchlorate



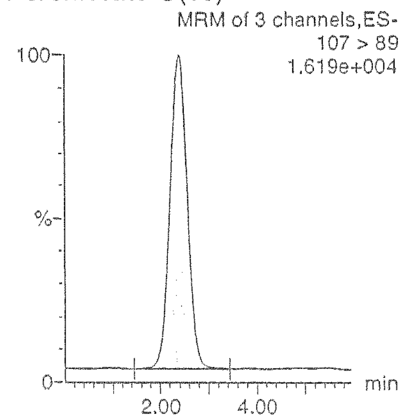
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	1200872595	Perchlorate	99 > 83	2.41	3472.878		3472.878	3472.878	bb			585.7	0.2162	108.1	2.81
2	1200872595	Perchlorate-101	101 > 85	2.39	1236.387		1236.387	1236.387	bb			509.9	0.2251	112.6	
3	1200872595	Perchlorate-O(18)	107 > 89	2.39	6511.066		6511.066	6511.066	bb			2553.6	0.4918	98.4	

MM= Manually Modified

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 138851

Extract Batch Code: 436181

Date Extracted: 27-JUN-05

GEL MS/PS ID: 1200872591

Client ID: GF0506G12R101

GEL MSD/PSD ID: 1200872592

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.00	ug/L	0.217	109	.227	113	4.26	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.08		3.11		0		-
Perchlorate-101	0.200	0.00	ug/L	0.205	103	.213	106	3.51	30	75 - 125
Perchlorate-O(18)	0	0.469	ug/L	0.521		.53		1.69		-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	27-JUN-05	per06270001b	IPB001
Perchlorate Isotope Ratio	0.00		NA	27-JUN-05	per06270001b	IPB001
Perchlorate-101	0.00	0	NA	27-JUN-05	per06270001b	IPB001
Perchlorate	0.00	0	NA	27-JUN-05	per06270002b	IPB001
Perchlorate Isotope Ratio	0.00		NA	27-JUN-05	per06270002b	IPB001
Perchlorate-101	0.00	0	NA	27-JUN-05	per06270002b	IPB001
Perchlorate	0.00	0	NA	28-JUN-05	per06280001b	IPB001
Perchlorate Isotope Ratio	0.00		NA	28-JUN-05	per06280001b	IPB001
Perchlorate-101	0.00	0	NA	28-JUN-05	per06280001b	IPB001
Perchlorate	0.00	0	NA	28-JUN-05	per06280002b	IPB001
Perchlorate Isotope Ratio	0.00		NA	28-JUN-05	per06280002b	IPB001
Perchlorate-101	0.00	0	NA	28-JUN-05	per06280002b	IPB001

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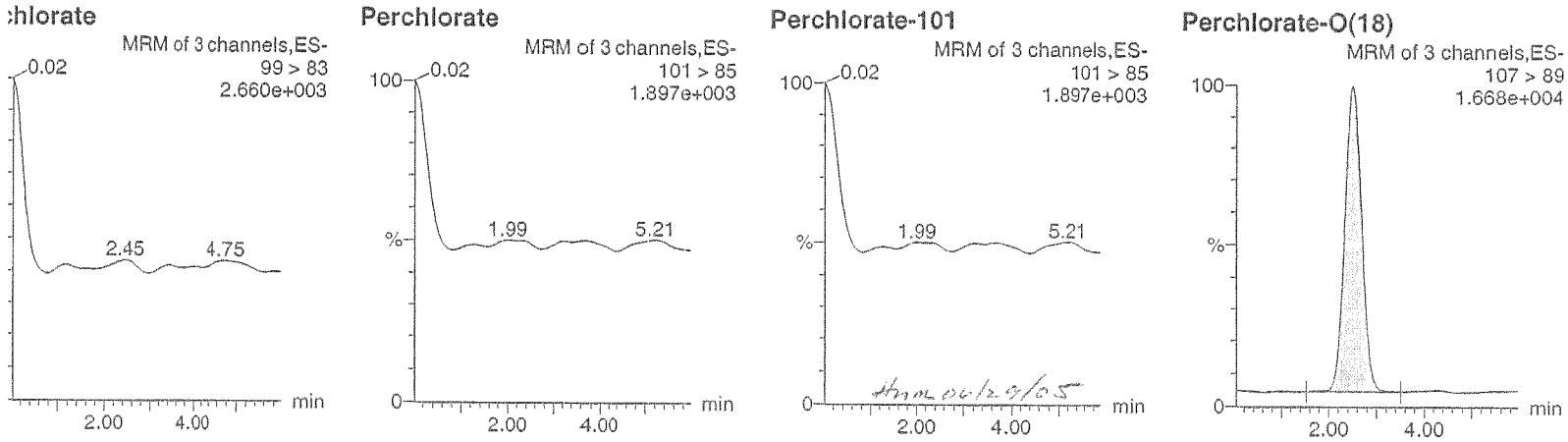
ıset: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

hod: C:\Masslynx\Perchlorate.PRO\MethDB\per062705b.mdb, Time: Mon Jun 27 20:34:23 2005
bration: Untitled, Time: Tue Jun 28 05:55:35 2005

ıe: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270001b
ɜ: 27-Jun-2005
e: 19:47:35
PB001
: 1:1,A



D	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
PB001	Perchlorate	99 > 83												
PB001	Perchlorate-101	101 > 85												
PB001	Perchlorate-O(18)	107 > 89	2.51	6540.263		6540.263	6540.263	bb			707.5	0.5055	101.1	

457

: Manually Modified

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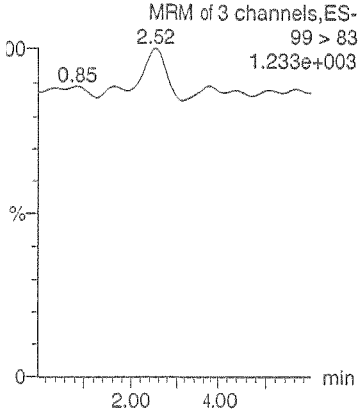
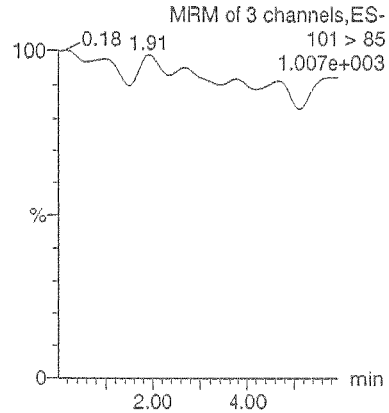
ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270002b
ate: 27-Jun-2005
me: 19:55:01
: IPB001
al: 1:1,A

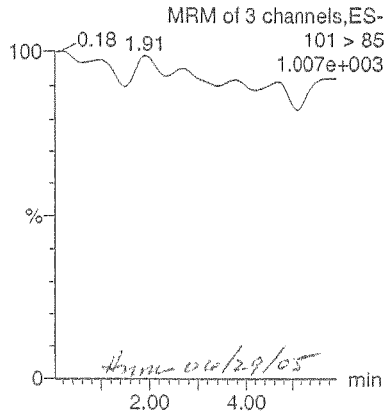
erchlorate



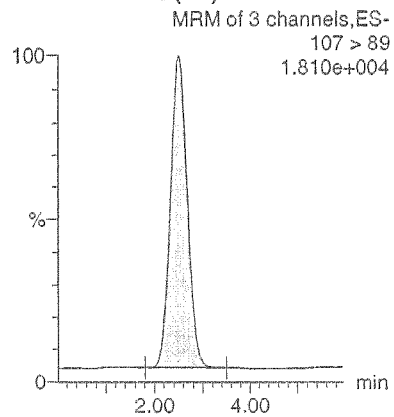
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB001	Perchlorate	99 > 83												
2	IPB001	Perchlorate-101	101 > 85												
3	IPB001	Perchlorate-O(18)	107 > 89	2.49	7122.704		7122.704	7122.704	bb			2015.8	0.5505	110.1	

M= Manually Modified

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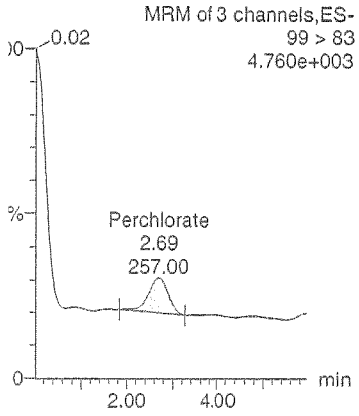
ataset: C:\Masslynx\Perchlorate.PRO\per062805b1.qld, Time: Tue Jun 28 23:24:46 2005

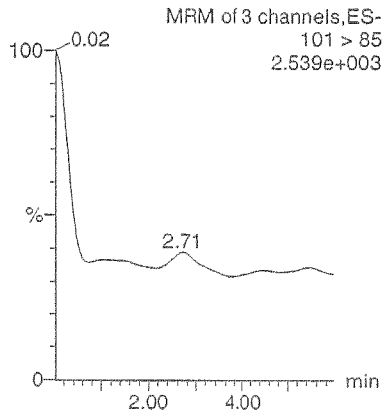
ethod: C:\Masslynx\Perchlorate.PRO\MethDB\per062805b.mdb, Time: Tue Jun 28 19:16:43 2005
alibration: Untitled, Time: Tue Jun 28 23:24:46 2005

ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280001b
ate: 28-Jun-2005
me: 18:33:45
: IPB001
al: 1:1,A

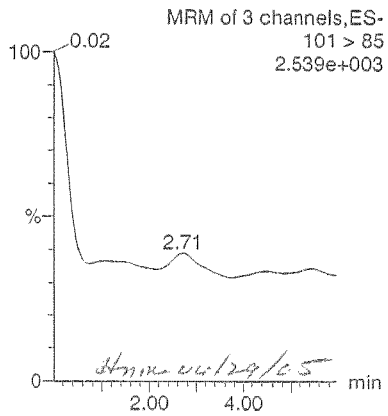
rchlorate



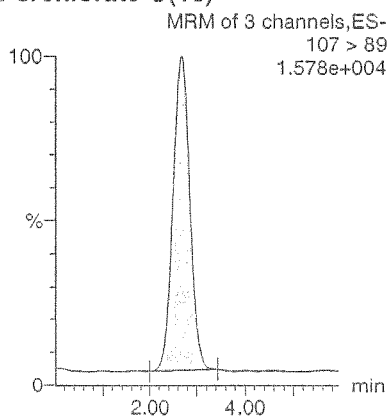
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
IPB001	Perchlorate	99 > 83	2.69	257.001		257.001	257.001	bb			144.6	0.0160		
IPB001	Perchlorate-101	101 > 85												
IPB001	Perchlorate-O(18)	107 > 89	2.68	6316.608		6316.608	6316.608	bb			725.6	0.4772	95.4	

M= Manually Modified

459

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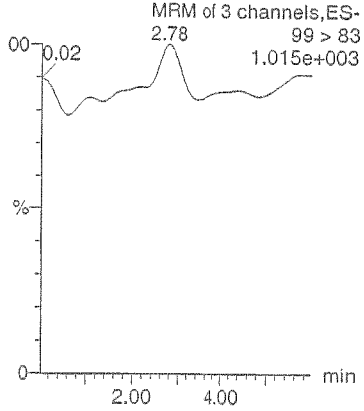
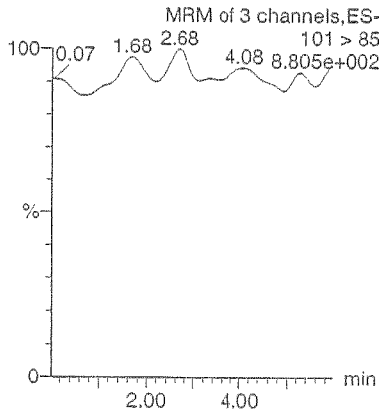
ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280002b
ate: 28-Jun-2005
ime: 18:41:14
): IPB001
ial: 1:1,A

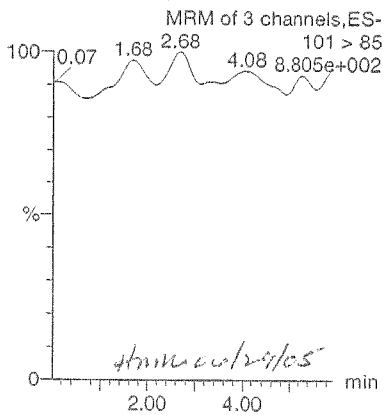
erchlorate



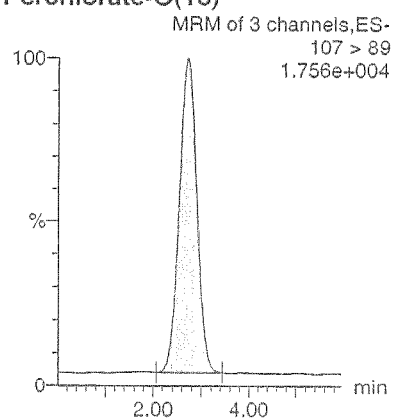
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB001	Perchlorate	99 > 83												
2	IPB001	Perchlorate-101	101 > 85												
3	IPB001	Perchlorate-O(18)	107 > 89	2.72	7191.828		7191.828	7191.828	bb			1005.2	0.5433	108.7	

M= Manually Modified

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	27-JUN-05	per06270009b	IPB002
Perchlorate Isotope Ratio	0.00		NA	27-JUN-05	per06270009b	IPB002
Perchlorate-101	0.00	0	NA	27-JUN-05	per06270009b	IPB002
Perchlorate	0.00	0	NA	27-JUN-05	per06270020b	IPB003
Perchlorate Isotope Ratio	0.00		NA	27-JUN-05	per06270020b	IPB003
Perchlorate-101	0.00	0	NA	27-JUN-05	per06270020b	IPB003
Perchlorate	0.00	0	NA	28-JUN-05	per06280009b	IPB002
Perchlorate Isotope Ratio	0.00		NA	28-JUN-05	per06280009b	IPB002
Perchlorate-101	0.00	0	NA	28-JUN-05	per06280009b	IPB002
Perchlorate	0.00	0	NA	28-JUN-05	per06280018b	IPB003
Perchlorate Isotope Ratio	0.00		NA	28-JUN-05	per06280018b	IPB003
Perchlorate-101	0.00	0	NA	28-JUN-05	per06280018b	IPB003

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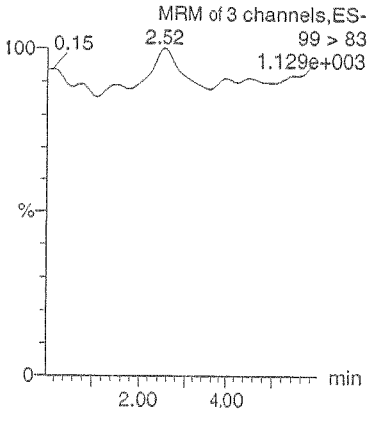
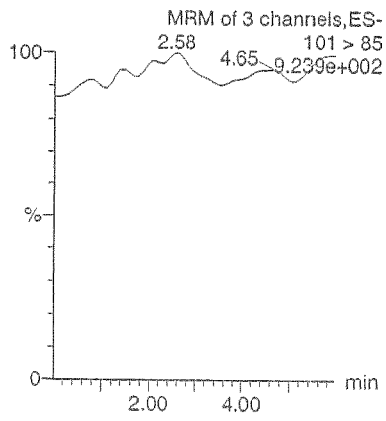
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270009b
Date: 27-Jun-2005
Time: 20:41:18
ID: IPB002
Vial: 1:1,A

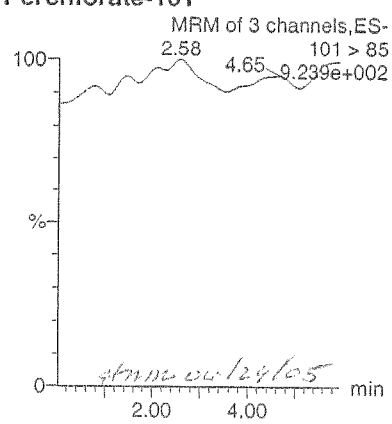
Perchlorate



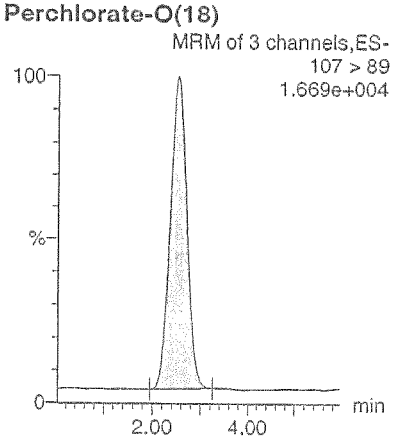
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB002	Perchlorate	99 > 83												
2	IPB002	Perchlorate-101	101 > 85												
3	IPB002	Perchlorate-O(18)	107 > 89	2.52	6544.344		6544.344	6544.344	bb			641.8	0.5058	101.2	

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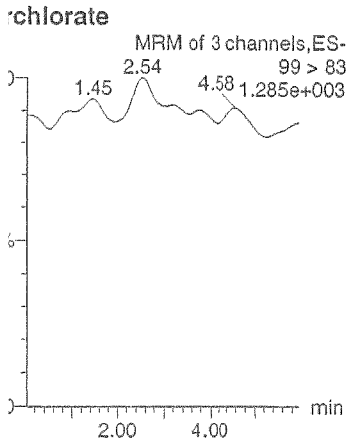
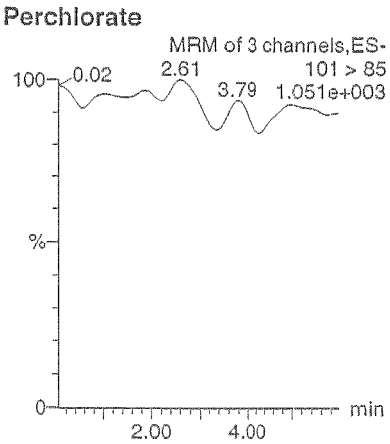
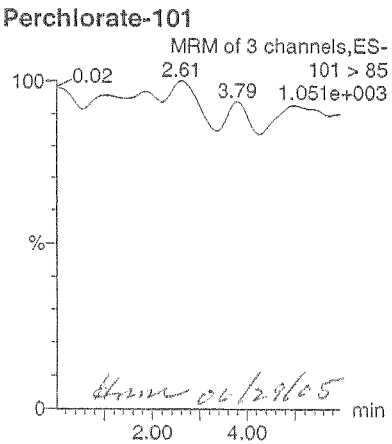
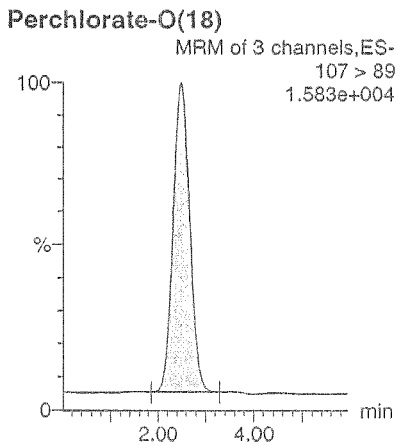
me: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270020b
te: 27-Jun-2005
ne: 21:58:17
IPB003
l: 1:1,A









ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
IPB003	Perchlorate	99 > 83												
IPB003	Perchlorate-101	101 > 85												
IPB003	Perchlorate-O(18)	107 > 89	2.49	6111.930		6111.930	6111.930	bb			3199.4	0.4724	94.5	

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l= Manually Modified

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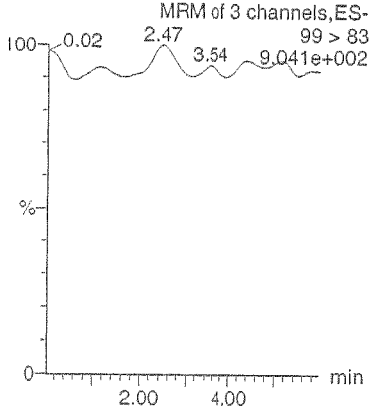
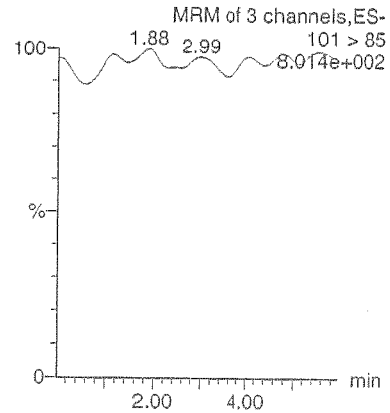
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280009b
Date: 28-Jun-2005
Time: 19:27:09
ID: IPB002
Vial: 1:1,A

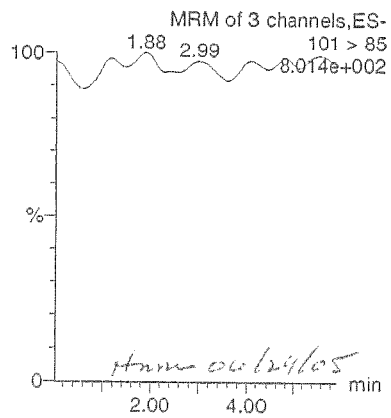
Perchlorate



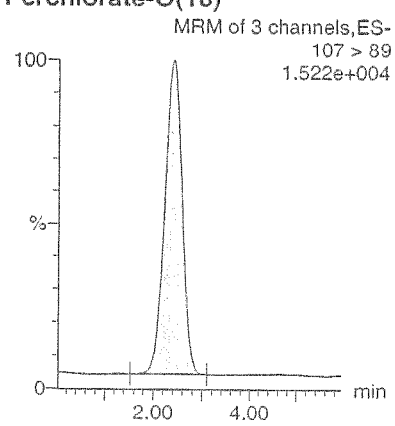
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB002	Perchlorate	99 > 83												
2	IPB002	Perchlorate-101	101 > 85												
3	IPB002	Perchlorate-O(18)	107 > 89	2.39	6051.097		6051.097	6051.097	bb			2149.0	0.4571	91.4	

M= Manually Modified

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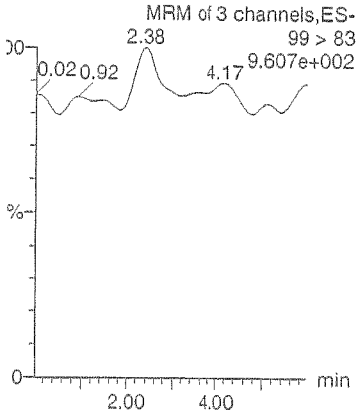
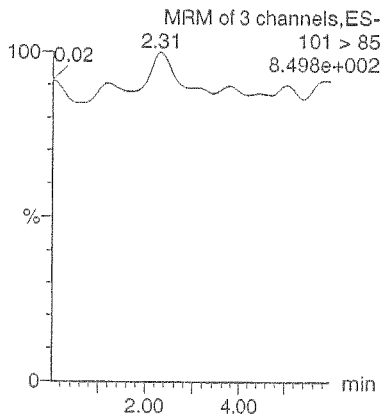
ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280018b
ate: 28-Jun-2005
me: 20:27:57
: IPB003
al: 1:1,A

erchlorate



Perchlorate



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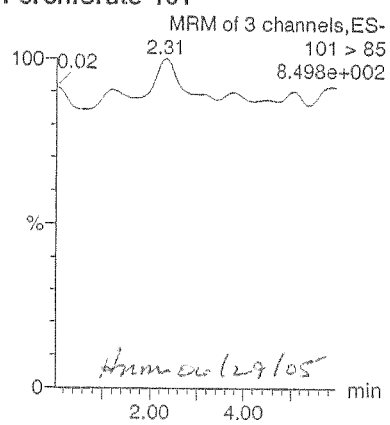
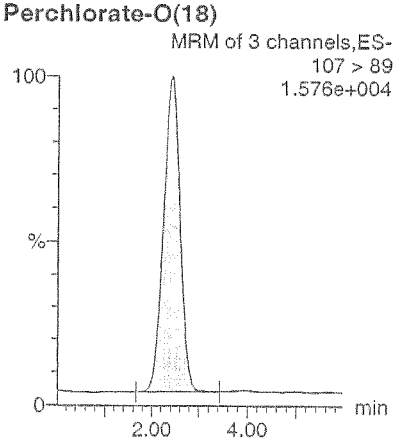


Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
IPB003	Perchlorate	99 > 83												
IPB003	Perchlorate-101	101 > 85												
IPB003	Perchlorate-O(18)	107 > 89	2.41	6287.874		6287.874	6287.874	bb			1055.3	0.4750	95.0	

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Nairb.ref

```
;Positive ion monoisotopic and average masses from solution
;of NaI/RbI (2.0/0.05ug/ul) in 50/50 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
;Updated 20 April '95
22.9898      100
84.9118      100
172.8840     100
322.7782     100
472.6725     100
622.5667     100
772.4610     100
;922.3552     100
;1072.2494    100
;1222.1437    100
;1372.0379    100
;1521.9321    100
;1671.8264    100
;1821.7206    100
;1971.6149    100
;2121.5091    100
;2271.4033    100
;2421.2976    100
;2571.1918    100
;2721.0861    100
;2870.9803    100
;3020.8745    100
;3170.7688    100
;3320.6630    100
;3470.5572    100
;3620.4515    100
;3770.3457    100
;3920.2400    100
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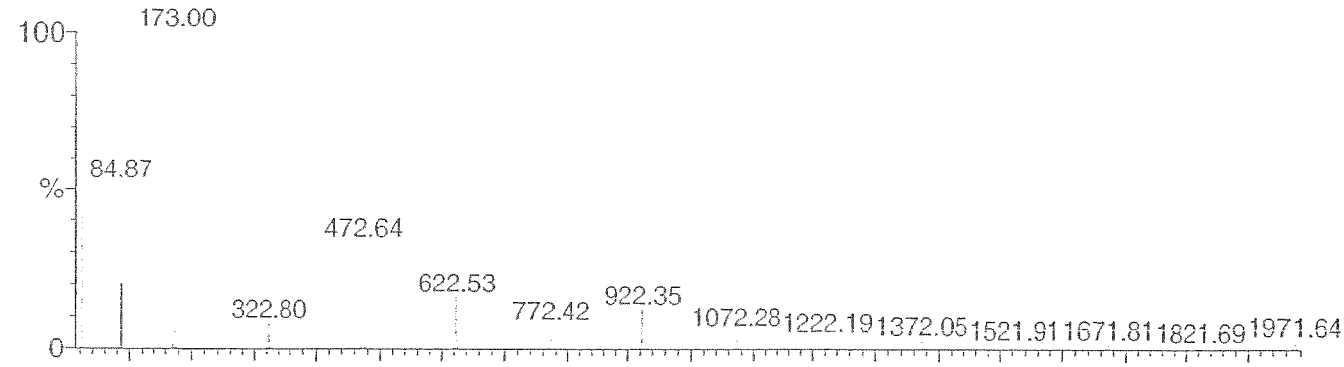
Quattro Micro comm
QHA125_ Cent_060705.CalC

Calibration Report - MS1 Static

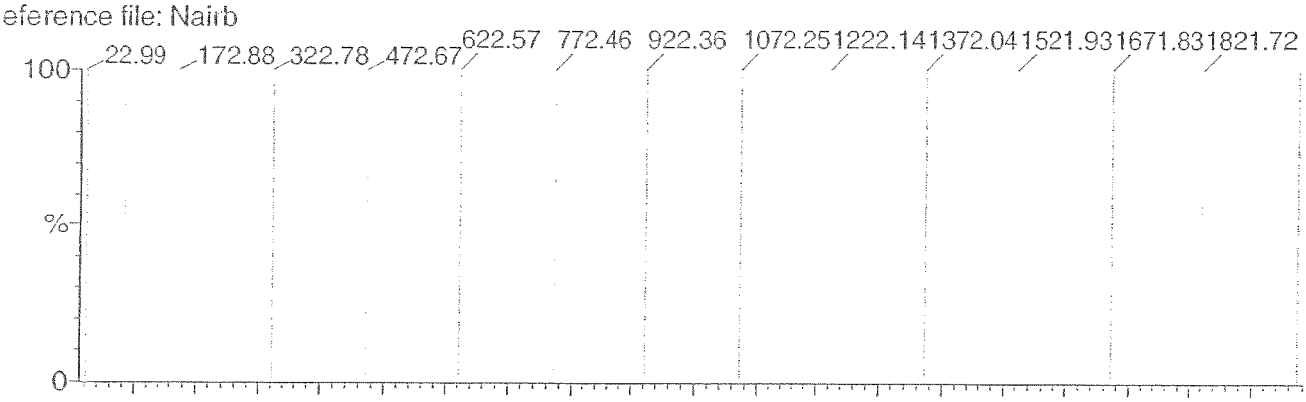
Printed: Tue Jun 07 12:16:55 2005

Data file: STATMS1 - Calibrated

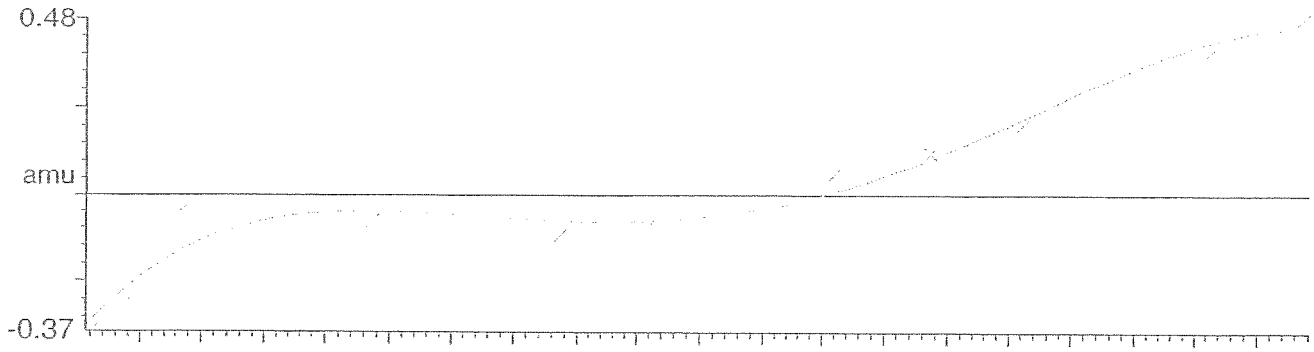
15 matches of 15 tested references



Reference file: Nairb

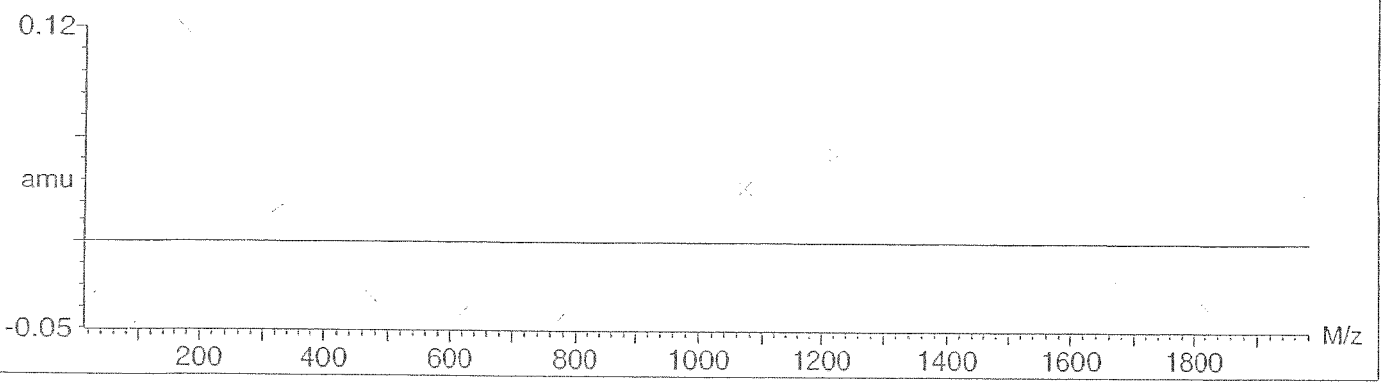


Mass difference (Raw - Ref mass)



Residuals

Mean residual = -3.725290e-9 ± 0.042178



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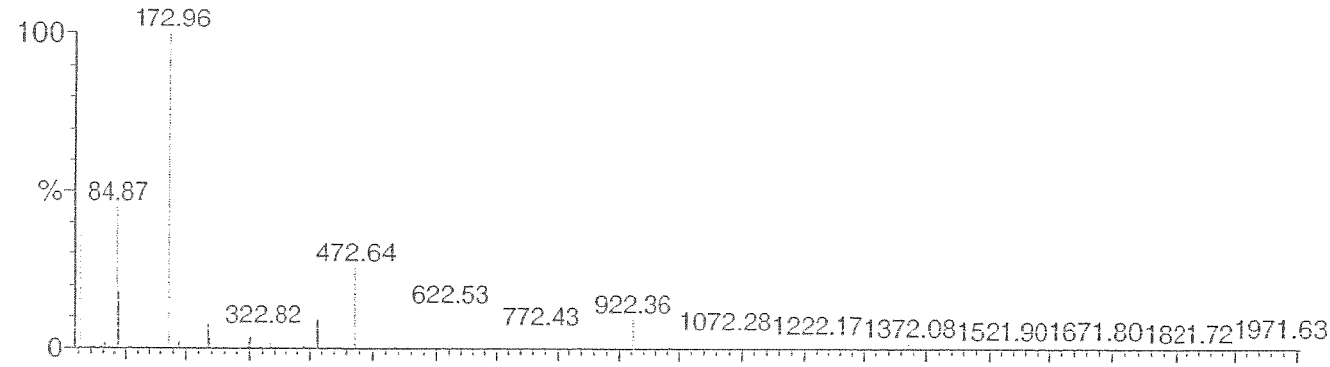
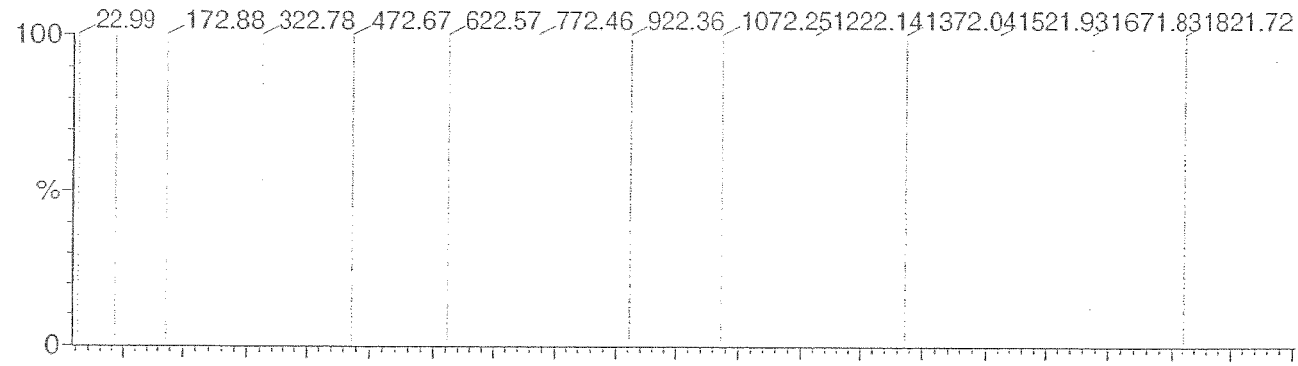
Printed: Tue Jun 07 12:17:59 2005

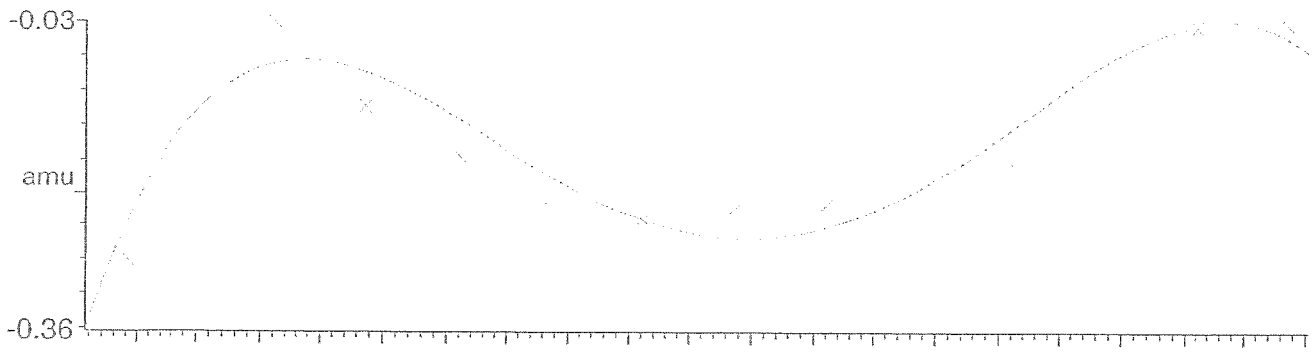
Data file: SCNMS1 - Calibrated 15 matches of 15 tested references



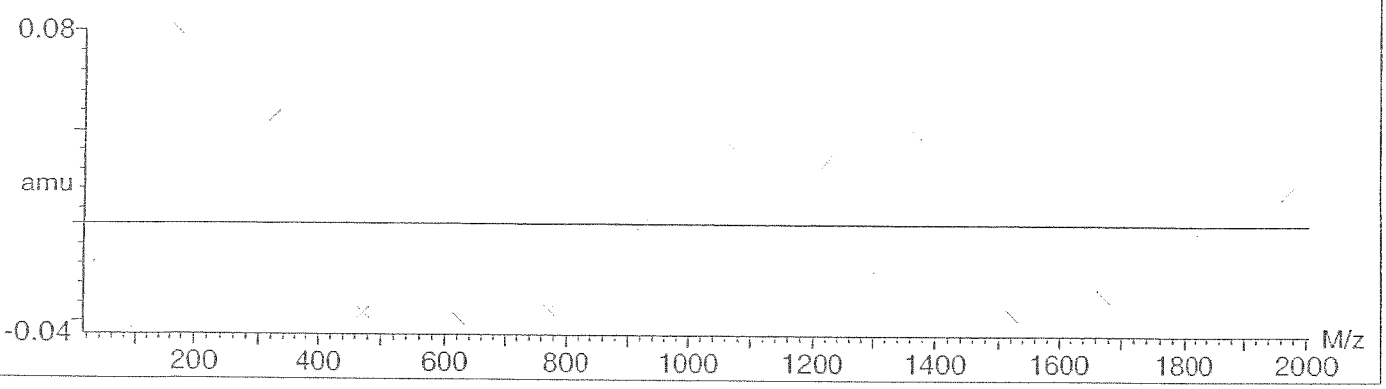
Reference file: Nairb



Mass difference (Raw - Ref mass)



Residuals Mean residual = 5.670396e-10 ± 0.036123



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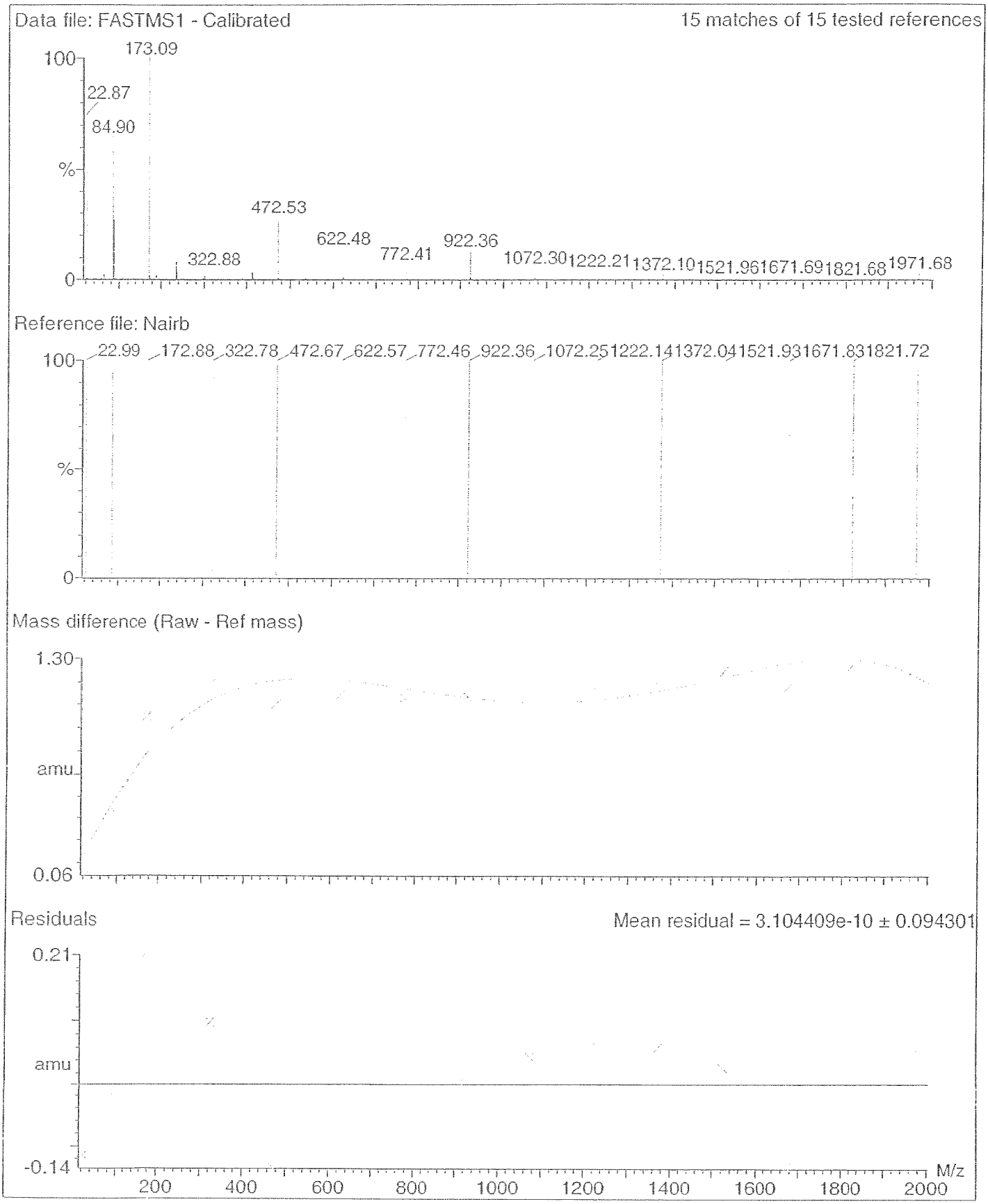
Printed: Tue Jun 07 12:19:07 2005



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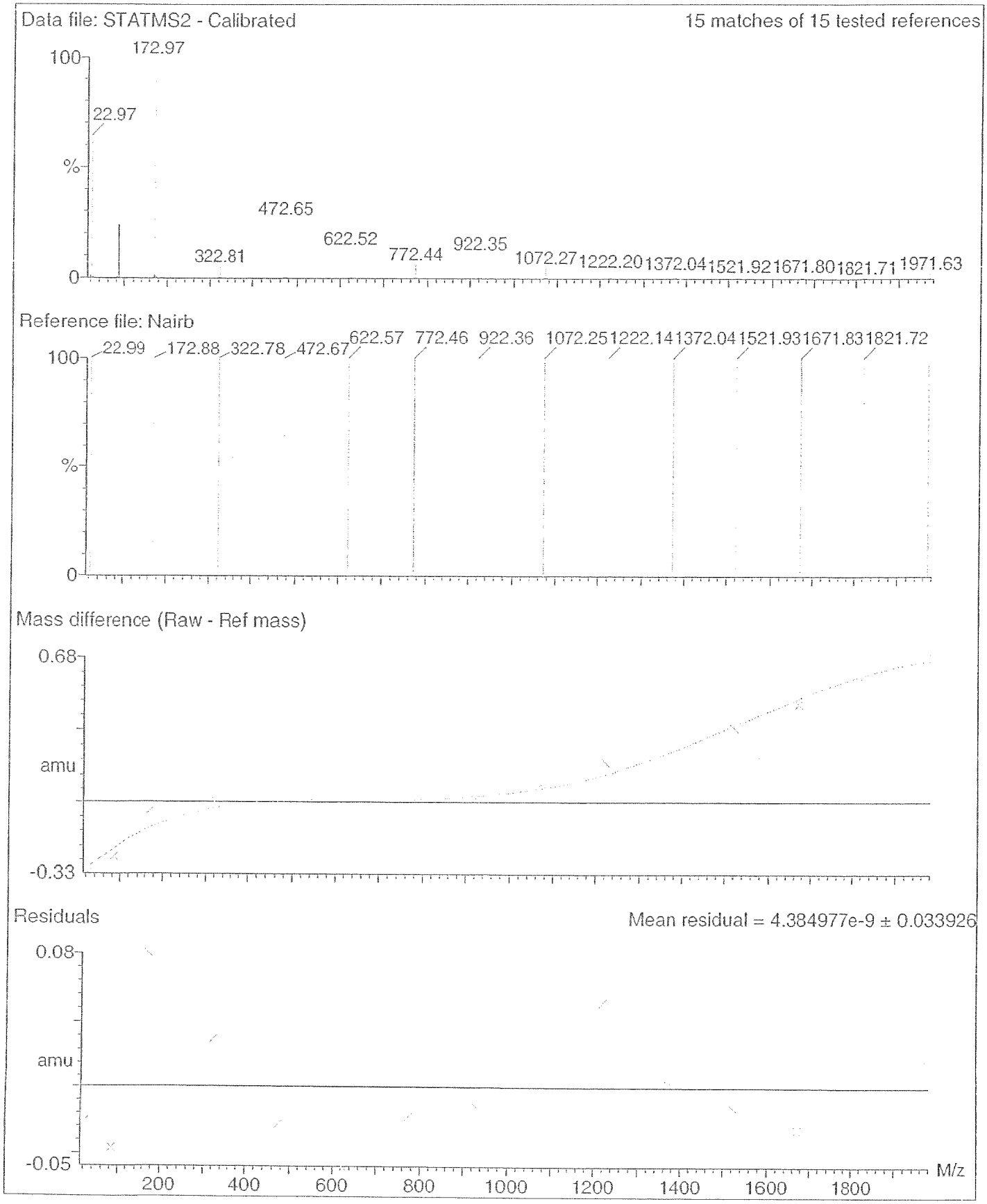
Calibration Report - MS2 Static

Printed: Tue Jun 07 12:20:11 2005



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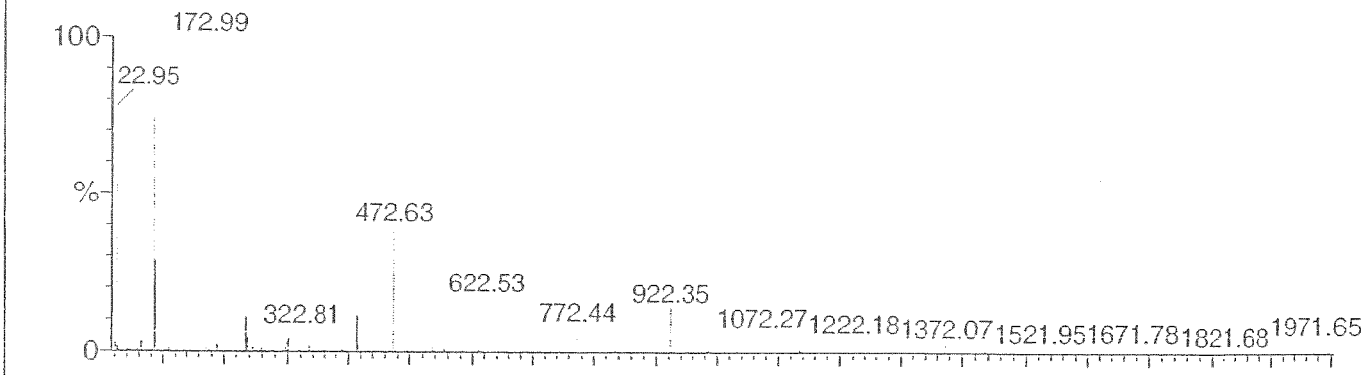
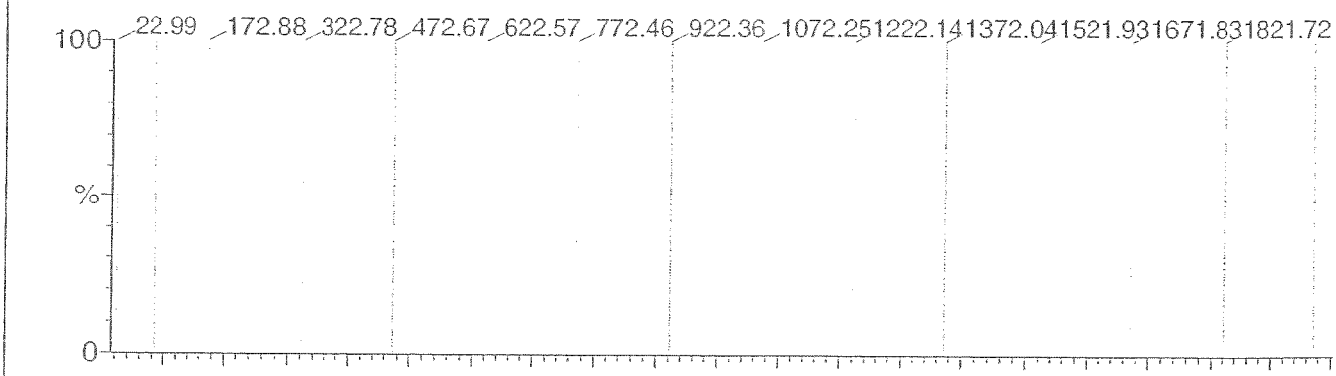
Printed: Tue Jun 07 12:21:16 2005

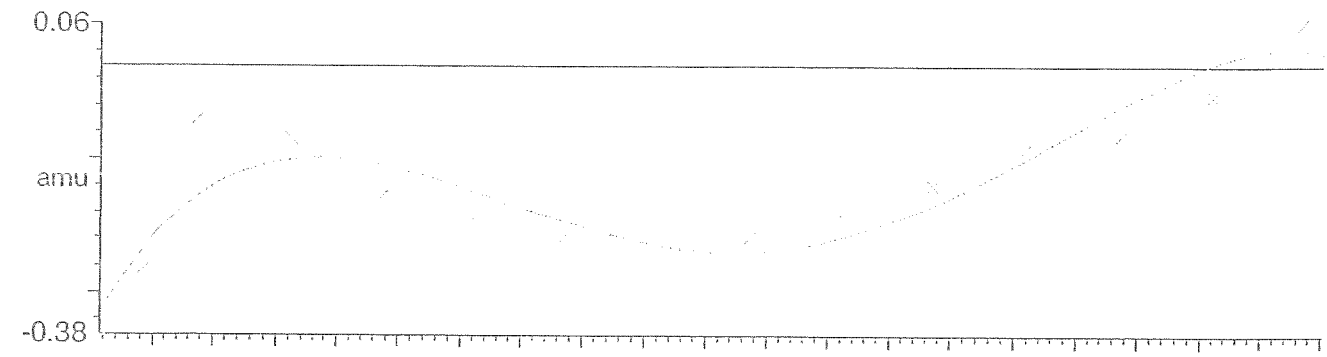
Data file: SCNMS2 - Calibrated 15 matches of 15 tested references



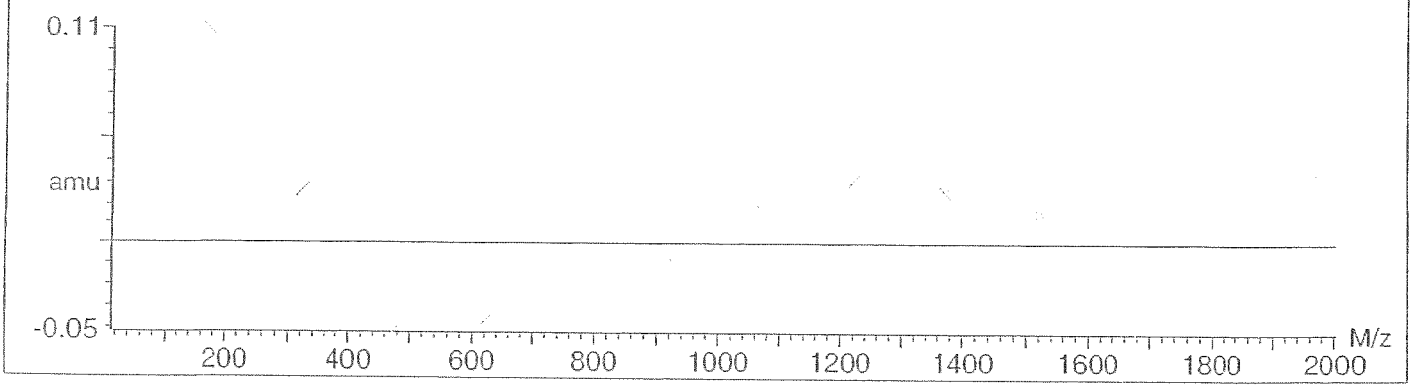
Reference file: Nairb



Mass difference (Raw - Ref mass)



Residuals Mean residual = 1.676381e-9 ± 0.042902



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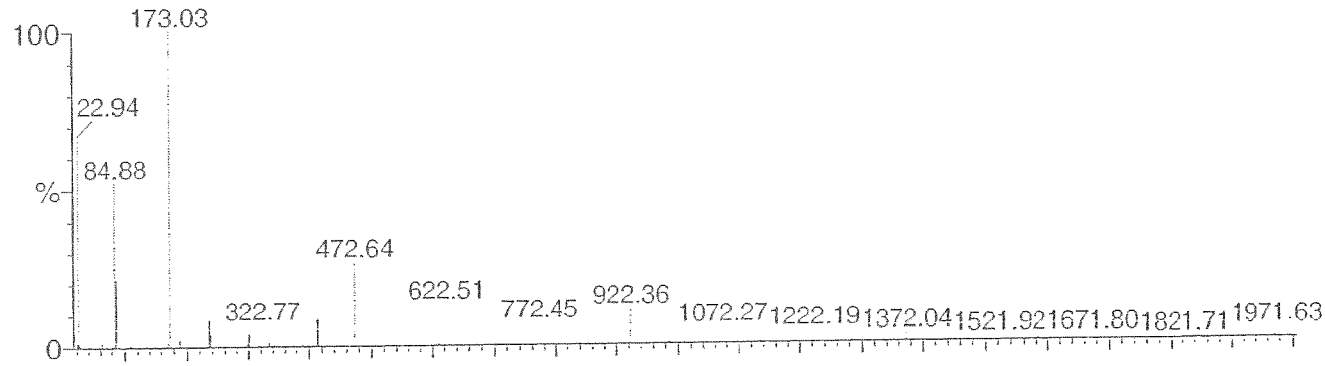
Calibration Report - MS2 Scan Speed Compensation

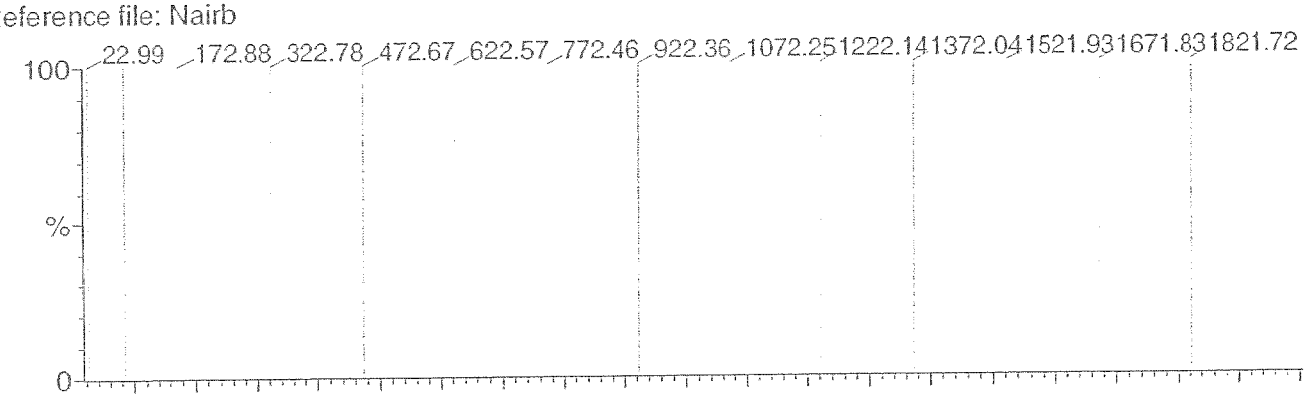
Printed: Tue Jun 07 12:22:24 2005

Data file: FASTMS2 - Calibrated

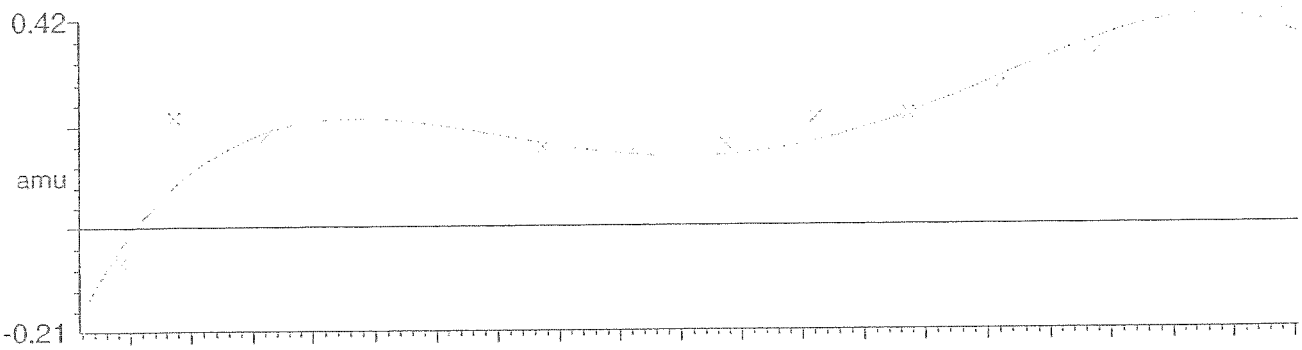
15 matches of 15 tested references



Reference file: Nairb

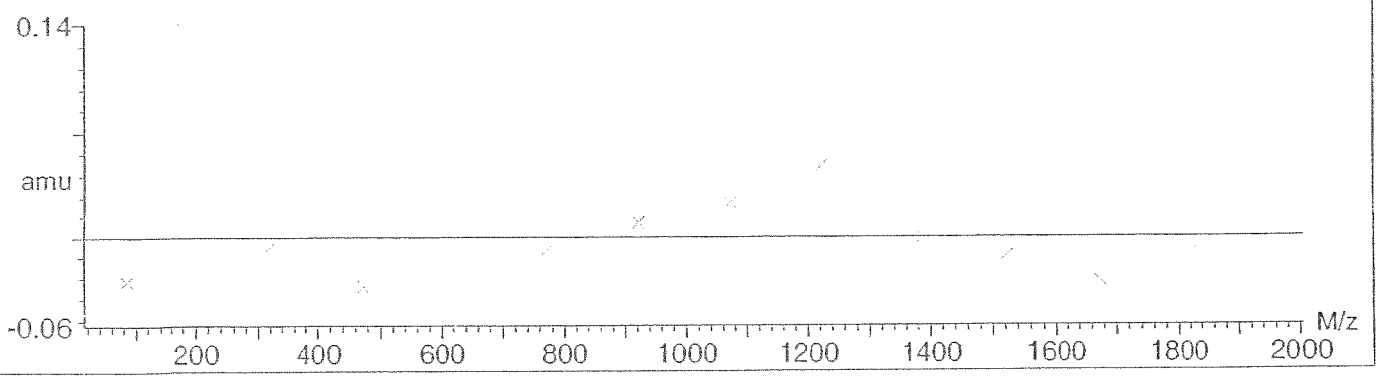


Mass difference (Raw - Ref mass)



Residuals

Mean residual = -3.919316e-10 ± 0.046624



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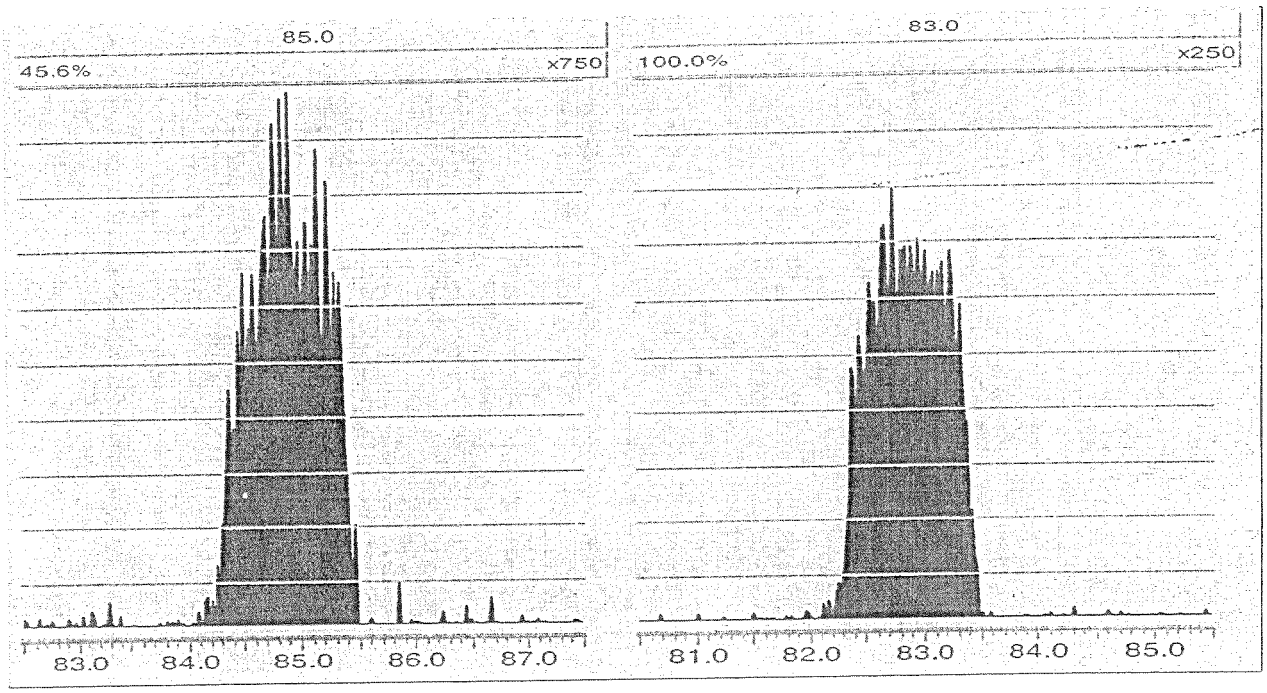
Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\PERCHLORATE.PRO\ACQUDB\perchlorate04.IPR

Printed : Mon Jun 27 18:42:03 2005



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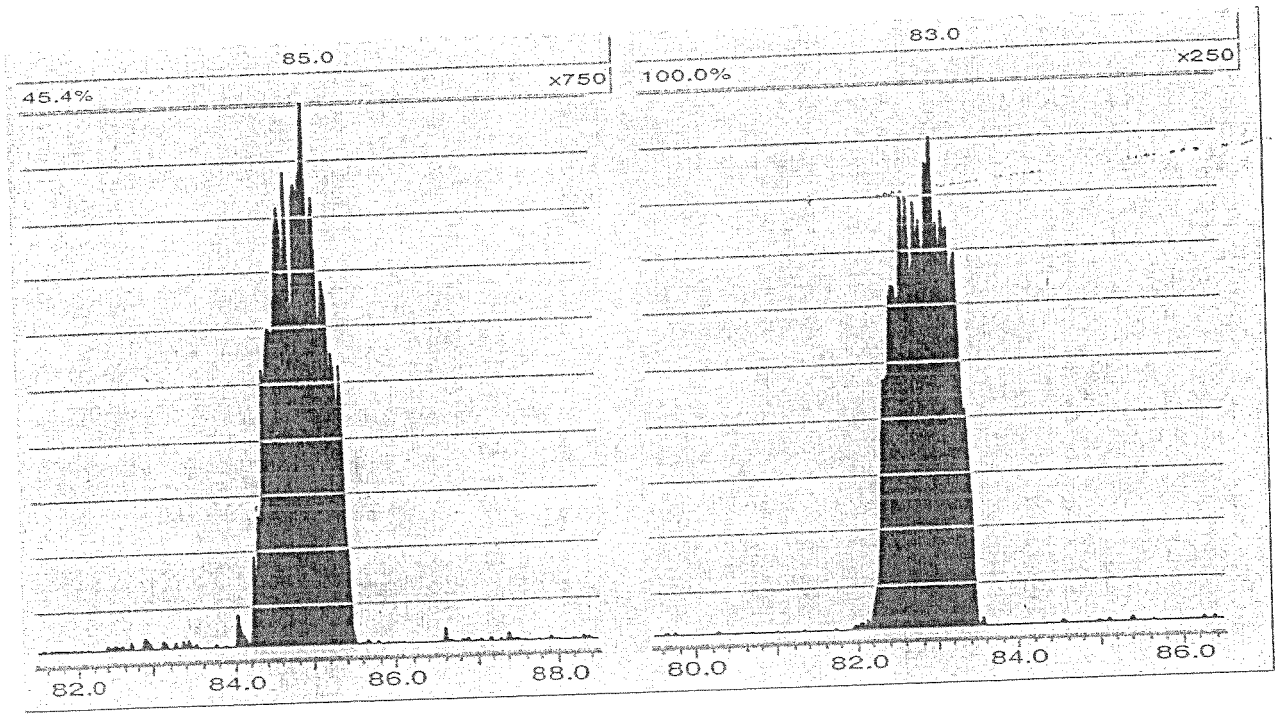
Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\PERCHLORATE.PRO\ACQUDB\perchlorate04.IPR

Printed : Tue Jun 28 18:26:57 2005



Perchlorate RT Standard Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Instrument ID: LCMSMS **Run Date:** 27-JUN-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

	Retention Time Marker (Area)	RT(min)	Q
mid-level Standard	**6469.72**	**2.52**	
Upper Limit	**12939.44**	**3.02**	
Lower Limit	**3234.86**	**2.02**	
1200872589	6417.93	2.52	
1200872590	6215.72	2.51	

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Perchlorate RT Standard Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Instrument ID: LCMSMS **Run Date:** 28-JUN-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

	Retention Time Marker (Area)	RT(min)	Q
mid-level Standard	**6252.13**	**2.44**	
Upper Limit	**12504.26**	**2.94**	
Lower Limit	**3126.065**	**1.94**	
1200872595	6511.07	2.39	
138851001	6702.12	2.39	
138851002	6259.02	2.41	

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SAMPLE
DATA

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 436181

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05050GMC601

Date Received: 17-JUN-05

GEL Job No (SDG): 138851

GEL Sample ID: 138851001

Date Filtered: 27-JUN-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	10	40	185	ug/L		200	28-JUN-05 20:07	per06280015b
	Perchlorate Isotope Ratio			2.96			200	28-JUN-05 20:07	per06280015b
14797-73-0	Perchlorate-101	10	40	183	ug/L		200	28-JUN-05 20:07	per06280015b
	Perchlorate-O(18)	0	0	101	ug/L		200	28-JUN-05 20:07	per06280015b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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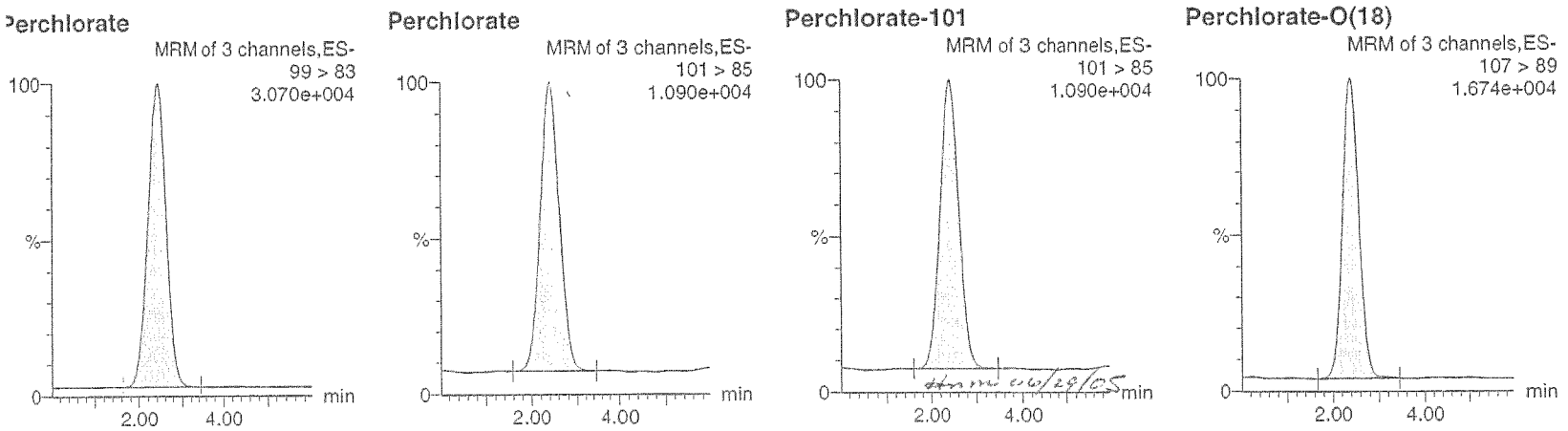
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280015b
Date: 28-Jun-2005
Time: 20:07:26
ID: 138851001 1E5HL| 436182| n/a| 2001
Vial: 1:4,E



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	138851001	Perchlorate	99 > 83	2.42	14833.772		14833.772	14833.772	bb			3346.8	0.9237		2.96
2	138851001	Perchlorate-101	101 > 85	2.41	5013.598		5013.598	5013.598	bb			1193.0	0.9130		
3	138851001	Perchlorate-O(18)	107 > 89	2.39	6702.124		6702.124	6702.124	bb			2550.8	0.5063	101.3	

x 200 = 184.74
x 200 = 182.60

MM= Manually Modified

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 436181

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05050GMC690

Date Received: 17-JUN-05

GEL Job No (SDG): 138851

GEL Sample ID: 138851002

Date Filtered: 27-JUN-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	10	40	177	ug/L		200	28-JUN-05 20:13	per06280016b
	Perchlorate Isotope Ratio			2.88			200	28-JUN-05 20:13	per06280016b
14797-73-0	Perchlorate-101	10	40	180	ug/L		200	28-JUN-05 20:13	per06280016b
	Perchlorate-O(18)	0	0	94.6	ug/L		200	28-JUN-05 20:13	per06280016b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration = Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\%\text{Solids}}$

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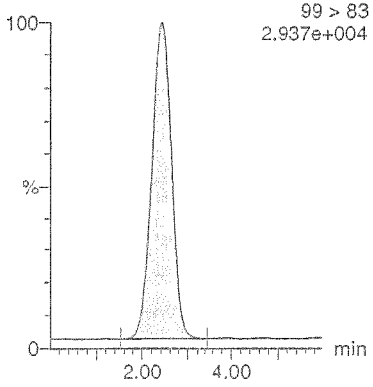
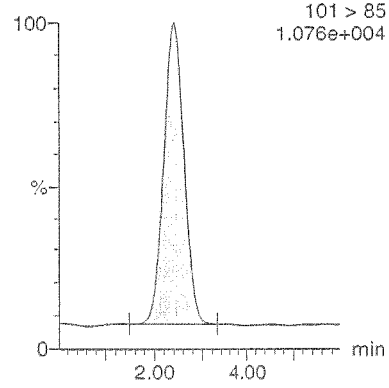
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280016b
Date: 28-Jun-2005
Time: 20:13:59
ID: 138851002
Vial: 1:4,F

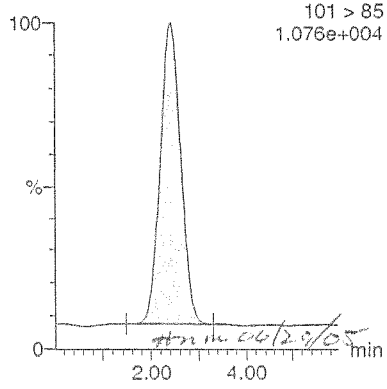
Perchlorate



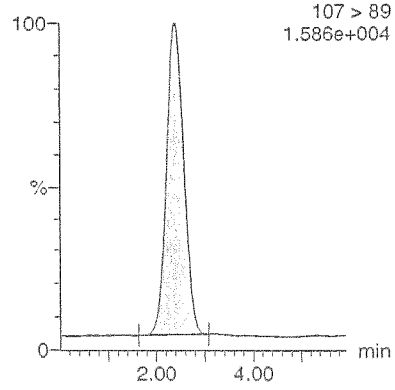
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	138851002	Perchlorate	99 > 83	2.42	14221.980		14221.980	14221.980	bb			3249.7	0.8856		2.88
2	138851002	Perchlorate-101	101 > 85	2.41	4935.299		4935.299	4935.299	bb			1138.0	0.8987		
3	138851002	Perchlorate-O(18)	107 > 89	2.41	6259.018		6259.018	6259.018	bb			2179.7	0.4728	94.6	

MM= Manually Modified

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 27-JUN-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination: .9996

Calibration Curve: 16509X + 0

Response Type: External Standard

Curve Type: Linear Null

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 27-JUN-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination: .9986

Calibration Curve: 5664.92X + 0

Response Type: External Standard

Curve Type: Linear Null

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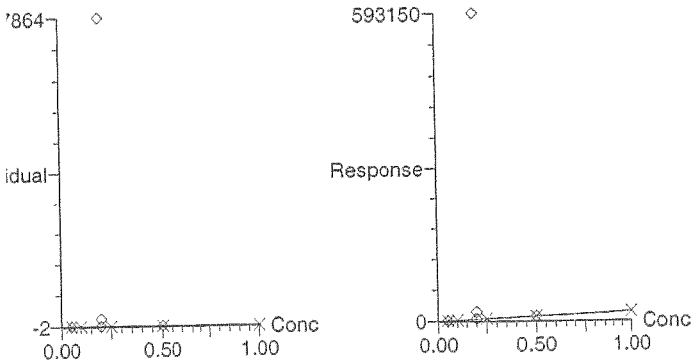
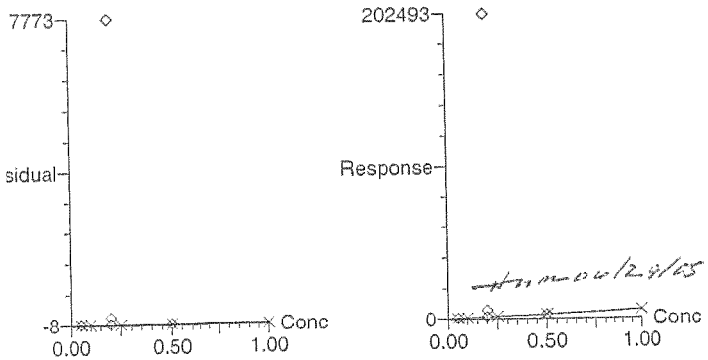
set: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

iod: C:\Masslynx\Perchlorate.PRO\MethDB\per062705b.mdb, Time: Mon Jun 27 20:34:23 2005
bration: Untitled, Time: Tue Jun 28 05:55:35 2005

ipound name: Perchlorate
fficient of Determination: 0.999572
oration curve: 16509 * x
ponse type: External Std, Area
/e type: Linear, Origin: Force, Weighting: Null, Axis trans: None



mpound name: Perchlorate-101
efficient of Determination: 0.998604
ibration curve: 5664.92 * x
sponse type: External Std, Area
ve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



M= Manually Modified

485

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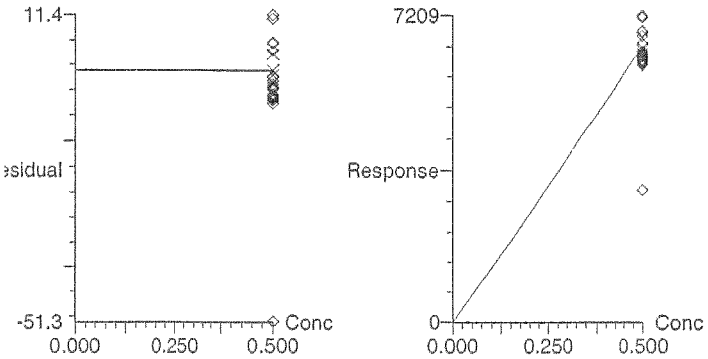
ompound name: Perchlorate-O(18)
oefficient of Determination: 0.000000
alibration curve: 12938.3 * x
esponse type: External Std, Area
urve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



6/28/05

M= Manually Modified

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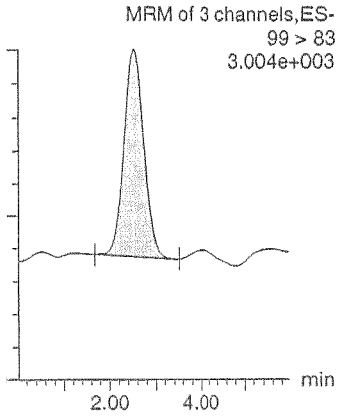
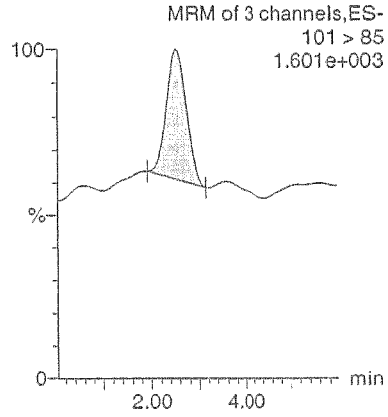
aset: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

ne: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270003b
e: 27-Jun-2005
e: 20:01:35
WCL050621-01
: 1:1,B

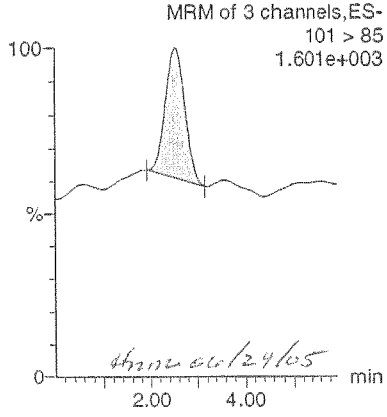
chlorate



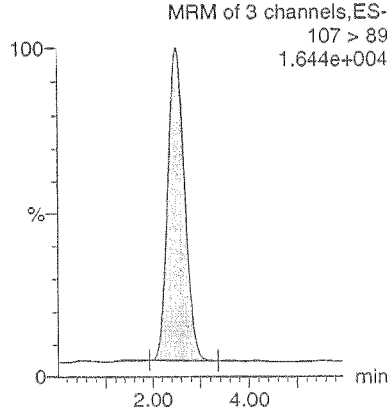
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-01	Perchlorate	99 > 83	2.52	939.656		939.656	939.656	bb			64.9	0.0569	113.8	3.07
WCL050621-01	Perchlorate-101	101 > 85	2.54	306.111		306.111	306.111	bb			40.4	0.0540	108.1	
WCL050621-01	Perchlorate-O(18)	107 > 89	2.51	6408.362		6408.362	6408.362	bb			791.1	0.4953	99.1	

= Manually Modified

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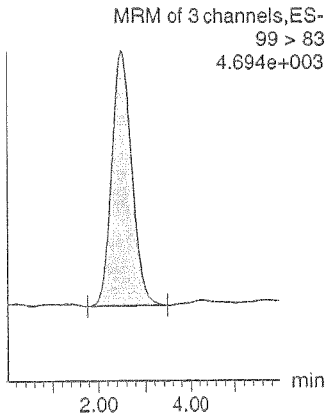
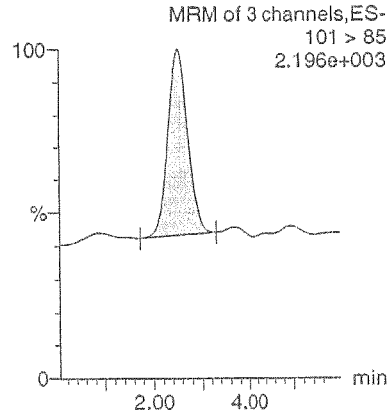
set: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

e: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270004b
: 27-Jun-2005
: 20:08:08
/CL050621-02
1:1,C

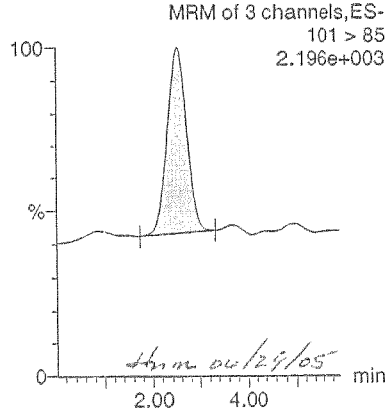
hlorate



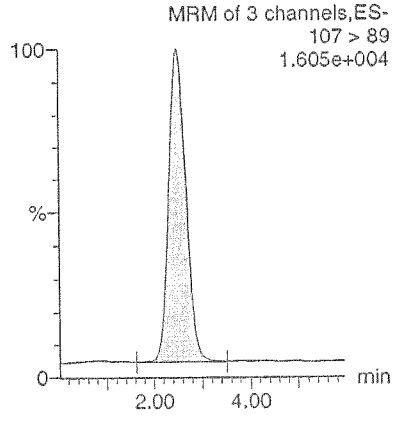
Perchlorate



Perchlorate-101



Perchlorate-O(18)



)	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
VCL050621-02	Perchlorate	99 > 83	2.52	1802.578		1802.578	1802.578	bb			683.1	0.1092	109.2	3.01
VCL050621-02	Perchlorate-101	101 > 85	2.52	598.917		598.917	598.917	bb			232.5	0.1057	105.7	
VCL050621-02	Perchlorate-O(18)	107 > 89	2.51	6316.484		6316.484	6316.484	bb			650.7	0.4882	97.6	

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ne: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270005b
e: 27-Jun-2005
ne: 20:15:02
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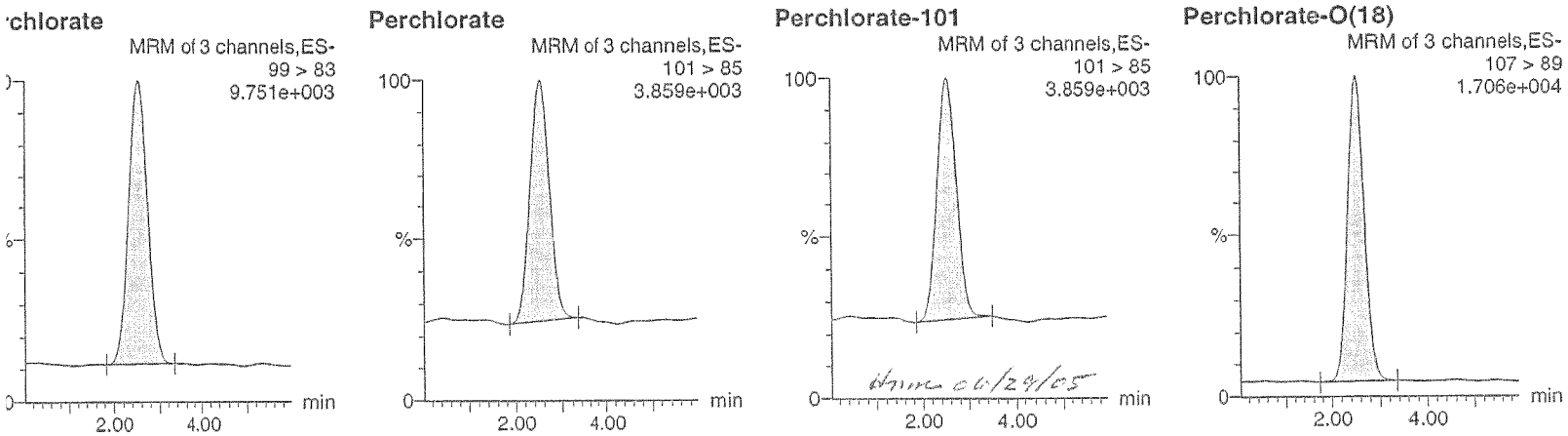

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-03	Perchlorate	99 > 83	2.54	4203.756		4203.756	4203.756	bb			548.0	0.2546	101.9	3.00
WCL050621-03	Perchlorate-101	101 > 85	2.52	1411.004		1411.004	1411.004	bb			539.4	0.2491	99.6	
WCL050621-03	Perchlorate-O(18)	107 > 89	2.51	6686.328		6686.328	6686.328	bb			601.7	0.5168	103.4	

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270006b
ate: 27-Jun-2005
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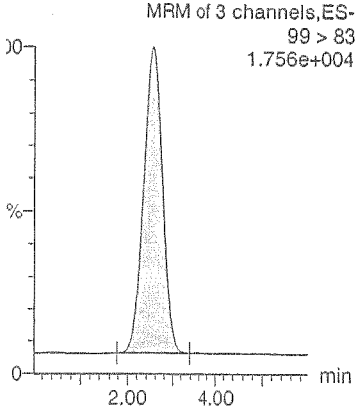
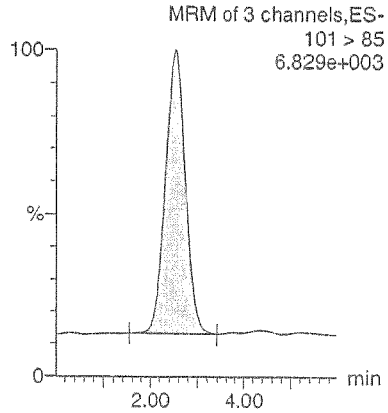
al: 1:1,E

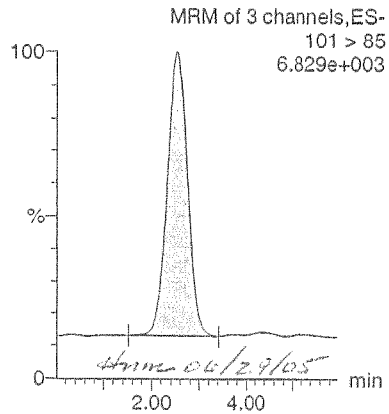
erchlorate



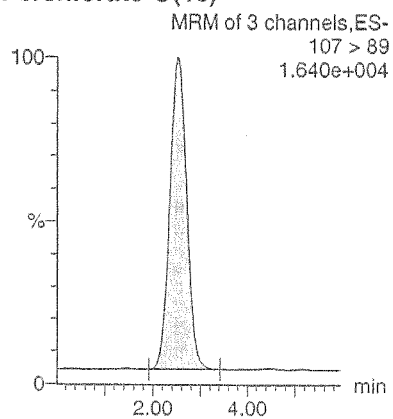
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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WCL050621-04	Perchlorate	99 > 83	2.54	8094.275		8094.275	8094.275	bb			1140.8	0.4903	98.1	2.73
WCL050621-04	Perchlorate-101	101 > 85	2.52	2971.896		2971.896	2971.896	bb			344.5	0.5246	104.9	
WCL050621-04	Perchlorate-O(18)	107 > 89	2.52	6469.720		6469.720	6469.720	bb			1232.5	0.5000	100.0	

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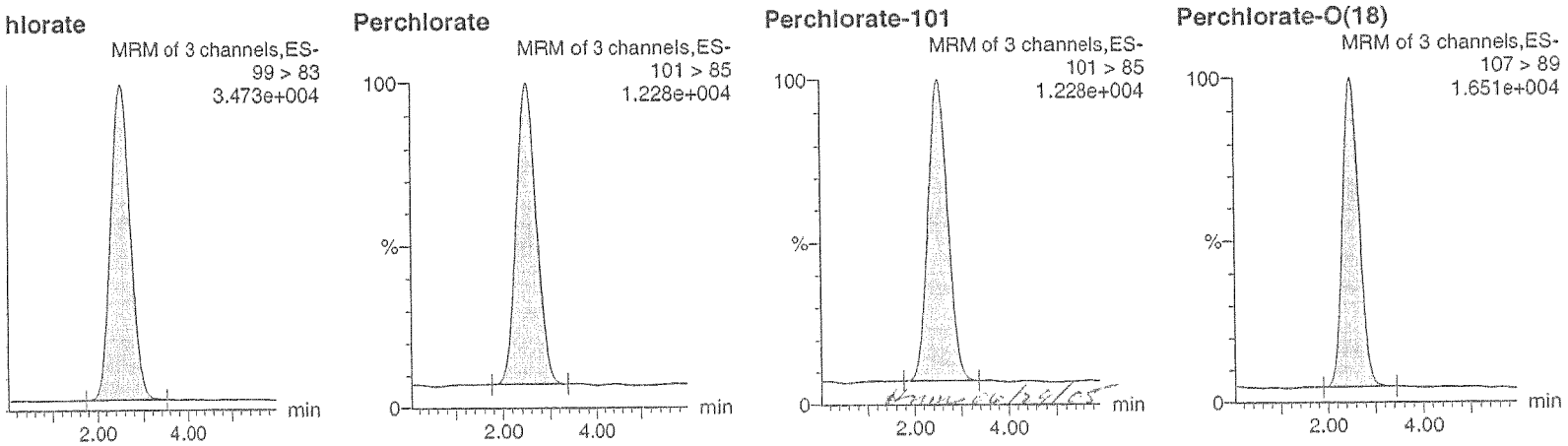

D	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
VCL050621-05	Perchlorate	99 > 83	2.52	16549.137		16549.137	16549.137	bb			2564.1	1.0024	100.2	2.96
VCL050621-05	Perchlorate-101	101 > 85	2.52	5592.123		5592.123	5592.123	bb			302.8	0.9871	98.7	
VCL050621-05	Perchlorate-O(18)	107 > 89	2.51	6464.838		6464.838	6464.838	bb			825.8	0.4997	99.9	

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491

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 28-JUN-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination: .9987

Calibration Curve: 16059.8X + 0

Response Type: External Standard

Curve Type: Linear Null

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 28-JUN-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination: .9995

Calibration Curve: 5491.54X + 0

Response Type: External Standard

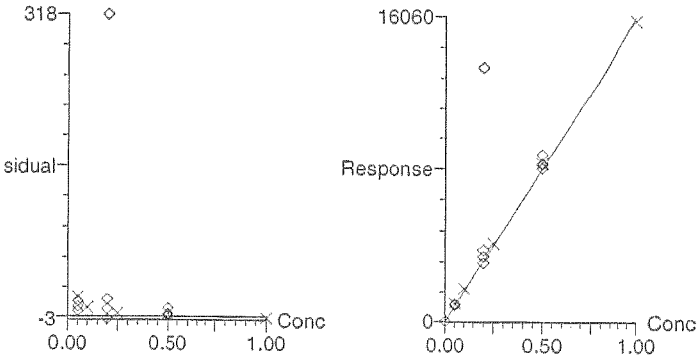
Curve Type: Linear Null

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

.taset: C:\Masslynx\Perchlorate.PRO\per062805b1.qld, Time: Tue Jun 28 23:24:46 2005

ıthod: C:\Masslynx\Perchlorate.PRO\MethDB\per062805b.mdb, Time: Tue Jun 28 19:16:43 2005
libration: Untitled, Time: Tue Jun 28 23:24:46 2005

mpound name: Perchlorate
efficient of Determination: 0.998660
libration curve: 16059.8 * x
sponse type: External Std, Area
rve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



mpound name: Perchlorate-101
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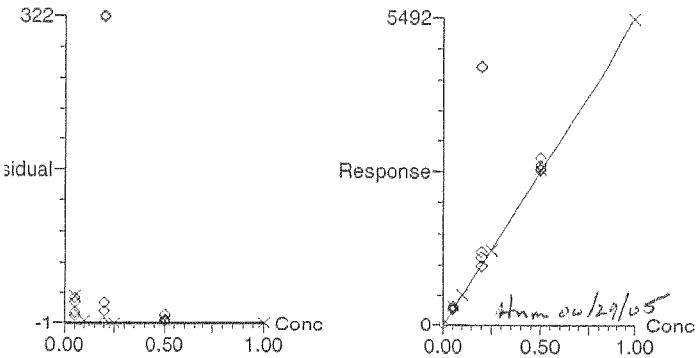

l= Manually Modified

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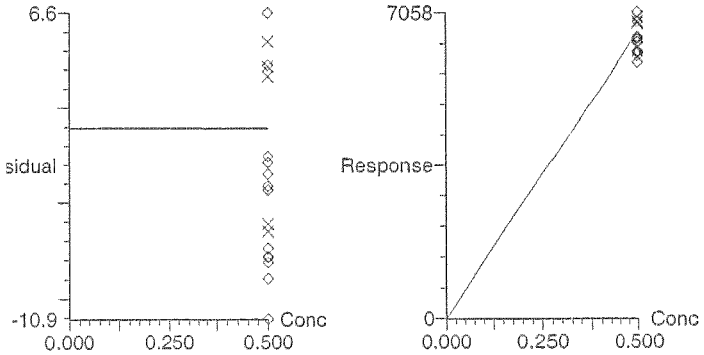
mpound name: Perchlorate-O(18)
efficient of Determination: 0.000000
libration curve: 13238.2 * x
sponse type: External Std, Area
rve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



M= Manually Modified

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

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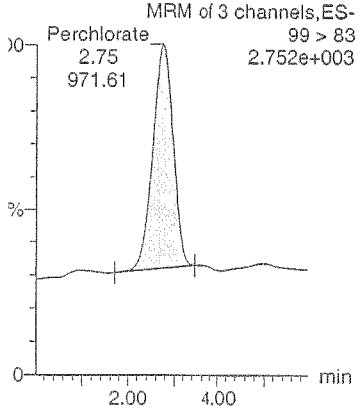
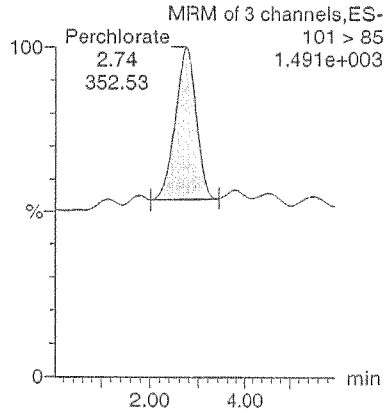
al: 1:1,B

erchlorate



Perchlorate



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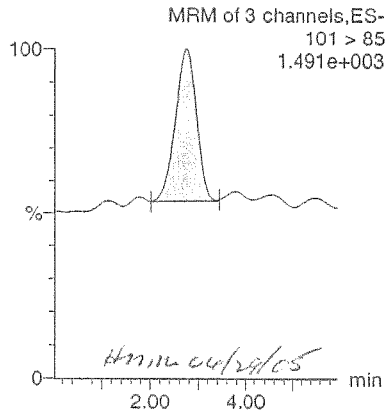
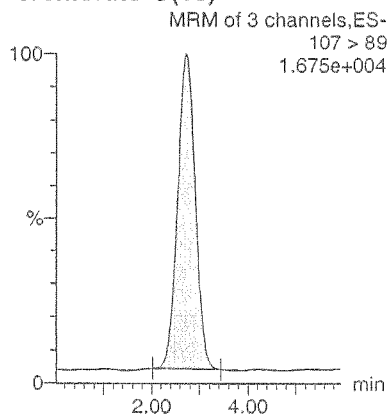


Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-01	Perchlorate	99 > 83	2.75	971.605		971.605	971.605	bb			74.4	0.0605	121.0	2.76
WCL050621-01	Perchlorate-101	101 > 85	2.74	353.350		353.350	353.350	bb			54.0	0.0643	128.7	
WCL050621-01	Perchlorate-O(18)	107 > 89	2.72	6853.622		6853.622	6853.622	bb			1072.6	0.5177	103.5	

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taset: C:\Masslynx\Perchlorate.PRO\per062805b1.qld, Time: Tue Jun 28 23:24:46 2005

me: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280004b
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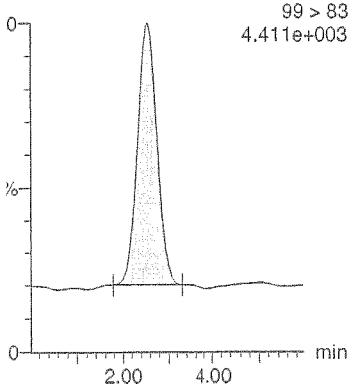
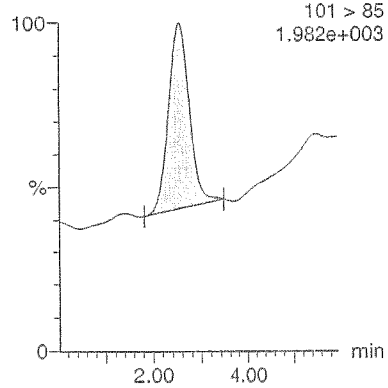
WCL050621-02
l: 1:1,C

rchlorate



Perchlorate



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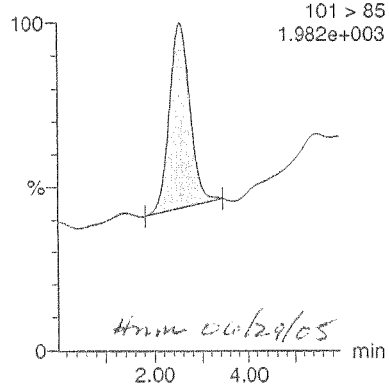
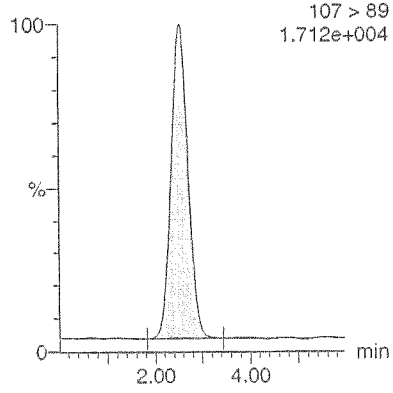


Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-02	Perchlorate	99 > 83	2.55	1762.309		1762.309	1762.309	bb			526.9	0.1097	109.7	3.14
WCL050621-02	Perchlorate-101	101 > 85	2.55	558.406		558.406	558.406	bb			123.6	0.1017	101.7	
WCL050621-02	Perchlorate-O(18)	107 > 89	2.54	6950.771		6950.771	6950.771	bb			1254.6	0.5251	105.0	

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

ne: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280005b
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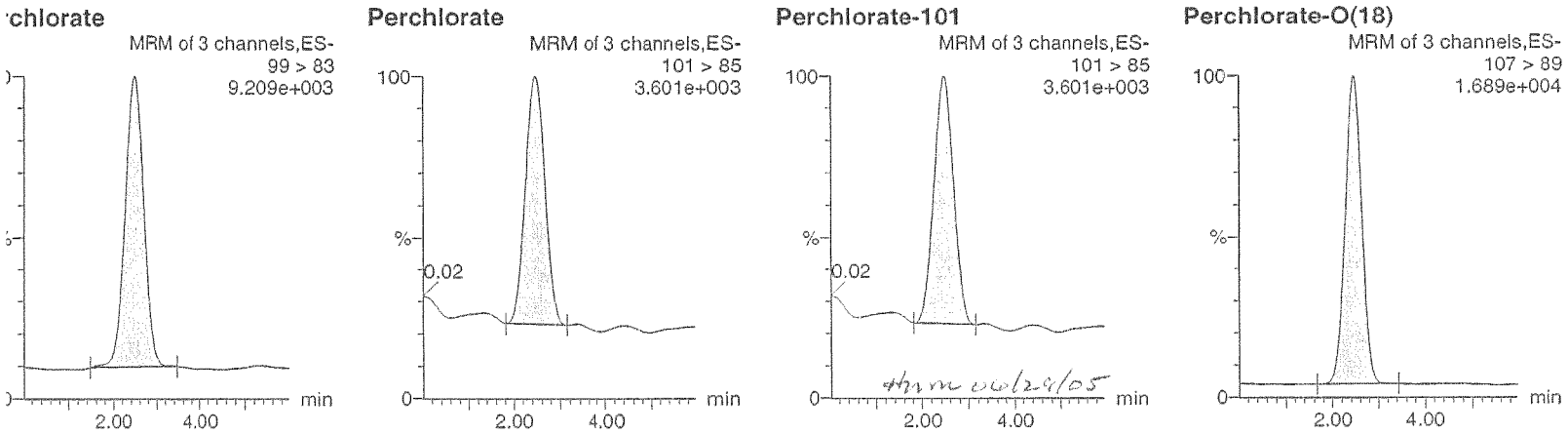

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-03	Perchlorate	99 > 83	2.48	4165.844		4165.844	4165.844	bb			446.4	0.2594	103.8	3.06
WCL050621-03	Perchlorate-101	101 > 85	2.47	1359.910		1359.910	1359.910	bb			203.1	0.2476	99.1	
WCL050621-03	Perchlorate-O(18)	107 > 89	2.47	6814.826		6814.826	6814.826	bb			547.7	0.5148	103.0	

498

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

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: WCL050621-04
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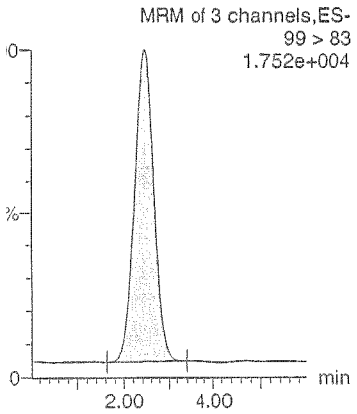
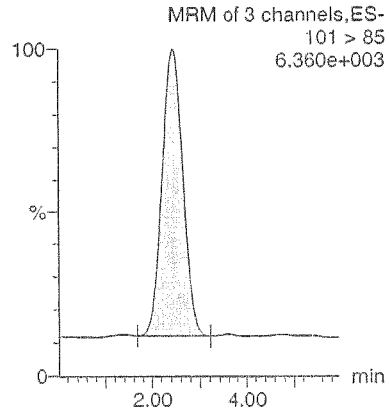
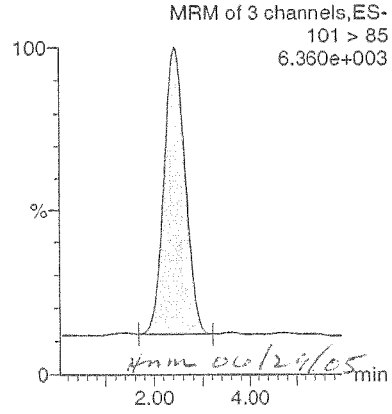
rchlorate



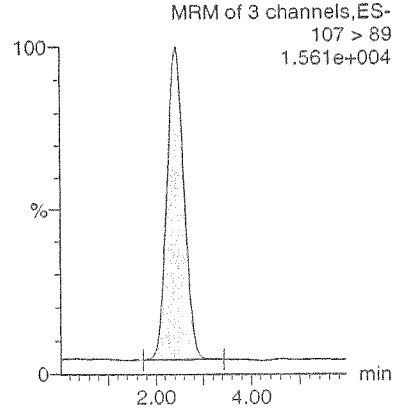
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-04	Perchlorate	99 > 83	2.45	8316.000		8316.000	8316.000	bb			870.9	0.5178	103.6	2.99
WCL050621-04	Perchlorate-101	101 > 85	2.45	2782.848		2782.848	2782.848	bb			282.5	0.5068	101.4	
WCL050621-04	Perchlorate-O(18)	107 > 89	2.44	6252.133		6252.133	6252.133	bb			737.4	0.4723	94.5	

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me: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280007b
te: 28-Jun-2005
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WCL050621-05
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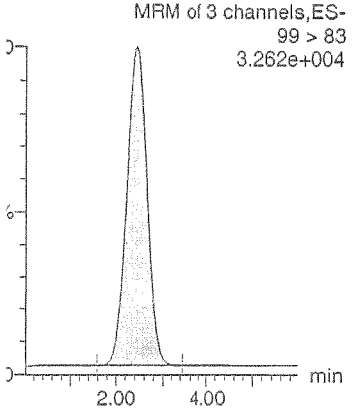
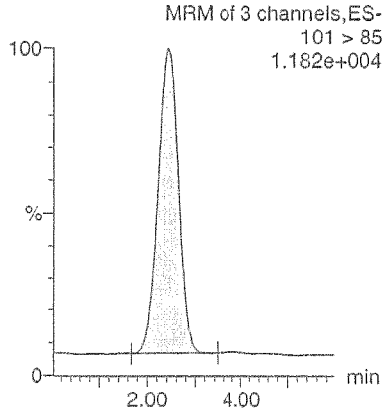
rchlorate



Perchlorate



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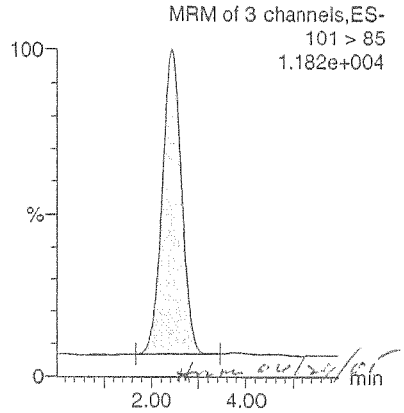
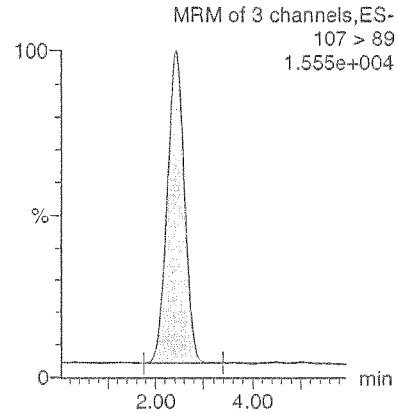


Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-05	Perchlorate	99 > 83	2.44	15854.924		15854.924	15854.924	bb			1657.5	0.9872	98.7	2.90
WCL050621-05	Perchlorate-101	101 > 85	2.44	5471.375		5471.375	5471.375	bb			1099.2	0.9963	99.6	
WCL050621-05	Perchlorate-O(18)	107 > 89	2.42	6224.053		6224.053	6224.053	bb			844.8	0.4702	94.0	

500

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Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.56	27-JUN-05 20:34	per06270008b
Perchlorate Isotope Ratio		2.91		27-JUN-05 20:34	per06270008b
Perchlorate-101	.5	.51	101.76	27-JUN-05 20:34	per06270008b
Perchlorate	.5	.51	102.76	28-JUN-05 19:20	per06280008b
Perchlorate Isotope Ratio		2.95		28-JUN-05 19:20	per06280008b
Perchlorate-101	.5	.51	101.79	28-JUN-05 19:20	per06280008b

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me: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270008b
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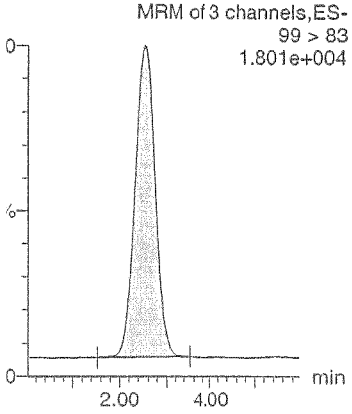
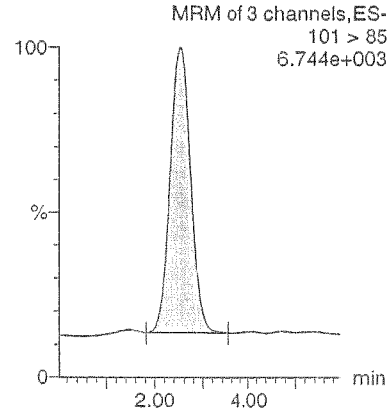
WCL050621-06ICV
ıl: 1:2,A

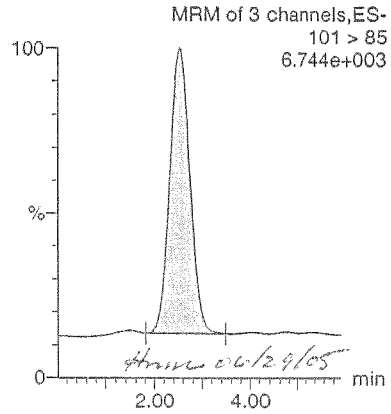
rchlorate



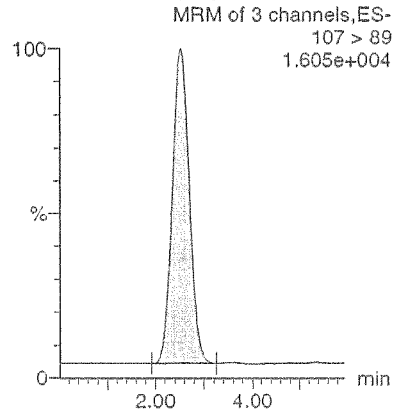
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-06ICV	Perchlorate	99 > 83	2.54	8383.056		8383.056	8383.056	bb			1051.9	0.5078	101.6	2.91
WCL050621-06ICV	Perchlorate-101	101 > 85	2.54	2882.307		2882.307	2882.307	bb			263.8	0.5088	101.8	
WCL050621-06ICV	Perchlorate-O(18)	107 > 89	2.52	6289.542		6289.542	6289.542	bb			562.3	0.4861	97.2	

502

M= Manually Modified

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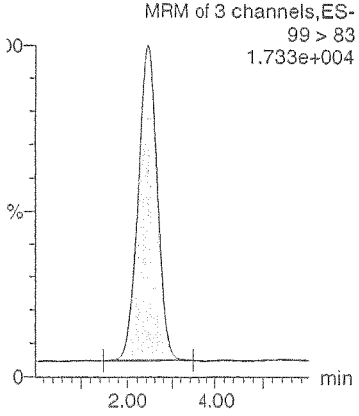
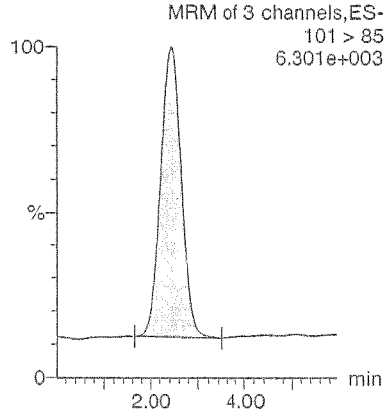
ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280008b
ate: 28-Jun-2005
me: 19:20:36
: WCL050621-06ICV
al: 1:2,A

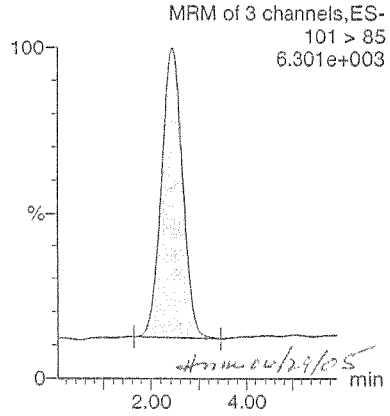
erchlorate



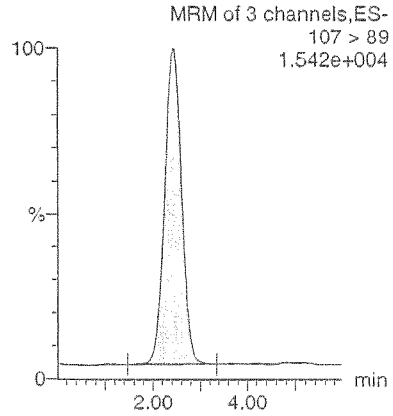
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050621-06ICV	Perchlorate	99 > 83	2.44	8251.622		8251.622	8251.622	bb			965.8	0.5138	102.8	2.95
2	WCL050621-06ICV	Perchlorate-101	101 > 85	2.44	2794.925		2794.925	2794.925	bb			955.7	0.5090	101.8	
3	WCL050621-06ICV	Perchlorate-O(18)	107 > 89	2.42	6161.116		6161.116	6161.116	bb			1673.5	0.4654	93.1	

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 138851

Lab Code: GEL

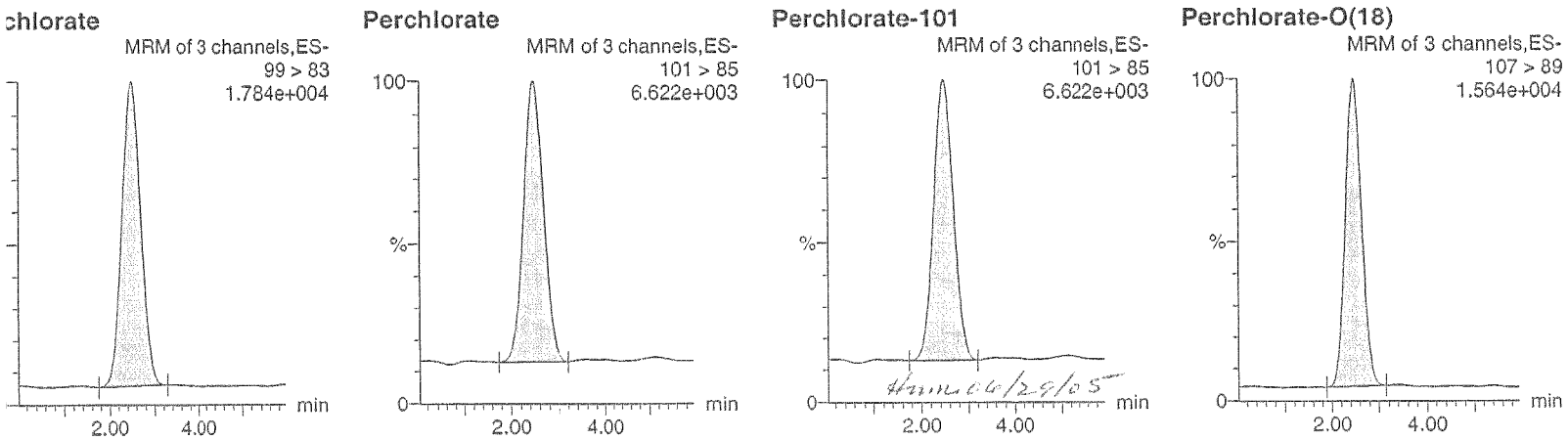
Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.83	27-JUN-05 21:51	per06270019b
Perchlorate Isotope Ratio		2.91		27-JUN-05 21:51	per06270019b
Perchlorate-101	.5	.5	99.98	27-JUN-05 21:51	per06270019b
Perchlorate	.5	.55	109.01	28-JUN-05 20:20	per06280017b
Perchlorate Isotope Ratio		2.93		28-JUN-05 20:20	per06280017b
Perchlorate-101	.5	.54	108.78	28-JUN-05 20:20	per06280017b

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

ıset: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

ıe: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270019b
ɛ: 27-Jun-2005
e: 21:51:44
WCL050621-06CCV
: 1:2,A



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-06CCV	Perchlorate	99 > 83	2.49	8240.805		8240.805	8240.805	bb			847.6	0.4992	99.8	2.91
WCL050621-06CCV	Perchlorate-101	101 > 85	2.48	2831.791		2831.791	2831.791	bb			1490.3	0.4999	100.0	
WCL050621-06CCV	Perchlorate-O(18)	107 > 89	2.47	6071.919		6071.919	6071.919	bb			1183.6	0.4693	93.9	

505

I= Manually Modified

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL

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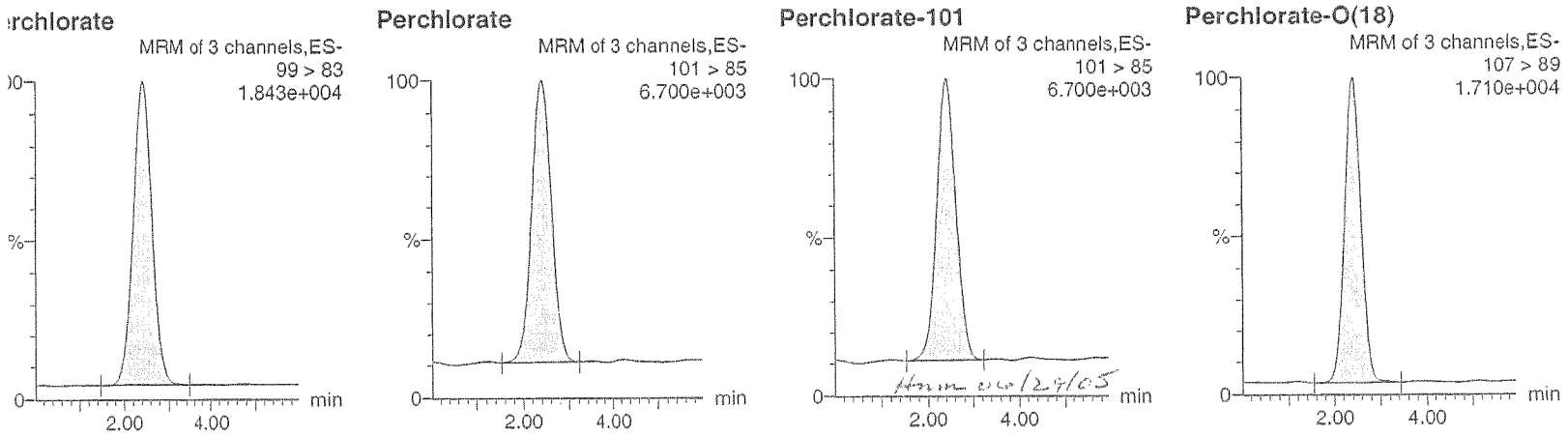
al: 1:2,A



	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050621-06CCV	Perchlorate	99 > 83	2.42	8753.370		8753.370	8753.370	bb			5402.6	0.5450	109.0	2.93
2	WCL050621-06CCV	Perchlorate-101	101 > 85	2.42	2986.851		2986.851	2986.851	bb			321.2	0.5439	108.8	
3	WCL050621-06CCV	Perchlorate-O(18)	107 > 89	2.41	6857.790		6857.790	6857.790	bb			1624.7	0.5180	103.6	

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 138851

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.7	27-JUN-05 20:47	per06270010b
Perchlorate Isotope Ratio		2.59		27-JUN-05 20:47	per06270010b
Perchlorate-101	.05	.06	110.06	27-JUN-05 20:47	per06270010b
Perchlorate	.05	.05	101.87	27-JUN-05 22:04	per06270021b
Perchlorate Isotope Ratio		2.79		27-JUN-05 22:04	per06270021b
Perchlorate-101	.05	.05	106.52	27-JUN-05 22:04	per06270021b
Perchlorate	.05	.06	110.81	28-JUN-05 19:33	per06280010b
Perchlorate Isotope Ratio		2.55		28-JUN-05 19:33	per06280010b
Perchlorate-101	.05	.06	126.89	28-JUN-05 19:33	per06280010b
Perchlorate	.05	.05	106.05	28-JUN-05 20:34	per06280019b
Perchlorate Isotope Ratio		2.54		28-JUN-05 20:34	per06280019b

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Perchlorate MDL Verification

Perchlorate-101	.05	.06	122.24	28-JUN-05 20:34	per06280019b

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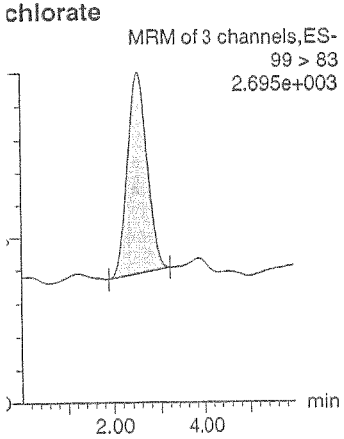
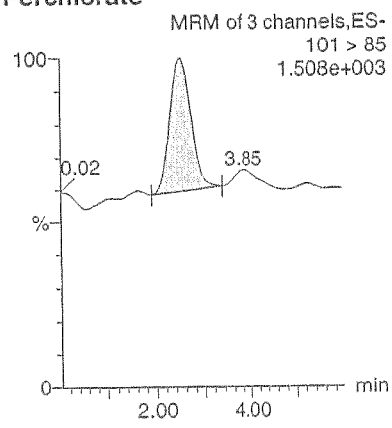
ne: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270010b
e: 27-Jun-2005
e: 20:47:51
WCL050621-07CRI
: 1:2,B

chlorate



Perchlorate



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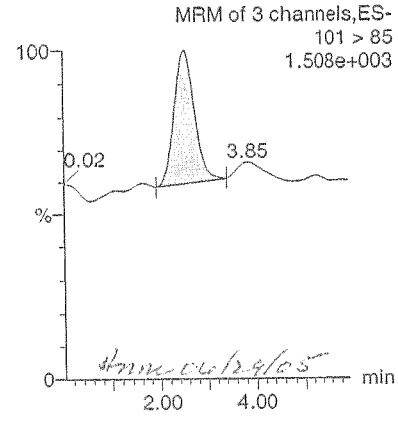
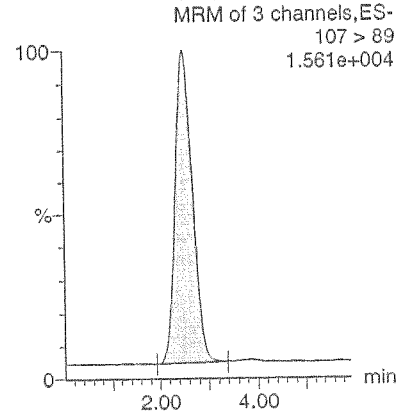


Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-07CRI	Perchlorate	99 > 83	2.54	806.479		806.479	806.479	bb			100.1	0.0489	97.7	2.61
WCL050621-07CRI	Perchlorate-101	101 > 85	2.52	311.744		311.744	311.744	bb			82.4	0.0550	110.1	
WCL050621-07CRI	Perchlorate-O(18)	107 > 89	2.51	6112.840		6112.840	6112.840	bb			657.8	0.4725	94.5	✓

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MAP 6/28/05

509

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ne: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270021b
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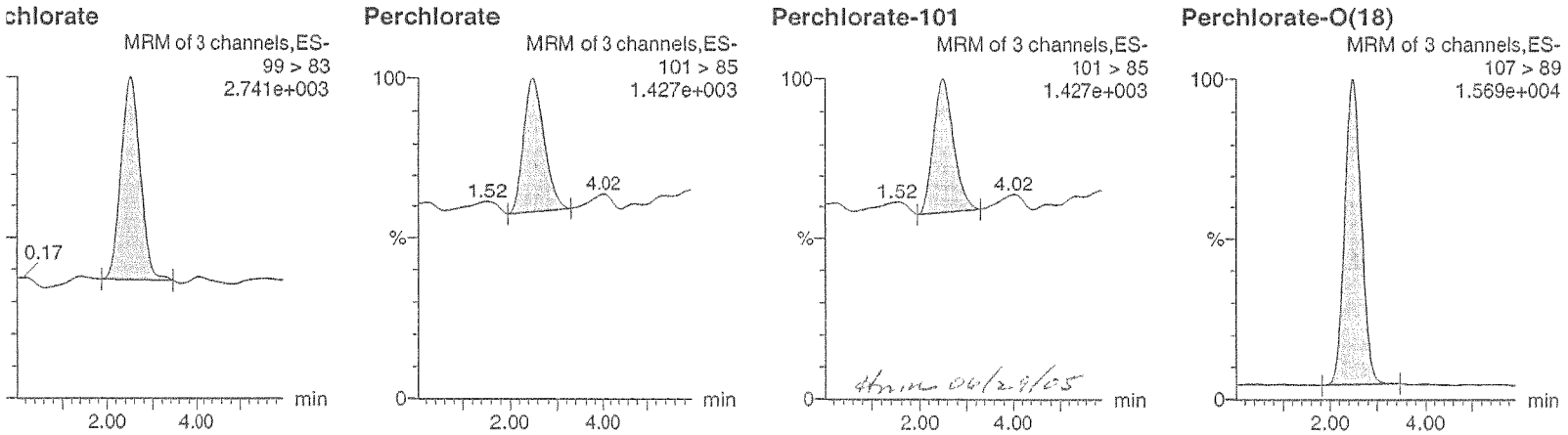
WCL050621-07CRI
: 1:2,B



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-07CRI	Perchlorate	99 > 83	2.51	840.891		840.891	840.891	bb			91.2	0.0509	101.9	2.79
WCL050621-07CRI	Perchlorate-101	101 > 85	2.49	301.704		301.704	301.704	bb			35.3	0.0533	106.5	
WCL050621-07CRI	Perchlorate-O(18)	107 > 89	2.48	6124.804		6124.804	6124.804	bb			1531.6	0.4734	94.7	

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510

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me: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06280010b
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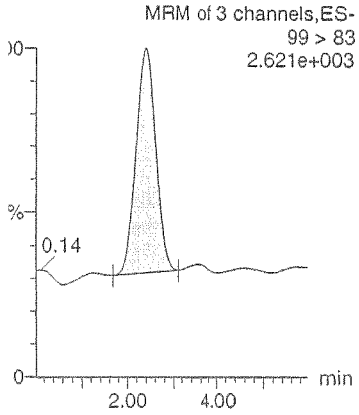
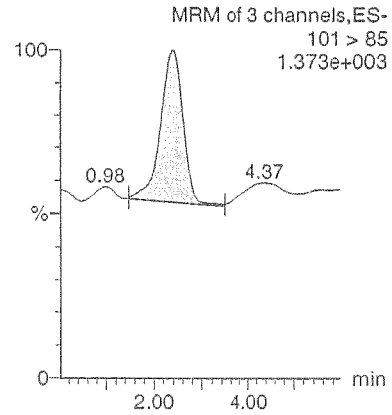
al: 1:2,B

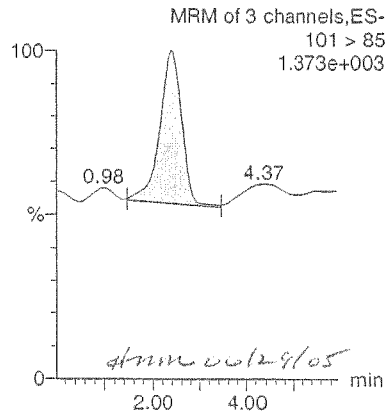
rchlorate



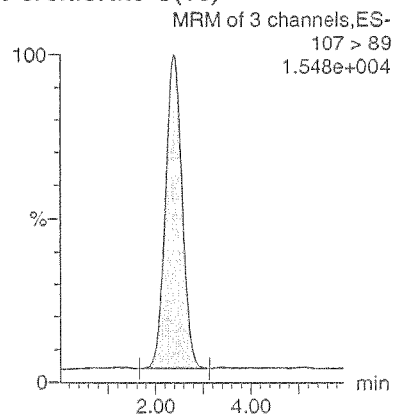
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-07CRI	Perchlorate	99 > 83	2.39	889.797		889.797	889.797	bb			136.6	0.0554	110.8	2.57
WCL050621-07CRI	Perchlorate-101	101 > 85	2.39	348.423		348.423	348.423	bb			63.1	0.0634	126.9	
WCL050621-07CRI	Perchlorate-O(18)	107 > 89	2.39	6128.954		6128.954	6128.954	bb			1026.6	0.4630	92.6	

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511

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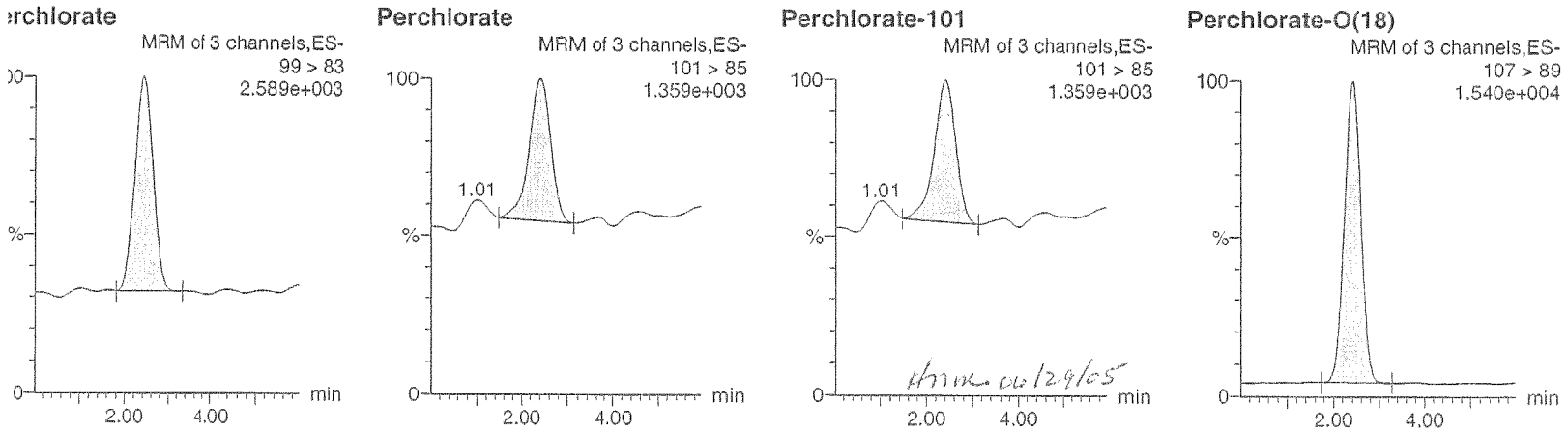
al: 1:2,B



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
WCL050621-07CRI	Perchlorate	99 > 83	2.42	851.532		851.532	851.532	bb			644.2	0.0530	106.0	2.54
WCL050621-07CRI	Perchlorate-101	101 > 85	2.41	335.630		335.630	335.630	bb			128.9	0.0611	122.2	
WCL050621-07CRI	Perchlorate-O(18)	107 > 89	2.41	6126.194		6126.194	6126.194	bb			733.7	0.4628	92.6	

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QUALITY CONTROL DATA

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A

Matrix: GROUND WATER

Extraction Batch ID: 436181

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 27-JUN-05

GEL Job No (SDG): 138851

GEL Sample ID: 1200872589

Date Filtered: 27-JUN-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1.00	27-JUN-05 21:05	per06270012b
	Perchlorate Isotope Ratio						1.00	27-JUN-05 21:05	per06270012b
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1.00	27-JUN-05 21:05	per06270012b
	Perchlorate-O(18)	0	0	0.496	ug/L		1.00	27-JUN-05 21:05	per06270012b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration = Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\%\text{Solids}}$

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taset: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

me: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270012b
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ne: 21:05:48
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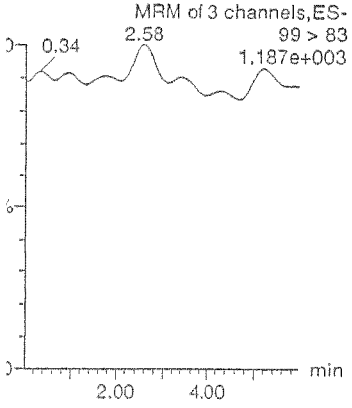
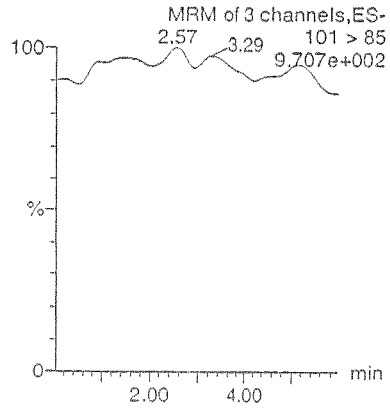
l: 1:4,B

rchlorate



Perchlorate



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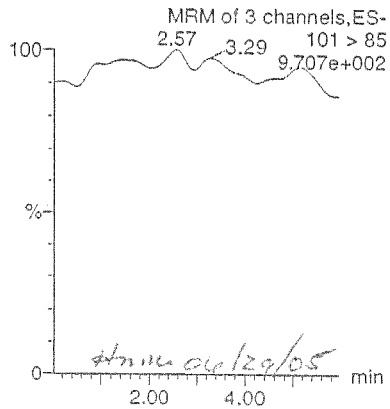

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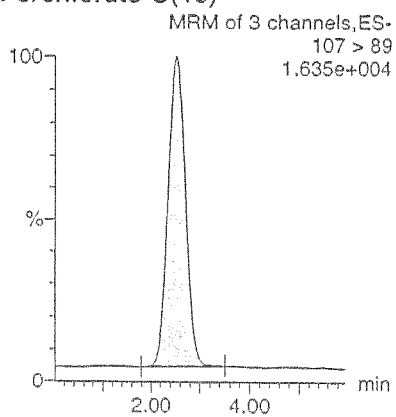

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1200872589	Perchlorate	99 > 83												
1200872589	Perchlorate-101	101 > 85												
1200872589	Perchlorate-O(18)	107 > 89	2.52	6417.930		6417.930	6417.930	bb			1469.6	0.4960	99.2	

= Manually Modified

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A

Matrix: GROUND WATER

Extraction Batch ID: 436181

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 27-JUN-05

GEL Job No (SDG): 138851

GEL Sample ID: 1200872590

Date Filtered: 27-JUN-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.207	ug/L		1.00	27-JUN-05 21:12	per06270013b
	Perchlorate Isotope Ratio			2.94			1.00	27-JUN-05 21:12	per06270013b
14797-73-0	Perchlorate-101	.05	.2	0.206	ug/L		1.00	27-JUN-05 21:12	per06270013b
	Perchlorate-O(18)	0	0	0.480	ug/L		1.00	27-JUN-05 21:12	per06270013b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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ataset: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

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ate: 27-Jun-2005
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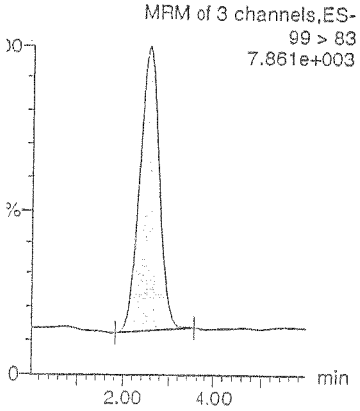
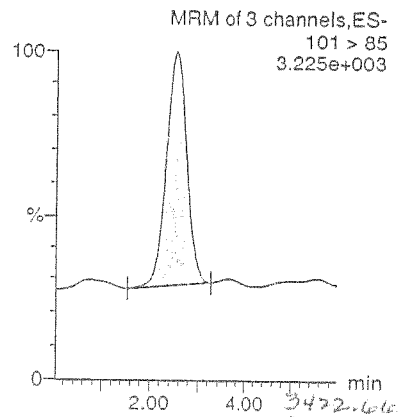
: 1200872590 |ESHL| 456182/ba|CC8|1|
al: 1:4,C

6/28/05

erchlorate

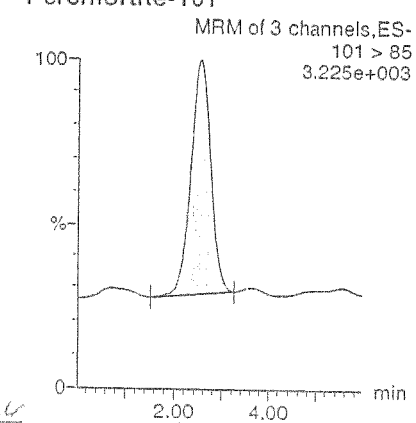


Perchlorate



3422.666 / 16507 = 0.2073 Hnm 6/29/05

Perchlorate-101



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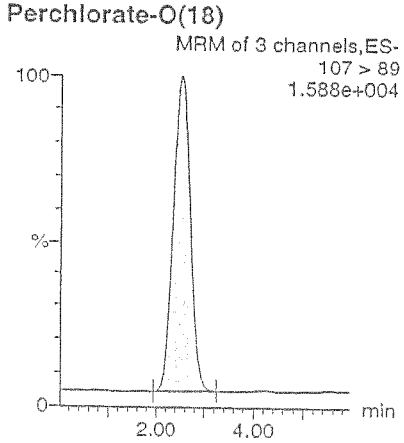

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1200872590	Perchlorate	99 > 83	2.54	3422.666		3422.666	3422.666	bb			513.3	0.2073	103.7	2.93
1200872590	Perchlorate-101	101 > 85	2.52	1164.669		1164.669	1164.669	bb			230.6	0.2056	102.8	
1200872590	Perchlorate-O(18)	107 > 89	2.51	6215.720		6215.720	6215.720	bb			1070.8	0.4804	96.1	

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MISCELLANEOUS DATA

Prep Logbook

Sample Preparation for Perchlorate Analysis using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry

Batch ID: 436181 Verified by: _____
Analyst: Lloyd O Fox
Method: SW846 8321A Modified

Lab SOP: GL-OA-E-057 REV# 1
Instrument: MicroMass QuatroMicro

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1200872589 MB	27-JUN-2005 20:23:02	10	10	1
1200872590 LCS	27-JUN-2005 20:23:02	10	10	1
138450001	27-JUN-2005 20:23:02	10	10	1
1200872593 MS (138450001)	27-JUN-2005 20:23:02	10	10	1
1200872594 MSD (138450001)	27-JUN-2005 20:23:02	10	10	1
138450002	27-JUN-2005 20:23:02	10	10	1
138450005	27-JUN-2005 20:23:02	10	10	1
138541001	27-JUN-2005 20:23:02	10	10	1
1200875129 MS (138541001)	27-JUN-2005 20:23:02	10	10	1
1200875130 MSD (138541001)	27-JUN-2005 20:23:02	10	10	1
138659001	27-JUN-2005 20:23:02	10	10	1
138659002	27-JUN-2005 20:23:02	10	10	1
138659003	27-JUN-2005 20:23:02	10	10	1
138659004	27-JUN-2005 20:23:02	10	10	1
138659005	27-JUN-2005 20:23:02	10	10	1
138659014	27-JUN-2005 20:23:02	10	10	1
138675001	27-JUN-2005 20:23:02	10	10	1
138800001	27-JUN-2005 20:23:02	10	10	1
138800002	27-JUN-2005 20:23:02	10	10	1
138850001	27-JUN-2005 20:23:02	10	10	1
138850002	27-JUN-2005 20:23:02	10	10	1
138851001	27-JUN-2005 20:23:02	10	10	1
138851002	27-JUN-2005 20:23:02	10	10	1
138905001	27-JUN-2005 20:23:02	10	10	1
1200872591 MS (138905001)	27-JUN-2005 20:23:02	10	10	1
1200872595 ICS	27-JUN-2005 20:23:02	10	10	1
1200872592 MSD (138905001)	27-JUN-2005 20:23:02	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1200872595	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
LCS	1200872590	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MS	1200872591	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MS	1200872593	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MS	1200875129	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MSD	1200872592	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MSD	1200872594	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MSD	1200875130	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
RGNT	All	O2SI HPLC Grade Water	316678	10	mL	

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Prep Logbook

Batch ID: 436181 Verified by: _____

Analyst: Lloyd O Fox

Method: SW846 8321A Modified

Lab SOP: GL-OA-E-057 REV# 1

Instrument: MicroMass QuatroMicro

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)	
RGNT All	500 ppm carbonate, bicarbonate, chloride, sulfate	316918	10	mL	

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS2

Date: 06/27/05
Extr. Injection Volume: 50uL
Sequence Number: per062705b
Initial Calibration Date: 062705

Method: 8321A-Modified
Int. Std.: UXX050113-01
Mobile Phase Lot#:: 278528, 316678
Standard-Samp Reagent Lot#:: 316678

Reviewed BY:
Date: 6/29/05
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID: WCL050621-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per06270001b	IPB001	MAP	6/27/05 19:47			1			B
per06270002b	IPB001	MAP	6/27/05 19:55			1			B
per06270003b	WCLICAL-01	MAP	6/27/05 20:01			1		USE	I
per06270004b	WCLICAL-02	MAP	6/27/05 20:08			1		USE	I
per06270005b	WCLICAL-03	MAP	6/27/05 20:15			1		USE	I
per06270006b	WCLICAL-04	MAP	6/27/05 20:21			1		USE	I
per06270007b	WCLICAL-05	MAP	6/27/05 20:28			1		USE	I
per06270008b	WCLICV	MAP	6/27/05 20:34			1		USE	C
per06270009b	IPB002	MAP	6/27/05 20:41			1			B
per06270010b	WCLCRI	MAP	6/27/05 20:47			1		USE	C
per06270011b	1200872595	MAP	6/27/05 20:58	436182	Various	1	Various	DUSE	S
per06270012b	1200872589	MAP	6/27/05 21:05	436182	Various	1	Various	USE	S
per06270013b	1200872590	MAP	6/27/05 21:12	436182	Various	1	Various	USE	S
per06270014b	138450001	MAP	6/27/05 21:18	436182	138450	1	ESHL	USE	S
per06270015b	1200872593	MAP	6/27/05 21:25	436182	138450	1	ESHL	USE	S
per06270016b	1200872594	MAP	6/27/05 21:32	436182	138450	1	ESHL	USE	S
per06270017b	138450002	MAP	6/27/05 21:38	436182	138450	1	ESHL	DUSE	S
per06270018b	138450005	MAP	6/27/05 21:45	436182	138450	1	ESHL	USE	S
per06270019b	WCLCCV	MAP	6/27/05 21:51			1		USE	C
per06270020b	IPB003	MAP	6/27/05 21:58			1			B
per06270021b	WCLCRI	MAP	6/27/05 22:04			1		USE	C
per06270022b	138541001	MAP	6/27/05 22:11	436182	3372S	1	LANL	USE	S
per06270023b	1200875129	MAP	6/27/05 22:18	436182	3372S	1	LANL	USE	S
per06270024b	1200875130	MAP	6/27/05 22:24	436182	3372S	1	LANL	USE	S
per06270025b	138659001	MAP	6/27/05 22:31	436182	138659	1	ESHL	USE	S
per06270026b	138659002	MAP	6/27/05 22:37	436182	138659	1	ESHL	USE	S
per06270027b	138659003	MAP	6/27/05 22:44	436182	138659	1	ESHL	USE	S
per06270028b	138659004	MAP	6/27/05 22:50	436182	138659	1	ESHL	USE	S
per06270029b	138659005	MAP	6/27/05 22:57	436182	138659	1	ESHL	USE	S
per06270030b	138659014	MAP	6/27/05 23:03	436182	138659	1	ESHL	USE	S
per06270031b	WCLCCV	MAP	6/27/05 23:10			1		USE	C
per06270032b	IPB004	MAP	6/27/05 23:17			1			B

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per062700033b	WCLCRI	MAP	6/27/05 23:23			1		USE		C
per062700034b	138675001	MAP	6/27/05 23:30	436182	138675	1	ESHL	USE		S
per062700035b	138800001	MAP	6/27/05 23:36	436182	138800	1	ESHL	USE		S
per062700036b	138800002	MAP	6/27/05 23:43	436182	138800	1	ESHL	USE		S
per062700037b	138850001	MAP	6/27/05 23:49	436182	138850	1	ESHL	DUSE-DL		S
per062700038b	138850002	MAP	6/27/05 23:56	436182	138850	1	ESHL	DUSE-DL		S
per062700039b	138851001	MAP	6/28/05 0:03	436182	138851	1	ESHL	DUSE-DL		S
per062700040b	138851002	MAP	6/28/05 0:09	436182	138851	1	ESHL	DUSE-DL		S
per062700041b	138905001	MAP	6/28/05 0:16	436182	138905	1	ESHL	DUSE		S
per062700042b	1200872591	MAP	6/28/05 0:22	436182	138905	1	ESHL	USE		S
per062700043b	1200872592	MAP	6/28/05 0:29	436182	138905	1	ESHL	USE		S
per062700044b	WCLCCV	MAP	6/28/05 0:35			1		USE		C
per062700045b	IPB005	MAP	6/28/05 0:42			1				B
per062700046b	WCLCRI	MAP	6/28/05 0:48			1		USE		C
per062700047b	316918PS screen	MAP	6/28/05 0:55	N/A	N/A	1	N/A	DUSE		S
per062700048b	1200866521	MAP	6/28/05 1:02	433602	Various	1	Various	USE		S
per062700049b	1200866504	MAP	6/28/05 1:09	433602	Various	1	Various	USE		S
per062700050b	1200866505	MAP	6/28/05 1:16	433602	Various	1	Various	USE		S
per062700051b	138159001	MAP	6/28/05 1:22	433602	138159	1	ESHL	USE		S
per062700052b	138159002	MAP	6/28/05 1:29	433602	138159	1	ESHL	USE		S
per062700053b	138259003	MAP	6/28/05 1:35	433602	138259	1	ESHL	USE		S
per062700054b	138369001	MAP	6/28/05 1:42	433602	138369	1	ESHL	USE		S
per062700055b	138369002	MAP	6/28/05 1:48	433602	138369	1	ESHL	USE		S
per062700056b	138369003	MAP	6/28/05 1:55	433602	138369	1	ESHL	USE		S
per062700057b	WCLCCV	MAP	6/28/05 2:02			1		USE		C
per062700058b	IPB006	MAP	6/28/05 2:08			1				B
per062700059b	WCLCRI	MAP	6/28/05 2:15			1		USE		C
per062700060b	138450002	MAP	6/28/05 2:21	436182	138450	1	ESHL	USE		S
per062700061b	138373001	MAP	6/28/05 2:28	433602	138373	1	ESHL	USE		S
per062700062b	138373003	MAP	6/28/05 2:34	433602	138373	1	ESHL	USE		S
per062700063b	138436001	MAP	6/28/05 2:41	433602	138436	1	ESHL	DUSE-DL		S
per062700064b	138436003	MAP	6/28/05 2:47	433602	138436	1	ESHL	DUSE-DL		S
per062700065b	1200866506	MAP	6/28/05 2:54	433602	138436	1	ESHL	DUSE-DL		S
per062700066b	1200866507	MAP	6/28/05 3:01	433602	138436	1	ESHL	DUSE-DL		S
per062700067b	WCLCCV	MAP	6/28/05 3:07			1		USE		C
per062700068b	IPB007	MAP	6/28/05 3:14			1				B
per062700069b	WCLCRI	MAP	6/28/05 3:20			1		USE		C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS2

Date:062805
Extr. Injection Volume: 50uL
Sequence Number:per062805b
Initial Calibration Date:062805

Method:8321a modified
Int. Std.:UXX050113-01
Mobile Phase Lot#::278528,316678
Standard-Samp Reagent Lot#::316678

Reviewed BY: [illegible]
Date: 6/29/05
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID:WCL050621-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per06280001b	IPB001	MAP	6/28/05 18:33			1			B
per06280002b	IPB001	MAP	6/28/05 18:41			1			B
per06280003b	WCLICAL-01	MAP	6/28/05 18:47			1		USE	I
per06280004b	WCLICAL-02	MAP	6/28/05 18:54			1		USE	I
per06280005b	WCLICAL-03	MAP	6/28/05 19:00			1		USE	I
per06280006b	WCLICAL-04	MAP	6/28/05 19:07			1		USE	I
per06280007b	WCLICAL-05	MAP	6/28/05 19:14			1		USE	I
per06280008b	WCLICV	MAP	6/28/05 19:20			1		USE	C
per06280009b	IPB002	MAP	6/28/05 19:27			1			B
per06280010b	WCLCRI	MAP	6/28/05 19:33			1		USE	C
per06280011b	1200872595	MAP	6/28/05 19:40	436182	various	1	various	USE	S
per06280012b	138905001	MAP	6/28/05 19:47	436182	138905	1	ESHL	USE	S
per06280013b	138850001	MAP	6/28/05 19:54	436182	138850	5	ESHL	USE	S
per06280014b	138850002	MAP	6/28/05 20:00	436182	138850	5	ESHL	USE	S
per06280015b	138851001	MAP	6/28/05 20:07	436182	138851	200	ESHL	USE	S
per06280016b	138851002	MAP	6/28/05 20:13	436182	138851	200	ESHL	USE	S
per06280017b	WCLCCV	MAP	6/28/05 20:20			1		USE	C
per06280018b	IPB003	MAP	6/28/05 20:27			1			B
per06280019b	WCLCRI	MAP	6/28/05 20:34			1		USE	C
per06280020b	138259002	MAP	6/28/05 20:41	433602	138159	1	ESHL	USE	S
per06280021b	138436001	MAP	6/28/05 20:47	433602	138436	200	ESHL	DUSE	S
per06280022b	138436003	MAP	6/28/05 20:54	433602	138436	100	ESHL	DUSE	S
per06280023b	1200866506	MAP	6/28/05 21:00	433602	138436	100	ESHL	USE	S
per06280024b	1200866507	MAP	6/28/05 21:07	433602	138436	100	ESHL	USE	S
per06280025b	138436003	MAP	6/28/05 21:27	433602	138436	100	ESHL	DUSE	S
per06280026b	138436001	MAP	6/28/05 21:37	433602	138436	400	ESHL	USE	S
per06280027b	WCLCCV	MAP	6/28/05 21:43			1		USE	C
per06280028b	IPB004	MAP	6/28/05 21:50			1			B
per06280029b	WCLCRI	MAP	6/28/05 21:56			1		USE	C

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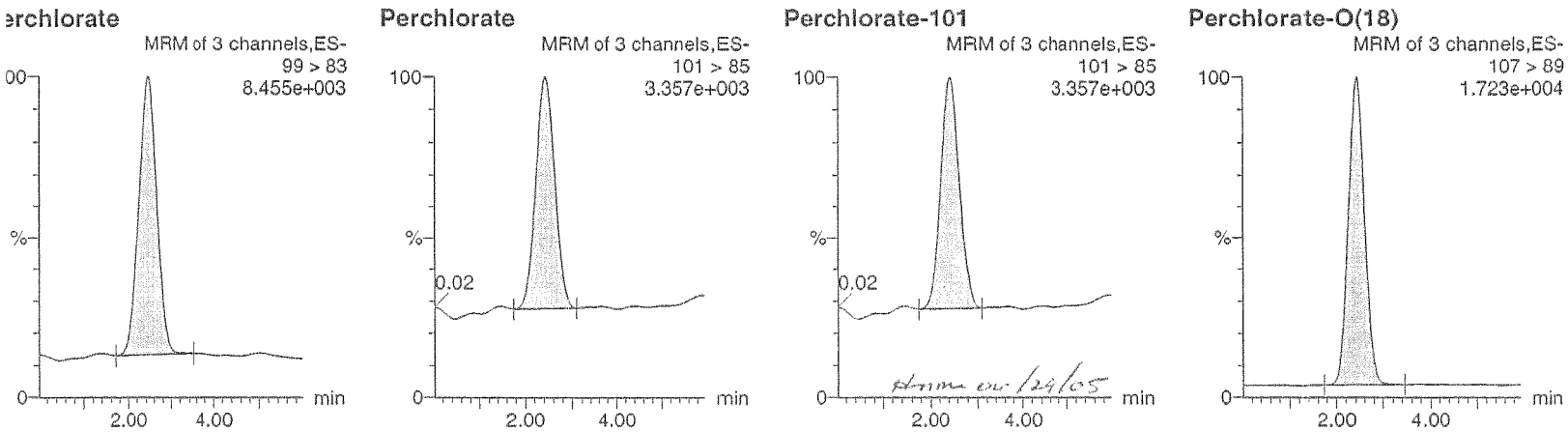
per06280030b	138436003	MAP	6/28/05 22:07	433602	138436	100	ESHL	USE	S
per06280031b	1200872601	MAP	6/28/05 22:15	436185	various	1	LANL	DUSE	S
per06280032b	1200872596	MAP	6/28/05 22:21	436185	various	1	LANL	USE	S
per06280033b	1200872597	MAP	6/28/05 22:28	436185	various	1	LANL	USE	S
per06280034b	138635001	MAP	6/28/05 22:34	436185	3376S	1	LANL	USE	S
per06280035b	138635002	MAP	6/28/05 22:41	436185	3376S	1	LANL	USE	S
per06280036b	138635003	MAP	6/28/05 22:47	436185	3376S	1	LANL	USE	S
per06280037b	138635004	MAP	6/28/05 22:54	436185	3376S	1	LANL	USE	S
per06280038b	138635005	MAP	6/28/05 23:00	436185	3376S	1	LANL	USE	S
per06280039b	WCLCCV	MAP	6/28/05 23:07			1		USE	C
per06280040b	IPB005	MAP	6/28/05 23:14			1			B
per06280041b	WCLCRI	MAP	6/28/05 23:20			1		USE	C
per06280042b	138761001	MAP	6/28/05 23:27	436185	3384S	1	LANL	USE	S
per06280043b	138761002	MAP	6/28/05 23:34	436185	3384S	1	LANL	USE	S
per06280044b	138761003	MAP	6/28/05 23:41	436185	3384S	1	LANL	USE	S
per06280045b	138761004	MAP	6/28/05 23:47	436185	3384S	1	LANL	USE	S
per06280046b	138761005	MAP	6/28/05 23:54	436185	3384S	1	LANL	USE	S
per06280047b	138915001	MAP	6/29/05 0:00	436185	3394S	1	LANL	USE	S
per06280048b	1200872598	MAP	6/29/05 0:07	436185	3394S	1	LANL	USE	S
per06280049b	1200872599	MAP	6/29/05 0:14	436185	3394S	1	LANL	USE	S
per06280050b	WCLCCV	MAP	6/29/05 0:20			1		USE	C
per06280051b	IPB006	MAP	6/29/05 0:27			1			B
per06280052b	WCLCRI	MAP	6/29/05 0:33			1		USE	C

ataset: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270042b
ate: 28-Jun-2005
me: 00:22:42
: 1200872591
al: 1:8,B



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	1200872591	Perchlorate	99 > 83	2.44	3586.085		3586.085	3586.085	bb			1003.6	0.2172	108.6	3.08
2	1200872591	Perchlorate-101	101 > 85	2.44	1163.563		1163.563	1163.563	bb			175.0	0.2054	102.7	
3	1200872591	Perchlorate-O(18)	107 > 89	2.42	6736.367		6736.367	6736.367	bb			1436.0	0.5207	104.1	

M= Manually Modified

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uantify Sample Report
eneral Engineering Labs, LLC., Analyst : Michael Penny

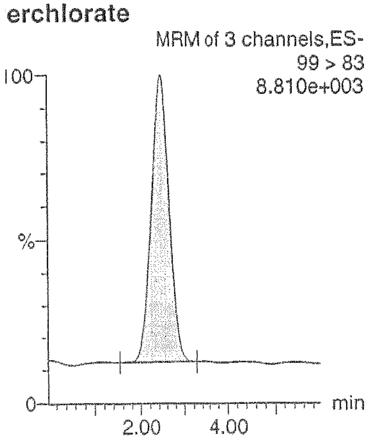
ataset: C:\Masslynx\Perchlorate.PRO\per062705b.qld, Time: Tue Jun 28 05:55:36 2005

ame: C:\MASSLYNX\PERCHLORATE.PRO\Data\per06270043b
ate: 28-Jun-2005
ime: 00:29:16
): 1200872592
ial: 1:8,C

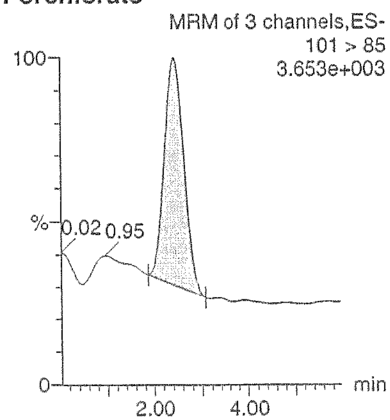
| ESHC | 436182 | [illegible] | 905001 [illegible] | | |

[illegible] 6/28/05

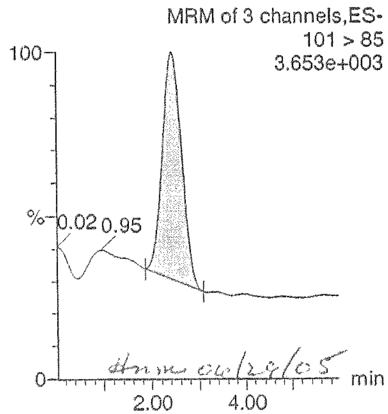
erchlorate



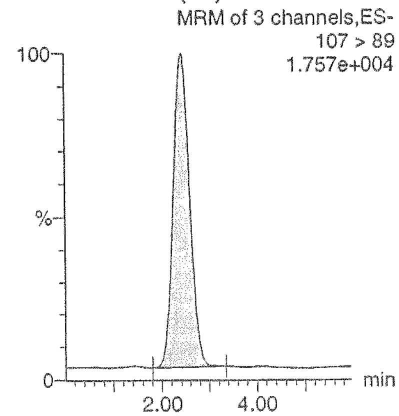
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	1200872592	Perchlorate	99 > 83	2.45	3742.346		3742.346	3742.346	bb			791.9	0.2267	113.3	3.11
2	1200872592	Perchlorate-101	101 > 85	2.44	1205.142		1205.142	1205.142	bb			181.3	0.2127	106.4	
3	1200872592	Perchlorate-O(18)	107 > 89	2.42	6851.389		6851.389	6851.389	bb			751.8	0.5295	105.9	

MM= Manually Modified

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Isotope Ratio Criteria

Average Isotope Ratio
2.93

Standard Deviation
0.19

Sample Between the MDL and RDL (0.050-0.20ug/L)
Control Limits : 2.36-3.50

Sample Above the RDL (0.20ug/L)
Control Limits : 2.55-3.31

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Metals Analysis

Metals Fractional Narrative
Los Alamos National Laboratory (ESHL)
SDG 138851

Method/Analysis Information

Analytical Batch:	435151, 435189 and 435683
Prep Batch :	435150, 435188 and 435682
Standard Operating Procedures:	GL-MA-E-013 REV# 13, GL-MA-E-014 REV# 10, GL-MA-E-010 REV# 16, GL-MA-E-006 REV# 9 and GL-MA-E-010 REV# 15
Analytical Method:	SW846 6010B, SW846 6020 and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A

Sample Analysis

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200870309	Method Blank (MB) **ICP**
1200870310	Laboratory Control Sample (LCS)
1200870313	138851001(GF05050GMC601L) Serial Dilution (SD)
1200870316	138851003(GU05050GMC601L) Serial Dilution (SD)
1200870311	138851001(GF05050GMC601D) Sample Duplicate (DUP)
1200870314	138851003(GU05050GMC601D) Sample Duplicate (DUP)
1200870312	138851001(GF05050GMC601S) Matrix Spike (MS)
1200870315	138851003(GU05050GMC601S) Matrix Spike (MS)
1200870402	Method Blank (MB) **ICP-MS**
1200870403	Laboratory Control Sample (LCS)
1200870406	138851001(GF05050GMC601L) Serial Dilution (SD)
1200870409	138851003(GU05050GMC601L) Serial Dilution (SD)
1200870404	138851001(GF05050GMC601D) Sample Duplicate (DUP)
1200870407	138851003(GU05050GMC601D) Sample Duplicate (DUP)

1200870405	138851001(GF05050GMC601S) Matrix Spike (MS)
1200870408	138851003(GU05050GMC601S) Matrix Spike (MS)
1200871461	Method Blank (MB) **CVAA**
1200871462	Laboratory Control Sample (LCS)
1200871467	138851001(GF05050GMC601L) Serial Dilution (SD)
1200871468	138851003(GU05050GMC601L) Serial Dilution (SD)
1200871463	138851001(GF05050GMC601D) Sample Duplicate (DUP)
1200871465	138851003(GU05050GMC601D) Sample Duplicate (DUP)
1200871464	138851001(GF05050GMC601S) Matrix Spike (MS)
1200871466	138851003(GU05050GMC601S) Matrix Spike (MS)

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The ICP analysis was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The ICP-MS analysis was performed on a Perkin Elmer ICP-MS ELAN 9000. The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, and tantalum were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 3607 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Mercury analysis was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 254 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80mL/min.

Calibration Information

Instrument Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

ICSA/ICSAB statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 138851001 (GF05050GMC601) and 138851003 (GU05050GMC601).

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL for CVAA, 50X the IDL for ICP, and 100X the IDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instruments. The samples were diluted 5x in order to minimize tin suppression due to matrix interferences.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ **Date:** 7/14/05

Sample Data Summary

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851001 **CLIENT ID:** GF05050GMC601

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17–JUN–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7429–90–5	Aluminum	68	ug/L	U		P	68	OPTIMA2	062305–2
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS5	050706–5
7440–38–2	Arsenic	6	ug/L	U		P	6	OPTIMA2	062305–2
7440–39–3	Barium	32.8	ug/L			P	1	OPTIMA2	062305–2
7440–41–7	Beryllium	0.10	ug/L	U		MS	0.1	ICPMS5	050706–5
7440–42–8	Boron	28.9	ug/L	J		P	10	OPTIMA2	062305–2
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS5	050706–5
7440–70–2	Calcium	46600	ug/L			P	36	OPTIMA2	062305–2
7440–47–3	Chromium	51.2	ug/L			P	1	OPTIMA2	062305–2
7440–48–4	Cobalt	1	ug/L	U		P	1	OPTIMA2	062305–2
7440–50–8	Copper	7.6	ug/L	J		P	3	OPTIMA2	062305–2
7439–89–6	Iron	18.2	ug/L	J		P	18	OPTIMA2	062305–2
7439–92–1	Lead	0.50	ug/L	U		MS	0.5	ICPMS5	050706–5
7439–95–4	Magnesium	9380	ug/L			P	85	OPTIMA2	062305–2
7439–96–5	Manganese	25.1	ug/L			MS	1	ICPMS5	050706–5
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	MER536	062405W1–1
7439–98–7	Molybdenum	1.9	ug/L			MS	0.1	ICPMS5	050706–5
7440–02–0	Nickel	2.9	ug/L	J		P	1	OPTIMA2	062305–2
7440–09–7	Potassium	728	ug/L			P	50	OPTIMA2	062305–2
7782–49–2	Selenium	6	ug/L	U		P	6	OPTIMA2	062305–2
7631–86–9	Silica	60.6	mg/L			P	0.032	OPTIMA2	062305–2
7440–22–4	Silver	1	ug/L	U		P	1	OPTIMA2	062305–2
7440–23–5	Sodium	20900	ug/L			P	45	OPTIMA2	062305–2
7440–24–6	Strontium	212	ug/L			P	1	OPTIMA2	062305–2
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS5	050706–5
7440–31–5	Tin	12.5	ug/L	U		P	12.5	OPTIMA2	062405–3

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851001 **CLIENT ID:** GF05050GMC601

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17-JUN-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-62-2	Vanadium	1.2	ug/L	J		P	1	OPTIMA2	062305-2
7440-66-6	Zinc	74.2	ug/L			P	2	OPTIMA2	062305-2

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851002 **CLIENT ID:** GF05050GMC690

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17–JUN–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7429–90–5	Aluminum	68	ug/L	U		P	68	OPTIMA2	062305–2
7440–36–0	Antimony	0.610	ug/L	J		MS	0.5	ICPMS5	050706–5
7440–38–2	Arsenic	6	ug/L	U		P	6	OPTIMA2	062305–2
7440–39–3	Barium	32.8	ug/L			P	1	OPTIMA2	062305–2
7440–41–7	Beryllium	0.10	ug/L	U		MS	0.1	ICPMS5	050706–4
7440–42–8	Boron	25.4	ug/L	J		P	10	OPTIMA2	062305–2
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS5	050706–5
7440–70–2	Calcium	45900	ug/L			P	36	OPTIMA2	062305–2
7440–47–3	Chromium	48.4	ug/L			P	1	OPTIMA2	062305–2
7440–48–4	Cobalt	1	ug/L	U		P	1	OPTIMA2	062305–2
7440–50–8	Copper	11.1	ug/L			P	3	OPTIMA2	062305–2
7439–89–6	Iron	18	ug/L	U		P	18	OPTIMA2	062305–2
7439–92–1	Lead	0.50	ug/L	U		MS	0.5	ICPMS5	050706–5
7439–95–4	Magnesium	9210	ug/L			P	85	OPTIMA2	062305–2
7439–96–5	Manganese	30.6	ug/L			MS	1	ICPMS5	050706–5
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	MER536	062405W1–1
7439–98–7	Molybdenum	2	ug/L			MS	0.1	ICPMS5	050706–5
7440–02–0	Nickel	3.3	ug/L	J		P	1	OPTIMA2	062305–2
7440–09–7	Potassium	712	ug/L			P	50	OPTIMA2	062305–2
7782–49–2	Selenium	6	ug/L	U		P	6	OPTIMA2	062305–2
7631–86–9	Silica	59.6	mg/L			P	0.032	OPTIMA2	062305–2
7440–22–4	Silver	1	ug/L	U		P	1	OPTIMA2	062305–2
7440–23–5	Sodium	20600	ug/L			P	45	OPTIMA2	062305–2
7440–24–6	Strontium	208	ug/L			P	1	OPTIMA2	062305–2
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS5	050706–5
7440–31–5	Tin	12.5	ug/L	U		P	12.5	OPTIMA2	062405–3

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851002 **CLIENT ID:** GF05050GMC690

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17-JUN-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-62-2	Vanadium	1.1	ug/L	J		P	1	OPTIMA2	062305-2
7440-66-6	Zinc	105	ug/L			P	2	OPTIMA2	062305-2

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851003 **CLIENT ID:** GU05050GMC601

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17-JUN-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U		P	68	OPTIMA2	062305-2
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS5	050706-5
7440-38-2	Arsenic	6	ug/L	U		P	6	OPTIMA2	062305-2
7440-39-3	Barium	33.2	ug/L			P	1	OPTIMA2	062305-2
7440-41-7	Beryllium	0.10	ug/L	U		MS	0.1	ICPMS5	050706-4
7440-42-8	Boron	26.5	ug/L	J		P	10	OPTIMA2	062305-2
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS5	050706-5
7440-70-2	Calcium	46300	ug/L			P	36	OPTIMA2	062305-2
7440-47-3	Chromium	52.2	ug/L			P	1	OPTIMA2	062305-2
7440-48-4	Cobalt	1	ug/L	U		P	1	OPTIMA2	062305-2
7440-50-8	Copper	14.5	ug/L			P	3	OPTIMA2	062305-2
7439-89-6	Iron	107	ug/L			P	18	OPTIMA2	062305-2
7439-92-1	Lead	1.3	ug/L	J		MS	0.5	ICPMS5	050706-5
7439-95-4	Magnesium	9340	ug/L			P	85	OPTIMA2	062305-2
7439-96-5	Manganese	27	ug/L			MS	1	ICPMS5	050706-5
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	062405W1-1
7439-98-7	Molybdenum	1.9	ug/L			MS	0.1	ICPMS5	050706-5
7440-02-0	Nickel	3	ug/L	J		P	1	OPTIMA2	062305-2
7440-09-7	Potassium	748	ug/L			P	50	OPTIMA2	062305-2
7782-49-2	Selenium	6	ug/L	U		P	6	OPTIMA2	062305-2
7631-86-9	Silica	60.7	mg/L			P	0.032	OPTIMA2	062305-2
7440-22-4	Silver	1	ug/L	U		P	1	OPTIMA2	062305-2
7440-23-5	Sodium	21000	ug/L			P	45	OPTIMA2	062305-2
7440-24-6	Strontium	212	ug/L			P	1	OPTIMA2	062305-2
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS5	050706-5
7440-31-5	Tin	12.5	ug/L	U		P	12.5	OPTIMA2	062405-3

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851003 **CLIENT ID:** GU05050GMC601

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17-JUN-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-62-2	Vanadium	1.2	ug/L	J		P	1	OPTIMA2	062305-2
7440-66-6	Zinc	90.8	ug/L			P	2	OPTIMA2	062305-2

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851004 **CLIENT ID:** GU05050GMC690

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17-JUN-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U		P	68	OPTIMA2	062305-2
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS5	050706-5
7440-38-2	Arsenic	6	ug/L	U		P	6	OPTIMA2	062305-2
7440-39-3	Barium	32.7	ug/L			P	1	OPTIMA2	062305-2
7440-41-7	Beryllium	0.10	ug/L	U		MS	0.1	ICPMS5	050706-4
7440-42-8	Boron	25.1	ug/L	J		P	10	OPTIMA2	062305-2
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS5	050706-5
7440-70-2	Calcium	46100	ug/L			P	36	OPTIMA2	062305-2
7440-47-3	Chromium	52.4	ug/L			P	1	OPTIMA2	062305-2
7440-48-4	Cobalt	1	ug/L	U		P	1	OPTIMA2	062305-2
7440-50-8	Copper	13.4	ug/L			P	3	OPTIMA2	062305-2
7439-89-6	Iron	93.5	ug/L	J		P	18	OPTIMA2	062305-2
7439-92-1	Lead	1.2	ug/L	J		MS	0.5	ICPMS5	050706-5
7439-95-4	Magnesium	9270	ug/L			P	85	OPTIMA2	062305-2
7439-96-5	Manganese	26.7	ug/L			MS	1	ICPMS5	050706-5
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	062405W1-1
7439-98-7	Molybdenum	2	ug/L			MS	0.1	ICPMS5	050706-5
7440-02-0	Nickel	3.9	ug/L	J		P	1	OPTIMA2	062305-2
7440-09-7	Potassium	721	ug/L			P	50	OPTIMA2	062305-2
7782-49-2	Selenium	6	ug/L	U		P	6	OPTIMA2	062305-2
7631-86-9	Silica	60.3	mg/L			P	0.032	OPTIMA2	062305-2
7440-22-4	Silver	1	ug/L	U		P	1	OPTIMA2	062305-2
7440-23-5	Sodium	20800	ug/L			P	45	OPTIMA2	062305-2
7440-24-6	Strontium	211	ug/L			P	1	OPTIMA2	062305-2
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS5	050706-5
7440-31-5	Tin	12.5	ug/L	U		P	12.5	OPTIMA2	062405-3

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 138851 **METHOD TYPE:** SW846

SAMPLE ID: 138851004 **CLIENT ID:** GU05050GMC690

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 17–JUN–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440–62–2	Vanadium	1.2	ug/L	J		P	1	OPTIMA2	062305–2
7440–66–6	Zinc	87.1	ug/L			P	2	OPTIMA2	062305–2

Comments:

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	5048.3	ug/L	5000	ug/L	101	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Arsenic	511.4	ug/L	500	ug/L	102.3	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Barium	500.98	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Boron	504.21	ug/L	500	ug/L	100.8	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Calcium	5078.3	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Chromium	506.02	ug/L	500	ug/L	101.2	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Cobalt	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Copper	506.75	ug/L	500	ug/L	101.4	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Iron	5155.7	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Magnesium	5140.5	ug/L	5000	ug/L	102.8	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Nickel	509.61	ug/L	500	ug/L	101.9	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Potassium	2527.6	ug/L	2500	ug/L	101.1	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Selenium	2530	ug/L	2500	ug/L	101.2	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Silica	9898.9	ug/L	10700	ug/L	92.5	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Silver	249.48	ug/L	250	ug/L	99.8	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Sodium	2548.3	ug/L	2500	ug/L	101.9	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Strontium	514.01	ug/L	500	ug/L	102.8	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Tin	493.5	ug/L	500	ug/L	98.7	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Vanadium	500.2	ug/L	500	ug/L	100	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Zinc	488.61	ug/L	500	ug/L	97.7	90.0 – 110.0	P	23-JUN-05 16:54	062305-2
	Tin	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	24-JUN-05 09:53	062405-3
	Mercury	5.17	ug/L	5	ug/L	103.4	90.0 – 110.0	AV	24-JUN-05 10:32	062405W1-1
	Antimony	47.67	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	06-JUL-05 13:09	050706-5
	Beryllium	48.42	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	06-JUL-05 13:09	050706-5
	Cadmium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	06-JUL-05 13:09	050706-5
	Lead	49.04	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	06-JUL-05 13:09	050706-5
	Manganese	52.04	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	06-JUL-05 13:09	050706-5
	Molybdenum	47.56	ug/L	50	ug/L	95.1	90.0 – 110.0	MS	06-JUL-05 13:09	050706-5
	Thallium	48.36	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	06-JUL-05 13:09	050706-5
	Beryllium	45.31	ug/L	50	ug/L	90.6	90.0 – 110.0	MS	06-JUL-05 17:42	050706-4

METALS
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Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Aluminum	5007.8	ug/L	5000	ug/L	100.2	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Arsenic	504.22	ug/L	500	ug/L	100.8	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Barium	497.44	ug/L	500	ug/L	99.5	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Boron	492.73	ug/L	500	ug/L	98.6	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Calcium	4984.3	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Chromium	496.41	ug/L	500	ug/L	99.3	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Cobalt	498.24	ug/L	500	ug/L	99.7	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Copper	496.33	ug/L	500	ug/L	99.3	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Iron	5124.8	ug/L	5000	ug/L	102.5	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Magnesium	5157.8	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Nickel	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Potassium	5004.9	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Selenium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Silica	5158	ug/L	5350	ug/L	96.4	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Silver	495.57	ug/L	500	ug/L	99.1	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Sodium	9873.5	ug/L	10000	ug/L	98.7	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Strontium	500.58	ug/L	500	ug/L	100.1	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Tin	492.97	ug/L	500	ug/L	98.6	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Vanadium	501.44	ug/L	500	ug/L	100.3	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Zinc	494.17	ug/L	500	ug/L	98.8	90.0 – 110.0	P	23-JUN-05 17:24	062305-2
	Tin	496.91	ug/L	500	ug/L	99.4	90.0 – 110.0	P	24-JUN-05 10:22	062405-3
	Mercury	5.06	ug/L	5	ug/L	101.1	80.0 – 120.0	AV	24-JUN-05 10:38	062405W1-1
	Antimony	47.66	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	06-JUL-05 13:35	050706-5
	Beryllium	49.96	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	06-JUL-05 13:35	050706-5
	Cadmium	47.78	ug/L	50	ug/L	95.6	90.0 – 110.0	MS	06-JUL-05 13:35	050706-5
	Lead	48.52	ug/L	50	ug/L	97	90.0 – 110.0	MS	06-JUL-05 13:35	050706-5
	Manganese	52.38	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	06-JUL-05 13:35	050706-5
	Molybdenum	48	ug/L	50	ug/L	96	90.0 – 110.0	MS	06-JUL-05 13:35	050706-5
	Thallium	48.45	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	06-JUL-05 13:35	050706-5
	Beryllium	44.95	ug/L	50	ug/L	89.9	90.0 – 110.0	MS	06-JUL-05 17:55	050706-4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Aluminum	5016.2	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Arsenic	500.17	ug/L	500	ug/L	100	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Barium	494.83	ug/L	500	ug/L	99	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Boron	488.37	ug/L	500	ug/L	97.7	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Calcium	5000.5	ug/L	5000	ug/L	100	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Chromium	493.2	ug/L	500	ug/L	98.6	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Cobalt	494.97	ug/L	500	ug/L	99	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Copper	502.77	ug/L	500	ug/L	100.6	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Iron	5168.4	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Magnesium	5158.3	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Nickel	511.93	ug/L	500	ug/L	102.4	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Potassium	5036	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Selenium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Silica	5115.9	ug/L	5350	ug/L	95.6	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Silver	493.76	ug/L	500	ug/L	98.8	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Sodium	9957	ug/L	10000	ug/L	99.6	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Strontium	504.71	ug/L	500	ug/L	100.9	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Tin	489.34	ug/L	500	ug/L	97.9	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Vanadium	499.19	ug/L	500	ug/L	99.8	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Zinc	490.45	ug/L	500	ug/L	98.1	90.0 – 110.0	P	23–JUN–05 18:22	062305–2
	Mercury	5.01	ug/L	5	ug/L	100.1	80.0 – 120.0	AV	24–JUN–05 11:02	062405W1–1
	Tin	491.19	ug/L	500	ug/L	98.2	90.0 – 110.0	P	24–JUN–05 11:19	062405–3
	Antimony	47.89	ug/L	50	ug/L	95.8	90.0 – 110.0	MS	06–JUL–05 14:37	050706–5
	Beryllium	49.42	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	06–JUL–05 14:37	050706–5
	Cadmium	47.63	ug/L	50	ug/L	95.3	90.0 – 110.0	MS	06–JUL–05 14:37	050706–5
	Lead	49.27	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	06–JUL–05 14:37	050706–5
	Manganese	52.17	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	06–JUL–05 14:37	050706–5
	Molybdenum	47.94	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	06–JUL–05 14:37	050706–5
	Thallium	49.58	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	06–JUL–05 14:37	050706–5
	Beryllium	45.38	ug/L	50	ug/L	90.8	90.0 – 110.0	MS	06–JUL–05 18:15	050706–4

METALS
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Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Aluminum	4955.4	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Arsenic	501.67	ug/L	500	ug/L	100.3	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Barium	497.44	ug/L	500	ug/L	99.5	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Boron	493.35	ug/L	500	ug/L	98.7	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Calcium	4913.5	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Chromium	496.72	ug/L	500	ug/L	99.3	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Cobalt	497.75	ug/L	500	ug/L	99.6	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Copper	496.8	ug/L	500	ug/L	99.4	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Iron	5063.4	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Magnesium	5059.9	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Nickel	501.04	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Potassium	4981.9	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Selenium	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Silica	5154	ug/L	5350	ug/L	96.3	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Silver	498.03	ug/L	500	ug/L	99.6	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Sodium	9836.7	ug/L	10000	ug/L	98.4	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Strontium	499.25	ug/L	500	ug/L	99.9	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Tin	491.96	ug/L	500	ug/L	98.4	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Vanadium	502.68	ug/L	500	ug/L	100.5	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Zinc	495.99	ug/L	500	ug/L	99.2	90.0 – 110.0	P	23–JUN–05 18:41	062305–2
	Mercury	5.09	ug/L	5	ug/L	101.8	80.0 – 120.0	AV	24–JUN–05 11:26	062405W1–1
	Tin	498.33	ug/L	500	ug/L	99.7	90.0 – 110.0	P	24–JUN–05 12:36	062405–3
	Antimony	48.13	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	06–JUL–05 15:18	050706–5
	Beryllium	47.82	ug/L	50	ug/L	95.6	90.0 – 110.0	MS	06–JUL–05 15:18	050706–5
	Cadmium	48.06	ug/L	50	ug/L	96.1	90.0 – 110.0	MS	06–JUL–05 15:18	050706–5
	Lead	49.87	ug/L	50	ug/L	99.7	90.0 – 110.0	MS	06–JUL–05 15:18	050706–5
	Manganese	51.23	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	06–JUL–05 15:18	050706–5
	Molybdenum	48.54	ug/L	50	ug/L	97.1	90.0 – 110.0	MS	06–JUL–05 15:18	050706–5
	Thallium	49.99	ug/L	50	ug/L	100	90.0 – 110.0	MS	06–JUL–05 15:18	050706–5

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Aluminum	5042.1	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Arsenic	504.09	ug/L	500	ug/L	100.8	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Barium	501.3	ug/L	500	ug/L	100.3	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Boron	493.3	ug/L	500	ug/L	98.7	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Calcium	4969.3	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Chromium	500.95	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Cobalt	501.79	ug/L	500	ug/L	100.4	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Copper	512.26	ug/L	500	ug/L	102.5	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Iron	5135.5	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Magnesium	5099.9	ug/L	5000	ug/L	102	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Nickel	503.56	ug/L	500	ug/L	100.7	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Potassium	4997.3	ug/L	5000	ug/L	100	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Selenium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Silica	6150.9	ug/L	5350	ug/L	115	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Silver	501.12	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Sodium	9881.2	ug/L	10000	ug/L	98.8	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Strontium	502.43	ug/L	500	ug/L	100.5	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Tin	490.82	ug/L	500	ug/L	98.2	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Vanadium	506.13	ug/L	500	ug/L	101.2	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Zinc	496.08	ug/L	500	ug/L	99.2	90.0 – 110.0	P	23–JUN–05 19:45	062305–2
	Mercury	5.04	ug/L	5	ug/L	100.9	80.0 – 120.0	AV	24–JUN–05 11:50	062405W1–1
	Tin	497.82	ug/L	500	ug/L	99.6	90.0 – 110.0	P	24–JUN–05 13:08	062405–3
	Antimony	47.92	ug/L	50	ug/L	95.8	90.0 – 110.0	MS	06–JUL–05 15:55	050706–5
	Beryllium	49.41	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	06–JUL–05 15:55	050706–5
	Cadmium	48.35	ug/L	50	ug/L	96.7	90.0 – 110.0	MS	06–JUL–05 15:55	050706–5
	Lead	50.27	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	06–JUL–05 15:55	050706–5
	Manganese	50.44	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	06–JUL–05 15:55	050706–5
	Molybdenum	48.95	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	06–JUL–05 15:55	050706–5
	Thallium	50.17	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	06–JUL–05 15:55	050706–5

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Aluminum	4974.3	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Arsenic	503.11	ug/L	500	ug/L	100.6	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Barium	499.59	ug/L	500	ug/L	99.9	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Boron	493.79	ug/L	500	ug/L	98.8	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Calcium	4930.7	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Chromium	499.27	ug/L	500	ug/L	99.9	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Cobalt	499.61	ug/L	500	ug/L	99.9	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Copper	511.94	ug/L	500	ug/L	102.4	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Iron	5088.6	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Magnesium	5065.7	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Nickel	516.59	ug/L	500	ug/L	103.3	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Potassium	4940.1	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Selenium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Silica	5768	ug/L	5350	ug/L	107.8	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Silver	500.75	ug/L	500	ug/L	100.2	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Sodium	9752.7	ug/L	10000	ug/L	97.5	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Strontium	498.09	ug/L	500	ug/L	99.6	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Tin	491.56	ug/L	500	ug/L	98.3	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Vanadium	505.31	ug/L	500	ug/L	101.1	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Zinc	494.33	ug/L	500	ug/L	98.9	90.0 – 110.0	P	23-JUN-05 20:49	062305-2
	Mercury	4.99	ug/L	5	ug/L	99.8	80.0 – 120.0	AV	24-JUN-05 12:13	062405W1-1
	Tin	495.83	ug/L	500	ug/L	99.2	90.0 – 110.0	P	24-JUN-05 14:04	062405-3
	Antimony	47.19	ug/L	50	ug/L	94.4	90.0 – 110.0	MS	06-JUL-05 16:40	050706-5
	Beryllium	47.5	ug/L	50	ug/L	95	90.0 – 110.0	MS	06-JUL-05 16:40	050706-5
	Cadmium	47.95	ug/L	50	ug/L	95.9	90.0 – 110.0	MS	06-JUL-05 16:40	050706-5
	Lead	49.64	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	06-JUL-05 16:40	050706-5
	Manganese	49.73	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	06-JUL-05 16:40	050706-5
	Molybdenum	49.41	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	06-JUL-05 16:40	050706-5
	Thallium	49.92	ug/L	50	ug/L	99.8	90.0 – 110.0	MS	06-JUL-05 16:40	050706-5

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV06										
	Aluminum	4971	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Arsenic	502.05	ug/L	500	ug/L	100.4	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Barium	497.45	ug/L	500	ug/L	99.5	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Boron	491.14	ug/L	500	ug/L	98.2	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Calcium	4958.1	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Chromium	496.43	ug/L	500	ug/L	99.3	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Cobalt	497.69	ug/L	500	ug/L	99.5	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Copper	507.67	ug/L	500	ug/L	101.5	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Iron	5073.1	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Magnesium	5030.5	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Nickel	512.95	ug/L	500	ug/L	102.6	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Potassium	4924	ug/L	5000	ug/L	98.5	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Selenium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Silica	5570.9	ug/L	5350	ug/L	104.1	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Silver	497.02	ug/L	500	ug/L	99.4	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Sodium	9788.2	ug/L	10000	ug/L	97.9	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Strontium	499.67	ug/L	500	ug/L	99.9	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Tin	490.04	ug/L	500	ug/L	98	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Vanadium	501.93	ug/L	500	ug/L	100.4	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Zinc	493.54	ug/L	500	ug/L	98.7	90.0 – 110.0	P	23–JUN–05 21:39	062305–2
	Tin	495.72	ug/L	500	ug/L	99.1	90.0 – 110.0	P	24–JUN–05 14:55	062405–3
	Antimony	47.41	ug/L	50	ug/L	94.8	90.0 – 110.0	MS	06–JUL–05 17:22	050706–5
	Beryllium	43.83	ug/L	50	ug/L	87.7	90.0 – 110.0	MS	06–JUL–05 17:22	050706–5
	Cadmium	46.54	ug/L	50	ug/L	93.1	90.0 – 110.0	MS	06–JUL–05 17:22	050706–5
	Lead	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	06–JUL–05 17:22	050706–5
	Manganese	49.07	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	06–JUL–05 17:22	050706–5
	Molybdenum	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	06–JUL–05 17:22	050706–5
	Thallium	49.03	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	06–JUL–05 17:22	050706–5
CCV07										
	Aluminum	4932.2	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	23–JUN–05 22:43	062305–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	496.79	ug/L	500	ug/L	99.4	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Barium	491.65	ug/L	500	ug/L	98.3	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Boron	485.57	ug/L	500	ug/L	97.1	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Calcium	4916.4	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Chromium	491.03	ug/L	500	ug/L	98.2	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Cobalt	491.84	ug/L	500	ug/L	98.4	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Copper	503.59	ug/L	500	ug/L	100.7	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Iron	5044.4	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Magnesium	5026.4	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Nickel	507.58	ug/L	500	ug/L	101.5	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Potassium	4854.6	ug/L	5000	ug/L	97.1	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Selenium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Silica	5268.5	ug/L	5350	ug/L	98.5	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Silver	493.67	ug/L	500	ug/L	98.7	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Sodium	9780.8	ug/L	10000	ug/L	97.8	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Strontium	497.03	ug/L	500	ug/L	99.4	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Tin	485.8	ug/L	500	ug/L	97.2	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Vanadium	497.27	ug/L	500	ug/L	99.5	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Zinc	489.24	ug/L	500	ug/L	97.9	90.0 – 110.0	P	23–JUN–05 22:43	062305–2
	Tin	494.26	ug/L	500	ug/L	98.9	90.0 – 110.0	P	24–JUN–05 15:52	062405–3
CCV08										
	Aluminum	4898.7	ug/L	5000	ug/L	98	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Arsenic	494.61	ug/L	500	ug/L	98.9	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Barium	494.7	ug/L	500	ug/L	98.9	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Boron	489.29	ug/L	500	ug/L	97.9	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Calcium	4915.4	ug/L	5000	ug/L	98.3	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Chromium	495.67	ug/L	500	ug/L	99.1	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Cobalt	495.68	ug/L	500	ug/L	99.1	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Copper	506.88	ug/L	500	ug/L	101.4	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Iron	5057.7	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	23–JUN–05 23:39	062305–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Magnesium	5048.8	ug/L	5000	ug/L	101	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Nickel	507.69	ug/L	500	ug/L	101.5	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Potassium	4842.2	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Selenium	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Silica	5450.5	ug/L	5350	ug/L	101.9	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Silver	497.51	ug/L	500	ug/L	99.5	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Sodium	9783.9	ug/L	10000	ug/L	97.8	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Strontium	495.99	ug/L	500	ug/L	99.2	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Tin	485.2	ug/L	500	ug/L	97	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Vanadium	499.98	ug/L	500	ug/L	100	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Zinc	492.73	ug/L	500	ug/L	98.6	90.0 – 110.0	P	23–JUN–05 23:39	062305–2
	Tin	496.42	ug/L	500	ug/L	99.3	90.0 – 110.0	P	24–JUN–05 17:07	062405–3
CCV09										
	Aluminum	4918.6	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Arsenic	495.13	ug/L	500	ug/L	99	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Barium	493.57	ug/L	500	ug/L	98.7	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Boron	486.59	ug/L	500	ug/L	97.3	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Calcium	4885.2	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Chromium	492.89	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Cobalt	492.92	ug/L	500	ug/L	98.6	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Copper	494.08	ug/L	500	ug/L	98.8	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Iron	5027.4	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Magnesium	5015.4	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Nickel	506.27	ug/L	500	ug/L	101.3	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Potassium	4842.8	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Selenium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Silica	5566.4	ug/L	5350	ug/L	104	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Silver	495.8	ug/L	500	ug/L	99.2	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Sodium	9828.8	ug/L	10000	ug/L	98.3	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Strontium	497.61	ug/L	500	ug/L	99.5	90.0 – 110.0	P	24–JUN–05 00:22	062305–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Tin	484.09	ug/L	500	ug/L	96.8	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Vanadium	498.08	ug/L	500	ug/L	99.6	90.0 – 110.0	P	24–JUN–05 00:22	062305–2
	Zinc	490.23	ug/L	500	ug/L	98.1	90.0 – 110.0	P	24–JUN–05 00:22	062305–2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.183	ug/L	.2	ug/L	91.49	70.0 – 130.0	AV	24–JUN–05 10:36	062405W1–1
	Lead	2.06	ug/L	2	ug/L	103.15	70.0 – 130.0	MS	06–JUL–05 13:19	050706–5
	Manganese	5.48	ug/L	5	ug/L	109.62	70.0 – 130.0	MS	06–JUL–05 13:19	050706–5
	Antimony	1.75	ug/L	2	ug/L	87.55	70.0 – 130.0	MS	06–JUL–05 13:19	050706–5
	Molybdenum	.429	ug/L	.5	ug/L	85.8	70.0 – 130.0	MS	06–JUL–05 13:19	050706–5
	Cadmium	.962	ug/L	1	ug/L	96.2	70.0 – 130.0	MS	06–JUL–05 13:19	050706–5
	Beryllium	.48	ug/L	.5	ug/L	96	70.0 – 130.0	MS	06–JUL–05 13:19	050706–5
	Thallium	1.03	ug/L	1	ug/L	103.3	70.0 – 130.0	MS	06–JUL–05 13:19	050706–5
	Beryllium	.445	ug/L	.5	ug/L	89	70.0 – 130.0	MS	06–JUL–05 17:47	050706–4
PQL01										
	Silica	171.99	ug/L	213	ug/L	80.75	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Aluminum	192.77	ug/L	200	ug/L	96.39	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Iron	108.32	ug/L	100	ug/L	108.32	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Magnesium	326.31	ug/L	300	ug/L	108.77	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Nickel	5.11	ug/L	5	ug/L	102.24	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Potassium	130.5	ug/L	150	ug/L	87	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Silver	5.04	ug/L	5	ug/L	100.86	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Sodium	126.35	ug/L	150	ug/L	84.23	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Arsenic	15.37	ug/L	15	ug/L	102.45	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Barium	5.09	ug/L	5	ug/L	101.88	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Chromium	5.1	ug/L	5	ug/L	102.03	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Cobalt	5.39	ug/L	5	ug/L	107.76	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Copper	9.97	ug/L	10	ug/L	99.73	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Vanadium	4.6	ug/L	5	ug/L	92	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Zinc	7.83	ug/L	10	ug/L	78.35	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Calcium	99.88	ug/L	100	ug/L	99.88	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Selenium	15.1	ug/L	15	ug/L	100.67	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Boron	48.53	ug/L	50	ug/L	97.06	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Tin	12.63	ug/L	10	ug/L	126.26	70.0 – 130.0	P	23–JUN–05 17:07	062305–2
	Strontium	4.89	ug/L	5	ug/L	97.78	70.0 – 130.0	P	23–JUN–05 17:07	062305–2

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Tin	14.19	ug/L	10	ug/L	141.86	70.0 – 130.0	P	24-JUN-05 10:05	062405-3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
ICB01									
	Aluminum	68.0	+/–200	U	68.0	200	P	23–JUN–05 17:00	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 17:00	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:00	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 17:00	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 17:00	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:00	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:00	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 17:00	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 17:00	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 17:00	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:00	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 17:00	062305–2
	Selenium	7.06	+/–15	J	6.0	15.0	P	23–JUN–05 17:00	062305–2
	Silica	32.0	+/–213	U	32.0	213	P	23–JUN–05 17:00	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:00	062305–2
	Sodium	45.0	+/–150	U	45.0	150	P	23–JUN–05 17:00	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:00	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 17:00	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:00	062305–2
	Zinc	–2.68	+/–10	J	2.0	10.0	P	23–JUN–05 17:00	062305–2
	Tin	3.97	+/–10	J	2.5	10.0	P	24–JUN–05 09:59	062405–3
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	24–JUN–05 10:34	062405W1–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 13:14	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 13:14	050706–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	06–JUL–05 13:14	050706–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 13:14	050706–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	06–JUL–05 13:14	050706–5
	Molybdenum	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 13:14	050706–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	06–JUL–05 13:14	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 17:45	050706–4

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB01									
	Aluminum	68.0	+/–200	U	68.0	200	P	23–JUN–05 17:30	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 17:30	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:30	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 17:30	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 17:30	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:30	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:30	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 17:30	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 17:30	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 17:30	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:30	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 17:30	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 17:30	062305–2
	Silica	32.0	+/–213	U	32.0	213	P	23–JUN–05 17:30	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:30	062305–2
	Sodium	45.0	+/–150	U	45.0	150	P	23–JUN–05 17:30	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:30	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 17:30	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 17:30	062305–2
	Zinc	–2.58	+/–10	J	2.0	10.0	P	23–JUN–05 17:30	062305–2
	Tin	4.71	+/–10	J	2.5	10.0	P	24–JUN–05 10:28	062405–3
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	24–JUN–05 10:40	062405W1–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 13:40	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 13:40	050706–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	06–JUL–05 13:40	050706–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 13:40	050706–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	06–JUL–05 13:40	050706–5
	Molybdenum	0.18	+/–.5	J	0.1	0.5	MS	06–JUL–05 13:40	050706–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	06–JUL–05 13:40	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 17:57	050706–4

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB02									
	Aluminum	68.0	+/–200	U	68.0	200	P	23–JUN–05 18:28	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 18:28	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 18:28	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 18:28	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 18:28	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 18:28	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 18:28	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 18:28	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 18:28	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 18:28	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 18:28	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 18:28	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 18:28	062305–2
	Silica	32.0	+/–213	U	32.0	213	P	23–JUN–05 18:28	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 18:28	062305–2
	Sodium	45.0	+/–150	U	45.0	150	P	23–JUN–05 18:28	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 18:28	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 18:28	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 18:28	062305–2
	Zinc	–3.26	+/–10	J	2.0	10.0	P	23–JUN–05 18:28	062305–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	24–JUN–05 11:04	062405W1–1
	Tin	4.29	+/–10	J	2.5	10.0	P	24–JUN–05 11:26	062405–3
	Antimony	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 14:42	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 14:42	050706–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	06–JUL–05 14:42	050706–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 14:42	050706–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	06–JUL–05 14:42	050706–5
	Molybdenum	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 14:42	050706–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	06–JUL–05 14:42	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 18:18	050706–4

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB03									
	Aluminum	68.0	+/-200	U	68.0	200	P	23-JUN-05 18:47	062305-2
	Arsenic	6.0	+/-15	U	6.0	15.0	P	23-JUN-05 18:47	062305-2
	Barium	1.0	+/-5	U	1.0	5.0	P	23-JUN-05 18:47	062305-2
	Boron	10.0	+/-50	U	10.0	50.0	P	23-JUN-05 18:47	062305-2
	Calcium	36.0	+/-100	U	36.0	100	P	23-JUN-05 18:47	062305-2
	Chromium	1.0	+/-5	U	1.0	5.0	P	23-JUN-05 18:47	062305-2
	Cobalt	1.0	+/-5	U	1.0	5.0	P	23-JUN-05 18:47	062305-2
	Copper	3.0	+/-10	U	3.0	10.0	P	23-JUN-05 18:47	062305-2
	Iron	18.0	+/-100	U	18.0	100	P	23-JUN-05 18:47	062305-2
	Magnesium	85.0	+/-300	U	85.0	300	P	23-JUN-05 18:47	062305-2
	Nickel	1.0	+/-5	U	1.0	5.0	P	23-JUN-05 18:47	062305-2
	Potassium	50.0	+/-150	U	50.0	150	P	23-JUN-05 18:47	062305-2
	Selenium	6.0	+/-15	U	6.0	15.0	P	23-JUN-05 18:47	062305-2
	Silica	32.0	+/-213	U	32.0	213	P	23-JUN-05 18:47	062305-2
	Silver	1.0	+/-5	U	1.0	5.0	P	23-JUN-05 18:47	062305-2
	Sodium	45.0	+/-150	U	45.0	150	P	23-JUN-05 18:47	062305-2
	Strontium	1.0	+/-5	U	1.0	5.0	P	23-JUN-05 18:47	062305-2
	Tin	2.5	+/-10	U	2.5	10.0	P	23-JUN-05 18:47	062305-2
	Vanadium	1.0	+/-5	U	1.0	5.0	P	23-JUN-05 18:47	062305-2
	Zinc	-2.5	+/-10	J	2.0	10.0	P	23-JUN-05 18:47	062305-2
	Mercury	0.05	+/-.2	U	0.05	0.2	AV	24-JUN-05 11:28	062405W1-1
	Tin	2.88	+/-10	J	2.5	10.0	P	24-JUN-05 12:42	062405-3
	Antimony	0.5	+/-2	U	0.5	2.0	MS	06-JUL-05 15:24	050706-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	MS	06-JUL-05 15:24	050706-5
	Cadmium	0.1	+/-1	U	0.1	1.0	MS	06-JUL-05 15:24	050706-5
	Lead	0.5	+/-2	U	0.5	2.0	MS	06-JUL-05 15:24	050706-5
	Manganese	1.0	+/-5	U	1.0	5.0	MS	06-JUL-05 15:24	050706-5
	Molybdenum	0.1	+/-.5	U	0.1	0.5	MS	06-JUL-05 15:24	050706-5
	Thallium	0.4	+/-1	U	0.4	1.0	MS	06-JUL-05 15:24	050706-5
CCB04									
	Aluminum	68.0	+/-200	U	68.0	200	P	23-JUN-05 19:51	062305-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 19:51	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 19:51	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 19:51	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 19:51	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 19:51	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 19:51	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 19:51	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 19:51	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 19:51	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 19:51	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 19:51	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 19:51	062305–2
	Silica	320.46	+/–213		32.0	213	P	23–JUN–05 19:51	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 19:51	062305–2
	Sodium	–52.43	+/–150	J	45.0	150	P	23–JUN–05 19:51	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 19:51	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 19:51	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 19:51	062305–2
	Zinc	–3.13	+/–10	J	2.0	10.0	P	23–JUN–05 19:51	062305–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	24–JUN–05 11:52	062405W1–1
	Tin	4.88	+/–10	J	2.5	10.0	P	24–JUN–05 13:14	062405–3
	Antimony	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 16:00	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 16:00	050706–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	06–JUL–05 16:00	050706–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 16:00	050706–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	06–JUL–05 16:00	050706–5
	Molybdenum	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 16:00	050706–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	06–JUL–05 16:00	050706–5
CCB05									
	Aluminum	68.0	+/–200	U	68.0	200	P	23–JUN–05 20:55	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 20:55	062305–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 20:55	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 20:55	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 20:55	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 20:55	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 20:55	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 20:55	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 20:55	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 20:55	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 20:55	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 20:55	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 20:55	062305–2
	Silica	196.39	+/–213	J	32.0	213	P	23–JUN–05 20:55	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 20:55	062305–2
	Sodium	–60.7	+/–150	J	45.0	150	P	23–JUN–05 20:55	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 20:55	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 20:55	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 20:55	062305–2
	Zinc	–3.35	+/–10	J	2.0	10.0	P	23–JUN–05 20:55	062305–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	24–JUN–05 12:16	062405W1–1
	Tin	4.34	+/–10	J	2.5	10.0	P	24–JUN–05 14:10	062405–3
	Antimony	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 16:45	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 16:45	050706–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	06–JUL–05 16:45	050706–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 16:45	050706–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	06–JUL–05 16:45	050706–5
	Molybdenum	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 16:45	050706–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	06–JUL–05 16:45	050706–5
CCB06									
	Aluminum	68.0	+/–200	U	68.0	200	P	23–JUN–05 21:45	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 21:45	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 21:45	062305–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 21:45	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 21:45	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 21:45	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 21:45	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 21:45	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 21:45	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 21:45	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 21:45	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 21:45	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 21:45	062305–2
	Silica	60.61	+/–213	J	32.0	213	P	23–JUN–05 21:45	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 21:45	062305–2
	Sodium	–57.9	+/–150	J	45.0	150	P	23–JUN–05 21:45	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 21:45	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 21:45	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 21:45	062305–2
	Zinc	–3.22	+/–10	J	2.0	10.0	P	23–JUN–05 21:45	062305–2
	Tin	3.59	+/–10	J	2.5	10.0	P	24–JUN–05 15:02	062405–3
	Antimony	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 17:27	050706–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 17:27	050706–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	06–JUL–05 17:27	050706–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	06–JUL–05 17:27	050706–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	06–JUL–05 17:27	050706–5
	Molybdenum	0.1	+/–.5	U	0.1	0.5	MS	06–JUL–05 17:27	050706–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	06–JUL–05 17:27	050706–5
CCB07									
	Aluminum	68.0	+/–200	U	68.0	200	P	23–JUN–05 22:49	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 22:49	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 22:49	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 22:49	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 22:49	062305–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 22:49	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 22:49	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 22:49	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 22:49	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 22:49	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 22:49	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 22:49	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 22:49	062305–2
	Silica	32.0	+/–213	U	32.0	213	P	23–JUN–05 22:49	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 22:49	062305–2
	Sodium	45.0	+/–150	U	45.0	150	P	23–JUN–05 22:49	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 22:49	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 22:49	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 22:49	062305–2
	Zinc	–2.42	+/–10	J	2.0	10.0	P	23–JUN–05 22:49	062305–2
	Tin	3.05	+/–10	J	2.5	10.0	P	24–JUN–05 15:58	062405–3
CCB08									
	Aluminum	68.0	+/–200	U	68.0	200	P	23–JUN–05 23:45	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 23:45	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 23:45	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	23–JUN–05 23:45	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	23–JUN–05 23:45	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 23:45	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 23:45	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	23–JUN–05 23:45	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	23–JUN–05 23:45	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	23–JUN–05 23:45	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 23:45	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	23–JUN–05 23:45	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	23–JUN–05 23:45	062305–2
	Silica	59.45	+/–213	J	32.0	213	P	23–JUN–05 23:45	062305–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Silver	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 23:45	062305–2
	Sodium	45.0	+/–150	U	45.0	150	P	23–JUN–05 23:45	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 23:45	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	23–JUN–05 23:45	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	23–JUN–05 23:45	062305–2
	Zinc	–3.01	+/–10	J	2.0	10.0	P	23–JUN–05 23:45	062305–2
	Tin	3.63	+/–10	J	2.5	10.0	P	24–JUN–05 17:13	062405–3
CCB09									
	Aluminum	68.0	+/–200	U	68.0	200	P	24–JUN–05 00:29	062305–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	24–JUN–05 00:29	062305–2
	Barium	1.0	+/–5	U	1.0	5.0	P	24–JUN–05 00:29	062305–2
	Boron	10.0	+/–50	U	10.0	50.0	P	24–JUN–05 00:29	062305–2
	Calcium	36.0	+/–100	U	36.0	100	P	24–JUN–05 00:29	062305–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	24–JUN–05 00:29	062305–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	24–JUN–05 00:29	062305–2
	Copper	3.0	+/–10	U	3.0	10.0	P	24–JUN–05 00:29	062305–2
	Iron	18.0	+/–100	U	18.0	100	P	24–JUN–05 00:29	062305–2
	Magnesium	85.0	+/–300	U	85.0	300	P	24–JUN–05 00:29	062305–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	24–JUN–05 00:29	062305–2
	Potassium	50.0	+/–150	U	50.0	150	P	24–JUN–05 00:29	062305–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	24–JUN–05 00:29	062305–2
	Silica	61.75	+/–213	J	32.0	213	P	24–JUN–05 00:29	062305–2
	Silver	1.0	+/–5	U	1.0	5.0	P	24–JUN–05 00:29	062305–2
	Sodium	–45.85	+/–150	J	45.0	150	P	24–JUN–05 00:29	062305–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	24–JUN–05 00:29	062305–2
	Tin	2.5	+/–10	U	2.5	10.0	P	24–JUN–05 00:29	062305–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	24–JUN–05 00:29	062305–2
	Zinc	–3.71	+/–10	J	2.0	10.0	P	24–JUN–05 00:29	062305–2

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 138851

Contract: ESHL00701

Matrix: GROUND WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1200870309								
	Aluminum	68	ug/L	+/–200	U	P	68	200
	Arsenic	6	ug/L	+/–15.0	U	P	6	15
	Barium	1	ug/L	+/–5.0	U	P	1	5
	Boron	10	ug/L	+/–50.0	U	P	10	50
	Calcium	43.363	ug/L	+/–100	J	P	36	100
	Chromium	1	ug/L	+/–5.0	U	P	1	5
	Cobalt	1	ug/L	+/–5.0	U	P	1	5
	Copper	3	ug/L	+/–10.0	U	P	3	10
	Iron	19.505	ug/L	+/–100	J	P	18	100
	Magnesium	85	ug/L	+/–300	U	P	85	300
	Nickel	1	ug/L	+/–5.0	U	P	1	5
	Potassium	50	ug/L	+/–150	U	P	50	150
	Selenium	6	ug/L	+/–15.0	U	P	6	15
	Silica	0.032	mg/L	+/–0.213	U	P	0.032	0.213
	Silver	1	ug/L	+/–5.0	U	P	1	5
	Sodium	45	ug/L	+/–150	U	P	45	150
	Strontium	1	ug/L	+/–5.0	U	P	1	5
	Tin	2.5	ug/L	+/–10.0	U	P	2.5	10
	Vanadium	1	ug/L	+/–5.0	U	P	1	5
	Zinc	2	ug/L	+/–10.0	U	P	2	10
1200870402								
	Antimony	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Beryllium	0.1	ug/L	+/–0.5	U	MS	0.1	0.5
	Cadmium	0.1	ug/L	+/–1.0	U	MS	0.1	1
	Lead	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Manganese	1	ug/L	+/–5.0	U	MS	1	5
	Molybdenum	0.1	ug/L	+/–0.5	U	MS	0.1	0.5
	Thallium	0.4	ug/L	+/–1.0	U	MS	0.4	1
1200871461								
	Mercury	0.05	ug/L	+/–0.2	U	AV	0.05	0.2

METALS
–4–
Interference Check Sample

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	508620	ug/L	500000	ug/L	102	80.0 – 120.0	23–JUN–05 17:13	062305–2
	Arsenic	–14.18	ug/L					23–JUN–05 17:13	062305–2
	Barium	1.01	ug/L					23–JUN–05 17:13	062305–2
	Boron	8.12	ug/L					23–JUN–05 17:13	062305–2
	Calcium	476660	ug/L	500000	ug/L	95.3	80.0 – 120.0	23–JUN–05 17:13	062305–2
	Chromium	1.04	ug/L					23–JUN–05 17:13	062305–2
	Cobalt	–1.55	ug/L					23–JUN–05 17:13	062305–2
	Copper	–0.588	ug/L					23–JUN–05 17:13	062305–2
	Iron	187960	ug/L	200000	ug/L	94	80.0 – 120.0	23–JUN–05 17:13	062305–2
	Magnesium	501600	ug/L	500000	ug/L	100	80.0 – 120.0	23–JUN–05 17:13	062305–2
	Nickel	–4.68	ug/L					23–JUN–05 17:13	062305–2
	Potassium	4.81	ug/L					23–JUN–05 17:13	062305–2
	Selenium	–5.26	ug/L					23–JUN–05 17:13	062305–2
	Silica	44.57	ug/L					23–JUN–05 17:13	062305–2
	Silver	0.124	ug/L					23–JUN–05 17:13	062305–2
	Sodium	70.58	ug/L					23–JUN–05 17:13	062305–2
	Strontium	5.12	ug/L					23–JUN–05 17:13	062305–2
	Tin	4.1	ug/L					23–JUN–05 17:13	062305–2
	Vanadium	–1.34	ug/L					23–JUN–05 17:13	062305–2
	Zinc	3.84	ug/L					23–JUN–05 17:13	062305–2
ICSAB01									
	Aluminum	515760	ug/L	500000	ug/L	103	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Arsenic	487.75	ug/L	500	ug/L	97.6	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Barium	476.12	ug/L	500	ug/L	95.2	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Boron	526.95	ug/L	500	ug/L	105	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Calcium	482160	ug/L	500000	ug/L	96.4	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Chromium	484.97	ug/L	500	ug/L	97	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Cobalt	449.38	ug/L	500	ug/L	89.9	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Copper	530.31	ug/L	500	ug/L	106	80.0 – 120.0	23–JUN–05 17:18	062305–2

METALS
–4–
Interference Check Sample

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Iron	187280	ug/L	200000	ug/L	93.6	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Magnesium	501350	ug/L	500000	ug/L	100	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Nickel	433.49	ug/L	500	ug/L	86.7	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Potassium	5751.7	ug/L	5000	ug/L	115	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Selenium	2330	ug/L	2500	ug/L	93.2	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Silica	9684.4	ug/L	10700	ug/L	90.5	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Silver	253.42	ug/L	250	ug/L	101	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Sodium	5380.3	ug/L	5000	ug/L	108	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Strontium	516.85	ug/L	500	ug/L	103	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Tin	456	ug/L	500	ug/L	91.2	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Vanadium	502.66	ug/L	500	ug/L	101	80.0 – 120.0	23–JUN–05 17:18	062305–2
	Zinc	487.73	ug/L	500	ug/L	97.6	80.0 – 120.0	23–JUN–05 17:18	062305–2

METALS
–4–
Interference Check Sample

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Tin	3.1	ug/L					24–JUN–05 10:11	062405–3
ICSAB01									
	Tin	457.63	ug/L	500	ug/L	91.5	80.0 – 120.0	24–JUN–05 10:17	062405–3

METALS
–4–
Interference Check Sample

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.028	ug/L					06–JUL–05 17:50	050706–4
ICSAB01									
	Beryllium	18.89	ug/L	20	ug/L	94.4	80.0 – 120.0	06–JUL–05 17:52	050706–4

METALS
-4-
Interference Check Sample

SDG No: 138851

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.549	ug/L					06-JUL-05 13:25	050706-5
	Beryllium	0.023	ug/L					06-JUL-05 13:25	050706-5
	Cadmium	0.311	ug/L					06-JUL-05 13:25	050706-5
	Lead	0.372	ug/L					06-JUL-05 13:25	050706-5
	Manganese	3.08	ug/L					06-JUL-05 13:25	050706-5
	Molybdenum	1873.43	ug/L	2000	ug/L	93.7	80.0 – 120.0	06-JUL-05 13:25	050706-5
	Thallium	0.0	ug/L					06-JUL-05 13:25	050706-5
ICSAB01									
	Antimony	20.44	ug/L	22.3	ug/L	91.6	80.0 – 120.0	06-JUL-05 13:30	050706-5
	Beryllium	19.29	ug/L	20	ug/L	96.5	80.0 – 120.0	06-JUL-05 13:30	050706-5
	Cadmium	19.47	ug/L	20	ug/L	97.4	80.0 – 120.0	06-JUL-05 13:30	050706-5
	Lead	19.49	ug/L	20.8	ug/L	93.7	80.0 – 120.0	06-JUL-05 13:30	050706-5
	Manganese	23.0	ug/L	21.9	ug/L	105	80.0 – 120.0	06-JUL-05 13:30	050706-5
	Molybdenum	1856.69	ug/L	2000	ug/L	92.8	80.0 – 120.0	06-JUL-05 13:30	050706-5
	Thallium	19.4	ug/L	20	ug/L	97	80.0 – 120.0	06-JUL-05 13:30	050706-5

METALS
-5a-

Matrix Spike Summary

SDG NO. 138851 **Client ID** GF05050GMC601S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 138851001 **Spike ID:** 1200870312

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	4970		68	U	5000	99		P
Arsenic	ug/L	75–125	518		6	U	500	104		P
Barium	ug/L	75–125	527		32.8		500	98.7		P
Boron	ug/L	75–125	523		28.9	J	500	98.9		P
Calcium	ug/L		50300		46600		5000	73.8	N/A	P
Chromium	ug/L	75–125	536		51.2		500	96.9		P
Cobalt	ug/L	75–125	475		1	U	500	95		P
Copper	ug/L	75–125	512		7.64	J	500	101		P
Iron	ug/L	75–125	5040		18.2	J	5000	100		P
Magnesium	ug/L	75–125	14200		9380		5000	95.6		P
Nickel	ug/L	75–125	481		2.87	J	500	95.5		P
Potassium	ug/L	75–125	5770		728		5000	101		P
Selenium	ug/L	75–125	461		6	U	500	92.2		P
Silica	mg/L		60.1		60.6		10.7	–4.84	N/A	P
Silver	ug/L	75–125	498		1	U	500	99.6		P
Sodium	ug/L		25500		20900		5000	91.4	N/A	P
Strontium	ug/L	75–125	712		212		500	99.9		P
Tin	ug/L	75–125	465		12.5	U	500	92.9		P
Vanadium	ug/L	75–125	501		1.15	J	500	100		P
Zinc	ug/L	75–125	544		74.2		500	93.9		P

METALS
-5a-

Matrix Spike Summary

SDG NO. 138851 **Client ID** GU05050GMC601S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 138851003 **Spike ID:** 1200870315

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5070		68	U	5000	101		P
Arsenic	ug/L	75–125	527		6	U	500	105		P
Barium	ug/L	75–125	540		33.2		500	101		P
Boron	ug/L	75–125	542		26.5	J	500	103		P
Calcium	ug/L		50500		46300		5000	83.6	N/A	P
Chromium	ug/L	75–125	556		52.2		500	101		P
Cobalt	ug/L	75–125	488		1	U	500	97.6		P
Copper	ug/L	75–125	536		14.5		500	104		P
Iron	ug/L	75–125	5220		107		5000	102		P
Magnesium	ug/L	75–125	14300		9340		5000	99.5		P
Nickel	ug/L	75–125	485		2.97	J	500	96.4		P
Potassium	ug/L	75–125	5860		748		5000	102		P
Selenium	ug/L	75–125	474		6	U	500	94.1		P
Silica	mg/L		67.5		60.7		10.7	63.2	N/A	P
Silver	ug/L	75–125	511		1	U	500	102		P
Sodium	ug/L		25800		21000		5000	96.6	N/A	P
Strontium	ug/L	75–125	718		212		500	101		P
Tin	ug/L	75–125	489		12.5	U	500	97.8		P
Vanadium	ug/L	75–125	519		1.15	J	500	104		P
Zinc	ug/L	75–125	580		90.8		500	97.9		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 138851 **Client ID** GF05050GMC601S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 138851001 **Spike ID:** 1200870405

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	101		0.5	U	100	101		MS
Beryllium	ug/L	75–125	47.4		0.1	U	50	94.7		MS
Cadmium	ug/L	75–125	5.32		0.1	U	5	106		MS
Lead	ug/L	75–125	19.9		0.5	U	20	98.6		MS
Manganese	ug/L	75–125	68.4		25.1		50	86.6		MS
Molybdenum	ug/L	75–125	53.3		1.9		50	103		MS
Thallium	ug/L	75–125	47.5		0.4	U	50	94.3		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 138851 **Client ID** GU05050GMC601S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 138851003 **Spike ID:** 1200870408

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Manganese	ug/L	75–125	71.4		27		50	88.7		MS
Molybdenum	ug/L	75–125	53.7		1.93		50	103		MS
Thallium	ug/L	75–125	47		0.4	U	50	94		MS
Lead	ug/L	75–125	20.8		1.31	J	20	97.3		MS
Antimony	ug/L	75–125	102		0.5	U	100	101		MS
Beryllium	ug/L	75–125	46.9		0.1	U	50	93.8		MS
Cadmium	ug/L	75–125	5.34		0.1	U	5	107		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 138851 **Client ID** GF05050GMC601S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 138851001 **Spike ID:** 1200871464

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.1		0.05	U	2	105		AV

METALS
-5a-

Matrix Spike Summary

SDG NO. 138851 **Client ID** GU05050GMC601S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 138851003 **Spike ID:** 1200871466

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.11		0.05	U	2	105		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF05050GMC601D

Sample ID: 138851001 **Duplicate ID:** 1200870311 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/–20%	32.8		32.9		.335		P
Boron	ug/L	+/–50	28.9	J	26.3	J	9.45		P
Calcium	ug/L	+/–20%	46600		46500		.26		P
Chromium	ug/L	+/–20%	51.2		52.8		3.11		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L	+/–10	7.64	J	7.99	J	4.49		P
Iron	ug/L	+/–100	18.2	J	48.9	J	91.5		P
Magnesium	ug/L	+/–20%	9380		9300		.867		P
Nickel	ug/L	+/–5	2.87	J	3.39	J	16.4		P
Potassium	ug/L	+/–150	728		718		1.45		P
Selenium	ug/L		6	U	6	U			P
Silica	mg/L	+/–20%	60.6		60.7		.0725		P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–20%	20900		20700		.97		P
Strontium	ug/L	+/–20%	212		211		.69		P
Tin	ug/L		12.5	U	12.5	U			P
Vanadium	ug/L	+/–5	1.15	J	1.35	J	16.5		P
Zinc	ug/L	+/–20%	74.2		74.8		.861		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05050GMC601D

Sample ID: 138851003 **Duplicate ID:** 1200870314 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/–20%	33.2		33.1		.208		P
Boron	ug/L	+/–50	26.5	J	25.4	J	4.27		P
Calcium	ug/L	+/–20%	46300		46600		.508		P
Chromium	ug/L	+/–20%	52.2		52.2		.0115		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L	+/–10	14.5		14.1		2.67		P
Iron	ug/L	+/–100	107		100		7.02		P
Magnesium	ug/L	+/–20%	9340		9370		.324		P
Nickel	ug/L	+/–5	2.97	J	3.01	J	1.42		P
Potassium	ug/L	+/–150	748		733		1.98		P
Selenium	ug/L		6	U	6	U			P
Silica	mg/L	+/–20%	60.7		61		.501		P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–20%	21000		21100		.37		P
Strontium	ug/L	+/–20%	212		213		.423		P
Tin	ug/L		12.5	U	12.5	U			P
Vanadium	ug/L	+/–5	1.15	J	1.21	J	5.12		P
Zinc	ug/L	+/–20%	90.8		91.4		.754		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF05050GMC601D

Sample ID: 138851001 **Duplicate ID:** 1200870404 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.1	U	0.1	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Manganese	ug/L	+/–20%	25.1		25		.319		MS
Molybdenum	ug/L	+/–.5	1.9		1.88		1.06		MS
Thallium	ug/L		0.4	U	0.4	U			MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05050GMC601D

Sample ID: 138851003 **Duplicate ID:** 1200870407 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.1	U	0.1	U			MS
Lead	ug/L	+/–2	1.31	J	1.29	J	1.38		MS
Manganese	ug/L	+/–20%	27		26.8		1.08		MS
Molybdenum	ug/L	+/–.5	1.93		1.93		.0519		MS
Thallium	ug/L		0.4	U	0.4	U			MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF05050GMC601D

Sample ID: 138851001 **Duplicate ID:** 1200871463 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 138851

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05050GMC601D

Sample ID: 138851003 **Duplicate ID:** 1200871465 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 138851

Contract: ESHL00701

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200870310								
	Aluminum	ug/L	5000	5110		102	80–120	P
	Arsenic	ug/L	500	515		103	80–120	P
	Barium	ug/L	500	508		102	80–120	P
	Boron	ug/L	500	496		99.3	80–120	P
	Calcium	ug/L	5000	5190		104	80–120	P
	Chromium	ug/L	500	503		101	80–120	P
	Cobalt	ug/L	500	504		101	80–120	P
	Copper	ug/L	500	516		103	80–120	P
	Iron	ug/L	5000	5240		105	80–120	P
	Magnesium	ug/L	5000	5230		105	80–120	P
	Nickel	ug/L	500	512		102	80–120	P
	Potassium	ug/L	5000	5100		102	80–120	P
	Selenium	ug/L	500	482		96.4	80–120	P
	Silica	mg/L	10.7	10.2		95.1	80–120	P
	Silver	ug/L	500	504		101	80–120	P
	Sodium	ug/L	5000	5140		103	80–120	P
	Strontium	ug/L	500	514		103	80–120	P
	Tin	ug/L	500	503		101	80–120	P
	Vanadium	ug/L	500	506		101	80–120	P
	Zinc	ug/L	500	488		97.6	80–120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 138851

Contract: ESHL00701

Aqueous LCS Source: o2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200870403								
	Antimony	ug/L	50	51		102	80–120	MS
	Beryllium	ug/L	50	54.1		108	80–120	MS
	Cadmium	ug/L	50	49.1		98.2	80–120	MS
	Lead	ug/L	50	49.5		98.9	80–120	MS
	Manganese	ug/L	50	48.1		96.2	80–120	MS
	Molybdenum	ug/L	50	50.1		100	80–120	MS
	Thallium	ug/L	50	48.6		97.2	80–120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 138851

Contract: ESHL00701

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200871462								
	Mercury	ug/L	2	2.1		105	80-120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 138851 **Client ID** GF05050GMC601L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 138851001 **Serial Dilution ID:** 1200870313

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	6	U	30	U				P
Barium	32.8		32.1		2.13			P
Boron	28.9	J	50	U	100			P
Calcium	46600		44050		5.47		10	P
Chromium	51.2		49.8		2.73		10	P
Cobalt	1	U	5	U				P
Copper	7.64	J	15	U	100			P
Iron	18.2	J	90	U	100			P
Magnesium	9380		9300		.853		10	P
Nickel	2.87	J	5	U	100			P
Potassium	728		650	J	10.7			P
Selenium	6	U	30	U				P
Silica	60600		58500		3.47		10	P
Silver	1	U	5	U				P
Sodium	20900		19800		5.26		10	P
Strontium	212		202		4.72		10	P
Tin	2.5	U	12.5	U				P
Vanadium	1.15	J	5	U	100			P
Zinc	74.2		65.5		11.7			P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 138851 **Client ID** GU05050GMC601L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 138851003 **Serial Dilution ID:** 1200870316

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	6	U	30	U				P
Barium	33.2		34.9		5.12			P
Boron	26.5	J	50	U	100			P
Calcium	46300		46750		.972		10	P
Chromium	52.2		54		3.45		10	P
Cobalt	1	U	5	U				P
Copper	14.5		15	U	100			P
Iron	107		115.5	J	7.94			P
Magnesium	9340		9900		6		10	P
Nickel	2.97	J	5	U	100			P
Potassium	748		710	J	5.08			P
Selenium	6	U	30	U				P
Silica	60700		61500		1.32		10	P
Silver	1	U	5	U				P
Sodium	21000		21150		.714		10	P
Strontium	212		215		1.42		10	P
Tin	2.5	U	12.5	U				P
Vanadium	1.15	J	5	U	100			P
Zinc	90.8		88.5		2.53			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 138851 **Client ID** GF05050GMC601L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 138851001 **Serial Dilution ID:** 1200870406

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	.5	U	2.5	U				MS
Manganese	25.1		27.8		10.8			MS
Molybdenum	1.9		1.805	J	5			MS
Thallium	.4	U	2	U				MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 138851 **Client ID** GU05050GMC601L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 138851003 **Serial Dilution ID:** 1200870409

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	1.31	J	2.5	U	100			MS
Manganese	27		23.85	J	11.7			MS
Molybdenum	1.93		1.51	J	21.8			MS
Thallium	.4	U	2	U				MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 138851 **Client ID** GF05050GMC601L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 138851001 **Serial Dilution ID:** 1200871467

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 138851 **Client ID** GU05050GMC601L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 138851003 **Serial Dilution ID:** 1200871468

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 138851 **Method Type:** P

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	435150						
1200870309	MB for batch 435150	MB	GROUND WATER	23-JUN-05	50mL	50mL	
1200870310	LCS for batch 435150	LCS	GROUND WATER	23-JUN-05	50mL	50mL	
1200870312	GF05050GMC601S	MS	GROUND WATER	23-JUN-05	50mL	50mL	
1200870315	GU05050GMC601S	MS	GROUND WATER	23-JUN-05	50mL	50mL	
1200870311	GF05050GMC601D	DUP	GROUND WATER	23-JUN-05	50mL	50mL	
1200870314	GU05050GMC601D	DUP	GROUND WATER	23-JUN-05	50mL	50mL	
138851001	GF05050GMC601	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	
138851002	GF05050GMC690	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	
138851003	GU05050GMC601	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	
138851004	GU05050GMC690	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 138851 **Method Type:** MS

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	435188						
1200870402	MB for batch 435188	MB	GROUND WATER	23-JUN-05	50mL	50mL	
1200870403	LCS for batch 435188	LCS	GROUND WATER	23-JUN-05	50mL	50mL	
1200870405	GF05050GMC601S	MS	GROUND WATER	23-JUN-05	50mL	50mL	
1200870408	GU05050GMC601S	MS	GROUND WATER	23-JUN-05	50mL	50mL	
1200870404	GF05050GMC601D	DUP	GROUND WATER	23-JUN-05	50mL	50mL	
1200870407	GU05050GMC601D	DUP	GROUND WATER	23-JUN-05	50mL	50mL	
138851001	GF05050GMC601	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	
138851002	GF05050GMC690	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	
138851003	GU05050GMC601	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	
138851004	GU05050GMC690	SAMPLE	GROUND WATER	23-JUN-05	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 138851 **Method Type:** AV

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 435682							
1200871461	MB for batch 435682	MB	GROUND WATER	23-JUN-05	20mL	20mL	
1200871462	LCS for batch 435682	LCS	GROUND WATER	23-JUN-05	20mL	20mL	
1200871464	GF05050GMC601S	MS	GROUND WATER	23-JUN-05	20mL	20mL	
1200871466	GU05050GMC601S	MS	GROUND WATER	23-JUN-05	20mL	20mL	
1200871463	GF05050GMC601D	DUP	GROUND WATER	23-JUN-05	20mL	20mL	
1200871465	GU05050GMC601D	DUP	GROUND WATER	23-JUN-05	20mL	20mL	
138851001	GF05050GMC601	SAMPLE	GROUND WATER	23-JUN-05	20mL	20mL	
138851002	GF05050GMC690	SAMPLE	GROUND WATER	23-JUN-05	20mL	20mL	
138851003	GU05050GMC601	SAMPLE	GROUND WATER	23-JUN-05	20mL	20mL	
138851004	GU05050GMC690	SAMPLE	GROUND WATER	23-JUN-05	20mL	20mL	

Metals
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Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: OPTIMA2
Start Date: 23–JUN–05 **End Date:** 24–JUN–05

Client Sdg: 138851
Method P
Data File: 062305–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
S0	1	16:27	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
S0.1	1	16:33	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
S0.5	1	16:38	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
SCAL	1	16:45	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
S10	1	16:50	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ICV01	1	16:54	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ICB01	1	17:00	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
PQL01	1	17:07	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ICSA01	1	17:13	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ICSAB01	1	17:18	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCV01	1	17:24	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB01	1	17:30	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ZZZZZZ	1	17:38																												
ZZZZZZ	1	17:45																												
ZZZZZZ	1	17:51																												
ZZZZZZ	1	17:57																												
ZZZZZZ	1	18:03																												
ZZZZZZ	1	18:09																												
ZZZZZZ	1	18:16																												
CCV02	1	18:22	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB02	1	18:28	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ZZZZZZ	1	18:35																												
CCV03	1	18:41	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB03	1	18:47	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ZZZZZZ	1	18:53																												
ZZZZZZ	1	19:00																												
ZZZZZZ	1	19:06																												
ZZZZZZ	1	19:11																												
ZZZZZZ	1	19:17																												
ZZZZZZ	1	19:22																												
ZZZZZZ	1	19:28																												
ZZZZZZ	1	19:33																												
ZZZZZZ	1	19:39																												
CCV04	1	19:45	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB04	1	19:51	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ZZZZZZ	1	19:57																												
ZZZZZZ	1	20:03																												
ZZZZZZ	1	20:09																												
ZZZZZZ	1	20:15																												
ZZZZZZ	1	20:20																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																										
ZZZZZZ	1	20:26																										
ZZZZZZ	1	20:32																										
ZZZZZZ	5	20:37																										
ZZZZZZ	5	20:43																										
CCV05	1	20:49	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB05	1	20:55	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ZZZZZZ	1	21:02																										
ZZZZZZ	1	21:08																										
ZZZZZZ	1	21:14																										
ZZZZZZ	1	21:21																										
ZZZZZZ	1	21:26																										
ZZZZZZ	5	21:32																										
CCV06	1	21:39	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB06	1	21:45	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
ZZZZZZ	1	21:51																										
ZZZZZZ	1	21:57																										
ZZZZZZ	1	22:05																										
ZZZZZZ	1	22:11																										
ZZZZZZ	1	22:18																										
ZZZZZZ	1	22:24																										
ZZZZZZ	5	22:30																										
ZZZZZZ	1	22:36																										
CCV07	1	22:43	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB07	1	22:49	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
1200870309	1	22:55	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
1200870310	1	23:02	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
138851001	1	23:08	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
1200870311	1	23:14	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
1200870312	1	23:21	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
1200870313	5	23:26	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
138851002	1	23:32	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
CCV08	1	23:39	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB08	1	23:45	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
138851003	1	23:51	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
1200870314	1	23:58	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
1200870315	1	00:04	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
1200870316	5	00:10	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
138851004	1	00:16	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X			X	X
CCV09	1	00:22	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X
CCB09	1	00:29	X		X	X		X		X	X	X	X	X		X				X	X	X	X	X	X	X		X	X	X

Metals
-14-
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: OPTIMA2
Start Date: 24-JUN-05 **End Date:** 24-JUN-05

Client Sdg: 138851
Method P
Data File: 062405-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
S0	1	09:25																										X		
S0.1	1	09:32																										X		
S0.5	1	09:37																										X		
SCAL	1	09:43																										X		
S10	1	09:49																										X		
ICV01	1	09:53																										X		
ICB01	1	09:59																										X		
PQL01	1	10:05																										X		
ICSA01	1	10:11																										X		
ICSAB01	1	10:17																										X		
CCV01	1	10:22																										X		
CCB01	1	10:28																										X		
ZZZZZZ	1	10:46																												
ZZZZZZ	5	10:52																												
ZZZZZZ	1	11:01																												
ZZZZZZ	100	11:07																												
ZZZZZZ	200	11:13																												
CCV02	1	11:19																										X		
CCB02	1	11:26																										X		
ZZZZZZ	1	11:32																												
ZZZZZZ	1	11:38																												
ZZZZZZ	1	11:44																												
ZZZZZZ	1	11:51																												
ZZZZZZ	1	11:57																												
ZZZZZZ	1	12:04																												
ZZZZZZ	1	12:10																												
ZZZZZZ	1	12:17																												
ZZZZZZ	1	12:23																												
ZZZZZZ	5	12:29																												
CCV03	1	12:36																										X		
CCB03	1	12:42																										X		
ZZZZZZ	1	12:48																												
ZZZZZZ	1	12:55																												
ZZZZZZ	1	13:01																												
CCV04	1	13:08																										X		
CCB04	1	13:14																										X		
ZZZZZZ	10	13:28																												
ZZZZZZ	10	13:34																												
ZZZZZZ	10	13:40																												
ZZZZZZ	10	13:46																												

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
ZZZZZZ	50	13:52																												
ZZZZZZ	10	13:58																												
CCV05	1	14:04																									X			
CCB05	1	14:10																									X			
ZZZZZZ	1	14:18																												
ZZZZZZ	1	14:24																												
ZZZZZZ	1	14:30																												
ZZZZZZ	1	14:37																												
ZZZZZZ	1	14:43																												
ZZZZZZ	5	14:49																												
CCV06	1	14:55																									X			
CCB06	1	15:02																									X			
ZZZZZZ	1	15:08																												
ZZZZZZ	1	15:14																												
ZZZZZZ	1	15:20																												
ZZZZZZ	1	15:27																												
ZZZZZZ	1	15:33																												
ZZZZZZ	1	15:39																												
ZZZZZZ	1	15:45																												
CCV07	1	15:52																									X			
CCB07	1	15:58																									X			
138851001	5	16:04																									X			
1200870311	5	16:10																									X			
1200870312	5	16:17																									X			
1200870313	25	16:23																									X			
138851002	5	16:29																									X			
138851003	5	16:36																									X			
1200870314	5	16:42																									X			
1200870315	5	16:48																									X			
1200870316	25	16:54																									X			
138851004	5	17:01																									X			
CCV08	1	17:07																									X			
CCB08	1	17:13																									X			

Metals
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Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 06-JUL-05 **End Date:** 06-JUL-05

Client Sdg: 138851
Method MS
Data File: 050706-5

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
Blank	1	12:54:00		X			X		X						X		X		X								X			
Standard 1	1	12:59:00		X			X		X						X		X		X								X			
Standard 2	1	13:04:00		X			X		X						X		X		X								X			
ICV01	1	13:09:00		X			X		X						X		X		X								X			
ICB01	1	13:14:00		X			X		X						X		X		X								X			
CRDL01	1	13:19:00		X			X		X						X		X		X								X			
ICSA01	1	13:25:00		X			X		X						X		X		X								X			
ICSAB01	1	13:30:00		X			X		X						X		X		X								X			
CCV01	1	13:35:00		X			X		X						X		X		X								X			
CCB01	1	13:40:00		X			X		X						X		X		X								X			
ZZZZZZ	1	13:45:00																												
ZZZZZZ	1	13:50:00																												
ZZZZZZ	1	13:55:00																												
ZZZZZZ	1	14:01:00																												
ZZZZZZ	1	14:06:00																												
ZZZZZZ	5	14:11:00																												
ZZZZZZ	1	14:16:00																												
ZZZZZZ	1	14:21:00																												
ZZZZZZ	1	14:26:00																												
ZZZZZZ	5	14:32:00																												
CCV02	1	14:37:00		X			X		X						X		X		X								X			
CCB02	1	14:42:00		X			X		X						X		X		X								X			
ZZZZZZ	1	14:47:00																												
ZZZZZZ	1	14:53:00																												
ZZZZZZ	1	14:58:00																												
ZZZZZZ	1	15:03:00																												
ZZZZZZ	1	15:08:00																												
ZZZZZZ	5	15:13:00																												
CCV03	1	15:18:00		X			X		X						X		X		X								X			
CCB03	1	15:24:00		X			X		X						X		X		X								X			
ZZZZZZ	1	15:29:00																												
ZZZZZZ	1	15:34:00																												
ZZZZZZ	1	15:39:00																												
ZZZZZZ	5	15:44:00																												
ZZZZZZ	1	15:49:00																												
CCV04	1	15:55:00		X			X		X						X		X		X								X			
CCB04	1	16:00:00		X			X		X						X		X		X								X			
1200870402	1	16:09:00		X			X		X						X		X		X								X			
1200870403	1	16:14:00		X			X		X						X		X		X								X			
138851001	1	16:19:00		X			X		X						X		X		X								X			

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
1200870404	1	16:25:00		X			X		X						X		X		X							X				
1200870405	1	16:30:00		X			X		X						X		X		X							X				
1200870406	5	16:35:00		X			X		X						X		X		X							X				
CCV05	1	16:40:00		X			X		X						X		X		X							X				
CCB05	1	16:45:00		X			X		X						X		X		X							X				
138851002	1	16:51:00		X					X						X		X		X							X				
138851003	1	16:56:00		X					X						X		X		X							X				
1200870407	1	17:01:00		X					X						X		X		X							X				
1200870408	1	17:06:00		X					X						X		X		X							X				
1200870409	5	17:11:00		X					X						X		X		X							X				
138851004	1	17:17:00		X					X						X		X		X							X				
CCV06	1	17:22:00		X			X		X						X		X		X							X				
CCB06	1	17:27:00		X			X		X						X		X		X							X				

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 06–JUL–05 **End Date:** 06–JUL–05

Client Sdg: 138851
Method MS
Data File: 050706–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
Blank	1	17:34:00					X																							
Standard 1	1	17:37:00					X																							
Standard 2	1	17:39:00					X																							
ICV01	1	17:42:00					X																							
ICB01	1	17:45:00					X																							
CRDL01	1	17:47:00					X																							
ICSA01	1	17:50:00					X																							
ICSAB01	1	17:52:00					X																							
CCV01	1	17:55:00					X																							
CCB01	1	17:57:00					X																							
138851002	1	18:00:00					X																							
138851003	1	18:03:00					X																							
1200870407	1	18:05:00					X																							
1200870408	1	18:08:00					X																							
1200870409	5	18:10:00					X																							
138851004	1	18:13:00					X																							
CCV02	1	18:15:00					X																							
CCB02	1	18:18:00					X																							

Metals
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Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: MER536
Start Date: 24-JUN-05
End Date: 24-JUN-05
Client Sdg: 138851
Method AV
Data File: 062405W1-1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
SCalib Blank	1	10:20																X												
S0.2	1	10:22																X												
S0.5	1	10:24																X												
S2.0	1	10:26																X												
S5.0	1	10:28																X												
S10	1	10:30																X												
ICV01	1	10:32																X												
ICB01	1	10:34																X												
CRDL01	1	10:36																X												
CCV01	1	10:38																X												
CCB01	1	10:40																X												
ZZZZZZ	1	10:42																												
ZZZZZZ	1	10:44																												
ZZZZZZ	1	10:46																												
ZZZZZZ	1	10:48																												
ZZZZZZ	1	10:50																												
ZZZZZZ	5	10:52																												
ZZZZZZ	1	10:54																												
ZZZZZZ	1	10:56																												
ZZZZZZ	1	10:58																												
ZZZZZZ	5	11:00																												
CCV02	1	11:02																X												
CCB02	1	11:04																X												
ZZZZZZ	1	11:06																												
ZZZZZZ	1	11:08																												
ZZZZZZ	1	11:10																												
ZZZZZZ	1	11:12																												
ZZZZZZ	1	11:14																												
ZZZZZZ	5	11:16																												
ZZZZZZ	1	11:18																												
ZZZZZZ	1	11:20																												
ZZZZZZ	1	11:22																												
ZZZZZZ	1	11:24																												
CCV03	1	11:26																X												
CCB03	1	11:28																X												
ZZZZZZ	1	11:30																												
ZZZZZZ	1	11:32																												
ZZZZZZ	1	11:34																												
ZZZZZZ	5	11:36																												
ZZZZZZ	1	11:38																												

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																											
ZZZZZZ	1	11:40																											
ZZZZZZ	1	11:42																											
ZZZZZZ	1	11:44																											
1200871461	1	11:46															X												
1200871462	1	11:48															X												
CCV04	1	11:50															X												
CCB04	1	11:52															X												
138851001	1	11:54															X												
1200871463	1	11:56															X												
1200871464	1	11:58															X												
1200871467	5	12:00															X												
138851002	1	12:02															X												
138851003	1	12:04															X												
1200871465	1	12:06															X												
1200871468	5	12:08															X												
1200871466	1	12:10															X												
138851004	1	12:11															X												
CCV05	1	12:13															X												
CCB05	1	12:16															X												

Standards

METALS
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Instrument Detection Limits

SDG NO. 138851

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Aluminum	308.215	68.0	200
	Antimony	206.838	4.0	10
	Arsenic	193.696	6.0	15
	Barium	493.409	1.0	5
	Beryllium	313.042	1.0	5
	Boron	249.678	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	36.0	100
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.754	3.0	10
	Iron	259.94	18.0	100
	Lead	220.353	2.5	10
	Magnesium	279.078	85.0	300
	Manganese	257.61	2.0	10
	Molybdenum	202.03	2.0	10
	Nickel	231.604	1.0	5
	Potassium	766.491	50.0	150
	Selenium	196.026	6.0	15
	Silica		32.0	213
	Silver	328.068	1.0	5
	Sodium	588.995	45.0	150
	Strontium	421.552	1.0	5

METALS
-10-
Instrument Detection Limits

SDG NO. 138851

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
ICP	Thallium	190.864	5.0	20
	Tin	283.991	2.5	10
	Vanadium	292.402	1.0	5
	Zinc	213.856	2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 138851

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Aluminum		5.0	15
	Antimony		0.5	2
	Arsenic		1.5	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		20.0	100
	Chromium		1.0	3
	Cobalt		0.1	1
	Copper		0.2	1
	Iron		10.0	25
	Lead		0.5	2
	Magnesium		5.0	15
	Manganese		1.0	5
	Molybdenum		0.1	.5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Strontium		2.0	10
	Thallium		0.4	1

METALS
-10-
Instrument Detection Limits

SDG NO. 138851

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Tin		1.0	5
	Vanadium		2.0	30
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 138851

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY	Mercury		0.05	.2

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: OPTIMA2
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 138851
Effective Dates: 31-OCT-04,31-JAN-05

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02788	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00788	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-0.11381	-0.11530	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	-0.29437	0.00000	0.00000	0.00000
Phosphorous	214.914	-0.21788	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05565	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14330	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	-0.21119	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 138851
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31-OCT-04,31-JAN-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Calcium	Chromium	Cobalt
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	12.5725	0.00000
Arsenic	188.979	0.00000	0.00000	-0.00610	-10.0253	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	-0.13503	0.00000
Boron	249.677	0.00000	0.00000	0.00000	-3.57994	3.32232
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	-0.28465	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.13964	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	-0.15932
Iron	238.204	0.00000	0.00000	0.00000	0.00000	-12.0418
Lead	220.353	0.00000	0.00000	-0.00050	-0.32526	-0.75979
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	1.25498
Phosphorous	214.914	0.00000	-7.07130	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.03806	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	-0.00274	0.00000	0.33245
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.01452	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.34753	3.63617
Tin	189.927	0.00000	0.00000	-0.05621	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	-0.02110	0.27477	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	-2.30557	0.00000
Zinc	213.857	0.00000	0.00000	0.02982	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 138851

Contract: ESHL00701

Instrument: OPTIMA2 **Effective Dates:** 31-OCT-04,31-JAN-05

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Copper	Iron	Lead	Magnesium	Manganese
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	-0.11987	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.01181	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.13460	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.08993	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.01997	0.00000	0.00000	0.00000
Copper	324.752	0.00000	-0.03415	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.65243	0.01790	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.84343	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	-0.11793	0.00000	0.01200	0.00000
Molybdenum	202.031	0.00000	-0.03161	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	131.38	1.15709	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.01842	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.02692	0.00000	0.03209	0.00000
Silica	251.611	0.00000	-0.24167	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	-0.11584	0.00000	0.00000	0.00000
Silver	328.068	0.00000	-0.19832	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	-0.05179	0.00000	0.00000	-2.75621
Tin	189.927	0.00000	0.00000	0.00000	-0.01428	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.12457	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	-0.02556	0.00000	0.00000	0.00000
Zinc	213.857	1.97688	0.12881	0.00000	0.02624	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: OPTIMA2
GEL Job No: 138851
Effective Dates: 31-OCT-04,31-JAN-05

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Molybdenum	Nickel	Phosphorous	Potassium	Selenium
Aluminum	396.153	43.4438	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-6.65235	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	1.99823	0.00000	0.00000	0.00000	0.00000
Barium	233.527	-0.26656	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	-2.14824	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	-0.79197	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.23510	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	-1.48397	0.17229	0.00000	0.00000	0.00000
Copper	324.752	0.64433	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-1.48239	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	-32.6995	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-2.19782	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	8.95841	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.34727	0.00000	0.00000	0.00000	0.00000
Silica	251.611	28.9491	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	13.4583	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.15092	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	-8.02414	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.21035	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.04247	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-9.59083	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	-0.14560	5.72240	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 138851

Contract: ESHL00701

Instrument: OPTIMA2 **Effective Dates:** 31-OCT-04,31-JAN-05

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silica	Silicon	Silver	Strontium	Sulfur
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	-1.06421	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	19.1407	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: OPTIMA2
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 138851
Effective Dates: 31–OCT–04,31–JAN–05

Parmname	Wavelength	Thallium	Tin	Titanium	Uranium	Vanadium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	–3.55679	0.00000	–0.78780	–2.58355
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	–0.16423	–0.66126
Beryllium	313.107	0.00000	0.00000	0.00000	–0.18887	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	–0.22683	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	–5.57052	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.66386	–0.32132
Cobalt	228.616	0.00000	0.00000	2.14745	0.20189	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.76698	–0.25907
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	1.26434	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	6.18572	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.12465	–0.14849
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	–0.26514
Nickel	231.604	0.44153	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	–5.10353	0.00000	3.33008	–1.39563
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	–2.70128	0.52990
Silica	251.611	0.00000	8.53667	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	4.29884	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.21905	–2.45525
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	–6.24213	–0.54613	–0.43913
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.50502	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	–9.85543
Vanadium	292.402	0.00000	0.00000	0.68159	–1.06136	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	–0.12650

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 138851
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31–OCT–04,31–JAN–05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Zinc
Aluminum	396.153	0.00000
Antimony	206.836	0.00000
Arsenic	188.979	0.00000
Barium	233.527	0.00000
Beryllium	313.107	0.00000
Boron	249.677	0.00000
Cadmium	226.502	0.00000
Calcium	317.933	0.00000
Chromium	267.716	0.00000
Cobalt	228.616	0.00000
Copper	324.752	0.00000
Iron	238.204	0.00000
Lead	220.353	0.00000
Magnesium	279.077	0.00000
Manganese	257.61	0.00000
Molybdenum	202.031	0.00000
Nickel	231.604	0.00000
Phosphorous	214.914	0.00000
Potassium	766.49	0.00000
Selenium	196.026	0.00000
Silica	251.611	0.00000
Silicon	251.611	0.00000
Silver	328.068	0.00000
Strontium	421.552	0.00000
Sulfur	181.975	0.00000
Thallium	190.801	0.00000
Tin	189.927	0.00000
Titanium	334.94	0.00000
Uranium	409.014	0.00000
Vanadium	292.402	0.00000
Zinc	213.857	0.00000

METALS
–12–
Linear Ranges

SDG NO. 138851

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID OPTIMA2

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		1000000	ug/L	01–MAY–05
Antimony		50000	ug/L	01–MAY–05
Arsenic		50000	ug/L	01–MAY–05
Barium		25000	ug/L	01–MAY–05
Beryllium		10000	ug/L	01–MAY–05
Boron		50000	ug/L	01–MAY–05
Cadmium		25000	ug/L	01–MAY–05
Calcium		1000000	ug/L	01–MAY–05
Chromium		50000	ug/L	01–MAY–05
Cobalt		50000	ug/L	01–MAY–05
Copper		25000	ug/L	01–MAY–05
Iron		500000	ug/L	01–MAY–05
Lead		50000	ug/L	01–MAY–05
Magnesium		1000000	ug/L	01–MAY–05
Manganese		10000	ug/L	01–MAY–05
Molybdenum		50000	ug/L	01–MAY–05
Nickel		50000	ug/L	01–MAY–05
Potassium		500000	ug/L	01–MAY–05
Selenium		50000	ug/L	01–MAY–05
Silica		107000	ug/L	01–MAY–05
Silver		5000	ug/L	01–MAY–05
Sodium		500000	ug/L	01–MAY–05
Strontium		10000	ug/L	01–MAY–05
Thallium		50000	ug/L	01–MAY–05
Tin		50000	ug/L	01–MAY–05
Vanadium		50000	ug/L	01–MAY–05
Zinc		10000	ug/L	01–MAY–05

METALS
–12–
Linear Ranges

SDG NO. 138851

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		200000	ug/L	01–MAY–05
Antimony		2500	ug/L	01–MAY–05
Arsenic		5000	ug/L	01–MAY–05
Barium		10000	ug/L	01–MAY–05
Beryllium		5000	ug/L	01–MAY–05
Boron		1000	ug/L	01–MAY–05
Cadmium		10000	ug/L	01–MAY–05
Calcium		200000	ug/L	01–MAY–05
Chromium		10000	ug/L	01–MAY–05
Cobalt		10000	ug/L	01–MAY–05
Copper		10000	ug/L	01–MAY–05
Iron		200000	ug/L	01–MAY–05
Lead		10000	ug/L	01–MAY–05
Magnesium		200000	ug/L	01–MAY–05
Manganese		10000	ug/L	01–MAY–05
Molybdenum		5000	ug/L	01–MAY–05
Nickel		10000	ug/L	01–MAY–05
Potassium		200000	ug/L	01–MAY–05
Selenium		2500	ug/L	01–MAY–05
Silver		100	ug/L	01–MAY–05
Sodium		100000	ug/L	01–MAY–05
Strontium		10000	ug/L	01–MAY–05
Thallium		10000	ug/L	01–MAY–05
Tin		5000	ug/L	01–MAY–05
Vanadium		10000	ug/L	01–MAY–05
Zinc		5000	ug/L	01–MAY–05

Raw Data

Reprocessing Begun
Logged In Analyst: Administrator Technique: ICP Continuous

Results Data Set (original): 062305
Results Library (original): C:\pe\Results\Results.mdb
Results Data Set (reprocessed):
Results Library (reprocessed):

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 6/23/2005 16:27:22
Analyst: Data Type: Reprocessed on 6/24/2005 07:38:20
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1079026.0	1079026.0	100.26	%	16:30:07
1	Sc RADIAL	39746.2	39746.2	100	%	16:28:49
1	Y 371.029	592739.6	592739.6	100.27	%	16:30:07
1	Ag 328.068†	-582.4	-580.8	[0.00]	µg/L	16:30:12
1	Al 396.153Radial†	97.5	97.3	[0.00]	µg/L	16:28:49
1	As 188.979†	-30.8	-30.7	[0.00]	µg/L	16:30:33
1	B 249.677†	224.1	223.5	[0.00]	µg/L	16:30:33
1	Ba 233.527†	-139.4	-139.1	[0.00]	µg/L	16:30:33
1	Be 313.107†	222.5	222.0	[0.00]	µg/L	16:30:12
1	Ca 317.933Radial†	166.3	165.9	[0.00]	µg/L	16:29:09
1	Cd 226.502†	-17.3	-17.3	[0.00]	µg/L	16:30:33
1	Co 228.616†	-150.9	-150.5	[0.00]	µg/L	16:30:33
1	Cr 267.716†	70.8	70.6	[0.00]	µg/L	16:30:33
1	Cu 324.752†	5022.9	5009.7	[0.00]	µg/L	16:30:12
1	Fe 238.204 Radial†	43.0	42.9	[0.00]	µg/L	16:29:09
1	K 766.490 Radial†	1106.7	1104.0	[0.00]	µg/L	16:28:49
1	Mg 279.077 IEC†	7.7	7.7	[0.00]	µg/L	16:29:09
1	Mn 257.610†	422.6	421.5	[0.00]	µg/L	16:30:33
1	Mo 202.031†	-1.2	-1.2	[0.00]	µg/L	16:30:33
1	Na 589.592 Radial†	988.6	986.2	[0.00]	µg/L	16:28:49
1	Ni 231.604†	184.7	184.3	[0.00]	µg/L	16:30:33
1	P 214.914†	184.6	184.1	[0.00]	µg/L	16:30:33
1	Pb 220.353†	-11.1	-11.1	[0.00]	µg/L	16:30:33
1	S 181.975 Axial†	40.9	40.8	[0.00]	µg/L	16:30:33
1	Sb 206.836†	29.7	29.7	[0.00]	µg/L	16:30:33
1	Se 196.026†	-26.3	-26.2	[0.00]	µg/L	16:30:33
1	SiO2 †	1424.6	1420.8	[0.00]	µg/L	16:30:12
1	Si 251.611†	1361.7	1358.1	[0.00]	µg/L	16:31:40
1	Sn 189.927†	-6.5	-6.5	[0.00]	µg/L	16:30:33
1	Sr 421.552†	-56.9	-56.8	[0.00]	µg/L	16:28:49
1	Ti 334.940†	376.4	375.4	[0.00]	µg/L	16:30:12
1	Tl 190.801†	-30.4	-30.3	[0.00]	µg/L	16:30:33
1	U 409.014†	372.9	372.0	[0.00]	µg/L	16:30:12
1	V 292.402†	-97.6	-97.3	[0.00]	µg/L	16:30:12
1	Zn 213.857†	586.3	584.8	[0.00]	µg/L	16:30:33
2	Sc 361.383	1077623.4	1077623.4	100.13	%	16:30:38
2	Sc RADIAL	40017.3	40017.3	101	%	16:29:14
2	Y 371.029	591710.1	591710.1	100.10	%	16:30:38
2	Ag 328.068†	-639.0	-638.2	[0.00]	µg/L	16:30:43
2	Al 396.153Radial†	102.4	101.4	[0.00]	µg/L	16:29:14
2	As 188.979†	-28.8	-28.7	[0.00]	µg/L	16:31:03
2	B 249.677†	224.9	224.6	[0.00]	µg/L	16:31:03
2	Ba 233.527†	-139.4	-139.2	[0.00]	µg/L	16:31:03
2	Be 313.107†	299.0	298.6	[0.00]	µg/L	16:30:43
2	Ca 317.933Radial†	166.2	164.7	[0.00]	µg/L	16:29:34
2	Cd 226.502†	-28.5	-28.4	[0.00]	µg/L	16:31:03
2	Co 228.616†	-144.9	-144.7	[0.00]	µg/L	16:31:03
2	Cr 267.716†	76.7	76.6	[0.00]	µg/L	16:31:03
2	Cu 324.752†	5073.1	5066.4	[0.00]	µg/L	16:30:43
2	Fe 238.204 Radial†	45.0	44.6	[0.00]	µg/L	16:29:34

2	K 766.490 Radial†	1160.7	1150.0	[0.00] µg/L	16:29:14
2	Mg 279.077 IEC†	-4.3	-4.2	[0.00] µg/L	16:29:34
2	Mn 257.610†	371.7	371.2	[0.00] µg/L	16:31:03
2	Mo 202.031†	1.5	1.5	[0.00] µg/L	16:31:03
2	Na 589.592 Radial†	1028.7	1019.3	[0.00] µg/L	16:29:14
2	Ni 231.604†	172.6	172.3	[0.00] µg/L	16:31:03
2	P 214.914†	176.3	176.0	[0.00] µg/L	16:31:03
2	Pb 220.353†	-11.7	-11.7	[0.00] µg/L	16:31:03
2	S 181.975 Axial†	39.4	39.3	[0.00] µg/L	16:31:03
2	Sb 206.836†	42.0	42.0	[0.00] µg/L	16:31:03
2	Se 196.026†	-36.3	-36.3	[0.00] µg/L	16:31:03
2	SiO2 †	1970.8	1968.2	[0.00] µg/L	16:30:43
2	Si 251.611†	1416.5	1414.6	[0.00] µg/L	16:31:45
2	Sn 189.927†	-9.8	-9.8	[0.00] µg/L	16:31:03
2	Sr 421.552†	-14.0	-13.8	[0.00] µg/L	16:29:14
2	Ti 334.940†	567.2	566.5	[0.00] µg/L	16:30:43
2	Tl 190.801†	-37.9	-37.8	[0.00] µg/L	16:31:03
2	U 409.014†	298.7	298.4	[0.00] µg/L	16:30:43
2	V 292.402†	-82.7	-82.6	[0.00] µg/L	16:30:43
2	Zn 213.857†	574.7	574.0	[0.00] µg/L	16:31:03
3	Sc 361.383	1071959.7	1071959.7	99.606 %	16:31:09
3	Sc RADIAL	39184.6	39184.6	98.8 %	16:29:39
3	Y 371.029	588969.9	588969.9	99.633 %	16:31:09
3	Ag 328.068†	-650.6	-653.2	[0.00] µg/L	16:31:14
3	Al 396.153Radial†	115.9	117.3	[0.00] µg/L	16:29:39
3	As 188.979†	-24.5	-24.6	[0.00] µg/L	16:31:34
3	B 249.677†	228.0	228.9	[0.00] µg/L	16:31:34
3	Ba 233.527†	-125.9	-126.4	[0.00] µg/L	16:31:34
3	Be 313.107†	261.3	262.3	[0.00] µg/L	16:31:14
3	Ca 317.933Radial†	163.7	165.6	[0.00] µg/L	16:29:59
3	Cd 226.502†	-26.0	-26.1	[0.00] µg/L	16:31:34
3	Co 228.616†	-139.5	-140.0	[0.00] µg/L	16:31:34
3	Cr 267.716†	66.1	66.3	[0.00] µg/L	16:31:34
3	Cu 324.752†	4977.4	4997.1	[0.00] µg/L	16:31:14
3	Fe 238.204 Radial†	42.9	43.4	[0.00] µg/L	16:29:59
3	K 766.490 Radial†	1109.6	1122.8	[0.00] µg/L	16:29:39
3	Mg 279.077 IEC†	7.4	7.5	[0.00] µg/L	16:29:59
3	Mn 257.610†	403.6	405.2	[0.00] µg/L	16:31:34
3	Mo 202.031†	-0.7	-0.7	[0.00] µg/L	16:31:34
3	Na 589.592 Radial†	1009.5	1021.5	[0.00] µg/L	16:29:39
3	Ni 231.604†	177.7	178.4	[0.00] µg/L	16:31:34
3	P 214.914†	185.3	186.1	[0.00] µg/L	16:31:34
3	Pb 220.353†	-15.6	-15.6	[0.00] µg/L	16:31:34
3	S 181.975 Axial†	41.6	41.7	[0.00] µg/L	16:31:34
3	Sb 206.836†	32.6	32.7	[0.00] µg/L	16:31:34
3	Se 196.026†	-34.5	-34.6	[0.00] µg/L	16:31:34
3	SiO2 †	1380.7	1386.2	[0.00] µg/L	16:31:14
3	Si 251.611†	1382.5	1388.0	[0.00] µg/L	16:31:50
3	Sn 189.927†	0.1	0.1	[0.00] µg/L	16:31:34
3	Sr 421.552†	-16.5	-16.7	[0.00] µg/L	16:29:39
3	Ti 334.940†	409.1	410.7	[0.00] µg/L	16:31:14
3	Tl 190.801†	-41.3	-41.4	[0.00] µg/L	16:31:34
3	U 409.014†	341.0	342.4	[0.00] µg/L	16:31:14
3	V 292.402†	-89.7	-90.0	[0.00] µg/L	16:31:14
3	Zn 213.857†	556.6	558.8	[0.00] µg/L	16:31:34

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1076203.1	3741.12	0.35%	100.000	%
Sc RADIAL	39649.3	424.68	1.07%	100	%
Y 371.029	591139.9	1948.49	0.33%	100.00	%
Ag 328.068†	-624.1	38.18	6.12%	[0.00]	µg/L
Al 396.153Radial†	105.3	10.56	10.03%	[0.00]	µg/L
As 188.979†	-28.0	3.12	11.13%	[0.00]	µg/L
B 249.677†	225.7	2.83	1.26%	[0.00]	µg/L
Ba 233.527†	-134.9	7.35	5.45%	[0.00]	µg/L
Be 313.107†	261.0	38.35	14.69%	[0.00]	µg/L
Ca 317.933Radial†	165.4	0.66	0.40%	[0.00]	µg/L
Cd 226.502†	-23.9	5.90	24.64%	[0.00]	µg/L

Co 228.616†	-145.1	5.27	3.63%	[0.00] µg/L
Cr 267.716†	71.2	5.17	7.26%	[0.00] µg/L
Cu 324.752†	5024.4	36.91	0.73%	[0.00] µg/L
Fe 238.204 Radial†	43.6	0.89	2.03%	[0.00] µg/L
K 766.490 Radial†	1125.6	23.13	2.05%	[0.00] µg/L
Mg 279.077 IEC†	3.6	6.81	186.72%	[0.00] µg/L
Mn 257.610†	399.3	25.68	6.43%	[0.00] µg/L
Mo 202.031†	-0.2	1.42	875.35%	[0.00] µg/L
Na 589.592 Radial†	1009.0	19.79	1.96%	[0.00] µg/L
Ni 231.604†	178.3	5.96	3.34%	[0.00] µg/L
P 214.914†	182.1	5.31	2.92%	[0.00] µg/L
Pb 220.353†	-12.8	2.47	19.32%	[0.00] µg/L
S 181.975 Axial†	40.6	1.22	3.01%	[0.00] µg/L
Sb 206.836†	34.8	6.41	18.43%	[0.00] µg/L
Se 196.026†	-32.4	5.39	16.65%	[0.00] µg/L
SiO2 †	1591.8	326.50	20.51%	[0.00] µg/L
Si 251.611†	1386.9	28.26	2.04%	[0.00] µg/L
Sn 189.927†	-5.4	5.02	92.84%	[0.00] µg/L
Sr 421.552†	-29.1	24.01	82.46%	[0.00] µg/L
Ti 334.940†	450.9	101.67	22.55%	[0.00] µg/L
Tl 190.801†	-36.5	5.67	15.53%	[0.00] µg/L
U 409.014†	337.6	37.04	10.97%	[0.00] µg/L
V 292.402†	-90.0	7.35	8.16%	[0.00] µg/L
Zn 213.857†	572.5	13.05	2.28%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 6/23/2005 16:33:39
Data Type: Reprocessed on 6/24/2005 07:38:22
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1081347.4	1081347.4	100.48	%	16:35:21
1	Sc RADIAL	39166.6	39166.6	98.8	%	16:35:03
1	Y 371.029	592432.8	592432.8	100.22	%	16:35:21
1	Ag 328.068†	13365.3	13925.8	[100]	µg/L	16:35:27
1	As 188.979†	175.2	202.4	[100]	µg/L	16:35:47
1	B 249.677†	1719.7	1485.8	[100]	µg/L	16:35:27
1	Ba 233.527†	9548.0	9637.5	[100]	µg/L	16:35:27
1	Be 313.107†	147094.3	146133.6	[100]	µg/L	16:35:21
1	Cd 226.502†	2865.4	2875.7	[100]	µg/L	16:35:47
1	Co 228.616†	3267.4	3397.0	[100]	µg/L	16:35:47
1	Cr 267.716†	3767.0	3677.8	[100]	µg/L	16:35:27
1	Cu 324.752†	31603.9	26429.1	[100]	µg/L	16:35:27
1	K 766.490 Radial†	3453.9	2370.9	[1000]	µg/L	16:35:03
1	Mn 257.610†	58827.6	58148.5	[100]	µg/L	16:35:27
1	Mo 202.031†	791.3	787.7	[100]	µg/L	16:35:47
1	Ni 231.604†	1810.0	1623.1	[100]	µg/L	16:35:47
1	P 214.914†	795.5	609.6	[500]	µg/L	16:35:47
1	Pb 220.353†	386.3	397.2	[100]	µg/L	16:35:47
1	S 181.975 Axial†	126.0	84.8	[200]	µg/L	16:35:47
1	Sb 206.836†	239.6	203.7	[100]	µg/L	16:35:47
1	Se 196.026†	87.8	119.8	[100]	µg/L	16:35:47
1	SiO2 †	16347.3	14677.8	[1069.5]	µg/L	16:35:27
1	Si 251.611†	15890.4	14427.9	[500]	µg/L	16:36:55
1	Sn 189.927†	390.9	394.5	[100]	µg/L	16:35:47
1	Sr 421.552†	22722.0	23031.2	[100]	µg/L	16:35:03
1	Ti 334.940†	76356.4	75542.3	[100]	µg/L	16:35:21
1	Tl 190.801†	226.3	261.7	[100]	µg/L	16:35:47
1	U 409.014†	1968.0	1621.1	[100]	µg/L	16:35:27
1	V 292.402†	6696.3	6754.4	[100]	µg/L	16:35:27
1	Zn 213.857†	4852.9	4257.3	[100]	µg/L	16:35:27
2	Sc 361.383	1074350.1	1074350.1	99.828	%	16:35:52
2	Sc RADIAL	40013.7	40013.7	101	%	16:35:08
2	Y 371.029	588903.5	588903.5	99.622	%	16:35:52
2	Ag 328.068†	13375.9	14023.0	[100]	µg/L	16:35:58
2	As 188.979†	178.8	207.1	[100]	µg/L	16:36:18
2	B 249.677†	1693.9	1471.1	[100]	µg/L	16:35:58
2	Ba 233.527†	9468.1	9619.3	[100]	µg/L	16:35:58
2	Be 313.107†	146064.7	146055.6	[100]	µg/L	16:35:52
2	Cd 226.502†	2862.2	2891.1	[100]	µg/L	16:36:18
2	Co 228.616†	3282.7	3433.4	[100]	µg/L	16:36:18
2	Cr 267.716†	3729.0	3664.3	[100]	µg/L	16:35:58
2	Cu 324.752†	31458.1	26487.9	[100]	µg/L	16:35:58
2	K 766.490 Radial†	3492.8	2335.4	[1000]	µg/L	16:35:08
2	Mn 257.610†	58637.6	58339.5	[100]	µg/L	16:35:58
2	Mo 202.031†	797.4	799.0	[100]	µg/L	16:36:18
2	Ni 231.604†	1806.1	1630.9	[100]	µg/L	16:36:18
2	P 214.914†	794.6	613.9	[500]	µg/L	16:36:18
2	Pb 220.353†	383.9	397.4	[100]	µg/L	16:36:18
2	S 181.975 Axial†	124.0	83.6	[200]	µg/L	16:36:18
2	Sb 206.836†	238.9	204.5	[100]	µg/L	16:36:18
2	Se 196.026†	91.9	124.4	[100]	µg/L	16:36:18
2	SiO2 †	16204.2	14640.3	[1069.5]	µg/L	16:35:58
2	Si 251.611†	15749.5	14389.7	[500]	µg/L	16:37:00
2	Sn 189.927†	391.6	397.7	[100]	µg/L	16:36:18
2	Sr 421.552†	23233.8	23051.3	[100]	µg/L	16:35:08
2	Ti 334.940†	75847.3	75527.2	[100]	µg/L	16:35:52
2	Tl 190.801†	224.8	261.7	[100]	µg/L	16:36:18
2	U 409.014†	1934.9	1600.7	[100]	µg/L	16:35:58
2	V 292.402†	6723.3	6824.9	[100]	µg/L	16:35:58

2	Zn 213.857†	4845.4	4281.2	[100] µg/L	16:35:58
3	Sc 361.383	1083105.6	1083105.6	100.64 %	16:36:24
3	Sc RADIAL	39664.1	39664.1	100 %	16:35:13
3	Y 371.029	593181.2	593181.2	100.35 %	16:36:24
3	Ag 328.068†	13223.7	13763.5	[100] µg/L	16:36:29
3	As 188.979†	169.7	196.6	[100] µg/L	16:36:49
3	B 249.677†	1667.7	1431.4	[100] µg/L	16:36:29
3	Ba 233.527†	9349.3	9424.6	[100] µg/L	16:36:29
3	Be 313.107†	147262.5	146063.1	[100] µg/L	16:36:24
3	Cd 226.502†	2874.5	2880.1	[100] µg/L	16:36:49
3	Co 228.616†	3294.3	3418.4	[100] µg/L	16:36:49
3	Cr 267.716†	3686.2	3591.6	[100] µg/L	16:36:29
3	Cu 324.752†	31154.0	25931.0	[100] µg/L	16:36:29
3	K 766.490 Radial†	3475.1	2348.2	[1000] µg/L	16:35:13
3	Mn 257.610†	57996.2	57227.3	[100] µg/L	16:36:29
3	Mo 202.031†	802.5	797.6	[100] µg/L	16:36:49
3	Ni 231.604†	1797.1	1607.3	[100] µg/L	16:36:49
3	P 214.914†	796.7	609.6	[500] µg/L	16:36:49
3	Pb 220.353†	382.9	393.3	[100] µg/L	16:36:49
3	S 181.975 Axial†	130.9	89.4	[200] µg/L	16:36:49
3	Sb 206.836†	243.3	207.0	[100] µg/L	16:36:49
3	Se 196.026†	87.6	119.4	[100] µg/L	16:36:49
3	SiO2 †	16030.4	14336.5	[1069.5] µg/L	16:36:29
3	Si 251.611†	15924.0	14435.5	[500] µg/L	16:37:05
3	Sn 189.927†	396.5	399.4	[100] µg/L	16:36:49
3	Sr 421.552†	23111.3	23131.8	[100] µg/L	16:35:13
3	Ti 334.940†	76505.6	75567.2	[100] µg/L	16:36:24
3	Tl 190.801†	229.9	264.9	[100] µg/L	16:36:49
3	U 409.014†	1974.4	1624.3	[100] µg/L	16:36:29
3	V 292.402†	6623.1	6670.9	[100] µg/L	16:36:29
3	Zn 213.857†	4779.4	4176.4	[100] µg/L	16:36:29

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1079601.0	4631.62	0.43%	100.32	%
Sc RADIAL	39614.8	425.73	1.07%	99.9	%
Y 371.029	591505.9	2284.55	0.39%	100.06	%
Ag 328.068†	13904.1	131.10	0.94%	[100]	µg/L
As 188.979†	202.1	5.27	2.61%	[100]	µg/L
B 249.677†	1462.8	28.16	1.93%	[100]	µg/L
Ba 233.527†	9560.5	118.04	1.23%	[100]	µg/L
Be 313.107†	146084.1	43.01	0.03%	[100]	µg/L
Cd 226.502†	2882.3	7.95	0.28%	[100]	µg/L
Co 228.616†	3416.3	18.31	0.54%	[100]	µg/L
Cr 267.716†	3644.6	46.40	1.27%	[100]	µg/L
Cu 324.752†	26282.7	305.96	1.16%	[100]	µg/L
K 766.490 Radial†	2351.5	17.95	0.76%	[1000]	µg/L
Mn 257.610†	57905.1	594.70	1.03%	[100]	µg/L
Mo 202.031†	794.7	6.15	0.77%	[100]	µg/L
Ni 231.604†	1620.4	12.00	0.74%	[100]	µg/L
P 214.914†	611.0	2.50	0.41%	[500]	µg/L
Pb 220.353†	396.0	2.33	0.59%	[100]	µg/L
S 181.975 Axial†	85.9	3.07	3.57%	[200]	µg/L
Sb 206.836†	205.1	1.72	0.84%	[100]	µg/L
Se 196.026†	121.2	2.79	2.31%	[100]	µg/L
SiO2 †	14551.5	187.17	1.29%	[1069.5]	µg/L
Si 251.611†	14417.7	24.54	0.17%	[500]	µg/L
Sn 189.927†	397.2	2.50	0.63%	[100]	µg/L
Sr 421.552†	23071.4	53.26	0.23%	[100]	µg/L
Ti 334.940†	75545.6	20.19	0.03%	[100]	µg/L
Tl 190.801†	262.8	1.86	0.71%	[100]	µg/L
U 409.014†	1615.4	12.79	0.79%	[100]	µg/L
V 292.402†	6750.1	77.08	1.14%	[100]	µg/L
Zn 213.857†	4238.3	54.93	1.30%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/23/2005 16:38:54
Data Type: Reprocessed on 6/24/2005 07:38:25
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1070900.0	1070900.0	99.507	%	16:41:40
1	Sc RADIAL	39718.4	39718.4	100	%	16:40:21
1	Y 371.029	583007.0	583007.0	98.624	%	16:41:40
1	Ag 328.068†	66448.2	67401.3	[500]	µg/L	16:41:45
1	Al 396.153Radial†	17092.3	16957.2	[5000]	µg/L	16:40:21
1	As 188.979†	958.4	991.2	[500]	µg/L	16:42:06
1	B 249.677†	7602.2	7414.2	[500]	µg/L	16:41:45
1	Ba 233.527†	46416.8	46781.6	[500]	µg/L	16:41:45
1	Be 313.107†	730742.3	734099.9	[500]	µg/L	16:41:40
1	Ca 317.933Radial†	22252.8	22048.7	[5000]	µg/L	16:40:41
1	Cd 226.502†	13534.6	13625.5	[500]	µg/L	16:41:45
1	Co 228.616†	15786.5	16009.8	[500]	µg/L	16:41:45
1	Cr 267.716†	17744.4	17761.1	[500]	µg/L	16:41:45
1	Cu 324.752†	132577.3	128209.4	[500]	µg/L	16:41:40
1	K 766.490 Radial†	12944.3	11796.2	[5000]	µg/L	16:40:21
1	Mg 279.077 IEC†	1766.1	1759.4	[5000]	µg/L	16:40:41
1	Mn 257.610†	275998.1	276965.5	[500]	µg/L	16:41:40
1	Mo 202.031†	3906.3	3925.8	[500]	µg/L	16:42:06
1	Ni 231.604†	7825.8	7686.2	[500]	µg/L	16:41:45
1	P 214.914†	3218.6	3052.4	[2500]	µg/L	16:42:06
1	Pb 220.353†	1908.4	1930.6	[500]	µg/L	16:42:06
1	S 181.975 Axial†	475.6	437.4	[1000]	µg/L	16:42:06
1	Sb 206.836†	1083.0	1053.6	[500]	µg/L	16:42:06
1	Se 196.026†	571.8	607.0	[500]	µg/L	16:42:06
1	SiO2 †	75491.6	74273.7	[5347.5]	µg/L	16:41:45
1	Si 251.611†	74674.0	73656.8	[2500]	µg/L	16:43:14
1	Sn 189.927†	1934.3	1949.3	[500]	µg/L	16:42:06
1	Sr 421.552†	112071.5	111905.9	[500]	µg/L	16:40:21
1	Ti 334.940†	375129.5	376536.2	[500]	µg/L	16:41:40
1	Tl 190.801†	1260.3	1303.0	[500]	µg/L	16:42:06
1	U 409.014†	8074.9	7777.3	[500]	µg/L	16:41:45
1	V 292.402†	32963.0	33216.2	[500]	µg/L	16:41:45
1	Zn 213.857†	21287.5	20820.4	[500]	µg/L	16:41:45
2	Sc 361.383	1071319.5	1071319.5	99.546	%	16:42:12
2	Sc RADIAL	39726.0	39726.0	100	%	16:40:46
2	Y 371.029	582782.4	582782.4	98.586	%	16:42:12
2	Ag 328.068†	67283.2	68214.0	[500]	µg/L	16:42:17
2	Al 396.153Radial†	17087.3	16949.0	[5000]	µg/L	16:40:46
2	As 188.979†	966.1	998.5	[500]	µg/L	16:42:37
2	B 249.677†	7773.6	7583.4	[500]	µg/L	16:42:17
2	Ba 233.527†	47284.1	47634.6	[500]	µg/L	16:42:17
2	Be 313.107†	729538.6	732603.2	[500]	µg/L	16:42:12
2	Ca 317.933Radial†	22386.0	22177.4	[5000]	µg/L	16:41:06
2	Cd 226.502†	13828.5	13915.5	[500]	µg/L	16:42:17
2	Co 228.616†	16045.4	16263.6	[500]	µg/L	16:42:17
2	Cr 267.716†	18061.2	18072.3	[500]	µg/L	16:42:17
2	Cu 324.752†	132068.6	127646.2	[500]	µg/L	16:42:12
2	K 766.490 Radial†	12944.6	11794.0	[5000]	µg/L	16:40:46
2	Mg 279.077 IEC†	1772.1	1765.0	[5000]	µg/L	16:41:06
2	Mn 257.610†	275845.7	276703.8	[500]	µg/L	16:42:12
2	Mo 202.031†	3899.7	3917.6	[500]	µg/L	16:42:37
2	Ni 231.604†	7927.3	7785.1	[500]	µg/L	16:42:17
2	P 214.914†	3213.0	3045.5	[2500]	µg/L	16:42:37
2	Pb 220.353†	1909.2	1930.6	[500]	µg/L	16:42:37
2	S 181.975 Axial†	480.1	441.6	[1000]	µg/L	16:42:37
2	Sb 206.836†	1083.1	1053.2	[500]	µg/L	16:42:37
2	Se 196.026†	560.6	595.6	[500]	µg/L	16:42:37
2	SiO2 †	76679.9	75437.7	[5347.5]	µg/L	16:42:17
2	Si 251.611†	74970.7	73925.6	[2500]	µg/L	16:43:20

2	Sn 189.927†	1927.4	1941.6	[500] µg/L	16:42:37
2	Sr 421.552†	111893.9	111707.1	[500] µg/L	16:40:46
2	Ti 334.940†	374615.6	375872.4	[500] µg/L	16:42:12
2	Tl 190.801†	1270.8	1313.1	[500] µg/L	16:42:37
2	U 409.014†	8181.7	7881.4	[500] µg/L	16:42:17
2	V 292.402†	33516.7	33759.4	[500] µg/L	16:42:17
2	Zn 213.857†	21646.4	21172.6	[500] µg/L	16:42:17
3	Sc 361.383	1069707.6	1069707.6	99.396 %	16:42:43
3	Sc RADIAL	39771.1	39771.1	100 %	16:41:11
3	Y 371.029	582136.9	582136.9	98.477 %	16:42:43
3	Ag 328.068†	67151.8	68183.6	[500] µg/L	16:42:48
3	Al 396.153Radial†	17107.5	16949.7	[5000] µg/L	16:41:11
3	As 188.979†	958.2	992.1	[500] µg/L	16:43:09
3	B 249.677†	7759.7	7581.2	[500] µg/L	16:42:48
3	Ba 233.527†	47045.7	47466.3	[500] µg/L	16:42:48
3	Be 313.107†	727617.8	731775.0	[500] µg/L	16:42:43
3	Ca 317.933Radial†	22338.7	22104.9	[5000] µg/L	16:41:32
3	Cd 226.502†	13786.0	13893.7	[500] µg/L	16:42:48
3	Co 228.616†	15987.9	16230.1	[500] µg/L	16:42:48
3	Cr 267.716†	18047.4	18085.8	[500] µg/L	16:42:48
3	Cu 324.752†	132065.0	127842.5	[500] µg/L	16:42:43
3	K 766.490 Radial†	12989.9	11824.5	[5000] µg/L	16:41:11
3	Mg 279.077 IEC†	1775.7	1766.7	[5000] µg/L	16:41:32
3	Mn 257.610†	275012.1	276282.7	[500] µg/L	16:42:43
3	Mo 202.031†	3870.9	3894.6	[500] µg/L	16:43:09
3	Ni 231.604†	7897.3	7766.9	[500] µg/L	16:42:48
3	P 214.914†	3175.4	3012.6	[2500] µg/L	16:43:09
3	Pb 220.353†	1895.6	1919.9	[500] µg/L	16:43:09
3	S 181.975 Axial†	470.2	432.5	[1000] µg/L	16:43:09
3	Sb 206.836†	1081.4	1053.2	[500] µg/L	16:43:09
3	Se 196.026†	569.0	604.9	[500] µg/L	16:43:09
3	SiO2 †	76452.0	75324.4	[5347.5] µg/L	16:42:48
3	Si 251.611†	75084.5	74153.5	[2500] µg/L	16:43:25
3	Sn 189.927†	1922.3	1939.4	[500] µg/L	16:43:09
3	Sr 421.552†	112579.2	112263.6	[500] µg/L	16:41:11
3	Ti 334.940†	374051.6	375872.0	[500] µg/L	16:42:43
3	Tl 190.801†	1260.8	1304.9	[500] µg/L	16:43:09
3	U 409.014†	8218.4	7930.8	[500] µg/L	16:42:48
3	V 292.402†	33406.5	33699.4	[500] µg/L	16:42:48
3	Zn 213.857†	21579.9	21138.4	[500] µg/L	16:42:48

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1070642.4	836.29	0.08%	99.483	%
Sc RADIAL	39738.5	28.53	0.07%	100	%
Y 371.029	582642.1	451.69	0.08%	98.562	%
Ag 328.068†	67933.0	460.71	0.68%	[500]	µg/L
Al 396.153Radial†	16952.0	4.56	0.03%	[5000]	µg/L
As 188.979†	993.9	4.01	0.40%	[500]	µg/L
B 249.677†	7526.3	97.04	1.29%	[500]	µg/L
Ba 233.527†	47294.1	451.79	0.96%	[500]	µg/L
Be 313.107†	732826.0	1178.35	0.16%	[500]	µg/L
Ca 317.933Radial†	22110.3	64.53	0.29%	[5000]	µg/L
Cd 226.502†	13811.6	161.48	1.17%	[500]	µg/L
Co 228.616†	16167.8	137.89	0.85%	[500]	µg/L
Cr 267.716†	17973.1	183.69	1.02%	[500]	µg/L
Cu 324.752†	127899.4	285.89	0.22%	[500]	µg/L
K 766.490 Radial†	11804.9	17.00	0.14%	[5000]	µg/L
Mg 279.077 IEC†	1763.7	3.80	0.22%	[5000]	µg/L
Mn 257.610†	276650.7	344.51	0.12%	[500]	µg/L
Mo 202.031†	3912.7	16.20	0.41%	[500]	µg/L
Ni 231.604†	7746.1	52.62	0.68%	[500]	µg/L
P 214.914†	3036.9	21.27	0.70%	[2500]	µg/L
Pb 220.353†	1927.1	6.19	0.32%	[500]	µg/L
S 181.975 Axial†	437.2	4.58	1.05%	[1000]	µg/L
Sb 206.836†	1053.3	0.20	0.02%	[500]	µg/L
Se 196.026†	602.5	6.09	1.01%	[500]	µg/L
SiO2 †	75011.9	641.84	0.86%	[5347.5]	µg/L
Si 251.611†	73911.9	248.59	0.34%	[2500]	µg/L

Sn 189.927†	1943.4	5.22	0.27%	[500] µg/L
Sr 421.552†	111958.9	281.98	0.25%	[500] µg/L
Ti 334.940†	376093.6	383.36	0.10%	[500] µg/L
Tl 190.801†	1307.0	5.37	0.41%	[500] µg/L
U 409.014†	7863.2	78.35	1.00%	[500] µg/L
V 292.402†	33558.3	297.80	0.89%	[500] µg/L
Zn 213.857†	21043.8	194.21	0.92%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/23/2005 16:45:16
Data Type: Reprocessed on 6/24/2005 07:38:30
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1069491.5	1069491.5	99.376	%	16:47:19
1	Sc RADIAL	39250.5	39250.5	99.0	%	16:46:48
1	Y 371.029	579765.1	579765.1	98.076	%	16:47:19
1	Ag 328.068†	133617.2	135079.8	[1000]	µg/L	16:47:24
1	Al 396.153Radial†	33375.9	33609.7	[10000]	µg/L	16:46:43
1	As 188.979†	1925.0	1965.1	[1000]	µg/L	16:47:44
1	B 249.677†	15064.4	14933.3	[1000]	µg/L	16:47:24
1	Ba 233.527†	92641.2	93357.5	[1000]	µg/L	16:47:24
1	Be 313.107†	1443842.4	1452642.2	[1000]	µg/L	16:47:19
1	Ca 317.933Radial†	43485.3	43761.8	[10000]	µg/L	16:46:48
1	Cd 226.502†	26908.1	27100.9	[1000]	µg/L	16:47:24
1	Co 228.616†	31394.7	31736.8	[1000]	µg/L	16:47:24
1	Cr 267.716†	35323.8	35474.3	[1000]	µg/L	16:47:24
1	Cu 324.752†	258132.6	254728.0	[1000]	µg/L	16:47:19
1	Fe 238.204 Radial†	9990.8	10048.7	[10000]	µg/L	16:46:48
1	K 766.490 Radial†	24418.2	23540.8	[10000]	µg/L	16:46:43
1	Mg 279.077 IEC†	3465.1	3496.7	[10000]	µg/L	16:46:48
1	Mn 257.610†	544277.1	547293.4	[1000]	µg/L	16:47:19
1	Mo 202.031†	7503.4	7550.7	[1000]	µg/L	16:47:24
1	Na 589.592 Radial†	62699.2	62327.4	[10000]	µg/L	16:46:43
1	Ni 231.604†	15194.6	15111.6	[1000]	µg/L	16:47:24
1	P 214.914†	6180.0	6036.7	[5000]	µg/L	16:47:44
1	Pb 220.353†	3766.7	3803.1	[1000]	µg/L	16:47:44
1	S 181.975 Axial†	914.2	879.3	[2000]	µg/L	16:47:44
1	Sb 206.836†	2128.3	2106.9	[1000]	µg/L	16:47:44
1	Se 196.026†	1151.3	1190.9	[1000]	µg/L	16:47:44
1	SiO2 †	153378.0	152748.8	[10695]	µg/L	16:47:24
1	Si 251.611†	152525.5	152095.8	[5000]	µg/L	16:48:56
1	Sn 189.927†	3894.2	3924.0	[1000]	µg/L	16:47:44
1	Sr 421.552†	220387.7	222656.4	[1000]	µg/L	16:46:43
1	Ti 334.940†	749328.3	753579.8	[1000]	µg/L	16:47:19
1	Tl 190.801†	2539.6	2592.0	[1000]	µg/L	16:47:44
1	U 409.014†	15640.6	15401.2	[1000]	µg/L	16:47:24
1	V 292.402†	66252.8	66758.6	[1000]	µg/L	16:47:24
1	Zn 213.857†	41720.6	41409.9	[1000]	µg/L	16:47:24
2	Sc 361.383	1063680.3	1063680.3	98.836	%	16:47:52
2	Sc RADIAL	39956.9	39956.9	101	%	16:46:59
2	Y 371.029	576542.5	576542.5	97.531	%	16:47:52
2	Ag 328.068†	133792.2	135991.4	[1000]	µg/L	16:47:57
2	Al 396.153Radial†	33773.1	33407.8	[10000]	µg/L	16:46:53
2	As 188.979†	1935.2	1986.0	[1000]	µg/L	16:48:17
2	B 249.677†	15204.2	15157.6	[1000]	µg/L	16:47:57
2	Ba 233.527†	92965.2	94194.6	[1000]	µg/L	16:47:57
2	Be 313.107†	1436208.5	1452856.1	[1000]	µg/L	16:47:52
2	Ca 317.933Radial†	44253.0	43746.9	[10000]	µg/L	16:46:59
2	Cd 226.502†	27014.0	27356.0	[1000]	µg/L	16:47:57
2	Co 228.616†	31584.7	32101.6	[1000]	µg/L	16:47:57
2	Cr 267.716†	35491.9	35838.5	[1000]	µg/L	16:47:57
2	Cu 324.752†	255767.4	253754.2	[1000]	µg/L	16:47:52
2	Fe 238.204 Radial†	10171.1	10049.2	[10000]	µg/L	16:46:59
2	K 766.490 Radial†	24708.0	23392.2	[10000]	µg/L	16:46:53
2	Mg 279.077 IEC†	3525.6	3494.8	[10000]	µg/L	16:46:59
2	Mn 257.610†	541833.8	547813.5	[1000]	µg/L	16:47:52
2	Mo 202.031†	7493.8	7582.2	[1000]	µg/L	16:47:57
2	Na 589.592 Radial†	63537.2	62039.1	[10000]	µg/L	16:46:53
2	Ni 231.604†	15264.7	15266.1	[1000]	µg/L	16:47:57
2	P 214.914†	6206.9	6097.9	[5000]	µg/L	16:48:17
2	Pb 220.353†	3772.3	3829.5	[1000]	µg/L	16:48:17
2	S 181.975 Axial†	912.0	882.1	[2000]	µg/L	16:48:17

2	Sb 206.836†	2148.5	2139.0	[1000] µg/L	16:48:17
2	Se 196.026†	1157.6	1203.6	[1000] µg/L	16:48:17
2	SiO2 †	154287.8	154512.5	[10695] µg/L	16:47:57
2	Si 251.611†	151606.3	152004.3	[5000] µg/L	16:49:01
2	Sn 189.927†	3908.6	3960.0	[1000] µg/L	16:48:17
2	Sr 421.552†	223441.0	221750.0	[1000] µg/L	16:46:53
2	Ti 334.940†	745115.3	753436.7	[1000] µg/L	16:47:52
2	Tl 190.801†	2537.8	2604.2	[1000] µg/L	16:48:17
2	U 409.014†	15622.7	15469.1	[1000] µg/L	16:47:57
2	V 292.402†	66422.0	67294.0	[1000] µg/L	16:47:57
2	Zn 213.857†	41782.6	41702.0	[1000] µg/L	16:47:57
3	Sc 361.383	1059433.2	1059433.2	98.442 %	16:48:24
3	Sc RADIAL	40423.8	40423.8	102 %	16:47:09
3	Y 371.029	574322.8	574322.8	97.155 %	16:48:24
3	Ag 328.068†	134149.1	136896.7	[1000] µg/L	16:48:30
3	Al 396.153Radial†	33566.2	32817.8	[10000] µg/L	16:47:04
3	As 188.979†	1925.5	1984.1	[1000] µg/L	16:48:50
3	B 249.677†	15283.0	15299.3	[1000] µg/L	16:48:30
3	Ba 233.527†	93208.4	94818.7	[1000] µg/L	16:48:30
3	Be 313.107†	1430936.3	1453325.8	[1000] µg/L	16:48:24
3	Ca 317.933Radial†	44673.0	43651.7	[10000] µg/L	16:47:09
3	Cd 226.502†	27097.2	27550.1	[1000] µg/L	16:48:30
3	Co 228.616†	31637.0	32282.9	[1000] µg/L	16:48:30
3	Cr 267.716†	35510.1	36001.0	[1000] µg/L	16:48:30
3	Cu 324.752†	255160.9	254175.5	[1000] µg/L	16:48:24
3	Fe 238.204 Radial†	10303.9	10062.9	[10000] µg/L	16:47:09
3	K 766.490 Radial†	24557.0	22960.9	[10000] µg/L	16:47:04
3	Mg 279.077 IEC†	3566.6	3494.6	[10000] µg/L	16:47:09
3	Mn 257.610†	539945.8	548093.4	[1000] µg/L	16:48:24
3	Mo 202.031†	7492.8	7611.5	[1000] µg/L	16:48:30
3	Na 589.592 Radial†	63251.0	61030.3	[10000] µg/L	16:47:04
3	Ni 231.604†	15299.9	15363.7	[1000] µg/L	16:48:30
3	P 214.914†	6178.2	6093.9	[5000] µg/L	16:48:50
3	Pb 220.353†	3748.9	3821.0	[1000] µg/L	16:48:50
3	S 181.975 Axial†	913.7	887.5	[2000] µg/L	16:48:50
3	Sb 206.836†	2150.3	2149.6	[1000] µg/L	16:48:50
3	Se 196.026†	1150.6	1201.2	[1000] µg/L	16:48:50
3	SiO2 †	154755.3	155613.2	[10695] µg/L	16:48:30
3	Si 251.611†	151759.4	152774.7	[5000] µg/L	16:49:06
3	Sn 189.927†	3883.2	3950.0	[1000] µg/L	16:48:50
3	Sr 421.552†	222081.5	217856.2	[1000] µg/L	16:47:04
3	Ti 334.940†	743012.1	754322.5	[1000] µg/L	16:48:24
3	Tl 190.801†	2519.3	2595.7	[1000] µg/L	16:48:50
3	U 409.014†	15676.9	15587.5	[1000] µg/L	16:48:30
3	V 292.402†	66568.4	67712.1	[1000] µg/L	16:48:30
3	Zn 213.857†	41981.9	42073.9	[1000] µg/L	16:48:30

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1064201.7	5049.38	0.47%	98.885	%
Sc RADIAL	39877.1	590.70	1.48%	101	%
Y 371.029	576876.8	2736.50	0.47%	97.587	%
Ag 328.068†	135989.3	908.46	0.67%	[1000]	µg/L
Al 396.153Radial†	33278.4	411.49	1.24%	[10000]	µg/L
As 188.979†	1978.4	11.55	0.58%	[1000]	µg/L
B 249.677†	15130.0	184.55	1.22%	[1000]	µg/L
Ba 233.527†	94123.6	733.18	0.78%	[1000]	µg/L
Be 313.107†	1452941.4	349.67	0.02%	[1000]	µg/L
Ca 317.933Radial†	43720.1	59.70	0.14%	[10000]	µg/L
Cd 226.502†	27335.6	225.28	0.82%	[1000]	µg/L
Co 228.616†	32040.4	278.14	0.87%	[1000]	µg/L
Cr 267.716†	35771.3	269.70	0.75%	[1000]	µg/L
Cu 324.752†	254219.2	488.42	0.19%	[1000]	µg/L
Fe 238.204 Radial†	10053.6	8.04	0.08%	[10000]	µg/L
K 766.490 Radial†	23298.0	301.19	1.29%	[10000]	µg/L
Mg 279.077 IEC†	3495.4	1.14	0.03%	[10000]	µg/L
Mn 257.610†	547733.4	405.93	0.07%	[1000]	µg/L
Mo 202.031†	7581.5	30.44	0.40%	[1000]	µg/L
Na 589.592 Radial†	61798.9	681.07	1.10%	[10000]	µg/L

Ni 231.604†	15247.1	127.14	0.83%	[1000] µg/L
P 214.914†	6076.2	34.27	0.56%	[5000] µg/L
Pb 220.353†	3817.9	13.47	0.35%	[1000] µg/L
S 181.975 Axial†	883.0	4.16	0.47%	[2000] µg/L
Sb 206.836†	2131.8	22.24	1.04%	[1000] µg/L
Se 196.026†	1198.6	6.76	0.56%	[1000] µg/L
SiO2 †	154291.5	1444.93	0.94%	[10695] µg/L
Si 251.611†	152291.6	420.89	0.28%	[5000] µg/L
Sn 189.927†	3944.7	18.58	0.47%	[1000] µg/L
Sr 421.552†	220754.2	2550.36	1.16%	[1000] µg/L
Ti 334.940†	753779.6	475.54	0.06%	[1000] µg/L
Tl 190.801†	2597.3	6.24	0.24%	[1000] µg/L
U 409.014†	15485.9	94.27	0.61%	[1000] µg/L
V 292.402†	67254.9	477.95	0.71%	[1000] µg/L
Zn 213.857†	41728.6	332.82	0.80%	[1000] µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/23/2005 16:50:57
Data Type: Reprocessed on 6/24/2005 07:38:34
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1033906.6	1033906.6	96.070	%	16:52:40
1	Sc RADIAL	38667.5	38667.5	97.5	%	16:52:21
1	Y 371.029	558380.8	558380.8	94.458	%	16:52:40
1	Al 396.153Radial†	163932.3	167989.3	[50000]	µg/L	16:52:21
1	Ca 317.933Radial†	217929.8	223297.8	[50000]	µg/L	16:52:21
1	Fe 238.204 Radial†	19261.3	19706.8	[20000]	µg/L	16:52:21
1	Mg 279.077 IEC†	16881.2	17306.2	[50000]	µg/L	16:52:21
1	Na 589.592 Radial†	123267.0	125387.9	[20000]	µg/L	16:52:21
2	Sc 361.383	1040201.5	1040201.5	96.655	%	16:52:47
2	Sc RADIAL	38427.8	38427.8	96.9	%	16:52:27
2	Y 371.029	562066.5	562066.5	95.082	%	16:52:47
2	Al 396.153Radial†	162624.2	167688.5	[50000]	µg/L	16:52:27
2	Ca 317.933Radial†	216701.3	223424.6	[50000]	µg/L	16:52:27
2	Fe 238.204 Radial†	19125.0	19689.4	[20000]	µg/L	16:52:27
2	Mg 279.077 IEC†	16805.7	17336.3	[50000]	µg/L	16:52:27
2	Na 589.592 Radial†	122360.5	125241.2	[20000]	µg/L	16:52:27
3	Sc 361.383	1044769.3	1044769.3	97.079	%	16:52:53
3	Sc RADIAL	38736.8	38736.8	97.7	%	16:52:32
3	Y 371.029	564635.2	564635.2	95.516	%	16:52:53
3	Al 396.153Radial†	164037.5	167796.6	[50000]	µg/L	16:52:32
3	Ca 317.933Radial†	218628.1	223613.3	[50000]	µg/L	16:52:32
3	Fe 238.204 Radial†	19300.9	19712.0	[20000]	µg/L	16:52:32
3	Mg 279.077 IEC†	16947.2	17342.8	[50000]	µg/L	16:52:32
3	Na 589.592 Radial†	123372.4	125269.8	[20000]	µg/L	16:52:32

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1039625.8	5454.21	0.52%	96.601	%
Sc RADIAL	38610.7	162.15	0.42%	97.4	%
Y 371.029	561694.2	3143.81	0.56%	95.019	%
Al 396.153Radial†	167824.8	152.34	0.09%	[50000]	µg/L
Ca 317.933Radial†	223445.2	158.75	0.07%	[50000]	µg/L
Fe 238.204 Radial†	19702.7	11.85	0.06%	[20000]	µg/L
Mg 279.077 IEC†	17328.4	19.52	0.11%	[50000]	µg/L
Na 589.592 Radial†	125299.6	77.75	0.06%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	136.0	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	3.356	0.00000	0.999998	
As 188.979	3	Lin Thru 0	0.0	1.981	0.00000	0.999997	
B 249.677	3	Lin Thru 0	0.0	15.11	0.00000	0.999994	
Ba 233.527	3	Lin Thru 0	0.0	94.23	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	1456	0.00000	0.999994	
Ca 317.933Radial	3	Lin Thru 0	0.0	4.465	0.00000	0.999991	
Cd 226.502	3	Lin Thru 0	0.0	27.40	0.00000	0.999981	
Co 228.616	3	Lin Thru 0	0.0	32.12	0.00000	0.999977	
Cr 267.716	3	Lin Thru 0	0.0	35.81	0.00000	0.999997	
Cu 324.752	3	Lin Thru 0	0.0	254.6	0.00000	0.999993	
Fe 238.204 Radial	2	Lin Thru 0	0.0	0.9892	0.00000	0.999967	
K 766.490 Radial	3	Lin Thru 0	0.0	2.336	0.00000	0.999986	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.3467	0.00000	0.999997	
Mn 257.610	3	Lin Thru 0	0.0	549.1	0.00000	0.999980	
Mo 202.031	3	Lin Thru 0	0.0	7.633	0.00000	0.999912	
Na 589.592 Radial	2	Lin Thru 0	0.0	6.248	0.00000	0.999985	

Ni 231.604	3	Lin Thru 0	0.0	15.30	0.00000	0.999966
P 214.914	3	Lin Thru 0	0.0	1.215	0.00000	1.000000
Pb 220.353	3	Lin Thru 0	0.0	3.826	0.00000	0.999988
S 181.975 Axial	3	Lin Thru 0	0.0	0.4405	0.00000	0.999990
Sb 206.836	3	Lin Thru 0	0.0	2.126	0.00000	0.999984
Se 196.026	3	Lin Thru 0	0.0	1.200	0.00000	0.999997
SiO2	3	Lin Thru 0	0.0	14.34	0.00000	0.999928
Si 251.611	3	Lin Thru 0	0.0	30.27	0.00000	0.999922
Sn 189.927	3	Lin Thru 0	0.0	3.933	0.00000	0.999982
Sr 421.552	3	Lin Thru 0	0.0	221.5	0.00000	0.999977
Ti 334.940	3	Lin Thru 0	0.0	753.5	0.00000	1.000000
Tl 190.801	3	Lin Thru 0	0.0	2.601	0.00000	0.999996
U 409.014	3	Lin Thru 0	0.0	15.54	0.00000	0.999975
V 292.402	3	Lin Thru 0	0.0	67.23	0.00000	1.000000
Zn 213.857	3	Lin Thru 0	0.0	41.81	0.00000	0.999993

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 6/23/2005 16:54:43
Data Type: Reprocessed on 6/24/2005 07:38:35
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1069825.4	1069825.4	99.407	%			16:57:30
1	Sc RADIAL	39441.8	39441.8	99.5	%			16:56:10
1	Y 371.029	583356.2	583356.2	98.683	%			16:57:30
1	Ag 328.068†	32887.8	33708.0	250.02	µg/L	250.02	ppb	16:57:30
1	Al 396.153Radial†	17041.1	17025.4	5048.8	µg/L	5048.8	ppb	16:56:10
1	As 188.979†	973.6	1007.4	515.54	µg/L	515.54	ppb	16:57:51
1	B 249.677†	7794.0	7614.8	504.43	µg/L	504.43	ppb	16:57:30
1	Ba 233.527†	46757.2	47170.9	501.13	µg/L	501.13	ppb	16:57:30
1	Be 313.107†	361982.8	363879.8	250.16	µg/L	250.16	ppb	16:57:30
1	Ca 317.933Radial†	22778.3	22732.8	5094.5	µg/L	5094.5	ppb	16:56:30
1	Cd 226.502†	13397.0	13500.8	492.82	µg/L	492.82	ppb	16:57:30
1	Co 228.616†	16483.0	16726.4	520.33	µg/L	520.33	ppb	16:57:51
1	Cr 267.716†	18091.3	18128.0	506.04	µg/L	506.04	ppb	16:57:30
1	Cu 324.752†	133439.4	129210.4	507.16	µg/L	507.16	ppb	16:57:30
1	Fe 238.204 Radial†	5126.2	5109.6	5171.7	µg/L	5171.7	ppb	16:56:30
1	K 766.490 Radial†	7016.1	5927.4	2537.2	µg/L	2537.2	ppb	16:56:10
1	Mg 279.077 IEC†	1777.2	1782.9	5151.1	µg/L	5151.1	ppb	16:56:30
1	Mn 257.610†	278505.9	279766.8	510.07	µg/L	510.07	ppb	16:57:30
1	Mo 202.031†	3903.1	3926.5	515.27	µg/L	515.27	ppb	16:57:51
1	Na 589.592 Radial†	16876.3	15956.1	2552.3	µg/L	2552.3	ppb	16:56:10
1	Ni 231.604†	7951.1	7820.2	511.41	µg/L	511.41	ppb	16:57:51
1	P 214.914†	3216.4	3053.5	2426.9	µg/L	2426.9	ppb	16:57:51
1	Pb 220.353†	1909.1	1933.3	506.07	µg/L	506.07	ppb	16:57:51
1	S 181.975 Axial†	1128.3	1094.4	2477.9	µg/L	2477.9	ppb	16:57:51
1	Sb 206.836†	1093.2	1064.9	501.27	µg/L	501.27	ppb	16:57:51
1	Se 196.026†	2998.3	3048.6	2540	µg/L	2540	ppb	16:57:51
1	SiO2 †	142879.1	142139.1	9895.3	µg/L	9895.3	ppb	16:57:30
1	Si 251.611†	144688.8	144164.4	4760	µg/L	4760	ppb	16:58:51
1	Sn 189.927†	1924.3	1941.2	494.02	µg/L	494.02	ppb	16:57:51
1	Sr 421.552†	113315.8	113941.2	514.42	µg/L	514.42	ppb	16:56:10
1	Ti 334.940†	377716.2	379517.0	503.40	µg/L	503.40	ppb	16:57:30
1	Tl 190.801†	1274.0	1318.1	509.66	µg/L	509.66	ppb	16:57:51
1	U 409.014†	8275.6	7987.4	516.15	µg/L	516.15	ppb	16:57:30
1	V 292.402†	32877.8	33163.8	499.98	µg/L	499.98	ppb	16:57:30
1	Zn 213.857†	21073.1	20626.3	488.79	µg/L	488.79	ppb	16:57:30
2	Sc 361.383	1084534.8	1084534.8	100.77	%			16:57:58
2	Sc RADIAL	39784.3	39784.3	100	%			16:56:35
2	Y 371.029	591422.8	591422.8	100.05	%			16:57:58
2	Ag 328.068†	33267.0	33635.5	249.49	µg/L	249.49	ppb	16:57:58
2	Al 396.153Radial†	17162.6	16999.0	5041.3	µg/L	5041.3	ppb	16:56:35
2	As 188.979†	959.1	979.7	501.54	µg/L	501.54	ppb	16:58:18
2	B 249.677†	7900.6	7614.2	504.40	µg/L	504.40	ppb	16:57:58
2	Ba 233.527†	47382.0	47152.9	500.94	µg/L	500.94	ppb	16:57:58
2	Be 313.107†	367254.9	364172.6	250.37	µg/L	250.37	ppb	16:57:58
2	Ca 317.933Radial†	22783.6	22540.9	5051.5	µg/L	5051.5	ppb	16:56:55
2	Cd 226.502†	13644.7	13563.8	495.12	µg/L	495.12	ppb	16:57:58
2	Co 228.616†	16437.2	16456.0	511.89	µg/L	511.89	ppb	16:58:18
2	Cr 267.716†	18359.4	18147.2	506.58	µg/L	506.58	ppb	16:57:58
2	Cu 324.752†	135255.4	129191.9	507.09	µg/L	507.09	ppb	16:57:58
2	Fe 238.204 Radial†	5130.0	5069.0	5130.6	µg/L	5130.6	ppb	16:56:55
2	K 766.490 Radial†	7053.7	5904.2	2527.3	µg/L	2527.3	ppb	16:56:35
2	Mg 279.077 IEC†	1783.6	1773.9	5125.0	µg/L	5125.0	ppb	16:56:55
2	Mn 257.610†	282401.2	279832.4	510.18	µg/L	510.18	ppb	16:57:58
2	Mo 202.031†	3886.1	3856.5	506.09	µg/L	506.09	ppb	16:58:18
2	Na 589.592 Radial†	16935.0	15868.6	2538.3	µg/L	2538.3	ppb	16:56:35
2	Ni 231.604†	7949.2	7709.8	504.19	µg/L	504.19	ppb	16:58:18
2	P 214.914†	3216.0	3009.2	2390.7	µg/L	2390.7	ppb	16:58:18
2	Pb 220.353†	1907.1	1905.3	498.73	µg/L	498.73	ppb	16:58:18
2	S 181.975 Axial†	1116.8	1067.6	2416.9	µg/L	2416.9	ppb	16:58:18

2	Sb 206.836†	1094.5	1051.3	494.77 µg/L	494.77 ppb	16:58:18
2	Se 196.026†	2983.4	2992.9	2490 µg/L	2490 ppb	16:58:18
2	SiO2 †	144966.0	142260.5	9904.1 µg/L	9904.1 ppb	16:57:58
2	Si 251.611†	144679.8	142181.4	4690 µg/L	4690 ppb	16:58:57
2	Sn 189.927†	1931.8	1922.3	489.23 µg/L	489.23 ppb	16:58:18
2	Sr 421.552†	114165.7	113807.5	513.82 µg/L	513.82 ppb	16:56:35
2	Ti 334.940†	383118.0	379723.9	503.67 µg/L	503.67 ppb	16:57:58
2	Tl 190.801†	1257.6	1284.4	496.76 µg/L	496.76 ppb	16:58:18
2	U 409.014†	8424.5	8022.3	518.41 µg/L	518.41 ppb	16:57:58
2	V 292.402†	33410.5	33243.9	501.09 µg/L	501.09 ppb	16:57:58
2	Zn 213.857†	21352.3	20615.8	488.59 µg/L	488.59 ppb	16:57:58
3	Sc 361.383	1074797.1	1074797.1	99.869 %		16:58:25
3	Sc RADIAL	39596.0	39596.0	99.9 %		16:57:01
3	Y 371.029	586016.9	586016.9	99.133 %		16:58:25
3	Ag 328.068†	32891.1	33558.2	248.92 µg/L	248.92 ppb	16:58:25
3	Al 396.153Radial†	17128.5	17046.3	5054.9 µg/L	5054.9 ppb	16:57:01
3	As 188.979†	981.2	1010.6	517.11 µg/L	517.11 ppb	16:58:46
3	B 249.677†	7820.7	7605.2	503.79 µg/L	503.79 ppb	16:58:25
3	Ba 233.527†	46950.6	47146.9	500.88 µg/L	500.88 ppb	16:58:25
3	Be 313.107†	363619.5	363834.2	250.13 µg/L	250.13 ppb	16:58:25
3	Ca 317.933Radial†	22843.4	22708.8	5089.1 µg/L	5089.1 ppb	16:57:21
3	Cd 226.502†	13518.3	13559.9	494.98 µg/L	494.98 ppb	16:58:25
3	Co 228.616†	16605.9	16772.7	521.77 µg/L	521.77 ppb	16:58:46
3	Cr 267.716†	18153.6	18106.2	505.44 µg/L	505.44 ppb	16:58:25
3	Cu 324.752†	133762.8	128913.3	506.00 µg/L	506.00 ppb	16:58:25
3	Fe 238.204 Radial†	5139.5	5102.8	5164.9 µg/L	5164.9 ppb	16:57:21
3	K 766.490 Radial†	6999.4	5883.3	2518.4 µg/L	2518.4 ppb	16:57:01
3	Mg 279.077 IEC†	1782.1	1780.9	5145.3 µg/L	5145.3 ppb	16:57:21
3	Mn 257.610†	279627.9	279594.4	509.76 µg/L	509.76 ppb	16:58:25
3	Mo 202.031†	3924.5	3929.8	515.70 µg/L	515.70 ppb	16:58:46
3	Na 589.592 Radial†	16955.0	15968.8	2554.3 µg/L	2554.3 ppb	16:57:01
3	Ni 231.604†	8015.7	7847.9	513.22 µg/L	513.22 ppb	16:58:46
3	P 214.914†	3255.0	3077.2	2446.7 µg/L	2446.7 ppb	16:58:46
3	Pb 220.353†	1908.9	1924.2	503.70 µg/L	503.70 ppb	16:58:46
3	S 181.975 Axial†	1131.2	1092.0	2472.4 µg/L	2472.4 ppb	16:58:46
3	Sb 206.836†	1096.0	1062.7	500.24 µg/L	500.24 ppb	16:58:46
3	Se 196.026†	3012.7	3049.0	2540 µg/L	2540 ppb	16:58:46
3	SiO2 †	143572.7	142168.8	9897.4 µg/L	9897.4 ppb	16:58:25
3	Si 251.611†	145423.1	144226.4	4760 µg/L	4760 ppb	16:59:02
3	Sn 189.927†	1945.9	1953.9	497.25 µg/L	497.25 ppb	16:58:46
3	Sr 421.552†	113620.8	113802.9	513.80 µg/L	513.80 ppb	16:57:01
3	Ti 334.940†	379250.5	379295.7	503.10 µg/L	503.10 ppb	16:58:25
3	Tl 190.801†	1278.1	1316.3	508.98 µg/L	508.98 ppb	16:58:46
3	U 409.014†	8278.2	7951.5	513.84 µg/L	513.84 ppb	16:58:25
3	V 292.402†	33000.9	33134.1	499.54 µg/L	499.54 ppb	16:58:25
3	Zn 213.857†	21156.6	20611.8	488.44 µg/L	488.44 ppb	16:58:25

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1076385.8	100.02	%	0.695				0.70%
Sc RADIAL	39607.4	99.9	%	0.43				0.43%
Y 371.029	586932.0	99.288	%	0.6953				0.70%
Ag 328.068†	33633.9	249.48	µg/L	0.552	249.48	ppb	0.552	0.22%
QC value within limits for Ag 328.068 Recovery = 99.79%								
Al 396.153Radial†	17023.6	5048.3	µg/L	6.82	5048.3	ppb	6.82	0.14%
QC value within limits for Al 396.153Radial Recovery = 100.97%								
As 188.979†	999.2	511.40	µg/L	8.571	511.40	ppb	8.571	1.68%
QC value within limits for As 188.979 Recovery = 102.28%								
B 249.677†	7611.4	504.21	µg/L	0.362	504.21	ppb	0.362	0.07%
QC value within limits for B 249.677 Recovery = 100.84%								
Ba 233.527†	47156.9	500.98	µg/L	0.133	500.98	ppb	0.133	0.03%
QC value within limits for Ba 233.527 Recovery = 100.20%								
Be 313.107†	363962.2	250.22	µg/L	0.127	250.22	ppb	0.127	0.05%
QC value within limits for Be 313.107 Recovery = 100.09%								
Ca 317.933Radial†	22660.8	5078.3	µg/L	23.41	5078.3	ppb	23.41	0.46%
QC value within limits for Ca 317.933Radial Recovery = 101.57%								
Cd 226.502†	13541.5	494.31	µg/L	1.288	494.31	ppb	1.288	0.26%
QC value within limits for Cd 226.502 Recovery = 98.86%								
Co 228.616†	16651.7	518.00	µg/L	5.334	518.00	ppb	5.334	1.03%

QC value within limits for Co 228.616 Recovery = 103.60%

Cr 267.716†	18127.1	506.02 µg/L	0.573	506.02 ppb	0.573	0.11%

QC value within limits for Cr 267.716 Recovery = 101.20%

Cu 324.752†	129105.2	506.75 µg/L	0.653	506.75 ppb	0.653	0.13%

QC value within limits for Cu 324.752 Recovery = 101.35%

Fe 238.204 Radial†	5093.8	5155.7 µg/L	22.04	5155.7 ppb	22.04	0.43%

QC value within limits for Fe 238.204 Radial Recovery = 103.11%

K 766.490 Radial†	5905.0	2527.6 µg/L	9.45	2527.6 ppb	9.45	0.37%

QC value within limits for K 766.490 Radial Recovery = 101.11%

Mg 279.077 IEC†	1779.2	5140.5 µg/L	13.70	5140.5 ppb	13.70	0.27%

QC value within limits for Mg 279.077 IEC Recovery = 102.81%

Mn 257.610†	279731.2	510.00 µg/L	0.222	510.00 ppb	0.222	0.04%

QC value within limits for Mn 257.610 Recovery = 102.00%

Mo 202.031†	3904.3	512.35 µg/L	5.429	512.35 ppb	5.429	1.06%

QC value within limits for Mo 202.031 Recovery = 102.47%

Na 589.592 Radial†	15931.2	2548.3 µg/L	8.72	2548.3 ppb	8.72	0.34%

QC value within limits for Na 589.592 Radial Recovery = 101.93%

Ni 231.604†	7792.6	509.61 µg/L	4.777	509.61 ppb	4.777	0.94%

QC value within limits for Ni 231.604 Recovery = 101.92%

P 214.914†	3046.6	2421.4 µg/L	28.42	2421.4 ppb	28.42	1.17%

QC value within limits for P 214.914 Recovery = 96.86%

Pb 220.353†	1920.9	502.84 µg/L	3.745	502.84 ppb	3.745	0.74%

QC value within limits for Pb 220.353 Recovery = 100.57%

S 181.975 Axial†	1084.7	2455.7 µg/L	33.73	2455.7 ppb	33.73	1.37%

QC value within limits for S 181.975 Axial Recovery = 98.23%

Sb 206.836†	1059.6	498.76 µg/L	3.493	498.76 ppb	3.493	0.70%

QC value within limits for Sb 206.836 Recovery = 99.75%

Se 196.026†	3030.2	2530 µg/L	26.9	2530 ppb	26.9	1.06%

QC value within limits for Se 196.026 Recovery = 101.04%

SiO2 †	142189.5	9898.9 µg/L	4.58	9898.9 ppb	4.58	0.05%

QC value within limits for SiO2 Recovery = 92.56%

Si 251.611†	143524.1	4730 µg/L	38.3	4730 ppb	38.3	0.81%

QC value within limits for Si 251.611 Recovery = 94.68%

Sn 189.927†	1939.1	493.50 µg/L	4.038	493.50 ppb	4.038	0.82%

QC value within limits for Sn 189.927 Recovery = 98.70%

Sr 421.552†	113850.5	514.01 µg/L	0.354	514.01 ppb	0.354	0.07%

QC value within limits for Sr 421.552 Recovery = 102.80%

Ti 334.940†	379512.2	503.39 µg/L	0.282	503.39 ppb	0.282	0.06%

QC value within limits for Ti 334.940 Recovery = 100.68%

Tl 190.801†	1306.3	505.14 µg/L	7.257	505.14 ppb	7.257	1.44%

QC value within limits for Tl 190.801 Recovery = 101.03%

U 409.014†	7987.1	516.13 µg/L	2.284	516.13 ppb	2.284	0.44%

QC value within limits for U 409.014 Recovery = 103.23%

V 292.402†	33180.6	500.20 µg/L	0.796	500.20 ppb	0.796	0.16%

QC value within limits for V 292.402 Recovery = 100.04%

Zn 213.857†	20617.9	488.61 µg/L	0.177	488.61 ppb	0.177	0.04%

QC value within limits for Zn 213.857 Recovery = 97.72%

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 6/23/2005 17:00:51
Data Type: Reprocessed on 6/24/2005 07:38:37
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1083571.0	1083571.0	100.68	%			17:03:36
1	Sc RADIAL	39976.1	39976.1	101	%			17:02:18
1	Y 371.029	595382.7	595382.7	100.72	%			17:03:36
1	Ag 328.068†	-589.6	38.4	0.2823	µg/L	0.2823	ppb	17:03:41
1	Al 396.153Radial†	142.9	36.4	10.769	µg/L	10.769	ppb	17:02:18
1	As 188.979†	-28.4	-0.2	-0.1023	µg/L	-0.1023	ppb	17:04:02
1	B 249.677†	281.4	53.8	3.5661	µg/L	3.5661	ppb	17:04:02
1	Ba 233.527†	-132.9	2.9	0.0307	µg/L	0.0307	ppb	17:04:02
1	Be 313.107†	288.6	25.6	0.0178	µg/L	0.0178	ppb	17:03:41
1	Ca 317.933Radial†	167.3	0.5	0.1135	µg/L	0.1135	ppb	17:02:38
1	Cd 226.502†	-27.2	-3.0	-0.1106	µg/L	-0.1106	ppb	17:04:02
1	Co 228.616†	-137.2	8.9	0.2775	µg/L	0.2775	ppb	17:04:02
1	Cr 267.716†	76.3	4.6	0.1279	µg/L	0.1279	ppb	17:04:02
1	Cu 324.752†	4956.7	-101.5	-0.4000	µg/L	-0.4000	ppb	17:03:41
1	Fe 238.204 Radial†	44.2	0.3	0.2878	µg/L	0.2878	ppb	17:02:38
1	K 766.490 Radial†	1095.5	-39.1	-16.719	µg/L	-16.719	ppb	17:02:18
1	Mg 279.077 IEC†	8.9	5.2	14.927	µg/L	14.927	ppb	17:02:38
1	Mn 257.610†	447.1	44.8	0.0813	µg/L	0.0813	ppb	17:04:02
1	Mo 202.031†	10.3	10.4	1.3593	µg/L	1.3593	ppb	17:04:02
1	Na 589.592 Radial†	934.1	-82.5	-13.206	µg/L	-13.206	ppb	17:02:18
1	Ni 231.604†	173.9	-5.6	-0.3625	µg/L	-0.3625	ppb	17:04:02
1	P 214.914†	182.3	-1.0	-0.7391	µg/L	-0.7391	ppb	17:04:02
1	Pb 220.353†	-8.0	4.8	1.2703	µg/L	1.2703	ppb	17:04:02
1	S 181.975 Axial†	40.8	-0.1	-0.1589	µg/L	-0.1589	ppb	17:04:02
1	Sb 206.836†	48.9	13.8	6.5250	µg/L	6.5250	ppb	17:04:02
1	Se 196.026†	-25.7	6.9	5.74	µg/L	5.74	ppb	17:04:02
1	SiO2 †	1443.1	-158.4	-11.098	µg/L	-11.098	ppb	17:03:41
1	Si 251.611†	1421.9	25.3	0.813	µg/L	0.813	ppb	17:05:09
1	Sn 189.927†	5.9	11.3	2.8725	µg/L	2.8725	ppb	17:04:02
1	Sr 421.552†	21.5	50.4	0.2276	µg/L	0.2276	ppb	17:02:18
1	Ti 334.940†	715.0	259.3	0.3436	µg/L	0.3436	ppb	17:03:41
1	Tl 190.801†	-36.5	0.3	0.1046	µg/L	0.1046	ppb	17:04:02
1	U 409.014†	353.5	13.6	0.8720	µg/L	0.8720	ppb	17:03:41
1	V 292.402†	-99.5	-8.8	-0.1168	µg/L	-0.1168	ppb	17:03:41
1	Zn 213.857†	466.3	-109.3	-2.6130	µg/L	-2.6130	ppb	17:04:02
2	Sc 361.383	1089950.6	1089950.6	101.28	%			17:04:07
2	Sc RADIAL	39923.8	39923.8	101	%			17:02:43
2	Y 371.029	598702.3	598702.3	101.28	%			17:04:07
2	Ag 328.068†	-667.7	-35.2	-0.2599	µg/L	-0.2599	ppb	17:04:12
2	Al 396.153Radial†	44.4	-61.3	-18.278	µg/L	-18.278	ppb	17:02:43
2	As 188.979†	-16.4	11.8	5.9652	µg/L	5.9652	ppb	17:04:32
2	B 249.677†	252.9	24.0	1.5874	µg/L	1.5874	ppb	17:04:32
2	Ba 233.527†	-128.1	8.4	0.0892	µg/L	0.0892	ppb	17:04:32
2	Be 313.107†	291.2	26.5	0.0183	µg/L	0.0183	ppb	17:04:12
2	Ca 317.933Radial†	181.6	14.9	3.3520	µg/L	3.3520	ppb	17:03:03
2	Cd 226.502†	-25.8	-1.5	-0.0562	µg/L	-0.0562	ppb	17:04:32
2	Co 228.616†	-125.0	21.7	0.6742	µg/L	0.6742	ppb	17:04:32
2	Cr 267.716†	69.6	-2.5	-0.0709	µg/L	-0.0709	ppb	17:04:32
2	Cu 324.752†	4932.5	-154.1	-0.6061	µg/L	-0.6061	ppb	17:04:12
2	Fe 238.204 Radial†	43.2	-0.7	-0.7379	µg/L	-0.7379	ppb	17:03:03
2	K 766.490 Radial†	1043.9	-88.9	-38.046	µg/L	-38.046	ppb	17:02:43
2	Mg 279.077 IEC†	2.4	-1.2	-3.5616	µg/L	-3.5616	ppb	17:03:03
2	Mn 257.610†	420.3	15.7	0.0284	µg/L	0.0284	ppb	17:04:32
2	Mo 202.031†	2.1	2.3	0.2960	µg/L	0.2960	ppb	17:04:32
2	Na 589.592 Radial†	946.9	-68.6	-10.983	µg/L	-10.983	ppb	17:02:43
2	Ni 231.604†	172.4	-8.1	-0.5256	µg/L	-0.5256	ppb	17:04:32
2	P 214.914†	185.0	0.6	0.5520	µg/L	0.5520	ppb	17:04:32
2	Pb 220.353†	-13.1	-0.2	-0.0428	µg/L	-0.0428	ppb	17:04:32
2	S 181.975 Axial†	39.7	-1.4	-3.1255	µg/L	-3.1255	ppb	17:04:32

2	Sb 206.836†	46.4	11.0	5.1972 µg/L	5.1972 ppb	17:04:32
2	Se 196.026†	-23.6	9.1	7.55 µg/L	7.55 ppb	17:04:32
2	SiO2 †	1416.9	-192.8	-13.453 µg/L	-13.453 ppb	17:04:12
2	Si 251.611†	1401.5	-3.1	-0.107 µg/L	-0.107 ppb	17:05:14
2	Sn 189.927†	-1.7	3.7	0.9404 µg/L	0.9404 ppb	17:04:32
2	Sr 421.552†	12.7	41.7	0.1882 µg/L	0.1882 ppb	17:02:43
2	Ti 334.940†	667.0	207.7	0.2754 µg/L	0.2754 ppb	17:04:12
2	Tl 190.801†	-37.5	-0.5	-0.1880 µg/L	-0.1880 ppb	17:04:32
2	U 409.014†	352.8	10.8	0.6952 µg/L	0.6952 ppb	17:04:12
2	V 292.402†	-113.4	-22.0	-0.3233 µg/L	-0.3233 ppb	17:04:12
2	Zn 213.857†	466.2	-112.2	-2.6794 µg/L	-2.6794 ppb	17:04:32
3	Sc 361.383	1086263.9	1086263.9	100.93 %		17:04:38
3	Sc RADIAL	40435.8	40435.8	102 %		17:03:08
3	Y 371.029	596904.8	596904.8	100.98 %		17:04:38
3	Ag 328.068†	-644.4	-14.4	-0.1048 µg/L	-0.1048 ppb	17:04:43
3	Al 396.153Radial†	116.3	8.7	2.5387 µg/L	2.5387 ppb	17:03:08
3	As 188.979†	-21.6	6.6	3.3300 µg/L	3.3300 ppb	17:05:03
3	B 249.677†	233.4	5.6	0.3745 µg/L	0.3745 ppb	17:05:03
3	Ba 233.527†	-133.0	3.1	0.0330 µg/L	0.0330 ppb	17:05:03
3	Be 313.107†	318.9	55.0	0.0377 µg/L	0.0377 ppb	17:04:43
3	Ca 317.933Radial†	184.8	15.8	3.5327 µg/L	3.5327 ppb	17:03:28
3	Cd 226.502†	-30.5	-6.3	-0.2306 µg/L	-0.2306 ppb	17:05:03
3	Co 228.616†	-139.4	7.0	0.2181 µg/L	0.2181 ppb	17:05:03
3	Cr 267.716†	81.2	9.2	0.2584 µg/L	0.2584 ppb	17:05:03
3	Cu 324.752†	4942.9	-127.3	-0.5000 µg/L	-0.5000 ppb	17:04:43
3	Fe 238.204 Radial†	43.0	-1.5	-1.5011 µg/L	-1.5011 ppb	17:03:28
3	K 766.490 Radial†	1072.2	-74.3	-31.790 µg/L	-31.790 ppb	17:03:08
3	Mg 279.077 IEC†	5.3	1.6	4.5515 µg/L	4.5515 ppb	17:03:28
3	Mn 257.610†	438.0	34.6	0.0630 µg/L	0.0630 ppb	17:05:03
3	Mo 202.031†	8.1	8.2	1.0773 µg/L	1.0773 ppb	17:05:03
3	Na 589.592 Radial†	973.2	-54.7	-8.7558 µg/L	-8.7558 ppb	17:03:08
3	Ni 231.604†	179.5	-0.5	-0.0281 µg/L	-0.0281 ppb	17:05:03
3	P 214.914†	175.2	-8.4	-6.8637 µg/L	-6.8637 ppb	17:05:03
3	Pb 220.353†	-12.4	0.5	0.1234 µg/L	0.1234 ppb	17:05:03
3	S 181.975 Axial†	35.7	-5.3	-11.980 µg/L	-11.980 ppb	17:05:03
3	Sb 206.836†	39.0	3.9	1.8488 µg/L	1.8488 ppb	17:05:03
3	Se 196.026†	-23.1	9.5	7.89 µg/L	7.89 ppb	17:05:03
3	SiO2 †	1429.1	-175.9	-12.306 µg/L	-12.306 ppb	17:04:43
3	Si 251.611†	1419.6	19.5	0.626 µg/L	0.626 ppb	17:05:19
3	Sn 189.927†	4.9	10.3	2.6141 µg/L	2.6141 ppb	17:05:03
3	Sr 421.552†	-4.2	25.0	0.1129 µg/L	0.1129 ppb	17:03:08
3	Ti 334.940†	639.7	182.9	0.2431 µg/L	0.2431 ppb	17:04:43
3	Tl 190.801†	-36.6	0.2	0.0868 µg/L	0.0868 ppb	17:05:03
3	U 409.014†	329.2	-11.4	-0.7297 µg/L	-0.7297 ppb	17:04:43
3	V 292.402†	-70.0	20.6	0.3168 µg/L	0.3168 ppb	17:04:43
3	Zn 213.857†	461.6	-115.1	-2.7534 µg/L	-2.7534 ppb	17:05:03

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1086595.2	100.97	%	0.298				0.29%
Sc RADIAL	40111.9	101	%	0.7				0.70%
Y 371.029	596996.6	100.99	%	0.281				0.28%
Ag 328.068†	-3.7	-0.0274	µg/L	0.27926	-0.0274	ppb	0.27926	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.4	-1.6566	µg/L	14.97100	-1.6566	ppb	14.97100	903.74%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.1	3.0643	µg/L	3.04248	3.0643	ppb	3.04248	99.29%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	27.8	1.8427	µg/L	1.61104	1.8427	ppb	1.61104	87.43%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.8	0.0510	µg/L	0.03315	0.0510	ppb	0.03315	65.04%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	35.7	0.0246	µg/L	0.01133	0.0246	ppb	0.01133	46.07%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.4	2.3328	µg/L	1.92404	2.3328	ppb	1.92404	82.48%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-3.6	-0.1325	µg/L	0.08922	-0.1325	ppb	0.08922	67.36%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	12.5	0.3899	µg/L	0.24796	0.3899	ppb	0.24796	63.60%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	3.8	0.1051 µg/L	0.16584	0.1051 ppb	0.16584	157.73%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-127.6	-0.5020 µg/L	0.10304	-0.5020 ppb	0.10304	20.53%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	-0.6	-0.6504 µg/L	0.89765	-0.6504 ppb	0.89765	138.02%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	-67.4	-28.852 µg/L	10.9628	-28.852 ppb	10.9628	38.00%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	1.8	5.3057 µg/L	9.26753	5.3057 ppb	9.26753	174.67%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	31.7	0.0575 µg/L	0.02688	0.0575 ppb	0.02688	46.71%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	7.0	0.9109 µg/L	0.55086	0.9109 ppb	0.55086	60.48%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-68.6	-10.982 µg/L	2.2251	-10.982 ppb	2.2251	20.26%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-4.7	-0.3054 µg/L	0.25359	-0.3054 ppb	0.25359	83.04%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-3.0	-2.3503 µg/L	3.96169	-2.3503 ppb	3.96169	168.56%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	1.7	0.4503 µg/L	0.71497	0.4503 ppb	0.71497	158.76%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-2.2	-5.0882 µg/L	6.15018	-5.0882 ppb	6.15018	120.87%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	9.6	4.5237 µg/L	2.40977	4.5237 ppb	2.40977	53.27%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	8.5	7.06 µg/L	1.158	7.06 ppb	1.158	16.41%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	-175.7	-12.286 µg/L	1.1776	-12.286 ppb	1.1776	9.58%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	13.9	0.444 µg/L	0.4866	0.444 ppb	0.4866	109.60%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	8.4	2.1423 µg/L	1.04890	2.1423 ppb	1.04890	48.96%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	39.0	0.1762 µg/L	0.05831	0.1762 ppb	0.05831	33.08%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	216.6	0.2874 µg/L	0.05132	0.2874 ppb	0.05132	17.86%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	0.0	0.0011 µg/L	0.16404	0.0011 ppb	0.16404	>999.9%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	4.3	0.2792 µg/L	0.87820	0.2792 ppb	0.87820	314.57%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-3.4	-0.0411 µg/L	0.32667	-0.0411 ppb	0.32667	794.76%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-112.2	-2.6819 µg/L	0.07020	-2.6819 ppb	0.07020	2.62%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 6/23/2005 17:07:08
Data Type: Reprocessed on 6/24/2005 07:38:39
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1076762.8	1076762.8	100.05	%			17:09:51
1	Sc RADIAL	40031.8	40031.8	101	%			17:08:32
1	Y 371.029	591736.0	591736.0	100.10	%			17:09:51
1	Ag 328.068†	75.0	699.0	5.1594	µg/L	5.1594	ppb	17:09:56
1	Al 396.153Radial†	741.3	628.9	186.91	µg/L	186.91	ppb	17:08:32
1	As 188.979†	1.2	29.3	14.855	µg/L	14.855	ppb	17:10:16
1	B 249.677†	968.4	742.3	49.131	µg/L	49.131	ppb	17:09:56
1	Ba 233.527†	352.0	486.7	5.1784	µg/L	5.1784	ppb	17:10:16
1	Be 313.107†	7422.8	7158.0	4.9285	µg/L	4.9285	ppb	17:09:56
1	Ca 317.933Radial†	611.6	440.3	98.914	µg/L	98.914	ppb	17:08:52
1	Cd 226.502†	112.3	136.1	4.9764	µg/L	4.9764	ppb	17:10:16
1	Co 228.616†	36.0	181.1	5.6320	µg/L	5.6320	ppb	17:10:16
1	Cr 267.716†	259.1	187.8	5.2079	µg/L	5.2079	ppb	17:10:16
1	Cu 324.752†	7572.5	2544.1	9.9509	µg/L	9.9509	ppb	17:09:56
1	Fe 238.204 Radial†	153.5	108.4	109.64	µg/L	109.64	ppb	17:08:52
1	K 766.490 Radial†	1467.2	327.6	140.25	µg/L	140.25	ppb	17:08:32
1	Mg 279.077 IEC†	112.8	108.1	311.63	µg/L	311.63	ppb	17:08:52
1	Mn 257.610†	6140.5	5738.0	10.453	µg/L	10.453	ppb	17:09:56
1	Mo 202.031†	80.6	80.7	10.584	µg/L	10.584	ppb	17:10:16
1	Na 589.592 Radial†	1829.3	802.8	128.46	µg/L	128.46	ppb	17:08:32
1	Ni 231.604†	258.1	79.6	5.2157	µg/L	5.2157	ppb	17:10:16
1	P 214.914†	362.9	180.7	146.83	µg/L	146.83	ppb	17:10:16
1	Pb 220.353†	32.3	45.1	11.745	µg/L	11.745	ppb	17:10:16
1	S 181.975 Axial†	80.5	39.8	90.297	µg/L	90.297	ppb	17:10:16
1	Sb 206.836†	60.2	25.4	12.074	µg/L	12.074	ppb	17:10:16
1	Se 196.026†	-16.2	16.1	13.6	µg/L	13.6	ppb	17:10:16
1	SiO2 †	4097.3	2503.4	174.23	µg/L	174.23	ppb	17:09:56
1	Si 251.611†	4100.4	2711.4	89.4	µg/L	89.4	ppb	17:11:24
1	Sn 189.927†	43.4	48.8	12.424	µg/L	12.424	ppb	17:10:16
1	Sr 421.552†	1069.4	1088.3	4.9129	µg/L	4.9129	ppb	17:08:32
1	Ti 334.940†	4359.4	3906.3	5.1583	µg/L	5.1583	ppb	17:09:56
1	Tl 190.801†	12.5	49.0	18.899	µg/L	18.899	ppb	17:10:16
1	U 409.014†	1161.0	822.8	52.959	µg/L	52.959	ppb	17:09:56
1	V 292.402†	168.0	257.9	4.0090	µg/L	4.0090	ppb	17:09:56
1	Zn 213.857†	916.9	343.9	8.1587	µg/L	8.1587	ppb	17:10:16
2	Sc 361.383	1087006.4	1087006.4	101.00	%			17:10:22
2	Sc RADIAL	39737.9	39737.9	100	%			17:08:57
2	Y 371.029	597115.4	597115.4	101.01	%			17:10:22
2	Ag 328.068†	72.2	695.6	5.1375	µg/L	5.1375	ppb	17:10:27
2	Al 396.153Radial†	770.0	662.9	196.99	µg/L	196.99	ppb	17:08:57
2	As 188.979†	5.6	33.5	17.006	µg/L	17.006	ppb	17:10:47
2	B 249.677†	967.8	732.5	48.485	µg/L	48.485	ppb	17:10:27
2	Ba 233.527†	354.6	485.9	5.1705	µg/L	5.1705	ppb	17:10:47
2	Be 313.107†	7376.8	7042.5	4.8484	µg/L	4.8484	ppb	17:10:27
2	Ca 317.933Radial†	614.9	448.1	100.64	µg/L	100.64	ppb	17:09:18
2	Cd 226.502†	111.9	134.8	4.9252	µg/L	4.9252	ppb	17:10:47
2	Co 228.616†	26.8	171.7	5.3406	µg/L	5.3406	ppb	17:10:47
2	Cr 267.716†	261.5	187.7	5.2089	µg/L	5.2089	ppb	17:10:47
2	Cu 324.752†	7682.5	2581.7	10.101	µg/L	10.101	ppb	17:10:27
2	Fe 238.204 Radial†	152.7	108.7	110.00	µg/L	110.00	ppb	17:09:18
2	K 766.490 Radial†	1402.3	273.6	117.10	µg/L	117.10	ppb	17:08:57
2	Mg 279.077 IEC†	119.9	116.0	334.56	µg/L	334.56	ppb	17:09:18
2	Mn 257.610†	6130.4	5670.2	10.330	µg/L	10.330	ppb	17:10:27
2	Mo 202.031†	89.4	88.6	11.621	µg/L	11.621	ppb	17:10:47
2	Na 589.592 Radial†	1821.5	808.4	129.36	µg/L	129.36	ppb	17:08:57
2	Ni 231.604†	255.8	75.0	4.9109	µg/L	4.9109	ppb	17:10:47
2	P 214.914†	363.5	177.8	144.46	µg/L	144.46	ppb	17:10:47
2	Pb 220.353†	19.4	32.0	8.3438	µg/L	8.3438	ppb	17:10:47
2	S 181.975 Axial†	81.4	40.0	90.752	µg/L	90.752	ppb	17:10:47

2	Sb 206.836†	56.9	21.5	10.245 µg/L	10.245 ppb	17:10:47
2	Se 196.026†	-17.0	15.6	13.1 µg/L	13.1 ppb	17:10:47
2	SiO2 †	4056.0	2424.0	168.66 µg/L	168.66 ppb	17:10:27
2	Si 251.611†	4033.4	2606.4	85.9 µg/L	85.9 ppb	17:11:29
2	Sn 189.927†	41.9	46.9	11.937 µg/L	11.937 ppb	17:10:47
2	Sr 421.552†	1061.1	1087.8	4.9105 µg/L	4.9105 ppb	17:08:57
2	Ti 334.940†	4307.0	3813.4	5.0370 µg/L	5.0370 ppb	17:10:27
2	Tl 190.801†	18.3	54.7	21.086 µg/L	21.086 ppb	17:10:47
2	U 409.014†	1108.7	760.1	48.931 µg/L	48.931 ppb	17:10:27
2	V 292.402†	230.0	317.7	4.9048 µg/L	4.9048 ppb	17:10:27
2	Zn 213.857†	900.7	319.3	7.5699 µg/L	7.5699 ppb	17:10:47
3	Sc 361.383	1084727.4	1084727.4	100.79 %		17:10:52
3	Sc RADIAL	39367.8	39367.8	99.3 %		17:09:23
3	Y 371.029	596293.9	596293.9	100.87 %		17:10:52
3	Ag 328.068†	30.4	654.3	4.8317 µg/L	4.8317 ppb	17:10:58
3	Al 396.153Radial†	754.0	654.1	194.40 µg/L	194.40 ppb	17:09:23
3	As 188.979†	0.0	28.1	14.244 µg/L	14.244 ppb	17:11:18
3	B 249.677†	957.9	724.7	47.969 µg/L	47.969 ppb	17:10:58
3	Ba 233.527†	331.3	463.6	4.9337 µg/L	4.9337 ppb	17:11:18
3	Be 313.107†	7265.4	6947.3	4.7840 µg/L	4.7840 ppb	17:10:58
3	Ca 317.933Radial†	606.5	445.4	100.07 µg/L	100.07 ppb	17:09:43
3	Cd 226.502†	115.3	138.3	5.0571 µg/L	5.0571 ppb	17:11:18
3	Co 228.616†	22.0	167.0	5.1917 µg/L	5.1917 ppb	17:11:18
3	Cr 267.716†	249.5	176.3	4.8879 µg/L	4.8879 ppb	17:11:18
3	Cu 324.752†	7607.0	2522.8	9.8661 µg/L	9.8661 ppb	17:10:58
3	Fe 238.204 Radial†	146.7	104.1	105.31 µg/L	105.31 ppb	17:09:43
3	K 766.490 Radial†	1428.8	313.4	134.16 µg/L	134.16 ppb	17:09:23
3	Mg 279.077 IEC†	118.2	115.4	332.75 µg/L	332.75 ppb	17:09:43
3	Mn 257.610†	6012.8	5566.3	10.140 µg/L	10.140 ppb	17:10:58
3	Mo 202.031†	81.7	81.2	10.652 µg/L	10.652 ppb	17:11:18
3	Na 589.592 Radial†	1754.0	757.6	121.22 µg/L	121.22 ppb	17:09:23
3	Ni 231.604†	259.9	79.6	5.2094 µg/L	5.2094 ppb	17:11:18
3	P 214.914†	365.6	180.7	146.84 µg/L	146.84 ppb	17:11:18
3	Pb 220.353†	33.8	46.3	12.073 µg/L	12.073 ppb	17:11:18
3	S 181.975 Axial†	81.1	39.8	90.375 µg/L	90.375 ppb	17:11:18
3	Sb 206.836†	54.4	19.2	9.1607 µg/L	9.1607 ppb	17:11:18
3	Se 196.026†	-10.1	22.3	18.8 µg/L	18.8 ppb	17:11:18
3	SiO2 †	4111.2	2487.2	173.09 µg/L	173.09 ppb	17:10:58
3	Si 251.611†	4052.0	2633.2	86.8 µg/L	86.8 ppb	17:11:34
3	Sn 189.927†	48.1	53.1	13.517 µg/L	13.517 ppb	17:11:18
3	Sr 421.552†	1036.3	1072.9	4.8430 µg/L	4.8430 ppb	17:09:23
3	Ti 334.940†	4231.3	3747.2	4.9465 µg/L	4.9465 ppb	17:10:58
3	Tl 190.801†	14.1	50.5	19.488 µg/L	19.488 ppb	17:11:18
3	U 409.014†	1191.1	844.2	54.342 µg/L	54.342 ppb	17:10:58
3	V 292.402†	228.6	316.8	4.8869 µg/L	4.8869 ppb	17:10:58
3	Zn 213.857†	907.5	327.9	7.7757 µg/L	7.7757 ppb	17:11:18

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1082832.2	100.62	%	0.500				0.50%
Sc RADIAL	39712.5	100	%	0.8				0.84%
Y 371.029	595048.4	100.66	%	0.490				0.49%
Ag 328.068†	682.9	5.0429	µg/L	0.18323	5.0429	ppb	0.18323	3.63%
QC value within limits for Ag 328.068 Recovery = 100.86%								
Al 396.153Radial†	648.6	192.77	µg/L	5.237	192.77	ppb	5.237	2.72%
QC value within limits for Al 396.153Radial Recovery = 96.38%								
As 188.979†	30.3	15.368	µg/L	1.4508	15.368	ppb	1.4508	9.44%
QC value within limits for As 188.979 Recovery = 102.46%								
B 249.677†	733.2	48.528	µg/L	0.5819	48.528	ppb	0.5819	1.20%
QC value within limits for B 249.677 Recovery = 97.06%								
Ba 233.527†	478.7	5.0942	µg/L	0.13909	5.0942	ppb	0.13909	2.73%
QC value within limits for Ba 233.527 Recovery = 101.88%								
Be 313.107†	7049.3	4.8536	µg/L	0.07241	4.8536	ppb	0.07241	1.49%
QC value within limits for Be 313.107 Recovery = 97.07%								
Ca 317.933Radial†	444.6	99.875	µg/L	0.8797	99.875	ppb	0.8797	0.88%
QC value within limits for Ca 317.933Radial Recovery = 99.87%								
Cd 226.502†	136.4	4.9863	µg/L	0.06650	4.9863	ppb	0.06650	1.33%
QC value within limits for Cd 226.502 Recovery = 99.73%								
Co 228.616†	173.2	5.3881	µg/L	0.22399	5.3881	ppb	0.22399	4.16%

QC value within limits for Co 228.616 Recovery = 107.76%

Cr 267.716†	183.9	5.1015 µg/L	0.18506	5.1015 ppb	0.18506	3.63%

QC value within limits for Cr 267.716 Recovery = 102.03%

Cu 324.752†	2549.6	9.9726 µg/L	0.11890	9.9726 ppb	0.11890	1.19%

QC value within limits for Cu 324.752 Recovery = 99.73%

Fe 238.204 Radial†	107.1	108.32 µg/L	2.610	108.32 ppb	2.610	2.41%

QC value within limits for Fe 238.204 Radial Recovery = 108.32%

K 766.490 Radial†	304.9	130.50 µg/L	11.996	130.50 ppb	11.996	9.19%

QC value within limits for K 766.490 Radial Recovery = 87.00%

Mg 279.077 IEC†	113.2	326.31 µg/L	12.748	326.31 ppb	12.748	3.91%

QC value within limits for Mg 279.077 IEC Recovery = 108.77%

Mn 257.610†	5658.1	10.308 µg/L	0.1580	10.308 ppb	0.1580	1.53%

QC value within limits for Mn 257.610 Recovery = 103.08%

Mo 202.031†	83.5	10.953 µg/L	0.5801	10.953 ppb	0.5801	5.30%

QC value within limits for Mo 202.031 Recovery = 109.53%

Na 589.592 Radial†	789.6	126.35 µg/L	4.465	126.35 ppb	4.465	3.53%

QC value within limits for Na 589.592 Radial Recovery = 84.23%

Ni 231.604†	78.1	5.1120 µg/L	0.17418	5.1120 ppb	0.17418	3.41%

QC value within limits for Ni 231.604 Recovery = 102.24%

P 214.914†	179.7	146.04 µg/L	1.373	146.04 ppb	1.373	0.94%

QC value within limits for P 214.914 Recovery = 97.36%

Pb 220.353†	41.1	10.721 µg/L	2.0650	10.721 ppb	2.0650	19.26%

QC value within limits for Pb 220.353 Recovery = 107.21%

S 181.975 Axial†	39.9	90.475 µg/L	0.2429	90.475 ppb	0.2429	0.27%

QC value within limits for S 181.975 Axial Recovery = 90.47%

Sb 206.836†	22.0	10.493 µg/L	1.4723	10.493 ppb	1.4723	14.03%

QC value within limits for Sb 206.836 Recovery = 104.93%

Se 196.026†	18.0	15.1 µg/L	3.14	15.1 ppb	3.14	20.72%

QC value within limits for Se 196.026 Recovery = 100.97%

SiO2 †	2471.5	171.99 µg/L	2.942	171.99 ppb	2.942	1.71%

QC value within limits for SiO2 Recovery = 80.75%

Si 251.611†	2650.3	87.4 µg/L	1.81	87.4 ppb	1.81	2.07%

QC value within limits for Si 251.611 Recovery = 87.40%

Sn 189.927†	49.6	12.626 µg/L	0.8091	12.626 ppb	0.8091	6.41%

QC value within limits for Sn 189.927 Recovery = 126.26%

Sr 421.552†	1083.0	4.8888 µg/L	0.03965	4.8888 ppb	0.03965	0.81%

QC value within limits for Sr 421.552 Recovery = 97.78%

Ti 334.940†	3822.3	5.0472 µg/L	0.10626	5.0472 ppb	0.10626	2.11%

QC value within limits for Ti 334.940 Recovery = 100.94%

Tl 190.801†	51.4	19.824 µg/L	1.1320	19.824 ppb	1.1320	5.71%

QC value within limits for Tl 190.801 Recovery = 99.12%

U 409.014†	809.1	52.078 µg/L	2.8113	52.078 ppb	2.8113	5.40%

QC value within limits for U 409.014 Recovery = 104.16%

V 292.402†	297.5	4.6002 µg/L	0.51207	4.6002 ppb	0.51207	11.13%

QC value within limits for V 292.402 Recovery = 92.00%

Zn 213.857†	330.4	7.8348 µg/L	0.29879	7.8348 ppb	0.29879	3.81%

QC value within limits for Zn 213.857 Recovery = 78.35%

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 6/23/2005 17:13:23
Data Type: Reprocessed on 6/24/2005 07:38:41
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	952489.9	952489.9	88.505	%			17:15:29
1	Sc RADIAL	36199.7	36199.7	91.3	%			17:14:58
1	Y 371.029	510803.7	510803.7	86.410	%			17:15:29
1	Ag 328.068†	-4513.6	-4475.7	0.2553	µg/L	0.2553	ppb	17:15:29
1	Al 396.153Radial†	1555955.7	1704127.1	507830	µg/L	507830	ppb	17:14:52
1	As 188.979†	-66.0	-46.6	-13.308	µg/L	-13.308	ppb	17:15:49
1	B 249.677†	626.9	482.6	6.6137	µg/L	6.6137	ppb	17:15:29
1	Ba 233.527†	144.4	298.0	0.9382	µg/L	0.9382	ppb	17:15:49
1	Be 313.107†	-1022.3	-1416.1	-0.9709	µg/L	-0.9709	ppb	17:15:29
1	Ca 317.933Radial†	1941104.3	2125918.9	476150	µg/L	476150	ppb	17:14:52
1	Cd 226.502†	339.8	407.9	2.1062	µg/L	2.1062	ppb	17:15:49
1	Co 228.616†	-71.0	64.8	-1.7193	µg/L	-1.7193	ppb	17:15:49
1	Cr 267.716†	83.6	23.3	0.6466	µg/L	0.6466	ppb	17:15:49
1	Cu 324.752†	2842.3	-1812.9	-0.7050	µg/L	-0.7050	ppb	17:15:29
1	Fe 238.204 Radial†	169868.8	186013.0	188050	µg/L	188050	ppb	17:14:58
1	K 766.490 Radial†	1001.3	-28.8	-12.332	µg/L	-12.332	ppb	17:14:58
1	Mg 279.077 IEC†	158792.7	173921.4	501430	µg/L	501430	ppb	17:14:58
1	Mn 257.610†	-7373.3	-8730.2	0.2551	µg/L	0.2551	ppb	17:15:29
1	Mo 202.031†	-30.6	-34.4	1.4508	µg/L	1.4508	ppb	17:15:49
1	Na 589.592 Radial†	1297.9	412.6	66.054	µg/L	66.054	ppb	17:14:58
1	Ni 231.604†	97.6	-68.0	-4.4504	µg/L	-4.4504	ppb	17:15:49
1	P 214.914†	245.4	95.2	32.548	µg/L	32.548	ppb	17:15:49
1	Pb 220.353†	-232.3	-249.7	-7.9279	µg/L	-7.9279	ppb	17:15:49
1	S 181.975 Axial†	52.6	18.8	-30.403	µg/L	-30.403	ppb	17:15:49
1	Sb 206.836†	41.7	12.3	10.884	µg/L	10.884	ppb	17:15:49
1	Se 196.026†	-46.4	-20.1	-11.2	µg/L	-11.2	ppb	17:15:49
1	SiO2 †	1357.5	-57.9	41.647	µg/L	41.647	ppb	17:15:49
1	Si 251.611†	1358.7	148.3	26.8	µg/L	26.8	ppb	17:16:49
1	Sn 189.927†	-150.9	-165.1	6.4119	µg/L	6.4119	ppb	17:15:49
1	Sr 421.552†	2413.2	2672.3	5.1520	µg/L	5.1520	ppb	17:14:58
1	Ti 334.940†	-7591.3	-9028.1	-1.9394	µg/L	-1.9394	ppb	17:15:29
1	Tl 190.801†	-57.9	-28.9	-8.9282	µg/L	-8.9282	ppb	17:15:49
1	U 409.014†	438.5	157.9	-13.300	µg/L	-13.300	ppb	17:15:29
1	V 292.402†	-438.1	-405.0	-1.0005	µg/L	-1.0005	ppb	17:15:49
1	Zn 213.857†	2601.0	2366.3	3.8699	µg/L	3.8699	ppb	17:15:49
2	Sc 361.383	954897.1	954897.1	88.728	%			17:15:56
2	Sc RADIAL	36338.6	36338.6	91.6	%			17:15:09
2	Y 371.029	512046.6	512046.6	86.620	%			17:15:56
2	Ag 328.068†	-4531.3	-4482.8	0.1839	µg/L	0.1839	ppb	17:15:56
2	Al 396.153Radial†	1562688.2	1704958.1	508070	µg/L	508070	ppb	17:15:03
2	As 188.979†	-59.3	-38.8	-9.3957	µg/L	-9.3957	ppb	17:16:16
2	B 249.677†	668.6	527.9	9.6241	µg/L	9.6241	ppb	17:15:56
2	Ba 233.527†	135.1	287.1	0.8242	µg/L	0.8242	ppb	17:16:16
2	Be 313.107†	-1089.2	-1488.6	-1.0191	µg/L	-1.0191	ppb	17:15:56
2	Ca 317.933Radial†	1947462.6	2124728.9	475890	µg/L	475890	ppb	17:15:03
2	Cd 226.502†	338.6	405.5	2.0263	µg/L	2.0263	ppb	17:16:16
2	Co 228.616†	-69.2	67.1	-1.6475	µg/L	-1.6475	ppb	17:16:16
2	Cr 267.716†	110.9	53.9	1.4948	µg/L	1.4948	ppb	17:16:16
2	Cu 324.752†	2963.8	-1684.1	-0.2083	µg/L	-0.2083	ppb	17:15:56
2	Fe 238.204 Radial†	170438.5	185923.4	187960	µg/L	187960	ppb	17:15:09
2	K 766.490 Radial†	1092.6	66.6	28.490	µg/L	28.490	ppb	17:15:09
2	Mg 279.077 IEC†	159683.7	174228.8	502320	µg/L	502320	ppb	17:15:09
2	Mn 257.610†	-7461.3	-8808.5	0.0903	µg/L	0.0903	ppb	17:15:56
2	Mo 202.031†	-31.7	-35.6	1.2898	µg/L	1.2898	ppb	17:16:16
2	Na 589.592 Radial†	1336.0	448.7	71.836	µg/L	71.836	ppb	17:15:09
2	Ni 231.604†	91.1	-75.7	-4.9489	µg/L	-4.9489	ppb	17:16:16
2	P 214.914†	235.9	83.8	23.253	µg/L	23.253	ppb	17:16:16
2	Pb 220.353†	-212.4	-226.6	-1.8862	µg/L	-1.8862	ppb	17:16:16
2	S 181.975 Axial†	58.0	24.7	-16.954	µg/L	-16.954	ppb	17:16:16

2	Sb 206.836†	57.4	29.9	19.129 µg/L	19.129 ppb	17:16:16
2	Se 196.026†	-42.7	-15.7	-7.54 µg/L	-7.54 ppb	17:16:16
2	SiO2 †	1383.6	-32.4	43.418 µg/L	43.418 ppb	17:16:16
2	Si 251.611†	1343.5	127.3	26.1 µg/L	26.1 ppb	17:16:54
2	Sn 189.927†	-165.9	-181.5	2.2204 µg/L	2.2204 ppb	17:16:16
2	Sr 421.552†	2431.3	2682.0	5.1995 µg/L	5.1995 ppb	17:15:09
2	Ti 334.940†	-7534.2	-8942.2	-1.8352 µg/L	-1.8352 ppb	17:15:56
2	Tl 190.801†	-63.5	-35.1	-11.307 µg/L	-11.307 ppb	17:16:16
2	U 409.014†	552.0	284.6	-5.1338 µg/L	-5.1338 ppb	17:15:56
2	V 292.402†	-467.2	-436.5	-1.4620 µg/L	-1.4620 ppb	17:16:16
2	Zn 213.857†	2579.2	2334.3	3.1053 µg/L	3.1053 ppb	17:16:16
3	Sc 361.383	960538.1	960538.1	89.253 %		17:16:23
3	Sc RADIAL	35993.5	35993.5	90.8 %		17:15:20
3	Y 371.029	514967.4	514967.4	87.114 %		17:16:23
3	Ag 328.068†	-4586.6	-4514.8	-0.0672 µg/L	-0.0672 ppb	17:16:23
3	Al 396.153Radial†	1553574.9	1711265.6	509950 µg/L	509950 ppb	17:15:15
3	As 188.979†	-78.0	-59.4	-19.827 µg/L	-19.827 ppb	17:16:43
3	B 249.677†	652.0	504.9	8.1131 µg/L	8.1131 ppb	17:16:23
3	Ba 233.527†	173.8	329.6	1.2763 µg/L	1.2763 ppb	17:16:43
3	Be 313.107†	-1032.3	-1417.6	-0.9704 µg/L	-0.9704 ppb	17:16:23
3	Ca 317.933Radial†	1937247.9	2133848.0	477930 µg/L	477930 ppb	17:15:15
3	Cd 226.502†	348.3	414.2	2.3501 µg/L	2.3501 ppb	17:16:43
3	Co 228.616†	-59.5	78.4	-1.2935 µg/L	-1.2935 ppb	17:16:43
3	Cr 267.716†	94.8	35.0	0.9692 µg/L	0.9692 ppb	17:16:43
3	Cu 324.752†	2836.3	-1846.6	-0.8504 µg/L	-0.8504 ppb	17:16:23
3	Fe 238.204 Radial†	168739.3	185834.5	187870 µg/L	187870 ppb	17:15:20
3	K 766.490 Radial†	1018.1	-4.1	-1.7392 µg/L	-1.7392 ppb	17:15:20
3	Mg 279.077 IEC†	157773.7	173795.1	501070 µg/L	501070 ppb	17:15:20
3	Mn 257.610†	-7397.5	-8687.5	0.3149 µg/L	0.3149 ppb	17:16:23
3	Mo 202.031†	-23.6	-26.3	2.5089 µg/L	2.5089 ppb	17:16:43
3	Na 589.592 Radial†	1334.8	461.4	73.856 µg/L	73.856 ppb	17:15:20
3	Ni 231.604†	95.9	-70.9	-4.6352 µg/L	-4.6352 ppb	17:16:43
3	P 214.914†	246.6	94.3	32.520 µg/L	32.520 ppb	17:16:43
3	Pb 220.353†	-214.9	-228.0	-2.0317 µg/L	-2.0317 ppb	17:16:43
3	S 181.975 Axial†	58.1	24.5	-17.711 µg/L	-17.711 ppb	17:16:43
3	Sb 206.836†	49.0	20.1	14.570 µg/L	14.570 ppb	17:16:43
3	Se 196.026†	-31.9	-3.4	2.94 µg/L	2.94 ppb	17:16:43
3	SiO2 †	1459.6	43.6	48.655 µg/L	48.655 ppb	17:16:43
3	Si 251.611†	1359.0	135.7	26.3 µg/L	26.3 ppb	17:16:59
3	Sn 189.927†	-162.3	-176.5	3.6625 µg/L	3.6625 ppb	17:16:43
3	Sr 421.552†	2377.6	2648.2	5.0173 µg/L	5.0173 ppb	17:15:20
3	Ti 334.940†	-7575.1	-8938.2	-1.7866 µg/L	-1.7866 ppb	17:16:23
3	Tl 190.801†	-55.9	-26.1	-7.8482 µg/L	-7.8482 ppb	17:16:43
3	U 409.014†	553.5	282.6	-5.2560 µg/L	-5.2560 ppb	17:16:23
3	V 292.402†	-476.1	-443.5	-1.5575 µg/L	-1.5575 ppb	17:16:43
3	Zn 213.857†	2649.4	2395.9	4.5401 µg/L	4.5401 ppb	17:16:43

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	955975.0	88.829	%	0.3838				0.43%
Sc RADIAL	36177.2	91.2	%	0.44				0.48%
Y 371.029	512605.9	86.715	%	0.3616				0.42%
Ag 328.068†	-4491.1	0.1240	µg/L	0.16938	0.1240	ppb	0.16938	136.62%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1706783.6	508620	µg/L	1163.3	508620	ppb	1163.3	0.23%
QC value within limits for Al 396.153Radial Recovery = 101.72%								
As 188.979†	-48.3	-14.177	µg/L	5.2698	-14.177	ppb	5.2698	37.17%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	505.1	8.1170	µg/L	1.50521	8.1170	ppb	1.50521	18.54%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	304.9	1.0129	µg/L	0.23515	1.0129	ppb	0.23515	23.21%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1440.8	-0.9868	µg/L	0.02795	-0.9868	ppb	0.02795	2.83%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2128165.3	476660	µg/L	1110.3	476660	ppb	1110.3	0.23%
QC value within limits for Ca 317.933Radial Recovery = 95.33%								
Cd 226.502†	409.2	2.1609	µg/L	0.16870	2.1609	ppb	0.16870	7.81%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	70.1	-1.5534	µg/L	0.22793	-1.5534	ppb	0.22793	14.67%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	37.4	1.0369 µg/L	0.42816	1.0369 ppb	0.42816	41.29%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-1781.2	-0.5879 µg/L	0.33667	-0.5879 ppb	0.33667	57.27%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	185923.6	187960 µg/L	90.2	187960 ppb	90.2	0.05%

QC value within limits for Fe 238.204 Radial Recovery = 93.98%

K 766.490 Radial†	11.2	4.8063 µg/L	21.18314	4.8063 ppb	21.18314	440.74%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	173981.8	501600 µg/L	643.2	501600 ppb	643.2	0.13%

QC value within limits for Mg 279.077 IEC Recovery = 100.32%

Mn 257.610†	-8742.1	0.2201 µg/L	0.11633	0.2201 ppb	0.11633	52.85%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	-32.1	1.7498 µg/L	0.66232	1.7498 ppb	0.66232	37.85%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	440.9	70.582 µg/L	4.0491	70.582 ppb	4.0491	5.74%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-71.5	-4.6782 µg/L	0.25199	-4.6782 ppb	0.25199	5.39%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	91.1	29.440 µg/L	5.3582	29.440 ppb	5.3582	18.20%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	-234.8	-3.9486 µg/L	3.44695	-3.9486 ppb	3.44695	87.30%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	22.7	-21.689 µg/L	7.5557	-21.689 ppb	7.5557	34.84%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	20.8	14.861 µg/L	4.1300	14.861 ppb	4.1300	27.79%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-13.1	-5.26 µg/L	7.328	-5.26 ppb	7.328	139.34%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	-15.6	44.573 µg/L	3.6439	44.573 ppb	3.6439	8.18%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	137.1	26.4 µg/L	0.35	26.4 ppb	0.35	1.34%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	-174.4	4.0983 µg/L	2.12945	4.0983 ppb	2.12945	51.96%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	2667.5	5.1229 µg/L	0.09451	5.1229 ppb	0.09451	1.84%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	-8969.5	-1.8537 µg/L	0.07803	-1.8537 ppb	0.07803	4.21%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	-30.0	-9.3613 µg/L	1.76982	-9.3613 ppb	1.76982	18.91%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	241.7	-7.8965 µg/L	4.67964	-7.8965 ppb	4.67964	59.26%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-428.4	-1.3400 µg/L	0.29784	-1.3400 ppb	0.29784	22.23%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	2365.5	3.8384 µg/L	0.71790	3.8384 ppb	0.71790	18.70%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 6/23/2005 17:18:49
Data Type: Reprocessed on 6/24/2005 07:38:43
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	950334.9	950334.9	88.304	%			17:20:53
1	Sc RADIAL	36186.1	36186.1	91.3	%			17:20:21
1	Y 371.029	510333.7	510333.7	86.330	%			17:20:53
1	Ag 328.068†	25750.2	29784.8	253.32	µg/L	253.32	ppb	17:20:53
1	Al 396.153Radial†	1568031.5	1717998.4	511940	µg/L	511940	ppb	17:20:15
1	As 188.979†	802.6	937.0	489.23	µg/L	489.23	ppb	17:21:13
1	B 249.677†	7518.6	8288.7	524.57	µg/L	524.57	ppb	17:20:53
1	Ba 233.527†	39621.5	45004.1	475.97	µg/L	475.97	ppb	17:20:53
1	Be 313.107†	303899.1	343888.3	236.42	µg/L	236.42	ppb	17:20:53
1	Ca 317.933Radial†	1948742.5	2135086.1	478210	µg/L	478210	ppb	17:20:15
1	Cd 226.502†	11325.9	12850.0	456.62	µg/L	456.62	ppb	17:21:13
1	Co 228.616†	12666.0	14488.6	447.02	µg/L	447.02	ppb	17:21:13
1	Cr 267.716†	15305.7	17261.6	481.87	µg/L	481.87	ppb	17:21:13
1	Cu 324.752†	122368.6	133551.4	530.47	µg/L	530.47	ppb	17:20:53
1	Fe 238.204 Radial†	169216.9	185368.6	187400	µg/L	187400	ppb	17:20:21
1	K 766.490 Radial†	13288.3	13434.5	5750.7	µg/L	5750.7	ppb	17:20:21
1	Mg 279.077 IEC†	158775.7	173968.1	501580	µg/L	501580	ppb	17:20:21
1	Mn 257.610†	219931.2	248660.9	468.95	µg/L	468.95	ppb	17:20:53
1	Mo 202.031†	3242.9	3672.5	487.77	µg/L	487.77	ppb	17:21:13
1	Na 589.592 Radial†	31639.1	33658.2	5385.6	µg/L	5385.6	ppb	17:20:21
1	Ni 231.604†	5969.0	6581.2	430.50	µg/L	430.50	ppb	17:21:13
1	P 214.914†	2834.1	3027.4	2361.1	µg/L	2361.1	ppb	17:21:13
1	Pb 220.353†	1321.8	1509.6	452.46	µg/L	452.46	ppb	17:21:13
1	S 181.975 Axial†	1037.7	1134.5	2495.7	µg/L	2495.7	ppb	17:21:13
1	Sb 206.836†	960.5	1052.9	500.61	µg/L	500.61	ppb	17:21:13
1	Se 196.026†	2407.6	2758.9	2310	µg/L	2310	ppb	17:21:13
1	SiO2 †	123692.5	138483.3	9685.7	µg/L	9685.7	ppb	17:20:53
1	Si 251.611†	122880.8	137768.9	4570	µg/L	4570	ppb	17:22:13
1	Sn 189.927†	1388.7	1578.0	449.74	µg/L	449.74	ppb	17:21:13
1	Sr 421.552†	105890.2	116053.8	517.09	µg/L	517.09	ppb	17:20:21
1	Ti 334.940†	320674.7	362695.9	491.08	µg/L	491.08	ppb	17:20:53
1	Tl 190.801†	941.3	1102.4	428.95	µg/L	428.95	ppb	17:21:13
1	U 409.014†	6981.8	7569.0	466.50	µg/L	466.50	ppb	17:20:53
1	V 292.402†	28932.9	32854.9	499.88	µg/L	499.88	ppb	17:21:13
1	Zn 213.857†	20473.6	22612.7	484.90	µg/L	484.90	ppb	17:21:13
2	Sc 361.383	941034.9	941034.9	87.440	%			17:21:20
2	Sc RADIAL	36038.8	36038.8	90.9	%			17:20:32
2	Y 371.029	505214.6	505214.6	85.464	%			17:21:20
2	Ag 328.068†	25547.2	29840.8	253.68	µg/L	253.68	ppb	17:21:20
2	Al 396.153Radial†	1567499.3	1724434.9	513850	µg/L	513850	ppb	17:20:27
2	As 188.979†	794.3	936.4	488.92	µg/L	488.92	ppb	17:21:40
2	B 249.677†	7506.4	8358.9	529.29	µg/L	529.29	ppb	17:21:20
2	Ba 233.527†	39207.8	44974.4	475.66	µg/L	475.66	ppb	17:21:20
2	Be 313.107†	300687.2	343616.2	236.23	µg/L	236.23	ppb	17:21:20
2	Ca 317.933Radial†	1950989.5	2146285.3	480720	µg/L	480720	ppb	17:20:27
2	Cd 226.502†	11365.5	13021.9	462.93	µg/L	462.93	ppb	17:21:40
2	Co 228.616†	12710.0	14680.7	453.02	µg/L	453.02	ppb	17:21:40
2	Cr 267.716†	15350.2	17483.8	488.08	µg/L	488.08	ppb	17:21:40
2	Cu 324.752†	121200.6	133585.1	530.59	µg/L	530.59	ppb	17:21:20
2	Fe 238.204 Radial†	168164.2	184968.2	187000	µg/L	187000	ppb	17:20:32
2	K 766.490 Radial†	13237.0	13437.6	5752.0	µg/L	5752.0	ppb	17:20:32
2	Mg 279.077 IEC†	157878.1	173691.6	500780	µg/L	500780	ppb	17:20:32
2	Mn 257.610†	217627.8	248488.1	468.60	µg/L	468.60	ppb	17:21:20
2	Mo 202.031†	3255.0	3722.7	494.32	µg/L	494.32	ppb	17:21:40
2	Na 589.592 Radial†	31426.5	33566.0	5370.9	µg/L	5370.9	ppb	17:20:32
2	Ni 231.604†	6001.0	6684.6	437.27	µg/L	437.27	ppb	17:21:40
2	P 214.914†	2857.2	3085.6	2409.9	µg/L	2409.9	ppb	17:21:40
2	Pb 220.353†	1321.1	1523.6	456.33	µg/L	456.33	ppb	17:21:40
2	S 181.975 Axial†	1035.1	1143.1	2515.2	µg/L	2515.2	ppb	17:21:40

2	Sb 206.836†	981.6	1087.9	517.06 µg/L	517.06 ppb	17:21:40
2	Se 196.026†	2437.0	2819.4	2360 µg/L	2360 ppb	17:21:40
2	SiO2 †	122416.5	138408.4	9680.2 µg/L	9680.2 ppb	17:21:20
2	Si 251.611†	122742.5	138986.0	4610 µg/L	4610 ppb	17:22:18
2	Sn 189.927†	1409.5	1617.3	459.94 µg/L	459.94 ppb	17:21:40
2	Sr 421.552†	105312.1	115891.9	516.33 µg/L	516.33 ppb	17:20:32
2	Ti 334.940†	317674.7	362853.9	491.34 µg/L	491.34 ppb	17:21:20
2	Tl 190.801†	932.8	1103.3	429.26 µg/L	429.26 ppb	17:21:40
2	U 409.014†	6842.8	7488.2	461.38 µg/L	461.38 ppb	17:21:20
2	V 292.402†	29009.9	33266.8	506.07 µg/L	506.07 ppb	17:21:40
2	Zn 213.857†	20513.7	22887.7	491.41 µg/L	491.41 ppb	17:21:40
3	Sc 361.383	944170.7	944170.7	87.732 %		17:21:47
3	Sc RADIAL	35669.2	35669.2	90.0 %		17:20:43
3	Y 371.029	506850.7	506850.7	85.741 %		17:21:47
3	Ag 328.068†	25574.4	29774.8	253.26 µg/L	253.26 ppb	17:21:47
3	Al 396.153Radial†	1574490.0	1750072.3	521490 µg/L	521490 ppb	17:20:38
3	As 188.979†	790.6	929.2	485.12 µg/L	485.12 ppb	17:22:07
3	B 249.677†	7501.8	8325.1	526.99 µg/L	526.99 ppb	17:21:47
3	Ba 233.527†	39427.4	45075.8	476.73 µg/L	476.73 ppb	17:21:47
3	Be 313.107†	302033.3	344008.5	236.50 µg/L	236.50 ppb	17:21:47
3	Ca 317.933Radial†	1958460.7	2176827.9	487560 µg/L	487560 ppb	17:20:38
3	Cd 226.502†	11289.0	12891.6	458.13 µg/L	458.13 ppb	17:22:07
3	Co 228.616†	12614.4	14523.5	448.11 µg/L	448.11 ppb	17:22:07
3	Cr 267.716†	15303.0	17371.8	484.95 µg/L	484.95 ppb	17:22:07
3	Cu 324.752†	121444.9	133403.2	529.89 µg/L	529.89 ppb	17:21:47
3	Fe 238.204 Radial†	166833.5	185405.8	187440 µg/L	187440 ppb	17:20:43
3	K 766.490 Radial†	13102.3	13438.7	5752.5 µg/L	5752.5 ppb	17:20:43
3	Mg 279.077 IEC†	156546.3	174010.7	501700 µg/L	501700 ppb	17:20:43
3	Mn 257.610†	218587.0	248754.8	469.13 µg/L	469.13 ppb	17:21:47
3	Mo 202.031†	3225.5	3676.7	488.32 µg/L	488.32 ppb	17:22:07
3	Na 589.592 Radial†	31179.4	33649.5	5384.3 µg/L	5384.3 ppb	17:20:43
3	Ni 231.604†	5959.5	6614.6	432.69 µg/L	432.69 ppb	17:22:07
3	P 214.914†	2842.7	3058.2	2389.2 µg/L	2389.2 ppb	17:22:07
3	Pb 220.353†	1324.8	1522.8	456.96 µg/L	456.96 ppb	17:22:07
3	S 181.975 Axial†	1032.7	1136.5	2498.9 µg/L	2498.9 ppb	17:22:07
3	Sb 206.836†	984.4	1087.2	516.83 µg/L	516.83 ppb	17:22:07
3	Se 196.026†	2422.8	2793.9	2340 µg/L	2340 ppb	17:22:07
3	SiO2 †	122909.4	138505.2	9687.2 µg/L	9687.2 ppb	17:21:47
3	Si 251.611†	123528.0	139415.2	4620 µg/L	4620 ppb	17:22:23
3	Sn 189.927†	1406.5	1608.6	458.32 µg/L	458.32 ppb	17:22:07
3	Sr 421.552†	104412.0	116091.8	517.13 µg/L	517.13 ppb	17:20:43
3	Ti 334.940†	319082.5	363252.0	492.01 µg/L	492.01 ppb	17:21:47
3	Tl 190.801†	931.1	1097.8	427.17 µg/L	427.17 ppb	17:22:07
3	U 409.014†	6877.1	7501.2	462.14 µg/L	462.14 ppb	17:21:47
3	V 292.402†	28872.6	33000.1	502.05 µg/L	502.05 ppb	17:22:07
3	Zn 213.857†	20427.8	22711.9	486.89 µg/L	486.89 ppb	17:22:07

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	945180.2	87.825	%	0.4396				0.50%
Sc RADIAL	35964.7	90.7	%	0.67				0.74%
Y 371.029	507466.3	85.845	%	0.4423				0.52%
Ag 328.068†	29800.1	253.42	µg/L	0.226	253.42	ppb	0.226	0.09%
QC value within limits for Ag 328.068 Recovery = 101.37%								
Al 396.153Radial†	1730835.2	515760	µg/L	5056.4	515760	ppb	5056.4	0.98%
QC value within limits for Al 396.153Radial Recovery = 103.15%								
As 188.979†	934.2	487.75	µg/L	2.288	487.75	ppb	2.288	0.47%
QC value within limits for As 188.979 Recovery = 97.55%								
B 249.677†	8324.3	526.95	µg/L	2.359	526.95	ppb	2.359	0.45%
QC value within limits for B 249.677 Recovery = 105.39%								
Ba 233.527†	45018.1	476.12	µg/L	0.549	476.12	ppb	0.549	0.12%
QC value within limits for Ba 233.527 Recovery = 95.22%								
Be 313.107†	343837.7	236.39	µg/L	0.138	236.39	ppb	0.138	0.06%
QC value within limits for Be 313.107 Recovery = 94.55%								
Ca 317.933Radial†	2152733.1	482160	µg/L	4839.0	482160	ppb	4839.0	1.00%
QC value within limits for Ca 317.933Radial Recovery = 96.43%								
Cd 226.502†	12921.1	459.23	µg/L	3.292	459.23	ppb	3.292	0.72%
QC value within limits for Cd 226.502 Recovery = 91.85%								
Co 228.616†	14564.3	449.38	µg/L	3.197	449.38	ppb	3.197	0.71%

QC value within limits for Co 228.616 Recovery = 89.88%

Cr 267.716†	17372.4	484.97 µg/L	3.105	484.97 ppb	3.105	0.64%

QC value within limits for Cr 267.716 Recovery = 96.99%

Cu 324.752†	133513.2	530.31 µg/L	0.373	530.31 ppb	0.373	0.07%

QC value within limits for Cu 324.752 Recovery = 106.06%

Fe 238.204 Radial†	185247.5	187280 µg/L	245.2	187280 ppb	245.2	0.13%

QC value within limits for Fe 238.204 Radial Recovery = 93.64%

K 766.490 Radial†	13436.9	5751.7 µg/L	0.93	5751.7 ppb	0.93	0.02%

QC value within limits for K 766.490 Radial Recovery = 115.03%

Mg 279.077 IEC†	173890.1	501350 µg/L	499.4	501350 ppb	499.4	0.10%

QC value within limits for Mg 279.077 IEC Recovery = 100.27%

Mn 257.610†	248634.6	468.89 µg/L	0.268	468.89 ppb	0.268	0.06%

QC value within limits for Mn 257.610 Recovery = 93.78%

Mo 202.031†	3690.6	490.13 µg/L	3.636	490.13 ppb	3.636	0.74%

QC value within limits for Mo 202.031 Recovery = 98.03%

Na 589.592 Radial†	33624.6	5380.3 µg/L	8.16	5380.3 ppb	8.16	0.15%

QC value within limits for Na 589.592 Radial Recovery = 107.61%

Ni 231.604†	6626.8	433.49 µg/L	3.454	433.49 ppb	3.454	0.80%

QC value within limits for Ni 231.604 Recovery = 86.70%

P 214.914†	3057.0	2386.7 µg/L	24.53	2386.7 ppb	24.53	1.03%

QC value within limits for P 214.914 Recovery = 95.47%

Pb 220.353†	1518.7	455.25 µg/L	2.437	455.25 ppb	2.437	0.54%

QC value within limits for Pb 220.353 Recovery = 91.05%

S 181.975 Axial†	1138.0	2503.3 µg/L	10.42	2503.3 ppb	10.42	0.42%

QC value within limits for S 181.975 Axial Recovery = 100.13%

Sb 206.836†	1076.0	511.50 µg/L	9.434	511.50 ppb	9.434	1.84%

QC value within limits for Sb 206.836 Recovery = 102.30%

Se 196.026†	2790.7	2330 µg/L	25.4	2330 ppb	25.4	1.09%

QC value within limits for Se 196.026 Recovery = 93.30%

SiO2 †	138465.6	9684.4 µg/L	3.71	9684.4 ppb	3.71	0.04%

QC value within limits for SiO2 Recovery = 90.55%

Si 251.611†	138723.4	4600 µg/L	28.2	4600 ppb	28.2	0.61%

QC value within limits for Si 251.611 Recovery = 91.94%

Sn 189.927†	1601.3	456.00 µg/L	5.481	456.00 ppb	5.481	1.20%

QC value within limits for Sn 189.927 Recovery = 91.20%

Sr 421.552†	116012.5	516.85 µg/L	0.454	516.85 ppb	0.454	0.09%

QC value within limits for Sr 421.552 Recovery = 103.37%

Ti 334.940†	362933.9	491.48 µg/L	0.483	491.48 ppb	0.483	0.10%

QC value within limits for Ti 334.940 Recovery = 98.30%

Tl 190.801†	1101.2	428.46 µg/L	1.130	428.46 ppb	1.130	0.26%

QC value within limits for Tl 190.801 Recovery = 85.69%

U 409.014†	7519.4	463.34 µg/L	2.760	463.34 ppb	2.760	0.60%

QC value within limits for U 409.014 Recovery = 92.67%

V 292.402†	33040.6	502.66 µg/L	3.142	502.66 ppb	3.142	0.62%

QC value within limits for V 292.402 Recovery = 100.53%

Zn 213.857†	22737.4	487.73 µg/L	3.334	487.73 ppb	3.334	0.68%

QC value within limits for Zn 213.857 Recovery = 97.55%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/23/2005 17:24:11
Data Type: Reprocessed on 6/24/2005 07:38:46
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1083610.3	1083610.3	100.69	%			17:26:56
1	Sc RADIAL	39124.0	39124.0	98.7	%			17:25:37
1	Y 371.029	589637.9	589637.9	99.746	%			17:26:56
1	Ag 328.068†	67334.5	67498.3	498.52	µg/L	498.52	ppb	17:27:02
1	Al 396.153Radial†	16794.0	16914.2	5015.9	µg/L	5015.9	ppb	17:25:37
1	As 188.979†	962.5	984.0	503.62	µg/L	503.62	ppb	17:27:22
1	B 249.677†	7774.3	7495.5	496.56	µg/L	496.56	ppb	17:27:02
1	Ba 233.527†	47435.4	47246.0	501.93	µg/L	501.93	ppb	17:27:02
1	Be 313.107†	734122.8	728843.5	500.90	µg/L	500.90	ppb	17:26:56
1	Ca 317.933Radial†	22403.9	22539.4	5051.1	µg/L	5051.1	ppb	17:25:57
1	Cd 226.502†	13966.2	13894.7	507.18	µg/L	507.18	ppb	17:27:02
1	Co 228.616†	16092.8	16127.9	501.70	µg/L	501.70	ppb	17:27:02
1	Cr 267.716†	18112.8	17917.8	500.19	µg/L	500.19	ppb	17:27:02
1	Cu 324.752†	132373.9	126444.6	496.31	µg/L	496.31	ppb	17:26:56
1	Fe 238.204 Radial†	5113.5	5138.5	5200.8	µg/L	5200.8	ppb	17:25:57
1	K 766.490 Radial†	12661.0	11705.5	5010.6	µg/L	5010.6	ppb	17:25:37
1	Mg 279.077 IEC†	1788.8	1809.2	5226.7	µg/L	5226.7	ppb	17:25:57
1	Mn 257.610†	277534.7	275238.3	501.83	µg/L	501.83	ppb	17:26:56
1	Mo 202.031†	3904.1	3877.5	508.84	µg/L	508.84	ppb	17:27:22
1	Na 589.592 Radial†	62022.7	61846.5	9897.2	µg/L	9897.2	ppb	17:25:37
1	Ni 231.604†	7992.1	7759.1	507.43	µg/L	507.43	ppb	17:27:02
1	P 214.914†	3228.4	3024.3	2404.9	µg/L	2404.9	ppb	17:27:22
1	Pb 220.353†	1911.8	1911.5	500.37	µg/L	500.37	ppb	17:27:22
1	S 181.975 Axial†	478.8	434.9	980.92	µg/L	980.92	ppb	17:27:22
1	Sb 206.836†	1092.4	1050.2	494.37	µg/L	494.37	ppb	17:27:22
1	Se 196.026†	567.3	595.8	497	µg/L	497	ppb	17:27:22
1	SiO2 †	76870.6	74753.4	5196.7	µg/L	5196.7	ppb	17:27:02
1	Si 251.611†	74980.7	73081.3	2410	µg/L	2410	ppb	17:28:31
1	Sn 189.927†	1942.6	1934.7	492.37	µg/L	492.37	ppb	17:27:22
1	Sr 421.552†	109431.1	110929.6	500.83	µg/L	500.83	ppb	17:25:37
1	Ti 334.940†	376471.0	373446.7	495.35	µg/L	495.35	ppb	17:26:56
1	Tl 190.801†	1274.5	1302.3	503.59	µg/L	503.59	ppb	17:27:22
1	U 409.014†	8192.7	7799.2	504.06	µg/L	504.06	ppb	17:27:02
1	V 292.402†	33646.3	33506.3	504.99	µg/L	504.99	ppb	17:27:02
1	Zn 213.857†	21726.7	21005.7	497.90	µg/L	497.90	ppb	17:27:02
2	Sc 361.383	1086140.7	1086140.7	100.92	%			17:27:28
2	Sc RADIAL	39816.8	39816.8	100	%			17:26:02
2	Y 371.029	591135.4	591135.4	99.999	%			17:27:28
2	Ag 328.068†	66889.4	66901.4	494.10	µg/L	494.10	ppb	17:27:33
2	Al 396.153Radial†	17066.2	16889.1	5008.5	µg/L	5008.5	ppb	17:26:02
2	As 188.979†	965.8	985.0	504.08	µg/L	504.08	ppb	17:27:53
2	B 249.677†	7716.7	7420.4	491.60	µg/L	491.60	ppb	17:27:33
2	Ba 233.527†	46878.8	46584.8	494.91	µg/L	494.91	ppb	17:27:33
2	Be 313.107†	734560.8	727578.9	500.03	µg/L	500.03	ppb	17:27:28
2	Ca 317.933Radial†	22301.2	22042.0	4939.6	µg/L	4939.6	ppb	17:26:22
2	Cd 226.502†	13742.1	13640.3	497.90	µg/L	497.90	ppb	17:27:33
2	Co 228.616†	15958.5	15957.6	496.40	µg/L	496.40	ppb	17:27:33
2	Cr 267.716†	17960.3	17724.8	494.80	µg/L	494.80	ppb	17:27:33
2	Cu 324.752†	132830.4	126590.6	496.89	µg/L	496.89	ppb	17:27:28
2	Fe 238.204 Radial†	5081.9	5016.9	5077.8	µg/L	5077.8	ppb	17:26:22
2	K 766.490 Radial†	12873.3	11693.6	5005.5	µg/L	5005.5	ppb	17:26:02
2	Mg 279.077 IEC†	1779.5	1768.3	5109.1	µg/L	5109.1	ppb	17:26:22
2	Mn 257.610†	277410.3	274472.8	500.42	µg/L	500.42	ppb	17:27:28
2	Mo 202.031†	3896.1	3860.6	506.62	µg/L	506.62	ppb	17:27:53
2	Na 589.592 Radial†	62918.4	61644.8	9864.9	µg/L	9864.9	ppb	17:26:02
2	Ni 231.604†	7838.3	7588.2	496.27	µg/L	496.27	ppb	17:27:33
2	P 214.914†	3218.4	3006.8	2390.5	µg/L	2390.5	ppb	17:27:53
2	Pb 220.353†	1920.1	1915.3	501.36	µg/L	501.36	ppb	17:27:53
2	S 181.975 Axial†	478.5	433.5	977.75	µg/L	977.75	ppb	17:27:53

2	Sb 206.836†	1087.3	1042.6	490.86 µg/L	490.86 ppb	17:27:53
2	Se 196.026†	577.0	604.1	504 µg/L	504 ppb	17:27:53
2	SiO2 †	76165.3	73876.6	5135.6 µg/L	5135.6 ppb	17:27:33
2	Si 251.611†	75477.9	73400.4	2420 µg/L	2420 ppb	17:28:36
2	Sn 189.927†	1943.6	1931.2	491.48 µg/L	491.48 ppb	17:27:53
2	Sr 421.552†	111264.3	110825.4	500.36 µg/L	500.36 ppb	17:26:02
2	Ti 334.940†	376981.8	373081.7	494.86 µg/L	494.86 ppb	17:27:28
2	Tl 190.801†	1273.5	1298.3	502.07 µg/L	502.07 ppb	17:27:53
2	U 409.014†	8121.5	7709.7	498.29 µg/L	498.29 ppb	17:27:33
2	V 292.402†	33356.1	33140.9	499.51 µg/L	499.51 ppb	17:27:33
2	Zn 213.857†	21509.4	20740.1	491.64 µg/L	491.64 ppb	17:27:33
3	Sc 361.383	1078189.0	1078189.0	100.18 %		17:27:59
3	Sc RADIAL	40053.1	40053.1	101 %		17:26:28
3	Y 371.029	586671.1	586671.1	99.244 %		17:27:59
3	Ag 328.068†	66397.4	66899.2	494.09 µg/L	494.09 ppb	17:28:05
3	Al 396.153Radial†	17135.2	16857.2	4999.0 µg/L	4999.0 ppb	17:26:28
3	As 188.979†	960.5	986.8	504.96 µg/L	504.96 ppb	17:28:25
3	B 249.677†	7636.7	7397.0	490.04 µg/L	490.04 ppb	17:28:05
3	Ba 233.527†	46591.2	46640.3	495.50 µg/L	495.50 ppb	17:28:05
3	Be 313.107†	729512.8	727908.1	500.26 µg/L	500.26 ppb	17:27:59
3	Ca 317.933Radial†	22534.8	22142.3	4962.1 µg/L	4962.1 ppb	17:26:48
3	Cd 226.502†	13643.9	13642.7	497.99 µg/L	497.99 ppb	17:28:05
3	Co 228.616†	15849.0	15964.9	496.63 µg/L	496.63 ppb	17:28:05
3	Cr 267.716†	17808.9	17704.9	494.25 µg/L	494.25 ppb	17:28:05
3	Cu 324.752†	131580.0	126313.2	495.80 µg/L	495.80 ppb	17:27:59
3	Fe 238.204 Radial†	5130.1	5034.7	5095.8 µg/L	5095.8 ppb	17:26:48
3	K 766.490 Radial†	12933.9	11677.9	4998.8 µg/L	4998.8 ppb	17:26:28
3	Mg 279.077 IEC†	1800.0	1778.2	5137.7 µg/L	5137.7 ppb	17:26:48
3	Mn 257.610†	275706.2	274799.1	501.02 µg/L	501.02 ppb	17:27:59
3	Mo 202.031†	3879.7	3872.7	508.20 µg/L	508.20 ppb	17:28:25
3	Na 589.592 Radial†	63252.0	61605.4	9858.6 µg/L	9858.6 ppb	17:26:28
3	Ni 231.604†	7827.2	7634.5	499.29 µg/L	499.29 ppb	17:28:05
3	P 214.914†	3202.5	3014.5	2396.9 µg/L	2396.9 ppb	17:28:25
3	Pb 220.353†	1900.3	1909.6	499.89 µg/L	499.89 ppb	17:28:25
3	S 181.975 Axial†	476.2	434.7	980.55 µg/L	980.55 ppb	17:28:25
3	Sb 206.836†	1087.7	1050.9	494.81 µg/L	494.81 ppb	17:28:25
3	Se 196.026†	571.9	603.2	503 µg/L	503 ppb	17:28:25
3	SiO2 †	75695.6	73964.4	5141.7 µg/L	5141.7 ppb	17:28:05
3	Si 251.611†	75367.0	73841.3	2430 µg/L	2430 ppb	17:28:41
3	Sn 189.927†	1943.5	1945.3	495.06 µg/L	495.06 ppb	17:28:25
3	Sr 421.552†	111972.4	110872.8	500.57 µg/L	500.57 ppb	17:26:28
3	Ti 334.940†	374147.7	373007.7	494.77 µg/L	494.77 ppb	17:27:59
3	Tl 190.801†	1259.0	1293.2	500.09 µg/L	500.09 ppb	17:28:25
3	U 409.014†	8044.8	7692.4	497.18 µg/L	497.18 ppb	17:28:05
3	V 292.402†	33131.8	33160.8	499.82 µg/L	499.82 ppb	17:28:05
3	Zn 213.857†	21408.8	20796.8	492.97 µg/L	492.97 ppb	17:28:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1082646.7	100.60	%	0.377				0.38%
Sc RADIAL	39664.6	100	%	1.2				1.22%
Y 371.029	589148.1	99.663	%	0.3844				0.39%
Ag 328.068†	67099.6	495.57	µg/L	2.558	495.57	ppb	2.558	0.52%
QC value within limits for Ag 328.068 Recovery = 99.11%								
Al 396.153Radial†	16886.8	5007.8	µg/L	8.51	5007.8	ppb	8.51	0.17%
QC value within limits for Al 396.153Radial Recovery = 100.16%								
As 188.979†	985.2	504.22	µg/L	0.680	504.22	ppb	0.680	0.13%
QC value within limits for As 188.979 Recovery = 100.84%								
B 249.677†	7437.6	492.73	µg/L	3.403	492.73	ppb	3.403	0.69%
QC value within limits for B 249.677 Recovery = 98.55%								
Ba 233.527†	46823.7	497.44	µg/L	3.895	497.44	ppb	3.895	0.78%
QC value within limits for Ba 233.527 Recovery = 99.49%								
Be 313.107†	728110.2	500.40	µg/L	0.452	500.40	ppb	0.452	0.09%
QC value within limits for Be 313.107 Recovery = 100.08%								
Ca 317.933Radial†	22241.2	4984.3	µg/L	58.93	4984.3	ppb	58.93	1.18%
QC value within limits for Ca 317.933Radial Recovery = 99.69%								
Cd 226.502†	13725.9	501.02	µg/L	5.335	501.02	ppb	5.335	1.06%
QC value within limits for Cd 226.502 Recovery = 100.20%								
Co 228.616†	16016.8	498.24	µg/L	2.995	498.24	ppb	2.995	0.60%

QC value within limits for Co 228.616 Recovery = 99.65%

Cr 267.716†	17782.5	496.41 µg/L	3.283	496.41 ppb	3.283	0.66%

QC value within limits for Cr 267.716 Recovery = 99.28%

Cu 324.752†	126449.5	496.33 µg/L	0.545	496.33 ppb	0.545	0.11%

QC value within limits for Cu 324.752 Recovery = 99.27%

Fe 238.204 Radial†	5063.4	5124.8 µg/L	66.43	5124.8 ppb	66.43	1.30%

QC value within limits for Fe 238.204 Radial Recovery = 102.50%

K 766.490 Radial†	11692.3	5004.9 µg/L	5.91	5004.9 ppb	5.91	0.12%

QC value within limits for K 766.490 Radial Recovery = 100.10%

Mg 279.077 IEC†	1785.2	5157.8 µg/L	61.36	5157.8 ppb	61.36	1.19%

QC value within limits for Mg 279.077 IEC Recovery = 103.16%

Mn 257.610†	274836.7	501.09 µg/L	0.706	501.09 ppb	0.706	0.14%

QC value within limits for Mn 257.610 Recovery = 100.22%

Mo 202.031†	3870.3	507.89 µg/L	1.143	507.89 ppb	1.143	0.23%

QC value within limits for Mo 202.031 Recovery = 101.58%

Na 589.592 Radial†	61698.9	9873.5 µg/L	20.70	9873.5 ppb	20.70	0.21%

QC value within limits for Na 589.592 Radial Recovery = 98.74%

Ni 231.604†	7660.6	501.00 µg/L	5.775	501.00 ppb	5.775	1.15%

QC value within limits for Ni 231.604 Recovery = 100.20%

P 214.914†	3015.2	2397.4 µg/L	7.19	2397.4 ppb	7.19	0.30%

QC value within limits for P 214.914 Recovery = 95.90%

Pb 220.353†	1912.1	500.54 µg/L	0.752	500.54 ppb	0.752	0.15%

QC value within limits for Pb 220.353 Recovery = 100.11%

S 181.975 Axial†	434.4	979.74 µg/L	1.732	979.74 ppb	1.732	0.18%

QC value within limits for S 181.975 Axial Recovery = 97.97%

Sb 206.836†	1047.9	493.35 µg/L	2.166	493.35 ppb	2.166	0.44%

QC value within limits for Sb 206.836 Recovery = 98.67%

Se 196.026†	601.0	502 µg/L	3.8	502 ppb	3.8	0.76%

QC value within limits for Se 196.026 Recovery = 100.32%

SiO2 †	74198.1	5158.0 µg/L	33.66	5158.0 ppb	33.66	0.65%

QC value within limits for SiO2 Recovery = 96.46%

Si 251.611†	73441.0	2420 µg/L	12.6	2420 ppb	12.6	0.52%

QC value within limits for Si 251.611 Recovery = 96.75%

Sn 189.927†	1937.1	492.97 µg/L	1.862	492.97 ppb	1.862	0.38%

QC value within limits for Sn 189.927 Recovery = 98.59%

Sr 421.552†	110875.9	500.58 µg/L	0.235	500.58 ppb	0.235	0.05%

QC value within limits for Sr 421.552 Recovery = 100.12%

Ti 334.940†	373178.7	494.99 µg/L	0.310	494.99 ppb	0.310	0.06%

QC value within limits for Ti 334.940 Recovery = 99.00%

Tl 190.801†	1297.9	501.92 µg/L	1.755	501.92 ppb	1.755	0.35%

QC value within limits for Tl 190.801 Recovery = 100.38%

U 409.014†	7733.8	499.84 µg/L	3.697	499.84 ppb	3.697	0.74%

QC value within limits for U 409.014 Recovery = 99.97%

V 292.402†	33269.3	501.44 µg/L	3.079	501.44 ppb	3.079	0.61%

QC value within limits for V 292.402 Recovery = 100.29%

Zn 213.857†	20847.5	494.17 µg/L	3.300	494.17 ppb	3.300	0.67%

QC value within limits for Zn 213.857 Recovery = 98.83%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/23/2005 17:30:29
Data Type: Reprocessed on 6/24/2005 07:38:48
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1084355.7	1084355.7	100.76	%			17:33:12
1	Sc RADIAL	39801.7	39801.7	100	%			17:31:53
1	Y 371.029	595613.9	595613.9	100.76	%			17:33:12
1	Ag 328.068†	-600.2	28.4	0.2095	µg/L	0.2095	ppb	17:33:17
1	Al 396.153Radial†	96.0	-9.7	-2.9119	µg/L	-2.9119	ppb	17:31:53
1	As 188.979†	-31.0	-2.8	-1.3951	µg/L	-1.3951	ppb	17:33:37
1	B 249.677†	231.0	3.6	0.2388	µg/L	0.2388	ppb	17:33:37
1	Ba 233.527†	-144.6	-8.7	-0.0913	µg/L	-0.0913	ppb	17:33:37
1	Be 313.107†	226.6	-36.1	-0.0244	µg/L	-0.0244	ppb	17:33:17
1	Ca 317.933Radial†	174.8	8.7	1.9571	µg/L	1.9571	ppb	17:32:13
1	Cd 226.502†	-17.7	6.3	0.2315	µg/L	0.2315	ppb	17:33:37
1	Co 228.616†	-139.9	6.2	0.1924	µg/L	0.1924	ppb	17:33:37
1	Cr 267.716†	64.0	-7.7	-0.2158	µg/L	-0.2158	ppb	17:33:37
1	Cu 324.752†	4938.2	-123.4	-0.4864	µg/L	-0.4864	ppb	17:33:17
1	Fe 238.204 Radial†	46.3	2.5	2.5696	µg/L	2.5696	ppb	17:32:13
1	K 766.490 Radial†	1133.4	3.5	1.4851	µg/L	1.4851	ppb	17:31:53
1	Mg 279.077 IEC†	7.6	3.9	11.208	µg/L	11.208	ppb	17:32:13
1	Mn 257.610†	386.1	-16.1	-0.0295	µg/L	-0.0295	ppb	17:33:37
1	Mo 202.031†	3.0	3.1	0.4077	µg/L	0.4077	ppb	17:33:37
1	Na 589.592 Radial†	868.9	-143.4	-22.945	µg/L	-22.945	ppb	17:31:53
1	Ni 231.604†	178.8	-0.8	-0.0535	µg/L	-0.0535	ppb	17:33:37
1	P 214.914†	181.2	-2.3	-1.8012	µg/L	-1.8012	ppb	17:33:37
1	Pb 220.353†	-7.6	5.3	1.3802	µg/L	1.3802	ppb	17:33:37
1	S 181.975 Axial†	37.5	-3.4	-7.7930	µg/L	-7.7930	ppb	17:33:37
1	Sb 206.836†	44.6	9.5	4.4933	µg/L	4.4933	ppb	17:33:37
1	Se 196.026†	-34.7	-2.1	-1.72	µg/L	-1.72	ppb	17:33:37
1	SiO2 †	1341.6	-260.2	-18.161	µg/L	-18.161	ppb	17:33:17
1	Si 251.611†	1349.5	-47.6	-1.58	µg/L	-1.58	ppb	17:34:45
1	Sn 189.927†	0.2	5.6	1.4365	µg/L	1.4365	ppb	17:33:37
1	Sr 421.552†	-66.0	-36.6	-0.1654	µg/L	-0.1654	ppb	17:31:53
1	Ti 334.940†	771.5	314.8	0.4168	µg/L	0.4168	ppb	17:33:17
1	Tl 190.801†	-33.3	3.4	1.3272	µg/L	1.3272	ppb	17:33:37
1	U 409.014†	374.4	34.1	2.1938	µg/L	2.1938	ppb	17:33:17
1	V 292.402†	-73.4	17.1	0.2606	µg/L	0.2606	ppb	17:33:17
1	Zn 213.857†	471.2	-104.9	-2.5085	µg/L	-2.5085	ppb	17:33:37
2	Sc 361.383	1076676.2	1076676.2	100.04	%			17:33:42
2	Sc RADIAL	40098.9	40098.9	101	%			17:32:18
2	Y 371.029	591662.8	591662.8	100.09	%			17:33:42
2	Ag 328.068†	-651.6	-27.2	-0.1981	µg/L	-0.1981	ppb	17:33:48
2	Al 396.153Radial†	79.7	-26.5	-7.9295	µg/L	-7.9295	ppb	17:32:18
2	As 188.979†	-31.2	-3.1	-1.5776	µg/L	-1.5776	ppb	17:34:08
2	B 249.677†	215.7	-10.0	-0.6656	µg/L	-0.6656	ppb	17:34:08
2	Ba 233.527†	-130.9	4.0	0.0429	µg/L	0.0429	ppb	17:34:08
2	Be 313.107†	293.8	32.7	0.0228	µg/L	0.0228	ppb	17:33:48
2	Ca 317.933Radial†	194.4	26.8	6.0205	µg/L	6.0205	ppb	17:32:38
2	Cd 226.502†	-25.9	-2.0	-0.0725	µg/L	-0.0725	ppb	17:34:08
2	Co 228.616†	-126.6	18.6	0.5784	µg/L	0.5784	ppb	17:34:08
2	Cr 267.716†	72.2	1.0	0.0267	µg/L	0.0267	ppb	17:34:08
2	Cu 324.752†	5003.6	-23.0	-0.0914	µg/L	-0.0914	ppb	17:33:48
2	Fe 238.204 Radial†	61.1	16.8	17.036	µg/L	17.036	ppb	17:32:38
2	K 766.490 Radial†	1105.1	-32.9	-14.074	µg/L	-14.074	ppb	17:32:18
2	Mg 279.077 IEC†	20.1	16.2	46.790	µg/L	46.790	ppb	17:32:38
2	Mn 257.610†	405.4	5.9	0.0120	µg/L	0.0120	ppb	17:34:08
2	Mo 202.031†	3.4	3.6	0.4698	µg/L	0.4698	ppb	17:34:08
2	Na 589.592 Radial†	863.4	-155.2	-24.843	µg/L	-24.843	ppb	17:32:18
2	Ni 231.604†	176.2	-2.2	-0.1392	µg/L	-0.1392	ppb	17:34:08
2	P 214.914†	183.4	1.3	1.0220	µg/L	1.0220	ppb	17:34:08
2	Pb 220.353†	-8.7	4.1	1.0586	µg/L	1.0586	ppb	17:34:08
2	S 181.975 Axial†	32.8	-7.9	-17.843	µg/L	-17.843	ppb	17:34:08

2	Sb 206.836†	43.0	8.2	3.8477 µg/L	3.8477 ppb	17:34:08
2	Se 196.026†	-39.6	-7.2	-6.04 µg/L	-6.04 ppb	17:34:08
2	SiO2 †	1339.7	-252.7	-17.633 µg/L	-17.633 ppb	17:33:48
2	Si 251.611†	1366.3	-21.2	-0.708 µg/L	-0.708 ppb	17:34:50
2	Sn 189.927†	0.4	5.8	1.4765 µg/L	1.4765 ppb	17:34:08
2	Sr 421.552†	-53.0	-23.2	-0.1051 µg/L	-0.1051 ppb	17:32:18
2	Ti 334.940†	709.8	258.6	0.3425 µg/L	0.3425 ppb	17:33:48
2	Tl 190.801†	-39.0	-2.4	-0.9399 µg/L	-0.9399 ppb	17:34:08
2	U 409.014†	364.1	26.4	1.6938 µg/L	1.6938 ppb	17:33:48
2	V 292.402†	-110.0	-20.0	-0.2901 µg/L	-0.2901 ppb	17:33:48
2	Zn 213.857†	469.8	-103.0	-2.4651 µg/L	-2.4651 ppb	17:34:08
3	Sc 361.383	1088283.8	1088283.8	101.12 %		17:34:14
3	Sc RADIAL	39611.5	39611.5	99.9 %		17:32:44
3	Y 371.029	597668.4	597668.4	101.10 %		17:34:14
3	Ag 328.068†	-642.4	-11.2	-0.0833 µg/L	-0.0833 ppb	17:34:19
3	Al 396.153Radial†	70.4	-34.9	-10.388 µg/L	-10.388 ppb	17:32:44
3	As 188.979†	-26.3	2.0	1.0195 µg/L	1.0195 ppb	17:34:39
3	B 249.677†	223.6	-4.5	-0.2988 µg/L	-0.2988 ppb	17:34:39
3	Ba 233.527†	-125.9	10.4	0.1106 µg/L	0.1106 ppb	17:34:39
3	Be 313.107†	244.3	-19.4	-0.0131 µg/L	-0.0131 ppb	17:34:19
3	Ca 317.933Radial†	184.4	19.1	4.2911 µg/L	4.2911 ppb	17:33:04
3	Cd 226.502†	-32.6	-8.3	-0.3036 µg/L	-0.3036 ppb	17:34:39
3	Co 228.616†	-142.5	4.1	0.1279 µg/L	0.1279 ppb	17:34:39
3	Cr 267.716†	78.4	6.4	0.1771 µg/L	0.1771 ppb	17:34:39
3	Cu 324.752†	4971.7	-107.9	-0.4248 µg/L	-0.4248 ppb	17:34:19
3	Fe 238.204 Radial†	45.1	1.6	1.5845 µg/L	1.5845 ppb	17:33:04
3	K 766.490 Radial†	1209.5	85.1	36.418 µg/L	36.418 ppb	17:32:44
3	Mg 279.077 IEC†	3.2	-0.4	-1.2916 µg/L	-1.2916 ppb	17:33:04
3	Mn 257.610†	394.3	-9.4	-0.0170 µg/L	-0.0170 ppb	17:34:39
3	Mo 202.031†	-0.1	0.0	0.0040 µg/L	0.0040 ppb	17:34:39
3	Na 589.592 Radial†	927.2	-80.9	-12.949 µg/L	-12.949 ppb	17:32:44
3	Ni 231.604†	172.2	-8.1	-0.5247 µg/L	-0.5247 ppb	17:34:39
3	P 214.914†	180.2	-3.9	-3.1427 µg/L	-3.1427 ppb	17:34:39
3	Pb 220.353†	-10.3	2.6	0.6746 µg/L	0.6746 ppb	17:34:39
3	S 181.975 Axial†	39.0	-2.1	-4.6555 µg/L	-4.6555 ppb	17:34:39
3	Sb 206.836†	57.3	21.9	10.309 µg/L	10.309 ppb	17:34:39
3	Se 196.026†	-29.3	3.4	2.85 µg/L	2.85 ppb	17:34:39
3	SiO2 †	1354.8	-252.0	-17.582 µg/L	-17.582 ppb	17:34:19
3	Si 251.611†	1315.4	-86.2	-2.85 µg/L	-2.85 ppb	17:34:55
3	Sn 189.927†	7.2	12.6	3.1917 µg/L	3.1917 ppb	17:34:39
3	Sr 421.552†	-32.8	-3.8	-0.0170 µg/L	-0.0170 ppb	17:32:44
3	Ti 334.940†	709.2	250.4	0.3318 µg/L	0.3318 ppb	17:34:19
3	Tl 190.801†	-34.3	2.6	0.9839 µg/L	0.9839 ppb	17:34:39
3	U 409.014†	359.7	18.1	1.1633 µg/L	1.1633 ppb	17:34:19
3	V 292.402†	-109.3	-18.1	-0.2675 µg/L	-0.2675 ppb	17:34:19
3	Zn 213.857†	461.8	-115.8	-2.7663 µg/L	-2.7663 ppb	17:34:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1083105.2	100.64	%	0.549				0.55%
Sc RADIAL	39837.3	100	%	0.6				0.62%
Y 371.029	594981.7	100.65	%	0.516				0.51%
Ag 328.068†	-3.4	-0.0240	µg/L	0.21017	-0.0240	ppb	0.21017	876.36%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-23.7	-7.0766	µg/L	3.81043	-7.0766	ppb	3.81043	53.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-0.6511	µg/L	1.44961	-0.6511	ppb	1.44961	222.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-3.6	-0.2419	µg/L	0.45488	-0.2419	ppb	0.45488	188.07%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.9	0.0207	µg/L	0.10271	0.0207	ppb	0.10271	495.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-7.6	-0.0049	µg/L	0.02464	-0.0049	ppb	0.02464	503.23%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	18.2	4.0896	µg/L	2.03919	4.0896	ppb	2.03919	49.86%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.3	-0.0482	µg/L	0.26837	-0.0482	ppb	0.26837	556.47%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	9.6	0.2996	µg/L	0.24358	0.2996	ppb	0.24358	81.31%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -0.1     -0.0040 µg/L       0.19823     -0.0040 ppb       0.19823 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -84.8     -0.3342 µg/L       0.21250     -0.3342 ppb       0.21250  63.58%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       7.0      7.0633 µg/L       8.65046      7.0633 ppb       8.65046 122.47%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       18.6      7.9431 µg/L      25.85776      7.9431 ppb      25.85776 325.54%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          6.6     18.902 µg/L       24.9474      18.902 ppb       24.9474 131.98%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             -6.5     -0.0115 µg/L       0.02127     -0.0115 ppb       0.02127 185.08%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              2.2      0.2938 µg/L       0.25288      0.2938 ppb       0.25288  86.06%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†    -126.5     -20.246 µg/L        6.3900     -20.246 ppb        6.3900  31.56%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -3.7     -0.2391 µg/L       0.25100     -0.2391 ppb       0.25100 104.96%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -1.6     -1.3073 µg/L       2.12582     -1.3073 ppb       2.12582 162.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              4.0      1.0378 µg/L       0.35325      1.0378 ppb       0.35325  34.04%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -4.5     -10.097 µg/L        6.8891     -10.097 ppb        6.8891  68.23%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             13.2      6.2167 µg/L       3.55870      6.2167 ppb       3.55870  57.24%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -2.0       -1.64 µg/L         4.443       -1.64 ppb         4.443 271.22%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2 †                -255.0     -17.792 µg/L        0.3210     -17.792 ppb        0.3210   1.80%
   QC value within limits for SiO2   Recovery = Not calculated
Si 251.611†            -51.7       -1.71 µg/L         1.077       -1.71 ppb         1.077  62.91%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              8.0      2.0349 µg/L       1.00199      2.0349 ppb       1.00199  49.24%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†            -21.2     -0.0958 µg/L       0.07460     -0.0958 ppb       0.07460  77.86%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            274.6      0.3637 µg/L       0.04629      0.3637 ppb       0.04629  12.73%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              1.2      0.4571 µg/L       1.22189      0.4571 ppb       1.22189 267.33%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              26.2      1.6836 µg/L       0.51528      1.6836 ppb       0.51528  30.61%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -7.0     -0.0990 µg/L       0.31160     -0.0990 ppb       0.31160 314.77%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -107.9     -2.5800 µg/L       0.16282     -2.5800 ppb       0.16282   6.31%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	8	S0	Applied
2	2	S0.1	Applied
3	3	S0.5	Applied
4	4	SCAL	Applied
5	5	S10	Applied
6	9	ICV	QC Passed
7	10	ICB	QC Passed
8	11	PQL	QC Passed
9	13	ICSA	QC Passed
10	14	ICSAB	QC Passed
11	7	CCV	QC Passed
12	8	CCB	QC Passed

Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/23/2005 18:22:28
Data Type: Reprocessed on 6/24/2005 07:39:04
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1072279.8	1072279.8	99.635	%			18:25:13
1	Sc RADIAL	38785.0	38785.0	97.8	%			18:23:54
1	Y 371.029	583227.0	583227.0	98.661	%			18:25:13
1	Ag 328.068†	66655.7	67523.7	498.71	µg/L	498.71	ppb	18:25:18
1	Al 396.153Radial†	16721.6	16988.9	5038.1	µg/L	5038.1	ppb	18:23:54
1	As 188.979†	950.5	982.0	502.61	µg/L	502.61	ppb	18:25:39
1	B 249.677†	7620.9	7423.1	491.77	µg/L	491.77	ppb	18:25:18
1	Ba 233.527†	46685.7	46991.4	499.22	µg/L	499.22	ppb	18:25:18
1	Be 313.107†	723992.2	726380.1	499.21	µg/L	499.21	ppb	18:25:13
1	Ca 317.933Radial†	22188.5	22517.6	5046.2	µg/L	5046.2	ppb	18:24:14
1	Cd 226.502†	13657.3	13731.2	501.22	µg/L	501.22	ppb	18:25:18
1	Co 228.616†	15823.3	16026.3	498.54	µg/L	498.54	ppb	18:25:18
1	Cr 267.716†	17840.6	17834.7	497.87	µg/L	497.87	ppb	18:25:18
1	Cu 324.752†	134048.9	129514.9	508.37	µg/L	508.37	ppb	18:25:18
1	Fe 238.204 Radial†	5088.4	5158.2	5220.7	µg/L	5220.7	ppb	18:24:14
1	K 766.490 Radial†	12604.3	11759.6	5033.7	µg/L	5033.7	ppb	18:23:54
1	Mg 279.077 IEC†	1763.9	1799.6	5199.2	µg/L	5199.2	ppb	18:24:14
1	Mn 257.610†	273922.9	274525.8	500.53	µg/L	500.53	ppb	18:25:13
1	Mo 202.031†	3869.6	3884.0	509.69	µg/L	509.69	ppb	18:25:39
1	Na 589.592 Radial†	62018.8	62392.0	9984.5	µg/L	9984.5	ppb	18:23:54
1	Ni 231.604†	8033.8	7884.9	515.66	µg/L	515.66	ppb	18:25:39
1	P 214.914†	3183.2	3012.8	2393.3	µg/L	2393.3	ppb	18:25:39
1	Pb 220.353†	1892.8	1912.6	500.64	µg/L	500.64	ppb	18:25:39
1	S 181.975 Axial†	471.7	432.8	976.08	µg/L	976.08	ppb	18:25:39
1	Sb 206.836†	1068.2	1037.3	488.37	µg/L	488.37	ppb	18:25:39
1	Se 196.026†	561.4	595.8	497	µg/L	497	ppb	18:25:39
1	SiO2 †	75627.7	74312.6	5165.9	µg/L	5165.9	ppb	18:25:18
1	Si 251.611†	74666.0	73552.2	2420	µg/L	2420	ppb	18:26:47
1	Sn 189.927†	1914.7	1927.1	490.45	µg/L	490.45	ppb	18:25:39
1	Sr 421.552†	109543.0	112013.4	505.72	µg/L	505.72	ppb	18:23:54
1	Ti 334.940†	371491.6	372399.9	493.96	µg/L	493.96	ppb	18:25:13
1	Tl 190.801†	1243.2	1284.2	496.64	µg/L	496.64	ppb	18:25:39
1	U 409.014†	8118.1	7810.2	504.76	µg/L	504.76	ppb	18:25:18
1	V 292.402†	33195.0	33406.5	503.51	µg/L	503.51	ppb	18:25:18
1	Zn 213.857†	21363.5	20869.2	494.57	µg/L	494.57	ppb	18:25:18
2	Sc 361.383	1078759.6	1078759.6	100.24	%			18:25:45
2	Sc RADIAL	39460.5	39460.5	99.5	%			18:24:19
2	Y 371.029	586888.9	586888.9	99.281	%			18:25:45
2	Ag 328.068†	66446.5	66913.1	494.19	µg/L	494.19	ppb	18:25:50
2	Al 396.153Radial†	16918.1	16893.7	5009.9	µg/L	5009.9	ppb	18:24:19
2	As 188.979†	956.4	982.2	502.63	µg/L	502.63	ppb	18:26:10
2	B 249.677†	7638.7	7394.9	489.90	µg/L	489.90	ppb	18:25:50
2	Ba 233.527†	46630.4	46654.8	495.65	µg/L	495.65	ppb	18:25:50
2	Be 313.107†	731501.5	729506.9	501.36	µg/L	501.36	ppb	18:25:45
2	Ca 317.933Radial†	22261.8	22202.9	4975.7	µg/L	4975.7	ppb	18:24:39
2	Cd 226.502†	13621.8	13613.5	496.93	µg/L	496.93	ppb	18:25:50
2	Co 228.616†	15863.0	15970.5	496.79	µg/L	496.79	ppb	18:25:50
2	Cr 267.716†	17799.5	17686.1	493.72	µg/L	493.72	ppb	18:25:50
2	Cu 324.752†	133538.8	128197.9	503.19	µg/L	503.19	ppb	18:25:50
2	Fe 238.204 Radial†	5092.0	5072.8	5134.3	µg/L	5134.3	ppb	18:24:39
2	K 766.490 Radial†	12845.9	11781.8	5043.2	µg/L	5043.2	ppb	18:24:19
2	Mg 279.077 IEC†	1773.3	1778.1	5137.2	µg/L	5137.2	ppb	18:24:39
2	Mn 257.610†	276368.5	275314.3	501.96	µg/L	501.96	ppb	18:25:45
2	Mo 202.031†	3875.7	3866.7	507.42	µg/L	507.42	ppb	18:26:10
2	Na 589.592 Radial†	62938.4	62230.7	9958.7	µg/L	9958.7	ppb	18:24:19
2	Ni 231.604†	8039.2	7841.8	512.84	µg/L	512.84	ppb	18:26:10
2	P 214.914†	3195.9	3006.3	2388.9	µg/L	2388.9	ppb	18:26:10
2	Pb 220.353†	1904.6	1912.9	500.72	µg/L	500.72	ppb	18:26:10
2	S 181.975 Axial†	473.4	431.6	973.49	µg/L	973.49	ppb	18:26:10

2	Sb 206.836†	1085.0	1047.7	493.27 µg/L	493.27 ppb	18:26:10
2	Se 196.026†	574.1	605.1	505 µg/L	505 ppb	18:26:10
2	SiO2 †	75530.4	73759.6	5127.4 µg/L	5127.4 ppb	18:25:50
2	Si 251.611†	74289.0	72726.1	2400 µg/L	2400 ppb	18:26:53
2	Sn 189.927†	1928.6	1929.4	491.03 µg/L	491.03 ppb	18:26:10
2	Sr 421.552†	111267.2	111828.9	504.89 µg/L	504.89 ppb	18:24:19
2	Ti 334.940†	375789.9	374448.4	496.67 µg/L	496.67 ppb	18:25:45
2	Tl 190.801†	1244.1	1277.7	494.16 µg/L	494.16 ppb	18:26:10
2	U 409.014†	8213.0	7856.0	507.70 µg/L	507.70 ppb	18:25:50
2	V 292.402†	33154.9	33166.3	499.91 µg/L	499.91 ppb	18:25:50
2	Zn 213.857†	21381.7	20758.5	491.96 µg/L	491.96 ppb	18:25:50
3	Sc 361.383	1088436.5	1088436.5	101.14 %		18:26:16
3	Sc RADIAL	39496.8	39496.8	99.6 %		18:24:45
3	Y 371.029	591983.1	591983.1	100.14 %		18:26:16
3	Ag 328.068†	66245.8	66125.3	488.39 µg/L	488.39 ppb	18:26:21
3	Al 396.153Radial†	16901.5	16861.5	5000.5 µg/L	5000.5 ppb	18:24:45
3	As 188.979†	950.4	967.7	495.28 µg/L	495.28 ppb	18:26:42
3	B 249.677†	7608.7	7297.5	483.45 µg/L	483.45 ppb	18:26:21
3	Ba 233.527†	46474.5	46087.0	489.62 µg/L	489.62 ppb	18:26:21
3	Be 313.107†	737102.0	728556.4	500.70 µg/L	500.70 ppb	18:26:16
3	Ca 317.933Radial†	22300.3	22221.1	4979.7 µg/L	4979.7 ppb	18:25:05
3	Cd 226.502†	13573.7	13445.1	490.78 µg/L	490.78 ppb	18:26:21
3	Co 228.616†	15771.2	15739.0	489.58 µg/L	489.58 ppb	18:26:21
3	Cr 267.716†	17752.9	17482.1	488.02 µg/L	488.02 ppb	18:26:21
3	Cu 324.752†	133076.8	126556.6	496.76 µg/L	496.76 ppb	18:26:21
3	Fe 238.204 Radial†	5112.6	5088.8	5150.3 µg/L	5150.3 ppb	18:25:05
3	K 766.490 Radial†	12829.6	11753.6	5031.2 µg/L	5031.2 ppb	18:24:45
3	Mg 279.077 IEC†	1775.4	1778.6	5138.5 µg/L	5138.5 ppb	18:25:05
3	Mn 257.610†	278349.9	274822.1	501.06 µg/L	501.06 ppb	18:26:16
3	Mo 202.031†	3877.3	3833.8	503.12 µg/L	503.12 ppb	18:26:42
3	Na 589.592 Radial†	62804.7	62038.3	9927.9 µg/L	9927.9 ppb	18:24:45
3	Ni 231.604†	8025.3	7756.8	507.28 µg/L	507.28 ppb	18:26:42
3	P 214.914†	3178.5	2960.7	2352.4 µg/L	2352.4 ppb	18:26:42
3	Pb 220.353†	1902.3	1893.7	495.71 µg/L	495.71 ppb	18:26:42
3	S 181.975 Axial†	475.3	429.4	968.29 µg/L	968.29 ppb	18:26:42
3	Sb 206.836†	1080.0	1033.1	486.40 µg/L	486.40 ppb	18:26:42
3	Se 196.026†	553.3	579.5	484 µg/L	484 ppb	18:26:42
3	SiO2 †	75143.9	72707.6	5054.2 µg/L	5054.2 ppb	18:26:21
3	Si 251.611†	74792.6	72565.0	2390 µg/L	2390 ppb	18:26:58
3	Sn 189.927†	1928.0	1911.8	486.53 µg/L	486.53 ppb	18:26:42
3	Sr 421.552†	111069.0	111527.1	503.52 µg/L	503.52 ppb	18:24:45
3	Ti 334.940†	378202.2	373500.5	495.42 µg/L	495.42 ppb	18:26:16
3	Tl 190.801†	1255.3	1277.7	494.17 µg/L	494.17 ppb	18:26:42
3	U 409.014†	8090.0	7661.5	495.15 µg/L	495.15 ppb	18:26:21
3	V 292.402†	33066.1	32784.4	494.16 µg/L	494.16 ppb	18:26:21
3	Zn 213.857†	21269.7	20458.2	484.81 µg/L	484.81 ppb	18:26:21

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1079825.3	100.34	%	0.756				0.75%
Sc RADIAL	39247.4	99.0	%	1.01				1.02%
Y 371.029	587366.3	99.362	%	0.7439				0.75%
Ag 328.068†	66854.0	493.76	µg/L	5.172	493.76	ppb	5.172	1.05%
QC value within limits for Ag 328.068 Recovery = 98.75%								
Al 396.153Radial†	16914.7	5016.2	µg/L	19.60	5016.2	ppb	19.60	0.39%
QC value within limits for Al 396.153Radial Recovery = 100.32%								
As 188.979†	977.3	500.17	µg/L	4.239	500.17	ppb	4.239	0.85%
QC value within limits for As 188.979 Recovery = 100.03%								
B 249.677†	7371.9	488.37	µg/L	4.366	488.37	ppb	4.366	0.89%
QC value within limits for B 249.677 Recovery = 97.67%								
Ba 233.527†	46577.7	494.83	µg/L	4.856	494.83	ppb	4.856	0.98%
QC value within limits for Ba 233.527 Recovery = 98.97%								
Be 313.107†	728147.8	500.43	µg/L	1.101	500.43	ppb	1.101	0.22%
QC value within limits for Be 313.107 Recovery = 100.09%								
Ca 317.933Radial†	22313.8	5000.5	µg/L	39.57	5000.5	ppb	39.57	0.79%
QC value within limits for Ca 317.933Radial Recovery = 100.01%								
Cd 226.502†	13596.6	496.31	µg/L	5.249	496.31	ppb	5.249	1.06%
QC value within limits for Cd 226.502 Recovery = 99.26%								
Co 228.616†	15911.9	494.97	µg/L	4.747	494.97	ppb	4.747	0.96%

QC value within limits for Co 228.616 Recovery = 98.99%

Cr 267.716†	17667.6	493.20 µg/L	4.941	493.20 ppb	4.941	1.00%

QC value within limits for Cr 267.716 Recovery = 98.64%

Cu 324.752†	128089.8	502.77 µg/L	5.818	502.77 ppb	5.818	1.16%

QC value within limits for Cu 324.752 Recovery = 100.55%

Fe 238.204 Radial†	5106.6	5168.4 µg/L	45.95	5168.4 ppb	45.95	0.89%

QC value within limits for Fe 238.204 Radial Recovery = 103.37%

K 766.490 Radial†	11765.0	5036.0 µg/L	6.36	5036.0 ppb	6.36	0.13%

QC value within limits for K 766.490 Radial Recovery = 100.72%

Mg 279.077 IEC†	1785.4	5158.3 µg/L	35.41	5158.3 ppb	35.41	0.69%

QC value within limits for Mg 279.077 IEC Recovery = 103.17%

Mn 257.610†	274887.4	501.18 µg/L	0.720	501.18 ppb	0.720	0.14%

QC value within limits for Mn 257.610 Recovery = 100.24%

Mo 202.031†	3861.5	506.74 µg/L	3.338	506.74 ppb	3.338	0.66%

QC value within limits for Mo 202.031 Recovery = 101.35%

Na 589.592 Radial†	62220.3	9957.0 µg/L	28.33	9957.0 ppb	28.33	0.28%

QC value within limits for Na 589.592 Radial Recovery = 99.57%

Ni 231.604†	7827.8	511.93 µg/L	4.262	511.93 ppb	4.262	0.83%

QC value within limits for Ni 231.604 Recovery = 102.39%

P 214.914†	2993.2	2378.2 µg/L	22.47	2378.2 ppb	22.47	0.94%

QC value within limits for P 214.914 Recovery = 95.13%

Pb 220.353†	1906.4	499.03 µg/L	2.873	499.03 ppb	2.873	0.58%

QC value within limits for Pb 220.353 Recovery = 99.81%

S 181.975 Axial†	431.3	972.62 µg/L	3.966	972.62 ppb	3.966	0.41%

QC value within limits for S 181.975 Axial Recovery = 97.26%

Sb 206.836†	1039.4	489.35 µg/L	3.536	489.35 ppb	3.536	0.72%

QC value within limits for Sb 206.836 Recovery = 97.87%

Se 196.026†	593.5	495 µg/L	10.8	495 ppb	10.8	2.18%

QC value within limits for Se 196.026 Recovery = 99.06%

SiO2 †	73593.3	5115.9 µg/L	56.75	5115.9 ppb	56.75	1.11%

QC value within limits for SiO2 Recovery = 95.67%

Si 251.611†	72947.8	2400 µg/L	17.5	2400 ppb	17.5	0.73%

QC value within limits for Si 251.611 Recovery = 96.10%

Sn 189.927†	1922.8	489.34 µg/L	2.444	489.34 ppb	2.444	0.50%

QC value within limits for Sn 189.927 Recovery = 97.87%

Sr 421.552†	111789.8	504.71 µg/L	1.108	504.71 ppb	1.108	0.22%

QC value within limits for Sr 421.552 Recovery = 100.94%

Ti 334.940†	373449.6	495.35 µg/L	1.360	495.35 ppb	1.360	0.27%

QC value within limits for Ti 334.940 Recovery = 99.07%

Tl 190.801†	1279.9	494.99 µg/L	1.430	494.99 ppb	1.430	0.29%

QC value within limits for Tl 190.801 Recovery = 99.00%

U 409.014†	7775.9	502.54 µg/L	6.564	502.54 ppb	6.564	1.31%

QC value within limits for U 409.014 Recovery = 100.51%

V 292.402†	33119.1	499.19 µg/L	4.718	499.19 ppb	4.718	0.95%

QC value within limits for V 292.402 Recovery = 99.84%

Zn 213.857†	20695.3	490.45 µg/L	5.050	490.45 ppb	5.050	1.03%

QC value within limits for Zn 213.857 Recovery = 98.09%

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/23/2005 18:28:45
Data Type: Reprocessed on 6/24/2005 07:39:06
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1097405.0	1097405.0	101.97	%			18:31:30
1	Sc RADIAL	39897.0	39897.0	101	%			18:30:12
1	Y 371.029	603296.0	603296.0	102.06	%			18:31:30
1	Ag 328.068†	-640.0	-3.6	-0.0269	µg/L	-0.0269	ppb	18:31:35
1	Al 396.153Radial†	76.9	-28.9	-8.6207	µg/L	-8.6207	ppb	18:30:12
1	As 188.979†	-30.4	-1.8	-0.8885	µg/L	-0.8885	ppb	18:31:56
1	B 249.677†	192.4	-37.0	-2.4470	µg/L	-2.4470	ppb	18:31:56
1	Ba 233.527†	-127.4	10.0	0.1058	µg/L	0.1058	ppb	18:31:56
1	Be 313.107†	286.4	19.9	0.0136	µg/L	0.0136	ppb	18:31:35
1	Ca 317.933Radial†	155.1	-11.3	-2.5255	µg/L	-2.5255	ppb	18:30:32
1	Cd 226.502†	-18.1	6.2	0.2263	µg/L	0.2263	ppb	18:31:56
1	Co 228.616†	-133.2	14.4	0.4496	µg/L	0.4496	ppb	18:31:56
1	Cr 267.716†	68.2	-4.3	-0.1208	µg/L	-0.1208	ppb	18:31:56
1	Cu 324.752†	4940.8	-179.1	-0.7031	µg/L	-0.7031	ppb	18:31:35
1	Fe 238.204 Radial†	42.7	-1.2	-1.1653	µg/L	-1.1653	ppb	18:30:32
1	K 766.490 Radial†	1148.4	15.7	6.7014	µg/L	6.7014	ppb	18:30:12
1	Mg 279.077 IEC†	1.8	-1.9	-5.3405	µg/L	-5.3405	ppb	18:30:32
1	Mn 257.610†	381.2	-25.4	-0.0464	µg/L	-0.0464	ppb	18:31:56
1	Mo 202.031†	1.8	2.0	0.2579	µg/L	0.2579	ppb	18:31:56
1	Na 589.592 Radial†	835.1	-179.1	-28.660	µg/L	-28.660	ppb	18:30:12
1	Ni 231.604†	181.6	-0.2	-0.0146	µg/L	-0.0146	ppb	18:31:56
1	P 214.914†	186.4	0.7	0.7188	µg/L	0.7188	ppb	18:31:56
1	Pb 220.353†	-14.5	-1.4	-0.3623	µg/L	-0.3623	ppb	18:31:56
1	S 181.975 Axial†	37.8	-3.5	-7.9446	µg/L	-7.9446	ppb	18:31:56
1	Sb 206.836†	47.3	11.7	5.4858	µg/L	5.4858	ppb	18:31:56
1	Se 196.026†	-25.1	7.8	6.50	µg/L	6.50	ppb	18:31:56
1	SiO2 †	1295.6	-321.2	-22.408	µg/L	-22.408	ppb	18:31:35
1	Si 251.611†	2275.1	844.2	27.9	µg/L	27.9	ppb	18:33:03
1	Sn 189.927†	-3.7	1.8	0.4557	µg/L	0.4557	ppb	18:31:56
1	Sr 421.552†	-15.4	13.8	0.0624	µg/L	0.0624	ppb	18:30:12
1	Ti 334.940†	697.2	232.9	0.3093	µg/L	0.3093	ppb	18:31:35
1	Tl 190.801†	-37.6	-0.3	-0.1265	µg/L	-0.1265	ppb	18:31:56
1	U 409.014†	336.0	-8.1	-0.5218	µg/L	-0.5218	ppb	18:31:35
1	V 292.402†	-107.0	-15.0	-0.2214	µg/L	-0.2214	ppb	18:31:35
1	Zn 213.857†	440.1	-140.9	-3.3688	µg/L	-3.3688	ppb	18:31:56
2	Sc 361.383	1079642.0	1079642.0	100.32	%			18:32:01
2	Sc RADIAL	40320.7	40320.7	102	%			18:30:37
2	Y 371.029	593537.7	593537.7	100.41	%			18:32:01
2	Ag 328.068†	-607.6	18.4	0.1340	µg/L	0.1340	ppb	18:32:06
2	Al 396.153Radial†	94.0	-12.9	-3.9125	µg/L	-3.9125	ppb	18:30:37
2	As 188.979†	-30.4	-2.3	-1.1659	µg/L	-1.1659	ppb	18:32:26
2	B 249.677†	178.5	-47.7	-3.1545	µg/L	-3.1545	ppb	18:32:26
2	Ba 233.527†	-151.0	-15.6	-0.1662	µg/L	-0.1662	ppb	18:32:26
2	Be 313.107†	308.0	46.1	0.0314	µg/L	0.0314	ppb	18:32:06
2	Ca 317.933Radial†	159.8	-8.2	-1.8541	µg/L	-1.8541	ppb	18:30:57
2	Cd 226.502†	-20.5	3.5	0.1264	µg/L	0.1264	ppb	18:32:26
2	Co 228.616†	-137.8	7.7	0.2424	µg/L	0.2424	ppb	18:32:26
2	Cr 267.716†	82.8	11.4	0.3184	µg/L	0.3184	ppb	18:32:26
2	Cu 324.752†	4920.4	-119.7	-0.4700	µg/L	-0.4700	ppb	18:32:06
2	Fe 238.204 Radial†	44.8	0.5	0.5040	µg/L	0.5040	ppb	18:30:57
2	K 766.490 Radial†	1115.2	-29.0	-12.405	µg/L	-12.405	ppb	18:30:37
2	Mg 279.077 IEC†	6.3	2.6	7.5215	µg/L	7.5215	ppb	18:30:57
2	Mn 257.610†	392.7	-7.8	-0.0142	µg/L	-0.0142	ppb	18:32:26
2	Mo 202.031†	9.8	9.9	1.3004	µg/L	1.3004	ppb	18:32:26
2	Na 589.592 Radial†	858.2	-165.0	-26.420	µg/L	-26.420	ppb	18:30:37
2	Ni 231.604†	174.8	-4.1	-0.2651	µg/L	-0.2651	ppb	18:32:26
2	P 214.914†	183.8	1.1	1.0000	µg/L	1.0000	ppb	18:32:26
2	Pb 220.353†	-12.3	0.5	0.1377	µg/L	0.1377	ppb	18:32:26
2	S 181.975 Axial†	34.5	-6.2	-14.117	µg/L	-14.117	ppb	18:32:26

2	Sb 206.836†	44.5	9.6	4.5208 µg/L	4.5208 ppb	18:32:26
2	Se 196.026†	-35.8	-3.3	-2.78 µg/L	-2.78 ppb	18:32:26
2	SiO2 †	1298.4	-297.5	-20.785 µg/L	-20.785 ppb	18:32:06
2	Si 251.611†	1309.3	-81.8	-2.72 µg/L	-2.72 ppb	18:33:08
2	Sn 189.927†	-3.4	2.0	0.5143 µg/L	0.5143 ppb	18:32:26
2	Sr 421.552†	-38.8	-9.1	-0.0410 µg/L	-0.0410 ppb	18:30:37
2	Ti 334.940†	635.3	182.4	0.2425 µg/L	0.2425 ppb	18:32:06
2	Tl 190.801†	-39.7	-3.1	-1.1947 µg/L	-1.1947 ppb	18:32:26
2	U 409.014†	318.3	-20.2	-1.3068 µg/L	-1.3068 ppb	18:32:06
2	V 292.402†	-141.7	-51.3	-0.7503 µg/L	-0.7503 ppb	18:32:06
2	Zn 213.857†	437.5	-136.4	-3.2594 µg/L	-3.2594 ppb	18:32:26
3	Sc 361.383	1086494.1	1086494.1	100.96 %		18:32:32
3	Sc RADIAL	40197.5	40197.5	101 %		18:31:02
3	Y 371.029	597299.1	597299.1	101.04 %		18:32:32
3	Ag 328.068†	-640.4	-10.3	-0.0766 µg/L	-0.0766 ppb	18:32:37
3	Al 396.153Radial†	90.7	-15.9	-4.7620 µg/L	-4.7620 ppb	18:31:02
3	As 188.979†	-28.9	-0.6	-0.2862 µg/L	-0.2862 ppb	18:32:57
3	B 249.677†	204.5	-23.1	-1.5273 µg/L	-1.5273 ppb	18:32:57
3	Ba 233.527†	-135.6	0.6	0.0061 µg/L	0.0061 ppb	18:32:57
3	Be 313.107†	278.4	14.8	0.0103 µg/L	0.0103 ppb	18:32:37
3	Ca 317.933Radial†	143.7	-23.6	-5.2855 µg/L	-5.2855 ppb	18:31:22
3	Cd 226.502†	-31.0	-6.8	-0.2470 µg/L	-0.2470 ppb	18:32:57
3	Co 228.616†	-140.2	6.3	0.1957 µg/L	0.1957 ppb	18:32:57
3	Cr 267.716†	78.5	6.6	0.1835 µg/L	0.1835 ppb	18:32:57
3	Cu 324.752†	4929.8	-141.3	-0.5562 µg/L	-0.5562 ppb	18:32:37
3	Fe 238.204 Radial†	42.6	-1.5	-1.5549 µg/L	-1.5549 ppb	18:31:22
3	K 766.490 Radial†	1066.9	-73.2	-31.336 µg/L	-31.336 ppb	18:31:02
3	Mg 279.077 IEC†	8.5	4.8	13.775 µg/L	13.775 ppb	18:31:22
3	Mn 257.610†	382.9	-20.0	-0.0370 µg/L	-0.0370 ppb	18:32:57
3	Mo 202.031†	5.7	5.8	0.7636 µg/L	0.7636 ppb	18:32:57
3	Na 589.592 Radial†	842.0	-178.5	-28.565 µg/L	-28.565 ppb	18:31:02
3	Ni 231.604†	173.6	-6.4	-0.4137 µg/L	-0.4137 ppb	18:32:57
3	P 214.914†	177.5	-6.2	-5.0469 µg/L	-5.0469 ppb	18:32:57
3	Pb 220.353†	-11.5	1.4	0.3624 µg/L	0.3624 ppb	18:32:57
3	S 181.975 Axial†	35.6	-5.4	-12.165 µg/L	-12.165 ppb	18:32:57
3	Sb 206.836†	41.9	6.8	3.1847 µg/L	3.1847 ppb	18:32:57
3	Se 196.026†	-38.2	-5.5	-4.55 µg/L	-4.55 ppb	18:32:57
3	SiO2 †	1353.3	-251.3	-17.546 µg/L	-17.546 ppb	18:32:37
3	Si 251.611†	1287.3	-111.8	-3.70 µg/L	-3.70 ppb	18:33:13
3	Sn 189.927†	-7.7	-2.2	-0.5571 µg/L	-0.5571 ppb	18:32:57
3	Sr 421.552†	13.3	42.2	0.1907 µg/L	0.1907 ppb	18:31:02
3	Ti 334.940†	672.6	215.4	0.2853 µg/L	0.2853 ppb	18:32:37
3	Tl 190.801†	-36.2	0.6	0.2435 µg/L	0.2435 ppb	18:32:57
3	U 409.014†	353.1	12.2	0.7832 µg/L	0.7832 ppb	18:32:37
3	V 292.402†	-108.8	-17.8	-0.2555 µg/L	-0.2555 ppb	18:32:37
3	Zn 213.857†	444.9	-131.8	-3.1500 µg/L	-3.1500 ppb	18:32:57

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1087847.0	101.08	%	0.832				0.82%
Sc RADIAL	40138.4	101	%	0.5				0.54%
Y 371.029	598044.3	101.17	%	0.833				0.82%
Ag 328.068†	1.5	0.0102	µg/L	0.11012	0.0102	ppb	0.11012	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-19.2	-5.7651	µg/L	2.50926	-5.7651	ppb	2.50926	43.52%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.5	-0.7802	µg/L	0.44976	-0.7802	ppb	0.44976	57.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-35.9	-2.3763	µg/L	0.81591	-2.3763	ppb	0.81591	34.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.7	-0.0181	µg/L	0.13761	-0.0181	ppb	0.13761	759.99%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	26.9	0.0184	µg/L	0.01137	0.0184	ppb	0.01137	61.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-14.4	-3.2217	µg/L	1.81858	-3.2217	ppb	1.81858	56.45%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.0	0.0352	µg/L	0.24946	0.0352	ppb	0.24946	708.29%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	9.5	0.2959	µg/L	0.13514	0.2959	ppb	0.13514	45.67%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	4.6	0.1270 µg/L	0.22497	0.1270 ppb	0.22497	177.09%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-146.7	-0.5764 µg/L	0.11786	-0.5764 ppb	0.11786	20.45%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	-0.7	-0.7388 µg/L	1.09372	-0.7388 ppb	1.09372	148.05%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	-28.8	-12.347 µg/L	19.0189	-12.347 ppb	19.0189	154.04%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	1.8	5.3185 µg/L	9.74618	5.3185 ppb	9.74618	183.25%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	-17.8	-0.0325 µg/L	0.01652	-0.0325 ppb	0.01652	50.80%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	5.9	0.7740 µg/L	0.52134	0.7740 ppb	0.52134	67.36%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-174.2	-27.882 µg/L	1.2669	-27.882 ppb	1.2669	4.54%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-3.6	-0.2311 µg/L	0.20171	-0.2311 ppb	0.20171	87.27%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-1.5	-1.1094 µg/L	3.41287	-1.1094 ppb	3.41287	307.64%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	0.2	0.0459 µg/L	0.37098	0.0459 ppb	0.37098	807.49%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-5.0	-11.409 µg/L	3.1550	-11.409 ppb	3.1550	27.65%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	9.3	4.3971 µg/L	1.15553	4.3971 ppb	1.15553	26.28%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-0.3	-0.275 µg/L	5.9307	-0.275 ppb	5.9307	>999.9%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	-290.0	-20.246 µg/L	2.4754	-20.246 ppb	2.4754	12.23%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	216.9	7.15 µg/L	17.963	7.15 ppb	17.963	251.12%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	0.5	0.1376 µg/L	0.60239	0.1376 ppb	0.60239	437.64%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	15.7	0.0707 µg/L	0.11608	0.0707 ppb	0.11608	164.10%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	210.2	0.2791 µg/L	0.03382	0.2791 ppb	0.03382	12.12%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	-0.9	-0.3592 µg/L	0.74682	-0.3592 ppb	0.74682	207.89%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	-5.4	-0.3485 µg/L	1.05573	-0.3485 ppb	1.05573	302.96%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-28.0	-0.4091 µg/L	0.29601	-0.4091 ppb	0.29601	72.36%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-136.4	-3.2594 µg/L	0.10945	-3.2594 ppb	0.10945	3.36%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/23/2005 18:41:17
Data Type: Reprocessed on 6/24/2005 07:39:10
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1071698.7	1071698.7	99.581	%			18:43:59
1	Sc RADIAL	40025.7	40025.7	101	%			18:42:40
1	Y 371.029	583264.1	583264.1	98.668	%			18:43:59
1	Ag 328.068†	67191.0	68097.5	502.91	µg/L	502.91	ppb	18:44:05
1	Al 396.153Radial†	16979.6	16714.6	4956.3	µg/L	4956.3	ppb	18:42:40
1	As 188.979†	955.2	987.2	505.25	µg/L	505.25	ppb	18:44:25
1	B 249.677†	7719.2	7526.0	498.60	µg/L	498.60	ppb	18:44:05
1	Ba 233.527†	46953.9	47286.2	502.36	µg/L	502.36	ppb	18:44:05
1	Be 313.107†	722665.8	725442.2	498.57	µg/L	498.57	ppb	18:43:59
1	Ca 317.933Radial†	22295.5	21920.5	4912.5	µg/L	4912.5	ppb	18:43:00
1	Cd 226.502†	13740.4	13822.0	504.54	µg/L	504.54	ppb	18:44:05
1	Co 228.616†	15938.1	16150.2	502.40	µg/L	502.40	ppb	18:44:05
1	Cr 267.716†	17945.2	17949.5	501.07	µg/L	501.07	ppb	18:44:05
1	Cu 324.752†	130979.8	126505.9	496.55	µg/L	496.55	ppb	18:43:59
1	Fe 238.204 Radial†	5094.6	5003.1	5063.9	µg/L	5063.9	ppb	18:43:00
1	K 766.490 Radial†	12892.5	11645.7	4985.0	µg/L	4985.0	ppb	18:42:40
1	Mg 279.077 IEC†	1773.4	1753.1	5065.1	µg/L	5065.1	ppb	18:43:00
1	Mn 257.610†	273236.2	273985.3	499.53	µg/L	499.53	ppb	18:43:59
1	Mo 202.031†	3882.2	3898.7	511.61	µg/L	511.61	ppb	18:44:25
1	Na 589.592 Radial†	63038.8	61437.0	9831.6	µg/L	9831.6	ppb	18:42:40
1	Ni 231.604†	7909.1	7764.1	507.76	µg/L	507.76	ppb	18:44:05
1	P 214.914†	3204.4	3035.8	2414.4	µg/L	2414.4	ppb	18:44:25
1	Pb 220.353†	1902.2	1923.0	503.37	µg/L	503.37	ppb	18:44:25
1	S 181.975 Axial†	472.6	434.0	978.98	µg/L	978.98	ppb	18:44:25
1	Sb 206.836†	1070.2	1039.9	489.57	µg/L	489.57	ppb	18:44:25
1	Se 196.026†	571.8	606.6	506	µg/L	506	ppb	18:44:25
1	SiO2 †	76155.4	74883.8	5205.6	µg/L	5205.6	ppb	18:44:05
1	Si 251.611†	74211.1	73136.1	2410	µg/L	2410	ppb	18:45:34
1	Sn 189.927†	1928.3	1941.8	494.17	µg/L	494.17	ppb	18:44:25
1	Sr 421.552†	111634.5	110613.9	499.40	µg/L	499.40	ppb	18:42:40
1	Ti 334.940†	370906.6	372014.7	493.44	µg/L	493.44	ppb	18:43:59
1	Tl 190.801†	1255.1	1296.9	501.49	µg/L	501.49	ppb	18:44:25
1	U 409.014†	8152.3	7849.0	507.30	µg/L	507.30	ppb	18:44:05
1	V 292.402†	33449.6	33680.2	507.61	µg/L	507.61	ppb	18:44:05
1	Zn 213.857†	21630.7	21149.2	501.36	µg/L	501.36	ppb	18:44:05
2	Sc 361.383	1082127.6	1082127.6	100.55	%			18:44:31
2	Sc RADIAL	39721.5	39721.5	100	%			18:43:05
2	Y 371.029	588686.8	588686.8	99.585	%			18:44:31
2	Ag 328.068†	66314.3	66575.3	491.70	µg/L	491.70	ppb	18:44:36
2	Al 396.153Radial†	16816.1	16680.2	4946.3	µg/L	4946.3	ppb	18:43:05
2	As 188.979†	949.5	972.4	497.67	µg/L	497.67	ppb	18:44:56
2	B 249.677†	7607.0	7339.7	486.26	µg/L	486.26	ppb	18:44:36
2	Ba 233.527†	46519.3	46399.5	492.94	µg/L	492.94	ppb	18:44:36
2	Be 313.107†	729737.0	725480.8	498.59	µg/L	498.59	ppb	18:44:31
2	Ca 317.933Radial†	22294.9	22088.9	4950.2	µg/L	4950.2	ppb	18:43:25
2	Cd 226.502†	13583.1	13532.7	493.97	µg/L	493.97	ppb	18:44:36
2	Co 228.616†	15772.4	15831.2	492.46	µg/L	492.46	ppb	18:44:36
2	Cr 267.716†	17824.3	17655.5	492.87	µg/L	492.87	ppb	18:44:36
2	Cu 324.752†	132259.8	126511.3	496.57	µg/L	496.57	ppb	18:44:31
2	Fe 238.204 Radial†	5096.4	5043.5	5104.6	µg/L	5104.6	ppb	18:43:25
2	K 766.490 Radial†	12761.1	11612.3	4970.7	µg/L	4970.7	ppb	18:43:05
2	Mg 279.077 IEC†	1769.3	1762.4	5092.0	µg/L	5092.0	ppb	18:43:25
2	Mn 257.610†	275624.5	273716.2	499.04	µg/L	499.04	ppb	18:44:31
2	Mo 202.031†	3877.3	3856.2	506.04	µg/L	506.04	ppb	18:44:56
2	Na 589.592 Radial†	62598.3	61475.6	9837.8	µg/L	9837.8	ppb	18:43:05
2	Ni 231.604†	7820.6	7599.4	497.01	µg/L	497.01	ppb	18:44:36
2	P 214.914†	3191.3	2991.8	2378.0	µg/L	2378.0	ppb	18:44:56
2	Pb 220.353†	1907.2	1909.6	499.85	µg/L	499.85	ppb	18:44:56
2	S 181.975 Axial†	471.4	428.2	965.83	µg/L	965.83	ppb	18:44:56

2	Sb 206.836†	1082.2	1041.5	490.33 µg/L	490.33 ppb	18:44:56
2	Se 196.026†	568.2	597.5	499 µg/L	499 ppb	18:44:56
2	SiO2 †	75242.5	73238.8	5091.1 µg/L	5091.1 ppb	18:44:36
2	Si 251.611†	74616.4	72821.0	2400 µg/L	2400 ppb	18:45:39
2	Sn 189.927†	1925.1	1919.9	488.61 µg/L	488.61 ppb	18:44:56
2	Sr 421.552†	110656.0	110484.0	498.82 µg/L	498.82 ppb	18:43:05
2	Ti 334.940†	374826.4	372323.3	493.86 µg/L	493.86 ppb	18:44:31
2	Tl 190.801†	1245.3	1275.0	493.12 µg/L	493.12 ppb	18:44:56
2	U 409.014†	8093.6	7711.7	498.40 µg/L	498.40 ppb	18:44:36
2	V 292.402†	33068.0	32976.9	497.06 µg/L	497.06 ppb	18:44:36
2	Zn 213.857†	21369.8	20680.3	490.20 µg/L	490.20 ppb	18:44:36
3	Sc 361.383	1071942.4	1071942.4	99.604 %		18:45:02
3	Sc RADIAL	40275.1	40275.1	102 %		18:43:31
3	Y 371.029	583466.4	583466.4	98.702 %		18:45:02
3	Ag 328.068†	66743.3	67632.7	499.47 µg/L	499.47 ppb	18:45:08
3	Al 396.153Radial†	17110.1	16738.9	4963.7 µg/L	4963.7 ppb	18:43:31
3	As 188.979†	949.2	981.0	502.08 µg/L	502.08 ppb	18:45:28
3	B 249.677†	7669.6	7474.4	495.18 µg/L	495.18 ppb	18:45:08
3	Ba 233.527†	46464.6	46784.2	497.03 µg/L	497.03 ppb	18:45:08
3	Be 313.107†	722999.7	725612.4	498.69 µg/L	498.69 ppb	18:45:02
3	Ca 317.933Radial†	22277.1	21765.5	4877.8 µg/L	4877.8 ppb	18:43:51
3	Cd 226.502†	13578.5	13656.4	498.49 µg/L	498.49 ppb	18:45:08
3	Co 228.616†	15813.5	16021.4	498.39 µg/L	498.39 ppb	18:45:08
3	Cr 267.716†	17776.1	17775.6	496.21 µg/L	496.21 ppb	18:45:08
3	Cu 324.752†	131194.8	126691.8	497.27 µg/L	497.27 ppb	18:45:02
3	Fe 238.204 Radial†	5084.0	4961.4	5021.6 µg/L	5021.6 ppb	18:43:51
3	K 766.490 Radial†	12984.9	11657.5	4990.0 µg/L	4990.0 ppb	18:43:31
3	Mg 279.077 IEC†	1769.4	1738.3	5022.5 µg/L	5022.5 ppb	18:43:51
3	Mn 257.610†	273067.7	273753.8	499.10 µg/L	499.10 ppb	18:45:02
3	Mo 202.031†	3868.3	3883.8	509.66 µg/L	509.66 ppb	18:45:28
3	Na 589.592 Radial†	63489.0	61493.6	9840.7 µg/L	9840.7 ppb	18:43:31
3	Ni 231.604†	7767.4	7620.0	498.35 µg/L	498.35 ppb	18:45:08
3	P 214.914†	3180.3	3010.9	2393.7 µg/L	2393.7 ppb	18:45:28
3	Pb 220.353†	1895.3	1915.6	501.43 µg/L	501.43 ppb	18:45:28
3	S 181.975 Axial†	470.2	431.5	973.27 µg/L	973.27 ppb	18:45:28
3	Sb 206.836†	1080.0	1049.5	494.11 µg/L	494.11 ppb	18:45:28
3	Se 196.026†	566.2	600.8	501 µg/L	501 ppb	18:45:28
3	SiO2 †	75594.5	74303.2	5165.2 µg/L	5165.2 ppb	18:45:08
3	Si 251.611†	74277.3	73185.6	2410 µg/L	2410 ppb	18:45:44
3	Sn 189.927†	1924.6	1937.6	493.10 µg/L	493.10 ppb	18:45:28
3	Sr 421.552†	112357.6	110640.9	499.52 µg/L	499.52 ppb	18:43:31
3	Ti 334.940†	371672.9	372699.4	494.35 µg/L	494.35 ppb	18:45:02
3	Tl 190.801†	1250.2	1291.7	499.50 µg/L	499.50 ppb	18:45:28
3	U 409.014†	8190.9	7885.9	509.66 µg/L	509.66 ppb	18:45:08
3	V 292.402†	33174.7	33396.6	503.36 µg/L	503.36 ppb	18:45:08
3	Zn 213.857†	21427.3	20940.0	496.42 µg/L	496.42 ppb	18:45:08

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1075256.2	99.912	%	0.5531				0.55%
Sc RADIAL	40007.5	101	%	0.7				0.69%
Y 371.029	585139.1	98.985	%	0.5200				0.53%
Ag 328.068†	67435.2	498.03	µg/L	5.744	498.03	ppb	5.744	1.15%
QC value within limits for Ag 328.068 Recovery = 99.61%								
Al 396.153Radial†	16711.2	4955.4	µg/L	8.69	4955.4	ppb	8.69	0.18%
QC value within limits for Al 396.153Radial Recovery = 99.11%								
As 188.979†	980.2	501.67	µg/L	3.809	501.67	ppb	3.809	0.76%
QC value within limits for As 188.979 Recovery = 100.33%								
B 249.677†	7446.7	493.35	µg/L	6.372	493.35	ppb	6.372	1.29%
QC value within limits for B 249.677 Recovery = 98.67%								
Ba 233.527†	46823.3	497.44	µg/L	4.724	497.44	ppb	4.724	0.95%
QC value within limits for Ba 233.527 Recovery = 99.49%								
Be 313.107†	725511.8	498.62	µg/L	0.062	498.62	ppb	0.062	0.01%
QC value within limits for Be 313.107 Recovery = 99.72%								
Ca 317.933Radial†	21925.0	4913.5	µg/L	36.20	4913.5	ppb	36.20	0.74%
QC value within limits for Ca 317.933Radial Recovery = 98.27%								
Cd 226.502†	13670.4	499.00	µg/L	5.304	499.00	ppb	5.304	1.06%
QC value within limits for Cd 226.502 Recovery = 99.80%								
Co 228.616†	16000.9	497.75	µg/L	5.001	497.75	ppb	5.001	1.00%

QC value within limits for Co 228.616 Recovery = 99.55%

Cr 267.716†	17793.5	496.72 µg/L	4.127	496.72 ppb	4.127	0.83%

QC value within limits for Cr 267.716 Recovery = 99.34%

Cu 324.752†	126569.7	496.80 µg/L	0.412	496.80 ppb	0.412	0.08%

QC value within limits for Cu 324.752 Recovery = 99.36%

Fe 238.204 Radial†	5002.7	5063.4 µg/L	41.50	5063.4 ppb	41.50	0.82%

QC value within limits for Fe 238.204 Radial Recovery = 101.27%

K 766.490 Radial†	11638.5	4981.9 µg/L	10.03	4981.9 ppb	10.03	0.20%

QC value within limits for K 766.490 Radial Recovery = 99.64%

Mg 279.077 IEC†	1751.3	5059.9 µg/L	35.02	5059.9 ppb	35.02	0.69%

QC value within limits for Mg 279.077 IEC Recovery = 101.20%

Mn 257.610†	273818.4	499.23 µg/L	0.265	499.23 ppb	0.265	0.05%

QC value within limits for Mn 257.610 Recovery = 99.85%

Mo 202.031†	3879.6	509.10 µg/L	2.826	509.10 ppb	2.826	0.56%

QC value within limits for Mo 202.031 Recovery = 101.82%

Na 589.592 Radial†	61468.7	9836.7 µg/L	4.63	9836.7 ppb	4.63	0.05%

QC value within limits for Na 589.592 Radial Recovery = 98.37%

Ni 231.604†	7661.2	501.04 µg/L	5.859	501.04 ppb	5.859	1.17%

QC value within limits for Ni 231.604 Recovery = 100.21%

P 214.914†	3012.8	2395.4 µg/L	18.22	2395.4 ppb	18.22	0.76%

QC value within limits for P 214.914 Recovery = 95.82%

Pb 220.353†	1916.0	501.55 µg/L	1.759	501.55 ppb	1.759	0.35%

QC value within limits for Pb 220.353 Recovery = 100.31%

S 181.975 Axial†	431.2	972.69 µg/L	6.592	972.69 ppb	6.592	0.68%

QC value within limits for S 181.975 Axial Recovery = 97.27%

Sb 206.836†	1043.6	491.34 µg/L	2.433	491.34 ppb	2.433	0.50%

QC value within limits for Sb 206.836 Recovery = 98.27%

Se 196.026†	601.6	502 µg/L	3.9	502 ppb	3.9	0.77%

QC value within limits for Se 196.026 Recovery = 100.43%

SiO2 †	74141.9	5154.0 µg/L	58.07	5154.0 ppb	58.07	1.13%

QC value within limits for SiO2 Recovery = 96.38%

Si 251.611†	73047.6	2410 µg/L	6.5	2410 ppb	6.5	0.27%

QC value within limits for Si 251.611 Recovery = 96.23%

Sn 189.927†	1933.1	491.96 µg/L	2.953	491.96 ppb	2.953	0.60%

QC value within limits for Sn 189.927 Recovery = 98.39%

Sr 421.552†	110579.6	499.25 µg/L	0.379	499.25 ppb	0.379	0.08%

QC value within limits for Sr 421.552 Recovery = 99.85%

Ti 334.940†	372345.8	493.88 µg/L	0.455	493.88 ppb	0.455	0.09%

QC value within limits for Ti 334.940 Recovery = 98.78%

Tl 190.801†	1287.9	498.04 µg/L	4.372	498.04 ppb	4.372	0.88%

QC value within limits for Tl 190.801 Recovery = 99.61%

U 409.014†	7815.5	505.12 µg/L	5.937	505.12 ppb	5.937	1.18%

QC value within limits for U 409.014 Recovery = 101.02%

V 292.402†	33351.2	502.68 µg/L	5.306	502.68 ppb	5.306	1.06%

QC value within limits for V 292.402 Recovery = 100.54%

Zn 213.857†	20923.2	495.99 µg/L	5.591	495.99 ppb	5.591	1.13%

QC value within limits for Zn 213.857 Recovery = 99.20%

All analyte(s) passed QC.

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/23/2005 18:47:32
Data Type: Reprocessed on 6/24/2005 07:39:12
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1078630.9	1078630.9	100.23	%			18:50:17
1	Sc RADIAL	39902.4	39902.4	101	%			18:48:59
1	Y 371.029	592488.3	592488.3	100.23	%			18:50:17
1	Ag 328.068†	-602.0	23.5	0.1709	µg/L	0.1709	ppb	18:50:22
1	Al 396.153Radial†	107.7	1.7	0.4365	µg/L	0.4365	ppb	18:48:59
1	As 188.979†	-25.4	2.7	1.3738	µg/L	1.3738	ppb	18:50:43
1	B 249.677†	201.8	-24.3	-1.6054	µg/L	-1.6054	ppb	18:50:43
1	Ba 233.527†	-139.0	-3.8	-0.0401	µg/L	-0.0401	ppb	18:50:43
1	Be 313.107†	329.7	68.0	0.0471	µg/L	0.0471	ppb	18:50:22
1	Ca 317.933Radial†	168.4	1.9	0.4438	µg/L	0.4438	ppb	18:49:19
1	Cd 226.502†	-27.0	-3.0	-0.1106	µg/L	-0.1106	ppb	18:50:43
1	Co 228.616†	-131.0	14.4	0.4491	µg/L	0.4491	ppb	18:50:43
1	Cr 267.716†	71.7	0.4	0.0091	µg/L	0.0091	ppb	18:50:43
1	Cu 324.752†	5012.1	-23.6	-0.0952	µg/L	-0.0952	ppb	18:50:22
1	Fe 238.204 Radial†	42.4	-1.5	-1.5019	µg/L	-1.5019	ppb	18:49:19
1	K 766.490 Radial†	1040.1	-92.1	-39.429	µg/L	-39.429	ppb	18:48:59
1	Mg 279.077 IEC†	3.5	-0.1	-0.3263	µg/L	-0.3263	ppb	18:49:19
1	Mn 257.610†	384.2	-16.0	-0.0296	µg/L	-0.0296	ppb	18:50:43
1	Mo 202.031†	9.3	9.5	1.2393	µg/L	1.2393	ppb	18:50:43
1	Na 589.592 Radial†	847.1	-167.3	-26.777	µg/L	-26.777	ppb	18:48:59
1	Ni 231.604†	168.9	-9.8	-0.6361	µg/L	-0.6361	ppb	18:50:43
1	P 214.914†	183.7	1.2	1.0164	µg/L	1.0164	ppb	18:50:43
1	Pb 220.353†	-8.6	4.2	1.0953	µg/L	1.0953	ppb	18:50:43
1	S 181.975 Axial†	37.6	-3.1	-7.0158	µg/L	-7.0158	ppb	18:50:43
1	Sb 206.836†	39.1	4.3	2.0299	µg/L	2.0299	ppb	18:50:43
1	Se 196.026†	-26.4	6.0	5.03	µg/L	5.03	ppb	18:50:43
1	SiO2 †	1288.4	-306.3	-21.399	µg/L	-21.399	ppb	18:50:22
1	Si 251.611†	1284.9	-104.9	-3.49	µg/L	-3.49	ppb	18:51:50
1	Sn 189.927†	0.5	5.9	1.4882	µg/L	1.4882	ppb	18:50:43
1	Sr 421.552†	-7.6	21.5	0.0972	µg/L	0.0972	ppb	18:48:59
1	Ti 334.940†	665.2	212.9	0.2814	µg/L	0.2814	ppb	18:50:22
1	Tl 190.801†	-40.1	-3.4	-1.3241	µg/L	-1.3241	ppb	18:50:43
1	U 409.014†	372.5	34.1	2.1942	µg/L	2.1942	ppb	18:50:22
1	V 292.402†	-121.3	-31.0	-0.4468	µg/L	-0.4468	ppb	18:50:22
1	Zn 213.857†	473.7	-99.9	-2.3842	µg/L	-2.3842	ppb	18:50:43
2	Sc 361.383	1087916.8	1087916.8	101.09	%			18:50:48
2	Sc RADIAL	40118.3	40118.3	101	%			18:49:24
2	Y 371.029	597085.1	597085.1	101.01	%			18:50:48
2	Ag 328.068†	-615.9	14.8	0.1076	µg/L	0.1076	ppb	18:50:53
2	Al 396.153Radial†	88.0	-18.3	-5.4994	µg/L	-5.4994	ppb	18:49:24
2	As 188.979†	-20.1	8.2	4.1341	µg/L	4.1341	ppb	18:51:13
2	B 249.677†	181.5	-46.1	-3.0539	µg/L	-3.0539	ppb	18:51:13
2	Ba 233.527†	-124.4	11.9	0.1271	µg/L	0.1271	ppb	18:51:13
2	Be 313.107†	276.1	12.1	0.0093	µg/L	0.0093	ppb	18:50:53
2	Ca 317.933Radial†	158.3	-9.0	-1.9772	µg/L	-1.9772	ppb	18:49:44
2	Cd 226.502†	-19.8	4.4	0.1618	µg/L	0.1618	ppb	18:51:13
2	Co 228.616†	-130.3	16.3	0.5052	µg/L	0.5052	ppb	18:51:13
2	Cr 267.716†	70.0	-1.9	-0.0580	µg/L	-0.0580	ppb	18:51:13
2	Cu 324.752†	4997.4	-80.9	-0.3220	µg/L	-0.3220	ppb	18:50:53
2	Fe 238.204 Radial†	44.0	-0.2	-0.1587	µg/L	-0.1587	ppb	18:49:44
2	K 766.490 Radial†	1120.1	-18.5	-7.9354	µg/L	-7.9354	ppb	18:49:24
2	Mg 279.077 IEC†	2.6	-1.1	-3.1691	µg/L	-3.1691	ppb	18:49:44
2	Mn 257.610†	379.3	-24.1	-0.0444	µg/L	-0.0444	ppb	18:51:13
2	Mo 202.031†	5.7	5.8	0.7558	µg/L	0.7558	ppb	18:51:13
2	Na 589.592 Radial†	781.3	-236.8	-37.899	µg/L	-37.899	ppb	18:49:24
2	Ni 231.604†	183.8	3.5	0.2327	µg/L	0.2327	ppb	18:51:13
2	P 214.914†	186.4	2.3	1.9203	µg/L	1.9203	ppb	18:51:13
2	Pb 220.353†	-28.0	-14.9	-3.9033	µg/L	-3.9033	ppb	18:51:13
2	S 181.975 Axial†	39.7	-1.3	-2.9498	µg/L	-2.9498	ppb	18:51:13

2	Sb 206.836†	42.0	6.7	3.1932 µg/L	3.1932 ppb	18:51:13
2	Se 196.026†	-32.9	-0.2	-0.140 µg/L	-0.140 ppb	18:51:13
2	SiO2 †	1273.7	-331.8	-23.162 µg/L	-23.162 ppb	18:50:53
2	Si 251.611†	1298.7	-102.2	-3.39 µg/L	-3.39 ppb	18:51:55
2	Sn 189.927†	1.3	6.7	1.6945 µg/L	1.6945 ppb	18:51:13
2	Sr 421.552†	-40.2	-10.6	-0.0479 µg/L	-0.0479 ppb	18:49:24
2	Ti 334.940†	771.4	312.2	0.4118 µg/L	0.4118 ppb	18:50:53
2	Tl 190.801†	-35.0	1.9	0.7384 µg/L	0.7384 ppb	18:51:13
2	U 409.014†	421.9	79.8	5.1342 µg/L	5.1342 ppb	18:50:53
2	V 292.402†	-92.2	-1.2	-0.0060 µg/L	-0.0060 ppb	18:50:53
2	Zn 213.857†	476.1	-101.6	-2.4300 µg/L	-2.4300 ppb	18:51:13
3	Sc 361.383	1091875.7	1091875.7	101.46 %		18:51:19
3	Sc RADIAL	40244.5	40244.5	102 %		18:49:49
3	Y 371.029	599725.8	599725.8	101.45 %		18:51:19
3	Ag 328.068†	-664.2	-30.6	-0.2256 µg/L	-0.2256 ppb	18:51:24
3	Al 396.153Radial†	106.8	-0.1	-0.1069 µg/L	-0.1069 ppb	18:49:49
3	As 188.979†	-34.9	-6.4	-3.2345 µg/L	-3.2345 ppb	18:51:44
3	B 249.677†	195.6	-32.9	-2.1715 µg/L	-2.1715 ppb	18:51:44
3	Ba 233.527†	-134.9	1.9	0.0199 µg/L	0.0199 ppb	18:51:44
3	Be 313.107†	258.0	-6.7	-0.0050 µg/L	-0.0050 ppb	18:51:24
3	Ca 317.933Radial†	156.9	-10.8	-2.4276 µg/L	-2.4276 ppb	18:50:09
3	Cd 226.502†	-27.3	-2.9	-0.1080 µg/L	-0.1080 ppb	18:51:44
3	Co 228.616†	-142.8	4.4	0.1380 µg/L	0.1380 ppb	18:51:44
3	Cr 267.716†	76.1	3.8	0.1083 µg/L	0.1083 ppb	18:51:44
3	Cu 324.752†	5017.5	-79.0	-0.3096 µg/L	-0.3096 ppb	18:51:24
3	Fe 238.204 Radial†	42.6	-1.7	-1.6890 µg/L	-1.6890 ppb	18:50:09
3	K 766.490 Radial†	1145.8	3.2	1.3870 µg/L	1.3870 ppb	18:49:49
3	Mg 279.077 IEC†	5.8	2.1	5.9928 µg/L	5.9928 ppb	18:50:09
3	Mn 257.610†	367.6	-36.9	-0.0673 µg/L	-0.0673 ppb	18:51:44
3	Mo 202.031†	11.3	11.3	1.4786 µg/L	1.4786 ppb	18:51:44
3	Na 589.592 Radial†	842.0	-179.4	-28.715 µg/L	-28.715 ppb	18:49:49
3	Ni 231.604†	175.5	-5.4	-0.3482 µg/L	-0.3482 ppb	18:51:44
3	P 214.914†	178.3	-6.3	-5.1582 µg/L	-5.1582 ppb	18:51:44
3	Pb 220.353†	-4.4	8.5	2.2210 µg/L	2.2210 ppb	18:51:44
3	S 181.975 Axial†	36.8	-4.3	-9.7681 µg/L	-9.7681 ppb	18:51:44
3	Sb 206.836†	37.5	2.2	1.0234 µg/L	1.0234 ppb	18:51:44
3	Se 196.026†	-25.5	7.2	6.03 µg/L	6.03 ppb	18:51:44
3	SiO2 †	1309.2	-301.4	-21.063 µg/L	-21.063 ppb	18:51:24
3	Si 251.611†	1290.9	-114.5	-3.81 µg/L	-3.81 ppb	18:52:00
3	Sn 189.927†	-3.3	2.2	0.5496 µg/L	0.5496 ppb	18:51:44
3	Sr 421.552†	-29.7	-0.2	-0.0008 µg/L	-0.0008 ppb	18:49:49
3	Ti 334.940†	647.0	186.8	0.2489 µg/L	0.2489 ppb	18:51:24
3	Tl 190.801†	-34.3	2.7	1.0318 µg/L	1.0318 ppb	18:51:44
3	U 409.014†	309.0	-33.0	-2.1278 µg/L	-2.1278 ppb	18:51:24
3	V 292.402†	-116.7	-25.1	-0.3606 µg/L	-0.3606 ppb	18:51:24
3	Zn 213.857†	467.4	-111.8	-2.6719 µg/L	-2.6719 ppb	18:51:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1086141.1	100.92	%	0.632				0.63%
Sc RADIAL	40088.4	101	%	0.4				0.43%
Y 371.029	596433.1	100.90	%	0.620				0.61%
Ag 328.068†	2.6	0.0176	µg/L	0.21302	0.0176	ppb	0.21302	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.6	-1.7233	µg/L	3.28152	-1.7233	ppb	3.28152	190.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	0.7578	µg/L	3.72272	0.7578	ppb	3.72272	491.27%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-34.4	-2.2769	µg/L	0.72998	-2.2769	ppb	0.72998	32.06%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.3	0.0356	µg/L	0.08466	0.0356	ppb	0.08466	237.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	24.5	0.0172	µg/L	0.02692	0.0172	ppb	0.02692	156.89%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-5.9	-1.3203	µg/L	1.54431	-1.3203	ppb	1.54431	116.96%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.5	-0.0189	µg/L	0.15656	-0.0189	ppb	0.15656	826.72%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	11.7	0.3641	µg/L	0.19782	0.3641	ppb	0.19782	54.33%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	0.8	0.0198 µg/L	0.08367	0.0198 ppb	0.08367	422.19%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-61.1	-0.2422 µg/L	0.12750	-0.2422 ppb	0.12750	52.63%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	-1.1	-1.1165 µg/L	0.83477	-1.1165 ppb	0.83477	74.76%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	-35.8	-15.326 µg/L	21.3879	-15.326 ppb	21.3879	139.56%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	0.3	0.8325 µg/L	4.68956	0.8325 ppb	4.68956	563.33%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	-25.7	-0.0471 µg/L	0.01899	-0.0471 ppb	0.01899	40.31%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	8.8	1.1579 µg/L	0.36820	1.1579 ppb	0.36820	31.80%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-194.5	-31.130 µg/L	5.9415	-31.130 ppb	5.9415	19.09%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-3.9	-0.2505 µg/L	0.44255	-0.2505 ppb	0.44255	176.66%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-0.9	-0.7405 µg/L	3.85242	-0.7405 ppb	3.85242	520.25%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	-0.7	-0.1957 µg/L	3.25984	-0.1957 ppb	3.25984	>999.9%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-2.9	-6.5779 µg/L	3.43013	-6.5779 ppb	3.43013	52.15%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	4.4	2.0822 µg/L	1.08588	2.0822 ppb	1.08588	52.15%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	4.4	3.64 µg/L	3.313	3.64 ppb	3.313	90.99%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	-313.1	-21.875 µg/L	1.1275	-21.875 ppb	1.1275	5.15%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	-107.2	-3.56 µg/L	0.219	-3.56 ppb	0.219	6.15%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	4.9	1.2441 µg/L	0.61024	1.2441 ppb	0.61024	49.05%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	3.6	0.0162 µg/L	0.07404	0.0162 ppb	0.07404	457.88%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	237.3	0.3140 µg/L	0.08617	0.3140 ppb	0.08617	27.44%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	0.4	0.1487 µg/L	1.28390	0.1487 ppb	1.28390	863.58%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	27.0	1.7335 µg/L	3.65286	1.7335 ppb	3.65286	210.72%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-19.1	-0.2711 µg/L	0.23359	-0.2711 ppb	0.23359	86.15%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-104.4	-2.4953 µg/L	0.15458	-2.4953 ppb	0.15458	6.19%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 34
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/23/2005 19:45:21
Data Type: Reprocessed on 6/24/2005 07:39:32
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1077201.3	1077201.3	100.09	%			19:48:04
1	Sc RADIAL	39391.2	39391.2	99.3	%			19:46:44
1	Y 371.029	586232.2	586232.2	99.170	%			19:48:04
1	Ag 328.068†	67294.7	67856.4	501.15	µg/L	501.15	ppb	19:48:09
1	Al 396.153Radial†	16912.0	16917.5	5016.8	µg/L	5016.8	ppb	19:46:44
1	As 188.979†	957.0	984.2	503.71	µg/L	503.71	ppb	19:48:30
1	B 249.677†	7662.8	7430.1	492.24	µg/L	492.24	ppb	19:48:09
1	Ba 233.527†	47031.2	47122.5	500.62	µg/L	500.62	ppb	19:48:09
1	Be 313.107†	728483.5	727547.4	500.02	µg/L	500.02	ppb	19:48:04
1	Ca 317.933Radial†	22146.4	22126.1	4958.5	µg/L	4958.5	ppb	19:47:05
1	Cd 226.502†	13715.9	13727.1	501.07	µg/L	501.07	ppb	19:48:09
1	Co 228.616†	15991.7	16122.0	501.52	µg/L	501.52	ppb	19:48:09
1	Cr 267.716†	18008.8	17920.9	500.27	µg/L	500.27	ppb	19:48:09
1	Cu 324.752†	135899.0	130748.7	513.21	µg/L	513.21	ppb	19:48:09
1	Fe 238.204 Radial†	5074.4	5064.1	5125.5	µg/L	5125.5	ppb	19:47:05
1	K 766.490 Radial†	12682.0	11639.6	4982.4	µg/L	4982.4	ppb	19:46:44
1	Mg 279.077 IEC†	1758.1	1766.0	5102.3	µg/L	5102.3	ppb	19:47:05
1	Mn 257.610†	275874.1	275219.2	501.78	µg/L	501.78	ppb	19:48:04
1	Mo 202.031†	3892.7	3889.3	510.38	µg/L	510.38	ppb	19:48:30
1	Na 589.592 Radial†	62272.6	61671.8	9869.2	µg/L	9869.2	ppb	19:46:44
1	Ni 231.604†	7899.3	7713.7	504.47	µg/L	504.47	ppb	19:48:09
1	P 214.914†	3196.0	3010.9	2391.1	µg/L	2391.1	ppb	19:48:30
1	Pb 220.353†	1894.4	1905.4	498.78	µg/L	498.78	ppb	19:48:30
1	S 181.975 Axial†	476.9	435.9	983.18	µg/L	983.18	ppb	19:48:30
1	Sb 206.836†	1083.9	1048.1	493.42	µg/L	493.42	ppb	19:48:30
1	Se 196.026†	563.0	594.9	496	µg/L	496	ppb	19:48:30
1	SiO2 †	91514.6	89838.0	6248.5	µg/L	6248.5	ppb	19:48:09
1	Si 251.611†	86973.6	85506.1	2820	µg/L	2820	ppb	19:49:38
1	Sn 189.927†	1930.9	1934.5	492.31	µg/L	492.31	ppb	19:48:30
1	Sr 421.552†	110441.2	111194.2	502.02	µg/L	502.02	ppb	19:46:44
1	Ti 334.940†	375450.2	374651.4	496.94	µg/L	496.94	ppb	19:48:04
1	Tl 190.801†	1256.3	1291.7	499.51	µg/L	499.51	ppb	19:48:30
1	U 409.014†	8219.0	7873.9	508.89	µg/L	508.89	ppb	19:48:09
1	V 292.402†	33544.6	33603.5	506.46	µg/L	506.46	ppb	19:48:09
1	Zn 213.857†	21495.4	20903.0	495.46	µg/L	495.46	ppb	19:48:09
2	Sc 361.383	1073816.0	1073816.0	99.778	%			19:48:35
2	Sc RADIAL	39369.1	39369.1	99.3	%			19:47:10
2	Y 371.029	584429.8	584429.8	98.865	%			19:48:35
2	Ag 328.068†	67253.7	68027.3	502.41	µg/L	502.41	ppb	19:48:41
2	Al 396.153Radial†	17168.9	17185.8	5096.7	µg/L	5096.7	ppb	19:47:10
2	As 188.979†	959.4	989.5	506.45	µg/L	506.45	ppb	19:49:01
2	B 249.677†	7697.8	7489.3	496.16	µg/L	496.16	ppb	19:48:41
2	Ba 233.527†	47056.1	47295.6	502.46	µg/L	502.46	ppb	19:48:41
2	Be 313.107†	726341.0	727694.6	500.12	µg/L	500.12	ppb	19:48:35
2	Ca 317.933Radial†	22323.9	22317.4	5001.4	µg/L	5001.4	ppb	19:47:30
2	Cd 226.502†	13675.9	13730.2	501.18	µg/L	501.18	ppb	19:48:41
2	Co 228.616†	15976.9	16157.5	502.62	µg/L	502.62	ppb	19:48:41
2	Cr 267.716†	18031.4	18000.3	502.49	µg/L	502.49	ppb	19:48:41
2	Cu 324.752†	135440.2	130716.9	513.09	µg/L	513.09	ppb	19:48:41
2	Fe 238.204 Radial†	5123.1	5116.0	5178.0	µg/L	5178.0	ppb	19:47:30
2	K 766.490 Radial†	12805.6	11771.2	5038.7	µg/L	5038.7	ppb	19:47:10
2	Mg 279.077 IEC†	1764.2	1773.1	5122.9	µg/L	5122.9	ppb	19:47:30
2	Mn 257.610†	274914.5	275126.3	501.62	µg/L	501.62	ppb	19:48:35
2	Mo 202.031†	3893.3	3902.1	512.07	µg/L	512.07	ppb	19:49:01
2	Na 589.592 Radial†	62816.7	62255.0	9962.5	µg/L	9962.5	ppb	19:47:10
2	Ni 231.604†	7849.0	7688.1	502.80	µg/L	502.80	ppb	19:48:41
2	P 214.914†	3194.0	3019.0	2397.8	µg/L	2397.8	ppb	19:49:01
2	Pb 220.353†	1903.7	1920.7	502.79	µg/L	502.79	ppb	19:49:01
2	S 181.975 Axial†	474.1	434.6	980.15	µg/L	980.15	ppb	19:49:01

2	Sb 206.836†	1085.6	1053.2	495.81 µg/L	495.81 ppb	19:49:01
2	Se 196.026†	565.0	598.6	500 µg/L	500 ppb	19:49:01
2	SiO2 †	89933.4	88541.5	6158.0 µg/L	6158.0 ppb	19:48:41
2	Si 251.611†	85418.5	84221.5	2770 µg/L	2770 ppb	19:49:44
2	Sn 189.927†	1924.3	1934.0	492.18 µg/L	492.18 ppb	19:49:01
2	Sr 421.552†	111411.8	112234.1	506.72 µg/L	506.72 ppb	19:47:10
2	Ti 334.940†	374196.2	374577.2	496.84 µg/L	496.84 ppb	19:48:35
2	Tl 190.801†	1255.8	1295.1	500.83 µg/L	500.83 ppb	19:49:01
2	U 409.014†	8199.3	7879.9	509.28 µg/L	509.28 ppb	19:48:41
2	V 292.402†	33486.5	33650.9	507.18 µg/L	507.18 ppb	19:48:41
2	Zn 213.857†	21523.5	20998.9	497.75 µg/L	497.75 ppb	19:48:41
3	Sc 361.383	1077017.2	1077017.2	100.08 %		19:49:07
3	Sc RADIAL	39607.7	39607.7	99.9 %		19:47:35
3	Y 371.029	586567.7	586567.7	99.227 %		19:49:07
3	Ag 328.068†	67101.8	67675.1	499.80 µg/L	499.80 ppb	19:49:12
3	Al 396.153Radial†	16990.7	16903.2	5012.7 µg/L	5012.7 ppb	19:47:35
3	As 188.979†	953.7	981.0	502.10 µg/L	502.10 ppb	19:49:32
3	B 249.677†	7650.2	7418.8	491.49 µg/L	491.49 ppb	19:49:12
3	Ba 233.527†	47042.1	47141.4	500.82 µg/L	500.82 ppb	19:49:12
3	Be 313.107†	729933.2	729120.4	501.10 µg/L	501.10 ppb	19:49:07
3	Ca 317.933Radial†	22220.6	22078.5	4947.9 µg/L	4947.9 ppb	19:47:56
3	Cd 226.502†	13696.1	13709.7	500.44 µg/L	500.44 ppb	19:49:12
3	Co 228.616†	15979.7	16112.7	501.22 µg/L	501.22 ppb	19:49:12
3	Cr 267.716†	17999.0	17914.2	500.09 µg/L	500.09 ppb	19:49:12
3	Cu 324.752†	135179.0	130052.4	510.48 µg/L	510.48 ppb	19:49:12
3	Fe 238.204 Radial†	5079.9	5041.6	5102.8 µg/L	5102.8 ppb	19:47:56
3	K 766.490 Radial†	12725.2	11613.0	4971.0 µg/L	4971.0 ppb	19:47:35
3	Mg 279.077 IEC†	1758.1	1756.3	5074.5 µg/L	5074.5 ppb	19:47:56
3	Mn 257.610†	276407.0	275798.7	502.84 µg/L	502.84 ppb	19:49:07
3	Mo 202.031†	3872.3	3869.5	507.79 µg/L	507.79 ppb	19:49:32
3	Na 589.592 Radial†	62256.7	61313.1	9811.8 µg/L	9811.8 ppb	19:47:35
3	Ni 231.604†	7881.8	7697.5	503.40 µg/L	503.40 ppb	19:49:12
3	P 214.914†	3187.9	3003.4	2385.4 µg/L	2385.4 ppb	19:49:32
3	Pb 220.353†	1897.0	1908.4	499.55 µg/L	499.55 ppb	19:49:32
3	S 181.975 Axial†	470.6	429.7	969.14 µg/L	969.14 ppb	19:49:32
3	Sb 206.836†	1071.1	1035.5	487.45 µg/L	487.45 ppb	19:49:32
3	Se 196.026†	556.8	588.8	491 µg/L	491 ppb	19:49:32
3	SiO2 †	88594.5	86935.7	6046.2 µg/L	6046.2 ppb	19:49:12
3	Si 251.611†	85420.0	83968.5	2770 µg/L	2770 ppb	19:49:49
3	Sn 189.927†	1913.4	1917.4	487.96 µg/L	487.96 ppb	19:49:32
3	Sr 421.552†	110280.2	110425.1	498.55 µg/L	498.55 ppb	19:47:35
3	Ti 334.940†	376218.1	375482.9	498.05 µg/L	498.05 ppb	19:49:07
3	Tl 190.801†	1243.4	1279.0	494.66 µg/L	494.66 ppb	19:49:32
3	U 409.014†	8171.2	7827.4	505.89 µg/L	505.89 ppb	19:49:12
3	V 292.402†	33426.2	33490.9	504.75 µg/L	504.75 ppb	19:49:12
3	Zn 213.857†	21473.7	20884.9	495.04 µg/L	495.04 ppb	19:49:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1076011.5	99.982	%	0.1769				0.18%
Sc RADIAL	39456.0	99.5	%	0.33				0.33%
Y 371.029	585743.3	99.087	%	0.1945				0.20%
Ag 328.068†	67852.9	501.12	µg/L	1.305	501.12	ppb	1.305	0.26%
QC value within limits for Ag 328.068 Recovery = 100.22%								
Al 396.153Radial†	17002.2	5042.1	µg/L	47.36	5042.1	ppb	47.36	0.94%
QC value within limits for Al 396.153Radial Recovery = 100.84%								
As 188.979†	984.9	504.09	µg/L	2.201	504.09	ppb	2.201	0.44%
QC value within limits for As 188.979 Recovery = 100.82%								
B 249.677†	7446.0	493.30	µg/L	2.507	493.30	ppb	2.507	0.51%
QC value within limits for B 249.677 Recovery = 98.66%								
Ba 233.527†	47186.5	501.30	µg/L	1.008	501.30	ppb	1.008	0.20%
QC value within limits for Ba 233.527 Recovery = 100.26%								
Be 313.107†	728120.8	500.41	µg/L	0.596	500.41	ppb	0.596	0.12%
QC value within limits for Be 313.107 Recovery = 100.08%								
Ca 317.933Radial†	22174.0	4969.3	µg/L	28.32	4969.3	ppb	28.32	0.57%
QC value within limits for Ca 317.933Radial Recovery = 99.39%								
Cd 226.502†	13722.3	500.90	µg/L	0.402	500.90	ppb	0.402	0.08%
QC value within limits for Cd 226.502 Recovery = 100.18%								
Co 228.616†	16130.7	501.79	µg/L	0.740	501.79	ppb	0.740	0.15%

QC value within limits for Co 228.616 Recovery = 100.36%

Cr 267.716†	17945.1	500.95 µg/L	1.336	500.95 ppb	1.336	0.27%

QC value within limits for Cr 267.716 Recovery = 100.19%

Cu 324.752†	130506.0	512.26 µg/L	1.543	512.26 ppb	1.543	0.30%

QC value within limits for Cu 324.752 Recovery = 102.45%

Fe 238.204 Radial†	5073.9	5135.5 µg/L	38.58	5135.5 ppb	38.58	0.75%

QC value within limits for Fe 238.204 Radial Recovery = 102.71%

K 766.490 Radial†	11674.6	4997.3 µg/L	36.26	4997.3 ppb	36.26	0.73%

QC value within limits for K 766.490 Radial Recovery = 99.95%

Mg 279.077 IEC†	1765.1	5099.9 µg/L	24.31	5099.9 ppb	24.31	0.48%

QC value within limits for Mg 279.077 IEC Recovery = 102.00%

Mn 257.610†	275381.4	502.08 µg/L	0.660	502.08 ppb	0.660	0.13%

QC value within limits for Mn 257.610 Recovery = 100.42%

Mo 202.031†	3887.0	510.08 µg/L	2.155	510.08 ppb	2.155	0.42%

QC value within limits for Mo 202.031 Recovery = 102.02%

Na 589.592 Radial†	61746.6	9881.2 µg/L	76.08	9881.2 ppb	76.08	0.77%

QC value within limits for Na 589.592 Radial Recovery = 98.81%

Ni 231.604†	7699.8	503.56 µg/L	0.845	503.56 ppb	0.845	0.17%

QC value within limits for Ni 231.604 Recovery = 100.71%

P 214.914†	3011.1	2391.4 µg/L	6.20	2391.4 ppb	6.20	0.26%

QC value within limits for P 214.914 Recovery = 95.66%

Pb 220.353†	1911.5	500.37 µg/L	2.127	500.37 ppb	2.127	0.43%

QC value within limits for Pb 220.353 Recovery = 100.07%

S 181.975 Axial†	433.4	977.49 µg/L	7.389	977.49 ppb	7.389	0.76%

QC value within limits for S 181.975 Axial Recovery = 97.75%

Sb 206.836†	1045.6	492.22 µg/L	4.306	492.22 ppb	4.306	0.87%

QC value within limits for Sb 206.836 Recovery = 98.44%

Se 196.026†	594.1	496 µg/L	4.1	496 ppb	4.1	0.84%

QC value within limits for Se 196.026 Recovery = 99.17%

SiO2 †	88438.4	6150.9 µg/L	101.33	6150.9 ppb	101.33	1.65%

QC value greater than the upper limit for SiO2 Recovery = 115.02%

Si 251.611†	84565.3	2790 µg/L	27.2	2790 ppb	27.2	0.98%

QC value greater than the upper limit for Si 251.611 Recovery = 111.45%

Sn 189.927†	1928.6	490.82 µg/L	2.472	490.82 ppb	2.472	0.50%

QC value within limits for Sn 189.927 Recovery = 98.16%

Sr 421.552†	111284.5	502.43 µg/L	4.099	502.43 ppb	4.099	0.82%

QC value within limits for Sr 421.552 Recovery = 100.49%

Ti 334.940†	374903.8	497.28 µg/L	0.668	497.28 ppb	0.668	0.13%

QC value within limits for Ti 334.940 Recovery = 99.46%

Tl 190.801†	1288.6	498.33 µg/L	3.250	498.33 ppb	3.250	0.65%

QC value within limits for Tl 190.801 Recovery = 99.67%

U 409.014†	7860.4	508.02 µg/L	1.851	508.02 ppb	1.851	0.36%

QC value within limits for U 409.014 Recovery = 101.60%

V 292.402†	33581.8	506.13 µg/L	1.249	506.13 ppb	1.249	0.25%

QC value within limits for V 292.402 Recovery = 101.23%

Zn 213.857†	20928.9	496.08 µg/L	1.462	496.08 ppb	1.462	0.29%

QC value within limits for Zn 213.857 Recovery = 99.22%

QC Failed. Continue with analysis.

Sequence No.: 35
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/23/2005 19:51:37
Data Type: Reprocessed on 6/24/2005 07:39:34
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc 361.383	1097085.5	1097085.5	101.94	%			19:54:20
1	Sc RADIAL	40376.8	40376.8	102	%			19:53:02
1	Y 371.029	602621.5	602621.5	101.94	%			19:54:20
1	Ag 328.068†	-624.8	11.2	0.0833	µg/L	0.0833	ppb	19:54:25
1	Al 396.153Radial†	122.6	15.0	4.4512	µg/L	4.4512	ppb	19:53:02
1	As 188.979†	-22.1	6.4	3.2185	µg/L	3.2185	ppb	19:54:46
1	B 249.677†	162.2	-66.6	-4.4064	µg/L	-4.4064	ppb	19:54:46
1	Ba 233.527†	-138.7	-1.2	-0.0129	µg/L	-0.0129	ppb	19:54:46
1	Be 313.107†	286.0	19.5	0.0134	µg/L	0.0134	ppb	19:54:25
1	Ca 317.933Radial†	168.0	-0.4	-0.0978	µg/L	-0.0978	ppb	19:53:22
1	Cd 226.502†	-25.0	-0.6	-0.0219	µg/L	-0.0219	ppb	19:54:46
1	Co 228.616†	-137.4	10.3	0.3200	µg/L	0.3200	ppb	19:54:46
1	Cr 267.716†	71.8	-0.7	-0.0201	µg/L	-0.0201	ppb	19:54:46
1	Cu 324.752†	5041.7	-78.7	-0.3092	µg/L	-0.3092	ppb	19:54:25
1	Fe 238.204 Radial†	54.4	9.8	9.9263	µg/L	9.9263	ppb	19:53:22
1	K 766.490 Radial†	1189.9	42.9	18.380	µg/L	18.380	ppb	19:53:02
1	Mg 279.077 IEC†	4.4	0.6	1.8684	µg/L	1.8684	ppb	19:53:22
1	Mn 257.610†	495.6	86.9	0.1594	µg/L	0.1594	ppb	19:54:46
1	Mo 202.031†	4.7	4.7	0.6204	µg/L	0.6204	ppb	19:54:46
1	Na 589.592 Radial†	693.1	-328.3	-52.550	µg/L	-52.550	ppb	19:53:02
1	Ni 231.604†	169.9	-11.6	-0.7586	µg/L	-0.7586	ppb	19:54:46
1	P 214.914†	174.2	-11.2	-9.1421	µg/L	-9.1421	ppb	19:54:46
1	Pb 220.353†	-11.8	1.2	0.3263	µg/L	0.3263	ppb	19:54:46
1	S 181.975 Axial†	39.7	-1.7	-3.7540	µg/L	-3.7540	ppb	19:54:46
1	Sb 206.836†	47.6	12.0	5.6327	µg/L	5.6327	ppb	19:54:46
1	Se 196.026†	-26.7	6.2	5.17	µg/L	5.17	ppb	19:54:46
1	SiO2 †	6541.8	4825.6	336.47	µg/L	336.47	ppb	19:54:25
1	Si 251.611†	5814.2	4316.6	143	µg/L	143	ppb	19:55:53
1	Sn 189.927†	-1.3	4.2	1.0591	µg/L	1.0591	ppb	19:54:46
1	Sr 421.552†	-18.9	10.5	0.0475	µg/L	0.0475	ppb	19:53:02
1	Ti 334.940†	787.8	322.0	0.4274	µg/L	0.4274	ppb	19:54:25
1	Tl 190.801†	-34.3	2.9	1.1051	µg/L	1.1051	ppb	19:54:46
1	U 409.014†	342.9	-1.2	-0.0797	µg/L	-0.0797	ppb	19:54:25
1	V 292.402†	-115.8	-23.6	-0.3449	µg/L	-0.3449	ppb	19:54:25
1	Zn 213.857†	447.3	-133.7	-3.1941	µg/L	-3.1941	ppb	19:54:46
2	Sc 361.383	1076893.3	1076893.3	100.06	%			19:54:51
2	Sc RADIAL	40393.8	40393.8	102	%			19:53:27
2	Y 371.029	591578.7	591578.7	100.07	%			19:54:51
2	Ag 328.068†	-589.6	34.9	0.2552	µg/L	0.2552	ppb	19:54:56
2	Al 396.153Radial†	158.4	50.1	14.916	µg/L	14.916	ppb	19:53:27
2	As 188.979†	-32.7	-4.6	-2.3297	µg/L	-2.3297	ppb	19:55:16
2	B 249.677†	156.2	-69.5	-4.6026	µg/L	-4.6026	ppb	19:55:16
2	Ba 233.527†	-135.8	-0.8	-0.0089	µg/L	-0.0089	ppb	19:55:16
2	Be 313.107†	270.0	8.9	0.0067	µg/L	0.0067	ppb	19:54:56
2	Ca 317.933Radial†	170.2	1.7	0.3969	µg/L	0.3969	ppb	19:53:47
2	Cd 226.502†	-25.0	-1.0	-0.0365	µg/L	-0.0365	ppb	19:55:16
2	Co 228.616†	-144.5	0.7	0.0222	µg/L	0.0222	ppb	19:55:16
2	Cr 267.716†	69.6	-1.7	-0.0492	µg/L	-0.0492	ppb	19:55:16
2	Cu 324.752†	5075.9	48.2	0.1865	µg/L	0.1865	ppb	19:54:56
2	Fe 238.204 Radial†	53.3	8.7	8.8400	µg/L	8.8400	ppb	19:53:47
2	K 766.490 Radial†	1144.1	-2.6	-1.0945	µg/L	-1.0945	ppb	19:53:27
2	Mg 279.077 IEC†	1.8	-1.9	-5.3564	µg/L	-5.3564	ppb	19:53:47
2	Mn 257.610†	474.2	74.6	0.1365	µg/L	0.1365	ppb	19:55:16
2	Mo 202.031†	4.2	4.4	0.5719	µg/L	0.5719	ppb	19:55:16
2	Na 589.592 Radial†	703.8	-318.2	-50.923	µg/L	-50.923	ppb	19:53:27
2	Ni 231.604†	173.8	-4.6	-0.3005	µg/L	-0.3005	ppb	19:55:16
2	P 214.914†	180.7	-1.5	-1.2638	µg/L	-1.2638	ppb	19:55:16
2	Pb 220.353†	-15.3	-2.5	-0.6449	µg/L	-0.6449	ppb	19:55:16
2	S 181.975 Axial†	40.1	-0.6	-1.2844	µg/L	-1.2844	ppb	19:55:16

2	Sb 206.836†	44.8	10.0	4.6898 µg/L	4.6898 ppb	19:55:16
2	Se 196.026†	-32.1	0.3	0.231 µg/L	0.231 ppb	19:55:16
2	SiO2 †	6205.8	4610.1	321.45 µg/L	321.45 ppb	19:54:56
2	Si 251.611†	5752.6	4362.0	144 µg/L	144 ppb	19:55:58
2	Sn 189.927†	-5.7	-0.3	-0.0652 µg/L	-0.0652 ppb	19:55:16
2	Sr 421.552†	-19.1	10.4	0.0468 µg/L	0.0468 ppb	19:53:27
2	Ti 334.940†	778.9	327.5	0.4330 µg/L	0.4330 ppb	19:54:56
2	Tl 190.801†	-30.2	6.3	2.4272 µg/L	2.4272 ppb	19:55:16
2	U 409.014†	391.7	53.9	3.4622 µg/L	3.4622 ppb	19:54:56
2	V 292.402†	-145.9	-55.8	-0.8212 µg/L	-0.8212 ppb	19:54:56
2	Zn 213.857†	444.6	-128.2	-3.0651 µg/L	-3.0651 ppb	19:55:16
3	Sc 361.383	1085438.3	1085438.3	100.86 %		19:55:22
3	Sc RADIAL	40361.9	40361.9	102 %		19:53:52
3	Y 371.029	595876.3	595876.3	100.80 %		19:55:22
3	Ag 328.068†	-654.6	-24.9	-0.1819 µg/L	-0.1819 ppb	19:55:27
3	Al 396.153Radial†	123.6	16.1	4.7548 µg/L	4.7548 ppb	19:53:52
3	As 188.979†	-27.4	0.8	0.4101 µg/L	0.4101 ppb	19:55:47
3	B 249.677†	161.5	-65.5	-4.3356 µg/L	-4.3356 ppb	19:55:47
3	Ba 233.527†	-133.2	2.9	0.0301 µg/L	0.0301 ppb	19:55:47
3	Be 313.107†	248.7	-14.4	-0.0101 µg/L	-0.0101 ppb	19:55:27
3	Ca 317.933Radial†	178.3	9.8	2.1806 µg/L	2.1806 ppb	19:54:12
3	Cd 226.502†	-24.4	-0.2	-0.0091 µg/L	-0.0091 ppb	19:55:47
3	Co 228.616†	-143.9	2.4	0.0752 µg/L	0.0752 ppb	19:55:47
3	Cr 267.716†	70.7	-1.1	-0.0303 µg/L	-0.0303 ppb	19:55:47
3	Cu 324.752†	5003.0	-64.0	-0.2510 µg/L	-0.2510 ppb	19:55:27
3	Fe 238.204 Radial†	54.1	9.5	9.6483 µg/L	9.6483 ppb	19:54:12
3	K 766.490 Radial†	1129.0	-16.5	-7.0739 µg/L	-7.0739 ppb	19:53:52
3	Mg 279.077 IEC†	1.6	-2.1	-6.0305 µg/L	-6.0305 ppb	19:54:12
3	Mn 257.610†	678.1	273.0	0.4985 µg/L	0.4985 ppb	19:55:47
3	Mo 202.031†	7.2	7.3	0.9563 µg/L	0.9563 ppb	19:55:47
3	Na 589.592 Radial†	684.8	-336.3	-53.827 µg/L	-53.827 ppb	19:53:52
3	Ni 231.604†	175.0	-4.8	-0.3105 µg/L	-0.3105 ppb	19:55:47
3	P 214.914†	177.4	-6.2	-5.0706 µg/L	-5.0706 ppb	19:55:47
3	Pb 220.353†	-16.7	-3.8	-0.9892 µg/L	-0.9892 ppb	19:55:47
3	S 181.975 Axial†	33.7	-7.2	-16.320 µg/L	-16.320 ppb	19:55:47
3	Sb 206.836†	40.7	5.6	2.6493 µg/L	2.6493 ppb	19:55:47
3	Se 196.026†	-37.2	-4.5	-3.74 µg/L	-3.74 ppb	19:55:47
3	SiO2 †	5995.3	4352.5	303.47 µg/L	303.47 ppb	19:55:27
3	Si 251.611†	5761.4	4325.5	143 µg/L	143 ppb	19:56:03
3	Sn 189.927†	-2.9	2.5	0.6438 µg/L	0.6438 ppb	19:55:47
3	Sr 421.552†	16.3	45.1	0.2036 µg/L	0.2036 ppb	19:53:52
3	Ti 334.940†	785.0	327.5	0.4353 µg/L	0.4353 ppb	19:55:27
3	Tl 190.801†	-33.9	2.9	1.1069 µg/L	1.1069 ppb	19:55:47
3	U 409.014†	321.4	-18.9	-1.2215 µg/L	-1.2215 ppb	19:55:27
3	V 292.402†	-110.8	-19.9	-0.2883 µg/L	-0.2883 ppb	19:55:27
3	Zn 213.857†	444.7	-131.5	-3.1452 µg/L	-3.1452 ppb	19:55:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1086472.4	100.95	%	0.942				0.93%
Sc RADIAL	40377.5	102	%	0.0				0.04%
Y 371.029	596692.2	100.94	%	0.942				0.93%
Ag 328.068†	7.1	0.0522	µg/L	0.22018	0.0522	ppb	0.22018	421.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	27.1	8.0407	µg/L	5.95619	8.0407	ppb	5.95619	74.08%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.9	0.4330	µg/L	2.77418	0.4330	ppb	2.77418	640.76%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-67.2	-4.4482	µg/L	0.13830	-4.4482	ppb	0.13830	3.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.3	0.0027	µg/L	0.02376	0.0027	ppb	0.02376	868.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	4.7	0.0034	µg/L	0.01212	0.0034	ppb	0.01212	361.40%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	3.7	0.8266	µg/L	1.19846	0.8266	ppb	1.19846	144.99%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.6	-0.0225	µg/L	0.01372	-0.0225	ppb	0.01372	61.00%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.5	0.1391	µg/L	0.15884	0.1391	ppb	0.15884	114.17%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	-1.2	-0.0332 µg/L	0.01479	-0.0332 ppb	0.01479	44.55%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-31.5	-0.1246 µg/L	0.27093	-0.1246 ppb	0.27093	217.52%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	9.4	9.4715 µg/L	0.56428	9.4715 ppb	0.56428	5.96%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	8.0	3.4039 µg/L	13.30987	3.4039 ppb	13.30987	391.02%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	-1.1	-3.1728 µg/L	4.37880	-3.1728 ppb	4.37880	138.01%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	144.9	0.2648 µg/L	0.20273	0.2648 ppb	0.20273	76.56%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	5.5	0.7162 µg/L	0.20933	0.7162 ppb	0.20933	29.23%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-327.6	-52.434 µg/L	1.4558	-52.434 ppb	1.4558	2.78%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-7.0	-0.4565 µg/L	0.26164	-0.4565 ppb	0.26164	57.31%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-6.3	-5.1588 µg/L	3.93990	-5.1588 ppb	3.93990	76.37%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	-1.7	-0.4359 µg/L	0.68218	-0.4359 ppb	0.68218	156.50%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-3.1	-7.1196 µg/L	8.06324	-7.1196 ppb	8.06324	113.25%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	9.2	4.3239 µg/L	1.52496	4.3239 ppb	1.52496	35.27%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	0.7	0.552 µg/L	4.4667	0.552 ppb	4.4667	808.57%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	4596.0	320.46 µg/L	16.521	320.46 ppb	16.521	5.16%

QC value greater than the upper limit for SiO2 Recovery = Not calculated

Si 251.611†	4334.7	143 µg/L	0.8	143 ppb	0.8	0.56%

QC value greater than the upper limit for Si 251.611 Recovery = Not calculated

Sn 189.927†	2.1	0.5459 µg/L	0.56851	0.5459 ppb	0.56851	104.14%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	22.0	0.0993 µg/L	0.09033	0.0993 ppb	0.09033	90.98%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	325.7	0.4319 µg/L	0.00408	0.4319 ppb	0.00408	0.94%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	4.0	1.5464 µg/L	0.76276	1.5464 ppb	0.76276	49.33%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	11.3	0.7203 µg/L	2.44219	0.7203 ppb	2.44219	339.03%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-33.1	-0.4848 µg/L	0.29271	-0.4848 ppb	0.29271	60.37%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-131.1	-3.1348 µg/L	0.06514	-3.1348 ppb	0.06514	2.08%

QC value within limits for Zn 213.857 Recovery = Not calculated

QC Failed. Continue with analysis.

Sequence No.: 45
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/23/2005 20:49:33
Data Type: Reprocessed on 6/24/2005 07:39:55
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1064126.3	1064126.3	98.878	%			20:52:16
1	Sc RADIAL	39707.3	39707.3	100	%			20:50:57
1	Y 371.029	579443.5	579443.5	98.021	%			20:52:16
1	Ag 328.068†	67017.9	68402.5	505.17	µg/L	505.17	ppb	20:52:22
1	Al 396.153Radial†	16942.0	16811.9	4985.2	µg/L	4985.2	ppb	20:50:57
1	As 188.979†	948.1	986.9	505.12	µg/L	505.12	ppb	20:52:42
1	B 249.677†	7632.0	7492.9	496.41	µg/L	496.41	ppb	20:52:22
1	Ba 233.527†	46808.4	47474.6	504.36	µg/L	504.36	ppb	20:52:22
1	Be 313.107†	718054.1	725942.3	498.91	µg/L	498.91	ppb	20:52:16
1	Ca 317.933Radial†	22248.7	22050.8	4941.7	µg/L	4941.7	ppb	20:51:17
1	Cd 226.502†	13648.0	13826.9	504.73	µg/L	504.73	ppb	20:52:22
1	Co 228.616†	15891.2	16216.6	504.47	µg/L	504.47	ppb	20:52:22
1	Cr 267.716†	17925.1	18057.4	504.09	µg/L	504.09	ppb	20:52:22
1	Cu 324.752†	135090.7	131599.4	516.55	µg/L	516.55	ppb	20:52:22
1	Fe 238.204 Radial†	5088.7	5037.7	5098.9	µg/L	5098.9	ppb	20:51:17
1	K 766.490 Radial†	12714.6	11570.4	4952.8	µg/L	4952.8	ppb	20:50:57
1	Mg 279.077 IEC†	1759.1	1752.9	5064.8	µg/L	5064.8	ppb	20:51:17
1	Mn 257.610†	271777.0	274462.1	500.40	µg/L	500.40	ppb	20:52:16
1	Mo 202.031†	3876.3	3920.5	514.46	µg/L	514.46	ppb	20:52:42
1	Na 589.592 Radial†	62149.9	61050.2	9769.7	µg/L	9769.7	ppb	20:50:57
1	Ni 231.604†	8031.2	7944.1	519.53	µg/L	519.53	ppb	20:52:42
1	P 214.914†	3184.9	3038.9	2413.6	µg/L	2413.6	ppb	20:52:42
1	Pb 220.353†	1890.2	1924.4	503.74	µg/L	503.74	ppb	20:52:42
1	S 181.975 Axial†	464.5	429.1	967.97	µg/L	967.97	ppb	20:52:42
1	Sb 206.836†	1080.0	1057.5	497.82	µg/L	497.82	ppb	20:52:42
1	Se 196.026†	560.4	599.2	500	µg/L	500	ppb	20:52:42
1	SiO2 †	84754.1	84124.2	5849.9	µg/L	5849.9	ppb	20:52:22
1	Si 251.611†	81101.5	80635.0	2660	µg/L	2660	ppb	20:53:50
1	Sn 189.927†	1908.9	1936.0	492.68	µg/L	492.68	ppb	20:52:42
1	Sr 421.552†	110695.4	110562.9	499.17	µg/L	499.17	ppb	20:50:57
1	Ti 334.940†	369344.6	373085.4	494.86	µg/L	494.86	ppb	20:52:16
1	Tl 190.801†	1247.0	1297.7	501.79	µg/L	501.79	ppb	20:52:42
1	U 409.014†	8093.0	7847.3	507.20	µg/L	507.20	ppb	20:52:22
1	V 292.402†	33365.1	33833.7	509.93	µg/L	509.93	ppb	20:52:22
1	Zn 213.857†	21317.4	20986.8	497.37	µg/L	497.37	ppb	20:52:22
2	Sc 361.383	1085701.8	1085701.8	100.88	%			20:52:48
2	Sc RADIAL	39798.9	39798.9	100	%			20:51:22
2	Y 371.029	591131.7	591131.7	99.999	%			20:52:48
2	Ag 328.068†	66800.9	66840.5	493.65	µg/L	493.65	ppb	20:52:53
2	Al 396.153Radial†	16951.3	16782.2	4976.8	µg/L	4976.8	ppb	20:51:22
2	As 188.979†	959.5	979.2	501.09	µg/L	501.09	ppb	20:53:13
2	B 249.677†	7654.9	7362.3	487.74	µg/L	487.74	ppb	20:52:53
2	Ba 233.527†	46630.1	46357.0	492.49	µg/L	492.49	ppb	20:52:53
2	Be 313.107†	731561.5	724900.1	498.19	µg/L	498.19	ppb	20:52:48
2	Ca 317.933Radial†	22202.0	21953.2	4919.7	µg/L	4919.7	ppb	20:51:42
2	Cd 226.502†	13615.0	13519.8	493.51	µg/L	493.51	ppb	20:52:53
2	Co 228.616†	15812.4	15819.2	492.08	µg/L	492.08	ppb	20:52:53
2	Cr 267.716†	17847.6	17620.3	491.88	µg/L	491.88	ppb	20:52:53
2	Cu 324.752†	134637.4	128435.0	504.13	µg/L	504.13	ppb	20:52:53
2	Fe 238.204 Radial†	5083.4	5020.7	5081.5	µg/L	5081.5	ppb	20:51:42
2	K 766.490 Radial†	12690.6	11517.4	4930.0	µg/L	4930.0	ppb	20:51:22
2	Mg 279.077 IEC†	1765.4	1755.1	5070.9	µg/L	5070.9	ppb	20:51:42
2	Mn 257.610†	276475.4	273657.3	498.94	µg/L	498.94	ppb	20:52:48
2	Mo 202.031†	3874.7	3841.0	504.04	µg/L	504.04	ppb	20:53:13
2	Na 589.592 Radial†	62105.8	60863.4	9739.8	µg/L	9739.8	ppb	20:51:22
2	Ni 231.604†	8040.6	7791.9	509.58	µg/L	509.58	ppb	20:53:13
2	P 214.914†	3192.5	2982.5	2369.3	µg/L	2369.3	ppb	20:53:13
2	Pb 220.353†	1888.4	1884.7	493.35	µg/L	493.35	ppb	20:53:13
2	S 181.975 Axial†	472.6	427.8	964.95	µg/L	964.95	ppb	20:53:13

2	Sb 206.836†	1090.3	1045.9	492.42 µg/L	492.42 ppb	20:53:13
2	Se 196.026†	560.6	588.1	491 µg/L	491 ppb	20:53:13
2	SiO2 †	83949.6	81623.4	5675.9 µg/L	5675.9 ppb	20:52:53
2	Si 251.611†	81225.4	79127.8	2610 µg/L	2610 ppb	20:53:56
2	Sn 189.927†	1920.5	1909.1	485.86 µg/L	485.86 ppb	20:53:13
2	Sr 421.552†	110493.1	110106.9	497.11 µg/L	497.11 ppb	20:51:22
2	Ti 334.940†	376278.1	372535.2	494.14 µg/L	494.14 ppb	20:52:48
2	Tl 190.801†	1253.6	1279.2	494.71 µg/L	494.71 ppb	20:53:13
2	U 409.014†	8094.9	7686.5	496.79 µg/L	496.79 ppb	20:52:53
2	V 292.402†	33235.0	33034.2	497.89 µg/L	497.89 ppb	20:52:53
2	Zn 213.857†	21373.6	20614.1	488.53 µg/L	488.53 ppb	20:52:53
3	Sc 361.383	1066750.5	1066750.5	99.122 %		20:53:19
3	Sc RADIAL	39589.4	39589.4	99.8 %		20:51:48
3	Y 371.029	580914.5	580914.5	98.270 %		20:53:19
3	Ag 328.068†	66951.8	68169.2	503.44 µg/L	503.44 ppb	20:53:24
3	Al 396.153Radial†	16810.1	16730.2	4960.9 µg/L	4960.9 ppb	20:51:48
3	As 188.979†	946.5	982.9	503.12 µg/L	503.12 ppb	20:53:45
3	B 249.677†	7662.7	7505.0	497.21 µg/L	497.21 ppb	20:53:24
3	Ba 233.527†	46697.3	47245.9	501.93 µg/L	501.93 ppb	20:53:24
3	Be 313.107†	718693.4	724800.8	498.13 µg/L	498.13 ppb	20:53:19
3	Ca 317.933Radial†	22134.0	22002.1	4930.8 µg/L	4930.8 ppb	20:52:08
3	Cd 226.502†	13628.2	13772.9	502.76 µg/L	502.76 ppb	20:53:24
3	Co 228.616†	15860.7	16146.3	502.28 µg/L	502.28 ppb	20:53:24
3	Cr 267.716†	17889.6	17977.0	501.84 µg/L	501.84 ppb	20:53:24
3	Cu 324.752†	135068.3	131240.7	515.14 µg/L	515.14 ppb	20:53:24
3	Fe 238.204 Radial†	5060.4	5024.4	5085.4 µg/L	5085.4 ppb	20:52:08
3	K 766.490 Radial†	12640.9	11534.5	4937.4 µg/L	4937.4 ppb	20:51:48
3	Mg 279.077 IEC†	1752.8	1751.8	5061.5 µg/L	5061.5 ppb	20:52:08
3	Mn 257.610†	272020.1	274031.2	499.62 µg/L	499.62 ppb	20:53:19
3	Mo 202.031†	3870.8	3905.2	512.46 µg/L	512.46 ppb	20:53:45
3	Na 589.592 Radial†	61834.1	60918.8	9748.7 µg/L	9748.7 ppb	20:51:48
3	Ni 231.604†	8068.3	7961.5	520.66 µg/L	520.66 ppb	20:53:45
3	P 214.914†	3186.8	3032.9	2408.9 µg/L	2408.9 ppb	20:53:45
3	Pb 220.353†	1890.0	1919.5	502.44 µg/L	502.44 ppb	20:53:45
3	S 181.975 Axial†	472.6	436.2	983.97 µg/L	983.97 ppb	20:53:45
3	Sb 206.836†	1090.1	1064.9	501.35 µg/L	501.35 ppb	20:53:45
3	Se 196.026†	571.9	609.3	509 µg/L	509 ppb	20:53:45
3	SiO2 †	83941.0	83093.1	5778.1 µg/L	5778.1 ppb	20:53:24
3	Si 251.611†	81346.6	80680.5	2660 µg/L	2660 ppb	20:54:01
3	Sn 189.927†	1927.1	1949.6	496.15 µg/L	496.15 ppb	20:53:45
3	Sr 421.552†	110104.3	110300.2	497.99 µg/L	497.99 ppb	20:51:48
3	Ti 334.940†	369608.7	372433.0	493.99 µg/L	493.99 ppb	20:53:19
3	Tl 190.801†	1258.6	1306.3	505.10 µg/L	505.10 ppb	20:53:45
3	U 409.014†	8202.7	7937.8	513.02 µg/L	513.02 ppb	20:53:24
3	V 292.402†	33327.7	33713.0	508.11 µg/L	508.11 ppb	20:53:24
3	Zn 213.857†	21358.6	20975.3	497.09 µg/L	497.09 ppb	20:53:24

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1072192.8	99.627	%	1.0939				1.10%
Sc RADIAL	39698.5	100	%	0.3				0.26%
Y 371.029	583829.9	98.763	%	1.0769				1.09%
Ag 328.068†	67804.1	500.75	µg/L	6.213	500.75	ppb	6.213	1.24%
QC value within limits for Ag 328.068 Recovery = 100.15%								
Al 396.153Radial†	16774.8	4974.3	µg/L	12.32	4974.3	ppb	12.32	0.25%
QC value within limits for Al 396.153Radial Recovery = 99.49%								
As 188.979†	983.0	503.11	µg/L	2.018	503.11	ppb	2.018	0.40%
QC value within limits for As 188.979 Recovery = 100.62%								
B 249.677†	7453.4	493.79	µg/L	5.249	493.79	ppb	5.249	1.06%
QC value within limits for B 249.677 Recovery = 98.76%								
Ba 233.527†	47025.8	499.59	µg/L	6.273	499.59	ppb	6.273	1.26%
QC value within limits for Ba 233.527 Recovery = 99.92%								
Be 313.107†	725214.4	498.41	µg/L	0.435	498.41	ppb	0.435	0.09%
QC value within limits for Be 313.107 Recovery = 99.68%								
Ca 317.933Radial†	22002.0	4930.7	µg/L	10.96	4930.7	ppb	10.96	0.22%
QC value within limits for Ca 317.933Radial Recovery = 98.61%								
Cd 226.502†	13706.5	500.33	µg/L	5.988	500.33	ppb	5.988	1.20%
QC value within limits for Cd 226.502 Recovery = 100.07%								
Co 228.616†	16060.7	499.61	µg/L	6.611	499.61	ppb	6.611	1.32%

QC value within limits for Co 228.616 Recovery = 99.92%

Cr 267.716†	17884.9	499.27 µg/L	6.495	499.27 ppb	6.495	1.30%

QC value within limits for Cr 267.716 Recovery = 99.85%

Cu 324.752†	130425.1	511.94 µg/L	6.799	511.94 ppb	6.799	1.33%

QC value within limits for Cu 324.752 Recovery = 102.39%

Fe 238.204 Radial†	5027.6	5088.6 µg/L	9.08	5088.6 ppb	9.08	0.18%

QC value within limits for Fe 238.204 Radial Recovery = 101.77%

K 766.490 Radial†	11540.8	4940.1 µg/L	11.59	4940.1 ppb	11.59	0.23%

QC value within limits for K 766.490 Radial Recovery = 98.80%

Mg 279.077 IEC†	1753.3	5065.7 µg/L	4.80	5065.7 ppb	4.80	0.09%

QC value within limits for Mg 279.077 IEC Recovery = 101.31%

Mn 257.610†	274050.2	499.65 µg/L	0.735	499.65 ppb	0.735	0.15%

QC value within limits for Mn 257.610 Recovery = 99.93%

Mo 202.031†	3888.9	510.32 µg/L	5.531	510.32 ppb	5.531	1.08%

QC value within limits for Mo 202.031 Recovery = 102.06%

Na 589.592 Radial†	60944.1	9752.7 µg/L	15.34	9752.7 ppb	15.34	0.16%

QC value within limits for Na 589.592 Radial Recovery = 97.53%

Ni 231.604†	7899.1	516.59 µg/L	6.099	516.59 ppb	6.099	1.18%

QC value within limits for Ni 231.604 Recovery = 103.32%

P 214.914†	3018.1	2397.3 µg/L	24.38	2397.3 ppb	24.38	1.02%

QC value within limits for P 214.914 Recovery = 95.89%

Pb 220.353†	1909.5	499.85 µg/L	5.659	499.85 ppb	5.659	1.13%

QC value within limits for Pb 220.353 Recovery = 99.97%

S 181.975 Axial†	431.0	972.30 µg/L	10.221	972.30 ppb	10.221	1.05%

QC value within limits for S 181.975 Axial Recovery = 97.23%

Sb 206.836†	1056.1	497.19 µg/L	4.499	497.19 ppb	4.499	0.90%

QC value within limits for Sb 206.836 Recovery = 99.44%

Se 196.026†	598.9	500 µg/L	8.9	500 ppb	8.9	1.77%

QC value within limits for Se 196.026 Recovery = 99.96%

SiO2 †	82946.9	5768.0 µg/L	87.46	5768.0 ppb	87.46	1.52%

QC value within limits for SiO2 Recovery = 107.86%

Si 251.611†	80147.8	2640 µg/L	29.1	2640 ppb	29.1	1.10%

QC value within limits for Si 251.611 Recovery = 105.61%

Sn 189.927†	1931.6	491.56 µg/L	5.235	491.56 ppb	5.235	1.06%

QC value within limits for Sn 189.927 Recovery = 98.31%

Sr 421.552†	110323.3	498.09 µg/L	1.033	498.09 ppb	1.033	0.21%

QC value within limits for Sr 421.552 Recovery = 99.62%

Ti 334.940†	372684.6	494.33 µg/L	0.465	494.33 ppb	0.465	0.09%

QC value within limits for Ti 334.940 Recovery = 98.87%

Tl 190.801†	1294.4	500.53 µg/L	5.306	500.53 ppb	5.306	1.06%

QC value within limits for Tl 190.801 Recovery = 100.11%

U 409.014†	7823.9	505.67 µg/L	8.224	505.67 ppb	8.224	1.63%

QC value within limits for U 409.014 Recovery = 101.13%

V 292.402†	33527.0	505.31 µg/L	6.489	505.31 ppb	6.489	1.28%

QC value within limits for V 292.402 Recovery = 101.06%

Zn 213.857†	20858.7	494.33 µg/L	5.025	494.33 ppb	5.025	1.02%

QC value within limits for Zn 213.857 Recovery = 98.87%

All analyte(s) passed QC.

Sequence No.: 46
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/23/2005 20:55:49
Data Type: Reprocessed on 6/24/2005 07:39:57
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1077334.4	1077334.4	100.11	%			20:58:32
1	Sc RADIAL	40610.7	40610.7	102	%			20:57:14
1	Y 371.029	591541.4	591541.4	100.07	%			20:58:32
1	Ag 328.068†	-623.9	0.8	0.0062	µg/L	0.0062	ppb	20:58:37
1	Al 396.153Radial†	113.4	5.4	1.6135	µg/L	1.6135	ppb	20:57:14
1	As 188.979†	-27.1	1.0	0.5067	µg/L	0.5067	ppb	20:58:58
1	B 249.677†	170.5	-55.3	-3.6613	µg/L	-3.6613	ppb	20:58:58
1	Ba 233.527†	-145.9	-10.8	-0.1153	µg/L	-0.1153	ppb	20:58:58
1	Be 313.107†	322.8	61.5	0.0422	µg/L	0.0422	ppb	20:58:37
1	Ca 317.933Radial†	163.6	-5.7	-1.2755	µg/L	-1.2755	ppb	20:57:34
1	Cd 226.502†	-28.5	-4.6	-0.1671	µg/L	-0.1671	ppb	20:58:58
1	Co 228.616†	-129.1	16.2	0.5018	µg/L	0.5018	ppb	20:58:58
1	Cr 267.716†	77.6	6.3	0.1774	µg/L	0.1774	ppb	20:58:58
1	Cu 324.752†	5002.1	-27.6	-0.1078	µg/L	-0.1078	ppb	20:58:37
1	Fe 238.204 Radial†	49.1	4.4	4.4100	µg/L	4.4100	ppb	20:57:34
1	K 766.490 Radial†	1162.1	9.0	3.8543	µg/L	3.8543	ppb	20:57:14
1	Mg 279.077 IEC†	0.4	-3.3	-9.4543	µg/L	-9.4543	ppb	20:57:34
1	Mn 257.610†	493.8	94.0	0.1719	µg/L	0.1719	ppb	20:58:58
1	Mo 202.031†	-0.6	-0.4	-0.0563	µg/L	-0.0563	ppb	20:58:58
1	Na 589.592 Radial†	671.8	-353.1	-56.518	µg/L	-56.518	ppb	20:57:14
1	Ni 231.604†	179.3	0.8	0.0508	µg/L	0.0508	ppb	20:58:58
1	P 214.914†	181.2	-1.1	-0.8759	µg/L	-0.8759	ppb	20:58:58
1	Pb 220.353†	-2.8	10.0	2.6142	µg/L	2.6142	ppb	20:58:58
1	S 181.975 Axial†	32.7	-7.9	-17.991	µg/L	-17.991	ppb	20:58:58
1	Sb 206.836†	41.3	6.5	3.0586	µg/L	3.0586	ppb	20:58:58
1	Se 196.026†	-29.8	2.6	2.18	µg/L	2.18	ppb	20:58:58
1	SiO2 †	5198.2	3601.0	251.10	µg/L	251.10	ppb	20:58:37
1	Si 251.611†	4213.9	2822.5	93.3	µg/L	93.3	ppb	21:00:05
1	Sn 189.927†	-3.6	1.8	0.4696	µg/L	0.4696	ppb	20:58:58
1	Sr 421.552†	-4.7	24.5	0.1107	µg/L	0.1107	ppb	20:57:14
1	Ti 334.940†	872.8	421.0	0.5589	µg/L	0.5589	ppb	20:58:37
1	Tl 190.801†	-27.3	9.2	3.5501	µg/L	3.5501	ppb	20:58:58
1	U 409.014†	331.0	-6.9	-0.4442	µg/L	-0.4442	ppb	20:58:37
1	V 292.402†	-102.7	-12.6	-0.1880	µg/L	-0.1880	ppb	20:58:37
1	Zn 213.857†	448.2	-124.8	-2.9850	µg/L	-2.9850	ppb	20:58:58
2	Sc 361.383	1083057.0	1083057.0	100.64	%			20:59:03
2	Sc RADIAL	40604.9	40604.9	102	%			20:57:39
2	Y 371.029	594938.4	594938.4	100.64	%			20:59:03
2	Ag 328.068†	-631.8	-3.7	-0.0249	µg/L	-0.0249	ppb	20:59:08
2	Al 396.153Radial†	115.5	7.4	2.1727	µg/L	2.1727	ppb	20:57:39
2	As 188.979†	-25.1	3.0	1.5347	µg/L	1.5347	ppb	20:59:28
2	B 249.677†	186.2	-40.6	-2.6875	µg/L	-2.6875	ppb	20:59:28
2	Ba 233.527†	-128.5	7.2	0.0768	µg/L	0.0768	ppb	20:59:28
2	Be 313.107†	229.8	-32.7	-0.0220	µg/L	-0.0220	ppb	20:59:08
2	Ca 317.933Radial†	165.6	-3.7	-0.8222	µg/L	-0.8222	ppb	20:57:59
2	Cd 226.502†	-26.2	-2.1	-0.0761	µg/L	-0.0761	ppb	20:59:28
2	Co 228.616†	-137.5	8.5	0.2637	µg/L	0.2637	ppb	20:59:28
2	Cr 267.716†	72.8	1.1	0.0294	µg/L	0.0294	ppb	20:59:28
2	Cu 324.752†	5058.7	2.3	0.0074	µg/L	0.0074	ppb	20:59:08
2	Fe 238.204 Radial†	60.2	15.2	15.327	µg/L	15.327	ppb	20:57:59
2	K 766.490 Radial†	1150.7	-1.9	-0.8198	µg/L	-0.8198	ppb	20:57:39
2	Mg 279.077 IEC†	-0.0	-3.7	-10.532	µg/L	-10.532	ppb	20:57:59
2	Mn 257.610†	546.2	143.4	0.2629	µg/L	0.2629	ppb	20:59:28
2	Mo 202.031†	6.4	6.5	0.8549	µg/L	0.8549	ppb	20:59:28
2	Na 589.592 Radial†	620.5	-403.1	-64.517	µg/L	-64.517	ppb	20:57:39
2	Ni 231.604†	172.4	-7.0	-0.4527	µg/L	-0.4527	ppb	20:59:28
2	P 214.914†	179.5	-3.7	-3.1179	µg/L	-3.1179	ppb	20:59:28
2	Pb 220.353†	-12.5	0.3	0.0847	µg/L	0.0847	ppb	20:59:28
2	S 181.975 Axial†	37.7	-3.2	-7.2468	µg/L	-7.2468	ppb	20:59:28

2	Sb 206.836†	45.4	10.3	4.8514 µg/L	4.8514 ppb	20:59:28
2	Se 196.026†	-40.3	-7.7	-6.39 µg/L	-6.39 ppb	20:59:28
2	SiO2 †	4110.7	2492.9	173.81 µg/L	173.81 ppb	20:59:08
2	Si 251.611†	3906.8	2495.1	82.4 µg/L	82.4 ppb	21:00:10
2	Sn 189.927†	-6.1	-0.7	-0.1790 µg/L	-0.1790 ppb	20:59:28
2	Sr 421.552†	-30.0	-0.2	-0.0009 µg/L	-0.0009 ppb	20:57:39
2	Ti 334.940†	843.4	387.2	0.5128 µg/L	0.5128 ppb	20:59:08
2	Tl 190.801†	-38.6	-1.9	-0.7142 µg/L	-0.7142 ppb	20:59:28
2	U 409.014†	372.2	32.3	2.0756 µg/L	2.0756 ppb	20:59:08
2	V 292.402†	-96.1	-5.5	-0.0716 µg/L	-0.0716 ppb	20:59:08
2	Zn 213.857†	431.8	-143.4	-3.4286 µg/L	-3.4286 ppb	20:59:28
3	Sc 361.383	1081883.6	1081883.6	100.53 %		20:59:34
3	Sc RADIAL	40157.1	40157.1	101 %		20:58:04
3	Y 371.029	594407.8	594407.8	100.55 %		20:59:34
3	Ag 328.068†	-648.4	-20.9	-0.1529 µg/L	-0.1529 ppb	20:59:39
3	Al 396.153Radial†	217.0	108.9	32.475 µg/L	32.475 ppb	20:58:04
3	As 188.979†	-25.9	2.2	1.1242 µg/L	1.1242 ppb	20:59:59
3	B 249.677†	163.5	-63.0	-4.1726 µg/L	-4.1726 ppb	20:59:59
3	Ba 233.527†	-127.2	8.3	0.0885 µg/L	0.0885 ppb	20:59:59
3	Be 313.107†	241.7	-20.6	-0.0134 µg/L	-0.0134 ppb	20:59:39
3	Ca 317.933Radial†	163.7	-3.8	-0.8229 µg/L	-0.8229 ppb	20:58:24
3	Cd 226.502†	-30.6	-6.5	-0.2359 µg/L	-0.2359 ppb	20:59:59
3	Co 228.616†	-129.0	16.8	0.5194 µg/L	0.5194 ppb	20:59:59
3	Cr 267.716†	68.0	-3.5	-0.1012 µg/L	-0.1012 ppb	20:59:59
3	Cu 324.752†	5032.2	-18.7	-0.0756 µg/L	-0.0756 ppb	20:59:39
3	Fe 238.204 Radial†	56.9	12.6	12.766 µg/L	12.766 ppb	20:58:24
3	K 766.490 Radial†	1141.8	1.8	0.7818 µg/L	0.7818 ppb	20:58:04
3	Mg 279.077 IEC†	2.1	-1.6	-4.6448 µg/L	-4.6448 ppb	20:58:24
3	Mn 257.610†	450.2	48.6	0.0895 µg/L	0.0895 ppb	20:59:59
3	Mo 202.031†	-3.4	-3.2	-0.4189 µg/L	-0.4189 ppb	20:59:59
3	Na 589.592 Radial†	635.5	-381.5	-61.053 µg/L	-61.053 ppb	20:58:04
3	Ni 231.604†	167.4	-11.8	-0.7730 µg/L	-0.7730 ppb	20:59:59
3	P 214.914†	181.4	-1.6	-1.2979 µg/L	-1.2979 ppb	20:59:59
3	Pb 220.353†	-13.0	-0.1	-0.0381 µg/L	-0.0381 ppb	20:59:59
3	S 181.975 Axial†	32.6	-8.2	-18.610 µg/L	-18.610 ppb	20:59:59
3	Sb 206.836†	46.4	11.4	5.3571 µg/L	5.3571 ppb	20:59:59
3	Se 196.026†	-17.7	14.7	12.3 µg/L	12.3 ppb	20:59:59
3	SiO2 †	3968.2	2355.6	164.27 µg/L	164.27 ppb	20:59:39
3	Si 251.611†	3966.7	2559.0	84.5 µg/L	84.5 ppb	21:00:15
3	Sn 189.927†	2.5	7.9	2.0028 µg/L	2.0028 ppb	20:59:59
3	Sr 421.552†	-47.0	-17.3	-0.0781 µg/L	-0.0781 ppb	20:58:04
3	Ti 334.940†	735.4	280.7	0.3705 µg/L	0.3705 ppb	20:59:39
3	Tl 190.801†	-42.0	-5.2	-2.0148 µg/L	-2.0148 ppb	20:59:59
3	U 409.014†	403.2	63.5	4.0870 µg/L	4.0870 ppb	20:59:39
3	V 292.402†	-94.6	-4.1	-0.0612 µg/L	-0.0612 ppb	20:59:39
3	Zn 213.857†	422.5	-152.3	-3.6388 µg/L	-3.6388 ppb	20:59:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1080758.3	100.42	%	0.281				0.28%
Sc RADIAL	40457.6	102	%	0.7				0.64%
Y 371.029	593629.2	100.42	%	0.309				0.31%
Ag 328.068†	-7.9	-0.0572	µg/L	0.08428	-0.0572	ppb	0.08428	147.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	40.6	12.087	µg/L	17.6584	12.087	ppb	17.6584	146.10%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.1	1.0552	µg/L	0.51744	1.0552	ppb	0.51744	49.04%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-53.0	-3.5071	µg/L	0.75449	-3.5071	ppb	0.75449	21.51%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.6	0.0167	µg/L	0.11446	0.0167	ppb	0.11446	686.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	2.7	0.0023	µg/L	0.03485	0.0023	ppb	0.03485	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-4.4	-0.9735	µg/L	0.26149	-0.9735	ppb	0.26149	26.86%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-4.4	-0.1597	µg/L	0.08015	-0.1597	ppb	0.08015	50.18%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	13.8	0.4283	µg/L	0.14284	0.4283	ppb	0.14284	33.35%

QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† 1.3 0.0352 µg/L 0.13938 0.0352 ppb 0.13938 395.99%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 324.752† -14.7 -0.0587 µg/L 0.05942 -0.0587 ppb 0.05942 101.24%
QC value within limits for Cu 324.752 Recovery = Not calculated
Fe 238.204 Radial† 10.7 10.834 µg/L 5.7091 10.834 ppb 5.7091 52.69%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated
K 766.490 Radial† 3.0 1.2721 µg/L 2.37531 1.2721 ppb 2.37531 186.72%
QC value within limits for K 766.490 Radial Recovery = Not calculated
Mg 279.077 IEC† -2.8 -8.2103 µg/L 3.13447 -8.2103 ppb 3.13447 38.18%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated
Mn 257.610† 95.3 0.1748 µg/L 0.08670 0.1748 ppb 0.08670 49.61%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† 1.0 0.1265 µg/L 0.65629 0.1265 ppb 0.65629 518.60%
QC value within limits for Mo 202.031 Recovery = Not calculated
Na 589.592 Radial† -379.2 -60.696 µg/L 4.0114 -60.696 ppb 4.0114 6.61%
QC value within limits for Na 589.592 Radial Recovery = Not calculated
Ni 231.604† -6.0 -0.3917 µg/L 0.41528 -0.3917 ppb 0.41528 106.03%
QC value within limits for Ni 231.604 Recovery = Not calculated
P 214.914† -2.1 -1.7639 µg/L 1.19141 -1.7639 ppb 1.19141 67.54%
QC value within limits for P 214.914 Recovery = Not calculated
Pb 220.353† 3.4 0.8869 µg/L 1.49711 0.8869 ppb 1.49711 168.80%
QC value within limits for Pb 220.353 Recovery = Not calculated
S 181.975 Axial† -6.4 -14.616 µg/L 6.3895 -14.616 ppb 6.3895 43.72%
QC value within limits for S 181.975 Axial Recovery = Not calculated
Sb 206.836† 9.4 4.4223 µg/L 1.20781 4.4223 ppb 1.20781 27.31%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† 3.2 2.69 µg/L 9.343 2.69 ppb 9.343 347.30%
QC value within limits for Se 196.026 Recovery = Not calculated
SiO2 † 2816.5 196.39 µg/L 47.617 196.39 ppb 47.617 24.25%
QC value within limits for SiO2 Recovery = Not calculated
Si 251.611† 2625.5 86.7 µg/L 5.74 86.7 ppb 5.74 6.61%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† 3.0 0.7645 µg/L 1.12042 0.7645 ppb 1.12042 146.56%
QC value within limits for Sn 189.927 Recovery = Not calculated
Sr 421.552† 2.3 0.0106 µg/L 0.09494 0.0106 ppb 0.09494 898.15%
QC value within limits for Sr 421.552 Recovery = Not calculated
Ti 334.940† 362.9 0.4807 µg/L 0.09822 0.4807 ppb 0.09822 20.43%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 0.7 0.2737 µg/L 2.91101 0.2737 ppb 2.91101 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated
U 409.014† 29.7 1.9062 µg/L 2.27033 1.9062 ppb 2.27033 119.11%
QC value within limits for U 409.014 Recovery = Not calculated
V 292.402† -7.4 -0.1069 µg/L 0.07040 -0.1069 ppb 0.07040 65.85%
QC value within limits for V 292.402 Recovery = Not calculated
Zn 213.857† -140.1 -3.3508 µg/L 0.33374 -3.3508 ppb 0.33374 9.96%
QC value within limits for Zn 213.857 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 53
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/23/2005 21:39:00
Data Type: Reprocessed on 6/24/2005 07:40:11
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1075241.1	1075241.1	99.911	%			21:41:43
1	Sc RADIAL	39165.0	39165.0	98.8	%			21:40:24
1	Y 371.029	584766.5	584766.5	98.922	%			21:41:43
1	Ag 328.068†	67144.3	67828.4	500.94	µg/L	500.94	ppb	21:41:49
1	Al 396.153Radial†	16790.3	16892.6	5009.4	µg/L	5009.4	ppb	21:40:24
1	As 188.979†	958.8	987.6	505.46	µg/L	505.46	ppb	21:42:09
1	B 249.677†	7666.1	7447.3	493.37	µg/L	493.37	ppb	21:41:49
1	Ba 233.527†	46850.9	47027.7	499.61	µg/L	499.61	ppb	21:41:49
1	Be 313.107†	723711.9	724098.4	497.65	µg/L	497.65	ppb	21:41:43
1	Ca 317.933Radial†	22418.8	22530.6	5049.1	µg/L	5049.1	ppb	21:40:44
1	Cd 226.502†	13676.9	13713.1	500.57	µg/L	500.57	ppb	21:41:49
1	Co 228.616†	15942.8	16102.2	500.90	µg/L	500.90	ppb	21:41:49
1	Cr 267.716†	17929.1	17874.0	498.96	µg/L	498.96	ppb	21:41:49
1	Cu 324.752†	135593.4	130690.2	512.98	µg/L	512.98	ppb	21:41:49
1	Fe 238.204 Radial†	5086.2	5105.5	5167.4	µg/L	5167.4	ppb	21:40:44
1	K 766.490 Radial†	12654.4	11685.3	5001.9	µg/L	5001.9	ppb	21:40:24
1	Mg 279.077 IEC†	1752.7	1770.7	5115.9	µg/L	5115.9	ppb	21:40:44
1	Mn 257.610†	273655.7	273501.2	498.66	µg/L	498.66	ppb	21:41:43
1	Mo 202.031†	3890.4	3894.1	511.01	µg/L	511.01	ppb	21:42:09
1	Na 589.592 Radial†	62026.2	61784.3	9887.2	µg/L	9887.2	ppb	21:40:24
1	Ni 231.604†	8084.9	7913.8	517.55	µg/L	517.55	ppb	21:42:09
1	P 214.914†	3213.0	3033.8	2409.9	µg/L	2409.9	ppb	21:42:09
1	Pb 220.353†	1911.7	1926.2	504.21	µg/L	504.21	ppb	21:42:09
1	S 181.975 Axial†	469.3	429.1	967.83	µg/L	967.83	ppb	21:42:09
1	Sb 206.836†	1074.8	1041.0	490.11	µg/L	490.11	ppb	21:42:09
1	Se 196.026†	570.3	603.2	503	µg/L	503	ppb	21:42:09
1	SiO2 †	82792.2	81274.5	5651.3	µg/L	5651.3	ppb	21:41:49
1	Si 251.611†	79375.4	78059.5	2570	µg/L	2570	ppb	21:43:17
1	Sn 189.927†	1931.7	1938.8	493.42	µg/L	493.42	ppb	21:42:09
1	Sr 421.552†	110373.9	111767.9	504.61	µg/L	504.61	ppb	21:40:24
1	Ti 334.940†	372970.8	372853.6	494.56	µg/L	494.56	ppb	21:41:43
1	Tl 190.801†	1262.2	1299.8	502.64	µg/L	502.64	ppb	21:42:09
1	U 409.014†	8184.1	7853.9	507.59	µg/L	507.59	ppb	21:41:49
1	V 292.402†	33345.4	33465.2	504.40	µg/L	504.40	ppb	21:41:49
1	Zn 213.857†	21533.2	20979.9	497.21	µg/L	497.21	ppb	21:41:49
2	Sc 361.383	1089700.3	1089700.3	101.25	%			21:42:15
2	Sc RADIAL	40187.9	40187.9	101	%			21:40:49
2	Y 371.029	592701.8	592701.8	100.26	%			21:42:15
2	Ag 328.068†	66693.8	66491.8	491.08	µg/L	491.08	ppb	21:42:20
2	Al 396.153Radial†	17026.7	16693.2	4950.3	µg/L	4950.3	ppb	21:40:49
2	As 188.979†	958.8	975.0	498.96	µg/L	498.96	ppb	21:42:40
2	B 249.677†	7641.7	7321.4	485.04	µg/L	485.04	ppb	21:42:20
2	Ba 233.527†	46672.7	46229.5	491.13	µg/L	491.13	ppb	21:42:20
2	Be 313.107†	731802.7	722477.4	496.53	µg/L	496.53	ppb	21:42:15
2	Ca 317.933Radial†	22482.4	22015.7	4933.7	µg/L	4933.7	ppb	21:41:09
2	Cd 226.502†	13609.4	13464.7	491.50	µg/L	491.50	ppb	21:42:20
2	Co 228.616†	15851.6	15800.4	491.50	µg/L	491.50	ppb	21:42:20
2	Cr 267.716†	17856.2	17563.8	490.31	µg/L	490.31	ppb	21:42:20
2	Cu 324.752†	134278.8	127591.2	500.82	µg/L	500.82	ppb	21:42:20
2	Fe 238.204 Radial†	5115.8	5003.6	5064.2	µg/L	5064.2	ppb	21:41:09
2	K 766.490 Radial†	12699.0	11403.2	4881.2	µg/L	4881.2	ppb	21:40:49
2	Mg 279.077 IEC†	1768.2	1740.8	5029.7	µg/L	5029.7	ppb	21:41:09
2	Mn 257.610†	276591.7	272766.5	497.31	µg/L	497.31	ppb	21:42:15
2	Mo 202.031†	3883.6	3835.6	503.34	µg/L	503.34	ppb	21:42:40
2	Na 589.592 Radial†	62712.1	60862.7	9739.7	µg/L	9739.7	ppb	21:40:49
2	Ni 231.604†	8065.4	7787.2	509.27	µg/L	509.27	ppb	21:42:40
2	P 214.914†	3202.9	2981.2	2368.7	µg/L	2368.7	ppb	21:42:40
2	Pb 220.353†	1896.1	1885.4	493.53	µg/L	493.53	ppb	21:42:40
2	S 181.975 Axial†	470.2	423.7	955.62	µg/L	955.62	ppb	21:42:40

2	Sb 206.836†	1078.4	1030.3	485.07 µg/L	485.07 ppb	21:42:40
2	Se 196.026†	570.3	595.6	497 µg/L	497 ppb	21:42:40
2	SiO2 †	81645.0	79042.0	5495.9 µg/L	5495.9 ppb	21:42:20
2	Si 251.611†	80275.4	77894.1	2570 µg/L	2570 ppb	21:43:23
2	Sn 189.927†	1936.1	1917.5	487.99 µg/L	487.99 ppb	21:42:40
2	Sr 421.552†	111602.2	110135.7	497.24 µg/L	497.24 ppb	21:40:49
2	Ti 334.940†	376835.2	371716.8	493.06 µg/L	493.06 ppb	21:42:15
2	Tl 190.801†	1257.3	1278.3	494.36 µg/L	494.36 ppb	21:42:40
2	U 409.014†	8091.6	7653.9	494.68 µg/L	494.68 ppb	21:42:20
2	V 292.402†	33262.9	32940.8	496.49 µg/L	496.49 ppb	21:42:20
2	Zn 213.857†	21338.8	20502.0	485.86 µg/L	485.86 ppb	21:42:20
3	Sc 361.383	1078509.1	1078509.1	100.21 %		21:42:46
3	Sc RADIAL	40593.3	40593.3	102 %		21:41:15
3	Y 371.029	586833.5	586833.5	99.272 %		21:42:46
3	Ag 328.068†	67092.2	67572.9	499.03 µg/L	499.03 ppb	21:42:51
3	Al 396.153Radial†	17209.2	16703.6	4953.4 µg/L	4953.4 ppb	21:41:15
3	As 188.979†	954.3	980.3	501.74 µg/L	501.74 ppb	21:43:12
3	B 249.677†	7713.9	7471.7	495.00 µg/L	495.00 ppb	21:42:51
3	Ba 233.527†	47182.8	47216.8	501.62 µg/L	501.62 ppb	21:42:51
3	Be 313.107†	726990.4	725175.0	498.38 µg/L	498.38 ppb	21:42:46
3	Ca 317.933Radial†	22515.4	21826.4	4891.4 µg/L	4891.4 ppb	21:41:35
3	Cd 226.502†	13805.9	13800.3	503.76 µg/L	503.76 ppb	21:42:51
3	Co 228.616†	15984.2	16095.1	500.68 µg/L	500.68 ppb	21:42:51
3	Cr 267.716†	18021.7	17912.0	500.03 µg/L	500.03 ppb	21:42:51
3	Cu 324.752†	135044.4	129731.3	509.22 µg/L	509.22 ppb	21:42:51
3	Fe 238.204 Radial†	5089.6	4927.6	4987.6 µg/L	4987.6 ppb	21:41:35
3	K 766.490 Radial†	12845.2	11420.9	4888.8 µg/L	4888.8 ppb	21:41:15
3	Mg 279.077 IEC†	1756.2	1711.7	4945.8 µg/L	4945.8 ppb	21:41:35
3	Mn 257.610†	274482.1	273496.0	498.63 µg/L	498.63 ppb	21:42:46
3	Mo 202.031†	3858.0	3849.9	505.21 µg/L	505.21 ppb	21:43:12
3	Na 589.592 Radial†	63332.2	60850.6	9737.8 µg/L	9737.8 ppb	21:41:15
3	Ni 231.604†	8024.9	7829.4	512.02 µg/L	512.02 ppb	21:43:12
3	P 214.914†	3193.2	3004.3	2386.5 µg/L	2386.5 ppb	21:43:12
3	Pb 220.353†	1885.5	1894.3	495.85 µg/L	495.85 ppb	21:43:12
3	S 181.975 Axial†	473.6	431.9	974.34 µg/L	974.34 ppb	21:43:12
3	Sb 206.836†	1087.4	1050.3	494.38 µg/L	494.38 ppb	21:43:12
3	Se 196.026†	563.7	594.8	496 µg/L	496 ppb	21:43:12
3	SiO2 †	81809.7	80043.0	5565.6 µg/L	5565.6 ppb	21:42:51
3	Si 251.611†	79250.8	77694.4	2560 µg/L	2560 ppb	21:43:28
3	Sn 189.927†	1919.0	1920.3	488.71 µg/L	488.71 ppb	21:43:12
3	Sr 421.552†	112704.7	110113.1	497.14 µg/L	497.14 ppb	21:41:15
3	Ti 334.940†	374422.7	373171.3	494.98 µg/L	494.98 ppb	21:42:46
3	Tl 190.801†	1264.1	1298.0	501.91 µg/L	501.91 ppb	21:43:12
3	U 409.014†	8129.1	7774.1	502.48 µg/L	502.48 ppb	21:42:51
3	V 292.402†	33484.3	33502.7	504.90 µg/L	504.90 ppb	21:42:51
3	Zn 213.857†	21609.5	20990.8	497.54 µg/L	497.54 ppb	21:42:51

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1081150.2	100.46	%	0.705				0.70%
Sc RADIAL	39982.1	101	%	1.9				1.84%
Y 371.029	588100.6	99.486	%	0.6964				0.70%
Ag 328.068†	67297.7	497.02	µg/L	5.232	497.02	ppb	5.232	1.05%
QC value within limits for Ag 328.068 Recovery = 99.40%								
Al 396.153Radial†	16763.1	4971.0	µg/L	33.25	4971.0	ppb	33.25	0.67%
QC value within limits for Al 396.153Radial Recovery = 99.42%								
As 188.979†	981.0	502.05	µg/L	3.265	502.05	ppb	3.265	0.65%
QC value within limits for As 188.979 Recovery = 100.41%								
B 249.677†	7413.5	491.14	µg/L	5.347	491.14	ppb	5.347	1.09%
QC value within limits for B 249.677 Recovery = 98.23%								
Ba 233.527†	46824.7	497.45	µg/L	5.566	497.45	ppb	5.566	1.12%
QC value within limits for Ba 233.527 Recovery = 99.49%								
Be 313.107†	723916.9	497.52	µg/L	0.934	497.52	ppb	0.934	0.19%
QC value within limits for Be 313.107 Recovery = 99.50%								
Ca 317.933Radial†	22124.3	4958.1	µg/L	81.65	4958.1	ppb	81.65	1.65%
QC value within limits for Ca 317.933Radial Recovery = 99.16%								
Cd 226.502†	13659.4	498.61	µg/L	6.357	498.61	ppb	6.357	1.28%
QC value within limits for Cd 226.502 Recovery = 99.72%								
Co 228.616†	15999.2	497.69	µg/L	5.364	497.69	ppb	5.364	1.08%

QC value within limits for Co 228.616 Recovery = 99.54%

Cr 267.716†	17783.3	496.43 µg/L	5.332	496.43 ppb	5.332	1.07%

QC value within limits for Cr 267.716 Recovery = 99.29%

Cu 324.752†	129337.6	507.67 µg/L	6.228	507.67 ppb	6.228	1.23%

QC value within limits for Cu 324.752 Recovery = 101.53%

Fe 238.204 Radial†	5012.2	5073.1 µg/L	90.22	5073.1 ppb	90.22	1.78%

QC value within limits for Fe 238.204 Radial Recovery = 101.46%

K 766.490 Radial†	11503.2	4924.0 µg/L	67.63	4924.0 ppb	67.63	1.37%

QC value within limits for K 766.490 Radial Recovery = 98.48%

Mg 279.077 IEC†	1741.1	5030.5 µg/L	85.05	5030.5 ppb	85.05	1.69%

QC value within limits for Mg 279.077 IEC Recovery = 100.61%

Mn 257.610†	273254.6	498.20 µg/L	0.771	498.20 ppb	0.771	0.15%

QC value within limits for Mn 257.610 Recovery = 99.64%

Mo 202.031†	3859.9	506.52 µg/L	3.998	506.52 ppb	3.998	0.79%

QC value within limits for Mo 202.031 Recovery = 101.30%

Na 589.592 Radial†	61165.9	9788.2 µg/L	85.71	9788.2 ppb	85.71	0.88%

QC value within limits for Na 589.592 Radial Recovery = 97.88%

Ni 231.604†	7843.5	512.95 µg/L	4.215	512.95 ppb	4.215	0.82%

QC value within limits for Ni 231.604 Recovery = 102.59%

P 214.914†	3006.4	2388.4 µg/L	20.67	2388.4 ppb	20.67	0.87%

QC value within limits for P 214.914 Recovery = 95.53%

Pb 220.353†	1902.0	497.86 µg/L	5.615	497.86 ppb	5.615	1.13%

QC value within limits for Pb 220.353 Recovery = 99.57%

S 181.975 Axial†	428.3	965.93 µg/L	9.500	965.93 ppb	9.500	0.98%

QC value within limits for S 181.975 Axial Recovery = 96.59%

Sb 206.836†	1040.5	489.85 µg/L	4.661	489.85 ppb	4.661	0.95%

QC value within limits for Sb 206.836 Recovery = 97.97%

Se 196.026†	597.9	499 µg/L	3.9	499 ppb	3.9	0.77%

QC value within limits for Se 196.026 Recovery = 99.80%

SiO2 †	80119.8	5570.9 µg/L	77.86	5570.9 ppb	77.86	1.40%

QC value within limits for SiO2 Recovery = 104.18%

Si 251.611†	77882.7	2570 µg/L	6.0	2570 ppb	6.0	0.23%

QC value within limits for Si 251.611 Recovery = 102.62%

Sn 189.927†	1925.6	490.04 µg/L	2.949	490.04 ppb	2.949	0.60%

QC value within limits for Sn 189.927 Recovery = 98.01%

Sr 421.552†	110672.2	499.67 µg/L	4.284	499.67 ppb	4.284	0.86%

QC value within limits for Sr 421.552 Recovery = 99.93%

Ti 334.940†	372580.5	494.20 µg/L	1.011	494.20 ppb	1.011	0.20%

QC value within limits for Ti 334.940 Recovery = 98.84%

Tl 190.801†	1292.0	499.64 µg/L	4.583	499.64 ppb	4.583	0.92%

QC value within limits for Tl 190.801 Recovery = 99.93%

U 409.014†	7760.6	501.58 µg/L	6.498	501.58 ppb	6.498	1.30%

QC value within limits for U 409.014 Recovery = 100.32%

V 292.402†	33302.9	501.93 µg/L	4.717	501.93 ppb	4.717	0.94%

QC value within limits for V 292.402 Recovery = 100.39%

Zn 213.857†	20824.2	493.54 µg/L	6.649	493.54 ppb	6.649	1.35%

QC value within limits for Zn 213.857 Recovery = 98.71%

All analyte(s) passed QC.

Sequence No.: 54
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/23/2005 21:45:16
Data Type: Reprocessed on 6/24/2005 07:40:13
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1090397.4	1090397.4	101.32	%			21:47:58
1	Sc RADIAL	40729.2	40729.2	103	%			21:46:40
1	Y 371.029	598368.8	598368.8	101.22	%			21:47:58
1	Ag 328.068†	-593.5	38.3	0.2855	µg/L	0.2855	ppb	21:48:03
1	Al 396.153Radial†	99.9	-8.1	-2.4342	µg/L	-2.4342	ppb	21:46:40
1	As 188.979†	-29.2	-0.8	-0.4001	µg/L	-0.4001	ppb	21:48:24
1	B 249.677†	194.5	-33.7	-2.2341	µg/L	-2.2341	ppb	21:48:24
1	Ba 233.527†	-110.2	26.1	0.2767	µg/L	0.2767	ppb	21:48:24
1	Be 313.107†	343.3	77.9	0.0536	µg/L	0.0536	ppb	21:48:03
1	Ca 317.933Radial†	316.1	142.3	31.876	µg/L	31.876	ppb	21:47:00
1	Cd 226.502†	-25.3	-1.0	-0.0381	µg/L	-0.0381	ppb	21:48:24
1	Co 228.616†	-139.5	7.4	0.2297	µg/L	0.2297	ppb	21:48:24
1	Cr 267.716†	80.5	8.2	0.2297	µg/L	0.2297	ppb	21:48:24
1	Cu 324.752†	5067.9	-22.5	-0.0885	µg/L	-0.0885	ppb	21:48:03
1	Fe 238.204 Radial†	66.7	21.4	21.607	µg/L	21.607	ppb	21:47:00
1	K 766.490 Radial†	1165.6	9.1	3.9119	µg/L	3.9119	ppb	21:46:40
1	Mg 279.077 IEC†	2.8	-0.9	-2.7131	µg/L	-2.7131	ppb	21:47:00
1	Mn 257.610†	632.5	225.0	0.4122	µg/L	0.4122	ppb	21:48:24
1	Mo 202.031†	5.3	5.4	0.7070	µg/L	0.7070	ppb	21:48:24
1	Na 589.592 Radial†	648.6	-377.6	-60.432	µg/L	-60.432	ppb	21:46:40
1	Ni 231.604†	176.1	-4.5	-0.2897	µg/L	-0.2897	ppb	21:48:24
1	P 214.914†	172.7	-11.6	-9.5944	µg/L	-9.5944	ppb	21:48:24
1	Pb 220.353†	-13.5	-0.5	-0.1412	µg/L	-0.1412	ppb	21:48:24
1	S 181.975 Axial†	37.1	-4.0	-9.1209	µg/L	-9.1209	ppb	21:48:24
1	Sb 206.836†	57.2	21.7	10.217	µg/L	10.217	ppb	21:48:24
1	Se 196.026†	-37.3	-4.4	-3.69	µg/L	-3.69	ppb	21:48:24
1	SiO2 †	2479.1	855.0	59.605	µg/L	59.605	ppb	21:48:03
1	Si 251.611†	2370.6	952.8	31.5	µg/L	31.5	ppb	21:49:31
1	Sn 189.927†	-3.3	2.2	0.5597	µg/L	0.5597	ppb	21:48:24
1	Sr 421.552†	-31.4	-1.4	-0.0068	µg/L	-0.0068	ppb	21:46:40
1	Ti 334.940†	998.3	534.4	0.7096	µg/L	0.7096	ppb	21:48:03
1	Tl 190.801†	-38.1	-1.1	-0.4195	µg/L	-0.4195	ppb	21:48:24
1	U 409.014†	350.2	8.1	0.5180	µg/L	0.5180	ppb	21:48:03
1	V 292.402†	-97.7	-6.4	-0.0873	µg/L	-0.0873	ppb	21:48:03
1	Zn 213.857†	445.3	-133.0	-3.1826	µg/L	-3.1826	ppb	21:48:24
2	Sc 361.383	1085171.5	1085171.5	100.83	%			21:48:29
2	Sc RADIAL	40490.9	40490.9	102	%			21:47:05
2	Y 371.029	595441.3	595441.3	100.73	%			21:48:29
2	Ag 328.068†	-692.8	-63.0	-0.4633	µg/L	-0.4633	ppb	21:48:34
2	Al 396.153Radial†	64.0	-42.6	-12.713	µg/L	-12.713	ppb	21:47:05
2	As 188.979†	-25.9	2.4	1.2087	µg/L	1.2087	ppb	21:48:54
2	B 249.677†	188.9	-38.4	-2.5404	µg/L	-2.5404	ppb	21:48:54
2	Ba 233.527†	-123.0	12.9	0.1369	µg/L	0.1369	ppb	21:48:54
2	Be 313.107†	288.2	24.9	0.0176	µg/L	0.0176	ppb	21:48:34
2	Ca 317.933Radial†	307.5	135.7	30.397	µg/L	30.397	ppb	21:47:25
2	Cd 226.502†	-27.6	-3.5	-0.1269	µg/L	-0.1269	ppb	21:48:54
2	Co 228.616†	-129.4	16.7	0.5189	µg/L	0.5189	ppb	21:48:54
2	Cr 267.716†	84.4	12.6	0.3490	µg/L	0.3490	ppb	21:48:54
2	Cu 324.752†	5083.9	17.4	0.0668	µg/L	0.0668	ppb	21:48:34
2	Fe 238.204 Radial†	55.9	11.1	11.256	µg/L	11.256	ppb	21:47:25
2	K 766.490 Radial†	1130.1	-19.0	-8.1356	µg/L	-8.1356	ppb	21:47:05
2	Mg 279.077 IEC†	3.4	-0.3	-0.8543	µg/L	-0.8543	ppb	21:47:25
2	Mn 257.610†	463.4	60.3	0.1107	µg/L	0.1107	ppb	21:48:54
2	Mo 202.031†	0.8	0.9	0.1207	µg/L	0.1207	ppb	21:48:54
2	Na 589.592 Radial†	689.7	-333.6	-53.393	µg/L	-53.393	ppb	21:47:05
2	Ni 231.604†	181.0	1.2	0.0784	µg/L	0.0784	ppb	21:48:54
2	P 214.914†	181.4	-2.1	-1.7805	µg/L	-1.7805	ppb	21:48:54
2	Pb 220.353†	-7.3	5.6	1.4579	µg/L	1.4579	ppb	21:48:54
2	S 181.975 Axial†	28.6	-12.2	-27.783	µg/L	-27.783	ppb	21:48:54

2	Sb 206.836†	42.4	7.3	3.4402 µg/L	3.4402 ppb	21:48:54
2	Se 196.026†	-32.0	0.6	0.531 µg/L	0.531 ppb	21:48:54
2	SiO2 †	2458.6	846.5	59.024 µg/L	59.024 ppb	21:48:34
2	Si 251.611†	2325.9	919.7	30.4 µg/L	30.4 ppb	21:49:36
2	Sn 189.927†	0.9	6.3	1.5933 µg/L	1.5933 ppb	21:48:54
2	Sr 421.552†	14.0	42.8	0.1928 µg/L	0.1928 ppb	21:47:05
2	Ti 334.940†	942.6	484.0	0.6417 µg/L	0.6417 ppb	21:48:34
2	Tl 190.801†	-31.6	5.2	2.0045 µg/L	2.0045 ppb	21:48:54
2	U 409.014†	377.0	36.3	2.3305 µg/L	2.3305 ppb	21:48:34
2	V 292.402†	-124.5	-33.5	-0.4941 µg/L	-0.4941 ppb	21:48:34
2	Zn 213.857†	441.2	-134.9	-3.2308 µg/L	-3.2308 ppb	21:48:54
3	Sc 361.383	1085683.7	1085683.7	100.88 %		21:49:00
3	Sc RADIAL	40377.3	40377.3	102 %		21:47:30
3	Y 371.029	595812.7	595812.7	100.79 %		21:49:00
3	Ag 328.068†	-566.8	62.2	0.4591 µg/L	0.4591 ppb	21:49:05
3	Al 396.153Radial†	157.7	49.5	14.695 µg/L	14.695 ppb	21:47:30
3	As 188.979†	-23.9	4.3	2.1745 µg/L	2.1745 ppb	21:49:25
3	B 249.677†	189.4	-37.9	-2.5064 µg/L	-2.5064 ppb	21:49:25
3	Ba 233.527†	-132.0	4.0	0.0429 µg/L	0.0429 ppb	21:49:25
3	Be 313.107†	309.2	45.6	0.0314 µg/L	0.0314 ppb	21:49:05
3	Ca 317.933Radial†	283.7	113.2	25.353 µg/L	25.353 ppb	21:47:50
3	Cd 226.502†	-18.4	5.7	0.2059 µg/L	0.2059 ppb	21:49:25
3	Co 228.616†	-132.5	13.8	0.4294 µg/L	0.4294 ppb	21:49:25
3	Cr 267.716†	88.2	16.2	0.4529 µg/L	0.4529 ppb	21:49:25
3	Cu 324.752†	5017.3	-50.9	-0.2007 µg/L	-0.2007 ppb	21:49:05
3	Fe 238.204 Radial†	54.4	9.8	9.8862 µg/L	9.8862 ppb	21:47:50
3	K 766.490 Radial†	1096.3	-49.0	-20.974 µg/L	-20.974 ppb	21:47:30
3	Mg 279.077 IEC†	5.8	2.1	6.0034 µg/L	6.0034 ppb	21:47:50
3	Mn 257.610†	516.6	112.8	0.2065 µg/L	0.2065 ppb	21:49:25
3	Mo 202.031†	10.5	10.5	1.3795 µg/L	1.3795 ppb	21:49:25
3	Na 589.592 Radial†	646.6	-374.0	-59.865 µg/L	-59.865 ppb	21:47:30
3	Ni 231.604†	180.4	0.5	0.0387 µg/L	0.0387 ppb	21:49:25
3	P 214.914†	180.7	-3.0	-2.4213 µg/L	-2.4213 ppb	21:49:25
3	Pb 220.353†	-10.5	2.4	0.6238 µg/L	0.6238 ppb	21:49:25
3	S 181.975 Axial†	40.5	-0.5	-1.1788 µg/L	-1.1788 ppb	21:49:25
3	Sb 206.836†	47.6	12.4	5.8403 µg/L	5.8403 ppb	21:49:25
3	Se 196.026†	-39.9	-7.2	-6.00 µg/L	-6.00 ppb	21:49:25
3	SiO2 †	2520.9	907.1	63.208 µg/L	63.208 ppb	21:49:05
3	Si 251.611†	2319.9	912.7	30.1 µg/L	30.1 ppb	21:49:41
3	Sn 189.927†	-1.6	3.9	0.9837 µg/L	0.9837 ppb	21:49:25
3	Sr 421.552†	27.2	55.8	0.2517 µg/L	0.2517 ppb	21:47:30
3	Ti 334.940†	943.7	484.6	0.6434 µg/L	0.6434 ppb	21:49:05
3	Tl 190.801†	-33.4	3.4	1.3119 µg/L	1.3119 ppb	21:49:25
3	U 409.014†	345.6	5.0	0.3219 µg/L	0.3219 ppb	21:49:05
3	V 292.402†	-99.9	-9.1	-0.1202 µg/L	-0.1202 ppb	21:49:05
3	Zn 213.857†	441.3	-135.1	-3.2329 µg/L	-3.2329 ppb	21:49:25

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1087084.2	101.01	%	0.268				0.26%
Sc RADIAL	40532.5	102	%	0.5				0.44%
Y 371.029	596540.9	100.91	%	0.270				0.27%
Ag 328.068†	12.5	0.0938	µg/L	0.49021	0.0938	ppb	0.49021	522.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.4	-0.1505	µg/L	13.84608	-0.1505	ppb	13.84608	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.0	0.9944	µg/L	1.30061	0.9944	ppb	1.30061	130.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-36.7	-2.4270	µg/L	0.16788	-2.4270	ppb	0.16788	6.92%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.3	0.1522	µg/L	0.11765	0.1522	ppb	0.11765	77.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	49.4	0.0342	µg/L	0.01820	0.0342	ppb	0.01820	53.19%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	130.4	29.208	µg/L	3.4203	29.208	ppb	3.4203	11.71%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	0.4	0.0136	µg/L	0.17232	0.0136	ppb	0.17232	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	12.6	0.3926	µg/L	0.14809	0.3926	ppb	0.14809	37.72%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	12.3	0.3439 µg/L	0.11171	0.3439 ppb	0.11171	32.49%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-18.7	-0.0741 µg/L	0.13434	-0.0741 ppb	0.13434	181.30%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	14.1	14.250 µg/L	6.4084	14.250 ppb	6.4084	44.97%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	-19.6	-8.3993 µg/L	12.44519	-8.3993 ppb	12.44519	148.17%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	0.3	0.8120 µg/L	4.59098	0.8120 ppb	4.59098	565.40%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	132.7	0.2432 µg/L	0.15406	0.2432 ppb	0.15406	63.36%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	5.6	0.7357 µg/L	0.62985	0.7357 ppb	0.62985	85.61%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-361.7	-57.896 µg/L	3.9106	-57.896 ppb	3.9106	6.75%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-0.9	-0.0575 µg/L	0.20202	-0.0575 ppb	0.20202	351.29%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-5.6	-4.5987 µg/L	4.33827	-4.5987 ppb	4.33827	94.34%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	2.5	0.6469 µg/L	0.79979	0.6469 ppb	0.79979	123.64%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-5.6	-12.694 µg/L	13.6572	-12.694 ppb	13.6572	107.59%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	13.8	6.4991 µg/L	3.43596	6.4991 ppb	3.43596	52.87%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-3.7	-3.05 µg/L	3.311	-3.05 ppb	3.311	108.49%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	869.5	60.612 µg/L	2.2662	60.612 ppb	2.2662	3.74%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	928.4	30.7 µg/L	0.71	30.7 ppb	0.71	2.32%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	4.1	1.0456 µg/L	0.51959	1.0456 ppb	0.51959	49.69%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	32.4	0.1459 µg/L	0.13549	0.1459 ppb	0.13549	92.87%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	501.0	0.6649 µg/L	0.03873	0.6649 ppb	0.03873	5.83%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	2.5	0.9656 µg/L	1.24858	0.9656 ppb	1.24858	129.30%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	16.5	1.0568 µg/L	1.10740	1.0568 ppb	1.10740	104.79%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-16.3	-0.2338 µg/L	0.22599	-0.2338 ppb	0.22599	96.64%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-134.3	-3.2155 µg/L	0.02843	-3.2155 ppb	0.02843	0.88%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 63
Sample ID: CCV1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/23/2005 22:43:15
Data Type: Reprocessed on 6/24/2005 07:40:31
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1083165.3	1083165.3	100.65	%			22:45:58
1	Sc RADIAL	40244.7	40244.7	102	%			22:44:39
1	Y 371.029	589446.9	589446.9	99.714	%			22:45:58
1	Ag 328.068†	66545.2	66741.6	492.91	µg/L	492.91	ppb	22:46:03
1	Al 396.153Radial†	16966.3	16610.0	4925.5	µg/L	4925.5	ppb	22:44:39
1	As 188.979†	948.5	970.4	496.65	µg/L	496.65	ppb	22:46:24
1	B 249.677†	7549.4	7275.2	481.99	µg/L	481.99	ppb	22:46:03
1	Ba 233.527†	46432.9	46269.3	491.56	µg/L	491.56	ppb	22:46:03
1	Be 313.107†	724489.3	719571.6	494.53	µg/L	494.53	ppb	22:45:58
1	Ca 317.933Radial†	22382.2	21885.7	4904.7	µg/L	4904.7	ppb	22:44:59
1	Cd 226.502†	13526.8	13463.7	491.47	µg/L	491.47	ppb	22:46:03
1	Co 228.616†	15783.0	15826.7	492.33	µg/L	492.33	ppb	22:46:03
1	Cr 267.716†	17770.9	17585.4	490.90	µg/L	490.90	ppb	22:46:03
1	Cu 324.752†	133895.8	128010.7	502.46	µg/L	502.46	ppb	22:46:03
1	Fe 238.204 Radial†	5094.8	4975.8	5036.2	µg/L	5036.2	ppb	22:44:59
1	K 766.490 Radial†	12592.1	11280.2	4828.5	µg/L	4828.5	ppb	22:44:39
1	Mg 279.077 IEC†	1765.0	1735.3	5013.7	µg/L	5013.7	ppb	22:44:59
1	Mn 257.610†	273935.6	271775.5	495.50	µg/L	495.50	ppb	22:45:58
1	Mo 202.031†	3872.0	3847.3	504.87	µg/L	504.87	ppb	22:46:24
1	Na 589.592 Radial†	63022.6	61081.3	9774.7	µg/L	9774.7	ppb	22:44:39
1	Ni 231.604†	7999.7	7769.9	508.14	µg/L	508.14	ppb	22:46:24
1	P 214.914†	3202.1	2999.4	2383.4	µg/L	2383.4	ppb	22:46:24
1	Pb 220.353†	1885.4	1886.1	493.71	µg/L	493.71	ppb	22:46:24
1	S 181.975 Axial†	471.6	427.9	965.19	µg/L	965.19	ppb	22:46:24
1	Sb 206.836†	1077.2	1035.5	487.52	µg/L	487.52	ppb	22:46:24
1	Se 196.026†	563.8	592.6	495	µg/L	495	ppb	22:46:24
1	SiO2 †	77915.1	75822.5	5271.3	µg/L	5271.3	ppb	22:46:03
1	Si 251.611†	76946.6	75065.1	2470	µg/L	2470	ppb	22:47:32
1	Sn 189.927†	1917.3	1910.4	486.19	µg/L	486.19	ppb	22:46:24
1	Sr 421.552†	111637.8	110015.4	496.70	µg/L	496.70	ppb	22:44:39
1	Ti 334.940†	372799.9	369952.8	490.71	µg/L	490.71	ppb	22:45:58
1	Tl 190.801†	1249.3	1277.7	494.14	µg/L	494.14	ppb	22:46:24
1	U 409.014†	8201.0	7810.7	504.79	µg/L	504.79	ppb	22:46:03
1	V 292.402†	33116.7	32993.8	497.31	µg/L	497.31	ppb	22:46:03
1	Zn 213.857†	21326.9	20617.3	488.63	µg/L	488.63	ppb	22:46:03
2	Sc 361.383	1081195.8	1081195.8	100.46	%			22:46:30
2	Sc RADIAL	39877.3	39877.3	101	%			22:45:04
2	Y 371.029	588038.0	588038.0	99.475	%			22:46:30
2	Ag 328.068†	66618.8	66935.3	494.34	µg/L	494.34	ppb	22:46:35
2	Al 396.153Radial†	16872.2	16670.4	4943.3	µg/L	4943.3	ppb	22:45:04
2	As 188.979†	954.9	978.5	500.76	µg/L	500.76	ppb	22:46:55
2	B 249.677†	7613.0	7352.2	487.09	µg/L	487.09	ppb	22:46:35
2	Ba 233.527†	46434.1	46354.6	492.46	µg/L	492.46	ppb	22:46:35
2	Be 313.107†	723729.0	720126.0	494.91	µg/L	494.91	ppb	22:46:30
2	Ca 317.933Radial†	22330.5	22037.4	4938.6	µg/L	4938.6	ppb	22:45:24
2	Cd 226.502†	13487.7	13449.4	490.95	µg/L	490.95	ppb	22:46:35
2	Co 228.616†	15737.7	15810.1	491.81	µg/L	491.81	ppb	22:46:35
2	Cr 267.716†	17751.3	17598.1	491.26	µg/L	491.26	ppb	22:46:35
2	Cu 324.752†	134093.8	128450.2	504.18	µg/L	504.18	ppb	22:46:35
2	Fe 238.204 Radial†	5072.7	5000.1	5060.7	µg/L	5060.7	ppb	22:45:24
2	K 766.490 Radial†	12551.9	11354.6	4860.4	µg/L	4860.4	ppb	22:45:04
2	Mg 279.077 IEC†	1763.6	1749.9	5055.9	µg/L	5055.9	ppb	22:45:24
2	Mn 257.610†	273416.7	271754.9	495.47	µg/L	495.47	ppb	22:46:30
2	Mo 202.031†	3882.1	3864.4	507.11	µg/L	507.11	ppb	22:46:55
2	Na 589.592 Radial†	62533.5	61167.1	9788.4	µg/L	9788.4	ppb	22:45:04
2	Ni 231.604†	8024.1	7808.7	510.68	µg/L	510.68	ppb	22:46:55
2	P 214.914†	3188.6	2991.8	2376.9	µg/L	2376.9	ppb	22:46:55
2	Pb 220.353†	1903.2	1907.2	499.23	µg/L	499.23	ppb	22:46:55
2	S 181.975 Axial†	467.7	424.9	958.44	µg/L	958.44	ppb	22:46:55

2	Sb 206.836†	1087.9	1048.1	493.49 µg/L	493.49 ppb	22:46:55
2	Se 196.026†	563.7	593.4	495 µg/L	495 ppb	22:46:55
2	SiO2 †	77801.6	75850.6	5273.2 µg/L	5273.2 ppb	22:46:35
2	Si 251.611†	76227.7	74488.8	2450 µg/L	2450 ppb	22:47:38
2	Sn 189.927†	1930.2	1926.7	490.33 µg/L	490.33 ppb	22:46:55
2	Sr 421.552†	110821.1	110216.7	497.61 µg/L	497.61 ppb	22:45:04
2	Ti 334.940†	372314.0	370143.9	490.96 µg/L	490.96 ppb	22:46:30
2	Tl 190.801†	1264.8	1295.5	500.95 µg/L	500.95 ppb	22:46:55
2	U 409.014†	8179.1	7803.8	504.34 µg/L	504.34 ppb	22:46:35
2	V 292.402†	33100.6	33037.8	497.98 µg/L	497.98 ppb	22:46:35
2	Zn 213.857†	21353.8	20682.7	490.17 µg/L	490.17 ppb	22:46:35
3	Sc 361.383	1088128.0	1088128.0	101.11 %		22:47:01
3	Sc RADIAL	40043.4	40043.4	101 %		22:45:30
3	Y 371.029	592015.1	592015.1	100.15 %		22:47:01
3	Ag 328.068†	66967.8	66858.0	493.76 µg/L	493.76 ppb	22:47:06
3	Al 396.153Radial†	16888.5	16617.0	4927.7 µg/L	4927.7 ppb	22:45:30
3	As 188.979†	945.5	963.1	492.97 µg/L	492.97 ppb	22:47:27
3	B 249.677†	7670.4	7360.7	487.64 µg/L	487.64 ppb	22:47:06
3	Ba 233.527†	46585.0	46209.3	490.92 µg/L	490.92 ppb	22:47:06
3	Be 313.107†	728376.8	720133.4	494.92 µg/L	494.92 ppb	22:47:01
3	Ca 317.933Radial†	22276.2	21891.6	4906.0 µg/L	4906.0 ppb	22:45:50
3	Cd 226.502†	13560.1	13435.4	490.43 µg/L	490.43 ppb	22:47:06
3	Co 228.616†	15824.5	15796.1	491.37 µg/L	491.37 ppb	22:47:06
3	Cr 267.716†	17852.8	17586.0	490.92 µg/L	490.92 ppb	22:47:06
3	Cu 324.752†	134936.6	128433.4	504.12 µg/L	504.12 ppb	22:47:06
3	Fe 238.204 Radial†	5069.4	4975.9	5036.2 µg/L	5036.2 ppb	22:45:50
3	K 766.490 Radial†	12638.7	11388.7	4875.0 µg/L	4875.0 ppb	22:45:30
3	Mg 279.077 IEC†	1754.8	1733.9	5009.6 µg/L	5009.6 ppb	22:45:50
3	Mn 257.610†	275190.6	271775.5	495.50 µg/L	495.50 ppb	22:47:01
3	Mo 202.031†	3856.5	3814.4	500.56 µg/L	500.56 ppb	22:47:27
3	Na 589.592 Radial†	62736.4	61110.1	9779.3 µg/L	9779.3 ppb	22:45:30
3	Ni 231.604†	7971.2	7705.5	503.93 µg/L	503.93 ppb	22:47:27
3	P 214.914†	3167.8	2951.0	2343.3 µg/L	2343.3 ppb	22:47:27
3	Pb 220.353†	1883.2	1875.3	490.89 µg/L	490.89 ppb	22:47:27
3	S 181.975 Axial†	466.0	420.3	947.77 µg/L	947.77 ppb	22:47:27
3	Sb 206.836†	1095.8	1049.0	493.81 µg/L	493.81 ppb	22:47:27
3	Se 196.026†	554.5	580.8	485 µg/L	485 ppb	22:47:27
3	SiO2 †	78117.9	75670.0	5260.8 µg/L	5260.8 ppb	22:47:06
3	Si 251.611†	76220.0	73997.7	2440 µg/L	2440 ppb	22:47:43
3	Sn 189.927†	1905.0	1889.5	480.88 µg/L	480.88 ppb	22:47:27
3	Sr 421.552†	111098.7	110034.5	496.79 µg/L	496.79 ppb	22:45:30
3	Ti 334.940†	374888.4	370329.1	491.21 µg/L	491.21 ppb	22:47:01
3	Tl 190.801†	1253.6	1276.4	493.63 µg/L	493.63 ppb	22:47:27
3	U 409.014†	8219.7	7792.1	503.58 µg/L	503.58 ppb	22:47:06
3	V 292.402†	33217.5	32943.5	496.51 µg/L	496.51 ppb	22:47:06
3	Zn 213.857†	21436.3	20628.9	488.93 µg/L	488.93 ppb	22:47:06

Mean Data: CCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1084163.0	100.74	%	0.332				0.33%
Sc RADIAL	40055.1	101	%	0.5				0.46%
Y 371.029	589833.3	99.779	%	0.3411				0.34%
Ag 328.068†	66844.9	493.67	µg/L	0.720	493.67	ppb	0.720	0.15%
QC value within limits for Ag 328.068 Recovery = 98.73%								
Al 396.153Radial†	16632.5	4932.2	µg/L	9.73	4932.2	ppb	9.73	0.20%
QC value within limits for Al 396.153Radial Recovery = 98.64%								
As 188.979†	970.7	496.79	µg/L	3.898	496.79	ppb	3.898	0.78%
QC value within limits for As 188.979 Recovery = 99.36%								
B 249.677†	7329.4	485.57	µg/L	3.116	485.57	ppb	3.116	0.64%
QC value within limits for B 249.677 Recovery = 97.11%								
Ba 233.527†	46277.7	491.65	µg/L	0.776	491.65	ppb	0.776	0.16%
QC value within limits for Ba 233.527 Recovery = 98.33%								
Be 313.107†	719943.7	494.79	µg/L	0.221	494.79	ppb	0.221	0.04%
QC value within limits for Be 313.107 Recovery = 98.96%								
Ca 317.933Radial†	21938.3	4916.4	µg/L	19.25	4916.4	ppb	19.25	0.39%
QC value within limits for Ca 317.933Radial Recovery = 98.33%								
Cd 226.502†	13449.5	490.95	µg/L	0.519	490.95	ppb	0.519	0.11%
QC value within limits for Cd 226.502 Recovery = 98.19%								
Co 228.616†	15811.0	491.84	µg/L	0.479	491.84	ppb	0.479	0.10%

QC value within limits for Co 228.616 Recovery = 98.37%

Cr 267.716†	17589.9	491.03 µg/L	0.200	491.03 ppb	0.200	0.04%

QC value within limits for Cr 267.716 Recovery = 98.21%

Cu 324.752†	128298.1	503.59 µg/L	0.979	503.59 ppb	0.979	0.19%

QC value within limits for Cu 324.752 Recovery = 100.72%

Fe 238.204 Radial†	4983.9	5044.4 µg/L	14.16	5044.4 ppb	14.16	0.28%

QC value within limits for Fe 238.204 Radial Recovery = 100.89%

K 766.490 Radial†	11341.2	4854.6 µg/L	23.76	4854.6 ppb	23.76	0.49%

QC value within limits for K 766.490 Radial Recovery = 97.09%

Mg 279.077 IEC†	1739.7	5026.4 µg/L	25.63	5026.4 ppb	25.63	0.51%

QC value within limits for Mg 279.077 IEC Recovery = 100.53%

Mn 257.610†	271768.6	495.49 µg/L	0.020	495.49 ppb	0.020	0.00%

QC value within limits for Mn 257.610 Recovery = 99.10%

Mo 202.031†	3842.0	504.18 µg/L	3.328	504.18 ppb	3.328	0.66%

QC value within limits for Mo 202.031 Recovery = 100.84%

Na 589.592 Radial†	61119.5	9780.8 µg/L	6.98	9780.8 ppb	6.98	0.07%

QC value within limits for Na 589.592 Radial Recovery = 97.81%

Ni 231.604†	7761.4	507.58 µg/L	3.413	507.58 ppb	3.413	0.67%

QC value within limits for Ni 231.604 Recovery = 101.52%

P 214.914†	2980.8	2367.9 µg/L	21.51	2367.9 ppb	21.51	0.91%

QC value within limits for P 214.914 Recovery = 94.71%

Pb 220.353†	1889.6	494.61 µg/L	4.243	494.61 ppb	4.243	0.86%

QC value within limits for Pb 220.353 Recovery = 98.92%

S 181.975 Axial†	424.4	957.13 µg/L	8.786	957.13 ppb	8.786	0.92%

QC value within limits for S 181.975 Axial Recovery = 95.71%

Sb 206.836†	1044.2	491.60 µg/L	3.543	491.60 ppb	3.543	0.72%

QC value within limits for Sb 206.836 Recovery = 98.32%

Se 196.026†	589.0	492 µg/L	5.9	492 ppb	5.9	1.19%

QC value within limits for Se 196.026 Recovery = 98.31%

SiO2 †	75781.0	5268.5 µg/L	6.66	5268.5 ppb	6.66	0.13%

QC value within limits for SiO2 Recovery = 98.52%

Si 251.611†	74517.2	2450 µg/L	17.6	2450 ppb	17.6	0.72%

QC value within limits for Si 251.611 Recovery = 98.18%

Sn 189.927†	1908.9	485.80 µg/L	4.738	485.80 ppb	4.738	0.98%

QC value within limits for Sn 189.927 Recovery = 97.16%

Sr 421.552†	110088.9	497.03 µg/L	0.502	497.03 ppb	0.502	0.10%

QC value within limits for Sr 421.552 Recovery = 99.41%

Ti 334.940†	370141.9	490.96 µg/L	0.250	490.96 ppb	0.250	0.05%

QC value within limits for Ti 334.940 Recovery = 98.19%

Tl 190.801†	1283.2	496.24 µg/L	4.088	496.24 ppb	4.088	0.82%

QC value within limits for Tl 190.801 Recovery = 99.25%

U 409.014†	7802.2	504.23 µg/L	0.610	504.23 ppb	0.610	0.12%

QC value within limits for U 409.014 Recovery = 100.85%

V 292.402†	32991.7	497.27 µg/L	0.735	497.27 ppb	0.735	0.15%

QC value within limits for V 292.402 Recovery = 99.45%

Zn 213.857†	20643.0	489.24 µg/L	0.818	489.24 ppb	0.818	0.17%

QC value within limits for Zn 213.857 Recovery = 97.85%

All analyte(s) passed QC.

Sequence No.: 64
Sample ID: CCB1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 6/23/2005 22:49:30
Data Type: Reprocessed on 6/24/2005 07:40:33
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1092093.5	1092093.5	101.48	%			22:52:14
1	Sc RADIAL	40220.3	40220.3	101	%			22:50:56
1	Y 371.029	599094.9	599094.9	101.35	%			22:52:14
1	Ag 328.068†	-613.4	19.6	0.1478	µg/L	0.1478	ppb	22:52:19
1	Al 396.153Radial†	122.2	15.1	4.4436	µg/L	4.4436	ppb	22:50:56
1	As 188.979†	-23.8	4.6	2.3167	µg/L	2.3167	ppb	22:52:40
1	B 249.677†	167.8	-60.3	-3.9921	µg/L	-3.9921	ppb	22:52:40
1	Ba 233.527†	-112.1	24.4	0.2596	µg/L	0.2596	ppb	22:52:40
1	Be 313.107†	427.0	159.8	0.1106	µg/L	0.1106	ppb	22:52:19
1	Ca 317.933Radial†	373.1	202.4	45.343	µg/L	45.343	ppb	22:51:16
1	Cd 226.502†	-17.9	6.3	0.2293	µg/L	0.2293	ppb	22:52:40
1	Co 228.616†	-123.5	23.4	0.7254	µg/L	0.7254	ppb	22:52:40
1	Cr 267.716†	83.5	11.1	0.3065	µg/L	0.3065	ppb	22:52:40
1	Cu 324.752†	5350.3	248.0	0.9713	µg/L	0.9713	ppb	22:52:19
1	Fe 238.204 Radial†	70.3	25.7	25.977	µg/L	25.977	ppb	22:51:16
1	K 766.490 Radial†	1069.6	-71.2	-30.461	µg/L	-30.461	ppb	22:50:56
1	Mg 279.077 IEC†	8.4	4.6	13.253	µg/L	13.253	ppb	22:51:16
1	Mn 257.610†	615.6	207.4	0.3801	µg/L	0.3801	ppb	22:52:40
1	Mo 202.031†	10.8	10.8	1.4175	µg/L	1.4175	ppb	22:52:40
1	Na 589.592 Radial†	747.8	-271.8	-43.513	µg/L	-43.513	ppb	22:50:56
1	Ni 231.604†	175.0	-5.9	-0.3817	µg/L	-0.3817	ppb	22:52:40
1	P 214.914†	173.2	-11.4	-9.6037	µg/L	-9.6037	ppb	22:52:40
1	Pb 220.353†	-15.8	-2.8	-0.7293	µg/L	-0.7293	ppb	22:52:40
1	S 181.975 Axial†	34.7	-6.4	-14.530	µg/L	-14.530	ppb	22:52:40
1	Sb 206.836†	49.2	13.7	6.4595	µg/L	6.4595	ppb	22:52:40
1	Se 196.026†	-28.5	4.3	3.58	µg/L	3.58	ppb	22:52:40
1	SiO2 †	2152.6	529.5	36.882	µg/L	36.882	ppb	22:52:19
1	Si 251.611†	1922.8	507.9	16.8	µg/L	16.8	ppb	22:53:47
1	Sn 189.927†	1.0	6.4	1.6263	µg/L	1.6263	ppb	22:52:40
1	Sr 421.552†	-13.5	15.8	0.0709	µg/L	0.0709	ppb	22:50:56
1	Ti 334.940†	1469.4	997.2	1.3224	µg/L	1.3224	ppb	22:52:19
1	Tl 190.801†	-34.3	2.7	1.0425	µg/L	1.0425	ppb	22:52:40
1	U 409.014†	401.0	57.6	3.7009	µg/L	3.7009	ppb	22:52:19
1	V 292.402†	-102.3	-10.8	-0.1423	µg/L	-0.1423	ppb	22:52:19
1	Zn 213.857†	492.2	-87.4	-2.0951	µg/L	-2.0951	ppb	22:52:40
2	Sc 361.383	1082724.4	1082724.4	100.61	%			22:52:45
2	Sc RADIAL	40312.7	40312.7	102	%			22:51:21
2	Y 371.029	594413.6	594413.6	100.55	%			22:52:45
2	Ag 328.068†	-629.0	-1.2	-0.0071	µg/L	-0.0071	ppb	22:52:50
2	Al 396.153Radial†	89.5	-17.3	-5.1990	µg/L	-5.1990	ppb	22:51:21
2	As 188.979†	-28.9	-0.7	-0.3257	µg/L	-0.3257	ppb	22:53:10
2	B 249.677†	174.7	-52.0	-3.4440	µg/L	-3.4440	ppb	22:53:10
2	Ba 233.527†	-110.2	25.3	0.2698	µg/L	0.2698	ppb	22:53:10
2	Be 313.107†	507.6	243.6	0.1681	µg/L	0.1681	ppb	22:52:50
2	Ca 317.933Radial†	273.0	103.1	23.115	µg/L	23.115	ppb	22:51:41
2	Cd 226.502†	-28.4	-4.3	-0.1554	µg/L	-0.1554	ppb	22:53:10
2	Co 228.616†	-131.2	14.7	0.4544	µg/L	0.4544	ppb	22:53:10
2	Cr 267.716†	81.5	9.8	0.2725	µg/L	0.2725	ppb	22:53:10
2	Cu 324.752†	5193.3	137.6	0.5378	µg/L	0.5378	ppb	22:52:50
2	Fe 238.204 Radial†	50.2	5.7	5.8019	µg/L	5.8019	ppb	22:51:41
2	K 766.490 Radial†	1126.5	-17.6	-7.5265	µg/L	-7.5265	ppb	22:51:21
2	Mg 279.077 IEC†	-3.1	-6.7	-19.390	µg/L	-19.390	ppb	22:51:41
2	Mn 257.610†	521.1	118.6	0.2166	µg/L	0.2166	ppb	22:53:10
2	Mo 202.031†	5.2	5.3	0.6992	µg/L	0.6992	ppb	22:53:10
2	Na 589.592 Radial†	747.2	-274.1	-43.871	µg/L	-43.871	ppb	22:51:21
2	Ni 231.604†	180.0	0.6	0.0435	µg/L	0.0435	ppb	22:53:10
2	P 214.914†	186.0	2.9	2.2529	µg/L	2.2529	ppb	22:53:10
2	Pb 220.353†	-8.2	4.6	1.1994	µg/L	1.1994	ppb	22:53:10
2	S 181.975 Axial†	34.9	-5.9	-13.489	µg/L	-13.489	ppb	22:53:10

2	Sb 206.836†	43.1	8.1	3.8158 µg/L	3.8158 ppb	22:53:10
2	Se 196.026†	-36.9	-4.3	-3.58 µg/L	-3.58 ppb	22:53:10
2	SiO2 †	1935.5	332.1	23.127 µg/L	23.127 ppb	22:52:50
2	Si 251.611†	1502.4	106.5	3.50 µg/L	3.50 ppb	22:53:52
2	Sn 189.927†	6.5	11.8	3.0109 µg/L	3.0109 ppb	22:53:10
2	Sr 421.552†	29.4	58.0	0.2616 µg/L	0.2616 ppb	22:51:21
2	Ti 334.940†	1407.1	947.8	1.2565 µg/L	1.2565 ppb	22:52:50
2	Tl 190.801†	-39.6	-2.9	-1.0924 µg/L	-1.0924 ppb	22:53:10
2	U 409.014†	393.3	53.4	3.4388 µg/L	3.4388 ppb	22:52:50
2	V 292.402†	-60.1	30.3	0.4610 µg/L	0.4610 ppb	22:52:50
2	Zn 213.857†	471.8	-103.6	-2.4790 µg/L	-2.4790 ppb	22:53:10
3	Sc 361.383	1085471.5	1085471.5	100.86 %		22:53:16
3	Sc RADIAL	40335.2	40335.2	102 %		22:51:46
3	Y 371.029	595681.5	595681.5	100.77 %		22:53:16
3	Ag 328.068†	-595.8	33.3	0.2466 µg/L	0.2466 ppb	22:53:21
3	Al 396.153Radial†	107.1	-0.1	-0.0655 µg/L	-0.0655 ppb	22:51:46
3	As 188.979†	-19.5	8.7	4.4097 µg/L	4.4097 ppb	22:53:41
3	B 249.677†	173.4	-53.8	-3.5568 µg/L	-3.5568 ppb	22:53:41
3	Ba 233.527†	-123.8	12.1	0.1292 µg/L	0.1292 ppb	22:53:41
3	Be 313.107†	354.9	90.9	0.0631 µg/L	0.0631 ppb	22:53:21
3	Ca 317.933Radial†	299.6	129.1	28.929 µg/L	28.929 ppb	22:52:06
3	Cd 226.502†	-23.2	0.9	0.0336 µg/L	0.0336 ppb	22:53:41
3	Co 228.616†	-142.7	3.6	0.1131 µg/L	0.1131 ppb	22:53:41
3	Cr 267.716†	77.9	6.0	0.1659 µg/L	0.1659 ppb	22:53:41
3	Cu 324.752†	5111.8	43.8	0.1692 µg/L	0.1692 ppb	22:53:21
3	Fe 238.204 Radial†	55.7	11.1	11.260 µg/L	11.260 ppb	22:52:06
3	K 766.490 Radial†	1135.6	-9.3	-3.9613 µg/L	-3.9613 ppb	22:51:46
3	Mg 279.077 IEC†	9.4	5.6	16.221 µg/L	16.221 ppb	22:52:06
3	Mn 257.610†	545.2	141.3	0.2580 µg/L	0.2580 ppb	22:53:41
3	Mo 202.031†	7.1	7.2	0.9495 µg/L	0.9495 ppb	22:53:41
3	Na 589.592 Radial†	755.2	-266.7	-42.682 µg/L	-42.682 ppb	22:51:46
3	Ni 231.604†	174.0	-5.8	-0.3735 µg/L	-0.3735 ppb	22:53:41
3	P 214.914†	173.5	-10.1	-8.3603 µg/L	-8.3603 ppb	22:53:41
3	Pb 220.353†	-9.4	3.4	0.8964 µg/L	0.8964 ppb	22:53:41
3	S 181.975 Axial†	33.4	-7.5	-16.925 µg/L	-16.925 ppb	22:53:41
3	Sb 206.836†	45.6	10.4	4.9187 µg/L	4.9187 ppb	22:53:41
3	Se 196.026†	-18.4	14.2	11.8 µg/L	11.8 ppb	22:53:41
3	SiO2 †	1507.7	-97.0	-6.7898 µg/L	-6.7898 ppb	22:53:21
3	Si 251.611†	1524.3	124.3	4.09 µg/L	4.09 ppb	22:53:57
3	Sn 189.927†	-3.8	1.7	0.4257 µg/L	0.4257 ppb	22:53:41
3	Sr 421.552†	-9.8	19.5	0.0878 µg/L	0.0878 ppb	22:51:46
3	Ti 334.940†	662.2	205.7	0.2719 µg/L	0.2719 ppb	22:53:21
3	Tl 190.801†	-38.2	-1.4	-0.5197 µg/L	-0.5197 ppb	22:53:41
3	U 409.014†	392.4	51.5	3.3140 µg/L	3.3140 ppb	22:53:21
3	V 292.402†	-86.3	4.4	0.0790 µg/L	0.0790 ppb	22:53:21
3	Zn 213.857†	464.6	-111.9	-2.6774 µg/L	-2.6774 ppb	22:53:41

Mean Data: CCB1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1086763.1	100.98	%	0.448				0.44%
Sc RADIAL	40289.4	102	%	0.2				0.15%
Y 371.029	596396.7	100.89	%	0.410				0.41%
Ag 328.068†	17.3	0.1291	µg/L	0.12785	0.1291	ppb	0.12785	99.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.8	-0.2736	µg/L	4.82465	-0.2736	ppb	4.82465	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.2	2.1336	µg/L	2.37298	2.1336	ppb	2.37298	111.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-55.4	-3.6643	µg/L	0.28940	-3.6643	ppb	0.28940	7.90%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	20.6	0.2195	µg/L	0.07839	0.2195	ppb	0.07839	35.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	164.8	0.1139	µg/L	0.05256	0.1139	ppb	0.05256	46.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	144.8	32.462	µg/L	11.5274	32.462	ppb	11.5274	35.51%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.0	0.0358	µg/L	0.19238	0.0358	ppb	0.19238	537.20%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	13.9	0.4310	µg/L	0.30681	0.4310	ppb	0.30681	71.19%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              9.0      0.2483 µg/L       0.07334      0.2483 ppb       0.07334  29.54%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            143.1      0.5594 µg/L       0.40153      0.5594 ppb       0.40153  71.77%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†      14.2      14.346 µg/L       10.4358      14.346 ppb       10.4358  72.74%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†      -32.7     -13.983 µg/L       14.3814     -13.983 ppb       14.3814 102.85%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          1.2      3.3613 µg/L      19.75906      3.3613 ppb      19.75906 587.85%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†            155.8      0.2849 µg/L       0.08503      0.2849 ppb       0.08503  29.84%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              7.8      1.0221 µg/L       0.36461      1.0221 ppb       0.36461  35.67%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†    -270.9     -43.355 µg/L        0.6097     -43.355 ppb        0.6097   1.41%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -3.7      -0.2372 µg/L       0.24315      -0.2372 ppb      0.24315 102.50%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -6.2      -5.2370 µg/L       6.51621      -5.2370 ppb      6.51621 124.43%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              1.8      0.4555 µg/L       1.03724      0.4555 ppb       1.03724 227.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†        -6.6     -14.981 µg/L        1.7617     -14.981 ppb        1.7617  11.76%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             10.7      5.0646 µg/L       1.32789      5.0646 ppb       1.32789  26.22%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              4.7       3.94 µg/L         7.703        3.94 ppb         7.703 195.73%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2 †                 254.9      17.740 µg/L       22.3289      17.740 ppb       22.3289 125.87%
   QC value within limits for SiO2   Recovery = Not calculated
Si 251.611†            246.2       8.12 µg/L         7.489        8.12 ppb         7.489  92.23%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              6.6      1.6876 µg/L       1.29372      1.6876 ppb       1.29372  76.66%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             31.1      0.1401 µg/L       0.10556      0.1401 ppb       0.10556  75.36%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            716.9      0.9503 µg/L       0.58844      0.9503 ppb       0.58844  61.92%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -0.5     -0.1899 µg/L       1.10503     -0.1899 ppb       1.10503 581.97%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              54.2      3.4846 µg/L       0.19747      3.4846 ppb       0.19747   5.67%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               8.0      0.1325 µg/L       0.30519      0.1325 ppb       0.30519 230.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†           -101.0     -2.4172 µg/L       0.29601     -2.4172 ppb       0.29601  12.25%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 65
Sample ID: 1200870309|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 6/23/2005 22:55:45
Data Type: Reprocessed on 6/24/2005 07:40:35
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870309|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1086500.4	1086500.4	100.96	%			22:58:31
1	Sc RADIAL	40266.5	40266.5	102	%			22:57:13
1	Y 371.029	595792.3	595792.3	100.79	%			22:58:31
1	Ag 328.068†	-575.0	54.5	0.4036	µg/L	0.4036	ppb	22:58:36
1	Al 396.153Radial†	73.9	-32.6	-9.7534	µg/L	-9.7534	ppb	22:57:13
1	As 188.979†	-24.5	3.7	1.8983	µg/L	1.8983	ppb	22:58:57
1	B 249.677†	163.4	-63.8	-4.2217	µg/L	-4.2217	ppb	22:58:57
1	Ba 233.527†	-107.5	28.4	0.3022	µg/L	0.3022	ppb	22:58:57
1	Be 313.107†	362.2	97.8	0.0684	µg/L	0.0684	ppb	22:58:36
1	Ca 317.933Radial†	404.6	233.0	52.221	µg/L	52.221	ppb	22:57:33
1	Cd 226.502†	-29.6	-5.4	-0.1967	µg/L	-0.1967	ppb	22:58:57
1	Co 228.616†	-139.4	7.0	0.2163	µg/L	0.2163	ppb	22:58:57
1	Cr 267.716†	88.7	16.7	0.4610	µg/L	0.4610	ppb	22:58:57
1	Cu 324.752†	5090.5	17.8	0.0654	µg/L	0.0654	ppb	22:58:36
1	Fe 238.204 Radial†	63.3	18.7	18.931	µg/L	18.931	ppb	22:57:33
1	K 766.490 Radial†	1093.6	-48.7	-20.862	µg/L	-20.862	ppb	22:57:13
1	Mg 279.077 IEC†	11.8	8.0	22.963	µg/L	22.963	ppb	22:57:33
1	Mn 257.610†	660.0	254.5	0.4647	µg/L	0.4647	ppb	22:58:57
1	Mo 202.031†	6.4	6.5	0.8478	µg/L	0.8478	ppb	22:58:57
1	Na 589.592 Radial†	767.4	-253.3	-40.546	µg/L	-40.546	ppb	22:57:13
1	Ni 231.604†	186.5	6.4	0.4180	µg/L	0.4180	ppb	22:58:57
1	P 214.914†	183.4	-0.4	-0.4150	µg/L	-0.4150	ppb	22:58:57
1	Pb 220.353†	-17.8	-4.9	-1.2792	µg/L	-1.2792	ppb	22:58:57
1	S 181.975 Axial†	32.0	-8.9	-20.147	µg/L	-20.147	ppb	22:58:57
1	Sb 206.836†	40.2	5.1	2.3983	µg/L	2.3983	ppb	22:58:57
1	Se 196.026†	-29.5	3.1	2.63	µg/L	2.63	ppb	22:58:57
1	SiO2 †	2015.1	404.2	28.164	µg/L	28.164	ppb	22:58:36
1	Si 251.611†	2046.0	639.7	21.1	µg/L	21.1	ppb	23:00:04
1	Sn 189.927†	-4.5	0.9	0.2370	µg/L	0.2370	ppb	22:58:57
1	Sr 421.552†	-23.1	6.4	0.0281	µg/L	0.0281	ppb	22:57:13
1	Ti 334.940†	736.8	278.9	0.3681	µg/L	0.3681	ppb	22:58:36
1	Tl 190.801†	-35.4	1.5	0.5767	µg/L	0.5767	ppb	22:58:57
1	U 409.014†	436.5	94.8	6.0979	µg/L	6.0979	ppb	22:58:36
1	V 292.402†	-80.3	10.5	0.1721	µg/L	0.1721	ppb	22:58:36
1	Zn 213.857†	644.0	65.4	1.5568	µg/L	1.5568	ppb	22:58:57
2	Sc 361.383	1097647.3	1097647.3	101.99	%			22:59:02
2	Sc RADIAL	40123.4	40123.4	101	%			22:57:38
2	Y 371.029	601582.9	601582.9	101.77	%			22:59:02
2	Ag 328.068†	-638.5	-2.0	-0.0110	µg/L	-0.0110	ppb	22:59:07
2	Al 396.153Radial†	110.6	4.0	1.1487	µg/L	1.1487	ppb	22:57:38
2	As 188.979†	-26.3	2.2	1.1101	µg/L	1.1101	ppb	22:59:27
2	B 249.677†	156.3	-72.4	-4.7971	µg/L	-4.7971	ppb	22:59:27
2	Ba 233.527†	-112.0	25.1	0.2660	µg/L	0.2660	ppb	22:59:27
2	Be 313.107†	283.5	16.9	0.0115	µg/L	0.0115	ppb	22:59:07
2	Ca 317.933Radial†	360.6	190.9	42.759	µg/L	42.759	ppb	22:57:58
2	Cd 226.502†	-24.7	-0.3	-0.0111	µg/L	-0.0111	ppb	22:59:27
2	Co 228.616†	-123.2	24.3	0.7580	µg/L	0.7580	ppb	22:59:27
2	Cr 267.716†	77.2	4.5	0.1247	µg/L	0.1247	ppb	22:59:27
2	Cu 324.752†	5019.1	-103.4	-0.4052	µg/L	-0.4052	ppb	22:59:07
2	Fe 238.204 Radial†	61.4	17.0	17.243	µg/L	17.243	ppb	22:57:58
2	K 766.490 Radial†	1181.6	42.0	17.996	µg/L	17.996	ppb	22:57:38
2	Mg 279.077 IEC†	14.4	10.5	30.416	µg/L	30.416	ppb	22:57:58
2	Mn 257.610†	601.1	190.1	0.3479	µg/L	0.3479	ppb	22:59:27
2	Mo 202.031†	4.5	4.6	0.6014	µg/L	0.6014	ppb	22:59:27
2	Na 589.592 Radial†	896.6	-122.9	-19.677	µg/L	-19.677	ppb	22:57:38
2	Ni 231.604†	181.6	-0.2	-0.0137	µg/L	-0.0137	ppb	22:59:27
2	P 214.914†	181.3	-4.3	-3.5062	µg/L	-3.5062	ppb	22:59:27
2	Pb 220.353†	-5.3	7.6	1.9867	µg/L	1.9867	ppb	22:59:27
2	S 181.975 Axial†	34.3	-7.0	-15.801	µg/L	-15.801	ppb	22:59:27

2	Sb 206.836†	39.6	4.1	1.9143 µg/L	1.9143 ppb	22:59:27
2	Se 196.026†	-26.2	6.7	5.56 µg/L	5.56 ppb	22:59:27
2	SiO2 †	2003.4	372.5	25.964 µg/L	25.964 ppb	22:59:07
2	Si 251.611†	2048.1	621.2	20.5 µg/L	20.5 ppb	23:00:09
2	Sn 189.927†	-8.1	-2.5	-0.6296 µg/L	-0.6296 ppb	22:59:27
2	Sr 421.552†	-8.5	20.7	0.0929 µg/L	0.0929 ppb	22:57:38
2	Ti 334.940†	757.0	291.3	0.3878 µg/L	0.3878 ppb	22:59:07
2	Tl 190.801†	-45.3	-7.9	-3.0411 µg/L	-3.0411 ppb	22:59:27
2	U 409.014†	335.1	-9.0	-0.5808 µg/L	-0.5808 ppb	22:59:07
2	V 292.402†	-87.6	4.1	0.0670 µg/L	0.0670 ppb	22:59:07
2	Zn 213.857†	648.8	63.6	1.5187 µg/L	1.5187 ppb	22:59:27
3	Sc 361.383	1094962.4	1094962.4	101.74 %		22:59:33
3	Sc RADIAL	40592.5	40592.5	102 %		22:58:03
3	Y 371.029	600777.3	600777.3	101.63 %		22:59:33
3	Ag 328.068†	-615.1	19.5	0.1471 µg/L	0.1471 ppb	22:59:38
3	Al 396.153Radial†	104.1	-3.6	-1.0801 µg/L	-1.0801 ppb	22:58:03
3	As 188.979†	-31.9	-3.4	-1.6896 µg/L	-1.6896 ppb	22:59:58
3	B 249.677†	143.4	-84.7	-5.6077 µg/L	-5.6077 ppb	22:59:58
3	Ba 233.527†	-115.5	21.4	0.2270 µg/L	0.2270 ppb	22:59:58
3	Be 313.107†	322.2	55.7	0.0384 µg/L	0.0384 ppb	22:59:38
3	Ca 317.933Radial†	329.8	156.7	35.109 µg/L	35.109 ppb	22:58:23
3	Cd 226.502†	-20.3	4.0	0.1449 µg/L	0.1449 ppb	22:59:58
3	Co 228.616†	-135.9	11.5	0.3580 µg/L	0.3580 ppb	22:59:58
3	Cr 267.716†	81.7	9.1	0.2552 µg/L	0.2552 ppb	22:59:58
3	Cu 324.752†	5111.5	-0.5	-0.0014 µg/L	-0.0014 ppb	22:59:38
3	Fe 238.204 Radial†	67.3	22.1	22.342 µg/L	22.342 ppb	22:58:23
3	K 766.490 Radial†	1105.8	-45.5	-19.464 µg/L	-19.464 ppb	22:58:03
3	Mg 279.077 IEC†	7.9	4.1	11.701 µg/L	11.701 ppb	22:58:23
3	Mn 257.610†	611.5	201.7	0.3699 µg/L	0.3699 ppb	22:59:58
3	Mo 202.031†	-0.2	-0.0	-0.0022 µg/L	-0.0022 ppb	22:59:58
3	Na 589.592 Radial†	849.3	-179.4	-28.710 µg/L	-28.710 ppb	22:58:03
3	Ni 231.604†	179.1	-2.3	-0.1508 µg/L	-0.1508 ppb	22:59:58
3	P 214.914†	183.4	-1.8	-1.5142 µg/L	-1.5142 ppb	22:59:58
3	Pb 220.353†	-7.5	5.4	1.4211 µg/L	1.4211 ppb	22:59:58
3	S 181.975 Axial†	31.6	-9.6	-21.750 µg/L	-21.750 ppb	22:59:58
3	Sb 206.836†	39.4	3.9	1.8526 µg/L	1.8526 ppb	22:59:58
3	Se 196.026†	-31.5	1.4	1.18 µg/L	1.18 ppb	22:59:58
3	SiO2 †	2003.8	377.7	26.338 µg/L	26.338 ppb	22:59:38
3	Si 251.611†	2035.3	613.5	20.3 µg/L	20.3 ppb	23:00:14
3	Sn 189.927†	-0.4	5.1	1.2878 µg/L	1.2878 ppb	22:59:58
3	Sr 421.552†	5.4	34.4	0.1546 µg/L	0.1546 ppb	22:58:03
3	Ti 334.940†	663.0	200.8	0.2670 µg/L	0.2670 ppb	22:59:38
3	Tl 190.801†	-37.8	-0.7	-0.2572 µg/L	-0.2572 ppb	22:59:58
3	U 409.014†	347.6	4.1	0.2602 µg/L	0.2602 ppb	22:59:38
3	V 292.402†	-90.3	1.2	0.0194 µg/L	0.0194 ppb	22:59:38
3	Zn 213.857†	642.9	59.3	1.4161 µg/L	1.4161 ppb	22:59:58

Mean Data: 1200870309|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1093036.7	101.56	%	0.541				0.53%
Sc RADIAL	40327.4	102	%	0.6				0.60%
Y 371.029	599384.2	101.39	%	0.531				0.52%
Ag 328.068†	24.0	0.1799	µg/L	0.20922	0.1799	ppb	0.20922	116.31%
Al 396.153Radial†	-10.8	-3.2283	µg/L	5.75976	-3.2283	ppb	5.75976	178.42%
As 188.979†	0.9	0.4396	µg/L	1.88560	0.4396	ppb	1.88560	428.94%
B 249.677†	-73.6	-4.8755	µg/L	0.69630	-4.8755	ppb	0.69630	14.28%
Ba 233.527†	25.0	0.2651	µg/L	0.03759	0.2651	ppb	0.03759	14.18%
Be 313.107†	56.8	0.0394	µg/L	0.02845	0.0394	ppb	0.02845	72.14%
Ca 317.933Radial†	193.6	43.363	µg/L	8.5720	43.363	ppb	8.5720	19.77%
Cd 226.502†	-0.6	-0.0209	µg/L	0.17101	-0.0209	ppb	0.17101	817.05%
Co 228.616†	14.3	0.4441	µg/L	0.28095	0.4441	ppb	0.28095	63.26%
Cr 267.716†	10.1	0.2803	µg/L	0.16957	0.2803	ppb	0.16957	60.50%
Cu 324.752†	-28.7	-0.1138	µg/L	0.25462	-0.1138	ppb	0.25462	223.81%
Fe 238.204 Radial†	19.3	19.505	µg/L	2.5977	19.505	ppb	2.5977	13.32%
K 766.490 Radial†	-17.4	-7.4434	µg/L	22.04206	-7.4434	ppb	22.04206	296.13%
Mg 279.077 IEC†	7.5	21.693	µg/L	9.4223	21.693	ppb	9.4223	43.43%
Mn 257.610†	215.4	0.3942	µg/L	0.06203	0.3942	ppb	0.06203	15.74%
Mo 202.031†	3.7	0.4823	µg/L	0.43733	0.4823	ppb	0.43733	90.67%
Na 589.592 Radial†	-185.2	-29.645	µg/L	10.4658	-29.645	ppb	10.4658	35.30%

Ni 231.604†	1.3	0.0845 µg/L	0.29685	0.0845 ppb	0.29685	351.21%
P 214.914†	-2.2	-1.8118 µg/L	1.56695	-1.8118 ppb	1.56695	86.49%
Pb 220.353†	2.7	0.7095 µg/L	1.74537	0.7095 ppb	1.74537	245.99%
S 181.975 Axial†	-8.5	-19.233 µg/L	3.0780	-19.233 ppb	3.0780	16.00%
Sb 206.836†	4.4	2.0551 µg/L	0.29886	2.0551 ppb	0.29886	14.54%
Se 196.026†	3.7	3.12 µg/L	2.233	3.12 ppb	2.233	71.54%
SiO2 †	384.8	26.822 µg/L	1.1768	26.822 ppb	1.1768	4.39%
Si 251.611†	624.8	20.6 µg/L	0.44	20.6 ppb	0.44	2.13%
Sn 189.927†	1.2	0.2984 µg/L	0.96020	0.2984 ppb	0.96020	321.76%
Sr 421.552†	20.5	0.0919 µg/L	0.06326	0.0919 ppb	0.06326	68.85%
Ti 334.940†	257.0	0.3410 µg/L	0.06480	0.3410 ppb	0.06480	19.01%
Tl 190.801†	-2.4	-0.9072 µg/L	1.89444	-0.9072 ppb	1.89444	208.82%
U 409.014†	30.0	1.9258 µg/L	3.63757	1.9258 ppb	3.63757	188.89%
V 292.402†	5.3	0.0862 µg/L	0.07816	0.0862 ppb	0.07816	90.72%
Zn 213.857†	62.8	1.4972 µg/L	0.07276	1.4972 ppb	0.07276	4.86%

Sequence No.: 66
Sample ID: 1200870310|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 6/23/2005 23:02:03
Data Type: Reprocessed on 6/24/2005 07:40:38
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870310|435151|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1078992.7	1078992.7	100.26	%			23:04:47
1	Sc RADIAL	39679.2	39679.2	100	%			23:03:28
1	Y 371.029	587062.5	587062.5	99.310	%			23:04:47
1	Ag 328.068†	68314.4	68761.9	507.83	µg/L	507.83	ppb	23:04:52
1	Al 396.153Radial†	17437.8	17319.3	5136.3	µg/L	5136.3	ppb	23:03:28
1	As 188.979†	980.6	1006.1	514.87	µg/L	514.87	ppb	23:05:13
1	B 249.677†	7792.1	7546.3	499.93	µg/L	499.93	ppb	23:04:52
1	Ba 233.527†	48078.7	48089.3	510.88	µg/L	510.88	ppb	23:04:52
1	Be 313.107†	744556.0	742370.1	510.20	µg/L	510.20	ppb	23:04:47
1	Ca 317.933Radial†	23298.1	23115.2	5180.1	µg/L	5180.1	ppb	23:03:48
1	Cd 226.502†	13717.2	13705.7	500.29	µg/L	500.29	ppb	23:04:52
1	Co 228.616†	16197.3	16300.5	507.07	µg/L	507.07	ppb	23:04:52
1	Cr 267.716†	18249.2	18130.9	506.13	µg/L	506.13	ppb	23:04:52
1	Cu 324.752†	137821.4	132440.6	519.85	µg/L	519.85	ppb	23:04:52
1	Fe 238.204 Radial†	5217.0	5169.5	5232.2	µg/L	5232.2	ppb	23:03:48
1	K 766.490 Radial†	13047.3	11911.9	5098.9	µg/L	5098.9	ppb	23:03:28
1	Mg 279.077 IEC†	1811.2	1806.1	5218.2	µg/L	5218.2	ppb	23:03:48
1	Mn 257.610†	281181.0	280054.7	510.60	µg/L	510.60	ppb	23:04:47
1	Mo 202.031†	3946.6	3936.6	516.59	µg/L	516.59	ppb	23:05:13
1	Na 589.592 Radial†	33278.6	32244.6	5159.3	µg/L	5159.3	ppb	23:03:28
1	Ni 231.604†	8054.2	7855.0	513.72	µg/L	513.72	ppb	23:05:13
1	P 214.914†	848.7	664.5	459.03	µg/L	459.03	ppb	23:05:13
1	Pb 220.353†	1930.4	1938.2	507.36	µg/L	507.36	ppb	23:05:13
1	S 181.975 Axial†	2222.3	2176.0	4932.9	µg/L	4932.9	ppb	23:05:13
1	Sb 206.836†	1156.4	1118.6	526.59	µg/L	526.59	ppb	23:05:13
1	Se 196.026†	551.0	582.0	486	µg/L	486	ppb	23:05:13
1	SiO2 †	149203.8	147226.3	10250	µg/L	10250	ppb	23:04:52
1	Si 251.611†	145964.7	144200.4	4760	µg/L	4760	ppb	23:06:21
1	Sn 189.927†	1983.0	1983.3	504.73	µg/L	504.73	ppb	23:05:13
1	Sr 421.552†	114337.9	114280.9	515.96	µg/L	515.96	ppb	23:03:28
1	Ti 334.940†	381226.0	379789.5	503.76	µg/L	503.76	ppb	23:04:47
1	Tl 190.801†	1257.2	1290.5	499.11	µg/L	499.11	ppb	23:05:13
1	U 409.014†	8289.9	7930.9	512.56	µg/L	512.56	ppb	23:04:52
1	V 292.402†	33797.4	33800.0	509.46	µg/L	509.46	ppb	23:04:52
1	Zn 213.857†	21357.5	20729.8	491.23	µg/L	491.23	ppb	23:04:52
2	Sc 361.383	1088929.7	1088929.7	101.18	%			23:05:19
2	Sc RADIAL	39223.3	39223.3	98.9	%			23:03:53
2	Y 371.029	592406.3	592406.3	100.21	%			23:05:19
2	Ag 328.068†	68320.9	68146.5	503.30	µg/L	503.30	ppb	23:05:24
2	Al 396.153Radial†	17164.9	17246.0	5114.6	µg/L	5114.6	ppb	23:03:53
2	As 188.979†	993.7	1010.1	516.86	µg/L	516.86	ppb	23:05:44
2	B 249.677†	7803.3	7486.4	495.95	µg/L	495.95	ppb	23:05:24
2	Ba 233.527†	48158.3	47730.3	507.07	µg/L	507.07	ppb	23:05:24
2	Be 313.107†	746879.5	737889.5	507.12	µg/L	507.12	ppb	23:05:19
2	Ca 317.933Radial†	23244.5	23331.5	5228.5	µg/L	5228.5	ppb	23:04:13
2	Cd 226.502†	13762.8	13625.9	497.38	µg/L	497.38	ppb	23:05:24
2	Co 228.616†	16196.4	16152.2	502.44	µg/L	502.44	ppb	23:05:24
2	Cr 267.716†	18239.1	17954.7	501.21	µg/L	501.21	ppb	23:05:24
2	Cu 324.752†	137668.0	131034.6	514.33	µg/L	514.33	ppb	23:05:24
2	Fe 238.204 Radial†	5196.0	5208.8	5271.9	µg/L	5271.9	ppb	23:04:13
2	K 766.490 Radial†	12985.3	12000.7	5137.0	µg/L	5137.0	ppb	23:03:53
2	Mg 279.077 IEC†	1801.5	1817.4	5250.6	µg/L	5250.6	ppb	23:04:13
2	Mn 257.610†	281627.1	277936.4	506.75	µg/L	506.75	ppb	23:05:19
2	Mo 202.031†	3951.9	3905.9	512.57	µg/L	512.57	ppb	23:05:44
2	Na 589.592 Radial†	32813.9	32161.3	5146.0	µg/L	5146.0	ppb	23:03:53
2	Ni 231.604†	8101.3	7828.3	511.97	µg/L	511.97	ppb	23:05:44
2	P 214.914†	840.6	648.7	446.90	µg/L	446.90	ppb	23:05:44
2	Pb 220.353†	1935.1	1925.3	503.97	µg/L	503.97	ppb	23:05:44
2	S 181.975 Axial†	2232.4	2165.7	4909.5	µg/L	4909.5	ppb	23:05:44

2	Sb 206.836†	1161.7	1113.3	524.15 µg/L	524.15 ppb	23:05:44
2	Se 196.026†	554.2	580.1	484 µg/L	484 ppb	23:05:44
2	SiO2 †	149194.2	145858.7	10155 µg/L	10155 ppb	23:05:24
2	Si 251.611†	143889.3	140820.7	4640 µg/L	4640 ppb	23:06:27
2	Sn 189.927†	1998.8	1980.8	504.12 µg/L	504.12 ppb	23:05:44
2	Sr 421.552†	112748.1	114001.8	514.70 µg/L	514.70 ppb	23:03:53
2	Ti 334.940†	383011.1	378083.9	501.50 µg/L	501.50 ppb	23:05:19
2	Tl 190.801†	1265.8	1287.5	497.95 µg/L	497.95 ppb	23:05:44
2	U 409.014†	8377.4	7942.0	513.24 µg/L	513.24 ppb	23:05:24
2	V 292.402†	33799.1	33494.1	504.86 µg/L	504.86 ppb	23:05:24
2	Zn 213.857†	21370.1	20547.8	486.88 µg/L	486.88 ppb	23:05:24
3	Sc 361.383	1088622.2	1088622.2	101.15 %		23:05:50
3	Sc RADIAL	39920.8	39920.8	101 %		23:04:19
3	Y 371.029	592607.6	592607.6	100.25 %		23:05:50
3	Ag 328.068†	68131.9	67978.7	502.06 µg/L	502.06 ppb	23:05:55
3	Al 396.153Radial†	17393.3	17169.7	5091.8 µg/L	5091.8 ppb	23:04:19
3	As 188.979†	983.5	1000.3	511.89 µg/L	511.89 ppb	23:06:16
3	B 249.677†	7760.6	7446.4	493.31 µg/L	493.31 ppb	23:05:55
3	Ba 233.527†	48145.1	47730.8	507.07 µg/L	507.07 ppb	23:05:55
3	Be 313.107†	750280.8	741460.6	509.57 µg/L	509.57 ppb	23:05:50
3	Ca 317.933Radial†	23378.6	23054.2	5166.4 µg/L	5166.4 ppb	23:04:39
3	Cd 226.502†	13697.7	13565.4	495.17 µg/L	495.17 ppb	23:05:55
3	Co 228.616†	16205.0	16165.3	502.85 µg/L	502.85 ppb	23:05:55
3	Cr 267.716†	18224.5	17945.4	500.95 µg/L	500.95 ppb	23:05:55
3	Cu 324.752†	137237.8	130647.7	512.82 µg/L	512.82 ppb	23:05:55
3	Fe 238.204 Radial†	5228.6	5149.4	5211.8 µg/L	5211.8 ppb	23:04:39
3	K 766.490 Radial†	13034.2	11820.0	5059.6 µg/L	5059.6 ppb	23:04:19
3	Mg 279.077 IEC†	1823.8	1807.8	5222.8 µg/L	5222.8 ppb	23:04:39
3	Mn 257.610†	283079.2	279450.5	509.50 µg/L	509.50 ppb	23:05:50
3	Mo 202.031†	3953.7	3908.7	512.94 µg/L	512.94 ppb	23:06:16
3	Na 589.592 Radial†	33108.3	31874.2	5100.0 µg/L	5100.0 ppb	23:04:19
3	Ni 231.604†	8061.0	7790.7	509.51 µg/L	509.51 ppb	23:06:16
3	P 214.914†	833.9	642.3	441.93 µg/L	441.93 ppb	23:06:16
3	Pb 220.353†	1927.7	1918.5	502.19 µg/L	502.19 ppb	23:06:16
3	S 181.975 Axial†	2219.8	2153.9	4882.9 µg/L	4882.9 ppb	23:06:16
3	Sb 206.836†	1153.8	1105.8	520.61 µg/L	520.61 ppb	23:06:16
3	Se 196.026†	544.3	570.4	476 µg/L	476 ppb	23:06:16
3	SiO2 †	148927.9	145637.1	10139 µg/L	10139 ppb	23:05:55
3	Si 251.611†	146574.1	143515.1	4730 µg/L	4730 ppb	23:06:32
3	Sn 189.927†	1984.3	1967.0	500.61 µg/L	500.61 ppb	23:06:16
3	Sr 421.552†	113742.1	112997.7	510.16 µg/L	510.16 ppb	23:04:19
3	Ti 334.940†	384889.4	380047.6	504.11 µg/L	504.11 ppb	23:05:50
3	Tl 190.801†	1264.4	1286.5	497.57 µg/L	497.57 ppb	23:06:16
3	U 409.014†	8311.9	7879.5	509.23 µg/L	509.23 ppb	23:05:55
3	V 292.402†	33787.4	33491.9	504.82 µg/L	504.82 ppb	23:05:55
3	Zn 213.857†	21315.5	20499.8	485.76 µg/L	485.76 ppb	23:05:55

Mean Data: 1200870310|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1085514.8	100.87	%	0.525				0.52%
Sc RADIAL	39607.8	99.9	%	0.89				0.89%
Y 371.029	590692.1	99.924	%	0.5320				0.53%
Ag 328.068†	68295.7	504.40	µg/L	3.039	504.40	ppb	3.039	0.60%
Al 396.153Radial†	17245.0	5114.2	µg/L	22.22	5114.2	ppb	22.22	0.43%
As 188.979†	1005.5	514.54	µg/L	2.503	514.54	ppb	2.503	0.49%
B 249.677†	7493.0	496.40	µg/L	3.334	496.40	ppb	3.334	0.67%
Ba 233.527†	47850.1	508.34	µg/L	2.201	508.34	ppb	2.201	0.43%
Be 313.107†	740573.4	508.97	µg/L	1.627	508.97	ppb	1.627	0.32%
Ca 317.933Radial†	23167.0	5191.7	µg/L	32.65	5191.7	ppb	32.65	0.63%
Cd 226.502†	13632.3	497.61	µg/L	2.570	497.61	ppb	2.570	0.52%
Co 228.616†	16206.0	504.12	µg/L	2.559	504.12	ppb	2.559	0.51%
Cr 267.716†	18010.3	502.77	µg/L	2.918	502.77	ppb	2.918	0.58%
Cu 324.752†	131374.3	515.67	µg/L	3.705	515.67	ppb	3.705	0.72%
Fe 238.204 Radial†	5175.9	5238.6	µg/L	30.53	5238.6	ppb	30.53	0.58%
K 766.490 Radial†	11910.9	5098.5	µg/L	38.68	5098.5	ppb	38.68	0.76%
Mg 279.077 IEC†	1810.4	5230.5	µg/L	17.54	5230.5	ppb	17.54	0.34%
Mn 257.610†	279147.2	508.95	µg/L	1.985	508.95	ppb	1.985	0.39%
Mo 202.031†	3917.1	514.03	µg/L	2.225	514.03	ppb	2.225	0.43%
Na 589.592 Radial†	32093.4	5135.1	µg/L	31.10	5135.1	ppb	31.10	0.61%

Ni 231.604†	7824.7	511.74 µg/L	2.114	511.74 ppb	2.114	0.41%
P 214.914†	651.8	449.29 µg/L	8.793	449.29 ppb	8.793	1.96%
Pb 220.353†	1927.3	504.51 µg/L	2.623	504.51 ppb	2.623	0.52%
S 181.975 Axial†	2165.2	4908.4 µg/L	25.04	4908.4 ppb	25.04	0.51%
Sb 206.836†	1112.6	523.79 µg/L	3.008	523.79 ppb	3.008	0.57%
Se 196.026†	577.5	482 µg/L	5.2	482 ppb	5.2	1.07%
SiO2 †	146240.7	10181 µg/L	59.9	10181 ppb	59.9	0.59%
Si 251.611†	142845.4	4710 µg/L	59.0	4710 ppb	59.0	1.25%
Sn 189.927†	1977.0	503.15 µg/L	2.224	503.15 ppb	2.224	0.44%
Sr 421.552†	113760.2	513.61 µg/L	3.047	513.61 ppb	3.047	0.59%
Ti 334.940†	379307.0	503.12 µg/L	1.416	503.12 ppb	1.416	0.28%
Tl 190.801†	1288.1	498.21 µg/L	0.803	498.21 ppb	0.803	0.16%
U 409.014†	7917.5	511.68 µg/L	2.146	511.68 ppb	2.146	0.42%
V 292.402†	33595.3	506.38 µg/L	2.666	506.38 ppb	2.666	0.53%
Zn 213.857†	20592.5	487.96 µg/L	2.886	487.96 ppb	2.886	0.59%

Sequence No.: 67
Sample ID: 138851001|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 6/23/2005 23:08:22
Data Type: Reprocessed on 6/24/2005 07:40:40
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851001|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1063323.5	1063323.5	98.803	%			23:11:05
1	Sc RADIAL	39580.4	39580.4	99.8	%			23:09:46
1	Y 371.029	576672.0	576672.0	97.553	%			23:11:05
1	Ag 328.068†	-606.5	10.3	0.0802	µg/L	0.0802	ppb	23:11:10
1	Al 396.153Radial†	143.8	38.7	11.243	µg/L	11.243	ppb	23:09:46
1	As 188.979†	-36.7	-9.1	-3.7135	µg/L	-3.7135	ppb	23:11:31
1	B 249.677†	658.2	440.5	29.344	µg/L	29.344	ppb	23:11:31
1	Ba 233.527†	2939.8	3110.2	33.011	µg/L	33.011	ppb	23:11:31
1	Be 313.107†	224.2	-34.1	-0.0157	µg/L	-0.0157	ppb	23:11:10
1	Ca 317.933Radial†	207693.7	207890.3	46562	µg/L	46562	ppb	23:09:46
1	Cd 226.502†	6.8	30.9	1.1283	µg/L	1.1283	ppb	23:11:31
1	Co 228.616†	-125.4	18.2	0.5820	µg/L	0.5820	ppb	23:11:31
1	Cr 267.716†	1882.9	1834.5	51.224	µg/L	51.224	ppb	23:11:31
1	Cu 324.752†	7007.0	2067.4	8.1139	µg/L	8.1139	ppb	23:11:10
1	Fe 238.204 Radial†	56.4	12.9	13.074	µg/L	13.074	ppb	23:10:06
1	K 766.490 Radial†	2835.3	1714.7	733.98	µg/L	733.98	ppb	23:09:46
1	Mg 279.077 IEC†	3247.8	3249.9	9372.7	µg/L	9372.7	ppb	23:09:46
1	Mn 257.610†	15442.6	15230.4	27.626	µg/L	27.626	ppb	23:11:10
1	Mo 202.031†	44.1	44.8	6.0901	µg/L	6.0901	ppb	23:11:31
1	Na 589.592 Radial†	131144.1	130363.7	20865	µg/L	20865	ppb	23:09:46
1	Ni 231.604†	222.4	46.7	3.0682	µg/L	3.0682	ppb	23:11:31
1	P 214.914†	251.6	72.6	58.243	µg/L	58.243	ppb	23:11:31
1	Pb 220.353†	-0.5	12.3	3.2430	µg/L	3.2430	ppb	23:11:31
1	S 181.975 Axial†	5317.0	5340.8	12120	µg/L	12120	ppb	23:11:31
1	Sb 206.836†	38.4	4.1	1.0526	µg/L	1.0526	ppb	23:11:31
1	Se 196.026†	-36.3	-4.4	-3.38	µg/L	-3.38	ppb	23:11:31
1	SiO2 †	860838.9	869674.1	60643	µg/L	60643	ppb	23:11:05
1	Si 251.611†	855095.1	864065.5	28500	µg/L	28500	ppb	23:12:39
1	Sn 189.927†	-67.1	-62.6	-11.738	µg/L	-11.738	ppb	23:11:31
1	Sr 421.552†	46975.9	47086.9	211.94	µg/L	211.94	ppb	23:09:46
1	Ti 334.940†	-147.0	-599.7	0.1704	µg/L	0.1704	ppb	23:11:10
1	Tl 190.801†	-45.1	-9.1	-3.4634	µg/L	-3.4634	ppb	23:11:31
1	U 409.014†	398.9	66.1	4.2602	µg/L	4.2602	ppb	23:11:10
1	V 292.402†	-24.3	65.4	1.1657	µg/L	1.1657	ppb	23:11:31
1	Zn 213.857†	3755.5	3228.5	75.128	µg/L	75.128	ppb	23:11:31
2	Sc 361.383	1074004.5	1074004.5	99.796	%			23:11:36
2	Sc RADIAL	38835.2	38835.2	97.9	%			23:10:11
2	Y 371.029	582189.3	582189.3	98.486	%			23:11:36
2	Ag 328.068†	-543.1	79.9	0.5935	µg/L	0.5935	ppb	23:11:41
2	Al 396.153Radial†	190.5	89.2	26.288	µg/L	26.288	ppb	23:10:11
2	As 188.979†	-29.5	-1.5	0.1310	µg/L	0.1310	ppb	23:12:02
2	B 249.677†	653.3	429.0	28.581	µg/L	28.581	ppb	23:12:02
2	Ba 233.527†	2948.5	3089.5	32.790	µg/L	32.790	ppb	23:12:02
2	Be 313.107†	247.8	-12.7	-0.0014	µg/L	-0.0014	ppb	23:11:41
2	Ca 317.933Radial†	204338.3	208456.5	46689	µg/L	46689	ppb	23:10:11
2	Cd 226.502†	-1.7	22.2	0.8122	µg/L	0.8122	ppb	23:12:02
2	Co 228.616†	-138.4	6.4	0.2161	µg/L	0.2161	ppb	23:12:02
2	Cr 267.716†	1903.7	1836.4	51.277	µg/L	51.277	ppb	23:12:02
2	Cu 324.752†	6916.0	1905.7	7.4804	µg/L	7.4804	ppb	23:11:41
2	Fe 238.204 Radial†	61.0	18.7	18.892	µg/L	18.892	ppb	23:10:32
2	K 766.490 Radial†	2789.0	1721.9	737.05	µg/L	737.05	ppb	23:10:11
2	Mg 279.077 IEC†	3199.0	3262.4	9409.0	µg/L	9409.0	ppb	23:10:11
2	Mn 257.610†	15467.8	15100.1	27.390	µg/L	27.390	ppb	23:11:41
2	Mo 202.031†	45.2	45.5	6.1860	µg/L	6.1860	ppb	23:12:02
2	Na 589.592 Radial†	129299.2	131000.7	20967	µg/L	20967	ppb	23:10:11
2	Ni 231.604†	224.0	46.1	3.0272	µg/L	3.0272	ppb	23:12:02
2	P 214.914†	248.0	66.4	53.271	µg/L	53.271	ppb	23:12:02
2	Pb 220.353†	-19.5	-6.7	-1.7186	µg/L	-1.7186	ppb	23:12:02
2	S 181.975 Axial†	5345.5	5315.8	12063	µg/L	12063	ppb	23:12:02

2	Sb 206.836†	41.2	6.5	2.1777 µg/L	2.1777 ppb	23:12:02
2	Se 196.026†	-32.6	-0.3	0.021 µg/L	0.021 ppb	23:12:02
2	SiO2 †	867615.2	867799.5	60512 µg/L	60512 ppb	23:11:36
2	Si 251.611†	848018.5	848367.5	28000 µg/L	28000 ppb	23:12:45
2	Sn 189.927†	-76.6	-71.3	-13.960 µg/L	-13.960 ppb	23:12:02
2	Sr 421.552†	46296.0	47295.6	212.88 µg/L	212.88 ppb	23:10:11
2	Ti 334.940†	-99.5	-550.6	0.2392 µg/L	0.2392 ppb	23:11:41
2	Tl 190.801†	-38.2	-1.8	-0.6362 µg/L	-0.6362 ppb	23:12:02
2	U 409.014†	374.2	37.4	2.4092 µg/L	2.4092 ppb	23:11:41
2	V 292.402†	-27.1	62.9	1.1273 µg/L	1.1273 ppb	23:12:02
2	Zn 213.857†	3739.3	3174.4	73.829 µg/L	73.829 ppb	23:12:02
3	Sc 361.383	1073139.3	1073139.3	99.715 %		23:12:07
3	Sc RADIAL	38949.9	38949.9	98.2 %		23:10:37
3	Y 371.029	581268.3	581268.3	98.330 %		23:12:07
3	Ag 328.068†	-613.9	8.4	0.0682 µg/L	0.0682 ppb	23:12:12
3	Al 396.153Radial†	135.7	32.8	9.5314 µg/L	9.5314 ppb	23:10:37
3	As 188.979†	-38.0	-10.1	-4.2154 µg/L	-4.2154 ppb	23:12:33
3	B 249.677†	656.1	432.3	28.799 µg/L	28.799 ppb	23:12:33
3	Ba 233.527†	2925.0	3068.2	32.564 µg/L	32.564 ppb	23:12:33
3	Be 313.107†	226.2	-34.1	-0.0160 µg/L	-0.0160 ppb	23:12:12
3	Ca 317.933Radial†	204219.8	207721.5	46525 µg/L	46525 ppb	23:10:37
3	Cd 226.502†	-2.1	21.8	0.7962 µg/L	0.7962 ppb	23:12:33
3	Co 228.616†	-135.9	8.8	0.2905 µg/L	0.2905 ppb	23:12:33
3	Cr 267.716†	1895.2	1829.4	51.081 µg/L	51.081 ppb	23:12:33
3	Cu 324.752†	6872.3	1867.5	7.3307 µg/L	7.3307 ppb	23:12:12
3	Fe 238.204 Radial†	64.8	22.4	22.633 µg/L	22.633 ppb	23:10:57
3	K 766.490 Radial†	2744.1	1667.8	713.92 µg/L	713.92 ppb	23:10:37
3	Mg 279.077 IEC†	3191.0	3244.6	9357.7 µg/L	9357.7 ppb	23:10:37
3	Mn 257.610†	15365.9	15010.5	27.227 µg/L	27.227 ppb	23:12:12
3	Mo 202.031†	37.2	37.5	5.1419 µg/L	5.1419 ppb	23:12:33
3	Na 589.592 Radial†	129548.8	130866.0	20945 µg/L	20945 ppb	23:10:37
3	Ni 231.604†	216.0	38.3	2.5188 µg/L	2.5188 ppb	23:12:33
3	P 214.914†	256.9	75.5	60.793 µg/L	60.793 ppb	23:12:33
3	Pb 220.353†	-13.8	-1.1	-0.2442 µg/L	-0.2442 ppb	23:12:33
3	S 181.975 Axial†	5306.4	5281.0	11984 µg/L	11984 ppb	23:12:33
3	Sb 206.836†	45.0	10.3	3.9890 µg/L	3.9890 ppb	23:12:33
3	Se 196.026†	-42.7	-10.5	-8.47 µg/L	-8.47 ppb	23:12:33
3	SiO2 †	870216.8	871109.5	60743 µg/L	60743 ppb	23:12:07
3	Si 251.611†	848363.9	849399.1	28100 µg/L	28100 ppb	23:12:51
3	Sn 189.927†	-74.9	-69.7	-13.564 µg/L	-13.564 ppb	23:12:33
3	Sr 421.552†	46365.1	47226.7	212.58 µg/L	212.58 ppb	23:10:37
3	Ti 334.940†	-197.1	-648.6	0.1054 µg/L	0.1054 ppb	23:12:12
3	Tl 190.801†	-47.3	-10.9	-4.1460 µg/L	-4.1460 ppb	23:12:33
3	U 409.014†	385.2	48.7	3.1381 µg/L	3.1381 ppb	23:12:12
3	V 292.402†	-25.3	64.7	1.1442 µg/L	1.1442 ppb	23:12:33
3	Zn 213.857†	3722.8	3160.9	73.517 µg/L	73.517 ppb	23:12:33

Mean Data: 138851001|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1070155.8	99.438	%	0.5513				0.55%
Sc RADIAL	39121.8	98.7	%	1.01				1.03%
Y 371.029	580043.2	98.123	%	0.5000				0.51%
Ag 328.068†	32.8	0.2473	µg/L	0.29991	0.2473	ppb	0.29991	121.27%
Al 396.153Radial†	53.5	15.688	µg/L	9.2202	15.688	ppb	9.2202	58.77%
As 188.979†	-6.9	-2.5993	µg/L	2.37783	-2.5993	ppb	2.37783	91.48%
B 249.677†	433.9	28.908	µg/L	0.3932	28.908	ppb	0.3932	1.36%
Ba 233.527†	3089.3	32.788	µg/L	0.2233	32.788	ppb	0.2233	0.68%
Be 313.107†	-27.0	-0.0110	µg/L	0.00835	-0.0110	ppb	0.00835	75.95%
Ca 317.933Radial†	208022.8	46592	µg/L	86.2	46592	ppb	86.2	0.19%
Cd 226.502†	25.0	0.9122	µg/L	0.18726	0.9122	ppb	0.18726	20.53%
Co 228.616†	11.1	0.3629	µg/L	0.19340	0.3629	ppb	0.19340	53.30%
Cr 267.716†	1833.4	51.194	µg/L	0.1015	51.194	ppb	0.1015	0.20%
Cu 324.752†	1946.9	7.6417	µg/L	0.41578	7.6417	ppb	0.41578	5.44%
Fe 238.204 Radial†	18.0	18.200	µg/L	4.8167	18.200	ppb	4.8167	26.47%
K 766.490 Radial†	1701.5	728.32	µg/L	12.562	728.32	ppb	12.562	1.72%
Mg 279.077 IEC†	3252.3	9379.8	µg/L	26.38	9379.8	ppb	26.38	0.28%
Mn 257.610†	15113.7	27.414	µg/L	0.2007	27.414	ppb	0.2007	0.73%
Mo 202.031†	42.6	5.8060	µg/L	0.57712	5.8060	ppb	0.57712	9.94%
Na 589.592 Radial†	130743.5	20926	µg/L	53.7	20926	ppb	53.7	0.26%

Ni 231.604†	43.7	2.8714 µg/L	0.30608	2.8714 ppb	0.30608	10.66%
P 214.914†	71.5	57.436 µg/L	3.8256	57.436 ppb	3.8256	6.66%
Pb 220.353†	1.5	0.4268 µg/L	2.54795	0.4268 ppb	2.54795	597.05%
S 181.975 Axial†	5312.5	12055 µg/L	68.2	12055 ppb	68.2	0.57%
Sb 206.836†	7.0	2.4064 µg/L	1.48149	2.4064 ppb	1.48149	61.56%
Se 196.026†	-5.1	-3.94 µg/L	4.272	-3.94 ppb	4.272	108.36%
SiO2 †	869527.7	60633 µg/L	115.8	60633 ppb	115.8	0.19%
Si 251.611†	853944.0	28200 µg/L	290.1	28200 ppb	290.1	1.03%
Sn 189.927†	-67.9	-13.087 µg/L	1.1850	-13.087 ppb	1.1850	9.05%
Sr 421.552†	47203.1	212.47 µg/L	0.479	212.47 ppb	0.479	0.23%
Ti 334.940†	-599.6	0.1717 µg/L	0.06693	0.1717 ppb	0.06693	38.99%
Tl 190.801†	-7.3	-2.7486 µg/L	1.86092	-2.7486 ppb	1.86092	67.71%
U 409.014†	50.8	3.2692 µg/L	0.93240	3.2692 ppb	0.93240	28.52%
V 292.402†	64.3	1.1457 µg/L	0.01925	1.1457 ppb	0.01925	1.68%
Zn 213.857†	3187.9	74.158 µg/L	0.8549	74.158 ppb	0.8549	1.15%

Sequence No.: 68
Sample ID: 1200870311|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 6/23/2005 23:14:41
Data Type: Reprocessed on 6/24/2005 07:40:42
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870311|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1052518.9	1052518.9	97.799	%			23:17:28
1	Sc RADIAL	39339.1	39339.1	99.2	%			23:16:09
1	Y 371.029	570477.2	570477.2	96.505	%			23:17:28
1	Ag 328.068†	-625.6	-15.6	-0.1043	µg/L	-0.1043	ppb	23:17:33
1	Al 396.153Radial†	127.7	23.4	6.7324	µg/L	6.7324	ppb	23:16:09
1	As 188.979†	-29.6	-2.3	-0.2395	µg/L	-0.2395	ppb	23:17:53
1	B 249.677†	619.5	407.7	27.178	µg/L	27.178	ppb	23:17:53
1	Ba 233.527†	2915.6	3116.1	33.073	µg/L	33.073	ppb	23:17:53
1	Be 313.107†	241.8	-13.8	-0.0012	µg/L	-0.0012	ppb	23:17:33
1	Ca 317.933Radial†	205535.9	206991.4	46361	µg/L	46361	ppb	23:16:09
1	Cd 226.502†	-12.8	10.9	0.3970	µg/L	0.3970	ppb	23:17:53
1	Co 228.616†	-134.4	7.7	0.2555	µg/L	0.2555	ppb	23:17:53
1	Cr 267.716†	1940.1	1912.5	53.402	µg/L	53.402	ppb	23:17:53
1	Cu 324.752†	6840.6	1970.1	7.7325	µg/L	7.7325	ppb	23:17:33
1	Fe 238.204 Radial†	88.1	45.2	45.719	µg/L	45.719	ppb	23:16:29
1	K 766.490 Radial†	2795.3	1691.8	724.19	µg/L	724.19	ppb	23:16:09
1	Mg 279.077 IEC†	3189.2	3210.7	9259.9	µg/L	9259.9	ppb	23:16:09
1	Mn 257.610†	15355.8	15302.1	27.762	µg/L	27.762	ppb	23:17:33
1	Mo 202.031†	36.1	37.1	5.0854	µg/L	5.0854	ppb	23:17:53
1	Na 589.592 Radial†	129161.6	129171.2	20674	µg/L	20674	ppb	23:16:09
1	Ni 231.604†	225.0	51.8	3.3938	µg/L	3.3938	ppb	23:17:53
1	P 214.914†	260.8	84.6	68.150	µg/L	68.150	ppb	23:17:53
1	Pb 220.353†	-10.1	2.5	0.6898	µg/L	0.6898	ppb	23:17:53
1	S 181.975 Axial†	5263.7	5341.6	12121	µg/L	12121	ppb	23:17:53
1	Sb 206.836†	34.8	0.8	-0.5481	µg/L	-0.5481	ppb	23:17:53
1	Se 196.026†	-29.2	2.5	2.34	µg/L	2.34	ppb	23:17:53
1	SiO2 †	851438.6	869006.2	60597	µg/L	60597	ppb	23:17:28
1	Si 251.611†	853973.2	871802.7	28800	µg/L	28800	ppb	23:19:02
1	Sn 189.927†	-78.3	-74.7	-14.842	µg/L	-14.842	ppb	23:17:53
1	Sr 421.552†	46384.9	46779.8	210.56	µg/L	210.56	ppb	23:16:09
1	Ti 334.940†	-517.0	-979.6	-0.3393	µg/L	-0.3393	ppb	23:17:33
1	Tl 190.801†	-39.1	-3.5	-1.2948	µg/L	-1.2948	ppb	23:17:53
1	U 409.014†	416.1	87.9	5.6572	µg/L	5.6572	ppb	23:17:33
1	V 292.402†	-7.6	82.2	1.4141	µg/L	1.4141	ppb	23:17:53
1	Zn 213.857†	3703.2	3214.0	74.787	µg/L	74.787	ppb	23:17:53
2	Sc 361.383	1071605.4	1071605.4	99.573	%			23:17:59
2	Sc RADIAL	39369.5	39369.5	99.3	%			23:16:34
2	Y 371.029	580912.8	580912.8	98.270	%			23:17:59
2	Ag 328.068†	-629.3	-7.9	-0.0437	µg/L	-0.0437	ppb	23:18:04
2	Al 396.153Radial†	124.5	20.0	5.6679	µg/L	5.6679	ppb	23:16:34
2	As 188.979†	-24.7	3.2	2.5363	µg/L	2.5363	ppb	23:18:24
2	B 249.677†	605.9	382.9	25.527	µg/L	25.527	ppb	23:18:24
2	Ba 233.527†	2915.8	3063.1	32.510	µg/L	32.510	ppb	23:18:24
2	Be 313.107†	147.1	-113.2	-0.0710	µg/L	-0.0710	ppb	23:18:04
2	Ca 317.933Radial†	206935.7	208241.2	46641	µg/L	46641	ppb	23:16:34
2	Cd 226.502†	3.5	27.5	1.0018	µg/L	1.0018	ppb	23:18:24
2	Co 228.616†	-136.4	8.1	0.2715	µg/L	0.2715	ppb	23:18:24
2	Cr 267.716†	1923.0	1860.1	51.941	µg/L	51.941	ppb	23:18:24
2	Cu 324.752†	7017.7	2023.4	7.9462	µg/L	7.9462	ppb	23:18:04
2	Fe 238.204 Radial†	98.8	55.9	56.499	µg/L	56.499	ppb	23:16:54
2	K 766.490 Radial†	2780.4	1674.6	716.80	µg/L	716.80	ppb	23:16:34
2	Mg 279.077 IEC†	3227.3	3246.6	9363.3	µg/L	9363.3	ppb	23:16:34
2	Mn 257.610†	15510.9	15178.2	27.537	µg/L	27.537	ppb	23:18:04
2	Mo 202.031†	46.6	47.0	6.3810	µg/L	6.3810	ppb	23:18:24
2	Na 589.592 Radial†	129706.7	129619.6	20746	µg/L	20746	ppb	23:16:34
2	Ni 231.604†	228.7	51.3	3.3700	µg/L	3.3700	ppb	23:18:24
2	P 214.914†	250.1	69.1	55.416	µg/L	55.416	ppb	23:18:24
2	Pb 220.353†	-10.5	2.2	0.6242	µg/L	0.6242	ppb	23:18:24
2	S 181.975 Axial†	5289.1	5271.2	11962	µg/L	11962	ppb	23:18:24

2	Sb 206.836†	43.2	8.6	3.1636 µg/L	3.1636 ppb	23:18:24
2	Se 196.026†	-36.4	-4.2	-3.23 µg/L	-3.23 ppb	23:18:24
2	SiO2 †	866218.8	868343.5	60550 µg/L	60550 ppb	23:17:59
2	Si 251.611†	834816.5	837011.3	27700 µg/L	27700 ppb	23:19:08
2	Sn 189.927†	-71.4	-66.3	-12.682 µg/L	-12.682 ppb	23:18:24
2	Sr 421.552†	46558.5	46918.6	211.18 µg/L	211.18 ppb	23:16:34
2	Ti 334.940†	-491.3	-944.3	-0.2829 µg/L	-0.2829 ppb	23:18:04
2	Tl 190.801†	-45.6	-9.3	-3.5236 µg/L	-3.5236 ppb	23:18:24
2	U 409.014†	322.3	-13.9	-0.8950 µg/L	-0.8950 ppb	23:18:04
2	V 292.402†	-4.7	85.3	1.4619 µg/L	1.4619 ppb	23:18:24
2	Zn 213.857†	3736.6	3180.1	73.962 µg/L	73.962 ppb	23:18:24
3	Sc 361.383	1055004.2	1055004.2	98.030 %		23:18:30
3	Sc RADIAL	39077.2	39077.2	98.6 %		23:17:00
3	Y 371.029	572072.5	572072.5	96.774 %		23:18:30
3	Ag 328.068†	-673.5	-62.9	-0.4512 µg/L	-0.4512 ppb	23:18:35
3	Al 396.153Radial†	157.2	54.2	15.899 µg/L	15.899 ppb	23:17:00
3	As 188.979†	-26.5	1.0	1.4083 µg/L	1.4083 ppb	23:18:55
3	B 249.677†	606.3	392.8	26.191 µg/L	26.191 ppb	23:18:55
3	Ba 233.527†	2926.2	3119.9	33.112 µg/L	33.112 ppb	23:18:55
3	Be 313.107†	197.3	-59.7	-0.0343 µg/L	-0.0343 ppb	23:18:35
3	Ca 317.933Radial†	204383.4	207210.6	46410 µg/L	46410 ppb	23:17:00
3	Cd 226.502†	-11.4	12.3	0.4467 µg/L	0.4467 ppb	23:18:55
3	Co 228.616†	-143.3	-1.0	-0.0157 µg/L	-0.0157 ppb	23:18:55
3	Cr 267.716†	1933.6	1901.2	53.091 µg/L	53.091 ppb	23:18:55
3	Cu 324.752†	6996.8	2113.0	8.2993 µg/L	8.2993 ppb	23:18:35
3	Fe 238.204 Radial†	86.4	44.1	44.553 µg/L	44.553 ppb	23:17:20
3	K 766.490 Radial†	2750.1	1664.8	712.62 µg/L	712.62 ppb	23:17:00
3	Mg 279.077 IEC†	3172.5	3215.4	9273.2 µg/L	9273.2 ppb	23:17:00
3	Mn 257.610†	15480.4	15392.2	27.927 µg/L	27.927 ppb	23:18:35
3	Mo 202.031†	37.2	38.1	5.2190 µg/L	5.2190 ppb	23:18:55
3	Na 589.592 Radial†	128782.3	129659.0	20752 µg/L	20752 ppb	23:17:00
3	Ni 231.604†	225.5	51.7	3.3932 µg/L	3.3932 ppb	23:18:55
3	P 214.914†	259.8	82.9	66.697 µg/L	66.697 ppb	23:18:55
3	Pb 220.353†	-3.3	9.4	2.5090 µg/L	2.5090 ppb	23:18:55
3	S 181.975 Axial†	5275.8	5341.2	12120 µg/L	12120 ppb	23:18:55
3	Sb 206.836†	43.4	9.5	3.5548 µg/L	3.5548 ppb	23:18:55
3	Se 196.026†	-38.2	-6.6	-5.23 µg/L	-5.23 ppb	23:18:55
3	SiO2 †	857505.1	873143.7	60885 µg/L	60885 ppb	23:18:30
3	Si 251.611†	855995.3	871808.4	28800 µg/L	28800 ppb	23:19:14
3	Sn 189.927†	-84.7	-81.0	-16.443 µg/L	-16.443 ppb	23:18:55
3	Sr 421.552†	46233.7	46939.8	211.28 µg/L	211.28 ppb	23:17:00
3	Ti 334.940†	-394.0	-852.8	-0.1660 µg/L	-0.1660 ppb	23:18:35
3	Tl 190.801†	-37.5	-1.8	-0.6329 µg/L	-0.6329 ppb	23:18:55
3	U 409.014†	300.1	-31.4	-2.0218 µg/L	-2.0218 ppb	23:18:35
3	V 292.402†	-22.7	66.9	1.1780 µg/L	1.1780 ppb	23:18:55
3	Zn 213.857†	3747.3	3250.1	75.648 µg/L	75.648 ppb	23:18:55

Mean Data: 1200870311|435151|1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1059709.5	98.467	%	0.9642				0.98%
Sc RADIAL	39261.9	99.0	%	0.41				0.41%
Y 371.029	574487.5	97.183	%	0.9509				0.98%
Ag 328.068†	-28.8	-0.1998	µg/L	0.21991	-0.1998	ppb	0.21991	110.09%
Al 396.153Radial†	32.5	9.4330	µg/L	5.62457	9.4330	ppb	5.62457	59.63%
As 188.979†	0.6	1.2350	µg/L	1.39600	1.2350	ppb	1.39600	113.04%
B 249.677†	394.5	26.299	µg/L	0.8306	26.299	ppb	0.8306	3.16%
Ba 233.527†	3099.7	32.898	µg/L	0.3368	32.898	ppb	0.3368	1.02%
Be 313.107†	-62.2	-0.0355	µg/L	0.03491	-0.0355	ppb	0.03491	98.43%
Ca 317.933Radial†	207481.1	46471	µg/L	149.5	46471	ppb	149.5	0.32%
Cd 226.502†	16.9	0.6152	µg/L	0.33578	0.6152	ppb	0.33578	54.58%
Co 228.616†	4.9	0.1705	µg/L	0.16138	0.1705	ppb	0.16138	94.67%
Cr 267.716†	1891.3	52.811	µg/L	0.7694	52.811	ppb	0.7694	1.46%
Cu 324.752†	2035.5	7.9926	µg/L	0.28624	7.9926	ppb	0.28624	3.58%
Fe 238.204 Radial†	48.4	48.924	µg/L	6.5862	48.924	ppb	6.5862	13.46%
K 766.490 Radial†	1677.1	717.87	µg/L	5.858	717.87	ppb	5.858	0.82%
Mg 279.077 IEC†	3224.2	9298.8	µg/L	56.27	9298.8	ppb	56.27	0.61%
Mn 257.610†	15290.8	27.742	µg/L	0.1956	27.742	ppb	0.1956	0.70%
Mo 202.031†	40.7	5.5618	µg/L	0.71258	5.5618	ppb	0.71258	12.81%
Na 589.592 Radial†	129483.3	20724	µg/L	43.4	20724	ppb	43.4	0.21%

Ni 231.604†	51.6	3.3857 µg/L	0.01359	3.3857 ppb	0.01359	0.40%
P 214.914†	78.9	63.421 µg/L	6.9703	63.421 ppb	6.9703	10.99%
Pb 220.353†	4.7	1.2743 µg/L	1.06974	1.2743 ppb	1.06974	83.94%
S 181.975 Axial†	5318.0	12068 µg/L	92.0	12068 ppb	92.0	0.76%
Sb 206.836†	6.3	2.0568 µg/L	2.26435	2.0568 ppb	2.26435	110.09%
Se 196.026†	-2.8	-2.04 µg/L	3.922	-2.04 ppb	3.922	192.12%
SiO2 †	870164.5	60677 µg/L	181.4	60677 ppb	181.4	0.30%
Si 251.611†	860207.5	28400 µg/L	663.7	28400 ppb	663.7	2.34%
Sn 189.927†	-74.0	-14.656 µg/L	1.8873	-14.656 ppb	1.8873	12.88%
Sr 421.552†	46879.4	211.01 µg/L	0.391	211.01 ppb	0.391	0.19%
Ti 334.940†	-925.6	-0.2627 µg/L	0.08836	-0.2627 ppb	0.08836	33.63%
Tl 190.801†	-4.9	-1.8171 µg/L	1.51446	-1.8171 ppb	1.51446	83.34%
U 409.014†	14.2	0.9135 µg/L	4.14664	0.9135 ppb	4.14664	453.93%
V 292.402†	78.1	1.3513 µg/L	0.15201	1.3513 ppb	0.15201	11.25%
Zn 213.857†	3214.8	74.799 µg/L	0.8431	74.799 ppb	0.8431	1.13%

Sequence No.: 69
Sample ID: 1200870312|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 6/23/2005 23:21:03
Data Type: Reprocessed on 6/24/2005 07:40:44
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870312|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1074389.1	1074389.1	99.831	%			23:23:05
1	Sc RADIAL	39346.5	39346.5	99.2	%			23:22:35
1	Y 371.029	581741.7	581741.7	98.410	%			23:23:05
1	Ag 328.068†	65671.9	66406.8	490.44	µg/L	490.44	ppb	23:23:10
1	Al 396.153Radial†	16724.0	16747.4	4966.2	µg/L	4966.2	ppb	23:22:35
1	As 188.979†	977.2	1006.9	515.77	µg/L	515.77	ppb	23:23:30
1	B 249.677†	7985.1	7773.0	515.14	µg/L	515.14	ppb	23:23:10
1	Ba 233.527†	48562.7	48779.6	518.19	µg/L	518.19	ppb	23:23:10
1	Be 313.107†	730847.4	731820.4	502.95	µg/L	502.95	ppb	23:23:05
1	Ca 317.933Radial†	221566.4	223106.4	49973	µg/L	49973	ppb	23:22:30
1	Cd 226.502†	12954.3	13000.1	474.52	µg/L	474.52	ppb	23:23:10
1	Co 228.616†	14875.7	15045.9	468.02	µg/L	468.02	ppb	23:23:10
1	Cr 267.716†	18944.0	18904.8	527.75	µg/L	527.75	ppb	23:23:10
1	Cu 324.752†	133022.6	128222.7	503.29	µg/L	503.29	ppb	23:23:10
1	Fe 238.204 Radial†	5005.6	5000.6	5060.9	µg/L	5060.9	ppb	23:22:35
1	K 766.490 Radial†	14458.2	13443.9	5754.7	µg/L	5754.7	ppb	23:22:35
1	Mg 279.077 IEC†	4884.4	4918.3	14194	µg/L	14194	ppb	23:22:35
1	Mn 257.610†	282882.4	282960.7	515.77	µg/L	515.77	ppb	23:23:05
1	Mo 202.031†	3865.4	3872.1	508.34	µg/L	508.34	ppb	23:23:30
1	Na 589.592 Radial†	158488.2	158699.1	25399	µg/L	25399	ppb	23:22:30
1	Ni 231.604†	7466.1	7300.3	477.51	µg/L	477.51	ppb	23:23:30
1	P 214.914†	909.5	729.0	514.74	µg/L	514.74	ppb	23:23:30
1	Pb 220.353†	1840.6	1856.5	486.01	µg/L	486.01	ppb	23:23:30
1	S 181.975 Axial†	7412.8	7384.7	16753	µg/L	16753	ppb	23:23:30
1	Sb 206.836†	1119.6	1086.7	510.99	µg/L	510.99	ppb	23:23:30
1	Se 196.026†	517.0	550.2	460	µg/L	460	ppb	23:23:30
1	SiO2 †	855478.1	855330.7	59627	µg/L	59627	ppb	23:23:05
1	Si 251.611†	839212.4	839242.4	27700	µg/L	27700	ppb	23:24:41
1	Sn 189.927†	1869.5	1878.0	481.98	µg/L	481.98	ppb	23:23:30
1	Sr 421.552†	156012.3	157242.2	709.30	µg/L	709.30	ppb	23:22:30
1	Ti 334.940†	373878.3	374058.7	497.11	µg/L	497.11	ppb	23:23:05
1	Tl 190.801†	1191.1	1229.6	475.80	µg/L	475.80	ppb	23:23:30
1	U 409.014†	7920.7	7596.6	490.97	µg/L	490.97	ppb	23:23:10
1	V 292.402†	32543.5	32688.4	492.87	µg/L	492.87	ppb	23:23:10
1	Zn 213.857†	23163.8	22630.4	534.96	µg/L	534.96	ppb	23:23:10
2	Sc 361.383	1057614.8	1057614.8	98.273	%			23:23:36
2	Sc RADIAL	39726.5	39726.5	100	%			23:22:45
2	Y 371.029	572716.7	572716.7	96.883	%			23:23:36
2	Ag 328.068†	66212.0	67999.8	502.18	µg/L	502.18	ppb	23:23:41
2	Al 396.153Radial†	16906.4	16768.2	4972.0	µg/L	4972.0	ppb	23:22:45
2	As 188.979†	974.4	1019.5	522.31	µg/L	522.31	ppb	23:24:02
2	B 249.677†	8052.9	7968.8	528.14	µg/L	528.14	ppb	23:23:41
2	Ba 233.527†	49082.9	50080.4	532.01	µg/L	532.01	ppb	23:23:41
2	Be 313.107†	720582.5	732986.2	503.76	µg/L	503.76	ppb	23:23:36
2	Ca 317.933Radial†	224299.7	223698.6	50106	µg/L	50106	ppb	23:22:40
2	Cd 226.502†	13047.0	13300.2	485.49	µg/L	485.49	ppb	23:23:41
2	Co 228.616†	14993.7	15402.3	479.13	µg/L	479.13	ppb	23:23:41
2	Cr 267.716†	19076.9	19341.0	539.92	µg/L	539.92	ppb	23:23:41
2	Cu 324.752†	134417.8	131755.9	517.16	µg/L	517.16	ppb	23:23:41
2	Fe 238.204 Radial†	5015.3	4961.9	5022.0	µg/L	5022.0	ppb	23:22:45
2	K 766.490 Radial†	14678.3	13524.2	5789.1	µg/L	5789.1	ppb	23:22:45
2	Mg 279.077 IEC†	4930.0	4916.8	14190	µg/L	14190	ppb	23:22:45
2	Mn 257.610†	279154.2	283661.2	517.04	µg/L	517.04	ppb	23:23:36
2	Mo 202.031†	3877.4	3945.7	517.99	µg/L	517.99	ppb	23:24:02
2	Na 589.592 Radial†	159803.2	158483.8	25364	µg/L	25364	ppb	23:22:40
2	Ni 231.604†	7433.3	7385.6	483.09	µg/L	483.09	ppb	23:24:02
2	P 214.914†	902.3	736.0	518.33	µg/L	518.33	ppb	23:24:02
2	Pb 220.353†	1844.2	1889.4	494.61	µg/L	494.61	ppb	23:24:02
2	S 181.975 Axial†	7391.0	7480.3	16970	µg/L	16970	ppb	23:24:02

2	Sb 206.836†	1124.3	1109.3	521.58 µg/L	521.58 ppb	23:24:02
2	Se 196.026†	509.1	550.4	460 µg/L	460 ppb	23:24:02
2	SiO2 †	849812.9	863157.1	60173 µg/L	60173 ppb	23:23:36
2	Si 251.611†	841049.9	854445.0	28200 µg/L	28200 ppb	23:24:47
2	Sn 189.927†	1870.6	1908.9	489.85 µg/L	489.85 ppb	23:24:02
2	Sr 421.552†	157275.1	156998.7	708.20 µg/L	708.20 ppb	23:22:40
2	Ti 334.940†	368747.0	374777.1	498.05 µg/L	498.05 ppb	23:23:36
2	Tl 190.801†	1186.8	1244.1	481.35 µg/L	481.35 ppb	23:24:02
2	U 409.014†	8032.4	7836.0	506.46 µg/L	506.46 ppb	23:23:41
2	V 292.402†	32878.4	33546.2	505.77 µg/L	505.77 ppb	23:23:41
2	Zn 213.857†	23366.2	23204.3	548.64 µg/L	548.64 ppb	23:23:41
3	Sc 361.383	1059340.0	1059340.0	98.433 %		23:24:08
3	Sc RADIAL	39573.2	39573.2	99.8 %		23:22:56
3	Y 371.029	573753.9	573753.9	97.059 %		23:24:08
3	Ag 328.068†	66310.3	67989.9	502.11 µg/L	502.11 ppb	23:24:13
3	Al 396.153Radial†	16811.4	16738.4	4963.3 µg/L	4963.3 ppb	23:22:56
3	As 188.979†	964.8	1008.2	516.59 µg/L	516.59 ppb	23:24:33
3	B 249.677†	8043.7	7946.1	526.62 µg/L	526.62 ppb	23:24:13
3	Ba 233.527†	48910.7	49824.2	529.29 µg/L	529.29 ppb	23:24:13
3	Be 313.107†	721041.4	732258.3	503.25 µg/L	503.25 ppb	23:24:08
3	Ca 317.933Radial†	226394.0	226664.4	50770 µg/L	50770 ppb	23:22:51
3	Cd 226.502†	13073.1	13305.2	485.66 µg/L	485.66 ppb	23:24:13
3	Co 228.616†	15008.7	15392.7	478.82 µg/L	478.82 ppb	23:24:13
3	Cr 267.716†	19069.7	19302.1	538.84 µg/L	538.84 ppb	23:24:13
3	Cu 324.752†	134374.4	131489.0	516.12 µg/L	516.12 ppb	23:24:13
3	Fe 238.204 Radial†	5011.7	4977.7	5037.9 µg/L	5037.9 ppb	23:22:56
3	K 766.490 Radial†	14565.2	13467.6	5764.9 µg/L	5764.9 ppb	23:22:56
3	Mg 279.077 IEC†	4878.0	4883.7	14094 µg/L	14094 ppb	23:22:56
3	Mn 257.610†	279326.8	283373.9	516.52 µg/L	516.52 ppb	23:24:08
3	Mo 202.031†	3853.3	3914.8	513.94 µg/L	513.94 ppb	23:24:33
3	Na 589.592 Radial†	161450.1	160751.9	25727 µg/L	25727 ppb	23:22:51
3	Ni 231.604†	7413.5	7353.2	480.96 µg/L	480.96 ppb	23:24:33
3	P 214.914†	895.4	727.6	511.57 µg/L	511.57 ppb	23:24:33
3	Pb 220.353†	1841.5	1883.6	493.09 µg/L	493.09 ppb	23:24:33
3	S 181.975 Axial†	7344.3	7420.6	16834 µg/L	16834 ppb	23:24:33
3	Sb 206.836†	1119.0	1102.0	518.10 µg/L	518.10 ppb	23:24:33
3	Se 196.026†	516.0	556.5	465 µg/L	465 ppb	23:24:33
3	SiO2 †	856467.1	868509.0	60546 µg/L	60546 ppb	23:24:08
3	Si 251.611†	846384.3	858470.5	28400 µg/L	28400 ppb	23:24:54
3	Sn 189.927†	1860.0	1895.0	486.37 µg/L	486.37 ppb	23:24:33
3	Sr 421.552†	158890.7	159225.7	718.24 µg/L	718.24 ppb	23:22:51
3	Ti 334.940†	369811.3	375247.2	498.69 µg/L	498.69 ppb	23:24:08
3	Tl 190.801†	1189.0	1244.4	481.46 µg/L	481.46 ppb	23:24:33
3	U 409.014†	7884.0	7671.9	495.89 µg/L	495.89 ppb	23:24:13
3	V 292.402†	32856.5	33469.5	504.58 µg/L	504.58 ppb	23:24:13
3	Zn 213.857†	23371.7	23171.2	547.83 µg/L	547.83 ppb	23:24:13

Mean Data: 1200870312|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1063781.3	98.846	%	0.8574				0.87%
Sc RADIAL	39548.7	99.7	%	0.48				0.48%
Y 371.029	576070.8	97.451	%	0.8354				0.86%
Ag 328.068†	67465.5	498.25	µg/L	6.756	498.25	ppb	6.756	1.36%
Al 396.153Radial†	16751.3	4967.2	µg/L	4.41	4967.2	ppb	4.41	0.09%
As 188.979†	1011.5	518.22	µg/L	3.562	518.22	ppb	3.562	0.69%
B 249.677†	7895.9	523.30	µg/L	7.105	523.30	ppb	7.105	1.36%
Ba 233.527†	49561.4	526.50	µg/L	7.321	526.50	ppb	7.321	1.39%
Be 313.107†	732355.0	503.32	µg/L	0.407	503.32	ppb	0.407	0.08%
Ca 317.933Radial†	224489.8	50283	µg/L	427.0	50283	ppb	427.0	0.85%
Cd 226.502†	13201.8	481.89	µg/L	6.380	481.89	ppb	6.380	1.32%
Co 228.616†	15280.3	475.33	µg/L	6.328	475.33	ppb	6.328	1.33%
Cr 267.716†	19182.6	535.50	µg/L	6.739	535.50	ppb	6.739	1.26%
Cu 324.752†	130489.2	512.19	µg/L	7.722	512.19	ppb	7.722	1.51%
Fe 238.204 Radial†	4980.1	5040.3	µg/L	19.58	5040.3	ppb	19.58	0.39%
K 766.490 Radial†	13478.6	5769.6	µg/L	17.67	5769.6	ppb	17.67	0.31%
Mg 279.077 IEC†	4906.3	14159	µg/L	56.4	14159	ppb	56.4	0.40%
Mn 257.610†	283331.9	516.44	µg/L	0.639	516.44	ppb	0.639	0.12%
Mo 202.031†	3910.8	513.42	µg/L	4.844	513.42	ppb	4.844	0.94%
Na 589.592 Radial†	159311.6	25497	µg/L	200.4	25497	ppb	200.4	0.79%

Ni 231.604†	7346.4	480.52 µg/L	2.817	480.52 ppb	2.817	0.59%
P 214.914†	730.9	514.88 µg/L	3.380	514.88 ppb	3.380	0.66%
Pb 220.353†	1876.5	491.24 µg/L	4.590	491.24 ppb	4.590	0.93%
S 181.975 Axial†	7428.5	16852 µg/L	109.7	16852 ppb	109.7	0.65%
Sb 206.836†	1099.4	516.89 µg/L	5.398	516.89 ppb	5.398	1.04%
Se 196.026†	552.4	461 µg/L	3.0	461 ppb	3.0	0.65%
SiO2 †	862332.2	60115 µg/L	462.0	60115 ppb	462.0	0.77%
Si 251.611†	850719.3	28100 µg/L	335.0	28100 ppb	335.0	1.19%
Sn 189.927†	1894.0	486.07 µg/L	3.943	486.07 ppb	3.943	0.81%
Sr 421.552†	157822.2	711.91 µg/L	5.510	711.91 ppb	5.510	0.77%
Ti 334.940†	374694.3	497.95 µg/L	0.799	497.95 ppb	0.799	0.16%
Tl 190.801†	1239.4	479.54 µg/L	3.237	479.54 ppb	3.237	0.68%
U 409.014†	7701.5	497.78 µg/L	7.913	497.78 ppb	7.913	1.59%
V 292.402†	33234.7	501.07 µg/L	7.128	501.07 ppb	7.128	1.42%
Zn 213.857†	23002.0	543.81 µg/L	7.675	543.81 ppb	7.675	1.41%

Sequence No.: 70
Sample ID: 1200870313|435151|5
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 6/23/2005 23:26:43
Data Type: Reprocessed on 6/24/2005 07:40:46
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870313|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1080738.4	1080738.4	100.42	%			23:29:26
1	Sc RADIAL	39910.0	39910.0	101	%			23:28:07
1	Y 371.029	590119.2	590119.2	99.827	%			23:29:26
1	Ag 328.068†	-639.2	-12.5	-0.0882	µg/L	-0.0882	ppb	23:29:31
1	Al 396.153Radial†	88.5	-17.4	-5.3365	µg/L	-5.3365	ppb	23:28:07
1	As 188.979†	-27.2	0.9	0.6376	µg/L	0.6376	ppb	23:29:52
1	B 249.677†	269.3	42.5	2.8535	µg/L	2.8535	ppb	23:29:52
1	Ba 233.527†	473.5	606.4	6.4348	µg/L	6.4348	ppb	23:29:52
1	Be 313.107†	307.9	45.7	0.0316	µg/L	0.0316	ppb	23:29:31
1	Ca 317.933Radial†	39573.7	39149.8	8768.6	µg/L	8768.6	ppb	23:28:07
1	Cd 226.502†	-17.2	6.8	0.2455	µg/L	0.2455	ppb	23:29:52
1	Co 228.616†	-130.7	14.9	0.4711	µg/L	0.4711	ppb	23:29:52
1	Cr 267.716†	433.4	360.3	10.066	µg/L	10.066	ppb	23:29:52
1	Cu 324.752†	5292.9	246.3	0.9706	µg/L	0.9706	ppb	23:29:31
1	Fe 238.204 Radial†	50.2	6.3	6.3399	µg/L	6.3399	ppb	23:28:27
1	K 766.490 Radial†	1455.1	320.0	136.98	µg/L	136.98	ppb	23:28:07
1	Mg 279.077 IEC†	661.6	653.7	1885.3	µg/L	1885.3	ppb	23:28:27
1	Mn 257.610†	3525.5	3111.4	5.6455	µg/L	5.6455	ppb	23:29:52
1	Mo 202.031†	21.8	21.9	2.9065	µg/L	2.9065	ppb	23:29:52
1	Na 589.592 Radial†	25820.3	24642.6	3944.1	µg/L	3944.1	ppb	23:28:07
1	Ni 231.604†	188.0	8.9	0.5902	µg/L	0.5902	ppb	23:29:52
1	P 214.914†	185.8	3.0	2.2674	µg/L	2.2674	ppb	23:29:52
1	Pb 220.353†	-10.3	2.5	0.6836	µg/L	0.6836	ppb	23:29:52
1	S 181.975 Axial†	1047.3	1002.3	2274.5	µg/L	2274.5	ppb	23:29:52
1	Sb 206.836†	40.7	5.8	2.5433	µg/L	2.5433	ppb	23:29:52
1	Se 196.026†	-31.9	0.6	0.519	µg/L	0.519	ppb	23:29:52
1	SiO2 †	171179.5	168869.4	11775	µg/L	11775	ppb	23:29:26
1	Si 251.611†	169895.5	167795.6	5540	µg/L	5540	ppb	23:31:00
1	Sn 189.927†	-26.4	-20.9	-4.5360	µg/L	-4.5360	ppb	23:29:52
1	Sr 421.552†	8966.4	8937.0	40.227	µg/L	40.227	ppb	23:28:07
1	Ti 334.940†	477.8	24.9	0.2184	µg/L	0.2184	ppb	23:29:31
1	Tl 190.801†	-35.5	1.2	0.4508	µg/L	0.4508	ppb	23:29:52
1	U 409.014†	241.8	-96.8	-6.2281	µg/L	-6.2281	ppb	23:29:31
1	V 292.402†	-77.9	12.4	0.2316	µg/L	0.2316	ppb	23:29:52
1	Zn 213.857†	1155.1	577.7	13.421	µg/L	13.421	ppb	23:29:52
2	Sc 361.383	1091321.8	1091321.8	101.40	%			23:29:57
2	Sc RADIAL	40146.3	40146.3	101	%			23:28:33
2	Y 371.029	595605.8	595605.8	100.76	%			23:29:57
2	Ag 328.068†	-617.1	15.5	0.1159	µg/L	0.1159	ppb	23:30:02
2	Al 396.153Radial†	117.6	10.8	3.0979	µg/L	3.0979	ppb	23:28:33
2	As 188.979†	-33.1	-4.6	-2.1547	µg/L	-2.1547	ppb	23:30:23
2	B 249.677†	280.5	50.9	3.4101	µg/L	3.4101	ppb	23:30:23
2	Ba 233.527†	476.9	605.2	6.4234	µg/L	6.4234	ppb	23:30:23
2	Be 313.107†	268.2	3.5	0.0036	µg/L	0.0036	ppb	23:30:02
2	Ca 317.933Radial†	39952.2	39292.2	8800.5	µg/L	8800.5	ppb	23:28:33
2	Cd 226.502†	-20.4	3.8	0.1382	µg/L	0.1382	ppb	23:30:23
2	Co 228.616†	-139.7	7.4	0.2350	µg/L	0.2350	ppb	23:30:23
2	Cr 267.716†	431.1	353.9	9.8833	µg/L	9.8833	ppb	23:30:23
2	Cu 324.752†	5381.9	282.9	1.1104	µg/L	1.1104	ppb	23:30:02
2	Fe 238.204 Radial†	53.3	9.1	9.1730	µg/L	9.1730	ppb	23:28:53
2	K 766.490 Radial†	1477.2	333.3	142.67	µg/L	142.67	ppb	23:28:33
2	Mg 279.077 IEC†	647.0	635.4	1832.5	µg/L	1832.5	ppb	23:28:53
2	Mn 257.610†	3488.3	3040.7	5.5170	µg/L	5.5170	ppb	23:30:23
2	Mo 202.031†	20.3	20.2	2.6836	µg/L	2.6836	ppb	23:30:23
2	Na 589.592 Radial†	26022.0	24690.9	3951.8	µg/L	3951.8	ppb	23:28:33
2	Ni 231.604†	183.6	2.8	0.1851	µg/L	0.1851	ppb	23:30:23
2	P 214.914†	188.6	3.9	3.0069	µg/L	3.0069	ppb	23:30:23
2	Pb 220.353†	-6.6	6.3	1.6646	µg/L	1.6646	ppb	23:30:23
2	S 181.975 Axial†	1053.2	998.0	2264.6	µg/L	2264.6	ppb	23:30:23

2	Sb 206.836†	36.4	1.2	0.3801 µg/L	0.3801 ppb	23:30:23
2	Se 196.026†	-27.5	5.2	4.42 µg/L	4.42 ppb	23:30:23
2	SiO2 †	172157.6	168180.8	11727 µg/L	11727 ppb	23:29:57
2	Si 251.611†	170483.3	166734.6	5510 µg/L	5510 ppb	23:31:05
2	Sn 189.927†	-28.3	-22.6	-4.9462 µg/L	-4.9462 ppb	23:30:23
2	Sr 421.552†	9020.9	8938.3	40.233 µg/L	40.233 ppb	23:28:33
2	Ti 334.940†	480.4	22.9	0.2139 µg/L	0.2139 ppb	23:30:02
2	Tl 190.801†	-34.3	2.6	1.0283 µg/L	1.0283 ppb	23:30:23
2	U 409.014†	327.6	-14.5	-0.9319 µg/L	-0.9319 ppb	23:30:02
2	V 292.402†	-95.5	-4.1	-0.0114 µg/L	-0.0114 ppb	23:30:23
2	Zn 213.857†	1136.0	547.7	12.706 µg/L	12.706 ppb	23:30:23
3	Sc 361.383	1086615.9	1086615.9	100.97 %		23:30:28
3	Sc RADIAL	39943.8	39943.8	101 %		23:28:58
3	Y 371.029	593428.6	593428.6	100.39 %		23:30:28
3	Ag 328.068†	-606.0	23.9	0.1771 µg/L	0.1771 ppb	23:30:33
3	Al 396.153Radial†	108.3	2.2	0.5733 µg/L	0.5733 ppb	23:28:58
3	As 188.979†	-30.4	-2.1	-0.8854 µg/L	-0.8854 ppb	23:30:54
3	B 249.677†	258.1	30.0	2.0190 µg/L	2.0190 ppb	23:30:54
3	Ba 233.527†	472.3	602.7	6.3960 µg/L	6.3960 ppb	23:30:54
3	Be 313.107†	313.8	49.8	0.0352 µg/L	0.0352 ppb	23:30:33
3	Ca 317.933Radial†	39987.4	39527.1	8853.1 µg/L	8853.1 ppb	23:28:58
3	Cd 226.502†	-28.8	-4.6	-0.1691 µg/L	-0.1691 ppb	23:30:54
3	Co 228.616†	-120.3	25.9	0.8106 µg/L	0.8106 ppb	23:30:54
3	Cr 267.716†	431.2	355.8	9.9376 µg/L	9.9376 ppb	23:30:54
3	Cu 324.752†	5364.5	288.7	1.1346 µg/L	1.1346 ppb	23:30:33
3	Fe 238.204 Radial†	47.5	3.6	3.6217 µg/L	3.6217 ppb	23:29:18
3	K 766.490 Radial†	1391.4	255.5	109.39 µg/L	109.39 ppb	23:28:58
3	Mg 279.077 IEC†	657.6	649.1	1872.1 µg/L	1872.1 ppb	23:29:18
3	Mn 257.610†	3555.6	3122.3	5.6645 µg/L	5.6645 ppb	23:30:54
3	Mo 202.031†	11.4	11.4	1.5419 µg/L	1.5419 ppb	23:30:54
3	Na 589.592 Radial†	26057.2	24856.1	3978.3 µg/L	3978.3 ppb	23:28:58
3	Ni 231.604†	181.8	1.7	0.1148 µg/L	0.1148 ppb	23:30:54
3	P 214.914†	189.1	5.2	4.0356 µg/L	4.0356 ppb	23:30:54
3	Pb 220.353†	-0.8	12.0	3.1385 µg/L	3.1385 ppb	23:30:54
3	S 181.975 Axial†	1044.2	993.6	2254.6 µg/L	2254.6 ppb	23:30:54
3	Sb 206.836†	44.5	9.2	4.1635 µg/L	4.1635 ppb	23:30:54
3	Se 196.026†	-32.8	-0.1	-0.039 µg/L	-0.039 ppb	23:30:54
3	SiO2 †	171007.7	167777.2	11699 µg/L	11699 ppb	23:30:28
3	Si 251.611†	168910.0	165904.5	5480 µg/L	5480 ppb	23:31:11
3	Sn 189.927†	-36.6	-30.9	-7.0557 µg/L	-7.0557 ppb	23:30:54
3	Sr 421.552†	9071.3	9033.5	40.662 µg/L	40.662 ppb	23:28:58
3	Ti 334.940†	480.5	25.0	0.2183 µg/L	0.2183 ppb	23:30:33
3	Tl 190.801†	-34.2	2.6	1.0081 µg/L	1.0081 ppb	23:30:54
3	U 409.014†	310.6	-29.9	-1.9247 µg/L	-1.9247 ppb	23:30:33
3	V 292.402†	-81.8	9.0	0.1711 µg/L	0.1711 ppb	23:30:54
3	Zn 213.857†	1148.6	565.1	13.118 µg/L	13.118 ppb	23:30:54

Mean Data: 1200870313|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1086225.4	100.93	%	0.493				0.49%
Sc RADIAL	40000.1	101	%	0.3				0.32%
Y 371.029	593051.2	100.32	%	0.467				0.47%
Ag 328.068†	9.0	0.0683	µg/L	0.13890	0.0683	ppb	0.13890	203.47%
Al 396.153Radial†	-1.5	-0.5551	µg/L	4.32892	-0.5551	ppb	4.32892	779.85%
As 188.979†	-1.9	-0.8008	µg/L	1.39807	-0.8008	ppb	1.39807	174.57%
B 249.677†	41.1	2.7608	µg/L	0.70016	2.7608	ppb	0.70016	25.36%
Ba 233.527†	604.7	6.4181	µg/L	0.01994	6.4181	ppb	0.01994	0.31%
Be 313.107†	33.0	0.0234	µg/L	0.01733	0.0234	ppb	0.01733	73.89%
Ca 317.933Radial†	39323.0	8807.4	µg/L	42.69	8807.4	ppb	42.69	0.48%
Cd 226.502†	2.0	0.0715	µg/L	0.21521	0.0715	ppb	0.21521	300.93%
Co 228.616†	16.1	0.5056	µg/L	0.28934	0.5056	ppb	0.28934	57.23%
Cr 267.716†	356.7	9.9623	µg/L	0.09381	9.9623	ppb	0.09381	0.94%
Cu 324.752†	272.6	1.0719	µg/L	0.08854	1.0719	ppb	0.08854	8.26%
Fe 238.204 Radial†	6.3	6.3782	µg/L	2.77585	6.3782	ppb	2.77585	43.52%
K 766.490 Radial†	303.0	129.68	µg/L	17.802	129.68	ppb	17.802	13.73%
Mg 279.077 IEC†	646.0	1863.3	µg/L	27.45	1863.3	ppb	27.45	1.47%
Mn 257.610†	3091.5	5.6090	µg/L	0.08024	5.6090	ppb	0.08024	1.43%
Mo 202.031†	17.8	2.3773	µg/L	0.73203	2.3773	ppb	0.73203	30.79%
Na 589.592 Radial†	24729.9	3958.1	µg/L	17.92	3958.1	ppb	17.92	0.45%

Ni 231.604†	4.5	0.2967 µg/L	0.25660	0.2967 ppb	0.25660	86.49%
P 214.914†	4.0	3.1033 µg/L	0.88803	3.1033 ppb	0.88803	28.62%
Pb 220.353†	6.9	1.8289 µg/L	1.23569	1.8289 ppb	1.23569	67.56%
S 181.975 Axial†	998.0	2264.6 µg/L	9.96	2264.6 ppb	9.96	0.44%
Sb 206.836†	5.4	2.3623 µg/L	1.89819	2.3623 ppb	1.89819	80.35%
Se 196.026†	1.9	1.63 µg/L	2.427	1.63 ppb	2.427	148.72%
SiO2 †	168275.8	11734 µg/L	38.5	11734 ppb	38.5	0.33%
Si 251.611†	166811.5	5510 µg/L	31.3	5510 ppb	31.3	0.57%
Sn 189.927†	-24.8	-5.5126 µg/L	1.35198	-5.5126 ppb	1.35198	24.53%
Sr 421.552†	8969.6	40.374 µg/L	0.2493	40.374 ppb	0.2493	0.62%
Ti 334.940†	24.3	0.2169 µg/L	0.00259	0.2169 ppb	0.00259	1.19%
Tl 190.801†	2.1	0.8290 µg/L	0.32773	0.8290 ppb	0.32773	39.53%
U 409.014†	-47.1	-3.0282 µg/L	2.81529	-3.0282 ppb	2.81529	92.97%
V 292.402†	5.7	0.1304 µg/L	0.12652	0.1304 ppb	0.12652	96.99%
Zn 213.857†	563.5	13.082 µg/L	0.3592	13.082 ppb	0.3592	2.75%

Sequence No.: 71
Sample ID: 138851002|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 6/23/2005 23:32:59
Data Type: Reprocessed on 6/24/2005 07:40:48
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851002|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1063480.7	1063480.7	98.818	%			23:35:44
1	Sc RADIAL	39377.4	39377.4	99.3	%			23:34:25
1	Y 371.029	576512.6	576512.6	97.526	%			23:35:44
1	Ag 328.068†	-623.0	-6.4	-0.0400	µg/L	-0.0400	ppb	23:35:49
1	Al 396.153Radial†	177.5	73.3	21.627	µg/L	21.627	ppb	23:34:25
1	As 188.979†	-27.9	-0.2	0.7429	µg/L	0.7429	ppb	23:36:09
1	B 249.677†	604.8	386.3	25.745	µg/L	25.745	ppb	23:36:09
1	Ba 233.527†	2915.0	3084.7	32.739	µg/L	32.739	ppb	23:36:09
1	Be 313.107†	198.8	-59.8	-0.0347	µg/L	-0.0347	ppb	23:35:49
1	Ca 317.933Radial†	203151.5	204388.9	45778	µg/L	45778	ppb	23:34:25
1	Cd 226.502†	-11.5	12.4	0.4518	µg/L	0.4518	ppb	23:36:09
1	Co 228.616†	-124.6	19.0	0.6066	µg/L	0.6066	ppb	23:36:09
1	Cr 267.716†	1774.9	1725.0	48.168	µg/L	48.168	ppb	23:36:09
1	Cu 324.752†	7697.1	2764.8	10.858	µg/L	10.858	ppb	23:35:49
1	Fe 238.204 Radial†	64.8	21.6	21.859	µg/L	21.859	ppb	23:34:45
1	K 766.490 Radial†	2785.5	1679.2	718.79	µg/L	718.79	ppb	23:34:25
1	Mg 279.077 IEC†	3173.6	3191.9	9205.6	µg/L	9205.6	ppb	23:34:25
1	Mn 257.610†	18415.3	18236.4	33.104	µg/L	33.104	ppb	23:35:49
1	Mo 202.031†	35.7	36.3	4.9743	µg/L	4.9743	ppb	23:36:09
1	Na 589.592 Radial†	128175.3	128051.4	20495	µg/L	20495	ppb	23:34:25
1	Ni 231.604†	228.6	53.1	3.4770	µg/L	3.4770	ppb	23:36:09
1	P 214.914†	250.8	71.8	57.157	µg/L	57.157	ppb	23:36:09
1	Pb 220.353†	-15.4	-2.8	-0.6980	µg/L	-0.6980	ppb	23:36:09
1	S 181.975 Axial†	5209.5	5231.2	11871	µg/L	11871	ppb	23:36:09
1	Sb 206.836†	29.0	-5.4	-3.3686	µg/L	-3.3686	ppb	23:36:09
1	Se 196.026†	-42.1	-10.2	-8.25	µg/L	-8.25	ppb	23:36:09
1	SiO2 †	845201.8	853721.1	59531	µg/L	59531	ppb	23:35:44
1	Si 251.611†	833325.8	841907.9	27800	µg/L	27800	ppb	23:37:18
1	Sn 189.927†	-76.5	-72.0	-14.207	µg/L	-14.207	ppb	23:36:09
1	Sr 421.552†	45812.1	46157.6	207.76	µg/L	207.76	ppb	23:34:25
1	Ti 334.940†	-484.7	-941.4	-0.2963	µg/L	-0.2963	ppb	23:35:49
1	Tl 190.801†	-43.1	-7.1	-2.6824	µg/L	-2.6824	ppb	23:36:09
1	U 409.014†	324.2	-9.5	-0.6105	µg/L	-0.6105	ppb	23:35:49
1	V 292.402†	-28.5	61.1	1.0792	µg/L	1.0792	ppb	23:36:09
1	Zn 213.857†	4980.5	4467.5	104.79	µg/L	104.79	ppb	23:36:09
2	Sc 361.383	1066921.4	1066921.4	99.138	%			23:36:15
2	Sc RADIAL	39238.6	39238.6	99.0	%			23:34:50
2	Y 371.029	578546.2	578546.2	97.870	%			23:36:15
2	Ag 328.068†	-582.5	36.5	0.2749	µg/L	0.2749	ppb	23:36:20
2	Al 396.153Radial†	143.8	40.0	11.655	µg/L	11.655	ppb	23:34:50
2	As 188.979†	-32.0	-4.2	-1.2775	µg/L	-1.2775	ppb	23:36:40
2	B 249.677†	599.6	379.2	25.278	µg/L	25.278	ppb	23:36:40
2	Ba 233.527†	2945.6	3106.1	32.966	µg/L	32.966	ppb	23:36:40
2	Be 313.107†	223.8	-35.2	-0.0175	µg/L	-0.0175	ppb	23:36:20
2	Ca 317.933Radial†	203397.9	205362.0	45996	µg/L	45996	ppb	23:34:50
2	Cd 226.502†	-6.4	17.5	0.6394	µg/L	0.6394	ppb	23:36:40
2	Co 228.616†	-134.4	9.5	0.3118	µg/L	0.3118	ppb	23:36:40
2	Cr 267.716†	1801.8	1746.3	48.763	µg/L	48.763	ppb	23:36:40
2	Cu 324.752†	7884.3	2928.5	11.499	µg/L	11.499	ppb	23:36:20
2	Fe 238.204 Radial†	59.2	16.2	16.379	µg/L	16.379	ppb	23:35:10
2	K 766.490 Radial†	2765.0	1668.4	714.16	µg/L	714.16	ppb	23:34:50
2	Mg 279.077 IEC†	3177.3	3206.9	9249.0	µg/L	9249.0	ppb	23:34:50
2	Mn 257.610†	18836.6	18601.2	33.768	µg/L	33.768	ppb	23:36:20
2	Mo 202.031†	40.5	41.0	5.6019	µg/L	5.6019	ppb	23:36:40
2	Na 589.592 Radial†	128461.3	128797.2	20614	µg/L	20614	ppb	23:34:50
2	Ni 231.604†	231.7	55.4	3.6307	µg/L	3.6307	ppb	23:36:40
2	P 214.914†	253.0	73.1	58.153	µg/L	58.153	ppb	23:36:40
2	Pb 220.353†	-4.2	8.6	2.2764	µg/L	2.2764	ppb	23:36:40
2	S 181.975 Axial†	5252.9	5258.0	11932	µg/L	11932	ppb	23:36:40

2	Sb 206.836†	37.7	3.2	0.6918 µg/L	0.6918 ppb	23:36:40
2	Se 196.026†	-30.3	1.8	1.76 µg/L	1.76 ppb	23:36:40
2	SiO2 †	850435.6	856242.1	59707 µg/L	59707 ppb	23:36:15
2	Si 251.611†	831945.1	837795.6	27700 µg/L	27700 ppb	23:37:24
2	Sn 189.927†	-73.2	-68.5	-13.295 µg/L	-13.295 ppb	23:36:40
2	Sr 421.552†	45953.2	46463.4	209.14 µg/L	209.14 ppb	23:34:50
2	Ti 334.940†	-261.4	-714.5	0.0087 µg/L	0.0087 ppb	23:36:20
2	Tl 190.801†	-39.0	-2.8	-1.0030 µg/L	-1.0030 ppb	23:36:40
2	U 409.014†	340.7	6.1	0.3980 µg/L	0.3980 ppb	23:36:20
2	V 292.402†	-21.4	68.4	1.1962 µg/L	1.1962 ppb	23:36:40
2	Zn 213.857†	5030.3	4501.6	105.60 µg/L	105.60 ppb	23:36:40
3	Sc 361.383	1059842.1	1059842.1	98.480 %		23:36:46
3	Sc RADIAL	39111.4	39111.4	98.6 %		23:35:16
3	Y 371.029	574959.7	574959.7	97.263 %		23:36:46
3	Ag 328.068†	-665.4	-51.6	-0.3751 µg/L	-0.3751 ppb	23:36:51
3	Al 396.153Radial†	142.2	38.8	11.330 µg/L	11.330 ppb	23:35:16
3	As 188.979†	-37.5	-10.1	-4.2425 µg/L	-4.2425 ppb	23:37:11
3	B 249.677†	593.5	376.9	25.127 µg/L	25.127 ppb	23:37:11
3	Ba 233.527†	2904.4	3084.1	32.733 µg/L	32.733 ppb	23:37:11
3	Be 313.107†	204.8	-53.0	-0.0289 µg/L	-0.0289 ppb	23:36:51
3	Ca 317.933Radial†	201886.4	204497.8	45803 µg/L	45803 ppb	23:35:16
3	Cd 226.502†	-5.5	18.4	0.6739 µg/L	0.6739 ppb	23:37:11
3	Co 228.616†	-135.7	7.3	0.2422 µg/L	0.2422 ppb	23:37:11
3	Cr 267.716†	1777.5	1733.8	48.410 µg/L	48.410 ppb	23:37:11
3	Cu 324.752†	7729.4	2824.3	11.086 µg/L	11.086 ppb	23:36:51
3	Fe 238.204 Radial†	58.0	15.2	15.386 µg/L	15.386 ppb	23:35:36
3	K 766.490 Radial†	2731.9	1643.9	703.67 µg/L	703.67 ppb	23:35:16
3	Mg 279.077 IEC†	3138.2	3177.7	9164.6 µg/L	9164.6 ppb	23:35:16
3	Mn 257.610†	18482.3	18368.3	33.344 µg/L	33.344 ppb	23:36:51
3	Mo 202.031†	36.1	36.9	5.0515 µg/L	5.0515 ppb	23:37:11
3	Na 589.592 Radial†	127751.2	128499.3	20567 µg/L	20567 ppb	23:35:16
3	Ni 231.604†	215.6	40.6	2.6649 µg/L	2.6649 ppb	23:37:11
3	P 214.914†	260.7	82.7	66.076 µg/L	66.076 ppb	23:37:11
3	Pb 220.353†	-18.3	-5.8	-1.4911 µg/L	-1.4911 ppb	23:37:11
3	S 181.975 Axial†	5187.3	5226.8	11861 µg/L	11861 ppb	23:37:11
3	Sb 206.836†	47.2	13.1	5.3287 µg/L	5.3287 ppb	23:37:11
3	Se 196.026†	-20.0	12.1	10.3 µg/L	10.3 ppb	23:37:11
3	SiO2 †	844275.2	855716.6	59670 µg/L	59670 ppb	23:36:46
3	Si 251.611†	831365.6	842812.6	27800 µg/L	27800 ppb	23:37:30
3	Sn 189.927†	-78.5	-74.3	-14.803 µg/L	-14.803 ppb	23:37:11
3	Sr 421.552†	45614.4	46270.9	208.27 µg/L	208.27 ppb	23:35:16
3	Ti 334.940†	-358.7	-815.1	-0.1312 µg/L	-0.1312 ppb	23:36:51
3	Tl 190.801†	-39.5	-3.6	-1.3259 µg/L	-1.3259 ppb	23:37:11
3	U 409.014†	413.2	82.0	5.2809 µg/L	5.2809 ppb	23:36:51
3	V 292.402†	-41.6	47.7	0.8870 µg/L	0.8870 ppb	23:37:11
3	Zn 213.857†	4973.7	4478.0	105.05 µg/L	105.05 ppb	23:37:11

Mean Data: 138851002|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1063414.8	98.812	%	0.3289				0.33%
Sc RADIAL	39242.5	99.0	%	0.34				0.34%
Y 371.029	576672.8	97.553	%	0.3043				0.31%
Ag 328.068†	-7.1	-0.0467	µg/L	0.32504	-0.0467	ppb	0.32504	695.78%
Al 396.153Radial†	50.7	14.871	µg/L	5.8537	14.871	ppb	5.8537	39.36%
As 188.979†	-4.8	-1.5924	µg/L	2.50755	-1.5924	ppb	2.50755	157.47%
B 249.677†	380.8	25.383	µg/L	0.3222	25.383	ppb	0.3222	1.27%
Ba 233.527†	3091.7	32.813	µg/L	0.1328	32.813	ppb	0.1328	0.40%
Be 313.107†	-49.3	-0.0270	µg/L	0.00872	-0.0270	ppb	0.00872	32.24%
Ca 317.933Radial†	204749.6	45859	µg/L	119.4	45859	ppb	119.4	0.26%
Cd 226.502†	16.1	0.5884	µg/L	0.11952	0.5884	ppb	0.11952	20.31%
Co 228.616†	11.9	0.3869	µg/L	0.19342	0.3869	ppb	0.19342	49.99%
Cr 267.716†	1735.0	48.447	µg/L	0.2993	48.447	ppb	0.2993	0.62%
Cu 324.752†	2839.2	11.148	µg/L	0.3252	11.148	ppb	0.3252	2.92%
Fe 238.204 Radial†	17.7	17.875	µg/L	3.4862	17.875	ppb	3.4862	19.50%
K 766.490 Radial†	1663.8	712.21	µg/L	7.746	712.21	ppb	7.746	1.09%
Mg 279.077 IEC†	3192.2	9206.4	µg/L	42.19	9206.4	ppb	42.19	0.46%
Mn 257.610†	18401.9	33.405	µg/L	0.3358	33.405	ppb	0.3358	1.01%
Mo 202.031†	38.1	5.2092	µg/L	0.34224	5.2092	ppb	0.34224	6.57%
Na 589.592 Radial†	128449.3	20559	µg/L	60.1	20559	ppb	60.1	0.29%

Ni 231.604†	49.7	3.2575 µg/L	0.51894	3.2575 ppb	0.51894	15.93%
P 214.914†	75.9	60.462 µg/L	4.8875	60.462 ppb	4.8875	8.08%
Pb 220.353†	-0.0	0.0291 µg/L	1.98624	0.0291 ppb	1.98624	>999.9%
S 181.975 Axial†	5238.7	11888 µg/L	38.4	11888 ppb	38.4	0.32%
Sb 206.836†	3.6	0.8840 µg/L	4.35181	0.8840 ppb	4.35181	492.31%
Se 196.026†	1.2	1.28 µg/L	9.302	1.28 ppb	9.302	726.95%
SiO2 †	855226.6	59636 µg/L	92.7	59636 ppb	92.7	0.16%
Si 251.611†	840838.7	27800 µg/L	88.3	27800 ppb	88.3	0.32%
Sn 189.927†	-71.6	-14.101 µg/L	0.7597	-14.101 ppb	0.7597	5.39%
Sr 421.552†	46297.3	208.39 µg/L	0.696	208.39 ppb	0.696	0.33%
Ti 334.940†	-823.7	-0.1396 µg/L	0.15269	-0.1396 ppb	0.15269	109.37%
Tl 190.801†	-4.5	-1.6704 µg/L	0.89113	-1.6704 ppb	0.89113	53.35%
U 409.014†	26.2	1.6894 µg/L	3.15091	1.6894 ppb	3.15091	186.51%
V 292.402†	59.1	1.0542 µg/L	0.15609	1.0542 ppb	0.15609	14.81%
Zn 213.857†	4482.4	105.15 µg/L	0.410	105.15 ppb	0.410	0.39%

Sequence No.: 72
Sample ID: CCV1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/23/2005 23:39:19
Data Type: Reprocessed on 6/24/2005 07:40:50
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1065472.8	1065472.8	99.003	%			23:42:04
1	Sc RADIAL	39664.2	39664.2	100	%			23:40:45
1	Y 371.029	579635.6	579635.6	98.054	%			23:42:04
1	Ag 328.068†	66765.1	68061.6	502.63	µg/L	502.63	ppb	23:42:09
1	Al 396.153Radial†	16564.5	16452.9	4878.6	µg/L	4878.6	ppb	23:40:45
1	As 188.979†	929.1	966.4	494.76	µg/L	494.76	ppb	23:42:30
1	B 249.677†	7643.0	7494.3	496.50	µg/L	496.50	ppb	23:42:09
1	Ba 233.527†	46493.6	47096.7	500.34	µg/L	500.34	ppb	23:42:09
1	Be 313.107†	716572.4	723527.9	497.25	µg/L	497.25	ppb	23:42:04
1	Ca 317.933Radial†	21874.8	21701.2	4863.3	µg/L	4863.3	ppb	23:41:05
1	Cd 226.502†	13569.6	13730.2	501.20	µg/L	501.20	ppb	23:42:09
1	Co 228.616†	15816.8	16121.2	501.50	µg/L	501.50	ppb	23:42:09
1	Cr 267.716†	17829.6	17938.0	500.75	µg/L	500.75	ppb	23:42:09
1	Cu 324.752†	134284.9	130612.9	512.68	µg/L	512.68	ppb	23:42:09
1	Fe 238.204 Radial†	4979.0	4933.5	4993.5	µg/L	4993.5	ppb	23:41:05
1	K 766.490 Radial†	12387.5	11257.3	4818.7	µg/L	4818.7	ppb	23:40:45
1	Mg 279.077 IEC†	1730.5	1726.2	4987.7	µg/L	4987.7	ppb	23:41:05
1	Mn 257.610†	270810.5	273138.5	497.98	µg/L	497.98	ppb	23:42:04
1	Mo 202.031†	3816.9	3855.5	505.94	µg/L	505.94	ppb	23:42:30
1	Na 589.592 Radial†	61941.8	60909.5	9747.2	µg/L	9747.2	ppb	23:40:45
1	Ni 231.604†	7895.8	7797.0	509.90	µg/L	509.90	ppb	23:42:30
1	P 214.914†	3127.0	2976.4	2362.9	µg/L	2362.9	ppb	23:42:30
1	Pb 220.353†	1864.2	1895.8	496.25	µg/L	496.25	ppb	23:42:30
1	S 181.975 Axial†	458.5	422.5	953.04	µg/L	953.04	ppb	23:42:30
1	Sb 206.836†	1072.3	1048.3	493.44	µg/L	493.44	ppb	23:42:30
1	Se 196.026†	550.0	587.9	491	µg/L	491	ppb	23:42:30
1	SiO2 †	80436.8	79655.1	5538.5	µg/L	5538.5	ppb	23:42:09
1	Si 251.611†	77566.0	76960.2	2540	µg/L	2540	ppb	23:43:38
1	Sn 189.927†	1884.6	1909.0	485.83	µg/L	485.83	ppb	23:42:30
1	Sr 421.552†	109540.9	109528.9	494.50	µg/L	494.50	ppb	23:40:45
1	Ti 334.940†	367982.6	371237.7	492.41	µg/L	492.41	ppb	23:42:04
1	Tl 190.801†	1240.7	1289.7	498.71	µg/L	498.71	ppb	23:42:30
1	U 409.014†	8034.8	7778.1	502.73	µg/L	502.73	ppb	23:42:09
1	V 292.402†	33051.6	33474.4	504.49	µg/L	504.49	ppb	23:42:09
1	Zn 213.857†	21378.1	21020.9	498.26	µg/L	498.26	ppb	23:42:09
2	Sc 361.383	1078593.3	1078593.3	100.22	%			23:42:36
2	Sc RADIAL	39413.2	39413.2	99.4	%			23:41:10
2	Y 371.029	586601.5	586601.5	99.232	%			23:42:36
2	Ag 328.068†	66776.3	67252.4	496.68	µg/L	496.68	ppb	23:42:41
2	Al 396.153Radial†	16558.8	16552.6	4908.6	µg/L	4908.6	ppb	23:41:10
2	As 188.979†	933.9	959.8	491.34	µg/L	491.34	ppb	23:43:01
2	B 249.677†	7597.8	7355.3	487.28	µg/L	487.28	ppb	23:42:41
2	Ba 233.527†	46501.4	46533.2	494.36	µg/L	494.36	ppb	23:42:41
2	Be 313.107†	718102.0	716249.6	492.25	µg/L	492.25	ppb	23:42:36
2	Ca 317.933Radial†	21985.8	21952.1	4919.5	µg/L	4919.5	ppb	23:41:30
2	Cd 226.502†	13576.2	13570.1	495.35	µg/L	495.35	ppb	23:42:41
2	Co 228.616†	15798.1	15908.2	494.86	µg/L	494.86	ppb	23:42:41
2	Cr 267.716†	17846.7	17735.9	495.11	µg/L	495.11	ppb	23:42:41
2	Cu 324.752†	134278.9	128956.9	506.18	µg/L	506.18	ppb	23:42:41
2	Fe 238.204 Radial†	5024.2	5010.7	5071.5	µg/L	5071.5	ppb	23:41:30
2	K 766.490 Radial†	12326.2	11274.4	4826.1	µg/L	4826.1	ppb	23:41:10
2	Mg 279.077 IEC†	1743.3	1750.1	5056.3	µg/L	5056.3	ppb	23:41:30
2	Mn 257.610†	271248.3	270247.9	492.73	µg/L	492.73	ppb	23:42:36
2	Mo 202.031†	3813.9	3805.6	499.40	µg/L	499.40	ppb	23:43:01
2	Na 589.592 Radial†	61828.3	61189.8	9792.1	µg/L	9792.1	ppb	23:41:10
2	Ni 231.604†	7918.5	7722.6	505.04	µg/L	505.04	ppb	23:43:01
2	P 214.914†	3140.0	2951.0	2343.0	µg/L	2343.0	ppb	23:43:01
2	Pb 220.353†	1861.5	1870.1	489.54	µg/L	489.54	ppb	23:43:01
2	S 181.975 Axial†	462.1	420.5	948.34	µg/L	948.34	ppb	23:43:01

2	Sb 206.836†	1073.2	1036.0	487.65 µg/L	487.65 ppb	23:43:01
2	Se 196.026†	561.7	592.8	495 µg/L	495 ppb	23:43:01
2	SiO2 †	80110.7	78341.4	5447.2 µg/L	5447.2 ppb	23:42:41
2	Si 251.611†	77549.4	75990.7	2500 µg/L	2500 ppb	23:43:44
2	Sn 189.927†	1896.0	1897.2	482.84 µg/L	482.84 ppb	23:43:01
2	Sr 421.552†	109189.5	109872.7	496.06 µg/L	496.06 ppb	23:41:10
2	Ti 334.940†	369102.3	367833.4	487.90 µg/L	487.90 ppb	23:42:36
2	Tl 190.801†	1228.4	1262.2	488.11 µg/L	488.11 ppb	23:43:01
2	U 409.014†	8094.3	7738.8	500.17 µg/L	500.17 ppb	23:42:41
2	V 292.402†	33179.7	33196.2	500.27 µg/L	500.27 ppb	23:42:41
2	Zn 213.857†	21389.8	20769.9	492.29 µg/L	492.29 ppb	23:42:41
3	Sc 361.383	1074619.3	1074619.3	99.853 %		23:43:07
3	Sc RADIAL	38967.2	38967.2	98.3 %		23:41:36
3	Y 371.029	584977.1	584977.1	98.957 %		23:43:07
3	Ag 328.068†	66060.7	66782.1	493.22 µg/L	493.22 ppb	23:43:12
3	Al 396.153Radial†	16373.3	16554.6	4909.0 µg/L	4909.0 ppb	23:41:36
3	As 188.979†	943.1	972.5	497.72 µg/L	497.72 ppb	23:43:33
3	B 249.677†	7521.5	7306.9	484.08 µg/L	484.08 ppb	23:43:12
3	Ba 233.527†	45864.4	46066.9	489.41 µg/L	489.41 ppb	23:43:12
3	Be 313.107†	716539.7	717334.7	493.00 µg/L	493.00 ppb	23:43:07
3	Ca 317.933Radial†	21930.0	22148.5	4963.5 µg/L	4963.5 ppb	23:41:56
3	Cd 226.502†	13419.4	13463.1	491.44 µg/L	491.44 ppb	23:43:12
3	Co 228.616†	15606.0	15774.1	490.69 µg/L	490.69 ppb	23:43:12
3	Cr 267.716†	17639.1	17593.9	491.14 µg/L	491.14 ppb	23:43:12
3	Cu 324.752†	132662.8	127833.9	501.77 µg/L	501.77 ppb	23:43:12
3	Fe 238.204 Radial†	5003.0	5047.0	5108.1 µg/L	5108.1 ppb	23:41:56
3	K 766.490 Radial†	12314.6	11404.6	4881.8 µg/L	4881.8 ppb	23:41:36
3	Mg 279.077 IEC†	1739.3	1766.1	5102.5 µg/L	5102.5 ppb	23:41:56
3	Mn 257.610†	270915.9	270915.9	493.94 µg/L	493.94 ppb	23:43:07
3	Mo 202.031†	3837.3	3843.1	504.32 µg/L	504.32 ppb	23:43:33
3	Na 589.592 Radial†	61254.0	61317.3	9812.5 µg/L	9812.5 ppb	23:41:36
3	Ni 231.604†	7936.3	7769.7	508.13 µg/L	508.13 ppb	23:43:33
3	P 214.914†	3153.9	2976.4	2364.6 µg/L	2364.6 ppb	23:43:33
3	Pb 220.353†	1869.3	1884.8	493.38 µg/L	493.38 ppb	23:43:33
3	S 181.975 Axial†	456.8	416.9	940.07 µg/L	940.07 ppb	23:43:33
3	Sb 206.836†	1076.4	1043.2	491.14 µg/L	491.14 ppb	23:43:33
3	Se 196.026†	549.9	583.1	487 µg/L	487 ppb	23:43:33
3	SiO2 †	78653.2	77177.4	5365.8 µg/L	5365.8 ppb	23:43:12
3	Si 251.611†	77117.6	75844.3	2500 µg/L	2500 ppb	23:43:49
3	Sn 189.927†	1905.1	1913.3	486.92 µg/L	486.92 ppb	23:43:33
3	Sr 421.552†	108248.8	110172.8	497.41 µg/L	497.41 ppb	23:41:36
3	Ti 334.940†	368513.4	368605.6	488.92 µg/L	488.92 ppb	23:43:07
3	Tl 190.801†	1249.8	1288.2	498.14 µg/L	498.14 ppb	23:43:33
3	U 409.014†	8046.2	7720.5	498.96 µg/L	498.96 ppb	23:43:12
3	V 292.402†	32714.2	32852.4	495.20 µg/L	495.20 ppb	23:43:12
3	Zn 213.857†	21118.0	20576.6	487.64 µg/L	487.64 ppb	23:43:12

Mean Data: CCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1072895.2	99.693	%	0.6252				0.63%
Sc RADIAL	39348.2	99.2	%	0.89				0.90%
Y 371.029	583738.1	98.748	%	0.6165				0.62%
Ag 328.068†	67365.4	497.51	µg/L	4.760	497.51	ppb	4.760	0.96%
QC value within limits for Ag 328.068 Recovery = 99.50%								
Al 396.153Radial†	16520.0	4898.7	µg/L	17.44	4898.7	ppb	17.44	0.36%
QC value within limits for Al 396.153Radial Recovery = 97.97%								
As 188.979†	966.3	494.61	µg/L	3.192	494.61	ppb	3.192	0.65%
QC value within limits for As 188.979 Recovery = 98.92%								
B 249.677†	7385.5	489.29	µg/L	6.448	489.29	ppb	6.448	1.32%
QC value within limits for B 249.677 Recovery = 97.86%								
Ba 233.527†	46565.6	494.70	µg/L	5.477	494.70	ppb	5.477	1.11%
QC value within limits for Ba 233.527 Recovery = 98.94%								
Be 313.107†	719037.4	494.17	µg/L	2.699	494.17	ppb	2.699	0.55%
QC value within limits for Be 313.107 Recovery = 98.83%								
Ca 317.933Radial†	21933.9	4915.4	µg/L	50.21	4915.4	ppb	50.21	1.02%
QC value within limits for Ca 317.933Radial Recovery = 98.31%								
Cd 226.502†	13587.8	496.00	µg/L	4.912	496.00	ppb	4.912	0.99%
QC value within limits for Cd 226.502 Recovery = 99.20%								
Co 228.616†	15934.5	495.68	µg/L	5.448	495.68	ppb	5.448	1.10%

QC value within limits for Co 228.616 Recovery = 99.14%
Cr 267.716† 17755.9 495.67 µg/L 4.830 495.67 ppb 4.830 0.97%
QC value within limits for Cr 267.716 Recovery = 99.13%
Cu 324.752† 129134.5 506.88 µg/L 5.489 506.88 ppb 5.489 1.08%
QC value within limits for Cu 324.752 Recovery = 101.38%
Fe 238.204 Radial† 4997.1 5057.7 µg/L 58.52 5057.7 ppb 58.52 1.16%
QC value within limits for Fe 238.204 Radial Recovery = 101.15%
K 766.490 Radial† 11312.1 4842.2 µg/L 34.48 4842.2 ppb 34.48 0.71%
QC value within limits for K 766.490 Radial Recovery = 96.84%
Mg 279.077 IEC† 1747.5 5048.8 µg/L 57.77 5048.8 ppb 57.77 1.14%
QC value within limits for Mg 279.077 IEC Recovery = 100.98%
Mn 257.610† 271434.1 494.88 µg/L 2.751 494.88 ppb 2.751 0.56%
QC value within limits for Mn 257.610 Recovery = 98.98%
Mo 202.031† 3834.7 503.22 µg/L 3.402 503.22 ppb 3.402 0.68%
QC value within limits for Mo 202.031 Recovery = 100.64%
Na 589.592 Radial† 61138.9 9783.9 µg/L 33.39 9783.9 ppb 33.39 0.34%
QC value within limits for Na 589.592 Radial Recovery = 97.84%
Ni 231.604† 7763.1 507.69 µg/L 2.460 507.69 ppb 2.460 0.48%
QC value within limits for Ni 231.604 Recovery = 101.54%
P 214.914† 2968.0 2356.8 µg/L 12.03 2356.8 ppb 12.03 0.51%
QC value within limits for P 214.914 Recovery = 94.27%
Pb 220.353† 1883.6 493.06 µg/L 3.366 493.06 ppb 3.366 0.68%
QC value within limits for Pb 220.353 Recovery = 98.61%
S 181.975 Axial† 420.0 947.15 µg/L 6.571 947.15 ppb 6.571 0.69%
QC value within limits for S 181.975 Axial Recovery = 94.72%
Sb 206.836† 1042.5 490.75 µg/L 2.915 490.75 ppb 2.915 0.59%
QC value within limits for Sb 206.836 Recovery = 98.15%
Se 196.026† 587.9 491 µg/L 4.0 491 ppb 4.0 0.82%
QC value within limits for Se 196.026 Recovery = 98.14%
SiO2 † 78391.3 5450.5 µg/L 86.40 5450.5 ppb 86.40 1.59%
QC value within limits for SiO2 Recovery = 101.93%
Si 251.611† 76265.1 2510 µg/L 20.0 2510 ppb 20.0 0.80%
QC value within limits for Si 251.611 Recovery = 100.49%
Sn 189.927† 1906.5 485.20 µg/L 2.115 485.20 ppb 2.115 0.44%
QC value within limits for Sn 189.927 Recovery = 97.04%
Sr 421.552† 109858.1 495.99 µg/L 1.454 495.99 ppb 1.454 0.29%
QC value within limits for Sr 421.552 Recovery = 99.20%
Ti 334.940† 369225.6 489.74 µg/L 2.366 489.74 ppb 2.366 0.48%
QC value within limits for Ti 334.940 Recovery = 97.95%
Tl 190.801† 1280.0 494.99 µg/L 5.965 494.99 ppb 5.965 1.21%
QC value within limits for Tl 190.801 Recovery = 99.00%
U 409.014† 7745.8 500.62 µg/L 1.926 500.62 ppb 1.926 0.38%
QC value within limits for U 409.014 Recovery = 100.12%
V 292.402† 33174.3 499.98 µg/L 4.652 499.98 ppb 4.652 0.93%
QC value within limits for V 292.402 Recovery = 100.00%
Zn 213.857† 20789.1 492.73 µg/L 5.325 492.73 ppb 5.325 1.08%
QC value within limits for Zn 213.857 Recovery = 98.55%
All analyte(s) passed QC.

Sequence No.: 73
Sample ID: CCB1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 6/23/2005 23:45:36
Data Type: Reprocessed on 6/24/2005 07:40:52
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1087018.5	1087018.5	101.00	%			23:48:19
1	Sc RADIAL	39351.0	39351.0	99.2	%			23:47:01
1	Y 371.029	597206.4	597206.4	101.03	%			23:48:19
1	Ag 328.068†	-619.5	10.7	0.0786	µg/L	0.0786	ppb	23:48:24
1	Al 396.153Radial†	80.0	-24.7	-7.4090	µg/L	-7.4090	ppb	23:47:01
1	As 188.979†	-23.0	5.2	2.6445	µg/L	2.6445	ppb	23:48:45
1	B 249.677†	180.6	-46.9	-3.1029	µg/L	-3.1029	ppb	23:48:45
1	Ba 233.527†	-120.0	16.1	0.1714	µg/L	0.1714	ppb	23:48:45
1	Be 313.107†	319.0	54.8	0.0381	µg/L	0.0381	ppb	23:48:24
1	Ca 317.933Radial†	211.0	47.1	10.573	µg/L	10.573	ppb	23:47:21
1	Cd 226.502†	-25.8	-1.6	-0.0581	µg/L	-0.0581	ppb	23:48:45
1	Co 228.616†	-128.2	18.1	0.5647	µg/L	0.5647	ppb	23:48:45
1	Cr 267.716†	84.4	12.4	0.3435	µg/L	0.3435	ppb	23:48:45
1	Cu 324.752†	4979.0	-95.0	-0.3751	µg/L	-0.3751	ppb	23:48:24
1	Fe 238.204 Radial†	45.1	1.8	1.8330	µg/L	1.8330	ppb	23:47:21
1	K 766.490 Radial†	1137.5	20.6	8.8127	µg/L	8.8127	ppb	23:47:01
1	Mg 279.077 IEC†	7.8	4.2	12.133	µg/L	12.133	ppb	23:47:21
1	Mn 257.610†	525.6	121.1	0.2203	µg/L	0.2203	ppb	23:48:45
1	Mo 202.031†	5.2	5.3	0.6977	µg/L	0.6977	ppb	23:48:45
1	Na 589.592 Radial†	760.5	-242.7	-38.848	µg/L	-38.848	ppb	23:47:01
1	Ni 231.604†	177.5	-2.6	-0.1653	µg/L	-0.1653	ppb	23:48:45
1	P 214.914†	177.6	-6.3	-5.1106	µg/L	-5.1106	ppb	23:48:45
1	Pb 220.353†	-8.6	4.3	1.1189	µg/L	1.1189	ppb	23:48:45
1	S 181.975 Axial†	36.0	-5.0	-11.386	µg/L	-11.386	ppb	23:48:45
1	Sb 206.836†	43.0	7.8	3.6511	µg/L	3.6511	ppb	23:48:45
1	Se 196.026†	-34.9	-2.2	-1.84	µg/L	-1.84	ppb	23:48:45
1	SiO2 †	2536.8	919.7	64.112	µg/L	64.112	ppb	23:48:24
1	Si 251.611†	2362.8	952.4	31.5	µg/L	31.5	ppb	23:49:52
1	Sn 189.927†	-2.7	2.7	0.6832	µg/L	0.6832	ppb	23:48:45
1	Sr 421.552†	-20.4	8.6	0.0386	µg/L	0.0386	ppb	23:47:01
1	Ti 334.940†	687.6	229.9	0.3041	µg/L	0.3041	ppb	23:48:24
1	Tl 190.801†	-37.7	-0.9	-0.3268	µg/L	-0.3268	ppb	23:48:45
1	U 409.014†	376.2	34.9	2.2474	µg/L	2.2474	ppb	23:48:24
1	V 292.402†	-93.5	-2.6	-0.0292	µg/L	-0.0292	ppb	23:48:24
1	Zn 213.857†	454.9	-122.2	-2.9214	µg/L	-2.9214	ppb	23:48:45
2	Sc 361.383	1072297.4	1072297.4	99.637	%			23:48:50
2	Sc RADIAL	39831.5	39831.5	100	%			23:47:26
2	Y 371.029	588715.5	588715.5	99.590	%			23:48:50
2	Ag 328.068†	-682.9	-61.4	-0.4538	µg/L	-0.4538	ppb	23:48:55
2	Al 396.153Radial†	96.3	-9.5	-2.8620	µg/L	-2.8620	ppb	23:47:26
2	As 188.979†	-20.9	7.0	3.5488	µg/L	3.5488	ppb	23:49:15
2	B 249.677†	172.4	-52.7	-3.4839	µg/L	-3.4839	ppb	23:49:15
2	Ba 233.527†	-130.0	4.4	0.0471	µg/L	0.0471	ppb	23:49:15
2	Be 313.107†	294.8	34.9	0.0243	µg/L	0.0243	ppb	23:48:55
2	Ca 317.933Radial†	196.5	30.2	6.7689	µg/L	6.7689	ppb	23:47:46
2	Cd 226.502†	-21.4	2.4	0.0886	µg/L	0.0886	ppb	23:49:15
2	Co 228.616†	-146.6	-2.1	-0.0642	µg/L	-0.0642	ppb	23:49:15
2	Cr 267.716†	72.2	1.3	0.0350	µg/L	0.0350	ppb	23:49:15
2	Cu 324.752†	4927.5	-78.9	-0.3123	µg/L	-0.3123	ppb	23:48:55
2	Fe 238.204 Radial†	42.9	-0.9	-0.8956	µg/L	-0.8956	ppb	23:47:46
2	K 766.490 Radial†	1089.0	-41.5	-17.779	µg/L	-17.779	ppb	23:47:26
2	Mg 279.077 IEC†	5.0	1.3	3.8275	µg/L	3.8275	ppb	23:47:46
2	Mn 257.610†	502.0	104.6	0.1899	µg/L	0.1899	ppb	23:49:15
2	Mo 202.031†	4.2	4.4	0.5731	µg/L	0.5731	ppb	23:49:15
2	Na 589.592 Radial†	704.8	-307.4	-49.195	µg/L	-49.195	ppb	23:47:26
2	Ni 231.604†	173.3	-4.4	-0.2832	µg/L	-0.2832	ppb	23:49:15
2	P 214.914†	179.0	-2.5	-1.9884	µg/L	-1.9884	ppb	23:49:15
2	Pb 220.353†	-13.9	-1.1	-0.2964	µg/L	-0.2964	ppb	23:49:15
2	S 181.975 Axial†	33.0	-7.5	-17.007	µg/L	-17.007	ppb	23:49:15

2	Sb 206.836†	44.9	10.3	4.8389 µg/L	4.8389 ppb	23:49:15
2	Se 196.026†	-29.3	2.9	2.45 µg/L	2.45 ppb	23:49:15
2	SiO2 †	2440.8	858.0	59.808 µg/L	59.808 ppb	23:48:55
2	Si 251.611†	2408.1	1029.9	34.0 µg/L	34.0 ppb	23:49:57
2	Sn 189.927†	-5.5	-0.1	-0.0169 µg/L	-0.0169 ppb	23:49:15
2	Sr 421.552†	-11.9	17.2	0.0777 µg/L	0.0777 ppb	23:47:26
2	Ti 334.940†	733.8	285.6	0.3781 µg/L	0.3781 ppb	23:48:55
2	Tl 190.801†	-32.7	3.7	1.4369 µg/L	1.4369 ppb	23:49:15
2	U 409.014†	368.2	32.0	2.0554 µg/L	2.0554 ppb	23:48:55
2	V 292.402†	-143.6	-54.1	-0.7971 µg/L	-0.7971 ppb	23:48:55
2	Zn 213.857†	452.1	-118.8	-2.8387 µg/L	-2.8387 ppb	23:49:15
3	Sc 361.383	1089860.0	1089860.0	101.27 %		23:49:21
3	Sc RADIAL	39993.3	39993.3	101 %		23:47:51
3	Y 371.029	598310.3	598310.3	101.21 %		23:49:21
3	Ag 328.068†	-594.3	37.2	0.2731 µg/L	0.2731 ppb	23:49:26
3	Al 396.153Radial†	70.9	-35.0	-10.461 µg/L	-10.461 ppb	23:47:51
3	As 188.979†	-22.7	5.6	2.8281 µg/L	2.8281 ppb	23:49:46
3	B 249.677†	170.2	-57.6	-3.8138 µg/L	-3.8138 ppb	23:49:46
3	Ba 233.527†	-119.6	16.8	0.1784 µg/L	0.1784 ppb	23:49:46
3	Be 313.107†	337.1	71.9	0.0494 µg/L	0.0494 ppb	23:49:26
3	Ca 317.933Radial†	206.2	39.0	8.7376 µg/L	8.7376 ppb	23:48:11
3	Cd 226.502†	-30.2	-5.9	-0.2143 µg/L	-0.2143 ppb	23:49:46
3	Co 228.616†	-130.2	16.6	0.5170 µg/L	0.5170 ppb	23:49:46
3	Cr 267.716†	79.2	7.0	0.1944 µg/L	0.1944 ppb	23:49:46
3	Cu 324.752†	4958.4	-128.2	-0.5038 µg/L	-0.5038 ppb	23:49:26
3	Fe 238.204 Radial†	45.1	1.1	1.1243 µg/L	1.1243 ppb	23:48:11
3	K 766.490 Radial†	1066.9	-67.8	-29.030 µg/L	-29.030 ppb	23:47:51
3	Mg 279.077 IEC†	1.5	-2.2	-6.3254 µg/L	-6.3254 ppb	23:48:11
3	Mn 257.610†	428.1	23.4	0.0428 µg/L	0.0428 ppb	23:49:46
3	Mo 202.031†	4.6	4.7	0.6215 µg/L	0.6215 ppb	23:49:46
3	Na 589.592 Radial†	746.2	-269.2	-43.093 µg/L	-43.093 ppb	23:47:51
3	Ni 231.604†	169.0	-11.5	-0.7463 µg/L	-0.7463 ppb	23:49:46
3	P 214.914†	173.7	-10.6	-8.6260 µg/L	-8.6260 ppb	23:49:46
3	Pb 220.353†	-10.9	2.1	0.5403 µg/L	0.5403 ppb	23:49:46
3	S 181.975 Axial†	36.9	-4.2	-9.4872 µg/L	-9.4872 ppb	23:49:46
3	Sb 206.836†	41.1	5.8	2.7399 µg/L	2.7399 ppb	23:49:46
3	Se 196.026†	-37.2	-4.4	-3.64 µg/L	-3.64 ppb	23:49:46
3	SiO2 †	2402.6	780.7	54.421 µg/L	54.421 ppb	23:49:26
3	Si 251.611†	2351.7	935.3	30.9 µg/L	30.9 ppb	23:50:02
3	Sn 189.927†	-4.0	1.4	0.3624 µg/L	0.3624 ppb	23:49:46
3	Sr 421.552†	8.3	37.3	0.1683 µg/L	0.1683 ppb	23:47:51
3	Ti 334.940†	612.3	153.7	0.2043 µg/L	0.2043 ppb	23:49:26
3	Tl 190.801†	-39.5	-2.5	-0.9706 µg/L	-0.9706 ppb	23:49:46
3	U 409.014†	338.4	-3.4	-0.2206 µg/L	-0.2206 ppb	23:49:26
3	V 292.402†	-119.5	-28.1	-0.4111 µg/L	-0.4111 ppb	23:49:26
3	Zn 213.857†	440.9	-137.1	-3.2747 µg/L	-3.2747 ppb	23:49:46

Mean Data: CCB1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1083058.6	100.64	%	0.876				0.87%
Sc RADIAL	39725.3	100	%	0.8				0.84%
Y 371.029	594744.1	100.61	%	0.888				0.88%
Ag 328.068†	-4.5	-0.0340	µg/L	0.37632	-0.0340	ppb	0.37632	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-23.1	-6.9107	µg/L	3.82394	-6.9107	ppb	3.82394	55.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.9	3.0072	µg/L	0.47801	3.0072	ppb	0.47801	15.90%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-52.4	-3.4669	µg/L	0.35571	-3.4669	ppb	0.35571	10.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.5	0.1323	µg/L	0.07386	0.1323	ppb	0.07386	55.83%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	53.9	0.0373	µg/L	0.01254	0.0373	ppb	0.01254	33.62%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	38.8	8.6930	µg/L	1.90218	8.6930	ppb	1.90218	21.88%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.7	-0.0613	µg/L	0.15147	-0.0613	ppb	0.15147	247.26%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	10.9	0.3391	µg/L	0.35016	0.3391	ppb	0.35016	103.25%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	6.9	0.1910 µg/L	0.15429	0.1910 ppb	0.15429	80.78%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-100.7	-0.3970 µg/L	0.09762	-0.3970 ppb	0.09762	24.59%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	0.7	0.6872 µg/L	1.41581	0.6872 ppb	1.41581	206.03%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	-29.6	-12.666 µg/L	19.4328	-12.666 ppb	19.4328	153.43%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	1.1	3.2115 µg/L	9.24438	3.2115 ppb	9.24438	287.85%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	83.0	0.1510 µg/L	0.09491	0.1510 ppb	0.09491	62.84%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	4.8	0.6308 µg/L	0.06281	0.6308 ppb	0.06281	9.96%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-273.1	-43.712 µg/L	5.2009	-43.712 ppb	5.2009	11.90%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-6.1	-0.3983 µg/L	0.30715	-0.3983 ppb	0.30715	77.13%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-6.4	-5.2417 µg/L	3.32078	-5.2417 ppb	3.32078	63.35%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	1.7	0.4543 µg/L	0.71158	0.4543 ppb	0.71158	156.64%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-5.6	-12.627 µg/L	3.9102	-12.627 ppb	3.9102	30.97%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	8.0	3.7433 µg/L	1.05252	3.7433 ppb	1.05252	28.12%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-1.2	-1.01 µg/L	3.130	-1.01 ppb	3.130	309.45%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	852.8	59.447 µg/L	4.8556	59.447 ppb	4.8556	8.17%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	972.5	32.1 µg/L	1.67	32.1 ppb	1.67	5.19%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	1.3	0.3429 µg/L	0.35047	0.3429 ppb	0.35047	102.22%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	21.0	0.0949 µg/L	0.06656	0.0949 ppb	0.06656	70.16%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	223.1	0.2955 µg/L	0.08724	0.2955 ppb	0.08724	29.53%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	0.1	0.0465 µg/L	1.24642	0.0465 ppb	1.24642	>999.9%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	21.2	1.3608 µg/L	1.37281	1.3608 ppb	1.37281	100.89%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-28.3	-0.4124 µg/L	0.38395	-0.4124 ppb	0.38395	93.09%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-126.0	-3.0116 µg/L	0.23158	-3.0116 ppb	0.23158	7.69%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 74
Sample ID: 138851003|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 6/23/2005 23:51:50
Data Type: Reprocessed on 6/24/2005 07:40:54
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851003|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1063435.2	1063435.2	98.814	%			23:54:33
1	Sc RADIAL	39742.2	39742.2	100	%			23:53:14
1	Y 371.029	576705.1	576705.1	97.558	%			23:54:33
1	Ag 328.068†	-678.0	-62.1	-0.4360	µg/L	-0.4360	ppb	23:54:39
1	Al 396.153Radial†	222.5	116.6	34.512	µg/L	34.512	ppb	23:53:14
1	As 188.979†	-27.9	-0.2	0.8098	µg/L	0.8098	ppb	23:54:59
1	B 249.677†	624.9	406.8	27.104	µg/L	27.104	ppb	23:54:59
1	Ba 233.527†	2962.0	3132.4	33.245	µg/L	33.245	ppb	23:54:59
1	Be 313.107†	238.9	-19.2	-0.0056	µg/L	-0.0056	ppb	23:54:39
1	Ca 317.933Radial†	207257.9	206608.3	46275	µg/L	46275	ppb	23:53:14
1	Cd 226.502†	-12.2	11.6	0.4210	µg/L	0.4210	ppb	23:54:59
1	Co 228.616†	-138.4	5.1	0.1719	µg/L	0.1719	ppb	23:54:59
1	Cr 267.716†	1917.7	1869.5	52.201	µg/L	52.201	ppb	23:54:59
1	Cu 324.752†	8702.5	3782.5	14.855	µg/L	14.855	ppb	23:54:39
1	Fe 238.204 Radial†	143.3	99.4	100.44	µg/L	100.44	ppb	23:53:34
1	K 766.490 Radial†	2848.8	1716.5	734.77	µg/L	734.77	ppb	23:53:14
1	Mg 279.077 IEC†	3229.7	3218.5	9282.1	µg/L	9282.1	ppb	23:53:14
1	Mn 257.610†	16637.0	16437.5	29.836	µg/L	29.836	ppb	23:54:39
1	Mo 202.031†	37.5	38.1	5.2248	µg/L	5.2248	ppb	23:54:59
1	Na 589.592 Radial†	132435.2	131116.9	20986	µg/L	20986	ppb	23:53:14
1	Ni 231.604†	224.5	48.9	3.2096	µg/L	3.2096	ppb	23:54:59
1	P 214.914†	259.4	80.5	63.595	µg/L	63.595	ppb	23:54:59
1	Pb 220.353†	9.0	21.9	5.7679	µg/L	5.7679	ppb	23:54:59
1	S 181.975 Axial†	5303.6	5326.6	12087	µg/L	12087	ppb	23:54:59
1	Sb 206.836†	43.5	9.2	3.4549	µg/L	3.4549	ppb	23:54:59
1	Se 196.026†	-32.0	0.0	0.271	µg/L	0.271	ppb	23:54:59
1	SiO2 †	862066.8	870825.2	60723	µg/L	60723	ppb	23:54:33
1	Si 251.611†	847230.5	856015.6	28300	µg/L	28300	ppb	23:56:08
1	Sn 189.927†	-71.8	-67.2	-12.950	µg/L	-12.950	ppb	23:54:59
1	Sr 421.552†	47246.8	47165.6	212.30	µg/L	212.30	ppb	23:53:14
1	Ti 334.940†	-45.3	-496.8	0.3014	µg/L	0.3014	ppb	23:54:39
1	Tl 190.801†	-41.3	-5.3	-1.9834	µg/L	-1.9834	ppb	23:54:59
1	U 409.014†	379.7	46.7	2.9973	µg/L	2.9973	ppb	23:54:39
1	V 292.402†	-19.9	69.9	1.2274	µg/L	1.2274	ppb	23:54:59
1	Zn 213.857†	4416.4	3896.9	91.110	µg/L	91.110	ppb	23:54:59
2	Sc 361.383	1066612.7	1066612.7	99.109	%			23:55:04
2	Sc RADIAL	39254.6	39254.6	99.0	%			23:53:40
2	Y 371.029	578514.7	578514.7	97.864	%			23:55:04
2	Ag 328.068†	-620.9	-2.4	0.0047	µg/L	0.0047	ppb	23:55:10
2	Al 396.153Radial†	254.2	151.4	44.854	µg/L	44.854	ppb	23:53:40
2	As 188.979†	-29.0	-1.3	0.2663	µg/L	0.2663	ppb	23:55:30
2	B 249.677†	618.1	398.0	26.517	µg/L	26.517	ppb	23:55:30
2	Ba 233.527†	2980.4	3142.0	33.347	µg/L	33.347	ppb	23:55:30
2	Be 313.107†	200.2	-59.0	-0.0323	µg/L	-0.0323	ppb	23:55:10
2	Ca 317.933Radial†	205341.7	207241.3	46417	µg/L	46417	ppb	23:53:40
2	Cd 226.502†	-6.4	17.5	0.6332	µg/L	0.6332	ppb	23:55:30
2	Co 228.616†	-127.2	16.8	0.5353	µg/L	0.5353	ppb	23:55:30
2	Cr 267.716†	1927.5	1873.7	52.316	µg/L	52.316	ppb	23:55:30
2	Cu 324.752†	8587.3	3640.1	14.293	µg/L	14.293	ppb	23:55:10
2	Fe 238.204 Radial†	158.4	116.4	117.64	µg/L	117.64	ppb	23:54:00
2	K 766.490 Radial†	2897.7	1801.3	771.05	µg/L	771.05	ppb	23:53:40
2	Mg 279.077 IEC†	3233.4	3262.3	9408.5	µg/L	9408.5	ppb	23:53:40
2	Mn 257.610†	16525.7	16275.0	29.540	µg/L	29.540	ppb	23:55:10
2	Mo 202.031†	39.7	40.3	5.5053	µg/L	5.5053	ppb	23:55:30
2	Na 589.592 Radial†	131117.3	131426.9	21035	µg/L	21035	ppb	23:53:40
2	Ni 231.604†	218.0	41.7	2.7349	µg/L	2.7349	ppb	23:55:30
2	P 214.914†	264.2	84.5	66.954	µg/L	66.954	ppb	23:55:30
2	Pb 220.353†	-12.0	0.6	0.2030	µg/L	0.2030	ppb	23:55:30
2	S 181.975 Axial†	5324.1	5331.3	12098	µg/L	12098	ppb	23:55:30

2	Sb 206.836†	46.9	12.5	5.0018 µg/L	5.0018 ppb	23:55:30
2	Se 196.026†	-21.2	11.0	9.46 µg/L	9.46 ppb	23:55:30
2	SiO2 †	863561.5	869734.3	60647 µg/L	60647 ppb	23:55:04
2	Si 251.611†	844860.2	851069.8	28100 µg/L	28100 ppb	23:56:14
2	Sn 189.927†	-70.0	-65.2	-12.419 µg/L	-12.419 ppb	23:55:30
2	Sr 421.552†	46741.2	47240.4	212.64 µg/L	212.64 ppb	23:53:40
2	Ti 334.940†	-6.2	-457.2	0.3554 µg/L	0.3554 ppb	23:55:10
2	Tl 190.801†	-36.5	-0.3	-0.0535 µg/L	-0.0535 ppb	23:55:30
2	U 409.014†	427.3	93.6	6.0115 µg/L	6.0115 ppb	23:55:10
2	V 292.402†	-37.9	51.8	0.9646 µg/L	0.9646 ppb	23:55:30
2	Zn 213.857†	4419.7	3886.9	90.864 µg/L	90.864 ppb	23:55:30
3	Sc 361.383	1069739.2	1069739.2	99.399 %		23:55:35
3	Sc RADIAL	39233.0	39233.0	98.9 %		23:54:05
3	Y 371.029	579938.9	579938.9	98.105 %		23:55:35
3	Ag 328.068†	-578.1	42.5	0.3334 µg/L	0.3334 ppb	23:55:41
3	Al 396.153Radial†	214.2	111.1	32.872 µg/L	32.872 ppb	23:54:05
3	As 188.979†	-23.1	4.7	3.2978 µg/L	3.2978 ppb	23:56:01
3	B 249.677†	609.3	387.3	25.817 µg/L	25.817 ppb	23:56:01
3	Ba 233.527†	2959.4	3112.2	33.030 µg/L	33.030 ppb	23:56:01
3	Be 313.107†	283.8	24.5	0.0246 µg/L	0.0246 ppb	23:55:41
3	Ca 317.933Radial†	204939.7	206949.3	46352 µg/L	46352 ppb	23:54:05
3	Cd 226.502†	-6.1	17.8	0.6462 µg/L	0.6462 ppb	23:56:01
3	Co 228.616†	-147.5	-3.3	-0.0892 µg/L	-0.0892 ppb	23:56:01
3	Cr 267.716†	1925.0	1865.4	52.088 µg/L	52.088 ppb	23:56:01
3	Cu 324.752†	8617.7	3645.3	14.316 µg/L	14.316 ppb	23:55:41
3	Fe 238.204 Radial†	145.0	103.0	104.10 µg/L	104.10 ppb	23:54:25
3	K 766.490 Radial†	2818.6	1723.0	737.52 µg/L	737.52 ppb	23:54:05
3	Mg 279.077 IEC†	3203.7	3234.1	9327.2 µg/L	9327.2 ppb	23:54:05
3	Mn 257.610†	16492.7	16193.1	29.391 µg/L	29.391 ppb	23:55:41
3	Mo 202.031†	37.8	38.2	5.2331 µg/L	5.2331 ppb	23:56:01
3	Na 589.592 Radial†	131048.8	131430.7	21036 µg/L	21036 ppb	23:54:05
3	Ni 231.604†	222.3	45.3	2.9708 µg/L	2.9708 ppb	23:56:01
3	P 214.914†	259.1	78.6	62.118 µg/L	62.118 ppb	23:56:01
3	Pb 220.353†	0.6	13.4	3.5457 µg/L	3.5457 ppb	23:56:01
3	S 181.975 Axial†	5277.9	5269.2	11957 µg/L	11957 ppb	23:56:01
3	Sb 206.836†	38.9	4.4	1.1781 µg/L	1.1781 ppb	23:56:01
3	Se 196.026†	-32.0	0.2	0.402 µg/L	0.402 ppb	23:56:01
3	SiO2 †	867386.8	871036.2	60738 µg/L	60738 ppb	23:55:35
3	Si 251.611†	848778.4	852520.2	28200 µg/L	28200 ppb	23:56:20
3	Sn 189.927†	-70.4	-65.4	-12.483 µg/L	-12.483 ppb	23:56:01
3	Sr 421.552†	46664.3	47188.6	212.41 µg/L	212.41 ppb	23:54:05
3	Ti 334.940†	32.9	-417.7	0.4076 µg/L	0.4076 ppb	23:55:41
3	Tl 190.801†	-37.6	-1.3	-0.4480 µg/L	-0.4480 ppb	23:56:01
3	U 409.014†	390.0	54.8	3.5220 µg/L	3.5220 ppb	23:55:41
3	V 292.402†	-17.6	72.3	1.2641 µg/L	1.2641 ppb	23:56:01
3	Zn 213.857†	4408.4	3862.5	90.285 µg/L	90.285 ppb	23:56:01

Mean Data: 138851003|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1066595.7	99.107	%	0.2929				0.30%
Sc RADIAL	39409.9	99.4	%	0.73				0.73%
Y 371.029	578386.2	97.843	%	0.2742				0.28%
Ag 328.068†	-7.3	-0.0326	µg/L	0.38609	-0.0326	ppb	0.38609	>999.9%
Al 396.153Radial†	126.4	37.413	µg/L	6.4964	37.413	ppb	6.4964	17.36%
As 188.979†	1.1	1.4579	µg/L	1.61633	1.4579	ppb	1.61633	110.86%
B 249.677†	397.4	26.479	µg/L	0.6444	26.479	ppb	0.6444	2.43%
Ba 233.527†	3128.9	33.207	µg/L	0.1620	33.207	ppb	0.1620	0.49%
Be 313.107†	-17.9	-0.0045	µg/L	0.02845	-0.0045	ppb	0.02845	638.52%
Ca 317.933Radial†	206933.0	46348	µg/L	71.0	46348	ppb	71.0	0.15%
Cd 226.502†	15.6	0.5668	µg/L	0.12644	0.5668	ppb	0.12644	22.31%
Co 228.616†	6.2	0.2060	µg/L	0.31361	0.2060	ppb	0.31361	152.23%
Cr 267.716†	1869.5	52.202	µg/L	0.1141	52.202	ppb	0.1141	0.22%
Cu 324.752†	3689.3	14.488	µg/L	0.3179	14.488	ppb	0.3179	2.19%
Fe 238.204 Radial†	106.2	107.39	µg/L	9.061	107.39	ppb	9.061	8.44%
K 766.490 Radial†	1746.9	747.78	µg/L	20.197	747.78	ppb	20.197	2.70%
Mg 279.077 IEC†	3238.3	9339.3	µg/L	64.06	9339.3	ppb	64.06	0.69%
Mn 257.610†	16301.9	29.589	µg/L	0.2266	29.589	ppb	0.2266	0.77%
Mo 202.031†	38.9	5.3211	µg/L	0.15960	5.3211	ppb	0.15960	3.00%
Na 589.592 Radial†	131324.8	21019	µg/L	28.8	21019	ppb	28.8	0.14%

Ni 231.604†	45.3	2.9718 µg/L	0.23737	2.9718 ppb	0.23737	7.99%
P 214.914†	81.2	64.222 µg/L	2.4787	64.222 ppb	2.4787	3.86%
Pb 220.353†	12.0	3.1722 µg/L	2.80118	3.1722 ppb	2.80118	88.30%
S 181.975 Axial†	5309.0	12047 µg/L	78.5	12047 ppb	78.5	0.65%
Sb 206.836†	8.7	3.2116 µg/L	1.92343	3.2116 ppb	1.92343	59.89%
Se 196.026†	3.7	3.38 µg/L	5.268	3.38 ppb	5.268	155.97%
SiO2 †	870531.9	60703 µg/L	48.7	60703 ppb	48.7	0.08%
Si 251.611†	853201.8	28200 µg/L	84.0	28200 ppb	84.0	0.30%
Sn 189.927†	-65.9	-12.617 µg/L	0.2898	-12.617 ppb	0.2898	2.30%
Sr 421.552†	47198.2	212.45 µg/L	0.172	212.45 ppb	0.172	0.08%
Ti 334.940†	-457.2	0.3548 µg/L	0.05312	0.3548 ppb	0.05312	14.97%
Tl 190.801†	-2.3	-0.8283 µg/L	1.01962	-0.8283 ppb	1.01962	123.10%
U 409.014†	65.0	4.1769 µg/L	1.61028	4.1769 ppb	1.61028	38.55%
V 292.402†	64.7	1.1520 µg/L	0.16335	1.1520 ppb	0.16335	14.18%
Zn 213.857†	3882.1	90.753 µg/L	0.4239	90.753 ppb	0.4239	0.47%

Sequence No.: 75
Sample ID: 1200870314|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 6/23/2005 23:58:08
Data Type: Reprocessed on 6/24/2005 07:40:56
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870314|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1068158.1	1068158.1	99.252	%			00:00:55
1	Sc RADIAL	39159.1	39159.1	98.8	%			23:59:36
1	Y 371.029	579211.4	579211.4	97.982	%			00:00:55
1	Ag 328.068†	-654.9	-35.8	-0.2427	µg/L	-0.2427	ppb	00:01:00
1	Al 396.153Radial†	196.7	93.8	27.722	µg/L	27.722	ppb	23:59:36
1	As 188.979†	-34.7	-6.9	-2.5922	µg/L	-2.5922	ppb	00:01:20
1	B 249.677†	595.4	374.2	24.949	µg/L	24.949	ppb	00:01:20
1	Ba 233.527†	2951.7	3108.8	32.994	µg/L	32.994	ppb	00:01:20
1	Be 313.107†	167.2	-92.5	-0.0560	µg/L	-0.0560	ppb	00:01:00
1	Ca 317.933Radial†	205313.3	207718.3	46524	µg/L	46524	ppb	23:59:36
1	Cd 226.502†	-11.0	12.9	0.4675	µg/L	0.4675	ppb	00:01:20
1	Co 228.616†	-139.3	4.7	0.1608	µg/L	0.1608	ppb	00:01:20
1	Cr 267.716†	1923.9	1867.2	52.137	µg/L	52.137	ppb	00:01:20
1	Cu 324.752†	8514.6	3554.3	13.958	µg/L	13.958	ppb	00:01:00
1	Fe 238.204 Radial†	142.4	100.6	101.71	µg/L	101.71	ppb	23:59:56
1	K 766.490 Radial†	2799.8	1709.3	731.67	µg/L	731.67	ppb	23:59:36
1	Mg 279.077 IEC†	3228.9	3265.6	9418.1	µg/L	9418.1	ppb	23:59:36
1	Mn 257.610†	16487.5	16212.4	29.425	µg/L	29.425	ppb	00:01:00
1	Mo 202.031†	36.7	37.1	5.0924	µg/L	5.0924	ppb	00:01:20
1	Na 589.592 Radial†	130849.5	131478.7	21043	µg/L	21043	ppb	23:59:36
1	Ni 231.604†	231.6	55.0	3.6054	µg/L	3.6054	ppb	00:01:20
1	P 214.914†	257.7	77.6	61.353	µg/L	61.353	ppb	00:01:20
1	Pb 220.353†	-6.1	6.7	1.7834	µg/L	1.7834	ppb	00:01:20
1	S 181.975 Axial†	5303.0	5302.4	12032	µg/L	12032	ppb	00:01:20
1	Sb 206.836†	42.6	8.2	2.9554	µg/L	2.9554	ppb	00:01:20
1	Se 196.026†	-23.6	8.6	7.46	µg/L	7.46	ppb	00:01:20
1	SiO2 †	870143.9	875105.7	61022	µg/L	61022	ppb	00:00:55
1	Si 251.611†	859228.7	864313.1	28600	µg/L	28600	ppb	00:02:29
1	Sn 189.927†	-71.5	-66.6	-12.771	µg/L	-12.771	ppb	00:01:20
1	Sr 421.552†	46668.6	47282.0	212.82	µg/L	212.82	ppb	23:59:36
1	Ti 334.940†	-73.2	-524.6	0.2697	µg/L	0.2697	ppb	00:01:00
1	Tl 190.801†	-31.1	5.2	2.0457	µg/L	2.0457	ppb	00:01:20
1	U 409.014†	381.6	46.9	3.0138	µg/L	3.0138	ppb	00:01:00
1	V 292.402†	-24.7	65.1	1.1546	µg/L	1.1546	ppb	00:01:20
1	Zn 213.857†	4445.0	3905.9	91.311	µg/L	91.311	ppb	00:01:20
2	Sc 361.383	1071666.1	1071666.1	99.578	%			00:01:26
2	Sc RADIAL	39200.9	39200.9	98.9	%			00:00:01
2	Y 371.029	581092.2	581092.2	98.300	%			00:01:26
2	Ag 328.068†	-637.8	-16.4	-0.1013	µg/L	-0.1013	ppb	00:01:31
2	Al 396.153Radial†	220.3	117.5	34.812	µg/L	34.812	ppb	00:00:01
2	As 188.979†	-29.3	-1.4	0.1972	µg/L	0.1972	ppb	00:01:51
2	B 249.677†	619.5	396.5	26.424	µg/L	26.424	ppb	00:01:51
2	Ba 233.527†	2992.5	3140.0	33.326	µg/L	33.326	ppb	00:01:51
2	Be 313.107†	229.0	-31.0	-0.0126	µg/L	-0.0126	ppb	00:01:31
2	Ca 317.933Radial†	205875.7	208065.7	46602	µg/L	46602	ppb	00:00:01
2	Cd 226.502†	-7.1	16.8	0.6109	µg/L	0.6109	ppb	00:01:51
2	Co 228.616†	-133.6	10.9	0.3524	µg/L	0.3524	ppb	00:01:51
2	Cr 267.716†	1954.8	1891.8	52.822	µg/L	52.822	ppb	00:01:51
2	Cu 324.752†	8577.7	3589.6	14.094	µg/L	14.094	ppb	00:01:31
2	Fe 238.204 Radial†	141.5	99.5	100.59	µg/L	100.59	ppb	00:00:21
2	K 766.490 Radial†	2759.2	1665.2	712.80	µg/L	712.80	ppb	00:00:01
2	Mg 279.077 IEC†	3205.6	3238.6	9340.1	µg/L	9340.1	ppb	00:00:01
2	Mn 257.610†	16551.7	16222.5	29.443	µg/L	29.443	ppb	00:01:31
2	Mo 202.031†	33.1	33.4	4.6115	µg/L	4.6115	ppb	00:01:51
2	Na 589.592 Radial†	131484.6	131979.9	21124	µg/L	21124	ppb	00:00:01
2	Ni 231.604†	222.7	45.3	2.9739	µg/L	2.9739	ppb	00:01:51
2	P 214.914†	262.6	81.6	64.640	µg/L	64.640	ppb	00:01:51
2	Pb 220.353†	-4.0	8.8	2.3307	µg/L	2.3307	ppb	00:01:51
2	S 181.975 Axial†	5357.4	5339.4	12116	µg/L	12116	ppb	00:01:51

2	Sb 206.836†	40.3	5.7	1.7727 µg/L	1.7727 ppb	00:01:51
2	Se 196.026†	-41.1	-8.9	-7.11 µg/L	-7.11 ppb	00:01:51
2	SiO2 †	873189.9	875294.9	61035 µg/L	61035 ppb	00:01:26
2	Si 251.611†	843034.4	845216.5	27900 µg/L	27900 ppb	00:02:35
2	Sn 189.927†	-75.6	-70.5	-13.763 µg/L	-13.763 ppb	00:01:51
2	Sr 421.552†	46871.9	47437.3	213.52 µg/L	213.52 ppb	00:00:01
2	Ti 334.940†	-57.7	-508.8	0.2894 µg/L	0.2894 ppb	00:01:31
2	Tl 190.801†	-46.7	-10.4	-3.9263 µg/L	-3.9263 ppb	00:01:51
2	U 409.014†	464.6	129.0	8.2978 µg/L	8.2978 ppb	00:01:31
2	V 292.402†	-24.4	65.5	1.1627 µg/L	1.1627 ppb	00:01:51
2	Zn 213.857†	4499.7	3946.3	92.279 µg/L	92.279 ppb	00:01:51
3	Sc 361.383	1072119.8	1072119.8	99.621 %		00:01:57
3	Sc RADIAL	39050.1	39050.1	98.5 %		00:00:27
3	Y 371.029	580861.1	580861.1	98.261 %		00:01:57
3	Ag 328.068†	-608.9	12.9	0.1145 µg/L	0.1145 ppb	00:02:02
3	Al 396.153Radial†	246.8	145.2	43.047 µg/L	43.047 ppb	00:00:27
3	As 188.979†	-26.5	1.4	1.6133 µg/L	1.6133 ppb	00:02:22
3	B 249.677†	594.6	371.2	24.747 µg/L	24.747 ppb	00:02:22
3	Ba 233.527†	2972.0	3118.2	33.094 µg/L	33.094 ppb	00:02:22
3	Be 313.107†	227.0	-33.1	-0.0149 µg/L	-0.0149 ppb	00:02:02
3	Ca 317.933Radial†	205187.5	208170.8	46625 µg/L	46625 ppb	00:00:27
3	Cd 226.502†	-12.4	11.5	0.4143 µg/L	0.4143 ppb	00:02:22
3	Co 228.616†	-145.9	-1.3	-0.0283 µg/L	-0.0283 ppb	00:02:22
3	Cr 267.716†	1914.3	1850.4	51.666 µg/L	51.666 ppb	00:02:22
3	Cu 324.752†	8624.2	3632.6	14.265 µg/L	14.265 ppb	00:02:02
3	Fe 238.204 Radial†	138.5	97.0	98.038 µg/L	98.038 ppb	00:00:47
3	K 766.490 Radial†	2845.6	1763.7	754.95 µg/L	754.95 ppb	00:00:27
3	Mg 279.077 IEC†	3196.8	3242.3	9350.7 µg/L	9350.7 ppb	00:00:27
3	Mn 257.610†	16624.7	16288.7	29.564 µg/L	29.564 ppb	00:02:02
3	Mo 202.031†	35.6	35.9	4.9401 µg/L	4.9401 ppb	00:02:22
3	Na 589.592 Radial†	130974.0	131974.9	21123 µg/L	21123 ppb	00:00:27
3	Ni 231.604†	215.0	37.5	2.4634 µg/L	2.4634 ppb	00:02:22
3	P 214.914†	263.3	82.3	65.149 µg/L	65.149 ppb	00:02:22
3	Pb 220.353†	-9.5	3.3	0.8966 µg/L	0.8966 ppb	00:02:22
3	S 181.975 Axial†	5304.9	5284.5	11992 µg/L	11992 ppb	00:02:22
3	Sb 206.836†	42.9	8.3	3.0053 µg/L	3.0053 ppb	00:02:22
3	Se 196.026†	-30.8	1.4	1.48 µg/L	1.48 ppb	00:02:22
3	SiO2 †	872571.3	874302.8	60966 µg/L	60966 ppb	00:01:57
3	Si 251.611†	853392.2	855255.5	28300 µg/L	28300 ppb	00:02:41
3	Sn 189.927†	-78.2	-73.1	-14.416 µg/L	-14.416 ppb	00:02:22
3	Sr 421.552†	46728.5	47474.6	213.69 µg/L	213.69 ppb	00:00:27
3	Ti 334.940†	-267.4	-719.3	0.0127 µg/L	0.0127 ppb	00:02:02
3	Tl 190.801†	-50.8	-14.5	-5.5221 µg/L	-5.5221 ppb	00:02:22
3	U 409.014†	410.4	74.4	4.7853 µg/L	4.7853 ppb	00:02:02
3	V 292.402†	-13.7	76.3	1.3204 µg/L	1.3204 ppb	00:02:22
3	Zn 213.857†	4436.9	3881.3	90.728 µg/L	90.728 ppb	00:02:22

Mean Data: 1200870314|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1070648.0	99.484	%	0.2015				0.20%
Sc RADIAL	39136.7	98.7	%	0.20				0.20%
Y 371.029	580388.2	98.181	%	0.1735				0.18%
Ag 328.068†	-13.1	-0.0765	µg/L	0.17989	-0.0765	ppb	0.17989	235.11%
Al 396.153Radial†	118.9	35.194	µg/L	7.6693	35.194	ppb	7.6693	21.79%
As 188.979†	-2.3	-0.2605	µg/L	2.13983	-0.2605	ppb	2.13983	821.28%
B 249.677†	380.6	25.373	µg/L	0.9157	25.373	ppb	0.9157	3.61%
Ba 233.527†	3122.3	33.138	µg/L	0.1703	33.138	ppb	0.1703	0.51%
Be 313.107†	-52.2	-0.0278	µg/L	0.02440	-0.0278	ppb	0.02440	87.75%
Ca 317.933Radial†	207984.9	46584	µg/L	53.0	46584	ppb	53.0	0.11%
Cd 226.502†	13.7	0.4976	µg/L	0.10171	0.4976	ppb	0.10171	20.44%
Co 228.616†	4.8	0.1617	µg/L	0.19035	0.1617	ppb	0.19035	117.75%
Cr 267.716†	1869.8	52.208	µg/L	0.5816	52.208	ppb	0.5816	1.11%
Cu 324.752†	3592.2	14.106	µg/L	0.1535	14.106	ppb	0.1535	1.09%
Fe 238.204 Radial†	99.0	100.11	µg/L	1.880	100.11	ppb	1.880	1.88%
K 766.490 Radial†	1712.7	733.14	µg/L	21.116	733.14	ppb	21.116	2.88%
Mg 279.077 IEC†	3248.8	9369.6	µg/L	42.33	9369.6	ppb	42.33	0.45%
Mn 257.610†	16241.2	29.477	µg/L	0.0756	29.477	ppb	0.0756	0.26%
Mo 202.031†	35.5	4.8813	µg/L	0.24579	4.8813	ppb	0.24579	5.04%
Na 589.592 Radial†	131811.2	21097	µg/L	46.1	21097	ppb	46.1	0.22%

Ni 231.604†	45.9	3.0142 µg/L	0.57208	3.0142 ppb	0.57208	18.98%
P 214.914†	80.5	63.714 µg/L	2.0601	63.714 ppb	2.0601	3.23%
Pb 220.353†	6.3	1.6702 µg/L	0.72376	1.6702 ppb	0.72376	43.33%
S 181.975 Axial†	5308.8	12047 µg/L	63.6	12047 ppb	63.6	0.53%
Sb 206.836†	7.4	2.5778 µg/L	0.69770	2.5778 ppb	0.69770	27.07%
Se 196.026†	0.4	0.610 µg/L	7.3196	0.610 ppb	7.3196	>999.9%
SiO2 †	874901.1	61008 µg/L	36.7	61008 ppb	36.7	0.06%
Si 251.611†	854928.4	28200 µg/L	315.6	28200 ppb	315.6	1.12%
Sn 189.927†	-70.1	-13.650 µg/L	0.8284	-13.650 ppb	0.8284	6.07%
Sr 421.552†	47398.0	213.35 µg/L	0.461	213.35 ppb	0.461	0.22%
Ti 334.940†	-584.2	0.1906 µg/L	0.15439	0.1906 ppb	0.15439	81.01%
Tl 190.801†	-6.6	-2.4676 µg/L	3.98923	-2.4676 ppb	3.98923	161.67%
U 409.014†	83.5	5.3657 µg/L	2.68938	5.3657 ppb	2.68938	50.12%
V 292.402†	68.9	1.2125 µg/L	0.09348	1.2125 ppb	0.09348	7.71%
Zn 213.857†	3911.2	91.440 µg/L	0.7836	91.440 ppb	0.7836	0.86%

Sequence No.: 76
Sample ID: 1200870315|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 6/24/2005 00:04:29
Data Type: Reprocessed on 6/24/2005 07:40:58
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870315|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1041694.6	1041694.6	96.793	%			00:06:31
1	Sc RADIAL	39639.5	39639.5	100.0	%			00:06:01
1	Y 371.029	563656.4	563656.4	95.351	%			00:06:31
1	Ag 328.068†	66820.5	69658.1	514.46	µg/L	514.46	ppb	00:06:36
1	Al 396.153Radial†	17325.2	17224.2	5107.1	µg/L	5107.1	ppb	00:06:01
1	As 188.979†	977.2	1037.6	531.69	µg/L	531.69	ppb	00:06:56
1	B 249.677†	8139.6	8183.6	542.38	µg/L	542.38	ppb	00:06:36
1	Ba 233.527†	49431.5	51203.9	543.95	µg/L	543.95	ppb	00:06:36
1	Be 313.107†	727435.2	751272.1	516.33	µg/L	516.33	ppb	00:06:31
1	Ca 317.933Radial†	225131.3	225021.7	50402	µg/L	50402	ppb	00:05:56
1	Cd 226.502†	13162.9	13622.9	497.25	µg/L	497.25	ppb	00:06:36
1	Co 228.616†	15123.9	15770.0	490.56	µg/L	490.56	ppb	00:06:36
1	Cr 267.716†	19451.2	20024.4	559.00	µg/L	559.00	ppb	00:06:36
1	Cu 324.752†	137296.2	136820.0	537.04	µg/L	537.04	ppb	00:06:31
1	Fe 238.204 Radial†	5235.4	5193.1	5255.9	µg/L	5255.9	ppb	00:06:01
1	K 766.490 Radial†	14892.9	13771.0	5894.7	µg/L	5894.7	ppb	00:06:01
1	Mg 279.077 IEC†	4972.5	4970.1	14344	µg/L	14344	ppb	00:06:01
1	Mn 257.610†	285249.9	294300.2	536.44	µg/L	536.44	ppb	00:06:31
1	Mo 202.031†	3928.7	4059.0	532.85	µg/L	532.85	ppb	00:06:56
1	Na 589.592 Radial†	162133.9	161165.1	25793	µg/L	25793	ppb	00:05:56
1	Ni 231.604†	7390.6	7457.1	487.78	µg/L	487.78	ppb	00:06:36
1	P 214.914†	919.8	768.2	541.40	µg/L	541.40	ppb	00:06:56
1	Pb 220.353†	1850.8	1924.9	503.91	µg/L	503.91	ppb	00:06:56
1	S 181.975 Axial†	7462.2	7668.8	17398	µg/L	17398	ppb	00:06:56
1	Sb 206.836†	1146.5	1149.7	540.55	µg/L	540.55	ppb	00:06:56
1	Se 196.026†	525.6	575.4	481	µg/L	481	ppb	00:06:56
1	SiO2 †	937844.1	967320.5	67436	µg/L	67436	ppb	00:06:31
1	Si 251.611†	943738.7	973615.2	32200	µg/L	32200	ppb	00:08:07
1	Sn 189.927†	1910.9	1979.6	507.84	µg/L	507.84	ppb	00:06:56
1	Sr 421.552†	158920.9	158989.4	717.18	µg/L	717.18	ppb	00:05:56
1	Ti 334.940†	374989.1	386960.6	514.21	µg/L	514.21	ppb	00:06:31
1	Tl 190.801†	1205.9	1282.3	496.16	µg/L	496.16	ppb	00:06:56
1	U 409.014†	8145.2	8077.5	522.06	µg/L	522.06	ppb	00:06:36
1	V 292.402†	33475.2	34674.1	522.75	µg/L	522.75	ppb	00:06:36
1	Zn 213.857†	24488.1	24726.8	584.96	µg/L	584.96	ppb	00:06:36
2	Sc 361.383	1061130.3	1061130.3	98.599	%			00:07:02
2	Sc RADIAL	39812.5	39812.5	100	%			00:06:11
2	Y 371.029	573781.2	573781.2	97.064	%			00:07:02
2	Ag 328.068†	67181.2	68759.5	507.82	µg/L	507.82	ppb	00:07:08
2	Al 396.153Radial†	17133.0	16957.5	5028.1	µg/L	5028.1	ppb	00:06:11
2	As 188.979†	982.5	1024.5	524.98	µg/L	524.98	ppb	00:07:28
2	B 249.677†	8256.0	8147.6	539.99	µg/L	539.99	ppb	00:07:08
2	Ba 233.527†	49567.7	50406.7	535.48	µg/L	535.48	ppb	00:07:08
2	Be 313.107†	737062.0	747270.6	513.57	µg/L	513.57	ppb	00:07:02
2	Ca 317.933Radial†	223797.3	222715.0	49886	µg/L	49886	ppb	00:06:06
2	Cd 226.502†	13175.7	13386.8	488.64	µg/L	488.64	ppb	00:07:08
2	Co 228.616†	15229.9	15591.4	484.99	µg/L	484.99	ppb	00:07:08
2	Cr 267.716†	19565.1	19771.8	551.95	µg/L	551.95	ppb	00:07:08
2	Cu 324.752†	139348.6	136303.6	535.02	µg/L	535.02	ppb	00:07:02
2	Fe 238.204 Radial†	5171.5	5106.7	5168.4	µg/L	5168.4	ppb	00:06:11
2	K 766.490 Radial†	14748.8	13562.8	5805.6	µg/L	5805.6	ppb	00:06:11
2	Mg 279.077 IEC†	4936.3	4912.5	14177	µg/L	14177	ppb	00:06:11
2	Mn 257.610†	289346.8	293057.5	534.17	µg/L	534.17	ppb	00:07:02
2	Mo 202.031†	3938.9	3995.0	524.45	µg/L	524.45	ppb	00:07:28
2	Na 589.592 Radial†	161238.7	159569.1	25538	µg/L	25538	ppb	00:06:06
2	Ni 231.604†	7439.1	7366.5	481.85	µg/L	481.85	ppb	00:07:08
2	P 214.914†	918.2	749.2	526.14	µg/L	526.14	ppb	00:07:28
2	Pb 220.353†	1860.5	1899.7	497.31	µg/L	497.31	ppb	00:07:28
2	S 181.975 Axial†	7490.2	7555.9	17142	µg/L	17142	ppb	00:07:28

2	Sb 206.836†	1163.0	1144.7	538.19 µg/L	538.19 ppb	00:07:28
2	Se 196.026†	521.0	560.8	468 µg/L	468 ppb	00:07:28
2	SiO2 †	955998.8	967986.5	67482 µg/L	67482 ppb	00:07:02
2	Si 251.611†	926353.6	938125.0	31000 µg/L	31000 ppb	00:08:14
2	Sn 189.927†	1921.2	1953.9	501.26 µg/L	501.26 ppb	00:07:28
2	Sr 421.552†	158008.3	157390.0	709.97 µg/L	709.97 ppb	00:06:06
2	Ti 334.940†	380797.1	385755.2	512.61 µg/L	512.61 ppb	00:07:02
2	Tl 190.801†	1219.4	1273.2	492.66 µg/L	492.66 ppb	00:07:28
2	U 409.014†	8129.8	7907.8	511.11 µg/L	511.11 ppb	00:07:08
2	V 292.402†	33577.0	34143.9	514.75 µg/L	514.75 ppb	00:07:08
2	Zn 213.857†	24533.9	24309.9	575.06 µg/L	575.06 ppb	00:07:08
3	Sc 361.383	1054185.8	1054185.8	97.954 %		00:07:34
3	Sc RADIAL	39125.7	39125.7	98.7 %		00:06:22
3	Y 371.029	570505.2	570505.2	96.509 %		00:07:34
3	Ag 328.068†	67107.8	69133.5	510.59 µg/L	510.59 ppb	00:07:39
3	Al 396.153Radial†	17032.6	17155.2	5086.8 µg/L	5086.8 ppb	00:06:22
3	As 188.979†	973.9	1022.2	523.92 µg/L	523.92 ppb	00:07:59
3	B 249.677†	8271.1	8218.1	544.66 µg/L	544.66 ppb	00:07:39
3	Ba 233.527†	49734.5	50908.2	540.81 µg/L	540.81 ppb	00:07:39
3	Be 313.107†	730325.6	745317.8	512.23 µg/L	512.23 ppb	00:07:34
3	Ca 317.933Radial†	226161.6	229022.9	51298 µg/L	51298 ppb	00:06:17
3	Cd 226.502†	13224.8	13524.9	493.68 µg/L	493.68 ppb	00:07:39
3	Co 228.616†	15254.1	15717.8	488.94 µg/L	488.94 ppb	00:07:39
3	Cr 267.716†	19624.6	19963.2	557.30 µg/L	557.30 ppb	00:07:39
3	Cu 324.752†	138593.3	136463.5	535.64 µg/L	535.64 ppb	00:07:34
3	Fe 238.204 Radial†	5153.8	5179.1	5241.7 µg/L	5241.7 ppb	00:06:22
3	K 766.490 Radial†	14650.9	13721.4	5873.5 µg/L	5873.5 ppb	00:06:22
3	Mg 279.077 IEC†	4935.4	4997.8	14423 µg/L	14423 ppb	00:06:22
3	Mn 257.610†	286489.9	292074.2	532.38 µg/L	532.38 ppb	00:07:34
3	Mo 202.031†	3940.0	4022.4	528.07 µg/L	528.07 ppb	00:07:59
3	Na 589.592 Radial†	162601.0	163768.1	26210 µg/L	26210 ppb	00:06:17
3	Ni 231.604†	7448.3	7425.6	485.71 µg/L	485.71 ppb	00:07:39
3	P 214.914†	916.0	753.1	529.18 µg/L	529.18 ppb	00:07:59
3	Pb 220.353†	1860.0	1911.6	500.42 µg/L	500.42 ppb	00:07:59
3	S 181.975 Axial†	7475.7	7591.2	17222 µg/L	17222 ppb	00:07:59
3	Sb 206.836†	1149.0	1138.3	535.09 µg/L	535.09 ppb	00:07:59
3	Se 196.026†	521.5	564.8	472 µg/L	472 ppb	00:07:59
3	SiO2 †	949847.4	968093.7	67490 µg/L	67490 ppb	00:07:34
3	Si 251.611†	931837.1	949912.1	31400 µg/L	31400 ppb	00:08:20
3	Sn 189.927†	1901.6	1946.7	499.56 µg/L	499.56 ppb	00:07:59
3	Sr 421.552†	159227.8	161387.8	728.00 µg/L	728.00 ppb	00:06:17
3	Ti 334.940†	377433.6	384865.6	511.46 µg/L	511.46 ppb	00:07:34
3	Tl 190.801†	1211.9	1273.7	492.81 µg/L	492.81 ppb	00:07:59
3	U 409.014†	8166.4	7999.4	517.03 µg/L	517.03 ppb	00:07:39
3	V 292.402†	33686.9	34480.4	519.82 µg/L	519.82 ppb	00:07:39
3	Zn 213.857†	24601.6	24542.9	580.54 µg/L	580.54 ppb	00:07:39

Mean Data: 1200870315|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1052336.9	97.782	%	0.9152				0.94%
Sc RADIAL	39525.9	99.7	%	0.90				0.90%
Y 371.029	569314.3	96.308	%	0.8740				0.91%
Ag 328.068†	69183.7	510.96	µg/L	3.336	510.96	ppb	3.336	0.65%
Al 396.153Radial†	17112.3	5074.0	µg/L	41.06	5074.0	ppb	41.06	0.81%
As 188.979†	1028.1	526.86	µg/L	4.215	526.86	ppb	4.215	0.80%
B 249.677†	8183.1	542.34	µg/L	2.337	542.34	ppb	2.337	0.43%
Ba 233.527†	50839.6	540.08	µg/L	4.281	540.08	ppb	4.281	0.79%
Be 313.107†	747953.5	514.04	µg/L	2.086	514.04	ppb	2.086	0.41%
Ca 317.933Radial†	225586.5	50529	µg/L	714.9	50529	ppb	714.9	1.41%
Cd 226.502†	13511.5	493.19	µg/L	4.328	493.19	ppb	4.328	0.88%
Co 228.616†	15693.0	488.16	µg/L	2.863	488.16	ppb	2.863	0.59%
Cr 267.716†	19919.8	556.08	µg/L	3.678	556.08	ppb	3.678	0.66%
Cu 324.752†	136529.0	535.90	µg/L	1.034	535.90	ppb	1.034	0.19%
Fe 238.204 Radial†	5159.7	5222.0	µg/L	46.94	5222.0	ppb	46.94	0.90%
K 766.490 Radial†	13685.1	5857.9	µg/L	46.54	5857.9	ppb	46.54	0.79%
Mg 279.077 IEC†	4960.1	14315	µg/L	125.6	14315	ppb	125.6	0.88%
Mn 257.610†	293144.0	534.33	µg/L	2.033	534.33	ppb	2.033	0.38%
Mo 202.031†	4025.5	528.46	µg/L	4.212	528.46	ppb	4.212	0.80%
Na 589.592 Radial†	161500.8	25847	µg/L	339.2	25847	ppb	339.2	1.31%

Ni 231.604†	7416.4	485.11 µg/L	3.013	485.11 ppb	3.013	0.62%
P 214.914†	756.8	532.24 µg/L	8.077	532.24 ppb	8.077	1.52%
Pb 220.353†	1912.1	500.55 µg/L	3.303	500.55 ppb	3.303	0.66%
S 181.975 Axial†	7605.3	17254 µg/L	131.1	17254 ppb	131.1	0.76%
Sb 206.836†	1144.2	537.94 µg/L	2.739	537.94 ppb	2.739	0.51%
Se 196.026†	567.0	474 µg/L	6.3	474 ppb	6.3	1.33%
SiO2 †	967800.2	67469 µg/L	29.3	67469 ppb	29.3	0.04%
Si 251.611†	953884.1	31500 µg/L	597.1	31500 ppb	597.1	1.90%
Sn 189.927†	1960.1	502.89 µg/L	4.376	502.89 ppb	4.376	0.87%
Sr 421.552†	159255.8	718.38 µg/L	9.075	718.38 ppb	9.075	1.26%
Ti 334.940†	385860.5	512.76 µg/L	1.385	512.76 ppb	1.385	0.27%
Tl 190.801†	1276.4	493.87 µg/L	1.978	493.87 ppb	1.978	0.40%
U 409.014†	7994.9	516.73 µg/L	5.484	516.73 ppb	5.484	1.06%
V 292.402†	34432.8	519.11 µg/L	4.046	519.11 ppb	4.046	0.78%
Zn 213.857†	24526.5	580.19 µg/L	4.960	580.19 ppb	4.960	0.85%

Sequence No.: 77
Sample ID: 1200870316|435151|5
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 6/24/2005 00:10:09
Data Type: Reprocessed on 6/24/2005 07:41:00
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870316|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1067679.3	1067679.3	99.208	%			00:12:53
1	Sc RADIAL	39807.2	39807.2	100	%			00:11:35
1	Y 371.029	583117.9	583117.9	98.643	%			00:12:53
1	Ag 328.068†	-634.2	-15.2	-0.1070	µg/L	-0.1070	ppb	00:12:59
1	Al 396.153Radial†	88.3	-17.4	-5.2643	µg/L	-5.2643	ppb	00:11:35
1	As 188.979†	-27.7	0.1	0.2355	µg/L	0.2355	ppb	00:13:19
1	B 249.677†	262.7	39.1	2.6253	µg/L	2.6253	ppb	00:13:19
1	Ba 233.527†	531.7	670.8	7.1194	µg/L	7.1194	ppb	00:13:19
1	Be 313.107†	278.6	19.8	0.0152	µg/L	0.0152	ppb	00:12:59
1	Ca 317.933Radial†	42014.3	41682.3	9335.8	µg/L	9335.8	ppb	00:11:35
1	Cd 226.502†	-24.8	-1.0	-0.0377	µg/L	-0.0377	ppb	00:13:19
1	Co 228.616†	-133.1	10.9	0.3422	µg/L	0.3422	ppb	00:13:19
1	Cr 267.716†	454.6	387.0	10.807	µg/L	10.807	ppb	00:13:19
1	Cu 324.752†	5727.4	748.7	2.9401	µg/L	2.9401	ppb	00:12:59
1	Fe 238.204 Radial†	68.7	24.8	25.068	µg/L	25.068	ppb	00:11:55
1	K 766.490 Radial†	1488.8	357.4	152.97	µg/L	152.97	ppb	00:11:35
1	Mg 279.077 IEC†	694.6	688.2	1984.8	µg/L	1984.8	ppb	00:11:55
1	Mn 257.610†	3891.8	3523.6	6.3963	µg/L	6.3963	ppb	00:12:59
1	Mo 202.031†	11.2	11.4	1.5407	µg/L	1.5407	ppb	00:13:19
1	Na 589.592 Radial†	27496.9	26378.9	4222.0	µg/L	4222.0	ppb	00:11:35
1	Ni 231.604†	188.3	11.5	0.7523	µg/L	0.7523	ppb	00:13:19
1	P 214.914†	196.1	15.6	12.312	µg/L	12.312	ppb	00:13:19
1	Pb 220.353†	-20.3	-7.7	-2.0066	µg/L	-2.0066	ppb	00:13:19
1	S 181.975 Axial†	1115.7	1083.9	2459.7	µg/L	2459.7	ppb	00:13:19
1	Sb 206.836†	42.1	7.7	3.4230	µg/L	3.4230	ppb	00:13:19
1	Se 196.026†	-24.7	7.5	6.31	µg/L	6.31	ppb	00:13:19
1	SiO2 †	177372.0	177196.3	12356	µg/L	12356	ppb	00:12:53
1	Si 251.611†	178324.3	178361.0	5890	µg/L	5890	ppb	00:14:27
1	Sn 189.927†	-37.0	-31.9	-7.2748	µg/L	-7.2748	ppb	00:13:19
1	Sr 421.552†	9549.8	9541.1	42.947	µg/L	42.947	ppb	00:11:35
1	Ti 334.940†	505.6	58.8	0.2717	µg/L	0.2717	ppb	00:12:59
1	Tl 190.801†	-31.0	5.2	2.0289	µg/L	2.0289	ppb	00:13:19
1	U 409.014†	345.7	10.9	0.7018	µg/L	0.7018	ppb	00:12:59
1	V 292.402†	-81.7	7.6	0.1566	µg/L	0.1566	ppb	00:12:59
1	Zn 213.857†	1327.3	765.4	17.879	µg/L	17.879	ppb	00:13:19
2	Sc 361.383	1079086.9	1079086.9	100.27	%			00:13:24
2	Sc RADIAL	39632.2	39632.2	100.0	%			00:12:00
2	Y 371.029	589284.7	589284.7	99.686	%			00:13:24
2	Ag 328.068†	-648.9	-23.1	-0.1657	µg/L	-0.1657	ppb	00:13:30
2	Al 396.153Radial†	126.9	21.6	6.3611	µg/L	6.3611	ppb	00:12:00
2	As 188.979†	-28.7	-0.6	-0.1195	µg/L	-0.1195	ppb	00:13:50
2	B 249.677†	238.9	12.5	0.8659	µg/L	0.8659	ppb	00:13:50
2	Ba 233.527†	519.3	652.8	6.9284	µg/L	6.9284	ppb	00:13:50
2	Be 313.107†	303.9	42.1	0.0308	µg/L	0.0308	ppb	00:13:30
2	Ca 317.933Radial†	41924.3	41777.0	9357.0	µg/L	9357.0	ppb	00:12:00
2	Cd 226.502†	-19.2	4.8	0.1729	µg/L	0.1729	ppb	00:13:50
2	Co 228.616†	-120.4	25.0	0.7810	µg/L	0.7810	ppb	00:13:50
2	Cr 267.716†	452.8	380.4	10.622	µg/L	10.622	ppb	00:13:50
2	Cu 324.752†	5731.2	691.5	2.7144	µg/L	2.7144	ppb	00:13:30
2	Fe 238.204 Radial†	66.2	22.6	22.859	µg/L	22.859	ppb	00:12:20
2	K 766.490 Radial†	1471.8	346.9	148.47	µg/L	148.47	ppb	00:12:00
2	Mg 279.077 IEC†	692.1	688.7	1986.2	µg/L	1986.2	ppb	00:12:20
2	Mn 257.610†	3788.5	3379.1	6.1327	µg/L	6.1327	ppb	00:13:30
2	Mo 202.031†	10.9	11.1	1.4980	µg/L	1.4980	ppb	00:13:50
2	Na 589.592 Radial†	27394.5	26397.4	4225.0	µg/L	4225.0	ppb	00:12:00
2	Ni 231.604†	189.3	10.5	0.6873	µg/L	0.6873	ppb	00:13:50
2	P 214.914†	181.8	-0.8	-1.1541	µg/L	-1.1541	ppb	00:13:50
2	Pb 220.353†	-7.4	5.4	1.4162	µg/L	1.4162	ppb	00:13:50
2	S 181.975 Axial†	1118.7	1075.1	2439.7	µg/L	2439.7	ppb	00:13:50

2	Sb 206.836†	43.8	8.9	4.0192 µg/L	4.0192 ppb	00:13:50
2	Se 196.026†	-19.5	12.9	10.8 µg/L	10.8 ppb	00:13:50
2	SiO2 †	179047.7	176977.5	12341 µg/L	12341 ppb	00:13:24
2	Si 251.611†	176619.8	174760.9	5770 µg/L	5770 ppb	00:14:32
2	Sn 189.927†	-30.2	-24.7	-5.4528 µg/L	-5.4528 ppb	00:13:50
2	Sr 421.552†	9535.3	9568.6	43.071 µg/L	43.071 ppb	00:12:00
2	Ti 334.940†	495.9	43.7	0.2514 µg/L	0.2514 ppb	00:13:30
2	Tl 190.801†	-33.6	3.0	1.1779 µg/L	1.1779 ppb	00:13:50
2	U 409.014†	371.0	32.4	2.0857 µg/L	2.0857 ppb	00:13:30
2	V 292.402†	-80.4	9.8	0.1902 µg/L	0.1902 ppb	00:13:30
2	Zn 213.857†	1340.3	764.2	17.851 µg/L	17.851 ppb	00:13:50
3	Sc 361.383	1075972.3	1075972.3	99.979 %		00:13:55
3	Sc RADIAL	39729.7	39729.7	100 %		00:12:25
3	Y 371.029	587200.1	587200.1	99.334 %		00:13:55
3	Ag 328.068†	-602.5	21.5	0.1629 µg/L	0.1629 ppb	00:14:01
3	Al 396.153Radial†	108.9	3.4	0.9251 µg/L	0.9251 ppb	00:12:25
3	As 188.979†	-26.7	1.3	0.8425 µg/L	0.8425 ppb	00:14:21
3	B 249.677†	248.0	22.4	1.5207 µg/L	1.5207 ppb	00:14:21
3	Ba 233.527†	514.2	649.2	6.8906 µg/L	6.8906 ppb	00:14:21
3	Be 313.107†	268.1	7.2	0.0065 µg/L	0.0065 ppb	00:14:01
3	Ca 317.933Radial†	42092.5	41842.0	9371.6 µg/L	9371.6 ppb	00:12:25
3	Cd 226.502†	-19.0	4.9	0.1779 µg/L	0.1779 ppb	00:14:21
3	Co 228.616†	-136.2	8.8	0.2791 µg/L	0.2791 ppb	00:14:21
3	Cr 267.716†	460.1	389.0	10.861 µg/L	10.861 ppb	00:14:21
3	Cu 324.752†	5687.0	663.8	2.6063 µg/L	2.6063 ppb	00:14:01
3	Fe 238.204 Radial†	65.0	21.2	21.450 µg/L	21.450 ppb	00:12:45
3	K 766.490 Radial†	1416.3	287.8	123.21 µg/L	123.21 ppb	00:12:25
3	Mg 279.077 IEC†	687.9	682.9	1969.5 µg/L	1969.5 ppb	00:12:45
3	Mn 257.610†	3790.3	3391.8	6.1560 µg/L	6.1560 ppb	00:14:01
3	Mo 202.031†	12.9	13.1	1.7594 µg/L	1.7594 ppb	00:14:21
3	Na 589.592 Radial†	27527.9	26463.2	4235.5 µg/L	4235.5 ppb	00:12:25
3	Ni 231.604†	185.1	6.8	0.4474 µg/L	0.4474 ppb	00:14:21
3	P 214.914†	185.2	3.1	2.0783 µg/L	2.0783 ppb	00:14:21
3	Pb 220.353†	-13.9	-1.1	-0.2746 µg/L	-0.2746 ppb	00:14:21
3	S 181.975 Axial†	1106.2	1065.8	2418.6 µg/L	2418.6 ppb	00:14:21
3	Sb 206.836†	38.1	3.4	1.3950 µg/L	1.3950 ppb	00:14:21
3	Se 196.026†	-32.3	0.1	0.136 µg/L	0.136 ppb	00:14:21
3	SiO2 †	177839.8	176286.2	12293 µg/L	12293 ppb	00:13:55
3	Si 251.611†	177382.6	176033.8	5820 µg/L	5820 ppb	00:14:38
3	Sn 189.927†	-33.0	-27.6	-6.1663 µg/L	-6.1663 ppb	00:14:21
3	Sr 421.552†	9533.9	9543.7	42.958 µg/L	42.958 ppb	00:12:25
3	Ti 334.940†	463.8	13.0	0.2117 µg/L	0.2117 ppb	00:14:01
3	Tl 190.801†	-34.1	2.4	0.9251 µg/L	0.9251 ppb	00:14:21
3	U 409.014†	346.8	9.3	0.6001 µg/L	0.6001 ppb	00:14:01
3	V 292.402†	-62.7	27.3	0.4519 µg/L	0.4519 ppb	00:14:01
3	Zn 213.857†	1321.6	749.3	17.497 µg/L	17.497 ppb	00:14:21

Mean Data: 1200870316|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1074246.2	99.818	%	0.5479				0.55%
Sc RADIAL	39723.0	100	%	0.2				0.22%
Y 371.029	586534.2	99.221	%	0.5306				0.53%
Ag 328.068†	-5.6	-0.0366	µg/L	0.17529	-0.0366	ppb	0.17529	478.83%
Al 396.153Radial†	2.5	0.6740	µg/L	5.81676	0.6740	ppb	5.81676	863.08%
As 188.979†	0.3	0.3195	µg/L	0.48648	0.3195	ppb	0.48648	152.26%
B 249.677†	24.7	1.6706	µg/L	0.88924	1.6706	ppb	0.88924	53.23%
Ba 233.527†	657.6	6.9795	µg/L	0.12265	6.9795	ppb	0.12265	1.76%
Be 313.107†	23.0	0.0175	µg/L	0.01229	0.0175	ppb	0.01229	70.21%
Ca 317.933Radial†	41767.1	9354.8	µg/L	17.99	9354.8	ppb	17.99	0.19%
Cd 226.502†	2.9	0.1044	µg/L	0.12305	0.1044	ppb	0.12305	117.89%
Co 228.616†	14.9	0.4674	µg/L	0.27339	0.4674	ppb	0.27339	58.49%
Cr 267.716†	385.5	10.764	µg/L	0.1255	10.764	ppb	0.1255	1.17%
Cu 324.752†	701.3	2.7536	µg/L	0.17029	2.7536	ppb	0.17029	6.18%
Fe 238.204 Radial†	22.9	23.126	µg/L	1.8235	23.126	ppb	1.8235	7.89%
K 766.490 Radial†	330.7	141.55	µg/L	16.040	141.55	ppb	16.040	11.33%
Mg 279.077 IEC†	686.6	1980.2	µg/L	9.30	1980.2	ppb	9.30	0.47%
Mn 257.610†	3431.5	6.2283	µg/L	0.14593	6.2283	ppb	0.14593	2.34%
Mo 202.031†	11.9	1.5994	µg/L	0.14020	1.5994	ppb	0.14020	8.77%
Na 589.592 Radial†	26413.2	4227.5	µg/L	7.09	4227.5	ppb	7.09	0.17%

Ni 231.604†	9.6	0.6290 µg/L	0.16058	0.6290 ppb	0.16058	25.53%
P 214.914†	6.0	4.4121 µg/L	7.02995	4.4121 ppb	7.02995	159.33%
Pb 220.353†	-1.1	-0.2883 µg/L	1.71143	-0.2883 ppb	1.71143	593.62%
S 181.975 Axial†	1075.0	2439.3 µg/L	20.57	2439.3 ppb	20.57	0.84%
Sb 206.836†	6.7	2.9457 µg/L	1.37566	2.9457 ppb	1.37566	46.70%
Se 196.026†	6.8	5.74 µg/L	5.348	5.74 ppb	5.348	93.09%
SiO2 †	176820.0	12330 µg/L	33.1	12330 ppb	33.1	0.27%
Si 251.611†	176385.2	5830 µg/L	60.3	5830 ppb	60.3	1.04%
Sn 189.927†	-28.1	-6.2980 µg/L	0.91814	-6.2980 ppb	0.91814	14.58%
Sr 421.552†	9551.1	42.992 µg/L	0.0684	42.992 ppb	0.0684	0.16%
Ti 334.940†	38.5	0.2450 µg/L	0.03051	0.2450 ppb	0.03051	12.45%
Tl 190.801†	3.5	1.3773 µg/L	0.57829	1.3773 ppb	0.57829	41.99%
U 409.014†	17.6	1.1292 µg/L	0.82988	1.1292 ppb	0.82988	73.49%
V 292.402†	14.9	0.2662 µg/L	0.16164	0.2662 ppb	0.16164	60.71%
Zn 213.857†	759.6	17.742 µg/L	0.2125	17.742 ppb	0.2125	1.20%

Sequence No.: 78
Sample ID: 138851004|435151|1
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 6/24/2005 00:16:27
Data Type: Reprocessed on 6/24/2005 07:41:02
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851004|435151|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1062359.5	1062359.5	98.714	%			00:19:14
1	Sc RADIAL	38960.8	38960.8	98.3	%			00:17:55
1	Y 371.029	576181.7	576181.7	97.470	%			00:19:14
1	Ag 328.068†	-595.2	21.1	0.1753	µg/L	0.1753	ppb	00:19:19
1	Al 396.153Radial†	209.9	108.2	32.009	µg/L	32.009	ppb	00:17:55
1	As 188.979†	-38.0	-10.5	-4.3725	µg/L	-4.3725	ppb	00:19:39
1	B 249.677†	598.1	380.3	25.353	µg/L	25.353	ppb	00:19:39
1	Ba 233.527†	2906.1	3078.9	32.676	µg/L	32.676	ppb	00:19:39
1	Be 313.107†	239.9	-17.9	-0.0050	µg/L	-0.0050	ppb	00:19:19
1	Ca 317.933Radial†	202600.9	206016.3	46143	µg/L	46143	ppb	00:17:55
1	Cd 226.502†	-17.9	5.8	0.2088	µg/L	0.2088	ppb	00:19:39
1	Co 228.616†	-150.7	-7.6	-0.2226	µg/L	-0.2226	ppb	00:19:39
1	Cr 267.716†	1930.5	1884.5	52.621	µg/L	52.621	ppb	00:19:39
1	Cu 324.752†	8299.5	3383.2	13.288	µg/L	13.288	ppb	00:19:19
1	Fe 238.204 Radial†	132.2	90.9	91.921	µg/L	91.921	ppb	00:18:15
1	K 766.490 Radial†	2800.4	1724.4	738.12	µg/L	738.12	ppb	00:17:55
1	Mg 279.077 IEC†	3183.8	3236.4	9333.9	µg/L	9333.9	ppb	00:17:55
1	Mn 257.610†	15869.3	15676.8	28.450	µg/L	28.450	ppb	00:19:19
1	Mo 202.031†	38.0	38.6	5.2874	µg/L	5.2874	ppb	00:19:39
1	Na 589.592 Radial†	128418.8	129679.5	20755	µg/L	20755	ppb	00:17:55
1	Ni 231.604†	234.1	58.9	3.8597	µg/L	3.8597	ppb	00:19:39
1	P 214.914†	267.6	89.0	70.823	µg/L	70.823	ppb	00:19:39
1	Pb 220.353†	-12.6	0.0	0.0418	µg/L	0.0418	ppb	00:19:39
1	S 181.975 Axial†	5246.0	5273.8	11967	µg/L	11967	ppb	00:19:39
1	Sb 206.836†	47.4	13.2	5.2979	µg/L	5.2979	ppb	00:19:39
1	Se 196.026†	-40.7	-8.9	-7.15	µg/L	-7.15	ppb	00:19:39
1	SiO2 †	856343.6	865910.8	60381	µg/L	60381	ppb	00:19:14
1	Si 251.611†	845771.5	855405.8	28300	µg/L	28300	ppb	00:20:48
1	Sn 189.927†	-82.9	-78.6	-15.857	µg/L	-15.857	ppb	00:19:39
1	Sr 421.552†	45930.0	46770.9	210.52	µg/L	210.52	ppb	00:17:55
1	Ti 334.940†	-57.0	-508.6	0.2837	µg/L	0.2837	ppb	00:19:19
1	Tl 190.801†	-40.4	-4.4	-1.6251	µg/L	-1.6251	ppb	00:19:39
1	U 409.014†	351.5	18.5	1.1860	µg/L	1.1860	ppb	00:19:19
1	V 292.402†	-7.0	82.9	1.4209	µg/L	1.4209	ppb	00:19:39
1	Zn 213.857†	4248.0	3730.8	87.141	µg/L	87.141	ppb	00:19:39
2	Sc 361.383	1061122.3	1061122.3	98.599	%			00:19:45
2	Sc RADIAL	38579.1	38579.1	97.3	%			00:18:20
2	Y 371.029	575259.7	575259.7	97.314	%			00:19:45
2	Ag 328.068†	-610.3	5.1	0.0565	µg/L	0.0565	ppb	00:19:50
2	Al 396.153Radial†	244.6	146.0	43.321	µg/L	43.321	ppb	00:18:20
2	As 188.979†	-26.2	1.4	1.6321	µg/L	1.6321	ppb	00:20:10
2	B 249.677†	591.5	374.3	24.949	µg/L	24.949	ppb	00:20:10
2	Ba 233.527†	2917.5	3093.9	32.835	µg/L	32.835	ppb	00:20:10
2	Be 313.107†	198.4	-59.7	-0.0337	µg/L	-0.0337	ppb	00:19:50
2	Ca 317.933Radial†	200250.7	205640.7	46059	µg/L	46059	ppb	00:18:20
2	Cd 226.502†	-4.6	19.3	0.7017	µg/L	0.7017	ppb	00:20:10
2	Co 228.616†	-125.1	18.3	0.5815	µg/L	0.5815	ppb	00:20:10
2	Cr 267.716†	1920.6	1876.7	52.404	µg/L	52.404	ppb	00:20:10
2	Cu 324.752†	8334.3	3428.3	13.465	µg/L	13.465	ppb	00:19:50
2	Fe 238.204 Radial†	131.9	91.9	92.935	µg/L	92.935	ppb	00:18:40
2	K 766.490 Radial†	2695.9	1645.1	704.20	µg/L	704.20	ppb	00:18:20
2	Mg 279.077 IEC†	3107.8	3190.4	9201.2	µg/L	9201.2	ppb	00:18:20
2	Mn 257.610†	15813.4	15638.8	28.382	µg/L	28.382	ppb	00:19:50
2	Mo 202.031†	30.7	31.3	4.3293	µg/L	4.3293	ppb	00:20:10
2	Na 589.592 Radial†	127324.5	129847.8	20782	µg/L	20782	ppb	00:18:20
2	Ni 231.604†	234.3	59.3	3.8867	µg/L	3.8867	ppb	00:20:10
2	P 214.914†	268.8	90.6	72.152	µg/L	72.152	ppb	00:20:10
2	Pb 220.353†	-23.1	-10.7	-2.7485	µg/L	-2.7485	ppb	00:20:10
2	S 181.975 Axial†	5254.0	5288.1	12000	µg/L	12000	ppb	00:20:10

2	Sb 206.836†	39.9	5.7	1.7562 µg/L	1.7562 ppb	00:20:10
2	Se 196.026†	-33.8	-1.9	-1.35 µg/L	-1.35 ppb	00:20:10
2	SiO2 †	853921.6	864465.9	60280 µg/L	60280 ppb	00:19:45
2	Si 251.611†	845751.0	856384.0	28300 µg/L	28300 ppb	00:20:54
2	Sn 189.927†	-74.7	-70.3	-13.765 µg/L	-13.765 ppb	00:20:10
2	Sr 421.552†	45528.6	46820.8	210.75 µg/L	210.75 ppb	00:18:20
2	Ti 334.940†	-77.0	-529.0	0.2550 µg/L	0.2550 ppb	00:19:50
2	Tl 190.801†	-45.0	-9.1	-3.4421 µg/L	-3.4421 ppb	00:20:10
2	U 409.014†	349.7	17.1	1.0920 µg/L	1.0920 ppb	00:19:50
2	V 292.402†	-36.3	53.1	0.9676 µg/L	0.9676 ppb	00:20:10
2	Zn 213.857†	4249.9	3737.8	87.314 µg/L	87.314 ppb	00:20:10
3	Sc 361.383	1061365.9	1061365.9	98.621 %		00:20:16
3	Sc RADIAL	39240.8	39240.8	99.0 %		00:18:46
3	Y 371.029	575472.3	575472.3	97.350 %		00:20:16
3	Ag 328.068†	-545.1	71.4	0.5445 µg/L	0.5445 ppb	00:20:21
3	Al 396.153Radial†	194.6	91.3	26.926 µg/L	26.926 ppb	00:18:46
3	As 188.979†	-29.1	-1.5	0.1611 µg/L	0.1611 ppb	00:20:41
3	B 249.677†	592.0	374.6	24.979 µg/L	24.979 ppb	00:20:41
3	Ba 233.527†	2904.0	3079.5	32.683 µg/L	32.683 ppb	00:20:41
3	Be 313.107†	126.4	-132.8	-0.0838 µg/L	-0.0838 ppb	00:20:21
3	Ca 317.933Radial†	204433.3	206396.5	46228 µg/L	46228 ppb	00:18:46
3	Cd 226.502†	-8.4	15.4	0.5591 µg/L	0.5591 ppb	00:20:41
3	Co 228.616†	-138.2	4.9	0.1689 µg/L	0.1689 ppb	00:20:41
3	Cr 267.716†	1911.5	1867.1	52.134 µg/L	52.134 ppb	00:20:41
3	Cu 324.752†	8302.8	3394.4	13.331 µg/L	13.331 ppb	00:20:21
3	Fe 238.204 Radial†	136.9	94.7	95.762 µg/L	95.762 ppb	00:19:06
3	K 766.490 Radial†	2781.6	1685.0	721.26 µg/L	721.26 ppb	00:18:46
3	Mg 279.077 IEC†	3185.7	3215.2	9272.8 µg/L	9272.8 ppb	00:18:46
3	Mn 257.610†	15850.8	15673.1	28.444 µg/L	28.444 ppb	00:20:21
3	Mo 202.031†	43.3	44.0	5.9979 µg/L	5.9979 ppb	00:20:41
3	Na 589.592 Radial†	129469.5	129808.6	20776 µg/L	20776 ppb	00:18:46
3	Ni 231.604†	233.9	58.8	3.8602 µg/L	3.8602 ppb	00:20:41
3	P 214.914†	261.0	82.6	65.575 µg/L	65.575 ppb	00:20:41
3	Pb 220.353†	-8.6	4.0	1.0976 µg/L	1.0976 ppb	00:20:41
3	S 181.975 Axial†	5221.7	5254.0	11923 µg/L	11923 ppb	00:20:41
3	Sb 206.836†	39.0	4.7	1.3490 µg/L	1.3490 ppb	00:20:41
3	Se 196.026†	-31.3	0.6	0.805 µg/L	0.805 ppb	00:20:41
3	SiO2 †	855208.2	865571.7	60357 µg/L	60357 ppb	00:20:16
3	Si 251.611†	840505.2	850867.9	28100 µg/L	28100 ppb	00:21:00
3	Sn 189.927†	-70.2	-65.8	-12.590 µg/L	-12.590 ppb	00:20:41
3	Sr 421.552†	46236.8	46747.4	210.41 µg/L	210.41 ppb	00:18:46
3	Ti 334.940†	-204.5	-658.2	0.0866 µg/L	0.0866 ppb	00:20:21
3	Tl 190.801†	-47.5	-11.7	-4.4400 µg/L	-4.4400 ppb	00:20:41
3	U 409.014†	363.4	30.9	1.9822 µg/L	1.9822 ppb	00:20:21
3	V 292.402†	-26.5	63.1	1.1334 µg/L	1.1334 ppb	00:20:41
3	Zn 213.857†	4231.3	3717.9	86.830 µg/L	86.830 ppb	00:20:41

Mean Data: 138851004|435151|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1061615.9	98.645	%	0.0609				0.06%
Sc RADIAL	38926.9	98.2	%	0.84				0.85%
Y 371.029	575637.9	97.378	%	0.0817				0.08%
Ag 328.068†	32.5	0.2588	µg/L	0.25446	0.2588	ppb	0.25446	98.33%
Al 396.153Radial†	115.2	34.085	µg/L	8.3924	34.085	ppb	8.3924	24.62%
As 188.979†	-3.5	-0.8598	µg/L	3.12977	-0.8598	ppb	3.12977	364.02%
B 249.677†	376.4	25.094	µg/L	0.2249	25.094	ppb	0.2249	0.90%
Ba 233.527†	3084.1	32.731	µg/L	0.0896	32.731	ppb	0.0896	0.27%
Be 313.107†	-70.2	-0.0409	µg/L	0.03990	-0.0409	ppb	0.03990	97.67%
Ca 317.933Radial†	206017.8	46143	µg/L	84.6	46143	ppb	84.6	0.18%
Cd 226.502†	13.5	0.4899	µg/L	0.25366	0.4899	ppb	0.25366	51.78%
Co 228.616†	5.2	0.1759	µg/L	0.40212	0.1759	ppb	0.40212	228.56%
Cr 267.716†	1876.1	52.386	µg/L	0.2442	52.386	ppb	0.2442	0.47%
Cu 324.752†	3402.0	13.361	µg/L	0.0927	13.361	ppb	0.0927	0.69%
Fe 238.204 Radial†	92.5	93.539	µg/L	1.9909	93.539	ppb	1.9909	2.13%
K 766.490 Radial†	1684.8	721.19	µg/L	16.959	721.19	ppb	16.959	2.35%
Mg 279.077 IEC†	3214.0	9269.3	µg/L	66.44	9269.3	ppb	66.44	0.72%
Mn 257.610†	15662.9	28.425	µg/L	0.0374	28.425	ppb	0.0374	0.13%
Mo 202.031†	38.0	5.2049	µg/L	0.83735	5.2049	ppb	0.83735	16.09%
Na 589.592 Radial†	129778.6	20771	µg/L	14.1	20771	ppb	14.1	0.07%

Ni 231.604†	59.0	3.8688 µg/L	0.01545	3.8688 ppb	0.01545	0.40%
P 214.914†	87.4	69.517 µg/L	3.4773	69.517 ppb	3.4773	5.00%
Pb 220.353†	-2.2	-0.5364 µg/L	1.98717	-0.5364 ppb	1.98717	370.47%
S 181.975 Axial†	5272.0	11963 µg/L	38.8	11963 ppb	38.8	0.32%
Sb 206.836†	7.9	2.8010 µg/L	2.17193	2.8010 ppb	2.17193	77.54%
Se 196.026†	-3.4	-2.57 µg/L	4.114	-2.57 ppb	4.114	160.33%
SiO2 †	865316.1	60339 µg/L	52.7	60339 ppb	52.7	0.09%
Si 251.611†	854219.2	28200 µg/L	97.3	28200 ppb	97.3	0.34%
Sn 189.927†	-71.6	-14.071 µg/L	1.6545	-14.071 ppb	1.6545	11.76%
Sr 421.552†	46779.7	210.56 µg/L	0.171	210.56 ppb	0.171	0.08%
Ti 334.940†	-565.3	0.2084 µg/L	0.10647	0.2084 ppb	0.10647	51.09%
Tl 190.801†	-8.4	-3.1691 µg/L	1.42718	-3.1691 ppb	1.42718	45.03%
U 409.014†	22.2	1.4201 µg/L	0.48906	1.4201 ppb	0.48906	34.44%
V 292.402†	66.4	1.1740 µg/L	0.22934	1.1740 ppb	0.22934	19.54%
Zn 213.857†	3728.9	87.095 µg/L	0.2450	87.095 ppb	0.2450	0.28%

Sequence No.: 79
Sample ID: CCV1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/24/2005 00:22:49
Data Type: Reprocessed on 6/24/2005 07:41:04
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1071685.9	1071685.9	99.580	%			00:25:35
1	Sc RADIAL	39259.9	39259.9	99.0	%			00:24:16
1	Y 371.029	583016.8	583016.8	98.626	%			00:25:35
1	Ag 328.068†	65784.5	66685.8	492.49	µg/L	492.49	ppb	00:25:41
1	Al 396.153Radial†	16537.1	16595.9	4921.4	µg/L	4921.4	ppb	00:24:16
1	As 188.979†	933.0	965.0	493.91	µg/L	493.91	ppb	00:26:01
1	B 249.677†	7475.8	7281.7	482.42	µg/L	482.42	ppb	00:25:41
1	Ba 233.527†	45845.6	46173.8	490.54	µg/L	490.54	ppb	00:25:41
1	Be 313.107†	715127.0	717880.3	493.37	µg/L	493.37	ppb	00:25:35
1	Ca 317.933Radial†	21718.8	21768.9	4878.4	µg/L	4878.4	ppb	00:24:36
1	Cd 226.502†	13379.2	13459.5	491.32	µg/L	491.32	ppb	00:25:41
1	Co 228.616†	15540.9	15751.5	489.99	µg/L	489.99	ppb	00:25:41
1	Cr 267.716†	17556.3	17559.1	490.18	µg/L	490.18	ppb	00:25:41
1	Cu 324.752†	130277.4	125802.1	493.79	µg/L	493.79	ppb	00:25:35
1	Fe 238.204 Radial†	4949.6	4955.1	5015.2	µg/L	5015.2	ppb	00:24:36
1	K 766.490 Radial†	12315.8	11312.4	4842.3	µg/L	4842.3	ppb	00:24:16
1	Mg 279.077 IEC†	1721.0	1734.4	5011.2	µg/L	5011.2	ppb	00:24:36
1	Mn 257.610†	270078.3	270817.4	493.76	µg/L	493.76	ppb	00:25:35
1	Mo 202.031†	3810.8	3827.0	502.21	µg/L	502.21	ppb	00:26:01
1	Na 589.592 Radial†	61744.1	61347.7	9817.3	µg/L	9817.3	ppb	00:24:16
1	Ni 231.604†	7906.0	7761.0	507.56	µg/L	507.56	ppb	00:26:01
1	P 214.914†	3114.8	2945.9	2340.8	µg/L	2340.8	ppb	00:26:01
1	Pb 220.353†	1871.0	1891.6	495.17	µg/L	495.17	ppb	00:26:01
1	S 181.975 Axial†	465.1	426.5	961.92	µg/L	961.92	ppb	00:26:01
1	Sb 206.836†	1069.8	1039.6	489.40	µg/L	489.40	ppb	00:26:01
1	Se 196.026†	546.6	581.3	485	µg/L	485	ppb	00:26:01
1	SiO2 †	81341.4	80092.5	5569.2	µg/L	5569.2	ppb	00:25:41
1	Si 251.611†	79475.0	78423.0	2580	µg/L	2580	ppb	00:27:10
1	Sn 189.927†	1888.9	1902.3	484.12	µg/L	484.12	ppb	00:26:01
1	Sr 421.552†	108989.2	110099.5	497.08	µg/L	497.08	ppb	00:24:16
1	Ti 334.940†	367195.6	368292.5	488.51	µg/L	488.51	ppb	00:25:35
1	Tl 190.801†	1235.7	1277.4	493.99	µg/L	493.99	ppb	00:26:01
1	U 409.014†	7924.8	7620.6	492.54	µg/L	492.54	ppb	00:25:41
1	V 292.402†	32597.8	32825.2	494.76	µg/L	494.76	ppb	00:25:41
1	Zn 213.857†	21020.8	20536.9	486.72	µg/L	486.72	ppb	00:25:41
2	Sc 361.383	1069306.8	1069306.8	99.359	%			00:26:07
2	Sc RADIAL	39053.8	39053.8	98.5	%			00:24:41
2	Y 371.029	582048.4	582048.4	98.462	%			00:26:07
2	Ag 328.068†	65929.9	66979.2	494.67	µg/L	494.67	ppb	00:26:12
2	Al 396.153Radial†	16409.3	16554.2	4908.9	µg/L	4908.9	ppb	00:24:41
2	As 188.979†	933.7	967.8	495.32	µg/L	495.32	ppb	00:26:32
2	B 249.677†	7503.6	7326.4	485.37	µg/L	485.37	ppb	00:26:12
2	Ba 233.527†	45881.5	46312.3	492.01	µg/L	492.01	ppb	00:26:12
2	Be 313.107†	713597.9	717939.1	493.41	µg/L	493.41	ppb	00:26:07
2	Ca 317.933Radial†	21868.6	22036.7	4938.4	µg/L	4938.4	ppb	00:25:01
2	Cd 226.502†	13355.1	13465.2	491.52	µg/L	491.52	ppb	00:26:12
2	Co 228.616†	15576.6	15822.2	492.19	µg/L	492.19	ppb	00:26:12
2	Cr 267.716†	17552.8	17594.9	491.17	µg/L	491.17	ppb	00:26:12
2	Cu 324.752†	130233.0	126048.5	494.76	µg/L	494.76	ppb	00:26:07
2	Fe 238.204 Radial†	4994.0	5026.6	5087.5	µg/L	5087.5	ppb	00:25:01
2	K 766.490 Radial†	12257.2	11318.5	4844.9	µg/L	4844.9	ppb	00:24:41
2	Mg 279.077 IEC†	1726.3	1748.9	5053.0	µg/L	5053.0	ppb	00:25:01
2	Mn 257.610†	269443.6	270782.0	493.70	µg/L	493.70	ppb	00:26:07
2	Mo 202.031†	3813.7	3838.4	503.71	µg/L	503.71	ppb	00:26:32
2	Na 589.592 Radial†	61507.5	61436.4	9831.5	µg/L	9831.5	ppb	00:24:41
2	Ni 231.604†	7860.0	7732.4	505.69	µg/L	505.69	ppb	00:26:32
2	P 214.914†	3109.9	2947.9	2342.2	µg/L	2342.2	ppb	00:26:32
2	Pb 220.353†	1838.1	1862.7	487.61	µg/L	487.61	ppb	00:26:32
2	S 181.975 Axial†	458.9	421.2	949.96	µg/L	949.96	ppb	00:26:32

2	Sb 206.836†	1071.9	1044.1	491.52 µg/L	491.52 ppb	00:26:32
2	Se 196.026†	554.6	590.6	493 µg/L	493 ppb	00:26:32
2	SiO2 †	80861.2	79790.9	5548.1 µg/L	5548.1 ppb	00:26:12
2	Si 251.611†	78424.8	77543.7	2550 µg/L	2550 ppb	00:27:15
2	Sn 189.927†	1878.3	1895.8	482.46 µg/L	482.46 ppb	00:26:32
2	Sr 421.552†	108656.3	110342.3	498.18 µg/L	498.18 ppb	00:24:41
2	Ti 334.940†	366614.9	368528.4	488.82 µg/L	488.82 ppb	00:26:07
2	Tl 190.801†	1233.0	1277.5	494.02 µg/L	494.02 ppb	00:26:32
2	U 409.014†	7984.4	7698.3	497.54 µg/L	497.54 ppb	00:26:12
2	V 292.402†	32690.3	32991.1	497.25 µg/L	497.25 ppb	00:26:12
2	Zn 213.857†	21062.6	20625.9	488.85 µg/L	488.85 ppb	00:26:12
3	Sc 361.383	1075982.0	1075982.0	99.979 %		00:26:38
3	Sc RADIAL	39554.8	39554.8	99.8 %		00:25:07
3	Y 371.029	585041.3	585041.3	98.968 %		00:26:38
3	Ag 328.068†	67100.1	67737.9	500.24 µg/L	500.24 ppb	00:26:44
3	Al 396.153Radial†	16675.8	16610.3	4925.6 µg/L	4925.6 ppb	00:25:07
3	As 188.979†	941.1	969.3	496.17 µg/L	496.17 ppb	00:27:04
3	B 249.677†	7650.1	7426.0	491.98 µg/L	491.98 ppb	00:26:44
3	Ba 233.527†	46747.0	46891.5	498.17 µg/L	498.17 ppb	00:26:44
3	Be 313.107†	718411.6	718298.2	493.66 µg/L	493.66 ppb	00:26:38
3	Ca 317.933Radial†	21705.0	21591.5	4838.8 µg/L	4838.8 ppb	00:25:27
3	Cd 226.502†	13664.1	13690.8	499.76 µg/L	499.76 ppb	00:26:44
3	Co 228.616†	15814.7	15963.0	496.58 µg/L	496.58 ppb	00:26:44
3	Cr 267.716†	17882.6	17815.0	497.32 µg/L	497.32 ppb	00:26:44
3	Cu 324.752†	130778.4	125780.9	493.70 µg/L	493.70 ppb	00:26:38
3	Fe 238.204 Radial†	4951.4	4919.6	4979.4 µg/L	4979.4 ppb	00:25:27
3	K 766.490 Radial†	12405.9	11310.0	4841.3 µg/L	4841.3 ppb	00:25:07
3	Mg 279.077 IEC†	1723.9	1724.3	4982.1 µg/L	4982.1 ppb	00:25:27
3	Mn 257.610†	271306.1	270962.6	494.02 µg/L	494.02 ppb	00:26:38
3	Mo 202.031†	3838.6	3839.6	503.86 µg/L	503.86 ppb	00:27:04
3	Na 589.592 Radial†	62333.0	61472.9	9837.4 µg/L	9837.4 ppb	00:25:07
3	Ni 231.604†	7907.4	7730.7	505.57 µg/L	505.57 ppb	00:27:04
3	P 214.914†	3146.2	2964.7	2356.4 µg/L	2356.4 ppb	00:27:04
3	Pb 220.353†	1869.6	1882.7	492.83 µg/L	492.83 ppb	00:27:04
3	S 181.975 Axial†	465.0	424.5	957.46 µg/L	957.46 ppb	00:27:04
3	Sb 206.836†	1072.7	1038.2	488.69 µg/L	488.69 ppb	00:27:04
3	Se 196.026†	555.5	588.0	491 µg/L	491 ppb	00:27:04
3	SiO2 †	81850.1	80275.2	5581.8 µg/L	5581.8 ppb	00:26:44
3	Si 251.611†	78344.9	76974.0	2540 µg/L	2540 ppb	00:27:20
3	Sn 189.927†	1902.7	1908.5	485.68 µg/L	485.68 ppb	00:27:04
3	Sr 421.552†	109915.1	110206.8	497.57 µg/L	497.57 ppb	00:25:07
3	Ti 334.940†	369054.2	368679.2	489.01 µg/L	489.01 ppb	00:26:38
3	Tl 190.801†	1230.2	1267.0	489.98 µg/L	489.98 ppb	00:27:04
3	U 409.014†	8196.1	7860.2	508.01 µg/L	508.01 ppb	00:26:44
3	V 292.402†	33227.5	33324.3	502.23 µg/L	502.23 ppb	00:26:44
3	Zn 213.857†	21455.5	20887.4	495.13 µg/L	495.13 ppb	00:26:44

Mean Data: CCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1072324.9	99.640	%	0.3144				0.32%
Sc RADIAL	39289.5	99.1	%	0.64				0.64%
Y 371.029	583368.8	98.685	%	0.2583				0.26%
Ag 328.068†	67134.3	495.80	µg/L	3.995	495.80	ppb	3.995	0.81%
QC value within limits for Ag 328.068 Recovery = 99.16%								
Al 396.153Radial†	16586.8	4918.6	µg/L	8.69	4918.6	ppb	8.69	0.18%
QC value within limits for Al 396.153Radial Recovery = 98.37%								
As 188.979†	967.4	495.13	µg/L	1.145	495.13	ppb	1.145	0.23%
QC value within limits for As 188.979 Recovery = 99.03%								
B 249.677†	7344.7	486.59	µg/L	4.897	486.59	ppb	4.897	1.01%
QC value within limits for B 249.677 Recovery = 97.32%								
Ba 233.527†	46459.2	493.57	µg/L	4.045	493.57	ppb	4.045	0.82%
QC value within limits for Ba 233.527 Recovery = 98.71%								
Be 313.107†	718039.2	493.48	µg/L	0.157	493.48	ppb	0.157	0.03%
QC value within limits for Be 313.107 Recovery = 98.70%								
Ca 317.933Radial†	21799.0	4885.2	µg/L	50.17	4885.2	ppb	50.17	1.03%
QC value within limits for Ca 317.933Radial Recovery = 97.70%								
Cd 226.502†	13538.5	494.20	µg/L	4.819	494.20	ppb	4.819	0.98%
QC value within limits for Cd 226.502 Recovery = 98.84%								
Co 228.616†	15845.6	492.92	µg/L	3.353	492.92	ppb	3.353	0.68%

QC value within limits for Co 228.616 Recovery = 98.58%

Cr 267.716†	17656.3	492.89 µg/L	3.867	492.89 ppb	3.867	0.78%

QC value within limits for Cr 267.716 Recovery = 98.58%

Cu 324.752†	125877.2	494.08 µg/L	0.587	494.08 ppb	0.587	0.12%

QC value within limits for Cu 324.752 Recovery = 98.82%

Fe 238.204 Radial†	4967.1	5027.4 µg/L	55.03	5027.4 ppb	55.03	1.09%

QC value within limits for Fe 238.204 Radial Recovery = 100.55%

K 766.490 Radial†	11313.6	4842.8 µg/L	1.89	4842.8 ppb	1.89	0.04%

QC value within limits for K 766.490 Radial Recovery = 96.86%

Mg 279.077 IEC†	1735.9	5015.4 µg/L	35.67	5015.4 ppb	35.67	0.71%

QC value within limits for Mg 279.077 IEC Recovery = 100.31%

Mn 257.610†	270854.0	493.82 µg/L	0.169	493.82 ppb	0.169	0.03%

QC value within limits for Mn 257.610 Recovery = 98.76%

Mo 202.031†	3835.0	503.26 µg/L	0.909	503.26 ppb	0.909	0.18%

QC value within limits for Mo 202.031 Recovery = 100.65%

Na 589.592 Radial†	61419.0	9828.8 µg/L	10.31	9828.8 ppb	10.31	0.10%

QC value within limits for Na 589.592 Radial Recovery = 98.29%

Ni 231.604†	7741.4	506.27 µg/L	1.115	506.27 ppb	1.115	0.22%

QC value within limits for Ni 231.604 Recovery = 101.25%

P 214.914†	2952.8	2346.5 µg/L	8.62	2346.5 ppb	8.62	0.37%

QC value within limits for P 214.914 Recovery = 93.86%

Pb 220.353†	1879.0	491.87 µg/L	3.872	491.87 ppb	3.872	0.79%

QC value within limits for Pb 220.353 Recovery = 98.37%

S 181.975 Axial†	424.1	956.45 µg/L	6.043	956.45 ppb	6.043	0.63%

QC value within limits for S 181.975 Axial Recovery = 95.64%

Sb 206.836†	1040.6	489.87 µg/L	1.472	489.87 ppb	1.472	0.30%

QC value within limits for Sb 206.836 Recovery = 97.97%

Se 196.026†	586.6	490 µg/L	4.0	490 ppb	4.0	0.82%

QC value within limits for Se 196.026 Recovery = 97.92%

SiO2 †	80052.8	5566.4 µg/L	17.04	5566.4 ppb	17.04	0.31%

QC value within limits for SiO2 Recovery = 104.09%

Si 251.611†	77646.9	2560 µg/L	24.1	2560 ppb	24.1	0.94%

QC value within limits for Si 251.611 Recovery = 102.31%

Sn 189.927†	1902.2	484.09 µg/L	1.609	484.09 ppb	1.609	0.33%

QC value within limits for Sn 189.927 Recovery = 96.82%

Sr 421.552†	110216.2	497.61 µg/L	0.549	497.61 ppb	0.549	0.11%

QC value within limits for Sr 421.552 Recovery = 99.52%

Ti 334.940†	368500.0	488.78 µg/L	0.254	488.78 ppb	0.254	0.05%

QC value within limits for Ti 334.940 Recovery = 97.76%

Tl 190.801†	1274.0	492.66 µg/L	2.326	492.66 ppb	2.326	0.47%

QC value within limits for Tl 190.801 Recovery = 98.53%

U 409.014†	7726.4	499.36 µg/L	7.892	499.36 ppb	7.892	1.58%

QC value within limits for U 409.014 Recovery = 99.87%

V 292.402†	33046.9	498.08 µg/L	3.806	498.08 ppb	3.806	0.76%

QC value within limits for V 292.402 Recovery = 99.62%

Zn 213.857†	20683.4	490.23 µg/L	4.369	490.23 ppb	4.369	0.89%

QC value within limits for Zn 213.857 Recovery = 98.05%

All analyte(s) passed QC.

Sequence No.: 80
Sample ID: CCB1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 6/24/2005 00:29:08
Data Type: Reprocessed on 6/24/2005 07:41:06
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1083970.6	1083970.6	100.72	%			00:31:51
1	Sc RADIAL	39726.3	39726.3	100	%			00:30:33
1	Y 371.029	595249.3	595249.3	100.70	%			00:31:51
1	Ag 328.068†	-610.0	18.4	0.1346	µg/L	0.1346	ppb	00:31:56
1	Al 396.153Radial†	110.1	4.6	1.3233	µg/L	1.3233	ppb	00:30:33
1	As 188.979†	-23.8	4.4	2.2121	µg/L	2.2121	ppb	00:32:17
1	B 249.677†	190.3	-36.7	-2.4285	µg/L	-2.4285	ppb	00:32:17
1	Ba 233.527†	-123.8	12.0	0.1273	µg/L	0.1273	ppb	00:32:17
1	Be 313.107†	376.0	112.3	0.0775	µg/L	0.0775	ppb	00:31:56
1	Ca 317.933Radial†	171.5	5.8	1.3026	µg/L	1.3026	ppb	00:30:53
1	Cd 226.502†	-21.3	2.8	0.1024	µg/L	0.1024	ppb	00:32:17
1	Co 228.616†	-134.8	11.3	0.3522	µg/L	0.3522	ppb	00:32:17
1	Cr 267.716†	80.4	8.6	0.2387	µg/L	0.2387	ppb	00:32:17
1	Cu 324.752†	4900.2	-159.3	-0.6276	µg/L	-0.6276	ppb	00:31:56
1	Fe 238.204 Radial†	46.5	2.8	2.8209	µg/L	2.8209	ppb	00:30:53
1	K 766.490 Radial†	1060.0	-67.7	-28.965	µg/L	-28.965	ppb	00:30:33
1	Mg 279.077 IEC†	-0.1	-3.7	-10.747	µg/L	-10.747	ppb	00:30:53
1	Mn 257.610†	433.6	31.2	0.0569	µg/L	0.0569	ppb	00:32:17
1	Mo 202.031†	5.6	5.8	0.7555	µg/L	0.7555	ppb	00:32:17
1	Na 589.592 Radial†	713.0	-297.3	-47.594	µg/L	-47.594	ppb	00:30:33
1	Ni 231.604†	176.6	-2.9	-0.1897	µg/L	-0.1897	ppb	00:32:17
1	P 214.914†	174.8	-8.5	-6.9222	µg/L	-6.9222	ppb	00:32:17
1	Pb 220.353†	-18.0	-5.1	-1.3313	µg/L	-1.3313	ppb	00:32:17
1	S 181.975 Axial†	34.0	-6.8	-15.504	µg/L	-15.504	ppb	00:32:17
1	Sb 206.836†	51.4	16.2	7.6449	µg/L	7.6449	ppb	00:32:17
1	Se 196.026†	-30.5	2.1	1.72	µg/L	1.72	ppb	00:32:17
1	SiO2 †	2531.1	921.2	64.209	µg/L	64.209	ppb	00:31:56
1	Si 251.611†	2383.0	979.0	32.3	µg/L	32.3	ppb	00:33:24
1	Sn 189.927†	0.7	6.1	1.5487	µg/L	1.5487	ppb	00:32:17
1	Sr 421.552†	-42.3	-13.1	-0.0592	µg/L	-0.0592	ppb	00:30:33
1	Ti 334.940†	763.5	307.1	0.4066	µg/L	0.4066	ppb	00:31:56
1	Tl 190.801†	-34.3	2.5	0.9551	µg/L	0.9551	ppb	00:32:17
1	U 409.014†	369.0	28.8	1.8532	µg/L	1.8532	ppb	00:31:56
1	V 292.402†	-120.5	-29.6	-0.4311	µg/L	-0.4311	ppb	00:31:56
1	Zn 213.857†	423.4	-152.2	-3.6378	µg/L	-3.6378	ppb	00:32:17
2	Sc 361.383	1089391.2	1089391.2	101.23	%			00:32:22
2	Sc RADIAL	39431.4	39431.4	99.5	%			00:30:58
2	Y 371.029	598263.6	598263.6	101.21	%			00:32:22
2	Ag 328.068†	-564.3	66.6	0.4911	µg/L	0.4911	ppb	00:32:27
2	Al 396.153Radial†	106.8	2.0	0.5544	µg/L	0.5544	ppb	00:30:58
2	As 188.979†	-24.0	4.3	2.1844	µg/L	2.1844	ppb	00:32:47
2	B 249.677†	170.6	-57.2	-3.7822	µg/L	-3.7822	ppb	00:32:47
2	Ba 233.527†	-123.4	13.0	0.1379	µg/L	0.1379	ppb	00:32:47
2	Be 313.107†	344.1	79.0	0.0546	µg/L	0.0546	ppb	00:32:27
2	Ca 317.933Radial†	260.5	96.5	21.622	µg/L	21.622	ppb	00:31:18
2	Cd 226.502†	-29.4	-5.1	-0.1878	µg/L	-0.1878	ppb	00:32:47
2	Co 228.616†	-130.3	16.4	0.5097	µg/L	0.5097	ppb	00:32:47
2	Cr 267.716†	78.0	5.9	0.1637	µg/L	0.1637	ppb	00:32:47
2	Cu 324.752†	4938.7	-145.5	-0.5733	µg/L	-0.5733	ppb	00:32:27
2	Fe 238.204 Radial†	53.6	10.3	10.434	µg/L	10.434	ppb	00:31:18
2	K 766.490 Radial†	1076.0	-43.6	-18.653	µg/L	-18.653	ppb	00:30:58
2	Mg 279.077 IEC†	10.6	7.0	20.268	µg/L	20.268	ppb	00:31:18
2	Mn 257.610†	443.1	38.4	0.0707	µg/L	0.0707	ppb	00:32:47
2	Mo 202.031†	8.6	8.6	1.1331	µg/L	1.1331	ppb	00:32:47
2	Na 589.592 Radial†	733.4	-271.5	-43.454	µg/L	-43.454	ppb	00:30:58
2	Ni 231.604†	182.1	1.5	0.1043	µg/L	0.1043	ppb	00:32:47
2	P 214.914†	176.4	-7.8	-6.3747	µg/L	-6.3747	ppb	00:32:47
2	Pb 220.353†	-11.5	1.4	0.3672	µg/L	0.3672	ppb	00:32:47
2	S 181.975 Axial†	33.3	-7.7	-17.485	µg/L	-17.485	ppb	00:32:47

2	Sb 206.836†	47.2	11.8	5.5638 µg/L	5.5638 ppb	00:32:47
2	Se 196.026†	-25.1	7.5	6.28 µg/L	6.28 ppb	00:32:47
2	SiO2 †	2504.6	882.5	61.507 µg/L	61.507 ppb	00:32:27
2	Si 251.611†	2351.2	935.8	30.9 µg/L	30.9 ppb	00:33:29
2	Sn 189.927†	-4.7	0.8	0.2041 µg/L	0.2041 ppb	00:32:47
2	Sr 421.552†	-14.2	14.9	0.0669 µg/L	0.0669 ppb	00:30:58
2	Ti 334.940†	839.7	378.6	0.5021 µg/L	0.5021 ppb	00:32:27
2	Tl 190.801†	-36.2	0.8	0.2998 µg/L	0.2998 ppb	00:32:47
2	U 409.014†	367.3	25.3	1.6224 µg/L	1.6224 ppb	00:32:27
2	V 292.402†	-107.4	-16.1	-0.2269 µg/L	-0.2269 ppb	00:32:27
2	Zn 213.857†	415.6	-161.9	-3.8752 µg/L	-3.8752 ppb	00:32:47
3	Sc 361.383	1075351.9	1075351.9	99.921 %		00:32:53
3	Sc RADIAL	39767.8	39767.8	100 %		00:31:23
3	Y 371.029	590601.8	590601.8	99.909 %		00:32:53
3	Ag 328.068†	-583.7	39.9	0.2955 µg/L	0.2955 ppb	00:32:58
3	Al 396.153Radial†	89.9	-15.7	-4.7098 µg/L	-4.7098 ppb	00:31:23
3	As 188.979†	-26.6	1.4	0.7113 µg/L	0.7113 ppb	00:33:18
3	B 249.677†	159.5	-66.1	-4.3730 µg/L	-4.3730 ppb	00:33:18
3	Ba 233.527†	-128.2	6.6	0.0695 µg/L	0.0695 ppb	00:33:18
3	Be 313.107†	339.9	79.2	0.0534 µg/L	0.0534 ppb	00:32:58
3	Ca 317.933Radial†	224.9	58.8	13.142 µg/L	13.142 ppb	00:31:43
3	Cd 226.502†	-24.9	-1.0	-0.0368 µg/L	-0.0368 ppb	00:33:18
3	Co 228.616†	-138.3	6.7	0.2110 µg/L	0.2110 ppb	00:33:18
3	Cr 267.716†	75.7	4.5	0.1297 µg/L	0.1297 ppb	00:33:18
3	Cu 324.752†	4939.6	-80.9	-0.3139 µg/L	-0.3139 ppb	00:32:58
3	Fe 238.204 Radial†	48.9	5.1	5.1632 µg/L	5.1632 ppb	00:31:43
3	K 766.490 Radial†	1093.2	-35.7	-15.261 µg/L	-15.261 ppb	00:31:23
3	Mg 279.077 IEC†	7.7	4.0	11.663 µg/L	11.663 ppb	00:31:43
3	Mn 257.610†	433.7	34.8	0.0644 µg/L	0.0644 ppb	00:33:18
3	Mo 202.031†	4.4	4.6	0.5984 µg/L	0.5984 ppb	00:33:18
3	Na 589.592 Radial†	720.6	-290.5	-46.495 µg/L	-46.495 ppb	00:31:23
3	Ni 231.604†	187.6	9.4	0.6195 µg/L	0.6195 ppb	00:33:18
3	P 214.914†	179.5	-2.4	-1.9145 µg/L	-1.9145 ppb	00:33:18
3	Pb 220.353†	-23.0	-10.2	-2.6625 µg/L	-2.6625 ppb	00:33:18
3	S 181.975 Axial†	30.0	-10.6	-24.011 µg/L	-24.011 ppb	00:33:18
3	Sb 206.836†	50.6	15.9	7.4774 µg/L	7.4774 ppb	00:33:18
3	Se 196.026†	-38.1	-5.7	-4.80 µg/L	-4.80 ppb	00:33:18
3	SiO2 †	2443.9	854.0	59.536 µg/L	59.536 ppb	00:32:58
3	Si 251.611†	2397.3	1012.3	33.4 µg/L	33.4 ppb	00:33:34
3	Sn 189.927†	-6.5	-1.1	-0.2778 µg/L	-0.2778 ppb	00:33:18
3	Sr 421.552†	15.3	44.4	0.2002 µg/L	0.2002 ppb	00:31:23
3	Ti 334.940†	628.5	178.1	0.2392 µg/L	0.2392 ppb	00:32:58
3	Tl 190.801†	-34.7	1.8	0.6836 µg/L	0.6836 ppb	00:33:18
3	U 409.014†	256.6	-80.7	-5.1955 µg/L	-5.1955 ppb	00:32:58
3	V 292.402†	-83.3	6.6	0.0987 µg/L	0.0987 ppb	00:32:58
3	Zn 213.857†	420.8	-151.4	-3.6255 µg/L	-3.6255 ppb	00:33:18

Mean Data: CCB1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1082904.6	100.62	%	0.658				0.65%
Sc RADIAL	39641.8	100.0	%	0.46				0.46%
Y 371.029	594704.9	100.60	%	0.653				0.65%
Ag 328.068†	41.6	0.3071	µg/L	0.17854	0.3071	ppb	0.17854	58.15%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-3.0	-0.9440	µg/L	3.28384	-0.9440	ppb	3.28384	347.85%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.4	1.7026	µg/L	0.85860	1.7026	ppb	0.85860	50.43%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-53.3	-3.5279	µg/L	0.99687	-3.5279	ppb	0.99687	28.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.5	0.1115	µg/L	0.03683	0.1115	ppb	0.03683	33.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	90.1	0.0618	µg/L	0.01359	0.0618	ppb	0.01359	21.98%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	53.7	12.022	µg/L	10.2056	12.022	ppb	10.2056	84.89%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.1	-0.0407	µg/L	0.14514	-0.0407	ppb	0.14514	356.54%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	11.5	0.3577	µg/L	0.14943	0.3577	ppb	0.14943	41.78%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	6.3	0.1774 µg/L	0.05581	0.1774 ppb	0.05581	31.47%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-128.6	-0.5049 µg/L	0.16766	-0.5049 ppb	0.16766	33.21%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	6.1	6.1395 µg/L	3.89952	6.1395 ppb	3.89952	63.52%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	-49.0	-20.960 µg/L	7.1372	-20.960 ppb	7.1372	34.05%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	2.4	7.0611 µg/L	16.01147	7.0611 ppb	16.01147	226.76%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	34.8	0.0640 µg/L	0.00690	0.0640 ppb	0.00690	10.77%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	6.3	0.8290 µg/L	0.27482	0.8290 ppb	0.27482	33.15%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-286.4	-45.848 µg/L	2.1444	-45.848 ppb	2.1444	4.68%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	2.7	0.1781 µg/L	0.40961	0.1781 ppb	0.40961	230.05%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	-6.2	-5.0705 µg/L	2.74680	-5.0705 ppb	2.74680	54.17%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	-4.6	-1.2089 µg/L	1.51856	-1.2089 ppb	1.51856	125.62%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	-8.4	-19.000 µg/L	4.4512	-19.000 ppb	4.4512	23.43%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	14.6	6.8953 µg/L	1.15623	6.8953 ppb	1.15623	16.77%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	1.3	1.07 µg/L	5.570	1.07 ppb	5.570	522.87%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	885.9	61.751 µg/L	2.3460	61.751 ppb	2.3460	3.80%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	975.7	32.2 µg/L	1.27	32.2 ppb	1.27	3.94%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	1.9	0.4917 µg/L	0.94664	0.4917 ppb	0.94664	192.53%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	15.4	0.0693 µg/L	0.12974	0.0693 ppb	0.12974	187.25%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	288.0	0.3827 µg/L	0.13308	0.3827 ppb	0.13308	34.78%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	1.7	0.6462 µg/L	0.32927	0.6462 ppb	0.32927	50.96%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	-8.9	-0.5733 µg/L	4.00461	-0.5733 ppb	4.00461	698.52%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-13.1	-0.1865 µg/L	0.26722	-0.1865 ppb	0.26722	143.31%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-155.1	-3.7128 µg/L	0.14076	-3.7128 ppb	0.14076	3.79%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Reprocessing Begun
Logged In Analyst: Administrator Technique: ICP Continuous

Results Data Set (original): 062405
Results Library (original): C:\pe\Results\Results.mdb
Results Data Set (reprocessed):
Results Library (reprocessed):

Sequence No.: 1 Autosampler Location: 8
Sample ID: S0 Date Collected: 6/24/2005 09:25:46
Analyst: Data Type: Reprocessed on 6/24/2005 10:58:33
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1067612.9	1067612.9	99.648	%	09:28:28
1	Sc RADIAL	40266.0	40266.0	100	%	09:27:09
1	Y 371.029	584917.4	584917.4	99.657	%	09:28:28
1	Ag 328.068†	-557.2	-559.1	[0.00]	µg/L	09:28:33
1	Al 396.153Radial†	95.3	95.2	[0.00]	µg/L	09:27:09
1	As 188.979†	-28.0	-28.1	[0.00]	µg/L	09:28:53
1	B 249.677†	140.3	140.8	[0.00]	µg/L	09:28:53
1	Ba 233.527†	-121.8	-122.2	[0.00]	µg/L	09:28:53
1	Be 313.107†	-105.8	-106.2	[0.00]	µg/L	09:28:33
1	Ca 317.933Radial†	149.9	149.6	[0.00]	µg/L	09:27:29
1	Cd 226.502†	-28.9	-29.0	[0.00]	µg/L	09:28:53
1	Co 228.616†	-132.5	-132.9	[0.00]	µg/L	09:28:53
1	Cr 267.716†	72.4	72.6	[0.00]	µg/L	09:28:53
1	Cu 324.752†	5015.9	5033.6	[0.00]	µg/L	09:28:33
1	Fe 238.204 Radial†	43.1	43.0	[0.00]	µg/L	09:27:29
1	K 766.490 Radial†	1087.2	1085.5	[0.00]	µg/L	09:27:09
1	Mg 279.077 IEC†	3.6	3.6	[0.00]	µg/L	09:27:29
1	Mn 257.610†	385.7	387.1	[0.00]	µg/L	09:28:53
1	Mo 202.031†	4.0	4.0	[0.00]	µg/L	09:28:53
1	Na 589.592 Radial†	1049.5	1047.7	[0.00]	µg/L	09:27:09
1	Ni 231.604†	162.5	163.1	[0.00]	µg/L	09:28:53
1	P 214.914†	170.7	171.3	[0.00]	µg/L	09:28:53
1	Pb 220.353†	-12.1	-12.1	[0.00]	µg/L	09:28:53
1	S 181.975 Axial†	43.1	43.3	[0.00]	µg/L	09:28:53
1	Sb 206.836†	40.9	41.0	[0.00]	µg/L	09:28:53
1	Se 196.026†	-25.3	-25.4	[0.00]	µg/L	09:28:53
1	SiO2 †	1335.6	1340.3	[0.00]	µg/L	09:28:33
1	Si 251.611†	1330.8	1335.5	[0.00]	µg/L	09:30:01
1	Sn 189.927†	-14.5	-14.6	[0.00]	µg/L	09:28:53
1	Sr 421.552†	-48.3	-48.2	[0.00]	µg/L	09:27:09
1	Ti 334.940†	449.5	451.1	[0.00]	µg/L	09:28:33
1	Tl 190.801†	-35.5	-35.6	[0.00]	µg/L	09:28:53
1	U 409.014†	319.0	320.2	[0.00]	µg/L	09:28:33
1	V 292.402†	-123.9	-124.3	[0.00]	µg/L	09:28:33
1	Zn 213.857†	573.8	575.8	[0.00]	µg/L	09:28:53
2	Sc 361.383	1068368.7	1068368.7	99.719	%	09:28:59
2	Sc RADIAL	40050.1	40050.1	99.6	%	09:27:35
2	Y 371.029	585431.3	585431.3	99.745	%	09:28:59
2	Ag 328.068†	-640.9	-642.7	[0.00]	µg/L	09:29:04
2	Al 396.153Radial†	84.8	85.2	[0.00]	µg/L	09:27:35
2	As 188.979†	-27.8	-27.9	[0.00]	µg/L	09:29:24
2	B 249.677†	145.1	145.5	[0.00]	µg/L	09:29:24
2	Ba 233.527†	-143.0	-143.4	[0.00]	µg/L	09:29:24
2	Be 313.107†	-145.5	-145.9	[0.00]	µg/L	09:29:04
2	Ca 317.933Radial†	154.5	155.1	[0.00]	µg/L	09:27:55
2	Cd 226.502†	-24.6	-24.7	[0.00]	µg/L	09:29:24
2	Co 228.616†	-129.1	-129.4	[0.00]	µg/L	09:29:24
2	Cr 267.716†	75.7	75.9	[0.00]	µg/L	09:29:24
2	Cu 324.752†	5072.4	5086.7	[0.00]	µg/L	09:29:04
2	Fe 238.204 Radial†	41.9	42.1	[0.00]	µg/L	09:27:55

2	K 766.490 Radial†	1109.7	1113.9	[0.00] µg/L	09:27:35
2	Mg 279.077 IEC†	5.5	5.5	[0.00] µg/L	09:27:55
2	Mn 257.610†	377.1	378.2	[0.00] µg/L	09:29:24
2	Mo 202.031†	7.1	7.2	[0.00] µg/L	09:29:24
2	Na 589.592 Radial†	1102.6	1106.7	[0.00] µg/L	09:27:35
2	Ni 231.604†	177.9	178.4	[0.00] µg/L	09:29:24
2	P 214.914†	161.5	161.9	[0.00] µg/L	09:29:24
2	Pb 220.353†	-4.1	-4.1	[0.00] µg/L	09:29:24
2	S 181.975 Axial†	40.5	40.6	[0.00] µg/L	09:29:24
2	Sb 206.836†	36.8	36.9	[0.00] µg/L	09:29:24
2	Se 196.026†	-38.6	-38.7	[0.00] µg/L	09:29:24
2	SiO2 †	1314.6	1318.3	[0.00] µg/L	09:29:04
2	Si 251.611†	1322.3	1326.0	[0.00] µg/L	09:30:06
2	Sn 189.927†	-11.8	-11.9	[0.00] µg/L	09:29:24
2	Sr 421.552†	-67.6	-67.9	[0.00] µg/L	09:27:35
2	Ti 334.940†	528.5	530.0	[0.00] µg/L	09:29:04
2	Tl 190.801†	-37.0	-37.1	[0.00] µg/L	09:29:24
2	U 409.014†	442.6	443.8	[0.00] µg/L	09:29:04
2	V 292.402†	-124.4	-124.7	[0.00] µg/L	09:29:04
2	Zn 213.857†	584.1	585.8	[0.00] µg/L	09:29:24
3	Sc 361.383	1078157.1	1078157.1	100.63 %	09:29:30
3	Sc RADIAL	40284.0	40284.0	100 %	09:28:00
3	Y 371.029	590436.1	590436.1	100.60 %	09:29:30
3	Ag 328.068†	-604.9	-601.1	[0.00] µg/L	09:29:35
3	Al 396.153Radial†	105.9	105.7	[0.00] µg/L	09:28:00
3	As 188.979†	-33.0	-32.8	[0.00] µg/L	09:29:55
3	B 249.677†	151.4	150.4	[0.00] µg/L	09:29:55
3	Ba 233.527†	-125.5	-124.7	[0.00] µg/L	09:29:55
3	Be 313.107†	-104.1	-103.5	[0.00] µg/L	09:29:35
3	Ca 317.933Radial†	161.9	161.6	[0.00] µg/L	09:28:20
3	Cd 226.502†	-29.0	-28.8	[0.00] µg/L	09:29:55
3	Co 228.616†	-133.6	-132.7	[0.00] µg/L	09:29:55
3	Cr 267.716†	72.8	72.3	[0.00] µg/L	09:29:55
3	Cu 324.752†	5105.5	5073.4	[0.00] µg/L	09:29:35
3	Fe 238.204 Radial†	44.3	44.2	[0.00] µg/L	09:28:20
3	K 766.490 Radial†	1138.4	1136.1	[0.00] µg/L	09:28:00
3	Mg 279.077 IEC†	6.7	6.7	[0.00] µg/L	09:28:20
3	Mn 257.610†	375.6	373.2	[0.00] µg/L	09:29:55
3	Mo 202.031†	2.1	2.1	[0.00] µg/L	09:29:55
3	Na 589.592 Radial†	1104.4	1102.1	[0.00] µg/L	09:28:00
3	Ni 231.604†	178.3	177.2	[0.00] µg/L	09:29:55
3	P 214.914†	172.7	171.6	[0.00] µg/L	09:29:55
3	Pb 220.353†	-4.9	-4.8	[0.00] µg/L	09:29:55
3	S 181.975 Axial†	41.8	41.6	[0.00] µg/L	09:29:55
3	Sb 206.836†	34.7	34.5	[0.00] µg/L	09:29:55
3	Se 196.026†	-34.5	-34.2	[0.00] µg/L	09:29:55
3	SiO2 †	1344.9	1336.4	[0.00] µg/L	09:29:35
3	Si 251.611†	1287.1	1279.0	[0.00] µg/L	09:30:11
3	Sn 189.927†	-12.5	-12.5	[0.00] µg/L	09:29:55
3	Sr 421.552†	-29.6	-29.5	[0.00] µg/L	09:28:00
3	Ti 334.940†	518.9	515.6	[0.00] µg/L	09:29:35
3	Tl 190.801†	-33.5	-33.3	[0.00] µg/L	09:29:55
3	U 409.014†	422.9	420.3	[0.00] µg/L	09:29:35
3	V 292.402†	-119.3	-118.6	[0.00] µg/L	09:29:35
3	Zn 213.857†	582.1	578.5	[0.00] µg/L	09:29:55

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1071379.6	5881.67	0.55%	100.00	%
Sc RADIAL	40200.0	130.18	0.32%	100	%
Y 371.029	586928.3	3048.71	0.52%	100.00	%
Ag 328.068†	-601.0	41.79	6.95%	[0.00]	µg/L
Al 396.153Radial†	95.4	10.28	10.78%	[0.00]	µg/L
As 188.979†	-29.6	2.77	9.36%	[0.00]	µg/L
B 249.677†	145.6	4.83	3.32%	[0.00]	µg/L
Ba 233.527†	-130.1	11.57	8.89%	[0.00]	µg/L
Be 313.107†	-118.5	23.76	20.05%	[0.00]	µg/L
Ca 317.933Radial†	155.4	5.97	3.84%	[0.00]	µg/L
Cd 226.502†	-27.5	2.43	8.83%	[0.00]	µg/L

Co 228.616†	-131.7	1.97	1.49%	[0.00] µg/L
Cr 267.716†	73.6	1.98	2.69%	[0.00] µg/L
Cu 324.752†	5064.6	27.67	0.55%	[0.00] µg/L
Fe 238.204 Radial†	43.1	1.07	2.48%	[0.00] µg/L
K 766.490 Radial†	1111.8	25.37	2.28%	[0.00] µg/L
Mg 279.077 IEC†	5.3	1.57	29.83%	[0.00] µg/L
Mn 257.610†	379.5	7.02	1.85%	[0.00] µg/L
Mo 202.031†	4.4	2.55	57.69%	[0.00] µg/L
Na 589.592 Radial†	1085.5	32.81	3.02%	[0.00] µg/L
Ni 231.604†	172.9	8.49	4.91%	[0.00] µg/L
P 214.914†	168.3	5.51	3.27%	[0.00] µg/L
Pb 220.353†	-7.0	4.43	63.14%	[0.00] µg/L
S 181.975 Axial†	41.8	1.37	3.29%	[0.00] µg/L
Sb 206.836†	37.5	3.31	8.84%	[0.00] µg/L
Se 196.026†	-32.8	6.76	20.63%	[0.00] µg/L
SiO2 †	1331.7	11.75	0.88%	[0.00] µg/L
Si 251.611†	1313.5	30.26	2.30%	[0.00] µg/L
Sn 189.927†	-13.0	1.42	10.95%	[0.00] µg/L
Sr 421.552†	-48.5	19.20	39.56%	[0.00] µg/L
Ti 334.940†	498.9	42.03	8.42%	[0.00] µg/L
Tl 190.801†	-35.3	1.94	5.50%	[0.00] µg/L
U 409.014†	394.8	65.66	16.63%	[0.00] µg/L
V 292.402†	-122.5	3.43	2.80%	[0.00] µg/L
Zn 213.857†	580.0	5.15	0.89%	[0.00] µg/L

Tl 190.801†	-35.3	1.94	5.50%	[0.00] µg/L
U 409.014†	394.8	65.66	16.63%	[0.00] µg/L
V 292.402†	-122.5	3.43	2.80%	[0.00] µg/L
Zn 213.857†	580.0	5.15	0.89%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 6/24/2005 09:32:00
Data Type: Reprocessed on 6/24/2005 10:58:35
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1073152.6	1073152.6	100.17	%	09:33:44
1	Sc RADIAL	39816.8	39816.8	99.0	%	09:33:26
1	Y 371.029	586311.5	586311.5	99.895	%	09:33:44
1	Ag 328.068†	12739.1	13319.1	[100]	µg/L	09:33:50
1	As 188.979†	166.3	195.6	[100]	µg/L	09:34:10
1	B 249.677†	1586.8	1438.6	[100]	µg/L	09:33:50
1	Ba 233.527†	9089.5	9204.5	[100]	µg/L	09:33:50
1	Be 313.107†	141148.7	141034.0	[100]	µg/L	09:33:44
1	Cd 226.502†	2758.2	2781.2	[100]	µg/L	09:34:10
1	Co 228.616†	3147.8	3274.3	[100]	µg/L	09:34:10
1	Cr 267.716†	3575.6	3496.1	[100]	µg/L	09:33:50
1	Cu 324.752†	30255.5	25140.9	[100]	µg/L	09:33:50
1	K 766.490 Radial†	3275.6	2195.3	[1000]	µg/L	09:33:26
1	Mn 257.610†	56221.7	55749.3	[100]	µg/L	09:33:50
1	Mo 202.031†	761.2	755.5	[100]	µg/L	09:34:10
1	Ni 231.604†	1719.6	1543.9	[100]	µg/L	09:34:10
1	P 214.914†	764.2	594.7	[500]	µg/L	09:34:10
1	Pb 220.353†	367.6	374.0	[100]	µg/L	09:34:10
1	S 181.975 Axial†	126.0	83.9	[200]	µg/L	09:34:10
1	Sb 206.836†	217.2	179.4	[100]	µg/L	09:34:10
1	Se 196.026†	85.4	118.1	[100]	µg/L	09:34:10
1	SiO2 †	15602.9	14245.5	[1069.5]	µg/L	09:33:50
1	Si 251.611†	15586.0	14246.8	[500]	µg/L	09:35:18
1	Sn 189.927†	367.4	379.7	[100]	µg/L	09:34:10
1	Sr 421.552†	22350.5	22614.2	[100]	µg/L	09:33:26
1	Ti 334.940†	72666.5	72047.5	[100]	µg/L	09:33:44
1	Tl 190.801†	219.0	253.9	[100]	µg/L	09:34:10
1	U 409.014†	1797.0	1399.3	[100]	µg/L	09:33:50
1	V 292.402†	6354.4	6466.5	[100]	µg/L	09:33:50
1	Zn 213.857†	4789.1	4201.2	[100]	µg/L	09:33:50
2	Sc 361.383	1073813.0	1073813.0	100.23	%	09:34:16
2	Sc RADIAL	39731.0	39731.0	98.8	%	09:33:31
2	Y 371.029	586228.9	586228.9	99.881	%	09:34:16
2	Ag 328.068†	12723.5	13295.6	[100]	µg/L	09:34:21
2	As 188.979†	165.9	195.1	[100]	µg/L	09:34:41
2	B 249.677†	1573.2	1424.0	[100]	µg/L	09:34:21
2	Ba 233.527†	8975.5	9085.2	[100]	µg/L	09:34:21
2	Be 313.107†	141305.8	141104.1	[100]	µg/L	09:34:16
2	Cd 226.502†	2763.5	2784.7	[100]	µg/L	09:34:41
2	Co 228.616†	3131.9	3256.5	[100]	µg/L	09:34:41
2	Cr 267.716†	3578.5	3496.8	[100]	µg/L	09:34:21
2	Cu 324.752†	30094.0	24961.3	[100]	µg/L	09:34:21
2	K 766.490 Radial†	3287.2	2214.2	[1000]	µg/L	09:33:31
2	Mn 257.610†	55551.1	55045.7	[100]	µg/L	09:34:21
2	Mo 202.031†	761.5	755.4	[100]	µg/L	09:34:41
2	Ni 231.604†	1736.5	1559.6	[100]	µg/L	09:34:41
2	P 214.914†	758.4	588.4	[500]	µg/L	09:34:41
2	Pb 220.353†	380.3	386.4	[100]	µg/L	09:34:41
2	S 181.975 Axial†	127.9	85.8	[200]	µg/L	09:34:41
2	Sb 206.836†	229.6	191.6	[100]	µg/L	09:34:41
2	Se 196.026†	80.6	113.2	[100]	µg/L	09:34:41
2	SiO2 †	15458.5	14091.8	[1069.5]	µg/L	09:34:21
2	Si 251.611†	15289.5	13941.4	[500]	µg/L	09:35:23
2	Sn 189.927†	369.1	381.2	[100]	µg/L	09:34:41
2	Sr 421.552†	22214.4	22525.2	[100]	µg/L	09:33:31
2	Ti 334.940†	72867.7	72203.7	[100]	µg/L	09:34:16
2	Tl 190.801†	216.6	251.5	[100]	µg/L	09:34:41
2	U 409.014†	1886.0	1486.9	[100]	µg/L	09:34:21
2	V 292.402†	6326.5	6434.7	[100]	µg/L	09:34:21

2	Zn 213.857†	4752.8	4162.0	[100] µg/L	09:34:21
3	Sc 361.383	1073707.9	1073707.9	100.22 %	09:34:47
3	Sc RADIAL	39701.8	39701.8	98.8 %	09:33:36
3	Y 371.029	586222.3	586222.3	99.880 %	09:34:47
3	Ag 328.068†	12717.8	13291.2	[100] µg/L	09:34:52
3	As 188.979†	168.1	197.3	[100] µg/L	09:35:12
3	B 249.677†	1597.2	1448.2	[100] µg/L	09:34:52
3	Ba 233.527†	9015.3	9125.8	[100] µg/L	09:34:52
3	Be 313.107†	141411.4	141223.3	[100] µg/L	09:34:47
3	Cd 226.502†	2797.5	2818.9	[100] µg/L	09:35:12
3	Co 228.616†	3169.2	3294.1	[100] µg/L	09:35:12
3	Cr 267.716†	3552.9	3471.6	[100] µg/L	09:34:52
3	Cu 324.752†	30300.8	25170.5	[100] µg/L	09:34:52
3	K 766.490 Radial†	3218.8	2147.4	[1000] µg/L	09:33:36
3	Mn 257.610†	55840.1	55339.5	[100] µg/L	09:34:52
3	Mo 202.031†	776.5	770.4	[100] µg/L	09:35:12
3	Ni 231.604†	1748.1	1571.4	[100] µg/L	09:35:12
3	P 214.914†	767.2	597.2	[500] µg/L	09:35:12
3	Pb 220.353†	374.2	380.4	[100] µg/L	09:35:12
3	S 181.975 Axial†	130.9	88.8	[200] µg/L	09:35:12
3	Sb 206.836†	242.1	204.1	[100] µg/L	09:35:12
3	Se 196.026†	77.8	110.5	[100] µg/L	09:35:12
3	SiO2 †	15474.0	14108.8	[1069.5] µg/L	09:34:52
3	Si 251.611†	15208.8	13862.3	[500] µg/L	09:35:28
3	Sn 189.927†	375.6	387.7	[100] µg/L	09:35:12
3	Sr 421.552†	22243.8	22571.5	[100] µg/L	09:33:36
3	Ti 334.940†	72891.6	72234.6	[100] µg/L	09:34:47
3	Tl 190.801†	229.2	264.0	[100] µg/L	09:35:12
3	U 409.014†	1841.8	1443.1	[100] µg/L	09:34:52
3	V 292.402†	6339.0	6447.8	[100] µg/L	09:34:52
3	Zn 213.857†	4781.3	4190.9	[100] µg/L	09:34:52

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1073557.9	354.85	0.03%	100.20	%
Sc RADIAL	39749.9	59.77	0.15%	98.9	%
Y 371.029	586254.2	49.73	0.01%	99.885	%
Ag 328.068†	13302.0	14.98	0.11%	[100]	µg/L
As 188.979†	196.0	1.15	0.59%	[100]	µg/L
B 249.677†	1436.9	12.16	0.85%	[100]	µg/L
Ba 233.527†	9138.5	60.66	0.66%	[100]	µg/L
Be 313.107†	141120.4	95.70	0.07%	[100]	µg/L
Cd 226.502†	2794.9	20.85	0.75%	[100]	µg/L
Co 228.616†	3275.0	18.80	0.57%	[100]	µg/L
Cr 267.716†	3488.2	14.36	0.41%	[100]	µg/L
Cu 324.752†	25090.9	113.25	0.45%	[100]	µg/L
K 766.490 Radial†	2185.6	34.46	1.58%	[1000]	µg/L
Mn 257.610†	55378.2	353.42	0.64%	[100]	µg/L
Mo 202.031†	760.4	8.61	1.13%	[100]	µg/L
Ni 231.604†	1558.3	13.79	0.88%	[100]	µg/L
P 214.914†	593.5	4.52	0.76%	[500]	µg/L
Pb 220.353†	380.3	6.23	1.64%	[100]	µg/L
S 181.975 Axial†	86.2	2.44	2.83%	[200]	µg/L
Sb 206.836†	191.7	12.36	6.45%	[100]	µg/L
Se 196.026†	113.9	3.87	3.39%	[100]	µg/L
SiO2 †	14148.7	84.23	0.60%	[1069.5]	µg/L
Si 251.611†	14016.8	203.04	1.45%	[500]	µg/L
Sn 189.927†	382.9	4.26	1.11%	[100]	µg/L
Sr 421.552†	22570.3	44.54	0.20%	[100]	µg/L
Ti 334.940†	72161.9	100.32	0.14%	[100]	µg/L
Tl 190.801†	256.5	6.65	2.59%	[100]	µg/L
U 409.014†	1443.1	43.83	3.04%	[100]	µg/L
V 292.402†	6449.7	15.97	0.25%	[100]	µg/L
Zn 213.857†	4184.7	20.32	0.49%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/24/2005 09:37:18
Data Type: Reprocessed on 6/24/2005 10:58:38
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1060334.9	1060334.9	98.969	%	09:40:02
1	Sc RADIAL	39642.0	39642.0	98.6	%	09:38:43
1	Y 371.029	574669.3	574669.3	97.911	%	09:40:02
1	Ag 328.068†	65109.9	66389.1	[500]	µg/L	09:40:07
1	Al 396.153Radial†	16331.4	16465.9	[5000]	µg/L	09:38:43
1	As 188.979†	926.5	965.7	[500]	µg/L	09:40:28
1	B 249.677†	7433.6	7365.5	[500]	µg/L	09:40:07
1	Ba 233.527†	45334.7	45937.0	[500]	µg/L	09:40:07
1	Be 313.107†	708894.9	716397.4	[500]	µg/L	09:40:02
1	Ca 317.933Radial†	21160.0	21302.5	[5000]	µg/L	09:39:03
1	Cd 226.502†	13340.4	13506.9	[500]	µg/L	09:40:07
1	Co 228.616†	15497.9	15791.0	[500]	µg/L	09:40:07
1	Cr 267.716†	17379.2	17486.6	[500]	µg/L	09:40:07
1	Cu 324.752†	127840.9	124107.9	[500]	µg/L	09:40:02
1	K 766.490 Radial†	12018.7	11076.1	[5000]	µg/L	09:38:43
1	Mg 279.077 IEC†	1696.2	1714.8	[5000]	µg/L	09:39:03
1	Mn 257.610†	266071.3	268463.3	[500]	µg/L	09:40:02
1	Mo 202.031†	3751.2	3785.8	[500]	µg/L	09:40:28
1	Ni 231.604†	7797.7	7706.0	[500]	µg/L	09:40:28
1	P 214.914†	3108.8	2972.9	[2500]	µg/L	09:40:28
1	Pb 220.353†	1851.1	1877.4	[500]	µg/L	09:40:28
1	S 181.975 Axial†	464.2	427.2	[1000]	µg/L	09:40:28
1	Sb 206.836†	995.4	968.4	[500]	µg/L	09:40:28
1	Se 196.026†	545.3	583.8	[500]	µg/L	09:40:28
1	SiO2 †	76485.1	75950.1	[5347.5]	µg/L	09:40:07
1	Si 251.611†	74790.0	74255.5	[2500]	µg/L	09:41:36
1	Sn 189.927†	1870.1	1902.6	[500]	µg/L	09:40:28
1	Sr 421.552†	108615.9	110193.3	[500]	µg/L	09:38:43
1	Ti 334.940†	360957.6	364218.5	[500]	µg/L	09:40:02
1	Tl 190.801†	1244.5	1292.8	[500]	µg/L	09:40:28
1	U 409.014†	7898.8	7586.3	[500]	µg/L	09:40:07
1	V 292.402†	32164.2	32621.8	[500]	µg/L	09:40:07
1	Zn 213.857†	21179.4	20820.0	[500]	µg/L	09:40:07
2	Sc 361.383	1064174.7	1064174.7	99.328	%	09:40:34
2	Sc RADIAL	39497.4	39497.4	98.3	%	09:39:08
2	Y 371.029	576483.7	576483.7	98.220	%	09:40:34
2	Ag 328.068†	65301.0	66344.1	[500]	µg/L	09:40:39
2	Al 396.153Radial†	16259.3	16453.2	[5000]	µg/L	09:39:08
2	As 188.979†	943.3	979.3	[500]	µg/L	09:40:59
2	B 249.677†	7499.0	7404.2	[500]	µg/L	09:40:39
2	Ba 233.527†	45439.5	45877.2	[500]	µg/L	09:40:39
2	Be 313.107†	711380.1	716315.0	[500]	µg/L	09:40:34
2	Ca 317.933Radial†	21268.2	21491.1	[5000]	µg/L	09:39:28
2	Cd 226.502†	13419.0	13537.4	[500]	µg/L	09:40:39
2	Co 228.616†	15556.3	15793.3	[500]	µg/L	09:40:39
2	Cr 267.716†	17391.7	17435.8	[500]	µg/L	09:40:39
2	Cu 324.752†	128064.6	123867.1	[500]	µg/L	09:40:34
2	K 766.490 Radial†	11991.2	11092.7	[5000]	µg/L	09:39:08
2	Mg 279.077 IEC†	1694.3	1719.2	[5000]	µg/L	09:39:28
2	Mn 257.610†	267149.4	268578.6	[500]	µg/L	09:40:34
2	Mo 202.031†	3788.5	3809.7	[500]	µg/L	09:40:59
2	Ni 231.604†	7880.4	7760.9	[500]	µg/L	09:40:59
2	P 214.914†	3129.7	2982.6	[2500]	µg/L	09:40:59
2	Pb 220.353†	1871.5	1891.2	[500]	µg/L	09:40:59
2	S 181.975 Axial†	465.7	427.0	[1000]	µg/L	09:40:59
2	Sb 206.836†	1018.3	987.7	[500]	µg/L	09:40:59
2	Se 196.026†	563.9	600.5	[500]	µg/L	09:40:59
2	SiO2 †	76631.5	75818.6	[5347.5]	µg/L	09:40:39
2	Si 251.611†	74648.3	73840.3	[2500]	µg/L	09:41:42

2	Sn 189.927†	1872.5	1898.2	[500] µg/L	09:40:59
2	Sr 421.552†	108465.8	110443.8	[500] µg/L	09:39:08
2	Ti 334.940†	362242.1	364195.7	[500] µg/L	09:40:34
2	Tl 190.801†	1234.6	1278.3	[500] µg/L	09:40:59
2	U 409.014†	7897.9	7556.6	[500] µg/L	09:40:39
2	V 292.402†	32167.5	32507.9	[500] µg/L	09:40:39
2	Zn 213.857†	21215.8	20779.5	[500] µg/L	09:40:39
3	Sc 361.383	1070501.8	1070501.8	99.918 %	09:41:05
3	Sc RADIAL	39630.2	39630.2	98.6 %	09:39:33
3	Y 371.029	580228.8	580228.8	98.859 %	09:41:05
3	Ag 328.068†	64713.6	65367.6	[500] µg/L	09:41:10
3	Al 396.153Radial†	16327.3	16466.7	[5000] µg/L	09:39:33
3	As 188.979†	916.7	947.0	[500] µg/L	09:41:31
3	B 249.677†	7469.5	7330.1	[500] µg/L	09:41:10
3	Ba 233.527†	44959.5	45126.4	[500] µg/L	09:41:10
3	Be 313.107†	715919.6	716625.2	[500] µg/L	09:41:05
3	Ca 317.933Radial†	21312.4	21463.4	[5000] µg/L	09:39:54
3	Cd 226.502†	13235.6	13274.0	[500] µg/L	09:41:10
3	Co 228.616†	15386.2	15530.5	[500] µg/L	09:41:10
3	Cr 267.716†	17171.3	17111.7	[500] µg/L	09:41:10
3	Cu 324.752†	128909.2	123950.3	[500] µg/L	09:41:05
3	K 766.490 Radial†	12015.8	11076.8	[5000] µg/L	09:39:33
3	Mg 279.077 IEC†	1701.9	1721.1	[5000] µg/L	09:39:54
3	Mn 257.610†	268763.4	268604.3	[500] µg/L	09:41:05
3	Mo 202.031†	3749.1	3747.8	[500] µg/L	09:41:31
3	Ni 231.604†	7785.8	7619.3	[500] µg/L	09:41:31
3	P 214.914†	3103.6	2937.8	[2500] µg/L	09:41:31
3	Pb 220.353†	1836.4	1845.0	[500] µg/L	09:41:31
3	S 181.975 Axial†	462.8	421.4	[1000] µg/L	09:41:31
3	Sb 206.836†	1019.5	982.9	[500] µg/L	09:41:31
3	Se 196.026†	550.4	583.6	[500] µg/L	09:41:31
3	SiO2 †	75754.9	74485.4	[5347.5] µg/L	09:41:10
3	Si 251.611†	75205.4	73953.6	[2500] µg/L	09:41:47
3	Sn 189.927†	1862.4	1876.9	[500] µg/L	09:41:31
3	Sr 421.552†	108593.4	110203.4	[500] µg/L	09:39:33
3	Ti 334.940†	364873.3	364673.5	[500] µg/L	09:41:05
3	Tl 190.801†	1225.2	1261.6	[500] µg/L	09:41:31
3	U 409.014†	7757.4	7369.0	[500] µg/L	09:41:10
3	V 292.402†	31849.0	31997.7	[500] µg/L	09:41:10
3	Zn 213.857†	21022.6	20459.8	[500] µg/L	09:41:10

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1065003.8	5133.92	0.48%	99.405	%
Sc RADIAL	39589.9	80.29	0.20%	98.5	%
Y 371.029	577127.3	2835.06	0.49%	98.330	%
Ag 328.068†	66033.6	577.21	0.87%	[500]	µg/L
Al 396.153Radial†	16461.9	7.58	0.05%	[5000]	µg/L
As 188.979†	964.0	16.21	1.68%	[500]	µg/L
B 249.677†	7366.6	37.07	0.50%	[500]	µg/L
Ba 233.527†	45646.9	451.71	0.99%	[500]	µg/L
Be 313.107†	716445.9	160.67	0.02%	[500]	µg/L
Ca 317.933Radial†	21419.0	101.86	0.48%	[5000]	µg/L
Cd 226.502†	13439.4	144.09	1.07%	[500]	µg/L
Co 228.616†	15704.9	151.10	0.96%	[500]	µg/L
Cr 267.716†	17344.7	203.34	1.17%	[500]	µg/L
Cu 324.752†	123975.1	122.33	0.10%	[500]	µg/L
K 766.490 Radial†	11081.9	9.36	0.08%	[5000]	µg/L
Mg 279.077 IEC†	1718.4	3.24	0.19%	[5000]	µg/L
Mn 257.610†	268548.7	75.12	0.03%	[500]	µg/L
Mo 202.031†	3781.1	31.23	0.83%	[500]	µg/L
Ni 231.604†	7695.4	71.38	0.93%	[500]	µg/L
P 214.914†	2964.5	23.57	0.80%	[2500]	µg/L
Pb 220.353†	1871.2	23.73	1.27%	[500]	µg/L
S 181.975 Axial†	425.2	3.29	0.77%	[1000]	µg/L
Sb 206.836†	979.7	10.08	1.03%	[500]	µg/L
Se 196.026†	589.3	9.68	1.64%	[500]	µg/L
SiO2 †	75418.0	810.36	1.07%	[5347.5]	µg/L
Si 251.611†	74016.5	214.66	0.29%	[2500]	µg/L

Sn 189.927†	1892.5	13.74	0.73%	[500] µg/L
Sr 421.552†	110280.2	141.78	0.13%	[500] µg/L
Ti 334.940†	364362.6	269.52	0.07%	[500] µg/L
Tl 190.801†	1277.6	15.60	1.22%	[500] µg/L
U 409.014†	7504.0	117.85	1.57%	[500] µg/L
V 292.402†	32375.8	332.39	1.03%	[500] µg/L
Zn 213.857†	20686.4	197.27	0.95%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/24/2005 09:43:38
Data Type: Reprocessed on 6/24/2005 10:58:42
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1055458.3	1055458.3	98.514	%	09:45:38
1	Sc RADIAL	40071.8	40071.8	99.7	%	09:45:07
1	Y 371.029	569387.8	569387.8	97.011	%	09:45:38
1	Ag 328.068†	130561.2	133131.6	[1000]	µg/L	09:45:43
1	Al 396.153Radial†	31884.9	31891.5	[10000]	µg/L	09:45:02
1	As 188.979†	1879.8	1937.7	[1000]	µg/L	09:46:04
1	B 249.677†	14793.8	14871.3	[1000]	µg/L	09:45:43
1	Ba 233.527†	90252.2	91743.7	[1000]	µg/L	09:45:43
1	Be 313.107†	1400139.4	1421378.7	[1000]	µg/L	09:45:38
1	Ca 317.933Radial†	42764.7	42746.1	[10000]	µg/L	09:45:07
1	Cd 226.502†	26413.3	26839.3	[1000]	µg/L	09:45:43
1	Co 228.616†	30791.2	31387.3	[1000]	µg/L	09:45:43
1	Cr 267.716†	34420.3	34865.9	[1000]	µg/L	09:45:43
1	Cu 324.752†	249925.8	248631.3	[1000]	µg/L	09:45:38
1	Fe 238.204 Radial†	9847.0	9835.4	[10000]	µg/L	09:45:07
1	K 766.490 Radial†	22538.4	21498.8	[10000]	µg/L	09:45:02
1	Mg 279.077 IEC†	3416.2	3421.9	[10000]	µg/L	09:45:07
1	Mn 257.610†	526492.8	534055.3	[1000]	µg/L	09:45:38
1	Mo 202.031†	7291.6	7397.2	[1000]	µg/L	09:45:43
1	Na 589.592 Radial†	60210.2	59317.3	[10000]	µg/L	09:45:02
1	Ni 231.604†	14853.3	14904.5	[1000]	µg/L	09:45:43
1	P 214.914†	6018.9	5941.4	[5000]	µg/L	09:46:04
1	Pb 220.353†	3704.1	3767.0	[1000]	µg/L	09:46:04
1	S 181.975 Axial†	916.4	888.4	[2000]	µg/L	09:46:04
1	Sb 206.836†	2044.9	2038.3	[1000]	µg/L	09:46:04
1	Se 196.026†	1125.1	1174.9	[1000]	µg/L	09:46:04
1	SiO2 †	153494.2	154478.0	[10695]	µg/L	09:45:43
1	Si 251.611†	150503.8	151460.6	[5000]	µg/L	09:47:15
1	Sn 189.927†	3785.4	3855.5	[1000]	µg/L	09:46:04
1	Sr 421.552†	211546.7	212272.0	[1000]	µg/L	09:45:02
1	Ti 334.940†	721659.7	732046.9	[1000]	µg/L	09:45:38
1	Tl 190.801†	2476.1	2548.8	[1000]	µg/L	09:46:04
1	U 409.014†	15165.2	14999.2	[1000]	µg/L	09:45:43
1	V 292.402†	64396.5	65490.5	[1000]	µg/L	09:45:43
1	Zn 213.857†	41101.2	41141.2	[1000]	µg/L	09:45:43
2	Sc 361.383	1056207.8	1056207.8	98.584	%	09:46:11
2	Sc RADIAL	39757.2	39757.2	98.9	%	09:45:18
2	Y 371.029	570104.6	570104.6	97.134	%	09:46:11
2	Ag 328.068†	130796.6	133276.4	[1000]	µg/L	09:46:16
2	Al 396.153Radial†	32427.6	32693.5	[10000]	µg/L	09:45:13
2	As 188.979†	1867.3	1923.7	[1000]	µg/L	09:46:36
2	B 249.677†	14824.5	14891.9	[1000]	µg/L	09:46:16
2	Ba 233.527†	90693.1	92125.9	[1000]	µg/L	09:46:16
2	Be 313.107†	1403603.2	1423883.6	[1000]	µg/L	09:46:11
2	Ca 317.933Radial†	42180.2	42494.6	[10000]	µg/L	09:45:18
2	Cd 226.502†	26542.0	26950.7	[1000]	µg/L	09:46:16
2	Co 228.616†	30968.0	31544.5	[1000]	µg/L	09:46:16
2	Cr 267.716†	34638.3	35062.3	[1000]	µg/L	09:46:16
2	Cu 324.752†	250048.4	248575.6	[1000]	µg/L	09:46:11
2	Fe 238.204 Radial†	9732.3	9797.6	[10000]	µg/L	09:45:18
2	K 766.490 Radial†	22895.7	22039.0	[10000]	µg/L	09:45:13
2	Mg 279.077 IEC†	3381.6	3414.0	[10000]	µg/L	09:45:18
2	Mn 257.610†	527302.4	534497.3	[1000]	µg/L	09:46:11
2	Mo 202.031†	7349.9	7451.1	[1000]	µg/L	09:46:16
2	Na 589.592 Radial†	61356.7	60954.6	[10000]	µg/L	09:45:13
2	Ni 231.604†	14955.7	14997.6	[1000]	µg/L	09:46:16
2	P 214.914†	6027.0	5945.3	[5000]	µg/L	09:46:36
2	Pb 220.353†	3696.9	3757.0	[1000]	µg/L	09:46:36
2	S 181.975 Axial†	886.4	857.3	[2000]	µg/L	09:46:36

2	Sb 206.836†	2080.5	2073.0	[1000] µg/L	09:46:36
2	Se 196.026†	1117.0	1165.8	[1000] µg/L	09:46:36
2	SiO2 †	154289.5	155174.1	[10695] µg/L	09:46:16
2	Si 251.611†	149538.4	150372.9	[5000] µg/L	09:47:20
2	Sn 189.927†	3797.6	3865.1	[1000] µg/L	09:46:36
2	Sr 421.552†	215763.2	218215.1	[1000] µg/L	09:45:13
2	Ti 334.940†	723363.9	733255.7	[1000] µg/L	09:46:11
2	Tl 190.801†	2484.2	2555.2	[1000] µg/L	09:46:36
2	U 409.014†	15155.4	14978.4	[1000] µg/L	09:46:16
2	V 292.402†	64681.8	65733.5	[1000] µg/L	09:46:16
2	Zn 213.857†	41156.6	41167.8	[1000] µg/L	09:46:16
3	Sc 361.383	1060359.3	1060359.3	98.971 %	09:46:43
3	Sc RADIAL	39711.7	39711.7	98.8 %	09:45:28
3	Y 371.029	572116.1	572116.1	97.476 %	09:46:43
3	Ag 328.068†	130538.1	132495.7	[1000] µg/L	09:46:49
3	Al 396.153Radial†	32077.7	32376.8	[10000] µg/L	09:45:23
3	As 188.979†	1870.1	1919.2	[1000] µg/L	09:47:09
3	B 249.677†	14803.8	14812.1	[1000] µg/L	09:46:49
3	Ba 233.527†	90180.4	91247.7	[1000] µg/L	09:46:49
3	Be 313.107†	1405864.0	1420593.5	[1000] µg/L	09:46:43
3	Ca 317.933Radial†	42483.5	42850.5	[10000] µg/L	09:45:28
3	Cd 226.502†	26391.9	26693.7	[1000] µg/L	09:46:49
3	Co 228.616†	30782.7	31234.3	[1000] µg/L	09:46:49
3	Cr 267.716†	34432.2	34716.4	[1000] µg/L	09:46:49
3	Cu 324.752†	250389.4	247927.2	[1000] µg/L	09:46:43
3	Fe 238.204 Radial†	9781.7	9858.9	[10000] µg/L	09:45:28
3	K 766.490 Radial†	22562.9	21728.6	[10000] µg/L	09:45:23
3	Mg 279.077 IEC†	3382.1	3418.4	[10000] µg/L	09:45:28
3	Mn 257.610†	528776.3	533892.3	[1000] µg/L	09:46:43
3	Mo 202.031†	7289.5	7360.9	[1000] µg/L	09:46:49
3	Na 589.592 Radial†	60610.1	60269.9	[10000] µg/L	09:45:23
3	Ni 231.604†	14895.2	14877.1	[1000] µg/L	09:46:49
3	P 214.914†	6018.3	5912.6	[5000] µg/L	09:47:09
3	Pb 220.353†	3687.6	3733.0	[1000] µg/L	09:47:09
3	S 181.975 Axial†	888.6	856.0	[2000] µg/L	09:47:09
3	Sb 206.836†	2084.0	2068.2	[1000] µg/L	09:47:09
3	Se 196.026†	1129.3	1173.8	[1000] µg/L	09:47:09
3	SiO2 †	153989.5	154258.3	[10695] µg/L	09:46:49
3	Si 251.611†	151185.6	151443.4	[5000] µg/L	09:47:25
3	Sn 189.927†	3795.9	3848.3	[1000] µg/L	09:47:09
3	Sr 421.552†	212955.5	215622.9	[1000] µg/L	09:45:23
3	Ti 334.940†	724889.9	731924.7	[1000] µg/L	09:46:43
3	Tl 190.801†	2494.1	2555.3	[1000] µg/L	09:47:09
3	U 409.014†	15192.8	14955.9	[1000] µg/L	09:46:49
3	V 292.402†	64265.8	65056.3	[1000] µg/L	09:46:49
3	Zn 213.857†	41031.9	40878.3	[1000] µg/L	09:46:49

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1057341.8	2640.00	0.25%	98.690	%
Sc RADIAL	39846.9	196.13	0.49%	99.1	%
Y 371.029	570536.1	1414.42	0.25%	97.207	%
Ag 328.068†	132967.9	415.30	0.31%	[1000]	µg/L
Al 396.153Radial†	32320.6	403.93	1.25%	[10000]	µg/L
As 188.979†	1926.9	9.69	0.50%	[1000]	µg/L
B 249.677†	14858.5	41.42	0.28%	[1000]	µg/L
Ba 233.527†	91705.8	440.33	0.48%	[1000]	µg/L
Be 313.107†	1421951.9	1718.33	0.12%	[1000]	µg/L
Ca 317.933Radial†	42697.1	182.92	0.43%	[10000]	µg/L
Cd 226.502†	26827.9	128.88	0.48%	[1000]	µg/L
Co 228.616†	31388.7	155.11	0.49%	[1000]	µg/L
Cr 267.716†	34881.5	173.47	0.50%	[1000]	µg/L
Cu 324.752†	248378.0	391.45	0.16%	[1000]	µg/L
Fe 238.204 Radial†	9830.6	30.93	0.31%	[10000]	µg/L
K 766.490 Radial†	21755.4	271.12	1.25%	[10000]	µg/L
Mg 279.077 IEC†	3418.1	3.93	0.11%	[10000]	µg/L
Mn 257.610†	534148.3	313.03	0.06%	[1000]	µg/L
Mo 202.031†	7403.0	45.38	0.61%	[1000]	µg/L
Na 589.592 Radial†	60180.6	822.30	1.37%	[10000]	µg/L

Ni 231.604†	14926.4	63.19	0.42%	[1000] µg/L
P 214.914†	5933.1	17.90	0.30%	[5000] µg/L
Pb 220.353†	3752.3	17.49	0.47%	[1000] µg/L
S 181.975 Axial†	867.2	18.34	2.11%	[2000] µg/L
Sb 206.836†	2059.8	18.82	0.91%	[1000] µg/L
Se 196.026†	1171.5	4.96	0.42%	[1000] µg/L
SiO2 †	154636.8	478.11	0.31%	[10695] µg/L
Si 251.611†	151092.3	623.08	0.41%	[5000] µg/L
Sn 189.927†	3856.3	8.42	0.22%	[1000] µg/L
Sr 421.552†	215370.0	2979.61	1.38%	[1000] µg/L
Ti 334.940†	732409.1	735.73	0.10%	[1000] µg/L
Tl 190.801†	2553.1	3.72	0.15%	[1000] µg/L
U 409.014†	14977.8	21.62	0.14%	[1000] µg/L
V 292.402†	65426.8	343.06	0.52%	[1000] µg/L
Zn 213.857†	41062.4	159.99	0.39%	[1000] µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/24/2005 09:49:16
Data Type: Reprocessed on 6/24/2005 10:58:46
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc 361.383	1024851.5	1024851.5	95.657	%	09:50:59
1	Sc RADIAL	39241.0	39241.0	97.6	%	09:50:40
1	Y 371.029	551281.1	551281.1	93.926	%	09:50:59
1	Al 396.153Radial†	160912.7	164750.0	[50000]	µg/L	09:50:40
1	Ca 317.933Radial†	213051.2	218102.8	[50000]	µg/L	09:50:40
1	Fe 238.204 Radial†	18884.6	19303.1	[20000]	µg/L	09:50:40
1	Mg 279.077 IEC†	16536.1	16935.0	[50000]	µg/L	09:50:40
1	Na 589.592 Radial†	121501.6	123385.6	[20000]	µg/L	09:50:40
2	Sc 361.383	1026186.4	1026186.4	95.782	%	09:51:06
2	Sc RADIAL	38741.3	38741.3	96.4	%	09:50:46
2	Y 371.029	551595.2	551595.2	93.980	%	09:51:06
2	Al 396.153Radial†	159010.3	164902.3	[50000]	µg/L	09:50:46
2	Ca 317.933Radial†	210124.5	217881.2	[50000]	µg/L	09:50:46
2	Fe 238.204 Radial†	18620.6	19278.6	[20000]	µg/L	09:50:46
2	Mg 279.077 IEC†	16290.4	16898.5	[50000]	µg/L	09:50:46
2	Na 589.592 Radial†	119846.3	123273.5	[20000]	µg/L	09:50:46
3	Sc 361.383	1027284.1	1027284.1	95.884	%	09:51:12
3	Sc RADIAL	38763.7	38763.7	96.4	%	09:50:51
3	Y 371.029	552304.0	552304.0	94.101	%	09:51:12
3	Al 396.153Radial†	159109.5	164909.7	[50000]	µg/L	09:50:51
3	Ca 317.933Radial†	210383.5	218023.5	[50000]	µg/L	09:50:51
3	Fe 238.204 Radial†	18667.4	19316.0	[20000]	µg/L	09:50:51
3	Mg 279.077 IEC†	16242.0	16838.6	[50000]	µg/L	09:50:51
3	Na 589.592 Radial†	120093.5	123457.9	[20000]	µg/L	09:50:51

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	1026107.3	1218.25	0.12%	95.774	%
Sc RADIAL	38915.3	282.26	0.73%	96.8	%
Y 371.029	551726.8	523.99	0.09%	94.002	%
Al 396.153Radial†	164854.0	90.15	0.05%	[50000]	µg/L
Ca 317.933Radial†	218002.5	112.27	0.05%	[50000]	µg/L
Fe 238.204 Radial†	19299.2	18.98	0.10%	[20000]	µg/L
Mg 279.077 IEC†	16890.7	48.69	0.29%	[50000]	µg/L
Na 589.592 Radial†	123372.3	92.94	0.08%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	132.8	0.00000	0.999996	
Al 396.153Radial	3	Lin Thru 0	0.0	3.295	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	1.927	0.00000	0.999999	
B 249.677	3	Lin Thru 0	0.0	14.83	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	91.62	0.00000	0.999998	
Be 313.107	3	Lin Thru 0	0.0	1424	0.00000	0.999995	
Ca 317.933Radial	3	Lin Thru 0	0.0	4.356	0.00000	0.999991	
Cd 226.502	3	Lin Thru 0	0.0	26.85	0.00000	0.999993	
Co 228.616	3	Lin Thru 0	0.0	31.40	0.00000	0.999993	
Cr 267.716	3	Lin Thru 0	0.0	34.84	0.00000	0.999998	
Cu 324.752	3	Lin Thru 0	0.0	248.3	0.00000	0.999999	
Fe 238.204 Radial	2	Lin Thru 0	0.0	0.9686	0.00000	0.999972	
K 766.490 Radial	3	Lin Thru 0	0.0	2.184	0.00000	0.999972	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.3380	0.00000	0.999996	
Mn 257.610	3	Lin Thru 0	0.0	534.9	0.00000	0.999993	
Mo 202.031	3	Lin Thru 0	0.0	7.436	0.00000	0.999962	
Na 589.592 Radial	2	Lin Thru 0	0.0	6.139	0.00000	0.999952	

Ni 231.604	3	Lin Thru 0	0.0	15.02	0.00000	0.999919
P 214.914	3	Lin Thru 0	0.0	1.186	0.00000	1.000000
Pb 220.353	3	Lin Thru 0	0.0	3.751	0.00000	0.999999
S 181.975 Axial	3	Lin Thru 0	0.0	0.4319	0.00000	0.999970
Sb 206.836	3	Lin Thru 0	0.0	2.039	0.00000	0.999793
Se 196.026	3	Lin Thru 0	0.0	1.173	0.00000	0.999994
SiO2	3	Lin Thru 0	0.0	14.38	0.00000	0.999926
Si 251.611	3	Lin Thru 0	0.0	30.08	0.00000	0.999949
Sn 189.927	3	Lin Thru 0	0.0	3.842	0.00000	0.999973
Sr 421.552	3	Lin Thru 0	0.0	216.5	0.00000	0.999947
Ti 334.940	3	Lin Thru 0	0.0	731.6	0.00000	0.999997
Tl 190.801	3	Lin Thru 0	0.0	2.554	0.00000	1.000000
U 409.014	3	Lin Thru 0	0.0	14.98	0.00000	0.999994
V 292.402	3	Lin Thru 0	0.0	65.29	0.00000	0.999991
Zn 213.857	3	Lin Thru 0	0.0	41.13	0.00000	0.999994

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 6/24/2005 09:53:02
Data Type: Reprocessed on 6/24/2005 10:58:48
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1078230.3	1078230.3	100.64	%			09:55:46
1	Sc RADIAL	39444.9	39444.9	98.1	%			09:54:26
1	Y 371.029	584652.4	584652.4	99.612	%			09:55:46
1	Ag 328.068†	32474.9	32869.6	249.68	µg/L	249.68	ppb	09:55:46
1	Al 396.153Radial†	16536.9	16758.1	5062.3	µg/L	5062.3	ppb	09:54:26
1	As 188.979†	937.0	960.6	505.32	µg/L	505.32	ppb	09:56:07
1	B 249.677†	7791.5	7596.4	512.75	µg/L	512.75	ppb	09:55:46
1	Ba 233.527†	46207.7	46044.2	503.07	µg/L	503.07	ppb	09:55:46
1	Be 313.107†	359618.7	357452.3	251.18	µg/L	251.18	ppb	09:55:46
1	Ca 317.933Radial†	21784.3	22045.9	5064.0	µg/L	5064.0	ppb	09:54:46
1	Cd 226.502†	13345.3	13288.1	495.12	µg/L	495.12	ppb	09:55:46
1	Co 228.616†	16059.4	16089.1	511.83	µg/L	511.83	ppb	09:56:07
1	Cr 267.716†	17909.8	17722.4	508.47	µg/L	508.47	ppb	09:55:46
1	Cu 324.752†	132450.0	126543.9	509.28	µg/L	509.28	ppb	09:55:46
1	Fe 238.204 Radial†	4915.0	4966.0	5133.2	µg/L	5133.2	ppb	09:54:46
1	K 766.490 Radial†	6661.6	5677.3	2599.8	µg/L	2599.8	ppb	09:54:26
1	Mg 279.077 IEC†	1698.9	1726.1	5115.5	µg/L	5115.5	ppb	09:54:46
1	Mn 257.610†	275885.4	273753.1	512.35	µg/L	512.35	ppb	09:55:46
1	Mo 202.031†	3782.2	3753.8	505.64	µg/L	505.64	ppb	09:56:07
1	Na 589.592 Radial†	16520.6	15751.3	2564.5	µg/L	2564.5	ppb	09:54:26
1	Ni 231.604†	7735.4	7513.4	500.49	µg/L	500.49	ppb	09:56:07
1	P 214.914†	3123.9	2935.8	2388.4	µg/L	2388.4	ppb	09:56:07
1	Pb 220.353†	1850.9	1846.1	492.99	µg/L	492.99	ppb	09:56:07
1	S 181.975 Axial†	1083.8	1035.1	2389.9	µg/L	2389.9	ppb	09:56:07
1	Sb 206.836†	1043.5	999.4	490.45	µg/L	490.45	ppb	09:56:07
1	Se 196.026†	2904.1	2918.4	2490	µg/L	2490	ppb	09:56:07
1	SiO2 †	143222.9	140981.3	9789.1	µg/L	9789.1	ppb	09:55:46
1	Si 251.611†	142309.6	140091.9	4650	µg/L	4650	ppb	09:57:07
1	Sn 189.927†	1876.1	1877.1	489.10	µg/L	489.10	ppb	09:56:07
1	Sr 421.552†	110066.1	112221.8	518.32	µg/L	518.32	ppb	09:54:26
1	Ti 334.940†	373234.9	370364.5	505.95	µg/L	505.95	ppb	09:55:46
1	Tl 190.801†	1242.2	1269.6	500.12	µg/L	500.12	ppb	09:56:07
1	U 409.014†	8081.8	7635.7	511.88	µg/L	511.88	ppb	09:55:46
1	V 292.402†	32352.1	32269.1	500.87	µg/L	500.87	ppb	09:55:46
1	Zn 213.857†	21076.9	20362.9	490.55	µg/L	490.55	ppb	09:55:46
2	Sc 361.383	1059572.2	1059572.2	98.898	%			09:56:14
2	Sc RADIAL	39876.9	39876.9	99.2	%			09:54:51
2	Y 371.029	574337.7	574337.7	97.855	%			09:56:14
2	Ag 328.068†	31895.8	32852.2	249.54	µg/L	249.54	ppb	09:56:14
2	Al 396.153Radial†	16720.4	16760.6	5062.5	µg/L	5062.5	ppb	09:54:51
2	As 188.979†	935.6	975.6	513.06	µg/L	513.06	ppb	09:56:34
2	B 249.677†	7631.8	7571.3	511.05	µg/L	511.05	ppb	09:56:14
2	Ba 233.527†	45372.8	46008.5	502.68	µg/L	502.68	ppb	09:56:14
2	Be 313.107†	352874.3	356925.1	250.81	µg/L	250.81	ppb	09:56:14
2	Ca 317.933Radial†	21928.2	21950.5	5042.1	µg/L	5042.1	ppb	09:55:11
2	Cd 226.502†	13136.1	13310.0	495.95	µg/L	495.95	ppb	09:56:14
2	Co 228.616†	16092.1	16403.1	521.84	µg/L	521.84	ppb	09:56:34
2	Cr 267.716†	17563.0	17685.1	507.40	µg/L	507.40	ppb	09:56:14
2	Cu 324.752†	130047.2	126431.8	508.83	µg/L	508.83	ppb	09:56:14
2	Fe 238.204 Radial†	4932.7	4929.5	5095.7	µg/L	5095.7	ppb	09:55:11
2	K 766.490 Radial†	6708.1	5650.7	2587.6	µg/L	2587.6	ppb	09:54:51
2	Mg 279.077 IEC†	1708.9	1717.5	5090.4	µg/L	5090.4	ppb	09:55:11
2	Mn 257.610†	270501.9	273136.8	511.19	µg/L	511.19	ppb	09:56:14
2	Mo 202.031†	3800.9	3838.8	517.07	µg/L	517.07	ppb	09:56:34
2	Na 589.592 Radial†	16648.1	15697.5	2555.7	µg/L	2555.7	ppb	09:54:51
2	Ni 231.604†	7759.4	7673.0	511.12	µg/L	511.12	ppb	09:56:34
2	P 214.914†	3138.3	3005.0	2446.8	µg/L	2446.8	ppb	09:56:34
2	Pb 220.353†	1862.5	1890.3	504.80	µg/L	504.80	ppb	09:56:34
2	S 181.975 Axial†	1090.7	1061.1	2450.1	µg/L	2450.1	ppb	09:56:34

2	Sb 206.836†	1046.7	1021.0	501.20 µg/L	501.20 ppb	09:56:34
2	Se 196.026†	2912.0	2977.2	2540 µg/L	2540 ppb	09:56:34
2	SiO2 †	140558.2	140792.9	9775.6 µg/L	9775.6 ppb	09:56:14
2	Si 251.611†	140980.5	141238.0	4690 µg/L	4690 ppb	09:57:13
2	Sn 189.927†	1889.1	1923.1	501.07 µg/L	501.07 ppb	09:56:34
2	Sr 421.552†	111399.4	112350.7	518.91 µg/L	518.91 ppb	09:54:51
2	Ti 334.940†	366390.3	369974.3	505.42 µg/L	505.42 ppb	09:56:14
2	Tl 190.801†	1247.5	1296.7	510.68 µg/L	510.68 ppb	09:56:34
2	U 409.014†	7895.9	7589.2	508.78 µg/L	508.78 ppb	09:56:14
2	V 292.402†	31751.6	32228.0	500.35 µg/L	500.35 ppb	09:56:14
2	Zn 213.857†	20686.2	20336.7	489.86 µg/L	489.86 ppb	09:56:14
3	Sc 361.383	1063219.4	1063219.4	99.238 %		09:56:41
3	Sc RADIAL	39508.8	39508.8	98.3 %		09:55:17
3	Y 371.029	576143.7	576143.7	98.163 %		09:56:41
3	Ag 328.068†	32074.3	32921.5	250.07 µg/L	250.07 ppb	09:56:41
3	Al 396.153Radial†	16567.9	16762.4	5063.1 µg/L	5063.1 ppb	09:55:17
3	As 188.979†	946.4	983.2	517.04 µg/L	517.04 ppb	09:57:01
3	B 249.677†	7632.8	7545.9	509.33 µg/L	509.33 ppb	09:56:41
3	Ba 233.527†	45658.3	46138.8	504.11 µg/L	504.11 ppb	09:56:41
3	Be 313.107†	354347.7	357185.8	250.99 µg/L	250.99 ppb	09:56:41
3	Ca 317.933Radial†	21944.8	22173.3	5093.3 µg/L	5093.3 ppb	09:55:37
3	Cd 226.502†	13158.0	13286.5	495.07 µg/L	495.07 ppb	09:56:41
3	Co 228.616†	16147.3	16402.9	521.83 µg/L	521.83 ppb	09:57:01
3	Cr 267.716†	17622.6	17684.3	507.38 µg/L	507.38 ppb	09:56:41
3	Cu 324.752†	130318.0	126253.6	508.11 µg/L	508.11 ppb	09:56:41
3	Fe 238.204 Radial†	4941.8	4985.1	5153.1 µg/L	5153.1 ppb	09:55:37
3	K 766.490 Radial†	6643.9	5648.3	2586.5 µg/L	2586.5 ppb	09:55:17
3	Mg 279.077 IEC†	1707.2	1731.8	5132.6 µg/L	5132.6 ppb	09:55:37
3	Mn 257.610†	272067.1	273775.8	512.39 µg/L	512.39 ppb	09:56:41
3	Mo 202.031†	3805.3	3830.1	515.90 µg/L	515.90 ppb	09:57:01
3	Na 589.592 Radial†	16582.7	15787.3	2570.3 µg/L	2570.3 ppb	09:55:17
3	Ni 231.604†	7765.5	7652.2	509.74 µg/L	509.74 ppb	09:57:01
3	P 214.914†	3146.3	3002.2	2444.5 µg/L	2444.5 ppb	09:57:01
3	Pb 220.353†	1868.0	1889.3	504.53 µg/L	504.53 ppb	09:57:01
3	S 181.975 Axial†	1096.2	1062.8	2454.1 µg/L	2454.1 ppb	09:57:01
3	Sb 206.836†	1060.7	1031.4	506.33 µg/L	506.33 ppb	09:57:01
3	Se 196.026†	2907.3	2962.4	2530 µg/L	2530 ppb	09:57:01
3	SiO2 †	141296.6	141049.4	9793.5 µg/L	9793.5 ppb	09:56:41
3	Si 251.611†	140168.1	139930.4	4640 µg/L	4640 ppb	09:57:18
3	Sn 189.927†	1894.7	1922.2	500.83 µg/L	500.83 ppb	09:57:01
3	Sr 421.552†	110500.4	112482.1	519.52 µg/L	519.52 ppb	09:55:17
3	Ti 334.940†	367798.7	370122.7	505.62 µg/L	505.62 ppb	09:56:41
3	Tl 190.801†	1244.2	1289.1	507.72 µg/L	507.72 ppb	09:57:01
3	U 409.014†	7976.2	7642.7	512.35 µg/L	512.35 ppb	09:56:41
3	V 292.402†	31909.3	32276.8	501.09 µg/L	501.09 ppb	09:56:41
3	Zn 213.857†	20797.5	20377.1	490.84 µg/L	490.84 ppb	09:56:41

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1067007.3	99.592	%	0.9230				0.93%
Sc RADIAL	39610.2	98.5	%	0.58				0.59%
Y 371.029	578377.9	98.543	%	0.9385				0.95%
Ag 328.068†	32881.1	249.76	µg/L	0.277	249.76	ppb	0.277	0.11%
QC value within limits for Ag 328.068 Recovery = 99.91%								
Al 396.153Radial†	16760.3	5062.6	µg/L	0.42	5062.6	ppb	0.42	0.01%
QC value within limits for Al 396.153Radial Recovery = 101.25%								
As 188.979†	973.1	511.81	µg/L	5.963	511.81	ppb	5.963	1.17%
QC value within limits for As 188.979 Recovery = 102.36%								
B 249.677†	7571.2	511.05	µg/L	1.712	511.05	ppb	1.712	0.34%
QC value within limits for B 249.677 Recovery = 102.21%								
Ba 233.527†	46063.8	503.29	µg/L	0.735	503.29	ppb	0.735	0.15%
QC value within limits for Ba 233.527 Recovery = 100.66%								
Be 313.107†	357187.7	250.99	µg/L	0.185	250.99	ppb	0.185	0.07%
QC value within limits for Be 313.107 Recovery = 100.40%								
Ca 317.933Radial†	22056.6	5066.5	µg/L	25.67	5066.5	ppb	25.67	0.51%
QC value within limits for Ca 317.933Radial Recovery = 101.33%								
Cd 226.502†	13294.9	495.38	µg/L	0.493	495.38	ppb	0.493	0.10%
QC value within limits for Cd 226.502 Recovery = 99.08%								
Co 228.616†	16298.4	518.50	µg/L	5.781	518.50	ppb	5.781	1.11%

QC value within limits for Co 228.616 Recovery = 103.70%

Cr 267.716†	17697.2	507.75 µg/L	0.626	507.75 ppb	0.626	0.12%

QC value within limits for Cr 267.716 Recovery = 101.55%

Cu 324.752†	126409.8	508.74 µg/L	0.592	508.74 ppb	0.592	0.12%

QC value within limits for Cu 324.752 Recovery = 101.75%

Fe 238.204 Radial†	4960.2	5127.4 µg/L	29.16	5127.4 ppb	29.16	0.57%

QC value within limits for Fe 238.204 Radial Recovery = 102.55%

K 766.490 Radial†	5658.8	2591.3 µg/L	7.38	2591.3 ppb	7.38	0.28%

QC value within limits for K 766.490 Radial Recovery = 103.65%

Mg 279.077 IEC†	1725.1	5112.8 µg/L	21.22	5112.8 ppb	21.22	0.42%

QC value within limits for Mg 279.077 IEC Recovery = 102.26%

Mn 257.610†	273555.2	511.98 µg/L	0.681	511.98 ppb	0.681	0.13%

QC value within limits for Mn 257.610 Recovery = 102.40%

Mo 202.031†	3807.6	512.87 µg/L	6.290	512.87 ppb	6.290	1.23%

QC value within limits for Mo 202.031 Recovery = 102.57%

Na 589.592 Radial†	15745.4	2563.5 µg/L	7.36	2563.5 ppb	7.36	0.29%

QC value within limits for Na 589.592 Radial Recovery = 102.54%

Ni 231.604†	7612.9	507.12 µg/L	5.782	507.12 ppb	5.782	1.14%

QC value within limits for Ni 231.604 Recovery = 101.42%

P 214.914†	2981.0	2426.6 µg/L	33.09	2426.6 ppb	33.09	1.36%

QC value within limits for P 214.914 Recovery = 97.06%

Pb 220.353†	1875.3	500.77 µg/L	6.738	500.77 ppb	6.738	1.35%

QC value within limits for Pb 220.353 Recovery = 100.15%

S 181.975 Axial†	1053.0	2431.4 µg/L	35.98	2431.4 ppb	35.98	1.48%

QC value within limits for S 181.975 Axial Recovery = 97.25%

Sb 206.836†	1017.2	499.33 µg/L	8.100	499.33 ppb	8.100	1.62%

QC value within limits for Sb 206.836 Recovery = 99.87%

Se 196.026†	2952.7	2520 µg/L	26.1	2520 ppb	26.1	1.03%

QC value within limits for Se 196.026 Recovery = 100.75%

SiO2 †	140941.2	9786.1 µg/L	9.32	9786.1 ppb	9.32	0.10%

QC value within limits for SiO2 Recovery = 91.50%

Si 251.611†	140420.1	4660 µg/L	23.6	4660 ppb	23.6	0.51%

QC value within limits for Si 251.611 Recovery = 93.21%

Sn 189.927†	1907.5	497.00 µg/L	6.842	497.00 ppb	6.842	1.38%

QC value within limits for Sn 189.927 Recovery = 99.40%

Sr 421.552†	112351.5	518.91 µg/L	0.601	518.91 ppb	0.601	0.12%

QC value within limits for Sr 421.552 Recovery = 103.78%

Ti 334.940†	370153.8	505.67 µg/L	0.269	505.67 ppb	0.269	0.05%

QC value within limits for Ti 334.940 Recovery = 101.13%

Tl 190.801†	1285.2	506.17 µg/L	5.450	506.17 ppb	5.450	1.08%

QC value within limits for Tl 190.801 Recovery = 101.23%

U 409.014†	7622.5	511.00 µg/L	1.941	511.00 ppb	1.941	0.38%

QC value within limits for U 409.014 Recovery = 102.20%

V 292.402†	32257.9	500.77 µg/L	0.381	500.77 ppb	0.381	0.08%

QC value within limits for V 292.402 Recovery = 100.15%

Zn 213.857†	20358.9	490.42 µg/L	0.504	490.42 ppb	0.504	0.10%

QC value within limits for Zn 213.857 Recovery = 98.08%

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 6/24/2005 09:59:06
Data Type: Reprocessed on 6/24/2005 10:58:50
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc 361.383	1069342.3	1069342.3	99.810	%			10:01:48
1	Sc RADIAL	40220.9	40220.9	100	%			10:00:30
1	Y 371.029	584551.4	584551.4	99.595	%			10:01:48
1	Ag 328.068†	-585.7	14.2	0.1080	µg/L	0.1080	ppb	10:01:53
1	Al 396.153Radial†	84.8	-10.6	-3.2488	µg/L	-3.2488	ppb	10:00:30
1	As 188.979†	-29.1	0.4	0.2110	µg/L	0.2110	ppb	10:02:14
1	B 249.677†	264.9	119.8	8.0835	µg/L	8.0835	ppb	10:02:14
1	Ba 233.527†	-138.1	-8.3	-0.0897	µg/L	-0.0897	ppb	10:02:14
1	Be 313.107†	-42.8	75.6	0.0534	µg/L	0.0534	ppb	10:01:53
1	Ca 317.933Radial†	153.1	-2.4	-0.5381	µg/L	-0.5381	ppb	10:00:50
1	Cd 226.502†	-28.2	-0.8	-0.0276	µg/L	-0.0276	ppb	10:02:14
1	Co 228.616†	-131.8	-0.3	-0.0104	µg/L	-0.0104	ppb	10:02:14
1	Cr 267.716†	85.3	11.8	0.3379	µg/L	0.3379	ppb	10:02:14
1	Cu 324.752†	4869.1	-186.2	-0.7508	µg/L	-0.7508	ppb	10:01:53
1	Fe 238.204 Radial†	44.0	0.8	0.8492	µg/L	0.8492	ppb	10:00:50
1	K 766.490 Radial†	1109.4	-3.0	-1.3636	µg/L	-1.3636	ppb	10:00:30
1	Mg 279.077 IEC†	2.7	-2.6	-7.7265	µg/L	-7.7265	ppb	10:00:50
1	Mn 257.610†	391.9	13.2	0.0247	µg/L	0.0247	ppb	10:02:14
1	Mo 202.031†	8.3	3.9	0.5216	µg/L	0.5216	ppb	10:02:14
1	Na 589.592 Radial†	1050.0	-36.0	-5.8691	µg/L	-5.8691	ppb	10:00:30
1	Ni 231.604†	179.8	7.2	0.4824	µg/L	0.4824	ppb	10:02:14
1	P 214.914†	173.5	5.5	4.7728	µg/L	4.7728	ppb	10:02:14
1	Pb 220.353†	-15.2	-8.2	-2.1916	µg/L	-2.1916	ppb	10:02:14
1	S 181.975 Axial†	41.0	-0.7	-1.5867	µg/L	-1.5867	ppb	10:02:14
1	Sb 206.836†	41.1	3.7	1.8459	µg/L	1.8459	ppb	10:02:14
1	Se 196.026†	-31.7	1.0	0.883	µg/L	0.883	ppb	10:02:14
1	SiO2 †	1549.0	220.3	15.296	µg/L	15.296	ppb	10:01:53
1	Si 251.611†	1505.8	195.2	6.48	µg/L	6.48	ppb	10:03:21
1	Sn 189.927†	4.4	17.3	4.5123	µg/L	4.5123	ppb	10:02:14
1	Sr 421.552†	-32.5	16.1	0.0742	µg/L	0.0742	ppb	10:00:30
1	Ti 334.940†	750.6	253.1	0.3452	µg/L	0.3452	ppb	10:01:53
1	Tl 190.801†	-37.7	-2.5	-0.9661	µg/L	-0.9661	ppb	10:02:14
1	U 409.014†	411.6	17.6	1.1791	µg/L	1.1791	ppb	10:01:53
1	V 292.402†	-90.0	32.4	0.5036	µg/L	0.5036	ppb	10:01:53
1	Zn 213.857†	556.5	-22.4	-0.5471	µg/L	-0.5471	ppb	10:02:14
2	Sc 361.383	1070294.4	1070294.4	99.899	%			10:02:19
2	Sc RADIAL	39895.6	39895.6	99.2	%			10:00:55
2	Y 371.029	584659.4	584659.4	99.613	%			10:02:19
2	Ag 328.068†	-662.0	-61.7	-0.4629	µg/L	-0.4629	ppb	10:02:24
2	Al 396.153Radial†	125.9	31.5	9.5652	µg/L	9.5652	ppb	10:00:55
2	As 188.979†	-26.4	3.2	1.6542	µg/L	1.6542	ppb	10:02:45
2	B 249.677†	244.5	99.2	6.6874	µg/L	6.6874	ppb	10:02:45
2	Ba 233.527†	-134.6	-4.6	-0.0509	µg/L	-0.0509	ppb	10:02:45
2	Be 313.107†	40.8	159.3	0.1112	µg/L	0.1112	ppb	10:02:24
2	Ca 317.933Radial†	151.9	-2.4	-0.5596	µg/L	-0.5596	ppb	10:01:15
2	Cd 226.502†	-24.2	3.3	0.1221	µg/L	0.1221	ppb	10:02:45
2	Co 228.616†	-127.5	4.0	0.1277	µg/L	0.1277	ppb	10:02:45
2	Cr 267.716†	68.5	-5.0	-0.1424	µg/L	-0.1424	ppb	10:02:45
2	Cu 324.752†	4888.5	-171.1	-0.6862	µg/L	-0.6862	ppb	10:02:24
2	Fe 238.204 Radial†	44.2	1.4	1.4906	µg/L	1.4906	ppb	10:01:15
2	K 766.490 Radial†	1091.7	-11.8	-5.3940	µg/L	-5.3940	ppb	10:00:55
2	Mg 279.077 IEC†	1.6	-3.6	-10.699	µg/L	-10.699	ppb	10:01:15
2	Mn 257.610†	385.0	5.9	0.0118	µg/L	0.0118	ppb	10:02:45
2	Mo 202.031†	3.8	-0.6	-0.0850	µg/L	-0.0850	ppb	10:02:45
2	Na 589.592 Radial†	1093.8	16.7	2.7130	µg/L	2.7130	ppb	10:00:55
2	Ni 231.604†	171.9	-0.8	-0.0530	µg/L	-0.0530	ppb	10:02:45
2	P 214.914†	182.9	14.8	12.598	µg/L	12.598	ppb	10:02:45
2	Pb 220.353†	-11.2	-4.2	-1.1032	µg/L	-1.1032	ppb	10:02:45
2	S 181.975 Axial†	41.8	0.0	0.0124	µg/L	0.0124	ppb	10:02:45

2	Sb 206.836†	41.4	4.0	1.9806 µg/L	1.9806 ppb	10:02:45
2	Se 196.026†	-39.8	-7.1	-6.04 µg/L	-6.04 ppb	10:02:45
2	SiO2 †	1538.9	208.8	14.516 µg/L	14.516 ppb	10:02:24
2	Si 251.611†	1533.3	221.3	7.36 µg/L	7.36 ppb	10:03:26
2	Sn 189.927†	1.6	14.6	3.8003 µg/L	3.8003 ppb	10:02:45
2	Sr 421.552†	-23.0	25.4	0.1173 µg/L	0.1173 ppb	10:00:55
2	Ti 334.940†	763.3	265.2	0.3643 µg/L	0.3643 ppb	10:02:24
2	Tl 190.801†	-30.4	4.9	1.9331 µg/L	1.9331 ppb	10:02:45
2	U 409.014†	340.8	-53.6	-3.5791 µg/L	-3.5791 ppb	10:02:24
2	V 292.402†	-109.4	13.0	0.1943 µg/L	0.1943 ppb	10:02:24
2	Zn 213.857†	561.7	-17.7	-0.4300 µg/L	-0.4300 ppb	10:02:45
3	Sc 361.383	1080589.5	1080589.5	100.86 %		10:02:50
3	Sc RADIAL	39842.7	39842.7	99.1 %		10:01:20
3	Y 371.029	590440.8	590440.8	100.60 %		10:02:50
3	Ag 328.068†	-638.5	-32.1	-0.2399 µg/L	-0.2399 ppb	10:02:55
3	Al 396.153Radial†	58.0	-36.8	-11.165 µg/L	-11.165 ppb	10:01:20
3	As 188.979†	-30.7	-0.8	-0.4376 µg/L	-0.4376 ppb	10:03:16
3	B 249.677†	251.9	104.2	7.0277 µg/L	7.0277 ppb	10:03:16
3	Ba 233.527†	-130.3	0.9	0.0093 µg/L	0.0093 ppb	10:03:16
3	Be 313.107†	0.5	119.0	0.0834 µg/L	0.0834 ppb	10:02:55
3	Ca 317.933Radial†	161.0	7.0	1.6043 µg/L	1.6043 ppb	10:01:40
3	Cd 226.502†	-27.7	0.1	0.0020 µg/L	0.0020 ppb	10:03:16
3	Co 228.616†	-138.5	-5.6	-0.1811 µg/L	-0.1811 ppb	10:03:16
3	Cr 267.716†	77.2	2.9	0.0851 µg/L	0.0851 ppb	10:03:16
3	Cu 324.752†	4820.9	-284.8	-1.1458 µg/L	-1.1458 ppb	10:02:55
3	Fe 238.204 Radial†	51.4	8.8	9.0688 µg/L	9.0688 ppb	10:01:40
3	K 766.490 Radial†	1119.5	17.7	8.1140 µg/L	8.1140 ppb	10:01:20
3	Mg 279.077 IEC†	9.4	4.2	12.459 µg/L	12.459 ppb	10:01:40
3	Mn 257.610†	410.1	27.1	0.0517 µg/L	0.0517 ppb	10:03:16
3	Mo 202.031†	1.9	-2.5	-0.3362 µg/L	-0.3362 ppb	10:03:16
3	Na 589.592 Radial†	1088.1	12.3	2.0054 µg/L	2.0054 ppb	10:01:20
3	Ni 231.604†	176.4	2.1	0.1378 µg/L	0.1378 ppb	10:03:16
3	P 214.914†	169.4	-0.3	-0.0551 µg/L	-0.0551 ppb	10:03:16
3	Pb 220.353†	-11.2	-4.1	-1.0969 µg/L	-1.0969 ppb	10:03:16
3	S 181.975 Axial†	43.2	1.1	2.4811 µg/L	2.4811 ppb	10:03:16
3	Sb 206.836†	47.4	9.6	4.6966 µg/L	4.6966 ppb	10:03:16
3	Se 196.026†	-31.3	1.7	1.48 µg/L	1.48 ppb	10:03:16
3	SiO2 †	1512.6	168.1	11.695 µg/L	11.695 ppb	10:02:55
3	Si 251.611†	1510.9	184.6	6.14 µg/L	6.14 ppb	10:03:32
3	Sn 189.927†	0.9	13.9	3.6072 µg/L	3.6072 ppb	10:03:16
3	Sr 421.552†	0.6	49.2	0.2272 µg/L	0.2272 ppb	10:01:20
3	Ti 334.940†	742.5	237.2	0.3246 µg/L	0.3246 ppb	10:02:55
3	Tl 190.801†	-36.4	-0.8	-0.2950 µg/L	-0.2950 ppb	10:03:16
3	U 409.014†	386.0	-12.0	-0.8033 µg/L	-0.8033 ppb	10:02:55
3	V 292.402†	-120.8	2.8	0.0387 µg/L	0.0387 ppb	10:02:55
3	Zn 213.857†	559.0	-25.8	-0.6271 µg/L	-0.6271 ppb	10:03:16

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1073408.7	100.19	%	0.582				0.58%
Sc RADIAL	39986.4	99.5	%	0.51				0.51%
Y 371.029	586550.5	99.936	%	0.5741				0.57%
Ag 328.068†	-26.5	-0.1983	µg/L	0.28774	-0.1983	ppb	0.28774	145.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-5.3	-1.6163	µg/L	10.46126	-1.6163	ppb	10.46126	647.23%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.9	0.4759	µg/L	1.07076	0.4759	ppb	1.07076	225.02%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	107.8	7.2662	µg/L	0.72796	7.2662	ppb	0.72796	10.02%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.0	-0.0438	µg/L	0.04991	-0.0438	ppb	0.04991	113.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	118.0	0.0827	µg/L	0.02891	0.0827	ppb	0.02891	34.98%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.8	0.1689	µg/L	1.24317	0.1689	ppb	1.24317	736.08%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	0.9	0.0322	µg/L	0.07929	0.0322	ppb	0.07929	246.44%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-0.6	-0.0212	µg/L	0.15469	-0.0212	ppb	0.15469	728.23%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	3.2	0.0935 µg/L	0.24025	0.0935 ppb	0.24025	256.87%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-214.0	-0.8609 µg/L	0.24878	-0.8609 ppb	0.24878	28.90%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	3.7	3.8029 µg/L	4.57170	3.8029 ppb	4.57170	120.22%

QC value within limits for Fe 238.204 Radial Recovery = Not calculated

K 766.490 Radial†	1.0	0.4521 µg/L	6.93463	0.4521 ppb	6.93463	>999.9%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	-0.7	-1.9888 µg/L	12.60024	-1.9888 ppb	12.60024	633.56%

QC value within limits for Mg 279.077 IEC Recovery = Not calculated

Mn 257.610†	15.4	0.0294 µg/L	0.02036	0.0294 ppb	0.02036	69.18%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	0.2	0.0335 µg/L	0.44098	0.0335 ppb	0.44098	>999.9%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	-2.4	-0.3836 µg/L	4.76381	-0.3836 ppb	4.76381	>999.9%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	2.8	0.1891 µg/L	0.27137	0.1891 ppb	0.27137	143.51%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	6.7	5.7718 µg/L	6.38536	5.7718 ppb	6.38536	110.63%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	-5.5	-1.4639 µg/L	0.63022	-1.4639 ppb	0.63022	43.05%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	0.1	0.3023 µg/L	2.04937	0.3023 ppb	2.04937	678.02%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	5.8	2.8410 µg/L	1.60837	2.8410 ppb	1.60837	56.61%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-1.4	-1.23 µg/L	4.180	-1.23 ppb	4.180	340.97%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	199.1	13.836 µg/L	1.8944	13.836 ppb	1.8944	13.69%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	200.4	6.66 µg/L	0.628	6.66 ppb	0.628	9.44%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	15.3	3.9733 µg/L	0.47670	3.9733 ppb	0.47670	12.00%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	30.2	0.1396 µg/L	0.07889	0.1396 ppb	0.07889	56.52%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	251.8	0.3447 µg/L	0.01984	0.3447 ppb	0.01984	5.76%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	0.6	0.2240 µg/L	1.51769	0.2240 ppb	1.51769	677.62%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	-16.0	-1.0678 µg/L	2.39014	-1.0678 ppb	2.39014	223.84%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	16.1	0.2455 µg/L	0.23665	0.2455 ppb	0.23665	96.38%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	-22.0	-0.5347 µg/L	0.09913	-0.5347 ppb	0.09913	18.54%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 6/24/2005 10:05:20
Data Type: Reprocessed on 6/24/2005 10:58:52
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1066010.8	1066010.8	99.499	%			10:08:05
1	Sc RADIAL	40507.8	40507.8	101	%			10:06:47
1	Y 371.029	582277.7	582277.7	99.208	%			10:08:05
1	Ag 328.068†	34.5	635.7	4.8095	µg/L	4.8095	ppb	10:08:10
1	Al 396.153Radial†	735.7	634.7	192.16	µg/L	192.16	ppb	10:06:47
1	As 188.979†	-2.3	27.2	14.206	µg/L	14.206	ppb	10:08:31
1	B 249.677†	976.2	835.5	56.350	µg/L	56.350	ppb	10:08:10
1	Ba 233.527†	328.7	460.5	5.0403	µg/L	5.0403	ppb	10:08:31
1	Be 313.107†	6913.3	7066.7	4.9734	µg/L	4.9734	ppb	10:08:10
1	Ca 317.933Radial†	601.2	441.2	101.60	µg/L	101.60	ppb	10:07:07
1	Cd 226.502†	109.1	137.2	5.1197	µg/L	5.1197	ppb	10:08:31
1	Co 228.616†	41.4	173.3	5.5099	µg/L	5.5099	ppb	10:08:31
1	Cr 267.716†	245.9	173.5	4.9447	µg/L	4.9447	ppb	10:08:31
1	Cu 324.752†	7351.4	2323.9	9.3162	µg/L	9.3162	ppb	10:08:10
1	Fe 238.204 Radial†	149.3	105.1	108.56	µg/L	108.56	ppb	10:07:07
1	K 766.490 Radial†	1509.6	386.3	176.90	µg/L	176.90	ppb	10:06:47
1	Mg 279.077 IEC†	108.6	102.5	303.10	µg/L	303.10	ppb	10:07:07
1	Mn 257.610†	5913.9	5564.2	10.406	µg/L	10.406	ppb	10:08:10
1	Mo 202.031†	81.2	77.1	10.384	µg/L	10.384	ppb	10:08:31
1	Na 589.592 Radial†	2001.7	900.9	146.74	µg/L	146.74	ppb	10:06:47
1	Ni 231.604†	251.7	80.1	5.3423	µg/L	5.3423	ppb	10:08:31
1	P 214.914†	345.6	179.0	149.17	µg/L	149.17	ppb	10:08:31
1	Pb 220.353†	25.6	32.8	8.7078	µg/L	8.7078	ppb	10:08:31
1	S 181.975 Axial†	83.0	41.6	96.388	µg/L	96.388	ppb	10:08:31
1	Sb 206.836†	60.8	23.6	11.734	µg/L	11.734	ppb	10:08:31
1	Se 196.026†	-16.1	16.6	14.3	µg/L	14.3	ppb	10:08:31
1	SiO2 †	4066.6	2755.4	191.30	µg/L	191.30	ppb	10:08:10
1	Si 251.611†	4056.5	2763.5	91.7	µg/L	91.7	ppb	10:09:38
1	Sn 189.927†	42.7	55.9	14.562	µg/L	14.562	ppb	10:08:31
1	Sr 421.552†	1019.0	1059.8	4.8941	µg/L	4.8941	ppb	10:06:47
1	Ti 334.940†	4192.6	3714.8	5.0510	µg/L	5.0510	ppb	10:08:10
1	Tl 190.801†	8.7	44.1	17.342	µg/L	17.342	ppb	10:08:31
1	U 409.014†	1202.6	813.9	54.352	µg/L	54.352	ppb	10:08:10
1	V 292.402†	217.8	341.5	5.4022	µg/L	5.4022	ppb	10:08:10
1	Zn 213.857†	968.9	393.8	9.5071	µg/L	9.5071	ppb	10:08:31
2	Sc 361.383	1081326.8	1081326.8	100.93	%			10:08:36
2	Sc RADIAL	39213.0	39213.0	97.5	%			10:07:12
2	Y 371.029	590582.1	590582.1	100.62	%			10:08:36
2	Ag 328.068†	52.9	653.4	4.9486	µg/L	4.9486	ppb	10:08:41
2	Al 396.153Radial†	734.5	657.6	199.13	µg/L	199.13	ppb	10:07:12
2	As 188.979†	2.4	32.0	16.685	µg/L	16.685	ppb	10:09:01
2	B 249.677†	946.8	792.5	53.446	µg/L	53.446	ppb	10:08:41
2	Ba 233.527†	339.8	466.7	5.1054	µg/L	5.1054	ppb	10:09:01
2	Be 313.107†	6901.6	6956.6	4.8934	µg/L	4.8934	ppb	10:08:41
2	Ca 317.933Radial†	605.1	464.9	106.95	µg/L	106.95	ppb	10:07:32
2	Cd 226.502†	110.0	136.5	5.0891	µg/L	5.0891	ppb	10:09:01
2	Co 228.616†	26.5	157.9	5.0225	µg/L	5.0225	ppb	10:09:01
2	Cr 267.716†	241.9	166.0	4.7382	µg/L	4.7382	ppb	10:09:01
2	Cu 324.752†	7389.6	2257.1	9.0589	µg/L	9.0589	ppb	10:08:41
2	Fe 238.204 Radial†	163.4	124.4	128.44	µg/L	128.44	ppb	10:07:32
2	K 766.490 Radial†	1449.9	374.6	171.55	µg/L	171.55	ppb	10:07:12
2	Mg 279.077 IEC†	115.5	113.2	334.75	µg/L	334.75	ppb	10:07:32
2	Mn 257.610†	5884.4	5450.7	10.197	µg/L	10.197	ppb	10:08:41
2	Mo 202.031†	78.2	73.0	9.8338	µg/L	9.8338	ppb	10:09:01
2	Na 589.592 Radial†	1911.4	874.0	142.35	µg/L	142.35	ppb	10:07:12
2	Ni 231.604†	256.4	81.2	5.4124	µg/L	5.4124	ppb	10:09:01
2	P 214.914†	341.3	169.9	141.53	µg/L	141.53	ppb	10:09:01
2	Pb 220.353†	37.2	43.9	11.693	µg/L	11.693	ppb	10:09:01
2	S 181.975 Axial†	81.6	39.0	90.341	µg/L	90.341	ppb	10:09:01

2	Sb 206.836†	60.0	22.0	10.922 µg/L	10.922 ppb	10:09:01
2	Se 196.026†	-15.7	17.2	14.8 µg/L	14.8 ppb	10:09:01
2	SiO2 †	4040.5	2671.6	185.50 µg/L	185.50 ppb	10:08:41
2	Si 251.611†	4071.1	2720.2	90.3 µg/L	90.3 ppb	10:09:43
2	Sn 189.927†	38.3	50.9	13.259 µg/L	13.259 ppb	10:09:01
2	Sr 421.552†	999.3	1073.0	4.9550 µg/L	4.9550 ppb	10:07:12
2	Ti 334.940†	4231.2	3693.3	5.0290 µg/L	5.0290 ppb	10:08:41
2	Tl 190.801†	10.2	45.4	17.850 µg/L	17.850 ppb	10:09:01
2	U 409.014†	1007.1	603.1	40.273 µg/L	40.273 ppb	10:08:41
2	V 292.402†	191.7	312.5	4.9378 µg/L	4.9378 ppb	10:08:41
2	Zn 213.857†	1001.8	412.6	9.9603 µg/L	9.9603 ppb	10:09:01
3	Sc 361.383	1065069.3	1065069.3	99.411 %		10:09:07
3	Sc RADIAL	40128.5	40128.5	99.8 %		10:07:37
3	Y 371.029	581647.3	581647.3	99.100 %		10:09:07
3	Ag 328.068†	28.3	629.4	4.7629 µg/L	4.7629 ppb	10:09:12
3	Al 396.153Radial†	694.3	600.2	181.70 µg/L	181.70 ppb	10:07:37
3	As 188.979†	5.3	35.0	18.219 µg/L	18.219 ppb	10:09:32
3	B 249.677†	931.1	791.0	53.348 µg/L	53.348 ppb	10:09:12
3	Ba 233.527†	324.4	456.4	4.9946 µg/L	4.9946 ppb	10:09:32
3	Be 313.107†	6969.6	7129.4	5.0164 µg/L	5.0164 ppb	10:09:12
3	Ca 317.933Radial†	577.6	423.2	97.438 µg/L	97.438 ppb	10:07:57
3	Cd 226.502†	100.3	128.4	4.7912 µg/L	4.7912 ppb	10:09:32
3	Co 228.616†	31.2	163.0	5.1846 µg/L	5.1846 ppb	10:09:32
3	Cr 267.716†	246.1	173.9	4.9593 µg/L	4.9593 ppb	10:09:32
3	Cu 324.752†	7399.9	2379.2	9.5435 µg/L	9.5435 ppb	10:09:12
3	Fe 238.204 Radial†	147.3	104.5	107.93 µg/L	107.93 ppb	10:07:57
3	K 766.490 Radial†	1526.0	417.0	190.94 µg/L	190.94 ppb	10:07:37
3	Mg 279.077 IEC†	102.7	97.6	288.57 µg/L	288.57 ppb	10:07:57
3	Mn 257.610†	5914.2	5569.7	10.417 µg/L	10.417 ppb	10:09:12
3	Mo 202.031†	79.1	75.2	10.116 µg/L	10.116 ppb	10:09:32
3	Na 589.592 Radial†	1988.2	906.2	147.59 µg/L	147.59 ppb	10:07:37
3	Ni 231.604†	249.7	78.3	5.2236 µg/L	5.2236 ppb	10:09:32
3	P 214.914†	355.2	189.0	157.55 µg/L	157.55 ppb	10:09:32
3	Pb 220.353†	27.3	34.5	9.1640 µg/L	9.1640 ppb	10:09:32
3	S 181.975 Axial†	84.4	43.1	99.753 µg/L	99.753 ppb	10:09:32
3	Sb 206.836†	55.9	18.8	9.3429 µg/L	9.3429 ppb	10:09:32
3	Se 196.026†	-15.0	17.7	15.2 µg/L	15.2 ppb	10:09:32
3	SiO2 †	4019.3	2711.4	188.25 µg/L	188.25 ppb	10:09:12
3	Si 251.611†	4019.4	2729.7	90.6 µg/L	90.6 ppb	10:09:48
3	Sn 189.927†	43.4	56.6	14.738 µg/L	14.738 ppb	10:09:32
3	Sr 421.552†	1070.5	1121.0	5.1766 µg/L	5.1766 ppb	10:07:37
3	Ti 334.940†	4196.8	3722.7	5.0646 µg/L	5.0646 ppb	10:09:12
3	Tl 190.801†	12.0	47.4	18.645 µg/L	18.645 ppb	10:09:32
3	U 409.014†	1117.7	729.5	48.718 µg/L	48.718 ppb	10:09:12
3	V 292.402†	207.6	331.4	5.2389 µg/L	5.2389 ppb	10:09:12
3	Zn 213.857†	972.7	398.5	9.6220 µg/L	9.6220 ppb	10:09:32

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1070802.3	99.946	%	0.8519				0.85%
Sc RADIAL	39949.8	99.4	%	1.66				1.67%
Y 371.029	584835.7	99.643	%	0.8496				0.85%
Ag 328.068†	639.5	4.8404	µg/L	0.09660	4.8404	ppb	0.09660	2.00%
QC value within limits for Ag 328.068 Recovery = 96.81%								
Al 396.153Radial†	630.8	190.99	µg/L	8.775	190.99	ppb	8.775	4.59%
QC value within limits for Al 396.153Radial Recovery = 95.50%								
As 188.979†	31.4	16.370	µg/L	2.0252	16.370	ppb	2.0252	12.37%
QC value within limits for As 188.979 Recovery = 109.13%								
B 249.677†	806.4	54.381	µg/L	1.7057	54.381	ppb	1.7057	3.14%
QC value within limits for B 249.677 Recovery = 108.76%								
Ba 233.527†	461.2	5.0467	µg/L	0.05568	5.0467	ppb	0.05568	1.10%
QC value within limits for Ba 233.527 Recovery = 100.93%								
Be 313.107†	7050.9	4.9610	µg/L	0.06240	4.9610	ppb	0.06240	1.26%
QC value within limits for Be 313.107 Recovery = 99.22%								
Ca 317.933Radial†	443.1	102.00	µg/L	4.769	102.00	ppb	4.769	4.68%
QC value within limits for Ca 317.933Radial Recovery = 102.00%								
Cd 226.502†	134.0	5.0000	µg/L	0.18151	5.0000	ppb	0.18151	3.63%
QC value within limits for Cd 226.502 Recovery = 100.00%								
Co 228.616†	164.7	5.2390	µg/L	0.24823	5.2390	ppb	0.24823	4.74%

QC value within limits for Co 228.616 Recovery = 104.78%

Cr 267.716†	171.1	4.8807 µg/L	0.12362	4.8807 ppb	0.12362	2.53%
QC value within limits for Cr 267.716 Recovery = 97.61%						
Cu 324.752†	2320.1	9.3062 µg/L	0.24246	9.3062 ppb	0.24246	2.61%
QC value within limits for Cu 324.752 Recovery = 93.06%						
Fe 238.204 Radial†	111.3	114.98 µg/L	11.667	114.98 ppb	11.667	10.15%
QC value within limits for Fe 238.204 Radial Recovery = 114.98%						
K 766.490 Radial†	392.6	179.80 µg/L	10.014	179.80 ppb	10.014	5.57%
QC value within limits for K 766.490 Radial Recovery = 119.87%						
Mg 279.077 IEC†	104.4	308.81 µg/L	23.611	308.81 ppb	23.611	7.65%
QC value within limits for Mg 279.077 IEC Recovery = 102.94%						
Mn 257.610†	5528.2	10.340 µg/L	0.1237	10.340 ppb	0.1237	1.20%
QC value within limits for Mn 257.610 Recovery = 103.40%						
Mo 202.031†	75.1	10.112 µg/L	0.2754	10.112 ppb	0.2754	2.72%
QC value within limits for Mo 202.031 Recovery = 101.12%						
Na 589.592 Radial†	893.7	145.56 µg/L	2.811	145.56 ppb	2.811	1.93%
QC value within limits for Na 589.592 Radial Recovery = 97.04%						
Ni 231.604†	79.9	5.3261 µg/L	0.09543	5.3261 ppb	0.09543	1.79%
QC value within limits for Ni 231.604 Recovery = 106.52%						
P 214.914†	179.3	149.42 µg/L	8.009	149.42 ppb	8.009	5.36%
QC value within limits for P 214.914 Recovery = 99.61%						
Pb 220.353†	37.1	9.8549 µg/L	1.60799	9.8549 ppb	1.60799	16.32%
QC value within limits for Pb 220.353 Recovery = 98.55%						
S 181.975 Axial†	41.3	95.494 µg/L	4.7696	95.494 ppb	4.7696	4.99%
QC value within limits for S 181.975 Axial Recovery = 95.49%						
Sb 206.836†	21.5	10.666 µg/L	1.2157	10.666 ppb	1.2157	11.40%
QC value within limits for Sb 206.836 Recovery = 106.66%						
Se 196.026†	17.2	14.8 µg/L	0.49	14.8 ppb	0.49	3.29%
QC value within limits for Se 196.026 Recovery = 98.38%						
SiO2 †	2712.8	188.35 µg/L	2.900	188.35 ppb	2.900	1.54%
QC value within limits for SiO2 Recovery = 88.43%						
Si 251.611†	2737.8	90.9 µg/L	0.75	90.9 ppb	0.75	0.83%
QC value within limits for Si 251.611 Recovery = 90.86%						
Sn 189.927†	54.5	14.186 µg/L	0.8080	14.186 ppb	0.8080	5.70%
QC value greater than the upper limit for Sn 189.927 Recovery = 141.86%						
Sr 421.552†	1084.6	5.0086 µg/L	0.14872	5.0086 ppb	0.14872	2.97%
QC value within limits for Sr 421.552 Recovery = 100.17%						
Ti 334.940†	3710.3	5.0482 µg/L	0.01799	5.0482 ppb	0.01799	0.36%
QC value within limits for Ti 334.940 Recovery = 100.96%						
Tl 190.801†	45.7	17.946 µg/L	0.6571	17.946 ppb	0.6571	3.66%
QC value within limits for Tl 190.801 Recovery = 89.73%						
U 409.014†	715.5	47.781 µg/L	7.0861	47.781 ppb	7.0861	14.83%
QC value within limits for U 409.014 Recovery = 95.56%						
V 292.402†	328.4	5.1930 µg/L	0.23563	5.1930 ppb	0.23563	4.54%
QC value within limits for V 292.402 Recovery = 103.86%						
Zn 213.857†	401.6	9.6965 µg/L	0.23558	9.6965 ppb	0.23558	2.43%
QC value within limits for Zn 213.857 Recovery = 96.96%						

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 6/24/2005 10:11:37
Data Type: Reprocessed on 6/24/2005 10:58:54
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	938295.9	938295.9	87.578	%			10:13:42
1	Sc RADIAL	36294.9	36294.9	90.3	%			10:13:11
1	Y 371.029	500928.1	500928.1	85.347	%			10:13:42
1	Ag 328.068†	-4317.9	-4329.4	0.7679	µg/L	0.7679	ppb	10:13:42
1	Al 396.153Radial†	1508389.2	1670586.8	507070	µg/L	507070	ppb	10:13:05
1	As 188.979†	-67.1	-47.1	-14.059	µg/L	-14.059	ppb	10:14:02
1	B 249.677†	634.4	578.8	13.550	µg/L	13.550	ppb	10:13:42
1	Ba 233.527†	132.3	281.1	0.8298	µg/L	0.8298	ppb	10:14:02
1	Be 313.107†	-1161.3	-1207.5	-0.8450	µg/L	-0.8450	ppb	10:13:42
1	Ca 317.933Radial†	1867031.6	2067756.8	474700	µg/L	474700	ppb	10:13:05
1	Cd 226.502†	319.6	392.4	1.7605	µg/L	1.7605	ppb	10:14:02
1	Co 228.616†	-65.8	56.6	-1.9625	µg/L	-1.9625	ppb	10:14:02
1	Cr 267.716†	100.7	41.4	1.1807	µg/L	1.1807	ppb	10:14:02
1	Cu 324.752†	2750.4	-1924.0	-1.2958	µg/L	-1.2958	ppb	10:13:42
1	Fe 238.204 Radial†	165507.5	183271.9	189220	µg/L	189220	ppb	10:13:11
1	K 766.490 Radial†	981.4	-24.8	-11.359	µg/L	-11.359	ppb	10:13:11
1	Mg 279.077 IEC†	153683.5	170213.6	503400	µg/L	503400	ppb	10:13:11
1	Mn 257.610†	-7168.0	-8564.2	0.2572	µg/L	0.2572	ppb	10:13:42
1	Mo 202.031†	-34.0	-43.2	0.1810	µg/L	0.1810	ppb	10:14:02
1	Na 589.592 Radial†	1573.1	656.8	107.02	µg/L	107.02	ppb	10:13:11
1	Ni 231.604†	93.7	-65.9	-4.3923	µg/L	-4.3923	ppb	10:14:02
1	P 214.914†	232.1	96.7	34.482	µg/L	34.482	ppb	10:14:02
1	Pb 220.353†	-227.1	-252.3	-10.009	µg/L	-10.009	ppb	10:14:02
1	S 181.975 Axial†	63.1	30.3	-2.8098	µg/L	-2.8098	ppb	10:14:02
1	Sb 206.836†	65.3	37.1	23.256	µg/L	23.256	ppb	10:14:02
1	Se 196.026†	-32.1	-3.8	2.18	µg/L	2.18	ppb	10:14:02
1	SiO2 †	1416.8	286.1	65.916	µg/L	65.916	ppb	10:14:02
1	Si 251.611†	1383.3	266.1	30.9	µg/L	30.9	ppb	10:15:01
1	Sn 189.927†	-165.7	-176.2	2.4121	µg/L	2.4121	ppb	10:14:02
1	Sr 421.552†	2325.1	2623.8	5.2263	µg/L	5.2263	ppb	10:13:11
1	Ti 334.940†	-7218.9	-8741.7	-1.9394	µg/L	-1.9394	ppb	10:13:42
1	Tl 190.801†	-45.4	-16.5	-4.2641	µg/L	-4.2641	ppb	10:14:02
1	U 409.014†	540.8	222.7	-8.7391	µg/L	-8.7391	ppb	10:13:42
1	V 292.402†	-489.5	-436.4	-1.6350	µg/L	-1.6350	ppb	10:14:02
1	Zn 213.857†	2719.0	2524.6	8.5236	µg/L	8.5236	ppb	10:14:02
2	Sc 361.383	944245.5	944245.5	88.134	%			10:14:09
2	Sc RADIAL	36369.5	36369.5	90.5	%			10:13:22
2	Y 371.029	503978.4	503978.4	85.867	%			10:14:09
2	Ag 328.068†	-4416.3	-4409.9	0.2793	µg/L	0.2793	ppb	10:14:09
2	Al 396.153Radial†	1514793.7	1674240.0	508180	µg/L	508180	ppb	10:13:17
2	As 188.979†	-73.9	-54.3	-17.747	µg/L	-17.747	ppb	10:14:29
2	B 249.677†	637.7	578.0	13.406	µg/L	13.406	ppb	10:14:09
2	Ba 233.527†	130.4	278.1	0.7877	µg/L	0.7877	ppb	10:14:29
2	Be 313.107†	-1151.2	-1187.6	-0.8320	µg/L	-0.8320	ppb	10:14:09
2	Ca 317.933Radial†	1877456.6	2075039.3	476380	µg/L	476380	ppb	10:13:17
2	Cd 226.502†	326.3	397.8	1.9125	µg/L	1.9125	ppb	10:14:29
2	Co 228.616†	-79.4	41.6	-2.4524	µg/L	-2.4524	ppb	10:14:29
2	Cr 267.716†	106.8	47.6	1.3636	µg/L	1.3636	ppb	10:14:29
2	Cu 324.752†	2815.4	-1870.1	-1.0519	µg/L	-1.0519	ppb	10:14:09
2	Fe 238.204 Radial†	166429.4	183915.0	189880	µg/L	189880	ppb	10:13:22
2	K 766.490 Radial†	1041.4	39.3	18.013	µg/L	18.013	ppb	10:13:22
2	Mg 279.077 IEC†	154798.0	171096.4	506010	µg/L	506010	ppb	10:13:22
2	Mn 257.610†	-7200.3	-8549.3	0.3327	µg/L	0.3327	ppb	10:14:09
2	Mo 202.031†	-32.8	-41.7	0.4105	µg/L	0.4105	ppb	10:14:29
2	Na 589.592 Radial†	1555.8	634.2	103.33	µg/L	103.33	ppb	10:13:22
2	Ni 231.604†	96.9	-63.0	-4.1950	µg/L	-4.1950	ppb	10:14:29
2	P 214.914†	236.2	99.7	36.599	µg/L	36.599	ppb	10:14:29
2	Pb 220.353†	-215.2	-237.2	-5.8475	µg/L	-5.8475	ppb	10:14:29
2	S 181.975 Axial†	66.7	33.9	5.2740	µg/L	5.2740	ppb	10:14:29

2	Sb 206.836†	51.3	20.8	15.236 µg/L	15.236 ppb	10:14:29
2	Se 196.026†	-34.9	-6.8	-0.445 µg/L	-0.445 ppb	10:14:29
2	SiO2 †	1422.0	281.8	65.767 µg/L	65.767 ppb	10:14:29
2	Si 251.611†	1321.3	185.8	28.3 µg/L	28.3 ppb	10:15:07
2	Sn 189.927†	-162.8	-171.7	3.7673 µg/L	3.7673 ppb	10:14:29
2	Sr 421.552†	2334.5	2628.9	5.2259 µg/L	5.2259 ppb	10:13:22
2	Ti 334.940†	-7455.7	-8958.5	-2.1977 µg/L	-2.1977 ppb	10:14:09
2	Tl 190.801†	-64.4	-37.7	-12.551 µg/L	-12.551 ppb	10:14:29
2	U 409.014†	471.3	140.0	-14.349 µg/L	-14.349 ppb	10:14:09
2	V 292.402†	-499.5	-444.2	-1.7397 µg/L	-1.7397 ppb	10:14:29
2	Zn 213.857†	2732.2	2520.0	8.2028 µg/L	8.2028 ppb	10:14:29
3	Sc 361.383	941887.7	941887.7	87.914 %		10:14:35
3	Sc RADIAL	35718.9	35718.9	88.9 %		10:13:33
3	Y 371.029	502676.4	502676.4	85.645 %		10:14:35
3	Ag 328.068†	-4332.6	-4327.3	0.8643 µg/L	0.8643 ppb	10:14:35
3	Al 396.153Radial†	1526016.1	1717369.0	521270 µg/L	521270 ppb	10:13:28
3	As 188.979†	-58.3	-36.8	-8.9761 µg/L	-8.9761 ppb	10:14:56
3	B 249.677†	680.2	628.2	16.817 µg/L	16.817 ppb	10:14:35
3	Ba 233.527†	155.3	306.7	1.1036 µg/L	1.1036 ppb	10:14:56
3	Be 313.107†	-1144.4	-1183.2	-0.8284 µg/L	-0.8284 ppb	10:14:35
3	Ca 317.933Radial†	1884909.3	2121227.5	486980 µg/L	486980 ppb	10:13:28
3	Cd 226.502†	307.5	377.3	1.1668 µg/L	1.1668 ppb	10:14:56
3	Co 228.616†	-65.4	57.3	-1.9477 µg/L	-1.9477 ppb	10:14:56
3	Cr 267.716†	89.4	28.1	0.8010 µg/L	0.8010 ppb	10:14:56
3	Cu 324.752†	3053.5	-1591.2	0.0615 µg/L	0.0615 ppb	10:14:35
3	Fe 238.204 Radial†	163270.7	183710.9	189670 µg/L	189670 ppb	10:13:33
3	K 766.490 Radial†	1070.1	92.6	42.409 µg/L	42.409 ppb	10:13:33
3	Mg 279.077 IEC†	152037.0	171105.7	506040 µg/L	506040 ppb	10:13:33
3	Mn 257.610†	-7039.3	-8386.6	0.6113 µg/L	0.6113 ppb	10:14:35
3	Mo 202.031†	-29.3	-37.8	0.9286 µg/L	0.9286 ppb	10:14:56
3	Na 589.592 Radial†	1580.2	693.0	112.90 µg/L	112.90 ppb	10:13:33
3	Ni 231.604†	95.9	-63.8	-4.2517 µg/L	-4.2517 ppb	10:14:56
3	P 214.914†	234.8	98.9	39.460 µg/L	39.460 ppb	10:14:56
3	Pb 220.353†	-217.8	-240.8	-5.3812 µg/L	-5.3812 ppb	10:14:56
3	S 181.975 Axial†	76.6	45.3	29.978 µg/L	29.978 ppb	10:14:56
3	Sb 206.836†	47.3	16.4	13.241 µg/L	13.241 ppb	10:14:56
3	Se 196.026†	-61.8	-37.5	-25.9 µg/L	-25.9 ppb	10:14:56
3	SiO2 †	1377.8	235.6	62.492 µg/L	62.492 ppb	10:14:56
3	Si 251.611†	1537.6	435.5	36.6 µg/L	36.6 ppb	10:15:12
3	Sn 189.927†	-167.7	-177.8	3.1178 µg/L	3.1178 ppb	10:14:56
3	Sr 421.552†	2288.2	2623.8	5.0482 µg/L	5.0482 ppb	10:13:33
3	Ti 334.940†	-7282.7	-8782.8	-1.7352 µg/L	-1.7352 ppb	10:14:35
3	Tl 190.801†	-53.9	-25.9	-7.9381 µg/L	-7.9381 ppb	10:14:56
3	U 409.014†	509.4	184.6	-11.339 µg/L	-11.339 ppb	10:14:35
3	V 292.402†	-490.7	-435.7	-1.6083 µg/L	-1.6083 ppb	10:14:56
3	Zn 213.857†	2808.2	2614.3	10.101 µg/L	10.101 ppb	10:14:56

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	941476.4	87.875	%	0.2796				0.32%
Sc RADIAL	36127.8	89.9	%	0.89				0.99%
Y 371.029	502527.6	85.620	%	0.2608				0.30%
Ag 328.068†	-4355.5	0.6372	µg/L	0.31367	0.6372	ppb	0.31367	49.23%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1687398.6	512180	µg/L	7897.7	512180	ppb	7897.7	1.54%
QC value within limits for Al 396.153Radial Recovery = 102.44%								
As 188.979†	-46.1	-13.594	µg/L	4.4040	-13.594	ppb	4.4040	32.40%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	595.0	14.591	µg/L	1.9289	14.591	ppb	1.9289	13.22%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	288.6	0.9070	µg/L	0.17156	0.9070	ppb	0.17156	18.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1192.8	-0.8351	µg/L	0.00870	-0.8351	ppb	0.00870	1.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2088007.9	479350	µg/L	6657.3	479350	ppb	6657.3	1.39%
QC value within limits for Ca 317.933Radial Recovery = 95.87%								
Cd 226.502†	389.2	1.6133	µg/L	0.39407	1.6133	ppb	0.39407	24.43%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	51.8	-2.1209	µg/L	0.28722	-2.1209	ppb	0.28722	13.54%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	39.0	1.1151 µg/L	0.28695	1.1151 ppb	0.28695	25.73%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	-1795.1	-0.7620 µg/L	0.72356	-0.7620 ppb	0.72356	94.95%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 238.204 Radial†	183632.6	189590 µg/L	339.3	189590 ppb	339.3	0.18%

QC value within limits for Fe 238.204 Radial Recovery = 94.79%

K 766.490 Radial†	35.7	16.354 µg/L	26.9220	16.354 ppb	26.9220	164.62%

QC value within limits for K 766.490 Radial Recovery = Not calculated

Mg 279.077 IEC†	170805.2	505150 µg/L	1515.5	505150 ppb	1515.5	0.30%

QC value within limits for Mg 279.077 IEC Recovery = 101.03%

Mn 257.610†	-8500.0	0.4004 µg/L	0.18649	0.4004 ppb	0.18649	46.58%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	-40.9	0.5067 µg/L	0.38299	0.5067 ppb	0.38299	75.59%

QC value within limits for Mo 202.031 Recovery = Not calculated

Na 589.592 Radial†	661.3	107.75 µg/L	4.827	107.75 ppb	4.827	4.48%

QC value within limits for Na 589.592 Radial Recovery = Not calculated

Ni 231.604†	-64.2	-4.2797 µg/L	0.10158	-4.2797 ppb	0.10158	2.37%

QC value within limits for Ni 231.604 Recovery = Not calculated

P 214.914†	98.4	36.847 µg/L	2.4979	36.847 ppb	2.4979	6.78%

QC value within limits for P 214.914 Recovery = Not calculated

Pb 220.353†	-243.4	-7.0791 µg/L	2.54768	-7.0791 ppb	2.54768	35.99%

QC value within limits for Pb 220.353 Recovery = Not calculated

S 181.975 Axial†	36.5	10.814 µg/L	17.0817	10.814 ppb	17.0817	157.96%

QC value within limits for S 181.975 Axial Recovery = Not calculated

Sb 206.836†	24.8	17.244 µg/L	5.3012	17.244 ppb	5.3012	30.74%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-16.1	-8.06 µg/L	15.510	-8.06 ppb	15.510	192.50%

QC value within limits for Se 196.026 Recovery = Not calculated

SiO2 †	267.8	64.725 µg/L	1.9353	64.725 ppb	1.9353	2.99%

QC value within limits for SiO2 Recovery = Not calculated

Si 251.611†	295.8	31.9 µg/L	4.23	31.9 ppb	4.23	13.25%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	-175.2	3.0991 µg/L	0.67778	3.0991 ppb	0.67778	21.87%

QC value within limits for Sn 189.927 Recovery = Not calculated

Sr 421.552†	2625.5	5.1668 µg/L	0.10275	5.1668 ppb	0.10275	1.99%

QC value within limits for Sr 421.552 Recovery = Not calculated

Ti 334.940†	-8827.7	-1.9574 µg/L	0.23177	-1.9574 ppb	0.23177	11.84%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	-26.7	-8.2511 µg/L	4.15232	-8.2511 ppb	4.15232	50.32%

QC value within limits for Tl 190.801 Recovery = Not calculated

U 409.014†	182.4	-11.476 µg/L	2.8074	-11.476 ppb	2.8074	24.46%

QC value within limits for U 409.014 Recovery = Not calculated

V 292.402†	-438.7	-1.6610 µg/L	0.06942	-1.6610 ppb	0.06942	4.18%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 213.857†	2553.0	8.9424 µg/L	1.01597	8.9424 ppb	1.01597	11.36%

QC value within limits for Zn 213.857 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 6/24/2005 10:17:01
Data Type: Reprocessed on 6/24/2005 10:58:56
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	933275.7	933275.7	87.110	%			10:19:02
1	Sc RADIAL	36144.8	36144.8	89.9	%			10:18:31
1	Y 371.029	498803.0	498803.0	84.985	%			10:19:02
1	Ag 328.068†	24913.8	29201.5	254.26	µg/L	254.26	ppb	10:19:02
1	Al 396.153Radial†	1530767.7	1702413.9	516710	µg/L	516710	ppb	10:18:25
1	As 188.979†	756.8	898.3	482.22	µg/L	482.22	ppb	10:19:23
1	B 249.677†	7466.4	8425.7	544.17	µg/L	544.17	ppb	10:19:23
1	Ba 233.527†	38369.9	44177.9	480.54	µg/L	480.54	ppb	10:19:02
1	Be 313.107†	294764.6	338501.6	237.86	µg/L	237.86	ppb	10:19:02
1	Ca 317.933Radial†	1893036.9	2105267.1	483320	µg/L	483320	ppb	10:18:25
1	Cd 226.502†	11041.4	12702.8	460.87	µg/L	460.87	ppb	10:19:23
1	Co 228.616†	12389.7	14354.8	452.98	µg/L	452.98	ppb	10:19:23
1	Cr 267.716†	14865.0	16991.1	487.50	µg/L	487.50	ppb	10:19:23
1	Cu 324.752†	118626.7	131116.2	533.95	µg/L	533.95	ppb	10:19:02
1	Fe 238.204 Radial†	163414.5	181705.4	187610	µg/L	187610	ppb	10:18:31
1	K 766.490 Radial†	12388.7	12666.8	5800.6	µg/L	5800.6	ppb	10:18:31
1	Mg 279.077 IEC†	152074.0	169130.4	500210	µg/L	500210	ppb	10:18:31
1	Mn 257.610†	213513.3	244729.0	473.66	µg/L	473.66	ppb	10:19:02
1	Mo 202.031†	3119.5	3576.7	487.61	µg/L	487.61	ppb	10:19:23
1	Na 589.592 Radial†	30835.5	33209.5	5408.6	µg/L	5408.6	ppb	10:18:31
1	Ni 231.604†	5854.9	6548.4	436.31	µg/L	436.31	ppb	10:19:23
1	P 214.914†	2748.3	2986.7	2387.7	µg/L	2387.7	ppb	10:19:23
1	Pb 220.353†	1268.6	1463.3	448.57	µg/L	448.57	ppb	10:19:23
1	S 181.975 Axial†	998.3	1104.2	2476.1	µg/L	2476.1	ppb	10:19:23
1	Sb 206.836†	930.6	1030.9	511.04	µg/L	511.04	ppb	10:19:23
1	Se 196.026†	2352.3	2733.1	2340	µg/L	2340	ppb	10:19:23
1	SiO2 †	119156.5	135457.3	9450.0	µg/L	9450.0	ppb	10:19:02
1	Si 251.611†	119834.5	136253.9	4540	µg/L	4540	ppb	10:20:23
1	Sn 189.927†	1368.7	1584.2	461.32	µg/L	461.32	ppb	10:19:23
1	Sr 421.552†	103219.2	114848.2	523.50	µg/L	523.50	ppb	10:18:31
1	Ti 334.940†	309198.6	354454.1	494.32	µg/L	494.32	ppb	10:19:02
1	Tl 190.801†	918.5	1089.8	431.84	µg/L	431.84	ppb	10:19:23
1	U 409.014†	6714.1	7312.8	467.59	µg/L	467.59	ppb	10:19:02
1	V 292.402†	27962.7	32223.1	504.77	µg/L	504.77	ppb	10:19:23
1	Zn 213.857†	20244.1	22659.7	494.69	µg/L	494.69	ppb	10:19:23
2	Sc 361.383	937401.2	937401.2	87.495	%			10:19:29
2	Sc RADIAL	36381.2	36381.2	90.5	%			10:18:42
2	Y 371.029	501279.3	501279.3	85.407	%			10:19:29
2	Ag 328.068†	25087.3	29273.9	254.81	µg/L	254.81	ppb	10:19:29
2	Al 396.153Radial†	1521754.0	1681391.2	510330	µg/L	510330	ppb	10:18:37
2	As 188.979†	748.1	884.6	475.21	µg/L	475.21	ppb	10:19:50
2	B 249.677†	7467.8	8389.6	541.73	µg/L	541.73	ppb	10:19:50
2	Ba 233.527†	38431.1	44053.9	479.18	µg/L	479.18	ppb	10:19:29
2	Be 313.107†	295930.1	338344.5	237.75	µg/L	237.75	ppb	10:19:29
2	Ca 317.933Radial†	1873612.6	2070122.9	475250	µg/L	475250	ppb	10:18:37
2	Cd 226.502†	11031.4	12635.5	458.35	µg/L	458.35	ppb	10:19:50
2	Co 228.616†	12384.2	14285.9	450.79	µg/L	450.79	ppb	10:19:50
2	Cr 267.716†	14846.5	16894.8	484.73	µg/L	484.73	ppb	10:19:50
2	Cu 324.752†	119000.6	130944.2	533.26	µg/L	533.26	ppb	10:19:29
2	Fe 238.204 Radial†	164550.4	181779.5	187680	µg/L	187680	ppb	10:18:42
2	K 766.490 Radial†	12492.8	12692.4	5812.3	µg/L	5812.3	ppb	10:18:42
2	Mg 279.077 IEC†	153148.1	169218.2	500470	µg/L	500470	ppb	10:18:42
2	Mn 257.610†	213531.3	243670.9	471.69	µg/L	471.69	ppb	10:19:29
2	Mo 202.031†	3146.3	3591.6	489.61	µg/L	489.61	ppb	10:19:50
2	Na 589.592 Radial†	31134.7	33317.2	5426.2	µg/L	5426.2	ppb	10:18:42
2	Ni 231.604†	5839.9	6501.7	433.21	µg/L	433.21	ppb	10:19:50
2	P 214.914†	2749.3	2974.0	2375.3	µg/L	2375.3	ppb	10:19:50
2	Pb 220.353†	1278.5	1468.2	449.18	µg/L	449.18	ppb	10:19:50
2	S 181.975 Axial†	994.2	1094.5	2454.6	µg/L	2454.6	ppb	10:19:50

2	Sb 206.836†	936.0	1032.3	511.69 µg/L	511.69 ppb	10:19:50
2	Se 196.026†	2323.6	2688.5	2300 µg/L	2300 ppb	10:19:50
2	SiO2 †	119551.2	135306.5	9439.5 µg/L	9439.5 ppb	10:19:29
2	Si 251.611†	118767.9	134429.3	4480 µg/L	4480 ppb	10:20:28
2	Sn 189.927†	1354.1	1560.6	454.50 µg/L	454.50 ppb	10:19:50
2	Sr 421.552†	103951.6	114911.6	523.91 µg/L	523.91 ppb	10:18:42
2	Ti 334.940†	310653.4	354554.8	494.29 µg/L	494.29 ppb	10:19:29
2	Tl 190.801†	904.8	1069.5	423.91 µg/L	423.91 ppb	10:19:50
2	U 409.014†	6696.4	7258.8	463.96 µg/L	463.96 ppb	10:19:29
2	V 292.402†	27943.3	32059.7	502.28 µg/L	502.28 ppb	10:19:50
2	Zn 213.857†	20192.8	22498.8	491.10 µg/L	491.10 ppb	10:19:50
3	Sc 361.383	938700.2	938700.2	87.616 %		10:19:56
3	Sc RADIAL	35879.0	35879.0	89.3 %		10:18:53
3	Y 371.029	501921.2	501921.2	85.517 %		10:19:56
3	Ag 328.068†	25191.8	29353.5	255.43 µg/L	255.43 ppb	10:19:56
3	Al 396.153Radial†	1498919.5	1679345.6	509710 µg/L	509710 ppb	10:18:48
3	As 188.979†	759.3	896.2	481.25 µg/L	481.25 ppb	10:20:17
3	B 249.677†	7509.7	8425.6	544.14 µg/L	544.14 ppb	10:20:17
3	Ba 233.527†	38374.1	43928.1	477.80 µg/L	477.80 ppb	10:19:56
3	Be 313.107†	296336.6	338340.5	237.75 µg/L	237.75 ppb	10:19:56
3	Ca 317.933Radial†	1845838.3	2067985.2	474760 µg/L	474760 ppb	10:18:48
3	Cd 226.502†	11100.0	12696.5	460.61 µg/L	460.61 ppb	10:20:17
3	Co 228.616†	12422.2	14309.7	451.54 µg/L	451.54 ppb	10:20:17
3	Cr 267.716†	14911.4	16945.4	486.19 µg/L	486.19 ppb	10:20:17
3	Cu 324.752†	119393.7	131204.7	534.32 µg/L	534.32 ppb	10:19:56
3	Fe 238.204 Radial†	162387.6	181901.5	187810 µg/L	187810 ppb	10:18:53
3	K 766.490 Radial†	12335.1	12708.9	5819.8 µg/L	5819.8 ppb	10:18:53
3	Mg 279.077 IEC†	151223.5	169430.8	501100 µg/L	501100 ppb	10:18:53
3	Mn 257.610†	213936.9	243796.1	471.93 µg/L	471.93 ppb	10:19:56
3	Mo 202.031†	3155.5	3597.1	490.37 µg/L	490.37 ppb	10:20:17
3	Na 589.592 Radial†	30621.2	33223.5	5410.9 µg/L	5410.9 ppb	10:18:53
3	Ni 231.604†	5871.9	6528.9	435.03 µg/L	435.03 ppb	10:20:17
3	P 214.914†	2786.8	3012.4	2407.2 µg/L	2407.2 ppb	10:20:17
3	Pb 220.353†	1315.8	1508.8	459.94 µg/L	459.94 ppb	10:20:17
3	S 181.975 Axial†	1115.1	1230.9	2770.4 µg/L	2770.4 ppb	10:20:17
3	Sb 206.836†	969.1	1068.7	529.52 µg/L	529.52 ppb	10:20:17
3	Se 196.026†	2332.0	2694.4	2300 µg/L	2300 ppb	10:20:17
3	SiO2 †	119855.7	135464.9	9450.5 µg/L	9450.5 ppb	10:19:56
3	Si 251.611†	119257.5	134800.3	4500 µg/L	4500 ppb	10:20:33
3	Sn 189.927†	1364.8	1570.7	457.09 µg/L	457.09 ppb	10:20:17
3	Sr 421.552†	102598.4	115003.4	524.34 µg/L	524.34 ppb	10:18:53
3	Ti 334.940†	311186.5	354671.8	494.44 µg/L	494.44 ppb	10:19:56
3	Tl 190.801†	917.5	1082.5	429.01 µg/L	429.01 ppb	10:20:17
3	U 409.014†	6663.1	7210.1	460.70 µg/L	460.70 ppb	10:19:56
3	V 292.402†	27993.0	32072.2	502.48 µg/L	502.48 ppb	10:20:17
3	Zn 213.857†	22113.5	24659.1	543.60 µg/L	543.60 ppb	10:20:17

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	936459.0	87.407	%	0.2644				0.30%
Sc RADIAL	36135.0	89.9	%	0.63				0.70%
Y 371.029	500667.9	85.303	%	0.2805				0.33%
Ag 328.068†	29276.3	254.83	µg/L	0.589	254.83	ppb	0.589	0.23%
QC value within limits for Ag 328.068 Recovery = 101.93%								
Al 396.153Radial†	1687716.9	512250	µg/L	3875.9	512250	ppb	3875.9	0.76%
QC value within limits for Al 396.153Radial Recovery = 102.45%								
As 188.979†	893.0	479.56	µg/L	3.798	479.56	ppb	3.798	0.79%
QC value within limits for As 188.979 Recovery = 95.91%								
B 249.677†	8413.6	543.35	µg/L	1.402	543.35	ppb	1.402	0.26%
QC value within limits for B 249.677 Recovery = 108.67%								
Ba 233.527†	44053.3	479.17	µg/L	1.365	479.17	ppb	1.365	0.28%
QC value within limits for Ba 233.527 Recovery = 95.83%								
Be 313.107†	338395.5	237.79	µg/L	0.065	237.79	ppb	0.065	0.03%
QC value within limits for Be 313.107 Recovery = 95.12%								
Ca 317.933Radial†	2081125.1	477780	µg/L	4806.1	477780	ppb	4806.1	1.01%
QC value within limits for Ca 317.933Radial Recovery = 95.56%								
Cd 226.502†	12678.3	459.94	µg/L	1.384	459.94	ppb	1.384	0.30%
QC value within limits for Cd 226.502 Recovery = 91.99%								
Co 228.616†	14316.8	451.77	µg/L	1.113	451.77	ppb	1.113	0.25%

QC value within limits for Co 228.616 Recovery = 90.35%

Cr 267.716†	16943.8	486.14 µg/L	1.382	486.14 ppb	1.382	0.28%
QC value within limits for Cr 267.716 Recovery = 97.23%						
Cu 324.752†	131088.4	533.84 µg/L	0.536	533.84 ppb	0.536	0.10%
QC value within limits for Cu 324.752 Recovery = 106.77%						
Fe 238.204 Radial†	181795.5	187700 µg/L	102.2	187700 ppb	102.2	0.05%
QC value within limits for Fe 238.204 Radial Recovery = 93.85%						
K 766.490 Radial†	12689.4	5810.9 µg/L	9.70	5810.9 ppb	9.70	0.17%
QC value within limits for K 766.490 Radial Recovery = 116.22%						
Mg 279.077 IEC†	169259.8	500590 µg/L	456.9	500590 ppb	456.9	0.09%
QC value within limits for Mg 279.077 IEC Recovery = 100.12%						
Mn 257.610†	244065.3	472.43 µg/L	1.076	472.43 ppb	1.076	0.23%
QC value within limits for Mn 257.610 Recovery = 94.49%						
Mo 202.031†	3588.5	489.20 µg/L	1.424	489.20 ppb	1.424	0.29%
QC value within limits for Mo 202.031 Recovery = 97.84%						
Na 589.592 Radial†	33250.1	5415.2 µg/L	9.54	5415.2 ppb	9.54	0.18%
QC value within limits for Na 589.592 Radial Recovery = 108.30%						
Ni 231.604†	6526.3	434.85 µg/L	1.558	434.85 ppb	1.558	0.36%
QC value within limits for Ni 231.604 Recovery = 86.97%						
P 214.914†	2991.0	2390.1 µg/L	16.10	2390.1 ppb	16.10	0.67%
QC value within limits for P 214.914 Recovery = 95.60%						
Pb 220.353†	1480.1	452.56 µg/L	6.394	452.56 ppb	6.394	1.41%
QC value within limits for Pb 220.353 Recovery = 90.51%						
S 181.975 Axial†	1143.2	2567.0 µg/L	176.46	2567.0 ppb	176.46	6.87%
QC value within limits for S 181.975 Axial Recovery = 102.68%						
Sb 206.836†	1043.9	517.42 µg/L	10.490	517.42 ppb	10.490	2.03%
QC value within limits for Sb 206.836 Recovery = 103.48%						
Se 196.026†	2705.3	2310 µg/L	20.9	2310 ppb	20.9	0.90%
QC value within limits for Se 196.026 Recovery = 92.54%						
SiO2 †	135409.6	9446.6 µg/L	6.22	9446.6 ppb	6.22	0.07%
QC value within limits for SiO2 Recovery = 88.33%						
Si 251.611†	135161.2	4510 µg/L	32.1	4510 ppb	32.1	0.71%
QC value within limits for Si 251.611 Recovery = 90.15%						
Sn 189.927†	1571.8	457.63 µg/L	3.442	457.63 ppb	3.442	0.75%
QC value within limits for Sn 189.927 Recovery = 91.53%						
Sr 421.552†	114921.0	523.92 µg/L	0.421	523.92 ppb	0.421	0.08%
QC value within limits for Sr 421.552 Recovery = 104.78%						
Ti 334.940†	354560.2	494.35 µg/L	0.080	494.35 ppb	0.080	0.02%
QC value within limits for Ti 334.940 Recovery = 98.87%						
Tl 190.801†	1080.6	428.26 µg/L	4.018	428.26 ppb	4.018	0.94%
QC value within limits for Tl 190.801 Recovery = 85.65%						
U 409.014†	7260.6	464.08 µg/L	3.450	464.08 ppb	3.450	0.74%
QC value within limits for U 409.014 Recovery = 92.82%						
V 292.402†	32118.3	503.17 µg/L	1.384	503.17 ppb	1.384	0.28%
QC value within limits for V 292.402 Recovery = 100.63%						
Zn 213.857†	23272.6	509.80 µg/L	29.329	509.80 ppb	29.329	5.75%
QC value within limits for Zn 213.857 Recovery = 101.96%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/24/2005 10:22:21
Data Type: Reprocessed on 6/24/2005 10:58:58
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1069611.4	1069611.4	99.835	%			10:25:07
1	Sc RADIAL	39705.3	39705.3	98.8	%			10:23:48
1	Y 371.029	579760.1	579760.1	98.779	%			10:25:07
1	Ag 328.068†	65531.7	66241.0	501.01	µg/L	501.01	ppb	10:25:13
1	Al 396.153Radial†	16561.3	16672.3	5035.9	µg/L	5035.9	ppb	10:23:48
1	As 188.979†	936.2	967.3	508.72	µg/L	508.72	ppb	10:25:33
1	B 249.677†	7531.7	7398.6	499.44	µg/L	499.44	ppb	10:25:13
1	Ba 233.527†	45913.6	46119.6	503.90	µg/L	503.90	ppb	10:25:13
1	Be 313.107†	713231.0	714528.6	501.92	µg/L	501.92	ppb	10:25:07
1	Ca 317.933Radial†	21509.4	21622.0	4966.6	µg/L	4966.6	ppb	10:24:08
1	Cd 226.502†	13453.4	13503.2	503.14	µg/L	503.14	ppb	10:25:13
1	Co 228.616†	15634.5	15792.0	502.39	µg/L	502.39	ppb	10:25:13
1	Cr 267.716†	17500.9	17456.2	500.84	µg/L	500.84	ppb	10:25:13
1	Cu 324.752†	131501.6	126654.4	509.73	µg/L	509.73	ppb	10:25:13
1	Fe 238.204 Radial†	4932.2	4950.6	5117.2	µg/L	5117.2	ppb	10:24:08
1	K 766.490 Radial†	12079.1	11117.8	5091.2	µg/L	5091.2	ppb	10:23:48
1	Mg 279.077 IEC†	1711.1	1727.1	5118.9	µg/L	5118.9	ppb	10:24:08
1	Mn 257.610†	268826.0	268890.9	503.26	µg/L	503.26	ppb	10:25:07
1	Mo 202.031†	3803.6	3805.5	512.58	µg/L	512.58	ppb	10:25:33
1	Na 589.592 Radial†	61552.8	61234.2	9973.9	µg/L	9973.9	ppb	10:23:48
1	Ni 231.604†	7841.3	7681.4	511.70	µg/L	511.70	ppb	10:25:33
1	P 214.914†	3113.0	2949.8	2400.2	µg/L	2400.2	ppb	10:25:33
1	Pb 220.353†	1850.3	1860.4	496.80	µg/L	496.80	ppb	10:25:33
1	S 181.975 Axial†	471.4	430.4	990.21	µg/L	990.21	ppb	10:25:33
1	Sb 206.836†	1020.8	985.0	483.63	µg/L	483.63	ppb	10:25:33
1	Se 196.026†	560.4	594.1	507	µg/L	507	ppb	10:25:33
1	SiO2 †	76125.7	74919.9	5194.5	µg/L	5194.5	ppb	10:25:13
1	Si 251.611†	74988.1	73798.6	2450	µg/L	2450	ppb	10:26:41
1	Sn 189.927†	1883.2	1899.3	494.86	µg/L	494.86	ppb	10:25:33
1	Sr 421.552†	108224.0	109621.1	506.30	µg/L	506.30	ppb	10:23:48
1	Ti 334.940†	364756.2	364860.3	498.44	µg/L	498.44	ppb	10:25:07
1	Tl 190.801†	1239.2	1276.6	502.81	µg/L	502.81	ppb	10:25:33
1	U 409.014†	7874.0	7492.3	502.34	µg/L	502.34	ppb	10:25:13
1	V 292.402†	32492.2	32668.4	507.03	µg/L	507.03	ppb	10:25:13
1	Zn 213.857†	21380.1	20835.4	501.98	µg/L	501.98	ppb	10:25:13
2	Sc 361.383	1076249.6	1076249.6	100.45	%			10:25:39
2	Sc RADIAL	39465.3	39465.3	98.2	%			10:24:13
2	Y 371.029	583518.3	583518.3	99.419	%			10:25:39
2	Ag 328.068†	64608.9	64917.5	491.01	µg/L	491.01	ppb	10:25:44
2	Al 396.153Radial†	16422.1	16632.5	5023.9	µg/L	5023.9	ppb	10:24:13
2	As 188.979†	926.9	952.3	500.80	µg/L	500.80	ppb	10:26:04
2	B 249.677†	7464.0	7284.7	491.75	µg/L	491.75	ppb	10:25:44
2	Ba 233.527†	45108.4	45034.4	492.04	µg/L	492.04	ppb	10:25:44
2	Be 313.107†	718130.5	714999.5	502.25	µg/L	502.25	ppb	10:25:39
2	Ca 317.933Radial†	21364.0	21606.3	4963.0	µg/L	4963.0	ppb	10:24:33
2	Cd 226.502†	13261.3	13228.9	492.92	µg/L	492.92	ppb	10:25:44
2	Co 228.616†	15369.2	15431.4	490.90	µg/L	490.90	ppb	10:25:44
2	Cr 267.716†	17235.8	17084.2	490.17	µg/L	490.17	ppb	10:25:44
2	Cu 324.752†	129798.4	124146.5	499.64	µg/L	499.64	ppb	10:25:44
2	Fe 238.204 Radial†	4904.6	4952.8	5119.4	µg/L	5119.4	ppb	10:24:33
2	K 766.490 Radial†	12064.8	11177.6	5118.6	µg/L	5118.6	ppb	10:24:13
2	Mg 279.077 IEC†	1700.8	1727.2	5118.9	µg/L	5118.9	ppb	10:24:33
2	Mn 257.610†	270805.0	269200.2	503.84	µg/L	503.84	ppb	10:25:39
2	Mo 202.031†	3809.6	3787.9	510.22	µg/L	510.22	ppb	10:26:04
2	Na 589.592 Radial†	61335.6	61392.0	9999.6	µg/L	9999.6	ppb	10:24:13
2	Ni 231.604†	7884.4	7675.9	511.34	µg/L	511.34	ppb	10:26:04
2	P 214.914†	3124.7	2942.3	2395.5	µg/L	2395.5	ppb	10:26:04
2	Pb 220.353†	1873.8	1872.3	499.98	µg/L	499.98	ppb	10:26:04
2	S 181.975 Axial†	469.5	425.6	978.95	µg/L	978.95	ppb	10:26:04

2	Sb 206.836†	1032.6	990.5	486.43 µg/L	486.43 ppb	10:26:04
2	Se 196.026†	555.0	585.3	500 µg/L	500 ppb	10:26:04
2	SiO2 †	75048.9	73377.7	5087.3 µg/L	5087.3 ppb	10:25:44
2	Si 251.611†	73746.1	72098.9	2390 µg/L	2390 ppb	10:26:47
2	Sn 189.927†	1893.7	1898.1	494.55 µg/L	494.55 ppb	10:26:04
2	Sr 421.552†	107894.0	109951.3	507.83 µg/L	507.83 ppb	10:24:13
2	Ti 334.940†	367161.1	365000.8	498.64 µg/L	498.64 ppb	10:25:39
2	Tl 190.801†	1247.7	1277.4	503.14 µg/L	503.14 ppb	10:26:04
2	U 409.014†	7744.5	7314.7	490.42 µg/L	490.42 ppb	10:25:44
2	V 292.402†	31957.4	31935.3	495.74 µg/L	495.74 ppb	10:25:44
2	Zn 213.857†	21138.7	20463.0	492.94 µg/L	492.94 ppb	10:25:44
3	Sc 361.383	1066646.7	1066646.7	99.558 %		10:26:10
3	Sc RADIAL	39269.4	39269.4	97.7 %		10:24:39
3	Y 371.029	578009.5	578009.5	98.480 %		10:26:10
3	Ag 328.068†	64911.2	65800.2	497.69 µg/L	497.69 ppb	10:26:15
3	Al 396.153Radial†	16344.4	16636.3	5024.9 µg/L	5024.9 ppb	10:24:39
3	As 188.979†	930.0	963.7	506.83 µg/L	506.83 ppb	10:26:36
3	B 249.677†	7529.0	7416.9	500.67 µg/L	500.67 ppb	10:26:15
3	Ba 233.527†	45518.2	45850.2	500.96 µg/L	500.96 ppb	10:26:15
3	Be 313.107†	711210.0	714484.3	501.89 µg/L	501.89 ppb	10:26:10
3	Ca 317.933Radial†	21446.4	21799.2	5007.3 µg/L	5007.3 ppb	10:24:59
3	Cd 226.502†	13385.1	13472.0	501.98 µg/L	501.98 ppb	10:26:15
3	Co 228.616†	15518.5	15719.1	500.07 µg/L	500.07 ppb	10:26:15
3	Cr 267.716†	17384.4	17387.9	498.88 µg/L	498.88 ppb	10:26:15
3	Cu 324.752†	130197.9	125711.0	505.93 µg/L	505.93 ppb	10:26:15
3	Fe 238.204 Radial†	4925.7	4999.3	5167.5 µg/L	5167.5 ppb	10:24:59
3	K 766.490 Radial†	11907.0	11077.4	5072.7 µg/L	5072.7 ppb	10:24:39
3	Mg 279.077 IEC†	1708.3	1743.5	5167.3 µg/L	5167.3 ppb	10:24:59
3	Mn 257.610†	268195.2	269005.8	503.48 µg/L	503.48 ppb	10:26:10
3	Mo 202.031†	3810.9	3823.4	515.00 µg/L	515.00 ppb	10:26:36
3	Na 589.592 Radial†	60971.8	61331.1	9989.7 µg/L	9989.7 ppb	10:24:39
3	Ni 231.604†	7898.7	7760.8	516.99 µg/L	516.99 ppb	10:26:36
3	P 214.914†	3133.5	2979.1	2425.5 µg/L	2425.5 ppb	10:26:36
3	Pb 220.353†	1877.5	1892.9	505.46 µg/L	505.46 ppb	10:26:36
3	S 181.975 Axial†	472.0	432.3	994.45 µg/L	994.45 ppb	10:26:36
3	Sb 206.836†	1036.5	1003.6	492.83 µg/L	492.83 ppb	10:26:36
3	Se 196.026†	553.3	588.6	503 µg/L	503 ppb	10:26:36
3	SiO2 †	75366.4	74369.1	5156.1 µg/L	5156.1 ppb	10:26:15
3	Si 251.611†	74073.5	73088.7	2420 µg/L	2420 ppb	10:26:52
3	Sn 189.927†	1902.7	1924.1	501.31 µg/L	501.31 ppb	10:26:36
3	Sr 421.552†	107194.5	109783.3	507.05 µg/L	507.05 ppb	10:24:39
3	Ti 334.940†	364217.4	365334.6	499.08 µg/L	499.08 ppb	10:26:10
3	Tl 190.801†	1242.8	1283.7	505.59 µg/L	505.59 ppb	10:26:36
3	U 409.014†	7899.9	7540.2	505.52 µg/L	505.52 ppb	10:26:15
3	V 292.402†	32197.4	32462.9	503.91 µg/L	503.91 ppb	10:26:15
3	Zn 213.857†	21216.1	20730.3	499.39 µg/L	499.39 ppb	10:26:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1070835.9	99.949	%	0.4590				0.46%
Sc RADIAL	39480.0	98.2	%	0.54				0.55%
Y 371.029	580429.3	98.893	%	0.4796				0.48%
Ag 328.068†	65652.9	496.57	µg/L	5.090	496.57	ppb	5.090	1.02%
QC value within limits for Ag 328.068 Recovery = 99.31%								
Al 396.153Radial†	16647.1	5028.2	µg/L	6.66	5028.2	ppb	6.66	0.13%
QC value within limits for Al 396.153Radial Recovery = 100.56%								
As 188.979†	961.1	505.45	µg/L	4.136	505.45	ppb	4.136	0.82%
QC value within limits for As 188.979 Recovery = 101.09%								
B 249.677†	7366.7	497.29	µg/L	4.834	497.29	ppb	4.834	0.97%
QC value within limits for B 249.677 Recovery = 99.46%								
Ba 233.527†	45668.1	498.97	µg/L	6.173	498.97	ppb	6.173	1.24%
QC value within limits for Ba 233.527 Recovery = 99.79%								
Be 313.107†	714670.8	502.02	µg/L	0.198	502.02	ppb	0.198	0.04%
QC value within limits for Be 313.107 Recovery = 100.40%								
Ca 317.933Radial†	21675.8	4979.0	µg/L	24.62	4979.0	ppb	24.62	0.49%
QC value within limits for Ca 317.933Radial Recovery = 99.58%								
Cd 226.502†	13401.3	499.35	µg/L	5.597	499.35	ppb	5.597	1.12%
QC value within limits for Cd 226.502 Recovery = 99.87%								
Co 228.616†	15647.5	497.79	µg/L	6.074	497.79	ppb	6.074	1.22%

QC value within limits for Co 228.616 Recovery = 99.56%

Cr 267.716†	17309.4	496.63 µg/L	5.681	496.63 ppb	5.681	1.14%

QC value within limits for Cr 267.716 Recovery = 99.33%

Cu 324.752†	125504.0	505.10 µg/L	5.098	505.10 ppb	5.098	1.01%

QC value within limits for Cu 324.752 Recovery = 101.02%

Fe 238.204 Radial†	4967.6	5134.7 µg/L	28.42	5134.7 ppb	28.42	0.55%

QC value within limits for Fe 238.204 Radial Recovery = 102.69%

K 766.490 Radial†	11124.3	5094.2 µg/L	23.08	5094.2 ppb	23.08	0.45%

QC value within limits for K 766.490 Radial Recovery = 101.88%

Mg 279.077 IEC†	1732.6	5135.0 µg/L	27.94	5135.0 ppb	27.94	0.54%

QC value within limits for Mg 279.077 IEC Recovery = 102.70%

Mn 257.610†	269032.3	503.52 µg/L	0.292	503.52 ppb	0.292	0.06%

QC value within limits for Mn 257.610 Recovery = 100.70%

Mo 202.031†	3805.6	512.60 µg/L	2.389	512.60 ppb	2.389	0.47%

QC value within limits for Mo 202.031 Recovery = 102.52%

Na 589.592 Radial†	61319.1	9987.7 µg/L	12.97	9987.7 ppb	12.97	0.13%

QC value within limits for Na 589.592 Radial Recovery = 99.88%

Ni 231.604†	7706.0	513.34 µg/L	3.167	513.34 ppb	3.167	0.62%

QC value within limits for Ni 231.604 Recovery = 102.67%

P 214.914†	2957.1	2407.1 µg/L	16.13	2407.1 ppb	16.13	0.67%

QC value within limits for P 214.914 Recovery = 96.28%

Pb 220.353†	1875.2	500.74 µg/L	4.383	500.74 ppb	4.383	0.88%

QC value within limits for Pb 220.353 Recovery = 100.15%

S 181.975 Axial†	429.4	987.87 µg/L	8.014	987.87 ppb	8.014	0.81%

QC value within limits for S 181.975 Axial Recovery = 98.79%

Sb 206.836†	993.0	487.63 µg/L	4.717	487.63 ppb	4.717	0.97%

QC value within limits for Sb 206.836 Recovery = 97.53%

Se 196.026†	589.3	503 µg/L	3.8	503 ppb	3.8	0.75%

QC value within limits for Se 196.026 Recovery = 100.66%

SiO2 †	74222.2	5145.9 µg/L	54.31	5145.9 ppb	54.31	1.06%

QC value within limits for SiO2 Recovery = 96.23%

Si 251.611†	72995.4	2420 µg/L	28.4	2420 ppb	28.4	1.17%

QC value within limits for Si 251.611 Recovery = 96.76%

Sn 189.927†	1907.2	496.91 µg/L	3.817	496.91 ppb	3.817	0.77%

QC value within limits for Sn 189.927 Recovery = 99.38%

Sr 421.552†	109785.3	507.06 µg/L	0.763	507.06 ppb	0.763	0.15%

QC value within limits for Sr 421.552 Recovery = 101.41%

Ti 334.940†	365065.2	498.72 µg/L	0.332	498.72 ppb	0.332	0.07%

QC value within limits for Ti 334.940 Recovery = 99.74%

Tl 190.801†	1279.2	503.85 µg/L	1.519	503.85 ppb	1.519	0.30%

QC value within limits for Tl 190.801 Recovery = 100.77%

U 409.014†	7449.1	499.43 µg/L	7.959	499.43 ppb	7.959	1.59%

QC value within limits for U 409.014 Recovery = 99.89%

V 292.402†	32355.5	502.22 µg/L	5.831	502.22 ppb	5.831	1.16%

QC value within limits for V 292.402 Recovery = 100.44%

Zn 213.857†	20676.2	498.10 µg/L	4.655	498.10 ppb	4.655	0.93%

QC value within limits for Zn 213.857 Recovery = 99.62%

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 10:28:39
Data Type: Reprocessed on 6/24/2005 10:59:00
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc 361.383	1071099.6	1071099.6	99.974	%			10:31:24
1	Sc RADIAL	39847.4	39847.4	99.1	%			10:30:06
1	Y 371.029	585426.2	585426.2	99.744	%			10:31:24
1	Ag 328.068†	-594.8	6.0	0.0469	µg/L	0.0469	ppb	10:31:29
1	Al 396.153Radial†	101.3	6.8	2.0693	µg/L	2.0693	ppb	10:30:06
1	As 188.979†	-22.3	7.3	3.7986	µg/L	3.7986	ppb	10:31:50
1	B 249.677†	261.6	116.1	7.8320	µg/L	7.8320	ppb	10:31:50
1	Ba 233.527†	-132.8	-2.8	-0.0305	µg/L	-0.0305	ppb	10:31:50
1	Be 313.107†	86.3	204.8	0.1440	µg/L	0.1440	ppb	10:31:29
1	Ca 317.933Radial†	186.1	32.3	7.4228	µg/L	7.4228	ppb	10:30:26
1	Cd 226.502†	-25.5	2.0	0.0738	µg/L	0.0738	ppb	10:31:50
1	Co 228.616†	-141.3	-9.7	-0.3088	µg/L	-0.3088	ppb	10:31:50
1	Cr 267.716†	89.1	15.5	0.4452	µg/L	0.4452	ppb	10:31:50
1	Cu 324.752†	4939.6	-123.7	-0.4984	µg/L	-0.4984	ppb	10:31:29
1	Fe 238.204 Radial†	51.5	8.9	9.1501	µg/L	9.1501	ppb	10:30:26
1	K 766.490 Radial†	1198.7	97.5	44.664	µg/L	44.664	ppb	10:30:06
1	Mg 279.077 IEC†	9.7	4.6	13.468	µg/L	13.468	ppb	10:30:26
1	Mn 257.610†	424.1	44.7	0.0844	µg/L	0.0844	ppb	10:31:50
1	Mo 202.031†	5.7	1.3	0.1758	µg/L	0.1758	ppb	10:31:50
1	Na 589.592 Radial†	1011.7	-64.9	-10.566	µg/L	-10.566	ppb	10:30:06
1	Ni 231.604†	182.0	9.2	0.6133	µg/L	0.6133	ppb	10:31:50
1	P 214.914†	176.5	8.3	7.0630	µg/L	7.0630	ppb	10:31:50
1	Pb 220.353†	-17.6	-10.6	-2.8251	µg/L	-2.8251	ppb	10:31:50
1	S 181.975 Axial†	39.7	-2.1	-4.9559	µg/L	-4.9559	ppb	10:31:50
1	Sb 206.836†	53.9	16.4	8.0611	µg/L	8.0611	ppb	10:31:50
1	Se 196.026†	-33.8	-1.0	-0.878	µg/L	-0.878	ppb	10:31:50
1	SiO2 †	1406.5	75.2	5.2167	µg/L	5.2167	ppb	10:31:29
1	Si 251.611†	1368.4	55.3	1.83	µg/L	1.83	ppb	10:32:57
1	Sn 189.927†	-0.6	12.4	3.2225	µg/L	3.2225	ppb	10:31:50
1	Sr 421.552†	-21.9	26.4	0.1220	µg/L	0.1220	ppb	10:30:06
1	Ti 334.940†	865.2	366.5	0.5008	µg/L	0.5008	ppb	10:31:29
1	Tl 190.801†	-33.6	1.7	0.6884	µg/L	0.6884	ppb	10:31:50
1	U 409.014†	401.8	7.1	0.4732	µg/L	0.4732	ppb	10:31:29
1	V 292.402†	-126.4	-3.9	-0.0566	µg/L	-0.0566	ppb	10:31:29
1	Zn 213.857†	607.4	27.6	0.6652	µg/L	0.6652	ppb	10:31:50
2	Sc 361.383	1076499.4	1076499.4	100.48	%			10:31:55
2	Sc RADIAL	40200.1	40200.1	100	%			10:30:31
2	Y 371.029	588084.7	588084.7	100.20	%			10:31:55
2	Ag 328.068†	-626.2	-22.2	-0.1674	µg/L	-0.1674	ppb	10:32:00
2	Al 396.153Radial†	114.0	18.6	5.6676	µg/L	5.6676	ppb	10:30:31
2	As 188.979†	-24.0	5.7	2.9672	µg/L	2.9672	ppb	10:32:21
2	B 249.677†	264.5	117.7	7.9373	µg/L	7.9373	ppb	10:32:21
2	Ba 233.527†	-133.0	-2.3	-0.0241	µg/L	-0.0241	ppb	10:32:21
2	Be 313.107†	51.7	170.0	0.1200	µg/L	0.1200	ppb	10:32:00
2	Ca 317.933Radial†	179.4	24.0	5.5253	µg/L	5.5253	ppb	10:30:51
2	Cd 226.502†	-29.0	-1.4	-0.0504	µg/L	-0.0504	ppb	10:32:21
2	Co 228.616†	-137.2	-4.8	-0.1557	µg/L	-0.1557	ppb	10:32:21
2	Cr 267.716†	78.6	4.6	0.1293	µg/L	0.1293	ppb	10:32:21
2	Cu 324.752†	4917.6	-170.4	-0.6885	µg/L	-0.6885	ppb	10:32:00
2	Fe 238.204 Radial†	44.1	1.0	0.9992	µg/L	0.9992	ppb	10:30:51
2	K 766.490 Radial†	1026.6	-85.2	-39.012	µg/L	-39.012	ppb	10:30:31
2	Mg 279.077 IEC†	3.3	-2.0	-5.8453	µg/L	-5.8453	ppb	10:30:51
2	Mn 257.610†	393.7	12.3	0.0228	µg/L	0.0228	ppb	10:32:21
2	Mo 202.031†	2.6	-1.8	-0.2417	µg/L	-0.2417	ppb	10:32:21
2	Na 589.592 Radial†	1061.1	-24.4	-3.9769	µg/L	-3.9769	ppb	10:30:31
2	Ni 231.604†	178.3	4.5	0.3027	µg/L	0.3027	ppb	10:32:21
2	P 214.914†	170.5	1.5	1.3570	µg/L	1.3570	ppb	10:32:21
2	Pb 220.353†	-10.9	-3.8	-1.0261	µg/L	-1.0261	ppb	10:32:21
2	S 181.975 Axial†	39.2	-2.8	-6.4819	µg/L	-6.4819	ppb	10:32:21

2	Sb 206.836†	51.5	13.8	6.8138 µg/L	6.8138 ppb	10:32:21
2	Se 196.026†	-27.4	5.5	4.69 µg/L	4.69 ppb	10:32:21
2	SiO2 †	1378.0	39.8	2.7628 µg/L	2.7628 ppb	10:32:00
2	Si 251.611†	1381.9	61.8	2.05 µg/L	2.05 ppb	10:33:02
2	Sn 189.927†	10.7	23.6	6.1527 µg/L	6.1527 ppb	10:32:21
2	Sr 421.552†	-71.1	-22.6	-0.1044 µg/L	-0.1044 ppb	10:30:31
2	Ti 334.940†	765.2	262.7	0.3575 µg/L	0.3575 ppb	10:32:00
2	Tl 190.801†	-32.2	3.3	1.2883 µg/L	1.2883 ppb	10:32:21
2	U 409.014†	446.5	49.6	3.3111 µg/L	3.3111 ppb	10:32:00
2	V 292.402†	-115.2	7.9	0.1223 µg/L	0.1223 ppb	10:32:00
2	Zn 213.857†	597.0	14.2	0.3432 µg/L	0.3432 ppb	10:32:21
3	Sc 361.383	1077585.6	1077585.6	100.58 %		10:32:26
3	Sc RADIAL	39776.4	39776.4	98.9 %		10:30:56
3	Y 371.029	588936.1	588936.1	100.34 %		10:32:26
3	Ag 328.068†	-636.4	-31.7	-0.2370 µg/L	-0.2370 ppb	10:32:31
3	Al 396.153Radial†	111.2	17.1	5.1741 µg/L	5.1741 ppb	10:30:56
3	As 188.979†	-22.3	7.4	3.8305 µg/L	3.8305 ppb	10:32:51
3	B 249.677†	258.5	111.4	7.5145 µg/L	7.5145 ppb	10:32:51
3	Ba 233.527†	-130.3	0.6	0.0060 µg/L	0.0060 ppb	10:32:51
3	Be 313.107†	18.0	136.4	0.0953 µg/L	0.0953 ppb	10:32:31
3	Ca 317.933Radial†	172.8	19.3	4.4057 µg/L	4.4057 ppb	10:31:16
3	Cd 226.502†	-17.5	10.1	0.3768 µg/L	0.3768 ppb	10:32:51
3	Co 228.616†	-135.6	-3.1	-0.1000 µg/L	-0.1000 ppb	10:32:51
3	Cr 267.716†	67.4	-6.6	-0.1882 µg/L	-0.1882 ppb	10:32:51
3	Cu 324.752†	4819.6	-272.7	-1.0961 µg/L	-1.0961 ppb	10:32:31
3	Fe 238.204 Radial†	45.9	3.3	3.4239 µg/L	3.4239 ppb	10:31:16
3	K 766.490 Radial†	1091.5	-8.6	-3.9599 µg/L	-3.9599 ppb	10:30:56
3	Mg 279.077 IEC†	1.5	-3.8	-11.214 µg/L	-11.214 ppb	10:31:16
3	Mn 257.610†	401.9	20.0	0.0384 µg/L	0.0384 ppb	10:32:51
3	Mo 202.031†	5.5	1.1	0.1452 µg/L	0.1452 ppb	10:32:51
3	Na 589.592 Radial†	980.5	-94.6	-15.411 µg/L	-15.411 ppb	10:30:56
3	Ni 231.604†	172.9	-1.0	-0.0661 µg/L	-0.0661 ppb	10:32:51
3	P 214.914†	176.4	7.1	6.2048 µg/L	6.2048 ppb	10:32:51
3	Pb 220.353†	-10.2	-3.1	-0.8266 µg/L	-0.8266 ppb	10:32:51
3	S 181.975 Axial†	42.9	0.8	1.9533 µg/L	1.9533 ppb	10:32:51
3	Sb 206.836†	44.6	6.9	3.3916 µg/L	3.3916 ppb	10:32:51
3	Se 196.026†	-35.1	-2.1	-1.77 µg/L	-1.77 ppb	10:32:51
3	SiO2 †	1389.5	49.9	3.4533 µg/L	3.4533 ppb	10:32:31
3	Si 251.611†	1424.1	102.4	3.40 µg/L	3.40 ppb	10:33:07
3	Sn 189.927†	5.3	18.2	4.7482 µg/L	4.7482 ppb	10:32:51
3	Sr 421.552†	-20.5	27.8	0.1286 µg/L	0.1286 ppb	10:30:56
3	Ti 334.940†	718.9	215.8	0.2965 µg/L	0.2965 ppb	10:32:31
3	Tl 190.801†	-36.1	-0.5	-0.1936 µg/L	-0.1936 ppb	10:32:51
3	U 409.014†	355.8	-41.0	-2.7390 µg/L	-2.7390 ppb	10:32:31
3	V 292.402†	-108.1	15.1	0.2292 µg/L	0.2292 ppb	10:32:31
3	Zn 213.857†	596.7	13.3	0.3245 µg/L	0.3245 ppb	10:32:51

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1075061.6	100.34	%	0.324				0.32%
Sc RADIAL	39941.3	99.4	%	0.56				0.57%
Y 371.029	587482.3	100.09	%	0.312				0.31%
Ag 328.068†	-16.0	-0.1192	µg/L	0.14801	-0.1192	ppb	0.14801	124.19%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	14.2	4.3037	µg/L	1.95071	4.3037	ppb	1.95071	45.33%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.8	3.5321	µg/L	0.48951	3.5321	ppb	0.48951	13.86%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	115.1	7.7613	µg/L	0.22009	7.7613	ppb	0.22009	2.84%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-1.5	-0.0162	µg/L	0.01947	-0.0162	ppb	0.01947	120.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	170.4	0.1197	µg/L	0.02436	0.1197	ppb	0.02436	20.34%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	25.2	5.7846	µg/L	1.52516	5.7846	ppb	1.52516	26.37%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	3.6	0.1334	µg/L	0.21972	0.1334	ppb	0.21972	164.68%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.9	-0.1882	µg/L	0.10810	-0.1882	ppb	0.10810	57.45%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	4.5	0.1288 µg/L	0.31670	0.1288 ppb	0.31670	245.95%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-188.9	-0.7610 µg/L	0.30538	-0.7610 ppb	0.30538	40.13%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	4.4	4.5244 µg/L	4.18539	4.5244 ppb	4.18539	92.51%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	1.2	0.5638 µg/L	42.02096	0.5638 ppb	42.02096	>999.9%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.4	-1.1971 µg/L	12.98088	-1.1971 ppb	12.98088	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	25.7	0.0485 µg/L	0.03202	0.0485 ppb	0.03202	66.00%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.2	0.0264 µg/L	0.23272	0.0264 ppb	0.23272	880.16%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-61.3	-9.9844 µg/L	5.73895	-9.9844 ppb	5.73895	57.48%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	4.2	0.2833 µg/L	0.34010	0.2833 ppb	0.34010	120.04%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	5.6	4.8749 µg/L	3.07667	4.8749 ppb	3.07667	63.11%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-5.9	-1.5593 µg/L	1.10077	-1.5593 ppb	1.10077	70.59%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.4	-3.1615 µg/L	4.49477	-3.1615 ppb	4.49477	142.17%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.4	6.0888 µg/L	2.41772	6.0888 ppb	2.41772	39.71%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.8	0.681 µg/L	3.4992	0.681 ppb	3.4992	514.20%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	55.0	3.8109 µg/L	1.26543	3.8109 ppb	1.26543	33.21%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	73.2	2.43 µg/L	0.848	2.43 ppb	0.848	34.92%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	18.1	4.7078 µg/L	1.46553	4.7078 ppb	1.46553	31.13%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	10.6	0.0487 µg/L	0.13262	0.0487 ppb	0.13262	272.17%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	281.7	0.3849 µg/L	0.10486	0.3849 ppb	0.10486	27.24%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.5	0.5944 µg/L	0.74542	0.5944 ppb	0.74542	125.41%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	5.2	0.3485 µg/L	3.02696	0.3485 ppb	3.02696	868.68%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	6.4	0.0983 µg/L	0.14440	0.0983 ppb	0.14440	146.91%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	18.3	0.4443 µg/L	0.19151	0.4443 ppb	0.19151	43.10%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	8	S0	Applied
2	2	S0.1	Applied
3	3	S0.5	Applied
4	4	SCAL	Applied
5	5	S10	Applied
6	9	ICV	QC Passed
7	10	ICB	QC Passed
8	11	PQL	QC Failed
9	13	ICSA	QC Passed
10	14	ICSAB	QC Passed
11	7	CCV	QC Passed
12	8	CCB	QC Passed

Sequence No.: 4 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 6/24/2005 11:19:50**
Nebulizer Back Pressure: 249.0 kPa **Nebulizer Flow: 0.65 L/min**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39705.2	39705.2	98.8	%			11:21:13
1	Al 396.153Radial†	16437.5	16546.9	4997.8	µg/L	4997.8	ppb	11:21:13
1	Ca 317.933Radial†	21291.2	21401.1	4915.9	µg/L	4915.9	ppb	11:21:33
1	Fe 238.204 Radial†	4884.2	4902.0	5067.0	µg/L	5067.0	ppb	11:21:33
1	K 766.490 Radial†	12112.8	11152.0	5106.9	µg/L	5106.9	ppb	11:21:13
1	Mg 279.077 IEC†	1688.7	1704.5	5051.8	µg/L	5051.8	ppb	11:21:33
1	Na 589.592 Radial†	61527.7	61208.9	9969.8	µg/L	9969.8	ppb	11:21:13
1	Sr 421.552†	108151.1	109547.5	505.96	µg/L	505.96	ppb	11:21:13
1	Sc 361.383	1058569.3	1058569.3	98.804	%			11:22:32
1	Y 371.029	573306.5	573306.5	97.679	%			11:22:32
1	Ag 328.068†	64418.2	65798.7	497.65	µg/L	497.65	ppb	11:22:38
1	As 188.979†	929.5	970.4	510.25	µg/L	510.25	ppb	11:22:58
1	B 249.677†	7330.2	7273.4	491.00	µg/L	491.00	ppb	11:22:38
1	Ba 233.527†	45147.6	45824.0	500.67	µg/L	500.67	ppb	11:22:38
1	Be 313.107†	706974.8	715648.8	502.71	µg/L	502.71	ppb	11:22:32
1	Cd 226.502†	13251.1	13439.0	500.76	µg/L	500.76	ppb	11:22:38
1	Co 228.616†	15390.5	15708.5	499.73	µg/L	499.73	ppb	11:22:38
1	Cr 267.716†	17246.3	17381.4	498.69	µg/L	498.69	ppb	11:22:38
1	Cu 324.752†	129119.1	125617.0	505.55	µg/L	505.55	ppb	11:22:38
1	Mn 257.610†	267346.0	270201.8	505.70	µg/L	505.70	ppb	11:22:32
1	Mo 202.031†	3766.1	3807.2	512.82	µg/L	512.82	ppb	11:22:58
1	Ni 231.604†	7847.4	7769.5	517.56	µg/L	517.56	ppb	11:22:58
1	P 214.914†	3123.0	2992.5	2436.9	µg/L	2436.9	ppb	11:22:58
1	Pb 220.353†	1854.3	1883.7	503.01	µg/L	503.01	ppb	11:22:58
1	S 181.975 Axial†	468.7	432.5	995.08	µg/L	995.08	ppb	11:22:58
1	Sb 206.836†	1005.2	979.9	481.14	µg/L	481.14	ppb	11:22:58
1	Se 196.026†	561.4	601.0	513	µg/L	513	ppb	11:22:58
1	SiO2 †	74659.8	74231.6	5146.6	µg/L	5146.6	ppb	11:22:38
1	Sn 189.927†	1855.8	1891.2	492.74	µg/L	492.74	ppb	11:22:58
1	Ti 334.940†	361754.8	365633.6	499.49	µg/L	499.49	ppb	11:22:32
1	Tl 190.801†	1230.1	1280.4	504.31	µg/L	504.31	ppb	11:22:58
1	U 409.014†	7799.3	7499.0	502.77	µg/L	502.77	ppb	11:22:38
1	V 292.402†	31874.6	32382.9	502.65	µg/L	502.65	ppb	11:22:38
1	Zn 213.857†	21012.3	20686.6	498.34	µg/L	498.34	ppb	11:22:38
1	Si 251.611†	74082.4	73665.4	2440	µg/L	2440	ppb	11:24:06
2	Sc RADIAL	38975.5	38975.5	97.0	%			11:21:38
2	Al 396.153Radial†	16175.9	16588.8	5010.8	µg/L	5010.8	ppb	11:21:38
2	Ca 317.933Radial†	21471.6	21990.8	5051.3	µg/L	5051.3	ppb	11:21:58
2	Fe 238.204 Radial†	4927.9	5039.6	5209.1	µg/L	5209.1	ppb	11:21:58
2	K 766.490 Radial†	11838.4	11098.6	5082.4	µg/L	5082.4	ppb	11:21:38
2	Mg 279.077 IEC†	1706.1	1754.5	5199.5	µg/L	5199.5	ppb	11:21:58
2	Na 589.592 Radial†	60497.9	61313.1	9986.8	µg/L	9986.8	ppb	11:21:38
2	Sr 421.552†	106485.1	109879.1	507.49	µg/L	507.49	ppb	11:21:38
2	Sc 361.383	1067492.9	1067492.9	99.637	%			11:23:04
2	Y 371.029	578068.4	578068.4	98.490	%			11:23:04
2	Ag 328.068†	65157.1	65995.3	499.16	µg/L	499.16	ppb	11:23:09
2	As 188.979†	928.0	961.0	505.41	µg/L	505.41	ppb	11:23:29
2	B 249.677†	7458.2	7339.8	495.46	µg/L	495.46	ppb	11:23:09
2	Ba 233.527†	45554.8	45850.7	500.96	µg/L	500.96	ppb	11:23:09
2	Be 313.107†	714961.1	717682.7	504.14	µg/L	504.14	ppb	11:23:04
2	Cd 226.502†	13422.2	13498.6	502.96	µg/L	502.96	ppb	11:23:09
2	Co 228.616†	15531.0	15719.2	500.06	µg/L	500.06	ppb	11:23:09
2	Cr 267.716†	17423.3	17413.1	499.61	µg/L	499.61	ppb	11:23:09
2	Cu 324.752†	130722.6	126134.0	507.64	µg/L	507.64	ppb	11:23:09
2	Mn 257.610†	269090.6	269690.9	504.76	µg/L	504.76	ppb	11:23:04
2	Mo 202.031†	3763.4	3772.7	508.18	µg/L	508.18	ppb	11:23:29
2	Ni 231.604†	7831.3	7686.9	512.06	µg/L	512.06	ppb	11:23:29
2	P 214.914†	3100.7	2943.7	2395.4	µg/L	2395.4	ppb	11:23:29

2	Pb 220.353†	1843.1	1856.8	495.85 µg/L	495.85 ppb	11:23:29
2	S 181.975 Axial†	471.4	431.3	992.14 µg/L	992.14 ppb	11:23:29
2	Sb 206.836†	1014.8	981.1	481.65 µg/L	481.65 ppb	11:23:29
2	Se 196.026†	553.2	588.0	502 µg/L	502 ppb	11:23:29
2	SiO2 †	75535.7	74479.1	5164.0 µg/L	5164.0 ppb	11:23:09
2	Sn 189.927†	1856.0	1875.7	488.74 µg/L	488.74 ppb	11:23:29
2	Ti 334.940†	364679.4	365508.3	499.32 µg/L	499.32 ppb	11:23:04
2	Tl 190.801†	1229.2	1269.1	499.88 µg/L	499.88 ppb	11:23:29
2	U 409.014†	7838.2	7472.0	500.96 µg/L	500.96 ppb	11:23:09
2	V 292.402†	32212.0	32451.8	503.67 µg/L	503.67 ppb	11:23:09
2	Zn 213.857†	21241.0	20738.3	499.60 µg/L	499.60 ppb	11:23:09
2	Si 251.611†	73987.1	72943.0	2420 µg/L	2420 ppb	11:24:12
3	Sc RADIAL	39109.6	39109.6	97.3 %		11:22:04
3	Al 396.153Radial†	16251.9	16609.7	5017.0 µg/L	5017.0 ppb	11:22:04
3	Ca 317.933Radial†	21335.1	21774.5	5001.7 µg/L	5001.7 ppb	11:22:24
3	Fe 238.204 Radial†	4899.4	4992.9	5160.8 µg/L	5160.8 ppb	11:22:24
3	K 766.490 Radial†	11961.1	11182.8	5121.0 µg/L	5121.0 ppb	11:22:04
3	Mg 279.077 IEC†	1691.5	1733.4	5137.4 µg/L	5137.4 ppb	11:22:24
3	Na 589.592 Radial†	60643.9	61249.2	9976.4 µg/L	9976.4 ppb	11:22:04
3	Sr 421.552†	106738.2	109762.6	506.96 µg/L	506.96 ppb	11:22:04
3	Sc 361.383	1063479.0	1063479.0	99.263 %		11:23:35
3	Y 371.029	576335.1	576335.1	98.195 %		11:23:35
3	Ag 328.068†	64783.8	65866.1	498.18 µg/L	498.18 ppb	11:23:40
3	As 188.979†	927.5	964.0	506.93 µg/L	506.93 ppb	11:24:01
3	B 249.677†	7439.2	7348.9	496.08 µg/L	496.08 ppb	11:23:40
3	Ba 233.527†	45219.0	45685.0	499.15 µg/L	499.15 ppb	11:23:40
3	Be 313.107†	711618.9	717024.0	503.68 µg/L	503.68 ppb	11:23:35
3	Cd 226.502†	13304.3	13430.7	500.44 µg/L	500.44 ppb	11:23:40
3	Co 228.616†	15427.3	15673.6	498.62 µg/L	498.62 ppb	11:23:40
3	Cr 267.716†	17267.6	17322.2	496.99 µg/L	496.99 ppb	11:23:40
3	Cu 324.752†	130139.5	126041.7	507.26 µg/L	507.26 ppb	11:23:40
3	Mn 257.610†	267857.1	269467.5	504.34 µg/L	504.34 ppb	11:23:35
3	Mo 202.031†	3771.6	3795.2	511.21 µg/L	511.21 ppb	11:24:01
3	Ni 231.604†	7810.0	7695.1	512.61 µg/L	512.61 ppb	11:24:01
3	P 214.914†	3114.0	2968.9	2416.6 µg/L	2416.6 ppb	11:24:01
3	Pb 220.353†	1844.8	1865.5	498.16 µg/L	498.16 ppb	11:24:01
3	S 181.975 Axial†	466.8	428.4	985.55 µg/L	985.55 ppb	11:24:01
3	Sb 206.836†	1013.1	983.2	482.77 µg/L	482.77 ppb	11:24:01
3	Se 196.026†	552.0	588.9	503 µg/L	503 ppb	11:24:01
3	SiO2 †	74954.8	74179.9	5143.0 µg/L	5143.0 ppb	11:23:40
3	Sn 189.927†	1861.9	1888.7	492.10 µg/L	492.10 ppb	11:24:01
3	Ti 334.940†	363409.0	365609.8	499.46 µg/L	499.46 ppb	11:23:35
3	Tl 190.801†	1235.0	1279.5	503.99 µg/L	503.99 ppb	11:24:01
3	U 409.014†	7853.8	7517.4	503.99 µg/L	503.99 ppb	11:23:40
3	V 292.402†	32057.0	32417.7	503.17 µg/L	503.17 ppb	11:23:40
3	Zn 213.857†	21099.8	20676.6	498.11 µg/L	498.11 ppb	11:23:40
3	Si 251.611†	74190.9	73428.6	2430 µg/L	2430 ppb	11:24:17

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1063180.4	99.235	%	0.4171				0.42%
Sc RADIAL	39263.5	97.7	%	0.97				0.99%
Y 371.029	575903.3	98.122	%	0.4106				0.42%
Ag 328.068†	65886.7	498.33	µg/L	0.766	498.33	ppb	0.766	0.15%
QC value within limits for Ag 328.068 Recovery = 99.67%								
Al 396.153Radial†	16581.8	5008.5	µg/L	9.75	5008.5	ppb	9.75	0.19%
QC value within limits for Al 396.153Radial Recovery = 100.17%								
As 188.979†	965.1	507.53	µg/L	2.476	507.53	ppb	2.476	0.49%
QC value within limits for As 188.979 Recovery = 101.51%								
B 249.677†	7320.7	494.18	µg/L	2.767	494.18	ppb	2.767	0.56%
QC value within limits for B 249.677 Recovery = 98.84%								
Ba 233.527†	45786.6	500.26	µg/L	0.971	500.26	ppb	0.971	0.19%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 313.107†	716785.2	503.51	µg/L	0.729	503.51	ppb	0.729	0.14%
QC value within limits for Be 313.107 Recovery = 100.70%								
Ca 317.933Radial†	21722.1	4989.6	µg/L	68.48	4989.6	ppb	68.48	1.37%
QC value within limits for Ca 317.933Radial Recovery = 99.79%								
Cd 226.502†	13456.1	501.39	µg/L	1.375	501.39	ppb	1.375	0.27%
QC value within limits for Cd 226.502 Recovery = 100.28%								

Co 228.616†	15700.4	499.47 µg/L	0.758	499.47 ppb	0.758	0.15%
QC value within limits for Co 228.616 Recovery = 99.89%						
Cr 267.716†	17372.3	498.43 µg/L	1.325	498.43 ppb	1.325	0.27%
QC value within limits for Cr 267.716 Recovery = 99.69%						
Cu 324.752†	125930.9	506.82 µg/L	1.115	506.82 ppb	1.115	0.22%
QC value within limits for Cu 324.752 Recovery = 101.36%						
Fe 238.204 Radial†	4978.1	5145.6 µg/L	72.25	5145.6 ppb	72.25	1.40%
QC value within limits for Fe 238.204 Radial Recovery = 102.91%						
K 766.490 Radial†	11144.5	5103.4 µg/L	19.52	5103.4 ppb	19.52	0.38%
QC value within limits for K 766.490 Radial Recovery = 102.07%						
Mg 279.077 IEC†	1730.8	5129.6 µg/L	74.14	5129.6 ppb	74.14	1.45%
QC value within limits for Mg 279.077 IEC Recovery = 102.59%						
Mn 257.610†	269786.7	504.93 µg/L	0.698	504.93 ppb	0.698	0.14%
QC value within limits for Mn 257.610 Recovery = 100.99%						
Mo 202.031†	3791.7	510.73 µg/L	2.354	510.73 ppb	2.354	0.46%
QC value within limits for Mo 202.031 Recovery = 102.15%						
Na 589.592 Radial†	61257.1	9977.6 µg/L	8.56	9977.6 ppb	8.56	0.09%
QC value within limits for Na 589.592 Radial Recovery = 99.78%						
Ni 231.604†	7717.2	514.08 µg/L	3.030	514.08 ppb	3.030	0.59%
QC value within limits for Ni 231.604 Recovery = 102.82%						
P 214.914†	2968.4	2416.3 µg/L	20.78	2416.3 ppb	20.78	0.86%
QC value within limits for P 214.914 Recovery = 96.65%						
Pb 220.353†	1868.7	499.00 µg/L	3.657	499.00 ppb	3.657	0.73%
QC value within limits for Pb 220.353 Recovery = 99.80%						
S 181.975 Axial†	430.7	990.92 µg/L	4.882	990.92 ppb	4.882	0.49%
QC value within limits for S 181.975 Axial Recovery = 99.09%						
Sb 206.836†	981.4	481.85 µg/L	0.834	481.85 ppb	0.834	0.17%
QC value within limits for Sb 206.836 Recovery = 96.37%						
Se 196.026†	592.6	506 µg/L	6.2	506 ppb	6.2	1.22%
QC value within limits for Se 196.026 Recovery = 101.22%						
SiO2 †	74296.9	5151.2 µg/L	11.20	5151.2 ppb	11.20	0.22%
QC value within limits for SiO2 Recovery = 96.33%						
Si 251.611†	73345.7	2430 µg/L	12.2	2430 ppb	12.2	0.50%
QC value within limits for Si 251.611 Recovery = 97.23%						
Sn 189.927†	1885.2	491.19 µg/L	2.150	491.19 ppb	2.150	0.44%
QC value within limits for Sn 189.927 Recovery = 98.24%						
Sr 421.552†	109729.7	506.80 µg/L	0.776	506.80 ppb	0.776	0.15%
QC value within limits for Sr 421.552 Recovery = 101.36%						
Ti 334.940†	365583.9	499.43 µg/L	0.089	499.43 ppb	0.089	0.02%
QC value within limits for Ti 334.940 Recovery = 99.89%						
Tl 190.801†	1276.3	502.72 µg/L	2.472	502.72 ppb	2.472	0.49%
QC value within limits for Tl 190.801 Recovery = 100.54%						
U 409.014†	7496.1	502.57 µg/L	1.526	502.57 ppb	1.526	0.30%
QC value within limits for U 409.014 Recovery = 100.51%						
V 292.402†	32417.5	503.16 µg/L	0.507	503.16 ppb	0.507	0.10%
QC value within limits for V 292.402 Recovery = 100.63%						
Zn 213.857†	20700.5	498.68 µg/L	0.804	498.68 ppb	0.804	0.16%
QC value within limits for Zn 213.857 Recovery = 99.74%						

All analyte(s) passed QC.

Sequence No.: 5
Sample ID: CCB
Nebulizer Back Pressure: 249.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 11:26:04
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	40135.5	40135.5	99.8	%			11:27:28
1	Al 396.153Radial†	93.1	-2.1	-0.6361	µg/L	-0.6361	ppb	11:27:28
1	Ca 317.933Radial†	151.6	-3.6	-0.8014	µg/L	-0.8014	ppb	11:27:48
1	Fe 238.204 Radial†	44.7	1.7	1.7242	µg/L	1.7242	ppb	11:27:48
1	K 766.490 Radial†	1135.3	25.3	11.581	µg/L	11.581	ppb	11:27:28
1	Mg 279.077 IEC†	14.1	8.9	26.240	µg/L	26.240	ppb	11:27:48
1	Na 589.592 Radial†	1004.6	-79.3	-12.912	µg/L	-12.912	ppb	11:27:28
1	Sr 421.552†	-36.3	12.2	0.0565	µg/L	0.0565	ppb	11:27:28
1	Sc 361.383	1074377.3	1074377.3	100.28	%			11:28:46
1	Y 371.029	587033.0	587033.0	100.02	%			11:28:46
1	Ag 328.068†	-585.6	17.0	0.1280	µg/L	0.1280	ppb	11:28:51
1	As 188.979†	-26.9	2.7	1.4274	µg/L	1.4274	ppb	11:29:12
1	B 249.677†	209.9	63.7	4.2979	µg/L	4.2979	ppb	11:29:12
1	Ba 233.527†	-129.7	0.8	0.0090	µg/L	0.0090	ppb	11:29:12
1	Be 313.107†	125.7	243.8	0.1720	µg/L	0.1720	ppb	11:28:51
1	Cd 226.502†	-27.8	-0.2	-0.0073	µg/L	-0.0073	ppb	11:29:12
1	Co 228.616†	-135.8	-3.7	-0.1201	µg/L	-0.1201	ppb	11:29:12
1	Cr 267.716†	84.9	11.0	0.3135	µg/L	0.3135	ppb	11:29:12
1	Cu 324.752†	4854.2	-223.9	-0.9046	µg/L	-0.9046	ppb	11:28:51
1	Mn 257.610†	387.5	6.9	0.0124	µg/L	0.0124	ppb	11:29:12
1	Mo 202.031†	4.5	0.0	0.0058	µg/L	0.0058	ppb	11:29:12
1	Ni 231.604†	179.2	5.9	0.3914	µg/L	0.3914	ppb	11:29:12
1	P 214.914†	167.7	-1.0	-0.7032	µg/L	-0.7032	ppb	11:29:12
1	Pb 220.353†	-4.9	2.1	0.5545	µg/L	0.5545	ppb	11:29:12
1	S 181.975 Axial†	46.1	4.2	9.7191	µg/L	9.7191	ppb	11:29:12
1	Sb 206.836†	47.9	10.3	5.0616	µg/L	5.0616	ppb	11:29:12
1	Se 196.026†	-36.7	-3.8	-3.20	µg/L	-3.20	ppb	11:29:12
1	SiO2 †	1398.0	62.5	4.3366	µg/L	4.3366	ppb	11:28:51
1	Sn 189.927†	-0.9	12.0	3.1323	µg/L	3.1323	ppb	11:29:12
1	Ti 334.940†	794.9	293.8	0.3995	µg/L	0.3995	ppb	11:28:51
1	Tl 190.801†	-37.3	-1.8	-0.7135	µg/L	-0.7135	ppb	11:29:12
1	U 409.014†	454.0	58.0	3.8741	µg/L	3.8741	ppb	11:28:51
1	V 292.402†	-104.7	18.1	0.2825	µg/L	0.2825	ppb	11:28:51
1	Zn 213.857†	546.6	-34.9	-0.8504	µg/L	-0.8504	ppb	11:29:12
1	Si 251.611†	1361.1	43.9	1.45	µg/L	1.45	ppb	11:30:19
2	Sc RADIAL	39670.3	39670.3	98.7	%			11:27:53
2	Al 396.153Radial†	50.0	-44.7	-13.620	µg/L	-13.620	ppb	11:27:53
2	Ca 317.933Radial†	149.9	-3.5	-0.7831	µg/L	-0.7831	ppb	11:28:13
2	Fe 238.204 Radial†	41.9	-0.6	-0.6384	µg/L	-0.6384	ppb	11:28:13
2	K 766.490 Radial†	1110.0	13.0	5.9688	µg/L	5.9688	ppb	11:27:53
2	Mg 279.077 IEC†	0.9	-4.4	-12.889	µg/L	-12.889	ppb	11:28:13
2	Na 589.592 Radial†	1041.4	-30.2	-4.9266	µg/L	-4.9266	ppb	11:27:53
2	Sr 421.552†	-53.6	-5.8	-0.0269	µg/L	-0.0269	ppb	11:27:53
2	Sc 361.383	1077309.5	1077309.5	100.55	%			11:29:17
2	Y 371.029	588454.9	588454.9	100.26	%			11:29:17
2	Ag 328.068†	-655.4	-50.8	-0.3841	µg/L	-0.3841	ppb	11:29:22
2	As 188.979†	-23.6	6.1	3.1751	µg/L	3.1751	ppb	11:29:42
2	B 249.677†	200.2	53.5	3.6133	µg/L	3.6133	ppb	11:29:42
2	Ba 233.527†	-124.6	6.2	0.0680	µg/L	0.0680	ppb	11:29:42
2	Be 313.107†	109.9	227.8	0.1607	µg/L	0.1607	ppb	11:29:22
2	Cd 226.502†	-19.2	8.4	0.3133	µg/L	0.3133	ppb	11:29:42
2	Co 228.616†	-131.4	1.0	0.0334	µg/L	0.0334	ppb	11:29:42
2	Cr 267.716†	84.5	10.4	0.2967	µg/L	0.2967	ppb	11:29:42
2	Cu 324.752†	4896.5	-195.1	-0.7889	µg/L	-0.7889	ppb	11:29:22
2	Mn 257.610†	364.5	-17.0	-0.0321	µg/L	-0.0321	ppb	11:29:42
2	Mo 202.031†	11.3	6.8	0.9190	µg/L	0.9190	ppb	11:29:42
2	Ni 231.604†	169.3	-4.5	-0.2939	µg/L	-0.2939	ppb	11:29:42
2	P 214.914†	177.7	8.5	7.2658	µg/L	7.2658	ppb	11:29:42

2	Pb 220.353†	-9.1	-2.1	-0.5511 µg/L	-0.5511 ppb	11:29:42
2	S 181.975 Axial†	43.7	1.6	3.7851 µg/L	3.7851 ppb	11:29:42
2	Sb 206.836†	54.5	16.7	8.2457 µg/L	8.2457 ppb	11:29:42
2	Se 196.026†	-23.5	9.5	8.08 µg/L	8.08 ppb	11:29:42
2	SiO2 †	1383.8	44.5	3.0524 µg/L	3.0524 ppb	11:29:22
2	Sn 189.927†	10.6	23.5	6.1075 µg/L	6.1075 ppb	11:29:42
2	Ti 334.940†	717.5	214.6	0.2915 µg/L	0.2915 ppb	11:29:22
2	Tl 190.801†	-41.8	-6.2	-2.4361 µg/L	-2.4361 ppb	11:29:42
2	U 409.014†	450.3	53.0	3.5404 µg/L	3.5404 ppb	11:29:22
2	V 292.402†	-134.5	-11.2	-0.1579 µg/L	-0.1579 ppb	11:29:22
2	Zn 213.857†	544.2	-38.8	-0.9397 µg/L	-0.9397 ppb	11:29:42
2	Si 251.611†	1404.5	83.3	2.75 µg/L	2.75 ppb	11:30:24
3	Sc RADIAL	39500.0	39500.0	98.3 %		11:28:18
3	Al 396.153Radial†	104.5	11.0	3.3146 µg/L	3.3146 ppb	11:28:18
3	Ca 317.933Radial†	159.8	7.2	1.6596 µg/L	1.6596 ppb	11:28:38
3	Fe 238.204 Radial†	41.4	-1.0	-0.9880 µg/L	-0.9880 ppb	11:28:38
3	K 766.490 Radial†	1124.7	32.8	15.026 µg/L	15.026 ppb	11:28:18
3	Mg 279.077 IEC†	-3.3	-8.6	-25.453 µg/L	-25.453 ppb	11:28:38
3	Na 589.592 Radial†	1010.7	-56.9	-9.2700 µg/L	-9.2700 ppb	11:28:18
3	Sr 421.552†	-21.3	26.9	0.1240 µg/L	0.1240 ppb	11:28:18
3	Sc 361.383	1060929.0	1060929.0	99.025 %		11:29:48
3	Y 371.029	579519.4	579519.4	98.738 %		11:29:48
3	Ag 328.068†	-602.4	-7.4	-0.0545 µg/L	-0.0545 ppb	11:29:53
3	As 188.979†	-30.6	-1.3	-0.6936 µg/L	-0.6936 ppb	11:30:13
3	B 249.677†	195.2	51.5	3.4751 µg/L	3.4751 ppb	11:30:13
3	Ba 233.527†	-129.7	-0.9	-0.0089 µg/L	-0.0089 ppb	11:30:13
3	Be 313.107†	145.7	265.6	0.1866 µg/L	0.1866 ppb	11:29:53
3	Cd 226.502†	-33.5	-6.3	-0.2344 µg/L	-0.2344 ppb	11:30:13
3	Co 228.616†	-133.4	-3.0	-0.0971 µg/L	-0.0971 ppb	11:30:13
3	Cr 267.716†	73.8	0.9	0.0256 µg/L	0.0256 ppb	11:30:13
3	Cu 324.752†	4903.9	-112.3	-0.4527 µg/L	-0.4527 ppb	11:29:53
3	Mn 257.610†	401.7	26.2	0.0492 µg/L	0.0492 ppb	11:30:13
3	Mo 202.031†	6.4	2.1	0.2788 µg/L	0.2788 ppb	11:30:13
3	Ni 231.604†	179.8	8.6	0.5779 µg/L	0.5779 ppb	11:30:13
3	P 214.914†	178.8	12.3	10.474 µg/L	10.474 ppb	11:30:13
3	Pb 220.353†	-11.2	-4.3	-1.1462 µg/L	-1.1462 ppb	11:30:13
3	S 181.975 Axial†	43.5	2.1	4.8557 µg/L	4.8557 ppb	11:30:13
3	Sb 206.836†	44.8	7.8	3.8413 µg/L	3.8413 ppb	11:30:13
3	Se 196.026†	-29.5	3.0	2.58 µg/L	2.58 ppb	11:30:13
3	SiO2 †	1368.7	50.6	3.4984 µg/L	3.4984 ppb	11:29:53
3	Sn 189.927†	1.0	13.9	3.6251 µg/L	3.6251 ppb	11:30:13
3	Ti 334.940†	736.2	244.5	0.3341 µg/L	0.3341 ppb	11:29:53
3	Tl 190.801†	-39.2	-4.3	-1.6699 µg/L	-1.6699 ppb	11:30:13
3	U 409.014†	396.3	5.4	0.3644 µg/L	0.3644 ppb	11:29:53
3	V 292.402†	-86.4	35.3	0.5437 µg/L	0.5437 ppb	11:29:53
3	Zn 213.857†	540.7	-34.0	-0.8277 µg/L	-0.8277 ppb	11:30:13
3	Si 251.611†	1356.8	56.7	1.88 µg/L	1.88 ppb	11:30:29

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1070871.9	99.953	%	0.8153				0.82%
Sc RADIAL	39768.6	98.9	%	0.82				0.83%
Y 371.029	585002.4	99.672	%	0.8180				0.82%
Ag 328.068†	-13.8	-0.1035	µg/L	0.25956	-0.1035	ppb	0.25956	250.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-12.0	-3.6472	µg/L	8.85985	-3.6472	ppb	8.85985	242.92%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.5	1.3029	µg/L	1.93734	1.3029	ppb	1.93734	148.69%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.3	3.7954	µg/L	0.44059	3.7954	ppb	0.44059	11.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.0	0.0227	µg/L	0.04023	0.0227	ppb	0.04023	177.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	245.8	0.1731	µg/L	0.01299	0.1731	ppb	0.01299	7.50%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.0	0.0251	µg/L	1.41561	0.0251	ppb	1.41561	>999.9%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	0.6	0.0239	µg/L	0.27514	0.0239	ppb	0.27514	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-1.9	-0.0613 µg/L	0.08275	-0.0613 ppb	0.08275	135.10%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	7.4	0.2119 µg/L	0.16160	0.2119 ppb	0.16160	76.25%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-177.1	-0.7154 µg/L	0.23473	-0.7154 ppb	0.23473	32.81%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.0	0.0326 µg/L	1.47534	0.0326 ppb	1.47534	>999.9%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	23.7	10.859 µg/L	4.5718	10.859 ppb	4.5718	42.10%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.4	-4.0338 µg/L	26.96044	-4.0338 ppb	26.96044	668.36%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	5.4	0.0098 µg/L	0.04072	0.0098 ppb	0.04072	413.70%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.0	0.4012 µg/L	0.46878	0.4012 ppb	0.46878	116.85%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-55.5	-9.0361 µg/L	3.99766	-9.0361 ppb	3.99766	44.24%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	3.3	0.2252 µg/L	0.45909	0.2252 ppb	0.45909	203.90%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	6.6	5.6788 µg/L	5.75504	5.6788 ppb	5.75504	101.34%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1.4	-0.3810 µg/L	0.86302	-0.3810 ppb	0.86302	226.54%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	2.6	6.1199 µg/L	3.16257	6.1199 ppb	3.16257	51.68%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	11.6	5.7162 µg/L	2.27397	5.7162 ppb	2.27397	39.78%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.9	2.49 µg/L	5.642	2.49 ppb	5.642	226.63%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	52.5	3.6292 µg/L	0.65201	3.6292 ppb	0.65201	17.97%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	61.3	2.03 µg/L	0.660	2.03 ppb	0.660	32.55%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	16.5	4.2883 µg/L	1.59462	4.2883 ppb	1.59462	37.19%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	11.1	0.0512 µg/L	0.07562	0.0512 ppb	0.07562	147.70%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	251.0	0.3417 µg/L	0.05440	0.3417 ppb	0.05440	15.92%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-4.1	-1.6065 µg/L	0.86304	-1.6065 ppb	0.86304	53.72%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	38.8	2.5930 µg/L	1.93716	2.5930 ppb	1.93716	74.71%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	14.1	0.2228 µg/L	0.35460	0.2228 ppb	0.35460	159.19%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-35.9	-0.8726 µg/L	0.05924	-0.8726 ppb	0.05924	6.79%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCV
Nebulizer Back Pressure: 249.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/24/2005 12:36:01
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39287.1	39287.1	97.7	%			12:37:27
1	Al 396.153Radial†	16269.6	16552.3	4999.4	µg/L	4999.4	ppb	12:37:27
1	Ca 317.933Radial†	21477.1	21820.7	5012.2	µg/L	5012.2	ppb	12:37:47
1	Fe 238.204 Radial†	4945.3	5017.1	5185.9	µg/L	5185.9	ppb	12:37:47
1	K 766.490 Radial†	11903.1	11067.9	5068.4	µg/L	5068.4	ppb	12:37:27
1	Mg 279.077 IEC†	1700.5	1734.7	5141.2	µg/L	5141.2	ppb	12:37:47
1	Na 589.592 Radial†	61173.5	61509.5	10019	µg/L	10019	ppb	12:37:27
1	Sr 421.552†	107144.2	109682.5	506.59	µg/L	506.59	ppb	12:37:27
1	Sc 361.383	1066429.9	1066429.9	99.538	%			12:38:46
1	Y 371.029	577283.9	577283.9	98.357	%			12:38:46
1	Ag 328.068†	65419.2	66323.9	501.64	µg/L	501.64	ppb	12:38:51
1	As 188.979†	937.0	970.9	510.55	µg/L	510.55	ppb	12:39:12
1	B 249.677†	7408.5	7297.3	492.60	µg/L	492.60	ppb	12:38:51
1	Ba 233.527†	45538.5	45879.9	501.28	µg/L	501.28	ppb	12:38:51
1	Be 313.107†	711447.2	714867.8	502.16	µg/L	502.16	ppb	12:38:46
1	Cd 226.502†	13385.5	13475.2	502.10	µg/L	502.10	ppb	12:38:51
1	Co 228.616†	15554.5	15758.4	501.32	µg/L	501.32	ppb	12:38:51
1	Cr 267.716†	17381.0	17388.0	498.89	µg/L	498.89	ppb	12:38:51
1	Cu 324.752†	131536.4	127082.3	511.46	µg/L	511.46	ppb	12:38:51
1	Mn 257.610†	268116.0	268981.0	503.43	µg/L	503.43	ppb	12:38:46
1	Mo 202.031†	3799.7	3812.9	513.59	µg/L	513.59	ppb	12:39:12
1	Ni 231.604†	7894.1	7757.9	516.79	µg/L	516.79	ppb	12:39:12
1	P 214.914†	3134.3	2980.6	2425.8	µg/L	2425.8	ppb	12:39:12
1	Pb 220.353†	1880.5	1896.3	506.36	µg/L	506.36	ppb	12:39:12
1	S 181.975 Axial†	460.1	420.4	967.03	µg/L	967.03	ppb	12:39:12
1	Sb 206.836†	1019.2	986.5	484.38	µg/L	484.38	ppb	12:39:12
1	Se 196.026†	559.5	594.9	508	µg/L	508	ppb	12:39:12
1	SiO2 †	75288.8	74306.6	5151.8	µg/L	5151.8	ppb	12:38:51
1	Sn 189.927†	1888.0	1909.7	497.57	µg/L	497.57	ppb	12:39:12
1	Ti 334.940†	364740.3	365934.3	499.91	µg/L	499.91	ppb	12:38:46
1	Tl 190.801†	1250.1	1291.3	508.57	µg/L	508.57	ppb	12:39:12
1	U 409.014†	7793.6	7435.0	498.50	µg/L	498.50	ppb	12:38:51
1	V 292.402†	32248.1	32520.3	504.76	µg/L	504.76	ppb	12:38:51
1	Zn 213.857†	21198.8	20717.1	499.06	µg/L	499.06	ppb	12:38:51
1	Si 251.611†	74175.9	73206.7	2430	µg/L	2430	ppb	12:40:20
2	Sc RADIAL	40046.5	40046.5	99.6	%			12:37:52
2	Al 396.153Radial†	16551.5	16519.6	4989.7	µg/L	4989.7	ppb	12:37:52
2	Ca 317.933Radial†	21524.8	21452.0	4927.6	µg/L	4927.6	ppb	12:38:12
2	Fe 238.204 Radial†	4968.5	4944.4	5110.8	µg/L	5110.8	ppb	12:38:12
2	K 766.490 Radial†	12035.8	10970.2	5023.6	µg/L	5023.6	ppb	12:37:52
2	Mg 279.077 IEC†	1714.9	1716.2	5086.5	µg/L	5086.5	ppb	12:38:12
2	Na 589.592 Radial†	62203.6	61356.7	9993.9	µg/L	9993.9	ppb	12:37:52
2	Sr 421.552†	109265.8	109733.4	506.82	µg/L	506.82	ppb	12:37:52
2	Sc 361.383	1074794.8	1074794.8	100.32	%			12:39:17
2	Y 371.029	581676.5	581676.5	99.105	%			12:39:17
2	Ag 328.068†	65123.9	65518.0	495.54	µg/L	495.54	ppb	12:39:23
2	As 188.979†	927.9	954.5	501.99	µg/L	501.99	ppb	12:39:43
2	B 249.677†	7427.1	7258.0	489.95	µg/L	489.95	ppb	12:39:23
2	Ba 233.527†	45239.0	45225.3	494.13	µg/L	494.13	ppb	12:39:23
2	Be 313.107†	718734.4	716569.1	503.36	µg/L	503.36	ppb	12:39:17
2	Cd 226.502†	13308.3	13293.6	495.33	µg/L	495.33	ppb	12:39:23
2	Co 228.616†	15495.0	15577.4	495.55	µg/L	495.55	ppb	12:39:23
2	Cr 267.716†	17339.6	17210.9	493.80	µg/L	493.80	ppb	12:39:23
2	Cu 324.752†	130806.6	125326.4	504.38	µg/L	504.38	ppb	12:39:23
2	Mn 257.610†	270803.7	269563.7	504.51	µg/L	504.51	ppb	12:39:17
2	Mo 202.031†	3799.7	3783.2	509.58	µg/L	509.58	ppb	12:39:43
2	Ni 231.604†	7866.4	7668.5	510.84	µg/L	510.84	ppb	12:39:43
2	P 214.914†	3129.8	2951.5	2402.5	µg/L	2402.5	ppb	12:39:43

2	Pb 220.353†	1851.5	1852.6	494.71 µg/L	494.71 ppb	12:39:43
2	S 181.975 Axial†	466.7	423.4	973.95 µg/L	973.95 ppb	12:39:43
2	Sb 206.836†	1023.9	983.1	482.78 µg/L	482.78 ppb	12:39:43
2	Se 196.026†	553.4	584.5	499 µg/L	499 ppb	12:39:43
2	SiO2 †	74961.3	73391.5	5088.2 µg/L	5088.2 ppb	12:39:23
2	Sn 189.927†	1892.2	1899.2	494.82 µg/L	494.82 ppb	12:39:43
2	Ti 334.940†	367916.5	366248.6	500.34 µg/L	500.34 ppb	12:39:17
2	Tl 190.801†	1252.4	1283.8	505.67 µg/L	505.67 ppb	12:39:43
2	U 409.014†	7852.2	7432.5	498.31 µg/L	498.31 ppb	12:39:23
2	V 292.402†	32176.1	32196.4	499.75 µg/L	499.75 ppb	12:39:23
2	Zn 213.857†	21030.6	20383.7	491.01 µg/L	491.01 ppb	12:39:23
2	Si 251.611†	73994.8	72446.2	2400 µg/L	2400 ppb	12:40:25
3	Sc RADIAL	40147.6	40147.6	99.9 %		12:38:18
3	Al 396.153Radial†	16631.0	16557.4	5000.9 µg/L	5000.9 ppb	12:38:18
3	Ca 317.933Radial†	21558.5	21431.3	4922.9 µg/L	4922.9 ppb	12:38:38
3	Fe 238.204 Radial†	4967.0	4930.3	5096.3 µg/L	5096.3 ppb	12:38:38
3	K 766.490 Radial†	12135.8	11039.9	5055.5 µg/L	5055.5 ppb	12:38:18
3	Mg 279.077 IEC†	1709.1	1706.1	5056.7 µg/L	5056.7 ppb	12:38:38
3	Na 589.592 Radial†	62404.1	61400.1	10001 µg/L	10001 ppb	12:38:18
3	Sr 421.552†	109412.9	109604.3	506.23 µg/L	506.23 ppb	12:38:18
3	Sc 361.383	1064519.5	1064519.5	99.360 %		12:39:49
3	Y 371.029	576107.5	576107.5	98.156 %		12:39:49
3	Ag 328.068†	65171.6	66192.6	500.64 µg/L	500.64 ppb	12:39:54
3	As 188.979†	929.1	964.7	507.35 µg/L	507.35 ppb	12:40:14
3	B 249.677†	7473.5	7376.1	497.93 µg/L	497.93 ppb	12:39:54
3	Ba 233.527†	45484.7	45907.9	501.59 µg/L	501.59 ppb	12:39:54
3	Be 313.107†	712267.9	716976.5	503.64 µg/L	503.64 ppb	12:39:49
3	Cd 226.502†	13363.1	13476.7	502.16 µg/L	502.16 ppb	12:39:54
3	Co 228.616†	15520.2	15751.9	501.11 µg/L	501.11 ppb	12:39:54
3	Cr 267.716†	17397.1	17435.6	500.25 µg/L	500.25 ppb	12:39:54
3	Cu 324.752†	130979.4	126758.9	510.15 µg/L	510.15 ppb	12:39:54
3	Mn 257.610†	268788.1	270140.7	505.59 µg/L	505.59 ppb	12:39:49
3	Mo 202.031†	3804.5	3824.6	515.15 µg/L	515.15 ppb	12:40:14
3	Ni 231.604†	7900.1	7778.1	518.14 µg/L	518.14 ppb	12:40:14
3	P 214.914†	3137.4	2989.4	2433.5 µg/L	2433.5 ppb	12:40:14
3	Pb 220.353†	1858.7	1877.7	501.42 µg/L	501.42 ppb	12:40:14
3	S 181.975 Axial†	467.4	428.6	986.01 µg/L	986.01 ppb	12:40:14
3	Sb 206.836†	1026.8	995.9	489.05 µg/L	489.05 ppb	12:40:14
3	Se 196.026†	553.7	590.0	504 µg/L	504 ppb	12:40:14
3	SiO2 †	75104.1	74256.4	5148.2 µg/L	5148.2 ppb	12:39:54
3	Sn 189.927†	1903.8	1929.0	502.58 µg/L	502.58 ppb	12:40:14
3	Ti 334.940†	365035.6	366889.1	501.21 µg/L	501.21 ppb	12:39:49
3	Tl 190.801†	1254.5	1297.9	511.17 µg/L	511.17 ppb	12:40:14
3	U 409.014†	7810.9	7466.5	500.62 µg/L	500.62 ppb	12:39:54
3	V 292.402†	32294.1	32624.8	506.38 µg/L	506.38 ppb	12:39:54
3	Zn 213.857†	21193.4	20750.0	499.87 µg/L	499.87 ppb	12:39:54
3	Si 251.611†	74599.5	73766.7	2440 µg/L	2440 ppb	12:40:31

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1068581.4	99.739	%	0.5101				0.51%
Sc RADIAL	39827.1	99.1	%	1.17				1.18%
Y 371.029	578355.9	98.539	%	0.5001				0.51%
Ag 328.068†	66011.5	499.27	µg/L	3.269	499.27	ppb	3.269	0.65%
QC value within limits for Ag 328.068 Recovery = 99.85%								
Al 396.153Radial†	16543.1	4996.7	µg/L	6.10	4996.7	ppb	6.10	0.12%
QC value within limits for Al 396.153Radial Recovery = 99.93%								
As 188.979†	963.4	506.63	µg/L	4.324	506.63	ppb	4.324	0.85%
QC value within limits for As 188.979 Recovery = 101.33%								
B 249.677†	7310.5	493.49	µg/L	4.066	493.49	ppb	4.066	0.82%
QC value within limits for B 249.677 Recovery = 98.70%								
Ba 233.527†	45671.1	499.00	µg/L	4.219	499.00	ppb	4.219	0.85%
QC value within limits for Ba 233.527 Recovery = 99.80%								
Be 313.107†	716137.8	503.05	µg/L	0.786	503.05	ppb	0.786	0.16%
QC value within limits for Be 313.107 Recovery = 100.61%								
Ca 317.933Radial†	21568.0	4954.2	µg/L	50.30	4954.2	ppb	50.30	1.02%
QC value within limits for Ca 317.933Radial Recovery = 99.08%								
Cd 226.502†	13415.2	499.86	µg/L	3.925	499.86	ppb	3.925	0.79%
QC value within limits for Cd 226.502 Recovery = 99.97%								

Co 228.616†	15695.9	499.33 µg/L	3.273	499.33 ppb	3.273	0.66%
QC value within limits for Co 228.616 Recovery = 99.87%						
Cr 267.716†	17344.8	497.65 µg/L	3.399	497.65 ppb	3.399	0.68%
QC value within limits for Cr 267.716 Recovery = 99.53%						
Cu 324.752†	126389.2	508.66 µg/L	3.764	508.66 ppb	3.764	0.74%
QC value within limits for Cu 324.752 Recovery = 101.73%						
Fe 238.204 Radial†	4964.0	5131.0 µg/L	48.08	5131.0 ppb	48.08	0.94%
QC value within limits for Fe 238.204 Radial Recovery = 102.62%						
K 766.490 Radial†	11026.0	5049.2 µg/L	23.04	5049.2 ppb	23.04	0.46%
QC value within limits for K 766.490 Radial Recovery = 100.98%						
Mg 279.077 IEC†	1719.0	5094.8 µg/L	42.88	5094.8 ppb	42.88	0.84%
QC value within limits for Mg 279.077 IEC Recovery = 101.90%						
Mn 257.610†	269561.8	504.51 µg/L	1.079	504.51 ppb	1.079	0.21%
QC value within limits for Mn 257.610 Recovery = 100.90%						
Mo 202.031†	3806.9	512.77 µg/L	2.873	512.77 ppb	2.873	0.56%
QC value within limits for Mo 202.031 Recovery = 102.55%						
Na 589.592 Radial†	61422.1	10005 µg/L	12.8	10005 ppb	12.8	0.13%
QC value within limits for Na 589.592 Radial Recovery = 100.05%						
Ni 231.604†	7734.8	515.26 µg/L	3.884	515.26 ppb	3.884	0.75%
QC value within limits for Ni 231.604 Recovery = 103.05%						
P 214.914†	2973.8	2420.6 µg/L	16.14	2420.6 ppb	16.14	0.67%
QC value within limits for P 214.914 Recovery = 96.82%						
Pb 220.353†	1875.5	500.83 µg/L	5.849	500.83 ppb	5.849	1.17%
QC value within limits for Pb 220.353 Recovery = 100.17%						
S 181.975 Axial†	424.1	975.66 µg/L	9.605	975.66 ppb	9.605	0.98%
QC value within limits for S 181.975 Axial Recovery = 97.57%						
Sb 206.836†	988.5	485.40 µg/L	3.257	485.40 ppb	3.257	0.67%
QC value within limits for Sb 206.836 Recovery = 97.08%						
Se 196.026†	589.8	504 µg/L	4.4	504 ppb	4.4	0.88%
QC value within limits for Se 196.026 Recovery = 100.74%						
SiO2 †	73984.8	5129.4 µg/L	35.69	5129.4 ppb	35.69	0.70%
QC value within limits for SiO2 Recovery = 95.92%						
Si 251.611†	73139.9	2420 µg/L	22.0	2420 ppb	22.0	0.91%
QC value within limits for Si 251.611 Recovery = 96.96%						
Sn 189.927†	1912.6	498.33 µg/L	3.936	498.33 ppb	3.936	0.79%
QC value within limits for Sn 189.927 Recovery = 99.67%						
Sr 421.552†	109673.4	506.55 µg/L	0.300	506.55 ppb	0.300	0.06%
QC value within limits for Sr 421.552 Recovery = 101.31%						
Ti 334.940†	366357.3	500.48 µg/L	0.663	500.48 ppb	0.663	0.13%
QC value within limits for Ti 334.940 Recovery = 100.10%						
Tl 190.801†	1291.0	508.47 µg/L	2.754	508.47 ppb	2.754	0.54%
QC value within limits for Tl 190.801 Recovery = 101.69%						
U 409.014†	7444.7	499.14 µg/L	1.282	499.14 ppb	1.282	0.26%
QC value within limits for U 409.014 Recovery = 99.83%						
V 292.402†	32447.2	503.63 µg/L	3.459	503.63 ppb	3.459	0.69%
QC value within limits for V 292.402 Recovery = 100.73%						
Zn 213.857†	20616.9	496.65 µg/L	4.896	496.65 ppb	4.896	0.99%
QC value within limits for Zn 213.857 Recovery = 99.33%						

All analyte(s) passed QC.

Sequence No.: 17
Sample ID: CCB
Nebulizer Back Pressure: 249.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 12:42:18
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39897.4	39897.4	99.2	%			12:43:44
1	Al 396.153Radial†	124.5	30.1	9.0976	µg/L	9.0976	ppb	12:43:44
1	Ca 317.933Radial†	171.3	17.2	3.9409	µg/L	3.9409	ppb	12:44:04
1	Fe 238.204 Radial†	43.4	0.6	0.6455	µg/L	0.6455	ppb	12:44:04
1	K 766.490 Radial†	1161.3	58.3	26.687	µg/L	26.687	ppb	12:43:44
1	Mg 279.077 IEC†	1.4	-3.8	-11.303	µg/L	-11.303	ppb	12:44:04
1	Na 589.592 Radial†	1083.2	5.8	0.9494	µg/L	0.9494	ppb	12:43:44
1	Sr 421.552†	-28.3	20.0	0.0924	µg/L	0.0924	ppb	12:43:44
1	Sc 361.383	1074806.0	1074806.0	100.32	%			12:45:02
1	Y 371.029	586453.9	586453.9	99.919	%			12:45:02
1	Ag 328.068†	-577.1	25.7	0.1955	µg/L	0.1955	ppb	12:45:07
1	As 188.979†	-28.5	1.1	0.5959	µg/L	0.5959	ppb	12:45:28
1	B 249.677†	208.7	62.5	4.2186	µg/L	4.2186	ppb	12:45:28
1	Ba 233.527†	-130.5	-0.0	-0.0001	µg/L	-0.0001	ppb	12:45:28
1	Be 313.107†	103.7	221.9	0.1554	µg/L	0.1554	ppb	12:45:07
1	Cd 226.502†	-24.7	2.9	0.1084	µg/L	0.1084	ppb	12:45:28
1	Co 228.616†	-136.0	-3.9	-0.1217	µg/L	-0.1217	ppb	12:45:28
1	Cr 267.716†	77.5	3.7	0.1067	µg/L	0.1067	ppb	12:45:28
1	Cu 324.752†	4892.6	-187.6	-0.7542	µg/L	-0.7542	ppb	12:45:07
1	Mn 257.610†	378.7	-2.0	-0.0032	µg/L	-0.0032	ppb	12:45:28
1	Mo 202.031†	12.1	7.6	1.0290	µg/L	1.0290	ppb	12:45:28
1	Ni 231.604†	176.8	3.4	0.2290	µg/L	0.2290	ppb	12:45:28
1	P 214.914†	177.0	8.1	7.0063	µg/L	7.0063	ppb	12:45:28
1	Pb 220.353†	-12.0	-4.9	-1.3038	µg/L	-1.3038	ppb	12:45:28
1	S 181.975 Axial†	37.3	-4.6	-10.606	µg/L	-10.606	ppb	12:45:28
1	Sb 206.836†	45.7	8.1	3.9842	µg/L	3.9842	ppb	12:45:28
1	Se 196.026†	-33.8	-0.9	-0.785	µg/L	-0.785	ppb	12:45:28
1	SiO2 †	1355.8	19.9	1.3424	µg/L	1.3424	ppb	12:45:07
1	Sn 189.927†	-0.8	12.1	3.1611	µg/L	3.1611	ppb	12:45:28
1	Ti 334.940†	785.4	283.9	0.3894	µg/L	0.3894	ppb	12:45:07
1	Tl 190.801†	-39.1	-3.6	-1.4181	µg/L	-1.4181	ppb	12:45:28
1	U 409.014†	359.7	-36.2	-2.4131	µg/L	-2.4131	ppb	12:45:07
1	V 292.402†	-99.1	23.7	0.3710	µg/L	0.3710	ppb	12:45:07
1	Zn 213.857†	513.7	-68.0	-1.6529	µg/L	-1.6529	ppb	12:45:28
1	Si 251.611†	1351.6	33.8	1.10	µg/L	1.10	ppb	12:46:35
2	Sc RADIAL	40251.3	40251.3	100	%			12:44:09
2	Al 396.153Radial†	71.5	-24.0	-7.3146	µg/L	-7.3146	ppb	12:44:09
2	Ca 317.933Radial†	162.8	7.2	1.6209	µg/L	1.6209	ppb	12:44:29
2	Fe 238.204 Radial†	45.4	2.2	2.3221	µg/L	2.3221	ppb	12:44:29
2	K 766.490 Radial†	1155.4	42.1	19.279	µg/L	19.279	ppb	12:44:09
2	Mg 279.077 IEC†	1.6	-3.7	-10.901	µg/L	-10.901	ppb	12:44:29
2	Na 589.592 Radial†	1085.7	-1.2	-0.2047	µg/L	-0.2047	ppb	12:44:09
2	Sr 421.552†	19.6	68.1	0.3145	µg/L	0.3145	ppb	12:44:09
2	Sc 361.383	1076426.0	1076426.0	100.47	%			12:45:33
2	Y 371.029	587578.3	587578.3	100.11	%			12:45:33
2	Ag 328.068†	-660.1	-56.0	-0.4189	µg/L	-0.4189	ppb	12:45:38
2	As 188.979†	-28.3	1.4	0.7419	µg/L	0.7419	ppb	12:45:58
2	B 249.677†	216.3	69.7	4.6989	µg/L	4.6989	ppb	12:45:58
2	Ba 233.527†	-128.2	2.5	0.0269	µg/L	0.0269	ppb	12:45:58
2	Be 313.107†	143.0	260.8	0.1824	µg/L	0.1824	ppb	12:45:38
2	Cd 226.502†	-24.5	3.1	0.1139	µg/L	0.1139	ppb	12:45:58
2	Co 228.616†	-127.5	4.7	0.1523	µg/L	0.1523	ppb	12:45:58
2	Cr 267.716†	65.9	-8.0	-0.2274	µg/L	-0.2274	ppb	12:45:58
2	Cu 324.752†	4870.0	-217.4	-0.8728	µg/L	-0.8728	ppb	12:45:38
2	Mn 257.610†	381.5	0.2	0.0014	µg/L	0.0014	ppb	12:45:58
2	Mo 202.031†	9.9	5.4	0.7316	µg/L	0.7316	ppb	12:45:58
2	Ni 231.604†	177.8	4.1	0.2744	µg/L	0.2744	ppb	12:45:58
2	P 214.914†	170.9	1.8	1.6700	µg/L	1.6700	ppb	12:45:58

2	Pb 220.353†	-13.6	-6.5	-1.7235 µg/L	-1.7235 ppb	12:45:58
2	S 181.975 Axial†	37.6	-4.4	-10.103 µg/L	-10.103 ppb	12:45:58
2	Sb 206.836†	55.0	17.3	8.5242 µg/L	8.5242 ppb	12:45:58
2	Se 196.026†	-28.7	4.2	3.57 µg/L	3.57 ppb	12:45:58
2	SiO2 †	1353.2	15.2	1.0308 µg/L	1.0308 ppb	12:45:38
2	Sn 189.927†	-2.2	10.8	2.7983 µg/L	2.7983 ppb	12:45:58
2	Ti 334.940†	724.3	222.0	0.3055 µg/L	0.3055 ppb	12:45:38
2	Tl 190.801†	-37.5	-2.0	-0.7736 µg/L	-0.7736 ppb	12:45:58
2	U 409.014†	338.1	-58.3	-3.8882 µg/L	-3.8882 ppb	12:45:38
2	V 292.402†	-90.5	32.5	0.5001 µg/L	0.5001 ppb	12:45:38
2	Zn 213.857†	513.9	-68.6	-1.6671 µg/L	-1.6671 ppb	12:45:58
2	Si 251.611†	1341.8	22.0	0.718 µg/L	0.718 ppb	12:46:40
3	Sc RADIAL	40293.0	40293.0	100 %		12:44:34
3	Al 396.153Radial†	88.9	-6.6	-2.0252 µg/L	-2.0252 ppb	12:44:34
3	Ca 317.933Radial†	170.2	14.4	3.2844 µg/L	3.2844 ppb	12:44:54
3	Fe 238.204 Radial†	44.3	1.0	1.0776 µg/L	1.0776 ppb	12:44:54
3	K 766.490 Radial†	1081.5	-32.8	-15.001 µg/L	-15.001 ppb	12:44:34
3	Mg 279.077 IEC†	4.1	-1.2	-3.6054 µg/L	-3.6054 ppb	12:44:54
3	Na 589.592 Radial†	1025.7	-62.2	-10.134 µg/L	-10.134 ppb	12:44:34
3	Sr 421.552†	-26.1	22.5	0.1037 µg/L	0.1037 ppb	12:44:34
3	Sc 361.383	1078032.7	1078032.7	100.62 %		12:46:04
3	Y 371.029	588415.0	588415.0	100.25 %		12:46:04
3	Ag 328.068†	-634.8	-29.9	-0.2238 µg/L	-0.2238 ppb	12:46:09
3	As 188.979†	-22.9	6.8	3.5417 µg/L	3.5417 ppb	12:46:29
3	B 249.677†	206.4	59.6	4.0166 µg/L	4.0166 ppb	12:46:29
3	Ba 233.527†	-130.8	0.1	0.0005 µg/L	0.0005 ppb	12:46:29
3	Be 313.107†	143.8	261.4	0.1832 µg/L	0.1832 ppb	12:46:09
3	Cd 226.502†	-29.7	-2.0	-0.0736 µg/L	-0.0736 ppb	12:46:29
3	Co 228.616†	-140.9	-8.4	-0.2659 µg/L	-0.2659 ppb	12:46:29
3	Cr 267.716†	70.3	-3.7	-0.1057 µg/L	-0.1057 ppb	12:46:29
3	Cu 324.752†	5063.1	-32.7	-0.1303 µg/L	-0.1303 ppb	12:46:09
3	Mn 257.610†	391.2	9.3	0.0178 µg/L	0.0178 ppb	12:46:29
3	Mo 202.031†	6.5	2.0	0.2699 µg/L	0.2699 ppb	12:46:29
3	Ni 231.604†	169.9	-4.0	-0.2649 µg/L	-0.2649 ppb	12:46:29
3	P 214.914†	168.5	-0.8	-0.6617 µg/L	-0.6617 ppb	12:46:29
3	Pb 220.353†	-12.6	-5.5	-1.4636 µg/L	-1.4636 ppb	12:46:29
3	S 181.975 Axial†	39.4	-2.6	-6.0896 µg/L	-6.0896 ppb	12:46:29
3	Sb 206.836†	52.2	14.5	7.1136 µg/L	7.1136 ppb	12:46:29
3	Se 196.026†	-33.5	-0.5	-0.417 µg/L	-0.417 ppb	12:46:29
3	SiO2 †	1352.0	12.0	0.8230 µg/L	0.8230 ppb	12:46:09
3	Sn 189.927†	-2.6	10.4	2.6952 µg/L	2.6952 ppb	12:46:29
3	Ti 334.940†	730.7	227.3	0.3118 µg/L	0.3118 ppb	12:46:09
3	Tl 190.801†	-30.8	4.8	1.8714 µg/L	1.8714 ppb	12:46:29
3	U 409.014†	368.1	-28.9	-1.9301 µg/L	-1.9301 ppb	12:46:09
3	V 292.402†	-107.9	15.3	0.2348 µg/L	0.2348 ppb	12:46:09
3	Zn 213.857†	517.5	-65.7	-1.5953 µg/L	-1.5953 ppb	12:46:29
3	Si 251.611†	1324.3	2.7	0.081 µg/L	0.081 ppb	12:46:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1076421.6	100.47	%	0.151				0.15%
Sc RADIAL	40147.2	99.9	%	0.54				0.54%
Y 371.029	587482.4	100.09	%	0.168				0.17%
Ag 328.068†	-20.0	-0.1491	µg/L	0.31393	-0.1491	ppb	0.31393	210.58%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-0.2	-0.0807	µg/L	8.37709	-0.0807	ppb	8.37709	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.1	1.6265	µg/L	1.66021	1.6265	ppb	1.66021	102.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	63.9	4.3114	µg/L	0.35047	4.3114	ppb	0.35047	8.13%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.8	0.0091	µg/L	0.01542	0.0091	ppb	0.01542	169.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	248.0	0.1737	µg/L	0.01584	0.1737	ppb	0.01584	9.12%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	12.9	2.9487	µg/L	1.19584	2.9487	ppb	1.19584	40.55%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.3	0.0496	µg/L	0.10672	0.0496	ppb	0.10672	215.30%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-2.5	-0.0784 µg/L	0.21245	-0.0784 ppb	0.21245	270.95%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-2.7	-0.0755 µg/L	0.16910	-0.0755 ppb	0.16910	224.09%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-145.9	-0.5858 µg/L	0.39889	-0.5858 ppb	0.39889	68.10%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.3	1.3484 µg/L	0.87051	1.3484 ppb	0.87051	64.56%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	22.5	10.322 µg/L	22.2405	10.322 ppb	22.2405	215.47%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-2.9	-8.6034 µg/L	4.33306	-8.6034 ppb	4.33306	50.36%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	2.5	0.0053 µg/L	0.01102	0.0053 ppb	0.01102	206.82%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.0	0.6768 µg/L	0.38248	0.6768 ppb	0.38248	56.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-19.2	-3.1298 µg/L	6.09336	-3.1298 ppb	6.09336	194.69%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.1	0.0795 µg/L	0.29914	0.0795 ppb	0.29914	376.23%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	3.0	2.6715 µg/L	3.93085	2.6715 ppb	3.93085	147.14%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-5.6	-1.4970 µg/L	0.21184	-1.4970 ppb	0.21184	14.15%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-3.9	-8.9329 µg/L	2.47514	-8.9329 ppb	2.47514	27.71%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	13.3	6.5407 µg/L	2.32358	6.5407 ppb	2.32358	35.53%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.9	0.789 µg/L	2.4133	0.789 ppb	2.4133	306.04%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	15.7	1.0654 µg/L	0.26141	1.0654 ppb	0.26141	24.54%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	19.5	0.635 µg/L	0.5169	0.635 ppb	0.5169	81.41%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	11.1	2.8849 µg/L	0.24470	2.8849 ppb	0.24470	8.48%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	36.8	0.1702 µg/L	0.12510	0.1702 ppb	0.12510	73.51%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	244.4	0.3356 µg/L	0.04672	0.3356 ppb	0.04672	13.92%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.3	-0.1068 µg/L	1.74320	-0.1068 ppb	1.74320	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-41.1	-2.7438 µg/L	1.02006	-2.7438 ppb	1.02006	37.18%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	23.8	0.3687 µg/L	0.13269	0.3687 ppb	0.13269	35.99%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-67.4	-1.6384 µg/L	0.03802	-1.6384 ppb	0.03802	2.32%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCV
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/24/2005 13:08:17
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39901.1	39901.1	99.3	%			13:09:44
1	Al 396.153Radial†	16531.2	16559.7	5001.8	µg/L	5001.8	ppb	13:09:44
1	Ca 317.933Radial†	21549.1	21555.1	4951.3	µg/L	4951.3	ppb	13:10:04
1	Fe 238.204 Radial†	4937.1	4931.0	5097.0	µg/L	5097.0	ppb	13:10:04
1	K 766.490 Radial†	12193.1	11172.6	5116.3	µg/L	5116.3	ppb	13:09:44
1	Mg 279.077 IEC†	1699.6	1707.1	5059.4	µg/L	5059.4	ppb	13:10:04
1	Na 589.592 Radial†	62090.7	61470.4	10012	µg/L	10012	ppb	13:09:44
1	Sr 421.552†	108166.1	109025.1	503.55	µg/L	503.55	ppb	13:09:44
1	Sc 361.383	1061920.8	1061920.8	99.117	%			13:11:03
1	Y 371.029	574460.1	574460.1	97.876	%			13:11:03
1	Ag 328.068†	64926.0	66105.3	499.97	µg/L	499.97	ppb	13:11:08
1	As 188.979†	924.2	962.0	505.91	µg/L	505.91	ppb	13:11:29
1	B 249.677†	7403.4	7323.8	494.39	µg/L	494.39	ppb	13:11:08
1	Ba 233.527†	45262.3	45795.5	500.36	µg/L	500.36	ppb	13:11:08
1	Be 313.107†	707867.5	714291.2	501.76	µg/L	501.76	ppb	13:11:03
1	Cd 226.502†	13256.4	13402.0	499.38	µg/L	499.38	ppb	13:11:08
1	Co 228.616†	15471.1	15740.6	500.75	µg/L	500.75	ppb	13:11:08
1	Cr 267.716†	17237.7	17317.6	496.86	µg/L	496.86	ppb	13:11:08
1	Cu 324.752†	130659.0	126758.3	510.14	µg/L	510.14	ppb	13:11:08
1	Mn 257.610†	267188.3	269188.7	503.81	µg/L	503.81	ppb	13:11:03
1	Mo 202.031†	3771.1	3800.2	511.87	µg/L	511.87	ppb	13:11:29
1	Ni 231.604†	7803.1	7699.7	512.92	µg/L	512.92	ppb	13:11:29
1	P 214.914†	3100.1	2959.4	2408.2	µg/L	2408.2	ppb	13:11:29
1	Pb 220.353†	1853.5	1877.0	501.22	µg/L	501.22	ppb	13:11:29
1	S 181.975 Axial†	473.5	435.9	1002.9	µg/L	1002.9	ppb	13:11:29
1	Sb 206.836†	1005.5	977.0	479.73	µg/L	479.73	ppb	13:11:29
1	Se 196.026†	550.0	587.7	502	µg/L	502	ppb	13:11:29
1	SiO2 †	74581.7	73914.4	5124.5	µg/L	5124.5	ppb	13:11:08
1	Sn 189.927†	1874.4	1904.0	496.09	µg/L	496.09	ppb	13:11:29
1	Ti 334.940†	362705.8	365437.5	499.22	µg/L	499.22	ppb	13:11:03
1	Tl 190.801†	1235.2	1281.5	504.75	µg/L	504.75	ppb	13:11:29
1	U 409.014†	7872.2	7547.6	506.02	µg/L	506.02	ppb	13:11:08
1	V 292.402†	32055.7	32463.8	503.88	µg/L	503.88	ppb	13:11:08
1	Zn 213.857†	20989.2	20596.1	496.16	µg/L	496.16	ppb	13:11:08
1	Si 251.611†	73846.1	73190.3	2430	µg/L	2430	ppb	13:12:37
2	Sc RADIAL	39779.6	39779.6	99.0	%			13:10:09
2	Al 396.153Radial†	16442.1	16520.5	4989.8	µg/L	4989.8	ppb	13:10:09
2	Ca 317.933Radial†	21493.5	21565.2	4953.6	µg/L	4953.6	ppb	13:10:29
2	Fe 238.204 Radial†	4930.8	4939.8	5106.1	µg/L	5106.1	ppb	13:10:29
2	K 766.490 Radial†	12118.4	11134.7	5098.9	µg/L	5098.9	ppb	13:10:09
2	Mg 279.077 IEC†	1698.1	1710.8	5070.4	µg/L	5070.4	ppb	13:10:29
2	Na 589.592 Radial†	62045.1	61615.3	10036	µg/L	10036	ppb	13:10:09
2	Sr 421.552†	108216.8	109409.0	505.32	µg/L	505.32	ppb	13:10:09
2	Sc 361.383	1067631.9	1067631.9	99.650	%			13:11:35
2	Y 371.029	577892.6	577892.6	98.461	%			13:11:35
2	Ag 328.068†	65110.6	65940.2	498.73	µg/L	498.73	ppb	13:11:40
2	As 188.979†	927.1	959.9	504.85	µg/L	504.85	ppb	13:12:00
2	B 249.677†	7443.5	7324.1	494.41	µg/L	494.41	ppb	13:11:40
2	Ba 233.527†	45499.8	45789.6	500.30	µg/L	500.30	ppb	13:11:40
2	Be 313.107†	712050.4	714668.4	502.02	µg/L	502.02	ppb	13:11:35
2	Cd 226.502†	13334.2	13408.6	499.62	µg/L	499.62	ppb	13:11:40
2	Co 228.616†	15576.2	15762.6	501.45	µg/L	501.45	ppb	13:11:40
2	Cr 267.716†	17397.1	17384.5	498.78	µg/L	498.78	ppb	13:11:40
2	Cu 324.752†	131146.6	126542.4	509.27	µg/L	509.27	ppb	13:11:40
2	Mn 257.610†	268530.1	269093.2	503.63	µg/L	503.63	ppb	13:11:35
2	Mo 202.031†	3807.7	3816.6	514.08	µg/L	514.08	ppb	13:12:00
2	Ni 231.604†	7850.7	7705.3	513.30	µg/L	513.30	ppb	13:12:00
2	P 214.914†	3121.5	2964.1	2412.3	µg/L	2412.3	ppb	13:12:00

2	Pb 220.353†	1860.6	1874.2	500.47 µg/L	500.47 ppb	13:12:00
2	S 181.975 Axial†	477.6	437.5	1006.6 µg/L	1006.6 ppb	13:12:00
2	Sb 206.836†	1030.9	997.0	489.58 µg/L	489.58 ppb	13:12:00
2	Se 196.026†	549.2	583.9	499 µg/L	499 ppb	13:12:00
2	SiO2 †	74989.0	73920.5	5124.9 µg/L	5124.9 ppb	13:11:40
2	Sn 189.927†	1893.3	1912.9	498.41 µg/L	498.41 ppb	13:12:00
2	Ti 334.940†	364999.6	365782.0	499.69 µg/L	499.69 ppb	13:11:35
2	Tl 190.801†	1236.1	1275.8	502.51 µg/L	502.51 ppb	13:12:00
2	U 409.014†	7900.7	7533.7	505.09 µg/L	505.09 ppb	13:11:40
2	V 292.402†	32209.6	32445.2	503.62 µg/L	503.62 ppb	13:11:40
2	Zn 213.857†	21114.9	20609.0	496.47 µg/L	496.47 ppb	13:11:40
2	Si 251.611†	74162.2	73109.0	2420 µg/L	2420 ppb	13:12:42
3	Sc RADIAL	40048.6	40048.6	99.6 %		13:10:35
3	Al 396.153Radial†	16592.9	16560.3	5001.7 µg/L	5001.7 ppb	13:10:35
3	Ca 317.933Radial†	21583.2	21509.4	4940.8 µg/L	4940.8 ppb	13:10:55
3	Fe 238.204 Radial†	4934.2	4909.8	5075.1 µg/L	5075.1 ppb	13:10:55
3	K 766.490 Radial†	12246.3	11180.8	5120.0 µg/L	5120.0 ppb	13:10:35
3	Mg 279.077 IEC†	1705.8	1707.0	5059.5 µg/L	5059.5 ppb	13:10:55
3	Na 589.592 Radial†	62477.0	61627.8	10038 µg/L	10038 ppb	13:10:35
3	Sr 421.552†	108908.8	109369.2	505.14 µg/L	505.14 ppb	13:10:35
3	Sc 361.383	1062416.3	1062416.3	99.163 %		13:12:06
3	Y 371.029	574923.4	574923.4	97.955 %		13:12:06
3	Ag 328.068†	65761.5	66917.3	506.10 µg/L	506.10 ppb	13:12:11
3	As 188.979†	922.1	959.5	504.68 µg/L	504.68 ppb	13:12:31
3	B 249.677†	7550.6	7468.7	504.19 µg/L	504.19 ppb	13:12:11
3	Ba 233.527†	45757.9	46274.0	505.59 µg/L	505.59 ppb	13:12:11
3	Be 313.107†	709042.3	715142.8	502.36 µg/L	502.36 ppb	13:12:06
3	Cd 226.502†	13399.6	13540.1	504.52 µg/L	504.52 ppb	13:12:11
3	Co 228.616†	15599.3	15862.6	504.64 µg/L	504.64 ppb	13:12:11
3	Cr 267.716†	17490.5	17564.5	503.95 µg/L	503.95 ppb	13:12:11
3	Cu 324.752†	132523.5	128577.0	517.47 µg/L	517.47 ppb	13:12:11
3	Mn 257.610†	267385.6	269261.9	503.95 µg/L	503.95 ppb	13:12:06
3	Mo 202.031†	3808.9	3836.7	516.77 µg/L	516.77 ppb	13:12:31
3	Ni 231.604†	7848.7	7742.0	515.74 µg/L	515.74 ppb	13:12:31
3	P 214.914†	3114.0	2972.0	2417.7 µg/L	2417.7 ppb	13:12:31
3	Pb 220.353†	1852.7	1875.3	500.78 µg/L	500.78 ppb	13:12:31
3	S 181.975 Axial†	476.0	438.2	1008.3 µg/L	1008.3 ppb	13:12:31
3	Sb 206.836†	1033.3	1004.6	493.25 µg/L	493.25 ppb	13:12:31
3	Se 196.026†	556.0	593.4	507 µg/L	507 ppb	13:12:31
3	SiO2 †	75663.9	74970.6	5197.8 µg/L	5197.8 ppb	13:12:11
3	Sn 189.927†	1886.2	1915.1	498.96 µg/L	498.96 ppb	13:12:31
3	Ti 334.940†	363623.8	366192.6	500.25 µg/L	500.25 ppb	13:12:06
3	Tl 190.801†	1237.7	1283.5	505.51 µg/L	505.51 ppb	13:12:31
3	U 409.014†	7855.8	7527.4	504.70 µg/L	504.70 ppb	13:12:11
3	V 292.402†	32434.5	32830.7	509.57 µg/L	509.57 ppb	13:12:11
3	Zn 213.857†	21217.6	20816.6	501.49 µg/L	501.49 ppb	13:12:11
3	Si 251.611†	74059.6	73371.0	2430 µg/L	2430 ppb	13:12:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1063989.7	99.310	%	0.2953				0.30%
Sc RADIAL	39909.8	99.3	%	0.34				0.34%
Y 371.029	575758.7	98.097	%	0.3173				0.32%
Ag 328.068†	66320.9	501.60	µg/L	3.945	501.60	ppb	3.945	0.79%
QC value within limits for Ag 328.068 Recovery = 100.32%								
Al 396.153Radial†	16546.8	4997.7	µg/L	6.91	4997.7	ppb	6.91	0.14%
QC value within limits for Al 396.153Radial Recovery = 99.95%								
As 188.979†	960.5	505.15	µg/L	0.665	505.15	ppb	0.665	0.13%
QC value within limits for As 188.979 Recovery = 101.03%								
B 249.677†	7372.2	497.66	µg/L	5.650	497.66	ppb	5.650	1.14%
QC value within limits for B 249.677 Recovery = 99.53%								
Ba 233.527†	45953.1	502.08	µg/L	3.037	502.08	ppb	3.037	0.60%
QC value within limits for Ba 233.527 Recovery = 100.42%								
Be 313.107†	714700.8	502.05	µg/L	0.300	502.05	ppb	0.300	0.06%
QC value within limits for Be 313.107 Recovery = 100.41%								
Ca 317.933Radial†	21543.2	4948.6	µg/L	6.83	4948.6	ppb	6.83	0.14%
QC value within limits for Ca 317.933Radial Recovery = 98.97%								
Cd 226.502†	13450.2	501.17	µg/L	2.905	501.17	ppb	2.905	0.58%
QC value within limits for Cd 226.502 Recovery = 100.23%								

Co 228.616†	15788.6	502.28 µg/L	2.074	502.28 ppb	2.074	0.41%
QC value within limits for Co 228.616 Recovery = 100.46%						
Cr 267.716†	17422.2	499.86 µg/L	3.666	499.86 ppb	3.666	0.73%
QC value within limits for Cr 267.716 Recovery = 99.97%						
Cu 324.752†	127292.6	512.30 µg/L	4.500	512.30 ppb	4.500	0.88%
QC value within limits for Cu 324.752 Recovery = 102.46%						
Fe 238.204 Radial†	4926.8	5092.7 µg/L	15.91	5092.7 ppb	15.91	0.31%
QC value within limits for Fe 238.204 Radial Recovery = 101.85%						
K 766.490 Radial†	11162.7	5111.8 µg/L	11.27	5111.8 ppb	11.27	0.22%
QC value within limits for K 766.490 Radial Recovery = 102.24%						
Mg 279.077 IEC†	1708.3	5063.1 µg/L	6.34	5063.1 ppb	6.34	0.13%
QC value within limits for Mg 279.077 IEC Recovery = 101.26%						
Mn 257.610†	269181.3	503.80 µg/L	0.157	503.80 ppb	0.157	0.03%
QC value within limits for Mn 257.610 Recovery = 100.76%						
Mo 202.031†	3817.8	514.24 µg/L	2.455	514.24 ppb	2.455	0.48%
QC value within limits for Mo 202.031 Recovery = 102.85%						
Na 589.592 Radial†	61571.1	10029 µg/L	14.2	10029 ppb	14.2	0.14%
QC value within limits for Na 589.592 Radial Recovery = 100.29%						
Ni 231.604†	7715.7	513.99 µg/L	1.532	513.99 ppb	1.532	0.30%
QC value within limits for Ni 231.604 Recovery = 102.80%						
P 214.914†	2965.2	2412.7 µg/L	4.73	2412.7 ppb	4.73	0.20%
QC value within limits for P 214.914 Recovery = 96.51%						
Pb 220.353†	1875.5	500.82 µg/L	0.380	500.82 ppb	0.380	0.08%
QC value within limits for Pb 220.353 Recovery = 100.16%						
S 181.975 Axial†	437.2	1006.0 µg/L	2.77	1006.0 ppb	2.77	0.28%
QC value within limits for S 181.975 Axial Recovery = 100.60%						
Sb 206.836†	992.9	487.52 µg/L	6.988	487.52 ppb	6.988	1.43%
QC value within limits for Sb 206.836 Recovery = 97.50%						
Se 196.026†	588.3	502 µg/L	4.1	502 ppb	4.1	0.81%
QC value within limits for Se 196.026 Recovery = 100.49%						
SiO2 †	74268.5	5149.1 µg/L	42.21	5149.1 ppb	42.21	0.82%
QC value within limits for SiO2 Recovery = 96.29%						
Si 251.611†	73223.4	2430 µg/L	4.4	2430 ppb	4.4	0.18%
QC value within limits for Si 251.611 Recovery = 97.07%						
Sn 189.927†	1910.7	497.82 µg/L	1.525	497.82 ppb	1.525	0.31%
QC value within limits for Sn 189.927 Recovery = 99.56%						
Sr 421.552†	109267.8	504.67 µg/L	0.975	504.67 ppb	0.975	0.19%
QC value within limits for Sr 421.552 Recovery = 100.93%						
Ti 334.940†	365804.0	499.72 µg/L	0.516	499.72 ppb	0.516	0.10%
QC value within limits for Ti 334.940 Recovery = 99.94%						
Tl 190.801†	1280.3	504.26 µg/L	1.560	504.26 ppb	1.560	0.31%
QC value within limits for Tl 190.801 Recovery = 100.85%						
U 409.014†	7536.2	505.27 µg/L	0.676	505.27 ppb	0.676	0.13%
QC value within limits for U 409.014 Recovery = 101.05%						
V 292.402†	32579.9	505.69 µg/L	3.359	505.69 ppb	3.359	0.66%
QC value within limits for V 292.402 Recovery = 101.14%						
Zn 213.857†	20673.9	498.04 µg/L	2.996	498.04 ppb	2.996	0.60%
QC value within limits for Zn 213.857 Recovery = 99.61%						

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: CCB
Nebulizer Back Pressure: 249.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 13:14:35
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	39867.3	39867.3	99.2	%			13:16:01
1	Al 396.153Radial†	34.3	-60.8	-18.458	µg/L	-18.458	ppb	13:16:01
1	Ca 317.933Radial†	171.3	17.3	3.9717	µg/L	3.9717	ppb	13:16:21
1	Fe 238.204 Radial†	45.5	2.8	2.8866	µg/L	2.8866	ppb	13:16:21
1	K 766.490 Radial†	1193.6	91.8	42.035	µg/L	42.035	ppb	13:16:01
1	Mg 279.077 IEC†	2.8	-2.5	-7.2444	µg/L	-7.2444	ppb	13:16:21
1	Na 589.592 Radial†	1339.3	264.9	43.158	µg/L	43.158	ppb	13:16:01
1	Sr 421.552†	-54.6	-6.6	-0.0303	µg/L	-0.0303	ppb	13:16:01
1	Sc 361.383	1078524.0	1078524.0	100.67	%			13:17:20
1	Y 371.029	588778.0	588778.0	100.32	%			13:17:20
1	Ag 328.068†	-631.0	-25.9	-0.1925	µg/L	-0.1925	ppb	13:17:25
1	As 188.979†	-27.3	2.4	1.2627	µg/L	1.2627	ppb	13:17:45
1	B 249.677†	212.3	65.3	4.4051	µg/L	4.4051	ppb	13:17:45
1	Ba 233.527†	-126.2	4.7	0.0514	µg/L	0.0514	ppb	13:17:45
1	Be 313.107†	125.5	243.2	0.1705	µg/L	0.1705	ppb	13:17:25
1	Cd 226.502†	-23.2	4.5	0.1658	µg/L	0.1658	ppb	13:17:45
1	Co 228.616†	-128.2	4.3	0.1366	µg/L	0.1366	ppb	13:17:45
1	Cr 267.716†	88.8	14.6	0.4193	µg/L	0.4193	ppb	13:17:45
1	Cu 324.752†	4899.9	-197.1	-0.7923	µg/L	-0.7923	ppb	13:17:25
1	Mn 257.610†	419.9	37.6	0.0711	µg/L	0.0711	ppb	13:17:45
1	Mo 202.031†	7.0	2.5	0.3424	µg/L	0.3424	ppb	13:17:45
1	Ni 231.604†	184.0	9.9	0.6643	µg/L	0.6643	ppb	13:17:45
1	P 214.914†	178.6	9.1	7.8606	µg/L	7.8606	ppb	13:17:45
1	Pb 220.353†	-10.5	-3.4	-0.9066	µg/L	-0.9066	ppb	13:17:45
1	S 181.975 Axial†	49.2	7.1	16.462	µg/L	16.462	ppb	13:17:45
1	Sb 206.836†	56.0	18.2	8.9466	µg/L	8.9466	ppb	13:17:45
1	Se 196.026†	-28.7	4.3	3.69	µg/L	3.69	ppb	13:17:45
1	SiO2 †	1358.1	17.4	1.1885	µg/L	1.1885	ppb	13:17:25
1	Sn 189.927†	7.0	19.9	5.1858	µg/L	5.1858	ppb	13:17:45
1	Ti 334.940†	850.6	346.0	0.4739	µg/L	0.4739	ppb	13:17:25
1	Tl 190.801†	-37.0	-1.4	-0.5449	µg/L	-0.5449	ppb	13:17:45
1	U 409.014†	369.1	-28.1	-1.8758	µg/L	-1.8758	ppb	13:17:25
1	V 292.402†	-87.5	35.6	0.5481	µg/L	0.5481	ppb	13:17:25
1	Zn 213.857†	500.8	-82.5	-2.0090	µg/L	-2.0090	ppb	13:17:45
1	Si 251.611†	1363.2	40.7	1.34	µg/L	1.34	ppb	13:18:53
2	Sc RADIAL	40632.9	40632.9	101	%			13:16:26
2	Al 396.153Radial†	61.7	-34.3	-10.429	µg/L	-10.429	ppb	13:16:26
2	Ca 317.933Radial†	169.2	12.0	2.7444	µg/L	2.7444	ppb	13:16:47
2	Fe 238.204 Radial†	41.8	-1.7	-1.8015	µg/L	-1.8015	ppb	13:16:47
2	K 766.490 Radial†	1147.5	23.5	10.766	µg/L	10.766	ppb	13:16:26
2	Mg 279.077 IEC†	7.2	1.8	5.4087	µg/L	5.4087	ppb	13:16:47
2	Na 589.592 Radial†	1270.3	171.3	27.897	µg/L	27.897	ppb	13:16:26
2	Sr 421.552†	-34.0	14.9	0.0688	µg/L	0.0688	ppb	13:16:26
2	Sc 361.383	1063663.5	1063663.5	99.280	%			13:17:51
2	Y 371.029	580664.1	580664.1	98.933	%			13:17:51
2	Ag 328.068†	-629.1	-32.7	-0.2457	µg/L	-0.2457	ppb	13:17:56
2	As 188.979†	-32.1	-2.8	-1.4279	µg/L	-1.4279	ppb	13:18:16
2	B 249.677†	197.7	53.5	3.6120	µg/L	3.6120	ppb	13:18:16
2	Ba 233.527†	-126.2	2.9	0.0318	µg/L	0.0318	ppb	13:18:16
2	Be 313.107†	142.5	262.1	0.1836	µg/L	0.1836	ppb	13:17:56
2	Cd 226.502†	-20.2	7.2	0.2682	µg/L	0.2682	ppb	13:18:16
2	Co 228.616†	-137.9	-7.2	-0.2301	µg/L	-0.2301	ppb	13:18:16
2	Cr 267.716†	76.1	3.1	0.0894	µg/L	0.0894	ppb	13:18:16
2	Cu 324.752†	4876.5	-152.7	-0.6134	µg/L	-0.6134	ppb	13:17:56
2	Mn 257.610†	392.0	15.4	0.0287	µg/L	0.0287	ppb	13:18:16
2	Mo 202.031†	8.4	4.0	0.5412	µg/L	0.5412	ppb	13:18:16
2	Ni 231.604†	172.5	0.9	0.0619	µg/L	0.0619	ppb	13:18:16
2	P 214.914†	169.3	2.2	2.0016	µg/L	2.0016	ppb	13:18:16

2	Pb 220.353†	-8.1	-1.2	-0.3074 µg/L	-0.3074 ppb	13:18:16
2	S 181.975 Axial†	49.6	8.2	18.878 µg/L	18.878 ppb	13:18:16
2	Sb 206.836†	49.2	12.1	5.9719 µg/L	5.9719 ppb	13:18:16
2	Se 196.026†	-31.9	0.6	0.543 µg/L	0.543 ppb	13:18:16
2	SiO2 †	1354.9	33.1	2.2715 µg/L	2.2715 ppb	13:17:56
2	Sn 189.927†	2.8	15.8	4.1086 µg/L	4.1086 ppb	13:18:16
2	Ti 334.940†	816.4	323.4	0.4432 µg/L	0.4432 ppb	13:17:56
2	Tl 190.801†	-42.0	-7.0	-2.7381 µg/L	-2.7381 ppb	13:18:16
2	U 409.014†	357.3	-34.8	-2.3252 µg/L	-2.3252 ppb	13:17:56
2	V 292.402†	-110.3	11.4	0.1778 µg/L	0.1778 ppb	13:17:56
2	Zn 213.857†	515.1	-61.2	-1.4866 µg/L	-1.4866 ppb	13:18:16
2	Si 251.611†	1320.7	16.8	0.546 µg/L	0.546 ppb	13:18:58
3	Sc RADIAL	40760.1	40760.1	101 %		13:16:52
3	Al 396.153Radial†	105.4	8.6	2.5679 µg/L	2.5679 ppb	13:16:52
3	Ca 317.933Radial†	156.2	-1.4	-0.3288 µg/L	-0.3288 ppb	13:17:12
3	Fe 238.204 Radial†	40.7	-2.9	-3.0293 µg/L	-3.0293 ppb	13:17:12
3	K 766.490 Radial†	1129.6	2.3	1.0657 µg/L	1.0657 ppb	13:16:52
3	Mg 279.077 IEC†	1.7	-3.6	-10.657 µg/L	-10.657 ppb	13:17:12
3	Na 589.592 Radial†	1370.4	266.0	43.332 µg/L	43.332 ppb	13:16:52
3	Sr 421.552†	-33.3	15.7	0.0727 µg/L	0.0727 ppb	13:16:52
3	Sc 361.383	1079398.1	1079398.1	100.75 %		13:18:21
3	Y 371.029	589086.9	589086.9	100.37 %		13:18:21
3	Ag 328.068†	-627.4	-21.7	-0.1625 µg/L	-0.1625 ppb	13:18:27
3	As 188.979†	-27.9	1.9	1.0026 µg/L	1.0026 ppb	13:18:47
3	B 249.677†	196.2	49.2	3.3206 µg/L	3.3206 ppb	13:18:47
3	Ba 233.527†	-137.2	-6.1	-0.0668 µg/L	-0.0668 ppb	13:18:47
3	Be 313.107†	127.6	245.2	0.1715 µg/L	0.1715 ppb	13:18:27
3	Cd 226.502†	-23.8	3.9	0.1430 µg/L	0.1430 ppb	13:18:47
3	Co 228.616†	-138.0	-5.3	-0.1676 µg/L	-0.1676 ppb	13:18:47
3	Cr 267.716†	73.2	-1.0	-0.0263 µg/L	-0.0263 ppb	13:18:47
3	Cu 324.752†	4901.3	-199.7	-0.8022 µg/L	-0.8022 ppb	13:18:27
3	Mn 257.610†	385.8	3.5	0.0067 µg/L	0.0067 ppb	13:18:47
3	Mo 202.031†	8.9	4.5	0.5995 µg/L	0.5995 ppb	13:18:47
3	Ni 231.604†	173.6	-0.5	-0.0330 µg/L	-0.0330 ppb	13:18:47
3	P 214.914†	170.4	0.9	0.8878 µg/L	0.8878 ppb	13:18:47
3	Pb 220.353†	-31.0	-23.7	-6.3181 µg/L	-6.3181 ppb	13:18:47
3	S 181.975 Axial†	48.7	6.5	15.167 µg/L	15.167 ppb	13:18:47
3	Sb 206.836†	43.2	5.4	2.6881 µg/L	2.6881 ppb	13:18:47
3	Se 196.026†	-31.0	2.1	1.75 µg/L	1.75 ppb	13:18:47
3	SiO2 †	1299.4	-41.9	-2.9451 µg/L	-2.9451 ppb	13:18:27
3	Sn 189.927†	7.6	20.5	5.3395 µg/L	5.3395 ppb	13:18:47
3	Ti 334.940†	710.5	206.3	0.2837 µg/L	0.2837 ppb	13:18:27
3	Tl 190.801†	-35.1	0.5	0.1830 µg/L	0.1830 ppb	13:18:47
3	U 409.014†	346.5	-50.8	-3.3878 µg/L	-3.3878 ppb	13:18:27
3	V 292.402†	-99.7	23.6	0.3640 µg/L	0.3640 ppb	13:18:27
3	Zn 213.857†	503.7	-80.0	-1.9432 µg/L	-1.9432 ppb	13:18:47
3	Si 251.611†	1359.3	35.7	1.17 µg/L	1.17 ppb	13:19:03

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1073861.9	100.23	%	0.825				0.82%
Sc RADIAL	40420.1	101	%	1.2				1.19%
Y 371.029	586176.3	99.872	%	0.8138				0.81%
Ag 328.068†	-26.8	-0.2002	µg/L	0.04216	-0.2002	ppb	0.04216	21.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-28.8	-8.7734	µg/L	10.61053	-8.7734	ppb	10.61053	120.94%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.5	0.2791	µg/L	1.48408	0.2791	ppb	1.48408	531.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	56.0	3.7792	µg/L	0.56122	3.7792	ppb	0.56122	14.85%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	0.5	0.0054	µg/L	0.06336	0.0054	ppb	0.06336	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	250.1	0.1752	µg/L	0.00730	0.1752	ppb	0.00730	4.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	9.3	2.1291	µg/L	2.21531	2.1291	ppb	2.21531	104.05%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.2	0.1923	µg/L	0.06667	0.1923	ppb	0.06667	34.66%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-2.7	-0.0870 µg/L	0.19621	-0.0870 ppb	0.19621	225.42%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	5.5	0.1608 µg/L	0.23117	0.1608 ppb	0.23117	143.76%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-183.2	-0.7360 µg/L	0.10626	-0.7360 ppb	0.10626	14.44%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.6	-0.6480 µg/L	3.12202	-0.6480 ppb	3.12202	481.76%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	39.2	17.956 µg/L	21.4099	17.956 ppb	21.4099	119.24%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-1.4	-4.1643 µg/L	8.46422	-4.1643 ppb	8.46422	203.26%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	18.8	0.0355 µg/L	0.03270	0.0355 ppb	0.03270	92.12%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.7	0.4944 µg/L	0.13480	0.4944 ppb	0.13480	27.27%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	234.1	38.129 µg/L	8.8618	38.129 ppb	8.8618	23.24%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	3.4	0.2311 µg/L	0.37814	0.2311 ppb	0.37814	163.64%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	4.1	3.5833 µg/L	3.74586	3.5833 ppb	3.74586	104.54%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-9.4	-2.5107 µg/L	3.31086	-2.5107 ppb	3.31086	131.87%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	7.3	16.836 µg/L	1.8837	16.836 ppb	1.8837	11.19%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	11.9	5.8688 µg/L	3.13050	5.8688 ppb	3.13050	53.34%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.3	1.99 µg/L	1.587	1.99 ppb	1.587	79.58%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	2.9	0.1716 µg/L	2.75298	0.1716 ppb	2.75298	>999.9%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	31.1	1.02 µg/L	0.420	1.02 ppb	0.420	41.14%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	18.7	4.8780 µg/L	0.67073	4.8780 ppb	0.67073	13.75%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	8.0	0.0371 µg/L	0.05839	0.0371 ppb	0.05839	157.53%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	291.9	0.4003 µg/L	0.10209	0.4003 ppb	0.10209	25.50%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.6	-1.0333 µg/L	1.52058	-1.0333 ppb	1.52058	147.15%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-37.9	-2.5296 µg/L	0.77643	-2.5296 ppb	0.77643	30.69%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	23.6	0.3633 µg/L	0.18515	0.3633 ppb	0.18515	50.96%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-74.6	-1.8129 µg/L	0.28453	-1.8129 ppb	0.28453	15.69%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	40	1200872107|435971|1	Analyzed
2	41	138877001|435971|100	Analyzed
3	42	138877001|435971|200	Analyzed
4	7	CCV	QC Passed
5	8	CCB	QC Passed
6	43	1200873601|436612|1	Analyzed
7	44	1200872521|436612|1	Analyzed
8	45	1200873293|436612|1	Analyzed
9	46	1200873602|436612|1	Analyzed
10	47	139011001|436612|1	Analyzed
11	48	139014001|436612|1	Analyzed
12	49	139014002|436612|1	Analyzed
13	50	1200872517|436612|1	Analyzed
14	51	1200873603|436612|1	Analyzed
15	52	1200873605|436612|5	Analyzed
16	7	CCV	QC Passed
17	8	CCB	QC Passed
18	53	139047001|436612|1	Analyzed
19	54	139047002|436612|1	Analyzed
20	55	139047003|436612|1	Analyzed
21	7	CCV	QC Passed
22	8	CCB	QC Passed

Sequence No.: 2
Sample ID: CCV
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/24/2005 14:04:23
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39212.9	39212.9	97.5	%			14:05:49
1	Al 396.153Radial†	16309.8	16625.0	5021.5	µg/L	5021.5	ppb	14:05:49
1	Ca 317.933Radial†	21607.9	21996.4	5052.6	µg/L	5052.6	ppb	14:06:09
1	Fe 238.204 Radial†	5000.1	5082.9	5253.9	µg/L	5253.9	ppb	14:06:09
1	K 766.490 Radial†	11884.8	11072.1	5070.3	µg/L	5070.3	ppb	14:05:49
1	Mg 279.077 IEC†	1708.3	1746.0	5174.6	µg/L	5174.6	ppb	14:06:09
1	Na 589.592 Radial†	61060.9	61512.6	10019	µg/L	10019	ppb	14:05:49
1	Sr 421.552†	107238.3	109986.4	507.99	µg/L	507.99	ppb	14:05:49
1	Sc 361.383	1060799.0	1060799.0	99.012	%			14:07:08
1	Y 371.029	574369.5	574369.5	97.860	%			14:07:08
1	Ag 328.068†	65326.8	66579.4	503.58	µg/L	503.58	ppb	14:07:14
1	As 188.979†	927.5	966.4	508.26	µg/L	508.26	ppb	14:07:34
1	B 249.677†	7483.8	7412.8	500.38	µg/L	500.38	ppb	14:07:14
1	Ba 233.527†	45599.0	46183.9	504.60	µg/L	504.60	ppb	14:07:14
1	Be 313.107†	708684.1	715871.1	502.87	µg/L	502.87	ppb	14:07:08
1	Cd 226.502†	13406.2	13567.4	505.53	µg/L	505.53	ppb	14:07:14
1	Co 228.616†	15612.0	15899.4	505.80	µg/L	505.80	ppb	14:07:14
1	Cr 267.716†	17436.0	17536.3	503.14	µg/L	503.14	ppb	14:07:14
1	Cu 324.752†	128769.0	124988.8	503.02	µg/L	503.02	ppb	14:07:08
1	Mn 257.610†	267200.1	269485.7	504.38	µg/L	504.38	ppb	14:07:08
1	Mo 202.031†	3785.7	3819.0	514.41	µg/L	514.41	ppb	14:07:34
1	Ni 231.604†	7858.6	7764.1	517.20	µg/L	517.20	ppb	14:07:34
1	P 214.914†	3114.6	2977.4	2424.4	µg/L	2424.4	ppb	14:07:34
1	Pb 220.353†	1873.5	1899.2	507.14	µg/L	507.14	ppb	14:07:34
1	S 181.975 Axial†	464.0	426.8	981.84	µg/L	981.84	ppb	14:07:34
1	Sb 206.836†	1020.9	993.7	487.87	µg/L	487.87	ppb	14:07:34
1	Se 196.026†	547.8	586.1	501	µg/L	501	ppb	14:07:34
1	SiO2 †	75624.3	75047.0	5203.3	µg/L	5203.3	ppb	14:07:14
1	Sn 189.927†	1875.3	1906.9	496.86	µg/L	496.86	ppb	14:07:34
1	Ti 334.940†	363565.5	366692.8	500.94	µg/L	500.94	ppb	14:07:08
1	Tl 190.801†	1240.9	1288.6	507.53	µg/L	507.53	ppb	14:07:34
1	U 409.014†	7918.2	7602.4	509.68	µg/L	509.68	ppb	14:07:14
1	V 292.402†	32289.2	32733.8	508.07	µg/L	508.07	ppb	14:07:14
1	Zn 213.857†	21163.7	20794.8	500.95	µg/L	500.95	ppb	14:07:14
1	Si 251.611†	74329.6	73757.5	2440	µg/L	2440	ppb	14:08:43
2	Sc RADIAL	39490.0	39490.0	98.2	%			14:06:14
2	Al 396.153Radial†	16431.6	16631.7	5023.5	µg/L	5023.5	ppb	14:06:14
2	Ca 317.933Radial†	21602.1	21835.1	5015.6	µg/L	5015.6	ppb	14:06:34
2	Fe 238.204 Radial†	4973.4	5019.7	5188.6	µg/L	5188.6	ppb	14:06:34
2	K 766.490 Radial†	11966.3	11069.7	5069.2	µg/L	5069.2	ppb	14:06:14
2	Mg 279.077 IEC†	1706.4	1731.8	5132.8	µg/L	5132.8	ppb	14:06:34
2	Na 589.592 Radial†	61511.3	61531.7	10022	µg/L	10022	ppb	14:06:14
2	Sr 421.552†	108088.9	110080.8	508.43	µg/L	508.43	ppb	14:06:14
2	Sc 361.383	1059094.8	1059094.8	98.853	%			14:07:40
2	Y 371.029	573211.8	573211.8	97.663	%			14:07:40
2	Ag 328.068†	65197.0	66554.2	503.38	µg/L	503.38	ppb	14:07:45
2	As 188.979†	921.9	962.2	506.07	µg/L	506.07	ppb	14:08:05
2	B 249.677†	7441.4	7382.2	498.33	µg/L	498.33	ppb	14:07:45
2	Ba 233.527†	45403.3	46060.1	503.25	µg/L	503.25	ppb	14:07:45
2	Be 313.107†	708452.2	716788.3	503.51	µg/L	503.51	ppb	14:07:40
2	Cd 226.502†	13347.2	13529.6	504.12	µg/L	504.12	ppb	14:07:45
2	Co 228.616†	15495.3	15806.7	502.85	µg/L	502.85	ppb	14:07:45
2	Cr 267.716†	17342.2	17469.7	501.23	µg/L	501.23	ppb	14:07:45
2	Cu 324.752†	128899.8	125330.4	504.40	µg/L	504.40	ppb	14:07:40
2	Mn 257.610†	267264.3	269984.9	505.31	µg/L	505.31	ppb	14:07:40
2	Mo 202.031†	3781.3	3820.8	514.64	µg/L	514.64	ppb	14:08:05
2	Ni 231.604†	7849.3	7767.4	517.43	µg/L	517.43	ppb	14:08:05
2	P 214.914†	3122.3	2990.3	2435.1	µg/L	2435.1	ppb	14:08:05

2	Pb 220.353†	1864.7	1893.3	505.59 µg/L	505.59 ppb	14:08:05
2	S 181.975 Axial†	463.4	427.0	982.23 µg/L	982.23 ppb	14:08:05
2	Sb 206.836†	1031.2	1005.7	493.79 µg/L	493.79 ppb	14:08:05
2	Se 196.026†	552.5	591.7	505 µg/L	505 ppb	14:08:05
2	SiO2 †	75383.0	74925.7	5194.8 µg/L	5194.8 ppb	14:07:45
2	Sn 189.927†	1879.5	1914.3	498.77 µg/L	498.77 ppb	14:08:05
2	Ti 334.940†	363574.0	367292.3	501.76 µg/L	501.76 ppb	14:07:40
2	Tl 190.801†	1240.6	1290.4	508.23 µg/L	508.23 ppb	14:08:05
2	U 409.014†	7847.2	7543.5	505.75 µg/L	505.75 ppb	14:07:45
2	V 292.402†	32161.8	32657.4	506.89 µg/L	506.89 ppb	14:07:45
2	Zn 213.857†	21107.5	20772.4	500.41 µg/L	500.41 ppb	14:07:45
2	Si 251.611†	74482.0	74032.5	2450 µg/L	2450 ppb	14:08:48
3	Sc RADIAL	40191.3	40191.3	100.0 %		14:06:40
3	Al 396.153Radial†	16655.3	16563.6	5002.9 µg/L	5002.9 ppb	14:06:40
3	Ca 317.933Radial†	21541.8	21391.1	4913.7 µg/L	4913.7 ppb	14:07:00
3	Fe 238.204 Radial†	4962.0	4920.0	5085.7 µg/L	5085.7 ppb	14:07:00
3	K 766.490 Radial†	12073.4	10964.2	5020.9 µg/L	5020.9 ppb	14:06:40
3	Mg 279.077 IEC†	1716.3	1711.4	5072.3 µg/L	5072.3 ppb	14:07:00
3	Na 589.592 Radial†	62421.6	61349.7	9992.7 µg/L	9992.7 ppb	14:06:40
3	Sr 421.552†	109634.9	109707.3	506.70 µg/L	506.70 ppb	14:06:40
3	Sc 361.383	1066404.6	1066404.6	99.536 %		14:08:11
3	Y 371.029	577035.6	577035.6	98.314 %		14:08:11
3	Ag 328.068†	65226.7	66131.9	500.17 µg/L	500.17 ppb	14:08:17
3	As 188.979†	917.8	951.7	500.59 µg/L	500.59 ppb	14:08:37
3	B 249.677†	7477.6	7366.9	497.30 µg/L	497.30 ppb	14:08:17
3	Ba 233.527†	45586.8	45929.5	501.82 µg/L	501.82 ppb	14:08:17
3	Be 313.107†	713769.4	717217.8	503.81 µg/L	503.81 ppb	14:08:11
3	Cd 226.502†	13355.1	13444.9	500.97 µg/L	500.97 ppb	14:08:17
3	Co 228.616†	15610.5	15815.0	503.11 µg/L	503.11 ppb	14:08:17
3	Cr 267.716†	17411.5	17419.1	499.77 µg/L	499.77 ppb	14:08:17
3	Cu 324.752†	129452.1	124991.4	503.03 µg/L	503.03 ppb	14:08:11
3	Mn 257.610†	269267.0	270143.7	505.60 µg/L	505.60 ppb	14:08:11
3	Mo 202.031†	3791.9	3805.2	512.54 µg/L	512.54 ppb	14:08:37
3	Ni 231.604†	7805.5	7669.0	510.87 µg/L	510.87 ppb	14:08:37
3	P 214.914†	3112.2	2958.5	2408.6 µg/L	2408.6 ppb	14:08:37
3	Pb 220.353†	1866.5	1882.2	502.61 µg/L	502.61 ppb	14:08:37
3	S 181.975 Axial†	459.8	420.2	966.50 µg/L	966.50 ppb	14:08:37
3	Sb 206.836†	1023.6	991.0	486.55 µg/L	486.55 ppb	14:08:37
3	Se 196.026†	546.9	582.2	497 µg/L	497 ppb	14:08:37
3	SiO2 †	75586.5	74607.5	5172.7 µg/L	5172.7 ppb	14:08:17
3	Sn 189.927†	1866.2	1887.8	491.88 µg/L	491.88 ppb	14:08:37
3	Ti 334.940†	366279.7	367489.5	502.02 µg/L	502.02 ppb	14:08:11
3	Tl 190.801†	1231.3	1272.4	501.18 µg/L	501.18 ppb	14:08:37
3	U 409.014†	7953.1	7595.4	509.22 µg/L	509.22 ppb	14:08:17
3	V 292.402†	32250.0	32523.0	504.80 µg/L	504.80 ppb	14:08:17
3	Zn 213.857†	21159.7	20678.4	498.18 µg/L	498.18 ppb	14:08:17
3	Si 251.611†	74497.8	73531.8	2440 µg/L	2440 ppb	14:08:53

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1062099.5	99.134	%	0.3570				0.36%
Sc RADIAL	39631.4	98.6	%	1.25				1.27%
Y 371.029	574872.3	97.946	%	0.3341				0.34%
Ag 328.068†	66421.9	502.37	µg/L	1.912	502.37	ppb	1.912	0.38%
QC value within limits for Ag 328.068 Recovery = 100.47%								
Al 396.153Radial†	16606.8	5015.9	µg/L	11.34	5015.9	ppb	11.34	0.23%
QC value within limits for Al 396.153Radial Recovery = 100.32%								
As 188.979†	960.1	504.97	µg/L	3.946	504.97	ppb	3.946	0.78%
QC value within limits for As 188.979 Recovery = 100.99%								
B 249.677†	7387.3	498.67	µg/L	1.570	498.67	ppb	1.570	0.31%
QC value within limits for B 249.677 Recovery = 99.73%								
Ba 233.527†	46057.8	503.22	µg/L	1.389	503.22	ppb	1.389	0.28%
QC value within limits for Ba 233.527 Recovery = 100.64%								
Be 313.107†	716625.7	503.40	µg/L	0.483	503.40	ppb	0.483	0.10%
QC value within limits for Be 313.107 Recovery = 100.68%								
Ca 317.933Radial†	21740.9	4994.0	µg/L	71.96	4994.0	ppb	71.96	1.44%
QC value within limits for Ca 317.933Radial Recovery = 99.88%								
Cd 226.502†	13514.0	503.54	µg/L	2.333	503.54	ppb	2.333	0.46%
QC value within limits for Cd 226.502 Recovery = 100.71%								

Co 228.616†	15840.4	503.92 µg/L	1.634	503.92 ppb	1.634	0.32%
QC value within limits for Co 228.616 Recovery = 100.78%						
Cr 267.716†	17475.0	501.38 µg/L	1.688	501.38 ppb	1.688	0.34%
QC value within limits for Cr 267.716 Recovery = 100.28%						
Cu 324.752†	125103.5	503.48 µg/L	0.793	503.48 ppb	0.793	0.16%
QC value within limits for Cu 324.752 Recovery = 100.70%						
Fe 238.204 Radial†	5007.5	5176.0 µg/L	84.80	5176.0 ppb	84.80	1.64%
QC value within limits for Fe 238.204 Radial Recovery = 103.52%						
K 766.490 Radial†	11035.3	5053.4 µg/L	28.22	5053.4 ppb	28.22	0.56%
QC value within limits for K 766.490 Radial Recovery = 101.07%						
Mg 279.077 IEC†	1729.7	5126.5 µg/L	51.44	5126.5 ppb	51.44	1.00%
QC value within limits for Mg 279.077 IEC Recovery = 102.53%						
Mn 257.610†	269871.4	505.10 µg/L	0.633	505.10 ppb	0.633	0.13%
QC value within limits for Mn 257.610 Recovery = 101.02%						
Mo 202.031†	3815.0	513.86 µg/L	1.153	513.86 ppb	1.153	0.22%
QC value within limits for Mo 202.031 Recovery = 102.77%						
Na 589.592 Radial†	61464.7	10011 µg/L	16.3	10011 ppb	16.3	0.16%
QC value within limits for Na 589.592 Radial Recovery = 100.11%						
Ni 231.604†	7733.5	515.17 µg/L	3.722	515.17 ppb	3.722	0.72%
QC value within limits for Ni 231.604 Recovery = 103.03%						
P 214.914†	2975.4	2422.7 µg/L	13.35	2422.7 ppb	13.35	0.55%
QC value within limits for P 214.914 Recovery = 96.91%						
Pb 220.353†	1891.6	505.11 µg/L	2.299	505.11 ppb	2.299	0.46%
QC value within limits for Pb 220.353 Recovery = 101.02%						
S 181.975 Axial†	424.7	976.86 µg/L	8.973	976.86 ppb	8.973	0.92%
QC value within limits for S 181.975 Axial Recovery = 97.69%						
Sb 206.836†	996.8	489.40 µg/L	3.855	489.40 ppb	3.855	0.79%
QC value within limits for Sb 206.836 Recovery = 97.88%						
Se 196.026†	586.7	501 µg/L	4.1	501 ppb	4.1	0.81%
QC value within limits for Se 196.026 Recovery = 100.21%						
SiO2 †	74860.0	5190.3 µg/L	15.77	5190.3 ppb	15.77	0.30%
QC value within limits for SiO2 Recovery = 97.06%						
Si 251.611†	73773.9	2440 µg/L	8.3	2440 ppb	8.3	0.34%
QC value within limits for Si 251.611 Recovery = 97.80%						
Sn 189.927†	1903.0	495.83 µg/L	3.558	495.83 ppb	3.558	0.72%
QC value within limits for Sn 189.927 Recovery = 99.17%						
Sr 421.552†	109924.8	507.71 µg/L	0.896	507.71 ppb	0.896	0.18%
QC value within limits for Sr 421.552 Recovery = 101.54%						
Ti 334.940†	367158.2	501.57 µg/L	0.567	501.57 ppb	0.567	0.11%
QC value within limits for Ti 334.940 Recovery = 100.31%						
Tl 190.801†	1283.8	505.64 µg/L	3.882	505.64 ppb	3.882	0.77%
QC value within limits for Tl 190.801 Recovery = 101.13%						
U 409.014†	7580.4	508.22 µg/L	2.147	508.22 ppb	2.147	0.42%
QC value within limits for U 409.014 Recovery = 101.64%						
V 292.402†	32638.1	506.59 µg/L	1.652	506.59 ppb	1.652	0.33%
QC value within limits for V 292.402 Recovery = 101.32%						
Zn 213.857†	20748.5	499.85 µg/L	1.466	499.85 ppb	1.466	0.29%
QC value within limits for Zn 213.857 Recovery = 99.97%						

All analyte(s) passed QC.

Sequence No.: 3
Sample ID: CCB
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 14:10:41
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	40542.3	40542.3	101	%			14:12:08
1	Al 396.153Radial†	62.8	-33.1	-10.048	µg/L	-10.048	ppb	14:12:08
1	Ca 317.933Radial†	157.0	0.3	0.0406	µg/L	0.0406	ppb	14:12:28
1	Fe 238.204 Radial†	43.5	-0.0	-0.0032	µg/L	-0.0032	ppb	14:12:28
1	K 766.490 Radial†	1079.2	-41.7	-19.115	µg/L	-19.115	ppb	14:12:08
1	Mg 279.077 IEC†	0.5	-4.8	-14.116	µg/L	-14.116	ppb	14:12:28
1	Na 589.592 Radial†	1023.8	-70.3	-11.456	µg/L	-11.456	ppb	14:12:08
1	Sr 421.552†	-49.6	-0.7	-0.0031	µg/L	-0.0031	ppb	14:12:08
1	Sc 361.383	1067461.1	1067461.1	99.634	%			14:13:26
1	Y 371.029	583053.5	583053.5	99.340	%			14:13:26
1	Ag 328.068†	-651.5	-52.9	-0.3964	µg/L	-0.3964	ppb	14:13:31
1	As 188.979†	-24.1	5.4	2.7949	µg/L	2.7949	ppb	14:13:52
1	B 249.677†	171.3	26.4	1.7768	µg/L	1.7768	ppb	14:13:52
1	Ba 233.527†	-121.1	8.5	0.0927	µg/L	0.0927	ppb	14:13:52
1	Be 313.107†	-675.6	-559.6	-0.3938	µg/L	-0.3938	ppb	14:13:31
1	Cd 226.502†	-34.6	-7.2	-0.2688	µg/L	-0.2688	ppb	14:13:52
1	Co 228.616†	-134.1	-2.9	-0.0911	µg/L	-0.0911	ppb	14:13:52
1	Cr 267.716†	68.0	-5.4	-0.1524	µg/L	-0.1524	ppb	14:13:52
1	Cu 324.752†	4839.6	-207.2	-0.8307	µg/L	-0.8307	ppb	14:13:31
1	Mn 257.610†	378.3	0.2	0.0012	µg/L	0.0012	ppb	14:13:52
1	Mo 202.031†	4.0	-0.4	-0.0587	µg/L	-0.0587	ppb	14:13:52
1	Ni 231.604†	165.2	-7.1	-0.4682	µg/L	-0.4682	ppb	14:13:52
1	P 214.914†	179.8	12.2	10.463	µg/L	10.463	ppb	14:13:52
1	Pb 220.353†	-8.8	-1.8	-0.4830	µg/L	-0.4830	ppb	14:13:52
1	S 181.975 Axial†	44.2	2.5	5.8984	µg/L	5.8984	ppb	14:13:52
1	Sb 206.836†	55.6	18.3	9.0117	µg/L	9.0117	ppb	14:13:52
1	Se 196.026†	-34.1	-1.4	-1.20	µg/L	-1.20	ppb	14:13:52
1	SiO2 †	1524.7	198.7	13.809	µg/L	13.809	ppb	14:13:31
1	Sn 189.927†	2.0	15.0	3.8938	µg/L	3.8938	ppb	14:13:52
1	Ti 334.940†	793.0	297.0	0.4083	µg/L	0.4083	ppb	14:13:31
1	Tl 190.801†	-34.3	0.9	0.3624	µg/L	0.3624	ppb	14:13:52
1	U 409.014†	323.2	-70.4	-4.6988	µg/L	-4.6988	ppb	14:13:31
1	V 292.402†	-103.8	18.4	0.2758	µg/L	0.2758	ppb	14:13:31
1	Zn 213.857†	513.4	-64.8	-1.5706	µg/L	-1.5706	ppb	14:13:52
1	Si 251.611†	1480.6	172.5	5.73	µg/L	5.73	ppb	14:14:59
2	Sc RADIAL	39800.4	39800.4	99.0	%			14:12:33
2	Al 396.153Radial†	77.5	-17.1	-5.2360	µg/L	-5.2360	ppb	14:12:33
2	Ca 317.933Radial†	160.6	6.8	1.5461	µg/L	1.5461	ppb	14:12:53
2	Fe 238.204 Radial†	46.7	4.0	4.1678	µg/L	4.1678	ppb	14:12:53
2	K 766.490 Radial†	1089.1	-11.7	-5.3776	µg/L	-5.3776	ppb	14:12:33
2	Mg 279.077 IEC†	1.3	-3.9	-11.546	µg/L	-11.546	ppb	14:12:53
2	Na 589.592 Radial†	1044.6	-30.5	-4.9680	µg/L	-4.9680	ppb	14:12:33
2	Sr 421.552†	-47.9	0.2	0.0009	µg/L	0.0009	ppb	14:12:33
2	Sc 361.383	1067665.4	1067665.4	99.653	%			14:13:57
2	Y 371.029	582786.2	582786.2	99.294	%			14:13:57
2	Ag 328.068†	-600.0	-1.1	-0.0061	µg/L	-0.0061	ppb	14:14:02
2	As 188.979†	-23.1	6.4	3.3375	µg/L	3.3375	ppb	14:14:22
2	B 249.677†	179.2	34.2	2.3112	µg/L	2.3112	ppb	14:14:22
2	Ba 233.527†	-122.5	7.2	0.0779	µg/L	0.0779	ppb	14:14:22
2	Be 313.107†	-656.9	-540.6	-0.3804	µg/L	-0.3804	ppb	14:14:02
2	Cd 226.502†	-24.3	3.2	0.1161	µg/L	0.1161	ppb	14:14:22
2	Co 228.616†	-138.3	-7.1	-0.2237	µg/L	-0.2237	ppb	14:14:22
2	Cr 267.716†	82.5	9.1	0.2646	µg/L	0.2646	ppb	14:14:22
2	Cu 324.752†	4965.4	-81.9	-0.3270	µg/L	-0.3270	ppb	14:14:02
2	Mn 257.610†	385.6	7.5	0.0152	µg/L	0.0152	ppb	14:14:22
2	Mo 202.031†	11.4	7.0	0.9412	µg/L	0.9412	ppb	14:14:22
2	Ni 231.604†	171.4	-0.9	-0.0571	µg/L	-0.0571	ppb	14:14:22
2	P 214.914†	163.1	-4.6	-3.8261	µg/L	-3.8261	ppb	14:14:22

2	Pb 220.353†	-9.3	-2.4	-0.6223 µg/L	-0.6223 ppb	14:14:22
2	S 181.975 Axial†	33.9	-7.8	-18.134 µg/L	-18.134 ppb	14:14:22
2	Sb 206.836†	50.7	13.5	6.6232 µg/L	6.6232 ppb	14:14:22
2	Se 196.026†	-31.8	0.9	0.727 µg/L	0.727 ppb	14:14:22
2	SiO2 †	1467.4	140.8	9.7541 µg/L	9.7541 ppb	14:14:02
2	Sn 189.927†	5.4	18.3	4.7707 µg/L	4.7707 ppb	14:14:22
2	Ti 334.940†	754.1	257.8	0.3545 µg/L	0.3545 ppb	14:14:02
2	Tl 190.801†	-32.4	2.8	1.0996 µg/L	1.0996 ppb	14:14:22
2	U 409.014†	328.4	-65.2	-4.3544 µg/L	-4.3544 ppb	14:14:02
2	V 292.402†	-107.7	14.4	0.2264 µg/L	0.2264 ppb	14:14:02
2	Zn 213.857†	513.0	-65.2	-1.5849 µg/L	-1.5849 ppb	14:14:22
2	Si 251.611†	1452.3	143.9	4.76 µg/L	4.76 ppb	14:15:04
3	Sc RADIAL	40159.6	40159.6	99.9 %		14:12:58
3	Al 396.153Radial†	115.1	19.9	5.9916 µg/L	5.9916 ppb	14:12:58
3	Ca 317.933Radial†	146.5	-8.8	-2.0381 µg/L	-2.0381 ppb	14:13:18
3	Fe 238.204 Radial†	42.7	-0.3	-0.3407 µg/L	-0.3407 ppb	14:13:18
3	K 766.490 Radial†	1074.0	-36.8	-16.833 µg/L	-16.833 ppb	14:12:58
3	Mg 279.077 IEC†	3.5	-1.8	-5.2256 µg/L	-5.2256 ppb	14:13:18
3	Na 589.592 Radial†	1005.1	-79.4	-12.932 µg/L	-12.932 ppb	14:12:58
3	Sr 421.552†	-19.4	29.1	0.1345 µg/L	0.1345 ppb	14:12:58
3	Sc 361.383	1082115.5	1082115.5	101.00 %		14:14:28
3	Y 371.029	590762.6	590762.6	100.65 %		14:14:28
3	Ag 328.068†	-607.3	-0.2	-0.0004 µg/L	-0.0004 ppb	14:14:33
3	As 188.979†	-25.2	4.6	2.3898 µg/L	2.3898 ppb	14:14:53
3	B 249.677†	175.4	28.1	1.8967 µg/L	1.8967 ppb	14:14:53
3	Ba 233.527†	-130.8	0.6	0.0068 µg/L	0.0068 ppb	14:14:53
3	Be 313.107†	-625.8	-501.1	-0.3524 µg/L	-0.3524 ppb	14:14:33
3	Cd 226.502†	-26.2	1.6	0.0589 µg/L	0.0589 ppb	14:14:53
3	Co 228.616†	-129.5	3.5	0.1132 µg/L	0.1132 ppb	14:14:53
3	Cr 267.716†	73.2	-1.1	-0.0312 µg/L	-0.0312 ppb	14:14:53
3	Cu 324.752†	4967.3	-146.5	-0.5883 µg/L	-0.5883 ppb	14:14:33
3	Mn 257.610†	369.9	-13.2	-0.0243 µg/L	-0.0243 ppb	14:14:53
3	Mo 202.031†	10.6	6.0	0.8107 µg/L	0.8107 ppb	14:14:53
3	Ni 231.604†	172.6	-2.0	-0.1277 µg/L	-0.1277 ppb	14:14:53
3	P 214.914†	167.7	-2.3	-1.7835 µg/L	-1.7835 ppb	14:14:53
3	Pb 220.353†	-11.7	-4.5	-1.2020 µg/L	-1.2020 ppb	14:14:53
3	S 181.975 Axial†	39.6	-2.6	-5.9142 µg/L	-5.9142 ppb	14:14:53
3	Sb 206.836†	51.3	13.4	6.5835 µg/L	6.5835 ppb	14:14:53
3	Se 196.026†	-26.1	6.9	5.90 µg/L	5.90 ppb	14:14:53
3	SiO2 †	1462.4	116.2	8.0460 µg/L	8.0460 ppb	14:14:33
3	Sn 189.927†	3.8	16.7	4.3556 µg/L	4.3556 ppb	14:14:53
3	Ti 334.940†	785.5	278.8	0.3825 µg/L	0.3825 ppb	14:14:33
3	Tl 190.801†	-35.7	0.0	0.0117 µg/L	0.0117 ppb	14:14:53
3	U 409.014†	356.3	-42.0	-2.8043 µg/L	-2.8043 ppb	14:14:33
3	V 292.402†	-103.6	20.0	0.3104 µg/L	0.3104 ppb	14:14:33
3	Zn 213.857†	518.5	-66.7	-1.6188 µg/L	-1.6188 ppb	14:14:53
3	Si 251.611†	1466.8	138.7	4.60 µg/L	4.60 ppb	14:15:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1072414.0	100.10	%	0.784				0.78%
Sc RADIAL	40167.4	99.9	%	0.92				0.92%
Y 371.029	585534.1	99.762	%	0.7718				0.77%
Ag 328.068†	-18.1	-0.1343	µg/L	0.22698	-0.1343	ppb	0.22698	169.01%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.1	-3.0976	µg/L	8.23098	-3.0976	ppb	8.23098	265.72%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.5	2.8407	µg/L	0.47550	2.8407	ppb	0.47550	16.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	29.6	1.9949	µg/L	0.28037	1.9949	ppb	0.28037	14.05%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.4	0.0591	µg/L	0.04590	0.0591	ppb	0.04590	77.63%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-533.8	-0.3756	µg/L	0.02116	-0.3756	ppb	0.02116	5.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.6	-0.1505	µg/L	1.79972	-0.1505	ppb	1.79972	>999.9%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-0.8	-0.0313	µg/L	0.20768	-0.0313	ppb	0.20768	664.38%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-2.1	-0.0672 µg/L	0.16970	-0.0672 ppb	0.16970	252.42%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	0.9	0.0270 µg/L	0.21447	0.0270 ppb	0.21447	794.27%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-145.2	-0.5820 µg/L	0.25189	-0.5820 ppb	0.25189	43.28%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.2	1.2746 µg/L	2.51123	1.2746 ppb	2.51123	197.01%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-30.1	-13.775 µg/L	7.3616	-13.775 ppb	7.3616	53.44%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-3.5	-10.296 µg/L	4.5752	-10.296 ppb	4.5752	44.44%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	-1.8	-0.0026 µg/L	0.02005	-0.0026 ppb	0.02005	762.11%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.2	0.5644 µg/L	0.54356	0.5644 ppb	0.54356	96.31%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-60.1	-9.7853 µg/L	4.23661	-9.7853 ppb	4.23661	43.30%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.3	-0.2176 µg/L	0.21981	-0.2176 ppb	0.21981	100.99%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	1.8	1.6176 µg/L	7.72769	1.6176 ppb	7.72769	477.71%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-2.9	-0.7691 µg/L	0.38133	-0.7691 ppb	0.38133	49.58%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.6	-6.0501 µg/L	12.01697	-6.0501 ppb	12.01697	198.63%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	15.1	7.4061 µg/L	1.39062	7.4061 ppb	1.39062	18.78%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.1	1.81 µg/L	3.673	1.81 ppb	3.673	203.03%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	151.9	10.536 µg/L	2.9603	10.536 ppb	2.9603	28.10%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	151.7	5.03 µg/L	0.613	5.03 ppb	0.613	12.19%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	16.7	4.3400 µg/L	0.43863	4.3400 ppb	0.43863	10.11%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	9.5	0.0441 µg/L	0.07829	0.0441 ppb	0.07829	177.56%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	277.9	0.3818 µg/L	0.02691	0.3818 ppb	0.02691	7.05%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.3	0.4913 µg/L	0.55528	0.4913 ppb	0.55528	113.03%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-59.2	-3.9525 µg/L	1.00914	-3.9525 ppb	1.00914	25.53%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	17.6	0.2709 µg/L	0.04224	0.2709 ppb	0.04224	15.60%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-65.6	-1.5914 µg/L	0.02476	-1.5914 ppb	0.02476	1.56%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	100	1200872380|436092|1	Analyzed
2	7	CCV	QC Passed
3	8	CCB	QC Passed

Sequence No.: 7
Sample ID: CCV
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/24/2005 14:55:45
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	40507.4	40507.4	101	%			14:57:10
1	Al 396.153Radial†	16743.1	16520.7	4989.8	µg/L	4989.8	ppb	14:57:10
1	Ca 317.933Radial†	21743.0	21422.6	4920.9	µg/L	4920.9	ppb	14:57:30
1	Fe 238.204 Radial†	4993.2	4912.2	5077.5	µg/L	5077.5	ppb	14:57:30
1	K 766.490 Radial†	12324.5	11119.2	5091.8	µg/L	5091.8	ppb	14:57:10
1	Mg 279.077 IEC†	1723.4	1705.1	5053.6	µg/L	5053.6	ppb	14:57:30
1	Na 589.592 Radial†	63335.3	61769.2	10061	µg/L	10061	ppb	14:57:10
1	Sr 421.552†	110119.9	109332.8	504.97	µg/L	504.97	ppb	14:57:10
1	Sc 361.383	1079324.5	1079324.5	100.74	%			14:58:29
1	Y 371.029	584251.6	584251.6	99.544	%			14:58:29
1	Ag 328.068†	66651.0	66761.4	504.91	µg/L	504.91	ppb	14:58:35
1	As 188.979†	943.2	965.9	507.92	µg/L	507.92	ppb	14:58:55
1	B 249.677†	7623.9	7422.2	501.04	µg/L	501.04	ppb	14:58:35
1	Ba 233.527†	46106.3	45897.0	501.47	µg/L	501.47	ppb	14:58:35
1	Be 313.107†	719768.4	714588.7	501.97	µg/L	501.97	ppb	14:58:29
1	Cd 226.502†	13481.6	13409.8	499.67	µg/L	499.67	ppb	14:58:35
1	Co 228.616†	15730.9	15746.8	500.95	µg/L	500.95	ppb	14:58:35
1	Cr 267.716†	17572.9	17369.9	498.36	µg/L	498.36	ppb	14:58:35
1	Cu 324.752†	130870.1	124842.2	502.42	µg/L	502.42	ppb	14:58:29
1	Mn 257.610†	271310.9	268934.3	503.33	µg/L	503.33	ppb	14:58:29
1	Mo 202.031†	3849.9	3817.1	514.14	µg/L	514.14	ppb	14:58:55
1	Ni 231.604†	7898.3	7667.3	510.77	µg/L	510.77	ppb	14:58:55
1	P 214.914†	3158.4	2966.9	2415.8	µg/L	2415.8	ppb	14:58:55
1	Pb 220.353†	1888.8	1881.9	502.53	µg/L	502.53	ppb	14:58:55
1	S 181.975 Axial†	487.4	442.0	1017.0	µg/L	1017.0	ppb	14:58:55
1	Sb 206.836†	1055.2	1010.0	495.94	µg/L	495.94	ppb	14:58:55
1	Se 196.026†	564.3	592.9	506	µg/L	506	ppb	14:58:55
1	SiO2 †	77623.2	75720.1	5250.0	µg/L	5250.0	ppb	14:58:35
1	Sn 189.927†	1906.0	1905.0	496.33	µg/L	496.33	ppb	14:58:55
1	Ti 334.940†	369347.9	366130.3	500.17	µg/L	500.17	ppb	14:58:29
1	Tl 190.801†	1265.0	1291.0	508.47	µg/L	508.47	ppb	14:58:55
1	U 409.014†	8039.3	7585.4	508.56	µg/L	508.56	ppb	14:58:35
1	V 292.402†	32719.2	32600.9	506.01	µg/L	506.01	ppb	14:58:35
1	Zn 213.857†	21431.9	20694.2	498.57	µg/L	498.57	ppb	14:58:35
1	Si 251.611†	75127.9	73261.4	2430	µg/L	2430	ppb	15:00:03
2	Sc RADIAL	40506.0	40506.0	101	%			14:57:35
2	Al 396.153Radial†	16808.2	16585.9	5009.6	µg/L	5009.6	ppb	14:57:35
2	Ca 317.933Radial†	21900.2	21579.3	4956.9	µg/L	4956.9	ppb	14:57:55
2	Fe 238.204 Radial†	5012.3	4931.3	5097.3	µg/L	5097.3	ppb	14:57:55
2	K 766.490 Radial†	12278.9	11074.4	5071.3	µg/L	5071.3	ppb	14:57:35
2	Mg 279.077 IEC†	1736.9	1718.5	5093.4	µg/L	5093.4	ppb	14:57:55
2	Na 589.592 Radial†	63656.7	62090.3	10113	µg/L	10113	ppb	14:57:35
2	Sr 421.552†	110584.0	109797.2	507.12	µg/L	507.12	ppb	14:57:35
2	Sc 361.383	1081012.4	1081012.4	100.90	%			14:59:01
2	Y 371.029	584687.9	584687.9	99.618	%			14:59:01
2	Ag 328.068†	66222.2	66233.1	500.93	µg/L	500.93	ppb	14:59:06
2	As 188.979†	943.7	964.9	507.39	µg/L	507.39	ppb	14:59:26
2	B 249.677†	7586.9	7373.7	497.76	µg/L	497.76	ppb	14:59:06
2	Ba 233.527†	45957.4	45677.9	499.08	µg/L	499.08	ppb	14:59:06
2	Be 313.107†	721112.0	714804.8	502.12	µg/L	502.12	ppb	14:59:01
2	Cd 226.502†	13434.1	13341.9	497.14	µg/L	497.14	ppb	14:59:06
2	Co 228.616†	15631.4	15623.8	497.03	µg/L	497.03	ppb	14:59:06
2	Cr 267.716†	17485.3	17255.8	495.09	µg/L	495.09	ppb	14:59:06
2	Cu 324.752†	130870.3	124639.6	501.61	µg/L	501.61	ppb	14:59:01
2	Mn 257.610†	271745.4	268944.4	503.35	µg/L	503.35	ppb	14:59:01
2	Mo 202.031†	3854.6	3815.8	513.97	µg/L	513.97	ppb	14:59:26
2	Ni 231.604†	7924.1	7680.6	511.66	µg/L	511.66	ppb	14:59:26
2	P 214.914†	3155.1	2958.7	2409.0	µg/L	2409.0	ppb	14:59:26

2	Pb 220.353†	1877.4	1867.7	498.75 µg/L	498.75 ppb	14:59:26
2	S 181.975 Axial†	489.7	443.5	1020.5 µg/L	1020.5 ppb	14:59:26
2	Sb 206.836†	1065.0	1018.1	499.98 µg/L	499.98 ppb	14:59:26
2	Se 196.026†	562.9	590.7	504 µg/L	504 ppb	14:59:26
2	SiO2 †	76973.9	74956.3	5196.9 µg/L	5196.9 ppb	14:59:06
2	Sn 189.927†	1934.5	1930.2	502.91 µg/L	502.91 ppb	14:59:26
2	Ti 334.940†	370341.0	366542.0	500.73 µg/L	500.73 ppb	14:59:01
2	Tl 190.801†	1252.2	1276.4	502.76 µg/L	502.76 ppb	14:59:26
2	U 409.014†	7984.2	7518.3	504.06 µg/L	504.06 ppb	14:59:06
2	V 292.402†	32548.7	32381.2	502.63 µg/L	502.63 ppb	14:59:06
2	Zn 213.857†	21336.4	20566.3	495.45 µg/L	495.45 ppb	14:59:06
2	Si 251.611†	75881.0	73891.3	2450 µg/L	2450 ppb	15:00:09
3	Sc RADIAL	40287.0	40287.0	100 %		14:58:01
3	Al 396.153Radial†	16717.3	16585.8	5010.0 µg/L	5010.0 ppb	14:58:01
3	Ca 317.933Radial†	21811.7	21609.2	4963.7 µg/L	4963.7 ppb	14:58:21
3	Fe 238.204 Radial†	4998.7	4944.8	5111.2 µg/L	5111.2 ppb	14:58:21
3	K 766.490 Radial†	12200.1	11062.0	5065.7 µg/L	5065.7 ppb	14:58:01
3	Mg 279.077 IEC†	1724.7	1715.7	5084.9 µg/L	5084.9 ppb	14:58:21
3	Na 589.592 Radial†	63069.1	61847.5	10074 µg/L	10074 ppb	14:58:01
3	Sr 421.552†	109685.1	109496.9	505.73 µg/L	505.73 ppb	14:58:01
3	Sc 361.383	1089347.5	1089347.5	101.68 %		14:59:32
3	Y 371.029	589123.6	589123.6	100.37 %		14:59:32
3	Ag 328.068†	66892.6	66390.2	502.12 µg/L	502.12 ppb	14:59:37
3	As 188.979†	932.9	947.1	498.16 µg/L	498.16 ppb	14:59:58
3	B 249.677†	7695.9	7423.4	501.09 µg/L	501.09 ppb	14:59:37
3	Ba 233.527†	46365.0	45730.4	499.65 µg/L	499.65 ppb	14:59:37
3	Be 313.107†	727290.7	715413.1	502.55 µg/L	502.55 ppb	14:59:32
3	Cd 226.502†	13512.4	13317.0	496.20 µg/L	496.20 ppb	14:59:37
3	Co 228.616†	15847.8	15718.1	500.02 µg/L	500.02 ppb	14:59:37
3	Cr 267.716†	17673.0	17307.8	496.58 µg/L	496.58 ppb	14:59:37
3	Cu 324.752†	131736.1	124498.7	501.05 µg/L	501.05 ppb	14:59:32
3	Mn 257.610†	273776.3	268881.1	503.24 µg/L	503.24 ppb	14:59:32
3	Mo 202.031†	3816.1	3748.8	504.95 µg/L	504.95 ppb	14:59:58
3	Ni 231.604†	7835.1	7533.0	501.81 µg/L	501.81 ppb	14:59:58
3	P 214.914†	3115.2	2895.6	2355.9 µg/L	2355.9 ppb	14:59:58
3	Pb 220.353†	1849.2	1825.7	487.55 µg/L	487.55 ppb	14:59:58
3	S 181.975 Axial†	481.3	431.6	992.83 µg/L	992.83 ppb	14:59:58
3	Sb 206.836†	1057.7	1002.8	492.33 µg/L	492.33 ppb	14:59:58
3	Se 196.026†	553.4	577.1	493 µg/L	493 ppb	14:59:58
3	SiO2 †	77634.3	75022.1	5201.8 µg/L	5201.8 ppb	14:59:37
3	Sn 189.927†	1890.9	1872.6	487.92 µg/L	487.92 ppb	14:59:58
3	Ti 334.940†	373096.0	366443.2	500.60 µg/L	500.60 ppb	14:59:32
3	Tl 190.801†	1250.5	1265.2	498.38 µg/L	498.38 ppb	14:59:58
3	U 409.014†	8083.7	7555.6	506.55 µg/L	506.55 ppb	14:59:37
3	V 292.402†	32844.2	32425.1	503.22 µg/L	503.22 ppb	14:59:37
3	Zn 213.857†	21474.8	20540.6	494.88 µg/L	494.88 ppb	14:59:37
3	Si 251.611†	75942.7	73376.6	2430 µg/L	2430 ppb	15:00:14

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1083228.1	101.11	%	0.501				0.50%
Sc RADIAL	40433.5	101	%	0.3				0.31%
Y 371.029	586021.0	99.845	%	0.4593				0.46%
Ag 328.068†	66461.6	502.65	µg/L	2.045	502.65	ppb	2.045	0.41%
QC value within limits for Ag 328.068 Recovery = 100.53%								
Al 396.153Radial†	16564.1	5003.1	µg/L	11.56	5003.1	ppb	11.56	0.23%
QC value within limits for Al 396.153Radial Recovery = 100.06%								
As 188.979†	959.3	504.49	µg/L	5.486	504.49	ppb	5.486	1.09%
QC value within limits for As 188.979 Recovery = 100.90%								
B 249.677†	7406.5	499.96	µg/L	1.907	499.96	ppb	1.907	0.38%
QC value within limits for B 249.677 Recovery = 99.99%								
Ba 233.527†	45768.4	500.06	µg/L	1.251	500.06	ppb	1.251	0.25%
QC value within limits for Ba 233.527 Recovery = 100.01%								
Be 313.107†	714935.5	502.21	µg/L	0.300	502.21	ppb	0.300	0.06%
QC value within limits for Be 313.107 Recovery = 100.44%								
Ca 317.933Radial†	21537.0	4947.2	µg/L	23.01	4947.2	ppb	23.01	0.47%
QC value within limits for Ca 317.933Radial Recovery = 98.94%								
Cd 226.502†	13356.3	497.67	µg/L	1.793	497.67	ppb	1.793	0.36%
QC value within limits for Cd 226.502 Recovery = 99.53%								

Co 228.616†	15696.2	499.33 µg/L	2.048	499.33 ppb	2.048	0.41%
QC value within limits for Co 228.616 Recovery = 99.87%						
Cr 267.716†	17311.2	496.67 µg/L	1.638	496.67 ppb	1.638	0.33%
QC value within limits for Cr 267.716 Recovery = 99.33%						
Cu 324.752†	124660.2	501.69 µg/L	0.692	501.69 ppb	0.692	0.14%
QC value within limits for Cu 324.752 Recovery = 100.34%						
Fe 238.204 Radial†	4929.4	5095.3 µg/L	16.91	5095.3 ppb	16.91	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 101.91%						
K 766.490 Radial†	11085.2	5076.3 µg/L	13.77	5076.3 ppb	13.77	0.27%
QC value within limits for K 766.490 Radial Recovery = 101.53%						
Mg 279.077 IEC†	1713.1	5077.3 µg/L	20.92	5077.3 ppb	20.92	0.41%
QC value within limits for Mg 279.077 IEC Recovery = 101.55%						
Mn 257.610†	268919.9	503.31 µg/L	0.062	503.31 ppb	0.062	0.01%
QC value within limits for Mn 257.610 Recovery = 100.66%						
Mo 202.031†	3793.9	511.02 µg/L	5.257	511.02 ppb	5.257	1.03%
QC value within limits for Mo 202.031 Recovery = 102.20%						
Na 589.592 Radial†	61902.3	10083 µg/L	27.3	10083 ppb	27.3	0.27%
QC value within limits for Na 589.592 Radial Recovery = 100.83%						
Ni 231.604†	7627.0	508.08 µg/L	5.447	508.08 ppb	5.447	1.07%
QC value within limits for Ni 231.604 Recovery = 101.62%						
P 214.914†	2940.4	2393.6 µg/L	32.80	2393.6 ppb	32.80	1.37%
QC value within limits for P 214.914 Recovery = 95.74%						
Pb 220.353†	1858.5	496.28 µg/L	7.791	496.28 ppb	7.791	1.57%
QC value within limits for Pb 220.353 Recovery = 99.26%						
S 181.975 Axial†	439.0	1010.1 µg/L	15.08	1010.1 ppb	15.08	1.49%
QC value within limits for S 181.975 Axial Recovery = 101.01%						
Sb 206.836†	1010.3	496.08 µg/L	3.826	496.08 ppb	3.826	0.77%
QC value within limits for Sb 206.836 Recovery = 99.22%						
Se 196.026†	586.9	501 µg/L	7.3	501 ppb	7.3	1.46%
QC value within limits for Se 196.026 Recovery = 100.25%						
SiO2 †	75232.9	5216.3 µg/L	29.36	5216.3 ppb	29.36	0.56%
QC value within limits for SiO2 Recovery = 97.55%						
Si 251.611†	73509.8	2440 µg/L	11.1	2440 ppb	11.1	0.46%
QC value within limits for Si 251.611 Recovery = 97.45%						
Sn 189.927†	1902.6	495.72 µg/L	7.511	495.72 ppb	7.511	1.52%
QC value within limits for Sn 189.927 Recovery = 99.14%						
Sr 421.552†	109542.3	505.94 µg/L	1.088	505.94 ppb	1.088	0.21%
QC value within limits for Sr 421.552 Recovery = 101.19%						
Ti 334.940†	366371.8	500.50 µg/L	0.296	500.50 ppb	0.296	0.06%
QC value within limits for Ti 334.940 Recovery = 100.10%						
Tl 190.801†	1277.5	503.20 µg/L	5.059	503.20 ppb	5.059	1.01%
QC value within limits for Tl 190.801 Recovery = 100.64%						
U 409.014†	7553.1	506.39 µg/L	2.256	506.39 ppb	2.256	0.45%
QC value within limits for U 409.014 Recovery = 101.28%						
V 292.402†	32469.1	503.95 µg/L	1.805	503.95 ppb	1.805	0.36%
QC value within limits for V 292.402 Recovery = 100.79%						
Zn 213.857†	20600.4	496.30 µg/L	1.984	496.30 ppb	1.984	0.40%
QC value within limits for Zn 213.857 Recovery = 99.26%						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: CCB
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 15:02:02
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	40725.6	40725.6	101	%			15:03:26
1	Al 396.153Radial†	65.8	-30.4	-9.2795	µg/L	-9.2795	ppb	15:03:26
1	Ca 317.933Radial†	209.7	51.6	11.843	µg/L	11.843	ppb	15:03:46
1	Fe 238.204 Radial†	54.0	10.1	10.475	µg/L	10.475	ppb	15:03:46
1	K 766.490 Radial†	1251.0	123.1	56.349	µg/L	56.349	ppb	15:03:26
1	Mg 279.077 IEC†	5.1	-0.2	-0.5922	µg/L	-0.5922	ppb	15:03:46
1	Na 589.592 Radial†	1628.8	522.3	85.080	µg/L	85.080	ppb	15:03:26
1	Sr 421.552†	-14.7	34.0	0.1569	µg/L	0.1569	ppb	15:03:26
1	Sc 361.383	1097964.5	1097964.5	102.48	%			15:04:44
1	Y 371.029	598330.2	598330.2	101.94	%			15:04:44
1	Ag 328.068†	-582.6	32.5	0.2485	µg/L	0.2485	ppb	15:04:49
1	As 188.979†	-27.9	2.4	1.2566	µg/L	1.2566	ppb	15:05:10
1	B 249.677†	211.4	60.7	4.0964	µg/L	4.0964	ppb	15:05:10
1	Ba 233.527†	-110.4	22.4	0.2448	µg/L	0.2448	ppb	15:05:10
1	Be 313.107†	254.8	367.2	0.2577	µg/L	0.2577	ppb	15:04:49
1	Cd 226.502†	-21.6	6.4	0.2376	µg/L	0.2376	ppb	15:05:10
1	Co 228.616†	-127.2	7.6	0.2418	µg/L	0.2418	ppb	15:05:10
1	Cr 267.716†	82.0	6.4	0.1837	µg/L	0.1837	ppb	15:05:10
1	Cu 324.752†	4951.4	-233.0	-0.9381	µg/L	-0.9381	ppb	15:04:49
1	Mn 257.610†	448.7	58.4	0.1106	µg/L	0.1106	ppb	15:05:10
1	Mo 202.031†	14.3	9.5	1.2785	µg/L	1.2785	ppb	15:05:10
1	Ni 231.604†	169.8	-7.2	-0.4744	µg/L	-0.4744	ppb	15:05:10
1	P 214.914†	179.6	6.9	5.9998	µg/L	5.9998	ppb	15:05:10
1	Pb 220.353†	-3.0	4.1	1.0903	µg/L	1.0903	ppb	15:05:10
1	S 181.975 Axial†	48.8	5.8	13.386	µg/L	13.386	ppb	15:05:10
1	Sb 206.836†	53.8	15.1	7.4124	µg/L	7.4124	ppb	15:05:10
1	Se 196.026†	-29.2	4.3	3.68	µg/L	3.68	ppb	15:05:10
1	SiO2 †	1427.1	60.9	4.1896	µg/L	4.1896	ppb	15:04:49
1	Sn 189.927†	-1.8	11.2	2.9203	µg/L	2.9203	ppb	15:05:10
1	Ti 334.940†	848.9	329.4	0.4508	µg/L	0.4508	ppb	15:04:49
1	Tl 190.801†	-34.0	2.1	0.8433	µg/L	0.8433	ppb	15:05:10
1	U 409.014†	393.1	-11.2	-0.7456	µg/L	-0.7456	ppb	15:04:49
1	V 292.402†	-89.3	35.4	0.5552	µg/L	0.5552	ppb	15:04:49
1	Zn 213.857†	520.5	-72.1	-1.7496	µg/L	-1.7496	ppb	15:05:10
1	Si 251.611†	1403.6	56.2	1.85	µg/L	1.85	ppb	15:06:17
2	Sc RADIAL	40807.4	40807.4	102	%			15:03:51
2	Al 396.153Radial†	100.2	3.4	0.9272	µg/L	0.9272	ppb	15:03:51
2	Ca 317.933Radial†	216.4	57.8	13.235	µg/L	13.235	ppb	15:04:11
2	Fe 238.204 Radial†	48.3	4.5	4.6028	µg/L	4.6028	ppb	15:04:11
2	K 766.490 Radial†	1096.7	-31.4	-14.389	µg/L	-14.389	ppb	15:03:51
2	Mg 279.077 IEC†	10.2	4.8	14.253	µg/L	14.253	ppb	15:04:11
2	Na 589.592 Radial†	1769.3	657.5	107.10	µg/L	107.10	ppb	15:03:51
2	Sr 421.552†	-4.3	44.3	0.2044	µg/L	0.2044	ppb	15:03:51
2	Sc 361.383	1084089.3	1084089.3	101.19	%			15:05:15
2	Y 371.029	591324.1	591324.1	100.75	%			15:05:15
2	Ag 328.068†	-621.1	-12.8	-0.0944	µg/L	-0.0944	ppb	15:05:20
2	As 188.979†	-25.1	4.8	2.4936	µg/L	2.4936	ppb	15:05:40
2	B 249.677†	211.2	63.2	4.2656	µg/L	4.2656	ppb	15:05:40
2	Ba 233.527†	-124.0	7.6	0.0824	µg/L	0.0824	ppb	15:05:40
2	Be 313.107†	205.3	321.4	0.2248	µg/L	0.2248	ppb	15:05:20
2	Cd 226.502†	-24.3	3.5	0.1276	µg/L	0.1276	ppb	15:05:40
2	Co 228.616†	-132.0	1.2	0.0429	µg/L	0.0429	ppb	15:05:40
2	Cr 267.716†	79.8	5.2	0.1531	µg/L	0.1531	ppb	15:05:40
2	Cu 324.752†	4975.7	-147.2	-0.5903	µg/L	-0.5903	ppb	15:05:20
2	Mn 257.610†	479.6	94.5	0.1777	µg/L	0.1777	ppb	15:05:40
2	Mo 202.031†	20.0	15.3	2.0580	µg/L	2.0580	ppb	15:05:40
2	Ni 231.604†	162.6	-12.2	-0.8094	µg/L	-0.8094	ppb	15:05:40
2	P 214.914†	169.0	-1.2	-0.9156	µg/L	-0.9156	ppb	15:05:40

2	Pb 220.353†	-11.8	-4.6	-1.2231 µg/L	-1.2231 ppb	15:05:40
2	S 181.975 Axial†	49.8	7.4	17.117 µg/L	17.117 ppb	15:05:40
2	Sb 206.836†	43.0	5.1	2.5183 µg/L	2.5183 ppb	15:05:40
2	Se 196.026†	-32.9	0.3	0.214 µg/L	0.214 ppb	15:05:40
2	SiO2 †	1473.4	124.4	8.5793 µg/L	8.5793 ppb	15:05:20
2	Sn 189.927†	6.6	19.5	5.0707 µg/L	5.0707 ppb	15:05:40
2	Ti 334.940†	878.0	368.7	0.5067 µg/L	0.5067 ppb	15:05:20
2	Tl 190.801†	-33.3	2.4	0.9458 µg/L	0.9458 ppb	15:05:40
2	U 409.014†	327.7	-70.9	-4.7313 µg/L	-4.7313 ppb	15:05:20
2	V 292.402†	-126.2	-2.2	-0.0184 µg/L	-0.0184 ppb	15:05:20
2	Zn 213.857†	526.1	-60.1	-1.4563 µg/L	-1.4563 ppb	15:05:40
2	Si 251.611†	1438.9	108.6	3.57 µg/L	3.57 ppb	15:06:22
3	Sc RADIAL	41030.0	41030.0	102 %		15:04:16
3	Al 396.153Radial†	106.2	8.7	2.5876 µg/L	2.5876 ppb	15:04:16
3	Ca 317.933Radial†	203.2	43.7	10.017 µg/L	10.017 ppb	15:04:36
3	Fe 238.204 Radial†	49.5	5.4	5.5822 µg/L	5.5822 ppb	15:04:36
3	K 766.490 Radial†	1122.0	-12.5	-5.7076 µg/L	-5.7076 ppb	15:04:16
3	Mg 279.077 IEC†	7.6	2.2	6.5833 µg/L	6.5833 ppb	15:04:36
3	Na 589.592 Radial†	1560.0	442.9	72.151 µg/L	72.151 ppb	15:04:16
3	Sr 421.552†	7.7	56.1	0.2588 µg/L	0.2588 ppb	15:04:16
3	Sc 361.383	1086621.9	1086621.9	101.42 %		15:05:46
3	Y 371.029	592793.4	592793.4	101.00 %		15:05:46
3	Ag 328.068†	-628.9	-19.1	-0.1419 µg/L	-0.1419 ppb	15:05:51
3	As 188.979†	-28.5	1.5	0.7678 µg/L	0.7678 ppb	15:06:11
3	B 249.677†	204.6	56.2	3.7867 µg/L	3.7867 ppb	15:06:11
3	Ba 233.527†	-122.1	9.7	0.1060 µg/L	0.1060 ppb	15:06:11
3	Be 313.107†	254.3	369.3	0.2590 µg/L	0.2590 ppb	15:05:51
3	Cd 226.502†	-17.5	10.2	0.3804 µg/L	0.3804 ppb	15:06:11
3	Co 228.616†	-124.7	8.8	0.2800 µg/L	0.2800 ppb	15:06:11
3	Cr 267.716†	65.7	-8.9	-0.2541 µg/L	-0.2541 ppb	15:06:11
3	Cu 324.752†	4972.5	-161.9	-0.6510 µg/L	-0.6510 ppb	15:05:51
3	Mn 257.610†	464.4	78.4	0.1473 µg/L	0.1473 ppb	15:06:11
3	Mo 202.031†	12.4	7.8	1.0478 µg/L	1.0478 ppb	15:06:11
3	Ni 231.604†	168.2	-7.0	-0.4639 µg/L	-0.4639 ppb	15:06:11
3	P 214.914†	172.5	1.8	1.6655 µg/L	1.6655 ppb	15:06:11
3	Pb 220.353†	-1.0	6.1	1.6232 µg/L	1.6232 ppb	15:06:11
3	S 181.975 Axial†	47.3	4.8	11.203 µg/L	11.203 ppb	15:06:11
3	Sb 206.836†	41.7	3.7	1.8435 µg/L	1.8435 ppb	15:06:11
3	Se 196.026†	-17.0	16.0	13.7 µg/L	13.7 ppb	15:06:11
3	SiO2 †	1461.4	109.2	7.5567 µg/L	7.5567 ppb	15:05:51
3	Sn 189.927†	-2.3	10.7	2.7812 µg/L	2.7812 ppb	15:06:11
3	Ti 334.940†	752.9	243.4	0.3338 µg/L	0.3338 ppb	15:05:51
3	Tl 190.801†	-31.1	4.7	1.8242 µg/L	1.8242 ppb	15:06:11
3	U 409.014†	375.8	-24.2	-1.6156 µg/L	-1.6156 ppb	15:05:51
3	V 292.402†	-115.9	8.3	0.1346 µg/L	0.1346 ppb	15:05:51
3	Zn 213.857†	520.2	-67.2	-1.6300 µg/L	-1.6300 ppb	15:06:11
3	Si 251.611†	1456.4	122.5	4.05 µg/L	4.05 ppb	15:06:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1089558.6	101.70	%	0.690				0.68%
Sc RADIAL	40854.3	102	%	0.4				0.39%
Y 371.029	594149.3	101.23	%	0.629				0.62%
Ag 328.068†	0.2	0.0041	µg/L	0.21303	0.0041	ppb	0.21303	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-6.1	-1.9215	µg/L	6.42604	-1.9215	ppb	6.42604	334.42%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.9	1.5060	µg/L	0.88955	1.5060	ppb	0.88955	59.07%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	60.0	4.0496	µg/L	0.24285	4.0496	ppb	0.24285	6.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	13.2	0.1444	µg/L	0.08776	0.1444	ppb	0.08776	60.77%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	352.6	0.2472	µg/L	0.01937	0.2472	ppb	0.01937	7.84%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	51.0	11.698	µg/L	1.6139	11.698	ppb	1.6139	13.80%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	6.7	0.2485	µg/L	0.12676	0.2485	ppb	0.12676	51.00%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	5.9	0.1882 µg/L	0.12730	0.1882 ppb	0.12730	67.63%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	0.9	0.0276 µg/L	0.24441	0.0276 ppb	0.24441	886.22%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-180.7	-0.7265 µg/L	0.18576	-0.7265 ppb	0.18576	25.57%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	6.7	6.8866 µg/L	3.14589	6.8866 ppb	3.14589	45.68%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	26.4	12.084 µg/L	38.5793	12.084 ppb	38.5793	319.26%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.3	6.7481 µg/L	7.42399	6.7481 ppb	7.42399	110.02%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	77.1	0.1452 µg/L	0.03360	0.1452 ppb	0.03360	23.15%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.9	1.4615 µg/L	0.52937	1.4615 ppb	0.52937	36.22%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	540.9	88.110 µg/L	17.6698	88.110 ppb	17.6698	20.05%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-8.8	-0.5825 µg/L	0.19650	-0.5825 ppb	0.19650	33.73%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	2.5	2.2499 µg/L	3.49453	2.2499 ppb	3.49453	155.32%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	1.8	0.4968 µg/L	1.51308	0.4968 ppb	1.51308	304.57%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	6.0	13.902 µg/L	2.9907	13.902 ppb	2.9907	21.51%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	7.9	3.9248 µg/L	3.03917	3.9248 ppb	3.03917	77.44%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.9	5.86 µg/L	6.988	5.86 ppb	6.988	119.35%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	98.2	6.7752 µg/L	2.29681	6.7752 ppb	2.29681	33.90%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	95.7	3.16 µg/L	1.161	3.16 ppb	1.161	36.77%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	13.8	3.5907 µg/L	1.28360	3.5907 ppb	1.28360	35.75%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	44.8	0.2067 µg/L	0.05099	0.2067 ppb	0.05099	24.67%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	313.8	0.4304 µg/L	0.08822	0.4304 ppb	0.08822	20.50%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	3.1	1.2044 µg/L	0.53916	1.2044 ppb	0.53916	44.77%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-35.4	-2.3642 µg/L	2.09564	-2.3642 ppb	2.09564	88.64%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	13.8	0.2238 µg/L	0.29703	0.2238 ppb	0.29703	132.74%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-66.4	-1.6120 µg/L	0.14749	-1.6120 ppb	0.14749	9.15%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 16
Sample ID: CCV
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/24/2005 15:52:07
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39905.6	39905.6	99.3	%			15:53:34
1	Al 396.153Radial†	16477.7	16503.9	4985.1	µg/L	4985.1	ppb	15:53:34
1	Ca 317.933Radial†	21612.6	21616.7	4965.4	µg/L	4965.4	ppb	15:53:54
1	Fe 238.204 Radial†	4960.9	4954.4	5121.1	µg/L	5121.1	ppb	15:53:54
1	K 766.490 Radial†	12005.2	10982.0	5029.0	µg/L	5029.0	ppb	15:53:34
1	Mg 279.077 IEC†	1707.0	1714.3	5080.8	µg/L	5080.8	ppb	15:53:54
1	Na 589.592 Radial†	61535.0	60903.6	9920.1	µg/L	9920.1	ppb	15:53:34
1	Sr 421.552†	108061.9	108907.9	503.01	µg/L	503.01	ppb	15:53:34
1	Sc 361.383	1078340.0	1078340.0	100.65	%			15:54:53
1	Y 371.029	583668.4	583668.4	99.445	%			15:54:53
1	Ag 328.068†	65437.2	65615.8	496.28	µg/L	496.28	ppb	15:54:58
1	As 188.979†	932.4	955.9	502.70	µg/L	502.70	ppb	15:55:19
1	B 249.677†	7444.5	7250.9	489.46	µg/L	489.46	ppb	15:54:58
1	Ba 233.527†	45397.7	45234.7	494.23	µg/L	494.23	ppb	15:54:58
1	Be 313.107†	717762.9	713248.4	501.02	µg/L	501.02	ppb	15:54:53
1	Cd 226.502†	13260.3	13202.2	491.92	µg/L	491.92	ppb	15:54:58
1	Co 228.616†	15517.9	15549.4	494.66	µg/L	494.66	ppb	15:54:58
1	Cr 267.716†	17367.8	17182.1	492.97	µg/L	492.97	ppb	15:54:58
1	Cu 324.752†	131719.3	125804.5	506.31	µg/L	506.31	ppb	15:54:58
1	Mn 257.610†	270230.4	268106.7	501.79	µg/L	501.79	ppb	15:54:53
1	Mo 202.031†	3791.6	3762.7	506.82	µg/L	506.82	ppb	15:55:19
1	Ni 231.604†	7796.5	7573.3	504.50	µg/L	504.50	ppb	15:55:19
1	P 214.914†	3118.9	2930.5	2384.4	µg/L	2384.4	ppb	15:55:19
1	Pb 220.353†	1850.7	1845.8	492.89	µg/L	492.89	ppb	15:55:19
1	S 181.975 Axial†	465.5	420.7	967.74	µg/L	967.74	ppb	15:55:19
1	Sb 206.836†	1034.9	990.8	486.50	µg/L	486.50	ppb	15:55:19
1	Se 196.026†	561.7	590.9	505	µg/L	505	ppb	15:55:19
1	SiO2 †	75951.9	74130.0	5139.7	µg/L	5139.7	ppb	15:54:58
1	Sn 189.927†	1880.8	1881.7	490.27	µg/L	490.27	ppb	15:55:19
1	Ti 334.940†	368727.2	365848.2	499.79	µg/L	499.79	ppb	15:54:53
1	Tl 190.801†	1221.4	1248.9	491.99	µg/L	491.99	ppb	15:55:19
1	U 409.014†	7899.4	7453.7	499.72	µg/L	499.72	ppb	15:54:58
1	V 292.402†	32200.8	32115.5	498.48	µg/L	498.48	ppb	15:54:58
1	Zn 213.857†	21141.0	20424.5	492.03	µg/L	492.03	ppb	15:54:58
1	Si 251.611†	74949.5	73152.3	2420	µg/L	2420	ppb	15:56:27
2	Sc RADIAL	40134.9	40134.9	99.8	%			15:53:59
2	Al 396.153Radial†	16635.7	16567.3	5003.9	µg/L	5003.9	ppb	15:53:59
2	Ca 317.933Radial†	21520.3	21399.8	4915.6	µg/L	4915.6	ppb	15:54:19
2	Fe 238.204 Radial†	4935.1	4899.9	5064.9	µg/L	5064.9	ppb	15:54:19
2	K 766.490 Radial†	12123.5	11031.3	5051.6	µg/L	5051.6	ppb	15:53:59
2	Mg 279.077 IEC†	1698.0	1695.4	5025.2	µg/L	5025.2	ppb	15:54:19
2	Na 589.592 Radial†	62181.2	61196.6	9967.8	µg/L	9967.8	ppb	15:53:59
2	Sr 421.552†	109131.7	109357.2	505.09	µg/L	505.09	ppb	15:53:59
2	Sc 361.383	1065242.0	1065242.0	99.427	%			15:55:24
2	Y 371.029	576481.6	576481.6	98.220	%			15:55:24
2	Ag 328.068†	65498.0	66476.3	502.77	µg/L	502.77	ppb	15:55:30
2	As 188.979†	932.7	967.6	508.85	µg/L	508.85	ppb	15:55:50
2	B 249.677†	7486.0	7383.6	498.43	µg/L	498.43	ppb	15:55:30
2	Ba 233.527†	45616.1	46009.0	502.69	µg/L	502.69	ppb	15:55:30
2	Be 313.107†	710706.8	714920.1	502.20	µg/L	502.20	ppb	15:55:24
2	Cd 226.502†	13326.9	13431.2	500.46	µg/L	500.46	ppb	15:55:30
2	Co 228.616†	15570.1	15791.5	502.38	µg/L	502.38	ppb	15:55:30
2	Cr 267.716†	17380.2	17406.7	499.42	µg/L	499.42	ppb	15:55:30
2	Cu 324.752†	131954.9	127650.6	513.74	µg/L	513.74	ppb	15:55:30
2	Mn 257.610†	267851.1	269014.8	503.48	µg/L	503.48	ppb	15:55:24
2	Mo 202.031†	3808.5	3826.0	515.34	µg/L	515.34	ppb	15:55:50
2	Ni 231.604†	7828.0	7700.3	512.96	µg/L	512.96	ppb	15:55:50
2	P 214.914†	3131.0	2980.7	2425.7	µg/L	2425.7	ppb	15:55:50

2	Pb 220.353†	1861.1	1878.9	501.73 µg/L	501.73 ppb	15:55:50
2	S 181.975 Axial†	459.8	420.7	967.68 µg/L	967.68 ppb	15:55:50
2	Sb 206.836†	1036.5	1005.0	493.50 µg/L	493.50 ppb	15:55:50
2	Se 196.026†	555.7	591.7	505 µg/L	505 ppb	15:55:50
2	SiO2 †	76169.8	75277.0	5219.2 µg/L	5219.2 ppb	15:55:30
2	Sn 189.927†	1891.3	1915.2	498.99 µg/L	498.99 ppb	15:55:50
2	Ti 334.940†	364442.4	366043.3	500.05 µg/L	500.05 ppb	15:55:24
2	Tl 190.801†	1228.6	1271.0	500.64 µg/L	500.64 ppb	15:55:50
2	U 409.014†	7825.2	7475.5	501.23 µg/L	501.23 ppb	15:55:30
2	V 292.402†	32330.0	32638.9	506.60 µg/L	506.60 ppb	15:55:30
2	Zn 213.857†	21188.1	20730.1	499.42 µg/L	499.42 ppb	15:55:30
2	Si 251.611†	74888.2	74006.2	2450 µg/L	2450 ppb	15:56:32
3	Sc RADIAL	40363.2	40363.2	100 %		15:54:25
3	Al 396.153Radial†	16759.9	16596.8	5013.3 µg/L	5013.3 ppb	15:54:25
3	Ca 317.933Radial†	21528.7	21286.3	4889.5 µg/L	4889.5 ppb	15:54:45
3	Fe 238.204 Radial†	4946.0	4882.9	5047.3 µg/L	5047.3 ppb	15:54:45
3	K 766.490 Radial†	12186.7	11025.6	5049.0 µg/L	5049.0 ppb	15:54:25
3	Mg 279.077 IEC†	1712.5	1700.3	5039.4 µg/L	5039.4 ppb	15:54:45
3	Na 589.592 Radial†	62648.8	61310.1	9986.3 µg/L	9986.3 ppb	15:54:25
3	Sr 421.552†	109813.5	109418.2	505.37 µg/L	505.37 ppb	15:54:25
3	Sc 361.383	1081567.0	1081567.0	100.95 %		15:55:56
3	Y 371.029	585429.1	585429.1	99.745 %		15:55:56
3	Ag 328.068†	65187.7	65174.7	492.94 µg/L	492.94 ppb	15:56:01
3	As 188.979†	935.0	955.8	502.59 µg/L	502.59 ppb	15:56:21
3	B 249.677†	7453.4	7237.6	488.58 µg/L	488.58 ppb	15:56:01
3	Ba 233.527†	45566.2	45267.1	494.59 µg/L	494.59 ppb	15:56:01
3	Be 313.107†	721114.1	714440.3	501.86 µg/L	501.86 ppb	15:55:56
3	Cd 226.502†	13319.2	13221.3	492.64 µg/L	492.64 ppb	15:56:01
3	Co 228.616†	15548.5	15533.7	494.16 µg/L	494.16 ppb	15:56:01
3	Cr 267.716†	17391.5	17154.1	492.17 µg/L	492.17 ppb	15:56:01
3	Cu 324.752†	130886.7	124589.3	501.42 µg/L	501.42 ppb	15:56:01
3	Mn 257.610†	271578.0	268640.5	502.78 µg/L	502.78 ppb	15:55:56
3	Mo 202.031†	3799.9	3759.6	506.41 µg/L	506.41 ppb	15:56:21
3	Ni 231.604†	7851.0	7604.1	506.56 µg/L	506.56 ppb	15:56:21
3	P 214.914†	3126.5	2928.8	2383.9 µg/L	2383.9 ppb	15:56:21
3	Pb 220.353†	1859.5	1849.0	493.75 µg/L	493.75 ppb	15:56:21
3	S 181.975 Axial†	465.6	419.5	964.80 µg/L	964.80 ppb	15:56:21
3	Sb 206.836†	1043.0	995.7	488.91 µg/L	488.91 ppb	15:56:21
3	Se 196.026†	557.5	585.0	500 µg/L	500 ppb	15:56:21
3	SiO2 †	75642.0	73597.8	5102.7 µg/L	5102.7 ppb	15:56:01
3	Sn 189.927†	1899.1	1894.2	493.53 µg/L	493.53 ppb	15:56:21
3	Ti 334.940†	370584.7	366595.2	500.81 µg/L	500.81 ppb	15:55:56
3	Tl 190.801†	1235.8	1259.5	496.17 µg/L	496.17 ppb	15:56:21
3	U 409.014†	7841.9	7373.3	494.36 µg/L	494.36 ppb	15:56:01
3	V 292.402†	32252.7	32071.5	497.79 µg/L	497.79 ppb	15:56:01
3	Zn 213.857†	21064.4	20286.0	488.67 µg/L	488.67 ppb	15:56:01
3	Si 251.611†	74341.6	72327.9	2400 µg/L	2400 ppb	15:56:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1075049.7	100.34	%	0.807				0.80%
Sc RADIAL	40134.6	99.8	%	0.57				0.57%
Y 371.029	581859.7	99.136	%	0.8076				0.81%
Ag 328.068†	65755.6	497.33	µg/L	4.998	497.33	ppb	4.998	1.00%
QC value within limits for Ag 328.068 Recovery = 99.47%								
Al 396.153Radial†	16556.0	5000.8	µg/L	14.37	5000.8	ppb	14.37	0.29%
QC value within limits for Al 396.153Radial Recovery = 100.02%								
As 188.979†	959.8	504.71	µg/L	3.585	504.71	ppb	3.585	0.71%
QC value within limits for As 188.979 Recovery = 100.94%								
B 249.677†	7290.7	492.16	µg/L	5.453	492.16	ppb	5.453	1.11%
QC value within limits for B 249.677 Recovery = 98.43%								
Ba 233.527†	45503.6	497.17	µg/L	4.786	497.17	ppb	4.786	0.96%
QC value within limits for Ba 233.527 Recovery = 99.43%								
Be 313.107†	714203.0	501.69	µg/L	0.605	501.69	ppb	0.605	0.12%
QC value within limits for Be 313.107 Recovery = 100.34%								
Ca 317.933Radial†	21434.3	4923.5	µg/L	38.55	4923.5	ppb	38.55	0.78%
QC value within limits for Ca 317.933Radial Recovery = 98.47%								
Cd 226.502†	13284.9	495.01	µg/L	4.737	495.01	ppb	4.737	0.96%
QC value within limits for Cd 226.502 Recovery = 99.00%								

Co 228.616†	15624.9	497.06 µg/L	4.610	497.06 ppb	4.610	0.93%
QC value within limits for Co 228.616 Recovery = 99.41%						
Cr 267.716†	17247.6	494.85 µg/L	3.975	494.85 ppb	3.975	0.80%
QC value within limits for Cr 267.716 Recovery = 98.97%						
Cu 324.752†	126014.8	507.16 µg/L	6.204	507.16 ppb	6.204	1.22%
QC value within limits for Cu 324.752 Recovery = 101.43%						
Fe 238.204 Radial†	4912.4	5077.8 µg/L	38.56	5077.8 ppb	38.56	0.76%
QC value within limits for Fe 238.204 Radial Recovery = 101.56%						
K 766.490 Radial†	11013.0	5043.2 µg/L	12.36	5043.2 ppb	12.36	0.25%
QC value within limits for K 766.490 Radial Recovery = 100.86%						
Mg 279.077 IEC†	1703.4	5048.5 µg/L	28.88	5048.5 ppb	28.88	0.57%
QC value within limits for Mg 279.077 IEC Recovery = 100.97%						
Mn 257.610†	268587.3	502.69 µg/L	0.851	502.69 ppb	0.851	0.17%
QC value within limits for Mn 257.610 Recovery = 100.54%						
Mo 202.031†	3782.8	509.52 µg/L	5.039	509.52 ppb	5.039	0.99%
QC value within limits for Mo 202.031 Recovery = 101.90%						
Na 589.592 Radial†	61136.7	9958.0 µg/L	34.17	9958.0 ppb	34.17	0.34%
QC value within limits for Na 589.592 Radial Recovery = 99.58%						
Ni 231.604†	7625.9	508.01 µg/L	4.413	508.01 ppb	4.413	0.87%
QC value within limits for Ni 231.604 Recovery = 101.60%						
P 214.914†	2946.7	2398.0 µg/L	23.96	2398.0 ppb	23.96	1.00%
QC value within limits for P 214.914 Recovery = 95.92%						
Pb 220.353†	1857.9	496.12 µg/L	4.871	496.12 ppb	4.871	0.98%
QC value within limits for Pb 220.353 Recovery = 99.22%						
S 181.975 Axial†	420.3	966.74 µg/L	1.683	966.74 ppb	1.683	0.17%
QC value within limits for S 181.975 Axial Recovery = 96.67%						
Sb 206.836†	997.2	489.64 µg/L	3.555	489.64 ppb	3.555	0.73%
QC value within limits for Sb 206.836 Recovery = 97.93%						
Se 196.026†	589.2	503 µg/L	3.1	503 ppb	3.1	0.62%
QC value within limits for Se 196.026 Recovery = 100.64%						
SiO2 †	74334.9	5153.9 µg/L	59.52	5153.9 ppb	59.52	1.15%
QC value within limits for SiO2 Recovery = 96.38%						
Si 251.611†	73162.1	2420 µg/L	27.8	2420 ppb	27.8	1.15%
QC value within limits for Si 251.611 Recovery = 96.99%						
Sn 189.927†	1897.0	494.26 µg/L	4.406	494.26 ppb	4.406	0.89%
QC value within limits for Sn 189.927 Recovery = 98.85%						
Sr 421.552†	109227.8	504.49 µg/L	1.288	504.49 ppb	1.288	0.26%
QC value within limits for Sr 421.552 Recovery = 100.90%						
Ti 334.940†	366162.2	500.22 µg/L	0.531	500.22 ppb	0.531	0.11%
QC value within limits for Ti 334.940 Recovery = 100.04%						
Tl 190.801†	1259.8	496.26 µg/L	4.326	496.26 ppb	4.326	0.87%
QC value within limits for Tl 190.801 Recovery = 99.25%						
U 409.014†	7434.2	498.43 µg/L	3.613	498.43 ppb	3.613	0.72%
QC value within limits for U 409.014 Recovery = 99.69%						
V 292.402†	32275.3	500.96 µg/L	4.897	500.96 ppb	4.897	0.98%
QC value within limits for V 292.402 Recovery = 100.19%						
Zn 213.857†	20480.2	493.37 µg/L	5.495	493.37 ppb	5.495	1.11%
QC value within limits for Zn 213.857 Recovery = 98.67%						

All analyte(s) passed QC.

Sequence No.: 17
Sample ID: CCB
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 15:58:25
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	40594.5	40594.5	101	%			15:59:52
1	Al 396.153Radial†	127.3	30.7	9.2729	µg/L	9.2729	ppb	15:59:52
1	Ca 317.933Radial†	183.4	26.2	5.9951	µg/L	5.9951	ppb	16:00:13
1	Fe 238.204 Radial†	43.4	-0.1	-0.1139	µg/L	-0.1139	ppb	16:00:13
1	K 766.490 Radial†	1080.4	-41.9	-19.167	µg/L	-19.167	ppb	15:59:52
1	Mg 279.077 IEC†	9.4	4.0	11.962	µg/L	11.962	ppb	16:00:13
1	Na 589.592 Radial†	1165.3	68.5	11.151	µg/L	11.151	ppb	15:59:52
1	Sr 421.552†	-37.0	11.9	0.0548	µg/L	0.0548	ppb	15:59:52
1	Sc 361.383	1083731.1	1083731.1	101.15	%			16:01:11
1	Y 371.029	590873.7	590873.7	100.67	%			16:01:11
1	Ag 328.068†	-605.4	2.5	0.0214	µg/L	0.0214	ppb	16:01:16
1	As 188.979†	-32.5	-2.5	-1.2923	µg/L	-1.2923	ppb	16:01:36
1	B 249.677†	165.9	18.4	1.2472	µg/L	1.2472	ppb	16:01:36
1	Ba 233.527†	-127.5	4.0	0.0436	µg/L	0.0436	ppb	16:01:36
1	Be 313.107†	278.4	393.7	0.2755	µg/L	0.2755	ppb	16:01:16
1	Cd 226.502†	-26.6	1.2	0.0446	µg/L	0.0446	ppb	16:01:36
1	Co 228.616†	-138.4	-5.1	-0.1616	µg/L	-0.1616	ppb	16:01:36
1	Cr 267.716†	80.2	5.7	0.1659	µg/L	0.1659	ppb	16:01:36
1	Cu 324.752†	4896.6	-223.8	-0.8977	µg/L	-0.8977	ppb	16:01:16
1	Mn 257.610†	422.3	38.0	0.0717	µg/L	0.0717	ppb	16:01:36
1	Mo 202.031†	11.4	6.8	0.9183	µg/L	0.9183	ppb	16:01:36
1	Ni 231.604†	176.7	1.8	0.1211	µg/L	0.1211	ppb	16:01:36
1	P 214.914†	177.6	7.2	6.2826	µg/L	6.2826	ppb	16:01:36
1	Pb 220.353†	-7.5	-0.4	-0.0999	µg/L	-0.0999	ppb	16:01:36
1	S 181.975 Axial†	42.1	-0.2	-0.4975	µg/L	-0.4975	ppb	16:01:36
1	Sb 206.836†	46.7	8.7	4.2960	µg/L	4.2960	ppb	16:01:36
1	Se 196.026†	-33.5	-0.3	-0.273	µg/L	-0.273	ppb	16:01:36
1	SiO2 †	1418.3	70.5	4.8653	µg/L	4.8653	ppb	16:01:16
1	Sn 189.927†	-3.4	9.6	2.4867	µg/L	2.4867	ppb	16:01:36
1	Ti 334.940†	878.2	369.2	0.5075	µg/L	0.5075	ppb	16:01:16
1	Tl 190.801†	-36.8	-1.0	-0.4008	µg/L	-0.4008	ppb	16:01:36
1	U 409.014†	318.9	-79.5	-5.3036	µg/L	-5.3036	ppb	16:01:16
1	V 292.402†	-84.0	39.5	0.6081	µg/L	0.6081	ppb	16:01:16
1	Zn 213.857†	511.0	-74.9	-1.8197	µg/L	-1.8197	ppb	16:01:36
1	Si 251.611†	1367.4	38.3	1.26	µg/L	1.26	ppb	16:02:44
2	Sc RADIAL	40529.8	40529.8	101	%			16:00:18
2	Al 396.153Radial†	69.6	-26.3	-7.9708	µg/L	-7.9708	ppb	16:00:18
2	Ca 317.933Radial†	204.3	47.2	10.866	µg/L	10.866	ppb	16:00:38
2	Fe 238.204 Radial†	48.9	5.4	5.5435	µg/L	5.5435	ppb	16:00:38
2	K 766.490 Radial†	1066.7	-53.8	-24.630	µg/L	-24.630	ppb	16:00:18
2	Mg 279.077 IEC†	5.3	0.0	0.0017	µg/L	0.0017	ppb	16:00:38
2	Na 589.592 Radial†	1176.5	81.4	13.256	µg/L	13.256	ppb	16:00:18
2	Sr 421.552†	-29.2	19.5	0.0901	µg/L	0.0901	ppb	16:00:18
2	Sc 361.383	1080921.8	1080921.8	100.89	%			16:01:42
2	Y 371.029	589249.3	589249.3	100.40	%			16:01:42
2	Ag 328.068†	-603.4	2.9	0.0239	µg/L	0.0239	ppb	16:01:47
2	As 188.979†	-25.5	4.3	2.2298	µg/L	2.2298	ppb	16:02:07
2	B 249.677†	140.8	-6.0	-0.4088	µg/L	-0.4088	ppb	16:02:07
2	Ba 233.527†	-110.8	20.3	0.2227	µg/L	0.2227	ppb	16:02:07
2	Be 313.107†	327.6	443.2	0.3121	µg/L	0.3121	ppb	16:01:47
2	Cd 226.502†	-13.4	14.2	0.5290	µg/L	0.5290	ppb	16:02:07
2	Co 228.616†	-129.2	3.6	0.1134	µg/L	0.1134	ppb	16:02:07
2	Cr 267.716†	81.3	6.9	0.1967	µg/L	0.1967	ppb	16:02:07
2	Cu 324.752†	4920.9	-187.2	-0.7566	µg/L	-0.7566	ppb	16:01:47
2	Mn 257.610†	447.9	64.4	0.1207	µg/L	0.1207	ppb	16:02:07
2	Mo 202.031†	2.4	-2.1	-0.2781	µg/L	-0.2781	ppb	16:02:07
2	Ni 231.604†	172.3	-2.1	-0.1390	µg/L	-0.1390	ppb	16:02:07
2	P 214.914†	158.6	-11.0	-9.1847	µg/L	-9.1847	ppb	16:02:07

2	Pb 220.353†	-19.8	-12.6	-3.3623 µg/L	-3.3623 ppb	16:02:07
2	S 181.975 Axial†	41.1	-1.0	-2.4238 µg/L	-2.4238 ppb	16:02:07
2	Sb 206.836†	42.7	4.9	2.4241 µg/L	2.4241 ppb	16:02:07
2	Se 196.026†	-33.4	-0.3	-0.215 µg/L	-0.215 ppb	16:02:07
2	SiO2 †	1395.7	51.7	3.5994 µg/L	3.5994 ppb	16:01:47
2	Sn 189.927†	-0.5	12.4	3.2390 µg/L	3.2390 ppb	16:02:07
2	Ti 334.940†	762.3	256.6	0.3486 µg/L	0.3486 ppb	16:01:47
2	Tl 190.801†	-41.3	-5.6	-2.1957 µg/L	-2.1957 ppb	16:02:07
2	U 409.014†	468.1	69.2	4.6249 µg/L	4.6249 ppb	16:01:47
2	V 292.402†	-65.4	57.7	0.8871 µg/L	0.8871 ppb	16:01:47
2	Zn 213.857†	522.1	-62.5	-1.5187 µg/L	-1.5187 ppb	16:02:07
2	Si 251.611†	1377.4	51.7	1.72 µg/L	1.72 ppb	16:02:49
3	Sc RADIAL	40509.0	40509.0	101 %		16:00:43
3	Al 396.153Radial†	79.7	-16.2	-4.9559 µg/L	-4.9559 ppb	16:00:43
3	Ca 317.933Radial†	185.7	28.9	6.6533 µg/L	6.6533 ppb	16:01:03
3	Fe 238.204 Radial†	48.1	4.6	4.7806 µg/L	4.7806 ppb	16:01:03
3	K 766.490 Radial†	1160.8	40.1	18.382 µg/L	18.382 ppb	16:00:43
3	Mg 279.077 IEC†	1.4	-3.9	-11.435 µg/L	-11.435 ppb	16:01:03
3	Na 589.592 Radial†	1299.0	203.6	33.163 µg/L	33.163 ppb	16:00:43
3	Sr 421.552†	21.1	69.5	0.3209 µg/L	0.3209 ppb	16:00:43
3	Sc 361.383	1082645.7	1082645.7	101.05 %		16:02:13
3	Y 371.029	590045.5	590045.5	100.53 %		16:02:13
3	Ag 328.068†	-577.6	29.4	0.2216 µg/L	0.2216 ppb	16:02:18
3	As 188.979†	-24.7	5.1	2.6610 µg/L	2.6610 ppb	16:02:38
3	B 249.677†	143.1	-4.0	-0.2684 µg/L	-0.2684 ppb	16:02:38
3	Ba 233.527†	-112.4	18.9	0.2069 µg/L	0.2069 ppb	16:02:38
3	Be 313.107†	260.2	376.0	0.2647 µg/L	0.2647 ppb	16:02:18
3	Cd 226.502†	-25.8	1.9	0.0734 µg/L	0.0734 ppb	16:02:38
3	Co 228.616†	-136.5	-3.4	-0.1078 µg/L	-0.1078 ppb	16:02:38
3	Cr 267.716†	72.1	-2.2	-0.0668 µg/L	-0.0668 ppb	16:02:38
3	Cu 324.752†	4922.6	-193.2	-0.7808 µg/L	-0.7808 ppb	16:02:18
3	Mn 257.610†	488.0	103.4	0.1936 µg/L	0.1936 ppb	16:02:38
3	Mo 202.031†	8.4	3.9	0.5227 µg/L	0.5227 ppb	16:02:38
3	Ni 231.604†	184.7	9.9	0.6622 µg/L	0.6622 ppb	16:02:38
3	P 214.914†	167.8	-2.3	-1.7752 µg/L	-1.7752 ppb	16:02:38
3	Pb 220.353†	-11.9	-4.7	-1.2683 µg/L	-1.2683 ppb	16:02:38
3	S 181.975 Axial†	43.7	1.4	3.2209 µg/L	3.2209 ppb	16:02:38
3	Sb 206.836†	47.6	9.6	4.7410 µg/L	4.7410 ppb	16:02:38
3	Se 196.026†	-31.7	1.4	1.23 µg/L	1.23 ppb	16:02:38
3	SiO2 †	1351.1	5.4	0.3505 µg/L	0.3505 ppb	16:02:18
3	Sn 189.927†	0.2	13.1	3.4231 µg/L	3.4231 ppb	16:02:38
3	Ti 334.940†	789.4	282.3	0.3843 µg/L	0.3843 ppb	16:02:18
3	Tl 190.801†	-35.8	-0.1	-0.0240 µg/L	-0.0240 ppb	16:02:38
3	U 409.014†	450.8	51.4	3.4308 µg/L	3.4308 ppb	16:02:18
3	V 292.402†	-117.2	6.6	0.1092 µg/L	0.1092 ppb	16:02:18
3	Zn 213.857†	528.7	-56.8	-1.3840 µg/L	-1.3840 ppb	16:02:38
3	Si 251.611†	1399.1	71.1	2.35 µg/L	2.35 ppb	16:02:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1082432.9	101.03	%	0.132				0.13%
Sc RADIAL	40544.4	101	%	0.1				0.11%
Y 371.029	590056.2	100.53	%	0.138				0.14%
Ag 328.068†	11.6	0.0889	µg/L	0.11487	0.0889	ppb	0.11487	129.15%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.0	-1.2179	µg/L	9.20952	-1.2179	ppb	9.20952	756.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.3	1.1995	µg/L	2.16871	1.1995	ppb	2.16871	180.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2.8	0.1900	µg/L	0.91823	0.1900	ppb	0.91823	483.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.4	0.1578	µg/L	0.09915	0.1578	ppb	0.09915	62.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	404.3	0.2841	µg/L	0.02486	0.2841	ppb	0.02486	8.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	34.1	7.8380	µg/L	2.64260	7.8380	ppb	2.64260	33.72%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	5.8	0.2156	µg/L	0.27173	0.2156	ppb	0.27173	126.00%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-1.6	-0.0520 µg/L	0.14572	-0.0520 ppb	0.14572	280.20%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	3.5	0.0986 µg/L	0.14407	0.0986 ppb	0.14407	146.11%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-201.4	-0.8117 µg/L	0.07543	-0.8117 ppb	0.07543	9.29%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	3.3	3.4034 µg/L	3.06984	3.4034 ppb	3.06984	90.20%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-18.5	-8.4718 µg/L	23.41603	-8.4718 ppb	23.41603	276.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.1	0.1761 µg/L	11.69957	0.1761 ppb	11.69957	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	68.6	0.1287 µg/L	0.06134	0.1287 ppb	0.06134	47.67%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.9	0.3876 µg/L	0.60957	0.3876 ppb	0.60957	157.26%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	117.8	19.190 µg/L	12.1466	19.190 ppb	12.1466	63.30%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	3.2	0.2148 µg/L	0.40877	0.2148 ppb	0.40877	190.33%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-2.0	-1.5591 µg/L	7.73591	-1.5591 ppb	7.73591	496.17%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-5.9	-1.5769 µg/L	1.65296	-1.5769 ppb	1.65296	104.83%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.0	0.0998 µg/L	2.86934	0.0998 ppb	2.86934	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	7.8	3.8204 µg/L	1.22952	3.8204 ppb	1.22952	32.18%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.3	0.246 µg/L	0.8504	0.246 ppb	0.8504	345.03%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	42.5	2.9384 µg/L	2.32887	2.9384 ppb	2.32887	79.26%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	53.7	1.78 µg/L	0.549	1.78 ppb	0.549	30.93%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	11.7	3.0496 µg/L	0.49613	3.0496 ppb	0.49613	16.27%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	33.6	0.1553 µg/L	0.14453	0.1553 ppb	0.14453	93.07%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	302.7	0.4134 µg/L	0.08336	0.4134 ppb	0.08336	20.16%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.2	-0.8735 µg/L	1.16045	-0.8735 ppb	1.16045	132.85%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	13.7	0.9174 µg/L	5.42046	0.9174 ppb	5.42046	590.87%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	34.6	0.5348 µg/L	0.39411	0.5348 ppb	0.39411	73.70%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-64.7	-1.5741 µg/L	0.22304	-1.5741 ppb	0.22304	14.17%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 18
Sample ID: 138851001|435151|5
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 6/24/2005 16:04:43
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851001|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	40021.8	40021.8	99.6	%			16:06:08
1	Al 396.153Radial†	99.8	4.9	1.4266	µg/L	1.4266	ppb	16:06:08
1	Ca 317.933Radial†	39471.2	39491.5	9066.2	µg/L	9066.2	ppb	16:06:08
1	Fe 238.204 Radial†	50.1	7.2	7.4095	µg/L	7.4095	ppb	16:06:28
1	K 766.490 Radial†	1377.3	271.7	124.41	µg/L	124.41	ppb	16:06:08
1	Mg 279.077 IEC†	643.6	641.2	1896.9	µg/L	1896.9	ppb	16:06:28
1	Na 589.592 Radial†	26317.5	25349.2	4129.5	µg/L	4129.5	ppb	16:06:08
1	Sr 421.552†	8963.0	9051.4	41.680	µg/L	41.680	ppb	16:06:08
1	Sc 361.383	1077169.9	1077169.9	100.54	%			16:07:26
1	Y 371.029	584348.5	584348.5	99.560	%			16:07:26
1	Ag 328.068†	-673.6	-68.9	-0.5162	µg/L	-0.5162	ppb	16:07:31
1	As 188.979†	-29.1	0.6	0.4953	µg/L	0.4953	ppb	16:07:52
1	B 249.677†	215.7	69.0	4.6930	µg/L	4.6930	ppb	16:07:52
1	Ba 233.527†	480.2	607.7	6.6332	µg/L	6.6332	ppb	16:07:52
1	Be 313.107†	224.5	341.8	0.2409	µg/L	0.2409	ppb	16:07:31
1	Cd 226.502†	-27.9	-0.3	-0.0100	µg/L	-0.0100	ppb	16:07:52
1	Co 228.616†	-136.9	-4.4	-0.1367	µg/L	-0.1367	ppb	16:07:52
1	Cr 267.716†	434.4	358.5	10.290	µg/L	10.290	ppb	16:07:52
1	Cu 324.752†	5295.1	202.0	0.8154	µg/L	0.8154	ppb	16:07:31
1	Mn 257.610†	3367.3	2969.7	5.5304	µg/L	5.5304	ppb	16:07:31
1	Mo 202.031†	15.0	10.5	1.4539	µg/L	1.4539	ppb	16:07:52
1	Ni 231.604†	187.5	13.6	0.9102	µg/L	0.9102	ppb	16:07:52
1	P 214.914†	193.1	23.7	19.860	µg/L	19.860	ppb	16:07:52
1	Pb 220.353†	-8.1	-1.0	-0.2517	µg/L	-0.2517	ppb	16:07:52
1	S 181.975 Axial†	1066.7	1019.2	2358.8	µg/L	2358.8	ppb	16:07:52
1	Sb 206.836†	37.8	0.1	-0.1142	µg/L	-0.1142	ppb	16:07:52
1	Se 196.026†	-32.6	0.3	0.326	µg/L	0.326	ppb	16:07:52
1	SiO2 †	164324.1	162109.1	11274	µg/L	11274	ppb	16:07:26
1	Sn 189.927†	-19.8	-6.7	-0.9339	µg/L	-0.9339	ppb	16:07:52
1	Ti 334.940†	379.3	-121.6	0.0238	µg/L	0.0238	ppb	16:07:31
1	Tl 190.801†	-35.6	-0.0	-0.0077	µg/L	-0.0077	ppb	16:07:52
1	U 409.014†	351.7	-45.0	-3.0019	µg/L	-3.0019	ppb	16:07:31
1	V 292.402†	-101.3	21.7	0.3702	µg/L	0.3702	ppb	16:07:31
1	Zn 213.857†	1241.3	654.6	15.503	µg/L	15.503	ppb	16:07:52
1	Si 251.611†	163689.8	161496.4	5370	µg/L	5370	ppb	16:09:00
2	Sc RADIAL	39654.7	39654.7	98.6	%			16:06:33
2	Al 396.153Radial†	123.9	30.2	9.1059	µg/L	9.1059	ppb	16:06:33
2	Ca 317.933Radial†	39151.5	39534.5	9076.1	µg/L	9076.1	ppb	16:06:33
2	Fe 238.204 Radial†	45.4	2.9	2.9862	µg/L	2.9862	ppb	16:06:53
2	K 766.490 Radial†	1508.5	417.5	191.18	µg/L	191.18	ppb	16:06:33
2	Mg 279.077 IEC†	646.5	650.1	1923.4	µg/L	1923.4	ppb	16:06:53
2	Na 589.592 Radial†	26068.6	25341.6	4128.3	µg/L	4128.3	ppb	16:06:33
2	Sr 421.552†	8898.4	9069.3	41.762	µg/L	41.762	ppb	16:06:33
2	Sc 361.383	1074008.6	1074008.6	100.25	%			16:07:57
2	Y 371.029	582734.4	582734.4	99.285	%			16:07:57
2	Ag 328.068†	-619.1	-16.6	-0.1224	µg/L	-0.1224	ppb	16:08:02
2	As 188.979†	-25.1	4.6	2.5529	µg/L	2.5529	ppb	16:08:23
2	B 249.677†	225.2	79.1	5.3734	µg/L	5.3734	ppb	16:08:23
2	Ba 233.527†	480.3	609.2	6.6500	µg/L	6.6500	ppb	16:08:23
2	Be 313.107†	206.1	324.1	0.2288	µg/L	0.2288	ppb	16:08:02
2	Cd 226.502†	-24.0	3.6	0.1328	µg/L	0.1328	ppb	16:08:23
2	Co 228.616†	-121.6	10.4	0.3355	µg/L	0.3355	ppb	16:08:23
2	Cr 267.716†	426.8	352.2	10.108	µg/L	10.108	ppb	16:08:23
2	Cu 324.752†	5314.7	237.1	0.9550	µg/L	0.9550	ppb	16:08:02
2	Mn 257.610†	3377.4	2989.6	5.5667	µg/L	5.5667	ppb	16:08:02
2	Mo 202.031†	15.2	10.8	1.4928	µg/L	1.4928	ppb	16:08:23
2	Ni 231.604†	186.0	12.7	0.8474	µg/L	0.8474	ppb	16:08:23
2	P 214.914†	191.2	22.4	18.722	µg/L	18.722	ppb	16:08:23

2	Pb 220.353†	-13.8	-6.8	-1.7892 µg/L	-1.7892 ppb	16:08:23
2	S 181.975 Axial†	1074.5	1030.1	2384.1 µg/L	2384.1 ppb	16:08:23
2	Sb 206.836†	39.4	1.8	0.7267 µg/L	0.7267 ppb	16:08:23
2	Se 196.026†	-38.4	-5.5	-4.64 µg/L	-4.64 ppb	16:08:23
2	SiO2 †	164032.8	162299.6	11288 µg/L	11288 ppb	16:07:57
2	Sn 189.927†	-23.9	-10.9	-2.0174 µg/L	-2.0174 ppb	16:08:23
2	Ti 334.940†	396.7	-103.2	0.0481 µg/L	0.0481 ppb	16:08:02
2	Tl 190.801†	-36.0	-0.5	-0.2036 µg/L	-0.2036 ppb	16:08:23
2	U 409.014†	382.0	-13.7	-0.9103 µg/L	-0.9103 ppb	16:08:02
2	V 292.402†	-87.4	35.4	0.5806 µg/L	0.5806 ppb	16:08:02
2	Zn 213.857†	1244.9	661.8	15.679 µg/L	15.679 ppb	16:08:23
2	Si 251.611†	164225.0	162509.5	5400 µg/L	5400 ppb	16:09:05
3	Sc RADIAL	39823.7	39823.7	99.1 %		16:06:58
3	Al 396.153Radial†	115.1	20.9	6.2933 µg/L	6.2933 ppb	16:06:58
3	Ca 317.933Radial†	39347.4	39563.8	9082.9 µg/L	9082.9 ppb	16:06:58
3	Fe 238.204 Radial†	48.4	5.7	5.8971 µg/L	5.8971 ppb	16:07:18
3	K 766.490 Radial†	1418.8	320.4	146.72 µg/L	146.72 ppb	16:06:58
3	Mg 279.077 IEC†	650.1	650.9	1925.7 µg/L	1925.7 ppb	16:07:18
3	Na 589.592 Radial†	26085.9	25246.9	4112.9 µg/L	4112.9 ppb	16:06:58
3	Sr 421.552†	8942.5	9075.5	41.791 µg/L	41.791 ppb	16:06:58
3	Sc 361.383	1072258.3	1072258.3	100.08 %		16:08:28
3	Y 371.029	581648.2	581648.2	99.100 %		16:08:28
3	Ag 328.068†	-621.4	-19.9	-0.1477 µg/L	-0.1477 ppb	16:08:33
3	As 188.979†	-23.4	6.2	3.3886 µg/L	3.3886 ppb	16:08:54
3	B 249.677†	212.7	66.9	4.5523 µg/L	4.5523 ppb	16:08:54
3	Ba 233.527†	469.0	598.7	6.5353 µg/L	6.5353 ppb	16:08:54
3	Be 313.107†	215.3	333.6	0.2361 µg/L	0.2361 ppb	16:08:33
3	Cd 226.502†	-23.4	4.1	0.1545 µg/L	0.1545 ppb	16:08:54
3	Co 228.616†	-140.4	-8.6	-0.2719 µg/L	-0.2719 ppb	16:08:54
3	Cr 267.716†	446.4	372.4	10.686 µg/L	10.686 ppb	16:08:54
3	Cu 324.752†	5376.6	307.6	1.2367 µg/L	1.2367 ppb	16:08:33
3	Mn 257.610†	3382.9	3000.7	5.5873 µg/L	5.5873 ppb	16:08:33
3	Mo 202.031†	10.1	5.6	0.8029 µg/L	0.8029 ppb	16:08:54
3	Ni 231.604†	186.5	13.4	0.8956 µg/L	0.8956 ppb	16:08:54
3	P 214.914†	176.1	7.7	6.2299 µg/L	6.2299 ppb	16:08:54
3	Pb 220.353†	-12.1	-5.1	-1.3454 µg/L	-1.3454 ppb	16:08:54
3	S 181.975 Axial†	1060.5	1017.9	2355.8 µg/L	2355.8 ppb	16:08:54
3	Sb 206.836†	35.8	-1.6	-0.9825 µg/L	-0.9825 ppb	16:08:54
3	Se 196.026†	-33.8	-0.9	-0.741 µg/L	-0.741 ppb	16:08:54
3	SiO2 †	163791.8	162325.9	11289 µg/L	11289 ppb	16:08:28
3	Sn 189.927†	-20.1	-7.1	-1.0348 µg/L	-1.0348 ppb	16:08:54
3	Ti 334.940†	413.6	-85.6	0.0705 µg/L	0.0705 ppb	16:08:33
3	Tl 190.801†	-37.7	-2.4	-0.9139 µg/L	-0.9139 ppb	16:08:54
3	U 409.014†	430.8	35.7	2.3838 µg/L	2.3838 ppb	16:08:33
3	V 292.402†	-81.9	40.7	0.6605 µg/L	0.6605 ppb	16:08:33
3	Zn 213.857†	1235.4	654.3	15.495 µg/L	15.495 ppb	16:08:54
3	Si 251.611†	164118.8	162670.8	5410 µg/L	5410 ppb	16:09:10

Mean Data: 138851001|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1074478.9	100.29	%	0.232				0.23%
Sc RADIAL	39833.4	99.1	%	0.46				0.46%
Y 371.029	582910.4	99.315	%	0.2315				0.23%
Ag 328.068†	-35.1	-0.2621	µg/L	0.22040	-0.2621	ppb	0.22040	84.08%
Al 396.153Radial†	18.7	5.6086	µg/L	3.88517	5.6086	ppb	3.88517	69.27%
As 188.979†	3.8	2.1456	µg/L	1.48904	2.1456	ppb	1.48904	69.40%
B 249.677†	71.7	4.8729	µg/L	0.43911	4.8729	ppb	0.43911	9.01%
Ba 233.527†	605.2	6.6062	µg/L	0.06192	6.6062	ppb	0.06192	0.94%
Be 313.107†	333.2	0.2353	µg/L	0.00610	0.2353	ppb	0.00610	2.59%
Ca 317.933Radial†	39529.9	9075.1	µg/L	8.36	9075.1	ppb	8.36	0.09%
Cd 226.502†	2.5	0.0924	µg/L	0.08936	0.0924	ppb	0.08936	96.70%
Co 228.616†	-0.9	-0.0244	µg/L	0.31891	-0.0244	ppb	0.31891	>999.9%
Cr 267.716†	361.0	10.361	µg/L	0.2954	10.361	ppb	0.2954	2.85%
Cu 324.752†	248.9	1.0024	µg/L	0.21462	1.0024	ppb	0.21462	21.41%
Fe 238.204 Radial†	5.3	5.4310	µg/L	2.24820	5.4310	ppb	2.24820	41.40%
K 766.490 Radial†	336.5	154.10	µg/L	33.990	154.10	ppb	33.990	22.06%
Mg 279.077 IEC†	647.4	1915.3	µg/L	15.97	1915.3	ppb	15.97	0.83%
Mn 257.610†	2986.7	5.5615	µg/L	0.02877	5.5615	ppb	0.02877	0.52%
Mo 202.031†	9.0	1.2499	µg/L	0.38758	1.2499	ppb	0.38758	31.01%

Na 589.592 Radial†	25312.6	4123.6	µg/L	9.28	4123.6	ppb	9.28	0.23%
Ni 231.604†	13.2	0.8844	µg/L	0.03291	0.8844	ppb	0.03291	3.72%
P 214.914†	17.9	14.937	µg/L	7.5620	14.937	ppb	7.5620	50.63%
Pb 220.353†	-4.3	-1.1288	µg/L	0.79129	-1.1288	ppb	0.79129	70.10%
S 181.975 Axial†	1022.4	2366.2	µg/L	15.54	2366.2	ppb	15.54	0.66%
Sb 206.836†	0.1	-0.1233	µg/L	0.85463	-0.1233	ppb	0.85463	692.91%
Se 196.026†	-2.0	-1.68	µg/L	2.612	-1.68	ppb	2.612	155.16%
SiO2 †	162244.9	11284	µg/L	8.2	11284	ppb	8.2	0.07%
Si 251.611†	162225.6	5390	µg/L	21.2	5390	ppb	21.2	0.39%
Sn 189.927†	-8.2	-1.3287	µg/L	0.59856	-1.3287	ppb	0.59856	45.05%
Sr 421.552†	9065.4	41.744	µg/L	0.0576	41.744	ppb	0.0576	0.14%
Ti 334.940†	-103.5	0.0474	µg/L	0.02335	0.0474	ppb	0.02335	49.23%
Tl 190.801†	-1.0	-0.3751	µg/L	0.47683	-0.3751	ppb	0.47683	127.13%
U 409.014†	-7.7	-0.5095	µg/L	2.71518	-0.5095	ppb	2.71518	532.95%
V 292.402†	32.6	0.5371	µg/L	0.14997	0.5371	ppb	0.14997	27.92%
Zn 213.857†	656.9	15.559	µg/L	0.1040	15.559	ppb	0.1040	0.67%

Sequence No.: 19
Sample ID: 1200870311|435151|5
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 6/24/2005 16:10:59
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870311|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	40678.5	40678.5	101	%			16:12:24
1	Al 396.153Radial†	99.9	3.4	0.9513	µg/L	0.9513	ppb	16:12:24
1	Ca 317.933Radial†	39390.9	38772.1	8901.1	µg/L	8901.1	ppb	16:12:24
1	Fe 238.204 Radial†	58.6	14.7	15.217	µg/L	15.217	ppb	16:12:44
1	K 766.490 Radial†	1424.0	295.4	135.29	µg/L	135.29	ppb	16:12:24
1	Mg 279.077 IEC†	633.5	620.8	1836.6	µg/L	1836.6	ppb	16:12:44
1	Na 589.592 Radial†	25974.6	24583.6	4004.8	µg/L	4004.8	ppb	16:12:24
1	Sr 421.552†	8860.9	8805.2	40.545	µg/L	40.545	ppb	16:12:24
1	Sc 361.383	1071044.1	1071044.1	99.969	%			16:13:42
1	Y 371.029	580925.9	580925.9	98.977	%			16:13:42
1	Ag 328.068†	-587.0	13.8	0.1091	µg/L	0.1091	ppb	16:13:47
1	As 188.979†	-35.3	-5.8	-2.8183	µg/L	-2.8183	ppb	16:14:08
1	B 249.677†	208.5	63.0	4.2864	µg/L	4.2864	ppb	16:14:08
1	Ba 233.527†	454.3	584.6	6.3803	µg/L	6.3803	ppb	16:14:08
1	Be 313.107†	217.3	335.9	0.2368	µg/L	0.2368	ppb	16:13:47
1	Cd 226.502†	-21.4	6.1	0.2268	µg/L	0.2268	ppb	16:14:08
1	Co 228.616†	-141.6	-10.0	-0.3135	µg/L	-0.3135	ppb	16:14:08
1	Cr 267.716†	424.0	350.5	10.061	µg/L	10.061	ppb	16:14:08
1	Cu 324.752†	5327.2	264.3	1.0660	µg/L	1.0660	ppb	16:13:47
1	Mn 257.610†	3238.7	2860.3	5.3275	µg/L	5.3275	ppb	16:13:47
1	Mo 202.031†	17.4	13.0	1.7854	µg/L	1.7854	ppb	16:14:08
1	Ni 231.604†	178.2	5.4	0.3660	µg/L	0.3660	ppb	16:14:08
1	P 214.914†	193.4	25.2	21.044	µg/L	21.044	ppb	16:14:08
1	Pb 220.353†	-17.5	-10.5	-2.7934	µg/L	-2.7934	ppb	16:14:08
1	S 181.975 Axial†	1032.5	991.0	2293.6	µg/L	2293.6	ppb	16:14:08
1	Sb 206.836†	42.0	4.6	2.0756	µg/L	2.0756	ppb	16:14:08
1	Se 196.026†	-25.9	6.9	5.89	µg/L	5.89	ppb	16:14:08
1	SiO2 †	160223.5	158942.0	11054	µg/L	11054	ppb	16:13:42
1	Sn 189.927†	-26.5	-13.5	-2.7254	µg/L	-2.7254	ppb	16:14:08
1	Ti 334.940†	315.8	-183.0	-0.0638	µg/L	-0.0638	ppb	16:13:47
1	Tl 190.801†	-37.9	-2.5	-0.9771	µg/L	-0.9771	ppb	16:14:08
1	U 409.014†	356.3	-38.3	-2.5576	µg/L	-2.5576	ppb	16:13:47
1	V 292.402†	-89.6	32.9	0.5442	µg/L	0.5442	ppb	16:13:47
1	Zn 213.857†	1211.3	631.6	14.955	µg/L	14.955	ppb	16:14:08
1	Si 251.611†	159831.1	158567.7	5270	µg/L	5270	ppb	16:15:15
2	Sc RADIAL	40617.9	40617.9	101	%			16:12:49
2	Al 396.153Radial†	127.7	31.0	9.3551	µg/L	9.3551	ppb	16:12:49
2	Ca 317.933Radial†	39264.4	38705.0	8885.7	µg/L	8885.7	ppb	16:12:49
2	Fe 238.204 Radial†	52.2	8.6	8.8568	µg/L	8.8568	ppb	16:13:09
2	K 766.490 Radial†	1359.0	233.2	106.78	µg/L	106.78	ppb	16:12:49
2	Mg 279.077 IEC†	631.3	619.5	1832.8	µg/L	1832.8	ppb	16:13:09
2	Na 589.592 Radial†	26136.4	24782.0	4037.1	µg/L	4037.1	ppb	16:12:49
2	Sr 421.552†	8890.0	8847.1	40.738	µg/L	40.738	ppb	16:12:49
2	Sc 361.383	1064470.3	1064470.3	99.355	%			16:14:13
2	Y 371.029	577843.3	577843.3	98.452	%			16:14:13
2	Ag 328.068†	-603.3	-6.2	-0.0426	µg/L	-0.0426	ppb	16:14:18
2	As 188.979†	-30.1	-0.7	-0.1750	µg/L	-0.1750	ppb	16:14:39
2	B 249.677†	198.6	54.3	3.7004	µg/L	3.7004	ppb	16:14:39
2	Ba 233.527†	451.5	584.5	6.3795	µg/L	6.3795	ppb	16:14:39
2	Be 313.107†	234.1	354.1	0.2491	µg/L	0.2491	ppb	16:14:18
2	Cd 226.502†	-13.9	13.5	0.5034	µg/L	0.5034	ppb	16:14:39
2	Co 228.616†	-135.3	-4.5	-0.1380	µg/L	-0.1380	ppb	16:14:39
2	Cr 267.716†	427.4	356.5	10.235	µg/L	10.235	ppb	16:14:39
2	Cu 324.752†	5274.0	243.7	0.9849	µg/L	0.9849	ppb	16:14:18
2	Mn 257.610†	3328.3	2970.4	5.5331	µg/L	5.5331	ppb	16:14:18
2	Mo 202.031†	12.8	8.5	1.1845	µg/L	1.1845	ppb	16:14:39
2	Ni 231.604†	188.0	16.3	1.0907	µg/L	1.0907	ppb	16:14:39
2	P 214.914†	176.9	9.8	8.0869	µg/L	8.0869	ppb	16:14:39

2	Pb 220.353†	-5.3	1.7	0.4760 µg/L	0.4760 ppb	16:14:39
2	S 181.975 Axial†	1037.7	1002.7	2320.6 µg/L	2320.6 ppb	16:14:39
2	Sb 206.836†	33.5	-3.7	-1.9996 µg/L	-1.9996 ppb	16:14:39
2	Se 196.026†	-34.8	-2.2	-1.85 µg/L	-1.85 ppb	16:14:39
2	SiO2 †	158957.9	158658.0	11034 µg/L	11034 ppb	16:14:13
2	Sn 189.927†	-31.3	-18.5	-4.0307 µg/L	-4.0307 ppb	16:14:39
2	Ti 334.940†	220.1	-277.4	-0.1919 µg/L	-0.1919 ppb	16:14:18
2	Tl 190.801†	-38.6	-3.5	-1.3465 µg/L	-1.3465 ppb	16:14:39
2	U 409.014†	318.4	-74.3	-4.9565 µg/L	-4.9565 ppb	16:14:18
2	V 292.402†	-83.9	38.1	0.6156 µg/L	0.6156 ppb	16:14:18
2	Zn 213.857†	1220.0	647.9	15.348 µg/L	15.348 ppb	16:14:39
2	Si 251.611†	159935.4	159660.0	5310 µg/L	5310 ppb	16:15:21
3	Sc RADIAL	40302.3	40302.3	100 %		16:13:14
3	Al 396.153Radial†	92.1	-3.5	-1.1192 µg/L	-1.1192 ppb	16:13:14
3	Ca 317.933Radial†	38985.1	38730.8	8891.6 µg/L	8891.6 ppb	16:13:14
3	Fe 238.204 Radial†	51.3	8.1	8.3505 µg/L	8.3505 ppb	16:13:34
3	K 766.490 Radial†	1410.8	295.4	135.29 µg/L	135.29 ppb	16:13:14
3	Mg 279.077 IEC†	630.9	624.0	1846.1 µg/L	1846.1 ppb	16:13:34
3	Na 589.592 Radial†	25799.0	24648.0	4015.3 µg/L	4015.3 ppb	16:13:14
3	Sr 421.552†	8849.4	8875.5	40.870 µg/L	40.870 ppb	16:13:14
3	Sc 361.383	1065096.6	1065096.6	99.414 %		16:14:44
3	Y 371.029	578128.4	578128.4	98.501 %		16:14:44
3	Ag 328.068†	-568.0	29.6	0.2260 µg/L	0.2260 ppb	16:14:49
3	As 188.979†	-32.2	-2.8	-1.2830 µg/L	-1.2830 ppb	16:15:10
3	B 249.677†	202.2	57.8	3.9369 µg/L	3.9369 ppb	16:15:10
3	Ba 233.527†	457.5	590.3	6.4440 µg/L	6.4440 ppb	16:15:10
3	Be 313.107†	248.7	368.7	0.2607 µg/L	0.2607 ppb	16:14:49
3	Cd 226.502†	-20.2	7.1	0.2670 µg/L	0.2670 ppb	16:15:10
3	Co 228.616†	-139.7	-8.8	-0.2781 µg/L	-0.2781 ppb	16:15:10
3	Cr 267.716†	439.2	368.2	10.565 µg/L	10.565 ppb	16:15:10
3	Cu 324.752†	5361.6	328.7	1.3219 µg/L	1.3219 ppb	16:14:49
3	Mn 257.610†	3284.1	2924.0	5.4452 µg/L	5.4452 ppb	16:14:49
3	Mo 202.031†	11.8	7.5	1.0490 µg/L	1.0490 ppb	16:15:10
3	Ni 231.604†	188.5	16.7	1.1153 µg/L	1.1153 ppb	16:15:10
3	P 214.914†	190.5	23.3	19.394 µg/L	19.394 ppb	16:15:10
3	Pb 220.353†	-9.8	-2.9	-0.7567 µg/L	-0.7567 ppb	16:15:10
3	S 181.975 Axial†	1028.3	992.6	2297.3 µg/L	2297.3 ppb	16:15:10
3	Sb 206.836†	31.9	-5.4	-2.8133 µg/L	-2.8133 ppb	16:15:10
3	Se 196.026†	-31.7	0.9	0.848 µg/L	0.848 ppb	16:15:10
3	SiO2 †	159074.3	158681.1	11036 µg/L	11036 ppb	16:14:44
3	Sn 189.927†	-27.5	-14.7	-3.0395 µg/L	-3.0395 ppb	16:15:10
3	Ti 334.940†	246.8	-250.7	-0.1589 µg/L	-0.1589 ppb	16:14:49
3	Tl 190.801†	-31.5	3.7	1.4609 µg/L	1.4609 ppb	16:15:10
3	U 409.014†	420.7	28.4	1.8979 µg/L	1.8979 ppb	16:14:49
3	V 292.402†	-77.8	44.3	0.7178 µg/L	0.7178 ppb	16:14:49
3	Zn 213.857†	1218.6	645.7	15.294 µg/L	15.294 ppb	16:15:10
3	Si 251.611†	160416.0	160048.8	5320 µg/L	5320 ppb	16:15:26

Mean Data: 1200870311|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1066870.3	99.579	%	0.3386				0.34%
Sc RADIAL	40532.9	101	%	0.5				0.50%
Y 371.029	578965.8	98.643	%	0.2902				0.29%
Ag 328.068†	12.4	0.0975	µg/L	0.13470	0.0975	ppb	0.13470	138.17%
Al 396.153Radial†	10.3	3.0624	µg/L	5.54712	3.0624	ppb	5.54712	181.14%
As 188.979†	-3.1	-1.4254	µg/L	1.32738	-1.4254	ppb	1.32738	93.12%
B 249.677†	58.4	3.9746	µg/L	0.29485	3.9746	ppb	0.29485	7.42%
Ba 233.527†	586.5	6.4013	µg/L	0.03700	6.4013	ppb	0.03700	0.58%
Be 313.107†	352.9	0.2489	µg/L	0.01197	0.2489	ppb	0.01197	4.81%
Ca 317.933Radial†	38736.0	8892.8	µg/L	7.78	8892.8	ppb	7.78	0.09%
Cd 226.502†	8.9	0.3324	µg/L	0.14944	0.3324	ppb	0.14944	44.95%
Co 228.616†	-7.8	-0.2432	µg/L	0.09279	-0.2432	ppb	0.09279	38.15%
Cr 267.716†	358.4	10.287	µg/L	0.2562	10.287	ppb	0.2562	2.49%
Cu 324.752†	278.9	1.1243	µg/L	0.17589	1.1243	ppb	0.17589	15.64%
Fe 238.204 Radial†	10.5	10.808	µg/L	3.8265	10.808	ppb	3.8265	35.40%
K 766.490 Radial†	274.7	125.79	µg/L	16.461	125.79	ppb	16.461	13.09%
Mg 279.077 IEC†	621.4	1838.5	µg/L	6.86	1838.5	ppb	6.86	0.37%
Mn 257.610†	2918.2	5.4353	µg/L	0.10315	5.4353	ppb	0.10315	1.90%
Mo 202.031†	9.6	1.3396	µg/L	0.39197	1.3396	ppb	0.39197	29.26%

Na 589.592 Radial†	24671.2	4019.1 µg/L	16.49	4019.1 ppb	16.49	0.41%
Ni 231.604†	12.8	0.8573 µg/L	0.42569	0.8573 ppb	0.42569	49.65%
P 214.914†	19.4	16.175 µg/L	7.0529	16.175 ppb	7.0529	43.60%
Pb 220.353†	-3.9	-1.0247 µg/L	1.65111	-1.0247 ppb	1.65111	161.13%
S 181.975 Axial†	995.4	2303.8 µg/L	14.68	2303.8 ppb	14.68	0.64%
Sb 206.836†	-1.5	-0.9125 µg/L	2.61948	-0.9125 ppb	2.61948	287.08%
Se 196.026†	1.9	1.63 µg/L	3.925	1.63 ppb	3.925	240.91%
SiO2 †	158760.4	11041 µg/L	11.0	11041 ppb	11.0	0.10%
Si 251.611†	159425.5	5300 µg/L	25.5	5300 ppb	25.5	0.48%
Sn 189.927†	-15.6	-3.2652 µg/L	0.68124	-3.2652 ppb	0.68124	20.86%
Sr 421.552†	8842.6	40.718 µg/L	0.1634	40.718 ppb	0.1634	0.40%
Ti 334.940†	-237.0	-0.1382 µg/L	0.06654	-0.1382 ppb	0.06654	48.15%
Tl 190.801†	-0.8	-0.2875 µg/L	1.52544	-0.2875 ppb	1.52544	530.50%
U 409.014†	-28.1	-1.8720 µg/L	3.47827	-1.8720 ppb	3.47827	185.80%
V 292.402†	38.4	0.6259 µg/L	0.08730	0.6259 ppb	0.08730	13.95%
Zn 213.857†	641.8	15.199 µg/L	0.2128	15.199 ppb	0.2128	1.40%

Sequence No.: 20
Sample ID: 1200870312|435151|5
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 6/24/2005 16:17:15
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870312|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39562.2	39562.2	98.4	%			16:18:42
1	Al 396.153Radial†	3268.7	3226.0	974.53	µg/L	974.53	ppb	16:18:42
1	Ca 317.933Radial†	41888.4	42408.3	9736.4	µg/L	9736.4	ppb	16:18:42
1	Fe 238.204 Radial†	997.9	970.9	1003.6	µg/L	1003.6	ppb	16:19:02
1	K 766.490 Radial†	3526.8	2471.8	1131.9	µg/L	1131.9	ppb	16:18:42
1	Mg 279.077 IEC†	945.3	955.3	2827.8	µg/L	2827.8	ppb	16:19:02
1	Na 589.592 Radial†	30696.2	30105.6	4904.1	µg/L	4904.1	ppb	16:18:42
1	Sr 421.552†	29226.8	29746.5	137.27	µg/L	137.27	ppb	16:18:42
1	Sc 361.383	1072931.6	1072931.6	100.14	%			16:20:00
1	Y 371.029	581390.8	581390.8	99.057	%			16:20:00
1	Ag 328.068†	12134.0	12717.4	96.188	µg/L	96.188	ppb	16:20:06
1	As 188.979†	166.2	195.5	102.95	µg/L	102.95	ppb	16:20:26
1	B 249.677†	1639.5	1491.6	100.72	µg/L	100.72	ppb	16:20:26
1	Ba 233.527†	9246.1	9362.8	102.29	µg/L	102.29	ppb	16:20:06
1	Be 313.107†	137250.7	137170.7	96.357	µg/L	96.357	ppb	16:20:00
1	Cd 226.502†	2591.9	2615.7	97.458	µg/L	97.458	ppb	16:20:26
1	Co 228.616†	2913.2	3040.7	96.734	µg/L	96.734	ppb	16:20:26
1	Cr 267.716†	3831.1	3751.9	107.65	µg/L	107.65	ppb	16:20:26
1	Cu 324.752†	29352.9	24245.9	97.584	µg/L	97.584	ppb	16:20:06
1	Mn 257.610†	55304.8	54845.3	102.62	µg/L	102.62	ppb	16:20:06
1	Mo 202.031†	727.1	721.7	97.251	µg/L	97.251	ppb	16:20:26
1	Ni 231.604†	1607.8	1432.6	95.437	µg/L	95.437	ppb	16:20:26
1	P 214.914†	317.5	148.8	108.91	µg/L	108.91	ppb	16:20:26
1	Pb 220.353†	339.6	346.1	92.439	µg/L	92.439	ppb	16:20:26
1	S 181.975 Axial†	1420.8	1376.9	3185.8	µg/L	3185.8	ppb	16:20:26
1	Sb 206.836†	242.8	205.0	100.44	µg/L	100.44	ppb	16:20:26
1	Se 196.026†	74.1	106.8	91.2	µg/L	91.2	ppb	16:20:26
1	SiO2 †	165527.0	163955.9	11400	µg/L	11400	ppb	16:20:00
1	Sn 189.927†	344.3	356.8	93.751	µg/L	93.751	ppb	16:20:26
1	Ti 334.940†	70642.9	70041.8	95.868	µg/L	95.868	ppb	16:20:06
1	Tl 190.801†	196.4	231.4	91.194	µg/L	91.194	ppb	16:20:26
1	U 409.014†	1771.1	1373.8	92.122	µg/L	92.122	ppb	16:20:06
1	V 292.402†	6084.7	6198.4	96.231	µg/L	96.231	ppb	16:20:06
1	Zn 213.857†	5165.8	4578.4	110.05	µg/L	110.05	ppb	16:20:26
1	Si 251.611†	167663.7	166107.7	5520	µg/L	5520	ppb	16:21:34
2	Sc RADIAL	39872.5	39872.5	99.2	%			16:19:07
2	Al 396.153Radial†	3313.3	3245.2	980.36	µg/L	980.36	ppb	16:19:07
2	Ca 317.933Radial†	42290.8	42482.8	9753.5	µg/L	9753.5	ppb	16:19:07
2	Fe 238.204 Radial†	993.3	958.3	990.59	µg/L	990.59	ppb	16:19:27
2	K 766.490 Radial†	3600.7	2518.5	1153.3	µg/L	1153.3	ppb	16:19:07
2	Mg 279.077 IEC†	946.3	948.8	2808.7	µg/L	2808.7	ppb	16:19:27
2	Na 589.592 Radial†	31236.4	30407.5	4953.3	µg/L	4953.3	ppb	16:19:07
2	Sr 421.552†	29640.5	29932.5	138.13	µg/L	138.13	ppb	16:19:07
2	Sc 361.383	1079598.5	1079598.5	100.77	%			16:20:32
2	Y 371.029	585031.7	585031.7	99.677	%			16:20:32
2	Ag 328.068†	12004.6	12514.2	94.652	µg/L	94.652	ppb	16:20:37
2	As 188.979†	161.2	189.6	99.861	µg/L	99.861	ppb	16:20:57
2	B 249.677†	1648.6	1490.5	100.64	µg/L	100.64	ppb	16:20:57
2	Ba 233.527†	9245.1	9304.8	101.66	µg/L	101.66	ppb	16:20:37
2	Be 313.107†	138265.9	137331.8	96.471	µg/L	96.471	ppb	16:20:32
2	Cd 226.502†	2596.8	2604.6	97.044	µg/L	97.044	ppb	16:20:57
2	Co 228.616†	2932.4	3041.8	96.771	µg/L	96.771	ppb	16:20:57
2	Cr 267.716†	3853.5	3750.6	107.61	µg/L	107.61	ppb	16:20:57
2	Cu 324.752†	29278.3	23990.8	96.554	µg/L	96.554	ppb	16:20:37
2	Mn 257.610†	55131.9	54332.7	101.66	µg/L	101.66	ppb	16:20:37
2	Mo 202.031†	729.5	719.5	96.965	µg/L	96.965	ppb	16:20:57
2	Ni 231.604†	1603.5	1418.4	94.493	µg/L	94.493	ppb	16:20:57
2	P 214.914†	306.5	135.9	98.222	µg/L	98.222	ppb	16:20:57

2	Pb 220.353†	345.7	350.1	93.505 µg/L	93.505 ppb	16:20:57
2	S 181.975 Axial†	1427.9	1375.2	3181.9 µg/L	3181.9 ppb	16:20:57
2	Sb 206.836†	241.8	202.5	99.189 µg/L	99.189 ppb	16:20:57
2	Se 196.026†	71.8	104.0	88.9 µg/L	88.9 ppb	16:20:57
2	SiO2 †	167332.6	164727.1	11453 µg/L	11453 ppb	16:20:32
2	Sn 189.927†	341.6	352.0	92.493 µg/L	92.493 ppb	16:20:57
2	Ti 334.940†	70420.1	69385.1	94.970 µg/L	94.970 ppb	16:20:37
2	Tl 190.801†	196.4	230.3	90.724 µg/L	90.724 ppb	16:20:57
2	U 409.014†	1820.9	1412.3	94.686 µg/L	94.686 ppb	16:20:37
2	V 292.402†	6049.8	6126.3	95.126 µg/L	95.126 ppb	16:20:37
2	Zn 213.857†	5168.0	4548.7	109.34 µg/L	109.34 ppb	16:20:57
2	Si 251.611†	167859.3	165267.9	5490 µg/L	5490 ppb	16:21:39
3	Sc RADIAL	39877.4	39877.4	99.2 %		16:19:32
3	Al 396.153Radial†	3303.2	3234.6	977.14 µg/L	977.14 ppb	16:19:32
3	Ca 317.933Radial†	42330.6	42517.7	9761.5 µg/L	9761.5 ppb	16:19:32
3	Fe 238.204 Radial†	998.3	963.3	995.70 µg/L	995.70 ppb	16:19:52
3	K 766.490 Radial†	3580.1	2497.3	1143.6 µg/L	1143.6 ppb	16:19:32
3	Mg 279.077 IEC†	945.1	947.5	2804.7 µg/L	2804.7 ppb	16:19:52
3	Na 589.592 Radial†	31060.1	30225.9	4923.7 µg/L	4923.7 ppb	16:19:32
3	Sr 421.552†	29569.8	29857.6	137.78 µg/L	137.78 ppb	16:19:32
3	Sc 361.383	1073302.6	1073302.6	100.18 %		16:21:03
3	Y 371.029	581860.5	581860.5	99.137 %		16:21:03
3	Ag 328.068†	12051.4	12630.8	95.532 µg/L	95.532 ppb	16:21:08
3	As 188.979†	165.9	195.2	102.79 µg/L	102.79 ppb	16:21:28
3	B 249.677†	1668.3	1519.8	102.62 µg/L	102.62 ppb	16:21:28
3	Ba 233.527†	9217.3	9330.9	101.94 µg/L	101.94 ppb	16:21:08
3	Be 313.107†	137389.7	137262.1	96.421 µg/L	96.421 ppb	16:21:03
3	Cd 226.502†	2610.7	2633.5	98.124 µg/L	98.124 ppb	16:21:28
3	Co 228.616†	2941.6	3068.1	97.606 µg/L	97.606 ppb	16:21:28
3	Cr 267.716†	3865.8	3785.3	108.61 µg/L	108.61 ppb	16:21:28
3	Cu 324.752†	29237.6	24120.7	97.080 µg/L	97.080 ppb	16:21:08
3	Mn 257.610†	55000.2	54522.1	102.02 µg/L	102.02 ppb	16:21:08
3	Mo 202.031†	725.0	719.3	96.936 µg/L	96.936 ppb	16:21:28
3	Ni 231.604†	1616.2	1440.4	95.954 µg/L	95.954 ppb	16:21:28
3	P 214.914†	314.8	146.0	106.66 µg/L	106.66 ppb	16:21:28
3	Pb 220.353†	343.7	350.1	93.511 µg/L	93.511 ppb	16:21:28
3	S 181.975 Axial†	1426.2	1381.8	3197.2 µg/L	3197.2 ppb	16:21:28
3	Sb 206.836†	242.5	204.7	100.23 µg/L	100.23 ppb	16:21:28
3	Se 196.026†	75.9	108.6	92.8 µg/L	92.8 ppb	16:21:28
3	SiO2 †	166992.5	165361.6	11498 µg/L	11498 ppb	16:21:03
3	Sn 189.927†	339.9	352.3	92.575 µg/L	92.575 ppb	16:21:28
3	Ti 334.940†	70371.3	69746.3	95.465 µg/L	95.465 ppb	16:21:08
3	Tl 190.801†	195.8	230.8	90.939 µg/L	90.939 ppb	16:21:28
3	U 409.014†	1763.4	1365.5	91.564 µg/L	91.564 ppb	16:21:08
3	V 292.402†	6038.4	6150.1	95.489 µg/L	95.489 ppb	16:21:08
3	Zn 213.857†	5185.6	4596.3	110.49 µg/L	110.49 ppb	16:21:28
3	Si 251.611†	167347.6	165734.3	5510 µg/L	5510 ppb	16:21:45

Mean Data: 1200870312|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1075277.6	100.36	%	0.350				0.35%
Sc RADIAL	39770.7	98.9	%	0.45				0.45%
Y 371.029	582761.0	99.290	%	0.3374				0.34%
Ag 328.068†	12620.8	95.457	µg/L	0.7708	95.457	ppb	0.7708	0.81%
Al 396.153Radial†	3235.3	977.34	µg/L	2.921	977.34	ppb	2.921	0.30%
As 188.979†	193.4	101.87	µg/L	1.739	101.87	ppb	1.739	1.71%
B 249.677†	1500.6	101.33	µg/L	1.121	101.33	ppb	1.121	1.11%
Ba 233.527†	9332.8	101.96	µg/L	0.317	101.96	ppb	0.317	0.31%
Be 313.107†	137254.9	96.416	µg/L	0.0570	96.416	ppb	0.0570	0.06%
Ca 317.933Radial†	42469.6	9750.5	µg/L	12.83	9750.5	ppb	12.83	0.13%
Cd 226.502†	2617.9	97.542	µg/L	0.5448	97.542	ppb	0.5448	0.56%
Co 228.616†	3050.2	97.037	µg/L	0.4936	97.037	ppb	0.4936	0.51%
Cr 267.716†	3762.6	107.96	µg/L	0.565	107.96	ppb	0.565	0.52%
Cu 324.752†	24119.1	97.072	µg/L	0.5149	97.072	ppb	0.5149	0.53%
Fe 238.204 Radial†	964.2	996.62	µg/L	6.542	996.62	ppb	6.542	0.66%
K 766.490 Radial†	2495.9	1143.0	µg/L	10.71	1143.0	ppb	10.71	0.94%
Mg 279.077 IEC†	950.5	2813.7	µg/L	12.33	2813.7	ppb	12.33	0.44%
Mn 257.610†	54566.7	102.10	µg/L	0.485	102.10	ppb	0.485	0.48%
Mo 202.031†	720.2	97.051	µg/L	0.1742	97.051	ppb	0.1742	0.18%

Na 589.592 Radial†	30246.3	4927.0 µg/L	24.76	4927.0 ppb	24.76	0.50%
Ni 231.604†	1430.5	95.294 µg/L	0.7409	95.294 ppb	0.7409	0.78%
P 214.914†	143.5	104.60 µg/L	5.634	104.60 ppb	5.634	5.39%
Pb 220.353†	348.8	93.152 µg/L	0.6172	93.152 ppb	0.6172	0.66%
S 181.975 Axial†	1378.0	3188.3 µg/L	7.94	3188.3 ppb	7.94	0.25%
Sb 206.836†	204.1	99.952 µg/L	0.6689	99.952 ppb	0.6689	0.67%
Se 196.026†	106.5	91.0 µg/L	1.97	91.0 ppb	1.97	2.16%
SiO2 †	164681.5	11450 µg/L	49.0	11450 ppb	49.0	0.43%
Si 251.611†	165703.3	5510 µg/L	14.0	5510 ppb	14.0	0.25%
Sn 189.927†	353.7	92.939 µg/L	0.7038	92.939 ppb	0.7038	0.76%
Sr 421.552†	29845.5	137.72 µg/L	0.432	137.72 ppb	0.432	0.31%
Ti 334.940†	69724.4	95.434 µg/L	0.4501	95.434 ppb	0.4501	0.47%
Tl 190.801†	230.8	90.953 µg/L	0.2353	90.953 ppb	0.2353	0.26%
U 409.014†	1383.9	92.791 µg/L	1.6653	92.791 ppb	1.6653	1.79%
V 292.402†	6158.3	95.615 µg/L	0.5634	95.615 ppb	0.5634	0.59%
Zn 213.857†	4574.4	109.96 µg/L	0.579	109.96 ppb	0.579	0.53%

Sequence No.: 21
Sample ID: 1200870313|435151|25
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 6/24/2005 16:23:33
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870313|435151|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	40853.7	40853.7	102	%			16:25:01
1	Al 396.153Radial†	101.2	4.3	1.2910	µg/L	1.2910	ppb	16:25:01
1	Ca 317.933Radial†	7898.3	7616.6	1748.6	µg/L	1748.6	ppb	16:25:01
1	Fe 238.204 Radial†	43.5	-0.3	-0.3563	µg/L	-0.3563	ppb	16:25:21
1	K 766.490 Radial†	1240.6	108.9	49.891	µg/L	49.891	ppb	16:25:01
1	Mg 279.077 IEC†	125.6	118.3	349.92	µg/L	349.92	ppb	16:25:21
1	Na 589.592 Radial†	6002.2	4820.7	785.32	µg/L	785.32	ppb	16:25:01
1	Sr 421.552†	1752.8	1773.3	8.1660	µg/L	8.1660	ppb	16:25:01
1	Sc 361.383	1079549.0	1079549.0	100.76	%			16:26:19
1	Y 371.029	587483.3	587483.3	100.09	%			16:26:19
1	Ag 328.068†	-607.0	-1.4	-0.0102	µg/L	-0.0102	ppb	16:26:24
1	As 188.979†	-31.7	-1.8	-0.9204	µg/L	-0.9204	ppb	16:26:45
1	B 249.677†	119.1	-27.4	-1.8372	µg/L	-1.8372	ppb	16:26:45
1	Ba 233.527†	-6.1	124.0	1.3535	µg/L	1.3535	ppb	16:26:45
1	Be 313.107†	284.7	401.1	0.2817	µg/L	0.2817	ppb	16:26:24
1	Cd 226.502†	-26.5	1.3	0.0469	µg/L	0.0469	ppb	16:26:45
1	Co 228.616†	-131.0	1.7	0.0558	µg/L	0.0558	ppb	16:26:45
1	Cr 267.716†	153.9	79.2	2.2728	µg/L	2.2728	ppb	16:26:45
1	Cu 324.752†	4976.4	-125.8	-0.5056	µg/L	-0.5056	ppb	16:26:24
1	Mn 257.610†	955.0	568.3	1.0584	µg/L	1.0584	ppb	16:26:24
1	Mo 202.031†	4.9	0.4	0.0681	µg/L	0.0681	ppb	16:26:45
1	Ni 231.604†	179.4	5.2	0.3466	µg/L	0.3466	ppb	16:26:45
1	P 214.914†	170.1	0.5	0.5247	µg/L	0.5247	ppb	16:26:45
1	Pb 220.353†	-11.1	-4.0	-1.0632	µg/L	-1.0632	ppb	16:26:45
1	S 181.975 Axial†	233.2	189.6	438.84	µg/L	438.84	ppb	16:26:45
1	Sb 206.836†	39.6	1.8	0.8716	µg/L	0.8716	ppb	16:26:45
1	Se 196.026†	-35.1	-2.0	-1.71	µg/L	-1.71	ppb	16:26:45
1	SiO2 †	34211.0	32620.4	2268.7	µg/L	2268.7	ppb	16:26:24
1	Sn 189.927†	-9.5	3.5	1.0714	µg/L	1.0714	ppb	16:26:45
1	Ti 334.940†	526.5	23.6	0.0693	µg/L	0.0693	ppb	16:26:24
1	Tl 190.801†	-39.0	-3.4	-1.3165	µg/L	-1.3165	ppb	16:26:45
1	U 409.014†	375.6	-21.9	-1.4649	µg/L	-1.4649	ppb	16:26:24
1	V 292.402†	-119.4	4.0	0.0668	µg/L	0.0668	ppb	16:26:24
1	Zn 213.857†	675.1	90.0	2.1095	µg/L	2.1095	ppb	16:26:45
1	Si 251.611†	33197.6	31632.9	1050	µg/L	1050	ppb	16:27:52
2	Sc RADIAL	40718.3	40718.3	101	%			16:25:26
2	Al 396.153Radial†	110.3	13.5	4.0908	µg/L	4.0908	ppb	16:25:26
2	Ca 317.933Radial†	7885.5	7629.7	1751.6	µg/L	1751.6	ppb	16:25:26
2	Fe 238.204 Radial†	44.5	0.8	0.8093	µg/L	0.8093	ppb	16:25:46
2	K 766.490 Radial†	1184.4	57.5	26.344	µg/L	26.344	ppb	16:25:26
2	Mg 279.077 IEC†	133.8	126.9	375.33	µg/L	375.33	ppb	16:25:46
2	Na 589.592 Radial†	6097.1	4933.9	803.77	µg/L	803.77	ppb	16:25:26
2	Sr 421.552†	1775.5	1801.4	8.2958	µg/L	8.2958	ppb	16:25:26
2	Sc 361.383	1069934.1	1069934.1	99.865	%			16:26:50
2	Y 371.029	582194.0	582194.0	99.193	%			16:26:50
2	Ag 328.068†	-612.9	-12.8	-0.0967	µg/L	-0.0967	ppb	16:26:55
2	As 188.979†	-32.0	-2.4	-1.2209	µg/L	-1.2209	ppb	16:27:15
2	B 249.677†	131.5	-13.9	-0.9306	µg/L	-0.9306	ppb	16:27:15
2	Ba 233.527†	-0.9	129.1	1.4090	µg/L	1.4090	ppb	16:27:15
2	Be 313.107†	281.4	400.3	0.2811	µg/L	0.2811	ppb	16:26:55
2	Cd 226.502†	-22.0	5.5	0.2041	µg/L	0.2041	ppb	16:27:15
2	Co 228.616†	-141.2	-9.7	-0.3079	µg/L	-0.3079	ppb	16:27:15
2	Cr 267.716†	138.1	64.6	1.8552	µg/L	1.8552	ppb	16:27:15
2	Cu 324.752†	4973.2	-84.7	-0.3403	µg/L	-0.3403	ppb	16:26:55
2	Mn 257.610†	965.9	587.7	1.0945	µg/L	1.0945	ppb	16:26:55
2	Mo 202.031†	7.5	3.1	0.4296	µg/L	0.4296	ppb	16:27:15
2	Ni 231.604†	180.6	7.9	0.5323	µg/L	0.5323	ppb	16:27:15
2	P 214.914†	176.6	8.5	7.2311	µg/L	7.2311	ppb	16:27:15

2	Pb 220.353†	-10.9	-3.9	-1.0258 µg/L	-1.0258 ppb	16:27:15
2	S 181.975 Axial†	233.9	192.4	445.39 µg/L	445.39 ppb	16:27:15
2	Sb 206.836†	46.6	9.2	4.4742 µg/L	4.4742 ppb	16:27:15
2	Se 196.026†	-32.6	0.1	0.103 µg/L	0.103 ppb	16:27:15
2	SiO2 †	34186.2	32900.7	2288.2 µg/L	2288.2 ppb	16:26:55
2	Sn 189.927†	-10.9	2.1	0.6913 µg/L	0.6913 ppb	16:27:15
2	Ti 334.940†	555.7	57.6	0.1159 µg/L	0.1159 ppb	16:26:55
2	Tl 190.801†	-40.2	-4.9	-1.9345 µg/L	-1.9345 ppb	16:27:15
2	U 409.014†	372.2	-22.1	-1.4779 µg/L	-1.4779 ppb	16:26:55
2	V 292.402†	-149.7	-27.3	-0.4112 µg/L	-0.4112 ppb	16:26:55
2	Zn 213.857†	656.0	76.8	1.7868 µg/L	1.7868 ppb	16:27:15
2	Si 251.611†	33260.6	31992.0	1060 µg/L	1060 ppb	16:27:57
3	Sc RADIAL	40682.4	40682.4	101 %		16:25:51
3	Al 396.153Radial†	129.6	32.7	9.9033 µg/L	9.9033 ppb	16:25:51
3	Ca 317.933Radial†	7896.3	7647.3	1755.6 µg/L	1755.6 ppb	16:25:51
3	Fe 238.204 Radial†	45.5	1.9	1.9285 µg/L	1.9285 ppb	16:26:11
3	K 766.490 Radial†	1186.5	60.7	27.786 µg/L	27.786 ppb	16:25:51
3	Mg 279.077 IEC†	135.1	128.2	379.35 µg/L	379.35 ppb	16:26:11
3	Na 589.592 Radial†	6015.9	4859.1	791.57 µg/L	791.57 ppb	16:25:51
3	Sr 421.552†	1750.3	1778.1	8.1879 µg/L	8.1879 ppb	16:25:51
3	Sc 361.383	1068053.6	1068053.6	99.690 %		16:27:21
3	Y 371.029	581514.9	581514.9	99.078 %		16:27:21
3	Ag 328.068†	-617.7	-18.7	-0.1394 µg/L	-0.1394 ppb	16:27:26
3	As 188.979†	-26.8	2.7	1.4276 µg/L	1.4276 ppb	16:27:46
3	B 249.677†	120.5	-24.7	-1.6568 µg/L	-1.6568 ppb	16:27:46
3	Ba 233.527†	-7.9	122.1	1.3330 µg/L	1.3330 ppb	16:27:46
3	Be 313.107†	256.5	375.8	0.2638 µg/L	0.2638 ppb	16:27:26
3	Cd 226.502†	-13.1	14.4	0.5346 µg/L	0.5346 ppb	16:27:46
3	Co 228.616†	-135.0	-3.7	-0.1159 µg/L	-0.1159 ppb	16:27:46
3	Cr 267.716†	141.9	68.7	1.9738 µg/L	1.9738 ppb	16:27:46
3	Cu 324.752†	5024.8	-24.2	-0.0959 µg/L	-0.0959 ppb	16:27:26
3	Mn 257.610†	974.9	598.4	1.1148 µg/L	1.1148 ppb	16:27:26
3	Mo 202.031†	8.0	3.6	0.4976 µg/L	0.4976 ppb	16:27:46
3	Ni 231.604†	177.0	4.7	0.3118 µg/L	0.3118 ppb	16:27:46
3	P 214.914†	173.2	5.4	4.5863 µg/L	4.5863 ppb	16:27:46
3	Pb 220.353†	-11.8	-4.8	-1.2752 µg/L	-1.2752 ppb	16:27:46
3	S 181.975 Axial†	232.6	191.5	443.30 µg/L	443.30 ppb	16:27:46
3	Sb 206.836†	38.4	1.0	0.4669 µg/L	0.4669 ppb	16:27:46
3	Se 196.026†	-32.9	-0.2	-0.200 µg/L	-0.200 ppb	16:27:46
3	SiO2 †	33815.4	32589.0	2266.5 µg/L	2266.5 ppb	16:27:26
3	Sn 189.927†	-16.1	-3.2	-0.6686 µg/L	-0.6686 ppb	16:27:46
3	Ti 334.940†	415.4	-82.3	-0.0749 µg/L	-0.0749 ppb	16:27:26
3	Tl 190.801†	-37.1	-1.9	-0.7373 µg/L	-0.7373 ppb	16:27:46
3	U 409.014†	361.7	-31.9	-2.1313 µg/L	-2.1313 ppb	16:27:26
3	V 292.402†	-115.2	7.0	0.1149 µg/L	0.1149 ppb	16:27:26
3	Zn 213.857†	686.0	108.2	2.5493 µg/L	2.5493 ppb	16:27:46
3	Si 251.611†	33108.1	31897.7	1060 µg/L	1060 ppb	16:28:02

Mean Data: 1200870313|435151|25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1072512.2	100.11	%	0.576				0.57%
Sc RADIAL	40751.5	101	%	0.2				0.22%
Y 371.029	583730.7	99.455	%	0.5567				0.56%
Ag 328.068†	-10.9	-0.0821	µg/L	0.06580	-0.0821	ppb	0.06580	80.15%
Al 396.153Radial†	16.8	5.0950	µg/L	4.39311	5.0950	ppb	4.39311	86.22%
As 188.979†	-0.5	-0.2379	µg/L	1.45015	-0.2379	ppb	1.45015	609.56%
B 249.677†	-22.0	-1.4749	µg/L	0.47988	-1.4749	ppb	0.47988	32.54%
Ba 233.527†	125.1	1.3652	µg/L	0.03935	1.3652	ppb	0.03935	2.88%
Be 313.107†	392.4	0.2755	µg/L	0.01018	0.2755	ppb	0.01018	3.69%
Ca 317.933Radial†	7631.2	1751.9	µg/L	3.54	1751.9	ppb	3.54	0.20%
Cd 226.502†	7.0	0.2619	µg/L	0.24893	0.2619	ppb	0.24893	95.06%
Co 228.616†	-3.9	-0.1227	µg/L	0.18196	-0.1227	ppb	0.18196	148.33%
Cr 267.716†	70.8	2.0340	µg/L	0.21519	2.0340	ppb	0.21519	10.58%
Cu 324.752†	-78.2	-0.3139	µg/L	0.20613	-0.3139	ppb	0.20613	65.66%
Fe 238.204 Radial†	0.8	0.7939	µg/L	1.14248	0.7939	ppb	1.14248	143.91%
K 766.490 Radial†	75.7	34.673	µg/L	13.1983	34.673	ppb	13.1983	38.06%
Mg 279.077 IEC†	124.5	368.20	µg/L	15.958	368.20	ppb	15.958	4.33%
Mn 257.610†	584.8	1.0892	µg/L	0.02854	1.0892	ppb	0.02854	2.62%
Mo 202.031†	2.4	0.3318	µg/L	0.23085	0.3318	ppb	0.23085	69.58%

Na 589.592 Radial†	4871.2	793.55 µg/L	9.383	793.55 ppb	9.383	1.18%
Ni 231.604†	5.9	0.3969 µg/L	0.11850	0.3969 ppb	0.11850	29.86%
P 214.914†	4.8	4.1140 µg/L	3.37805	4.1140 ppb	3.37805	82.11%
Pb 220.353†	-4.2	-1.1214 µg/L	0.13447	-1.1214 ppb	0.13447	11.99%
S 181.975 Axial†	191.2	442.51 µg/L	3.345	442.51 ppb	3.345	0.76%
Sb 206.836†	4.0	1.9376 µg/L	2.20607	1.9376 ppb	2.20607	113.86%
Se 196.026†	-0.7	-0.601 µg/L	0.9696	-0.601 ppb	0.9696	161.25%
SiO2 †	32703.4	2274.4 µg/L	11.93	2274.4 ppb	11.93	0.52%
Si 251.611†	31840.8	1060 µg/L	6.2	1060 ppb	6.2	0.58%
Sn 189.927†	0.8	0.3647 µg/L	0.91481	0.3647 ppb	0.91481	250.85%
Sr 421.552†	1784.2	8.2166 µg/L	0.06948	8.2166 ppb	0.06948	0.85%
Ti 334.940†	-0.4	0.0368 µg/L	0.09945	0.0368 ppb	0.09945	270.50%
Tl 190.801†	-3.4	-1.3294 µg/L	0.59870	-1.3294 ppb	0.59870	45.03%
U 409.014†	-25.3	-1.6914 µg/L	0.38107	-1.6914 ppb	0.38107	22.53%
V 292.402†	-5.4	-0.0765 µg/L	0.29085	-0.0765 ppb	0.29085	380.24%
Zn 213.857†	91.7	2.1485 µg/L	0.38275	2.1485 ppb	0.38275	17.81%

Sequence No.: 22
Sample ID: 138851002|435151|5
Nebulizer Back Pressure: 249.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 6/24/2005 16:29:51
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851002|435151|5

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	40098.1	40098.1	99.7	%			16:31:16
1	Al 396.153Radial†	139.2	44.2	13.373	µg/L	13.373	ppb	16:31:16
1	Ca 317.933Radial†	37889.0	37829.9	8684.8	µg/L	8684.8	ppb	16:31:16
1	Fe 238.204 Radial†	46.8	3.8	3.9343	µg/L	3.9343	ppb	16:31:36
1	K 766.490 Radial†	1351.4	243.0	111.28	µg/L	111.28	ppb	16:31:16
1	Mg 279.077 IEC†	613.5	609.8	1804.1	µg/L	1804.1	ppb	16:31:36
1	Na 589.592 Radial†	25243.2	24221.8	3945.9	µg/L	3945.9	ppb	16:31:16
1	Sr 421.552†	8663.5	8734.1	40.220	µg/L	40.220	ppb	16:31:16
1	Sc 361.383	1067177.0	1067177.0	99.608	%			16:32:34
1	Y 371.029	578849.0	578849.0	98.623	%			16:32:34
1	Ag 328.068†	-605.9	-7.3	-0.0524	µg/L	-0.0524	ppb	16:32:39
1	As 188.979†	-28.2	1.3	0.8259	µg/L	0.8259	ppb	16:33:00
1	B 249.677†	187.6	42.8	2.9213	µg/L	2.9213	ppb	16:33:00
1	Ba 233.527†	456.3	588.2	6.4200	µg/L	6.4200	ppb	16:33:00
1	Be 313.107†	203.8	323.1	0.2281	µg/L	0.2281	ppb	16:32:39
1	Cd 226.502†	-14.5	12.9	0.4810	µg/L	0.4810	ppb	16:33:00
1	Co 228.616†	-132.9	-1.7	-0.0499	µg/L	-0.0499	ppb	16:33:00
1	Cr 267.716†	408.4	336.4	9.6555	µg/L	9.6555	ppb	16:33:00
1	Cu 324.752†	5402.9	359.6	1.4480	µg/L	1.4480	ppb	16:32:39
1	Mn 257.610†	3888.3	3524.1	6.5674	µg/L	6.5674	ppb	16:32:39
1	Mo 202.031†	12.3	7.9	1.1082	µg/L	1.1082	ppb	16:33:00
1	Ni 231.604†	181.1	8.9	0.5970	µg/L	0.5970	ppb	16:33:00
1	P 214.914†	180.0	12.4	10.231	µg/L	10.231	ppb	16:33:00
1	Pb 220.353†	-6.3	0.7	0.1980	µg/L	0.1980	ppb	16:33:00
1	S 181.975 Axial†	1020.3	982.5	2274.0	µg/L	2274.0	ppb	16:33:00
1	Sb 206.836†	37.0	-0.3	-0.3111	µg/L	-0.3111	ppb	16:33:00
1	Se 196.026†	-27.8	4.9	4.21	µg/L	4.21	ppb	16:33:00
1	SiO2 †	156240.1	155523.7	10816	µg/L	10816	ppb	16:32:34
1	Sn 189.927†	-28.5	-15.7	-3.3013	µg/L	-3.3013	ppb	16:33:00
1	Ti 334.940†	250.5	-247.5	-0.1574	µg/L	-0.1574	ppb	16:32:39
1	Tl 190.801†	-43.0	-7.8	-3.0521	µg/L	-3.0521	ppb	16:33:00
1	U 409.014†	386.5	-6.7	-0.4444	µg/L	-0.4444	ppb	16:32:39
1	V 292.402†	-85.7	36.5	0.5934	µg/L	0.5934	ppb	16:32:39
1	Zn 213.857†	1445.8	871.5	20.795	µg/L	20.795	ppb	16:33:00
1	Si 251.611†	156559.5	155862.6	5180	µg/L	5180	ppb	16:34:07
2	Sc RADIAL	39830.6	39830.6	99.1	%			16:31:41
2	Al 396.153Radial†	84.9	-9.6	-2.9337	µg/L	-2.9337	ppb	16:31:41
2	Ca 317.933Radial†	37679.8	37873.9	8694.9	µg/L	8694.9	ppb	16:31:41
2	Fe 238.204 Radial†	44.2	1.4	1.4900	µg/L	1.4900	ppb	16:32:01
2	K 766.490 Radial†	1365.4	266.3	121.93	µg/L	121.93	ppb	16:31:41
2	Mg 279.077 IEC†	619.1	619.6	1833.0	µg/L	1833.0	ppb	16:32:01
2	Na 589.592 Radial†	25155.9	24303.7	3959.2	µg/L	3959.2	ppb	16:31:41
2	Sr 421.552†	8575.4	8703.5	40.078	µg/L	40.078	ppb	16:31:41
2	Sc 361.383	1070917.5	1070917.5	99.957	%			16:33:05
2	Y 371.029	581152.0	581152.0	99.016	%			16:33:05
2	Ag 328.068†	-651.8	-51.1	-0.3825	µg/L	-0.3825	ppb	16:33:10
2	As 188.979†	-26.7	2.9	1.6546	µg/L	1.6546	ppb	16:33:31
2	B 249.677†	179.6	34.1	2.3305	µg/L	2.3305	ppb	16:33:31
2	Ba 233.527†	444.9	575.2	6.2780	µg/L	6.2780	ppb	16:33:31
2	Be 313.107†	209.8	328.5	0.2312	µg/L	0.2312	ppb	16:33:10
2	Cd 226.502†	-24.6	2.9	0.1083	µg/L	0.1083	ppb	16:33:31
2	Co 228.616†	-131.4	0.2	0.0094	µg/L	0.0094	ppb	16:33:31
2	Cr 267.716†	394.0	320.5	9.2021	µg/L	9.2021	ppb	16:33:31
2	Cu 324.752†	5481.5	419.3	1.6915	µg/L	1.6915	ppb	16:33:10
2	Mn 257.610†	3880.3	3502.5	6.5268	µg/L	6.5268	ppb	16:33:10
2	Mo 202.031†	6.1	1.7	0.2667	µg/L	0.2667	ppb	16:33:31
2	Ni 231.604†	180.1	7.3	0.4876	µg/L	0.4876	ppb	16:33:31
2	P 214.914†	189.6	21.4	17.738	µg/L	17.738	ppb	16:33:31

2	Pb 220.353†	-2.9	4.1	1.1119 µg/L	1.1119 ppb	16:33:31
2	S 181.975 Axial†	1006.5	965.1	2233.6 µg/L	2233.6 ppb	16:33:31
2	Sb 206.836†	35.1	-2.3	-1.3081 µg/L	-1.3081 ppb	16:33:31
2	Se 196.026†	-24.4	8.3	7.15 µg/L	7.15 ppb	16:33:31
2	SiO2 †	156713.7	155449.7	10811 µg/L	10811 ppb	16:33:05
2	Sn 189.927†	-26.8	-13.9	-2.8375 µg/L	-2.8375 ppb	16:33:31
2	Ti 334.940†	281.6	-217.2	-0.1141 µg/L	-0.1141 ppb	16:33:10
2	Tl 190.801†	-38.6	-3.3	-1.2722 µg/L	-1.2722 ppb	16:33:31
2	U 409.014†	340.2	-54.4	-3.6284 µg/L	-3.6284 ppb	16:33:10
2	V 292.402†	-94.2	28.3	0.4556 µg/L	0.4556 ppb	16:33:10
2	Zn 213.857†	1438.5	859.1	20.494 µg/L	20.494 ppb	16:33:31
2	Si 251.611†	156528.7	155282.8	5160 µg/L	5160 ppb	16:34:13
3	Sc RADIAL	40043.6	40043.6	99.6 %		16:32:06
3	Al 396.153Radial†	117.3	22.4	6.8375 µg/L	6.8375 ppb	16:32:06
3	Ca 317.933Radial†	37907.1	37899.8	8700.8 µg/L	8700.8 ppb	16:32:06
3	Fe 238.204 Radial†	43.2	0.2	0.2145 µg/L	0.2145 ppb	16:32:26
3	K 766.490 Radial†	1431.0	324.8	148.74 µg/L	148.74 ppb	16:32:06
3	Mg 279.077 IEC†	613.4	610.5	1806.1 µg/L	1806.1 ppb	16:32:26
3	Na 589.592 Radial†	25309.1	24322.5	3962.3 µg/L	3962.3 ppb	16:32:06
3	Sr 421.552†	8598.2	8680.4	39.971 µg/L	39.971 ppb	16:32:06
3	Sc 361.383	1066994.5	1066994.5	99.591 %		16:33:36
3	Y 371.029	578820.7	578820.7	98.619 %		16:33:36
3	Ag 328.068†	-664.7	-66.5	-0.5000 µg/L	-0.5000 ppb	16:33:41
3	As 188.979†	-23.1	6.4	3.4613 µg/L	3.4613 ppb	16:34:02
3	B 249.677†	173.4	28.5	1.9559 µg/L	1.9559 ppb	16:34:02
3	Ba 233.527†	447.8	579.8	6.3266 µg/L	6.3266 ppb	16:34:02
3	Be 313.107†	185.7	305.0	0.2144 µg/L	0.2144 ppb	16:33:41
3	Cd 226.502†	-19.3	8.1	0.3020 µg/L	0.3020 ppb	16:34:02
3	Co 228.616†	-136.3	-5.1	-0.1615 µg/L	-0.1615 ppb	16:34:02
3	Cr 267.716†	391.8	319.8	9.1820 µg/L	9.1820 ppb	16:34:02
3	Cu 324.752†	5481.4	439.3	1.7737 µg/L	1.7737 ppb	16:33:41
3	Mn 257.610†	3855.4	3491.8	6.5070 µg/L	6.5070 ppb	16:33:41
3	Mo 202.031†	0.2	-4.2	-0.5275 µg/L	-0.5275 ppb	16:34:02
3	Ni 231.604†	189.1	17.0	1.1299 µg/L	1.1299 ppb	16:34:02
3	P 214.914†	191.5	24.0	19.949 µg/L	19.949 ppb	16:34:02
3	Pb 220.353†	-15.6	-8.7	-2.2971 µg/L	-2.2971 ppb	16:34:02
3	S 181.975 Axial†	1000.7	963.1	2228.9 µg/L	2228.9 ppb	16:34:02
3	Sb 206.836†	30.9	-6.4	-3.3251 µg/L	-3.3251 ppb	16:34:02
3	Se 196.026†	-34.6	-2.0	-1.66 µg/L	-1.66 ppb	16:34:02
3	SiO2 †	155661.8	154969.8	10778 µg/L	10778 ppb	16:33:36
3	Sn 189.927†	-25.1	-12.2	-2.4031 µg/L	-2.4031 ppb	16:34:02
3	Ti 334.940†	221.6	-276.4	-0.1940 µg/L	-0.1940 ppb	16:33:41
3	Tl 190.801†	-38.2	-3.0	-1.1788 µg/L	-1.1788 ppb	16:34:02
3	U 409.014†	313.0	-80.5	-5.3742 µg/L	-5.3742 ppb	16:33:41
3	V 292.402†	-132.1	-10.1	-0.1418 µg/L	-0.1418 ppb	16:33:41
3	Zn 213.857†	1459.9	885.9	21.141 µg/L	21.141 ppb	16:34:02
3	Si 251.611†	156363.3	155692.4	5180 µg/L	5180 ppb	16:34:18

Mean Data: 138851002|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1068363.0	99.718	%	0.2067				0.21%
Sc RADIAL	39990.8	99.5	%	0.35				0.35%
Y 371.029	579607.2	98.753	%	0.2279				0.23%
Ag 328.068†	-41.6	-0.3116	µg/L	0.23208	-0.3116	ppb	0.23208	74.47%
Al 396.153Radial†	19.0	5.7589	µg/L	8.20666	5.7589	ppb	8.20666	142.50%
As 188.979†	3.5	1.9806	µg/L	1.34758	1.9806	ppb	1.34758	68.04%
B 249.677†	35.1	2.4026	µg/L	0.48674	2.4026	ppb	0.48674	20.26%
Ba 233.527†	581.0	6.3415	µg/L	0.07214	6.3415	ppb	0.07214	1.14%
Be 313.107†	318.8	0.2246	µg/L	0.00895	0.2246	ppb	0.00895	3.98%
Ca 317.933Radial†	37867.9	8693.5	µg/L	8.09	8693.5	ppb	8.09	0.09%
Cd 226.502†	8.0	0.2971	µg/L	0.18643	0.2971	ppb	0.18643	62.75%
Co 228.616†	-2.2	-0.0673	µg/L	0.08680	-0.0673	ppb	0.08680	128.95%
Cr 267.716†	325.6	9.3466	µg/L	0.26777	9.3466	ppb	0.26777	2.86%
Cu 324.752†	406.1	1.6377	µg/L	0.16941	1.6377	ppb	0.16941	10.34%
Fe 238.204 Radial†	1.8	1.8796	µg/L	1.89027	1.8796	ppb	1.89027	100.57%
K 766.490 Radial†	278.0	127.32	µg/L	19.304	127.32	ppb	19.304	15.16%
Mg 279.077 IEC†	613.3	1814.4	µg/L	16.15	1814.4	ppb	16.15	0.89%
Mn 257.610†	3506.1	6.5337	µg/L	0.03079	6.5337	ppb	0.03079	0.47%
Mo 202.031†	1.8	0.2824	µg/L	0.81799	0.2824	ppb	0.81799	289.61%

Na 589.592 Radial†	24282.7	3955.8 µg/L	8.72	3955.8 ppb	8.72	0.22%
Ni 231.604†	11.1	0.7382 µg/L	0.34366	0.7382 ppb	0.34366	46.56%
P 214.914†	19.3	15.973 µg/L	5.0940	15.973 ppb	5.0940	31.89%
Pb 220.353†	-1.3	-0.3291 µg/L	1.76456	-0.3291 ppb	1.76456	536.18%
S 181.975 Axial†	970.2	2245.5 µg/L	24.81	2245.5 ppb	24.81	1.11%
Sb 206.836†	-3.0	-1.6481 µg/L	1.53549	-1.6481 ppb	1.53549	93.17%
Se 196.026†	3.7	3.23 µg/L	4.484	3.23 ppb	4.484	138.74%
SiO2 †	155314.4	10802 µg/L	20.9	10802 ppb	20.9	0.19%
Si 251.611†	155612.6	5170 µg/L	9.9	5170 ppb	9.9	0.19%
Sn 189.927†	-13.9	-2.8473 µg/L	0.44916	-2.8473 ppb	0.44916	15.77%
Sr 421.552†	8706.0	40.090 µg/L	0.1247	40.090 ppb	0.1247	0.31%
Ti 334.940†	-247.0	-0.1552 µg/L	0.03999	-0.1552 ppb	0.03999	25.77%
Tl 190.801†	-4.7	-1.8344 µg/L	1.05564	-1.8344 ppb	1.05564	57.55%
U 409.014†	-47.2	-3.1490 µg/L	2.49960	-3.1490 ppb	2.49960	79.38%
V 292.402†	18.2	0.3024 µg/L	0.39082	0.3024 ppb	0.39082	129.25%
Zn 213.857†	872.2	20.810 µg/L	0.3235	20.810 ppb	0.3235	1.55%

Sequence No.: 23
Sample ID: 138851003|435151|5
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 6/24/2005 16:36:07
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851003|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39868.1	39868.1	99.2	%			16:37:31
1	Al 396.153Radial†	129.6	35.4	10.685	µg/L	10.685	ppb	16:37:31
1	Ca 317.933Radial†	38681.5	38848.1	8918.5	µg/L	8918.5	ppb	16:37:31
1	Fe 238.204 Radial†	61.0	18.3	18.934	µg/L	18.934	ppb	16:37:51
1	K 766.490 Radial†	1419.5	319.5	146.32	µg/L	146.32	ppb	16:37:31
1	Mg 279.077 IEC†	630.9	630.9	1866.5	µg/L	1866.5	ppb	16:37:51
1	Na 589.592 Radial†	25573.3	24700.7	4023.9	µg/L	4023.9	ppb	16:37:31
1	Sr 421.552†	8774.6	8896.2	40.965	µg/L	40.965	ppb	16:37:31
1	Sc 361.383	1072447.1	1072447.1	100.10	%			16:38:49
1	Y 371.029	581912.6	581912.6	99.145	%			16:38:49
1	Ag 328.068†	-608.5	-6.9	-0.0449	µg/L	-0.0449	ppb	16:38:54
1	As 188.979†	-21.2	8.4	4.5252	µg/L	4.5252	ppb	16:39:15
1	B 249.677†	184.2	38.5	2.6298	µg/L	2.6298	ppb	16:39:15
1	Ba 233.527†	471.2	600.9	6.5573	µg/L	6.5573	ppb	16:39:15
1	Be 313.107†	214.2	332.5	0.2334	µg/L	0.2334	ppb	16:38:54
1	Cd 226.502†	-27.8	-0.3	-0.0125	µg/L	-0.0125	ppb	16:39:15
1	Co 228.616†	-129.0	2.9	0.0955	µg/L	0.0955	ppb	16:39:15
1	Cr 267.716†	424.1	350.0	10.050	µg/L	10.050	ppb	16:39:15
1	Cu 324.752†	5568.7	498.6	2.0140	µg/L	2.0140	ppb	16:38:54
1	Mn 257.610†	3611.3	3228.2	6.0161	µg/L	6.0161	ppb	16:39:15
1	Mo 202.031†	12.1	7.6	1.0707	µg/L	1.0707	ppb	16:39:15
1	Ni 231.604†	171.8	-1.2	-0.0771	µg/L	-0.0771	ppb	16:39:15
1	P 214.914†	189.0	20.5	16.952	µg/L	16.952	ppb	16:39:15
1	Pb 220.353†	-3.8	3.2	0.8694	µg/L	0.8694	ppb	16:39:15
1	S 181.975 Axial†	1026.7	983.9	2277.2	µg/L	2277.2	ppb	16:39:15
1	Sb 206.836†	38.2	0.7	0.1928	µg/L	0.1928	ppb	16:39:15
1	Se 196.026†	-30.4	2.5	2.14	µg/L	2.14	ppb	16:39:15
1	SiO2 †	164563.4	163067.9	11341	µg/L	11341	ppb	16:38:54
1	Sn 189.927†	-24.6	-11.6	-2.2234	µg/L	-2.2234	ppb	16:39:15
1	Ti 334.940†	371.2	-128.0	0.0142	µg/L	0.0142	ppb	16:38:54
1	Tl 190.801†	-40.1	-4.7	-1.8378	µg/L	-1.8378	ppb	16:39:15
1	U 409.014†	281.6	-113.5	-7.5730	µg/L	-7.5730	ppb	16:38:54
1	V 292.402†	-79.8	42.8	0.6837	µg/L	0.6837	ppb	16:39:15
1	Zn 213.857†	1354.3	773.0	18.391	µg/L	18.391	ppb	16:39:15
1	Si 251.611†	161531.3	160057.0	5320	µg/L	5320	ppb	16:40:23
2	Sc RADIAL	39726.3	39726.3	98.8	%			16:37:56
2	Al 396.153Radial†	136.7	43.0	12.993	µg/L	12.993	ppb	16:37:56
2	Ca 317.933Radial†	38537.8	38842.0	8917.1	µg/L	8917.1	ppb	16:37:56
2	Fe 238.204 Radial†	66.7	24.3	25.125	µg/L	25.125	ppb	16:38:16
2	K 766.490 Radial†	1387.6	292.3	133.86	µg/L	133.86	ppb	16:37:56
2	Mg 279.077 IEC†	626.8	629.0	1860.9	µg/L	1860.9	ppb	16:38:16
2	Na 589.592 Radial†	25594.2	24813.9	4042.3	µg/L	4042.3	ppb	16:37:56
2	Sr 421.552†	8742.1	8894.9	40.959	µg/L	40.959	ppb	16:37:56
2	Sc 361.383	1073579.2	1073579.2	100.21	%			16:39:20
2	Y 371.029	582239.1	582239.1	99.201	%			16:39:20
2	Ag 328.068†	-586.2	15.9	0.1283	µg/L	0.1283	ppb	16:39:25
2	As 188.979†	-37.9	-8.2	-4.0817	µg/L	-4.0817	ppb	16:39:46
2	B 249.677†	189.9	44.0	2.9993	µg/L	2.9993	ppb	16:39:46
2	Ba 233.527†	466.1	595.2	6.4956	µg/L	6.4956	ppb	16:39:46
2	Be 313.107†	236.4	354.4	0.2485	µg/L	0.2485	ppb	16:39:25
2	Cd 226.502†	-24.7	2.9	0.1033	µg/L	0.1033	ppb	16:39:46
2	Co 228.616†	-126.3	5.7	0.1864	µg/L	0.1864	ppb	16:39:46
2	Cr 267.716†	419.3	344.8	9.9026	µg/L	9.9026	ppb	16:39:46
2	Cu 324.752†	5550.7	474.8	1.9191	µg/L	1.9191	ppb	16:39:25
2	Mn 257.610†	3627.6	3240.7	6.0404	µg/L	6.0404	ppb	16:39:46
2	Mo 202.031†	14.2	9.7	1.3502	µg/L	1.3502	ppb	16:39:46
2	Ni 231.604†	180.4	7.1	0.4763	µg/L	0.4763	ppb	16:39:46
2	P 214.914†	195.2	26.5	21.995	µg/L	21.995	ppb	16:39:46

2	Pb 220.353†	-7.9	-0.9	-0.2232 µg/L	-0.2232 ppb	16:39:46
2	S 181.975 Axial†	1028.8	984.8	2279.4 µg/L	2279.4 ppb	16:39:46
2	Sb 206.836†	28.6	-8.9	-4.5273 µg/L	-4.5273 ppb	16:39:46
2	Se 196.026†	-38.1	-5.2	-4.44 µg/L	-4.44 ppb	16:39:46
2	SiO2 †	164838.7	163169.3	11348 µg/L	11348 ppb	16:39:25
2	Sn 189.927†	-27.3	-14.3	-2.9329 µg/L	-2.9329 ppb	16:39:46
2	Ti 334.940†	296.9	-202.6	-0.0869 µg/L	-0.0869 ppb	16:39:25
2	Tl 190.801†	-40.4	-5.0	-1.9393 µg/L	-1.9393 ppb	16:39:46
2	U 409.014†	258.7	-136.6	-9.1207 µg/L	-9.1207 ppb	16:39:25
2	V 292.402†	-81.7	41.0	0.6577 µg/L	0.6577 ppb	16:39:46
2	Zn 213.857†	1351.1	768.3	18.273 µg/L	18.273 ppb	16:39:46
2	Si 251.611†	161193.8	159550.0	5300 µg/L	5300 ppb	16:40:28
3	Sc RADIAL	39866.8	39866.8	99.2 %		16:38:21
3	Al 396.153Radial†	-96.3	-192.5	-58.462 µg/L	-58.462 ppb	16:38:21
3	Ca 317.933Radial†	38715.3	38883.5	8926.7 µg/L	8926.7 ppb	16:38:21
3	Fe 238.204 Radial†	64.5	21.9	22.652 µg/L	22.652 ppb	16:38:42
3	K 766.490 Radial†	1456.0	356.4	163.19 µg/L	163.19 ppb	16:38:21
3	Mg 279.077 IEC†	630.5	630.5	1865.4 µg/L	1865.4 ppb	16:38:42
3	Na 589.592 Radial†	25688.1	24817.3	4042.9 µg/L	4042.9 ppb	16:38:21
3	Sr 421.552†	8733.1	8854.7	40.773 µg/L	40.773 ppb	16:38:21
3	Sc 361.383	1068145.4	1068145.4	99.698 %		16:39:51
3	Y 371.029	579955.3	579955.3	98.812 %		16:39:51
3	Ag 328.068†	-623.6	-24.5	-0.1794 µg/L	-0.1794 ppb	16:39:56
3	As 188.979†	-25.0	4.5	2.5335 µg/L	2.5335 ppb	16:40:17
3	B 249.677†	183.7	38.7	2.6456 µg/L	2.6456 ppb	16:40:17
3	Ba 233.527†	453.8	585.3	6.3884 µg/L	6.3884 ppb	16:40:17
3	Be 313.107†	178.6	297.7	0.2107 µg/L	0.2107 ppb	16:39:56
3	Cd 226.502†	-26.9	0.5	0.0178 µg/L	0.0178 ppb	16:40:17
3	Co 228.616†	-126.2	5.1	0.1652 µg/L	0.1652 ppb	16:40:17
3	Cr 267.716†	418.9	346.6	9.9458 µg/L	9.9458 ppb	16:40:17
3	Cu 324.752†	5578.3	530.6	2.1362 µg/L	2.1362 ppb	16:39:56
3	Mn 257.610†	3584.2	3215.6	5.9919 µg/L	5.9919 ppb	16:40:17
3	Mo 202.031†	10.2	5.8	0.8235 µg/L	0.8235 ppb	16:40:17
3	Ni 231.604†	185.5	13.1	0.8750 µg/L	0.8750 ppb	16:40:17
3	P 214.914†	194.2	26.5	21.912 µg/L	21.912 ppb	16:40:17
3	Pb 220.353†	-10.3	-3.3	-0.8735 µg/L	-0.8735 ppb	16:40:17
3	S 181.975 Axial†	1018.3	979.5	2267.1 µg/L	2267.1 ppb	16:40:17
3	Sb 206.836†	28.8	-8.6	-4.3862 µg/L	-4.3862 ppb	16:40:17
3	Se 196.026†	-40.2	-7.5	-6.38 µg/L	-6.38 ppb	16:40:17
3	SiO2 †	165534.2	164703.8	11455 µg/L	11455 ppb	16:39:56
3	Sn 189.927†	-32.5	-19.7	-4.3223 µg/L	-4.3223 ppb	16:40:17
3	Ti 334.940†	239.2	-259.0	-0.1692 µg/L	-0.1692 ppb	16:39:56
3	Tl 190.801†	-33.6	1.6	0.6442 µg/L	0.6442 ppb	16:40:17
3	U 409.014†	415.4	22.0	1.4652 µg/L	1.4652 ppb	16:39:56
3	V 292.402†	-91.2	31.0	0.5108 µg/L	0.5108 ppb	16:40:17
3	Zn 213.857†	1335.1	759.1	18.048 µg/L	18.048 ppb	16:40:17
3	Si 251.611†	161330.4	160505.4	5340 µg/L	5340 ppb	16:40:33

Mean Data: 138851003|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1071390.6	100.00	%	0.268				0.27%
Sc RADIAL	39820.4	99.1	%	0.20				0.20%
Y 371.029	581369.0	99.053	%	0.2104				0.21%
Ag 328.068†	-5.1	-0.0320	µg/L	0.15429	-0.0320	ppb	0.15429	481.98%
Al 396.153Radial†	-38.0	-11.595	µg/L	40.6044	-11.595	ppb	40.6044	350.20%
As 188.979†	1.6	0.9924	µg/L	4.50566	0.9924	ppb	4.50566	454.04%
B 249.677†	40.4	2.7582	µg/L	0.20892	2.7582	ppb	0.20892	7.57%
Ba 233.527†	593.8	6.4804	µg/L	0.08547	6.4804	ppb	0.08547	1.32%
Be 313.107†	328.2	0.2308	µg/L	0.01904	0.2308	ppb	0.01904	8.25%
Ca 317.933Radial†	38857.9	8920.8	µg/L	5.18	8920.8	ppb	5.18	0.06%
Cd 226.502†	1.0	0.0362	µg/L	0.06007	0.0362	ppb	0.06007	166.05%
Co 228.616†	4.6	0.1490	µg/L	0.04756	0.1490	ppb	0.04756	31.92%
Cr 267.716†	347.1	9.9661	µg/L	0.07584	9.9661	ppb	0.07584	0.76%
Cu 324.752†	501.3	2.0231	µg/L	0.10884	2.0231	ppb	0.10884	5.38%
Fe 238.204 Radial†	21.5	22.237	µg/L	3.1160	22.237	ppb	3.1160	14.01%
K 766.490 Radial†	322.7	147.79	µg/L	14.722	147.79	ppb	14.722	9.96%
Mg 279.077 IEC†	630.1	1864.2	µg/L	2.97	1864.2	ppb	2.97	0.16%
Mn 257.610†	3228.1	6.0161	µg/L	0.02429	6.0161	ppb	0.02429	0.40%
Mo 202.031†	7.7	1.0815	µg/L	0.26350	1.0815	ppb	0.26350	24.36%

Na 589.592 Radial†	24777.3	4036.4 µg/L	10.81	4036.4 ppb	10.81	0.27%
Ni 231.604†	6.4	0.4248 µg/L	0.47814	0.4248 ppb	0.47814	112.57%
P 214.914†	24.5	20.286 µg/L	2.8880	20.286 ppb	2.8880	14.24%
Pb 220.353†	-0.3	-0.0758 µg/L	0.88075	-0.0758 ppb	0.88075	>999.9%
S 181.975 Axial†	982.8	2274.5 µg/L	6.55	2274.5 ppb	6.55	0.29%
Sb 206.836†	-5.6	-2.9069 µg/L	2.68538	-2.9069 ppb	2.68538	92.38%
Se 196.026†	-3.4	-2.89 µg/L	4.461	-2.89 ppb	4.461	154.21%
SiO2 †	163647.0	11381 µg/L	63.8	11381 ppb	63.8	0.56%
Si 251.611†	160037.5	5320 µg/L	15.9	5320 ppb	15.9	0.30%
Sn 189.927†	-15.2	-3.1596 µg/L	1.06764	-3.1596 ppb	1.06764	33.79%
Sr 421.552†	8881.9	40.899 µg/L	0.1091	40.899 ppb	0.1091	0.27%
Ti 334.940†	-196.6	-0.0806 µg/L	0.09186	-0.0806 ppb	0.09186	113.98%
Tl 190.801†	-2.7	-1.0443 µg/L	1.46316	-1.0443 ppb	1.46316	140.11%
U 409.014†	-76.0	-5.0762 µg/L	5.71764	-5.0762 ppb	5.71764	112.64%
V 292.402†	38.3	0.6174 µg/L	0.09325	0.6174 ppb	0.09325	15.10%
Zn 213.857†	766.8	18.237 µg/L	0.1742	18.237 ppb	0.1742	0.96%

Sequence No.: 24
Sample ID: 1200870314|435151|5
Nebulizer Back Pressure: 249.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 6/24/2005 16:42:22
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870314|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39398.4	39398.4	98.0	%			16:43:47
1	Al 396.153Radial†	109.4	16.3	4.9082	µg/L	4.9082	ppb	16:43:47
1	Ca 317.933Radial†	39562.4	40211.9	9231.6	µg/L	9231.6	ppb	16:43:47
1	Fe 238.204 Radial†	62.3	20.4	21.073	µg/L	21.073	ppb	16:44:07
1	K 766.490 Radial†	1396.3	313.0	143.31	µg/L	143.31	ppb	16:43:47
1	Mg 279.077 IEC†	645.0	652.9	1931.4	µg/L	1931.4	ppb	16:44:07
1	Na 589.592 Radial†	26198.4	25646.0	4177.9	µg/L	4177.9	ppb	16:43:47
1	Sr 421.552†	8990.5	9222.0	42.465	µg/L	42.465	ppb	16:43:47
1	Sc 361.383	1065359.8	1065359.8	99.438	%			16:45:05
1	Y 371.029	578089.4	578089.4	98.494	%			16:45:05
1	Ag 328.068†	-657.1	-59.8	-0.4446	µg/L	-0.4446	ppb	16:45:10
1	As 188.979†	-35.9	-6.5	-3.2128	µg/L	-3.2128	ppb	16:45:31
1	B 249.677†	176.2	31.6	2.1682	µg/L	2.1682	ppb	16:45:31
1	Ba 233.527†	480.1	612.9	6.6896	µg/L	6.6896	ppb	16:45:31
1	Be 313.107†	187.0	306.5	0.2161	µg/L	0.2161	ppb	16:45:10
1	Cd 226.502†	-21.5	5.9	0.2176	µg/L	0.2176	ppb	16:45:31
1	Co 228.616†	-125.8	5.2	0.1703	µg/L	0.1703	ppb	16:45:31
1	Cr 267.716†	430.7	359.5	10.321	µg/L	10.321	ppb	16:45:31
1	Cu 324.752†	5626.8	594.0	2.3948	µg/L	2.3948	ppb	16:45:10
1	Mn 257.610†	3694.6	3336.0	6.2166	µg/L	6.2166	ppb	16:45:31
1	Mo 202.031†	11.4	7.0	0.9879	µg/L	0.9879	ppb	16:45:31
1	Ni 231.604†	187.8	16.0	1.0682	µg/L	1.0682	ppb	16:45:31
1	P 214.914†	187.0	19.8	16.239	µg/L	16.239	ppb	16:45:31
1	Pb 220.353†	-15.5	-8.6	-2.2797	µg/L	-2.2797	ppb	16:45:31
1	S 181.975 Axial†	1056.4	1020.6	2362.0	µg/L	2362.0	ppb	16:45:31
1	Sb 206.836†	36.1	-1.1	-0.7330	µg/L	-0.7330	ppb	16:45:31
1	Se 196.026†	-34.2	-1.6	-1.29	µg/L	-1.29	ppb	16:45:31
1	SiO2 †	169094.4	168718.2	11734	µg/L	11734	ppb	16:45:10
1	Sn 189.927†	-34.2	-21.4	-4.7448	µg/L	-4.7448	ppb	16:45:31
1	Ti 334.940†	219.0	-278.7	-0.1874	µg/L	-0.1874	ppb	16:45:10
1	Tl 190.801†	-32.3	2.8	1.1238	µg/L	1.1238	ppb	16:45:31
1	U 409.014†	346.9	-45.8	-3.0606	µg/L	-3.0606	ppb	16:45:10
1	V 292.402†	-90.8	31.2	0.5108	µg/L	0.5108	ppb	16:45:31
1	Zn 213.857†	1371.3	799.1	19.004	µg/L	19.004	ppb	16:45:31
1	Si 251.611†	164694.1	164311.2	5460	µg/L	5460	ppb	16:46:38
2	Sc RADIAL	39719.0	39719.0	98.8	%			16:44:12
2	Al 396.153Radial†	75.6	-18.8	-5.7465	µg/L	-5.7465	ppb	16:44:12
2	Ca 317.933Radial†	39585.2	39909.1	9162.1	µg/L	9162.1	ppb	16:44:12
2	Fe 238.204 Radial†	62.5	20.2	20.841	µg/L	20.841	ppb	16:44:32
2	K 766.490 Radial†	1415.6	320.9	146.96	µg/L	146.96	ppb	16:44:12
2	Mg 279.077 IEC†	648.1	650.7	1925.1	µg/L	1925.1	ppb	16:44:32
2	Na 589.592 Radial†	26141.5	25372.5	4133.3	µg/L	4133.3	ppb	16:44:12
2	Sr 421.552†	8929.0	9085.7	41.837	µg/L	41.837	ppb	16:44:12
2	Sc 361.383	1077942.7	1077942.7	100.61	%			16:45:36
2	Y 371.029	585088.7	585088.7	99.687	%			16:45:36
2	Ag 328.068†	-555.3	49.1	0.3762	µg/L	0.3762	ppb	16:45:41
2	As 188.979†	-27.0	2.8	1.6112	µg/L	1.6112	ppb	16:46:02
2	B 249.677†	185.1	38.4	2.6283	µg/L	2.6283	ppb	16:46:02
2	Ba 233.527†	476.8	604.0	6.5912	µg/L	6.5912	ppb	16:46:02
2	Be 313.107†	224.6	341.7	0.2399	µg/L	0.2399	ppb	16:45:41
2	Cd 226.502†	-19.4	8.2	0.3022	µg/L	0.3022	ppb	16:46:02
2	Co 228.616†	-131.5	1.0	0.0369	µg/L	0.0369	ppb	16:46:02
2	Cr 267.716†	436.9	360.7	10.356	µg/L	10.356	ppb	16:46:02
2	Cu 324.752†	5575.4	476.9	1.9267	µg/L	1.9267	ppb	16:45:41
2	Mn 257.610†	3632.1	3230.5	6.0200	µg/L	6.0200	ppb	16:46:02
2	Mo 202.031†	10.4	5.9	0.8389	µg/L	0.8389	ppb	16:46:02
2	Ni 231.604†	176.1	2.2	0.1463	µg/L	0.1463	ppb	16:46:02
2	P 214.914†	184.9	15.5	12.751	µg/L	12.751	ppb	16:46:02

2	Pb 220.353†	-11.6	-4.5	-1.1926 µg/L	-1.1926 ppb	16:46:02
2	S 181.975 Axial†	1044.9	996.7	2306.8 µg/L	2306.8 ppb	16:46:02
2	Sb 206.836†	36.6	-1.1	-0.7386 µg/L	-0.7386 ppb	16:46:02
2	Se 196.026†	-34.4	-1.4	-1.15 µg/L	-1.15 ppb	16:46:02
2	SiO2 †	169048.3	166687.4	11593 µg/L	11593 ppb	16:45:41
2	Sn 189.927†	-28.0	-14.8	-3.0390 µg/L	-3.0390 ppb	16:46:02
2	Ti 334.940†	285.0	-215.7	-0.1004 µg/L	-0.1004 ppb	16:45:41
2	Tl 190.801†	-39.3	-3.7	-1.4544 µg/L	-1.4544 ppb	16:46:02
2	U 409.014†	281.4	-115.1	-7.6818 µg/L	-7.6818 ppb	16:45:41
2	V 292.402†	-100.1	23.0	0.3796 µg/L	0.3796 ppb	16:46:02
2	Zn 213.857†	1367.3	778.9	18.523 µg/L	18.523 ppb	16:46:02
2	Si 251.611†	165303.6	162983.7	5420 µg/L	5420 ppb	16:46:44
3	Sc RADIAL	40079.0	40079.0	99.7 %		16:44:37
3	Al 396.153Radial†	119.2	24.2	7.3364 µg/L	7.3364 ppb	16:44:37
3	Ca 317.933Radial†	39834.2	39799.1	9136.8 µg/L	9136.8 ppb	16:44:37
3	Fe 238.204 Radial†	61.9	19.0	19.585 µg/L	19.585 ppb	16:44:57
3	K 766.490 Radial†	1477.5	370.1	169.50 µg/L	169.50 ppb	16:44:37
3	Mg 279.077 IEC†	653.2	649.9	1922.8 µg/L	1922.8 ppb	16:44:57
3	Na 589.592 Radial†	26386.2	25380.4	4134.6 µg/L	4134.6 ppb	16:44:37
3	Sr 421.552†	9079.6	9155.5	42.160 µg/L	42.160 ppb	16:44:37
3	Sc 361.383	1075365.8	1075365.8	100.37 %		16:46:07
3	Y 371.029	583634.3	583634.3	99.439 %		16:46:07
3	Ag 328.068†	-617.9	-14.6	-0.1043 µg/L	-0.1043 ppb	16:46:12
3	As 188.979†	-23.8	5.9	3.2419 µg/L	3.2419 ppb	16:46:33
3	B 249.677†	186.0	39.8	2.7161 µg/L	2.7161 ppb	16:46:33
3	Ba 233.527†	471.5	599.8	6.5461 µg/L	6.5461 ppb	16:46:33
3	Be 313.107†	227.0	344.6	0.2424 µg/L	0.2424 ppb	16:46:12
3	Cd 226.502†	-15.1	12.4	0.4613 µg/L	0.4613 ppb	16:46:33
3	Co 228.616†	-130.9	1.3	0.0447 µg/L	0.0447 ppb	16:46:33
3	Cr 267.716†	430.5	355.3	10.201 µg/L	10.201 ppb	16:46:33
3	Cu 324.752†	5564.9	479.7	1.9366 µg/L	1.9366 ppb	16:46:12
3	Mn 257.610†	3657.9	3264.8	6.0837 µg/L	6.0837 ppb	16:46:33
3	Mo 202.031†	7.5	3.0	0.4511 µg/L	0.4511 ppb	16:46:33
3	Ni 231.604†	177.6	4.1	0.2744 µg/L	0.2744 ppb	16:46:33
3	P 214.914†	189.2	20.2	16.691 µg/L	16.691 ppb	16:46:33
3	Pb 220.353†	-7.4	-0.4	-0.0882 µg/L	-0.0882 ppb	16:46:33
3	S 181.975 Axial†	1057.9	1012.1	2342.5 µg/L	2342.5 ppb	16:46:33
3	Sb 206.836†	35.2	-2.4	-1.3686 µg/L	-1.3686 ppb	16:46:33
3	Se 196.026†	-36.3	-3.4	-2.85 µg/L	-2.85 ppb	16:46:33
3	SiO2 †	170437.5	168474.1	11717 µg/L	11717 ppb	16:46:12
3	Sn 189.927†	-32.9	-19.9	-4.3539 µg/L	-4.3539 ppb	16:46:33
3	Ti 334.940†	334.0	-166.2	-0.0345 µg/L	-0.0345 ppb	16:46:12
3	Tl 190.801†	-36.5	-1.1	-0.4041 µg/L	-0.4041 ppb	16:46:33
3	U 409.014†	315.7	-80.3	-5.3589 µg/L	-5.3589 ppb	16:46:12
3	V 292.402†	-99.5	23.4	0.3834 µg/L	0.3834 ppb	16:46:33
3	Zn 213.857†	1364.7	779.6	18.541 µg/L	18.541 ppb	16:46:33
3	Si 251.611†	164845.9	162921.4	5420 µg/L	5420 ppb	16:46:49

Mean Data: 1200870314|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1072889.4	100.14	%	0.620				0.62%
Sc RADIAL	39732.1	98.8	%	0.85				0.86%
Y 371.029	582270.8	99.206	%	0.6293				0.63%
Ag 328.068†	-8.4	-0.0576	µg/L	0.41238	-0.0576	ppb	0.41238	716.25%
Al 396.153Radial†	7.2	2.1660	µg/L	6.95915	2.1660	ppb	6.95915	321.29%
As 188.979†	0.7	0.5468	µg/L	3.35644	0.5468	ppb	3.35644	613.86%
B 249.677†	36.6	2.5042	µg/L	0.29430	2.5042	ppb	0.29430	11.75%
Ba 233.527†	605.6	6.6090	µg/L	0.07339	6.6090	ppb	0.07339	1.11%
Be 313.107†	331.0	0.2328	µg/L	0.01452	0.2328	ppb	0.01452	6.24%
Ca 317.933Radial†	39973.4	9176.8	µg/L	49.09	9176.8	ppb	49.09	0.53%
Cd 226.502†	8.8	0.3270	µg/L	0.12370	0.3270	ppb	0.12370	37.82%
Co 228.616†	2.5	0.0840	µg/L	0.07486	0.0840	ppb	0.07486	89.14%
Cr 267.716†	358.5	10.292	µg/L	0.0814	10.292	ppb	0.0814	0.79%
Cu 324.752†	516.9	2.0860	µg/L	0.26743	2.0860	ppb	0.26743	12.82%
Fe 238.204 Radial†	19.9	20.500	µg/L	0.8005	20.500	ppb	0.8005	3.90%
K 766.490 Radial†	334.7	153.26	µg/L	14.183	153.26	ppb	14.183	9.25%
Mg 279.077 IEC†	651.2	1926.5	µg/L	4.46	1926.5	ppb	4.46	0.23%
Mn 257.610†	3277.1	6.1068	µg/L	0.10033	6.1068	ppb	0.10033	1.64%
Mo 202.031†	5.3	0.7593	µg/L	0.27714	0.7593	ppb	0.27714	36.50%

Na 589.592 Radial†	25466.3	4148.6 µg/L	25.36	4148.6 ppb	25.36	0.61%
Ni 231.604†	7.4	0.4963 µg/L	0.49940	0.4963 ppb	0.49940	100.62%
P 214.914†	18.5	15.227 µg/L	2.1563	15.227 ppb	2.1563	14.16%
Pb 220.353†	-4.5	-1.1869 µg/L	1.09573	-1.1869 ppb	1.09573	92.32%
S 181.975 Axial†	1009.8	2337.1 µg/L	27.98	2337.1 ppb	27.98	1.20%
Sb 206.836†	-1.5	-0.9467 µg/L	0.36539	-0.9467 ppb	0.36539	38.59%
Se 196.026†	-2.1	-1.76 µg/L	0.941	-1.76 ppb	0.941	53.38%
SiO2 †	167959.9	11681 µg/L	77.1	11681 ppb	77.1	0.66%
Si 251.611†	163405.4	5430 µg/L	26.1	5430 ppb	26.1	0.48%
Sn 189.927†	-18.7	-4.0459 µg/L	0.89367	-4.0459 ppb	0.89367	22.09%
Sr 421.552†	9154.4	42.154 µg/L	0.3144	42.154 ppb	0.3144	0.75%
Ti 334.940†	-220.2	-0.1074 µg/L	0.07670	-0.1074 ppb	0.07670	71.40%
Tl 190.801†	-0.6	-0.2449 µg/L	1.29643	-0.2449 ppb	1.29643	529.36%
U 409.014†	-80.4	-5.3671 µg/L	2.31063	-5.3671 ppb	2.31063	43.05%
V 292.402†	25.9	0.4246 µg/L	0.07466	0.4246 ppb	0.07466	17.58%
Zn 213.857†	785.9	18.689 µg/L	0.2724	18.689 ppb	0.2724	1.46%

Sequence No.: 25
Sample ID: 1200870315|435151|5
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 6/24/2005 16:48:38
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870315|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39374.2	39374.2	97.9	%			16:50:05
1	Al 396.153Radial†	3471.9	3449.4	1042.1	µg/L	1042.1	ppb	16:50:05
1	Ca 317.933Radial†	42995.7	43742.1	10043	µg/L	10043	ppb	16:50:05
1	Fe 238.204 Radial†	1037.1	1015.7	1049.8	µg/L	1049.8	ppb	16:50:25
1	K 766.490 Radial†	3628.4	2592.7	1187.3	µg/L	1187.3	ppb	16:50:05
1	Mg 279.077 IEC†	974.5	989.6	2929.6	µg/L	2929.6	ppb	16:50:25
1	Na 589.592 Radial†	31838.6	31420.9	5118.4	µg/L	5118.4	ppb	16:50:05
1	Sr 421.552†	30297.1	30981.1	142.97	µg/L	142.97	ppb	16:50:05
1	Sc 361.383	1066797.1	1066797.1	99.572	%			16:51:23
1	Y 371.029	577920.5	577920.5	98.465	%			16:51:23
1	Ag 328.068†	12454.9	13109.4	99.158	µg/L	99.158	ppb	16:51:29
1	As 188.979†	168.6	198.9	104.77	µg/L	104.77	ppb	16:51:49
1	B 249.677†	1687.7	1549.4	104.62	µg/L	104.62	ppb	16:51:49
1	Ba 233.527†	9537.8	9708.8	106.07	µg/L	106.07	ppb	16:51:29
1	Be 313.107†	141294.1	142019.5	99.764	µg/L	99.764	ppb	16:51:23
1	Cd 226.502†	2666.7	2705.7	100.81	µg/L	100.81	ppb	16:51:49
1	Co 228.616†	3020.3	3165.0	100.69	µg/L	100.69	ppb	16:51:49
1	Cr 267.716†	3990.4	3934.0	112.88	µg/L	112.88	ppb	16:51:49
1	Cu 324.752†	30815.3	25883.1	104.17	µg/L	104.17	ppb	16:51:29
1	Mn 257.610†	57774.4	57643.1	107.86	µg/L	107.86	ppb	16:51:29
1	Mo 202.031†	760.8	759.6	102.36	µg/L	102.36	ppb	16:51:49
1	Ni 231.604†	1660.1	1494.4	99.554	µg/L	99.554	ppb	16:51:49
1	P 214.914†	317.1	150.2	109.03	µg/L	109.03	ppb	16:51:49
1	Pb 220.353†	359.3	367.9	98.256	µg/L	98.256	ppb	16:51:49
1	S 181.975 Axial†	1464.8	1429.3	3307.0	µg/L	3307.0	ppb	16:51:49
1	Sb 206.836†	251.0	214.6	105.15	µg/L	105.15	ppb	16:51:49
1	Se 196.026†	77.6	110.7	94.6	µg/L	94.6	ppb	16:51:49
1	SiO2 †	188311.9	187789.2	13057	µg/L	13057	ppb	16:51:23
1	Sn 189.927†	355.6	370.0	97.228	µg/L	97.228	ppb	16:51:49
1	Ti 334.940†	73528.5	73345.5	100.39	µg/L	100.39	ppb	16:51:29
1	Tl 190.801†	216.4	252.6	99.530	µg/L	99.530	ppb	16:51:49
1	U 409.014†	1827.6	1440.7	96.603	µg/L	96.603	ppb	16:51:29
1	V 292.402†	6309.1	6458.8	100.29	µg/L	100.29	ppb	16:51:29
1	Zn 213.857†	5482.8	4926.4	118.46	µg/L	118.46	ppb	16:51:49
1	Si 251.611†	187276.6	186767.6	6210	µg/L	6210	ppb	16:52:57
2	Sc RADIAL	40038.7	40038.7	99.6	%			16:50:30
2	Al 396.153Radial†	3498.7	3417.5	1032.4	µg/L	1032.4	ppb	16:50:30
2	Ca 317.933Radial†	43795.4	43816.4	10060	µg/L	10060	ppb	16:50:30
2	Fe 238.204 Radial†	1041.7	1002.8	1036.6	µg/L	1036.6	ppb	16:50:50
2	K 766.490 Radial†	3674.1	2577.1	1180.1	µg/L	1180.1	ppb	16:50:30
2	Mg 279.077 IEC†	972.3	970.9	2874.3	µg/L	2874.3	ppb	16:50:50
2	Na 589.592 Radial†	32386.8	31431.8	5120.1	µg/L	5120.1	ppb	16:50:30
2	Sr 421.552†	30756.6	30929.1	142.73	µg/L	142.73	ppb	16:50:30
2	Sc 361.383	1067500.4	1067500.4	99.638	%			16:51:54
2	Y 371.029	578483.1	578483.1	98.561	%			16:51:54
2	Ag 328.068†	12366.6	13012.5	98.425	µg/L	98.425	ppb	16:52:00
2	As 188.979†	176.0	206.2	108.55	µg/L	108.55	ppb	16:52:20
2	B 249.677†	1683.7	1544.3	104.29	µg/L	104.29	ppb	16:52:20
2	Ba 233.527†	9541.7	9706.4	106.04	µg/L	106.04	ppb	16:52:00
2	Be 313.107†	141862.0	142496.0	100.10	µg/L	100.10	ppb	16:51:54
2	Cd 226.502†	2688.6	2725.9	101.57	µg/L	101.57	ppb	16:52:20
2	Co 228.616†	3021.0	3163.7	100.65	µg/L	100.65	ppb	16:52:20
2	Cr 267.716†	3991.3	3932.2	112.83	µg/L	112.83	ppb	16:52:20
2	Cu 324.752†	30684.8	25731.8	103.56	µg/L	103.56	ppb	16:52:00
2	Mn 257.610†	57607.3	57437.2	107.47	µg/L	107.47	ppb	16:52:00
2	Mo 202.031†	764.8	763.1	102.84	µg/L	102.84	ppb	16:52:20
2	Ni 231.604†	1666.4	1499.6	99.903	µg/L	99.903	ppb	16:52:20
2	P 214.914†	320.3	153.2	111.65	µg/L	111.65	ppb	16:52:20

2	Pb 220.353†	366.3	374.6	100.06 µg/L	100.06 ppb	16:52:20
2	S 181.975 Axial†	1471.4	1435.0	3320.2 µg/L	3320.2 ppb	16:52:20
2	Sb 206.836†	256.1	219.6	107.57 µg/L	107.57 ppb	16:52:20
2	Se 196.026†	81.6	114.7	98.0 µg/L	98.0 ppb	16:52:20
2	SiO2 †	189263.0	188619.1	13115 µg/L	13115 ppb	16:51:54
2	Sn 189.927†	359.4	373.7	98.174 µg/L	98.174 ppb	16:52:20
2	Ti 334.940†	73364.3	73131.9	100.10 µg/L	100.10 ppb	16:52:00
2	Tl 190.801†	215.6	251.8	99.178 µg/L	99.178 ppb	16:52:20
2	U 409.014†	1827.3	1439.2	96.501 µg/L	96.501 ppb	16:52:00
2	V 292.402†	6284.5	6429.9	99.847 µg/L	99.847 ppb	16:52:00
2	Zn 213.857†	5498.8	4938.8	118.77 µg/L	118.77 ppb	16:52:20
2	Si 251.611†	190032.1	189409.1	6300 µg/L	6300 ppb	16:53:03
3	Sc RADIAL	40259.8	40259.8	100 %		16:50:55
3	Al 396.153Radial†	3514.0	3413.5	1031.2 µg/L	1031.2 ppb	16:50:55
3	Ca 317.933Radial†	43995.2	43774.4	10050 µg/L	10050 ppb	16:50:55
3	Fe 238.204 Radial†	1052.9	1008.2	1042.1 µg/L	1042.1 ppb	16:51:15
3	K 766.490 Radial†	3622.5	2505.3	1147.3 µg/L	1147.3 ppb	16:50:55
3	Mg 279.077 IEC†	979.5	972.8	2879.6 µg/L	2879.6 ppb	16:51:15
3	Na 589.592 Radial†	32487.6	31353.9	5107.4 µg/L	5107.4 ppb	16:50:55
3	Sr 421.552†	30937.1	30939.7	142.77 µg/L	142.77 ppb	16:50:55
3	Sc 361.383	1073934.5	1073934.5	100.24 %		16:52:26
3	Y 371.029	582155.9	582155.9	99.187 %		16:52:26
3	Ag 328.068†	12314.5	12886.2	97.472 µg/L	97.472 ppb	16:52:31
3	As 188.979†	165.4	194.6	102.53 µg/L	102.53 ppb	16:52:51
3	B 249.677†	1684.8	1535.2	103.67 µg/L	103.67 ppb	16:52:51
3	Ba 233.527†	9429.3	9537.0	104.19 µg/L	104.19 ppb	16:52:31
3	Be 313.107†	141828.7	141609.8	99.476 µg/L	99.476 ppb	16:52:26
3	Cd 226.502†	2656.4	2677.6	99.764 µg/L	99.764 ppb	16:52:51
3	Co 228.616†	3036.7	3161.2	100.57 µg/L	100.57 ppb	16:52:51
3	Cr 267.716†	3988.6	3905.5	112.06 µg/L	112.06 ppb	16:52:51
3	Cu 324.752†	30538.7	25401.5	102.23 µg/L	102.23 ppb	16:52:31
3	Mn 257.610†	57320.4	56804.6	106.29 µg/L	106.29 ppb	16:52:31
3	Mo 202.031†	757.2	750.9	101.20 µg/L	101.20 ppb	16:52:51
3	Ni 231.604†	1665.2	1488.4	99.153 µg/L	99.153 ppb	16:52:51
3	P 214.914†	314.2	145.1	105.08 µg/L	105.08 ppb	16:52:51
3	Pb 220.353†	367.0	373.1	99.654 µg/L	99.654 ppb	16:52:51
3	S 181.975 Axial†	1458.9	1413.7	3270.9 µg/L	3270.9 ppb	16:52:51
3	Sb 206.836†	250.1	212.0	103.87 µg/L	103.87 ppb	16:52:51
3	Se 196.026†	82.3	114.9	98.1 µg/L	98.1 ppb	16:52:51
3	SiO2 †	189743.5	187960.5	13069 µg/L	13069 ppb	16:52:26
3	Sn 189.927†	360.4	372.5	97.871 µg/L	97.871 ppb	16:52:51
3	Ti 334.940†	72762.2	72090.2	98.672 µg/L	98.672 ppb	16:52:31
3	Tl 190.801†	205.8	240.7	94.819 µg/L	94.819 ppb	16:52:51
3	U 409.014†	1837.0	1437.9	96.408 µg/L	96.408 ppb	16:52:31
3	V 292.402†	6253.3	6361.0	98.775 µg/L	98.775 ppb	16:52:31
3	Zn 213.857†	5474.6	4881.6	117.38 µg/L	117.38 ppb	16:52:51
3	Si 251.611†	186314.9	184558.1	6130 µg/L	6130 ppb	16:53:08

Mean Data: 1200870315|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1069410.7	99.816	%	0.3671				0.37%
Sc RADIAL	39890.9	99.2	%	1.15				1.16%
Y 371.029	579519.8	98.738	%	0.3919				0.40%
Ag 328.068†	13002.7	98.352	µg/L	0.8454	98.352	ppb	0.8454	0.86%
Al 396.153Radial†	3426.8	1035.2	µg/L	5.96	1035.2	ppb	5.96	0.58%
As 188.979†	199.9	105.28	µg/L	3.046	105.28	ppb	3.046	2.89%
B 249.677†	1543.0	104.19	µg/L	0.485	104.19	ppb	0.485	0.47%
Ba 233.527†	9650.8	105.44	µg/L	1.076	105.44	ppb	1.076	1.02%
Be 313.107†	142041.8	99.779	µg/L	0.3115	99.779	ppb	0.3115	0.31%
Ca 317.933Radial†	43777.7	10051	µg/L	8.6	10051	ppb	8.6	0.09%
Cd 226.502†	2703.1	100.71	µg/L	0.905	100.71	ppb	0.905	0.90%
Co 228.616†	3163.3	100.64	µg/L	0.061	100.64	ppb	0.061	0.06%
Cr 267.716†	3923.9	112.59	µg/L	0.458	112.59	ppb	0.458	0.41%
Cu 324.752†	25672.1	103.32	µg/L	0.992	103.32	ppb	0.992	0.96%
Fe 238.204 Radial†	1008.9	1042.9	µg/L	6.67	1042.9	ppb	6.67	0.64%
K 766.490 Radial†	2558.4	1171.6	µg/L	21.35	1171.6	ppb	21.35	1.82%
Mg 279.077 IEC†	977.8	2894.5	µg/L	30.51	2894.5	ppb	30.51	1.05%
Mn 257.610†	57294.9	107.21	µg/L	0.817	107.21	ppb	0.817	0.76%
Mo 202.031†	757.9	102.13	µg/L	0.844	102.13	ppb	0.844	0.83%

Na 589.592 Radial†	31402.2	5115.3 µg/L	6.87	5115.3 ppb	6.87	0.13%
Ni 231.604†	1494.1	99.537 µg/L	0.3751	99.537 ppb	0.3751	0.38%
P 214.914†	149.5	108.59 µg/L	3.309	108.59 ppb	3.309	3.05%
Pb 220.353†	371.9	99.322 µg/L	0.9450	99.322 ppb	0.9450	0.95%
S 181.975 Axial†	1426.0	3299.4 µg/L	25.54	3299.4 ppb	25.54	0.77%
Sb 206.836†	215.4	105.53 µg/L	1.878	105.53 ppb	1.878	1.78%
Se 196.026†	113.4	96.9 µg/L	2.02	96.9 ppb	2.02	2.08%
SiO2 †	188122.9	13080 µg/L	30.5	13080 ppb	30.5	0.23%
Si 251.611†	186911.6	6210 µg/L	80.7	6210 ppb	80.7	1.30%
Sn 189.927†	372.1	97.758 µg/L	0.4830	97.758 ppb	0.4830	0.49%
Sr 421.552†	30950.0	142.82 µg/L	0.127	142.82 ppb	0.127	0.09%
Ti 334.940†	72855.9	99.718 µg/L	0.9179	99.718 ppb	0.9179	0.92%
Tl 190.801†	248.3	97.842 µg/L	2.6241	97.842 ppb	2.6241	2.68%
U 409.014†	1439.3	96.504 µg/L	0.0976	96.504 ppb	0.0976	0.10%
V 292.402†	6416.6	99.636 µg/L	0.7772	99.636 ppb	0.7772	0.78%
Zn 213.857†	4915.6	118.20 µg/L	0.728	118.20 ppb	0.728	0.62%

Sequence No.: 26
Sample ID: 1200870316|435151|25
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 6/24/2005 16:54:57
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200870316|435151|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39943.2	39943.2	99.4	%			16:56:23
1	Al 396.153Radial†	87.1	-7.7	-2.3819	µg/L	-2.3819	ppb	16:56:23
1	Ca 317.933Radial†	7407.3	7299.5	1675.8	µg/L	1675.8	ppb	16:56:23
1	Fe 238.204 Radial†	52.0	9.2	9.4912	µg/L	9.4912	ppb	16:56:43
1	K 766.490 Radial†	1183.6	79.4	36.372	µg/L	36.372	ppb	16:56:23
1	Mg 279.077 IEC†	131.2	126.8	375.14	µg/L	375.14	ppb	16:56:43
1	Na 589.592 Radial†	5715.9	4667.1	760.30	µg/L	760.30	ppb	16:56:23
1	Sr 421.552†	1602.5	1661.3	7.6497	µg/L	7.6497	ppb	16:56:23
1	Sc 361.383	1068738.0	1068738.0	99.753	%			16:57:41
1	Y 371.029	581687.9	581687.9	99.107	%			16:57:41
1	Ag 328.068†	-635.7	-36.2	-0.2710	µg/L	-0.2710	ppb	16:57:46
1	As 188.979†	-27.2	2.3	1.2221	µg/L	1.2221	ppb	16:58:07
1	B 249.677†	123.2	-22.1	-1.4836	µg/L	-1.4836	ppb	16:58:07
1	Ba 233.527†	-18.6	111.4	1.2161	µg/L	1.2161	ppb	16:58:07
1	Be 313.107†	270.4	389.6	0.2739	µg/L	0.2739	ppb	16:57:46
1	Cd 226.502†	-25.5	2.0	0.0733	µg/L	0.0733	ppb	16:58:07
1	Co 228.616†	-134.5	-3.2	-0.0998	µg/L	-0.0998	ppb	16:58:07
1	Cr 267.716†	138.0	64.7	1.8579	µg/L	1.8579	ppb	16:58:07
1	Cu 324.752†	5146.1	94.3	0.3791	µg/L	0.3791	ppb	16:57:46
1	Mn 257.610†	979.5	602.4	1.1228	µg/L	1.1228	ppb	16:57:46
1	Mo 202.031†	9.8	5.4	0.7370	µg/L	0.7370	ppb	16:58:07
1	Ni 231.604†	175.6	3.2	0.2133	µg/L	0.2133	ppb	16:58:07
1	P 214.914†	172.5	4.7	3.8507	µg/L	3.8507	ppb	16:58:07
1	Pb 220.353†	-12.8	-5.8	-1.5363	µg/L	-1.5363	ppb	16:58:07
1	S 181.975 Axial†	219.0	177.7	411.35	µg/L	411.35	ppb	16:58:07
1	Sb 206.836†	41.2	3.9	1.8817	µg/L	1.8817	ppb	16:58:07
1	Se 196.026†	-34.7	-2.0	-1.70	µg/L	-1.70	ppb	16:58:07
1	SiO2 †	32026.6	30774.1	2140.3	µg/L	2140.3	ppb	16:57:46
1	Sn 189.927†	-12.0	0.9	0.3906	µg/L	0.3906	ppb	16:58:07
1	Ti 334.940†	455.8	-42.0	-0.0228	µg/L	-0.0228	ppb	16:57:46
1	Tl 190.801†	-35.9	-0.6	-0.2481	µg/L	-0.2481	ppb	16:58:07
1	U 409.014†	400.3	6.5	0.4324	µg/L	0.4324	ppb	16:57:46
1	V 292.402†	-115.5	6.7	0.1159	µg/L	0.1159	ppb	16:57:46
1	Zn 213.857†	673.8	95.5	2.2426	µg/L	2.2426	ppb	16:58:07
1	Si 251.611†	31143.8	29907.3	994	µg/L	994	ppb	16:59:14
2	Sc RADIAL	40390.3	40390.3	100	%			16:56:48
2	Al 396.153Radial†	79.8	-16.0	-4.8352	µg/L	-4.8352	ppb	16:56:48
2	Ca 317.933Radial†	7470.5	7279.8	1671.3	µg/L	1671.3	ppb	16:56:48
2	Fe 238.204 Radial†	51.2	7.9	8.1305	µg/L	8.1305	ppb	16:57:08
2	K 766.490 Radial†	1162.5	45.2	20.698	µg/L	20.698	ppb	16:56:48
2	Mg 279.077 IEC†	116.0	110.2	325.96	µg/L	325.96	ppb	16:57:08
2	Na 589.592 Radial†	5764.9	4652.2	757.88	µg/L	757.88	ppb	16:56:48
2	Sr 421.552†	1634.0	1674.9	7.7125	µg/L	7.7125	ppb	16:56:48
2	Sc 361.383	1071405.0	1071405.0	100.00	%			16:58:12
2	Y 371.029	582915.8	582915.8	99.316	%			16:58:12
2	Ag 328.068†	-618.7	-17.7	-0.1312	µg/L	-0.1312	ppb	16:58:17
2	As 188.979†	-23.3	6.3	3.3140	µg/L	3.3140	ppb	16:58:37
2	B 249.677†	109.2	-36.3	-2.4461	µg/L	-2.4461	ppb	16:58:37
2	Ba 233.527†	-23.5	106.6	1.1635	µg/L	1.1635	ppb	16:58:37
2	Be 313.107†	249.9	368.4	0.2590	µg/L	0.2590	ppb	16:58:17
2	Cd 226.502†	-33.0	-5.5	-0.2057	µg/L	-0.2057	ppb	16:58:37
2	Co 228.616†	-125.7	6.0	0.1897	µg/L	0.1897	ppb	16:58:37
2	Cr 267.716†	132.0	58.4	1.6749	µg/L	1.6749	ppb	16:58:37
2	Cu 324.752†	5027.1	-37.6	-0.1510	µg/L	-0.1510	ppb	16:58:17
2	Mn 257.610†	967.1	587.6	1.0957	µg/L	1.0957	ppb	16:58:17
2	Mo 202.031†	3.4	-1.0	-0.1276	µg/L	-0.1276	ppb	16:58:37
2	Ni 231.604†	184.3	11.4	0.7587	µg/L	0.7587	ppb	16:58:37
2	P 214.914†	177.9	9.6	8.1119	µg/L	8.1119	ppb	16:58:37

2	Pb 220.353†	-10.2	-3.1	-0.8361 µg/L	-0.8361 ppb	16:58:37
2	S 181.975 Axial†	224.8	183.0	423.62 µg/L	423.62 ppb	16:58:37
2	Sb 206.836†	40.4	2.9	1.4141 µg/L	1.4141 ppb	16:58:37
2	Se 196.026†	-22.7	10.1	8.65 µg/L	8.65 ppb	16:58:37
2	SiO2 †	32162.4	30830.0	2144.2 µg/L	2144.2 ppb	16:58:17
2	Sn 189.927†	-13.6	-0.7	-0.0261 µg/L	-0.0261 ppb	16:58:37
2	Ti 334.940†	417.7	-81.2	-0.0763 µg/L	-0.0763 ppb	16:58:17
2	Tl 190.801†	-36.8	-1.4	-0.5577 µg/L	-0.5577 ppb	16:58:37
2	U 409.014†	397.7	2.9	0.1957 µg/L	0.1957 ppb	16:58:17
2	V 292.402†	-108.5	14.1	0.2188 µg/L	0.2188 ppb	16:58:17
2	Zn 213.857†	671.4	91.3	2.1411 µg/L	2.1411 ppb	16:58:37
2	Si 251.611†	31346.8	30032.6	998 µg/L	998 ppb	16:59:19
3	Sc RADIAL	39615.1	39615.1	98.5 %		16:57:13
3	Al 396.153Radial†	83.7	-10.4	-3.1646 µg/L	-3.1646 ppb	16:57:13
3	Ca 317.933Radial†	7347.8	7300.8	1676.1 µg/L	1676.1 ppb	16:57:13
3	Fe 238.204 Radial†	47.5	5.1	5.2655 µg/L	5.2655 ppb	16:57:33
3	K 766.490 Radial†	1139.9	45.0	20.590 µg/L	20.590 ppb	16:57:13
3	Mg 279.077 IEC†	121.8	118.4	350.20 µg/L	350.20 ppb	16:57:33
3	Na 589.592 Radial†	5587.6	4584.6	746.85 µg/L	746.85 ppb	16:57:13
3	Sr 421.552†	1637.0	1709.7	7.8732 µg/L	7.8732 ppb	16:57:13
3	Sc 361.383	1062773.2	1062773.2	99.197 %		16:58:43
3	Y 371.029	578708.0	578708.0	98.599 %		16:58:43
3	Ag 328.068†	-618.3	-22.3	-0.1662 µg/L	-0.1662 ppb	16:58:48
3	As 188.979†	-30.3	-0.9	-0.4503 µg/L	-0.4503 ppb	16:59:08
3	B 249.677†	110.7	-34.0	-2.2864 µg/L	-2.2864 ppb	16:59:08
3	Ba 233.527†	-17.6	112.4	1.2257 µg/L	1.2257 ppb	16:59:08
3	Be 313.107†	270.2	390.9	0.2741 µg/L	0.2741 ppb	16:58:48
3	Cd 226.502†	-25.2	2.1	0.0793 µg/L	0.0793 ppb	16:59:08
3	Co 228.616†	-132.2	-1.5	-0.0486 µg/L	-0.0486 ppb	16:59:08
3	Cr 267.716†	131.3	58.7	1.6880 µg/L	1.6880 ppb	16:59:08
3	Cu 324.752†	4997.4	-26.7	-0.1047 µg/L	-0.1047 ppb	16:58:48
3	Mn 257.610†	992.8	621.3	1.1584 µg/L	1.1584 ppb	16:58:48
3	Mo 202.031†	3.3	-1.1	-0.1422 µg/L	-0.1422 ppb	16:59:08
3	Ni 231.604†	180.5	9.1	0.6045 µg/L	0.6045 ppb	16:59:08
3	P 214.914†	170.5	3.6	3.0913 µg/L	3.0913 ppb	16:59:08
3	Pb 220.353†	-16.2	-9.3	-2.4851 µg/L	-2.4851 ppb	16:59:08
3	S 181.975 Axial†	222.5	182.5	422.46 µg/L	422.46 ppb	16:59:08
3	Sb 206.836†	45.2	8.1	3.9662 µg/L	3.9662 ppb	16:59:08
3	Se 196.026†	-33.2	-0.7	-0.598 µg/L	-0.598 ppb	16:59:08
3	SiO2 †	31732.0	30657.3	2132.2 µg/L	2132.2 ppb	16:58:48
3	Sn 189.927†	-10.5	2.4	0.7770 µg/L	0.7770 ppb	16:59:08
3	Ti 334.940†	414.9	-80.7	-0.0738 µg/L	-0.0738 ppb	16:58:48
3	Tl 190.801†	-38.8	-3.8	-1.4874 µg/L	-1.4874 ppb	16:59:08
3	U 409.014†	343.8	-48.2	-3.2192 µg/L	-3.2192 ppb	16:58:48
3	V 292.402†	-122.7	-1.2	-0.0181 µg/L	-0.0181 ppb	16:58:48
3	Zn 213.857†	658.5	83.8	1.9577 µg/L	1.9577 ppb	16:59:08
3	Si 251.611†	31245.0	30184.5	1000 µg/L	1000 ppb	16:59:24

Mean Data: 1200870316|435151|25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1067638.7	99.651	%	0.4125				0.41%
Sc RADIAL	39982.9	99.5	%	0.97				0.97%
Y 371.029	581103.9	99.008	%	0.3687				0.37%
Ag 328.068†	-25.4	-0.1895	µg/L	0.07273	-0.1895	ppb	0.07273	38.38%
Al 396.153Radial†	-11.4	-3.4606	µg/L	1.25312	-3.4606	ppb	1.25312	36.21%
As 188.979†	2.6	1.3619	µg/L	1.88601	1.3619	ppb	1.88601	138.48%
B 249.677†	-30.8	-2.0720	µg/L	0.51579	-2.0720	ppb	0.51579	24.89%
Ba 233.527†	110.1	1.2018	µg/L	0.03349	1.2018	ppb	0.03349	2.79%
Be 313.107†	383.0	0.2690	µg/L	0.00870	0.2690	ppb	0.00870	3.23%
Ca 317.933Radial†	7293.4	1674.4	µg/L	2.69	1674.4	ppb	2.69	0.16%
Cd 226.502†	-0.5	-0.0177	µg/L	0.16283	-0.0177	ppb	0.16283	920.48%
Co 228.616†	0.4	0.0138	µg/L	0.15449	0.0138	ppb	0.15449	>999.9%
Cr 267.716†	60.6	1.7403	µg/L	0.10208	1.7403	ppb	0.10208	5.87%
Cu 324.752†	10.0	0.0411	µg/L	0.29362	0.0411	ppb	0.29362	713.78%
Fe 238.204 Radial†	7.4	7.6291	µg/L	2.15703	7.6291	ppb	2.15703	28.27%
K 766.490 Radial†	56.5	25.887	µg/L	9.0809	25.887	ppb	9.0809	35.08%
Mg 279.077 IEC†	118.5	350.43	µg/L	24.588	350.43	ppb	24.588	7.02%
Mn 257.610†	603.8	1.1256	µg/L	0.03146	1.1256	ppb	0.03146	2.79%
Mo 202.031†	1.1	0.1558	µg/L	0.50345	0.1558	ppb	0.50345	323.24%

Na 589.592 Radial†	4634.6	755.01 µg/L	7.167	755.01 ppb	7.167	0.95%
Ni 231.604†	7.9	0.5255 µg/L	0.28118	0.5255 ppb	0.28118	53.51%
P 214.914†	6.0	5.0179 µg/L	2.70619	5.0179 ppb	2.70619	53.93%
Pb 220.353†	-6.1	-1.6192 µg/L	0.82759	-1.6192 ppb	0.82759	51.11%
S 181.975 Axial†	181.1	419.14 µg/L	6.775	419.14 ppb	6.775	1.62%
Sb 206.836†	5.0	2.4207 µg/L	1.35876	2.4207 ppb	1.35876	56.13%
Se 196.026†	2.5	2.12 µg/L	5.685	2.12 ppb	5.685	268.56%
SiO2 †	30753.8	2138.9 µg/L	6.13	2138.9 ppb	6.13	0.29%
Si 251.611†	30041.5	999 µg/L	4.6	999 ppb	4.6	0.46%
Sn 189.927†	0.9	0.3805 µg/L	0.40164	0.3805 ppb	0.40164	105.55%
Sr 421.552†	1681.9	7.7452 µg/L	0.11523	7.7452 ppb	0.11523	1.49%
Ti 334.940†	-68.0	-0.0576 µg/L	0.03020	-0.0576 ppb	0.03020	52.41%
Tl 190.801†	-2.0	-0.7644 µg/L	0.64499	-0.7644 ppb	0.64499	84.38%
U 409.014†	-12.9	-0.8637 µg/L	2.04334	-0.8637 ppb	2.04334	236.57%
V 292.402†	6.5	0.1055 µg/L	0.11879	0.1055 ppb	0.11879	112.59%
Zn 213.857†	90.2	2.1138 µg/L	0.14439	2.1138 ppb	0.14439	6.83%

Sequence No.: 27
Sample ID: 138851004|435151|5
Nebulizer Back Pressure: 250.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 6/24/2005 17:01:13
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 138851004|435151|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39982.8	39982.8	99.5	%			17:02:41
1	Al 396.153Radial†	105.8	11.0	3.2831	µg/L	3.2831	ppb	17:02:41
1	Ca 317.933Radial†	38903.5	38959.5	8944.1	µg/L	8944.1	ppb	17:02:41
1	Fe 238.204 Radial†	60.8	18.0	18.552	µg/L	18.552	ppb	17:03:01
1	K 766.490 Radial†	1404.1	299.9	137.35	µg/L	137.35	ppb	17:02:41
1	Mg 279.077 IEC†	631.1	629.3	1861.6	µg/L	1861.6	ppb	17:03:01
1	Na 589.592 Radial†	25868.9	24924.0	4060.3	µg/L	4060.3	ppb	17:02:41
1	Sr 421.552†	8840.1	8936.7	41.151	µg/L	41.151	ppb	17:02:41
1	Sc 361.383	1073230.2	1073230.2	100.17	%			17:03:59
1	Y 371.029	582615.1	582615.1	99.265	%			17:03:59
1	Ag 328.068†	-565.6	36.4	0.2795	µg/L	0.2795	ppb	17:04:04
1	As 188.979†	-30.3	-0.6	-0.1532	µg/L	-0.1532	ppb	17:04:25
1	B 249.677†	174.7	28.8	1.9795	µg/L	1.9795	ppb	17:04:25
1	Ba 233.527†	457.8	587.1	6.4087	µg/L	6.4087	ppb	17:04:25
1	Be 313.107†	181.3	299.5	0.2115	µg/L	0.2115	ppb	17:04:04
1	Cd 226.502†	-17.8	9.7	0.3606	µg/L	0.3606	ppb	17:04:25
1	Co 228.616†	-131.0	1.0	0.0349	µg/L	0.0349	ppb	17:04:25
1	Cr 267.716†	426.1	351.8	10.097	µg/L	10.097	ppb	17:04:25
1	Cu 324.752†	5534.3	460.2	1.8543	µg/L	1.8543	ppb	17:04:04
1	Mn 257.610†	3486.0	3100.5	5.7765	µg/L	5.7765	ppb	17:04:25
1	Mo 202.031†	13.1	8.7	1.2130	µg/L	1.2130	ppb	17:04:25
1	Ni 231.604†	180.0	6.8	0.4582	µg/L	0.4582	ppb	17:04:25
1	P 214.914†	188.4	19.7	16.306	µg/L	16.306	ppb	17:04:25
1	Pb 220.353†	-16.4	-9.4	-2.4897	µg/L	-2.4897	ppb	17:04:25
1	S 181.975 Axial†	1022.6	979.0	2265.9	µg/L	2265.9	ppb	17:04:25
1	Sb 206.836†	34.8	-2.7	-1.4970	µg/L	-1.4970	ppb	17:04:25
1	Se 196.026†	-33.8	-1.0	-0.781	µg/L	-0.781	ppb	17:04:25
1	SiO2 †	165369.5	163752.7	11389	µg/L	11389	ppb	17:04:04
1	Sn 189.927†	-23.6	-10.6	-1.9575	µg/L	-1.9575	ppb	17:04:25
1	Ti 334.940†	177.2	-322.0	-0.2536	µg/L	-0.2536	ppb	17:04:04
1	Tl 190.801†	-41.5	-6.1	-2.3816	µg/L	-2.3816	ppb	17:04:25
1	U 409.014†	379.3	-16.1	-1.0725	µg/L	-1.0725	ppb	17:04:04
1	V 292.402†	-79.2	43.5	0.7033	µg/L	0.7033	ppb	17:04:25
1	Zn 213.857†	1312.5	730.2	17.347	µg/L	17.347	ppb	17:04:25
1	Si 251.611†	161670.7	160078.4	5320	µg/L	5320	ppb	17:05:32
2	Sc RADIAL	39670.5	39670.5	98.7	%			17:03:06
2	Al 396.153Radial†	77.7	-16.6	-5.1234	µg/L	-5.1234	ppb	17:03:06
2	Ca 317.933Radial†	38635.5	38995.8	8952.4	µg/L	8952.4	ppb	17:03:06
2	Fe 238.204 Radial†	62.6	20.3	21.010	µg/L	21.010	ppb	17:03:26
2	K 766.490 Radial†	1321.5	227.4	104.12	µg/L	104.12	ppb	17:03:06
2	Mg 279.077 IEC†	641.5	644.7	1907.5	µg/L	1907.5	ppb	17:03:26
2	Na 589.592 Radial†	25524.7	24779.9	4036.8	µg/L	4036.8	ppb	17:03:06
2	Sr 421.552†	8736.7	8901.9	40.991	µg/L	40.991	ppb	17:03:06
2	Sc 361.383	1079088.1	1079088.1	100.72	%			17:04:30
2	Y 371.029	585718.5	585718.5	99.794	%			17:04:30
2	Ag 328.068†	-571.9	33.1	0.2557	µg/L	0.2557	ppb	17:04:35
2	As 188.979†	-30.6	-0.8	-0.2203	µg/L	-0.2203	ppb	17:04:56
2	B 249.677†	178.1	31.3	2.1482	µg/L	2.1482	ppb	17:04:56
2	Ba 233.527†	465.9	592.6	6.4680	µg/L	6.4680	ppb	17:04:56
2	Be 313.107†	259.6	376.3	0.2648	µg/L	0.2648	ppb	17:04:35
2	Cd 226.502†	-21.3	6.4	0.2357	µg/L	0.2357	ppb	17:04:56
2	Co 228.616†	-132.8	-0.1	0.0007	µg/L	0.0007	ppb	17:04:56
2	Cr 267.716†	437.5	360.8	10.357	µg/L	10.357	ppb	17:04:56
2	Cu 324.752†	5559.8	455.5	1.8374	µg/L	1.8374	ppb	17:04:35
2	Mn 257.610†	3493.4	3089.0	5.7552	µg/L	5.7552	ppb	17:04:56
2	Mo 202.031†	17.5	12.9	1.7809	µg/L	1.7809	ppb	17:04:56
2	Ni 231.604†	177.8	3.7	0.2481	µg/L	0.2481	ppb	17:04:56
2	P 214.914†	193.5	23.9	19.775	µg/L	19.775	ppb	17:04:56

2	Pb 220.353†	-12.7	-5.6	-1.4885 µg/L	-1.4885 ppb	17:04:56
2	S 181.975 Axial†	1043.7	994.4	2301.5 µg/L	2301.5 ppb	17:04:56
2	Sb 206.836†	37.7	-0.0	-0.1905 µg/L	-0.1905 ppb	17:04:56
2	Se 196.026†	-30.6	2.4	2.11 µg/L	2.11 ppb	17:04:56
2	SiO2 †	165948.9	163431.8	11366 µg/L	11366 ppb	17:04:35
2	Sn 189.927†	-27.8	-14.6	-3.0035 µg/L	-3.0035 ppb	17:04:56
2	Ti 334.940†	239.6	-261.0	-0.1685 µg/L	-0.1685 ppb	17:04:35
2	Tl 190.801†	-38.3	-2.7	-1.0404 µg/L	-1.0404 ppb	17:04:56
2	U 409.014†	330.7	-66.4	-4.4354 µg/L	-4.4354 ppb	17:04:35
2	V 292.402†	-91.5	31.7	0.5254 µg/L	0.5254 ppb	17:04:56
2	Zn 213.857†	1306.9	717.5	17.038 µg/L	17.038 ppb	17:04:56
2	Si 251.611†	162500.0	160025.7	5320 µg/L	5320 ppb	17:05:38
3	Sc RADIAL	40591.5	40591.5	101 %		17:03:31
3	Al 396.153Radial†	134.4	37.7	11.422 µg/L	11.422 ppb	17:03:31
3	Ca 317.933Radial†	39554.4	39017.5	8957.5 µg/L	8957.5 ppb	17:03:31
3	Fe 238.204 Radial†	62.4	18.7	19.266 µg/L	19.266 ppb	17:03:51
3	K 766.490 Radial†	1483.6	357.5	163.72 µg/L	163.72 ppb	17:03:31
3	Mg 279.077 IEC†	641.8	630.3	1864.7 µg/L	1864.7 ppb	17:03:51
3	Na 589.592 Radial†	26168.7	24830.8	4045.1 µg/L	4045.1 ppb	17:03:31
3	Sr 421.552†	8916.9	8879.4	40.887 µg/L	40.887 ppb	17:03:31
3	Sc 361.383	1073616.9	1073616.9	100.21 %		17:05:01
3	Y 371.029	582393.2	582393.2	99.227 %		17:05:01
3	Ag 328.068†	-634.2	-31.9	-0.2361 µg/L	-0.2361 ppb	17:05:06
3	As 188.979†	-27.2	2.4	1.4278 µg/L	1.4278 ppb	17:05:27
3	B 249.677†	169.6	23.7	1.6355 µg/L	1.6355 ppb	17:05:27
3	Ba 233.527†	460.4	589.6	6.4356 µg/L	6.4356 ppb	17:05:27
3	Be 313.107†	244.5	362.5	0.2567 µg/L	0.2567 ppb	17:05:06
3	Cd 226.502†	-24.7	2.8	0.1052 µg/L	0.1052 ppb	17:05:27
3	Co 228.616†	-141.9	-9.9	-0.3142 µg/L	-0.3142 ppb	17:05:27
3	Cr 267.716†	435.5	360.9	10.356 µg/L	10.356 ppb	17:05:27
3	Cu 324.752†	5467.4	391.5	1.5740 µg/L	1.5740 ppb	17:05:06
3	Mn 257.610†	3485.3	3098.5	5.7724 µg/L	5.7724 ppb	17:05:27
3	Mo 202.031†	10.0	5.5	0.7892 µg/L	0.7892 ppb	17:05:27
3	Ni 231.604†	183.6	10.3	0.6885 µg/L	0.6885 ppb	17:05:27
3	P 214.914†	190.9	22.3	18.445 µg/L	18.445 ppb	17:05:27
3	Pb 220.353†	-16.2	-9.2	-2.4357 µg/L	-2.4357 ppb	17:05:27
3	S 181.975 Axial†	1031.6	987.6	2285.8 µg/L	2285.8 ppb	17:05:27
3	Sb 206.836†	31.9	-5.6	-2.9380 µg/L	-2.9380 ppb	17:05:27
3	Se 196.026†	-42.1	-9.2	-7.80 µg/L	-7.80 ppb	17:05:27
3	SiO2 †	164727.7	163052.7	11340 µg/L	11340 ppb	17:05:06
3	Sn 189.927†	-28.7	-15.7	-3.2912 µg/L	-3.2912 ppb	17:05:27
3	Ti 334.940†	274.3	-225.2	-0.1235 µg/L	-0.1235 ppb	17:05:06
3	Tl 190.801†	-37.6	-2.1	-0.8192 µg/L	-0.8192 ppb	17:05:27
3	U 409.014†	450.1	54.4	3.6305 µg/L	3.6305 ppb	17:05:06
3	V 292.402†	-92.2	30.6	0.5066 µg/L	0.5066 ppb	17:05:27
3	Zn 213.857†	1312.5	729.7	17.334 µg/L	17.334 ppb	17:05:27
3	Si 251.611†	161434.7	159784.8	5310 µg/L	5310 ppb	17:05:43

Mean Data: 138851004|435151|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1075311.7	100.37	%	0.306				0.30%
Sc RADIAL	40081.6	99.7	%	1.17				1.17%
Y 371.029	583575.6	99.429	%	0.3168				0.32%
Ag 328.068†	12.6	0.0997	µg/L	0.29105	0.0997	ppb	0.29105	291.94%
Al 396.153Radial†	10.7	3.1938	µg/L	8.27290	3.1938	ppb	8.27290	259.03%
As 188.979†	0.3	0.3514	µg/L	0.93280	0.3514	ppb	0.93280	265.43%
B 249.677†	27.9	1.9211	µg/L	0.26126	1.9211	ppb	0.26126	13.60%
Ba 233.527†	589.8	6.4374	µg/L	0.02968	6.4374	ppb	0.02968	0.46%
Be 313.107†	346.1	0.2443	µg/L	0.02872	0.2443	ppb	0.02872	11.76%
Ca 317.933Radial†	38991.0	8951.3	µg/L	6.74	8951.3	ppb	6.74	0.08%
Cd 226.502†	6.3	0.2338	µg/L	0.12773	0.2338	ppb	0.12773	54.63%
Co 228.616†	-3.0	-0.0929	µg/L	0.19241	-0.0929	ppb	0.19241	207.15%
Cr 267.716†	357.8	10.270	µg/L	0.1501	10.270	ppb	0.1501	1.46%
Cu 324.752†	435.7	1.7552	µg/L	0.15718	1.7552	ppb	0.15718	8.95%
Fe 238.204 Radial†	19.0	19.609	µg/L	1.2643	19.609	ppb	1.2643	6.45%
K 766.490 Radial†	294.9	135.07	µg/L	29.865	135.07	ppb	29.865	22.11%
Mg 279.077 IEC†	634.8	1877.9	µg/L	25.65	1877.9	ppb	25.65	1.37%
Mn 257.610†	3096.0	5.7680	µg/L	0.01131	5.7680	ppb	0.01131	0.20%
Mo 202.031†	9.0	1.2610	µg/L	0.49756	1.2610	ppb	0.49756	39.46%

Na 589.592 Radial†	24844.9	4047.4 µg/L	11.90	4047.4 ppb	11.90	0.29%
Ni 231.604†	6.9	0.4649 µg/L	0.22032	0.4649 ppb	0.22032	47.39%
P 214.914†	22.0	18.175 µg/L	1.7501	18.175 ppb	1.7501	9.63%
Pb 220.353†	-8.1	-2.1380 µg/L	0.56313	-2.1380 ppb	0.56313	26.34%
S 181.975 Axial†	987.0	2284.4 µg/L	17.84	2284.4 ppb	17.84	0.78%
Sb 206.836†	-2.8	-1.5418 µg/L	1.37429	-1.5418 ppb	1.37429	89.13%
Se 196.026†	-2.6	-2.16 µg/L	5.092	-2.16 ppb	5.092	236.06%
SiO2 †	163412.4	11365 µg/L	24.4	11365 ppb	24.4	0.21%
Si 251.611†	159963.0	5320 µg/L	5.2	5320 ppb	5.2	0.10%
Sn 189.927†	-13.6	-2.7507 µg/L	0.70183	-2.7507 ppb	0.70183	25.51%
Sr 421.552†	8906.0	41.010 µg/L	0.1333	41.010 ppb	0.1333	0.33%
Ti 334.940†	-269.4	-0.1819 µg/L	0.06608	-0.1819 ppb	0.06608	36.34%
Tl 190.801†	-3.6	-1.4137 µg/L	0.84547	-1.4137 ppb	0.84547	59.80%
U 409.014†	-9.4	-0.6258 µg/L	4.05149	-0.6258 ppb	4.05149	647.39%
V 292.402†	35.3	0.5784 µg/L	0.10853	0.5784 ppb	0.10853	18.76%
Zn 213.857†	725.8	17.240 µg/L	0.1746	17.240 ppb	0.1746	1.01%

Sequence No.: 28
Sample ID: CCV
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/24/2005 17:07:33
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39994.8	39994.8	99.5	%			17:08:58
1	Al 396.153Radial†	16628.2	16618.2	5019.6	µg/L	5019.6	ppb	17:08:58
1	Ca 317.933Radial†	21455.4	21410.1	4918.0	µg/L	4918.0	ppb	17:09:18
1	Fe 238.204 Radial†	4939.8	4922.0	5087.8	µg/L	5087.8	ppb	17:09:18
1	K 766.490 Radial†	12144.6	11095.1	5080.8	µg/L	5080.8	ppb	17:08:58
1	Mg 279.077 IEC†	1694.4	1697.8	5032.1	µg/L	5032.1	ppb	17:09:18
1	Na 589.592 Radial†	62141.7	61375.0	9996.9	µg/L	9996.9	ppb	17:08:58
1	Sr 421.552†	109485.7	110096.0	508.50	µg/L	508.50	ppb	17:08:58
1	Sc 361.383	1068423.0	1068423.0	99.724	%			17:10:17
1	Y 371.029	577994.8	577994.8	98.478	%			17:10:17
1	Ag 328.068†	65555.9	66338.3	501.73	µg/L	501.73	ppb	17:10:22
1	As 188.979†	928.8	960.9	505.34	µg/L	505.34	ppb	17:10:43
1	B 249.677†	7455.8	7330.8	494.86	µg/L	494.86	ppb	17:10:22
1	Ba 233.527†	45659.9	45916.3	501.68	µg/L	501.68	ppb	17:10:22
1	Be 313.107†	712102.6	714191.7	501.69	µg/L	501.69	ppb	17:10:17
1	Cd 226.502†	13393.0	13457.6	501.44	µg/L	501.44	ppb	17:10:22
1	Co 228.616†	15600.7	15775.6	501.86	µg/L	501.86	ppb	17:10:22
1	Cr 267.716†	17389.9	17364.4	498.20	µg/L	498.20	ppb	17:10:22
1	Cu 324.752†	131775.3	127075.3	511.42	µg/L	511.42	ppb	17:10:22
1	Mn 257.610†	268007.4	268369.6	502.28	µg/L	502.28	ppb	17:10:17
1	Mo 202.031†	3774.5	3780.5	509.22	µg/L	509.22	ppb	17:10:43
1	Ni 231.604†	7792.7	7641.4	509.03	µg/L	509.03	ppb	17:10:43
1	P 214.914†	3112.8	2953.1	2402.8	µg/L	2402.8	ppb	17:10:43
1	Pb 220.353†	1844.1	1856.3	495.68	µg/L	495.68	ppb	17:10:43
1	S 181.975 Axial†	458.2	417.7	960.72	µg/L	960.72	ppb	17:10:43
1	Sb 206.836†	1021.4	986.7	484.48	µg/L	484.48	ppb	17:10:43
1	Se 196.026†	552.9	587.2	501	µg/L	501	ppb	17:10:43
1	SiO2 †	76311.2	75190.7	5213.4	µg/L	5213.4	ppb	17:10:22
1	Sn 189.927†	1882.8	1901.0	495.29	µg/L	495.29	ppb	17:10:43
1	Ti 334.940†	365071.7	365583.0	499.42	µg/L	499.42	ppb	17:10:17
1	Tl 190.801†	1223.6	1262.3	497.23	µg/L	497.23	ppb	17:10:43
1	U 409.014†	7936.2	7563.4	507.08	µg/L	507.08	ppb	17:10:22
1	V 292.402†	32305.0	32517.0	504.67	µg/L	504.67	ppb	17:10:22
1	Zn 213.857†	21228.2	20706.9	498.87	µg/L	498.87	ppb	17:10:22
1	Si 251.611†	74473.7	73366.3	2430	µg/L	2430	ppb	17:11:51
2	Sc RADIAL	39954.8	39954.8	99.4	%			17:09:23
2	Al 396.153Radial†	16541.9	16548.1	4998.2	µg/L	4998.2	ppb	17:09:23
2	Ca 317.933Radial†	21405.3	21381.3	4911.4	µg/L	4911.4	ppb	17:09:43
2	Fe 238.204 Radial†	4924.3	4911.4	5076.8	µg/L	5076.8	ppb	17:09:43
2	K 766.490 Radial†	12082.3	11044.7	5057.7	µg/L	5057.7	ppb	17:09:23
2	Mg 279.077 IEC†	1694.8	1699.9	5038.2	µg/L	5038.2	ppb	17:09:43
2	Na 589.592 Radial†	61986.8	61281.8	9981.7	µg/L	9981.7	ppb	17:09:23
2	Sr 421.552†	109056.6	109774.7	507.01	µg/L	507.01	ppb	17:09:23
2	Sc 361.383	1063194.5	1063194.5	99.236	%			17:10:48
2	Y 371.029	575237.2	575237.2	98.008	%			17:10:48
2	Ag 328.068†	65332.8	66436.7	502.47	µg/L	502.47	ppb	17:10:54
2	As 188.979†	936.3	973.1	511.68	µg/L	511.68	ppb	17:11:14
2	B 249.677†	7424.1	7335.7	495.19	µg/L	495.19	ppb	17:10:54
2	Ba 233.527†	45548.6	46029.3	502.91	µg/L	502.91	ppb	17:10:54
2	Be 313.107†	709710.8	715293.1	502.46	µg/L	502.46	ppb	17:10:48
2	Cd 226.502†	13321.4	13451.4	501.22	µg/L	501.22	ppb	17:10:54
2	Co 228.616†	15559.4	15810.9	502.99	µg/L	502.99	ppb	17:10:54
2	Cr 267.716†	17349.5	17409.5	499.50	µg/L	499.50	ppb	17:10:54
2	Cu 324.752†	131709.8	127659.2	513.78	µg/L	513.78	ppb	17:10:54
2	Mn 257.610†	267256.4	268934.4	503.33	µg/L	503.33	ppb	17:10:48
2	Mo 202.031†	3772.2	3796.8	511.41	µg/L	511.41	ppb	17:11:14
2	Ni 231.604†	7795.4	7682.5	511.77	µg/L	511.77	ppb	17:11:14
2	P 214.914†	3093.5	2949.0	2399.0	µg/L	2399.0	ppb	17:11:14

2	Pb 220.353†	1852.4	1873.7	500.33 µg/L	500.33 ppb	17:11:14
2	S 181.975 Axial†	463.0	424.7	976.99 µg/L	976.99 ppb	17:11:14
2	Sb 206.836†	1034.4	1004.9	493.39 µg/L	493.39 ppb	17:11:14
2	Se 196.026†	551.4	588.4	503 µg/L	503 ppb	17:11:14
2	SiO2 †	75996.7	75250.1	5217.4 µg/L	5217.4 ppb	17:10:54
2	Sn 189.927†	1883.4	1910.8	497.86 µg/L	497.86 ppb	17:11:14
2	Ti 334.940†	363725.1	366026.4	500.03 µg/L	500.03 ppb	17:10:48
2	Tl 190.801†	1230.6	1275.4	502.37 µg/L	502.37 ppb	17:11:14
2	U 409.014†	7785.0	7450.2	499.53 µg/L	499.53 ppb	17:10:54
2	V 292.402†	32219.0	32589.6	505.80 µg/L	505.80 ppb	17:10:54
2	Zn 213.857†	21146.2	20729.0	499.39 µg/L	499.39 ppb	17:10:54
2	Si 251.611†	74381.7	73640.9	2440 µg/L	2440 ppb	17:11:56
3	Sc RADIAL	40101.9	40101.9	99.8 %		17:09:49
3	Al 396.153Radial†	16624.1	16569.5	5004.9 µg/L	5004.9 ppb	17:09:49
3	Ca 317.933Radial†	21367.4	21264.2	4884.5 µg/L	4884.5 ppb	17:10:09
3	Fe 238.204 Radial†	4905.7	4874.6	5038.8 µg/L	5038.8 ppb	17:10:09
3	K 766.490 Radial†	12112.5	11030.3	5051.1 µg/L	5051.1 ppb	17:09:49
3	Mg 279.077 IEC†	1699.4	1698.3	5033.4 µg/L	5033.4 ppb	17:10:09
3	Na 589.592 Radial†	62188.0	61254.6	9977.3 µg/L	9977.3 ppb	17:09:49
3	Sr 421.552†	109362.1	109678.2	506.57 µg/L	506.57 ppb	17:09:49
3	Sc 361.383	1061468.0	1061468.0	99.075 %		17:11:20
3	Y 371.029	574215.6	574215.6	97.834 %		17:11:20
3	Ag 328.068†	65817.7	67033.2	506.96 µg/L	506.96 ppb	17:11:25
3	As 188.979†	917.4	955.5	502.60 µg/L	502.60 ppb	17:11:45
3	B 249.677†	7549.3	7474.2	504.54 µg/L	504.54 ppb	17:11:25
3	Ba 233.527†	45820.1	46378.0	506.72 µg/L	506.72 ppb	17:11:25
3	Be 313.107†	709373.8	716116.2	503.04 µg/L	503.04 ppb	17:11:20
3	Cd 226.502†	13418.6	13571.4	505.69 µg/L	505.69 ppb	17:11:25
3	Co 228.616†	15625.3	15902.9	505.91 µg/L	505.91 ppb	17:11:25
3	Cr 267.716†	17472.4	17561.9	503.87 µg/L	503.87 ppb	17:11:25
3	Cu 324.752†	132751.3	128926.3	518.88 µg/L	518.88 ppb	17:11:25
3	Mn 257.610†	267442.4	269560.2	504.50 µg/L	504.50 ppb	17:11:20
3	Mo 202.031†	3741.9	3772.5	508.14 µg/L	508.14 ppb	17:11:45
3	Ni 231.604†	7773.5	7673.2	511.14 µg/L	511.14 ppb	17:11:45
3	P 214.914†	3092.7	2953.3	2401.8 µg/L	2401.8 ppb	17:11:45
3	Pb 220.353†	1841.3	1865.5	498.14 µg/L	498.14 ppb	17:11:45
3	S 181.975 Axial†	456.8	419.3	964.44 µg/L	964.44 ppb	17:11:45
3	Sb 206.836†	1031.1	1003.2	492.49 µg/L	492.49 ppb	17:11:45
3	Se 196.026†	548.4	586.3	501 µg/L	501 ppb	17:11:45
3	SiO2 †	76426.3	75808.3	5256.4 µg/L	5256.4 ppb	17:11:25
3	Sn 189.927†	1873.6	1904.1	496.10 µg/L	496.10 ppb	17:11:45
3	Ti 334.940†	363584.3	366480.4	500.64 µg/L	500.64 ppb	17:11:20
3	Tl 190.801†	1218.2	1264.9	498.25 µg/L	498.25 ppb	17:11:45
3	U 409.014†	7892.8	7571.8	507.67 µg/L	507.67 ppb	17:11:25
3	V 292.402†	32384.2	32809.1	509.15 µg/L	509.15 ppb	17:11:25
3	Zn 213.857†	21318.9	20937.9	504.47 µg/L	504.47 ppb	17:11:25
3	Si 251.611†	74712.1	74096.3	2460 µg/L	2460 ppb	17:12:02

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1064361.8	99.345	%	0.3380				0.34%
Sc RADIAL	40017.2	99.5	%	0.19				0.19%
Y 371.029	575815.9	98.107	%	0.3331				0.34%
Ag 328.068†	66602.8	503.72	µg/L	2.833	503.72	ppb	2.833	0.56%
QC value within limits for Ag 328.068 Recovery = 100.74%								
Al 396.153Radial†	16578.6	5007.6	µg/L	10.95	5007.6	ppb	10.95	0.22%
QC value within limits for Al 396.153Radial Recovery = 100.15%								
As 188.979†	963.2	506.54	µg/L	4.660	506.54	ppb	4.660	0.92%
QC value within limits for As 188.979 Recovery = 101.31%								
B 249.677†	7380.3	498.20	µg/L	5.495	498.20	ppb	5.495	1.10%
QC value within limits for B 249.677 Recovery = 99.64%								
Ba 233.527†	46107.9	503.77	µg/L	2.629	503.77	ppb	2.629	0.52%
QC value within limits for Ba 233.527 Recovery = 100.75%								
Be 313.107†	715200.3	502.40	µg/L	0.678	502.40	ppb	0.678	0.14%
QC value within limits for Be 313.107 Recovery = 100.48%								
Ca 317.933Radial†	21351.9	4904.6	µg/L	17.73	4904.6	ppb	17.73	0.36%
QC value within limits for Ca 317.933Radial Recovery = 98.09%								
Cd 226.502†	13493.5	502.78	µg/L	2.519	502.78	ppb	2.519	0.50%
QC value within limits for Cd 226.502 Recovery = 100.56%								

Co 228.616†	15829.8	503.59 µg/L	2.091	503.59 ppb	2.091	0.42%
QC value within limits for Co 228.616 Recovery = 100.72%						
Cr 267.716†	17445.2	500.53 µg/L	2.971	500.53 ppb	2.971	0.59%
QC value within limits for Cr 267.716 Recovery = 100.11%						
Cu 324.752†	127886.9	514.69 µg/L	3.810	514.69 ppb	3.810	0.74%
QC value within limits for Cu 324.752 Recovery = 102.94%						
Fe 238.204 Radial†	4902.7	5067.8 µg/L	25.67	5067.8 ppb	25.67	0.51%
QC value within limits for Fe 238.204 Radial Recovery = 101.36%						
K 766.490 Radial†	11056.7	5063.2 µg/L	15.59	5063.2 ppb	15.59	0.31%
QC value within limits for K 766.490 Radial Recovery = 101.26%						
Mg 279.077 IEC†	1698.7	5034.6 µg/L	3.23	5034.6 ppb	3.23	0.06%
QC value within limits for Mg 279.077 IEC Recovery = 100.69%						
Mn 257.610†	268954.7	503.37 µg/L	1.111	503.37 ppb	1.111	0.22%
QC value within limits for Mn 257.610 Recovery = 100.67%						
Mo 202.031†	3783.2	509.59 µg/L	1.667	509.59 ppb	1.667	0.33%
QC value within limits for Mo 202.031 Recovery = 101.92%						
Na 589.592 Radial†	61303.8	9985.3 µg/L	10.29	9985.3 ppb	10.29	0.10%
QC value within limits for Na 589.592 Radial Recovery = 99.85%						
Ni 231.604†	7665.7	510.65 µg/L	1.435	510.65 ppb	1.435	0.28%
QC value within limits for Ni 231.604 Recovery = 102.13%						
P 214.914†	2951.8	2401.2 µg/L	1.97	2401.2 ppb	1.97	0.08%
QC value within limits for P 214.914 Recovery = 96.05%						
Pb 220.353†	1865.1	498.05 µg/L	2.327	498.05 ppb	2.327	0.47%
QC value within limits for Pb 220.353 Recovery = 99.61%						
S 181.975 Axial†	420.6	967.38 µg/L	8.525	967.38 ppb	8.525	0.88%
QC value within limits for S 181.975 Axial Recovery = 96.74%						
Sb 206.836†	998.3	490.12 µg/L	4.906	490.12 ppb	4.906	1.00%
QC value within limits for Sb 206.836 Recovery = 98.02%						
Se 196.026†	587.3	502 µg/L	0.9	502 ppb	0.9	0.18%
QC value within limits for Se 196.026 Recovery = 100.32%						
SiO2 †	75416.3	5229.1 µg/L	23.73	5229.1 ppb	23.73	0.45%
QC value within limits for SiO2 Recovery = 97.79%						
Si 251.611†	73701.2	2440 µg/L	12.3	2440 ppb	12.3	0.50%
QC value within limits for Si 251.611 Recovery = 97.70%						
Sn 189.927†	1905.3	496.42 µg/L	1.311	496.42 ppb	1.311	0.26%
QC value within limits for Sn 189.927 Recovery = 99.28%						
Sr 421.552†	109849.6	507.36 µg/L	1.010	507.36 ppb	1.010	0.20%
QC value within limits for Sr 421.552 Recovery = 101.47%						
Ti 334.940†	366029.9	500.03 µg/L	0.612	500.03 ppb	0.612	0.12%
QC value within limits for Ti 334.940 Recovery = 100.01%						
Tl 190.801†	1267.6	499.28 µg/L	2.720	499.28 ppb	2.720	0.54%
QC value within limits for Tl 190.801 Recovery = 99.86%						
U 409.014†	7528.5	504.76 µg/L	4.541	504.76 ppb	4.541	0.90%
QC value within limits for U 409.014 Recovery = 100.95%						
V 292.402†	32638.6	506.54 µg/L	2.329	506.54 ppb	2.329	0.46%
QC value within limits for V 292.402 Recovery = 101.31%						
Zn 213.857†	20791.3	500.91 µg/L	3.094	500.91 ppb	3.094	0.62%
QC value within limits for Zn 213.857 Recovery = 100.18%						

All analyte(s) passed QC.

Sequence No.: 29
Sample ID: CCB
Nebulizer Back Pressure: 250.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/24/2005 17:13:49
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	39970.2	39970.2	99.4	%			17:15:15
1	Al 396.153Radial†	99.6	4.9	1.4243	µg/L	1.4243	ppb	17:15:15
1	Ca 317.933Radial†	179.8	25.4	5.8172	µg/L	5.8172	ppb	17:15:35
1	Fe 238.204 Radial†	46.4	3.5	3.6219	µg/L	3.6219	ppb	17:15:35
1	K 766.490 Radial†	1133.5	28.2	12.904	µg/L	12.904	ppb	17:15:15
1	Mg 279.077 IEC†	3.4	-1.9	-5.5173	µg/L	-5.5173	ppb	17:15:35
1	Na 589.592 Radial†	1047.4	-32.1	-5.2264	µg/L	-5.2264	ppb	17:15:15
1	Sr 421.552†	-14.2	34.3	0.1583	µg/L	0.1583	ppb	17:15:15
1	Sc 361.383	1069506.0	1069506.0	99.825	%			17:16:33
1	Y 371.029	583536.2	583536.2	99.422	%			17:16:33
1	Ag 328.068†	-567.1	32.9	0.2484	µg/L	0.2484	ppb	17:16:38
1	As 188.979†	-29.7	-0.1	-0.0693	µg/L	-0.0693	ppb	17:16:59
1	B 249.677†	151.0	5.7	0.3891	µg/L	0.3891	ppb	17:16:59
1	Ba 233.527†	-123.4	6.4	0.0699	µg/L	0.0699	ppb	17:16:59
1	Be 313.107†	338.6	457.7	0.3211	µg/L	0.3211	ppb	17:16:38
1	Cd 226.502†	-29.4	-1.9	-0.0722	µg/L	-0.0722	ppb	17:16:59
1	Co 228.616†	-148.7	-17.3	-0.5486	µg/L	-0.5486	ppb	17:16:59
1	Cr 267.716†	79.6	6.2	0.1773	µg/L	0.1773	ppb	17:16:59
1	Cu 324.752†	4936.9	-119.1	-0.4790	µg/L	-0.4790	ppb	17:16:38
1	Mn 257.610†	439.7	61.0	0.1147	µg/L	0.1147	ppb	17:16:59
1	Mo 202.031†	12.7	8.3	1.1167	µg/L	1.1167	ppb	17:16:59
1	Ni 231.604†	184.1	11.5	0.7716	µg/L	0.7716	ppb	17:16:59
1	P 214.914†	172.2	4.2	3.6574	µg/L	3.6574	ppb	17:16:59
1	Pb 220.353†	-16.1	-9.1	-2.4133	µg/L	-2.4133	ppb	17:16:59
1	S 181.975 Axial†	43.5	1.7	4.0406	µg/L	4.0406	ppb	17:16:59
1	Sb 206.836†	45.5	8.1	4.0141	µg/L	4.0141	ppb	17:16:59
1	Se 196.026†	-34.7	-1.9	-1.66	µg/L	-1.66	ppb	17:16:59
1	SiO2 †	1505.7	176.6	12.242	µg/L	12.242	ppb	17:16:38
1	Sn 189.927†	1.0	14.0	3.6345	µg/L	3.6345	ppb	17:16:59
1	Ti 334.940†	802.1	304.6	0.4172	µg/L	0.4172	ppb	17:16:38
1	Tl 190.801†	-34.8	0.5	0.2035	µg/L	0.2035	ppb	17:16:59
1	U 409.014†	370.3	-23.8	-1.5899	µg/L	-1.5899	ppb	17:16:38
1	V 292.402†	-134.5	-12.2	-0.1769	µg/L	-0.1769	ppb	17:16:38
1	Zn 213.857†	511.9	-67.3	-1.6398	µg/L	-1.6398	ppb	17:16:59
1	Si 251.611†	1490.6	179.7	5.95	µg/L	5.95	ppb	17:18:06
2	Sc RADIAL	40157.9	40157.9	99.9	%			17:15:40
2	Al 396.153Radial†	100.4	5.2	1.5747	µg/L	1.5747	ppb	17:15:40
2	Ca 317.933Radial†	178.8	23.6	5.4023	µg/L	5.4023	ppb	17:16:00
2	Fe 238.204 Radial†	45.5	2.5	2.5322	µg/L	2.5322	ppb	17:16:00
2	K 766.490 Radial†	1168.8	58.2	26.651	µg/L	26.651	ppb	17:15:40
2	Mg 279.077 IEC†	0.8	-4.5	-13.387	µg/L	-13.387	ppb	17:16:00
2	Na 589.592 Radial†	1007.8	-76.6	-12.484	µg/L	-12.484	ppb	17:15:40
2	Sr 421.552†	-17.7	30.8	0.1422	µg/L	0.1422	ppb	17:15:40
2	Sc 361.383	1067458.8	1067458.8	99.634	%			17:17:04
2	Y 371.029	582336.3	582336.3	99.218	%			17:17:04
2	Ag 328.068†	-652.8	-54.3	-0.4076	µg/L	-0.4076	ppb	17:17:09
2	As 188.979†	-24.4	5.1	2.6688	µg/L	2.6688	ppb	17:17:29
2	B 249.677†	136.0	-9.1	-0.6114	µg/L	-0.6114	ppb	17:17:29
2	Ba 233.527†	-132.8	-3.2	-0.0354	µg/L	-0.0354	ppb	17:17:29
2	Be 313.107†	360.8	480.7	0.3372	µg/L	0.3372	ppb	17:17:09
2	Cd 226.502†	-23.1	4.3	0.1593	µg/L	0.1593	ppb	17:17:29
2	Co 228.616†	-141.2	-10.1	-0.3213	µg/L	-0.3213	ppb	17:17:29
2	Cr 267.716†	76.8	3.5	0.1006	µg/L	0.1006	ppb	17:17:29
2	Cu 324.752†	4990.7	-55.5	-0.2221	µg/L	-0.2221	ppb	17:17:09
2	Mn 257.610†	430.4	52.4	0.0987	µg/L	0.0987	ppb	17:17:29
2	Mo 202.031†	2.8	-1.6	-0.2211	µg/L	-0.2211	ppb	17:17:29
2	Ni 231.604†	173.8	1.6	0.1056	µg/L	0.1056	ppb	17:17:29
2	P 214.914†	179.1	11.4	9.7080	µg/L	9.7080	ppb	17:17:29

2	Pb 220.353†	-16.3	-9.4	-2.4977 µg/L	-2.4977 ppb	17:17:29
2	S 181.975 Axial†	39.9	-1.8	-4.0727 µg/L	-4.0727 ppb	17:17:29
2	Sb 206.836†	47.6	10.3	5.0845 µg/L	5.0845 ppb	17:17:29
2	Se 196.026†	-31.1	1.5	1.31 µg/L	1.31 ppb	17:17:29
2	SiO2 †	1538.2	212.2	14.753 µg/L	14.753 ppb	17:17:09
2	Sn 189.927†	3.4	16.3	4.2532 µg/L	4.2532 ppb	17:17:29
2	Ti 334.940†	762.0	265.9	0.3644 µg/L	0.3644 ppb	17:17:09
2	Tl 190.801†	-30.6	4.6	1.8033 µg/L	1.8033 ppb	17:17:29
2	U 409.014†	368.5	-24.9	-1.6644 µg/L	-1.6644 ppb	17:17:09
2	V 292.402†	-116.5	5.6	0.0817 µg/L	0.0817 ppb	17:17:09
2	Zn 213.857†	501.9	-76.3	-1.8553 µg/L	-1.8553 ppb	17:17:29
2	Si 251.611†	1499.9	191.9	6.38 µg/L	6.38 ppb	17:18:11
3	Sc RADIAL	40557.0	40557.0	101 %		17:16:05
3	Al 396.153Radial†	110.3	14.0	4.1992 µg/L	4.1992 ppb	17:16:05
3	Ca 317.933Radial†	171.8	14.8	3.4056 µg/L	3.4056 ppb	17:16:25
3	Fe 238.204 Radial†	43.5	0.0	0.0319 µg/L	0.0319 ppb	17:16:25
3	K 766.490 Radial†	1078.0	-43.3	-19.839 µg/L	-19.839 ppb	17:16:05
3	Mg 279.077 IEC†	9.2	3.9	11.516 µg/L	11.516 ppb	17:16:25
3	Na 589.592 Radial†	1001.1	-93.3	-15.196 µg/L	-15.196 ppb	17:16:05
3	Sr 421.552†	-9.0	39.6	0.1829 µg/L	0.1829 ppb	17:16:05
3	Sc 361.383	1082360.9	1082360.9	101.02 %		17:17:35
3	Y 371.029	590416.1	590416.1	100.59 %		17:17:35
3	Ag 328.068†	-596.6	10.4	0.0795 µg/L	0.0795 ppb	17:17:40
3	As 188.979†	-27.1	2.8	1.4563 µg/L	1.4563 ppb	17:18:00
3	B 249.677†	136.6	-10.3	-0.6962 µg/L	-0.6962 ppb	17:18:00
3	Ba 233.527†	-127.2	4.1	0.0456 µg/L	0.0456 ppb	17:18:00
3	Be 313.107†	315.2	430.5	0.3023 µg/L	0.3023 ppb	17:17:40
3	Cd 226.502†	-26.1	1.7	0.0631 µg/L	0.0631 ppb	17:18:00
3	Co 228.616†	-130.2	2.9	0.0918 µg/L	0.0918 ppb	17:18:00
3	Cr 267.716†	76.9	2.5	0.0728 µg/L	0.0728 ppb	17:18:00
3	Cu 324.752†	4893.5	-220.7	-0.8889 µg/L	-0.8889 ppb	17:17:40
3	Mn 257.610†	428.6	44.7	0.0836 µg/L	0.0836 ppb	17:18:00
3	Mo 202.031†	10.6	6.0	0.8101 µg/L	0.8101 ppb	17:18:00
3	Ni 231.604†	180.3	5.6	0.3768 µg/L	0.3768 ppb	17:18:00
3	P 214.914†	181.7	11.6	9.9205 µg/L	9.9205 ppb	17:18:00
3	Pb 220.353†	-14.7	-7.6	-2.0159 µg/L	-2.0159 ppb	17:18:00
3	S 181.975 Axial†	39.1	-3.1	-7.0890 µg/L	-7.0890 ppb	17:18:00
3	Sb 206.836†	48.0	10.0	4.9402 µg/L	4.9402 ppb	17:18:00
3	Se 196.026†	-26.3	6.7	5.72 µg/L	5.72 ppb	17:18:00
3	SiO2 †	1486.6	139.8	9.6915 µg/L	9.6915 ppb	17:17:40
3	Sn 189.927†	-1.4	11.6	3.0100 µg/L	3.0100 ppb	17:18:00
3	Ti 334.940†	718.7	212.5	0.2906 µg/L	0.2906 ppb	17:17:40
3	Tl 190.801†	-33.4	2.3	0.9077 µg/L	0.9077 ppb	17:18:00
3	U 409.014†	394.9	-3.9	-0.2550 µg/L	-0.2550 ppb	17:17:40
3	V 292.402†	-97.4	26.1	0.4074 µg/L	0.4074 ppb	17:17:40
3	Zn 213.857†	503.9	-81.2	-1.9763 µg/L	-1.9763 ppb	17:18:00
3	Si 251.611†	1547.5	218.3	7.24 µg/L	7.24 ppb	17:18:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1073108.6	100.16	%	0.754				0.75%
Sc RADIAL	40228.4	100	%	0.7				0.74%
Y 371.029	585429.5	99.745	%	0.7428				0.74%
Ag 328.068†	-3.7	-0.0266	µg/L	0.34065	-0.0266	ppb	0.34065	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	8.0	2.3994	µg/L	1.56045	2.3994	ppb	1.56045	65.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.6	1.3520	µg/L	1.37206	1.3520	ppb	1.37206	101.49%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-4.6	-0.3062	µg/L	0.60360	-0.3062	ppb	0.60360	197.13%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.4	0.0267	µg/L	0.05513	0.0267	ppb	0.05513	206.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	456.3	0.3202	µg/L	0.01749	0.3202	ppb	0.01749	5.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	21.3	4.8750	µg/L	1.28938	4.8750	ppb	1.28938	26.45%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.3	0.0501	µg/L	0.11628	0.0501	ppb	0.11628	232.21%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-8.2	-0.2593 µg/L	0.32467	-0.2593 ppb	0.32467	125.19%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	4.0	0.1169 µg/L	0.05410	0.1169 ppb	0.05410	46.28%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-131.7	-0.5300 µg/L	0.33632	-0.5300 ppb	0.33632	63.46%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2.0	2.0620 µg/L	1.84063	2.0620 ppb	1.84063	89.26%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	14.4	6.5720 µg/L	23.88315	6.5720 ppb	23.88315	363.41%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.8	-2.4629 µg/L	12.72937	-2.4629 ppb	12.72937	516.85%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	52.7	0.0990 µg/L	0.01558	0.0990 ppb	0.01558	15.74%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.2	0.5686 µg/L	0.70087	0.5686 ppb	0.70087	123.27%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-67.3	-10.969 µg/L	5.1546	-10.969 ppb	5.1546	46.99%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	6.2	0.4180 µg/L	0.33492	0.4180 ppb	0.33492	80.12%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	9.1	7.7619 µg/L	3.55623	7.7619 ppb	3.55623	45.82%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-8.7	-2.3090 µg/L	0.25731	-2.3090 ppb	0.25731	11.14%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.0	-2.3737 µg/L	5.75604	-2.3737 ppb	5.75604	242.49%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.5	4.6796 µg/L	0.58082	4.6796 ppb	0.58082	12.41%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.1	1.79 µg/L	3.715	1.79 ppb	3.715	207.48%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	176.2	12.229 µg/L	2.5308	12.229 ppb	2.5308	20.69%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	196.6	6.52 µg/L	0.657	6.52 ppb	0.657	10.06%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	14.0	3.6326 µg/L	0.62159	3.6326 ppb	0.62159	17.11%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	34.9	0.1611 µg/L	0.02048	0.1611 ppb	0.02048	12.71%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	261.0	0.3574 µg/L	0.06358	0.3574 ppb	0.06358	17.79%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.5	0.9715 µg/L	0.80181	0.9715 ppb	0.80181	82.53%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-17.5	-1.1698 µg/L	0.79310	-1.1698 ppb	0.79310	67.80%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	6.5	0.1041 µg/L	0.29279	0.1041 ppb	0.29279	281.36%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-74.9	-1.8238 µg/L	0.17046	-1.8238 ppb	0.17046	9.35%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	38	1200873848|436713|1	Analyzed
2	39	1200873849|436713|1	Analyzed
3	40	139182001|436713|1	Analyzed
4	41	1200873850|436713|1	Analyzed
5	42	1200873851|436713|1	Analyzed
6	43	1200873852|436713|5	Analyzed
7	7	CCV	QC Passed
8	8	CCB	QC Passed
9	44	139198004|436713|1	Analyzed
10	45	139198005|436713|1	Analyzed
11	46	139198006|436713|1	Analyzed
12	47	139198007|436713|1	Analyzed
13	48	139198008|436713|1	Analyzed
14	49	139198009|436713|1	Analyzed
15	50	139198010|436713|1	Analyzed
16	7	CCV	QC Passed
17	8	CCB	QC Passed
18	51	138851001|435151|5	Analyzed
19	52	1200870311|435151|5	Analyzed
20	53	1200870312|435151|5	Analyzed
21	54	1200870313|435151|25	Analyzed
22	55	138851002|435151|5	Analyzed
23	56	138851003|435151|5	Analyzed
24	57	1200870314|435151|5	Analyzed
25	58	1200870315|435151|5	Analyzed
26	59	1200870316|435151|25	Analyzed
27	60	138851004|435151|5	Analyzed
28	7	CCV	QC Passed
29	8	CCB	QC Passed

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	600	2075	0.582
Be	9.0	9.0	2054	2080	0.625
Mg	24.0	24.0	5690	2100	0.595
Mg	25.0	25.0	5944	2115	0.603
Mg	26.0	26.0	6162	2100	0.607
Co	58.9	58.9	14183	2140	0.581
Rh	102.9	102.9	24873	2185	0.583
In	114.9	114.9	27791	2205	0.584
Ce	139.9	139.9	33873	2225	0.599
Pb	206.0	206.0	49948	2300	0.641
Pb	207.0	207.0	50159	2310	0.548
Pb	208.0	208.0	50463	2315	0.565
U	238.1	238.1	57728	2337	0.600

Report Date/Time: Wednesday, July 06, 2005 08:58:07
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ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, July 06, 2005 08:59:31
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.584
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	5731.9	5731.950	39.095	0.7
	Mg	24.0	38034.8	38034.771	436.677	1.1
	Co	58.9	81828.3	81828.306	848.102	1.0
	Rh	102.9	168361.1	168361.106	976.430	0.6
	In	114.9	210519.1	210519.082	1787.773	0.8
	Pb	208.0	102923.8	102923.850	718.902	0.7
>	Ba	137.9	191731.9	191731.933	835.044	0.4
	Ba++	69.0	3447.9	0.018	0.000	1.2
>	Ce	139.9	242274.2	242274.180	1567.150	0.6
	CeO	155.9	4192.6	0.017	0.000	0.6
	Bkgd	220.0	24.0	24.000	2.574	10.7

Current Optimization File Data

Current Value	Description
0.90	Nebulizer Gas Flow
8.75	Lens Voltage
1400.00	ICP RF Power
-1750.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

SAQ 7/6/05

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	13	6.5	3666.1
Co	59	13	7.0	60825.2
In	115	13	7.8	175338.5

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, July 06, 2005 12:54:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\Blank.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		101	
	Be	9		ug/L		25	
	B	11		ug/L		462	
	Na	23		ug/L		25690	
	Mg	24		ug/L		6001	
	Al	27		ug/L		13673	
	P	31		ug/L		6491	
	K	39		ug/L		1032361	
	Ca	43		ug/L		749	
>	Sc	45		ug/L		868134	
	Ti	47		ug/L		657	
	V	51		ug/L		21434	
	Cr	52		ug/L		9191	
	Cr	53		ug/L		217543	
	Mn	55		ug/L		3601	
	Fe	57		ug/L		12445	
	Co	59		ug/L		229	
	Ni	60		ug/L		272	
	Cu	63		ug/L		731	
	Cu	65		ug/L		234	
	Zn	66		ug/L		540	
	Zn	67		ug/L		13282	
	Zn	68		ug/L		1430	
>	Ge	74		ug/L		339947	
	As	75		ug/L		3360	
	Se	77		ug/L		18939	
	Se	82		ug/L		11	
	Kr	83		ug/L		1099	
	Sr	88		ug/L		355	
	Y	89		ug/L		120	
	Zr	90		ug/L		466	
	Mo	98		ug/L		145	
	Ag	107		ug/L		100	
	Cd	111		ug/L		31	
	Cd	114		ug/L		51	
>	In	115		ug/L		176760	
	Sn	120		ug/L		236	
	Sb	121		ug/L		436	
	Sb	123		ug/L		337	
	Ba	135		ug/L		59	
	Ba	137		ug/L		87	
	Ho	165		ug/L		30	
>	Ta	181		ug/L		214757	
	Tl	205		ug/L		419	
	Pb	208		ug/L		396	
	Bi	209		ug/L		35	
	Th	232		ug/L		400	
	U	238		ug/L		375	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Linear Thru Zero	
Cr	53	Linear Thru Zero	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Zr	90	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Ta	181	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, July 06, 2005 12:59:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\Standard 1.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.000**	**ug/L**	1.253	14321	0.016
	Be	9	**10.000**	**ug/L**	1.600	4315	0.005
	B	11	**20.000**	**ug/L**	3.083	7516	0.008
	Na	23	**1000.000**	**ug/L**	8.465	3375746	3.803
	Mg	24	**1000.000**	**ug/L**	5.399	2229262	2.525
	Al	27	**1000.000**	**ug/L**	5.322	3078161	3.479
	P	31	**1000.000**	**ug/L**	1.551	211130	0.232
	K	39	**1000.000**	**ug/L**	7.009	5188682	4.701
	Ca	43	**1000.000**	**ug/L**	2.476	10300	0.011
>	Sc	45		**ug/L**		880826	880826.207
	Ti	47	**10.000**	**ug/L**	2.400	5492	0.005
	V	51	**10.000**	**ug/L**	10.571	71886	0.057
	Cr	52	**10.000**	**ug/L**	0.446	55767	0.053
	Cr	53		**ug/L**		222178	0.002
	Mn	55	**10.000**	**ug/L**	2.160	75196	0.081
	Fe	57	**1000.000**	**ug/L**	0.661	151922	0.158
	Co	59	**10.000**	**ug/L**	1.004	54394	0.061
	Ni	60	**10.000**	**ug/L**	2.479	11643	0.013
	Cu	63		**ug/L**		29002	0.032
	Cu	65	**10.000**	**ug/L**	0.688	14274	0.016
	Zn	66	**10.000**	**ug/L**	1.432	10283	0.028
	Zn	67		**ug/L**		14924	0.004
	Zn	68		**ug/L**		8632	0.021
>	Ge	74		**ug/L**		343150	343150.003
	As	75	**10.000**	**ug/L**	11.312	14457	0.032
	Se	77		**ug/L**		19597	0.001
	Se	82	**10.000**	**ug/L**	13.430	962	0.003
	Kr	83		**ug/L**		1082	-0.000
	Sr	88	**10.000**	**ug/L**	0.527	107026	0.590
	Y	89		**ug/L**		160	0.000
	Zr	90	**10.000**	**ug/L**	1.606	60540	0.332
	Mo	98	**10.000**	**ug/L**	1.864	25883	0.142
	Ag	107	**10.000**	**ug/L**	1.362	42911	0.237
	Cd	111	**10.000**	**ug/L**	1.416	10379	0.057
	Cd	114		**ug/L**		24596	0.136
>	In	115		**ug/L**		180855	180854.896
	Sn	120	**10.000**	**ug/L**	1.204	43614	0.240
	Sb	121	**10.000**	**ug/L**	1.456	42941	0.235
	Sb	123		**ug/L**		33244	0.182
	Ba	135		**ug/L**		10362	0.047
	Ba	137	**10.000**	**ug/L**	2.081	17940	0.082
	Ho	165		**ug/L**		31	-0.000
>	Ta	181		**ug/L**		217353	217352.573
	Tl	205	**10.000**	**ug/L**	0.655	99473	0.456
	Pb	208	**10.000**	**ug/L**	1.486	123277	0.565
	Bi	209		**ug/L**		39	0.000
	Th	232	**10.000**	**ug/L**	0.664	144273	0.662
	U	238	**10.000**	**ug/L**	1.243	141256	0.648

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, July 06, 2005 13:04:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\Standard 2.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.943**	**ug/L**	1.294	134598	0.153
	Be	9	**99.950**	**ug/L**	0.947	40879	0.046
	B	11	**199.927**	**ug/L**	1.640	68476	0.077
	Na	23	**10001.552**	**ug/L**	6.201	34059289	38.638
	Mg	24	**9998.479**	**ug/L**	2.138	21916271	24.864
	Al	27	**10003.372**	**ug/L**	12.146	31720711	36.021
	P	31	**9987.753**	**ug/L**	2.261	1827124	2.066
	K	39	**9996.303**	**ug/L**	6.409	40967555	45.321
	Ca	43	**9994.811**	**ug/L**	1.381	91439	0.103
>	Sc	45		**ug/L**		881233	881232.980
	Ti	47	**99.985**	**ug/L**	1.292	48240	0.054
	V	51	**99.991**	**ug/L**	3.691	518733	0.564
	Cr	52	**99.936**	**ug/L**	2.638	445748	0.495
	Cr	53		**ug/L**		249406	0.032
	Mn	55	**99.913**	**ug/L**	1.617	661608	0.747
	Fe	57	**9985.402**	**ug/L**	0.946	1226786	1.378
	Co	59	**99.895**	**ug/L**	1.464	490280	0.556
	Ni	60	**99.913**	**ug/L**	0.876	104772	0.119
	Cu	63		**ug/L**		260353	0.295
	Cu	65	**99.922**	**ug/L**	1.208	130406	0.148
	Zn	66	**99.933**	**ug/L**	1.229	91575	0.266
	Zn	67		**ug/L**		28309	0.044
	Zn	68		**ug/L**		69703	0.199
>	Ge	74		**ug/L**		342412	342412.374
	As	75	**99.967**	**ug/L**	2.027	110258	0.312
	Se	77		**ug/L**		24457	0.016
	Se	82	**99.932**	**ug/L**	1.010	8885	0.026
	Kr	83		**ug/L**		1132	0.000
	Sr	88	**99.938**	**ug/L**	0.989	966901	5.547
	Y	89		**ug/L**		334	0.001
	Zr	90	**99.972**	**ug/L**	1.788	562949	3.229
	Mo	98	**99.994**	**ug/L**	0.987	246578	1.414
	Ag	107	**99.952**	**ug/L**	1.199	393462	2.258
	Cd	111	**99.969**	**ug/L**	0.311	96682	0.555
	Cd	114		**ug/L**		226549	1.300
>	In	115		**ug/L**		174241	174240.709
	Sn	120	**99.956**	**ug/L**	1.881	400496	2.297
	Sb	121	**99.961**	**ug/L**	1.717	394473	2.262
	Sb	123		**ug/L**		310457	1.780
	Ba	135		**ug/L**		98181	0.453
	Ba	137	**99.956**	**ug/L**	1.971	170550	0.786
	Ho	165		**ug/L**		28	-0.000
>	Ta	181		**ug/L**		216846	216845.700
	Tl	205	**99.846**	**ug/L**	0.755	855682	3.944
	Pb	208	**99.902**	**ug/L**	1.388	1116112	5.146
	Bi	209		**ug/L**		113	0.000
	Th	232	**99.822**	**ug/L**	1.798	1216502	5.609
	U	238	**99.814**	**ug/L**	2.039	1183606	5.457

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, July 06, 2005 13:09:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 1.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**49.058**	**ug/L**	0.637	62804	0.075
|	Be	9	**48.422**	**ug/L**	1.907	18825	0.022
|	B	11	**108.532**	**ug/L**	1.436	35509	0.042
|	Na	23	**4803.064**	**ug/L**	6.813	15555437	18.555
|	Mg	24	**4933.819**	**ug/L**	4.933	10273252	12.269
|	Al	27	**4763.965**	**ug/L**	3.743	14371708	17.155
|	P	31	**5204.768**	**ug/L**	2.214	907411	1.077
|	K	39	**4880.013**	**ug/L**	3.875	19508360	22.125
|	Ca	43	**4935.364**	**ug/L**	0.819	43251	0.051
|>	Sc	45		**ug/L**		836954	836954.192
|	Ti	47	**48.413**	**ug/L**	1.466	22511	0.026
|	V	51	**49.055**	**ug/L**	1.783	252281	0.277
|	Cr	52	**48.338**	**ug/L**	1.340	209377	0.240
|	Cr	53		**ug/L**		119795	-0.107
|	Mn	55	**52.040**	**ug/L**	1.737	328897	0.389
|	Fe	57	**5163.107**	**ug/L**	1.648	608226	0.712
|	Co	59	**50.172**	**ug/L**	1.966	233974	0.279
|	Ni	60	**51.705**	**ug/L**	0.932	51618	0.061
|	Cu	63		**ug/L**		123252	0.146
⌊	Cu	65	**49.215**	**ug/L**	0.903	61123	0.073
⌈	Zn	66	**48.876**	**ug/L**	2.019	44118	0.130
|	Zn	67		**ug/L**		14846	0.005
|	Zn	68		**ug/L**		33978	0.097
|>	Ge	74		**ug/L**		335232	335232.343
|	As	75	**48.232**	**ug/L**	1.579	53785	0.151
|	Se	77		**ug/L**		9292	-0.028
|	Se	82	**46.932**	**ug/L**	1.786	4091	0.012
⌊	Kr	83		**ug/L**		1089	0.000
⌈	Sr	88	**48.739**	**ug/L**	0.287	484028	2.706
|	Y	89		**ug/L**		783	0.004
|	Zr	90	**48.120**	**ug/L**	1.159	278274	1.554
|	Mo	98	**47.563**	**ug/L**	0.684	120416	0.673
|	Ag	107	**48.223**	**ug/L**	1.566	194833	1.089
|	Cd	111	**48.400**	**ug/L**	0.269	48042	0.269
|	Cd	114		**ug/L**		113497	0.635
|>	In	115		**ug/L**		178775	178775.398
|	Sn	120	**48.719**	**ug/L**	0.228	200420	1.120
|	Sb	121	**47.669**	**ug/L**	1.342	193253	1.079
⌊	Sb	123		**ug/L**		149805	0.836
⌈	Ba	135		**ug/L**		48460	0.211
|	Ba	137	**46.999**	**ug/L**	0.537	84753	0.370
|	Ho	165		**ug/L**		77	0.000
|>	Ta	181		**ug/L**		229006	229006.257
|	Tl	205	**48.364**	**ug/L**	0.483	437963	1.911
|	Pb	208	**49.035**	**ug/L**	0.672	578811	2.526
|	Bi	209		**ug/L**		81	0.000
|	Th	232	**49.681**	**ug/L**	1.106	639638	2.791
⌊	U	238	**52.985**	**ug/L**	1.198	663805	2.897

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	98.116				
|	Be	9	96.843				
|	B	11	108.532				
|	Na	23	96.061				
|	Mg	24	98.676				
|	Al	27	94.336				
|	P	31	104.095				
|	K	39	97.600				
|	Ca	43	98.707				
|>	Sc	45			96.4		
|	Ti	47	96.826				
|	V	51	98.109				
|	Cr	52	96.676				
|	Cr	53					
|	Mn	55	104.080				
|	Fe	57	103.262				
|	Co	59	100.345				
|	Ni	60	103.409				
|	Cu	63					
⌊	Cu	65	98.429				
⌈	Zn	66	97.752				
|	Zn	67					
|	Zn	68					
|>	Ge	74			98.6		
|	As	75	96.464				
|	Se	77					
|	Se	82	93.864				
⌊	Kr	83					
⌈	Sr	88	97.479				
|	Y	89					
|	Zr	90	96.241				
|	Mo	98	95.127				
|	Ag	107	96.446				
|	Cd	111	96.799				
|	Cd	114					
|>	In	115			101.1		
|	Sn	120	97.439				
|	Sb	121	95.338				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	93.999				
|	Ho	165					
|>	Ta	181			106.6		
|	Tl	205	96.728				
|	Pb	208	98.070				
|	Bi	209					
|	Th	232	99.361				
⌊	U	238	105.971				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, July 06, 2005 13:14:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 2.095

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.035**	**ug/L**	13.612	145	0.000
|	Be	9	**0.020**	**ug/L**	61.235	32	0.000
|	B	11	**1.248**	**ug/L**	6.777	864	0.000
|	Na	23	**0.040**	**ug/L**	2378.837	25356	0.000
|	Mg	24	**0.835**	**ug/L**	114.807	7669	0.002
|	Al	27	**0.625**	**ug/L**	78.769	15342	0.002
|	P	31	**-0.257**	**ug/L**	65.119	6327	-0.000
|	K	39	**-5.458**	**ug/L**	82.564	992313	-0.025
|	Ca	43	**9.545**	**ug/L**	7.313	819	0.000
|>	Sc	45		**ug/L**		852223	852222.530
|	Ti	47	**-0.040**	**ug/L**	74.466	626	-0.000
|	V	51	**1.270**	**ug/L**	112.232	27107	0.007
|	Cr	52	**0.615**	**ug/L**	16.208	11617	0.003
|	Cr	53		**ug/L**		198671	-0.017
|	Mn	55	**-0.006**	**ug/L**	321.696	3499	-0.000
|	Fe	57	**0.269**	**ug/L**	195.066	12249	0.000
|	Co	59	**0.015**	**ug/L**	41.043	294	0.000
|	Ni	60	**0.015**	**ug/L**	111.874	281	0.000
|	Cu	63		**ug/L**		559	-0.000
⌞	Cu	65	**-0.048**	**ug/L**	7.800	169	-0.000
⌜	Zn	66	**0.036**	**ug/L**	43.336	568	0.000
|	Zn	67		**ug/L**		12470	-0.002
|	Zn	68		**ug/L**		1396	-0.000
|>	Ge	74		**ug/L**		336780	336779.543
|	As	75	**0.511**	**ug/L**	113.561	3865	0.002
|	Se	77		**ug/L**		17701	-0.003
|	Se	82	**-0.321**	**ug/L**	228.389	-17	-0.000
⌞	Kr	83		**ug/L**		1102	0.000
⌜	Sr	88	**0.004**	**ug/L**	44.364	391	0.000
|	Y	89		**ug/L**		123	0.000
|	Zr	90	**-0.024**	**ug/L**	15.878	327	-0.001
|	Mo	98	**0.016**	**ug/L**	37.609	182	0.000
|	Ag	107	**0.004**	**ug/L**	33.311	115	0.000
|	Cd	111	**-0.002**	**ug/L**	837.949	28	-0.000
|	Cd	114		**ug/L**		78	0.000
|>	In	115		**ug/L**		174603	174603.379
|	Sn	120	**0.007**	**ug/L**	14.890	261	0.000
|	Sb	121	**0.499**	**ug/L**	13.378	2401	0.011
⌞	Sb	123		**ug/L**		1864	0.009
⌜	Ba	135		**ug/L**		61	0.000
|	Ba	137	**0.004**	**ug/L**	127.587	92	0.000
|	Ho	165		**ug/L**		32	0.000
|>	Ta	181		**ug/L**		209902	209901.901
|	Tl	205	**0.010**	**ug/L**	58.455	495	0.000
|	Pb	208	**0.007**	**ug/L**	45.997	461	0.000
|	Bi	209		**ug/L**		33	-0.000
|	Th	232	**0.007**	**ug/L**	82.154	476	0.000
⌞	U	238	**0.013**	**ug/L**	14.257	518	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		98.2			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		99.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		98.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		97.7			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, July 06, 2005 13:19:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 3.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**10.183**	**ug/L**	1.444	12821	0.016
|	Be	9	**0.480**	**ug/L**	8.084	206	0.000
|	B	11	**16.163**	**ug/L**	1.610	5542	0.006
|	Na	23	**238.636**	**ug/L**	7.999	778375	0.922
|	Mg	24	**17.246**	**ug/L**	17.503	40725	0.043
|	Al	27	**15.807**	**ug/L**	13.040	59458	0.057
|	P	31	**46.876**	**ug/L**	1.555	14055	0.010
|	K	39	**273.895**	**ug/L**	5.718	1989576	1.242
|	Ca	43	**118.040**	**ug/L**	9.799	1701	0.001
|>	Sc	45		**ug/L**		818361	818360.680
|	Ti	47	**8.084**	**ug/L**	1.938	4191	0.004
|	V	51	**9.156**	**ug/L**	7.993	62468	0.052
|	Cr	52	**2.210**	**ug/L**	6.786	17632	0.011
|	Cr	53		**ug/L**		93085	-0.137
|	Mn	55	**5.481**	**ug/L**	1.195	36913	0.041
|	Fe	57	**26.950**	**ug/L**	7.191	14774	0.004
|	Co	59	**1.064**	**ug/L**	1.098	5064	0.006
|	Ni	60	**2.088**	**ug/L**	0.715	2284	0.002
|	Cu	63		**ug/L**		3056	0.003
⌊	Cu	65	**1.000**	**ug/L**	3.305	1430	0.001
⌈	Zn	66	**9.897**	**ug/L**	1.650	9279	0.026
|	Zn	67		**ug/L**		8214	-0.014
|	Zn	68		**ug/L**		7616	0.019
|>	Ge	74		**ug/L**		332413	332412.873
|	As	75	**4.279**	**ug/L**	10.662	7727	0.013
|	Se	77		**ug/L**		6104	-0.037
|	Se	82	**4.197**	**ug/L**	21.433	374	0.001
⌊	Kr	83		**ug/L**		1072	-0.000
⌈	Sr	88	**9.931**	**ug/L**	0.692	99257	0.551
|	Y	89		**ug/L**		535	0.002
|	Zr	90	**1.236**	**ug/L**	9.935	7640	0.040
|	Mo	98	**0.429**	**ug/L**	7.458	1235	0.006
|	Ag	107	**0.973**	**ug/L**	1.314	4047	0.022
|	Cd	111	**0.962**	**ug/L**	6.769	988	0.005
|	Cd	114		**ug/L**		2297	0.013
|>	In	115		**ug/L**		179399	179399.402
|	Sn	120	**4.880**	**ug/L**	0.740	20358	0.112
|	Sb	121	**1.751**	**ug/L**	1.987	7549	0.040
⌊	Sb	123		**ug/L**		5893	0.031
⌈	Ba	135		**ug/L**		1980	0.008
|	Ba	137	**1.953**	**ug/L**	0.792	3593	0.015
|	Ho	165		**ug/L**		59	0.000
|>	Ta	181		**ug/L**		227852	227852.040
|	Tl	205	**1.033**	**ug/L**	1.863	9741	0.041
|	Pb	208	**2.063**	**ug/L**	0.535	24627	0.106
|	Bi	209		**ug/L**		170	0.001
|	Th	232	**0.816**	**ug/L**	7.140	10876	0.046
⌊	U	238	**0.200**	**ug/L**	3.482	2891	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	101.826				
|	Be	9	96.071				
|	B	11	107.756				
|	Na	23	95.454				
|	Mg	24	114.973				
|	Al	27	105.380				
|	P	31	93.752				
|	K	39	91.298				
⌊	Ca	43	118.040				
|>	Sc	45		94.3			
|	Ti	47	80.839				
|	V	51	91.565				
|	Cr	52	73.666				
|	Cr	53					
|	Mn	55	109.627				
|	Fe	57	107.802				
|	Co	59	106.409				
|	Ni	60	104.387				
|	Cu	63					
⌊	Cu	65	100.034				
⌈	Zn	66	98.971				
|	Zn	67					
⌊	Zn	68					
|>	Ge	74		97.8			
|	As	75	85.581				
|	Se	77					
⌊	Se	82	83.946				
⌊	Kr	83					
⌈	Sr	88	99.309				
|	Y	89					
|	Zr	90	61.815				
|	Mo	98	85.789				
|	Ag	107	97.340				
|	Cd	111	96.201				
⌊	Cd	114					
|>	In	115		101.5			
|	Sn	120	97.591				
|	Sb	121	87.531				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	97.647				
⌊	Ho	165					
|>	Ta	181		106.1			
|	Tl	205	103.289				
|	Pb	208	103.132				
|	Bi	209					
|	Th	232	81.612				
⌊	U	238	100.093				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Zr		90CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, July 06, 2005 13:25:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 4.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.482**	**ug/L**	0.781	695	0.001
|	Be	9	**0.023**	**ug/L**	18.181	32	0.000
|	B	11	**6.164**	**ug/L**	6.730	2376	0.002
|	Na	23	**96126.066**	**ug/L**	3.409	303178511	371.354
|	Mg	24	**103673.531**	**ug/L**	6.839	210374506	257.817
|	Al	27	**94371.831**	**ug/L**	4.962	277472743	339.824
|	P	31	**107967.469**	**ug/L**	1.356	18235610	22.337
|	K	39	**96964.061**	**ug/L**	6.940	359600710	439.612
|	Ca	43	**94409.047**	**ug/L**	1.173	794051	0.972
|>	Sc	45		**ug/L**		816198	816198.366
|	Ti	47	**1712.419**	**ug/L**	1.646	755252	0.925
|	V	51	**-1.586**	**ug/L**	42.640	12823	-0.009
|	Cr	52	**0.028**	**ug/L**	291.044	8753	0.000
|	Cr	53		**ug/L**		74886	-0.159
|	Mn	55	**3.079**	**ug/L**	1.599	22163	0.023
|	Fe	57	**97261.039**	**ug/L**	2.354	10964731	13.421
|	Co	59	**0.274**	**ug/L**	5.162	1458	0.002
|	Ni	60	**1.486**	**ug/L**	0.357	1695	0.002
|	Cu	63		**ug/L**		4484	0.005
⌞	Cu	65	**2.543**	**ug/L**	1.206	3288	0.004
⌜	Zn	66	**5.823**	**ug/L**	3.233	5610	0.015
|	Zn	67		**ug/L**		6923	-0.018
|	Zn	68		**ug/L**		3297	0.006
|>	Ge	74		**ug/L**		328395	328395.388
|	As	75	**-0.209**	**ug/L**	74.220	3031	-0.001
|	Se	77		**ug/L**		6069	-0.037
|	Se	82	**-0.430**	**ug/L**	237.902	-26	-0.000
⌞	Kr	83		**ug/L**		1145	0.000
⌜	Sr	88	**1.574**	**ug/L**	0.711	15410	0.087
|	Y	89		**ug/L**		1181	0.006
|	Zr	90	**0.427**	**ug/L**	21.691	2828	0.014
|	Mo	98	**1873.434**	**ug/L**	0.652	4568762	26.499
|	Ag	107	**0.038**	**ug/L**	9.841	248	0.001
|	Cd	111	**0.311**	**ug/L**	21.561	327	0.002
|	Cd	114		**ug/L**		5164	0.030
|>	In	115		**ug/L**		172403	172403.313
|	Sn	120	**0.121**	**ug/L**	2.126	709	0.003
|	Sb	121	**0.549**	**ug/L**	4.536	2566	0.012
⌞	Sb	123		**ug/L**		1968	0.010
⌜	Ba	135		**ug/L**		463	0.002
|	Ba	137	**0.376**	**ug/L**	4.379	774	0.003
|	Ho	165		**ug/L**		89	0.000
|>	Ta	181		**ug/L**		229989	229988.698
|	Tl	205	**-0.000**	**ug/L**	423.610	445	-0.000
|	Pb	208	**0.372**	**ug/L**	2.461	4832	0.019
|	Bi	209		**ug/L**		1950	0.008
|	Th	232	**0.065**	**ug/L**	26.744	1262	0.004
⌞	U	238	**-0.002**	**ug/L**	86.234	374	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11	308.191				
|	Na	23	96.126				
|	Mg	24	103.840				
|	Al	27	94.372				
|	P	31	107.978				
|	K	39	96.964				
|	Ca	43	94.409				
|>	Sc	45			94.0		
|	Ti	47	85.621				
|	V	51	-79.324				
|	Cr	52	0.656				
|	Cr	53					
|	Mn	55	162.057				
|	Fe	57	97.261				
|	Co	59					
|	Ni	60	106.157				
|	Cu	63					
⌊	Cu	65	133.817				
⌈	Zn	66	103.981				
|	Zn	67					
|	Zn	68					
|>	Ge	74			96.6		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	54.281				
|	Y	89					
|	Zr	90					
|	Mo	98	93.672				
|	Ag	107	12.827				
|	Cd	111					
|	Cd	114					
|>	In	115			97.5		
|	Sn	120	3.779				
|	Sb	121	23.868				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	188.104				
|	Ho	165					
|>	Ta	181			107.1		
|	Tl	205					
|	Pb	208	46.518				
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, July 06, 2005 13:30:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 5.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**19.686**	**ug/L**	0.996	24434	0.030
	Be	9	**19.290**	**ug/L**	3.093	7267	0.009
	B	11	**26.274**	**ug/L**	2.114	8642	0.010
	Na	23	**97166.009**	**ug/L**	4.458	303991867	375.372
	Mg	24	**108423.063**	**ug/L**	2.166	218294743	269.628
	Al	27	**93572.452**	**ug/L**	2.872	272798112	336.945
	P	31	**108853.715**	**ug/L**	1.243	18237692	22.520
	K	39	**94272.323**	**ug/L**	2.832	347032043	427.408
	Ca	43	**94217.814**	**ug/L**	0.867	786098	0.970
>	Sc	45		**ug/L**		809613	809612.585
	Ti	47	**1727.663**	**ug/L**	0.321	755903	0.933
	V	51	**19.151**	**ug/L**	3.395	107456	0.108
	Cr	52	**19.584**	**ug/L**	2.909	87152	0.097
	Cr	53		**ug/L**		79149	-0.153
	Mn	55	**22.999**	**ug/L**	1.045	142494	0.172
	Fe	57	**99361.287**	**ug/L**	2.158	11111225	13.711
	Co	59	**20.229**	**ug/L**	1.105	91388	0.113
	Ni	60	**21.119**	**ug/L**	0.977	20546	0.025
	Cu	63		**ug/L**		49976	0.061
	Cu	65	**21.614**	**ug/L**	0.389	26089	0.032
	Zn	66	**25.037**	**ug/L**	0.165	22136	0.067
	Zn	67		**ug/L**		9681	-0.009
	Zn	68		**ug/L**		15611	0.044
>	Ge	74		**ug/L**		324568	324567.688
	As	75	**19.833**	**ug/L**	1.614	23305	0.062
	Se	77		**ug/L**		6694	-0.035
	Se	82	**19.187**	**ug/L**	3.167	1626	0.005
	Kr	83		**ug/L**		1131	0.000
	Sr	88	**21.854**	**ug/L**	0.639	212706	1.213
	Y	89		**ug/L**		814	0.004
	Zr	90	**19.891**	**ug/L**	1.125	112911	0.642
	Mo	98	**1856.691**	**ug/L**	0.547	4597427	26.262
	Ag	107	**19.075**	**ug/L**	1.155	75527	0.431
	Cd	111	**19.473**	**ug/L**	1.450	18944	0.108
	Cd	114		**ug/L**		49453	0.282
>	In	115		**ug/L**		175053	175052.701
	Sn	120	**20.195**	**ug/L**	1.216	81488	0.464
	Sb	121	**20.435**	**ug/L**	1.029	81365	0.462
	Sb	123		**ug/L**		63059	0.358
	Ba	135		**ug/L**		20004	0.086
	Ba	137	**19.017**	**ug/L**	0.148	34717	0.150
	Ho	165		**ug/L**		69	0.000
>	Ta	181		**ug/L**		231464	231463.705
	Tl	205	**19.397**	**ug/L**	0.765	177813	0.766
	Pb	208	**19.491**	**ug/L**	0.407	232804	1.004
	Bi	209		**ug/L**		1979	0.008
	Th	232	**20.507**	**ug/L**	1.181	267121	1.152
	U	238	**21.727**	**ug/L**	0.653	275363	1.188

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7	98.429				
Be	9	96.450				
B	11	119.429				
Na	23	97.166				
Mg	24	108.597				
Al	27	93.572				
P	31	108.865				
K	39	94.272				
Ca	43	94.218				
> Sc	45		93.3			
Ti	47	86.383				
V	51	87.050				
Cr	52	80.925				
Cr	53					
Mn	55	105.018				
Fe	57	99.361				
Co	59	101.143				
Ni	60	98.686				
Cu	63					
Cu	65	98.695				
Zn	66	97.801				
Zn	67					
Zn	68					
> Ge	74		95.5			
As	75	99.163				
Se	77					
Se	82	95.935				
Kr	83					
Sr	88	95.431				
Y	89					
Zr	90	99.454				
Mo	98	92.835				
Ag	107	93.968				
Cd	111	97.364				
Cd	114					
> In	115		99.0			
Sn	120	87.049				
Sb	121	91.637				
Sb	123					
Ba	135					
Ba	137	94.143				
Ho	165					
> Ta	181		107.8			
Tl	205	96.987				
Pb	208	93.708				
Bi	209					
Th	232	102.536				
U	238	108.635				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 13:35:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.099

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**50.613**	**ug/L**	1.574	63673	0.077
Be	9	**49.955**	**ug/L**	1.882	19087	0.023
B	11	**109.732**	**ug/L**	1.239	35282	0.042
Na	23	**4756.888**	**ug/L**	3.989	15148759	18.377
Mg	24	**5063.637**	**ug/L**	5.793	10361406	12.592
Al	27	**4923.951**	**ug/L**	4.149	14594309	17.731
P	31	**5110.072**	**ug/L**	1.910	875633	1.057
K	39	**4910.511**	**ug/L**	10.826	19291600	22.263
Ca	43	**4864.366**	**ug/L**	1.331	41911	0.050
> Sc	45		**ug/L**		822640	822639.988
Ti	47	**48.393**	**ug/L**	0.895	22121	0.026
V	51	**48.553**	**ug/L**	3.085	245585	0.274
Cr	52	**47.781**	**ug/L**	3.530	203454	0.237
Cr	53		**ug/L**		92026	-0.139
Mn	55	**52.380**	**ug/L**	1.911	325351	0.391
Fe	57	**5252.952**	**ug/L**	2.513	607918	0.725
Co	59	**50.789**	**ug/L**	2.224	232765	0.283
Ni	60	**51.667**	**ug/L**	1.368	50695	0.061
Cu	63		**ug/L**		121785	0.147
Cu	65	**50.204**	**ug/L**	0.888	61277	0.074
Zn	66	**48.370**	**ug/L**	1.810	43099	0.129
Zn	67		**ug/L**		12695	-0.001
Zn	68		**ug/L**		33343	0.097
> Ge	74		**ug/L**		330825	330824.682
As	75	**47.961**	**ug/L**	1.513	52805	0.150
Se	77		**ug/L**		7373	-0.033
Se	82	**48.009**	**ug/L**	1.253	4130	0.012
Kr	83		**ug/L**		1035	-0.000
Sr	88	**47.724**	**ug/L**	1.357	479450	2.649
Y	89		**ug/L**		830	0.004
Zr	90	**46.818**	**ug/L**	2.127	273881	1.512
Mo	98	**47.998**	**ug/L**	1.898	122919	0.679
Ag	107	**47.919**	**ug/L**	1.794	195841	1.082
Cd	111	**47.777**	**ug/L**	1.038	47977	0.265
Cd	114		**ug/L**		114041	0.630
> In	115		**ug/L**		180875	180875.138
Sn	120	**48.452**	**ug/L**	2.787	201597	1.114
Sb	121	**47.655**	**ug/L**	1.554	195427	1.078
Sb	123		**ug/L**		151689	0.837
Ba	135		**ug/L**		48703	0.207
Ba	137	**45.526**	**ug/L**	0.223	84160	0.358
Ho	165		**ug/L**		73	0.000
> Ta	181		**ug/L**		234750	234750.047
Tl	205	**48.445**	**ug/L**	0.649	449710	1.914
Pb	208	**48.520**	**ug/L**	0.156	587112	2.499
Bi	209		**ug/L**		71	0.000
Th	232	**49.052**	**ug/L**	0.335	647410	2.756
U	238	**52.962**	**ug/L**	0.195	680174	2.896

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	101.226				
	Be	9	99.910				
	B	11	109.732				
	Na	23	95.138				
	Mg	24	101.273				
	Al	27	97.504				
	P	31	102.201				
	K	39	98.210				
	Ca	43	97.287				
>	Sc	45		94.8			
	Ti	47	96.786				
	V	51	97.106				
	Cr	52	95.563				
	Cr	53					
	Mn	55	104.761				
	Fe	57	105.059				
	Co	59	101.578				
	Ni	60	103.333				
	Cu	63					
	Cu	65	100.409				
	Zn	66	96.741				
	Zn	67					
	Zn	68					
>	Ge	74		97.3			
	As	75	95.922				
	Se	77					
	Se	82	96.018				
	Kr	83					
	Sr	88	95.448				
	Y	89					
	Zr	90	93.636				
	Mo	98	95.995				
	Ag	107	95.838				
	Cd	111	95.553				
	Cd	114					
>	In	115		102.3			
	Sn	120	96.904				
	Sb	121	95.311				
	Sb	123					
	Ba	135					
	Ba	137	91.053				
	Ho	165					
>	Ta	181		109.3			
	Tl	205	96.891				
	Pb	208	97.040				
	Bi	209					
	Th	232	98.104				
	U	238	105.924				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6
Report Date/Time: Wednesday, July 06, 2005 13:38:02

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 13:40:26
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.100

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.047**	**ug/L**	42.761	162	0.000
|	Be	9	**0.009**	**ug/L**	75.509	28	0.000
|	B	11	**0.457**	**ug/L**	28.797	614	0.000
|	Na	23	**5.195**	**ug/L**	20.282	43065	0.020
|	Mg	24	**2.187**	**ug/L**	87.954	10671	0.005
|	Al	27	**1.825**	**ug/L**	115.013	19347	0.007
|	P	31	**-1.026**	**ug/L**	56.981	6295	-0.000
|	K	39	**13.132**	**ug/L**	111.756	1081854	0.060
|	Ca	43	**-1.698**	**ug/L**	344.626	733	-0.000
|>	Sc	45		**ug/L**		866637	866637.066
|	Ti	47	**-0.190**	**ug/L**	30.384	566	-0.000
|	V	51	**-0.152**	**ug/L**	549.190	20621	-0.001
|	Cr	52	**-0.188**	**ug/L**	53.738	8363	-0.001
|	Cr	53		**ug/L**		161495	-0.064
|	Mn	55	**-0.096**	**ug/L**	10.375	2970	-0.001
|	Fe	57	**-2.265**	**ug/L**	28.415	12153	-0.000
|	Co	59	**0.006**	**ug/L**	102.342	256	0.000
|	Ni	60	**-0.012**	**ug/L**	68.330	259	-0.000
|	Cu	63		**ug/L**		399	-0.000
⌞	Cu	65	**-0.055**	**ug/L**	21.584	162	-0.000
⌜	Zn	66	**0.043**	**ug/L**	66.791	574	0.000
|	Zn	67		**ug/L**		10981	-0.006
|	Zn	68		**ug/L**		1245	-0.001
|>	Ge	74		**ug/L**		336697	336697.285
|	As	75	**-0.133**	**ug/L**	535.071	3186	-0.000
|	Se	77		**ug/L**		14464	-0.013
|	Se	82	**-0.048**	**ug/L**	1087.004	7	-0.000
⌞	Kr	83		**ug/L**		1065	-0.000
⌜	Sr	88	**0.001**	**ug/L**	25.233	363	0.000
|	Y	89		**ug/L**		123	0.000
|	Zr	90	**-0.026**	**ug/L**	11.837	316	-0.001
|	Mo	98	**0.180**	**ug/L**	7.037	591	0.003
|	Ag	107	**0.008**	**ug/L**	15.086	132	0.000
|	Cd	111	**-0.006**	**ug/L**	115.198	24	-0.000
|	Cd	114		**ug/L**		73	0.000
|>	In	115		**ug/L**		175600	175599.504
|	Sn	120	**-0.000**	**ug/L**	3736.743	234	-0.000
|	Sb	121	**0.264**	**ug/L**	19.027	1483	0.006
⌞	Sb	123		**ug/L**		1202	0.005
⌜	Ba	135		**ug/L**		58	-0.000
|	Ba	137	**0.003**	**ug/L**	114.475	92	0.000
|	Ho	165		**ug/L**		27	-0.000
|>	Ta	181		**ug/L**		214989	214988.856
|	Tl	205	**0.006**	**ug/L**	95.165	473	0.000
|	Pb	208	**0.005**	**ug/L**	23.542	457	0.000
|	Bi	209		**ug/L**		42	0.000
|	Th	232	**0.009**	**ug/L**	57.350	507	0.000
⌞	U	238	**0.014**	**ug/L**	24.752	541	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		99.8			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		99.0			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		99.3			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		100.1			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 14:37:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**49.401**	**ug/L**	0.757	60550	0.075
|	Be	9	**49.423**	**ug/L**	0.151	18393	0.023
|	B	11	**109.657**	**ug/L**	0.657	34347	0.042
|	Na	23	**5378.464**	**ug/L**	2.432	16673801	20.778
|	Mg	24	**5296.472**	**ug/L**	5.223	10559750	13.171
|	Al	27	**5015.199**	**ug/L**	1.562	14483009	18.059
|	P	31	**5292.994**	**ug/L**	0.721	883419	1.095
|	K	39	**4809.673**	**ug/L**	2.499	18424562	21.806
|	Ca	43	**4924.954**	**ug/L**	0.665	41324	0.051
|>	Sc	45		**ug/L**		801282	801281.804
|	Ti	47	**49.771**	**ug/L**	1.813	22140	0.027
|	V	51	**50.286**	**ug/L**	1.642	247110	0.284
|	Cr	52	**48.750**	**ug/L**	0.467	202105	0.242
|	Cr	53		**ug/L**		102715	-0.122
|	Mn	55	**52.171**	**ug/L**	0.583	315705	0.390
|	Fe	57	**5244.121**	**ug/L**	2.066	591303	0.724
|	Co	59	**50.521**	**ug/L**	2.361	225578	0.281
|	Ni	60	**51.512**	**ug/L**	1.355	49237	0.061
|	Cu	63		**ug/L**		117755	0.146
⌊	Cu	65	**49.264**	**ug/L**	0.801	58577	0.073
⌈	Zn	66	**49.117**	**ug/L**	1.881	42207	0.131
|	Zn	67		**ug/L**		13475	0.003
|	Zn	68		**ug/L**		32274	0.097
|>	Ge	74		**ug/L**		319167	319167.464
|	As	75	**47.940**	**ug/L**	1.232	50916	0.150
|	Se	77		**ug/L**		8229	-0.030
|	Se	82	**46.708**	**ug/L**	3.586	3876	0.012
⌊	Kr	83		**ug/L**		1074	0.000
⌈	Sr	88	**48.807**	**ug/L**	1.228	459774	2.709
|	Y	89		**ug/L**		758	0.004
|	Zr	90	**48.145**	**ug/L**	0.776	264111	1.555
|	Mo	98	**47.937**	**ug/L**	1.056	115122	0.678
|	Ag	107	**48.134**	**ug/L**	1.108	184472	1.087
|	Cd	111	**47.632**	**ug/L**	1.901	44847	0.264
|	Cd	114		**ug/L**		106282	0.626
|>	In	115		**ug/L**		169590	169590.470
|	Sn	120	**48.710**	**ug/L**	0.439	190086	1.120
|	Sb	121	**47.887**	**ug/L**	1.619	184147	1.083
⌊	Sb	123		**ug/L**		142113	0.836
⌈	Ba	135		**ug/L**		46547	0.212
|	Ba	137	**46.922**	**ug/L**	0.589	81048	0.369
|	Ho	165		**ug/L**		84	0.000
|>	Ta	181		**ug/L**		219362	219362.298
|	Tl	205	**49.578**	**ug/L**	0.565	430032	1.958
|	Pb	208	**49.269**	**ug/L**	0.488	557076	2.538
|	Bi	209		**ug/L**		72	0.000
|	Th	232	**50.040**	**ug/L**	2.099	617083	2.812
⌊	U	238	**54.080**	**ug/L**	1.555	648953	2.957

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	98.802				
|	Be	9	98.846				
|	B	11	109.657				
|	Na	23	107.569				
|	Mg	24	105.929				
|	Al	27	99.311				
|	P	31	105.860				
|	K	39	96.193				
|	Ca	43	98.499				
|>	Sc	45		92.3			
|	Ti	47	99.542				
|	V	51	100.572				
|	Cr	52	97.500				
|	Cr	53					
|	Mn	55	104.343				
|	Fe	57	104.882				
|	Co	59	101.043				
|	Ni	60	103.025				
|	Cu	63					
⌊	Cu	65	98.527				
⌈	Zn	66	98.235				
|	Zn	67					
|	Zn	68					
|>	Ge	74		93.9			
|	As	75	95.879				
|	Se	77					
|	Se	82	93.416				
⌊	Kr	83					
⌈	Sr	88	97.615				
|	Y	89					
|	Zr	90	96.290				
|	Mo	98	95.874				
|	Ag	107	96.269				
|	Cd	111	95.263				
|	Cd	114					
|>	In	115		95.9			
|	Sn	120	97.420				
|	Sb	121	95.775				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	93.844				
|	Ho	165					
|>	Ta	181		102.1			
|	Tl	205	99.155				
|	Pb	208	98.539				
|	Bi	209					
|	Th	232	100.079				
⌊	U	238	108.161				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 14:42:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.112

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.014**	**ug/L**	59.609	116	0.000
Be	9	**0.019**	**ug/L**	17.432	31	0.000
B	11	**0.704**	**ug/L**	17.726	679	0.000
Na	23	**1.145**	**ug/L**	55.390	28696	0.004
Mg	24	**0.721**	**ug/L**	156.167	7335	0.002
Al	27	**0.463**	**ug/L**	336.050	14675	0.002
P	31	**-0.984**	**ug/L**	41.793	6136	-0.000
K	39	**20.027**	**ug/L**	29.656	1079652	0.091
Ca	43	**-9.085**	**ug/L**	45.006	649	-0.000
> Sc	45		**ug/L**		843561	843561.022
Ti	47	**-0.099**	**ug/L**	47.728	593	-0.000
V	51	**0.609**	**ug/L**	114.599	23721	0.003
Cr	52	**0.115**	**ug/L**	44.410	9411	0.001
Cr	53		**ug/L**		167881	-0.052
Mn	55	**-0.077**	**ug/L**	6.470	3015	-0.001
Fe	57	**-6.759**	**ug/L**	21.523	11306	-0.001
Co	59	**0.007**	**ug/L**	100.803	256	0.000
Ni	60	**-0.029**	**ug/L**	72.174	235	-0.000
Cu	63		**ug/L**		449	-0.000
Cu	65	**-0.052**	**ug/L**	23.074	162	-0.000
Zn	66	**0.018**	**ug/L**	145.234	525	0.000
Zn	67		**ug/L**		11262	-0.004
Zn	68		**ug/L**		1380	0.000
> Ge	74		**ug/L**		320783	320783.225
As	75	**0.744**	**ug/L**	58.929	3914	0.002
Se	77		**ug/L**		15512	-0.007
Se	82	**0.074**	**ug/L**	450.012	17	0.000
Kr	83		**ug/L**		1038	0.000
Sr	88	**0.002**	**ug/L**	115.114	353	0.000
Y	89		**ug/L**		114	0.000
Zr	90	**-0.025**	**ug/L**	13.934	305	-0.001
Mo	98	**0.012**	**ug/L**	26.146	165	0.000
Ag	107	**0.008**	**ug/L**	20.377	122	0.000
Cd	111	**0.007**	**ug/L**	58.779	35	0.000
Cd	114		**ug/L**		61	0.000
> In	115		**ug/L**		165362	165362.439
Sn	120	**0.002**	**ug/L**	105.554	230	0.000
Sb	121	**0.276**	**ug/L**	22.304	1441	0.006
Sb	123		**ug/L**		1169	0.005
Ba	135		**ug/L**		60	0.000
Ba	137	**0.005**	**ug/L**	11.729	90	0.000
Ho	165		**ug/L**		28	-0.000
> Ta	181		**ug/L**		201990	201989.997
Tl	205	**0.039**	**ug/L**	11.080	709	0.002
Pb	208	**0.005**	**ug/L**	81.409	426	0.000
Bi	209		**ug/L**		33	0.000
Th	232	**0.007**	**ug/L**	69.725	455	0.000
U	238	**0.015**	**ug/L**	36.462	515	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		97.2			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		94.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		93.6			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		94.1			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7
Report Date/Time: Wednesday, July 06, 2005 14:45:07

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 15:18:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.119

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**47.009**	**ug/L**	1.045	57967	0.072
|	Be	9	**47.815**	**ug/L**	1.279	17902	0.022
|	B	11	**109.140**	**ug/L**	2.375	34387	0.042
|	Na	23	**5478.873**	**ug/L**	5.384	17080479	21.166
|	Mg	24	**5346.859**	**ug/L**	6.658	10720800	13.297
|	Al	27	**5365.633**	**ug/L**	6.068	15582103	19.321
|	P	31	**5404.314**	**ug/L**	1.760	907171	1.118
|	K	39	**4573.213**	**ug/L**	6.649	17665904	20.734
|	Ca	43	**4955.792**	**ug/L**	1.507	41823	0.051
|>	Sc	45		**ug/L**		806044	806044.323
|	Ti	47	**50.244**	**ug/L**	1.500	22479	0.027
|	V	51	**50.160**	**ug/L**	1.272	247999	0.283
|	Cr	52	**48.127**	**ug/L**	0.716	200811	0.239
|	Cr	53		**ug/L**		119741	-0.102
|	Mn	55	**51.233**	**ug/L**	0.656	311931	0.383
|	Fe	57	**5106.979**	**ug/L**	1.181	579564	0.705
|	Co	59	**49.129**	**ug/L**	2.166	220662	0.274
|	Ni	60	**50.009**	**ug/L**	1.597	48090	0.059
|	Cu	63		**ug/L**		114704	0.141
⌊	Cu	65	**47.603**	**ug/L**	0.594	56943	0.070
⌜	Zn	66	**48.374**	**ug/L**	0.308	40742	0.129
|	Zn	67		**ug/L**		14928	0.009
|	Zn	68		**ug/L**		32125	0.099
|>	Ge	74		**ug/L**		312707	312707.250
|	As	75	**46.835**	**ug/L**	2.189	48813	0.146
|	Se	77		**ug/L**		8703	-0.028
|	Se	82	**47.653**	**ug/L**	1.072	3875	0.012
⌊	Kr	83		**ug/L**		976	-0.000
⌜	Sr	88	**49.987**	**ug/L**	0.245	448464	2.775
|	Y	89		**ug/L**		761	0.004
|	Zr	90	**49.555**	**ug/L**	1.796	258865	1.600
|	Mo	98	**48.543**	**ug/L**	1.904	111016	0.687
|	Ag	107	**48.850**	**ug/L**	0.925	178294	1.103
|	Cd	111	**48.061**	**ug/L**	1.508	43097	0.267
|	Cd	114		**ug/L**		103241	0.639
|>	In	115		**ug/L**		161508	161507.571
|	Sn	120	**49.860**	**ug/L**	1.597	185282	1.146
|	Sb	121	**48.130**	**ug/L**	1.337	176270	1.089
⌊	Sb	123		**ug/L**		137083	0.847
⌜	Ba	135		**ug/L**		45547	0.217
|	Ba	137	**47.758**	**ug/L**	1.813	78791	0.376
|	Ho	165		**ug/L**		74	0.000
|>	Ta	181		**ug/L**		209533	209532.555
|	Tl	205	**49.989**	**ug/L**	0.464	414176	1.975
|	Pb	208	**49.865**	**ug/L**	0.337	538549	2.568
|	Bi	209		**ug/L**		59	0.000
|	Th	232	**51.115**	**ug/L**	1.052	602139	2.872
⌊	U	238	**54.875**	**ug/L**	0.746	629011	3.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	94.018				
|	Be	9	95.630				
|	B	11	109.140				
|	Na	23	109.577				
|	Mg	24	106.937				
|	Al	27	106.250				
|	P	31	108.086				
|	K	39	91.464				
|	Ca	43	99.116				
|>	Sc	45		92.8			
|	Ti	47	100.489				
|	V	51	100.319				
|	Cr	52	96.254				
|	Cr	53					
|	Mn	55	102.466				
|	Fe	57	102.140				
|	Co	59	98.258				
|	Ni	60	100.018				
|	Cu	63					
⌊	Cu	65	95.206				
⌈	Zn	66	96.748				
|	Zn	67					
|	Zn	68					
|>	Ge	74		92.0			
|	As	75	93.669				
|	Se	77					
|	Se	82	95.306				
⌊	Kr	83					
⌈	Sr	88	99.974				
|	Y	89					
|	Zr	90	99.110				
|	Mo	98	97.086				
|	Ag	107	97.700				
|	Cd	111	96.122				
|	Cd	114					
|>	In	115		91.4			
|	Sn	120	99.720				
|	Sb	121	96.261				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	95.515				
|	Ho	165					
|>	Ta	181		97.6			
|	Tl	205	99.979				
|	Pb	208	99.730				
|	Bi	209					
|	Th	232	102.230				
⌊	U	238	109.750				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 15:24:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.120

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.001**	**ug/L**	1764.639	97	0.000
Be	9	**0.026**	**ug/L**	77.205	34	0.000
B	11	**1.045**	**ug/L**	22.033	778	0.000
Na	23	**1.590**	**ug/L**	49.301	29698	0.006
Mg	24	**-0.843**	**ug/L**	99.909	4001	-0.002
Al	27	**0.529**	**ug/L**	158.617	14674	0.002
P	31	**1.182**	**ug/L**	60.745	6418	0.000
K	39	**19.874**	**ug/L**	29.422	1063147	0.090
Ca	43	**-9.432**	**ug/L**	57.054	637	-0.000
> Sc	45		**ug/L**		831099	831099.388
Ti	47	**-0.186**	**ug/L**	23.231	545	-0.000
V	51	**1.376**	**ug/L**	14.183	26970	0.008
Cr	52	**-0.243**	**ug/L**	21.919	7799	-0.001
Cr	53		**ug/L**		170038	-0.046
Mn	55	**-0.095**	**ug/L**	10.300	2859	-0.001
Fe	57	**-15.212**	**ug/L**	13.503	10170	-0.002
Co	59	**0.006**	**ug/L**	75.003	246	0.000
Ni	60	**-0.028**	**ug/L**	31.691	232	-0.000
Cu	63		**ug/L**		398	-0.000
Cu	65	**-0.060**	**ug/L**	19.088	150	-0.000
Zn	66	**0.037**	**ug/L**	139.343	536	0.000
Zn	67		**ug/L**		11939	-0.001
Zn	68		**ug/L**		1462	0.000
> Ge	74		**ug/L**		317421	317420.920
As	75	**0.318**	**ug/L**	170.992	3452	0.001
Se	77		**ug/L**		15217	-0.008
Se	82	**-0.282**	**ug/L**	249.369	-12	-0.000
Kr	83		**ug/L**		1039	0.000
Sr	88	**0.006**	**ug/L**	113.664	374	0.000
Y	89		**ug/L**		116	0.000
Zr	90	**-0.023**	**ug/L**	16.031	306	-0.001
Mo	98	**0.014**	**ug/L**	39.741	166	0.000
Ag	107	**0.005**	**ug/L**	67.745	110	0.000
Cd	111	**-0.001**	**ug/L**	1134.365	27	-0.000
Cd	114		**ug/L**		67	0.000
> In	115		**ug/L**		161483	161482.904
Sn	120	**0.004**	**ug/L**	185.024	229	0.000
Sb	121	**0.357**	**ug/L**	26.116	1703	0.008
Sb	123		**ug/L**		1302	0.006
Ba	135		**ug/L**		60	0.000
Ba	137	**0.002**	**ug/L**	354.017	85	0.000
Ho	165		**ug/L**		28	-0.000
> Ta	181		**ug/L**		200346	200345.826
Tl	205	**0.072**	**ug/L**	14.455	963	0.003
Pb	208	**0.008**	**ug/L**	27.072	450	0.000
Bi	209		**ug/L**		31	-0.000
Th	232	**0.010**	**ug/L**	64.178	482	0.001
U	238	**0.018**	**ug/L**	41.663	544	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		95.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		93.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		91.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		93.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 15:55:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.126

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	48.383	ug/L	1.058	60428	0.074
Be	9	49.406	ug/L	1.738	18734	0.023
B	11	111.283	ug/L	1.594	35507	0.043
Na	23	5051.832	ug/L	3.407	15962115	19.516
Mg	24	5534.832	ug/L	5.330	11239548	13.764
Al	27	5221.967	ug/L	6.639	15359502	18.804
P	31	5350.168	ug/L	1.440	909818	1.107
K	39	5126.147	ug/L	6.029	19941879	23.241
Ca	43	4971.311	ug/L	1.138	42496	0.051
> Sc	45		ug/L		816469	816469.008
Ti	47	49.485	ug/L	2.604	22430	0.027
V	51	50.057	ug/L	1.849	250725	0.282
Cr	52	47.810	ug/L	0.839	202121	0.237
Cr	53		ug/L		135675	-0.085
Mn	55	50.444	ug/L	1.512	311122	0.377
Fe	57	5070.966	ug/L	2.459	582941	0.700
Co	59	48.323	ug/L	1.510	219852	0.269
Ni	60	48.631	ug/L	0.740	47382	0.058
Cu	63		ug/L		114821	0.140
Cu	65	47.219	ug/L	1.535	57215	0.070
Zn	66	49.165	ug/L	1.184	41361	0.131
Zn	67		ug/L		15560	0.011
Zn	68		ug/L		32091	0.099
> Ge	74		ug/L		312433	312432.855
As	75	47.361	ug/L	1.650	49279	0.148
Se	77		ug/L		10351	-0.023
Se	82	47.990	ug/L	0.898	3899	0.012
Kr	83		ug/L		969	-0.000
Sr	88	50.154	ug/L	0.136	446639	2.784
Y	89		ug/L		748	0.004
Zr	90	49.883	ug/L	0.737	258670	1.611
Mo	98	48.954	ug/L	0.860	111142	0.692
Ag	107	48.557	ug/L	0.884	175924	1.097
Cd	111	48.351	ug/L	1.128	43039	0.268
Cd	114		ug/L		102278	0.638
> In	115		ug/L		160312	160311.884
Sn	120	50.006	ug/L	0.674	184462	1.149
Sb	121	47.921	ug/L	0.227	174208	1.084
Sb	123		ug/L		134587	0.838
Ba	135		ug/L		44925	0.216
Ba	137	48.273	ug/L	0.824	79120	0.380
Ho	165		ug/L		67	0.000
> Ta	181		ug/L		208159	208159.400
Tl	205	50.172	ug/L	1.129	412953	1.982
Pb	208	50.270	ug/L	1.086	539335	2.589
Bi	209		ug/L		60	0.000
Th	232	51.991	ug/L	0.964	608425	2.921
U	238	55.395	ug/L	1.131	630810	3.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovi	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	96.766				
|	Be	9	98.812				
|	B	11	111.283				
|	Na	23	101.037				
|	Mg	24	110.697				
|	Al	27	103.405				
|	P	31	107.003				
|	K	39	102.523				
|	Ca	43	99.426				
|>	Sc	45		94.0			
|	Ti	47	98.969				
|	V	51	100.114				
|	Cr	52	95.620				
|	Cr	53					
|	Mn	55	100.888				
|	Fe	57	101.419				
|	Co	59	96.646				
|	Ni	60	97.263				
|	Cu	63					
⌊	Cu	65	94.438				
⌈	Zn	66	98.329				
|	Zn	67					
|	Zn	68					
|>	Ge	74		91.9			
|	As	75	94.723				
|	Se	77					
|	Se	82	95.981				
⌊	Kr	83					
⌈	Sr	88	100.309				
|	Y	89					
|	Zr	90	99.767				
|	Mo	98	97.908				
|	Ag	107	97.114				
|	Cd	111	96.702				
|	Cd	114					
|>	In	115		90.7			
|	Sn	120	100.013				
|	Sb	121	95.842				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	96.546				
|	Ho	165					
|>	Ta	181		96.9			
|	Tl	205	100.344				
|	Pb	208	100.539				
|	Bi	209					
|	Th	232	103.982				
⌊	U	238	110.790				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	B	11	CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 16:00:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.127

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.011**	**ug/L**	6.930	111	0.000
|	Be	9	**0.010**	**ug/L**	163.748	28	0.000
|	B	11	**0.992**	**ug/L**	15.781	770	0.000
|	Na	23	**0.245**	**ug/L**	680.251	25690	0.001
|	Mg	24	**-0.070**	**ug/L**	1038.470	5668	-0.000
|	Al	27	**2.015**	**ug/L**	40.424	19347	0.007
|	P	31	**2.386**	**ug/L**	18.882	6702	0.000
|	K	39	**13.784**	**ug/L**	28.847	1052390	0.062
|	Ca	43	**-11.357**	**ug/L**	61.185	627	-0.000
|>	Sc	45		**ug/L**		840807	840807.203
|	Ti	47	**-0.212**	**ug/L**	2.179	540	-0.000
|	V	51	**1.035**	**ug/L**	99.851	25659	0.006
|	Cr	52	**0.539**	**ug/L**	10.258	11150	0.003
|	Cr	53		**ug/L**		199427	-0.013
|	Mn	55	**-0.073**	**ug/L**	12.925	3032	-0.001
|	Fe	57	**-5.222**	**ug/L**	34.511	11447	-0.001
|	Co	59	**0.006**	**ug/L**	9.155	250	0.000
|	Ni	60	**-0.027**	**ug/L**	19.520	236	-0.000
|	Cu	63		**ug/L**		423	-0.000
⌊	Cu	65	**-0.058**	**ug/L**	24.879	154	-0.000
⌈	Zn	66	**-0.021**	**ug/L**	112.714	489	-0.000
|	Zn	67		**ug/L**		12513	0.000
|	Zn	68		**ug/L**		1494	0.000
|>	Ge	74		**ug/L**		318713	318712.622
|	As	75	**0.765**	**ug/L**	75.363	3911	0.002
|	Se	77		**ug/L**		19056	0.004
|	Se	82	**-0.530**	**ug/L**	72.363	-33	-0.000
⌊	Kr	83		**ug/L**		1022	-0.000
⌈	Sr	88	**0.008**	**ug/L**	32.546	400	0.000
|	Y	89		**ug/L**		124	0.000
|	Zr	90	**-0.027**	**ug/L**	8.176	291	-0.001
|	Mo	98	**0.020**	**ug/L**	39.628	179	0.000
|	Ag	107	**0.002**	**ug/L**	80.324	101	0.000
|	Cd	111	**0.000**	**ug/L**	48331.995	28	0.000
|	Cd	114		**ug/L**		62	0.000
|>	In	115		**ug/L**		163262	163261.923
|	Sn	120	**-0.002**	**ug/L**	81.562	212	-0.000
|	Sb	121	**0.354**	**ug/L**	30.631	1708	0.008
⌊	Sb	123		**ug/L**		1401	0.007
⌈	Ba	135		**ug/L**		67	0.000
|	Ba	137	**0.006**	**ug/L**	121.065	91	0.000
|	Ho	165		**ug/L**		25	-0.000
|>	Ta	181		**ug/L**		199010	199010.304
|	Tl	205	**0.044**	**ug/L**	19.211	731	0.002
|	Pb	208	**0.004**	**ug/L**	111.396	412	0.000
|	Bi	209		**ug/L**		33	0.000
|	Th	232	**0.008**	**ug/L**	32.715	459	0.000
⌊	U	238	**0.017**	**ug/L**	22.260	529	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		96.9			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		93.8			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		92.4			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Ta	181		92.7			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870402
Sample Date/Time: Wednesday, July 06, 2005 16:09:34
Sample Type:
Sample Description: ESHL 6020 MB
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870402.128

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**0.031**	**ug/L**	15.022	142	0.000
Be	9	**-0.012**	**ug/L**	155.057	20	-0.000
B	11	**0.916**	**ug/L**	18.464	767	0.000
Na	23	**5.231**	**ug/L**	75.076	43069	0.020
Mg	24	**-1.073**	**ug/L**	125.724	3667	-0.003
Al	27	**-0.198**	**ug/L**	331.592	13006	-0.001
P	31	**-0.191**	**ug/L**	506.582	6435	-0.000
K	39	**25.197**	**ug/L**	47.161	1127512	0.114
Ca	43	**38.316**	**ug/L**	3.577	1088	0.000
> Sc	45		**ug/L**		865107	865107.434
Ti	47	**0.862**	**ug/L**	4.610	1057	0.000
V	51	**0.810**	**ug/L**	416.070	25284	0.005
Cr	52	**6.189**	**ug/L**	0.192	35697	0.031
Cr	53		**ug/L**		481091	0.306
Mn	55	**0.304**	**ug/L**	4.518	5551	0.002
Fe	57	**18.883**	**ug/L**	6.692	14656	0.003
Co	59	**0.004**	**ug/L**	123.190	245	0.000
Ni	60	**-0.032**	**ug/L**	29.733	238	-0.000
Cu	63		**ug/L**		2052	0.002
Cu	65	**0.571**	**ug/L**	4.714	963	0.001
Zn	66	**1.620**	**ug/L**	1.513	1833	0.004
Zn	67		**ug/L**		38958	0.086
Zn	68		**ug/L**		3970	0.009
> Ge	74		**ug/L**		310865	310865.403
As	75	**2.204**	**ug/L**	89.432	5219	0.007
Se	77		**ug/L**		53169	0.115
Se	82	**1.756**	**ug/L**	47.377	152	0.000
Kr	83		**ug/L**		967	-0.000
Sr	88	**0.040**	**ug/L**	3.296	649	0.002
Y	89		**ug/L**		140	0.000
Zr	90	**-0.028**	**ug/L**	14.764	266	-0.001
Mo	98	**-0.024**	**ug/L**	13.379	73	-0.000
Ag	107	**-0.010**	**ug/L**	6.814	54	-0.000
Cd	111	**-0.007**	**ug/L**	181.220	20	-0.000
Cd	114		**ug/L**		29	-0.000
> In	115		**ug/L**		153934	153934.174
Sn	120	**0.088**	**ug/L**	5.978	516	0.002
Sb	121	**0.143**	**ug/L**	20.953	877	0.003
Sb	123		**ug/L**		758	0.003
Ba	135		**ug/L**		78	0.000
Ba	137	**0.034**	**ug/L**	9.798	129	0.000
Ho	165		**ug/L**		29	0.000
> Ta	181		**ug/L**		191570	191570.162
Tl	205	**0.000**	**ug/L**	2780.197	375	0.000
Pb	208	**0.024**	**ug/L**	18.692	593	0.001
Bi	209		**ug/L**		91	0.000
Th	232	**-0.015**	**ug/L**	15.002	198	-0.001
U	238	**-0.024**	**ug/L**	3.093	80	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		99.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		91.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		87.1			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		89.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870403
Sample Date/Time: Wednesday, July 06, 2005 16:14:45
Sample Type:
Sample Description: ESHL 6020 LCS
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870403.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**49.322**	**ug/L**	1.354	64878	0.075
Be	9	**54.117**	**ug/L**	1.328	21613	0.025
B	11	**115.313**	**ug/L**	3.069	38734	0.045
Na	23	**2299.247**	**ug/L**	2.597	7663340	8.882
Mg	24	**2355.321**	**ug/L**	4.208	5041692	5.857
Al	27	**2094.572**	**ug/L**	3.567	6498920	7.542
P	31	**2259.067**	**ug/L**	0.802	408382	0.467
K	39	**1987.585**	**ug/L**	4.631	8773682	9.011
Ca	43	**2066.190**	**ug/L**	0.553	19039	0.021
> Sc	45		**ug/L**		860050	860049.985
Ti	47	**46.492**	**ug/L**	3.049	22240	0.025
V	51	**42.679**	**ug/L**	6.593	228319	0.241
Cr	52	**54.287**	**ug/L**	1.243	240521	0.269
Cr	53		**ug/L**		496327	0.327
Mn	55	**48.092**	**ug/L**	1.243	312622	0.359
Fe	57	**2021.754**	**ug/L**	0.517	252263	0.279
Co	59	**48.061**	**ug/L**	1.466	230338	0.268
Ni	60	**48.850**	**ug/L**	0.755	50132	0.058
Cu	63		**ug/L**		121220	0.140
Cu	65	**47.106**	**ug/L**	0.430	60127	0.070
Zn	66	**53.172**	**ug/L**	1.614	44001	0.141
Zn	67		**ug/L**		48377	0.118
Zn	68		**ug/L**		35579	0.111
> Ge	74		**ug/L**		307611	307610.885
As	75	**51.579**	**ug/L**	5.340	52555	0.161
Se	77		**ug/L**		53653	0.119
Se	82	**49.603**	**ug/L**	1.518	3967	0.013
Kr	83		**ug/L**		973	-0.000
Sr	88	**52.386**	**ug/L**	0.885	442147	2.908
Y	89		**ug/L**		149	0.000
Zr	90	**50.208**	**ug/L**	0.116	246773	1.621
Mo	98	**50.055**	**ug/L**	0.369	107707	0.708
Ag	107	**50.678**	**ug/L**	1.243	174032	1.145
Cd	111	**49.109**	**ug/L**	1.581	41431	0.273
Cd	114		**ug/L**		98731	0.649
> In	115		**ug/L**		151949	151948.746
Sn	120	**50.539**	**ug/L**	0.456	176705	1.162
Sb	121	**50.966**	**ug/L**	1.144	175582	1.153
Sb	123		**ug/L**		136494	0.896
Ba	135		**ug/L**		43161	0.224
Ba	137	**49.914**	**ug/L**	2.407	75641	0.393
Ho	165		**ug/L**		62	0.000
> Ta	181		**ug/L**		192526	192525.606
Tl	205	**48.577**	**ug/L**	1.716	369735	1.919
Pb	208	**49.450**	**ug/L**	2.237	490591	2.547
Bi	209		**ug/L**		88	0.000
Th	232	**50.402**	**ug/L**	3.118	545317	2.832
U	238	**54.682**	**ug/L**	4.129	575598	2.990

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌜	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		99.1			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌜	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		90.5			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌜	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		86.0			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌜	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		89.6			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 138851001
Sample Date/Time: Wednesday, July 06, 2005 16:19:56
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\138851001.130

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**29.451**	**ug/L**	0.507	41307	0.045
Be	9	**-0.004**	**ug/L**	242.917	24	-0.000
B	11	**31.792**	**ug/L**	0.854	11730	0.012
Na	23	**20681.907**	**ug/L**	3.179	73202055	79.898
Mg	24	**9334.784**	**ug/L**	4.402	21265293	23.214
Al	27	**2.203**	**ug/L**	36.574	21683	0.008
P	31	**67.913**	**ug/L**	3.655	19717	0.014
K	39	**714.902**	**ug/L**	4.932	4057468	3.241
Ca	43	**42842.547**	**ug/L**	1.296	404842	0.441
> Sc	45		**ug/L**		916016	916015.503
Ti	47	**5.730**	**ug/L**	1.930	3527	0.003
V	51	**-3.607**	**ug/L**	34.946	3967	-0.020
Cr	52	**51.676**	**ug/L**	1.347	244309	0.256
Cr	53		**ug/L**		577885	0.380
Mn	55	**25.118**	**ug/L**	0.794	175741	0.188
Fe	57	**181.435**	**ug/L**	1.821	36067	0.025
Co	59	**0.457**	**ug/L**	2.085	2571	0.003
Ni	60	**6.030**	**ug/L**	1.422	6843	0.007
Cu	63		**ug/L**		21543	0.023
Cu	65	**7.713**	**ug/L**	1.537	10692	0.011
Zn	66	**67.621**	**ug/L**	2.429	57167	0.180
Zn	67		**ug/L**		50510	0.121
Zn	68		**ug/L**		45091	0.139
> Ge	74		**ug/L**		315002	315001.604
As	75	**2.816**	**ug/L**	114.118	5873	0.009
Se	77		**ug/L**		66528	0.155
Se	82	**0.691**	**ug/L**	87.789	67	0.000
Kr	83		**ug/L**		1006	-0.000
Sr	88	**192.574**	**ug/L**	1.673	1629353	10.690
Y	89		**ug/L**		292	0.001
Zr	90	**0.438**	**ug/L**	45.158	2554	0.014
Mo	98	**1.903**	**ug/L**	2.673	4226	0.027
Ag	107	**0.004**	**ug/L**	79.665	101	0.000
Cd	111	**-0.005**	**ug/L**	24.453	22	-0.000
Cd	114		**ug/L**		68	0.000
> In	115		**ug/L**		152409	152409.334
Sn	120	**0.147**	**ug/L**	6.056	720	0.003
Sb	121	**0.357**	**ug/L**	3.746	1606	0.008
Sb	123		**ug/L**		1442	0.008
Ba	135		**ug/L**		27498	0.142
Ba	137	**31.341**	**ug/L**	3.017	47787	0.247
Ho	165		**ug/L**		37	0.000
> Ta	181		**ug/L**		193585	193585.255
Tl	205	**0.369**	**ug/L**	30.693	3195	0.015
Pb	208	**0.144**	**ug/L**	5.015	1789	0.007
Bi	209		**ug/L**		100	0.000
Th	232	**0.115**	**ug/L**	40.350	1612	0.006
U	238	**0.481**	**ug/L**	3.258	5428	0.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		105.5			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		92.7			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		86.2			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Ta	181		90.1			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870404
Sample Date/Time: Wednesday, July 06, 2005 16:25:07
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870404.131

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**28.897**	**ug/L**	1.080	41372	0.044
Be	9	**-0.011**	**ug/L**	110.550	22	-0.000
B	11	**30.907**	**ug/L**	1.303	11652	0.012
Na	23	**19839.261**	**ug/L**	1.730	71677012	76.643
Mg	24	**9566.867**	**ug/L**	6.827	22241761	23.791
Al	27	**1.575**	**ug/L**	52.442	20014	0.006
P	31	**68.082**	**ug/L**	1.586	20158	0.014
K	39	**688.675**	**ug/L**	3.399	4030373	3.122
Ca	43	**42757.115**	**ug/L**	0.759	412388	0.440
> Sc	45		**ug/L**		934916	934915.758
Ti	47	**5.378**	**ug/L**	4.189	3422	0.003
V	51	**-3.355**	**ug/L**	70.293	5337	-0.019
Cr	52	**50.713**	**ug/L**	2.453	244885	0.251
Cr	53		**ug/L**		616781	0.409
Mn	55	**25.038**	**ug/L**	1.808	178788	0.187
Fe	57	**183.153**	**ug/L**	2.133	37030	0.025
Co	59	**0.457**	**ug/L**	2.971	2627	0.003
Ni	60	**5.948**	**ug/L**	1.046	6892	0.007
Cu	63		**ug/L**		21802	0.022
Cu	65	**7.545**	**ug/L**	1.276	10680	0.011
Zn	66	**67.412**	**ug/L**	0.558	57125	0.179
Zn	67		**ug/L**		51861	0.125
Zn	68		**ug/L**		45539	0.140
> Ge	74		**ug/L**		315719	315719.492
As	75	**3.879**	**ug/L**	76.989	6955	0.012
Se	77		**ug/L**		71726	0.171
Se	82	**1.227**	**ug/L**	67.065	111	0.000
Kr	83		**ug/L**		1009	-0.000
Sr	88	**195.043**	**ug/L**	0.582	1648130	10.827
Y	89		**ug/L**		289	0.001
Zr	90	**0.115**	**ug/L**	15.458	966	0.004
Mo	98	**1.883**	**ug/L**	2.032	4179	0.027
Ag	107	**-0.008**	**ug/L**	50.020	59	-0.000
Cd	111	**-0.002**	**ug/L**	1148.346	25	-0.000
Cd	114		**ug/L**		60	0.000
> In	115		**ug/L**		152202	152202.274
Sn	120	**0.096**	**ug/L**	9.132	538	0.002
Sb	121	**0.350**	**ug/L**	1.636	1579	0.008
Sb	123		**ug/L**		1362	0.007
Ba	135		**ug/L**		27792	0.143
Ba	137	**31.684**	**ug/L**	1.024	48429	0.249
Ho	165		**ug/L**		34	0.000
> Ta	181		**ug/L**		194019	194019.002
Tl	205	**0.104**	**ug/L**	9.786	1177	0.004
Pb	208	**0.135**	**ug/L**	3.156	1706	0.007
Bi	209		**ug/L**		58	0.000
Th	232	**0.018**	**ug/L**	36.156	553	0.001
U	238	**0.471**	**ug/L**	2.175	5338	0.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		107.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		92.9			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		86.1			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		90.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870405
Sample Date/Time: Wednesday, July 06, 2005 16:30:19
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870405.132

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	70.109	ug/L	0.888	99160	0.107
Be	9	47.358	ug/L	0.559	20349	0.022
B	11	133.215	ug/L	1.031	48066	0.051
Na	23	22950.746	ug/L	1.985	82047303	88.663
Mg	24	11787.834	ug/L	1.841	27124098	29.314
Al	27	1999.334	ug/L	4.471	6674566	7.199
P	31	2181.047	ug/L	0.650	424334	0.451
K	39	2594.380	ug/L	1.541	11981046	11.762
Ca	43	44716.363	ug/L	0.630	426722	0.460
> Sc	45		ug/L		925074	925073.587
Ti	47	48.312	ug/L	0.718	24833	0.026
V	51	37.720	ug/L	6.140	219709	0.213
Cr	52	95.782	ug/L	0.686	448985	0.475
Cr	53		ug/L		622626	0.422
Mn	55	68.432	ug/L	0.925	476890	0.511
Fe	57	2046.955	ug/L	0.744	274562	0.282
Co	59	44.401	ug/L	0.816	228924	0.247
Ni	60	49.230	ug/L	0.879	54340	0.058
Cu	63		ug/L		137258	0.148
Cu	65	50.253	ug/L	0.589	68979	0.074
Zn	66	114.697	ug/L	1.445	96711	0.305
Zn	67		ug/L		58365	0.146
Zn	68		ug/L		75462	0.235
> Ge	74		ug/L		315289	315288.733
As	75	43.494	ug/L	7.318	45926	0.136
Se	77		ug/L		68615	0.162
Se	82	10.572	ug/L	9.939	875	0.003
Kr	83		ug/L		1017	-0.000
Sr	88	233.246	ug/L	1.306	1944248	12.947
Y	89		ug/L		333	0.002
Zr	90	53.373	ug/L	2.618	259145	1.724
Mo	98	53.341	ug/L	2.412	113389	0.754
Ag	107	49.305	ug/L	1.179	167298	1.114
Cd	111	5.320	ug/L	3.009	4457	0.030
Cd	114		ug/L		9648	0.064
> In	115		ug/L		150160	150160.431
Sn	120	50.902	ug/L	2.030	175838	1.170
Sb	121	101.217	ug/L	1.637	344178	2.290
Sb	123		ug/L		271296	1.805
Ba	135		ug/L		70162	0.368
Ba	137	81.968	ug/L	1.145	123005	0.645
Ho	165		ug/L		79	0.000
> Ta	181		ug/L		190680	190680.485
Tl	205	47.521	ug/L	1.188	358303	1.877
Pb	208	19.871	ug/L	1.385	195494	1.024
Bi	209		ug/L		103	0.000
Th	232	50.386	ug/L	1.121	540117	2.831
U	238	55.506	ug/L	1.798	578933	3.035

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		106.6			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		92.7			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		85.0			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		88.8			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870406
Sample Date/Time: Wednesday, July 06, 2005 16:35:32
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 435189|5|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870406.133

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**6.439**	**ug/L**	1.663	8490	0.010
Be	9	**-0.010**	**ug/L**	97.111	20	-0.000
B	11	**8.612**	**ug/L**	1.846	3292	0.003
Na	23	**4802.782**	**ug/L**	3.246	15860445	18.554
Mg	24	**2424.585**	**ug/L**	13.852	5143407	6.029
Al	27	**-0.794**	**ug/L**	107.520	11004	-0.003
P	31	**18.002**	**ug/L**	8.288	9557	0.004
K	39	**139.555**	**ug/L**	5.222	1554557	0.633
Ca	43	**9534.292**	**ug/L**	0.426	84513	0.098
> Sc	45		**ug/L**		853418	853418.174
Ti	47	**1.181**	**ug/L**	5.056	1189	0.001
V	51	**2.326**	**ug/L**	13.102	32256	0.013
Cr	52	**10.731**	**ug/L**	0.837	54432	0.053
Cr	53		**ug/L**		359818	0.171
Mn	55	**5.560**	**ug/L**	1.511	38991	0.042
Fe	57	**29.767**	**ug/L**	4.146	15739	0.004
Co	59	**0.083**	**ug/L**	4.346	620	0.000
Ni	60	**1.289**	**ug/L**	2.521	1572	0.002
Cu	63		**ug/L**		4841	0.005
Cu	65	**1.659**	**ug/L**	2.784	2323	0.002
Zn	66	**14.255**	**ug/L**	1.220	12501	0.038
Zn	67		**ug/L**		22212	0.031
Zn	68		**ug/L**		11120	0.031
> Ge	74		**ug/L**		316366	316366.322
As	75	**1.514**	**ug/L**	88.628	4626	0.005
Se	77		**ug/L**		34353	0.053
Se	82	**1.566**	**ug/L**	35.763	139	0.000
Kr	83		**ug/L**		966	-0.000
Sr	88	**45.062**	**ug/L**	1.930	395751	2.501
Y	89		**ug/L**		132	0.000
Zr	90	**0.011**	**ug/L**	129.006	471	0.000
Mo	98	**0.361**	**ug/L**	4.809	938	0.005
Ag	107	**-0.008**	**ug/L**	57.661	61	-0.000
Cd	111	**-0.011**	**ug/L**	34.763	18	-0.000
Cd	114		**ug/L**		33	-0.000
> In	115		**ug/L**		158110	158110.407
Sn	120	**0.025**	**ug/L**	21.367	302	0.001
Sb	121	**0.054**	**ug/L**	9.096	584	0.001
Sb	123		**ug/L**		487	0.001
Ba	135		**ug/L**		6034	0.031
Ba	137	**6.827**	**ug/L**	2.348	10498	0.054
Ho	165		**ug/L**		22	-0.000
> Ta	181		**ug/L**		194023	194022.963
Tl	205	**0.380**	**ug/L**	28.254	3292	0.015
Pb	208	**0.032**	**ug/L**	3.119	675	0.002
Bi	209		**ug/L**		44	0.000
Th	232	**0.044**	**ug/L**	35.168	843	0.002
U	238	**0.084**	**ug/L**	5.088	1233	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		98.3			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		93.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		89.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		90.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 16:40:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**43.351**	**ug/L**	1.021	54325	0.066
Be	9	**47.500**	**ug/L**	0.798	18072	0.022
B	11	**110.813**	**ug/L**	1.669	35474	0.043
Na	23	**5938.420**	**ug/L**	7.327	18808861	22.941
Mg	24	**5797.999**	**ug/L**	2.091	11815935	14.419
Al	27	**5353.611**	**ug/L**	1.876	15804705	19.278
P	31	**5535.965**	**ug/L**	2.445	944185	1.145
K	39	**4845.600**	**ug/L**	7.596	18966461	21.969
Ca	43	**4901.701**	**ug/L**	0.438	42048	0.050
> Sc	45		**ug/L**		819118	819117.750
Ti	47	**49.517**	**ug/L**	0.710	22522	0.027
V	51	**50.107**	**ug/L**	0.835	251785	0.283
Cr	52	**47.776**	**ug/L**	2.354	202624	0.237
Cr	53		**ug/L**		137317	-0.083
Mn	55	**49.732**	**ug/L**	1.231	307793	0.372
Fe	57	**4974.981**	**ug/L**	1.261	574038	0.687
Co	59	**48.222**	**ug/L**	1.055	220114	0.268
Ni	60	**47.759**	**ug/L**	1.574	46682	0.057
Cu	63		**ug/L**		113039	0.137
Cu	65	**46.664**	**ug/L**	1.021	56730	0.069
Zn	66	**47.487**	**ug/L**	1.624	40267	0.126
Zn	67		**ug/L**		15178	0.009
Zn	68		**ug/L**		32022	0.098
> Ge	74		**ug/L**		314825	314825.373
As	75	**46.586**	**ug/L**	3.300	48910	0.145
Se	77		**ug/L**		10357	-0.023
Se	82	**46.598**	**ug/L**	3.371	3816	0.012
Kr	83		**ug/L**		975	-0.000
Sr	88	**50.218**	**ug/L**	0.919	444176	2.788
Y	89		**ug/L**		779	0.004
Zr	90	**50.555**	**ug/L**	1.508	260351	1.633
Mo	98	**49.411**	**ug/L**	1.901	111409	0.699
Ag	107	**48.174**	**ug/L**	0.071	173350	1.088
Cd	111	**47.949**	**ug/L**	1.494	42390	0.266
Cd	114		**ug/L**		98779	0.620
> In	115		**ug/L**		159221	159220.735
Sn	120	**49.764**	**ug/L**	1.840	182319	1.144
Sb	121	**47.188**	**ug/L**	0.781	170384	1.068
Sb	123		**ug/L**		132190	0.828
Ba	135		**ug/L**		45325	0.223
Ba	137	**48.848**	**ug/L**	1.183	78075	0.384
Ho	165		**ug/L**		73	0.000
> Ta	181		**ug/L**		203001	203001.446
Tl	205	**49.915**	**ug/L**	1.049	400635	1.972
Pb	208	**49.637**	**ug/L**	0.950	519334	2.557
Bi	209		**ug/L**		65	0.000
Th	232	**51.119**	**ug/L**	1.775	583318	2.872
U	238	**54.858**	**ug/L**	2.122	609084	2.999

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	86.702				
|	Be	9	94.999				
|	B	11	110.813				
|	Na	23	118.768				
|	Mg	24	115.960				
|	Al	27	106.012				
|	P	31	110.719				
|	K	39	96.912				
|	Ca	43	98.034				
|>	Sc	45		94.4			
|	Ti	47	99.035				
|	V	51	100.214				
|	Cr	52	95.551				
|	Cr	53					
|	Mn	55	99.465				
|	Fe	57	99.500				
|	Co	59	96.444				
|	Ni	60	95.518				
|	Cu	63					
⌊	Cu	65	93.328				
⌈	Zn	66	94.973				
|	Zn	67					
|	Zn	68					
|>	Ge	74		92.6			
|	As	75	93.173				
|	Se	77					
|	Se	82	93.196				
⌊	Kr	83					
⌈	Sr	88	100.436				
|	Y	89					
|	Zr	90	101.110				
|	Mo	98	98.822				
|	Ag	107	96.349				
|	Cd	111	95.898				
|	Cd	114					
|>	In	115		90.1			
|	Sn	120	99.528				
|	Sb	121	94.377				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	97.697				
|	Ho	165					
|>	Ta	181		94.5			
|	Tl	205	99.830				
|	Pb	208	99.273				
|	Bi	209					
|	Th	232	102.238				
⌊	U	238	109.716				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	B	11	CCV is out of limits (+/- 10%)
QC Std 6	Na	23	CCV is out of limits (+/- 10%)
QC Std 6	Mg	24	CCV is out of limits (+/- 10%)
QC Std 6	P	31	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 16:45:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.135

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	0.005	ug/L	69.525	103	0.000
	Be	9	0.019	ug/L	27.476	31	0.000
	B	11	1.031	ug/L	6.167	777	0.000
	Na	23	2.276	ug/L	98.415	32037	0.009
	Mg	24	1.719	ug/L	32.307	9336	0.004
	Al	27	0.175	ug/L	546.072	13673	0.001
	P	31	4.843	ug/L	8.700	7076	0.001
	K	39	25.144	ug/L	43.242	1087583	0.114
	Ca	43	-6.094	ug/L	10.789	668	-0.000
>	Sc	45		ug/L		834571	834571.059
	Ti	47	-0.069	ug/L	46.106	600	-0.000
	V	51	2.255	ug/L	54.986	31226	0.013
	Cr	52	0.341	ug/L	28.158	10245	0.002
	Cr	53		ug/L		218394	0.011
	Mn	55	-0.070	ug/L	12.838	3026	-0.001
	Fe	57	-2.034	ug/L	124.284	11730	-0.000
	Co	59	0.004	ug/L	129.421	238	0.000
	Ni	60	-0.032	ug/L	28.452	229	-0.000
	Cu	63		ug/L		481	-0.000
	Cu	65	-0.055	ug/L	19.137	157	-0.000
	Zn	66	-0.027	ug/L	75.827	483	-0.000
	Zn	67		ug/L		13151	0.002
	Zn	68		ug/L		1561	0.001
>	Ge	74		ug/L		318733	318733.275
	As	75	0.784	ug/L	83.303	3930	0.002
	Se	77		ug/L		19785	0.006
	Se	82	0.051	ug/L	1073.359	15	0.000
	Kr	83		ug/L		1006	-0.000
	Sr	88	0.007	ug/L	22.088	389	0.000
	Y	89		ug/L		142	0.000
	Zr	90	-0.023	ug/L	17.803	307	-0.001
	Mo	98	0.025	ug/L	12.580	190	0.000
	Ag	107	0.005	ug/L	79.051	108	0.000
	Cd	111	-0.001	ug/L	832.848	27	-0.000
	Cd	114		ug/L		63	0.000
>	In	115		ug/L		161262	161262.083
	Sn	120	0.011	ug/L	16.348	257	0.000
	Sb	121	0.354	ug/L	29.272	1692	0.008
	Sb	123		ug/L		1284	0.006
	Ba	135		ug/L		62	0.000
	Ba	137	0.007	ug/L	24.522	89	0.000
	Ho	165		ug/L		29	0.000
>	Ta	181		ug/L		193630	193630.037
	Tl	205	0.075	ug/L	9.195	950	0.003
	Pb	208	0.006	ug/L	14.418	414	0.000
	Bi	209		ug/L		28	-0.000
	Th	232	0.009	ug/L	64.795	458	0.001
	U	238	0.015	ug/L	54.054	494	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
\>	Sc	45		96.1			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
\>	Ge	74		93.8			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
\>	In	115		91.2			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
\>	Ta	181		90.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 138851002
Sample Date/Time: Wednesday, July 06, 2005 16:51:05
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\138851002.136

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**26.093**	**ug/L**	0.760	37604	0.040
Be	9	**-0.014**	**ug/L**	98.113	21	-0.000
B	11	**30.835**	**ug/L**	3.593	11700	0.012
Na	23	**20605.416**	**ug/L**	2.310	74930437	79.603
Mg	24	**9643.043**	**ug/L**	6.025	22567250	23.980
Al	27	**2.523**	**ug/L**	45.689	23353	0.009
P	31	**66.967**	**ug/L**	1.546	20070	0.014
K	39	**696.913**	**ug/L**	3.398	4091337	3.160
Ca	43	**42132.274**	**ug/L**	0.928	408964	0.434
> Sc	45		**ug/L**		940874	940874.103
Ti	47	**5.709**	**ug/L**	1.263	3612	0.003
V	51	**-1.800**	**ug/L**	71.657	13666	-0.010
Cr	52	**48.842**	**ug/L**	1.029	237739	0.242
Cr	53		**ug/L**		613724	0.402
Mn	55	**30.588**	**ug/L**	0.800	218952	0.229
Fe	57	**191.786**	**ug/L**	2.993	38389	0.026
Co	59	**0.389**	**ug/L**	1.813	2284	0.002
Ni	60	**6.585**	**ug/L**	2.519	7647	0.008
Cu	63		**ug/L**		30553	0.032
Cu	65	**10.663**	**ug/L**	2.484	15084	0.016
Zn	66	**98.385**	**ug/L**	0.638	84374	0.262
Zn	67		**ug/L**		54524	0.131
Zn	68		**ug/L**		65961	0.202
> Ge	74		**ug/L**		320403	320403.171
As	75	**5.299**	**ug/L**	45.634	8477	0.017
Se	77		**ug/L**		71699	0.168
Se	82	**0.953**	**ug/L**	20.432	90	0.000
Kr	83		**ug/L**		1010	-0.000
Sr	88	**191.856**	**ug/L**	0.284	1658715	10.650
Y	89		**ug/L**		286	0.001
Zr	90	**0.016**	**ug/L**	58.074	492	0.001
Mo	98	**2.036**	**ug/L**	0.958	4612	0.029
Ag	107	**-0.009**	**ug/L**	2.439	55	-0.000
Cd	111	**-0.002**	**ug/L**	785.360	25	-0.000
Cd	114		**ug/L**		64	0.000
> In	115		**ug/L**		155722	155721.563
Sn	120	**0.071**	**ug/L**	6.009	461	0.002
Sb	121	**0.608**	**ug/L**	11.703	2525	0.014
Sb	123		**ug/L**		2085	0.011
Ba	135		**ug/L**		28658	0.148
Ba	137	**32.777**	**ug/L**	2.008	49914	0.258
Ho	165		**ug/L**		42	0.000
> Ta	181		**ug/L**		193323	193323.325
Tl	205	**0.035**	**ug/L**	10.550	642	0.001
Pb	208	**0.142**	**ug/L**	2.966	1772	0.007
Bi	209		**ug/L**		42	0.000
Th	232	**-0.006**	**ug/L**	49.476	297	-0.000
U	238	**0.457**	**ug/L**	1.206	5163	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		108.4			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		94.3			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		88.1			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		90.0			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 138851003
Sample Date/Time: Wednesday, July 06, 2005 16:56:17
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\138851003.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**25.724**	**ug/L**	1.496	36515	0.039
|	Be	9	**0.001**	**ug/L**	3283.856	27	0.000
|	B	11	**31.031**	**ug/L**	1.630	11595	0.012
|	Na	23	**21913.071**	**ug/L**	3.496	78488870	84.655
|	Mg	24	**9550.347**	**ug/L**	7.458	22024768	23.750
|	Al	27	**23.458**	**ug/L**	21.803	92976	0.084
|	P	31	**76.125**	**ug/L**	2.551	21524	0.016
|	K	39	**697.082**	**ug/L**	7.202	4032066	3.160
|	Ca	43	**42194.343**	**ug/L**	0.446	403436	0.434
|>	Sc	45		**ug/L**		926788	926788.487
|	Ti	47	**5.899**	**ug/L**	3.840	3653	0.003
|	V	51	**-3.033**	**ug/L**	39.377	6987	-0.017
|	Cr	52	**51.240**	**ug/L**	1.845	245174	0.254
|	Cr	53		**ug/L**		649854	0.451
|	Mn	55	**27.045**	**ug/L**	0.725	191146	0.202
|	Fe	57	**281.461**	**ug/L**	2.019	49279	0.039
|	Co	59	**0.369**	**ug/L**	3.635	2147	0.002
|	Ni	60	**6.432**	**ug/L**	1.760	7365	0.008
|	Cu	63		**ug/L**		37688	0.040
⌞	Cu	65	**13.165**	**ug/L**	1.292	18287	0.019
⌜	Zn	66	**84.244**	**ug/L**	1.478	71764	0.224
|	Zn	67		**ug/L**		54348	0.132
|	Zn	68		**ug/L**		56369	0.173
|>	Ge	74		**ug/L**		317965	317965.082
|	As	75	**5.600**	**ug/L**	20.474	8702	0.017
|	Se	77		**ug/L**		75099	0.181
|	Se	82	**0.812**	**ug/L**	116.210	78	0.000
⌞	Kr	83		**ug/L**		1052	0.000
⌜	Sr	88	**197.896**	**ug/L**	0.714	1660021	10.985
|	Y	89		**ug/L**		632	0.004
|	Zr	90	**0.804**	**ug/L**	0.891	4323	0.026
|	Mo	98	**1.928**	**ug/L**	0.821	4244	0.027
|	Ag	107	**0.006**	**ug/L**	32.472	108	0.000
|	Cd	111	**0.011**	**ug/L**	151.312	36	0.000
|	Cd	114		**ug/L**		71	0.000
|>	In	115		**ug/L**		151090	151089.758
|	Sn	120	**0.120**	**ug/L**	1.323	617	0.003
|	Sb	121	**0.434**	**ug/L**	1.784	1857	0.010
⌞	Sb	123		**ug/L**		1655	0.009
⌜	Ba	135		**ug/L**		28176	0.147
|	Ba	137	**33.046**	**ug/L**	2.358	49751	0.260
|	Ho	165		**ug/L**		53	0.000
|>	Ta	181		**ug/L**		191154	191153.875
|	Tl	205	**0.024**	**ug/L**	16.255	552	0.001
|	Pb	208	**1.310**	**ug/L**	4.053	13246	0.067
|	Bi	209		**ug/L**		84	0.000
|	Th	232	**-0.005**	**ug/L**	24.245	300	-0.000
⌞	U	238	**0.459**	**ug/L**	2.928	5134	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		106.8			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		93.5			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		85.5			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		89.0			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870407
Sample Date/Time: Wednesday, July 06, 2005 17:01:27
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870407.138

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**24.636**	**ug/L**	0.516	35053	0.038
Be	9	**-0.002**	**ug/L**	878.274	26	-0.000
B	11	**30.471**	**ug/L**	2.406	11419	0.012
Na	23	**20365.414**	**ug/L**	3.818	73100385	78.676
Mg	24	**9721.684**	**ug/L**	6.398	22458753	24.176
Al	27	**19.731**	**ug/L**	18.587	80563	0.071
P	31	**75.817**	**ug/L**	0.979	21512	0.016
K	39	**687.327**	**ug/L**	7.536	3998198	3.116
Ca	43	**41649.955**	**ug/L**	0.807	399082	0.429
> Sc	45		**ug/L**		928750	928750.109
Ti	47	**5.707**	**ug/L**	3.176	3564	0.003
V	51	**-5.219**	**ug/L**	27.517	-4450	-0.029
Cr	52	**50.526**	**ug/L**	1.661	242418	0.250
Cr	53		**ug/L**		668146	0.469
Mn	55	**26.754**	**ug/L**	1.817	189516	0.200
Fe	57	**274.370**	**ug/L**	2.452	48475	0.038
Co	59	**0.362**	**ug/L**	3.692	2115	0.002
Ni	60	**6.268**	**ug/L**	1.876	7200	0.007
Cu	63		**ug/L**		36814	0.039
Cu	65	**13.116**	**ug/L**	2.155	18259	0.019
Zn	66	**80.806**	**ug/L**	2.042	69803	0.215
Zn	67		**ug/L**		55420	0.133
Zn	68		**ug/L**		55600	0.168
> Ge	74		**ug/L**		322324	322323.980
As	75	**4.680**	**ug/L**	36.753	7901	0.015
Se	77		**ug/L**		77150	0.184
Se	82	**0.856**	**ug/L**	49.721	82	0.000
Kr	83		**ug/L**		999	-0.000
Sr	88	**192.621**	**ug/L**	0.776	1632735	10.692
Y	89		**ug/L**		592	0.003
Zr	90	**0.039**	**ug/L**	18.308	596	0.001
Mo	98	**1.927**	**ug/L**	1.840	4288	0.027
Ag	107	**0.006**	**ug/L**	20.160	107	0.000
Cd	111	**-0.004**	**ug/L**	267.987	23	-0.000
Cd	114		**ug/L**		47	0.000
> In	115		**ug/L**		152673	152672.857
Sn	120	**0.127**	**ug/L**	5.706	649	0.003
Sb	121	**0.408**	**ug/L**	3.234	1786	0.009
Sb	123		**ug/L**		1525	0.008
Ba	135		**ug/L**		28211	0.147
Ba	137	**32.648**	**ug/L**	0.256	49262	0.257
Ho	165		**ug/L**		46	0.000
> Ta	181		**ug/L**		191524	191524.222
Tl	205	**0.016**	**ug/L**	25.615	492	0.001
Pb	208	**1.292**	**ug/L**	0.998	13103	0.067
Bi	209		**ug/L**		178	0.001
Th	232	**-0.010**	**ug/L**	4.071	247	-0.001
U	238	**0.464**	**ug/L**	0.935	5197	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		107.0			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		94.8			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		86.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		89.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870408
Sample Date/Time: Wednesday, July 06, 2005 17:06:39
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870408.139

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**61.303**	**ug/L**	1.265	86063	0.094
Be	9	**45.671**	**ug/L**	2.689	19476	0.021
B	11	**132.004**	**ug/L**	1.263	47271	0.051
Na	23	**22922.327**	**ug/L**	1.613	81335617	88.554
Mg	24	**11971.998**	**ug/L**	1.921	27341091	29.772
Al	27	**2144.501**	**ug/L**	5.140	7102378	7.722
P	31	**2250.240**	**ug/L**	0.724	434259	0.466
K	39	**2530.358**	**ug/L**	2.483	11625424	11.472
Ca	43	**43556.548**	**ug/L**	1.813	412505	0.448
> Sc	45		**ug/L**		918107	918107.048
Ti	47	**48.829**	**ug/L**	2.166	24899	0.026
V	51	**64.600**	**ug/L**	43.513	356466	0.364
Cr	52	**95.785**	**ug/L**	2.004	445556	0.475
Cr	53		**ug/L**		672920	0.482
Mn	55	**71.410**	**ug/L**	1.011	493697	0.534
Fe	57	**2174.977**	**ug/L**	1.417	288688	0.300
Co	59	**44.697**	**ug/L**	2.270	228673	0.249
Ni	60	**49.727**	**ug/L**	0.740	54470	0.059
Cu	63		**ug/L**		152013	0.165
Cu	65	**56.917**	**ug/L**	0.079	77505	0.084
Zn	66	**128.861**	**ug/L**	1.094	110406	0.343
Zn	67		**ug/L**		63328	0.159
Zn	68		**ug/L**		86016	0.264
> Ge	74		**ug/L**		320565	320565.168
As	75	**44.726**	**ug/L**	4.310	47921	0.140
Se	77		**ug/L**		74695	0.177
Se	82	**9.330**	**ug/L**	7.218	786	0.002
Kr	83		**ug/L**		1069	0.000
Sr	88	**233.044**	**ug/L**	0.677	1966818	12.936
Y	89		**ug/L**		629	0.003
Zr	90	**53.117**	**ug/L**	0.849	261160	1.715
Mo	98	**53.667**	**ug/L**	0.605	115521	0.759
Ag	107	**49.636**	**ug/L**	2.043	170513	1.121
Cd	111	**5.342**	**ug/L**	2.918	4532	0.030
Cd	114		**ug/L**		9715	0.064
> In	115		**ug/L**		152017	152017.167
Sn	120	**50.769**	**ug/L**	2.489	177577	1.167
Sb	121	**101.680**	**ug/L**	1.643	350079	2.300
Sb	123		**ug/L**		274171	1.802
Ba	135		**ug/L**		71818	0.374
Ba	137	**83.175**	**ug/L**	1.184	125491	0.654
Ho	165		**ug/L**		94	0.000
> Ta	181		**ug/L**		191697	191696.508
Tl	205	**47.004**	**ug/L**	0.825	356322	1.857
Pb	208	**20.765**	**ug/L**	0.348	205382	1.070
Bi	209		**ug/L**		109	0.000
Th	232	**49.034**	**ug/L**	0.701	528487	2.755
U	238	**53.011**	**ug/L**	1.367	555922	2.898

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		94.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		86.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		89.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870409
Sample Date/Time: Wednesday, July 06, 2005 17:11:51
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 435189|5|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\1200870409.140

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.461**	**ug/L**	1.559	5773	0.007
	Be	9	**-0.019**	**ug/L**	59.974	16	-0.000
	B	11	**7.045**	**ug/L**	1.059	2710	0.003
	Na	23	**4162.283**	**ug/L**	2.804	13420377	16.080
	Mg	24	**1828.190**	**ug/L**	2.015	3793983	4.546
	Al	27	**1.743**	**ug/L**	31.305	18345	0.006
	P	31	**17.076**	**ug/L**	6.877	9172	0.004
	K	39	**127.855**	**ug/L**	8.766	1473641	0.580
	Ca	43	**7446.999**	**ug/L**	2.486	64603	0.077
>	Sc	45		**ug/L**		833169	833168.621
	Ti	47	**1.022**	**ug/L**	3.727	1090	0.001
	V	51	**2.884**	**ug/L**	19.041	34133	0.016
	Cr	52	**8.326**	**ug/L**	3.383	43200	0.041
	Cr	53		**ug/L**		364257	0.187
	Mn	55	**4.766**	**ug/L**	1.294	33125	0.036
	Fe	57	**42.190**	**ug/L**	2.610	16795	0.006
	Co	59	**0.052**	**ug/L**	4.641	460	0.000
	Ni	60	**1.053**	**ug/L**	9.598	1302	0.001
	Cu	63		**ug/L**		6054	0.006
	Cu	65	**2.249**	**ug/L**	1.103	2994	0.003
	Zn	66	**13.563**	**ug/L**	1.819	11787	0.036
	Zn	67		**ug/L**		22135	0.032
	Zn	68		**ug/L**		10570	0.030
>	Ge	74		**ug/L**		312902	312901.673
	As	75	**2.933**	**ug/L**	42.557	5961	0.009
	Se	77		**ug/L**		34053	0.053
	Se	82	**0.856**	**ug/L**	35.105	80	0.000
	Kr	83		**ug/L**		972	-0.000
	Sr	88	**35.838**	**ug/L**	1.163	309302	1.989
	Y	89		**ug/L**		167	0.000
	Zr	90	**0.129**	**ug/L**	9.040	1058	0.004
	Mo	98	**0.302**	**ug/L**	1.731	790	0.004
	Ag	107	**-0.009**	**ug/L**	22.169	58	-0.000
	Cd	111	**-0.014**	**ug/L**	84.255	15	-0.000
	Cd	114		**ug/L**		28	-0.000
>	In	115		**ug/L**		155334	155334.174
	Sn	120	**0.021**	**ug/L**	23.957	282	0.000
	Sb	121	**0.051**	**ug/L**	14.149	562	0.001
	Sb	123		**ug/L**		465	0.001
	Ba	135		**ug/L**		4924	0.025
	Ba	137	**5.619**	**ug/L**	1.742	8547	0.044
	Ho	165		**ug/L**		24	-0.000
>	Ta	181		**ug/L**		191655	191654.776
	Tl	205	**0.366**	**ug/L**	33.673	3154	0.014
	Pb	208	**0.210**	**ug/L**	3.951	2421	0.011
	Bi	209		**ug/L**		37	0.000
	Th	232	**0.036**	**ug/L**	36.234	747	0.002
	U	238	**0.059**	**ug/L**	3.482	953	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.0		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			92.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			87.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181			89.2		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 138851004
Sample Date/Time: Wednesday, July 06, 2005 17:17:04
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\138851004.141

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**23.949**	**ug/L**	1.035	33415	0.037
|	Be	9	**0.004**	**ug/L**	239.028	27	0.000
|	B	11	**31.457**	**ug/L**	2.310	11542	0.012
|	Na	23	**22247.104**	**ug/L**	5.456	78285531	85.945
|	Mg	24	**9671.797**	**ug/L**	3.321	21916271	24.052
|	Al	27	**21.858**	**ug/L**	27.044	85933	0.079
|	P	31	**80.992**	**ug/L**	1.815	22067	0.017
|	K	39	**707.658**	**ug/L**	1.445	4004971	3.208
|	Ca	43	**42425.105**	**ug/L**	0.467	398611	0.437
\>	Sc	45		**ug/L**		910705	910705.426
|	Ti	47	**6.297**	**ug/L**	2.791	3785	0.003
|	V	51	**-6.165**	**ug/L**	33.261	-9287	-0.035
|	Cr	52	**52.311**	**ug/L**	2.649	245724	0.259
|	Cr	53		**ug/L**		683040	0.500
|	Mn	55	**26.679**	**ug/L**	2.210	185317	0.199
|	Fe	57	**282.931**	**ug/L**	3.210	48604	0.039
|	Co	59	**0.365**	**ug/L**	2.684	2093	0.002
|	Ni	60	**6.488**	**ug/L**	1.088	7298	0.008
|	Cu	63		**ug/L**		34900	0.037
⌊	Cu	65	**12.812**	**ug/L**	2.239	17494	0.019
⌈	Zn	66	**78.704**	**ug/L**	0.985	67053	0.209
|	Zn	67		**ug/L**		55733	0.136
|	Zn	68		**ug/L**		54137	0.166
\>	Ge	74		**ug/L**		317807	317806.676
|	As	75	**5.708**	**ug/L**	34.182	8805	0.018
|	Se	77		**ug/L**		79246	0.194
|	Se	82	**1.245**	**ug/L**	70.671	113	0.000
⌊	Kr	83		**ug/L**		1019	-0.000
⌈	Sr	88	**197.025**	**ug/L**	0.314	1667702	10.937
|	Y	89		**ug/L**		599	0.003
|	Zr	90	**0.097**	**ug/L**	10.629	879	0.003
|	Mo	98	**1.961**	**ug/L**	2.773	4353	0.028
|	Ag	107	**0.008**	**ug/L**	35.109	114	0.000
|	Cd	111	**-0.012**	**ug/L**	50.745	17	-0.000
|	Cd	114		**ug/L**		53	0.000
\>	In	115		**ug/L**		152457	152456.683
|	Sn	120	**0.138**	**ug/L**	6.166	689	0.003
|	Sb	121	**0.382**	**ug/L**	1.603	1693	0.009
⌊	Sb	123		**ug/L**		1455	0.008
⌈	Ba	135		**ug/L**		28985	0.152
|	Ba	137	**33.580**	**ug/L**	0.900	50308	0.264
|	Ho	165		**ug/L**		47	0.000
\>	Ta	181		**ug/L**		190181	190180.847
|	Tl	205	**0.105**	**ug/L**	12.630	1158	0.004
|	Pb	208	**1.183**	**ug/L**	0.117	11941	0.061
|	Bi	209		**ug/L**		61	0.000
|	Th	232	**0.028**	**ug/L**	41.002	650	0.002
⌊	U	238	**0.472**	**ug/L**	2.284	5242	0.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
¦	Be	9					
¦	B	11					
¦	Na	23					
¦	Mg	24					
¦	Al	27					
¦	P	31					
¦	K	39					
¦	Ca	43					
¦>	Sc	45		104.9			
¦	Ti	47					
¦	V	51					
¦	Cr	52					
¦	Cr	53					
¦	Mn	55					
¦	Fe	57					
¦	Co	59					
¦	Ni	60					
¦	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
¦	Zn	67					
¦	Zn	68					
¦>	Ge	74		93.5			
¦	As	75					
¦	Se	77					
¦	Se	82					
⌊	Kr	83					
⌈	Sr	88					
¦	Y	89					
¦	Zr	90					
¦	Mo	98					
¦	Ag	107					
¦	Cd	111					
¦	Cd	114					
¦>	In	115		86.3			
¦	Sn	120					
¦	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
¦	Ba	137					
¦	Ho	165					
¦>	Ta	181		88.6			
¦	Tl	205					
¦	Pb	208					
¦	Bi	209					
¦	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 17:22:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.142

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**36.968**	**ug/L**	1.228	44693	0.056
Be	9	**43.826**	**ug/L**	2.123	16081	0.020
B	11	**103.216**	**ug/L**	0.723	31898	0.040
Na	23	**5422.747**	**ug/L**	3.934	16572132	20.949
Mg	24	**5225.566**	**ug/L**	6.226	10268166	12.995
Al	27	**5590.069**	**ug/L**	6.082	15916006	20.129
P	31	**5602.807**	**ug/L**	0.712	921615	1.159
K	39	**4882.091**	**ug/L**	2.906	18424562	22.134
Ca	43	**4794.141**	**ug/L**	0.707	39676	0.049
> Sc	45		**ug/L**		789987	789987.332
Ti	47	**49.231**	**ug/L**	2.129	21597	0.027
V	51	**50.298**	**ug/L**	1.623	243683	0.284
Cr	52	**47.032**	**ug/L**	2.033	192543	0.233
Cr	53		**ug/L**		155316	-0.054
Mn	55	**49.068**	**ug/L**	1.364	292931	0.367
Fe	57	**4912.999**	**ug/L**	1.707	546865	0.678
Co	59	**47.520**	**ug/L**	0.904	209220	0.265
Ni	60	**47.644**	**ug/L**	0.511	44919	0.057
Cu	63		**ug/L**		108499	0.137
Cu	65	**46.446**	**ug/L**	1.286	54456	0.069
Zn	66	**46.084**	**ug/L**	0.981	38059	0.123
Zn	67		**ug/L**		15900	0.013
Zn	68		**ug/L**		30758	0.096
> Ge	74		**ug/L**		306474	306474.426
As	75	**46.430**	**ug/L**	1.409	47453	0.145
Se	77		**ug/L**		11168	-0.019
Se	82	**44.095**	**ug/L**	4.030	3516	0.011
Kr	83		**ug/L**		948	-0.000
Sr	88	**51.040**	**ug/L**	0.356	431400	2.833
Y	89		**ug/L**		759	0.004
Zr	90	**51.208**	**ug/L**	1.682	252010	1.654
Mo	98	**50.196**	**ug/L**	1.436	108151	0.710
Ag	107	**48.270**	**ug/L**	0.698	165983	1.090
Cd	111	**46.542**	**ug/L**	0.406	39321	0.258
Cd	114		**ug/L**		94132	0.618
> In	115		**ug/L**		152159	152159.284
Sn	120	**49.342**	**ug/L**	2.004	172741	1.134
Sb	121	**47.410**	**ug/L**	1.153	163571	1.073
Sb	123		**ug/L**		130539	0.856
Ba	135		**ug/L**		44174	0.228
Ba	137	**50.455**	**ug/L**	1.712	76921	0.397
Ho	165		**ug/L**		69	0.000
> Ta	181		**ug/L**		193644	193644.014
Tl	205	**49.026**	**ug/L**	0.568	375389	1.937
Pb	208	**48.398**	**ug/L**	1.872	483004	2.493
Bi	209		**ug/L**		58	0.000
Th	232	**49.624**	**ug/L**	1.762	540221	2.788
U	238	**53.340**	**ug/L**	2.794	564980	2.916

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	73.937				
	Be	9	87.651				
	B	11	103.216				
	Na	23	108.455				
	Mg	24	104.511				
	Al	27	110.694				
	P	31	112.056				
	K	39	97.642				
	Ca	43	95.883				
>	Sc	45			91.0		
	Ti	47	98.463				
	V	51	100.597				
	Cr	52	94.063				
	Cr	53					
	Mn	55	98.135				
	Fe	57	98.260				
	Co	59	95.040				
	Ni	60	95.289				
	Cu	63					
	Cu	65	92.892				
	Zn	66	92.167				
	Zn	67					
	Zn	68					
>	Ge	74			90.2		
	As	75	92.859				
	Se	77					
	Se	82	88.189				
	Kr	83					
	Sr	88	102.081				
	Y	89					
	Zr	90	102.417				
	Mo	98	100.392				
	Ag	107	96.539				
	Cd	111	93.084				
	Cd	114					
>	In	115			86.1		
	Sn	120	98.684				
	Sb	121	94.820				
	Sb	123					
	Ba	135					
	Ba	137	100.910				
	Ho	165					
>	Ta	181			90.2		
	Tl	205	98.053				
	Pb	208	96.795				
	Bi	209					
	Th	232	99.247				
	U	238	106.680				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	Be	9	CCV is out of limits (+/- 10%)
QC Std 6	Al	27	CCV is out of limits (+/- 10%)
QC Std 6	P	31	CCV is out of limits (+/- 10%)
QC Std 6	Se	82	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 17:27:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.143

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.006**	**ug/L**	199.500	84	-0.000
	Be	9	**0.011**	**ug/L**	102.590	27	0.000
	B	11	**0.977**	**ug/L**	29.221	723	0.000
	Na	23	**0.482**	**ug/L**	138.482	25022	0.002
	Mg	24	**0.756**	**ug/L**	112.907	7002	0.002
	Al	27	**1.557**	**ug/L**	122.624	17011	0.006
	P	31	**7.503**	**ug/L**	12.612	7184	0.002
	K	39	**24.985**	**ug/L**	25.876	1036288	0.113
	Ca	43	**5.540**	**ug/L**	108.194	732	0.000
>	Sc	45		**ug/L**		795582	795581.618
	Ti	47	**0.021**	**ug/L**	190.957	611	0.000
	V	51	**3.160**	**ug/L**	21.117	33827	0.018
	Cr	52	**-0.161**	**ug/L**	77.564	7787	-0.001
	Cr	53		**ug/L**		242360	0.054
	Mn	55	**-0.047**	**ug/L**	22.320	3021	-0.000
	Fe	57	**2.691**	**ug/L**	54.436	11700	0.000
	Co	59	**0.005**	**ug/L**	105.740	231	0.000
	Ni	60	**-0.052**	**ug/L**	14.496	200	-0.000
	Cu	63		**ug/L**		467	-0.000
	Cu	65	**-0.066**	**ug/L**	8.480	137	-0.000
	Zn	66	**-0.044**	**ug/L**	62.542	454	-0.000
	Zn	67		**ug/L**		14070	0.007
	Zn	68		**ug/L**		1626	0.001
>	Ge	74		**ug/L**		308020	308020.378
	As	75	**2.201**	**ug/L**	26.812	5162	0.007
	Se	77		**ug/L**		21648	0.015
	Se	82	**0.017**	**ug/L**	3483.549	12	0.000
	Kr	83		**ug/L**		946	-0.000
	Sr	88	**0.010**	**ug/L**	28.975	395	0.001
	Y	89		**ug/L**		122	0.000
	Zr	90	**-0.021**	**ug/L**	22.182	301	-0.001
	Mo	98	**0.028**	**ug/L**	22.409	189	0.000
	Ag	107	**0.007**	**ug/L**	19.432	111	0.000
	Cd	111	**0.001**	**ug/L**	885.830	28	0.000
	Cd	114		**ug/L**		57	0.000
>	In	115		**ug/L**		155183	155183.162
	Sn	120	**0.007**	**ug/L**	105.999	234	0.000
	Sb	121	**0.375**	**ug/L**	31.036	1699	0.008
	Sb	123		**ug/L**		1366	0.007
	Ba	135		**ug/L**		58	0.000
	Ba	137	**0.010**	**ug/L**	29.827	92	0.000
	Ho	165		**ug/L**		25	-0.000
>	Ta	181		**ug/L**		188374	188373.773
	Tl	205	**0.044**	**ug/L**	16.965	693	0.002
	Pb	208	**0.006**	**ug/L**	50.358	406	0.000
	Bi	209		**ug/L**		25	-0.000
	Th	232	**0.006**	**ug/L**	79.822	414	0.000
	U	238	**0.014**	**ug/L**	54.603	469	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		91.6			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		90.6			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		87.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		87.7			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Wednesday, July 06, 2005 17:34:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\Blank.144

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9		ug/L		20	
⌊>	Sc	45		ug/L		806585	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
\>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Wednesday, July 06, 2005 17:37:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\Standard 1.145

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	**10.000**	**ug/L**	1.012	3909	0.005
⌞>	Sc	45		**ug/L**		802810	802809.600

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌜	Be	9					
⌞>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Wednesday, July 06, 2005 17:39:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\Standard 2.146

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	**99.924**	**ug/L**	0.844	35812	0.045
⌞>	Sc	45		**ug/L**		795784	795783.706

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Wednesday, July 06, 2005 17:42:28
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 1.147

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**45.309**	**ug/L**	3.331	15939	0.020
⌊>	Sc	45		**ug/L**		780716	780715.726

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌜	Be	9	90.617				
⌞>	Sc	45		96.8			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Wednesday, July 06, 2005 17:45:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 2.148

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	0.030	ug/L	48.896	30	0.000
⌞>	Sc	45		ug/L		794637	794637.257

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		98.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Wednesday, July 06, 2005 17:47:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 3.149

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.445**	**ug/L**	7.679	174	0.000
⌊>	Sc	45		**ug/L**		773147	773147.316

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9	89.035				
Sc	45		95.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Wednesday, July 06, 2005 17:50:11
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 4.150

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	**0.028**	**ug/L**	50.561	28	0.000
⌞>	Sc	45		**ug/L**		739498	739497.892

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		91.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Wednesday, July 06, 2005 17:52:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 5.151

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	**18.886**	**ug/L**	2.892	6408	0.009
[>	Sc	45		**ug/L**		751796	751795.798

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9	94.432				
⌊>	Sc	45		93.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 17:55:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.152

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	**44.951**	**ug/L**	1.902	15832	0.020
⌞>	Sc	45		**ug/L**		781624	781623.634

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9	89.902				
⌊>	Sc	45		96.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 17:57:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.153

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	0.024	ug/L	45.444	29	0.000
⌊>	Sc	45		ug/L		805668	805668.081

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		99.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 138851002
Sample Date/Time: Wednesday, July 06, 2005 18:00:29
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\138851002.154

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	**0.004**	**ug/L**	44.484	24	0.000
⌞>	Sc	45		**ug/L**		908204	908204.389

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		112.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 138851003
Sample Date/Time: Wednesday, July 06, 2005 18:03:03
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\138851003.155

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	-0.004	ug/L	64.409	21	-0.000
⌞>	Sc	45		ug/L		918574	918573.771

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		113.9			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870407
Sample Date/Time: Wednesday, July 06, 2005 18:05:37
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\1200870407.156

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	0.009	ug/L	77.357	26	0.000
⌞>	Sc	45		ug/L		899725	899725.230

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌜	Be	9					
⌞>	Sc	45		111.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870408
Sample Date/Time: Wednesday, July 06, 2005 18:08:11
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\1200870408.157

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	**46.902**	**ug/L**	0.846	19045	0.021
⌞>	Sc	45		**ug/L**		901086	901085.626

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		111.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200870409
Sample Date/Time: Wednesday, July 06, 2005 18:10:47
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 435189|5|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\1200870409.158

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	0.003	ug/L	297.119	22	0.000
⌞>	Sc	45		ug/L		825126	825125.732

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		102.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 138851004
Sample Date/Time: Wednesday, July 06, 2005 18:13:22
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 435189|1|baj
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\138851004.159

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	-0.001	ug/L	1494.395	22	-0.000
⌊>	Sc	45		ug/L		889222	889221.757

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌜	Be	9					
⌞>	Sc	45		110.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, July 06, 2005 18:15:57
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 6.160

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**45.381**	**ug/L**	1.876	15786	0.020
⌊>	Sc	45		**ug/L**		771889	771889.488

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9	90.763				
⌊>	Sc	45		95.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, July 06, 2005 18:18:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\be only.mth
Dataset File: c:\elandata\Dataset\050706\QC Std 7.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Be	9	0.030	ug/L	68.665	30	0.000
⌞>	Sc	45		ug/L		785244	785243.714

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Be	9					
⌊>	Sc	45		97.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: WATER1
Method Description: 7470A, 245.2, ILM04 ANALYST NOR1
Element: Hg

Date: 06/24/2005
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: 062405W1.SIF Results Data Set Name: 062405W1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 06/24/2005
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0047	0.0047	10:20:01	No
2			0.0046	0.0046	10:20:36	No
Mean:			0.0047			
SD :			0.0001			
%RSD:			2.0507			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 06/24/2005
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0027	0.0074	10:21:59	No
2			0.0027	0.0074	10:22:33	No
Mean:			0.0027			
SD :			0.0000			
%RSD:			0.7776			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.01356

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 06/24/2005
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0075	0.0121	10:23:56	No
2			0.0075	0.0122	10:24:31	No
Mean:			0.0075			
SD :			0.0000			
%RSD:						

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99654 Slope: 0.01479

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 06/24/2005
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0290	0.0336	10:25:55	No
2			0.0286	0.0333	10:26:30	No
Mean:			0.0288			
SD :			0.0002			
%RSD:			0.8195			

[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99987 Slope: 0.01443

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 06/24/2005
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0716	0.0763	10:27:55	No
2			0.0715	0.0762	10:28:30	No
Mean:			0.0716			
SD :			0.0001			
%RSD:			0.1080			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99997 Slope: 0.01433

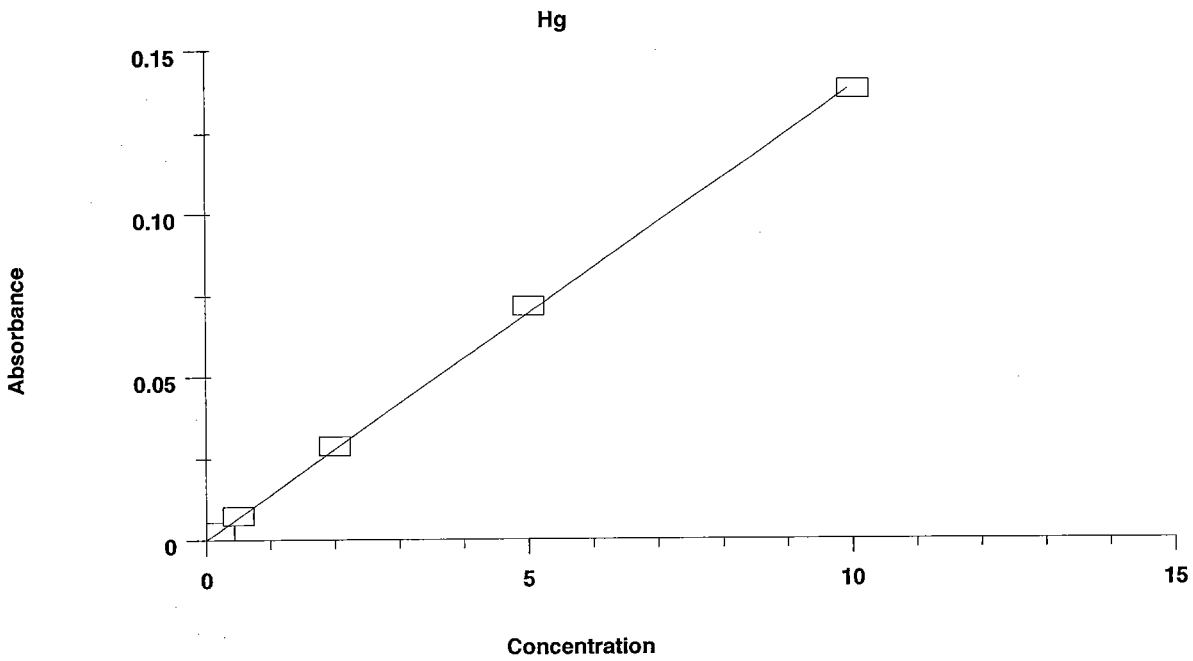
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 06/24/2005
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.1379	0.1425	10:29:57	No
2			0.1375	0.1422	10:30:32	No
Mean:			0.1377			
SD :			0.0003			
%RSD:			0.2018			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99971 Slope: 0.01390

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0047	---	----	----	----
S0.2	0.0027	0.200	0.195	0.0000	0.8
S0.5	0.0075	0.500	0.538	0.0000	----
S2.0	0.0288	2.000	2.073	0.0002	0.8
S5.0	0.0716	5.000	5.150	0.0001	0.1
S10	0.1377	10.000	9.905	0.0003	0.2
Correlation Coefficient: 0.99971		Slope:	0.01390	----	



Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 06/24/2005
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.149	5.149	0.0716	0.0762	10:32:01	No
2	5.186	5.186	0.0721	0.0768	10:32:36	No
Mean:	5.167	5.167	0.0718			
SD :	0.0265	0.0265	0.0004			
%RSD:	0.5	0.5	0.5136			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 06/24/2005
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0048	10:33:58	No
2	-0.007	-0.007	-0.0001	0.0046	10:34:33	No
Mean:	-0.001	-0.001	0.0000			
SD :	0.0095	0.0095	0.0001			
%RSD:	1677	1677	1676.6336			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 06/24/2005
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.188	0.188	0.0026	0.0073	10:35:55	No
2	0.178	0.178	0.0025	0.0072	10:36:30	No
Mean:	0.183	0.183	0.0025			
SD :	0.0065	0.0065	0.0001			
%RSD:	3.6	3.6	3.5565			

QC value within specified limits.

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 06/24/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.064	5.064	0.0704	0.0751	10:37:55	No
2	5.047	5.047	0.0702	0.0748	10:38:30	No
Mean:	5.056	5.056	0.0703			
SD :	0.0125	0.0125	0.0002			
%RSD:	0.2	0.2	0.2476			

QC value within specified limits.

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 06/24/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0046	10:39:59	No
2	-0.011	-0.011	-0.0002	0.0045	10:40:33	No
Mean:	-0.007	-0.007	-0.0001			
SD :	0.0054	0.0054	0.0001			
%RSD:	73.1	73.1	73.0502			

QC value within specified limits.

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 06/24/2005
Sample ID: 1200871380|i||435640|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0002	0.0044	10:42:00	No
2	-0.032	-0.032	-0.0004	0.0042	10:42:35	No
Mean:	-0.024	-0.024	-0.0003			
SD :	0.0107	0.0107	0.0001			
%RSD:	43.9	43.9	43.8684			

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 06/24/2005
Sample ID: 1200871381|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.061	2.061	0.0287	0.0333	10:43:59	No
2	2.073	2.073	0.0288	0.0335	10:44:34	No
Mean:	2.067	2.067	0.0287			
SD :	0.0082	0.0082	0.0001			
%RSD:	0.4	0.4	0.3965			

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 06/24/2005
Sample ID: 138905001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.037	0.037	0.0005	0.0052	10:46:00	No
2	0.033	0.033	0.0005	0.0051	10:46:35	No
Mean:	0.035	0.035	0.0005			
SD :	0.0026	0.0026	0.0000			
%RSD:	7.4	7.4	7.3526			

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 06/24/2005
Sample ID: 1200871382|i|||DUP

%RSD: 0.9 0.9 0.8788

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Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 06/24/2005
Sample ID: 1200871387|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0004	0.0042	10:59:50	No
2	-0.036	-0.036	-0.0005	0.0042	11:00:25	No
Mean:	-0.033	-0.033	-0.0005			
SD :	0.0029	0.0029	0.0000			
%RSD:	8.6	8.6	8.6155			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 06/24/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.000	5.000	0.0695	0.0742	11:01:50	No
2	5.010	5.010	0.0696	0.0743	11:02:25	No
Mean:	5.005	5.005	0.0696			
SD :	0.0072	0.0072	0.0001			
%RSD:	0.1	0.1	0.1435			

QC value within specified limits.

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Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 06/24/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.019	-0.019	-0.0003	0.0044	11:03:53	No
2	-0.026	-0.026	-0.0004	0.0043	11:04:28	No
Mean:	-0.023	-0.023	-0.0003			
SD :	0.0049	0.0049	0.0001			
%RSD:	21.5	21.5	21.5376			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 06/24/2005
Sample ID: 1200873191|i||436454|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0002	0.0045	11:05:53	No
2	-0.020	-0.020	-0.0003	0.0044	11:06:28	No
Mean:	-0.017	-0.017	-0.0002			
SD :	0.0048	0.0048	0.0001			
%RSD:	28.2	28.2	28.2151			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 06/24/2005
Sample ID: 1200873192|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.064	2.064	0.0287	0.0334	11:07:51	No
2	2.062	2.062	0.0287	0.0333	11:08:26	No
Mean:	2.063	2.063	0.0287			
SD :	0.0014	0.0014	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 06/24/2005
Sample ID: 139099001|i|

%RSD: 4.6 4.6 4.5708

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 06/24/2005
Sample ID: 1200872720|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.082	2.082	0.0289	0.0336	11:21:49	No
2	2.083	2.083	0.0290	0.0336	11:22:26	No
Mean:	2.083	2.083	0.0289			
SD :	0.0010	0.0010	0.0000			
%RSD:						

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 06/24/2005
Sample ID: 138868001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.024	-0.024	-0.0003	0.0043	11:23:54	No
2	-0.027	-0.027	-0.0004	0.0043	11:24:30	No
Mean:	-0.025	-0.025	-0.0004			
SD :	0.0022	0.0022	0.0000			
%RSD:	8.8	8.8	8.7745			

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 06/24/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.087	5.087	0.0707	0.0754	11:25:57	No
2	5.094	5.094	0.0708	0.0755	11:26:32	No
Mean:	5.091	5.091	0.0708			
SD :	0.0051	0.0051	0.0001			
%RSD:	0.1	0.1	0.1010			

QC value within specified limits.

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 06/24/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0002	0.0045	11:28:00	No
2	-0.022	-0.022	-0.0003	0.0044	11:28:35	No
Mean:	-0.019	-0.019	-0.0003			
SD :	0.0043	0.0043	0.0001			
%RSD:	23.0	23.0	23.0242			

QC value within specified limits.

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 06/24/2005
Sample ID: 1200872721|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0004	0.0043	11:29:59	No
2	-0.030	-0.030	-0.0004	0.0043	11:30:34	No
Mean:	-0.028	-0.028	-0.0004			
SD :	0.0026	0.0026	0.0000			
%RSD:	9.5	9.5	9.4680			

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 06/24/2005
Sample ID: 1200871987|i|||MS

%RSD: 25.0 25.0 25.0412

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 06/24/2005
Sample ID: 138868005|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0003	0.0044	11:43:35	No
2	-0.026	-0.026	-0.0004	0.0043	11:44:10	No
Mean:	-0.022	-0.022	-0.0003			
SD :	0.0057	0.0057	0.0001			
%RSD:	25.5	25.5	25.4506			

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 06/24/2005
Sample ID: 1200871461|i||435683|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0002	0.0044	11:45:34	No
2	-0.024	-0.024	-0.0003	0.0043	11:46:09	No
Mean:	-0.021	-0.021	-0.0003			
SD :	0.0046	0.0046	0.0001			
%RSD:	21.7	21.7	21.7001			

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 06/24/2005
Sample ID: 1200871462|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.108	2.108	0.0293	0.0340	11:47:34	No
2	2.100	2.100	0.0292	0.0339	11:48:09	No
Mean:	2.104	2.104	0.0293			
SD :	0.0056	0.0056	0.0001			
%RSD:	0.3	0.3	0.2660			

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 06/24/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.037	5.037	0.0700	0.0747	11:49:34	No
2	5.049	5.049	0.0702	0.0748	11:50:09	No
Mean:	5.043	5.043	0.0701			
SD :	0.0083	0.0083	0.0001			
%RSD:	0.2	0.2	0.1638			

QC value within specified limits.

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 06/24/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.022	-0.022	-0.0003	0.0044	11:51:37	No
2	-0.023	-0.023	-0.0003	0.0043	11:52:11	No
Mean:	-0.022	-0.022	-0.0003			
SD :	0.0011	0.0011	0.0000			
%RSD:	4.9	4.9	4.8688			

QC value within specified limits.

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 06/24/2005
Sample ID: 138851001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	0.0046	11:53:37	No
2	-0.014	-0.014	-0.0002	0.0045	11:54:12	No
Mean:	-0.010	-0.010	-0.0001			
SD :	0.0051	0.0051	0.0001			
%RSD:	50.3	50.3	50.3243			

Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 06/24/2005
Sample ID: 1200871463|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0001	0.0048	11:55:36	No
2	0.000	0.000	0.0000	0.0047	11:56:11	No
Mean:	0.005	0.005	0.0001			
SD :	0.0064	0.0064	0.0001			
%RSD:	142.3	142.3	142.3040			

Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 06/24/2005
Sample ID: 1200871464|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.102	2.102	0.0292	0.0339	11:57:36	No
2	2.108	2.108	0.0293	0.0340	11:58:11	No
Mean:	2.105	2.105	0.0293			
SD :	0.0039	0.0039	0.0001			
%RSD:	0.2	0.2	0.1841			

Element: Hg Seq. No.: 51 AS Loc.: 45 Date: 06/24/2005
Sample ID: 1200871467|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0005	0.0041	11:59:37	No
2	-0.046	-0.046	-0.0006	0.0040	12:00:13	No
Mean:	-0.042	-0.042	-0.0006			
SD :	0.0055	0.0055	0.0001			
%RSD:	13.0	13.0	12.9693			

Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 06/24/2005
Sample ID: 138851002|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0002	0.0045	12:01:39	No
2	-0.036	-0.036	-0.0005	0.0042	12:02:14	No
Mean:	-0.026	-0.026	-0.0004			
SD :	0.0145	0.0145	0.0002			
%RSD:	56.6	56.6	56.6190			

Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 06/24/2005
Sample ID: 138851003|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.027	-0.027	-0.0004	0.0043	12:03:40	No
2	-0.027	-0.027	-0.0004	0.0043	12:04:15	No
Mean:	-0.027	-0.027	-0.0004			
SD :	0.0003	0.0003	0.0000			

%RSD: 1.1 1.1 1.0734

Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 06/24/2005
Sample ID: 1200871465|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.022	-0.022	-0.0003	0.0044	12:05:39	No
2	-0.020	-0.020	-0.0003	0.0044	12:06:13	No
Mean:	-0.021	-0.021	-0.0003			
SD :	0.0021	0.0021	0.0000			
%RSD:	9.9	9.9	9.8760			

Element: Hg Seq. No.: 55 AS Loc.: 49 Date: 06/24/2005
Sample ID: 1200871466|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0007	0.0040	12:07:33	No
2	-0.058	-0.058	-0.0008	0.0039	12:08:08	No
Mean:	-0.053	-0.053	-0.0007			
SD :	0.0080	0.0080	0.0001			
%RSD:	15.2	15.2	15.2222			

Element: Hg Seq. No.: 56 AS Loc.: 50 Date: 06/24/2005
Sample ID: 1200871468|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.110	2.110	0.0293	0.0340	12:09:28	No
2	2.109	2.109	0.0293	0.0340	12:10:03	No
Mean:	2.109	2.109	0.0293			
SD :	0.0003	0.0003	0.0000			
%RSD:						

Element: Hg Seq. No.: 57 AS Loc.: 51 Date: 06/24/2005
Sample ID: 138851004|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0045	12:11:23	No
2	-0.020	-0.020	-0.0003	0.0044	12:11:59	No
Mean:	-0.014	-0.014	-0.0002			
SD :	0.0079	0.0079	0.0001			
%RSD:	54.5	54.5	54.4982			

Element: Hg Seq. No.: 58 AS Loc.: 7 Date: 06/24/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.993	4.993	0.0694	0.0741	12:13:23	No
2	4.987	4.987	0.0693	0.0740	12:13:58	No
Mean:	4.990	4.990	0.0694			
SD :	0.0043	0.0043	0.0001			
%RSD:						

QC value within specified limits.

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 06/24/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0005	0.0042	12:15:26	No
2	-0.037	-0.037	-0.0005	0.0042	12:16:01	No
Mean:	-0.035	-0.035	-0.0005			
SD :	0.0026	0.0026	0.0000			
%RSD:	7.4	7.4	7.4272			

QC value within specified limits.

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 06/24/2005
Sample ID: 1200871451|i||435676|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0006	0.0041	12:17:25	No
2	-0.047	-0.047	-0.0007	0.0040	12:18:00	No
Mean:	-0.044	-0.044	-0.0006			
SD :	0.0042	0.0042	0.0001			
%RSD:	9.5	9.5	9.5361			

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 06/24/2005
Sample ID: 1200871452|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.037	2.037	0.0283	0.0330	12:19:22	No
2	2.040	2.040	0.0284	0.0330	12:19:57	No
Mean:	2.038	2.038	0.0283			
SD :	0.0022	0.0022	0.0000			
%RSD:	0.1	0.1	0.1101			

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 06/24/2005
Sample ID: 138831005|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0003	0.0044	12:21:20	No
2	-0.028	-0.028	-0.0004	0.0043	12:21:55	No
Mean:	-0.025	-0.025	-0.0003			
SD :	0.0049	0.0049	0.0001			
%RSD:	19.8	19.8	19.7934			

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 06/24/2005
Sample ID: 1200871453|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.023	-0.023	-0.0003	0.0044	12:23:19	No
2	-0.028	-0.028	-0.0004	0.0043	12:23:53	No
Mean:	-0.026	-0.026	-0.0004			
SD :	0.0039	0.0039	0.0001			
%RSD:	15.2	15.2	15.1800			

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 06/24/2005
Sample ID: 1200871454|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.039	2.039	0.0283	0.0330	12:25:18	No
2	2.040	2.040	0.0284	0.0330	12:25:53	No
Mean:	2.039	2.039	0.0283			
SD :	0.0010	0.0010	0.0000			

Miscellaneous

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 435150

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200870310	UI050503-01	.25	mL
LCS	1200870310	UI050503-06	.25	mL
MS	1200870312	UI050503-01	.25	mL
MS	1200870312	UI050503-06	.25	mL
MS	1200870315	UI050503-01	.25	mL
MS	1200870315	UI050503-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200870309		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
LCS	1200870310		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851001		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
DUP	1200870311	138851001	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
MS	1200870312	138851001	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200870313	138851001	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851002		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851003		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
DUP	1200870314	138851003	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
MS	1200870315	138851003	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200870316	138851003	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851004		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
314189	2.5 mL	HYDROCHLORIC ACID
314199	1 mL	Nitric Acid CONC.

Comments

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Prep LogBook

Analyst: FGA Verified by:_____

Batch: 435188

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200870403	UI050610A	.5	mL
MS	1200870405	UI050608-02	.5	mL
MS	1200870408	UI050608-02	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200870402		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
LCS	1200870403		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851001		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
DUP	1200870404	138851001	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
MS	1200870405	138851001	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200870406	138851001	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851002		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851003		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
DUP	1200870407	138851003	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
MS	1200870408	138851003	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200870409	138851003	SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851004		SW846 3005A	23-JUN-2005 10:30	50 mL	50 mL	1	GROUND WATER

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Comments

Prep LogBook

Analyst: MXW1 Verified by:_____

Batch: 435682

Lab SOP: GL-MA-E-010 REV# 15

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200871462	WHG050623-13	.2	mL
MS	1200871464	WHG050623-13	.2	mL
MS	1200871466	WHG050623-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200871461		SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
LCS	1200871462		SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851001		SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
DUP	1200871463	138851001	SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
MS	1200871464	138851001	SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
SDILT	1200871467	138851001	SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851002		SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851003		SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
DUP	1200871465	138851003	SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
MS	1200871466	138851003	SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
SDILT	1200871468	138851003	SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851004		SW846 7470A Prep	23-JUN-2005 11:00	20 mL	20 mL	1	GROUND WATER

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Reagent/Solvent Lot ID	Amount	Description
312539	1 mL	Sulfuric Acid, Concentrated
312532-1	.5 mL	NITRIC ACID
304277-C	1.5 mL	5% Potassium Persulfate
313824-C	3 mL	5% KMnO4 solution
313826-C	1 mL	Hg reducing agent
WHG050623-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG050623-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG050623-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG050623-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG050623-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG050623-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 23-JUN-05 11:00:00
Digestion End Date: 23-JUN-05 13:00:00

General Chemistry Analysis

General Chemistry Narrative
Los Alamos National Laboratory (ESHL)
SDG 138851

Method/Analysis Information

Product: **Carbon, Total Organic**

Analytical Batch: 435939 **Method:** SW846 9060

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9060:

Sample ID	Client ID
138851003	GU05050GMC601
138851004	GU05050GMC690
1200872040	Method Blank (MB)
1200872041	138436004(GU05050GMC501) Sample Duplicate (DUP)
1200872043	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200872044	138436004(GU05050GMC501) Post Spike (PS)
1200872046	138851003(GU05050GMC601) Post Spike (PS)
1200872047	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-093 REV# 5.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Carbon analysis was performed on a O-I Analytical Model 1010 Total Organic Carbon Analyzer.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 138436004 (GU05050GMC501) and 138851003 (GU05050GMC601) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
A 15 mg/L Total Inorganic Carbon check standard is analyzed with each analytical run to prove that the instrument is effectively sparging away the inorganic carbon.

Method/Analysis Information

Product:	**Specific Conductivity**		
Analytical Batch:	435656	**Method:**	SW846 9050A

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9050A:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200871414	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200871415	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200871417	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-009 REV# 6.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Conductivity analysis was performed on a Orion 160 Conductivity Meter.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 138851001 (GF05050GMC601) and 138851003 (GU05050GMC601) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement

The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **pH**

Analytical Batch: 435123 **Method:** EPA 150.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 150.1:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200870234	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200870235	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200870236	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 9.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Electrode analysis was performed on a Orion EA940 pH/Ion Selective Electrode Meter .

Initial Calibration
All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

Samples 138851001 (GF05050GMC601) and 138851003 (GU05050GMC601) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
The following samples from this sample group were received by the lab outside of the method specified holding time: 138851001 (GF05050GMC601), 138851002 (GF05050GMC690), 138851003 (GU05050GMC601) and 138851004 (GU05050GMC690).

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	435375	**Method:**	SW846 9012A
Prep Batch :	435372	**Method:**	SW846 9010B Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
1200870797	Method Blank (MB)
1200870798	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200870799	138851001(GF05050GMC601) Matrix Spike (MS)
1200870800	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Flow Injection analysis was performed on a Lachat QuickChem FIA+.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 138851001 (GF05050GMC601) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Hardness by Calculation**		
Analytical Batch:	438102	**Method:**	SM 2340 B

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SM 2340 B:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-107 REV# 1.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The value is calculated from Calcium and Magnesium results.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Total Hardness by Calculation is determined using the results of Total Calcium (Ca) and Total Magnesium (Mg) determined by ICP or ICP-MS.
Hardness = 2.497 (Ca) + 4.118 (Mg)
Please refer to the Total Ca and Total Mg data to validate results appearing on the Hardness Summary sheet. Both results are in the Inorganic/metals section of the package.
There is no Batch QC for calculated results, and thus no QC Summary for the Hardness by Calculation Batch. The exception is when there is a duplicate sample result that can be used to calculate RPD.

Method/Analysis Information

Product:	**Ion Chromatography**		
Analytical Batch:	436313	**Method:**	EPA 300.0

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200872862	Method Blank (MB)
1200872863	Laboratory Control Sample (LCS)
1200872864	138800001(GF0506G16R301) Sample Duplicate (DUP)
1200872865	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200872866	138903001(GU05060OSRW01) Sample Duplicate (DUP)
1200872867	138800001(GF0506G16R301) Post Spike (PS)
1200872868	138851003(GU05050GMC601) Post Spike (PS)
1200872869	138903001(GU05060OSRW01) Post Spike (PS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Ion Chromatography analysis was performed on a Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 138800001 (GF0506G16R301), 138851003 (GU05050GMC601) and 138903001 (GU05060OSRW01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The Chloride PS failed with a recovery of 114%. 1200872869 (GU05060OSRW01).
The PS recoveries for Chloride and Sulfate failed; however, the recoveries passed for Bromide and Fluoride with recoveries of 106% and 102% respectively. The Chloride and Sulfate recoveries are 120% and 118% respectively. 1200872868 (GU05050GMC601) and 138851003 (GU05050GMC601).

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The following samples were re-analyzed due to instrument failure; run stopped prior to CCV and CCB: 1200872865 (GU05050GMC601), 1200872866 (GU05060OSRW01), 1200872867 (GF0506G16R301), 1200872868 (GU05050GMC601), 1200872869 (GU05060OSRW01), 138851001 (GF05050GMC601), 138851002 (GF05050GMC690), 138851003 (GU05050GMC601) and 138851004 (GU05050GMC690).

Miscellaneous Information

Nonconformance (NCR) Documentation

NCR ID 215362 was submitted for PS failures. 1200872868 (GU05050GMC601), 1200872869 (GU05060OSRW01) and 138851003 (GU05050GMC601).

Manual Integrations

The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1200872863 (LCS).

Additional Comments

Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Perchlorate**		
Analytical Batch:	435270	**Method:**	EPA 314.0 DOE-AL

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 314.0 DOE-AL:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
1200870603	Method Blank (MB)
1200870605	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200870607	138851001(GF05050GMC601) Post Spike (PS)
1200870608	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-096 REV# 4.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Ion Chromatography analysis was performed on a Dionex Ion Chromatograph.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 138851001 (GF05050GMC601) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for samples 1200870605 (GF05050GMC601), 1200870607 (GF05050GMC601), 138851001 (GF05050GMC601) and 138851002 (GF05050GMC690).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
Manual integrations were not required for the samples in this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Kjeldahl Nitrogen**		
Analytical Batch:	436361	**Method:**	EPA 351.2
Prep Batch :	436360	**Method:**	EPA 351.2 Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 351.2:

Sample ID	Client ID
138851003	GU05050GMC601
138851004	GU05050GMC690
1200872969	Method Blank (MB)
1200872970	Laboratory Control Sample (LCS)
1200872971	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200872972	138851003(GU05050GMC601) Matrix Spike (MS)
1200872973	138850001(GF05060G3CM01) Sample Duplicate (DUP)
1200872974	138903001(GU05060OSRW01) Sample Duplicate (DUP)
1200872975	138850001(GF05060G3CM01) Matrix Spike (MS)
1200872976	138903001(GU05060OSRW01) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-104 REV# 1.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 138850001 (GF05060G3CM01), 138851003 (GU05050GMC601) and 138903001 (GU05060OSRW01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery for samples 1200872972 (GU05050GMC601), 1200872975 (GF05060G3CM01), 1200872976 (GU05060OSRW01) and 138851003 (GU05050GMC601) were outside of the required acceptance limits due to matrix interference.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The following samples were re-analyzed to verify the results: 1200872973 (GF05060G3CM01), 1200872974 (GU05060OSRW01), 1200872975 (GF05060G3CM01) and 1200872976 (GU05060OSRW01).

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 214372 1200872972 (GU05050GMC601), 1200872975 (GF05060G3CM01), 1200872976 (GU05060OSRW01) and 138851003 (GU05050GMC601).

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Nitrate + Nitrite**		
Analytical Batch:	436707	**Method:**	EPA 353.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 353.1:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200873933	Method Blank (MB)
1200873934	Laboratory Control Sample (LCS)
1200873935	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200873936	138851001(GF05050GMC601) Post Spike (PS)
1200873937	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200873938	138851003(GU05050GMC601) Post Spike (PS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-108 REV# 0.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Konelab 20.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 138851001 (GF05050GMC601) and 138851003 (GU05050GMC601) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for samples 1200873935 (GF05050GMC601), 1200873936 (GF05050GMC601), 1200873937 (GU05050GMC601), 1200873938 (GU05050GMC601), 138851001 (GF05050GMC601), 138851002 (GF05050GMC690), 138851003 (GU05050GMC601) and 138851004 (GU05050GMC690).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Phosphorus**		
Analytical Batch:	436000	**Method:**	EPA 365.4
Prep Batch :	435999	**Method:**	EPA 365.4 Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 365.4:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200872170	Method Blank (MB)
1200872171	Laboratory Control Sample (LCS)
1200872175	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200872177	138851003(GU05050GMC601) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-103 REV# 2.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 138851003 (GU05050GMC601) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Solids, Total Dissolved**		
Analytical Batch:	435444	**Method:**	EPA 160.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 160.1:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200870991	Method Blank (MB)
1200870992	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200870993	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200870995	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-001 REV# 7.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Solids analysis was performed on a Sartorius Balance.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 138851001 (GF05050GMC601) and 138851003 (GU05050GMC601) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Solids, Total Suspended**		
Analytical Batch:	435452	**Method:**	EPA 160.2

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SM 2540D:

Sample ID	Client ID
138851003	GU05050GMC601
138851004	GU05050GMC690
1200871003	Method Blank (MB)
1200871005	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200871007	Laboratory Control Sample (LCS)
1200871888	138894001(NQ02A129050616) Sample Duplicate (DUP)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-012 REV# 6.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Solids analysis was performed on a Sartorius Balance.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 138851003 (GU05050GMC601) and 138894001 (NQ02A129050616) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Alkalinity**

Analytical Batch: 437304 **Method:** EPA 310.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 310.1:

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200875161	Laboratory Control Sample (LCS)
1200875164	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200875165	138851001(GF05050GMC601) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-033 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Titration analysis was performed on a Titration.

Initial Standardization
The titrant was properly standardized

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 138851001 (GF05050GMC601) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ **Date:** 14 July 05

Sample Data Summary

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 138851 GEL Work Order: 138851

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GF05050GMC601
Sample ID: 138851001
Matrix: Ground Water
Collect Date: 15-JUN-05 09:07
Receive Date: 17-JUN-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
9050A Specific Conductivity Federal											
Conductivity		406	1.00	1.00	umhos/cm	1	JAR2	06/21/05	0022	435656	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.4C	H	7.05	0.010	0.100	SU	1	JAR2	06/17/05	1803	435123	2
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal											
Cyanide, Total	J	3.89	2.50	5.00	ug/L	1	ADF	06/22/05	1347	435375	3
Hardness by Calculation											
SM18-2340B Total Hardness by Calculation											
Hardness as CaCO3		155	0.085	0.300	mg/L	1	NXS1	06/29/05	0846	438102	4
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.222	0.041	0.200	mg/L	1	BJB	06/24/05	1325	436313	5
Fluoride	J	0.568	0.030	1.00	mg/L	1					
Sulfate		39.5	0.057	0.400	mg/L	1					
Chloride		24.0	0.106	1.00	mg/L	2	BJB	06/27/05	2144	436313	6
EPA 314.0 Perchlorate by IC											
Perchlorate		166	20.0	60.0	ug/L	5	MAR1	06/22/05	0855	435270	7
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		15.0	0.170	0.500	mg/L	10	JXM	06/24/05	1236	436707	8
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.076	0.010	0.050	mg/L	1	JXM	06/23/05	1327	436000	9
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		362	2.38	10.0	mg/L		JLD1	06/21/05	1512	435444	10
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		74.1	1.45	2.00	mg/L		NXS1	06/27/05	1239	437304	11
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXA2	06/22/05	1736	435999

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GF05050GMC601
Sample ID: 138851001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
SW846 9010B Prep	SW846 9010B Prep			DXB2	06/21/05	1646	435372			

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9050A	
2	EPA 150.1	
3	SW846 9012A	
4	SM 2340 B	
5	EPA 300.0	
6	EPA 300.0	
7	EPA 314.0 DOE-AL	
8	EPA 353.1	
9	EPA 365.4	
10	EPA 160.1	
11	EPA 310.1	

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Company : Los Alamos National Labs
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GF05050GMC690
Sample ID: 138851002
Matrix: Ground Water
Collect Date: 15-JUN-05 09:07
Receive Date: 17-JUN-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
9050A Specific Conductivity Federal											
Conductivity		403	1.00	1.00	umhos/cm	1	JAR2	06/21/05	0023	435656	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 21.4C	H	7.07	0.010	0.100	SU	1	JAR2	06/17/05	1806	435123	2
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal											
Cyanide, Total	J	3.23	2.50	5.00	ug/L	1	ADF	06/22/05	1350	435375	3
Hardness by Calculation											
SM18-2340B Total Hardness by Calculation											
Hardness as CaCO3		152	0.085	0.300	mg/L	1	NXS1	06/29/05	0846	438102	4
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.212	0.041	0.200	mg/L	1	BJB	06/24/05	1345	436313	5
Fluoride	J	0.592	0.030	1.00	mg/L	1					
Sulfate		39.6	0.057	0.400	mg/L	1					
Chloride		24.1	0.106	1.00	mg/L	2	BJB	06/27/05	2204	436313	6
EPA 314.0 Perchlorate by IC											
Perchlorate		165	20.0	60.0	ug/L	5	MAR1	06/22/05	0940	435270	7
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		14.2	0.170	0.500	mg/L	10	JXM	06/24/05	1134	436707	8
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.100	0.010	0.050	mg/L	1	JXM	06/23/05	1328	436000	9
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		334	2.38	10.0	mg/L		JLD1	06/21/05	1512	435444	10
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		77.2	1.45	2.00	mg/L		NXS1	06/27/05	1303	437304	11
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXA2	06/22/05	1736	435999

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GF05050GMC690
Sample ID: 138851002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
SW846 9010B Prep	SW846 9010B Prep			DXB2	06/21/05	1646	435372			

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9050A	
2	EPA 150.1	
3	SW846 9012A	
4	SM 2340 B	
5	EPA 300.0	
6	EPA 300.0	
7	EPA 314.0 DOE-AL	
8	EPA 353.1	
9	EPA 365.4	
10	EPA 160.1	
11	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GU05050GMC601
Sample ID: 138851003
Matrix: Ground Water
Collect Date: 15-JUN-05 09:07
Receive Date: 17-JUN-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis Federal											
SW 9060 Total Organic Carbon											
Total Organic Carbon Average		1.64	0.074	0.200	mg/L	1	TSM	06/24/05	2104	435939	1
Conductivity Analysis Federal											
9050A Specific Conductivity Federal											
Conductivity		408	1.00	1.00	umhos/cm	1	JAR2	06/21/05	0024	435656	2
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.1C	H	1.78	0.010	0.100	SU	1	JAR2	06/17/05	1809	435123	3
Hardness by Calculation											
SM18-2340B Total Hardness by Calculation											
Hardness as CaCO3		154	0.085	0.300	mg/L	1	NXS1	06/29/05	0846	438102	4
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.246	0.041	0.200	mg/L	1	BJB	06/24/05	1446	436313	5
Fluoride	J	0.582	0.030	1.00	mg/L	1					
Sulfate		39.5	0.057	0.400	mg/L	1					
Chloride		24.1	0.106	1.00	mg/L	2	BJB	06/27/05	2225	436313	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		15.0	0.170	0.500	mg/L	10	JXM	06/24/05	1236	436707	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.085	0.010	0.050	mg/L	1	JXM	06/23/05	1329	436000	8
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl		0.203	0.010	0.100	mg/L	1	JXM	06/24/05	1139	436361	9
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		346	2.38	10.0	mg/L		JLD1	06/21/05	1512	435444	10
EPA 160.2 Total Suspended Liq											
Total Suspended Solids	U	ND	1.63	7.14	mg/L		JLD1	06/21/05	1139	435452	11
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		75.1	1.45	2.00	mg/L		NXS1	06/27/05	1308	437304	12
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GU05050GMC601
Sample ID: 138851003

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	DXB2	06/23/05	1058	436360
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXA2	06/22/05	1736	435999

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9060	
2	SW846 9050A	
3	EPA 150.1	
4	SM 2340 B	
5	EPA 300.0	
6	EPA 300.0	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 351.2	
10	EPA 160.1	
11	EPA 160.2	
12	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GU05050GMC690
Sample ID: 138851004
Matrix: Ground Water
Collect Date: 15-JUN-05 09:07
Receive Date: 17-JUN-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis Federal											
SW 9060 Total Organic Carbon											
Total Organic Carbon Average		1.64	0.074	0.200	mg/L	1	TSM	06/24/05	2206	435939	1
Conductivity Analysis Federal											
9050A Specific Conductivity Federal											
Conductivity		404	1.00	1.00	umhos/cm	1	JAR2	06/21/05	0025	435656	2
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.9C	H	7.35	0.010	0.100	SU	1	JAR2	06/17/05	1812	435123	3
Hardness by Calculation											
SM18-2340B Total Hardness by Calculation											
Hardness as CaCO3		153	0.085	0.300	mg/L	1	NXS1	06/29/05	0846	438102	4
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.212	0.041	0.200	mg/L	1	BJB	06/24/05	1548	436313	5
Fluoride	J	0.565	0.030	1.00	mg/L	1					
Sulfate		39.5	0.057	0.400	mg/L	1					
Chloride		23.7	0.106	1.00	mg/L	2	BJB	06/27/05	2326	436313	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		13.7	0.170	0.500	mg/L	10	JXM	06/24/05	1145	436707	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.088	0.010	0.050	mg/L	1	JXM	06/23/05	1332	436000	8
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl		0.220	0.010	0.100	mg/L	1	JXM	06/24/05	1141	436361	9
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		342	2.38	10.0	mg/L		JLD1	06/21/05	1512	435444	10
EPA 160.2 Total Suspended Liq											
Total Suspended Solids	U	ND	1.14	5.00	mg/L		JLD1	06/21/05	1139	435452	11
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		76.2	1.45	2.00	mg/L		NXS1	06/27/05	1325	437304	12
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GU05050GMC690
Sample ID: 138851004

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	DXB2	06/23/05	1058	436360
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXA2	06/22/05	1736	435999

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9060	
2	SW846 9050A	
3	EPA 150.1	
4	SM 2340 B	
5	EPA 300.0	
6	EPA 300.0	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 351.2	
10	EPA 160.1	
11	EPA 160.2	
12	EPA 310.1	

Quality Control Summary

QC Summary

Report Date: July 12, 2005

Los Alamos National Labs
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico
Contact: **Billy Turney**

Workorder: **138851**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Carbon Analysis Federal												
Batch 435939												
QC1200872041 138436004 DUP												
Total Organic Carbon Average			1.54		1.61	mg/L	4		(0%-20%)	TSM	06/24/05	15:44
QC1200872043 138851003 DUP												
Total Organic Carbon Average			1.64		1.56	mg/L	5		(0%-20%)		06/24/05	21:37
QC1200872047 LCS												
Total Organic Carbon Average	10.0				9.53	mg/L		95	(85%-115%)		06/24/05	11:57
QC1200872040 MB												
Total Organic Carbon Average				U	ND	mg/L					06/24/05	11:46
QC1200872044 138436004 PS												
Total Organic Carbon Average	10.0		1.54		11.9	mg/L		103	(80%-120%)		06/24/05	16:04
QC1200872046 138851003 PS												
Total Organic Carbon Average	10.0		1.64		11.3	mg/L		97	(80%-120%)		06/24/05	21:57
Conductivity Analysis Federal												
Batch 435656												
QC1200871414 138851001 DUP												
Conductivity			406		407	umhos/cm	0		(0%-10%)	JAR2	06/21/05	00:23
QC1200871415 138851003 DUP												
Conductivity			408		409	umhos/cm	0		(0%-10%)		06/21/05	00:24
QC1200871417 LCS												
Conductivity	1410				1470	umhos/cm		104	(95%-105%)		06/21/05	00:12
Electrode Analysis Federal												
Batch 435123												
QC1200870234 138851001 DUP												
pH		H	7.05	H	7.06	SU	0		(0%-10%)	JAR2	06/17/05	18:05
QC1200870235 138851003 DUP												
pH		H	1.78	H	1.77	SU	1		(0%-10%)		06/17/05	18:11
QC1200870236 LCS												
pH	7.00				7.03	SU		100	(95%-105%)		06/17/05	18:01
Flow Injection Analysis Federal												
Batch 435375												
QC1200870798 138851001 DUP												
Cyanide, Total		J	3.89	J	4.72	ug/L	N/A ^		(+/-5.00)	ADF	06/22/05	13:48
QC1200870800 LCS												
Cyanide, Total	50.0				51.9	ug/L		104	(90%-110%)		06/22/05	13:46
QC1200870797 MB												
Cyanide, Total				U	ND	ug/L					06/22/05	13:45
QC1200870799 138851001 MS												
Cyanide, Total	100	J	3.89		116	ug/L		112	(73%-117%)		06/22/05	13:49
Ion Chromatography Federal												
Batch 435270												
QC1200870605 138851001 DUP												
Perchlorate			179		165	ug/L	8 ^		(+/-60.0)	MAR1	06/22/05	09:10
QC1200870608 LCS												

QC Summary

Workorder: 138851

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography Federal											
Batch 435270											
Perchlorate	50.0				50.4	ug/L		101	(90%-110%)		06/21/05 17:33
QC1200870603 MB											
Perchlorate				U	ND	ug/L				MAR1	06/21/05 17:18
QC1200870607 138851001 PS											
Perchlorate	10.0		33.2		42.3	ug/L		90	(86%-126%)		06/22/05 09:25
Batch 436313											
QC1200872864 138800001 DUP											
Bromide		U	ND	U	ND	mg/L	N/A		(+/-0.200)	BJB	06/24/05 11:43
Chloride			2.85		2.81	mg/L	1		(0%-20%)		
Fluoride			0.454	J	0.462	mg/L	2 ^		(+/-0.100)		
Sulfate			4.90		4.91	mg/L	0		(0%-20%)		
QC1200872865 138851003 DUP											
Bromide			0.246		0.237	mg/L	4 ^		(+/-0.200)		06/24/05 15:07
Chloride			24.1		24.0	mg/L	0		(0%-20%)		06/27/05 22:45
Fluoride		J	0.582	J	0.589	mg/L	1 ^		(+/-1.00)		06/24/05 15:07
Sulfate			39.5		39.4	mg/L	0		(0%-20%)		
QC1200872866 138903001 DUP											
Chloride			126		124	mg/L	2		(0%-20%)		06/28/05 00:07
QC1200872863 LCS											
Bromide	2.50				2.64	mg/L		106	(90%-110%)		06/24/05 11:02
Chloride	10.0				10.3	mg/L		103	(90%-110%)		
Fluoride	5.00				5.27	mg/L		105	(90%-110%)		
Sulfate	20.0				20.9	mg/L		104	(90%-110%)		
QC1200872862 MB											
Bromide				U	ND	mg/L					06/24/05 10:42
Chloride				U	ND	mg/L					
Fluoride				U	ND	mg/L					
Sulfate				U	ND	mg/L					
QC1200872867 138800001 PS											
Bromide	2.50	U	ND		2.66	mg/L		106	(90%-110%)		06/24/05 12:03
Chloride	10.0		2.85		13.6	mg/L		108	(90%-110%)		
Fluoride	5.00		0.454		5.67	mg/L		104	(90%-110%)		
Sulfate	20.0		4.90		26.0	mg/L		105	(90%-110%)		
QC1200872868 138851003 PS											
Bromide	2.50		0.246		2.91	mg/L		106	(90%-110%)		06/24/05 15:27
Chloride	10.0		12.0		24.0	mg/L		120*	(90%-110%)		06/27/05 23:06
Fluoride	5.00	J	0.582		5.67	mg/L		102	(90%-110%)		06/24/05 15:27
Sulfate	20.0		39.5		63.2	mg/L		118*	(90%-110%)		
QC1200872869 138903001 PS											
Chloride	10.0		6.30		17.7	mg/L		114*	(90%-110%)		06/28/05 00:27
Nutrient Analysis											
Batch 436000											
QC1200872171 LCS											
Phosphorus, Total as P	1.00				0.945	mg/L		95	(80%-115%)	JXM	06/23/05 13:06
QC1200872170 MB											
Phosphorus, Total as P				U	ND	mg/L					
Batch 436361											
QC1200872970 LCS											

QC Summary

Workorder: 138851

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis											
Batch 436361											
Nitrogen, Total Kjeldahl	1.00			1.07	mg/L		107	(90%-110%)	JXM	06/24/05	11:35
QC1200872969 MB											
Nitrogen, Total Kjeldahl			U	ND	mg/L					06/24/05	11:34
Batch 436707											
QC1200873934 LCS											
Nitrogen, Nitrate/Nitrite	1.00			1.06	mg/L		106	(90%-110%)	JXM	06/24/05	10:50
QC1200873933 MB											
Nitrogen, Nitrate/Nitrite			U	ND	mg/L						
Nutrient Analysis Federal											
Batch 436000											
QC1200872175 138851003 DUP											
Phosphorus, Total as P		0.085		0.098	mg/L	14 ^		(+/-0.050)	JXM	06/23/05	13:30
QC1200872177 138851003 MS											
Phosphorus, Total as P	1.00	0.085		1.05	mg/L		96	(80%-115%)		06/23/05	13:31
Batch 436361											
QC1200872971 138851003 DUP											
Nitrogen, Total Kjeldahl		0.203		0.170	mg/L	18 ^		(+/-0.100)	JXM	06/24/05	11:40
QC1200872973 138850001 DUP											
Nitrogen, Total Kjeldahl		0.202		0.176	mg/L	14 ^		(+/-0.100)		06/24/05	12:01
QC1200872974 138903001 DUP											
Nitrogen, Total Kjeldahl		1.06		1.07	mg/L	1		(0%-20%)		06/24/05	16:15
QC1200872972 138851003 MS											
Nitrogen, Total Kjeldahl	1.00	0.203		1.35	mg/L		115*	(90%-110%)		06/24/05	11:40
QC1200872975 138850001 MS											
Nitrogen, Total Kjeldahl	1.00	0.202		1.46	mg/L		126*	(90%-110%)		06/24/05	12:00
QC1200872976 138903001 MS											
Nitrogen, Total Kjeldahl	1.00	1.06		2.18	mg/L		113*	(90%-110%)		06/24/05	16:16
Batch 436707											
QC1200873935 138851001 DUP											
Nitrogen, Nitrate/Nitrite		15.0		15.0	mg/L	0		(0%-20%)	JXM	06/24/05	12:36
QC1200873937 138851003 DUP											
Nitrogen, Nitrate/Nitrite		15.0		14.6	mg/L	3		(0%-20%)			
QC1200873936 138851001 PS											
Nitrogen, Nitrate/Nitrite	1.00	1.50		2.56	mg/L		106	(80%-120%)			
QC1200873938 138851003 PS											
Nitrogen, Nitrate/Nitrite	1.00	1.50		2.56	mg/L		105	(80%-120%)			
Solids Analysis Federal											
Batch 435444											
QC1200870992 138851001 DUP											
Total Dissolved Solids		362		337	mg/L	7		(0%-10%)	JLD1	06/21/05	15:12
QC1200870993 138851003 DUP											
Total Dissolved Solids		346		320	mg/L	8		(0%-10%)			
QC1200870995 LCS											
Total Dissolved Solids	300			292	mg/L		97	(95%-105%)			
QC1200870991 MB											
Total Dissolved Solids			U	ND	mg/L						
Batch 435452											
QC1200871005 138851003 DUP											

QC Summary

Workorder: **138851**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Solids Analysis Federal											
Batch 435452											
Total Suspended Solids	U	ND	U	ND	mg/L	N/A		(+/-7.14)	JLD1	06/21/05	11:39
QC1200871888 138894001 DUP											
Total Suspended Solids	J	1.20	J	1.20	mg/L	N/A ^		(+/-5.00)			
QC1200871007 LCS											
Total Suspended Solids	500			501	mg/L		100	(95%-105%)			
QC1200871003 MB											
Total Suspended Solids			U	ND	mg/L						
Titration Analysis											
Batch 437304											
QC1200875161 LCS											
Alkalinity, Total as CaCO3	1000			1070	mg/L		107	(90%-110%)	NXS1	06/27/05	11:37
Titration Analysis Federal											
Batch 437304											
QC1200875164 138851001 DUP											
Alkalinity, Total as CaCO3		74.1		75.1	mg/L	1		(0%-20%)	NXS1	06/27/05	12:44
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A		(+/-2.00)			
QC1200875165 138851001 MS											
Alkalinity, Total as CaCO3	100	74.1		182	mg/L		108	(80%-120%)		06/27/05	12:46

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Indicates the analyte is a surrogate compound.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- P The response between the confirmation and the primary columns is >40% Different.
- R Sample results are rejected.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
- h Sample preparation or preservation holding time exceeded.

QC Summary

Workorder: **138851**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Carbon Analysis

Method: SW846 9060 Concentration Units:mg/L

Instrument: O-I Analytical Model 1010 Total Organic Carbon Analyzer

Parmname: Total Organic Carbon
Average

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	24-JUN-2005 09:59:00	XI587.rlt	9.767	10	97.7	(90%-110%)	Yes
CCV	24-JUN-2005 14:10:00	XI600.rlt	9.808	10	98.1	(90%-110%)	Yes
CCV	24-JUN-2005 18:23:00	XI611.rlt	9.935	10	99.4	(90%-110%)	Yes
CCV	24-JUN-2005 22:41:00	XI621.rlt	9.9	10	99.0	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	24-JUN-2005 10:35:00	XI589.rlt	0.023	0.2	Yes
CCB	24-JUN-2005 15:02:00	XI602.rlt	0.129	0.2	Yes
CCB	24-JUN-2005 19:15:00	XI613.rlt	0.086	0.2	Yes
CCB	24-JUN-2005 23:33:00	XI623.rlt	-0.019	0.2	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: **ESHL00701**

SDG #: **138851**

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	22-JUN-2005 13:36:16	OM_6-22-2005_13-27-47	159	150	106	(90%-110%)	Yes
CCV	22-JUN-2005 13:51:30	OM_6-22-2005_13-27-47	102	100	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	22-JUN-2005 13:38:12	OM_6-22-2005_13-27-47	1.2	5	Yes
CCB	22-JUN-2005 13:53:26	OM_6-22-2005_13-27-47	1.1	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Bromide

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	23-JUN-2005 15:36:46	AZFWKC01.D02	2.678	2.5	107	(90%-110%)	Yes
CCV	24-JUN-2005 10:01:35	AZFWKC01.D54	2.524	2.5	101	(90%-110%)	Yes
CCV	24-JUN-2005 14:05:58	AZFWKC01.D66	3.963	3.75	106	(90%-110%)	Yes
CCV	24-JUN-2005 17:30:08	AZFWKC01.D76	2.704	2.5	108	(90%-110%)	Yes
ICV	24-JUN-2005 19:15:19	AZFXKC01.D02	2.76	2.5	110	(90%-110%)	Yes
CCV	24-JUN-2005 21:58:32	AZFXKC01.D10	3.987	3.75	106	(90%-110%)	Yes
CCV	25-JUN-2005 15:52:23	AZFXKC01.D18	2.577	2.5	103	(90%-110%)	Yes
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	2.689	2.5	108	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	4.128	3.75	110	(90%-110%)	Yes
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	2.747	2.5	110	(90%-110%)	Yes
CCV	28-JUN-2005 00:48:24	AZF7KC01.D32	4.06	3.75	108	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-JUN-2005 15:57:14	AZFWKC01.D03	0	0.2	Yes
CCB	24-JUN-2005 10:21:55	AZFWKC01.D55	0	0.2	Yes
CCB	24-JUN-2005 14:26:30	AZFWKC01.D67	0	0.2	Yes
CCB	24-JUN-2005 17:50:36	AZFWKC01.D77	0	0.2	Yes
ICB	24-JUN-2005 19:35:43	AZFXKC01.D03	0	0.2	Yes
CCB	24-JUN-2005 22:19:01	AZFXKC01.D11	0	0.2	Yes
CCB	25-JUN-2005 16:12:42	AZFXKC01.D19	0	0.2	Yes
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.2	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.2	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.2	Yes
CCB	28-JUN-2005 01:08:53	AZF7KC01.D33	0	0.2	Yes

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	23-JUN-2005 15:36:46	AZFWKC01.D02	10.182	10	102	(90%-110%)	Yes
CCV	24-JUN-2005 10:01:35	AZFWKC01.D54	10.391	10	104	(90%-110%)	Yes
CCV	24-JUN-2005 14:05:58	AZFWKC01.D66	15.943	15	106	(90%-110%)	Yes
CCV	24-JUN-2005 17:30:08	AZFWKC01.D76	10.167	10	102	(90%-110%)	Yes
ICV	24-JUN-2005 19:15:19	AZFXKC01.D02	10.323	10	103	(90%-110%)	Yes
CCV	24-JUN-2005 21:58:32	AZFXKC01.D10	15.963	15	106	(90%-110%)	Yes
CCV	25-JUN-2005 15:52:23	AZFXKC01.D18	10.334	10	103	(90%-110%)	Yes
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	10.112	10	101	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	16.308	15	109	(90%-110%)	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	10.735	10	107	(90%-110%)	Yes
CCV	28-JUN-2005 00:48:24	AZF7KC01.D32	16.526	15	110	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-JUN-2005 15:57:14	AZFWKC01.D03	-0.053	0.2	Yes
CCB	24-JUN-2005 10:21:55	AZFWKC01.D55	0	0.2	Yes
CCB	24-JUN-2005 14:26:30	AZFWKC01.D67	0	0.2	Yes
CCB	24-JUN-2005 17:50:36	AZFWKC01.D77	0	0.2	Yes
ICB	24-JUN-2005 19:35:43	AZFXKC01.D03	0	0.2	Yes
CCB	24-JUN-2005 22:19:01	AZFXKC01.D11	0	0.2	Yes
CCB	25-JUN-2005 16:12:42	AZFXKC01.D19	0	0.2	Yes
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.2	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.2	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.2	Yes
CCB	28-JUN-2005 01:08:53	AZF7KC01.D33	0	0.2	Yes

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	23-JUN-2005 15:36:46	AZFWKC01.D02	5.282	5	106	(90%-110%)	Yes
CCV	24-JUN-2005 10:01:35	AZFWKC01.D54	5.253	5	105	(90%-110%)	Yes
CCV	24-JUN-2005 14:05:58	AZFWKC01.D66	7.934	7.5	106	(90%-110%)	Yes
CCV	24-JUN-2005 17:30:08	AZFWKC01.D76	5.138	5	103	(90%-110%)	Yes
ICV	24-JUN-2005 19:15:19	AZFXKC01.D02	5.282	5	106	(90%-110%)	Yes
CCV	24-JUN-2005 21:58:32	AZFXKC01.D10	7.852	7.5	105	(90%-110%)	Yes
CCV	25-JUN-2005 15:52:23	AZFXKC01.D18	5.303	5	106	(90%-110%)	Yes
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	5.304	5	106	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	8.04	7.5	107	(90%-110%)	Yes
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	5.42	5	108	(90%-110%)	Yes
CCV	28-JUN-2005 00:48:24	AZF7KC01.D32	8.148	7.5	109	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-JUN-2005 15:57:14	AZFWKC01.D03	0	0.1	Yes
CCB	24-JUN-2005 10:21:55	AZFWKC01.D55	0	0.1	Yes
CCB	24-JUN-2005 14:26:30	AZFWKC01.D67	0	0.1	Yes
CCB	24-JUN-2005 17:50:36	AZFWKC01.D77	0	0.1	Yes
ICB	24-JUN-2005 19:35:43	AZFXKC01.D03	0	0.1	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Limits	Within Limits
CCB	24-JUN-2005 22:19:01	AZFXKC01.D11	0	0.1	Yes
CCB	25-JUN-2005 16:12:42	AZFXKC01.D19	0	0.1	Yes
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.1	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.1	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.1	Yes
CCB	28-JUN-2005 01:08:53	AZF7KC01.D33	0	0.1	Yes

Parmname: Sulfate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	23-JUN-2005 15:36:46	AZFWKC01.D02	21.096	20	105	(90%-110%)	Yes
CCV	24-JUN-2005 10:01:35	AZFWKC01.D54	21.22	20	106	(90%-110%)	Yes
CCV	24-JUN-2005 14:05:58	AZFWKC01.D66	32.311	30	108	(90%-110%)	Yes
CCV	24-JUN-2005 17:30:08	AZFWKC01.D76	21.059	20	105	(90%-110%)	Yes
ICV	24-JUN-2005 19:15:19	AZFXKC01.D02	21.226	20	106	(90%-110%)	Yes
CCV	24-JUN-2005 21:58:32	AZFXKC01.D10	32.436	30	108	(90%-110%)	Yes
CCV	25-JUN-2005 15:52:23	AZFXKC01.D18	21.346	20	107	(90%-110%)	Yes
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	21.275	20	106	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	32.946	30	110	(90%-110%)	Yes
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	21.851	20	109	(90%-110%)	Yes
CCV	28-JUN-2005 00:48:24	AZF7KC01.D32	32.954	30	110	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-JUN-2005 15:57:14	AZFWKC01.D03	0	0.4	Yes
CCB	24-JUN-2005 10:21:55	AZFWKC01.D55	0	0.4	Yes
CCB	24-JUN-2005 14:26:30	AZFWKC01.D67	0	0.4	Yes
CCB	24-JUN-2005 17:50:36	AZFWKC01.D77	0	0.4	Yes
ICB	24-JUN-2005 19:35:43	AZFXKC01.D03	0	0.4	Yes
CCB	24-JUN-2005 22:19:01	AZFXKC01.D11	0	0.4	Yes
CCB	25-JUN-2005 16:12:42	AZFXKC01.D19	0	0.4	Yes
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.4	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.4	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.4	Yes
CCB	28-JUN-2005 01:08:53	AZF7KC01.D33	0	0.4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Ion Chromatography

Method: EPA 314.0 DOE-AL Concentration Units:ug/L

Instrument: Dionex Ion Chromatograph

Parmname: Perchlorate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	21-JUN-2005 11:14:31	050621_006.DXD	48.45103	50	96.9	(90%-110%)	Yes
CCV	21-JUN-2005 16:47:46	050621_028.DXD	77.11548	75	103	(90%-110%)	Yes
CCV	21-JUN-2005 18:48:56	050621_036.DXD	25.45247	25	102	(90%-110%)	Yes
CCV	21-JUN-2005 20:34:57	050621_043.DXD	76.50885	75	102	(90%-110%)	Yes
CCV	22-JUN-2005 08:25:01	050621_045.DXD	24.98351	25	99.9	(90%-110%)	Yes
CCV	22-JUN-2005 09:55:47	050621_051.DXD	76.10972	75	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	21-JUN-2005 10:29:05	050621_003.DXD	0	4	Yes
CCB	21-JUN-2005 17:02:55	050621_029.DXD	0	4	Yes
CCB	21-JUN-2005 19:04:04	050621_037.DXD	0	4	Yes
CCB	21-JUN-2005 20:50:07	050621_044.DXD	0	4	Yes
CCB	22-JUN-2005 08:40:05	050621_046.DXD	0	4	Yes
CCB	22-JUN-2005 10:10:57	050621_052.DXD	0	4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Nutrient Analysis

Method: EPA 351.2 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Nitrogen, Total Kjeldahl

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	24-JUN-2005 11:30:26	OM_6-24-2005_11-22-46	1.005	1	101	(90%-110%)	Yes
CCV	24-JUN-2005 11:42:35	OM_6-24-2005_11-22-46	1.031	1	103	(90%-110%)	Yes
CCV	24-JUN-2005 11:54:42	OM_6-24-2005_11-22-46	1.053	1	105	(90%-110%)	Yes
CCV	24-JUN-2005 12:03:33	OM_6-24-2005_11-22-46	1.049	1	105	(90%-110%)	Yes
ICV	24-JUN-2005 16:10:31	OM_6-24-2005_16-02-47	0.995	1	99.5	(90%-110%)	Yes
CCV	24-JUN-2005 16:16:54	OM_6-24-2005_16-02-47	0.988	1	98.8	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	24-JUN-2005 11:32:21	OM_6-24-2005_11-22-46	0.00043	0.1	Yes
CCB	24-JUN-2005 11:44:31	OM_6-24-2005_11-22-46	0.007	0.1	Yes
CCB	24-JUN-2005 11:56:38	OM_6-24-2005_11-22-46	-0.005	0.1	Yes
CCB	24-JUN-2005 12:05:30	OM_6-24-2005_11-22-46	-0.008	0.1	Yes
ICB	24-JUN-2005 16:12:26	OM_6-24-2005_16-02-47	0.009	0.1	Yes
CCB	24-JUN-2005 16:18:50	OM_6-24-2005_16-02-47	0.007	0.1	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Nutrient Analysis

Method: EPA 353.1 Concentration Units:mg/L

Instrument: Konelab 20

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	24-JUN-2005 10:31:34	Kone2005_06_24_14_03_51.dat	0.93507	1	93.5	(90%-110%)	Yes
CCV	24-JUN-2005 10:50:28	Kone2005_06_24_14_03_51.dat	1.05954	1	106	(90%-110%)	Yes
CCV	24-JUN-2005 11:02:43	Kone2005_06_24_14_03_51.dat	1.06693	1	107	(90%-110%)	Yes
CCV	24-JUN-2005 11:23:25	Kone2005_06_24_14_03_51.dat	1.07241	1	107	(90%-110%)	Yes
CCV	24-JUN-2005 11:45:39	Kone2005_06_24_14_03_51.dat	1.09639	1	110	(90%-110%)	Yes
CCV	24-JUN-2005 11:56:15	Kone2005_06_24_14_03_51.dat	1.02201	1	102	(90%-110%)	Yes
CCV	24-JUN-2005 12:36:32	Kone2005_06_24_14_03_51.dat	1.05969	1	106	(90%-110%)	Yes
CCV	24-JUN-2005 12:45:58	Kone2005_06_24_14_03_51.dat	1.0973	1	110	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	24-JUN-2005 10:31:35	Kone2005_06_24_14_03_51.dat	-0.02251	0.02	Yes
CCB	24-JUN-2005 10:50:29	Kone2005_06_24_14_03_51.dat	-0.01929	0.02	Yes
CCB	24-JUN-2005 11:02:44	Kone2005_06_24_14_03_51.dat	-0.02435	0.02	Yes
CCB	24-JUN-2005 11:23:26	Kone2005_06_24_14_03_51.dat	-0.02313	0.02	Yes
CCB	24-JUN-2005 11:45:40	Kone2005_06_24_14_03_51.dat	-0.02673	0.02	Yes
CCB	24-JUN-2005 11:56:16	Kone2005_06_24_14_03_51.dat	-0.02258	0.02	Yes
CCB	24-JUN-2005 12:36:33	Kone2005_06_24_14_03_51.dat	-0.02581	0.02	Yes
CCB	24-JUN-2005 12:45:59	Kone2005_06_24_14_03_51.dat	-0.02215	0.02	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 10:48

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 138851

Nutrient Analysis

Method: EPA 365.4 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Phosphorus, Total as P

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	23-JUN-2005 12:30:34	OM_6-23-2005_12-22-02	1.053	1	105	(85%-115%)	Yes
CCV	23-JUN-2005 12:55:27	OM_6-23-2005_12-22-02	0.994	1	99.4	(85%-115%)	Yes
CCV	23-JUN-2005 13:07:46	OM_6-23-2005_12-22-02	0.942	1	94.2	(85%-115%)	Yes
CCV	23-JUN-2005 13:20:23	OM_6-23-2005_12-22-02	0.945	1	94.5	(85%-115%)	Yes
CCV	23-JUN-2005 13:32:51	OM_6-23-2005_12-22-02	0.952	1	95.2	(85%-115%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-JUN-2005 12:32:38	OM_6-23-2005_12-22-02	0.015	0.05	Yes
CCB	23-JUN-2005 12:57:32	OM_6-23-2005_12-22-02	0.016	0.05	Yes
CCB	23-JUN-2005 13:09:51	OM_6-23-2005_12-22-02	0.016	0.05	Yes
CCB	23-JUN-2005 13:22:27	OM_6-23-2005_12-22-02	0.018	0.05	Yes
CCB	23-JUN-2005 13:34:57	OM_6-23-2005_12-22-02	0.014	0.05	Yes

Alkalinity

Alkalinity LogBook

Analyst: NXS1
Batch: 437304
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 27-JUN-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200875161	WAL050512-02	1000	106.858
MS	1200875163	WAL050512-02	100	105.8
MS	1200875165	WAL050512-02	100	107.916
MS	1200875170	WAL050512-02	100	103.684
MS	1200875171	WAL050512-02	100	106.858
MS	1200875172	WAL050512-02	100	105.8

Type	Sample Id	Rpd(%)	Parmname
DUP	1200875162	3.077	Alkalinity, Total as CaCO3
DUP	1200875164	1.418	Alkalinity, Total as CaCO3
DUP	1200875167	.816	Alkalinity, Total as CaCO3
DUP	1200875168	4.317	Alkalinity, Total as CaCO3
DUP	1200875169	.676	Alkalinity, Total as CaCO3

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
LCS	1200875161		11:37	8.45	5	mL	0.02116	0	5.05	1068.6							mg/L
SAMPLE	138659001		11:39	7.04	50	mL	0.02116	0	1.65	34.914					0.035943		mg/L
DUP	1200875162	138659001	11:46	7.05	50	mL	0.02116	0	1.6	33.856	33.815				0.035664		mg/L
MS	1200875163	138659001	11:49	8.62	50	mL	0.02116	0	6.65	140.71							mg/L
SAMPLE	138659004		11:50	7.36	50	mL	0.02116	0	2.5	52.900					0.11365		mg/L
SAMPLE	138659014		11:59	7.2	50	mL	0.02116	0	1.65	34.914					0.051926		mg/L
SAMPLE	138788005		12:04	6.48	50	mL	0.02116	0	6.15	130.13					0.036931		mg/L
DUP	1200875167	138788005	12:09	6.52	50	mL	0.02116	0	6.1	129.08	129.03				0.040164		mg/L
MS	1200875170	138788005	12:13	8.57	50	mL	0.02116	0	11.05	233.82							mg/L
SAMPLE	138788006		12:23	6.53	50	mL	0.02116	0	4.55	96.278					0.030656		mg/L
SAMPLE	138800002		12:30	9.52	50	mL	0.02116	2.5	5.95	125.90					29.493		mg/L
SAMPLE	138851001		12:39	7.31	50	mL	0.02116	0	3.5	74.060					0.14185		mg/L
DUP	1200875164	138851001	12:44	7.31	50	mL	0.02116	0	3.55	75.118	74.964				0.14387		mg/L
MS	1200875165	138851001	12:46	8.91	50	mL	0.02116	0	8.6	181.98							mg/L
SAMPLE	138851002		13:03	7.42	50	mL	0.02116	0	3.65	77.234					0.19045		mg/L
SAMPLE	138851003		13:08	7.4	50	mL	0.02116	0	3.55	75.118					0.17692		mg/L
DUP	1200875168	138851003	13:19	7.38	50	mL	0.02116	0	3.4	71.944	71.770				0.16183		mg/L
MS	1200875171	138851003	13:22	8.9	50	mL	0.02116	0	8.6	181.98							mg/L
SAMPLE	138851004		13:25	7.34	50	mL	0.02116	0	3.6	76.176					0.15631		mg/L

Alkalinity LogBook

Analyst: NXS1
Batch: 437304
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 27-JUN-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200875161	WAL050512-02	1000	106.858
MS	1200875163	WAL050512-02	100	105.8
MS	1200875165	WAL050512-02	100	107.916
MS	1200875170	WAL050512-02	100	103.684
MS	1200875171	WAL050512-02	100	106.858
MS	1200875172	WAL050512-02	100	105.8

Type	Sample Id	Rpd(%)	Parmname
DUP	1200875162	3.077	Alkalinity, Total as CaCO3
DUP	1200875164	1.418	Alkalinity, Total as CaCO3
DUP	1200875167	.816	Alkalinity, Total as CaCO3
DUP	1200875168	4.317	Alkalinity, Total as CaCO3
DUP	1200875169	.676	Alkalinity, Total as CaCO3

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
SAMPLE	138905001		13:30	8.6	50	mL	0.02116	0.2	2.05	43.378					1.5576		mg/L
SAMPLE	138929001		13:35	8.28	50	mL	0.02116	0	6.75	142.83							mg/L
SAMPLE	138929002		13:43	8.17	50	mL	0.02116	0	6.8	143.89							mg/L
SAMPLE	138929003		13:45	7.95	50	mL	0.02116	0	6.75	142.83							mg/L
SAMPLE	139182001		13:55	7.38	50	mL	0.02116	0	22.25	470.81	469.74						mg/L
DUP	1200875169	139182001	14:04	7.39	50	mL	0.02116	0	22.1	467.64	466.55				1.0765		mg/L
MS	1200875172	139182001	14:07	8.42	50	mL	0.02116	0	27.25	576.61							mg/L

Comments:

Alkalinity Titrant Standardization Logbook

Date	Time	Analyst	Balance ID	Na2CO3 Std. ID	Na2CO3, 0.05 N g Na2C03/L	H2SO4 N (approx.)	mL NA2CO3 titrated	mL acid to pH 3.7	Actual Normality
6/21/2005	14:15	NXS	BAL745	243145	2.5002	0.02	15.00	33.40	0.02119
					2.5002	0.02	15.00	33.45	0.02115
					2.5002	0.02	15.00	33.45	0.02115
									0.02116

Calculation: $\frac{(gNa2CO3)(mL\ Na2CO3\ titrated)}{(mLacid)(53)}$

Comments:

1078

pH Calibration

Buffer	Standard ID	Value	Temp	Date	Time
pH 4.00	UPH215026-01	4.01	23.2'C	27-Jun-05	10:20
pH 7.00	UPH050217-02	7.02	23.2'C	27-Jun-05	10:20
pH 10.00	UPH050217-02	9.98	23.2'C	27-Jun-05	10:20
pH 2.00	UPH240737-01		23.2'C	27-Jun-05	
pH 12.00	040512-A		23.2'C	27-Jun-05	
pH 7.00 (LCS)	UPH213969-02	7.03	23.2'C	27-Jun-05	10:20

Analyst: NXS

Sheet Created :	27-Jun-05	10:20

The acceptance range for 040512-A is 12.00 +/- 0.10.

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Carbon, Total Organic

Pos#	Remarks
1	435939|1|1|WTC050624-01
2	435939|1|1|WTC050624-02
3	435939|1|1|WTC050624-03
4	435939|1|1|WTC050624-04
5	435939|1|1|
6	435939|1|1|WTC050624-05
7	435939|1|1|
8	435939|1|1|WIC050624-01
9	436681|1|1|METH BLK
10	436681|1|1|WTC050624-05:LCS
11	436681|1|1|
12	436681|1|1|139108001:DUP
13	436681|1|1|139108001:PS
14	436721|500|1|
15	436721|500|1|139182001:DUP
16	436721|500|1|139182001:PS
17	436721|1|1|WTC050624-02
18	436721|1|1|
19	435939|1|1|
20	435939|1|1|138436004:DUP
21	435939|1|1|138436004:PS
22	435939|1|1|
23	435939|1|1|
24	435939|1|1|
25	435939|1|1|138759003:DUP
26	435939|1|1|138759003:PS
27	435939|1|1|WTC050624-02
28	435939|1|1|
29	435939|1|1|
30	435939|1|1|
31	435939|1|1|
32	435939|1|1|
33	435939|1|1|138851003:DUP
34	435939|1|1|138851003:PS
35	435939|1|1|
36	435939|1|1|WTC050624-02
37	435939|1|1|
38	436680|1|1|DOC
39	436680|1|1|138788001:DUP
40	436680|1|1|138788001:PS
41	436680|2|1|
42	436680|2|1|
43	436680|1|1|
44	436680|1|1|138799001:DUP
45	436680|1|1|138799001:PS
46	436680|1|1|WTC050624-02
47	436680|1|1|

TSM 6/25/05
GL-GC-E-093

Pos#	Remarks
1	436680|5|2|DOC
2	436680|5|2|138788001:DUP
3	436680|5|2|138788001:PS
4	436680|5|2|
5	436680|5|2|
6	436680|5|2|138799001:DUP
7	436680|5|2|138799001:PS
8	436680|1|2|WTC050624-02
9	436680|1|2|

TSM 6/25/05
GL-GC-E-093

****
** CONFIGURATION **
****

Analysis Mode: TOC Spl Intro: Autosampler 53
Remote Start : OFF

Loop Size: 5 mL

Actual Volume	1mL	5mL	10mL	25mL
Loop A (uL):	1000	4900	10000	25000
Loop B (uL):	1000	4900	10000	25000

Tray Type: 53 Vial Vial Option: Septum Piercing
Needle Depth: 94 % Preacid Volume (uL): 100
Wash Needle Depth: 94 % Preacid Purge Time (min:sec): 0:30

	TIC	TOC	TC
Blank	----	----	----
Average:	83	968	784

Linearization Coeff: 53000

Sample Transfer Times (sec)

	Initial Fill			Loop Fill			Sample Inject
	Non-AS	AS	AS w/Sep	Non-AS	AS	AS w/Sep	(all)
1mL:	6.0	4.5	3.5	1.2	1.2	1.0	4.5
5mL:	8.1	8.2	7.8	5.1	6.1	5.2	9.3
10mL:	14.2	12.2	11.0	10.5	10.5	11.0	16.5
25mL:	35.0	35.0	32.0	n/a	n/a	n/a	38.0

Analog Concentration Signal indicates TOC
Analog Conc. Signal Timer is OFF, Timer duration (h:m:s): 00:00:00
Min Signal Range: 0.000 ppmC, Max Signal Range: 0.000 ppmC

Alarms DISABLED
Alarm Relay Timer is OFF, Timer duration (h:m:s): 00:00:00

Conc. Alarm Setpoints (ppm C)

	Low	High
TIC:	0.000	0.000
TOC:	0.000	0.000
TC:	0.000	0.000

****
** CALIBRATION **
****

06/24/05 Fri Jun 24 09:48:55 2005

Std. #	Used	Conc. (ppm)	Volume (mL)
1	Yes	20.000	5.000
2	Yes	10.000	5.000
3	Yes	1.000	5.000
4	Yes	0.200	5.000
5	Yes	0.000	5.000

RF (ugC/k-cts): 1.110
R-Squared: 0.9995
Offset (cts): 2413
Offset (ugC): -2.679
Calibration Mode: TOC
Allow Editing: No

Rep	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
1	91224	45318	7929	3061	2252
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-

(* = unused)

TSM 6/25/05
GL-GC-E-093

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Std1	Name: ICAL-01						Data File: XI581						
	Remarks: 435939|1|1|WTC050624-01												
1	Std1	1	24Jun2005	08:41	-	-	-	91224	98.000	20.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.082												
	R-Squared: 1.0000												
	Offset (cts): 0												
	Offset (ugC): 0.000												
** Std2	Name: ICAL-02						Data File: XI582						
	Remarks: 435939|1|1|WTC050624-02												
2	Std2	1	24Jun2005	08:52	-	-	-	45318	49.000	10.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.067												
	R-Squared: 1.0000												
	Offset (cts): -588												
	Offset (ugC): 0.628												
** Std3	Name: ICAL-03						Data File: XI583						
	Remarks: 435939|1|1|WTC050624-03												
3	Std3	1	24Jun2005	09:02	-	-	-	7929	4.900	1.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.116												
	R-Squared: 0.9992												
	Offset (cts): 2779												
	Offset (ugC): -3.102												
** Std4	Name: ICAL-04						Data File: XI584						
	Remarks: 435939|1|1|WTC050624-04												
4	Std4	1	24Jun2005	09:12	-	-	-	3061	0.980	0.200	-	-	-
** Calibration:	RF (ugC/k-cts): 1.111												
	R-Squared: 0.9994												
	Offset (cts): 2491												
	Offset (ugC): -2.769												
5	Blk	1	24Jun2005	09:21	-	-	-	1385	-	-	-	-	-
5	Blk	2	24Jun2005	09:28	-	-	-	1008	-	-	-	-	-
5	Blk	3	24Jun2005	09:38	-	-	-	856	-	-	-	-	-
** Std5	Name: ICAL-05						Data File: XI586						
	Remarks: 435939|1|1|											
5	Std5	1	24Jun2005	09:48	-	-	-	2252	0.000	0.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.110												
	R-Squared: 0.9995												
	Offset (cts): 2413												
	Offset (ugC): -2.679												
** Chk2	Name: ICV						Data File: XI587						

Remarks: 435939|1|1|WTC050624-05

6	Chk2	1	24Jun2005 09:59	-	-	-	45525	47.858	9.767	-	-	-
7	Blk	1	24Jun2005 10:07	-	-	-	1271	-	-	-	-	-
7	Blk	2	24Jun2005 10:15	-	-	-	846	-	-	-	-	-
7	Blk	3	24Jun2005 10:25	-	-	-	746	-	-	-	-	-

** Chk5 Name: ICB Data File: XI589
Remarks: 435939|1|1|

7	Chk5	1	24Jun2005 10:35	-	-	-	2514	0.112	0.023	-	-	-
8	Blk	1	24Jun2005 10:43	-	-	-	1244	-	-	-	-	-
8	Blk	2	24Jun2005 10:51	-	-	-	1117	-	-	-	-	-
8	Blk	3	24Jun2005 11:01	-	-	-	1052	-	-	-	-	-

** Spl Name: TIC Data File: XI591
Remarks: 435939|1|1|WIC050624-01

8	Spl	1	24Jun2005 11:11	-	-	-	2496	1.509	0.308	-	-	-

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Chk5	Name: 1200873791 / 2040						Data File: XI592						
	Remarks: 436681|1|1|METH BLK												
9	Chk5	1	24Jun2005	11:46	-	-	-	2456	0.048	0.010	-	-	-
** Chk2	Name: 1200873794 / 2047						Data File: XI593						
	Remarks: 436681|1|1|WTC050624-05:LCS												
10	Chk2	1	24Jun2005	11:57	-	-	-	44466	46.683	9.527	-	-	-
** Spl	Name: 139108001						Data File: XI594						
	Remarks: 436681|1|1|											
11	Spl	1	24Jun2005	12:05	-	-	-	5778	5.152	1.051	-	-	-
11	Spl	2	24Jun2005	12:13	-	-	-	5453	4.791	0.978	-	-	-
11	Spl	3	24Jun2005	12:21	-	-	-	5308	4.630	0.945	-	-	-
11	Spl	4	24Jun2005	12:30	-	-	-	4636	3.884	0.793	-	-	-
11	Spl	Avg						5293	4.614	0.942			
11	Spl	SDev						480.519					
11	Spl	%RSD						9.08					
** Spl	Name: 1200873792						Data File: XI595						
	Remarks: 436681|1|1|139108001:DUP												
12	Spl	1	24Jun2005	12:39	-	-	-	6085	5.493	1.121	-	-	-
12	Spl	2	24Jun2005	12:48	-	-	-	5378	4.708	0.961	-	-	-
12	Spl	Avg						5731	5.100	1.041			
12	Spl	SDev						499.924					
12	Spl	%RSD						8.72					
** Spl	Name: 1200873793						Data File: XI596						
	Remarks: 436681|1|1|139108001:PS												
13	Spl	1	24Jun2005	12:58	-	-	-	49948	54.185	11.058	-	-	-
** Spl	Name: 139182001						Data File: XI597						
	Remarks: 436721|500|1|											
14	Spl	1	24Jun2005	13:07	-	-	-	7494	7.057	1.440	-	-	-
14	Spl	2	24Jun2005	13:15	-	-	-	7387	6.938	1.416	-	-	-
14	Spl	3	24Jun2005	13:22	-	-	-	7709	7.296	1.489	-	-	-
14	Spl	4	24Jun2005	13:32	-	-	-	7516	7.081	1.445	-	-	-
14	Spl	Avg						7526	7.093	1.447			
14	Spl	SDev						134.081					
14	Spl	%RSD						1.78					
** Spl	Name: 1200873872						Data File: XI598						
	Remarks: 436721|500|1|139182001:DUP												
15	Spl	1	24Jun2005	13:40	-	-	-	7586	7.159	1.461	-	-	-
15	Spl	2	24Jun2005	13:50	-	-	-	7612	7.188	1.467	-	-	-
15	Spl	Avg						7599	7.173	1.464			
15	Spl	SDev						18.385					
15	Spl	%RSD						0.24					

```
** Spl      Name:    1200873873                  Data File: XI599
            Remarks: 436721|500|1|139182001:PS

16   Spl    1 24Jun2005 14:00      -       -          -    51233  55.611     11.349      -       -          -


** Chk2     Name:    CCV                         Data File: XI600
            Remarks: 436721|1|1|WTC050624-02

17   Chk2   1 24Jun2005 14:10      -       -          -    45707  48.060      9.808      -       -          -

18   Blk    1 24Jun2005 14:19      -       -          -     1521      -          -       -       -          -
18   Blk    2 24Jun2005 14:27      -       -          -     1203      -          -       -       -          -
18   Blk    3 24Jun2005 14:35      -       -          -     1281      -          -       -       -          -
18   Blk    4 24Jun2005 14:42      -       -          -     1159      -          -       -       -          -
18   Blk    5 24Jun2005 14:52      -       -          -     1054      -          -       -       -          -


** Chk5     Name:    CCB                         Data File: XI602
            Remarks: 436721|1|1|

18   Chk5   1 24Jun2005 15:02      -       -          -     2983   0.633      0.129      -       -          -


** Spl      Name:    138436004                   Data File: XI603
            Remarks: 435939|1|1|

19   Spl    1 24Jun2005 15:11      -       -          -     8141   7.745      1.581      -       -          -
19   Spl    2 24Jun2005 15:18      -       -          -     7952   7.535      1.538      -       -          -
19   Spl    3 24Jun2005 15:26      -       -          -     8030   7.622      1.556      -       -          -
19   Spl    4 24Jun2005 15:36      -       -          -     7728   7.287      1.487      -       -          -
19   Spl  Avg                                          7962   7.547      1.540
19   Spl  SDev                                      174.660
19   Spl  %RSD                                        2.19


** Spl      Name:    1200872041                  Data File: XI604
            Remarks: 435939|1|1|138436004:DUP

20   Spl    1 24Jun2005 15:44      -       -          -     8269   7.887      1.610      -       -          -
20   Spl    2 24Jun2005 15:54      -       -          -     8228   7.842      1.600      -       -          -
20   Spl  Avg                                          8248   7.864      1.605
20   Spl  SDev                                       28.991
20   Spl  %RSD                                        0.35


** Spl      Name:    1200872044                  Data File: XI605
            Remarks: 435939|1|1|138436004:PS

21   Spl    1 24Jun2005 16:04      -       -          -    53560  58.164     11.870      -       -          -


** Spl      Name:    138759001                   Data File: XI606
            Remarks: 435939|1|1|

22   Spl    1 24Jun2005 16:12      -       -          -     4677   3.900      0.796      -       -          -
22   Spl    2 24Jun2005 16:20      -       -          -     4868   4.112      0.839      -       -          -
22   Spl    3 24Jun2005 16:28      -       -          -     4905   4.153      0.848      -       -          -
22   Spl    4 24Jun2005 16:38      -       -          -     4832   4.072      0.831      -       -          -
22   Spl  Avg                                          4820   4.059      0.828
22   Spl  SDev                                      100.201
22   Spl  %RSD                                        2.08
```

```
** Spl      Name:    138759002                  Data File: XI607
            Remarks: 435939|1|1|

23   Spl    1 24Jun2005 16:46      -       -          -    12866  12.990      2.651      -       -          -
23   Spl    2 24Jun2005 16:54      -       -          -    12758  12.870      2.627      -       -          -
23   Spl    3 24Jun2005 17:01      -       -          -    13154  13.310      2.716      -       -          -
23   Spl    4 24Jun2005 17:11      -       -          -    13011  13.151      2.684      -       -          -
23   Spl  Avg                                            12947  13.080      2.670
23   Spl  SDev                                         172.459
23   Spl  %RSD                                            1.33


** Spl      Name:    138759003                  Data File: XI608
            Remarks: 435939|1|1|

24   Spl    1 24Jun2005 17:19      -       -          -    27007  28.688      5.855      -       -          -
24   Spl    2 24Jun2005 17:27      -       -          -    27241  28.948      5.908      -       -          -
24   Spl    3 24Jun2005 17:35      -       -          -    27929  29.712      6.064      -       -          -
24   Spl    4 24Jun2005 17:44      -       -          -    24641  26.062      5.319      -       -          -
24   Spl  Avg                                            26704  28.352      5.786
24   Spl  SDev                                        1430.241
24   Spl  %RSD                                            5.36


** Spl      Name:    1200872042                 Data File: XI609
            Remarks: 435939|1|1|138759003:DUP

25   Spl    1 24Jun2005 17:53      -       -          -    27322  29.038      5.926      -       -          -
25   Spl    2 24Jun2005 18:02      -       -          -    27622  29.371      5.994      -       -          -
25   Spl  Avg                                            27472  29.204      5.960
25   Spl  SDev                                         212.132
25   Spl  %RSD                                            0.77


** Spl      Name:    1200872045                 Data File: XI610
            Remarks: 435939|1|1|138759003:PS

26   Spl    1 24Jun2005 18:13      -       -          -    72157  78.809     16.083      -       -          -


** Chk2     Name:    CCV                        Data File: XI611
            Remarks: 435939|1|1|WTC050624-02

27   Chk2   1 24Jun2005 18:23      -       -          -    46268  48.683      9.935      -       -          -

28   Blk    1 24Jun2005 18:31      -       -          -     1565       -          -      -       -          -
28   Blk    2 24Jun2005 18:39      -       -          -     1419       -          -      -       -          -
28   Blk    3 24Jun2005 18:47      -       -          -     1318       -          -      -       -          -
28   Blk    4 24Jun2005 18:55      -       -          -     1111       -          -      -       -          -
28   Blk    5 24Jun2005 19:05      -       -          -     1101       -          -      -       -          -


** Chk5     Name:    CCB                        Data File: XI613
            Remarks: 435939|1|1|

28   Chk5   1 24Jun2005 19:15      -       -          -     2794   0.423      0.086      -       -          -


** Spl      Name:    138759004                  Data File: XI614
            Remarks: 435939|1|1|

29   Spl    1 24Jun2005 19:23      -       -          -     5405   4.695      0.958      -       -          -
29   Spl    2 24Jun2005 19:31      -       -          -     5308   4.587      0.936      -       -          -
29   Spl    3 24Jun2005 19:39      -       -          -     5718   5.042      1.029      -       -          -
```

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29   Spl    4 24Jun2005 19:49      -       -          -     5166   4.429      0.904      -       -          -
29   Spl  Avg                                            5399   4.688      0.957
29   Spl  SDev                                         234.070
29   Spl  %RSD                                            4.34


** Spl      Name:    138759005                  Data File: XI615
            Remarks: 435939|1|1|

30   Spl    1 24Jun2005 19:57      -       -          -     7416   6.927      1.414      -       -          -
30   Spl    2 24Jun2005 20:05      -       -          -     5814   5.149      1.051      -       -          -
30   Spl    3 24Jun2005 20:12      -       -          -     5641   4.957      1.012      -       -          -
30   Spl    4 24Jun2005 20:22      -       -          -     5562   4.869      0.994      -       -          -
30   Spl  Avg                                            6108   5.475      1.117
30   Spl  SDev                                         878.162
30   Spl  %RSD                                           14.38


** Spl      Name:    138759006                  Data File: XI616
            Remarks: 435939|1|1|

31   Spl    1 24Jun2005 20:30      -       -          -     6699   6.131      1.251      -       -          -
31   Spl    2 24Jun2005 20:38      -       -          -     6753   6.191      1.263      -       -          -
31   Spl    3 24Jun2005 20:46      -       -          -     6800   6.243      1.274      -       -          -
31   Spl    4 24Jun2005 20:56      -       -          -     6766   6.205      1.266      -       -          -
31   Spl  Avg                                            6754   6.193      1.264
31   Spl  SDev                                          41.972
31   Spl  %RSD                                            0.62


** Spl      Name:    138851003                  Data File: XI617
            Remarks: 435939|1|1|

32   Spl    1 24Jun2005 21:04      -       -          -     9083   8.778      1.791      -       -          -
32   Spl    2 24Jun2005 21:12      -       -          -     8311   7.921      1.616      -       -          -
32   Spl    3 24Jun2005 21:19      -       -          -     8142   7.733      1.578      -       -          -
32   Spl    4 24Jun2005 21:29      -       -          -     8164   7.757      1.583      -       -          -
32   Spl  Avg                                            8425   8.047      1.642
32   Spl  SDev                                         445.036
32   Spl  %RSD                                            5.28


** Spl      Name:    1200872043                 Data File: XI618
            Remarks: 435939|1|1|138851003:DUP

33   Spl    1 24Jun2005 21:37      -       -          -     8189   7.785      1.589      -       -          -
33   Spl    2 24Jun2005 21:47      -       -          -     7919   7.485      1.528      -       -          -
33   Spl  Avg                                            8054   7.635      1.558
33   Spl  SDev                                         190.919
33   Spl  %RSD                                            2.37


** Spl      Name:    1200872046                 Data File: XI619
            Remarks: 435939|1|1|138851003:PS

34   Spl    1 24Jun2005 21:57      -       -          -    51070  55.387     11.304      -       -          -


** Spl      Name:    138851004                  Data File: XI620
            Remarks: 435939|1|1|

35   Spl    1 24Jun2005 22:06      -       -          -     8510   8.141      1.661      -       -          -
35   Spl    2 24Jun2005 22:13      -       -          -     8486   8.115      1.656      -       -          -
35   Spl    3 24Jun2005 22:21      -       -          -     8527   8.160      1.665      -       -          -
35   Spl    4 24Jun2005 22:31      -       -          -     8181   7.776      1.587      -       -          -
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35   Spl  Avg                                          8426   8.048      1.643
35   Spl  SDev                                      164.197
35   Spl  %RSD                                         1.95


** Chk2     Name:    CCV                          Data File: XI621
            Remarks: 435939|1|1|WTC050624-02

36   Chk2   1 24Jun2005 22:41      -       -          -    46113  48.511      9.900      -       -          -

37   Blk    1 24Jun2005 22:49      -       -          -     1527      -          -       -       -          -
37   Blk    2 24Jun2005 22:57      -       -          -     1329      -          -       -       -          -
37   Blk    3 24Jun2005 23:05      -       -          -     1191      -          -       -       -          -
37   Blk    4 24Jun2005 23:13      -       -          -     1089      -          -       -       -          -
37   Blk    5 24Jun2005 23:23      -       -          -     1042      -          -       -       -          -


** Chk5     Name:    CCB                          Data File: XI623
            Remarks: 435939|1|1|

37   Chk5   1 24Jun2005 23:33      -       -          -     2329  -0.093     -0.019      -       -          -


** Spl      Name:    138788001                    Data File: XI624
            Remarks: 436680|1|1|DOC

38   Spl    1 24Jun2005 23:41      -       -          -   175478 193.568     39.504      -       -          -
38   Spl    2 24Jun2005 23:51      -       -          -   186937 206.288     42.100      -       -          -
38   Spl  Avg                                          181207 199.928     40.802
38   Spl  SDev                                       8102.737
38   Spl  %RSD                                            4.47


** Spl      Name:    1200873786                   Data File: XI625
            Remarks: 436680|1|1|138788001:DUP

39   Spl    1 24Jun2005 23:59      -       -          -   179901 198.478     40.506      -       -          -
39   Spl    2 25Jun2005 00:09      -       -          -   186409 205.702     41.980      -       -          -
39   Spl  Avg                                          183155 202.090     41.243
39   Spl  SDev                                       4601.851
39   Spl  %RSD                                            2.51


** Spl      Name:    1200873788                   Data File: XI626
            Remarks: 436680|1|1|138788001:PS

40   Spl    1 25Jun2005 00:19      -       -          -   152664 168.242     34.335      -       -          -


** Spl      Name:    138788002                    Data File: XI627
            Remarks: 436680|2|1|

41   Spl    1 25Jun2005 00:28      -       -          -   154422 170.194     34.733      -       -          -
41   Spl    2 25Jun2005 00:38      -       -          -   158854 175.114     35.737      -       -          -
41   Spl  Avg                                          156638 172.654     35.236
41   Spl  SDev                                       3133.897
41   Spl  %RSD                                            2.00


** Spl      Name:    138788003                    Data File: XI628
            Remarks: 436680|2|1|

42   Spl    1 25Jun2005 00:46      -       -          -    38945  42.004      8.572      -       -          -
42   Spl    2 25Jun2005 00:56      -       -          -    47843  51.881     10.588      -       -          -
42   Spl  Avg                                           43394  46.942      9.580
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42   Spl  SDev                                      6291.836
42   Spl  %RSD                                        14.50


** Spl      Name:    138799001                   Data File: XI629
            Remarks: 436680|1|1|

43   Spl    1 25Jun2005 01:04      -       -          -   184305 203.367     41.503      -       -          -
43   Spl    2 25Jun2005 01:14      -       -          -   192672 212.655     43.399      -       -          -
43   Spl  Avg                                         188488 208.011     42.451
43   Spl  SDev                                      5916.362
43   Spl  %RSD                                         3.14


** Spl      Name:    1200873787                  Data File: XI630
            Remarks: 436680|1|1|138799001:DUP

44   Spl    1 25Jun2005 01:22      -       -          -   187013 206.373     42.117      -       -          -
44   Spl    2 25Jun2005 01:32      -       -          -   188111 207.592     42.366      -       -          -
44   Spl  Avg                                         187562 206.982     42.241
44   Spl  SDev                                      776.403
44   Spl  %RSD                                         0.41


** Spl      Name:    1200873789                  Data File: XI631
            Remarks: 436680|1|1|138799001:PS

45   Spl    1 25Jun2005 01:42      -       -          -   147245 162.227     33.107      -       -          -


** Chk2     Name:    CCV                         Data File: XI632
            Remarks: 436680|1|1|WTC050624-02

46   Chk2   1 25Jun2005 01:52      -       -          -    46690  49.151     10.031      -       -          -

47   Blk    1 25Jun2005 02:01      -       -          -     1715       -          -       -       -          -
47   Blk    2 25Jun2005 02:09      -       -          -     1443       -          -       -       -          -
47   Blk    3 25Jun2005 02:17      -       -          -     1098       -          -       -       -          -
47   Blk    4 25Jun2005 02:24      -       -          -     1132       -          -       -       -          -
47   Blk    5 25Jun2005 02:32      -       -          -     1138       -          -       -       -          -
47   Blk    6 25Jun2005 02:42      -       -          -      987       -          -       -       -          -


** Chk5     Name:    CCB                         Data File: XI634
            Remarks: 436680|1|1|

47   Chk5   1 25Jun2005 02:52      -       -          -     2638   0.250      0.051      -       -          -
```

Cyanide, Total

Prep LogBook

Analyst: DXB2 Verified by:_____

Batch: 435372

Lab SOP: GL-GC-E-067 REV# 7

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200870800	URF050613-01	.025	mL
MS	1200870799	URF050613-01	.05	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200870797		EPA 335.3	21-JUN-2005 16:46	50 mL	50 mL	1	GROUND WATER
LCS	1200870800		EPA 335.3	21-JUN-2005 16:46	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851001		SW846 9010B Prep	21-JUN-2005 16:46	50 mL	50 mL	1	GROUND WATER
DUP	1200870798	138851001	SW846 9010B Prep	21-JUN-2005 16:46	50 mL	50 mL	1	GROUND WATER
MS	1200870799	138851001	SW846 9010B Prep	21-JUN-2005 16:46	50 mL	50 mL	1	GROUND WATER
SAMPLE	138851002		SW846 9010B Prep	21-JUN-2005 16:46	50 mL	50 mL	1	GROUND WATER
SAMPLE	138904002		SW846 9010B Prep	21-JUN-2005 16:46	50 mL	50 mL	1	WATER
SAMPLE	138905001		EPA 335.3	21-JUN-2005 16:46	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
311855-C	50 mL	0.25N Sodium Hydroxide Solution
305807-C	2.5 mL	Bismuth Nitrate Solution
313695-C	5 mL	50% H2SO4 CN Prep
314709-C	2 mL	51% Magnesium Chloride Solution
315296-C	2.5 mL	Sulfamic Acid Solution

Comments

1094

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	adf	6/22/2005 13:29:38	OM_6-22-2005_13-27-47
150 ppb		1	adf	6/22/2005 13:30:33	OM_6-22-2005_13-27-47
100 ppb		1	adf	6/22/2005 13:31:30	OM_6-22-2005_13-27-47
50 ppb		1	adf	6/22/2005 13:32:26	OM_6-22-2005_13-27-47
10 ppb		1	adf	6/22/2005 13:33:23	OM_6-22-2005_13-27-47
CRDL 5.0 ppb		1	adf	6/22/2005 13:34:21	OM_6-22-2005_13-27-47
ICAL-00		1	adf	6/22/2005 13:35:18	OM_6-22-2005_13-27-47
ICV		1	adf	6/22/2005 13:36:16	OM_6-22-2005_13-27-47
ICB		1	adf	6/22/2005 13:38:12	OM_6-22-2005_13-27-47
CRDL		1	adf	6/22/2005 13:40:08	OM_6-22-2005_13-27-47
1200868220	434296	1	adf	6/22/2005 13:42:04	OM_6-22-2005_13-27-47
CCV		1	adf	6/22/2005 13:51:30	OM_6-22-2005_13-27-47
CCB		1	adf	6/22/2005 13:53:26	OM_6-22-2005_13-27-47

Author: adf Date : 6/22/2005

Original Run Filename: OM_6-22-2005_13-27-47.OMN created 6/22/2005 13:27:47
Original Run Author's Signature: [adf]
Current Run Filename: OM_6-22-2005_13-27-47.OMN last modified 6/22/2005 15:03:02
Current Run Author's Signature: [adf]

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN050622-01	1	S1	200	9.19	6/22/2005@13:29:38			200 ppb
WCN050622-02	1	S2	150	7.04	6/22/2005@13:30:33			150 ppb
WCN050622-03	1	S3	100	4.55	6/22/2005@13:31:30			100 ppb
WCN050622-04	1	S4	50.0	2.18	6/22/2005@13:32:26			50 ppb
WCN050622-05	1	S5	10.0	0.470	6/22/2005@13:33:23			10 ppb
WCN050622-06	1	S6	5.00	0.259	6/22/2005@13:34:21			CRDL 5.0 ppb
0.0	1	S7	0.00	0.0323	6/22/2005@13:35:18			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99976 > 0.99500					
Message			Pass					
Action			None					
WCN050622-07	1	S8	159	7.34	6/22/2005@13:36:16			ICV
Known Conc:			150					
DQM Test: > + Concentration Limit								
Result:			159 < 165					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			159 > 135					
Message			ICV Passed					
Action			Continue					
DQM Test: > + Percent Relative Difference								
Result:			6.1 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.1 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB/CCB	1	S7	1.20	0.0464	6/22/2005@13:38:12			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.20 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.20 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN050622-06	1	S6	6.01	0.269	6/22/2005@13:40:08			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			6.01 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			6.01 > 2.50					
Message			CRDL Passed					
Action			Continue					
1200868220|434296|MS	1	1	110	5.05	6/22/2005@13:42:04			
1200870042|435038|MS	1	2	105	4.83	6/22/2005@13:43:01			
1200870044||MS	1	3	130	6.01	6/22/2005@13:43:58			
1200870043||MS	1	4	113	5.23	6/22/2005@13:44:55			
1200870797|435375|MB	1	5	1.25	0.0485	6/22/2005@13:45:52			
1200870800||LCS	1	6	51.9	2.39	6/22/2005@13:46:49			
138851001	1	7	3.89	0.171	6/22/2005@13:47:46			
1200870798||DUP	1	8	4.72	0.209	6/22/2005@13:48:41			
1200870799||MS	1	9	116	5.36	6/22/2005@13:49:37			

138851002	1	10	3.23	0.140	6/22/2005@13:50:33			
WCN050622-03	1	S3	102	4.68	6/22/2005@13:51:30			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	102 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	102 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	1.10	0.0417	6/22/2005@13:53:26			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.10 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.10 > -5.00					
		Message	CCB Passed					
		Action	Continue					
138904002	1	11	1.18	0.0454	6/22/2005@13:55:20			
138905001	1	12	1.27	0.0497	6/22/2005@13:56:16			
1200871798|435820|MB	1	13	3.94	0.173	6/22/2005@13:57:11			
1200871803||LCS	1	14	15.9	0.725	6/22/2005@14:00:26	50.00		
138583001	1	15	5.03	0.224	6/22/2005@14:01:21			
138583002	1	16	7.29	0.328	6/22/2005@14:02:20			
138594001	1	17	2.89	0.124	6/22/2005@14:03:16			
138631001	1	18	20.4	0.933	6/22/2005@14:04:14			
138632001	1	19	5.18	0.230	6/22/2005@14:05:10			
1200871799||DUP	1	20	5.93	0.265	6/22/2005@14:06:07			
WCN050622-03	1	S3	102	4.72	6/22/2005@14:07:03			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	102 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	102 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.983	0.0364	6/22/2005@14:09:00			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.983 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.983 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1200871801||MS	1	21	83.1	3.83	6/22/2005@14:10:55			
138632002	1	22	6.58	0.295	6/22/2005@14:11:52			
138670001	1	23	32.7	1.50	6/22/2005@14:12:48			
138753001	1	24	5.39	0.240	6/22/2005@14:13:44			
138755001	1	25	22.2	1.02	6/22/2005@14:14:40			
138871001	1	26	11.8	0.535	6/22/2005@14:15:36			
138873001	1	27	129	5.97	6/22/2005@14:16:32			
138874001	1	28	103	4.77	6/22/2005@14:17:28			
138876001	1	29	3.01	0.130	6/22/2005@14:18:22			
138877001	1	30	25.9	1.19	6/22/2005@14:19:18			
WCN050622-03	1	S3	102	4.69	6/22/2005@14:20:13			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	102 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

		Result:	102 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.894	0.0322	6/22/2005@14:22:08			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.894 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.894 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1200871800||DUP	1	31	12.9	0.587	6/22/2005@14:24:02			
1200871802||MS	1	32	94.0	4.33	6/22/2005@14:24:58			
138878001	1	33	3.56	0.156	6/22/2005@14:25:55			
1200871804|435823|MB	1	34	1.24	0.0481	6/22/2005@14:26:52			
1200871809||LCS	1	35	5.46	0.243	6/22/2005@14:27:48			
138583001	1	36	1.99	0.0831	6/22/2005@14:28:45			
138583002	1	37	3.80	0.166	6/22/2005@14:29:42			
138594001	1	38	5.11	0.227	6/22/2005@14:30:39			
138631001	1	39	20.3	0.930	6/22/2005@14:31:35			
138632001	1	40	58.1	2.68	6/22/2005@14:32:30			
WCN050622-03	1	S3	102	4.72	6/22/2005@14:33:26			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	102 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	102 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.946	0.0346	6/22/2005@14:35:22			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.946 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.946 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1200871805||DUP	1	41	67.1	3.09	6/22/2005@14:37:19			
1200871807||MS	1	42	89.7	4.13	6/22/2005@14:38:15			
138632002	1	43	78.2	3.60	6/22/2005@14:39:10			
138670001	1	44	22.2	1.02	6/22/2005@14:40:05			
138753001	1	45	36.3	1.67	6/22/2005@14:41:01			
138755001	1	46	1.41	0.0563	6/22/2005@14:41:58			
138871001	1	47	21.8	0.998	6/22/2005@14:42:56			
138873001	1	48	238	11.0	6/22/2005@14:43:54			
138874001	1	49	373	17.2	6/22/2005@14:44:51			
138876001	1	50	3.34	0.145	6/22/2005@14:45:50			
WCN050622-03	1	S3	102	4.69	6/22/2005@14:46:42			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	102 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	102 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	1.02	0.0382	6/22/2005@14:48:39			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	1.02 < 5.00					
		Message	CCB Passed					

		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.02 > -5.00					
		Message	CCB Passed					
		Action	Continue					
138877001	1	51	9.92	0.449	6/22/2005@14:50:32			
1200871806||DUP	1	52	12.2	0.554	6/22/2005@14:51:29			
1200871808||MS	1	53	14.5	0.662	6/22/2005@14:52:25			
138878001	1	54	42.0	1.93	6/22/2005@14:53:21			
138873001	1	48	14.6	0.664	6/22/2005@14:56:15	10.00		
138874001	1	49	17.7	0.810	6/22/2005@14:59:04	10.00		
WCN050622-03	1	S3	101	4.68	6/22/2005@14:59:59			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	101 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	101 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	2.00	0.0832	6/22/2005@15:01:53			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	2.00 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	2.00 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_6-22-2005_13-27-47.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: adf Date : 6/22/2005

Channel 1: Current View

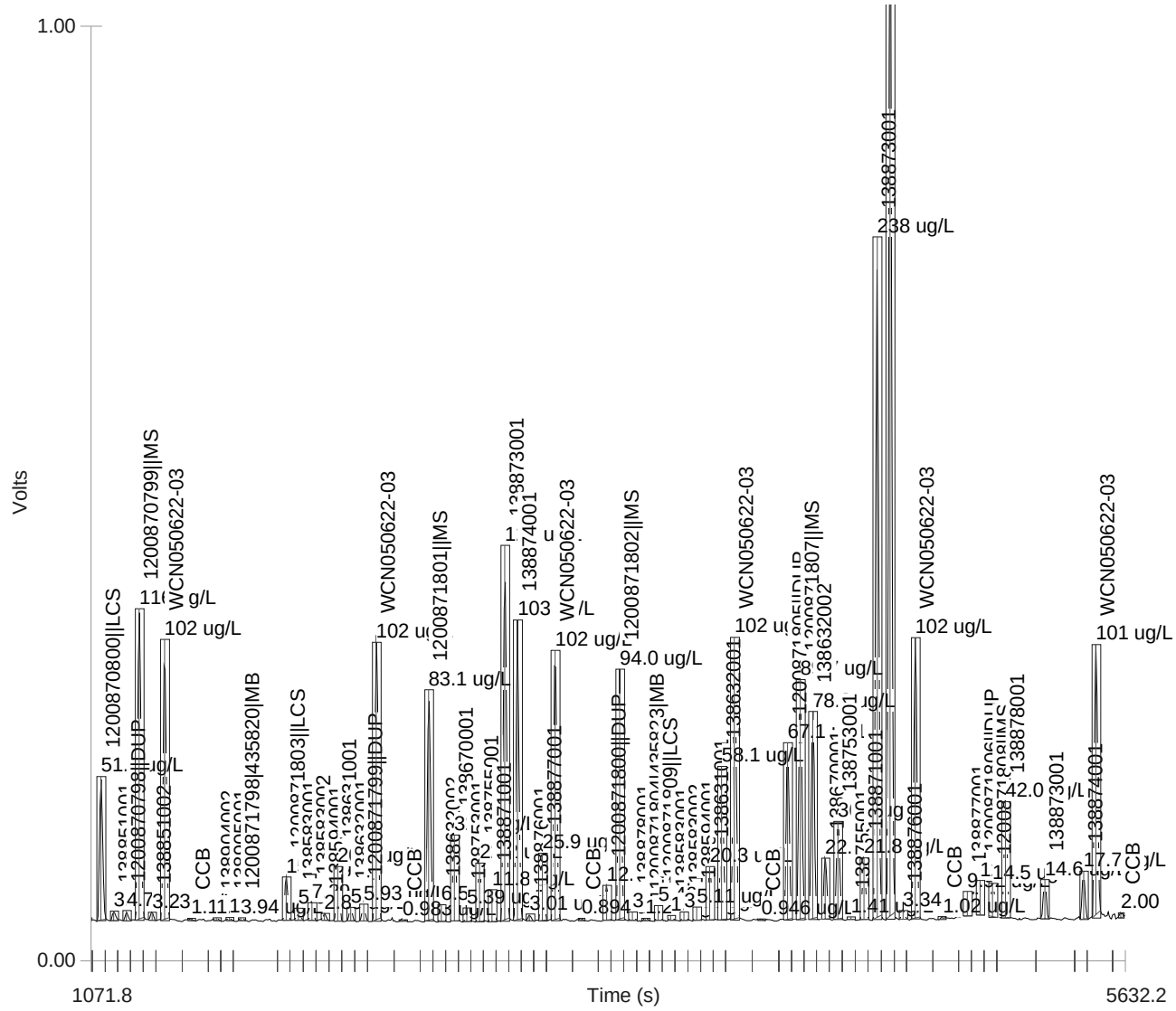
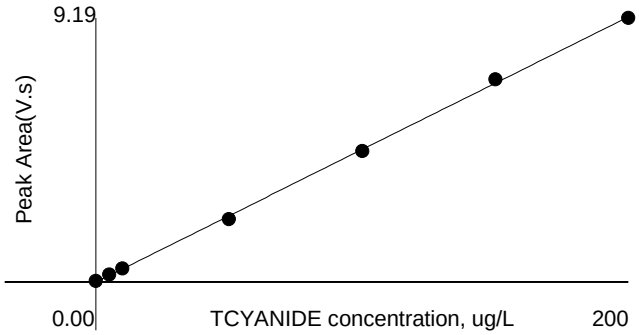


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.19	0.580	0.4	6/22/2005	13:30:46
2	150	1	7.04	0.433	-1.8	6/22/2005	13:31:38
3	100	1	4.55	0.276	1.4	6/22/2005	13:32:35
4	50.0	1	2.18	0.131	5.2	6/22/2005	13:33:31
5	10.0	1	0.470	0.0293	-3.6	6/22/2005	13:34:28
6	5.00	1	0.259	0.0163	-15.7	6/22/2005	13:35:26
7	0.00	1	0.0323	0.00202		6/22/2005	13:36:24

Author: adf Date : 6/22/2005

Figure 1: TCYANIDE



Area = 0.0462 * Conc - 0.00737
Conc = 21.7 * Area + 0.196
Correlation Coefficient (r) = 0.99976

No Weighting

Ion Chromatography

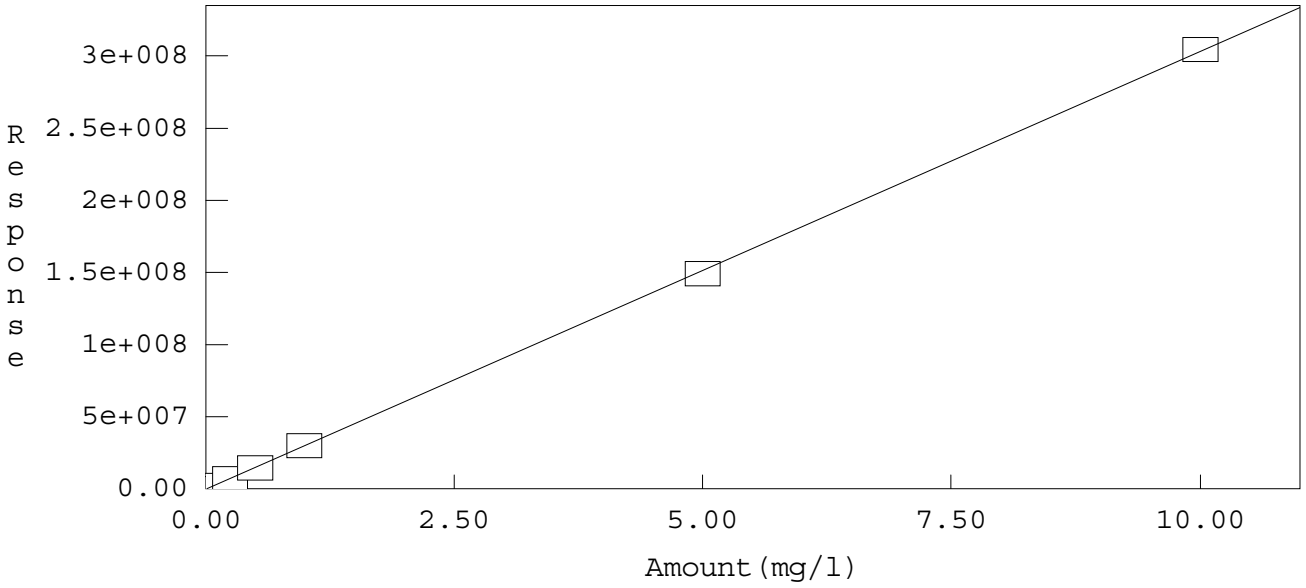
METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			BJB	05/27/2005 14:57:33	AZE7KC01.R01
AUTOCAL7:			BJB	05/27/2005 15:17:51	AZE7KC01.R02
AUTOCAL6:			BJB	05/27/2005 15:38:09	AZE7KC01.R03
AUTOCAL5:			BJB	05/27/2005 15:58:29	AZE7KC01.R04
AUTOCAL4:			BJB	05/27/2005 16:18:56	AZE7KC01.R05
AUTOCAL3:			BJB	05/27/2005 16:39:24	AZE7KC01.R06
AUTOCAL2:			BJB	05/27/2005 16:59:52	AZE7KC01.R07
AUTOCAL1:			BJB	05/27/2005 17:20:10	AZE7KC01.R08
AUTOCAL7:			BJB	05/27/2005 17:40:39	AZE7KC01.R09
AUTOCAL6:			BJB	05/27/2005 18:01:06	AZE7KC01.R10
WIC050527-02ICV:1		1	BJB	05/27/2005 18:21:24	AZE7KC01.R11
ICB:			BJB	05/27/2005 18:41:53	AZE7KC01.R12
1200856010:1	429373	1	BJB	05/27/2005 19:02:22	AZE7KC01.R13
1200856013:1	429373	1	BJB	05/27/2005 19:22:40	AZE7KC01.R14
137441001:1	429373	1	BJB	05/27/2005 19:42:58	AZE7KC01.R15
137441002:1	429373	1	BJB	05/27/2005 20:03:15	AZE7KC01.R16
137441003:1	429373	1	BJB	05/27/2005 20:23:33	AZE7KC01.R17
137441004:1	429373	1	BJB	05/27/2005 20:43:51	AZE7KC01.R18
1200856011:1	429373	1	BJB	05/27/2005 21:04:08	AZE7KC01.R19
1200856012:1	429373	1	BJB	05/27/2005 21:24:26	AZE7KC01.R20
137441005:1	429373	1	BJB	05/27/2005 21:44:44	AZE7KC01.R21
137441006:1	429373	1	BJB	05/27/2005 22:05:01	AZE7KC01.R22
WIC050527-02CCV:1		1	BJB	05/27/2005 22:25:19	AZE7KC01.R23
CCB:			BJB	05/27/2005 22:45:37	AZE7KC01.R24
137441007:1	429373	1	BJB	05/27/2005 23:05:54	AZE7KC01.R25
137441008:1	429373	1	BJB	05/27/2005 23:26:12	AZE7KC01.R26
WIC050527-02CVH:1		1	BJB	05/27/2005 23:46:30	AZE7KC01.R27
CCB:			BJB	05/28/2005 00:06:47	AZE7KC01.R28
1200856014:1	429374	1	BJB	05/28/2005 00:27:05	AZE7KC01.R29
1200856019:1	429374	1	BJB	05/28/2005 00:47:23	AZE7KC01.R30
1200856129:1	429374	1	BJB	05/28/2005 01:07:40	AZE7KC01.R31
137455001:1	429374	1	BJB	05/28/2005 01:27:58	AZE7KC01.R32
137455002:1	429374	1	BJB	05/28/2005 01:48:27	AZE7KC01.R33
137455003:1	429374	1	BJB	05/28/2005 02:08:44	AZE7KC01.R34
137455004:1	429374	1	BJB	05/28/2005 02:29:02	AZE7KC01.R35
137455005:1	429374	1	BJB	05/28/2005 02:49:20	AZE7KC01.R36
137455006:1	429374	1	BJB	05/28/2005 03:09:37	AZE7KC01.R37
137455007:1	429374	1	BJB	05/28/2005 03:29:55	AZE7KC01.R38
WIC050527-02CCV:1		1	BJB	05/28/2005 03:50:24	AZE7KC01.R39
CCB:			BJB	05/28/2005 04:10:41	AZE7KC01.R40
137455008:1	429374	1	BJB	05/28/2005 04:30:59	AZE7KC01.R41
137455009:1	429374	1	BJB	05/28/2005 04:51:28	AZE7KC01.R42
137455010:1	429374	1	BJB	05/28/2005 05:11:46	AZE7KC01.R43
137455011:1	429374	1	BJB	05/28/2005 05:32:15	AZE7KC01.R44
137455012:1	429374	1	BJB	05/28/2005 05:52:32	AZE7KC01.R45
137455013:1	429374	1	BJB	05/28/2005 06:12:50	AZE7KC01.R46
137455014:1	429374	1	BJB	05/28/2005 06:33:19	AZE7KC01.R47
137455015:1	429374	1	BJB	05/28/2005 06:53:36	AZE7KC01.R48
WIC050527-02CVH:1		1	BJB	05/28/2005 07:13:54	AZE7KC01.R49
CCB:			BJB	05/28/2005 07:34:12	AZE7KC01.R50
136854001:2	428261	5	BJB	05/28/2005 07:54:53	AZE7KC01.R51
1200853347:2	428261	5	BJB	05/28/2005 08:15:11	AZE7KC01.R52
1200853349:2	428261	5	BJB	05/28/2005 08:35:29	AZE7KC01.R53
136854002:2	428261	5	BJB	05/28/2005 08:55:46	AZE7KC01.R54
136854003:3	428261	5	BJB	05/28/2005 09:16:04	AZE7KC01.R55

136908001:2	428261	2	BJB	05/28/2005 09:36:21	AZE7KC01.R56
1200853348:2	428261	2	BJB	05/28/2005 09:56:39	AZE7KC01.R57
1200853350:2	428261	2	BJB	05/28/2005 10:16:57	AZE7KC01.R58
WIC050527-02CCV:1		1	BJB	05/28/2005 10:37:38	AZE7KC01.R59
CCB:			BJB	05/28/2005 10:58:07	AZE7KC01.R60
BLK:			BJB	05/28/2005 19:00:05	AZE7KC01.R61
WIC050527-02CVH:1		1	BJB	05/28/2005 19:20:23	AZE7KC01.R62
CCB:			BJB	05/28/2005 19:40:52	AZE7KC01.R63
1200856440:1	429554	1	BJB	05/28/2005 20:01:21	AZE7KC01.R64
1200856443:1	429554	1	BJB	05/28/2005 20:21:50	AZE7KC01.R65
137521001:1	429554	1	BJB	05/28/2005 20:42:08	AZE7KC01.R66
1200856441:1	429554	1	BJB	05/28/2005 21:02:25	AZE7KC01.R67
1200856442:1	429554	1	BJB	05/28/2005 21:22:43	AZE7KC01.R68
137521002:1	429554	1	BJB	05/28/2005 21:43:01	AZE7KC01.R69
137521003:1	429554	1	BJB	05/28/2005 22:03:30	AZE7KC01.R70
137521004:1	429554	1	BJB	05/28/2005 22:23:47	AZE7KC01.R71
WIC050527-02CCV:1		1	BJB	05/28/2005 22:44:05	AZE7KC01.R72
CCB:			BJB	05/28/2005 23:04:34	AZE7KC01.R73

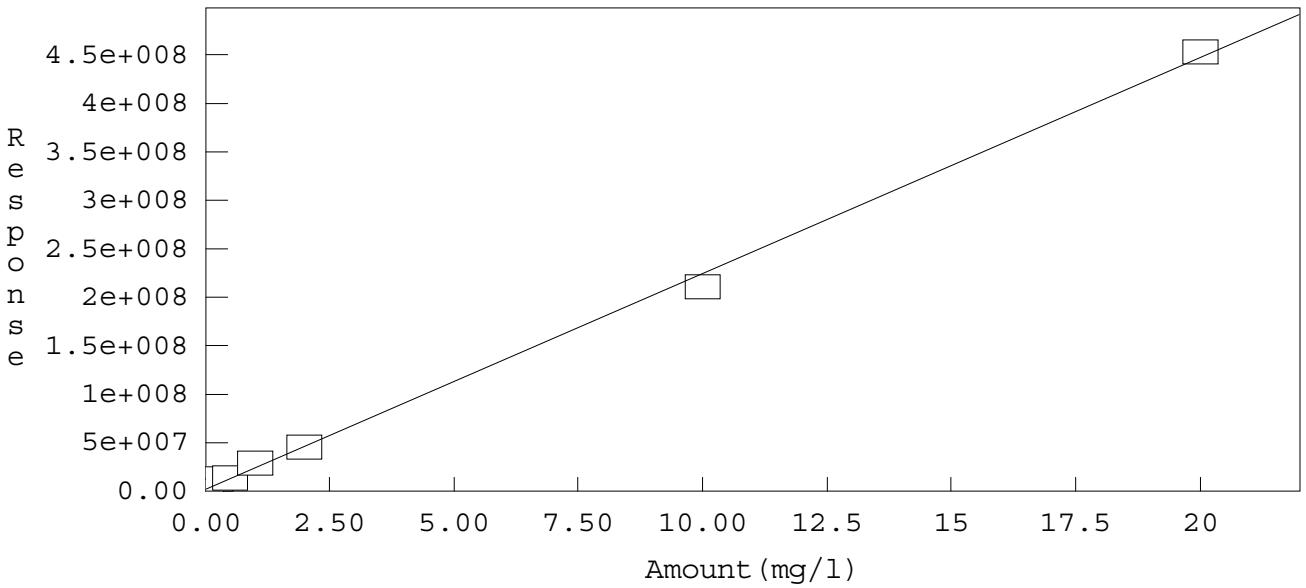
Method: MAY27.MET - Last Updated: 18:01 on Fri, 27 May 2005

Component: Fluoride
Fit Type: Linear
r^2 = 0.999918
Amt = Resp * 3.291e-008 + 0.02083
Resp = Amt * 3.038e+007 + -6.329e+005
Standardization: External
Calibration: Area



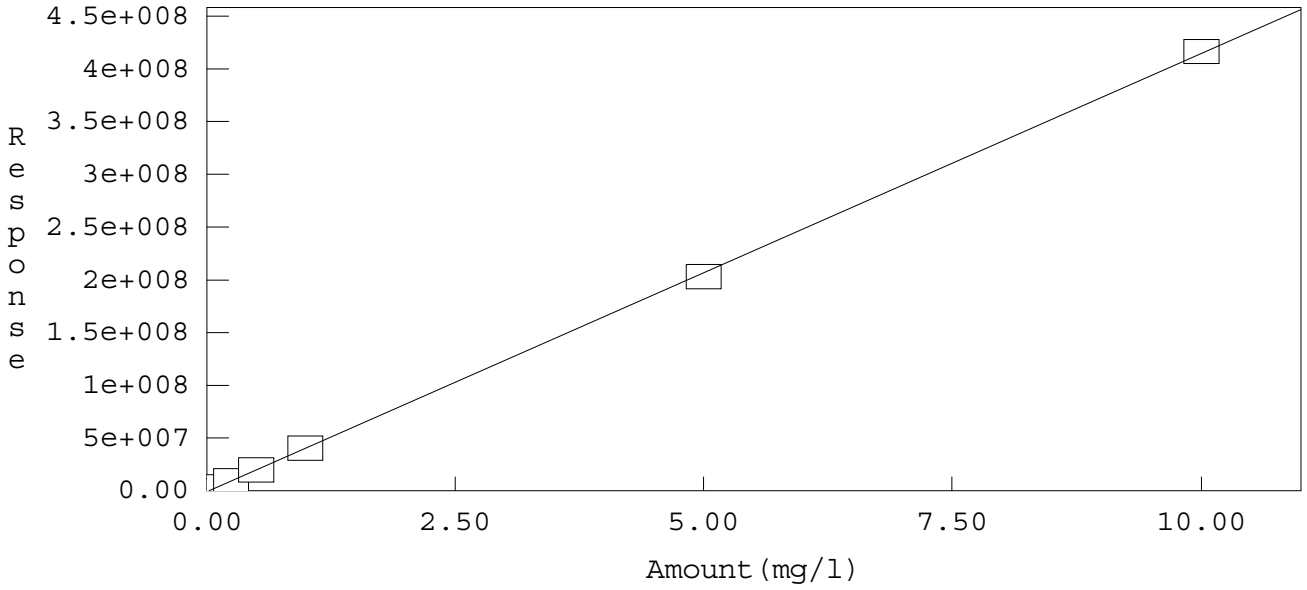
Method: C:\DX\METHOD\MAY27.MET

Component: Chloride
Fit Type: Linear
r^2 = 0.998265
Amt = Resp * 4.498e-008 + -0.1021
Resp = Amt * 2.223e+007 + 2.27e+006
Standardization: External
Calibration: Area



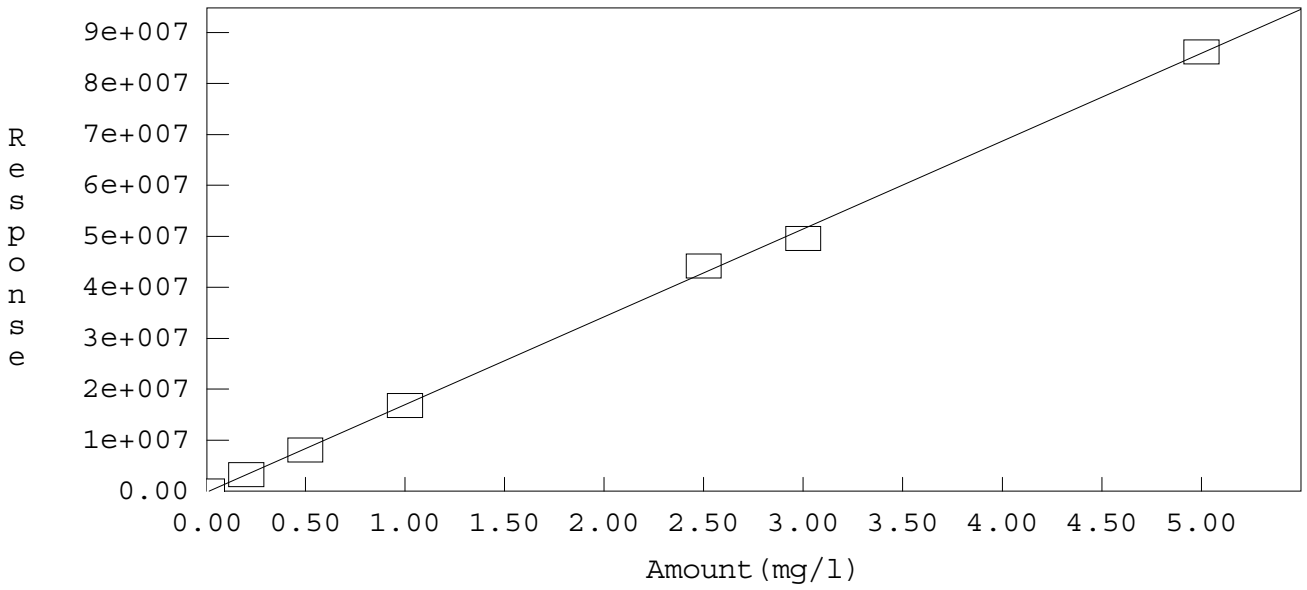
Method: C:\DX\METHOD\MAY27.MET

Component: Nitrite-N
Fit Type: Linear
r^2 = 0.999887
Amt = Resp * 2.407e-008 + 0.02263
Resp = Amt * 4.154e+007 + -9.401e+005
Standardization: External
Calibration: Area



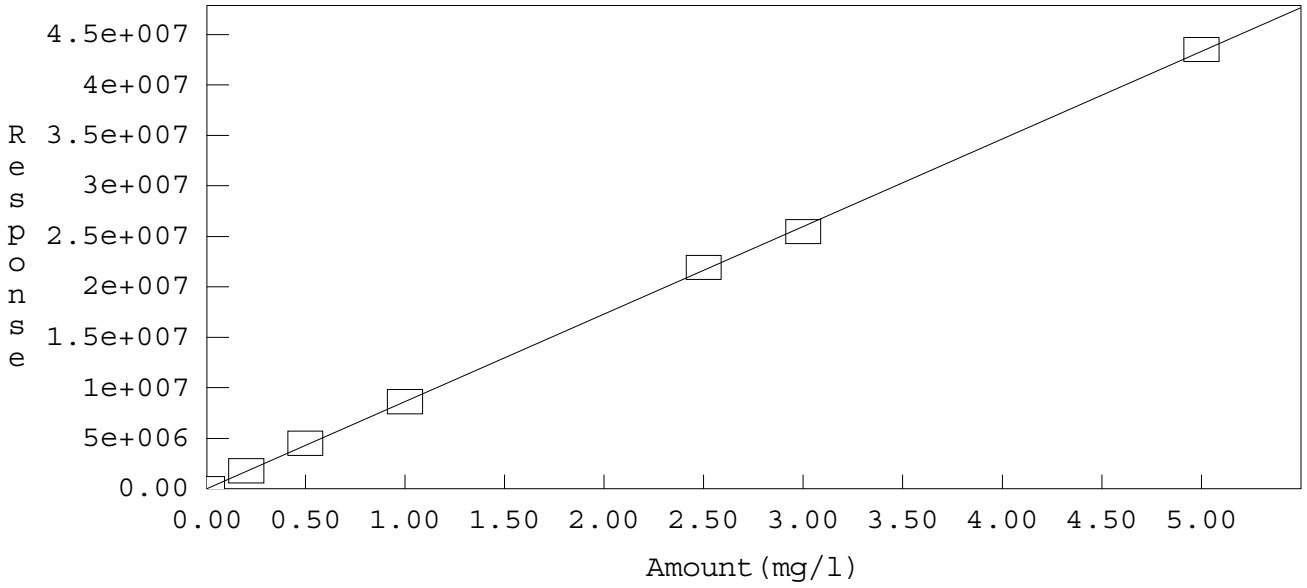
Method: C:\DX\METHOD\MAY27.MET

Component: O-Phosphate-P
Fit Type: Linear
r^2 = 0.999085
Amt = Resp * 5.809e-008 + 0.01538
Resp = Amt * 1.721e+007 + -2.647e+005
Standardization: External
Calibration: Area



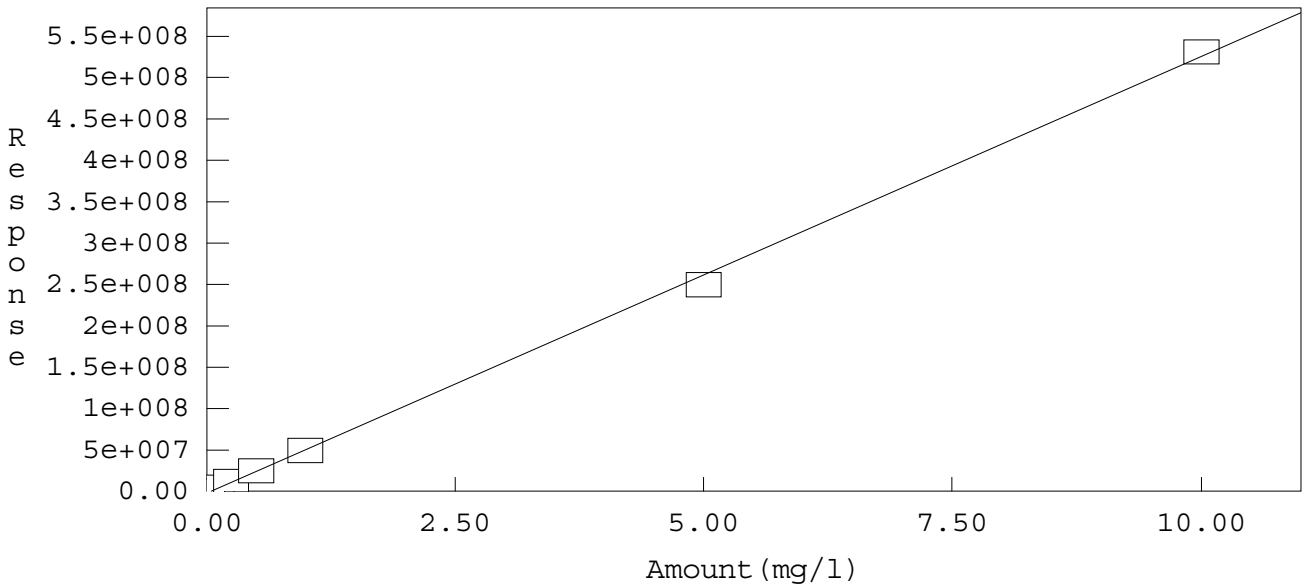
Method: C:\DX\METHOD\MAY27.MET

Component: Bromide
Fit Type: Linear
r^2 = 0.999740
Amt = Resp * 1.155e-007 + -0.004011
Resp = Amt * 8.656e+006 + 3.472e+004
Standardization: External
Calibration: Area



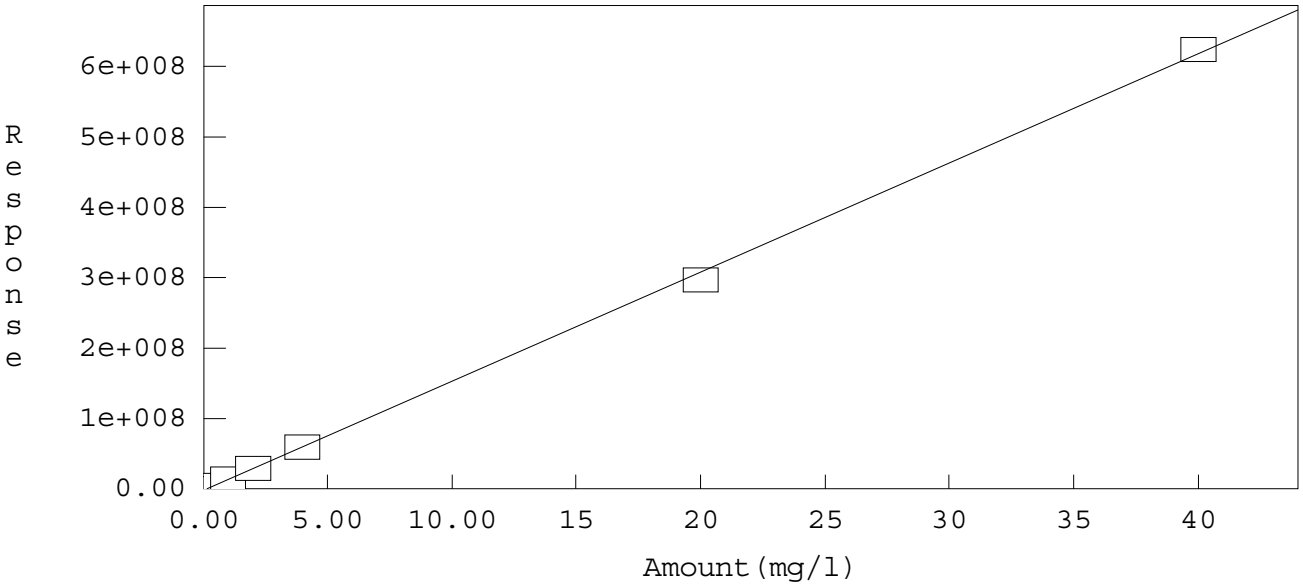
Method: C:\DX\METHOD\MAY27.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.999213
Amt = Resp * 1.894e-008 + 0.05062
Resp = Amt * 5.279e+007 + -2.672e+006
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\MAY27.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999485
Amt = Resp * 6.44e-008 + 0.1721
Resp = Amt * 1.553e+007 + -2.672e+006
Standardization: External
Calibration: Area

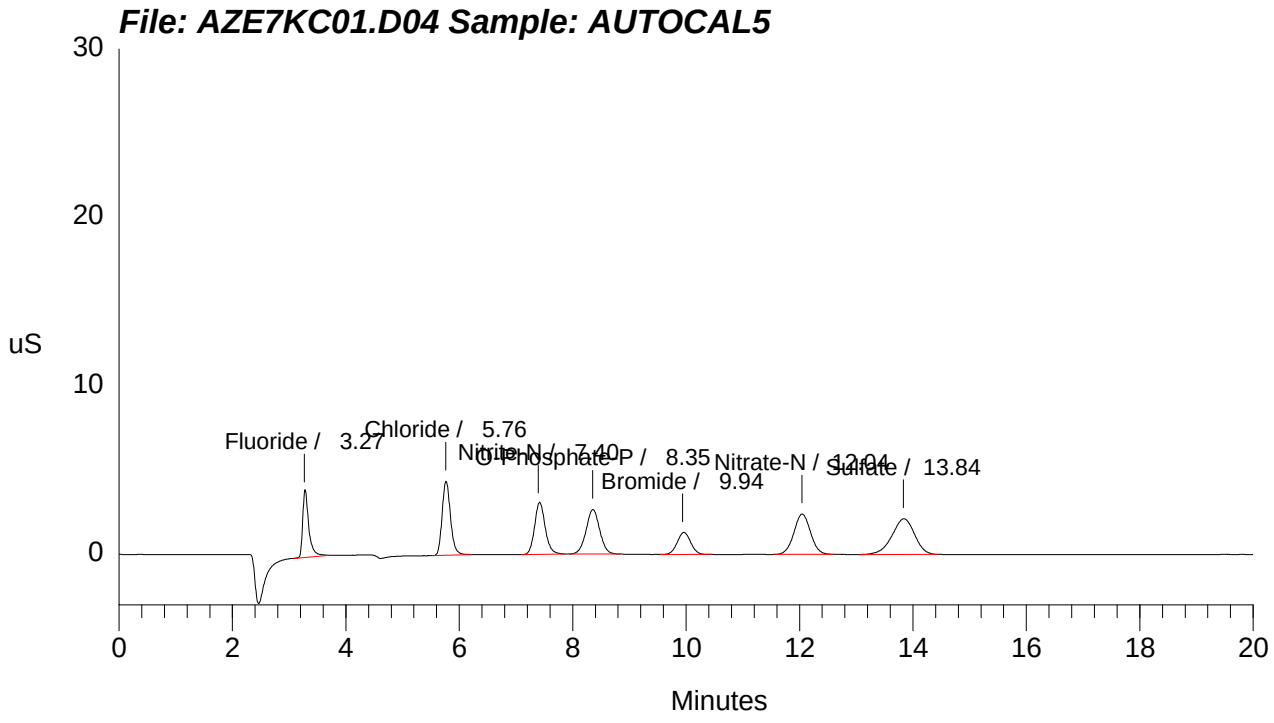


```
================================================================================
| Sample Name: AUTOCAL5                        Date: 05/27/2005 15:58:29       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D04                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 4                   Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	1.000	3829726	29992980	1	0.00
2	5.76	Chloride	2.000	4403140	45441250	1	0.00
3	7.40	Nitrite-N	1.000	3003109	40330948	1	0.00
4	8.35	O-Phosphate-P	2.500	2643095	44224432	1	0.00
5	9.94	Bromide	2.500	1291728	21921150	1	0.00
6	12.04	Nitrate-N	1.000	2398169	49159414	1	0.00
7	13.84	Sulfate	4.000	2125440	59326984	1	0.00
		Totals	14.000	19694406	290397158		

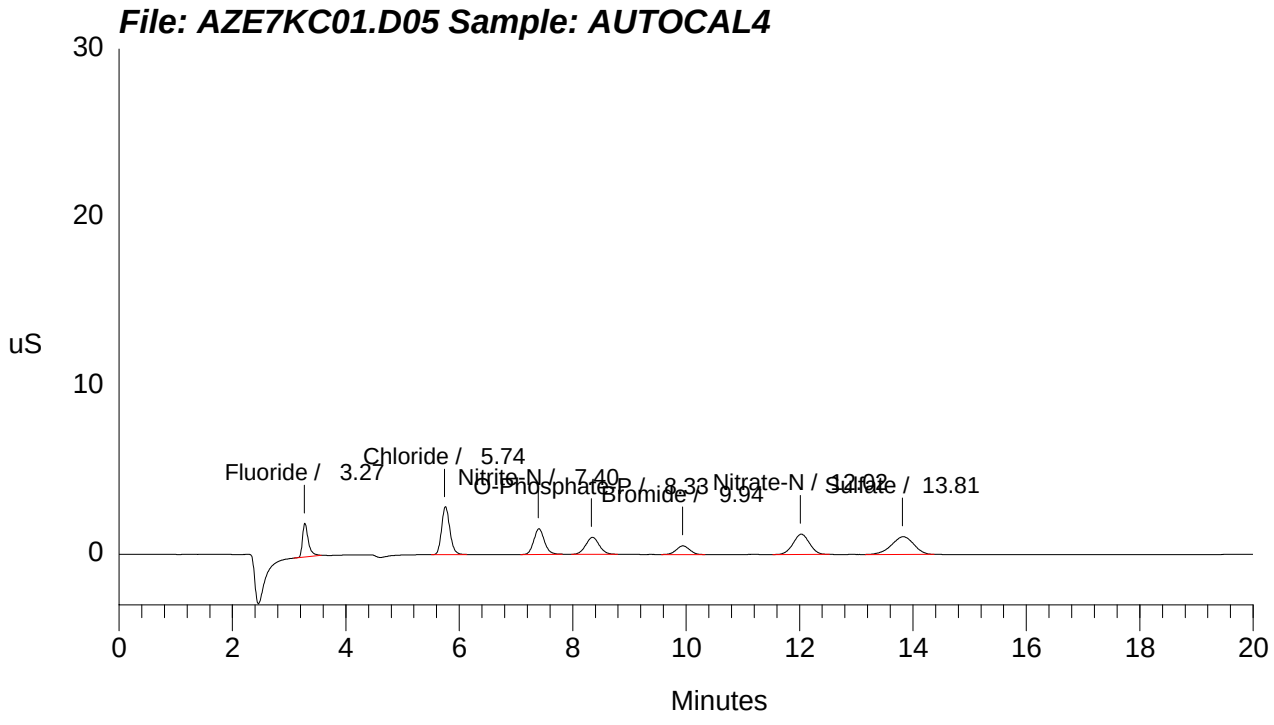


```
================================================================================
| Sample Name: AUTOCAL4                        Date: 05/27/2005 16:18:56       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D05                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.500	1965077	14425310	1	0.00
2	5.74	Chloride	1.000	2779406	29107304	1	0.00
3	7.40	Nitrite-N	0.500	1520305	19862106	1	0.00
4	8.33	O-Phosphate-P	1.000	996524	16828380	1	0.00
5	9.94	Bromide	1.000	520037	8645016	1	0.00
6	12.02	Nitrate-N	0.500	1205544	24610088	1	0.00
7	13.81	Sulfate	2.000	1049141	29058306	1	0.00
		Totals	6.500	10036034	142536510		

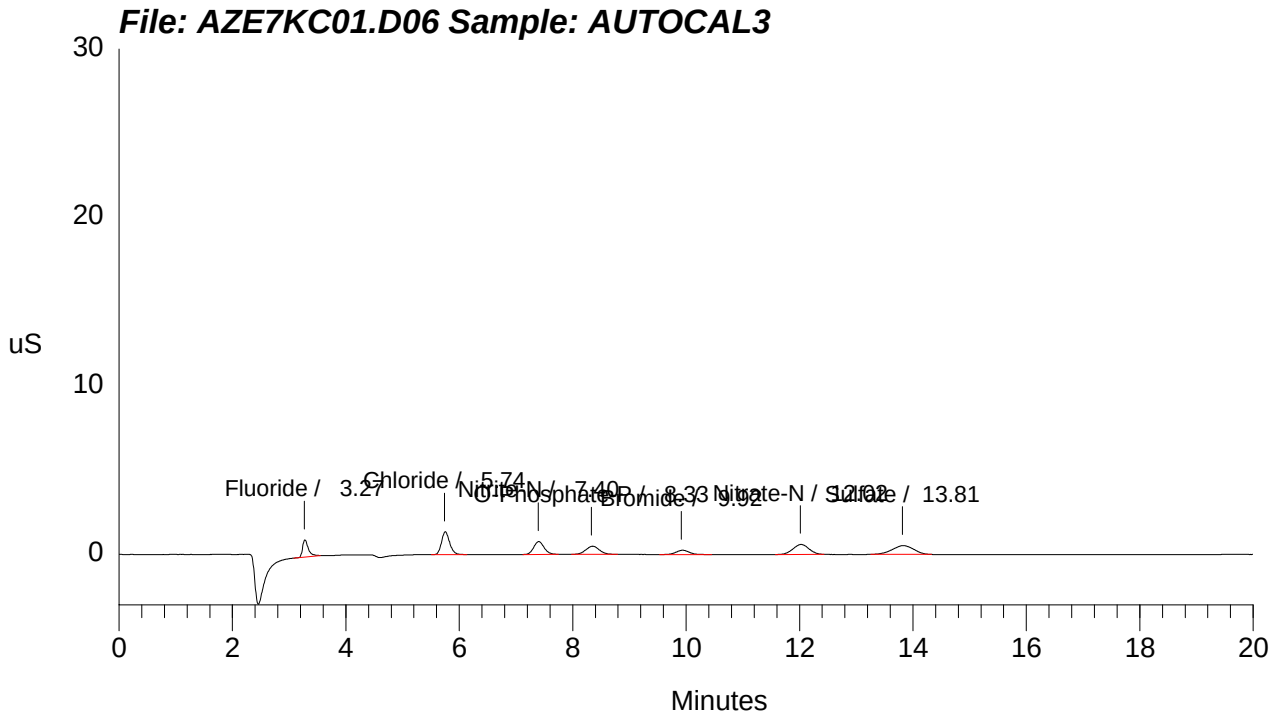


```
================================================================================
| Sample Name: AUTOCAL3                        Date: 05/27/2005 16:39:24       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D06                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 6                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.250    1003116    7181875    1   0.00
   2    5.74 Chloride                  0.500    1342491   13923902    1   0.00
   3    7.40 Nitrite-N                 0.250     766362    9868560    1   0.00
   4    8.33 O-Phosphate-P             0.500     477490    8127246    1   0.00
   5    9.92 Bromide                   0.500     256968    4536316    1   0.00
   6   12.02 Nitrate-N                 0.250     596358   11966890    1   0.00
   7   13.81 Sulfate                   1.000     522179   14052078    1   0.00
                                     ----------------------------------
                      Totals          3.250    4964963   69656867
```

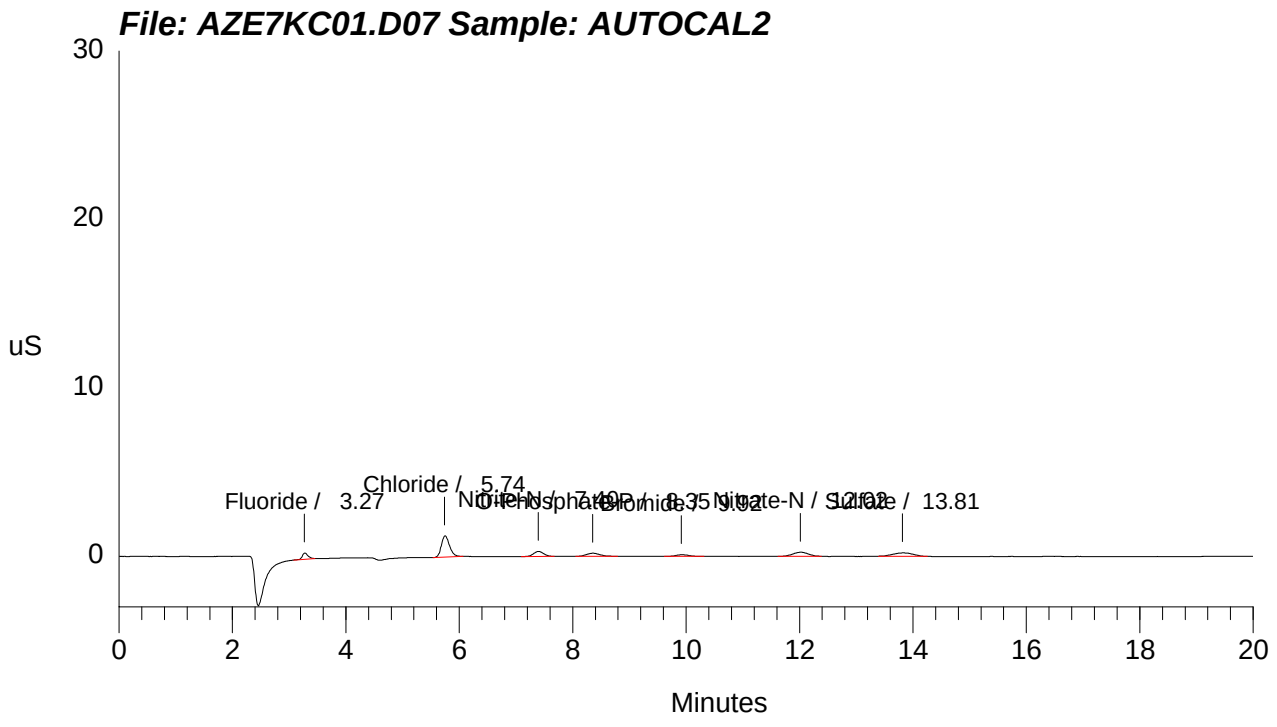


```
================================================================================
| Sample Name: AUTOCAL2                        Date: 05/27/2005 16:59:52       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D07                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 7                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.100     374400    2587112    1   0.00
   2    5.74 Chloride                  0.200    1256437   12888266    1   0.00
   3    7.40 Nitrite-N                 0.100     303909    3876850    1   0.00
   4    8.35 O-Phosphate-P             0.200     189088    3255854    1   0.00
   5    9.92 Bromide                   0.200     103634    1776920    1   0.00
   6   12.02 Nitrate-N                 0.100     245192    4870006    1   0.00
   7   13.81 Sulfate                   0.400     205498    5156446    1   0.00
                                    ----------------------------------
                      Totals          1.300    2678158   34411454
```

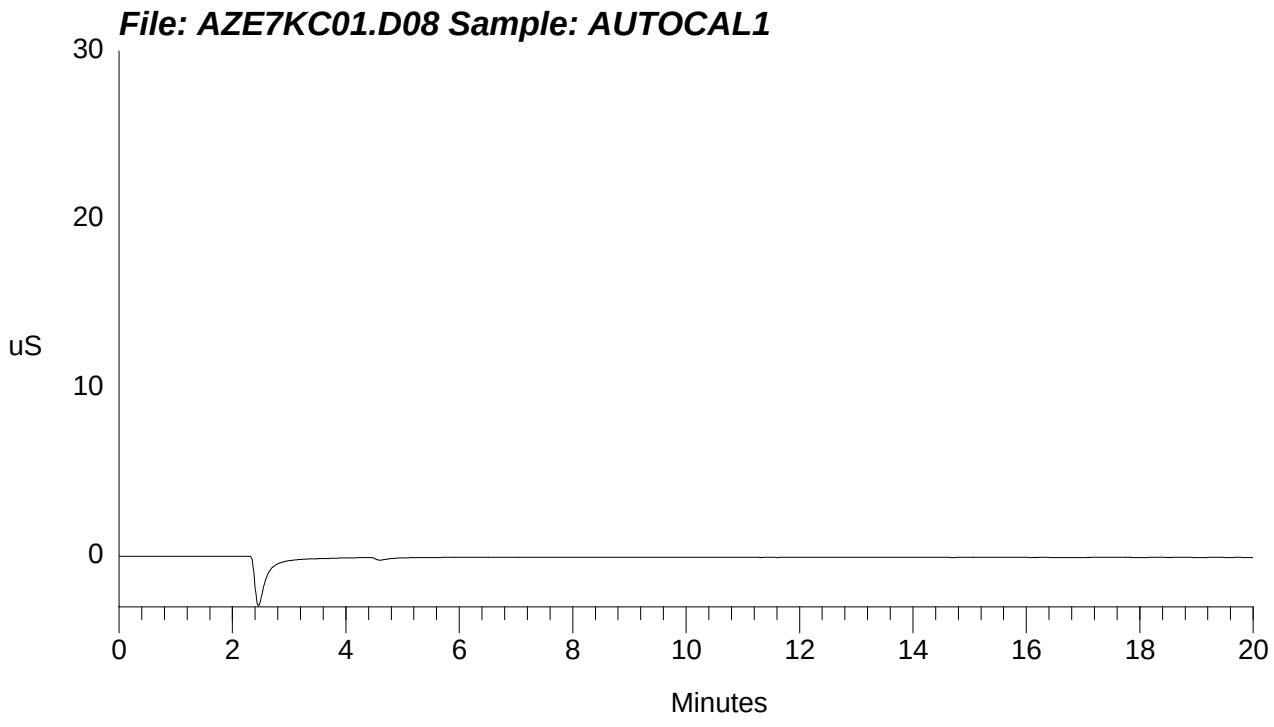


```
================================================================================
| Sample Name: AUTOCAL1                        Date: 05/27/2005 17:20:10       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D08                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

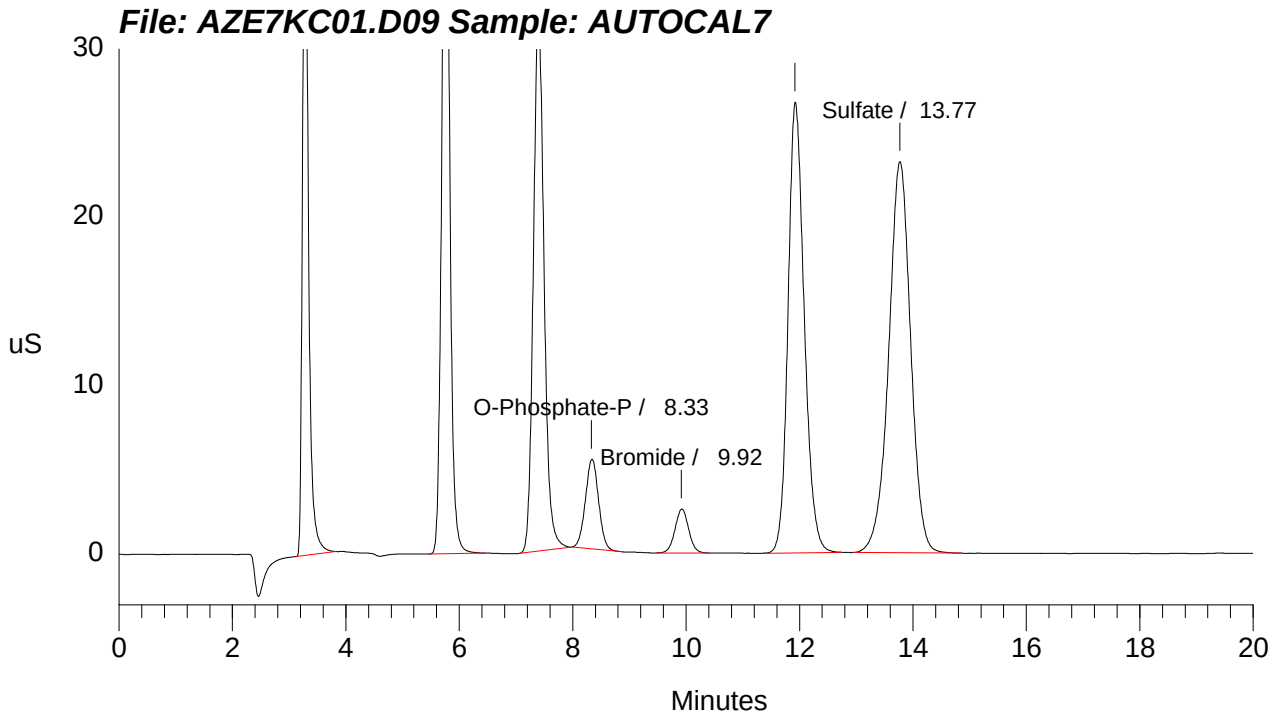


```
================================================================================
| Sample Name: AUTOCAL7                        Date: 05/27/2005 17:40:39       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D09                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	10.000	38862375	304251052	1	0.00
2	5.74	Chloride	20.000	45004294	453020880	1	0.00
3	7.40	Nitrite-N	10.000	31528382	416218956	1	0.00
4	8.33	O-Phosphate-P	5.000	5309069	86127660	1	0.00
5	9.92	Bromide	5.000	2605014	43489084	1	0.00
6	11.92	Nitrate-N	10.000	26755220	530841028	1	0.00
7	13.77	Sulfate	40.000	23212113	623815988	1	0.00
		Totals	100.000	173276467	2457764648		

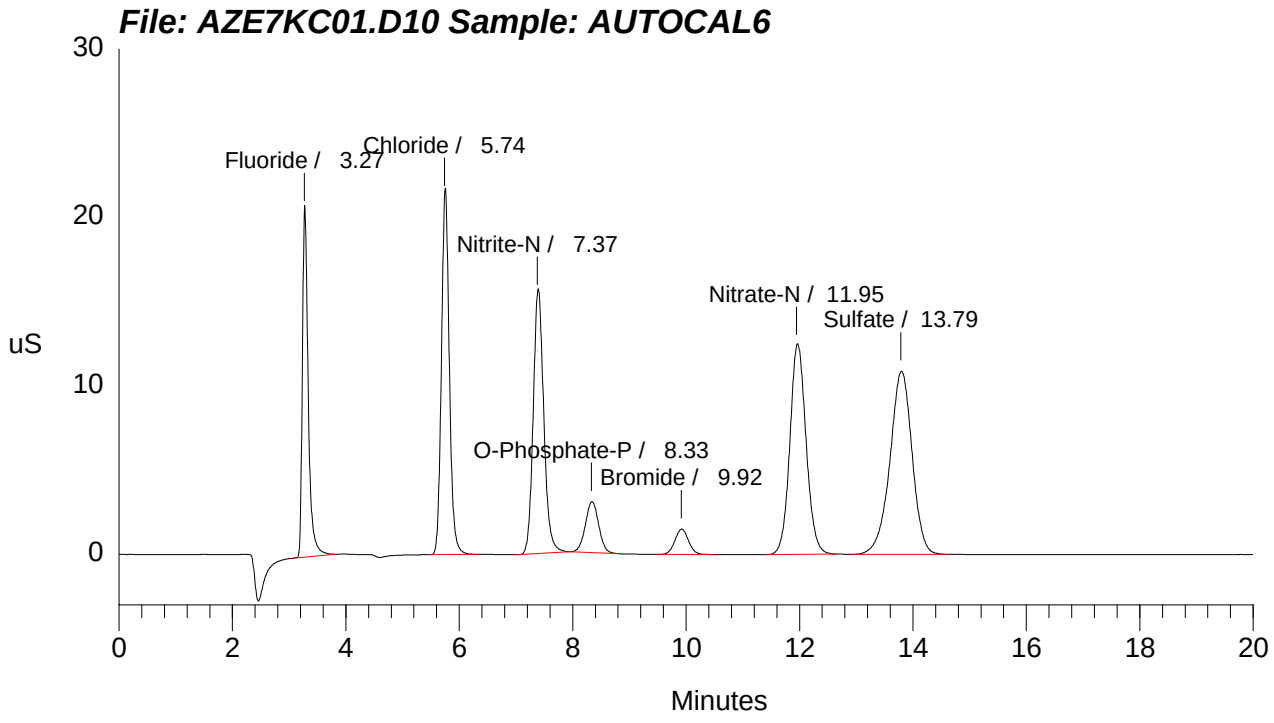


```
================================================================================
| Sample Name: AUTOCAL6                        Date: 05/27/2005 18:01:06       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D10                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 10                 Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.000	20492027	149091320	1	0.00
2	5.74	Chloride	10.000	21248244	210793510	1	0.00
3	7.37	Nitrite-N	5.000	15305035	203278544	1	0.00
4	8.33	O-Phosphate-P	3.000	3017303	49605101	1	0.00
5	9.92	Bromide	3.000	1511281	25482654	1	0.00
6	11.95	Nitrate-N	5.000	12384561	249424298	1	0.00
7	13.79	Sulfate	20.000	10864758	296485316	1	0.00
		Totals	51.000	84823210	1184160743		

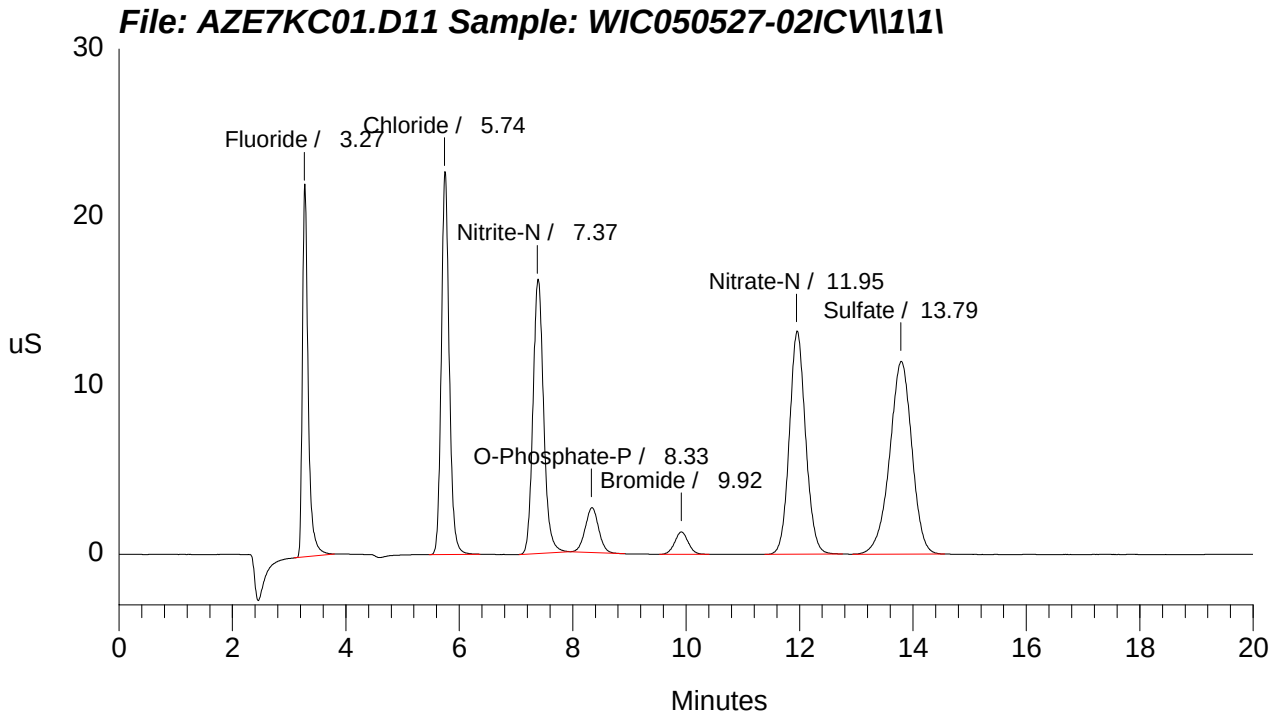


```
================================================================================
| Sample Name: WIC050527-02ICV\\1\1\          Date: 05/27/2005 18:21:24      |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D11                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 11                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.157	21704095	156055451	1	0.00
2	5.74	Chloride	9.806	22441795	220287470	1	0.00
3	7.37	Nitrite-N	5.134	15974152	212330573	1	0.00
4	8.33	O-Phosphate-P	2.560	2651670	43810432	1	0.00
5	9.92	Bromide	2.545	1330915	22065294	1	0.00
6	11.95	Nitrate-N	5.042	13142800	263499216	1	0.00
7	13.79	Sulfate	20.277	11429901	312193452	1	0.00
		Totals	50.520	88675328	1230241888		



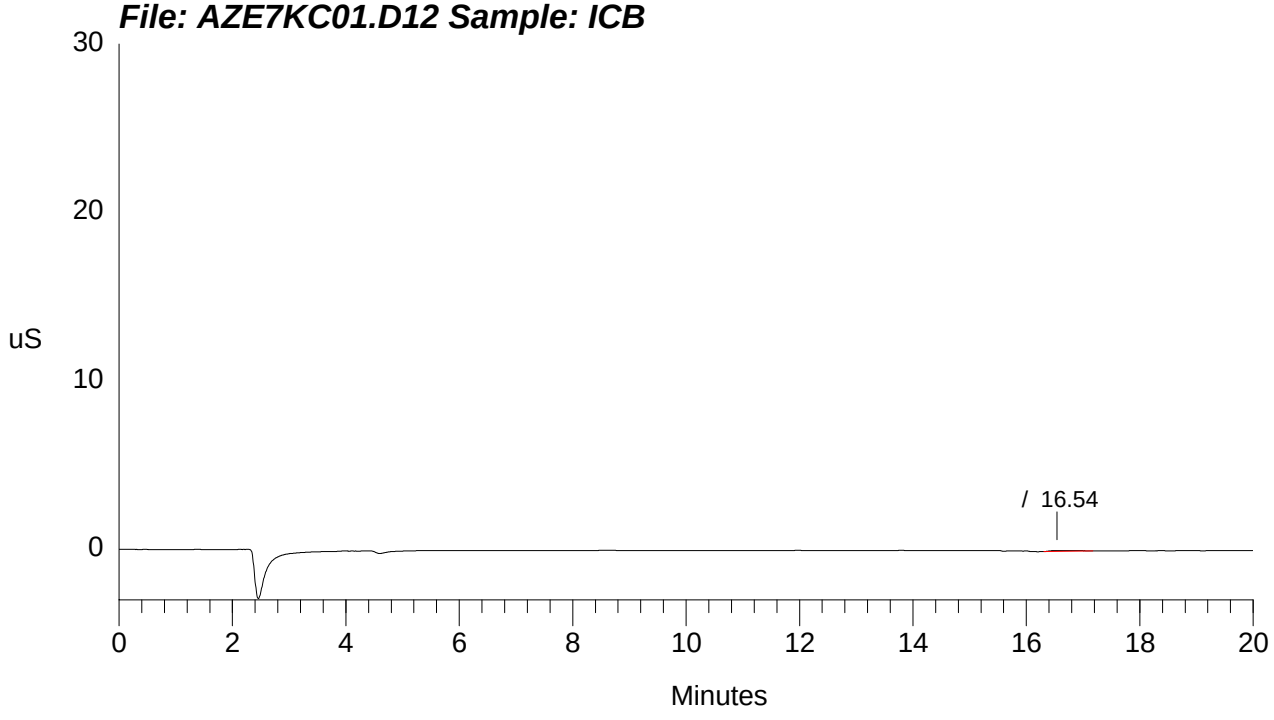
```
================================================================================
| Sample Name: ICB                              Date: 05/27/2005 18:41:53      |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D12                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 12                 Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                  ----------------------------------
                         Totals       0.000          0          0
```

File: AZE7KC01.D12 Sample: ICB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			BJB	06/23/2005 15:16:17	AZFWKC01.R01
WIC050623-02ICV:1		1	BJB	06/23/2005 15:36:46	AZFWKC01.R02
ICB:			BJB	06/23/2005 15:57:14	AZFWKC01.R03
138633011:	436225	5	BJB	06/23/2005 16:17:43	AZFWKC01.R04
1200872671:	436225	5	BJB	06/23/2005 16:38:12	AZFWKC01.R05
1200872673:	436225	5	BJB	06/23/2005 16:58:41	AZFWKC01.R06
138633011:2	436225	5	BJB	06/23/2005 17:59:31	AZFWKC01.R07
1200872671:2	436225	5	BJB	06/23/2005 18:19:59	AZFWKC01.R08
1200872673:2	436225	5	BJB	06/23/2005 18:40:17	AZFWKC01.R09
138633012:2	436225	5	BJB	06/23/2005 19:00:45	AZFWKC01.R10
138831006:2	436225	2	BJB	06/23/2005 19:21:14	AZFWKC01.R11
WIC050623-02CVH:1		1	BJB	06/23/2005 19:41:43	AZFWKC01.R12
CCB:			BJB	06/23/2005 20:02:02	AZFWKC01.R13
1200873542:1	436589	1	BJB	06/23/2005 20:22:19	AZFWKC01.R14
1200873545:1	436589	1	BJB	06/23/2005 20:42:48	AZFWKC01.R15
139091007:1	436589	1	BJB	06/23/2005 21:03:17	AZFWKC01.R16
1200873543:1	436589	1	BJB	06/23/2005 21:23:46	AZFWKC01.R17
1200873544:1	436589	1	BJB	06/23/2005 21:44:16	AZFWKC01.R18
139136001:1	436589	1	BJB	06/23/2005 22:04:46	AZFWKC01.R19
1200873546:1	436589	1	BJB	06/23/2005 22:25:15	AZFWKC01.R20
1200873547:1	436589	1	BJB	06/23/2005 22:45:44	AZFWKC01.R21
139136002:1	436589	1	BJB	06/23/2005 23:06:13	AZFWKC01.R22
139136003:1	436589	1	BJB	06/23/2005 23:26:42	AZFWKC01.R23
WIC050623-02CCV:1		1	BJB	06/23/2005 23:47:11	AZFWKC01.R24
CCB:			BJB	06/24/2005 00:07:40	AZFWKC01.R25
139136004:1	436589	1	BJB	06/24/2005 00:28:08	AZFWKC01.R26
WIC050623-02CVH:1		1	BJB	06/24/2005 00:48:37	AZFWKC01.R27
CCB:			BJB	06/24/2005 01:09:06	AZFWKC01.R28
1200872888:1	436326	1	BJB	06/24/2005 01:29:35	AZFWKC01.R29
1200872892:1	436326	1	BJB	06/24/2005 01:50:03	AZFWKC01.R30
138991001:1	436326	1	BJB	06/24/2005 02:10:32	AZFWKC01.R31
1200872889:1	436326	1	BJB	06/24/2005 02:31:01	AZFWKC01.R32
1200872890:1	436326	1	BJB	06/24/2005 02:51:30	AZFWKC01.R33
1200872891:1	436326	1	BJB	06/24/2005 03:11:59	AZFWKC01.R34
138991002:1	436326	1	BJB	06/24/2005 03:32:27	AZFWKC01.R35
138991003:1	436326	1	BJB	06/24/2005 03:52:56	AZFWKC01.R36
138991004:1	436326	1	BJB	06/24/2005 04:13:25	AZFWKC01.R37
138991005:1	436326	1	BJB	06/24/2005 04:33:54	AZFWKC01.R38
WIC050623-02CCV:1		1	BJB	06/24/2005 04:54:23	AZFWKC01.R39
CCB:			BJB	06/24/2005 05:14:52	AZFWKC01.R40
138991006:1	436326	1	BJB	06/24/2005 05:35:20	AZFWKC01.R41
WIC050623-02CVH:1		1	BJB	06/24/2005 05:55:49	AZFWKC01.R42
CCB:			BJB	06/24/2005 06:16:18	AZFWKC01.R43
1200873288:1	436493	1	BJB	06/24/2005 06:36:47	AZFWKC01.R44
1200873292:1	436493	1	BJB	06/24/2005 06:57:16	AZFWKC01.R45
138991019:1	436493	1	BJB	06/24/2005 07:17:45	AZFWKC01.R46
1200873289:1	436493	1	BJB	06/24/2005 07:38:13	AZFWKC01.R47
1200873290:1	436493	1	BJB	06/24/2005 07:58:42	AZFWKC01.R48
1200873291:1	436493	1	BJB	06/24/2005 08:19:11	AZFWKC01.R49
138991020:1	436493	1	BJB	06/24/2005 08:39:40	AZFWKC01.R50
138991021:1	436493	1	BJB	06/24/2005 09:00:09	AZFWKC01.R51
138991022:1	436493	1	BJB	06/24/2005 09:20:37	AZFWKC01.R52
138991023:1	436493	1	BJB	06/24/2005 09:41:06	AZFWKC01.R53
WIC050623-02CCV:1		1	BJB	06/24/2005 10:01:35	AZFWKC01.R54
CCB:			BJB	06/24/2005 10:21:55	AZFWKC01.R55

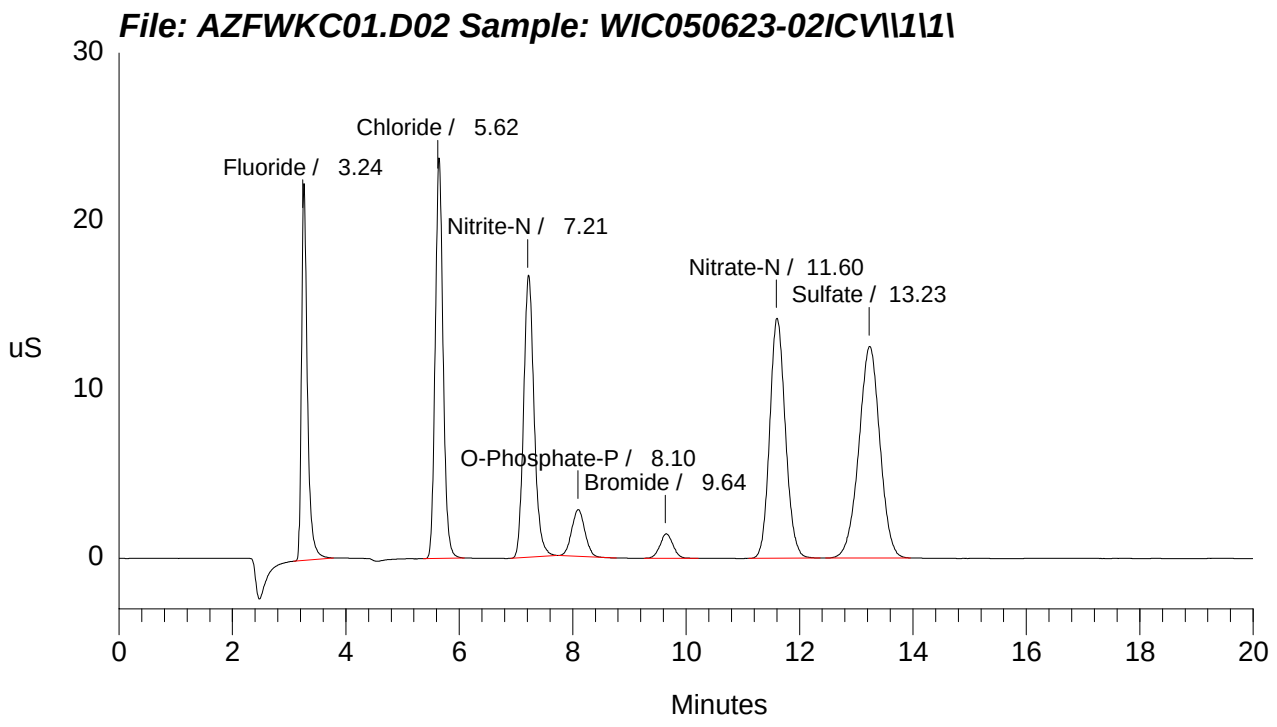
```
1200872862:1          436313   1     BJB   06/24/2005 10:42:23 AZFWKC01.R56
1200872863:1          436313   1     BJB   06/24/2005 11:02:46 AZFWKC01.R57
138800001:1           436313   1     BJB   06/24/2005 11:23:15 AZFWKC01.R58
1200872864:1          436313   1     BJB   06/24/2005 11:43:33 AZFWKC01.R59
1200872867:1          436313   1     BJB   06/24/2005 12:03:51 AZFWKC01.R60
138800002:1           436313   1     BJB   06/24/2005 12:24:09 AZFWKC01.R61
138850001:1           436313   1     BJB   06/24/2005 12:44:27 AZFWKC01.R62
138850002:1           436313   1     BJB   06/24/2005 13:04:56 AZFWKC01.R63
138851001:1           436313   1     BJB   06/24/2005 13:25:14 AZFWKC01.R64
138851002:1           436313   1     BJB   06/24/2005 13:45:32 AZFWKC01.R65
WIC050623-02CVH:1              1     BJB   06/24/2005 14:05:58 AZFWKC01.R66
CCB:                           1     BJB   06/24/2005 14:26:30 AZFWKC01.R67
138851003:1           436313   1     BJB   06/24/2005 14:46:50 AZFWKC01.R68
1200872865:1          436313   1     BJB   06/24/2005 15:07:10 AZFWKC01.R69
1200872868:1          436313   1     BJB   06/24/2005 15:27:35 AZFWKC01.R70
138851004:1           436313   1     BJB   06/24/2005 15:48:03 AZFWKC01.R71
138903001:1           436313   1     BJB   06/24/2005 16:08:31 AZFWKC01.R72
1200872866:1          436313   1     BJB   06/24/2005 16:29:00 AZFWKC01.R73
1200872869:1          436313   1     BJB   06/24/2005 16:49:28 AZFWKC01.R74
138905001:1           436313   1     BJB   06/24/2005 17:09:50 AZFWKC01.R75
WIC050623-02CCV:1              1     BJB   06/24/2005 17:30:08 AZFWKC01.R76
CCB:                           1     BJB   06/24/2005 17:50:36 AZFWKC01.R77
LCR:                           1     BJB   06/24/2005 18:11:05 AZFWKC01.R78
```

```
================================================================================
| Sample Name: WIC050623-02ICV\\1\1\          Date: 06/23/2005 15:36:46      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D02                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component          Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                  5.282   20295396  159843333    1   0.00
   2   5.62 Chloride                 10.182   22516047  228659282    1   0.00
   3   7.21 Nitrite-N                 5.180   16546511  214244654    1   0.00
   4   8.10 O-Phosphate-P             2.611    2779259   44678474    1   0.00
   5   9.64 Bromide                   2.678    1437584   23213462    1   0.00
   6  11.60 Nitrate-N                 5.239   14224530  273923682    1   0.00
   7  13.23 Sulfate                  21.096   12563613  324912052    1   0.00
                                  ----------------------------------
                        Totals       52.267   90362940 1269474939
```



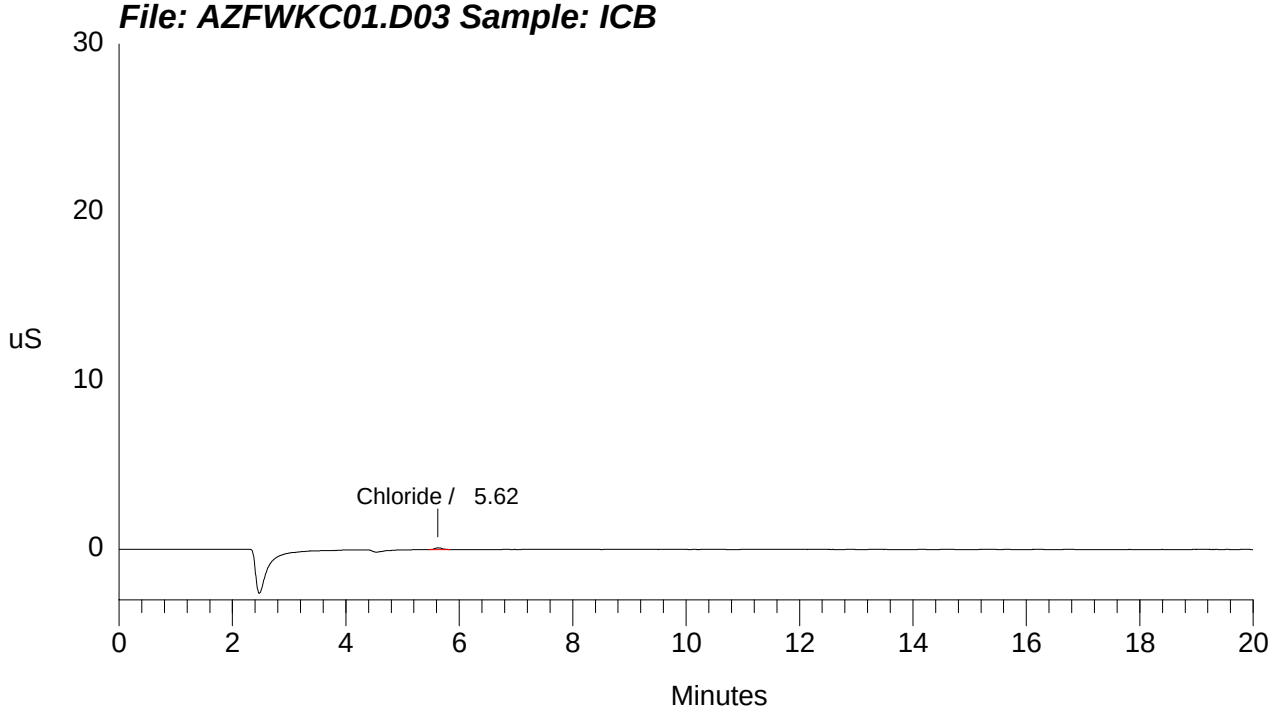
```
================================================================================
| Sample Name: ICB                          Date: 06/23/2005 15:57:14          |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D03                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                  Detector:CDM-2        |
| Analyst    : BJB           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                      Code
-------------------------------------------------------------------------------
   0    0.00 Fluoride                   0.000          0          0    0   0.00
   1    5.62 Chloride                  -0.053     111418    1091050    1   0.00
   0    0.00 Nitrite-N                  0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P              0.000          0          0    0   0.00
   0    0.00 Bromide                    0.000          0          0    0   0.00
   0    0.00 Nitrate-N                  0.000          0          0    0   0.00
   0    0.00 Sulfate                    0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         -0.053     111418    1091050
```

File: AZFWKC01.D03 Sample: ICB

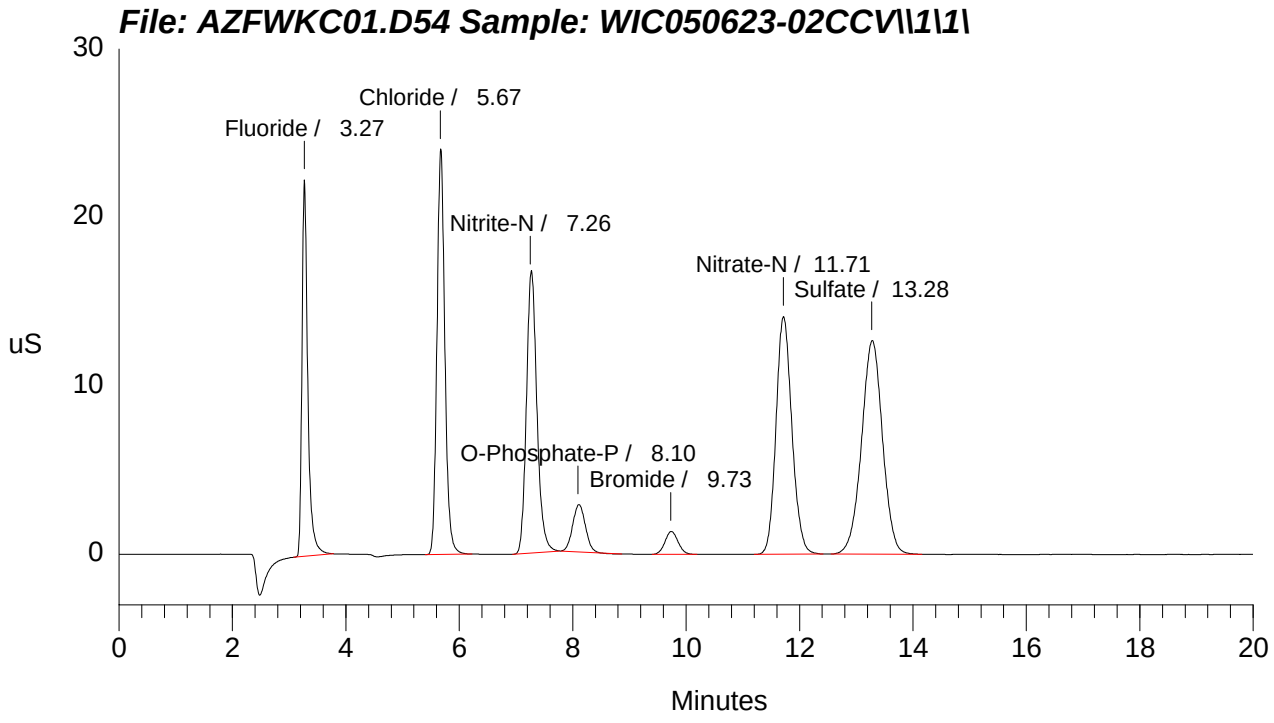


```
================================================================================
| Sample Name: WIC050623-02CCV\\1\1\          Date: 06/24/2005 10:01:35      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D54                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 54                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.253	22345881	158968509	1	0.00
2	5.67	Chloride	10.391	24035486	233308276	1	0.00
3	7.26	Nitrite-N	5.204	16488071	215257809	1	0.00
4	8.10	O-Phosphate-P	2.552	2783045	43664047	1	0.00
5	9.73	Bromide	2.524	1358356	21882292	1	0.00
6	11.71	Nitrate-N	5.251	14116408	274566016	1	0.00
7	13.28	Sulfate	21.220	12673026	326841878	1	0.00
		Totals	52.396	93800273	1274488827		



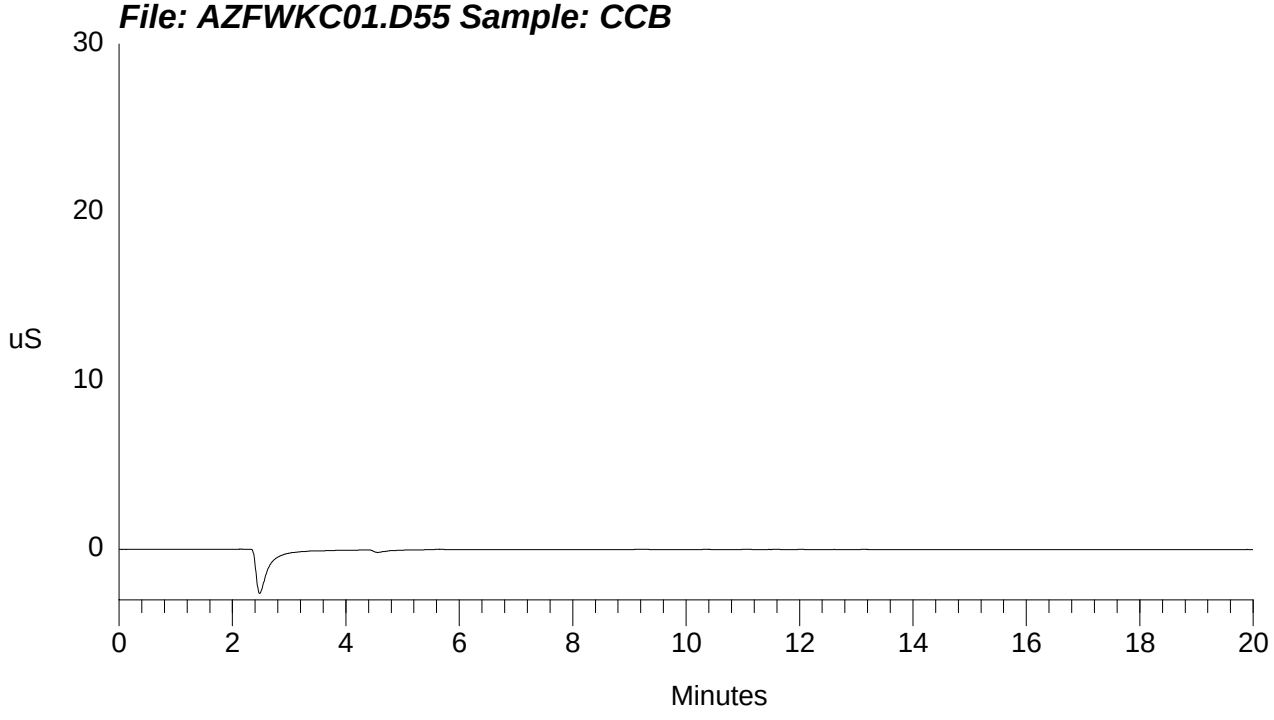
```
================================================================================
| Sample Name: CCB                              Date: 06/24/2005 10:21:55      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D55                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 55                  Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZFWKC01.D55 Sample: CCB



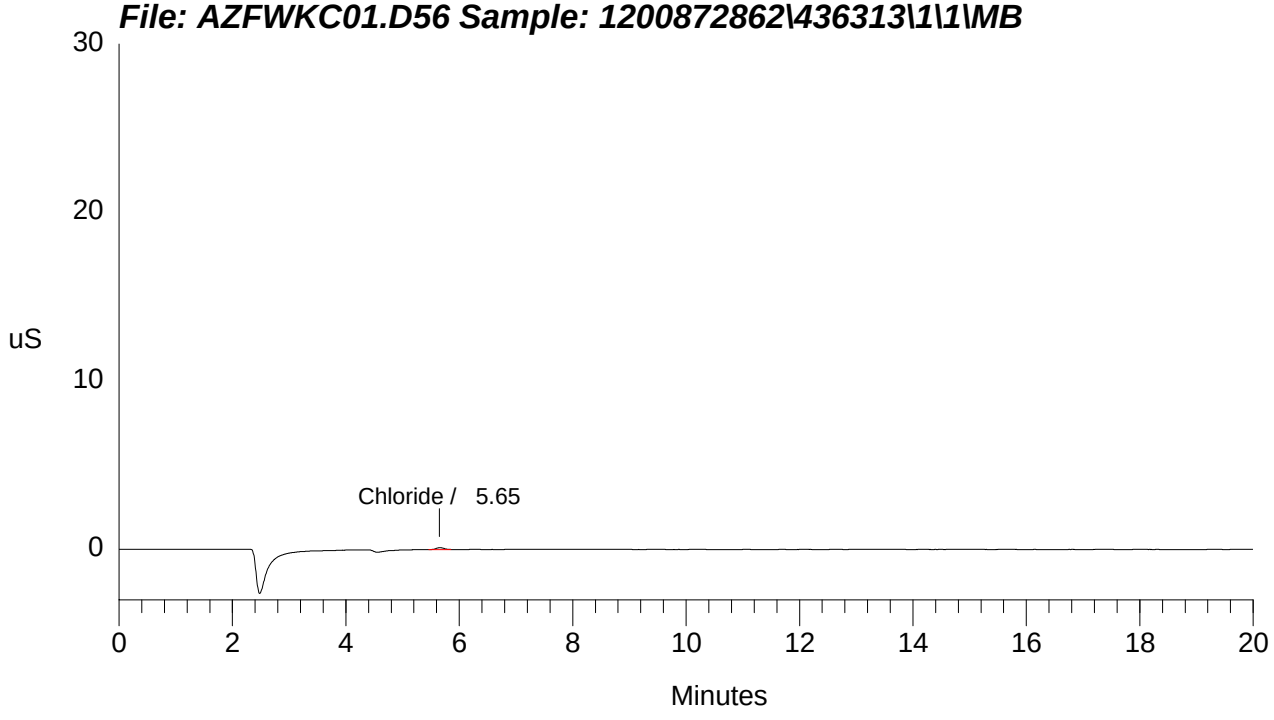
```
================================================================================
| Sample Name: 1200872862\436313\1\1\MB       Date: 06/24/2005 10:42:23     |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D56                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 56                  Detector:CDM-2    |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   1    5.65 Chloride                 -0.046     121723    1241948    1   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals        -0.046     121723    1241948
```

File: AZFWKC01.D56 Sample: 1200872862\436313\1\1\MB



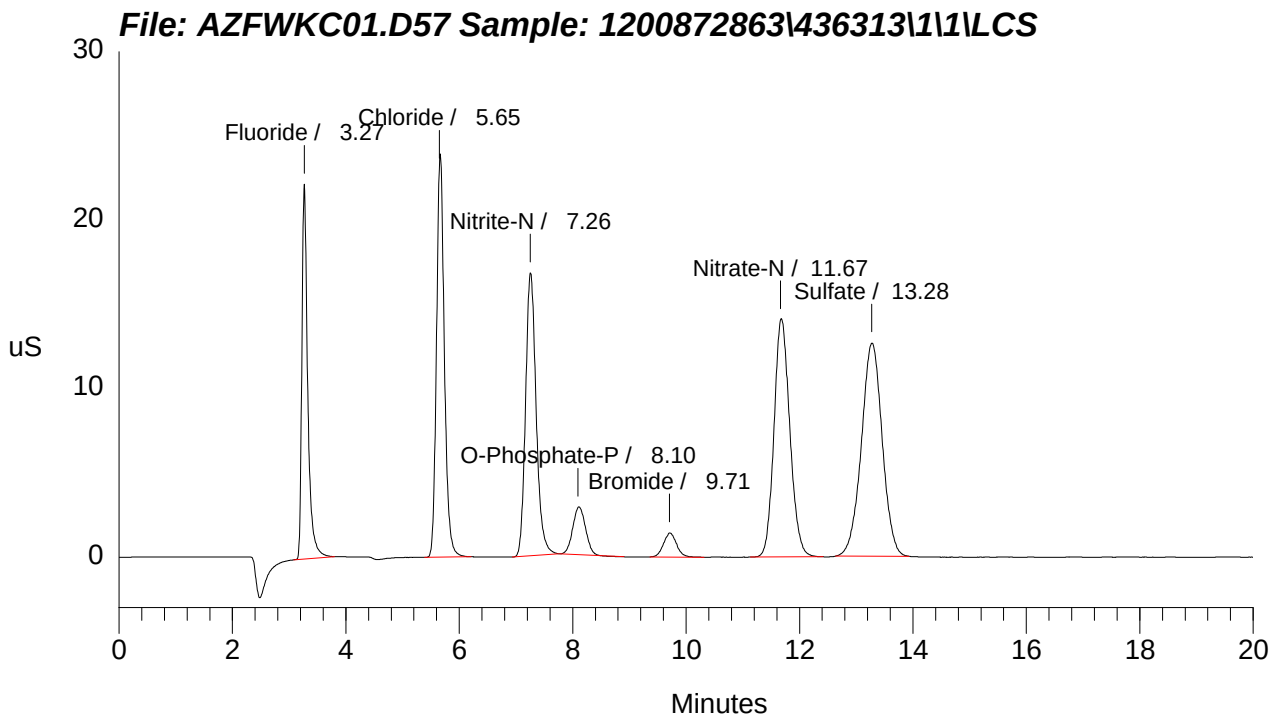
Data Reprocessed On 06/28/2005 14:58:29

Sample Name:	1200872863\436313\1\1\LCS
Date:	06/24/2005 11:02:46
Data File :	C:\TMP\HORIZON\AZFWKC01.D57
Method :	C:\DX\METHOD\MAY27.MET
ACI Address:	1 System: 1 Inject#: 57
Detector:	CDM-2
Analyst :	BJB
Column:	AS9-HC;GL-GC-E-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.273	22247430	159573190	1	0.00
2	5.65	Chloride	10.268	23019229	230558630	1	0.00
3	7.26	Nitrite-N	5.254	16788320	217335220	1	0.00
4	8.10	O-Phosphate-P	2.598	2809862	44464666	1	0.00
5	9.71	Bromide	2.642	1430221	22905012	1	0.00
6	11.67	Nitrate-N	5.256	14085505	274789454	1	0.00
7	13.28	Sulfate	20.865	12653990	321318830	1	0.00
		Totals	52.155	93034557	1270945002		

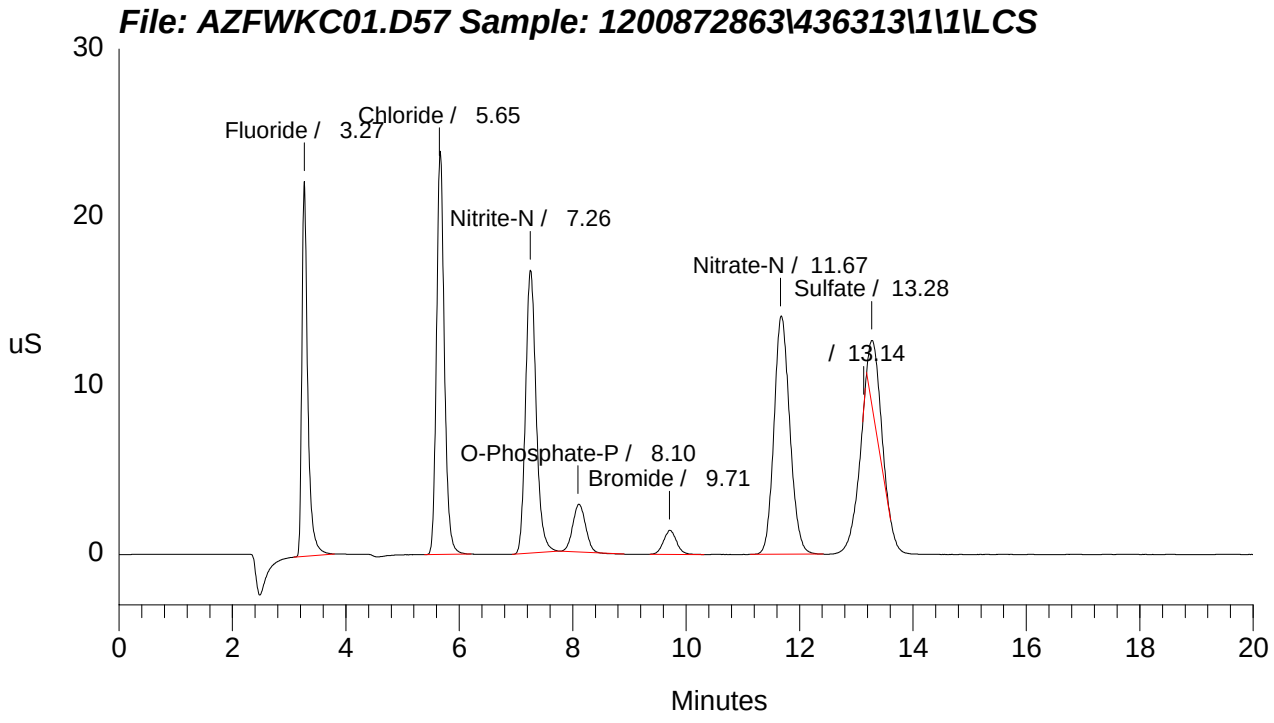


```
================================================================================
| Sample Name: 1200872863\436313\1\1\LCS      Date: 06/24/2005 11:02:46      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D57                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 57                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.273	22247430	159573190	1	0.00
2	5.65	Chloride	10.268	23019229	230558630	1	0.00
3	7.26	Nitrite-N	5.254	16788320	217335220	1	0.00
4	8.10	O-Phosphate-P	2.598	2809862	44464666	1	0.00
5	9.71	Bromide	2.642	1430221	22905012	1	0.00
6	11.67	Nitrate-N	5.256	14085505	274789454	1	0.00
8	13.28	Sulfate	3.812	3834719	56526100	1	0.00
		Totals	35.103	84215286	1006152272		

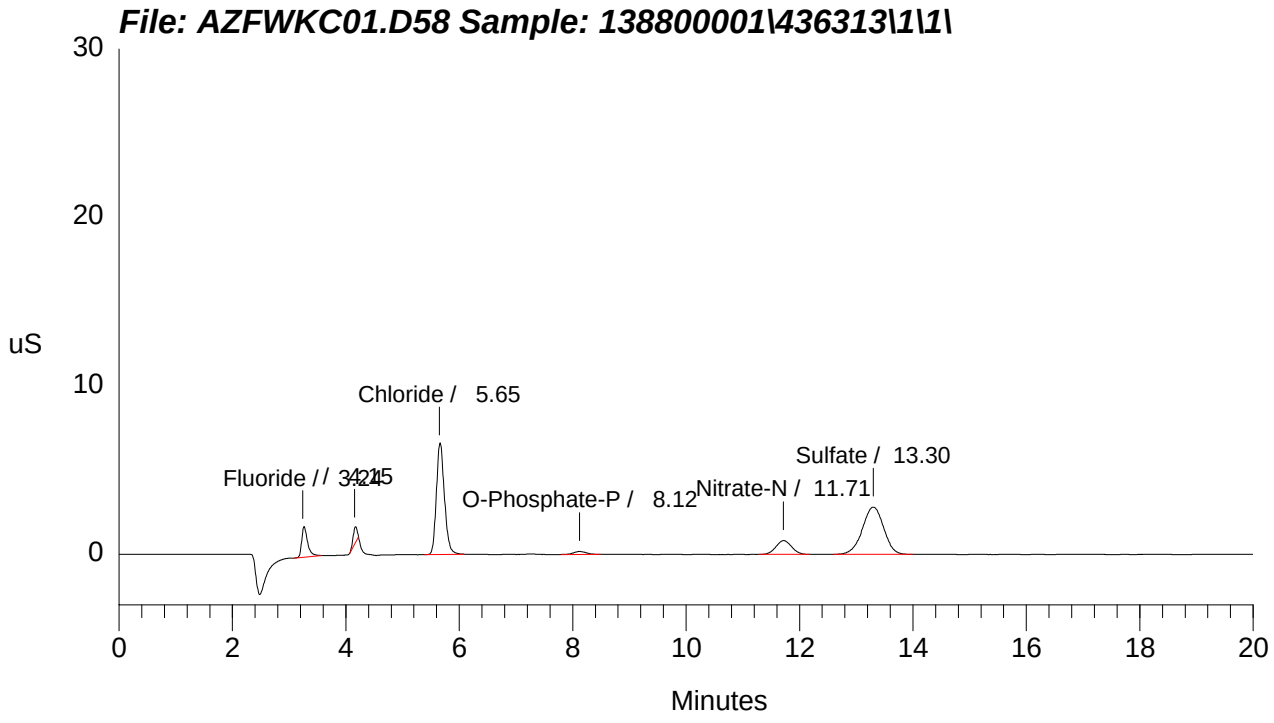


```
================================================================================
| Sample Name: 138800001\436313\1\1\          Date: 06/24/2005 11:23:15      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D58                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 58                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.454	1644460	13155109	1	0.00
3	5.65	Chloride	2.846	6453690	65547294	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
4	8.12	O-Phosphate-P	0.189	180524	2983984	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
5	11.71	Nitrate-N	0.353	821876	15957728	1	0.00
6	13.30	Sulfate	4.903	2807610	73458936	1	0.00
		Totals	8.744	11908160	171103051		

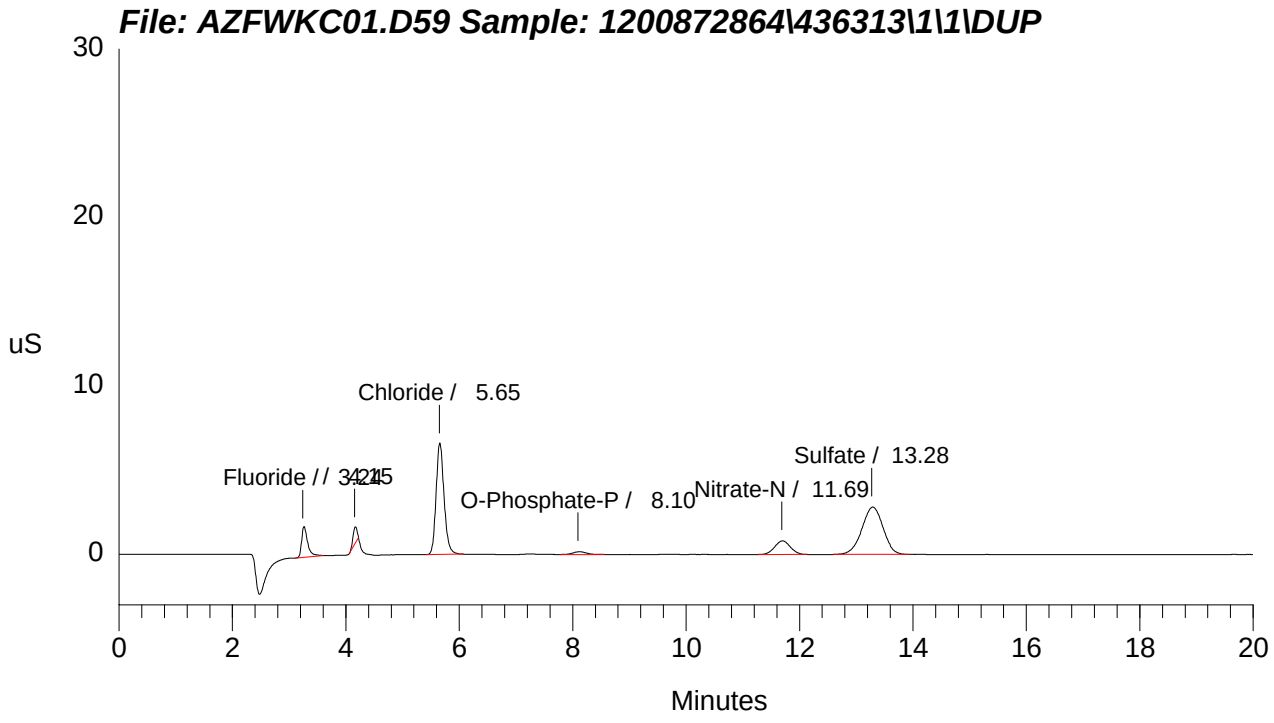


```
================================================================================
| Sample Name: 1200872864\436313\1\1\DUP      Date: 06/24/2005 11:43:33      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D59                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 59                Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.462	1668620	13411980	1	0.00
3	5.65	Chloride	2.805	6542344	64642190	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
4	8.10	O-Phosphate-P	0.187	168975	2956228	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
5	11.69	Nitrate-N	0.351	811866	15851680	1	0.00
6	13.28	Sulfate	4.910	2807595	73564846	1	0.00
		Totals	8.715	11999400	170426924		

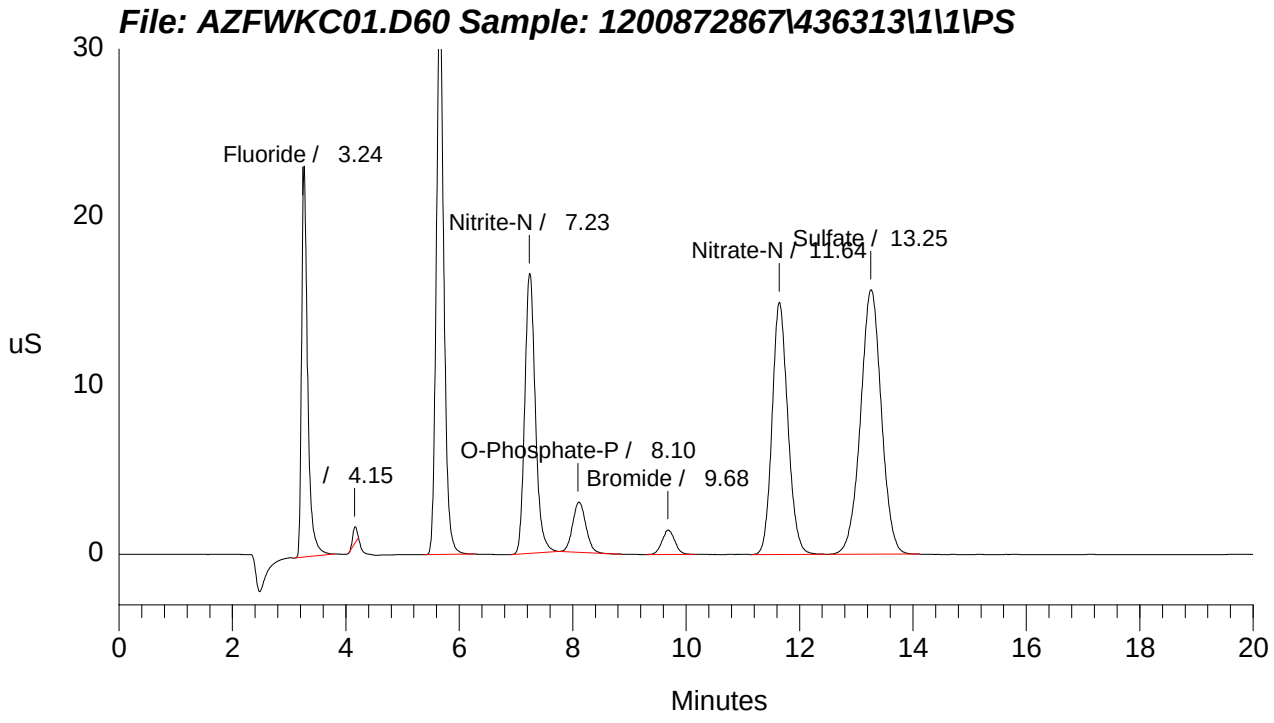


```
================================================================================
| Sample Name: 1200872867\436313\1\1\PS       Date: 06/24/2005 12:03:51     |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D60                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 60                 Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
-------------------------------------------------------------------------------
   1    3.24 Fluoride                   5.665   20860931  171492406    1   0.00
   3    5.65 Chloride                  13.629   31701171  305287228    1   0.00
   4    7.23 Nitrite-N                  5.196   16566105  214930090    1   0.00
   5    8.10 O-Phosphate-P              2.806    2956028   48033968    1   0.00
   6    9.68 Bromide                    2.659    1451201   23048422    1   0.00
   7   11.64 Nitrate-N                  5.510   14971545  288217182    1   0.00
   8   13.25 Sulfate                   25.994   15677773  400975352    1   0.00
                                ----------------------------------
                         Totals        61.458  104184754 1451984648
```

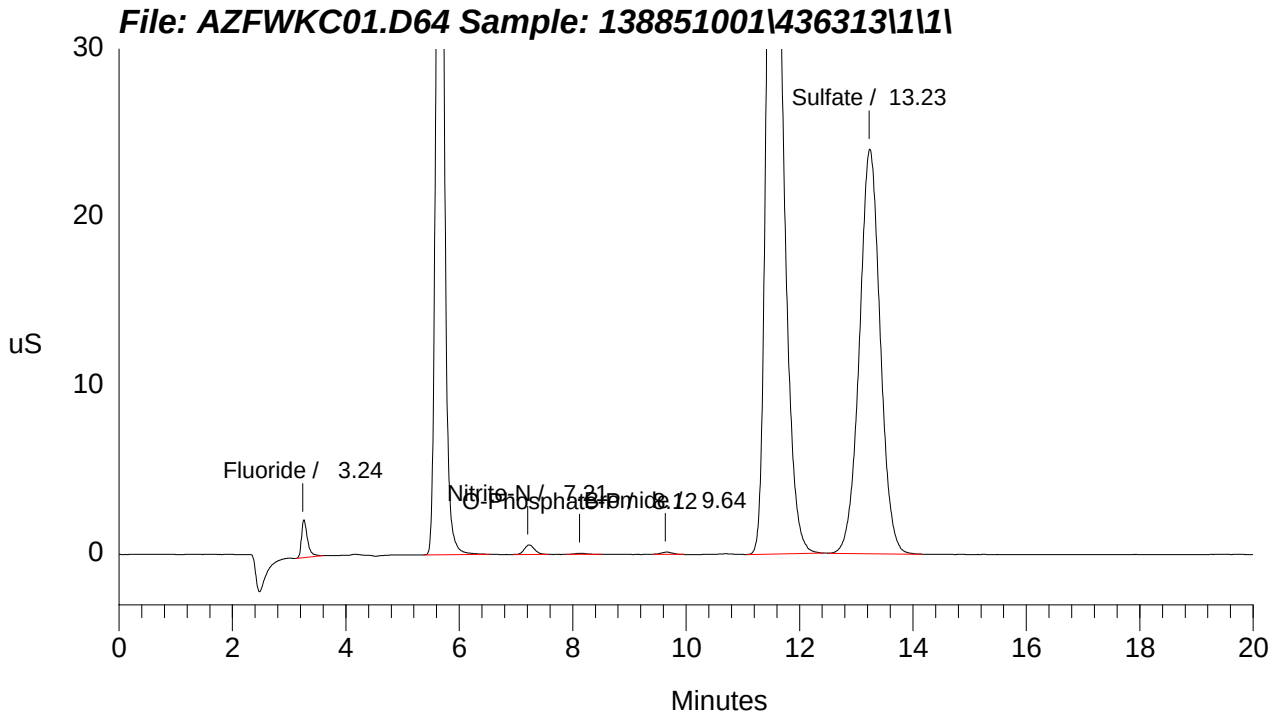


```
================================================================================
| Sample Name: 138851001\436313\1\1\          Date: 06/24/2005 13:25:14      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D64                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 64                 Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.568	2093738	16618166	1	0.00
2	5.65	Chloride	25.933	60735776	578873346	1	0.00
3	7.21	Nitrite-N	0.196	553008	7209958	1	0.00
4	8.12	O-Phosphate-P	0.085	69346	1191294	1	0.00
5	9.64	Bromide	0.222	130461	1954618	1	0.00
6	11.53	Nitrate-N	19.409	51669388	1022026696	1	0.00
7	13.23	Sulfate	39.463	23982874	610124698	1	0.00
		Totals	85.877	139234592	2237998776		

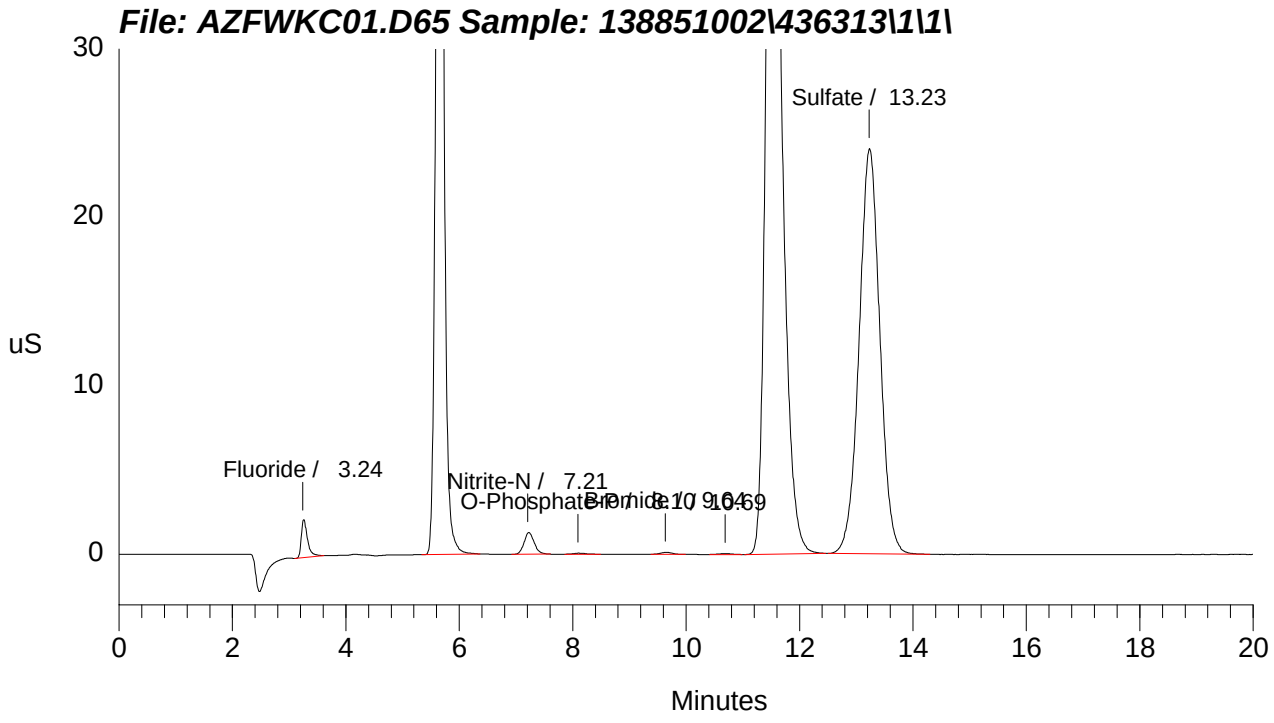


```
================================================================================
| Sample Name: 138851002\436313\1\1\          Date: 06/24/2005 13:45:32      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D65                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 65                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.592	2168817	17338893	1	0.00
2	5.65	Chloride	26.119	61439192	583006928	1	0.00
3	7.21	Nitrite-N	0.412	1270701	16176368	1	0.00
4	8.10	O-Phosphate-P	0.076	63010	1041824	1	0.00
5	9.64	Bromide	0.212	122188	1873132	1	0.00
7	11.50	Nitrate-N	18.820	49898496	990919786	1	0.00
8	13.23	Sulfate	39.571	24035083	611801350	1	0.00
		Totals	85.803	138997488	2222158281		

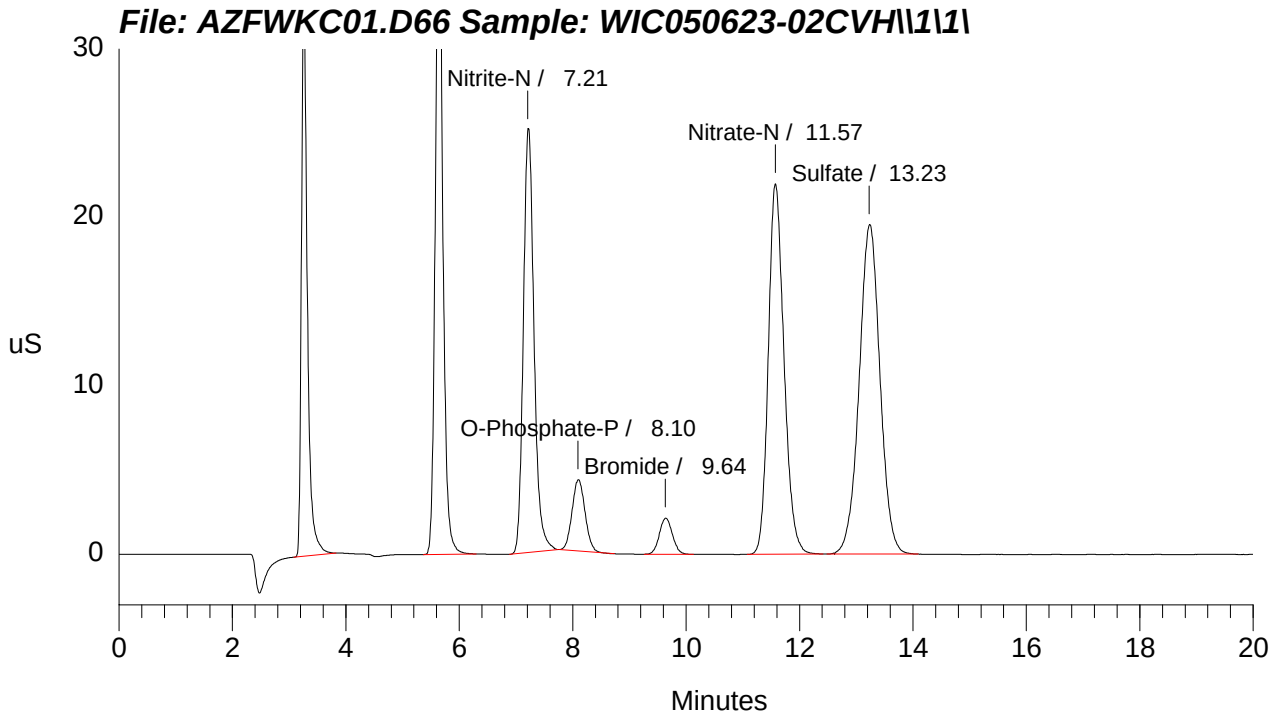


```
================================================================================
| Sample Name: WIC050623-02CVH\\1\1\          Date: 06/24/2005 14:05:58      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D66                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 66                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	7.934	30645692	240429717	1	0.00
2	5.62	Chloride	15.943	36008847	356748246	1	0.00
3	7.21	Nitrite-N	7.918	25102482	328016536	1	0.00
4	8.10	O-Phosphate-P	3.920	4217964	67216753	1	0.00
5	9.64	Bromide	3.963	2146228	34343396	1	0.00
6	11.57	Nitrate-N	8.049	21997977	422271880	1	0.00
7	13.23	Sulfate	32.311	19526490	499061212	1	0.00
		Totals	80.039	139645680	1948087740		



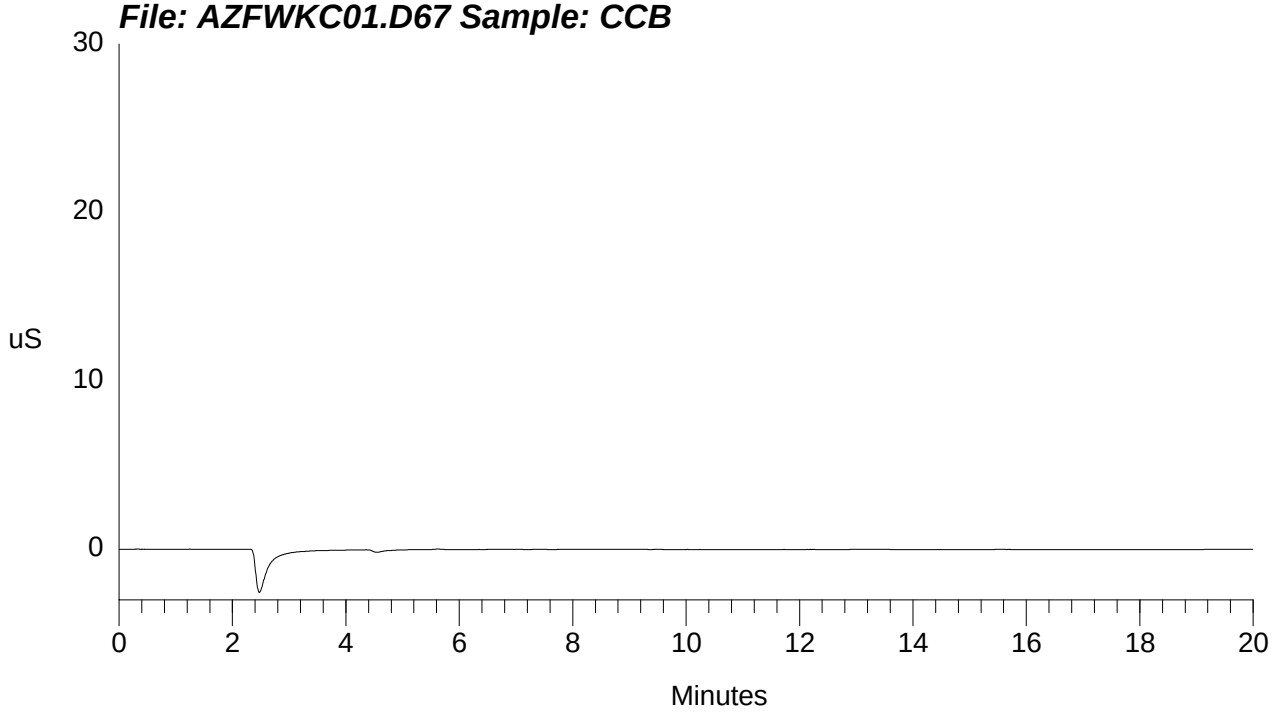
```
================================================================================
| Sample Name: CCB                          Date: 06/24/2005 14:26:30          |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D67                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 67              Detector:CDM-2           |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZFWKC01.D67 Sample: CCB

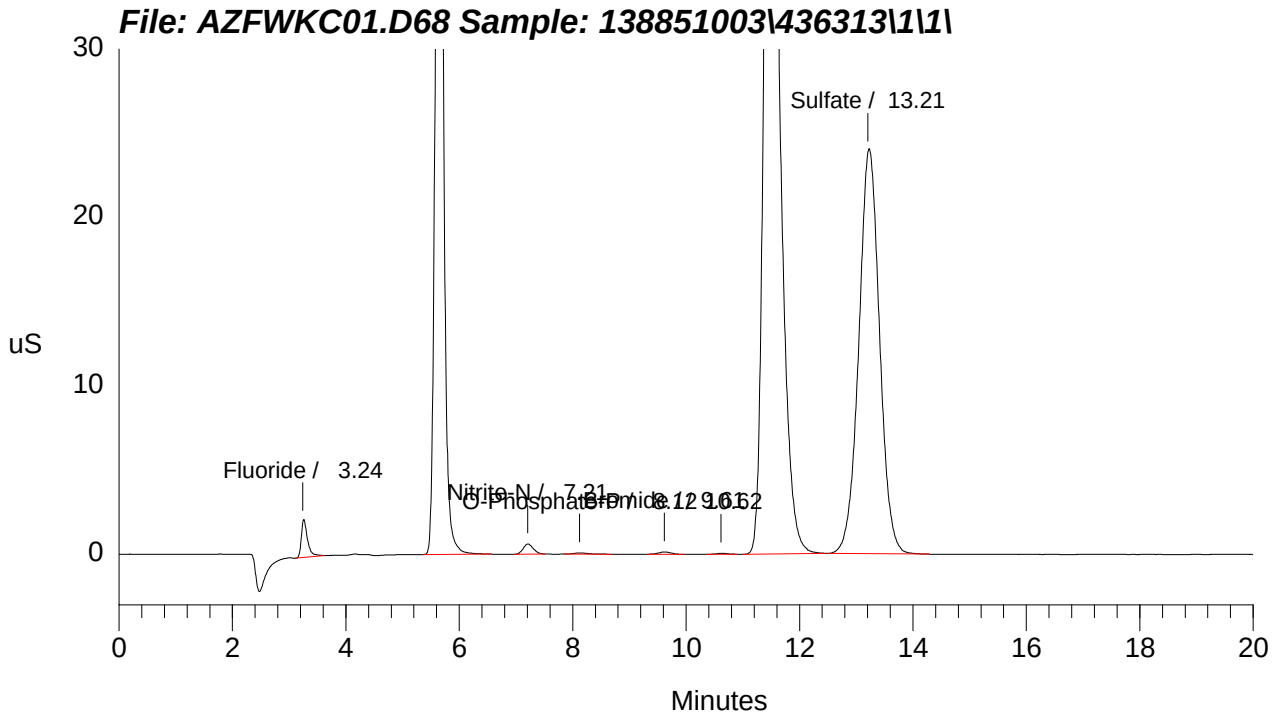


```
================================================================================
| Sample Name: 138851003\436313\1\1\          Date: 06/24/2005 14:46:50      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D68                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 68                Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.582	2140783	17039802	1	0.00
2	5.65	Chloride	25.902	62435319	578173190	1	0.00
3	7.21	Nitrite-N	0.204	606215	7522586	1	0.00
4	8.12	O-Phosphate-P	0.093	68033	1331026	1	0.00
5	9.61	Bromide	0.246	134137	2160894	1	0.00
7	11.48	Nitrate-N	19.253	51565623	1013745776	1	0.00
8	13.21	Sulfate	39.539	23828895	611298890	1	0.00
		Totals	85.817	140779006	2231272164		

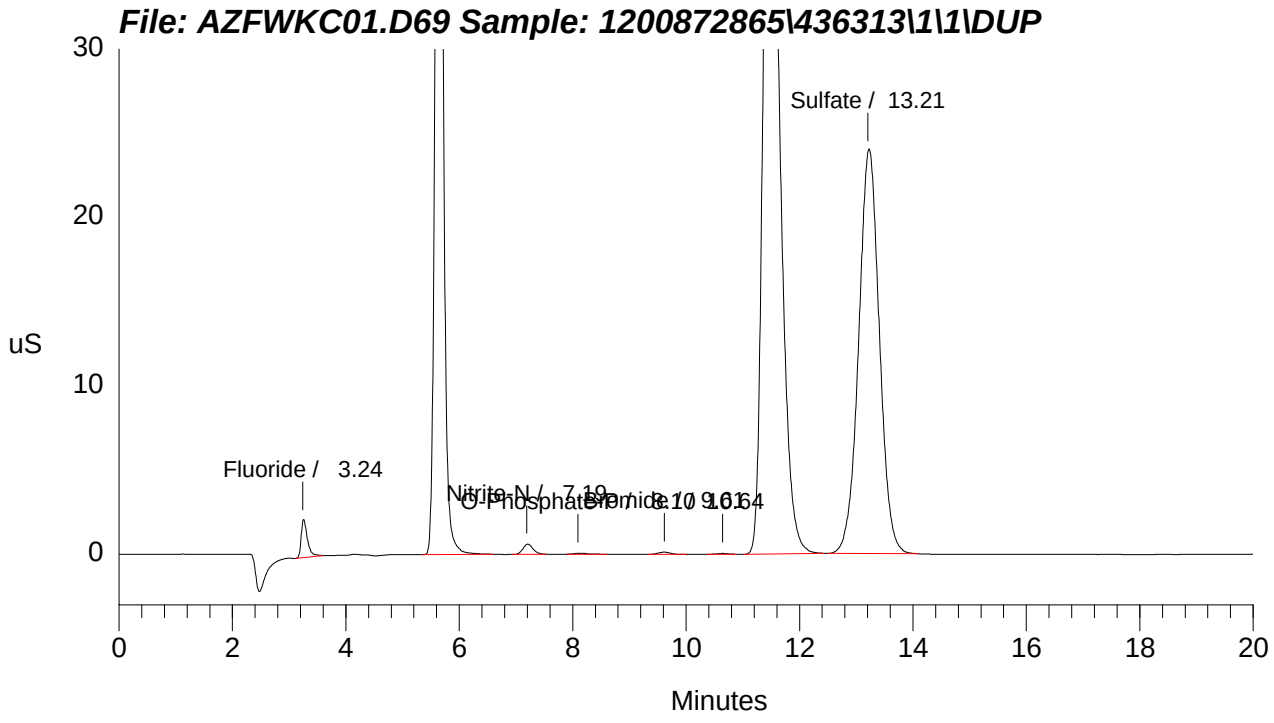


```
================================================================================
| Sample Name: 1200872865\436313\1\1\DUP      Date: 06/24/2005 15:07:10      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D69                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 69                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.589	2190152	17271510	1	0.00
2	5.62	Chloride	26.175	59161113	584252138	1	0.00
3	7.19	Nitrite-N	0.205	586942	7568524	1	0.00
4	8.10	O-Phosphate-P	0.089	61265	1262828	1	0.00
5	9.61	Bromide	0.237	134356	2087896	1	0.00
7	11.46	Nitrate-N	19.232	50869147	1012682188	1	0.00
8	13.21	Sulfate	39.423	23840080	609498458	1	0.00
		Totals	85.951	136843055	2234623542		

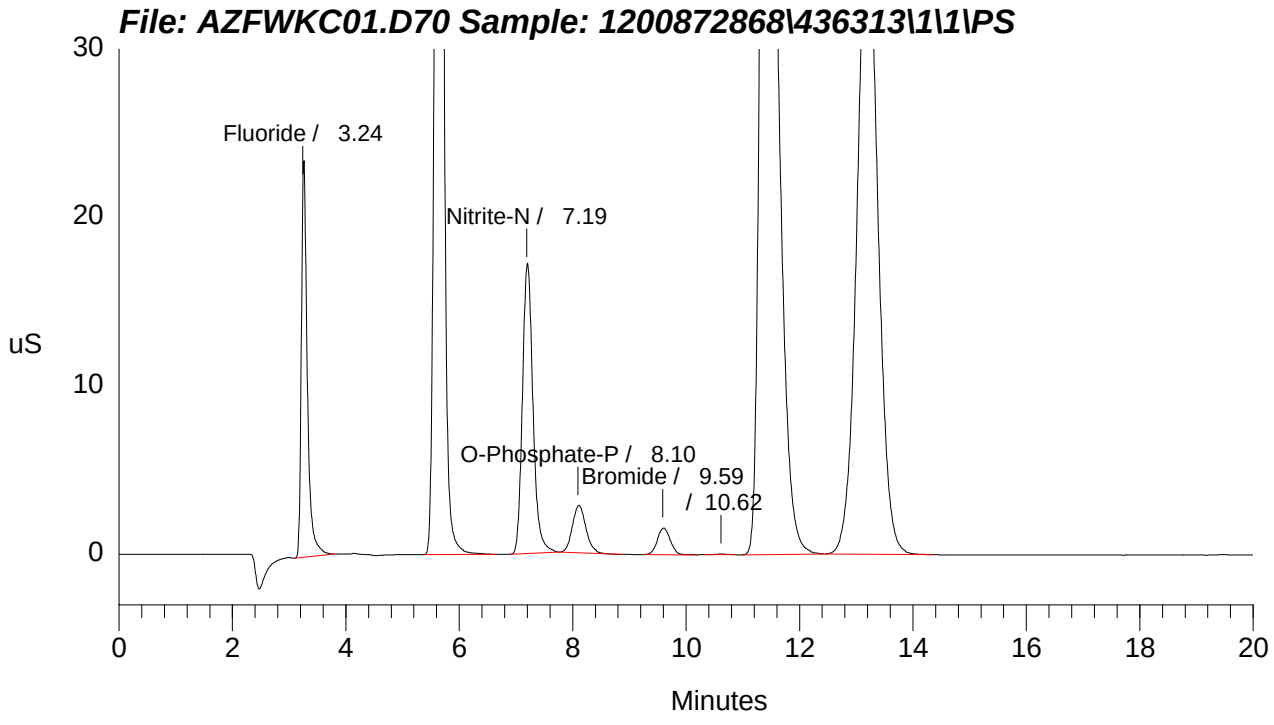


```
================================================================================
| Sample Name: 1200872868\436313\1\1\PS       Date: 06/24/2005 15:27:35     |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D70                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 70                 Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.673	22083554	171730609	1	0.00
2	5.62	Chloride	39.121	87528231	872090104	1	0.00
3	7.19	Nitrite-N	5.382	16963310	222661306	1	0.00
4	8.10	O-Phosphate-P	2.731	2792395	46748621	1	0.00
5	9.59	Bromide	2.906	1569686	25187508	1	0.00
7	11.41	Nitrate-N	25.443	66164429	1340573108	1	0.00
8	13.18	Sulfate	63.171	38658250	978258806	1	0.00
		Totals	144.427	235759856	3657250062		

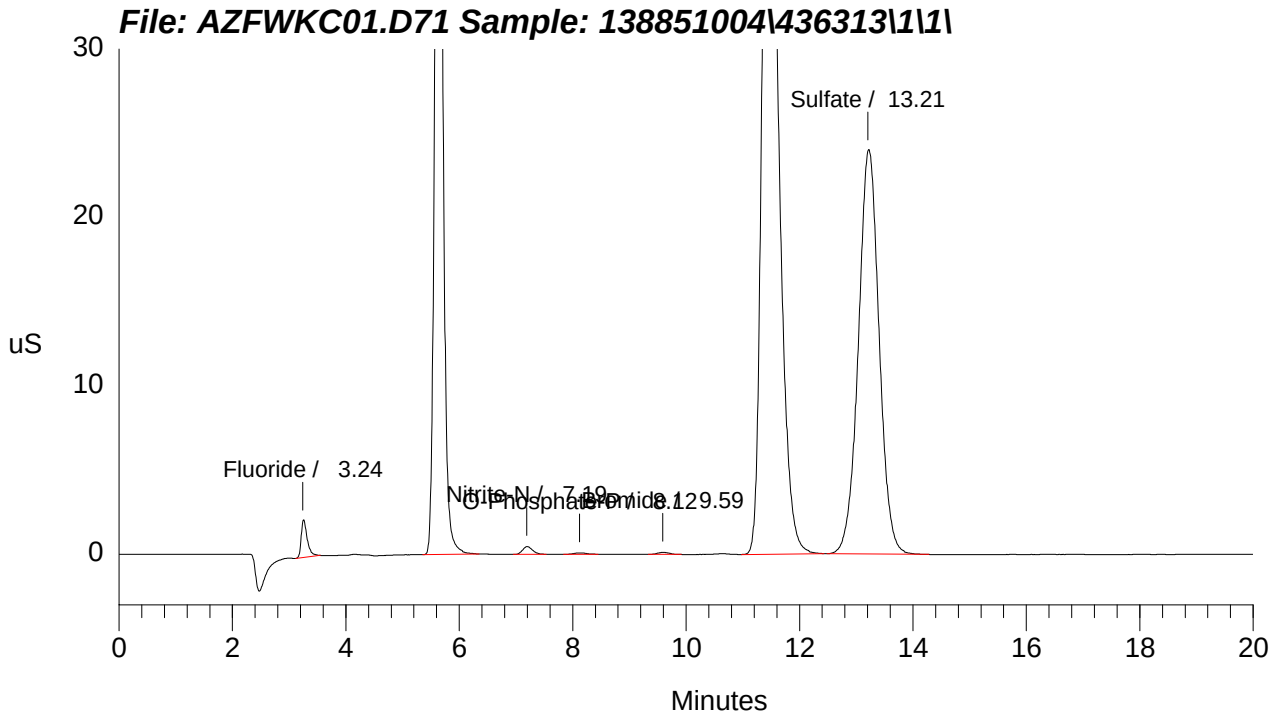


```
================================================================================
| Sample Name: 138851004\436313\1\1\          Date: 06/24/2005 15:48:03      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D71                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 71                 Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.565	2165935	16520105	1	0.00
2	5.62	Chloride	25.713	60476399	573980760	1	0.00
3	7.19	Nitrite-N	0.164	463386	5890310	1	0.00
4	8.12	O-Phosphate-P	0.098	83565	1422576	1	0.00
5	9.59	Bromide	0.212	126538	1866450	1	0.00
6	11.46	Nitrate-N	19.352	52061246	1019019456	1	0.00
7	13.21	Sulfate	39.451	23925602	609930324	1	0.00
		Totals	85.555	139302671	2228629981		

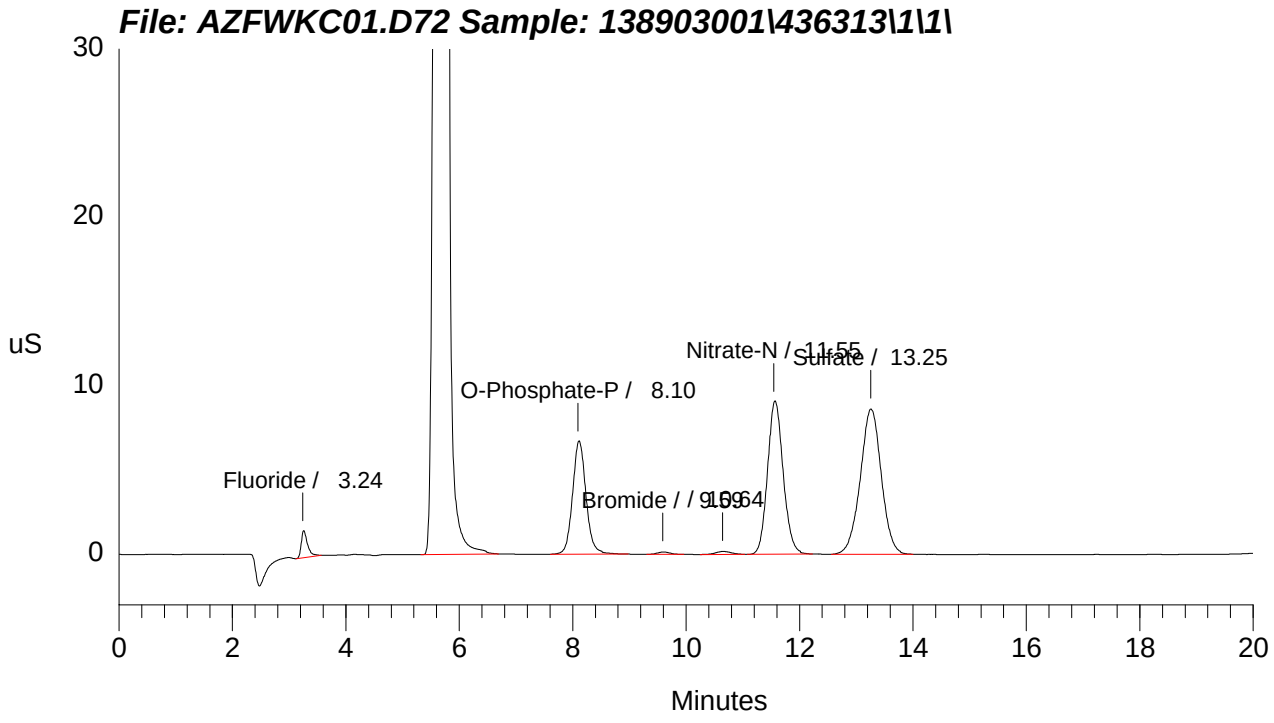


```
================================================================================
| Sample Name: 138903001\436313\1\1\          Date: 06/24/2005 16:08:31      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D72                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 72                 Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
-------------------------------------------------------------------------------
   1    3.24 Fluoride                   0.431    1550403   12474538    1   0.00
   2    5.69 Chloride                 175.429  388911322 3902756736    1   0.00
   0    0.00 Nitrite-N                  0.000          0          0    0   0.00
   3    8.10 O-Phosphate-P              6.469    6654911  111093666    1   0.00
   4    9.59 Bromide                    0.256     137404    2248030    1   0.00
   6   11.55 Nitrate-N                  3.361    9001428  174769946    1   0.00
   7   13.25 Sulfate                   14.498    8618283  222459870    1   0.00
                                  ------------------------------------
                         Totals       200.444  414873752 4425802786
```

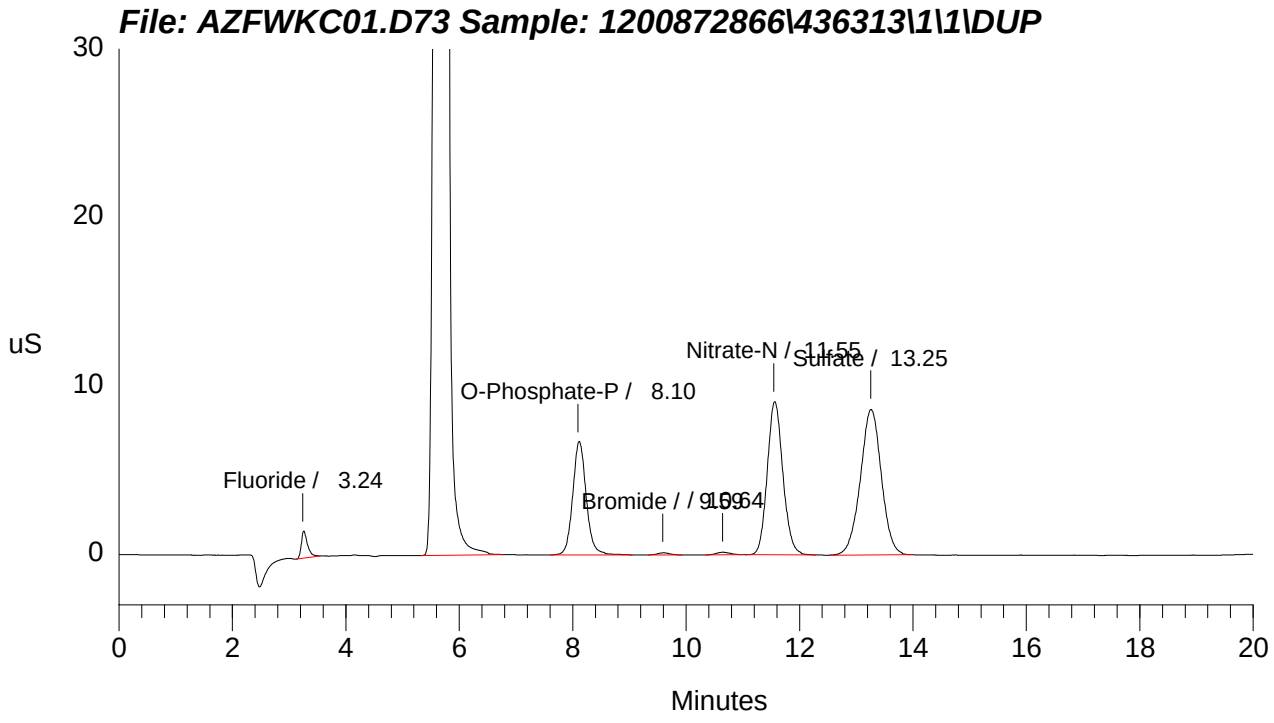


```
================================================================================
| Sample Name: 1200872866\436313\1\1\DUP      Date: 06/24/2005 16:29:00      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D73                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 73                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1    3.24 Fluoride                  0.428    1538386   12378703    1   0.00
   2    5.69 Chloride                176.508  387956277 3926749818    1   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   3    8.10 O-Phosphate-P             6.552    6648308  112527072    1   0.00
   4    9.59 Bromide                   0.244     138511    2148500    1   0.00
   6   11.55 Nitrate-N                 3.368    9057387  175130440    1   0.00
   7   13.25 Sulfate                  14.552    8638484  223291664    1   0.00
                                    ---------------------------------
                          Totals      201.652  413977353 4452226197
```

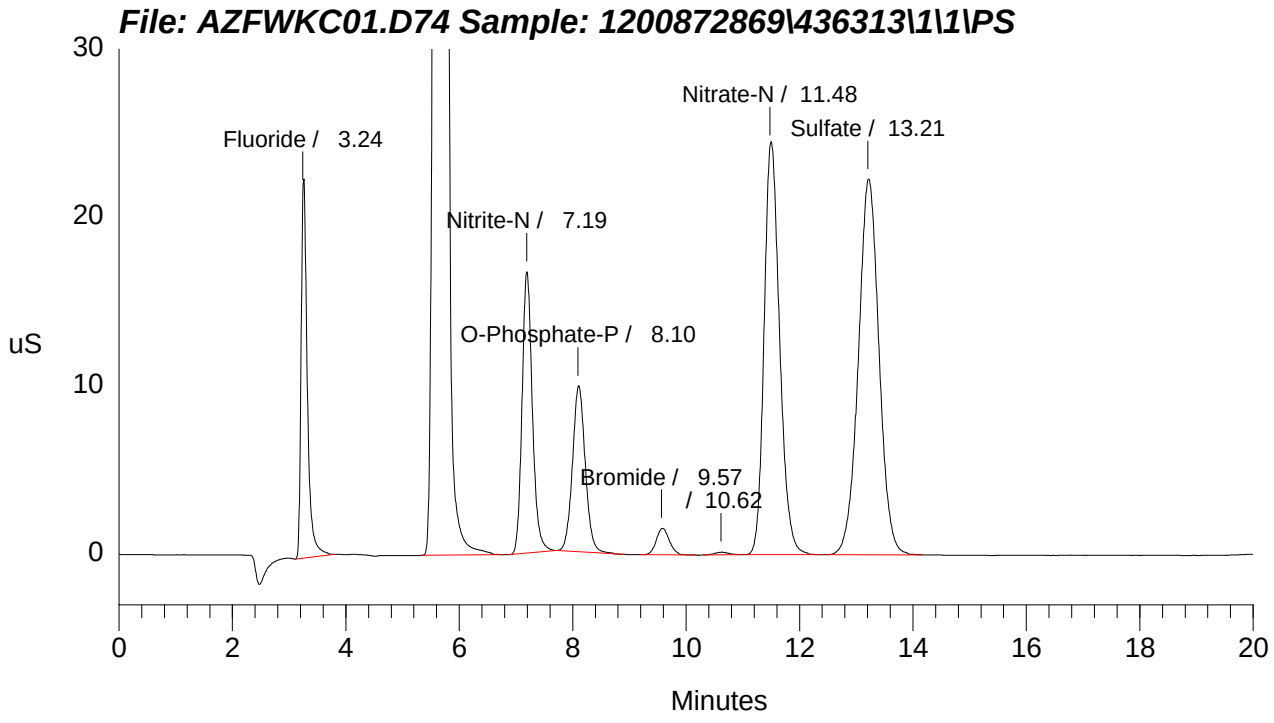


```
================================================================================
| Sample Name: 1200872869\436313\1\1\PS       Date: 06/24/2005 16:49:28     |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D74                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 74                Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.644	21817123	170857030	1	0.00
2	5.69	Chloride	188.183	409753232	4186333898	1	0.00
3	7.19	Nitrite-N	5.090	16676818	210514742	1	0.00
4	8.10	O-Phosphate-P	9.002	9807535	154699556	1	0.00
5	9.57	Bromide	2.958	1568787	25637544	1	0.00
7	11.48	Nitrate-N	8.900	24258412	467187710	1	0.00
8	13.21	Sulfate	36.636	22261152	566218754	1	0.00
		Totals	256.413	506143059	5781449234		

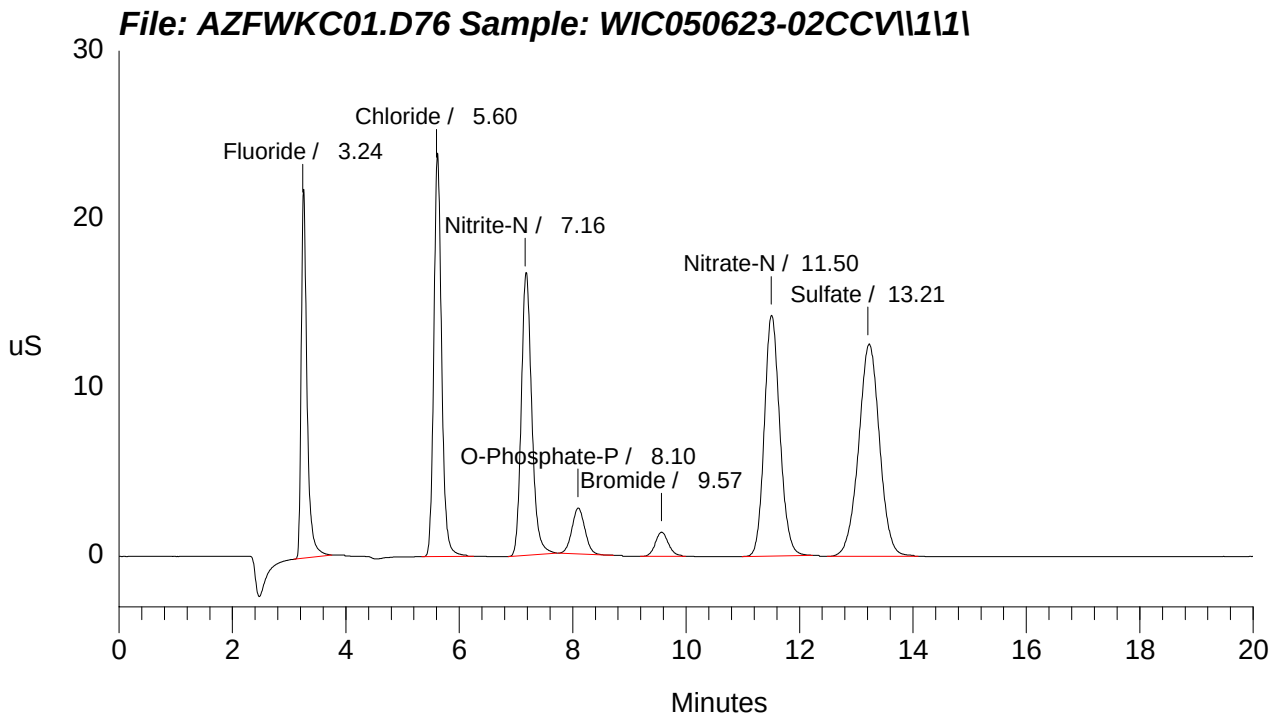


```
================================================================================
| Sample Name: WIC050623-02CCV\\1\1\          Date: 06/24/2005 17:30:08      |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D76                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 76                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.138	21081440	155472906	1	0.00
2	5.60	Chloride	10.167	23048549	228315778	1	0.00
3	7.16	Nitrite-N	5.196	16505588	214920825	1	0.00
4	8.10	O-Phosphate-P	2.523	2723722	43176320	1	0.00
5	9.57	Bromide	2.704	1443884	23442176	1	0.00
6	11.50	Nitrate-N	5.192	14288335	271432076	1	0.00
7	13.21	Sulfate	21.059	12490419	324339698	1	0.00
		Totals	51.979	91581939	1261099779		



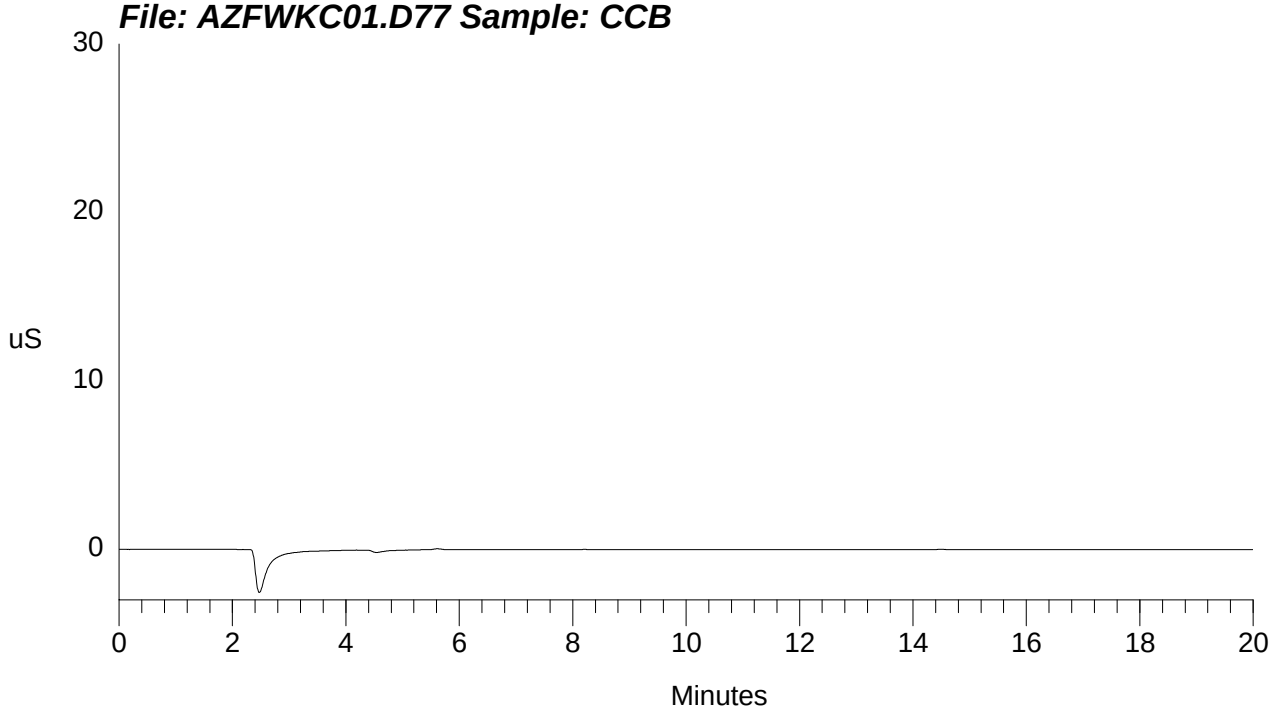
```
================================================================================
| Sample Name: CCB                          Date: 06/24/2005 17:50:36          |
| Data File  : C:\TMP\HORIZON\AZFWKC01.D77                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 77              Detector:CDM-2           |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZFWKC01.D77 Sample: CCB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

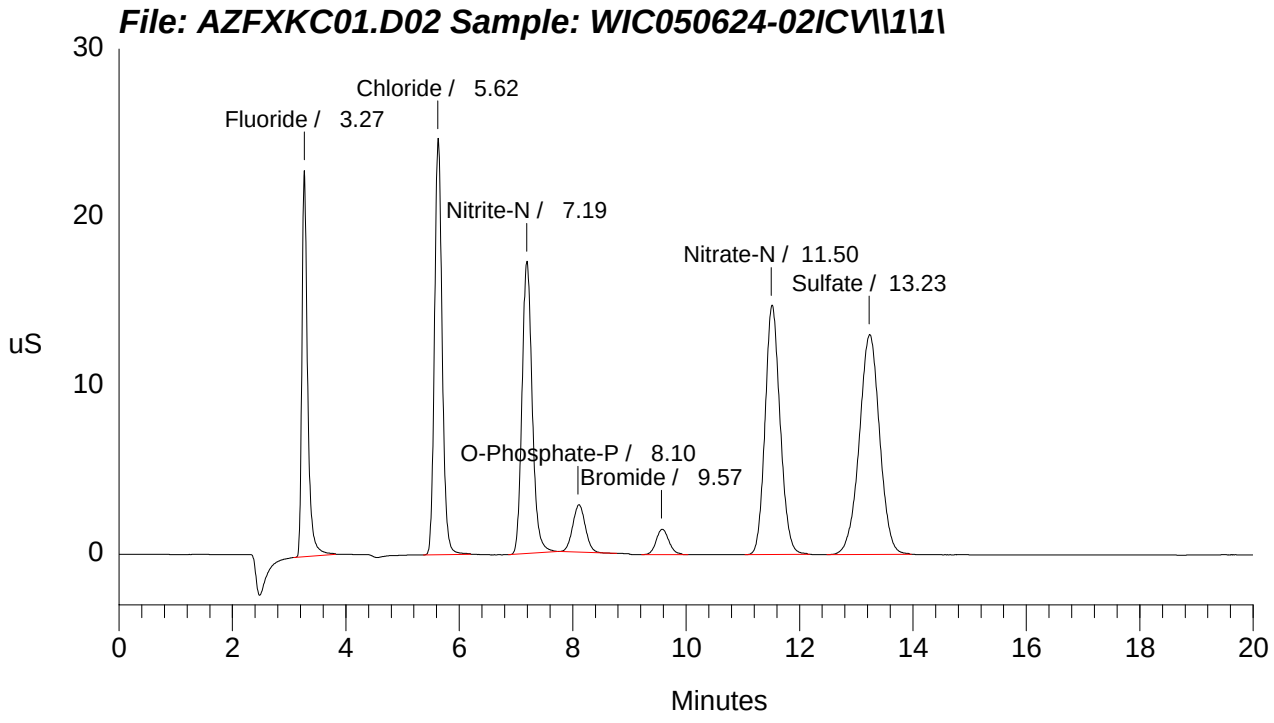
SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			BJB	06/24/2005 18:54:54	AZFXKC01.R01
WIC050624-02ICV:1		1	BJB	06/24/2005 19:15:19	AZFXKC01.R02
ICB:			BJB	06/24/2005 19:35:43	AZFXKC01.R03
139091007:2	436589	2	BJB	06/24/2005 19:56:12	AZFXKC01.R04
1200873543:2	436589	2	BJB	06/24/2005 20:16:30	AZFXKC01.R05
1200873544:2	436589	2	BJB	06/24/2005 20:36:59	AZFXKC01.R06
139091007:3	436589	10	BJB	06/24/2005 20:57:27	AZFXKC01.R07
1200873543:3	436589	10	BJB	06/24/2005 21:17:46	AZFXKC01.R08
1200873544:3	436589	10	BJB	06/24/2005 21:38:14	AZFXKC01.R09
WIC050624-02CVH:1		1	BJB	06/24/2005 21:58:32	AZFXKC01.R10
CCB:			BJB	06/24/2005 22:19:01	AZFXKC01.R11
138851001:2	436313	2	BJB	06/24/2005 22:39:31	AZFXKC01.R12
138851002:2	436313	2	BJB	06/24/2005 23:00:00	AZFXKC01.R13
138851003:2	436313	2	BJB	06/24/2005 23:20:30	AZFXKC01.R14
1200872865:2	436313	2	BJB	06/24/2005 23:40:48	AZFXKC01.R15
1200872868:2	436313	2	BJB	06/25/2005 00:01:17	AZFXKC01.R16
138851004:2	436313	2	BJB	06/25/2005 00:15:04	AZFXKC01.R17
WIC050625-02CCV:1		1	BJB	06/25/2005 15:52:23	AZFXKC01.R18
CCB:			BJB	06/25/2005 16:12:42	AZFXKC01.R19
138851001:3	436313	2	BJB	06/25/2005 16:33:06	AZFXKC01.R20
138851002:3	436313	2	BJB	06/25/2005 16:53:25	AZFXKC01.R21
138851003:3	436313	2	BJB	06/25/2005 17:13:45	AZFXKC01.R22
1200872865:3	436313	2	BJB	06/25/2005 17:34:05	AZFXKC01.R23
1200872868:3	436313	2	BJB	06/25/2005 17:54:34	AZFXKC01.R24
138851004:3	436313	2	BJB	06/25/2005 18:15:03	AZFXKC01.R25
138903001:2	436313	20	BJB	06/25/2005 18:35:31	AZFXKC01.R26
1200872866:2	436313	20	BJB	06/25/2005 18:42:59	AZFXKC01.R27

```
================================================================================
| Sample Name: WIC050624-02ICV\\1\1\          Date: 06/24/2005 19:15:19      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D02                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 2                   Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.282	22912313	159865223	1	0.00
2	5.62	Chloride	10.323	24637817	231796096	1	0.00
3	7.19	Nitrite-N	5.247	17283284	217050270	1	0.00
4	8.10	O-Phosphate-P	2.547	2786852	43583776	1	0.00
5	9.57	Bromide	2.760	1503321	23929402	1	0.00
6	11.50	Nitrate-N	5.239	14725717	273918758	1	0.00
7	13.23	Sulfate	21.226	13043710	326922930	1	0.00
		Totals	52.625	96893014	1277066455		



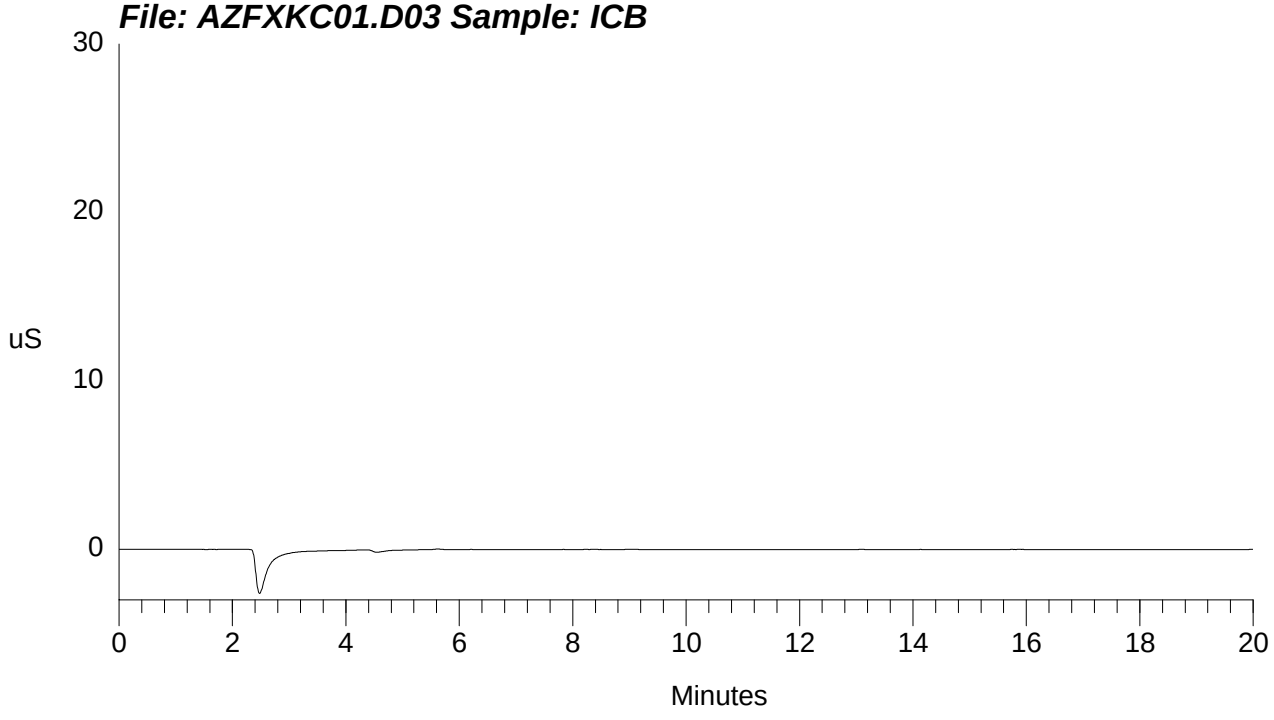
```
================================================================================
| Sample Name: ICB                              Date: 06/24/2005 19:35:43      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D03                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZFXKC01.D03 Sample: ICB

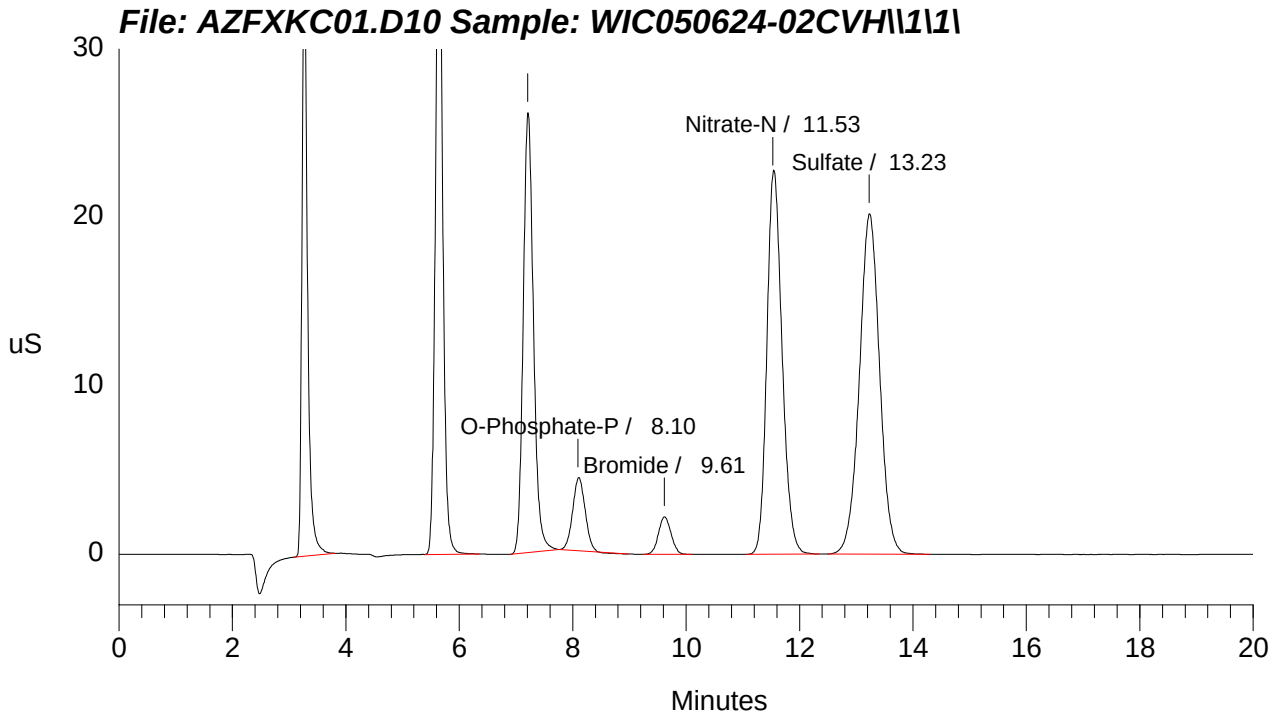


```
================================================================================
| Sample Name: WIC050624-02CVH\\1\1\          Date: 06/24/2005 21:58:32      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D10                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                   7.852   34018411  237927182    1   0.00
   2    5.62 Chloride                  15.963   37209283  357188724    1   0.00
   3    7.21 Nitrite-N                  7.888   26118152  326746702    1   0.00
   4    8.10 O-Phosphate-P              3.829    4303707   65647625    1   0.00
   5    9.61 Bromide                    3.987    2228000   34550830    1   0.00
   6   11.53 Nitrate-N                  8.081   22438074  423953844    1   0.00
   7   13.23 Sulfate                   32.436   20215579  500992708    1   0.00
                                ----------------------------------
                         Totals        80.035  146531206 1947007615
```

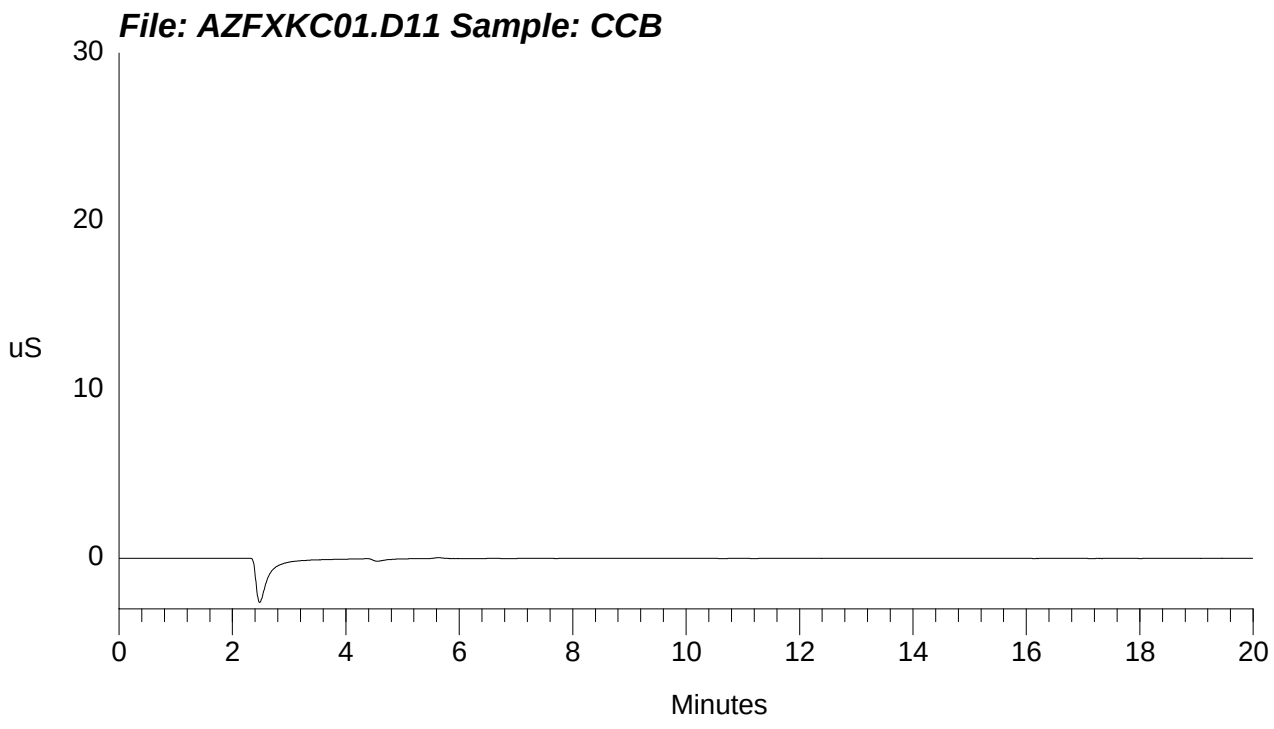


```
================================================================================
| Sample Name: CCB                              Date: 06/24/2005 22:19:01      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D11                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 11                 Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component          Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                  0.000          0          0    0   0.00
   0   0.00 Chloride                  0.000          0          0    0   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0   0.00 Bromide                   0.000          0          0    0   0.00
   0   0.00 Nitrate-N                 0.000          0          0    0   0.00
   0   0.00 Sulfate                   0.000          0          0    0   0.00
                                   ----------------------------------
                        Totals        0.000          0          0
```

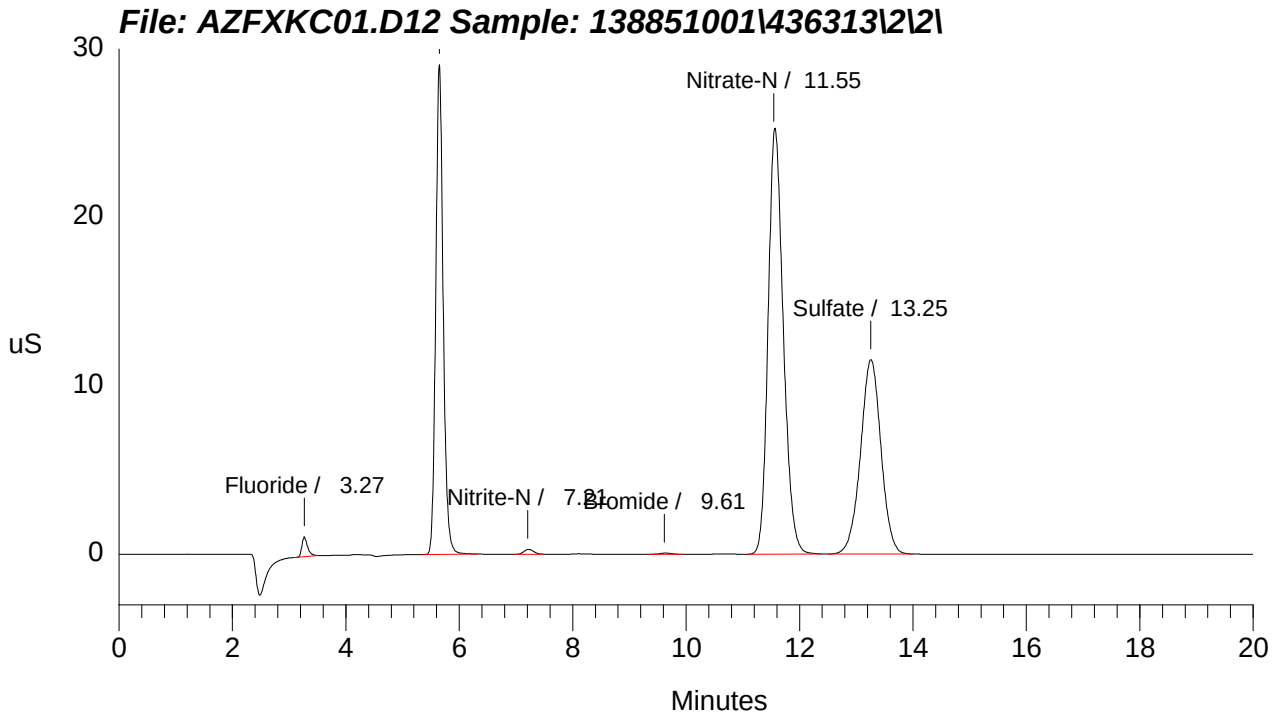


```
================================================================================
| Sample Name: 138851001\436313\2\2\          Date: 06/24/2005 22:39:31      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D12                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 12                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.292	1184166	8234514	1	0.00
2	5.65	Chloride	11.784	29074191	264285564	1	0.00
3	7.21	Nitrite-N	0.108	291152	3526916	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.61	Bromide	0.137	74463	1220396	1	0.00
5	11.55	Nitrate-N	8.962	25032768	470446938	1	0.00
6	13.25	Sulfate	18.804	11523850	289322172	1	0.00
		Totals	40.087	67180590	1037036500		

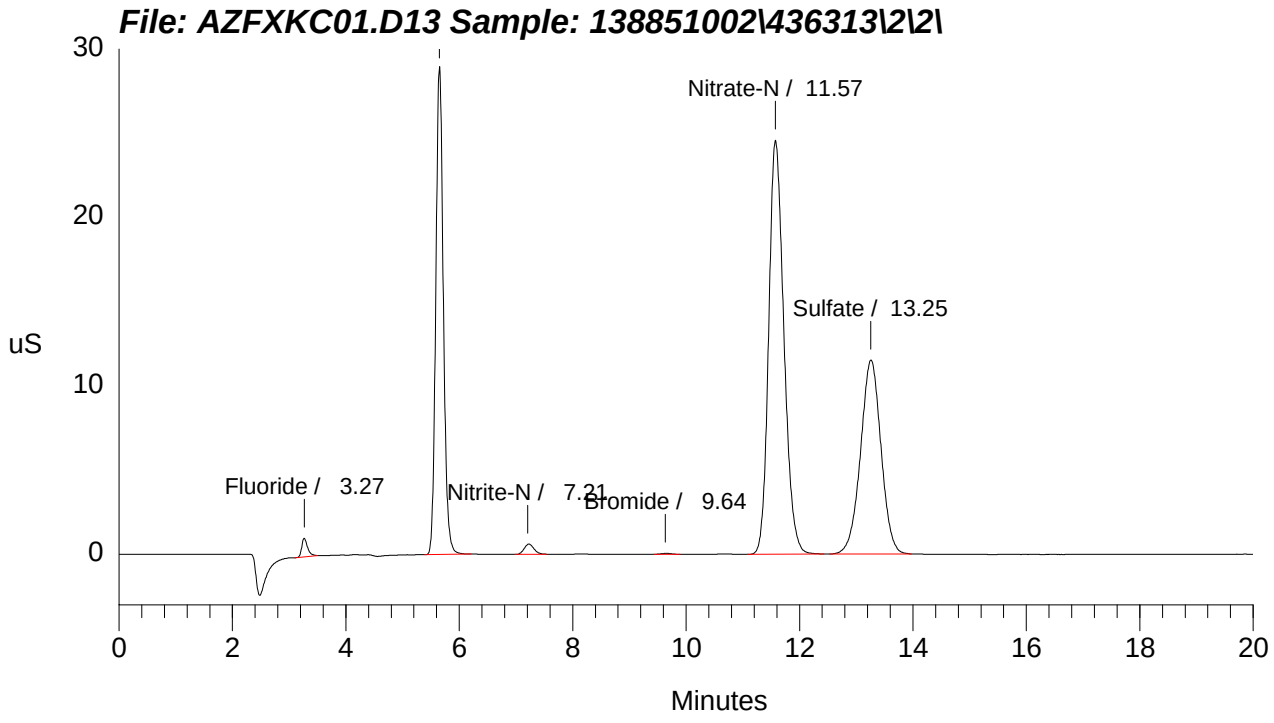


```
================================================================================
| Sample Name: 138851002\436313\2\2\          Date: 06/24/2005 23:00:00      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D13                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 13                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.283	1115683	7956706	1	0.00
2	5.65	Chloride	11.926	28818085	267424740	1	0.00
3	7.21	Nitrite-N	0.201	601335	7423258	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.64	Bromide	0.096	58191	861990	1	0.00
5	11.57	Nitrate-N	8.709	24583101	457094446	1	0.00
6	13.25	Sulfate	18.752	11499660	288517546	1	0.00
		Totals	39.966	66676055	1029278686		

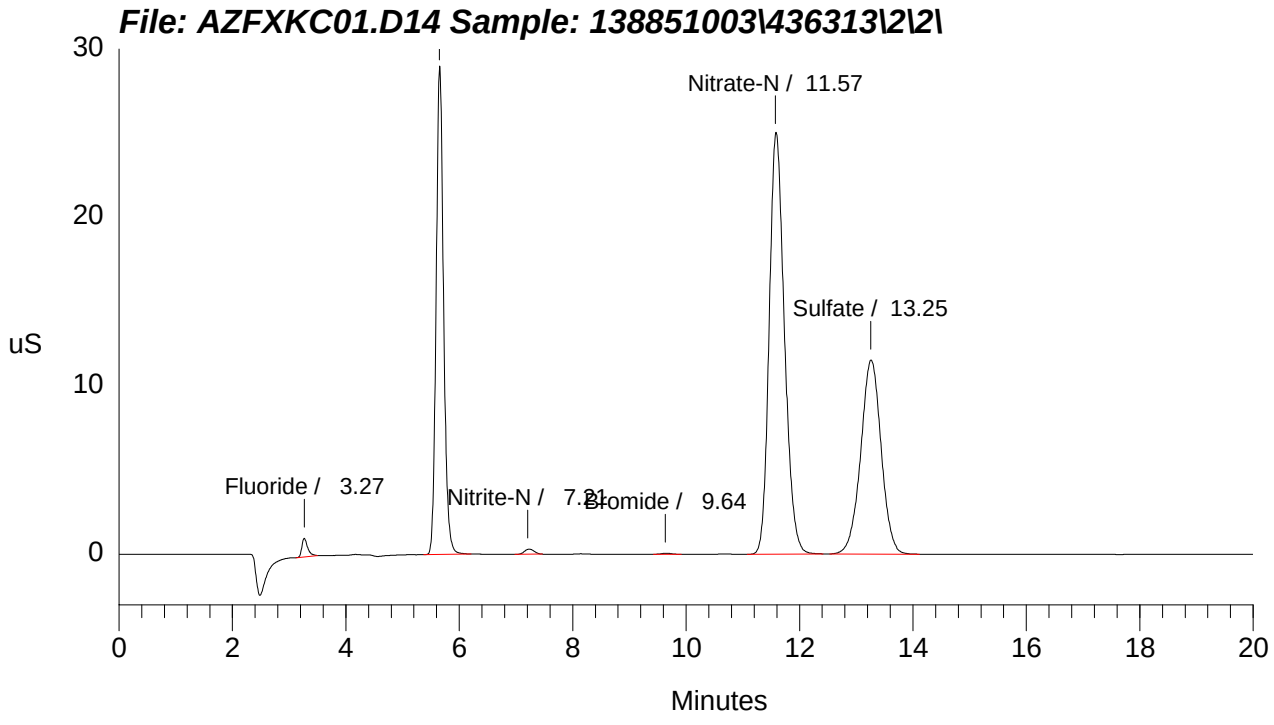


```
================================================================================
| Sample Name: 138851003\436313\2\2\          Date: 06/24/2005 23:20:30          |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D14                                       |
| Method     : C:\DX\METHOD\MAY27.MET                                            |
| ACI Address: 1  System: 1  Inject#: 14                  Detector:CDM-2         |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056                |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                   0.280    1115648    7879207    1   0.00
   2    5.65 Chloride                  11.746   28698140  263423944    1   0.00
   3    7.21 Nitrite-N                  0.112     302526    3728606    1   0.00
   0    0.00 O-Phosphate-P              0.000          0          0    0   0.00
   4    9.64 Bromide                    0.100      62509     897644    1   0.00
   5   11.57 Nitrate-N                  8.886   24897928  466450392    1   0.00
   6   13.25 Sulfate                   18.784   11507278  289015308    1   0.00
                                ----------------------------------
                         Totals        39.908   66584029 1031395101
```

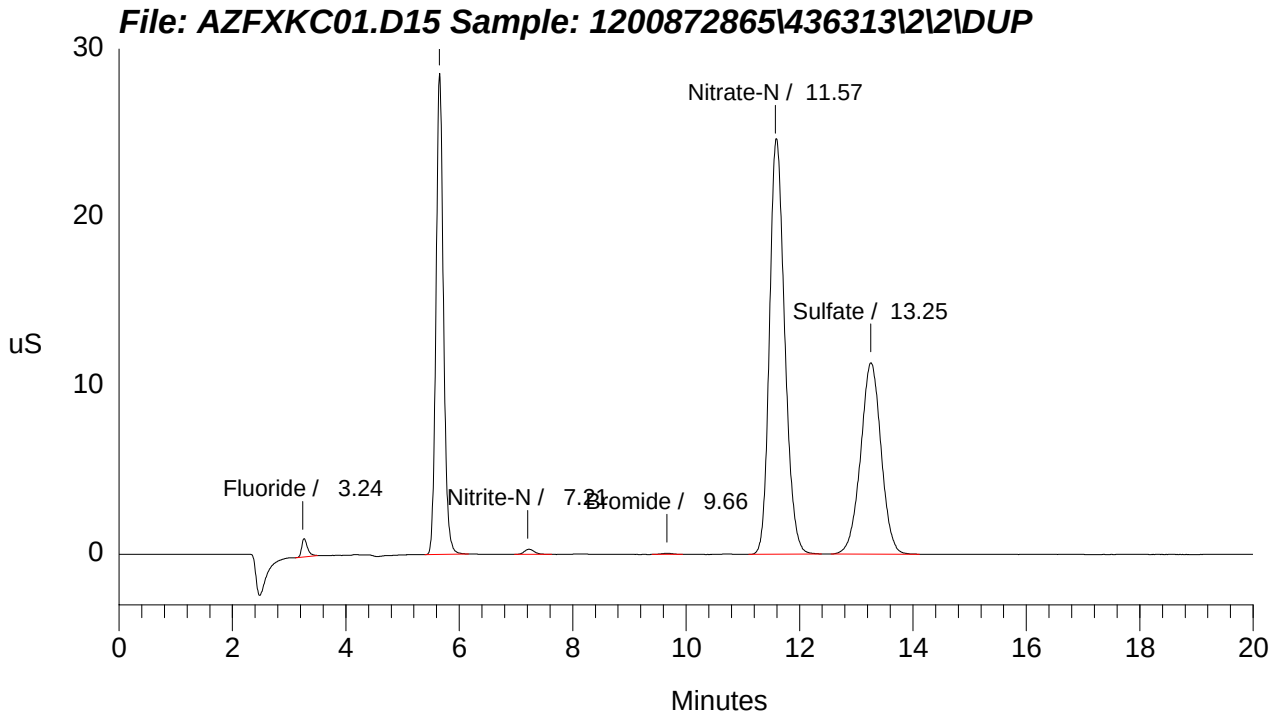


```
================================================================================
| Sample Name: 1200872865\436313\2\2\DUP      Date: 06/24/2005 23:40:48      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D15                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 15                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.276	987818	7747287	1	0.00
2	5.65	Chloride	11.556	28394335	259210502	1	0.00
3	7.21	Nitrite-N	0.119	305857	4024056	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.66	Bromide	0.117	69791	1048016	1	0.00
5	11.57	Nitrate-N	8.771	24337417	460409058	1	0.00
6	13.25	Sulfate	18.552	11349026	285400686	1	0.00
		Totals	39.392	65444245	1017839605		

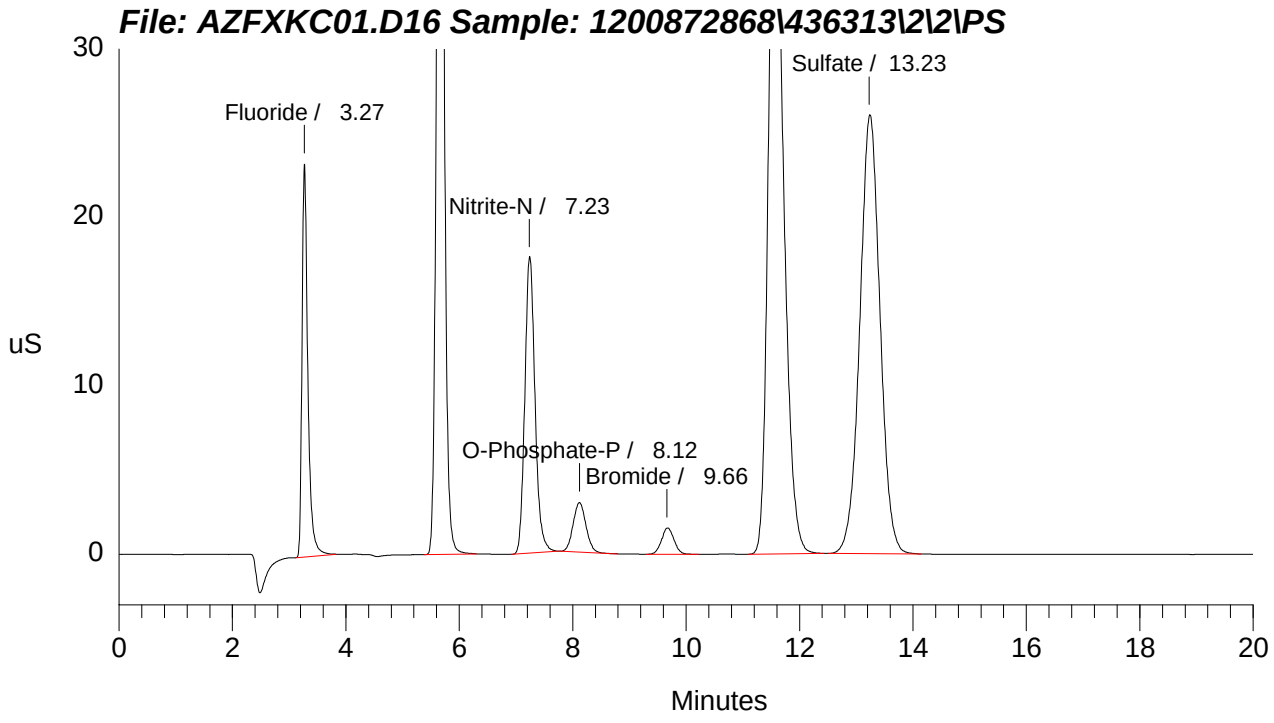


```
================================================================================
| Sample Name: 1200872868\436313\2\2\PS       Date: 06/25/2005 00:01:17     |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D16                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 16                  Detector:CDM-2    |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.488	23324282	166101574	1	0.00
2	5.65	Chloride	24.172	56736894	539714076	1	0.00
3	7.23	Nitrite-N	5.310	17517037	219650081	1	0.00
4	8.12	O-Phosphate-P	2.713	2950840	46438279	1	0.00
5	9.66	Bromide	2.805	1552817	24312742	1	0.00
6	11.55	Nitrate-N	14.966	41642329	787422058	1	0.00
7	13.23	Sulfate	41.641	26002830	643938204	1	0.00
		Totals	97.094	169727028	2427577014		

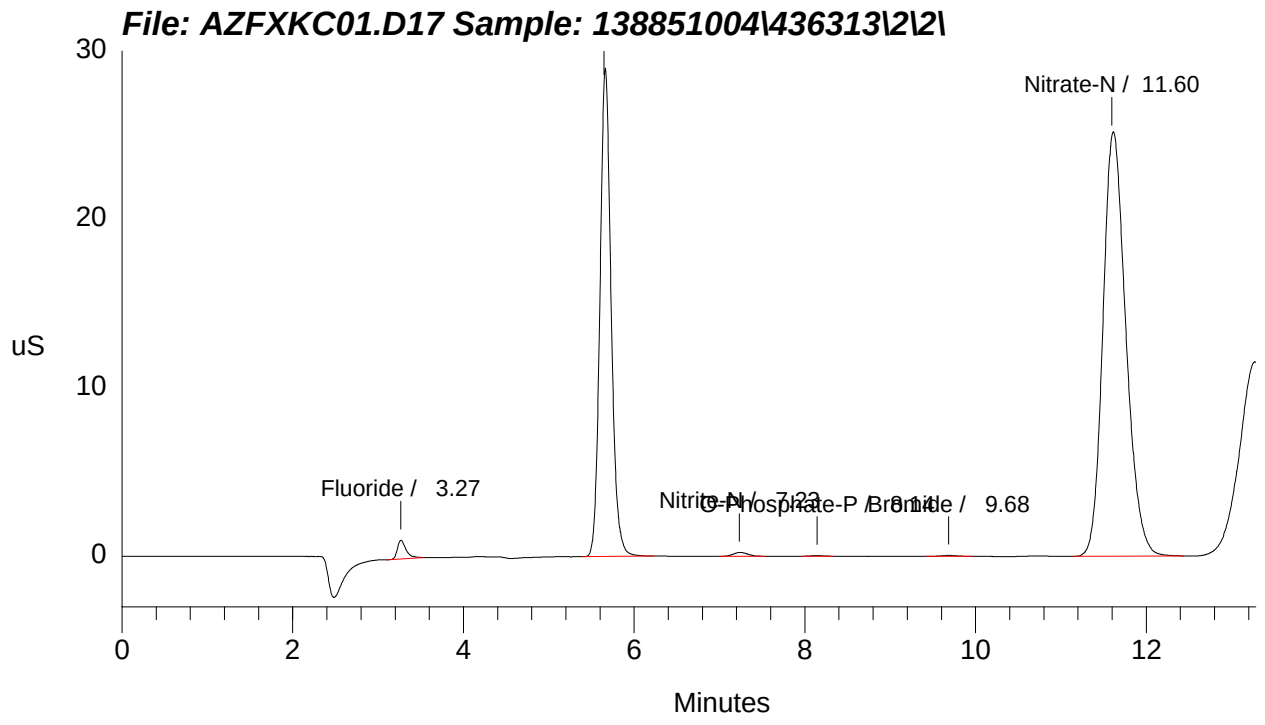


```
================================================================================
| Sample Name: 138851004\436313\2\2\          Date: 06/25/2005 00:15:04      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D17                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 17                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   3986  5Hz   0.00  13.28           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.281	1119667	7895421	1	0.00
2	5.65	Chloride	11.762	27940346	263781302	1	0.00
3	7.23	Nitrite-N	0.090	230821	2811426	1	0.00
4	8.14	O-Phosphate-P	0.044	41605	485984	1	0.00
5	9.68	Bromide	0.105	60587	941072	1	0.00
6	11.60	Nitrate-N	8.977	24921385	471269904	1	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	21.258	54314411	747185109		

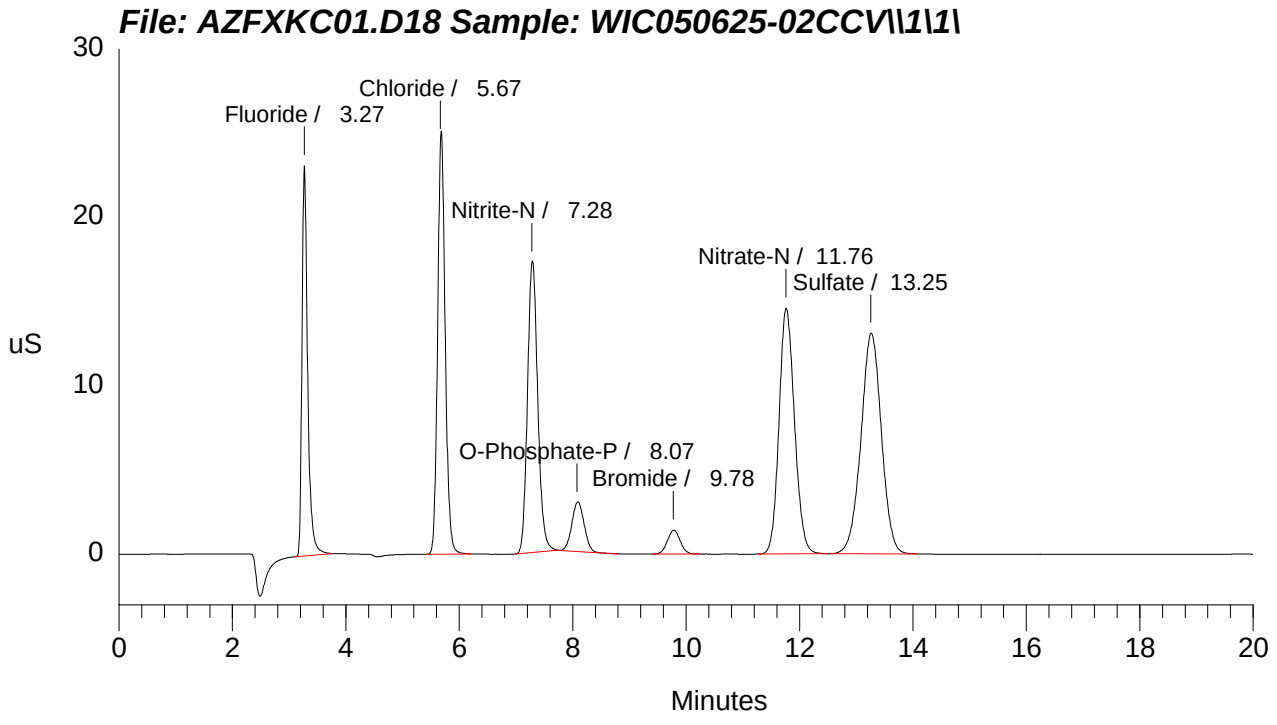


```
================================================================================
| Sample Name: WIC050625-02CCV\\1\1\          Date: 06/25/2005 15:52:23      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D18                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 18                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.303	23164208	160485702	1	0.00
2	5.67	Chloride	10.334	24591019	232030130	1	0.00
3	7.28	Nitrite-N	5.259	17221082	217542351	1	0.00
4	8.07	O-Phosphate-P	2.580	2895530	44141943	1	0.00
5	9.78	Bromide	2.577	1417780	22339546	1	0.00
6	11.76	Nitrate-N	5.294	14582886	276815592	1	0.00
7	13.25	Sulfate	21.346	13071317	328798766	1	0.00
		Totals	52.692	96943820	1282154030		



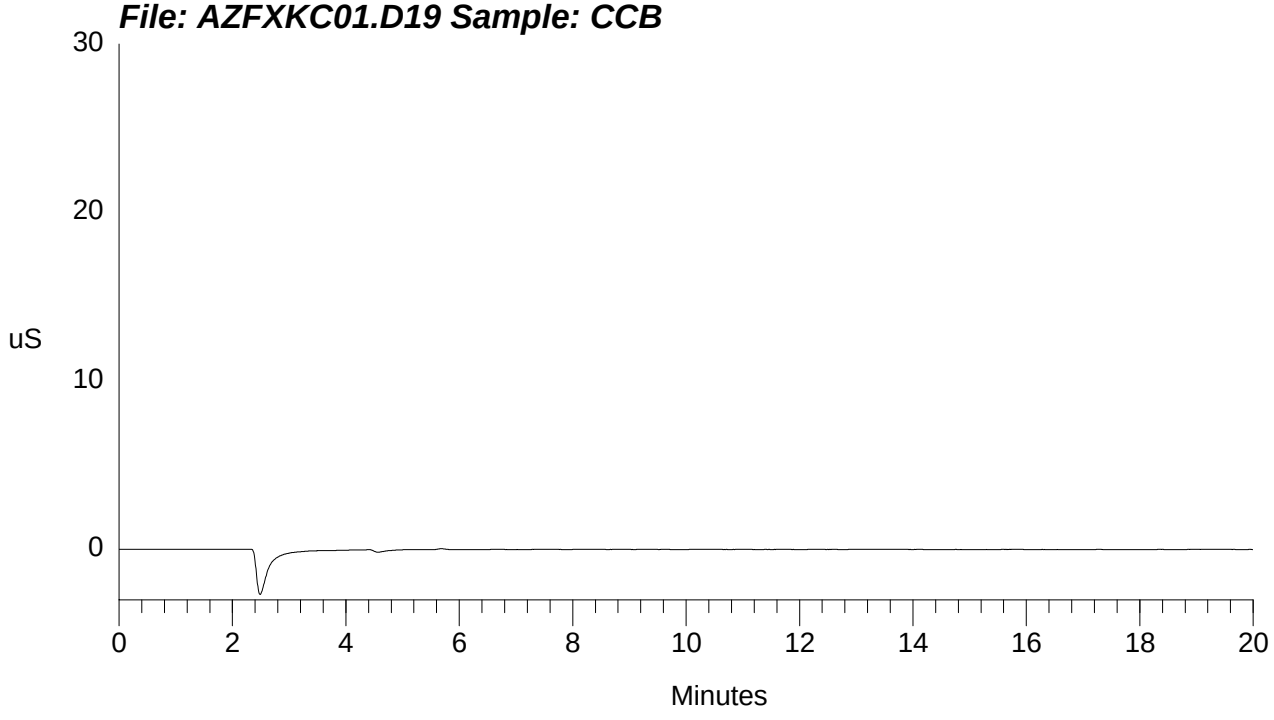
```
================================================================================
| Sample Name: CCB                          Date: 06/25/2005 16:12:42          |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D19                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 19              Detector:CDM-2           |
| Analyst    : BJB           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZFXKC01.D19 Sample: CCB

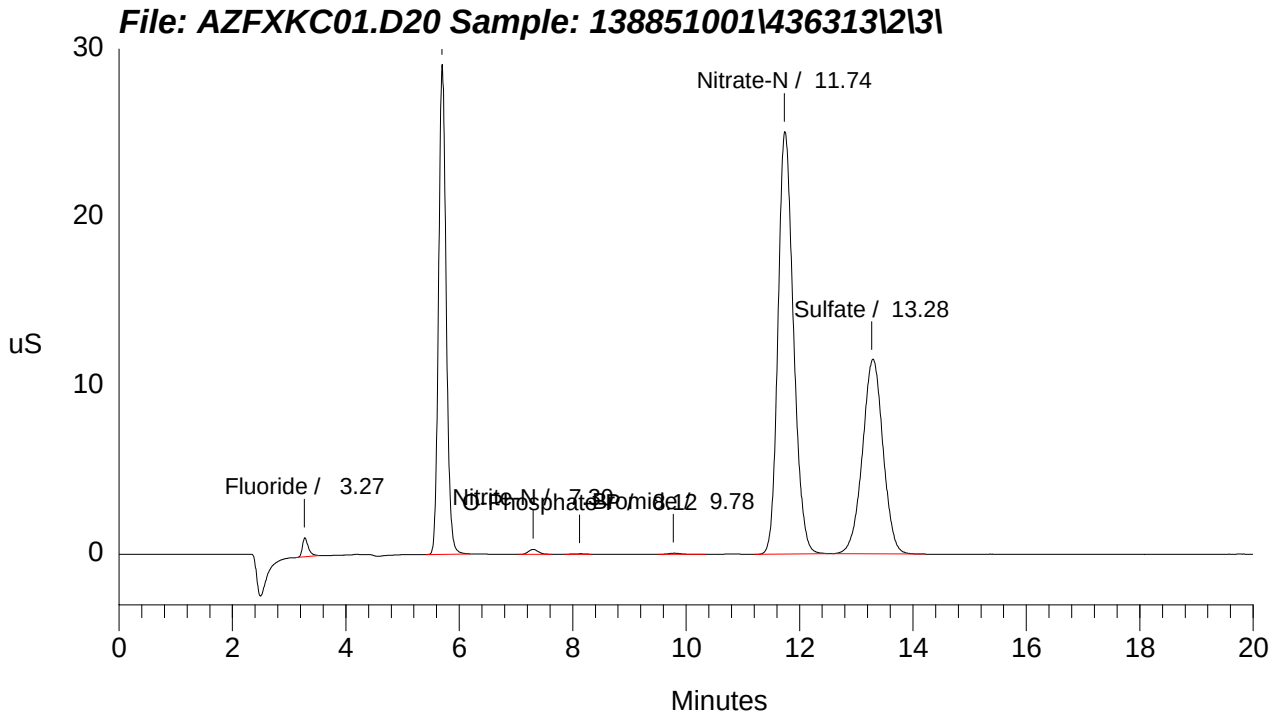


```
================================================================================
| Sample Name: 138851001\436313\2\3\          Date: 06/25/2005 16:33:06      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D20                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 20                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.293	1115125	8274799	1	0.00
2	5.69	Chloride	12.071	29004082	270657700	1	0.00
3	7.30	Nitrite-N	0.111	298158	3674762	1	0.00
4	8.12	O-Phosphate-P	0.051	36919	607156	1	0.00
5	9.78	Bromide	0.141	69311	1258752	1	0.00
6	11.74	Nitrate-N	9.041	25030320	474623984	1	0.00
7	13.28	Sulfate	18.931	11475287	291287806	1	0.00
		Totals	40.639	67029202	1050384959		

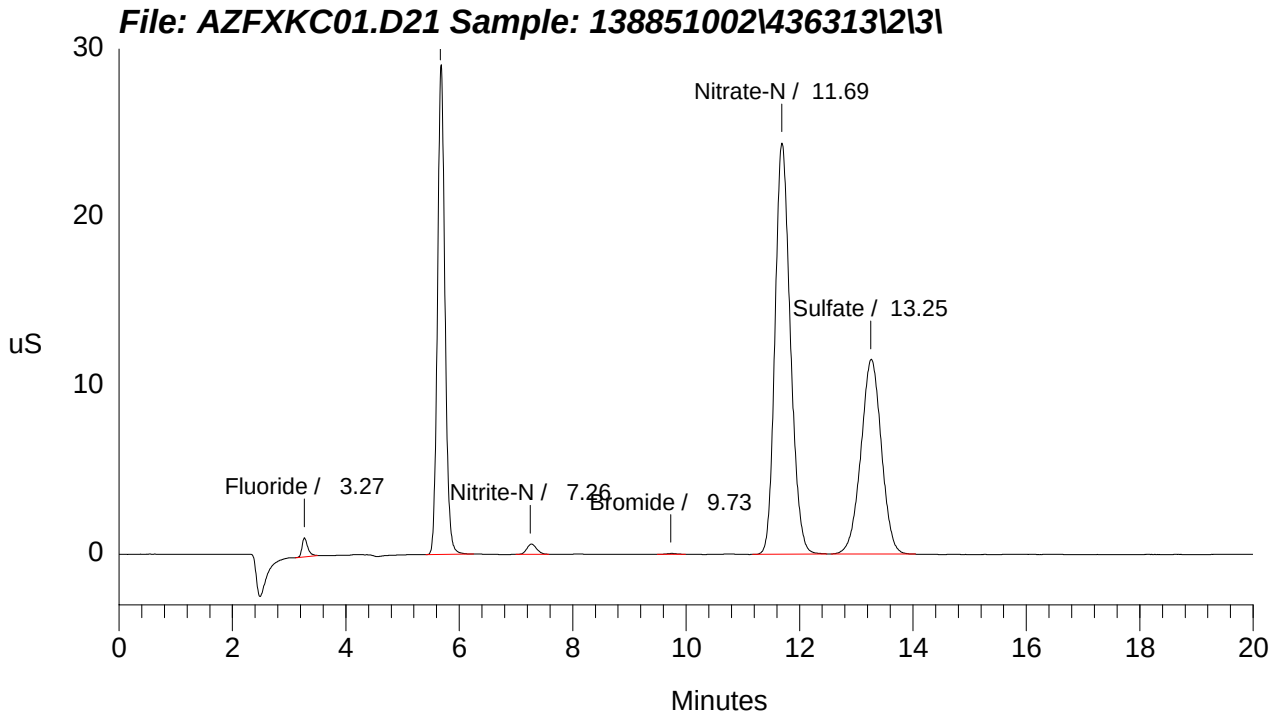


```
================================================================================
| Sample Name: 138851002\436313\2\3\          Date: 06/25/2005 16:53:25      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D21                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 21                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.281	1132044	7903985	1	0.00
2	5.67	Chloride	11.846	28697803	265651656	1	0.00
3	7.26	Nitrite-N	0.205	605283	7578338	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.73	Bromide	0.092	58250	833056	1	0.00
5	11.69	Nitrate-N	8.763	24419799	459979866	1	0.00
6	13.25	Sulfate	18.856	11523504	290124218	1	0.00
		Totals	40.043	66436684	1032071119		

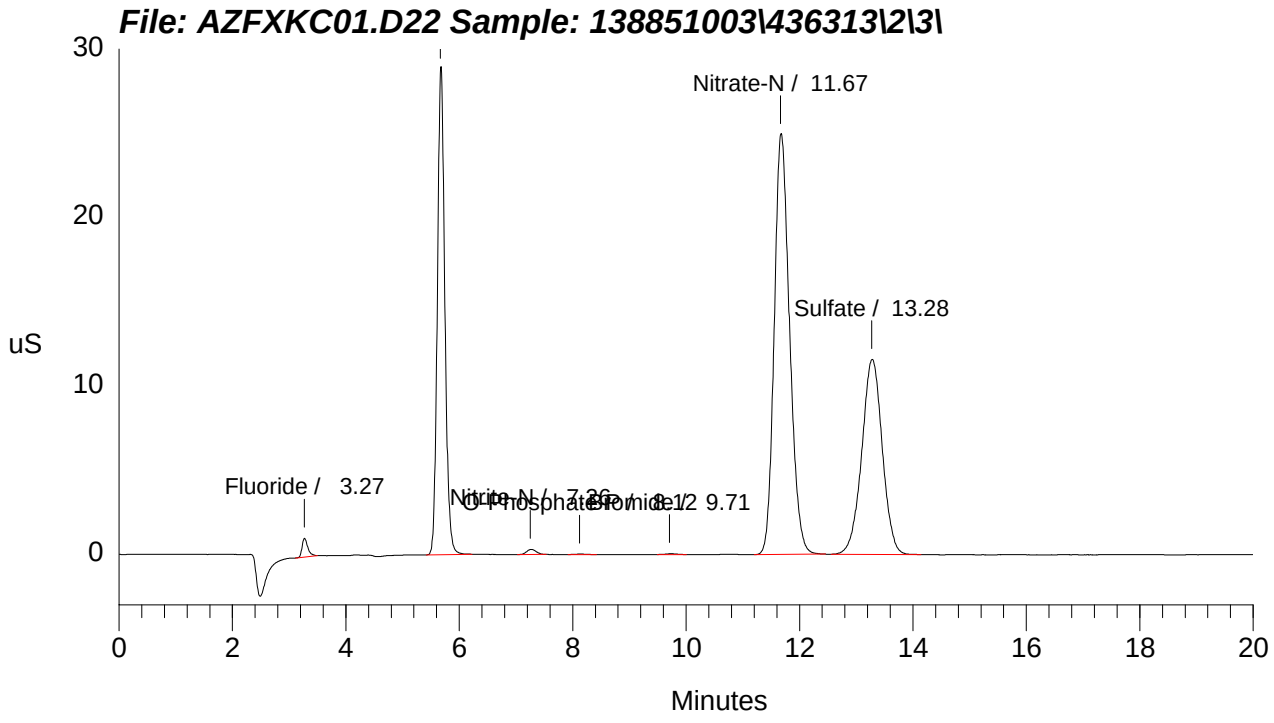


```
================================================================================
| Sample Name: 138851003\436313\2\3\          Date: 06/25/2005 17:13:45      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D22                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 22                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.282	1128839	7922161	1	0.00
2	5.67	Chloride	11.827	28811721	265238452	1	0.00
3	7.26	Nitrite-N	0.112	304964	3703178	1	0.00
4	8.12	O-Phosphate-P	0.047	37812	535934	1	0.00
5	9.71	Bromide	0.098	58035	885008	1	0.00
6	11.67	Nitrate-N	8.956	24918021	470172214	1	0.00
7	13.28	Sulfate	18.954	11571869	291654764	1	0.00
		Totals	40.276	66831260	1040111711		

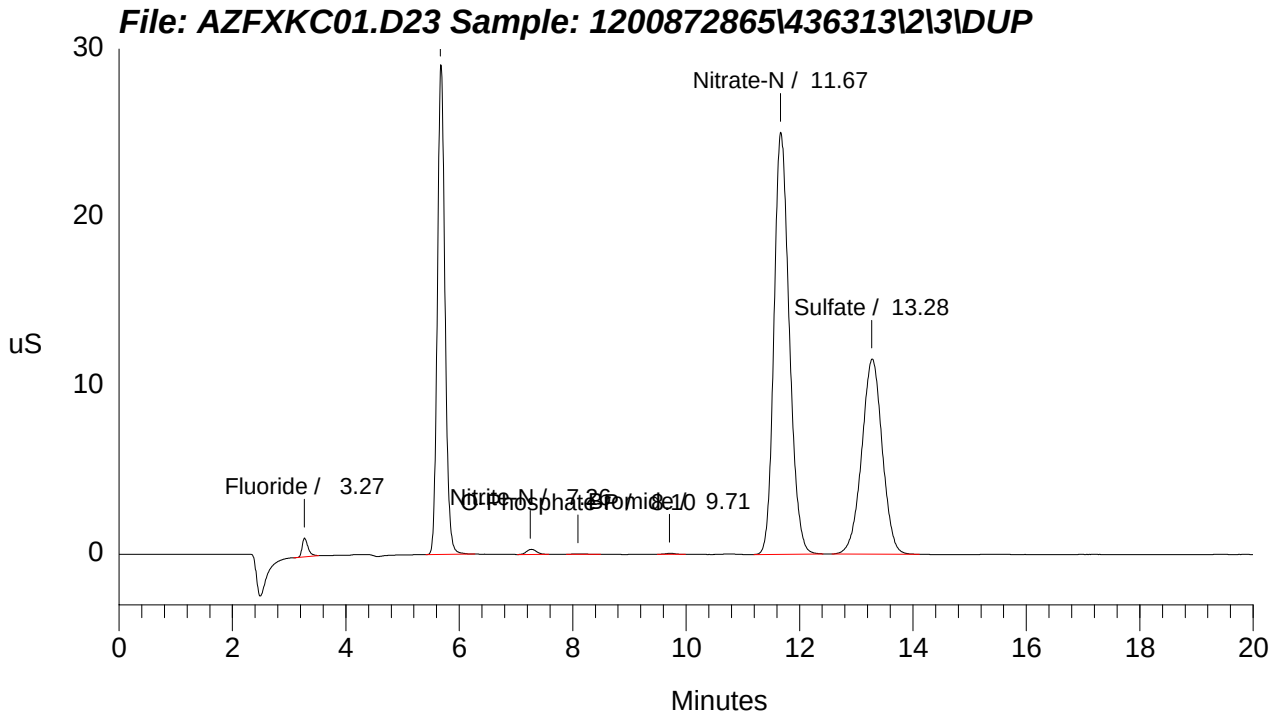


```
================================================================================
| Sample Name: 1200872865\436313\2\3\DUP      Date: 06/25/2005 17:34:05      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D23                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 23                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.290	1128921	8171111	1	0.00
2	5.67	Chloride	12.056	28914365	270328404	1	0.00
3	7.26	Nitrite-N	0.116	308730	3887588	1	0.00
4	8.10	O-Phosphate-P	0.055	38755	680092	1	0.00
5	9.71	Bromide	0.094	61760	851768	1	0.00
6	11.67	Nitrate-N	8.956	25041930	470143870	1	0.00
7	13.28	Sulfate	18.913	11570472	291015840	1	0.00
		Totals	40.481	67064933	1045078673		

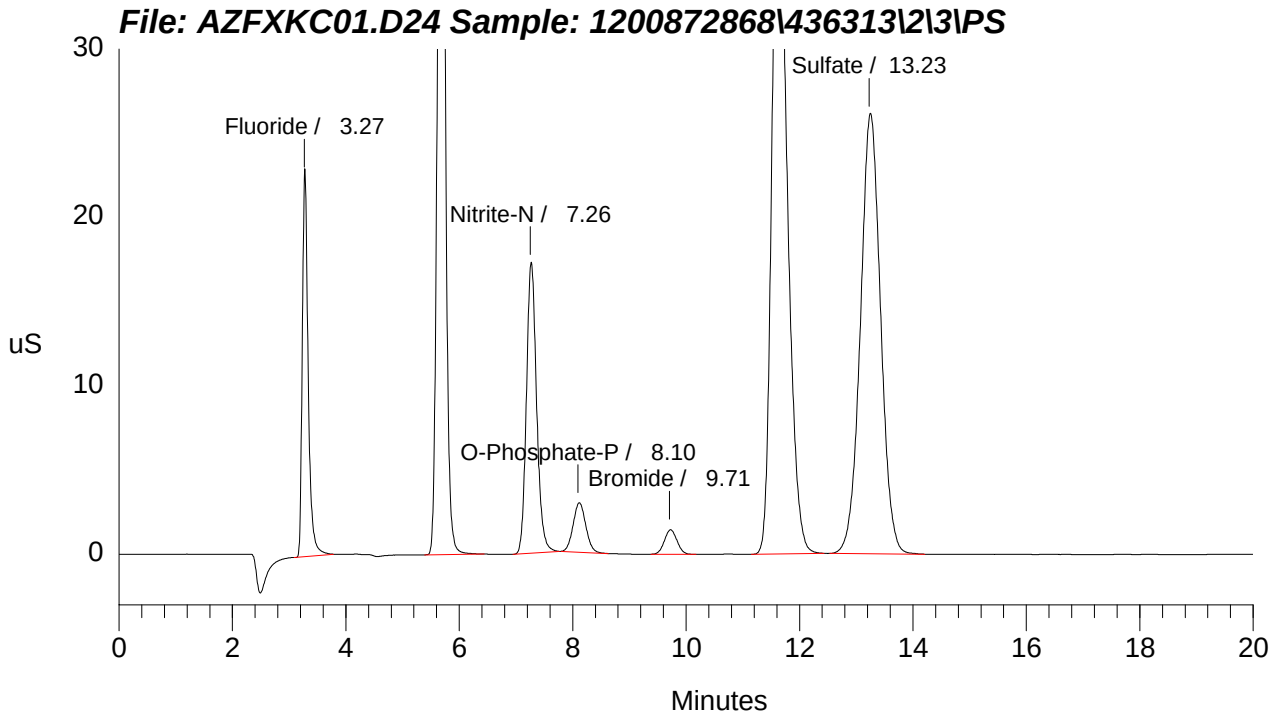


```
================================================================================
| Sample Name: 1200872868\436313\2\3\PS       Date: 06/25/2005 17:54:34      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D24                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 24                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.474	22473936	165699328	1	0.00
2	5.67	Chloride	24.206	57669815	540469460	1	0.00
3	7.26	Nitrite-N	5.205	17082597	215317234	1	0.00
4	8.10	O-Phosphate-P	2.666	2872035	45635631	1	0.00
5	9.71	Bromide	2.599	1430896	22530544	1	0.00
6	11.62	Nitrate-N	15.136	41822650	796391334	1	0.00
7	13.23	Sulfate	41.829	25911145	646851162	1	0.00
		Totals	97.115	169263073	2432894693		

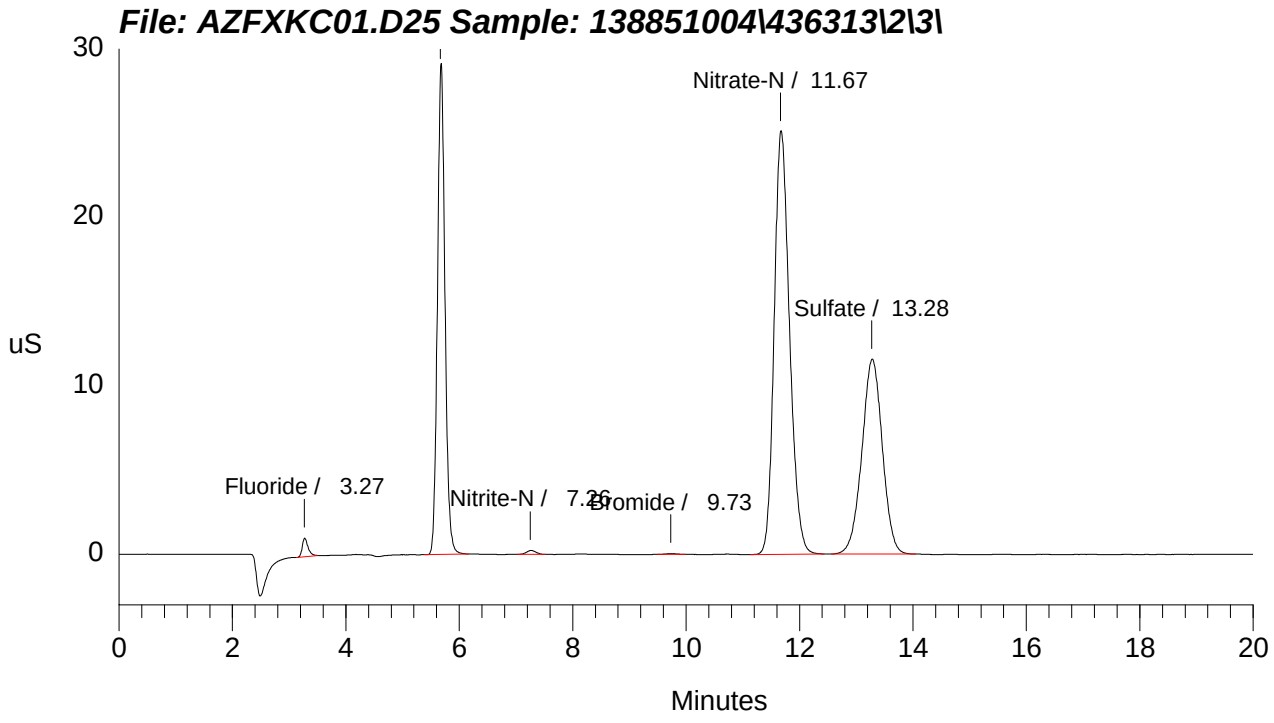


```
================================================================================
| Sample Name: 138851004\436313\2\3\          Date: 06/25/2005 18:15:03      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D25                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 25                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.279	1104011	7852717	1	0.00
2	5.67	Chloride	11.958	28776603	268145878	1	0.00
3	7.26	Nitrite-N	0.090	230399	2792468	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.73	Bromide	0.090	56173	813946	1	0.00
5	11.67	Nitrate-N	9.003	25085132	472645258	1	0.00
6	13.28	Sulfate	18.867	11544826	290295842	1	0.00
		Totals	40.287	66797144	1042546109		

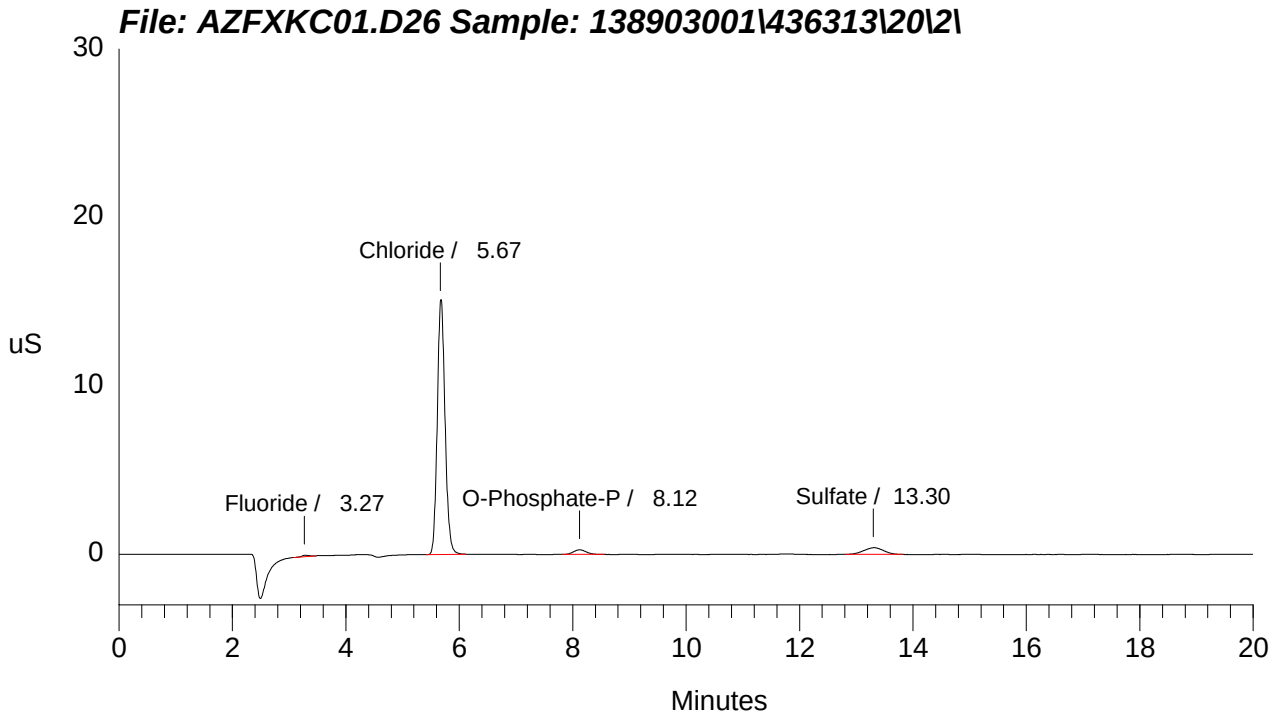


```
================================================================================
| Sample Name: 138903001\436313\20\2\          Date: 06/25/2005 18:35:31      |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D26                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 26                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                   0.045      89690     742682    1   0.00
   2    5.67 Chloride                   6.393   15017949  144418374    1   0.00
   0    0.00 Nitrite-N                  0.000          0          0    0   0.00
   3    8.12 O-Phosphate-P              0.275     278248    4470474    1   0.00
   0    0.00 Bromide                    0.000          0          0    0   0.00
   0    0.00 Nitrate-N                  0.000          0          0    0   0.00
   4   13.30 Sulfate                    0.820     399778   10060066    1   0.00
                                  ----------------------------------
                        Totals          7.534   15785665  159691596
```



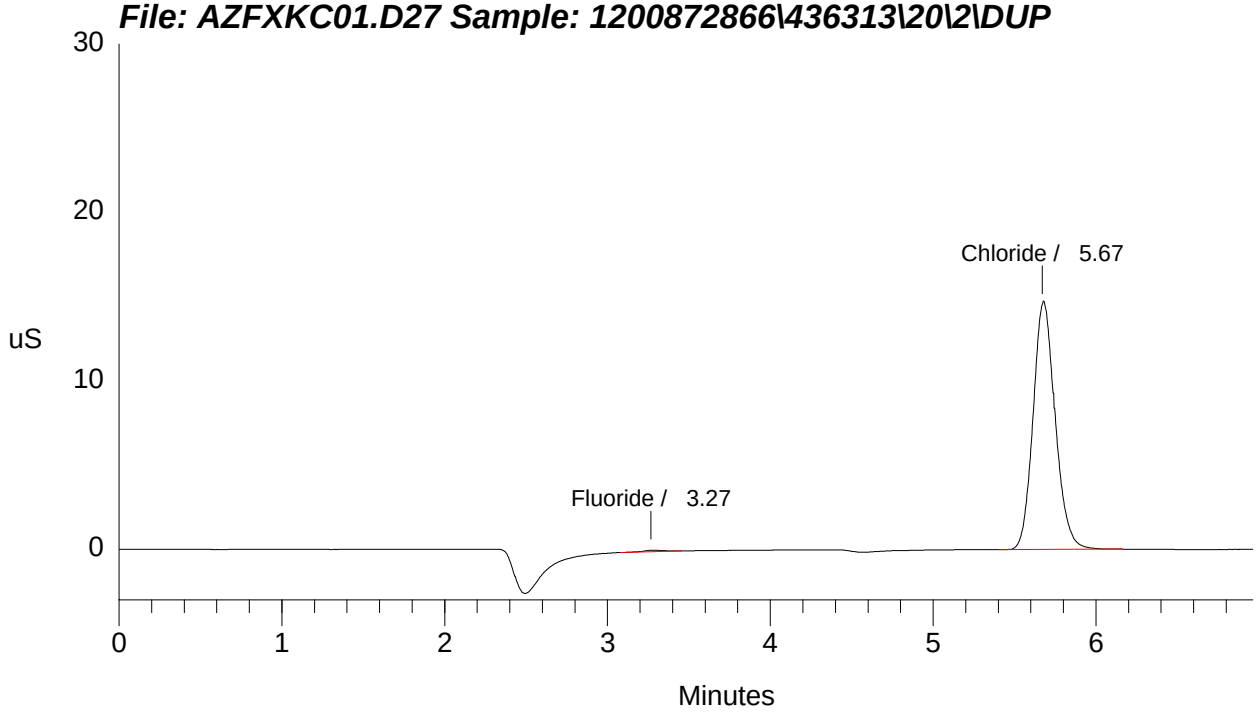
```
================================================================================
| Sample Name: 1200872866\436313\20\2\DUP     Date: 06/25/2005 18:42:59     |
| Data File  : C:\TMP\HORIZON\AZFXKC01.D27                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 27                 Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   2090  5Hz   0.00   6.96           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                     Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.045      90575     740025    1   0.00
   2    5.67 Chloride                  6.167   14544306  139382294    1   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                      Totals          6.212   14634881  140122319
```

File: AZFXKC01.D27 Sample: 1200872866\436313\20\2\DUP



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

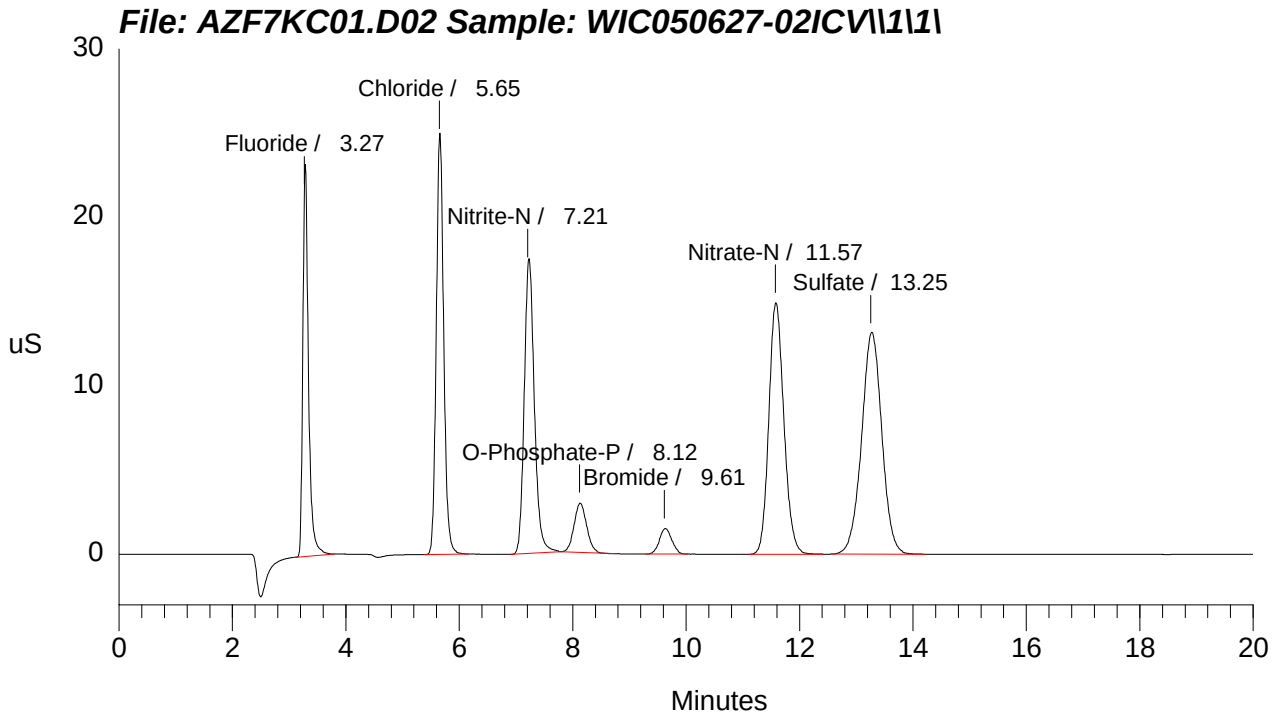
SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			BJB	06/27/2005 14:13:49	AZF7KC01.R01
WIC050627-02ICV:1		1	BJB	06/27/2005 14:34:18	AZF7KC01.R02
ICB:			BJB	06/27/2005 14:54:47	AZF7KC01.R03
LCR:			BJB	06/27/2005 15:15:04	AZF7KC01.R04
1200875449:1	437414	1	BJB	06/27/2005 15:35:33	AZF7KC01.R05
1200875454:1	437414	1	BJB	06/27/2005 15:56:02	AZF7KC01.R06
139349001:1	437414	1	BJB	06/27/2005 16:16:31	AZF7KC01.R07
1200875450:1	437414	1	BJB	06/27/2005 16:36:59	AZF7KC01.R08
1200875452:1	437414	1	BJB	06/27/2005 16:57:28	AZF7KC01.R09
139349009:1	437414	1	BJB	06/27/2005 17:17:57	AZF7KC01.R10
139405001:1	437414	1	BJB	06/27/2005 17:38:26	AZF7KC01.R11
WIC050627-02CVH:1		1	BJB	06/27/2005 17:58:55	AZF7KC01.R12
CCB:			BJB	06/27/2005 18:19:24	AZF7KC01.R13
139405002:1	437414	1	BJB	06/27/2005 18:39:53	AZF7KC01.R14
1200875455:1	437414	1	BJB	06/27/2005 19:00:22	AZF7KC01.R15
1200875456:1	437414	1	BJB	06/27/2005 19:20:51	AZF7KC01.R16
139406001:1	437414	1	BJB	06/27/2005 19:41:19	AZF7KC01.R17
1200875451:1	437414	1	BJB	06/27/2005 20:01:48	AZF7KC01.R18
1200875453:1	437414	1	BJB	06/27/2005 20:22:17	AZF7KC01.R19
WIC050627-02CCV:1		1	BJB	06/27/2005 20:42:46	AZF7KC01.R20
CCB:			BJB	06/27/2005 21:03:15	AZF7KC01.R21
LCR:			BJB	06/27/2005 21:23:43	AZF7KC01.R22
138851001:4	436313	2	BJB	06/27/2005 21:44:13	AZF7KC01.R23
138851002:4	436313	2	BJB	06/27/2005 22:04:42	AZF7KC01.R24
138851003:4	436313	2	BJB	06/27/2005 22:25:12	AZF7KC01.R25
1200872865:4	436313	2	BJB	06/27/2005 22:45:42	AZF7KC01.R26
1200872868:4	436313	2	BJB	06/27/2005 23:06:11	AZF7KC01.R27
138851004:4	436313	2	BJB	06/27/2005 23:26:40	AZF7KC01.R28
138903001:3	436313	20	BJB	06/27/2005 23:46:57	AZF7KC01.R29
1200872866:3	436313	20	BJB	06/28/2005 00:07:26	AZF7KC01.R30
1200872869:3	436313	20	BJB	06/28/2005 00:27:55	AZF7KC01.R31
WIC050627-02CVH:1		1	BJB	06/28/2005 00:48:24	AZF7KC01.R32
CCB:			BJB	06/28/2005 01:08:53	AZF7KC01.R33

```
================================================================================
| Sample Name: WIC050627-02ICV\\1\1\          Date: 06/27/2005 14:34:18      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D02                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.304	21440465	160511748	1	0.00
2	5.65	Chloride	10.112	24611763	227104270	1	0.00
3	7.21	Nitrite-N	5.223	16934789	216050905	1	0.00
4	8.12	O-Phosphate-P	2.636	2899593	45112115	1	0.00
5	9.61	Bromide	2.689	1484425	23311524	1	0.00
6	11.57	Nitrate-N	5.274	14881120	275779182	1	0.00
7	13.25	Sulfate	21.275	13054914	327691054	1	0.00
		Totals	52.513	95307070	1275560798		



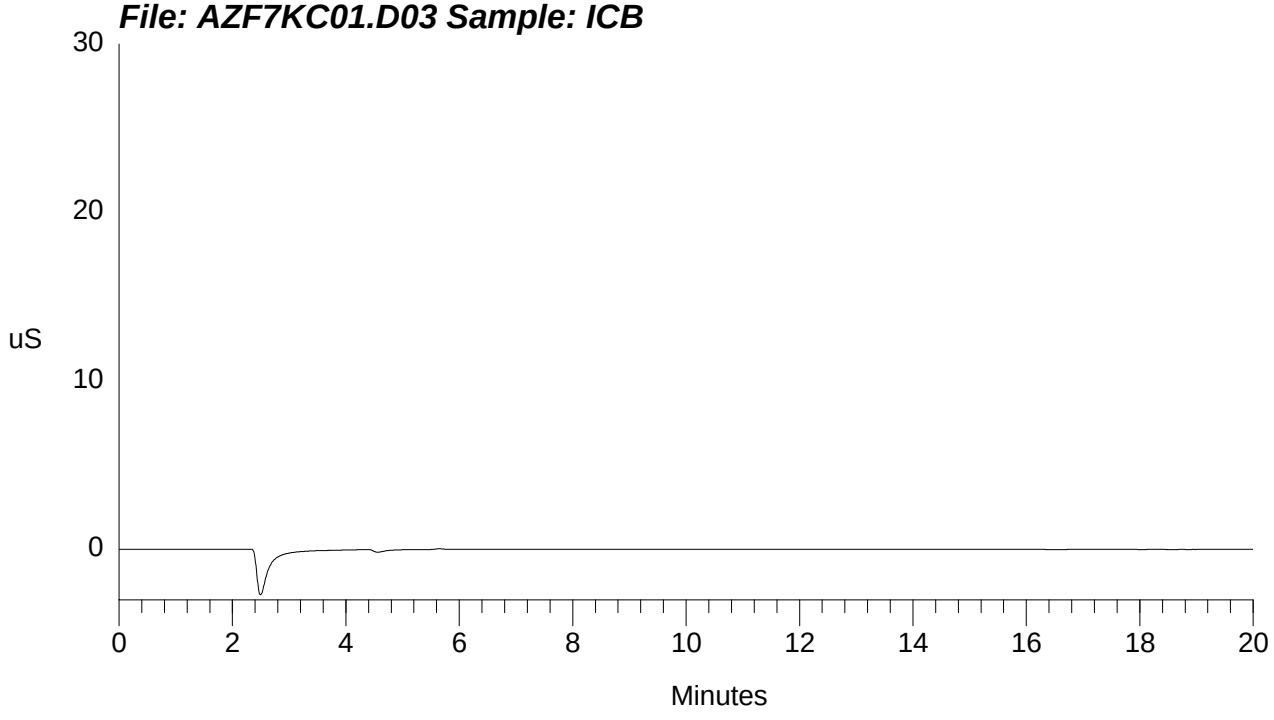
```
================================================================================
| Sample Name: ICB                          Date: 06/27/2005 14:54:47          |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D03                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                  Detector:CDM-2        |
| Analyst    : BJB           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF7KC01.D03 Sample: ICB

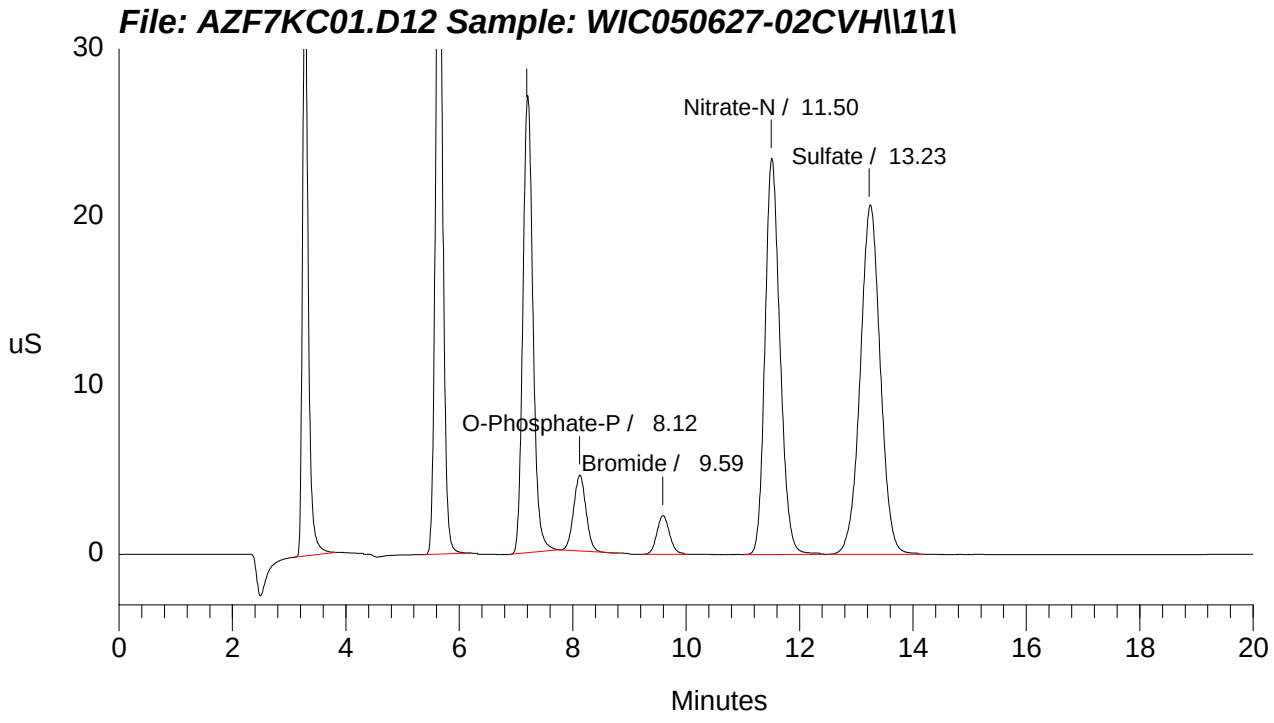


```
================================================================================
| Sample Name: WIC050627-02CVH\\1\1\          Date: 06/27/2005 17:58:55      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D12                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 12                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  8.040   33694050  243644570    1   0.00
   2    5.62 Chloride                 16.308   38261722  364860234    1   0.00
   3    7.19 Nitrite-N                 8.105   26417106  335758465    1   0.00
   4    8.12 O-Phosphate-P             3.962    4489276   67943914    1   0.00
   5    9.59 Bromide                   4.128    2291119   35770974    1   0.00
   6   11.50 Nitrate-N                 8.235   23491280  432086176    1   0.00
   7   13.23 Sulfate                  32.946   20580325  508925648    1   0.00
                                    ----------------------------------
                        Totals        81.724  149224878 1988989981
```



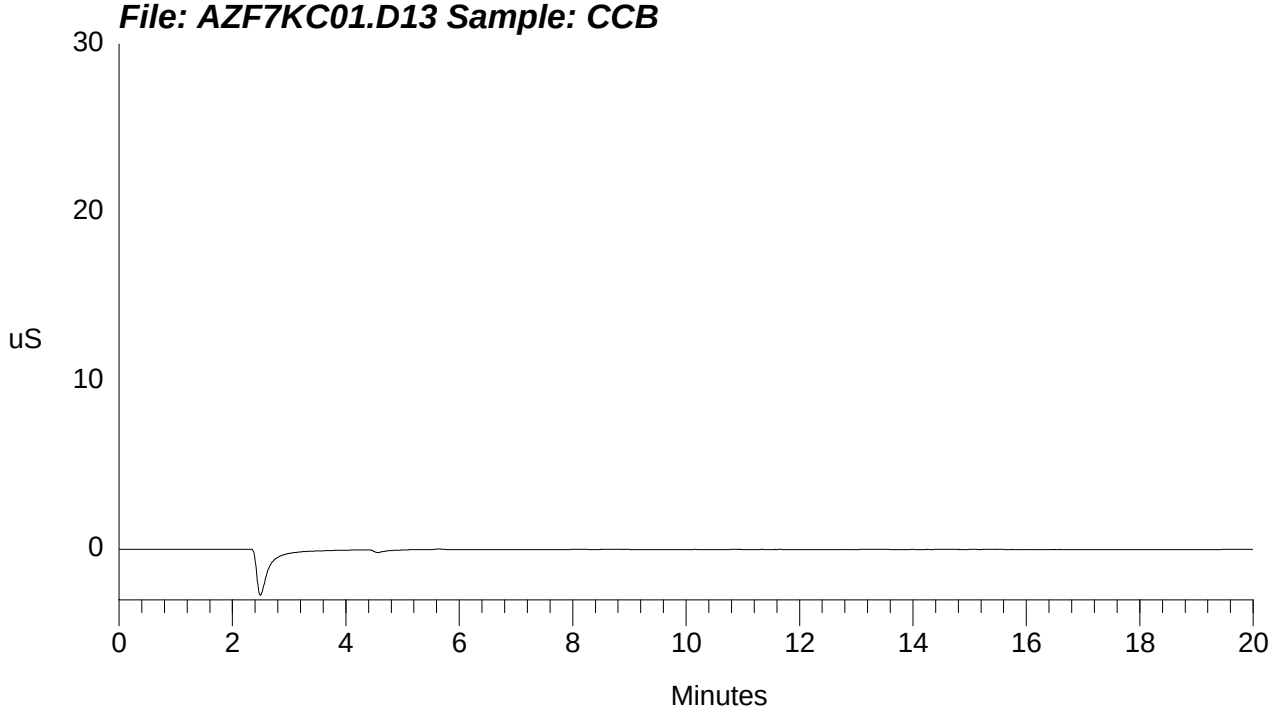
```
================================================================================
| Sample Name: CCB                          Date: 06/27/2005 18:19:24          |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D13                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 13              Detector:CDM-2           |
| Analyst    : BJB           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF7KC01.D13 Sample: CCB

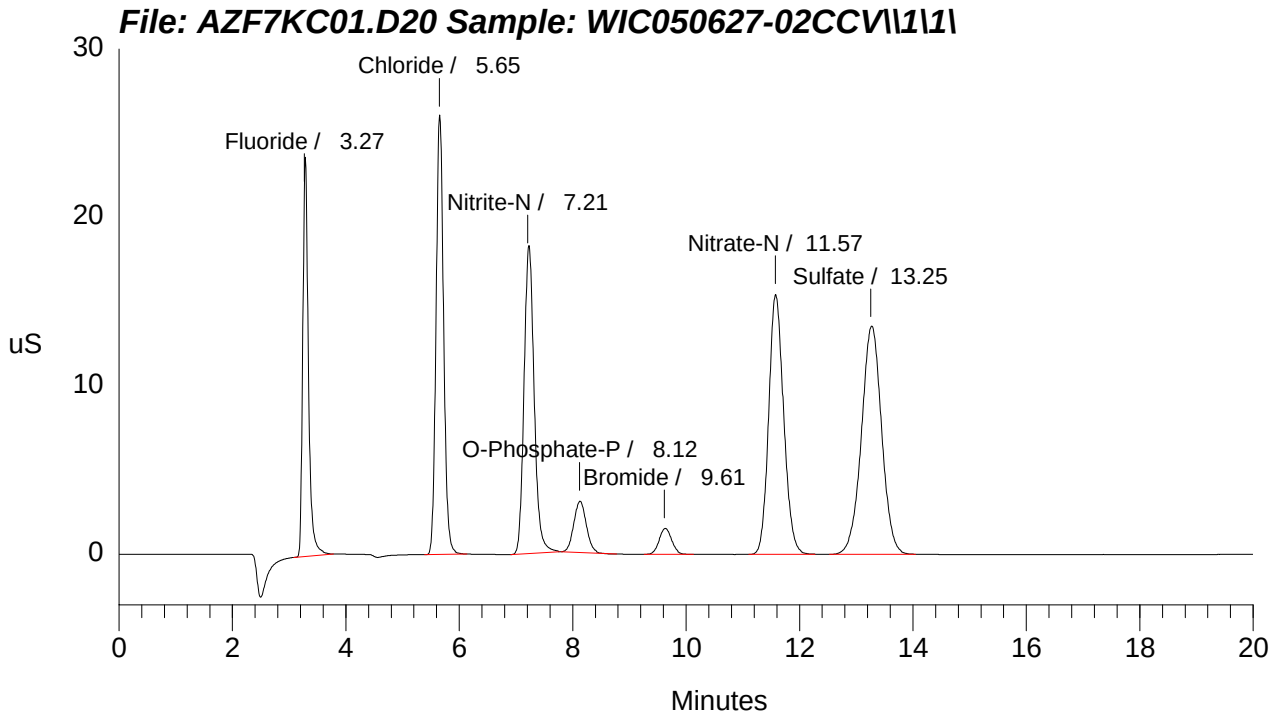


```
================================================================================
| Sample Name: WIC050627-02CCV\\1\1\          Date: 06/27/2005 20:42:46      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D20                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 20                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                  5.420   21598513  164047701    1   0.00
   2    5.65 Chloride                 10.735   25939906  240944492    1   0.00
   3    7.21 Nitrite-N                 5.487   17784664  227002112    1   0.00
   4    8.12 O-Phosphate-P             2.752    3044877   47108315    1   0.00
   5    9.61 Bromide                   2.747    1512996   23818020    1   0.00
   6   11.57 Nitrate-N                 5.416   15406524  283241540    1   0.00
   7   13.25 Sulfate                  21.851   13445952  336629156    1   0.00
                                    ----------------------------------
                        Totals        54.407   98733432 1322791336
```



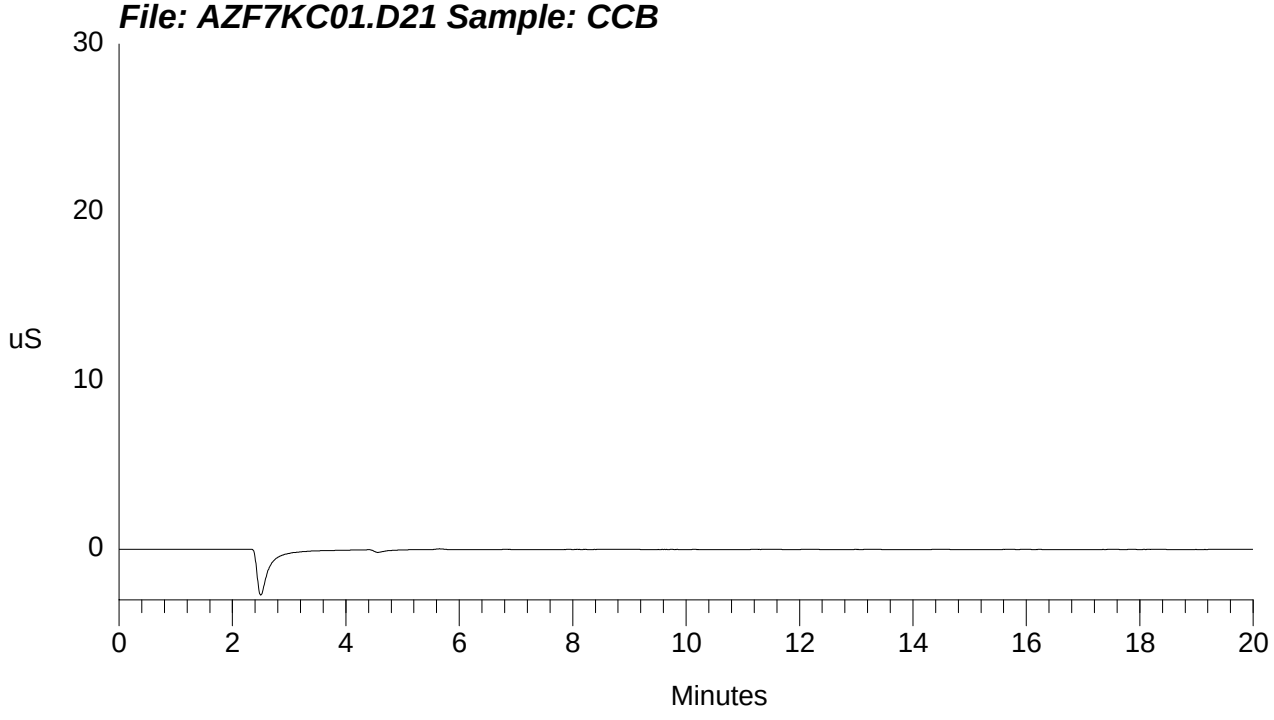
```
================================================================================
| Sample Name: CCB                          Date: 06/27/2005 21:03:15          |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D21                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 21              Detector:CDM-2           |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF7KC01.D21 Sample: CCB

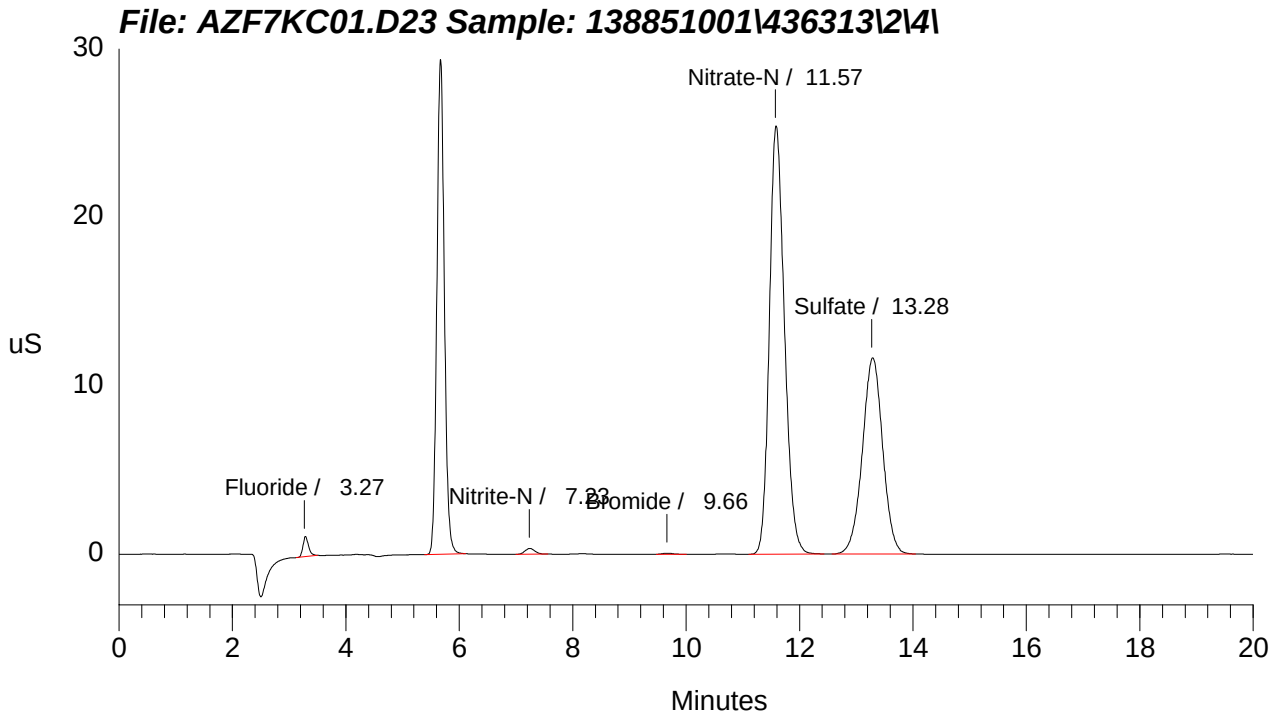


```
================================================================================
| Sample Name: 138851001\436313\2\4\          Date: 06/27/2005 21:44:13      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D23                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 23                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.294	1036919	8304836	1	0.00
2	5.67	Chloride	12.011	29343742	269318284	1	0.00
3	7.23	Nitrite-N	0.124	344573	4203006	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.66	Bromide	0.107	64276	957580	1	0.00
5	11.57	Nitrate-N	8.950	25255739	469830322	1	0.00
6	13.28	Sulfate	18.847	11601544	289981122	1	0.00
		Totals	40.332	67646794	1042595150		

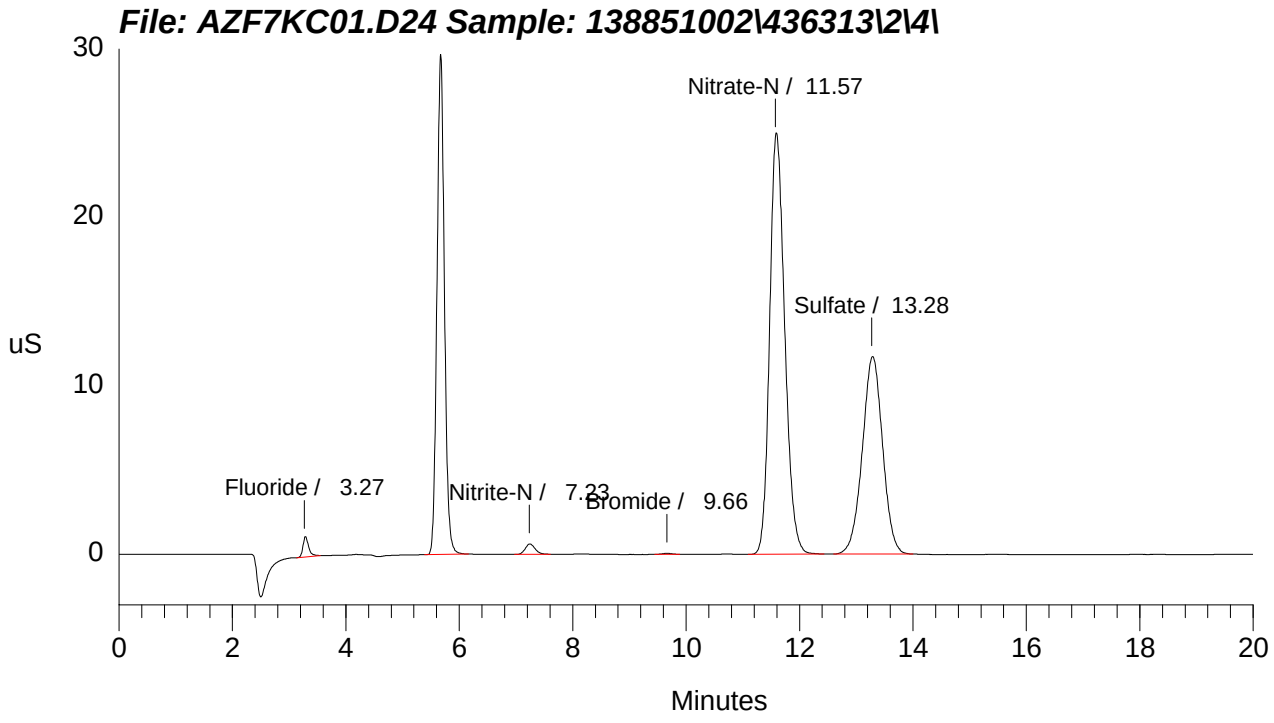


```
================================================================================
| Sample Name: 138851002\436313\2\4\          Date: 06/27/2005 22:04:42      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D24                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 24                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.298	1050872	8415870	1	0.00
2	5.67	Chloride	12.060	29679310	270409470	1	0.00
3	7.23	Nitrite-N	0.209	616202	7735190	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.66	Bromide	0.099	67292	887790	1	0.00
5	11.57	Nitrate-N	8.815	24723161	462708120	1	0.00
6	13.28	Sulfate	18.958	11707197	291714156	1	0.00
		Totals	40.438	67844034	1041870596		

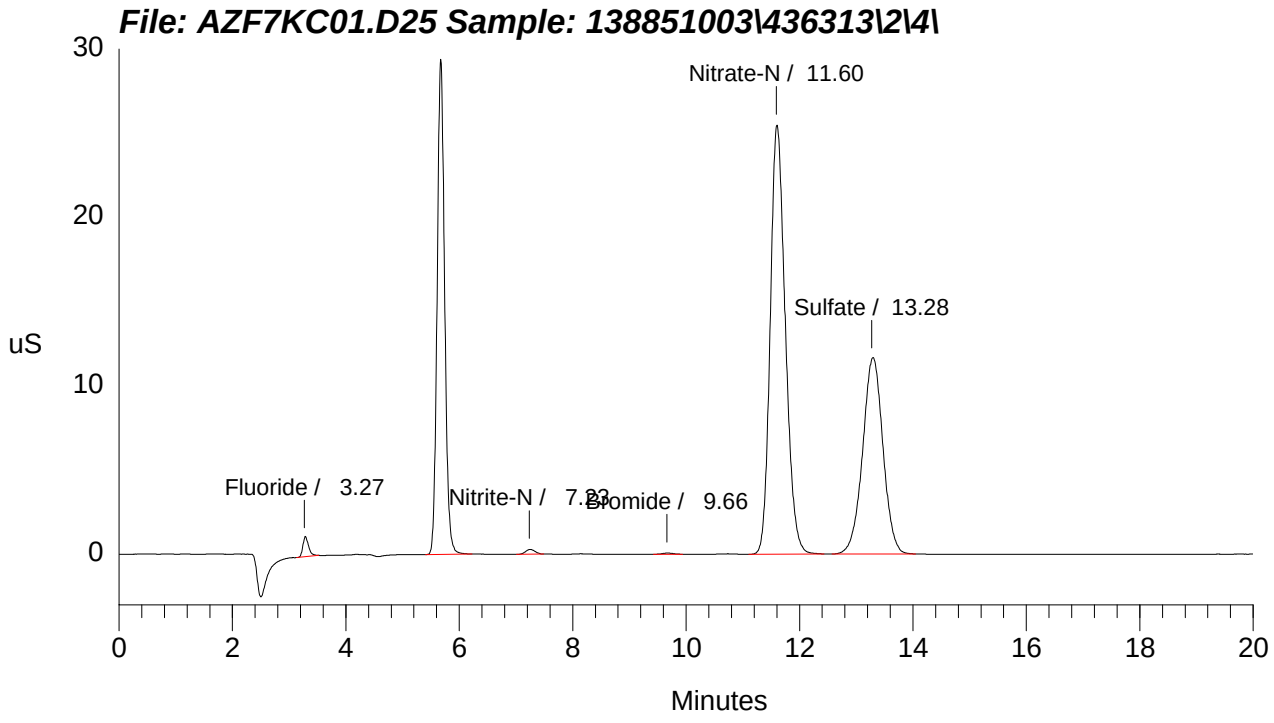


```
================================================================================
| Sample Name: 138851003\436313\2\4\          Date: 06/27/2005 22:25:12      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D25                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 25                 Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.299	1069933	8465646	1	0.00
2	5.67	Chloride	12.029	29370787	269728740	1	0.00
3	7.23	Nitrite-N	0.104	279335	3360790	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.66	Bromide	0.119	71995	1066678	1	0.00
5	11.60	Nitrate-N	8.968	25453927	470780982	1	0.00
6	13.28	Sulfate	18.893	11559494	290708388	1	0.00
		Totals	40.413	67805471	1044111224		

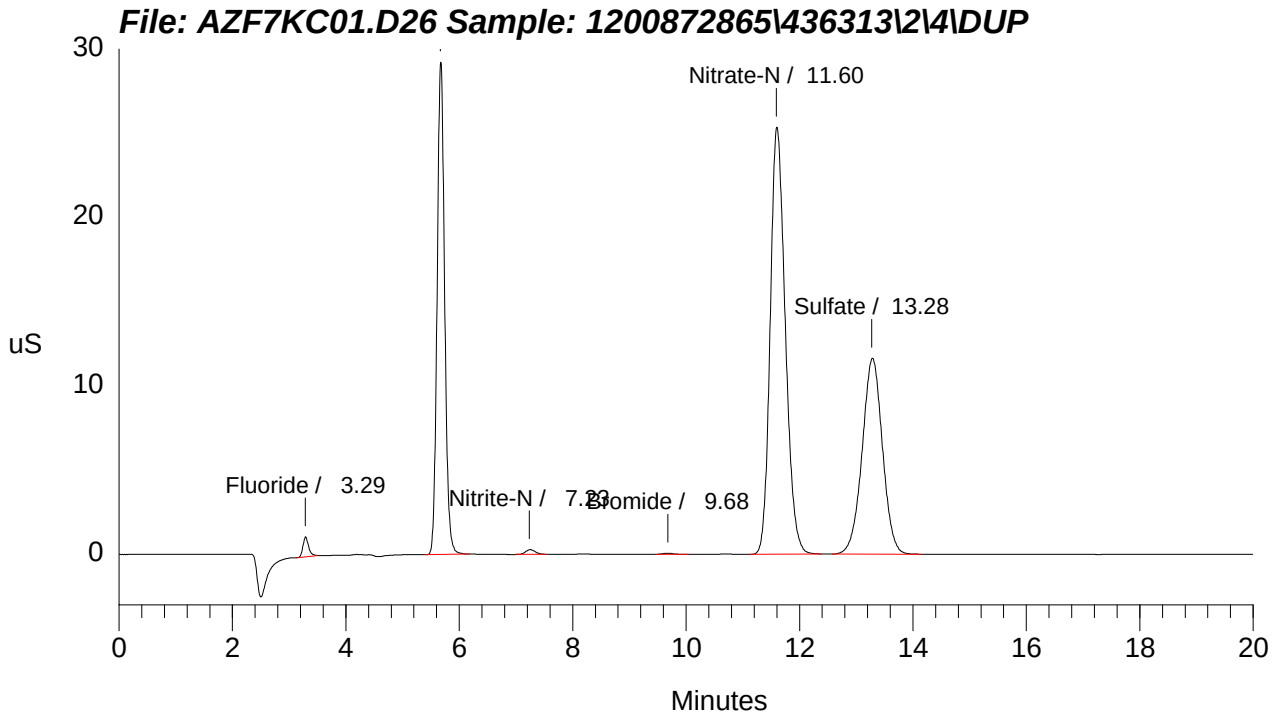


```
================================================================================
| Sample Name: 1200872865\436313\2\4\DUP      Date: 06/27/2005 22:45:42      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D26                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 26                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	0.290	1191421	8184503	1	0.00
2	5.67	Chloride	11.998	29235442	269023634	1	0.00
3	7.23	Nitrite-N	0.107	278054	3496568	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.68	Bromide	0.109	66097	980702	1	0.00
5	11.60	Nitrate-N	8.925	25342039	468511074	1	0.00
6	13.28	Sulfate	18.833	11612800	289774856	1	0.00
		Totals	40.262	67725854	1039971337		

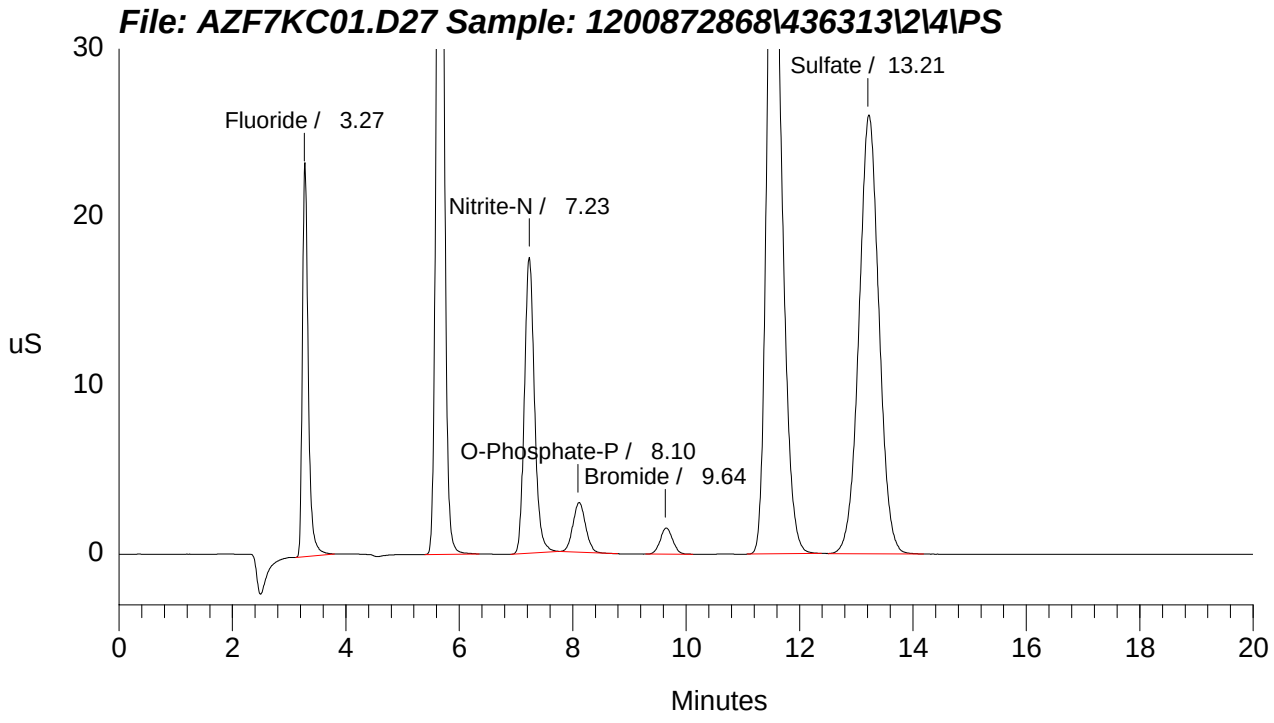


```
================================================================================
| Sample Name: 1200872868\436313\2\4\PS       Date: 06/27/2005 23:06:11     |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D27                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 27                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.522	22825298	167142364	1	0.00
2	5.65	Chloride	24.015	57129542	536223826	1	0.00
3	7.23	Nitrite-N	5.223	17551761	216056101	1	0.00
4	8.10	O-Phosphate-P	2.672	2902067	45726607	1	0.00
5	9.64	Bromide	2.746	1542225	23808810	1	0.00
6	11.53	Nitrate-N	14.873	41917645	782524506	1	0.00
7	13.21	Sulfate	41.186	25886450	636873028	1	0.00
		Totals	96.237	169754986	2408355242		

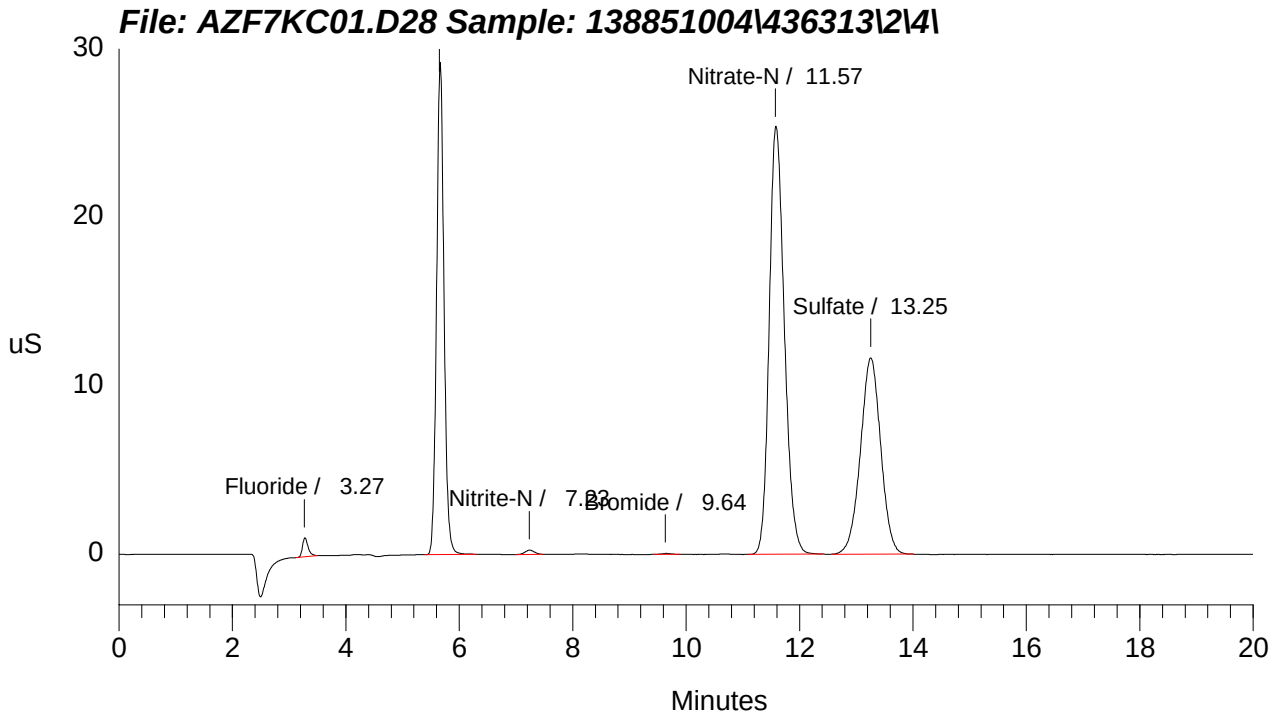


```
================================================================================
| Sample Name: 138851004\436313\2\4\          Date: 06/27/2005 23:26:40      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D28                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 28                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.280	1103561	7861849	1	0.00
2	5.65	Chloride	11.827	28022500	265223158	1	0.00
3	7.23	Nitrite-N	0.094	252500	2953198	1	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
4	9.64	Bromide	0.094	61676	849216	1	0.00
5	11.57	Nitrate-N	8.970	25326246	470902670	1	0.00
6	13.25	Sulfate	18.850	11655085	290037586	1	0.00
		Totals	40.114	66421569	1037827677		



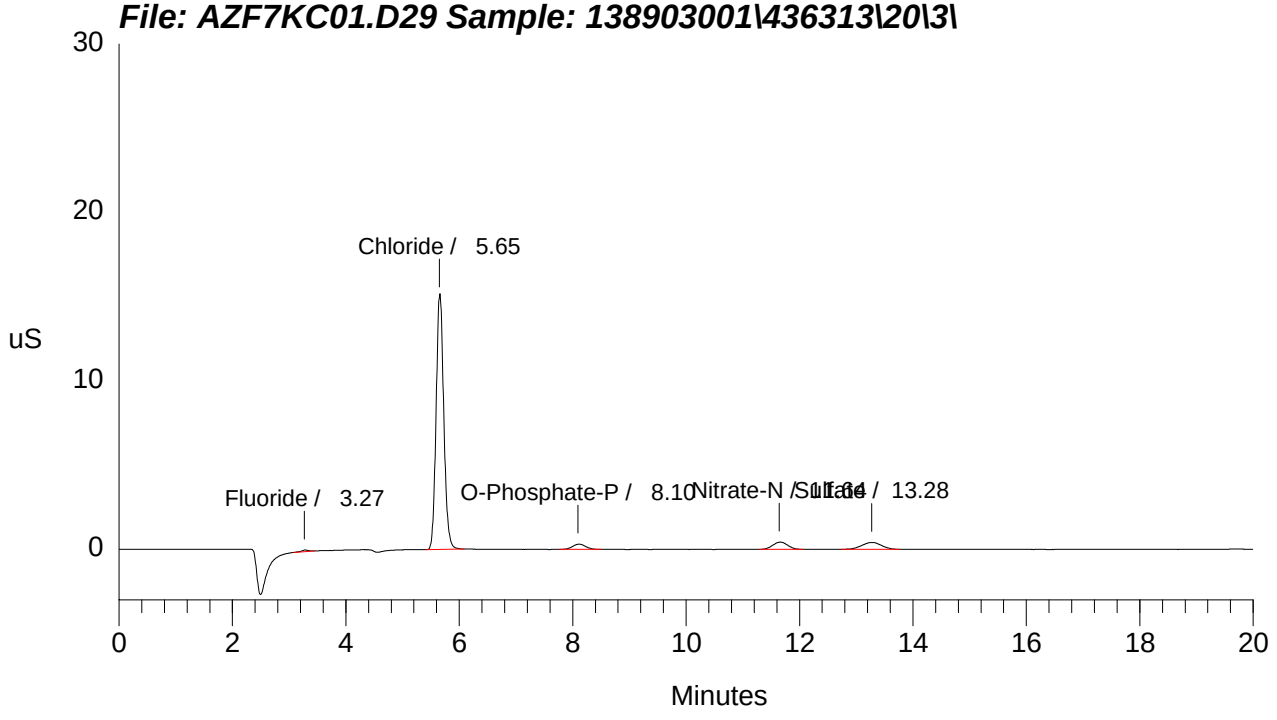
```
================================================================================
| Sample Name: 138903001\436313\20\3\          Date: 06/27/2005 23:46:57      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D29                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 29                  Detector:CDM-2      |
| Analyst    : BJB             Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.046      92205     767225    1   0.00
   2    5.65 Chloride                  6.300   14930522  142346188    1   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   3    8.10 O-Phosphate-P             0.305     310915    4985974    1   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   4   11.64 Nitrate-N                 0.203     429248    8037656    1   0.00
   5   13.28 Sulfate                   0.833     416744   10269232    1   0.00
                                  ----------------------------------
                      Totals         7.687   16179633  166406275
```

File: AZF7KC01.D29 Sample: 138903001\436313\20\3

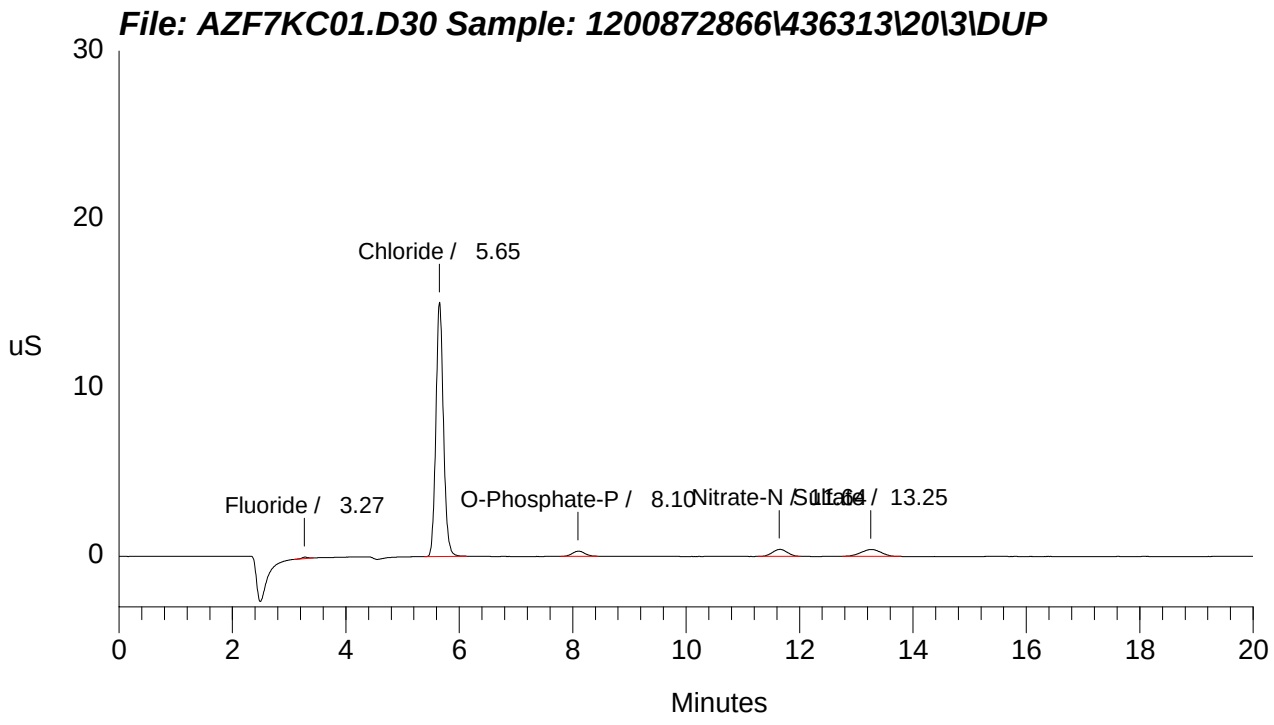


```
================================================================================
| Sample Name: 1200872866\436313\20\3\DUP     Date: 06/28/2005 00:07:26     |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D30                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 30                 Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.042	88861	653868	1	0.00
2	5.65	Chloride	6.180	15039499	139676214	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
3	8.10	O-Phosphate-P	0.294	312842	4793862	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
4	11.64	Nitrate-N	0.198	420410	7786394	1	0.00
5	13.25	Sulfate	0.834	410659	10281776	1	0.00
		Totals	7.549	16272271	163192114		

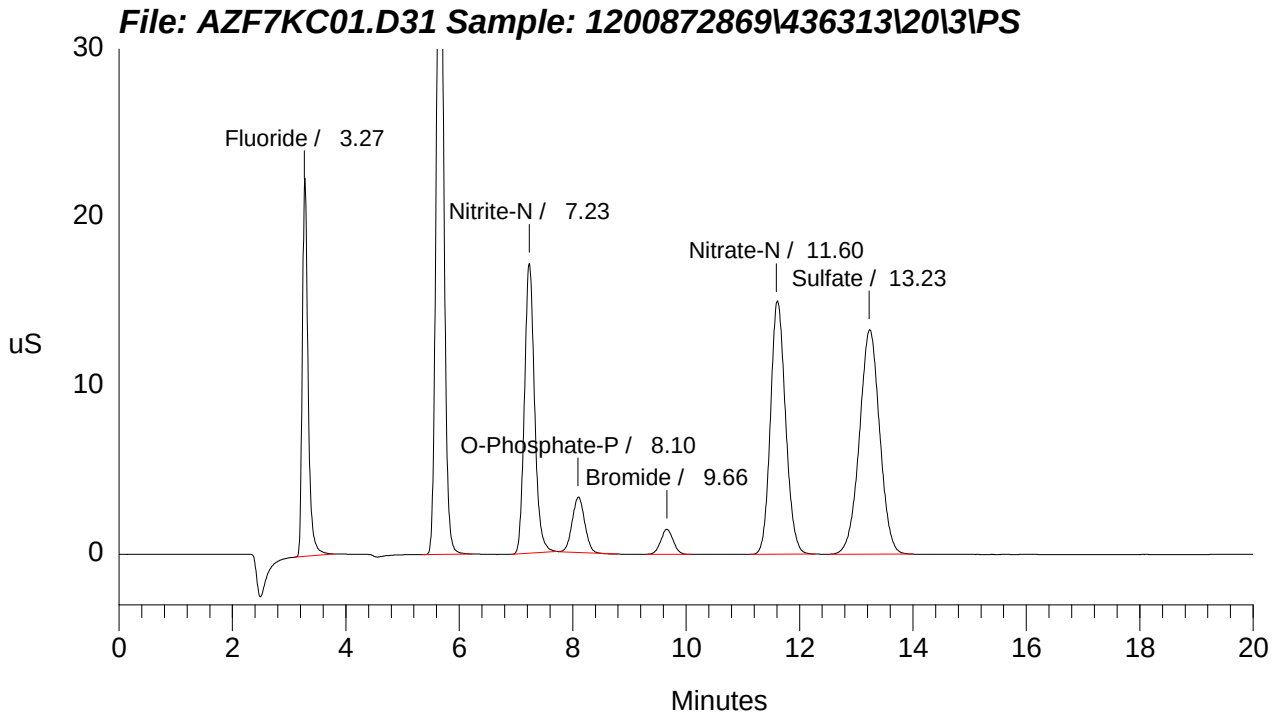


```
================================================================================
| Sample Name: 1200872869\436313\20\3\PS      Date: 06/28/2005 00:27:55      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D31                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 31                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.222	21769073	158030195	1	0.00
2	5.65	Chloride	17.697	42217103	395754088	1	0.00
3	7.23	Nitrite-N	5.144	17204252	212747282	1	0.00
4	8.10	O-Phosphate-P	2.939	3285770	50321556	1	0.00
5	9.66	Bromide	2.617	1487622	22688788	1	0.00
6	11.60	Nitrate-N	5.327	14941412	278550774	1	0.00
7	13.23	Sulfate	21.465	13314635	330640928	1	0.00
		Totals	60.410	114219867	1448733611		

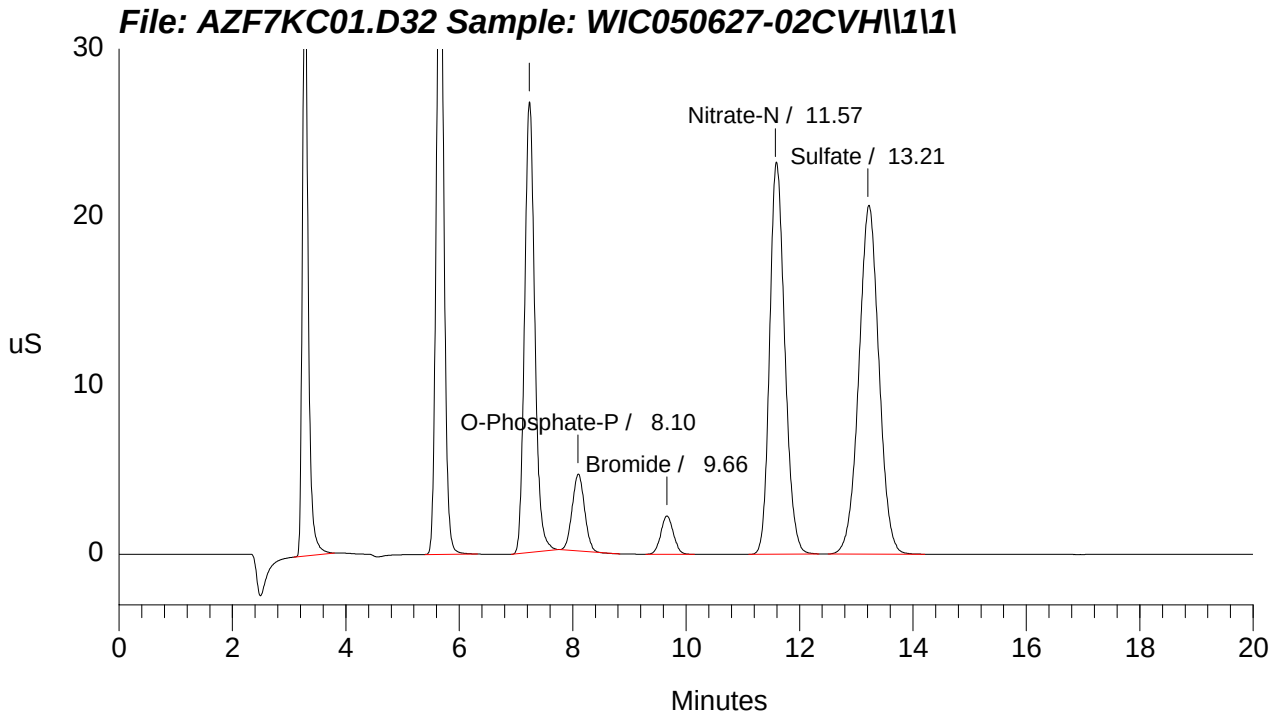


```
================================================================================
| Sample Name: WIC050627-02CVH\\1\1\          Date: 06/28/2005 00:48:24      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D32                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 32                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	8.148	32971654	246937022	1	0.00
2	5.65	Chloride	16.526	39270351	369713878	1	0.00
3	7.23	Nitrite-N	8.039	26739664	333052879	1	0.00
4	8.10	O-Phosphate-P	4.022	4564779	68970566	1	0.00
5	9.66	Bromide	4.060	2277745	35178932	1	0.00
6	11.57	Nitrate-N	8.229	22957016	431757760	1	0.00
7	13.21	Sulfate	32.954	20567339	509046406	1	0.00
		Totals	81.979	149348549	1994657443		



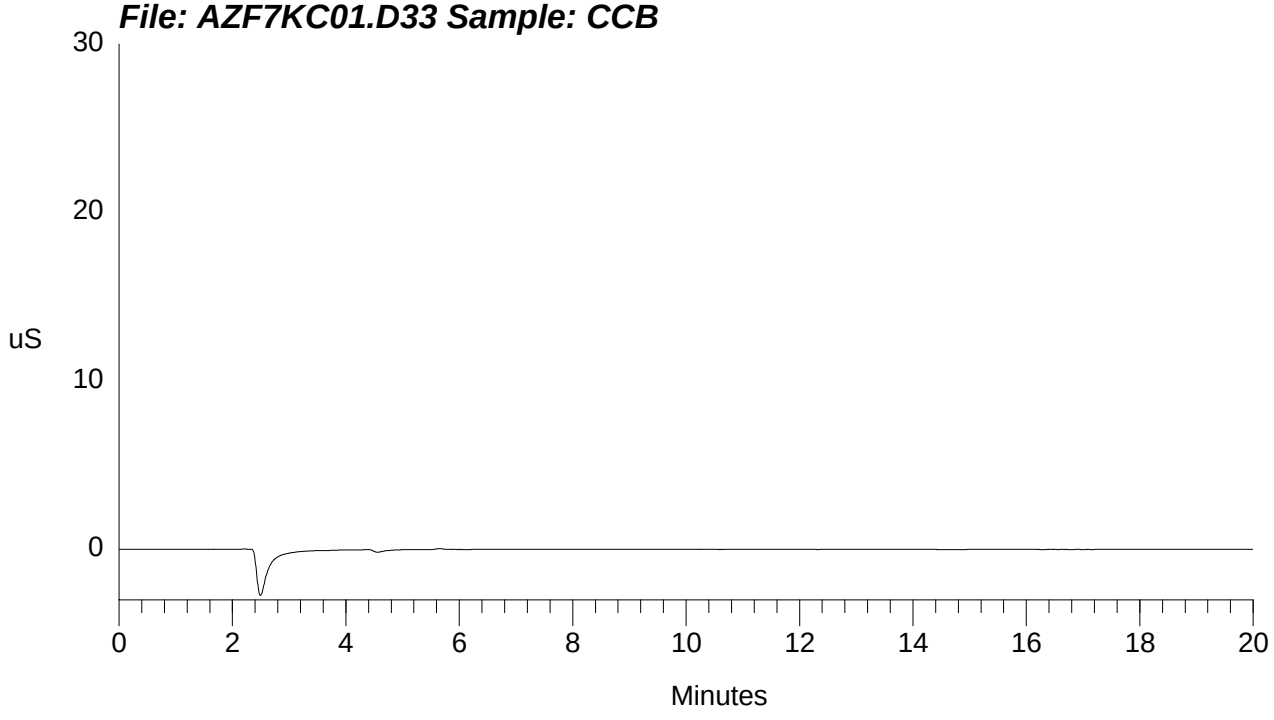
```
================================================================================
| Sample Name: CCB                          Date: 06/28/2005 01:08:53          |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D33                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 33              Detector:CDM-2           |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF7KC01.D33 Sample: CCB



Nitrate + Nitrite

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
TON0	436707	NO3NO2	06/24/2005 08:59:26	JXM	1	
TON.02	436707	NO3NO2	06/24/2005 08:59:27	JXM	1	
TON.05	436707	NO3NO2	06/24/2005 08:59:28	JXM	1	
TON.1	436707	NO3NO2	06/24/2005 08:59:29	JXM	1	
TON.5	436707	NO3NO2	06/24/2005 08:59:30	JXM	1	
TON1	436707	NO3NO2	06/24/2005 08:59:31	JXM	1	
TON2	436707	NO3NO2	06/24/2005 08:59:32	JXM	1	
TON5	436707	NO3NO2	06/24/2005 08:59:33	JXM	1	
icv	436707	NO3NO2	06/24/2005 08:59:35	JXM	1	WTR050624-08
icb	436707	NO3NO2	06/24/2005 08:59:36	JXM	1	WTR050624-10
TON0	436707	NO3NO2	06/24/2005 09:41:52	JXM	1	
TON.02	436707	NO3NO2	06/24/2005 09:41:53	JXM	1	
TON.05	436707	NO3NO2	06/24/2005 09:41:54	JXM	1	
TON.1	436707	NO3NO2	06/24/2005 09:41:55	JXM	1	
TON.5	436707	NO3NO2	06/24/2005 09:41:56	JXM	1	
TON1	436707	NO3NO2	06/24/2005 09:41:57	JXM	1	
TON2	436707	NO3NO2	06/24/2005 09:41:58	JXM	1	
TON5	436707	NO3NO2	06/24/2005 09:41:59	JXM	1	
icv	436707	NO3NO2	06/24/2005 09:42:01	JXM	1	WTR050624-08
icb	436707	NO3NO2	06/24/2005 09:42:02	JXM	1	WTR050624-10
TON0	436707	NO3NO2	06/24/2005 10:00:31	JXM	1	
TON.02	436707	NO3NO2	06/24/2005 10:00:32	JXM	1	
TON.05	436707	NO3NO2	06/24/2005 10:00:33	JXM	1	
TON.1	436707	NO3NO2	06/24/2005 10:00:34	JXM	1	
TON.5	436707	NO3NO2	06/24/2005 10:00:35	JXM	1	
TON1	436707	NO3NO2	06/24/2005 10:00:36	JXM	1	
TON2	436707	NO3NO2	06/24/2005 10:00:37	JXM	1	
TON5	436707	NO3NO2	06/24/2005 10:00:38	JXM	1	
icv	436707	NO3NO2	06/24/2005 10:00:40	JXM	1	WTR050624-08
icb	436707	NO3NO2	06/24/2005 10:00:41	JXM	1	WTR050624-10
TON0	436707	NO3NO2	06/24/2005 10:31:25	JXM	1	
TON.02	436707	NO3NO2	06/24/2005 10:31:26	JXM	1	
TON.05	436707	NO3NO2	06/24/2005 10:31:27	JXM	1	
TON.1	436707	NO3NO2	06/24/2005 10:31:28	JXM	1	
TON.5	436707	NO3NO2	06/24/2005 10:31:29	JXM	1	
TON1	436707	NO3NO2	06/24/2005 10:31:30	JXM	1	
TON2	436707	NO3NO2	06/24/2005 10:31:31	JXM	1	
TON5	436707	NO3NO2	06/24/2005 10:31:32	JXM	1	
icv	436707	NO3NO2	06/24/2005 10:31:34	JXM	1	WTR050624-08
icb	436707	NO3NO2	06/24/2005 10:31:35	JXM	1	WTR050624-10
TON-CCV	436707	NO3NO2	06/24/2005 10:50:28	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 10:50:29	JXM	1	WTR050624-10
1200873933	436707	NO3NO2	06/24/2005 10:50:30	JXM	1	
1200873934	436707	NO3NO2	06/24/2005 10:50:31	JXM	1	
138658001	436707	NO3NO2	06/24/2005 10:50:32	JXM	1	
138675001	436707	NO3NO2	06/24/2005 10:50:33	JXM	1	
138831008	436707	NO3NO2	06/24/2005 10:50:34	JXM	1	
138831009	436707	NO3NO2	06/24/2005 10:50:35	JXM	1	
138850001	436707	NO3NO2	06/24/2005 10:50:36	JXM	1	
138850002	436707	NO3NO2	06/24/2005 10:50:37	JXM	1	
138851001	436707	NO3NO2	06/24/2005 10:50:38	JXM	1	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
1200873935	436707	NO3NO2	06/24/2005 10:50:39	JXM	1	
TON-CCV	436707	NO3NO2	06/24/2005 11:02:43	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 11:02:44	JXM	1	WTR050624-10
1200873936	436707	NO3NO2	06/24/2005 11:02:45	JXM	1	
138851002	436707	NO3NO2	06/24/2005 11:02:46	JXM	1	
138851003	436707	NO3NO2	06/24/2005 11:02:47	JXM	1	
1200873937	436707	NO3NO2	06/24/2005 11:02:48	JXM	1	
1200873938	436707	NO3NO2	06/24/2005 11:02:49	JXM	1	
138851004	436707	NO3NO2	06/24/2005 11:02:50	JXM	1	
138903001	436707	NO3NO2	06/24/2005 11:02:51	JXM	1	
1200873943	436707	NO3NO2	06/24/2005 11:02:52	JXM	1	
1200873944	436707	NO3NO2	06/24/2005 11:02:53	JXM	1	
139034005	436707	NO3NO2	06/24/2005 11:02:54	JXM	1	
TON-CCV	436707	NO3NO2	06/24/2005 11:14:55	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 11:14:56	JXM	1	WTR050624-10
139091009	436707	NO3NO2	06/24/2005 11:14:57	JXM	1	
139091010	436707	NO3NO2	06/24/2005 11:14:58	JXM	1	
139136002	436707	NO3NO2	06/24/2005 11:14:59	JXM	1	
139136003	436707	NO3NO2	06/24/2005 11:15:00	JXM	1	
139182001	436707	NO3NO2	06/24/2005 11:15:01	JXM	1	
1200873939	436707	NO3NO2	06/24/2005 11:15:02	JXM	1	
1200873940	436707	NO3NO2	06/24/2005 11:15:03	JXM	1	
139188011	436707	NO3NO2	06/24/2005 11:15:04	JXM	1	
139188012	436707	NO3NO2	06/24/2005 11:15:05	JXM	1	
139188013	436707	NO3NO2	06/24/2005 11:15:06	JXM	1	
TON-CCV	436707	NO3NO2	06/24/2005 11:23:25	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 11:23:26	JXM	1	WTR050624-10
1200873950	436707	NO3NO2	06/24/2005 11:23:27	JXM	1	
1200873951	436707	NO3NO2	06/24/2005 11:23:28	JXM	1	
138831008	436707	NO3NO2	06/24/2005 11:34:23	JXM	10	
138851001	436707	NO3NO2	06/24/2005 11:34:24	JXM	10	
1200873935	436707	NO3NO2	06/24/2005 11:34:25	JXM	10	
1200873936	436707	NO3NO2	06/24/2005 11:34:26	JXM	10	
138851002	436707	NO3NO2	06/24/2005 11:34:27	JXM	10	
138851003	436707	NO3NO2	06/24/2005 11:34:28	JXM	10	
1200873937	436707	NO3NO2	06/24/2005 11:45:37	JXM	10	
1200873938	436707	NO3NO2	06/24/2005 11:45:38	JXM	10	
TON-CCV	436707	NO3NO2	06/24/2005 11:45:39	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 11:45:40	JXM	1	WTR050624-10
138851004	436707	NO3NO2	06/24/2005 11:45:41	JXM	10	
139091009	436707	NO3NO2	06/24/2005 11:45:42	JXM	10	
139091010	436707	NO3NO2	06/24/2005 11:54:18	JXM	10	
139188011	436707	NO3NO2	06/24/2005 11:54:19	JXM	10	
139188012	436707	NO3NO2	06/24/2005 11:54:20	JXM	10	
TON-CCV	436707	NO3NO2	06/24/2005 11:56:15	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 11:56:16	JXM	1	WTR050624-10
TON-CCV	436707	NO3NO2	06/24/2005 12:36:32	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 12:36:33	JXM	1	WTR050624-10
138850001	436707	NO3NO2	06/24/2005 12:36:34	JXM	50	
138850002	436707	NO3NO2	06/24/2005 12:36:35	JXM	50	
138851001	436707	NO3NO2	06/24/2005 12:36:36	JXM	10	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
1200873935	436707	NO3NO2	06/24/2005 12:36:37	JXM	10	
1200873936	436707	NO3NO2	06/24/2005 12:36:38	JXM	10	
138851003	436707	NO3NO2	06/24/2005 12:36:39	JXM	10	
1200873937	436707	NO3NO2	06/24/2005 12:36:40	JXM	10	
1200873938	436707	NO3NO2	06/24/2005 12:36:41	JXM	10	
139182001	436707	NO3NO2	06/24/2005 12:36:42	JXM	10	
1200873939	436707	NO3NO2	06/24/2005 12:36:43	JXM	10	
TON-CCV	436707	NO3NO2	06/24/2005 12:45:58	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 12:45:59	JXM	1	WTR050624-10
1200873940	436707	NO3NO2	06/24/2005 12:46:00	JXM	10	
139188013	436707	NO3NO2	06/24/2005 12:46:01	JXM	10	
1200873950	436707	NO3NO2	06/24/2005 12:46:02	JXM	10	
1200873951	436707	NO3NO2	06/24/2005 12:46:03	JXM	10	
TON-CCV	436707	NO3NO2	06/24/2005 12:47:55	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 12:47:56	JXM	1	WTR050624-10
138850001	436707	NO3NO2	06/24/2005 12:55:15	JXM	500	
138850002	436707	NO3NO2	06/24/2005 12:55:16	JXM	500	
TON-CCV	436707	NO3NO2	06/24/2005 12:57:15	JXM	1	WTR050624-04
TON-CCB	436707	NO3NO2	06/24/2005 12:57:16	JXM	1	WTR050624-10

Laboratory
Analyzer User

27.06.2005 11:00

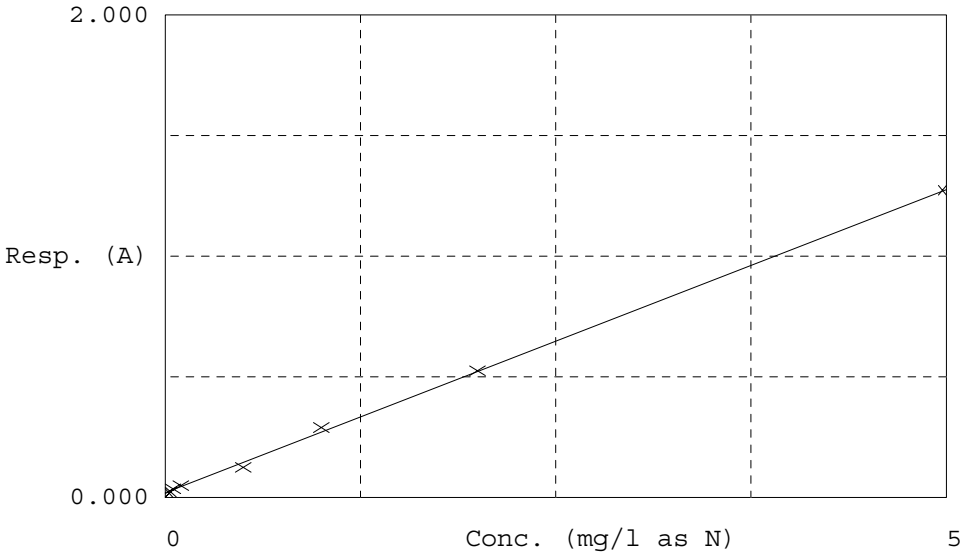
Test NO3NO2

Accepted 27.06.2005 11:00

Factor 3.981
Bias 0.020

Coeff. of det. 0.999372

Errors QC rule violated



	Calibrator	Response	Calc. con.	Conc.	Errors
1	TON0	0.017	-0.014687	0.000000	
2	TON.02	0.023	0.010803	0.020000	
3	TON.05	0.037	0.065631	0.050000	
4	TON.1	0.050	0.115733	0.100000	
5	TON.5	0.126	0.419121	0.500000	
6	TON1	0.290	1.074524	1.000000	
7	TON2	0.525	2.010211	2.000000	
8	TON5	1.274	4.988665	5.000000	
9	icb(control)	0.016	-0.017675	0.000000	Test limit low
10	icv(control)	0.284	1.049489	1.000000	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
TON0	NO3NO2	06/24/2005 08:59:26	0.011	-0.040306	mg/l as N	1		0
TON.02	NO3NO2	06/24/2005 08:59:27	0.01639	-0.020436	mg/l as N	1		0.02
TON.05	NO3NO2	06/24/2005 08:59:28	0.03691	0.055294	mg/l as N	1		0.05
TON.1	NO3NO2	06/24/2005 08:59:29	0.04287	0.077281	mg/l as N	1		0.1
TON.5	NO3NO2	06/24/2005 08:59:30	0.14545	0.455783	mg/l as N	1		0.5
TON1	NO3NO2	06/24/2005 08:59:31	0.30763	1.054153	mg/l as N	1		1
TON2	NO3NO2	06/24/2005 08:59:32	0.60647	2.156795	mg/l as N	1		2
TON5	NO3NO2	06/24/2005 08:59:33	1.35846	4.931436	mg/l as N	1		5
icv	NO3NO2	06/24/2005 08:59:35	0.27058	0.917478	mg/l as N	1		1
icb	NO3NO2	06/24/2005 08:59:36	0.00934	-0.046439	mg/l as N	1		0
TON0	NO3NO2	06/24/2005 09:41:52	0.01581	-0.029839	mg/l as N	1		0
TON.02	NO3NO2	06/24/2005 09:41:53	0.0229	-0.003436	mg/l as N	1		0.02
TON.05	NO3NO2	06/24/2005 09:41:54	0.03683	0.048435	mg/l as N	1		0.05
TON.1	NO3NO2	06/24/2005 09:41:55	0.05339	0.11011	mg/l as N	1		0.1
TON.5	NO3NO2	06/24/2005 09:41:56	0.14775	0.46159	mg/l as N	1		0.5
TON1	NO3NO2	06/24/2005 09:41:57	0.3103	1.067047	mg/l as N	1		1
TON2	NO3NO2	06/24/2005 09:41:58	0.5723	2.042926	mg/l as N	1		2
TON5	NO3NO2	06/24/2005 09:41:59	1.35901	4.973168	mg/l as N	1		5
icv	NO3NO2	06/24/2005 09:42:01	0.27354	0.930108	mg/l as N	1		1
icb	NO3NO2	06/24/2005 09:42:02	0.0145	-0.034739	mg/l as N	1		0
TON0	NO3NO2	06/24/2005 10:00:31	0.01535	-0.022147	mg/l as N	1		0
TON.02	NO3NO2	06/24/2005 10:00:32	0.02302	0.007359	mg/l as N	1		0.02
TON.05	NO3NO2	06/24/2005 10:00:33	0.03617	0.057878	mg/l as N	1		0.05
TON.1	NO3NO2	06/24/2005 10:00:34	0.05282	0.121906	mg/l as N	1		0.1
TON.5	NO3NO2	06/24/2005 10:00:35	0.14235	0.466026	mg/l as N	1		0.5
TON1	NO3NO2	06/24/2005 10:00:36	0.29198	1.041188	mg/l as N	1		1
TON2	NO3NO2	06/24/2005 10:00:37	0.54277	2.005162	mg/l as N	1		2
TON5	NO3NO2	06/24/2005 10:00:38	1.31999	4.992629	mg/l as N	1		5
icv	NO3NO2	06/24/2005 10:00:40	0.25863	0.912998	mg/l as N	1		1
icb	NO3NO2	06/24/2005 10:00:41	0.01359	-0.028887	mg/l as N	1		0
TON0	NO3NO2	06/24/2005 10:31:25	0.0142	-0.014753	mg/l as N	1		0
TON.02	NO3NO2	06/24/2005 10:31:26	0.02145	0.012709	mg/l as N	1		0.02
TON.05	NO3NO2	06/24/2005 10:31:27	0.03509	0.064352	mg/l as N	1		0.05
TON.1	NO3NO2	06/24/2005 10:31:28	0.05124	0.125538	mg/l as N	1		0.1
TON.5	NO3NO2	06/24/2005 10:31:29	0.13944	0.459631	mg/l as N	1		0.5

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
TON1	NO3NO2	06/24/2005 10:31:30	0.29188	1.037075	mg/l as N	1		1
TON2	NO3NO2	06/24/2005 10:31:31	0.54145	1.98242	mg/l as N	1		2
TON5	NO3NO2	06/24/2005 10:31:32	1.33888	5.003029	mg/l as N	1		5
icv	NO3NO2	06/24/2005 10:31:34	0.26495	0.935074	mg/l as N	1		1
icb	NO3NO2	06/24/2005 10:31:35	0.01216	-0.02251	mg/l as N	1		0
TON-CCV	NO3NO2	06/24/2005 10:50:28	0.29781	1.059535	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 10:50:29	0.01301	-0.019287	mg/l as N	1		0
1200873933	NO3NO2	06/24/2005 10:50:30	0.01332	-0.018102	mg/l as N	1	1	
1200873934	NO3NO2	06/24/2005 10:50:31	0.29738	1.057916	mg/l as N	1	1	
138658001	NO3NO2	06/24/2005 10:50:32	0.52656	1.926019	mg/l as N	1	1	
138675001	NO3NO2	06/24/2005 10:50:33	0.01451	-0.013607	mg/l as N	1	1	
138831008	NO3NO2	06/24/2005 10:50:34	1.74486	6.540856	mg/l as N	1	1	
138831009	NO3NO2	06/24/2005 10:50:35	0.02679	0.032907	mg/l as N	1	1	
138850001	NO3NO2	06/24/2005 10:50:36	10.05789	38.029972	mg/l as N	1	50	
138850002	NO3NO2	06/24/2005 10:50:37	10.05789	38.029972	mg/l as N	1	50	
138851001	NO3NO2	06/24/2005 10:50:38	2.68793	10.113121	mg/l as N	1	10	
1200873935	NO3NO2	06/24/2005 10:50:39	2.75764	10.377168	mg/l as N	1	10	
TON-CCV	NO3NO2	06/24/2005 11:02:43	0.29976	1.066929	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 11:02:44	0.01167	-0.024345	mg/l as N	1		0
1200873936	NO3NO2	06/24/2005 11:02:45	2.71706	10.223476	mg/l as N	1	10	
138851002	NO3NO2	06/24/2005 11:02:46	2.68526	10.103009	mg/l as N	1	1	
138851003	NO3NO2	06/24/2005 11:02:47	2.66063	10.009725	mg/l as N	1	10	
1200873937	NO3NO2	06/24/2005 11:02:48	2.6899	10.120572	mg/l as N	1	10	
1200873938	NO3NO2	06/24/2005 11:02:49	2.72399	10.249711	mg/l as N	1	10	
138851004	NO3NO2	06/24/2005 11:02:50	2.72504	10.253701	mg/l as N	1	1	
138903001	NO3NO2	06/24/2005 11:02:51	0.89396	3.317691	mg/l as N	1	1	
1200873943	NO3NO2	06/24/2005 11:02:52	0.89779	3.332206	mg/l as N	1	1	
1200873944	NO3NO2	06/24/2005 11:02:53	1.1109	4.139451	mg/l as N	1	1	
139034005	NO3NO2	06/24/2005 11:02:54	0.36711	1.322016	mg/l as N	1	1	
TON-CCV	NO3NO2	06/24/2005 11:14:55	0.29523	1.049759	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 11:14:56	0.01095	-0.027084	mg/l as N	1		0
139091009	NO3NO2	06/24/2005 11:14:57	2.10466	7.903752	mg/l as N	1	1	
139091010	NO3NO2	06/24/2005 11:14:58	1.64165	6.149899	mg/l as N	1	1	
139136002	NO3NO2	06/24/2005 11:14:59	0.07297	0.207867	mg/l as N	1	1	
139136003	NO3NO2	06/24/2005 11:15:00	0.06331	0.171265	mg/l as N	1	1	
139182001	NO3NO2	06/24/2005 11:15:01	0.01805	-0.000178	mg/l as N	1	10	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
1200873939	NO3NO2	06/24/2005 11:15:02	0.01793	-0.000631	mg/l as N	1	10	
1200873940	NO3NO2	06/24/2005 11:15:03	0.04753	0.111473	mg/l as N	1	10	
139188011	NO3NO2	06/24/2005 11:15:04	1.50729	5.640942	mg/l as N	1	1	
139188012	NO3NO2	06/24/2005 11:15:05	1.46869	5.494726	mg/l as N	1	1	
139188013	NO3NO2	06/24/2005 11:15:06	0.0297	0.043935	mg/l as N	1	10	
TON-CCV	NO3NO2	06/24/2005 11:23:25	0.30121	1.072409	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 11:23:26	0.01199	-0.023132	mg/l as N	1		0
1200873950	NO3NO2	06/24/2005 11:23:27	0.037	0.071601	mg/l as N	1	10	
1200873951	NO3NO2	06/24/2005 11:23:28	0.16017	0.538142	mg/l as N	1	10	
138831008	NO3NO2	06/24/2005 11:34:23	0.15797	5.298311	mg/l as N	10	1	
138851001	NO3NO2	06/24/2005 11:34:24	0.37949	13.689207	mg/l as N	10	10	
1200873935	NO3NO2	06/24/2005 11:34:25	0.40042	14.481982	mg/l as N	10	10	
1200873936	NO3NO2	06/24/2005 11:34:26	0.41434	15.009209	mg/l as N	10	10	
138851002	NO3NO2	06/24/2005 11:34:27	0.39202	14.16398	mg/l as N	10	1	
138851003	NO3NO2	06/24/2005 11:34:28	0.3884	14.026881	mg/l as N	10	10	
1200873937	NO3NO2	06/24/2005 11:45:37	0.38229	13.795432	mg/l as N	10	10	
1200873938	NO3NO2	06/24/2005 11:45:38	0.41117	14.889301	mg/l as N	10	10	
TON-CCV	NO3NO2	06/24/2005 11:45:39	0.30754	1.096392	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 11:45:40	0.01104	-0.026729	mg/l as N	1		0
138851004	NO3NO2	06/24/2005 11:45:41	0.37971	13.697614	mg/l as N	10	1	
139091009	NO3NO2	06/24/2005 11:45:42	0.27318	9.662158	mg/l as N	10	1	
139091010	NO3NO2	06/24/2005 11:54:18	0.15252	5.091727	mg/l as N	10	1	
139188011	NO3NO2	06/24/2005 11:54:19	0.26237	9.252852	mg/l as N	10	1	
139188012	NO3NO2	06/24/2005 11:54:20	0.25665	9.036348	mg/l as N	10	1	
TON-CCV	NO3NO2	06/24/2005 11:56:15	0.28791	1.022008	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 11:56:16	0.01214	-0.022576	mg/l as N	1		0
TON-CCV	NO3NO2	06/24/2005 12:36:32	0.29785	1.059685	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 12:36:33	0.01129	-0.025805	mg/l as N	1		0
138850001	NO3NO2	06/24/2005 12:36:34	3.08104	580.10913	mg/l as N	1	50	
138850002	NO3NO2	06/24/2005 12:36:35	2.96444	558.02625	mg/l as N	1	50	
138851001	NO3NO2	06/24/2005 12:36:36	0.41448	15.014532	mg/l as N	1	10	
1200873935	NO3NO2	06/24/2005 12:36:37	0.41359	14.980931	mg/l as N	1	10	
1200873936	NO3NO2	06/24/2005 12:36:38	0.69363	25.58873	mg/l as N	1	10	
138851003	NO3NO2	06/24/2005 12:36:39	0.41515	15.040201	mg/l as N	1	10	
1200873937	NO3NO2	06/24/2005 12:36:40	0.403	14.5796	mg/l as N	1	10	
1200873938	NO3NO2	06/24/2005 12:36:41	0.6931	25.568718	mg/l as N	1	10	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
139182001	NO3NO2	06/24/2005 12:36:42	0.0099	-0.31056	mg/l as N	1	10	
1200873939	NO3NO2	06/24/2005 12:36:43	0.00934	-0.331903	mg/l as N	1	10	
TON-CCV	NO3NO2	06/24/2005 12:45:58	0.30778	1.0973	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 12:45:59	0.01225	-0.022154	mg/l as N	1		0
1200873940	NO3NO2	06/24/2005 12:46:00	0.2035	7.022926	mg/l as N	1	10	
139188013	NO3NO2	06/24/2005 12:46:01	0.01201	-0.230438	mg/l as N	1	10	
1200873950	NO3NO2	06/24/2005 12:46:02	0.01222	-0.222706	mg/l as N	1	10	
1200873951	NO3NO2	06/24/2005 12:46:03	0.24704	8.672321	mg/l as N	1	10	
TON-CCV	NO3NO2	06/24/2005 12:47:55	0.28225	1.000577	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 12:47:56	0.01113	-0.026408	mg/l as N	1		0
138850001	NO3NO2	06/24/2005 12:55:15	0.29816	530.43329	mg/l as N	10	50	
138850002	NO3NO2	06/24/2005 12:55:16	0.29778	529.70984	mg/l as N	10	50	
TON-CCV	NO3NO2	06/24/2005 12:57:15	0.28721	1.019379	mg/l as N	1		1
TON-CCB	NO3NO2	06/24/2005 12:57:16	0.0112	-0.026112	mg/l as N	1		0

1190

Perchlorate

METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	MAR1	6/10/2005 11:34:47	050610_001.DXD
AUTOCAL6		1	MAR1	6/10/2005 11:49:54	050610_002.DXD
AUTOCAL5		1	MAR1	6/10/2005 12:05:02	050610_003.DXD
AUTOCAL4		1	MAR1	6/10/2005 12:20:12	050610_004.DXD
AUTOCAL3		1	MAR1	6/10/2005 12:35:20	050610_005.DXD
AUTOCAL2		1	MAR1	6/10/2005 12:50:29	050610_006.DXD
AUTOCAL1		1	MAR1	6/10/2005 13:05:37	050610_007.DXD
WPC050610-03ICV		1	MAR1	6/10/2005 13:20:46	050610_008.DXD
ICB		1	MAR1	6/10/2005 13:35:55	050610_009.DXD
IPC-25-TREATED		1	MAR1	6/10/2005 13:51:04	050610_010.DXD
MRL-4-TREATED		1	MAR1	6/10/2005 14:06:13	050610_011.DXD
PQL		1	MAR1	6/10/2005 14:21:22	050610_012.DXD
WPC050610-03CVH		1	MAR1	6/10/2005 14:36:32	050610_013.DXD
CCB		1	MAR1	6/10/2005 14:51:40	050610_014.DXD
1200855228	429053	1	MAR1	6/10/2005 15:06:48	050610_015.DXD
1200855231	429053	1	MAR1	6/10/2005 15:21:56	050610_016.DXD
137321001	429053	1	MAR1	6/10/2005 15:37:04	050610_017.DXD
137321002	429053	1	MAR1	6/10/2005 15:52:12	050610_018.DXD
137321003	429053	1	MAR1	6/10/2005 16:07:20	050610_019.DXD
137322001	429053	1	MAR1	6/10/2005 16:22:29	050610_020.DXD
1200855229	429053	1	MAR1	6/10/2005 16:37:37	050610_021.DXD
1200855230	429053	1	MAR1	6/10/2005 16:52:46	050610_022.DXD
137322002	429053	1	MAR1	6/10/2005 17:07:56	050610_023.DXD
137322003	429053	1	MAR1	6/10/2005 17:23:04	050610_024.DXD
WPC050610-03CVL		1	MAR1	6/10/2005 17:38:12	050610_025.DXD
CCB		1	MAR1	6/10/2005 17:53:20	050610_026.DXD
1200857210	429874	1	MAR1	6/10/2005 18:08:29	050610_027.DXD
1200857215	429874	1	MAR1	6/10/2005 18:23:38	050610_028.DXD
137274001	429874	1	MAR1	6/10/2005 18:38:48	050610_029.DXD
1200857211	429874	1	MAR1	6/10/2005 18:53:57	050610_030.DXD
1200857213	429874	1	MAR1	6/10/2005 19:09:05	050610_031.DXD
137274002	429874	1	MAR1	6/10/2005 19:24:14	050610_032.DXD
137274003	429874	1	MAR1	6/10/2005 19:39:23	050610_033.DXD
137274004	429874	1	MAR1	6/10/2005 19:54:31	050610_034.DXD
137274005	429874	1	MAR1	6/10/2005 20:09:39	050610_035.DXD
WPC050610-03CVH		1	MAR1	6/10/2005 20:24:48	050610_036.DXD
CCB		1	MAR1	6/10/2005 20:39:56	050610_037.DXD
137408001	429874	1	MAR1	6/10/2005 20:55:05	050610_038.DXD
1200857212	429874	1	MAR1	6/10/2005 21:10:14	050610_039.DXD
1200857214	429874	1	MAR1	6/10/2005 21:25:22	050610_040.DXD
137408002	429874	1	MAR1	6/10/2005 21:40:30	050610_041.DXD
137408003	429874	1	MAR1	6/10/2005 21:55:38	050610_042.DXD
137408004	429874	1	MAR1	6/10/2005 22:10:47	050610_043.DXD
137408005	429874	1	MAR1	6/10/2005 22:25:55	050610_044.DXD
137516001	429874	1	MAR1	6/10/2005 22:41:05	050610_045.DXD
137516002	429874	1	MAR1	6/10/2005 22:56:13	050610_046.DXD
137516003	429874	1	MAR1	6/10/2005 23:11:21	050610_047.DXD
WPC050610-03CVL		1	MAR1	6/10/2005 23:26:29	050610_048.DXD
CCB		1	MAR1	6/10/2005 23:41:37	050610_049.DXD
1200862170	431843	1	MAR1	6/10/2005 23:56:45	050610_050.DXD
1200862175	431843	1	MAR1	6/11/2005 00:11:54	050610_051.DXD
137866001	431843	1	MAR1	6/11/2005 00:27:02	050610_052.DXD
1200862171	431843	1	MAR1	6/11/2005 00:42:11	050610_053.DXD
1200862173	431843	1	MAR1	6/11/2005 00:57:20	050610_054.DXD
137881003	431843	1	MAR1	6/11/2005 01:12:30	050610_055.DXD

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1200862172          431843   1     MAR1  6/11/2005 01:27:38 050610_056.DXD
1200862174          431843   1     MAR1  6/11/2005 01:42:46 050610_057.DXD
WPC050610-03CVH              1     MAR1  6/11/2005 01:57:54 050610_058.DXD
CCB                          1     MAR1  6/11/2005 02:13:03 050610_059.DXD
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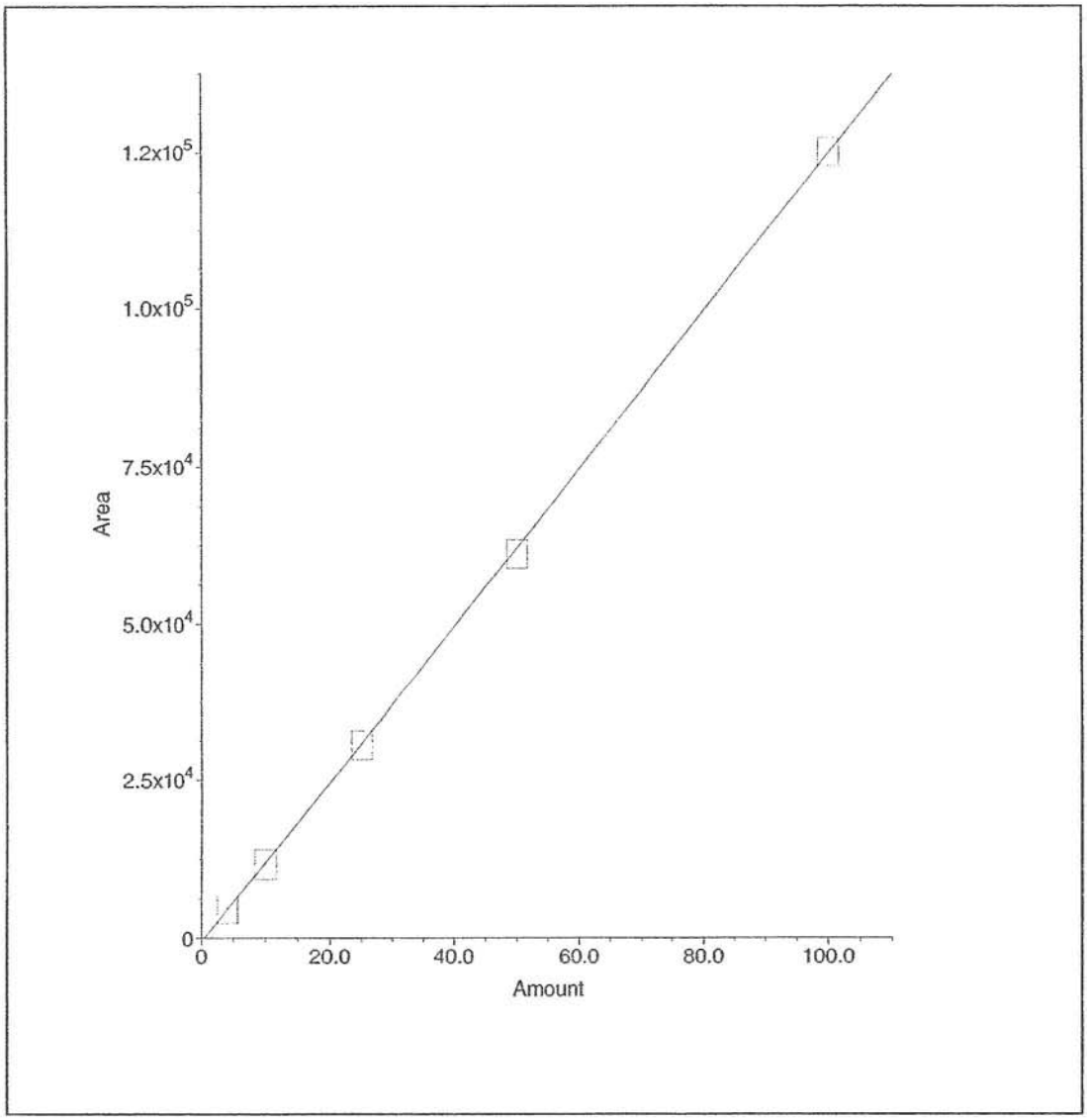
Standard:External Fit Type:Linear
Origin:Ignore Calibration:Area
r^2=0.999882
Amt=0.0007971*Resp+0.4239



4-13-05

KMM 6-13-05

IC: 3 **IC Calibration Spreadsheet**

Date: 6/13/2005

Perchlorate

Conc., ug/L	Area
100	125382
50	61338
25	30679
10	11798
4	4702
0	0
CORR:	0.999941
R2	0.999883
INT.	0.425159
Area	62727
Conc. ug/L	50.427

KMM
6-13-05

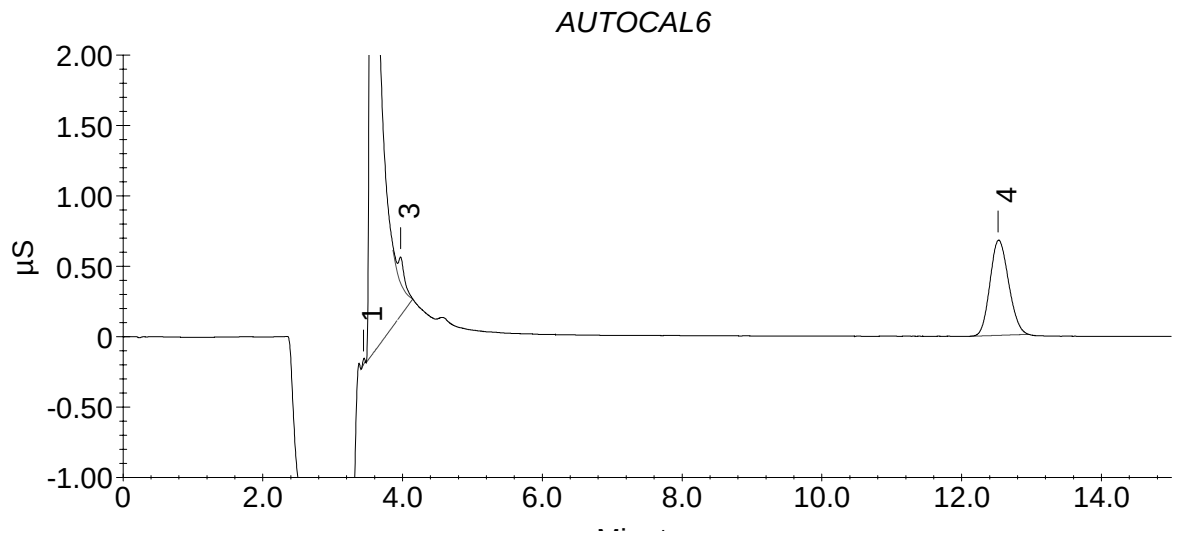
Calibration Update Report

Sample Name : AUTOCAL6
Data File Name : C:\PEAKNET\DATA\050610_002.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 11:49:54
Calibration Date : 6/10/2005 12:04:58
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak	3.55		529738	
4	Perchlorate	12.52	128819	125382	125382



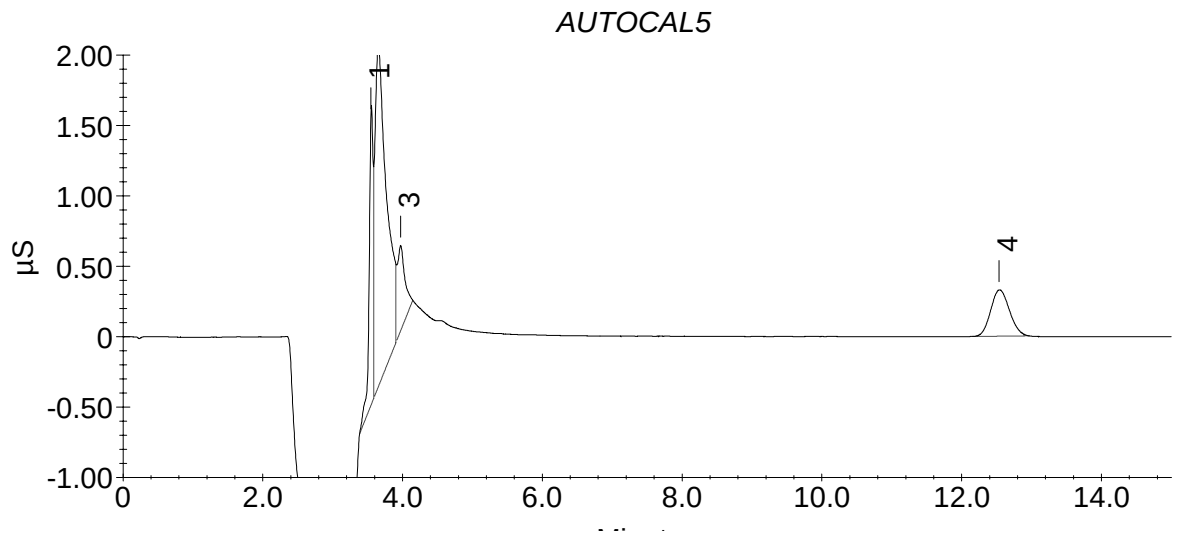
Calibration Update Report

Sample Name : AUTOCAL5
Data File Name : C:\PEAKNET\DATA\050610_003.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:05:02
Calibration Date : 6/10/2005 12:20:07
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak	3.65		268083	
4	Perchlorate	12.53	64372	61338	61338



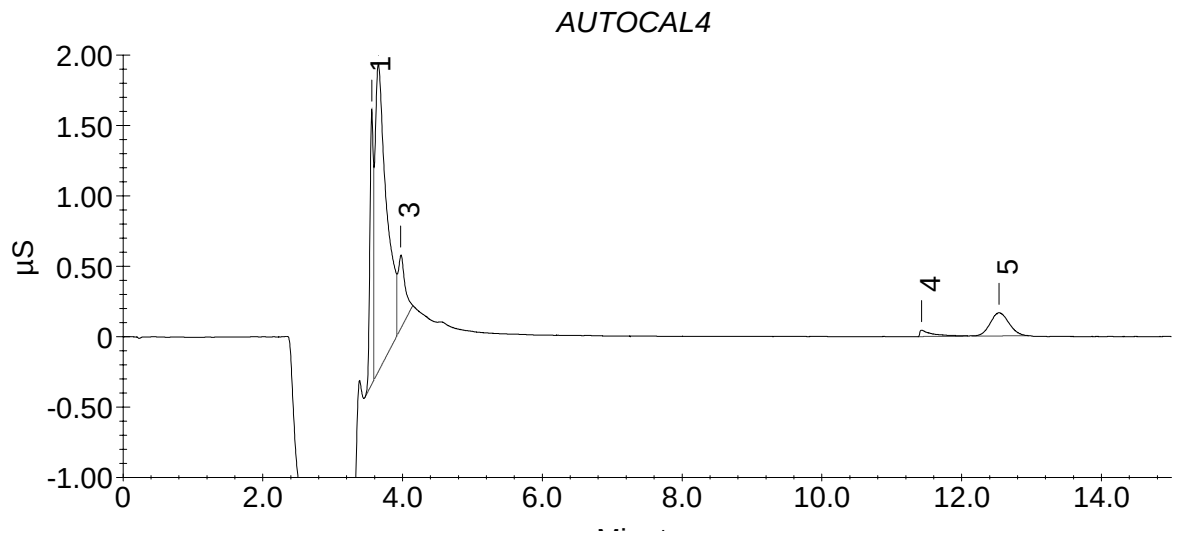
Calibration Update Report

Sample Name : AUTOCAL4
Data File Name : C:\PEAKNET\DATA\050610_004.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:20:12
Calibration Date : 6/10/2005 12:35:16
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak	3.65		240815	
5	Perchlorate	12.53	30005	30679	30679



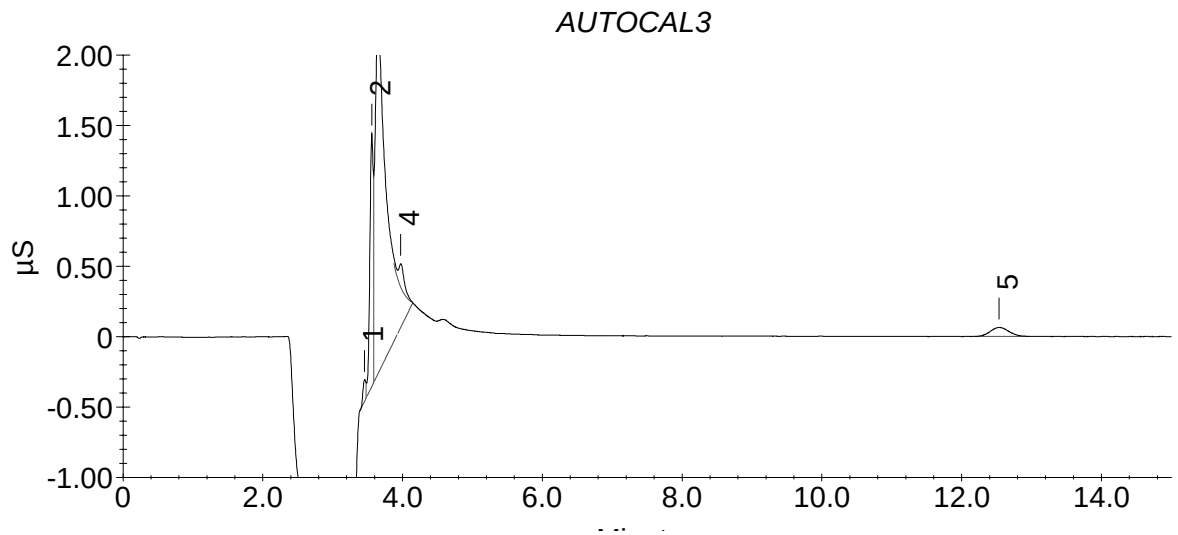
Calibration Update Report

Sample Name : AUTOCAL3
Data File Name : C:\PEAKNET\DATA\050610_005.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:35:20
Calibration Date : 6/10/2005 12:50:24
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
3	Solvent peak	3.64		285639	
5	Perchlorate	12.53	12271	11798	11798



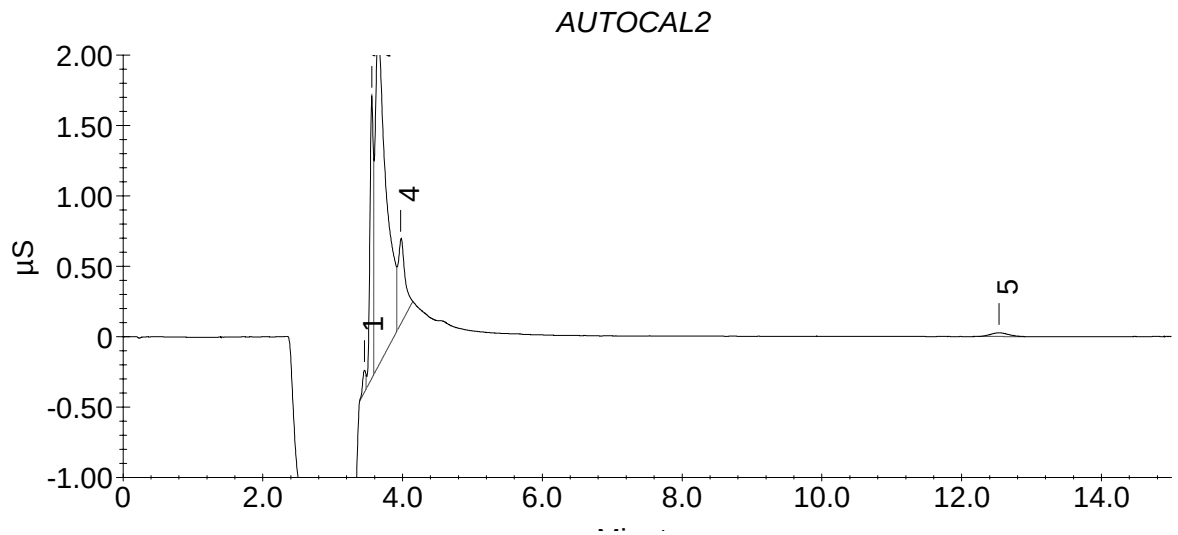
Calibration Update Report

Sample Name : AUTOCAL2
Data File Name : C:\PEAKNET\DATA\050610_006.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:50:29
Calibration Date : 6/10/2005 13:05:33
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
3	Solvent peak	3.65		254031	
5	Perchlorate	12.53	4883	4702	4702



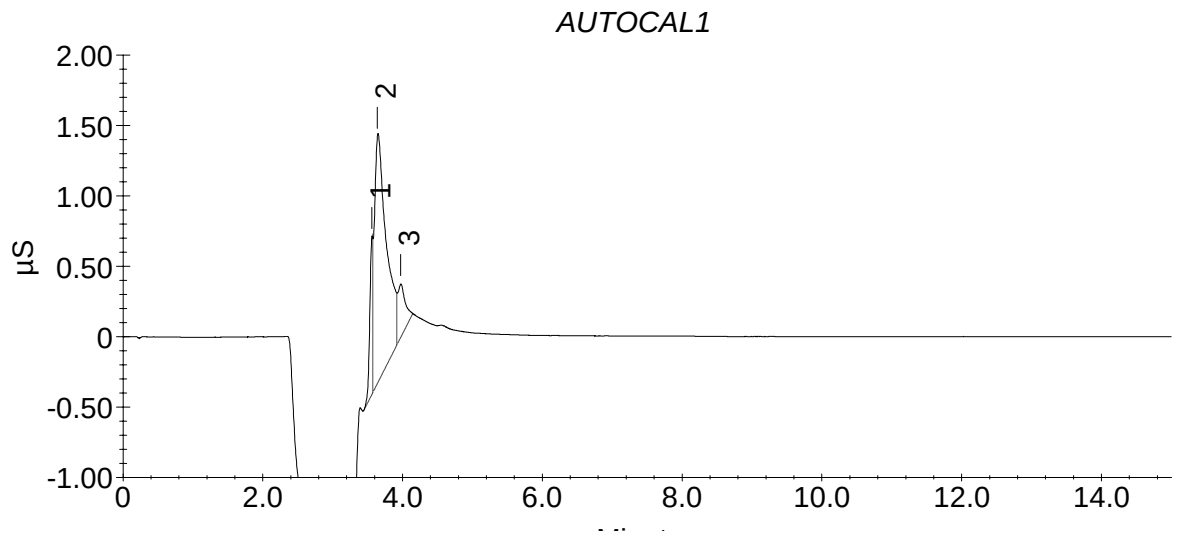
Calibration Update Report

Sample Name : AUTOCAL1
Data File Name : C:\PEAKNET\DATA\050610_007.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 13:05:37
Calibration Date : 6/10/2005 13:20:42
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak Perchlorate	3.64		203971	



Sample Analysis Report

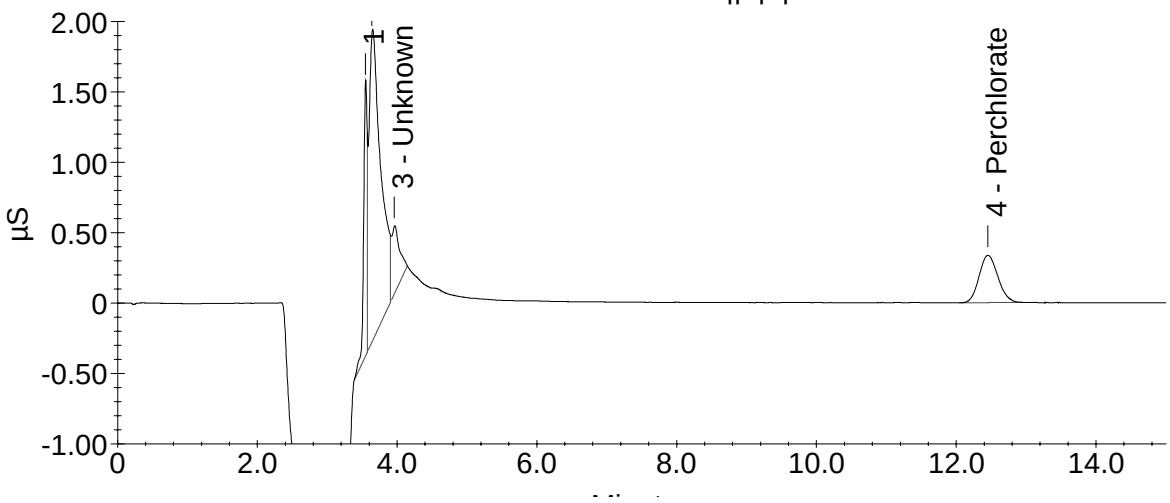
Sample Name : WPC050610-03ICV||1|1|
Data File Name : C:\PEAKNET\DATA\050610_008.DXD

Method : ...\050610.met	Inject# : 8	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/10/2005 13:20:46	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.64	0.00	251202	21880
4	Perchlorate	12.45	50.43	62727	3359



Sample Analysis Report

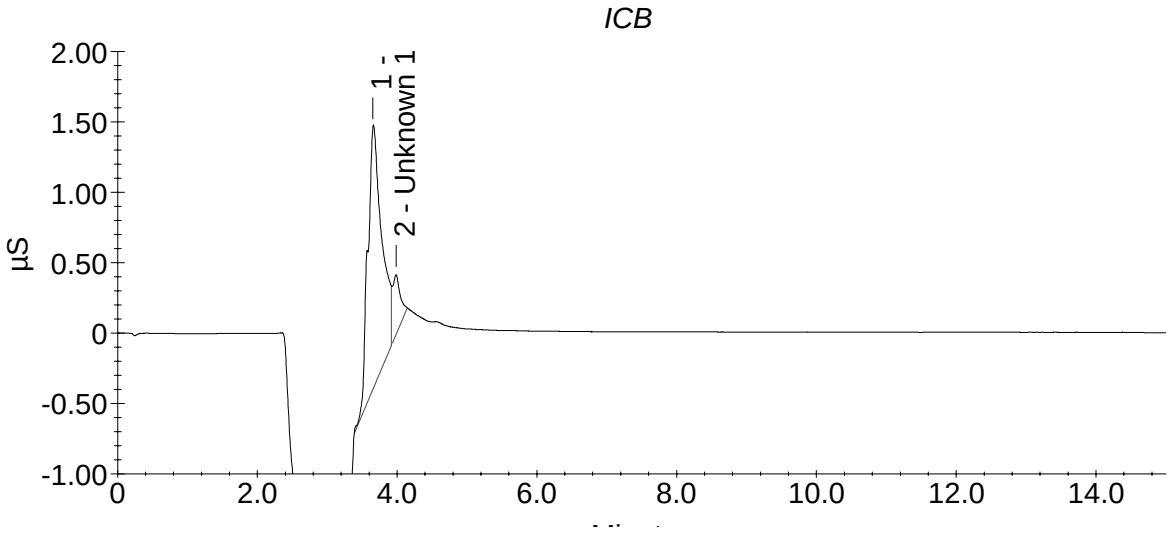
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\050610_009.DXD

Method : ...\050610.met	Inject# : 9	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/10/2005 13:35:55	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.65	0.00	258303	18625



METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	MAR1	6/21/2005 09:58:48	050621_001.DXD
WPC050610-03ICV		1	MAR1	6/21/2005 10:13:55	050621_002.DXD
ICB		1	MAR1	6/21/2005 10:29:05	050621_003.DXD
IPC-25-TREATED		1	MAR1	6/21/2005 10:44:13	050621_004.DXD
BLK		1	MAR1	6/21/2005 10:59:22	050621_005.DXD
WPC050610-03ICV		1	MAR1	6/21/2005 11:14:31	050621_006.DXD
PQL		1	MAR1	6/21/2005 11:29:41	050621_007.DXD
WPC050610-03CVH		1	MAR1	6/21/2005 11:44:49	050621_008.DXD
CCB		1	MAR1	6/21/2005 11:59:58	050621_009.DXD
1200868719	434520	1	MAR1	6/21/2005 12:15:07	050621_010.DXD
1200868726	434520	1	MAR1	6/21/2005 12:30:16	050621_011.DXD
138658001	434520	1	MAR1	6/21/2005 12:45:25	050621_012.DXD
1200868722	434520	1	MAR1	6/21/2005 13:00:33	050621_013.DXD
1200868725	434520	1	MAR1	6/21/2005 13:15:42	050621_014.DXD
138659001	434520	1	MAR1	6/21/2005 13:30:52	050621_015.DXD
1200868720	434520	1	MAR1	6/21/2005 13:46:00	050621_016.DXD
1200868723	434520	1	MAR1	6/21/2005 14:01:08	050621_017.DXD
138659002	434520	1	MAR1	6/21/2005 14:16:16	050621_018.DXD
138659003	434520	1	MAR1	6/21/2005 14:31:25	050621_019.DXD
WPC050610-03CVL		1	MAR1	6/21/2005 14:46:34	050621_020.DXD
CCB		1	MAR1	6/21/2005 15:01:43	050621_021.DXD
138659004	434520	1	MAR1	6/21/2005 15:16:52	050621_022.DXD
138659005	434520	1	MAR1	6/21/2005 15:32:01	050621_023.DXD
138659014	434520	1	MAR1	6/21/2005 15:47:10	050621_024.DXD
138675001	434520	1	MAR1	6/21/2005 16:02:19	050621_025.DXD
1200868721	434520	1	MAR1	6/21/2005 16:17:28	050621_026.DXD
1200868724	434520	1	MAR1	6/21/2005 16:32:37	050621_027.DXD
WPC050610-03CVH		1	MAR1	6/21/2005 16:47:46	050621_028.DXD
CCB		1	MAR1	6/21/2005 17:02:55	050621_029.DXD
1200870603	435270	1	MAR1	6/21/2005 17:18:04	050621_030.DXD
1200870608	435270	1	MAR1	6/21/2005 17:33:12	050621_031.DXD
138800001	435270	1	MAR1	6/21/2005 17:48:21	050621_032.DXD
138800002	435270	1	MAR1	6/21/2005 18:03:30	050621_033.DXD
138850001	435270	1	MAR1	6/21/2005 18:18:38	050621_034.DXD
138850002	435270	1	MAR1	6/21/2005 18:33:46	050621_035.DXD
WPC050610-03CVL		1	MAR1	6/21/2005 18:48:56	050621_036.DXD
CCB		1	MAR1	6/21/2005 19:04:04	050621_037.DXD
138851001	435270	1	MAR1	6/21/2005 19:19:13	050621_038.DXD
1200870605	435270	1	MAR1	6/21/2005 19:34:21	050621_039.DXD
1200870607	435270	1	MAR1	6/21/2005 19:49:31	050621_040.DXD
138851002	435270	1	MAR1	6/21/2005 20:04:40	050621_041.DXD
138905001	435270	1	MAR1	6/21/2005 20:19:48	050621_042.DXD
WPC050610-03CVH		1	MAR1	6/21/2005 20:34:57	050621_043.DXD
CCB		1	MAR1	6/21/2005 20:50:07	050621_044.DXD
WPC050610-03CVL		1	MAR1	6/22/2005 08:25:01	050621_045.DXD
CCB		1	MAR1	6/22/2005 08:40:05	050621_046.DXD
138851001	435270	5	MAR1	6/22/2005 08:55:13	050621_047.DXD
1200870605	435270	5	MAR1	6/22/2005 09:10:21	050621_048.DXD
1200870607	435270	5	MAR1	6/22/2005 09:25:30	050621_049.DXD
138851002	435270	5	MAR1	6/22/2005 09:40:38	050621_050.DXD
WPC050610-03CVH		1	MAR1	6/22/2005 09:55:47	050621_051.DXD
CCB		1	MAR1	6/22/2005 10:10:57	050621_052.DXD

Sample Analysis Report

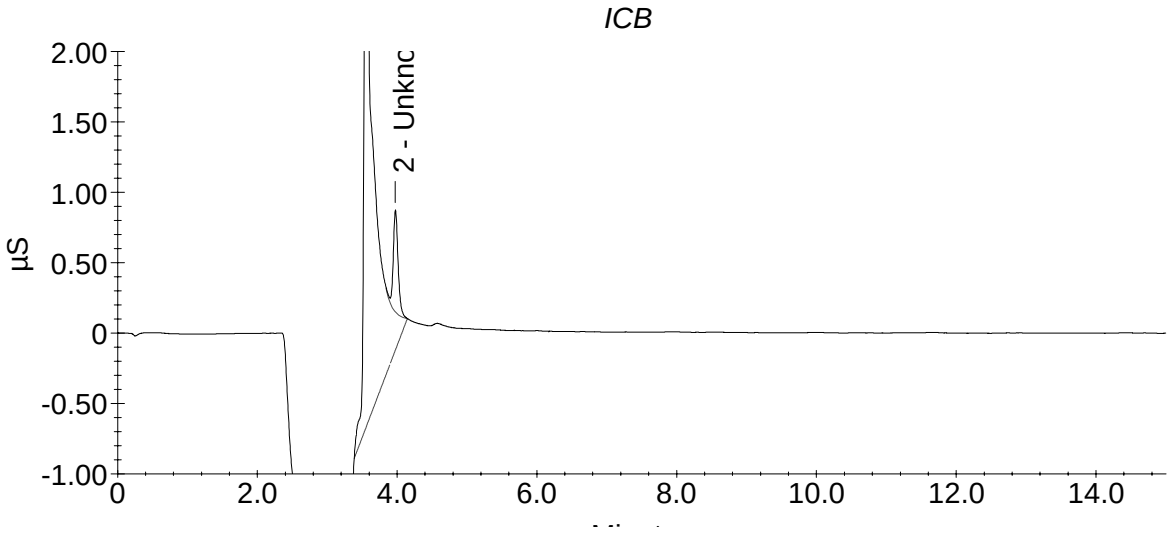
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\050621_003.DXD
Date Time Updated : 6/21/2005 10:44:09

Method : ...\050610.met	Inject# : 3	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 10:29:05	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.55	0.00	466201	54379



Sample Analysis Report

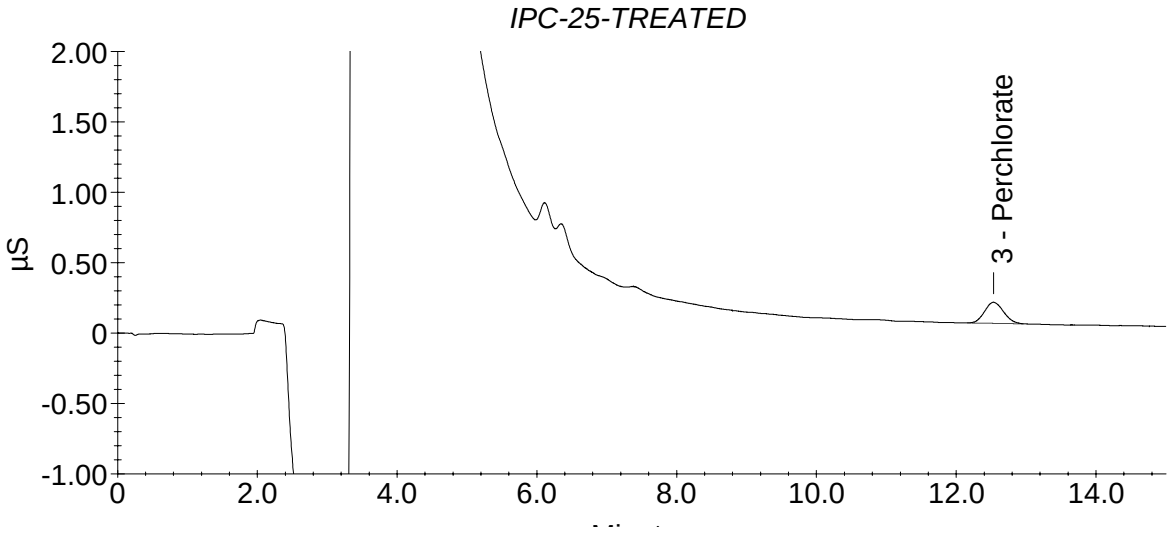
Sample Name : IPC-25-TREATED
Data File Name : C:\PEAKNET\DATA\050621_004.DXD
Date Time Updated : 6/21/2005 10:59:18

Method : ...\050610.met	Inject# : 4	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 10:44:13	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.57	0.00	1940461	535635
3	Perchlorate	12.53	22.99	28304	1502



Sample Analysis Report

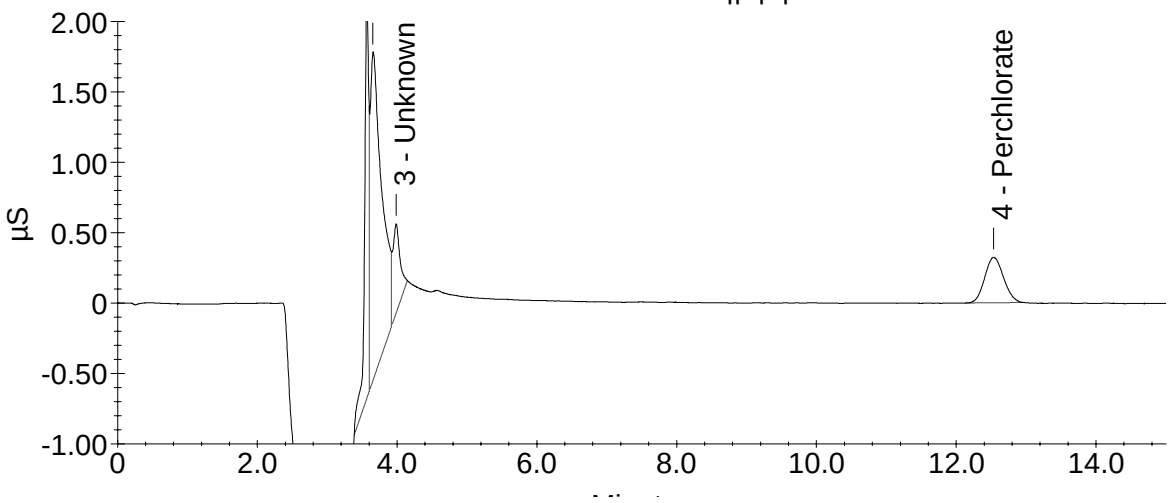
Sample Name : WPC050610-03ICV||1|1|
Data File Name : C:\PEAKNET\DATA\050621_006.DXD
Date Time Updated : 6/21/2005 11:29:36

Method : ...\050610.met	Inject# : 6	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 11:14:31	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	256518	23318
4	Perchlorate	12.53	48.45	60249	3223



Sample Analysis Report

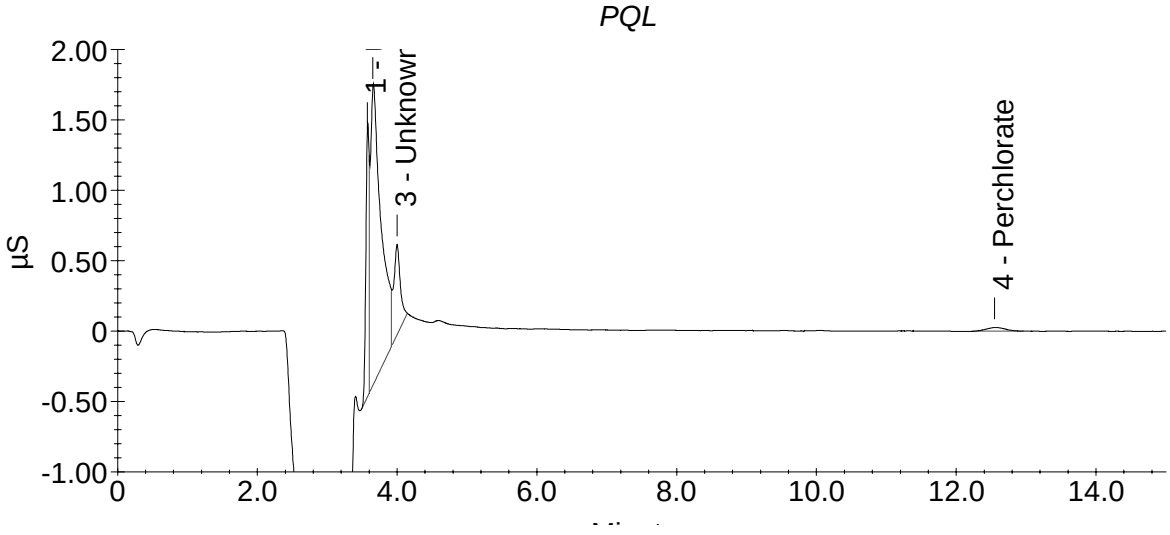
Sample Name : PQL
Data File Name : C:\PEAKNET\DATA\050621_007.DXD
Date Time Updated : 6/21/2005 11:44:45

Method : ...\050610.met	Inject# : 7	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 11:29:41	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	217897	21206
4	Perchlorate	12.55	4.39	4980	266



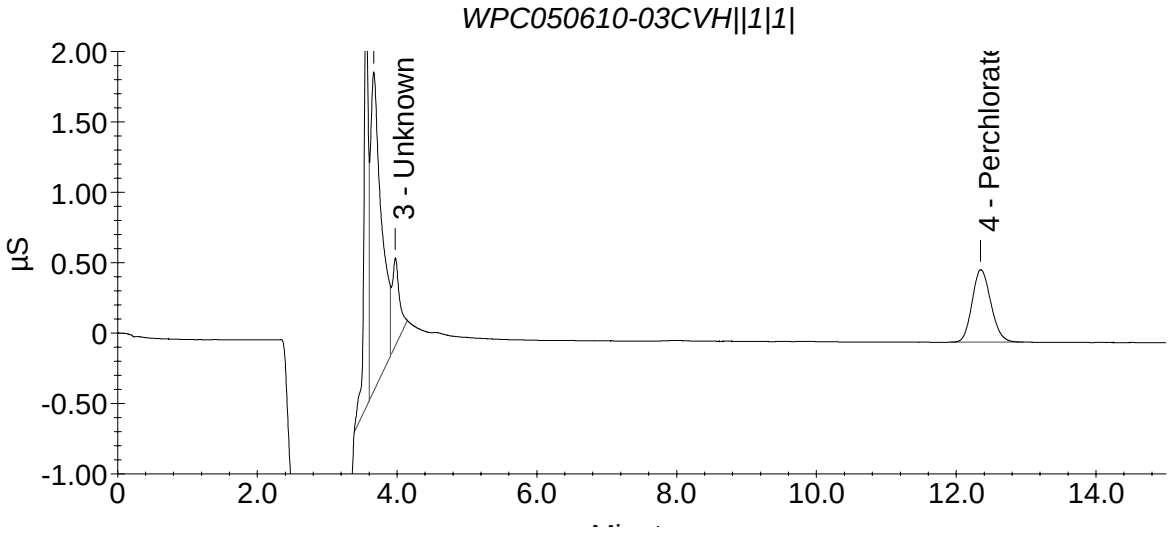
Sample Analysis Report

Sample Name : WPC050610-03CVH||1|1|
Data File Name : C:\PEAKNET\DATA\050621_028.DXD
Date Time Updated : 6/21/2005 17:02:50

Method : ...\050610.met	Inject# : 28	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 16:47:46	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
Peak Information : All Components					
2	Solvent peak	3.67	0.00	237029	22677
4	Perchlorate	12.35	77.12	96207	5151



Sample Analysis Report

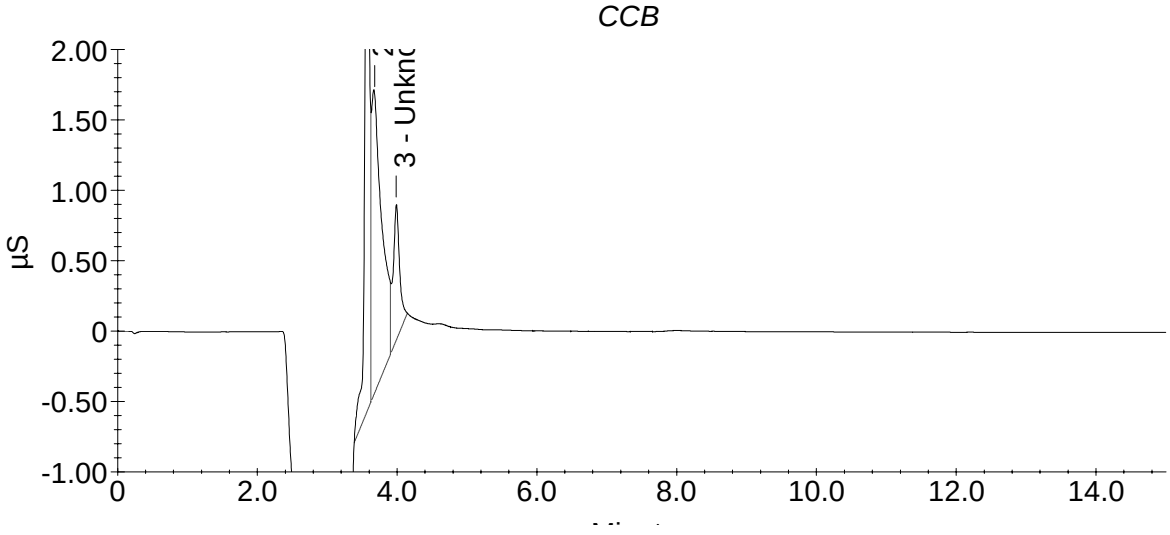
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050621_029.DXD
Date Time Updated : 6/21/2005 17:17:59

Method : ...\050610.met	Inject# : 29	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 17:02:55	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.68	0.00	205722	21149



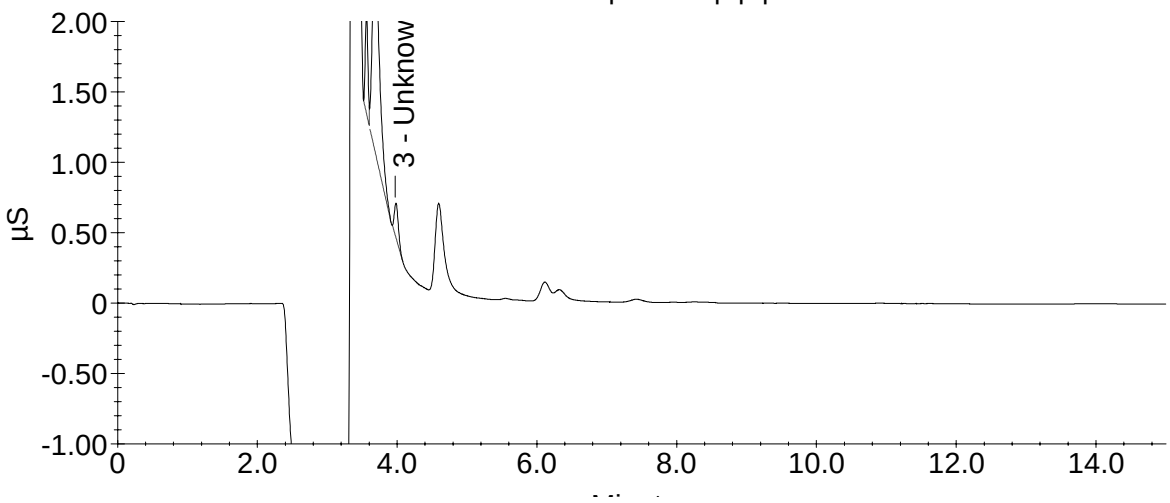
Sample Analysis Report

Sample Name : 1200870603|435270|1|1|MB
Data File Name : C:\PEAKNET\DATA\050621_030.DXD
Date Time Updated : 6/21/2005 17:33:08

Method : ...\050610.met	Inject# : 30	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 17:18:04	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
Peak Information : All Components					
2	Solvent peak Perchlorate	3.68	0.00	106547	15545



Sample Analysis Report

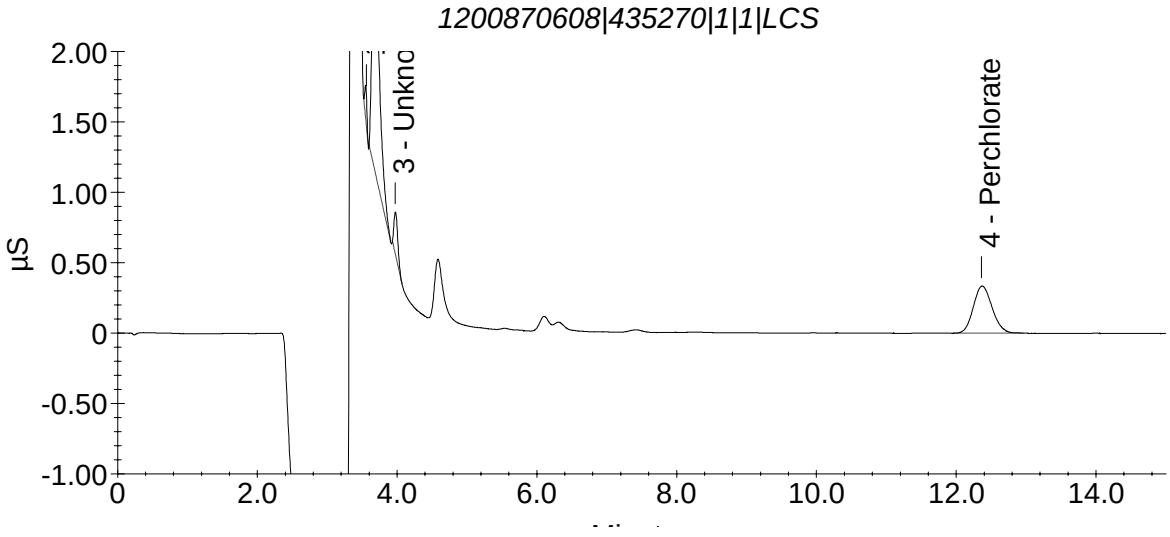
Sample Name : 1200870608|435270|1|1|LCS
Data File Name : C:\PEAKNET\DATA\050621_031.DXD
Date Time Updated : 6/21/2005 17:48:17

Method : ...\050610.met	Inject# : 31	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 17:33:12	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.68	0.00	125903	18542
4	Perchlorate	12.36	50.45	62754	3336



Sample Analysis Report

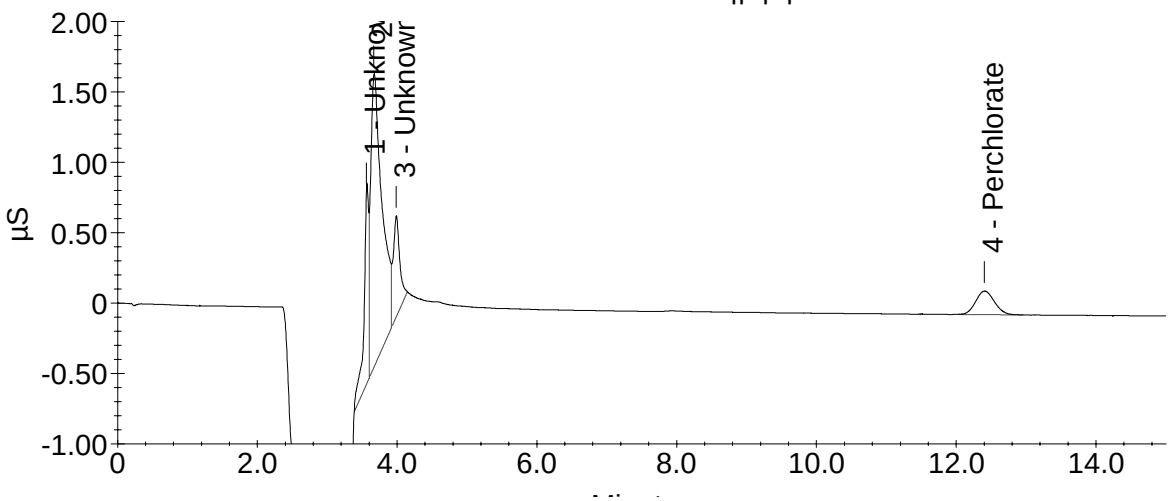
Sample Name : WPC050610-03CVL||1|1|
Data File Name : C:\PEAKNET\DATA\050621_036.DXD
Date Time Updated : 6/21/2005 19:04:00

Method : ...\050610.met	Inject# : 36	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 18:48:56	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.67	0.00	224342	20770
4	Perchlorate	12.40	25.45	31398	1676

Peak Information : All Components



Sample Analysis Report

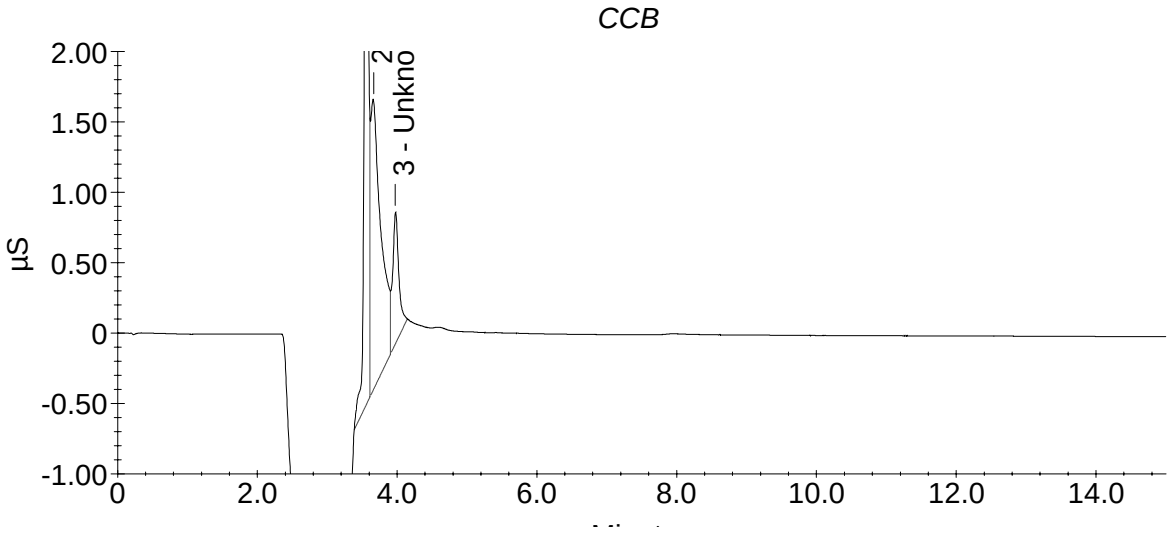
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050621_037.DXD
Date Time Updated : 6/21/2005 19:19:09

Method : ...\050610.met	Inject# : 37	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 19:04:04	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.67	0.00	198190	20374



Sample Analysis Report

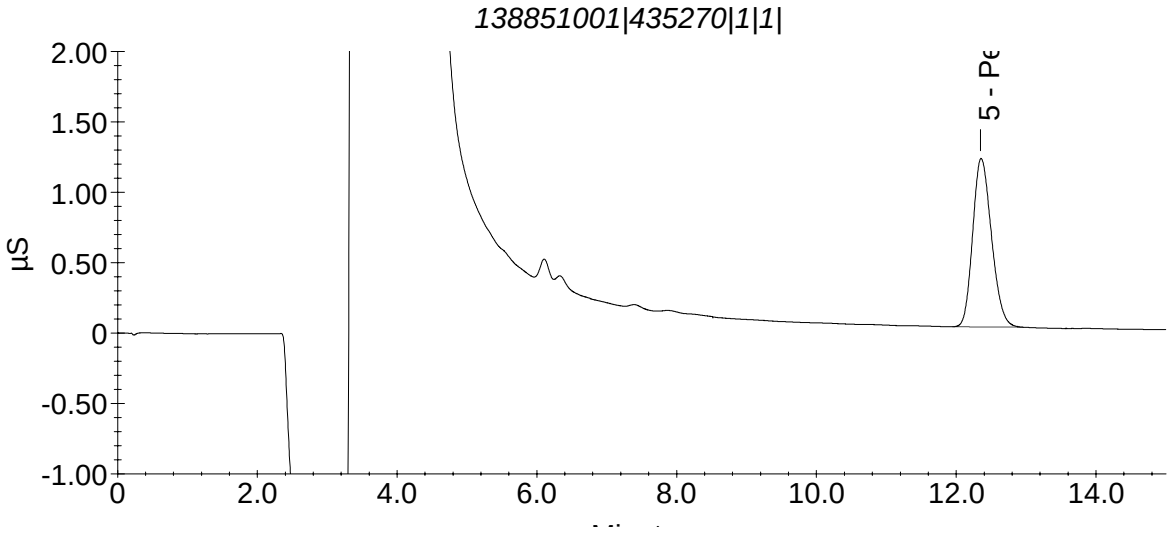
Sample Name : 138851001|435270|1|1|
Data File Name : C:\PEAKNET\DATA\050621_038.DXD
Date Time Updated : 6/21/2005 19:34:17

Method : ...\050610.met	Inject# : 38	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 19:19:13	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
3	Solvent peak	3.80	0.00	12165150	2853611
5	Perchlorate	12.35	178.79	223759	11932



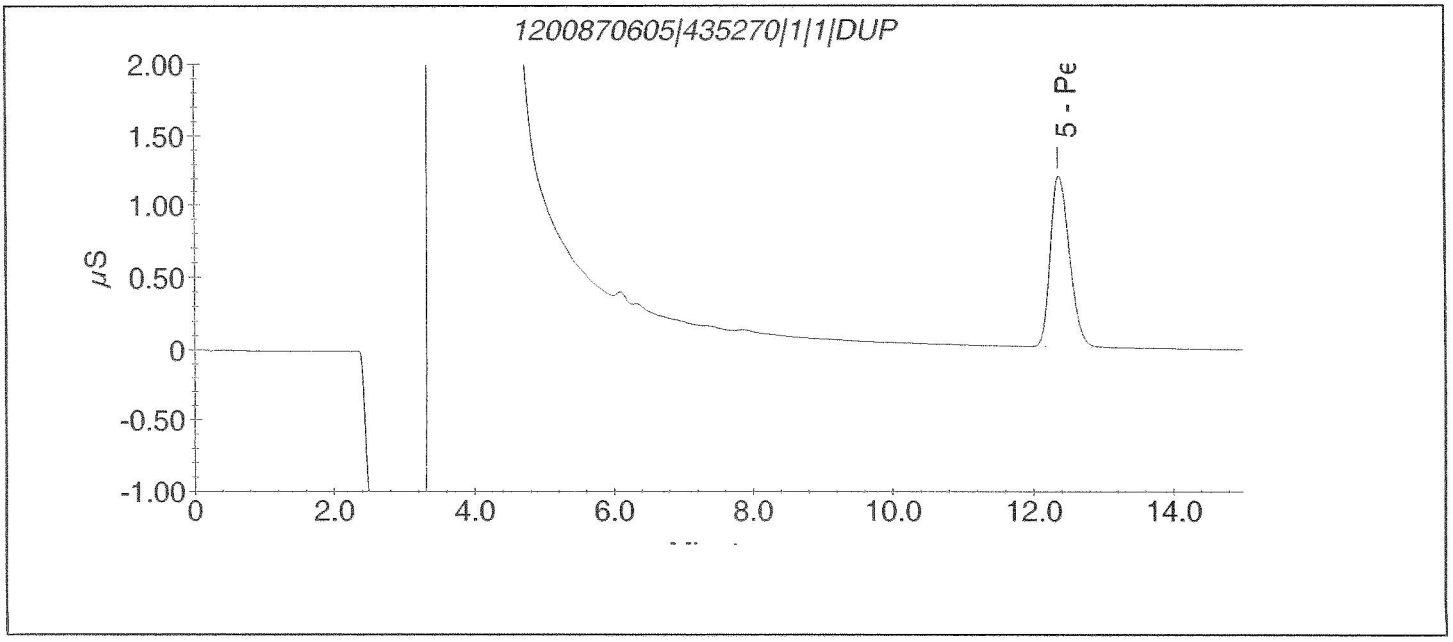
Sample Analysis Report

Sample Name : 1200870605|435270|1|1|DUP
Data File Name : C:\PEAKNET\DATA\050621_039.DXD
Date Time Updated : 6/21/2005 19:49:26

Method : ...\050610.met	Inject# : 39	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 19:34:21	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
Peak Information : All Components					
3	Solvent peak	3.80	0.00	14720200	3207009
5	Perchlorate	12.36	178.29	223125	11900



6-22-05 MJ

Sample Analysis Report

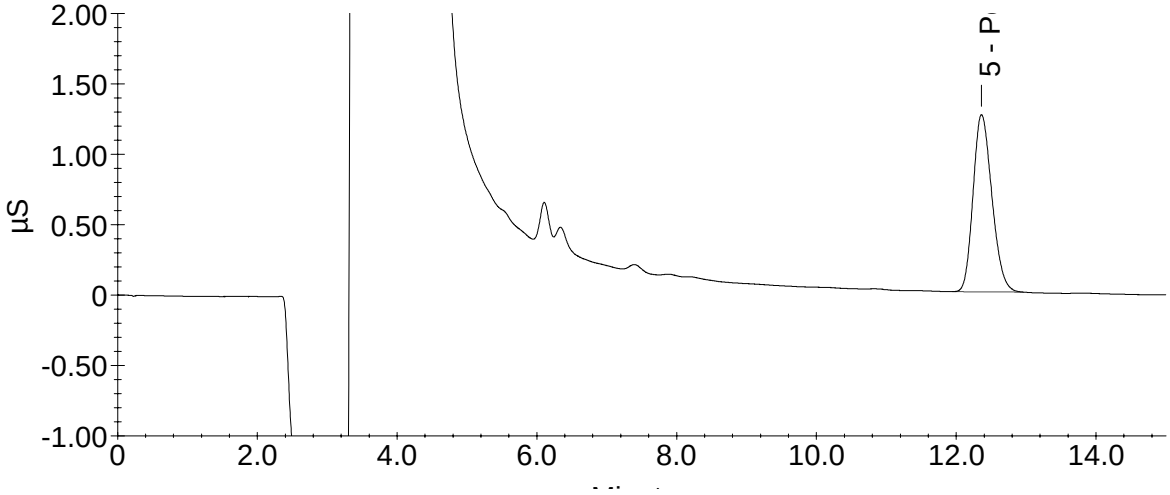
Sample Name : 1200870607|435270|1|1|PS
Data File Name : C:\PEAKNET\DATA\050621_040.DXD
Date Time Updated : 6/21/2005 20:04:35

Method : ...\050610.met	Inject# : 40	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 19:49:31	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
3	Solvent peak	3.79	0.00	16364126	3382445
5	Perchlorate	12.36	188.54	235988	12590



Sample Analysis Report

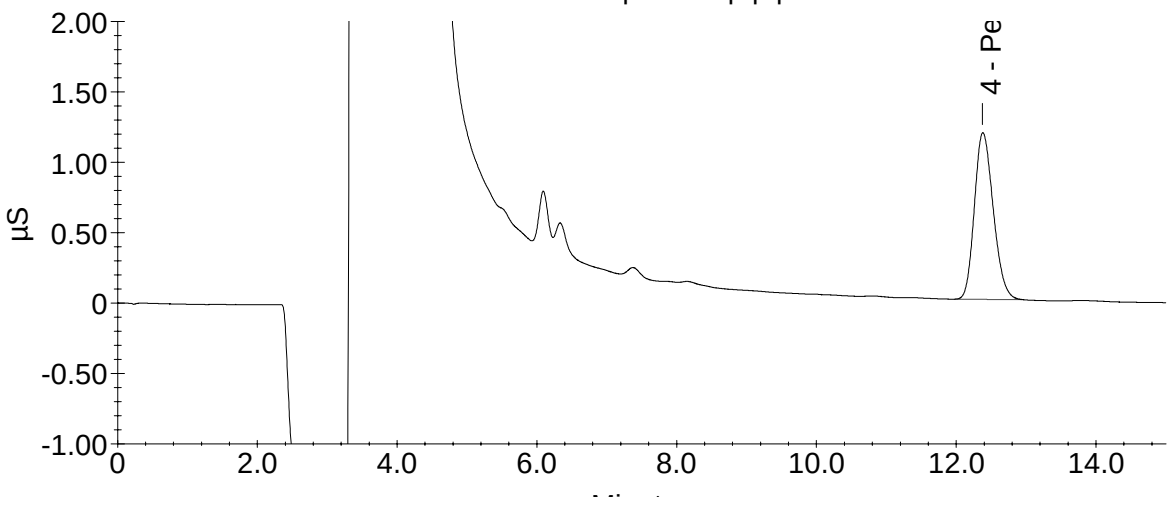
Sample Name : 138851002|435270|1|1|
Data File Name : C:\PEAKNET\DATA\050621_041.DXD
Date Time Updated : 6/21/2005 20:19:44

Method : ...\050610.met	Inject# : 41	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 20:04:40	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.80	0.00	21161350	4686898
4	Perchlorate	12.37	177.69	222378	11822



Sample Analysis Report

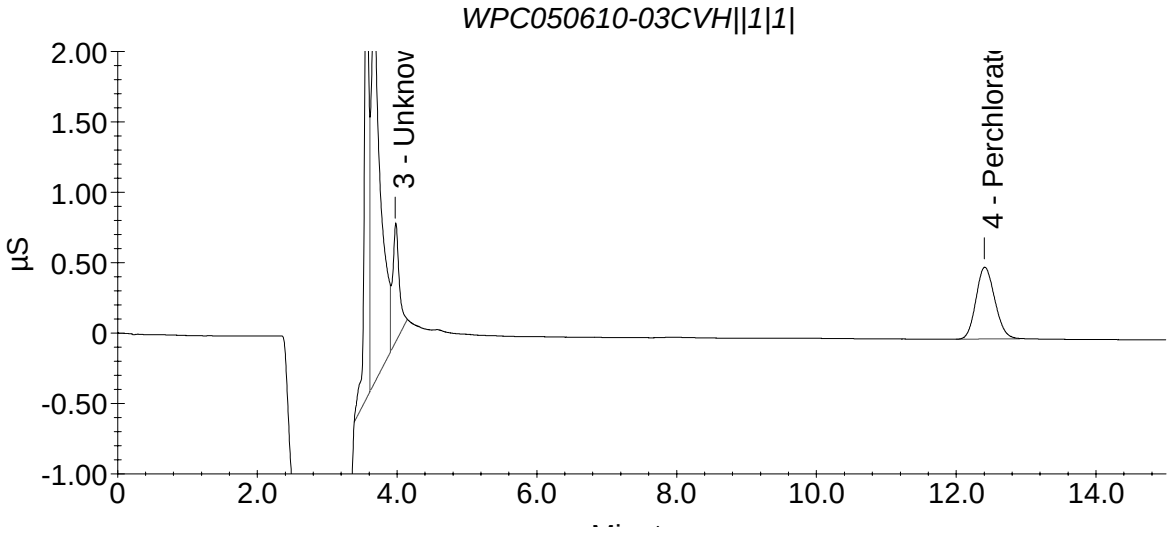
Sample Name : WPC050610-03CVH||1|1|
Data File Name : C:\PEAKNET\DATA\050621_043.DXD
Date Time Updated : 6/21/2005 20:50:03

Method : ...\050610.met	Inject# : 43	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 20:34:57	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.67	0.00	242995	26828
4	Perchlorate	12.40	76.51	95446	5089



Sample Analysis Report

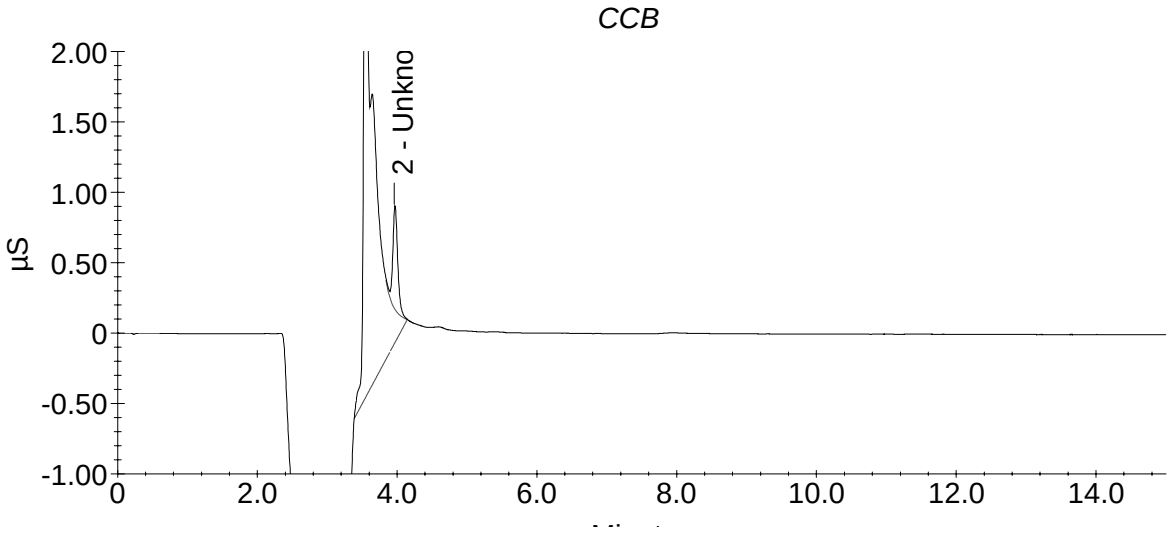
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050621_044.DXD
Date Time Updated : 6/21/2005 21:05:12

Method : ...\050610.met	Inject# : 44	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/21/2005 20:50:07	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.55	0.00	438531	51160



Sample Analysis Report

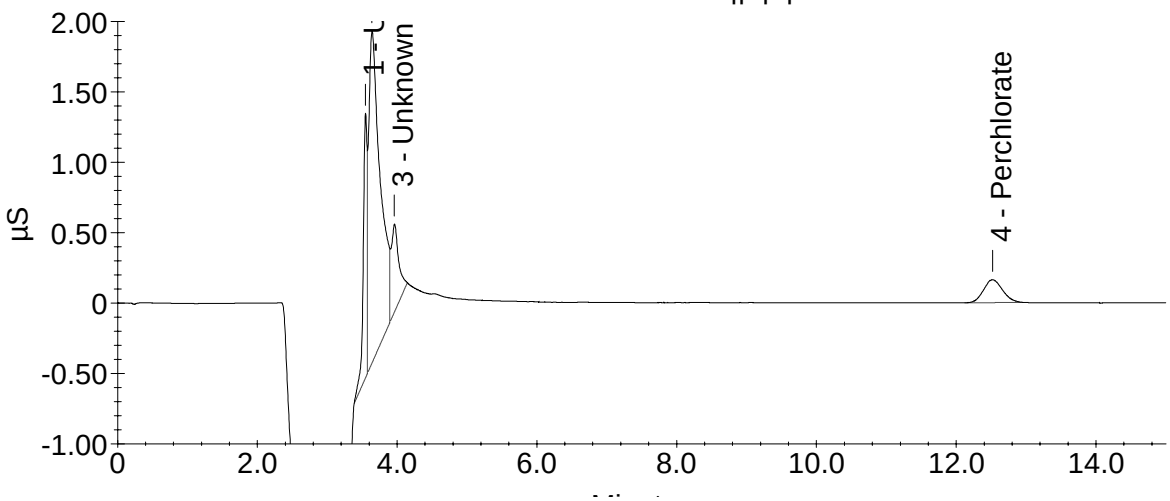
Sample Name : WPC050610-03CVL||1|1|
Data File Name : C:\PEAKNET\DATA\050621_045.DXD
Date Time Updated : 6/22/2005 08:40:01

Method : ...\050610.met	Inject# : 45	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 08:25:01	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.64	0.00	258652	23587
4	Perchlorate	12.52	24.98	30809	1624



Sample Analysis Report

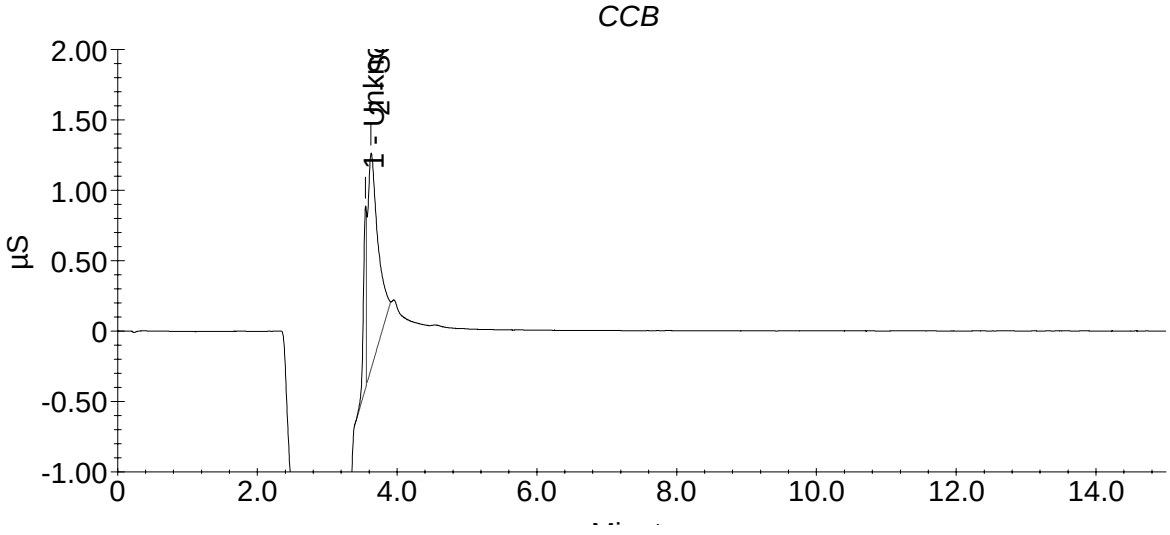
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050621_046.DXD
Date Time Updated : 6/22/2005 08:55:09

Method : ...\050610.met	Inject# : 46	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 08:40:05	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.63	0.00	146616	15334



Sample Analysis Report

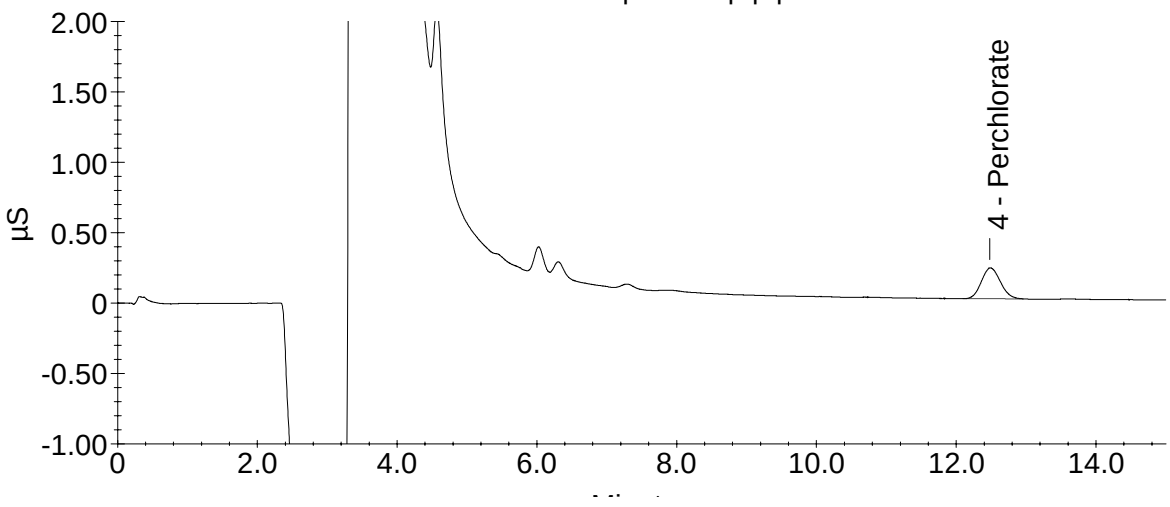
Sample Name : 138851001|435270|5|2|
Data File Name : C:\PEAKNET\DATA\050621_047.DXD
Date Time Updated : 6/22/2005 09:10:17

Method : ...\050610.met	Inject# : 47	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 08:55:13	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.72	0.00	25186217	5311497
4	Perchlorate	12.48	33.24	41171	2189



Sample Analysis Report

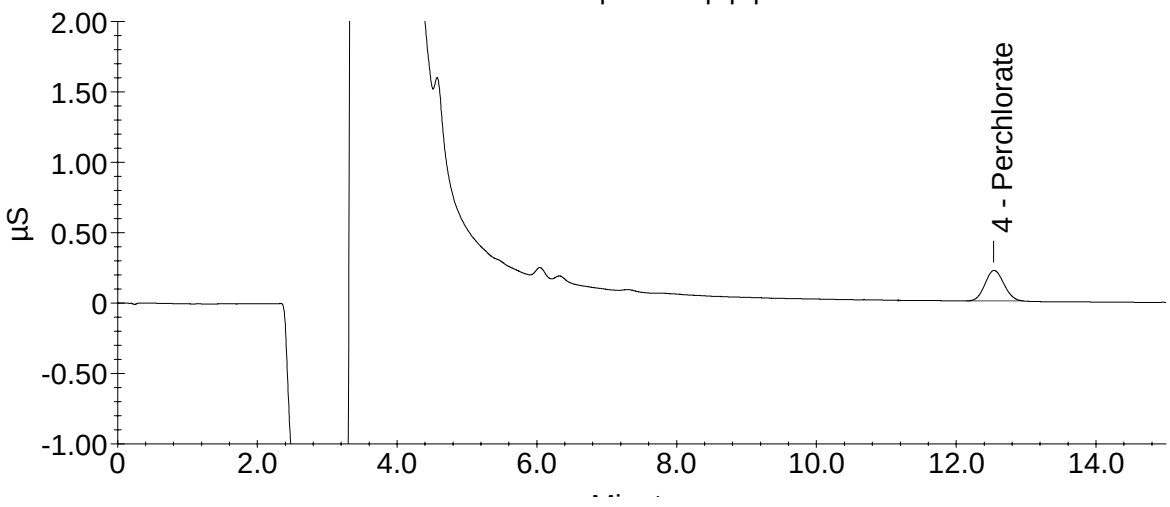
Sample Name : 1200870605|435270|5|2|DUP
Data File Name : C:\PEAKNET\DATA\050621_048.DXD
Date Time Updated : 6/22/2005 09:25:26

Method : ...\050610.met	Inject# : 48	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 09:10:21	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.73	0.00	25155743	5453373
4	Perchlorate	12.53	32.96	40816	2171



Sample Analysis Report

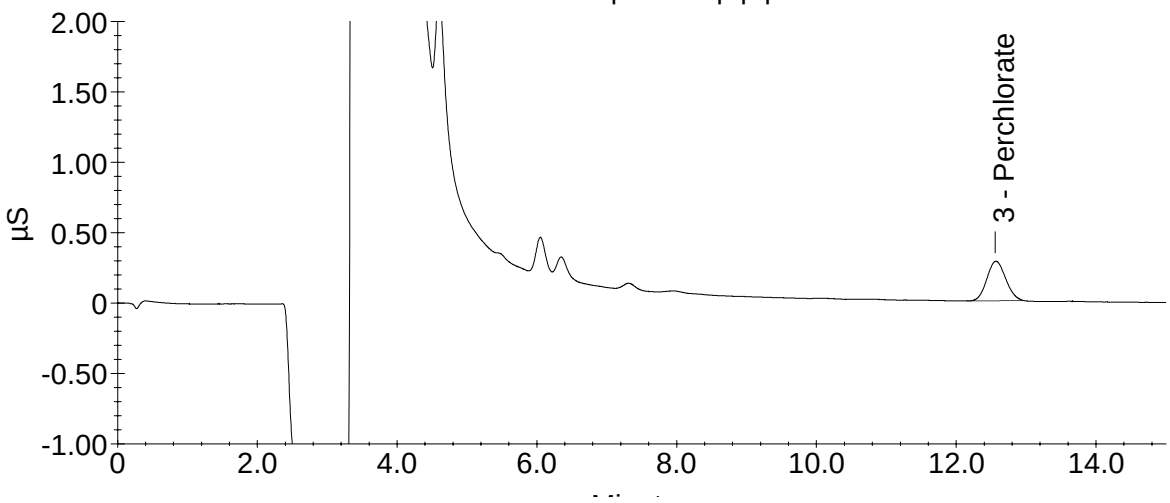
Sample Name : 1200870607|435270|5|2|PS
Data File Name : C:\PEAKNET\DATA\050621_049.DXD
Date Time Updated : 6/22/2005 09:40:34

Method : ...\050610.met	Inject# : 49	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 09:25:30	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.75	0.00	24883758	5620416
3	Perchlorate	12.56	42.28	52503	2809



Sample Analysis Report

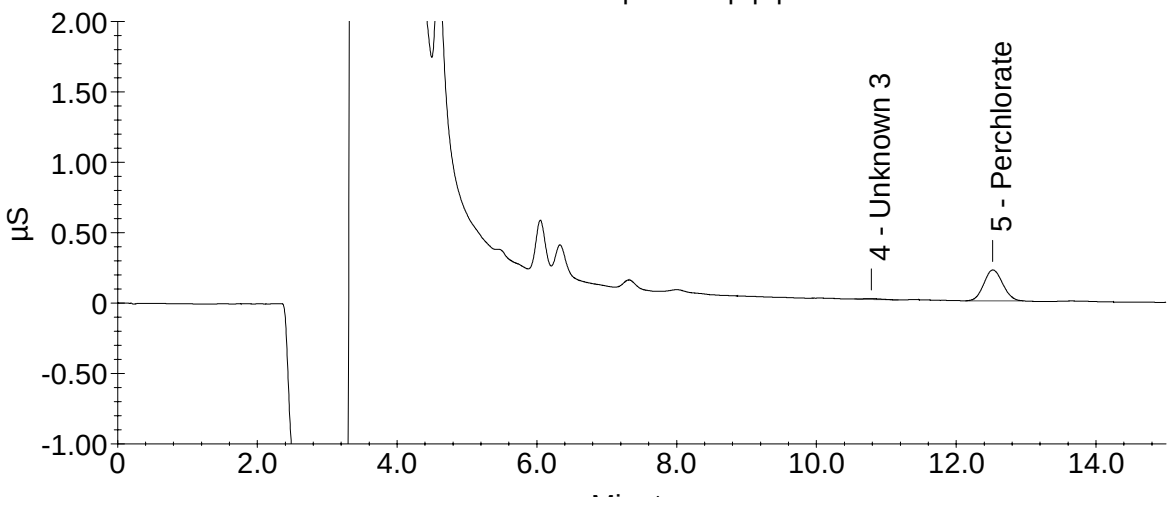
Sample Name : 138851002|435270|5|2|
Data File Name : C:\PEAKNET\DATA\050621_050.DXD
Date Time Updated : 6/22/2005 09:55:43

Method : ...\050610.met	Inject# : 50	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 09:40:38	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.73	0.00	25774826	5448336
5	Perchlorate	12.52	33.08	40964	2192

Peak Information : All Components



Sample Analysis Report

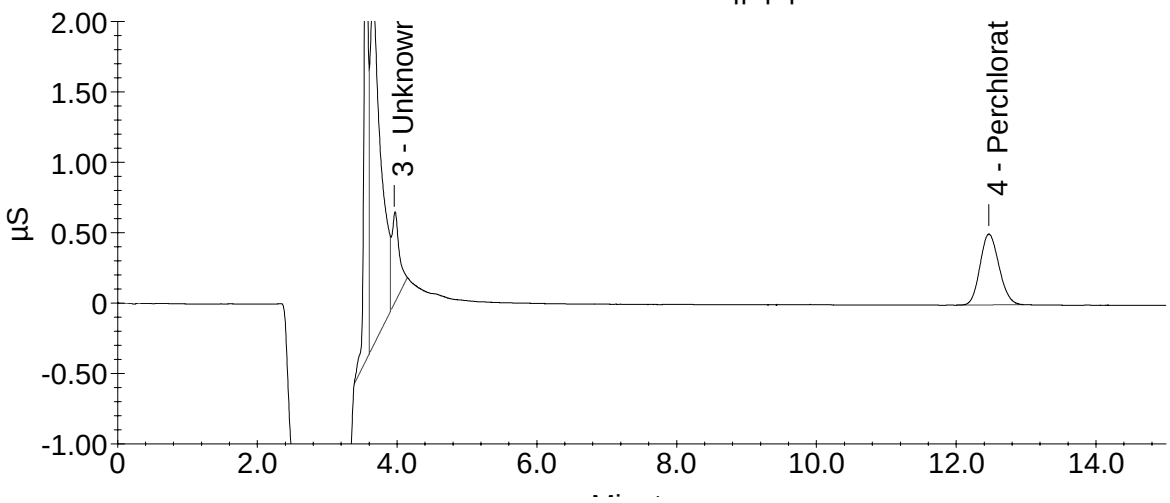
Sample Name : WPC050610-03CVH||1|1|
Data File Name : C:\PEAKNET\DATA\050621_051.DXD
Date Time Updated : 6/22/2005 10:10:52

Method : ...\050610.met	Inject# : 51	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 09:55:47	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	254890	24822
4	Perchlorate	12.47	76.11	94946	5034



Sample Analysis Report

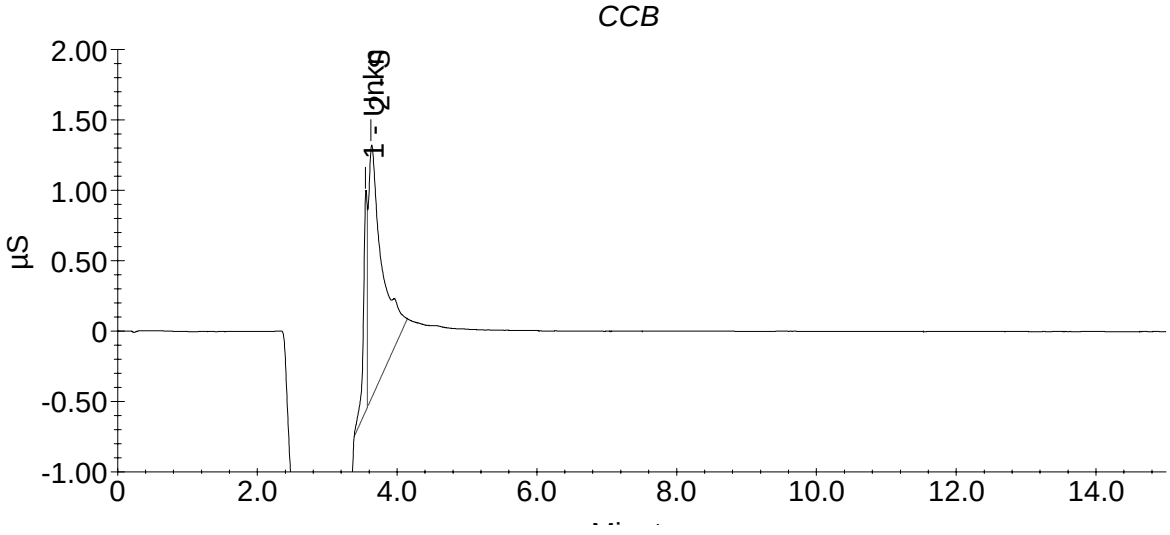
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050621_052.DXD
Date Time Updated : 6/22/2005 10:26:02

Method : ...\050610.met	Inject# : 52	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/22/2005 10:10:57	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.63	0.00	231291	17772



Solids, Total Dissolved

Batch: 435444.0
Analyst: JLD1
Date/Time: 21-JUN-05 15:12
Procedure Code BALDSEP_LF
Procedure Description EPA 160.1 Solids, Dissolved
Lab Sop GL-GC-E-001

TDS/TS/VS LogBook

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200870995	WTD050609-01	300	97.333

Sample Type	Sample Id	Rpd(%)
DUP	1200870992	7.1530758226037
DUP	1200870993	7.8078078078078
DUP	1200870994	1.3793103448276

Sample Id	Sample Type	Original Hsn	Instrument	Crucible ID	Aliquot (L)	Crucible Wt(g)	Final Wt Event 1	Final Wt Event 2	Final Wt Event 3	Final Wt Event 4	Result	Units
1200870991	MB		BAL216	MB	0.1	53.7306	53.7303	53.7303			-3	mg/L
1200870995	LCS		BAL216	K1	0.1	53.0028	53.0323	53.032			292	mg/L
138850001	SAMPLE		BAL216	W3	0.1	56.4649	56.4894	56.4899			250	mg/L
138850002	SAMPLE		BAL216	4E	0.1	50.3359	50.3609	50.3614			255	mg/L
138851001	SAMPLE		BAL216	J5	0.1	50.2746	50.3103	50.3108			362	mg/L
1200870992	DUP	138851001	BAL216	Z6	0.1	49.0903	49.1236	49.124			337	mg/L
138851002	SAMPLE		BAL216	2C	0.1	47.9793	48.0122	48.0127			334	mg/L
138851003	SAMPLE		BAL216	LC	0.1	57.5861	57.6206	57.6207			346	mg/L
1200870993	DUP	138851003	BAL216	Y4	0.03	60.408	60.4171	60.4176			320	mg/L
138851004	SAMPLE		BAL216	M5	0.1	53.5551	53.5889	53.5893			342	mg/L
138855012	SAMPLE		BAL216	K3	0.1	52.9654	52.9676	52.9681			27	mg/L
138903001	SAMPLE		BAL216	4P	0.1	54.2952	54.3466	54.347			518	mg/L
138905001	SAMPLE		BAL216	HD	0.1	50.99	50.9968	50.9972			72	mg/L
1200870994	DUP	138905001	BAL216	ZZ	0.1	53.6492	53.6561	53.6565			73	mg/L
138929001	SAMPLE		BAL216	A	0.065	51.3656	51.3807	51.381			236.92308	mg/L

1230

Comments: **All Weights are in Grams**

A) Result = (Final - Crucible)/Aliquot * 1000

B) Prep Factor = 0.5 / Aliquot

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS

Solids, Total Suspended

TSS/VSS LogBook

Batch: 435452.0
Analyst: JLD1
Date/Time: 21-JUN-2005 11:39
Procedure Code TSS160.2LF
Procedure Description EPA 160.2 Total Suspended Solids
Lab Sop GL-GC-E-012

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200871007	WTS050621	500	100.2

Sample Type	Sample Id	Rpd(%)
DUP	1200871004	18.181818181818
DUP	1200871005	0
DUP	1200871006	0
DUP	1200871888	0

Sample Id	Sample Type	Original Hsn	Instrument	Filter ID	Aliquot (L)	Initial Filter Wt Event 1	Initial Filter Wt Event 2	Final Filter Wt Event 1	Final Filter Wt Event 2	Final Filter Wt Event 3	Final Filter Wt Event 4	Result (mg/L)
1200871003	MB		BAL216	1	0.5	0.1044	0.1043	0.1046	0.1046			0.6
1200871007	LCS		BAL216	2	0.1	0.104	0.1039	0.154	0.154			501
138803002	SAMPLE		BAL216	13	0.25	0.1044	0.1045	0.1052	0.1051			2.4
1200871004	DUP	138803002	BAL216	14	0.25	0.1048	0.1049	0.1054	0.1054			2
138803003	SAMPLE		BAL216	15	0.5	0.1033	0.1032	0.104	0.104			1.6
138851003	SAMPLE		BAL216	16	0.35	0.1042	0.1042	0.1046	0.1046			1.14286
1200871005	DUP	138851003	BAL216	17	0.35	0.1052	0.1053	0.1057	0.1057			1.14286
138851004	SAMPLE		BAL216	18	0.5	0.1044	0.1044	0.1047	0.1047			0.6
138894001	SAMPLE		BAL216	19	0.5	0.1043	0.1042	0.1049	0.1048			1.2
1200871888	DUP	138894001	BAL216	24	0.5	0.1052	0.1052	0.1059	0.1058			1.2
138904001	SAMPLE		BAL216	20	0.7	0.1047	0.1048	0.1049	0.1048			0
138904003	SAMPLE		BAL216	21	0.13	0.1042	0.1042	0.1252	0.1252			161.5384
138905005	SAMPLE		BAL216	22	0.2	0.1056	0.1057	0.1057	0.1057			0
1200871006	DUP	138905005	BAL216	23	0.2	0.1054	0.1054	0.1054	0.1054			0

1232

Comments: **A) TSS** Result = (Final Filter Wt - Initial Filter Wt) * 1000 / Aliquot
B) VSS Result = (Initial Filter Wt - Final Filter Wt) * 1000 / Aliquot

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS
All Weights are in Grams

Specific Conductivity

Analytical Logbook

Conductivity and Salinity

Batch ID: **435656.0**
Analyst: **James Robinson**
Method: **EPA 120.1 (gk) SW846 9050A (jj)**
Lab SOP: **GL-GC-E-009 REV# 6**
Instrument: **Orion 160 Conductivity Meter**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO040709-06	25	mL
LCS	1200871417	Conductivity LCS	WCO040709-06	150	mL

Sample ID	Run Date	Dilution	Temperature (C)	Conductivity Result (umhos/cm)
1200871417 LCS	21-JUN-2005 00:12:47	1	23.4	1466
138659014 (gk)	21-JUN-2005 00:13:27	1	19.3	101.5
138675001 (gk)	21-JUN-2005 00:15:18	1	20.6	169.2
1200871412 DUP (138675001)	21-JUN-2005 00:16:20	1	20.4	170
138800001 (gk)	21-JUN-2005 00:20:08	1	20.3	209
CCV	21-JUN-2005 00:20:58	1	23.4	1466
1200871413 DUP (138800001)	21-JUN-2005 00:21:16	1	20.9	207
138800002 (gk)	21-JUN-2005 00:21:58	1	20.2	279
138851001 (jj)	21-JUN-2005 00:22:09	1	20	406
1200871414 DUP (138851001)	21-JUN-2005 00:23:07	1	20	407
138851002 (jj)	21-JUN-2005 00:23:56	1	19.6	403
CCV	21-JUN-2005 00:24:10	1	23.4	1466
138851003 (jj)	21-JUN-2005 00:24:51	1	20.1	408
1200871415 DUP (138851003)	21-JUN-2005 00:24:58	1	20.2	409
138851004 (jj)	21-JUN-2005 00:25:47	1	19.8	404
138905001 (gk)	21-JUN-2005 00:26:32	1	20.7	114.3
1200871416 DUP (138905001)	21-JUN-2005 00:27:19	1	20.4	113.9
CCV	21-JUN-2005 00:28:02	1	23.4	1466

Calibration Information:

Run Date: 20-JUN-05 23:56
Instrument: CON160
Analyst: JAR2

Standard	Observed	Theoretical		%Recovery
WCO050620-05	14.51	14.5	umhos/cm	100.07
WCO050620-03	1404	1413	umhos/cm	99.363
WCO050620-04	1866	1900	umhos/cm	98.211
WCO050620-08	24900	24800	umhos/cm	100.40
WCO050620-01	248	250	umhos/cm	99.2
WCO050620-02	741	750	umhos/cm	98.8

Comments:

1234

Total Hardness by Calculation

Calculation Data Logbook

Report run on: July 12, 2005 10:51 AM

Batch Id: **438102** **Sop:** **GL-GC-E-107**
Employee: **Neal Satterfield**
Instrument: **No instrument-calculation method.**

Samp Id	Sample Type	Parmname	Run Date	Calcium mg/L	Magnesium mg/L	Result	Units
138414001	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	21.5	6.20	79.2	mg/L
138414002	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	21.1	6.02	77.5	mg/L
138414003	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	21.4	5.89	77.6	mg/L
138414004	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	0.0208	0.00	0.0518	mg/L
138414005	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	11.3	4.00	44.8	mg/L
138414006	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	11.1	4.36	45.7	mg/L
138414007	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	0.0391	0.00	0.0977	mg/L
138414008	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	7.57	3.44	33.1	mg/L
138414009	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	0.030	0.00	0.0749	mg/L
138414010	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	0.0225	0.00	0.0563	mg/L
138675001	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	15.3	1.26	43.3	mg/L
138675002	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	15.0	1.26	42.8	mg/L
138788001	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	8.09	1.06	24.6	mg/L
138788002	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	20.5	1.20	56.1	mg/L
138788003	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	35.1	1.85	95.4	mg/L
138788004	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	8.20	1.20	25.4	mg/L
138788005	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	44.1	5.20	131	mg/L
138788006	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	48.1	4.58	139	mg/L
138799001	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	8.85	0.623	24.7	mg/L
138799002	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	8.06	0.711	23.1	mg/L
138800001	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	25.1	1.52	68.8	mg/L
138800002	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	37.1	0.336	94.0	mg/L
138800003	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	25.6	1.57	70.4	mg/L
138800004	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	36.7	0.282	92.7	mg/L
138851001	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	46.6	9.38	155	mg/L
138851002	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	45.9	9.21	152	mg/L
138851003	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	46.3	9.34	154	mg/L

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Calculation Data Logbook

Report run on: July 12, 2005 10:51 AM

Batch Id: **438102** **Sop:** **GL-GC-E-107**
Employee: **Neal Satterfield**
Instrument: **No instrument-calculation method.**

Samp Id	Sample Type	Parmname	Run Date	Calcium mg/L	Magnesium mg/L	Result	Units
138851004	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	46.1	9.27	153	mg/L
138905001	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	3.96	0.492	11.9	mg/L
138905005	SAMPLE	Hardness as CaCO3	29-JUN-2005 08:46	3.70	0.430	11.0	mg/L

Calculation: **(2.497 * Calcium) + (4.118 * Magnesium)**

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Total Kjeldahl Nitrogen

Prep LogBook

Analyst: DXB2 Verified by:_____

Batch: 436360

Lab SOP: GL-GC-E-071 REV# 5

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200872970	UTR040728-01.1	.2	mL
MS	1200872972	UTR040728-01.1	.2	mL
MS	1200872975	UTR040728-01.1	.2	mL
MS	1200872976	UTR040728-01.1	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200872969		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
LCS	1200872970		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
SAMPLE	138850001		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
DUP	1200872973	138850001	EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
MS	1200872975	138850001	EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
SAMPLE	138850002		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851003		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
DUP	1200872971	138851003	EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
MS	1200872972	138851003	EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851004		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	GROUND WATER
SAMPLE	138903001		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WATER
DUP	1200872974	138903001	EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WATER
MS	1200872976	138903001	EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WATER
SAMPLE	138990007		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WASTE WATER
SAMPLE	138990008		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WASTE WATER
SAMPLE	138990009		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WASTE WATER
SAMPLE	139056001		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WASTE WATER
SAMPLE	139056002		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WASTE WATER
SAMPLE	139056003		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WASTE WATER
SAMPLE	139056004		EPA 351.2 Prep	23-JUN-2005 10:58	20 mL	20 mL	1	WASTE WATER

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Reagent/Solvent Lot ID	Amount	Description
310709-C	5 mL	TKN/PO4 Digestion Solution

Comments

This is runlog Lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	6/24/2005 11:24:18	OM_6-24-2005_11-22-46
3.0 ppm Std.		1	jxm	6/24/2005 11:25:06	OM_6-24-2005_11-22-46
1.0 ppm Std.		1	jxm	6/24/2005 11:25:55	OM_6-24-2005_11-22-46
0.5 ppm Std		1	jxm	6/24/2005 11:26:46	OM_6-24-2005_11-22-46
0.1 ppm Std		1	jxm	6/24/2005 11:27:37	OM_6-24-2005_11-22-46
ICAL-00		1	jxm	6/24/2005 11:28:29	OM_6-24-2005_11-22-46
ICV		1	jxm	6/24/2005 11:30:26	OM_6-24-2005_11-22-46
ICB		1	jxm	6/24/2005 11:32:21	OM_6-24-2005_11-22-46
138851003	436361	1	jxm	6/24/2005 11:39:19	OM_6-24-2005_11-22-46
1200872971	436361	1	jxm	6/24/2005 11:40:08	OM_6-24-2005_11-22-46
1200872972	436361	1	jxm	6/24/2005 11:40:57	OM_6-24-2005_11-22-46
CCV		1	jxm	6/24/2005 11:42:35	OM_6-24-2005_11-22-46
CCB		1	jxm	6/24/2005 11:44:31	OM_6-24-2005_11-22-46
138903001	436361	1	jxm	6/24/2005 11:46:25	OM_6-24-2005_11-22-46
1200872974	436361	1	jxm	6/24/2005 11:47:13	OM_6-24-2005_11-22-46
1200872976	436361	1	jxm	6/24/2005 11:48:01	OM_6-24-2005_11-22-46
CCV		1	jxm	6/24/2005 11:54:42	OM_6-24-2005_11-22-46
CCB		1	jxm	6/24/2005 11:56:38	OM_6-24-2005_11-22-46
138850001	436361	1	jxm	6/24/2005 11:58:33	OM_6-24-2005_11-22-46
1200872975	436361	1	jxm	6/24/2005 12:00:14	OM_6-24-2005_11-22-46
1200872973	436361	1	jxm	6/24/2005 12:01:52	OM_6-24-2005_11-22-46
CCV		1	jxm	6/24/2005 12:03:33	OM_6-24-2005_11-22-46
CCB		1	jxm	6/24/2005 12:05:30	OM_6-24-2005_11-22-46

Author: jxm 6/24/05

Date : 6/24/2005

Original Run Filename: OM_6-24-2005_11-22-46.OMN created 6/24/2005 11:22:46
Original Run Author's Signature: [jxm]
Current Run Filename: OM_6-24-2005_11-22-46.OMN last modified 6/24/2005 12:06:40
Current Run Author's Signature: [jxm]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Channel 1 TKN Area (Vs)	Detection Time	ADF	MDF	Description
WTR050624-01	1	S9	5.000	6.767	6/24/2005@11:24:18			5.0 ppm Std.
WTR050624-02	1	S10	3.000	3.897	6/24/2005@11:25:06			3.0 ppm Std.
WTR050624-04	1	S11	1.000	1.296	6/24/2005@11:25:55			1.0 ppm Std.
WTR050624-05	1	S12	0.500	0.696	6/24/2005@11:26:46			0.5 ppm Std
WTR050624-06	1	S13	0.100	0.127	6/24/2005@11:27:37			0.1 ppm Std
WTR050624-10 0.0 ppm	1	S15	0.000	-0.028	6/24/2005@11:28:29			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99972 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR050624-08 ICV	1	S16	1.005	1.325	6/24/2005@11:30:26			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.005 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.005 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	4.251e-4	-0.027	6/24/2005@11:32:21			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			4.251e-4 < 0.050					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.251e-4 > -0.050					
Message			ICB Passed					
Action			Continue					
1200872969|436361|MB	1	1	-0.111	-0.178	6/24/2005@11:34:16			
1200872970||LCS	1	2	1.069	1.410	6/24/2005@11:35:07			
138850001	1	3	0.242	0.298	6/24/2005@11:35:58			
1200872973||DUP	1	4	0.140	0.160	6/24/2005@11:36:49			Report & Reanalyze
1200872975||MS	1	5	0.374	0.475	6/24/2005@11:37:39			
138850002	1	6	-0.098	-0.160	6/24/2005@11:38:29			
138851003	1	7	0.203	0.246	6/24/2005@11:39:19			
1200872971||DUP	1	8	0.170	0.200	6/24/2005@11:40:08			
1200872972||MS	1	9	1.350	1.790	6/24/2005@11:40:57			
138851004	1	10	0.220	0.269	6/24/2005@11:41:46			
WTR050624-04 CCV	1	S11	1.031	1.360	6/24/2005@11:42:35			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.031 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.031 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	0.007	-0.018	6/24/2005@11:44:31			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.007 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								

6/30/05

		Result:	0.007 > -0.050					
		Message	CCB Passed					
		Action	Continue					
138903001	1	11	1.163	1.538	6/24/2005@11:46:25			
1200872974||DUP	1	12	1.096	1.448	6/24/2005@11:47:13			
1200872976||MS	1	13	2.334	3.114	6/24/2005@11:48:01			
138990007	1	14	0.740	0.968	6/24/2005@11:48:49			
138990008	1	15	22.839	30.717	6/24/2005@11:49:37	- Dilution Needed		
138990009	1	16	0.021	-3.397e-4	6/24/2005@11:50:26			
139056001	1	17	0.499	0.644	6/24/2005@11:51:18			
139056002	1	18	0.704	0.919	6/24/2005@11:52:09			
139056003	1	19	0.473	0.609	6/24/2005@11:53:01			
139056004	1	20	0.552	0.716	6/24/2005@11:53:51			
WTR050624-04 CCV	1	S11	1.053	1.389	6/24/2005@11:54:42			CCV
		Known Conc:	1.000					
			DQM Test: > + Concentration Limit					
		Result:	1.053 < 1.104					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.053 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.005	-0.035	6/24/2005@11:56:38			CCB
		Known Conc:	0.000					
			DQM Test: > + Concentration Limit					
		Result:	-0.005 < 0.050					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.005 > -0.050					
		Message	CCB Passed					
		Action	Continue					
138850001	1	3	0.202	0.244	6/24/2005@11:58:33			
1200872973||DUP	1	4	0.057	0.048	6/24/2005@11:59:24			
1200872974||MS	1	5	1.459	1.937	6/24/2005@12:00:14			
138990008 5 JXM 6/24/05	1	15	2.373	3.166	6/24/2005@12:01:03		10.00	
~~Sample37~~ 1200872973||Dup	1	4	0.176	0.209	6/24/2005@12:01:52			
1200872973||DUP	1	4	0.020	-9.986e-4	6/24/2005@12:02:43			
WTR050624-04 CCV	1	S11	1.049	1.385	6/24/2005@12:03:33			CCV
		Known Conc:	1.000					
			DQM Test: > + Concentration Limit					
		Result:	1.049 < 1.104					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.049 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.008	-0.038	6/24/2005@12:05:30			CCB
		Known Conc:	0.000					
			DQM Test: > + Concentration Limit					
		Result:	-0.008 < 0.050					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.008 > -0.050					
		Message	CCB Passed					
		Action	Continue					

6/28/05

Author: jxm Date : 6/24/2005

Channel 1 (TKN) : Current View

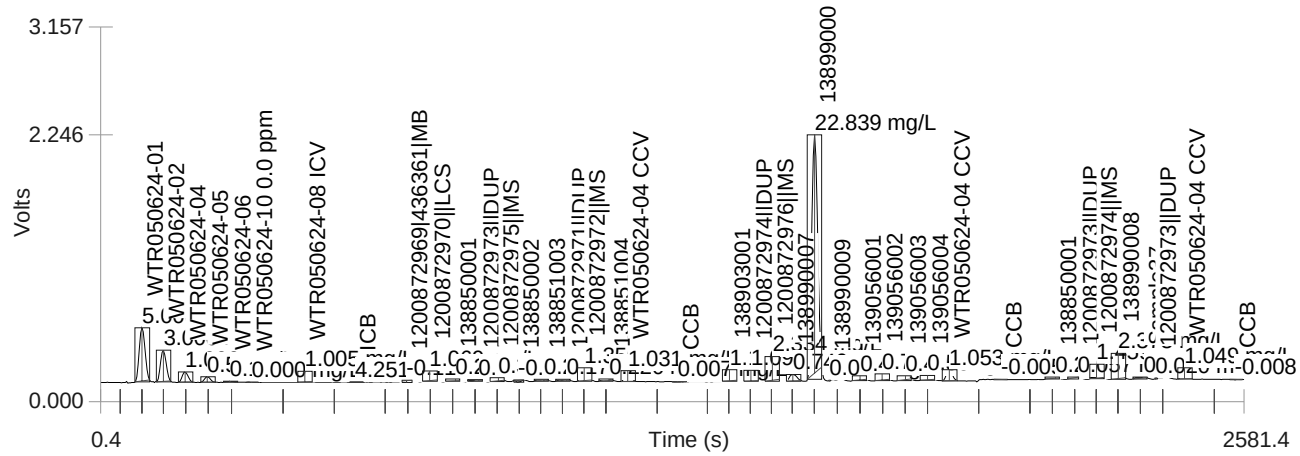
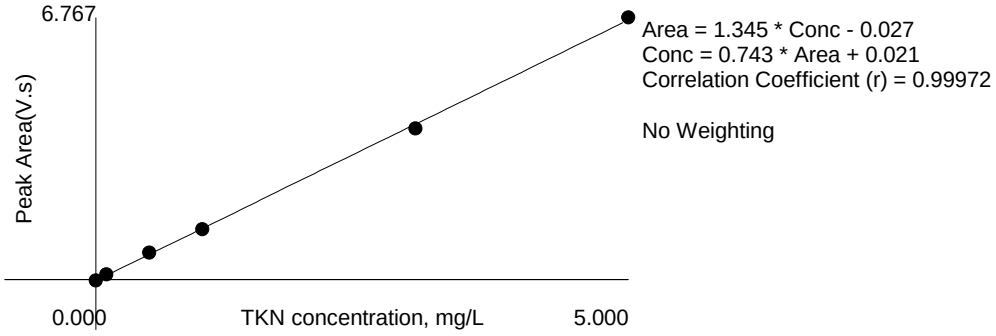


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	6.767	0.449	-1.0	6/24/2005	11:25:26
2	3.000	1	3.897	0.264	2.8	6/24/2005	11:26:14
3	1.000	1	1.296	0.087	1.7	6/24/2005	11:27:04
4	0.500	1	0.696	0.047	-7.7	6/24/2005	11:27:54
5	0.100	1	0.127	0.008	-17.6	6/24/2005	11:28:45
6	0.000	1	-0.028	-0.002		6/24/2005	11:29:37

Figure 1: TKN



This is runlog Lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	6/24/2005 16:04:19	OM_6-24-2005_16-02-47
3.0 ppm Std.		1	jxm	6/24/2005 16:05:10	OM_6-24-2005_16-02-47
1.0 ppm Std.		1	jxm	6/24/2005 16:06:00	OM_6-24-2005_16-02-47
0.5 ppm Std		1	jxm	6/24/2005 16:06:50	OM_6-24-2005_16-02-47
0.1 ppm Std		1	jxm	6/24/2005 16:07:41	OM_6-24-2005_16-02-47
ICAL-00		1	jxm	6/24/2005 16:08:34	OM_6-24-2005_16-02-47
ICV		1	jxm	6/24/2005 16:10:31	OM_6-24-2005_16-02-47
ICB		1	jxm	6/24/2005 16:12:26	OM_6-24-2005_16-02-47
138903001	436361	1	jxm	6/24/2005 16:14:22	OM_6-24-2005_16-02-47
1200872974	436361	1	jxm	6/24/2005 16:15:13	OM_6-24-2005_16-02-47
1200872976	436361	1	jxm	6/24/2005 16:16:04	OM_6-24-2005_16-02-47
CCV		1	jxm	6/24/2005 16:16:54	OM_6-24-2005_16-02-47
CCB		1	jxm	6/24/2005 16:18:50	OM_6-24-2005_16-02-47

Author: jxm Date : 6/24/2005

Original Run Filename: OM_6-24-2005_16-02-47.OMN created 6/24/2005 16:02:47
Original Run Author's Signature: [jxm]
Current Run Filename: OM_6-24-2005_16-02-47.OMN last modified 6/24/2005 16:20:00
Current Run Author's Signature: [jxm]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR050624-01	1	S9	5.000	8.733	6/24/2005@16:04:19			5.0 ppm Std.
WTR050624-02	1	S10	3.000	5.121	6/24/2005@16:05:10			3.0 ppm Std.
WTR050624-04	1	S11	1.000	1.620	6/24/2005@16:06:00			1.0 ppm Std.
WTR050624-05	1	S12	0.500	0.863	6/24/2005@16:06:50			0.5 ppm Std
WTR050624-06	1	S13	0.100	0.163	6/24/2005@16:07:41			0.1 ppm Std
WTR050624-10 0.0 ppm	1	S15	0.000	-0.049	6/24/2005@16:08:34			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99987 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR050624-08 ICV	1	S16	0.995	1.684	6/24/2005@16:10:31			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.995 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.995 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	0.009	-0.039	6/24/2005@16:12:26			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.009 < 0.050					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.009 > -0.050					
Message			ICB Passed					
Action			Continue					
138903001|436361|	1	1	1.055	1.788	6/24/2005@16:14:22			
1200872974||DUP	1	2	1.070	1.816	6/24/2005@16:15:13			
1200872976||MS	1	3	2.183	3.761	6/24/2005@16:16:04			
WTR050624-04 CCV	1	S11	0.988	1.671	6/24/2005@16:16:54			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.988 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.988 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	0.007	-0.042	6/24/2005@16:18:50			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.007 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.007 > -0.050					
Message			CCB Passed					
Action			Continue					

Author: jxm Date : 6/24/2005

Channel 1 (TKN) : Current View

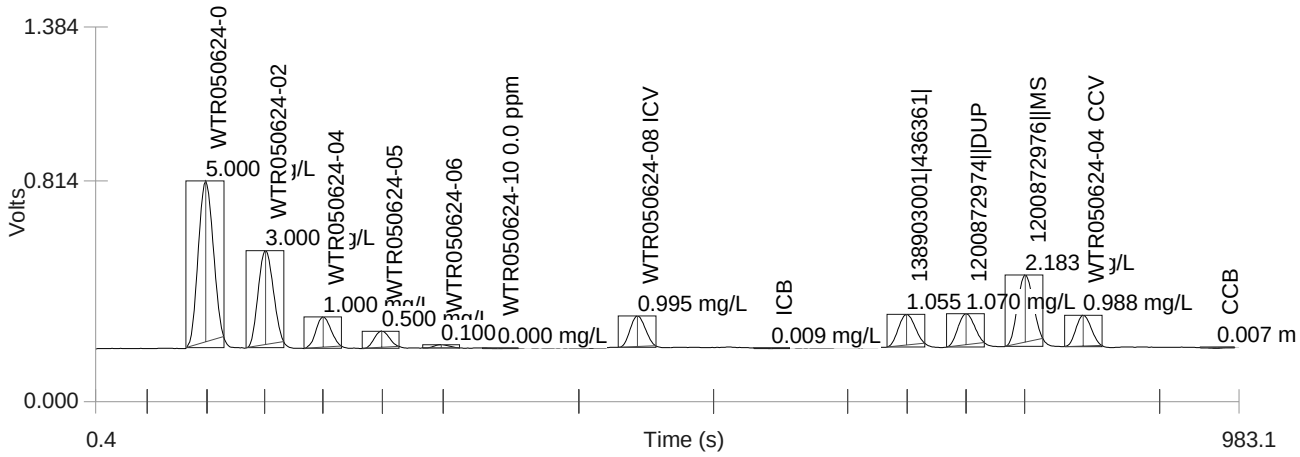
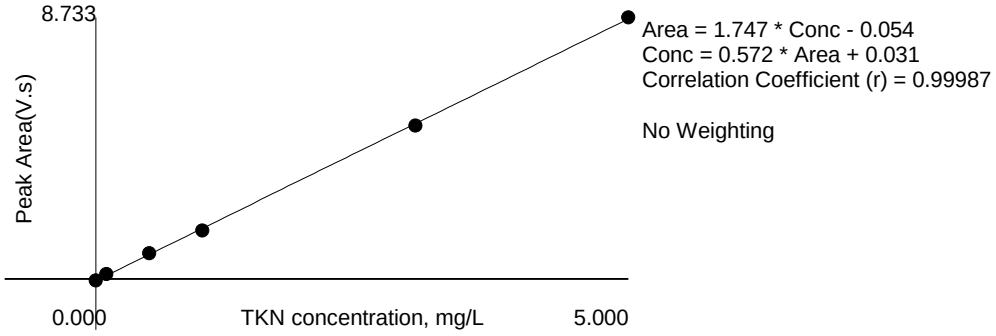


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	8.733	0.594	-0.6	6/24/2005	16:05:27
2	3.000	1	5.121	0.347	1.3	6/24/2005	16:06:19
3	1.000	1	1.620	0.112	4.3	6/24/2005	16:07:08
4	0.500	1	0.863	0.059	-5.2	6/24/2005	16:07:58
5	0.100	1	0.163	0.012	-35.3	6/24/2005	16:08:50
6	0.000	1	-0.049	-0.003		6/24/2005	16:09:42

Figure 1: TKN



Total Phosphorus

Prep LogBook

Analyst: GXA2 Verified by:_____

Batch: 435999

Lab SOP: GL-GC-E-071 REV# 5

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200872171	UTR040728-01.1	.2	mL
MS	1200872173	UTR040728-01.1	.2	mL
MS	1200872176	UTR040728-01.1	.2	mL
MS	1200872177	UTR040728-01.1	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200872170		EPA 365.4 Prep	22-JUN-2005 17:35	20 mL	20 mL	1	WATER
LCS	1200872171		EPA 365.4 Prep	22-JUN-2005 17:35	20 mL	20 mL	1	WATER
SAMPLE	138529001		EPA 365.4 Prep	22-JUN-2005 17:35	20 mL	20 mL	1	WATER
SAMPLE	138529002		EPA 365.4 Prep	22-JUN-2005 17:35	20 mL	20 mL	1	WATER
SAMPLE	138529003		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WATER
SAMPLE	138529004		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WATER
SAMPLE	138529005		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WATER
SAMPLE	138529006		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WATER
SAMPLE	138576001		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WATER
DUP	1200872172	138576001	EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WATER
MS	1200872173	138576001	EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WATER
SAMPLE	138675001		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
SAMPLE	138800001		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
DUP	1200872174	138800001	EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
MS	1200872176	138800001	EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
SAMPLE	138800002		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851001		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851002		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851003		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
DUP	1200872175	138851003	EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
MS	1200872177	138851003	EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
SAMPLE	138851004		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	GROUND WATER
SAMPLE	138990010		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WASTE WATER
SAMPLE	138990011		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WASTE WATER
SAMPLE	138990012		EPA 365.4 Prep	22-JUN-2005 17:36	20 mL	20 mL	1	WASTE WATER

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Reagent/Solvent Lot ID	Amount	Description
310709-C	5 mL	TKN/PO4 Digestion Solution

Comments

This is runlog Lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	6/23/2005 12:23:29	OM_6-23-2005_12-22-02
3.0 ppm Std.		1	jxm	6/23/2005 12:24:17	OM_6-23-2005_12-22-02
1.0 ppm Std.		1	jxm	6/23/2005 12:25:06	OM_6-23-2005_12-22-02
0.5 ppm Std		1	jxm	6/23/2005 12:25:55	OM_6-23-2005_12-22-02
0.1 ppm Std		1	jxm	6/23/2005 12:26:46	OM_6-23-2005_12-22-02
0.05 ppm Std		1	jxm	6/23/2005 12:27:37	OM_6-23-2005_12-22-02
ICAL-00		1	jxm	6/23/2005 12:28:29	OM_6-23-2005_12-22-02
ICV		1	jxm	6/23/2005 12:30:34	OM_6-23-2005_12-22-02
ICB		1	jxm	6/23/2005 12:32:38	OM_6-23-2005_12-22-02
1200871503	435701	1	jxm	6/23/2005 12:34:42	OM_6-23-2005_12-22-02
1200871504	435701	1	jxm	6/23/2005 12:35:33	OM_6-23-2005_12-22-02
138528003	435701	1	jxm	6/23/2005 12:36:24	OM_6-23-2005_12-22-02
138528004	435701	1	jxm	6/23/2005 12:37:16	OM_6-23-2005_12-22-02
138659001	435701	1	jxm	6/23/2005 12:38:06	OM_6-23-2005_12-22-02
1200871886	435701	1	jxm	6/23/2005 12:38:56	OM_6-23-2005_12-22-02
1200871887	435701	1	jxm	6/23/2005 12:39:46	OM_6-23-2005_12-22-02
138659002	435701	1	jxm	6/23/2005 12:40:35	OM_6-23-2005_12-22-02
138659003	435701	1	jxm	6/23/2005 12:41:25	OM_6-23-2005_12-22-02
138659004	435701	1	jxm	6/23/2005 12:42:14	OM_6-23-2005_12-22-02
CCV		1	jxm	6/23/2005 12:43:03	OM_6-23-2005_12-22-02
CCB		1	jxm	6/23/2005 12:45:08	OM_6-23-2005_12-22-02
138659005	435701	1	jxm	6/23/2005 12:47:10	OM_6-23-2005_12-22-02
138659014	435701	1	jxm	6/23/2005 12:47:59	OM_6-23-2005_12-22-02
138781018	435701	1	jxm	6/23/2005 12:48:47	OM_6-23-2005_12-22-02
138781019	435701	1	jxm	6/23/2005 12:49:35	OM_6-23-2005_12-22-02
138781020	435701	1	jxm	6/23/2005 12:50:22	OM_6-23-2005_12-22-02
138894001	435701	1	jxm	6/23/2005 12:51:12	OM_6-23-2005_12-22-02
1200871508	435701	1	jxm	6/23/2005 12:52:04	OM_6-23-2005_12-22-02
1200871509	435701	1	jxm	6/23/2005 12:52:55	OM_6-23-2005_12-22-02
138904001	435701	1	jxm	6/23/2005 12:53:46	OM_6-23-2005_12-22-02
138905001	435701	1	jxm	6/23/2005 12:54:37	OM_6-23-2005_12-22-02
CCV		1	jxm	6/23/2005 12:55:27	OM_6-23-2005_12-22-02
CCB		1	jxm	6/23/2005 12:57:32	OM_6-23-2005_12-22-02
1200871505	435701	1	jxm	6/23/2005 12:59:36	OM_6-23-2005_12-22-02
1200871506	435701	1	jxm	6/23/2005 13:00:26	OM_6-23-2005_12-22-02
138943001	435701	1	jxm	6/23/2005 13:01:16	OM_6-23-2005_12-22-02
138943002	435701	1	jxm	6/23/2005 13:02:05	OM_6-23-2005_12-22-02
138950001	435701	1	jxm	6/23/2005 13:02:55	OM_6-23-2005_12-22-02
138950002	435701	1	jxm	6/23/2005 13:03:44	OM_6-23-2005_12-22-02
138951001	435701	1	jxm	6/23/2005 13:04:33	OM_6-23-2005_12-22-02
138951002	435701	1	jxm	6/23/2005 13:05:21	OM_6-23-2005_12-22-02
1200872170	436000	1	jxm	6/23/2005 13:06:09	OM_6-23-2005_12-22-02
1200872171	436000	1	jxm	6/23/2005 13:06:58	OM_6-23-2005_12-22-02
CCV		1	jxm	6/23/2005 13:07:46	OM_6-23-2005_12-22-02
CCB		1	jxm	6/23/2005 13:09:51	OM_6-23-2005_12-22-02
138529001	436000	1	jxm	6/23/2005 13:11:55	OM_6-23-2005_12-22-02
138529002	436000	1	jxm	6/23/2005 13:12:47	OM_6-23-2005_12-22-02
138529003	436000	1	jxm	6/23/2005 13:13:39	OM_6-23-2005_12-22-02
138529004	436000	1	jxm	6/23/2005 13:14:30	OM_6-23-2005_12-22-02
138529005	436000	1	jxm	6/23/2005 13:15:22	OM_6-23-2005_12-22-02
138529006	436000	1	jxm	6/23/2005 13:16:13	OM_6-23-2005_12-22-02
138576001	436000	1	jxm	6/23/2005 13:17:03	OM_6-23-2005_12-22-02
1200872172	436000	1	jxm	6/23/2005 13:17:54	OM_6-23-2005_12-22-02
1200872173	436000	1	jxm	6/23/2005 13:18:43	OM_6-23-2005_12-22-02
138675001	436000	1	jxm	6/23/2005 13:19:33	OM_6-23-2005_12-22-02
CCV		1	jxm	6/23/2005 13:20:23	OM_6-23-2005_12-22-02
CCB		1	jxm	6/23/2005 13:22:27	OM_6-23-2005_12-22-02
138800001	436000	1	jxm	6/23/2005 13:24:30	OM_6-23-2005_12-22-02

1200872174	436000	1	jxm	6/23/2005 13:25:19 OM_6-23-2005_12-22-02
1200872176	436000	1	jxm	6/23/2005 13:26:07 OM_6-23-2005_12-22-02
138800002	436000	1	jxm	6/23/2005 13:26:56 OM_6-23-2005_12-22-02
138851001	436000	1	jxm	6/23/2005 13:27:45 OM_6-23-2005_12-22-02
138851002	436000	1	jxm	6/23/2005 13:28:34 OM_6-23-2005_12-22-02
138851003	436000	1	jxm	6/23/2005 13:29:27 OM_6-23-2005_12-22-02
1200872175	436000	1	jxm	6/23/2005 13:30:19 OM_6-23-2005_12-22-02
1200872177	436000	1	jxm	6/23/2005 13:31:10 OM_6-23-2005_12-22-02
138851004	436000	1	jxm	6/23/2005 13:32:02 OM_6-23-2005_12-22-02
CCV		1	jxm	6/23/2005 13:32:51 OM_6-23-2005_12-22-02
CCB		1	jxm	6/23/2005 13:34:57 OM_6-23-2005_12-22-02
138990010	436000	1	jxm	6/23/2005 13:37:01 OM_6-23-2005_12-22-02
138990011	436000	1	jxm	6/23/2005 13:37:53 OM_6-23-2005_12-22-02
138990012	436000	1	jxm	6/23/2005 13:38:44 OM_6-23-2005_12-22-02
138894001	435701	10	jxm	6/23/2005 13:39:35 OM_6-23-2005_12-22-02
1200871508	435701	10	jxm	6/23/2005 13:40:27 OM_6-23-2005_12-22-02
1200871509	435701	10	jxm	6/23/2005 13:41:19 OM_6-23-2005_12-22-02
138951001	435701	50	jxm	6/23/2005 13:42:08 OM_6-23-2005_12-22-02
138951002	435701	50	jxm	6/23/2005 13:42:57 OM_6-23-2005_12-22-02
138990011	436000	5	jxm	6/23/2005 13:43:46 OM_6-23-2005_12-22-02
CCV		1	jxm	6/23/2005 13:44:37 OM_6-23-2005_12-22-02
CCB		1	jxm	6/23/2005 13:46:41 OM_6-23-2005_12-22-02

Author: jxm Date : 6/23/2005

Original Run Filename: OM_6-23-2005_12-22-02.OMN created 6/23/2005 12:22:02
Original Run Author's Signature: [jxm]
Current Run Filename: OM_6-23-2005_12-22-02.OMN last modified 6/23/2005 13:48:03
Current Run Author's Signature: [jxm]
Description: Total Phosphorus EPA Method 365.4 GEL SOP:GL-GC-E-103 Rev 0
Detection wavelength: 880 nM

Sample	Rep.	Cup No.	Channel 1 TLPOS Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR050623-01	1	S1	5.000	23.631	6/23/2005@12:23:29			5.0 ppm Std.
WTR050623-02	1	S2	3.000	13.991	6/23/2005@12:24:17			3.0 ppm Std.
WTR050623-04	1	S3	1.000	4.591	6/23/2005@12:25:06			1.0 ppm Std.
WTR050623-05	1	S4	0.500	2.341	6/23/2005@12:25:55			0.5 ppm Std
WTR050623-06	1	S5	0.100	0.457	6/23/2005@12:26:46			0.1 ppm Std
WTR050623-07	1	S6	0.050	0.250	6/23/2005@12:27:37			0.05 ppm Std
WTR050623-10 0.0	1	S7	0.000	0.054	6/23/2005@12:28:29			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99996 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR050623-08 ICV	1	S8	1.053	4.938	6/23/2005@12:30:34			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.053 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.053 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S7	0.015	0.049	6/23/2005@12:32:38			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.015 < 0.050					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.015 > -0.050					
Message			ICB Passed					
Action			Continue					
1200871503|435701|MB	1	1	0.017	0.059	6/23/2005@12:34:42			
1200871504||LCS	1	2	1.008	4.729	6/23/2005@12:35:33			
138528003	1	3	0.055	0.235	6/23/2005@12:36:24			
138528004	1	4	0.919	4.306	6/23/2005@12:37:16			
138659001	1	5	0.107	0.479	6/23/2005@12:38:06			
1200871886||DUP	1	6	0.108	0.488	6/23/2005@12:38:56			
1200871887||MS	1	7	1.097	5.147	6/23/2005@12:39:46			
138659002	1	8	0.104	0.466	6/23/2005@12:40:35			
138659003	1	9	0.113	0.508	6/23/2005@12:41:25			
138659004	1	10	0.125	0.568	6/23/2005@12:42:14			
WTR050623-04 CCV	1	S3	1.001	4.696	6/23/2005@12:43:03			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.001 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.001 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	0.015	0.047	6/23/2005@12:45:08			CCB
Known Conc:			0.000					

DQM Test: > + Concentration Limit								
		Result:	0.015 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.015 > -0.050					
		Message	CCB Passed					
		Action	Continue					
138659005	1	11	0.071	0.309	6/23/2005@12:47:10			
138659014	1	12	0.076	0.333	6/23/2005@12:47:59			
138781018	1	13	0.098	0.440	6/23/2005@12:48:47			
138781019	1	14	0.077	0.342	6/23/2005@12:49:35			
138781020	1	15	0.096	0.431	6/23/2005@12:50:22			
138894001	1	16	10.642	50.127	6/23/2005@12:51:12			
1200871508||DUP	1	17	10.549	49.692	6/23/2005@12:52:04			
1200871509||MS	1	18	11.449	53.931	6/23/2005@12:52:55			
138904001	1	19	1.151	5.399	6/23/2005@12:53:46			
138905001	1	20	0.324	1.504	6/23/2005@12:54:37			
WTR050623-04 CCV	1	S3	0.994	4.661	6/23/2005@12:55:27			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.994 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.994 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.016	0.051	6/23/2005@12:57:32			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.016 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.016 > -0.050					
		Message	CCB Passed					
		Action	Continue					
1200871505||DUP	1	21	0.306	1.418	6/23/2005@12:59:36			
1200871506||MS	1	22	1.374	6.452	6/23/2005@13:00:26			
138943001	1	23	0.083	0.366	6/23/2005@13:01:16			
138943002	1	24	0.493	2.299	6/23/2005@13:02:05			
138950001	1	25	0.989	4.637	6/23/2005@13:02:55			
138950002	1	26	0.512	2.390	6/23/2005@13:03:44			
138951001	1	27	49.404	232.800	6/23/2005@13:04:33			
138951002	1	28	51.926	244.685	6/23/2005@13:05:21			
1200872170|436000|MB	1	29	0.005	0.000	6/23/2005@13:06:09			
1200872171||LCS	1	30	0.945	4.429	6/23/2005@13:06:58			
WTR050623-04 CCV	1	S3	0.942	4.418	6/23/2005@13:07:46			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.942 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.942 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.016	0.054	6/23/2005@13:09:51			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.016 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.016 > -0.050					
		Message	CCB Passed					
		Action	Continue					

138529001	1	31	2.398	11.276	6/23/2005@13:11:55			
138529002	1	32	0.431	2.008	6/23/2005@13:12:47			
138529003	1	33	0.402	1.874	6/23/2005@13:13:39			
138529004	1	34	0.589	2.752	6/23/2005@13:14:30			
138529005	1	35	0.254	1.172	6/23/2005@13:15:22			
138529006	1	36	0.278	1.287	6/23/2005@13:16:13			
138576001	1	37	1.414	6.642	6/23/2005@13:17:03			
1200872172||DUP	1	38	1.382	6.491	6/23/2005@13:17:54			
1200872173||MS	1	39	2.343	11.020	6/23/2005@13:18:43			
138675001	1	40	0.005	0.000	6/23/2005@13:19:33			
WTR050623-04 CCV	1	S3	0.945	4.429	6/23/2005@13:20:23			CCV
	Known Conc:		1.000					
DQM Test: > + Concentration Limit								
	Result:		0.945 < 1.104					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.945 > 0.895					
	Message		CCV Passed					
	Action		Continue					
CCB	1	S7	0.018	0.061	6/23/2005@13:22:27			CCB
	Known Conc:		0.000					
DQM Test: > + Concentration Limit								
	Result:		0.018 < 0.050					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.018 > -0.050					
	Message		CCB Passed					
	Action		Continue					
138800001	1	41	0.165	0.756	6/23/2005@13:24:30			
1200872174||DUP	1	42	0.163	0.744	6/23/2005@13:25:19			
1200872176||MS	1	43	1.149	5.391	6/23/2005@13:26:07			
138800002	1	44	0.278	1.287	6/23/2005@13:26:56			
138851001	1	45	0.076	0.333	6/23/2005@13:27:45			
138851002	1	46	0.100	0.449	6/23/2005@13:28:34			
138851003	1	47	0.085	0.376	6/23/2005@13:29:27			
1200872175||DUP	1	48	0.098	0.439	6/23/2005@13:30:19			
1200872177||MS	1	49	1.045	4.904	6/23/2005@13:31:10			
138851004	1	50	0.088	0.393	6/23/2005@13:32:02			
WTR050623-04 CCV	1	S3	0.952	4.463	6/23/2005@13:32:51			CCV
	Known Conc:		1.000					
DQM Test: > + Concentration Limit								
	Result:		0.952 < 1.104					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.952 > 0.895					
	Message		CCV Passed					
	Action		Continue					
CCB	1	S7	0.014	0.043	6/23/2005@13:34:57			CCB
	Known Conc:		0.000					
DQM Test: > + Concentration Limit								
	Result:		0.014 < 0.050					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		0.014 > -0.050					
	Message		CCB Passed					
	Action		Continue					
138990010	1	51	0.268	1.241	6/23/2005@13:37:01			
138990011	1	52	6.971	32.830	6/23/2005@13:37:53			
138990012	1	53	0.005	0.000	6/23/2005@13:38:44			
138894001|435701|	1	16	1.026	4.810	6/23/2005@13:39:35		10.00	
1200871508||DUP	1	17	0.986	4.622	6/23/2005@13:40:27		10.00	
1200871509||MS	1	18	1.086	5.093	6/23/2005@13:41:19		10.00	
138951001	1	27	1.557	7.314	6/23/2005@13:42:08		50.00	
138951002	1	28	1.833	8.615	6/23/2005@13:42:57		50.00	

138990011|436000|	1	52	1.445	6.784	6/23/2005@13:43:46		5.00	
WTR050623-04 CCV	1	S3	0.944	4.426	6/23/2005@13:44:37			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.944 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.944 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	0.014	0.043	6/23/2005@13:46:41			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.014 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.014 > -0.050					
Message			CCB Passed					
Action			Continue					

Channel 1 (TLPOS) : Current View

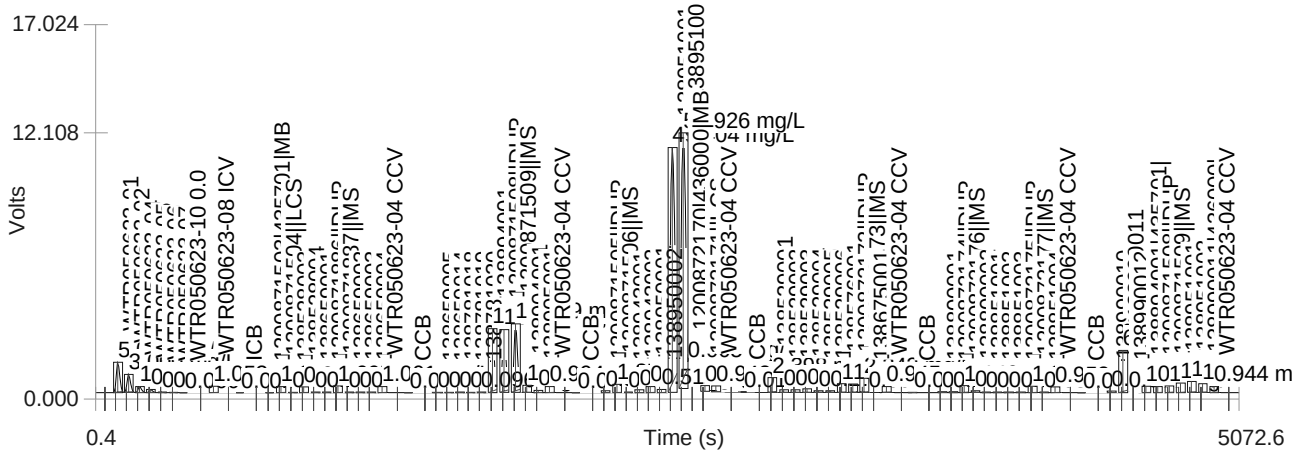
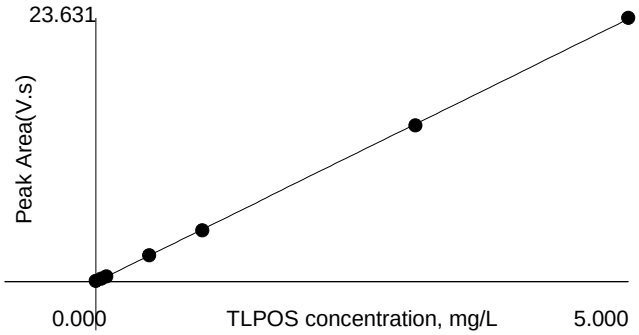


Table 1: TLPOS

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	23.631	1.347	-0.4	6/23/2005	12:24:50
2	3.000	1	13.991	0.803	0.9	6/23/2005	12:25:37
3	1.000	1	4.591	0.265	2.1	6/23/2005	12:26:26
4	0.500	1	2.341	0.135	-0.3	6/23/2005	12:27:15
5	0.100	1	0.457	0.029	-1.8	6/23/2005	12:28:06
6	0.050	1	0.250	0.017	-17.1	6/23/2005	12:28:57
7	0.000	1	0.054	0.005		6/23/2005	12:29:49

Author: jxm Date : 6/23/2005

Figure 1: TLPOS



Area = 4.712 * Conc - 0.023
Conc = 0.212 * Area + 0.005
Correlation Coefficient (r) = 0.99996

No Weighting

pH

pH / Corrosivity LogBook

Analyst: JAR2
Batch: 435123
Lab SOP: GL-GC-E-008 REV# 9
Description: pH

Type	Sample Id	Serial Number	Description
CCV	240	UPH297361-01	PH 7 BUFFER FOR PH
LCS	1200870236	UPH305149-02	LCS BUFFER SOLUTION

Type	Sample id	Parent Sample Id	Matrix	Method	Run Date	Run Time	Parmname	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
LCS	1200870236		Ground Water		17-JUN-05	18:01	pH	7.03	22.1'C	7	100.429	
LCS	1200870236		Ground Water		17-JUN-05	18:01	pH 2	7.03	22.1'C	7	100.429	
SAMPLE	138851001		Ground Water	EPA 150.1	17-JUN-05	18:03	pH	7.05	20.4'C			
SAMPLE	138851001		Ground Water	EPA 150.1	17-JUN-05	18:03	pH 2	7.05	20.4'C			
DUP	1200870234	138851001	Ground Water	EPA 150.1	17-JUN-05	18:05	pH	7.06	20.4'C			.142
DUP	1200870234	138851001	Ground Water	EPA 150.1	17-JUN-05	18:05	pH 2	7.06	20.4'C			.142
SAMPLE	138851002		Ground Water	EPA 150.1	17-JUN-05	18:06	pH	7.07	21.4'C			
SAMPLE	138851002		Ground Water	EPA 150.1	17-JUN-05	18:06	pH 2	7.08	21.4'C			
SAMPLE	138851003		Ground Water	EPA 150.1	17-JUN-05	18:09	pH	1.78	20.1'C			
SAMPLE	138851003		Ground Water	EPA 150.1	17-JUN-05	18:09	pH 2	1.78	20.1'C			
CCV					17-JUN-05	18:10	pH	7.03	22.1'C			
CCV					17-JUN-05	18:10	pH 2	7.03	22.1'C			
DUP	1200870235	138851003	Ground Water	EPA 150.1	17-JUN-05	18:11	pH	1.77	20.1'C			.563
DUP	1200870235	138851003	Ground Water	EPA 150.1	17-JUN-05	18:11	pH 2	1.77	20.1'C			.563
SAMPLE	138851004		Ground Water	EPA 150.1	17-JUN-05	18:12	pH	7.35	20.9'C			
SAMPLE	138851004		Ground Water	EPA 150.1	17-JUN-05	18:12	pH 2	7.36	20.9'C			
CCV					17-JUN-05	18:13	pH	7.03	22.1'C			
CCV					17-JUN-05	18:13	pH 2	7.03	22.1'C			

1257

Calibration Information:
Run Date: 17-JUN-05 12:33
Instrument: PHX060
Analyst: BEP2

Standard	Observed	Theoretical		C	%Recovery
UPH305147-01	4.04	4	SU	23.2	101
UPH297361-01	6.97	7	SU	23.2	99.571
UPH050217-02	9.95	10	SU	23.2	99.5
UPH305149-02	7.05	7	SU	23.2	100.71

Comments:

Miscellaneous

NCR Report No.: 214372
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
24-JUN-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 351.2	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
436361	See Below		

Potentially affected work order(s)(SDG): 138850,138851,138903,138990,139056

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for LCS/MS/PS: QC 1200872972MS,1200872975MS, 1200872976MS	1. Sample spike recoveries failed due to matrix interference for 1200872972MS,1200872975MS. The samples and their duplicates showed double peaks, a sign of matrix interference. The blank and the LCS passed showing that the prep method works for the 1200872976MS, which failed high. The spike that failed high was repoured and reanalyzed along with the sample and sample duplicate to verify failing MS.

Originator's Name:

James Maestas 24-JUN-05

Data Validator/Group Leader:

Julia Hamilton 30-JUN-05

Quality Review:

Nancy Mattern 01-JUL-05

Director:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
28-JUN-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
IC	EPA 300.0	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
436313	See Below		

Potentially affected work order(s)(SDG): 138800,138850,138851,138903,138905

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for LCS/MS/PS: QC 1200872868PS QC 1200872869PS	1.The PS recoveries for Chloride and Sulfate failed; however, Bromide and Fluoride passed with recoveries of 106% and 102% respectively. The Chloride and Sulfate recoveries are 120% and 118% respectively. The Chloride PS failed with a recovery of 114%.

Originator's Name:

Mary Sherwood 28-JUN-05

Data Validator/Group Leader:

Julia Hamilton 28-JUN-05

Quality Review:

Nancy Mattern 01-JUL-05

Director:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (ESHL)
Work Order 138851

Method/Analysis Information

Product:	**Alphaspec Am241 Liquid**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Analytical Batch Number:	435429

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200870937	Method Blank (MB)
1200870938	138373002(GU05060P12301) Sample Duplicate (DUP)
1200870939	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138373002 (GU05060P12301).
The QC sample is from ESHL work order 138373.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package. Aliquots for samples 1200870937 (MB) and 1200870939 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Liquid**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Analytical Batch Number:	435430

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200870940	Method Blank (MB)
1200870941	138373002(GU05060P12301) Sample Duplicate (DUP)
1200870942	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138373002 (GU05060P12301).
The QC sample is from ESHL work order 138373.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200870942 (LCS) was recounted due to a peak shift.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG:
NCR 217492 was generated due to RDL less than MDA. 1. The RDL is less than the MDA for 138373001, 138675001, 138800002, 138800003, 138800004, 138851002, and 138905005. When a blank population is performed, the MDA is greater than the RDL due to the high standard deviation. 2. Samples 138675001 and 138800004 fail to meet the client tracer recovery requirements, however they do have over 400 tracer counts and meet the GEL standard tracer recovery requirements. 1. Reporting results. 2. Reporting results.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package.
Aliquots for samples 1200870940 (MB) and 1200870942 (LCS) were changed to 1.0 per client request.
Pu-238 blank activity is greater than the DLC, but less than the MDA.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec U, Liquid**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Analytical Batch Number:	435431

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690

1200870943	Method Blank (MB)
1200870944	138373002(GU05060P12301) Sample Duplicate (DUP)
1200870945	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138373002 (GU05060P12301).
The QC sample is from ESHL work order 138373.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package.

Aliquots for samples 1200870943 (MB) and 1200870945 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gammaspec, Gamma, Liquid (Standard List)**
Analytical Method:	EPA 901.1
Analytical Batch Number:	435282

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200870615	Method Blank (MB)
1200870616	138675001(GF0506G16R201) Sample Duplicate (DUP)
1200870617	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed as follows: October 2004, December 2004, January 2005 and March 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138675001 (GF0506G16R201).
The QC sample is from ESHL work order 138675.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200870616 (GF0506G16R201) was recount due to analyst error.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to low abundance.	Potassium-40	138851002
UI	Data rejected due to no valid peak.		1200870615

Method/Analysis Information

Product:	**GFPC, Gross A/B, liquid**
Analytical Method:	EPA 900.0
Analytical Batch Number:	435482

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200874003	Method Blank (MB)
1200874004	138675002(GU0506G16R201) Sample Duplicate (DUP)
1200874005	138675002(GU0506G16R201) Matrix Spike (MS)
1200874006	138675002(GU0506G16R201) Matrix Spike Duplicate (MSD)
1200874007	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-001 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on July 19, 2004.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138675002 (GU0506G16R201).
The QC sample is from ESHL work order 138675.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200874005 (GU0506G16R201) was recounted due to low/high recovery.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Gross Alpha/Beta Preparation Information
High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating, especially to a dull red heat. For this sample set, the prepared planchet was counted for beta activity before being flamed. After flaming, the planchet was counted for alpha activity. This sequence causes the alpha count run data to record over the beta count run data in AlphaLims, therefore only the alpha count data will appear on the instrument runlog.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200874003 (MB) and 1200874007 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Sr90, liquid**
Analytical Method:	EPA 905.0 Modified
Analytical Batch Number:	435484

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601

138851004	GU05050GMC690
1200871072	Method Blank (MB)
1200871073	138450003(GU05060P12101) Sample Duplicate (DUP)
1200871074	138450003(GU05060P12101) Matrix Spike (MS)
1200871075	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on November 2, 2004.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138450003 (GU05060P12101).
The QC sample is from ESHL work order 138450.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments

Aliquots for samples 1200871072 (MB) and 1200871075 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**TC99**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	435379

Sample ID	Client ID
138851003	GU05050GMC601
1200870805	Method Blank (MB)
1200870806	138851003(GU05050GMC601) Sample Duplicate (DUP)
1200870807	138851003(GU05050GMC601) Matrix Spike (MS)
1200870808	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed on June 20, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138851003 (GU05050GMC601).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200870805 (MB) and 1200870808 (LCS) were changed to 1.0 per client request.
Samples 1200870805 (MB) and 1200870808 (LCS) did not meet the client's tracer yield requirements, they did however meet GEL's standard tracer requirements.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**TC99**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	438136

Sample ID	Client ID
138851004	GU05050GMC690
1200877105	Method Blank (MB)
1200877106	139551002(GU0506G33R201) Sample Duplicate (DUP)
1200877107	139551002(GU0506G33R201) Matrix Spike (MS)
1200877108	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed on June 20, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139551002 (GU0506G33R201).
The QC sample is from ESHL work order 139551.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200877105 (MB) and 1200877108 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Liquid**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	435237

Sample ID	Client ID
138851003	GU05050GMC601
138851004	GU05050GMC690
1200870537	Method Blank (MB)
1200870538	138259002(GU05060G34R01) Sample Duplicate (DUP)
1200870539	138259002(GU05060G34R01) Matrix Spike (MS)
1200870540	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on April 8, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138259002 (GU05060G34R01).
The QC sample is from ESHL work order 138259.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Lucas Cell, Ra226, liquid**
Analytical Method:	EPA 903.1 Modified
Analytical Batch Number:	437415

Sample ID	Client ID
138851001	GF05050GMC601
138851002	GF05050GMC690
138851003	GU05050GMC601
138851004	GU05050GMC690
1200875441	Method Blank (MB)
1200875442	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200875443	138851001(GF05050GMC601) Matrix Spike (MS)
1200875444	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-008 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed as follows: Detector 1 was calibrated on December 9, 2004. Detector 4 was calibrated on September 23, 2004. Detector 5 was calibrated on November 8, 2004. Detector 6 was calibrated on November 22, 2004.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138851001 (GF05050GMC601).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200875441 (MB) and 1200875444 (LCS) were changed to 1.0 per client request.
The blank result is greater than the decision level, but less than the mdc.

Qualifier information
Manual qualifiers were not required.

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

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP

or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: H Paille G Crow 7/13/05

NCR Report No.: 217492
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
06-JUL-05	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ALPHA SPECTROMETER	DOE EML HASL-300, Pu-11-RC Modified	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
435430	See Below		

Potentially affected work order(s)(SDG): 138373,138436,138675,138800,138851,138905

Application Issues:

RDL less than MDA

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The RDL is less than the MDA for 138373001, 138675001, 138800002, 138800003, 138800004, 138851002, and 138905005. When a blank population is performed, the MDA is greater than the RDL due to the high standard deviation.	1. Reporting results.
2. Samples 138675001 and 138800004 fail to meet the client tracer recovery requirements, however they do have over 400 tracer counts and meet the GEL standard tracer recovery requirements.	2. Reporting results.

Originator's Name:
Jessica Downey 06-JUL-05

Data Validator/Group Leader:
Melanie Aycock 07-JUL-05

Quality Review:

Director:

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 138851 GEL Work Order: 138851

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID:	GF05050GMC601	Project:	ESHL00701
Sample ID:	138851001	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	15−JUN−05		
Receive Date:	17−JUN−05		
Collector:	Client		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		−0.00404	0.041	+/−0.00982	0.050	pCi/L		SCP	06/30/05	1400	435429	1
Alphaspec Pu, Liquid												
Plutonium−238		−0.00419	0.043	+/−0.00726	0.050	pCi/L		SCP	06/30/05	1400	435430	2
Plutonium−239/240		0.00838	0.037	+/−0.00514	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.352	0.078	+/−0.0339	0.100	pCi/L		SCP	06/29/05	1616	435431	3
Uranium−235/236		0.0412	0.048	+/−0.0116	0.100	pCi/L						
Uranium−238		0.157	0.055	+/−0.0216	0.100	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid (Standard List)												
Cesium−137		−0.586	2.37	+/−0.695	5.00	pCi/L		AKB	06/30/05	2331	435282	4
Cobalt−60		0.669	2.51	+/−0.665	5.00	pCi/L						
Gross Gamma		107	278	+/−85.3		pCi/L						
Neptunium−237		15.6	17.6	+/−10.4		pCi/L						
Potassium−40		13.8	20.6	+/−13.4	100	pCi/L						
Sodium−22		−0.785	2.34	+/−0.695	5.00	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha		0.456	1.62	+/−0.398	3.00	pCi/L		SXE1	07/07/05	1218	435482	5
Beta		2.26	2.68	+/−0.698	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		0.0325	0.207	+/−0.0567	0.500	pCi/L		EXW1	06/30/05	2003	435484	6
Rad Radium−226												
Lucas Cell, Ra226, liquid												
Radium−226		3.04	0.448	+/−0.374	1.00	pCi/L		AB1	07/01/05	1335	437415	7

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	GXA2	06/22/05	1736	435999
SW846 3005A	ICP−MS 3005 PREP	FGA	06/23/05	1030	435188
SW846 3005A	ICP−TRACE SW846 3005A	FGA	06/23/05	1030	435150
SW846 7470A Pre	EPA 7470A Mercury Prep Liquid	MXW1	06/23/05	1100	435682

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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GF05050GMC601
Sample ID: 138851001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M
SW846 8321A Mc	SW846 8321A Perchlorate Extraction in Liquid			LOF	06/27/05	2023	436181			
SW846 9010B Pre	SW846 9010B Prep			DXB2	06/21/05	1646	435372			

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 905.0 Modified
7	EPA 903.1 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	80	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	78	(15%−125%)
Uranium−232	Alphaspec U, Liquid	79	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	71	(25%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

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> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GF05050GMC601
Sample ID: 138851001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M

The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GF05050GMC690
Sample ID: 138851002
Matrix: Ground Water
Collect Date: 15−JUN−05
Receive Date: 17−JUN−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.00531	0.031	+/−0.00762	0.050	pCi/L		SCP	06/30/05	1400	435429	1
Alphaspec Pu, Liquid												
Plutonium−238		−0.00547	0.057	+/−0.0067	0.050	pCi/L		SCP	06/30/05	1400	435430	2
Plutonium−239/240		0.0082	0.048	+/−0.00724	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.375	0.065	+/−0.0323	0.100	pCi/L		SCP	06/29/05	1616	435431	3
Uranium−235/236		0.0236	0.040	+/−0.00718	0.100	pCi/L						
Uranium−238		0.186	0.046	+/−0.0214	0.100	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid (Standard List)												
Cesium−137		0.395	2.44	+/−1.17	5.00	pCi/L		AKB	06/30/05	2354	435282	4
Cobalt−60		0.0519	2.41	+/−0.661	5.00	pCi/L						
Gross Gamma		72.7	217	+/−55.0		pCi/L						
Neptunium−237		1.08	20.2	+/−5.77		pCi/L						
Potassium−40		45.9	36.1	+/−8.52	100	pCi/L						
Sodium−22		−0.128	2.12	+/−0.584	5.00	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha		0.978	2.22	+/−0.548	3.00	pCi/L		SXE1	07/07/05	1218	435482	5
Beta		3.24	2.85	+/−0.749	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		0.0315	0.191	+/−0.0522	0.500	pCi/L		EXW1	06/30/05	2003	435484	6
Rad Radium−226												
Lucas Cell, Ra226, liquid												
Radium−226		0.782	0.653	+/−0.245	1.00	pCi/L		AB1	07/01/05	1335	437415	7

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	GXA2	06/22/05	1736	435999
SW846 3005A	ICP−MS 3005 PREP	FGA	06/23/05	1030	435188
SW846 3005A	ICP−TRACE SW846 3005A	FGA	06/23/05	1030	435150
SW846 7470A Pre	EPA 7470A Mercury Prep Liquid	MXW1	06/23/05	1100	435682
SW846 8321A Mo	SW846 8321A Perchlorate Extraction in Liquid	LOF	06/27/05	2023	436181

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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GF05050GMC690
Sample ID: 138851002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M
SW846 9010B Pre	SW846 9010B Prep			DXB2	06/21/05	1646	435372			

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 905.0 Modified
7	EPA 903.1 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	86	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	81	(15%−125%)
Uranium−232	Alphaspec U, Liquid	80	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	70	(25%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.

The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GU05050GMC601
Sample ID: 138851003
Matrix: Ground Water
Collect Date: 15−JUN−05
Receive Date: 17−JUN−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		−0.0134	0.036	+/−0.0102	0.050	pCi/L		SCP	06/30/05	1400	435429	1
Alphaspec Pu, Liquid												
Plutonium−238		−0.00203	0.042	+/−0.00455	0.050	pCi/L		SCP	07/01/05	2201	435430	2
Plutonium−239/240		0.0061	0.036	+/−0.00455	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.414	0.079	+/−0.0381	0.100	pCi/L		SCP	06/29/05	1616	435431	3
Uranium−235/236		0.0261	0.049	+/−0.00911	0.100	pCi/L						
Uranium−238		0.219	0.056	+/−0.0262	0.100	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid (Standard List)												
Cesium−137		0.542	2.39	+/−0.666	5.00	pCi/L		AKB	07/01/05	1514	435282	4
Cobalt−60		1.61	2.64	+/−0.644	5.00	pCi/L						
Gross Gamma		114	345	+/−69.7		pCi/L						
Neptunium−237		−4.57	18.9	+/−5.59		pCi/L						
Potassium−40		24.0	32.8	+/−8.30	100	pCi/L						
Sodium−22		−0.355	2.32	+/−0.661	5.00	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha		1.12	1.66	+/−0.474	3.00	pCi/L		SXE1	07/07/05	1218	435482	5
Beta		3.27	3.31	+/−0.850	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		−0.0961	0.240	+/−0.0625	0.500	pCi/L		EXW1	06/30/05	2003	435484	6
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		13100	180	+/−226	200	pCi/L		LAG1	07/06/05	2332	435237	7
TC99												
Technetium−99		7.86	4.18	+/−1.33	5.00	pCi/L		BXD1	07/05/05	0239	435379	8
Rad Radium−226												
Lucas Cell, Ra226, liquid												
Radium−226		0.739	0.570	+/−0.227	1.00	pCi/L		AB1	07/01/05	1335	437415	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GU05050GMC601
Sample ID: 138851003

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M
EPA 160.2	EPA 160.2 Total Suspended Solids			JLD1	06/21/05	1139	435452				
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa			JXM	06/24/05	1139	436361				
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep			DXB2	06/23/05	1058	436360				
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe			GXA2	06/22/05	1736	435999				
SW846 3005A	ICP−MS 3005 PREP			FGA	06/23/05	1030	435188				
SW846 3005A	ICP−TRACE SW846 3005A			FGA	06/23/05	1030	435150				
SW846 3510C	3510C−8270C BNA Appendix 9 Prep Fed			JB1	06/20/05	2110	435481				
SW846 7470A Pre	EPA 7470A Mercury Prep Liquid			MXW1	06/23/05	1100	435682				
SW846 8260B	VOA Library Search						435197				
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL			CDS1	06/29/05	2229	438041				
SW846 8270C	BNA Library Search						437748				

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 905.0 Modified
7	EPA 906.0 Modified
8	DOE EML HASL−300, Tc−02−RC Modified
9	EPA 903.1 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	86	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	79	(15%−125%)
Uranium−232	Alphaspec U, Liquid	80	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	66	(25%−125%)
Carrier/Tracer Recovery	TC99	105	(15%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.

GENERAL ENGINEERING LABORATORIES, LLC
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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GU05050GMC601
Sample ID: 138851003

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M

B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID:	GU05050GMC690	Project:	ESHL00701
Sample ID:	138851004	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	15−JUN−05		
Receive Date:	17−JUN−05		
Collector:	Client		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.0069	0.036	+/−0.00985	0.050	pCi/L		SCP	06/30/05	1400	435429	1
Alphaspec Pu, Liquid												
Plutonium−238		0.00355	0.037	+/−0.00355	0.050	pCi/L		SCP	07/01/05	2201	435430	2
Plutonium−239/240		0.0106	0.031	+/−0.00562	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.380	0.071	+/−0.0349	0.100	pCi/L		SCP	06/29/05	1616	435431	3
Uranium−235/236		0.0279	0.043	+/−0.00993	0.100	pCi/L						
Uranium−238		0.158	0.050	+/−0.0209	0.100	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid (Standard List)												
Cesium−137		0.0714	3.07	+/−0.895	5.00	pCi/L		AKB	07/01/05	1514	435282	4
Cobalt−60		1.40	3.16	+/−0.928	5.00	pCi/L						
Gross Gamma		87.3	341	+/−89.8		pCi/L						
Neptunium−237		2.05	22.3	+/−7.50		pCi/L						
Potassium−40		25.2	31.6	+/−16.3	100	pCi/L						
Sodium−22		0.163	3.28	+/−0.922	5.00	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha		2.20	1.28	+/−0.532	3.00	pCi/L		SXE1	07/07/05	1218	435482	5
Beta		4.23	3.15	+/−0.840	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		−0.05	0.144	+/−0.0373	0.500	pCi/L		EXW1	06/30/05	2003	435484	6
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		12200	179	+/−216	200	pCi/L		LAG1	07/07/05	0105	435237	7
TC99												
Technetium−99		4.65	3.53	+/−1.10	5.00	pCi/L		EGD1	07/05/05	1904	438136	9
Rad Radium−226												
Lucas Cell, Ra226, liquid												
Radium−226		0.302	0.609	+/−0.188	1.00	pCi/L		AB1	07/01/05	1425	437415	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch

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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GU05050GMC690
Sample ID: 138851004

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M
EPA 160.2	EPA 160.2 Total Suspended Solids			JLD1	06/21/05	1139	435452				
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa			JXM	06/24/05	1141	436361				
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep			DXB2	06/23/05	1058	436360				
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe			GXA2	06/22/05	1736	435999				
SW846 3005A	ICP−MS 3005 PREP			FGA	06/23/05	1030	435188				
SW846 3005A	ICP−TRACE SW846 3005A			FGA	06/23/05	1030	435150				
SW846 3510C	3510C−8270C BNA Appendix 9 Prep Fed			JB1	06/20/05	2110	435481				
SW846 7470A Pre	EPA 7470A Mercury Prep Liquid			MXW1	06/23/05	1100	435682				
SW846 8260B	VOA Library Search						435197				
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL			CDS1	06/29/05	2255	438041				
SW846 8270C	BNA Library Search						437748				

The following Analytical Methods were performed

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1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 905.0 Modified
7	EPA 906.0 Modified
8	DOE EML HASL−300, Tc−02−RC Modified
9	DOE EML HASL−300, Tc−02−RC Modified
10	EPA 903.1 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	92	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	87	(15%−125%)
Uranium−232	Alphaspec U, Liquid	74	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	103	(25%−125%)
Carrier/Tracer Recovery	TC99	97	(15%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 8, 2005

Client Sample ID: GU05050GMC690
Sample ID: 138851004

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

QUALITY CONTROL DATA

QC Summary

Report Date: July 8, 2005

Client : **Los Alamos National Labs**
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico
Contact: **Billy Turney**

Workorder: **138851**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 435429										
QC1200870938 138373002 DUP										
Americium-241	U	-0.00435	U	0.00476	pCi/L	0.356		(0% - 100%)	SCP	06/30/05 14:00
TPU:		+/-0.00724		+/-0.00554						
Yield:		94.5		85.1						
QC1200870939 LCS										
Americium-241	2.73			2.64	pCi/L		97	(75%-125%)		06/30/05 14:00
TPU:				+/-0.138						
Yield:				93.7						
QC1200870937 MB										
Americium-241			U	0.00244	pCi/L					06/30/05 14:00
TPU:				+/-0.00928						
Yield:				54.0						
Batch 435430										
QC1200870941 138373002 DUP										
Plutonium-238	U	-0.00959	U	0.0094	pCi/L	0.815		(0% - 100%)	SCP	07/01/05 22:01
TPU:		+/-0.00588		+/-0.00577						
Yield:		71.7		71.5						
Plutonium-239/240	U	0.00958	U	0.0164	pCi/L	0.233		(0% - 100%)		
TPU:		+/-0.00758		+/-0.00707						
Yield:		71.7		71.5						
QC1200870942 LCS										
Plutonium-238			U	0.0119	pCi/L			(75%-125%)		07/05/05 14:15
TPU:				+/-0.00515						
Yield:				84.4						
Plutonium-239/240	2.39			2.43	pCi/L		102	(75%-125%)		
TPU:				+/-0.131						
Yield:				84.4						
QC1200870940 MB										
Plutonium-238			U	0.00651	pCi/L					07/01/05 22:01
TPU:				+/-0.00399						
Yield:				80.5						
Plutonium-239/240			U	0.00163	pCi/L					
TPU:				+/-0.00282						
Yield:				80.5						

QC Summary

Workorder: 138851

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 435431										
QC1200870944 138373002 DUP										
Uranium-234		0.237		0.188	pCi/L	0.463		(0% - 100%)	SCP	06/29/05 16:16
	TPU:	+/-0.0255		+/-0.0274						
	Yield:	78.3		67.7						
Uranium-235/236	U	0.0283	U	0.0348	pCi/L	0.160		(0% - 100%)		
	TPU:	+/-0.00797		+/-0.0124						
	Yield:	78.3		67.7						
Uranium-238		0.148		0.142	pCi/L	0.0716		(0% - 100%)		
	TPU:	+/-0.0197		+/-0.0222						
	Yield:	78.3		67.7						
QC1200870945 LCS										
Uranium-234				2.50	pCi/L			(75%-125%)		
	TPU:			+/-0.129						
	Yield:			68.5						
Uranium-235/236				0.184	pCi/L			(75%-125%)		
	TPU:			+/-0.0237						
	Yield:			68.5						
Uranium-238	2.43			2.67	pCi/L		110	(75%-125%)		
	TPU:			+/-0.136						
	Yield:			68.5						
QC1200870943 MB										
Uranium-234			U	-0.00226	pCi/L					
	TPU:			+/-0.00876						
	Yield:			57.3						
Uranium-235/236			U	0.00	pCi/L					
	TPU:			+/-0.00454						
	Yield:			57.3						
Uranium-238			U	0.00	pCi/L					
	TPU:			+/-0.0064						
	Yield:			57.3						
Rad Gamma Spec										
Batch 435282										
QC1200870616 138675001 DUP										
Americium-241		-1.63	U	2.13	pCi/L	0.332		(0% - 100%)	AKB	07/05/05 08:13
	TPU:	+/-4.10		+/-1.55						
Cesium-137	U	0.935	U	-0.556	pCi/L	0.482		(0% - 100%)		
	TPU:	+/-0.658		+/-0.889						

QC Summary

Workorder: 138851

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 435282										
Cobalt-60	U	1.44	U	0.432	pCi/L	0.294		(0% - 100%)		
	TPU:	+/-0.784		+/-0.935						
Gross Gamma	U	66.4	U	72.5	pCi/L	0.00767		(0% - 100%)		
	TPU:	+/-320		+/-79.3						
Neptunium-237	U	5.32	U	-11.9	pCi/L	0.948		(0% - 100%)		
	TPU:	+/-4.68		+/-4.39						
Potassium-40	UI	35.5	U	15.5	pCi/L	0.536		(0% - 100%)		
	TPU:	+/-8.04		+/-10.6						
Sodium-22	U	0.826	U	0.0855	pCi/L	0.226		(0% - 100%)		
	TPU:	+/-0.647		+/-0.994						
QC1200870617 LCS										
Americium-241	1220			1210	pCi/L		99	(75%-125%)		07/01/05 19:24
	TPU:			+/-101						
Cesium-137	472			502	pCi/L		106	(75%-125%)		
	TPU:			+/-24.9						
Cobalt-60	736			761	pCi/L		103	(75%-125%)		
	TPU:			+/-31.5						
Gross Gamma	6370			6590	pCi/L		104			
	TPU:			+/-1320						
Neptunium-237				266	pCi/L					
	TPU:			+/-64.4						
Potassium-40			U	141	pCi/L					
	TPU:			+/-69.8						
Sodium-22			U	1.10	pCi/L					
	TPU:			+/-5.61						
QC1200870615 MB										
Americium-241			U	2.76	pCi/L					07/01/05 21:01
	TPU:			+/-3.93						
Cesium-137			U	0.194	pCi/L					
	TPU:			+/-0.751						
Cobalt-60			U	0.356	pCi/L					
	TPU:			+/-0.725						
Gross Gamma			U	40.1	pCi/L					
	TPU:			+/-41.2						
Neptunium-237			U	-1.31	pCi/L					

QC Summary

Workorder: 138851

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 435282											
	TPU:			+/-5.20							
Potassium-40			UI	28.8	pCi/L						
	TPU:			+/-14.5							
Sodium-22			U	-0.0941	pCi/L						
	TPU:			+/-0.690							
Rad Gas Flow											
Batch 435482											
QC1200874004 138675002 DUP											
Alpha	U	0.0835	U	0.626	pCi/L	0.369		(0% - 100%)	SXE1	07/07/05	12:18
	TPU:	+/-0.423		+/-0.314							
Beta		3.51		3.08	pCi/L	0.149		(0% - 100%)			
	TPU:	+/-0.756		+/-0.703							
QC1200874007 LCS											
Alpha	10.8			10.3	pCi/L		96	(75%-125%)		07/07/05	12:58
	TPU:			+/-1.20							
Beta	35.8			34.1	pCi/L		95	(75%-125%)			
	TPU:			+/-1.09							
QC1200874003 MB											
Alpha			U	0.0124	pCi/L					07/07/05	12:18
	TPU:			+/-0.0397							
Beta			U	0.0563	pCi/L						
	TPU:			+/-0.0798							
QC1200874005 138675002 MS											
Alpha	71.9 U	0.0835		54.7	pCi/L		76	(75%-125%)		07/08/05	10:10
	TPU:	+/-0.423		+/-4.99							
Beta	239	3.51		184	pCi/L		76	(75%-125%)			
	TPU:	+/-0.756		+/-5.79							
QC1200874006 138675002 MSD											
Alpha	71.9 U	0.0835		73.8	pCi/L	0.575	103	(0%-20%)		07/07/05	12:58
	TPU:	+/-0.423		+/-11.7							
Beta	239	3.51		278	pCi/L		115*	(0%-20%)			
	TPU:	+/-0.756		+/-7.47							
Batch 435484											
QC1200871073 138450003 DUP											
Strontium-90	U	-0.17	U	-0.21	pCi/L	0.142		(0% - 100%)	SXW1	06/30/05	20:04

QC Summary

Workorder: 138851

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 435484										
	TPU:	+/-0.0726		+/-0.0711						
	Yield:	52.7		58.3						
QC1200871075 LCS										
Strontium-90	17.9			21.5	pCi/L		120	(75%-125%)		06/30/05 10:46
	TPU:			+/-0.721						
	Yield:			57.2						
QC1200871072 MB										
Strontium-90			U	0.0524	pCi/L					06/30/05 20:04
	TPU:			+/-0.0466						
	Yield:			58.3						
QC1200871074 138450003 MS										
Strontium-90	22.4 U	-0.17		26.8	pCi/L		120	(75%-125%)		06/30/05 16:26
	TPU:	+/-0.0726		+/-0.984						
	Yield:	52.7		50.5						
Rad Liquid Scintillation										
Batch 435237										
QC1200870538 138259002 DUP										
Tritium	U	127	U	5.07	pCi/L	0.538		(0% - 100%)	LAG1	07/07/05 05:42
	TPU:	+/-59.1		+/-54.7						
QC1200870540 LCS										
Tritium	3070			2810	pCi/L		92	(75%-125%)		07/07/05 07:47
	TPU:			+/-167						
QC1200870537 MB										
Tritium			U	74.6	pCi/L					07/07/05 04:10
	TPU:			+/-53.6						
QC1200870539 138259002 MS										
Tritium	3080 U	127		3210	pCi/L		100	(75%-125%)		07/07/05 07:15
	TPU:	+/-59.1		+/-183						
Batch 435379										
QC1200870806 138851003 DUP										
Technetium-99		7.86		9.91	pCi/L	0.380		(0% - 100%)	BXD1	07/05/05 04:44
	TPU:	+/-1.33		+/-1.36						
	Yield:	105		105						
QC1200870808 LCS										
Technetium-99	118			106	pCi/L		90	(75%-125%)		07/05/05 06:35
	TPU:			+/-1.91						
	Yield:			106						
QC1200870805 MB										
Technetium-99			U	1.13	pCi/L					07/05/05 03:42

QC Summary

Workorder: 138851

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 435379										
	TPU:			+/-0.382						
	Yield:			106						
QC1200870807 138851003 MS										
Technetium-99	788	7.86		709	pCi/L		89	(75%-125%)		07/05/05 05:46
	TPU:	+/-1.33		+/-12.9						
	Yield:	105		71.5						
Batch 438136										
QC1200877106 139551002 DUP										
Technetium-99	U	-1.34	U	-0.66	pCi/L	0.163		(0% - 100%)	EGD1	07/05/05 22:12
	TPU:	+/-1.03		+/-1.05						
	Yield:	98.4		96.8						
QC1200877108 LCS										
Technetium-99	118			107	pCi/L		91	(75%-125%)		07/06/05 00:00
	TPU:			+/-1.84						
	Yield:			89.8						
QC1200877105 MB										
Technetium-99			U	0.517	pCi/L					07/05/05 21:09
	TPU:			+/-0.451						
	Yield:			91.9						
QC1200877107 139551002 MS										
Technetium-99	296 U	-1.34		279	pCi/L		94	(75%-125%)		07/05/05 23:14
	TPU:	+/-1.03		+/-4.74						
	Yield:	98.4		96.8						
Rad Ra-226										
Batch 437415										
QC1200875442 138851001 DUP										
Radium-226		3.04		2.09	pCi/L	0.689		(0% - 100%)	AB1	07/01/05 14:25
	TPU:	+/-0.374		+/-0.314						
QC1200875444 LCS										
Radium-226	12.1			12.0	pCi/L		100	(75%-125%)		07/01/05 15:00
	TPU:			+/-0.608						
QC1200875441 MB										
Radium-226			U	0.270	pCi/L					07/01/05 14:25
	TPU:			+/-0.0999						
QC1200875443 138851001 MS										
Radium-226	24.1	3.04		22.6	pCi/L		81	(75%-125%)		
	TPU:	+/-0.374		+/-1.13						

QC Summary

Workorder: **138851**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

Notes:
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E	Concentration of the target analyte exceeds the instrument calibration range.
H	Analytical holding time exceeded.
J	Indicates an estimated value.
P	The response between the confirmation and the primary columns is >40% Different.
R	Sample results are rejected.
U	Target analyte was analyzed for but not detected above the MDL or LOD.
UI	Uncertain identification for gamma spectroscopy.
X	Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y	QC Samples were not spiked with this compound.
Z	Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h	Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 3

Batch# 435429 Product: AM Date: 7/1/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	~		
Instrument source check is within limits. Instument bkg check is within limits.	~		
Method RDL has been met.	~		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	~		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	~		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	~		
Sample was run within hold time. Special requirements page checked	~		
Sample was correctly preserved if required.	~		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	~		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	~		
QC data entered into QC database. Batch entered into Case Narrative.	~		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/2000

Primary Review Performed By: 7/1/05

Secondary Review Performed By: 7/1/05

7/2-7/9

ESH&L

Am/Cm Que Sheet

20-JUN-05

Batch #: 435429 **Analyst:** SCP **Minimum DueDate:** 02-JUL-05 **Comments:**

Tracer(s): Am243/Cm244 **Tracer Code:** 4459628 **Expiration Date:** 9/10/05 **Vol:** 0.1

LCS Isotope(s): Am241/Cm244 **LCS Code(s):** 0533E / NA **Expiration Date:** 9/10/05 / NA **Vol(s):** 0.1 / NA

Spike Isotope(s): Am241/Cm244 **Spike Code(s):** NA / NA **Expiration Date:** NA / NA **Vol(s):** NA / NA

Prep Date: 6/23/05 **Initials:** SCP **Pipet ID:** 4497317 **Balance ID:** 1675207 **Witness:** LAW 6/23/05

Sample I	Client Description	Type	Hazard Code	Min	Matrix	Client	Collection Date	Label #	Aliquot (g/mL/f)	Am/Cm D	Ash Weight (g)
138373001	GF05060P12301	SAMPLE		.05 pCi/L	WATER	ESHL001	08-JUN-05	101	.806	83	
138373002	GU05060P12301	SAMPLE		.05 pCi/L	WATER	ESHL001	08-JUN-05	102	.800	84	
138373003	GU05060P12301-FB	SAMPLE		.05 pCi/L	WATER	ESHL001	08-JUN-05	103	.800	85	
138436003	GF05050GMC501	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	09-JUN-05	104	.800	86	
138436004	GU05050GMC501	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	09-JUN-05	105	.800	39	
138675001	GF0506G16R201	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	13-JUN-05	106	.800	42	
138675002	GU0506G16R201	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	13-JUN-05	107	.800	48	
138800001	GF0506G16R301	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	13-JUN-05	108	.800	53	
138800002	GF0506G16R401	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	14-JUN-05	109	.800	54	
138800003	GU0506G16R301	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	13-JUN-05	110	.800	58	
138800004	GU0506G16R401	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	14-JUN-05	111	.800	59	
138851001	GF05050GMC601	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	15-JUN-05	112	.800	61	
138851002	GF05050GMC690	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	15-JUN-05	113	.800	62	
138851003	GU05050GMC601	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	15-JUN-05	114	.800	64	
138851004	GU05050GMC690	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	15-JUN-05	115	.800	65 sc 6/30/05	
138905001	GF0506G12R101	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	16-JUN-05	116	.800	~~67~~ 67	
138905005	GU0506G12R101	SAMPLE		.05 pCi/L	GROUND WATE	ESHL001	16-JUN-05	117	.800	68	
1200870937	MB for batch 435429	MB		.05 pCi/L	WATER	QC ACCOUNT		118	1.00	69	
1200870938	GU05060P12301(138373002DUP)	DUP		.05 pCi/L	WATER	QC ACCOUNT	08-JUN-05	119	.800	70	
1200870939	LCS for batch 435429	LCS		.05 pCi/L	WATER	QC ACCOUNT		120	1.00	71	

SCP 6/30/05

1300

Solid Sample Dissolution by: **LEACH or DIGESTION** (Circle One) SCP 6/23/05

Data Reviewed By: 7/1/05

7/1/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200870938	DUP	Americium-241	0.800 L	0.00476	0.00554	0.030	.00305	pCi/L	YES
1200870939	LCS	Americium-241	1.00 L	2.64	0.138	0.024	.00244	pCi/L	NO
1200870937	MB	Americium-241	1.00 L	0.00244	0.00928	0.041	.00244	pCi/L	YES
138373001	GF05060P12301	Americium-241	0.800 L	-0.00233	0.00829	0.034	.00305	pCi/L	YES
138373002	GU05060P12301	Americium-241	0.800 L	-0.00435	0.00724	0.036	.00305	pCi/L	YES
138373003	GU05060P12301-FB	Americium-241	0.800 L	0.00357	0.00699	0.032	.00305	pCi/L	YES
138436003	GF05050GMC501	Americium-241	0.800 L	0.00325	0.00668	0.039	.00305	pCi/L	YES
138436004	GU05050GMC501	Americium-241	0.800 L	0.0325	0.0135	0.036	.00305	pCi/L	NO
138675001	GF0506G16R201	Americium-241	0.800 L	-0.0047	0.00851	0.030	.00305	pCi/L	YES
138675002	GU0506G16R201	Americium-241	0.800 L	0.00339	0.00933	0.032	.00305	pCi/L	YES
138800001	GF0506G16R301	Americium-241	0.800 L	0.00331	0.00972	0.039	.00305	pCi/L	YES
138800002	GF0506G16R401	Americium-241	0.800 L	0.00801	0.00745	0.039	.00305	pCi/L	YES
138800003	GU0506G16R301	Americium-241	0.800 L	-0.000271	0.0137	0.033	.00305	pCi/L	YES
138800004	GU0506G16R401	Americium-241	0.800 L	-0.0214	0.020	0.039	.00305	pCi/L	YES
138851001	GF05050GMC601	Americium-241	0.800 L	-0.00404	0.00982	0.041	.00305	pCi/L	YES
138851002	GF05050GMC690	Americium-241	0.800 L	0.00531	0.00762	0.031	.00305	pCi/L	YES
138851003	GU05050GMC601	Americium-241	0.800 L	-0.0134	0.0102	0.036	.00305	pCi/L	YES
138851004	GU05050GMC690	Americium-241	0.800 L	0.0069	0.00985	0.036	.00305	pCi/L	YES
138905001	GF0506G12R101	Americium-241	0.800 L	0.00358	0.00765	0.054	.00305	pCi/L	YES
138905005	GU0506G12R101	Americium-241	0.800 L	0.00704	0.0141	0.043	.00305	pCi/L	YES

Calculation of MDA using a Blank Population. **Sg** **Updated:** 7/29/2004

Batch: 435429 **Am-241** 2.81724

sample	isotope	eff (dec)	yield (dec)	volume (Liter)	abundance (dec)	count time (min)	**MDA (pCi/Liter)**
138373001	Am-241	0.31379	0.83675	0.8	0.9994	1000	**0.034**
138373002	Am-241	0.261897	0.94451	0.8	0.9994	1000	**0.036**
138373003	Am-241	0.343886	0.80339	0.8	0.9994	1000	**0.032**
138436003	Am-241	0.254216	0.89802	0.8	0.9994	1000	**0.039**
138436004	Am-241	0.356321	0.68627	0.8	0.9994	1000	**0.036**
138675001	Am-241	0.342278	0.85592	0.8	0.9994	1000	**0.030**
138675002	Am-241	0.343095	0.82001	0.8	0.9994	1000	**0.032**
138800001	Am-241	0.2985	0.7603	0.8	0.9994	1000	**0.039**
138800002	Am-241	0.283038	0.81605	0.8	0.9994	1000	**0.039**
138800003	Am-241	0.304372	0.8739	0.8	0.9994	1000	**0.033**
138800004	Am-241	0.291881	0.78265	0.8	0.9994	1000	**0.039**
138851001	Am-241	0.274201	0.79507	0.8	0.9994	1000	**0.041**
138851002	Am-241	0.330319	0.85758	0.8	0.9994	1000	**0.031**
138851003	Am-241	0.290314	0.85514	0.8	0.9994	1000	**0.036**
138851004	Am-241	0.272109	0.91837	0.8	0.9994	1000	**0.036**
138905001	Am-241	0.315291	0.52509	0.8	0.9994	1000	**0.054**
138905005	Am-241	0.295353	0.69777	0.8	0.9994	1000	**0.043**
1200870937	Am-241	0.323879	0.53969	1	0.9994	1000	**0.041**
1200870938	Am-241	0.349156	0.85058	0.8	0.9994	1000	**0.030**
1200870939	Am-241	0.310833	0.93675	1	0.9994	1000	**0.024**

7/31/04

7/1/04

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

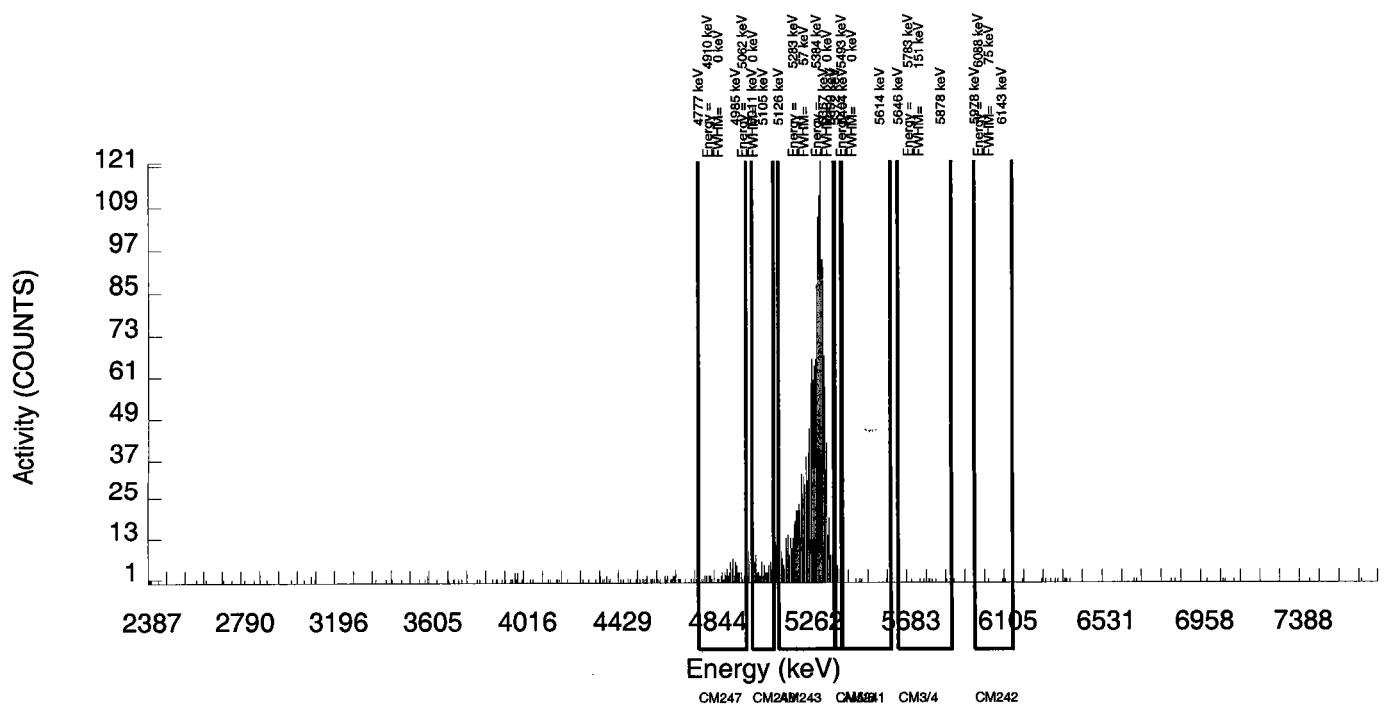
BATCH NUMBER: 435429 SAMPLE DATE : 8-JUN-2005 00:00:00.	SAMPLE ID : S0138373002_AM SAMPLE QTY: 0.800 L
DETECTOR NUMBER :29953 AVERAGE %EFFICIENCY :26.1897 % YIELD : 94.451	COUNT DATE:29-JUN-2005 16:16:14 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :SCP

MS : 0533-E MSD : 0533-E LCS : 0533-E TRACER : 445-96-2-BB BKG FILE: B084.CNF;519 BKG DATE: 26-JUN-2005	MS PCI/L : 3.407681 MSD PCI/L : 3.407681 LCS PCI/L : 3.407681 TRACER DPM : 6.7256 EFF FILE : W084.CNF;172 CAL DATE: 1-JUN-2005	MS ISOTOPE : AM-241 MSD ISOTOPE: AM-241 LCS ISOTOPE: AM-241 TRACER ISOTOPE: AM243 LIB FILE : ENV_ALPHA_AM.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-1.000	9.000	100.0000	-2.28E-03	9.41E-03	1.59E-02	3.80E-02	9.41E-03
CM-5/6	5386.000	37.000	0.000	86.09000	9.78E-02	1.67E-02	0.00E+00	7.17E-03	1.61E-02
AM-241	5479.150	-1.909	6.000	99.94000	-4.35E-03	7.24E-03	1.30E-02	3.21E-02	7.24E-03
CM-242	6102.000	2.000	1.000	100.0000	5.00E-03	5.01E-03	5.82E-03	1.84E-02	5.00E-03
AM243	5270.000	1660.000	3.000	99.78000	3.79E+00	2.02E-01	9.19E-03	2.46E-02	9.31E-02
CM-247	4946.000	84.000	2.000	79.30000	2.41E-01	2.93E-02	9.44E-03	2.67E-02	2.69E-02
CM-248	5078.600	76.000	1.000	91.00000	1.90E-01	2.39E-02	5.82E-03	1.84E-02	2.21E-02

REVIEWED BY: NOTE: Corrections made to AM-241 DATE : 7/1/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435429
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851001_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :34437
AVERAGE %EFFICIENCY :27.4201
% YIELD : 79.507

COUNT DATE:30-JUN-2005 14:00:10
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B061.CNF;554
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407577
MSD PCI/L : 3.407577
LCS PCI/L : 3.407577
TRACER DPM : 6.7256
EFF FILE : W061.CNF;158
CAL DATE: 3-JUN-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

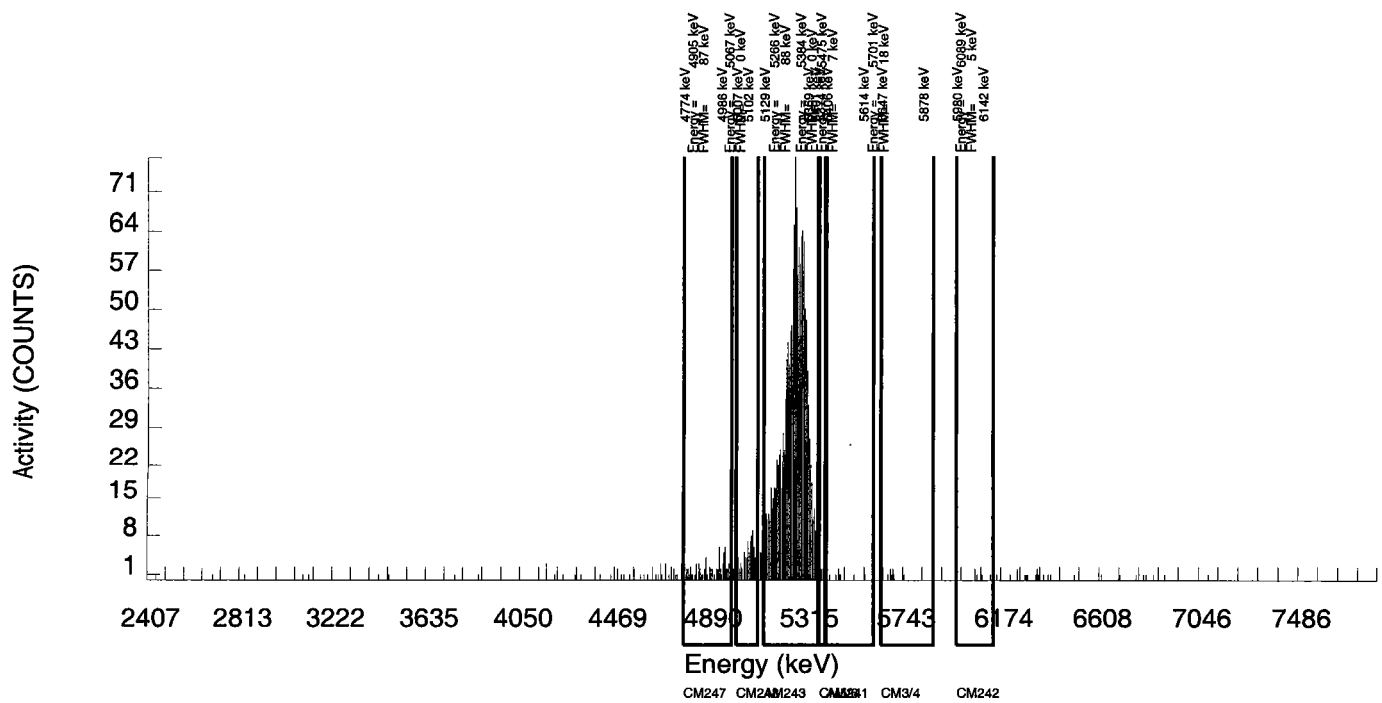
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-1.000	10.000	100.0000	-2.59E-03	1.13E-02	1.90E-02	4.51E-02	1.13E-02
CM-5/6	5386.000	19.000	1.000	86.09000	5.70E-02	1.41E-02	6.98E-03	2.21E-02	1.37E-02
AM-241	5479.150	-1.564	8.000	99.94000	-4.04E-03	9.82E-03	1.70E-02	4.10E-02	9.82E-03
CM-242	6102.000	-3.000	8.000	100.0000	-8.29E-03	9.98E-03	1.82E-02	4.38E-02	9.97E-03
AM243	5270.000	1463.000	6.000	99.78000	3.79E+00	2.39E-01	1.48E-02	3.65E-02	9.94E-02
CM-247	4946.000	64.000	4.000	79.30000	2.08E-01	3.01E-02	1.52E-02	3.91E-02	2.76E-02
CM-248	5078.600	83.000	2.000	91.00000	2.36E-01	2.97E-02	9.34E-03	2.64E-02	2.65E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 4/11/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435429
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851002_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :28409
AVERAGE %EFFICIENCY :33.0319
% YIELD : 85.758

COUNT DATE:30-JUN-2005 14:00:10
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B062.CNF;556
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407577
MSD PCI/L : 3.407577
LCS PCI/L : 3.407577
TRACER DPM : 6.7256
EFF FILE : W062.CNF;3145
CAL DATE: 3-JUN-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

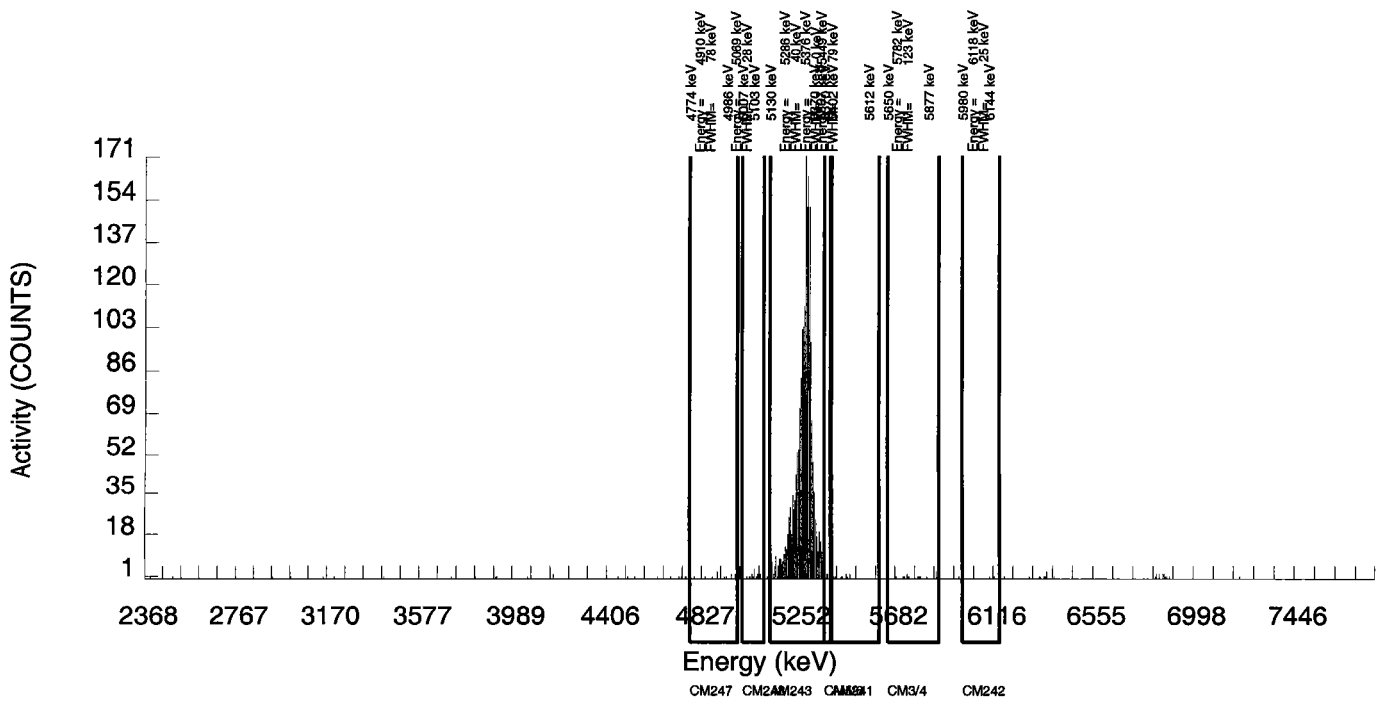
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	4.000	11.000	100.0000	7.96E-03	1.02E-02	1.54E-02	3.61E-02	1.02E-02
CM-5/6	5386.000	40.000	3.000	86.09000	9.24E-02	1.65E-02	9.30E-03	2.49E-02	1.57E-02
AM-241	5479.150	2.669	6.000	99.94000	5.31E-03	7.62E-03	1.13E-02	2.80E-02	7.62E-03
CM-242	6102.000	1.000	2.000	100.0000	2.13E-03	4.76E-03	7.00E-03	1.98E-02	4.76E-03
AM243	5270.000	1901.000	7.000	99.78000	3.79E+00	2.29E-01	1.23E-02	2.99E-02	8.72E-02
CM-247	4946.000	11.000	2.000	79.30000	2.76E-02	9.83E-03	8.25E-03	2.33E-02	9.71E-03
CM-248	5078.600	21.000	0.000	91.00000	4.59E-02	1.03E-02	0.00E+00	5.92E-03	1.00E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435429
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851003_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :31698
AVERAGE %EFFICIENCY :29.0314
% YIELD : 85.514

COUNT DATE:30-JUN-2005 14:00:10
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B064.CNF;557
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407577
MSD PCI/L : 3.407577
LCS PCI/L : 3.407577
TRACER DPM : 6.7256
EFF FILE : W064.CNF;142
CAL DATE: 3-JUN-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

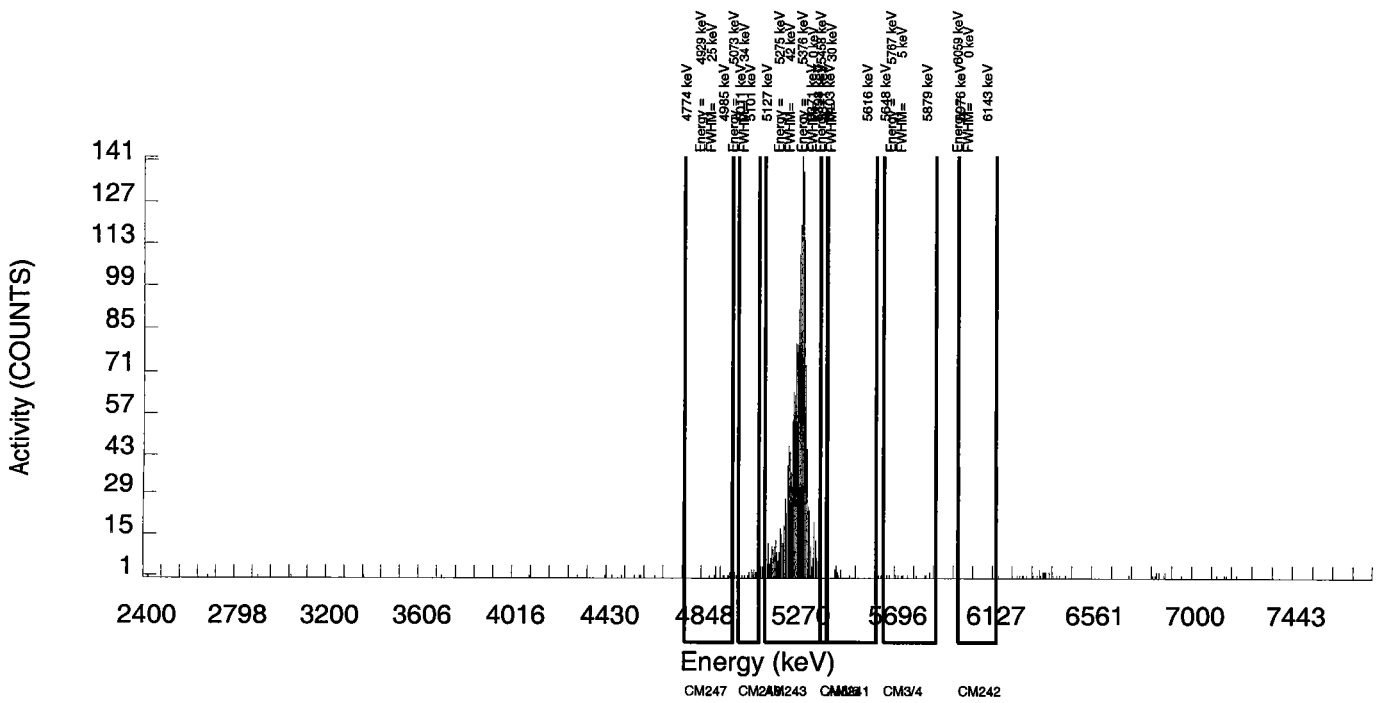
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-3.000	15.000	100.0000	-6.82E-03	1.18E-02	2.05E-02	4.71E-02	1.18E-02
CM-5/6	5386.000	17.000	1.000	86.09000	4.48E-02	1.18E-02	6.13E-03	1.94E-02	1.15E-02
AM-241	5479.150	-5.919	13.000	99.94000	-1.34E-02	1.02E-02	1.90E-02	4.42E-02	1.02E-02
CM-242	6102.000	-1.000	1.000	100.0000	-2.43E-03	3.43E-03	5.65E-03	1.79E-02	3.43E-03
AM243	5270.000	1666.000	6.000	99.78000	3.79E+00	2.34E-01	1.30E-02	3.21E-02	9.31E-02
CM-247	4946.000	16.000	0.000	79.30000	4.58E-02	1.17E-02	0.00E+00	7.75E-03	1.14E-02
CM-248	5078.600	19.000	0.000	91.00000	4.74E-02	1.12E-02	0.00E+00	6.75E-03	1.09E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435429
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851004_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :21087
AVERAGE %EFFICIENCY :27.2109
% YIELD : 91.837

COUNT DATE:30-JUN-2005 14:00:14
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B065.CNF;1434
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407577
MSD PCI/L : 3.407577
LCS PCI/L : 3.407577
TRACER DPM : 6.7256
EFF FILE : W065.CNF;165
CAL DATE: 1-JUN-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

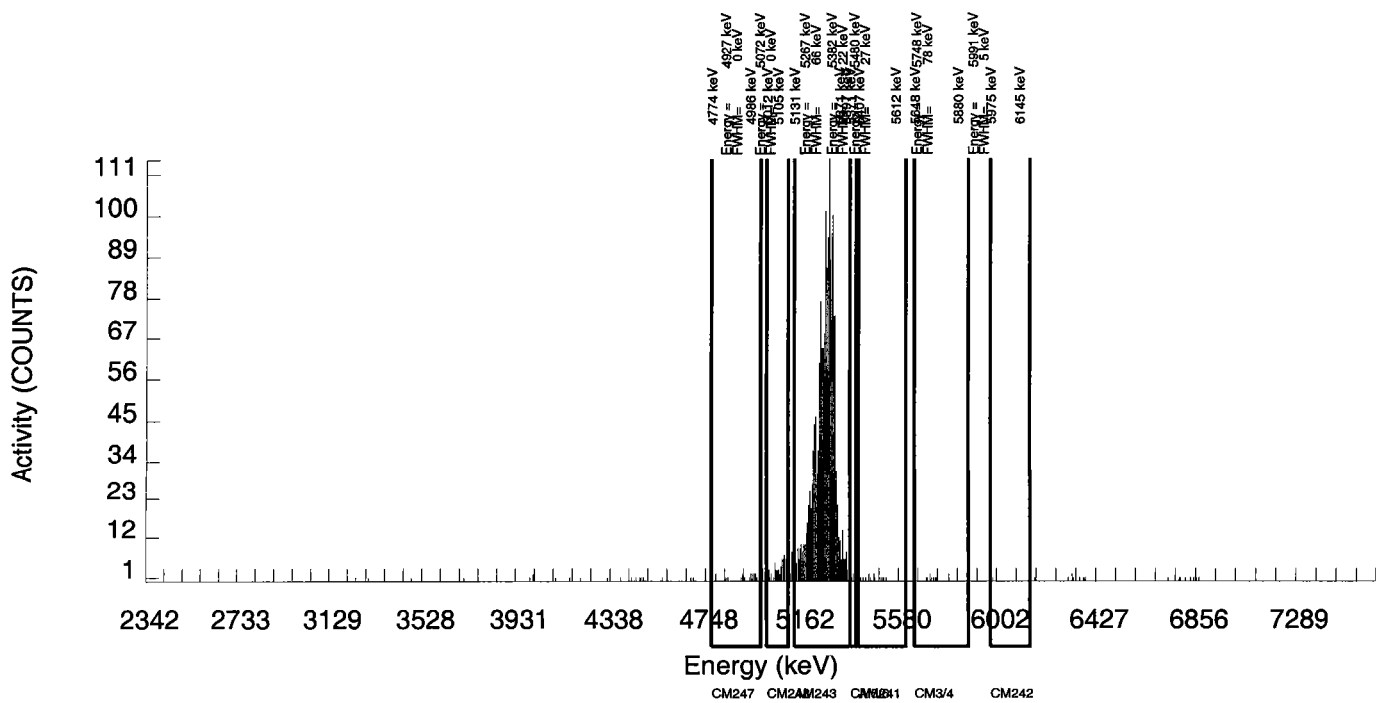
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	1.000	12.000	100.0000	2.26E-03	1.13E-02	1.82E-02	4.25E-02	1.13E-02
CM-5/6	5386.000	6.000	1.000	86.09000	1.57E-02	7.44E-03	6.09E-03	1.93E-02	7.40E-03
AM-241	5479.150	3.061	8.000	99.94000	6.90E-03	9.85E-03	1.48E-02	3.58E-02	9.84E-03
CM-242	6102.000	-1.000	2.000	100.0000	-2.41E-03	4.18E-03	7.93E-03	2.24E-02	4.18E-03
AM243	5270.000	1677.000	6.000	99.78000	3.79E+00	2.02E-01	1.29E-02	3.18E-02	9.28E-02
CM-247	4946.000	24.000	1.000	79.30000	6.82E-02	1.48E-02	6.61E-03	2.09E-02	1.45E-02
CM-248	5078.600	64.000	0.000	91.00000	1.58E-01	2.12E-02	0.00E+00	6.71E-03	1.98E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 7/1/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435429
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S1200870937_AM
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :39172
AVERAGE %EFFICIENCY :32.3879
% YIELD : 53.969

COUNT DATE:30-JUN-2005 14:00:14
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B069.CNF;594
BKG DATE: 26-JUN-2005

MS PCI/L : 2.725968
MSD PCI/L : 2.725968
LCS PCI/L : 2.725968
TRACER DPM : 6.7255
EFF FILE : W069.CNF;148
CAL DATE: 1-JUN-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

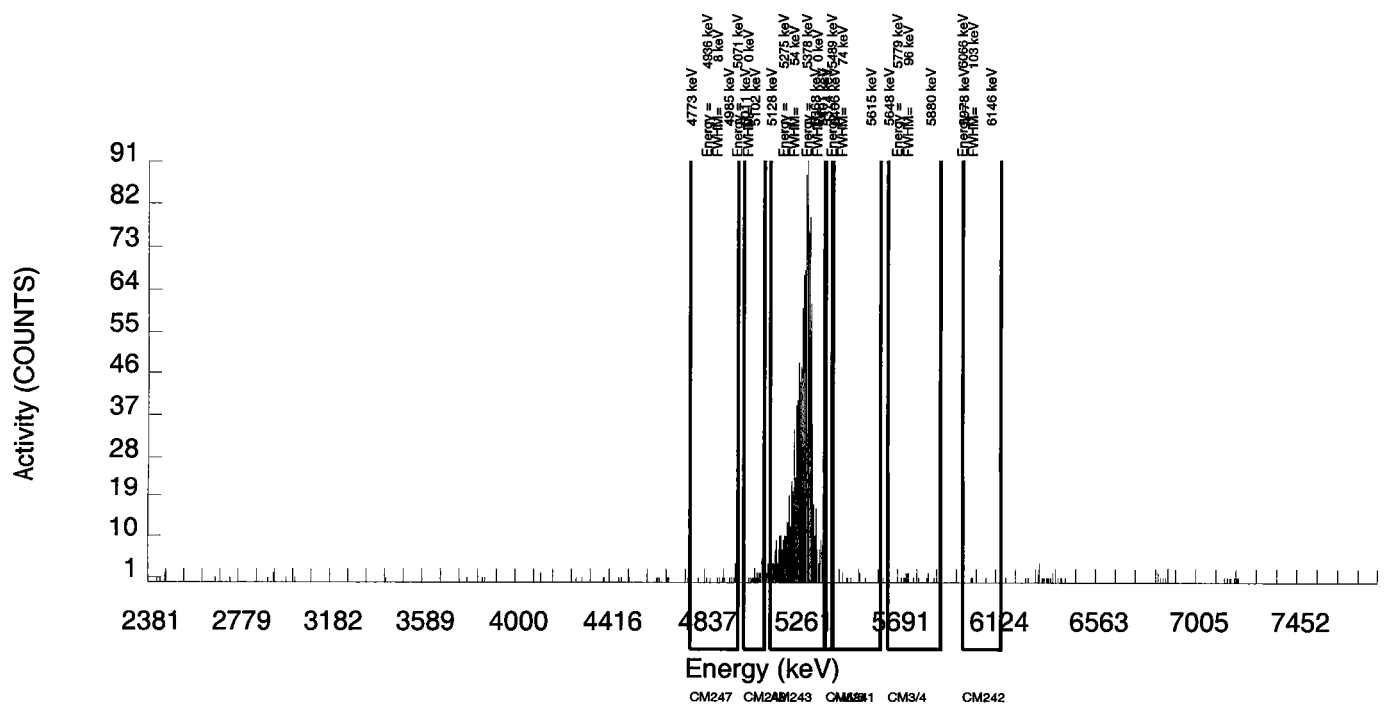
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-8.000	25.000	100.0000	-2.06E-02	1.67E-02	3.00E-02	6.70E-02	1.67E-02
CM-5/6	5386.000	13.000	0.000	86.09000	3.89E-02	1.10E-02	0.00E+00	8.11E-03	1.08E-02
AM-241	5479.150	0.945	6.000	99.94000	2.44E-03	9.28E-03	1.47E-02	3.64E-02	9.28E-03
CM-242	6102.000	2.000	2.000	100.0000	5.33E-03	6.53E-03	8.77E-03	2.48E-02	6.53E-03
AM243	5270.000	1173.000	3.000	99.78000	3.03E+00	1.75E-01	1.04E-02	2.78E-02	8.87E-02
CM-247	4946.000	11.000	6.000	79.30000	3.57E-02	1.57E-02	1.85E-02	4.58E-02	1.56E-02
CM-248	5078.600	25.000	5.000	91.00000	7.08E-02	1.71E-02	1.47E-02	3.71E-02	1.68E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 9/1/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435429
SAMPLE DATE : 8-JUN-2005 00:00:00.

SAMPLE ID : S1200870938_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33207
AVERAGE %EFFICIENCY :34.9156
% YIELD : 85.058

COUNT DATE:30-JUN-2005 14:00:14
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B070.CNF;599
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407681
MSD PCI/L : 3.407681
LCS PCI/L : 3.407681
TRACER DPM : 6.7256
EFF FILE : W070.CNF;146
CAL DATE: 1-JUN-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-5.000	15.000	100.0000	-9.50E-03	9.51E-03	1.71E-02	3.94E-02	9.50E-03
CM-5/6	5386.000	17.000	2.000	86.09000	3.74E-02	1.02E-02	7.25E-03	2.05E-02	1.01E-02
AM-241	5479.150	2.508	3.000	99.94000	4.76E-03	5.54E-03	7.64E-03	2.04E-02	5.53E-03
CM-242	6102.000	6.000	0.000	100.0000	1.25E-02	5.15E-03	0.00E+00	5.67E-03	5.12E-03
AM243	5270.000	1993.000	6.000	99.78000	3.79E+00	1.94E-01	1.08E-02	2.68E-02	8.51E-02
CM-247	4946.000	24.000	1.000	79.30000	5.74E-02	1.25E-02	5.56E-03	1.76E-02	1.22E-02
CM-248	5078.600	36.000	1.000	91.00000	7.50E-02	1.33E-02	4.85E-03	1.53E-02	1.28E-02

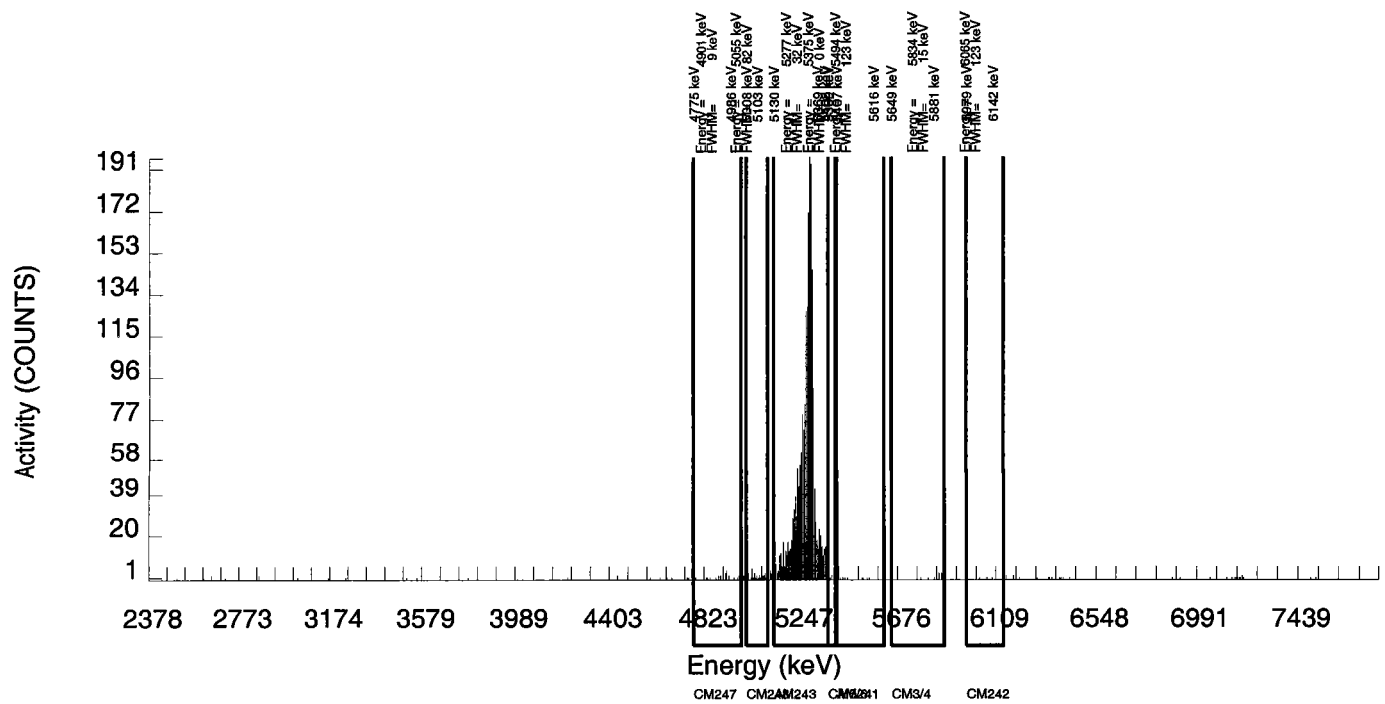
REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 7/1/05

7/1/05

RQR = 0.356



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435429
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S1200870939_AM
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :33209
AVERAGE %EFFICIENCY :31.0833
% YIELD : 93.675

COUNT DATE:30-JUN-2005 14:00:16
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :SCP

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B071.CNF;600
BKG DATE: 26-JUN-2005

MS PCI/L : 2.725968
MSD PCI/L : 2.725968
LCS PCI/L : 2.725968
TRACER DPM : 6.7255
EFF FILE : W071.CNF;150
CAL DATE: 1-JUN-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-13.000	24.000	100.0000	-2.01E-02	9.21E-03	1.76E-02	3.95E-02	9.16E-03
CM-5/6	5386.000	70.000	3.000	86.09000	1.26E-01	1.67E-02	7.24E-03	1.93E-02	1.57E-02
AM-241	5479.150	1705.576	13.000	99.94000	2.64E+00	1.38E-01	1.30E-02	3.01E-02	6.44E-02
CM-242	6102.000	5.000	4.000	100.0000	8.00E-03	5.78E-03	7.45E-03	1.92E-02	5.77E-03
AM243	5270.000	1954.000	6.000	99.78000	3.03E+00	1.56E-01	8.84E-03	2.19E-02	6.87E-02
CM-247	4946.000	14.000	2.000	79.30000	2.73E-02	8.37E-03	6.42E-03	1.81E-02	8.28E-03
CM-248	5078.600	22.000	2.000	91.00000	3.74E-02	8.84E-03	5.59E-03	1.58E-02	8.67E-03

REVIEWED BY:

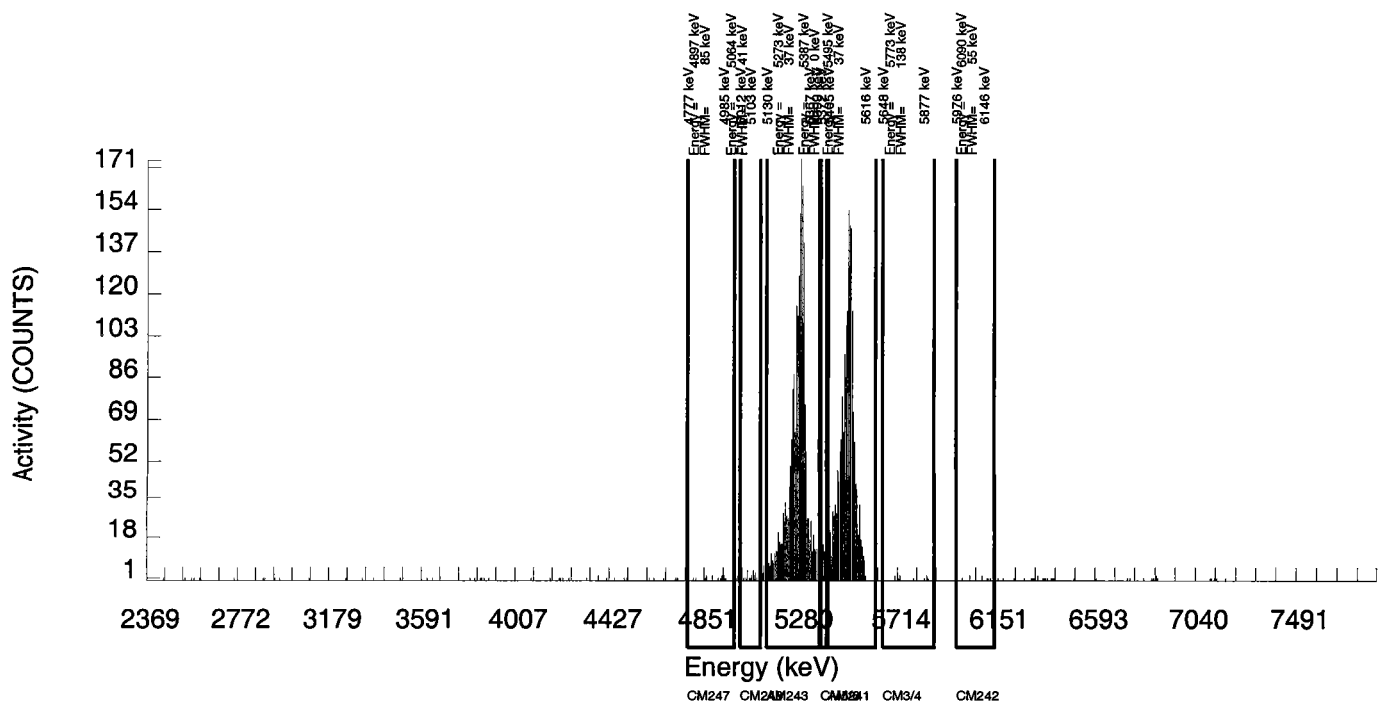
NOTE: Corrections made to AM-241

DATE :

7/1/05

7/11/06

$LCS = \frac{2.64}{2.73} = 96.7\%$



Radiochemistry Batch Checklist, Rev 3

Batch# 435430 Product: PU Date: 7/6/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.		✓	NCR # 217492
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.			
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .		✓	NCR # 217492
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	✓		
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	✓		NCR # 217492

General Engineering Laboratories

10/31/2000

Primary Review Performed By: 7/6/05

Secondary Review Performed By: 7/6/05

7/2-7/9

CSHL

Plutonium Que Sheet

20-JUN-05

QBatch #: 435430 Analyst: SCP Minimum DueDate: 02-JUL-05

Tracer Isotope(s): Pu-242/Pu-236 Tracer Code: 0757A Expiration Date: 5/31/06 Vol: 0.1

LCS Isotope(s): Pu-239/Pu-238 LCS Code: 0838N Expiration Date: 4/26/06 Vol: 0.1

Spike Isotope(s): Pu-239/Pu-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 6/23/05 Initials: SCP Pipet ID: 4987313 Balance ID: 16750207 Witness: CCW 6/23/05

Sample ID	Client	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label #	Aliquot (g (l) f)	Pu Det #	Ash Weight (g)
138373001	GF05060P12301	SAMPLE		.05 pCi/L	WATER	ESHL001	08-JUN-05	101	.800	72	
138373002	GU05060P12301	SAMPLE		.05 pCi/L	WATER	ESHL001	08-JUN-05	102	.800	73	
138373003	GU05060P12301-FB	SAMPLE		.05 pCi/L	WATER	ESHL001	08-JUN-05	103	.800	74	
138436003	GF05050GMC501	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	09-JUN-05	104	.800	75	
138436004	GU05050GMC501	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	09-JUN-05	105	.800	77	
138675001	GF0506G16R201	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-JUN-05	106	.800	78	
138675002	GU0506G16R201	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-JUN-05	107	.800	79	
138800001	GF0506G16R301	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-JUN-05	108	.800	81	
138800002	GF0506G16R401	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-JUN-05	109	.800	82	
138800003	GU0506G16R301	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-JUN-05	110	.800	83	
138800004	GU0506G16R401	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-JUN-05	111	.800	84	
138851001	GF05050GMC601	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	15-JUN-05	112	.800	85	
138851002	GF05050GMC690	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	15-JUN-05	113	.800	86	
138851003	GU05050GMC601	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	15-JUN-05	114	.800	87	
138851004	GU05050GMC690	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	15-JUN-05	115	.800	102	
138905001	GF0506G12R101	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	16-JUN-05	116	.800	103	
138905005	GU0506G12R101	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	16-JUN-05	117	.800	105	
1200870940	MB for batch 435430	MB		.05 pCi/L	WATER	QC ACCOUNT		118	1.00	106	
1200870941	GU05060P12301(138373002DUP)	DUP		.05 pCi/L	WATER	QC ACCOUNT	08-JUN-05	119	.800	109	
1200870942	LCS for batch 435430	LCS		.05 pCi/L	WATER	QC ACCOUNT		120	1.00	94	

6/30/05 101 87

6/30/05 SCP 6/28/05

1312

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One) SCP 6/23/05

Data Reviewed By: 7/6/05

General Engineering Laboratories, Radiochemistry Division

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200870941	DUP	Plutonium-238	0.800 L	0.0094	0.00577	0.049	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0164	0.00707	0.041	.0020375	pCi/L	NO
1200870942	LCS	Plutonium-238	1.00 L	0.0119	0.00515	0.035	.00651	pCi/L	YES
		Plutonium-239/240	1.00 L	2.43	0.131	0.030	.00163	pCi/L	NO
1200870940	MB	Plutonium-238	1.00 L	0.00651	0.00399	0.034	.00651	pCi/L	YES
		Plutonium-239/240	1.00 L	0.00163	0.00282	0.029	.00163	pCi/L	YES
138373001	GF05060P12301	Plutonium-238	0.800 L	-0.00312	0.0129	0.065	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00312	0.00441	0.055	.0020375	pCi/L	YES
138373002	GU05060P12301	Plutonium-238	0.800 L	-0.00959	0.00588	0.050	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00958	0.00758	0.042	.0020375	pCi/L	YES
138373003	GU05060P12301-FB	Plutonium-238	0.800 L	-0.0138	0.00978	0.048	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	1.100E-09	0.00728	0.040	.0020375	pCi/L	YES
138436003	GF05050GMC501	Plutonium-238	0.800 L	0.0021	0.0113	0.044	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.0042	0.0084	0.037	.0020375	pCi/L	YES
138436004	GU05050GMC501	Plutonium-238	0.800 L	0.0114	0.00601	0.039	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00569	0.00684	0.033	.0020375	pCi/L	YES
138675001	GF0506G16R201	Plutonium-238	0.800 L	0.0214	0.017	0.094	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00535	0.00757	0.111	.0020375	pCi/L	YES
138675002	GU0506G16R201	Plutonium-238	0.800 L	0.0155	0.015	0.053	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00515	0.00729	0.045	.0020375	pCi/L	YES
138800001	GF0506G16R301	Plutonium-238	0.800 L	-0.00435	0.0111	0.045	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00652	0.00575	0.038	.0020375	pCi/L	YES
138800002	GF0506G16R401	Plutonium-238	0.800 L	-2.810E-09	0.0132	0.061	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.0177	0.00935	0.052	.0020375	pCi/L	YES
138800003	GU0506G16R301	Plutonium-238	0.800 L	0.00561	0.0119	0.058	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00561	0.00561	0.049	.0020375	pCi/L	YES
138800004	GU0506G16R401	Plutonium-238	0.800 L	0.00	0.0194	0.116	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0168	0.0168	0.098	.0020375	pCi/L	NO
138851001	GF05050GMC601	Plutonium-238	0.800 L	-0.00419	0.00726	0.043	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00838	0.00514	0.037	.0020375	pCi/L	YES
138851002	GF05050GMC690	Plutonium-238	0.800 L	-0.00547	0.0067	0.057	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0082	0.00724	0.048	.0020375	pCi/L	YES
138851003	GU05050GMC601	Plutonium-238	0.800 L	-0.00203	0.00455	0.042	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0061	0.00455	0.036	.0020375	pCi/L	YES
138851004	GU05050GMC690	Plutonium-238	0.800 L	0.00355	0.00355	0.037	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0106	0.00562	0.031	.0020375	pCi/L	NO
138905001	GF0506G12R101	Plutonium-238	0.800 L	-0.0051	0.00625	0.053	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0128	0.00676	0.045	.0020375	pCi/L	NO
138905005	GU0506G12R101	Plutonium-238	0.800 L	-0.0087	0.00503	0.060	.0081375	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.0029	0.00648	0.051	.0020375	pCi/L	YES

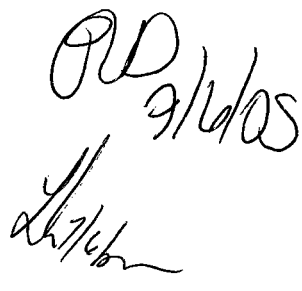
Calculation of MDA using a Blank Population.

Batch: 435430

Sg	
Pu-239	3.187
Pu-238	3.881

Updated: 6-Apr-05

sample	isotope	eff (dec)	yield (dec)	volume (Liter)	abundance (dec)	count time (min)	MDA (pCi/Liter)
138373001	Pu-239	0.279382	0.6476	0.8	0.999	1000	**0.055**
	Pu-238	0.279382	0.6476	0.8	0.999	1000	**0.065**
138373002	Pu-239	0.328165	0.71688	0.8	0.999	1000	**0.042**
	Pu-238	0.328165	0.71688	0.8	0.999	1000	**0.050**
138373003	Pu-239	0.27185	0.9008	0.8	0.999	1000	**0.040**
	Pu-238	0.27185	0.9008	0.8	0.999	1000	**0.048**
138436003	Pu-239	0.330124	0.81345	0.8	0.999	1000	**0.037**
	Pu-238	0.330124	0.81345	0.8	0.999	1000	**0.044**
138436004	Pu-239	0.324636	0.91545	0.8	0.999	1000	**0.033**
	Pu-238	0.324636	0.91545	0.8	0.999	1000	**0.039**
138675001	Pu-239	0.348223	0.30246	0.8	0.999	1000	**0.094**
	Pu-238	0.348223	0.30246	0.8	0.999	1000	**0.111**
138675002	Pu-239	0.347388	0.62964	0.8	0.999	1000	**0.045**
	Pu-238	0.347388	0.62964	0.8	0.999	1000	**0.053**
138800001	Pu-239	0.287718	0.90194	0.8	0.999	1000	**0.038**
	Pu-238	0.287718	0.90194	0.8	0.999	1000	**0.045**
138800002	Pu-239	0.283082	0.67525	0.8	0.999	1000	**0.052**
	Pu-238	0.283082	0.67525	0.8	0.999	1000	**0.061**
138800003	Pu-239	0.31379	0.64061	0.8	0.999	1000	**0.049**
	Pu-238	0.31379	0.64061	0.8	0.999	1000	**0.058**
138800004	Pu-239	0.261897	0.38536	0.8	0.999	1000	**0.098**
	Pu-238	0.261897	0.38536	0.8	0.999	1000	**0.116**
138851001	Pu-239	0.343886	0.78262	0.8	0.999	1000	**0.037**
	Pu-238	0.343886	0.78262	0.8	0.999	1000	**0.043**
138851002	Pu-239	0.254216	0.81131	0.8	0.999	1000	**0.048**
	Pu-238	0.254216	0.81131	0.8	0.999	1000	**0.057**
138851003	Pu-239	0.351812	0.78763	0.8	0.999	1000	**0.036**
	Pu-238	0.351812	0.78763	0.8	0.999	1000	**0.042**



138851004	Pu-239	0.364596	0.87152	0.8	0.999	1000	**0.031**
	Pu-238	0.364596	0.87152	0.8	0.999	1000	**0.037**
138905001	Pu-239	0.34562	0.6394	0.8	0.999	1000	**0.045**
	Pu-238	0.34562	0.6394	0.8	0.999	1000	**0.053**
138905005	Pu-239	0.327627	0.5936	0.8	0.999	1000	**0.051**
	Pu-238	0.327627	0.5936	0.8	0.999	1000	**0.060**
1200870940	Pu-239	0.34401	0.80515	1	0.999	1000	**0.029**
	Pu-238	0.34401	0.80515	1	0.999	1000	**0.034**
1200870941	Pu-239	0.335793	0.71475	0.8	0.999	1000	**0.041**
	Pu-238	0.335793	0.71475	0.8	0.999	1000	**0.049**
1200870942	Pu-239	0.313176	0.8438	1	0.999	1000	**0.030**
	Pu-238	0.313176	0.8438	1	0.999	1000	**0.035**

QD 7/6/05

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

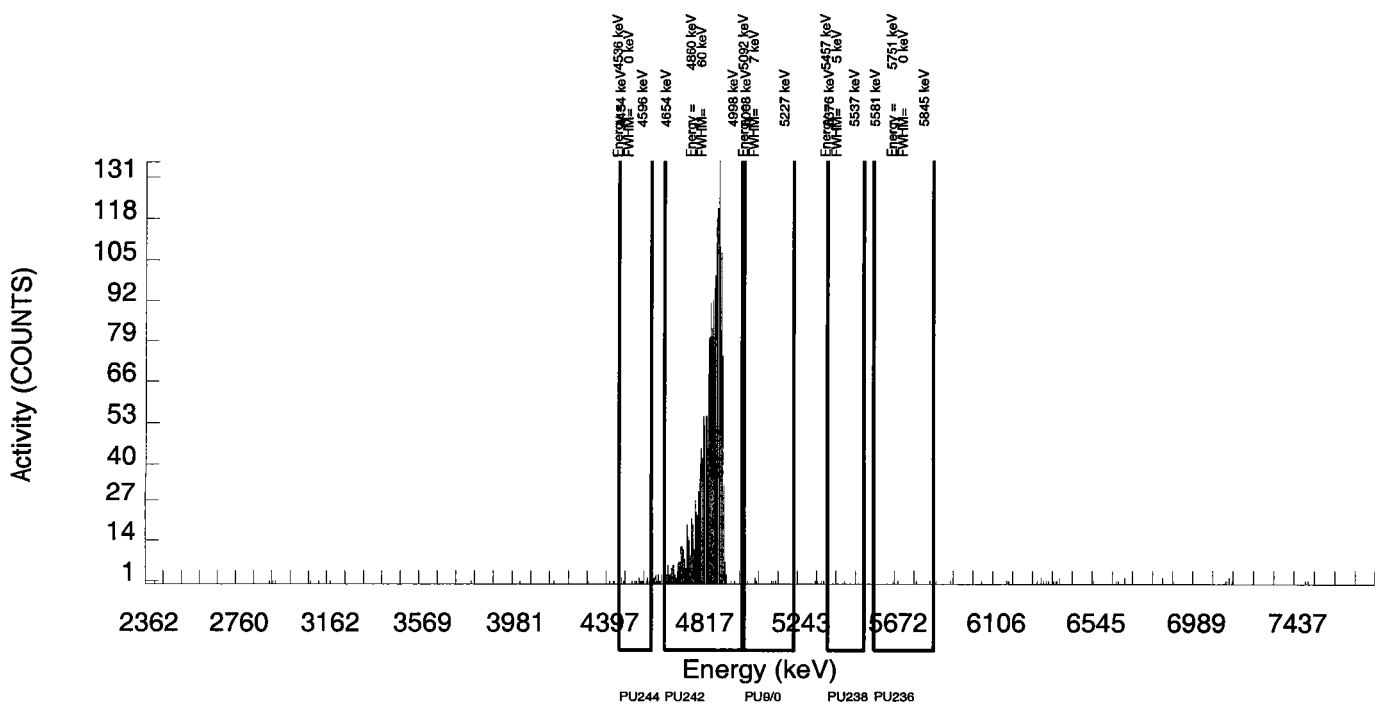
BATCH NUMBER: 435430 SAMPLE DATE : 8-JUN-2005 00:00:00.	SAMPLE ID : S0138373002_PU SAMPLE QTY: 0.800 L
DETECTOR NUMBER :33211 AVERAGE %EFFICIENCY :32.8165 % YIELD : 71.688	COUNT DATE:30-JUN-2005 14:00:16 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :SCP

MS : 0338-N MSD : 0338-N LCS : 0338-N TRACER : 0757-A BKG FILE: B073.CNF;598 BKG DATE: 26-JUN-2005	MS PCI/L : 2.987608 MSD PCI/L : 2.987608 LCS PCI/L : 2.987608 TRACER DPM : 8.4122 EFF FILE : W073.CNF;150 CAL DATE: 1-JUN-2005	MS ISOTOPE : PU-9/0 MSD ISOTOPE: PU-9/0 LCS ISOTOPE: PU-9/0 TRACER ISOTOPE: PU242 LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	4.000	3.000	99.90000	9.58E-03	7.58E-03	9.65E-03	2.58E-02	7.58E-03
PU-236	5749.000	-8.000	15.000	100.0000	-1.94E-02	1.14E-02	2.19E-02	5.04E-02	1.14E-02
PU-238	5499.000	-4.000	5.000	99.90000	-9.59E-03	5.88E-03	1.25E-02	3.14E-02	5.87E-03
PU242	4890.000	1979.000	5.000	100.0000	4.74E+00	2.01E-01	1.25E-02	3.14E-02	1.07E-01
PU-244	4589.000	20.000	0.000	99.90000	4.79E-02	1.09E-02	0.00E+00	6.49E-03	1.07E-02

REVIEWED BY: DATE : 7/5/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435430
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851001_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :30451
AVERAGE %EFFICIENCY :34.3886
% YIELD : 78.262

COUNT DATE:30-JUN-2005 14:00:26
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :SCP

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0757-A
BKG FILE: B085.CNF;518
BKG DATE: 26-JUN-2005

MS PCI/L : 2.987608
MSD PCI/L : 2.987608
LCS PCI/L : 2.987608
TRACER DPM : 8.4122
EFF FILE : W085.CNF;179
CAL DATE: 1-JUN-2005

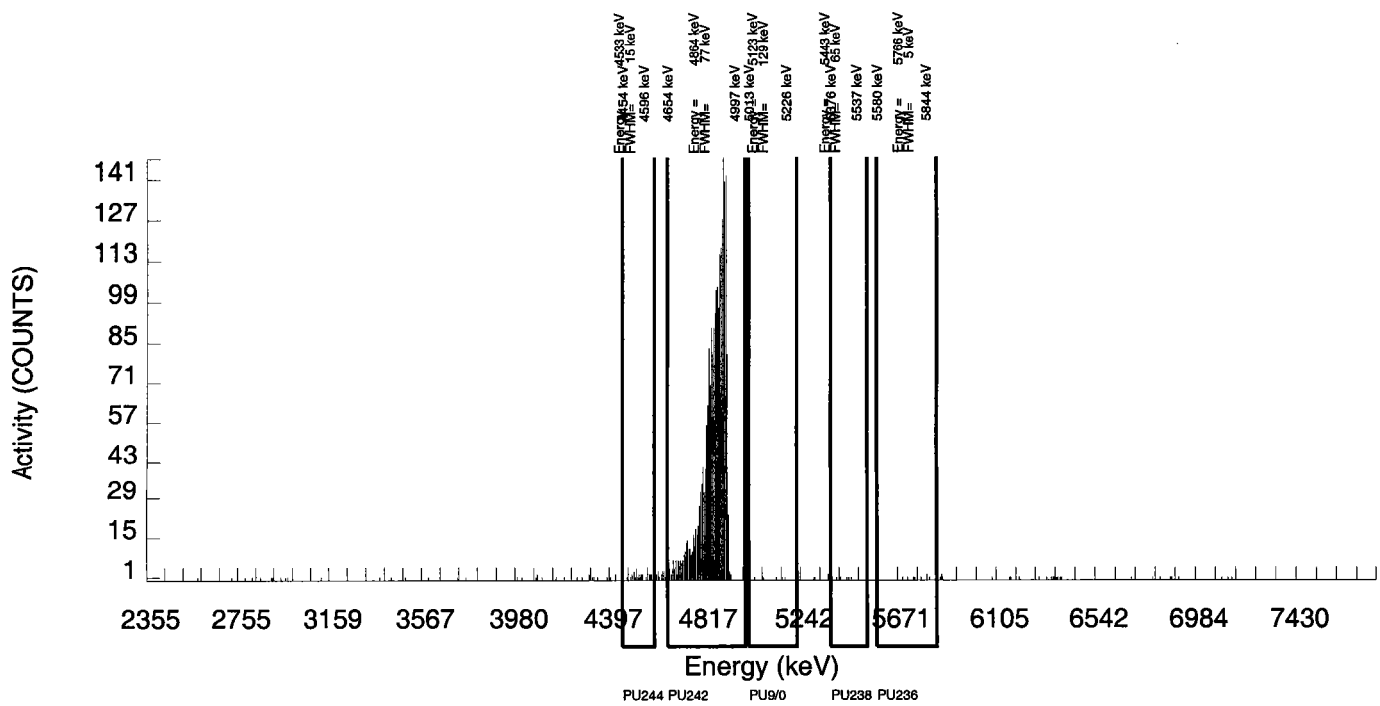
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	4.000	1.000	99.90000	8.38E-03	5.14E-03	4.87E-03	1.54E-02	5.13E-03
PU-236	5749.000	-1.000	9.000	100.0000	-2.11E-03	8.72E-03	1.48E-02	3.52E-02	8.72E-03
PU-238	5499.000	-2.000	7.000	99.90000	-4.19E-03	7.26E-03	1.29E-02	3.15E-02	7.26E-03
PU242	4890.000	2264.000	6.000	100.0000	4.74E+00	1.93E-01	1.19E-02	2.95E-02	9.98E-02
PU-244	4589.000	31.000	0.000	99.90000	6.49E-02	1.19E-02	0.00E+00	5.68E-03	1.17E-02

REVIEWED BY:

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435430
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851002_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :29278
AVERAGE %EFFICIENCY :25.4216
% YIELD : 81.131

COUNT DATE:30-JUN-2005 14:00:26
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :SCP

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0757-A
BKG FILE: B086.CNF;519
BKG DATE: 26-JUN-2005

MS PCI/L : 2.987608
MSD PCI/L : 2.987608
LCS PCI/L : 2.987608
TRACER DPM : 8.4122
EFF FILE : W086.CNF;152
CAL DATE: 1-JUN-2005

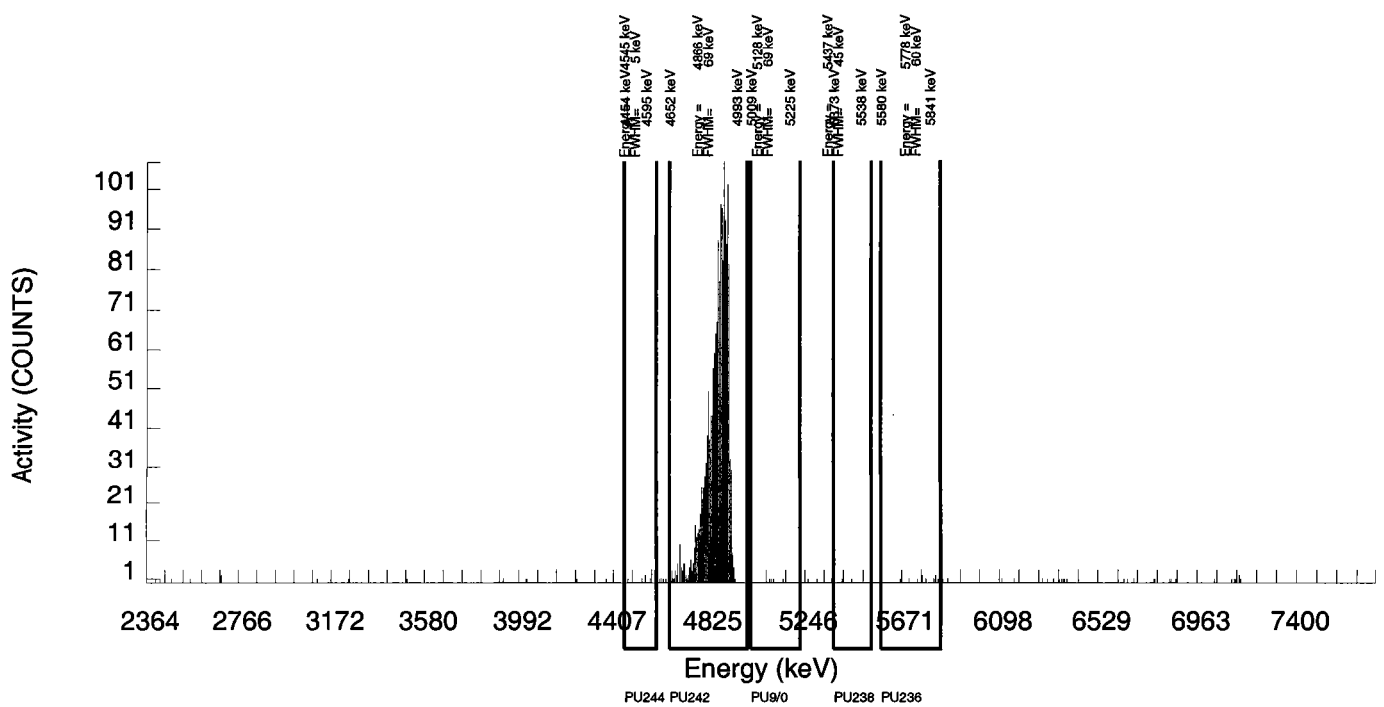
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	3.000	2.000	99.90000	8.20E-03	7.24E-03	8.99E-03	2.54E-02	7.23E-03
PU-236	5749.000	4.000	7.000	100.0000	1.10E-02	1.17E-02	1.70E-02	4.14E-02	1.17E-02
PU-238	5499.000	-2.000	4.000	99.90000	-5.47E-03	6.70E-03	1.27E-02	3.28E-02	6.70E-03
PU242	4890.000	1735.000	1.000	100.0000	4.74E+00	2.09E-01	6.35E-03	2.01E-02	1.14E-01
PU-244	4589.000	6.000	0.000	99.90000	1.64E-02	6.72E-03	0.00E+00	7.41E-03	6.69E-03

REVIEWED BY:

DATE : 7/5/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435430
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851003_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :31696
AVERAGE %EFFICIENCY :35.1812
% YIELD : 78.763

COUNT DATE: 1-JUL-2005 22:01:31
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :SCP

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0757-A
BKG FILE: B101.CNF;170
BKG DATE: 26-JUN-2005

MS PCI/L : 2.987608
MSD PCI/L : 2.987608
LCS PCI/L : 2.987608
TRACER DPM : 8.4122
EFF FILE : W101.CNF;50
CAL DATE: 1-JUL-2005

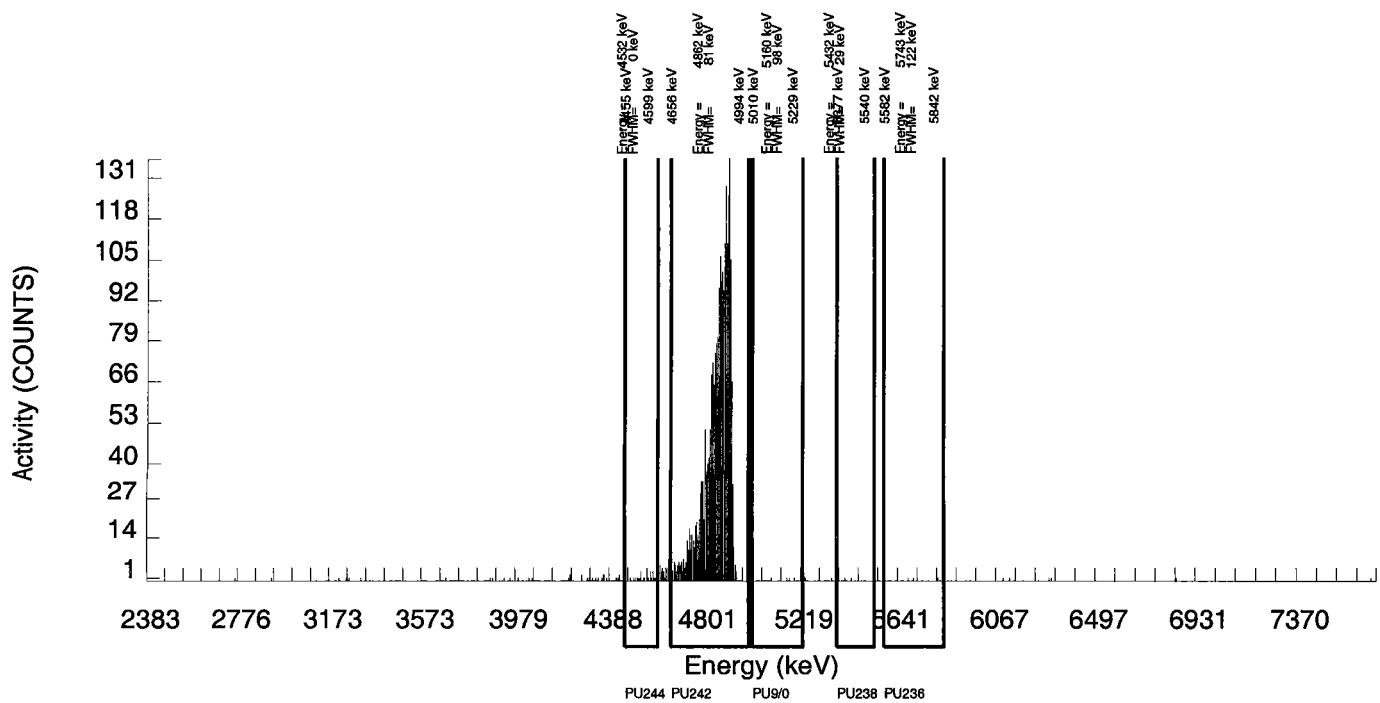
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	3.000	1.000	99.90000	6.10E-03	4.55E-03	4.73E-03	1.50E-02	4.55E-03
PU-236	5749.000	1.000	2.000	100.0000	2.06E-03	4.60E-03	6.76E-03	1.91E-02	4.60E-03
PU-238	5499.000	-1.000	3.000	99.90000	-2.03E-03	4.55E-03	8.20E-03	2.19E-02	4.55E-03
PU242	4890.000	2331.000	1.000	100.0000	4.74E+00	1.91E-01	4.73E-03	1.50E-02	9.81E-02
PU-244	4589.000	25.000	3.000	99.90000	5.09E-02	1.15E-02	8.20E-03	2.19E-02	1.13E-02

REVIEWED BY:

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435430	SAMPLE ID : S0138851004_PU
SAMPLE DATE : 15-JUN-2005 00:00:00	SAMPLE QTY: 0.800 L
DETECTOR NUMBER :30438	COUNT DATE: 1-JUL-2005 22:01:31
AVERAGE %EFFICIENCY :36.4596	ELAPSED LIVE TIME(SEC): 59999.99
% YIELD : 87.152	ANALYST :SCP

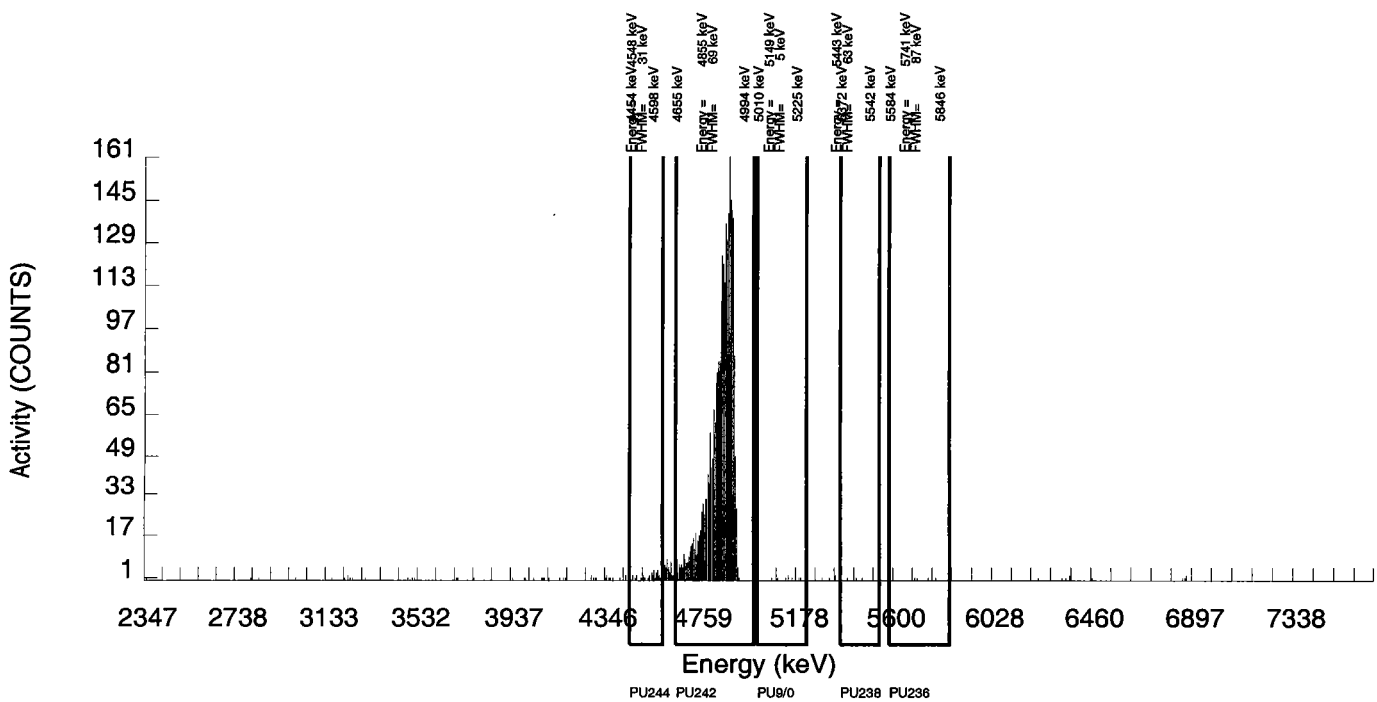
MS : 0338-N	MS PCI/L : 2.987608	MS ISOTOPE : PU-9/0
MSD : 0338-N	MSD PCI/L : 2.987608	MSD ISOTOPE: PU-9/0
LCS : 0338-N	LCS PCI/L : 2.987608	LCS ISOTOPE: PU-9/0
TRACER : 0757-A	TRACER DPM : 8.4122	TRACER ISOTOPE: PU242
BKG FILE: B102.CNF;170	EFF FILE : W102.CNF;48	LIB FILE : ENV_ALPHA_PU.N
BKG DATE: 26-JUN-2005	CAL DATE: 1-JUL-2005	

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	6.000	2.000	99.90000	1.06E-02	5.62E-03	5.84E-03	1.65E-02	5.61E-03
PU-236	5749.000	1.000	3.000	100.0000	1.79E-03	4.74E-03	7.22E-03	1.93E-02	4.74E-03
PU-238	5499.000	2.000	1.000	99.90000	3.55E-03	3.55E-03	4.13E-03	1.31E-02	3.55E-03
PU242	4890.000	2673.000	3.000	100.0000	4.74E+00	1.85E-01	7.14E-03	1.91E-02	9.17E-02
PU-244	4589.000	37.000	0.000	99.90000	6.56E-02	1.10E-02	0.00E+00	4.81E-03	1.08E-02

REVIEWED BY:

DATE : 7/8/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

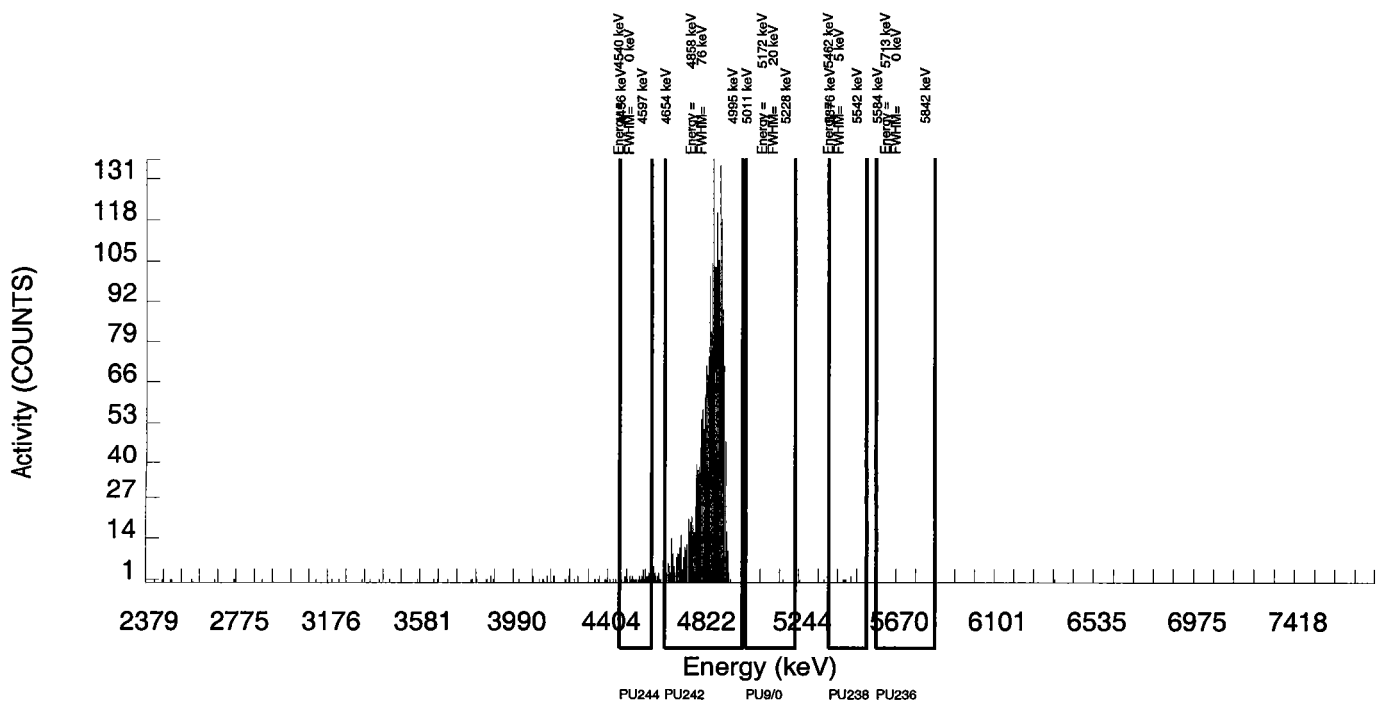
BATCH NUMBER: 435430 SAMPLE DATE : 23-JUN-2005 00:00:00	SAMPLE ID : S1200870940_PU SAMPLE QTY: 1.000 L
DETECTOR NUMBER :45382 AVERAGE %EFFICIENCY :34.4010 % YIELD : 80.515	COUNT DATE: 1-JUL-2005 22:01:31 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :SCP

MS : 0338-N MSD : 0338-N LCS : 0338-N TRACER : 0757-A BKG FILE: B106.CNF;170 BKG DATE: 26-JUN-2005	MS PCI/L : 2.390086 MSD PCI/L : 2.390086 LCS PCI/L : 2.390086 TRACER DPM : 8.4122 EFF FILE : W106.CNF;46 CAL DATE: 1-JUL-2005	MS ISOTOPE : PU-9/0 MSD ISOTOPE: PU-9/0 LCS ISOTOPE: PU-9/0 TRACER ISOTOPE: PU242 LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	1.000	1.000	99.90000	1.63E-03	2.82E-03	3.79E-03	1.20E-02	2.82E-03
PU-236	5749.000	-1.000	1.000	100.0000	-1.64E-03	2.31E-03	3.81E-03	1.20E-02	2.31E-03
PU-238	5499.000	4.000	1.000	99.90000	6.51E-03	3.99E-03	3.79E-03	1.20E-02	3.99E-03
PU242	4890.000	2330.000	3.000	100.0000	3.79E+00	1.53E-01	6.55E-03	1.75E-02	7.86E-02
PU-244	4589.000	38.000	2.000	99.90000	6.19E-02	1.08E-02	5.36E-03	1.51E-02	1.06E-02

REVIEWED BY: DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435430	SAMPLE ID : S1200870941_PU
SAMPLE DATE : 8-JUN-2005 00:00:00.	SAMPLE QTY: 0.800 L
DETECTOR NUMBER :31693	COUNT DATE: 1-JUL-2005 22:01:33
AVERAGE %EFFICIENCY :33.5793	ELAPSED LIVE TIME(SEC): 59999.99
% YIELD : 71.475	ANALYST :SCP

MS : 0338-N	MS PCI/L : 2.987608	MS ISOTOPE : PU-9/0
MSD : 0338-N	MSD PCI/L : 2.987608	MSD ISOTOPE: PU-9/0
LCS : 0338-N	LCS PCI/L : 2.987608	LCS ISOTOPE: PU-9/0
TRACER : 0757-A	TRACER DPM : 8.4122	TRACER ISOTOPE: PU242
BKG FILE: B109.CNF;170	EFF FILE : W109.CNF;46	LIB FILE : ENV_ALPHA_PU.N
BKG DATE: 26-JUN-2005	CAL DATE: 1-JUL-2005	

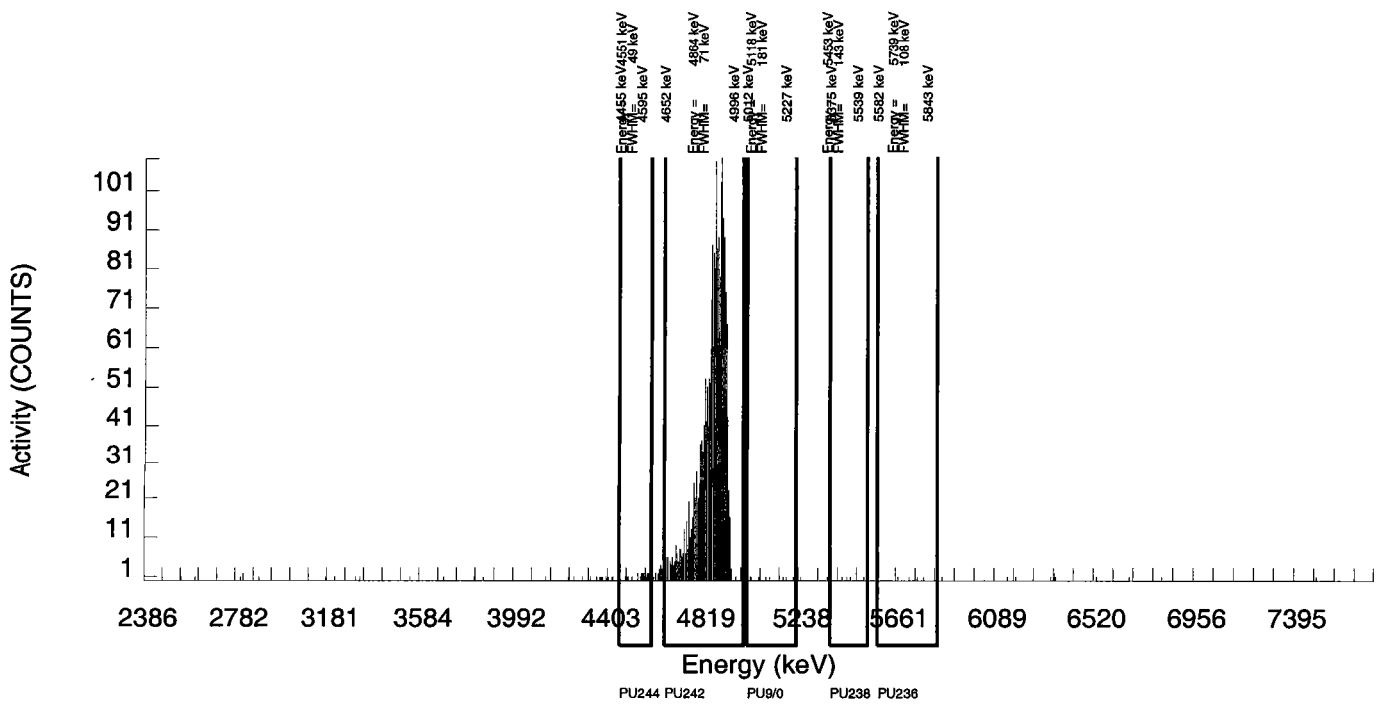
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	7.000	1.000	99.90000	1.64E-02	7.07E-03	5.46E-03	1.73E-02	7.05E-03
PU-236	5749.000	1.000	3.000	100.0000	2.38E-03	6.31E-03	9.61E-03	2.57E-02	6.31E-03
PU-238	5499.000	4.000	1.000	99.90000	9.40E-03	5.77E-03	5.47E-03	1.73E-02	5.76E-03
PU242	4890.000	2019.000	3.000	100.0000	4.74E+00	1.99E-01	9.45E-03	2.53E-02	1.06E-01
PU-244	4589.000	19.000	1.000	99.90000	4.46E-02	1.09E-02	5.46E-03	1.73E-02	1.08E-02

REVIEWED BY: DATE :

PU9/0 = 0.233

Pu-238 = 0.815



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435430
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S1200870942_PU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :33207
AVERAGE %EFFICIENCY :31.3176
% YIELD : 84.380

COUNT DATE: 5-JUL-2005 14:15:16
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0757-A
BKG FILE: B094.CNF;208
BKG DATE: 3-JUL-2005

MS PCI/L : 2.390086
MSD PCI/L : 2.390086
LCS PCI/L : 2.390086
TRACER DPM : 8.4122
EFF FILE : W094.CNF;56
CAL DATE: 1-JUL-2005

MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

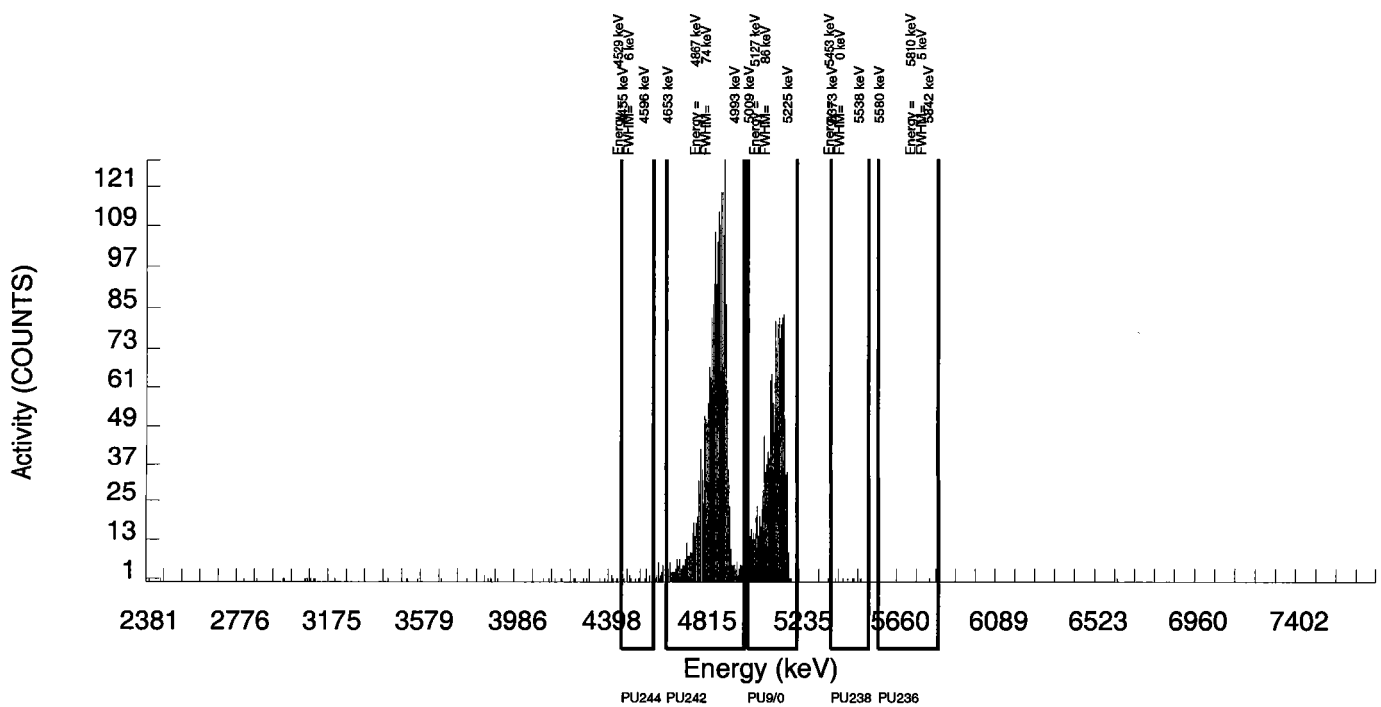
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	1424.000	1.000	99.90000	2.43E+00	1.31E-01	3.97E-03	1.26E-02	6.44E-02
PU-236	5749.000	-3.000	4.000	100.0000	-5.16E-03	3.85E-03	8.00E-03	2.06E-02	3.84E-03
PU-238	5499.000	7.000	1.000	99.90000	1.19E-02	5.15E-03	3.97E-03	1.26E-02	5.12E-03
PU242	4890.000	2223.000	6.000	100.0000	3.79E+00	1.96E-01	9.71E-03	2.40E-02	8.06E-02
PU-244	4589.000	16.000	0.000	99.90000	2.73E-02	6.95E-03	0.00E+00	4.62E-03	6.83E-03

REVIEWED BY:

DATE : 30/6/05

$LCS = \frac{2.43}{2.39} = 102\%$



Radiochemistry Batch Checklist, Rev 3

Batch# 435437 Product: U Date: 6/30/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/2000

Primary Review Performed By: 6/30/05

Secondary Review Performed By: 7/1/05

7/2-7/9

ESH2

Uranium Que Sheet

20-JUN-05

Batch #: 435431 **Analyst:** SCP **Minimum DueDate:** 02-JUL-05

Tracer Isotope: U-232/U-236 **Tracer Code:** 0688E **Expiration Date:** 6/25/05 **Vol:** 0.1

LCS Isotope: U-238 **LCS Code:** 03896 **Expiration Date:** 7/27/05 **Vol:** 0.1

Spike Isotope: U-238 **Spike Code:** NA **Expiration Date:** NA **Vol:** NA

Prep Date: 6/23/05 **Initials:** SCP **Pipet ID:** 949313 **Balance ID:** [illegible] **Witness:** LCW 6/23/05

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label #	Aliquot (g / l / f)	U Det #	Ash Weight (g)
138373001	GF05060P12301	SAMPLE		.1 pCi/L	WATER	ESHL001	08-JUN-05	101	.800	19	
138373002	GU05060P12301	SAMPLE		.1 pCi/L	WATER	ESHL001	08-JUN-05	102	.800	20	
138373003	GU05060P12301-FB	SAMPLE		.1 pCi/L	WATER	ESHL001	08-JUN-05	103	.800	21	
138436003	GF05050GMC501	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	09-JUN-05	104	.800	22	
138436004	GU05050GMC501	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	09-JUN-05	105	.800	23	
138675001	GF0506G16R201	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	13-JUN-05	106	.800	24	
138675002	GU0506G16R201	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	13-JUN-05	107	.800	65	
138800001	GF0506G16R301	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	13-JUN-05	108	.800	68	
138800002	GF0506G16R401	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	14-JUN-05	109	.800	69	
138800003	GU0506G16R301	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	13-JUN-05	110	.800	70	
138800004	GU0506G16R401	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	14-JUN-05	111	.800	71	
138851001	GF05050GMC601	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	15-JUN-05	112	.800	72	
138851002	GF05050GMC690	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	15-JUN-05	113	.800	73	
138851003	GU05050GMC601	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	15-JUN-05	114	.800	74	
138851004	GU05050GMC690	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	15-JUN-05	115	.800	75	
138905001	GF0506G12R101	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	16-JUN-05	116	.800	77	
138905005	GU0506G12R101	SAMPLE		.1 pCi/L	GROUND WATI	ESHL001	16-JUN-05	117	.800	78	
1200870943	MB for batch 435431	MB		.1 pCi/L	WATER	QC ACCOUNT		118	.800 1.0	79	
1200870944	GU05060P12301(138373002DUP)	DUP		.1 pCi/L	WATER	QC ACCOUNT	08-JUN-05	119	.800	81	
1200870945	LCS for batch 435431	LCS		.1 pCi/L	WATER	QC ACCOUNT		120	.800 1.0	82	

SCP 6/29/05

1325

Solid Sample Dissolution by: **LEACH or DIGESTION** (Circle One) SCP 6/23/05

Data Reviewed By: 6/30/05

General Engineering Laboratories, Radiochemistry Division

7/1/05

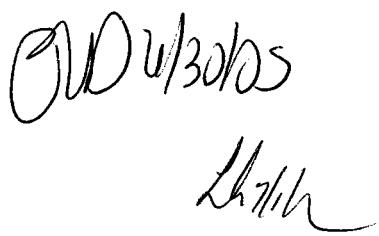
Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200870944	DUP	Uranium-233/234	0.800 L	0.188	0.0274	0.088	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0348	0.0124	0.054	0	pCi/L	NO
		Uranium-238	0.800 L	0.142	0.0222	0.062	0	pCi/L	NO
1200870945	LCS	Uranium-233/234	1.00 L	2.50	0.129	0.071	-.00226	pCi/L	NO
		Uranium-235/236	1.00 L	0.184	0.0237	0.043	0	pCi/L	NO
		Uranium-238	1.00 L	2.67	0.136	0.050	0	pCi/L	NO
1200870943	MB	Uranium-233/234	1.00 L	-0.00226	0.00876	0.069	-.00226	pCi/L	NO
		Uranium-235/236	1.00 L	0.00	0.00454	0.042	0	pCi/L	NO
		Uranium-238	1.00 L	0.00	0.0064	0.049	0	pCi/L	NO
138373001	GF05060P12301	Uranium-233/234	0.800 L	0.178	0.0273	0.105	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0275	0.011	0.064	0	pCi/L	NO
		Uranium-238	0.800 L	0.0721	0.0195	0.074	0	pCi/L	NO
138373002	GU05060P12301	Uranium-233/234	0.800 L	0.237	0.0255	0.066	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0283	0.00797	0.040	0	pCi/L	NO
		Uranium-238	0.800 L	0.148	0.0197	0.047	0	pCi/L	NO
138373003	GU05060P12301-FB	Uranium-233/234	0.800 L	0.0102	0.00719	0.077	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.00255	0.00569	0.047	0	pCi/L	NO
		Uranium-238	0.800 L	0.00508	0.00622	0.055	0	pCi/L	NO
138436003	GF05050GMC501	Uranium-233/234	0.800 L	0.119	0.0193	0.071	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.021	0.0078	0.043	0	pCi/L	NO
		Uranium-238	0.800 L	0.0604	0.0126	0.050	0	pCi/L	NO
138436004	GU05050GMC501	Uranium-233/234	0.800 L	0.194	0.0257	0.081	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.016	0.0119	0.049	0	pCi/L	NO
		Uranium-238	0.800 L	0.133	0.0222	0.057	0	pCi/L	NO
138675001	GF0506G16R201	Uranium-233/234	0.800 L	0.328	0.0326	0.071	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.021	0.00967	0.043	0	pCi/L	NO
		Uranium-238	0.800 L	0.186	0.0238	0.050	0	pCi/L	NO
138675002	GU0506G16R201	Uranium-233/234	0.800 L	0.148	0.0227	0.085	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.014	0.00844	0.052	0	pCi/L	NO
		Uranium-238	0.800 L	0.0672	0.0151	0.060	0	pCi/L	NO
138800001	GF0506G16R301	Uranium-233/234	0.800 L	1.24	0.0777	0.083	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0714	0.0143	0.051	0	pCi/L	NO
		Uranium-238	0.800 L	0.827	0.0583	0.059	0	pCi/L	NO
138800002	GF0506G16R401	Uranium-233/234	0.800 L	0.120	0.0196	0.076	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.025	0.00873	0.046	0	pCi/L	NO
		Uranium-238	0.800 L	0.0924	0.0164	0.054	0	pCi/L	NO
138800003	GU0506G16R301	Uranium-233/234	0.800 L	1.36	0.0774	0.071	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0776	0.0146	0.044	0	pCi/L	NO
		Uranium-238	0.800 L	0.840	0.0553	0.051	0	pCi/L	NO
138800004	GU0506G16R401	Uranium-233/234	0.800 L	0.0755	0.0197	0.096	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0252	0.010	0.059	0	pCi/L	NO
		Uranium-238	0.800 L	0.0503	0.0135	0.068	0	pCi/L	NO

4/30/03

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
138851001	GF05050GMC601	Uranium-233/234	0.800 L	0.352	0.0339	0.078	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0412	0.0116	0.048	0	pCi/L	NO
		Uranium-238	0.800 L	0.157	0.0216	0.055	0	pCi/L	NO
138851002	GF05050GMC690	Uranium-233/234	0.800 L	0.375	0.0323	0.065	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0236	0.00718	0.040	0	pCi/L	NO
		Uranium-238	0.800 L	0.186	0.0214	0.046	0	pCi/L	NO
138851003	GU05050GMC601	Uranium-233/234	0.800 L	0.414	0.0381	0.079	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0261	0.00911	0.049	0	pCi/L	NO
		Uranium-238	0.800 L	0.219	0.0262	0.056	0	pCi/L	NO
138851004	GU05050GMC690	Uranium-233/234	0.800 L	0.380	0.0349	0.071	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0279	0.00993	0.043	0	pCi/L	NO
		Uranium-238	0.800 L	0.158	0.0209	0.050	0	pCi/L	NO
138905001	GF0506G12R101	Uranium-233/234	0.800 L	0.034	0.012	0.074	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0146	0.00773	0.045	0	pCi/L	NO
		Uranium-238	0.800 L	0.0121	0.0073	0.052	0	pCi/L	NO
138905005	GU0506G12R101	Uranium-233/234	0.800 L	0.0352	0.0113	0.072	-.002825	pCi/L	NO
		Uranium-235/236	0.800 L	0.0141	0.00943	0.044	0	pCi/L	NO
		Uranium-238	0.800 L	0.0235	0.00748	0.051	0	pCi/L	NO



Calculation of MDA using a Blank Population.

Updated: 4/27/2004

Batch: 435431

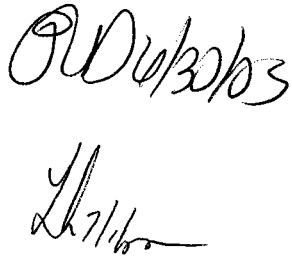
Sg	
U-234	5.97252
U-235	3.41012
U-238	4.05878

sample	isotope	eff (dec)	yield (dec)	volume (gram)	abundance (dec)	count time (min)	MDA (pCi/Liter)
138373001	U-234	0.27027	0.60709	0.8	1	1000	**0.105**
	U-235	0.27027	0.60709	0.8	0.997	1000	**0.064**
	U-238	0.27027	0.60709	0.8	1	1000	**0.074**
138373002	U-234	0.331133	0.78261	0.8	1	1000	**0.066**
	U-235	0.331133	0.78261	0.8	0.997	1000	**0.040**
	U-238	0.331133	0.78261	0.8	1	1000	**0.047**
138373003	U-234	0.28814	0.77008	0.8	1	1000	**0.077**
	U-235	0.28814	0.77008	0.8	0.997	1000	**0.047**
	U-238	0.28814	0.77008	0.8	1	1000	**0.055**
138436003	U-234	0.33979	0.71298	0.8	1	1000	**0.071**
	U-235	0.33979	0.71298	0.8	0.997	1000	**0.043**
	U-238	0.33979	0.71298	0.8	1	1000	**0.050**
138436004	U-234	0.287092	0.73965	0.8	1	1000	**0.081**
	U-235	0.287092	0.73965	0.8	0.997	1000	**0.049**
	U-238	0.287092	0.73965	0.8	1	1000	**0.057**
138675001	U-234	0.295415	0.81946	0.8	1	1000	**0.071**
	U-235	0.295415	0.81946	0.8	0.997	1000	**0.043**
	U-238	0.295415	0.81946	0.8	1	1000	**0.050**
138675002	U-234	0.272109	0.73923	0.8	1	1000	**0.085**
	U-235	0.272109	0.73923	0.8	0.997	1000	**0.052**
	U-238	0.272109	0.73923	0.8	1	1000	**0.060**
138800001	U-234	0.295353	0.69659	0.8	1	1000	**0.083**
	U-235	0.295353	0.69659	0.8	0.997	1000	**0.051**
	U-238	0.295353	0.69659	0.8	1	1000	**0.059**
138800002	U-234	0.323879	0.69644	0.8	1	1000	**0.076**
	U-235	0.323879	0.69644	0.8	0.997	1000	**0.046**
	U-238	0.323879	0.69644	0.8	1	1000	**0.054**
138800003	U-234	0.349156	0.68755	0.8	1	1000	**0.071**
	U-235	0.349156	0.68755	0.8	0.997	1000	**0.044**
	U-238	0.349156	0.68755	0.8	1	1000	**0.051**

6/30/05

7/1/05

138800004	U-234	0.310833	0.57569	0.8	1	1000	**0.096**
	U-235	0.310833	0.57569	0.8	0.997	1000	**0.059**
	U-238	0.310833	0.57569	0.8	1	1000	**0.068**
138851001	U-234	0.279382	0.78502	0.8	1	1000	**0.078**
	U-235	0.279382	0.78502	0.8	0.997	1000	**0.048**
	U-238	0.279382	0.78502	0.8	1	1000	**0.055**
138851002	U-234	0.328165	0.80143	0.8	1	1000	**0.065**
	U-235	0.328165	0.80143	0.8	0.997	1000	**0.040**
	U-238	0.328165	0.80143	0.8	1	1000	**0.046**
138851003	U-234	0.27185	0.7953	0.8	1	1000	**0.079**
	U-235	0.27185	0.7953	0.8	0.997	1000	**0.049**
	U-238	0.27185	0.7953	0.8	1	1000	**0.056**
138851004	U-234	0.330124	0.73552	0.8	1	1000	**0.071**
	U-235	0.330124	0.73552	0.8	0.997	1000	**0.043**
	U-238	0.330124	0.73552	0.8	1	1000	**0.050**
138905001	U-234	0.324636	0.71404	0.8	1	1000	**0.074**
	U-235	0.324636	0.71404	0.8	0.997	1000	**0.045**
	U-238	0.324636	0.71404	0.8	1	1000	**0.052**
138905005	U-234	0.348223	0.68886	0.8	1	1000	**0.072**
	U-235	0.348223	0.68886	0.8	0.997	1000	**0.044**
	U-238	0.348223	0.68886	0.8	1	1000	**0.051**
1200870943	U-234	0.347388	0.57323	1	1	1000	**0.069**
	U-235	0.347388	0.57323	1	0.997	1000	**0.042**
	U-238	0.347388	0.57323	1	1	1000	**0.049**
1200870944	U-234	0.287718	0.67744	0.8	1	1000	**0.088**
	U-235	0.287718	0.67744	0.8	0.997	1000	**0.054**
	U-238	0.287718	0.67744	0.8	1	1000	**0.062**
1200870945	U-234	0.283082	0.6853	1	1	1000	**0.071**
	U-235	0.283082	0.6853	1	0.997	1000	**0.043**
	U-238	0.283082	0.6853	1	1	1000	**0.050**



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435431
SAMPLE DATE : 8-JUN-2005 00:00:00.

SAMPLE ID : S0138373002_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33093
AVERAGE %EFFICIENCY :33.1133
% YIELD : 78.261

COUNT DATE:29-JUN-2005 15:13:55
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0389-G
MSD : 0389-G
LCS : 0389-G
TRACER : 0688-E
BKG FILE: B020.CNF;592
BKG DATE: 26-JUN-2005

MS PCI/L : 3.039161
MSD PCI/L : 3.039161
LCS PCI/L : 3.039161
TRACER DPM : 5.4518
EFF FILE : W020.CNF;159
CAL DATE: 2-JUN-2005

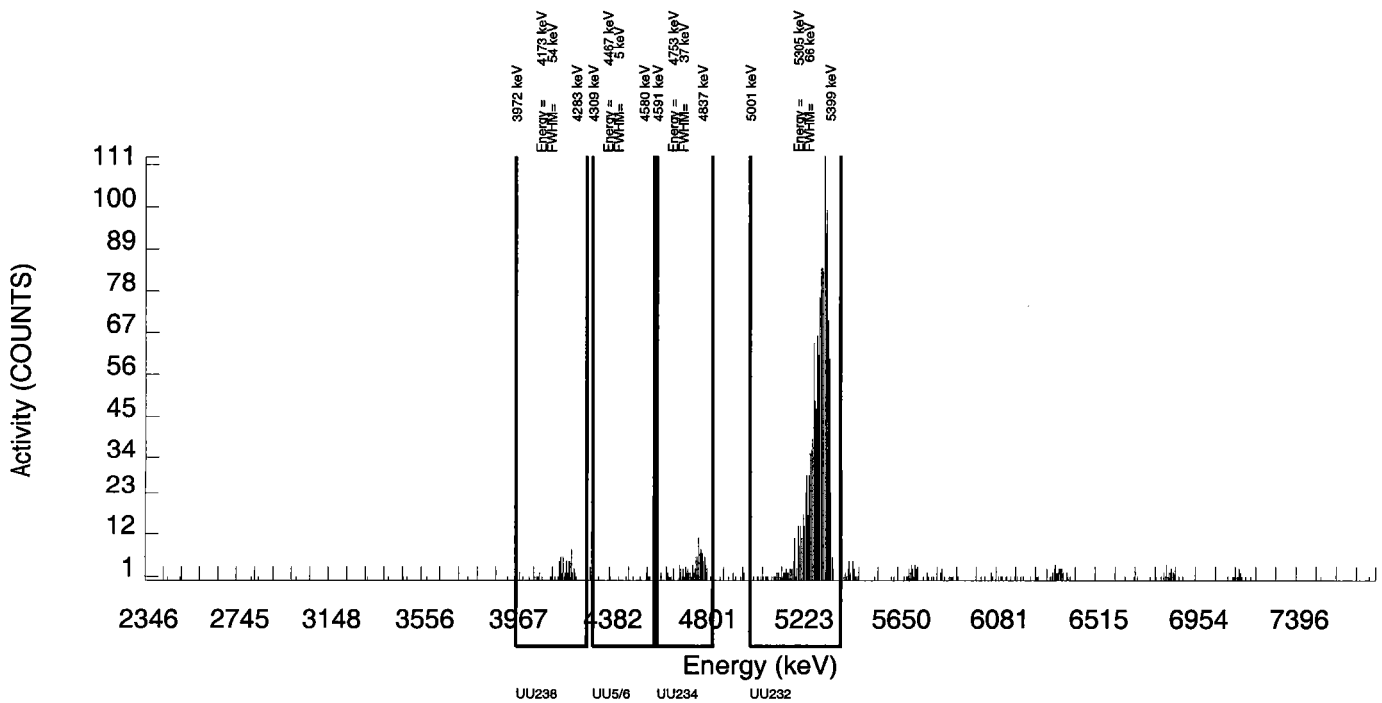
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	109.000	1.000	100.0000	2.37E-01	2.55E-02	5.05E-03	1.60E-02	2.29E-02
U232	5302.100	1412.000	16.000	100.0000	3.07E+00	1.67E-01	2.02E-02	4.63E-02	8.26E-02
U-235	4391.000	13.000	0.000	99.70000	2.83E-02	7.97E-03	0.00E+00	5.91E-03	7.86E-03
U-238	4184.730	68.000	2.000	100.0000	1.48E-01	1.97E-02	7.15E-03	2.02E-02	1.84E-02

REVIEWED BY:

DATE : 6/30/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435431
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851001_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33210
AVERAGE %EFFICIENCY :27.9382
% YIELD : 78.502

COUNT DATE:29-JUN-2005 16:16:10
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0389-G
MSD : 0389-G
LCS : 0389-G
TRACER : 0688-E
BKG FILE: B072.CNF;596
BKG DATE: 26-JUN-2005

MS PCI/L : 3.039161
MSD PCI/L : 3.039161
LCS PCI/L : 3.039161
TRACER DPM : 5.4508
EFF FILE : W072.CNF;145
CAL DATE: 1-JUN-2005

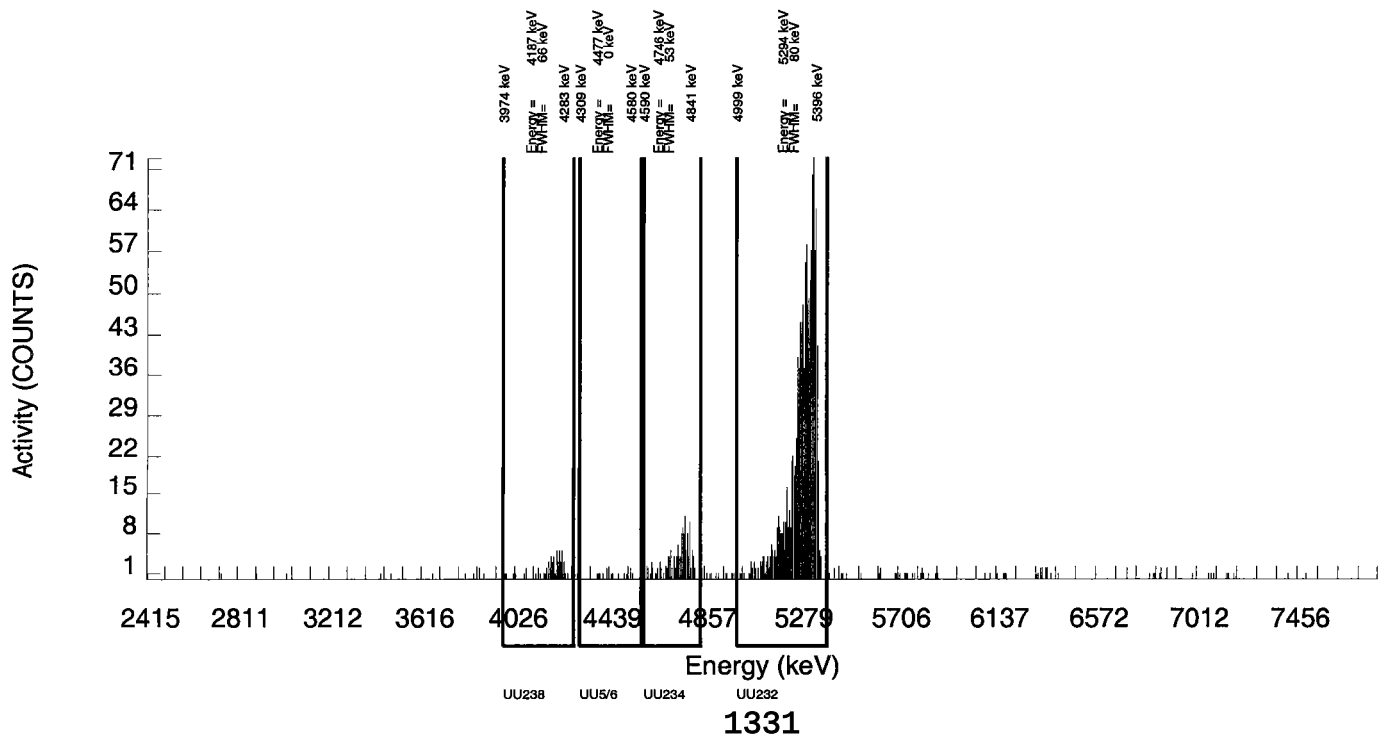
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	137.000	4.000	100.0000	3.52E-01	3.39E-02	1.19E-02	3.08E-02	3.09E-02
U232	5302.100	1195.000	3.000	100.0000	3.07E+00	1.51E-01	1.03E-02	2.76E-02	8.90E-02
U-235	4391.000	16.000	2.000	99.70000	4.12E-02	1.16E-02	8.47E-03	2.39E-02	1.15E-02
U-238	4184.730	61.000	2.000	100.0000	1.57E-01	2.16E-02	8.45E-03	2.38E-02	2.07E-02

REVIEWED BY:

DATE : 6/30/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

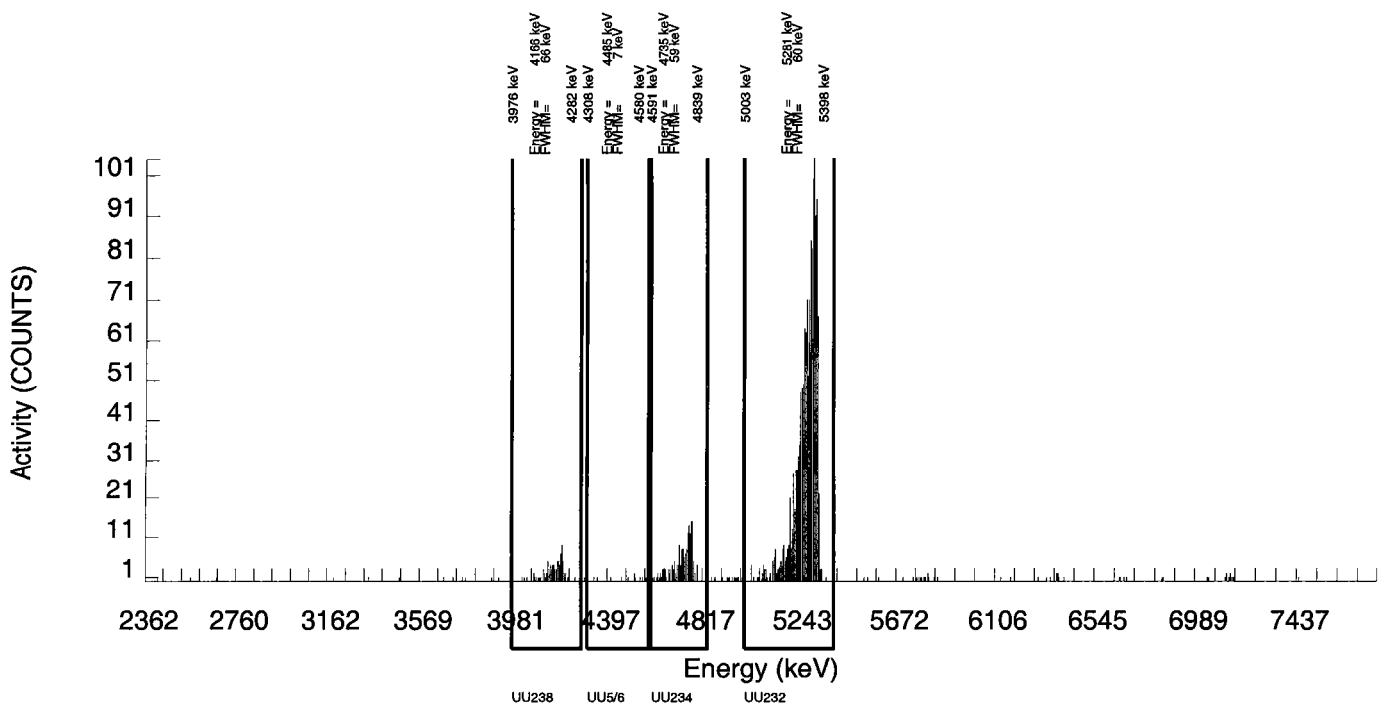
BATCH NUMBER: 435431	SAMPLE ID : S0138851002_UU
SAMPLE DATE : 15-JUN-2005 00:00:00	SAMPLE QTY: 0.800 L
DETECTOR NUMBER :33211	COUNT DATE:29-JUN-2005 16:16:10
AVERAGE %EFFICIENCY :32.8165	ELAPSED LIVE TIME(SEC): 60000.00
% YIELD : 80.143	ANALYST :SCP

MS : 0389-G	MS PCI/L : 3.039161	MS ISOTOPE : U-238
MSD : 0389-G	MSD PCI/L : 3.039161	MSD ISOTOPE: U-238
LCS : 0389-G	LCS PCI/L : 3.039161	LCS ISOTOPE: U-238
TRACER : 0688-E	TRACER DPM : 5.4508	TRACER ISOTOPE: U232
BKG FILE: B073.CNF;598	EFF FILE : W073.CNF;150	LIB FILE : ENV_ALPHA_UU.N
BKG DATE: 26-JUN-2005	CAL DATE: 1-JUN-2005	

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	175.000	4.000	100.0000	3.75E-01	3.23E-02	9.96E-03	2.57E-02	2.90E-02
U232	5302.100	1433.000	8.000	100.0000	3.07E+00	1.42E-01	1.41E-02	3.40E-02	8.15E-02
U-235	4391.000	11.000	0.000	99.70000	2.36E-02	7.18E-03	0.00E+00	5.82E-03	7.12E-03
U-238	4184.730	87.000	1.000	100.0000	1.86E-01	2.14E-02	4.98E-03	1.58E-02	2.02E-02

REVIEWED BY: DATE : 4/30/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435431
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851003_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :42465
AVERAGE %EFFICIENCY :27.1850
% YIELD : 79.530

COUNT DATE:29-JUN-2005 16:16:10
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0389-G
MSD : 0389-G
LCS : 0389-G
TRACER : 0688-E
BKG FILE: B074.CNF;614
BKG DATE: 26-JUN-2005

MS PCI/L : 3.039161
MSD PCI/L : 3.039161
LCS PCI/L : 3.039161
TRACER DPM : 5.4508
EFF FILE : W074.CNF;170
CAL DATE: 1-JUN-2005

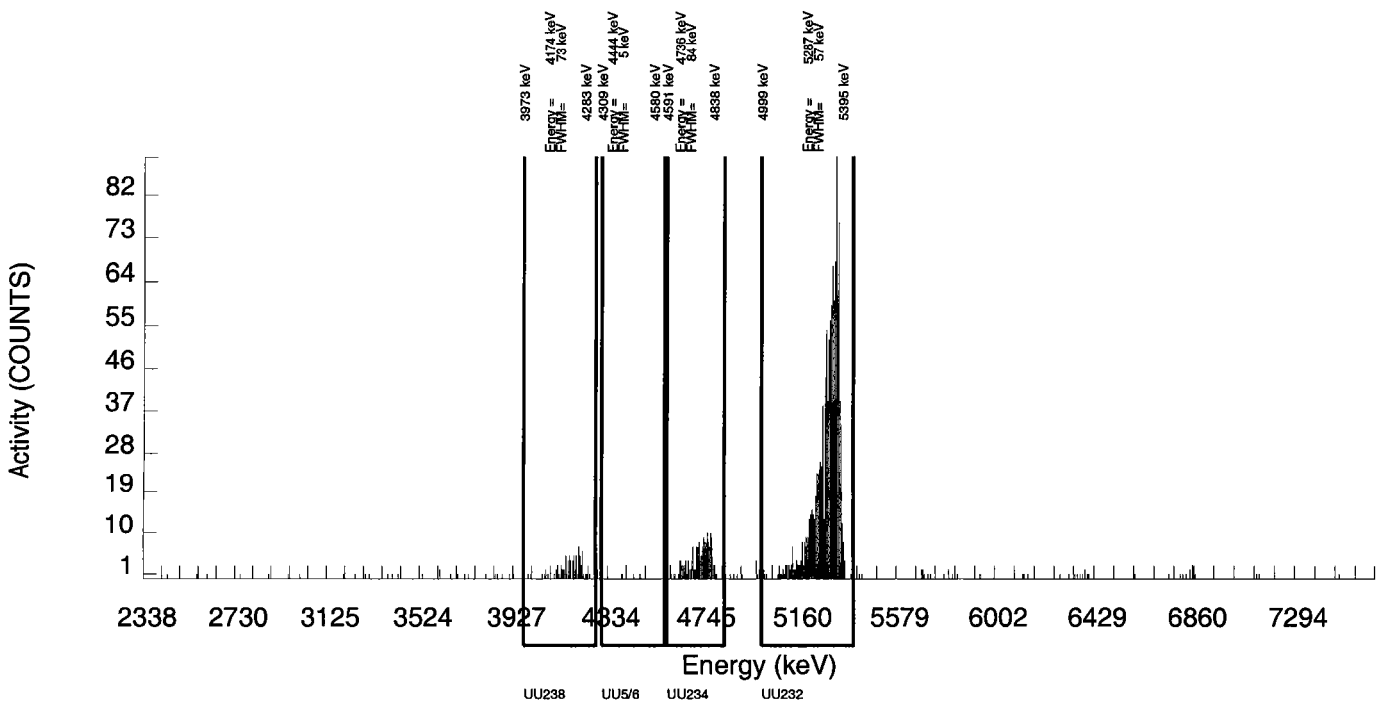
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	159.000	7.000	100.0000	4.14E-01	3.81E-02	1.60E-02	3.91E-02	3.43E-02
U232	5302.100	1178.000	9.000	100.0000	3.07E+00	1.53E-01	1.82E-02	4.34E-02	9.01E-02
U-235	4391.000	10.000	1.000	99.70000	2.61E-02	9.11E-03	6.08E-03	1.92E-02	9.05E-03
U-238	4184.730	84.000	3.000	100.0000	2.19E-01	2.62E-02	1.05E-02	2.80E-02	2.47E-02

REVIEWED BY:

DATE : 6/30/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435431
SAMPLE DATE : 15-JUN-2005 00:00:00

SAMPLE ID : S0138851004_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :29976
AVERAGE %EFFICIENCY :33.0124
% YIELD : 73.552

COUNT DATE:29-JUN-2005 16:16:10
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :SCP

MS : 0389-G
MSD : 0389-G
LCS : 0389-G
TRACER : 0688-E
BKG FILE: B075.CNF;603
BKG DATE: 26-JUN-2005

MS PCI/L : 3.039161
MSD PCI/L : 3.039161
LCS PCI/L : 3.039161
TRACER DPM : 5.4508
EFF FILE : W075.CNF;158
CAL DATE: 1-JUN-2005

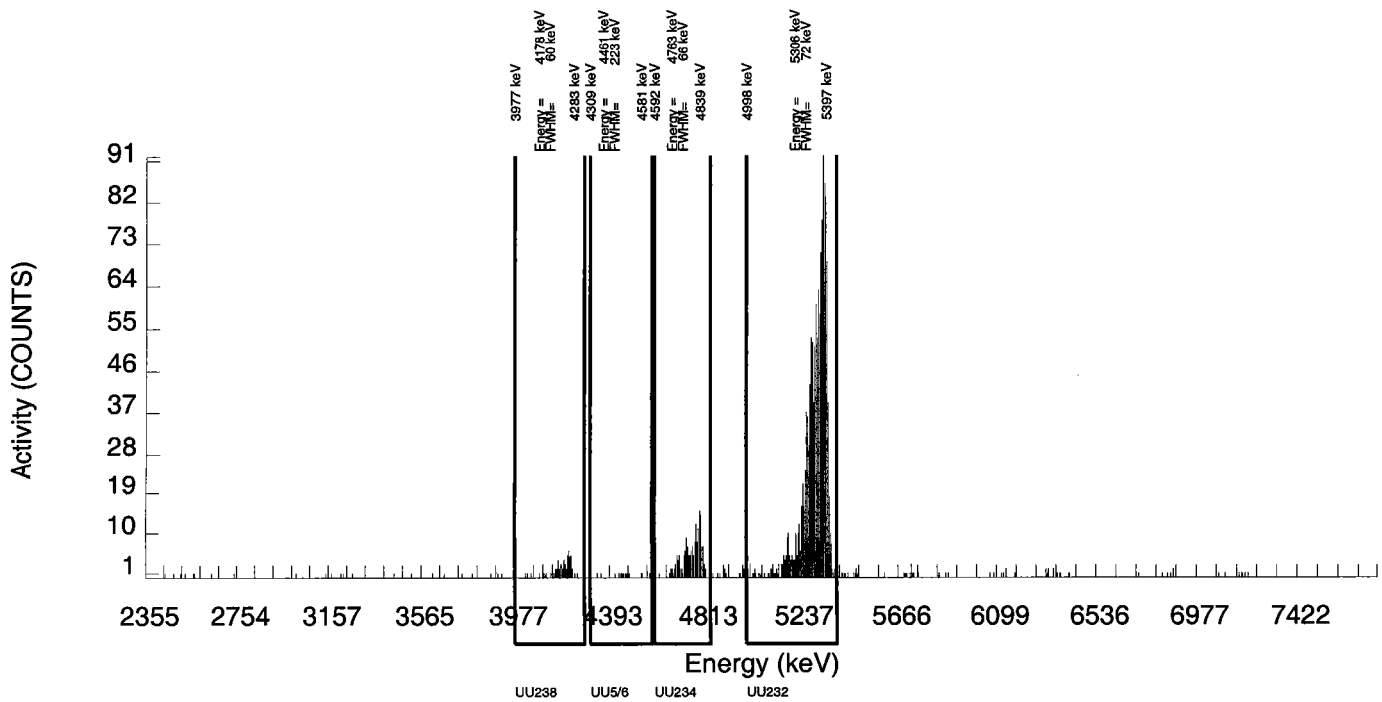
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	164.000	11.000	100.0000	3.80E-01	3.49E-02	1.79E-02	4.20E-02	3.16E-02
U232	5302.100	1323.000	16.000	100.0000	3.07E+00	1.47E-01	2.16E-02	4.94E-02	8.54E-02
U-235	4391.000	12.000	3.000	99.70000	2.79E-02	9.93E-03	9.37E-03	2.50E-02	9.87E-03
U-238	4184.730	68.000	3.000	100.0000	1.58E-01	2.09E-02	9.34E-03	2.50E-02	1.99E-02

REVIEWED BY:

DATE : 4/30/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435431
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S1200870943_UU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :28408
AVERAGE %EFFICIENCY :34.7388
% YIELD : 57.323

COUNT DATE:29-JUN-2005 16:16:12
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :SCP

MS : 0389-G
MSD : 0389-G
LCS : 0389-G
TRACER : 0688-E
BKG FILE: B079.CNF;515
BKG DATE: 26-JUN-2005

MS PCI/L : 2.431329
MSD PCI/L : 2.431329
LCS PCI/L : 2.431329
TRACER DPM : 5.4496
EFF FILE : W079.CNF;134
CAL DATE: 1-JUN-2005

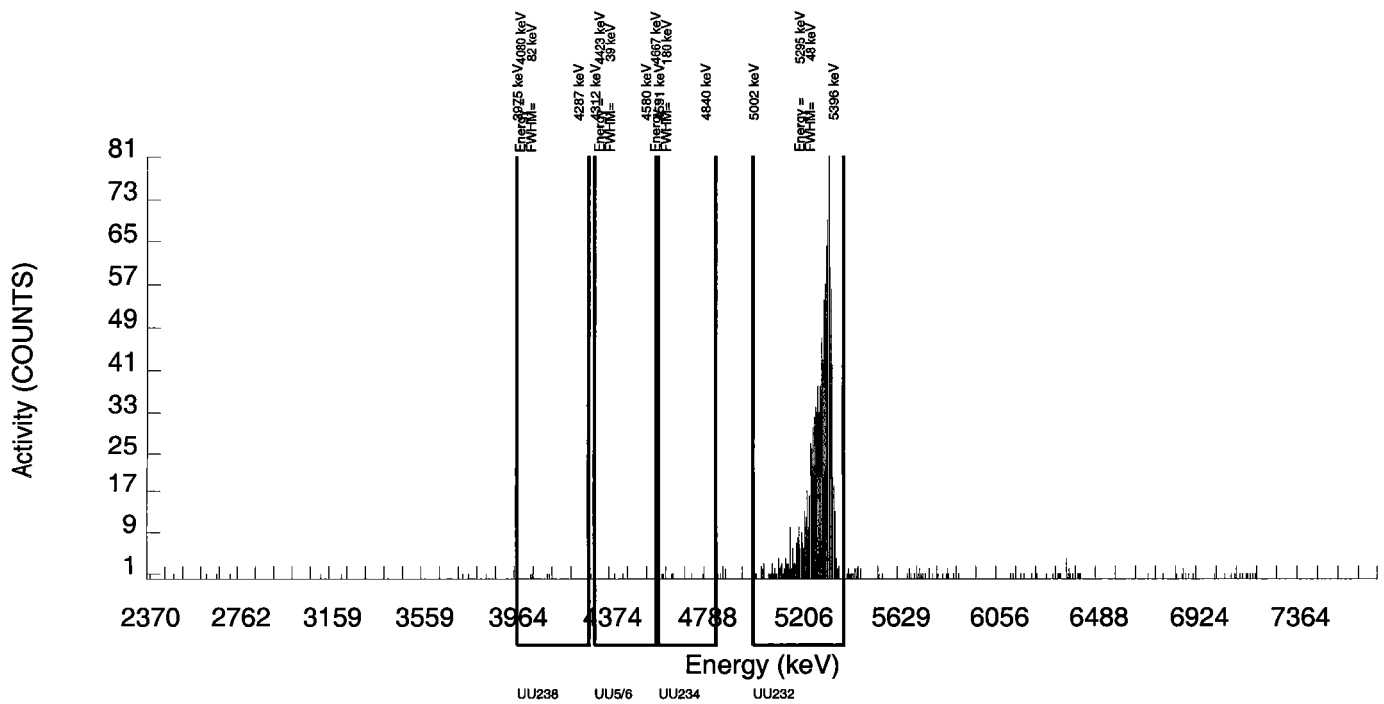
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	-1.000	8.000	100.0000	-2.26E-03	8.76E-03	1.49E-02	3.59E-02	8.76E-03
U232	5302.100	1085.000	7.000	100.0000	2.45E+00	1.25E-01	1.39E-02	3.40E-02	7.50E-02
U-235	4391.000	0.000	2.000	99.70000	0.00E+00	4.54E-03	7.46E-03	2.11E-02	4.54E-03
U-238	4184.730	0.000	4.000	100.0000	0.00E+00	6.40E-03	1.05E-02	2.72E-02	6.40E-03

REVIEWED BY:

DATE : 6/30/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435431	SAMPLE ID : S1200870944_UU
SAMPLE DATE : 8-JUN-2005 00:00:00.	SAMPLE QTY: 0.800 L
DETECTOR NUMBER :28243	COUNT DATE:29-JUN-2005 16:16:12
AVERAGE %EFFICIENCY :28.7718	ELAPSED LIVE TIME(SEC): 59999.99
% YIELD : 67.744	ANALYST :SCP

MS : 0389-G	MS PCI/L : 3.039161	MS ISOTOPE : U-238
MSD : 0389-G	MSD PCI/L : 3.039161	MSD ISOTOPE: U-238
LCS : 0389-G	LCS PCI/L : 3.039161	LCS ISOTOPE: U-238
TRACER : 0688-E	TRACER DPM : 5.4518	TRACER ISOTOPE: U232
BKG FILE: B081.CNF;522	EFF FILE : W081.CNF;130	LIB FILE : ENV_ALPHA_UU.N
BKG DATE: 26-JUN-2005	CAL DATE: 1-JUN-2005	

NUCLIDE ACTIVITY SUMMARY

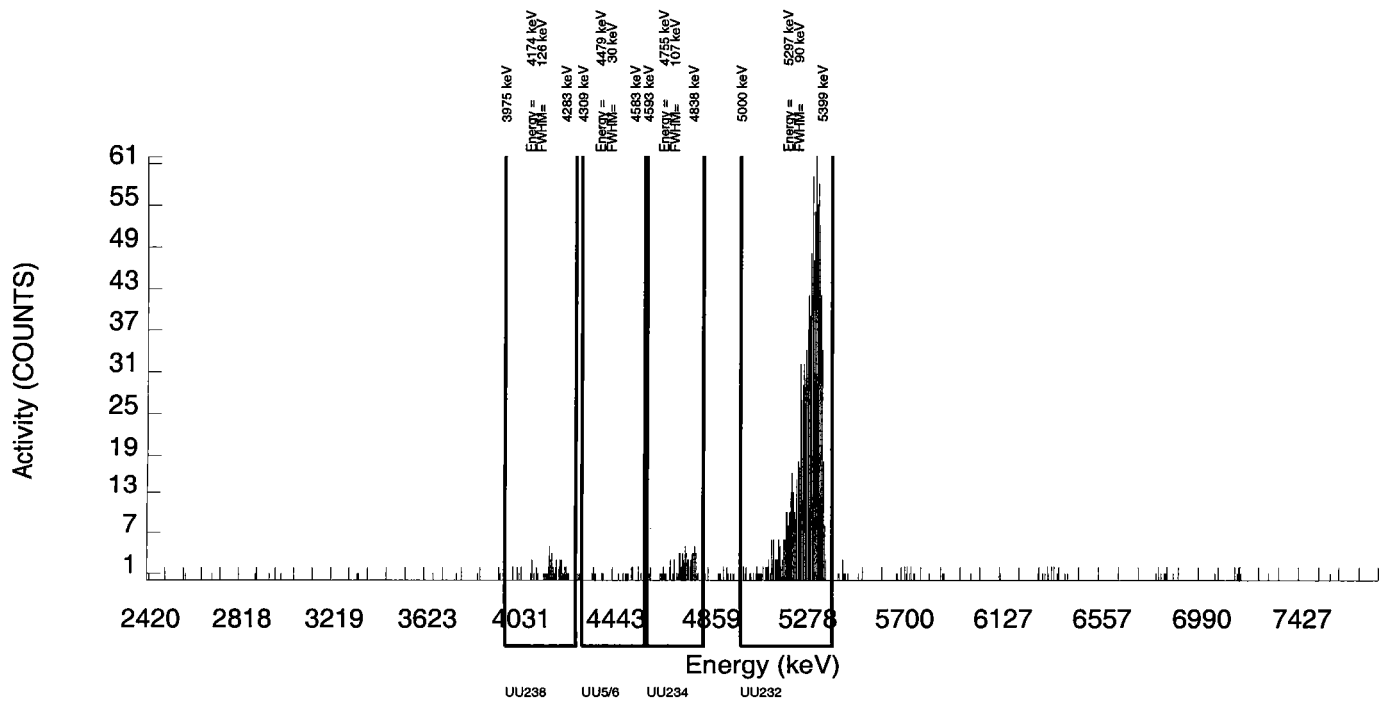
NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	65.000	9.000	100.0000	1.88E-01	2.74E-02	2.02E-02	4.81E-02	2.63E-02
U232	5302.100	1062.000	6.000	100.0000	3.07E+00	1.58E-01	1.65E-02	4.08E-02	9.47E-02
U-235	4391.000	12.000	3.000	99.70000	3.48E-02	1.24E-02	1.17E-02	3.12E-02	1.23E-02
U-238	4184.730	49.000	3.000	100.0000	1.42E-01	2.22E-02	1.16E-02	3.11E-02	2.14E-02

REVIEWED BY: DATE :

6/1/06

4/30/05

U 3/4 = 0.463
U-235 = 0.160
U-238 = 0.0716



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 435431	SAMPLE ID : S1200870945_UU
SAMPLE DATE : 23-JUN-2005 00:00:00	SAMPLE QTY: 1.000 L
DETECTOR NUMBER :27510	COUNT DATE:29-JUN-2005 16:16:12
AVERAGE %EFFICIENCY :28.3082	ELAPSED LIVE TIME(SEC): 59999.99
% YIELD : 68.530	ANALYST :SCP

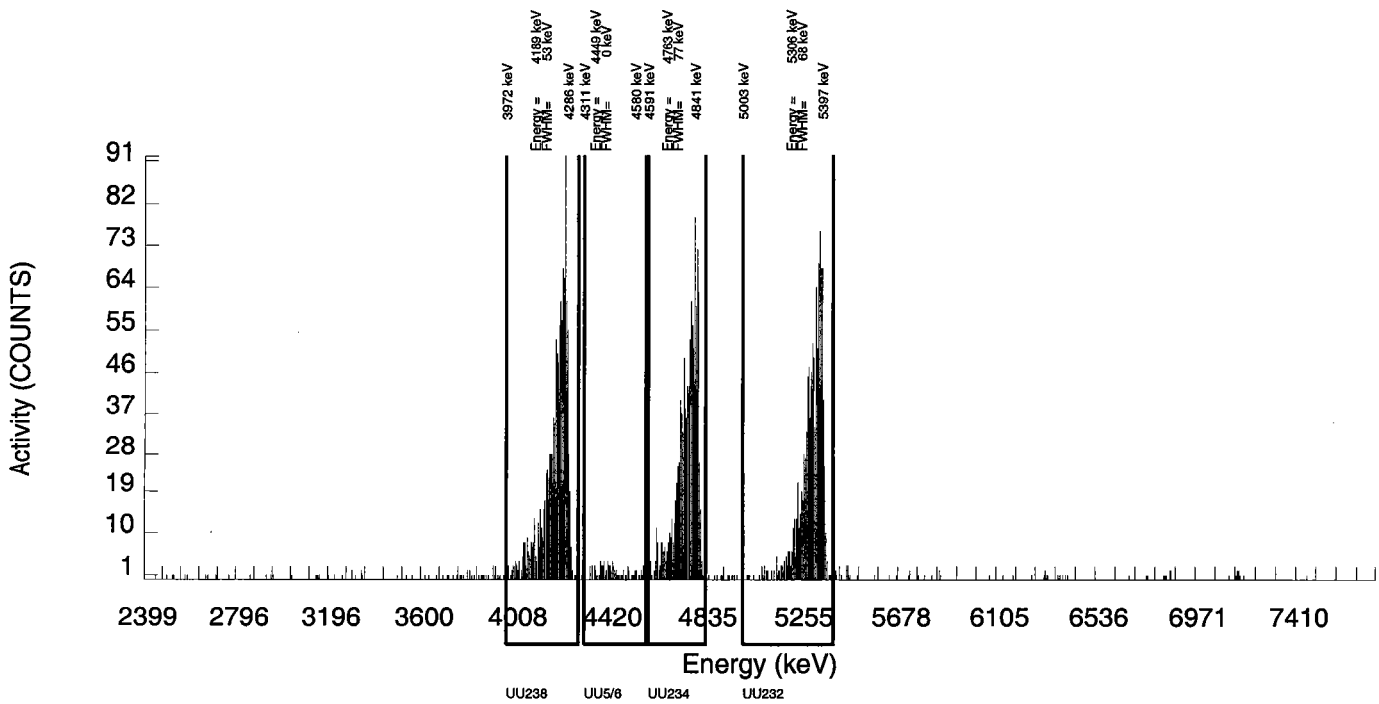
MS : 0389-G	MS PCI/L : 2.431329	MS ISOTOPE : U-238
MSD : 0389-G	MSD PCI/L : 2.431329	MSD ISOTOPE: U-238
LCS : 0389-G	LCS PCI/L : 2.431329	LCS ISOTOPE: U-238
TRACER : 0688-E	TRACER DPM : 5.4496	TRACER ISOTOPE: U232
BKG FILE: B082.CNF;515	EFF FILE : W082.CNF;133	LIB FILE : ENV_ALPHA_UU.N
BKG DATE: 26-JUN-2005	CAL DATE: 1-JUN-2005	

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	1075.000	18.000	100.0000	2.50E+00	1.29E-01	2.29E-02	5.21E-02	7.74E-02
U232	5302.100	1057.000	14.000	100.0000	2.45E+00	1.27E-01	2.02E-02	4.67E-02	7.65E-02
U-235	4391.000	79.000	7.000	99.70000	1.84E-01	2.37E-02	1.43E-02	3.50E-02	2.25E-02
U-238	4184.730	1151.000	9.000	100.0000	2.67E+00	1.36E-01	1.62E-02	3.87E-02	7.94E-02

REVIEWED BY: DATE : 6/30/05

LCS = 2.67 / 2.43 = 110%



Radiochemistry Batch Checklist, Rev 3

Batch# 435252 Product: 8260 ESHL Date: 7/5/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			N/A
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits.	✓		
Instument bkg check is within limits.			
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%.			
Carrier yield is 25-125% .			N/A
Method blank is less than the RDL.	✓		
(If rad samples, < 5% of lowest activity)			
Sample was run within hold time.	✓		
Special requirements page checked			
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms.			
All lineouts initialed and dated.	✓		
No transcription errors are apparent.			
QC data entered into QC database.	✓		
Batch entered into Case Narrative.			
Batch non-conformances completed			
If applicable.			N/A

General Engineering Laboratories

10/31/2000

Primary Review Performed By: [signature] 7/5/05

Secondary Review Performed By: [signature] 7/5/05

Gamma Spec Que Sheet

06/20/2005

Batch #:435282 Analyst: AKB Minimum DueDate: 06/29/2005

Gamma Spike Isotope: Mixed Gamma Spike Code: Expiration Date: Vol: Nominal Concentration:

Gamma LCS Isotope: Mixed Gamma LCS Code: 0781-1 Expiration Date: 4/27/06 Vol: 1.0mL Nominal Concentration: CS137-412.3 CO60 - 786.4 AM241-1230 GROSS A-6367

Initials: Prep Date: 6/20/05 Witness:

Sample ID	Client Description	Type	Hazard Code	RDL	Client	Matrix	Collect Date	Aliquot (1/g/F)	Detector	Sealing Date/Time (if Applicable)
138533001	05I460603	SAMPLE		750 pCi/L	ESHL001	WASTE WATER	03-JUN-05 09:00:00	1.946	10	
138533002	05E460603	SAMPLE		750 pCi/L	ESHL001	WASTE WATER	03-JUN-05 09:00:00	2.0	17	
138659014	GF05060P24201	SAMPLE		10 pCi/L	ESHL001	WATER	14-JUN-05 09:55:00	2.0	4	
138659015	GU05060P24201	SAMPLE		10 pCi/L	ESHL001	WATER	14-JUN-05 09:55:00	2.0	5 → 7 6/30/05	
138675001	GF0506G16R201	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-JUN-05 10:36:00	2.0	8 → 6/30/05	
138675002	GU0506G16R201	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-JUN-05 10:36:00	2.0	9 → 11 6/30/05	
138799002	GU0506E243501	SAMPLE		5 pCi/L	ESHL001	WASTE WATER	11-JUN-05 21:03:00	2.0	11	
138800001	GF0506G16R301	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-JUN-05 12:49:00	2.0	16	
138800002	GF0506G16R401	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-JUN-05 11:26:00	2.0	2	
138800003	GU0506G16R301	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-JUN-05 12:49:00	2.0	10	
138800004	GU0506G16R401	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-JUN-05 11:26:00	2.0	1	
138851001	GF05050GMC601	SAMPLE		5 pCi/L	ESHL001	GROUND WATER	15-JUN-05 09:07:00	2.0	3	
138851002	GF05050GMC690	SAMPLE		5 pCi/L	ESHL001	GROUND WATER	15-JUN-05 09:07:00	2.0	16	
138851003	GU05050GMC601	SAMPLE		5 pCi/L	ESHL001	GROUND WATER	15-JUN-05 09:07:00	2.0	10	
138851004	GU05050GMC690	SAMPLE		5 pCi/L	ESHL001	GROUND WATER	15-JUN-05 09:07:00	2.0	11 mgm 7/5/05	
138905001	GF0506G12R101	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	16-JUN-05 11:08:00	2.0	15 → 1 mgm 7/5/05	
138905005	GU0506G12R101	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	16-JUN-05 11:08:00	2.0	6 → 2 mgm 7/5/05	
1200870615	MB for batch 435282	MB		5 pCi/L	QC ACCOUNT	WASTE WATER	~~03-JUN-05 09:00:00~~ 6/20/05	2.0	3 6/20/05	
1200870616	~~05I460603(138533001DUP)~~ GF0506G16R201(138675001) 7-7/5/05	DUP		750 pCi/L	QC ACCOUNT	WASTE WATER	~~03-JUN-05 09:00:00~~ 6/13/05	2.0	16 → 17 mgm 7/5/05	
1200870617	LCS for batch 435282	LCS		5 pCi/L	QC ACCOUNT	WASTE WATER	~~03-JUN-05 09:00:00~~ 6/20/05	2.0	3 7/5/05	

7-7/5/05

1339

General Engineering Laboratories, Radiochemistry Division

Data Reviewed By: 7/5/05 7/5/05

Failed RDL Report

Batch Id	Samp Id	Sample Type	Run Date	Parmname	Result	MDA	RDL
435282	138533001	SAMPLE	29-JUN-05				
435282	138533002	SAMPLE	29-JUN-05				
435282	138659014	SAMPLE	30-JUN-05	Gross Gamma	87.85	218	120
				Neptunium-237	2.57	17.2	10.0
435282	138659015	SAMPLE	30-JUN-05	Gross Gamma	71.76	209.4	120
				Neptunium-237	7.824	16.69	10.0
				Potassium-40	23.46	34.3	10.0
435282	138675001	SAMPLE	30-JUN-05	Gross Gamma	66.39	177.8	120
				Neptunium-237	5.316	16.75	10.0
435282	138675002	SAMPLE	30-JUN-05	Gross Gamma	51.82	218.8	120
				Neptunium-237	5.323	21.94	10.0
				Potassium-40	34.04	37.88	10.0
435282	138799002	SAMPLE	30-JUN-05	Neptunium-237	11.04	21.89	20.0
435282	138800001	SAMPLE	30-JUN-05	Gross Gamma	60.4	177.7	120
				Neptunium-237	-2.46	19.25	10.0
				Potassium-40	24.25	30.71	10.0
435282	138800002	SAMPLE	30-JUN-05	Gross Gamma	81.17	316	120
				Neptunium-237	-11.42	21.96	10.0
435282	138800003	SAMPLE	30-JUN-05	Gross Gamma	86.99	214.7	120
				Neptunium-237	2.2	18.64	10.0
435282	138800004	SAMPLE	30-JUN-05	Gross Gamma	45.85	123.6	120
				Neptunium-237	0.7159	17.76	10.0
435282	138851001	SAMPLE	30-JUN-05				
435282	138851002	SAMPLE	30-JUN-05				
435282	138851003	SAMPLE	01-JUL-05				
435282	138851004	SAMPLE	01-JUL-05				
435282	138905001	SAMPLE	01-JUL-05	Gross Gamma	79.44	261	120
				Neptunium-237	-0.1632	17.93	10.0
435282	138905005	SAMPLE	01-JUL-05	Gross Gamma	1557	2793	120
				Neptunium-237	6.04	21.25	10.0
				Potassium-40	10.03	26.95	10.0
435282	1200870615	MB	01-JUL-05				
435282	1200870616	DUP	05-JUL-05	Gross Gamma	72.51	251.6	120
				Neptunium-237	-11.87	13.02	10.0
				Potassium-40	15.5	42.02	10.0
435282	1200870617	LCS	01-JUL-05	Potassium-40	140.5	239.1	100
				Sodium-22	1.098	20.27	5.00

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL	
435282	138533001	SAMPLE	29-JUN-05	Annihilation Rad.	13.72	1.044	pCi/L	4.078	N	
				Cadmium-115	13370	6526	pCi/L	0	N	
				Cerium-143	6.185E+05	9.032E+05	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	9.772E+08	1.281E+09	pCi/L	0	N	
				Iodine-135	1.942E+29	0	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99	833.6	698.1	pCi/L	0	N	
				Potassium-40	38.73	13.78	pCi/L	21.91	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Promethium-149	1758	72720	pCi/L	0	N	
				Technetium-99m	1.274E+32	0	pCi/L	0	N	
				Tellurium-132	141.9	166.2	pCi/L	0	N	
				Thulium-171	3141	1452	pCi/L	2878	N	
435282	138533002	SAMPLE	29-JUN-05	Annihilation Rad.	13.13	1.166	pCi/L	4.438	N	
				Cadmium-115	7342	8770	pCi/L	0	N	
				Lanthanum-140	44100	62070	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99	115	769.5	pCi/L	0	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Technetium-99m	1.759E+31	0	pCi/L	0	N	
				Tellurium-132	120.6	152.2	pCi/L	0	N	
				Thorium-234	241.6	26.25	pCi/L	65.49	N	
				Uranium-238	241.6	26.25	pCi/L	65.49	N	
435282	138659014	SAMPLE	30-JUN-05	Annihilation Rad.	16.11	1.175	pCi/L	4.44	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	83890	2.921E+05	pCi/L	0	N	
				Iodine-135	6.731E+17	0	pCi/L	0	N	
				Lanthanum-140	368.4	608.4	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99 ME	228.8	61.65	pCi/L	123.6	N	
				Potassium-40 NVP	21.63	15	pCi/L	17.27	10.0	UL
				Sodium-24	9.300E+06	5.093E+07	pCi/L	0	N	
				Technetium-99m	1.742E+20	0	pCi/L	0	N	
				Thorium-234 ME	169.7	87.94	pCi/L	119.6	N	
				Thulium-171 ME	3448	1391	pCi/L	2451	N	
				Uranium-238 ME	169.7	87.94	pCi/L	119.6	N	

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL	
435282	138659015	SAMPLE	30-JUN-05	Krypton-85	1470	193.2	pCi/L	707.7	N	
				Lanthanum-140	199.5	713	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99	305.6	62.93	pCi/L	121.3	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Protactinium-234m	329	159.6	pCi/L	279.4	N	
				Technetium-99m	2.329E+20	0	pCi/L	0	N	
				Thulium-171	4312	1320	pCi/L	2647	N	
435282	138675001	SAMPLE	30-JUN-05	Annihilation Rad.	15.18	0.9584	pCi/L	4.131	N	
				Potassium-40	35.47	8.038	pCi/L	33.95	10.0	U
				Technetium-99m	7.741E+20	0	pCi/L	0	N	
435282	138675002	SAMPLE	30-JUN-05	Annihilation Rad.	19.12	1.326	pCi/L	5.012	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	5.564E+05	1.171E+06	pCi/L	0	N	
				Iodine-135	8.045E+19	0	pCi/L	0	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Radium-224	66.07	33.78	pCi/L	55.15	N	
				Technetium-99m	2.096E+21	0	pCi/L	0	N	
435282	138799002	SAMPLE	30-JUN-05	Annihilation Rad.	15.05	1.24	pCi/L	4.72	N	
				Beryllium-7	107.5	14.99	pCi/L	31.94	N	
				Cerium-143	28080	22760	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	2.125E+06	3.021E+06	pCi/L	0	N	
				Molybdenum-99	470.5	157	pCi/L	305.3	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Promethium-149	5606	7944	pCi/L	0	N	
				Sodium-24	2.546E+08	1.052E+09	pCi/L	0	N	
				Technetium-99m	2.124E+23	0	pCi/L	0	N	
435282	138800001	SAMPLE	30-JUN-05	Actinium-228	12.46	3.99	pCi/L	8.665	N	
				Annihilation Rad.	14.96	0.9856	pCi/L	4.154	N	
				Bismuth-211	16.18	8.573	pCi/L	13.32	N	
				Cerium-143	5013	8247	pCi/L	0	N	
				Cesium-137	3.24	0.7747	pCi/L	3.015	10.0	U
				Iodine-135	1.222E+19	0	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99	184.3	66.71	pCi/L	157	N	
				Radium-228	12.46	3.99	pCi/L	8.665	N	

Add #715605 Add Be-7

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL
435282	138800001	SAMPLE	30-JUN-05	Technetium-99m	1.296E+21	0	pCi/L	0	N
				Uranium-234	14.01	6.194	pCi/L	8.841	N
435282	138800002	SAMPLE	30-JUN-05	Annihilation Rad.	15.66	1.196	pCi/L	4.477	N
				Iodine-133	1.096E+06	6.037E+05	pCi/L	0	N
				Lanthanum-140	844	785.1	pCi/L	0	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	180.8	72.51	pCi/L	162.9	N
				Potassium-40	26.96	14.58	pCi/L	23.36	10.0
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Protactinium-234m	389.4	127.5	pCi/L	295.5	N
				Sodium-24	1.443E+08	7.586E+07	pCi/L	0	N
				Technetium-99m	2.498E+20	0	pCi/L	0	N
				Thorium-234	197.6	83.1	pCi/L	148.2	N
				Thulium-171	6465	1462	pCi/L	3089	N
				Uranium-238	197.6	83.1	pCi/L	148.2	N
435282	138800003	SAMPLE	30-JUN-05	Actinium-228	11.48	2.521	pCi/L	9.078	N
				Annihilation Rad.	15.15	1.042	pCi/L	4.055	N
				Bismuth-211	16.1	4.125	pCi/L	15.7	N
				Cerium-143	8196	8961	pCi/L	0	N
				Lead-214	15.59	5.475	pCi/L	5.484	N
				Potassium-40	33.1	13.02	pCi/L	22.76	10.0
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Radium-228	11.48	2.521	pCi/L	9.078	N
				Technetium-99m	1.249E+21	0	pCi/L	0	N
				Thulium-171	3715	1423	pCi/L	2869	N
435282	138800004	SAMPLE	30-JUN-05	Actinium-228	15.98	5.563	pCi/L	9.285	N
				Annihilation Rad.	14.79	1.108	pCi/L	4.243	N
				Cerium-143	2208	5377	pCi/L	0	N
				Iodine-135	2.135E+18	0	pCi/L	0	N
				Lanthanum-140	208.8	656.8	pCi/L	0	N
				Molybdenum-99	225.2	65.05	pCi/L	139	N
				Potassium-40	33.83	18.2	pCi/L	28.72	10.0
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Radium-228	15.98	5.563	pCi/L	9.285	N
				Technetium-99m	3.121E+20	0	pCi/L	0	N
				Thulium-171	3369	1315	pCi/L	2344	N
435282	138851001	SAMPLE	30-JUN-05	Actinium-228	12.73	6.414	pCi/L	10.32	N

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertainty	Units	MDA	RDL	
435282	138851001	SAMPLE	30-JUN-05	Annihilation Rad.	14.93	1.094	pCi/L	4.167	N	
				Bismuth-210 NE	634.9	223.6	pCi/L	345.8	N	
				Bismuth-211 NE	15.29	8.809	pCi/L	14.26	N	
				Cerium-143	3409	3449	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-135	5.368E+15	0	pCi/L	0	N	
				Lead-210 NE	634.9	223.6	pCi/L	345.8	N	
				Molybdenum-99 NE	118.1	44.57	pCi/L	110.4	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Radium-228 NE	12.73	6.414	pCi/L	10.32	N	
				Sodium-24	2.260E+08	4.922E+07	pCi/L	0	N	
				Technetium-99m	1.791E+19	0	pCi/L	0	N	
				Thulium-171 NE	3866	940.2	pCi/L	2657	N	
435282	138851002	SAMPLE	30-JUN-05	Annihilation Rad.	15.44	0.9839	pCi/L	4.171	N	
				Bismuth-211 NE	22.39	10.03	pCi/L	13.27	N	
				Cerium-143	1795	3988	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	7.513E+05	3.148E+05	pCi/L	0	N	
				Iodine-135	4.800E+17	0	pCi/L	0	N	
				Lanthanum-140	641.6	462.8	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99 NE	113	45.69	pCi/L	110.4	N	
				Neodymium-147 NE	44.3	18.56	pCi/L	40.32	N	
				Potassium-40 LA	45.85	8.522	pCi/L	36.13	100	UI
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Sodium-24	5.045E+06	2.328E+07	pCi/L	0	N	
				Technetium-99m	1.785E+19	0	pCi/L	0	N	
435282	138851003	SAMPLE	01-JUL-05	Annihilation Rad.	13.93	1.069	pCi/L	4.117	N	
				Bismuth-211 NE	18.78	8.919	pCi/L	12.88	N	
				Iodine-135	2.742E+18	0	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Sodium-24	2.817E+07	5.405E+07	pCi/L	0	N	
				Technetium-99m	5.343E+19	0	pCi/L	0	N	
				Thorium-234 NE	196.1	46.86	pCi/L	160.9	N	
				Uranium-234 NE	15.51	4.739	pCi/L	8.929	N	
				Uranium-238 NE	196.1	46.86	pCi/L	160.9	N	

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL	
435282	138851004	SAMPLE	01-JUL-05	Annihilation Rad.	15.01	1.245	pCi/L	4.736	N	
				Cerium-143	2968	7108	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	4.122E+05	4.148E+05	pCi/L	0	N	
				Iodine-135	2.602E+18	0	pCi/L	0	N	
				Lanthanum-140	2136	904.2	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Radium-224 H E	65.91	36.08	pCi/L	58.21	N	
				Sodium-24	3.304E+07	6.158E+07	pCi/L	0	N	
				Technetium-99m	1.003E+20	0	pCi/L	0	N	
435282	138905001	SAMPLE	01-JUL-05	Annihilation Rad.	14.28	1.091	pCi/L	4.19	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-135	2.602E+17	0	pCi/L	0	N	
				Lanthanum-140	2419	1250	pCi/L	0	N	
				Molybdenum-99 H E	184.8	49.13	pCi/L	104.4	N	
				Potassium-40 ✓	57.97	9.678	pCi/L	22.78	10.0	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Technetium-99m	1.741E+19	0	pCi/L	0	N	
				Thulium-171 H E	2660	887.8	pCi/L	2304	N	
435282	138905005	SAMPLE	01-JUL-05	Annihilation Rad.	13.46	1.126	pCi/L	4.346	N	
				Cadmium-115 H E	1265	449.9	pCi/L	1005	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	8.603E+05	3.102E+05	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Neodymium-147 H E	59	21.28	pCi/L	42.31	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Technetium-99m	4.788E+18	0	pCi/L	0	N	
435282	1200870615	MB	01-JUL-05	Iodine-135	5.385E+13	3.065E+13	pCi/L	0	N	
				Krypton-85 L A R	1727	188.8	pCi/L	708.7	N	
				Manganese-56	3.931E+33	0	pCi/L	0	N	
				Potassium-40 M P	28.79	14.49	pCi/L	25.04	100	J I
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Sodium-24	7.085E+05	4.070E+05	pCi/L	0	N	
				Technetium-99m	7.820E+13	1.614E+14	pCi/L	0	N	
				Thorium-234 H E	150.4	36.91	pCi/L	117.2	N	
				Uranium-238 H E	150.4	36.91	pCi/L	117.2	N	

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL
435282	1200870616	DUP	05-JUL-05	Annihilation Rad.	11.63	1.272	pCi/L	4.926	N
				Cadmium-115	3027	2774	pCi/L	0	N
				Cerium-143	1.009E+05	1.438E+05	pCi/L	0	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-133	4.366E+07	5.652E+07	pCi/L	0	N
				Molybdenum-99	323.4	270.3	pCi/L	0	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Radon-219 NE	40.68	14.99	pCi/L	36.75	N
				Technetium-99m	1.045E+27	0	pCi/L	0	N
				Thulium-171 NE	1563	570.4	pCi/L	1327	N
435282	1200870617	LCS	01-JUL-05	Actinium-227	276.5	82.26	pCi/L	257.3	N
				Americium-241	1207	100.9	pCi/L	151.7	25.0
				Annihilation Rad.	22.87	9.934	pCi/L	17.1	N
				Barium-137m	474.7	23.53	pCi/L	25.25	N
				Cadmium-109	14760	658.9	pCi/L	615.4	N
				Cerium-139	386.5	17.87	pCi/L	20.11	N
				Cesium-137	501.8	24.91	pCi/L	26.69	5.00
				Cobalt-57	321.5	15.63	pCi/L	19.35	N
				Cobalt-60	761	31.5	pCi/L	23.47	5.00
				Gross Gamma	6589	1323	pCi/L	3543	Y
				Iodine-132	2.293E+38	0	pCi/L	0	N
				Iodine-133	49390	68430	pCi/L	0	N
				Iodine-135	5.392E+13	1.591E+14	pCi/L	0	N
				Manganese-56	3.065E+33	0	pCi/L	0	N
				Mercury-203	244.2	17	pCi/L	23.61	N
				Neptunium-237	266.3	64.41	pCi/L	185.9	Y
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Promethium-147	6.725E+08	3.266E+07	pCi/L	8.133E+07	N
				Technetium-99m	2.600E+14	9.605E+14	pCi/L	0	N
				Thorium-227	272.3	81.98	pCi/L	253.3	N
				Tin-113	585.2	26.65	pCi/L	26.32	N
				Tin-126	1486	66.31	pCi/L	62.33	N
				Vanadium-48	43.89	18.38	pCi/L	43.54	N
				Yttrium-88	963.7	40.16	pCi/L	19.42	N

GEL QUALS

Batch ID: 435282

Report run on: July 5, 2005 5:09 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
1200870615-1 MB 01-JUL-2005 21:01	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		28.79			
138659014-1 30-JUN-2005 15:42	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		21.63			
138675001-1 30-JUN-2005 15:44	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		35.47			
138800001-1 30-JUN-2005 15:49	Cesium-137	UI	UI	UI	Data rejected due to low abundance.		3.24			
138800002-1 30-JUN-2005 22:54	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		26.96			
138800004-1 30-JUN-2005 22:56	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		33.83			
138851002-1 30-JUN-2005 23:54	Potassium-40	UI	UI	UI	Data rejected due to low abundance.		45.85			

Result Greater Than DL

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	DL	RDL
435282	138905005	SAMPLE	01-JUL-05	Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-133	8.603E+05	3.102E+05	pCi/L	0	N
				Lead-210	350.2	151.3	pCi/L	251.5	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Neodymium-147	59	21.28	pCi/L	20.01	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Protactinium-234m	216	88.55	pCi/L	158.1	N
				Technetium-99m	4.788E+18	0	pCi/L	0	N
				Thorium-234	69.78	71.61	pCi/L	60.74	N
				Thulium-171	1650	1651	pCi/L	1511	N
				Uranium-235	11.81	5.979	pCi/L	10.24	N
				Uranium-238	69.78	71.61	pCi/L	60.74	N
435282	1200870615	MB	01-JUL-05	Bismuth-212	17.87	9.475	pCi/L	8.662	N
				Iodine-135	5.385E+13	3.065E+13	pCi/L	0	N
				Krypton-85	1727	188.8	pCi/L	343.1	N
				Manganese-56	3.931E+33	0	pCi/L	0	N
				Potassium-40	28.79	14.49	pCi/L	11.49	100
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Radium-223	24.76	13.12	pCi/L	22.38	N
				Radium-224	45.65	14.23	pCi/L	22.82	N
				Sodium-24	7.085E+05	4.070E+05	pCi/L	0	N
				Technetium-99m	7.820E+13	1.614E+14	pCi/L	0	N
				Thorium-234	150.4	36.91	pCi/L	56.99	N
				Uranium-238	150.4	36.91	pCi/L	56.99	N
435282	1200870616	DUP	05-JUL-05	Annihilation Rad.	11.63	1.272	pCi/L	2.385	N
				Cadmium-115	3027	2774	pCi/L	0	N
				Cerium-143	1.009E+05	1.438E+05	pCi/L	0	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-133	4.366E+07	5.652E+07	pCi/L	0	N
				Molybdenum-99	323.4	270.3	pCi/L	0	N
				Neptunium-239	10.96	4.418	pCi/L	7.41	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Radon-219	40.68	14.99	pCi/L	17.4	N
				Technetium-99m	1.045E+27	0	pCi/L	0	N
				Thorium-229	19.11	11	pCi/L	18.6	N
				Thulium-171	1563	570.4	pCi/L	643.8	N
435282	1200870617	LCS	01-JUL-05	Actinium-227	276.5	82.26	pCi/L	124.7	N

MDA

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G138675001
ANALYST	: AKB	DETECTOR	: GAMMA8
SAMPLE DATE	: 13-JUN-2005 10:36:00.00	COUNT TIME	: 0 08:00:00.00
ANALYSIS DATE	: 30-JUN-2005 15:44:11.57	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 6.639E+01
GROSS GAMMA ERROR (pCi/LITER)	: 3.197E+02
GROSS GAMMA MDA (pCi/LITER)	: 1.778E+02
GROSS GAMMA DLC (pCi/LITER)	: 8.598E+01

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G138851001
ANALYST	: AKB	DETECTOR	: GAMMA3
SAMPLE DATE	: 15-JUN-2005 09:07:00.00	COUNT TIME	: 0 08:00:00.00
ANALYSIS DATE	: 30-JUN-2005 23:31:24.37	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 1.071E+02
GROSS GAMMA ERROR (pCi/LITER)	: 8.531E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.775E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.348E+02

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G138851002
ANALYST	: AKB	DETECTOR	: GAMMA16
SAMPLE DATE	: 15-JUN-2005 09:07:00.00	COUNT TIME	: 0 08:00:00.00
ANALYSIS DATE	: 30-JUN-2005 23:54:38.63	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 7.274E+01
GROSS GAMMA ERROR (pCi/LITER)	: 5.503E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.166E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.049E+02

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G138851003
ANALYST	: AKB	DETECTOR	: GAMMA10
SAMPLE DATE	: 15-JUN-2005 09:07:00.00	COUNT TIME	: 0 08:00:00.00
ANALYSIS DATE:	1-JUL-2005 15:14:04.94	SAMPLE ALQT:	2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 1.136E+02
GROSS GAMMA ERROR (pCi/LITER)	: 6.972E+01
GROSS GAMMA MDA (pCi/LITER)	: 3.451E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.675E+02

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G138851004
ANALYST	: AKB	DETECTOR	: GAMMA11
SAMPLE DATE	: 15-JUN-2005 09:07:00.00	COUNT TIME	: 0 08:00:00.00
ANALYSIS DATE:	1-JUL-2005 15:14:28.21	SAMPLE ALQT:	2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 8.726E+01
GROSS GAMMA ERROR (pCi/LITER)	: 8.978E+01
GROSS GAMMA MDA (pCi/LITER)	: 3.414E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.665E+02

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G1200870615
ANALYST	: AKB	DETECTOR	: GAMMA3
SAMPLE DATE	: 20-JUN-2005 00:00:00.00	COUNT TIME	: 0 08:00:00.00
ANALYSIS DATE:	1-JUL-2005 21:01:15.20	SAMPLE ALQT:	2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 4.011E+01
GROSS GAMMA ERROR (pCi/LITER)	: 4.121E+01
GROSS GAMMA MDA (pCi/LITER)	: 1.493E+02
GROSS GAMMA DLC (pCi/LITER)	: 7.234E+01

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G1200870616
ANALYST	: AKB	DETECTOR	: GAMMA17
SAMPLE DATE	: 13-JUN-2005 00:00:00.00	COUNT TIME	: 0 06:01:20.11
ANALYSIS DATE:	5-JUL-2005 08:13:08.86	SAMPLE ALQT:	2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 7.251E+01
GROSS GAMMA ERROR (pCi/LITER)	: 7.929E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.516E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.215E+02

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 435282	SAMPLE ID	: G1200870617
ANALYST	: AKB	DETECTOR	: GAMMA3
SAMPLE DATE	: 20-JUN-2005 00:00:00.00	COUNT TIME	: 0 01:00:00.00
ANALYSIS DATE:	1-JUL-2005 19:24:49.19	SAMPLE ALQT:	2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 6.589E+03
GROSS GAMMA ERROR (pCi/LITER)	: 1.323E+03
GROSS GAMMA MDA (pCi/LITER)	: 3.543E+03
GROSS GAMMA DLC (pCi/LITER)	: 1.731E+03

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 10:38:08.07

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138675001.CNF;2
Sample date       : 13-JUN-2005 10:36:00 Acquisition date : 30-JUN-2005 15:44:11
Sample ID         : G138675001           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA8               Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00         Elapsed real time: 0 08:00:06.36  0.0%
Energy tolerance  : 2.00000 KEV          Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 1943234
Matrix Spike DPM :                       LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.70*	51	341	2.41	78.97	74	9	1.76E-03	75.3	
2	0	53.56	76	338	1.37	92.75	89	8	2.64E-03	43.3	
3	0	66.70*	27	379	1.34	119.16	116	7	9.53E-04	139.2	
4	0	92.93*	0	450	1.31	171.88	169	8	3.31E-06	*****	
5	0	139.97*	49	521	1.03	266.41	262	9	1.70E-03	94.3	
6	2	196.99*	26	188	1.19	380.98	378	12	9.04E-04	120.5	4.19E+00
7	2	198.61*	162	280	1.33	384.24	378	12	5.63E-03	24.6	
8	0	238.97*	12	246	0.97	465.35	462	8	4.26E-04	308.8	
9	0	352.00*	26	117	1.46	692.52	689	7	8.86E-04	98.9	
10	0	368.98	32	71	1.06	726.64	725	5	1.11E-03	43.3	
11	0	417.51	41	149	3.77	824.17	819	12	1.44E-03	61.1	
12	0	500.44	34	59	1.63	990.87	989	6	1.17E-03	40.1	
13	0	521.84	17	69	1.47	1033.89	1029	8	5.73E-04	91.1	
14	0	596.19	51	65	1.26	1183.32	1180	8	1.79E-03	30.3	
15	0	609.42*	33	84	1.10	1209.93	1206	9	1.15E-03	66.7	
16	0	765.64	43	71	3.33	1523.96	1518	14	1.51E-03	43.6	
17	0	901.90	8	31	0.56	1797.91	1795	6	2.88E-04	111.8	
18	0	911.41*	13	32	0.89	1817.04	1815	7	4.52E-04	187.7	
19	7	1085.77	9	6	1.09	2167.60	2166	13	3.22E-04	45.8	3.90E+00
20	7	1088.88*	20	23	2.91	2173.85	2166	13	6.78E-04	52.5	
21	0	1095.86	20	39	1.75	2187.90	2185	13	6.94E-04	68.1	
22	0	1110.04	19	16	1.70	2216.40	2214	7	6.55E-04	41.9	
23	0	1120.71*	8	25	2.30	2237.87	2231	11	2.65E-04	169.4	
24	0	1209.25	14	14	1.46	2415.91	2412	8	4.83E-04	53.8	
25	0	1256.68	26	31	4.64	2511.29	2506	15	8.98E-04	50.3	
26	0	1334.66*	13	28	4.93	2668.11	2662	14	4.66E-04	108.8	
27	0	1380.52	24	34	6.80	2760.33	2755	17	8.33E-04	59.3	
28	0	1402.07	29	13	1.55	2803.68	2799	11	9.96E-04	31.2	
29	0	1534.48	86	33	19.72	3069.97	3051	43	2.99E-03	25.1	
30	0	1614.33	18	53	11.07	3230.57	3225	26	6.10E-04	115.1	
31	0	1764.61*	30	20	0.69	3532.88	3525	14	1.04E-03	44.2	
32	0	1817.19	21	44	12.50	3638.64	3629	29	7.18E-04	94.3	
33	0	1960.91	14	3	1.06	3927.79	3925	6	5.02E-04	32.0	
34	0	1983.68	13	5	1.41	3973.58	3971	6	4.63E-04	37.3	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 5-JUL-2005 10:38:14

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138675001.CNF;2
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 13-JUN-2005 10:36:00 Acquisition date : 30-JUN-2005 15:44:11
Sample ID : G138675001 Sample quantity : 2.0000 LITER
Sample type : EPI1 Sample geometry : 3190-H
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:06.36 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.25 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NB-95	+	765.79	*	3.161E+00	2.757E+00	2.721E+00	0.000E+00	1.162
MO-99	+	140.51	*	8.802E+01	1.661E+02	1.603E+02	0.000E+00	0.549
		181.06		1.280E+03	1.180E+03	2.100E+03	0.000E+00	0.609
		739.58		9.302E+01	6.582E+02	1.171E+03	0.000E+00	0.079
TM-171	+	51.87		9.039E+02	7.832E+02	9.866E+02	0.000E+00	0.916
		59.40		-2.994E+02	1.418E+03	2.258E+03	0.000E+00	-0.133
	+	66.72	*	7.460E+02	2.077E+03	2.207E+03	0.000E+00	0.338
BI-210	+	46.50	*	2.425E+02	3.653E+02	3.435E+02	0.000E+00	0.706
PB-210	+	46.50	*	2.425E+02	3.653E+02	3.435E+02	0.000E+00	0.706
BI-211	+	351.07	*	5.716E+00	1.131E+01	1.176E+01	0.000E+00	0.486
BI-214	+	609.31	*	3.068E+00	4.094E+00	4.387E+00	0.000E+00	0.699
		768.36		1.400E+01	2.576E+01	4.192E+01	0.000E+00	0.334
		934.06		1.630E+01	3.823E+01	6.908E+01	0.000E+00	0.236
	+	1120.29		3.558E+00	1.206E+01	1.423E+01	0.000E+00	0.250
		1238.11		1.204E+00	2.291E+01	4.167E+01	0.000E+00	0.029
		1377.67		1.764E+01	3.724E+01	6.286E+01	0.000E+00	0.281
RA-226		295.21		2.642E+00	5.302E+00	9.105E+00	0.000E+00	0.290
	+	351.92		1.988E+00	3.934E+00	4.240E+00	0.000E+00	0.469
	+	609.31	*	3.068E+00	4.094E+00	4.387E+00	0.000E+00	0.699
TH-228		84.40		8.058E+01	1.022E+02	1.845E+02	0.000E+00	0.437
	+	238.60	*	6.345E-01	3.919E+00	3.833E+00	0.000E+00	0.166
		300.10		5.911E+00	2.936E+01	4.972E+01	0.000E+00	0.119
TH-230		295.21		2.642E+00	5.302E+00	9.105E+00	0.000E+00	0.290
	+	351.92		1.988E+00	3.934E+00	4.240E+00	0.000E+00	0.469
	+	609.31	*	3.068E+00	4.094E+00	4.387E+00	0.000E+00	0.699
TH-232	+	238.59	*	6.236E-01	3.851E+00	3.768E+00	0.000E+00	0.166
	+	911.20		2.792E+00	1.048E+01	7.462E+00	0.000E+00	0.374
		964.40		7.354E+00	2.494E+01	4.429E+01	0.000E+00	0.166
		969.11		7.818E+00	8.363E+00	1.557E+01	0.000E+00	0.502

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA

BE-7	477.59 *	7.695E-01	1.209E+01	2.151E+01	0.000E+00	0.036

---- Non-Identified Nuclides ----

Nuclide	Ided	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22		1274.53	*	8.263E-01	1.294E+00	2.512E+00	0.000E+00	0.329
K-40		1460.81	*	3.547E+01	1.608E+01	3.395E+01	0.000E+00	1.045
SC-46		889.25	*	2.981E-01	1.254E+00	2.252E+00	0.000E+00	0.132
	+	1120.51		6.204E-01	2.102E+00	2.482E+00	0.000E+00	0.250
V-48		944.10		3.687E+00	3.168E+01	5.587E+01	0.000E+00	0.066
		983.50	*	-8.564E-01	2.319E+00	4.118E+00	0.000E+00	-0.208
		1312.09		1.738E+00	2.545E+00	5.043E+00	0.000E+00	0.345
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	4.737E+00	1.534E+01	2.613E+01	0.000E+00	0.181
MN-54		834.83	*	-7.659E-01	1.287E+00	2.110E+00	0.000E+00	-0.363
CO-56		846.75	*	-1.728E-01	1.365E+00	2.348E+00	0.000E+00	-0.074
		1037.82		-1.018E+01	9.040E+00	1.462E+01	0.000E+00	-0.696
		1238.25		1.617E-01	2.371E+00	4.319E+00	0.000E+00	0.037
CO-57		122.06	*	9.345E-02	1.168E+00	2.026E+00	0.000E+00	0.046
		136.47		1.438E+00	9.849E+00	1.536E+01	0.000E+00	0.094
CO-58		810.78	*	-1.321E-01	1.310E+00	2.271E+00	0.000E+00	-0.058
FE-59		192.35		3.903E-01	3.836E+01	6.533E+01	0.000E+00	0.006
		1099.25	*	-3.034E-01	2.907E+00	4.586E+00	0.000E+00	-0.066
		1291.60		3.252E+00	4.336E+00	8.373E+00	0.000E+00	0.388
CO-60		1173.24		5.682E-01	1.306E+00	2.472E+00	0.000E+00	0.230
		1332.50	*	1.443E+00	1.568E+00	2.789E+00	0.000E+00	0.517
ZN-65		1115.55	*	-1.900E+00	2.836E+00	4.043E+00	0.000E+00	-0.470
SE-75	+	66.05		1.256E+02	3.497E+02	4.292E+02	0.000E+00	0.293
		96.73		-3.535E+01	3.414E+01	5.742E+01	0.000E+00	-0.616
		121.11		8.138E-01	6.317E+00	1.098E+01	0.000E+00	0.074
		136.00		2.859E-04	1.658E+00	2.861E+00	0.000E+00	0.000
	+	198.60		2.543E+02	1.252E+02	1.212E+02	0.000E+00	2.098
		264.65	*	-1.357E+00	1.780E+00	2.874E+00	0.000E+00	-0.472
		279.53		-2.289E+00	4.239E+00	6.911E+00	0.000E+00	-0.331
		303.91		1.602E+01	7.877E+01	1.337E+02	0.000E+00	0.120
		400.65		1.539E+00	8.954E+00	1.615E+01	0.000E+00	0.095
KR-85		513.99	*	-7.984E+02	4.044E+02	6.417E+02	0.000E+00	-1.244
SR-85		513.99	*	-4.191E+00	2.123E+00	3.368E+00	0.000E+00	-1.244
Y-88		898.02		6.715E-01	1.578E+00	2.543E+00	0.000E+00	0.264
		1836.01	*	-5.884E-01	1.317E+00	2.358E+00	0.000E+00	-0.249
Y-91		557.57	*	-1.732E-01	1.249E+00	2.190E+00	0.000E+00	-0.079
		1204.90		-1.262E+02	6.128E+02	9.368E+02	0.000E+00	-0.135
NB-94		702.63	*	4.760E-01	1.149E+00	2.073E+00	0.000E+00	0.230
		871.10		-1.159E+00	1.197E+00	1.875E+00	0.000E+00	-0.618
NB-95M		235.69	*	7.477E+01	1.150E+02	1.810E+02	0.000E+00	0.413
ZR-95		724.18		-1.114E-01	3.338E+00	5.796E+00	0.000E+00	-0.019
		756.74	*	3.415E+00	2.593E+00	4.989E+00	0.000E+00	0.684
RU-103		497.08	*	7.519E-01	1.630E+00	2.957E+00	0.000E+00	0.254
	+	610.33		3.445E+01	4.597E+01	5.092E+01	0.000E+00	0.677
RH-106		511.85		7.407E+01	9.597E+00	2.060E+01	0.000E+00	3.595
		621.84	*	2.493E+00	1.105E+01	1.979E+01	0.000E+00	0.126
		1050.47		-2.036E+01	7.209E+01	1.282E+02	0.000E+00	-0.159
RU-106		622.20	*	2.302E+00	1.111E+01	1.987E+01	0.000E+00	0.116
AG-108M		433.93	*	4.264E-01	1.157E+00	2.106E+00	0.000E+00	0.202

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		614.37		6.258E-01	1.325E+00	2.408E+00	0.000E+00	0.260
		722.95		-7.304E-01	1.392E+00	2.324E+00	0.000E+00	-0.314
CD-109		88.03	*	-2.014E+01	3.134E+01	5.370E+01	0.000E+00	-0.375
AG-110M		657.75	*	-5.157E-01	1.117E+00	1.892E+00	0.000E+00	-0.272
		677.61		8.378E-01	1.041E+01	1.843E+01	0.000E+00	0.045
		706.67		2.958E+00	7.105E+00	1.285E+01	0.000E+00	0.230
	+	763.93		1.054E+01	9.192E+00	8.908E+00	0.000E+00	1.183
		884.67		1.911E-01	1.719E+00	3.022E+00	0.000E+00	0.063
		937.48		-2.615E+00	3.709E+00	5.949E+00	0.000E+00	-0.440
		1384.27		4.720E+00	5.702E+00	1.041E+01	0.000E+00	0.454
SN-113		391.69	*	1.271E+00	1.651E+00	3.064E+00	0.000E+00	0.415
CD-115		231.44		2.663E+03	2.689E+04	4.568E+04	0.000E+00	0.058
		260.90		-2.627E+03	1.023E+04	1.700E+04	0.000E+00	-0.155
		492.35		-3.400E+01	2.624E+03	4.646E+03	0.000E+00	-0.007
		527.90	*	3.501E+02	7.274E+02	1.336E+03	0.000E+00	0.262
SN-115		484.47		-1.826E+02	6.620E+02	1.154E+03	0.000E+00	-0.158
		933.00	*	7.155E+01	1.241E+02	2.266E+02	0.000E+00	0.316
		1290.58		1.610E+02	3.077E+02	5.845E+02	0.000E+00	0.275
SN-117M		156.02		-3.341E+01	1.064E+02	1.802E+02	0.000E+00	-0.185
		158.56	*	-8.217E-01	2.597E+00	4.394E+00	0.000E+00	-0.187
TE-123M		159.00	*	-6.270E-01	1.226E+00	2.057E+00	0.000E+00	-0.305
SB-124		602.73		-5.591E-01	1.352E+00	2.305E+00	0.000E+00	-0.243
		645.85		-1.804E+00	1.867E+01	3.250E+01	0.000E+00	-0.055
		713.78		3.527E+01	6.288E+01	1.140E+02	0.000E+00	0.309
		722.79		-6.421E+00	1.258E+01	2.103E+01	0.000E+00	-0.305
		1368.16		-2.798E+01	5.527E+01	9.482E+01	0.000E+00	-0.295
		1690.98	*	1.447E+00	3.009E+00	5.896E+00	0.000E+00	0.245
SB-125		176.33		6.751E+00	1.337E+01	2.330E+01	0.000E+00	0.290
		427.89	*	2.593E+00	3.352E+00	6.228E+00	0.000E+00	0.416
		463.38		5.087E+00	9.493E+00	1.743E+01	0.000E+00	0.292
		600.56		-3.590E+00	6.313E+00	1.063E+01	0.000E+00	-0.338
		606.64		3.956E+00	2.587E+01	4.042E+01	0.000E+00	0.098
		635.90		-3.980E+00	1.022E+01	1.738E+01	0.000E+00	-0.229
TE-125M		109.28	*	-2.752E+02	4.158E+02	7.058E+02	0.000E+00	-0.390
I-126		388.63		-3.589E+00	8.292E+00	1.444E+01	0.000E+00	-0.248
		666.33	*	-7.225E+00	7.179E+00	1.155E+01	0.000E+00	-0.626
		753.82		-1.561E+01	6.199E+01	1.055E+02	0.000E+00	-0.148
SB-126		666.33		-3.034E+00	3.015E+00	4.849E+00	0.000E+00	-0.626
		695.00		1.570E-01	3.222E+00	5.633E+00	0.000E+00	0.028
		697.00		-2.215E+00	1.103E+01	1.891E+01	0.000E+00	-0.117
		720.50	*	-6.024E+00	5.585E+00	8.841E+00	0.000E+00	-0.681
SN-126		64.28		2.124E+01	2.609E+01	4.325E+01	0.000E+00	0.491
		86.94		4.688E+00	1.340E+01	2.378E+01	0.000E+00	0.197
		87.57	*	-1.876E+00	3.216E+00	5.522E+00	0.000E+00	-0.340
SB-127		252.40		1.383E+02	2.696E+02	4.648E+02	0.000E+00	0.298
		411.60		2.008E+02	6.261E+02	1.137E+03	0.000E+00	0.177
		444.90		2.035E+02	5.125E+02	9.350E+02	0.000E+00	0.218
		473.00		-2.105E+01	9.287E+01	1.623E+02	0.000E+00	-0.130
		543.30		4.989E+02	8.547E+02	1.577E+03	0.000E+00	0.316

---- Non-Identified Nuclides ----

Nuclide		Line Energy (KEV)	Ided Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		603.50		-7.019E+00	5.662E+02	9.961E+02	0.000E+00	-0.007
		685.70	*	2.865E+01	6.850E+01	1.244E+02	0.000E+00	0.230
		698.50		-1.844E+02	7.892E+02	1.352E+03	0.000E+00	-0.136
		783.70		-1.650E+02	1.713E+02	2.714E+02	0.000E+00	-0.608
I-131		284.30		8.107E+00	6.818E+01	1.155E+02	0.000E+00	0.070
		364.48	*	-1.340E+00	5.453E+00	8.933E+00	0.000E+00	-0.150
		636.97		-8.921E-01	6.705E+01	1.176E+02	0.000E+00	-0.008
TE-132		228.16	*	1.587E+01	4.349E+01	7.477E+01	0.000E+00	0.212
BA-133		79.62		-3.603E+01	5.002E+01	8.583E+01	0.000E+00	-0.420
		81.00		-2.312E-01	3.767E+00	6.622E+00	0.000E+00	-0.035
		276.40		-5.265E+00	1.465E+01	2.411E+01	0.000E+00	-0.218
		302.85		-8.333E-01	5.350E+00	8.891E+00	0.000E+00	-0.094
		356.02	*	7.113E-01	1.659E+00	2.839E+00	0.000E+00	0.251
		383.85		8.353E+00	1.101E+01	2.043E+01	0.000E+00	0.409
CS-134		563.23		5.562E+00	1.285E+01	2.332E+01	0.000E+00	0.239
		569.32		-2.305E+00	7.377E+00	1.268E+01	0.000E+00	-0.182
		604.70		9.776E-02	1.149E+00	2.029E+00	0.000E+00	0.048
		795.84	*	-1.421E-01	1.335E+00	2.310E+00	0.000E+00	-0.061
		801.93		8.205E+00	1.452E+01	2.637E+01	0.000E+00	0.311
		1365.15		2.968E+01	3.776E+01	7.635E+01	0.000E+00	0.389
CS-135		268.24	*	-8.458E-01	6.048E+00	1.010E+01	0.000E+00	-0.084
CS-136	+	66.88		2.315E+01	6.446E+01	6.804E+01	0.000E+00	0.340
		86.36		2.435E+01	4.708E+01	8.410E+01	0.000E+00	0.290
		153.25		1.707E+01	3.044E+01	5.336E+01	0.000E+00	0.320
		163.92		2.557E+00	5.058E+01	8.668E+01	0.000E+00	0.029
		176.60		5.284E+00	1.674E+01	2.894E+01	0.000E+00	0.183
		273.65		-3.419E+00	1.952E+01	3.249E+01	0.000E+00	-0.105
		340.55		-2.270E+00	5.355E+00	8.689E+00	0.000E+00	-0.261
		818.51		-3.240E+00	2.845E+00	4.395E+00	0.000E+00	-0.737
		1048.07	*	-3.200E-01	3.779E+00	6.853E+00	0.000E+00	-0.047
		1235.36		7.403E+00	1.669E+01	3.163E+01	0.000E+00	0.234
BA-137M		661.65	*	8.812E-01	1.245E+00	2.298E+00	0.000E+00	0.383
CS-137		661.66	*	9.351E-01	1.317E+00	2.430E+00	0.000E+00	0.385
CE-139		165.85	*	-5.850E-01	1.254E+00	2.105E+00	0.000E+00	-0.278
BA-140		162.67		3.973E+01	3.534E+01	6.307E+01	0.000E+00	0.630
		304.87		3.033E+01	5.384E+01	9.325E+01	0.000E+00	0.325
		423.73		-1.329E+01	7.367E+01	1.300E+02	0.000E+00	-0.102
		537.31	*	7.929E+00	1.009E+01	1.884E+01	0.000E+00	0.421
CE-141		145.44	*	1.768E+00	2.787E+00	4.899E+00	0.000E+00	0.361
CE-144		133.51	*	-3.769E+00	8.674E+00	1.473E+01	0.000E+00	-0.256
PM-144		476.78		-1.086E+00	2.449E+00	4.220E+00	0.000E+00	-0.257
		618.01		-3.568E-01	1.124E+00	1.928E+00	0.000E+00	-0.185
		696.49	*	-3.540E-01	1.265E+00	2.155E+00	0.000E+00	-0.164
PM-146		453.88	*	5.291E-01	1.571E+00	2.848E+00	0.000E+00	0.186
		633.25		3.825E+01	5.161E+01	9.523E+01	0.000E+00	0.402
		735.93		-3.919E+00	5.263E+00	8.594E+00	0.000E+00	-0.456
		747.24		-1.170E+00	3.104E+00	5.247E+00	0.000E+00	-0.223
ND-147	+	91.11		2.293E-02	2.307E+01	1.950E+01	0.000E+00	0.001
		531.02	*	2.454E+00	2.114E+01	3.793E+01	0.000E+00	0.065

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-147		121.30	*	3.652E+05	2.407E+06	4.188E+06	0.000E+00	0.087
PM-149		285.95	*	-1.482E+03	7.247E+03	1.203E+04	0.000E+00	-0.123
EU-152		121.78		2.024E-01	3.370E+00	5.842E+00	0.000E+00	0.035
		344.31	*	-5.523E-01	3.769E+00	6.228E+00	0.000E+00	-0.089
		963.37		5.777E+00	8.718E+00	1.608E+01	0.000E+00	0.359
GD-153		69.67		-2.675E+01	6.939E+01	1.212E+02	0.000E+00	-0.221
		83.37		-2.524E+02	5.959E+02	1.031E+03	0.000E+00	-0.245
		97.43	*	-2.173E+00	3.530E+00	6.030E+00	0.000E+00	-0.360
		103.18		-5.523E-01	4.437E+00	7.714E+00	0.000E+00	-0.072
EU-154		123.07		-5.534E-01	2.359E+00	4.045E+00	0.000E+00	-0.137
		247.93		-7.342E+00	1.472E+01	2.420E+01	0.000E+00	-0.303
		591.76		-5.167E+00	2.217E+01	3.835E+01	0.000E+00	-0.135
		723.30		-3.215E+00	5.944E+00	9.904E+00	0.000E+00	-0.325
		756.86		3.513E+01	2.745E+01	5.270E+01	0.000E+00	0.667
		873.20		3.194E+00	9.285E+00	1.688E+01	0.000E+00	0.189
		996.30		-9.765E+00	1.134E+01	1.907E+01	0.000E+00	-0.512
		1004.76		-6.202E+00	6.732E+00	1.124E+01	0.000E+00	-0.552
		1274.51	*	2.314E+00	3.611E+00	7.013E+00	0.000E+00	0.330
EU-155		86.54		2.055E+00	3.833E+00	6.853E+00	0.000E+00	0.300
		105.31	*	-1.659E+00	4.412E+00	7.593E+00	0.000E+00	-0.219
TB-160		86.79		2.852E+00	1.058E+01	1.873E+01	0.000E+00	0.152
		298.57		-2.398E-01	4.512E+00	7.522E+00	0.000E+00	-0.032
		879.36	*	-2.300E-02	4.898E+00	8.516E+00	0.000E+00	-0.003
		962.29		-7.812E-02	1.668E+01	2.882E+01	0.000E+00	-0.003
		966.15		-4.027E+00	6.931E+00	1.123E+01	0.000E+00	-0.359
		1177.93		2.925E+00	1.074E+01	2.001E+01	0.000E+00	0.146
HF-181		56.28		1.314E+01	5.838E+01	8.789E+01	0.000E+00	0.150
		57.53		3.694E+00	2.904E+01	4.711E+01	0.000E+00	0.078
	+	65.20		2.444E+01	6.803E+01	8.654E+01	0.000E+00	0.282
		133.02		-1.044E+00	2.895E+00	4.930E+00	0.000E+00	-0.212
		136.25		2.641E+00	2.522E+01	3.925E+01	0.000E+00	0.067
		345.85		6.452E+00	7.445E+00	1.311E+01	0.000E+00	0.492
		482.03	*	1.136E-01	1.583E+00	2.821E+00	0.000E+00	0.040
TA-182	+	67.75		3.042E+00	8.470E+00	8.235E+00	0.000E+00	0.369
		100.10		3.309E+00	7.961E+00	1.410E+01	0.000E+00	0.235
		222.10		1.166E+01	1.342E+01	2.365E+01	0.000E+00	0.493
	+	1121.28		1.705E+00	5.778E+00	6.986E+00	0.000E+00	0.244
		1189.05		1.964E-01	8.642E+00	1.577E+01	0.000E+00	0.012
		1221.42	*	-1.292E+00	5.520E+00	9.761E+00	0.000E+00	-0.132
		1230.97		-2.543E+00	1.168E+01	2.084E+01	0.000E+00	-0.122
IR-192		295.96		1.690E+00	4.166E+00	7.117E+00	0.000E+00	0.237
		308.46		-6.170E-02	3.878E+00	6.485E+00	0.000E+00	-0.010
		316.51	*	7.301E-02	1.400E+00	2.348E+00	0.000E+00	0.031
		468.07		-8.776E-01	2.328E+00	4.039E+00	0.000E+00	-0.217
		604.41		-2.740E+00	1.597E+01	2.769E+01	0.000E+00	-0.099
		612.46		2.601E+01	2.655E+01	4.508E+01	0.000E+00	0.577
HG-203		70.83		-1.383E+01	4.371E+01	7.649E+01	0.000E+00	-0.181
		72.87		-1.069E+01	2.500E+01	4.350E+01	0.000E+00	-0.246
		82.60		-5.053E+01	4.528E+01	7.640E+01	0.000E+00	-0.661

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		279.20	*	1.715E-01	1.607E+00	2.716E+00	0.000E+00	0.063
BI-207		569.67		3.298E-01	1.128E+00	2.022E+00	0.000E+00	0.163
		897.83		4.565E+02	7.857E+02	1.448E+03	0.000E+00	0.315
		1063.62	*	3.199E-01	1.541E+00	2.884E+00	0.000E+00	0.111
		1442.20		4.866E+02	9.059E+02	1.744E+03	0.000E+00	0.279
		1770.23		-3.628E+01	2.428E+01	3.451E+01	0.000E+00	-1.051
TL-208		75.00		-2.335E+00	4.537E+01	7.984E+01	0.000E+00	-0.029
		277.35		1.949E+00	1.469E+01	2.483E+01	0.000E+00	0.078
		510.84		6.929E+01	8.940E+00	1.923E+01	0.000E+00	3.602
		583.14	*	1.721E+00	1.408E+00	2.656E+00	0.000E+00	0.648
		763.30		7.430E+01	7.174E+01	1.252E+02	0.000E+00	0.593
		860.37		-4.906E-01	1.008E+01	1.741E+01	0.000E+00	-0.028
	+	1093.90		3.805E+02	5.187E+02	6.022E+02	0.000E+00	0.632
PB-211		404.84	*	-2.243E+01	3.094E+01	5.289E+01	0.000E+00	-0.424
		427.08		3.713E+01	7.319E+01	1.342E+02	0.000E+00	0.277
		831.96		2.448E+01	4.122E+01	7.549E+01	0.000E+00	0.324
BI-212		727.18	*	6.982E+00	1.048E+01	1.916E+01	0.000E+00	0.364
PB-212		74.80		-1.719E+00	1.458E+01	2.561E+01	0.000E+00	-0.067
		87.30		-3.825E+00	1.521E+01	2.643E+01	0.000E+00	-0.145
		115.19		1.524E+01	1.606E+02	2.796E+02	0.000E+00	0.055
	+	238.63	*	6.345E-01	3.919E+00	4.328E+00	0.000E+00	0.147
		300.09		1.636E+01	2.875E+01	4.974E+01	0.000E+00	0.329
PB-214		74.81		-2.829E+00	2.469E+01	4.337E+01	0.000E+00	-0.065
		77.11		1.031E+01	1.360E+01	2.459E+01	0.000E+00	0.419
		87.30		-6.821E+00	2.712E+01	4.713E+01	0.000E+00	-0.145
		241.98		-3.413E-01	1.489E+01	2.235E+01	0.000E+00	-0.015
		295.21		2.642E+00	5.302E+00	9.105E+00	0.000E+00	0.290
	+	351.92	*	1.988E+00	3.934E+00	4.767E+00	0.000E+00	0.417
RN-219		271.23		1.220E+00	9.334E+00	1.578E+01	0.000E+00	0.077
		401.81	*	-3.974E+00	1.408E+01	2.474E+01	0.000E+00	-0.161
RA-223		122.32		1.211E+01	7.991E+01	1.390E+02	0.000E+00	0.087
		144.24		-6.061E+00	2.958E+01	5.043E+01	0.000E+00	-0.120
		154.21		-1.901E+00	1.640E+01	2.800E+01	0.000E+00	-0.068
		269.46		2.048E+00	7.173E+00	1.223E+01	0.000E+00	0.167
		323.87	*	3.753E+00	2.745E+01	4.606E+01	0.000E+00	0.081
		338.28		3.062E+01	3.713E+01	6.490E+01	0.000E+00	0.472
		445.03		2.797E+01	7.976E+01	1.451E+02	0.000E+00	0.193
RA-224		240.98	*	3.281E+01	2.828E+01	4.555E+01	0.000E+00	0.720
AC-227		79.80		-3.196E+01	6.504E+01	1.126E+02	0.000E+00	-0.284
		236.00		5.615E+00	9.006E+00	1.415E+01	0.000E+00	0.397
		256.20	*	-1.078E+01	1.599E+01	2.600E+01	0.000E+00	-0.414
		286.10		-1.117E+01	6.156E+01	1.023E+02	0.000E+00	-0.109
		299.80		2.057E+01	5.473E+01	9.354E+01	0.000E+00	0.220
		304.40		4.133E+01	7.007E+01	1.217E+02	0.000E+00	0.340
		329.70		1.150E+01	3.635E+01	6.168E+01	0.000E+00	0.186
		334.20		-9.919E+00	8.863E+01	1.469E+02	0.000E+00	-0.068
TH-227		79.80		-3.144E+01	6.396E+01	1.107E+02	0.000E+00	-0.284
	+	94.00		1.531E-01	1.540E+02	1.293E+02	0.000E+00	0.001
		236.00		5.528E+00	8.867E+00	1.393E+01	0.000E+00	0.397

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		256.20	*	-1.061E+01	1.574E+01	2.559E+01	0.000E+00	-0.414
		286.10		-1.100E+01	6.062E+01	1.007E+02	0.000E+00	-0.109
		299.80		2.020E+01	5.375E+01	9.188E+01	0.000E+00	0.220
		304.40		4.065E+01	6.893E+01	1.197E+02	0.000E+00	0.340
		329.70		1.132E+01	3.580E+01	6.073E+01	0.000E+00	0.186
		334.20		-9.731E+00	8.696E+01	1.441E+02	0.000E+00	-0.068
AC-228		209.25		1.046E+01	2.124E+01	3.682E+01	0.000E+00	0.284
		338.32		7.456E+00	8.949E+00	1.565E+01	0.000E+00	0.476
		463.01		-2.935E+00	2.263E+01	3.985E+01	0.000E+00	-0.074
		794.95		-2.867E+00	2.375E+01	4.113E+01	0.000E+00	-0.070
	+	911.21	*	2.808E+00	1.054E+01	8.886E+00	0.000E+00	0.316
		964.77		-1.378E+01	2.711E+01	4.427E+01	0.000E+00	-0.311
		969.11		7.863E+00	8.411E+00	1.566E+01	0.000E+00	0.502
RA-228		209.25		1.046E+01	2.124E+01	3.682E+01	0.000E+00	0.284
		338.32		7.456E+00	8.949E+00	1.565E+01	0.000E+00	0.476
		463.01		-2.935E+00	2.263E+01	3.985E+01	0.000E+00	-0.074
		794.95		-2.867E+00	2.375E+01	4.113E+01	0.000E+00	-0.070
	+	911.21	*	2.808E+00	1.054E+01	8.886E+00	0.000E+00	0.316
		964.77		-1.378E+01	2.711E+01	4.427E+01	0.000E+00	-0.311
		969.11		7.863E+00	8.411E+00	1.566E+01	0.000E+00	0.502
TH-229		85.43		4.318E+00	7.486E+00	1.339E+01	0.000E+00	0.323
		88.47		-4.880E-02	4.176E+00	7.322E+00	0.000E+00	-0.007
		100.00		4.526E+00	8.132E+00	1.448E+01	0.000E+00	0.313
		193.63	*	1.317E+01	2.014E+01	3.520E+01	0.000E+00	0.374
		210.97		8.716E+00	2.898E+01	4.977E+01	0.000E+00	0.175
PA-231		283.67	*	1.048E+01	5.732E+01	9.746E+01	0.000E+00	0.108
		301.29		-1.910E+01	2.162E+01	3.436E+01	0.000E+00	-0.556
		330.00		1.121E+01	8.080E+01	1.356E+02	0.000E+00	0.083
TH-231		84.21		1.670E+01	1.913E+01	3.462E+01	0.000E+00	0.482
		236.00		5.606E+00	8.993E+00	1.413E+01	0.000E+00	0.397
		256.20		-1.076E+01	1.597E+01	2.597E+01	0.000E+00	-0.414
		269.46	*	2.048E+00	7.173E+00	1.223E+01	0.000E+00	0.167
		271.23		1.220E+00	9.334E+00	1.578E+01	0.000E+00	0.077
		283.67		1.048E+01	5.732E+01	9.746E+01	0.000E+00	0.108
		301.29		-1.910E+01	2.162E+01	3.436E+01	0.000E+00	-0.556
		329.85		1.181E+01	2.483E+01	4.252E+01	0.000E+00	0.278
	+	351.07		5.716E+00	1.131E+01	1.176E+01	0.000E+00	0.486
		401.81		-3.974E+00	1.408E+01	2.474E+01	0.000E+00	-0.161
PA-233		75.28		3.547E+01	1.201E+02	2.138E+02	0.000E+00	0.166
		86.59		1.033E+01	6.293E+01	1.110E+02	0.000E+00	0.093
		300.12		2.859E+00	1.490E+01	2.522E+01	0.000E+00	0.113
		311.98	*	-1.498E+00	2.558E+00	4.132E+00	0.000E+00	-0.362
		340.50		-9.349E+00	2.313E+01	3.757E+01	0.000E+00	-0.249
		398.62		4.084E+01	7.175E+01	1.324E+02	0.000E+00	0.308
	+	415.76		8.338E+01	1.019E+02	1.034E+02	0.000E+00	0.806
PA-234		63.00		1.086E+02	7.407E+01	1.376E+02	0.000E+00	0.789
	+	94.67		1.365E-02	1.373E+01	1.200E+01	0.000E+00	0.001
		98.44		3.529E+00	4.041E+00	7.274E+00	0.000E+00	0.485
		99.70		1.347E+01	2.125E+01	3.792E+01	0.000E+00	0.355

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		111.00		6.181E+00	8.064E+00	1.440E+01	0.000E+00	0.429
		131.20		2.896E+00	4.486E+00	7.927E+00	0.000E+00	0.365
		152.70		5.576E+00	1.334E+01	2.326E+01	0.000E+00	0.240
		186.00		1.551E+02	5.159E+01	9.692E+01	0.000E+00	1.600
		226.40		-3.370E+00	1.570E+01	2.630E+01	0.000E+00	-0.128
		227.20		4.042E+00	1.683E+01	2.879E+01	0.000E+00	0.140
		248.90		-6.106E+00	3.399E+01	5.681E+01	0.000E+00	-0.107
		293.70		-9.926E+00	2.464E+01	4.037E+01	0.000E+00	-0.246
	+	369.80		3.180E+01	2.755E+01	5.360E+01	0.000E+00	0.593
		568.70		-2.434E+01	3.732E+01	6.264E+01	0.000E+00	-0.389
		569.50		2.037E+00	9.945E+00	1.773E+01	0.000E+00	0.115
		574.00		2.378E+01	5.661E+01	1.021E+02	0.000E+00	0.233
		699.00		7.730E-01	2.529E+01	4.420E+01	0.000E+00	0.017
		706.10		1.767E+01	3.631E+01	6.581E+01	0.000E+00	0.268
		733.00		1.333E+01	1.231E+01	2.356E+01	0.000E+00	0.566
		742.81		-1.610E+01	4.376E+01	7.424E+01	0.000E+00	-0.217
		796.30		1.165E+01	2.820E+01	5.126E+01	0.000E+00	0.227
		805.80		5.624E+00	3.492E+01	6.165E+01	0.000E+00	0.091
		819.60		-1.654E+01	4.256E+01	7.146E+01	0.000E+00	-0.231
		826.30		-5.948E+00	2.846E+01	4.860E+01	0.000E+00	-0.122
		831.60		1.119E+01	2.160E+01	3.926E+01	0.000E+00	0.285
		876.40		-1.287E+01	2.712E+01	4.500E+01	0.000E+00	-0.286
		880.51		2.960E+00	9.853E+00	1.760E+01	0.000E+00	0.168
		883.24		3.544E-01	1.014E+01	1.766E+01	0.000E+00	0.020
		899.00		1.870E-01	3.375E+01	5.106E+01	0.000E+00	0.004
		925.00		-1.055E+01	3.959E+01	6.689E+01	0.000E+00	-0.158
		926.50		-1.888E+00	6.134E+00	1.030E+01	0.000E+00	-0.183
		946.00	*	-5.761E+00	9.946E+00	1.619E+01	0.000E+00	-0.356
		949.00		-2.550E-01	1.479E+01	2.563E+01	0.000E+00	-0.010
		980.50		3.927E+00	2.262E+01	4.221E+01	0.000E+00	0.093
		1394.10		3.452E-01	4.005E+01	7.316E+01	0.000E+00	0.005
PA-234M	+	766.40		1.066E+03	9.294E+02	9.179E+02	0.000E+00	1.161
		1001.03	*	1.610E+02	1.486E+02	2.947E+02	0.000E+00	0.546
TH-234		63.29	*	7.369E+01	6.362E+01	1.170E+02	0.000E+00	0.630
	+	92.38		3.961E-02	3.986E+01	3.590E+01	0.000E+00	0.001
		112.81		-4.458E+01	3.962E+02	6.853E+02	0.000E+00	-0.065
U-234	+	67.67		3.106E+02	8.648E+02	8.435E+02	0.000E+00	0.368
		241.98		-3.417E-01	1.491E+01	2.238E+01	0.000E+00	-0.015
		295.21	*	2.642E+00	5.302E+00	9.105E+00	0.000E+00	0.290
	+	351.92		1.988E+00	3.934E+00	4.240E+00	0.000E+00	0.469
U-235		89.95		-3.558E+00	4.616E+01	7.255E+01	0.000E+00	-0.049
	+	93.35		4.762E-02	4.792E+01	4.150E+01	0.000E+00	0.001
		105.00		-2.248E+01	4.423E+01	7.570E+01	0.000E+00	-0.297
		143.76	*	-5.252E-01	9.149E+00	1.568E+01	0.000E+00	-0.033
		163.33		1.572E+01	1.960E+01	3.458E+01	0.000E+00	0.455
		185.71		5.424E+00	1.917E+00	3.580E+00	0.000E+00	1.515
		205.31		5.389E+00	1.846E+01	3.175E+01	0.000E+00	0.170
NP-237		86.48	*	5.316E+00	9.359E+00	1.675E+01	0.000E+00	0.317
		95.87		-2.169E+01	4.502E+01	6.916E+01	0.000E+00	-0.314

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
U-238		63.29	*	7.369E+01	6.362E+01	1.170E+02	0.000E+00	0.630
NP-239		99.55		4.697E+00	6.988E+00	1.248E+01	0.000E+00	0.376
		117.00	*	3.986E+00	8.484E+00	1.496E+01	0.000E+00	0.266
		209.75		2.633E+00	2.893E+01	4.926E+01	0.000E+00	0.053
		228.18		3.218E+00	8.888E+00	1.528E+01	0.000E+00	0.211
		277.60		2.602E+00	6.871E+00	1.177E+01	0.000E+00	0.221
		334.31		-8.344E+00	4.906E+01	8.101E+01	0.000E+00	-0.103
AM-241		59.54	*	-1.634E+00	8.206E+00	1.307E+01	0.000E+00	-0.125
CM-247		278.00		2.914E+01	2.785E+01	4.942E+01	0.000E+00	0.590
		287.40		1.521E+01	4.887E+01	8.335E+01	0.000E+00	0.182
		402.60	*	1.054E-01	1.228E+00	2.209E+00	0.000E+00	0.048
CF-249		252.85		3.622E+01	3.598E+01	6.347E+01	0.000E+00	0.571
		333.44		3.380E-01	6.499E+00	1.088E+01	0.000E+00	0.031
		387.95	*	-1.857E+00	1.458E+00	2.416E+00	0.000E+00	-0.768
CF-251		176.00	*	2.922E+00	5.124E+00	8.954E+00	0.000E+00	0.326
		227.00		-2.943E+00	1.513E+01	2.536E+01	0.000E+00	-0.116
		285.00		-1.077E+01	6.742E+01	1.123E+02	0.000E+00	-0.096
ANH-511		511.00	*	1.518E+01	1.917E+00	4.131E+00	0.000E+00	3.673

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138675001        *
* Acquisition date : 30-JUN-2005 15:44:11 Detector SN#     : 1943234        *
* Detector ID       : GAMMA8              Sensitivity      : 3.000          *
* Geometry          : 2L_MB               Energy tolerance: 2.000           *
* Elapsed live time:    0 08:00:00.00     Abundance limit  : 75.000         *
* Elapsed real time:    0 08:00:06.36     Half life ratio  :  8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 13-JUN-2005 10:36:00 Nuclide Library : FERMC          *
* Sample ID         : G138675001           Analyst initials: AKB            *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight  :    0.00000     *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
* Standard Weight   :   0.00000                                             *
* CALIB. DATE/TIME  :  1-OCT-2004 14:17:22 MS Isotope      : TOPLOADER      *
* MSD DPM           :    5.440             MSD Isotope     : TOPLOADER      *
* LCS DPM           :    0.000             LCS Isotope     : TOPLOADER      *
* LCSD DPM          :    0.000             LCSD Isotope    : TOPLOADER      *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
NB-95	3.161E+00	2.757E+00	2.721E+00	0.000E+00
MO-99	8.802E+01	1.661E+02	1.603E+02	0.000E+00
TM-171	7.460E+02	2.077E+03	2.207E+03	0.000E+00
BI-210	2.425E+02	3.653E+02	3.435E+02	0.000E+00
PB-210	2.425E+02	3.653E+02	3.435E+02	0.000E+00
BI-211	5.716E+00	1.131E+01	1.176E+01	0.000E+00
BI-214	3.068E+00	4.094E+00	4.387E+00	0.000E+00
RA-226	3.068E+00	4.094E+00	4.387E+00	0.000E+00
TH-228	6.345E-01	3.919E+00	3.833E+00	0.000E+00
TH-230	3.068E+00	4.094E+00	4.387E+00	0.000E+00
TH-232	6.236E-01	3.851E+00	3.768E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)

BE-7	7.695E-01	1.209E+01	2.151E+01	0.000E+00	NOT IDENT.
NA-22	8.263E-01	1.294E+00	2.512E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	2.669E+08	0.000E+00	0.000E+00	SHORT HLIF
K-40	0.000E+00	1.608E+01	3.395E+01	0.000E+00	NOT IDENT.
SC-46	2.981E-01	1.254E+00	2.252E+00	0.000E+00	FAIL ABUN
V-48	-8.564E-01	2.319E+00	4.118E+00	0.000E+00	NOT IDENT.
CR-51	4.737E+00	1.534E+01	2.613E+01	0.000E+00	NOT IDENT.
MN-54	-7.659E-01	1.287E+00	2.110E+00	0.000E+00	NOT IDENT.
CO-56	-1.728E-01	1.365E+00	2.348E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	9.345E-02	1.168E+00	2.026E+00	0.000E+00	NOT IDENT.
CO-58	-1.321E-01	1.310E+00	2.271E+00	0.000E+00	NOT IDENT.
FE-59	-3.034E-01	2.907E+00	4.586E+00	0.000E+00	NOT IDENT.
CO-60	1.443E+00	1.568E+00	2.789E+00	0.000E+00	NOT IDENT.
ZN-65	-1.900E+00	2.836E+00	4.043E+00	0.000E+00	NOT IDENT.
SE-75	-1.357E+00	1.780E+00	2.874E+00	0.000E+00	FAIL ABUN
KR-85	-7.984E+02	4.044E+02	6.417E+02	0.000E+00	NOT IDENT.
SR-85	-4.191E+00	2.123E+00	3.368E+00	0.000E+00	NOT IDENT.
Y-88	-5.884E-01	1.317E+00	2.358E+00	0.000E+00	NOT IDENT.
Y-91	-1.732E-01	1.249E+00	2.190E+00	0.000E+00	NOT IDENT.
NB-94	4.760E-01	1.149E+00	2.073E+00	0.000E+00	NOT IDENT.
NB-95M	7.477E+01	1.150E+02	1.810E+02	0.000E+00	NOT IDENT.
ZR-95	3.415E+00	2.593E+00	4.989E+00	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	1.461E+21	0.000E+00	0.000E+00	SHORT HLIF
RU-103	7.519E-01	1.630E+00	2.957E+00	0.000E+00	FAIL ABUN
RH-106	2.493E+00	1.105E+01	1.979E+01	0.000E+00	NOT IDENT.
RU-106	2.302E+00	1.111E+01	1.987E+01	0.000E+00	NOT IDENT.
AG-108M	4.264E-01	1.157E+00	2.106E+00	0.000E+00	NOT IDENT.
CD-109	-2.014E+01	3.134E+01	5.370E+01	0.000E+00	NOT IDENT.
AG-110M	-5.157E-01	1.117E+00	1.892E+00	0.000E+00	FAIL ABUN
SN-113	1.271E+00	1.651E+00	3.064E+00	0.000E+00	NOT IDENT.
CD-115	3.501E+02	7.274E+02	1.336E+03	0.000E+00	NOT IDENT.
SN-115	7.155E+01	1.241E+02	2.266E+02	0.000E+00	NOT IDENT.
SN-117M	-8.217E-01	2.597E+00	4.394E+00	0.000E+00	NOT IDENT.
TE-123M	-6.270E-01	1.226E+00	2.057E+00	0.000E+00	NOT IDENT.
SB-124	1.447E+00	3.009E+00	5.896E+00	0.000E+00	NOT IDENT.
SB-125	2.593E+00	3.352E+00	6.228E+00	0.000E+00	NOT IDENT.
TE-125M	-2.752E+02	4.158E+02	7.058E+02	0.000E+00	NOT IDENT.
I-126	-7.225E+00	7.179E+00	1.155E+01	0.000E+00	NOT IDENT.
SB-126	-6.024E+00	5.585E+00	8.841E+00	0.000E+00	NOT IDENT.
SN-126	-1.876E+00	3.216E+00	5.522E+00	0.000E+00	NOT IDENT.
SB-127	2.865E+01	6.850E+01	1.244E+02	0.000E+00	NOT IDENT.
I-131	-1.340E+00	5.453E+00	8.933E+00	0.000E+00	NOT IDENT.
I-132	0.000E+00	1.843E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.587E+01	4.349E+01	7.477E+01	0.000E+00	NOT IDENT.
BA-133	7.113E-01	1.659E+00	2.839E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	1.206E+06	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-1.421E-01	1.335E+00	2.310E+00	0.000E+00	NOT IDENT.
CS-135	-8.458E-01	6.048E+00	1.010E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	5.159E+19	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-3.200E-01	3.779E+00	6.853E+00	0.000E+00	FAIL ABUN
BA-137M	8.812E-01	1.245E+00	2.298E+00	0.000E+00	NOT IDENT.
CS-137	9.351E-01	1.317E+00	2.430E+00	0.000E+00	NOT IDENT.
CE-139	-5.850E-01	1.254E+00	2.105E+00	0.000E+00	NOT IDENT.
BA-140	7.929E+00	1.009E+01	1.884E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	1.843E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-141	1.768E+00	2.787E+00	4.899E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	1.526E+04	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-3.769E+00	8.674E+00	1.473E+01	0.000E+00	NOT IDENT.

PM-144	-3.540E-01	1.265E+00	2.155E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	5.291E-01	1.571E+00	2.848E+00	0.000E+00	NOT IDENT.
ND-147	2.454E+00	2.114E+01	3.793E+01	0.000E+00	FAIL ABUN
PM-147	3.652E+05	2.407E+06	4.188E+06	0.000E+00	NOT IDENT.
PM-149	-1.482E+03	7.247E+03	1.203E+04	0.000E+00	NOT IDENT.
EU-152	-5.523E-01	3.769E+00	6.228E+00	0.000E+00	NOT IDENT.
GD-153	-2.173E+00	3.530E+00	6.030E+00	0.000E+00	NOT IDENT.
EU-154	2.314E+00	3.611E+00	7.013E+00	0.000E+00	NOT IDENT.
EU-155	-1.659E+00	4.412E+00	7.593E+00	0.000E+00	NOT IDENT.
TB-160	-2.300E-02	4.898E+00	8.516E+00	0.000E+00	NOT IDENT.
HF-181	1.136E-01	1.583E+00	2.821E+00	0.000E+00	FAIL ABUN
TA-182	-1.292E+00	5.520E+00	9.761E+00	0.000E+00	FAIL ABUN
IR-192	7.301E-02	1.400E+00	2.348E+00	0.000E+00	NOT IDENT.
HG-203	1.715E-01	1.607E+00	2.716E+00	0.000E+00	NOT IDENT.
BI-207	3.199E-01	1.541E+00	2.884E+00	0.000E+00	NOT IDENT.
TL-208	1.721E+00	1.408E+00	2.656E+00	0.000E+00	FAIL ABUN
PB-211	-2.243E+01	3.094E+01	5.289E+01	0.000E+00	NOT IDENT.
BI-212	6.982E+00	1.048E+01	1.916E+01	0.000E+00	NOT IDENT.
PB-212	6.345E-01	3.919E+00	4.328E+00	0.000E+00	FAIL ABUN
PB-214	1.988E+00	3.934E+00	4.767E+00	0.000E+00	FAIL ABUN
RN-219	-3.974E+00	1.408E+01	2.474E+01	0.000E+00	NOT IDENT.
RA-223	3.753E+00	2.745E+01	4.606E+01	0.000E+00	NOT IDENT.
RA-224	3.281E+01	2.828E+01	4.555E+01	0.000E+00	NOT IDENT.
AC-227	-1.078E+01	1.599E+01	2.600E+01	0.000E+00	NOT IDENT.
TH-227	-1.061E+01	1.574E+01	2.559E+01	0.000E+00	FAIL ABUN
AC-228	2.808E+00	1.054E+01	8.886E+00	0.000E+00	FAIL ABUN
RA-228	2.808E+00	1.054E+01	8.886E+00	0.000E+00	FAIL ABUN
TH-229	1.317E+01	2.014E+01	3.520E+01	0.000E+00	NOT IDENT.
PA-231	1.048E+01	5.732E+01	9.746E+01	0.000E+00	NOT IDENT.
TH-231	2.048E+00	7.173E+00	1.223E+01	0.000E+00	FAIL ABUN
PA-233	-1.498E+00	2.558E+00	4.132E+00	0.000E+00	FAIL ABUN
PA-234	-5.761E+00	9.946E+00	1.619E+01	0.000E+00	FAIL ABUN
PA-234M	1.610E+02	1.486E+02	2.947E+02	0.000E+00	FAIL ABUN
TH-234	7.369E+01	6.362E+01	1.170E+02	0.000E+00	FAIL ABUN
U-234	2.642E+00	5.302E+00	9.105E+00	0.000E+00	FAIL ABUN
U-235	-5.252E-01	9.149E+00	1.568E+01	0.000E+00	FAIL ABUN
NP-237	5.316E+00	9.359E+00	1.675E+01	0.000E+00	NOT IDENT.
U-238	7.369E+01	6.362E+01	1.170E+02	0.000E+00	NOT IDENT.
NP-239	3.986E+00	8.484E+00	1.496E+01	0.000E+00	NOT IDENT.
AM-241	-1.634E+00	8.206E+00	1.307E+01	0.000E+00	NOT IDENT.
CM-247	1.054E-01	1.228E+00	2.209E+00	0.000E+00	NOT IDENT.
CF-249	-1.857E+00	1.458E+00	2.416E+00	0.000E+00	NOT IDENT.
CF-251	2.922E+00	5.124E+00	8.954E+00	0.000E+00	NOT IDENT.
ANH-511	0.000E+00	1.917E+00	4.131E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 10:38:02.69

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138675001.CNF;2
Sample date       : 13-JUN-2005 10:36:00 Acquisition date : 30-JUN-2005 15:44:11
Sample ID         : G138675001           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA8               Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00         Elapsed real time: 0 08:00:06.36  0.0%
Energy tolerance  : 2.00000 KEV          Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 1943234
Matrix Spike DPM  :                      LCS DPM          :
*************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.70	87	341	2.41	78.97	74	9	3.02E-03	39.7	
2	0	53.56	76	338	1.37	92.75	89	8	2.64E-03	43.3	
3	0	63.44	77	442	1.23	112.60	109	8	2.67E-03	48.8	
4	0	66.70	70	379	1.34	119.16	116	7	2.43E-03	47.7	
5	0	92.93	247	450	1.31	171.88	169	8	8.56E-03	16.1	
6	0	139.97	75	521	1.03	266.41	262	9	2.60E-03	56.1	
7	0	185.95	177	416	1.10	358.81	354	10	6.15E-03	22.8	
8	2	196.99	53	188	1.19	380.98	378	12	1.84E-03	39.9	4.19E+00
9	2	198.61	189	280	1.33	384.24	378	12	6.56E-03	17.2	
10	0	238.97	111	246	0.97	465.35	462	8	3.86E-03	26.2	
11	0	352.00	45	117	1.46	692.52	689	7	1.56E-03	42.9	
12	0	368.98	32	71	1.06	726.64	725	5	1.11E-03	43.3	
13	0	417.51	41	149	3.77	824.17	819	12	1.44E-03	61.1	
14	0	500.44	34	59	1.63	990.87	989	6	1.17E-03	40.1	
15	0	511.47	461	226	2.69	1013.03	1007	17	1.60E-02	8.8	
16	0	521.84	17	69	1.47	1033.89	1029	8	5.73E-04	91.1	
17	0	596.19	51	65	1.26	1183.32	1180	8	1.79E-03	30.3	
18	0	609.42	59	84	1.10	1209.93	1206	9	2.04E-03	31.2	
19	0	765.64	43	71	3.33	1523.96	1518	14	1.51E-03	43.6	
20	0	860.42	9	28	0.75	1714.52	1713	6	3.09E-04	100.4	
21	0	901.90	8	31	0.56	1797.91	1795	6	2.88E-04	111.8	
22	0	911.41	25	32	0.89	1817.04	1815	7	8.83E-04	41.1	
23	7	1085.77	9	6	1.09	2167.60	2166	13	3.22E-04	45.8	3.90E+00
24	7	1088.88	26	23	2.91	2173.85	2166	13	8.86E-04	37.6	
25	0	1095.86	20	39	1.75	2187.90	2185	13	6.94E-04	68.1	
26	0	1110.04	19	16	1.70	2216.40	2214	7	6.55E-04	41.9	
27	0	1120.71	35	25	2.30	2237.87	2231	11	1.22E-03	32.3	
28	0	1209.25	14	14	1.46	2415.91	2412	8	4.83E-04	53.8	
29	0	1256.68	26	31	4.64	2511.29	2506	15	8.98E-04	50.3	
30	0	1334.66	24	28	4.93	2668.11	2662	14	8.37E-04	52.8	
31	0	1353.41	16	7	1.53	2705.81	2703	7	5.56E-04	37.1	
32	0	1380.52	24	34	6.80	2760.33	2755	17	8.33E-04	59.3	
33	0	1402.07	29	13	1.55	2803.68	2799	11	9.96E-04	31.2	
34	0	1461.28	47	22	1.71	2922.75	2917	10	1.62E-03	24.0	
35	0	1534.48	86	33	19.72	3069.97	3051	43	2.99E-03	25.1	
36	0	1614.33	18	53	11.07	3230.57	3225	26	6.10E-04	115.1	
37	0	1764.61	44	20	0.69	3532.88	3525	14	1.52E-03	26.8	
38	0	1817.19	21	44	12.50	3638.64	3629	29	7.18E-04	94.3	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1960.91	14	3	1.06	3927.79	3925	6	5.02E-04	32.0	
40	0	1983.68	13	5	1.41	3973.58	3971	6	4.63E-04	37.3	
41	0	1987.40	16	14	2.99	3981.08	3977	11	5.50E-04	52.0	

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 10:38:11.03

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*********************************************************************
*                          GENERAL ENG. LABS, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138675001.CNF;2
Sample date      : 13-JUN-2005 10:36:00 Acquisition date : 30-JUN-2005 15:44:11
Sample ID        : G138675001           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA8               Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00        Elapsed real time: 0 08:00:06.36  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : AKB
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 435282               Detector SN#     : 1943234
Matrix Spike DPM :                      LCS DPM          :
*********************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
NB-95	765.79	43	99.81*	9.111E-01	2.242E+00	3.161E+00	87.22
MO-99	140.51	49	82.70*	2.516E+00	1.103E+00	8.802E+01	188.67
	181.06	------	6.20	2.372E+00	------ Line Not Found		------
	739.58	------	12.80	9.367E-01	------ Line Not Found		------
TM-171	51.87	76	0.81	4.966E-01	8.885E+02	9.039E+02	86.65
	59.40	------	0.21	7.614E-01	------ Line Not Found		------
	66.72	27	0.16*	1.111E+00	7.333E+02	7.460E+02	278.40
BI-210	46.50	51	4.05*	2.421E-01	2.421E+02	2.425E+02	150.64
PB-210	46.50	51	4.05*	2.421E-01	2.421E+02	2.425E+02	150.64
BI-211	351.07	26	12.94*	1.618E+00	5.716E+00	5.716E+00	197.84
BI-214	609.31	33	46.30*	1.090E+00	3.068E+00	3.068E+00	133.46
	768.36	------	5.04	9.085E-01	------ Line Not Found		------
	934.06	------	3.21	7.743E-01	------ Line Not Found		------
	1120.29	8	15.10	6.656E-01	3.558E+00	3.558E+00	338.88
	1238.11	------	5.94	6.135E-01	------ Line Not Found		------
	1377.67	------	4.11	5.637E-01	------ Line Not Found		------
RA-226	295.21	------	19.20	1.818E+00	------ Line Not Found		------
	351.92	26	37.20	1.618E+00	1.988E+00	1.988E+00	197.84
	609.31	33	46.30*	1.090E+00	3.068E+00	3.068E+00	133.46
TH-228	84.40	------	1.21	1.840E+00	------ Line Not Found		------
	238.60	12	44.60*	2.069E+00	6.236E-01	6.345E-01	617.60
	300.10	------	3.41	1.799E+00	------ Line Not Found		------
TH-230	295.21	------	19.20	1.818E+00	------ Line Not Found		------
	351.92	26	37.20	1.618E+00	1.988E+00	1.988E+00	197.84
	609.31	33	46.30*	1.090E+00	3.068E+00	3.068E+00	133.46
TH-232	238.59	12	44.60*	2.069E+00	6.236E-01	6.236E-01	617.60
	911.20	13	27.70	7.902E-01	2.792E+00	2.792E+00	375.43
	964.40	------	5.20	7.541E-01	------ Line Not Found		------
	969.11	------	16.60	7.510E-01	------ Line Not Found		------

Flag: "*" = Keyline

Sample ID : G138675001 Acquisition date : 30-JUN-2005 15:44:11

Total number of lines in spectrum 34
Number of unidentified lines 18
Number of lines tentatively identified by NID 16 47.06%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NB-95	35.06D	1.41	2.242E+00	3.161E+00	2.757E+00	87.22	
MO-99	66.02H	79.8	1.103E+00	8.802E+01	16.61E+01	188.67	
TM-171	1.92Y	1.02	7.333E+02	7.460E+02	20.77E+02	278.40	
BI-210	22.26Y	1.00	2.421E+02	2.425E+02	3.653E+02	150.64	
PB-210	22.26Y	1.00	2.421E+02	2.425E+02	3.653E+02	150.64	
BI-211	7.04E+08Y	1.00	5.716E+00	5.716E+00	11.31E+00	197.84	
BI-214	1600.00Y	1.00	3.068E+00	3.068E+00	4.094E+00	133.46	
RA-226	1600.00Y	1.00	3.068E+00	3.068E+00	4.094E+00	133.46	
TH-228	1.91Y	1.02	6.236E-01	6.345E-01	39.19E-01	617.60	
TH-230	7.70E+04Y	1.00	3.068E+00	3.068E+00	4.094E+00	133.46	
TH-232	1.41E+10Y	1.00	6.236E-01	6.236E-01	38.51E-01	617.60	
	Total Activity :		1.237E+03	1.338E+03			

Grand Total Activity : 1.237E+03 1.338E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G138675001 Acquisition date : 30-JUN-2005 15:44:11

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	92.93	0	450	1.31	171.88	169	8	3.31E-06	****	2.09E+00	T
2	196.99	26	188	1.19	380.98	378	12	9.04E-04	****	2.29E+00	
2	198.61	162	280	1.33	384.24	378	12	5.63E-03	49.2	2.28E+00	T
0	368.98	32	71	1.06	726.64	725	5	1.11E-03	86.6	1.57E+00	T
0	417.51	41	149	3.77	824.17	819	12	1.44E-03	****	1.44E+00	T
0	500.44	34	59	1.63	990.87	989	6	1.17E-03	80.1	1.26E+00	
0	521.84	17	69	1.47	1033.89	1029	8	5.73E-04	****	1.22E+00	T
0	596.19	51	65	1.26	1183.32	1180	8	1.79E-03	60.7	1.11E+00	
0	901.90	8	31	0.56	1797.91	1795	6	2.88E-04	****	7.97E-01	
7	1085.77	9	6	1.09	2167.60	2166	13	3.22E-04	91.7	6.83E-01	
7	1088.88	20	23	2.91	2173.85	2166	13	6.78E-04	****	6.82E-01	
0	1095.86	20	39	1.75	2187.90	2185	13	6.94E-04	****	6.78E-01	T
0	1110.04	19	16	1.70	2216.40	2214	7	6.55E-04	83.8	6.71E-01	
0	1209.25	14	14	1.46	2415.91	2412	8	4.83E-04	****	6.25E-01	
0	1256.68	26	31	4.64	2511.29	2506	15	8.98E-04	****	6.06E-01	
0	1334.66	13	28	4.93	2668.11	2662	14	4.66E-04	****	5.78E-01	
0	1380.52	24	34	6.80	2760.33	2755	17	8.33E-04	****	5.63E-01	
0	1402.07	29	13	1.55	2803.68	2799	11	9.96E-04	62.3	5.56E-01	
0	1534.48	86	33	19.72	3069.97	3051	43	2.99E-03	50.1	5.20E-01	
0	1614.33	18	53	11.07	3230.57	3225	26	6.10E-04	****	5.02E-01	
0	1764.61	30	20	0.69	3532.88	3525	14	1.04E-03	88.4	4.75E-01	
0	1817.19	21	44	12.50	3638.64	3629	29	7.18E-04	****	4.67E-01	
0	1960.91	14	3	1.06	3927.79	3925	6	5.02E-04	64.1	4.50E-01	
0	1983.68	13	5	1.41	3973.58	3971	6	4.63E-04	74.6	4.47E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 10:38:21.28

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138675001.CNF;2		
Acquisition date	: 30-JUN-2005 15:44:11	Detector SN#	: 1943234
Detector ID	: GAMMA8	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 08:00:00.00	Abundance limit	: 75.00000
Elapsed real time	: 0 08:00:06.36	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 13-JUN-2005 10:36:00	Nuclide Library	: EPI1
Sample ID	: G138675001	Analyst initials	: AKB
Batch Number	: 435282	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 1-OCT-2004 14:17:22.65	MS Isotope	: TOPLOADER
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NB-95	3.161E+00	2.757E+00	2.721E+00	0.000E+00	1.162
MO-99	8.802E+01	1.661E+02	1.603E+02	0.000E+00	0.549
TM-171	7.460E+02	2.077E+03	2.207E+03	0.000E+00	0.338
BI-210	2.425E+02	3.653E+02	3.435E+02	0.000E+00	0.706
PB-210	2.425E+02	3.653E+02	3.435E+02	0.000E+00	0.706
BI-211	5.716E+00	1.131E+01	1.176E+01	0.000E+00	0.486
BI-214	3.068E+00	4.094E+00	4.387E+00	0.000E+00	0.699
RA-226	3.068E+00	4.094E+00	4.387E+00	0.000E+00	0.699
TH-228	6.345E-01	3.919E+00	3.833E+00	0.000E+00	0.166
TH-230	3.068E+00	4.094E+00	4.387E+00	0.000E+00	0.699
TH-232	6.236E-01	3.851E+00	3.768E+00	0.000E+00	0.166

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	7.695E-01		1.209E+01	2.151E+01	0.000E+00	0.036

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	8.263E-01		1.294E+00	2.512E+00	0.000E+00	0.329
K-40	3.547E+01		1.608E+01	3.395E+01	0.000E+00	1.045
SC-46	2.981E-01		1.254E+00	2.252E+00	0.000E+00	0.132
V-48	-8.564E-01		2.319E+00	4.118E+00	0.000E+00	-0.208
CR-51	4.737E+00		1.534E+01	2.613E+01	0.000E+00	0.181
MN-54	-7.659E-01		1.287E+00	2.110E+00	0.000E+00	-0.363
CO-56	-1.728E-01		1.365E+00	2.348E+00	0.000E+00	-0.074
CO-57	9.345E-02		1.168E+00	2.026E+00	0.000E+00	0.046
CO-58	-1.321E-01		1.310E+00	2.271E+00	0.000E+00	-0.058
FE-59	-3.034E-01		2.907E+00	4.586E+00	0.000E+00	-0.066
CO-60	1.443E+00		1.568E+00	2.789E+00	0.000E+00	0.517
ZN-65	-1.900E+00		2.836E+00	4.043E+00	0.000E+00	-0.470
SE-75	-1.357E+00		1.780E+00	2.874E+00	0.000E+00	-0.472
KR-85	-7.984E+02		4.044E+02	6.417E+02	0.000E+00	-1.244
SR-85	-4.191E+00		2.123E+00	3.368E+00	0.000E+00	-1.244
Y-88	-5.884E-01		1.317E+00	2.358E+00	0.000E+00	-0.249
Y-91	-1.732E-01		1.249E+00	2.190E+00	0.000E+00	-0.079
NB-94	4.760E-01		1.149E+00	2.073E+00	0.000E+00	0.230
NB-95M	7.477E+01		1.150E+02	1.810E+02	0.000E+00	0.413
ZR-95	3.415E+00		2.593E+00	4.989E+00	0.000E+00	0.684
RU-103	7.519E-01		1.630E+00	2.957E+00	0.000E+00	0.254
RH-106	2.493E+00		1.105E+01	1.979E+01	0.000E+00	0.126
RU-106	2.302E+00		1.111E+01	1.987E+01	0.000E+00	0.116
AG-108M	4.264E-01		1.157E+00	2.106E+00	0.000E+00	0.202
CD-109	-2.014E+01		3.134E+01	5.370E+01	0.000E+00	-0.375
AG-110M	-5.157E-01		1.117E+00	1.892E+00	0.000E+00	-0.272
SN-113	1.271E+00		1.651E+00	3.064E+00	0.000E+00	0.415
CD-115	3.501E+02		7.274E+02	1.336E+03	0.000E+00	0.262
SN-115	7.155E+01		1.241E+02	2.266E+02	0.000E+00	0.316
SN-117M	-8.217E-01		2.597E+00	4.394E+00	0.000E+00	-0.187
TE-123M	-6.270E-01		1.226E+00	2.057E+00	0.000E+00	-0.305
SB-124	1.447E+00		3.009E+00	5.896E+00	0.000E+00	0.245
SB-125	2.593E+00		3.352E+00	6.228E+00	0.000E+00	0.416
TE-125M	-2.752E+02		4.158E+02	7.058E+02	0.000E+00	-0.390
I-126	-7.225E+00		7.179E+00	1.155E+01	0.000E+00	-0.626
SB-126	-6.024E+00		5.585E+00	8.841E+00	0.000E+00	-0.681
SN-126	-1.876E+00		3.216E+00	5.522E+00	0.000E+00	-0.340
SB-127	2.865E+01		6.850E+01	1.244E+02	0.000E+00	0.230
I-131	-1.340E+00		5.453E+00	8.933E+00	0.000E+00	-0.150
TE-132	1.587E+01		4.349E+01	7.477E+01	0.000E+00	0.212
BA-133	7.113E-01		1.659E+00	2.839E+00	0.000E+00	0.251
CS-134	-1.421E-01		1.335E+00	2.310E+00	0.000E+00	-0.061
CS-135	-8.458E-01		6.048E+00	1.010E+01	0.000E+00	-0.084
CS-136	-3.200E-01		3.779E+00	6.853E+00	0.000E+00	-0.047
BA-137M	8.812E-01		1.245E+00	2.298E+00	0.000E+00	0.383
CS-137	9.351E-01		1.317E+00	2.430E+00	0.000E+00	0.385
CE-139	-5.850E-01		1.254E+00	2.105E+00	0.000E+00	-0.278
BA-140	7.929E+00		1.009E+01	1.884E+01	0.000E+00	0.421

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CE-141	1.768E+00		2.787E+00	4.899E+00	0.000E+00	0.361
CE-144	-3.769E+00		8.674E+00	1.473E+01	0.000E+00	-0.256
PM-144	-3.540E-01		1.265E+00	2.155E+00	0.000E+00	-0.164
PM-146	5.291E-01		1.571E+00	2.848E+00	0.000E+00	0.186
ND-147	2.454E+00		2.114E+01	3.793E+01	0.000E+00	0.065
PM-147	3.652E+05		2.407E+06	4.188E+06	0.000E+00	0.087
PM-149	-1.482E+03		7.247E+03	1.203E+04	0.000E+00	-0.123
EU-152	-5.523E-01		3.769E+00	6.228E+00	0.000E+00	-0.089
GD-153	-2.173E+00		3.530E+00	6.030E+00	0.000E+00	-0.360
EU-154	2.314E+00		3.611E+00	7.013E+00	0.000E+00	0.330
EU-155	-1.659E+00		4.412E+00	7.593E+00	0.000E+00	-0.219
TB-160	-2.300E-02		4.898E+00	8.516E+00	0.000E+00	-0.003
HF-181	1.136E-01		1.583E+00	2.821E+00	0.000E+00	0.040
TA-182	-1.292E+00		5.520E+00	9.761E+00	0.000E+00	-0.132
IR-192	7.301E-02		1.400E+00	2.348E+00	0.000E+00	0.031
HG-203	1.715E-01		1.607E+00	2.716E+00	0.000E+00	0.063
BI-207	3.199E-01		1.541E+00	2.884E+00	0.000E+00	0.111
TL-208	1.721E+00		1.408E+00	2.656E+00	0.000E+00	0.648
PB-211	-2.243E+01		3.094E+01	5.289E+01	0.000E+00	-0.424
BI-212	6.982E+00		1.048E+01	1.916E+01	0.000E+00	0.364
PB-212	6.345E-01	+	3.919E+00	4.328E+00	0.000E+00	0.147
PB-214	1.988E+00	+	3.934E+00	4.767E+00	0.000E+00	0.417
RN-219	-3.974E+00		1.408E+01	2.474E+01	0.000E+00	-0.161
RA-223	3.753E+00		2.745E+01	4.606E+01	0.000E+00	0.081
RA-224	3.281E+01		2.828E+01	4.555E+01	0.000E+00	0.720
AC-227	-1.078E+01		1.599E+01	2.600E+01	0.000E+00	-0.414
TH-227	-1.061E+01		1.574E+01	2.559E+01	0.000E+00	-0.414
AC-228	2.808E+00	+	1.054E+01	8.886E+00	0.000E+00	0.316
RA-228	2.808E+00	+	1.054E+01	8.886E+00	0.000E+00	0.316
TH-229	1.317E+01		2.014E+01	3.520E+01	0.000E+00	0.374
PA-231	1.048E+01		5.732E+01	9.746E+01	0.000E+00	0.108
TH-231	2.048E+00		7.173E+00	1.223E+01	0.000E+00	0.167
PA-233	-1.498E+00		2.558E+00	4.132E+00	0.000E+00	-0.362
PA-234	-5.761E+00		9.946E+00	1.619E+01	0.000E+00	-0.356
PA-234M	1.610E+02		1.486E+02	2.947E+02	0.000E+00	0.546
TH-234	7.369E+01		6.362E+01	1.170E+02	0.000E+00	0.630
U-234	2.642E+00		5.302E+00	9.105E+00	0.000E+00	0.290
U-235	-5.252E-01		9.149E+00	1.568E+01	0.000E+00	-0.033
NP-237	5.316E+00		9.359E+00	1.675E+01	0.000E+00	0.317
U-238	7.369E+01		6.362E+01	1.170E+02	0.000E+00	0.630
NP-239	3.986E+00		8.484E+00	1.496E+01	0.000E+00	0.266
AM-241	-1.634E+00		8.206E+00	1.307E+01	0.000E+00	-0.125
CM-247	1.054E-01		1.228E+00	2.209E+00	0.000E+00	0.048
CF-249	-1.857E+00		1.458E+00	2.416E+00	0.000E+00	-0.768
CF-251	2.922E+00		5.124E+00	8.954E+00	0.000E+00	0.326
ANH-511	1.518E+01		1.917E+00	4.131E+00	0.000E+00	3.673

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          Environmental Physics, Inc.                  *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                             DETECTOR DATA                             *
*                                                                       *
* Configuration     : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G138675001       *
* Acquisition date  : 30-JUN-2005 15:44:11 Detector SN#     : 1943234  *
* Detector ID       : GAMMA8               Sensitivity      : 3.000    *
* Geometry          : 2L_MB                Energy tolerance: 2.000     *
* Elapsed live time:    0 08:00:00.00      Abundance limit  : 75.000   *
* Elapsed real time:    0 08:00:06.36      Half life ratio  : 8.000    *
*************************************************************************
*                                                                       *
*                             SAMPLE DATA                               *
*                                                                       *
* Sample date       : 13-JUN-2005 10:36:00 Nuclide Library : FERMC      *
* Sample ID         : G138675001           Analyst initials: AKB        *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight  :    0.00000 *
*************************************************************************
*                                                                       *
*                               QC DATA                                 *
*                                                                       *
* CALIB. DATE/TIME :  1-OCT-2004 14:17:22 MS Isotope      : TOPLOADER   *
* MSD DPM          :    5.440             MSD Isotope     : TOPLOADER   *
* LCS DPM          :    0.000             LCS Isotope     : TOPLOADER   *
* LCSD DPM         :    0.000             LCSD Isotope    : TOPLOADER   *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
NB-95	3.161E+00	2.757E+00	1.263E+00	1.379E+00
MO-99	8.802E+01	1.661E+02	7.777E+01	8.303E+01
TM-171	7.460E+02	2.077E+03	1.067E+03	1.038E+03
BI-210	2.425E+02	3.653E+02	1.652E+02	1.826E+02
PB-210	2.425E+02	3.653E+02	1.652E+02	1.826E+02
BI-211	5.716E+00	1.131E+01	5.579E+00	5.654E+00
BI-214	3.068E+00	4.094E+00	2.069E+00	2.047E+00
RA-226	3.068E+00	4.094E+00	2.069E+00	2.047E+00
TH-228	6.345E-01	3.919E+00	1.848E+00	1.959E+00
TH-230	3.068E+00	4.094E+00	2.069E+00	2.047E+00
TH-232	6.236E-01	3.851E+00	1.816E+00	1.926E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU

BE-7	7.695E-01	1.209E+01	1.018E+01	6.043E+00 NOT IDENT.
NA-22	8.263E-01	1.294E+00	1.149E+00	6.469E-01 NOT IDENT.
NA-24	-1.887E+08	2.669E+08	0.000E+00	1.335E+08 SHORT HLIF
K-40	3.547E+01	1.608E+01	1.588E+01	8.038E+00 NOT IDENT.
SC-46	2.981E-01	1.254E+00	1.035E+00	6.271E-01 FAIL ABUN
V-48	-8.564E-01	2.319E+00	1.878E+00	1.159E+00 NOT IDENT.
CR-51	4.737E+00	1.534E+01	1.249E+01	7.672E+00 NOT IDENT.
MN-54	-7.659E-01	1.287E+00	9.776E-01	6.434E-01 NOT IDENT.
CO-56	-1.728E-01	1.365E+00	1.086E+00	6.825E-01 NOT IDENT.
MN-56	-1.000E+41	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
CO-57	9.345E-02	1.168E+00	9.822E-01	5.839E-01 NOT IDENT.
CO-58	-1.321E-01	1.310E+00	1.049E+00	6.551E-01 NOT IDENT.
FE-59	-3.034E-01	2.907E+00	2.077E+00	1.454E+00 NOT IDENT.
CO-60	1.443E+00	1.568E+00	1.285E+00	7.838E-01 NOT IDENT.
ZN-65	-1.900E+00	2.836E+00	1.826E+00	1.418E+00 NOT IDENT.
SE-75	-1.357E+00	1.780E+00	1.378E+00	8.899E-01 FAIL ABUN
KR-85	-7.984E+02	4.044E+02	3.091E+02	2.022E+02 NOT IDENT.
SR-85	-4.191E+00	2.123E+00	1.623E+00	1.061E+00 NOT IDENT.
Y-88	-5.884E-01	1.317E+00	1.026E+00	6.587E-01 NOT IDENT.
Y-91	-1.732E-01	1.249E+00	1.025E+00	6.243E-01 NOT IDENT.
NB-94	4.760E-01	1.149E+00	9.721E-01	5.745E-01 NOT IDENT.
NB-95M	7.477E+01	1.150E+02	8.709E+01	5.749E+01 NOT IDENT.
ZR-95	3.415E+00	2.593E+00	2.345E+00	1.297E+00 NOT IDENT.
TC-99M	7.741E+20	1.461E+21	0.000E+00	0.000E+00 SHORT HLIF
RU-103	7.519E-01	1.630E+00	1.403E+00	8.148E-01 FAIL ABUN
RH-106	2.493E+00	1.105E+01	9.275E+00	5.524E+00 NOT IDENT.
RU-106	2.302E+00	1.111E+01	9.316E+00	5.557E+00 NOT IDENT.
AG-108M	4.264E-01	1.157E+00	9.980E-01	5.783E-01 NOT IDENT.
CD-109	-2.014E+01	3.134E+01	2.599E+01	1.567E+01 NOT IDENT.
AG-110M	-5.157E-01	1.117E+00	8.779E-01	5.586E-01 FAIL ABUN
SN-113	1.271E+00	1.651E+00	1.460E+00	8.254E-01 NOT IDENT.
CD-115	3.501E+02	7.274E+02	6.282E+02	3.637E+02 NOT IDENT.
SN-115	7.155E+01	1.241E+02	1.053E+02	6.203E+01 NOT IDENT.
SN-117M	-8.217E-01	2.597E+00	2.126E+00	1.298E+00 NOT IDENT.
TE-123M	-6.270E-01	1.226E+00	9.954E-01	6.128E-01 NOT IDENT.
SB-124	1.447E+00	3.009E+00	2.624E+00	1.504E+00 NOT IDENT.
SB-125	2.593E+00	3.352E+00	2.960E+00	1.676E+00 NOT IDENT.
TE-125M	-2.752E+02	4.158E+02	3.415E+02	2.079E+02 NOT IDENT.
I-126	-7.225E+00	7.179E+00	5.382E+00	3.589E+00 NOT IDENT.
SB-126	-6.024E+00	5.585E+00	4.097E+00	2.793E+00 NOT IDENT.
SN-126	-1.876E+00	3.216E+00	2.674E+00	1.608E+00 NOT IDENT.
SB-127	2.865E+01	6.850E+01	5.816E+01	3.425E+01 NOT IDENT.
I-131	-1.340E+00	5.453E+00	4.248E+00	2.726E+00 NOT IDENT.
I-132	-1.000E+41	1.843E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	1.587E+01	4.349E+01	3.604E+01	2.175E+01 NOT IDENT.
BA-133	7.113E-01	1.659E+00	1.354E+00	8.293E-01 NOT IDENT.
I-133	-5.863E+05	1.206E+06	0.000E+00	6.028E+05 SHORT HLIF
CS-134	-1.421E-01	1.335E+00	1.070E+00	6.676E-01 NOT IDENT.
CS-135	-8.458E-01	6.048E+00	4.845E+00	3.024E+00 NOT IDENT.
I-135	-1.348E+19	5.159E+19	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-3.200E-01	3.779E+00	3.145E+00	1.890E+00 FAIL ABUN
BA-137M	8.812E-01	1.245E+00	1.080E+00	6.227E-01 NOT IDENT.
CS-137	9.351E-01	1.317E+00	1.143E+00	6.584E-01 NOT IDENT.
CE-139	-5.850E-01	1.254E+00	1.018E+00	6.269E-01 NOT IDENT.
BA-140	7.929E+00	1.009E+01	8.881E+00	5.043E+00 NOT IDENT.
LA-140	-8.659E+02	1.843E+03	0.000E+00	9.216E+02 SHORT HLIF
CE-141	1.768E+00	2.787E+00	2.375E+00	1.393E+00 NOT IDENT.
CE-143	-1.613E+04	1.526E+04	0.000E+00	7.631E+03 SHORT HLIF
CE-144	-3.769E+00	8.674E+00	7.124E+00	4.337E+00 NOT IDENT.

PM-144	-3.540E-01	1.265E+00	1.011E+00	6.324E-01	NOT IDENT.
PR-144	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	5.291E-01	1.571E+00	1.350E+00	7.854E-01	NOT IDENT.
ND-147	2.454E+00	2.114E+01	1.777E+01	1.057E+01	FAIL ABUN
PM-147	3.652E+05	2.407E+06	2.030E+06	1.203E+06	NOT IDENT.
PM-149	-1.482E+03	7.247E+03	5.760E+03	3.623E+03	NOT IDENT.
EU-152	-5.523E-01	3.769E+00	2.969E+00	1.885E+00	NOT IDENT.
GD-153	-2.173E+00	3.530E+00	2.919E+00	1.765E+00	NOT IDENT.
EU-154	2.314E+00	3.611E+00	3.208E+00	1.806E+00	NOT IDENT.
EU-155	-1.659E+00	4.412E+00	3.666E+00	2.206E+00	NOT IDENT.
TB-160	-2.300E-02	4.898E+00	3.937E+00	2.449E+00	NOT IDENT.
HF-181	1.136E-01	1.583E+00	1.332E+00	7.913E-01	FAIL ABUN
TA-182	-1.292E+00	5.520E+00	4.463E+00	2.760E+00	FAIL ABUN
IR-192	7.301E-02	1.400E+00	1.123E+00	6.998E-01	NOT IDENT.
HG-203	1.715E-01	1.607E+00	1.302E+00	8.037E-01	NOT IDENT.
BI-207	3.199E-01	1.541E+00	1.321E+00	7.705E-01	NOT IDENT.
TL-208	1.721E+00	1.408E+00	1.261E+00	7.039E-01	FAIL ABUN
PB-211	-2.243E+01	3.094E+01	2.497E+01	1.547E+01	NOT IDENT.
BI-212	6.982E+00	1.048E+01	9.010E+00	5.238E+00	NOT IDENT.
PB-212	6.345E-01	3.919E+00	2.095E+00	1.959E+00	FAIL ABUN
PB-214	1.988E+00	3.934E+00	2.279E+00	1.967E+00	FAIL ABUN
RN-219	-3.974E+00	1.408E+01	1.171E+01	7.038E+00	NOT IDENT.
RA-223	3.753E+00	2.745E+01	2.208E+01	1.372E+01	NOT IDENT.
RA-224	3.281E+01	2.828E+01	2.199E+01	1.414E+01	NOT IDENT.
AC-227	-1.078E+01	1.599E+01	1.249E+01	7.997E+00	NOT IDENT.
TH-227	-1.061E+01	1.574E+01	1.230E+01	7.871E+00	FAIL ABUN
AC-228	2.808E+00	1.054E+01	4.154E+00	5.272E+00	FAIL ABUN
RA-228	2.808E+00	1.054E+01	4.154E+00	5.272E+00	FAIL ABUN
TH-229	1.317E+01	2.014E+01	1.701E+01	1.007E+01	NOT IDENT.
PA-231	1.048E+01	5.732E+01	4.663E+01	2.866E+01	NOT IDENT.
TH-231	2.048E+00	7.173E+00	5.877E+00	3.587E+00	FAIL ABUN
PA-233	-1.498E+00	2.558E+00	1.973E+00	1.279E+00	FAIL ABUN
PA-234	-5.761E+00	9.946E+00	7.407E+00	4.973E+00	FAIL ABUN
PA-234M	1.610E+02	1.486E+02	1.371E+02	7.430E+01	FAIL ABUN
TH-234	7.369E+01	6.362E+01	5.675E+01	3.181E+01	FAIL ABUN
U-234	2.642E+00	5.302E+00	4.373E+00	2.651E+00	FAIL ABUN
U-235	-5.252E-01	9.149E+00	7.603E+00	4.574E+00	FAIL ABUN
NP-237	5.316E+00	9.359E+00	8.116E+00	4.679E+00	NOT IDENT.
U-238	7.369E+01	6.362E+01	5.675E+01	3.181E+01	NOT IDENT.
NP-239	3.986E+00	8.484E+00	7.251E+00	4.242E+00	NOT IDENT.
AM-241	-1.634E+00	8.206E+00	6.308E+00	4.103E+00	NOT IDENT.
CM-247	1.054E-01	1.228E+00	1.046E+00	6.139E-01	NOT IDENT.
CF-249	-1.857E+00	1.458E+00	1.145E+00	7.292E-01	NOT IDENT.
CF-251	2.922E+00	5.124E+00	4.330E+00	2.562E+00	NOT IDENT.
ANH-511	1.518E+01	1.917E+00	2.016E+00	9.584E-01	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:31:52.86

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851001.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:31:24
Sample ID : G138851001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.87 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.19*	140	508	2.14	93.26	88	11	4.88E-03	35.0	
2	3	63.67*	5	482	1.37	128.15	123	15	1.85E-04	874.1	6.84E-01
3	3	66.48	149	395	1.42	133.77	123	15	5.17E-03	24.0	
4	0	74.36	71	430	2.27	149.51	146	7	2.47E-03	49.7	
5	0	84.57*	80	589	1.38	169.89	165	10	2.78E-03	65.8	
6	4	90.30	65	241	1.08	181.32	179	15	2.26E-03	35.5	1.02E+00
7	4	92.78*	105	532	1.50	186.29	179	15	3.63E-03	58.7	
8	0	139.95	101	450	1.06	280.49	277	8	3.52E-03	37.6	
9	0	175.02	63	416	1.38	350.53	347	9	2.20E-03	59.2	
10	0	197.96*	56	454	1.49	396.33	393	10	1.93E-03	84.8	
11	0	206.44	71	338	2.34	413.27	408	9	2.46E-03	48.3	
12	0	238.70*	29	303	1.43	477.69	474	8	9.96E-04	143.8	
13	0	352.30*	71	246	1.32	704.58	698	13	2.45E-03	57.5	
14	0	467.96	68	158	2.98	935.58	929	15	2.36E-03	42.0	
15	0	596.15	83	101	1.90	1191.64	1185	13	2.90E-03	27.1	
16	0	609.27*	92	103	1.71	1217.83	1214	12	3.19E-03	27.8	
17	0	631.53	70	87	4.23	1262.31	1256	17	2.44E-03	32.5	
18	0	638.70	34	93	0.67	1276.62	1273	13	1.19E-03	60.1	
19	0	878.79	15	20	1.30	1756.23	1754	5	5.37E-04	50.1	
20	0	898.65*	11	60	2.08	1795.89	1791	13	3.89E-04	161.9	
21	0	905.21*	8	39	4.36	1809.01	1803	12	2.71E-04	191.2	
22	0	913.05*	62	91	7.14	1824.68	1815	26	2.14E-03	50.1	
23	0	937.26*	5	89	7.83	1873.04	1860	23	1.81E-04	523.6	
24	0	969.54*	23	37	0.96	1937.52	1933	10	7.94E-04	73.9	
25	0	996.88*	2	35	1.55	1992.14	1989	9	7.82E-05	537.5	
26	0	1155.27	7	39	1.12	2308.59	2304	12	2.57E-04	172.7	
27	2	1173.27*	27	17	2.83	2344.55	2338	25	9.30E-04	52.2	1.18E+00
28	2	1178.96	30	26	2.84	2355.92	2338	25	1.04E-03	40.2	
29	0	1228.33*	23	15	1.57	2454.57	2448	12	8.13E-04	46.4	
30	0	1237.61	6	19	1.08	2473.09	2472	7	2.20E-04	117.6	
31	0	1353.85	36	36	4.89	2705.35	2700	20	1.24E-03	43.9	
32	0	1367.21	76	22	12.72	2732.05	2719	29	2.63E-03	21.1	
33	0	1395.96*	12	13	2.18	2789.50	2783	12	4.28E-04	83.9	
34	0	1451.76	35	9	4.64	2901.00	2895	13	1.20E-03	25.2	
35	0	1461.16*	18	38	3.22	2919.79	2914	15	6.22E-04	96.9	
36	0	1485.41*	12	34	0.53	2968.25	2960	15	4.33E-04	112.4	
37	0	1645.62	12	8	0.66	3288.39	3285	10	4.13E-04	52.3	
38	0	1711.64*	15	24	5.01	3420.33	3416	13	5.35E-04	76.9	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1751.02	15	11	0.69	3499.03	3493	12	5.11E-04	53.5	
40	0	1756.37	13	23	4.59	3509.73	3504	14	4.38E-04	87.5	
41	0	1827.13	14	15	1.04	3651.13	3646	12	5.02E-04	59.5	
42	0	1855.83	8	7	0.98	3708.49	3707	5	2.92E-04	56.9	
43	0	1873.28	31	19	8.93	3743.37	3730	25	1.09E-03	41.3	
44	4	1966.45*	11	25	4.10	3929.57	3904	41	3.97E-04	143.1	5.71E-01
45	4	1972.21	15	8	1.95	3941.09	3904	41	5.18E-04	40.3	
46	0	2013.97	26	26	10.79	4024.56	4017	25	8.95E-04	56.0	
47	0	2026.33	10	14	1.27	4049.26	4045	11	3.46E-04	78.8	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 1-JUL-2005 07:31:58

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851001.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:31:24
Sample ID : G138851001 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.87 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Ided	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	1.377E+01	2.669E+01	2.063E+01	1.235E+00	0.668
MO-99	+	140.51	*	1.181E+02	8.914E+01	1.104E+02	6.840E+00	1.070
		181.06		1.386E+03	9.621E+02	1.607E+03	2.771E+02	0.862
		739.58		3.740E+02	4.859E+02	8.964E+02	1.266E+02	0.417
BI-210	+	46.50	*	6.349E+02	4.471E+02	3.458E+02	2.833E+01	1.836
PB-210	+	46.50	*	6.349E+02	4.471E+02	3.458E+02	2.833E+01	1.836
BI-211	+	351.07	*	1.529E+01	1.762E+01	1.426E+01	9.923E-01	1.072
PB-212	+	74.80		2.082E+01	2.083E+01	2.870E+01	3.382E+00	0.726
		87.30		-1.477E+01	1.894E+01	2.748E+01	3.437E+00	-0.537
		115.19		-7.537E+01	1.839E+02	3.025E+02	1.917E+01	-0.249
	+	238.63	*	1.432E+00	4.121E+00	4.255E+00	3.290E-01	0.337
		300.09		7.084E+00	3.009E+01	5.234E+01	4.553E+00	0.135
RA-226		295.21		3.488E+00	5.526E+00	9.743E+00	8.731E-01	0.358
	+	351.92		5.319E+00	6.127E+00	4.940E+00	3.162E-01	1.077
	+	609.31	*	8.241E+00	4.623E+00	4.261E+00	3.470E-01	1.934
TH-228	+	84.40		1.652E+02	2.182E+02	1.958E+02	2.422E+01	0.844
	+	238.60	*	1.432E+00	4.121E+00	4.254E+00	3.289E-01	0.337
		300.10		6.979E+00	3.036E+01	5.233E+01	3.087E+01	0.133
TH-230		295.21		3.488E+00	5.525E+00	9.743E+00	8.731E-01	0.358
	+	351.92		5.319E+00	6.127E+00	4.940E+00	3.162E-01	1.077
	+	609.31	*	8.240E+00	4.623E+00	4.261E+00	3.470E-01	1.934
TH-232	+	238.59	*	1.410E+00	4.057E+00	4.188E+00	3.238E-01	0.337
	+	911.20		1.266E+01	1.276E+01	8.283E+00	8.588E-01	1.529
		964.40		1.035E+01	3.244E+01	4.965E+01	1.201E+01	0.208
	+	969.11		8.225E+00	1.231E+01	1.528E+01	3.495E+00	0.538
TH-234	+	63.29	*	6.409E+00	1.121E+02	1.158E+02	2.019E+01	0.055
	+	92.38		4.228E+01	5.018E+01	3.823E+01	6.668E+00	1.106
		112.81		2.040E+02	4.707E+02	7.954E+02	1.357E+02	0.256
NP-237	+	86.48	*	1.561E+01	2.082E+01	1.762E+01	3.867E+00	0.886
		95.87		-4.460E+01	5.343E+01	7.562E+01	1.823E+01	-0.590
U-238	+	63.29	*	6.409E+00	1.121E+02	1.158E+02	2.019E+01	0.055

---- Non-Identified Nuclides ----

Line Energy	Activity	Act error	MDA	MDA error	Act/MDA

Nuclide	Ided	(KEV)	Key	(pCi/LITER)		(pCi/LITER)		
BE-7		477.59	*	-1.457E+00	1.327E+01	2.220E+01	1.616E+00	-0.066

---- Non-Identified Nuclides ----

Nuclide	Ided	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22		1274.53	*	-7.846E-01	1.390E+00	2.343E+00	1.358E-01	-0.335
AL-26		511.00		9.126E+00	1.337E+00	2.547E+00	1.635E-01	3.583
		1808.65	*	1.080E+00	1.488E+00	2.927E+00	1.657E-01	0.369
SC-46		889.25	*	4.165E-01	1.360E+00	2.437E+00	1.809E-01	0.171
		1120.51		1.651E+00	1.633E+00	3.150E+00	2.061E-01	0.524
V-48		944.10		4.376E+00	3.476E+01	5.317E+01	3.908E+00	0.082
		983.50	*	-4.078E-01	2.443E+00	4.363E+00	3.148E-01	-0.093
		1312.09		-4.829E-01	2.862E+00	5.023E+00	2.810E-01	-0.096
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-6.632E+00	1.529E+01	2.567E+01	1.804E+00	-0.258
MN-54		834.83	*	3.704E-01	1.318E+00	2.343E+00	1.668E-01	0.158
CO-56		846.75	*	-1.251E+00	1.511E+00	2.434E+00	1.750E-01	-0.514
		1037.82		-3.501E+00	1.061E+01	1.858E+01	1.403E+00	-0.188
	+	1238.25		7.881E-01	1.855E+00	4.860E+00	3.063E-01	0.162
CO-57		122.06	*	2.483E-01	1.326E+00	2.221E+00	1.398E-01	0.112
		136.47		-1.970E+00	1.201E+01	1.756E+01	1.230E+00	-0.112
CO-58		810.78	*	-1.699E+00	1.530E+00	2.410E+00	1.690E-01	-0.705
FE-59		192.35		-2.392E+01	4.048E+01	6.924E+01	8.294E+00	-0.346
		1099.25	*	1.548E+00	3.198E+00	5.948E+00	4.491E-01	0.260
		1291.60		4.321E-01	4.265E+00	7.675E+00	5.636E-01	0.056
CO-60	+	1173.24		1.875E+00	1.960E+00	1.978E+00	1.227E-01	0.948
		1332.50	*	6.685E-01	1.329E+00	2.511E+00	1.377E-01	0.266
ZN-65		1115.55	*	-1.936E+00	2.959E+00	4.990E+00	3.287E-01	-0.388
SE-75	+	66.05		6.459E+02	3.165E+02	4.184E+02	3.917E+01	1.544
		96.73		-1.841E+01	4.332E+01	6.380E+01	8.045E+00	-0.289
		121.11		-8.103E-02	7.155E+00	1.191E+01	1.137E+00	-0.007
		136.00		-2.740E-02	1.986E+00	3.284E+00	2.032E-01	-0.008
	+	198.60		8.368E+01	1.420E+02	1.332E+02	9.872E+00	0.628
		264.65	*	-6.090E-01	1.804E+00	3.075E+00	1.977E-01	-0.198
		279.53		1.106E+00	4.558E+00	7.932E+00	5.418E-01	0.139
		303.91		-6.809E+01	8.446E+01	1.392E+02	1.382E+01	-0.489
		400.65		-1.055E+00	1.014E+01	1.714E+01	1.611E+00	-0.062
KR-85		513.99	*	-5.232E+02	4.205E+02	6.962E+02	4.470E+01	-0.751
SR-85		513.99	*	-2.700E+00	2.170E+00	3.593E+00	2.307E-01	-0.751
Y-88	+	898.02		7.464E-01	2.417E+00	2.558E+00	1.924E-01	0.292
		1836.01	*	8.588E-01	1.602E+00	3.109E+00	1.760E-01	0.276
Y-91		557.57	*	-1.223E-01	1.330E+00	2.348E+00	1.500E-01	-0.052
		1204.90		7.483E+02	5.893E+02	1.159E+03	7.052E+01	0.646
NB-94		702.63	*	-4.724E-01	1.239E+00	2.108E+00	1.338E-01	-0.224
		871.10		-4.119E-01	1.342E+00	2.263E+00	1.657E-01	-0.182
NB-95		765.79	*	-1.324E+00	1.807E+00	2.967E+00	1.995E-01	-0.446
NB-95M		235.69	*	4.187E+01	9.834E+01	1.534E+02	1.487E+01	0.273
ZR-95		724.18		3.200E+00	3.311E+00	6.173E+00	4.592E-01	0.518
		756.74	*	-1.721E+00	2.641E+00	4.371E+00	3.394E-01	-0.394
RU-103		497.08	*	-2.133E+00	1.835E+00	2.809E+00	3.635E-01	-0.759
	+	610.33		8.994E+01	5.186E+01	4.590E+01	7.162E+00	1.959
RH-106		511.85		7.774E+01	1.094E+01	2.085E+01	1.339E+00	3.729
		621.84	*	6.949E+00	1.207E+01	2.206E+01	1.377E+00	0.315
		1050.47		1.611E+01	8.143E+01	1.486E+02	1.029E+01	0.108

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
RU-106		622.20	*	2.166E+00	1.203E+01	2.145E+01	2.565E+00	0.101
AG-108M		433.93	*	4.166E-01	1.358E+00	2.339E+00	1.591E-01	0.178
		614.37		-6.527E-01	1.636E+00	2.408E+00	1.619E-01	-0.271
		722.95		4.273E-01	1.544E+00	2.747E+00	1.899E-01	0.156
CD-109		88.03	*	-4.945E-01	4.793E+01	5.735E+01	4.330E+00	-0.009
AG-110M		657.75	*	9.946E-02	1.242E+00	2.201E+00	1.424E-01	0.045
		677.61		-2.023E+00	1.135E+01	1.968E+01	1.285E+00	-0.103
		706.67		3.222E+00	7.883E+00	1.415E+01	9.465E-01	0.228
		763.93		-1.505E+00	6.112E+00	1.044E+01	7.330E-01	-0.144
		884.67		1.530E-02	1.790E+00	3.115E+00	2.405E-01	0.005
	+	937.48		9.273E-01	9.710E+00	7.201E+00	5.568E-01	0.129
		1384.27		2.059E+00	6.124E+00	1.129E+01	6.683E-01	0.182
SN-113		391.69	*	-2.909E-01	1.875E+00	3.157E+00	2.081E-01	-0.092
CD-115		231.44		6.580E+02	1.798E+04	3.125E+04	1.960E+03	0.021
		260.90		-3.278E+03	6.401E+03	1.083E+04	6.893E+02	-0.303
		492.35		8.685E+02	1.803E+03	3.128E+03	2.008E+02	0.278
		527.90	*	-1.402E+02	5.028E+02	8.776E+02	5.630E+01	-0.160
SN-115		484.47		-4.164E+02	7.560E+02	1.226E+03	7.861E+01	-0.340
		933.00	*	-7.424E+01	1.592E+02	2.226E+02	1.643E+01	-0.334
		1290.58		-4.998E+01	3.059E+02	5.372E+02	3.064E+01	-0.093
SN-117M		156.02		1.171E+01	1.131E+02	1.866E+02	1.129E+01	0.063
		158.56	*	7.487E-01	2.805E+00	4.651E+00	2.816E-01	0.161
TE-123M		159.00	*	7.692E-01	1.400E+00	2.344E+00	1.437E-01	0.328
SB-124		602.73		-9.996E-02	1.480E+00	2.591E+00	1.632E-01	-0.039
		645.85		3.707E+00	1.942E+01	3.456E+01	2.373E+00	0.107
		713.78		-2.860E+01	6.421E+01	1.084E+02	1.146E+01	-0.264
		722.79		3.625E+00	1.368E+01	2.430E+01	1.632E+00	0.149
	+	1368.16		2.830E+02	1.239E+02	1.241E+02	1.457E+01	2.281
		1690.98	*	-1.558E+00	3.230E+00	5.632E+00	3.495E-01	-0.277
SB-125	+	176.33		1.766E+01	2.097E+01	2.597E+01	2.291E+00	0.680
		427.89	*	-1.435E+00	3.729E+00	6.170E+00	4.046E-01	-0.233
		463.38		-9.118E+00	1.274E+01	1.751E+01	1.274E+00	-0.521
		600.56		9.828E-01	7.454E+00	1.157E+01	8.269E-01	0.085
		606.64		2.360E+01	2.916E+01	4.737E+01	3.428E+00	0.498
		635.90		6.136E+00	1.435E+01	1.631E+01	1.164E+00	0.376
TE-125M		109.28	*	7.569E+01	4.717E+02	7.941E+02	6.822E+01	0.095
I-126		388.63		6.356E-02	8.530E+00	1.452E+01	9.068E-01	0.004
		666.33	*	-1.003E-01	7.379E+00	1.289E+01	7.898E-01	-0.008
		753.82		3.660E+00	5.363E+01	9.443E+01	6.281E+00	0.039
SB-126		666.33		-4.197E-02	3.087E+00	5.394E+00	3.304E-01	-0.008
		695.00		3.302E+00	3.030E+00	5.667E+00	3.571E-01	0.583
		697.00		1.754E-01	1.091E+01	1.904E+01	1.202E+00	0.009
		720.50	*	-3.086E-01	5.460E+00	9.512E+00	6.139E-01	-0.032
SN-126	+	64.28		2.537E+00	4.435E+01	4.380E+01	6.350E+00	0.058
		86.94		-1.065E+01	1.740E+01	2.474E+01	1.018E+01	-0.431
		87.57	*	-3.658E-02	4.824E+00	5.776E+00	4.348E-01	-0.006
SB-127		252.40		2.197E+02	2.322E+02	3.836E+02	1.599E+02	0.573
		411.60		1.594E+02	5.514E+02	9.494E+02	1.397E+02	0.168
		444.90		1.844E+02	4.483E+02	7.764E+02	8.762E+01	0.238

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		473.00		4.670E+01	8.140E+01	1.264E+02	1.476E+01	0.369
		543.30		-3.465E+02	6.895E+02	1.183E+03	1.587E+02	-0.293
		603.50		-1.776E+02	4.892E+02	8.401E+02	9.426E+01	-0.211
		685.70	*	2.798E+01	5.755E+01	1.041E+02	1.033E+01	0.269
		698.50		3.464E+02	6.456E+02	1.164E+03	1.726E+02	0.298
		783.70		4.324E+01	1.429E+02	2.551E+02	2.915E+01	0.169
I-131		284.30		-2.493E+01	6.704E+01	1.135E+02	7.956E+00	-0.220
		364.48	*	-2.761E+00	5.151E+00	8.526E+00	5.941E-01	-0.324
	+	636.97		7.883E+01	9.494E+01	8.752E+01	5.997E+00	0.901
TE-132		228.16	*	-1.449E+01	3.207E+01	5.469E+01	8.016E+00	-0.265
BA-133		79.62		-2.327E+01	6.080E+01	1.018E+02	1.475E+01	-0.229
		81.00		-3.753E+00	5.136E+00	7.492E+00	1.138E+00	-0.501
		276.40		-8.546E+00	1.521E+01	2.551E+01	3.378E+00	-0.335
		302.85		-3.412E+00	5.689E+00	9.482E+00	1.136E+00	-0.360
		356.02	*	1.321E-01	1.972E+00	2.968E+00	3.518E-01	0.045
		383.85		-2.392E+00	1.214E+01	2.044E+01	2.275E+00	-0.117
CS-134		563.23		-3.194E+00	1.242E+01	2.170E+01	1.408E+00	-0.147
		569.32		2.799E+00	7.551E+00	1.363E+01	8.895E-01	0.205
		604.70		-2.564E+00	1.415E+00	2.196E+00	1.388E-01	-1.168
		795.84	*	-4.719E-01	1.491E+00	2.531E+00	1.762E-01	-0.186
		801.93		2.642E-01	1.499E+01	2.610E+01	1.825E+00	0.010
		1365.15		8.216E+00	4.951E+01	8.939E+01	5.472E+00	0.092
CS-135		268.24	*	-4.854E-01	6.397E+00	1.101E+01	8.927E-01	-0.044
CS-136	+	66.88		1.104E+02	5.552E+01	6.985E+01	1.028E+01	1.580
	+	86.36		7.165E+01	9.465E+01	7.878E+01	9.543E+00	0.910
		153.25		-2.637E+00	3.216E+01	5.277E+01	3.918E+00	-0.050
		163.92		3.034E+01	5.271E+01	8.828E+01	6.594E+00	0.344
	+	176.60		2.037E+01	2.415E+01	2.997E+01	2.031E+00	0.680
		273.65		-1.358E+01	1.901E+01	3.175E+01	2.267E+00	-0.428
		340.55		-4.697E+00	5.123E+00	8.333E+00	5.611E-01	-0.564
		818.51		-5.821E-01	2.919E+00	4.995E+00	3.515E-01	-0.117
		1048.07	*	-8.014E-01	4.033E+00	7.116E+00	5.259E-01	-0.113
		1235.36		1.697E+01	1.716E+01	3.020E+01	3.044E+00	0.562
BA-137M		661.65	*	-5.588E-01	1.314E+00	2.239E+00	1.365E-01	-0.250
CS-137		661.66	*	-5.862E-01	1.390E+00	2.368E+00	1.450E-01	-0.247
CE-139		165.85	*	1.119E-01	1.434E+00	2.357E+00	1.432E-01	0.047
BA-140		162.67		-1.736E+01	3.801E+01	6.122E+01	4.138E+00	-0.284
		304.87		-2.165E+01	5.257E+01	8.808E+01	2.416E+01	-0.246
		423.73		4.853E+01	8.268E+01	1.423E+02	4.538E+01	0.341
		537.31	*	-1.454E+00	1.025E+01	1.801E+01	5.876E+00	-0.081
CE-141		145.44	*	5.836E+00	3.117E+00	5.444E+00	3.419E-01	1.072
CE-144		133.51	*	-6.075E+00	1.052E+01	1.701E+01	2.439E+00	-0.357
PM-144		476.78		3.744E-02	2.769E+00	4.671E+00	3.484E-01	0.008
		618.01		3.884E-01	1.230E+00	2.208E+00	1.453E-01	0.176
		696.49	*	5.184E-01	1.345E+00	2.405E+00	1.519E-01	0.216
PM-146		453.88	*	-6.990E-01	1.715E+00	2.824E+00	2.548E-01	-0.248
	+	633.25		1.366E+02	1.020E+02	9.061E+01	3.342E+01	1.508
		735.93		-3.579E+00	5.445E+00	8.882E+00	2.491E+00	-0.403
		747.24		2.109E-02	3.361E+00	5.880E+00	7.588E-01	0.004

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
ND-147	+	91.11		1.419E+01	1.015E+01	2.027E+01	1.643E+00	0.700
		531.02	*	-5.201E+00	2.304E+01	4.027E+01	5.555E+00	-0.129
PM-147		121.30	*	1.231E+05	2.763E+06	4.606E+06	2.895E+05	0.027
PM-149		285.95	*	2.146E+03	4.620E+03	8.106E+03	1.170E+03	0.265
EU-152		121.78		1.611E+00	3.832E+00	6.468E+00	5.166E-01	0.249
		344.31	*	3.213E+00	4.090E+00	7.242E+00	5.119E-01	0.444
		963.37		5.712E+00	1.034E+01	1.850E+01	1.348E+00	0.309
GD-153		69.67		1.109E+02	8.930E+01	1.438E+02	1.035E+01	0.771
	+	83.37		9.357E+02	1.233E+03	1.172E+03	8.625E+01	0.799
		97.43	*	1.417E+00	4.336E+00	6.626E+00	4.545E-01	0.214
		103.18		1.488E+00	5.364E+00	9.092E+00	6.008E-01	0.164
EU-154		123.07		-1.367E+00	2.687E+00	4.383E+00	4.252E-01	-0.312
		247.93		-4.935E+00	1.552E+01	2.654E+01	2.619E+00	-0.186
		591.76		-1.482E+01	2.828E+01	4.119E+01	4.157E+00	-0.360
		723.30		3.374E+00	6.364E+00	1.152E+01	8.800E-01	0.293
		756.86		-2.644E+01	2.948E+01	4.762E+01	5.075E+00	-0.555
		873.20		-6.666E+00	1.185E+01	1.950E+01	2.218E+00	-0.342
	+	996.30		1.340E+00	1.441E+01	2.189E+01	3.745E+00	0.061
		1004.76		-1.685E+00	7.709E+00	1.361E+01	1.441E+00	-0.124
		1274.51	*	-2.158E+00	3.888E+00	6.555E+00	6.117E-01	-0.329
EU-155	+	86.54		6.406E+00	8.440E+00	7.221E+00	5.476E-01	0.887
		105.31	*	1.499E+00	5.457E+00	9.240E+00	6.169E-01	0.162
TB-160		86.79		-6.914E-02	1.275E+01	1.932E+01	1.448E+00	-0.004
		298.57		-4.252E+00	4.524E+00	7.426E+00	4.770E-01	-0.573
	+	879.36	*	3.486E+00	3.500E+00	9.737E+00	7.176E-01	0.358
		962.29		1.289E+01	1.822E+01	3.317E+01	2.418E+00	0.389
		966.15		-2.851E+00	8.441E+00	1.195E+01	8.695E-01	-0.239
	+	1177.93		1.695E+01	1.368E+01	1.989E+01	1.230E+00	0.853
TM-171		51.87		-3.448E+02	6.292E+02	1.068E+03	8.420E+01	-0.323
		59.40		7.307E+02	1.441E+03	2.522E+03	1.918E+02	0.290
	+	66.72	*	3.866E+03	1.880E+03	2.657E+03	1.930E+02	1.455
HF-181		56.28		-3.439E+01	5.686E+01	9.592E+01	7.436E+00	-0.359
		57.53		-2.462E+01	2.972E+01	4.964E+01	3.820E+00	-0.496
	+	65.20		1.235E+02	6.009E+01	8.294E+01	6.063E+00	1.489
		133.02		-1.794E+00	3.367E+00	5.469E+00	3.352E-01	-0.328
		136.25		5.049E-01	2.663E+01	4.411E+01	2.691E+00	0.011
		345.85		6.702E+00	8.267E+00	1.464E+01	9.353E-01	0.458
		482.03	*	-3.900E-01	1.788E+00	2.967E+00	1.903E-01	-0.131
TA-182	+	67.75		1.564E+01	7.606E+00	9.751E+00	7.054E-01	1.604
		100.10		-2.041E+00	9.048E+00	1.509E+01	1.016E+00	-0.135
		222.10		2.759E-01	1.427E+01	2.486E+01	1.551E+00	0.011
		1121.28		3.045E+00	4.653E+00	8.723E+00	5.705E-01	0.349
		1189.05		2.034E+00	8.155E+00	1.514E+01	9.305E-01	0.134
		1221.42	*	1.295E+00	5.548E+00	1.016E+01	6.113E-01	0.128
		1230.97		3.880E+00	1.454E+01	2.332E+01	1.394E+00	0.166
IR-192		295.96		3.857E+00	4.185E+00	7.473E+00	4.861E-01	0.516
		308.46		6.750E-01	4.041E+00	6.995E+00	4.538E-01	0.096
		316.51	*	1.865E-01	1.433E+00	2.476E+00	1.597E-01	0.075
	+	468.07		5.591E+00	4.719E+00	4.236E+00	3.055E-01	1.320

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		604.41		-3.005E+01	1.925E+01	3.005E+01	3.489E+00	-1.000
		612.46		2.009E+00	3.029E+01	4.653E+01	3.694E+00	0.043
HG-203		70.83		6.088E+01	5.171E+01	9.071E+01	1.156E+01	0.671
	+	72.87		3.466E+01	3.470E+01	5.065E+01	6.233E+00	0.684
	+	82.60		7.007E+01	9.262E+01	8.675E+01	1.126E+01	0.808
		279.20	*	6.186E-01	1.709E+00	2.989E+00	2.011E-01	0.207
BI-207		569.67		4.316E-01	1.186E+00	2.139E+00	1.362E-01	0.202
	+	897.83		4.284E+02	1.387E+03	1.468E+03	1.097E+02	0.292
		1063.62	*	-8.857E-02	1.980E+00	3.524E+00	2.418E-01	-0.025
		1442.20		-2.334E+02	1.009E+03	1.747E+03	9.794E+01	-0.134
		1770.23		-2.013E+01	2.604E+01	4.337E+01	2.464E+00	-0.464
TL-208	+	75.00		6.496E+01	6.496E+01	9.021E+01	1.021E+01	0.720
		277.35		4.526E+00	1.573E+01	2.741E+01	2.988E+00	0.165
		510.84		7.004E+01	1.181E+01	1.958E+01	2.059E+00	3.578
		583.14	*	6.234E-01	1.483E+00	2.670E+00	1.912E-01	0.233
		763.30		-1.404E+01	7.822E+01	1.345E+02	1.730E+01	-0.104
		860.37		1.164E+01	1.007E+01	1.913E+01	1.532E+00	0.609
		1093.90		-1.897E+02	3.815E+02	6.507E+02	1.473E+02	-0.292
PB-211		404.84	*	2.504E+01	3.947E+01	6.410E+01	3.999E+01	0.391
		427.08		-7.366E+00	8.463E+01	1.424E+02	8.809E+01	-0.052
		831.96		3.018E+01	4.919E+01	8.281E+01	5.174E+01	0.364
BI-212		727.18	*	-3.173E+00	1.044E+01	1.784E+01	1.472E+00	-0.178
BI-214	+	609.31	*	8.241E+00	4.623E+00	6.108E+00	4.974E-01	1.349
		768.36		2.909E+01	2.514E+01	4.723E+01	4.246E+00	0.616
		934.06		6.501E-01	4.246E+01	7.337E+01	7.086E+00	0.009
		1120.29		1.012E+01	9.639E+00	1.857E+01	1.729E+00	0.545
	+	1238.11		7.738E+00	1.822E+01	4.104E+01	3.387E+00	0.189
		1377.67		2.221E+01	4.084E+01	6.717E+01	5.649E+00	0.331
PB-214	+	74.81		3.532E+01	3.528E+01	4.862E+01	5.016E+00	0.726
		77.11		6.316E+00	1.730E+01	2.676E+01	2.806E+00	0.236
		87.30		-2.637E+01	3.379E+01	4.907E+01	5.445E+00	-0.537
		241.98		9.931E+00	1.578E+01	2.484E+01	2.096E+00	0.400
		295.21		3.488E+00	5.526E+00	9.743E+00	8.731E-01	0.358
	+	351.92	*	5.319E+00	6.135E+00	5.756E+00	5.005E-01	0.924
RN-219		271.23		-4.609E-01	9.923E+00	1.708E+01	1.458E+00	-0.027
		401.81	*	-6.339E+00	1.626E+01	2.698E+01	3.726E+00	-0.235
RA-223		122.32		1.934E+00	9.097E+01	1.515E+02	1.079E+01	0.013
		144.24		3.600E+01	3.385E+01	5.773E+01	4.297E+00	0.624
		154.21		7.494E+00	1.867E+01	3.118E+01	2.251E+00	0.240
		269.46		5.691E+00	7.510E+00	1.336E+01	8.850E-01	0.426
		323.87	*	8.355E+00	2.807E+01	4.864E+01	8.145E+00	0.172
		338.28		4.282E+01	3.841E+01	6.886E+01	7.489E+00	0.622
		445.03		3.704E+01	9.352E+01	1.618E+02	1.715E+01	0.229
RA-224		240.98	*	3.052E+01	3.161E+01	5.044E+01	3.181E+00	0.605
AC-227		79.80		-3.244E+01	7.840E+01	1.307E+02	2.782E+01	-0.248
		236.00		4.791E+00	1.063E+01	1.659E+01	1.797E+00	0.289
		256.20	*	-1.748E+01	1.689E+01	2.764E+01	3.970E+00	-0.632
		286.10		2.317E+01	6.527E+01	1.141E+02	1.369E+01	0.203
		299.80		1.878E+01	5.619E+01	9.804E+01	1.642E+01	0.192

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		304.40		-7.617E+01	7.787E+01	1.256E+02	2.228E+01	-0.607
		329.70		-1.371E+01	3.867E+01	6.493E+01	8.375E+00	-0.211
		334.20		-5.341E+01	9.325E+01	1.541E+02	2.901E+01	-0.347
TH-227		79.80		-3.191E+01	7.711E+01	1.286E+02	2.736E+01	-0.248
	+	94.00		1.634E+02	1.949E+02	1.453E+02	3.081E+01	1.125
		236.00		4.718E+00	1.047E+01	1.634E+01	1.532E+00	0.289
		256.20	*	-1.721E+01	1.670E+01	2.721E+01	4.652E+00	-0.632
		286.10		2.282E+01	6.818E+01	1.124E+02	1.126E+02	0.203
		299.80		1.845E+01	5.520E+01	9.631E+01	1.591E+01	0.192
		304.40		-7.494E+01	7.658E+01	1.235E+02	2.164E+01	-0.607
		329.70		-1.350E+01	3.809E+01	6.395E+01	8.162E+00	-0.211
		334.20		-5.241E+01	9.149E+01	1.512E+02	2.803E+01	-0.347
AC-228		209.25		4.827E+00	2.595E+01	4.004E+01	2.560E+01	0.121
		338.32		1.029E+01	1.009E+01	1.657E+01	6.772E+00	0.621
		463.01		-1.010E+01	2.884E+01	4.100E+01	9.679E+00	-0.246
		794.95		-7.264E+00	2.717E+01	4.625E+01	1.055E+01	-0.157
	+	911.21	*	1.273E+01	1.283E+01	1.032E+01	1.070E+00	1.233
		964.77		-2.538E+00	3.287E+01	4.812E+01	1.165E+01	-0.053
	+	969.11		8.268E+00	1.237E+01	1.647E+01	3.767E+00	0.502
RA-228		209.25		4.827E+00	2.595E+01	4.004E+01	2.560E+01	0.121
		338.32		1.029E+01	1.009E+01	1.657E+01	6.772E+00	0.621
		463.01		-1.010E+01	2.884E+01	4.100E+01	9.679E+00	-0.246
		794.95		-7.264E+00	2.717E+01	4.625E+01	1.055E+01	-0.157
	+	911.21	*	1.273E+01	1.283E+01	1.032E+01	1.070E+00	1.233
		964.77		-2.538E+00	3.287E+01	4.812E+01	1.165E+01	-0.053
	+	969.11		8.268E+00	1.237E+01	1.647E+01	3.767E+00	0.502
TH-229	+	85.43		1.192E+01	1.571E+01	1.351E+01	1.005E+00	0.883
	+	88.47		5.419E+00	3.873E+00	7.996E+00	6.003E-01	0.678
		100.00		-2.044E+00	9.362E+00	1.562E+01	1.052E+00	-0.131
		193.63	*	4.838E+00	2.164E+01	3.814E+01	2.340E+00	0.127
		210.97		1.461E+01	3.141E+01	5.557E+01	3.444E+00	0.263
PA-231		283.67	*	-2.888E+01	6.487E+01	1.094E+02	1.536E+01	-0.264
		301.29		1.044E+01	2.200E+01	3.864E+01	4.178E+00	0.270
		330.00		-3.309E+01	8.423E+01	1.402E+02	4.408E+01	-0.236
TH-231	+	84.21		3.074E+01	4.079E+01	3.655E+01	6.318E+00	0.841
		236.00		4.784E+00	1.062E+01	1.657E+01	1.795E+00	0.289
		256.20		-1.746E+01	1.687E+01	2.760E+01	3.965E+00	-0.632
		269.46	*	5.691E+00	7.513E+00	1.336E+01	1.037E+00	0.426
		271.23		-4.609E-01	9.923E+00	1.708E+01	1.689E+00	-0.027
		283.67		-2.888E+01	6.487E+01	1.094E+02	1.536E+01	-0.264
		301.29		1.044E+01	2.199E+01	3.864E+01	3.431E+00	0.270
		329.85		-7.828E+00	2.626E+01	4.422E+01	6.138E+00	-0.177
	+	351.07		1.529E+01	1.762E+01	1.426E+01	9.923E-01	1.072
		401.81		-6.339E+00	1.626E+01	2.698E+01	3.009E+00	-0.235
PA-233	+	75.28		1.741E+02	1.748E+02	2.400E+02	3.502E+01	0.725
		86.59		-2.883E+00	7.729E+01	1.169E+02	3.096E+01	-0.025
		300.12		3.444E+00	1.530E+01	2.660E+01	3.649E+00	0.129
		311.98	*	-1.765E-01	2.765E+00	4.729E+00	3.193E-01	-0.037
		340.50		-2.134E+01	2.455E+01	3.927E+01	9.081E+00	-0.543

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		398.62		-4.411E+01	8.587E+01	1.403E+02	3.642E+01	-0.314
		415.76		6.166E+00	6.883E+01	1.172E+02	2.430E+01	0.053
PA-234	+	63.00		7.471E+00	1.306E+02	1.369E+02	2.034E+01	0.055
	+	94.67		1.457E+01	1.718E+01	1.298E+01	1.473E+00	1.122
		98.44		4.103E+00	5.127E+00	7.970E+00	4.426E+00	0.515
		99.70		6.714E-01	2.419E+01	4.073E+01	2.748E+00	0.016
		111.00		6.139E-01	9.523E+00	1.596E+01	1.694E+00	0.038
		131.20		2.495E+00	5.290E+00	8.911E+00	5.478E-01	0.280
		152.70		-5.255E+00	1.535E+01	2.491E+01	3.961E+00	-0.211
		186.00		2.323E+02	9.400E+01	1.125E+02	3.444E+01	2.065
		226.40		-1.294E+01	1.645E+01	2.762E+01	3.258E+00	-0.469
		227.20		-2.296E+01	1.775E+01	2.921E+01	1.828E+00	-0.786
		248.90		-1.337E+01	3.724E+01	6.333E+01	1.415E+01	-0.211
		293.70		1.555E+01	2.627E+01	4.615E+01	7.529E+00	0.337
		369.80		1.555E+01	3.523E+01	6.126E+01	1.285E+01	0.254
		568.70		-2.850E+00	3.819E+01	6.716E+01	4.278E+00	-0.042
		569.50		3.586E+00	1.051E+01	1.893E+01	1.206E+00	0.189
		574.00		-6.032E-01	5.998E+01	1.056E+02	6.717E+00	-0.006
		699.00		7.582E+00	2.726E+01	4.842E+01	8.792E+00	0.157
		706.10		6.606E+00	3.912E+01	6.898E+01	3.050E+01	0.096
		733.00		6.480E+00	1.287E+01	2.338E+01	5.020E+00	0.277
		742.81		-1.880E+01	5.258E+01	8.672E+01	5.810E+01	-0.217
		796.30		-3.852E+00	3.205E+01	5.528E+01	1.468E+01	-0.070
		805.80		2.338E+01	3.855E+01	6.896E+01	2.084E+01	0.339
		819.60		-5.609E+01	5.176E+01	7.393E+01	2.787E+01	-0.759
		826.30		-6.609E+00	3.134E+01	5.331E+01	2.371E+01	-0.124
		831.60		1.456E+01	2.414E+01	4.310E+01	1.269E+01	0.338
		876.40		2.381E+01	4.433E+01	5.941E+01	6.101E+01	0.401
	+	880.51		6.978E+00	7.006E+00	1.629E+01	1.201E+00	0.428
		883.24		-1.645E+00	1.105E+01	1.879E+01	1.261E+01	-0.088
	+	899.00		1.498E+01	4.893E+01	4.962E+01	2.159E+01	0.302
		925.00		-2.674E+00	4.355E+01	7.499E+01	5.553E+00	-0.036
		926.50		3.843E-02	6.404E+00	1.110E+01	2.763E+00	0.003
		946.00	*	2.164E+00	9.983E+00	1.774E+01	3.231E+00	0.122
		949.00		7.020E+00	1.494E+01	2.712E+01	1.989E+00	0.259
		980.50		7.743E+00	2.408E+01	4.486E+01	3.242E+00	0.173
	+	1394.10		3.153E+01	5.671E+01	7.018E+01	4.545E+01	0.449
PA-234M		766.40		-3.414E+02	6.722E+02	1.033E+03	7.904E+02	-0.330
		1001.03	*	1.428E+02	1.856E+02	3.120E+02	2.716E+01	0.458
U-234	+	67.67		1.612E+03	8.050E+02	1.008E+03	1.350E+02	1.599
		241.98		9.944E+00	1.580E+01	2.488E+01	2.100E+00	0.400
		295.21	*	3.488E+00	5.525E+00	9.743E+00	8.731E-01	0.358
	+	351.92		5.319E+00	6.135E+00	4.940E+00	4.295E-01	1.077
U-235	+	89.95		5.439E+01	4.208E+01	7.754E+01	2.367E+01	0.701
	+	93.35		5.083E+01	6.130E+01	4.549E+01	1.256E+01	1.117
		105.00		2.516E+01	5.441E+01	9.188E+01	2.693E+01	0.274
		143.76	*	7.438E+00	1.042E+01	1.751E+01	2.871E+00	0.425
		163.33		6.682E+00	2.253E+01	3.732E+01	6.744E+00	0.179
		185.71		8.217E+00	2.335E+00	4.151E+00	2.536E-01	1.980

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	205.31		2.879E+01	2.827E+01	3.619E+01	6.207E+00	0.796
NP-239		99.55		8.453E-01	7.930E+00	1.339E+01	9.042E-01	0.063
		117.00	*	-2.191E+00	9.685E+00	1.603E+01	1.012E+00	-0.137
		209.75		-2.562E+00	3.549E+01	5.440E+01	3.369E+00	-0.047
		228.18		-4.127E+00	9.225E+00	1.576E+01	9.869E-01	-0.262
		277.60		3.620E+00	7.466E+00	1.312E+01	8.395E-01	0.276
		334.31		-4.008E+01	5.178E+01	8.505E+01	5.451E+00	-0.471
AM-241		59.54	*	2.986E+00	9.302E+00	1.458E+01	1.211E+00	0.205
AM-242		99.55		1.973E+01	1.851E+02	3.124E+02	2.110E+01	0.063
		103.70	*	8.914E+01	1.115E+02	1.922E+02	1.267E+01	0.464
CM-247		278.00		1.222E+01	3.056E+01	5.355E+01	3.427E+00	0.228
		287.40		3.190E+01	5.159E+01	9.118E+01	5.848E+00	0.350
		402.60	*	-3.976E-01	1.482E+00	2.479E+00	1.553E-01	-0.160
CF-249		252.85		4.080E+01	3.812E+01	6.851E+01	4.345E+00	0.595
		333.44		-3.777E+00	6.782E+00	1.128E+01	7.230E-01	-0.335
		387.95	*	-2.984E-01	1.617E+00	2.723E+00	1.701E-01	-0.110
CF-251	+	176.00	*	6.801E+00	8.062E+00	1.001E+01	6.093E-01	0.679
		227.00		-2.053E+01	1.576E+01	2.593E+01	1.623E+00	-0.792
		285.00		-2.481E+01	7.453E+01	1.264E+02	8.106E+00	-0.196
ANH-511		511.00	*	1.493E+01	2.187E+00	4.167E+00	2.676E-01	3.583

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851001        *
* Acquisition date : 30-JUN-2005 23:31:24 Detector SN#    : 12922955       *
* Detector ID       : GAMMA3              Sensitivity     : 3.000          *
* Geometry          : 2L_MB               Energy tolerance: 2.000          *
* Elapsed live time:    0 08:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 08:00:02.87     Half life ratio :  8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 15-JUN-2005 09:07:00 Nuclide Library :                *
* Sample ID         : G138851001           Analyst initials: AKB            *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* Standard Weight   :   0.00000                                             *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :                 *
* MSD DPM           :    0.000            MSD Isotope     :                 *
* LCS DPM           :    0.000            LCS Isotope     :                 *
* LCSD DPM          :    0.000            LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	1.377E+01	2.669E+01	2.063E+01	0.000E+00
MO-99	1.181E+02	8.914E+01	1.104E+02	0.000E+00
BI-210	6.349E+02	4.471E+02	3.458E+02	0.000E+00
PB-210	6.349E+02	4.471E+02	3.458E+02	0.000E+00
BI-211	1.529E+01	1.762E+01	1.426E+01	0.000E+00
PB-212	1.432E+00	4.121E+00	4.255E+00	0.000E+00
RA-226	8.241E+00	4.623E+00	4.261E+00	0.000E+00
TH-228	1.432E+00	4.121E+00	4.254E+00	0.000E+00
TH-230	8.240E+00	4.623E+00	4.261E+00	0.000E+00
TH-232	1.410E+00	4.057E+00	4.188E+00	0.000E+00
TH-234	6.409E+00	1.121E+02	1.158E+02	0.000E+00
NP-237	1.561E+01	2.082E+01	1.762E+01	0.000E+00
U-238	6.409E+00	1.121E+02	1.158E+02	0.000E+00

---- Non-Identified Nuclides ----

Key-Line

Nuclide	Activity (pCi/LITER)	K.L. Act error) Ided	MDA (pCi/LITER)	)	
BE-7	-1.457E+00	1.327E+01	2.220E+01	0.000E+00	NOT IDENT.
NA-22	-7.846E-01	1.390E+00	2.343E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	9.844E+07	0.000E+00	0.000E+00	SHORT HLIF
AL-26	1.080E+00	1.488E+00	2.927E+00	0.000E+00	NOT IDENT.
SC-46	4.165E-01	1.360E+00	2.437E+00	0.000E+00	NOT IDENT.
V-48	-4.078E-01	2.443E+00	4.363E+00	0.000E+00	NOT IDENT.
CR-51	-6.632E+00	1.529E+01	2.567E+01	0.000E+00	NOT IDENT.
MN-54	3.704E-01	1.318E+00	2.343E+00	0.000E+00	NOT IDENT.
CO-56	-1.251E+00	1.511E+00	2.434E+00	0.000E+00	FAIL ABUN
MN-56	0.000E+00	1.206E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	2.483E-01	1.326E+00	2.221E+00	0.000E+00	NOT IDENT.
CO-58	-1.699E+00	1.530E+00	2.410E+00	0.000E+00	NOT IDENT.
FE-59	1.548E+00	3.198E+00	5.948E+00	0.000E+00	NOT IDENT.
CO-60	6.685E-01	1.329E+00	2.511E+00	0.000E+00	FAIL ABUN
ZN-65	-1.936E+00	2.959E+00	4.990E+00	0.000E+00	NOT IDENT.
SE-75	-6.090E-01	1.804E+00	3.075E+00	0.000E+00	FAIL ABUN
KR-85	-5.232E+02	4.205E+02	6.962E+02	0.000E+00	NOT IDENT.
SR-85	-2.700E+00	2.170E+00	3.593E+00	0.000E+00	NOT IDENT.
Y-88	8.588E-01	1.602E+00	3.109E+00	0.000E+00	FAIL ABUN
Y-91	-1.223E-01	1.330E+00	2.348E+00	0.000E+00	NOT IDENT.
NB-94	-4.724E-01	1.239E+00	2.108E+00	0.000E+00	NOT IDENT.
NB-95	-1.324E+00	1.807E+00	2.967E+00	0.000E+00	NOT IDENT.
NB-95M	4.187E+01	9.834E+01	1.534E+02	0.000E+00	NOT IDENT.
ZR-95	-1.721E+00	2.641E+00	4.371E+00	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	1.448E+19	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-2.133E+00	1.835E+00	2.809E+00	0.000E+00	FAIL ABUN
RH-106	6.949E+00	1.207E+01	2.206E+01	0.000E+00	NOT IDENT.
RU-106	2.166E+00	1.203E+01	2.145E+01	0.000E+00	NOT IDENT.
AG-108M	4.166E-01	1.358E+00	2.339E+00	0.000E+00	NOT IDENT.
CD-109	-4.945E-01	4.793E+01	5.735E+01	0.000E+00	NOT IDENT.
AG-110M	9.946E-02	1.242E+00	2.201E+00	0.000E+00	FAIL ABUN
SN-113	-2.909E-01	1.875E+00	3.157E+00	0.000E+00	NOT IDENT.
CD-115	-1.402E+02	5.028E+02	8.776E+02	0.000E+00	NOT IDENT.
SN-115	-7.424E+01	1.592E+02	2.226E+02	0.000E+00	NOT IDENT.
SN-117M	7.487E-01	2.805E+00	4.651E+00	0.000E+00	NOT IDENT.
TE-123M	7.692E-01	1.400E+00	2.344E+00	0.000E+00	NOT IDENT.
SB-124	-1.558E+00	3.230E+00	5.632E+00	0.000E+00	FAIL ABUN
SB-125	-1.435E+00	3.729E+00	6.170E+00	0.000E+00	FAIL ABUN
TE-125M	7.569E+01	4.717E+02	7.941E+02	0.000E+00	NOT IDENT.
I-126	-1.003E-01	7.379E+00	1.289E+01	0.000E+00	NOT IDENT.
SB-126	-3.086E-01	5.460E+00	9.512E+00	0.000E+00	NOT IDENT.
SN-126	-3.658E-02	4.824E+00	5.776E+00	0.000E+00	FAIL ABUN
SB-127	2.798E+01	5.755E+01	1.041E+02	0.000E+00	NOT IDENT.
I-131	-2.761E+00	5.151E+00	8.526E+00	0.000E+00	FAIL ABUN
I-132	0.000E+00	1.454E+42	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.449E+01	3.207E+01	5.469E+01	0.000E+00	NOT IDENT.
BA-133	1.321E-01	1.972E+00	2.968E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	3.859E+05	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-4.719E-01	1.491E+00	2.531E+00	0.000E+00	NOT IDENT.
CS-135	-4.854E-01	6.397E+00	1.101E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	8.700E+17	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-8.014E-01	4.033E+00	7.116E+00	0.000E+00	FAIL ABUN
BA-137M	-5.588E-01	1.314E+00	2.239E+00	0.000E+00	NOT IDENT.
CS-137	-5.862E-01	1.390E+00	2.368E+00	0.000E+00	NOT IDENT.
CE-139	1.119E-01	1.434E+00	2.357E+00	0.000E+00	NOT IDENT.
BA-140	-1.454E+00	1.025E+01	1.801E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	1.109E+03	0.000E+00	0.000E+00	SHORT HLIF

CE-141	0.000E+00	3.117E+00	5.444E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	6.898E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-6.075E+00	1.052E+01	1.701E+01	0.000E+00	NOT IDENT.
PM-144	5.184E-01	1.345E+00	2.405E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	2.595E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-6.990E-01	1.715E+00	2.824E+00	0.000E+00	FAIL ABUN
ND-147	-5.201E+00	2.304E+01	4.027E+01	0.000E+00	FAIL ABUN
PM-147	1.231E+05	2.763E+06	4.606E+06	0.000E+00	NOT IDENT.
PM-149	2.146E+03	4.620E+03	8.106E+03	0.000E+00	NOT IDENT.
EU-152	3.213E+00	4.090E+00	7.242E+00	0.000E+00	NOT IDENT.
GD-153	1.417E+00	4.336E+00	6.626E+00	0.000E+00	FAIL ABUN
EU-154	-2.158E+00	3.888E+00	6.555E+00	0.000E+00	FAIL ABUN
EU-155	1.499E+00	5.457E+00	9.240E+00	0.000E+00	FAIL ABUN
TB-160	3.486E+00	3.500E+00	9.737E+00	0.000E+00	FAIL ABUN
TM-171	0.000E+00	1.880E+03	2.657E+03	0.000E+00	FAIL ABUN
HF-181	-3.900E-01	1.788E+00	2.967E+00	0.000E+00	FAIL ABUN
TA-182	1.295E+00	5.548E+00	1.016E+01	0.000E+00	FAIL ABUN
IR-192	1.865E-01	1.433E+00	2.476E+00	0.000E+00	FAIL ABUN
HG-203	6.186E-01	1.709E+00	2.989E+00	0.000E+00	FAIL ABUN
BI-207	-8.857E-02	1.980E+00	3.524E+00	0.000E+00	FAIL ABUN
TL-208	6.234E-01	1.483E+00	2.670E+00	0.000E+00	FAIL ABUN
PB-211	2.504E+01	3.947E+01	6.410E+01	0.000E+00	NOT IDENT.
BI-212	-3.173E+00	1.044E+01	1.784E+01	0.000E+00	NOT IDENT.
BI-214	0.000E+00	4.623E+00	6.108E+00	0.000E+00	FAIL ABUN
PB-214	5.319E+00	6.135E+00	5.756E+00	0.000E+00	FAIL ABUN
RN-219	-6.339E+00	1.626E+01	2.698E+01	0.000E+00	NOT IDENT.
RA-223	8.355E+00	2.807E+01	4.864E+01	0.000E+00	NOT IDENT.
RA-224	3.052E+01	3.161E+01	5.044E+01	0.000E+00	NOT IDENT.
AC-227	-1.748E+01	1.689E+01	2.764E+01	0.000E+00	NOT IDENT.
TH-227	-1.721E+01	1.670E+01	2.721E+01	0.000E+00	FAIL ABUN
AC-228	0.000E+00	1.283E+01	1.032E+01	0.000E+00	FAIL ABUN
RA-228	0.000E+00	1.283E+01	1.032E+01	0.000E+00	FAIL ABUN
TH-229	4.838E+00	2.164E+01	3.814E+01	0.000E+00	FAIL ABUN
PA-231	-2.888E+01	6.487E+01	1.094E+02	0.000E+00	NOT IDENT.
TH-231	5.691E+00	7.513E+00	1.336E+01	0.000E+00	FAIL ABUN
PA-233	-1.765E-01	2.765E+00	4.729E+00	0.000E+00	FAIL ABUN
PA-234	2.164E+00	9.983E+00	1.774E+01	0.000E+00	FAIL ABUN
PA-234M	1.428E+02	1.856E+02	3.120E+02	0.000E+00	NOT IDENT.
U-234	3.488E+00	5.525E+00	9.743E+00	0.000E+00	FAIL ABUN
U-235	7.438E+00	1.042E+01	1.751E+01	0.000E+00	FAIL ABUN
NP-239	-2.191E+00	9.685E+00	1.603E+01	0.000E+00	NOT IDENT.
AM-241	2.986E+00	9.302E+00	1.458E+01	0.000E+00	NOT IDENT.
AM-242	8.914E+01	1.115E+02	1.922E+02	0.000E+00	NOT IDENT.
CM-247	-3.976E-01	1.482E+00	2.479E+00	0.000E+00	NOT IDENT.
CF-249	-2.984E-01	1.617E+00	2.723E+00	0.000E+00	NOT IDENT.
CF-251	6.801E+00	8.062E+00	1.001E+01	0.000E+00	FAIL ABUN
ANH-511	0.000E+00	2.187E+00	4.167E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:31:49.00

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851001.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:31:24
Sample ID : G138851001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.87 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.19	158	508	2.14	93.26	88	11	5.50E-03	28.7	
2	3	63.67	199	482	1.37	128.15	123	15	6.92E-03	20.4	6.84E-01
3	3	66.48	149	395	1.42	133.77	123	15	5.17E-03	24.0	
4	0	74.36	71	430	2.27	149.51	146	7	2.47E-03	49.7	
5	0	84.57	114	589	1.38	169.89	165	10	3.97E-03	40.9	
6	4	90.30	65	241	1.08	181.32	179	15	2.26E-03	35.5	1.02E+00
7	4	92.78	575	532	1.50	186.29	179	15	2.00E-02	8.4	
8	0	139.95	101	450	1.06	280.49	277	8	3.52E-03	37.6	
9	0	144.21	80	527	2.01	288.99	286	9	2.78E-03	52.7	
10	0	175.02	63	416	1.38	350.53	347	9	2.20E-03	59.2	
11	0	185.83	204	481	1.07	372.12	369	9	7.08E-03	20.6	
12	0	197.96	113	454	1.49	396.33	393	10	3.91E-03	36.5	
13	0	206.44	71	338	2.34	413.27	408	9	2.46E-03	48.3	
14	0	238.70	159	303	1.43	477.69	474	8	5.54E-03	20.5	
15	0	294.95	29	238	2.22	590.04	587	9	1.02E-03	96.1	
16	0	352.30	101	246	1.32	704.58	698	13	3.50E-03	33.8	
17	0	467.96	68	158	2.98	935.58	929	15	2.36E-03	42.0	
18	0	511.49	505	262	2.88	1022.52	1013	19	1.75E-02	8.9	
19	0	583.64	20	207	0.72	1166.64	1158	18	6.78E-04	174.3	
20	0	596.15	83	101	1.90	1191.64	1185	13	2.90E-03	27.1	
21	0	609.27	123	103	1.71	1217.83	1214	12	4.26E-03	18.6	
22	0	631.53	70	87	4.23	1262.31	1256	17	2.44E-03	32.5	
23	0	638.70	34	93	0.67	1276.62	1273	13	1.19E-03	60.1	
24	0	878.79	15	20	1.30	1756.23	1754	5	5.37E-04	50.1	
25	0	898.65	21	60	2.08	1795.89	1791	13	7.25E-04	80.4	
26	0	905.21	26	39	4.36	1809.01	1803	12	8.99E-04	52.1	
27	0	913.05	97	91	7.14	1824.68	1815	26	3.37E-03	28.8	
28	0	937.26	33	89	7.83	1873.04	1860	23	1.16E-03	76.6	
29	0	969.54	43	37	0.96	1937.52	1933	10	1.49E-03	30.8	
30	0	996.88	15	35	1.55	1992.14	1989	9	5.37E-04	72.5	
31	0	1155.27	7	39	1.12	2308.59	2304	12	2.57E-04	172.7	
32	2	1173.27	34	17	2.83	2344.55	2338	25	1.18E-03	33.4	1.18E+00
33	2	1178.96	30	26	2.84	2355.92	2338	25	1.04E-03	40.2	
34	0	1228.33	28	15	1.57	2454.57	2448	12	9.87E-04	33.0	
35	0	1237.61	6	19	1.08	2473.09	2472	7	2.20E-04	117.6	
36	0	1353.85	36	36	4.89	2705.35	2700	20	1.24E-03	43.9	
37	0	1367.21	76	22	12.72	2732.05	2719	29	2.63E-03	21.1	
38	0	1395.96	26	13	2.18	2789.50	2783	12	8.91E-04	35.7	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1451.76	35	9	4.64	2901.00	2895	13	1.20E-03	25.2	
40	0	1461.16	51	38	3.22	2919.79	2914	15	1.75E-03	29.9	
41	0	1485.41	15	34	0.53	2968.25	2960	15	5.35E-04	86.0	
42	0	1645.62	12	8	0.66	3288.39	3285	10	4.13E-04	52.3	
43	0	1711.64	17	24	5.01	3420.33	3416	13	6.01E-04	61.9	
44	0	1751.02	15	11	0.69	3499.03	3493	12	5.11E-04	53.5	
45	0	1756.37	13	23	4.59	3509.73	3504	14	4.38E-04	87.5	
46	0	1764.43	22	23	1.10	3525.82	3522	10	7.56E-04	46.2	
47	0	1827.13	14	15	1.04	3651.13	3646	12	5.02E-04	59.5	
48	0	1855.83	8	7	0.98	3708.49	3707	5	2.92E-04	56.9	
49	0	1873.28	31	19	8.93	3743.37	3730	25	1.09E-03	41.3	
50	4	1966.45	20	25	4.10	3929.57	3904	41	7.03E-04	73.2	5.71E-01
51	4	1972.21	15	8	1.95	3941.09	3904	41	5.18E-04	40.3	
52	0	2013.97	26	26	10.79	4024.56	4017	25	8.95E-04	56.0	
53	0	2026.33	10	14	1.27	4049.26	4045	11	3.46E-04	78.8	

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:31:55.78

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851001.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:31:24
Sample ID : G138851001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.87 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	18	10.67*	5.726E-01	1.377E+01	1.377E+01	193.88
MO-99	140.51	101	82.70*	2.585E+00	2.223E+00	1.181E+02	75.50
	181.06	------	6.20	2.443E+00	------ Line Not Found		------
	739.58	------	12.80	9.745E-01	------ Line Not Found		------
BI-210	46.50	140	4.05*	2.567E-01	6.340E+02	6.349E+02	70.43
PB-210	46.50	140	4.05*	2.567E-01	6.340E+02	6.349E+02	70.43
BI-211	351.07	71	12.94*	1.676E+00	1.529E+01	1.529E+01	115.22
PB-212	74.80	71	10.70	1.521E+00	2.050E+01	2.082E+01	100.05
	87.30	------	8.00	1.995E+00	------ Line Not Found		------
	115.19	------	0.60	2.503E+00	------ Line Not Found		------
	238.63	29	44.60*	2.140E+00	1.410E+00	1.432E+00	287.66
	300.09	------	3.41	1.863E+00	------ Line Not Found		------
RA-226	295.21	------	19.20	1.882E+00	------ Line Not Found		------
	351.92	71	37.20	1.676E+00	5.319E+00	5.319E+00	115.19
	609.31	92	46.30*	1.131E+00	8.240E+00	8.241E+00	56.10
TH-228	84.40	80	1.21	1.909E+00	1.626E+02	1.652E+02	132.13
	238.60	29	44.60*	2.140E+00	1.410E+00	1.432E+00	287.66
	300.10	------	3.41	1.863E+00	------ Line Not Found		------
TH-230	295.21	------	19.20	1.882E+00	------ Line Not Found		------
	351.92	71	37.20	1.676E+00	5.319E+00	5.319E+00	115.19
	609.31	92	46.30*	1.131E+00	8.240E+00	8.240E+00	56.10
TH-232	238.59	29	44.60*	2.140E+00	1.410E+00	1.410E+00	287.66
	911.20	62	27.70	8.243E-01	1.266E+01	1.266E+01	100.79
	964.40	------	5.20	7.888E-01	------ Line Not Found		------
	969.11	23	16.60	7.855E-01	8.225E+00	8.225E+00	149.62
TH-234	63.29	5	3.80*	1.024E+00	6.409E+00	6.409E+00	1748.31
	92.38	105	5.41	2.146E+00	4.228E+01	4.228E+01	118.69
	112.81	------	0.24	2.481E+00	------ Line Not Found		------
NP-237	86.48	80	12.60*	1.909E+00	1.561E+01	1.561E+01	133.36
	95.87	------	2.60	2.219E+00	------ Line Not Found		------
U-238	63.29	5	3.80*	1.024E+00	6.409E+00	6.409E+00	1748.31

Flag: "*" = Keyline

Summary of Nuclide Activity
Sample ID : G138851001 Acquisition date : 30-JUN-2005 23:31:24

Total number of lines in spectrum 47
Number of unidentified lines 18
Number of lines tentatively identified by NID 29 61.70%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.377E+01	1.377E+01	2.669E+01	193.88	
MO-99	66.02H	53.1	2.223E+00	1.181E+02	0.891E+02	75.50	
BI-210	22.26Y	1.00	6.340E+02	6.349E+02	4.471E+02	70.43	
PB-210	22.26Y	1.00	6.340E+02	6.349E+02	4.471E+02	70.43	
BI-211	7.04E+08Y	1.00	1.529E+01	1.529E+01	1.762E+01	115.22	
PB-212	1.91Y	1.02	1.410E+00	1.432E+00	4.121E+00	287.66	
RA-226	1600.00Y	1.00	8.240E+00	8.241E+00	4.623E+00	56.10	
TH-228	1.91Y	1.02	1.410E+00	1.432E+00	4.121E+00	287.66	
TH-230	7.70E+04Y	1.00	8.240E+00	8.240E+00	4.623E+00	56.10	
TH-232	1.41E+10Y	1.00	1.410E+00	1.410E+00	4.057E+00	287.66	
TH-234	4.47E+09Y	1.00	6.409E+00	6.409E+00	112.1E+00	1748.31	
NP-237	2.14E+06Y	1.00	1.561E+01	1.561E+01	2.082E+01	133.36	
U-238	4.47E+09Y	1.00	6.409E+00	6.409E+00	112.1E+00	1748.31	
			---------	---------			
	Total Activity :		1.348E+03	1.466E+03			

Grand Total Activity : 1.348E+03 1.466E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Unidentified Energy Lines
Sample ID : G138851001

Acquisition date : 30-JUN-2005 23:31:24

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	66.48	149	395	1.42	133.77	123	15	5.17E-03	48.1	1.16E+00	T
4	90.30	65	241	1.08	181.32	179	15	2.26E-03	71.1	2.08E+00	T
0	175.02	63	416	1.38	350.53	347	9	2.20E-03	****	2.47E+00	T
0	197.96	56	454	1.49	396.33	393	10	1.93E-03	****	2.36E+00	T
0	206.44	71	338	2.34	413.27	408	9	2.46E-03	96.7	2.31E+00	T
0	467.96	68	158	2.98	935.58	929	15	2.36E-03	84.1	1.37E+00	T
0	596.15	83	101	1.90	1191.64	1185	13	2.90E-03	54.2	1.15E+00	
0	631.53	70	87	4.23	1262.31	1256	17	2.44E-03	64.9	1.10E+00	T
0	638.70	34	93	0.67	1276.62	1273	13	1.19E-03	****	1.09E+00	T
0	878.79	15	20	1.30	1756.23	1754	5	5.37E-04	****	8.50E-01	T
0	898.65	11	60	2.08	1795.89	1791	13	3.89E-04	****	8.35E-01	T
0	905.21	8	39	4.36	1809.01	1803	12	2.71E-04	****	8.30E-01	
0	937.26	5	89	7.83	1873.04	1860	23	1.81E-04	****	8.07E-01	T
0	996.88	2	35	1.55	1992.14	1989	9	7.82E-05	****	7.68E-01	T
0	1155.27	7	39	1.12	2308.59	2304	12	2.57E-04	****	6.83E-01	
2	1173.27	27	17	2.83	2344.55	2338	25	9.30E-04	****	6.75E-01	T
2	1178.96	30	26	2.84	2355.92	2338	25	1.04E-03	80.5	6.72E-01	T
0	1228.33	23	15	1.57	2454.57	2448	12	8.13E-04	92.9	6.51E-01	
0	1237.61	6	19	1.08	2473.09	2472	7	2.20E-04	****	6.47E-01	T
0	1353.85	36	36	4.89	2705.35	2700	20	1.24E-03	87.7	6.05E-01	
0	1367.21	76	22	12.72	2732.05	2719	29	2.63E-03	42.2	6.00E-01	T
0	1395.96	12	13	2.18	2789.50	2783	12	4.28E-04	****	5.91E-01	T
0	1451.76	35	9	4.64	2901.00	2895	13	1.20E-03	50.3	5.75E-01	
0	1485.41	12	34	0.53	2968.25	2960	15	4.33E-04	****	5.66E-01	
0	1645.62	12	8	0.66	3288.39	3285	10	4.13E-04	****	5.30E-01	
0	1711.64	15	24	5.01	3420.33	3416	13	5.35E-04	****	5.18E-01	
0	1751.02	15	11	0.69	3499.03	3493	12	5.11E-04	****	5.11E-01	
0	1756.37	13	23	4.59	3509.73	3504	14	4.38E-04	****	5.10E-01	
0	1827.13	14	15	1.04	3651.13	3646	12	5.02E-04	****	5.00E-01	
0	1855.83	8	7	0.98	3708.49	3707	5	2.92E-04	****	4.96E-01	
0	1873.28	31	19	8.93	3743.37	3730	25	1.09E-03	82.5	4.94E-01	
4	1966.45	11	25	4.10	3929.57	3904	41	3.97E-04	****	4.84E-01	
4	1972.21	15	8	1.95	3941.09	3904	41	5.18E-04	80.5	4.83E-01	
0	2013.97	26	26	10.79	4024.56	4017	25	8.95E-04	****	4.79E-01	
0	2026.33	10	14	1.27	4049.26	4045	11	3.46E-04	****	4.78E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:32:06.06

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851001.CNF;1		
Acquisition date	: 30-JUN-2005 23:31:24	Detector SN#	: 12922955
Detector ID	: GAMMA3	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 08:00:00.00	Abundance limit	: 75.00000
Elapsed real time	: 0 08:00:02.87	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 15-JUN-2005 09:07:00	Nuclide Library	: EPI
Sample ID	: G138851001	Analyst initials	: AKB
Batch Number	: 435282	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 24-MAR-2005 14:55:19.2	MS Isotope	:
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	1.377E+01	2.669E+01	2.063E+01	1.235E+00	0.668
MO-99	1.181E+02	8.914E+01	1.104E+02	6.840E+00	1.070
BI-210	6.349E+02	4.471E+02	3.458E+02	2.833E+01	1.836
PB-210	6.349E+02	4.471E+02	3.458E+02	2.833E+01	1.836
BI-211	1.529E+01	1.762E+01	1.426E+01	9.923E-01	1.072
PB-212	1.432E+00	4.121E+00	4.255E+00	3.290E-01	0.337
RA-226	8.241E+00	4.623E+00	4.261E+00	3.470E-01	1.934
TH-228	1.432E+00	4.121E+00	4.254E+00	3.289E-01	0.337
TH-230	8.240E+00	4.623E+00	4.261E+00	3.470E-01	1.934
TH-232	1.410E+00	4.057E+00	4.188E+00	3.238E-01	0.337
TH-234	6.409E+00	1.121E+02	1.158E+02	2.019E+01	0.055
NP-237	1.561E+01	2.082E+01	1.762E+01	3.867E+00	0.886
U-238	6.409E+00	1.121E+02	1.158E+02	2.019E+01	0.055

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA

BE-7	-1.457E+00	1.327E+01	2.220E+01	1.616E+00	-0.066

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	-7.846E-01		1.390E+00	2.343E+00	1.358E-01	-0.335
AL-26	1.080E+00		1.488E+00	2.927E+00	1.657E-01	0.369
SC-46	4.165E-01		1.360E+00	2.437E+00	1.809E-01	0.171
V-48	-4.078E-01		2.443E+00	4.363E+00	3.148E-01	-0.093
CR-51	-6.632E+00		1.529E+01	2.567E+01	1.804E+00	-0.258
MN-54	3.704E-01		1.318E+00	2.343E+00	1.668E-01	0.158
CO-56	-1.251E+00		1.511E+00	2.434E+00	1.750E-01	-0.514
CO-57	2.483E-01		1.326E+00	2.221E+00	1.398E-01	0.112
CO-58	-1.699E+00		1.530E+00	2.410E+00	1.690E-01	-0.705
FE-59	1.548E+00		3.198E+00	5.948E+00	4.491E-01	0.260
CO-60	6.685E-01		1.329E+00	2.511E+00	1.377E-01	0.266
ZN-65	-1.936E+00		2.959E+00	4.990E+00	3.287E-01	-0.388
SE-75	-6.090E-01		1.804E+00	3.075E+00	1.977E-01	-0.198
KR-85	-5.232E+02		4.205E+02	6.962E+02	4.470E+01	-0.751
SR-85	-2.700E+00		2.170E+00	3.593E+00	2.307E-01	-0.751
Y-88	8.588E-01		1.602E+00	3.109E+00	1.760E-01	0.276
Y-91	-1.223E-01		1.330E+00	2.348E+00	1.500E-01	-0.052
NB-94	-4.724E-01		1.239E+00	2.108E+00	1.338E-01	-0.224
NB-95	-1.324E+00		1.807E+00	2.967E+00	1.995E-01	-0.446
NB-95M	4.187E+01		9.834E+01	1.534E+02	1.487E+01	0.273
ZR-95	-1.721E+00		2.641E+00	4.371E+00	3.394E-01	-0.394
RU-103	-2.133E+00		1.835E+00	2.809E+00	3.635E-01	-0.759
RH-106	6.949E+00		1.207E+01	2.206E+01	1.377E+00	0.315
RU-106	2.166E+00		1.203E+01	2.145E+01	2.565E+00	0.101
AG-108M	4.166E-01		1.358E+00	2.339E+00	1.591E-01	0.178
CD-109	-4.945E-01		4.793E+01	5.735E+01	4.330E+00	-0.009
AG-110M	9.946E-02		1.242E+00	2.201E+00	1.424E-01	0.045
SN-113	-2.909E-01		1.875E+00	3.157E+00	2.081E-01	-0.092
CD-115	-1.402E+02		5.028E+02	8.776E+02	5.630E+01	-0.160
SN-115	-7.424E+01		1.592E+02	2.226E+02	1.643E+01	-0.334
SN-117M	7.487E-01		2.805E+00	4.651E+00	2.816E-01	0.161
TE-123M	7.692E-01		1.400E+00	2.344E+00	1.437E-01	0.328
SB-124	-1.558E+00		3.230E+00	5.632E+00	3.495E-01	-0.277
SB-125	-1.435E+00		3.729E+00	6.170E+00	4.046E-01	-0.233
TE-125M	7.569E+01		4.717E+02	7.941E+02	6.822E+01	0.095
I-126	-1.003E-01		7.379E+00	1.289E+01	7.898E-01	-0.008
SB-126	-3.086E-01		5.460E+00	9.512E+00	6.139E-01	-0.032
SN-126	-3.658E-02		4.824E+00	5.776E+00	4.348E-01	-0.006
SB-127	2.798E+01		5.755E+01	1.041E+02	1.033E+01	0.269
I-131	-2.761E+00		5.151E+00	8.526E+00	5.941E-01	-0.324
TE-132	-1.449E+01		3.207E+01	5.469E+01	8.016E+00	-0.265
BA-133	1.321E-01		1.972E+00	2.968E+00	3.518E-01	0.045
CS-134	-4.719E-01		1.491E+00	2.531E+00	1.762E-01	-0.186
CS-135	-4.854E-01		6.397E+00	1.101E+01	8.927E-01	-0.044
CS-136	-8.014E-01		4.033E+00	7.116E+00	5.259E-01	-0.113
BA-137M	-5.588E-01		1.314E+00	2.239E+00	1.365E-01	-0.250
CS-137	-5.862E-01		1.390E+00	2.368E+00	1.450E-01	-0.247
CE-139	1.119E-01		1.434E+00	2.357E+00	1.432E-01	0.047

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BA-140	-1.454E+00		1.025E+01	1.801E+01	5.876E+00	-0.081
CE-141	5.836E+00		3.117E+00	5.444E+00	3.419E-01	1.072
CE-144	-6.075E+00		1.052E+01	1.701E+01	2.439E+00	-0.357
PM-144	5.184E-01		1.345E+00	2.405E+00	1.519E-01	0.216
PM-146	-6.990E-01		1.715E+00	2.824E+00	2.548E-01	-0.248
ND-147	-5.201E+00		2.304E+01	4.027E+01	5.555E+00	-0.129
PM-147	1.231E+05		2.763E+06	4.606E+06	2.895E+05	0.027
PM-149	2.146E+03		4.620E+03	8.106E+03	1.170E+03	0.265
EU-152	3.213E+00		4.090E+00	7.242E+00	5.119E-01	0.444
GD-153	1.417E+00		4.336E+00	6.626E+00	4.545E-01	0.214
EU-154	-2.158E+00		3.888E+00	6.555E+00	6.117E-01	-0.329
EU-155	1.499E+00		5.457E+00	9.240E+00	6.169E-01	0.162
TB-160	3.486E+00	+	3.500E+00	9.737E+00	7.176E-01	0.358
TM-171	3.866E+03	+	1.880E+03	2.657E+03	1.930E+02	1.455
HF-181	-3.900E-01		1.788E+00	2.967E+00	1.903E-01	-0.131
TA-182	1.295E+00		5.548E+00	1.016E+01	6.113E-01	0.128
IR-192	1.865E-01		1.433E+00	2.476E+00	1.597E-01	0.075
HG-203	6.186E-01		1.709E+00	2.989E+00	2.011E-01	0.207
BI-207	-8.857E-02		1.980E+00	3.524E+00	2.418E-01	-0.025
TL-208	6.234E-01		1.483E+00	2.670E+00	1.912E-01	0.233
PB-211	2.504E+01		3.947E+01	6.410E+01	3.999E+01	0.391
BI-212	-3.173E+00		1.044E+01	1.784E+01	1.472E+00	-0.178
BI-214	8.241E+00	+	4.623E+00	6.108E+00	4.974E-01	1.349
PB-214	5.319E+00	+	6.135E+00	5.756E+00	5.005E-01	0.924
RN-219	-6.339E+00		1.626E+01	2.698E+01	3.726E+00	-0.235
RA-223	8.355E+00		2.807E+01	4.864E+01	8.145E+00	0.172
RA-224	3.052E+01		3.161E+01	5.044E+01	3.181E+00	0.605
AC-227	-1.748E+01		1.689E+01	2.764E+01	3.970E+00	-0.632
TH-227	-1.721E+01		1.670E+01	2.721E+01	4.652E+00	-0.632
AC-228	1.273E+01	+	1.283E+01	1.032E+01	1.070E+00	1.233
RA-228	1.273E+01	+	1.283E+01	1.032E+01	1.070E+00	1.233
TH-229	4.838E+00		2.164E+01	3.814E+01	2.340E+00	0.127
PA-231	-2.888E+01		6.487E+01	1.094E+02	1.536E+01	-0.264
TH-231	5.691E+00		7.513E+00	1.336E+01	1.037E+00	0.426
PA-233	-1.765E-01		2.765E+00	4.729E+00	3.193E-01	-0.037
PA-234	2.164E+00		9.983E+00	1.774E+01	3.231E+00	0.122
PA-234M	1.428E+02		1.856E+02	3.120E+02	2.716E+01	0.458
U-234	3.488E+00		5.525E+00	9.743E+00	8.731E-01	0.358
U-235	7.438E+00		1.042E+01	1.751E+01	2.871E+00	0.425
NP-239	-2.191E+00		9.685E+00	1.603E+01	1.012E+00	-0.137
AM-241	2.986E+00		9.302E+00	1.458E+01	1.211E+00	0.205
AM-242	8.914E+01		1.115E+02	1.922E+02	1.267E+01	0.464
CM-247	-3.976E-01		1.482E+00	2.479E+00	1.553E-01	-0.160
CF-249	-2.984E-01		1.617E+00	2.723E+00	1.701E-01	-0.110
CF-251	6.801E+00	+	8.062E+00	1.001E+01	6.093E-01	0.679
ANH-511	1.493E+01		2.187E+00	4.167E+00	2.676E-01	3.583

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G138851001            *
* Acquisition date : 30-JUN-2005 23:31:24 Detector SN#     : 12922955      *
* Detector ID      : GAMMA3               Sensitivity      : 3.000         *
* Geometry         : 2L_MB                Energy tolerance: 2.000         *
* Elapsed live time:    0 08:00:00.00     Abundance limit  : 75.000        *
* Elapsed real time:    0 08:00:02.87     Half life ratio  : 8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 15-JUN-2005 09:07:00 Nuclide Library :                 *
* Sample ID        : G138851001           Analyst initials: AKB             *
* Batch Number     : 435282               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	1.377E+01	2.669E+01	9.278E+00	1.335E+01
MO-99	1.181E+02	8.914E+01	5.365E+01	4.457E+01
BI-210	6.349E+02	4.471E+02	1.671E+02	2.236E+02
PB-210	6.349E+02	4.471E+02	1.671E+02	2.236E+02
BI-211	1.529E+01	1.762E+01	6.843E+00	8.809E+00
PB-212	1.432E+00	4.121E+00	2.061E+00	2.060E+00
RA-226	8.241E+00	4.623E+00	2.010E+00	2.311E+00
TH-228	1.432E+00	4.121E+00	2.061E+00	2.060E+00
TH-230	8.240E+00	4.623E+00	2.010E+00	2.311E+00
TH-232	1.410E+00	4.057E+00	2.029E+00	2.028E+00
TH-234	6.409E+00	1.121E+02	5.629E+01	5.603E+01
NP-237	1.561E+01	2.082E+01	8.557E+00	1.041E+01
U-238	6.409E+00	1.121E+02	5.629E+01	5.603E+01

---- Non-Identified Nuclides ----

Key-Line

Nuclide	Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-1.457E+00	1.327E+01	1.055E+01	6.634E+00	NOT IDENT.
NA-22	-7.846E-01	1.390E+00	1.070E+00	6.950E-01	NOT IDENT.
NA-24	2.260E+08	9.844E+07	0.000E+00	4.922E+07	SHORT HLIF
AL-26	1.080E+00	1.488E+00	1.337E+00	7.441E-01	NOT IDENT.
SC-46	4.165E-01	1.360E+00	1.133E+00	6.800E-01	NOT IDENT.
V-48	-4.078E-01	2.443E+00	2.021E+00	1.222E+00	NOT IDENT.
CR-51	-6.632E+00	1.529E+01	1.231E+01	7.646E+00	NOT IDENT.
MN-54	3.704E-01	1.318E+00	1.098E+00	6.590E-01	NOT IDENT.
CO-56	-1.251E+00	1.511E+00	1.134E+00	7.553E-01	FAIL ABUN
MN-56	-1.000E+41	1.206E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	2.483E-01	1.326E+00	1.081E+00	6.630E-01	NOT IDENT.
CO-58	-1.699E+00	1.530E+00	1.124E+00	7.652E-01	NOT IDENT.
FE-59	1.548E+00	3.198E+00	2.773E+00	1.599E+00	NOT IDENT.
CO-60	6.685E-01	1.329E+00	1.151E+00	6.647E-01	FAIL ABUN
ZN-65	-1.936E+00	2.959E+00	2.310E+00	1.479E+00	NOT IDENT.
SE-75	-6.090E-01	1.804E+00	1.481E+00	9.021E-01	FAIL ABUN
KR-85	-5.232E+02	4.205E+02	3.369E+02	2.102E+02	NOT IDENT.
SR-85	-2.700E+00	2.170E+00	1.738E+00	1.085E+00	NOT IDENT.
Y-88	8.588E-01	1.602E+00	1.413E+00	8.008E-01	FAIL ABUN
Y-91	-1.223E-01	1.330E+00	1.108E+00	6.651E-01	NOT IDENT.
NB-94	-4.724E-01	1.239E+00	9.920E-01	6.196E-01	NOT IDENT.
NB-95	-1.324E+00	1.807E+00	1.393E+00	9.036E-01	NOT IDENT.
NB-95M	4.187E+01	9.834E+01	7.432E+01	4.917E+01	NOT IDENT.
ZR-95	-1.721E+00	2.641E+00	2.044E+00	1.320E+00	NOT IDENT.
TC-99M	1.791E+19	1.448E+19	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-2.133E+00	1.835E+00	1.334E+00	9.175E-01	FAIL ABUN
RH-106	6.949E+00	1.207E+01	1.043E+01	6.037E+00	NOT IDENT.
RU-106	2.166E+00	1.203E+01	1.013E+01	6.014E+00	NOT IDENT.
AG-108M	4.166E-01	1.358E+00	1.116E+00	6.788E-01	NOT IDENT.
CD-109	-4.945E-01	4.793E+01	2.784E+01	2.396E+01	NOT IDENT.
AG-110M	9.946E-02	1.242E+00	1.035E+00	6.211E-01	FAIL ABUN
SN-113	-2.909E-01	1.875E+00	1.510E+00	9.374E-01	NOT IDENT.
CD-115	-1.402E+02	5.028E+02	4.156E+02	2.514E+02	NOT IDENT.
SN-115	-7.424E+01	1.592E+02	1.038E+02	7.962E+01	NOT IDENT.
SN-117M	7.487E-01	2.805E+00	2.262E+00	1.403E+00	NOT IDENT.
TE-123M	7.692E-01	1.400E+00	1.140E+00	6.999E-01	NOT IDENT.
SB-124	-1.558E+00	3.230E+00	2.519E+00	1.615E+00	FAIL ABUN
SB-125	-1.435E+00	3.729E+00	2.937E+00	1.865E+00	FAIL ABUN
TE-125M	7.569E+01	4.717E+02	3.862E+02	2.359E+02	NOT IDENT.
I-126	-1.003E-01	7.379E+00	6.101E+00	3.690E+00	NOT IDENT.
SB-126	-3.086E-01	5.460E+00	4.472E+00	2.730E+00	NOT IDENT.
SN-126	-3.658E-02	4.824E+00	2.804E+00	2.412E+00	FAIL ABUN
SB-127	2.798E+01	5.755E+01	4.916E+01	2.877E+01	NOT IDENT.
I-131	-2.761E+00	5.151E+00	4.079E+00	2.576E+00	FAIL ABUN
I-132	1.000E+41	1.454E+42	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.449E+01	3.207E+01	2.642E+01	1.604E+01	NOT IDENT.
BA-133	1.321E-01	1.972E+00	1.421E+00	9.861E-01	NOT IDENT.
I-133	-1.016E+05	3.859E+05	0.000E+00	1.929E+05	SHORT HLIF
CS-134	-4.719E-01	1.491E+00	1.184E+00	7.454E-01	NOT IDENT.
CS-135	-4.854E-01	6.397E+00	5.310E+00	3.198E+00	NOT IDENT.
I-135	5.368E+15	8.700E+17	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-8.014E-01	4.033E+00	3.312E+00	2.016E+00	FAIL ABUN
BA-137M	-5.588E-01	1.314E+00	1.054E+00	6.572E-01	NOT IDENT.
CS-137	-5.862E-01	1.390E+00	1.114E+00	6.949E-01	NOT IDENT.
CE-139	1.119E-01	1.434E+00	1.145E+00	7.168E-01	NOT IDENT.
BA-140	-1.454E+00	1.025E+01	8.527E+00	5.125E+00	NOT IDENT.
LA-140	-3.850E+01	1.109E+03	0.000E+00	5.544E+02	SHORT HLIF

CE-141	5.836E+00	3.117E+00	2.652E+00	1.558E+00 NOT IDENT.
CE-143	3.409E+03	6.898E+03	0.000E+00	3.449E+03 SHORT HLIF
CE-144	-6.075E+00	1.052E+01	8.272E+00	5.262E+00 NOT IDENT.
PM-144	5.184E-01	1.345E+00	1.139E+00	6.727E-01 NOT IDENT.
PR-144	1.000E+41	2.595E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	-6.990E-01	1.715E+00	1.340E+00	8.576E-01 FAIL ABUN
ND-147	-5.201E+00	2.304E+01	1.910E+01	1.152E+01 FAIL ABUN
PM-147	1.231E+05	2.763E+06	2.241E+06	1.381E+06 NOT IDENT.
PM-149	2.146E+03	4.620E+03	3.906E+03	2.310E+03 NOT IDENT.
EU-152	3.213E+00	4.090E+00	3.482E+00	2.045E+00 NOT IDENT.
GD-153	1.417E+00	4.336E+00	3.221E+00	2.168E+00 FAIL ABUN
EU-154	-2.158E+00	3.888E+00	2.995E+00	1.944E+00 FAIL ABUN
EU-155	1.499E+00	5.457E+00	4.494E+00	2.729E+00 FAIL ABUN
TB-160	3.486E+00	3.500E+00	4.566E+00	1.750E+00 FAIL ABUN
TM-171	3.866E+03	1.880E+03	1.295E+03	9.402E+02 FAIL ABUN
HF-181	-3.900E-01	1.788E+00	1.411E+00	8.940E-01 FAIL ABUN
TA-182	1.295E+00	5.548E+00	4.688E+00	2.774E+00 FAIL ABUN
IR-192	1.865E-01	1.433E+00	1.189E+00	7.165E-01 FAIL ABUN
HG-203	6.186E-01	1.709E+00	1.442E+00	8.545E-01 FAIL ABUN
BI-207	-8.857E-02	1.980E+00	1.646E+00	9.899E-01 FAIL ABUN
TL-208	6.234E-01	1.483E+00	1.270E+00	7.416E-01 FAIL ABUN
PB-211	2.504E+01	3.947E+01	3.063E+01	1.974E+01 NOT IDENT.
BI-212	-3.173E+00	1.044E+01	8.372E+00	5.219E+00 NOT IDENT.
BI-214	8.241E+00	4.623E+00	2.934E+00	2.311E+00 FAIL ABUN
PB-214	5.319E+00	6.135E+00	2.778E+00	3.067E+00 FAIL ABUN
RN-219	-6.339E+00	1.626E+01	1.286E+01	8.132E+00 NOT IDENT.
RA-223	8.355E+00	2.807E+01	2.341E+01	1.404E+01 NOT IDENT.
RA-224	3.052E+01	3.161E+01	2.447E+01	1.580E+01 NOT IDENT.
AC-227	-1.748E+01	1.689E+01	1.333E+01	8.444E+00 NOT IDENT.
TH-227	-1.721E+01	1.670E+01	1.312E+01	8.350E+00 FAIL ABUN
AC-228	1.273E+01	1.283E+01	4.885E+00	6.414E+00 FAIL ABUN
RA-228	1.273E+01	1.283E+01	4.885E+00	6.414E+00 FAIL ABUN
TH-229	4.838E+00	2.164E+01	1.850E+01	1.082E+01 FAIL ABUN
PA-231	-2.888E+01	6.487E+01	5.265E+01	3.244E+01 NOT IDENT.
TH-231	5.691E+00	7.513E+00	6.450E+00	3.757E+00 FAIL ABUN
PA-233	-1.765E-01	2.765E+00	2.275E+00	1.383E+00 FAIL ABUN
PA-234	2.164E+00	9.983E+00	8.213E+00	4.992E+00 FAIL ABUN
PA-234M	1.428E+02	1.856E+02	1.462E+02	9.278E+01 NOT IDENT.
U-234	3.488E+00	5.525E+00	4.698E+00	2.763E+00 FAIL ABUN
U-235	7.438E+00	1.042E+01	8.524E+00	5.211E+00 FAIL ABUN
NP-239	-2.191E+00	9.685E+00	7.791E+00	4.842E+00 NOT IDENT.
AM-241	2.986E+00	9.302E+00	7.079E+00	4.651E+00 NOT IDENT.
AM-242	8.914E+01	1.115E+02	9.350E+01	5.577E+01 NOT IDENT.
CM-247	-3.976E-01	1.482E+00	1.183E+00	7.412E-01 NOT IDENT.
CF-249	-2.984E-01	1.617E+00	1.301E+00	8.086E-01 NOT IDENT.
CF-251	6.801E+00	8.062E+00	4.863E+00	4.031E+00 FAIL ABUN
ANH-511	1.493E+01	2.187E+00	2.035E+00	1.094E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:55:39.71

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851002.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:54:38
Sample ID : G138851002 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA16 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.14 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 1922864
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.58*	62	372	0.98	104.49	101	8	2.15E-03	63.6	
2	3	63.44*	42	398	1.36	124.23	120	15	1.47E-03	96.2	8.06E-01
3	3	66.47*	72	383	1.37	130.29	120	15	2.49E-03	55.3	
4	0	78.30	74	408	0.90	153.97	150	8	2.58E-03	48.8	
5	0	98.77	57	352	0.88	194.94	192	7	1.97E-03	56.3	
6	0	139.98	93	435	1.43	277.44	274	8	3.21E-03	40.4	
7	0	142.55*	23	537	1.34	282.59	282	9	7.98E-04	188.5	
8	0	162.97	35	377	1.30	323.47	320	7	1.23E-03	92.4	
9	0	185.82*	77	508	1.08	369.23	363	12	2.66E-03	75.4	
10	0	198.43*	114	443	1.09	394.47	390	10	3.96E-03	40.0	
11	0	209.45	60	305	1.10	416.52	413	7	2.09E-03	49.6	
12	0	295.62	52	235	1.09	589.06	586	8	1.79E-03	53.2	
13	0	339.12*	21	267	3.29	676.17	672	10	7.14E-04	160.3	
14	0	351.50*	103	336	2.47	700.97	695	17	3.58E-03	44.8	
15	0	392.64	65	152	1.53	783.36	779	10	2.26E-03	38.1	
16	0	416.86	29	111	0.95	831.87	829	7	9.92E-04	64.2	
17	0	475.24	17	116	1.25	948.81	947	8	5.90E-04	111.8	
18	0	531.06	58	129	0.67	1060.61	1056	13	2.03E-03	41.9	
19	0	557.95*	45	106	1.06	1114.48	1111	9	1.58E-03	53.1	
20	0	583.24*	16	127	1.80	1165.15	1160	13	5.61E-04	185.8	
21	0	588.36	19	89	1.41	1175.40	1172	9	6.77E-04	89.7	
22	0	596.36*	14	100	3.24	1191.42	1187	10	4.99E-04	188.0	
23	0	661.33*	8	88	1.22	1321.58	1318	9	2.72E-04	296.6	
24	0	911.22*	15	63	1.29	1822.37	1816	15	5.28E-04	155.2	
25	0	980.75	8	22	0.52	1961.73	1960	6	2.80E-04	97.2	
26	0	1052.36	25	15	1.48	2105.28	2102	7	8.68E-04	32.9	
27	0	1189.72*	6	22	1.13	2380.69	2377	10	2.02E-04	232.0	
28	1	1234.95	26	14	2.06	2471.38	2466	31	9.02E-04	33.8	1.01E+00
29	1	1238.25	23	14	1.88	2478.00	2466	31	7.91E-04	42.3	
30	1	1242.43	28	14	2.07	2486.38	2466	31	9.81E-04	36.3	
31	1	1245.21	20	11	2.07	2491.96	2466	31	6.80E-04	43.7	
32	0	1416.17	11	24	1.34	2834.83	2829	9	3.76E-04	87.9	
33	0	1422.29	7	12	0.83	2847.10	2845	7	2.51E-04	87.9	
34	0	1428.95	14	24	1.99	2860.46	2855	11	4.91E-04	75.4	
35	5	1587.05*	27	4	2.62	3177.63	3174	29	9.48E-04	26.7	1.62E+00
36	5	1592.02	35	10	3.26	3187.60	3174	29	1.22E-03	33.6	
37	0	1639.78*	34	56	12.77	3283.45	3266	37	1.19E-03	74.4	
38	0	1764.70*	31	12	2.51	3534.11	3528	17	1.07E-03	45.3	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1777.27	6	7	1.21	3559.35	3558	5	2.11E-04	75.1	
40	0	1781.38	12	22	0.62	3567.59	3562	10	4.27E-04	77.3	
41	0	1832.74	16	4	0.58	3670.67	3666	9	5.52E-04	34.5	
42	0	1860.38*	5	23	6.10	3726.15	3720	18	1.58E-04	276.3	
43	0	1976.41	7	13	1.41	3959.07	3956	10	2.47E-04	100.5	
44	0	2004.96	11	1	1.45	4016.39	4014	6	3.78E-04	34.7	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 1-JUL-2005 07:55:43

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851002.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:54:38
Sample ID : G138851002 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry : 3190-H
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.14 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.24 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
Y-91	+	557.57	*	2.187E+00	2.324E+00	2.485E+00	0.000E+00	0.880
		1204.90		-2.804E+01	5.491E+02	9.897E+02	0.000E+00	-0.028
MO-99	+	140.51	*	1.130E+02	9.138E+01	1.104E+02	0.000E+00	1.023
		181.06		-7.228E+01	9.586E+02	1.451E+03	0.000E+00	-0.050
		739.58		-1.892E+02	4.579E+02	7.749E+02	0.000E+00	-0.244
SN-113	+	391.69	*	3.325E+00	2.534E+00	3.040E+00	0.000E+00	1.093
BA-137M	+	661.65	*	3.738E-01	2.217E+00	2.312E+00	0.000E+00	0.162
CS-137	+	661.66	*	3.951E-01	2.344E+00	2.444E+00	0.000E+00	0.162
TM-171	+	51.87		1.306E+03	1.660E+03	1.932E+03	0.000E+00	0.676
		59.40		-1.550E+03	1.921E+03	3.300E+03	0.000E+00	-0.470
	+	66.72	*	2.680E+03	2.965E+03	2.812E+03	0.000E+00	0.953
BI-211	+	351.07	*	2.239E+01	2.007E+01	1.327E+01	0.000E+00	1.687
PB-214		74.81		2.425E+00	3.493E+01	5.534E+01	0.000E+00	0.044
	+	77.11		2.459E+01	2.401E+01	3.054E+01	0.000E+00	0.805
		87.30		-7.736E+00	3.187E+01	5.512E+01	0.000E+00	-0.140
		241.98		1.047E+00	1.406E+01	2.371E+01	0.000E+00	0.044
	+	295.21		6.814E+00	7.246E+00	9.278E+00	0.000E+00	0.734
	+	351.92	*	7.788E+00	6.981E+00	4.624E+00	0.000E+00	1.684
U-234	+	67.67		1.118E+03	1.237E+03	1.091E+03	0.000E+00	1.024
		241.98		1.049E+00	1.408E+01	2.374E+01	0.000E+00	0.044
	+	295.21	*	6.814E+00	7.246E+00	9.278E+00	0.000E+00	0.734
	+	351.92		7.788E+00	6.981E+00	4.624E+00	0.000E+00	1.684
U-235		89.95		-1.948E+02	5.436E+01	8.329E+01	0.000E+00	-2.338
		93.35		1.432E+02	3.104E+01	6.102E+01	0.000E+00	2.346
		105.00		-2.560E+01	5.087E+01	8.665E+01	0.000E+00	-0.295
	+	143.76	*	4.143E+00	1.562E+01	1.587E+01	0.000E+00	0.261
	+	163.33		1.449E+01	2.678E+01	3.515E+01	0.000E+00	0.412
	+	185.71		2.834E+00	4.275E+00	2.977E+00	0.000E+00	0.952
		205.31		1.561E+01	2.094E+01	3.639E+01	0.000E+00	0.429
U-238	+	63.29	*	7.824E+01	1.506E+02	1.420E+02	0.000E+00	0.551

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA

BE-7	477.59 *	-3.889E+00	1.401E+01	2.137E+01	0.000E+00	-0.182

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22		1274.53	*	-1.277E-01	1.169E+00	2.121E+00	0.000E+00	-0.060
AL-26		511.00		9.436E+00	1.203E+00	2.549E+00	0.000E+00	3.702
		1808.65	*	4.389E-01	1.343E+00	2.523E+00	0.000E+00	0.174
K-40		1460.81	*	4.585E+01	1.704E+01	3.613E+01	0.000E+00	1.269
SC-46		889.25	*	6.767E-01	1.285E+00	2.353E+00	0.000E+00	0.288
		1120.51		-7.752E-01	1.544E+00	2.680E+00	0.000E+00	-0.289
V-48		944.10		1.112E+01	2.885E+01	5.229E+01	0.000E+00	0.213
		983.50	*	-2.229E+00	2.913E+00	3.927E+00	0.000E+00	-0.568
		1312.09		4.021E-01	2.500E+00	4.643E+00	0.000E+00	0.087
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-2.472E+01	1.618E+01	2.467E+01	0.000E+00	-1.002
MN-54		834.83	*	1.064E+00	1.256E+00	2.333E+00	0.000E+00	0.456
CO-56		846.75	*	6.047E-01	1.439E+00	2.580E+00	0.000E+00	0.234
		1037.82		3.426E+00	1.027E+01	1.836E+01	0.000E+00	0.187
	+	1238.25		2.780E+00	2.351E+00	3.242E+00	0.000E+00	0.857
CO-57		122.06	*	-3.578E-01	1.221E+00	2.083E+00	0.000E+00	-0.172
		136.47		-4.013E+00	9.847E+00	1.665E+01	0.000E+00	-0.241
CO-58		810.78	*	4.496E-02	1.246E+00	2.193E+00	0.000E+00	0.020
FE-59		192.35		-3.088E+01	3.861E+01	6.335E+01	0.000E+00	-0.488
		1099.25	*	-6.481E-01	2.837E+00	5.067E+00	0.000E+00	-0.128
		1291.60		-1.717E-01	3.488E+00	6.360E+00	0.000E+00	-0.027
CO-60		1173.24		7.138E-01	1.318E+00	2.507E+00	0.000E+00	0.285
		1332.50	*	5.190E-02	1.322E+00	2.409E+00	0.000E+00	0.022
ZN-65		1115.55	*	-6.243E-01	2.622E+00	4.674E+00	0.000E+00	-0.134
SE-75	+	66.05		4.477E+02	4.954E+02	4.880E+02	0.000E+00	0.917
		96.73		-2.094E+01	3.919E+01	5.973E+01	0.000E+00	-0.351
		121.11		1.129E+00	6.587E+00	1.143E+01	0.000E+00	0.099
		136.00		9.158E-01	1.791E+00	3.132E+00	0.000E+00	0.292
	+	198.60		1.769E+02	1.414E+02	1.292E+02	0.000E+00	1.370
		264.65	*	-2.175E-01	1.940E+00	3.234E+00	0.000E+00	-0.067
		279.53		-2.698E-01	4.492E+00	7.502E+00	0.000E+00	-0.036
		303.91		1.482E+01	8.579E+01	1.446E+02	0.000E+00	0.102
		400.65		6.455E-01	9.585E+00	1.712E+01	0.000E+00	0.038
KR-85		513.99	*	-2.058E+03	4.026E+02	5.482E+02	0.000E+00	-3.754
SR-85		513.99	*	-1.062E+01	2.078E+00	2.829E+00	0.000E+00	-3.754
Y-88		898.02		1.480E+00	1.256E+00	2.453E+00	0.000E+00	0.604
		1836.01	*	1.332E+00	1.323E+00	2.575E+00	0.000E+00	0.517
NB-94		702.63	*	-5.517E-01	1.140E+00	1.920E+00	0.000E+00	-0.287
		871.10		4.331E-01	1.101E+00	1.997E+00	0.000E+00	0.217
NB-95		765.79	*	3.898E-01	1.620E+00	2.875E+00	0.000E+00	0.136
NB-95M		235.69	*	-2.617E+02	9.285E+01	1.369E+02	0.000E+00	-1.911
ZR-95		724.18		-1.176E+00	3.535E+00	5.991E+00	0.000E+00	-0.196
		756.74	*	-4.305E-01	2.351E+00	4.055E+00	0.000E+00	-0.106
RU-103		497.08	*	-4.978E-01	1.590E+00	2.757E+00	0.000E+00	-0.181
		610.33		1.133E+01	3.144E+01	5.577E+01	0.000E+00	0.203
RH-106		511.85		6.490E+01	9.537E+00	1.987E+01	0.000E+00	3.266
		621.84	*	3.692E+00	1.192E+01	2.133E+01	0.000E+00	0.173
	+	1050.47		9.270E+01	6.096E+01	1.253E+02	0.000E+00	0.740
RU-106		622.20	*	5.018E+00	1.178E+01	2.125E+01	0.000E+00	0.236

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AG-108M		433.93	*	-3.985E-01	1.224E+00	2.136E+00	0.000E+00	-0.187
		614.37		3.625E-01	1.490E+00	2.640E+00	0.000E+00	0.137
		722.95		1.190E-01	1.540E+00	2.691E+00	0.000E+00	0.044
CD-109		88.03	*	1.112E+01	3.745E+01	6.594E+01	0.000E+00	0.169
AG-110M		657.75	*	-5.432E-01	1.482E+00	2.193E+00	0.000E+00	-0.248
		677.61		-2.573E+00	1.029E+01	1.775E+01	0.000E+00	-0.145
		706.67		7.513E-01	7.881E+00	1.379E+01	0.000E+00	0.054
		763.93		-7.337E+00	5.399E+00	8.334E+00	0.000E+00	-0.880
		884.67		-7.658E-03	1.630E+00	2.845E+00	0.000E+00	-0.003
		937.48		6.473E-02	3.755E+00	6.524E+00	0.000E+00	0.010
		1384.27		-6.121E-01	5.392E+00	9.710E+00	0.000E+00	-0.063
CD-115		231.44		1.135E+04	1.753E+04	3.038E+04	0.000E+00	0.374
		260.90		-4.526E+02	6.734E+03	1.127E+04	0.000E+00	-0.040
		492.35		6.119E+02	1.676E+03	3.025E+03	0.000E+00	0.202
		527.90	*	2.059E+02	5.200E+02	8.405E+02	0.000E+00	0.245
SN-115		484.47		1.619E+02	6.742E+02	1.211E+03	0.000E+00	0.134
		933.00	*	4.080E+01	1.253E+02	2.226E+02	0.000E+00	0.183
		1290.58		-2.664E+01	2.488E+02	4.517E+02	0.000E+00	-0.059
SN-117M		156.02		-3.382E+01	9.978E+01	1.684E+02	0.000E+00	-0.201
		158.56	*	1.700E+00	2.450E+00	4.296E+00	0.000E+00	0.396
TE-123M		159.00	*	1.559E-02	1.246E+00	2.129E+00	0.000E+00	0.007
SB-124		602.73		2.292E-01	1.517E+00	2.673E+00	0.000E+00	0.086
		645.85		3.616E+00	1.883E+01	3.341E+01	0.000E+00	0.108
		713.78		1.912E+01	5.765E+01	1.033E+02	0.000E+00	0.185
		722.79		1.372E+00	1.368E+01	2.393E+01	0.000E+00	0.057
		1368.16		1.792E+01	5.605E+01	1.065E+02	0.000E+00	0.168
		1690.98	*	1.201E+00	3.098E+00	5.908E+00	0.000E+00	0.203
SB-125		176.33		7.260E+00	1.421E+01	2.466E+01	0.000E+00	0.294
		427.89	*	-4.038E-02	3.572E+00	6.334E+00	0.000E+00	-0.006
		463.38		3.529E+00	1.033E+01	1.862E+01	0.000E+00	0.190
		600.56		1.288E+00	7.506E+00	1.173E+01	0.000E+00	0.110
		606.64		-1.793E+00	2.686E+01	4.654E+01	0.000E+00	-0.039
		635.90		-1.642E+00	9.543E+00	1.657E+01	0.000E+00	-0.099
TE-125M		109.28	*	2.774E+02	4.471E+02	7.911E+02	0.000E+00	0.351
I-126		388.63		7.323E+00	9.216E+00	1.449E+01	0.000E+00	0.506
		666.33	*	5.067E+00	6.716E+00	1.234E+01	0.000E+00	0.411
		753.82		5.360E+01	5.141E+01	9.715E+01	0.000E+00	0.552
SB-126		666.33		2.120E+00	2.810E+00	5.165E+00	0.000E+00	0.411
		695.00		2.322E+00	3.010E+00	5.506E+00	0.000E+00	0.422
		697.00		8.056E+00	1.032E+01	1.889E+01	0.000E+00	0.426
		720.50	*	1.127E+00	5.431E+00	9.601E+00	0.000E+00	0.117
SN-126	+	64.28		3.097E+01	5.961E+01	5.269E+01	0.000E+00	0.588
		86.94		-3.359E+00	1.609E+01	2.785E+01	0.000E+00	-0.121
		87.57	*	-1.012E+00	3.809E+00	6.580E+00	0.000E+00	-0.154
SB-127		252.40		2.710E+02	2.207E+02	3.896E+02	0.000E+00	0.696
		411.60		1.117E+02	5.029E+02	9.043E+02	0.000E+00	0.123
		444.90		1.458E+02	4.268E+02	7.697E+02	0.000E+00	0.189
		473.00		1.397E+01	7.356E+01	1.173E+02	0.000E+00	0.119
		543.30		-6.003E+02	6.772E+02	1.126E+03	0.000E+00	-0.533

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		603.50		1.661E+02	5.078E+02	9.025E+02	0.000E+00	0.184
		685.70	*	4.450E+00	5.216E+01	9.212E+01	0.000E+00	0.048
		698.50		-1.461E+02	6.175E+02	1.058E+03	0.000E+00	-0.138
		783.70		-4.302E+01	1.348E+02	2.289E+02	0.000E+00	-0.188
I-131		284.30		5.200E+01	6.524E+01	1.137E+02	0.000E+00	0.458
		364.48	*	-1.323E+00	5.048E+00	8.254E+00	0.000E+00	-0.160
		636.97		-2.274E+01	5.850E+01	9.988E+01	0.000E+00	-0.228
TE-132		228.16	*	-1.561E+01	3.274E+01	5.405E+01	0.000E+00	-0.289
BA-133	+	79.62		1.015E+02	9.913E+01	1.064E+02	0.000E+00	0.955
		81.00		-5.260E+00	5.173E+00	7.745E+00	0.000E+00	-0.679
		276.40		-1.205E+01	1.504E+01	2.420E+01	0.000E+00	-0.498
		302.85		-2.613E+00	5.894E+00	9.616E+00	0.000E+00	-0.272
		356.02	*	-1.606E+00	1.994E+00	2.753E+00	0.000E+00	-0.583
		383.85		-2.725E+00	1.228E+01	2.008E+01	0.000E+00	-0.136
CS-134		563.23		2.332E+00	1.296E+01	2.308E+01	0.000E+00	0.101
		569.32		1.357E+00	7.109E+00	1.267E+01	0.000E+00	0.107
		604.70		-2.625E-01	1.328E+00	2.288E+00	0.000E+00	-0.115
		795.84	*	6.361E-01	1.433E+00	2.579E+00	0.000E+00	0.247
		801.93		7.335E+00	1.317E+01	2.407E+01	0.000E+00	0.305
		1365.15		1.170E+01	4.145E+01	7.792E+01	0.000E+00	0.150
CS-135		268.24	*	1.016E+00	6.716E+00	1.132E+01	0.000E+00	0.090
CS-136	+	66.88		7.657E+01	8.473E+01	7.883E+01	0.000E+00	0.971
		86.36		2.402E+00	5.326E+01	9.299E+01	0.000E+00	0.026
		153.25		1.355E+01	2.811E+01	4.905E+01	0.000E+00	0.276
	+	163.92		3.393E+01	6.269E+01	8.365E+01	0.000E+00	0.406
		176.60		6.657E+00	1.635E+01	2.826E+01	0.000E+00	0.236
		273.65		9.810E+00	1.798E+01	3.101E+01	0.000E+00	0.316
	+	340.55		2.677E+00	8.583E+00	8.407E+00	0.000E+00	0.318
		818.51		2.120E+00	2.740E+00	5.066E+00	0.000E+00	0.418
		1048.07	*	1.490E+00	3.639E+00	6.552E+00	0.000E+00	0.227
	+	1235.36		2.151E+01	1.455E+01	2.199E+01	0.000E+00	0.978
CE-139		165.85	*	-1.586E-01	1.470E+00	2.231E+00	0.000E+00	-0.071
BA-140	+	162.67		2.392E+01	4.418E+01	6.057E+01	0.000E+00	0.395
		304.87		-3.858E+01	5.579E+01	8.973E+01	0.000E+00	-0.430
		423.73		1.585E+01	7.685E+01	1.377E+02	0.000E+00	0.115
		537.31	*	3.326E+00	9.910E+00	1.785E+01	0.000E+00	0.186
CE-141		145.44	*	1.494E+00	3.196E+00	5.012E+00	0.000E+00	0.298
CE-144		133.51	*	-2.357E+00	9.300E+00	1.584E+01	0.000E+00	-0.149
PM-144	+	476.78		1.420E+00	3.175E+00	4.716E+00	0.000E+00	0.301
		618.01		1.847E-01	1.253E+00	2.209E+00	0.000E+00	0.084
		696.49	*	1.068E+00	1.293E+00	2.373E+00	0.000E+00	0.450
PM-146		453.88	*	4.682E-02	1.646E+00	2.922E+00	0.000E+00	0.016
		633.25		3.324E+01	4.874E+01	8.980E+01	0.000E+00	0.370
		735.93		-1.965E+00	4.932E+00	8.362E+00	0.000E+00	-0.235
		747.24		1.599E+00	3.305E+00	5.969E+00	0.000E+00	0.268
ND-147		91.11		-1.100E+01	1.421E+01	2.409E+01	0.000E+00	-0.457
	+	531.02	*	4.430E+01	3.713E+01	4.032E+01	0.000E+00	1.099
PM-147		121.30	*	5.681E+05	2.519E+06	4.379E+06	0.000E+00	0.130
PM-149		285.95	*	4.360E+01	4.597E+03	7.704E+03	0.000E+00	0.006

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
EU-152		121.78		3.143E-01	3.477E+00	6.018E+00	0.000E+00	0.052
		344.31	*	-1.724E+00	4.100E+00	6.653E+00	0.000E+00	-0.259
		963.37		6.060E+00	8.666E+00	1.597E+01	0.000E+00	0.379
GD-153		69.67		-1.146E+02	1.003E+02	1.500E+02	0.000E+00	-0.764
		83.37		6.261E+02	7.211E+02	1.297E+03	0.000E+00	0.483
	+	97.43	*	4.339E+00	4.890E+00	6.421E+00	0.000E+00	0.676
		103.18		2.908E+00	5.070E+00	8.983E+00	0.000E+00	0.324
EU-154		123.07		-2.727E-01	2.480E+00	4.257E+00	0.000E+00	-0.064
		247.93		1.331E+01	1.523E+01	2.664E+01	0.000E+00	0.499
		591.76		-3.234E+01	2.738E+01	3.755E+01	0.000E+00	-0.861
		723.30		-8.894E-01	6.514E+00	1.120E+01	0.000E+00	-0.079
		756.86		-4.916E+00	2.537E+01	4.373E+01	0.000E+00	-0.112
		873.20		-3.306E+00	9.834E+00	1.663E+01	0.000E+00	-0.199
		996.30		-8.412E+00	1.182E+01	1.899E+01	0.000E+00	-0.443
		1004.76		-6.030E+00	7.487E+00	1.190E+01	0.000E+00	-0.507
		1274.51	*	-3.483E-01	3.265E+00	5.927E+00	0.000E+00	-0.059
EU-155		86.54		3.559E-01	4.721E+00	8.253E+00	0.000E+00	0.043
		105.31	*	-2.232E+00	5.151E+00	8.796E+00	0.000E+00	-0.254
TB-160		86.79		-9.709E-01	1.259E+01	2.190E+01	0.000E+00	-0.044
		298.57		1.961E+00	5.067E+00	7.733E+00	0.000E+00	0.254
		879.36	*	4.936E-01	4.460E+00	7.889E+00	0.000E+00	0.063
		962.29		7.772E+00	1.607E+01	2.909E+01	0.000E+00	0.267
		966.15		1.766E+00	6.247E+00	1.107E+01	0.000E+00	0.160
		1177.93		-2.296E+00	1.019E+01	1.817E+01	0.000E+00	-0.126
HF-181		56.28		3.055E+01	8.898E+01	1.452E+02	0.000E+00	0.210
		57.53		3.489E+00	4.294E+01	7.324E+01	0.000E+00	0.048
	+	65.20		8.565E+01	9.477E+01	9.817E+01	0.000E+00	0.872
		133.02		-6.626E-01	2.991E+00	5.102E+00	0.000E+00	-0.130
		136.25		-7.016E-02	2.439E+01	4.187E+01	0.000E+00	-0.002
		345.85		6.086E+00	7.867E+00	1.366E+01	0.000E+00	0.445
		482.03	*	-8.497E-02	1.636E+00	2.885E+00	0.000E+00	-0.029
TA-182	+	67.75		1.084E+01	1.199E+01	1.054E+01	0.000E+00	1.029
	+	100.10		1.013E+01	1.141E+01	1.507E+01	0.000E+00	0.672
		222.10		-7.190E+00	1.403E+01	2.315E+01	0.000E+00	-0.311
		1121.28		6.721E-01	4.255E+00	7.810E+00	0.000E+00	0.086
	+	1189.05		2.706E+00	1.256E+01	1.471E+01	0.000E+00	0.184
		1221.42	*	4.523E+00	5.087E+00	1.004E+01	0.000E+00	0.451
		1230.97		-3.700E+00	1.233E+01	1.878E+01	0.000E+00	-0.197
IR-192	+	295.96		5.226E+00	5.558E+00	7.312E+00	0.000E+00	0.715
		308.46		2.553E+00	4.173E+00	7.177E+00	0.000E+00	0.356
		316.51	*	7.697E-01	1.537E+00	2.624E+00	0.000E+00	0.293
		468.07		-2.442E-01	2.508E+00	4.416E+00	0.000E+00	-0.055
		604.41		-8.488E-01	1.788E+01	3.109E+01	0.000E+00	-0.027
		612.46		-2.578E+01	2.837E+01	4.673E+01	0.000E+00	-0.552
HG-203		70.83		-1.192E+01	5.668E+01	9.904E+01	0.000E+00	-0.120
		72.87		9.025E+00	3.198E+01	5.675E+01	0.000E+00	0.159
		82.60		1.366E+01	5.403E+01	9.531E+01	0.000E+00	0.143
		279.20	*	4.411E-01	1.672E+00	2.838E+00	0.000E+00	0.155
BI-207		569.67		6.527E-01	1.081E+00	1.980E+00	0.000E+00	0.330

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		897.83		6.857E+02	7.292E+02	1.394E+03	0.000E+00	0.492
		1063.62	*	1.978E+00	1.488E+00	2.972E+00	0.000E+00	0.665
		1442.20		2.886E+02	8.138E+02	1.552E+03	0.000E+00	0.186
		1770.23		4.647E+00	1.886E+01	3.156E+01	0.000E+00	0.147
TL-208		75.00		1.886E+00	6.358E+01	1.005E+02	0.000E+00	0.019
		277.35		4.826E+00	1.527E+01	2.599E+01	0.000E+00	0.186
		510.84		7.771E+01	9.131E+00	1.968E+01	0.000E+00	3.948
	+	583.14	*	7.640E-01	2.840E+00	2.753E+00	0.000E+00	0.278
		763.30		-5.940E+01	6.973E+01	1.131E+02	0.000E+00	-0.525
		860.37		7.978E+00	9.377E+00	1.756E+01	0.000E+00	0.454
		1093.90		9.600E+01	3.321E+02	6.223E+02	0.000E+00	0.154
BI-210		46.50	*	3.579E+01	5.948E+02	8.836E+02	0.000E+00	0.041
PB-210		46.50	*	3.579E+01	5.948E+02	8.836E+02	0.000E+00	0.041
PB-211		404.84	*	3.965E+00	3.603E+01	6.432E+01	0.000E+00	0.062
		427.08		-2.604E+01	8.034E+01	1.401E+02	0.000E+00	-0.186
		831.96		-3.674E+01	4.100E+01	6.572E+01	0.000E+00	-0.559
BI-212		727.18	*	9.856E+00	1.035E+01	1.924E+01	0.000E+00	0.512
PB-212		74.80		1.475E+00	2.060E+01	3.264E+01	0.000E+00	0.045
		87.30		-4.332E+00	1.784E+01	3.086E+01	0.000E+00	-0.140
		115.19		-8.754E+01	1.702E+02	2.888E+02	0.000E+00	-0.303
		238.63	*	5.238E+00	2.630E+00	4.743E+00	0.000E+00	1.104
		300.09		5.042E+00	3.127E+01	5.266E+01	0.000E+00	0.096
BI-214		609.31	*	1.598E+00	2.930E+00	5.241E+00	0.000E+00	0.305
		768.36		2.659E+01	2.411E+01	4.534E+01	0.000E+00	0.586
		934.06		2.094E+01	4.101E+01	7.386E+01	0.000E+00	0.284
		1120.29		-4.312E+00	8.991E+00	1.564E+01	0.000E+00	-0.276
	+	1238.11		2.729E+01	2.308E+01	3.182E+01	0.000E+00	0.858
		1377.67		2.530E+01	3.370E+01	6.528E+01	0.000E+00	0.388
RN-219		271.23		7.619E-02	9.969E+00	1.670E+01	0.000E+00	0.005
		401.81	*	-4.741E+00	1.582E+01	2.770E+01	0.000E+00	-0.171
RA-223		122.32		4.061E+00	8.408E+01	1.452E+02	0.000E+00	0.028
	+	144.24		1.343E+01	5.061E+01	5.145E+01	0.000E+00	0.261
		154.21		-6.900E-01	1.692E+01	2.890E+01	0.000E+00	-0.024
		269.46		1.407E+00	7.777E+00	1.314E+01	0.000E+00	0.107
		323.87	*	2.496E+01	2.733E+01	4.773E+01	0.000E+00	0.523
	+	338.28		2.071E+01	6.641E+01	6.736E+01	0.000E+00	0.307
		445.03		4.068E+01	8.862E+01	1.608E+02	0.000E+00	0.253
RA-224		240.98	*	-4.912E+01	2.981E+01	4.657E+01	0.000E+00	-1.055
RA-226	+	295.21		6.814E+00	7.246E+00	9.278E+00	0.000E+00	0.734
	+	351.92		7.788E+00	6.981E+00	4.624E+00	0.000E+00	1.684
		609.31	*	1.598E+00	2.930E+00	5.241E+00	0.000E+00	0.305
AC-227	+	79.80		1.312E+02	1.281E+02	1.367E+02	0.000E+00	0.960
		236.00		-2.391E+01	9.853E+00	1.482E+01	0.000E+00	-1.613
		256.20	*	-1.108E+01	1.649E+01	2.681E+01	0.000E+00	-0.413
		286.10		-1.301E+01	6.507E+01	1.078E+02	0.000E+00	-0.121
		299.80		6.366E+00	5.851E+01	9.826E+01	0.000E+00	0.065
		304.40		-1.889E+01	7.876E+01	1.299E+02	0.000E+00	-0.145
		329.70		-3.739E-02	3.805E+01	6.331E+01	0.000E+00	-0.001
		334.20		1.496E+00	9.596E+01	1.597E+02	0.000E+00	0.009

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
TH-227	+	79.80		1.291E+02	1.260E+02	1.345E+02	0.000E+00	0.960
		94.00		7.508E+01	9.812E+01	1.742E+02	0.000E+00	0.431
		236.00		-2.354E+01	9.702E+00	1.459E+01	0.000E+00	-1.613
		256.20	*	-1.091E+01	1.623E+01	2.639E+01	0.000E+00	-0.413
		286.10		-1.281E+01	6.409E+01	1.062E+02	0.000E+00	-0.121
		299.80		6.254E+00	5.748E+01	9.653E+01	0.000E+00	0.065
		304.40		-1.859E+01	7.749E+01	1.278E+02	0.000E+00	-0.145
		329.70		-3.683E-02	3.748E+01	6.235E+01	0.000E+00	-0.001
		334.20		1.468E+00	9.416E+01	1.568E+02	0.000E+00	0.009
AC-228	+	209.25		2.896E+01	2.872E+01	4.169E+01	0.000E+00	0.695
	+	338.32		4.986E+00	1.599E+01	1.647E+01	0.000E+00	0.303
		463.01		3.389E+00	2.435E+01	4.339E+01	0.000E+00	0.078
		794.95		1.277E+01	2.660E+01	4.797E+01	0.000E+00	0.266
	+	911.21	*	3.046E+00	9.457E+00	9.768E+00	0.000E+00	0.312
		964.77		-2.455E+01	2.635E+01	4.153E+01	0.000E+00	-0.591
		969.11		5.725E+00	7.699E+00	1.421E+01	0.000E+00	0.403
RA-228	+	209.25		2.896E+01	2.872E+01	4.169E+01	0.000E+00	0.695
	+	338.32		4.986E+00	1.599E+01	1.647E+01	0.000E+00	0.303
		463.01		3.389E+00	2.435E+01	4.339E+01	0.000E+00	0.078
		794.95		1.277E+01	2.660E+01	4.797E+01	0.000E+00	0.266
	+	911.21	*	3.046E+00	9.457E+00	9.768E+00	0.000E+00	0.312
		964.77		-2.455E+01	2.635E+01	4.153E+01	0.000E+00	-0.591
		969.11		5.725E+00	7.699E+00	1.421E+01	0.000E+00	0.403
TH-228		84.40		1.871E+02	1.270E+02	2.323E+02	0.000E+00	0.805
		238.60	*	5.219E+00	2.629E+00	4.741E+00	0.000E+00	1.101
		300.10		5.057E+00	3.127E+01	5.267E+01	0.000E+00	0.096
TH-229		85.43		-1.545E+00	9.057E+00	1.571E+01	0.000E+00	-0.098
		88.47		3.558E+00	4.996E+00	8.923E+00	0.000E+00	0.399
	+	100.00		1.047E+01	1.180E+01	1.560E+01	0.000E+00	0.671
		193.63	*	3.888E+00	2.084E+01	3.565E+01	0.000E+00	0.109
	+	210.97		3.884E+01	3.851E+01	4.962E+01	0.000E+00	0.783
TH-230	+	295.21		6.814E+00	7.246E+00	9.278E+00	0.000E+00	0.734
	+	351.92		7.788E+00	6.981E+00	4.624E+00	0.000E+00	1.684
		609.31	*	1.598E+00	2.930E+00	5.241E+00	0.000E+00	0.305
PA-231		283.67	*	4.122E+01	6.375E+01	1.102E+02	0.000E+00	0.374
		301.29		-7.282E+00	2.279E+01	3.743E+01	0.000E+00	-0.195
		330.00		-1.481E+01	8.293E+01	1.367E+02	0.000E+00	-0.108
TH-231		84.21		3.094E+01	2.362E+01	4.300E+01	0.000E+00	0.719
		236.00		-2.388E+01	9.839E+00	1.480E+01	0.000E+00	-1.613
		256.20		-1.106E+01	1.647E+01	2.678E+01	0.000E+00	-0.413
		269.46	*	1.407E+00	7.777E+00	1.314E+01	0.000E+00	0.107
		271.23		7.619E-02	9.969E+00	1.670E+01	0.000E+00	0.005
		283.67		4.122E+01	6.375E+01	1.102E+02	0.000E+00	0.374
		301.29		-7.282E+00	2.279E+01	3.743E+01	0.000E+00	-0.195
		329.85		-2.174E+00	2.603E+01	4.311E+01	0.000E+00	-0.050
	+	351.07		2.239E+01	2.007E+01	1.327E+01	0.000E+00	1.687
		401.81		-4.741E+00	1.582E+01	2.770E+01	0.000E+00	-0.171
TH-232		238.59	*	5.132E+00	2.588E+00	4.666E+00	0.000E+00	1.100
	+	911.20		3.031E+00	9.408E+00	6.551E+00	0.000E+00	0.463

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		964.40		-2.268E+01	2.592E+01	4.108E+01	0.000E+00	-0.552
		969.11		5.695E+00	7.659E+00	1.414E+01	0.000E+00	0.403
PA-233		75.28		-1.306E+01	1.680E+02	2.644E+02	0.000E+00	-0.049
		86.59		4.601E+00	7.660E+01	1.338E+02	0.000E+00	0.034
		300.12		2.588E+00	1.591E+01	2.679E+01	0.000E+00	0.097
		311.98	*	-8.938E-01	2.796E+00	4.583E+00	0.000E+00	-0.195
	+	340.50		1.257E+01	4.029E+01	3.946E+01	0.000E+00	0.318
		398.62		4.828E+01	7.500E+01	1.383E+02	0.000E+00	0.349
	+	415.76		5.512E+01	7.076E+01	1.069E+02	0.000E+00	0.516
PA-234	+	63.00		9.120E+01	1.755E+02	1.688E+02	0.000E+00	0.540
		94.67		-2.512E+01	8.389E+00	1.309E+01	0.000E+00	-1.919
	+	98.44		5.110E+00	5.759E+00	7.057E+00	0.000E+00	0.724
	+	99.70		2.704E+01	3.048E+01	4.042E+01	0.000E+00	0.669
		111.00		1.051E+01	8.932E+00	1.607E+01	0.000E+00	0.654
		131.20		-1.270E+00	4.794E+00	8.164E+00	0.000E+00	-0.156
		152.70		1.235E+01	1.353E+01	2.398E+01	0.000E+00	0.515
	+	186.00		7.652E+01	1.154E+02	8.044E+01	0.000E+00	0.951
		226.40		1.297E+01	1.641E+01	2.866E+01	0.000E+00	0.453
		227.20		7.454E+00	1.770E+01	3.042E+01	0.000E+00	0.245
		248.90		-1.693E+01	3.785E+01	6.228E+01	0.000E+00	-0.272
	+	293.70		3.271E+01	3.478E+01	4.405E+01	0.000E+00	0.743
		369.80		1.182E+01	3.607E+01	6.097E+01	0.000E+00	0.194
		568.70		-5.184E+00	3.633E+01	6.334E+01	0.000E+00	-0.082
		569.50		4.837E+00	9.668E+00	1.758E+01	0.000E+00	0.275
		574.00		4.712E+00	5.299E+01	9.391E+01	0.000E+00	0.050
		699.00		-1.459E+01	2.595E+01	4.340E+01	0.000E+00	-0.336
		706.10		1.938E+00	3.812E+01	6.664E+01	0.000E+00	0.029
		733.00		2.536E+00	1.123E+01	2.021E+01	0.000E+00	0.125
		742.81		2.244E+00	4.937E+01	8.637E+01	0.000E+00	0.026
		796.30		1.046E+01	3.067E+01	5.483E+01	0.000E+00	0.191
		805.80		-1.254E+01	3.457E+01	5.840E+01	0.000E+00	-0.215
		819.60		1.477E+00	4.373E+01	7.638E+01	0.000E+00	0.019
		826.30		1.513E+01	2.770E+01	5.062E+01	0.000E+00	0.299
		831.60		-2.157E+01	2.100E+01	3.321E+01	0.000E+00	-0.650
		876.40		1.182E+01	2.714E+01	4.936E+01	0.000E+00	0.239
		880.51		-9.899E+00	9.287E+00	1.450E+01	0.000E+00	-0.683
		883.24		1.446E-01	8.861E+00	1.557E+01	0.000E+00	0.009
		899.00		8.190E+00	2.627E+01	4.733E+01	0.000E+00	0.173
		925.00		-1.611E-01	3.875E+01	6.747E+01	0.000E+00	-0.002
		926.50		-4.850E-01	5.899E+00	1.018E+01	0.000E+00	-0.048
		946.00	*	-1.493E+00	9.775E+00	1.676E+01	0.000E+00	-0.089
		949.00		2.149E+00	1.423E+01	2.515E+01	0.000E+00	0.085
	+	980.50		9.474E+00	1.842E+01	3.214E+01	0.000E+00	0.295
		1394.10		-1.570E+01	3.865E+01	6.739E+01	0.000E+00	-0.233
PA-234M		766.40		5.206E+02	5.641E+02	1.051E+03	0.000E+00	0.495
		1001.03	*	1.636E+02	1.613E+02	3.019E+02	0.000E+00	0.542
TH-234	+	63.29	*	7.824E+01	1.506E+02	1.676E+02	0.000E+00	0.467
		92.38		1.290E+02	2.703E+01	5.313E+01	0.000E+00	2.428
		112.81		-2.368E+02	4.405E+02	7.470E+02	0.000E+00	-0.317

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NP-237		86.48	*	1.081E+00	1.153E+01	2.017E+01	0.000E+00	0.054
		95.87		-2.208E+02	5.632E+01	7.159E+01	0.000E+00	-3.084
NP-239	+	99.55		8.830E+00	9.952E+00	1.333E+01	0.000E+00	0.663
		117.00	*	4.272E+00	8.973E+00	1.577E+01	0.000E+00	0.271
	+	209.75		3.912E+01	3.880E+01	5.252E+01	0.000E+00	0.745
		228.18		-4.581E+00	9.396E+00	1.550E+01	0.000E+00	-0.295
		277.60		6.006E+00	7.189E+00	1.255E+01	0.000E+00	0.479
		334.31		-6.452E-01	5.302E+01	8.813E+01	0.000E+00	-0.007
AM-241		59.54	*	-7.925E+00	1.114E+01	1.921E+01	0.000E+00	-0.412
AM-242	+	99.55		2.061E+02	2.322E+02	3.111E+02	0.000E+00	0.663
		103.70	*	5.132E+01	1.060E+02	1.872E+02	0.000E+00	0.274
CM-247		278.00		4.147E+01	2.947E+01	5.283E+01	0.000E+00	0.785
		287.40		-1.330E+01	5.088E+01	8.406E+01	0.000E+00	-0.158
		402.60	*	-4.018E-01	1.412E+00	2.474E+00	0.000E+00	-0.162
CF-249		252.85		6.668E+01	3.872E+01	6.982E+01	0.000E+00	0.955
		333.44		-1.360E+00	7.006E+00	1.153E+01	0.000E+00	-0.118
		387.95	*	9.209E-01	1.605E+00	2.754E+00	0.000E+00	0.334
CF-251		176.00	*	4.696E+00	5.546E+00	9.735E+00	0.000E+00	0.482
		227.00		6.204E+00	1.571E+01	2.697E+01	0.000E+00	0.230
		285.00		7.824E+01	7.286E+01	1.285E+02	0.000E+00	0.609
ANH-511		511.00	*	1.544E+01	1.968E+00	4.171E+00	0.000E+00	3.702

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851002        *
* Acquisition date : 30-JUN-2005 23:54:38 Detector SN#    : 1922864        *
* Detector ID       : GAMMA16             Sensitivity     : 3.000          *
* Geometry          : 2L_MB               Energy tolerance: 2.000          *
* Elapsed live time:    0 08:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 08:00:02.14     Half life ratio :  8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 15-JUN-2005 09:07:00 Nuclide Library : FERMC          *
* Sample ID         : G138851002           Analyst initials: AKB            *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
* Standard Weight   :   0.00000                                             *
* CALIB. DATE/TIME :  3-DEC-2004 14:25:57 MS Isotope      : TOPLOADER       *
* MSD DPM           :   21.330            MSD Isotope     : TOPLOADER       *
* LCS DPM           :    0.000            LCS Isotope     : TOPLOADER       *
* LCSD DPM          :    0.000            LCSD Isotope    : TOPLOADER       *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
Y-91	2.187E+00	2.324E+00	2.485E+00	0.000E+00
MO-99	1.130E+02	9.138E+01	1.104E+02	0.000E+00
SN-113	3.325E+00	2.534E+00	3.040E+00	0.000E+00
BA-137M	3.738E-01	2.217E+00	2.312E+00	0.000E+00
CS-137	3.951E-01	2.344E+00	2.444E+00	0.000E+00
TM-171	2.680E+03	2.965E+03	2.812E+03	0.000E+00
BI-211	2.239E+01	2.007E+01	1.327E+01	0.000E+00
PB-214	7.788E+00	6.981E+00	4.624E+00	0.000E+00
U-234	6.814E+00	7.246E+00	9.278E+00	0.000E+00
U-235	4.143E+00	1.562E+01	1.587E+01	0.000E+00
U-238	7.824E+01	1.506E+02	1.420E+02	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)

BE-7	-3.889E+00	1.401E+01	2.137E+01	0.000E+00	NOT IDENT.
NA-22	-1.277E-01	1.169E+00	2.121E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	4.656E+07	0.000E+00	0.000E+00	SHORT HLIF
AL-26	4.389E-01	1.343E+00	2.523E+00	0.000E+00	NOT IDENT.
K-40	0.000E+00	1.704E+01	3.613E+01	0.000E+00	NOT IDENT.
SC-46	6.767E-01	1.285E+00	2.353E+00	0.000E+00	NOT IDENT.
V-48	-2.229E+00	2.913E+00	3.927E+00	0.000E+00	NOT IDENT.
CR-51	-2.472E+01	1.618E+01	2.467E+01	0.000E+00	NOT IDENT.
MN-54	1.064E+00	1.256E+00	2.333E+00	0.000E+00	NOT IDENT.
CO-56	6.047E-01	1.439E+00	2.580E+00	0.000E+00	FAIL ABUN
MN-56	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-3.578E-01	1.221E+00	2.083E+00	0.000E+00	NOT IDENT.
CO-58	4.496E-02	1.246E+00	2.193E+00	0.000E+00	NOT IDENT.
FE-59	-6.481E-01	2.837E+00	5.067E+00	0.000E+00	NOT IDENT.
CO-60	5.190E-02	1.322E+00	2.409E+00	0.000E+00	NOT IDENT.
ZN-65	-6.243E-01	2.622E+00	4.674E+00	0.000E+00	NOT IDENT.
SE-75	-2.175E-01	1.940E+00	3.234E+00	0.000E+00	FAIL ABUN
KR-85	-2.058E+03	4.026E+02	5.482E+02	0.000E+00	NOT IDENT.
SR-85	-1.062E+01	2.078E+00	2.829E+00	0.000E+00	NOT IDENT.
Y-88	1.332E+00	1.323E+00	2.575E+00	0.000E+00	NOT IDENT.
NB-94	-5.517E-01	1.140E+00	1.920E+00	0.000E+00	NOT IDENT.
NB-95	3.898E-01	1.620E+00	2.875E+00	0.000E+00	NOT IDENT.
NB-95M	-2.617E+02	9.285E+01	1.369E+02	0.000E+00	NOT IDENT.
ZR-95	-4.305E-01	2.351E+00	4.055E+00	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	1.443E+19	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-4.978E-01	1.590E+00	2.757E+00	0.000E+00	NOT IDENT.
RH-106	3.692E+00	1.192E+01	2.133E+01	0.000E+00	FAIL ABUN
RU-106	5.018E+00	1.178E+01	2.125E+01	0.000E+00	NOT IDENT.
AG-108M	-3.985E-01	1.224E+00	2.136E+00	0.000E+00	NOT IDENT.
CD-109	1.112E+01	3.745E+01	6.594E+01	0.000E+00	NOT IDENT.
AG-110M	-5.432E-01	1.482E+00	2.193E+00	0.000E+00	NOT IDENT.
CD-115	2.059E+02	5.200E+02	8.405E+02	0.000E+00	NOT IDENT.
SN-115	4.080E+01	1.253E+02	2.226E+02	0.000E+00	NOT IDENT.
SN-117M	1.700E+00	2.450E+00	4.296E+00	0.000E+00	NOT IDENT.
TE-123M	1.559E-02	1.246E+00	2.129E+00	0.000E+00	NOT IDENT.
SB-124	1.201E+00	3.098E+00	5.908E+00	0.000E+00	NOT IDENT.
SB-125	-4.038E-02	3.572E+00	6.334E+00	0.000E+00	NOT IDENT.
TE-125M	2.774E+02	4.471E+02	7.911E+02	0.000E+00	NOT IDENT.
I-126	5.067E+00	6.716E+00	1.234E+01	0.000E+00	NOT IDENT.
SB-126	1.127E+00	5.431E+00	9.601E+00	0.000E+00	NOT IDENT.
SN-126	-1.012E+00	3.809E+00	6.580E+00	0.000E+00	FAIL ABUN
SB-127	4.450E+00	5.216E+01	9.212E+01	0.000E+00	NOT IDENT.
I-131	-1.323E+00	5.048E+00	8.254E+00	0.000E+00	NOT IDENT.
I-132	0.000E+00	1.774E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.561E+01	3.274E+01	5.405E+01	0.000E+00	NOT IDENT.
BA-133	-1.606E+00	1.994E+00	2.753E+00	0.000E+00	FAIL ABUN
I-133	0.000E+00	6.297E+05	0.000E+00	0.000E+00	SHORT HLIF
CS-134	6.361E-01	1.433E+00	2.579E+00	0.000E+00	NOT IDENT.
CS-135	1.016E+00	6.716E+00	1.132E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	7.672E+17	0.000E+00	0.000E+00	SHORT HLIF
CS-136	1.490E+00	3.639E+00	6.552E+00	0.000E+00	FAIL ABUN
CE-139	-1.586E-01	1.470E+00	2.231E+00	0.000E+00	NOT IDENT.
BA-140	3.326E+00	9.910E+00	1.785E+01	0.000E+00	FAIL ABUN
LA-140	0.000E+00	9.255E+02	0.000E+00	0.000E+00	SHORT HLIF
CE-141	1.494E+00	3.196E+00	5.012E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	7.976E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-2.357E+00	9.300E+00	1.584E+01	0.000E+00	NOT IDENT.
PM-144	1.068E+00	1.293E+00	2.373E+00	0.000E+00	FAIL ABUN
PR-144	0.000E+00	1.211E+41	0.000E+00	0.000E+00	SHORT HLIF

PM-146	4.682E-02	1.646E+00	2.922E+00	0.000E+00 NOT IDENT.
ND-147	0.000E+00	3.713E+01	4.032E+01	0.000E+00 FAIL ABUN
PM-147	5.681E+05	2.519E+06	4.379E+06	0.000E+00 NOT IDENT.
PM-149	4.360E+01	4.597E+03	7.704E+03	0.000E+00 NOT IDENT.
EU-152	-1.724E+00	4.100E+00	6.653E+00	0.000E+00 NOT IDENT.
GD-153	4.339E+00	4.890E+00	6.421E+00	0.000E+00 FAIL ABUN
EU-154	-3.483E-01	3.265E+00	5.927E+00	0.000E+00 NOT IDENT.
EU-155	-2.232E+00	5.151E+00	8.796E+00	0.000E+00 NOT IDENT.
TB-160	4.936E-01	4.460E+00	7.889E+00	0.000E+00 NOT IDENT.
HF-181	-8.497E-02	1.636E+00	2.885E+00	0.000E+00 FAIL ABUN
TA-182	4.523E+00	5.087E+00	1.004E+01	0.000E+00 FAIL ABUN
IR-192	7.697E-01	1.537E+00	2.624E+00	0.000E+00 FAIL ABUN
HG-203	4.411E-01	1.672E+00	2.838E+00	0.000E+00 NOT IDENT.
BI-207	1.978E+00	1.488E+00	2.972E+00	0.000E+00 NOT IDENT.
TL-208	7.640E-01	2.840E+00	2.753E+00	0.000E+00 FAIL ABUN
BI-210	3.579E+01	5.948E+02	8.836E+02	0.000E+00 NOT IDENT.
PB-210	3.579E+01	5.948E+02	8.836E+02	0.000E+00 NOT IDENT.
PB-211	3.965E+00	3.603E+01	6.432E+01	0.000E+00 NOT IDENT.
BI-212	9.856E+00	1.035E+01	1.924E+01	0.000E+00 NOT IDENT.
PB-212	0.000E+00	2.630E+00	4.743E+00	0.000E+00 NOT IDENT.
BI-214	1.598E+00	2.930E+00	5.241E+00	0.000E+00 FAIL ABUN
RN-219	-4.741E+00	1.582E+01	2.770E+01	0.000E+00 NOT IDENT.
RA-223	2.496E+01	2.733E+01	4.773E+01	0.000E+00 FAIL ABUN
RA-224	-4.912E+01	2.981E+01	4.657E+01	0.000E+00 NOT IDENT.
RA-226	1.598E+00	2.930E+00	5.241E+00	0.000E+00 FAIL ABUN
AC-227	-1.108E+01	1.649E+01	2.681E+01	0.000E+00 FAIL ABUN
TH-227	-1.091E+01	1.623E+01	2.639E+01	0.000E+00 FAIL ABUN
AC-228	3.046E+00	9.457E+00	9.768E+00	0.000E+00 FAIL ABUN
RA-228	3.046E+00	9.457E+00	9.768E+00	0.000E+00 FAIL ABUN
TH-228	0.000E+00	2.629E+00	4.741E+00	0.000E+00 NOT IDENT.
TH-229	3.888E+00	2.084E+01	3.565E+01	0.000E+00 FAIL ABUN
TH-230	1.598E+00	2.930E+00	5.241E+00	0.000E+00 FAIL ABUN
PA-231	4.122E+01	6.375E+01	1.102E+02	0.000E+00 NOT IDENT.
TH-231	1.407E+00	7.777E+00	1.314E+01	0.000E+00 FAIL ABUN
TH-232	0.000E+00	2.588E+00	4.666E+00	0.000E+00 FAIL ABUN
PA-233	-8.938E-01	2.796E+00	4.583E+00	0.000E+00 FAIL ABUN
PA-234	-1.493E+00	9.775E+00	1.676E+01	0.000E+00 FAIL ABUN
PA-234M	1.636E+02	1.613E+02	3.019E+02	0.000E+00 NOT IDENT.
TH-234	7.824E+01	1.506E+02	1.676E+02	0.000E+00 FAIL ABUN
NP-237	1.081E+00	1.153E+01	2.017E+01	0.000E+00 NOT IDENT.
NP-239	4.272E+00	8.973E+00	1.577E+01	0.000E+00 FAIL ABUN
AM-241	-7.925E+00	1.114E+01	1.921E+01	0.000E+00 NOT IDENT.
AM-242	5.132E+01	1.060E+02	1.872E+02	0.000E+00 FAIL ABUN
CM-247	-4.018E-01	1.412E+00	2.474E+00	0.000E+00 NOT IDENT.
CF-249	9.209E-01	1.605E+00	2.754E+00	0.000E+00 NOT IDENT.
CF-251	4.696E+00	5.546E+00	9.735E+00	0.000E+00 NOT IDENT.
ANH-511	0.000E+00	1.968E+00	4.171E+00	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:55:36.39

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

****

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851002.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:54:38
Sample ID : G138851002 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA16 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.14 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 1922864
Matrix Spike DPM : LCS DPM :

****

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.58	95	372	0.98	104.49	101	8	3.30E-03	36.6	
2	3	63.44	113	398	1.36	124.23	120	15	3.91E-03	31.7	8.06E-01
3	3	66.47	114	383	1.37	130.29	120	15	3.94E-03	31.9	
4	0	78.30	74	408	0.90	153.97	150	8	2.58E-03	48.8	
5	0	92.81	296	547	1.59	183.02	178	10	1.03E-02	15.9	
6	0	98.77	57	352	0.88	194.94	192	7	1.97E-03	56.3	
7	0	139.98	93	435	1.43	277.44	274	8	3.21E-03	40.4	
8	0	142.55	43	537	1.34	282.59	282	9	1.48E-03	98.7	
9	0	162.97	35	377	1.30	323.47	320	7	1.23E-03	92.4	
10	0	185.82	289	508	1.08	369.23	363	12	1.00E-02	16.7	
11	0	198.43	185	443	1.09	394.47	390	10	6.43E-03	22.5	
12	0	209.45	60	305	1.10	416.52	413	7	2.09E-03	49.6	
13	0	238.55	88	386	1.17	474.80	471	9	3.04E-03	41.9	
14	0	295.62	52	235	1.09	589.06	586	8	1.79E-03	53.2	
15	0	339.12	37	267	3.29	676.17	672	10	1.29E-03	84.0	
16	0	351.50	130	336	2.47	700.97	695	17	4.50E-03	33.5	
17	0	392.64	65	152	1.53	783.36	779	10	2.26E-03	38.1	
18	0	416.86	29	111	0.95	831.87	829	7	9.92E-04	64.2	
19	0	475.24	17	116	1.25	948.81	947	8	5.90E-04	111.8	
20	0	510.84	601	213	2.60	1020.11	1012	17	2.09E-02	6.9	
21	0	531.06	58	129	0.67	1060.61	1056	13	2.03E-03	41.9	
22	0	557.95	70	106	1.06	1114.48	1111	9	2.44E-03	28.7	
23	0	575.19	15	58	0.66	1149.03	1145	6	5.17E-04	85.1	
24	0	583.24	70	127	1.80	1165.15	1160	13	2.43E-03	35.5	
25	0	588.36	19	89	1.41	1175.40	1172	9	6.77E-04	89.7	
26	0	596.36	64	100	3.24	1191.42	1187	10	2.22E-03	32.0	
27	0	661.33	77	88	1.22	1321.58	1318	9	2.67E-03	24.8	
28	0	911.22	77	63	1.29	1822.37	1816	15	2.66E-03	25.4	
29	0	968.46	31	47	1.85	1937.10	1933	12	1.08E-03	47.7	
30	0	980.75	8	22	0.52	1961.73	1960	6	2.80E-04	97.2	
31	0	1052.36	25	15	1.48	2105.28	2102	7	8.68E-04	32.9	
32	0	1189.72	13	22	1.13	2380.69	2377	10	4.50E-04	73.6	
33	1	1234.95	26	14	2.06	2471.38	2466	31	9.02E-04	33.8	1.01E+00
34	1	1238.25	23	14	1.88	2478.00	2466	31	7.91E-04	42.3	
35	1	1242.43	28	14	2.07	2486.38	2466	31	9.81E-04	36.3	
36	1	1245.21	20	11	2.07	2491.96	2466	31	6.80E-04	43.7	
37	0	1416.17	11	24	1.34	2834.83	2829	9	3.76E-04	87.9	
38	0	1422.29	7	12	0.83	2847.10	2845	7	2.51E-04	87.9	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1428.95	14	24	1.99	2860.46	2855	11	4.91E-04	75.4	
40	5	1587.05	30	4	2.62	3177.63	3174	29	1.03E-03	21.7	1.62E+00
41	5	1592.02	35	10	3.26	3187.60	3174	29	1.22E-03	33.6	
42	0	1639.78	42	56	12.77	3283.45	3266	37	1.44E-03	59.5	
43	0	1651.22	7	12	1.25	3306.40	3302	7	2.37E-04	93.3	
44	0	1764.70	59	12	2.51	3534.11	3528	17	2.06E-03	18.8	
45	0	1777.27	6	7	1.21	3559.35	3558	5	2.11E-04	75.1	
46	0	1781.38	12	22	0.62	3567.59	3562	10	4.27E-04	77.3	
47	0	1832.74	16	4	0.58	3670.67	3666	9	5.52E-04	34.5	
48	0	1860.38	15	23	6.10	3726.15	3720	18	5.20E-04	78.8	
49	0	1976.41	7	13	1.41	3959.07	3956	10	2.47E-04	100.5	
50	0	2004.96	11	1	1.45	4016.39	4014	6	3.78E-04	34.7	

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:55:42.05

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*********************************************************************
*                        GENERAL ENG. LABS, LLC.                    *
*                            2040 Savage Road                       *
*                          Charleston, SC 29414                     *
*********************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851002.CNF;1
Sample date       : 15-JUN-2005 09:07:00 Acquisition date : 30-JUN-2005 23:54:38
Sample ID         : G138851002           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA16              Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00         Elapsed real time: 0 08:00:02.14  0.0%
Energy tolerance : 2.00000 KEV           Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 1922864
Matrix Spike DPM :                       LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
Y-91	557.57	45	95.08*	1.236E+00	1.814E+00	2.187E+00	106.25
	1204.90	------	0.30	6.740E-01	------ Line Not Found		------
MO-99	140.51	93	82.70*	2.478E+00	2.118E+00	1.130E+02	80.88
	181.06	------	6.20	2.371E+00	------ Line Not Found		------
	739.58	------	12.80	1.004E+00	------ Line Not Found		------
SN-113	391.69	65	64.90*	1.559E+00	3.023E+00	3.325E+00	76.23
BA-137M	661.65	8	89.98*	1.093E+00	3.734E-01	3.738E-01	593.19
CS-137	661.66	8	85.12*	1.093E+00	3.947E-01	3.951E-01	593.19
TM-171	51.87	62	0.81	2.791E-01	1.285E+03	1.306E+03	127.16
	59.40	------	0.21	4.934E-01	------ Line Not Found		------
	66.72	72	0.16*	8.067E-01	2.638E+03	2.680E+03	110.65
BI-211	351.07	103	12.94*	1.670E+00	2.239E+01	2.239E+01	89.63
PB-214	74.81	------	6.21	1.194E+00	------ Line Not Found		------
	77.11	74	10.50	1.350E+00	2.459E+01	2.459E+01	97.64
	87.30	------	4.41	1.706E+00	------ Line Not Found		------
	241.98	------	7.50	2.076E+00	------ Line Not Found		------
	295.21	52	19.20	1.853E+00	6.814E+00	6.814E+00	106.34
	351.92	103	37.20*	1.670E+00	7.788E+00	7.788E+00	89.63
U-234	67.67	72	0.37	8.067E-01	1.118E+03	1.118E+03	110.65
	241.98	------	7.49	2.076E+00	------ Line Not Found		------
	295.21	52	19.20*	1.853E+00	6.814E+00	6.814E+00	106.34
	351.92	103	37.20	1.670E+00	7.788E+00	7.788E+00	89.63
U-235	89.95	------	2.70	1.797E+00	------ Line Not Found		------
	93.35	------	4.50	1.904E+00	------ Line Not Found		------
	105.00	------	2.10	2.186E+00	------ Line Not Found		------
	143.76	23	10.50*	2.480E+00	4.143E+00	4.143E+00	376.94
	163.33	35	4.70	2.443E+00	1.449E+01	1.449E+01	184.74
	185.71	77	54.00	2.349E+00	2.834E+00	2.834E+00	150.84
	205.31	------	5.00	2.254E+00	------ Line Not Found		------
U-238	63.29	42	3.80*	6.681E-01	7.824E+01	7.824E+01	192.49

Flag: "*" = Keyline

Summary of Nuclide Activity
Sample ID : G138851002 Acquisition date : 30-JUN-2005 23:54:38

Total number of lines in spectrum	44	
Number of unidentified lines	17	
Number of lines tentatively identified by NID	27	61.36%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
Y-91	58.51D	1.21	1.814E+00	2.187E+00	2.324E+00	106.25	
MO-99	66.02H	53.3	2.118E+00	1.130E+02	0.914E+02	80.88	
SN-113	115.10D	1.10	3.023E+00	3.325E+00	2.534E+00	76.23	
BA-137M	30.17Y	1.00	3.734E-01	3.738E-01	22.17E-01	593.19	
CS-137	30.17Y	1.00	3.947E-01	3.951E-01	23.44E-01	593.19	
TM-171	1.92Y	1.02	2.638E+03	2.680E+03	2.965E+03	110.65	
BI-211	7.04E+08Y	1.00	2.239E+01	2.239E+01	2.007E+01	89.63	
PB-214	1600.00Y	1.00	7.788E+00	7.788E+00	6.981E+00	89.63	
U-234	2.45E+05Y	1.00	6.814E+00	6.814E+00	7.246E+00	106.34	
U-235	7.04E+08Y	1.00	4.143E+00	4.143E+00	15.62E+00	376.94	
U-238	4.47E+09Y	1.00	7.824E+01	7.824E+01	15.06E+01	192.49	
			---------	---------			
	Total Activity :		2.765E+03	2.918E+03			

Grand Total Activity : 2.765E+03 2.918E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Unidentified Energy Lines
Sample ID : G138851002
Acquisition date : 30-JUN-2005 23:54:38

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	98.77	57	352	0.88	194.94	192	7	1.97E-03	****	2.05E+00	T
0	198.43	114	443	1.09	394.47	390	10	3.96E-03	79.9	2.29E+00	T
0	209.45	60	305	1.10	416.52	413	7	2.09E-03	99.2	2.23E+00	T
0	339.12	21	267	3.29	676.17	672	10	7.14E-04	****	1.71E+00	T
0	416.86	29	111	0.95	831.87	829	7	9.92E-04	****	1.50E+00	T
0	475.24	17	116	1.25	948.81	947	8	5.90E-04	****	1.38E+00	T
0	531.06	58	129	0.67	1060.61	1056	13	2.03E-03	83.8	1.28E+00	T
0	583.24	16	127	1.80	1165.15	1160	13	5.61E-04	****	1.20E+00	T
0	588.36	19	89	1.41	1175.40	1172	9	6.77E-04	****	1.19E+00	
0	596.36	14	100	3.24	1191.42	1187	10	4.99E-04	****	1.18E+00	
0	911.22	15	63	1.29	1822.37	1816	15	5.28E-04	****	8.49E-01	T
0	980.75	8	22	0.52	1961.73	1960	6	2.80E-04	****	7.99E-01	T
0	1052.36	25	15	1.48	2105.28	2102	7	8.68E-04	65.8	7.54E-01	T
0	1189.72	6	22	1.13	2380.69	2377	10	2.02E-04	****	6.81E-01	T
1	1234.95	26	14	2.06	2471.38	2466	31	9.02E-04	67.6	6.61E-01	T
1	1238.25	23	14	1.88	2478.00	2466	31	7.91E-04	84.6	6.59E-01	T
1	1242.43	28	14	2.07	2486.38	2466	31	9.81E-04	72.5	6.58E-01	
1	1245.21	20	11	2.07	2491.96	2466	31	6.80E-04	87.4	6.56E-01	
0	1416.17	11	24	1.34	2834.83	2829	9	3.76E-04	****	5.95E-01	
0	1422.29	7	12	0.83	2847.10	2845	7	2.51E-04	****	5.94E-01	
0	1428.95	14	24	1.99	2860.46	2855	11	4.91E-04	****	5.92E-01	
5	1587.05	27	4	2.62	3177.63	3174	29	9.48E-04	53.5	5.52E-01	
5	1592.02	35	10	3.26	3187.60	3174	29	1.22E-03	67.2	5.51E-01	
0	1639.78	34	56	12.77	3283.45	3266	37	1.19E-03	****	5.42E-01	
0	1764.70	31	12	2.51	3534.11	3528	17	1.07E-03	90.6	5.23E-01	
0	1777.27	6	7	1.21	3559.35	3558	5	2.11E-04	****	5.22E-01	
0	1781.38	12	22	0.62	3567.59	3562	10	4.27E-04	****	5.21E-01	
0	1832.74	16	4	0.58	3670.67	3666	9	5.52E-04	69.0	5.16E-01	
0	1860.38	5	23	6.10	3726.15	3720	18	1.58E-04	****	5.13E-01	
0	1976.41	7	13	1.41	3959.07	3956	10	2.47E-04	****	5.05E-01	
0	2004.96	11	1	1.45	4016.39	4014	6	3.78E-04	69.4	5.04E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 07:55:51.50

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                             DETECTOR DATA                                 *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851002.CNF;1  *
* Acquisition date : 30-JUN-2005 23:54:38  Detector SN#     : 1922864       *
* Detector ID      : GAMMA16               Sensitivity      : 3.00000       *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000       *
* Elapsed live time: 0 08:00:00.00         Abundance limit  : 75.00000      *
* Elapsed real time: 0 08:00:02.14         Half life ratio  : 8.00000       *
*****************************************************************************
*                                                                           *
*                             SAMPLE DATA                                   *
*                                                                           *
* Sample date      : 15-JUN-2005 09:07:00  Nuclide Library  : EPI           *
* Sample ID        : G138851002            Analyst initials: AKB           *
* Batch Number     : 435282                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                               QC DATA                                     *
*                                                                           *
* CALIB. DATE/TIME : 3-DEC-2004 14:25:57.69MS Isotope      : TOPLOADER      *
* MSD DPM          :                       MSD Isotope     :                *
* LCS DPM          :                       LCS Isotope     :                *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
Y-91	2.187E+00	2.324E+00	2.485E+00	0.000E+00	0.880
MO-99	1.130E+02	9.138E+01	1.104E+02	0.000E+00	1.023
SN-113	3.325E+00	2.534E+00	3.040E+00	0.000E+00	1.093
BA-137M	3.738E-01	2.217E+00	2.312E+00	0.000E+00	0.162
CS-137	3.951E-01	2.344E+00	2.444E+00	0.000E+00	0.162
TM-171	2.680E+03	2.965E+03	2.812E+03	0.000E+00	0.953
BI-211	2.239E+01	2.007E+01	1.327E+01	0.000E+00	1.687
PB-214	7.788E+00	6.981E+00	4.624E+00	0.000E+00	1.684
U-234	6.814E+00	7.246E+00	9.278E+00	0.000E+00	0.734
U-235	4.143E+00	1.562E+01	1.587E+01	0.000E+00	0.261
U-238	7.824E+01	1.506E+02	1.420E+02	0.000E+00	0.551

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-3.889E+00		1.401E+01	2.137E+01	0.000E+00	-0.182

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	-1.277E-01		1.169E+00	2.121E+00	0.000E+00	-0.060
AL-26	4.389E-01		1.343E+00	2.523E+00	0.000E+00	0.174
K-40	4.585E+01		1.704E+01	3.613E+01	0.000E+00	1.269
SC-46	6.767E-01		1.285E+00	2.353E+00	0.000E+00	0.288
V-48	-2.229E+00		2.913E+00	3.927E+00	0.000E+00	-0.568
CR-51	-2.472E+01		1.618E+01	2.467E+01	0.000E+00	-1.002
MN-54	1.064E+00		1.256E+00	2.333E+00	0.000E+00	0.456
CO-56	6.047E-01		1.439E+00	2.580E+00	0.000E+00	0.234
CO-57	-3.578E-01		1.221E+00	2.083E+00	0.000E+00	-0.172
CO-58	4.496E-02		1.246E+00	2.193E+00	0.000E+00	0.020
FE-59	-6.481E-01		2.837E+00	5.067E+00	0.000E+00	-0.128
CO-60	5.190E-02		1.322E+00	2.409E+00	0.000E+00	0.022
ZN-65	-6.243E-01		2.622E+00	4.674E+00	0.000E+00	-0.134
SE-75	-2.175E-01		1.940E+00	3.234E+00	0.000E+00	-0.067
KR-85	-2.058E+03		4.026E+02	5.482E+02	0.000E+00	-3.754
SR-85	-1.062E+01		2.078E+00	2.829E+00	0.000E+00	-3.754
Y-88	1.332E+00		1.323E+00	2.575E+00	0.000E+00	0.517
NB-94	-5.517E-01		1.140E+00	1.920E+00	0.000E+00	-0.287
NB-95	3.898E-01		1.620E+00	2.875E+00	0.000E+00	0.136
NB-95M	-2.617E+02		9.285E+01	1.369E+02	0.000E+00	-1.911
ZR-95	-4.305E-01		2.351E+00	4.055E+00	0.000E+00	-0.106
RU-103	-4.978E-01		1.590E+00	2.757E+00	0.000E+00	-0.181
RH-106	3.692E+00		1.192E+01	2.133E+01	0.000E+00	0.173
RU-106	5.018E+00		1.178E+01	2.125E+01	0.000E+00	0.236
AG-108M	-3.985E-01		1.224E+00	2.136E+00	0.000E+00	-0.187
CD-109	1.112E+01		3.745E+01	6.594E+01	0.000E+00	0.169
AG-110M	-5.432E-01		1.482E+00	2.193E+00	0.000E+00	-0.248
CD-115	2.059E+02		5.200E+02	8.405E+02	0.000E+00	0.245
SN-115	4.080E+01		1.253E+02	2.226E+02	0.000E+00	0.183
SN-117M	1.700E+00		2.450E+00	4.296E+00	0.000E+00	0.396
TE-123M	1.559E-02		1.246E+00	2.129E+00	0.000E+00	0.007
SB-124	1.201E+00		3.098E+00	5.908E+00	0.000E+00	0.203
SB-125	-4.038E-02		3.572E+00	6.334E+00	0.000E+00	-0.006
TE-125M	2.774E+02		4.471E+02	7.911E+02	0.000E+00	0.351
I-126	5.067E+00		6.716E+00	1.234E+01	0.000E+00	0.411
SB-126	1.127E+00		5.431E+00	9.601E+00	0.000E+00	0.117
SN-126	-1.012E+00		3.809E+00	6.580E+00	0.000E+00	-0.154
SB-127	4.450E+00		5.216E+01	9.212E+01	0.000E+00	0.048
I-131	-1.323E+00		5.048E+00	8.254E+00	0.000E+00	-0.160
TE-132	-1.561E+01		3.274E+01	5.405E+01	0.000E+00	-0.289
BA-133	-1.606E+00		1.994E+00	2.753E+00	0.000E+00	-0.583
CS-134	6.361E-01		1.433E+00	2.579E+00	0.000E+00	0.247
CS-135	1.016E+00		6.716E+00	1.132E+01	0.000E+00	0.090
CS-136	1.490E+00		3.639E+00	6.552E+00	0.000E+00	0.227
CE-139	-1.586E-01		1.470E+00	2.231E+00	0.000E+00	-0.071
BA-140	3.326E+00		9.910E+00	1.785E+01	0.000E+00	0.186
CE-141	1.494E+00		3.196E+00	5.012E+00	0.000E+00	0.298
CE-144	-2.357E+00		9.300E+00	1.584E+01	0.000E+00	-0.149

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-144	1.068E+00		1.293E+00	2.373E+00	0.000E+00	0.450
PM-146	4.682E-02		1.646E+00	2.922E+00	0.000E+00	0.016
ND-147	4.430E+01	+	3.713E+01	4.032E+01	0.000E+00	1.099
PM-147	5.681E+05		2.519E+06	4.379E+06	0.000E+00	0.130
PM-149	4.360E+01		4.597E+03	7.704E+03	0.000E+00	0.006
EU-152	-1.724E+00		4.100E+00	6.653E+00	0.000E+00	-0.259
GD-153	4.339E+00	+	4.890E+00	6.421E+00	0.000E+00	0.676
EU-154	-3.483E-01		3.265E+00	5.927E+00	0.000E+00	-0.059
EU-155	-2.232E+00		5.151E+00	8.796E+00	0.000E+00	-0.254
TB-160	4.936E-01		4.460E+00	7.889E+00	0.000E+00	0.063
HF-181	-8.497E-02		1.636E+00	2.885E+00	0.000E+00	-0.029
TA-182	4.523E+00		5.087E+00	1.004E+01	0.000E+00	0.451
IR-192	7.697E-01		1.537E+00	2.624E+00	0.000E+00	0.293
HG-203	4.411E-01		1.672E+00	2.838E+00	0.000E+00	0.155
BI-207	1.978E+00		1.488E+00	2.972E+00	0.000E+00	0.665
TL-208	7.640E-01	+	2.840E+00	2.753E+00	0.000E+00	0.278
BI-210	3.579E+01		5.948E+02	8.836E+02	0.000E+00	0.041
PB-210	3.579E+01		5.948E+02	8.836E+02	0.000E+00	0.041
PB-211	3.965E+00		3.603E+01	6.432E+01	0.000E+00	0.062
BI-212	9.856E+00		1.035E+01	1.924E+01	0.000E+00	0.512
PB-212	5.238E+00		2.630E+00	4.743E+00	0.000E+00	1.104
BI-214	1.598E+00		2.930E+00	5.241E+00	0.000E+00	0.305
RN-219	-4.741E+00		1.582E+01	2.770E+01	0.000E+00	-0.171
RA-223	2.496E+01		2.733E+01	4.773E+01	0.000E+00	0.523
RA-224	-4.912E+01		2.981E+01	4.657E+01	0.000E+00	-1.055
RA-226	1.598E+00		2.930E+00	5.241E+00	0.000E+00	0.305
AC-227	-1.108E+01		1.649E+01	2.681E+01	0.000E+00	-0.413
TH-227	-1.091E+01		1.623E+01	2.639E+01	0.000E+00	-0.413
AC-228	3.046E+00	+	9.457E+00	9.768E+00	0.000E+00	0.312
RA-228	3.046E+00	+	9.457E+00	9.768E+00	0.000E+00	0.312
TH-228	5.219E+00		2.629E+00	4.741E+00	0.000E+00	1.101
TH-229	3.888E+00		2.084E+01	3.565E+01	0.000E+00	0.109
TH-230	1.598E+00		2.930E+00	5.241E+00	0.000E+00	0.305
PA-231	4.122E+01		6.375E+01	1.102E+02	0.000E+00	0.374
TH-231	1.407E+00		7.777E+00	1.314E+01	0.000E+00	0.107
TH-232	5.132E+00		2.588E+00	4.666E+00	0.000E+00	1.100
PA-233	-8.938E-01		2.796E+00	4.583E+00	0.000E+00	-0.195
PA-234	-1.493E+00		9.775E+00	1.676E+01	0.000E+00	-0.089
PA-234M	1.636E+02		1.613E+02	3.019E+02	0.000E+00	0.542
TH-234	7.824E+01	+	1.506E+02	1.676E+02	0.000E+00	0.467
NP-237	1.081E+00		1.153E+01	2.017E+01	0.000E+00	0.054
NP-239	4.272E+00		8.973E+00	1.577E+01	0.000E+00	0.271
AM-241	-7.925E+00		1.114E+01	1.921E+01	0.000E+00	-0.412
AM-242	5.132E+01		1.060E+02	1.872E+02	0.000E+00	0.274
CM-247	-4.018E-01		1.412E+00	2.474E+00	0.000E+00	-0.162
CF-249	9.209E-01		1.605E+00	2.754E+00	0.000E+00	0.334
CF-251	4.696E+00		5.546E+00	9.735E+00	0.000E+00	0.482
ANH-511	1.544E+01		1.968E+00	4.171E+00	0.000E+00	3.702

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G138851002            *
* Acquisition date : 30-JUN-2005 23:54:38 Detector SN#     : 1922864       *
* Detector ID      : GAMMA16              Sensitivity      : 3.000         *
* Geometry         : 2L_MB                Energy tolerance: 2.000         *
* Elapsed live time:    0 08:00:00.00     Abundance limit  : 75.000        *
* Elapsed real time:    0 08:00:02.14     Half life ratio  : 8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 15-JUN-2005 09:07:00 Nuclide Library  : FERMC          *
* Sample ID        : G138851002           Analyst initials: AKB             *
* Batch Number     : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery         :    1.00000           Carrier Weight  :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME :  3-DEC-2004 14:25:57 MS Isotope       : TOPLOADER      *
* MSD DPM          :   21.330             MSD Isotope      : TOPLOADER      *
* LCS DPM          :    0.000             LCS Isotope      : TOPLOADER      *
* LCSD DPM         :    0.000             LCSD Isotope     : TOPLOADER      *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
Y-91	2.187E+00	2.324E+00	1.178E+00	1.162E+00
MO-99	1.130E+02	9.138E+01	5.358E+01	4.569E+01
SN-113	3.325E+00	2.534E+00	1.452E+00	1.267E+00
BA-137M	3.738E-01	2.217E+00	1.092E+00	1.109E+00
CS-137	3.951E-01	2.344E+00	1.154E+00	1.172E+00
TM-171	2.680E+03	2.965E+03	1.357E+03	1.483E+03
BI-211	2.239E+01	2.007E+01	6.345E+00	1.003E+01
PB-214	7.788E+00	6.981E+00	2.211E+00	3.491E+00
U-234	6.814E+00	7.246E+00	4.463E+00	3.623E+00
U-235	4.143E+00	1.562E+01	7.696E+00	7.808E+00
U-238	7.824E+01	1.506E+02	6.851E+01	7.530E+01

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU

BE-7	-3.889E+00	1.401E+01	1.014E+01	7.007E+00	NOT IDENT.
NA-22	-1.277E-01	1.169E+00	9.613E-01	5.844E-01	NOT IDENT.
NA-24	5.045E+06	4.656E+07	0.000E+00	2.328E+07	SHORT HLIF
AL-26	4.389E-01	1.343E+00	1.139E+00	6.715E-01	NOT IDENT.
K-40	4.585E+01	1.704E+01	1.705E+01	8.522E+00	NOT IDENT.
SC-46	6.767E-01	1.285E+00	1.094E+00	6.425E-01	NOT IDENT.
V-48	-2.229E+00	2.913E+00	1.806E+00	1.457E+00	NOT IDENT.
CR-51	-2.472E+01	1.618E+01	1.180E+01	8.088E+00	NOT IDENT.
MN-54	1.064E+00	1.256E+00	1.095E+00	6.282E-01	NOT IDENT.
CO-56	6.047E-01	1.439E+00	1.209E+00	7.193E-01	FAIL ABUN
MN-56	1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-3.578E-01	1.221E+00	1.010E+00	6.106E-01	NOT IDENT.
CO-58	4.496E-02	1.246E+00	1.017E+00	6.230E-01	NOT IDENT.
FE-59	-6.481E-01	2.837E+00	2.337E+00	1.418E+00	NOT IDENT.
CO-60	5.190E-02	1.322E+00	1.103E+00	6.608E-01	NOT IDENT.
ZN-65	-6.243E-01	2.622E+00	2.156E+00	1.311E+00	NOT IDENT.
SE-75	-2.175E-01	1.940E+00	1.559E+00	9.699E-01	FAIL ABUN
KR-85	-2.058E+03	4.026E+02	2.630E+02	2.013E+02	NOT IDENT.
SR-85	-1.062E+01	2.078E+00	1.357E+00	1.039E+00	NOT IDENT.
Y-88	1.332E+00	1.323E+00	1.150E+00	6.615E-01	NOT IDENT.
NB-94	-5.517E-01	1.140E+00	8.998E-01	5.699E-01	NOT IDENT.
NB-95	3.898E-01	1.620E+00	1.349E+00	8.098E-01	NOT IDENT.
NB-95M	-2.617E+02	9.285E+01	6.600E+01	4.643E+01	NOT IDENT.
ZR-95	-4.305E-01	2.351E+00	1.890E+00	1.175E+00	NOT IDENT.
TC-99M	1.785E+19	1.443E+19	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-4.978E-01	1.590E+00	1.309E+00	7.950E-01	NOT IDENT.
RH-106	3.692E+00	1.192E+01	1.008E+01	5.962E+00	FAIL ABUN
RU-106	5.018E+00	1.178E+01	1.005E+01	5.892E+00	NOT IDENT.
AG-108M	-3.985E-01	1.224E+00	1.015E+00	6.122E-01	NOT IDENT.
CD-109	1.112E+01	3.745E+01	3.200E+01	1.873E+01	NOT IDENT.
AG-110M	-5.432E-01	1.482E+00	1.033E+00	7.412E-01	NOT IDENT.
CD-115	2.059E+02	5.200E+02	3.974E+02	2.600E+02	NOT IDENT.
SN-115	4.080E+01	1.253E+02	1.040E+02	6.267E+01	NOT IDENT.
SN-117M	1.700E+00	2.450E+00	2.082E+00	1.225E+00	NOT IDENT.
TE-123M	1.559E-02	1.246E+00	1.031E+00	6.228E-01	NOT IDENT.
SB-124	1.201E+00	3.098E+00	2.664E+00	1.549E+00	NOT IDENT.
SB-125	-4.038E-02	3.572E+00	3.020E+00	1.786E+00	NOT IDENT.
TE-125M	2.774E+02	4.471E+02	3.838E+02	2.236E+02	NOT IDENT.
I-126	5.067E+00	6.716E+00	5.836E+00	3.358E+00	NOT IDENT.
SB-126	1.127E+00	5.431E+00	4.525E+00	2.715E+00	NOT IDENT.
SN-126	-1.012E+00	3.809E+00	3.192E+00	1.904E+00	FAIL ABUN
SB-127	4.450E+00	5.216E+01	4.322E+01	2.608E+01	NOT IDENT.
I-131	-1.323E+00	5.048E+00	3.942E+00	2.524E+00	NOT IDENT.
I-132	1.000E+41	1.774E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.561E+01	3.274E+01	2.607E+01	1.637E+01	NOT IDENT.
BA-133	-1.606E+00	1.994E+00	1.313E+00	9.968E-01	FAIL ABUN
I-133	7.513E+05	6.297E+05	0.000E+00	3.148E+05	SHORT HLIF
CS-134	6.361E-01	1.433E+00	1.211E+00	7.164E-01	NOT IDENT.
CS-135	1.016E+00	6.716E+00	5.462E+00	3.358E+00	NOT IDENT.
I-135	4.800E+17	7.672E+17	0.000E+00	0.000E+00	SHORT HLIF
CS-136	1.490E+00	3.639E+00	3.035E+00	1.819E+00	FAIL ABUN
CE-139	-1.586E-01	1.470E+00	1.081E+00	7.352E-01	NOT IDENT.
BA-140	3.326E+00	9.910E+00	8.458E+00	4.955E+00	FAIL ABUN
LA-140	6.416E+02	9.255E+02	0.000E+00	4.628E+02	SHORT HLIF
CE-141	1.494E+00	3.196E+00	2.433E+00	1.598E+00	NOT IDENT.
CE-143	1.795E+03	7.976E+03	0.000E+00	3.988E+03	SHORT HLIF
CE-144	-2.357E+00	9.300E+00	7.675E+00	4.650E+00	NOT IDENT.
PM-144	1.068E+00	1.293E+00	1.124E+00	6.467E-01	FAIL ABUN
PR-144	1.000E+41	1.211E+41	0.000E+00	0.000E+00	SHORT HLIF

PM-146	4.682E-02	1.646E+00	1.390E+00	8.230E-01 NOT IDENT.
ND-147	4.430E+01	3.713E+01	1.914E+01	1.856E+01 FAIL ABUN
PM-147	5.681E+05	2.519E+06	2.124E+06	1.259E+06 NOT IDENT.
PM-149	4.360E+01	4.597E+03	3.702E+03	2.298E+03 NOT IDENT.
EU-152	-1.724E+00	4.100E+00	3.186E+00	2.050E+00 NOT IDENT.
GD-153	4.339E+00	4.890E+00	3.107E+00	2.445E+00 FAIL ABUN
EU-154	-3.483E-01	3.265E+00	2.686E+00	1.633E+00 NOT IDENT.
EU-155	-2.232E+00	5.151E+00	4.260E+00	2.575E+00 NOT IDENT.
TB-160	4.936E-01	4.460E+00	3.650E+00	2.230E+00 NOT IDENT.
HF-181	-8.497E-02	1.636E+00	1.370E+00	8.178E-01 FAIL ABUN
TA-182	4.523E+00	5.087E+00	4.633E+00	2.544E+00 FAIL ABUN
IR-192	7.697E-01	1.537E+00	1.263E+00	7.687E-01 FAIL ABUN
HG-203	4.411E-01	1.672E+00	1.365E+00	8.358E-01 NOT IDENT.
BI-207	1.978E+00	1.488E+00	1.373E+00	7.439E-01 NOT IDENT.
TL-208	7.640E-01	2.840E+00	1.313E+00	1.420E+00 FAIL ABUN
BI-210	3.579E+01	5.948E+02	4.267E+02	2.974E+02 NOT IDENT.
PB-210	3.579E+01	5.948E+02	4.267E+02	2.974E+02 NOT IDENT.
PB-211	3.965E+00	3.603E+01	3.074E+01	1.802E+01 NOT IDENT.
BI-212	9.856E+00	1.035E+01	9.088E+00	5.173E+00 NOT IDENT.
PB-212	5.238E+00	2.630E+00	2.304E+00	1.315E+00 NOT IDENT.
BI-214	1.598E+00	2.930E+00	2.504E+00	1.465E+00 FAIL ABUN
RN-219	-4.741E+00	1.582E+01	1.322E+01	7.912E+00 NOT IDENT.
RA-223	2.496E+01	2.733E+01	2.295E+01	1.367E+01 FAIL ABUN
RA-224	-4.912E+01	2.981E+01	2.251E+01	1.490E+01 NOT IDENT.
RA-226	1.598E+00	2.930E+00	2.504E+00	1.465E+00 FAIL ABUN
AC-227	-1.108E+01	1.649E+01	1.290E+01	8.245E+00 FAIL ABUN
TH-227	-1.091E+01	1.623E+01	1.270E+01	8.116E+00 FAIL ABUN
AC-228	3.046E+00	9.457E+00	4.615E+00	4.729E+00 FAIL ABUN
RA-228	3.046E+00	9.457E+00	4.615E+00	4.729E+00 FAIL ABUN
TH-228	5.219E+00	2.629E+00	2.302E+00	1.315E+00 NOT IDENT.
TH-229	3.888E+00	2.084E+01	1.724E+01	1.042E+01 FAIL ABUN
TH-230	1.598E+00	2.930E+00	2.504E+00	1.465E+00 FAIL ABUN
PA-231	4.122E+01	6.375E+01	5.305E+01	3.188E+01 NOT IDENT.
TH-231	1.407E+00	7.777E+00	6.334E+00	3.888E+00 FAIL ABUN
TH-232	5.132E+00	2.588E+00	2.266E+00	1.294E+00 FAIL ABUN
PA-233	-8.938E-01	2.796E+00	2.201E+00	1.398E+00 FAIL ABUN
PA-234	-1.493E+00	9.775E+00	7.740E+00	4.888E+00 FAIL ABUN
PA-234M	1.636E+02	1.613E+02	1.415E+02	8.066E+01 NOT IDENT.
TH-234	7.824E+01	1.506E+02	8.133E+01	7.530E+01 FAIL ABUN
NP-237	1.081E+00	1.153E+01	9.789E+00	5.766E+00 NOT IDENT.
NP-239	4.272E+00	8.973E+00	7.646E+00	4.487E+00 FAIL ABUN
AM-241	-7.925E+00	1.114E+01	9.258E+00	5.570E+00 NOT IDENT.
AM-242	5.132E+01	1.060E+02	9.072E+01	5.299E+01 FAIL ABUN
CM-247	-4.018E-01	1.412E+00	1.180E+00	7.060E-01 NOT IDENT.
CF-249	9.209E-01	1.605E+00	1.317E+00	8.024E-01 NOT IDENT.
CF-251	4.696E+00	5.546E+00	4.720E+00	2.773E+00 NOT IDENT.
ANH-511	1.544E+01	1.968E+00	2.038E+00	9.839E-01 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:14:33.83

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**********************************************************************
*                          GENERAL ENG. LABS, LLC.                   *
*                              2040 Savage Road                      *
*                            Charleston, SC 29414                    *
**********************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851003.CNF;1
Sample date       : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:04.
Sample ID         : G138851003           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA10              Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00         Elapsed real time: 0 08:00:02.94  0.0%
Energy tolerance  : 2.00000 KEV          Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 2605
Matrix Spike DPM :                       LCS DPM          :
**********************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	54.53	78	294	1.47	101.74	99	6	2.70E-03	37.0	
2	4	66.60	69	523	1.57	126.00	112	19	2.40E-03	60.6	7.45E-01
3	0	113.23	64	403	1.76	219.67	215	8	2.23E-03	55.7	
4	0	122.16	46	290	0.64	237.63	234	6	1.60E-03	60.3	
5	0	139.21*	47	517	1.79	271.89	269	9	1.65E-03	92.3	
6	0	164.67	70	345	0.72	323.03	319	8	2.42E-03	47.9	
7	0	185.40*	57	632	1.54	364.68	357	16	1.99E-03	116.6	
8	0	197.63*	49	461	1.16	389.27	385	11	1.70E-03	100.7	
9	0	253.07	31	246	0.90	500.63	498	8	1.08E-03	88.5	
10	0	296.25	115	272	1.20	587.39	582	12	4.01E-03	30.2	
11	0	351.89*	84	213	1.49	699.17	694	12	2.93E-03	47.4	
12	0	393.68	41	140	2.23	783.13	779	9	1.44E-03	54.0	
13	0	476.54*	24	156	5.30	949.57	943	14	8.20E-04	130.2	
14	0	558.60*	79	86	1.35	1114.42	1109	11	2.75E-03	28.8	
15	0	596.22	79	121	2.14	1189.98	1185	12	2.74E-03	30.0	
16	0	609.51*	82	147	2.10	1216.68	1210	17	2.84E-03	41.7	
17	0	767.39	62	114	5.76	1533.80	1524	20	2.15E-03	44.2	
18	0	805.68	74	90	8.68	1610.69	1602	20	2.57E-03	33.5	
19	0	847.01*	8	17	1.04	1693.69	1692	5	2.83E-04	188.5	
20	0	849.72	15	39	1.57	1699.15	1696	9	5.35E-04	76.8	
21	0	867.62*	23	66	2.90	1735.09	1730	11	7.87E-04	85.3	
22	0	890.07	39	42	3.23	1780.17	1776	11	1.37E-03	35.5	
23	0	906.78	30	35	1.71	1813.73	1810	9	1.03E-03	40.6	
24	0	943.25	27	24	2.31	1886.98	1883	9	9.32E-04	39.4	
25	0	959.26	59	95	9.98	1919.13	1907	24	2.03E-03	46.1	
26	0	970.11*	10	55	4.75	1940.91	1933	13	3.36E-04	202.1	
27	1	1005.19	32	45	2.02	2011.37	1994	25	1.12E-03	44.0	2.71E+00
28	0	1033.65*	19	48	4.23	2068.52	2063	13	6.47E-04	102.0	
29	0	1039.80	10	32	1.04	2080.87	2078	7	3.43E-04	99.7	
30	0	1062.71	10	14	0.66	2126.87	2125	5	3.47E-04	64.2	
31	0	1072.06	15	21	1.07	2145.66	2143	8	5.31E-04	57.0	
32	4	1085.77	21	8	2.75	2173.19	2171	38	7.33E-04	24.8	4.09E+00
33	4	1088.67	30	17	1.88	2179.00	2171	38	1.04E-03	32.2	
34	4	1101.61	34	14	1.89	2205.00	2171	38	1.19E-03	24.5	
35	0	1137.36	25	27	3.77	2276.78	2272	12	8.51E-04	47.0	
36	2	1219.05	39	42	2.35	2440.82	2435	18	1.34E-03	33.6	1.07E+01
37	0	1227.23	13	36	4.16	2457.23	2453	13	4.35E-04	102.6	
38	0	1256.61	44	23	6.39	2516.22	2508	18	1.54E-03	29.3	

Sample ID : G138851003 Acquisition date : 1-JUL-2005 15:14:04

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1293.24*	13	18	1.79	2589.78	2587	8	4.69E-04	74.2	
40	0	1299.63*	15	27	0.91	2602.61	2596	16	5.25E-04	95.3	
41	0	1346.29	10	38	5.57	2696.31	2686	14	3.43E-04	136.9	
42	0	1376.99	34	11	3.88	2757.94	2750	14	1.20E-03	26.2	
43	0	1427.28	38	66	10.21	2858.90	2849	29	1.32E-03	63.3	
44	0	1476.44	19	17	3.01	2957.59	2952	11	6.42E-04	48.5	
45	0	1513.21	9	10	1.44	3031.42	3029	6	3.06E-04	66.9	
46	0	1521.16	16	16	0.70	3047.39	3044	14	5.71E-04	54.8	
47	0	1542.69	29	6	1.69	3090.60	3087	9	9.91E-04	26.0	
48	0	1578.21	23	14	1.80	3161.91	3158	14	7.99E-04	40.3	
49	0	1587.22	18	11	0.87	3180.00	3174	11	6.25E-04	42.8	
50	0	1607.46	32	17	8.46	3220.63	3210	23	1.10E-03	38.5	
51	0	1719.97*	10	21	4.83	3446.49	3440	15	3.38E-04	122.2	
52	1	1752.60	22	6	2.17	3512.00	3509	11	7.49E-04	21.7	1.23E+01
53	1	1755.09	20	10	2.17	3517.00	3509	11	7.09E-04	26.5	
54	0	1823.42	31	24	6.50	3654.14	3642	21	1.09E-03	44.1	
55	3	1882.92	22	8	2.20	3773.58	3758	20	7.68E-04	29.7	2.53E+00
56	0	1927.02	11	21	6.25	3862.09	3855	17	3.66E-04	105.0	
57	5	1978.62*	3	6	1.93	3965.66	3963	19	8.90E-05	360.9	2.90E+00
58	5	1981.28*	22	11	2.26	3971.00	3963	19	7.51E-04	54.0	
59	0	2007.84	8	10	0.64	4024.31	4021	8	2.71E-04	79.0	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 1-JUL-2005 23:14:38

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851003.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:04
Sample ID : G138851003 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.94 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	+	477.59	*	9.946E+00	2.592E+01	2.184E+01	1.507E+00	0.455
CO-57	+	122.06	*	1.087E+00	1.313E+00	1.994E+00	1.288E-01	0.545
		136.47		4.449E-01	1.082E+01	1.649E+01	1.208E+00	0.027
Y-91	+	557.57	*	4.024E+00	2.334E+00	2.510E+00	1.531E-01	1.603
		1204.90		5.115E+01	5.528E+02	1.004E+03	5.874E+01	0.051
NB-95	+	765.79	*	4.365E+00	3.865E+00	2.581E+00	1.676E-01	1.691
MO-99	+	140.51	*	6.785E+01	1.254E+02	1.333E+02	8.828E+00	0.509
		181.06		-6.774E+02	1.059E+03	1.523E+03	2.673E+02	-0.445
		739.58		6.328E+01	5.539E+02	9.714E+02	1.364E+02	0.065
SN-113	+	391.69	*	2.188E+00	2.367E+00	2.869E+00	1.747E-01	0.763
CE-139	+	165.85	*	1.820E+00	1.749E+00	2.017E+00	1.404E-01	0.902
PM-147	+	121.30	*	2.254E+06	2.724E+06	4.038E+06	2.615E+05	0.558
BI-211	+	351.07	*	1.878E+01	1.784E+01	1.288E+01	8.761E-01	1.458
RA-226	+	295.21		1.551E+01	9.478E+00	8.929E+00	8.165E-01	1.737
	+	351.92		6.534E+00	6.203E+00	4.537E+00	2.825E-01	1.440
	+	609.31	*	7.499E+00	6.288E+00	4.310E+00	3.455E-01	1.740
TH-230	+	295.21		1.551E+01	9.478E+00	8.929E+00	8.165E-01	1.737
	+	351.92		6.534E+00	6.202E+00	4.537E+00	2.825E-01	1.440
	+	609.31	*	7.499E+00	6.288E+00	4.310E+00	3.455E-01	1.740
U-234	+	67.67		9.585E+02	1.170E+03	1.112E+03	1.659E+02	0.862
		241.98		-1.048E+01	1.468E+01	2.356E+01	2.090E+00	-0.445
	+	295.21	*	1.551E+01	9.478E+00	8.929E+00	8.165E-01	1.737
	+	351.92		6.534E+00	6.214E+00	4.537E+00	3.887E-01	1.440

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22		1274.53	*	-3.552E-01	1.323E+00	2.322E+00	1.384E-01	-0.153
AL-26		511.00		8.514E+00	1.307E+00	2.516E+00	1.520E-01	3.383
		1808.65	*	6.266E-01	1.189E+00	2.406E+00	1.354E-01	0.260
K-40		1460.81	*	2.403E+01	1.660E+01	3.277E+01	2.092E+00	0.733
SC-46	+	889.25	*	2.580E+00	1.838E+00	2.657E+00	1.831E-01	0.971
		1120.51		2.288E+00	1.590E+00	3.192E+00	1.948E-01	0.717

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
V-48	+	944.10		4.239E+01	3.350E+01	5.539E+01	3.774E+00	0.765
		983.50	*	-4.884E-01	2.228E+00	3.998E+00	2.678E-01	-0.122
		1312.09		1.070E+00	2.982E+00	5.540E+00	3.320E-01	0.193
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	6.445E+00	1.573E+01	2.661E+01	1.888E+00	0.242
MN-54		834.83	*	3.031E-03	1.337E+00	2.301E+00	1.548E-01	0.001
CO-56	+	846.75	*	5.185E-01	1.955E+00	2.480E+00	1.678E-01	0.209
	+	1037.82		5.303E+00	1.058E+01	1.825E+01	1.295E+00	0.290
		1238.25		3.950E-02	2.401E+00	4.324E+00	2.706E-01	0.009
CO-58		810.78	*	1.211E+00	1.503E+00	2.511E+00	1.677E-01	0.482
FE-59		192.35		1.040E+01	3.886E+01	6.608E+01	8.191E+00	0.157
		1099.25	*	2.295E+00	2.813E+00	5.487E+00	3.925E-01	0.418
	+	1291.60		3.133E+00	4.658E+00	5.822E+00	4.399E-01	0.538
CO-60		1173.24		5.607E-02	1.237E+00	2.259E+00	1.308E-01	0.025
		1332.50	*	1.614E+00	1.287E+00	2.635E+00	1.585E-01	0.612
ZN-65		1115.55	*	-1.778E+00	2.891E+00	4.908E+00	3.015E-01	-0.362
SE-75	+	66.05		3.855E+02	4.690E+02	4.800E+02	5.539E+01	0.803
		96.73		-2.652E+01	3.788E+01	6.326E+01	8.442E+00	-0.419
	+	121.11		5.868E+00	7.103E+00	1.051E+01	1.018E+00	0.558
		136.00		2.665E-01	1.837E+00	3.137E+00	2.054E-01	0.085
	+	198.60		7.652E+01	1.542E+02	1.248E+02	1.005E+01	0.613
		264.65	*	-4.296E-01	1.833E+00	3.011E+00	2.068E-01	-0.143
		279.53		2.992E+00	4.381E+00	7.527E+00	5.393E-01	0.397
		303.91		3.407E+01	8.652E+01	1.461E+02	1.470E+01	0.233
		400.65		-3.295E+00	9.469E+00	1.639E+01	1.485E+00	-0.201
KR-85		513.99	*	-1.509E+03	4.222E+02	5.957E+02	3.601E+01	-2.533
SR-85		513.99	*	-7.840E+00	2.194E+00	3.095E+00	1.871E-01	-2.533
Y-88		898.02		6.925E-01	1.409E+00	2.553E+00	1.779E-01	0.271
		1836.01	*	-1.586E-01	1.554E+00	2.864E+00	1.598E-01	-0.055
NB-94		702.63	*	-5.992E-02	1.155E+00	1.996E+00	1.248E-01	-0.030
		871.10		7.125E-01	1.448E+00	2.305E+00	1.577E-01	0.309
NB-95M		235.69	*	-1.278E+02	9.889E+01	1.532E+02	1.566E+01	-0.834
ZR-95		724.18		-1.585E+00	3.505E+00	5.829E+00	4.266E-01	-0.272
		756.74	*	-3.325E-01	2.447E+00	4.197E+00	3.184E-01	-0.079
RU-103		497.08	*	-1.068E+00	1.561E+00	2.607E+00	3.322E-01	-0.410
	+	610.33		8.280E+01	7.030E+01	4.765E+01	7.405E+00	1.738
RH-106		511.85		4.965E+01	1.037E+01	1.972E+01	1.191E+00	2.518
		621.84	*	1.325E-01	1.139E+01	1.990E+01	1.216E+00	0.007
		1050.47		-1.138E+01	7.776E+01	1.388E+02	8.943E+00	-0.082
RU-106		622.20	*	-8.155E-01	1.154E+01	2.002E+01	2.382E+00	-0.041
AG-108M		433.93	*	-5.608E-01	1.263E+00	2.165E+00	1.373E-01	-0.259
		614.37		1.752E-01	1.499E+00	2.321E+00	1.528E-01	0.075
		722.95		-1.402E+00	1.577E+00	2.525E+00	1.713E-01	-0.555
CD-109		88.03	*	3.503E+01	3.633E+01	6.452E+01	6.134E+00	0.543
AG-110M		657.75	*	4.198E-01	1.198E+00	2.147E+00	1.384E-01	0.196
		677.61		3.868E+00	1.082E+01	1.938E+01	1.256E+00	0.200
		706.67		2.436E+00	7.517E+00	1.334E+01	8.790E-01	0.183
		763.93		5.164E+00	6.044E+00	1.009E+01	6.868E-01	0.512
		884.67		1.474E+00	1.867E+00	3.426E+00	2.475E-01	0.430

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		937.48		-1.018E+00	3.749E+00	6.655E+00	4.805E-01	-0.153
		1384.27		-1.347E+00	5.157E+00	9.093E+00	5.800E-01	-0.148
CD-115		231.44		-1.038E+04	2.140E+04	3.488E+04	2.402E+03	-0.298
		260.90		-4.111E+03	8.107E+03	1.312E+04	8.960E+02	-0.313
		492.35		-7.474E+02	1.943E+03	3.329E+03	1.999E+02	-0.224
		527.90	*	1.449E+02	5.828E+02	1.040E+03	6.307E+01	0.139
SN-115		484.47		4.212E+02	6.803E+02	1.241E+03	7.433E+01	0.339
		933.00	*	9.562E+01	1.193E+02	2.299E+02	1.573E+01	0.416
		1290.58		5.695E+01	3.233E+02	5.210E+02	3.110E+01	0.109
SN-117M		156.02		5.102E+01	9.988E+01	1.727E+02	1.166E+01	0.296
		158.56	*	2.981E-01	2.540E+00	4.316E+00	2.935E-01	0.069
TE-123M		159.00	*	3.106E-01	1.242E+00	2.121E+00	1.459E-01	0.146
SB-124		602.73		2.333E-01	1.479E+00	2.594E+00	1.587E-01	0.090
		645.85		-3.746E+00	1.932E+01	3.307E+01	2.252E+00	-0.113
		713.78		1.154E+01	5.861E+01	1.033E+02	1.085E+01	0.112
		722.79		-1.323E+01	1.411E+01	2.251E+01	1.482E+00	-0.588
		1368.16		2.046E+01	6.643E+01	1.234E+02	1.479E+01	0.166
		1690.98	*	-2.224E+00	3.410E+00	5.569E+00	3.528E-01	-0.399
SB-125		176.33		1.114E+00	1.389E+01	2.349E+01	2.214E+00	0.047
		427.89	*	7.745E-01	3.603E+00	6.414E+00	3.896E-01	0.121
		463.38		5.551E+00	9.626E+00	1.756E+01	1.208E+00	0.316
		600.56		4.044E+00	7.706E+00	1.229E+01	8.582E-01	0.329
		606.64		2.740E+01	2.798E+01	4.615E+01	3.271E+00	0.594
		635.90		4.924E+00	9.817E+00	1.774E+01	1.252E+00	0.277
TE-125M		109.28	*	-7.436E+01	5.053E+02	7.703E+02	6.989E+01	-0.097
I-126		388.63		-3.066E+00	7.821E+00	1.354E+01	7.767E-01	-0.226
		666.33	*	4.820E-01	6.601E+00	1.157E+01	7.057E-01	0.042
		753.82		5.190E+00	5.444E+01	9.521E+01	6.140E+00	0.055
SB-126		666.33		2.020E-01	2.766E+00	4.846E+00	2.957E-01	0.042
		695.00		-2.309E+00	2.946E+00	4.778E+00	2.972E-01	-0.483
		697.00		-2.205E+00	9.971E+00	1.700E+01	1.059E+00	-0.130
		720.50	*	3.516E+00	5.741E+00	1.037E+01	6.558E-01	0.339
SN-126		64.28		6.376E+01	3.343E+01	5.900E+01	9.486E+00	1.081
		86.94		7.663E+00	1.576E+01	2.711E+01	1.126E+01	0.283
		87.57	*	1.658E+00	3.727E+00	6.523E+00	6.190E-01	0.254
SB-127	+	252.40		1.675E+02	3.047E+02	3.488E+02	1.458E+02	0.480
		411.60		-1.601E+02	5.853E+02	1.014E+03	1.488E+02	-0.158
		444.90		1.110E+01	4.310E+02	7.630E+02	8.567E+01	0.015
		473.00		1.386E+01	9.222E+01	1.442E+02	1.678E+01	0.096
		543.30		5.058E+02	8.040E+02	1.458E+03	1.959E+02	0.347
		603.50		-2.268E+02	5.537E+02	9.328E+02	1.056E+02	-0.243
		685.70	*	2.493E+01	6.349E+01	1.133E+02	1.145E+01	0.220
		698.50		-2.219E+02	6.556E+02	1.105E+03	1.652E+02	-0.201
		783.70		-7.190E+01	1.532E+02	2.537E+02	2.910E+01	-0.283
I-131		284.30		2.160E+01	6.748E+01	1.140E+02	8.333E+00	0.190
		364.48	*	1.151E+00	4.838E+00	8.680E+00	5.829E-01	0.133
		636.97		1.542E+01	6.279E+01	1.114E+02	7.553E+00	0.138
TE-132		228.16	*	3.133E+00	3.707E+01	6.214E+01	9.364E+00	0.050
BA-133		79.62		-1.330E+01	6.082E+01	1.046E+02	1.636E+01	-0.127

---- Non-Identified Nuclides ----

Nuclide	Ided	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		81.00		-1.879E+00	4.596E+00	7.827E+00	1.274E+00	-0.240
		276.40		-2.884E+00	1.480E+01	2.431E+01	3.264E+00	-0.119
		302.85		-8.535E-01	5.820E+00	9.550E+00	1.155E+00	-0.089
		356.02	*	-1.463E-01	1.827E+00	2.842E+00	3.336E-01	-0.051
		383.85		6.262E-01	1.127E+01	1.999E+01	2.173E+00	0.031
CS-134		563.23		-1.058E+01	1.219E+01	1.994E+01	1.240E+00	-0.531
		569.32		-6.818E-01	7.228E+00	1.254E+01	7.861E-01	-0.054
		604.70		-9.241E-01	1.487E+00	2.125E+00	1.306E-01	-0.435
		795.84	*	-3.806E-01	1.324E+00	2.237E+00	1.491E-01	-0.170
		801.93		2.140E+01	1.427E+01	2.569E+01	1.717E+00	0.833
		1365.15		3.278E+00	5.029E+01	9.039E+01	5.947E+00	0.036
CS-135		268.24	*	5.241E+00	6.286E+00	1.086E+01	9.173E-01	0.482
CS-136	+	66.88		6.792E+01	8.300E+01	8.106E+01	1.310E+01	0.838
		86.36		-4.792E+01	5.371E+01	8.917E+01	1.197E+01	-0.537
		153.25		-1.278E+01	2.909E+01	4.840E+01	3.855E+00	-0.264
	+	163.92		6.936E+01	6.670E+01	8.613E+01	7.039E+00	0.805
		176.60		1.414E+00	1.659E+01	2.806E+01	2.116E+00	0.050
		273.65		4.405E+00	1.826E+01	3.077E+01	2.305E+00	0.143
		340.55		1.953E+00	4.883E+00	8.808E+00	5.862E-01	0.222
		818.51		1.642E+00	2.767E+00	5.048E+00	3.376E-01	0.325
		1048.07	*	-8.974E-01	3.885E+00	6.880E+00	4.774E-01	-0.130
		1235.36		4.006E+00	1.559E+01	2.895E+01	2.907E+00	0.138
BA-137M		661.65	*	5.152E-01	1.259E+00	2.258E+00	1.373E-01	0.228
CS-137		661.66	*	5.423E-01	1.331E+00	2.386E+00	1.457E-01	0.227
BA-140	+	162.67		4.893E+01	4.703E+01	5.992E+01	4.498E+00	0.817
		304.87		-1.728E+01	5.628E+01	9.115E+01	2.504E+01	-0.190
		423.73		2.654E+01	7.565E+01	1.353E+02	4.302E+01	0.196
		537.31	*	-2.201E+00	1.076E+01	1.851E+01	6.031E+00	-0.119
CE-141		145.44	*	-1.015E-01	2.927E+00	4.953E+00	3.357E-01	-0.021
CE-144		133.51	*	-3.391E+00	9.352E+00	1.567E+01	2.269E+00	-0.216
PM-144	+	476.78		2.058E+00	5.362E+00	4.513E+00	3.198E-01	0.456
		618.01		4.847E-01	1.068E+00	1.936E+00	1.248E-01	0.250
		696.49	*	2.504E-01	1.135E+00	2.013E+00	1.255E-01	0.124
PM-146		453.88	*	-9.129E-01	1.588E+00	2.694E+00	2.343E-01	-0.339
		633.25		1.039E+01	4.896E+01	8.665E+01	3.195E+01	0.120
		735.93		-2.554E+00	4.962E+00	8.149E+00	2.282E+00	-0.313
		747.24		-2.776E+00	3.376E+00	5.396E+00	6.911E-01	-0.514
ND-147		91.11		-7.985E+00	1.521E+01	2.566E+01	2.474E+00	-0.311
		531.02	*	-5.743E+00	2.332E+01	4.011E+01	5.471E+00	-0.143
PM-149		285.95	*	-3.748E+02	5.713E+03	9.434E+03	1.376E+03	-0.040
EU-152	+	121.78		3.145E+00	3.803E+00	5.773E+00	4.691E-01	0.545
		344.31	*	3.390E-01	3.695E+00	6.578E+00	4.582E-01	0.052
		963.37		3.973E+00	9.929E+00	1.643E+01	1.110E+00	0.242
GD-153		69.67		3.380E+01	9.622E+01	1.533E+02	1.477E+01	0.221
		83.37		6.526E+02	6.927E+02	1.233E+03	1.156E+02	0.529
		97.43	*	4.601E+00	3.755E+00	6.725E+00	5.435E-01	0.684
		103.18		-1.754E+00	5.010E+00	8.496E+00	6.382E-01	-0.206
EU-154	+	123.07		2.208E+00	2.673E+00	4.125E+00	4.049E-01	0.535
		247.93		1.488E+01	1.561E+01	2.702E+01	2.762E+00	0.551

---- Non-Identified Nuclides ----

Nuclide		Line Energy (KEV)		Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		591.76		4.333E-01	2.471E+01	3.799E+01	3.786E+00	0.011
		723.30		-4.087E+00	6.522E+00	1.069E+01	8.041E-01	-0.382
		756.86		-2.447E+00	2.635E+01	4.538E+01	4.778E+00	-0.054
		873.20		1.342E+00	1.109E+01	1.928E+01	2.134E+00	0.070
		996.30		-8.532E+00	1.363E+01	1.964E+01	3.319E+00	-0.434
	+	1004.76		1.142E+01	1.011E+01	1.251E+01	1.283E+00	0.913
		1274.51	*	-9.829E-01	3.694E+00	6.485E+00	6.119E-01	-0.152
EU-155		86.54		-1.526E+00	4.575E+00	7.801E+00	7.438E-01	-0.196
		105.31	*	-1.347E+00	5.172E+00	8.792E+00	6.562E-01	-0.153
TB-160		86.79		1.280E+00	1.228E+01	2.127E+01	2.013E+00	0.060
		298.57		2.160E+00	4.872E+00	7.408E+00	4.929E-01	0.292
		879.36	*	3.445E+00	4.968E+00	9.124E+00	6.263E-01	0.378
		962.29		8.650E+00	1.890E+01	3.139E+01	2.123E+00	0.276
		966.15		-1.101E+00	1.030E+01	1.066E+01	7.197E-01	-0.103
		1177.93		-9.499E+00	9.790E+00	1.585E+01	9.196E-01	-0.599
TM-171		51.87		8.527E+01	1.338E+03	1.701E+03	2.047E+02	0.050
		59.40		-3.883E+02	1.998E+03	3.120E+03	3.357E+02	-0.124
	+	66.72	*	2.300E+03	2.795E+03	3.088E+03	3.047E+02	0.745
HF-181	+	56.28		1.457E+02	1.092E+02	1.256E+02	1.423E+01	1.160
		57.53		2.257E+01	4.112E+01	6.664E+01	7.394E+00	0.339
	+	65.20		7.423E+01	9.020E+01	9.675E+01	9.686E+00	0.767
		133.02		-8.675E-01	2.976E+00	5.009E+00	3.230E-01	-0.173
		136.25		4.701E+00	2.744E+01	4.208E+01	2.723E+00	0.112
		345.85		-5.597E-01	7.277E+00	1.286E+01	8.050E-01	-0.044
		482.03	*	1.305E-01	1.635E+00	2.885E+00	1.726E-01	0.045
TA-182	+	67.75		9.333E+00	1.134E+01	1.079E+01	1.055E+00	0.865
		100.10		-3.315E+00	8.499E+00	1.441E+01	1.123E+00	-0.230
		222.10		-7.087E-01	1.429E+01	2.383E+01	1.643E+00	-0.030
		1121.28		3.785E+00	4.445E+00	8.548E+00	5.214E-01	0.443
		1189.05		4.988E+00	8.542E+00	1.638E+01	9.532E-01	0.305
		1221.42	*	2.191E-01	5.215E+00	9.485E+00	5.571E-01	0.023
		1230.97		3.252E+00	1.366E+01	2.231E+01	1.313E+00	0.146
IR-192	+	295.96		1.197E+01	7.275E+00	6.801E+00	4.591E-01	1.760
		308.46		1.779E+00	4.148E+00	7.013E+00	4.661E-01	0.254
		316.51	*	2.646E-01	1.428E+00	2.387E+00	1.565E-01	0.111
		468.07		-2.145E+00	2.417E+00	4.003E+00	2.728E-01	-0.536
		604.41		-1.355E+01	2.031E+01	2.882E+01	3.318E+00	-0.470
		612.46		2.026E+01	2.634E+01	4.348E+01	3.399E+00	0.466
HG-203		70.83		-1.906E+01	5.431E+01	9.325E+01	1.326E+01	-0.204
		72.87		-1.910E+01	3.006E+01	5.088E+01	7.006E+00	-0.375
		82.60		-3.028E+01	5.320E+01	8.988E+01	1.278E+01	-0.337
		279.20	*	1.456E+00	1.674E+00	2.899E+00	2.049E-01	0.502
BI-207		569.67		-5.663E-01	1.158E+00	1.951E+00	1.191E-01	-0.290
		897.83		2.469E+02	8.174E+02	1.453E+03	1.005E+02	0.170
	+	1063.62	*	8.867E-01	1.139E+00	3.049E+00	1.948E-01	0.291
		1442.20		9.060E+02	9.317E+02	1.852E+03	1.119E+02	0.489
		1770.23		-1.230E+01	2.112E+01	3.470E+01	1.979E+00	-0.354
TL-208		75.00		-1.051E+01	5.259E+01	9.068E+01	1.164E+01	-0.116
		277.35		-1.822E+00	1.523E+01	2.511E+01	2.792E+00	-0.073

Sample ID : G138851003 Acquisition date : 1-JUL-2005 15:14:04

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		510.84		6.224E+01	1.135E+01	1.938E+01	1.995E+00	3.212
		583.14	*	2.099E+00	1.510E+00	2.823E+00	1.965E-01	0.743
		763.30		2.440E+01	7.960E+01	1.253E+02	1.597E+01	0.195
		860.37		-1.110E+01	9.596E+00	1.455E+01	1.105E+00	-0.763
		1093.90		1.803E+02	3.279E+02	6.246E+02	1.406E+02	0.289
BI-210		46.50	*	3.795E+02	4.260E+02	7.025E+02	7.931E+01	0.540
PB-210		46.50	*	3.795E+02	4.260E+02	7.025E+02	7.931E+01	0.540
PB-211		404.84	*	2.731E+01	3.741E+01	6.158E+01	3.839E+01	0.443
		427.08		-1.317E+01	8.046E+01	1.396E+02	8.626E+01	-0.094
		831.96		-2.029E+00	4.480E+01	7.668E+01	4.787E+01	-0.026
BI-212		727.18	*	3.497E+00	1.040E+01	1.846E+01	1.502E+00	0.189
PB-212		74.80		-6.421E+00	1.698E+01	2.907E+01	3.853E+00	-0.221
		87.30		1.050E+01	1.743E+01	3.061E+01	4.218E+00	0.343
	+	115.19		2.164E+02	2.414E+02	2.861E+02	1.927E+01	0.756
		238.63	*	2.571E+00	2.474E+00	4.284E+00	3.518E-01	0.600
		300.09		-1.062E+01	3.441E+01	4.942E+01	4.380E+00	-0.215
BI-214	+	609.31	*	7.499E+00	6.288E+00	6.019E+00	4.825E-01	1.246
	+	768.36		6.248E+01	5.545E+01	4.464E+01	3.935E+00	1.400
		934.06		-1.709E+01	3.924E+01	6.857E+01	6.343E+00	-0.249
		1120.29		1.466E+01	9.309E+00	1.874E+01	1.688E+00	0.783
		1238.11		7.410E-01	2.347E+01	4.233E+01	3.479E+00	0.018
	+	1377.67		6.835E+01	3.635E+01	5.819E+01	5.087E+00	1.175
PB-214		74.81		-1.080E+01	2.878E+01	4.927E+01	5.897E+00	-0.219
		77.11		1.243E+01	1.597E+01	2.836E+01	3.421E+00	0.438
		87.30		1.874E+01	3.109E+01	5.463E+01	6.834E+00	0.343
		241.98		-1.047E+01	1.466E+01	2.353E+01	2.086E+00	-0.445
	+	295.21		1.551E+01	9.478E+00	1.023E+01	9.353E-01	1.516
	+	351.92	*	6.534E+00	6.215E+00	6.050E+00	5.182E-01	1.080
RN-219		271.23		-5.035E+00	9.403E+00	1.516E+01	1.340E+00	-0.332
		401.81	*	-4.360E+00	1.498E+01	2.602E+01	3.533E+00	-0.168
RA-223	+	122.32		7.488E+01	9.052E+01	1.367E+02	9.937E+00	0.548
		144.24		7.869E+00	3.075E+01	5.260E+01	4.130E+00	0.150
		154.21		-7.119E-02	1.623E+01	2.751E+01	2.143E+00	-0.003
		269.46		1.389E+00	7.377E+00	1.238E+01	8.694E-01	0.112
		323.87	*	-1.460E+01	2.721E+01	4.330E+01	7.259E+00	-0.337
		338.28		6.819E+00	3.666E+01	6.548E+01	7.097E+00	0.104
		445.03		-7.082E+00	8.083E+01	1.420E+02	1.465E+01	-0.050
RA-224		240.98	*	-3.821E+00	2.794E+01	4.616E+01	3.173E+00	-0.083
AC-227		79.80		-1.530E+01	7.777E+01	1.338E+02	2.953E+01	-0.114
		236.00		-1.607E+01	9.646E+00	1.453E+01	1.626E+00	-1.106
		256.20	*	-5.804E+00	1.892E+01	2.739E+01	3.995E+00	-0.212
		286.10		-6.341E+00	6.574E+01	1.084E+02	1.318E+01	-0.059
		299.80		-1.008E+01	6.334E+01	9.205E+01	1.550E+01	-0.109
		304.40		2.238E+01	7.691E+01	1.292E+02	2.302E+01	0.173
		329.70		-2.748E+01	3.589E+01	6.096E+01	7.863E+00	-0.451
		334.20		-6.752E+01	9.065E+01	1.532E+02	2.883E+01	-0.441
TH-227		79.80		-1.505E+01	7.650E+01	1.316E+02	2.904E+01	-0.114
		94.00		1.563E+02	1.070E+02	1.820E+02	3.956E+01	0.859
		236.00		-1.582E+01	9.460E+00	1.431E+01	1.400E+00	-1.106

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		256.20	*	-5.713E+00	1.863E+01	2.696E+01	4.660E+00	-0.212
		286.10		-6.244E+00	6.504E+01	1.067E+02	1.070E+02	-0.059
		299.80		-9.897E+00	6.222E+01	9.042E+01	1.501E+01	-0.109
		304.40		2.201E+01	7.566E+01	1.271E+02	2.236E+01	0.173
		329.70		-2.706E+01	3.534E+01	6.003E+01	7.663E+00	-0.451
		334.20		-6.625E+01	8.892E+01	1.504E+02	2.785E+01	-0.441
AC-228		209.25		-2.732E+00	2.241E+01	3.722E+01	2.382E+01	-0.073
		338.32		1.283E+00	8.822E+00	1.570E+01	6.414E+00	0.082
		463.01		1.062E+01	2.255E+01	4.068E+01	9.555E+00	0.261
		794.95		-7.345E+00	2.527E+01	4.254E+01	9.665E+00	-0.173
		911.21	*	2.866E+00	5.274E+00	8.450E+00	8.434E-01	0.339
		964.77		-4.675E+00	4.110E+01	4.246E+01	1.021E+01	-0.110
	+	969.11		3.605E+00	1.460E+01	1.361E+01	3.092E+00	0.265
RA-228		209.25		-2.732E+00	2.241E+01	3.722E+01	2.382E+01	-0.073
		338.32		1.283E+00	8.822E+00	1.570E+01	6.414E+00	0.082
		463.01		1.062E+01	2.255E+01	4.068E+01	9.555E+00	0.261
		794.95		-7.345E+00	2.527E+01	4.254E+01	9.665E+00	-0.173
		911.21	*	2.866E+00	5.274E+00	8.450E+00	8.434E-01	0.339
		964.77		-4.675E+00	4.110E+01	4.246E+01	1.021E+01	-0.110
	+	969.11		3.605E+00	1.460E+01	1.361E+01	3.092E+00	0.265
TH-228		84.40		9.712E+01	1.218E+02	2.150E+02	2.937E+01	0.452
		238.60	*	2.605E+00	2.475E+00	4.288E+00	3.521E-01	0.608
		300.10		-1.078E+01	3.498E+01	4.939E+01	2.915E+01	-0.218
TH-229		85.43		-4.283E-01	8.581E+00	1.480E+01	1.394E+00	-0.029
		88.47		2.966E-01	4.985E+00	8.617E+00	8.119E-01	0.034
		100.00		-3.494E+00	8.756E+00	1.484E+01	1.158E+00	-0.235
		193.63	*	-9.771E+00	2.106E+01	3.464E+01	2.393E+00	-0.282
		210.97		6.064E+00	2.966E+01	5.014E+01	3.460E+00	0.121
PA-231		283.67	*	-2.466E+01	6.255E+01	1.014E+02	1.440E+01	-0.243
		301.29		7.853E+00	2.209E+01	3.728E+01	4.078E+00	0.211
		330.00		-2.848E+01	7.752E+01	1.340E+02	4.213E+01	-0.212
TH-231		84.21		1.855E+01	2.269E+01	3.990E+01	7.273E+00	0.465
		236.00		-1.605E+01	9.633E+00	1.451E+01	1.623E+00	-1.106
		256.20		-5.796E+00	1.890E+01	2.735E+01	3.989E+00	-0.212
		269.46	*	1.389E+00	7.377E+00	1.238E+01	1.003E+00	0.112
		271.23		-5.035E+00	9.406E+00	1.516E+01	1.539E+00	-0.332
		283.67		-2.466E+01	6.255E+01	1.014E+02	1.440E+01	-0.243
		301.29		7.853E+00	2.208E+01	3.728E+01	3.368E+00	0.211
		329.85		-1.967E+01	2.463E+01	4.172E+01	5.791E+00	-0.472
	+	351.07		1.878E+01	1.784E+01	1.288E+01	8.761E-01	1.458
		401.81		-4.360E+00	1.498E+01	2.602E+01	2.828E+00	-0.168
TH-232		238.59	*	2.575E+00	2.436E+00	4.220E+00	3.465E-01	0.610
		911.20		2.838E+00	5.244E+00	8.400E+00	8.384E-01	0.338
		964.40		-1.870E+00	4.100E+01	4.311E+01	1.037E+01	-0.043
	+	969.11		3.585E+00	1.452E+01	1.354E+01	3.075E+00	0.265
PA-233		75.28		1.014E+01	1.405E+02	2.446E+02	3.862E+01	0.041
		86.59		-2.009E+01	7.459E+01	1.272E+02	3.447E+01	-0.158
		300.12		-5.636E+00	1.749E+01	2.508E+01	3.466E+00	-0.225
		311.98	*	-1.122E+00	2.642E+00	4.259E+00	2.931E-01	-0.263

Sample ID : G138851003 Acquisition date : 1-JUL-2005 15:14:04

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		340.50		9.114E+00	2.227E+01	4.002E+01	9.244E+00	0.228
		398.62		3.471E+01	7.556E+01	1.362E+02	3.520E+01	0.255
		415.76		7.541E+01	6.451E+01	1.175E+02	2.419E+01	0.642
PA-234		63.00		2.253E+02	1.085E+02	1.901E+02	3.131E+01	1.185
		94.67		-2.729E+01	9.685E+00	1.410E+01	1.729E+00	-1.936
		98.44		1.195E+00	4.478E+00	7.696E+00	4.286E+00	0.155
		99.70		-1.445E+01	2.296E+01	3.854E+01	3.020E+00	-0.375
		111.00		-5.812E+00	9.785E+00	1.455E+01	1.595E+00	-0.400
		131.20		-1.573E+00	4.621E+00	7.769E+00	5.003E-01	-0.203
		152.70		-1.057E+01	1.373E+01	2.236E+01	3.612E+00	-0.473
	+	186.00		5.738E+01	1.350E+02	7.744E+01	2.384E+01	0.741
		226.40		-6.372E+00	1.685E+01	2.761E+01	3.353E+00	-0.231
		227.20		-1.166E+01	1.820E+01	2.944E+01	2.029E+00	-0.396
		248.90		1.913E+01	3.603E+01	6.112E+01	1.375E+01	0.313
		293.70		-4.236E-01	3.016E+01	4.427E+01	7.270E+00	-0.010
		369.80		4.625E+00	3.293E+01	5.864E+01	1.224E+01	0.079
		568.70		4.371E+00	3.578E+01	6.308E+01	3.852E+00	0.069
		569.50		-1.074E+00	9.980E+00	1.729E+01	1.056E+00	-0.062
		574.00		4.984E+00	5.431E+01	9.548E+01	5.832E+00	0.052
		699.00		-3.589E+00	2.427E+01	4.163E+01	7.547E+00	-0.086
		706.10		3.888E+00	3.780E+01	6.586E+01	2.911E+01	0.059
		733.00		5.343E+00	1.217E+01	2.196E+01	4.704E+00	0.243
		742.81		6.059E+01	6.390E+01	9.374E+01	6.278E+01	0.646
		796.30		-1.021E+01	2.793E+01	4.665E+01	1.235E+01	-0.219
	+	805.80		1.149E+02	8.436E+01	5.899E+01	1.779E+01	1.947
		819.60		-1.311E+01	4.554E+01	7.610E+01	2.864E+01	-0.172
		826.30		-6.024E+00	3.041E+01	5.131E+01	2.279E+01	-0.117
		831.60		-2.415E+00	2.326E+01	3.961E+01	1.162E+01	-0.061
		876.40		4.925E+00	3.046E+01	5.259E+01	5.399E+01	0.094
		880.51		-8.221E+00	1.070E+01	1.703E+01	1.170E+00	-0.483
		883.24		2.180E+00	1.059E+01	1.841E+01	1.234E+01	0.118
		899.00		1.469E+01	2.897E+01	5.134E+01	2.229E+01	0.286
		925.00		-9.294E+00	3.805E+01	6.799E+01	4.664E+00	-0.137
		926.50		-6.459E+00	5.977E+00	9.442E+00	2.335E+00	-0.684
		946.00	*	1.579E+00	1.015E+01	1.658E+01	2.985E+00	0.095
		949.00		3.527E+00	1.389E+01	2.595E+01	1.765E+00	0.136
		980.50		9.154E+00	2.402E+01	4.511E+01	3.026E+00	0.203
		1394.10		4.757E+01	5.435E+01	8.934E+01	5.789E+01	0.533
PA-234M	+	766.40		1.499E+03	1.752E+03	8.873E+02	6.785E+02	1.690
		1001.03	*	1.786E+02	1.630E+02	3.167E+02	2.627E+01	0.564
TH-234		63.29	*	1.961E+02	9.372E+01	1.609E+02	3.027E+01	1.219
		92.38		1.495E+02	3.876E+01	5.449E+01	9.888E+00	2.743
	+	112.81		5.339E+02	6.017E+02	7.230E+02	1.247E+02	0.739
U-235		89.95		-2.534E+02	9.621E+01	8.101E+01	2.512E+01	-3.128
		93.35		1.507E+02	5.338E+01	6.319E+01	1.771E+01	2.384
		105.00		-2.141E+01	5.090E+01	8.537E+01	2.519E+01	-0.251
		143.76	*	4.017E+00	9.526E+00	1.635E+01	2.712E+00	0.246
	+	163.33		2.865E+01	2.795E+01	3.593E+01	6.600E+00	0.797
	+	185.71		2.125E+00	4.959E+00	2.866E+00	1.982E-01	0.741

Sample ID : G138851003 Acquisition date : 1-JUL-2005 15:14:04

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		205.31		1.632E+01	2.020E+01	3.465E+01	6.039E+00	0.471
NP-237		86.48	*	-4.569E+00	1.117E+01	1.893E+01	4.296E+00	-0.241
		95.87		-1.499E+02	6.183E+01	7.650E+01	1.875E+01	-1.960
U-238		63.29	*	1.961E+02	9.372E+01	1.609E+02	3.027E+01	1.219
NP-239		99.55		-5.267E+00	7.555E+00	1.264E+01	9.927E-01	-0.417
		117.00	*	2.737E+00	8.754E+00	1.516E+01	1.008E+00	0.181
		209.75		7.836E+00	3.053E+01	5.169E+01	3.568E+00	0.152
		228.18		8.353E-01	9.292E+00	1.558E+01	1.074E+00	0.054
		277.60		-8.234E-01	7.294E+00	1.203E+01	8.137E-01	-0.068
		334.31		-3.887E+01	4.964E+01	8.451E+01	5.388E+00	-0.460
AM-241		59.54	*	-1.678E+00	1.157E+01	1.810E+01	2.036E+00	-0.093
AM-242		99.55		-1.229E+02	1.763E+02	2.951E+02	2.317E+01	-0.417
		103.70	*	-8.646E+01	1.066E+02	1.772E+02	1.324E+01	-0.488
CM-247		278.00		5.904E+00	3.006E+01	5.038E+01	3.407E+00	0.117
		287.40		3.987E+01	5.046E+01	8.712E+01	5.853E+00	0.458
		402.60	*	-9.272E-02	1.337E+00	2.354E+00	1.351E-01	-0.039
CF-249	+	252.85		2.677E+01	4.743E+01	5.533E+01	3.790E+00	0.484
		333.44		4.443E-01	6.490E+00	1.153E+01	7.361E-01	0.039
		387.95	*	7.216E-01	1.459E+00	2.650E+00	1.523E-01	0.272
CF-251		176.00	*	-7.650E-01	5.361E+00	8.983E+00	6.224E-01	-0.085
		227.00		-1.106E+01	1.614E+01	2.605E+01	1.795E+00	-0.425
		285.00		2.492E+01	7.257E+01	1.225E+02	8.247E+00	0.203
ANH-511		511.00	*	1.393E+01	2.138E+00	4.117E+00	2.487E-01	3.383

VAX/VMS Nuclide Identification Report Generated

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*********************************************************************
*                          General Eng. Labs, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
*                                                                   *
*                            DETECTOR DATA                          *
*                                                                   *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851003 *
* Acquisition date :  1-JUL-2005 15:14:04 Detector SN#     : 2605   *
* Detector ID       : GAMMA10             Sensitivity      : 3.000  *
* Geometry          : 2L_MB               Energy tolerance: 2.000   *
* Elapsed live time:    0 08:00:00.00     Abundance limit  : 75.000  *
* Elapsed real time:    0 08:00:02.94     Half life ratio  :  8.000  *
*********************************************************************
*                                                                   *
*                            SAMPLE DATA                            *
*                                                                   *
* Sample date       : 15-JUN-2005 09:07:00 Nuclide Library :        *
* Sample ID         : G138851003           Analyst initials: AKB    *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000 *
*********************************************************************
*                                                                   *
*                              QC DATA                              *
* Standard Weight   :   0.00000                                     *
* CALIB. DATE/TIME : 12-JAN-2005 14:39:51 MS Isotope      :         *
* MSD DPM           :    0.000            MSD Isotope     :         *
* LCS DPM           :    0.000            LCS Isotope     :         *
* LCSD DPM          :    0.000            LCSD Isotope    :         *
*********************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
BE-7	9.946E+00	2.592E+01	2.184E+01	0.000E+00
CO-57	1.087E+00	1.313E+00	1.994E+00	0.000E+00
Y-91	4.024E+00	2.334E+00	2.510E+00	0.000E+00
NB-95	4.365E+00	3.865E+00	2.581E+00	0.000E+00
MO-99	6.785E+01	1.254E+02	1.333E+02	0.000E+00
SN-113	2.188E+00	2.367E+00	2.869E+00	0.000E+00
CE-139	1.820E+00	1.749E+00	2.017E+00	0.000E+00
PM-147	2.254E+06	2.724E+06	4.038E+06	0.000E+00
BI-211	1.878E+01	1.784E+01	1.288E+01	0.000E+00
RA-226	7.499E+00	6.288E+00	4.310E+00	0.000E+00
TH-230	7.499E+00	6.288E+00	4.310E+00	0.000E+00
U-234	1.551E+01	9.478E+00	8.929E+00	0.000E+00

---- Non-Identified Nuclides ----

Key-Line Activity	K.L.	Act error	MDA

Nuclide	(pCi/LITER	) Ided	(pCi/LITER	)	
NA-22	-3.552E-01	1.323E+00	2.322E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	1.081E+08	0.000E+00	0.000E+00	SHORT HLIF
AL-26	6.266E-01	1.189E+00	2.406E+00	0.000E+00	NOT IDENT.
K-40	2.403E+01	1.660E+01	3.277E+01	0.000E+00	NOT IDENT.
SC-46	2.580E+00	1.838E+00	2.657E+00	0.000E+00	FAIL ABUN
V-48	-4.884E-01	2.228E+00	3.998E+00	0.000E+00	FAIL ABUN
CR-51	6.445E+00	1.573E+01	2.661E+01	0.000E+00	NOT IDENT.
MN-54	3.031E-03	1.337E+00	2.301E+00	0.000E+00	NOT IDENT.
CO-56	5.185E-01	1.955E+00	2.480E+00	0.000E+00	FAIL ABUN
MN-56	0.000E+00	3.771E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-58	1.211E+00	1.503E+00	2.511E+00	0.000E+00	NOT IDENT.
FE-59	2.295E+00	2.813E+00	5.487E+00	0.000E+00	FAIL ABUN
CO-60	1.614E+00	1.287E+00	2.635E+00	0.000E+00	NOT IDENT.
ZN-65	-1.778E+00	2.891E+00	4.908E+00	0.000E+00	NOT IDENT.
SE-75	-4.296E-01	1.833E+00	3.011E+00	0.000E+00	FAIL ABUN
KR-85	-1.509E+03	4.222E+02	5.957E+02	0.000E+00	NOT IDENT.
SR-85	-7.840E+00	2.194E+00	3.095E+00	0.000E+00	NOT IDENT.
Y-88	-1.586E-01	1.554E+00	2.864E+00	0.000E+00	NOT IDENT.
NB-94	-5.992E-02	1.155E+00	1.996E+00	0.000E+00	NOT IDENT.
NB-95M	-1.278E+02	9.889E+01	1.532E+02	0.000E+00	NOT IDENT.
ZR-95	-3.325E-01	2.447E+00	4.197E+00	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	1.000E+20	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.068E+00	1.561E+00	2.607E+00	0.000E+00	FAIL ABUN
RH-106	1.325E-01	1.139E+01	1.990E+01	0.000E+00	NOT IDENT.
RU-106	-8.155E-01	1.154E+01	2.002E+01	0.000E+00	NOT IDENT.
AG-108M	-5.608E-01	1.263E+00	2.165E+00	0.000E+00	NOT IDENT.
CD-109	3.503E+01	3.633E+01	6.452E+01	0.000E+00	NOT IDENT.
AG-110M	4.198E-01	1.198E+00	2.147E+00	0.000E+00	NOT IDENT.
CD-115	1.449E+02	5.828E+02	1.040E+03	0.000E+00	NOT IDENT.
SN-115	9.562E+01	1.193E+02	2.299E+02	0.000E+00	NOT IDENT.
SN-117M	2.981E-01	2.540E+00	4.316E+00	0.000E+00	NOT IDENT.
TE-123M	3.106E-01	1.242E+00	2.121E+00	0.000E+00	NOT IDENT.
SB-124	-2.224E+00	3.410E+00	5.569E+00	0.000E+00	NOT IDENT.
SB-125	7.745E-01	3.603E+00	6.414E+00	0.000E+00	NOT IDENT.
TE-125M	-7.436E+01	5.053E+02	7.703E+02	0.000E+00	NOT IDENT.
I-126	4.820E-01	6.601E+00	1.157E+01	0.000E+00	NOT IDENT.
SB-126	3.516E+00	5.741E+00	1.037E+01	0.000E+00	NOT IDENT.
SN-126	1.658E+00	3.727E+00	6.523E+00	0.000E+00	NOT IDENT.
SB-127	2.493E+01	6.349E+01	1.133E+02	0.000E+00	FAIL ABUN
I-131	1.151E+00	4.838E+00	8.680E+00	0.000E+00	NOT IDENT.
I-132	0.000E+00	3.676E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	3.133E+00	3.707E+01	6.214E+01	0.000E+00	NOT IDENT.
BA-133	-1.463E-01	1.827E+00	2.842E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	6.248E+05	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-3.806E-01	1.324E+00	2.237E+00	0.000E+00	NOT IDENT.
CS-135	5.241E+00	6.286E+00	1.086E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	3.824E+18	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-8.974E-01	3.885E+00	6.880E+00	0.000E+00	FAIL ABUN
BA-137M	5.152E-01	1.259E+00	2.258E+00	0.000E+00	NOT IDENT.
CS-137	5.423E-01	1.331E+00	2.386E+00	0.000E+00	NOT IDENT.
BA-140	-2.201E+00	1.076E+01	1.851E+01	0.000E+00	FAIL ABUN
LA-140	0.000E+00	1.212E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-141	-1.015E-01	2.927E+00	4.953E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	1.123E+04	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-3.391E+00	9.352E+00	1.567E+01	0.000E+00	NOT IDENT.
PM-144	2.504E-01	1.135E+00	2.013E+00	0.000E+00	FAIL ABUN
PR-144	0.000E+00	4.533E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-9.129E-01	1.588E+00	2.694E+00	0.000E+00	NOT IDENT.

ND-147	-5.743E+00	2.332E+01	4.011E+01	0.000E+00	NOT IDENT.
PM-149	-3.748E+02	5.713E+03	9.434E+03	0.000E+00	NOT IDENT.
EU-152	3.390E-01	3.695E+00	6.578E+00	0.000E+00	FAIL ABUN
GD-153	4.601E+00	3.755E+00	6.725E+00	0.000E+00	NOT IDENT.
EU-154	-9.829E-01	3.694E+00	6.485E+00	0.000E+00	FAIL ABUN
EU-155	-1.347E+00	5.172E+00	8.792E+00	0.000E+00	NOT IDENT.
TB-160	3.445E+00	4.968E+00	9.124E+00	0.000E+00	NOT IDENT.
TM-171	2.300E+03	2.795E+03	3.088E+03	0.000E+00	FAIL ABUN
HF-181	1.305E-01	1.635E+00	2.885E+00	0.000E+00	FAIL ABUN
TA-182	2.191E-01	5.215E+00	9.485E+00	0.000E+00	FAIL ABUN
IR-192	2.646E-01	1.428E+00	2.387E+00	0.000E+00	FAIL ABUN
HG-203	1.456E+00	1.674E+00	2.899E+00	0.000E+00	NOT IDENT.
BI-207	8.867E-01	1.139E+00	3.049E+00	0.000E+00	FAIL ABUN
TL-208	2.099E+00	1.510E+00	2.823E+00	0.000E+00	NOT IDENT.
BI-210	3.795E+02	4.260E+02	7.025E+02	0.000E+00	NOT IDENT.
PB-210	3.795E+02	4.260E+02	7.025E+02	0.000E+00	NOT IDENT.
PB-211	2.731E+01	3.741E+01	6.158E+01	0.000E+00	NOT IDENT.
BI-212	3.497E+00	1.040E+01	1.846E+01	0.000E+00	NOT IDENT.
PB-212	2.571E+00	2.474E+00	4.284E+00	0.000E+00	FAIL ABUN
BI-214	0.000E+00	6.288E+00	6.019E+00	0.000E+00	FAIL ABUN
PB-214	0.000E+00	6.215E+00	6.050E+00	0.000E+00	FAIL ABUN
RN-219	-4.360E+00	1.498E+01	2.602E+01	0.000E+00	NOT IDENT.
RA-223	-1.460E+01	2.721E+01	4.330E+01	0.000E+00	FAIL ABUN
RA-224	-3.821E+00	2.794E+01	4.616E+01	0.000E+00	NOT IDENT.
AC-227	-5.804E+00	1.892E+01	2.739E+01	0.000E+00	NOT IDENT.
TH-227	-5.713E+00	1.863E+01	2.696E+01	0.000E+00	NOT IDENT.
AC-228	2.866E+00	5.274E+00	8.450E+00	0.000E+00	FAIL ABUN
RA-228	2.866E+00	5.274E+00	8.450E+00	0.000E+00	FAIL ABUN
TH-228	2.605E+00	2.475E+00	4.288E+00	0.000E+00	NOT IDENT.
TH-229	-9.771E+00	2.106E+01	3.464E+01	0.000E+00	NOT IDENT.
PA-231	-2.466E+01	6.255E+01	1.014E+02	0.000E+00	NOT IDENT.
TH-231	1.389E+00	7.377E+00	1.238E+01	0.000E+00	FAIL ABUN
TH-232	2.575E+00	2.436E+00	4.220E+00	0.000E+00	FAIL ABUN
PA-233	-1.122E+00	2.642E+00	4.259E+00	0.000E+00	NOT IDENT.
PA-234	1.579E+00	1.015E+01	1.658E+01	0.000E+00	FAIL ABUN
PA-234M	1.786E+02	1.630E+02	3.167E+02	0.000E+00	FAIL ABUN
TH-234	0.000E+00	9.372E+01	1.609E+02	0.000E+00	FAIL ABUN
U-235	4.017E+00	9.526E+00	1.635E+01	0.000E+00	FAIL ABUN
NP-237	-4.569E+00	1.117E+01	1.893E+01	0.000E+00	NOT IDENT.
U-238	0.000E+00	9.372E+01	1.609E+02	0.000E+00	NOT IDENT.
NP-239	2.737E+00	8.754E+00	1.516E+01	0.000E+00	NOT IDENT.
AM-241	-1.678E+00	1.157E+01	1.810E+01	0.000E+00	NOT IDENT.
AM-242	-8.646E+01	1.066E+02	1.772E+02	0.000E+00	NOT IDENT.
CM-247	-9.272E-02	1.337E+00	2.354E+00	0.000E+00	NOT IDENT.
CF-249	7.216E-01	1.459E+00	2.650E+00	0.000E+00	FAIL ABUN
CF-251	-7.650E-01	5.361E+00	8.983E+00	0.000E+00	NOT IDENT.
ANH-511	0.000E+00	2.138E+00	4.117E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:14:30.49

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851003.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:04.
Sample ID : G138851003 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA10 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.94 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 2605
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	54.53	78	294	1.47	101.74	99	6	2.70E-03	37.0	
2	4	63.25	121	499	1.56	119.26	112	19	4.20E-03	34.9	7.45E-01
3	4	66.60	69	523	1.57	126.00	112	19	2.40E-03	60.6	
4	0	92.64	377	654	1.88	178.32	173	12	1.31E-02	14.5	
5	0	113.23	64	403	1.76	219.67	215	8	2.23E-03	55.7	
6	0	122.16	46	290	0.64	237.63	234	6	1.60E-03	60.3	
7	0	139.21	71	517	1.79	271.89	269	9	2.46E-03	58.8	
8	0	164.67	70	345	0.72	323.03	319	8	2.42E-03	47.9	
9	0	185.40	317	632	1.54	364.68	357	16	1.10E-02	18.6	
10	0	197.63	110	461	1.16	389.27	385	11	3.81E-03	38.9	
11	0	238.64	110	425	4.99	471.65	467	13	3.83E-03	39.5	
12	0	253.07	31	246	0.90	500.63	498	8	1.08E-03	88.5	
13	0	296.25	115	272	1.20	587.39	582	12	4.01E-03	30.2	
14	0	351.89	142	213	1.49	699.17	694	12	4.94E-03	22.3	
15	0	393.68	41	140	2.23	783.13	779	9	1.44E-03	54.0	
16	0	476.54	44	156	5.30	949.57	943	14	1.54E-03	62.0	
17	0	511.04	514	246	2.49	1018.88	1011	18	1.78E-02	8.5	
18	0	558.60	91	86	1.35	1114.42	1109	11	3.16E-03	22.7	
19	0	596.22	79	121	2.14	1189.98	1185	12	2.74E-03	30.0	
20	0	609.51	130	147	2.10	1216.68	1210	17	4.52E-03	23.2	
21	0	767.39	62	114	5.76	1533.80	1524	20	2.15E-03	44.2	
22	0	805.68	74	90	8.68	1610.69	1602	20	2.57E-03	33.5	
23	0	847.01	24	17	1.04	1693.69	1692	5	8.29E-04	34.4	
24	0	849.72	15	39	1.57	1699.15	1696	9	5.35E-04	76.8	
25	0	867.62	33	66	2.90	1735.09	1730	11	1.13E-03	51.5	
26	0	890.07	39	42	3.23	1780.17	1776	11	1.37E-03	35.5	
27	0	906.78	30	35	1.71	1813.73	1810	9	1.03E-03	40.6	
28	0	923.96	20	13	1.38	1848.23	1846	5	6.93E-04	35.5	
29	0	943.25	27	24	2.31	1886.98	1883	9	9.32E-04	39.4	
30	0	959.26	59	95	9.98	1919.13	1907	24	2.03E-03	46.1	
31	0	970.11	31	55	4.75	1940.91	1933	13	1.07E-03	52.8	
32	1	1000.07	38	50	2.02	2001.09	1994	25	1.33E-03	39.5	2.71E+00
33	1	1005.19	32	45	2.02	2011.37	1994	25	1.12E-03	44.0	
34	0	1033.65	33	48	4.23	2068.52	2063	13	1.13E-03	47.4	
35	0	1039.80	10	32	1.04	2080.87	2078	7	3.43E-04	99.7	
36	0	1062.71	10	14	0.66	2126.87	2125	5	3.47E-04	64.2	
37	0	1072.06	15	21	1.07	2145.66	2143	8	5.31E-04	57.0	
38	4	1085.77	21	8	2.75	2173.19	2171	38	7.33E-04	24.8	4.09E+00

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	4	1088.67	30	17	1.88	2179.00	2171	38	1.04E-03	32.2	
40	4	1101.61	34	14	1.89	2205.00	2171	38	1.19E-03	24.5	
41	0	1137.36	25	27	3.77	2276.78	2272	12	8.51E-04	47.0	
42	2	1219.05	39	42	2.35	2440.82	2435	18	1.34E-03	33.6	1.07E+01
43	2	1223.24	15	17	1.86	2449.23	2435	18	5.18E-04	53.5	
44	0	1227.23	13	36	4.16	2457.23	2453	13	4.35E-04	102.6	
45	0	1256.61	44	23	6.39	2516.22	2508	18	1.54E-03	29.3	
46	0	1293.24	18	18	1.79	2589.78	2587	8	6.41E-04	45.9	
47	0	1299.63	31	27	0.91	2602.61	2596	16	1.06E-03	42.6	
48	0	1346.29	10	38	5.57	2696.31	2686	14	3.43E-04	136.9	
49	0	1376.99	34	11	3.88	2757.94	2750	14	1.20E-03	26.2	
50	0	1427.28	38	66	10.21	2858.90	2849	29	1.32E-03	63.3	
51	0	1476.44	19	17	3.01	2957.59	2952	11	6.42E-04	48.5	
52	0	1513.21	9	10	1.44	3031.42	3029	6	3.06E-04	66.9	
53	0	1521.16	16	16	0.70	3047.39	3044	14	5.71E-04	54.8	
54	0	1542.69	29	6	1.69	3090.60	3087	9	9.91E-04	26.0	
55	0	1578.21	23	14	1.80	3161.91	3158	14	7.99E-04	40.3	
56	0	1587.22	18	11	0.87	3180.00	3174	11	6.25E-04	42.8	
57	0	1607.46	32	17	8.46	3220.63	3210	23	1.10E-03	38.5	
58	0	1719.97	18	21	4.83	3446.49	3440	15	6.17E-04	62.5	
59	1	1752.60	22	6	2.17	3512.00	3509	11	7.49E-04	21.7	1.23E+01
60	1	1755.09	20	10	2.17	3517.00	3509	11	7.09E-04	26.5	
61	0	1823.42	31	24	6.50	3654.14	3642	21	1.09E-03	44.1	
62	3	1877.92	25	7	2.95	3763.54	3758	20	8.57E-04	27.8	2.53E+00
63	3	1882.92	22	8	2.20	3773.58	3758	20	7.68E-04	29.7	
64	0	1927.02	11	21	6.25	3862.09	3855	17	3.66E-04	105.0	
65	5	1978.62	10	6	1.93	3965.66	3963	19	3.62E-04	42.6	2.90E+00
66	5	1981.28	30	11	2.26	3971.00	3963	19	1.02E-03	28.5	
67	0	2007.84	8	10	0.64	4024.31	4021	8	2.71E-04	79.0	

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:14:36.23

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851003.CNF;1
Sample date       : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:04.
Sample ID         : G138851003           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA10              Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00         Elapsed real time: 0 08:00:02.94  0.0%
Energy tolerance : 2.00000 KEV           Analyst Initials : AKB
Abundance limit   : 75.00000            Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 2605
Matrix Spike DPM :                       LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
BE-7	477.59	24	10.42*	1.324E+00	8.038E+00	9.946E+00	260.56
CO-57	122.06	46	85.51*	2.429E+00	1.042E+00	1.087E+00	120.85
	136.47	------	10.47	2.483E+00	------ Line Not Found		------
Y-91	557.57	79	95.08*	1.181E+00	3.312E+00	4.024E+00	57.99
	1204.90	------	0.30	6.382E-01	------ Line Not Found		------
NB-95	765.79	62	99.81*	9.248E-01	3.155E+00	4.365E+00	88.56
MO-99	140.51	47	82.70*	2.485E+00	1.083E+00	6.785E+01	184.78
	181.06	------	6.20	2.362E+00	------ Line Not Found		------
	739.58	------	12.80	9.525E-01	------ Line Not Found		------
SN-113	391.69	41	64.90*	1.510E+00	1.982E+00	2.188E+00	108.22
CE-139	165.85	70	80.35*	2.433E+00	1.676E+00	1.820E+00	96.07
PM-147	121.30	46	0.00*	2.429E+00	2.228E+06	2.254E+06	120.85
BI-211	351.07	84	12.94*	1.627E+00	1.878E+01	1.878E+01	94.97
RA-226	295.21	115	19.20	1.818E+00	1.551E+01	1.551E+01	61.10
	351.92	84	37.20	1.627E+00	6.534E+00	6.534E+00	94.93
	609.31	82	46.30*	1.107E+00	7.499E+00	7.499E+00	83.85
TH-230	295.21	115	19.20	1.818E+00	1.551E+01	1.551E+01	61.10
	351.92	84	37.20	1.627E+00	6.534E+00	6.534E+00	94.93
	609.31	82	46.30*	1.107E+00	7.499E+00	7.499E+00	83.85
U-234	67.67	69	0.37	9.087E-01	9.585E+02	9.585E+02	122.04
	241.98	------	7.49	2.053E+00	------ Line Not Found		------
	295.21	115	19.20*	1.818E+00	1.551E+01	1.551E+01	61.10
	351.92	84	37.20	1.627E+00	6.534E+00	6.534E+00	95.11

Flag: "*" = Keyline

Sample ID : G138851003 Acquisition date : 1-JUL-2005 15:14:04

Total number of lines in spectrum	59	
Number of unidentified lines	30	
Number of lines tentatively identified by NID	29	49.15%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
BE-7	53.44D	1.24	8.038E+00	9.946E+00	25.92E+00	260.56	
CO-57	270.90D	1.04	1.042E+00	1.087E+00	1.313E+00	120.85	
Y-91	58.51D	1.21	3.312E+00	4.024E+00	2.334E+00	57.99	
NB-95	35.06D	1.38	3.155E+00	4.365E+00	3.865E+00	88.56	
MO-99	66.02H	62.7	1.083E+00	6.785E+01	12.54E+01	184.78	
SN-113	115.10D	1.10	1.982E+00	2.188E+00	2.367E+00	108.22	
CE-139	137.66D	1.09	1.676E+00	1.820E+00	1.749E+00	96.07	
PM-147	2.62Y	1.01	2.228E+06	2.254E+06	2.724E+06	120.85	
BI-211	7.04E+08Y	1.00	1.878E+01	1.878E+01	1.784E+01	94.97	
RA-226	1600.00Y	1.00	7.499E+00	7.499E+00	6.288E+00	83.85	
TH-230	7.70E+04Y	1.00	7.499E+00	7.499E+00	6.288E+00	83.85	
U-234	2.45E+05Y	1.00	1.551E+01	1.551E+01	0.948E+01	61.10	
			---------	---------			
	Total Activity :		2.228E+06	2.254E+06			
	Grand Total Activity :		2.228E+06	2.254E+06			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G138851003 Acquisition date : 1-JUL-2005 15:14:04

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	54.53	78	294	1.47	101.74	99	6	2.70E-03	74.1	3.80E-01	T
0	113.23	64	403	1.76	219.67	215	8	2.23E-03	****	2.35E+00	T
0	185.40	57	632	1.54	364.68	357	16	1.99E-03	****	2.34E+00	T
0	197.63	49	461	1.16	389.27	385	11	1.70E-03	****	2.28E+00	T
0	253.07	31	246	0.90	500.63	498	8	1.08E-03	****	2.00E+00	T
0	596.22	79	121	2.14	1189.98	1185	12	2.74E-03	60.0	1.12E+00	
0	805.68	74	90	8.68	1610.69	1602	20	2.57E-03	67.0	8.89E-01	T
0	847.01	8	17	1.04	1693.69	1692	5	2.83E-04	****	8.54E-01	T
0	849.72	15	39	1.57	1699.15	1696	9	5.35E-04	****	8.51E-01	
0	867.62	23	66	2.90	1735.09	1730	11	7.87E-04	****	8.37E-01	T
0	890.07	39	42	3.23	1780.17	1776	11	1.37E-03	70.9	8.19E-01	T
0	906.78	30	35	1.71	1813.73	1810	9	1.03E-03	81.2	8.07E-01	
0	943.25	27	24	2.31	1886.98	1883	9	9.32E-04	78.7	7.81E-01	T
0	959.26	59	95	9.98	1919.13	1907	24	2.03E-03	92.2	7.70E-01	
0	970.11	10	55	4.75	1940.91	1933	13	3.36E-04	****	7.63E-01	T
1	1005.19	32	45	2.02	2011.37	1994	25	1.12E-03	88.0	7.41E-01	T
0	1033.65	19	48	4.23	2068.52	2063	13	6.47E-04	****	7.24E-01	
0	1039.80	10	32	1.04	2080.87	2078	7	3.43E-04	****	7.20E-01	T
0	1062.71	10	14	0.66	2126.87	2125	5	3.47E-04	****	7.07E-01	T
0	1072.06	15	21	1.07	2145.66	2143	8	5.31E-04	****	7.02E-01	
4	1085.77	21	8	2.75	2173.19	2171	38	7.33E-04	49.5	6.95E-01	
4	1088.67	30	17	1.88	2179.00	2171	38	1.04E-03	64.4	6.93E-01	
4	1101.61	34	14	1.89	2205.00	2171	38	1.19E-03	49.1	6.86E-01	
0	1137.36	25	27	3.77	2276.78	2272	12	8.51E-04	94.1	6.69E-01	T
2	1219.05	39	42	2.35	2440.82	2435	18	1.34E-03	67.2	6.32E-01	
0	1227.23	13	36	4.16	2457.23	2453	13	4.35E-04	****	6.29E-01	
0	1256.61	44	23	6.39	2516.22	2508	18	1.54E-03	58.6	6.17E-01	
0	1293.24	13	18	1.79	2589.78	2587	8	4.69E-04	****	6.04E-01	T
0	1299.63	15	27	0.91	2602.61	2596	16	5.25E-04	****	6.01E-01	T
0	1346.29	10	38	5.57	2696.31	2686	14	3.43E-04	****	5.85E-01	
0	1376.99	34	11	3.88	2757.94	2750	14	1.20E-03	52.5	5.76E-01	T
0	1427.28	38	66	10.21	2858.90	2849	29	1.32E-03	****	5.61E-01	
0	1476.44	19	17	3.01	2957.59	2952	11	6.42E-04	96.9	5.48E-01	
0	1513.21	9	10	1.44	3031.42	3029	6	3.06E-04	****	5.39E-01	
0	1521.16	16	16	0.70	3047.39	3044	14	5.71E-04	****	5.37E-01	
0	1542.69	29	6	1.69	3090.60	3087	9	9.91E-04	52.1	5.32E-01	
0	1578.21	23	14	1.80	3161.91	3158	14	7.99E-04	80.6	5.25E-01	
0	1587.22	18	11	0.87	3180.00	3174	11	6.25E-04	85.5	5.23E-01	
0	1607.46	32	17	8.46	3220.63	3210	23	1.10E-03	77.0	5.19E-01	
0	1719.97	10	21	4.83	3446.49	3440	15	3.38E-04	****	5.00E-01	
1	1752.60	22	6	2.17	3512.00	3509	11	7.49E-04	43.3	4.96E-01	
1	1755.09	20	10	2.17	3517.00	3509	11	7.09E-04	53.0	4.96E-01	
0	1823.42	31	24	6.50	3654.14	3642	21	1.09E-03	88.3	4.88E-01	
3	1882.92	22	8	2.20	3773.58	3758	20	7.68E-04	59.4	4.82E-01	
0	1927.02	11	21	6.25	3862.09	3855	17	3.66E-04	****	4.78E-01	
5	1978.62	3	6	1.93	3965.66	3963	19	8.90E-05	****	4.75E-01	
5	1981.28	22	11	2.26	3971.00	3963	19	7.51E-04	****	4.75E-01	
0	2007.84	8	10	0.64	4024.31	4021	8	2.71E-04	****	4.74E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:14:44.64

```
*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                            DETECTOR DATA                              *
*                                                                       *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851003.CNF;1     *
* Acquisition date : 1-JUL-2005 15:14:04.  Detector SN#     : 2605      *
* Detector ID      : GAMMA10               Sensitivity      : 3.00000   *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000    *
* Elapsed live time: 0 08:00:00.00         Abundance limit  : 75.00000  *
* Elapsed real time: 0 08:00:02.94         Half life ratio  : 8.00000   *
*************************************************************************
*                                                                       *
*                            SAMPLE DATA                                *
*                                                                       *
* Sample date      : 15-JUN-2005 09:07:00  Nuclide Library : EPI        *
* Sample ID        : G138851003            Analyst initials: AKB        *
* Batch Number     : 435282                Sample Quantity : 2.00000E+00 LITER *
*************************************************************************
*                                                                       *
*                              QC DATA                                  *
*                                                                       *
* CALIB. DATE/TIME : 12-JAN-2005 14:39:51.7MS Isotope      :           *
* MSD DPM          :                       MSD Isotope     :           *
* LCS DPM          :                       LCS Isotope     :           *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	9.946E+00	2.592E+01	2.184E+01	1.507E+00	0.455
CO-57	1.087E+00	1.313E+00	1.994E+00	1.288E-01	0.545
Y-91	4.024E+00	2.334E+00	2.510E+00	1.531E-01	1.603
NB-95	4.365E+00	3.865E+00	2.581E+00	1.676E-01	1.691
MO-99	6.785E+01	1.254E+02	1.333E+02	8.828E+00	0.509
SN-113	2.188E+00	2.367E+00	2.869E+00	1.747E-01	0.763
CE-139	1.820E+00	1.749E+00	2.017E+00	1.404E-01	0.902
PM-147	2.254E+06	2.724E+06	4.038E+06	2.615E+05	0.558
BI-211	1.878E+01	1.784E+01	1.288E+01	8.761E-01	1.458
RA-226	7.499E+00	6.288E+00	4.310E+00	3.455E-01	1.740
TH-230	7.499E+00	6.288E+00	4.310E+00	3.455E-01	1.740
U-234	1.551E+01	9.478E+00	8.929E+00	8.165E-01	1.737

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA

NA-22	-3.552E-01	1.323E+00	2.322E+00	1.384E-01	-0.153

Sample ID : G138851003 Acquisition date : 1-JUL-2005 15:14:04

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	6.266E-01		1.189E+00	2.406E+00	1.354E-01	0.260
K-40	2.403E+01		1.660E+01	3.277E+01	2.092E+00	0.733
SC-46	2.580E+00	+	1.838E+00	2.657E+00	1.831E-01	0.971
V-48	-4.884E-01		2.228E+00	3.998E+00	2.678E-01	-0.122
CR-51	6.445E+00		1.573E+01	2.661E+01	1.888E+00	0.242
MN-54	3.031E-03		1.337E+00	2.301E+00	1.548E-01	0.001
CO-56	5.185E-01	+	1.955E+00	2.480E+00	1.678E-01	0.209
CO-58	1.211E+00		1.503E+00	2.511E+00	1.677E-01	0.482
FE-59	2.295E+00		2.813E+00	5.487E+00	3.925E-01	0.418
CO-60	1.614E+00		1.287E+00	2.635E+00	1.585E-01	0.612
ZN-65	-1.778E+00		2.891E+00	4.908E+00	3.015E-01	-0.362
SE-75	-4.296E-01		1.833E+00	3.011E+00	2.068E-01	-0.143
KR-85	-1.509E+03		4.222E+02	5.957E+02	3.601E+01	-2.533
SR-85	-7.840E+00		2.194E+00	3.095E+00	1.871E-01	-2.533
Y-88	-1.586E-01		1.554E+00	2.864E+00	1.598E-01	-0.055
NB-94	-5.992E-02		1.155E+00	1.996E+00	1.248E-01	-0.030
NB-95M	-1.278E+02		9.889E+01	1.532E+02	1.566E+01	-0.834
ZR-95	-3.325E-01		2.447E+00	4.197E+00	3.184E-01	-0.079
RU-103	-1.068E+00		1.561E+00	2.607E+00	3.322E-01	-0.410
RH-106	1.325E-01		1.139E+01	1.990E+01	1.216E+00	0.007
RU-106	-8.155E-01		1.154E+01	2.002E+01	2.382E+00	-0.041
AG-108M	-5.608E-01		1.263E+00	2.165E+00	1.373E-01	-0.259
CD-109	3.503E+01		3.633E+01	6.452E+01	6.134E+00	0.543
AG-110M	4.198E-01		1.198E+00	2.147E+00	1.384E-01	0.196
CD-115	1.449E+02		5.828E+02	1.040E+03	6.307E+01	0.139
SN-115	9.562E+01		1.193E+02	2.299E+02	1.573E+01	0.416
SN-117M	2.981E-01		2.540E+00	4.316E+00	2.935E-01	0.069
TE-123M	3.106E-01		1.242E+00	2.121E+00	1.459E-01	0.146
SB-124	-2.224E+00		3.410E+00	5.569E+00	3.528E-01	-0.399
SB-125	7.745E-01		3.603E+00	6.414E+00	3.896E-01	0.121
TE-125M	-7.436E+01		5.053E+02	7.703E+02	6.989E+01	-0.097
I-126	4.820E-01		6.601E+00	1.157E+01	7.057E-01	0.042
SB-126	3.516E+00		5.741E+00	1.037E+01	6.558E-01	0.339
SN-126	1.658E+00		3.727E+00	6.523E+00	6.190E-01	0.254
SB-127	2.493E+01		6.349E+01	1.133E+02	1.145E+01	0.220
I-131	1.151E+00		4.838E+00	8.680E+00	5.829E-01	0.133
TE-132	3.133E+00		3.707E+01	6.214E+01	9.364E+00	0.050
BA-133	-1.463E-01		1.827E+00	2.842E+00	3.336E-01	-0.051
CS-134	-3.806E-01		1.324E+00	2.237E+00	1.491E-01	-0.170
CS-135	5.241E+00		6.286E+00	1.086E+01	9.173E-01	0.482
CS-136	-8.974E-01		3.885E+00	6.880E+00	4.774E-01	-0.130
BA-137M	5.152E-01		1.259E+00	2.258E+00	1.373E-01	0.228
CS-137	5.423E-01		1.331E+00	2.386E+00	1.457E-01	0.227
BA-140	-2.201E+00		1.076E+01	1.851E+01	6.031E+00	-0.119
CE-141	-1.015E-01		2.927E+00	4.953E+00	3.357E-01	-0.021
CE-144	-3.391E+00		9.352E+00	1.567E+01	2.269E+00	-0.216
PM-144	2.504E-01		1.135E+00	2.013E+00	1.255E-01	0.124
PM-146	-9.129E-01		1.588E+00	2.694E+00	2.343E-01	-0.339

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
ND-147	-5.743E+00		2.332E+01	4.011E+01	5.471E+00	-0.143
PM-149	-3.748E+02		5.713E+03	9.434E+03	1.376E+03	-0.040
EU-152	3.390E-01		3.695E+00	6.578E+00	4.582E-01	0.052
GD-153	4.601E+00		3.755E+00	6.725E+00	5.435E-01	0.684
EU-154	-9.829E-01		3.694E+00	6.485E+00	6.119E-01	-0.152
EU-155	-1.347E+00		5.172E+00	8.792E+00	6.562E-01	-0.153
TB-160	3.445E+00		4.968E+00	9.124E+00	6.263E-01	0.378
TM-171	2.300E+03	+	2.795E+03	3.088E+03	3.047E+02	0.745
HF-181	1.305E-01		1.635E+00	2.885E+00	1.726E-01	0.045
TA-182	2.191E-01		5.215E+00	9.485E+00	5.571E-01	0.023
IR-192	2.646E-01		1.428E+00	2.387E+00	1.565E-01	0.111
HG-203	1.456E+00		1.674E+00	2.899E+00	2.049E-01	0.502
BI-207	8.867E-01	+	1.139E+00	3.049E+00	1.948E-01	0.291
TL-208	2.099E+00		1.510E+00	2.823E+00	1.965E-01	0.743
BI-210	3.795E+02		4.260E+02	7.025E+02	7.931E+01	0.540
PB-210	3.795E+02		4.260E+02	7.025E+02	7.931E+01	0.540
PB-211	2.731E+01		3.741E+01	6.158E+01	3.839E+01	0.443
BI-212	3.497E+00		1.040E+01	1.846E+01	1.502E+00	0.189
PB-212	2.571E+00		2.474E+00	4.284E+00	3.518E-01	0.600
BI-214	7.499E+00	+	6.288E+00	6.019E+00	4.825E-01	1.246
PB-214	6.534E+00	+	6.215E+00	6.050E+00	5.182E-01	1.080
RN-219	-4.360E+00		1.498E+01	2.602E+01	3.533E+00	-0.168
RA-223	-1.460E+01		2.721E+01	4.330E+01	7.259E+00	-0.337
RA-224	-3.821E+00		2.794E+01	4.616E+01	3.173E+00	-0.083
AC-227	-5.804E+00		1.892E+01	2.739E+01	3.995E+00	-0.212
TH-227	-5.713E+00		1.863E+01	2.696E+01	4.660E+00	-0.212
AC-228	2.866E+00		5.274E+00	8.450E+00	8.434E-01	0.339
RA-228	2.866E+00		5.274E+00	8.450E+00	8.434E-01	0.339
TH-228	2.605E+00		2.475E+00	4.288E+00	3.521E-01	0.608
TH-229	-9.771E+00		2.106E+01	3.464E+01	2.393E+00	-0.282
PA-231	-2.466E+01		6.255E+01	1.014E+02	1.440E+01	-0.243
TH-231	1.389E+00		7.377E+00	1.238E+01	1.003E+00	0.112
TH-232	2.575E+00		2.436E+00	4.220E+00	3.465E-01	0.610
PA-233	-1.122E+00		2.642E+00	4.259E+00	2.931E-01	-0.263
PA-234	1.579E+00		1.015E+01	1.658E+01	2.985E+00	0.095
PA-234M	1.786E+02		1.630E+02	3.167E+02	2.627E+01	0.564
TH-234	1.961E+02		9.372E+01	1.609E+02	3.027E+01	1.219
U-235	4.017E+00		9.526E+00	1.635E+01	2.712E+00	0.246
NP-237	-4.569E+00		1.117E+01	1.893E+01	4.296E+00	-0.241
U-238	1.961E+02		9.372E+01	1.609E+02	3.027E+01	1.219
NP-239	2.737E+00		8.754E+00	1.516E+01	1.008E+00	0.181
AM-241	-1.678E+00		1.157E+01	1.810E+01	2.036E+00	-0.093
AM-242	-8.646E+01		1.066E+02	1.772E+02	1.324E+01	-0.488
CM-247	-9.272E-02		1.337E+00	2.354E+00	1.351E-01	-0.039
CF-249	7.216E-01		1.459E+00	2.650E+00	1.523E-01	0.272
CF-251	-7.650E-01		5.361E+00	8.983E+00	6.224E-01	-0.085
ANH-511	1.393E+01		2.138E+00	4.117E+00	2.487E-01	3.383

VAX/VMS Nuclide Identification Report Generated

```
*************************************************************************
*                        Environmental Physics, Inc.                    *
*                             2040 Savage Road                          *
*                           Charleston, SC 29414                        *
*************************************************************************
*                                                                       *
*                             DETECTOR DATA                             *
*                                                                       *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G138851003        *
* Acquisition date :  1-JUL-2005 15:14:04 Detector SN#     : 2605       *
* Detector ID      : GAMMA10              Sensitivity      : 3.000      *
* Geometry         : 2L_MB                Energy tolerance: 2.000      *
* Elapsed live time:    0 08:00:00.00     Abundance limit  : 75.000     *
* Elapsed real time:    0 08:00:02.94     Half life ratio  : 8.000      *
*************************************************************************
*                                                                       *
*                             SAMPLE DATA                               *
*                                                                       *
* Sample date      : 15-JUN-2005 09:07:00 Nuclide Library :             *
* Sample ID        : G138851003           Analyst initials: AKB         *
* Batch Number     : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery         :    1.00000           Carrier Weight  :    0.00000  *
*************************************************************************
*                                                                       *
*                               QC DATA                                 *
*                                                                       *
* CALIB. DATE/TIME : 12-JAN-2005 14:39:51 MS Isotope       :           *
* MSD DPM          :    0.000             MSD Isotope      :           *
* LCS DPM          :    0.000             LCS Isotope      :           *
* LCSD DPM         :    0.000             LCSD Isotope     :           *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
BE-7	9.946E+00	2.592E+01	1.036E+01	1.296E+01
CO-57	1.087E+00	1.313E+00	9.656E-01	6.567E-01
Y-91	4.024E+00	2.334E+00	1.187E+00	1.167E+00
NB-95	4.365E+00	3.865E+00	1.196E+00	1.933E+00
MO-99	6.785E+01	1.254E+02	6.474E+01	6.269E+01
SN-113	2.188E+00	2.367E+00	1.364E+00	1.184E+00
CE-139	1.820E+00	1.749E+00	9.739E-01	8.743E-01
PM-147	2.254E+06	2.724E+06	1.954E+06	1.362E+06
BI-211	1.878E+01	1.784E+01	6.143E+00	8.919E+00
RA-226	7.499E+00	6.288E+00	2.032E+00	3.144E+00
TH-230	7.499E+00	6.288E+00	2.032E+00	3.144E+00
U-234	1.551E+01	9.478E+00	4.285E+00	4.739E+00

---- Non-Identified Nuclides ----

Key-Line Activity	K.L Act error	DLC	TPU

Nuclide	(pCi/LITER)		(pCi/LITER)		
NA-22	-3.552E-01	1.323E+00	1.056E+00	6.614E-01	NOT IDENT.
NA-24	2.817E+07	1.081E+08	0.000E+00	5.405E+07	SHORT HLIF
AL-26	6.266E-01	1.189E+00	1.074E+00	5.945E-01	NOT IDENT.
K-40	2.403E+01	1.660E+01	1.532E+01	8.299E+00	NOT IDENT.
SC-46	2.580E+00	1.838E+00	1.240E+00	9.191E-01	FAIL ABUN
V-48	-4.884E-01	2.228E+00	1.828E+00	1.114E+00	FAIL ABUN
CR-51	6.445E+00	1.573E+01	1.275E+01	7.866E+00	NOT IDENT.
MN-54	3.031E-03	1.337E+00	1.075E+00	6.687E-01	NOT IDENT.
CO-56	5.185E-01	1.955E+00	1.155E+00	9.776E-01	FAIL ABUN
MN-56	1.000E+41	3.771E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-58	1.211E+00	1.503E+00	1.171E+00	7.515E-01	NOT IDENT.
FE-59	2.295E+00	2.813E+00	2.534E+00	1.406E+00	FAIL ABUN
CO-60	1.614E+00	1.287E+00	1.210E+00	6.436E-01	NOT IDENT.
ZN-65	-1.778E+00	2.891E+00	2.262E+00	1.446E+00	NOT IDENT.
SE-75	-4.296E-01	1.833E+00	1.447E+00	9.167E-01	FAIL ABUN
KR-85	-1.509E+03	4.222E+02	2.863E+02	2.111E+02	NOT IDENT.
SR-85	-7.840E+00	2.194E+00	1.488E+00	1.097E+00	NOT IDENT.
Y-88	-1.586E-01	1.554E+00	1.286E+00	7.768E-01	NOT IDENT.
NB-94	-5.992E-02	1.155E+00	9.346E-01	5.775E-01	NOT IDENT.
NB-95M	-1.278E+02	9.889E+01	7.381E+01	4.944E+01	NOT IDENT.
ZR-95	-3.325E-01	2.447E+00	1.953E+00	1.223E+00	NOT IDENT.
TC-99M	5.343E+19	1.000E+20	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.068E+00	1.561E+00	1.230E+00	7.806E-01	FAIL ABUN
RH-106	1.325E-01	1.139E+01	9.341E+00	5.696E+00	NOT IDENT.
RU-106	-8.155E-01	1.154E+01	9.403E+00	5.772E+00	NOT IDENT.
AG-108M	-5.608E-01	1.263E+00	1.028E+00	6.315E-01	NOT IDENT.
CD-109	3.503E+01	3.633E+01	3.133E+01	1.816E+01	NOT IDENT.
AG-110M	4.198E-01	1.198E+00	1.007E+00	5.990E-01	NOT IDENT.
CD-115	1.449E+02	5.828E+02	4.908E+02	2.914E+02	NOT IDENT.
SN-115	9.562E+01	1.193E+02	1.072E+02	5.963E+01	NOT IDENT.
SN-117M	2.981E-01	2.540E+00	2.090E+00	1.270E+00	NOT IDENT.
TE-123M	3.106E-01	1.242E+00	1.027E+00	6.212E-01	NOT IDENT.
SB-124	-2.224E+00	3.410E+00	2.476E+00	1.705E+00	NOT IDENT.
SB-125	7.745E-01	3.603E+00	3.055E+00	1.802E+00	NOT IDENT.
TE-125M	-7.436E+01	5.053E+02	3.735E+02	2.526E+02	NOT IDENT.
I-126	4.820E-01	6.601E+00	5.417E+00	3.301E+00	NOT IDENT.
SB-126	3.516E+00	5.741E+00	4.885E+00	2.871E+00	NOT IDENT.
SN-126	1.658E+00	3.727E+00	3.167E+00	1.864E+00	NOT IDENT.
SB-127	2.493E+01	6.349E+01	5.328E+01	3.174E+01	FAIL ABUN
I-131	1.151E+00	4.838E+00	4.140E+00	2.419E+00	NOT IDENT.
I-132	-1.000E+41	3.676E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	3.133E+00	3.707E+01	2.997E+01	1.853E+01	NOT IDENT.
BA-133	-1.463E-01	1.827E+00	1.356E+00	9.136E-01	NOT IDENT.
I-133	-4.689E+05	6.248E+05	0.000E+00	3.124E+05	SHORT HLIF
CS-134	-3.806E-01	1.324E+00	1.035E+00	6.618E-01	NOT IDENT.
CS-135	5.241E+00	6.286E+00	5.230E+00	3.143E+00	NOT IDENT.
I-135	2.742E+18	3.824E+18	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-8.974E-01	3.885E+00	3.177E+00	1.942E+00	FAIL ABUN
BA-137M	5.152E-01	1.259E+00	1.061E+00	6.297E-01	NOT IDENT.
CS-137	5.423E-01	1.331E+00	1.122E+00	6.656E-01	NOT IDENT.
BA-140	-2.201E+00	1.076E+01	8.753E+00	5.382E+00	FAIL ABUN
LA-140	-3.781E+02	1.212E+03	0.000E+00	6.062E+02	SHORT HLIF
CE-141	-1.015E-01	2.927E+00	2.403E+00	1.464E+00	NOT IDENT.
CE-143	-1.488E+03	1.123E+04	0.000E+00	5.616E+03	SHORT HLIF
CE-144	-3.391E+00	9.352E+00	7.593E+00	4.676E+00	NOT IDENT.
PM-144	2.504E-01	1.135E+00	9.412E-01	5.676E-01	FAIL ABUN
PR-144	1.000E+41	4.533E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-9.129E-01	1.588E+00	1.273E+00	7.940E-01	NOT IDENT.

ND-147	-5.743E+00	2.332E+01	1.895E+01	1.166E+01 NOT IDENT.
PM-149	-3.748E+02	5.713E+03	4.530E+03	2.856E+03 NOT IDENT.
EU-152	3.390E-01	3.695E+00	3.145E+00	1.848E+00 FAIL ABUN
GD-153	4.601E+00	3.755E+00	3.262E+00	1.878E+00 NOT IDENT.
EU-154	-9.829E-01	3.694E+00	2.950E+00	1.847E+00 FAIL ABUN
EU-155	-1.347E+00	5.172E+00	4.260E+00	2.586E+00 NOT IDENT.
TB-160	3.445E+00	4.968E+00	4.249E+00	2.484E+00 NOT IDENT.
TM-171	2.300E+03	2.795E+03	1.500E+03	1.397E+03 FAIL ABUN
HF-181	1.305E-01	1.635E+00	1.367E+00	8.173E-01 FAIL ABUN
TA-182	2.191E-01	5.215E+00	4.335E+00	2.607E+00 FAIL ABUN
IR-192	2.646E-01	1.428E+00	1.143E+00	7.141E-01 FAIL ABUN
HG-203	1.456E+00	1.674E+00	1.394E+00	8.369E-01 NOT IDENT.
BI-207	8.867E-01	1.139E+00	1.405E+00	5.697E-01 FAIL ABUN
TL-208	2.099E+00	1.510E+00	1.345E+00	7.552E-01 NOT IDENT.
BI-210	3.795E+02	4.260E+02	3.402E+02	2.130E+02 NOT IDENT.
PB-210	3.795E+02	4.260E+02	3.402E+02	2.130E+02 NOT IDENT.
PB-211	2.731E+01	3.741E+01	2.933E+01	1.870E+01 NOT IDENT.
BI-212	3.497E+00	1.040E+01	8.669E+00	5.201E+00 NOT IDENT.
PB-212	2.571E+00	2.474E+00	2.073E+00	1.237E+00 FAIL ABUN
BI-214	7.499E+00	6.288E+00	2.887E+00	3.144E+00 FAIL ABUN
PB-214	6.534E+00	6.215E+00	2.922E+00	3.107E+00 FAIL ABUN
RN-219	-4.360E+00	1.498E+01	1.236E+01	7.491E+00 NOT IDENT.
RA-223	-1.460E+01	2.721E+01	2.071E+01	1.360E+01 FAIL ABUN
RA-224	-3.821E+00	2.794E+01	2.230E+01	1.397E+01 NOT IDENT.
AC-227	-5.804E+00	1.892E+01	1.319E+01	9.462E+00 NOT IDENT.
TH-227	-5.713E+00	1.863E+01	1.298E+01	9.317E+00 NOT IDENT.
AC-228	2.866E+00	5.274E+00	3.940E+00	2.637E+00 FAIL ABUN
RA-228	2.866E+00	5.274E+00	3.940E+00	2.637E+00 FAIL ABUN
TH-228	2.605E+00	2.475E+00	2.075E+00	1.238E+00 NOT IDENT.
TH-229	-9.771E+00	2.106E+01	1.673E+01	1.053E+01 NOT IDENT.
PA-231	-2.466E+01	6.255E+01	4.860E+01	3.128E+01 NOT IDENT.
TH-231	1.389E+00	7.377E+00	5.950E+00	3.688E+00 FAIL ABUN
TH-232	2.575E+00	2.436E+00	2.042E+00	1.218E+00 FAIL ABUN
PA-233	-1.122E+00	2.642E+00	2.037E+00	1.321E+00 NOT IDENT.
PA-234	1.579E+00	1.015E+01	7.613E+00	5.073E+00 FAIL ABUN
PA-234M	1.786E+02	1.630E+02	1.483E+02	8.148E+01 FAIL ABUN
TH-234	1.961E+02	9.372E+01	7.829E+01	4.686E+01 FAIL ABUN
U-235	4.017E+00	9.526E+00	7.937E+00	4.763E+00 FAIL ABUN
NP-237	-4.569E+00	1.117E+01	9.181E+00	5.585E+00 NOT IDENT.
U-238	1.961E+02	9.372E+01	7.829E+01	4.686E+01 NOT IDENT.
NP-239	2.737E+00	8.754E+00	7.343E+00	4.377E+00 NOT IDENT.
AM-241	-1.678E+00	1.157E+01	8.754E+00	5.784E+00 NOT IDENT.
AM-242	-8.646E+01	1.066E+02	8.581E+01	5.329E+01 NOT IDENT.
CM-247	-9.272E-02	1.337E+00	1.119E+00	6.686E-01 NOT IDENT.
CF-249	7.216E-01	1.459E+00	1.262E+00	7.293E-01 FAIL ABUN
CF-251	-7.650E-01	5.361E+00	4.343E+00	2.681E+00 NOT IDENT.
ANH-511	1.393E+01	2.138E+00	2.009E+00	1.069E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:15:37.78

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851004.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:28.
Sample ID : G138851004 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA11 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.98 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 11912863
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	102.50*	21	429	1.65	194.55	193	9	7.23E-04	192.8	
2	0	110.04	45	373	2.19	209.79	207	8	1.56E-03	75.4	
3	4	137.52	33	241	1.23	265.34	263	12	1.13E-03	72.5	6.86E-01
4	4	140.43*	80	373	1.34	271.21	263	12	2.77E-03	49.8	
5	0	143.46*	23	312	0.90	277.33	275	7	8.02E-04	155.4	
6	0	156.70	49	260	1.54	304.11	301	7	1.69E-03	57.0	
7	0	185.75*	94	509	1.50	362.81	356	14	3.25E-03	59.2	
8	0	198.70	177	495	1.96	389.00	382	15	6.15E-03	28.4	
9	0	239.82*	95	431	1.62	472.11	466	14	3.31E-03	54.6	
10	0	244.97*	29	190	0.95	482.52	480	7	9.99E-04	93.3	
11	0	275.41	53	130	0.98	544.03	541	6	1.83E-03	36.9	
12	0	278.37*	35	226	1.48	550.03	547	10	1.22E-03	93.9	
13	0	295.86	64	198	1.21	585.36	581	8	2.24E-03	39.8	
14	0	330.54	32	162	1.21	655.46	653	8	1.10E-03	71.9	
15	0	338.52*	19	194	2.15	671.59	667	10	6.46E-04	168.6	
16	0	352.06*	27	215	1.97	698.95	694	11	9.44E-04	134.7	
17	0	499.84	27	93	1.87	997.57	994	8	9.32E-04	65.4	
18	0	545.31	6	75	1.20	1089.45	1089	8	1.97E-04	266.8	
19	0	557.57*	28	170	4.83	1114.23	1105	17	9.74E-04	134.3	
20	0	583.17*	1	68	1.82	1165.94	1162	9	5.08E-05	*****	
21	0	595.57	76	156	2.08	1191.00	1181	19	2.65E-03	40.9	
22	0	610.29*	54	207	1.82	1220.74	1210	20	1.87E-03	74.0	
23	0	700.48	18	33	1.17	1402.94	1401	6	6.31E-04	54.5	
24	0	804.05	28	97	3.53	1612.16	1606	16	9.81E-04	79.8	
25	0	817.80	33	55	4.13	1639.93	1633	13	1.14E-03	49.8	
26	0	823.10	16	78	4.02	1650.64	1647	14	5.47E-04	120.9	
27	0	839.55	79	84	7.23	1683.86	1673	21	2.74E-03	31.1	
28	0	910.69*	9	66	1.48	1827.54	1823	13	3.21E-04	204.4	
29	0	969.16*	14	57	1.61	1945.64	1940	13	5.00E-04	127.5	
30	0	1014.03	28	48	1.30	2036.25	2030	13	9.55E-04	55.7	
31	0	1120.17	29	24	1.90	2250.58	2247	9	9.95E-04	36.4	
32	0	1130.48*	1	43	4.31	2271.40	2269	12	4.15E-05	*****	
33	1	1155.54	37	40	2.39	2322.00	2308	31	1.27E-03	39.2	6.20E+00
34	1	1158.02*	6	39	2.39	2327.00	2308	31	2.14E-04	259.0	
35	0	1207.50	14	40	2.54	2426.91	2424	14	4.89E-04	97.6	
36	5	1251.38	18	5	1.44	2515.50	2513	20	6.38E-04	28.4	1.76E+00
37	5	1255.38	25	18	2.95	2523.58	2513	20	8.85E-04	47.7	
38	0	1291.88	14	13	1.31	2597.27	2595	7	4.98E-04	48.5	

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1334.85	40	42	9.72	2684.02	2676	23	1.39E-03	44.2	
40	0	1396.67*	28	29	4.92	2808.81	2800	17	9.62E-04	68.7	
41	0	1420.99	11	11	1.38	2857.89	2856	7	3.71E-04	59.5	
42	0	1453.75	8	12	0.80	2924.01	2921	6	2.85E-04	75.2	
43	2	1460.71*	27	38	3.07	2938.08	2929	20	9.48E-04	64.6	3.26E+00
44	2	1464.40	22	12	2.28	2945.51	2929	20	7.63E-04	27.7	
45	0	1481.04	13	10	1.46	2979.10	2976	8	4.66E-04	48.8	
46	0	1566.50	59	31	11.90	3151.58	3138	31	2.05E-03	30.8	
47	2	1749.63*	16	9	2.71	3521.14	3517	19	5.67E-04	44.3	2.96E+00
48	2	1752.04*	13	20	2.65	3526.00	3517	19	4.65E-04	86.5	
49	0	1815.68*	7	9	4.73	3654.40	3647	12	2.26E-04	136.6	
50	0	1862.25	42	30	10.01	3748.37	3733	31	1.47E-03	41.6	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 1-JUL-2005 23:15:42

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851004.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:28
Sample ID : G138851004 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.98 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	2.523E+01	3.263E+01	3.161E+01	2.306E+00	0.798
Y-91	+	557.57	*	1.683E+00	4.519E+00	3.153E+00	2.043E-01	0.534
		1204.90		1.927E+02	8.152E+02	1.276E+03	7.685E+01	0.151
MO-99	+	140.51	*	1.273E+02	1.270E+02	1.495E+02	9.797E+00	0.851
		181.06		2.383E+02	1.460E+03	2.133E+03	3.729E+02	0.112
		739.58		4.153E+02	7.461E+02	1.325E+03	1.915E+02	0.313
SN-117M	+	156.02		1.155E+02	1.318E+02	2.210E+02	1.450E+01	0.523
	+	158.56	*	2.820E+00	3.218E+00	5.673E+00	3.739E-01	0.497
TE-125M	+	109.28	*	4.165E+02	6.295E+02	8.940E+02	8.231E+01	0.466
CE-141	+	145.44	*	1.434E+00	4.457E+00	5.993E+00	4.001E-01	0.239
HG-203		70.83		-1.702E+01	7.196E+01	1.061E+02	1.533E+01	-0.160
		72.87		-7.359E+00	4.010E+01	5.922E+01	8.274E+00	-0.124
		82.60		-1.162E+01	7.058E+01	1.040E+02	1.494E+01	-0.112
	+	279.20	*	1.711E+00	3.217E+00	3.791E+00	2.752E-01	0.451
BI-211	+	351.07	*	7.228E+00	1.947E+01	1.763E+01	1.266E+00	0.410
BI-214	+	609.31	*	5.831E+00	8.639E+00	5.500E+00	4.537E-01	1.060
		768.36		3.627E+01	3.083E+01	5.873E+01	5.677E+00	0.618
		934.06		1.051E+01	5.015E+01	9.054E+01	9.949E+00	0.116
	+	1120.29		1.524E+01	1.118E+01	2.141E+01	2.007E+00	0.712
		1238.11		1.074E+01	2.849E+01	5.231E+01	4.454E+00	0.205
		1377.67		2.882E+01	4.106E+01	7.804E+01	7.423E+00	0.369
RA-224	+	240.98	*	6.591E+01	7.215E+01	5.821E+01	4.044E+00	1.132
RA-226	+	295.21		1.031E+01	8.262E+00	1.156E+01	1.078E+00	0.892
	+	351.92		2.514E+00	6.774E+00	6.016E+00	3.997E-01	0.418
	+	609.31	*	5.831E+00	8.639E+00	5.500E+00	4.537E-01	1.060
TH-228		84.40		5.065E+01	1.628E+02	2.443E+02	3.377E+01	0.207
	+	238.60	*	5.838E+00	6.396E+00	5.177E+00	4.279E-01	1.128
		300.10		-3.523E+01	4.610E+01	6.883E+01	4.065E+01	-0.512
TH-230	+	295.21		1.031E+01	8.262E+00	1.156E+01	1.078E+00	0.892
	+	351.92		2.514E+00	6.773E+00	6.016E+00	3.997E-01	0.418
	+	609.31	*	5.831E+00	8.639E+00	5.500E+00	4.537E-01	1.060
TH-232	+	238.59	*	5.743E+00	6.292E+00	5.093E+00	4.209E-01	1.128
	+	911.20		2.264E+00	9.259E+00	1.006E+01	1.182E+00	0.225
		964.40		2.756E+01	3.936E+01	6.342E+01	1.565E+01	0.435

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	969.11		6.189E+00	1.584E+01	2.079E+01	4.857E+00	0.298
U-234		67.67		9.114E+02	8.300E+02	1.277E+03	1.941E+02	0.714
		241.98		3.605E+01	2.711E+01	3.166E+01	2.827E+00	1.139
	+	295.21	*	1.031E+01	8.262E+00	1.156E+01	1.078E+00	0.892
	+	351.92		2.514E+00	6.775E+00	6.016E+00	5.339E-01	0.418
U-235		89.95		-2.677E+02	1.138E+02	9.852E+01	3.062E+01	-2.718
		93.35		1.093E+02	5.007E+01	6.484E+01	1.822E+01	1.686
		105.00		3.977E+01	6.988E+01	1.045E+02	3.088E+01	0.381
	+	143.76	*	4.657E+00	1.449E+01	1.971E+01	3.262E+00	0.236
		163.33		1.843E+01	2.727E+01	4.609E+01	8.423E+00	0.400
	+	185.71		4.041E+00	4.795E+00	3.953E+00	2.669E-01	1.022
		205.31		3.746E+00	2.669E+01	4.437E+01	7.720E+00	0.084

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	6.083E+00	1.691E+01	2.969E+01	2.173E+00	0.205
NA-22		1274.53	*	1.628E-01	1.843E+00	3.277E+00	2.175E-01	0.050
AL-26		511.00		9.175E+00	1.522E+00	2.894E+00	1.876E-01	3.170
		1808.65	*	-1.475E+00	1.932E+00	2.592E+00	1.551E-01	-0.569
SC-46		889.25	*	1.723E-01	1.754E+00	3.151E+00	2.920E-01	0.055
	+	1120.51		2.635E+00	1.926E+00	3.704E+00	2.457E-01	0.712
V-48		944.10		1.928E+00	3.897E+01	6.994E+01	6.259E+00	0.028
		983.50	*	4.332E-01	3.276E+00	5.886E+00	5.012E-01	0.074
		1312.09		2.441E+00	3.332E+00	6.387E+00	4.443E-01	0.382
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-1.012E+01	2.054E+01	3.483E+01	2.576E+00	-0.291
MN-54		834.83	*	-9.561E-01	1.879E+00	2.722E+00	2.315E-01	-0.351
CO-56		846.75	*	3.481E-01	1.973E+00	3.099E+00	2.687E-01	0.112
		1037.82		1.020E+01	1.295E+01	2.456E+01	2.049E+00	0.415
		1238.25		1.227E+00	2.931E+00	5.400E+00	3.588E-01	0.227
CO-57		122.06	*	9.897E-01	1.530E+00	2.617E+00	1.694E-01	0.378
	+	136.47		6.835E+00	9.925E+00	2.116E+01	1.542E+00	0.323
CO-58		810.78	*	-1.088E+00	2.096E+00	3.039E+00	2.492E-01	-0.358
FE-59		192.35		3.763E+01	5.367E+01	9.102E+01	1.122E+01	0.413
		1099.25	*	-1.945E+00	3.733E+00	6.310E+00	4.930E-01	-0.308
	+	1291.60		3.856E+00	3.753E+00	7.789E+00	6.391E-01	0.495
CO-60		1173.24		1.203E+00	1.644E+00	3.117E+00	1.793E-01	0.386
		1332.50	*	1.404E+00	1.856E+00	3.160E+00	2.256E-01	0.444
ZN-65		1115.55	*	-2.887E+00	4.051E+00	5.557E+00	3.737E-01	-0.520
SE-75		66.05		2.628E+02	3.721E+02	5.683E+02	6.805E+01	0.462
		96.73		-4.415E+01	5.158E+01	7.269E+01	9.816E+00	-0.607
		121.11		4.186E+00	8.285E+00	1.411E+01	1.367E+00	0.297
	+	136.00		1.275E+00	1.850E+00	4.029E+00	2.619E-01	0.316
	+	198.60		3.236E+02	1.857E+02	1.586E+02	1.263E+01	2.041
		264.65	*	1.685E+00	2.400E+00	4.283E+00	3.006E-01	0.393
	+	279.53		4.521E+00	8.500E+00	1.014E+01	7.455E-01	0.446
		303.91		-2.529E-01	1.074E+02	1.866E+02	1.912E+01	-0.001

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		400.65		5.583E+00	1.291E+01	2.281E+01	2.147E+00	0.245
KR-85		513.99	*	-7.257E+02	5.192E+02	8.241E+02	5.342E+01	-0.881
SR-85		513.99	*	-3.771E+00	2.698E+00	4.282E+00	2.776E-01	-0.881
Y-88		898.02		-4.418E-01	1.813E+00	3.171E+00	2.990E-01	-0.139
		1836.01	*	-2.098E-02	1.818E+00	3.351E+00	1.971E-01	-0.006
NB-94		702.63	*	-1.226E+00	1.934E+00	2.649E+00	1.798E-01	-0.463
		871.10		-4.304E-01	1.493E+00	2.605E+00	2.347E-01	-0.165
NB-95		765.79	*	-3.392E-01	2.148E+00	3.786E+00	2.872E-01	-0.090
NB-95M		235.69	*	-4.718E+01	1.522E+02	2.144E+02	2.198E+01	-0.220
ZR-95		724.18		2.629E-01	4.344E+00	7.438E+00	5.912E-01	0.035
		756.74	*	1.435E+00	3.040E+00	5.626E+00	4.760E-01	0.255
RU-103		497.08	*	1.567E-01	2.535E+00	3.789E+00	4.913E-01	0.041
	+	610.33		6.438E+01	9.577E+01	6.081E+01	9.523E+00	1.059
RH-106		511.85		7.199E+01	1.234E+01	2.347E+01	1.521E+00	3.067
		621.84	*	1.869E+01	1.493E+01	2.776E+01	1.775E+00	0.673
		1050.47		-2.253E+01	8.857E+01	1.546E+02	1.186E+01	-0.146
RU-106		622.20	*	1.175E+01	1.504E+01	2.711E+01	3.264E+00	0.434
AG-108M		433.93	*	-2.300E+00	1.684E+00	2.669E+00	1.822E-01	-0.862
		614.37		-3.853E-01	2.019E+00	2.933E+00	2.011E-01	-0.131
		722.95		-5.754E-01	1.952E+00	3.253E+00	2.423E-01	-0.177
CD-109		88.03	*	1.381E+01	4.948E+01	7.413E+01	7.225E+00	0.186
AG-110M		657.75	*	-7.630E-01	1.666E+00	2.756E+00	1.834E-01	-0.277
		677.61		1.315E+01	1.411E+01	2.582E+01	1.757E+00	0.509
		706.67		9.630E+00	9.570E+00	1.750E+01	1.249E+00	0.550
		763.93		-1.010E+00	6.887E+00	1.218E+01	9.547E-01	-0.083
		884.67		3.516E-01	2.385E+00	4.276E+00	4.045E-01	0.082
		937.48		2.599E+00	5.014E+00	9.236E+00	8.603E-01	0.281
		1384.27		-3.570E+00	7.415E+00	1.244E+01	9.193E-01	-0.287
SN-113		391.69	*	6.854E-01	2.338E+00	4.099E+00	2.706E-01	0.167
CD-115		231.44		1.351E+04	2.903E+04	4.877E+04	3.378E+03	0.277
		260.90		-1.935E+03	1.049E+04	1.812E+04	1.263E+03	-0.107
		492.35		-2.475E+02	2.819E+03	4.823E+03	3.119E+02	-0.051
		527.90	*	-1.660E+02	8.082E+02	1.372E+03	8.900E+01	-0.121
SN-115		484.47		9.477E+01	9.378E+02	1.625E+03	1.050E+02	0.058
		933.00	*	-3.859E+01	1.543E+02	2.689E+02	2.437E+01	-0.144
	+	1290.58		2.814E+02	2.736E+02	6.838E+02	4.626E+01	0.412
TE-123M		159.00	*	-1.646E+00	1.892E+00	2.626E+00	1.750E-01	-0.627
SB-124		602.73		-1.241E+00	2.360E+00	3.308E+00	2.127E-01	-0.375
		645.85		-3.198E+00	2.670E+01	4.517E+01	3.174E+00	-0.071
		713.78		3.247E+01	7.794E+01	1.371E+02	1.493E+01	0.237
		722.79		-2.170E+00	1.714E+01	2.895E+01	2.103E+00	-0.075
		1368.16		2.849E+01	7.508E+01	1.398E+02	1.756E+01	0.204
		1690.98	*	1.253E+00	4.151E+00	7.886E+00	5.421E-01	0.159
SB-125		176.33		-5.686E+00	1.902E+01	3.121E+01	2.892E+00	-0.182
		427.89	*	-2.501E+00	4.765E+00	7.986E+00	5.253E-01	-0.313
		463.38		-1.052E+01	1.420E+01	2.340E+01	1.710E+00	-0.450
		600.56		4.952E+00	9.933E+00	1.535E+01	1.115E+00	0.323
		606.64		2.679E+01	3.992E+01	6.180E+01	4.546E+00	0.434
		635.90		-1.636E+01	1.284E+01	1.981E+01	1.442E+00	-0.826

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
I-126		388.63		-1.256E+00	1.142E+01	1.962E+01	1.231E+00	-0.064
		666.33	*	-7.173E+00	9.169E+00	1.476E+01	9.374E-01	-0.486
		753.82		5.409E+01	6.585E+01	1.247E+02	9.264E+00	0.434
SB-126		666.33		-3.006E+00	3.842E+00	6.184E+00	3.928E-01	-0.486
		695.00		2.712E+00	3.874E+00	6.940E+00	4.646E-01	0.391
		697.00		4.040E+00	1.496E+01	2.270E+01	1.525E+00	0.178
		720.50	*	2.145E+00	7.139E+00	1.247E+01	8.738E-01	0.172
SN-126		64.28		2.119E+01	3.969E+01	6.019E+01	9.912E+00	0.352
		86.94		-9.227E-01	2.124E+01	3.139E+01	1.306E+01	-0.029
		87.57	*	6.979E-01	5.027E+00	7.488E+00	7.284E-01	0.093
SB-127		252.40		-6.482E+01	3.056E+02	5.256E+02	2.199E+02	-0.123
		411.60		-2.918E+00	7.655E+02	1.322E+03	1.968E+02	-0.002
		444.90		1.058E+02	6.351E+02	1.105E+03	1.271E+02	0.096
		473.00		-3.418E+01	1.131E+02	1.911E+02	2.273E+01	-0.179
		543.30		-2.891E+02	1.265E+03	1.837E+03	2.502E+02	-0.157
		603.50		-3.455E+02	8.318E+02	1.178E+03	1.355E+02	-0.293
		685.70	*	-6.648E+00	7.770E+01	1.324E+02	1.371E+01	-0.050
	+	698.50		5.712E+02	6.289E+02	1.538E+03	2.332E+02	0.371
		783.70		2.133E+01	1.948E+02	3.504E+02	4.288E+01	0.061
I-131		284.30		7.779E+01	8.852E+01	1.591E+02	1.194E+01	0.489
		364.48	*	1.237E+00	6.606E+00	1.156E+01	8.243E-01	0.107
		636.97		-8.853E+01	8.268E+01	1.301E+02	9.122E+00	-0.681
TE-132		228.16	*	1.918E+01	5.116E+01	8.555E+01	1.290E+01	0.224
BA-133		79.62		1.900E+01	7.968E+01	1.197E+02	1.888E+01	0.159
		81.00		-7.520E+00	6.332E+00	8.723E+00	1.432E+00	-0.862
	+	276.40		2.246E+01	1.687E+01	2.909E+01	3.934E+00	0.772
		302.85		3.410E+00	7.283E+00	1.289E+01	1.578E+00	0.264
		356.02	*	-4.049E-03	2.656E+00	3.990E+00	4.777E-01	-0.001
		383.85		-1.051E+01	1.556E+01	2.591E+01	2.892E+00	-0.406
CS-134		563.23		4.687E+00	2.003E+01	3.038E+01	2.001E+00	0.154
		569.32		3.703E+00	9.606E+00	1.688E+01	1.119E+00	0.219
		604.70		-6.678E-01	1.908E+00	2.721E+00	1.757E-01	-0.245
		795.84	*	6.664E-01	1.943E+00	3.527E+00	2.833E-01	0.189
		801.93		-1.393E+01	2.181E+01	3.121E+01	2.531E+00	-0.446
		1365.15		-3.112E+01	5.772E+01	9.620E+01	7.298E+00	-0.324
CS-135		268.24	*	5.540E-01	7.953E+00	1.389E+01	1.191E+00	0.040
CS-136		66.88		4.735E+01	6.204E+01	9.464E+01	1.556E+01	0.500
		86.36		9.750E+00	7.130E+01	1.062E+02	1.443E+01	0.092
		153.25		-8.942E+00	4.419E+01	6.375E+01	4.990E+00	-0.140
		163.92		1.392E+01	6.621E+01	1.109E+02	8.821E+00	0.125
		176.60		4.853E-01	2.252E+01	3.742E+01	2.749E+00	0.013
	+	273.65		2.898E+01	2.153E+01	4.033E+01	3.088E+00	0.719
		340.55		7.209E+00	7.401E+00	1.184E+01	8.315E-01	0.609
	+	818.51		4.884E+00	4.878E+00	5.576E+00	4.623E-01	0.876
		1048.07	*	5.388E-01	4.410E+00	7.981E+00	6.474E-01	0.068
		1235.36		1.036E+01	1.928E+01	3.613E+01	3.712E+00	0.287
BA-137M		661.65	*	6.752E-02	1.693E+00	2.903E+00	1.828E-01	0.023
CS-137		661.66	*	7.138E-02	1.790E+00	3.069E+00	1.939E-01	0.023
CE-139		165.85	*	2.055E-02	1.731E+00	2.879E+00	1.923E-01	0.007

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BA-140		162.67		1.881E+01	4.583E+01	7.736E+01	5.632E+00	0.243
		304.87		-2.981E+01	7.103E+01	1.203E+02	3.314E+01	-0.248
		423.73		1.666E+01	1.022E+02	1.780E+02	5.675E+01	0.094
		537.31	*	3.538E+00	1.449E+01	2.514E+01	8.208E+00	0.141
CE-144		133.51	*	-3.578E+00	1.224E+01	2.025E+01	2.929E+00	-0.177
PM-144		476.78		5.155E-01	3.547E+00	6.152E+00	4.611E-01	0.084
		618.01		-1.440E-01	1.526E+00	2.599E+00	1.747E-01	-0.055
		696.49	*	1.955E-01	1.607E+00	2.769E+00	1.860E-01	0.071
PM-146		453.88	*	-2.404E+00	2.326E+00	3.756E+00	3.398E-01	-0.640
		633.25		-1.763E+01	6.689E+01	1.120E+02	4.134E+01	-0.157
		735.93		2.994E-01	7.055E+00	1.208E+01	3.408E+00	0.025
		747.24		-6.170E-01	3.886E+00	6.584E+00	8.753E-01	-0.094
ND-147		91.11		8.356E+00	1.865E+01	2.804E+01	2.770E+00	0.298
		531.02	*	2.245E+01	3.011E+01	5.396E+01	7.463E+00	0.416
PM-147		121.30	*	2.238E+06	3.170E+06	5.434E+06	3.530E+05	0.412
PM-149		285.95	*	2.336E+03	7.137E+03	1.257E+04	1.846E+03	0.186
EU-152		121.78		4.061E+00	4.424E+00	7.622E+00	6.201E-01	0.533
		344.31	*	6.132E-02	4.896E+00	8.501E+00	6.227E-01	0.007
		963.37		1.206E+01	1.358E+01	2.264E+01	1.979E+00	0.533
GD-153		69.67		-4.741E+01	1.153E+02	1.687E+02	1.686E+01	-0.281
		83.37		-4.045E+01	9.288E+02	1.375E+03	1.321E+02	-0.029
		97.43	*	1.044E+00	5.141E+00	7.676E+00	6.399E-01	0.136
	+	103.18		2.190E+00	8.447E+00	1.023E+01	7.917E-01	0.214
EU-154		123.07		2.848E+00	3.062E+00	5.273E+00	5.178E-01	0.540
		247.93		3.740E-01	2.262E+01	3.437E+01	3.535E+00	0.011
		591.76		9.763E-01	3.251E+01	4.851E+01	4.934E+00	0.020
		723.30		-3.075E+00	8.258E+00	1.367E+01	1.112E+00	-0.225
		756.86		1.540E+01	3.265E+01	6.037E+01	6.747E+00	0.255
		873.20		-8.648E+00	1.304E+01	2.198E+01	2.757E+00	-0.393
		996.30		-3.857E+00	1.690E+01	2.933E+01	5.176E+00	-0.131
		1004.76		-8.673E+00	1.004E+01	1.644E+01	1.870E+00	-0.528
		1274.51	*	4.644E-01	5.146E+00	9.151E+00	9.037E-01	0.051
EU-155		86.54		8.413E-01	6.144E+00	9.153E+00	8.940E-01	0.092
		105.31	*	2.317E+00	6.972E+00	1.045E+01	8.017E-01	0.222
TB-160		86.79		-6.537E-01	1.667E+01	2.465E+01	2.390E+00	-0.027
		298.57		3.606E+00	6.564E+00	1.024E+01	7.076E-01	0.352
		879.36	*	1.248E+00	6.573E+00	1.185E+01	1.081E+00	0.105
		962.29		9.742E+00	2.301E+01	4.186E+01	3.665E+00	0.233
		966.15		2.508E+00	1.050E+01	1.629E+01	1.419E+00	0.154
		1177.93		-3.390E+00	1.296E+01	2.247E+01	1.302E+00	-0.151
TM-171		51.87		-8.274E+02	9.803E+02	1.410E+03	1.679E+02	-0.587
		59.40		5.513E+02	2.215E+03	3.349E+03	3.972E+02	0.165
		66.72	*	1.125E+03	2.128E+03	3.235E+03	3.343E+02	0.348
HF-181		56.28		-4.220E+01	8.733E+01	1.280E+02	1.536E+01	-0.330
		57.53		2.023E+00	4.582E+01	6.877E+01	8.218E+00	0.029
		65.20		8.732E+01	7.462E+01	1.156E+02	1.220E+01	0.756
		133.02		-1.485E+00	3.956E+00	6.528E+00	4.189E-01	-0.228
	+	136.25		1.726E+01	2.506E+01	5.342E+01	3.431E+00	0.323
		345.85		5.578E-01	9.825E+00	1.710E+01	1.139E+00	0.033

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		482.03	*	1.214E+00	2.267E+00	4.015E+00	2.592E-01	0.302
TA-182		67.75		8.776E+00	7.992E+00	1.239E+01	1.264E+00	0.708
		100.10		1.134E+01	1.564E+01	1.769E+01	1.422E+00	0.641
		222.10		-8.307E+00	1.914E+01	3.103E+01	2.141E+00	-0.268
	+	1121.28		7.258E+00	5.304E+00	1.033E+01	6.842E-01	0.702
		1189.05		5.657E+00	1.018E+01	1.923E+01	1.132E+00	0.294
		1221.42	*	1.590E+00	6.548E+00	1.194E+01	7.356E-01	0.133
		1230.97		-1.154E+00	1.402E+01	2.494E+01	1.557E+00	-0.046
IR-192	+	295.96		7.958E+00	6.356E+00	8.905E+00	6.231E-01	0.894
		308.46		2.549E+00	5.152E+00	9.132E+00	6.331E-01	0.279
		316.51	*	1.187E+00	1.872E+00	3.333E+00	2.289E-01	0.356
		468.07		-3.939E-01	3.503E+00	5.990E+00	4.340E-01	-0.066
		604.41		-1.022E+01	2.603E+01	3.696E+01	4.317E+00	-0.277
		612.46		4.398E+01	3.607E+01	5.945E+01	4.786E+00	0.740
BI-207		569.67		2.558E-01	1.488E+00	2.583E+00	1.671E-01	0.099
		897.83		-2.361E+02	1.030E+03	1.804E+03	1.694E+02	-0.131
		1063.62	*	2.495E-02	2.143E+00	3.815E+00	2.857E-01	0.007
		1442.20		3.653E+02	1.158E+03	2.125E+03	1.493E+02	0.172
		1770.23		3.214E+00	2.529E+01	4.706E+01	2.888E+00	0.068
TL-208		75.00		1.157E+01	7.156E+01	1.071E+02	1.396E+01	0.108
	+	277.35		1.549E+01	2.914E+01	3.617E+01	4.064E+00	0.428
		510.84		6.983E+01	1.304E+01	2.220E+01	2.343E+00	3.146
	+	583.14	*	8.553E-02	2.449E+00	3.348E+00	2.432E-01	0.026
		763.30		-4.921E+01	9.229E+01	1.583E+02	2.108E+01	-0.311
		860.37		-2.948E+00	1.283E+01	2.244E+01	2.126E+00	-0.131
		1093.90		1.936E+02	4.483E+02	8.231E+02	1.872E+02	0.235
BI-210		46.50	*	1.029E+02	3.465E+02	5.304E+02	5.341E+01	0.194
PB-210		46.50	*	1.029E+02	3.465E+02	5.304E+02	5.341E+01	0.194
PB-211		404.84	*	-4.004E+01	5.327E+01	7.765E+01	4.845E+01	-0.516
		427.08		-7.135E+01	1.144E+02	1.755E+02	1.085E+02	-0.407
		831.96		-1.429E+01	5.944E+01	8.807E+01	5.517E+01	-0.162
BI-212		727.18	*	6.012E+00	1.364E+01	2.399E+01	2.093E+00	0.251
PB-212		74.80		-4.301E+00	2.337E+01	3.447E+01	4.634E+00	-0.125
		87.30		3.114E+00	2.372E+01	3.531E+01	4.924E+00	0.088
		115.19		-6.999E+00	2.115E+02	3.548E+02	2.427E+01	-0.020
	+	238.63	*	5.838E+00	6.396E+00	6.249E+00	5.165E-01	0.934
		300.09		-3.515E+01	4.126E+01	6.884E+01	6.238E+00	-0.511
PB-214		74.81		-7.192E+00	3.961E+01	5.842E+01	7.114E+00	-0.123
		77.11		1.307E+01	2.142E+01	3.257E+01	3.991E+00	0.401
		87.30		5.558E+00	4.233E+01	6.302E+01	7.998E+00	0.088
		241.98		3.601E+01	2.707E+01	3.162E+01	2.822E+00	1.139
	+	295.21		1.031E+01	8.262E+00	1.321E+01	1.232E+00	0.781
	+	351.92	*	2.514E+00	6.775E+00	7.353E+00	6.526E-01	0.342
RN-219		271.23		-1.301E+01	1.225E+01	2.030E+01	1.822E+00	-0.641
		401.81	*	5.741E+00	2.076E+01	3.639E+01	5.027E+00	0.158
RA-223		122.32		6.307E+01	1.047E+02	1.790E+02	1.303E+01	0.352
PI	+	144.24		1.509E+01	4.691E+01	6.318E+01	4.910E+00	0.239
		154.21		3.174E+00	2.481E+01	3.640E+01	2.781E+00	0.087
		269.46		-4.069E+00	9.211E+00	1.575E+01	1.132E+00	-0.258

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		323.87	*	3.488E+01	3.543E+01	6.314E+01	1.067E+01	0.552
	+	338.28		2.284E+01	7.705E+01	8.611E+01	9.526E+00	0.265
		445.03		1.693E+01	1.177E+02	2.046E+02	2.172E+01	0.083
AC-227		79.80		-1.303E+02	1.119E+02	1.519E+02	3.369E+01	-0.857
		236.00		-2.545E+00	1.437E+01	2.040E+01	2.289E+00	-0.125
		256.20	*	1.461E+00	2.095E+01	3.657E+01	5.356E+00	0.040
		286.10		2.561E+01	8.168E+01	1.438E+02	1.768E+01	0.178
		299.80		-6.413E+01	7.685E+01	1.274E+02	2.158E+01	-0.504
		304.40		-2.067E+01	9.728E+01	1.674E+02	2.999E+01	-0.124
	+	329.70		3.661E+01	5.283E+01	8.829E+01	1.155E+01	0.415
		334.20		-7.227E+01	2.089E+02	2.008E+02	3.803E+01	-0.360
TH-227		79.80		-1.281E+02	1.100E+02	1.495E+02	3.314E+01	-0.857
		94.00		4.222E+02	1.542E+02	2.078E+02	4.538E+01	2.032
		236.00		-2.506E+00	1.415E+01	2.009E+01	1.974E+00	-0.125
		256.20	*	1.438E+00	2.062E+01	3.600E+01	6.240E+00	0.040
		286.10		2.522E+01	8.427E+01	1.416E+02	1.420E+02	0.178
		299.80		-6.299E+01	7.547E+01	1.251E+02	2.091E+01	-0.504
		304.40		-2.034E+01	9.570E+01	1.647E+02	2.913E+01	-0.124
	+	329.70		3.605E+01	5.202E+01	8.695E+01	1.126E+01	0.415
		334.20		-7.091E+01	2.050E+02	1.970E+02	3.674E+01	-0.360
AC-228		209.25		5.717E+00	3.099E+01	5.124E+01	3.280E+01	0.112
	+	338.32		5.499E+00	1.868E+01	2.242E+01	9.171E+00	0.245
		463.01		-2.364E+01	3.367E+01	5.486E+01	1.296E+01	-0.431
		794.95		1.795E+00	3.562E+01	6.347E+01	1.469E+01	0.028
	+	911.21	*	2.276E+00	9.309E+00	1.188E+01	1.397E+00	0.191
		964.77		2.293E+01	3.907E+01	6.258E+01	1.544E+01	0.366
	+	969.11		6.222E+00	1.593E+01	1.989E+01	4.646E+00	0.313
RA-228		209.25		5.717E+00	3.099E+01	5.124E+01	3.280E+01	0.112
	+	338.32		5.499E+00	1.868E+01	2.242E+01	9.171E+00	0.245
		463.01		-2.364E+01	3.367E+01	5.486E+01	1.296E+01	-0.431
		794.95		1.795E+00	3.562E+01	6.347E+01	1.469E+01	0.028
	+	911.21	*	2.276E+00	9.309E+00	1.188E+01	1.397E+00	0.191
		964.77		2.293E+01	3.907E+01	6.258E+01	1.544E+01	0.366
	+	969.11		6.222E+00	1.593E+01	1.989E+01	4.646E+00	0.313
TH-229		85.43		6.922E-02	1.174E+01	1.740E+01	1.680E+00	0.004
		88.47		-2.640E+00	6.892E+00	1.002E+01	9.688E-01	-0.263
		100.00		7.272E+00	1.650E+01	1.823E+01	1.467E+00	0.399
		193.63	*	-1.851E+01	3.242E+01	4.537E+01	3.080E+00	-0.408
		210.97		-2.966E+01	4.134E+01	6.626E+01	4.546E+00	-0.448
PA-231		283.67	*	7.091E+00	9.366E+01	1.424E+02	2.036E+01	0.050
		301.29		-1.026E+01	2.871E+01	4.906E+01	5.447E+00	-0.209
	+	330.00		8.042E+01	1.183E+02	1.935E+02	6.096E+01	0.416
TH-231		84.21		9.451E+00	3.039E+01	4.559E+01	8.365E+00	0.207
		236.00		-2.541E+00	1.435E+01	2.037E+01	2.286E+00	-0.125
		256.20		1.459E+00	2.092E+01	3.652E+01	5.349E+00	0.040
		269.46	*	-4.069E+00	9.212E+00	1.575E+01	1.299E+00	-0.258
		271.23		-1.301E+01	1.227E+01	2.030E+01	2.085E+00	-0.641
		283.67		7.091E+00	9.366E+01	1.424E+02	2.036E+01	0.050
		301.29		-1.026E+01	2.870E+01	4.906E+01	4.529E+00	-0.209

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	329.85		2.513E+01	3.629E+01	6.063E+01	8.517E+00	0.414
	+	351.07		7.228E+00	1.947E+01	1.763E+01	1.266E+00	0.410
		401.81		5.741E+00	2.076E+01	3.639E+01	4.062E+00	0.158
PA-233		75.28		6.866E+01	1.892E+02	2.852E+02	4.548E+01	0.241
		86.59		1.366E+01	9.980E+01	1.486E+02	4.039E+01	0.092
		300.12		-1.798E+01	2.106E+01	3.498E+01	4.879E+00	-0.514
		311.98	*	-5.746E-01	3.501E+00	6.030E+00	4.322E-01	-0.095
	+	340.50		1.386E+01	4.683E+01	4.833E+01	1.122E+01	0.287
		398.62		-5.089E+00	1.061E+02	1.831E+02	4.754E+01	-0.028
		415.76		7.822E+01	8.802E+01	1.561E+02	3.237E+01	0.501
PA-234		63.00		2.125E+00	1.229E+02	1.835E+02	3.105E+01	0.012
		94.67		1.665E+01	1.139E+01	1.754E+01	2.184E+00	0.949
		98.44		1.327E+00	6.082E+00	9.017E+00	5.025E+00	0.147
		99.70		1.766E+01	4.266E+01	4.705E+01	3.802E+00	0.375
	+	111.00		8.209E+00	1.242E+01	1.798E+01	1.989E+00	0.457
		131.20		2.318E+00	6.121E+00	1.037E+01	6.653E-01	0.224
		152.70		-4.506E+00	1.800E+01	2.972E+01	4.783E+00	-0.152
	+	186.00		1.091E+02	1.335E+02	1.068E+02	3.285E+01	1.022
		226.40		-5.490E+00	2.272E+01	3.710E+01	4.511E+00	-0.148
		227.20		-4.677E+00	2.441E+01	3.994E+01	2.762E+00	-0.117
		248.90		8.924E+00	5.388E+01	8.242E+01	1.857E+01	0.108
		293.70		2.449E+01	3.787E+01	5.912E+01	9.768E+00	0.414
		369.80		-1.564E+01	4.501E+01	7.638E+01	1.605E+01	-0.205
		568.70		2.324E+01	4.804E+01	8.502E+01	5.501E+00	0.273
		569.50		2.864E+00	1.325E+01	2.305E+01	1.491E+00	0.124
		574.00		9.653E+00	7.158E+01	1.240E+02	8.021E+00	0.078
	+	699.00		2.142E+01	2.369E+01	5.570E+01	1.020E+01	0.385
		706.10		3.016E+01	5.085E+01	8.737E+01	3.869E+01	0.345
		733.00		-5.313E+00	1.772E+01	2.949E+01	6.391E+00	-0.180
		742.81		-2.582E+01	6.545E+01	1.043E+02	6.997E+01	-0.248
		796.30		3.116E+01	4.295E+01	7.831E+01	2.103E+01	0.398
	+	805.80		5.116E+01	8.317E+01	7.791E+01	2.377E+01	0.657
	+	819.60		7.594E+01	8.089E+01	8.680E+01	3.295E+01	0.875
		826.30		-6.091E+00	4.485E+01	6.770E+01	3.026E+01	-0.090
		831.60		-9.754E+00	3.142E+01	4.646E+01	1.384E+01	-0.210
		876.40		-2.060E+01	4.244E+01	6.273E+01	6.451E+01	-0.328
		880.51		1.369E+01	1.292E+01	2.463E+01	2.252E+00	0.556
		883.24		7.373E+00	1.442E+01	2.497E+01	1.681E+01	0.295
		899.00		-1.804E+00	3.689E+01	6.546E+01	2.872E+01	-0.028
		925.00		-8.281E+00	5.067E+01	8.920E+01	8.153E+00	-0.093
		926.50		-1.788E+00	7.500E+00	1.310E+01	3.334E+00	-0.136
		946.00	*	-6.214E+00	1.252E+01	2.132E+01	4.031E+00	-0.291
		949.00		-5.252E+00	1.784E+01	3.110E+01	2.768E+00	-0.169
		980.50		3.055E+01	3.153E+01	6.027E+01	5.154E+00	0.507
		1394.10		4.388E+01	7.070E+01	1.080E+02	7.011E+01	0.406
PA-234M		766.40		4.789E+02	8.343E+02	1.388E+03	1.063E+03	0.345
		1001.03	*	1.876E+02	2.026E+02	3.824E+02	3.702E+01	0.490
TH-234		63.29	*	1.381E+01	1.042E+02	1.563E+02	2.999E+01	0.088
		92.38		1.232E+02	3.960E+01	5.542E+01	1.013E+01	2.223

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		112.81		-1.093E+02	6.073E+02	8.855E+02	1.533E+02	-0.123
NP-237		86.48	*	2.051E+00	1.499E+01	2.233E+01	5.089E+00	0.092
		95.87		-1.200E+02	7.308E+01	9.086E+01	2.235E+01	-1.321
U-238		63.29	*	1.381E+01	1.042E+02	1.563E+02	2.999E+01	0.088
NP-239		99.55		5.585E+00	1.394E+01	1.536E+01	1.244E+00	0.364
		117.00	*	-2.422E+00	1.131E+01	1.884E+01	1.269E+00	-0.129
		209.75		1.858E+00	4.142E+01	6.858E+01	4.701E+00	0.027
		228.18		4.876E+00	1.281E+01	2.145E+01	1.484E+00	0.227
	+	277.60		7.348E+00	1.381E+01	1.424E+01	9.907E-01	0.516
		334.31		-4.288E+01	1.153E+02	1.106E+02	7.457E+00	-0.388
AM-241		59.54	*	-5.147E+00	1.318E+01	1.938E+01	2.386E+00	-0.266
AM-242		99.55		1.303E+02	3.253E+02	3.584E+02	2.902E+01	0.364
	+	103.70	*	4.593E+01	1.772E+02	2.190E+02	1.684E+01	0.210
CM-247	+	278.00		3.047E+01	5.728E+01	5.910E+01	4.113E+00	0.516
		287.40		-2.276E+01	6.429E+01	1.101E+02	7.645E+00	-0.207
		402.60	*	8.203E-01	1.845E+00	3.263E+00	2.049E-01	0.251
CF-249		252.85		-5.329E+00	4.819E+01	8.355E+01	5.818E+00	-0.064
		333.44		-9.355E+00	1.064E+01	1.508E+01	1.017E+00	-0.620
		387.95	*	5.404E-01	2.046E+00	3.586E+00	2.252E-01	0.151
CF-251		176.00	*	-1.930E+00	7.250E+00	1.192E+01	8.002E-01	-0.162
		227.00		-5.825E+00	2.162E+01	3.526E+01	2.438E+00	-0.165
		285.00		3.375E+01	9.293E+01	1.639E+02	1.139E+01	0.206
ANH-511		511.00	*	1.501E+01	2.490E+00	4.736E+00	3.069E-01	3.170

VAX/VMS Nuclide Identification Report Generated

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*********************************************************************
*                          General Eng. Labs, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
*                                                                   *
*                            DETECTOR DATA                          *
*                                                                   *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851004 *
* Acquisition date :  1-JUL-2005 15:14:28 Detector SN#    : 11912863 *
* Detector ID       : GAMMA11             Sensitivity     : 3.000    *
* Geometry          : 2L_MB               Energy tolerance: 2.000    *
* Elapsed live time:    0 08:00:00.00     Abundance limit : 75.000   *
* Elapsed real time:    0 08:00:02.98     Half life ratio :  8.000   *
*********************************************************************
*                                                                   *
*                            SAMPLE DATA                            *
*                                                                   *
* Sample date       : 15-JUN-2005 09:07:00 Nuclide Library :        *
* Sample ID         : G138851004           Analyst initials: AKB    *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000 *
*********************************************************************
*                                                                   *
*                              QC DATA                              *
* Standard Weight   :   0.00000                                     *
* CALIB. DATE/TIME : 11-JAN-2005 15:33:41 MS Isotope      :         *
* MSD DPM           :    0.000            MSD Isotope     :         *
* LCS DPM           :    0.000            LCS Isotope     :         *
* LCSD DPM          :    0.000            LCSD Isotope    :         *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	2.523E+01	3.263E+01	3.161E+01	0.000E+00
Y-91	1.683E+00	4.519E+00	3.153E+00	0.000E+00
MO-99	1.273E+02	1.270E+02	1.495E+02	0.000E+00
SN-117M	2.820E+00	3.218E+00	5.673E+00	0.000E+00
TE-125M	4.165E+02	6.295E+02	8.940E+02	0.000E+00
CE-141	1.895E-01	4.698E+00	5.993E+00	0.000E+00
HG-203	1.711E+00	3.217E+00	3.791E+00	0.000E+00
BI-211	7.228E+00	1.947E+01	1.763E+01	0.000E+00
BI-214	5.831E+00	8.639E+00	5.500E+00	0.000E+00
RA-224	6.591E+01	7.215E+01	5.821E+01	0.000E+00
RA-226	5.831E+00	8.639E+00	5.500E+00	0.000E+00
TH-228	5.838E+00	6.396E+00	5.177E+00	0.000E+00
TH-230	5.831E+00	8.639E+00	5.500E+00	0.000E+00
TH-232	5.743E+00	6.292E+00	5.093E+00	0.000E+00
U-234	1.031E+01	8.262E+00	1.156E+01	0.000E+00
U-235	4.657E+00	1.449E+01	2.000E+01	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error) Ided	MDA (pCi/LITER)		
BE-7	6.083E+00	1.691E+01	2.969E+01	0.000E+00	NOT IDENT.
NA-22	1.628E-01	1.843E+00	3.277E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	1.232E+08	0.000E+00	0.000E+00	SHORT HLIF
AL-26	-1.475E+00	1.932E+00	2.592E+00	0.000E+00	NOT IDENT.
SC-46	1.723E-01	1.754E+00	3.151E+00	0.000E+00	FAIL ABUN
V-48	4.332E-01	3.276E+00	5.886E+00	0.000E+00	NOT IDENT.
CR-51	-1.012E+01	2.054E+01	3.483E+01	0.000E+00	NOT IDENT.
MN-54	-9.561E-01	1.879E+00	2.722E+00	0.000E+00	NOT IDENT.
CO-56	3.481E-01	1.973E+00	3.099E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	5.654E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	9.897E-01	1.530E+00	2.617E+00	0.000E+00	FAIL ABUN
CO-58	-1.088E+00	2.096E+00	3.039E+00	0.000E+00	NOT IDENT.
FE-59	-1.945E+00	3.733E+00	6.310E+00	0.000E+00	FAIL ABUN
CO-60	1.404E+00	1.856E+00	3.160E+00	0.000E+00	NOT IDENT.
ZN-65	-2.887E+00	4.051E+00	5.557E+00	0.000E+00	NOT IDENT.
SE-75	1.685E+00	2.400E+00	4.283E+00	0.000E+00	FAIL ABUN
KR-85	-7.257E+02	5.192E+02	8.241E+02	0.000E+00	NOT IDENT.
SR-85	-3.771E+00	2.698E+00	4.282E+00	0.000E+00	NOT IDENT.
Y-88	-2.098E-02	1.818E+00	3.351E+00	0.000E+00	NOT IDENT.
NB-94	-1.226E+00	1.934E+00	2.649E+00	0.000E+00	NOT IDENT.
NB-95	-3.392E-01	2.148E+00	3.786E+00	0.000E+00	NOT IDENT.
NB-95M	-4.718E+01	1.522E+02	2.144E+02	0.000E+00	NOT IDENT.
ZR-95	1.435E+00	3.040E+00	5.626E+00	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	1.046E+20	0.000E+00	0.000E+00	SHORT HLIF
RU-103	1.567E-01	2.535E+00	3.789E+00	0.000E+00	FAIL ABUN
RH-106	1.869E+01	1.493E+01	2.776E+01	0.000E+00	NOT IDENT.
RU-106	1.175E+01	1.504E+01	2.711E+01	0.000E+00	NOT IDENT.
AG-108M	-2.300E+00	1.684E+00	2.669E+00	0.000E+00	NOT IDENT.
CD-109	1.381E+01	4.948E+01	7.413E+01	0.000E+00	NOT IDENT.
AG-110M	-7.630E-01	1.666E+00	2.756E+00	0.000E+00	NOT IDENT.
SN-113	6.854E-01	2.338E+00	4.099E+00	0.000E+00	NOT IDENT.
CD-115	-1.660E+02	8.082E+02	1.372E+03	0.000E+00	NOT IDENT.
SN-115	-3.859E+01	1.543E+02	2.689E+02	0.000E+00	FAIL ABUN
TE-123M	-1.646E+00	1.892E+00	2.626E+00	0.000E+00	NOT IDENT.
SB-124	1.253E+00	4.151E+00	7.886E+00	0.000E+00	NOT IDENT.
SB-125	-2.501E+00	4.765E+00	7.986E+00	0.000E+00	NOT IDENT.
I-126	-7.173E+00	9.169E+00	1.476E+01	0.000E+00	NOT IDENT.
SB-126	2.145E+00	7.139E+00	1.247E+01	0.000E+00	NOT IDENT.
SN-126	6.979E-01	5.027E+00	7.488E+00	0.000E+00	NOT IDENT.
SB-127	-6.648E+00	7.770E+01	1.324E+02	0.000E+00	FAIL ABUN
I-131	1.237E+00	6.606E+00	1.156E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	3.573E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.918E+01	5.116E+01	8.555E+01	0.000E+00	NOT IDENT.
BA-133	-4.049E-03	2.656E+00	3.990E+00	0.000E+00	FAIL ABUN
I-133	0.000E+00	8.296E+05	0.000E+00	0.000E+00	SHORT HLIF
CS-134	6.664E-01	1.943E+00	3.527E+00	0.000E+00	NOT IDENT.
CS-135	5.540E-01	7.953E+00	1.389E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	5.144E+18	0.000E+00	0.000E+00	SHORT HLIF
CS-136	5.388E-01	4.410E+00	7.981E+00	0.000E+00	FAIL ABUN
BA-137M	6.752E-02	1.693E+00	2.903E+00	0.000E+00	NOT IDENT.
CS-137	7.138E-02	1.790E+00	3.069E+00	0.000E+00	NOT IDENT.
CE-139	2.055E-02	1.731E+00	2.879E+00	0.000E+00	NOT IDENT.
BA-140	3.538E+00	1.449E+01	2.514E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	1.808E+03	0.000E+00	0.000E+00	SHORT HLIF

CE-143	0.000E+00	1.422E+04	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-3.578E+00	1.224E+01	2.025E+01	0.000E+00	NOT IDENT.
PM-144	1.955E-01	1.607E+00	2.769E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	8.223E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-2.404E+00	2.326E+00	3.756E+00	0.000E+00	NOT IDENT.
ND-147	2.245E+01	3.011E+01	5.396E+01	0.000E+00	NOT IDENT.
PM-147	2.238E+06	3.170E+06	5.434E+06	0.000E+00	NOT IDENT.
PM-149	2.336E+03	7.137E+03	1.257E+04	0.000E+00	NOT IDENT.
EU-152	6.132E-02	4.896E+00	8.501E+00	0.000E+00	NOT IDENT.
GD-153	1.044E+00	5.141E+00	7.676E+00	0.000E+00	FAIL ABUN
EU-154	4.644E-01	5.146E+00	9.151E+00	0.000E+00	NOT IDENT.
EU-155	2.317E+00	6.972E+00	1.045E+01	0.000E+00	NOT IDENT.
TB-160	1.248E+00	6.573E+00	1.185E+01	0.000E+00	NOT IDENT.
TM-171	1.125E+03	2.128E+03	3.235E+03	0.000E+00	NOT IDENT.
HF-181	1.214E+00	2.267E+00	4.015E+00	0.000E+00	FAIL ABUN
TA-182	1.590E+00	6.548E+00	1.194E+01	0.000E+00	FAIL ABUN
IR-192	1.187E+00	1.872E+00	3.333E+00	0.000E+00	FAIL ABUN
BI-207	2.495E-02	2.143E+00	3.815E+00	0.000E+00	NOT IDENT.
TL-208	8.553E-02	2.449E+00	3.348E+00	0.000E+00	FAIL ABUN
BI-210	1.029E+02	3.465E+02	5.304E+02	0.000E+00	NOT IDENT.
PB-210	1.029E+02	3.465E+02	5.304E+02	0.000E+00	NOT IDENT.
PB-211	-4.004E+01	5.327E+01	7.765E+01	0.000E+00	NOT IDENT.
BI-212	6.012E+00	1.364E+01	2.399E+01	0.000E+00	NOT IDENT.
PB-212	5.838E+00	6.396E+00	6.249E+00	0.000E+00	FAIL ABUN
PB-214	2.514E+00	6.775E+00	7.353E+00	0.000E+00	FAIL ABUN
RN-219	5.741E+00	2.076E+01	3.639E+01	0.000E+00	NOT IDENT.
RA-223	3.488E+01	3.543E+01	6.314E+01	0.000E+00	FAIL ABUN
AC-227	1.461E+00	2.095E+01	3.657E+01	0.000E+00	FAIL ABUN
TH-227	1.438E+00	2.062E+01	3.600E+01	0.000E+00	FAIL ABUN
AC-228	2.276E+00	9.309E+00	1.188E+01	0.000E+00	FAIL ABUN
RA-228	2.276E+00	9.309E+00	1.188E+01	0.000E+00	FAIL ABUN
TH-229	-1.851E+01	3.242E+01	4.537E+01	0.000E+00	NOT IDENT.
PA-231	7.091E+00	9.366E+01	1.424E+02	0.000E+00	FAIL ABUN
TH-231	-4.069E+00	9.212E+00	1.575E+01	0.000E+00	FAIL ABUN
PA-233	-5.746E-01	3.501E+00	6.030E+00	0.000E+00	FAIL ABUN
PA-234	-6.214E+00	1.252E+01	2.132E+01	0.000E+00	FAIL ABUN
PA-234M	1.876E+02	2.026E+02	3.824E+02	0.000E+00	NOT IDENT.
TH-234	1.381E+01	1.042E+02	1.563E+02	0.000E+00	NOT IDENT.
NP-237	2.051E+00	1.499E+01	2.233E+01	0.000E+00	NOT IDENT.
U-238	1.381E+01	1.042E+02	1.563E+02	0.000E+00	NOT IDENT.
NP-239	-2.422E+00	1.131E+01	1.884E+01	0.000E+00	FAIL ABUN
AM-241	-5.147E+00	1.318E+01	1.938E+01	0.000E+00	NOT IDENT.
AM-242	4.593E+01	1.772E+02	2.190E+02	0.000E+00	FAIL ABUN
CM-247	8.203E-01	1.845E+00	3.263E+00	0.000E+00	FAIL ABUN
CF-249	5.404E-01	2.046E+00	3.586E+00	0.000E+00	NOT IDENT.
CF-251	-1.930E+00	7.250E+00	1.192E+01	0.000E+00	NOT IDENT.
ANH-511	0.000E+00	2.490E+00	4.736E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:15:34.11

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851004.CNF;1
Sample date : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:28.
Sample ID : G138851004 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA11 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.98 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 11912863
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.86	83	521	1.53	116.43	113	8	2.88E-03	48.8	
2	0	77.65	53	329	0.96	144.30	142	6	1.84E-03	56.1	
3	0	93.21	218	426	1.69	175.76	173	8	7.55E-03	17.8	
4	0	102.50	45	429	1.65	194.55	193	9	1.55E-03	85.1	
5	0	110.04	45	373	2.19	209.79	207	8	1.56E-03	75.4	
6	4	137.52	33	241	1.23	265.34	263	12	1.13E-03	72.5	6.86E-01
7	4	140.43	100	373	1.34	271.21	263	12	3.47E-03	34.9	
8	0	143.46	54	312	0.90	277.33	275	7	1.86E-03	56.3	
9	0	156.70	49	260	1.54	304.11	301	7	1.69E-03	57.0	
10	0	185.75	265	509	1.50	362.81	356	14	9.22E-03	19.0	
11	0	198.70	177	495	1.96	389.00	382	15	6.15E-03	28.4	
12	0	239.82	206	431	1.62	472.11	466	14	7.16E-03	22.6	
13	0	244.97	43	190	0.95	482.52	480	7	1.49E-03	55.3	
14	0	275.41	53	130	0.98	544.03	541	6	1.83E-03	36.9	
15	0	278.37	51	226	1.48	550.03	547	10	1.76E-03	57.3	
16	0	295.86	64	198	1.21	585.36	581	8	2.24E-03	39.8	
17	0	330.54	32	162	1.21	655.46	653	8	1.10E-03	71.9	
18	0	338.52	63	194	2.15	671.59	667	10	2.17E-03	43.6	
19	0	352.06	81	215	1.97	698.95	694	11	2.81E-03	36.7	
20	0	408.99	15	82	0.74	814.00	812	6	5.37E-04	95.7	
21	0	499.84	27	93	1.87	997.57	994	8	9.32E-04	65.4	
22	0	511.34	343	318	1.99	1020.82	1012	20	1.19E-02	14.0	
23	0	545.31	6	75	1.20	1089.45	1089	8	1.97E-04	266.8	
24	0	557.57	67	170	4.83	1114.23	1105	17	2.32E-03	46.3	
25	0	583.17	55	68	1.82	1165.94	1162	9	1.91E-03	30.1	
26	0	595.57	76	156	2.08	1191.00	1181	19	2.65E-03	40.9	
27	0	610.29	92	207	1.82	1220.74	1210	20	3.18E-03	40.1	
28	0	700.48	18	33	1.17	1402.94	1401	6	6.31E-04	54.5	
29	0	804.05	28	97	3.53	1612.16	1606	16	9.81E-04	79.8	
30	0	817.80	33	55	4.13	1639.93	1633	13	1.14E-03	49.8	
31	0	823.10	16	78	4.02	1650.64	1647	14	5.47E-04	120.9	
32	0	839.55	79	84	7.23	1683.86	1673	21	2.74E-03	31.1	
33	0	910.69	38	66	1.48	1827.54	1823	13	1.30E-03	47.3	
34	0	969.16	33	57	1.61	1945.64	1940	13	1.16E-03	50.0	
35	0	1014.03	28	48	1.30	2036.25	2030	13	9.55E-04	55.7	
36	0	1120.17	29	24	1.90	2250.58	2247	9	9.95E-04	36.4	
37	0	1130.48	12	43	4.31	2271.40	2269	12	4.08E-04	114.4	
38	1	1155.54	37	40	2.39	2322.00	2308	31	1.27E-03	39.2	6.20E+00

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	1	1158.02	21	39	2.39	2327.00	2308	31	7.24E-04	69.1	
40	0	1207.50	14	40	2.54	2426.91	2424	14	4.89E-04	97.6	
41	5	1251.38	18	5	1.44	2515.50	2513	20	6.38E-04	28.4	1.76E+00
42	5	1255.38	25	18	2.95	2523.58	2513	20	8.85E-04	47.7	
43	0	1291.88	14	13	1.31	2597.27	2595	7	4.98E-04	48.5	
44	0	1334.85	40	42	9.72	2684.02	2676	23	1.39E-03	44.2	
45	0	1396.67	35	29	4.92	2808.81	2800	17	1.22E-03	39.1	
46	0	1420.99	11	11	1.38	2857.89	2856	7	3.71E-04	59.5	
47	0	1453.75	8	12	0.80	2924.01	2921	6	2.85E-04	75.2	
48	2	1460.71	46	38	3.07	2938.08	2929	20	1.58E-03	35.8	3.26E+00
49	2	1464.40	22	12	2.28	2945.51	2929	20	7.63E-04	27.7	
50	0	1481.04	13	10	1.46	2979.10	2976	8	4.66E-04	48.8	
51	0	1566.50	59	31	11.90	3151.58	3138	31	2.05E-03	30.8	
52	0	1674.14	7	6	0.79	3368.81	3364	6	2.38E-04	68.5	
53	2	1749.63	22	9	2.71	3521.14	3517	19	7.50E-04	29.6	2.96E+00
54	2	1752.04	19	20	2.65	3526.00	3517	19	6.49E-04	59.4	
55	0	1815.68	17	9	4.73	3654.40	3647	12	5.90E-04	42.8	
56	0	1862.25	42	30	10.01	3748.37	3733	31	1.47E-03	41.6	
57	0	1944.13	9	4	2.29	3913.56	3910	8	3.12E-04	50.9	

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:15:40.05

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851004.CNF;1
Sample date       : 15-JUN-2005 09:07:00 Acquisition date : 1-JUL-2005 15:14:28.
Sample ID         : G138851004           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA11              Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00         Elapsed real time: 0 08:00:02.98  0.0%
Energy tolerance : 2.00000 KEV           Analyst Initials : AKB
Abundance limit   : 75.00000            Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 11912863
Matrix Spike DPM :                       LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	27	10.67*	4.759E-01	2.523E+01	2.523E+01	129.34
Y-91	557.57	28	95.08*	9.996E-01	1.385E+00	1.683E+00	268.59
	1204.90	------	0.30	5.511E-01	------ Line Not Found		------
MO-99	140.51	80	82.70*	2.225E+00	2.032E+00	1.273E+02	99.80
	181.06	------	6.20	2.040E+00	------ Line Not Found		------
	739.58	------	12.80	8.129E-01	------ Line Not Found		------
SN-117M	156.02	49	2.11	2.164E+00	5.000E+01	1.155E+02	114.13
	158.56	49	86.40*	2.164E+00	1.221E+00	2.820E+00	114.13
TE-125M	109.28	45	0.28*	2.181E+00	3.423E+02	4.165E+02	151.15
CE-141	145.44	23	48.40*	2.216E+00	1.010E+00	1.434E+00	310.80
HG-203	70.83	------	4.75	1.242E+00	------ Line Not Found		------
	72.87	------	8.00	1.328E+00	------ Line Not Found		------
	82.60	------	3.55	1.681E+00	------ Line Not Found		------
	279.20	35	77.30*	1.589E+00	1.340E+00	1.711E+00	187.99
BI-211	351.07	27	12.94*	1.364E+00	7.228E+00	7.228E+00	269.40
BI-214	609.31	54	46.30*	9.373E-01	5.831E+00	5.831E+00	148.15
	768.36	------	5.04	7.895E-01	------ Line Not Found		------
	934.06	------	3.21	6.769E-01	------ Line Not Found		------
	1120.29	29	15.10	5.844E-01	1.524E+01	1.524E+01	73.38
	1238.11	------	5.94	5.394E-01	------ Line Not Found		------
	1377.67	------	4.11	4.967E-01	------ Line Not Found		------
RA-226	295.21	64	19.20	1.528E+00	1.031E+01	1.031E+01	80.11
	351.92	27	37.20	1.364E+00	2.514E+00	2.514E+00	269.39
	609.31	54	46.30*	9.373E-01	5.831E+00	5.831E+00	148.15
TH-228	84.40	------	1.21	1.736E+00	------ Line Not Found		------
	238.60	95	44.60*	1.745E+00	5.743E+00	5.838E+00	109.56
	300.10	------	3.41	1.514E+00	------ Line Not Found		------
TH-230	295.21	64	19.20	1.528E+00	1.031E+01	1.031E+01	80.11
	351.92	27	37.20	1.364E+00	2.514E+00	2.514E+00	269.39
	609.31	54	46.30*	9.373E-01	5.831E+00	5.831E+00	148.15
TH-232	238.59	95	44.60*	1.745E+00	5.743E+00	5.743E+00	109.56
	911.20	9	27.70	6.908E-01	2.264E+00	2.264E+00	409.06

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
	964.40	------	5.20	6.597E-01	------ Line Not Found		------
	969.11	14	16.60	6.571E-01	6.189E+00	6.189E+00	256.01
U-234	67.67	------	0.37	1.103E+00	------ Line Not Found		------
	241.98	------	7.49	1.735E+00	------ Line Not Found		------
	295.21	64	19.20*	1.528E+00	1.031E+01	1.031E+01	80.11
	351.92	27	37.20	1.364E+00	2.514E+00	2.514E+00	269.45
U-235	89.95	------	2.70	1.882E+00	------ Line Not Found		------
	93.35	------	4.50	1.957E+00	------ Line Not Found		------
	105.00	------	2.10	2.135E+00	------ Line Not Found		------
	143.76	23	10.50*	2.216E+00	4.657E+00	4.657E+00	311.17
	163.33	------	4.70	2.133E+00	------ Line Not Found		------
	185.71	94	54.00	2.015E+00	4.041E+00	4.041E+00	118.66
	205.31	------	5.00	1.912E+00	------ Line Not Found		------

Nuclide Type: NATURAL

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
RA-224	240.98	95	3.95*	1.745E+00	6.485E+01	6.591E+01	109.47

Flag: "*" = Keyline

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

Total number of lines in spectrum	50	
Number of unidentified lines	21	
Number of lines tentatively identified by NID	29	58.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.523E+01	2.523E+01	3.263E+01	129.34	
Y-91	58.51D	1.21	1.385E+00	1.683E+00	4.519E+00	268.59	
MO-99	66.02H	62.7	2.032E+00	1.273E+02	1.270E+02	99.80	
SN-117M	13.60D	2.31	1.221E+00	2.820E+00	3.218E+00	114.13	
TE-125M	58.00D	1.22	3.423E+02	4.165E+02	6.295E+02	151.15	
CE-141	32.50D	1.42	1.010E+00	1.434E+00	4.457E+00	310.80	
HG-203	46.61D	1.28	1.340E+00	1.711E+00	3.217E+00	187.99	
BI-211	7.04E+08Y	1.00	7.228E+00	7.228E+00	19.47E+00	269.40	
BI-214	1600.00Y	1.00	5.831E+00	5.831E+00	8.639E+00	148.15	
RA-226	1600.00Y	1.00	5.831E+00	5.831E+00	8.639E+00	148.15	
TH-228	1.91Y	1.02	5.743E+00	5.838E+00	6.396E+00	109.56	
TH-230	7.70E+04Y	1.00	5.831E+00	5.831E+00	8.639E+00	148.15	
TH-232	1.41E+10Y	1.00	5.743E+00	5.743E+00	6.292E+00	109.56	
U-234	2.45E+05Y	1.00	1.031E+01	1.031E+01	0.826E+01	80.11	
U-235	7.04E+08Y	1.00	4.657E+00	4.657E+00	14.49E+00	311.17	
			---------	---------			
	Total Activity :		4.257E+02	6.279E+02			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RA-224	1.91Y	1.02	6.485E+01	6.591E+01	7.215E+01	109.47	
			---------	---------			
	Total Activity :		6.485E+01	6.591E+01			

Grand Total Activity :	4.905E+02	6.939E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G138851004 Acquisition date : 1-JUL-2005 15:14:28

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	102.50	21	429	1.65	194.55	193	9	7.23E-04	****	2.11E+00	T
4	137.52	33	241	1.23	265.34	263	12	1.13E-03	****	2.23E+00	T
0	198.70	177	495	1.96	389.00	382	15	6.15E-03	56.8	1.95E+00	T
0	244.97	29	190	0.95	482.52	480	7	9.99E-04	****	1.72E+00	
0	275.41	53	130	0.98	544.03	541	6	1.83E-03	73.9	1.60E+00	T
0	330.54	32	162	1.21	655.46	653	8	1.10E-03	****	1.42E+00	T
0	338.52	19	194	2.15	671.59	667	10	6.46E-04	****	1.40E+00	T
0	499.84	27	93	1.87	997.57	994	8	9.32E-04	****	1.08E+00	
0	545.31	6	75	1.20	1089.45	1089	8	1.97E-04	****	1.02E+00	T
0	583.17	1	68	1.82	1165.94	1162	9	5.08E-05	****	9.68E-01	T
0	595.57	76	156	2.08	1191.00	1181	19	2.65E-03	81.8	9.54E-01	
0	700.48	18	33	1.17	1402.94	1401	6	6.31E-04	****	8.47E-01	T
0	804.05	28	97	3.53	1612.16	1606	16	9.81E-04	****	7.62E-01	T
0	817.80	33	55	4.13	1639.93	1633	13	1.14E-03	99.5	7.52E-01	T
0	823.10	16	78	4.02	1650.64	1647	14	5.47E-04	****	7.48E-01	
0	839.55	79	84	7.23	1683.86	1673	21	2.74E-03	62.2	7.37E-01	
0	1014.03	28	48	1.30	2036.25	2030	13	9.55E-04	****	6.33E-01	
0	1130.48	1	43	4.31	2271.40	2269	12	4.15E-05	****	5.80E-01	T
1	1155.54	37	40	2.39	2322.00	2308	31	1.27E-03	78.4	5.70E-01	
1	1158.02	6	39	2.39	2327.00	2308	31	2.14E-04	****	5.69E-01	
0	1207.50	14	40	2.54	2426.91	2424	14	4.89E-04	****	5.50E-01	
5	1251.38	18	5	1.44	2515.50	2513	20	6.38E-04	56.8	5.35E-01	
5	1255.38	25	18	2.95	2523.58	2513	20	8.85E-04	95.5	5.33E-01	
0	1291.88	14	13	1.31	2597.27	2595	7	4.98E-04	97.0	5.22E-01	T
0	1334.85	40	42	9.72	2684.02	2676	23	1.39E-03	88.4	5.09E-01	
0	1396.67	28	29	4.92	2808.81	2800	17	9.62E-04	****	4.92E-01	T
0	1420.99	11	11	1.38	2857.89	2856	7	3.71E-04	****	4.85E-01	
0	1453.75	8	12	0.80	2924.01	2921	6	2.85E-04	****	4.78E-01	
2	1464.40	22	12	2.28	2945.51	2929	20	7.63E-04	55.4	4.75E-01	
0	1481.04	13	10	1.46	2979.10	2976	8	4.66E-04	97.6	4.71E-01	
0	1566.50	59	31	11.90	3151.58	3138	31	2.05E-03	61.6	4.54E-01	
2	1749.63	16	9	2.71	3521.14	3517	19	5.67E-04	88.7	4.25E-01	
2	1752.04	13	20	2.65	3526.00	3517	19	4.65E-04	****	4.24E-01	
0	1815.68	7	9	4.73	3654.40	3647	12	2.26E-04	****	4.17E-01	
0	1862.25	42	30	10.01	3748.37	3733	31	1.47E-03	83.3	4.12E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 1-JUL-2005 23:15:52.07

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G138851004.CNF;1     *
* Acquisition date : 1-JUL-2005 15:14:28.  Detector SN#     : 11912863       *
* Detector ID      : GAMMA11               Sensitivity      : 3.00000        *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000        *
* Elapsed live time: 0 08:00:00.00         Abundance limit  : 75.00000       *
* Elapsed real time: 0 08:00:02.98         Half life ratio  : 8.00000        *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 15-JUN-2005 09:07:00  Nuclide Library : EPI             *
* Sample ID        : G138851004            Analyst initials: AKB            *
* Batch Number     : 435282                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 11-JAN-2005 15:33:41.3MS Isotope      :               *
* MSD DPM          :                      MSD Isotope      :               *
* LCS DPM          :                      LCS Isotope      :               *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	2.523E+01	3.263E+01	3.161E+01	2.306E+00	0.798
Y-91	1.683E+00	4.519E+00	3.153E+00	2.043E-01	0.534
MO-99	1.273E+02	1.270E+02	1.495E+02	9.797E+00	0.851
SN-117M	2.820E+00	3.218E+00	5.673E+00	3.739E-01	0.497
TE-125M	4.165E+02	6.295E+02	8.940E+02	8.231E+01	0.466
CE-141	1.895E-01	4.698E+00	5.993E+00	4.001E-01	0.032
HG-203	1.711E+00	3.217E+00	3.791E+00	2.752E-01	0.451
BI-211	7.228E+00	1.947E+01	1.763E+01	1.266E+00	0.410
BI-214	5.831E+00	8.639E+00	5.500E+00	4.537E-01	1.060
RA-224	6.591E+01	7.215E+01	5.821E+01	4.044E+00	1.132
RA-226	5.831E+00	8.639E+00	5.500E+00	4.537E-01	1.060
TH-228	5.838E+00	6.396E+00	5.177E+00	4.279E-01	1.128
TH-230	5.831E+00	8.639E+00	5.500E+00	4.537E-01	1.060
TH-232	5.743E+00	6.292E+00	5.093E+00	4.209E-01	1.128
U-234	1.031E+01	8.262E+00	1.156E+01	1.078E+00	0.892
U-235	4.657E+00	1.449E+01	2.000E+01	3.310E+00	0.233

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	6.083E+00		1.691E+01	2.969E+01	2.173E+00	0.205

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	1.628E-01		1.843E+00	3.277E+00	2.175E-01	0.050
AL-26	-1.475E+00		1.932E+00	2.592E+00	1.551E-01	-0.569
SC-46	1.723E-01		1.754E+00	3.151E+00	2.920E-01	0.055
V-48	4.332E-01		3.276E+00	5.886E+00	5.012E-01	0.074
CR-51	-1.012E+01		2.054E+01	3.483E+01	2.576E+00	-0.291
MN-54	-9.561E-01		1.879E+00	2.722E+00	2.315E-01	-0.351
CO-56	3.481E-01		1.973E+00	3.099E+00	2.687E-01	0.112
CO-57	9.897E-01		1.530E+00	2.617E+00	1.694E-01	0.378
CO-58	-1.088E+00		2.096E+00	3.039E+00	2.492E-01	-0.358
FE-59	-1.945E+00		3.733E+00	6.310E+00	4.930E-01	-0.308
CO-60	1.404E+00		1.856E+00	3.160E+00	2.256E-01	0.444
ZN-65	-2.887E+00		4.051E+00	5.557E+00	3.737E-01	-0.520
SE-75	1.685E+00		2.400E+00	4.283E+00	3.006E-01	0.393
KR-85	-7.257E+02		5.192E+02	8.241E+02	5.342E+01	-0.881
SR-85	-3.771E+00		2.698E+00	4.282E+00	2.776E-01	-0.881
Y-88	-2.098E-02		1.818E+00	3.351E+00	1.971E-01	-0.006
NB-94	-1.226E+00		1.934E+00	2.649E+00	1.798E-01	-0.463
NB-95	-3.392E-01		2.148E+00	3.786E+00	2.872E-01	-0.090
NB-95M	-4.718E+01		1.522E+02	2.144E+02	2.198E+01	-0.220
ZR-95	1.435E+00		3.040E+00	5.626E+00	4.760E-01	0.255
RU-103	1.567E-01		2.535E+00	3.789E+00	4.913E-01	0.041
RH-106	1.869E+01		1.493E+01	2.776E+01	1.775E+00	0.673
RU-106	1.175E+01		1.504E+01	2.711E+01	3.264E+00	0.434
AG-108M	-2.300E+00		1.684E+00	2.669E+00	1.822E-01	-0.862
CD-109	1.381E+01		4.948E+01	7.413E+01	7.225E+00	0.186
AG-110M	-7.630E-01		1.666E+00	2.756E+00	1.834E-01	-0.277
SN-113	6.854E-01		2.338E+00	4.099E+00	2.706E-01	0.167
CD-115	-1.660E+02		8.082E+02	1.372E+03	8.900E+01	-0.121
SN-115	-3.859E+01		1.543E+02	2.689E+02	2.437E+01	-0.144
TE-123M	-1.646E+00		1.892E+00	2.626E+00	1.750E-01	-0.627
SB-124	1.253E+00		4.151E+00	7.886E+00	5.421E-01	0.159
SB-125	-2.501E+00		4.765E+00	7.986E+00	5.253E-01	-0.313
I-126	-7.173E+00		9.169E+00	1.476E+01	9.374E-01	-0.486
SB-126	2.145E+00		7.139E+00	1.247E+01	8.738E-01	0.172
SN-126	6.979E-01		5.027E+00	7.488E+00	7.284E-01	0.093
SB-127	-6.648E+00		7.770E+01	1.324E+02	1.371E+01	-0.050
I-131	1.237E+00		6.606E+00	1.156E+01	8.243E-01	0.107
TE-132	1.918E+01		5.116E+01	8.555E+01	1.290E+01	0.224
BA-133	-4.049E-03		2.656E+00	3.990E+00	4.777E-01	-0.001
CS-134	6.664E-01		1.943E+00	3.527E+00	2.833E-01	0.189
CS-135	5.540E-01		7.953E+00	1.389E+01	1.191E+00	0.040
CS-136	5.388E-01		4.410E+00	7.981E+00	6.474E-01	0.068
BA-137M	6.752E-02		1.693E+00	2.903E+00	1.828E-01	0.023
CS-137	7.138E-02		1.790E+00	3.069E+00	1.939E-01	0.023
CE-139	2.055E-02		1.731E+00	2.879E+00	1.923E-01	0.007
BA-140	3.538E+00		1.449E+01	2.514E+01	8.208E+00	0.141
CE-144	-3.578E+00		1.224E+01	2.025E+01	2.929E+00	-0.177
PM-144	1.955E-01		1.607E+00	2.769E+00	1.860E-01	0.071

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-146	-2.404E+00		2.326E+00	3.756E+00	3.398E-01	-0.640
ND-147	2.245E+01		3.011E+01	5.396E+01	7.463E+00	0.416
PM-147	2.238E+06		3.170E+06	5.434E+06	3.530E+05	0.412
PM-149	2.336E+03		7.137E+03	1.257E+04	1.846E+03	0.186
EU-152	6.132E-02		4.896E+00	8.501E+00	6.227E-01	0.007
GD-153	1.044E+00		5.141E+00	7.676E+00	6.399E-01	0.136
EU-154	4.644E-01		5.146E+00	9.151E+00	9.037E-01	0.051
EU-155	2.317E+00		6.972E+00	1.045E+01	8.017E-01	0.222
TB-160	1.248E+00		6.573E+00	1.185E+01	1.081E+00	0.105
TM-171	1.125E+03		2.128E+03	3.235E+03	3.343E+02	0.348
HF-181	1.214E+00		2.267E+00	4.015E+00	2.592E-01	0.302
TA-182	1.590E+00		6.548E+00	1.194E+01	7.356E-01	0.133
IR-192	1.187E+00		1.872E+00	3.333E+00	2.289E-01	0.356
BI-207	2.495E-02		2.143E+00	3.815E+00	2.857E-01	0.007
TL-208	8.553E-02	+	2.449E+00	3.348E+00	2.432E-01	0.026
BI-210	1.029E+02		3.465E+02	5.304E+02	5.341E+01	0.194
PB-210	1.029E+02		3.465E+02	5.304E+02	5.341E+01	0.194
PB-211	-4.004E+01		5.327E+01	7.765E+01	4.845E+01	-0.516
BI-212	6.012E+00		1.364E+01	2.399E+01	2.093E+00	0.251
PB-212	5.838E+00	+	6.396E+00	6.249E+00	5.165E-01	0.934
PB-214	2.514E+00	+	6.775E+00	7.353E+00	6.526E-01	0.342
RN-219	5.741E+00		2.076E+01	3.639E+01	5.027E+00	0.158
RA-223	3.488E+01		3.543E+01	6.314E+01	1.067E+01	0.552
AC-227	1.461E+00		2.095E+01	3.657E+01	5.356E+00	0.040
TH-227	1.438E+00		2.062E+01	3.600E+01	6.240E+00	0.040
AC-228	2.276E+00	+	9.309E+00	1.188E+01	1.397E+00	0.191
RA-228	2.276E+00	+	9.309E+00	1.188E+01	1.397E+00	0.191
TH-229	-1.851E+01		3.242E+01	4.537E+01	3.080E+00	-0.408
PA-231	7.091E+00		9.366E+01	1.424E+02	2.036E+01	0.050
TH-231	-4.069E+00		9.212E+00	1.575E+01	1.299E+00	-0.258
PA-233	-5.746E-01		3.501E+00	6.030E+00	4.322E-01	-0.095
PA-234	-6.214E+00		1.252E+01	2.132E+01	4.031E+00	-0.291
PA-234M	1.876E+02		2.026E+02	3.824E+02	3.702E+01	0.490
TH-234	1.381E+01		1.042E+02	1.563E+02	2.999E+01	0.088
NP-237	2.051E+00		1.499E+01	2.233E+01	5.089E+00	0.092
U-238	1.381E+01		1.042E+02	1.563E+02	2.999E+01	0.088
NP-239	-2.422E+00		1.131E+01	1.884E+01	1.269E+00	-0.129
AM-241	-5.147E+00		1.318E+01	1.938E+01	2.386E+00	-0.266
AM-242	4.593E+01	+	1.772E+02	2.190E+02	1.684E+01	0.210
CM-247	8.203E-01		1.845E+00	3.263E+00	2.049E-01	0.251
CF-249	5.404E-01		2.046E+00	3.586E+00	2.252E-01	0.151
CF-251	-1.930E+00		7.250E+00	1.192E+01	8.002E-01	-0.162
ANH-511	1.501E+01		2.490E+00	4.736E+00	3.069E-01	3.170

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G138851004            *
* Acquisition date :  1-JUL-2005 15:14:28 Detector SN#     : 11912863      *
* Detector ID      : GAMMA11              Sensitivity      : 3.000         *
* Geometry         : 2L_MB                Energy tolerance: 2.000         *
* Elapsed live time:    0 08:00:00.00     Abundance limit  : 75.000        *
* Elapsed real time:    0 08:00:02.98     Half life ratio  : 8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 15-JUN-2005 09:07:00 Nuclide Library :                 *
* Sample ID        : G138851004           Analyst initials: AKB             *
* Batch Number     : 435282               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 11-JAN-2005 15:33:41 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	2.523E+01	3.263E+01	1.456E+01	1.631E+01
Y-91	1.683E+00	4.519E+00	1.496E+00	2.260E+00
MO-99	1.273E+02	1.270E+02	7.264E+01	6.352E+01
SN-117M	2.820E+00	3.218E+00	2.759E+00	1.609E+00
TE-125M	4.165E+02	6.295E+02	4.347E+02	3.148E+02
CE-141	1.895E-01	4.698E+00	2.914E+00	2.349E+00
HG-203	1.711E+00	3.217E+00	1.830E+00	1.608E+00
BI-211	7.228E+00	1.947E+01	8.458E+00	9.737E+00
BI-214	5.831E+00	8.639E+00	2.605E+00	4.319E+00
RA-224	6.591E+01	7.215E+01	2.818E+01	3.608E+01
RA-226	5.831E+00	8.639E+00	2.605E+00	4.319E+00
TH-228	5.838E+00	6.396E+00	2.507E+00	3.198E+00
TH-230	5.831E+00	8.639E+00	2.605E+00	4.319E+00
TH-232	5.743E+00	6.292E+00	2.466E+00	3.146E+00
U-234	1.031E+01	8.262E+00	5.566E+00	4.131E+00
U-235	4.657E+00	1.449E+01	9.732E+00	7.245E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	6.083E+00	1.691E+01	1.418E+01	8.455E+00	NOT IDENT.
NA-22	1.628E-01	1.843E+00	1.517E+00	9.216E-01	NOT IDENT.
NA-24	3.304E+07	1.232E+08	0.000E+00	6.158E+07	SHORT HLIF
AL-26	-1.475E+00	1.932E+00	1.144E+00	9.662E-01	NOT IDENT.
SC-46	1.723E-01	1.754E+00	1.473E+00	8.770E-01	FAIL ABUN
V-48	4.332E-01	3.276E+00	2.745E+00	1.638E+00	NOT IDENT.
CR-51	-1.012E+01	2.054E+01	1.675E+01	1.027E+01	NOT IDENT.
MN-54	-9.561E-01	1.879E+00	1.273E+00	9.396E-01	NOT IDENT.
CO-56	3.481E-01	1.973E+00	1.450E+00	9.866E-01	NOT IDENT.
MN-56	1.000E+41	5.654E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	9.897E-01	1.530E+00	1.275E+00	7.650E-01	FAIL ABUN
CO-58	-1.088E+00	2.096E+00	1.421E+00	1.048E+00	NOT IDENT.
FE-59	-1.945E+00	3.733E+00	2.912E+00	1.867E+00	FAIL ABUN
CO-60	1.404E+00	1.856E+00	1.455E+00	9.278E-01	NOT IDENT.
ZN-65	-2.887E+00	4.051E+00	2.556E+00	2.026E+00	NOT IDENT.
SE-75	1.685E+00	2.400E+00	2.072E+00	1.200E+00	FAIL ABUN
KR-85	-7.257E+02	5.192E+02	3.984E+02	2.596E+02	NOT IDENT.
SR-85	-3.771E+00	2.698E+00	2.070E+00	1.349E+00	NOT IDENT.
Y-88	-2.098E-02	1.818E+00	1.504E+00	9.091E-01	NOT IDENT.
NB-94	-1.226E+00	1.934E+00	1.250E+00	9.670E-01	NOT IDENT.
NB-95	-3.392E-01	2.148E+00	1.783E+00	1.074E+00	NOT IDENT.
NB-95M	-4.718E+01	1.522E+02	1.039E+02	7.611E+01	NOT IDENT.
ZR-95	1.435E+00	3.040E+00	2.643E+00	1.520E+00	NOT IDENT.
TC-99M	1.003E+20	1.046E+20	0.000E+00	0.000E+00	SHORT HLIF
RU-103	1.567E-01	2.535E+00	1.807E+00	1.267E+00	FAIL ABUN
RH-106	1.869E+01	1.493E+01	1.316E+01	7.463E+00	NOT IDENT.
RU-106	1.175E+01	1.504E+01	1.284E+01	7.519E+00	NOT IDENT.
AG-108M	-2.300E+00	1.684E+00	1.270E+00	8.422E-01	NOT IDENT.
CD-109	1.381E+01	4.948E+01	3.615E+01	2.474E+01	NOT IDENT.
AG-110M	-7.630E-01	1.666E+00	1.299E+00	8.332E-01	NOT IDENT.
SN-113	6.854E-01	2.338E+00	1.966E+00	1.169E+00	NOT IDENT.
CD-115	-1.660E+02	8.082E+02	6.516E+02	4.041E+02	NOT IDENT.
SN-115	-3.859E+01	1.543E+02	1.254E+02	7.713E+01	FAIL ABUN
TE-123M	-1.646E+00	1.892E+00	1.275E+00	9.461E-01	NOT IDENT.
SB-124	1.253E+00	4.151E+00	3.583E+00	2.075E+00	NOT IDENT.
SB-125	-2.501E+00	4.765E+00	3.812E+00	2.382E+00	NOT IDENT.
I-126	-7.173E+00	9.169E+00	6.950E+00	4.584E+00	NOT IDENT.
SB-126	2.145E+00	7.139E+00	5.880E+00	3.570E+00	NOT IDENT.
SN-126	6.979E-01	5.027E+00	3.652E+00	2.514E+00	NOT IDENT.
SB-127	-6.648E+00	7.770E+01	6.224E+01	3.885E+01	FAIL ABUN
I-131	1.237E+00	6.606E+00	5.541E+00	3.303E+00	NOT IDENT.
I-132	1.000E+41	3.573E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.918E+01	5.116E+01	4.148E+01	2.558E+01	NOT IDENT.
BA-133	-4.049E-03	2.656E+00	1.918E+00	1.328E+00	FAIL ABUN
I-133	4.122E+05	8.296E+05	0.000E+00	4.148E+05	SHORT HLIF
CS-134	6.664E-01	1.943E+00	1.666E+00	9.717E-01	NOT IDENT.
CS-135	5.540E-01	7.953E+00	6.704E+00	3.977E+00	NOT IDENT.
I-135	2.602E+18	5.144E+18	0.000E+00	0.000E+00	SHORT HLIF
CS-136	5.388E-01	4.410E+00	3.685E+00	2.205E+00	FAIL ABUN
BA-137M	6.752E-02	1.693E+00	1.372E+00	8.465E-01	NOT IDENT.
CS-137	7.138E-02	1.790E+00	1.451E+00	8.948E-01	NOT IDENT.
CE-139	2.055E-02	1.731E+00	1.400E+00	8.653E-01	NOT IDENT.
BA-140	3.538E+00	1.449E+01	1.197E+01	7.243E+00	NOT IDENT.
LA-140	2.136E+03	1.808E+03	0.000E+00	9.042E+02	SHORT HLIF

CE-143	2.968E+03	1.422E+04	0.000E+00	7.108E+03 SHORT HLIF
CE-144	-3.578E+00	1.224E+01	9.855E+00	6.122E+00 NOT IDENT.
PM-144	1.955E-01	1.607E+00	1.308E+00	8.037E-01 NOT IDENT.
PR-144	1.000E+41	8.223E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	-2.404E+00	2.326E+00	1.791E+00	1.163E+00 NOT IDENT.
ND-147	2.245E+01	3.011E+01	2.567E+01	1.506E+01 NOT IDENT.
PM-147	2.238E+06	3.170E+06	2.647E+06	1.585E+06 NOT IDENT.
PM-149	2.336E+03	7.137E+03	6.062E+03	3.569E+03 NOT IDENT.
EU-152	6.132E-02	4.896E+00	4.079E+00	2.448E+00 NOT IDENT.
GD-153	1.044E+00	5.141E+00	3.736E+00	2.571E+00 FAIL ABUN
EU-154	4.644E-01	5.146E+00	4.237E+00	2.573E+00 NOT IDENT.
EU-155	2.317E+00	6.972E+00	5.086E+00	3.486E+00 NOT IDENT.
TB-160	1.248E+00	6.573E+00	5.558E+00	3.287E+00 NOT IDENT.
TM-171	1.125E+03	2.128E+03	1.580E+03	1.064E+03 NOT IDENT.
HF-181	1.214E+00	2.267E+00	1.918E+00	1.133E+00 FAIL ABUN
TA-182	1.590E+00	6.548E+00	5.497E+00	3.274E+00 FAIL ABUN
IR-192	1.187E+00	1.872E+00	1.606E+00	9.358E-01 FAIL ABUN
BI-207	2.495E-02	2.143E+00	1.769E+00	1.071E+00 NOT IDENT.
TL-208	8.553E-02	2.449E+00	1.596E+00	1.224E+00 FAIL ABUN
BI-210	1.029E+02	3.465E+02	2.579E+02	1.733E+02 NOT IDENT.
PB-210	1.029E+02	3.465E+02	2.579E+02	1.733E+02 NOT IDENT.
PB-211	-4.004E+01	5.327E+01	3.709E+01	2.664E+01 NOT IDENT.
BI-212	6.012E+00	1.364E+01	1.133E+01	6.820E+00 NOT IDENT.
PB-212	5.838E+00	6.396E+00	3.044E+00	3.198E+00 FAIL ABUN
PB-214	2.514E+00	6.775E+00	3.553E+00	3.388E+00 FAIL ABUN
RN-219	5.741E+00	2.076E+01	1.742E+01	1.038E+01 NOT IDENT.
RA-223	3.488E+01	3.543E+01	3.045E+01	1.772E+01 FAIL ABUN
AC-227	1.461E+00	2.095E+01	1.768E+01	1.047E+01 FAIL ABUN
TH-227	1.438E+00	2.062E+01	1.741E+01	1.031E+01 FAIL ABUN
AC-228	2.276E+00	9.309E+00	5.612E+00	4.655E+00 FAIL ABUN
RA-228	2.276E+00	9.309E+00	5.612E+00	4.655E+00 FAIL ABUN
TH-229	-1.851E+01	3.242E+01	2.200E+01	1.621E+01 NOT IDENT.
PA-231	7.091E+00	9.366E+01	6.870E+01	4.683E+01 FAIL ABUN
TH-231	-4.069E+00	9.212E+00	7.591E+00	4.606E+00 FAIL ABUN
PA-233	-5.746E-01	3.501E+00	2.905E+00	1.751E+00 FAIL ABUN
PA-234	-6.214E+00	1.252E+01	9.876E+00	6.262E+00 FAIL ABUN
PA-234M	1.876E+02	2.026E+02	1.796E+02	1.013E+02 NOT IDENT.
TH-234	1.381E+01	1.042E+02	7.632E+01	5.211E+01 NOT IDENT.
NP-237	2.051E+00	1.499E+01	1.089E+01	7.495E+00 NOT IDENT.
U-238	1.381E+01	1.042E+02	7.632E+01	5.211E+01 NOT IDENT.
NP-239	-2.422E+00	1.131E+01	9.169E+00	5.655E+00 FAIL ABUN
AM-241	-5.147E+00	1.318E+01	9.450E+00	6.591E+00 NOT IDENT.
AM-242	4.593E+01	1.772E+02	1.066E+02	8.858E+01 FAIL ABUN
CM-247	8.203E-01	1.845E+00	1.562E+00	9.224E-01 FAIL ABUN
BK-249	5.404E-01	2.046E+00	1.719E+00	1.023E+00 NOT IDENT.
CF-251	-1.930E+00	7.250E+00	5.789E+00	3.625E+00 NOT IDENT.
ANH-511	1.501E+01	2.490E+00	2.309E+00	1.245E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:13:13.76

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870615.CNF;1
Sample date : 20-JUN-2005 00:00:00 Acquisition date : 1-JUL-2005 21:01:15.
Sample ID : G1200870615 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.69 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.46	133	318	1.11	127.73	124	7	4.61E-03	23.9	
2	0	92.91	528	593	1.36	186.55	181	12	1.83E-02	10.2	
3	0	144.32	64	425	1.27	289.21	285	9	2.21E-03	60.0	
4	1	181.81	52	186	1.53	364.08	361	17	1.81E-03	40.3	1.91E+00
5	1	185.86	331	323	1.47	372.17	361	17	1.15E-02	11.4	
6	0	189.89	63	230	1.36	380.22	378	7	2.18E-03	42.2	
7	0	198.20	47	378	1.29	396.81	393	9	1.63E-03	76.0	
8	0	238.64	149	361	1.63	477.58	472	11	5.17E-03	26.0	
9	0	278.41	34	210	1.81	557.00	552	9	1.18E-03	79.5	
10	0	295.36	47	151	1.33	590.86	587	7	1.63E-03	45.9	
11	0	352.13	58	158	2.04	704.25	701	9	2.03E-03	41.3	
12	0	403.45	26	107	1.28	806.74	804	8	8.95E-04	72.9	
13	0	416.51	12	111	1.20	832.83	830	8	4.03E-04	159.6	
14	0	430.67	17	75	2.34	861.10	857	8	6.06E-04	88.7	
15	0	510.98	613	232	2.79	1021.51	1012	19	2.13E-02	7.2	
16	0	582.85	36	143	1.17	1165.06	1160	13	1.25E-03	70.5	
17	0	609.77	44	91	1.39	1218.83	1216	8	1.51E-03	41.4	
18	0	645.57	26	60	1.00	1290.35	1287	8	8.95E-04	56.2	
19	0	728.84	44	94	4.75	1456.69	1450	17	1.52E-03	52.9	
20	0	783.33	35	71	0.91	1565.53	1559	14	1.21E-03	54.9	
21	0	821.19	12	78	0.91	1641.17	1637	12	4.17E-04	150.0	
22	0	903.28	64	93	7.97	1805.14	1792	25	2.23E-03	42.5	
23	0	912.07	78	66	3.80	1822.72	1817	16	2.70E-03	25.7	
24	0	981.14	10	46	1.19	1960.70	1959	9	3.62E-04	122.1	
25	0	1000.51	20	67	0.79	1999.40	1995	14	6.96E-04	89.2	
26	0	1125.86	47	106	16.47	2249.84	2234	39	1.62E-03	74.2	
27	0	1187.68	20	16	1.33	2373.34	2370	10	6.98E-04	42.6	
28	0	1196.92	11	24	1.67	2391.79	2386	10	3.91E-04	87.7	
29	0	1239.31	25	39	3.60	2476.51	2470	14	8.82E-04	55.5	
30	0	1251.08	24	38	3.80	2500.00	2494	17	8.50E-04	61.2	
31	0	1341.02	13	12	1.82	2679.73	2675	8	4.56E-04	53.4	
32	0	1359.20	22	42	3.30	2716.05	2709	19	7.63E-04	74.4	
33	0	1378.12	23	10	0.91	2753.86	2750	8	8.02E-04	31.5	
34	0	1462.81	70	31	9.76	2923.08	2914	24	2.43E-03	23.9	
35	0	1556.22	18	27	5.99	3109.74	3100	17	6.27E-04	72.5	
36	0	1573.94	19	43	3.88	3145.14	3140	24	6.59E-04	93.3	
37	0	1600.82	28	15	6.68	3198.85	3189	21	9.65E-04	40.4	
38	0	1833.34	7	4	0.78	3663.54	3659	7	2.59E-04	55.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1892.78	6	5	0.61	3782.33	3781	5	2.08E-04	69.2	

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:13:19.89

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870615.CNF;1
Sample date : 20-JUN-2005 00:00:00 Acquisition date : 1-JUL-2005 21:01:15.
Sample ID : G1200870615 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 08:00:00.00 Elapsed real time: 0 08:00:02.69 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	37	10.67*	5.721E-01	2.879E+01	2.879E+01	100.65
HG-203	70.83	------	4.75	1.365E+00	------ Line Not Found		------
	72.87	------	8.00	1.457E+00	------ Line Not Found		------
	82.60	------	3.55	1.842E+00	------ Line Not Found		------
	279.20	34	77.30*	1.953E+00	1.052E+00	1.258E+00	159.24
BI-211	351.07	28	12.94*	1.676E+00	6.092E+00	6.092E+00	232.54
BI-212	727.18	44	11.80*	9.857E-01	1.766E+01	1.787E+01	106.05
RA-226	295.21	8	19.20	1.882E+00	1.068E+00	1.068E+00	690.21
	351.92	28	37.20	1.676E+00	2.119E+00	2.119E+00	232.52
	609.31	13	46.30*	1.131E+00	1.150E+00	1.150E+00	332.95
TH-228	84.40	------	1.21	1.904E+00	------ Line Not Found		------
	238.60	18	44.60*	2.140E+00	8.864E-01	8.970E-01	512.14
	300.10	------	3.41	1.863E+00	------ Line Not Found		------
TH-230	295.21	8	19.20	1.882E+00	1.068E+00	1.068E+00	690.21
	351.92	28	37.20	1.676E+00	2.119E+00	2.119E+00	232.52
	609.31	13	46.30*	1.131E+00	1.150E+00	1.150E+00	332.95
TH-232	238.59	18	44.60*	2.140E+00	8.864E-01	8.864E-01	512.14
	911.20	42	27.70	8.250E-01	8.695E+00	8.695E+00	113.66
	964.40	------	5.20	7.888E-01	------ Line Not Found		------
	969.11	------	16.60	7.858E-01	------ Line Not Found		------
U-234	67.67	------	0.37	1.218E+00	------ Line Not Found		------
	241.98	------	7.49	2.124E+00	------ Line Not Found		------
	295.21	8	19.20*	1.882E+00	1.068E+00	1.068E+00	690.21
	351.92	28	37.20	1.676E+00	2.119E+00	2.119E+00	232.60
ANH-511	511.00	22	100.00*	1.290E+00	8.126E-01	8.126E-01	508.10

Flag: "*" = Keyline

Sample ID : G1200870615 Acquisition date : 1-JUL-2005 21:01:15

Total number of lines in spectrum	32	
Number of unidentified lines	11	
Number of lines tentatively identified by NID	21	65.63%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.879E+01	2.879E+01	2.898E+01	100.65	
HG-203	46.61D	1.20	1.052E+00	1.258E+00	2.004E+00	159.24	
BI-211	7.04E+08Y	1.00	6.092E+00	6.092E+00	14.17E+00	232.54	
BI-212	1.91Y	1.01	1.766E+01	1.787E+01	1.895E+01	106.05	
RA-226	1600.00Y	1.00	1.150E+00	1.150E+00	3.828E+00	332.95	
TH-228	1.91Y	1.01	8.864E-01	8.970E-01	45.94E-01	512.14	
TH-230	7.70E+04Y	1.00	1.150E+00	1.150E+00	3.828E+00	332.95	
TH-232	1.41E+10Y	1.00	8.864E-01	8.864E-01	45.39E-01	512.14	
U-234	2.45E+05Y	1.00	1.068E+00	1.068E+00	7.375E+00	690.21	
ANH-511	1.00E+09Y	1.00	8.126E-01	8.126E-01	41.29E-01	508.10	
			---------	---------			
	Total Activity :		5.954E+01	5.997E+01			

Grand Total Activity : 5.954E+01 5.997E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1200870615 Acquisition date : 1-JUL-2005 21:01:15

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	92.91	57	593	1.36	186.55	181	12	1.99E-03	****	2.15E+00	T
1	181.81	52	186	1.53	364.08	361	17	1.81E-03	80.5	2.44E+00	T
1	185.86	46	323	1.47	372.17	361	17	1.58E-03	****	2.42E+00	T
0	189.89	63	230	1.36	380.22	378	7	2.18E-03	84.3	2.40E+00	
0	416.51	12	111	1.20	832.83	830	8	4.03E-04	****	1.49E+00	T
0	430.67	17	75	2.34	861.10	857	8	6.06E-04	****	1.46E+00	T
0	645.57	26	60	1.00	1290.35	1287	8	8.95E-04	****	1.08E+00	T
0	783.33	35	71	0.91	1565.53	1559	14	1.21E-03	****	9.31E-01	T
0	903.28	46	93	7.97	1805.14	1792	25	1.60E-03	****	8.31E-01	
0	981.14	10	46	1.19	1960.70	1959	9	3.62E-04	****	7.78E-01	T
0	1125.86	47	106	16.47	2249.84	2234	39	1.62E-03	****	6.97E-01	T
0	1187.68	20	16	1.33	2373.34	2370	10	6.98E-04	85.3	6.68E-01	T
0	1196.92	11	24	1.67	2391.79	2386	10	3.91E-04	****	6.64E-01	
0	1239.31	24	39	3.60	2476.51	2470	14	8.46E-04	****	6.47E-01	T
0	1251.08	24	38	3.80	2500.00	2494	17	8.50E-04	****	6.42E-01	
0	1341.02	6	12	1.82	2679.73	2675	8	1.98E-04	****	6.09E-01	
0	1359.20	22	42	3.30	2716.05	2709	19	7.63E-04	****	6.03E-01	
0	1378.12	8	10	0.91	2753.86	2750	8	2.94E-04	****	5.97E-01	T
0	1556.22	7	27	5.99	3109.74	3100	17	2.26E-04	****	5.49E-01	
0	1573.94	19	43	3.88	3145.14	3140	24	6.59E-04	****	5.45E-01	
0	1600.82	28	15	6.68	3198.85	3189	21	9.65E-04	80.7	5.39E-01	
0	1833.34	7	4	0.78	3663.54	3659	7	2.59E-04	****	4.99E-01	
0	1892.78	6	5	0.61	3782.33	3781	5	2.08E-04	****	4.92E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:13:29.49

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870615.CNF;1    *
* Acquisition date : 1-JUL-2005 21:01:15.  Detector SN#     : 12922955       *
* Detector ID      : GAMMA3                Sensitivity      : 3.00000        *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000        *
* Elapsed live time: 0 08:00:00.00         Abundance limit  : 75.00000       *
* Elapsed real time: 0 08:00:02.69         Half life ratio  : 8.00000        *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 20-JUN-2005 00:00:00  Nuclide Library : EPI             *
* Sample ID        : G1200870615           Analyst initials: AKB             *
* Batch Number     : 435282                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19.2MS Isotope      :                *
* MSD DPM          :                      MSD Isotope      :                *
* LCS DPM          :                      LCS Isotope      :                *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	2.879E+01	2.898E+01	2.504E+01	1.500E+00	1.150
HG-203	1.258E+00	2.004E+00	2.567E+00	1.727E-01	0.490
BI-211	6.092E+00	1.417E+01	1.438E+01	1.001E+00	0.424
BI-212	1.787E+01	1.895E+01	1.842E+01	1.519E+00	0.970
RA-226	1.150E+00	3.828E+00	5.323E+00	4.335E-01	0.216
TH-228	8.970E-01	4.594E+00	3.801E+00	2.939E-01	0.236
TH-230	1.150E+00	3.828E+00	5.323E+00	4.335E-01	0.216
TH-232	8.864E-01	4.539E+00	3.756E+00	2.904E-01	0.236
U-234	1.068E+00	7.375E+00	9.170E+00	8.218E-01	0.117
ANH-511	8.126E-01	4.129E+00	1.761E+00	1.131E-01	0.461

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-1.058E+00		1.186E+01	1.992E+01	1.451E+00	-0.053
NA-22	-9.410E-02		1.379E+00	2.452E+00	1.421E-01	-0.038

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	6.076E-02		1.223E+00	2.294E+00	1.299E-01	0.026
SC-46	2.297E-02		1.419E+00	2.465E+00	1.830E-01	0.009
V-48	1.882E+00		2.415E+00	4.116E+00	2.970E-01	0.457
CR-51	-1.686E+00		1.348E+01	2.302E+01	1.618E+00	-0.073
MN-54	-4.856E-01		1.362E+00	2.293E+00	1.633E-01	-0.212
CO-56	9.448E-01		1.520E+00	2.751E+00	1.977E-01	0.343
CO-57	7.852E-01		1.160E+00	1.987E+00	1.251E-01	0.395
CO-58	-3.533E-02		1.235E+00	2.166E+00	1.518E-01	-0.016
FE-59	-8.710E-01		2.920E+00	5.105E+00	3.855E-01	-0.171
CO-60	3.561E-01		1.450E+00	2.645E+00	1.451E-01	0.135
ZN-65	-1.550E+00		3.179E+00	4.592E+00	3.025E-01	-0.337
SE-75	-1.034E+00		1.705E+00	2.870E+00	1.845E-01	-0.360
KR-85	1.727E+03		3.776E+02	7.087E+02	4.551E+01	2.436
SR-85	8.568E+00		1.874E+00	3.517E+00	2.258E-01	2.436
Y-88	-1.207E-01		1.507E+00	2.368E+00	1.341E-01	-0.051
Y-91	-4.698E-01		1.253E+00	2.171E+00	1.387E-01	-0.216
NB-94	1.149E+00		1.381E+00	2.520E+00	1.600E-01	0.456
NB-95	6.312E-01		1.442E+00	2.619E+00	1.761E-01	0.241
NB-95M	-6.092E+00		4.345E+01	6.606E+01	5.940E+00	-0.092
ZR-95	1.911E+00		2.607E+00	4.777E+00	3.709E-01	0.400
MO-99	6.052E+00		2.495E+01	4.170E+01	2.584E+00	0.145
RU-103	9.157E-01		1.674E+00	2.897E+00	3.748E-01	0.316
RH-106	1.072E+01		1.274E+01	2.349E+01	1.466E+00	0.456
RU-106	5.369E+00		1.283E+01	2.307E+01	2.760E+00	0.233
AG-108M	-8.695E-01		1.484E+00	2.080E+00	1.415E-01	-0.418
CD-109	4.283E+00		3.329E+01	5.098E+01	3.849E+00	0.084
AG-110M	1.414E-01		1.401E+00	2.467E+00	1.596E-01	0.057
SN-113	2.494E+00		1.689E+00	3.107E+00	2.049E-01	0.802
CD-115	2.841E+01		1.495E+02	2.694E+02	1.728E+01	0.105
SN-115	-7.541E+01		1.189E+02	1.935E+02	1.429E+01	-0.390
SN-117M	1.706E-01		1.945E+00	3.223E+00	1.951E-01	0.053
TE-123M	-5.750E-01		1.184E+00	1.910E+00	1.171E-01	-0.301
SB-124	-5.937E-01		2.892E+00	5.252E+00	3.259E-01	-0.113
SB-125	-3.085E+00		4.179E+00	5.777E+00	3.788E-01	-0.534
TE-125M	-1.515E+02		3.929E+02	6.498E+02	5.575E+01	-0.233
I-126	-2.169E+00		5.956E+00	1.017E+01	6.230E-01	-0.213
SB-126	9.410E-01		4.420E+00	7.852E+00	5.068E-01	0.120
SN-126	-3.540E-01		3.393E+00	5.132E+00	3.864E-01	-0.069
SB-127	-1.339E+01		2.689E+01	4.552E+01	3.961E+00	-0.294
I-131	7.890E-01		3.569E+00	6.170E+00	4.280E-01	0.128
TE-132	2.385E+00		1.384E+01	2.428E+01	3.392E+00	0.098
BA-133	8.081E-01		1.847E+00	2.864E+00	3.395E-01	0.282
CS-134	-5.600E-01		1.569E+00	2.649E+00	1.844E-01	-0.211
CS-135	-1.808E+00		6.040E+00	1.031E+01	8.359E-01	-0.175
CS-136	-2.289E-01		2.847E+00	5.126E+00	3.786E-01	-0.045
BA-137M	1.861E-01		1.421E+00	2.506E+00	1.528E-01	0.074
CS-137	1.944E-01		1.502E+00	2.649E+00	1.621E-01	0.073
CE-139	8.869E-01		1.248E+00	2.114E+00	1.285E-01	0.420

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BA-140	6.173E+00		8.380E+00	1.511E+01	4.932E+00	0.409
LA-140	2.629E+01		2.541E+02	3.924E+02	2.244E+01	0.067
CE-141	9.583E-01		2.589E+00	4.344E+00	2.728E-01	0.221
CE-144	2.845E+00		8.969E+00	1.509E+01	2.164E+00	0.188
PM-144	1.976E-01		1.500E+00	2.622E+00	1.655E-01	0.075
PM-146	6.755E-01		1.692E+00	2.938E+00	2.651E-01	0.230
ND-147	-1.798E+00		1.711E+01	3.022E+01	4.169E+00	-0.059
PM-147	8.920E+05		2.429E+06	4.114E+06	2.586E+05	0.217
PM-149	3.289E+01		1.407E+03	2.429E+03	3.504E+02	0.014
EU-152	-1.851E+00		4.063E+00	6.779E+00	4.792E-01	-0.273
GD-153	3.586E+00		3.778E+00	5.984E+00	4.104E-01	0.599
EU-154	-2.800E-01		3.856E+00	6.855E+00	6.397E-01	-0.041
EU-155	6.433E-02		4.751E+00	8.006E+00	5.345E-01	0.008
TB-160	3.659E+00		5.307E+00	9.671E+00	7.127E-01	0.378
TM-171	9.200E+02		1.339E+03	2.138E+03	1.552E+02	0.430
HF-181	-1.074E-01		1.609E+00	2.702E+00	1.733E-01	-0.040
TA-182	1.967E+00		5.381E+00	9.979E+00	6.005E-01	0.197
IR-192	-1.523E+00		1.400E+00	2.267E+00	1.463E-01	-0.672
BI-207	2.700E-01		1.857E+00	3.369E+00	2.312E-01	0.080
TL-208	2.563E+00		1.472E+00	2.822E+00	2.021E-01	0.908
BI-210	6.206E+01		2.185E+02	3.478E+02	2.849E+01	0.178
PB-210	6.206E+01		2.185E+02	3.478E+02	2.849E+01	0.178
PB-211	1.245E+01		3.648E+01	6.191E+01	3.862E+01	0.201
PB-212	8.970E-01	+	4.594E+00	4.761E+00	3.681E-01	0.188
BI-214	1.150E+00	+	3.828E+00	5.590E+00	4.552E-01	0.206
PB-214	2.119E+00	+	4.929E+00	5.234E+00	4.551E-01	0.405
RN-219	2.399E+00		1.579E+01	2.713E+01	3.747E+00	0.088
RA-223	2.476E+01		2.624E+01	4.658E+01	7.799E+00	0.532
RA-224	4.565E+01		2.847E+01	4.714E+01	2.972E+00	0.968
AC-227	8.307E-01		1.567E+01	2.721E+01	3.908E+00	0.031
TH-227	8.180E-01		1.543E+01	2.679E+01	4.581E+00	0.031
AC-228	8.730E+00	+	9.922E+00	1.029E+01	1.067E+00	0.848
RA-228	8.730E+00	+	9.922E+00	1.029E+01	1.067E+00	0.848
TH-229	-2.162E+01		2.277E+01	3.345E+01	2.052E+00	-0.646
PA-231	2.637E+01		5.969E+01	1.051E+02	1.476E+01	0.251
TH-231	3.899E+00		7.117E+00	1.260E+01	9.778E-01	0.309
PA-233	1.391E+00		2.754E+00	4.830E+00	3.261E-01	0.288
PA-234	8.756E+00		1.121E+01	2.048E+01	3.730E+00	0.427
PA-234M	1.004E+02		1.629E+02	3.059E+02	2.663E+01	0.328
TH-234	1.504E+02		7.382E+01	1.172E+02	2.044E+01	1.283
U-235	7.012E+00		9.494E+00	1.604E+01	2.630E+00	0.437
NP-237	-1.313E+00		1.040E+01	1.570E+01	3.445E+00	-0.084
U-238	1.504E+02		7.382E+01	1.172E+02	2.044E+01	1.283
NP-239	9.796E-01		8.393E+00	1.413E+01	8.925E-01	0.069
AM-241	2.759E+00		7.856E+00	1.243E+01	1.032E+00	0.222
AM-242	6.850E+01		9.738E+01	1.686E+02	1.111E+01	0.406
CM-247	9.007E-01		1.425E+00	2.514E+00	1.575E-01	0.358
CF-249	-1.340E+00		1.599E+00	2.586E+00	1.616E-01	-0.518

Sample ID : G1200870615 Acquisition date : 1-JUL-2005 21:01:15

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CF-251	3.988E-01		5.405E+00	8.893E+00	5.413E-01	0.045

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200870615           *
* Acquisition date :  1-JUL-2005 21:01:15 Detector SN#     : 12922955       *
* Detector ID      : GAMMA3               Sensitivity      : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 08:00:00.00     Abundance limit  : 75.000         *
* Elapsed real time:    0 08:00:02.69     Half life ratio  : 8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 20-JUN-2005 00:00:00 Nuclide Library :                 *
* Sample ID        : G1200870615          Analyst initials: AKB             *
* Batch Number     : 435282               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	2.879E+01	2.898E+01	1.149E+01	1.449E+01
HG-203	1.258E+00	2.004E+00	1.234E+00	1.002E+00
BI-211	6.092E+00	1.417E+01	6.903E+00	7.083E+00
BI-212	1.787E+01	1.895E+01	8.662E+00	9.475E+00
RA-226	1.150E+00	3.828E+00	2.542E+00	1.914E+00
TH-228	8.970E-01	4.594E+00	1.834E+00	2.297E+00
TH-230	1.150E+00	3.828E+00	2.542E+00	1.914E+00
TH-232	8.864E-01	4.539E+00	1.812E+00	2.270E+00
U-234	1.068E+00	7.375E+00	4.412E+00	3.687E+00
ANH-511	8.126E-01	4.129E+00	8.317E-01	2.064E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU

BE-7	-1.058E+00	1.186E+01	9.441E+00	5.929E+00	NOT IDENT.
NA-22	-9.410E-02	1.379E+00	1.125E+00	6.895E-01	NOT IDENT.
NA-24	7.085E+05	8.139E+05	0.000E+00	4.070E+05	SHORT HLIF
AL-26	6.076E-02	1.223E+00	1.021E+00	6.113E-01	FAIL ABUN
SC-46	2.297E-02	1.419E+00	1.150E+00	7.093E-01	NOT IDENT.
V-48	1.882E+00	2.415E+00	1.921E+00	1.208E+00	NOT IDENT.
CR-51	-1.686E+00	1.348E+01	1.103E+01	6.738E+00	NOT IDENT.
MN-54	-4.856E-01	1.362E+00	1.073E+00	6.808E-01	NOT IDENT.
CO-56	9.448E-01	1.520E+00	1.296E+00	7.602E-01	FAIL ABUN
MN-56	3.931E+33	6.338E+33	0.000E+00	0.000E+00	SHORT HLIF
CO-57	7.852E-01	1.160E+00	9.640E-01	5.801E-01	NOT IDENT.
CO-58	-3.533E-02	1.235E+00	1.004E+00	6.177E-01	NOT IDENT.
FE-59	-8.710E-01	2.920E+00	2.363E+00	1.460E+00	NOT IDENT.
CO-60	3.561E-01	1.450E+00	1.219E+00	7.251E-01	NOT IDENT.
ZN-65	-1.550E+00	3.179E+00	2.113E+00	1.590E+00	NOT IDENT.
SE-75	-1.034E+00	1.705E+00	1.379E+00	8.524E-01	FAIL ABUN
KR-85	1.727E+03	3.776E+02	3.431E+02	1.888E+02	NOT IDENT.
SR-85	8.568E+00	1.874E+00	1.703E+00	9.369E-01	NOT IDENT.
Y-88	-1.207E-01	1.507E+00	1.046E+00	7.537E-01	NOT IDENT.
Y-91	-4.698E-01	1.253E+00	1.022E+00	6.265E-01	NOT IDENT.
NB-94	1.149E+00	1.381E+00	1.198E+00	6.906E-01	NOT IDENT.
NB-95	6.312E-01	1.442E+00	1.225E+00	7.209E-01	NOT IDENT.
NB-95M	-6.092E+00	4.345E+01	3.186E+01	2.172E+01	NOT IDENT.
ZR-95	1.911E+00	2.607E+00	2.253E+00	1.303E+00	NOT IDENT.
MO-99	6.052E+00	2.495E+01	2.024E+01	1.248E+01	FAIL ABUN
TC-99M	7.820E+13	3.229E+14	0.000E+00	1.614E+14	SHORT HLIF
RU-103	9.157E-01	1.674E+00	1.382E+00	8.370E-01	FAIL ABUN
RH-106	1.072E+01	1.274E+01	1.116E+01	6.370E+00	FAIL ABUN
RU-106	5.369E+00	1.283E+01	1.095E+01	6.415E+00	NOT IDENT.
AG-108M	-8.695E-01	1.484E+00	9.867E-01	7.418E-01	NOT IDENT.
CD-109	4.283E+00	3.329E+01	2.466E+01	1.665E+01	NOT IDENT.
AG-110M	1.414E-01	1.401E+00	1.169E+00	7.007E-01	NOT IDENT.
SN-113	2.494E+00	1.689E+00	1.487E+00	8.444E-01	NOT IDENT.
CD-115	2.841E+01	1.495E+02	1.274E+02	7.477E+01	NOT IDENT.
SN-115	-7.541E+01	1.189E+02	8.969E+01	5.944E+01	NOT IDENT.
SN-117M	1.706E-01	1.945E+00	1.559E+00	9.725E-01	NOT IDENT.
TE-123M	-5.750E-01	1.184E+00	9.239E-01	5.920E-01	NOT IDENT.
SB-124	-5.937E-01	2.892E+00	2.341E+00	1.446E+00	FAIL ABUN
SB-125	-3.085E+00	4.179E+00	2.741E+00	2.089E+00	NOT IDENT.
TE-125M	-1.515E+02	3.929E+02	3.145E+02	1.964E+02	NOT IDENT.
I-126	-2.169E+00	5.956E+00	4.802E+00	2.978E+00	NOT IDENT.
SB-126	9.410E-01	4.420E+00	3.695E+00	2.210E+00	NOT IDENT.
SN-126	-3.540E-01	3.393E+00	2.482E+00	1.697E+00	NOT IDENT.
SB-127	-1.339E+01	2.689E+01	2.127E+01	1.345E+01	FAIL ABUN
I-131	7.890E-01	3.569E+00	2.952E+00	1.785E+00	NOT IDENT.
I-132	-7.002E+35	6.777E+37	0.000E+00	0.000E+00	SHORT HLIF
TE-132	2.385E+00	1.384E+01	1.172E+01	6.922E+00	NOT IDENT.
BA-133	8.081E-01	1.847E+00	1.369E+00	9.233E-01	NOT IDENT.
I-133	-1.073E+03	1.822E+04	0.000E+00	9.111E+03	SHORT HLIF
CS-134	-5.600E-01	1.569E+00	1.243E+00	7.843E-01	NOT IDENT.
CS-135	-1.808E+00	6.040E+00	4.960E+00	3.020E+00	NOT IDENT.
I-135	5.385E+13	6.129E+13	0.000E+00	3.065E+13	SHORT HLIF
CS-136	-2.289E-01	2.847E+00	2.360E+00	1.424E+00	NOT IDENT.
BA-137M	1.861E-01	1.421E+00	1.187E+00	7.107E-01	NOT IDENT.
CS-137	1.944E-01	1.502E+00	1.255E+00	7.512E-01	NOT IDENT.
CE-139	8.869E-01	1.248E+00	1.024E+00	6.241E-01	NOT IDENT.
BA-140	6.173E+00	8.380E+00	7.167E+00	4.190E+00	NOT IDENT.
LA-140	2.629E+01	2.541E+02	1.784E+02	1.270E+02	FAIL ABUN
CE-141	9.583E-01	2.589E+00	2.107E+00	1.294E+00	NOT IDENT.
CE-143	-1.010E+02	1.193E+03	0.000E+00	5.964E+02	SHORT HLIF

CE-144	2.845E+00	8.969E+00	7.316E+00	4.485E+00 NOT IDENT.
PM-144	1.976E-01	1.500E+00	1.247E+00	7.501E-01 NOT IDENT.
PR-144	1.000E+41	7.594E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	6.755E-01	1.692E+00	1.397E+00	8.460E-01 NOT IDENT.
ND-147	-1.798E+00	1.711E+01	1.429E+01	8.554E+00 FAIL ABUN
PM-147	8.920E+05	2.429E+06	1.995E+06	1.214E+06 NOT IDENT.
PM-149	3.289E+01	1.407E+03	1.169E+03	7.036E+02 NOT IDENT.
EU-152	-1.851E+00	4.063E+00	3.250E+00	2.032E+00 NOT IDENT.
GD-153	3.586E+00	3.778E+00	2.900E+00	1.889E+00 NOT IDENT.
EU-154	-2.800E-01	3.856E+00	3.146E+00	1.928E+00 NOT IDENT.
EU-155	6.433E-02	4.751E+00	3.876E+00	2.375E+00 NOT IDENT.
TB-160	3.659E+00	5.307E+00	4.543E+00	2.654E+00 NOT IDENT.
TM-171	9.200E+02	1.339E+03	1.035E+03	6.697E+02 NOT IDENT.
HF-181	-1.074E-01	1.609E+00	1.282E+00	8.043E-01 NOT IDENT.
TA-182	1.967E+00	5.381E+00	4.606E+00	2.691E+00 FAIL ABUN
IR-192	-1.523E+00	1.400E+00	1.087E+00	6.998E-01 FAIL ABUN
BI-207	2.700E-01	1.857E+00	1.569E+00	9.283E-01 NOT IDENT.
TL-208	2.563E+00	1.472E+00	1.347E+00	7.361E-01 FAIL ABUN
BI-210	6.206E+01	2.185E+02	1.681E+02	1.093E+02 NOT IDENT.
PB-210	6.206E+01	2.185E+02	1.681E+02	1.093E+02 NOT IDENT.
PB-211	1.245E+01	3.648E+01	2.953E+01	1.824E+01 NOT IDENT.
PB-212	8.970E-01	4.594E+00	2.315E+00	2.297E+00 FAIL ABUN
BI-214	1.150E+00	3.828E+00	2.675E+00	1.914E+00 FAIL ABUN
PB-214	2.119E+00	4.929E+00	2.517E+00	2.465E+00 FAIL ABUN
RN-219	2.399E+00	1.579E+01	1.294E+01	7.897E+00 NOT IDENT.
RA-223	2.476E+01	2.624E+01	2.238E+01	1.312E+01 NOT IDENT.
RA-224	4.565E+01	2.847E+01	2.282E+01	1.423E+01 NOT IDENT.
AC-227	8.307E-01	1.567E+01	1.311E+01	7.833E+00 NOT IDENT.
TH-227	8.180E-01	1.543E+01	1.291E+01	7.713E+00 FAIL ABUN
AC-228	8.730E+00	9.922E+00	4.870E+00	4.961E+00 FAIL ABUN
RA-228	8.730E+00	9.922E+00	4.870E+00	4.961E+00 FAIL ABUN
TH-229	-2.162E+01	2.277E+01	1.615E+01	1.139E+01 NOT IDENT.
PA-231	2.637E+01	5.969E+01	5.052E+01	2.985E+01 NOT IDENT.
TH-231	3.899E+00	7.117E+00	6.070E+00	3.559E+00 FAIL ABUN
PA-233	1.391E+00	2.754E+00	2.326E+00	1.377E+00 FAIL ABUN
PA-234	8.756E+00	1.121E+01	9.585E+00	5.607E+00 FAIL ABUN
PA-234M	1.004E+02	1.629E+02	1.432E+02	8.147E+01 NOT IDENT.
TH-234	1.504E+02	7.382E+01	5.699E+01	3.691E+01 FAIL ABUN
U-235	7.012E+00	9.494E+00	7.788E+00	4.747E+00 FAIL ABUN
NP-237	-1.313E+00	1.040E+01	7.596E+00	5.198E+00 NOT IDENT.
U-238	1.504E+02	7.382E+01	5.699E+01	3.691E+01 NOT IDENT.
NP-239	9.796E-01	8.393E+00	6.842E+00	4.196E+00 FAIL ABUN
AM-241	2.759E+00	7.856E+00	6.005E+00	3.928E+00 NOT IDENT.
AM-242	6.850E+01	9.738E+01	8.168E+01	4.869E+01 NOT IDENT.
CM-247	9.007E-01	1.425E+00	1.201E+00	7.127E-01 FAIL ABUN
CF-249	-1.340E+00	1.599E+00	1.232E+00	7.994E-01 NOT IDENT.
CF-251	3.988E-01	5.405E+00	4.303E+00	2.703E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:15:25.06

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870616.CNF;3
Sample date : 13-JUN-2005 00:00:00 Acquisition date : 5-JUL-2005 08:13:08.
Sample ID : G1200870616 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 06:01:20.11 Elapsed real time: 0 06:01:21.80 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	47.14*	30	386	0.77	81.68	78	8	1.36E-03	140.8	
2	3	63.85*	10	251	0.75	115.28	112	13	4.46E-04	408.1	8.08E-01
3	3	66.92*	106	390	1.09	121.45	112	13	4.89E-03	36.4	
4	1	75.72*	55	355	0.94	139.14	136	11	2.53E-03	64.3	1.59E+00
5	1	77.73*	15	294	0.78	143.17	136	11	7.00E-04	212.8	
6	0	140.21*	39	275	0.77	268.81	266	7	1.80E-03	83.5	
7	0	144.70*	14	243	0.83	277.83	275	7	6.25E-04	229.5	
8	0	163.49*	41	292	1.61	315.62	311	9	1.90E-03	83.0	
9	0	186.08*	40	239	1.03	361.04	356	9	1.86E-03	94.3	
10	0	193.69	32	131	1.29	376.34	375	5	1.45E-03	57.5	
11	0	198.96	74	225	1.50	386.95	384	8	3.41E-03	37.0	
12	0	209.72*	13	168	1.36	408.58	406	6	5.87E-04	195.9	
13	4	219.97	38	186	1.28	429.18	425	11	1.75E-03	63.5	1.11E+00
14	4	222.11	27	90	0.73	433.49	425	11	1.27E-03	52.1	
15	0	239.02*	7	144	0.70	467.49	465	6	3.36E-04	393.4	
16	0	278.57*	25	168	0.87	547.00	544	8	1.14E-03	105.2	
17	0	294.73	14	136	0.86	579.51	578	7	6.38E-04	142.0	
18	0	327.28	60	178	1.31	644.96	639	12	2.76E-03	47.2	
19	0	351.89*	5	204	1.01	694.44	689	11	2.26E-04	643.1	
20	0	386.54	21	103	0.54	764.14	761	8	9.64E-04	86.7	
21	0	402.05	56	99	3.73	795.32	791	10	2.57E-03	36.2	
22	0	432.48	52	97	1.41	856.51	852	11	2.39E-03	39.2	
23	0	594.63*	19	119	1.17	1182.61	1179	11	8.87E-04	134.7	
24	0	645.44	70	93	6.61	1284.78	1276	17	3.25E-03	33.6	
25	0	723.71	13	40	0.70	1442.19	1440	6	5.88E-04	86.9	
26	0	777.34	29	48	2.16	1550.06	1546	8	1.34E-03	45.9	
27	0	829.74	18	26	0.95	1655.46	1653	5	8.27E-04	48.9	
28	0	968.35*	7	34	0.95	1934.27	1932	8	3.19E-04	210.6	
29	0	1098.58	17	22	1.42	2196.22	2191	9	7.70E-04	56.7	
30	0	1167.29	40	36	5.68	2334.44	2327	16	1.84E-03	37.2	
31	0	1173.29	29	14	1.38	2346.52	2343	8	1.32E-03	30.3	
32	0	1241.20	31	35	6.81	2483.13	2475	18	1.43E-03	48.6	
33	0	1267.18	71	59	16.28	2535.40	2518	39	3.25E-03	37.5	
34	0	1320.40	18	45	4.14	2642.45	2634	20	8.18E-04	95.7	
35	0	1413.63	4	14	1.35	2830.02	2828	8	1.70E-04	183.6	
36	0	1650.80	20	10	1.65	3307.21	3299	14	9.16E-04	41.2	
37	0	1715.25	4	19	3.39	3436.88	3431	11	1.70E-04	235.8	
38	0	1731.89	17	3	3.52	3470.36	3464	13	7.85E-04	32.5	

Sample ID : G1200870616 Acquisition date : 5-JUL-2005 08:13:08

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1737.74	2	8	0.41	3482.14	3481	6	1.01E-04	209.5	
40	0	1764.33*	5	8	1.91	3535.64	3530	10	2.38E-04	156.8	
41	0	1835.61*	10	7	1.70	3679.08	3674	9	4.54E-04	62.2	
42	0	1991.93*	5	16	0.45	3993.65	3987	14	2.49E-04	189.6	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 5-JUL-2005 15:15:29

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870616.CNF;3
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 13-JUN-2005 00:00:00 Acquisition date : 5-JUL-2005 08:13:08
Sample ID : G1200870616 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 06:01:20.11 Elapsed real time: 0 06:01:21.80 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CE-141	+	145.44	*	1.093E+00	5.019E+00	5.472E+00	3.579E-01	0.200
HG-203		70.83		-4.144E+00	3.120E+01	5.195E+01	6.339E+00	-0.080
		72.87		-4.634E+00	2.083E+01	3.175E+01	3.737E+00	-0.146
		82.60		7.824E+00	4.047E+01	6.792E+01	8.490E+00	0.115
	+	279.20	*	1.586E+00	3.339E+00	3.226E+00	2.193E-01	0.492
BI-210	+	46.50	*	1.970E+01	5.550E+01	4.776E+01	3.439E+00	0.413
PB-210	+	46.50	*	1.970E+01	5.550E+01	4.776E+01	3.439E+00	0.413
BI-211	+	351.07	*	1.611E+00	2.071E+01	1.661E+01	1.195E+00	0.097
PB-212	+	74.80		1.164E+01	1.502E+01	1.768E+01	1.988E+00	0.659
		87.30		-9.159E+00	1.314E+01	2.104E+01	2.522E+00	-0.435
		115.19		-1.504E+02	1.767E+02	2.768E+02	1.897E+01	-0.543
	+	238.63	*	5.299E-01	4.170E+00	4.360E+00	3.356E-01	0.122
		300.09		1.282E+01	3.536E+01	6.299E+01	5.540E+00	0.203
PB-214	+	74.81		1.962E+01	2.529E+01	2.979E+01	2.887E+00	0.659
	+	77.11		3.194E+00	1.360E+01	1.681E+01	1.662E+00	0.190
		87.30		-1.625E+01	2.330E+01	3.733E+01	3.920E+00	-0.435
		241.98		-1.450E+01	1.574E+01	2.631E+01	2.213E+00	-0.551
	+	295.21		2.663E+00	7.566E+00	1.021E+01	9.234E-01	0.261
	+	351.92	*	5.602E-01	7.205E+00	5.790E+00	5.148E-01	0.097
RA-224	+	240.98	*	5.983E+00	4.708E+01	4.787E+01	3.002E+00	0.125
TH-228		84.40		1.116E+02	8.679E+01	1.510E+02	1.791E+01	0.739
	+	238.60	*	5.299E-01	4.170E+00	4.359E+00	3.356E-01	0.122
		300.10		1.293E+01	3.616E+01	6.302E+01	3.719E+01	0.205
U-234	+	67.67		6.475E+02	4.782E+02	4.827E+02	6.186E+01	1.341
		241.98		-1.452E+01	1.576E+01	2.634E+01	2.217E+00	-0.551
	+	295.21	*	2.663E+00	7.566E+00	1.021E+01	9.234E-01	0.261
	+	351.92		5.602E-01	7.205E+00	5.790E+00	5.148E-01	0.097
U-235		89.95		8.885E+00	3.744E+01	6.263E+01	1.902E+01	0.142
		93.35		3.013E+02	8.893E+01	6.734E+01	1.851E+01	4.475
		105.00		2.341E+00	4.271E+01	7.090E+01	2.081E+01	0.033
	+	143.76	*	3.121E+00	1.433E+01	1.590E+01	2.626E+00	0.196
	+	163.33		2.229E+01	3.722E+01	3.538E+01	6.363E+00	0.630
	+	185.71		2.038E+00	3.844E+00	3.166E+00	1.863E-01	0.644
		205.31		8.949E+00	2.063E+01	3.722E+01	6.364E+00	0.240

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
U-238	+	63.29	*	5.889E+00	4.808E+01	4.966E+01	8.402E+00	0.119
CM-247	+	278.00		2.582E+01	5.434E+01	5.556E+01	3.594E+00	0.465
		287.40		1.675E+00	5.310E+01	9.347E+01	6.083E+00	0.018
	+	402.60	*	3.642E+00	2.646E+00	2.922E+00	1.938E-01	1.246
CF-249		252.85		-1.346E+01	3.994E+01	6.898E+01	4.374E+00	-0.195
		333.44		4.468E+00	7.504E+00	1.357E+01	8.997E-01	0.329
	+	387.95	*	1.456E+00	2.526E+00	3.264E+00	2.153E-01	0.446

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-1.443E+01	1.716E+01	2.728E+01	2.080E+00	-0.529
NA-22		1274.53	*	8.546E-02	1.987E+00	3.557E+00	2.154E-01	0.024
AL-26		511.00		7.105E+00	1.555E+00	3.011E+00	2.045E-01	2.360
		1808.65	*	-2.836E-01	1.716E+00	3.177E+00	1.890E-01	-0.089
K-40		1460.81	*	1.550E+01	2.119E+01	4.202E+01	2.579E+00	0.369
SC-46		889.25	*	3.829E+00	2.407E+00	4.830E+00	2.686E-01	0.793
		1120.51		3.520E+00	2.786E+00	5.452E+00	3.524E-01	0.646
V-48		944.10		-1.768E+01	6.080E+01	1.058E+02	6.056E+00	-0.167
		983.50	*	1.455E+00	5.130E+00	9.405E+00	5.547E-01	0.155
		1312.09		-5.185E+00	5.329E+00	8.102E+00	4.678E-01	-0.640
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-1.920E+01	2.146E+01	3.522E+01	2.533E+00	-0.545
MN-54		834.83	*	-2.569E-01	1.966E+00	3.478E+00	2.023E-01	-0.074
CO-56		846.75	*	-3.304E+00	2.279E+00	3.497E+00	2.017E-01	-0.945
		1037.82		8.679E+00	1.549E+01	2.954E+01	1.997E+00	0.294
		1238.25		2.022E-01	4.444E+00	6.895E+00	4.566E-01	0.029
CO-57		122.06	*	-1.567E-01	1.243E+00	2.022E+00	1.409E-01	-0.077
		136.47		2.765E+00	1.045E+01	1.725E+01	1.279E+00	0.160
CO-58		810.78	*	9.269E-02	2.322E+00	4.173E+00	2.478E-01	0.022
FE-59	+	192.35		3.999E+01	4.620E+01	8.051E+01	9.564E+00	0.497
	+	1099.25	*	4.813E+00	5.470E+00	9.458E+00	6.902E-01	0.509
		1291.60		-6.844E-01	6.233E+00	1.096E+01	8.240E-01	-0.062
CO-60	+	1173.24		3.492E+00	2.132E+00	3.228E+00	2.151E-01	1.082
		1332.50	*	4.322E-01	1.869E+00	3.611E+00	2.029E-01	0.120
ZN-65		1115.55	*	-1.086E+00	4.089E+00	7.056E+00	4.555E-01	-0.154
SE-75	+	66.05		2.697E+02	1.975E+02	2.054E+02	1.741E+01	1.313
		96.73		-2.482E+01	3.241E+01	5.137E+01	6.412E+00	-0.483
		121.11		1.563E+00	6.642E+00	1.102E+01	1.101E+00	0.142
		136.00		5.308E-01	1.973E+00	3.259E+00	2.170E-01	0.163
	+	198.60		1.644E+02	1.224E+02	1.415E+02	1.029E+01	1.162
		264.65	*	-8.829E-01	2.038E+00	3.495E+00	2.257E-01	-0.253
	+	279.53		3.967E+00	8.351E+00	7.974E+00	5.501E-01	0.497
		303.91		-5.090E+01	1.072E+02	1.814E+02	1.818E+01	-0.281
	+	400.65		2.641E+01	1.928E+01	2.238E+01	2.160E+00	1.180
KR-85		513.99	*	-1.751E+03	5.502E+02	7.201E+02	4.890E+01	-2.431
SR-85		513.99	*	-9.693E+00	3.046E+00	3.987E+00	2.708E-01	-2.431
Y-88		898.02		-1.107E-01	2.296E+00	4.091E+00	2.282E-01	-0.027

---- Non-Identified Nuclides ----

Nuclide	Iden	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	1836.01	*	1.925E+00	2.396E+00	4.504E+00	2.684E-01	0.427
Y-91		557.57	*	1.249E+00	2.012E+00	3.622E+00	2.429E-01	0.345
		1204.90		-1.415E+02	1.000E+03	1.728E+03	1.121E+02	-0.082
NB-94		702.63	*	5.376E-01	1.727E+00	3.185E+00	1.958E-01	0.169
		871.10		-1.682E+00	1.837E+00	2.993E+00	1.692E-01	-0.562
NB-95		765.79	*	-3.109E-01	2.651E+00	4.732E+00	2.861E-01	-0.066
NB-95M		235.69	*	-5.875E+01	3.320E+02	5.793E+02	6.491E+01	-0.101
ZR-95	+	724.18		2.979E+00	5.179E+00	9.883E+00	7.050E-01	0.301
		756.74	*	3.868E+00	3.781E+00	7.408E+00	5.372E-01	0.522
RU-103		497.08	*	-1.356E+00	2.553E+00	4.159E+00	5.463E-01	-0.326
		610.33		7.148E+01	5.049E+01	9.601E+01	1.507E+01	0.744
RH-106		511.85		4.953E+01	1.283E+01	2.447E+01	1.662E+00	2.024
		621.84	*	4.635E+00	1.646E+01	3.052E+01	1.963E+00	0.152
		1050.47		-1.215E+01	1.233E+02	2.165E+02	1.338E+01	-0.056
RU-106		622.20	*	7.659E-02	1.683E+01	3.055E+01	3.684E+00	0.003
AG-108M	+	433.93	*	3.223E+00	2.536E+00	2.789E+00	1.998E-01	1.155
		614.37		-1.802E-01	1.983E+00	3.568E+00	2.468E-01	-0.051
	+	722.95		1.244E+00	2.163E+00	4.281E+00	2.822E-01	0.291
CD-109		88.03	*	1.986E+01	2.701E+01	4.636E+01	3.074E+00	0.428
AG-110M		657.75	*	6.936E-01	1.821E+00	3.391E+00	2.220E-01	0.205
		677.61		-1.607E+01	1.627E+01	2.702E+01	1.756E+00	-0.595
		706.67		8.637E-02	1.053E+01	1.905E+01	1.233E+00	0.005
		763.93		-2.653E+00	8.062E+00	1.412E+01	9.022E-01	-0.188
		884.67		-5.195E+00	2.703E+00	3.820E+00	2.294E-01	-1.360
		937.48		3.129E+00	5.882E+00	1.104E+01	6.795E-01	0.283
		1384.27		-3.707E+00	9.270E+00	1.645E+01	9.959E-01	-0.225
SN-113		391.69	*	-1.730E-01	2.227E+00	3.834E+00	2.658E-01	-0.045
SN-115		484.47		-3.270E+02	1.037E+03	1.730E+03	1.177E+02	-0.189
		933.00	*	-9.929E+01	1.797E+02	3.040E+02	1.725E+01	-0.327
		1290.58		-2.566E+02	4.767E+02	7.839E+02	4.649E+01	-0.327
SN-117M		156.02		-3.327E+01	1.560E+02	2.494E+02	1.503E+01	-0.133
		158.56	*	1.180E+00	3.869E+00	6.361E+00	3.788E-01	0.186
TE-123M		159.00	*	1.041E+00	1.386E+00	2.339E+00	1.408E-01	0.445
SB-124		602.73		-3.101E-01	2.260E+00	3.769E+00	2.462E-01	-0.082
	+	645.85		9.077E+01	6.132E+01	4.915E+01	3.427E+00	1.847
		713.78		-1.116E+01	8.749E+01	1.567E+02	1.631E+01	-0.071
	+	722.79		1.191E+01	2.070E+01	3.670E+01	2.343E+00	0.325
		1368.16		-4.765E+01	1.006E+02	1.775E+02	2.096E+01	-0.268
		1690.98	*	-3.346E+00	4.376E+00	7.231E+00	4.642E-01	-0.463
SB-125		176.33		1.463E+01	1.437E+01	2.667E+01	2.304E+00	0.549
		427.89	*	1.114E+00	4.220E+00	7.467E+00	5.172E-01	0.149
		463.38		3.699E+00	1.476E+01	2.567E+01	1.957E+00	0.144
		600.56		-3.760E+00	1.020E+01	1.663E+01	1.224E+00	-0.226
		606.64		-4.033E+01	3.681E+01	6.132E+01	4.559E+00	-0.658
		635.90		-1.494E+00	1.289E+01	2.332E+01	1.694E+00	-0.064
TE-125M		109.28	*	-2.934E-01	4.594E+02	7.560E+02	6.707E+01	0.000
I-126		388.63		-5.927E+00	1.668E+01	2.488E+01	1.641E+00	-0.238
		666.33	*	8.628E+00	1.353E+01	2.563E+01	1.580E+00	0.337
		753.82		-1.614E+02	1.122E+02	1.752E+02	1.063E+01	-0.922

Sample ID : G1200870616 Acquisition date : 5-JUL-2005 08:13:08

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
SB-126		666.33		3.666E+00	5.747E+00	1.089E+01	6.713E-01	0.337
		695.00		5.808E-01	6.357E+00	1.150E+01	7.077E-01	0.051
		697.00		2.240E+01	2.229E+01	4.273E+01	2.629E+00	0.524
		720.50	*	-2.543E+00	1.210E+01	2.136E+01	1.309E+00	-0.119
SN-126	+	64.28		2.331E+00	1.903E+01	1.929E+01	2.681E+00	0.121
		86.94		-1.672E+01	1.360E+01	1.821E+01	7.463E+00	-0.918
		87.57	*	-1.653E-02	2.722E+00	4.521E+00	2.991E-01	-0.004
SB-127		252.40		-2.539E+02	7.459E+02	1.275E+03	5.398E+02	-0.199
		411.60		1.462E+03	2.053E+03	3.723E+03	6.203E+02	0.393
		444.90		5.681E+02	1.833E+03	3.226E+03	4.429E+02	0.176
		473.00		-7.992E+01	3.309E+02	5.555E+02	7.807E+01	-0.144
		543.30		2.950E+02	3.086E+03	5.328E+03	8.262E+02	0.055
		603.50		8.140E+02	2.243E+03	3.907E+03	5.313E+02	0.208
		685.70	*	9.536E+01	2.461E+02	4.609E+02	5.707E+01	0.207
		698.50		-1.434E+03	3.132E+03	5.415E+03	8.962E+02	-0.265
		783.70		8.905E+01	7.278E+02	1.316E+03	1.745E+02	0.068
I-131		284.30		8.123E+01	1.249E+02	2.272E+02	1.627E+01	0.357
		364.48	*	7.357E+00	1.012E+01	1.846E+01	1.349E+00	0.399
		636.97		1.514E+01	1.395E+02	2.567E+02	1.812E+01	0.059
TE-132		228.16	*	1.868E+01	1.369E+02	2.439E+02	3.951E+01	0.077
BA-133	+	79.62		1.321E+01	5.624E+01	6.772E+01	9.530E+00	0.195
		81.00		-1.254E+00	3.097E+00	5.056E+00	7.479E-01	-0.248
		276.40		-4.466E+00	1.811E+01	2.794E+01	3.708E+00	-0.160
		302.85		-1.349E+00	6.900E+00	1.189E+01	1.433E+00	-0.113
		356.02	*	9.144E-01	2.165E+00	3.844E+00	4.614E-01	0.238
		383.85		-4.281E+00	1.560E+01	2.352E+01	2.664E+00	-0.182
CS-134		563.23		8.445E+00	1.714E+01	3.068E+01	2.085E+00	0.275
		569.32		4.559E+00	1.099E+01	1.923E+01	1.312E+00	0.237
		604.70		-2.635E-01	1.690E+00	3.030E+00	1.985E-01	-0.087
		795.84	*	-6.946E-02	2.136E+00	3.826E+00	2.307E-01	-0.018
		801.93		7.565E-01	2.121E+01	3.817E+01	2.294E+00	0.020
		1365.15		-1.102E+01	6.352E+01	1.168E+02	7.298E+00	-0.094
CS-135		268.24	*	1.642E-01	6.963E+00	1.224E+01	9.960E-01	0.013
CS-136	+	66.88		6.310E+01	4.676E+01	4.794E+01	6.804E+00	1.316
		86.36		-3.922E+01	5.337E+01	8.532E+01	9.885E+00	-0.460
		153.25		1.491E-01	4.524E+01	7.333E+01	5.488E+00	0.002
	+	163.92		7.421E+01	1.233E+02	1.150E+02	8.348E+00	0.645
		176.60		2.328E+01	2.315E+01	4.306E+01	2.818E+00	0.541
		273.65		-3.961E+00	2.772E+01	4.831E+01	3.479E+00	-0.082
		340.55		-9.582E-01	8.714E+00	1.500E+01	1.045E+00	-0.064
		818.51		-7.651E-01	5.594E+00	9.953E+00	5.877E-01	-0.077
		1048.07	*	-4.133E+00	8.112E+00	1.362E+01	9.106E-01	-0.303
		1235.36		1.421E+01	3.503E+01	5.870E+01	6.043E+00	0.242
BA-137M		661.65	*	-5.208E-01	1.682E+00	2.981E+00	1.838E-01	-0.175
CS-137		661.66	*	-5.563E-01	1.777E+00	3.150E+00	1.949E-01	-0.177
CE-139		165.85	*	8.544E-01	1.380E+00	2.317E+00	1.330E-01	0.369
BA-140	+	162.67		5.284E+01	8.778E+01	8.161E+01	5.349E+00	0.647
		304.87		-2.989E-01	9.050E+01	1.578E+02	4.333E+01	-0.002
		423.73		2.180E+01	1.425E+02	2.479E+02	7.924E+01	0.088

Sample ID : G1200870616 Acquisition date : 5-JUL-2005 08:13:08

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		537.31	*	-1.438E+00	2.024E+01	3.429E+01	1.122E+01	-0.042
CE-144		133.51	*	-3.090E+00	9.905E+00	1.587E+01	2.311E+00	-0.195
PM-144		476.78		-1.630E+00	3.250E+00	5.348E+00	4.171E-01	-0.305
		618.01		2.782E-01	1.738E+00	3.180E+00	2.153E-01	0.087
		696.49	*	1.879E+00	1.889E+00	3.628E+00	2.235E-01	0.518
PM-146		453.88	*	-1.572E+00	2.208E+00	3.570E+00	3.321E-01	-0.441
		633.25		-1.127E+01	6.636E+01	1.192E+02	4.401E+01	-0.094
		735.93		3.135E+00	8.182E+00	1.507E+01	4.210E+00	0.208
		747.24		-1.578E+00	5.103E+00	8.925E+00	1.128E+00	-0.177
ND-147		91.11		-1.305E+02	2.246E+01	2.458E+01	1.854E+00	-5.310
		531.02	*	3.663E+01	4.641E+01	8.403E+01	1.174E+01	0.436
PM-147		121.30	*	6.471E+05	2.479E+06	4.120E+06	2.860E+05	0.157
EU-152		121.78		1.209E+00	3.467E+00	5.784E+00	4.928E-01	0.209
		344.31	*	-2.891E+00	4.280E+00	7.103E+00	5.179E-01	-0.407
		963.37		-1.281E+00	1.418E+01	2.498E+01	1.451E+00	-0.051
GD-153		69.67		2.893E+01	4.344E+01	7.491E+01	4.606E+00	0.386
		83.37		-3.779E+02	5.093E+02	8.175E+02	5.295E+01	-0.462
		97.43	*	-2.639E+00	3.298E+00	5.232E+00	3.486E-01	-0.504
		103.18		-3.138E-01	4.463E+00	7.354E+00	4.934E-01	-0.043
EU-154		123.07		6.188E-02	2.449E+00	4.017E+00	4.074E-01	0.015
		247.93		-2.621E-01	1.583E+01	2.789E+01	2.751E+00	-0.009
		591.76		-9.879E+00	3.909E+01	5.692E+01	5.839E+00	-0.174
	+	723.30		5.206E+00	9.053E+00	1.774E+01	1.303E+00	0.294
		756.86		3.057E+01	3.900E+01	7.477E+01	7.693E+00	0.409
		873.20		-6.602E+00	1.525E+01	2.623E+01	2.719E+00	-0.252
		996.30		3.680E+00	1.802E+01	3.293E+01	5.478E+00	0.112
		1004.76		-1.278E+01	1.148E+01	1.786E+01	1.760E+00	-0.716
		1274.51	*	2.526E-01	5.532E+00	9.906E+00	9.406E-01	0.025
EU-155		86.54		-4.925E+00	3.465E+00	5.349E+00	3.581E-01	-0.921
		105.31	*	-2.514E+00	4.489E+00	7.191E+00	4.936E-01	-0.350
TB-160		86.79		-1.331E+01	9.810E+00	1.520E+01	1.001E+00	-0.876
		298.57		-4.244E+00	6.217E+00	9.190E+00	6.018E-01	-0.462
		879.36	*	-1.951E+00	8.294E+00	1.450E+01	8.137E-01	-0.135
		962.29		-7.056E+00	2.957E+01	5.118E+01	2.971E+00	-0.138
		966.15		5.571E+00	1.163E+01	1.927E+01	1.122E+00	0.289
		1177.93		-4.105E+00	1.813E+01	3.122E+01	2.072E+00	-0.131
TM-171		51.87		-3.174E+01	1.394E+02	2.347E+02	1.403E+01	-0.135
		59.40		3.921E+02	5.308E+02	9.229E+02	5.605E+01	0.425
	+	66.72	*	1.563E+03	1.141E+03	1.327E+03	8.105E+01	1.178
HF-181		56.28		-4.570E-02	1.815E+01	3.074E+01	1.850E+00	-0.001
		57.53		-7.265E+00	1.047E+01	1.714E+01	1.035E+00	-0.424
	+	65.20		5.129E+00	4.187E+01	4.229E+01	2.577E+00	0.121
		133.02		-1.671E+00	3.431E+00	5.448E+00	3.629E-01	-0.307
		136.25		7.674E+00	2.850E+01	4.708E+01	3.096E+00	0.163
		345.85		-6.587E+00	9.627E+00	1.596E+01	1.059E+00	-0.413
		482.03	*	1.109E+00	2.438E+00	4.332E+00	2.946E-01	0.256
TA-182	+	67.75		6.540E+00	4.773E+00	4.874E+00	2.984E-01	1.342
		100.10		3.708E+00	7.710E+00	1.306E+01	8.727E-01	0.284
	+	222.10		1.254E+01	1.309E+01	2.579E+01	1.586E+00	0.486

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1121.28		1.280E+01	7.583E+00	1.530E+01	9.892E-01	0.837
		1189.05		-5.299E-01	1.436E+01	2.534E+01	1.667E+00	-0.021
		1221.42	*	7.253E+00	8.932E+00	1.721E+01	1.099E+00	0.422
		1230.97		-9.884E+00	2.072E+01	3.447E+01	2.182E+00	-0.287
IR-192	+	295.96		2.174E+00	6.176E+00	8.485E+00	5.618E-01	0.256
		308.46		-3.711E-01	4.851E+00	8.431E+00	5.595E-01	-0.044
		316.51	*	-6.809E-01	1.739E+00	2.959E+00	1.960E-01	-0.230
		468.07		-1.659E-01	3.727E+00	6.358E+00	4.807E-01	-0.026
		604.41		-2.595E+00	2.441E+01	4.389E+01	5.151E+00	-0.059
		612.46		-5.975E+01	4.205E+01	6.802E+01	5.515E+00	-0.878
BI-207		569.67		9.097E-01	1.695E+00	2.993E+00	1.996E-01	0.304
		897.83		-2.682E+02	1.281E+03	2.244E+03	1.238E+02	-0.120
		1063.62	*	8.415E-01	2.753E+00	5.033E+00	3.139E-01	0.167
		1442.20		-1.725E+02	1.215E+03	2.255E+03	1.299E+02	-0.077
		1770.23		-7.168E+00	2.395E+01	4.349E+01	2.586E+00	-0.165
TL-208	+	75.00		3.632E+01	4.685E+01	5.615E+01	6.037E+00	0.647
	+	277.35		1.320E+01	2.781E+01	3.036E+01	3.321E+00	0.435
		510.84		4.901E+01	1.285E+01	2.325E+01	2.500E+00	2.108
		583.14	*	2.488E+00	2.173E+00	3.967E+00	2.939E-01	0.627
		763.30		-3.433E+01	1.043E+02	1.826E+02	2.288E+01	-0.188
		860.37		6.105E+00	1.662E+01	3.046E+01	2.018E+00	0.200
		1093.90		6.893E+01	5.474E+02	8.807E+02	1.985E+02	0.078
PB-211		404.84	*	2.654E-01	4.980E+01	7.686E+01	4.798E+01	0.003
		427.08		2.014E+01	9.738E+01	1.697E+02	1.051E+02	0.119
		831.96		2.043E-01	7.326E+01	1.153E+02	7.187E+01	0.002
BI-212		727.18	*	1.012E+01	1.689E+01	2.856E+01	2.272E+00	0.354
BI-214		609.31	*	7.424E+00	4.024E+00	7.927E+00	6.590E-01	0.936
		768.36		1.165E+01	3.354E+01	6.228E+01	5.279E+00	0.187
		934.06		-5.375E+01	5.567E+01	8.907E+01	7.508E+00	-0.603
		1120.29		1.681E+01	1.526E+01	2.946E+01	2.726E+00	0.571
		1238.11		2.473E+00	4.119E+01	6.406E+01	5.445E+00	0.039
		1377.67		2.230E+01	5.143E+01	9.983E+01	8.489E+00	0.223
RN-219		271.23		2.287E+00	1.003E+01	1.787E+01	1.532E+00	0.128
	+	401.81	*	4.068E+01	2.998E+01	3.675E+01	5.137E+00	1.107
RA-223		122.32		-2.267E+01	8.389E+01	1.354E+02	1.045E+01	-0.167
	+	144.24		1.011E+01	4.643E+01	5.161E+01	3.968E+00	0.196
		154.21		-1.836E+01	1.893E+01	2.886E+01	2.092E+00	-0.636
		269.46		-2.255E-01	8.256E+00	1.446E+01	9.642E-01	-0.016
		323.87	*	-1.093E+01	3.525E+01	5.343E+01	8.987E+00	-0.205
		338.28		2.154E+00	4.582E+01	7.981E+01	8.789E+00	0.027
		445.03		4.889E+01	1.148E+02	2.037E+02	2.208E+01	0.240
RA-226	+	295.21		2.663E+00	7.566E+00	1.021E+01	9.234E-01	0.261
	+	351.92		5.602E-01	7.205E+00	5.790E+00	3.859E-01	0.097
		609.31	*	7.424E+00	4.024E+00	7.927E+00	6.590E-01	0.936
AC-227		79.80		-2.044E+01	5.572E+01	8.376E+01	1.758E+01	-0.244
		236.00		-4.422E+00	9.824E+00	1.689E+01	1.825E+00	-0.262
		256.20	*	-1.035E+01	1.777E+01	3.014E+01	4.330E+00	-0.343
		286.10		-4.821E+01	6.999E+01	1.172E+02	1.412E+01	-0.411
		299.80		1.757E+01	6.486E+01	1.150E+02	1.931E+01	0.153

Sample ID : G1200870616 Acquisition date : 5-JUL-2005 08:13:08

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		304.40		-2.661E+01	9.218E+01	1.577E+02	2.807E+01	-0.169
		329.70		-2.432E+01	4.282E+01	6.328E+01	8.228E+00	-0.384
		334.20		4.610E+01	1.045E+02	1.867E+02	3.528E+01	0.247
TH-227		79.80		-2.009E+01	5.478E+01	8.234E+01	1.728E+01	-0.244
		94.00		5.932E+02	1.621E+02	1.986E+02	4.185E+01	2.987
		236.00		-4.352E+00	9.666E+00	1.662E+01	1.553E+00	-0.262
		256.20	*	-1.018E+01	1.750E+01	2.965E+01	5.070E+00	-0.343
		286.10		-4.745E+01	8.352E+01	1.154E+02	1.156E+02	-0.411
		299.80		1.725E+01	6.367E+01	1.129E+02	1.870E+01	0.153
		304.40		-2.617E+01	9.063E+01	1.551E+02	2.725E+01	-0.169
		329.70		-2.393E+01	4.214E+01	6.229E+01	8.016E+00	-0.384
		334.20		4.521E+01	1.025E+02	1.831E+02	3.407E+01	0.247
AC-228	+	209.25		8.508E+00	3.378E+01	4.219E+01	2.697E+01	0.202
		338.32		8.417E-01	1.108E+01	1.932E+01	7.902E+00	0.044
		463.01		-4.791E+00	3.465E+01	5.857E+01	1.389E+01	-0.082
		794.95		-1.810E+01	3.833E+01	6.567E+01	1.480E+01	-0.276
		911.21	*	-7.508E-01	7.965E+00	1.397E+01	1.274E+00	-0.054
		964.77		-3.958E+01	4.412E+01	6.969E+01	1.658E+01	-0.568
	+	969.11		4.343E+00	1.832E+01	1.952E+01	4.384E+00	0.222
RA-228	+	209.25		8.508E+00	3.378E+01	4.219E+01	2.697E+01	0.202
		338.32		8.417E-01	1.108E+01	1.932E+01	7.902E+00	0.044
		463.01		-4.791E+00	3.465E+01	5.857E+01	1.389E+01	-0.082
		794.95		-1.810E+01	3.833E+01	6.567E+01	1.480E+01	-0.276
		911.21	*	-7.508E-01	7.965E+00	1.397E+01	1.274E+00	-0.054
		964.77		-3.958E+01	4.412E+01	6.969E+01	1.658E+01	-0.568
	+	969.11		4.343E+00	1.832E+01	1.952E+01	4.384E+00	0.222
TH-229		85.43		4.076E+00	6.426E+00	1.095E+01	7.166E-01	0.372
		88.47		1.496E+00	3.732E+00	6.307E+00	4.183E-01	0.237
		100.00		3.977E+00	7.667E+00	1.301E+01	8.692E-01	0.306
	+	193.63	*	1.911E+01	2.200E+01	3.881E+01	2.307E+00	0.492
	+	210.97		1.138E+01	4.461E+01	5.738E+01	3.484E+00	0.198
TH-230	+	295.21		2.663E+00	7.566E+00	1.021E+01	9.234E-01	0.261
	+	351.92		5.602E-01	7.205E+00	5.790E+00	3.859E-01	0.097
		609.31	*	7.423E+00	4.024E+00	7.927E+00	6.590E-01	0.936
PA-231		283.67	*	9.230E+00	6.882E+01	1.216E+02	1.713E+01	0.076
		301.29		1.603E+01	2.600E+01	4.686E+01	5.103E+00	0.342
		330.00		-6.279E+01	9.530E+01	1.366E+02	4.301E+01	-0.460
TH-231		84.21		1.223E+01	1.634E+01	2.784E+01	4.712E+00	0.439
		236.00		-4.414E+00	9.805E+00	1.686E+01	1.821E+00	-0.262
		256.20		-1.033E+01	1.773E+01	3.008E+01	4.321E+00	-0.343
		269.46	*	-2.255E-01	8.256E+00	1.446E+01	1.128E+00	-0.016
		271.23		2.287E+00	1.003E+01	1.787E+01	1.773E+00	0.128
		283.67		9.230E+00	6.882E+01	1.216E+02	1.713E+01	0.076
		301.29		1.603E+01	2.599E+01	4.686E+01	4.206E+00	0.342
		329.85		-1.815E+01	2.933E+01	4.306E+01	6.019E+00	-0.422
	+	351.07		1.611E+00	2.071E+01	1.661E+01	1.195E+00	0.097
	+	401.81		4.068E+01	2.980E+01	3.556E+01	4.042E+00	1.144
TH-232	+	238.59	*	5.182E-01	4.078E+00	5.326E+00	4.100E-01	0.097
		911.20		-7.949E-01	7.901E+00	1.385E+01	1.264E+00	-0.057

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		964.40		-1.621E+01	4.093E+01	6.949E+01	1.654E+01	-0.233
	+	969.11		4.311E+00	1.818E+01	2.171E+01	4.875E+00	0.199
PA-233	+	75.28		9.670E+01	1.250E+02	1.494E+02	2.116E+01	0.647
		86.59		-8.042E+01	5.974E+01	8.662E+01	2.273E+01	-0.928
		300.12		6.647E+00	1.789E+01	3.187E+01	4.391E+00	0.209
		311.98	*	5.270E-01	2.979E+00	5.261E+00	3.633E-01	0.100
		340.50		-2.791E+00	2.879E+01	4.959E+01	1.150E+01	-0.056
		398.62		2.777E+01	1.109E+02	1.753E+02	4.566E+01	0.158
		415.76		-5.596E+01	8.260E+01	1.338E+02	2.789E+01	-0.418
PA-234	+	63.00		6.865E+00	5.604E+01	5.657E+01	8.059E+00	0.121
		94.67		-3.860E+01	1.021E+01	1.292E+01	1.437E+00	-2.988
		98.44		2.675E+00	3.990E+00	6.356E+00	3.529E+00	0.421
		99.70		1.188E+01	1.961E+01	3.343E+01	2.233E+00	0.355
		111.00		-3.574E+00	8.292E+00	1.333E+01	1.448E+00	-0.268
		131.20		-5.074E-01	4.810E+00	7.815E+00	5.244E-01	-0.065
		152.70		6.569E+00	1.527E+01	2.529E+01	4.029E+00	0.260
	+	186.00		5.501E+01	1.051E+02	8.557E+01	2.616E+01	0.643
		226.40		-7.726E+00	1.679E+01	2.896E+01	3.404E+00	-0.267
		227.20		-9.280E+00	1.814E+01	3.121E+01	1.930E+00	-0.297
		248.90		-4.915E+00	3.764E+01	6.585E+01	1.471E+01	-0.075
	+	293.70		1.278E+01	3.636E+01	4.783E+01	7.825E+00	0.267
		369.80		-1.066E+01	4.026E+01	6.852E+01	1.444E+01	-0.156
		568.70		4.259E+00	5.425E+01	9.253E+01	6.174E+00	0.046
		569.50		4.107E+00	1.527E+01	2.639E+01	1.761E+00	0.156
		574.00		-4.194E+01	8.288E+01	1.340E+02	8.919E+00	-0.313
		699.00		-6.436E+00	3.975E+01	7.041E+01	1.274E+01	-0.091
		706.10		2.293E+00	5.292E+01	9.581E+01	4.233E+01	0.024
		733.00		-9.734E+00	1.965E+01	3.375E+01	7.206E+00	-0.288
		742.81		1.160E+00	6.740E+01	1.222E+02	8.179E+01	0.009
		796.30		1.290E+01	4.410E+01	8.127E+01	2.139E+01	0.159
		805.80		1.792E+01	5.720E+01	1.043E+02	3.128E+01	0.172
		819.60		-5.551E+01	6.636E+01	1.038E+02	3.894E+01	-0.535
		826.30		-1.691E+01	4.656E+01	7.958E+01	3.525E+01	-0.213
	+	831.60		2.891E+01	2.951E+01	5.804E+01	1.692E+01	0.498
		876.40		4.540E+01	6.424E+01	8.668E+01	8.893E+01	0.524
		880.51		2.761E+00	1.517E+01	2.761E+01	1.548E+00	0.100
		883.24		-2.130E+00	1.475E+01	2.601E+01	1.740E+01	-0.082
		899.00		-4.863E+00	4.345E+01	7.694E+01	3.325E+01	-0.063
		925.00		3.905E+01	5.371E+01	1.048E+02	5.909E+00	0.372
		926.50		5.421E+00	8.399E+00	1.599E+01	3.906E+00	0.339
		946.00	*	-7.616E+00	1.513E+01	2.558E+01	4.509E+00	-0.298
		949.00		9.064E+00	2.310E+01	4.286E+01	2.462E+00	0.211
		980.50		-2.370E+01	4.083E+01	6.828E+01	4.018E+00	-0.347
		1394.10		5.075E+00	6.243E+01	1.180E+02	7.641E+01	0.043
PA-234M		766.40		6.769E+01	8.048E+02	1.460E+03	1.116E+03	0.046
		1001.03	*	9.495E+01	2.394E+02	4.416E+02	3.431E+01	0.215
TH-234	+	63.29	*	5.889E+00	4.808E+01	7.582E+01	1.283E+01	0.078
		92.38		1.541E+02	3.696E+01	5.010E+01	8.630E+00	3.076
		112.81		2.592E+02	4.073E+02	6.875E+02	1.185E+02	0.377

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NP-237		86.48	*	-1.187E+01	8.775E+00	1.302E+01	2.820E+00	-0.912
		95.87		-2.295E+02	7.259E+01	6.107E+01	1.467E+01	-3.758
NP-239		99.55		1.538E+00	6.507E+00	1.089E+01	7.275E-01	0.141
		117.00	*	1.096E+01	8.836E+00	1.536E+01	1.056E+00	0.713
	+	209.75		1.147E+01	4.494E+01	5.675E+01	3.441E+00	0.202
		228.18		1.456E+00	9.488E+00	1.692E+01	1.047E+00	0.086
	+	277.60		6.225E+00	1.310E+01	1.433E+01	9.266E-01	0.434
		334.31		2.771E+01	5.779E+01	1.037E+02	6.876E+00	0.267
AM-241		59.54	*	2.125E+00	3.102E+00	5.379E+00	3.730E-01	0.395
AM-242		99.55		3.589E+01	1.519E+02	2.543E+02	1.698E+01	0.141
		103.70	*	2.269E+01	8.940E+01	1.500E+02	1.007E+01	0.151
CF-251		176.00	*	7.786E+00	5.439E+00	1.028E+01	5.975E-01	0.757
		227.00		-8.634E+00	1.609E+01	2.765E+01	1.709E+00	-0.312
		285.00		2.069E+01	7.619E+01	1.360E+02	8.840E+00	0.152
ANH-511		511.00	*	1.163E+01	2.544E+00	4.926E+00	3.347E-01	2.360

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870616      *
* Acquisition date :  5-JUL-2005 08:13:08 Detector SN#    : 30-TN10348      *
* Detector ID       : GAMMA17             Sensitivity     : 3.000           *
* Geometry          : 2L_MB               Energy tolerance: 2.000           *
* Elapsed live time:    0 06:01:20.11     Abundance limit : 75.000          *
* Elapsed real time:    0 06:01:21.80     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 13-JUN-2005 00:00:00 Nuclide Library :                *
* Sample ID         : G1200870616          Analyst initials: AKB            *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* Standard Weight   :   0.00000                                             *
* CALIB. DATE/TIME :  1-DEC-2004 11:39:23 MS Isotope      :                 *
* MSD DPM           :    0.000            MSD Isotope     :                 *
* LCS DPM           :    0.000            LCS Isotope     :                 *
* LCSD DPM          :    0.000            LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
CE-141	3.045E-01	5.196E+00	5.472E+00	0.000E+00
HG-203	1.586E+00	3.339E+00	3.226E+00	0.000E+00
BI-210	1.970E+01	5.550E+01	4.776E+01	0.000E+00
PB-210	1.970E+01	5.550E+01	4.776E+01	0.000E+00
BI-211	1.611E+00	2.071E+01	1.661E+01	0.000E+00
PB-212	5.299E-01	4.170E+00	4.360E+00	0.000E+00
PB-214	5.602E-01	7.205E+00	5.790E+00	0.000E+00
RA-224	5.983E+00	4.708E+01	4.787E+01	0.000E+00
TH-228	5.299E-01	4.170E+00	4.359E+00	0.000E+00
U-234	2.663E+00	7.566E+00	1.021E+01	0.000E+00
U-235	3.121E+00	1.433E+01	1.689E+01	0.000E+00
U-238	5.889E+00	4.808E+01	4.966E+01	0.000E+00
CM-247	3.642E+00	2.646E+00	2.922E+00	0.000E+00
CF-249	1.456E+00	2.526E+00	3.264E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error) Ided	MDA (pCi/LITER)	)	
BE-7	-1.443E+01	1.716E+01	2.728E+01	0.000E+00	NOT IDENT.
NA-22	8.546E-02	1.987E+00	3.557E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	1.290E+11	0.000E+00	0.000E+00	SHORT HLIF
AL-26	-2.836E-01	1.716E+00	3.177E+00	0.000E+00	NOT IDENT.
K-40	1.550E+01	2.119E+01	4.202E+01	0.000E+00	NOT IDENT.
SC-46	3.829E+00	2.407E+00	4.830E+00	0.000E+00	NOT IDENT.
V-48	1.455E+00	5.130E+00	9.405E+00	0.000E+00	NOT IDENT.
CR-51	-1.920E+01	2.146E+01	3.522E+01	0.000E+00	NOT IDENT.
MN-54	-2.569E-01	1.966E+00	3.478E+00	0.000E+00	NOT IDENT.
CO-56	-3.304E+00	2.279E+00	3.497E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	6.900E+40	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-1.567E-01	1.243E+00	2.022E+00	0.000E+00	NOT IDENT.
CO-58	9.269E-02	2.322E+00	4.173E+00	0.000E+00	NOT IDENT.
FE-59	4.813E+00	5.470E+00	9.458E+00	0.000E+00	FAIL ABUN
CO-60	4.322E-01	1.869E+00	3.611E+00	0.000E+00	FAIL ABUN
ZN-65	-1.086E+00	4.089E+00	7.056E+00	0.000E+00	NOT IDENT.
SE-75	-8.829E-01	2.038E+00	3.495E+00	0.000E+00	FAIL ABUN
KR-85	-1.751E+03	5.502E+02	7.201E+02	0.000E+00	NOT IDENT.
SR-85	-9.693E+00	3.046E+00	3.987E+00	0.000E+00	NOT IDENT.
Y-88	1.925E+00	2.396E+00	4.504E+00	0.000E+00	FAIL ABUN
Y-91	1.249E+00	2.012E+00	3.622E+00	0.000E+00	NOT IDENT.
NB-94	5.376E-01	1.727E+00	3.185E+00	0.000E+00	NOT IDENT.
NB-95	-3.109E-01	2.651E+00	4.732E+00	0.000E+00	NOT IDENT.
NB-95M	-5.875E+01	3.320E+02	5.793E+02	0.000E+00	NOT IDENT.
ZR-95	3.868E+00	3.781E+00	7.408E+00	0.000E+00	FAIL ABUN
MO-99	0.000E+00	5.406E+02	0.000E+00	0.000E+00	SHORT HLIF
TC-99M	0.000E+00	1.800E+27	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.356E+00	2.553E+00	4.159E+00	0.000E+00	NOT IDENT.
RH-106	4.635E+00	1.646E+01	3.052E+01	0.000E+00	NOT IDENT.
RU-106	7.659E-02	1.683E+01	3.055E+01	0.000E+00	NOT IDENT.
AG-108M	0.000E+00	2.536E+00	2.789E+00	0.000E+00	FAIL ABUN
CD-109	1.986E+01	2.701E+01	4.636E+01	0.000E+00	NOT IDENT.
AG-110M	6.936E-01	1.821E+00	3.391E+00	0.000E+00	NOT IDENT.
SN-113	-1.730E-01	2.227E+00	3.834E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	5.548E+03	0.000E+00	0.000E+00	SHORT HLIF
SN-115	-9.929E+01	1.797E+02	3.040E+02	0.000E+00	NOT IDENT.
SN-117M	1.180E+00	3.869E+00	6.361E+00	0.000E+00	NOT IDENT.
TE-123M	1.041E+00	1.386E+00	2.339E+00	0.000E+00	NOT IDENT.
SB-124	-3.346E+00	4.376E+00	7.231E+00	0.000E+00	FAIL ABUN
SB-125	1.114E+00	4.220E+00	7.467E+00	0.000E+00	NOT IDENT.
TE-125M	-2.934E-01	4.594E+02	7.560E+02	0.000E+00	NOT IDENT.
I-126	8.628E+00	1.353E+01	2.563E+01	0.000E+00	NOT IDENT.
SB-126	-2.543E+00	1.210E+01	2.136E+01	0.000E+00	NOT IDENT.
SN-126	-1.653E-02	2.722E+00	4.521E+00	0.000E+00	FAIL ABUN
SB-127	9.536E+01	2.461E+02	4.609E+02	0.000E+00	NOT IDENT.
I-131	7.357E+00	1.012E+01	1.846E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	4.638E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.868E+01	1.369E+02	2.439E+02	0.000E+00	NOT IDENT.
BA-133	9.144E-01	2.165E+00	3.844E+00	0.000E+00	FAIL ABUN
I-133	0.000E+00	1.130E+08	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-6.946E-02	2.136E+00	3.826E+00	0.000E+00	NOT IDENT.
CS-135	1.642E-01	6.963E+00	1.224E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	3.021E+25	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-4.133E+00	8.112E+00	1.362E+01	0.000E+00	FAIL ABUN
BA-137M	-5.208E-01	1.682E+00	2.981E+00	0.000E+00	NOT IDENT.
CS-137	-5.563E-01	1.777E+00	3.150E+00	0.000E+00	NOT IDENT.

CE-139	8.544E-01	1.380E+00	2.317E+00	0.000E+00	NOT IDENT.
BA-140	-1.438E+00	2.024E+01	3.429E+01	0.000E+00	FAIL ABUN
LA-140	0.000E+00	2.084E+04	0.000E+00	0.000E+00	SHORT HLIF
CE-143	0.000E+00	2.877E+05	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-3.090E+00	9.905E+00	1.587E+01	0.000E+00	NOT IDENT.
PM-144	1.879E+00	1.889E+00	3.628E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	1.005E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-1.572E+00	2.208E+00	3.570E+00	0.000E+00	NOT IDENT.
ND-147	3.663E+01	4.641E+01	8.403E+01	0.000E+00	NOT IDENT.
PM-147	6.471E+05	2.479E+06	4.120E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	4.068E+04	0.000E+00	0.000E+00	SHORT HLIF
EU-152	-2.891E+00	4.280E+00	7.103E+00	0.000E+00	NOT IDENT.
GD-153	-2.639E+00	3.298E+00	5.232E+00	0.000E+00	NOT IDENT.
EU-154	2.526E-01	5.532E+00	9.906E+00	0.000E+00	FAIL ABUN
EU-155	-2.514E+00	4.489E+00	7.191E+00	0.000E+00	NOT IDENT.
TB-160	-1.951E+00	8.294E+00	1.450E+01	0.000E+00	NOT IDENT.
TM-171	0.000E+00	1.141E+03	1.327E+03	0.000E+00	FAIL ABUN
HF-181	1.109E+00	2.438E+00	4.332E+00	0.000E+00	FAIL ABUN
TA-182	7.253E+00	8.932E+00	1.721E+01	0.000E+00	FAIL ABUN
IR-192	-6.809E-01	1.739E+00	2.959E+00	0.000E+00	FAIL ABUN
BI-207	8.415E-01	2.753E+00	5.033E+00	0.000E+00	NOT IDENT.
TL-208	2.488E+00	2.173E+00	3.967E+00	0.000E+00	FAIL ABUN
PB-211	2.654E-01	4.980E+01	7.686E+01	0.000E+00	NOT IDENT.
BI-212	1.012E+01	1.689E+01	2.856E+01	0.000E+00	NOT IDENT.
BI-214	7.424E+00	4.024E+00	7.927E+00	0.000E+00	NOT IDENT.
RN-219	0.000E+00	2.998E+01	3.675E+01	0.000E+00	FAIL ABUN
RA-223	-1.093E+01	3.525E+01	5.343E+01	0.000E+00	FAIL ABUN
RA-226	7.424E+00	4.024E+00	7.927E+00	0.000E+00	FAIL ABUN
AC-227	-1.035E+01	1.777E+01	3.014E+01	0.000E+00	NOT IDENT.
TH-227	-1.018E+01	1.750E+01	2.965E+01	0.000E+00	NOT IDENT.
AC-228	-7.508E-01	7.965E+00	1.397E+01	0.000E+00	FAIL ABUN
RA-228	-7.508E-01	7.965E+00	1.397E+01	0.000E+00	FAIL ABUN
TH-229	1.911E+01	2.200E+01	3.881E+01	0.000E+00	FAIL ABUN
TH-230	7.423E+00	4.024E+00	7.927E+00	0.000E+00	FAIL ABUN
PA-231	9.230E+00	6.882E+01	1.216E+02	0.000E+00	NOT IDENT.
TH-231	-2.255E-01	8.256E+00	1.446E+01	0.000E+00	FAIL ABUN
TH-232	5.182E-01	4.078E+00	5.326E+00	0.000E+00	FAIL ABUN
PA-233	5.270E-01	2.979E+00	5.261E+00	0.000E+00	FAIL ABUN
PA-234	-7.616E+00	1.513E+01	2.558E+01	0.000E+00	FAIL ABUN
PA-234M	9.495E+01	2.394E+02	4.416E+02	0.000E+00	NOT IDENT.
TH-234	5.889E+00	4.808E+01	7.582E+01	0.000E+00	FAIL ABUN
NP-237	-1.187E+01	8.775E+00	1.302E+01	0.000E+00	NOT IDENT.
NP-239	1.096E+01	8.836E+00	1.536E+01	0.000E+00	FAIL ABUN
AM-241	2.125E+00	3.102E+00	5.379E+00	0.000E+00	NOT IDENT.
AM-242	2.269E+01	8.940E+01	1.500E+02	0.000E+00	NOT IDENT.
CF-251	7.786E+00	5.439E+00	1.028E+01	0.000E+00	NOT IDENT.
ANH-511	0.000E+00	2.544E+00	4.926E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:15:21.74

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870616.CNF;3
Sample date : 13-JUN-2005 00:00:00 Acquisition date : 5-JUL-2005 08:13:08.
Sample ID : G1200870616 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 06:01:20.11 Elapsed real time: 0 06:01:21.80 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	47.14	305	386	0.77	81.68	78	8	1.41E-02	12.6	
2	3	63.85	470	251	0.75	115.28	112	13	2.17E-02	6.6	8.08E-01
3	3	66.92	127	390	1.09	121.45	112	13	5.87E-03	27.8	
4	1	75.72	79	355	0.94	139.14	136	11	3.66E-03	39.2	1.59E+00
5	1	77.73	42	294	0.78	143.17	136	11	1.95E-03	63.4	
6	0	85.05	65	299	1.04	157.89	156	6	3.01E-03	43.7	
7	0	93.17	634	620	1.07	174.22	168	12	2.92E-02	8.8	
8	0	140.21	72	275	0.77	268.81	266	7	3.34E-03	39.6	
9	0	144.70	59	243	0.83	277.83	275	7	2.74E-03	45.7	
10	0	163.49	60	292	1.61	315.62	311	9	2.76E-03	52.9	
11	0	186.08	295	239	1.03	361.04	356	9	1.36E-02	11.1	
12	0	193.69	32	131	1.29	376.34	375	5	1.45E-03	57.5	
13	0	198.96	74	225	1.50	386.95	384	8	3.41E-03	37.0	
14	0	209.72	31	168	1.36	408.58	406	6	1.41E-03	69.6	
15	4	219.97	38	186	1.28	429.18	425	11	1.75E-03	63.5	1.11E+00
16	4	222.11	27	90	0.73	433.49	425	11	1.27E-03	52.1	
17	0	239.02	113	144	0.70	467.49	465	6	5.23E-03	19.1	
18	0	278.57	41	168	0.87	547.00	544	8	1.90E-03	56.4	
19	0	294.73	14	136	0.86	579.51	578	7	6.38E-04	142.0	
20	0	327.28	60	178	1.31	644.96	639	12	2.76E-03	47.2	
21	0	351.89	44	204	1.01	694.44	689	11	2.01E-03	65.1	
22	0	386.54	21	103	0.54	764.14	761	8	9.64E-04	86.7	
23	0	402.05	56	99	3.73	795.32	791	10	2.57E-03	36.2	
24	0	432.48	52	97	1.41	856.51	852	11	2.39E-03	39.2	
25	0	511.32	234	157	1.91	1015.06	1010	11	1.08E-02	12.4	
26	0	583.36	33	112	1.78	1159.93	1157	11	1.54E-03	63.5	
27	0	594.63	24	119	1.17	1182.61	1179	11	1.11E-03	89.9	
28	0	609.83	34	99	1.34	1213.17	1210	9	1.56E-03	56.1	
29	0	645.44	70	93	6.61	1284.78	1276	17	3.25E-03	33.6	
30	0	723.71	13	40	0.70	1442.19	1440	6	5.88E-04	86.9	
31	0	777.34	29	48	2.16	1550.06	1546	8	1.34E-03	45.9	
32	0	829.74	18	26	0.95	1655.46	1653	5	8.27E-04	48.9	
33	0	968.35	13	34	0.95	1934.27	1932	8	6.21E-04	79.7	
34	0	1098.58	17	22	1.42	2196.22	2191	9	7.70E-04	56.7	
35	0	1167.29	40	36	5.68	2334.44	2327	16	1.84E-03	37.2	
36	0	1173.29	29	14	1.38	2346.52	2343	8	1.32E-03	30.3	
37	0	1241.20	31	35	6.81	2483.13	2475	18	1.43E-03	48.6	
38	0	1267.18	71	59	16.28	2535.40	2518	39	3.25E-03	37.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1320.40	18	45	4.14	2642.45	2634	20	8.18E-04	95.7	
40	0	1339.32	8	51	8.86	2680.53	2668	23	3.49E-04	249.2	
41	0	1413.63	4	14	1.35	2830.02	2828	8	1.70E-04	183.6	
42	0	1460.93	9	25	0.57	2925.19	2920	9	4.25E-04	102.7	
43	0	1650.80	20	10	1.65	3307.21	3299	14	9.16E-04	41.2	
44	0	1715.25	4	19	3.39	3436.88	3431	11	1.70E-04	235.8	
45	0	1731.89	17	3	3.52	3470.36	3464	13	7.85E-04	32.5	
46	0	1737.74	2	8	0.41	3482.14	3481	6	1.01E-04	209.5	
47	0	1764.33	16	8	1.91	3535.64	3530	10	7.59E-04	39.7	
48	0	1835.61	11	7	1.70	3679.08	3674	9	5.20E-04	51.1	
49	0	1991.93	10	16	0.45	3993.65	3987	14	4.83E-04	89.3	

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:15:27.49

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870616.CNF;3
Sample date       : 13-JUN-2005 00:00:00 Acquisition date : 5-JUL-2005 08:13:08.
Sample ID         : G1200870616          Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA17              Detector geometry: 2L_MB
Elapsed live time: 0 06:01:20.11         Elapsed real time: 0 06:01:21.80  0.0%
Energy tolerance : 2.00000 KEV           Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 30-TN10348
Matrix Spike DPM :                       LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
CE-141	145.44	14	48.40*	2.577E+00	6.770E-01	1.093E+00	459.10
HG-203	70.83	------	4.75	2.774E+00	------ Line Not Found		------
	72.87	------	8.00	2.790E+00	------ Line Not Found		------
	82.60	------	3.55	2.837E+00	------ Line Not Found		------
	279.20	25	77.30*	1.760E+00	1.136E+00	1.586E+00	210.52
BI-210	46.50	30	4.05*	2.314E+00	1.967E+01	1.970E+01	281.65
PB-210	46.50	30	4.05*	2.314E+00	1.967E+01	1.970E+01	281.65
BI-211	351.07	5	12.94*	1.466E+00	1.611E+00	1.611E+00	1286.14
PB-212	74.80	55	10.70	2.809E+00	1.139E+01	1.164E+01	129.03
	87.30	------	8.00	2.844E+00	------ Line Not Found		------
	115.19	------	0.60	2.764E+00	------ Line Not Found		------
	238.63	7	44.60*	1.962E+00	5.182E-01	5.299E-01	786.92
	300.09	------	3.41	1.663E+00	------ Line Not Found		------
PB-214	74.81	55	6.21	2.809E+00	1.962E+01	1.962E+01	128.91
	77.11	15	10.50	2.820E+00	3.194E+00	3.194E+00	425.75
	87.30	------	4.41	2.844E+00	------ Line Not Found		------
	241.98	------	7.50	1.945E+00	------ Line Not Found		------
	295.21	14	19.20	1.687E+00	2.663E+00	2.663E+00	284.13
	351.92	5	37.20*	1.466E+00	5.602E-01	5.602E-01	1286.15
TH-228	84.40	------	1.21	2.841E+00	------ Line Not Found		------
	238.60	7	44.60*	1.962E+00	5.182E-01	5.299E-01	786.92
	300.10	------	3.41	1.663E+00	------ Line Not Found		------
U-234	67.67	106	0.37	2.734E+00	6.475E+02	6.475E+02	73.85
	241.98	------	7.49	1.945E+00	------ Line Not Found		------
	295.21	14	19.20*	1.687E+00	2.663E+00	2.663E+00	284.13
	351.92	5	37.20	1.466E+00	5.602E-01	5.602E-01	1286.15
U-235	89.95	------	2.70	2.845E+00	------ Line Not Found		------
	93.35	------	4.50	2.842E+00	------ Line Not Found		------
	105.00	------	2.10	2.811E+00	------ Line Not Found		------
	143.76	14	10.50*	2.577E+00	3.121E+00	3.121E+00	459.35
	163.33	41	4.70	2.445E+00	2.229E+01	2.229E+01	166.97
	185.71	40	54.00	2.289E+00	2.038E+00	2.038E+00	188.66

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
	205.31	------	5.00	2.163E+00	------ Line Not Found		------
U-238	63.29	10	3.80*	2.695E+00	5.889E+00	5.889E+00	816.33
CM-247	278.00	25	3.40	1.760E+00	2.582E+01	2.582E+01	210.51
	287.40	------	2.00	1.719E+00	------ Line Not Found		------
	402.60	56	72.60*	1.311E+00	3.642E+00	3.642E+00	72.67
CF-249	252.85	------	2.73	1.887E+00	------ Line Not Found		------
	333.44	------	15.50	1.531E+00	------ Line Not Found		------
	387.95	21	66.00*	1.356E+00	1.455E+00	1.456E+00	173.51

Nuclide Type: NATURAL

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
RA-224	240.98	7	3.95*	1.962E+00	5.851E+00	5.983E+00	786.90

Flag: "*" = Keyline

Sample ID : G1200870616 Acquisition date : 5-JUL-2005 08:13:08

Total number of lines in spectrum	42	
Number of unidentified lines	14	
Number of lines tentatively identified by NID	28	66.67%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CE-141	32.50D	1.61	6.770E-01	1.093E+00	5.019E+00	459.10	
HG-203	46.61D	1.40	1.136E+00	1.586E+00	3.339E+00	210.52	
BI-210	22.26Y	1.00	1.967E+01	1.970E+01	5.550E+01	281.65	
PB-210	22.26Y	1.00	1.967E+01	1.970E+01	5.550E+01	281.65	
BI-211	7.04E+08Y	1.00	1.611E+00	1.611E+00	20.71E+00	1286.14	
PB-212	1.91Y	1.02	5.182E-01	5.299E-01	41.70E-01	786.92	
PB-214	1600.00Y	1.00	5.602E-01	5.602E-01	72.05E-01	1286.15	
TH-228	1.91Y	1.02	5.182E-01	5.299E-01	41.70E-01	786.92	
U-234	2.45E+05Y	1.00	2.663E+00	2.663E+00	7.566E+00	284.13	
U-235	7.04E+08Y	1.00	3.121E+00	3.121E+00	14.33E+00	459.35	
U-238	4.47E+09Y	1.00	5.889E+00	5.889E+00	48.08E+00	816.33	
CM-247	1.56E+07Y	1.00	3.642E+00	3.642E+00	2.646E+00	72.67	
CF-249	350.60Y	1.00	1.455E+00	1.456E+00	2.526E+00	173.51	
			---------	---------			
	Total Activity :		6.112E+01	6.209E+01			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RA-224	1.91Y	1.02	5.851E+00	5.983E+00	47.08E+00	786.90	
			---------	---------			
	Total Activity :		5.851E+00	5.983E+00			

Grand Total Activity : 6.697E+01 6.807E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1200870616 Acquisition date : 5-JUL-2005 08:13:08

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	140.21	39	275	0.77	268.81	266	7	1.80E-03	****	2.61E+00	T
0	193.69	32	131	1.29	376.34	375	5	1.45E-03	****	2.24E+00	T
0	198.96	74	225	1.50	386.95	384	8	3.41E-03	74.1	2.20E+00	T
0	209.72	13	168	1.36	408.58	406	6	5.87E-04	****	2.13E+00	T
4	219.97	38	186	1.28	429.18	425	11	1.75E-03	****	2.07E+00	
4	222.11	27	90	0.73	433.49	425	11	1.27E-03	****	2.06E+00	T
0	327.28	60	178	1.31	644.96	639	12	2.76E-03	94.4	1.55E+00	T
0	432.48	52	97	1.41	856.51	852	11	2.39E-03	78.4	1.23E+00	T
0	594.63	19	119	1.17	1182.61	1179	11	8.87E-04	****	9.29E-01	
0	645.44	70	93	6.61	1284.78	1276	17	3.25E-03	67.2	8.63E-01	T
0	723.71	13	40	0.70	1442.19	1440	6	5.88E-04	****	7.79E-01	T
0	777.34	29	48	2.16	1550.06	1546	8	1.34E-03	91.9	7.31E-01	
0	829.74	18	26	0.95	1655.46	1653	5	8.27E-04	97.8	6.90E-01	T
0	968.35	7	34	0.95	1934.27	1932	8	3.19E-04	****	6.03E-01	T
0	1098.58	17	22	1.42	2196.22	2191	9	7.70E-04	****	5.42E-01	T
0	1167.29	40	36	5.68	2334.44	2327	16	1.84E-03	74.3	5.16E-01	
0	1173.29	29	14	1.38	2346.52	2343	8	1.32E-03	60.7	5.14E-01	T
0	1241.20	31	35	6.81	2483.13	2475	18	1.43E-03	97.2	4.91E-01	
0	1267.18	71	59	16.28	2535.40	2518	39	3.25E-03	75.0	4.83E-01	
0	1320.40	18	45	4.14	2642.45	2634	20	8.18E-04	****	4.68E-01	
0	1413.63	4	14	1.35	2830.02	2828	8	1.70E-04	****	4.45E-01	
0	1650.80	20	10	1.65	3307.21	3299	14	9.16E-04	82.3	3.98E-01	
0	1715.25	4	19	3.39	3436.88	3431	11	1.70E-04	****	3.88E-01	
0	1731.89	17	3	3.52	3470.36	3464	13	7.85E-04	64.9	3.85E-01	
0	1737.74	2	8	0.41	3482.14	3481	6	1.01E-04	****	3.85E-01	
0	1764.33	5	8	1.91	3535.64	3530	10	2.38E-04	****	3.81E-01	
0	1835.61	10	7	1.70	3679.08	3674	9	4.54E-04	****	3.71E-01	T
0	1991.93	5	16	0.45	3993.65	3987	14	2.49E-04	****	3.53E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:15:36.39

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870616.CNF;3		
Acquisition date	: 5-JUL-2005 08:13:08.	Detector SN#	: 30-TN10348
Detector ID	: GAMMA17	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 06:01:20.11	Abundance limit	: 75.00000
Elapsed real time	: 0 06:01:21.80	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 13-JUN-2005 00:00:00	Nuclide Library	: EPI
Sample ID	: G1200870616	Analyst initials	: AKB
Batch Number	: 435282	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 1-DEC-2004 11:39:23.06	MS Isotope	:
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CE-141	3.045E-01	5.196E+00	5.472E+00	3.579E-01	0.056
HG-203	1.586E+00	3.339E+00	3.226E+00	2.193E-01	0.492
BI-210	1.970E+01	5.550E+01	4.776E+01	3.439E+00	0.413
PB-210	1.970E+01	5.550E+01	4.776E+01	3.439E+00	0.413
BI-211	1.611E+00	2.071E+01	1.661E+01	1.195E+00	0.097
PB-212	5.299E-01	4.170E+00	4.360E+00	3.356E-01	0.122
PB-214	5.602E-01	7.205E+00	5.790E+00	5.148E-01	0.097
RA-224	5.983E+00	4.708E+01	4.787E+01	3.002E+00	0.125
TH-228	5.299E-01	4.170E+00	4.359E+00	3.356E-01	0.122
U-234	2.663E+00	7.566E+00	1.021E+01	9.234E-01	0.261
U-235	3.121E+00	1.433E+01	1.689E+01	2.789E+00	0.185
U-238	5.889E+00	4.808E+01	4.966E+01	8.402E+00	0.119
CM-247	3.642E+00	2.646E+00	2.922E+00	1.938E-01	1.246
CF-249	1.456E+00	2.526E+00	3.264E+00	2.153E-01	0.446

---- Non-Identified Nuclides ----

Key-Line Activity	K.L.	Act error	MDA	MDA error	Act/MDA

Nuclide	(pCi/LITER) Ided		(pCi/LITER)		
BE-7	-1.443E+01	1.716E+01	2.728E+01	2.080E+00	-0.529

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	8.546E-02		1.987E+00	3.557E+00	2.154E-01	0.024
AL-26	-2.836E-01		1.716E+00	3.177E+00	1.890E-01	-0.089
K-40	1.550E+01		2.119E+01	4.202E+01	2.579E+00	0.369
SC-46	3.829E+00		2.407E+00	4.830E+00	2.686E-01	0.793
V-48	1.455E+00		5.130E+00	9.405E+00	5.547E-01	0.155
CR-51	-1.920E+01		2.146E+01	3.522E+01	2.533E+00	-0.545
MN-54	-2.569E-01		1.966E+00	3.478E+00	2.023E-01	-0.074
CO-56	-3.304E+00		2.279E+00	3.497E+00	2.017E-01	-0.945
CO-57	-1.567E-01		1.243E+00	2.022E+00	1.409E-01	-0.077
CO-58	9.269E-02		2.322E+00	4.173E+00	2.478E-01	0.022
FE-59	4.813E+00	+	5.470E+00	9.458E+00	6.902E-01	0.509
CO-60	4.322E-01		1.869E+00	3.611E+00	2.029E-01	0.120
ZN-65	-1.086E+00		4.089E+00	7.056E+00	4.555E-01	-0.154
SE-75	-8.829E-01		2.038E+00	3.495E+00	2.257E-01	-0.253
KR-85	-1.751E+03		5.502E+02	7.201E+02	4.890E+01	-2.431
SR-85	-9.693E+00		3.046E+00	3.987E+00	2.708E-01	-2.431
Y-88	1.925E+00	+	2.396E+00	4.504E+00	2.684E-01	0.427
Y-91	1.249E+00		2.012E+00	3.622E+00	2.429E-01	0.345
NB-94	5.376E-01		1.727E+00	3.185E+00	1.958E-01	0.169
NB-95	-3.109E-01		2.651E+00	4.732E+00	2.861E-01	-0.066
NB-95M	-5.875E+01		3.320E+02	5.793E+02	6.491E+01	-0.101
ZR-95	3.868E+00		3.781E+00	7.408E+00	5.372E-01	0.522
RU-103	-1.356E+00		2.553E+00	4.159E+00	5.463E-01	-0.326
RH-106	4.635E+00		1.646E+01	3.052E+01	1.963E+00	0.152
RU-106	7.659E-02		1.683E+01	3.055E+01	3.684E+00	0.003
AG-108M	3.223E+00	+	2.536E+00	2.789E+00	1.998E-01	1.155
CD-109	1.986E+01		2.701E+01	4.636E+01	3.074E+00	0.428
AG-110M	6.936E-01		1.821E+00	3.391E+00	2.220E-01	0.205
SN-113	-1.730E-01		2.227E+00	3.834E+00	2.658E-01	-0.045
SN-115	-9.929E+01		1.797E+02	3.040E+02	1.725E+01	-0.327
SN-117M	1.180E+00		3.869E+00	6.361E+00	3.788E-01	0.186
TE-123M	1.041E+00		1.386E+00	2.339E+00	1.408E-01	0.445
SB-124	-3.346E+00		4.376E+00	7.231E+00	4.642E-01	-0.463
SB-125	1.114E+00		4.220E+00	7.467E+00	5.172E-01	0.149
TE-125M	-2.934E-01		4.594E+02	7.560E+02	6.707E+01	0.000
I-126	8.628E+00		1.353E+01	2.563E+01	1.580E+00	0.337
SB-126	-2.543E+00		1.210E+01	2.136E+01	1.309E+00	-0.119
SN-126	-1.653E-02		2.722E+00	4.521E+00	2.991E-01	-0.004
SB-127	9.536E+01		2.461E+02	4.609E+02	5.707E+01	0.207
I-131	7.357E+00		1.012E+01	1.846E+01	1.349E+00	0.399
TE-132	1.868E+01		1.369E+02	2.439E+02	3.951E+01	0.077
BA-133	9.144E-01		2.165E+00	3.844E+00	4.614E-01	0.238
CS-134	-6.946E-02		2.136E+00	3.826E+00	2.307E-01	-0.018
CS-135	1.642E-01		6.963E+00	1.224E+01	9.960E-01	0.013
CS-136	-4.133E+00		8.112E+00	1.362E+01	9.106E-01	-0.303
BA-137M	-5.208E-01		1.682E+00	2.981E+00	1.838E-01	-0.175
CS-137	-5.563E-01		1.777E+00	3.150E+00	1.949E-01	-0.177
CE-139	8.544E-01		1.380E+00	2.317E+00	1.330E-01	0.369

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BA-140	-1.438E+00		2.024E+01	3.429E+01	1.122E+01	-0.042
CE-144	-3.090E+00		9.905E+00	1.587E+01	2.311E+00	-0.195
PM-144	1.879E+00		1.889E+00	3.628E+00	2.235E-01	0.518
PM-146	-1.572E+00		2.208E+00	3.570E+00	3.321E-01	-0.441
ND-147	3.663E+01		4.641E+01	8.403E+01	1.174E+01	0.436
PM-147	6.471E+05		2.479E+06	4.120E+06	2.860E+05	0.157
EU-152	-2.891E+00		4.280E+00	7.103E+00	5.179E-01	-0.407
GD-153	-2.639E+00		3.298E+00	5.232E+00	3.486E-01	-0.504
EU-154	2.526E-01		5.532E+00	9.906E+00	9.406E-01	0.025
EU-155	-2.514E+00		4.489E+00	7.191E+00	4.936E-01	-0.350
TB-160	-1.951E+00		8.294E+00	1.450E+01	8.137E-01	-0.135
TM-171	1.563E+03	+	1.141E+03	1.327E+03	8.105E+01	1.178
HF-181	1.109E+00		2.438E+00	4.332E+00	2.946E-01	0.256
TA-182	7.253E+00		8.932E+00	1.721E+01	1.099E+00	0.422
IR-192	-6.809E-01		1.739E+00	2.959E+00	1.960E-01	-0.230
BI-207	8.415E-01		2.753E+00	5.033E+00	3.139E-01	0.167
TL-208	2.488E+00		2.173E+00	3.967E+00	2.939E-01	0.627
PB-211	2.654E-01		4.980E+01	7.686E+01	4.798E+01	0.003
BI-212	1.012E+01		1.689E+01	2.856E+01	2.272E+00	0.354
BI-214	7.424E+00		4.024E+00	7.927E+00	6.590E-01	0.936
RN-219	4.068E+01	+	2.998E+01	3.675E+01	5.137E+00	1.107
RA-223	-1.093E+01		3.525E+01	5.343E+01	8.987E+00	-0.205
RA-226	7.424E+00		4.024E+00	7.927E+00	6.590E-01	0.936
AC-227	-1.035E+01		1.777E+01	3.014E+01	4.330E+00	-0.343
TH-227	-1.018E+01		1.750E+01	2.965E+01	5.070E+00	-0.343
AC-228	-7.508E-01		7.965E+00	1.397E+01	1.274E+00	-0.054
RA-228	-7.508E-01		7.965E+00	1.397E+01	1.274E+00	-0.054
TH-229	1.911E+01	+	2.200E+01	3.881E+01	2.307E+00	0.492
TH-230	7.423E+00		4.024E+00	7.927E+00	6.590E-01	0.936
PA-231	9.230E+00		6.882E+01	1.216E+02	1.713E+01	0.076
TH-231	-2.255E-01		8.256E+00	1.446E+01	1.128E+00	-0.016
TH-232	5.182E-01	+	4.078E+00	5.326E+00	4.100E-01	0.097
PA-233	5.270E-01		2.979E+00	5.261E+00	3.633E-01	0.100
PA-234	-7.616E+00		1.513E+01	2.558E+01	4.509E+00	-0.298
PA-234M	9.495E+01		2.394E+02	4.416E+02	3.431E+01	0.215
TH-234	5.889E+00	+	4.808E+01	7.582E+01	1.283E+01	0.078
NP-237	-1.187E+01		8.775E+00	1.302E+01	2.820E+00	-0.912
NP-239	1.096E+01		8.836E+00	1.536E+01	1.056E+00	0.713
AM-241	2.125E+00		3.102E+00	5.379E+00	3.730E-01	0.395
AM-242	2.269E+01		8.940E+01	1.500E+02	1.007E+01	0.151
CF-251	7.786E+00		5.439E+00	1.028E+01	5.975E-01	0.757
ANH-511	1.163E+01		2.544E+00	4.926E+00	3.347E-01	2.360

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200870616           *
* Acquisition date :  5-JUL-2005 08:13:08 Detector SN#     : 30-TN10348     *
* Detector ID      : GAMMA17              Sensitivity      : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 06:01:20.11     Abundance limit  : 75.000         *
* Elapsed real time:    0 06:01:21.80     Half life ratio  : 8.000          *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 13-JUN-2005 00:00:00 Nuclide Library :                 *
* Sample ID        : G1200870616          Analyst initials: AKB             *
* Batch Number     : 435282               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME :  1-DEC-2004 11:39:23 MS Isotope       :               *
* MSD DPM          :    0.000             MSD Isotope      :               *
* LCS DPM          :    0.000             LCS Isotope      :               *
* LCSD DPM         :    0.000             LCSD Isotope     :               *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
CE-141	3.045E-01	5.196E+00	2.628E+00	2.598E+00
HG-203	1.586E+00	3.339E+00	1.527E+00	1.669E+00
BI-210	1.970E+01	5.550E+01	2.298E+01	2.775E+01
PB-210	1.970E+01	5.550E+01	2.298E+01	2.775E+01
BI-211	1.611E+00	2.071E+01	7.863E+00	1.036E+01
PB-212	5.299E-01	4.170E+00	2.082E+00	2.085E+00
PB-214	5.602E-01	7.205E+00	2.742E+00	3.603E+00
RA-224	5.983E+00	4.708E+01	2.283E+01	2.354E+01
TH-228	5.299E-01	4.170E+00	2.082E+00	2.085E+00
U-234	2.663E+00	7.566E+00	4.847E+00	3.783E+00
U-235	3.121E+00	1.433E+01	8.137E+00	7.167E+00
U-238	5.889E+00	4.808E+01	2.402E+01	2.404E+01
CM-247	3.642E+00	2.646E+00	1.373E+00	1.323E+00
CF-249	1.456E+00	2.526E+00	1.538E+00	1.263E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-1.443E+01	1.716E+01	1.269E+01	8.578E+00	NOT IDENT.
NA-22	8.546E-02	1.987E+00	1.601E+00	9.935E-01	NOT IDENT.
NA-24	-5.887E+10	1.290E+11	0.000E+00	6.450E+10	SHORT HLIF
AL-26	-2.836E-01	1.716E+00	1.363E+00	8.578E-01	NOT IDENT.
K-40	1.550E+01	2.119E+01	1.920E+01	1.060E+01	NOT IDENT.
SC-46	3.829E+00	2.407E+00	2.260E+00	1.204E+00	NOT IDENT.
V-48	1.455E+00	5.130E+00	4.329E+00	2.565E+00	NOT IDENT.
CR-51	-1.920E+01	2.146E+01	1.666E+01	1.073E+01	NOT IDENT.
MN-54	-2.569E-01	1.966E+00	1.610E+00	9.829E-01	NOT IDENT.
CO-56	-3.304E+00	2.279E+00	1.598E+00	1.139E+00	NOT IDENT.
MN-56	-1.000E+41	6.900E+40	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-1.567E-01	1.243E+00	9.734E-01	6.216E-01	NOT IDENT.
CO-58	9.269E-02	2.322E+00	1.937E+00	1.161E+00	NOT IDENT.
FE-59	4.813E+00	5.470E+00	4.341E+00	2.735E+00	FAIL ABUN
CO-60	4.322E-01	1.869E+00	1.623E+00	9.345E-01	FAIL ABUN
ZN-65	-1.086E+00	4.089E+00	3.198E+00	2.044E+00	NOT IDENT.
SE-75	-8.829E-01	2.038E+00	1.660E+00	1.019E+00	FAIL ABUN
KR-85	-1.751E+03	5.502E+02	3.418E+02	2.751E+02	NOT IDENT.
SR-85	-9.693E+00	3.046E+00	1.892E+00	1.523E+00	NOT IDENT.
Y-88	1.925E+00	2.396E+00	1.988E+00	1.198E+00	FAIL ABUN
Y-91	1.249E+00	2.012E+00	1.694E+00	1.006E+00	NOT IDENT.
NB-94	5.376E-01	1.727E+00	1.488E+00	8.633E-01	NOT IDENT.
NB-95	-3.109E-01	2.651E+00	2.189E+00	1.326E+00	NOT IDENT.
NB-95M	-5.875E+01	3.320E+02	2.771E+02	1.660E+02	NOT IDENT.
ZR-95	3.868E+00	3.781E+00	3.446E+00	1.890E+00	FAIL ABUN
MO-99	3.234E+02	5.406E+02	0.000E+00	2.703E+02	SHORT HLIF
TC-99M	1.045E+27	1.800E+27	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.356E+00	2.553E+00	1.951E+00	1.277E+00	NOT IDENT.
RH-106	4.635E+00	1.646E+01	1.426E+01	8.230E+00	NOT IDENT.
RU-106	7.659E-02	1.683E+01	1.428E+01	8.417E+00	NOT IDENT.
AG-108M	3.223E+00	2.536E+00	1.311E+00	1.268E+00	FAIL ABUN
CD-109	1.986E+01	2.701E+01	2.238E+01	1.350E+01	NOT IDENT.
AG-110M	6.936E-01	1.821E+00	1.584E+00	9.104E-01	NOT IDENT.
SN-113	-1.730E-01	2.227E+00	1.807E+00	1.114E+00	NOT IDENT.
CD-115	3.027E+03	5.548E+03	0.000E+00	2.774E+03	SHORT HLIF
SN-115	-9.929E+01	1.797E+02	1.376E+02	8.985E+01	NOT IDENT.
SN-117M	1.180E+00	3.869E+00	3.058E+00	1.935E+00	NOT IDENT.
TE-123M	1.041E+00	1.386E+00	1.124E+00	6.931E-01	NOT IDENT.
SB-124	-3.346E+00	4.376E+00	3.047E+00	2.188E+00	FAIL ABUN
SB-125	1.114E+00	4.220E+00	3.500E+00	2.110E+00	NOT IDENT.
TE-125M	-2.934E-01	4.594E+02	3.642E+02	2.297E+02	NOT IDENT.
I-126	8.628E+00	1.353E+01	1.199E+01	6.764E+00	NOT IDENT.
SB-126	-2.543E+00	1.210E+01	9.980E+00	6.051E+00	NOT IDENT.
SN-126	-1.653E-02	2.722E+00	2.182E+00	1.361E+00	FAIL ABUN
SB-127	9.536E+01	2.461E+02	2.140E+02	1.230E+02	NOT IDENT.
I-131	7.357E+00	1.012E+01	8.728E+00	5.060E+00	NOT IDENT.
I-132	1.000E+41	4.638E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.868E+01	1.369E+02	1.164E+02	6.845E+01	NOT IDENT.
BA-133	9.144E-01	2.165E+00	1.826E+00	1.083E+00	FAIL ABUN
I-133	4.366E+07	1.130E+08	0.000E+00	5.652E+07	SHORT HLIF
CS-134	-6.946E-02	2.136E+00	1.773E+00	1.068E+00	NOT IDENT.
CS-135	1.642E-01	6.963E+00	5.830E+00	3.481E+00	NOT IDENT.
I-135	-5.397E+24	3.021E+25	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-4.133E+00	8.112E+00	6.199E+00	4.056E+00	FAIL ABUN
BA-137M	-5.208E-01	1.682E+00	1.380E+00	8.409E-01	NOT IDENT.
CS-137	-5.563E-01	1.777E+00	1.458E+00	8.886E-01	NOT IDENT.

CE-139	8.544E-01	1.380E+00	1.111E+00	6.902E-01	NOT IDENT.
BA-140	-1.438E+00	2.024E+01	1.603E+01	1.012E+01	FAIL ABUN
LA-140	-1.302E+04	2.084E+04	0.000E+00	1.042E+04	SHORT HLIF
CE-143	1.009E+05	2.877E+05	0.000E+00	1.438E+05	SHORT HLIF
CE-144	-3.090E+00	9.905E+00	7.626E+00	4.952E+00	NOT IDENT.
PM-144	1.879E+00	1.889E+00	1.705E+00	9.443E-01	NOT IDENT.
PR-144	1.000E+41	1.005E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-1.572E+00	2.208E+00	1.671E+00	1.104E+00	NOT IDENT.
ND-147	3.663E+01	4.641E+01	3.945E+01	2.320E+01	NOT IDENT.
PM-147	6.471E+05	2.479E+06	1.983E+06	1.240E+06	NOT IDENT.
PM-149	-2.797E+04	4.068E+04	0.000E+00	2.034E+04	SHORT HLIF
EU-152	-2.891E+00	4.280E+00	3.339E+00	2.140E+00	NOT IDENT.
GD-153	-2.639E+00	3.298E+00	2.516E+00	1.649E+00	NOT IDENT.
EU-154	2.526E-01	5.532E+00	4.459E+00	2.766E+00	FAIL ABUN
EU-155	-2.514E+00	4.489E+00	3.451E+00	2.244E+00	NOT IDENT.
TB-160	-1.951E+00	8.294E+00	6.692E+00	4.147E+00	NOT IDENT.
TM-171	1.563E+03	1.141E+03	6.438E+02	5.704E+02	FAIL ABUN
HF-181	1.109E+00	2.438E+00	2.036E+00	1.219E+00	FAIL ABUN
TA-182	7.253E+00	8.932E+00	7.891E+00	4.466E+00	FAIL ABUN
IR-192	-6.809E-01	1.739E+00	1.402E+00	8.696E-01	FAIL ABUN
BI-207	8.415E-01	2.753E+00	2.315E+00	1.376E+00	NOT IDENT.
TL-208	2.488E+00	2.173E+00	1.876E+00	1.086E+00	FAIL ABUN
PB-211	2.654E-01	4.980E+01	3.622E+01	2.490E+01	NOT IDENT.
BI-212	1.012E+01	1.689E+01	1.334E+01	8.446E+00	NOT IDENT.
BI-214	7.424E+00	4.024E+00	3.765E+00	2.012E+00	NOT IDENT.
RN-219	4.068E+01	2.998E+01	1.740E+01	1.499E+01	FAIL ABUN
RA-223	-1.093E+01	3.525E+01	2.534E+01	1.762E+01	FAIL ABUN
RA-226	7.424E+00	4.024E+00	3.765E+00	2.012E+00	FAIL ABUN
AC-227	-1.035E+01	1.777E+01	1.435E+01	8.883E+00	NOT IDENT.
TH-227	-1.018E+01	1.750E+01	1.412E+01	8.752E+00	NOT IDENT.
AC-228	-7.508E-01	7.965E+00	6.506E+00	3.982E+00	FAIL ABUN
RA-228	-7.508E-01	7.965E+00	6.506E+00	3.982E+00	FAIL ABUN
TH-229	1.911E+01	2.200E+01	1.860E+01	1.100E+01	FAIL ABUN
TH-230	7.423E+00	4.024E+00	3.765E+00	2.012E+00	FAIL ABUN
PA-231	9.230E+00	6.882E+01	5.782E+01	3.441E+01	NOT IDENT.
TH-231	-2.255E-01	8.256E+00	6.891E+00	4.128E+00	FAIL ABUN
TH-232	5.182E-01	4.078E+00	2.568E+00	2.039E+00	FAIL ABUN
PA-233	5.270E-01	2.979E+00	2.496E+00	1.490E+00	FAIL ABUN
PA-234	-7.616E+00	1.513E+01	1.165E+01	7.566E+00	FAIL ABUN
PA-234M	9.495E+01	2.394E+02	2.039E+02	1.197E+02	NOT IDENT.
TH-234	5.889E+00	4.808E+01	3.711E+01	2.404E+01	FAIL ABUN
NP-237	-1.187E+01	8.775E+00	6.278E+00	4.387E+00	NOT IDENT.
NP-239	1.096E+01	8.836E+00	7.410E+00	4.418E+00	FAIL ABUN
AM-241	2.125E+00	3.102E+00	2.601E+00	1.551E+00	NOT IDENT.
AM-242	2.269E+01	8.940E+01	7.207E+01	4.470E+01	NOT IDENT.
CF-251	7.786E+00	5.439E+00	4.940E+00	2.720E+00	NOT IDENT.
ANH-511	1.163E+01	2.544E+00	2.385E+00	1.272E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:16:33.01

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870617.CNF;2
Sample date : 20-JUN-2005 00:00:00 Acquisition date : 1-JUL-2005 19:24:49.
Sample ID : G1200870617 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.81 0.1%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	34.11	50	515	0.94	69.12	68	6	1.38E-02	73.7	
2	0	59.60*	952	1080	1.23	120.02	115	10	2.65E-01	7.3	
3	6	86.05*	175	625	2.12	172.84	170	13	4.86E-02	21.6	1.07E+00
4	6	88.22	2962	699	1.21	177.18	170	13	8.23E-01	2.4	
5	0	92.84*	10	595	1.02	186.42	183	7	2.81E-03	410.8	
6	0	122.22	1812	766	1.26	245.07	240	10	5.03E-01	3.7	
7	0	136.84	230	640	1.38	274.27	270	9	6.40E-02	20.9	
8	0	166.07*	1960	714	1.28	332.64	327	11	5.44E-01	3.5	
9	0	185.77*	28	384	1.83	372.00	369	8	7.87E-03	123.9	
10	0	192.91	36	310	0.90	386.24	383	7	1.00E-02	82.8	
11	0	255.63	94	229	1.16	511.51	509	7	2.61E-02	28.9	
12	0	273.95	37	136	1.36	548.10	546	5	1.03E-02	49.8	
13	0	279.41*	822	394	1.47	559.01	553	13	2.28E-01	6.1	
14	0	378.50	73	230	5.35	756.90	750	14	2.03E-02	45.7	
15	0	391.80*	1468	195	1.33	783.47	778	11	4.08E-01	3.1	
16	0	396.30	42	148	0.76	792.47	789	9	1.16E-02	54.6	
17	0	425.10	7	184	1.35	849.98	849	9	1.96E-03	347.5	
18	0	477.28	34	133	3.20	954.20	949	9	9.36E-03	64.4	
19	5	506.29	40	60	1.56	1012.15	1009	19	1.12E-02	33.5	8.93E-01
20	5	510.77*	79	208	2.91	1021.10	1009	19	2.18E-02	43.3	
21	0	546.86*	35	161	3.49	1093.17	1086	14	9.62E-03	80.8	
22	0	661.70	1208	206	1.72	1322.57	1313	16	3.36E-01	3.9	
23	0	666.09	44	78	1.72	1331.33	1328	7	1.23E-02	36.6	
24	0	683.62	8	121	0.84	1366.35	1362	8	2.21E-03	241.8	
25	0	804.36*	38	114	5.19	1607.54	1600	17	1.05E-02	67.0	
26	0	898.06*	1879	179	1.92	1794.73	1786	20	5.22E-01	2.9	
27	3	939.46*	41	73	2.39	1877.43	1873	12	1.15E-02	36.5	3.01E+00
28	3	941.81	30	37	1.59	1882.13	1873	12	8.30E-03	39.2	
29	0	983.27	54	95	2.82	1964.94	1957	15	1.51E-02	41.7	
30	0	1020.22	51	206	9.35	2038.77	2021	31	1.43E-02	84.2	
31	0	1042.60	18	43	1.25	2083.49	2080	9	4.88E-03	71.3	
32	0	1173.26*	1337	91	2.01	2344.52	2337	19	3.71E-01	3.2	
33	0	1246.57	32	52	8.35	2491.00	2483	19	8.97E-03	56.5	
34	0	1332.54*	1235	30	2.61	2662.78	2656	20	3.43E-01	3.1	
35	0	1432.41	12	13	0.54	2862.34	2860	8	3.38E-03	57.6	
36	0	1463.96	35	26	4.39	2925.38	2919	14	9.72E-03	37.4	
37	0	1469.50	24	12	2.69	2936.45	2933	9	6.66E-03	32.7	
38	0	1496.93	12	23	0.84	2991.25	2989	9	3.23E-03	79.6	

Es137 - $\frac{501.8}{472.8} = 106.2\%$ Co60 - $\frac{761}{736} = 103.3\%$ Am241 - $\frac{1307}{1220} = 98.9\%$ Gross Y - $\frac{6589}{6367} = 103.5\%$

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1580.47*	10	19	1.02	3158.19	3156	5	2.86E-03	71.1	
40	0	1802.83*	15	3	1.08	3602.56	3595	16	4.24E-03	39.5	
41	0	1811.49	23	0	1.11	3619.87	3611	21	6.39E-03	20.9	
42	0	1836.06	1178	20	2.99	3668.97	3659	20	3.27E-01	3.1	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 5-JUL-2005 15:16:37

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870617.CNF;2
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 20-JUN-2005 00:00:00 Acquisition date : 1-JUL-2005 19:24:49
Sample ID : G1200870617 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.81 0.1%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Iden	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	+	477.59	*	1.045E+02	1.347E+02	1.821E+02	1.326E+01	0.574
CO-57	+	122.06	*	3.215E+02	3.125E+01	1.935E+01	1.219E+00	16.612
	+	136.47		3.293E+02	1.394E+02	1.465E+02	1.026E+01	2.247
CO-60	+	1173.24		7.478E+02	6.712E+01	2.447E+01	1.517E+00	30.567
	+	1332.50	*	7.610E+02	6.301E+01	2.347E+01	1.288E+00	32.420
Y-88	+	898.02		9.763E+02	9.253E+01	2.640E+01	1.986E+00	36.975
	+	1836.01	*	9.637E+02	8.031E+01	1.942E+01	1.100E+00	49.612
CD-109	+	88.03	*	1.476E+04	1.318E+03	6.154E+02	4.646E+01	23.985
SN-113	+	391.69	*	5.852E+02	5.331E+01	2.632E+01	1.735E+00	22.236
SN-126		64.28		-1.600E+02	2.549E+02	4.254E+02	6.167E+01	-0.376
	+	86.94		3.770E+02	2.246E+02	2.615E+02	1.076E+02	1.442
	+	87.57	*	1.486E+03	1.326E+02	6.233E+01	4.693E+00	23.833
BA-137M	+	661.65	*	4.747E+02	4.707E+01	2.525E+01	1.540E+00	18.801
CS-137	+	661.66	*	5.018E+02	4.983E+01	2.669E+01	1.634E+00	18.801
CE-139	+	165.85	*	3.865E+02	3.574E+01	2.011E+01	1.222E+00	19.219
PM-147	+	121.30	*	6.725E+08	6.531E+07	4.268E+07	2.682E+06	15.758
HG-203		70.83		1.494E+02	5.244E+02	8.943E+02	1.140E+02	0.167
		72.87		-3.014E+01	2.904E+02	4.903E+02	6.034E+01	-0.061
		82.60		8.972E+01	5.521E+02	9.320E+02	1.209E+02	0.096
	+	279.20	*	2.442E+02	3.400E+01	2.361E+01	1.588E+00	10.343
TH-229	+	85.43		2.033E+02	8.897E+01	1.586E+02	1.180E+01	1.282
	+	88.47		2.028E+03	1.811E+02	8.406E+01	6.311E+00	24.128
		100.00		-8.893E+00	8.534E+01	1.425E+02	9.599E+00	-0.062
	+	193.63	*	1.237E+02	2.051E+02	3.165E+02	1.941E+01	0.391
		210.97		2.791E+01	2.657E+02	4.637E+02	2.874E+01	0.060
NP-237	+	86.48	*	2.663E+02	1.288E+02	1.859E+02	4.081E+01	1.432
		95.87		-5.089E+01	4.655E+02	6.953E+02	1.676E+02	-0.073
AM-241	+	59.54	*	1.207E+03	2.017E+02	1.517E+02	1.260E+01	7.959
ANH-511	+	511.00	*	2.287E+01	1.987E+01	1.710E+01	1.098E+00	1.337

---- Non-Identified Nuclides ----

Nuclide	Iden	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA

NA-22	1274.53 *	1.098E+00	1.123E+01	2.027E+01	1.175E+00	0.054

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	+	511.00		1.398E+01	1.214E+01	1.045E+01	6.712E-01	1.337
		1808.65	*	1.241E+01	6.138E+00	1.621E+01	9.177E-01	0.766
K-40		1460.81	*	1.405E+02	1.395E+02	2.391E+02	1.432E+01	0.588
SC-46		889.25	*	3.845E+00	1.529E+01	2.648E+01	1.966E+00	0.145
		1120.51		2.067E+00	1.537E+01	2.739E+01	1.793E+00	0.075
V-48		944.10		6.662E+01	3.320E+02	4.976E+02	3.657E+01	0.134
	+	983.50	*	4.389E+01	3.677E+01	4.354E+01	3.141E+00	1.008
		1312.09		8.480E+00	1.898E+01	3.542E+01	1.982E+00	0.239
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-6.047E+01	1.202E+02	2.008E+02	1.411E+01	-0.301
MN-54		834.83	*	-1.631E+00	1.251E+01	2.132E+01	1.518E+00	-0.076
CO-56		846.75	*	2.403E+00	1.386E+01	2.407E+01	1.730E+00	0.100
		1037.82		-2.596E+01	1.278E+02	1.912E+02	1.443E+01	-0.136
		1238.25		-5.461E+00	1.834E+01	3.187E+01	2.009E+00	-0.171
CO-58		810.78	*	-3.269E+00	1.643E+01	2.394E+01	1.678E+00	-0.137
FE-59	+	192.35		2.194E+02	3.645E+02	5.360E+02	6.420E+01	0.409
		1099.25	*	1.927E+01	2.817E+01	5.223E+01	3.944E+00	0.369
		1291.60		-2.163E+01	2.787E+01	4.571E+01	3.356E+00	-0.473
ZN-65		1115.55	*	8.390E+00	2.909E+01	5.228E+01	3.443E+00	0.160
SE-75		66.05		5.993E+02	2.460E+03	4.212E+03	3.942E+02	0.142
		96.73		-1.479E+02	3.418E+02	5.651E+02	7.127E+01	-0.262
	+	121.11		1.710E+03	2.066E+02	1.086E+02	1.036E+01	15.754
	+	136.00		6.050E+01	2.554E+01	2.733E+01	1.691E+00	2.214
		198.60		3.773E+02	6.219E+02	1.105E+03	8.195E+01	0.341
		264.65	*	3.145E+00	1.517E+01	2.639E+01	1.696E+00	0.119
	+	279.53		6.726E+02	9.401E+01	6.509E+01	4.446E+00	10.334
		303.91		-2.504E+02	6.728E+02	1.135E+03	1.128E+02	-0.221
		400.65		6.070E+01	9.794E+01	1.516E+02	1.425E+01	0.400
KR-85		513.99	*	3.557E+03	2.710E+03	4.524E+03	2.905E+02	0.786
SR-85		513.99	*	1.761E+01	1.342E+01	2.240E+01	1.438E+00	0.786
Y-91		557.57	*	-6.067E+00	1.152E+01	1.969E+01	1.258E+00	-0.308
		1204.90		3.481E+03	4.521E+03	8.575E+03	5.217E+02	0.406
NB-94		702.63	*	-3.095E+00	1.207E+01	2.058E+01	1.306E+00	-0.150
		871.10		-1.148E+01	1.380E+01	2.222E+01	1.627E+00	-0.517
NB-95		765.79	*	1.688E+00	1.497E+01	2.605E+01	1.752E+00	0.065
NB-95M		235.69	*	-1.422E+02	3.522E+02	6.003E+02	5.376E+01	-0.237
ZR-95		724.18		-9.637E+00	3.133E+01	5.314E+01	3.953E+00	-0.181
		756.74	*	-7.083E+00	2.490E+01	4.220E+01	3.277E+00	-0.168
MO-99		140.51	*	3.321E+01	2.453E+02	3.623E+02	2.245E+01	0.092
		181.06		2.847E+02	2.627E+03	4.311E+03	7.433E+02	0.066
		739.58		5.082E+02	1.756E+03	3.096E+03	4.371E+02	0.164
RU-103		497.08	*	-7.443E+00	1.395E+01	2.253E+01	2.916E+00	-0.330
		610.33		-3.845E+01	2.518E+02	4.354E+02	6.794E+01	-0.088
RH-106	+	511.85		1.135E+02	9.862E+01	8.684E+01	5.576E+00	1.307
		621.84	*	-3.068E+01	1.163E+02	1.999E+02	1.248E+01	-0.154
		1050.47		3.835E+02	8.048E+02	1.469E+03	1.018E+02	0.261
RU-106		622.20	*	-1.530E+01	1.157E+02	2.003E+02	2.396E+01	-0.076
AG-108M		433.93	*	-2.039E+00	1.179E+01	1.969E+01	1.339E+00	-0.104
		614.37		4.212E+00	1.385E+01	2.454E+01	1.650E+00	0.172

Sample ID : G1200870617 Acquisition date : 1-JUL-2005 19:24:49

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		722.95		-3.184E+00	1.426E+01	2.435E+01	1.683E+00	-0.131
AG-110M		657.75	*	5.581E+00	1.605E+01	2.471E+01	1.599E+00	0.226
		677.61		-8.782E+00	1.234E+02	2.125E+02	1.387E+01	-0.041
		706.67		3.184E+01	7.448E+01	1.320E+02	8.832E+00	0.241
		763.93		-3.577E+01	5.499E+01	9.083E+01	6.378E+00	-0.394
		884.67		8.131E+00	1.948E+01	3.411E+01	2.633E+00	0.238
	+	937.48		5.812E+01	4.271E+01	7.682E+01	5.939E+00	0.757
		1384.27		3.347E+01	4.976E+01	9.429E+01	5.581E+00	0.355
CD-115		231.44		1.140E+04	4.562E+04	7.965E+04	4.997E+03	0.143
		260.90		8.797E+03	1.639E+04	2.887E+04	1.837E+03	0.305
		492.35		2.130E+03	4.635E+03	7.977E+03	5.120E+02	0.267
		527.90	*	-1.042E+01	1.255E+03	2.220E+03	1.424E+02	-0.005
SN-115		484.47		9.063E+02	6.324E+03	1.068E+04	6.851E+02	0.085
		933.00	*	4.946E+02	1.309E+03	2.276E+03	1.681E+02	0.217
		1290.58		-1.785E+03	2.094E+03	3.402E+03	1.940E+02	-0.525
SN-117M		156.02		3.429E+01	7.802E+02	1.282E+03	7.760E+01	0.027
		158.56	*	2.142E+00	1.943E+01	3.197E+01	1.935E+00	0.067
TE-123M		159.00	*	-9.557E-01	1.188E+01	1.941E+01	1.190E+00	-0.049
SB-124		602.73		-5.913E+00	1.237E+01	2.106E+01	1.326E+00	-0.281
		645.85		2.145E+02	1.870E+02	3.435E+02	2.358E+01	0.624
		713.78		-2.665E+02	5.593E+02	9.395E+02	9.932E+01	-0.284
		722.79		-1.824E+01	1.214E+02	2.081E+02	1.398E+01	-0.088
		1368.16		-1.164E+02	5.011E+02	8.731E+02	1.025E+02	-0.133
		1690.98	*	5.570E-01	2.553E+01	4.722E+01	2.931E+00	0.012
SB-125		176.33		-2.166E+01	1.202E+02	1.952E+02	1.722E+01	-0.111
		427.89	*	7.978E+00	3.898E+01	5.823E+01	3.818E+00	0.137
		463.38		9.978E+01	1.002E+02	1.766E+02	1.285E+01	0.565
		600.56		-2.798E+01	5.901E+01	1.005E+02	7.185E+00	-0.278
		606.64		6.650E+01	2.230E+02	3.955E+02	2.862E+01	0.168
		635.90		6.471E+01	9.941E+01	1.793E+02	1.279E+01	0.361
TE-125M		109.28	*	2.279E+03	4.334E+03	7.325E+03	6.284E+02	0.311
I-126		388.63		8.016E+01	7.402E+01	1.170E+02	7.304E+00	0.685
	+	666.33	*	7.383E+01	5.420E+01	1.015E+02	6.219E+00	0.727
		753.82		2.558E+02	4.287E+02	7.693E+02	5.117E+01	0.333
SB-126	+	666.33		3.061E+01	2.247E+01	3.963E+01	2.428E+00	0.772
		695.00		2.550E+01	2.465E+01	4.483E+01	2.825E+00	0.569
		697.00		-6.770E+00	8.372E+01	1.440E+02	9.092E+00	-0.047
		720.50	*	-2.455E+01	4.210E+01	7.020E+01	4.531E+00	-0.350
SB-127		252.40		2.658E+02	1.012E+03	1.550E+03	6.415E+02	0.171
		411.60		9.240E+02	2.256E+03	3.898E+03	5.415E+02	0.237
		444.90		-1.325E+03	1.975E+03	3.189E+03	3.246E+02	-0.416
		473.00		-3.080E+02	4.130E+02	5.655E+02	6.000E+01	-0.545
		543.30		-1.648E+03	3.725E+03	5.503E+03	6.877E+02	-0.299
		603.50		-7.450E+02	2.103E+03	3.604E+03	3.642E+02	-0.207
		685.70	*	1.433E+02	3.360E+02	5.205E+02	4.496E+01	0.275
		698.50		-1.884E+03	3.053E+03	5.073E+03	7.106E+02	-0.371
		783.70		7.105E+01	7.053E+02	1.223E+03	1.264E+02	0.058
I-131		284.30		2.285E+02	4.496E+02	6.994E+02	4.879E+01	0.327
		364.48	*	-1.397E+01	3.137E+01	5.213E+01	3.616E+00	-0.268

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		636.97		1.030E+02	4.219E+02	7.459E+02	5.087E+01	0.138
TE-132		228.16	*	-2.642E+01	1.236E+02	2.125E+02	2.962E+01	-0.124
BA-133		79.62		7.294E+01	6.491E+02	1.097E+03	1.591E+02	0.066
		81.00		1.707E+01	5.015E+01	8.505E+01	1.292E+01	0.201
		276.40		5.438E+01	2.002E+02	2.252E+02	2.983E+01	0.241
		302.85		-2.452E-01	4.703E+01	8.079E+01	9.680E+00	-0.003
		356.02	*	1.300E-01	1.536E+01	2.615E+01	3.100E+00	0.005
		383.85		-4.086E+00	1.175E+02	1.742E+02	1.939E+01	-0.023
CS-134		563.23		3.573E+01	1.217E+02	2.174E+02	1.411E+01	0.164
		569.32		-5.008E+01	6.871E+01	1.156E+02	7.547E+00	-0.433
		604.70		-7.609E+00	1.123E+01	1.886E+01	1.193E+00	-0.403
		795.84	*	3.312E+00	1.306E+01	2.302E+01	1.602E+00	0.144
		801.93		2.334E+01	1.527E+02	2.316E+02	1.619E+01	0.101
		1365.15		-1.489E+02	3.763E+02	6.427E+02	3.935E+01	-0.232
CS-135		268.24	*	-9.825E+00	5.440E+01	9.306E+01	7.544E+00	-0.106
CS-136		66.88		3.278E+01	3.442E+02	5.865E+02	8.631E+01	0.056
	+	86.36		9.930E+02	4.447E+02	7.304E+02	8.846E+01	1.360
		153.25		3.955E+00	2.297E+02	3.774E+02	2.801E+01	0.010
		163.92		2.667E+03	5.448E+02	8.730E+02	6.517E+01	3.055
		176.60		-1.470E+01	1.133E+02	1.843E+02	1.248E+01	-0.080
	+	273.65		1.040E+02	1.039E+02	2.218E+02	1.583E+01	0.469
		340.55		-1.324E+01	3.292E+01	5.512E+01	3.709E+00	-0.240
		818.51		-2.121E+01	2.279E+01	3.660E+01	2.574E+00	-0.580
		1048.07	*	-9.905E+00	3.188E+01	5.529E+01	4.083E+00	-0.179
		1235.36		1.750E+01	9.812E+01	1.797E+02	1.811E+01	0.097
BA-140		162.67		-7.107E+01	3.111E+02	4.474E+02	3.024E+01	-0.159
		304.87		-1.800E+01	3.471E+02	5.951E+02	1.632E+02	-0.030
	+	423.73		1.068E+02	7.428E+02	9.411E+02	3.001E+02	0.113
		537.31	*	-2.460E-01	7.160E+01	1.265E+02	4.128E+01	-0.002
LA-140		328.76		1.052E+03	5.796E+03	9.987E+03	7.060E+02	0.105
		432.49		-2.202E+04	4.356E+04	7.132E+04	4.934E+03	-0.309
		487.02		1.683E+03	2.901E+03	5.027E+03	3.585E+02	0.335
		751.64		-2.240E+04	3.570E+04	5.914E+04	4.621E+03	-0.379
		815.77		4.477E+03	7.015E+03	1.255E+04	1.031E+03	0.357
		867.85		1.707E+04	3.218E+04	5.676E+04	4.458E+03	0.301
		919.55		1.573E+04	6.393E+04	1.106E+05	1.074E+04	0.142
		925.19		-2.080E+04	2.631E+04	4.221E+04	3.395E+03	-0.493
		1596.21	*	8.728E+02	2.258E+03	4.030E+03	2.304E+02	0.217
CE-141		145.44	*	-7.818E+00	2.446E+01	3.982E+01	2.501E+00	-0.196
CE-144		133.51	*	-5.192E+00	9.764E+01	1.435E+02	2.057E+01	-0.036
PM-144	+	476.78		2.274E+01	2.932E+01	4.352E+01	3.246E+00	0.523
		618.01		-2.391E+00	1.172E+01	2.021E+01	1.330E+00	-0.118
		696.49	*	1.920E+00	1.288E+01	2.243E+01	1.416E+00	0.086
PM-146		453.88	*	1.967E+01	1.529E+01	2.746E+01	2.477E+00	0.716
		633.25		-2.612E+01	5.297E+02	9.191E+02	3.391E+02	-0.028
		735.93		1.246E+01	5.311E+01	9.310E+01	2.611E+01	0.134
		747.24		5.009E+00	3.248E+01	5.673E+01	7.320E+00	0.088
ND-147	+	91.11		1.330E+01	1.093E+02	1.412E+02	1.144E+01	0.094
		531.02	*	-5.494E+01	1.496E+02	2.587E+02	3.569E+01	-0.212

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-149		285.95	*	9.585E+03	1.136E+04	2.008E+04	2.897E+03	0.477
EU-152	+	121.78		9.407E+02	1.024E+02	5.664E+01	4.524E+00	16.606
		344.31	*	7.295E-01	3.276E+01	5.602E+01	3.960E+00	0.013
		963.37		-7.561E+00	1.046E+02	1.761E+02	1.283E+01	-0.043
GD-153		69.67		2.093E+02	8.695E+02	1.483E+03	1.068E+02	0.141
		83.37		5.218E+02	8.432E+03	1.271E+04	9.359E+02	0.041
		97.43	*	-8.203E+00	3.507E+01	5.843E+01	4.008E+00	-0.140
		103.18		4.434E+00	4.955E+01	8.308E+01	5.490E+00	0.053
EU-154	+	123.07		6.602E+02	8.064E+01	3.829E+01	3.714E+00	17.242
		247.93		-5.538E+01	1.320E+02	2.244E+02	2.215E+01	-0.247
		591.76		-1.332E+02	2.222E+02	3.753E+02	3.789E+01	-0.355
		723.30		-4.151E+01	6.058E+01	1.002E+02	7.657E+00	-0.414
		756.86		1.345E+01	2.756E+02	4.776E+02	5.091E+01	0.028
		873.20		-1.523E+01	1.178E+02	1.995E+02	2.269E+01	-0.076
		996.30		-1.308E+01	1.250E+02	2.209E+02	3.780E+01	-0.059
		1004.76		7.031E+01	7.826E+01	1.455E+02	1.540E+01	0.483
		1274.51	*	2.737E+00	3.138E+01	5.660E+01	5.282E+00	0.048
EU-155	+	86.54		1.091E+02	4.774E+01	7.609E+01	5.771E+00	1.433
		105.31	*	-1.788E+01	5.191E+01	8.577E+01	5.726E+00	-0.208
TB-160	+	86.79		2.825E+02	1.236E+02	1.964E+02	1.472E+01	1.439
		298.57		2.178E+01	3.520E+01	6.206E+01	3.987E+00	0.351
		879.36	*	-2.746E+01	5.418E+01	8.927E+01	6.579E+00	-0.308
		962.29		1.570E+02	1.799E+02	3.221E+02	2.348E+01	0.488
		966.15		-2.156E+01	6.811E+01	1.128E+02	8.213E+00	-0.191
		1177.93		2.021E+02	1.256E+02	2.203E+02	1.363E+01	0.917
TM-171		51.87		-1.405E+03	6.718E+03	1.148E+04	9.054E+02	-0.122
	+	59.40		2.059E+05	3.370E+04	2.608E+04	1.984E+03	7.894
		66.72	*	3.179E+02	1.487E+04	2.529E+04	1.837E+03	0.013
HF-181		56.28		1.360E+02	6.376E+02	9.865E+02	7.649E+01	0.138
		57.53		4.584E+02	3.461E+02	5.510E+02	4.240E+01	0.832
		65.20		6.801E+01	4.570E+02	7.816E+02	5.713E+01	0.087
		133.02		-5.727E+00	2.974E+01	4.344E+01	2.662E+00	-0.132
	+	136.25		7.805E+02	3.293E+02	3.472E+02	2.119E+01	2.248
		345.85		-2.296E+01	6.179E+01	1.035E+02	6.611E+00	-0.222
		482.03	*	-4.888E+00	1.490E+01	2.448E+01	1.570E+00	-0.200
TA-182		67.75		4.011E+01	5.722E+01	9.881E+01	7.148E+00	0.406
		100.10		-3.493E+00	8.071E+01	1.350E+02	9.088E+00	-0.026
		222.10		7.625E+00	1.220E+02	2.122E+02	1.324E+01	0.036
		1121.28		7.124E+00	4.171E+01	7.463E+01	4.881E+00	0.095
		1189.05		8.234E+00	8.123E+01	1.455E+02	8.943E+00	0.057
		1221.42	*	1.644E+01	4.260E+01	7.922E+01	4.767E+00	0.208
		1230.97		-7.354E+01	9.348E+01	1.540E+02	9.206E+00	-0.478
IR-192		295.96		-1.225E+01	3.261E+01	5.509E+01	3.584E+00	-0.222
		308.46		1.431E+01	3.065E+01	5.381E+01	3.491E+00	0.266
		316.51	*	7.661E+00	1.148E+01	2.027E+01	1.308E+00	0.378
		468.07		-8.825E-01	2.310E+01	3.869E+01	2.790E+00	-0.023
		604.41		-1.067E+02	1.471E+02	2.457E+02	2.853E+01	-0.434
		612.46		-1.987E+02	2.449E+02	4.072E+02	3.233E+01	-0.488
BI-207		569.67		-6.214E+00	1.066E+01	1.811E+01	1.153E+00	-0.343

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	897.83		5.748E+05	5.425E+04	1.554E+04	1.161E+03	36.982
		1063.62	*	6.370E+00	1.756E+01	3.193E+01	2.191E+00	0.199
		1442.20		9.431E+02	8.764E+03	1.561E+04	8.752E+02	0.060
		1770.23		5.688E+01	1.288E+02	2.577E+02	1.464E+01	0.221
TL-208		75.00		1.417E+02	5.301E+02	9.025E+02	1.021E+02	0.157
		277.35		8.908E+02	2.092E+02	3.341E+02	3.641E+01	2.666
	+	510.84		1.071E+02	9.350E+01	8.009E+01	8.426E+00	1.337
		583.14	*	6.552E+00	1.284E+01	2.309E+01	1.654E+00	0.284
		763.30		-4.080E+02	7.232E+02	1.200E+03	1.544E+02	-0.340
		860.37		1.544E+00	1.066E+02	1.825E+02	1.462E+01	0.008
		1093.90		-1.809E+02	3.788E+03	6.674E+03	1.511E+03	-0.027
BI-210		46.50	*	7.073E+01	2.100E+03	3.637E+03	2.979E+02	0.019
PB-210		46.50	*	7.073E+01	2.100E+03	3.637E+03	2.979E+02	0.019
BI-211		351.07	*	2.440E+01	6.696E+01	1.163E+02	8.093E+00	0.210
PB-211		404.84	*	-9.412E+00	3.254E+02	5.496E+02	3.429E+02	-0.017
	+	427.08		1.384E+02	9.658E+02	1.234E+03	7.636E+02	0.112
		831.96		-2.741E+02	4.394E+02	6.631E+02	4.142E+02	-0.413
BI-212		727.18	*	6.159E+01	1.027E+02	1.837E+02	1.515E+01	0.335
PB-212		74.80		6.995E+01	1.710E+02	2.920E+02	3.441E+01	0.240
	+	87.30		6.952E+03	9.319E+02	2.928E+02	3.663E+01	23.743
		115.19		1.055E+03	1.737E+03	2.937E+03	1.860E+02	0.359
		238.63	*	8.523E+00	2.047E+01	3.589E+01	2.775E+00	0.238
		300.09		9.811E+01	2.493E+02	4.356E+02	3.790E+01	0.225
BI-214		609.31	*	2.005E+01	2.458E+01	4.459E+01	3.631E+00	0.450
		768.36		1.445E+02	2.307E+02	4.143E+02	3.725E+01	0.349
		934.06		2.252E+02	4.579E+02	8.002E+02	7.728E+01	0.281
		1120.29		1.299E+01	9.285E+01	1.654E+02	1.541E+01	0.078
		1238.11		-6.644E+01	1.853E+02	3.200E+02	2.641E+01	-0.208
		1377.67		-6.119E+01	2.831E+02	4.924E+02	4.141E+01	-0.124
PB-214		74.81		1.183E+02	2.910E+02	4.970E+02	5.127E+01	0.238
		77.11		-1.572E+02	1.625E+02	2.662E+02	2.792E+01	-0.590
	+	87.30		1.246E+04	1.508E+03	5.249E+02	5.825E+01	23.743
		241.98		4.780E+01	1.188E+02	2.082E+02	1.756E+01	0.230
		295.21		-4.681E+01	4.457E+01	7.264E+01	6.509E+00	-0.644
		351.92	*	-8.379E+00	2.375E+01	3.976E+01	3.457E+00	-0.211
RN-219		271.23		-1.548E+01	9.283E+01	1.393E+02	1.189E+01	-0.111
		401.81	*	9.904E+01	1.438E+02	2.512E+02	3.469E+01	0.394
RA-223	+	122.32		2.241E+04	2.303E+03	1.349E+03	9.604E+01	16.618
		144.24		1.052E+02	2.797E+02	4.666E+02	3.473E+01	0.225
		154.21		-5.751E+01	1.632E+02	2.645E+02	1.910E+01	-0.217
		269.46		2.521E+01	6.395E+01	1.119E+02	7.409E+00	0.225
		323.87	*	5.407E+01	2.312E+02	3.990E+02	6.681E+01	0.136
		338.28		2.861E+01	3.055E+02	5.253E+02	5.713E+01	0.054
		445.03		-5.564E+02	8.382E+02	1.354E+03	1.435E+02	-0.411
RA-224		240.98	*	-7.003E+00	2.315E+02	3.996E+02	2.520E+01	-0.018
RA-226		295.21		-4.681E+01	4.457E+01	7.264E+01	6.509E+00	-0.644
		351.92		-8.379E+00	2.374E+01	3.976E+01	2.546E+00	-0.211
		609.31	*	2.005E+01	2.458E+01	4.459E+01	3.631E+00	0.450
AC-227		79.80		1.805E+02	8.392E+02	1.421E+03	3.024E+02	0.127

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		236.00		4.953E-01	7.941E+01	1.374E+02	1.488E+01	0.004
	+	256.20	*	2.765E+02	1.645E+02	2.573E+02	3.695E+01	1.075
		286.10		4.756E+02	5.457E+02	9.678E+02	1.161E+02	0.491
		299.80		2.859E+02	4.713E+02	8.271E+02	1.385E+02	0.346
		304.40		-1.526E+02	6.247E+02	1.060E+03	1.882E+02	-0.144
		329.70		-1.137E+02	3.069E+02	5.149E+02	6.641E+01	-0.221
		334.20		-3.989E+01	7.415E+02	1.266E+03	2.383E+02	-0.032
TH-227		79.80		1.776E+02	8.258E+02	1.398E+03	2.975E+02	0.127
	+	94.00		1.261E+02	1.036E+03	1.402E+03	2.974E+02	0.090
		236.00		4.879E-01	7.822E+01	1.353E+02	1.269E+01	0.004
	+	256.20	*	2.723E+02	1.640E+02	2.533E+02	4.331E+01	1.075
		286.10		4.685E+02	7.116E+02	9.535E+02	9.555E+02	0.491
		299.80		2.810E+02	4.631E+02	8.128E+02	1.343E+02	0.346
		304.40		-1.501E+02	6.148E+02	1.044E+03	1.828E+02	-0.144
		329.70		-1.120E+02	3.024E+02	5.073E+02	6.475E+01	-0.221
		334.20		-3.915E+01	7.279E+02	1.243E+03	2.303E+02	-0.032
AC-228		209.25		-2.590E+01	1.960E+02	3.384E+02	2.163E+02	-0.077
		338.32		7.646E+00	7.355E+01	1.264E+02	5.165E+01	0.060
		463.01		1.930E+02	2.427E+02	4.168E+02	9.841E+01	0.463
		794.95		-2.427E+01	2.478E+02	4.255E+02	9.703E+01	-0.057
		911.21	*	8.007E+00	4.953E+01	8.531E+01	8.845E+00	0.094
		964.77		-2.000E+02	2.954E+02	4.702E+02	1.138E+02	-0.425
		969.11		-4.576E+00	8.733E+01	1.475E+02	3.374E+01	-0.031
RA-228		209.25		-2.590E+01	1.960E+02	3.384E+02	2.163E+02	-0.077
		338.32		7.646E+00	7.355E+01	1.264E+02	5.165E+01	0.060
		463.01		1.930E+02	2.427E+02	4.168E+02	9.841E+01	0.463
		794.95		-2.427E+01	2.478E+02	4.255E+02	9.703E+01	-0.057
		911.21	*	8.007E+00	4.953E+01	8.531E+01	8.845E+00	0.094
		964.77		-2.000E+02	2.954E+02	4.702E+02	1.138E+02	-0.425
		969.11		-4.576E+00	8.733E+01	1.475E+02	3.374E+01	-0.031
TH-228	+	84.40		2.805E+03	1.259E+03	2.234E+03	2.764E+02	1.256
		238.60	*	8.332E+00	2.046E+01	3.586E+01	2.772E+00	0.232
		300.10		9.620E+01	2.554E+02	4.353E+02	2.569E+02	0.221
TH-230		295.21		-4.680E+01	4.457E+01	7.264E+01	6.509E+00	-0.644
		351.92		-8.379E+00	2.374E+01	3.976E+01	2.546E+00	-0.211
		609.31	*	2.005E+01	2.458E+01	4.459E+01	3.630E+00	0.450
PA-231		283.67	*	3.068E+02	6.167E+02	9.569E+02	1.344E+02	0.321
		301.29		-1.120E+02	1.853E+02	3.088E+02	3.338E+01	-0.363
		330.00		-3.428E+02	6.799E+02	1.120E+03	3.520E+02	-0.306
TH-231	+	84.21		5.242E+02	2.436E+02	4.180E+02	7.226E+01	1.254
		236.00		4.948E-01	7.932E+01	1.372E+02	1.487E+01	0.004
	+	256.20		2.762E+02	1.644E+02	2.392E+02	3.436E+01	1.155
		269.46	*	2.521E+01	6.395E+01	1.119E+02	8.680E+00	0.225
		271.23		-1.548E+01	9.283E+01	1.393E+02	1.377E+01	-0.111
		283.67		3.068E+02	6.167E+02	9.569E+02	1.344E+02	0.321
		301.29		-1.120E+02	1.851E+02	3.088E+02	2.742E+01	-0.363
		329.85		-9.628E+01	2.107E+02	3.516E+02	4.881E+01	-0.274
		351.07		2.440E+01	6.696E+01	1.163E+02	8.093E+00	0.210
		401.81		9.904E+01	1.436E+02	2.512E+02	2.802E+01	0.394

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
TH-232		238.59	*	8.171E+00	2.022E+01	3.543E+01	2.739E+00	0.231
		911.20		8.173E+00	4.935E+01	8.502E+01	8.815E+00	0.096
		964.40		-8.272E+01	2.889E+02	4.784E+02	1.158E+02	-0.173
		969.11		-4.558E+00	8.699E+01	1.469E+02	3.361E+01	-0.031
PA-233		75.28		1.218E+02	1.409E+03	2.388E+03	3.484E+02	0.051
	+	86.59		1.775E+03	8.981E+02	1.237E+03	3.276E+02	1.434
		300.12		4.718E+01	1.272E+02	2.220E+02	3.046E+01	0.212
		311.98	*	-7.218E+00	2.133E+01	3.602E+01	2.432E+00	-0.200
		340.50		-7.216E+01	1.911E+02	3.193E+02	7.384E+01	-0.226
		398.62		-7.824E+01	8.412E+02	1.237E+03	3.211E+02	-0.063
		415.76		-3.122E+02	5.775E+02	9.409E+02	1.951E+02	-0.332
PA-234		63.00		-6.918E+02	8.888E+02	1.312E+03	1.949E+02	-0.527
	+	94.67		1.124E+01	9.239E+01	1.130E+02	1.282E+01	0.100
		98.44		-3.083E+01	4.571E+01	6.946E+01	3.858E+01	-0.444
		99.70		-1.490E+01	2.194E+02	3.670E+02	2.476E+01	-0.041
		111.00		-2.681E+01	8.969E+01	1.479E+02	1.571E+01	-0.181
		131.20		1.836E+01	4.391E+01	7.372E+01	4.532E+00	0.249
		152.70		5.094E+01	1.335E+02	2.219E+02	3.528E+01	0.230
	+	186.00		2.199E+02	5.489E+02	6.832E+02	2.092E+02	0.322
		226.40		2.266E+01	1.469E+02	2.560E+02	3.020E+01	0.088
		227.20		4.148E+00	1.574E+02	2.731E+02	1.709E+01	0.015
		248.90		-1.408E+02	3.165E+02	5.350E+02	1.195E+02	-0.263
		293.70		3.796E+01	2.088E+02	3.619E+02	5.904E+01	0.105
		369.80		3.696E+01	3.108E+02	5.308E+02	1.113E+02	0.070
		568.70		-7.120E+01	3.439E+02	5.971E+02	3.803E+01	-0.119
		569.50		-5.516E+01	9.463E+01	1.607E+02	1.023E+01	-0.343
		574.00		1.037E+02	5.247E+02	9.300E+02	5.915E+01	0.112
		699.00		-1.709E+02	2.594E+02	4.285E+02	7.781E+01	-0.399
		706.10		1.807E+02	3.835E+02	6.672E+02	2.950E+02	0.271
		733.00		-2.421E+01	1.387E+02	2.368E+02	5.085E+01	-0.102
		742.81		-4.485E+02	5.747E+02	7.971E+02	5.340E+02	-0.563
		796.30		1.215E+02	2.884E+02	5.107E+02	1.356E+02	0.238
	+	805.80		4.596E+02	6.316E+02	6.295E+02	1.903E+02	0.730
		819.60		-2.128E+02	4.408E+02	7.213E+02	2.719E+02	-0.295
		826.30		8.519E+01	2.815E+02	4.922E+02	2.189E+02	0.173
		831.60		-8.452E+01	2.116E+02	3.516E+02	1.035E+02	-0.240
		876.40		2.442E+02	4.093E+02	5.800E+02	5.957E+02	0.421
		880.51		-7.954E+01	1.130E+02	1.834E+02	1.353E+01	-0.434
		883.24		-3.636E+01	1.167E+02	1.906E+02	1.279E+02	-0.191
	+	899.00		2.010E+04	8.822E+03	5.443E+02	2.368E+02	36.937
		925.00		-3.799E+02	4.676E+02	7.492E+02	5.547E+01	-0.507
		926.50		-3.496E+01	6.972E+01	1.136E+02	2.827E+01	-0.308
		946.00	*	-6.406E+01	1.182E+02	1.922E+02	3.500E+01	-0.333
		949.00		-5.188E+01	1.772E+02	2.946E+02	2.161E+01	-0.176
		980.50		-9.032E+00	3.287E+02	5.014E+02	3.624E+01	-0.018
		1394.10		7.252E+01	3.762E+02	6.774E+02	4.386E+02	0.107
PA-234M		766.40		1.859E+03	5.613E+03	9.610E+03	7.350E+03	0.193
		1001.03	*	-1.184E+03	1.592E+03	2.684E+03	2.336E+02	-0.441
TH-234		63.29	*	-5.444E+02	6.789E+02	1.121E+03	1.955E+02	-0.485

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	92.38		3.263E+01	2.682E+02	3.414E+02	5.954E+01	0.096
		112.81		-2.121E+03	4.384E+03	7.164E+03	1.223E+03	-0.296
U-234		67.67		4.417E+03	6.085E+03	1.048E+04	1.403E+03	0.421
		241.98		4.787E+01	1.190E+02	2.085E+02	1.760E+01	0.230
		295.21	*	-4.680E+01	4.457E+01	7.264E+01	6.509E+00	-0.644
		351.92		-8.379E+00	2.375E+01	3.976E+01	3.457E+00	-0.211
U-235	+	89.95		2.036E+04	6.300E+03	7.035E+02	2.148E+02	28.936
	+	93.35		3.923E+01	3.225E+02	4.249E+02	1.173E+02	0.092
		105.00		-1.711E+02	5.126E+02	8.435E+02	2.472E+02	-0.203
		143.76	*	9.349E+00	8.600E+01	1.422E+02	2.333E+01	0.066
		163.33		1.992E+02	2.400E+02	3.571E+02	6.453E+01	0.558
	+	185.71		8.144E+00	2.018E+01	2.585E+01	1.579E+00	0.315
		205.31		-1.569E+01	1.664E+02	2.891E+02	4.958E+01	-0.054
U-238		63.29	*	-5.444E+02	6.789E+02	1.121E+03	1.955E+02	-0.485
NP-239		99.55		-5.868E+00	7.169E+01	1.199E+02	8.097E+00	-0.049
		117.00	*	5.419E+00	9.282E+01	1.544E+02	9.753E+00	0.035
		209.75		-3.459E+01	2.659E+02	4.607E+02	2.853E+01	-0.075
		228.18		-1.816E+01	8.219E+01	1.414E+02	8.851E+00	-0.128
	+	277.60		1.123E+03	1.546E+02	1.073E+02	6.869E+00	10.458
		334.31		-6.019E+01	4.118E+02	6.997E+02	4.485E+01	-0.086
AM-242		99.55		-1.369E+02	1.673E+03	2.797E+03	1.889E+02	-0.049
		103.70	*	-3.459E+02	1.060E+03	1.753E+03	1.155E+02	-0.197
CM-247	+	278.00		4.656E+03	6.411E+02	4.456E+02	2.852E+01	10.447
		287.40		-2.502E+02	4.317E+02	7.233E+02	4.639E+01	-0.346
		402.60	*	-1.793E+00	1.305E+01	2.192E+01	1.373E+00	-0.082
CF-249		252.85		-3.186E+01	3.776E+02	5.709E+02	3.621E+01	-0.056
		333.44		-9.238E+00	5.444E+01	9.240E+01	5.923E+00	-0.100
		387.95	*	-3.910E+00	1.612E+01	2.349E+01	1.467E+00	-0.166
CF-251		176.00	*	-1.934E+00	4.661E+01	7.613E+01	4.634E+00	-0.025
		227.00		5.860E+00	1.399E+02	2.429E+02	1.520E+01	0.024
		285.00		4.484E+02	6.263E+02	1.107E+03	7.096E+01	0.405

VAX/VMS Nuclide Identification Report Generated

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*********************************************************************
*                          General Eng. Labs, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
*                                                                   *
*                            DETECTOR DATA                          *
*                                                                   *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870617  *
* Acquisition date :  1-JUL-2005 19:24:49 Detector SN#    : 12922955  *
* Detector ID       : GAMMA3              Sensitivity     : 3.000     *
* Geometry          : 2L_MB               Energy tolerance: 2.000     *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000    *
* Elapsed real time:    0 01:00:01.81     Half life ratio :  8.000    *
*********************************************************************
*                                                                   *
*                            SAMPLE DATA                            *
*                                                                   *
* Sample date       : 20-JUN-2005 00:00:00 Nuclide Library :        *
* Sample ID         : G1200870617          Analyst initials: AKB    *
* Batch Number      : 435282               Sample Quantity : 2.0000E+00 LITER  *
* Recovery          :    1.00000           Carrier Weight :    0.00000  *
*********************************************************************
*                                                                   *
*                              QC DATA                              *
*                                                                   *
* Standard Weight   :   0.00000                                     *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :         *
* MSD DPM           :    0.000            MSD Isotope     :         *
* LCS DPM           :    0.000            LCS Isotope     :         *
* LCSD DPM          :    0.000            LCSD Isotope    :         *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
BE-7	1.045E+02	1.347E+02	1.821E+02	0.000E+00
CO-57	3.215E+02	3.125E+01	1.935E+01	0.000E+00
CO-60	7.610E+02	6.301E+01	2.347E+01	0.000E+00
Y-88	9.637E+02	8.031E+01	1.942E+01	0.000E+00
CD-109	1.476E+04	1.318E+03	6.154E+02	0.000E+00
SN-113	5.852E+02	5.331E+01	2.632E+01	0.000E+00
SN-126	1.486E+03	1.326E+02	6.233E+01	0.000E+00
BA-137M	4.747E+02	4.707E+01	2.525E+01	0.000E+00
CS-137	5.018E+02	4.983E+01	2.669E+01	0.000E+00
CE-139	3.865E+02	3.574E+01	2.011E+01	0.000E+00
HG-203	2.442E+02	3.400E+01	2.361E+01	0.000E+00
TH-229	1.237E+02	2.051E+02	3.165E+02	0.000E+00
NP-237	2.663E+02	1.288E+02	1.859E+02	0.000E+00
AM-241	1.207E+03	2.017E+02	1.517E+02	0.000E+00
ANH-511	2.287E+01	1.987E+01	1.710E+01	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Act error) Ided	MDA (pCi/LITER	)	
NA-22	1.098E+00	1.123E+01	2.027E+01	0.000E+00	NOT IDENT.
NA-24	0.000E+00	5.379E+06	0.000E+00	0.000E+00	SHORT HLIF
AL-26	1.241E+01	6.138E+00	1.621E+01	0.000E+00	FAIL ABUN
K-40	1.405E+02	1.395E+02	2.391E+02	0.000E+00	NOT IDENT.
SC-46	3.845E+00	1.529E+01	2.648E+01	0.000E+00	NOT IDENT.
V-48	0.000E+00	3.677E+01	4.354E+01	0.000E+00	FAIL ABUN
CR-51	-6.047E+01	1.202E+02	2.008E+02	0.000E+00	NOT IDENT.
MN-54	-1.631E+00	1.251E+01	2.132E+01	0.000E+00	NOT IDENT.
CO-56	2.403E+00	1.386E+01	2.407E+01	0.000E+00	NOT IDENT.
MN-56	0.000E+00	1.760E+34	0.000E+00	0.000E+00	SHORT HLIF
CO-58	-3.269E+00	1.643E+01	2.394E+01	0.000E+00	NOT IDENT.
FE-59	1.927E+01	2.817E+01	5.223E+01	0.000E+00	FAIL ABUN
ZN-65	8.390E+00	2.909E+01	5.228E+01	0.000E+00	NOT IDENT.
SE-75	3.145E+00	1.517E+01	2.639E+01	0.000E+00	FAIL ABUN
KR-85	3.557E+03	2.710E+03	4.524E+03	0.000E+00	NOT IDENT.
SR-85	1.761E+01	1.342E+01	2.240E+01	0.000E+00	NOT IDENT.
Y-91	-6.067E+00	1.152E+01	1.969E+01	0.000E+00	NOT IDENT.
NB-94	-3.095E+00	1.207E+01	2.058E+01	0.000E+00	NOT IDENT.
NB-95	1.688E+00	1.497E+01	2.605E+01	0.000E+00	NOT IDENT.
NB-95M	-1.422E+02	3.522E+02	6.003E+02	0.000E+00	NOT IDENT.
ZR-95	-7.083E+00	2.490E+01	4.220E+01	0.000E+00	NOT IDENT.
MO-99	3.321E+01	2.453E+02	3.623E+02	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	1.921E+15	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-7.443E+00	1.395E+01	2.253E+01	0.000E+00	NOT IDENT.
RH-106	-3.068E+01	1.163E+02	1.999E+02	0.000E+00	FAIL ABUN
RU-106	-1.530E+01	1.157E+02	2.003E+02	0.000E+00	NOT IDENT.
AG-108M	-2.039E+00	1.179E+01	1.969E+01	0.000E+00	NOT IDENT.
AG-110M	5.581E+00	1.605E+01	2.471E+01	0.000E+00	FAIL ABUN
CD-115	-1.042E+01	1.255E+03	2.220E+03	0.000E+00	NOT IDENT.
SN-115	4.946E+02	1.309E+03	2.276E+03	0.000E+00	NOT IDENT.
SN-117M	2.142E+00	1.943E+01	3.197E+01	0.000E+00	NOT IDENT.
TE-123M	-9.557E-01	1.188E+01	1.941E+01	0.000E+00	NOT IDENT.
SB-124	5.570E-01	2.553E+01	4.722E+01	0.000E+00	NOT IDENT.
SB-125	7.978E+00	3.898E+01	5.823E+01	0.000E+00	NOT IDENT.
TE-125M	2.279E+03	4.334E+03	7.325E+03	0.000E+00	NOT IDENT.
I-126	7.383E+01	5.420E+01	1.015E+02	0.000E+00	FAIL ABUN
SB-126	-2.455E+01	4.210E+01	7.020E+01	0.000E+00	FAIL ABUN
SB-127	1.433E+02	3.360E+02	5.205E+02	0.000E+00	NOT IDENT.
I-131	-1.397E+01	3.137E+01	5.213E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	5.388E+38	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-2.642E+01	1.236E+02	2.125E+02	0.000E+00	NOT IDENT.
BA-133	1.300E-01	1.536E+01	2.615E+01	0.000E+00	NOT IDENT.
I-133	0.000E+00	1.369E+05	0.000E+00	0.000E+00	SHORT HLIF
CS-134	3.312E+00	1.306E+01	2.302E+01	0.000E+00	NOT IDENT.
CS-135	-9.825E+00	5.440E+01	9.306E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	3.183E+14	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-9.905E+00	3.188E+01	5.529E+01	0.000E+00	FAIL ABUN
BA-140	-2.460E-01	7.160E+01	1.265E+02	0.000E+00	FAIL ABUN
LA-140	8.728E+02	2.258E+03	4.030E+03	0.000E+00	NOT IDENT.
CE-141	-7.818E+00	2.446E+01	3.982E+01	0.000E+00	NOT IDENT.
CE-143	0.000E+00	7.703E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-5.192E+00	9.764E+01	1.435E+02	0.000E+00	NOT IDENT.
PM-144	1.920E+00	1.288E+01	2.243E+01	0.000E+00	FAIL ABUN
PR-144	0.000E+00	6.705E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	1.967E+01	1.529E+01	2.746E+01	0.000E+00	NOT IDENT.

ND-147	-5.494E+01	1.496E+02	2.587E+02	0.000E+00	FAIL ABUN
PM-147	0.000E+00	6.531E+07	8.133E+07	0.000E+00	FAIL ABUN
PM-149	9.585E+03	1.136E+04	2.008E+04	0.000E+00	NOT IDENT.
EU-152	7.295E-01	3.276E+01	5.602E+01	0.000E+00	FAIL ABUN
GD-153	-8.203E+00	3.507E+01	5.843E+01	0.000E+00	NOT IDENT.
EU-154	2.737E+00	3.138E+01	5.660E+01	0.000E+00	FAIL ABUN
EU-155	-1.788E+01	5.191E+01	8.577E+01	0.000E+00	FAIL ABUN
TB-160	-2.746E+01	5.418E+01	8.927E+01	0.000E+00	FAIL ABUN
TM-171	3.179E+02	1.487E+04	2.529E+04	0.000E+00	FAIL ABUN
HF-181	-4.888E+00	1.490E+01	2.448E+01	0.000E+00	FAIL ABUN
TA-182	1.644E+01	4.260E+01	7.922E+01	0.000E+00	NOT IDENT.
IR-192	7.661E+00	1.148E+01	2.027E+01	0.000E+00	NOT IDENT.
BI-207	6.370E+00	1.756E+01	3.193E+01	0.000E+00	FAIL ABUN
TL-208	6.552E+00	1.284E+01	2.309E+01	0.000E+00	FAIL ABUN
BI-210	7.073E+01	2.100E+03	3.637E+03	0.000E+00	NOT IDENT.
PB-210	7.073E+01	2.100E+03	3.637E+03	0.000E+00	NOT IDENT.
BI-211	2.440E+01	6.696E+01	1.163E+02	0.000E+00	NOT IDENT.
PB-211	-9.412E+00	3.254E+02	5.496E+02	0.000E+00	FAIL ABUN
BI-212	6.159E+01	1.027E+02	1.837E+02	0.000E+00	NOT IDENT.
PB-212	8.523E+00	2.047E+01	3.589E+01	0.000E+00	FAIL ABUN
BI-214	2.005E+01	2.458E+01	4.459E+01	0.000E+00	NOT IDENT.
PB-214	-8.379E+00	2.375E+01	3.976E+01	0.000E+00	FAIL ABUN
RN-219	9.904E+01	1.438E+02	2.512E+02	0.000E+00	NOT IDENT.
RA-223	5.407E+01	2.312E+02	3.990E+02	0.000E+00	FAIL ABUN
RA-224	-7.003E+00	2.315E+02	3.996E+02	0.000E+00	NOT IDENT.
RA-226	2.005E+01	2.458E+01	4.459E+01	0.000E+00	NOT IDENT.
AC-227	0.000E+00	1.645E+02	2.573E+02	0.000E+00	FAIL ABUN
TH-227	0.000E+00	1.640E+02	2.533E+02	0.000E+00	FAIL ABUN
AC-228	8.007E+00	4.953E+01	8.531E+01	0.000E+00	NOT IDENT.
RA-228	8.007E+00	4.953E+01	8.531E+01	0.000E+00	NOT IDENT.
TH-228	8.332E+00	2.046E+01	3.586E+01	0.000E+00	FAIL ABUN
TH-230	2.005E+01	2.458E+01	4.459E+01	0.000E+00	NOT IDENT.
PA-231	3.068E+02	6.167E+02	9.569E+02	0.000E+00	NOT IDENT.
TH-231	2.521E+01	6.395E+01	1.119E+02	0.000E+00	FAIL ABUN
TH-232	8.171E+00	2.022E+01	3.543E+01	0.000E+00	NOT IDENT.
PA-233	-7.218E+00	2.133E+01	3.602E+01	0.000E+00	FAIL ABUN
PA-234	-6.406E+01	1.182E+02	1.922E+02	0.000E+00	FAIL ABUN
PA-234M	-1.184E+03	1.592E+03	2.684E+03	0.000E+00	NOT IDENT.
TH-234	-5.444E+02	6.789E+02	1.121E+03	0.000E+00	FAIL ABUN
U-234	-4.680E+01	4.457E+01	7.264E+01	0.000E+00	NOT IDENT.
U-235	9.349E+00	8.600E+01	1.422E+02	0.000E+00	FAIL ABUN
U-238	-5.444E+02	6.789E+02	1.121E+03	0.000E+00	NOT IDENT.
NP-239	5.419E+00	9.282E+01	1.544E+02	0.000E+00	FAIL ABUN
AM-242	-3.459E+02	1.060E+03	1.753E+03	0.000E+00	NOT IDENT.
CM-247	-1.793E+00	1.305E+01	2.192E+01	0.000E+00	FAIL ABUN
CF-249	-3.910E+00	1.612E+01	2.349E+01	0.000E+00	NOT IDENT.
CF-251	-1.934E+00	4.661E+01	7.613E+01	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:16:29.65

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870617.CNF;2
Sample date : 20-JUN-2005 00:00:00 Acquisition date : 1-JUL-2005 19:24:49.
Sample ID : G1200870617 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:01.81 0.1%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 435282 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	34.11	50	515	0.94	69.12	68	6	1.38E-02	73.7	
2	0	59.60	958	1080	1.23	120.02	115	10	2.66E-01	7.2	
3	6	86.05	179	625	2.12	172.84	170	13	4.98E-02	21.0	1.07E+00
4	6	88.22	2962	699	1.21	177.18	170	13	8.23E-01	2.4	
5	0	92.84	69	595	1.02	186.42	183	7	1.91E-02	59.8	
6	0	122.22	1812	766	1.26	245.07	240	10	5.03E-01	3.7	
7	0	136.84	230	640	1.38	274.27	270	9	6.40E-02	20.9	
8	0	166.07	1963	714	1.28	332.64	327	11	5.45E-01	3.5	
9	0	185.77	64	384	1.83	372.00	369	8	1.78E-02	54.5	
10	0	192.91	36	310	0.90	386.24	383	7	1.00E-02	82.8	
11	0	255.63	94	229	1.16	511.51	509	7	2.61E-02	28.9	
12	0	273.95	37	136	1.36	548.10	546	5	1.03E-02	49.8	
13	0	279.41	824	394	1.47	559.01	553	13	2.29E-01	6.1	
14	0	378.50	73	230	5.35	756.90	750	14	2.03E-02	45.7	
15	0	391.80	1470	195	1.33	783.47	778	11	4.08E-01	3.1	
16	0	396.30	42	148	0.76	792.47	789	9	1.16E-02	54.6	
17	0	425.10	7	184	1.35	849.98	849	9	1.96E-03	347.5	
18	0	477.28	34	133	3.20	954.20	949	9	9.36E-03	64.4	
19	5	506.29	40	60	1.56	1012.15	1009	19	1.12E-02	33.5	8.93E-01
20	5	510.77	152	208	2.91	1021.10	1009	19	4.23E-02	22.2	
21	0	546.86	40	161	3.49	1093.17	1086	14	1.11E-02	69.9	
22	0	661.70	1208	206	1.72	1322.57	1313	16	3.36E-01	3.9	
23	0	666.09	44	78	1.72	1331.33	1328	7	1.23E-02	36.6	
24	0	683.62	8	121	0.84	1366.35	1362	8	2.21E-03	241.8	
25	0	804.36	43	114	5.19	1607.54	1600	17	1.18E-02	59.6	
26	0	898.06	1880	179	1.92	1794.73	1786	20	5.22E-01	2.9	
27	3	939.46	45	73	2.39	1877.43	1873	12	1.24E-02	33.6	3.01E+00
28	3	941.81	30	37	1.59	1882.13	1873	12	8.30E-03	39.2	
29	0	983.27	54	95	2.82	1964.94	1957	15	1.51E-02	41.7	
30	0	1020.22	51	206	9.35	2038.77	2021	31	1.43E-02	84.2	
31	0	1042.60	18	43	1.25	2083.49	2080	9	4.88E-03	71.3	
32	0	1173.26	1338	91	2.01	2344.52	2337	19	3.72E-01	3.2	
33	0	1246.57	32	52	8.35	2491.00	2483	19	8.97E-03	56.5	
34	0	1332.54	1236	30	2.61	2662.78	2656	20	3.43E-01	3.1	
35	0	1432.41	12	13	0.54	2862.34	2860	8	3.38E-03	57.6	
36	0	1463.96	35	26	4.39	2925.38	2919	14	9.72E-03	37.4	
37	0	1469.50	24	12	2.69	2936.45	2933	9	6.66E-03	32.7	
38	0	1496.93	12	23	0.84	2991.25	2989	9	3.23E-03	79.6	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1580.47	11	19	1.02	3158.19	3156	5	3.19E-03	63.7	
40	0	1802.83	16	3	1.08	3602.56	3595	16	4.32E-03	38.0	
41	0	1811.49	23	0	1.11	3619.87	3611	21	6.39E-03	20.9	
42	0	1836.06	1178	20	2.99	3668.97	3659	20	3.27E-01	3.1	

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:16:35.58

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870617.CNF;2
Sample date       : 20-JUN-2005 00:00:00 Acquisition date : 1-JUL-2005 19:24:49.
Sample ID         : G1200870617          Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA3               Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00         Elapsed real time: 0 01:00:01.81  0.1%
Energy tolerance  : 2.00000 KEV          Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 435282               Detector SN#     : 12922955
Matrix Spike DPM :                       LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
BE-7	477.59	34	10.42*	1.355E+00	8.962E+01	1.045E+02	128.92
CO-57	122.06	1812	85.51*	2.550E+00	3.119E+02	3.215E+02	9.72
	136.47	230	10.47	2.585E+00	3.195E+02	3.293E+02	42.34
CO-60	1173.24	1337	99.90	6.747E-01	7.446E+02	7.478E+02	8.98
	1332.50	1235	99.98*	6.120E-01	7.578E+02	7.610E+02	8.28
Y-88	898.02	1879	93.40	8.353E-01	9.040E+02	9.763E+02	9.48
	1836.01	1178	99.38*	4.986E-01	8.923E+02	9.637E+02	8.33
CD-109	88.03	2962	3.79*	2.023E+00	1.450E+04	1.476E+04	8.93
SN-113	391.69	1468	64.90*	1.558E+00	5.450E+02	5.852E+02	9.11
SN-126	64.28	------	9.60	1.054E+00	------ Line Not Found		------
	86.94	175	8.90	1.957E+00	3.770E+02	3.770E+02	59.59
	87.57	2962	37.00*	2.023E+00	1.486E+03	1.486E+03	8.93
BA-137M	661.65	1208	89.98*	1.062E+00	4.744E+02	4.747E+02	9.91
CS-137	661.66	1208	85.12*	1.062E+00	5.015E+02	5.018E+02	9.93
CE-139	165.85	1960	80.35*	2.514E+00	3.642E+02	3.865E+02	9.25
PM-147	121.30	1812	0.00*	2.550E+00	6.668E+08	6.725E+08	9.71
HG-203	70.83	------	4.75	1.365E+00	------ Line Not Found		------
	72.87	------	8.00	1.457E+00	------ Line Not Found		------
	82.60	------	3.55	1.842E+00	------ Line Not Found		------
	279.20	822	77.30*	1.949E+00	2.048E+02	2.442E+02	13.93
TH-229	85.43	175	16.50	1.957E+00	2.033E+02	2.033E+02	43.76
	88.47	2962	27.10	2.023E+00	2.028E+03	2.028E+03	8.93
	100.00	------	12.40	2.302E+00	------ Line Not Found		------
	193.63	36	4.59*	2.382E+00	1.237E+02	1.237E+02	165.80
	210.97	------	3.26	2.285E+00	------ Line Not Found		------
NP-237	86.48	175	12.60*	1.957E+00	2.663E+02	2.663E+02	48.38
	95.87	------	2.60	2.219E+00	------ Line Not Found		------
AM-241	59.54	952	35.90*	8.249E-01	1.207E+03	1.207E+03	16.71
ANH-511	511.00	79	100.00*	1.290E+00	2.287E+01	2.287E+01	86.89

Flag: "*" = Keyline

Summary of Nuclide Activity
Sample ID : G1200870617 Acquisition date : 1-JUL-2005 19:24:49

Total number of lines in spectrum	42	
Number of unidentified lines	14	
Number of lines tentatively identified by NID	28	66.67%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
BE-7	53.44D	1.17	8.962E+01	1.045E+02	1.347E+02	128.92	
CO-57	270.90D	1.03	3.119E+02	3.215E+02	0.313E+02	9.72	
CO-60	5.27Y	1.00	7.578E+02	7.610E+02	0.630E+02	8.28	
Y-88	106.60D	1.08	8.923E+02	9.637E+02	0.803E+02	8.33	
CD-109	464.00D	1.02	1.450E+04	1.476E+04	0.132E+04	8.93	
SN-113	115.10D	1.07	5.450E+02	5.852E+02	0.533E+02	9.11	
SN-126	1.00E+05Y	1.00	1.486E+03	1.486E+03	0.133E+03	8.93	
BA-137M	30.17Y	1.00	4.744E+02	4.747E+02	0.471E+02	9.91	
CS-137	30.17Y	1.00	5.015E+02	5.018E+02	0.498E+02	9.93	
CE-139	137.66D	1.06	3.642E+02	3.865E+02	0.357E+02	9.25	
PM-147	2.62Y	1.01	6.668E+08	6.725E+08	0.653E+08	9.71	
HG-203	46.61D	1.19	2.048E+02	2.442E+02	0.340E+02	13.93	
TH-229	7340.00Y	1.00	1.237E+02	1.237E+02	2.051E+02	165.80	
NP-237	2.14E+06Y	1.00	2.663E+02	2.663E+02	1.288E+02	48.38	
AM-241	432.20Y	1.00	1.207E+03	1.207E+03	0.202E+03	16.71	
ANH-511	1.00E+09Y	1.00	2.287E+01	2.287E+01	1.987E+01	86.89	
			---------	---------			
	Total Activity :		6.668E+08	6.725E+08			
	Grand Total Activity :		6.668E+08	6.725E+08			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Unidentified Energy Lines
Sample ID : G1200870617 Acquisition date : 1-JUL-2005 19:24:49

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	34.11	50	515	0.94	69.12	68	6	1.38E-02	****	2.59E-02	
0	92.84	10	595	1.02	186.42	183	7	2.81E-03	****	2.15E+00	T
0	185.77	28	384	1.83	372.00	369	8	7.87E-03	****	2.42E+00	T
0	255.63	94	229	1.16	511.51	509	7	2.61E-02	57.7	2.06E+00	T
0	273.95	37	136	1.36	548.10	546	5	1.03E-02	99.7	1.97E+00	T
0	378.50	73	230	5.35	756.90	750	14	2.03E-02	91.3	1.60E+00	
0	396.30	42	148	0.76	792.47	789	9	1.16E-02	****	1.55E+00	
0	425.10	7	184	1.35	849.98	849	9	1.96E-03	****	1.47E+00	T
5	506.29	40	60	1.56	1012.15	1009	19	1.12E-02	66.9	1.30E+00	T
0	546.86	35	161	3.49	1093.17	1086	14	9.62E-03	****	1.23E+00	T
0	666.09	44	78	1.72	1331.33	1328	7	1.23E-02	73.2	1.06E+00	T
0	683.62	8	121	0.84	1366.35	1362	8	2.21E-03	****	1.04E+00	
0	804.36	38	114	5.19	1607.54	1600	17	1.05E-02	****	9.12E-01	T
3	939.46	41	73	2.39	1877.43	1873	12	1.15E-02	73.1	8.06E-01	T
3	941.81	30	37	1.59	1882.13	1873	12	8.30E-03	78.4	8.04E-01	
0	983.27	54	95	2.82	1964.94	1957	15	1.51E-02	83.5	7.77E-01	T
0	1020.22	51	206	9.35	2038.77	2021	31	1.43E-02	****	7.54E-01	
0	1042.60	18	43	1.25	2083.49	2080	9	4.88E-03	****	7.41E-01	
0	1246.57	32	52	8.35	2491.00	2483	19	8.97E-03	****	6.44E-01	
0	1432.41	12	13	0.54	2862.34	2860	8	3.38E-03	****	5.81E-01	
0	1463.96	35	26	4.39	2925.38	2919	14	9.72E-03	74.8	5.72E-01	
0	1469.50	24	12	2.69	2936.45	2933	9	6.66E-03	65.4	5.70E-01	
0	1496.93	12	23	0.84	2991.25	2989	9	3.23E-03	****	5.63E-01	
0	1580.47	10	19	1.02	3158.19	3156	5	2.86E-03	****	5.43E-01	
0	1802.83	15	3	1.08	3602.56	3595	16	4.24E-03	79.1	5.03E-01	
0	1811.49	23	0	1.11	3619.87	3611	21	6.39E-03	41.7	5.02E-01	T

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 5-JUL-2005 15:16:44.72

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200870617.CNF;2		
Acquisition date	: 1-JUL-2005 19:24:49.	Detector SN#	: 12922955
Detector ID	: GAMMA3	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 01:00:00.00	Abundance limit	: 75.00000
Elapsed real time	: 0 01:00:01.81	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 20-JUN-2005 00:00:00	Nuclide Library	: EPI
Sample ID	: G1200870617	Analyst initials	: AKB
Batch Number	: 435282	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 24-MAR-2005 14:55:19.2	MS Isotope	:
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	1.045E+02	1.347E+02	1.821E+02	1.326E+01	0.574
CO-57	3.215E+02	3.125E+01	1.935E+01	1.219E+00	16.612
CO-60	7.610E+02	6.301E+01	2.347E+01	1.288E+00	32.420
Y-88	9.637E+02	8.031E+01	1.942E+01	1.100E+00	49.612
CD-109	1.476E+04	1.318E+03	6.154E+02	4.646E+01	23.985
SN-113	5.852E+02	5.331E+01	2.632E+01	1.735E+00	22.236
SN-126	1.486E+03	1.326E+02	6.233E+01	4.693E+00	23.833
BA-137M	4.747E+02	4.707E+01	2.525E+01	1.540E+00	18.801
CS-137	5.018E+02	4.983E+01	2.669E+01	1.634E+00	18.801
CE-139	3.865E+02	3.574E+01	2.011E+01	1.222E+00	19.219
HG-203	2.442E+02	3.400E+01	2.361E+01	1.588E+00	10.343
TH-229	1.237E+02	2.051E+02	3.165E+02	1.941E+01	0.391
NP-237	2.663E+02	1.288E+02	1.859E+02	4.081E+01	1.432
AM-241	1.207E+03	2.017E+02	1.517E+02	1.260E+01	7.959
ANH-511	2.287E+01	1.987E+01	1.710E+01	1.098E+00	1.337

---- Non-Identified Nuclides ----

	Key-Line

Nuclide	Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	1.098E+00		1.123E+01	2.027E+01	1.175E+00	0.054

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	1.241E+01		6.138E+00	1.621E+01	9.177E-01	0.766
K-40	1.405E+02		1.395E+02	2.391E+02	1.432E+01	0.588
SC-46	3.845E+00		1.529E+01	2.648E+01	1.966E+00	0.145
V-48	4.389E+01	+	3.677E+01	4.354E+01	3.141E+00	1.008
CR-51	-6.047E+01		1.202E+02	2.008E+02	1.411E+01	-0.301
MN-54	-1.631E+00		1.251E+01	2.132E+01	1.518E+00	-0.076
CO-56	2.403E+00		1.386E+01	2.407E+01	1.730E+00	0.100
CO-58	-3.269E+00		1.643E+01	2.394E+01	1.678E+00	-0.137
FE-59	1.927E+01		2.817E+01	5.223E+01	3.944E+00	0.369
ZN-65	8.390E+00		2.909E+01	5.228E+01	3.443E+00	0.160
SE-75	3.145E+00		1.517E+01	2.639E+01	1.696E+00	0.119
KR-85	3.557E+03		2.710E+03	4.524E+03	2.905E+02	0.786
SR-85	1.761E+01		1.342E+01	2.240E+01	1.438E+00	0.786
Y-91	-6.067E+00		1.152E+01	1.969E+01	1.258E+00	-0.308
NB-94	-3.095E+00		1.207E+01	2.058E+01	1.306E+00	-0.150
NB-95	1.688E+00		1.497E+01	2.605E+01	1.752E+00	0.065
NB-95M	-1.422E+02		3.522E+02	6.003E+02	5.376E+01	-0.237
ZR-95	-7.083E+00		2.490E+01	4.220E+01	3.277E+00	-0.168
MO-99	3.321E+01		2.453E+02	3.623E+02	2.245E+01	0.092
RU-103	-7.443E+00		1.395E+01	2.253E+01	2.916E+00	-0.330
RH-106	-3.068E+01		1.163E+02	1.999E+02	1.248E+01	-0.154
RU-106	-1.530E+01		1.157E+02	2.003E+02	2.396E+01	-0.076
AG-108M	-2.039E+00		1.179E+01	1.969E+01	1.339E+00	-0.104
AG-110M	5.581E+00		1.605E+01	2.471E+01	1.599E+00	0.226
CD-115	-1.042E+01		1.255E+03	2.220E+03	1.424E+02	-0.005
SN-115	4.946E+02		1.309E+03	2.276E+03	1.681E+02	0.217
SN-117M	2.142E+00		1.943E+01	3.197E+01	1.935E+00	0.067
TE-123M	-9.557E-01		1.188E+01	1.941E+01	1.190E+00	-0.049
SB-124	5.570E-01		2.553E+01	4.722E+01	2.931E+00	0.012
SB-125	7.978E+00		3.898E+01	5.823E+01	3.818E+00	0.137
TE-125M	2.279E+03		4.334E+03	7.325E+03	6.284E+02	0.311
I-126	7.383E+01	+	5.420E+01	1.015E+02	6.219E+00	0.727
SB-126	-2.455E+01		4.210E+01	7.020E+01	4.531E+00	-0.350
SB-127	1.433E+02		3.360E+02	5.205E+02	4.496E+01	0.275
I-131	-1.397E+01		3.137E+01	5.213E+01	3.616E+00	-0.268
TE-132	-2.642E+01		1.236E+02	2.125E+02	2.962E+01	-0.124
BA-133	1.300E-01		1.536E+01	2.615E+01	3.100E+00	0.005
CS-134	3.312E+00		1.306E+01	2.302E+01	1.602E+00	0.144
CS-135	-9.825E+00		5.440E+01	9.306E+01	7.544E+00	-0.106
CS-136	-9.905E+00		3.188E+01	5.529E+01	4.083E+00	-0.179
BA-140	-2.460E-01		7.160E+01	1.265E+02	4.128E+01	-0.002
LA-140	8.728E+02		2.258E+03	4.030E+03	2.304E+02	0.217
CE-141	-7.818E+00		2.446E+01	3.982E+01	2.501E+00	-0.196
CE-144	-5.192E+00		9.764E+01	1.435E+02	2.057E+01	-0.036
PM-144	1.920E+00		1.288E+01	2.243E+01	1.416E+00	0.086
PM-146	1.967E+01		1.529E+01	2.746E+01	2.477E+00	0.716
ND-147	-5.494E+01		1.496E+02	2.587E+02	3.569E+01	-0.212
PM-147	6.725E+08		6.531E+07	8.133E+07	5.112E+06	8.269

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-149	9.585E+03		1.136E+04	2.008E+04	2.897E+03	0.477
EU-152	7.295E-01		3.276E+01	5.602E+01	3.960E+00	0.013
GD-153	-8.203E+00		3.507E+01	5.843E+01	4.008E+00	-0.140
EU-154	2.737E+00		3.138E+01	5.660E+01	5.282E+00	0.048
EU-155	-1.788E+01		5.191E+01	8.577E+01	5.726E+00	-0.208
TB-160	-2.746E+01		5.418E+01	8.927E+01	6.579E+00	-0.308
TM-171	3.179E+02		1.487E+04	2.529E+04	1.837E+03	0.013
HF-181	-4.888E+00		1.490E+01	2.448E+01	1.570E+00	-0.200
TA-182	1.644E+01		4.260E+01	7.922E+01	4.767E+00	0.208
IR-192	7.661E+00		1.148E+01	2.027E+01	1.308E+00	0.378
BI-207	6.370E+00		1.756E+01	3.193E+01	2.191E+00	0.199
TL-208	6.552E+00		1.284E+01	2.309E+01	1.654E+00	0.284
BI-210	7.073E+01		2.100E+03	3.637E+03	2.979E+02	0.019
PB-210	7.073E+01		2.100E+03	3.637E+03	2.979E+02	0.019
BI-211	2.440E+01		6.696E+01	1.163E+02	8.093E+00	0.210
PB-211	-9.412E+00		3.254E+02	5.496E+02	3.429E+02	-0.017
BI-212	6.159E+01		1.027E+02	1.837E+02	1.515E+01	0.335
PB-212	8.523E+00		2.047E+01	3.589E+01	2.775E+00	0.238
BI-214	2.005E+01		2.458E+01	4.459E+01	3.631E+00	0.450
PB-214	-8.379E+00		2.375E+01	3.976E+01	3.457E+00	-0.211
RN-219	9.904E+01		1.438E+02	2.512E+02	3.469E+01	0.394
RA-223	5.407E+01		2.312E+02	3.990E+02	6.681E+01	0.136
RA-224	-7.003E+00		2.315E+02	3.996E+02	2.520E+01	-0.018
RA-226	2.005E+01		2.458E+01	4.459E+01	3.631E+00	0.450
AC-227	2.765E+02	+	1.645E+02	2.573E+02	3.695E+01	1.075
TH-227	2.723E+02	+	1.640E+02	2.533E+02	4.331E+01	1.075
AC-228	8.007E+00		4.953E+01	8.531E+01	8.845E+00	0.094
RA-228	8.007E+00		4.953E+01	8.531E+01	8.845E+00	0.094
TH-228	8.332E+00		2.046E+01	3.586E+01	2.772E+00	0.232
TH-230	2.005E+01		2.458E+01	4.459E+01	3.630E+00	0.450
PA-231	3.068E+02		6.167E+02	9.569E+02	1.344E+02	0.321
TH-231	2.521E+01		6.395E+01	1.119E+02	8.680E+00	0.225
TH-232	8.171E+00		2.022E+01	3.543E+01	2.739E+00	0.231
PA-233	-7.218E+00		2.133E+01	3.602E+01	2.432E+00	-0.200
PA-234	-6.406E+01		1.182E+02	1.922E+02	3.500E+01	-0.333
PA-234M	-1.184E+03		1.592E+03	2.684E+03	2.336E+02	-0.441
TH-234	-5.444E+02		6.789E+02	1.121E+03	1.955E+02	-0.485
U-234	-4.680E+01		4.457E+01	7.264E+01	6.509E+00	-0.644
U-235	9.349E+00		8.600E+01	1.422E+02	2.333E+01	0.066
U-238	-5.444E+02		6.789E+02	1.121E+03	1.955E+02	-0.485
NP-239	5.419E+00		9.282E+01	1.544E+02	9.753E+00	0.035
AM-242	-3.459E+02		1.060E+03	1.753E+03	1.155E+02	-0.197
CM-247	-1.793E+00		1.305E+01	2.192E+01	1.373E+00	-0.082
CF-249	-3.910E+00		1.612E+01	2.349E+01	1.467E+00	-0.166
CF-251	-1.934E+00		4.661E+01	7.613E+01	4.634E+00	-0.025

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200870617           *
* Acquisition date :  1-JUL-2005 19:24:49 Detector SN#     : 12922955       *
* Detector ID      : GAMMA3               Sensitivity      : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 01:00:00.00     Abundance limit  : 75.000         *
* Elapsed real time:    0 01:00:01.81     Half life ratio  : 8.000          *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 20-JUN-2005 00:00:00 Nuclide Library :                 *
* Sample ID        : G1200870617          Analyst initials: AKB             *
* Batch Number     : 435282               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
BE-7	1.045E+02	1.347E+02	8.691E+01	6.735E+01
CO-57	3.215E+02	3.125E+01	9.441E+00	1.563E+01
CO-60	7.610E+02	6.301E+01	1.091E+01	3.150E+01
Y-88	9.637E+02	8.031E+01	8.609E+00	4.016E+01
CD-109	1.476E+04	1.318E+03	3.011E+02	6.589E+02
SN-113	5.852E+02	5.331E+01	1.263E+01	2.665E+01
SN-126	1.486E+03	1.326E+02	3.050E+01	6.631E+01
BA-137M	4.747E+02	4.707E+01	1.210E+01	2.353E+01
CS-137	5.018E+02	4.983E+01	1.279E+01	2.491E+01
CE-139	3.865E+02	3.574E+01	9.795E+00	1.787E+01
HG-203	2.442E+02	3.400E+01	1.141E+01	1.700E+01
TH-229	1.237E+02	2.051E+02	1.537E+02	1.026E+02
NP-237	2.663E+02	1.288E+02	9.096E+01	6.441E+01
AM-241	1.207E+03	2.017E+02	7.418E+01	1.009E+02
ANH-511	2.287E+01	1.987E+01	8.162E+00	9.934E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
NA-22	1.098E+00	1.123E+01	9.329E+00	5.614E+00	NOT IDENT.
NA-24	-1.893E+06	5.379E+06	0.000E+00	2.689E+06	SHORT HLIF
AL-26	1.241E+01	6.138E+00	7.092E+00	3.069E+00	FAIL ABUN
K-40	1.405E+02	1.395E+02	1.113E+02	6.977E+01	NOT IDENT.
SC-46	3.845E+00	1.529E+01	1.258E+01	7.645E+00	NOT IDENT.
V-48	4.389E+01	3.677E+01	2.069E+01	1.838E+01	FAIL ABUN
CR-51	-6.047E+01	1.202E+02	9.655E+01	6.009E+01	NOT IDENT.
MN-54	-1.631E+00	1.251E+01	1.008E+01	6.256E+00	NOT IDENT.
CO-56	2.403E+00	1.386E+01	1.139E+01	6.928E+00	NOT IDENT.
MN-56	3.065E+33	1.760E+34	0.000E+00	0.000E+00	SHORT HLIF
CO-58	-3.269E+00	1.643E+01	1.134E+01	8.215E+00	NOT IDENT.
FE-59	1.927E+01	2.817E+01	2.461E+01	1.408E+01	FAIL ABUN
ZN-65	8.390E+00	2.909E+01	2.468E+01	1.454E+01	NOT IDENT.
SE-75	3.145E+00	1.517E+01	1.275E+01	7.585E+00	FAIL ABUN
KR-85	3.557E+03	2.710E+03	2.172E+03	1.355E+03	NOT IDENT.
SR-85	1.761E+01	1.342E+01	1.075E+01	6.708E+00	NOT IDENT.
Y-91	-6.067E+00	1.152E+01	9.342E+00	5.761E+00	NOT IDENT.
NB-94	-3.095E+00	1.207E+01	9.795E+00	6.037E+00	NOT IDENT.
NB-95	1.688E+00	1.497E+01	1.235E+01	7.487E+00	NOT IDENT.
NB-95M	-1.422E+02	3.522E+02	2.912E+02	1.761E+02	NOT IDENT.
ZR-95	-7.083E+00	2.490E+01	2.002E+01	1.245E+01	NOT IDENT.
MO-99	3.321E+01	2.453E+02	1.766E+02	1.226E+02	NOT IDENT.
TC-99M	2.600E+14	1.921E+15	0.000E+00	9.605E+14	SHORT HLIF
RU-103	-7.443E+00	1.395E+01	1.074E+01	6.977E+00	NOT IDENT.
RH-106	-3.068E+01	1.163E+02	9.522E+01	5.814E+01	FAIL ABUN
RU-106	-1.530E+01	1.157E+02	9.547E+01	5.784E+01	NOT IDENT.
AG-108M	-2.039E+00	1.179E+01	9.420E+00	5.896E+00	NOT IDENT.
AG-110M	5.581E+00	1.605E+01	1.184E+01	8.027E+00	FAIL ABUN
CD-115	-1.042E+01	1.255E+03	1.056E+03	6.275E+02	NOT IDENT.
SN-115	4.946E+02	1.309E+03	1.082E+03	6.547E+02	NOT IDENT.
SN-117M	2.142E+00	1.943E+01	1.557E+01	9.713E+00	NOT IDENT.
TE-123M	-9.557E-01	1.188E+01	9.455E+00	5.940E+00	NOT IDENT.
SB-124	5.570E-01	2.553E+01	2.134E+01	1.276E+01	NOT IDENT.
SB-125	7.978E+00	3.898E+01	2.794E+01	1.949E+01	NOT IDENT.
TE-125M	2.279E+03	4.334E+03	3.580E+03	2.167E+03	NOT IDENT.
I-126	7.383E+01	5.420E+01	4.853E+01	2.710E+01	FAIL ABUN
SB-126	-2.455E+01	4.210E+01	3.328E+01	2.105E+01	FAIL ABUN
SB-127	1.433E+02	3.360E+02	2.488E+02	1.680E+02	NOT IDENT.
I-131	-1.397E+01	3.137E+01	2.502E+01	1.569E+01	NOT IDENT.
I-132	2.293E+38	5.388E+38	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-2.642E+01	1.236E+02	1.031E+02	6.179E+01	NOT IDENT.
BA-133	1.300E-01	1.536E+01	1.257E+01	7.680E+00	NOT IDENT.
I-133	4.939E+04	1.369E+05	0.000E+00	6.843E+04	SHORT HLIF
CS-134	3.312E+00	1.306E+01	1.086E+01	6.528E+00	NOT IDENT.
CS-135	-9.825E+00	5.440E+01	4.497E+01	2.720E+01	NOT IDENT.
I-135	5.392E+13	3.183E+14	0.000E+00	1.591E+14	SHORT HLIF
CS-136	-9.905E+00	3.188E+01	2.605E+01	1.594E+01	FAIL ABUN
BA-140	-2.460E-01	7.160E+01	6.016E+01	3.580E+01	FAIL ABUN
LA-140	8.728E+02	2.258E+03	1.884E+03	1.129E+03	NOT IDENT.
CE-141	-7.818E+00	2.446E+01	1.940E+01	1.223E+01	NOT IDENT.
CE-143	-3.886E+02	7.703E+03	0.000E+00	3.852E+03	SHORT HLIF
CE-144	-5.192E+00	9.764E+01	6.992E+01	4.882E+01	NOT IDENT.
PM-144	1.920E+00	1.288E+01	1.071E+01	6.438E+00	FAIL ABUN
PR-144	1.000E+41	6.705E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	1.967E+01	1.529E+01	1.316E+01	7.647E+00	NOT IDENT.

ND-147	-5.494E+01	1.496E+02	1.229E+02	7.479E+01 FAIL ABUN
PM-147	6.725E+08	6.531E+07	4.019E+07	3.266E+07 FAIL ABUN
PM-149	9.585E+03	1.136E+04	9.698E+03	5.679E+03 NOT IDENT.
EU-152	7.295E-01	3.276E+01	2.689E+01	1.638E+01 FAIL ABUN
GD-153	-8.203E+00	3.507E+01	2.848E+01	1.754E+01 NOT IDENT.
EU-154	2.737E+00	3.138E+01	2.605E+01	1.569E+01 FAIL ABUN
EU-155	-1.788E+01	5.191E+01	4.188E+01	2.596E+01 FAIL ABUN
TB-160	-2.746E+01	5.418E+01	4.230E+01	2.709E+01 FAIL ABUN
TM-171	3.179E+02	1.487E+04	1.238E+04	7.434E+03 FAIL ABUN
HF-181	-4.888E+00	1.490E+01	1.169E+01	7.452E+00 FAIL ABUN
TA-182	1.644E+01	4.260E+01	3.655E+01	2.130E+01 NOT IDENT.
IR-192	7.661E+00	1.148E+01	9.759E+00	5.741E+00 NOT IDENT.
BI-207	6.370E+00	1.756E+01	1.504E+01	8.782E+00 FAIL ABUN
TL-208	6.552E+00	1.284E+01	1.103E+01	6.421E+00 FAIL ABUN
BI-210	7.073E+01	2.100E+03	1.772E+03	1.050E+03 NOT IDENT.
PB-210	7.073E+01	2.100E+03	1.772E+03	1.050E+03 NOT IDENT.
BI-211	2.440E+01	6.696E+01	5.586E+01	3.348E+01 NOT IDENT.
PB-211	-9.412E+00	3.254E+02	2.635E+02	1.627E+02 FAIL ABUN
BI-212	6.159E+01	1.027E+02	8.748E+01	5.134E+01 NOT IDENT.
PB-212	8.523E+00	2.047E+01	1.741E+01	1.024E+01 FAIL ABUN
BI-214	2.005E+01	2.458E+01	2.134E+01	1.229E+01 NOT IDENT.
PB-214	-8.379E+00	2.375E+01	1.908E+01	1.187E+01 FAIL ABUN
RN-219	9.904E+01	1.438E+02	1.206E+02	7.191E+01 NOT IDENT.
RA-223	5.407E+01	2.312E+02	1.922E+02	1.156E+02 FAIL ABUN
RA-224	-7.003E+00	2.315E+02	1.938E+02	1.157E+02 NOT IDENT.
RA-226	2.005E+01	2.458E+01	2.134E+01	1.229E+01 NOT IDENT.
AC-227	2.765E+02	1.645E+02	1.247E+02	8.226E+01 FAIL ABUN
TH-227	2.723E+02	1.640E+02	1.228E+02	8.198E+01 FAIL ABUN
AC-228	8.007E+00	4.953E+01	4.044E+01	2.476E+01 NOT IDENT.
RA-228	8.007E+00	4.953E+01	4.044E+01	2.476E+01 NOT IDENT.
TH-228	8.332E+00	2.046E+01	1.740E+01	1.023E+01 FAIL ABUN
TH-230	2.005E+01	2.458E+01	2.133E+01	1.229E+01 NOT IDENT.
PA-231	3.068E+02	6.167E+02	4.623E+02	3.083E+02 NOT IDENT.
TH-231	2.521E+01	6.395E+01	5.409E+01	3.198E+01 FAIL ABUN
TH-232	8.171E+00	2.022E+01	1.719E+01	1.011E+01 NOT IDENT.
PA-233	-7.218E+00	2.133E+01	1.729E+01	1.066E+01 FAIL ABUN
PA-234	-6.406E+01	1.182E+02	9.086E+01	5.909E+01 FAIL ABUN
PA-234M	-1.184E+03	1.592E+03	1.264E+03	7.962E+02 NOT IDENT.
TH-234	-5.444E+02	6.789E+02	5.477E+02	3.394E+02 FAIL ABUN
U-234	-4.680E+01	4.457E+01	3.493E+01	2.228E+01 NOT IDENT.
U-235	9.349E+00	8.600E+01	6.928E+01	4.300E+01 FAIL ABUN
U-238	-5.444E+02	6.789E+02	5.477E+02	3.394E+02 NOT IDENT.
NP-239	5.419E+00	9.282E+01	7.544E+01	4.641E+01 FAIL ABUN
AM-242	-3.459E+02	1.060E+03	8.560E+02	5.299E+02 NOT IDENT.
CM-247	-1.793E+00	1.305E+01	1.051E+01	6.525E+00 FAIL ABUN
CF-249	-3.910E+00	1.612E+01	1.126E+01	8.060E+00 NOT IDENT.
CF-251	-1.934E+00	4.661E+01	3.692E+01	2.331E+01 NOT IDENT.

Radiochemistry Batch Checklist, Rev 3

Batch# 435482 Product: GAB Date: 7/8/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg	✓		
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .			NA
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/00

Primary Review Performed By: Melanie Work 7/8/05

Secondary Review Performed By: KO 7/8/05

7/2-7/9
ESH

Gross Alpha Beta Que Sheet

07/07/2005 09:46:39 150/180

Batch #:435482 Analyst:SXE1 Minimum DueDate: 07/02/2005

Alpha Spike Isotope: Th-230 Spike Code: 0159-0 Vol: 0.1 Balance #: 51204863
Beta Spike Isotope: Sr-90 Spike Code: 0133-N Vol: 0.1 Pipet #: 4497063
Alpha LCS Isotope: Th-230 LCS Code: 0159-0 Vol: 0.1 Prep Date: 7/5/05
Beta LCS Isotope: Sr-90 LCS Code: 0133-N Vol: 0.1 Initials: SXE

Analytical Scale # C31514
Witness: MA 7/7/05

10% HNO3: 315074.1
Conc HNO3: 314611.6
Conc HCl: NA
Conc HF: NA
Conc Boric: NA

Sample ID	Client Description	Type	Hazard Code	RDL Alpha/Beta	Client	Matrix	Bkr#	Aliquot (mL) or g)	Carrier or Det#	Initial Wt (g)	Final Wt (g)	Net Wt (mg)
138533001	05I460603	SAMPLE		5 pCi/L	ESHL001	WASTE WATER	1	50	H1	7.3277	7.3464	18.7
138533002	05E460603	SAMPLE		5 pCi/L	ESHL001	WASTE WATER	2	100	F1	7.4767	7.5307	54.0
138675001	GF0506G16R201	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	3	150	F2	7.4425	7.4611	18.6
138675002	GU0506G16R201	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	4	150	F3	7.4148	7.4331	18.3
138788004	GU0506K243202	SAMPLE		3 pCi/L	ESHL001	WASTE WATER	5	150	F4	7.5313	7.5410	9.7
138799002	GU0506E243501	SAMPLE		3 pCi/L	ESHL001	WASTE WATER	6	150	A1	7.4697	7.4761	6.4
138800001	GF0506G16R301	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	7	150	A2	7.4468	7.4670	20.2
138800002	GF0506G16R401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	8	150	B1	7.4870	7.5154	28.4
138800003	GU0506G16R301	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	9	150	~~B3~~ B2	7.4651	7.4861	21.0
138800004	GU0506G16R401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	10	150	B4	7.4588	7.4902	31.4
138851001	GF05050GMC601	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	11	150	C1	7.4644	7.5023	37.9
138851002	GF05050GMC690	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	12	150	C2	7.4329	7.4666	33.7
138851003	GU05050GMC601	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	13	125	C3	7.4234	7.4526	29.2
138851004	GU05050GMC690	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	14	150	C4	7.4475	7.4809	33.4
138905001	GF0506G12R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	15	150	D1	7.3713	7.3834	12.1
138905005	GU0506G12R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	16	150	D2	7.4385	7.4503	11.8 MA 7/8/05
1200874003	MB for batch 435482	MB		3 pCi/L	QC ACCOUNT	GROUND WATE	17	1000	D3	7.3925	7.3924	-1.0
1200874004	GU0506G16R201(138675002DUP)	DUP		3 pCi/L	QC ACCOUNT	GROUND WATE	18	150	D4	7.4410	7.4630	22
1200874005	GU0506G16R201(138675002MS)	MS		3 pCi/L	QC ACCOUNT	GROUND WATE	19	150	D1 E3 MA 7/8/05	7.4243	7.4388	14.5
1200874006	GU0506G16R201(138675002MSD)	MSD		3 pCi/L	QC ACCOUNT	GROUND WATE	20	150	E3	7.3969	7.4182	21.3
1200874007	LCS for batch 435482	LCS		3 pCi/L	QC ACCOUNT	GROUND WATE	21	1000	E4	7.4176	7.4175	-1.0

MA 7/8/05

1556

✓ wts ok

Have the planchets been flamed? (Yes) / No

Instrument Used: (Circle One) LB4100 S/N: 8219 PIC S/N:10751-4

Data Reviewed By: MA 7/8/05

Page 1 of 1

MA 7/8/05

✓ Nuclistons

Gross Alpha Beta Que Sheet

06/30/2005 07:14:45

Batch #:435482 **Analyst:SXE1** **Minimum DueDate: 07/02/2005**

Alpha Spike Isotope: Th-230 Spike Code: 0159-0 Vol: 0.1 Balance #: 51204863
Beta Spike Isotope: Sr-90 Spike Code: 0133-N Vol: 0.1 Pipet #: 44970163
Alpha LCS Isotope: Th-230 LCS Code: 0159-0 Vol: 0.1 Prep Date: 7/5/05
Beta LCS Isotope: Sr-90 LCS Code: 0133-N Vol: 0.1 Initials: SSE

Analytical Scale # C31514
Witness: [illegible] 7/7/05

10% HNO3: 315074.1
Conc HNO3: 314611.6
Conc HCl: NA
Conc HF: NA
Conc Boric: NA

Sample ID	Client Description	Type	Hazard Code	RDL Alpha/Beta	Client	Matrix	Bkr#	Aliquot (mL) or g)	Carrier or Det#	Initial Wt (g)	Final Wt (g)	Net Wt (mg)
138533001	05I460603	SAMPLE		5 pCi/L	ESHL001	WASTE WATER	1	~~100~~ 50	B1	7.3277	7.3721	44.4
138533002	05E460603	SAMPLE		5 pCi/L	ESHL001	WASTE WATER	2	100	B1	7.4767	7.5513	74.6
138675001	GF0506G16R201	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	3	150	B3	7.4425	7.4812	38.7
138675002	GU0506G16R201	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	4	150	B4	7.4148	7.4535	38.7
138788004	GU0506K243202	SAMPLE		3 pCi/L	ESHL001	WASTE WATER	5	~~100~~ 150	C1	7.5313	7.5526	21.3
138799002	GU0506E243501	SAMPLE		3 pCi/L	ESHL001	WASTE WATER	6	~~100~~ 150	C2	7.4697	7.4856	15.9
138800001	GF0506G16R301	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	7	150	C3	7.4468	7.4970	50.2
138800002	GF0506G16R401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	8	150	C4	7.4870	7.5484	61.4
138800003	GU0506G16R301	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	9	150	D1	7.4651	7.5153	50.2
138800004	GU0506G16R401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	10	150	D2	7.4588	7.5197	60.9
138851001	GF05050GMC601	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	11	150	D3	7.4644	7.5502	~~85.8~~ 85.8 corr 7/6/05
138851002	GF05050GMC690	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	12	150	G2	7.4329	7.5155	82.6
138851003	GU05050GMC601	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	13	~~150~~ 125	G1	7.4234	7.4923	68.9
138851004	GU05050GMC690	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	14	150	A1	7.4475	7.5281	80.6
138905001	GF0506G12R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	15	150	A2	7.3713	7.3916	20.3
138905005	GU0506G12R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	16	150	A3	7.4385	7.4593	20.8
1200874003	MB for batch 435482	MB		3 pCi/L	QC ACCOUNT	GROUND WATE	17	1000	H1	7.3925	7.3930	.5
1200874004	GU0506G16R201(138675002DUP)	DUP		3 pCi/L	QC ACCOUNT	GROUND WATE	18	150	H3	7.4410	7.4861	39.1
1200874005	GU0506G16R201(138675002MS)	MS		3 pCi/L	QC ACCOUNT	GROUND WATE	19	150	F1	7.4243	7.4545	30.2
1200874006	GU0506G16R201(138675002MSD)	MSD		3 pCi/L	QC ACCOUNT	GROUND WATE	20	150	F2	7.3969	7.4370	40.1
1200874007	LCS for batch 435482	LCS		3 pCi/L	QC ACCOUNT	GROUND WATE	21	1000	F3	7.4176	7.4188	1.2

*440133

Wt ✓

1557

Have the planchets been flamed? Yes / (No)

Instrument Used: (Circle One) LB4100 S/N: 8219 PIC S/N:10751-4

Data Reviewed By: JPARKER 7/7/05

no 7/8/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200874004	DUP	ALPHA	0.150 L	0.626	0.314	1.11	.082666667	pCi/L	NO
		BETA	0.150 L	3.08	0.703	2.67	.375333333	pCi/L	NO
1200874007	LCS	ALPHA	1.00 L	10.3	1.20	0.430	.0124	pCi/L	NO
		BETA	1.00 L	34.1	1.09	0.674	.0563	pCi/L	NO
1200874003	MB	ALPHA	1.00 L	0.0124	0.0397	0.193	.0124	pCi/L	YES
		BETA	1.00 L	0.0563	0.0798	0.349	.0563	pCi/L	YES
1200874005	MS	ALPHA	0.150 L	54.7	4.99	3.27	.082666667	pCi/L	NO
		BETA	0.150 L	184	5.79	4.42	.375333333	pCi/L	NO
1200874006	MSD	ALPHA	0.150 L	73.8	11.7	2.07	.082666667	pCi/L	NO
		BETA	0.150 L	278	7.47	4.74	.375333333	pCi/L	NO
138533001	05I460603	ALPHA	0.050 L	-0.335	0.791	2.59	.248	pCi/L	YES
		BETA	0.050 L	18.0	1.75	5.65	1.126	pCi/L	NO
138533002	05E460603	ALPHA	0.100 L	1.25	0.668	2.31	.124	pCi/L	NO
		BETA	0.100 L	15.2	1.60	5.26	.563	pCi/L	NO
138675001	GF0506G16R201	ALPHA	0.150 L	0.0445	0.362	1.76	.082666667	pCi/L	YES
		BETA	0.150 L	2.13	0.656	2.60	.375333333	pCi/L	NO
138675002	GU0506G16R201	ALPHA	0.150 L	0.0835	0.423	2.04	.082666667	pCi/L	YES
		BETA	0.150 L	3.51	0.756	2.87	.375333333	pCi/L	NO
138788004	GU0506K243202	ALPHA	0.150 L	0.768	0.550	2.31	.082666667	pCi/L	NO
		BETA	0.150 L	7.83	0.809	2.51	.375333333	pCi/L	NO
138799002	GU0506E243501	ALPHA	0.150 L	4.52	0.705	1.43	.082666667	pCi/L	NO
		BETA	0.150 L	6.21	0.736	2.40	.375333333	pCi/L	NO
138800001	GF0506G16R301	ALPHA	0.150 L	2.86	0.747	2.51	.082666667	pCi/L	NO
		BETA	0.150 L	3.24	0.674	2.51	.375333333	pCi/L	NO
138800002	GF0506G16R401	ALPHA	0.150 L	-0.699	0.467	2.54	.082666667	pCi/L	YES
		BETA	0.150 L	3.25	0.694	2.60	.375333333	pCi/L	NO
138800003	GU0506G16R301	ALPHA	0.150 L	1.62	0.451	1.26	.082666667	pCi/L	NO
		BETA	0.150 L	4.03	0.676	2.39	.375333333	pCi/L	NO
138800004	GU0506G16R401	ALPHA	0.150 L	-0.693	0.406	2.32	.082666667	pCi/L	YES
		BETA	0.150 L	3.78	0.686	2.42	.375333333	pCi/L	NO
138851001	GF05050GMC601	ALPHA	0.150 L	0.456	0.398	1.62	.082666667	pCi/L	NO
		BETA	0.150 L	2.26	0.698	2.68	.375333333	pCi/L	NO
138851002	GF05050GMC690	ALPHA	0.150 L	0.978	0.548	2.22	.082666667	pCi/L	NO
		BETA	0.150 L	3.24	0.749	2.85	.375333333	pCi/L	NO
138851003	GU05050GMC601	ALPHA	0.125 L	1.12	0.474	1.66	.0992	pCi/L	NO
		BETA	0.125 L	3.27	0.850	3.31	.4504	pCi/L	NO
138851004	GU05050GMC690	ALPHA	0.150 L	2.20	0.532	1.28	.082666667	pCi/L	NO
		BETA	0.150 L	4.23	0.840	3.15	.375333333	pCi/L	NO
138905001	GF0506G12R101	ALPHA	0.150 L	1.17	0.381	1.16	.082666667	pCi/L	NO
		BETA	0.150 L	3.49	0.741	2.82	.375333333	pCi/L	NO

7/8/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
138905005	GU0506G12R101	ALPHA	0.150 L	0.627	0.324	1.20	.082666667	pCi/L	NO
		BETA	0.150 L	1.47	0.630	2.59	.375333333	pCi/L	YES

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Gross Alpha Water

Filename : ALPHA.XLS
File type : Excel
Version # : 1

Batch : 435482
Analyst : SXE1
Prep Date : 7/5/2005

Calibration Date : 7/19/2004
Calibration Due Date : 7/19/2005

Spike S/N : 0159-O
Spike Exp Date : 6/23/2006
Spike Activity (dpm/ml): 239.45
Spike Volume Added: 0.1

LCS S/N : 0159-O
LCS Exp Date : 6/23/2006
LCS Activity (dpm/ml): 239.45
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : GFCGANBL
Parmname : Alpha
Required MDC: 3 pCi/L
Batch counted on : LB4100
BKG Count time : 1000 min

Sample Characteristics | **Count Raw Data**

Sample ID	Sample Aliquot L	Sample Residue Wt. (mg)	Sample Aliquot StDev.	Sample Date/Time	Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency	Detector Efficiency Error	Beta X-Talk	Count Start Date/Time
138533001	0.050	18.7	7.8337E-06	6/3/2005 9:00	H1	500	75	787	0.082	1000	0.2263	0.05164	0.04855	7/7/2005 21:31
138533002	0.100	54.0	1.1370E-05	6/3/2005 9:00	F1	150	14	325	0.035	1000	0.1734	0.03764	0.00470	7/7/2005 11:45
138675001	0.150	18.6	1.4035E-05	6/13/2005 10:36	F2	150	16	196	0.100	1000	0.2361	0.03582	0.00242	7/7/2005 11:45
138675002	0.150	18.3	1.4035E-05	6/13/2005 10:36	F3	150	19	196	0.120	1000	0.2207	0.03022	0.00041	7/7/2005 11:45
138788004	0.150	9.7	1.4035E-05	6/13/2005 21:14	F4	150	42	347	0.210	1000	0.2494	0.03692	0.00270	7/7/2005 11:45
138799002	0.150	6.4	1.4035E-05	6/11/2005 21:03	A1	150	63	271	0.061	1000	0.2348	0.03687	0.00289	7/7/2005 12:18
138800001	0.150	20.2	1.4035E-05	6/13/2005 12:49	A2	150	58	234	0.179	1000	0.2135	0.03827	0.00292	7/7/2005 12:18
138800002	0.150	28.4	1.4035E-05	6/14/2005 11:26	B1	150	21	244	0.187	1000	0.2156	0.05118	0.00197	7/7/2005 12:18
138800003	0.150	21.0	1.4035E-05	6/13/2005 12:49	B3	150	26	173	0.044	1000	0.2334	0.04273	0.00322	7/7/2005 12:18
138800004	0.150	31.4	1.4035E-05	6/14/2005 11:26	B4	150	15	228	0.146	1000	0.2115	0.04316	0.00185	7/7/2005 12:18
138851001	0.150	37.9	1.4035E-05	6/15/2005 9:07	C1	150	15	214	0.059	1000	0.2039	0.04512	0.00704	7/7/2005 12:18
138851002	0.150	33.7	1.4035E-05	6/15/2005 9:07	C2	150	30	199	0.130	1000	0.2100	0.02803	0.00120	7/7/2005 12:18
138851003	0.125	29.2	1.2800E-05	6/15/2005 9:07	C3	150	17	187	0.046	1000	0.2155	0.02544	0.00015	7/7/2005 12:18
138851004	0.150	33.4	1.4035E-05	6/15/2005 9:07	C4	150	27	206	0.032	1000	0.2018	0.04529	0.00015	7/7/2005 12:18
138905001	0.150	12.1	1.4035E-05	6/16/2005 11:08	D1	150	21	160	0.042	1000	0.2472	0.02577	0.00135	7/7/2005 12:18
138905005	0.150	11.8	1.4035E-05	6/16/2005 11:08	D2	150	15	149	0.046	1000	0.2481	0.04478	0.00219	7/7/2005 12:18
1200874003	1.000	0.0	2.0399E-05	7/5/2005 0:00	D3	150	11	128	0.064	1000	0.2668	0.08011	0.00230	7/7/2005 12:18
1200874004	0.150	22.0	1.4035E-05	6/13/2005 10:36	D4	150	12	208	0.031	1000	0.2293	0.06032	0.00085	7/7/2005 12:18
1200874005	0.150	14.5	1.4035E-05	6/13/2005 10:36	D1	30	135	777	0.042	1000	0.2430	0.02577	0.00135	7/8/2005 10:10
1200874006	0.150	21.3	1.4035E-05	6/13/2005 10:36	E3	60	364	2262	0.036	1000	0.2306	0.13900	0.00962	7/7/2005 12:58
1200874007	1.000	0.0	2.0399E-05	7/5/2005 0:00	E4	60	386	1963	0.120	1000	0.2652	0.09947	0.00678	7/7/2005 12:58

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Alpha Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	**1 SIGMA** Counting Uncertainty	**1 SIGMA** Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
1.6798	1.1860	2.5874	**-0.3350**	0.2920	0.0680	0.0195	0.7780	0.7905		SAMPLE				
1.3074	0.9230	2.3147	**1.2507**	0.4411	0.0583	0.0256	0.6659	0.6683		SAMPLE				
1.0821	0.7640	1.7574	**0.0445**	4.2722	0.0067	0.0285	0.3622	0.3622		SAMPLE				
1.2682	0.8953	2.0362	**0.0835**	4.6584	0.0067	0.0311	0.4226	0.4226		SAMPLE				
1.4846	1.0482	2.3136	**0.7678**	0.6521	0.0700	0.0456	0.5487	0.5496		SAMPLE				
0.8498	0.5999	1.4306	**4.5242**	0.1535	0.3590	0.0535	0.6840	0.7047		SAMPLE				
1.6010	1.1303	2.5144	**2.8569**	0.2557	0.2077	0.0525	0.7385	0.7469		SAMPLE				
1.6202	1.1439	2.5389	**-0.6991**	0.7140	-0.0470	0.0335	0.4661	0.4673		SAMPLE				
0.7261	0.5126	1.2573	**1.6161**	0.2712	0.1293	0.0346	0.4456	0.4512		SAMPLE				
1.4595	1.0304	2.3169	**-0.6930**	0.6212	-0.0460	0.0285	0.4047	0.4057		SAMPLE				
0.9625	0.6796	1.6248	**0.4559**	0.6586	0.0410	0.0269	0.3968	0.3977		SAMPLE				
1.3871	0.9793	2.2166	**0.9781**	0.5472	0.0700	0.0383	0.5470	0.5477		SAMPLE				
0.9648	0.6812	1.6640	**1.1228**	0.4212	0.0673	0.0283	0.4734	0.4742		SAMPLE				
0.7162	0.5057	1.2798	**2.1994**	0.2414	0.1480	0.0351	0.5224	0.5318		SAMPLE				
0.6698	0.4729	1.1648	**1.1729**	0.3197	0.0980	0.0312	0.3794	0.3806		SAMPLE				
0.6985	0.4931	1.2047	**0.6273**	0.4964	0.0540	0.0267	0.3232	0.3245		SAMPLE				
0.1149	0.0811	0.1927	**0.0124**	2.5206	0.0093	0.0235	0.0397	0.0397		MB				
0.6204	0.4380	1.1123	**0.6263**	0.4885	0.0490	0.0238	0.3111	0.3135	138675002	DUP	0.0%	0.3687		
1.5234	1.0755	3.2656	**54.6515**	0.0906	4.4580	0.3874	4.7861	4.9922	138675002	MS			71.91	75.9%
1.0512	0.7422	2.0717	**73.8215**	0.1487	6.0307	0.3180	4.1421	11.6770	138675002	MSD	29.8%	0.5750	71.91	102.5%
0.2503	0.1767	0.4300	**10.3451**	0.1122	6.3133	0.3276	0.5564	1.2030		LCS			10.79	95.9%

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SampleID	Instr	Time	Alpha	Beta	Total Counts	Count Start Time	Count End Time	Voltage
138533001	H1	500	75	787	999	07/07/05 21:31	07/08/05 5:51	1470
138533002	F1	150	14	325	384	07/07/05 11:45	07/07/05 14:15	1470
138675001	F2	150	16	196	241	07/07/05 11:45	07/07/05 14:15	1470
138675002	F3	150	19	196	255	07/07/05 11:45	07/07/05 14:15	1470
138788004	F4	150	42	347	468	07/07/05 11:45	07/07/05 14:15	1470
138799002	A1	150	63	271	390	07/07/05 12:18	07/07/05 14:48	1470
138800001	A2	150	58	234	336	07/07/05 12:18	07/07/05 14:48	1470
138800002	B1	150	21	244	288	07/07/05 12:18	07/07/05 14:48	1470
138800003	B3	150	26	173	232	07/07/05 12:18	07/07/05 14:48	1470
138800004	B4	150	15	228	278	07/07/05 12:18	07/07/05 14:48	1470
138851001	C1	150	15	214	269	07/07/05 12:18	07/07/05 14:48	1470
138851002	C2	150	30	199	261	07/07/05 12:18	07/07/05 14:48	1470
138851003	C3	150	17	187	223	07/07/05 12:18	07/07/05 14:48	1470
138851004	C4	150	27	206	266	07/07/05 12:18	07/07/05 14:48	1470
138905001	D1	150	21	160	199	07/07/05 12:18	07/07/05 14:48	1470
138905005	D2	150	15	149	182	07/07/05 12:18	07/07/05 14:48	1470
1200874003	D3	150	11	128	156	07/07/05 12:18	07/07/05 14:48	1470
1200874004	D4	150	12	208	244	07/07/05 12:18	07/07/05 14:48	1470
1200874005	D1	30	135	777	1036	07/08/05 10:10	07/08/05 10:40	1470
1200874006	E3	60	364	2262	3092	07/07/05 12:58	07/07/05 13:58	1470
1200874007	E4	60	386	1963	2732	07/07/05 12:58	07/07/05 13:58	1522.5

MA 7/8/05

MA 7/8/05

Gross Beta Water

Filename : BETA.XLS
File type : Excel
Version # : 1

Batch : 435482
Analyst : SXE1
Prep Date : 7/5/2005

Calibration Date : 7/19/2004
Calibration Due Date : 7/19/2005

Spike S/N : 0133-N
Spike Exp Date : 5/25/2006
Spike Activity (dpm/ml): 397.66
Spike Volume Added: 0.1

LCS S/N : 0133-N
LCS Exp Date : 5/25/2006
LCS Activity (dpm/ml): 397.66
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : GFCGANBL
Parmname : Beta
Required MDC: 3 pCi/L
Batch counted on : LB4100
BKG Count time : 1000 min

Sample Characteristics					Count Raw Data									
Sample ID	Sample Aliquot L	Sample Residue Wt. (mg)	Sample Aliquot StDev.	Sample Date/Time	Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency	Detector Efficiency Error	Alpha X-Talk	Count Start Date/Time
138533001	0.050	44.4	7.8337E-06	6/3/2005 9:00	B1	500	115	1025	1.278	1000	0.3837	0.01808	0.02098	7/6/2005 21:13
138533002	0.100	74.6	1.1370E-05	6/3/2005 9:00	B1	180	27	442	1.278	1000	0.3487	0.01808	0.02098	7/6/2005 18:01
138675001	0.150	38.7	1.4035E-05	6/13/2005 10:36	B3	180	16	202	0.847	1000	0.3859	0.01849	0.01602	7/6/2005 18:01
138675002	0.150	38.7	1.4035E-05	6/13/2005 10:36	B4	180	18	260	0.999	1000	0.3790	0.02075	0.01876	7/6/2005 18:01
138788004	0.150	21.3	1.4035E-05	6/13/2005 21:14	C1	180	125	369	0.937	1000	0.4195	0.01902	0.02797	7/6/2005 18:01
138799002	0.150	15.9	1.4035E-05	6/11/2005 21:03	C2	180	182	323	0.885	1000	0.4275	0.01220	0.02584	7/6/2005 18:01
138800001	0.150	50.2	1.4035E-05	6/13/2005 12:49	C3	180	24	230	0.844	1000	0.3992	0.02111	0.02700	7/6/2005 18:01
138800002	0.150	61.4	1.4035E-05	6/14/2005 11:26	C4	180	14	226	0.838	1000	0.3844	0.02048	0.02603	7/6/2005 18:01
138800003	0.150	50.2	1.4035E-05	6/13/2005 12:49	D1	180	25	231	0.751	1000	0.3958	0.01320	0.00966	7/6/2005 18:01
138800004	0.150	60.9	1.4035E-05	6/14/2005 11:26	D2	180	14	205	0.670	1000	0.3713	0.03039	0.01288	7/6/2005 18:01
138851001	0.150	85.8	1.4035E-05	6/15/2005 9:07	D3	180	8	185	0.759	1000	0.3558	0.07231	0.01131	7/6/2005 18:01
138851002	0.150	82.6	1.4035E-05	6/15/2005 9:07	G2	180	13	216	0.824	1000	0.3472	0.01093	0.01967	7/6/2005 18:02
138851003	0.125	68.9	1.2800E-05	6/15/2005 9:07	G4	180	8	221	0.889	1000	0.3728	0.01264	0.01636	7/6/2005 18:02
138851004	0.150	80.6	1.4035E-05	6/15/2005 9:07	A1	180	14	273	1.024	1000	0.3492	0.01870	0.01454	7/6/2005 19:09
138905001	0.150	20.3	1.4035E-05	6/16/2005 11:08	A2	180	39	284	1.104	1000	0.4046	0.01949	0.01405	7/6/2005 19:09
138905005	0.150	20.8	1.4035E-05	6/16/2005 11:08	A3	180	17	197	0.898	1000	0.3991	0.02780	0.01075	7/6/2005 19:09
1200874003	1.000	0.5	2.0399E-05	7/5/2005 0:00	H1	180	17	141	0.731	1000	0.4026	0.02167	0.02173	7/6/2005 20:25
1200874004	0.150	39.1	1.4035E-05	6/13/2005 10:36	H3	180	25	227	0.869	1000	0.3801	0.01564	0.01746	7/6/2005 20:25
1200874005	0.150	30.2	1.4035E-05	6/13/2005 10:36	F1	60	217	1504	0.794	1000	0.3942	0.01646	0.01589	7/6/2005 20:06
1200874006	0.150	40.1	1.4035E-05	6/13/2005 10:36	F2	60	211	2230	0.905	1000	0.3908	0.01570	0.02847	7/6/2005 20:06
1200874007	1.000	1.2	2.0399E-05	7/5/2005 0:00	F3	60	373	2034	0.999	1000	0.4316	0.02185	0.02973	7/6/2005 20:06

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Beta Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
3.9115	2.7616	5.6502	**18.0132**	0.0967	0.7720	0.0733	1.7219	1.7528		SAMPLE				
3.5862	2.5319	5.2579	**15.1689**	0.1053	1.1776	0.1221	1.5777	1.6015		SAMPLE				
1.7588	1.2417	2.6004	**2.1304**	0.3063	0.2752	0.0842	0.6548	0.6560		SAMPLE				
1.9451	1.3732	2.8656	**3.5146**	0.2143	0.4454	0.0950	0.7527	0.7562		SAMPLE				
1.7020	1.2016	2.5109	**7.8291**	0.1015	1.1130	0.1110	0.7948	0.8091		SAMPLE				
1.6232	1.1460	2.3976	**6.2057**	0.1152	0.9094	0.1042	0.7319	0.7361		SAMPLE				
1.6973	1.1983	2.5097	**3.2360**	0.2065	0.4338	0.0891	0.6704	0.6739		SAMPLE				
1.7564	1.2401	2.5976	**3.2462**	0.2127	0.4176	0.0884	0.6905	0.6938		SAMPLE				
1.6148	1.1401	2.3942	**4.0286**	0.1673	0.5323	0.0888	0.6735	0.6756		SAMPLE				
1.6258	1.1478	2.4172	**3.7839**	0.1810	0.4689	0.0836	0.6765	0.6862		SAMPLE				
1.8057	1.2749	2.6766	**2.2640**	0.3079	0.2688	0.0804	0.6787	0.6983		SAMPLE				
1.9283	1.3614	2.8529	**3.2399**	0.2304	0.3760	0.0865	0.7486	0.7494		SAMPLE				
2.2383	1.5803	3.3059	**3.2675**	0.2595	0.3388	0.0878	0.8487	0.8497		SAMPLE				
2.1375	1.5091	3.1475	**4.2275**	0.1982	0.4927	0.0972	0.8361	0.8398		SAMPLE				
1.9153	1.3523	2.8161	**3.4938**	0.2106	0.4738	0.0993	0.7374	0.7405		SAMPLE				
1.7513	1.2364	2.5859	**1.4705**	0.4261	0.1964	0.0835	0.6286	0.6299		SAMPLE				
0.2349	0.1659	0.3486	**0.0563**	1.3625	0.0523	0.0713	0.0798	0.0798		MB				
1.8091	1.2772	2.6732	**3.0791**	0.2269	0.3921	0.0887	0.7012	0.7029	138675002	DUP	13.2%	0.1492		
2.8873	2.0385	4.4205	**184.4484**	0.0313	24.2727	0.6470	4.9280	5.7917	138675002	MS			238.83	75.8%
3.1100	2.1957	4.7380	**277.9010**	0.0268	36.2617	0.7876	6.0529	7.4687	138675002	MSD			238.83	114.9%
0.4438	0.3133	0.6737	**34.1487**	0.0316	32.9010	0.7523	0.7853	1.0861		LCS			35.82	95.3%

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JKP 7/7/05

SampleID	Instr	Time	Alpha	Beta	Total Counts	Count Start Time	Count End Time	Voltage
138533001	B1	500	115	1025	1308	7/6/2005 21:13	7/7/2005 5:33	1470
138533002	B1	180	27	442	529	7/6/2005 18:01	7/6/2005 21:01	1470
138675001	B3	180	16	202	260	7/6/2005 18:01	7/6/2005 21:01	1470
138675002	B4	180	18	260	318	7/6/2005 18:01	7/6/2005 21:01	1470
138788004	C1	180	125	369	559	7/6/2005 18:01	7/6/2005 21:01	1470
138799002	C2	180	182	323	545	7/6/2005 18:01	7/6/2005 21:01	1470
138800001	C3	180	24	230	276	7/6/2005 18:01	7/6/2005 21:01	1470
138800002	C4	180	14	226	258	7/6/2005 18:01	7/6/2005 21:01	1470
138800003	D1	180	25	231	286	7/6/2005 18:01	7/6/2005 21:01	1470
138800004	D2	180	14	205	239	7/6/2005 18:01	7/6/2005 21:01	1470
138851001	D3	180	8	185	226	7/6/2005 18:01	7/6/2005 21:01	1470
138851002	G2	180	13	216	247	7/6/2005 18:02	7/6/2005 21:02	1470
138851003	G4	180	8	221	241	7/6/2005 18:02	7/6/2005 21:02	1470
138851004	A1	180	14	273	341	7/6/2005 19:09	7/6/2005 22:09	1470
138905001	A2	180	39	284	378	7/6/2005 19:09	7/6/2005 22:09	1470
138905005	A3	180	17	197	250	7/6/2005 19:09	7/6/2005 22:09	1470
1200874003	H1	180	17	141	190	7/6/2005 20:25	7/6/2005 23:25	1470
1200874004	H3	180	25	227	287	7/6/2005 20:25	7/6/2005 23:25	1470
1200874005	F1	60	217	1504	2009	7/6/2005 20:06	7/6/2005 21:06	1470
1200874006	F2	60	211	2230	2667	7/6/2005 20:06	7/6/2005 21:06	1522.5
1200874007	F3	60	373	2034	2729	7/6/2005 20:06	7/6/2005 21:06	1522.5

mo 7/8/05

JEB 7/7/05

Radiochemistry Batch Checklist, Rev 3

Batch# 435484 Product: Sr-90 Date: 7/1/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/00

Primary Review Performed By: [signature] 7/1/05

Secondary Review Performed By: [signature] 7.1.05

6/05-7/2

Strontium 90 Que Sheet

06/20/05

Batch #: 435484 **Analyst:** EXW1 **Minimum DueDate:** 06/25/2005 **Comments**

Sr-90 Spike Code: D133-N **Expiration Date:** 5/25/06 **Vol:** 0.1 **Sr Sep. Date/time:** 6/28/05 16:15

Sr-90 LCS Code: 0133-N **Expiration Date:** 5/25/06 **Vol:** 0.1

Sr Carrier Code: 1005153 **Exp Date:** 11/13/06 **Vol:** 0.5 **Sdt Wt:** 8.91

Prep Date: 6/27/05 **Initials:** AEW **Pipet ID:** 44970603 **Balance #:** 512048603 **Analytical Scale #:** 38110047 **Witness:** DRS 6-27-05

Sample ID	Client Description	Type	RDL	Collection Date	Matrix	Client	Rad	Bkr#	Aliquot (mL) or (g)	Det # 1 & 2	Initial Sr wt (g)	Final Sr wt (g)	Net Sr wt (mg)
138436003	GF05050GMC501	SAMPLE	.5 pCi/L	JUN-09-05 08:00 AM	GROUND WATE	ESHL001		1	800	4D	0.0837	0.0897	6.0
138436004	GU05050GMC501	SAMPLE	.5 pCi/L	JUN-09-05 08:00 AM	GROUND WATE	ESHL001		2	800	1A	0.0794	0.0841	4.7
138450001	GF05060P12101	SAMPLE	.4 pCi/L	JUN-09-05 09:00 AM	WATER	ESHL001		3	800	1B	0.0844	0.0901	5.7
138450002	GF05060P12190	SAMPLE	.4 pCi/L	JUN-09-05 09:00 AM	WATER	ESHL001		4	800	1C	0.0794	0.0847	5.3
138450003	GU05060P12101	SAMPLE	.4 pCi/L	JUN-09-05 09:00 AM	WATER	ESHL001		5	800	1D	0.0840	0.0887	4.7
138450004	GU05060P12190	SAMPLE	.4 pCi/L	JUN-09-05 09:00 AM	WATER	ESHL001		6	800	2A	0.0828	0.0894	6.6
138659014	GF05060P24201	SAMPLE	.4 pCi/L	JUN-14-05 09:55 AM	WATER	ESHL001		7	800	2B	0.0805	0.0850	4.5
138659015	GU05060P24201	SAMPLE	.4 pCi/L	JUN-14-05 09:55 AM	WATER	ESHL001		8	800	2C	0.0826	0.0873	4.7
138675001	GF0506G16R201	SAMPLE	.4 pCi/L	JUN-13-05 10:36 AM	GROUND WATE	ESHL001		9	800	2D	0.0794	0.0860	6.6
138675002	GU0506G16R201	SAMPLE	.4 pCi/L	JUN-13-05 10:36 AM	GROUND WATE	ESHL001		10	800	3A	0.0819	0.0886	6.7
138800001	GF0506G16R301	SAMPLE	.4 pCi/L	JUN-13-05 12:49 PM	GROUND WATE	ESHL001		11	800	3B	0.0819	0.0876	5.7
138800002	GF0506G16R401	SAMPLE	.4 pCi/L	JUN-14-05 11:26 AM	GROUND WATE	ESHL001		12	800	3D	0.0814	0.0863	4.9
138800003	GU0506G16R301	SAMPLE	.4 pCi/L	JUN-13-05 12:49 PM	GROUND WATE	ESHL001		13	800	4A	0.0832	0.0889	5.7
138800004	GU0506G16R401	SAMPLE	.4 pCi/L	JUN-14-05 11:26 AM	GROUND WATE	ESHL001		14	800	4B	0.0807	0.0859	5.2
138851001	GF05050GMC601	SAMPLE	.5 pCi/L	JUN-15-05 09:07 AM	GROUND WATE	ESHL001		15	800	1A	0.0806	0.0869	6.3
138851002	GF05050GMC690	SAMPLE	.5 pCi/L	JUN-15-05 09:07 AM	GROUND WATE	ESHL001		16	800	1B	0.0814	0.0876	6.2
138851003	GU05050GMC601	SAMPLE	.5 pCi/L	JUN-15-05 09:07 AM	GROUND WATE	ESHL001		17	800	1C	0.0820	0.0879	5.9
138851004	GU05050GMC690	SAMPLE	.5 pCi/L	JUN-15-05 09:07 AM	GROUND WATE	ESHL001		18	800	1D	0.0817	0.0909	9.2
138905001	GF0506G12R101	SAMPLE	.4 pCi/L	JUN-16-05 11:08 AM	GROUND WATE	ESHL001		19	800	2A	0.0819	0.0870	5.1
138905005	GU0506G12R101	SAMPLE	.4 pCi/L	JUN-16-05 11:08 AM	GROUND WATE	ESHL001		20	800	2B	0.0797	0.0863	6.6
1200871072	MB for batch 435484	MB	.4 pCi/L		GROUND WATE	QC ACCOUNT		21	1000	2C	0.0800	0.0852	5.2
1200871073	GU05060P12101(138450003DUP)	DUP	.5 pCi/L	JUN-15-05 09:07 AM	GROUND WATE	QC ACCOUNT		22	800	2D	0.0859	0.0911	5.2
1200871074	GU05060P12101(138450003MS)	MS	.4 pCi/L	JUN-09-05 09:00 AM	WATER	QC ACCOUNT		23	800	4D	0.0807	0.0852	4.5
1200871075	LCS for batch 435484	LCS	.4 pCi/L		GROUND WATE	QC ACCOUNT		24	1000	1C	0.0857	0.0908	5.1

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AEW 6/30/05

Instruments used: ~~LB4110 S/N 8219,~~ PIC S/N 10751-4

Solid Sample Dissolution by: **LEACH** or **DIGESTION** (Circle One)

MA 7/1/05 MP 7/1/05

Data Reviewed By: MA 7/1/05

General Engineering Laboratories, Radiochemistry Division

✓ nohistory ✓ not sdc

MP 7/1/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200871073	DUP	Strontium-90	0.800 L	-0.21	0.0711	0.283	.0655	pCi/L	YES
1200871075	LCS	Strontium-90	1.00 L	21.5	0.721	0.611	.0524	pCi/L	NO
1200871072	MB	Strontium-90	1.00 L	0.0524	0.0466	0.167	.0524	pCi/L	YES
1200871074	MS	Strontium-90	0.800 L	26.8	0.984	0.833	.0655	pCi/L	NO
138436003	GF05050GMC501	Strontium-90	0.800 L	0.0687	0.0696	0.250	.0655	pCi/L	YES
138436004	GU05050GMC501	Strontium-90	0.800 L	-0.0175	0.0767	0.286	.0655	pCi/L	YES
138450001	GF05060P12101	Strontium-90	0.800 L	-0.0846	0.0548	0.215	.0655	pCi/L	YES
138450002	GF05060P12190	Strontium-90	0.800 L	-0.189	0.0698	0.277	.0655	pCi/L	YES
138450003	GU05060P12101	Strontium-90	0.800 L	-0.17	0.0726	0.288	.0655	pCi/L	YES
138450004	GU05060P12190	Strontium-90	0.800 L	0.0408	0.0456	0.165	.0655	pCi/L	YES
138659014	GF05060P24201	Strontium-90	0.800 L	-0.0779	0.0699	0.270	.0655	pCi/L	YES
138659015	GU05060P24201	Strontium-90	0.800 L	0.0434	0.0658	0.240	.0655	pCi/L	YES
138675001	GF0506G16R201	Strontium-90	0.800 L	-0.262	0.056	0.233	.0655	pCi/L	YES
138675002	GU0506G16R201	Strontium-90	0.800 L	0.0157	0.0566	0.208	.0655	pCi/L	YES
138800001	GF0506G16R301	Strontium-90	0.800 L	0.0813	0.062	0.221	.0655	pCi/L	YES
138800002	GF0506G16R401	Strontium-90	0.800 L	-0.0993	0.0765	0.294	.0655	pCi/L	YES
138800003	GU0506G16R301	Strontium-90	0.800 L	-0.192	0.0627	0.252	.0655	pCi/L	YES
138800004	GU0506G16R401	Strontium-90	0.800 L	0.113	0.0675	0.238	.0655	pCi/L	YES
138851001	GF05050GMC601	Strontium-90	0.800 L	0.0325	0.0567	0.207	.0655	pCi/L	YES
138851002	GF05050GMC690	Strontium-90	0.800 L	0.0315	0.0522	0.191	.0655	pCi/L	YES
138851003	GU05050GMC601	Strontium-90	0.800 L	-0.0961	0.0625	0.240	.0655	pCi/L	YES
138851004	GU05050GMC690	Strontium-90	0.800 L	-0.05	0.0373	0.144	.0655	pCi/L	YES
138905001	GF0506G12R101	Strontium-90	0.800 L	0.0198	0.0554	0.205	.0655	pCi/L	YES
138905005	GU0506G12R101	Strontium-90	0.800 L	0.0448	0.0494	0.179	.0655	pCi/L	YES

MA 7/1/05

Strontium-90 Water

Filename : SR90.XLS
File type : Excel
Version # : 1

Batch : 435484
Analyst : EXW1
Prep Date : 6/27/2005
Sr-90 Abundance : 1

Calibration Date : 11/2/2004
Calibration Due Date : 11/2/2005

Spike S/N : 0133-N
Spike Exp Date : 5/25/2006
Spike Activity (dpm/ml): 397.87
Spike Volume Added: 0.1

LCS S/N : 0133-N
LCS Exp Date : 5/25/2006
LCS Activity (dpm/ml): 397.87
LCS Volume Added: 0.1

Carrier S/N : 1005753
Carrier Exp Date : 11/13/2006
Carrier Volume Added: 0.5
Carrier Weight (mg/ml): 17.83
Carrier Weight StDev.: 0.07

Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1 ml Stdev : +/-	0.005480	ml
Procedure Code :	GFC90SRL	
Parmname :	Strontium-90	
Required MDC:	0.4	pCi/L
Halflife of Sr-90 :	28.6	years
Halflife of Y-90 :	64.1	hours
Batch counted on :	PIC	
BKG Count time :	500	min

Sample Characteristics				**Carrier Calculations**				
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Carrier Weight (Standard)	Net Weight (Sample)	Net Weight StDev.	Carrier Aliquot (mL)	Carrier Aliquot StDev.
138436003	0.800	2.0861E-05	6/9/2005 8:00	17.83	6.00	0.033118	0.5	0.002564
138436004	0.800	2.0861E-05	6/9/2005 8:00	17.83	4.70	0.027531	0.5	0.002564
138450001	0.800	2.0861E-05	6/9/2005 9:00	17.83	5.70	0.031829	0.5	0.002564
138450002	0.800	2.0861E-05	6/9/2005 9:00	17.83	5.30	0.030109	0.5	0.002564
138450003	0.800	2.0861E-05	6/9/2005 9:00	17.83	4.70	0.027531	0.5	0.002564
138450004	0.800	2.0861E-05	6/9/2005 9:00	17.83	6.60	0.035697	0.5	0.002564
138659014	0.800	2.0861E-05	6/14/2005 9:55	17.83	4.50	0.026671	0.5	0.002564
138659015	0.800	2.0861E-05	6/14/2005 9:55	17.83	4.70	0.027531	0.5	0.002564
138675001	0.800	2.0861E-05	6/13/2005 10:36	17.83	6.60	0.035697	0.5	0.002564
138675002	0.800	2.0861E-05	6/13/2005 10:36	17.83	6.70	0.036127	0.5	0.002564
138800001	0.800	2.0861E-05	6/13/2005 12:49	17.83	5.70	0.031829	0.5	0.002564
138800002	0.800	2.0861E-05	6/14/2005 11:26	17.83	4.90	0.028390	0.5	0.002564
138800003	0.800	2.0861E-05	6/13/2005 12:49	17.83	5.70	0.031829	0.5	0.002564
138800004	0.800	2.0861E-05	6/14/2005 11:26	17.83	5.20	0.029680	0.5	0.002564
138851001	0.800	2.0861E-05	6/15/2005 9:07	17.83	6.30	0.034407	0.5	0.002564
138851002	0.800	2.0861E-05	6/15/2005 9:07	17.83	6.20	0.033978	0.5	0.002564
138851003	0.800	2.0861E-05	6/15/2005 9:07	17.83	5.90	0.032688	0.5	0.002564
138851004	0.800	2.0861E-05	6/15/2005 9:07	17.83	9.20	0.046872	0.5	0.002564
138905001	0.800	2.0861E-05	6/16/2005 11:08	17.83	5.10	0.029250	0.5	0.002564
138905005	0.800	2.0861E-05	6/16/2005 11:08	17.83	6.60	0.035697	0.5	0.002564
1200871072	1.000	2.0399E-05	6/27/2005 0:00	17.83	5.20	0.029680	0.5	0.002564
1200871073	0.800	2.0861E-05	6/15/2005 9:07	17.83	5.20	0.029680	0.5	0.002564
1200871074	0.800	2.0861E-05	6/9/2005 9:00	17.83	4.50	0.026671	0.5	0.002564
1200871075	1.000	2.0399E-05	6/27/2005 0:00	17.83	5.10	0.029250	0.5	0.002564

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LWW 7.1.05

Count Raw Data

Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Gross Beta CPM	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency Sr-90	Detector Efficiency Y-90	Detector Efficiency Error	Alpha X-Talk	Count Start Date/Time	Strontium Separation Date/Time	Yttrium Ingrowth	Sr-90 Decay	Sample Recovery %	Sample Recovery Error %
4D	360	30	215	0.594	0.542	500	0.4187	0.5650	0.00816	0.04325	6/30/2005 8:26	6/28/2005 16:15	0.373	0.999	67.30%	1.01%
1A	360	41	167	0.455	0.466	500	0.4266	0.5635	0.00600	0.07526	6/30/2005 12:51	6/28/2005 16:15	0.402	0.999	52.72%	1.05%
1B	360	9	110	0.303	0.364	500	0.4136	0.5561	0.00409	0.10671	6/30/2005 12:51	6/28/2005 16:15	0.402	0.999	63.94%	1.02%
1C	360	54	159	0.431	0.562	500	0.4292	0.5605	0.00344	0.06882	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	59.45%	1.03%
1D	360	14	132	0.363	0.466	500	0.4213	0.5655	0.00511	0.09375	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	52.72%	1.05%
2A	360	26	121	0.333	0.298	500	0.4222	0.5685	0.00349	0.04435	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	74.03%	1.00%
2B	360	24	125	0.338	0.384	500	0.4330	0.5645	0.00383	0.13885	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	50.48%	1.06%
2C	360	17	124	0.340	0.314	500	0.4179	0.5631	0.00575	0.09043	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	52.72%	1.05%
2D	360	29	140	0.386	0.610	500	0.4212	0.5719	0.00479	0.03859	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	74.03%	1.00%
3A	360	39	169	0.465	0.452	500	0.3990	0.5517	0.00943	0.04131	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	75.15%	1.00%
3B	360	38	162	0.445	0.386	500	0.4126	0.5589	0.00655	0.04935	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	63.94%	1.02%
3D	360	23	159	0.439	0.500	500	0.4111	0.5470	0.00464	0.04332	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	54.96%	1.04%
4A	360	23	138	0.380	0.520	500	0.4207	0.5540	0.00744	0.05788	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	63.94%	1.02%
4B	360	16	170	0.469	0.392	500	0.4268	0.5653	0.00196	0.08088	6/30/2005 12:52	6/28/2005 16:15	0.402	0.999	58.33%	1.03%
1A	360	31	180	0.494	0.466	500	0.4225	0.5635	0.00600	0.07537	6/30/2005 20:03	6/28/2005 16:15	0.447	0.999	70.67%	1.01%
1B	360	16	142	0.390	0.364	500	0.4125	0.5561	0.00409	0.10673	6/30/2005 20:03	6/28/2005 16:15	0.447	0.999	69.55%	1.01%
1C	360	47	178	0.485	0.562	500	0.4275	0.5605	0.00344	0.06884	6/30/2005 20:03	6/28/2005 16:15	0.447	0.999	66.18%	1.02%
1D	360	12	147	0.405	0.466	500	0.4109	0.5655	0.00511	0.09414	6/30/2005 20:03	6/28/2005 16:15	0.447	0.999	103.20%	0.97%
2A	360	18	113	0.312	0.298	500	0.4261	0.5685	0.00349	0.04427	6/30/2005 20:03	6/28/2005 16:15	0.447	0.999	57.21%	1.04%
2B	360	17	155	0.424	0.384	500	0.4276	0.5645	0.00383	0.13910	6/30/2005 20:03	6/28/2005 16:15	0.447	0.999	74.03%	1.00%
2C	360	18	131	0.359	0.314	500	0.4168	0.5631	0.00575	0.09046	6/30/2005 20:04	6/28/2005 16:15	0.447	1.000	58.33%	1.03%
2D	360	19	167	0.462	0.610	500	0.4245	0.5719	0.00479	0.03851	6/30/2005 20:04	6/28/2005 16:15	0.447	0.999	58.33%	1.03%
4D	60	37	975	16.223	0.542	500	0.4223	0.5650	0.00816	0.04320	6/30/2005 16:26	6/28/2005 16:15	0.409	0.999	50.48%	1.06%
1C	60	12	1082	18.020	0.562	500	0.4298	0.5605	0.00344	0.06881	6/30/2005 10:46	6/28/2005 16:15	0.372	1.000	57.21%	1.04%

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Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.1701	0.1201	0.2502	**0.0687**	1.0129	0.0516	0.0523	0.0696	0.0696		SAMPLE				
0.1941	0.1370	0.2863	**-0.0175**	4.3874	-0.0107	0.0469	0.0767	0.0767		SAMPLE				
0.1450	0.1024	0.2151	**-0.0846**	0.6483	-0.0611	0.0396	0.0548	0.0548		SAMPLE				
0.1886	0.1331	0.2772	**-0.1893**	0.3690	-0.1307	0.0482	0.0698	0.0698		SAMPLE				
0.1954	0.1380	0.2883	**-0.1697**	0.4279	-0.1030	0.0440	0.0726	0.0726		SAMPLE				
0.1109	0.0783	0.1654	**0.0408**	1.1172	0.0349	0.0390	0.0456	0.0456		SAMPLE				
0.1820	0.1285	0.2697	**-0.0779**	0.8975	-0.0460	0.0413	0.0699	0.0699		SAMPLE				
0.1614	0.1140	0.2404	**0.0434**	1.5153	0.0262	0.0397	0.0658	0.0658		SAMPLE				
0.1586	0.1119	0.2327	**-0.2621**	0.2138	-0.2242	0.0479	0.0560	0.0560		SAMPLE				
0.1410	0.0996	0.2082	**0.0157**	3.6130	0.0130	0.0469	0.0566	0.0566		SAMPLE				
0.1492	0.1053	0.2211	**0.0813**	0.7622	0.0588	0.0448	0.0620	0.0620		SAMPLE				
0.1995	0.1408	0.2939	**-0.0993**	0.7711	-0.0611	0.0471	0.0765	0.0765		SAMPLE				
0.1715	0.1211	0.2525	**-0.1923**	0.3263	-0.1404	0.0458	0.0627	0.0627		SAMPLE				
0.1606	0.1134	0.2379	**0.1132**	0.5961	0.0766	0.0457	0.0675	0.0675		SAMPLE				
0.1402	0.0990	0.2068	**0.0325**	1.7444	0.0275	0.0480	0.0567	0.0567		SAMPLE				
0.1284	0.0907	0.1906	**0.0315**	1.6556	0.0257	0.0426	0.0522	0.0522		SAMPLE				
0.1635	0.1154	0.2403	**-0.0961**	0.6497	-0.0765	0.0497	0.0624	0.0625		SAMPLE				
0.0976	0.0689	0.1439	**-0.0500**	0.7461	-0.0608	0.0454	0.0373	0.0373		SAMPLE				
0.1373	0.0969	0.2047	**0.0198**	2.7958	0.0137	0.0382	0.0554	0.0554		SAMPLE				
0.1205	0.0851	0.1785	**0.0448**	1.1032	0.0400	0.0441	0.0494	0.0494		SAMPLE				
0.1124	0.0794	0.1674	**0.0524**	0.8890	0.0454	0.0403	0.0466	0.0466		MB				
0.1927	0.1360	0.2827	**-0.2104**	0.3379	-0.1481	0.0500	0.0711	0.0711	138450003	DUP	0.0%	0.1416		
0.5353	0.3779	0.8330	**26.8038**	0.0358	15.6814	0.5210	0.8906	0.9845	138450003	MS			22.43	120%
0.3935	0.2778	0.6113	**21.5411**	0.0333	17.4576	0.5490	0.6775	0.7210		LCS			17.92	120%

MA 7/1/05
MM 7.1.05

SampleID	Instr	Time	Alpha	Beta	Count Start Time	Count End Time
138436003	4D	360	30	215	06/30/05 8:26	06/30/05 14:26
138436004	1A	360	41	167	06/30/05 12:51	06/30/05 18:51
138450001	1B	360	9	110	06/30/05 12:51	06/30/05 18:51
138450002	1C	360	54	159	06/30/05 12:52	06/30/05 18:52
138450003	1D	360	14	132	06/30/05 12:52	06/30/05 18:52
138450004	2A	360	26	121	06/30/05 12:52	06/30/05 18:52
138659014	2B	360	24	125	06/30/05 12:52	06/30/05 18:52
138659015	2C	360	17	124	06/30/05 12:52	06/30/05 18:52
138675001	2D	360	29	140	06/30/05 12:52	06/30/05 18:52
138675002	3A	360	39	169	06/30/05 12:52	06/30/05 18:52
138800001	3B	360	38	162	06/30/05 12:52	06/30/05 18:52
138800002	3D	360	23	159	06/30/05 12:52	06/30/05 18:52
138800003	4A	360	23	138	06/30/05 12:52	06/30/05 18:52
138800004	4B	360	16	170	06/30/05 12:52	06/30/05 18:52
138851001	1A	360	31	180	06/30/05 20:03	07/01/05 2:03
138851002	1B	360	16	142	06/30/05 20:03	07/01/05 2:03
138851003	1C	360	47	178	06/30/05 20:03	07/01/05 2:03
138851004	1D	360	12	147	06/30/05 20:03	07/01/05 2:03
138905001	2A	360	18	113	06/30/05 20:03	07/01/05 2:03
138905005	2B	360	17	155	06/30/05 20:03	07/01/05 2:03
1200871072	2C	360	18	131	06/30/05 20:04	07/01/05 2:04
1200871073	2D	360	19	167	06/30/05 20:04	07/01/05 2:04
1200871074	4D	60	37	975	06/30/05 16:26	06/30/05 17:26
1200871075	1C	60	12	1082	06/30/05 10:46	06/30/05 11:46

7.1.05 7.1.05

Radiochemistry Batch Checklist for LSC, Rev 3

Batch# 435237 Product: H-3 Date: 7/7/05

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* RDL, error is 100% or less of sample activity. If greater 10* RDL, error is 20% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	NA		
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	NA		
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable. 7/7/05	NA ✓		NCR 217874

General Engineering Laboratories
10/31/2000

Primary Review Performed By: JParker 7/7/05

Secondary Review Performed By: KO 7/7/05

7/2-7/9
ESHL

Tritium Que Sheet

20-JUN-05

Batch #: 435237 Analyst: ~~JMB1~~ LAK Minimum DueDate: 02-JUL-05

Spike Isotope: Hydrogen-3 Spike Code: 013417 Expiration Date: 7/20/05 Vol: 0.1

LCS Isotope: Hydrogen-3 LCS Code: 013417 Expiration Date: 7/20/05 Vol: 0.1

Prep Date: 7/5/05 Initials: LAK Pipet ID: 14291303 Witness: EBD 7/5/05

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date		Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Dist Vol (mL)
~~138259002~~	GU05060G34R01	SAMPLE		.25 pCi/mL	GROUND WATE	SHL001	07-JUN-05	1	10	22	31		50		13
~~138369001~~	GU05060G1MB01	SAMPLE		.25 pCi/mL	GROUND WATE	SHL001	08-JUN-05	2	10	23	46		50		13
~~138533001~~	05I460603	SAMPLE		.2 pCi/mL	WASTE WATE	ESHL001	03-JUN-05	3	10	24	49		50		13
~~138788004~~	GU0506K243202	SAMPLE		.2 pCi/mL	WASTE WATE	ESHL001	13-JUN-05	4	10	25	48		50		13
~~138799002~~	GU0506E243501	SAMPLE		.2 pCi/mL	WASTE WATE	ESHL001	11-JUN-05	5	10	26	70		50		13
~~138800003~~	GU0506G16R301	SAMPLE		.2 pCi/mL	GROUND WATE	SHL001	13-JUN-05	6	10	27	318		50		13
~~138800004~~	GU0506G16R401	SAMPLE		.2 pCi/mL	GROUND WATE	SHL001	14-JUN-05	7	10	28	322		50		13
~~138851003~~	GU05050GMC601	SAMPLE		.2 pCi/mL	GROUND WATE	SHL001	15-JUN-05	8	10	29	323		50		13
~~138851004~~	GU05050GMC690	SAMPLE		.2 pCi/mL	GROUND WATE	SHL001	15-JUN-05	9	10	30	507		50		13
~~138905005~~	GU0506G12R101	SAMPLE		.2 pCi/mL	GROUND WATE	SHL001	16-JUN-05	10	10	31	516		50		13
1200870537	MB for batch 435237	MB		.2 pCi/mL	GROUND WATE	QC ACCOUNT		11	10	32	522		50		13
1200870538	GU05060G34R01(138259002DUP)	DUP		.25 pCi/mL	GROUND WATE	QC ACCOUNT	07-JUN-05	12	10	33	526		50		13
1200870539	GU05060G34R01(138259002MS)	MS		.25 pCi/mL	GROUND WATE	QC ACCOUNT	07-JUN-05	13	10	34	530		50		13
1200870540	LCS for batch 435237	LCS		.2 pCi/mL	GROUND WATE	QC ACCOUNT		14	10	35	535		50		13

LAK 7/5/05

LAK 7/5/05

Comments:

Instrument Used (circle as appropriate): *LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4040127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299*

General Engineering Laboratories, Radiochemistry Division

Bkg prepared with dead water? Yes (No)

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly via*

Data Reviewed By: Parker 7/7/05

NO 7/7/05

Tritium Water

Filename : H3DST.XLS
File type : Excel
Version # : 1

Batch : 435237
Analyst : LAG1
Prep Date : 7/5/2005
H-3 Abundance : 1
Calibration Date : 4/8/2005
Calibration Due Date : 4/8/2006
Geometry:
13mL Trisafe/10ml sample

Spike S/N :	0134-H	
Spike Exp Date :	7/20/2005	
Spike Activity (dpm/ml):	3406.82	
Spike Volume Added:	0.1	
Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1.0 ml Stdev : +/-	0.005480	ml
Pipet, 5.0 ml Stdev : +/-	0.025729	ml

LCS S/N :	0134-H	
LCS Exp Date :	7/20/2005	
LCS Activity (dpm/ml):	3406.82	
LCS Volume Added:	0.1	
Procedure Code :	LSCDSH3L	
Parmname :	Tritium	
Required MDC:	200	pCi/L
Halflife of Tritium :	12.28	years
Batch counted on :	LSCPINK	
Detector Effiency Error :	0.00792	
BKG Count time :	90	min

Sample Characteristics							Count raw Data								
Sample ID	Total Sample Volume (L)	Sample Aliquot L	Sample Aliquot StDev.	Distilled Sample Counted L	Sample Counted StDev.	Sample Date/Time	Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time
138259002	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/7/2005 13:37	22	90.0296	772.84	2.57	0.1740	0.00792	2.08	90	7/6/2005 12:44
138369001	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/8/2005 13:55	23	90.0296	772.67	2.31	0.1737	0.00792	2.08	90	7/6/2005 14:17
138533001	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/3/2005 9:00	24	90.013	779.06	2.39	0.1822	0.00792	2.08	90	7/6/2005 15:49
138788004	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/13/2005 21:14	25	90.0296	785.71	2.48	0.1913	0.00792	2.08	90	7/6/2005 17:22
138799002	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/11/2005 21:03	26	90.0296	776.46	2.46	0.1788	0.00792	2.08	90	7/6/2005 18:55
138800003	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/13/2005 12:49	27	90.0296	775.86	2.33	0.1780	0.00792	2.08	90	7/6/2005 20:27
138800004	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/14/2005 11:26	28	90.0296	783.29	2.4	0.1880	0.00792	2.08	90	7/6/2005 22:00
138851003	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/15/2005 9:07	29	90.0296	781.25	55.73	0.1852	0.00792	2.08	90	7/6/2005 23:32
138851004	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/15/2005 9:07	30	90.0296	782.04	52.18	0.1863	0.00792	2.08	90	7/7/2005 1:05
138905005	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/16/2005 11:08	31	90.0296	772.13	2.73	0.1730	0.00792	2.08	90	7/7/2005 2:37
1200870537	0.050	0.050	7.8337E-06	0.010	2.5729E-05	7/5/2005 0:00	32	90.0296	782.8	2.39	0.1873	0.00792	2.08	90	7/7/2005 4:10
1200870538	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/7/2005 13:37	33	90.0296	776.18	2.1	0.1784	0.00792	2.08	90	7/7/2005 5:42
1200870539	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/7/2005 13:37	34	30.0296	777.26	14.84	0.1798	0.00792	2.08	90	7/7/2005 7:15
1200870540	0.050	0.050	7.8337E-06	0.010	2.5729E-05	7/5/2005 0:00	35	30.0296	784.73	13.92	0.1899	0.00792	2.08	90	7/7/2005 7:47

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jfp 7/7/05

NVO 7/7/05

Sample Decay	Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.996	130.2722	91.9733	191.7644	**127.4494**	0.4639	0.4900	0.2273	59.1120	59.1224		SAMPLE				
0.996	130.4208	92.0782	191.9832	**59.8914**	0.9601	0.2300	0.2208	57.5011	57.5035		SAMPLE				
0.995	124.4508	87.8633	183.1958	**77.0210**	0.7189	0.3100	0.2228	55.3643	55.3684		SAMPLE				
0.996	118.3634	83.5656	174.2344	**94.5296**	0.5627	0.4000	0.2251	53.1860	53.1924		SAMPLE				
0.996	126.6987	89.4504	186.5042	**96.1271**	0.5910	0.3800	0.2246	56.8064	56.8126		SAMPLE				
0.996	127.2362	89.8298	187.2954	**63.5098**	0.8853	0.2500	0.2213	56.2247	56.2275		SAMPLE				
0.997	120.4435	85.0342	177.2963	**76.9526**	0.6972	0.3200	0.2231	53.6438	53.6480		SAMPLE				
0.997	122.2317	86.2966	179.9286	**13093.1341**	0.0173	53.6500	0.8013	195.5612	226.4316		SAMPLE				
0.997	121.5295	85.8008	178.8949	**12156.5240**	0.0178	50.1000	0.7763	188.3731	216.1351		SAMPLE				
0.997	130.8065	92.3505	192.5509	**169.7590**	0.3557	0.6500	0.2311	60.3669	60.3851		SAMPLE				
1.000	120.4951	85.0706	177.3723	**74.5798**	0.7188	0.3100	0.2228	53.6069	53.6108		MB				
0.995	127.0571	89.7034	187.0317	**5.0736**	10.7737	0.0200	0.2155	54.6619	54.6619	138259002	DUP	0.0%	0.5378		
0.995	218.2357	154.0763	330.8293	**3211.0620**	0.0570	12.7600	0.7192	180.9931	183.1448	138259002	MS			3082.25	100.0%
1.000	205.7421	145.2557	311.8900	**2808.9702**	0.0596	11.8400	0.6976	165.5016	167.3032		LCS			3069.21	91.5%

1576

JEP
7/7/05

REGISTRY

WED 6 JUL 2005 11:10

*** DIRECTORY PATH :S:\LSC\Q\DA\435237 ***

PARAMETER GROUP: 8
ID: H-3(1)

00A PROGRAM MODE 6 ->

ORDER	POS	ID	CTIME	COUNTS	CUCNTS	MCW	REP	STD	STMS	STIME
1	21	BKG	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
2	22	138259002	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
3	23	138369001	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
4	24	138533001	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
5	25	138788004	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
6	26	138799002	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
7	27	138800003	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
8	28	138800004	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
9	29	138851003	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
10	30	138851004	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
11	31	138905005	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
12	32	1200870537	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
13	33	1200870538	90:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
14	34	1200870539	30:00	1.0E04	NO LIM	1	1	Y	1/10	1:00
15	35	1200870540	30:00	1.0E04	NO LIM	1	1	Y	1/10	1:00

NUMBER OF CYCLES 1
COINCIDENCE BIAS (L/H) L

MCA	INPUT	TRIGG.	INHIBIT	MEMORY SPLIT
1	LRSUM	DCOS	G	L*R
2	GSUM	G		L*R

WINDOW	CHANNELS	MCA	HALF
1	1- 300	1	2
2	1- 300	1	2
3	60- 220	1	2
4	50- 320	1	1
5	50- 270	1	1
6	60- 220	1	1
7	1- 1024	2	1
8	1- 1024	2	2

SELECTED PRINTOUT FOR TERMINAL 1 (A)

SELECTED PRINTOUT FOR TERMINAL 2 (B)

1.	2.	3.	4.	5.	6.	7.
POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

SEND SPECTRA 12
RESOLUTION OF SPECTRA 1024
LISTING Y
INSTRUMENT NUMBER 1

POS	ID	CTIME	SQP	CPM1	CPM2	CPM3

7/7/05

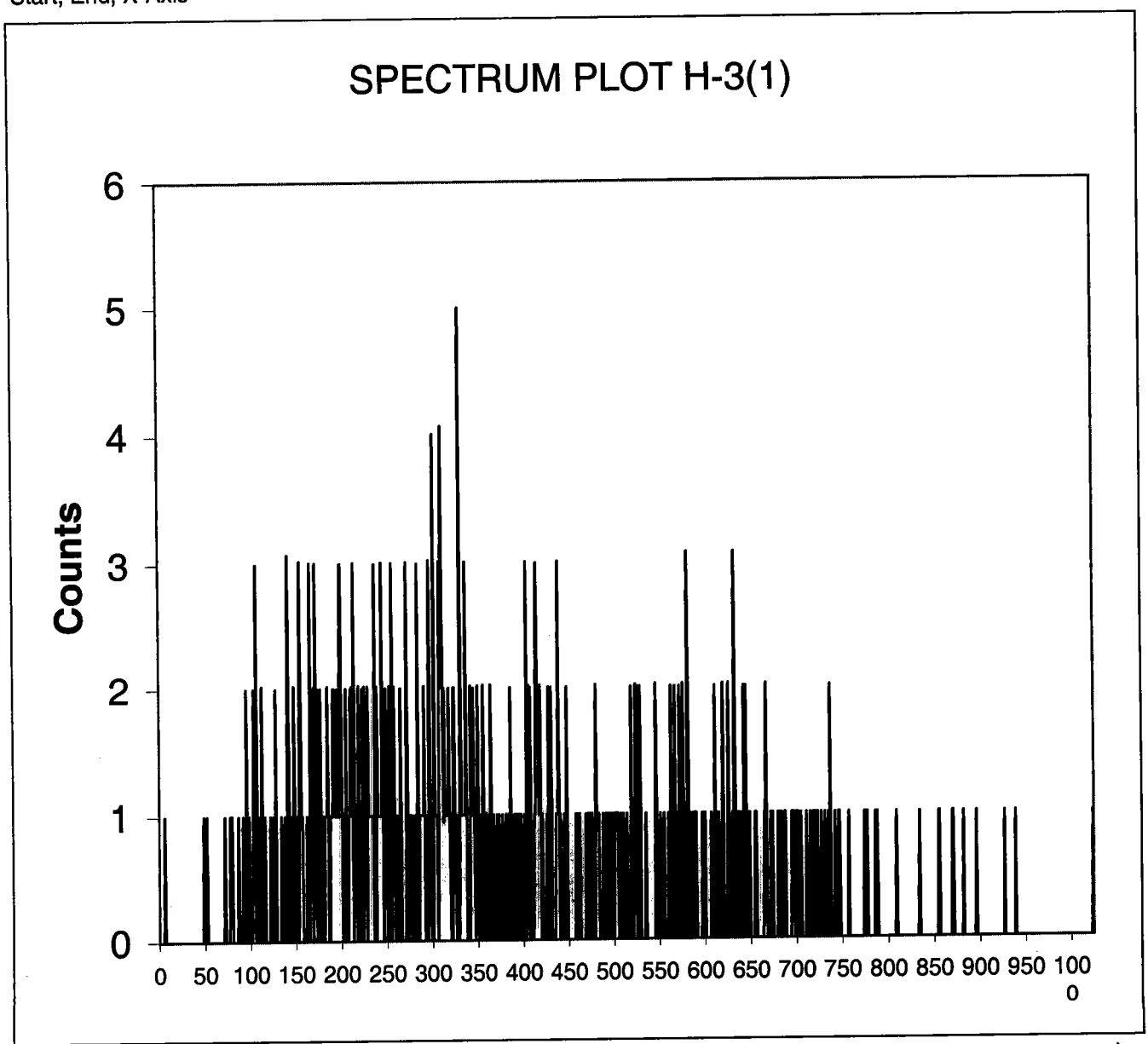
JEF 7/7/05

Q012101N.001	6 JUL 2005	12:43				
21	BKG	90:01.778	768.71	2.08	2.08	1.22
Q022201N.001	6 JUL 2005	14:15				
22	138259002	90:01.777	772.84	2.57	2.57	1.47
Q032301N.001	6 JUL 2005	15:48				
23	138369001	90:01.777	772.67	2.31	2.31	1.30
Q042401N.001	6 JUL 2005	17:20				
24	138533001	90:00.777	779.06	2.39	2.39	1.41
Q052501N.001	6 JUL 2005	18:53				
25	138788004	90:01.777	785.71	2.48	2.48	1.55
Q062601N.001	6 JUL 2005	20:26				
26	138799002	90:01.777	776.46	2.46	2.46	1.55
Q072701N.001	6 JUL 2005	21:58				
27	138800003	90:01.777	775.86	2.33	2.33	1.27
Q082801N.001	6 JUL 2005	23:31				
28	138800004	90:01.777	783.29	2.40	2.40	1.33
Q092901N.001	7 JUL 2005	1:03				
29	138851003	90:01.777	781.25	55.73	55.73	51.47
Q103001N.001	7 JUL 2005	2:36				
30	138851004	90:01.777	782.04	52.18	52.18	48.06
Q113101N.001	7 JUL 2005	4:08				
31	138905005	90:01.776	772.13	2.73	2.73	1.64
Q123201N.001	7 JUL 2005	5:41				
32	1200870537	90:01.776	782.80	2.39	2.39	1.24
Q133301N.001	7 JUL 2005	7:13				
33	1200870538	90:01.776	776.18	2.10	2.10	1.39
Q143401N.001	7 JUL 2005	7:46				
34	1200870539	30:01.776	777.26	14.84	14.84	12.58
Q153501N.001	7 JUL 2005	8:18				
35	1200870540	30:01.776	784.73	13.92	13.92	12.17

7/7/05

JKL 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ012101N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	1, BKG, 90.02963:
Quench:	768.71
Start, End, X-Axis	1-300

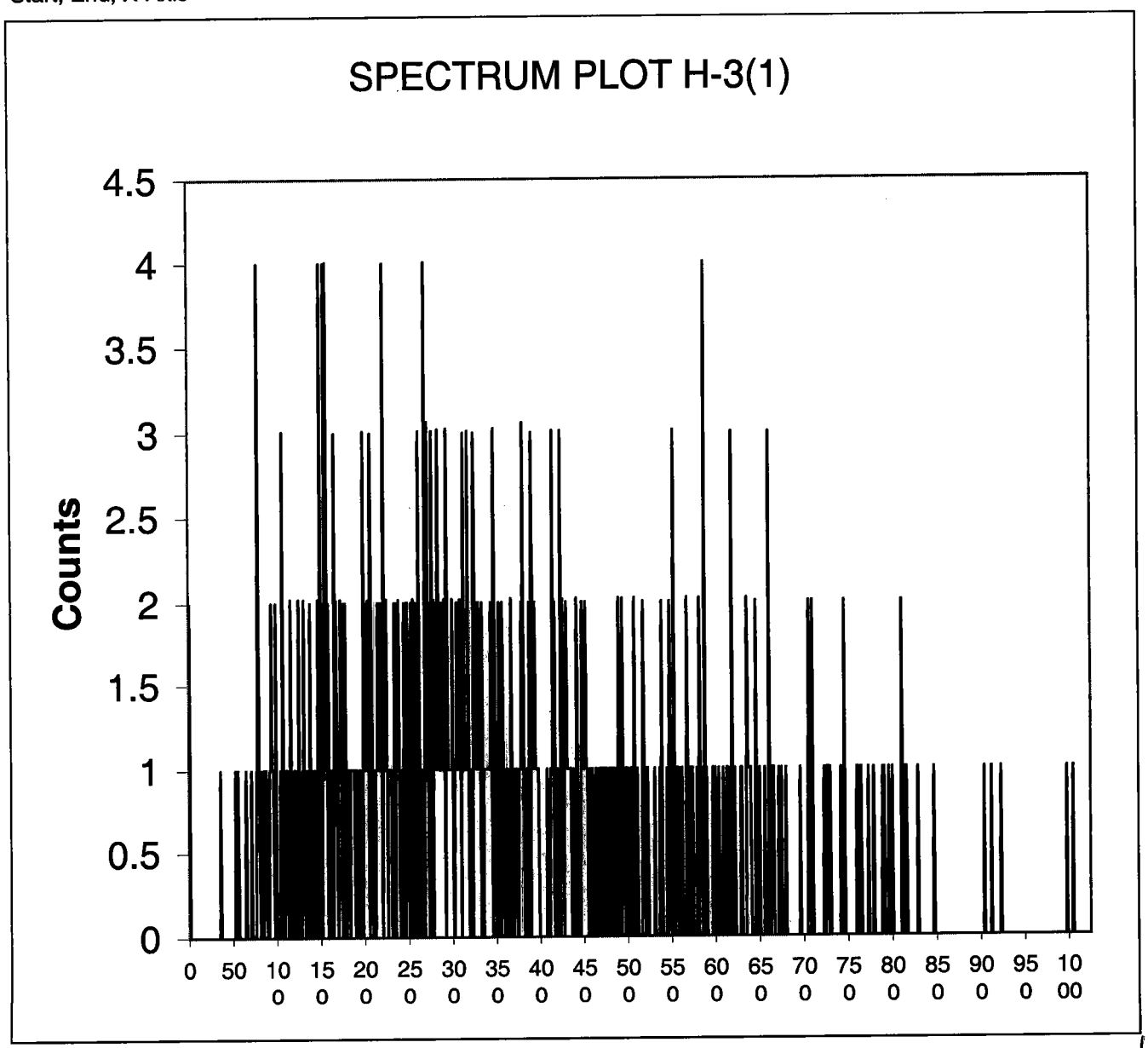


34	0
35	0

MD 7/7/05

JSG 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ022201N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	2, 138259002, 90.02962:
Quench:	772.84
Start, End, X-Axis	1-300

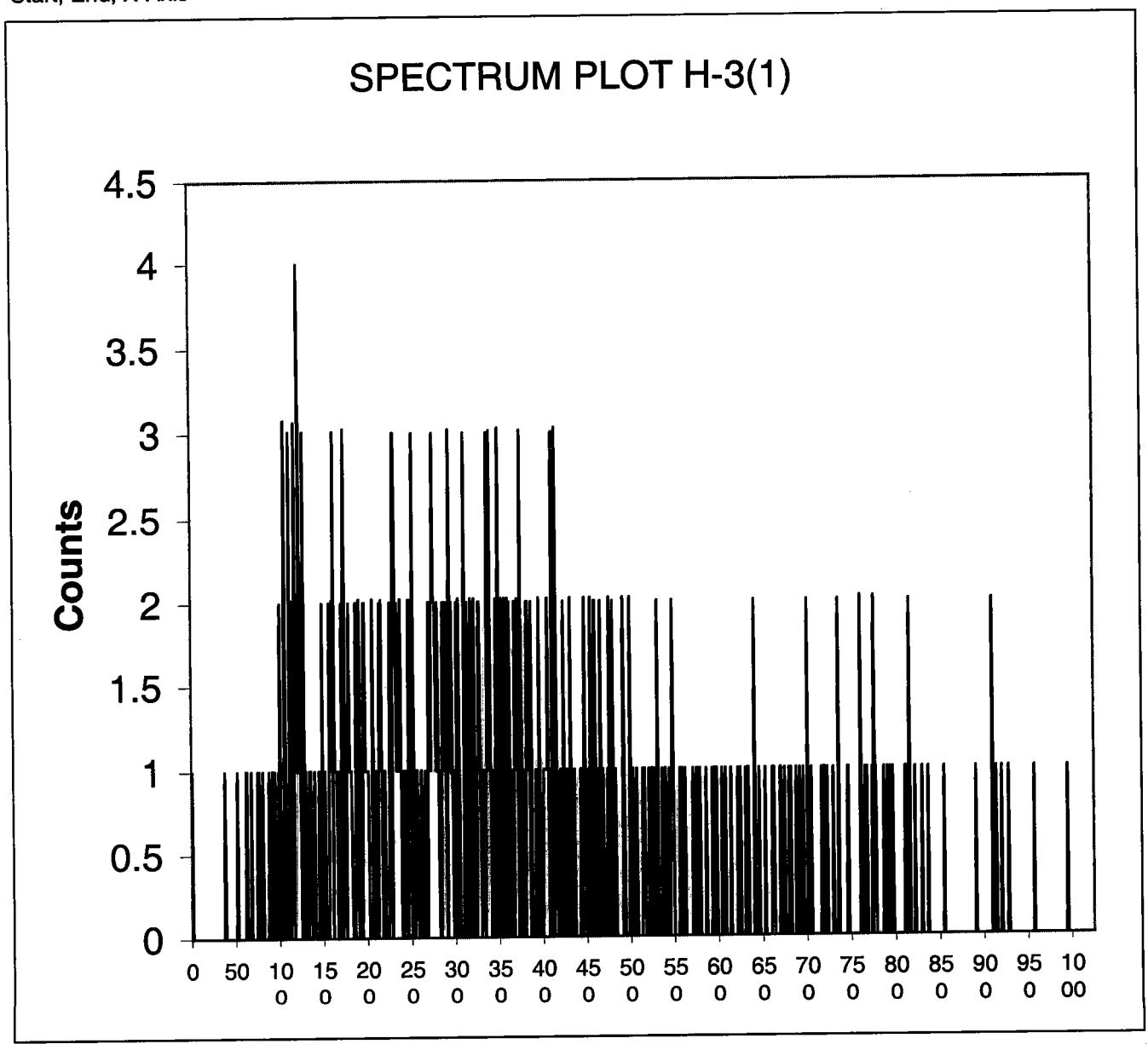


34	0
35	0

7/7/05

JEP 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ032301N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	3, 138369001, 90.02962:
Quench:	772.67
Start, End, X-Axis	1-300

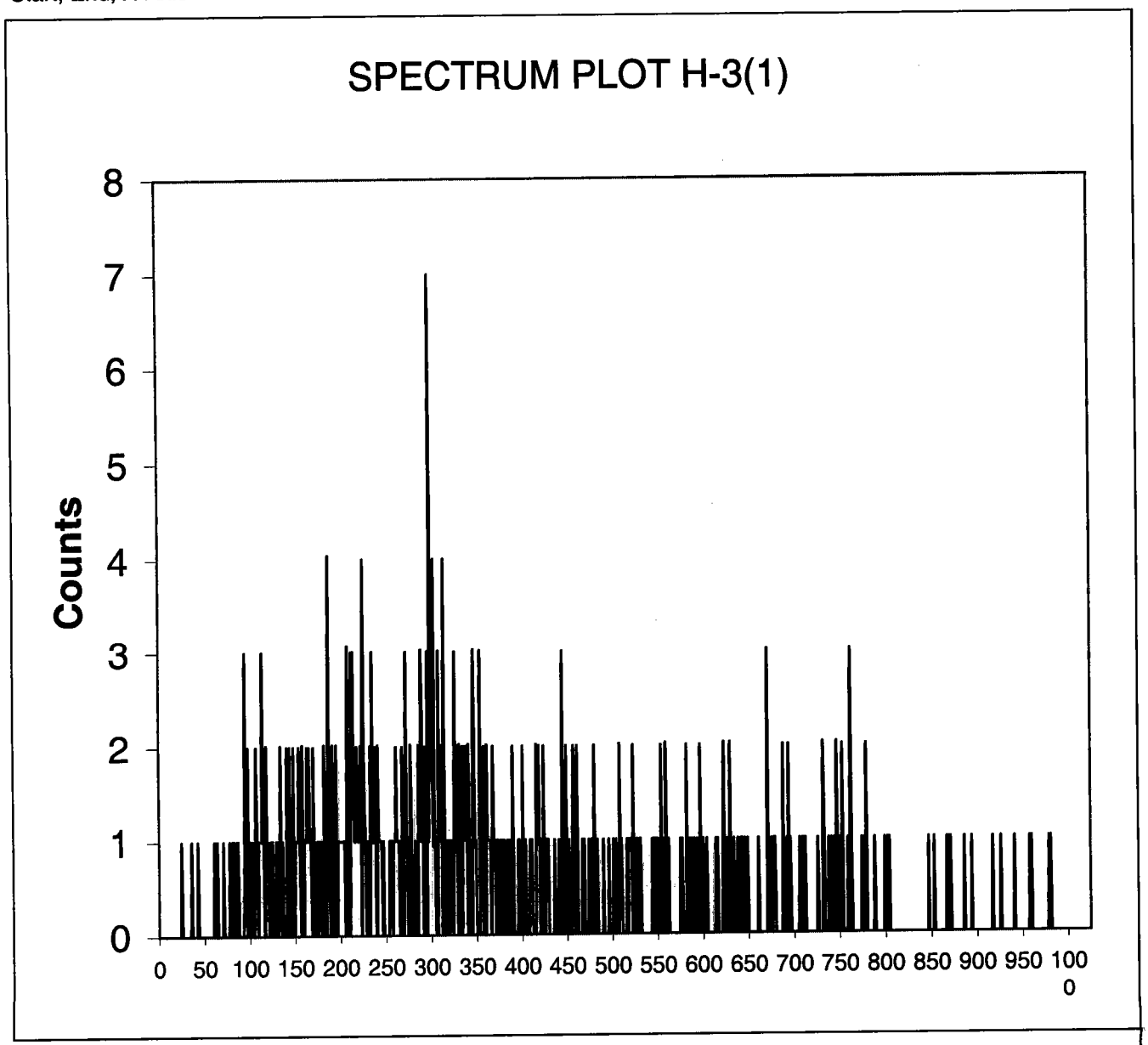


34	0
35	0

7/7/05

JKS 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ042401N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	4, 138533001, 90.01295:
Quench:	779.06
Start, End, X-Axis	1-300

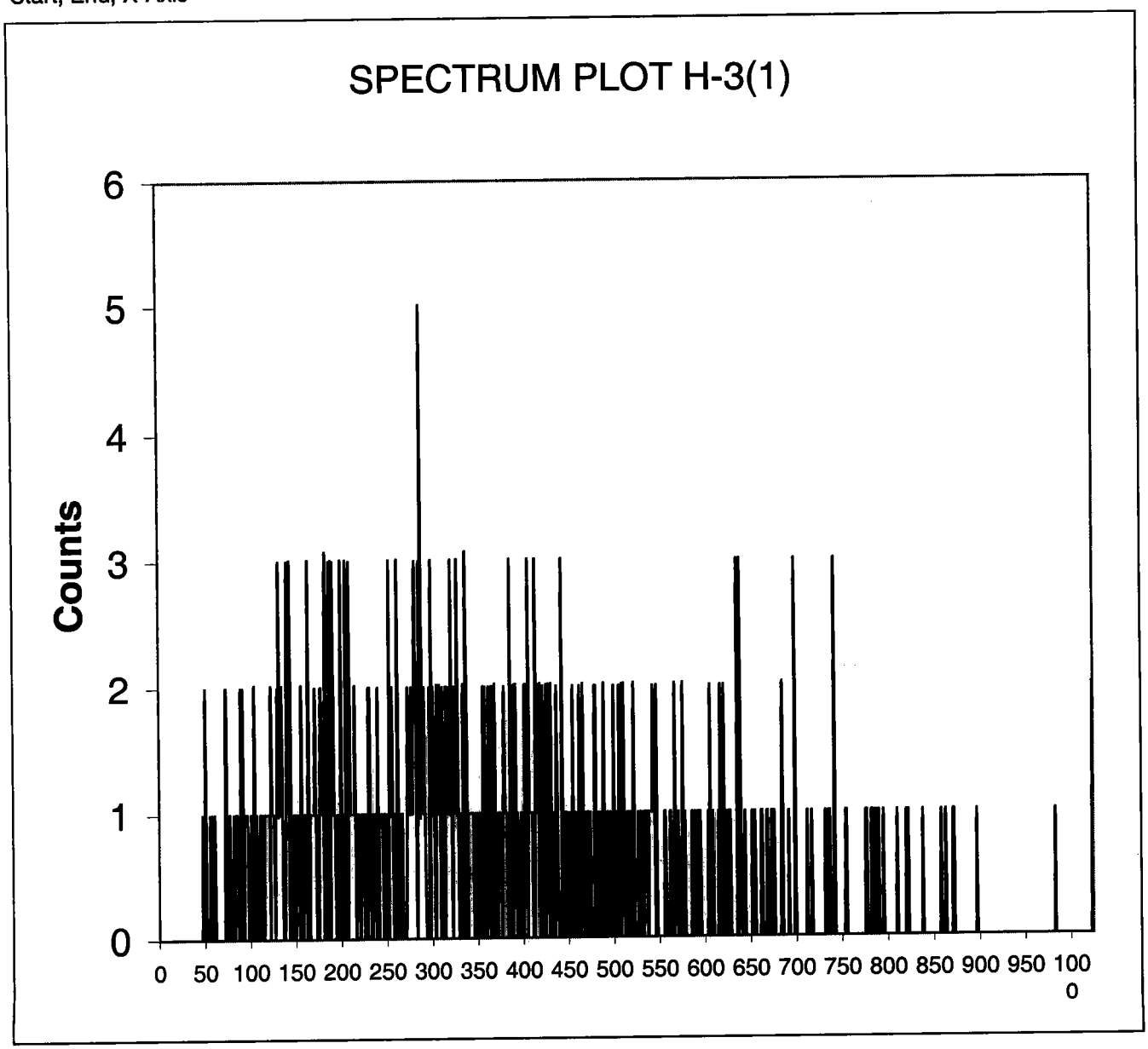


34	0
35	0

7/7/05

SEP 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ052501N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	5, 138788004, 90.02962:
Quench:	785.71
Start, End, X-Axis	1-300

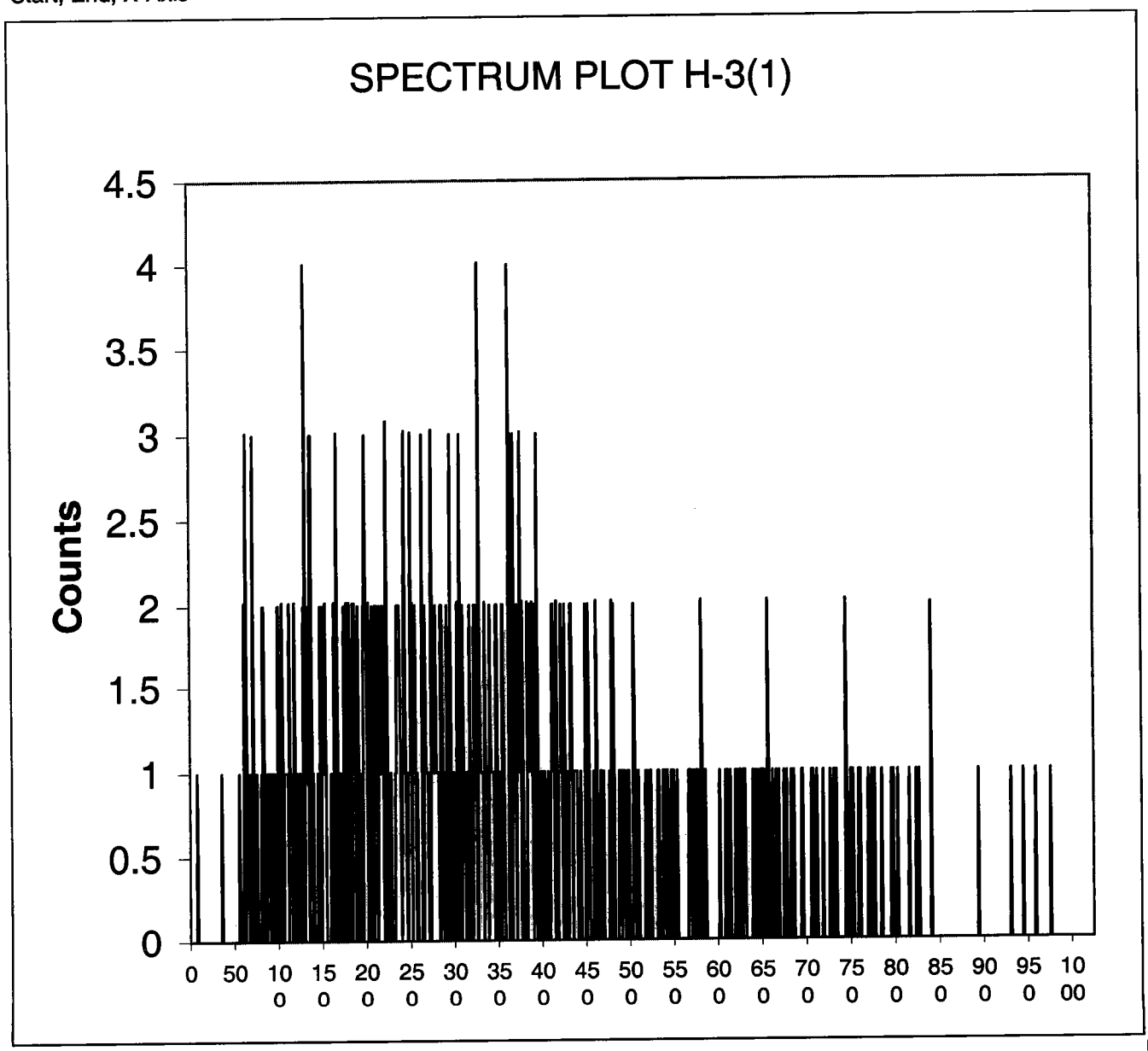


34	0
35	0

7/7/05

7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ062601N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	6, 138799002, 90.02962:
Quench:	776.46
Start, End, X-Axis	1-300

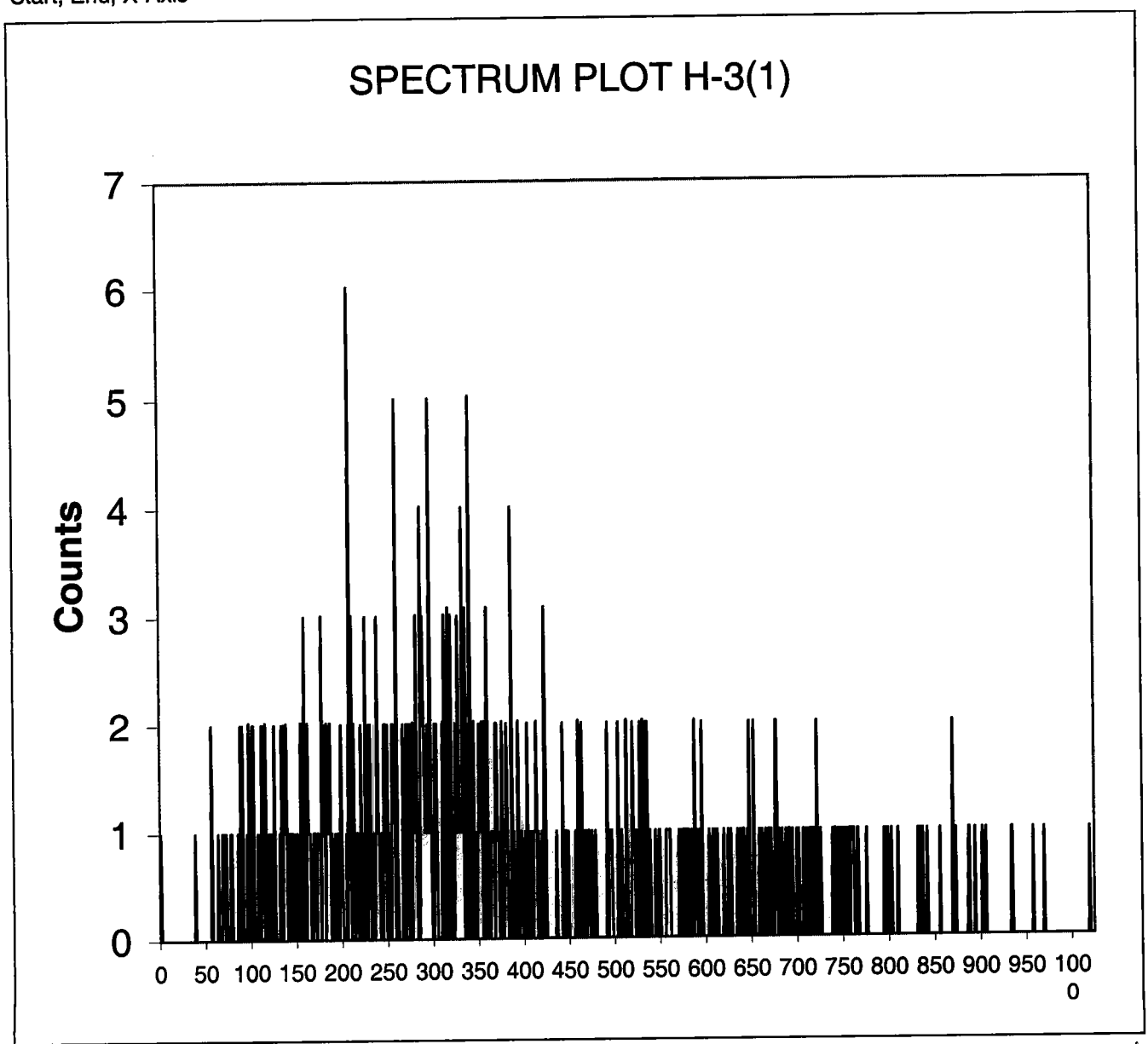


34	0
35	0

7/7/05

JES 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ072701N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	7, 138800003, 90.02962:
Quench:	775.86
Start, End, X-Axis	1-300

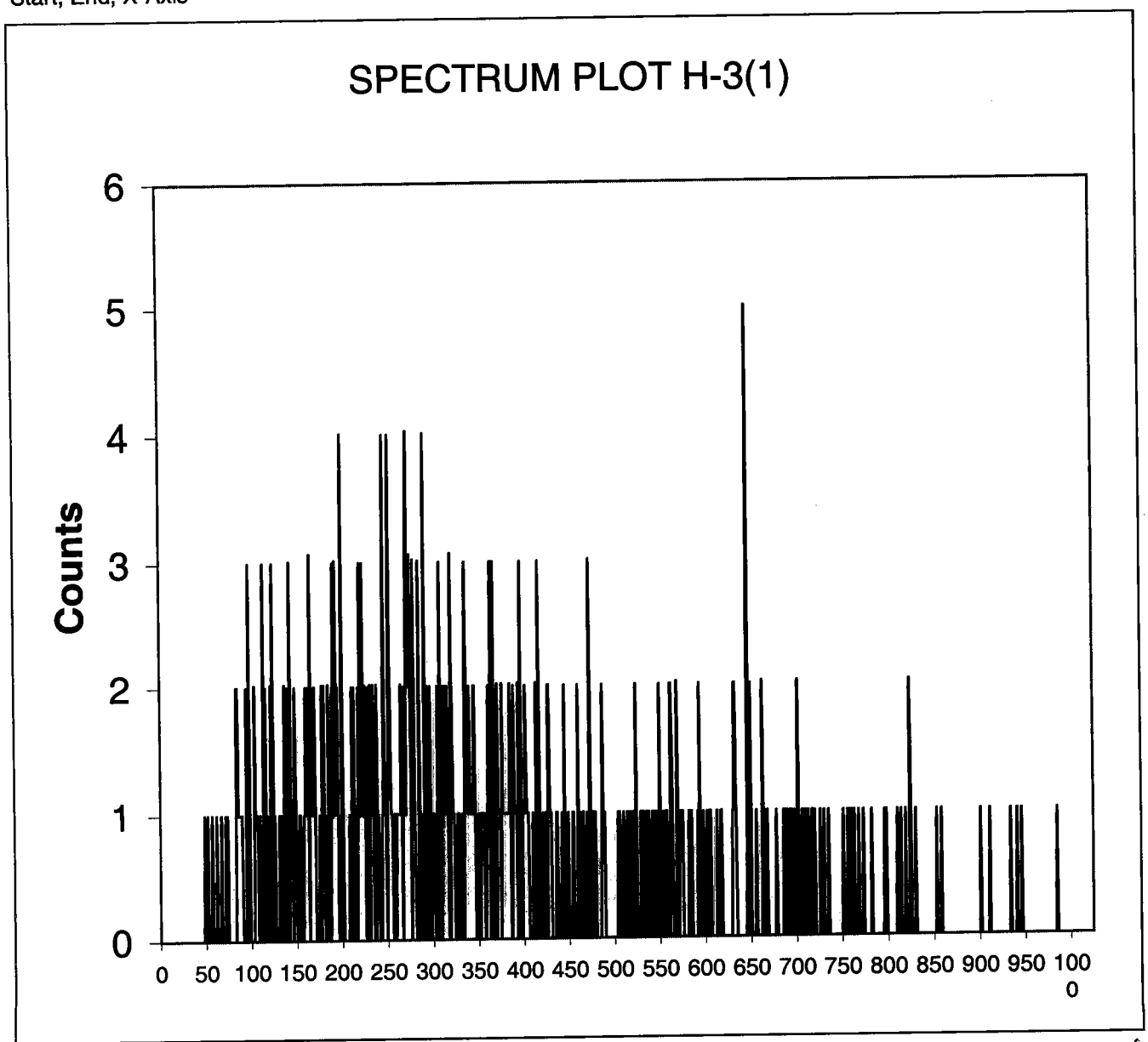


34	0
35	0

7/7/05

7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ082801N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	8, 138800004, 90.02962:
Quench:	783.29
Start, End, X-Axis	1-300

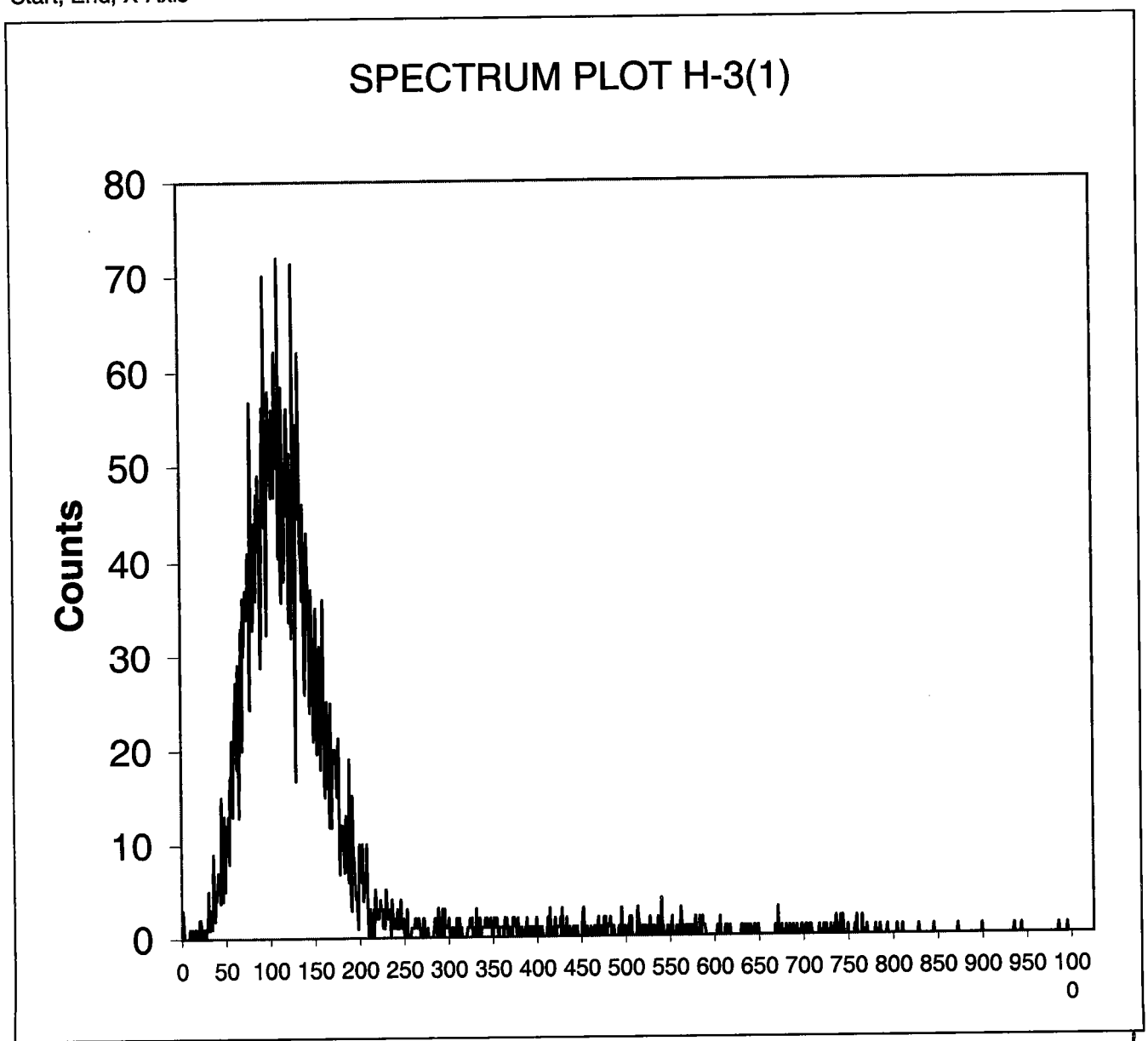


34 0
35 0

No 7/7/05

dts 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ092901N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	9, 138851003, 90.02962:
Quench:	781.25
Start, End, X-Axis	1-300

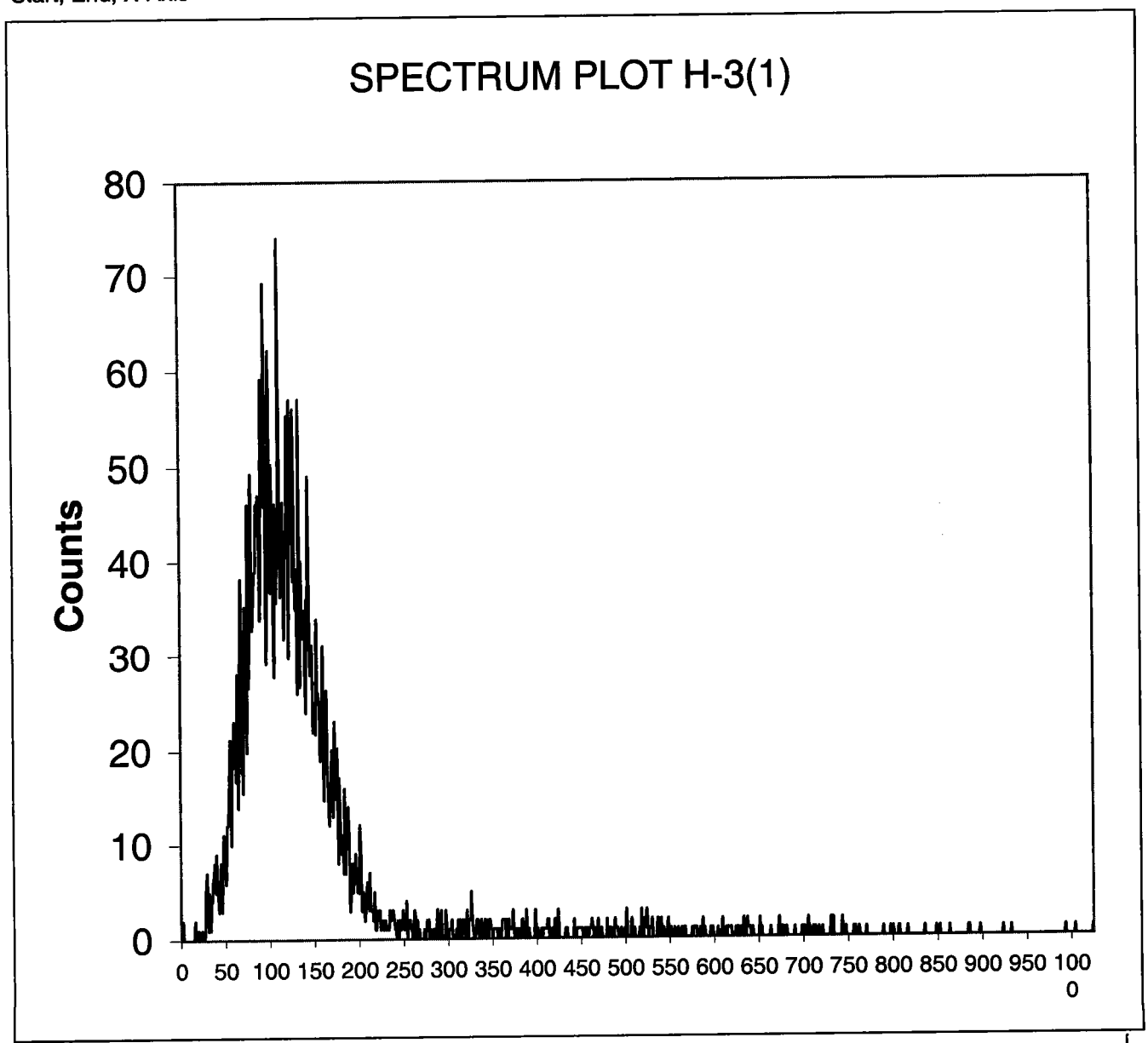


34 1
35 4

7/7/05

JEP 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ103001N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	10, 138851004, 90.02962:
Quench:	782.04
Start, End, X-Axis	1-300

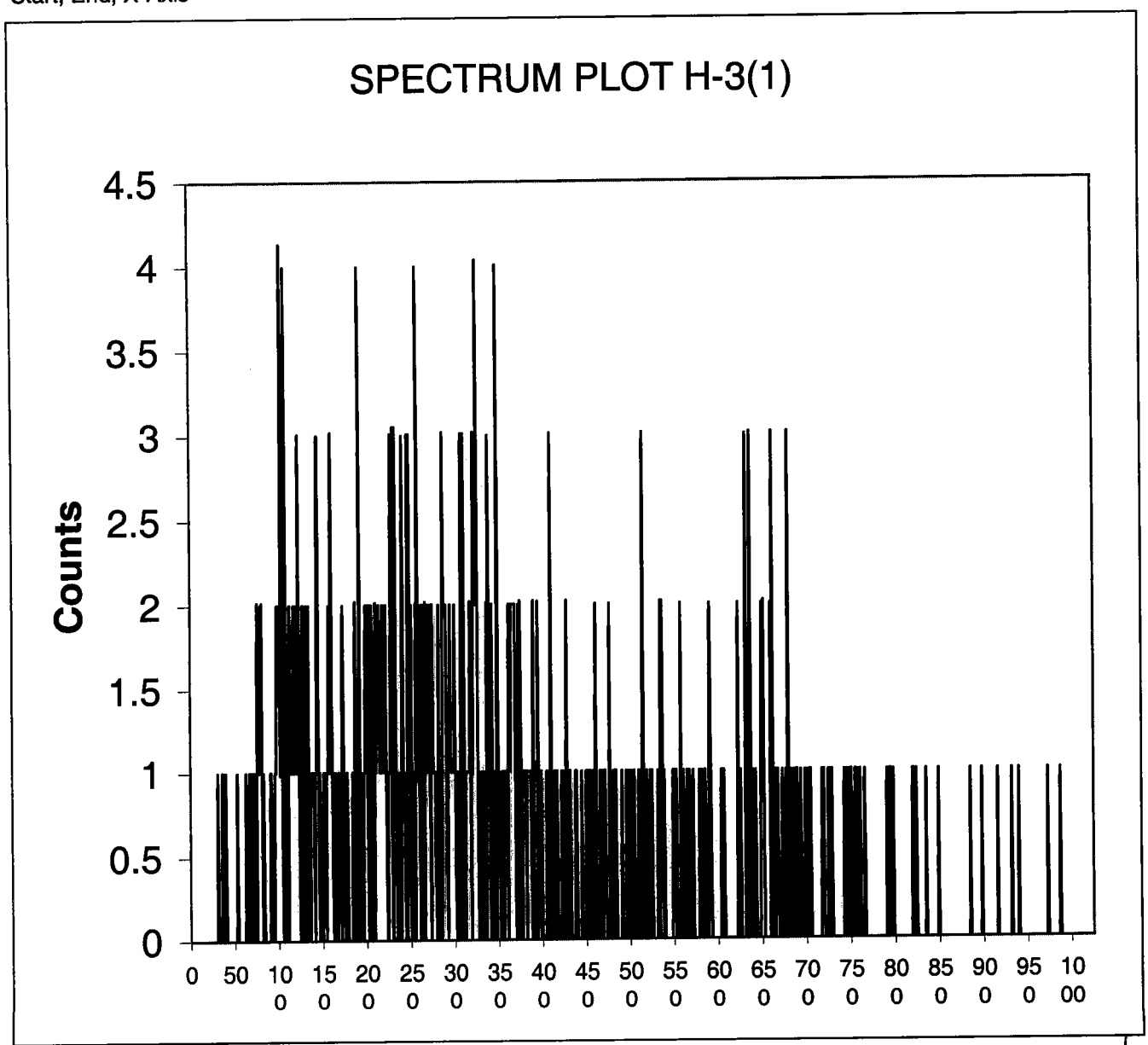


34	4
35	4

7/7/05

7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ113101N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	11, 138905005, 90.0296:
Quench:	772.13
Start, End, X-Axis	1-300

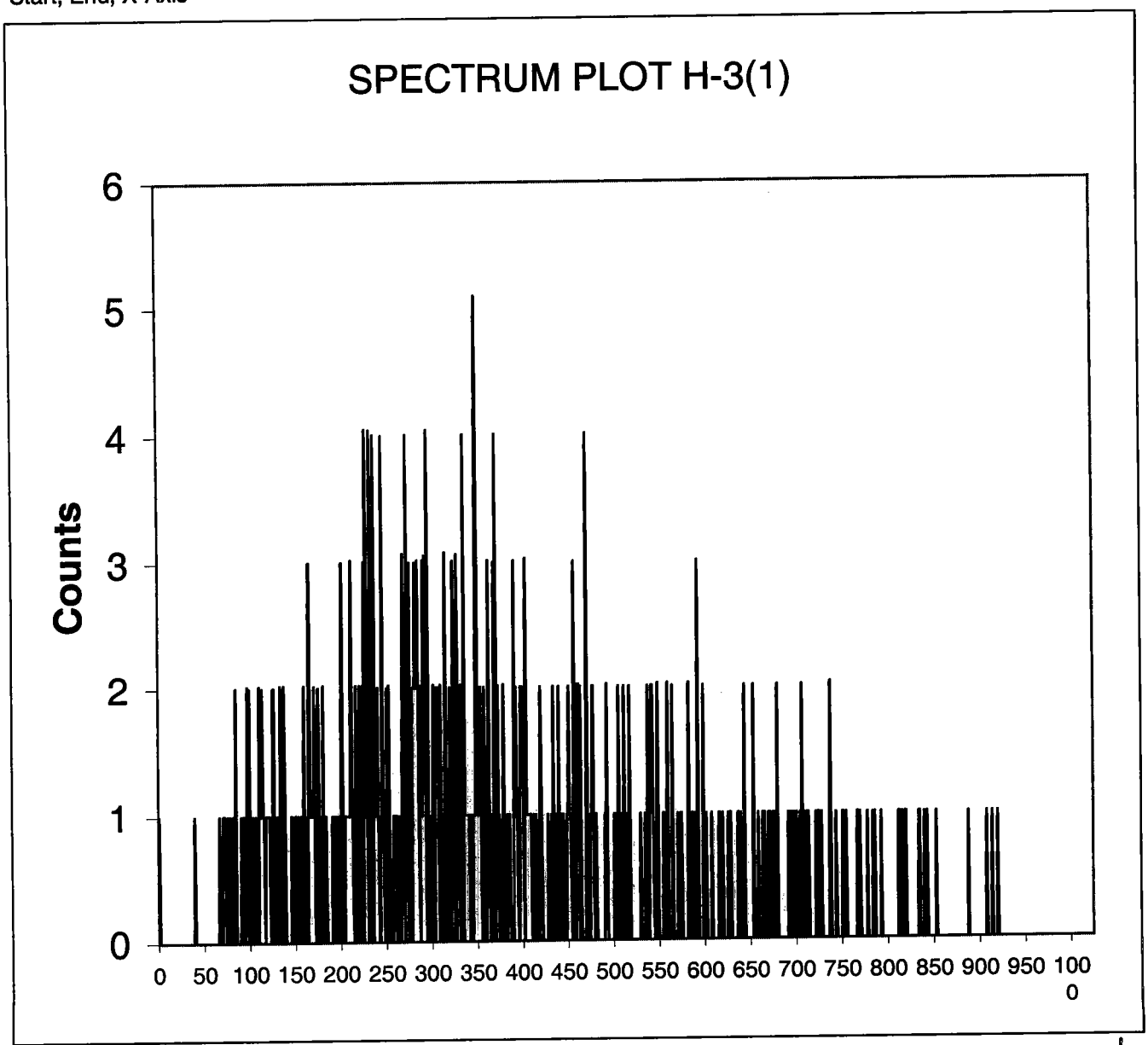


34	0
35	0

MD 7/7/05

DBP 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ123201N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	12, 1200870537, 90.0296:
Quench:	782.8
Start, End, X-Axis	1-300

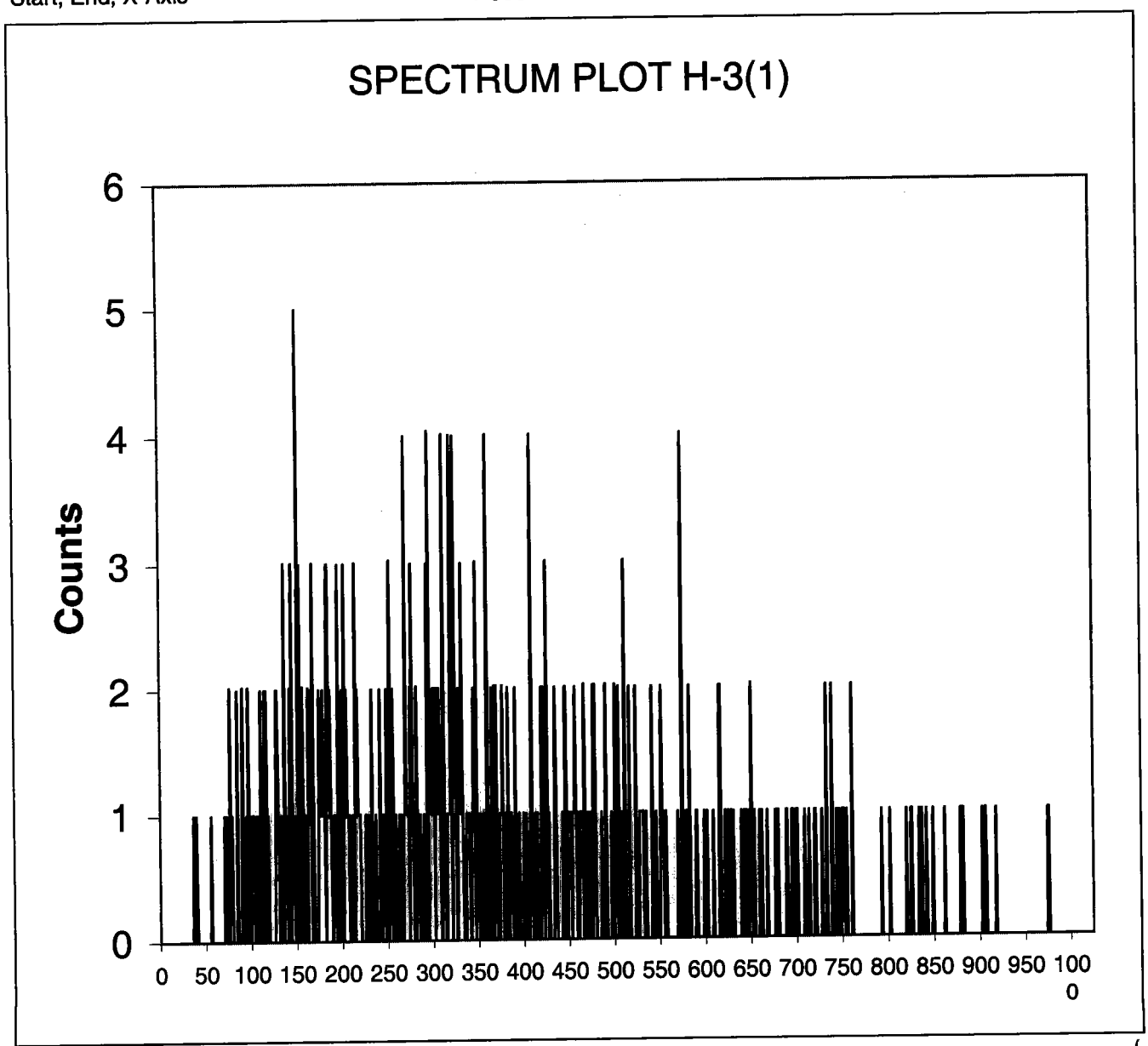


34	0
35	0

mo 7/7/05

JCS 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ133301N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	13, 1200870538, 90.0296:
Quench:	776.18
Start, End, X-Axis	1-300

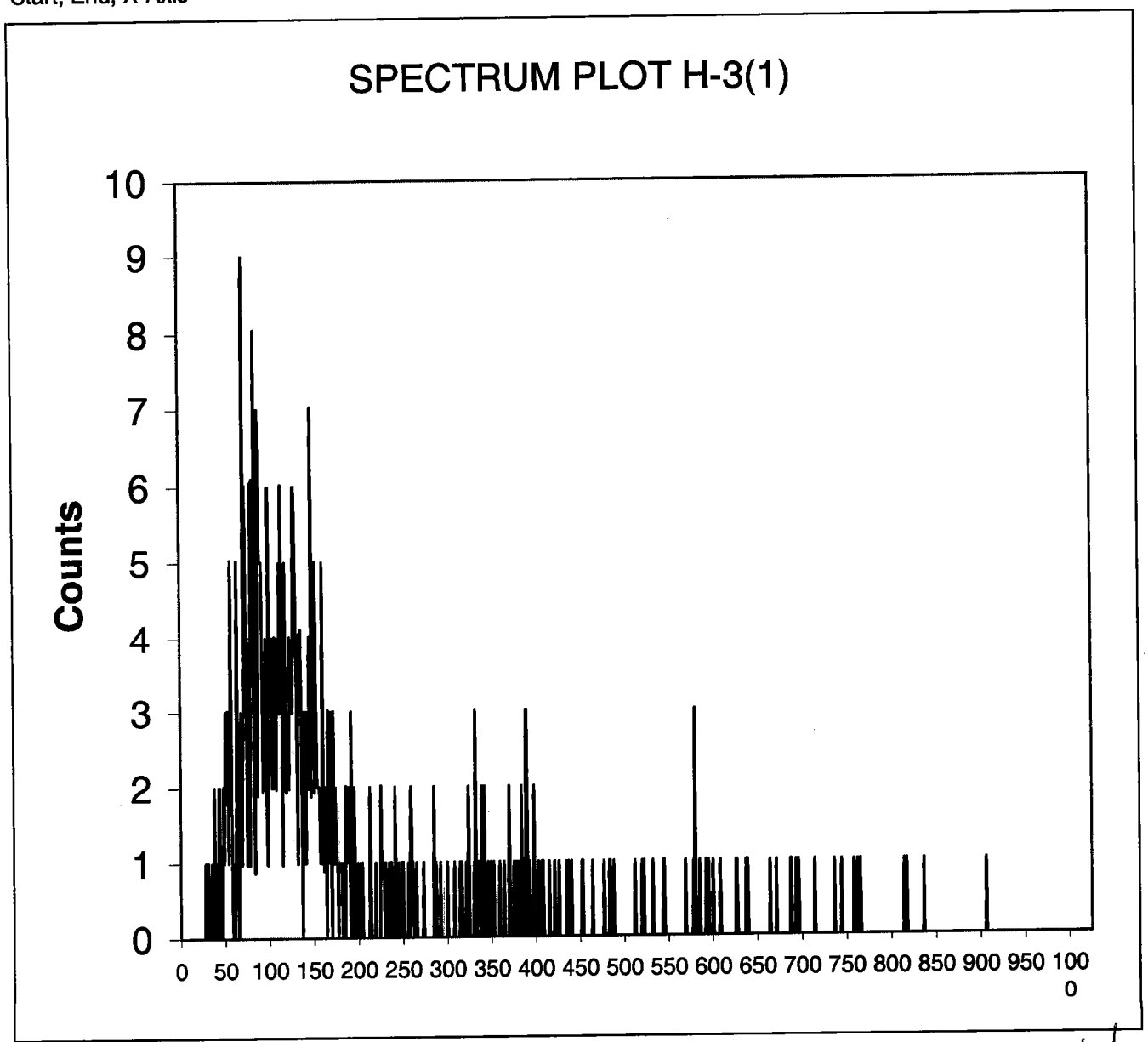


34	0
35	0

7/7/05

JEB 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ143401N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	14, 1200870539, 30.0296:
Quench:	777.26
Start, End, X-Axis	1-300

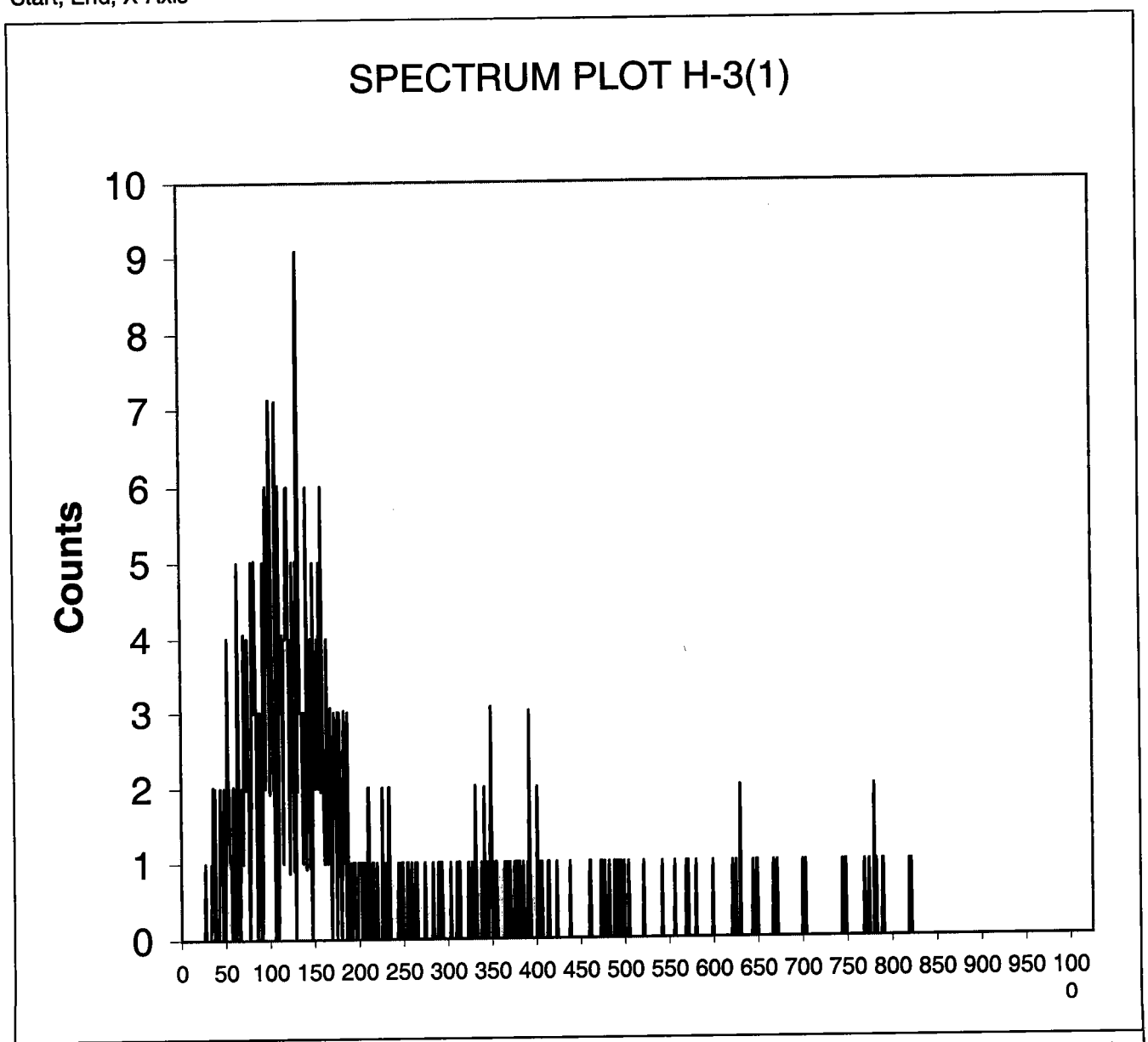


34	0
35	1

7/7/05

JGL 7/7/05

Instrument Type:	Quantulus
Data Capture Date:	WED 6 JUL 2005 11:10
FileName:	s:\lsc\files\pink\435237\SQ153501N.001.xls
File Info:	s:\lsc\files\pink\435237\U435237.xls
ID:	H-3(1)
Comments:	PINK
Sample, Rack-Pos, Time:	15, 1200870540, 30.0296:
Quench:	784.73
Start, End, X-Axis	1-300



34	1
35	1

7/7/05

JKL 7/7/05

Radiochemistry Batch Checklist for LSC, Rev 3

Batch# 435379 Product: Tc-99 Date: 7/5/05

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* RDL, error is 100% or less of sample activity. If greater 10* RDL, error is 20% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		Case narrative
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories
10/31/00

Primary Review Performed By: [signature] 7/5/05

Secondary Review Performed By: [signature] 7/6/05

7/2 - 9
ESH&C

Tc-99 Que Sheet

06/27/2005

Batch #: 435379 **Analyst:BXD1** **Minimum DueDate:** 07/02/2005 **Comments**

Spike Isotope: Technetium-99 **Spike Code:** 0718B **Expiration Date:** 2/4/06 **Vol:** 0.1

LCS Isotope: Technetium-99 **LCS Code:** 0718B **Expiration Date:** 2/4/06 **Vol:** 0.1

Tracer Isotope: Technetium-99m Tracer Code: TC 0641A **Reference Date:** 6/27/05 **Expiration Date:** 6/28/05 **Vol:** 1.0

Prep Date: 6/27/05 **Initials:** BXD **Pipet ID:** 1429303 **Balance ID:** 51204863 **Witness:** Jmb 6/27/05

Sample I	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label	Sample Mass (g/mL)	LSC Rack #
138259002	GU05060G34R01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	07-JUN-05 01:37 PM	1	300	6-2
138259003	GU05060G34R01-FB	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	07-JUN-05 01:37 PM	2	300	6-3
138436004	GU05050GMC501	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	09-JUN-05 08:00 AM	3	300	6-4
138851003	GU05050GMC601	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	15-JUN-05 09:07 AM	4	300	6-5
* ~~138851004~~	~~GU05050GMC690~~	~~SAMPLE~~		~~5 pCi/L~~	~~GROUND WATER~~	~~ESHL001~~	~~15-JUN-05 09:07 AM~~	~~5~~	~~300~~	~~mel~~
1200870805	MB for batch 435379	MB		5 pCi/L	GROUND WATER	QC ACCOUNT		6	1000	6-7
1200870806	GU05050GMC601(138851003DUP	DUP		5 pCi/L	GROUND WATER	QC ACCOUNT	15-JUN-05 09:07 AM	7	300	6-8
1200870807	GU05050GMC601(138851003MS)	MS		5 pCi/L	GROUND WATER	QC ACCOUNT	15-JUN-05 09:07 AM	8	150	6-9
1200870808	LCS for batch 435379	LCS		5 pCi/L	GROUND WATER	QC ACCOUNT		9	1000	6-10

1595

* SAMPLE REMOVED FROM BATCH DUE TO FAILING YIELD.

Comments:

Data Reviewed By: MA 7/5/05

Instrument Used: LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Green) 7067404 Wallac (Yellow) 4040127, Wallac (Pink) 2200082, LS6000 (Brown) 7060655, LS6500 (Gold) 7070506, Wallac (White) 4140299

MA 7/6/05

General Engineering Laboratories, Radiochemistry Division

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200870806	DUP	Technetium-99	0.300 L	9.91	1.36	4.18	3.76666667	pCi/L	YES
1200870808	LCS	Technetium-99	1.00 L	106	1.91	1.77	1.13	pCi/L	NO
1200870805	MB	Technetium-99	1.00 L	1.13	0.382	1.24	1.13	pCi/L	YES
1200870807	MS	Technetium-99	0.150 L	709	12.9	14.0	7.53333333	pCi/L	NO
138259002	GU05060G34R01	Technetium-99	0.300 L	5.24	1.29	4.14	3.76666667	pCi/L	YES
138259003	GU05060G34R01 -FB	Technetium-99	0.300 L	3.00	1.25	4.06	3.76666667	pCi/L	YES
138436004	GU05050GMC501	Technetium-99	0.300 L	4.72	1.32	4.26	3.76666667	pCi/L	YES
138851003	GU05050GMC601	Technetium-99	0.300 L	7.86	1.33	4.18	3.76666667	pCi/L	YES

MD 7/6/05

MD 7/5/05

Tc-99 Water

Filename : TC99.XLS
File type : Excel
Version # : 1

Batch : 435379
Analyst : BXD1
Prep Date : 06/27/05
Tc-99 Abundance : 1
Calibration Date : 06/20/05
Calibration Due Date : 06/20/06
Geometry:
5ml DI/10ml ultima gold

Spike S/N :	0718-B
Spike Exp Date :	02/04/06
Spike Activity (dpm/ml):	2624.66
Spike Volume Added:	0.1
LCS S/N :	0718-B
LCS Exp Date :	02/04/06
LCS Activity (dpm/ml):	2624.66
LCS Volume Added:	0.1
Tracer S/N :	TC0641A
Tracer Exp Date :	06/28/05
Tracer Volume Added:	1.0

Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1 ml Stdev : +/-	0.005480	ml
Procedure Code :	LSC99TCL	
Parmname :	Technetium-99	
Required MDC:	5	pCi/L
Halflife of Tc-99 :	213000	years
Batch counted on :	LSCBLUE	
Detector Effiency Error :	0.00792	
BKG Count time :	60	min

Sample Characteristics				Tracer Calculations					
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Tracer Concentration (Tc-99 Ref.)	Tracer Ref. Count Uncertainty	Tracer Concentration (Tc-99 Samp.)	Tracer Samp. Count Uncertainty	Tracer Aliquot (mL)	Tracer Aliquot StDev.
138259002	0.300	1.8459E-05	06/07/05 13:37	150489	0.76%	160305	0.80%	1.0	0.005480
138259003	0.300	1.8459E-05	06/07/05 13:37	150489	0.76%	162606	0.79%	1.0	0.005480
138436004	0.300	1.8459E-05	06/09/05 8:00	150489	0.76%	158597	0.80%	1.0	0.005480
138851003	0.300	1.8459E-05	06/15/05 9:07	150489	0.76%	158089	0.80%	1.0	0.005480
1200870805	1.000	2.0399E-05	06/27/05 0:00	150489	0.76%	160203	0.80%	1.0	0.005480
1200870806	0.300	1.8459E-05	06/15/05 9:07	150489	0.76%	158096	0.80%	1.0	0.005480
1200870807	0.150	1.4035E-05	06/15/05 9:07	150489	0.76%	107549	0.84%	1.0	0.005480
1200870808	1.000	2.0399E-05	06/27/05 0:00	150489	0.76%	159526	0.80%	1.0	0.005480

1597

MA 7/5/05 JW 7/6/05

Count raw Data

Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time	Sample Decay	Sample Recovery %	Sample Recovery Error %
6-2	60	136.6	21.03	0.8771	0.00792	17.77	60	07/04/05 23:31	1.000	106.52%	0.95%
6-3	60	119.7	19.67	0.8815	0.00792	17.77	60	07/05/05 0:34	1.000	108.05%	0.95%
6-4	60	156.1	20.62	0.8611	0.00792	17.77	60	07/05/05 1:36	1.000	105.39%	0.95%
6-5	60	123.8	22.62	0.8814	0.00792	17.77	60	07/05/05 2:39	1.000	105.05%	0.95%
6-7	60	123.4	20.12	0.8814	0.00792	17.77	60	07/05/05 3:42	1.000	106.46%	0.95%
6-8	60	126.1	23.88	0.8810	0.00792	17.77	60	07/05/05 4:44	1.000	105.06%	0.95%
6-9	46.55	121.1	166.62	0.8816	0.00792	17.77	60	07/05/05 5:46	1.000	71.47%	0.96%
6-10	30	126.7	238.07	0.8809	0.00792	17.77	60	07/05/05 6:35	1.000	106.01%	0.95%

1598

mm 7/5/05

Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
2.8817	2.0345	4.1415	**5.2387**	0.2470	3.2600	0.8042	1.2923	1.2939		SAMPLE				
2.8268	1.9957	4.0626	**2.9951**	0.4159	1.9000	0.7899	1.2452	1.2458		SAMPLE				
2.9671	2.0948	4.2643	**4.7156**	0.2809	2.8500	0.7999	1.3235	1.3248		SAMPLE				
2.9080	2.0531	4.1793	**7.8650**	0.1696	4.8500	0.8205	1.3305	1.3341		SAMPLE				
0.8609	0.6078	1.2372	**1.1281**	0.3384	2.3500	0.7947	0.3815	0.3817		MB				
2.9090	2.0538	4.1808	**9.9117**	0.1369	6.1100	0.8332	1.3516	1.3571	138851003	DUP	23.0%	0.3803		
9.7041	6.8512	13.9794	**709.4947**	0.0182	148.8500	1.9686	9.3835	12.8846	138851003	MS			788.19	89.0%
1.2233	0.8637	1.7708	**106.2657**	0.0180	220.3000	2.8691	1.3840	1.9094		LCS			118.23	89.9%

1599

MA 7/5/16

1480, RiaCalc WIZ, program 3.6, serial #4800440

ASSAY 28-Jun-05 8:21:12

Protocol	id	12	TC99_REC
Time	limit	300	
Count	limit	10000	
Isotope	Tc-99m		
Protocol	date	15-Jun-04	6:53:27
Run	id.	73	

POS	RACK	BATCH	TIME	COUNTS	CPM	ERROR	% RECOVI
1	69	1	7	17249	150488.5	0.76	
2	69	2	6	15722	160304.5	0.8	106.52
3	69	3	6	15936	162605.9	0.79	108.05
4	69	4	6	15540	158597.1	0.8	105.39
5	69	5	6	15483	158089	0.8	105.05
~~6~~	~~96~~	~~6~~	~~13~~	~~12446~~	~~58032.8~~	~~0.9~~	~~38.56~~ multiplier
7	96	7	6	15660	160203	0.8	106.46
8	96	8	6	15447	158096.2	0.8	105.06
9	96	9	8	14087	107549.4	0.84	71.47
10	96	10	6	15567	159526.3	0.8	106.01

END OF ASSAY

END OF COUNTING

MA 7/6/05

MA 7/6/05

ID: TC-99 4 JUL 2005 22:27

USER: 9 COMMENT:BLUE

PRESET TIME :	60.00						
DATA CALC :	CPM	H# :YES	SAMPLE REPEATS:	1	PRINTER	:EDIT
COUNT BLANK :	NO	IC# : NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AQC : NO	CYCLE REPEATS :	1	DISK	:EDIT
SCINTILLATOR:	LIQUID	LUMEX:YES	LOW SAMPLE REJ:	0	RWM LIST	: OFF
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:			none	

CHAN: 250.0 - 625.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

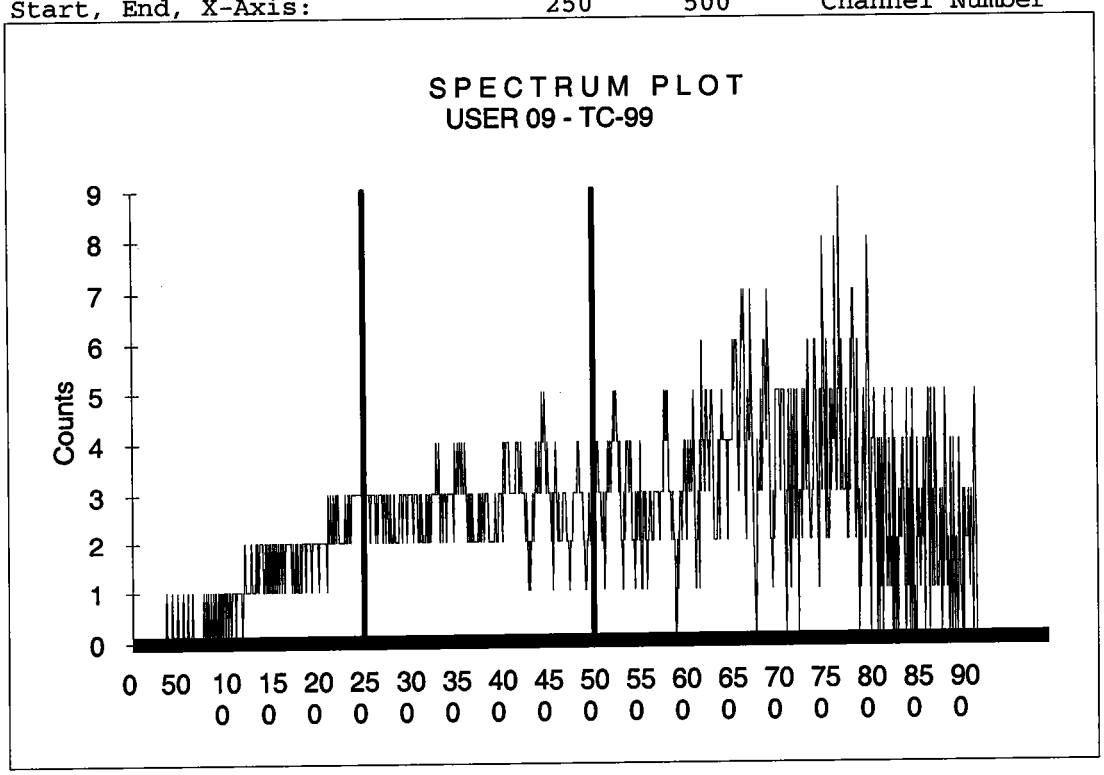
ALPHA-BETA DISCRIMINATION: NO

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	LUMEX %	ELAPSED TIME
1	6-1	60.00	128.7	17.77	6.13	37.37	4.25	1.01	61.92
2	6-2	60.00	136.6	21.03	5.63	41.30	4.04	1.11	124.51
3	6-3	60.00	119.7	19.67	5.82	39.40	4.14	1.08	187.09
4	6-4	60.00	156.1	20.62	5.69	38.80	4.18	1.60	249.76
5	6-5	60.00	123.8	22.62	5.43	44.27	3.90	1.06	312.35
MISSING SAMPLE									
7	6-7	60.00	123.4	20.12	5.76	39.48	4.13	0.99	374.94
8	6-8	60.00	126.1	23.88	5.28	45.10	3.86	0.89	437.51
9	6-9	46.55	121.1	166.62	2.27	197.12	2.09	0.24	486.32
10	6-10	30.00	126.7	238.07	2.37	273.00	2.21	0.16	518.17

MA 7/6/05

MO 7/6/05

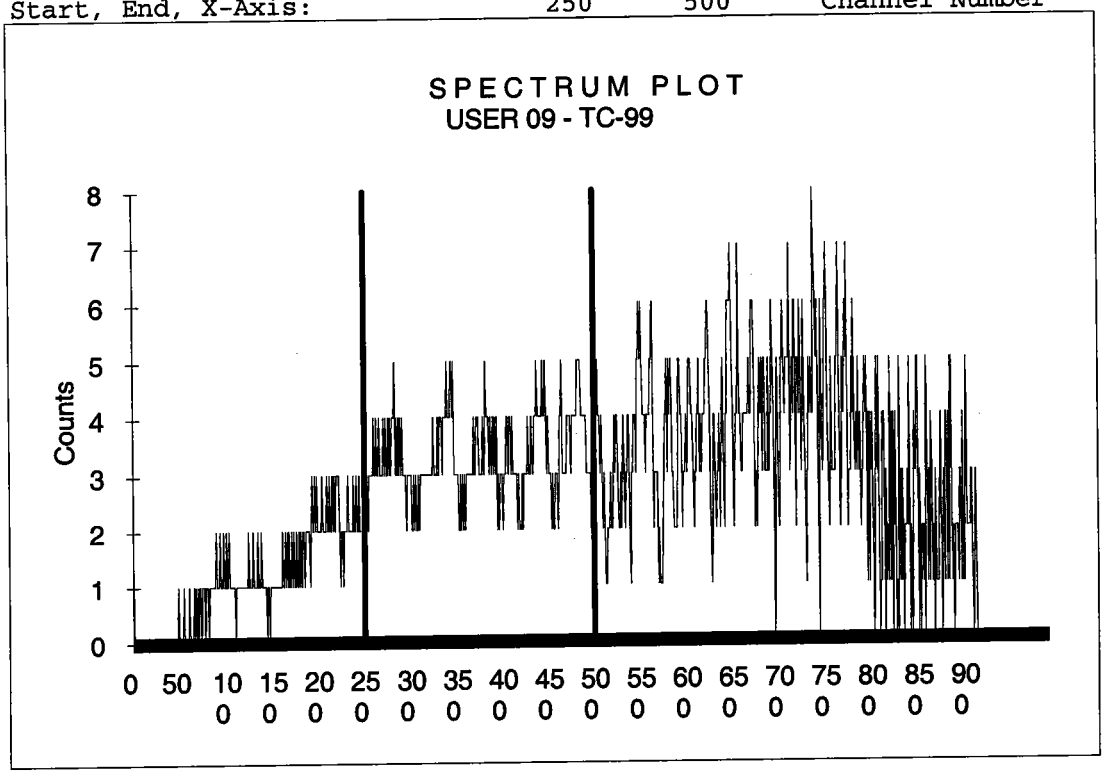
Instrument Type:	LS 6000			
Data Capture Date:	4 Jul 2005 23:29:02			
User Filename:	A:\USER09\S0970407.BSF			
File Info:	A:\USER09\U0970416.BSF			
USER#:	09			
User ID:	TC-99			
User Comments:	BLUE			
Scintillator:	LIQUID			
Sample, Rack-Pos, Time:	1	6-1	60	
H#, Total Counts:	128.7		0	
Start, End, X-Axis:	250	500	Channel Number	



VMA 7/6/05

KO 7/6/05

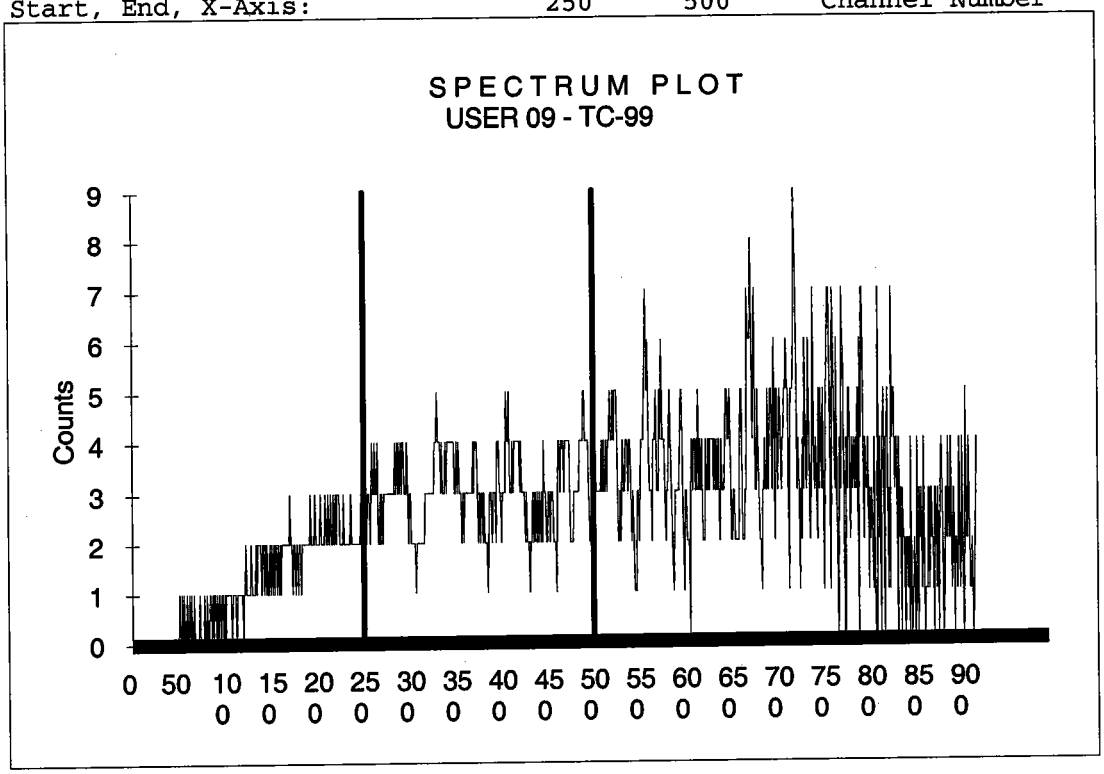
Instrument Type:	LS 6000			
Data Capture Date:	5 Jul 2005 00:31:38			
User Filename:	A:\USER09\S0970501.BSF			
File Info:	A:\USER09\U0970416.BSF			
USER#:	09			
User ID:	TC-99			
User Comments:	BLUE			
Scintillator:	LIQUID			
Sample, Rack-Pos, Time:	2	6-2	60	
H#, Total Counts:	136.6			0
Start, End, X-Axis:	250	500	Channel Number	



MA 7/6/05

JAO 7/6/05

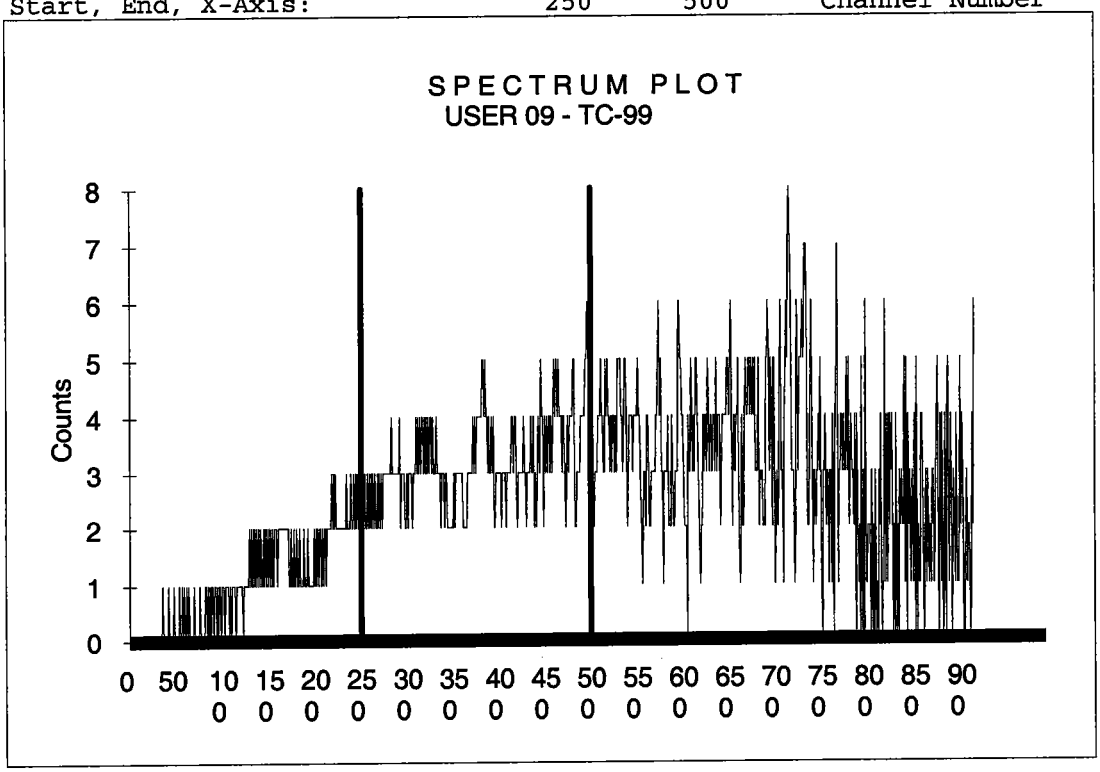
Instrument Type:	LS 6000			
Data Capture Date:	5 Jul 2005 01:34:13			
User Filename:	A:\USER09\S0970502.BSF			
File Info:	A:\USER09\U0970416.BSF			
USER#:	09			
User ID:	TC-99			
User Comments:	BLUE			
Scintillator:	LIQUID			
Sample, Rack-Pos, Time:	3	6-3	60	
H#, Total Counts:	119.7			0
Start, End, X-Axis:	250	500	Channel Number	



MA 7/6/05

no 7/6/05

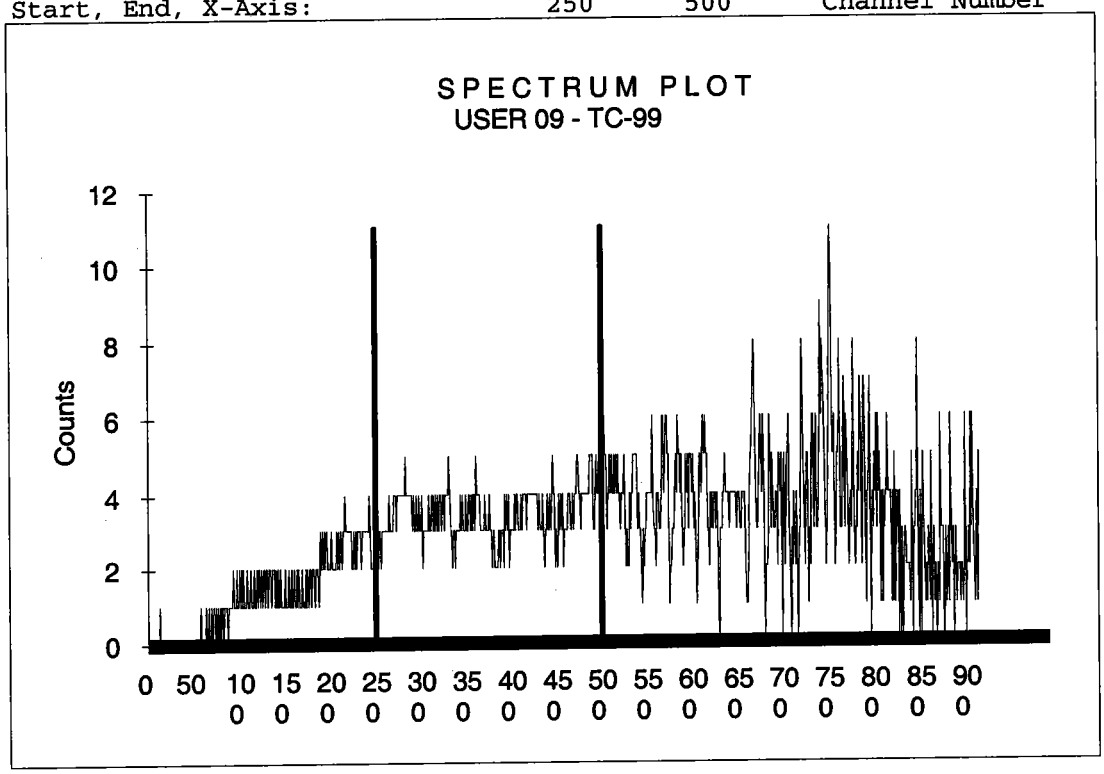
Instrument Type:	LS 6000
Data Capture Date:	5 Jul 2005 02:36:52
User Filename:	A:\USER09\S0970503.BSF
File Info:	A:\USER09\U0970416.BSF
USER#:	09
User ID:	TC-99
User Comments:	BLUE
Scintillator:	LIQUID
Sample, Rack-Pos, Time:	4 6-4 60
H#, Total Counts:	156.1 0
Start, End, X-Axis:	250 500 Channel Number



MA 7/6/05

JO 7/6/05

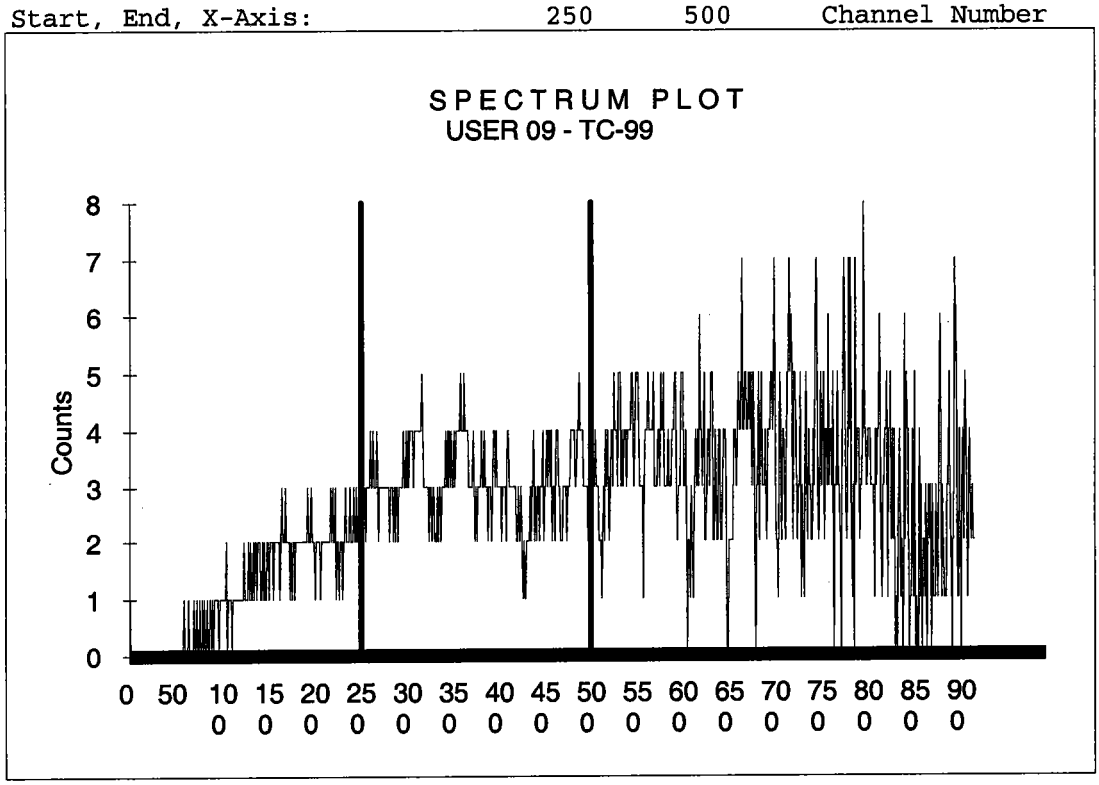
Instrument Type:	LS 6000
Data Capture Date:	5 Jul 2005 03:39:29
User Filename:	A:\USER09\S0970504.BSF
File Info:	A:\USER09\U0970416.BSF
USER#:	09
User ID:	TC-99
User Comments:	BLUE
Scintillator:	LIQUID
Sample, Rack-Pos, Time:	5 6-5 60
H#, Total Counts:	123.8 0
Start, End, X-Axis:	250 500 Channel Number



MA 7/6/05

JO 7/6/05

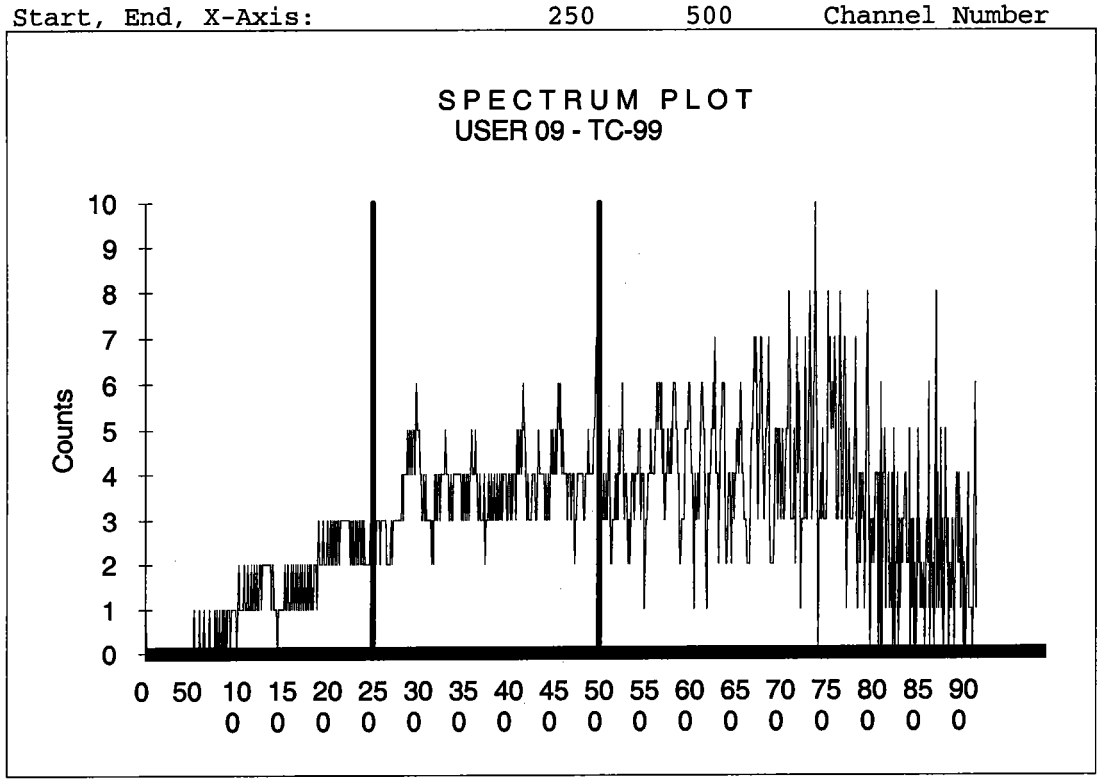
Instrument Type:	LS 6000
Data Capture Date:	5 Jul 2005 04:42:03
User Filename:	A:\USER09\S0970505.BSF
File Info:	A:\USER09\U0970416.BSF
USER#:	09
User ID:	TC-99
User Comments:	BLUE
Scintillator:	LIQUID
Sample, Rack-Pos, Time:	7 6-7 60
H#, Total Counts:	123.4 0
Start, End, X-Axis:	250 500 Channel Number



MA 7/6/05

MO 7/6/05

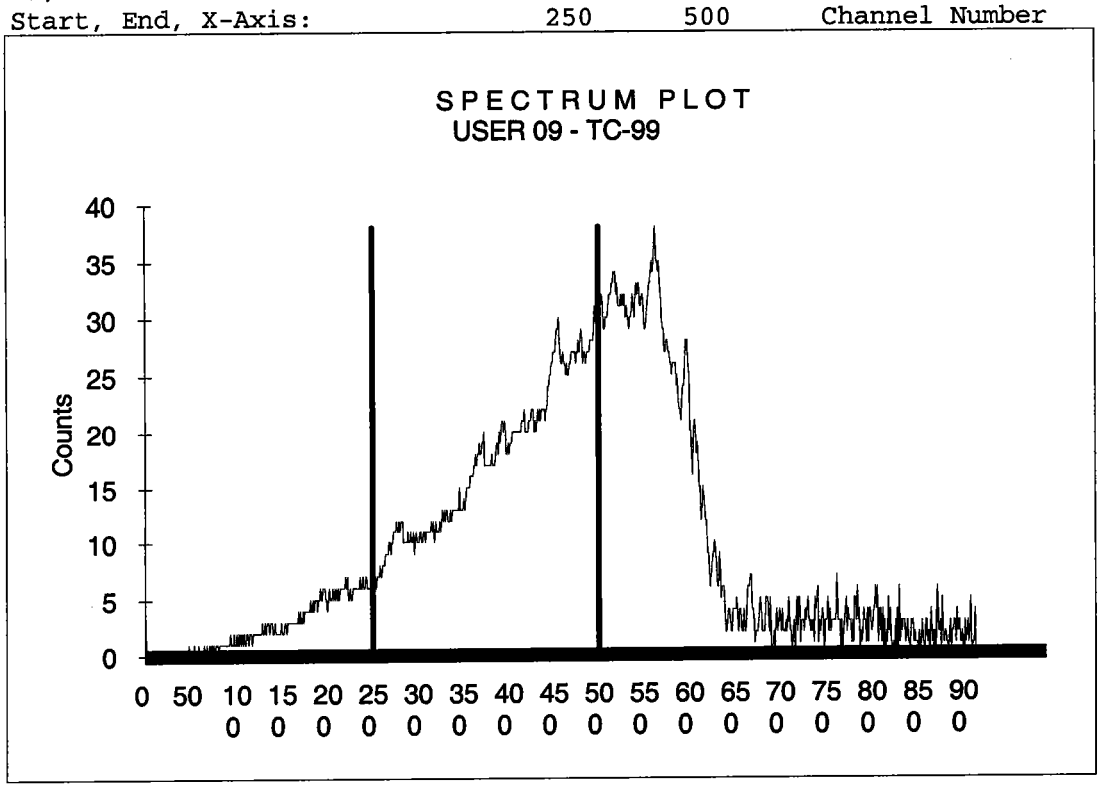
Instrument Type:	LS 6000			
Data Capture Date:	5 Jul 2005 05:44:38			
User Filename:	A:\USER09\S0970506.BSF			
File Info:	A:\USER09\U0970416.BSF			
USER#:	09			
User ID:	TC-99			
User Comments:	BLUE			
Scintillator:	LIQUID			
Sample, Rack-Pos, Time:	8	6-8	60	
H#, Total Counts:	126.1		0	
Start, End, X-Axis:	250	500	Channel Number	



MA 7/6/05

MA 7/6/05

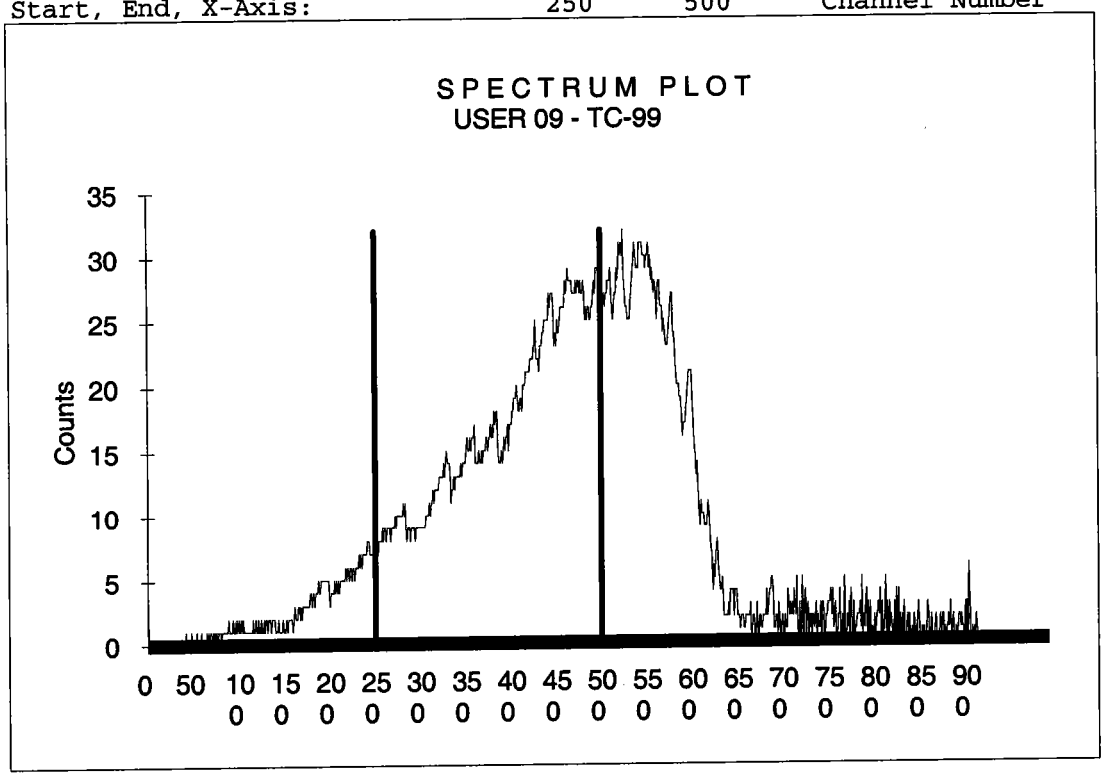
Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 06:33:26		
User Filename:	A:\USER09\S0970507.BSF		
File Info:	A:\USER09\U0970416.BSF		
USER#:	09		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	9	6-9	46.55
H#, Total Counts:	121.1		0
Start, End, X-Axis:	250	500	Channel Number



MA 7/6/05

JO 7/6/05

Instrument Type:	LS 6000			
Data Capture Date:	5 Jul 2005 07:05:18			
User Filename:	A:\USER09\S0970508.BSF			
File Info:	A:\USER09\U0970416.BSF			
USER#:	09			
User ID:	TC-99			
User Comments:	BLUE			
Scintillator:	LIQUID			
Sample, Rack-Pos, Time:	10	6-10	30	
H#, Total Counts:	126.7		0	
Start, End, X-Axis:	250	500	Channel Number	



MA 7/6/05

MO 7/6/05

Radiochemistry Batch Checklist for LSC, Rev 3

Batch# 4381360 Product: Tc-99 Date: 7/6/05

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* RDL, error is 100% or less of sample activity. If greater 10* RDL, error is 20% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories
10/31/00

Primary Review Performed By: Marie Quick 7/6/05

Secondary Review Performed By: KO 7/8/05

7/10-7/17
ESHL

Tc-99 Que Sheet

06/29/2005

Batch #: 438136 **Analyst:EGD1** **Minimum DueDate:** 07/10/2005 **Comments**

Spike Isotope: Technetium-99 **Spike Code:** 0718-B **Expiration Date:** 2/4/06 **Vol:** 0.1 ml
LCS Isotope: Technetium-99 **LCS Code:** 0718-B **Expiration Date:** 2/4/06 **Vol:** 0.1 ml
Tracer Isotope: Technetium-99m **Tracer Code:** TC0643A **Reference Date:** 6/30/05 **Expiration Date:** 7/1/05 **Vol:** 1.0 ml
Prep Date: 7/1/05 **Initials:** SSD **Pipet ID:** 1429303 **Balance ID:** 512048863 **Witness:** LAG 7/1/05

Sample I	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label	Sample Mass (g/mL)	LSC Rack #
138851004	GU05050GMC690	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	15-JUN-05 09:07 AM	1	400	31-2
139551002	GU0506G33R201	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	24-JUN-05 10:30 AM	2	400	31-3
1200877105	MB for batch 438136	MB		5 pCi/L	GROUND WATER	QC ACCOUNT		3	1000	31-4
1200877106	GU0506G33R201(139551002DUP)	DUP		5 pCi/L	GROUND WATER	QC ACCOUNT	24-JUN-05 10:30 AM	4	400	31-5
1200877107	GU0506G33R201(139551002MS)	MS		5 pCi/L	GROUND WATER	QC ACCOUNT	24-JUN-05 10:30 AM	5	400	31-6
1200877108	LCS for batch 438136	LCS		5 pCi/L	GROUND WATER	QC ACCOUNT		6	1000	31-7

1612

√ no history

Comments:

Data Reviewed By: MA 7/6/05

Instrument Used: LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Green) 7067404 Wallac (Yellow) 4040127, Wallac (Pink) 2200082, LS6000 (Brown) 7060655, LS6500 (Gold) 7070506, Wallac (White) 4140299

MO 7/8/05

General Engineering Laboratories, Radiochemistry Division

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200877106	DUP	Technetium-99	0.400 L	-0.66	1.05	3.54	1.2925	pCi/L	YES
1200877108	LCS	Technetium-99	1.00 L	107	1.84	1.71	.517	pCi/L	NO
1200877105	MB	Technetium-99	1.00 L	0.517	0.451	1.49	.517	pCi/L	YES
1200877107	MS	Technetium-99	0.400 L	279	4.74	4.17	1.2925	pCi/L	NO
138851004	GU05050GMC690	Technetium-99	0.400 L	4.65	1.10	3.53	1.2925	pCi/L	YES
139551002	GU0506G33R201	Technetium-99	0.400 L	-1.34	1.03	3.48	1.2925	pCi/L	YES

MAM 7/8/05
JWO 7/8/05

E438136

Tc-99 Water

Filename : TC99.XLS
File type : Excel
Version # : 1

Batch : 438136
Analyst : EGD1
Prep Date : 07/01/05
Tc-99 Abundance : 1
Calibration Date : 06/20/05
Calibration Due Date : 06/20/06
Geometry:
5ml DI/10ml ultima gold

Spike S/N :	0718-B
Spike Exp Date :	02/04/06
Spike Activity (dpm/ml):	2624.66
Spike Volume Added:	0.1
LCS S/N :	0718-B
LCS Exp Date :	02/04/06
LCS Activity (dpm/ml):	2624.66
LCS Volume Added:	0.1
Tracer S/N :	TC0643A
Tracer Exp Date :	07/01/05
Tracer Volume Added:	1.0

Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1 ml Stdev : +/-	0.005480	ml
Procedure Code :	LSC99TCL	
Parmname :	Technetium-99	
Required MDC:	5	pCi/L
Halflife of Tc-99 :	213000	years
Batch counted on :	LSCBLUE	
Detector Effiency Error :	0.00792	
BKG Count time :	60	min

Sample Characteristics				**Tracer Calculations**					
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Tracer Concentration (Tc-99 Ref.)	Tracer Ref. Count Uncertainty	Tracer Concentration (Tc-99 Samp.)	Tracer Samp. Count Uncertainty	Tracer Aliquot (mL)	Tracer Aliquot StDev.
138851004	0.400	1.9669E-05	06/15/05 9:07	54742	0.89%	53118	0.90%	1.0	0.005480
139551002	0.400	1.9669E-05	06/24/05 10:30	54742	0.89%	53844	0.90%	1.0	0.005480
1200877105	1.000	2.0399E-05	07/01/05 0:00	54742	0.89%	50314	0.93%	1.0	0.005480
1200877106	0.400	1.9669E-05	06/24/05 10:30	54742	0.89%	53010	0.90%	1.0	0.005480
1200877107	0.400	1.9669E-05	06/24/05 10:30	54742	0.89%	52990	0.90%	1.0	0.005480
1200877108	1.000	2.0399E-05	07/01/05 0:00	54742	0.89%	49165	0.91%	1.0	0.005480

1614

MA 7/6/05 MO 7/8/05

Count raw Data

Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time	Sample Decay	Sample Recovery %	Sample Recovery Error %
31-2	60	124.3	22.78	0.8813	0.00792	19.25	60	07/05/05 19:04	1.000	97.03%	1.00%
31-3	60	125.3	18.22	0.8812	0.00792	19.25	60	07/05/05 20:07	1.000	98.36%	1.00%
31-4	60	126.3	20.18	0.8810	0.00792	19.25	60	07/05/05 21:09	1.000	91.91%	1.01%
31-5	60	128.5	18.75	0.8805	0.00792	19.25	60	07/05/05 22:12	1.000	96.83%	1.00%
31-6	43.5	129	230.09	0.8803	0.00792	19.25	60	07/05/05 23:14	1.000	96.80%	1.00%
31-7	48.2	127	207.53	0.8809	0.00792	19.25	60	07/06/05 0:00	1.000	89.81%	1.00%

1615

MA 7/14/05

Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
2.4577	1.7352	3.5298	**4.6484**	0.2374	3.5300	0.8370	1.1021	1.1037		SAMPLE				
2.4250	1.7121	3.4827	**-1.3382**	0.7673	-1.0300	0.7903	1.0268	1.0269		SAMPLE				
1.0383	0.7330	1.4911	**0.5173**	0.8718	0.9300	0.8107	0.4510	0.4510		MB				
2.4652	1.7404	3.5404	**-0.6604**	1.5917	-0.5000	0.7958	1.0511	1.0511	139551002	DUP	0.0%	0.1631		
2.8967	2.0451	4.1724	**278.6248**	0.0170	210.8400	2.3686	3.1301	4.7370	139551002	MS			295.57	94.3%
1.1857	0.8371	1.7062	**107.2031**	0.0171	188.2800	2.1509	1.2247	1.8375		LCS			118.23	90.7%

1616

MA 7/6/05

COUNTING

1480, RiaCalc WIZ, program 3.6, serial #4800440

ASSAY 1-Jul-05 21:34:33

Protocol	id	12	TC99_REC
Time	limit	300	
Count	limit	10000	
Isotope	Tc-99m		
Protocol	date	15-Jun-04	6:53:27
Run	id.	88	

POS	RACK	BATCH	TIME	COUNTS	CPM	ERROR	% RECOVERY
1	63	1	14	12690	54742.3	0.89	
2	63	2	14	12306	53118.1	0.9	97.03
3	63	3	14	12463	53844.4	0.9	98.36
4	63	4	14	11641	50314.2	0.93	91.91
5	63	5	14	12250	53009.6	0.9	96.83
6	96	6	14	12231	52989.7	0.9	96.80
7	96	7	15	12154	49165.4	0.91	89.81

LY 7/1/05 MA 7/5/05

END OF ASSAY

MA 7/5/05

MA 7/8/05

ID: TC-99 5 JUL 2005 17:59

USER: 9 COMMENT:BLUE

PRESET TIME :	60.00						
DATA CALC :	CPM	H# :YES	SAMPLE REPEATS:	1	PRINTER	:EDIT
COUNT BLANK :	NO	IC# : NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AQC : NO	CYCLE REPEATS :	1	DISK	:EDIT
SCINTILLATOR:	LIQUID	LUMEX:YES	LOW SAMPLE REJ:	0	RWM LIST	: OFF
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:			none	

CHAN: 250.0 - 625.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

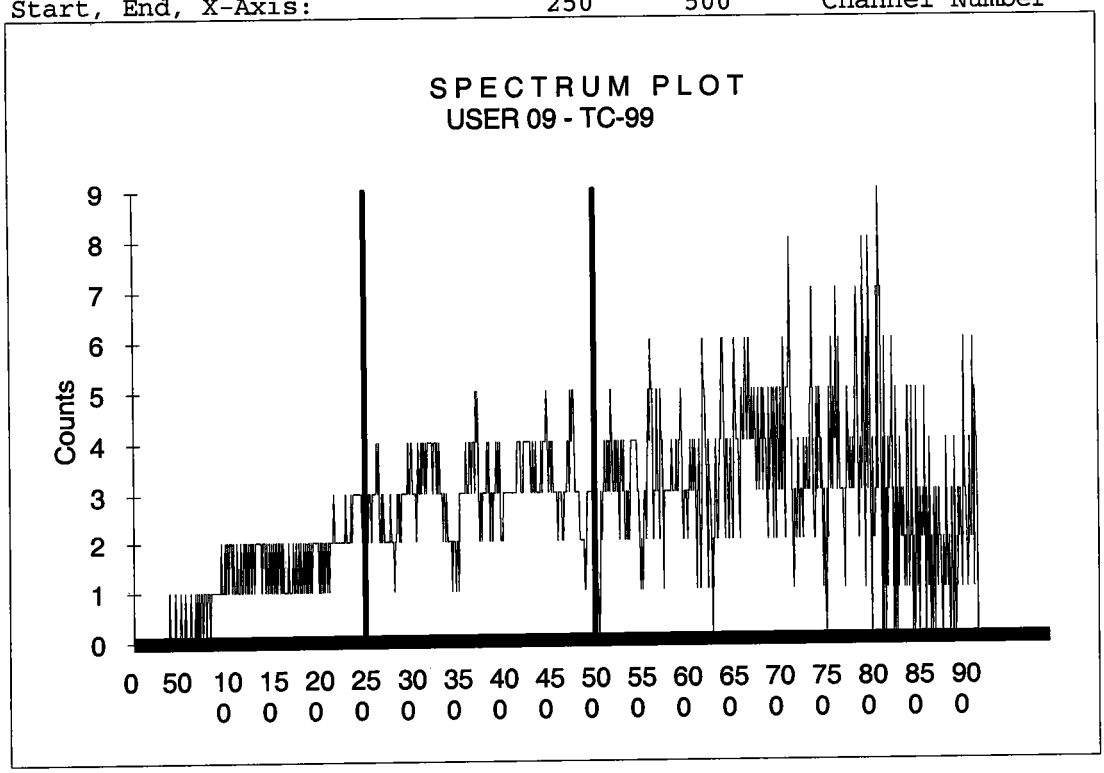
ALPHA-BETA DISCRIMINATION: NO

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	LUMEX %	ELAPSED TIME
1	31-1	60.00	123.4	19.25	5.88	39.05	4.23	3.96	62.25
2	31-2	60.00	124.3	22.78	5.41	42.25	4.01	1.55	124.92
3	31-3	60.00	125.3	18.22	6.05	39.08	4.17	1.58	187.61
4	31-4	60.00	126.3	20.18	5.75	40.90	4.07	1.40	250.26
5	31-5	60.00	128.5	18.75	5.96	39.58	4.14	1.35	312.86
6	31-6	43.50	129.0	230.09	2.00	267.91	1.85	0.21	358.65
7	31-7	48.20	127.0	207.53	2.00	243.34	1.85	0.23	409.18

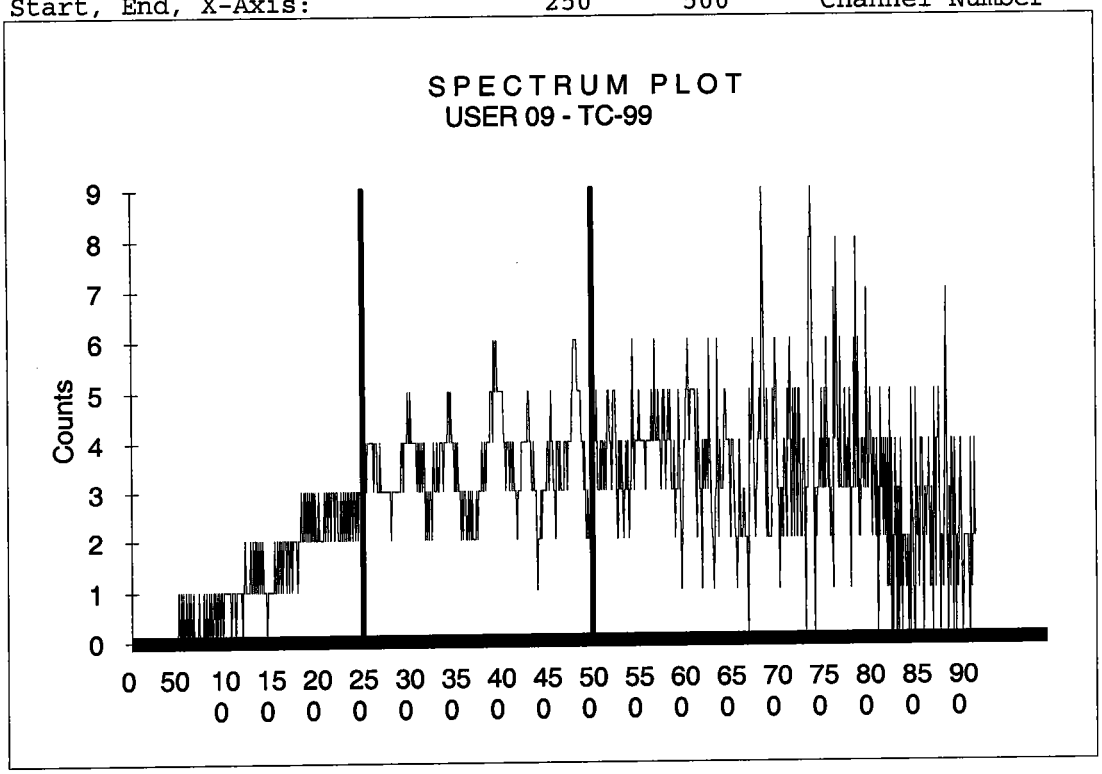
vw 7/8/05

MA 7/8/05

Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 19:01:49		
User Filename:	A:\USER09\S0970509.BSF		
File Info:	A:\USER09\U0970517.BSF		
USER#:	09		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	1	31-1	60
H#, Total Counts:	123.4		0
Start, End, X-Axis:	250	500	Channel Number

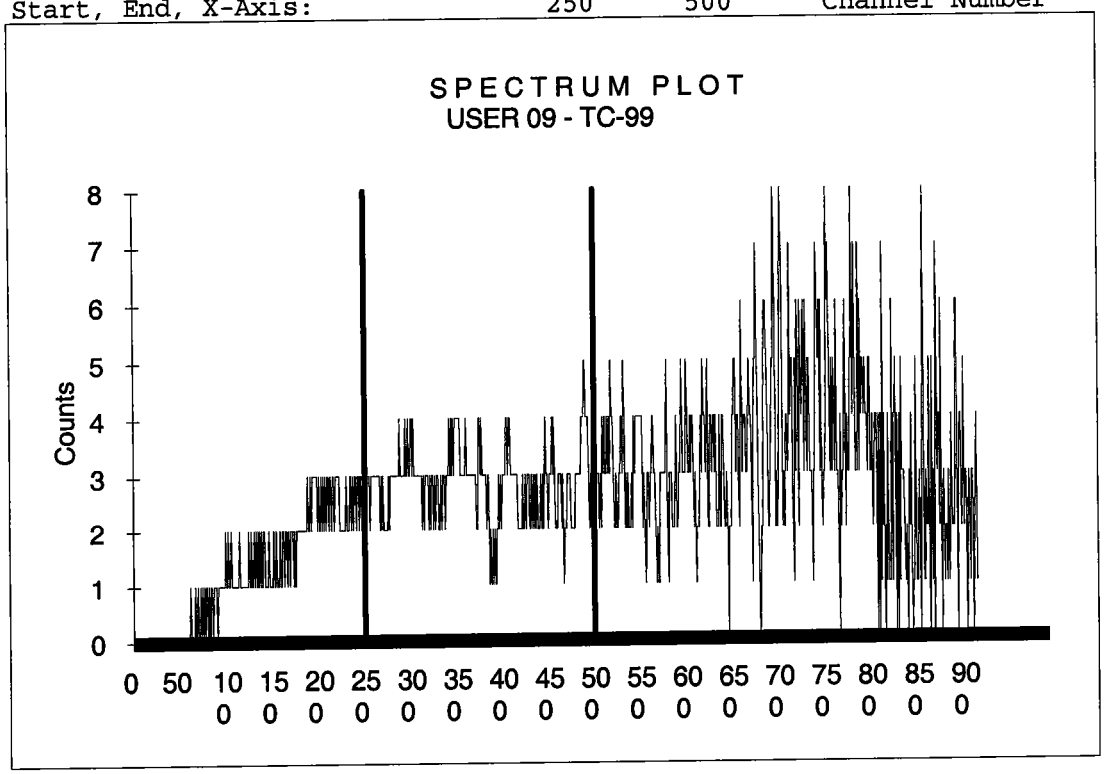


Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 20:04:30		
User Filename:	A:\USER09\S0970510.BSF		
File Info:	A:\USER09\U0970517.BSF		
USER#:	09		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	2	31-2	60
H#, Total Counts:	124.3		0
Start, End, X-Axis:	250	500	Channel Number



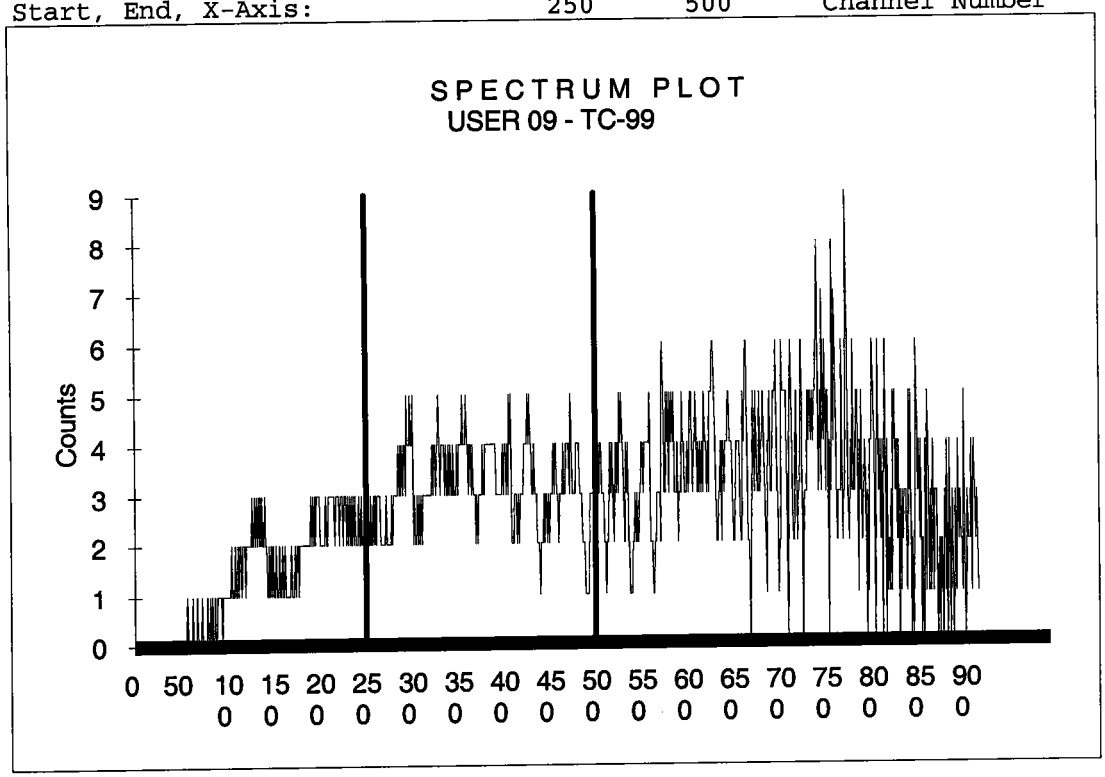
7/8/05

Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 21:07:10		
User Filename:	A:\USER09\S0970511.BSF		
File Info:	A:\USER09\U0970517.BSF		
USER#:	09		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	3	31-3	60
H#, Total Counts:	125.3		0
Start, End, X-Axis:	250	500	Channel Number



7/8/05

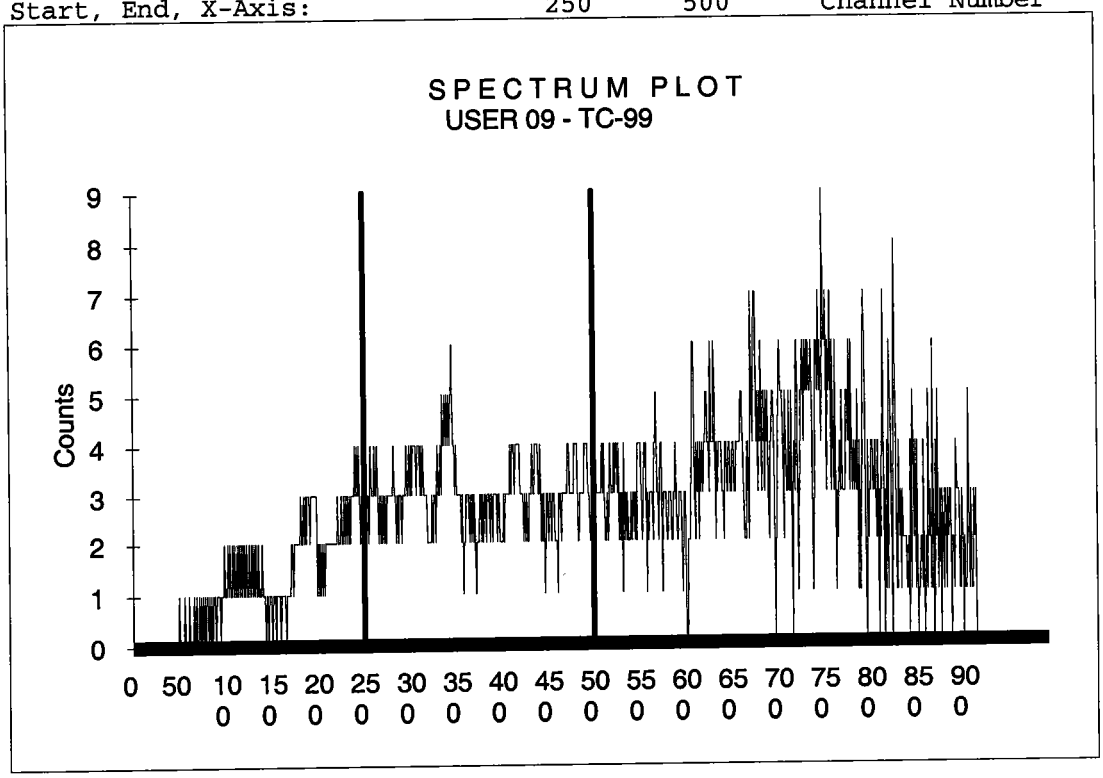
Instrument Type:	LS 6000			
Data Capture Date:	5 Jul 2005 22:09:49			
User Filename:	A:\USER09\S0970512.BSF			
File Info:	A:\USER09\U0970517.BSF			
USER#:	09			
User ID:	TC-99			
User Comments:	BLUE			
Scintillator:	LIQUID			
Sample, Rack-Pos, Time:	4	31-4	60	
H#, Total Counts:	126.3		0	
Start, End, X-Axis:	250	500	Channel Number	



MA 7/8/05

MA 7/6/05

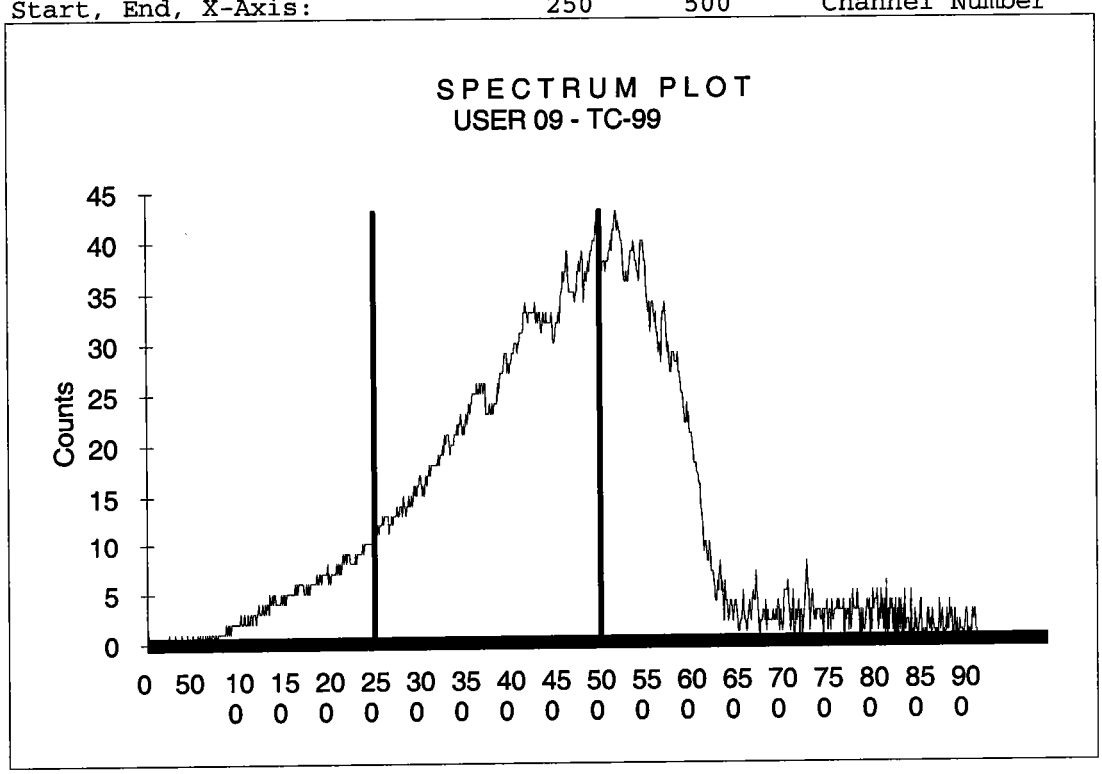
Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 23:12:26		
User Filename:	A:\USER09\S0970513.BSF		
File Info:	A:\USER09\U0970517.BSF		
USER#:	09		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	5	31-5	60
H#, Total Counts:	128.5		0
Start, End, X-Axis:	250	500	Channel Number



mw 7/8/05

mm 7/6/05

Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 23:58:14		
User Filename:	A:\USER09\S0970514.BSF		
File Info:	A:\USER09\U0970517.BSF		
USER#:	09		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	6	31-6	43.5
H#, Total Counts:	129.0		0
Start, End, X-Axis:	250	500	Channel Number



7/8/05

7/6/05

Instrument Type:	LS 6000		
Data Capture Date:	6 Jul 2005 00:48:45		
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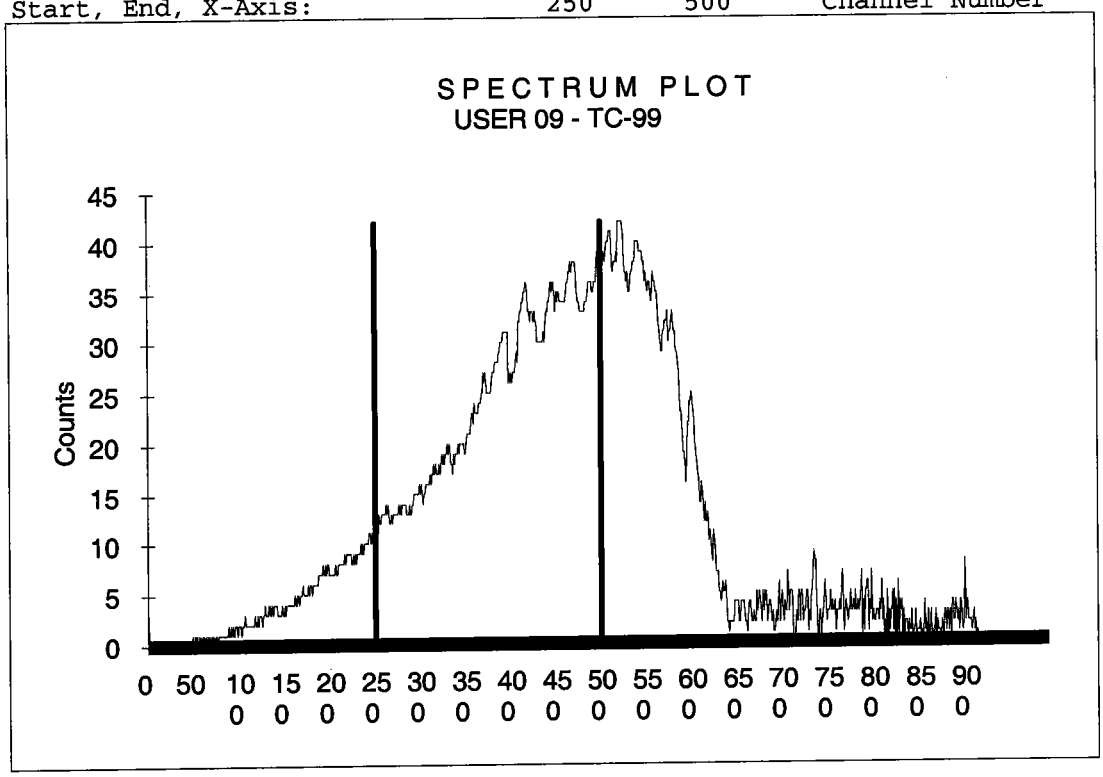
File Info:	A:\USER09\U0970517.BSF		
USER#:	09		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	7	31-7	48.2
H#, Total Counts:	127.0		0
Start, End, X-Axis:	250	500	Channel Number



7/8/05

MA 7/26/05

Radiochemistry Batch Checklist, Rev 3

Batch# 437415 Product: Ra-226 Date: 7/6/15

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .			NA
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	✓		NA
Method Spike and LCS are within 75-125%.	✓ 7/6/15		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓ ✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/00

Primary Review Performed By: [signature] 7/6/15

Secondary Review Performed By: [signature] 7/7/15

7/4 - 7/16

ESH/C

Radium-226 Que Sheet

06/27/2005 *General Engineering Laboratories, Radiochemistry Division*

Batch #: 437415 **Analyst:AB1** **Minimum DueDate:** 07/04/2005

Spike Isotope: Radium-226 **Spike Code:** 0321-H **Expiration Date:** 5/20/06 **Vol:** 0.1 **Nom Conc:** 24.15

LCS Isotope: Radium-226 **LCS Code:** 0321-H **Expiration Date:** 5/20/06 **Vol:** 0.1 **Nom Conc:** 12.07

Sample Count Time: 30 (Min)

Prep Date: 6/28/05 **Pipet ID:** 1429303 **Initials:** Jmb **Witness:** BXD 6/28/05 **Bkg Count Time:** 30 (Min)

	Sample I	Client Description	Type	Hazard Code	Matrix	Min CRDL	Client	Vol (mL)	End Init Degas Date/Tin	End LN De-em Date/Time	Start Count Date/Time	Cell #	Det #	Bkg cpm	Total Counts
1	138436003	GF05050GMC501	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	206	2	8	11
2	138436004	GU05050GMC501	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	306	3	8	14
3	138851001	GF05050GMC601	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	406	4	3	76
4	138851002	GF05050GMC690	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	506	5	8	27
5	138851003	GU05050GMC601	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	606	6	5	22
6	138851004	GU05050GMC690	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 1025	7/1/05 1425	107	1	6	13
7	139405001	GF05050GMC401	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 1025	7/1/05 1425	207	2	3	13
8	139405002	GU05050GMC401	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 1025	7/1/05 1425	307	3	8	93
9	1200875441	MB for batch 437415	MB		GROUND WAT	1 pCi/L	QC ACCOUNT	1000	6/28/05 740	7/1/05 1025	7/1/05 1425	407	4	5	18
10	1200875442	GF05050GMC601(138851001DUDUP			GROUND WAT	1 pCi/L	QC ACCOUNT	500	6/28/05 740	7/1/05 1025	7/1/05 1425	507	5	4	57
11	1200875443	GF05050GMC601(138851001MSMS			GROUND WAT	1 pCi/L	QC ACCOUNT	500	6/28/05 740	7/1/05 1025	7/1/05 1425	607	6	6	572
12	1200875444	LCS for batch 437415	LCS		GROUND WAT	1 pCi/L	QC ACCOUNT	1000	6/28/05 740	7/1/05 1100	7/1/05 1500	112	1	6	523

I627

✓ nonistory

Comments:

Data Reviewed By: MA 7/1/05

MP 7/1/05

Instrument ID's:
LUCAS1:90988, LUCAS2:136917, LUCAS3:90989, LUCAS4:102753, LUC5:132286, LUC6:170055

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200875442	DUP	Radium-226	0.500 L	2.09	0.314	0.474	.54	pCi/L	YES
1200875444	LCS	Radium-226	1.00 L	12.0	0.608	0.328	.27	pCi/L	NO
1200875441	MB	Radium-226	1.00 L	0.270	0.0999	0.273	.27	pCi/L	YES
1200875443	MS	Radium-226	0.500 L	22.6	1.13	0.562	.54	pCi/L	NO
138436003	GF05050GMC501	Radium-226	0.500 L	0.115	0.167	0.607	.54	pCi/L	YES
138436004	GU05050GMC501	Radium-226	0.500 L	0.241	0.188	0.638	.54	pCi/L	YES
138851001	GF05050GMC601	Radium-226	0.500 L	3.04	0.374	0.448	.54	pCi/L	NO
138851002	GF05050GMC690	Radium-226	0.500 L	0.782	0.245	0.653	.54	pCi/L	YES
138851003	GU05050GMC601	Radium-226	0.500 L	0.739	0.227	0.570	.54	pCi/L	YES
138851004	GU05050GMC690	Radium-226	0.500 L	0.302	0.188	0.609	.54	pCi/L	YES
139405001	GF05050GMC401	Radium-226	0.500 L	0.415	0.166	0.447	.54	pCi/L	YES
139405002	GU05050GMC401	Radium-226	0.500 L	3.28	0.418	0.694	.54	pCi/L	NO

MA 7/6/05
MO 7/7/05

Radium-226 Water

Filename : RA226.XLS
File type : Excel
Version # : 1

Batch : 437415
Analyst : AB1
Prep Date : 06/28/05
Ra-226 Abundance : 1

Calibration Date : 09/23/04
Calibration Due Date : 09/23/05

Spike S/N : 0321-H
Spike Exp Date : 05/20/06
Spike Activity (dpm/ml): 268.01
Spike Volume Added: 0.1

LCS S/N : 0321-H
LCS Exp Date : 05/20/06
LCS Activity (dpm/ml): 268.01
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : LUC26RAL
Parmname : Radium-226
Required MDC: 1 pCi/L
Halflife of Ra-226 : 1600 years
Halflife of Rn-222: 3.823 days
Batch counted on : LUCAS CELL DETECTOR
BKG Count time : 30 min

Sample Characteristics				Count Raw Data							
								Weekly Background			
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Cell Number	Counting Time	Gross Counts	Gross CPM	Counts	CPM	Count Time	Detector Efficiency
138436003	0.500	2.0256E-05	06/09/05 8:00	206	30	11	0.367	8	0.267	30	1.8800
138436004	0.500	2.0256E-05	06/09/05 8:00	306	30	14	0.467	8	0.267	30	1.7890
138851001	0.500	2.0256E-05	06/15/05 9:07	406	30	76	2.533	3	0.100	30	1.7270
138851002	0.500	2.0256E-05	06/15/05 9:07	506	30	27	0.900	8	0.267	30	1.7460
138851003	0.500	2.0256E-05	06/15/05 9:07	606	30	22	0.733	5	0.167	30	1.6540
138851004	0.500	2.0256E-05	06/15/05 9:07	107	30	13	0.433	6	0.200	30	1.6590
139405001	0.500	2.0256E-05	06/23/05 8:50	207	30	13	0.433	3	0.100	30	1.7250
139405002	0.500	2.0256E-05	06/23/05 8:50	307	30	83	2.767	8	0.267	30	1.6380
1200875441	1.000	2.0399E-05	06/28/05 0:00	407	30	18	0.600	5	0.167	30	1.7210
1200875442	0.500	2.0256E-05	06/15/05 9:07	507	30	57	1.900	4	0.133	30	1.8150
1200875443	0.500	2.0256E-05	06/15/05 9:07	607	30	572	19.067	6	0.200	30	1.7970
1200875444	1.000	2.0399E-05	06/28/05 0:00	112	30	523	17.433	6	0.200	30	1.5310

1629

mo 7/6/05
mo 7/7/05

Detector Efficiency Error	De-Gas Date/Time	Rn-222 Ingrow Start Date/Time	Count Start Date/Time	Rn-222 Corrections De-Gas to Ingrowth	Ingrowth to Count	During Count	Ra-226 Decay
0.02691	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.00980	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.01759	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.02843	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.02655	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.02415	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02691	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.00980	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.01759	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02843	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02655	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02415	06/28/05 7:40	07/01/05 11:00	07/01/05 15:00	0.434	0.970	1.002	1.000

1630

MA7/6/05

Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	**1 SIGMA** Counting Uncertainty	**1 SIGMA** Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.3564	0.2516	0.6067	**0.1147**	1.4532	0.1000	0.1453	0.1667	0.1667		SAMPLE				
0.3745	0.2644	0.6375	**0.2411**	0.7818	0.2000	0.1563	0.1885	0.1885		SAMPLE				
0.2376	0.1677	0.4481	**3.0385**	0.1230	2.4333	0.2963	0.3700	0.3738		SAMPLE				
0.3837	0.2709	0.6532	**0.7822**	0.3127	0.6333	0.1972	0.2436	0.2446		SAMPLE				
0.3202	0.2261	0.5698	**0.7388**	0.3068	0.5667	0.1732	0.2258	0.2267		SAMPLE				
0.3483	0.2459	0.6087	**0.3021**	0.6232	0.2333	0.1453	0.1881	0.1883		SAMPLE				
0.2369	0.1672	0.4468	**0.4151**	0.4009	0.3333	0.1333	0.1660	0.1664		SAMPLE				
0.4074	0.2876	0.6935	**3.2784**	0.1276	2.5000	0.3180	0.4170	0.4182		SAMPLE				
0.1533	0.1082	0.2727	**0.2704**	0.3693	0.4333	0.1599	0.0998	0.0999		MB				
0.2600	0.1835	0.4738	**2.0908**	0.1501	1.7667	0.2603	0.3081	0.3138	138851001	DUP	37.0%	0.6891		
0.3216	0.2271	0.5619	**22.5518**	0.0501	18.8667	0.8014	0.9579	1.1296	138851001	MS			24.15	80.8%
0.1876	0.1325	0.3279	**12.0194**	0.0506	17.2333	0.7667	0.5347	0.6084		LCS			12.07	99.6%

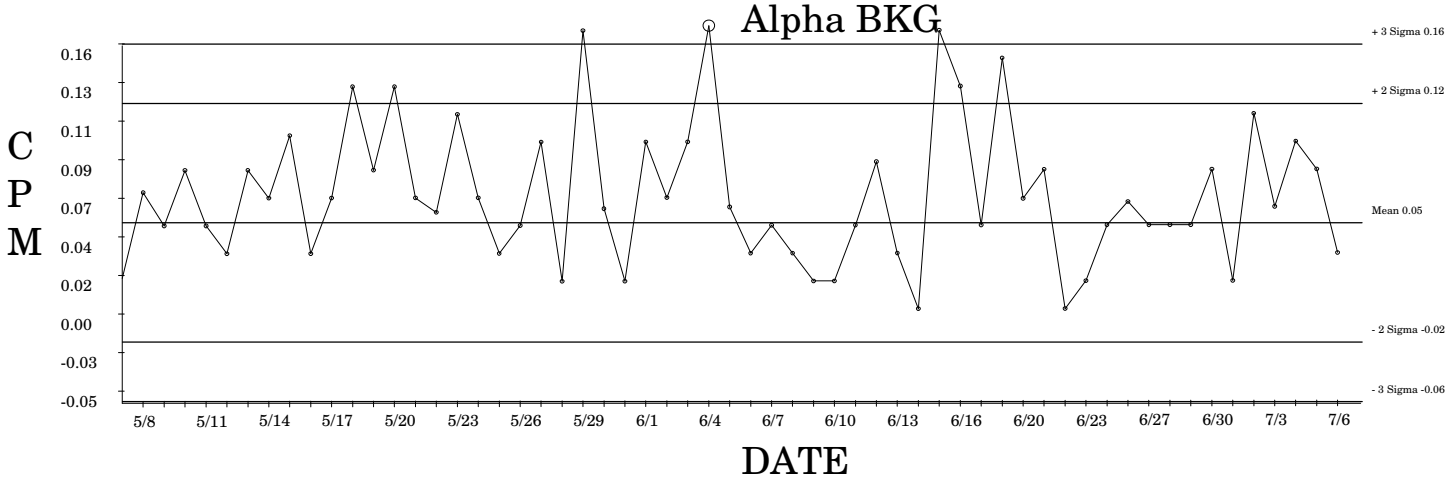
T63T

MA716105

BACKGROUND AND EFFICIENCY DATA

LB4100A1 07/06/2005

Alpha BKG



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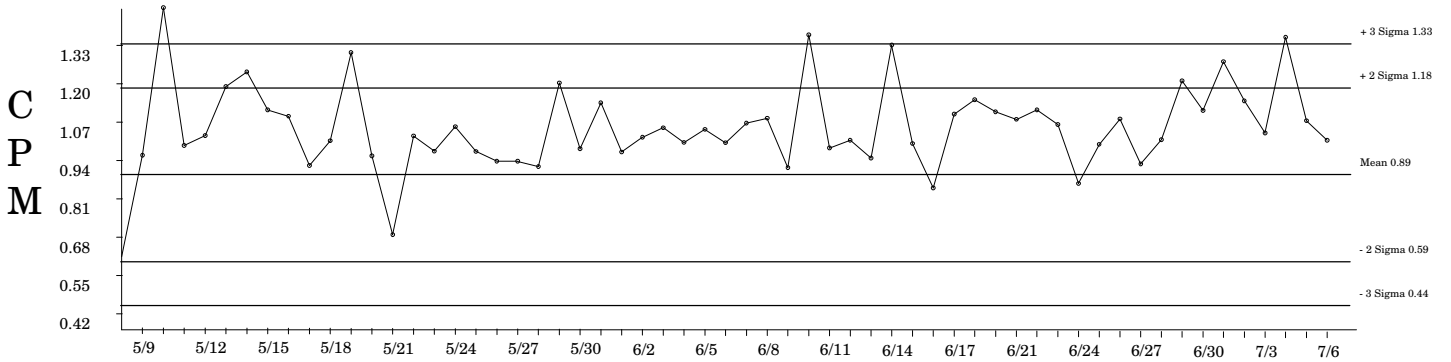

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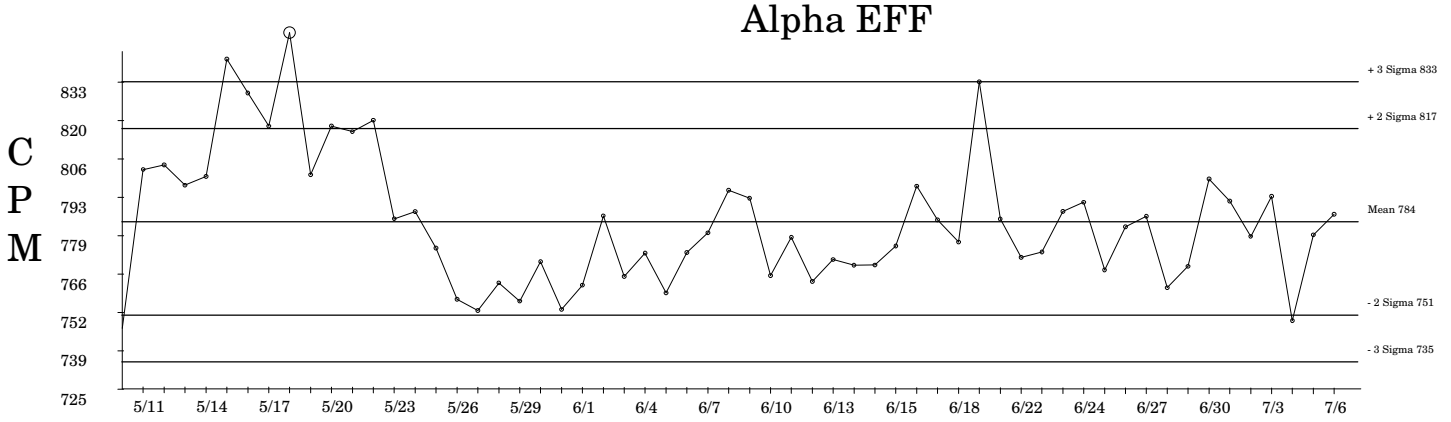

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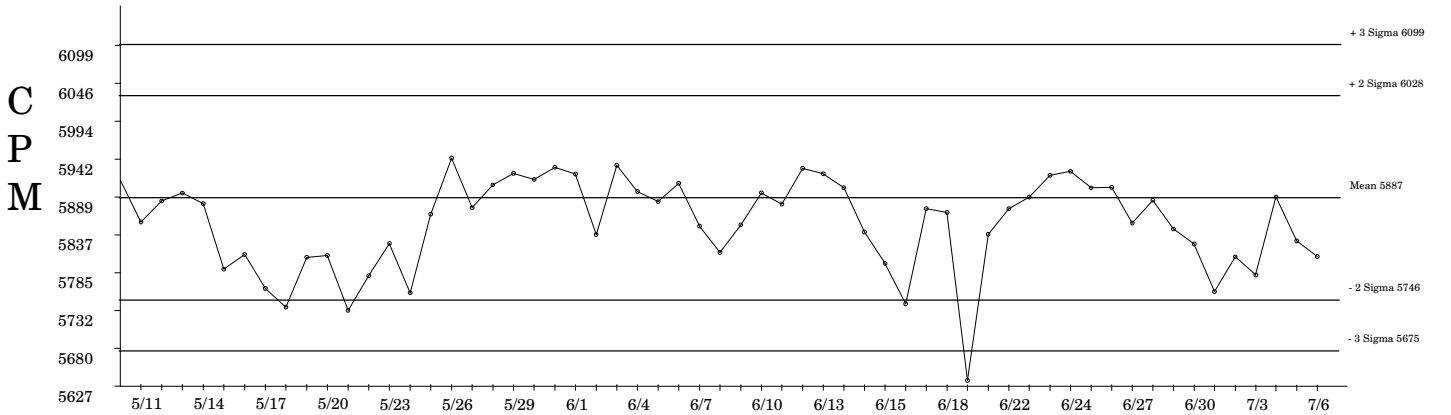

○ Denotes Outlier

LB4100B4 07/08/2005

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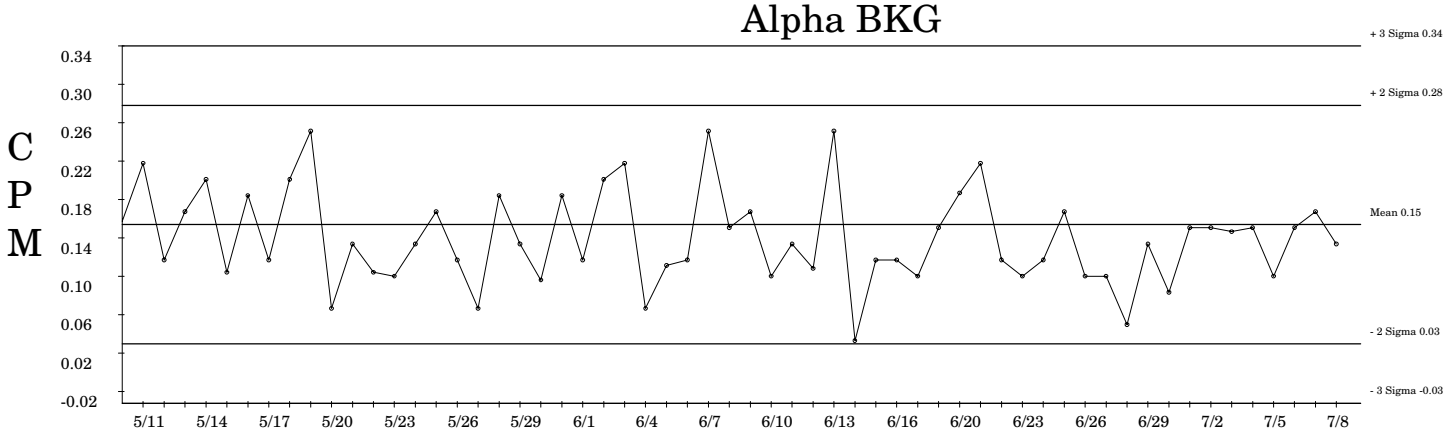

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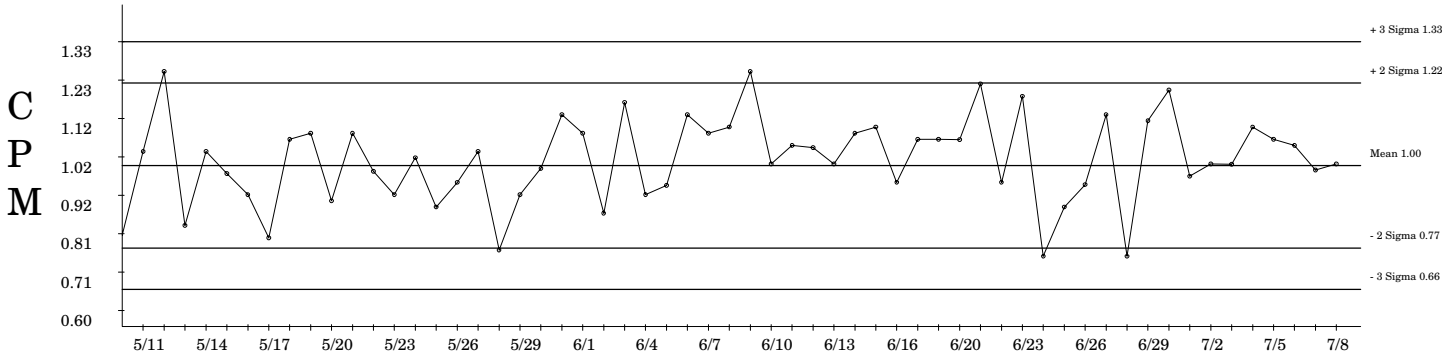

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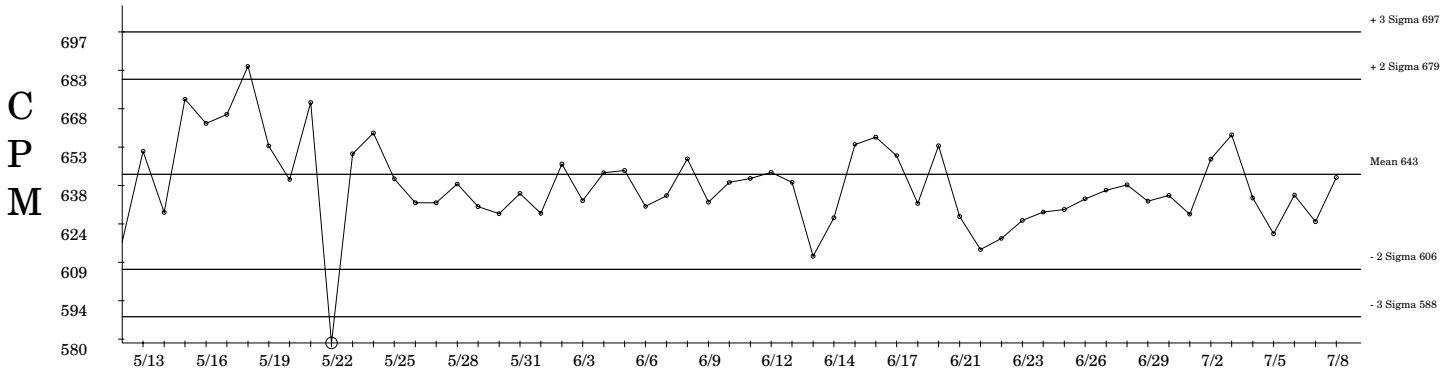

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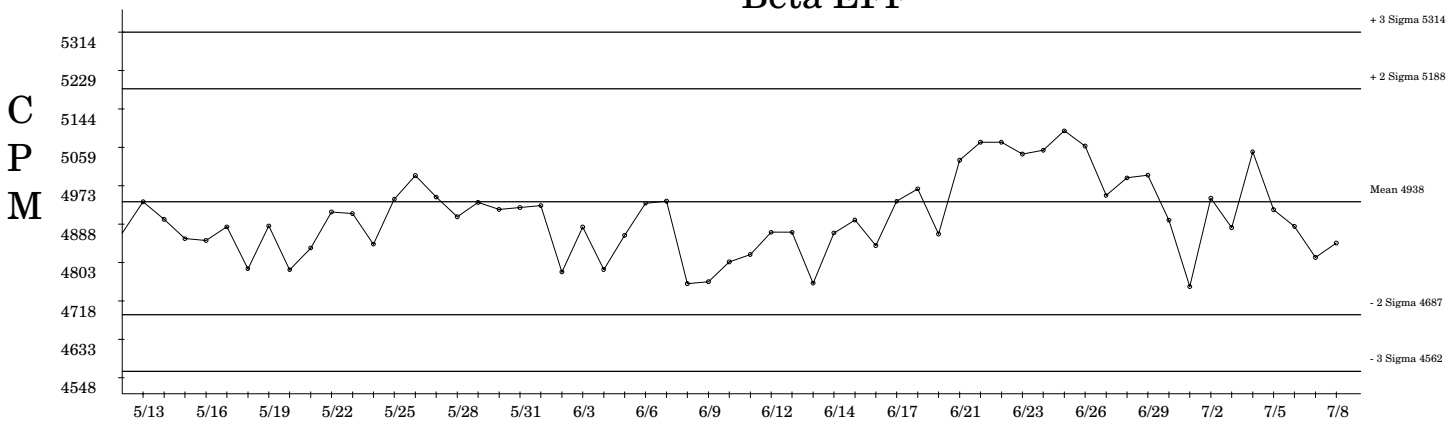

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LB4100C1 07/07/2005

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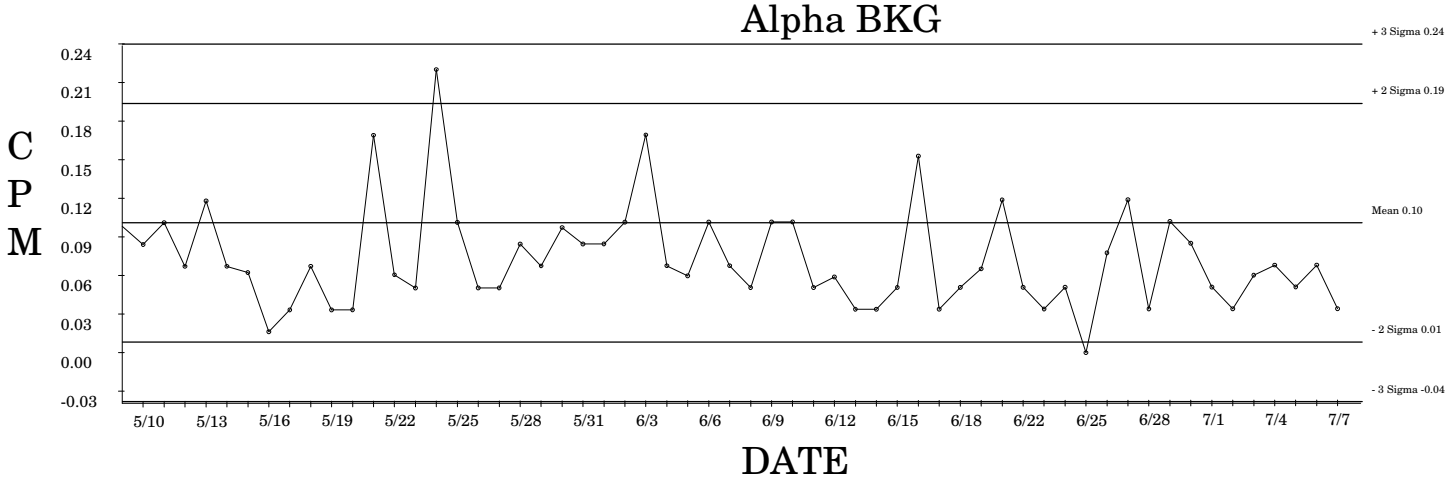

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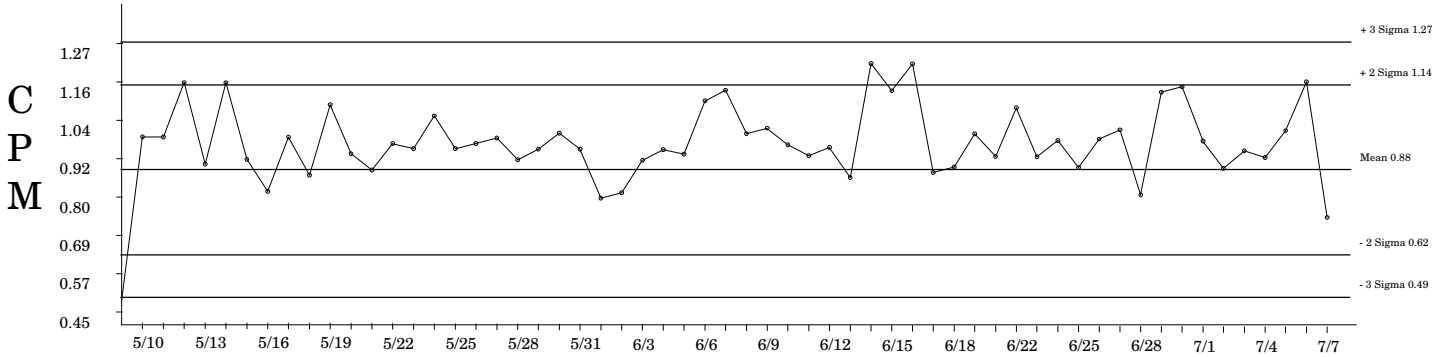

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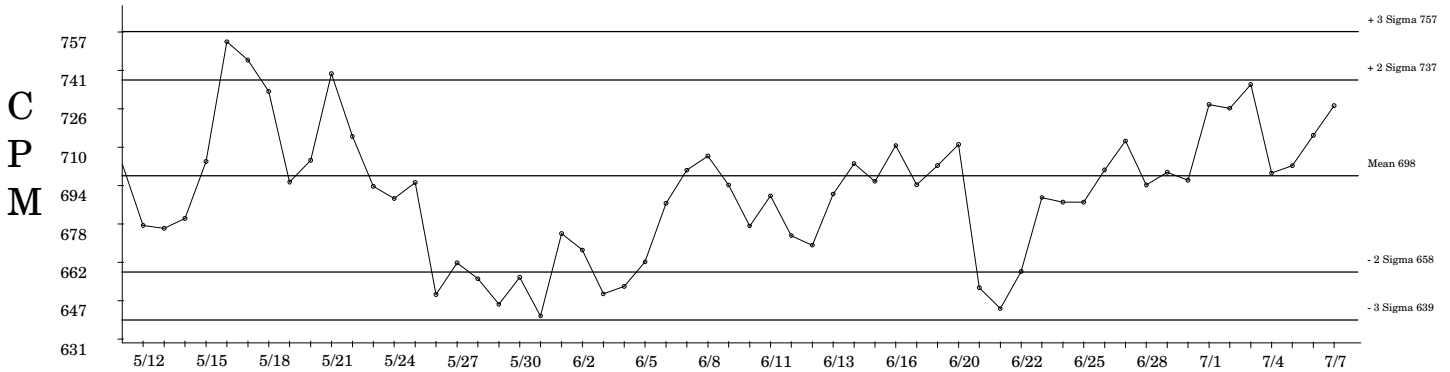

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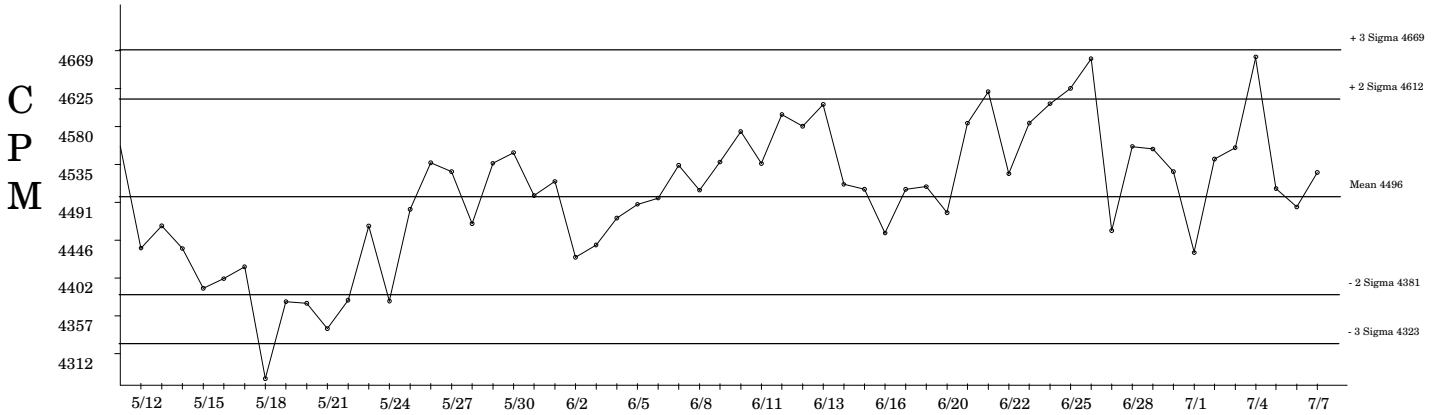
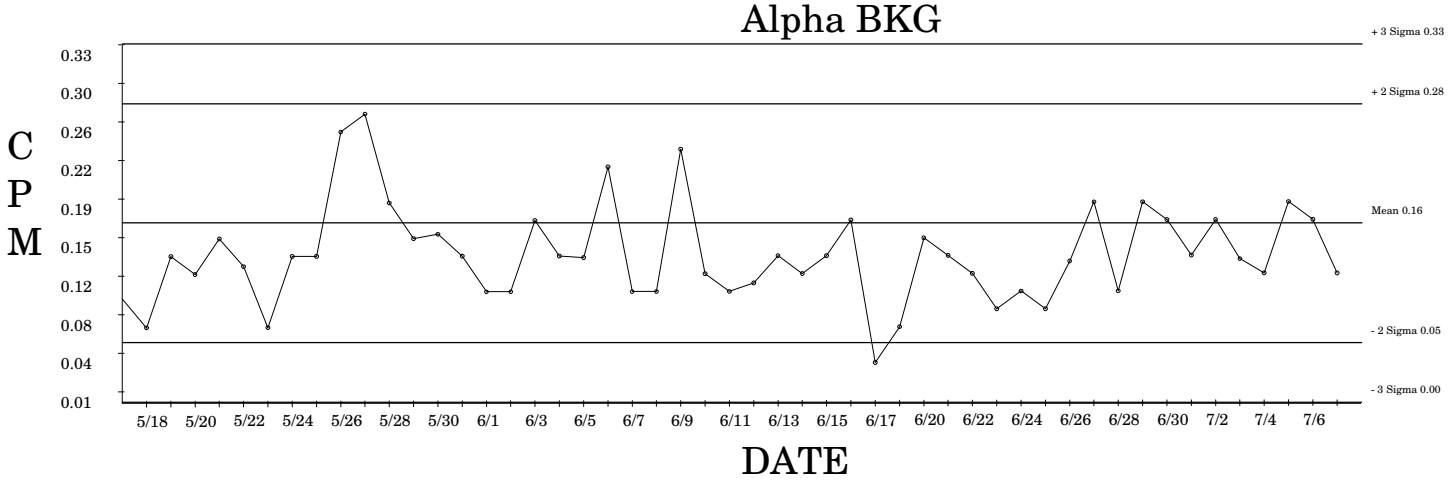


○ Denotes Outlier

LB4100C2 07/07/2005

Alpha BKG



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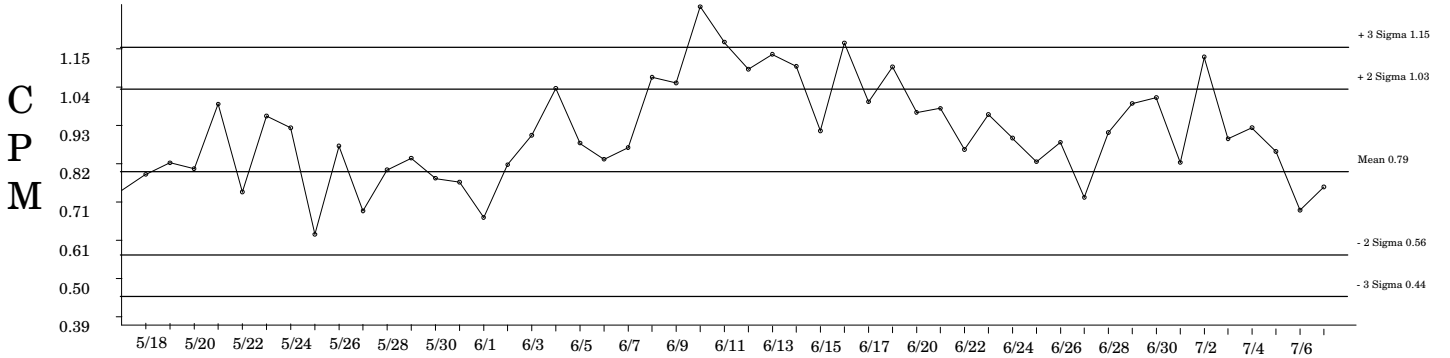

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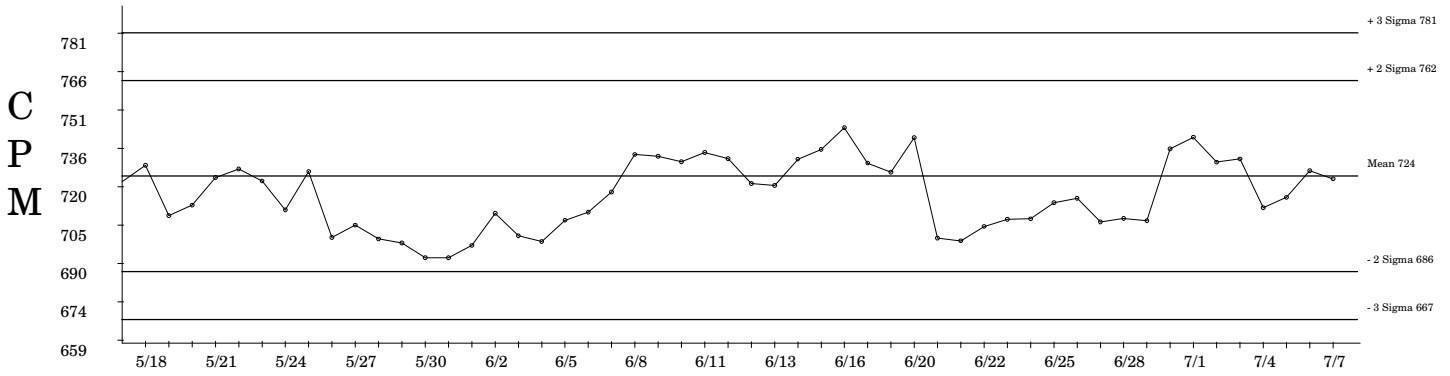

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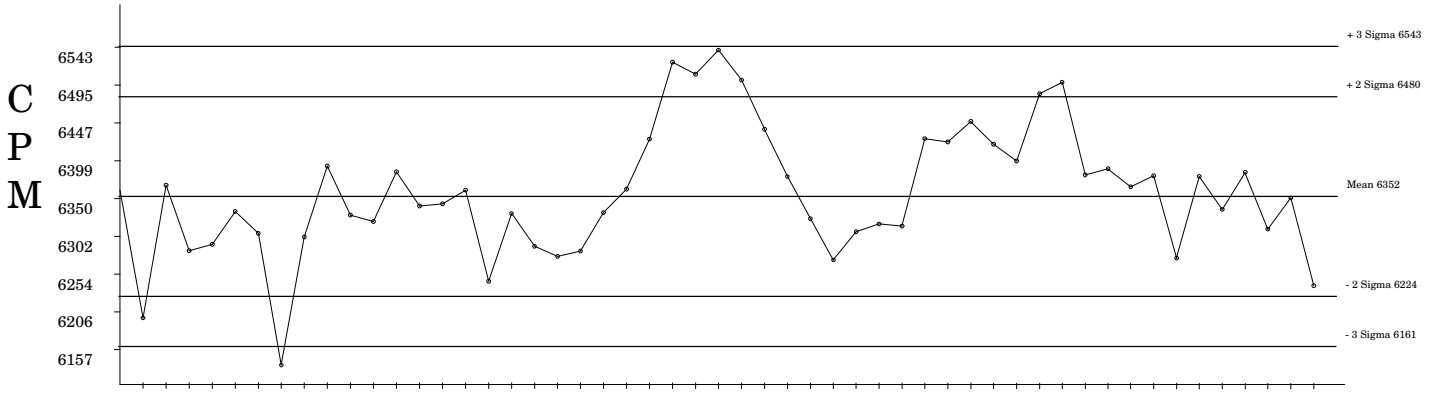

○ Denotes Outlier

LB4100C3 07/07/2005

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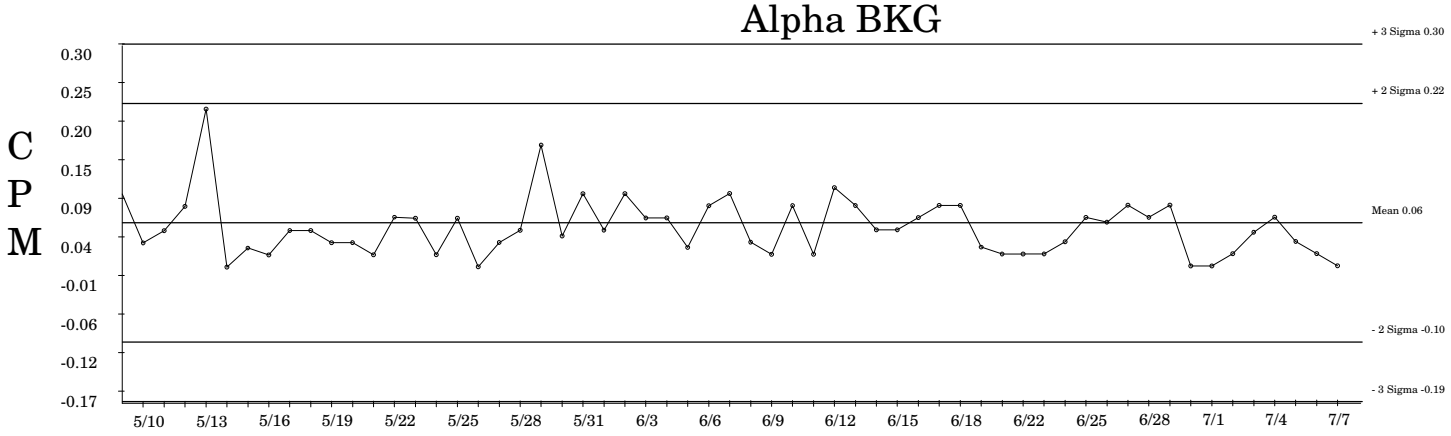

DATE

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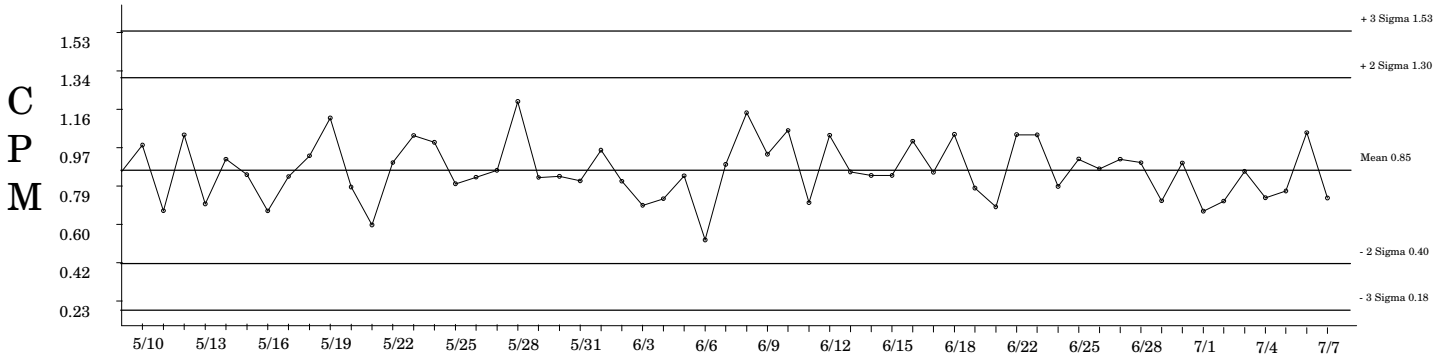

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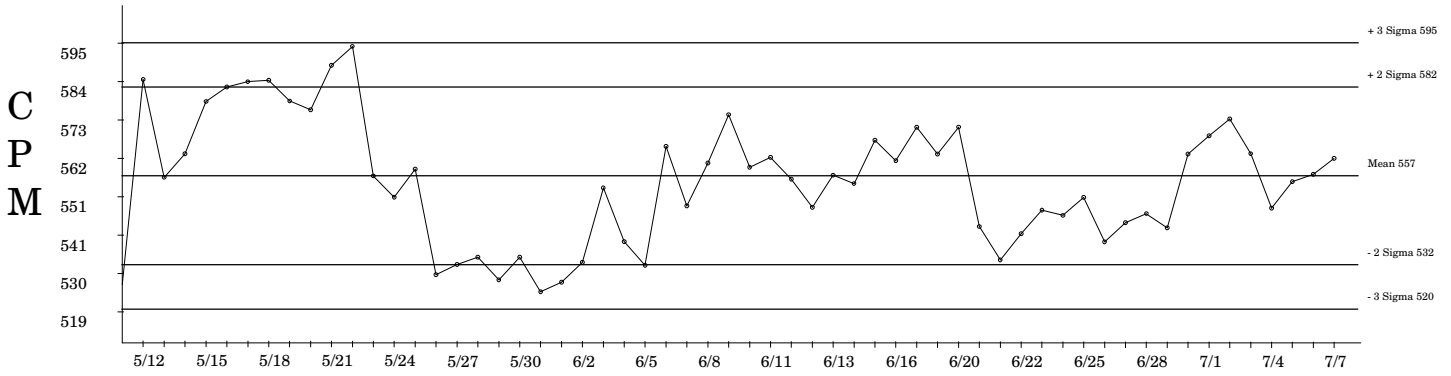

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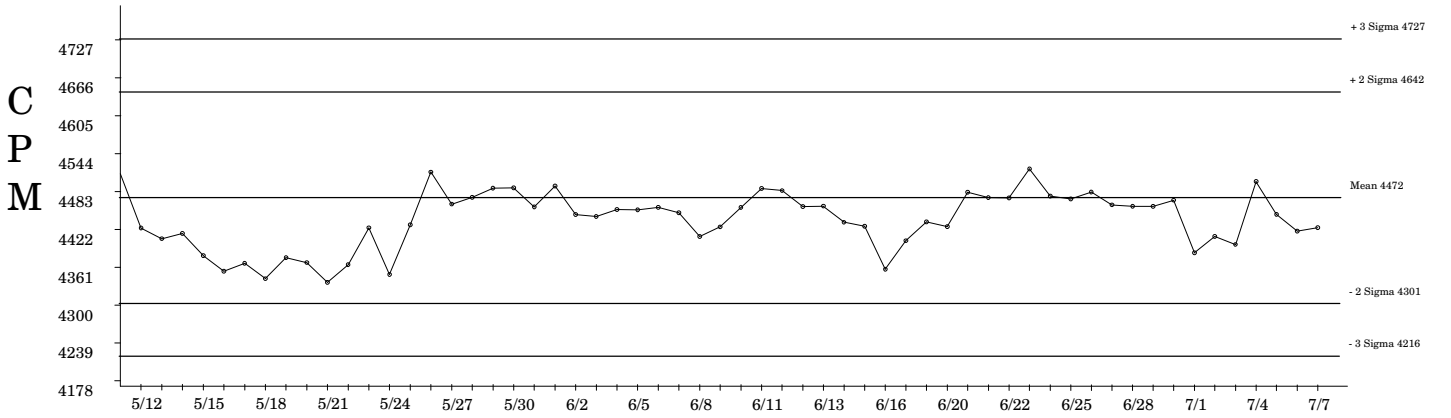

DATE

○ Denotes Outlier

LB4100C4 07/07/2005

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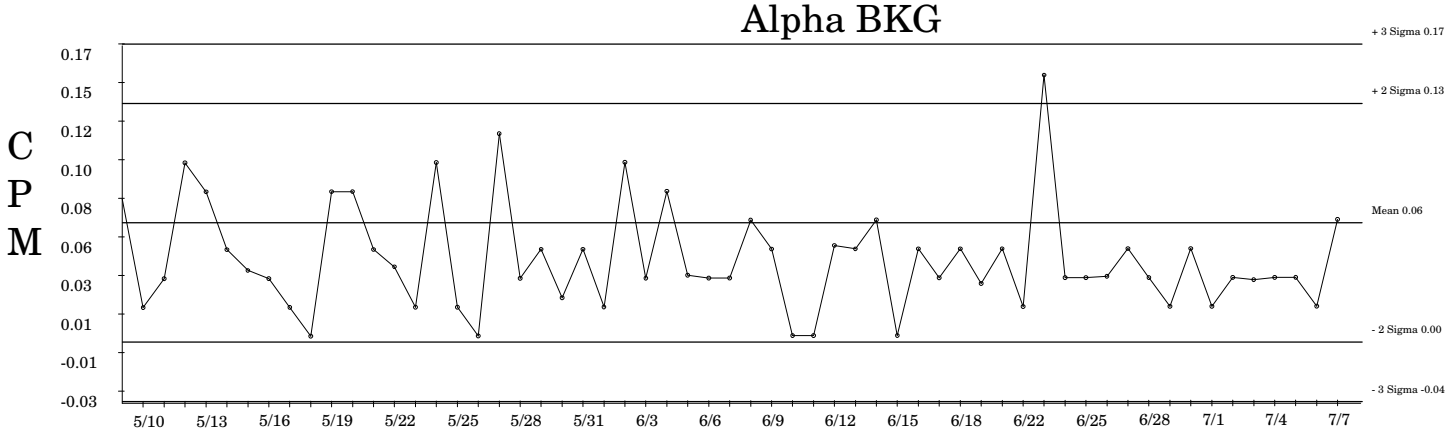

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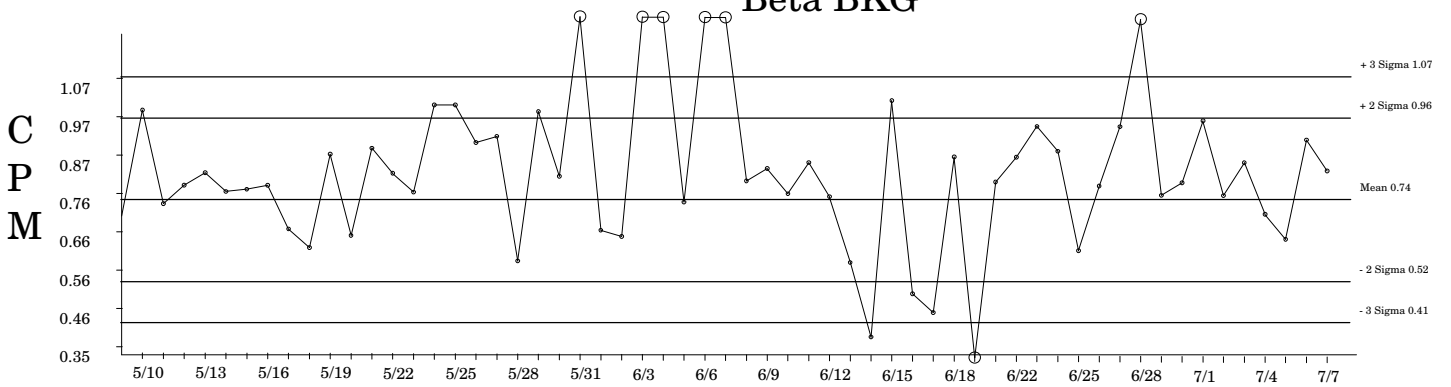

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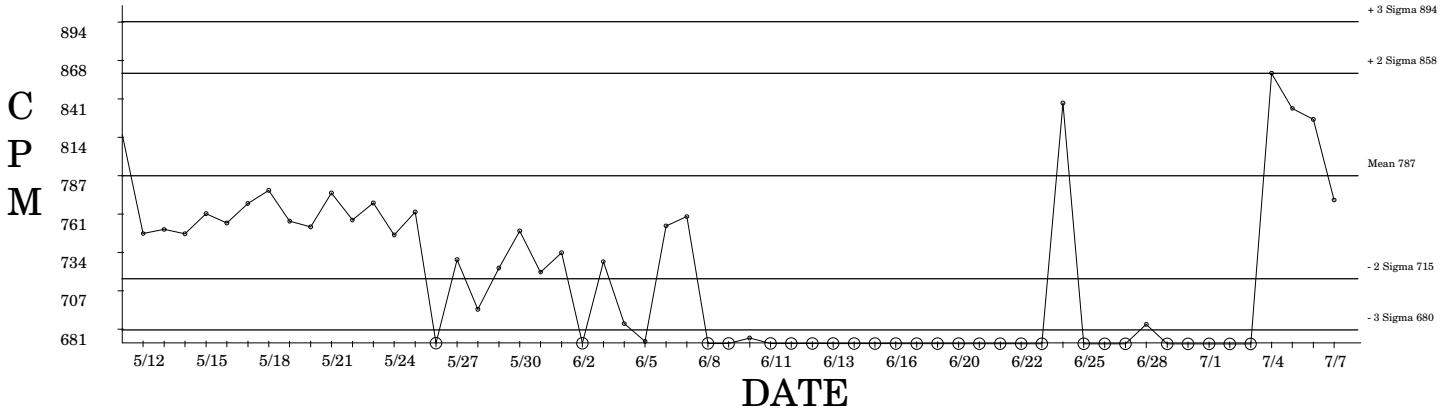

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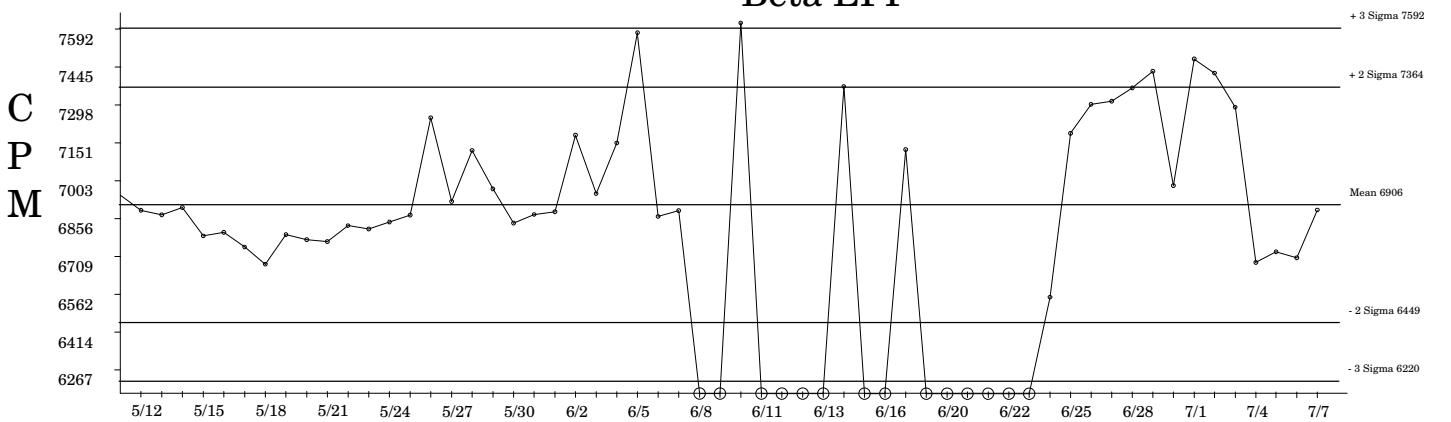

○ Denotes Outlier

LB4100D1 07/08/2005

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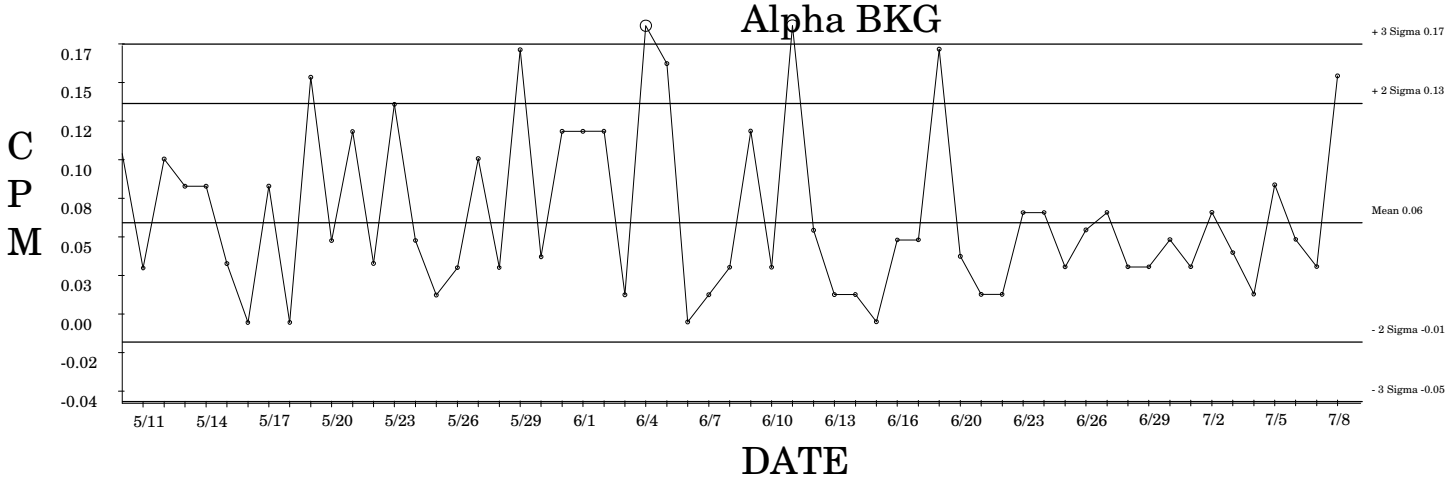

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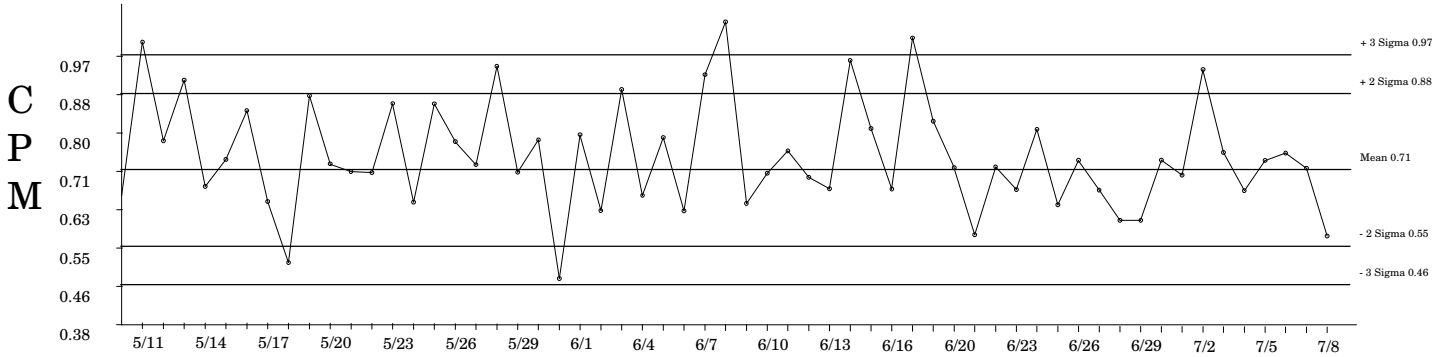

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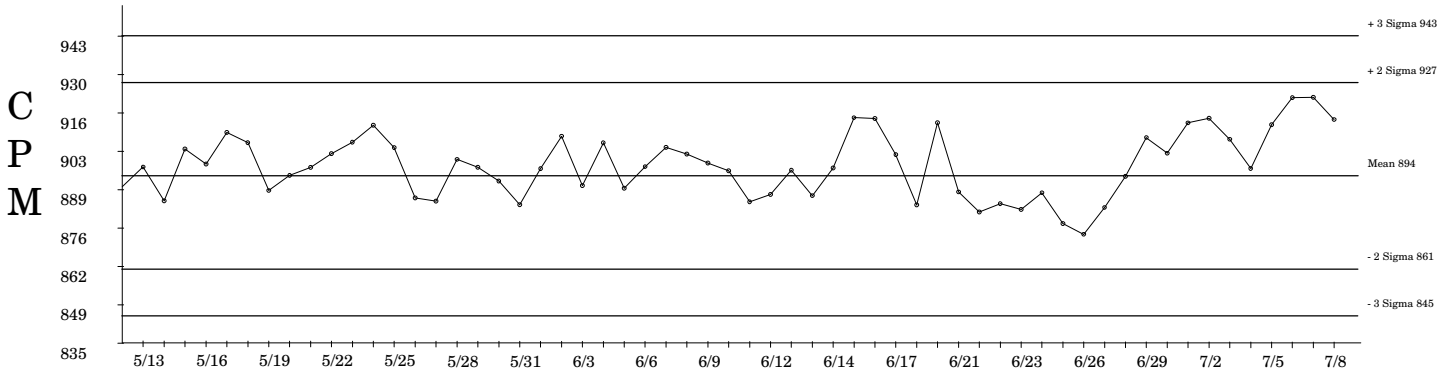

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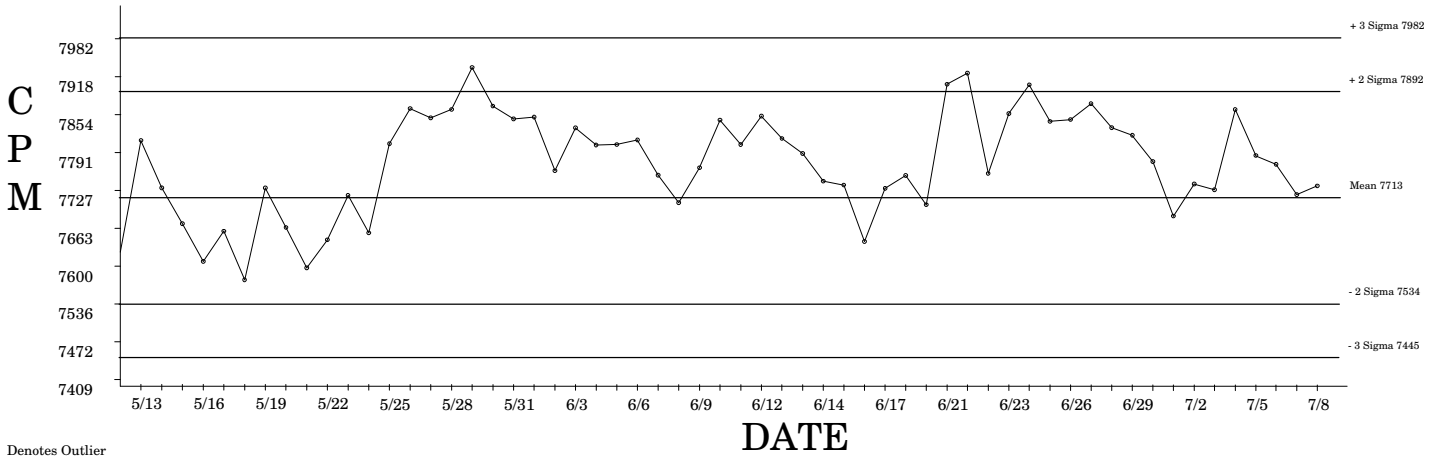

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LB4100D3 07/07/2005

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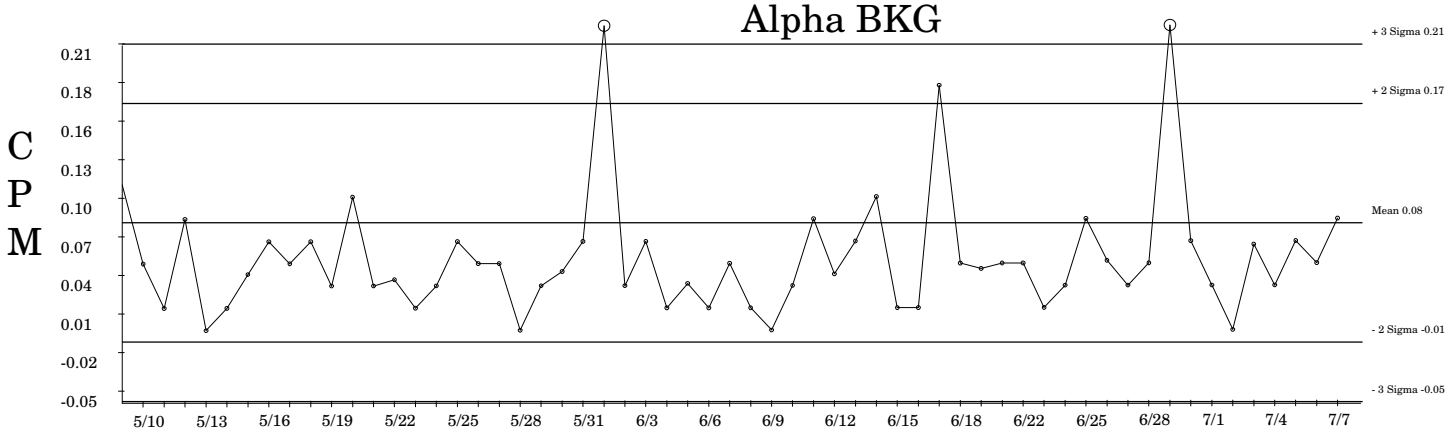

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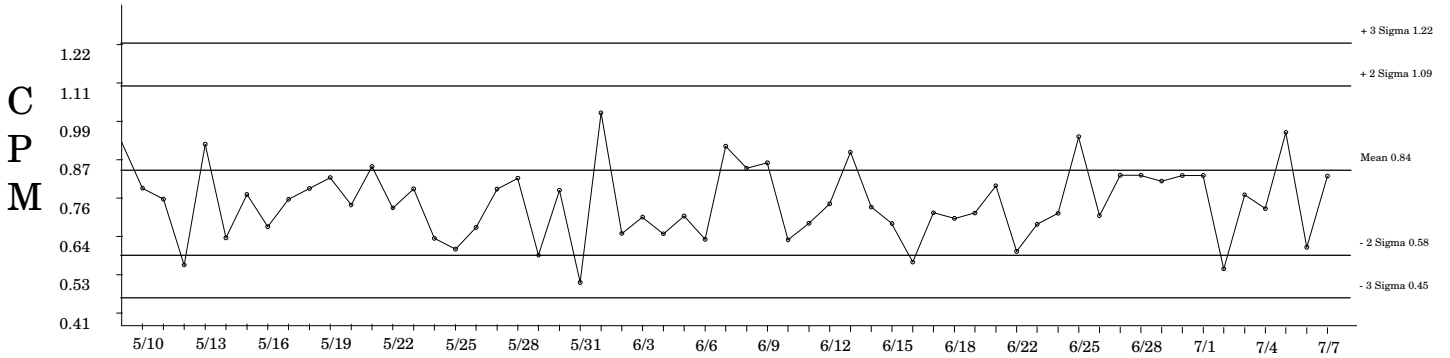

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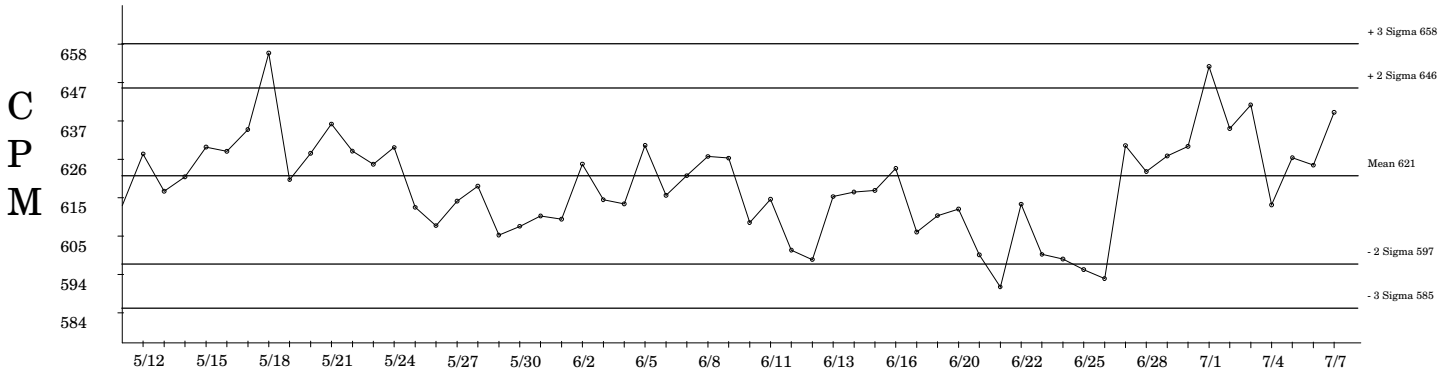

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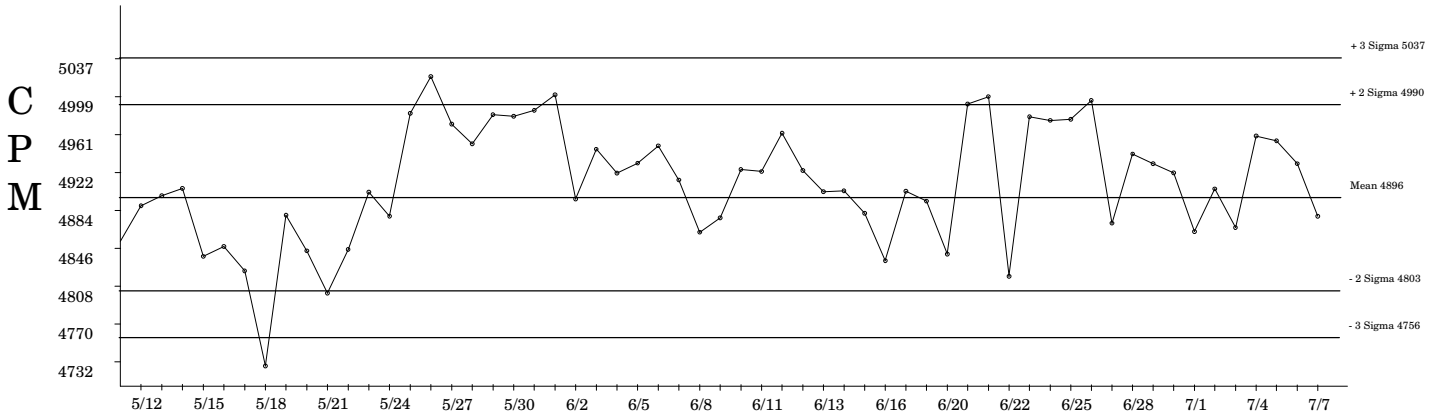

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LB4100D4 07/07/2005

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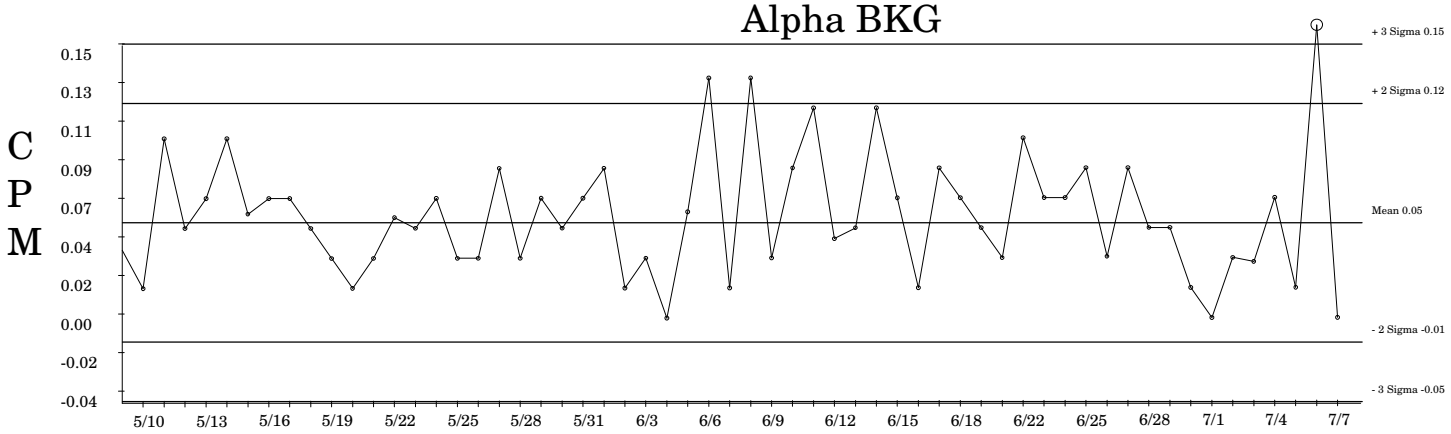

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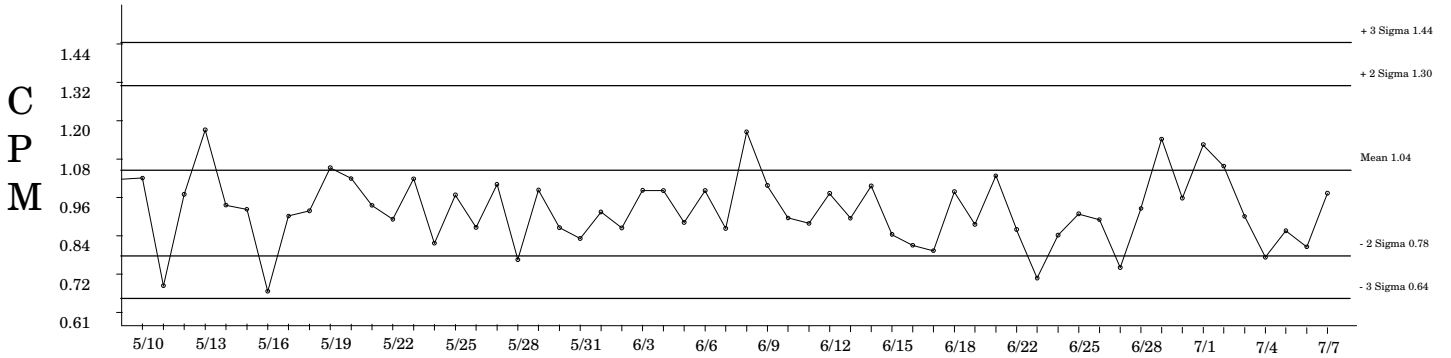

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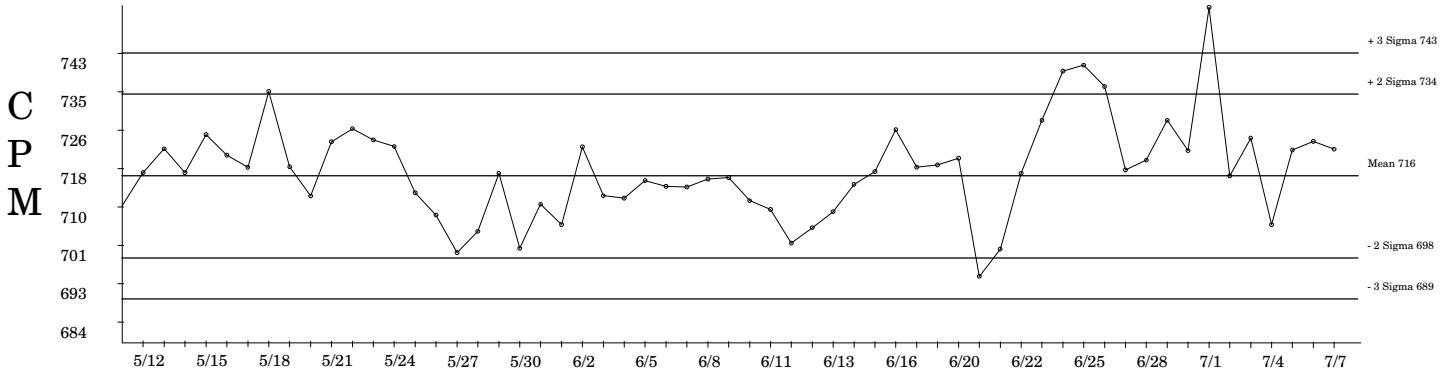

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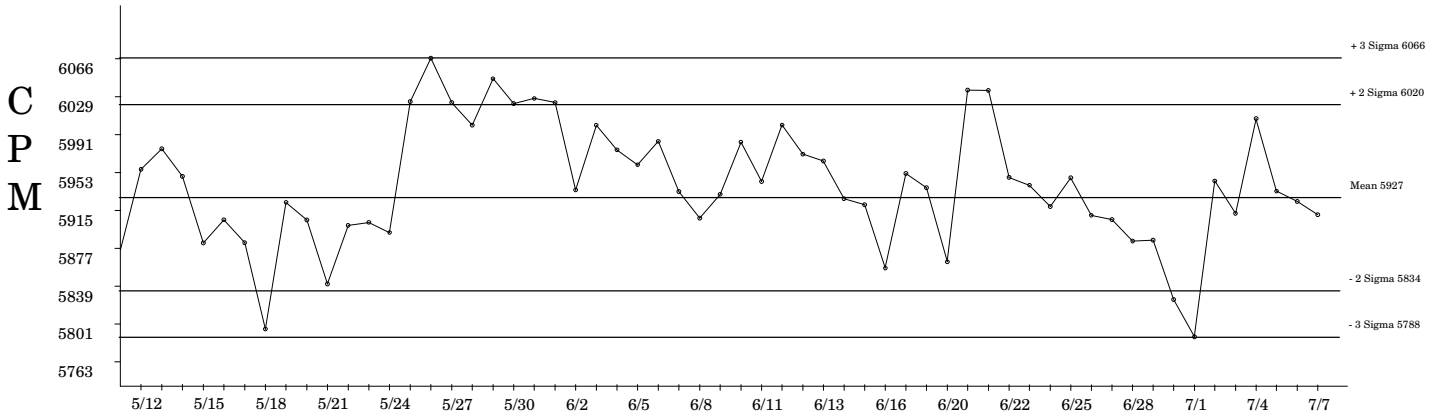

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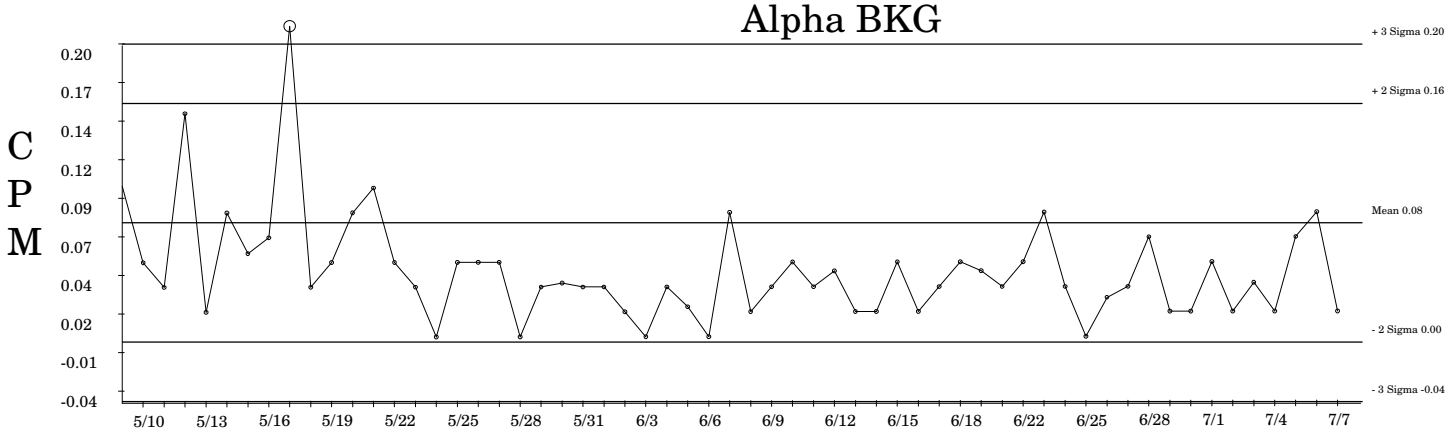

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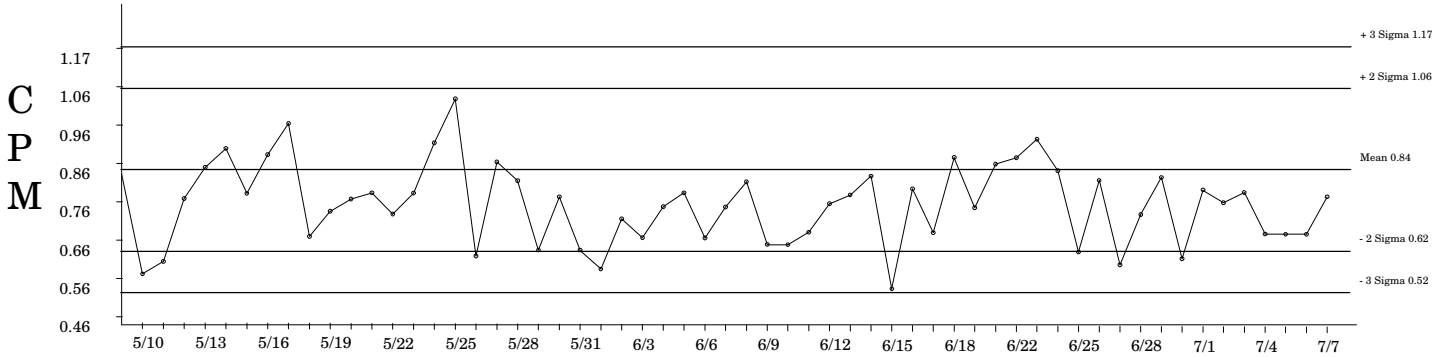

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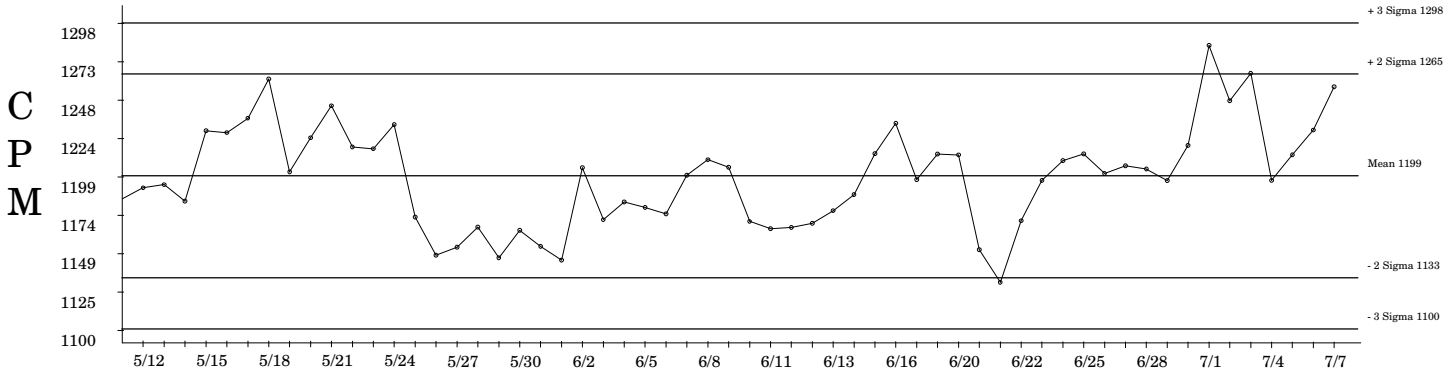

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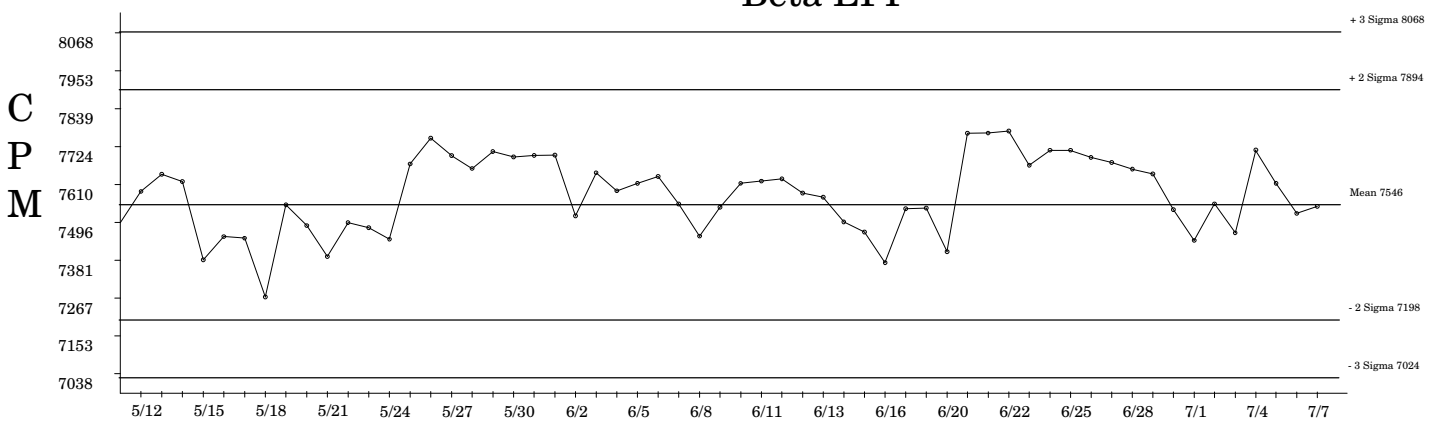

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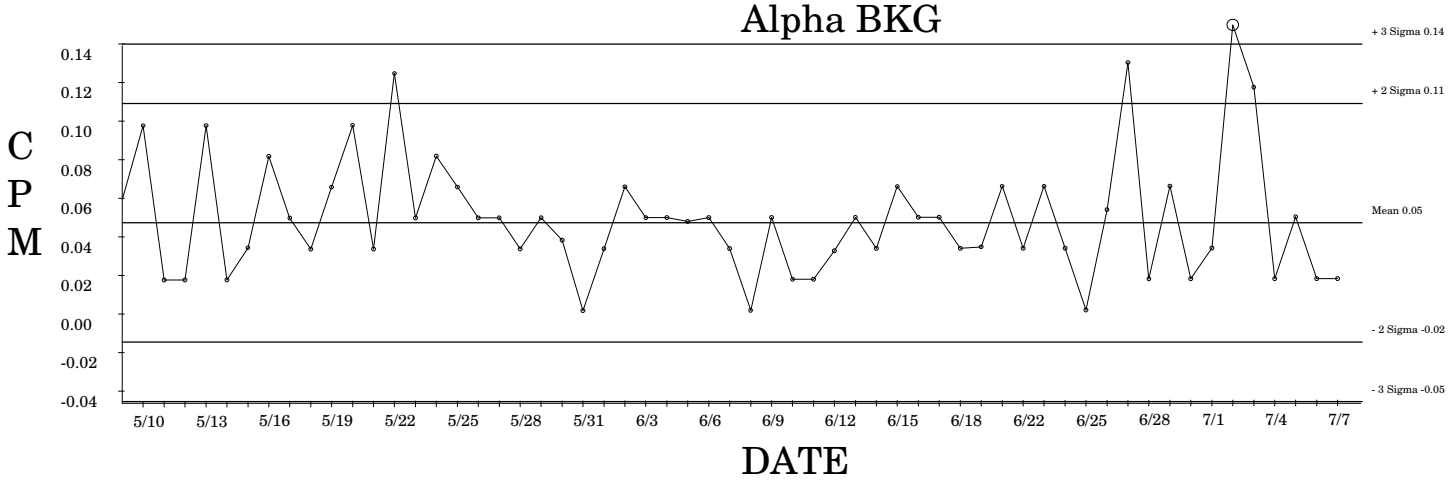

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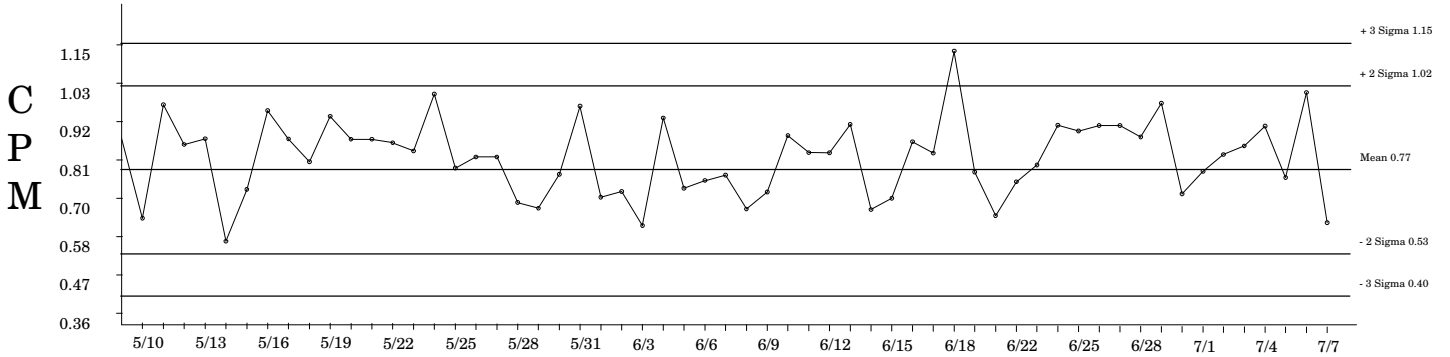

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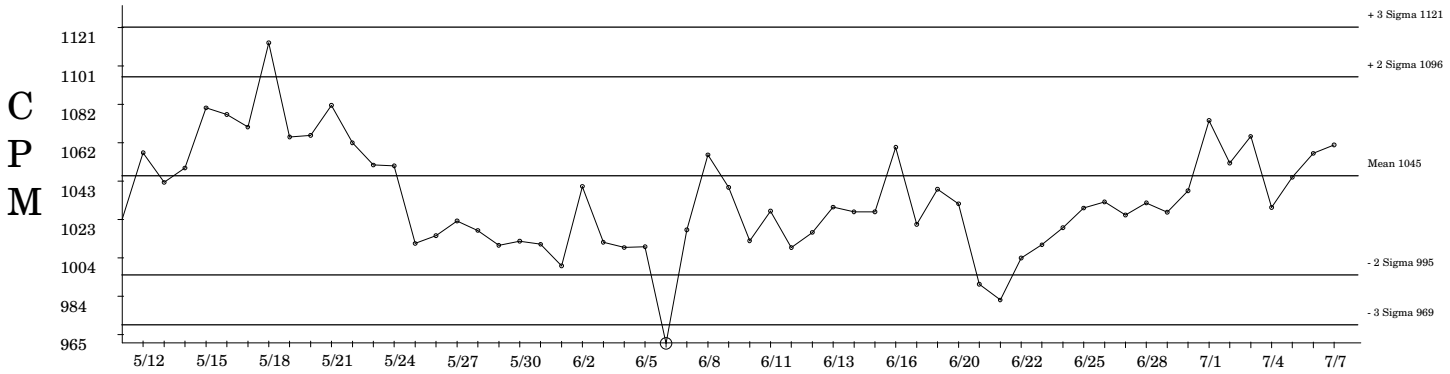

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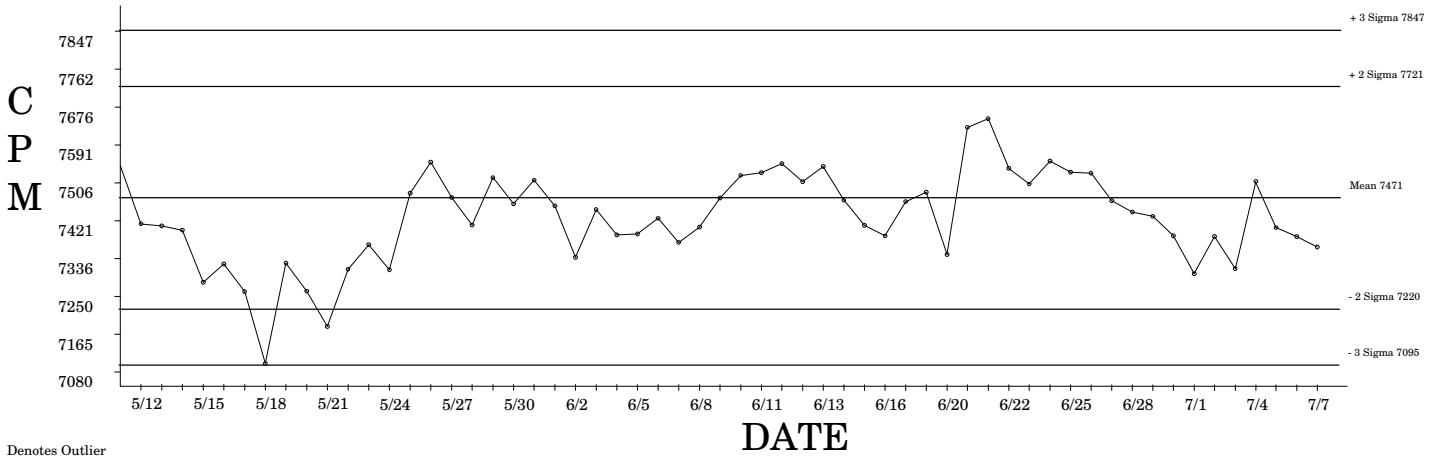

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LB4100F1 07/08/2005

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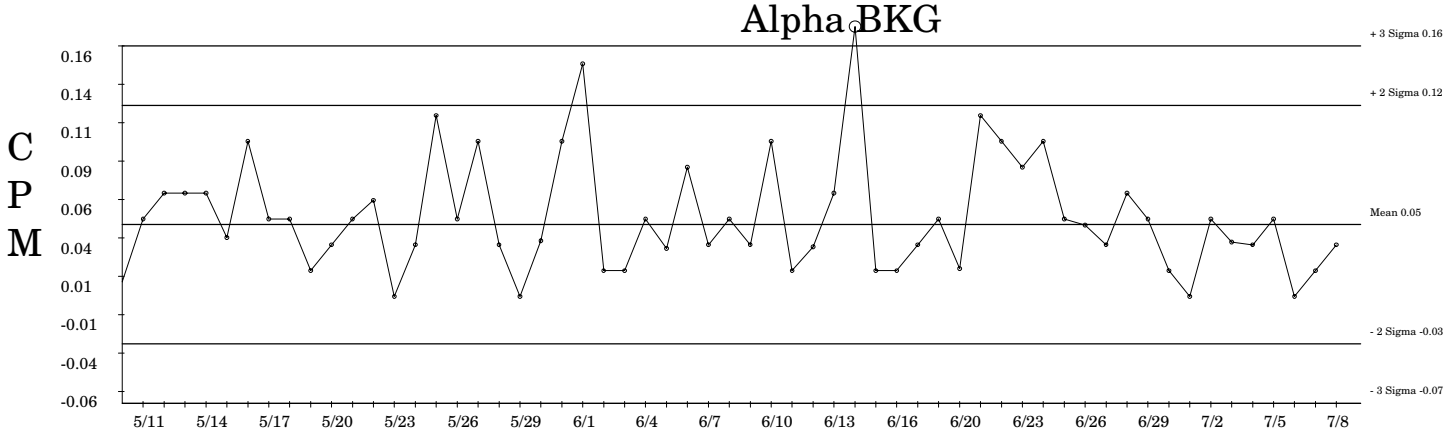

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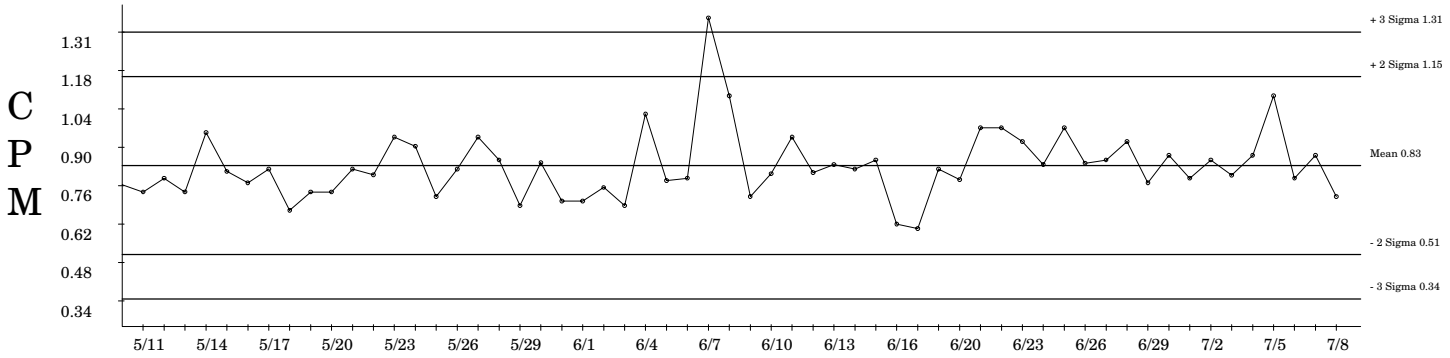

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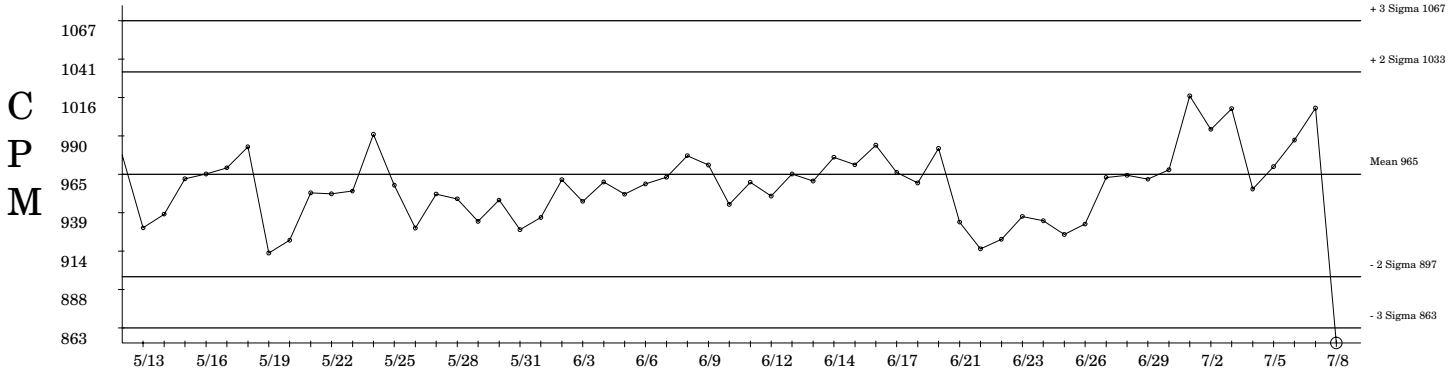

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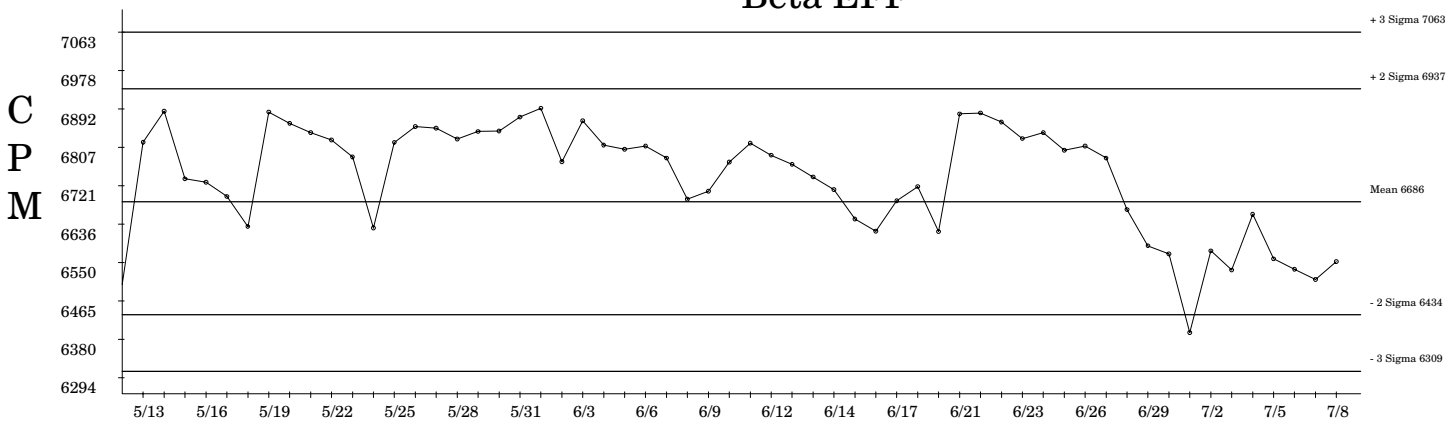

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LB4100F2 07/08/2005

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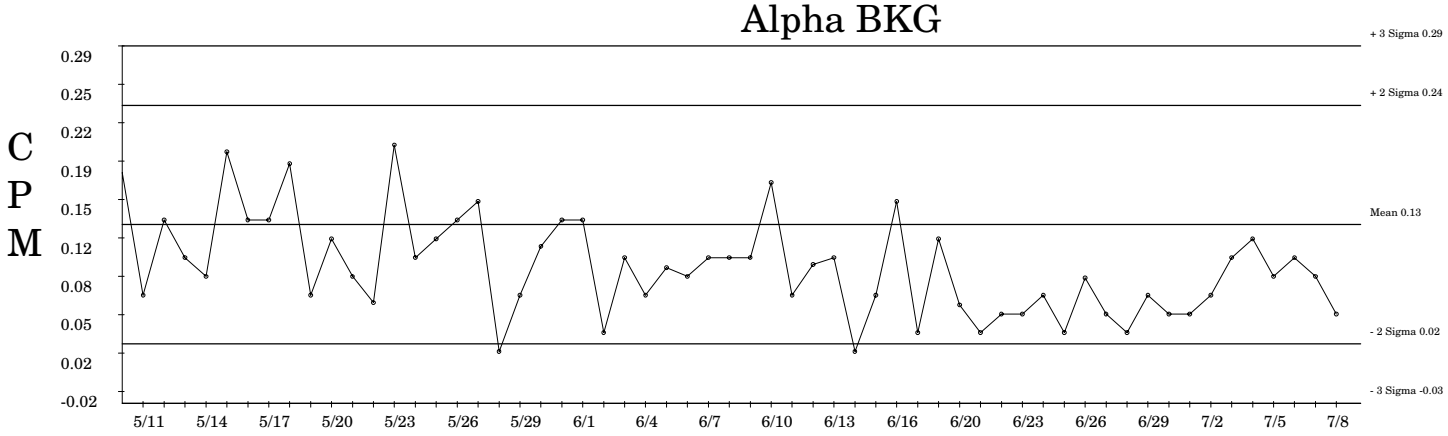

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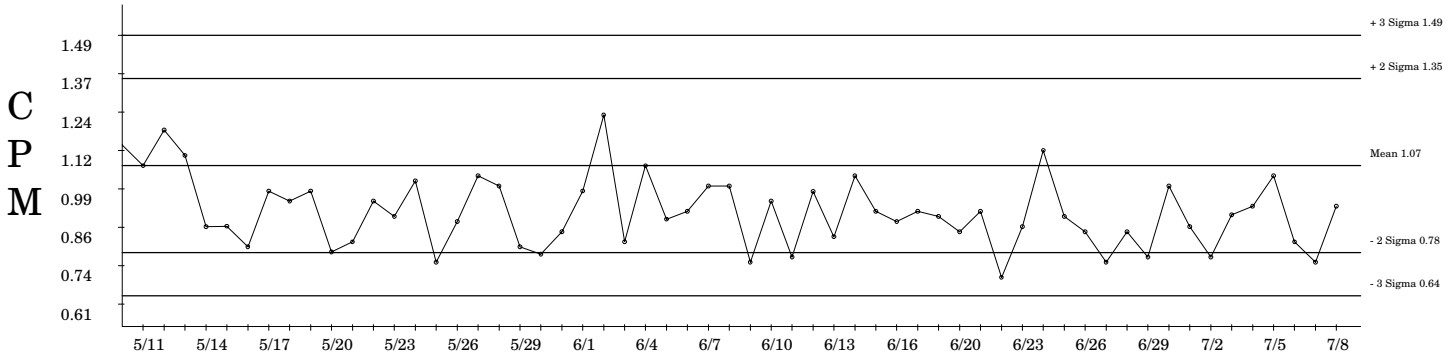

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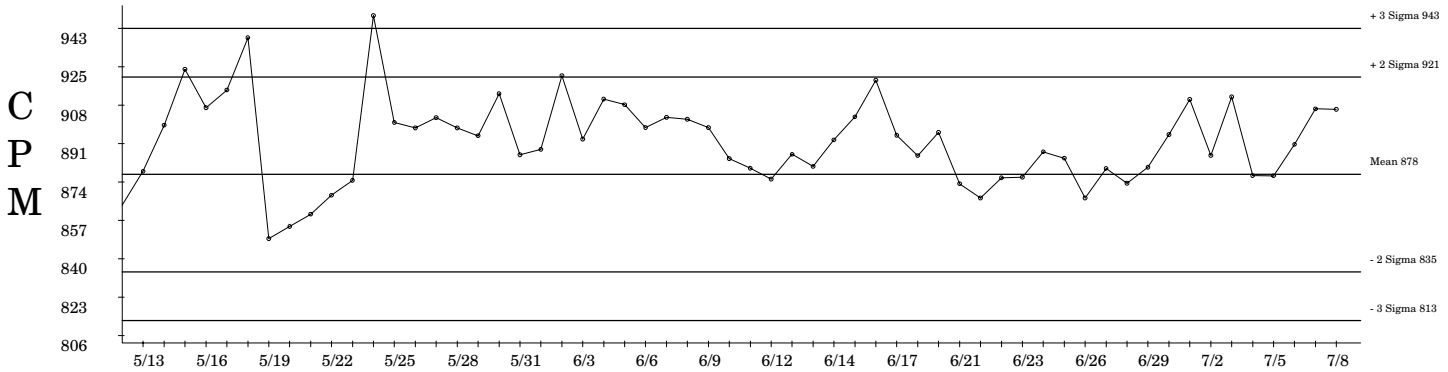

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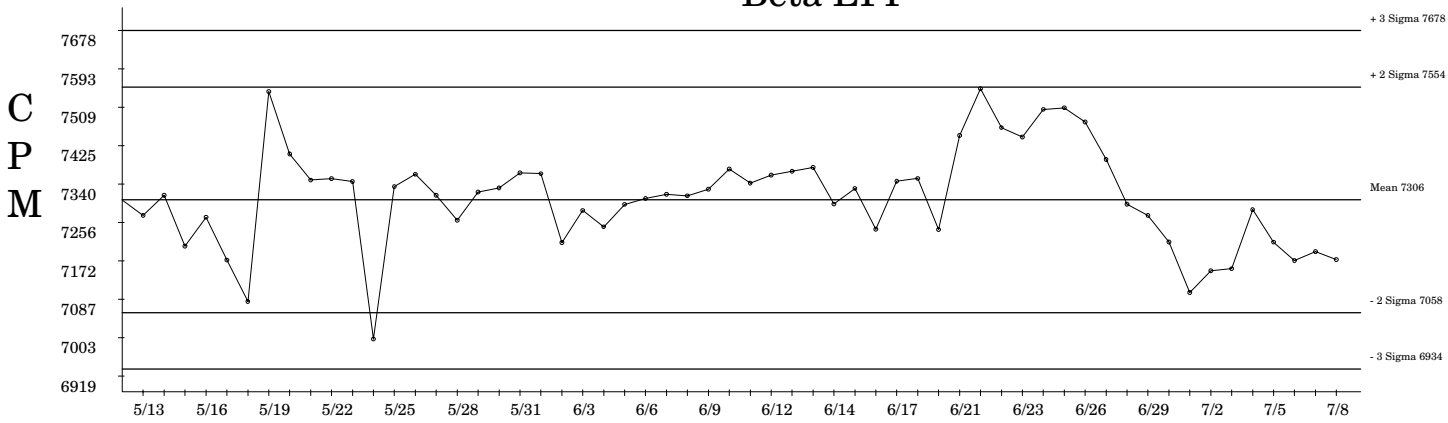

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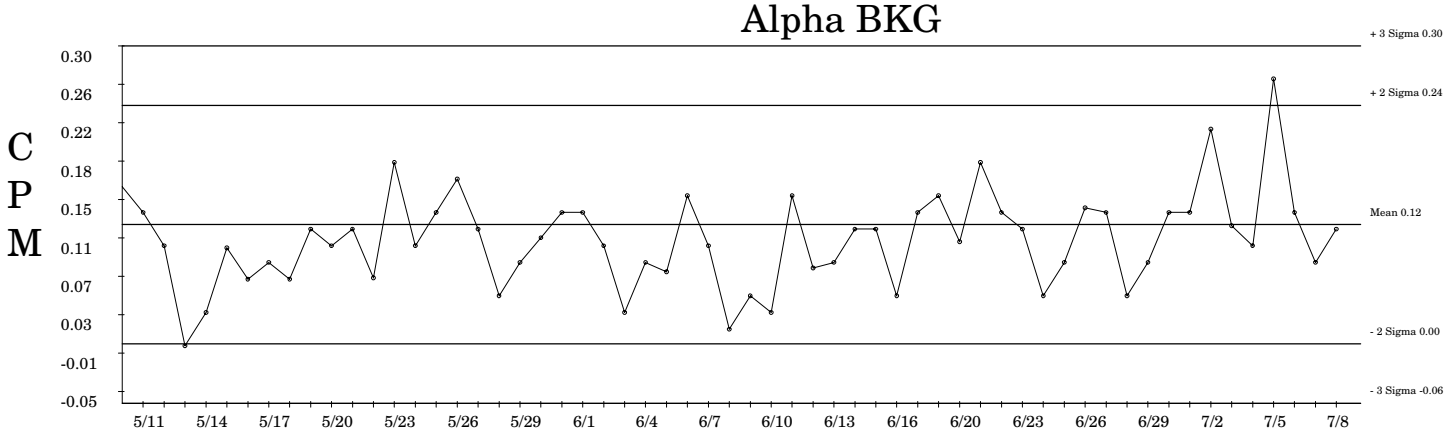

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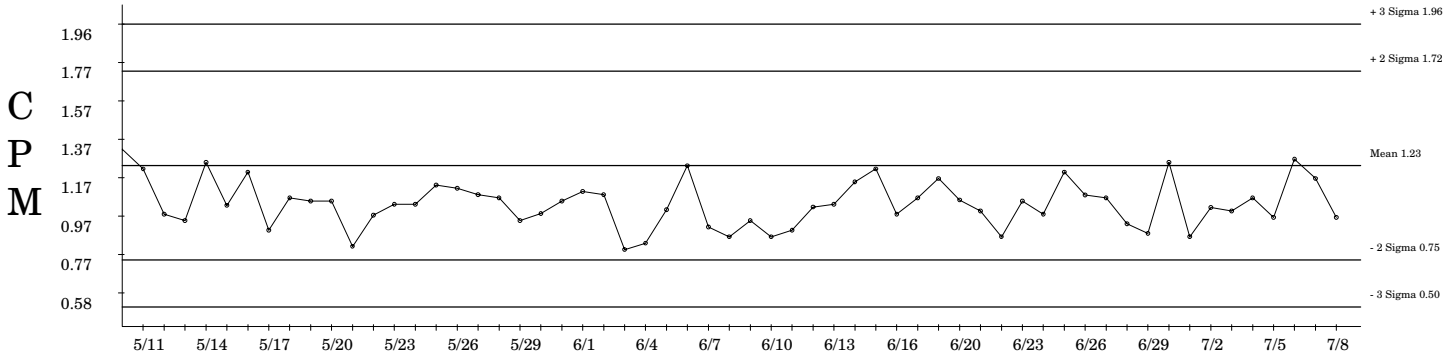

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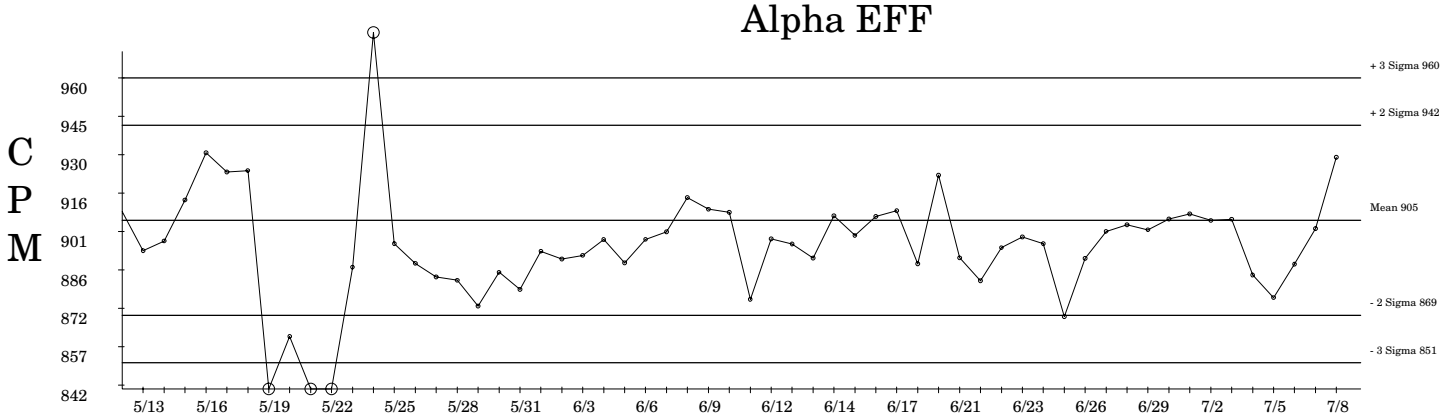

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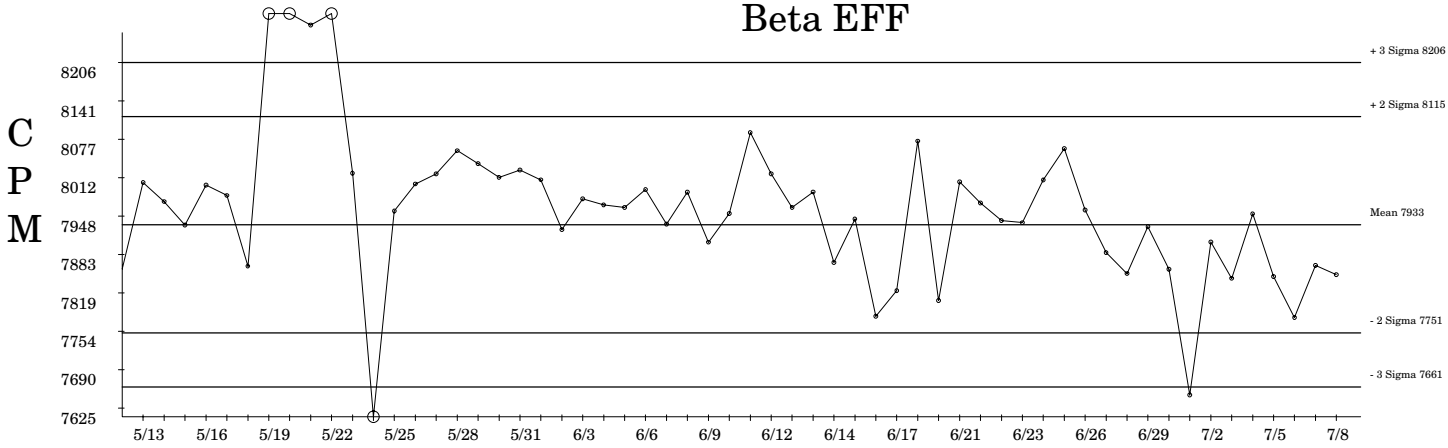

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LB4100G2 07/06/2005

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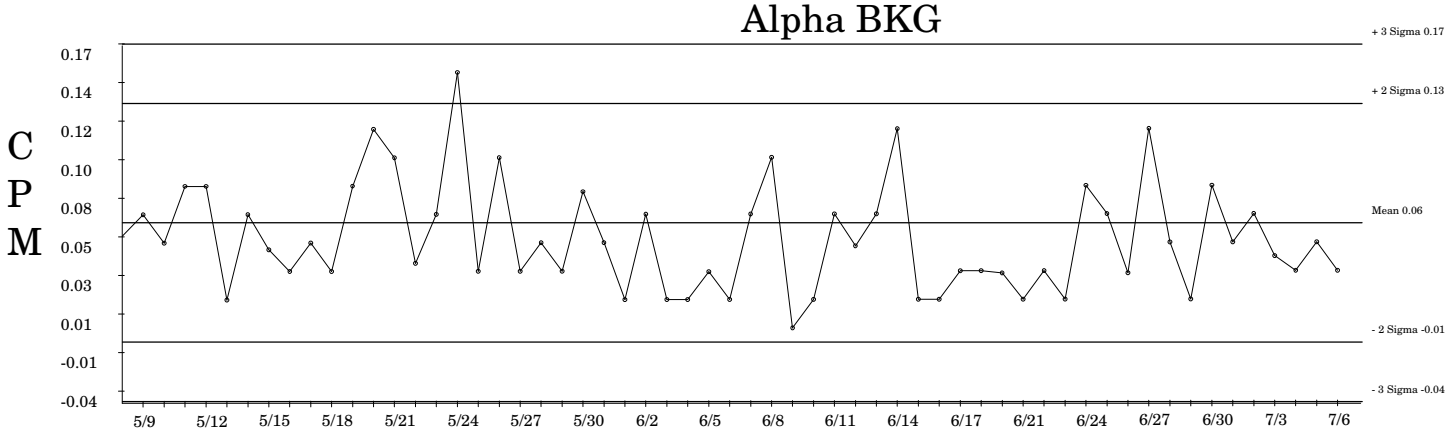

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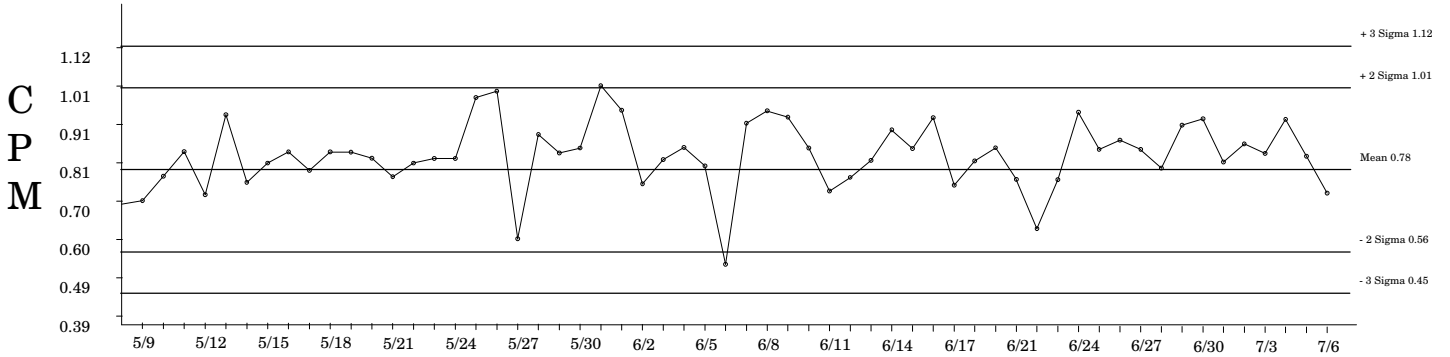

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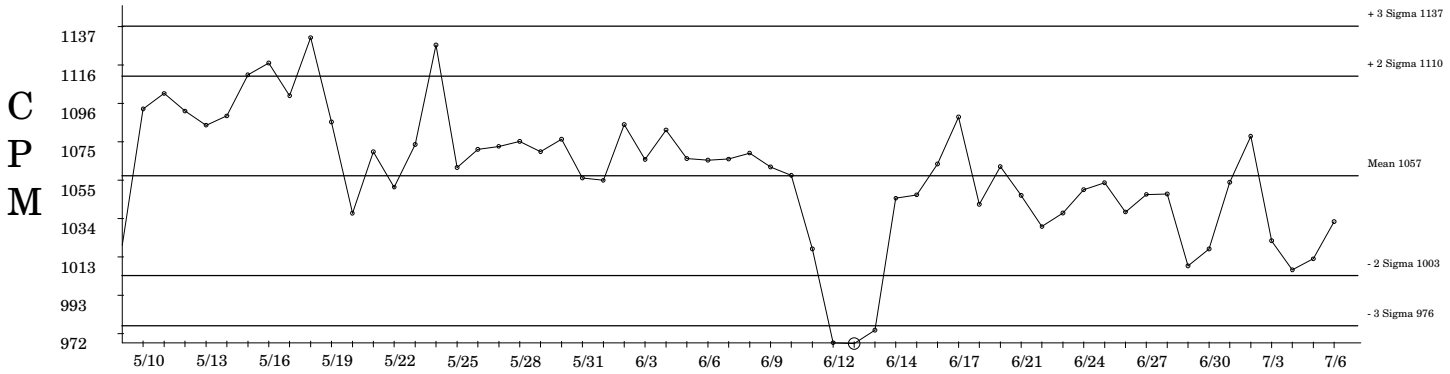

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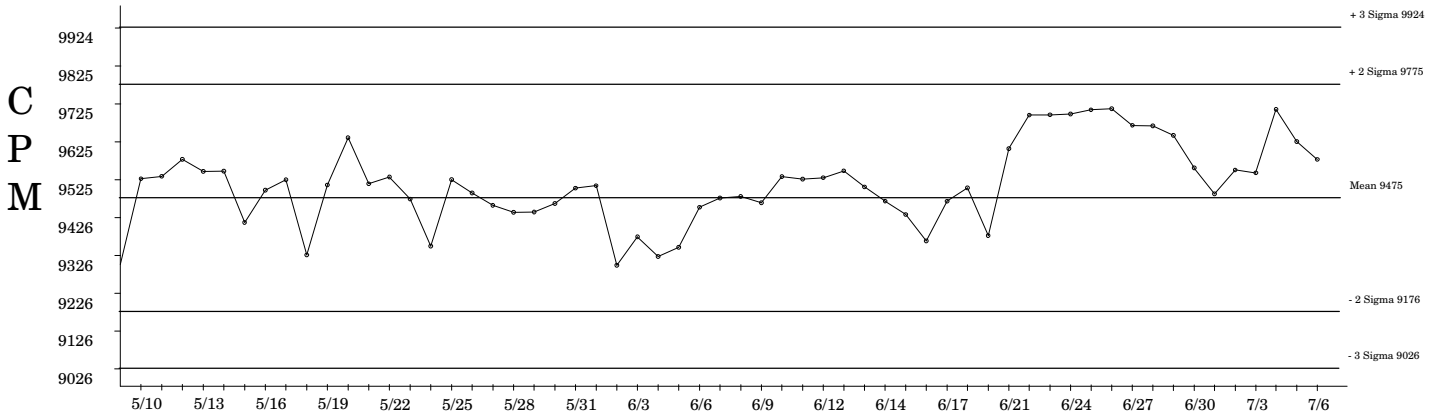

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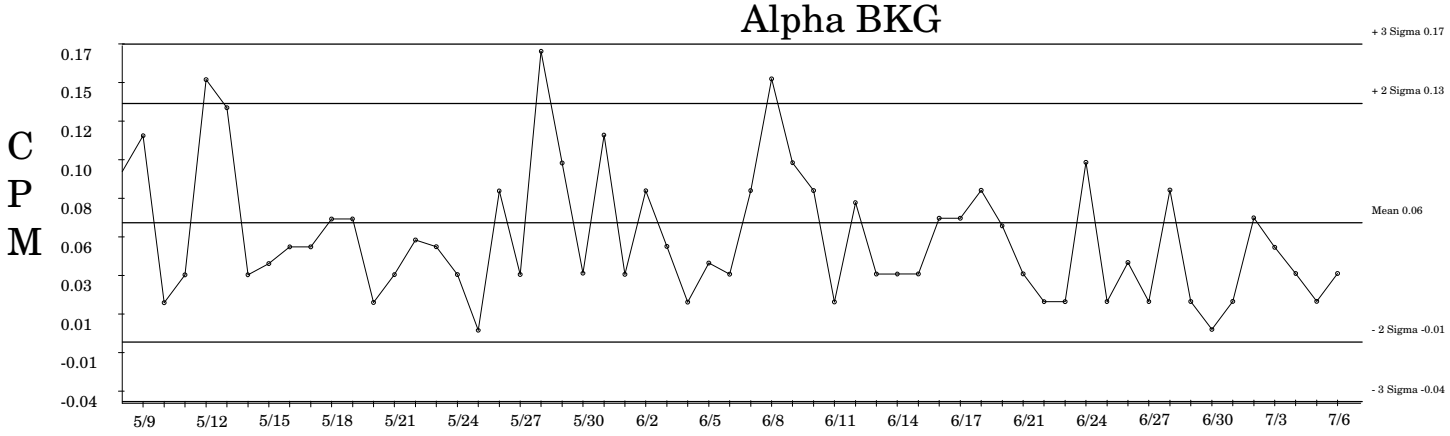

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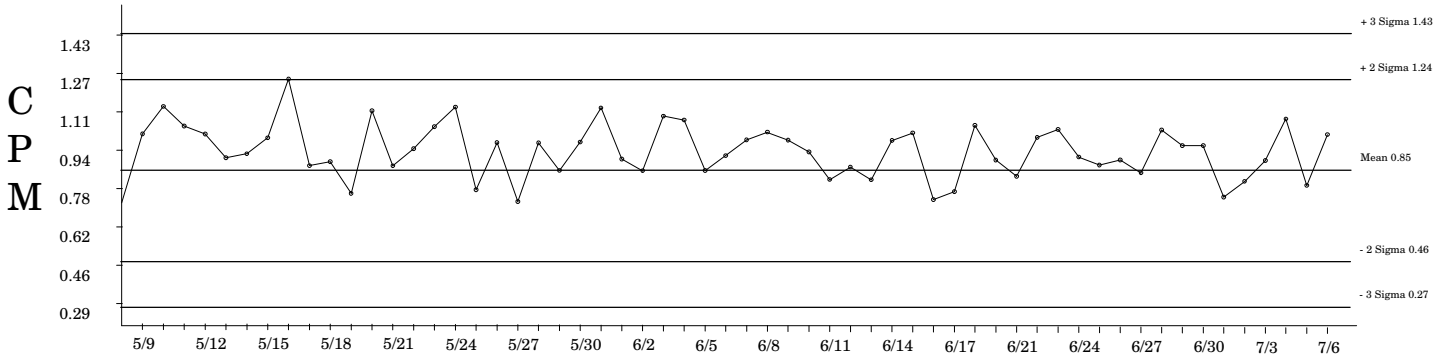

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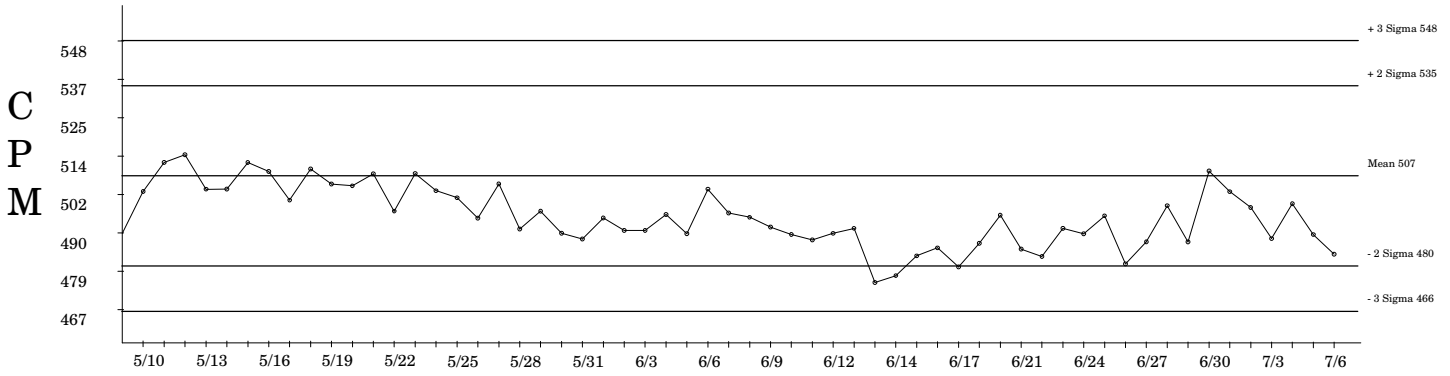

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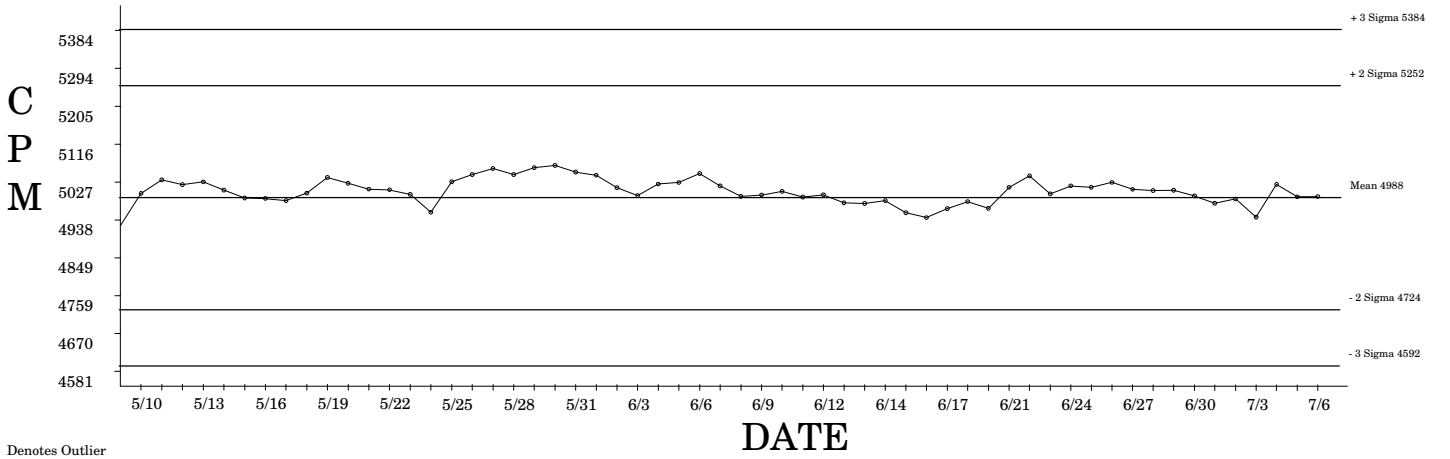

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LB4100H1 07/08/2005

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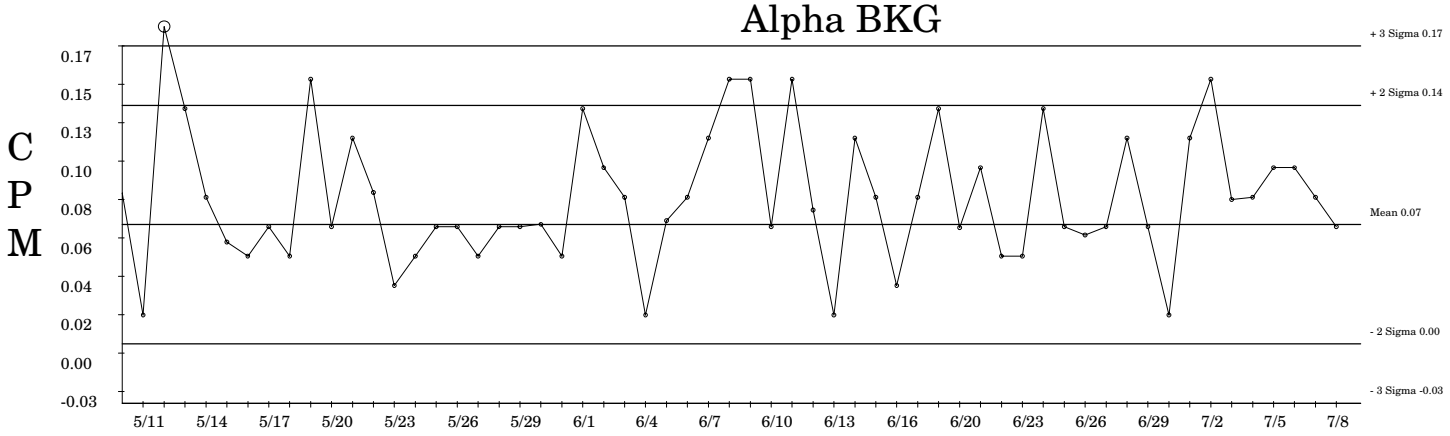

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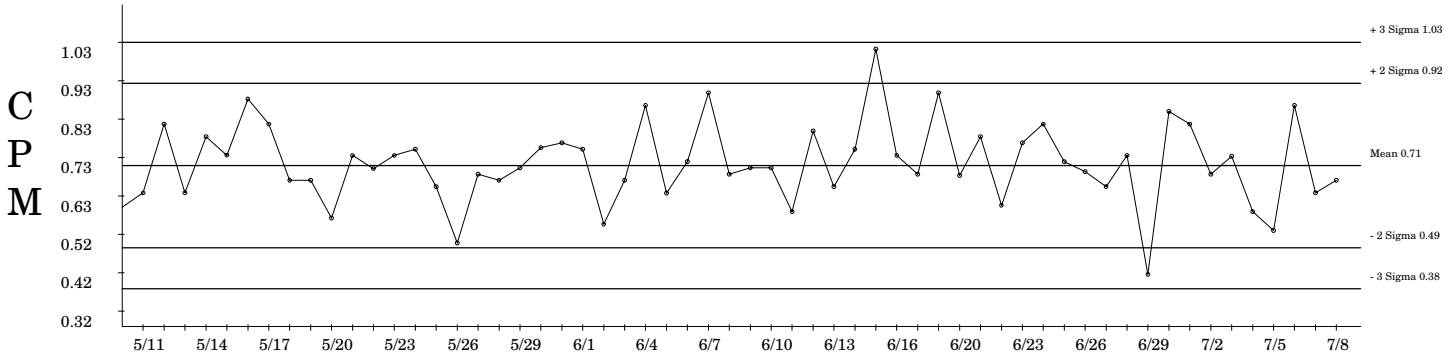

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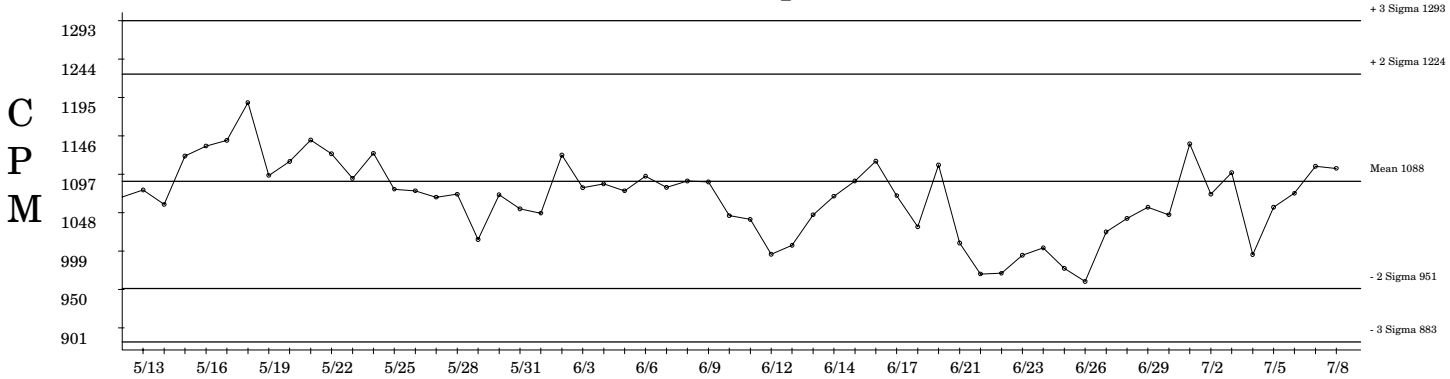

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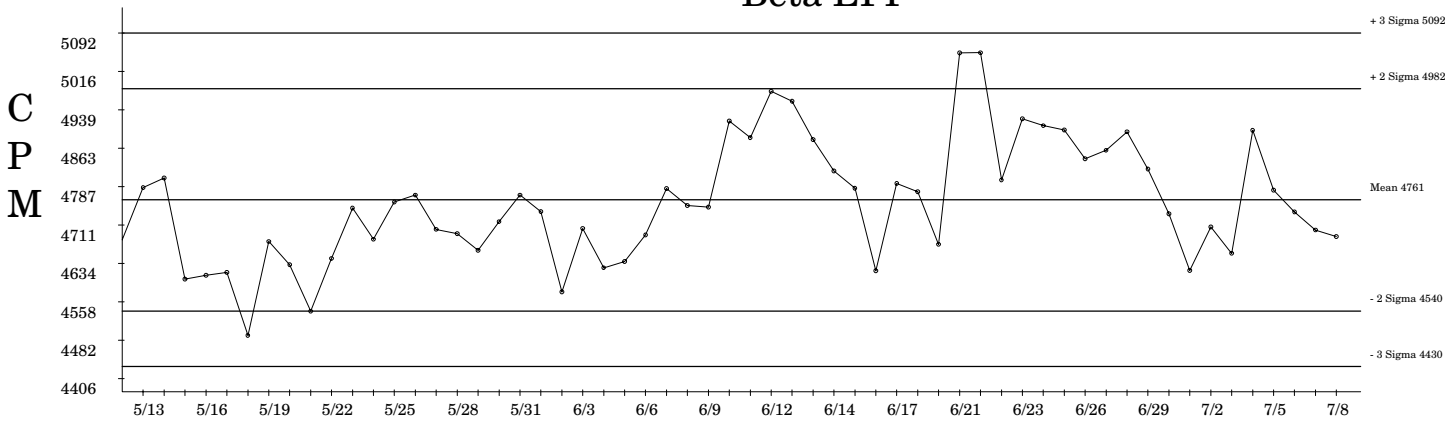

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LB4100H3 07/08/2005

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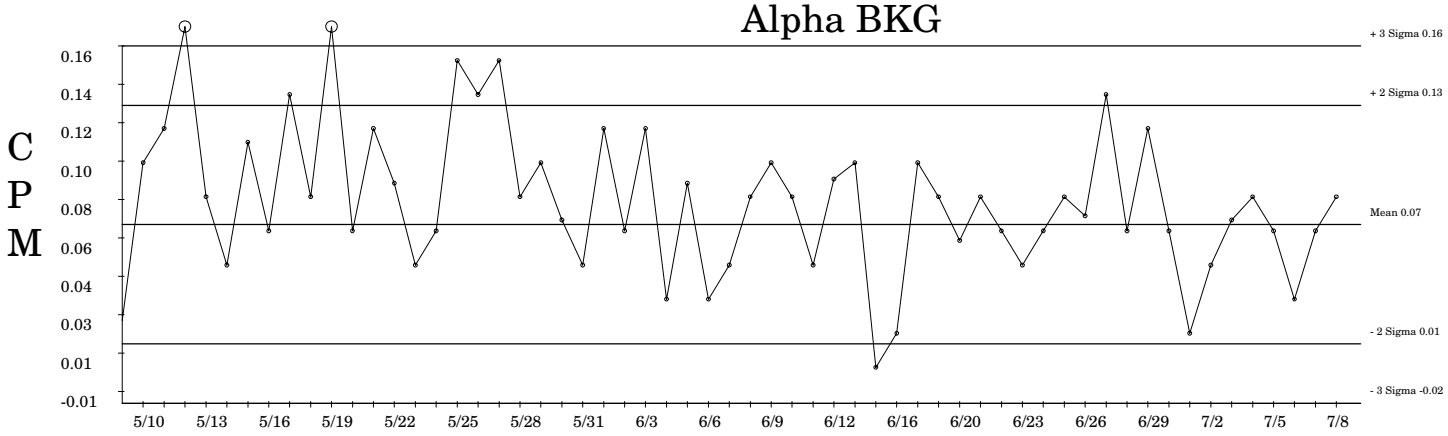

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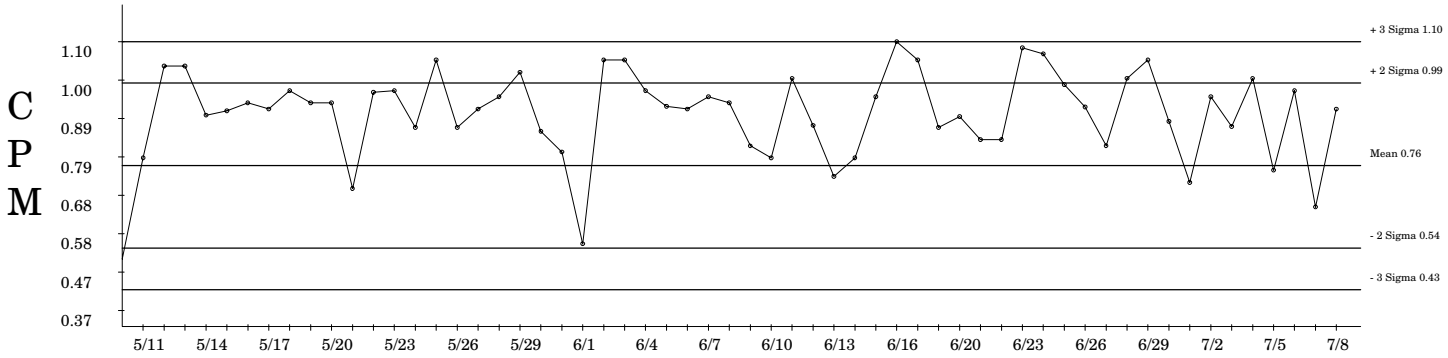

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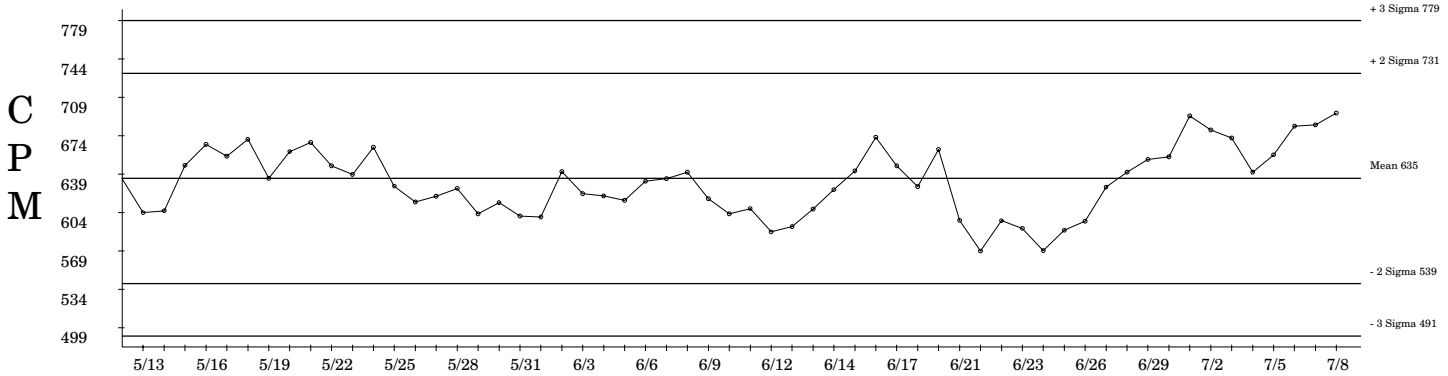

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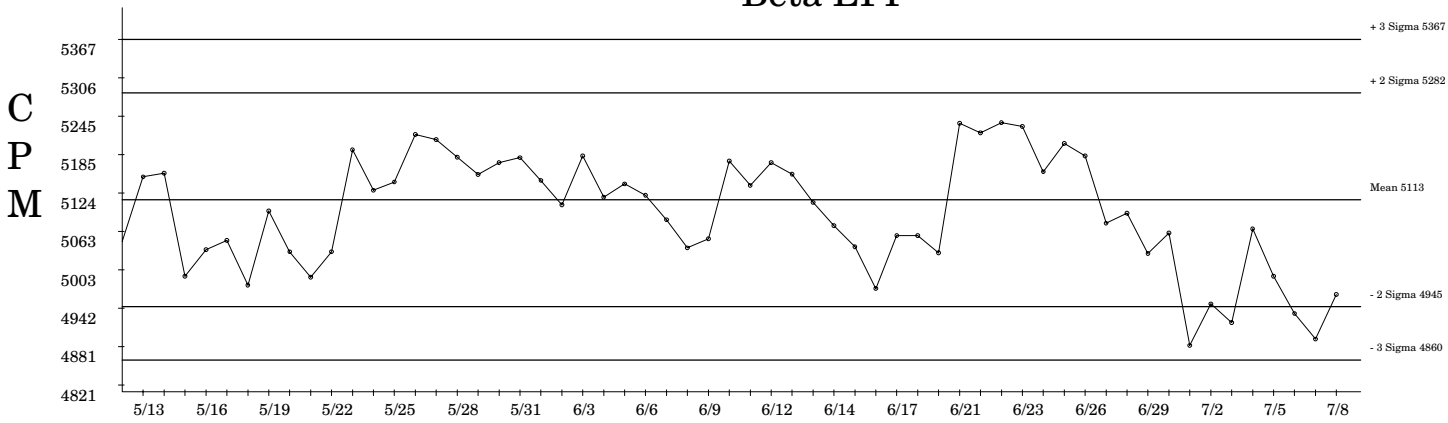

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LSCBLUE 07/06/2005

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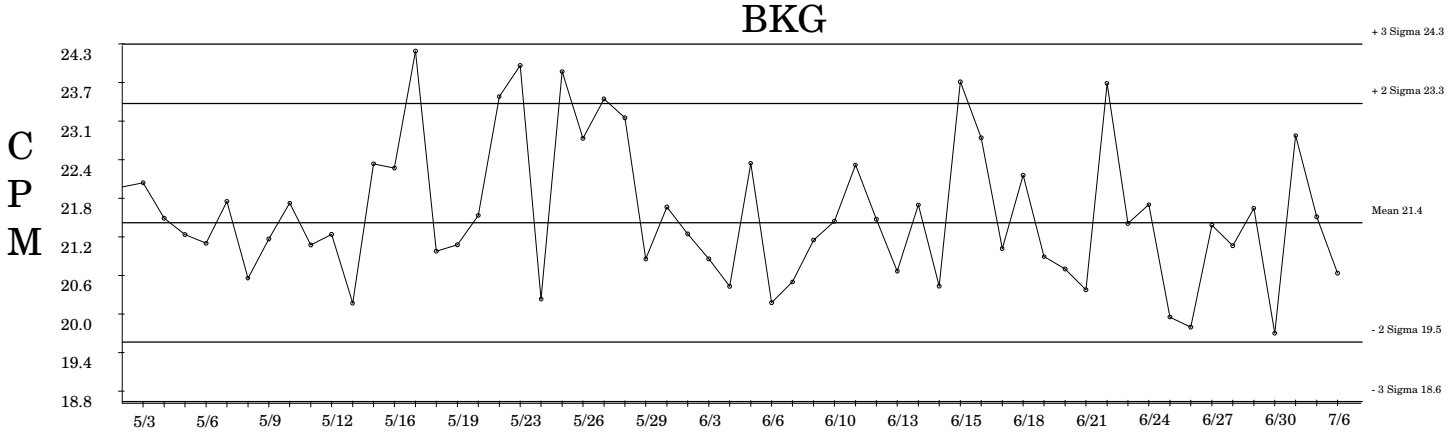

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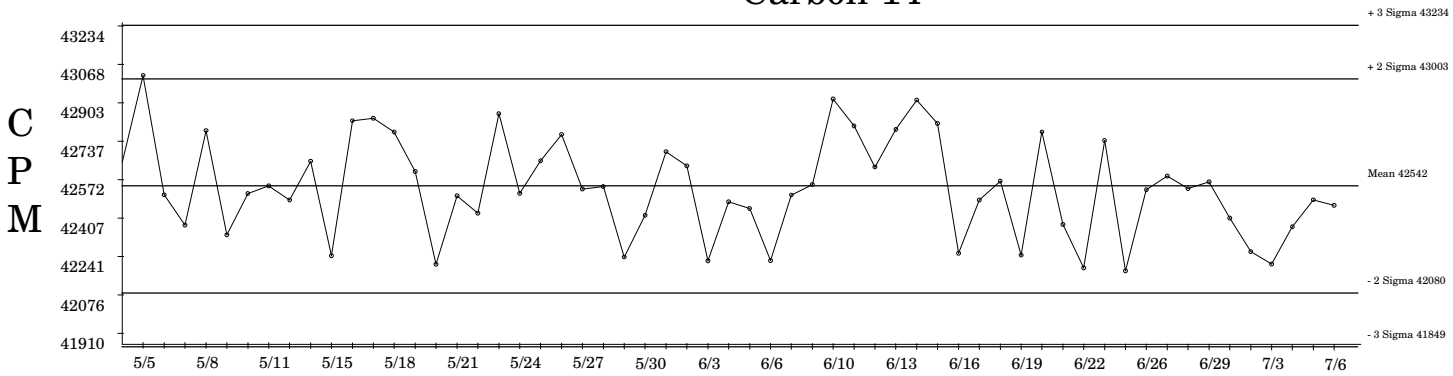
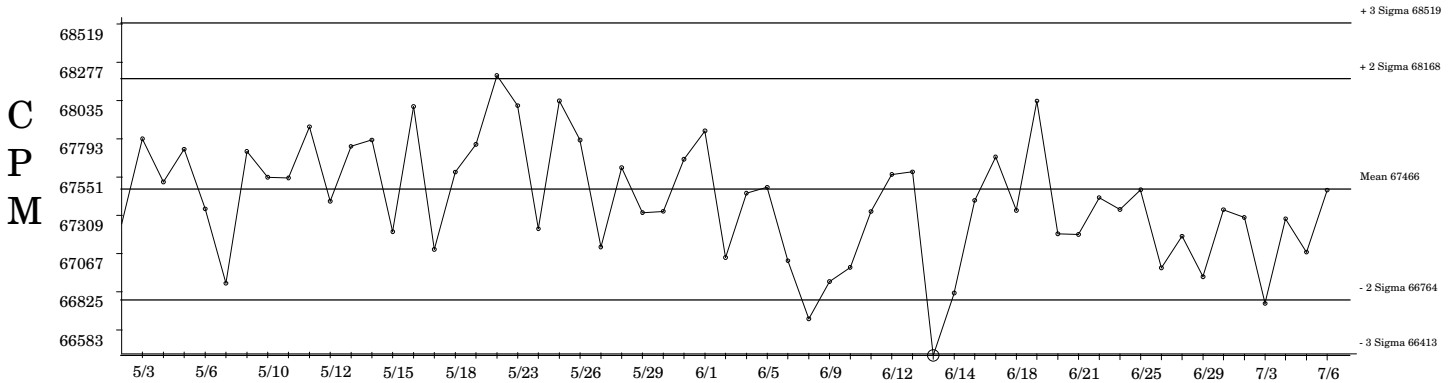


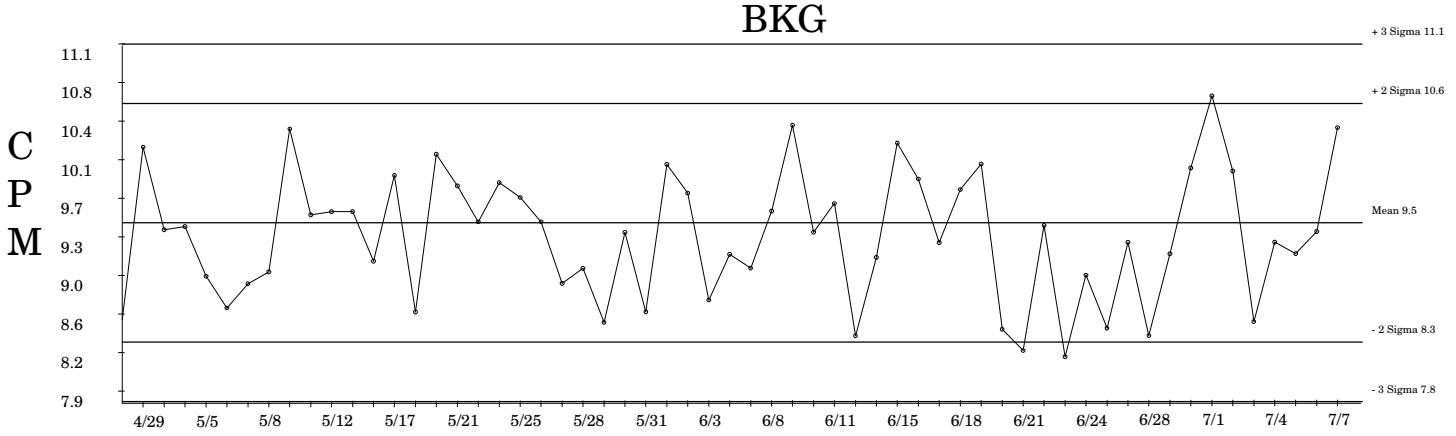
Tritium



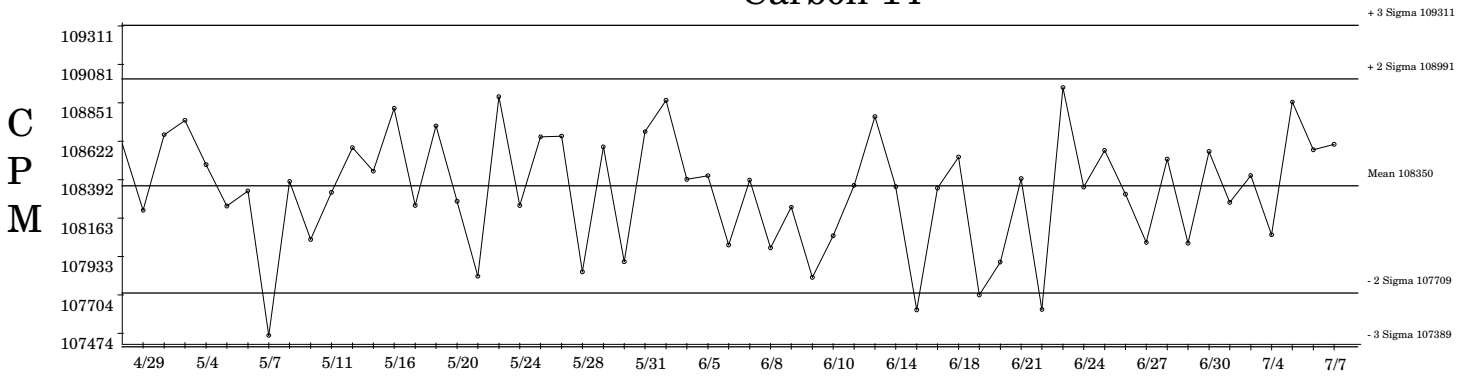
○ Denotes Outlier

LSCPINK 07/07/2005

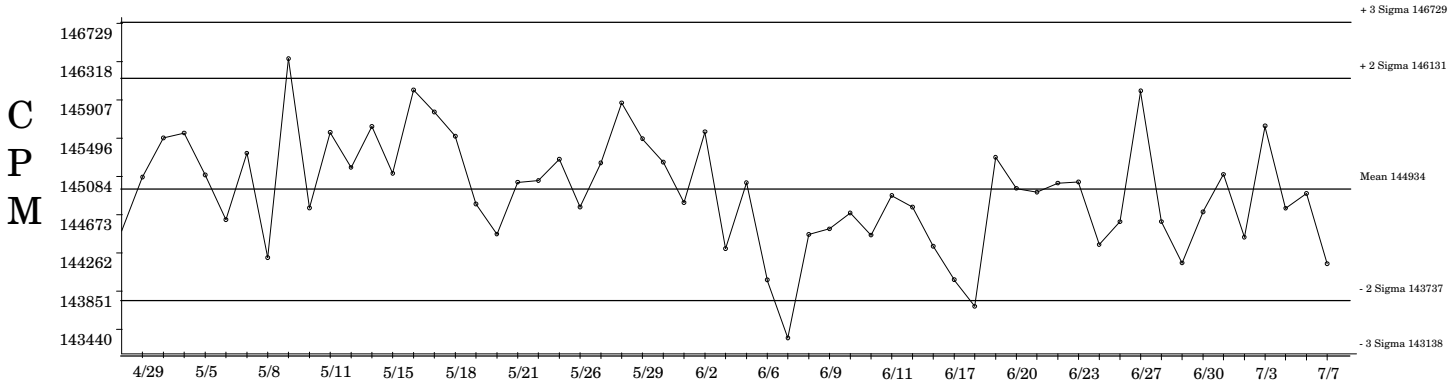
BKG



Carbon-14

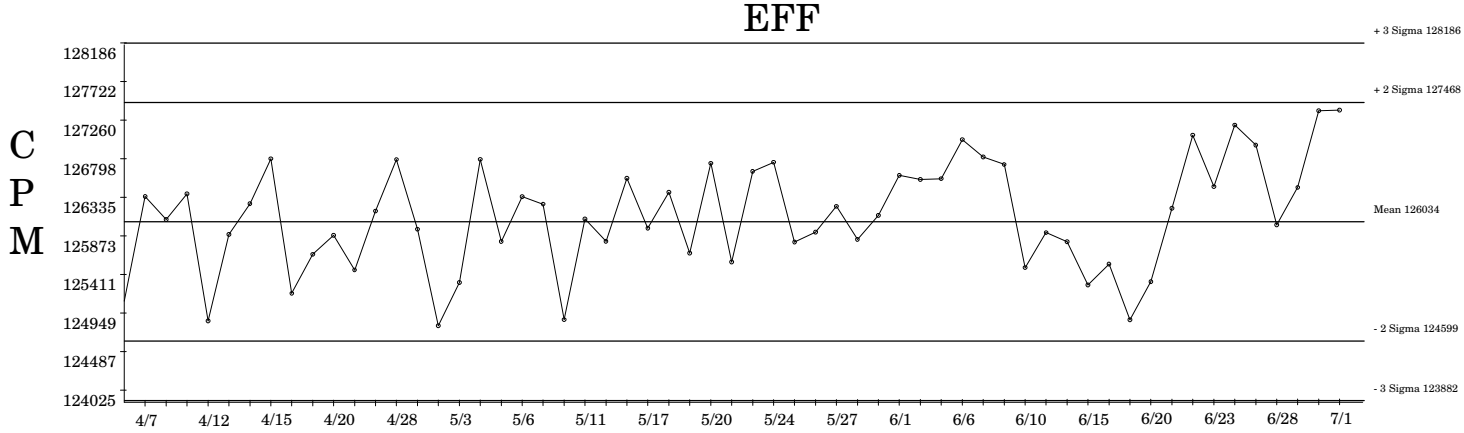


Tritium



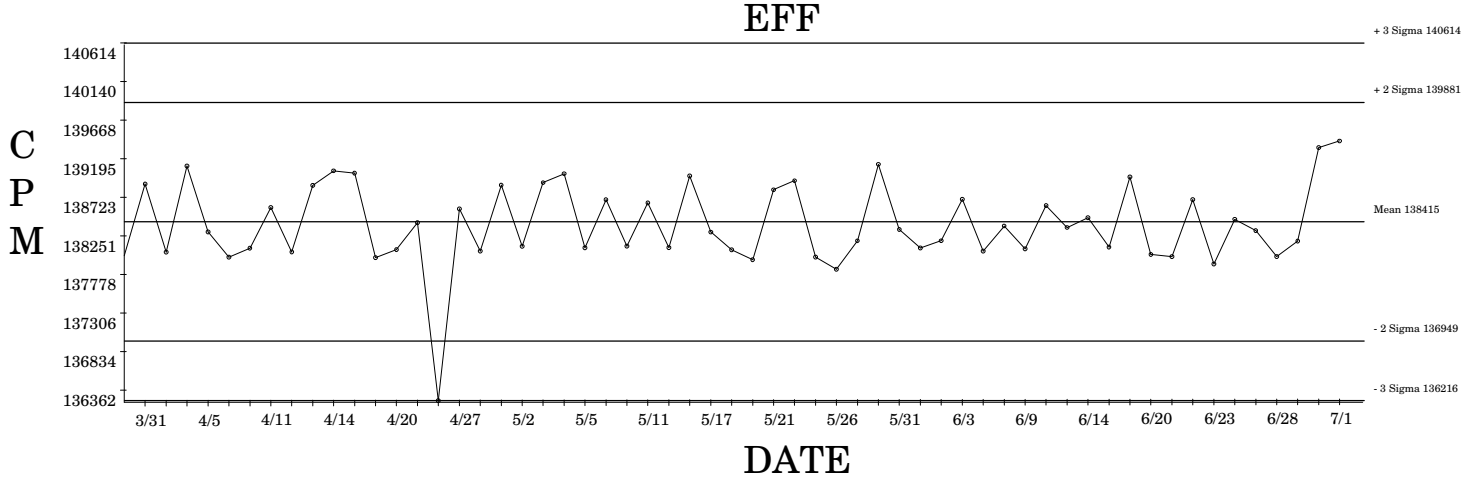
○ Denotes Outlier

LUCAS1 07/01/2005
EFF



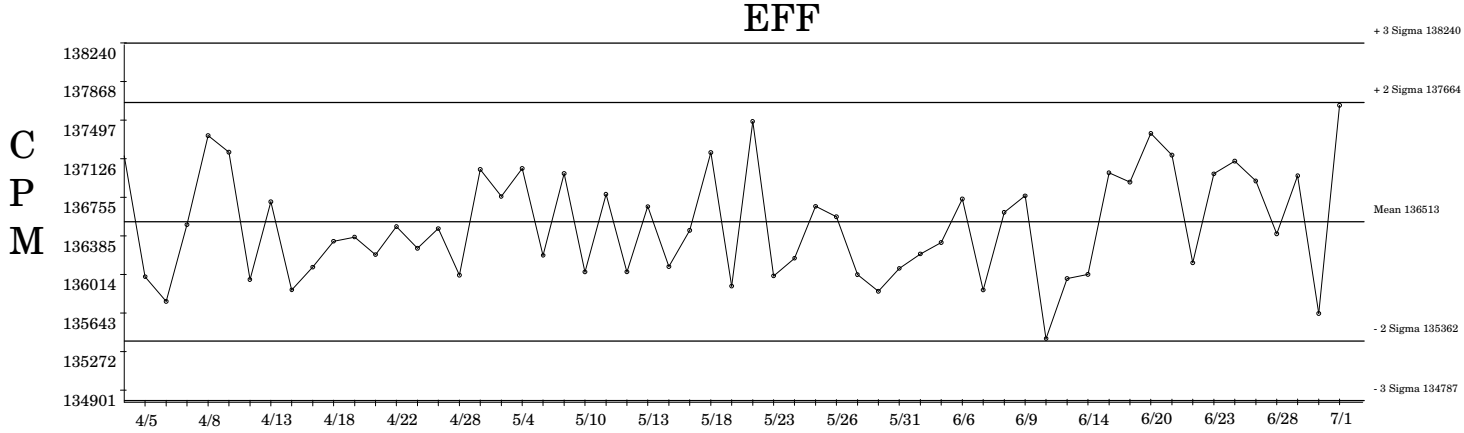
○ Denotes Outlier

LUCAS4 07/01/2005
EFF



○ Denotes Outlier

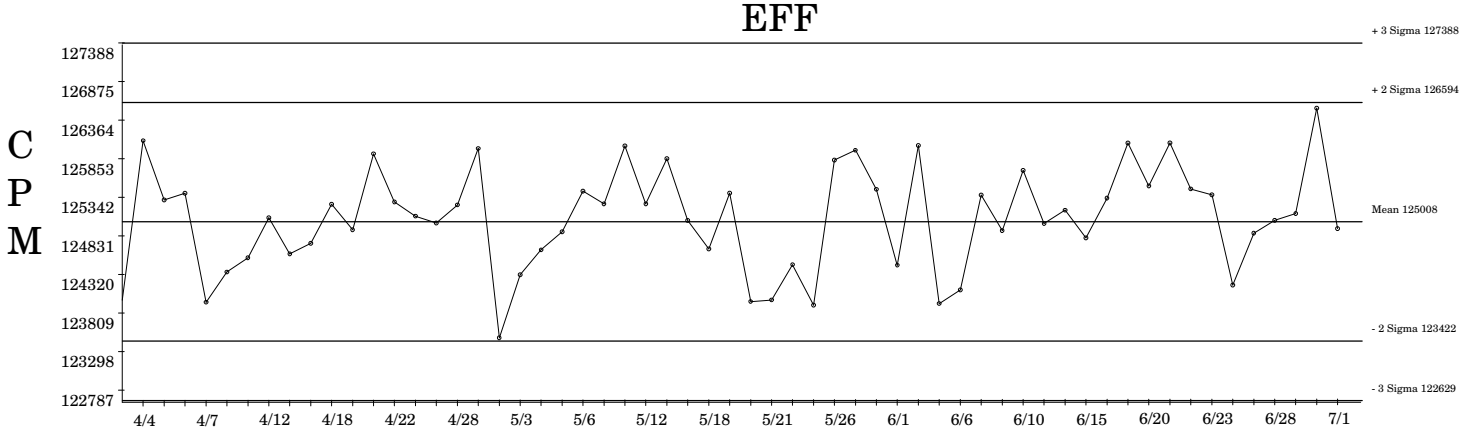
LUCAS5 07/01/2005
EFF



DATE

○ Denotes Outlier

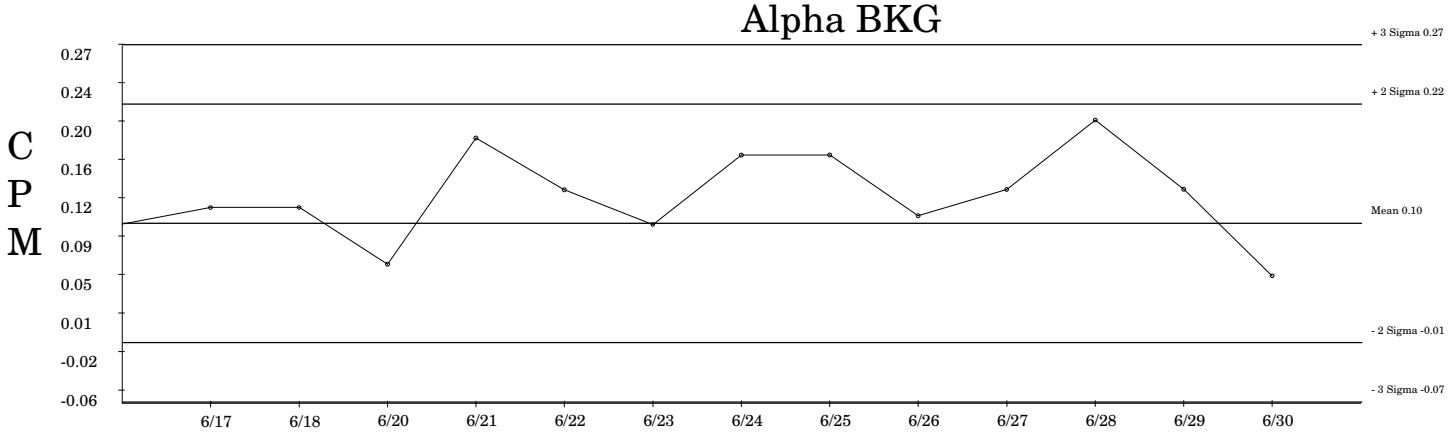
LUCAS6 07/01/2005
EFF



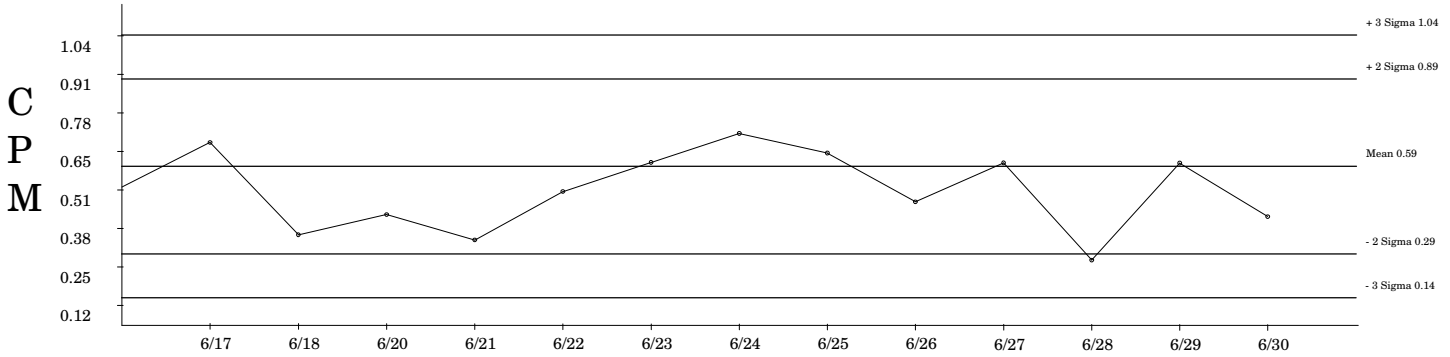
○ Denotes Outlier

PIC1A 06/30/2005

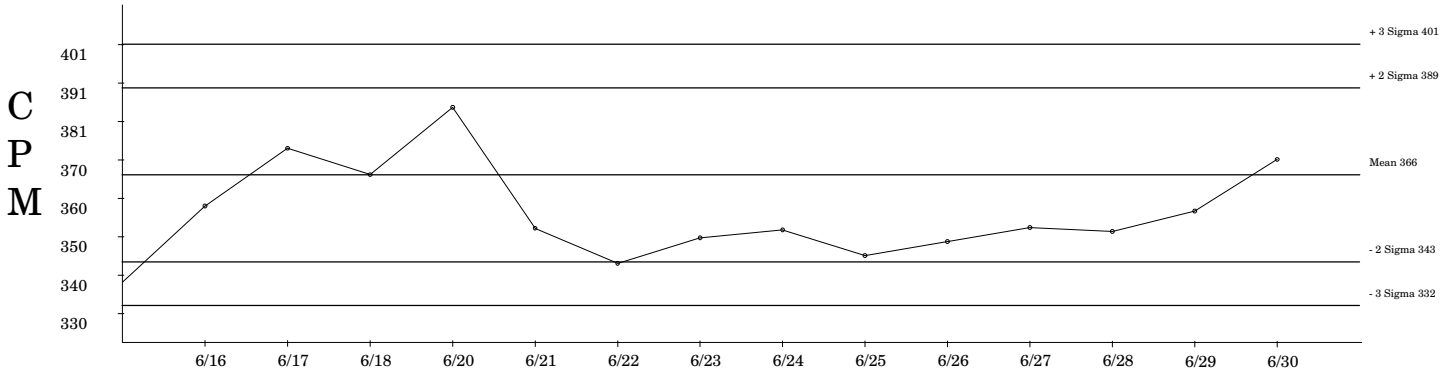
Alpha BKG



Beta BKG



Alpha EFF



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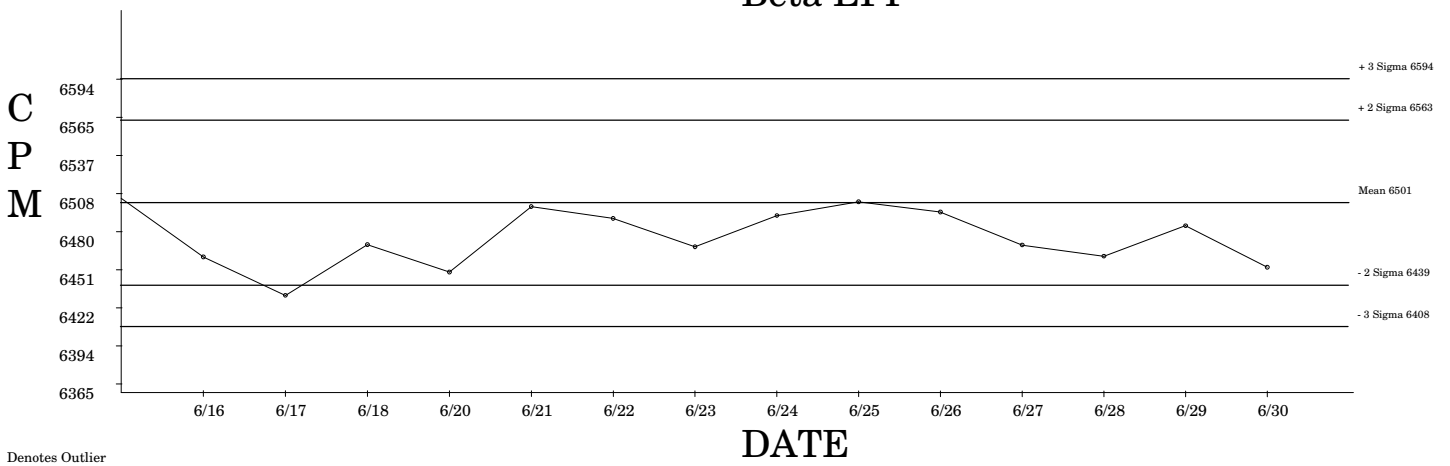
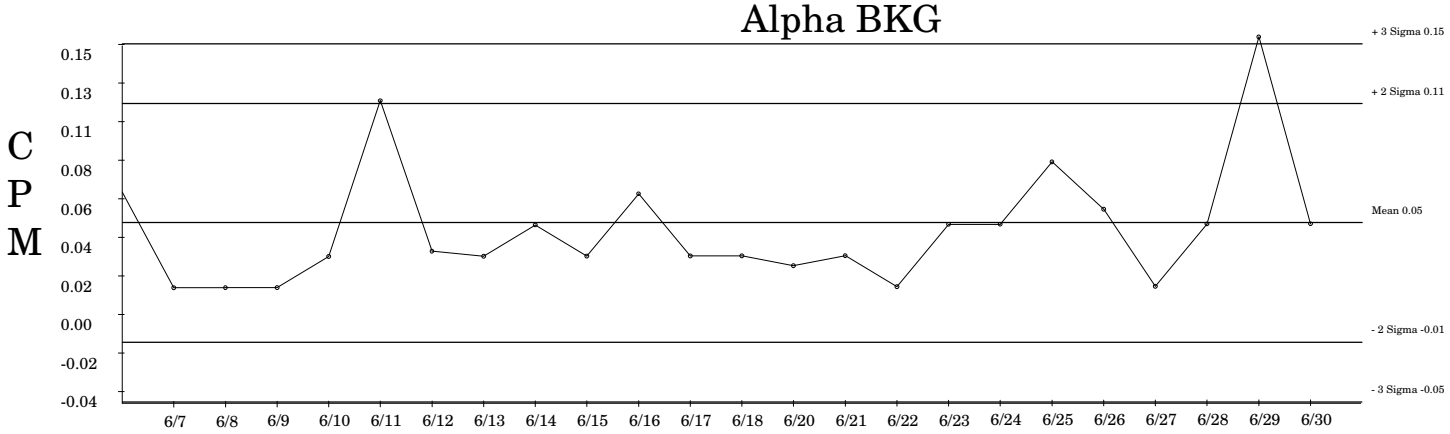


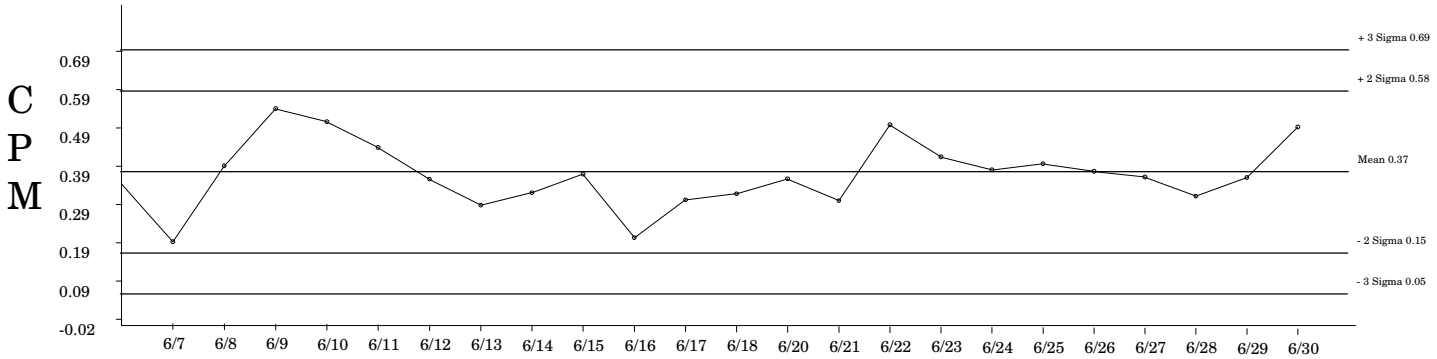
○ Denotes Outlier

PIC1B 06/30/2005

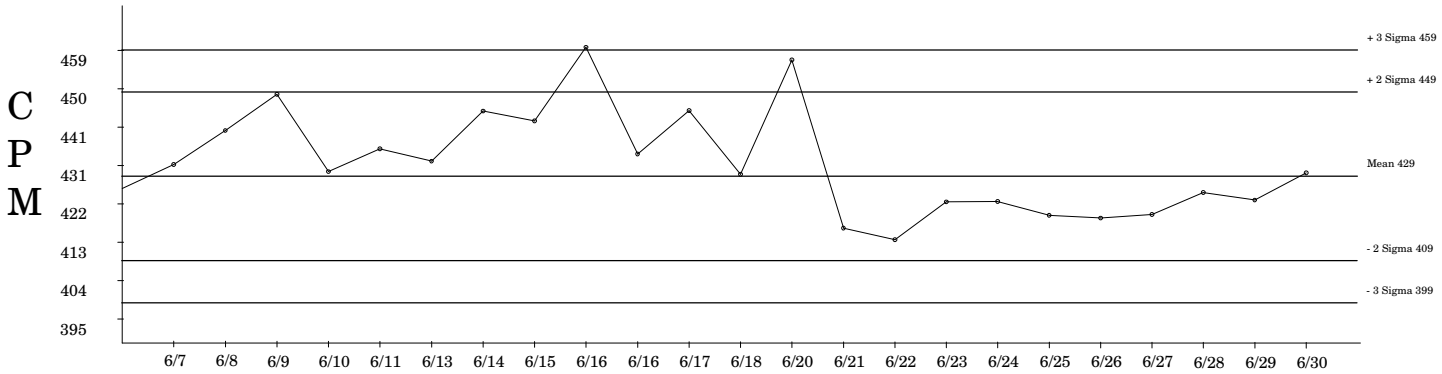
Alpha BKG



Beta BKG



Alpha EFF



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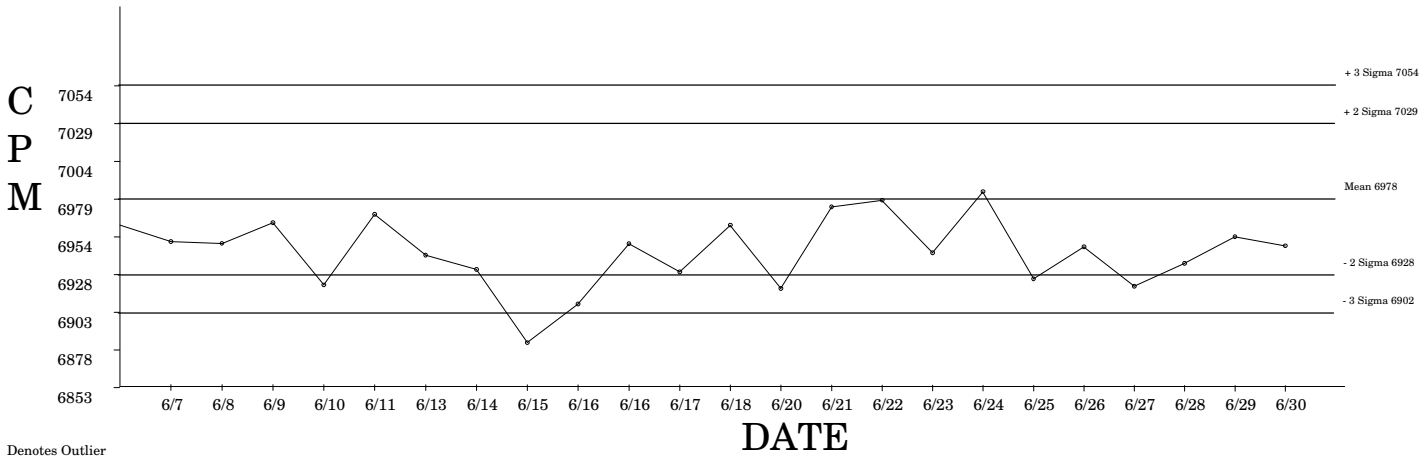
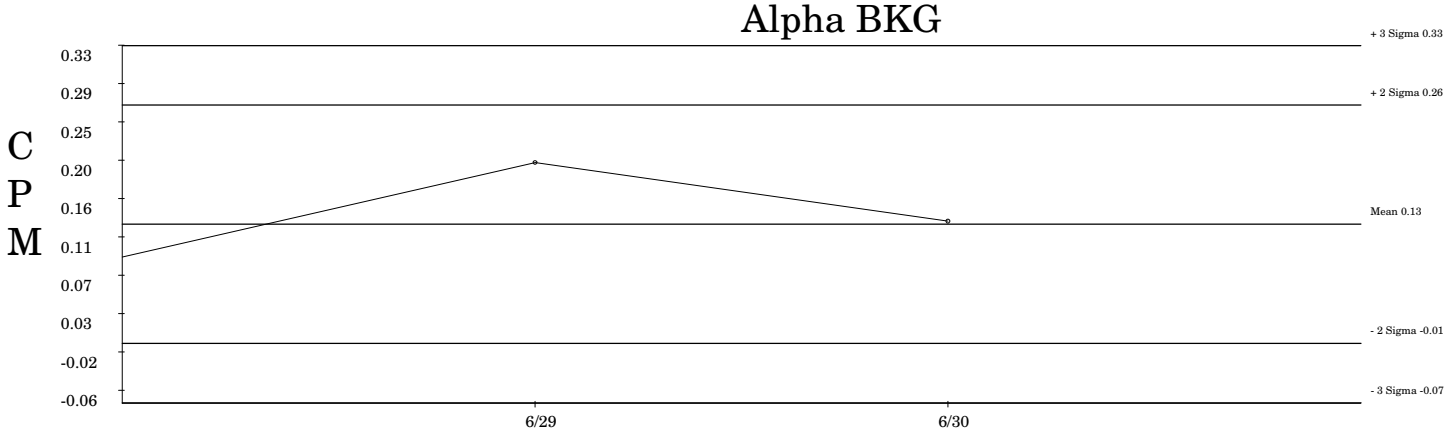


○ Denotes Outlier

PIC1C 06/30/2005

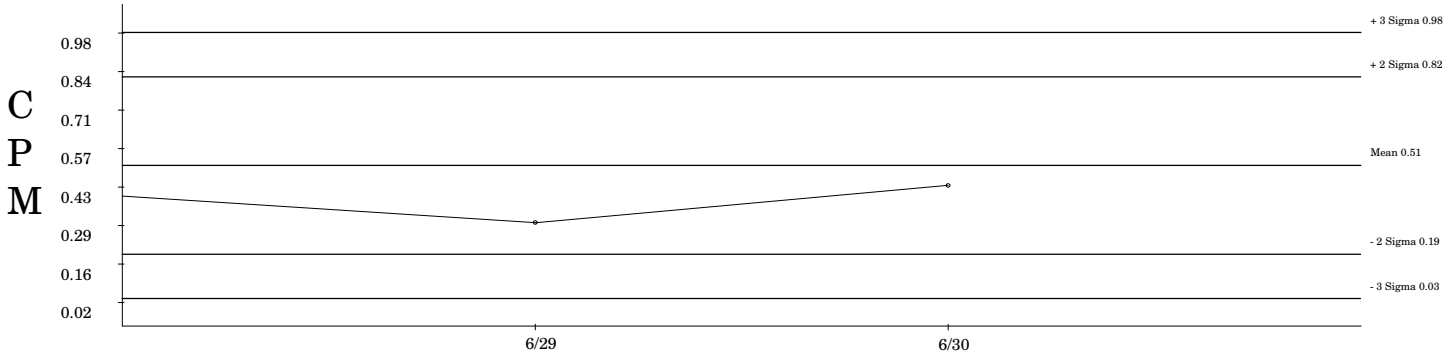
Alpha BKG



C P M

DATE

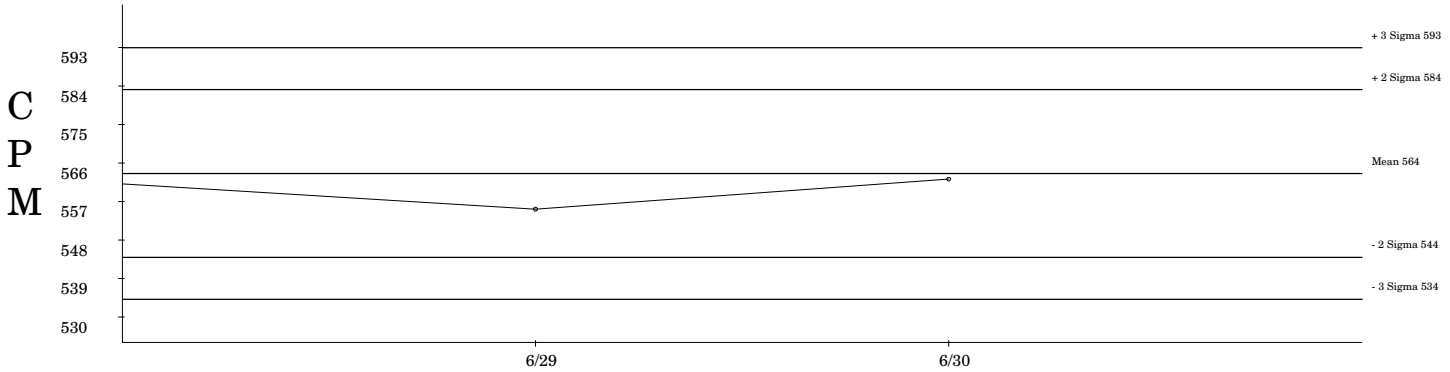
Beta BKG



C P M

DATE

Alpha EFF



C P M

DATE

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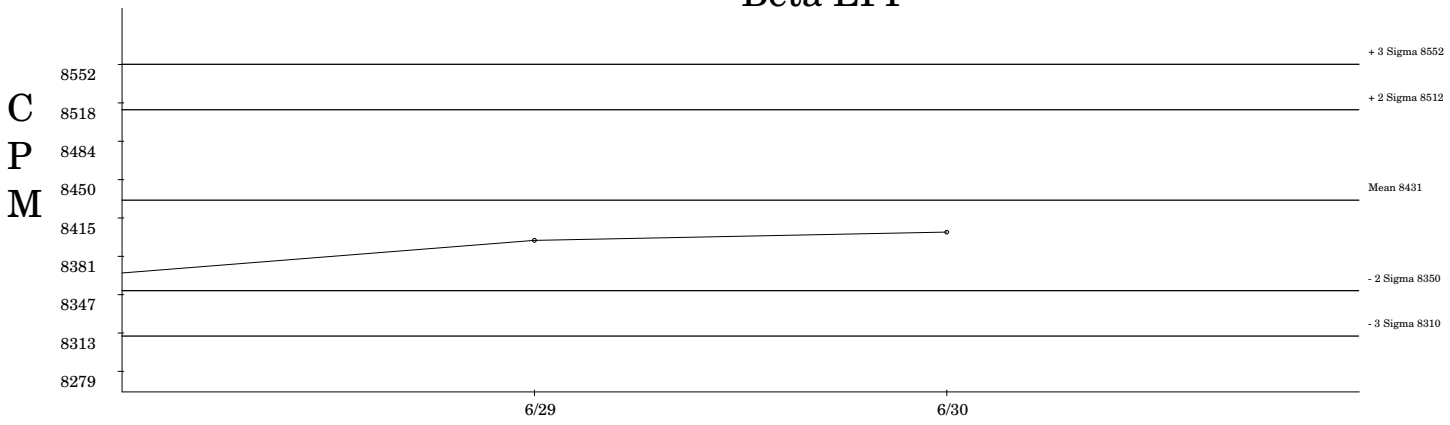


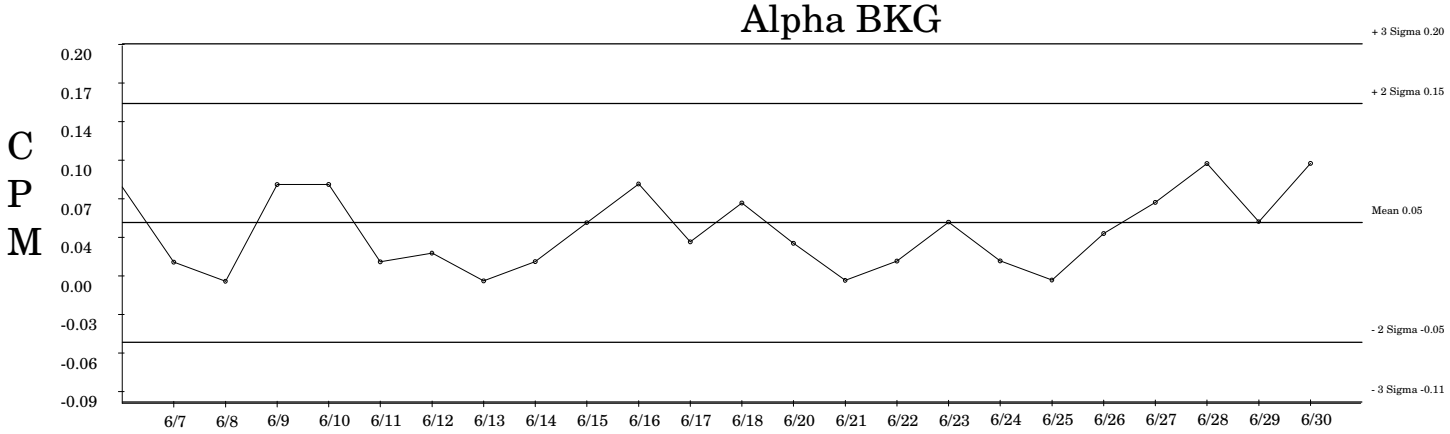
C P M

DATE

○ Denotes Outlier

PIC1D 06/30/2005

Alpha BKG



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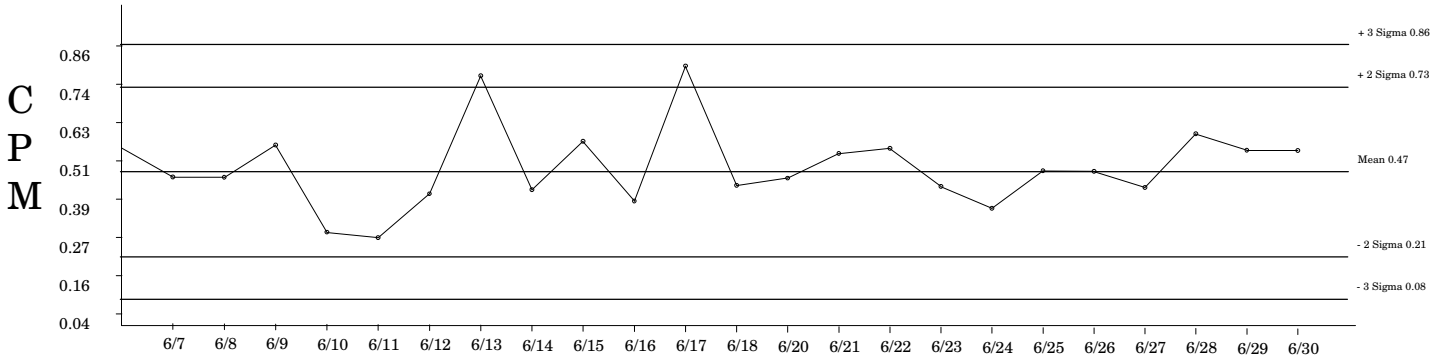

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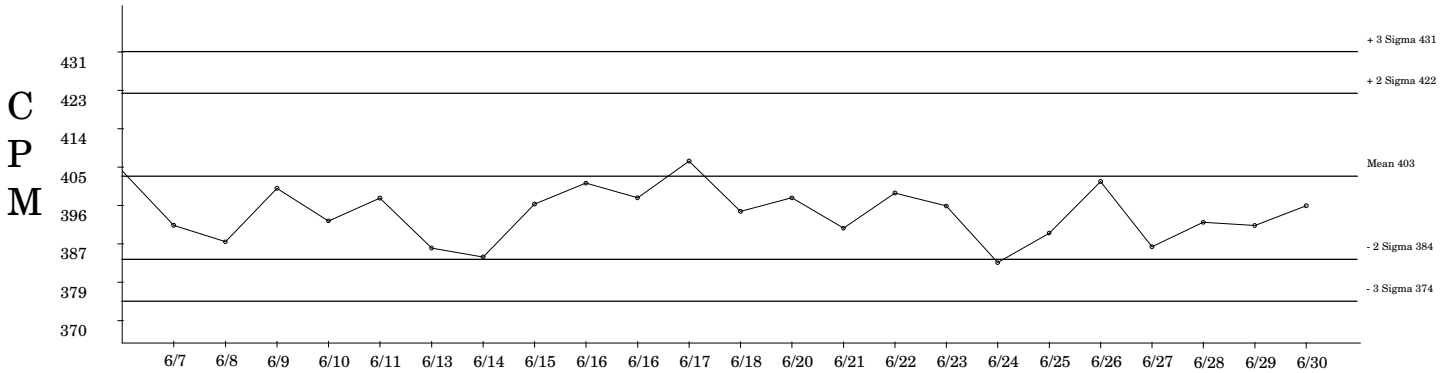

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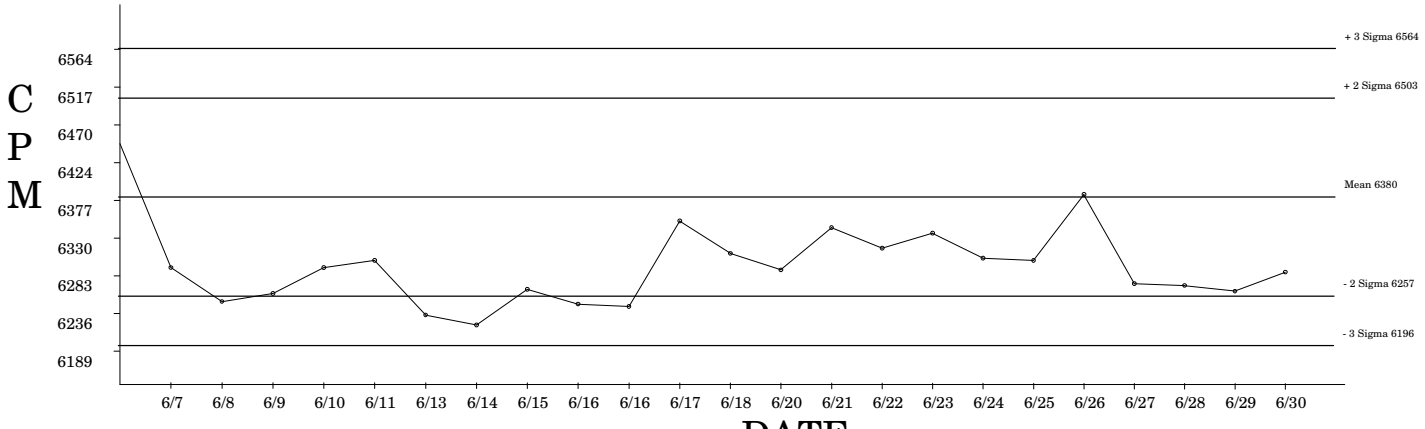
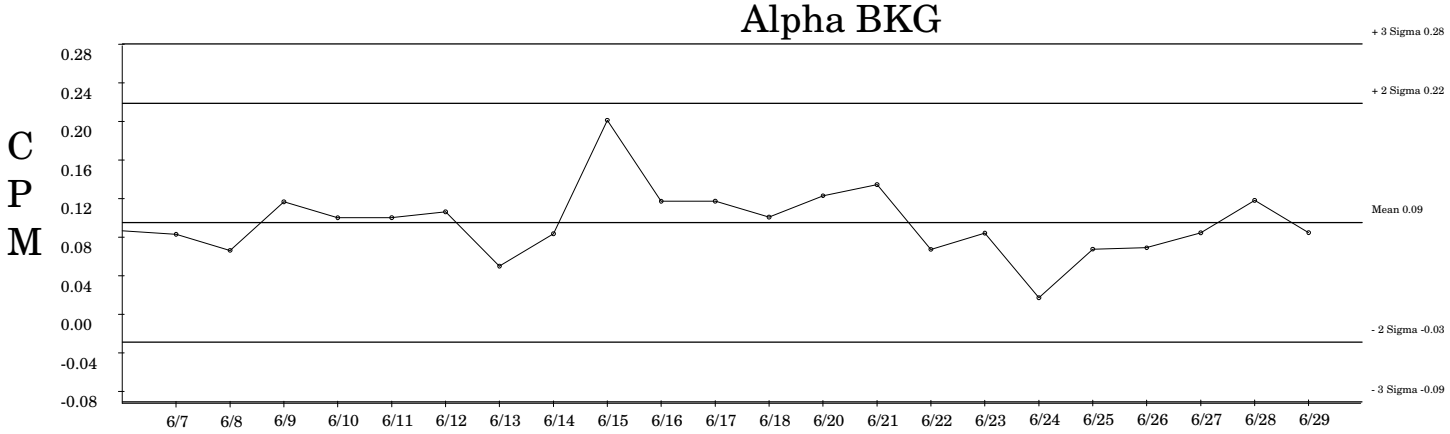


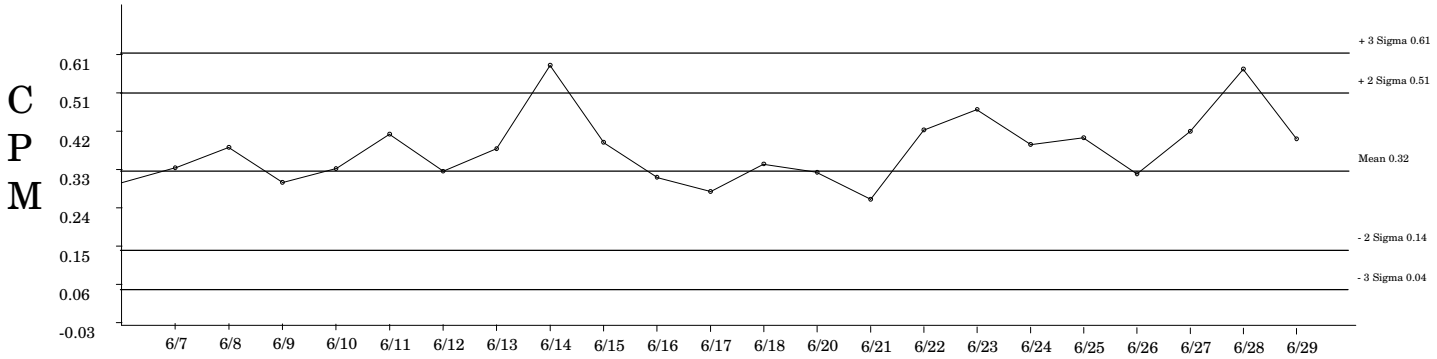
○ Denotes Outlier

PIC2C 06/30/2005

Alpha BKG



Beta BKG



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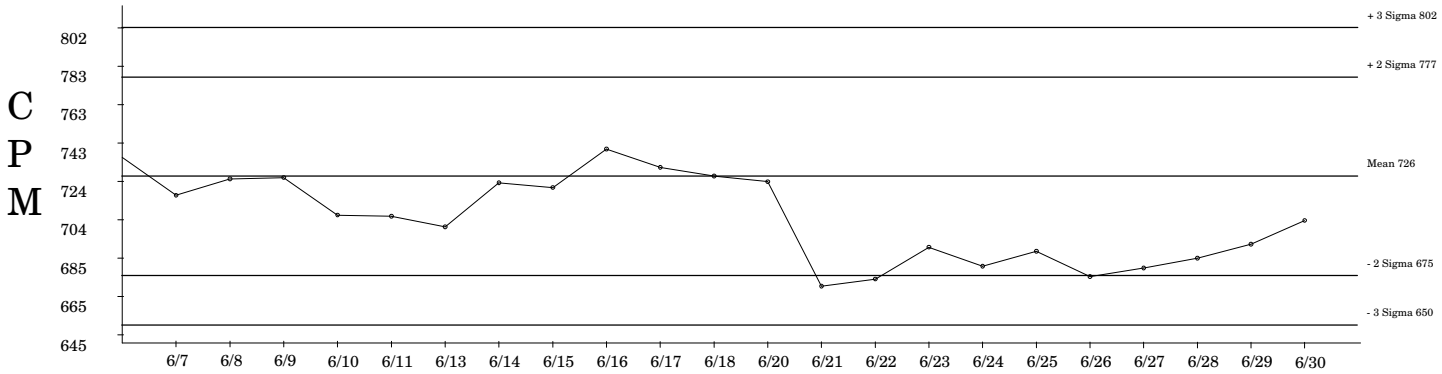

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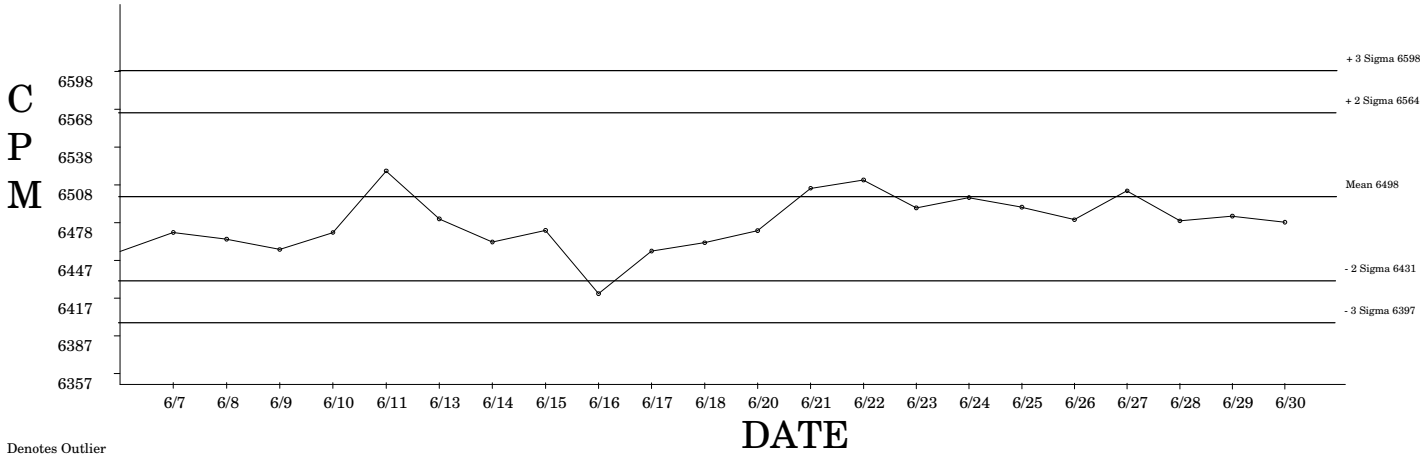

○ Denotes Outlier

PIC2D 06/30/2005

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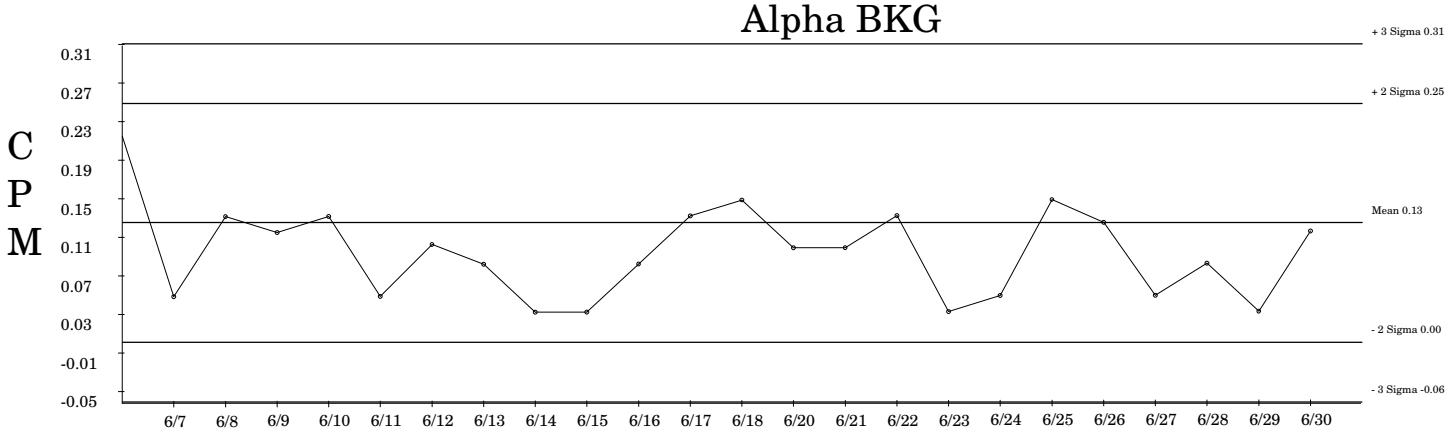

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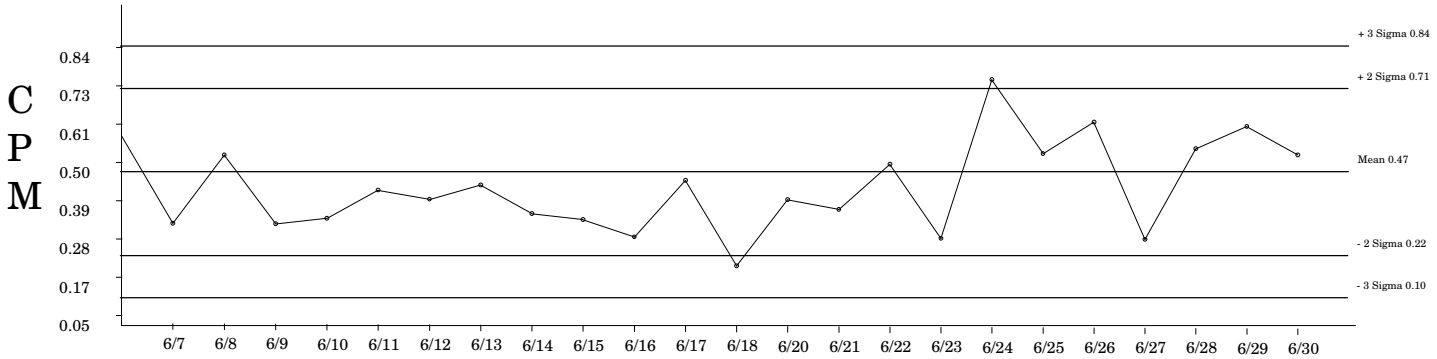

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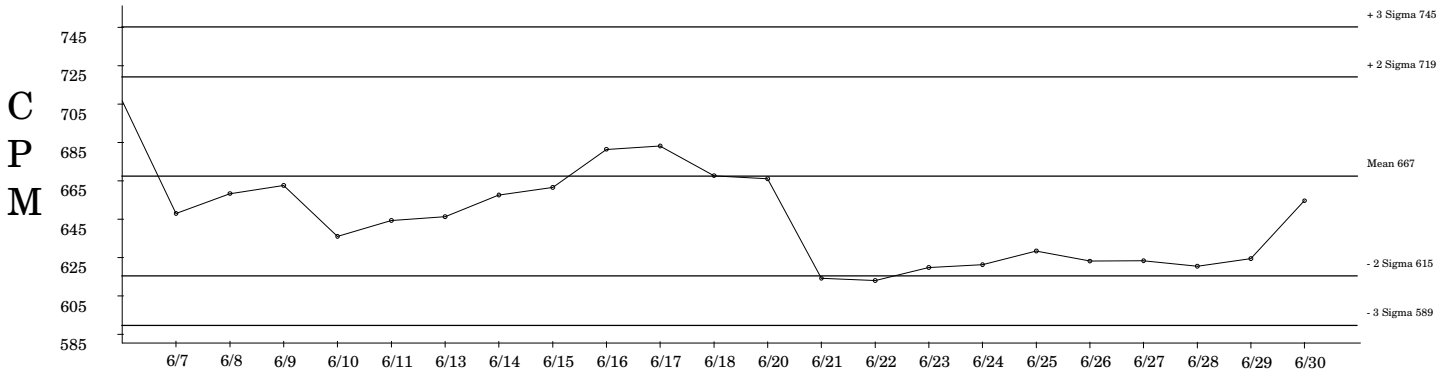

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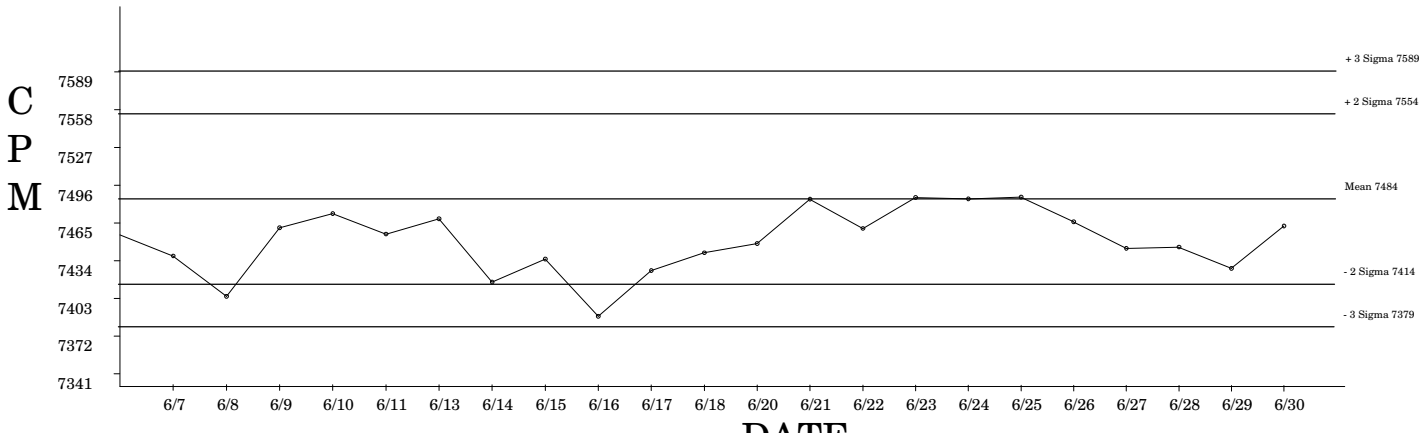
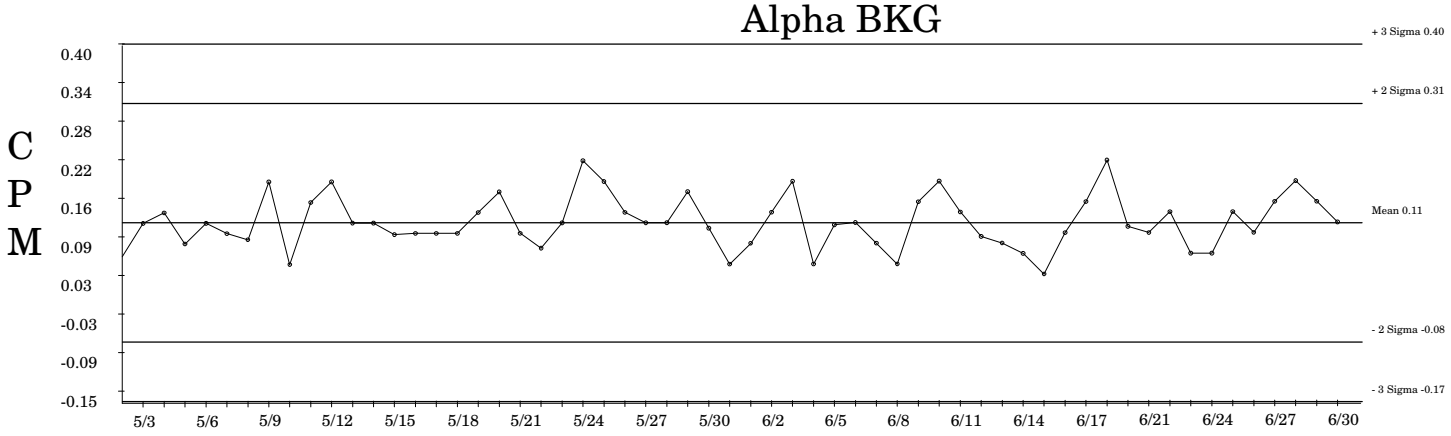


○ Denotes Outlier

PIC4D 06/30/2005

Alpha BKG



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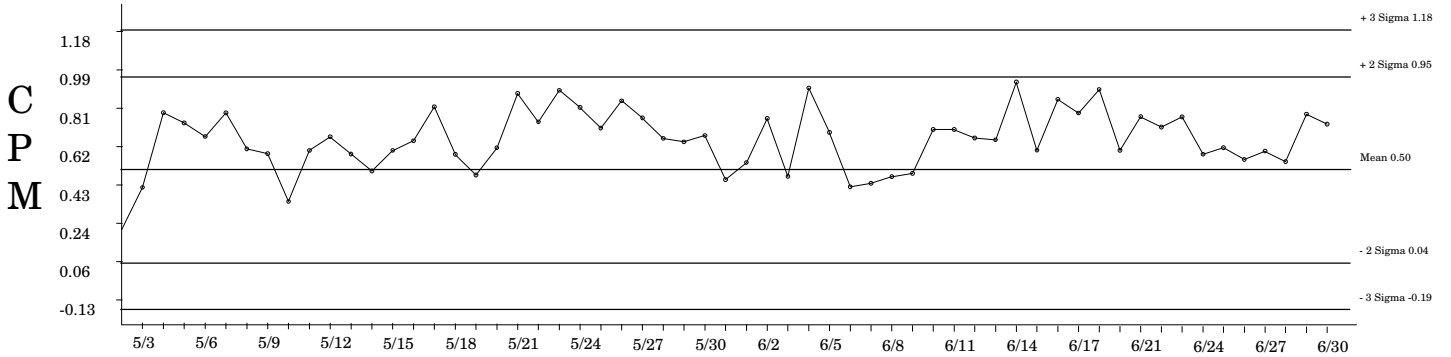

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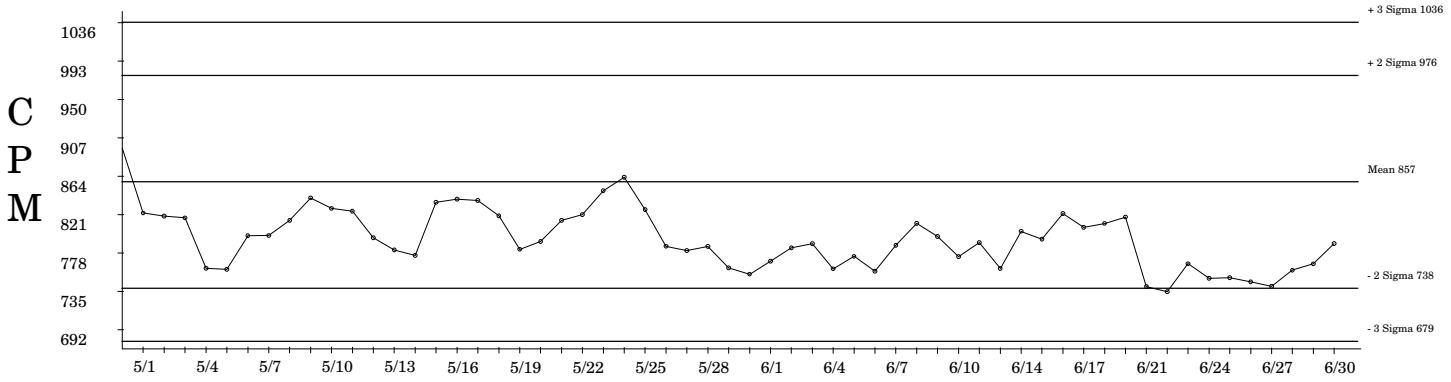

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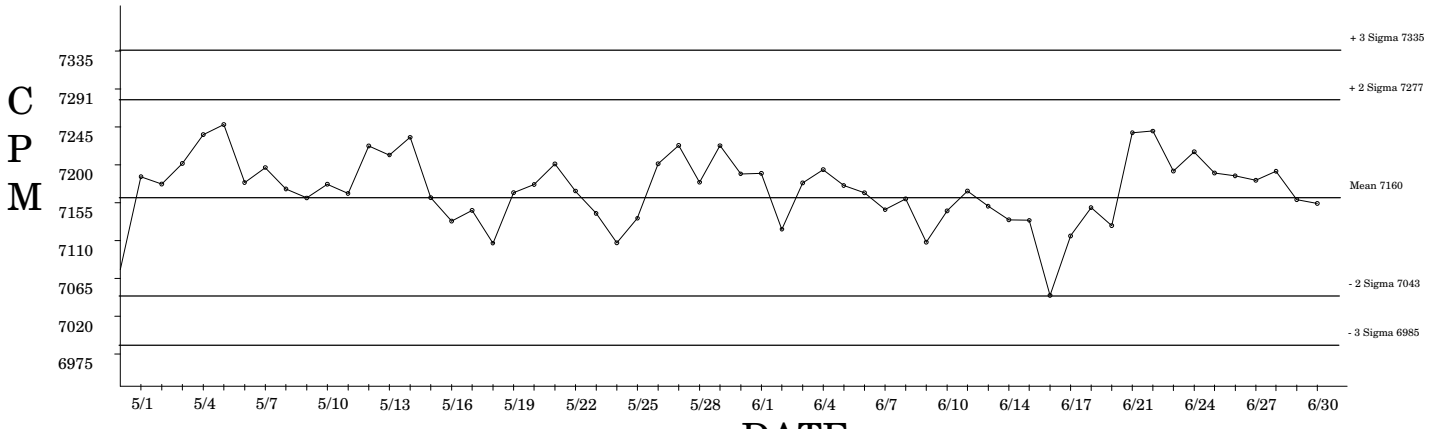
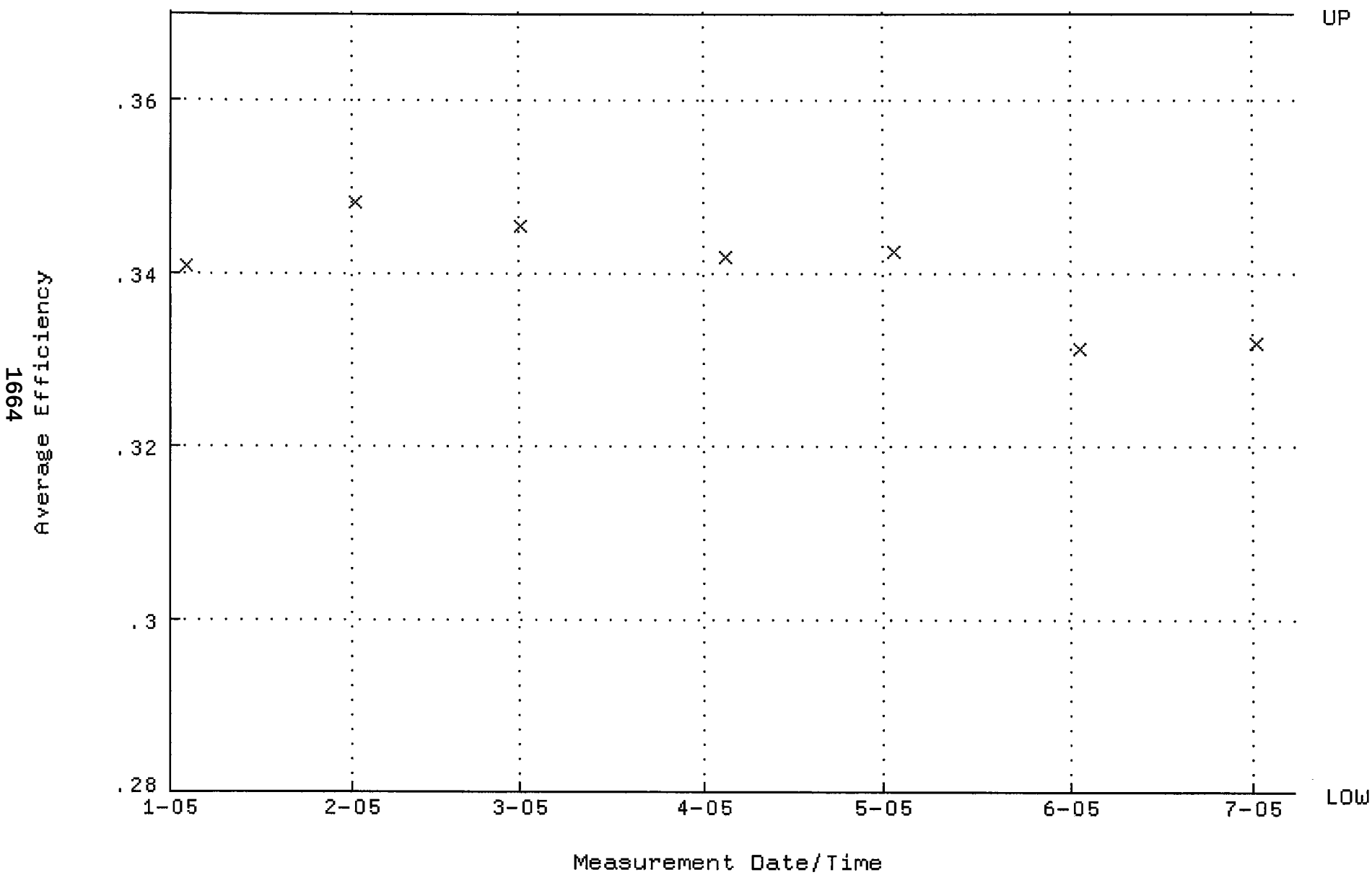
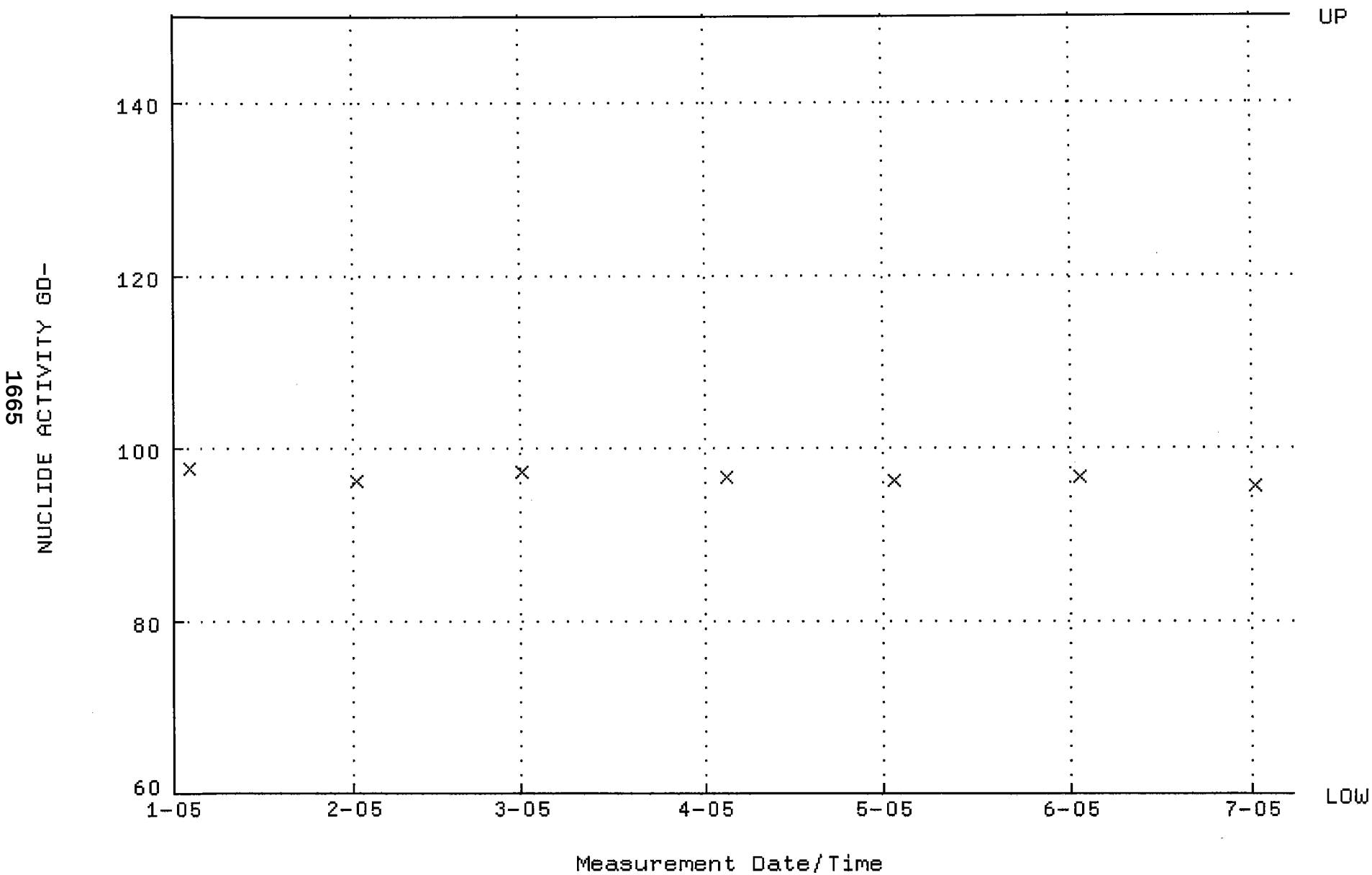


○ Denotes Outlier

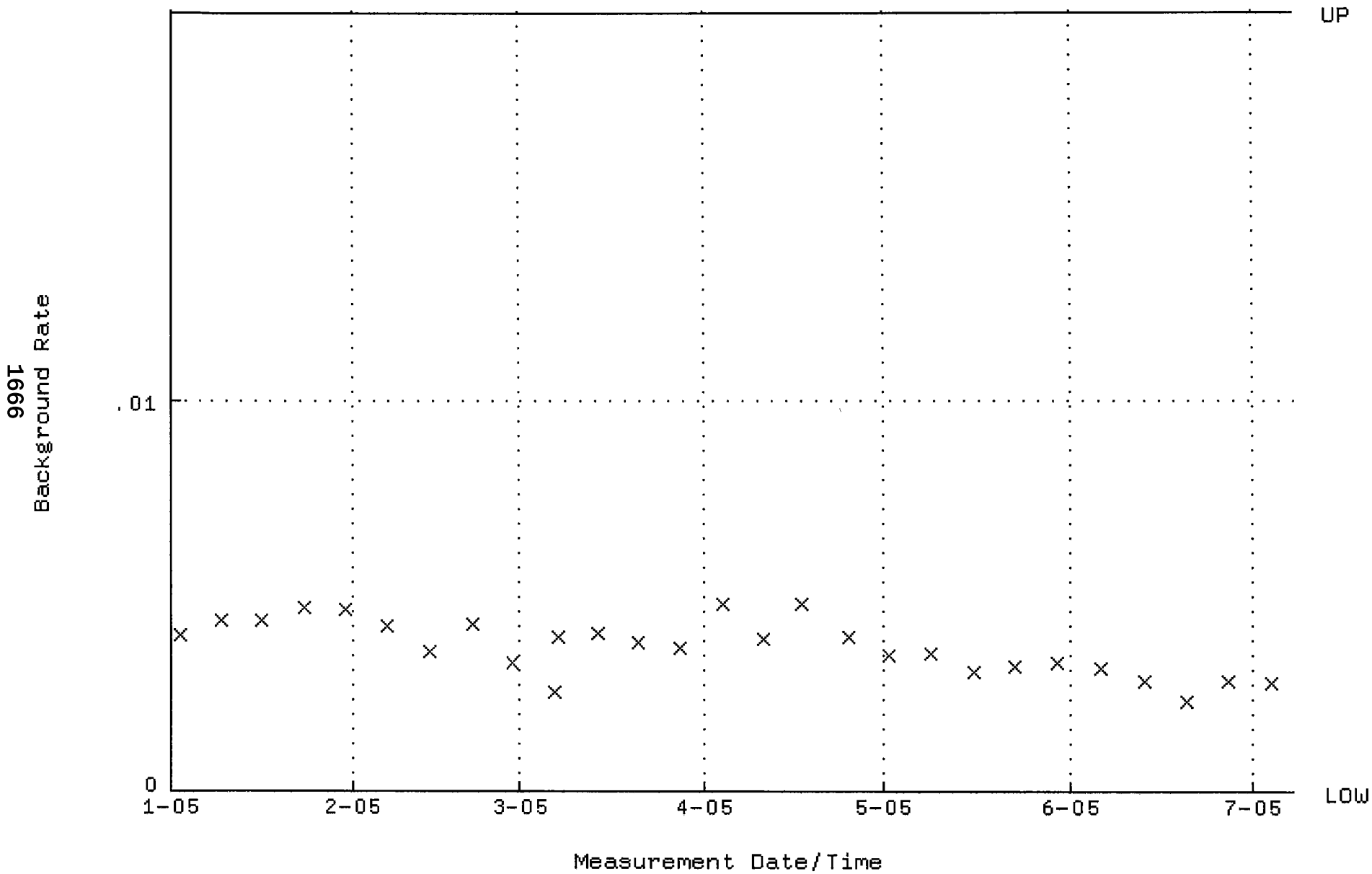
QA filename : DKA100:[ENV_ALPHA.QA.W]W020.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 18:00:42 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



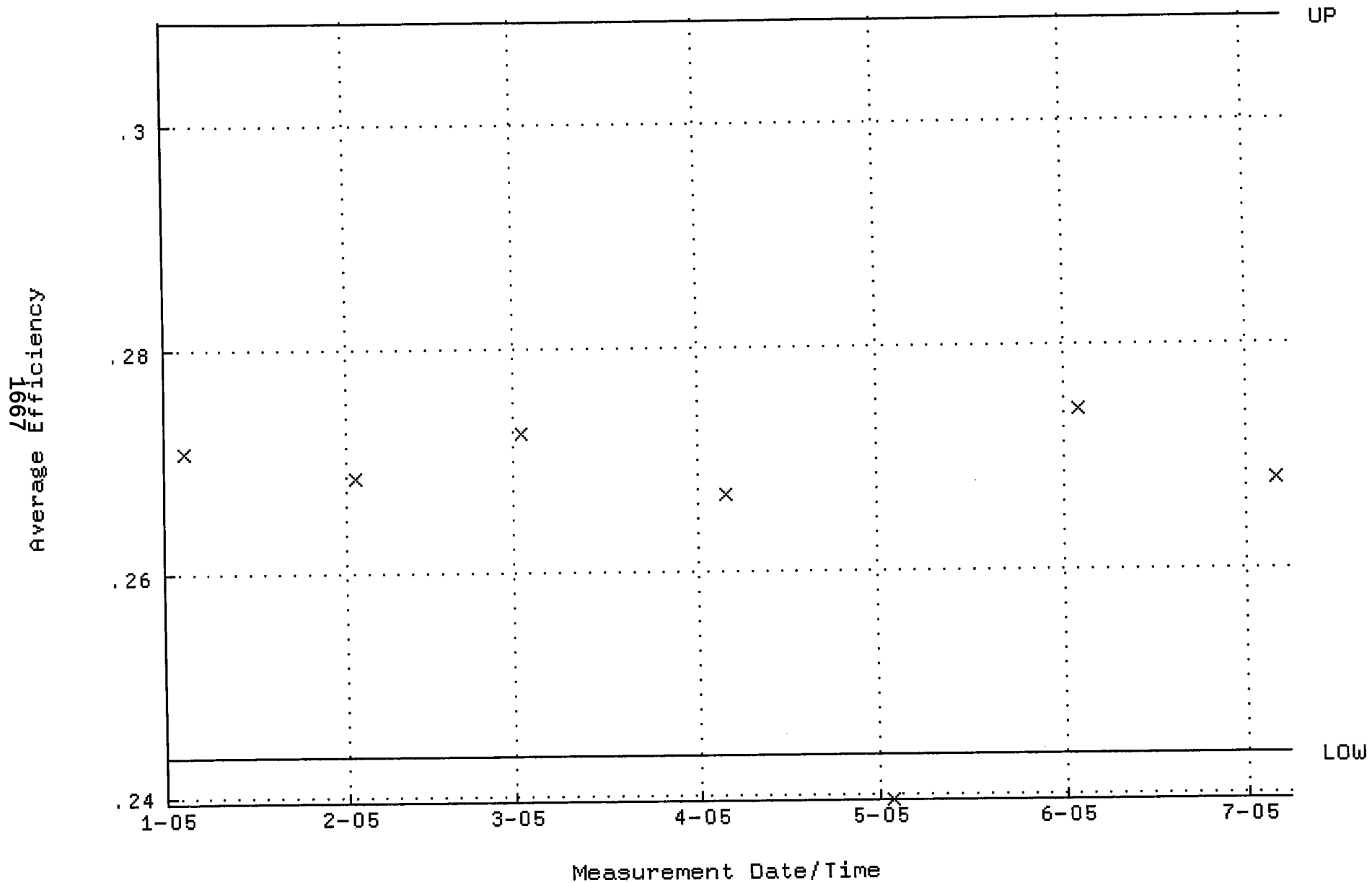
QA filename : DKA100:[ENV_ALPHA.QA.W]W020.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 18:00:42 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



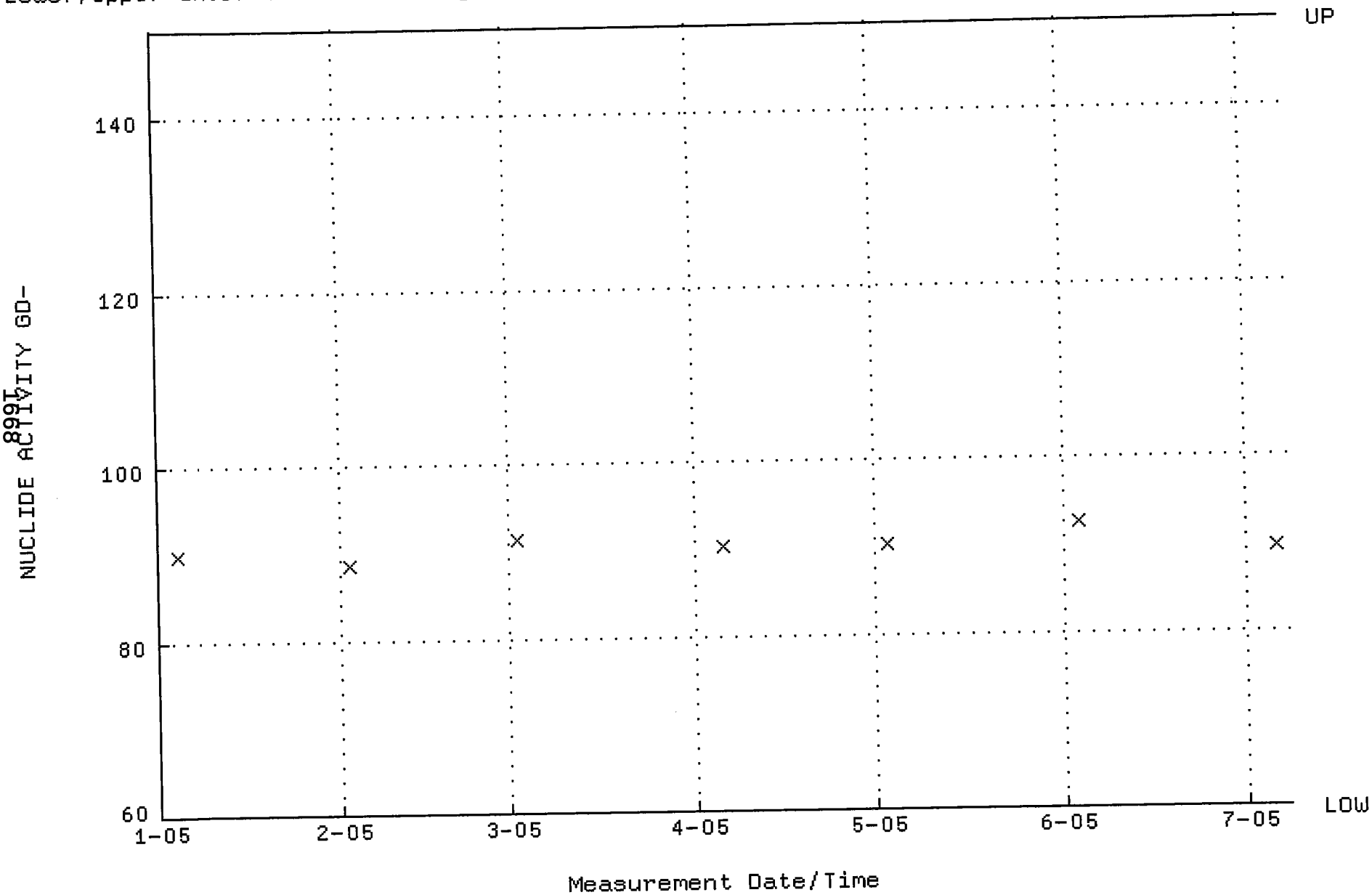
QA filename : DKA100:[ENV_ALPHA.QA.B]B020.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:00 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



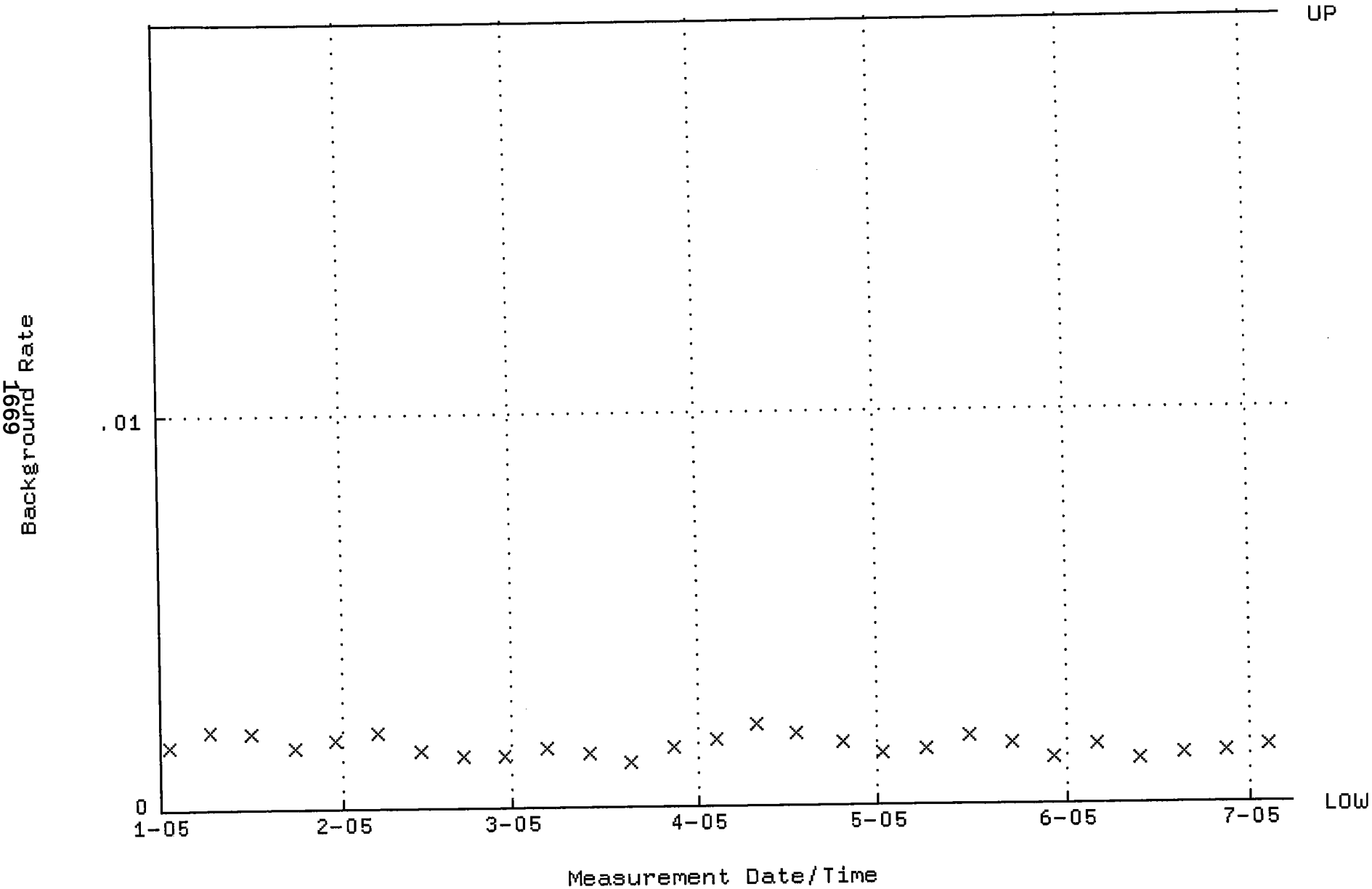
QA filename : DKA100:[ENV_ALPHA.QA.W]W061.QAF;6
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 12:11:49 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.243830 through 0.309170



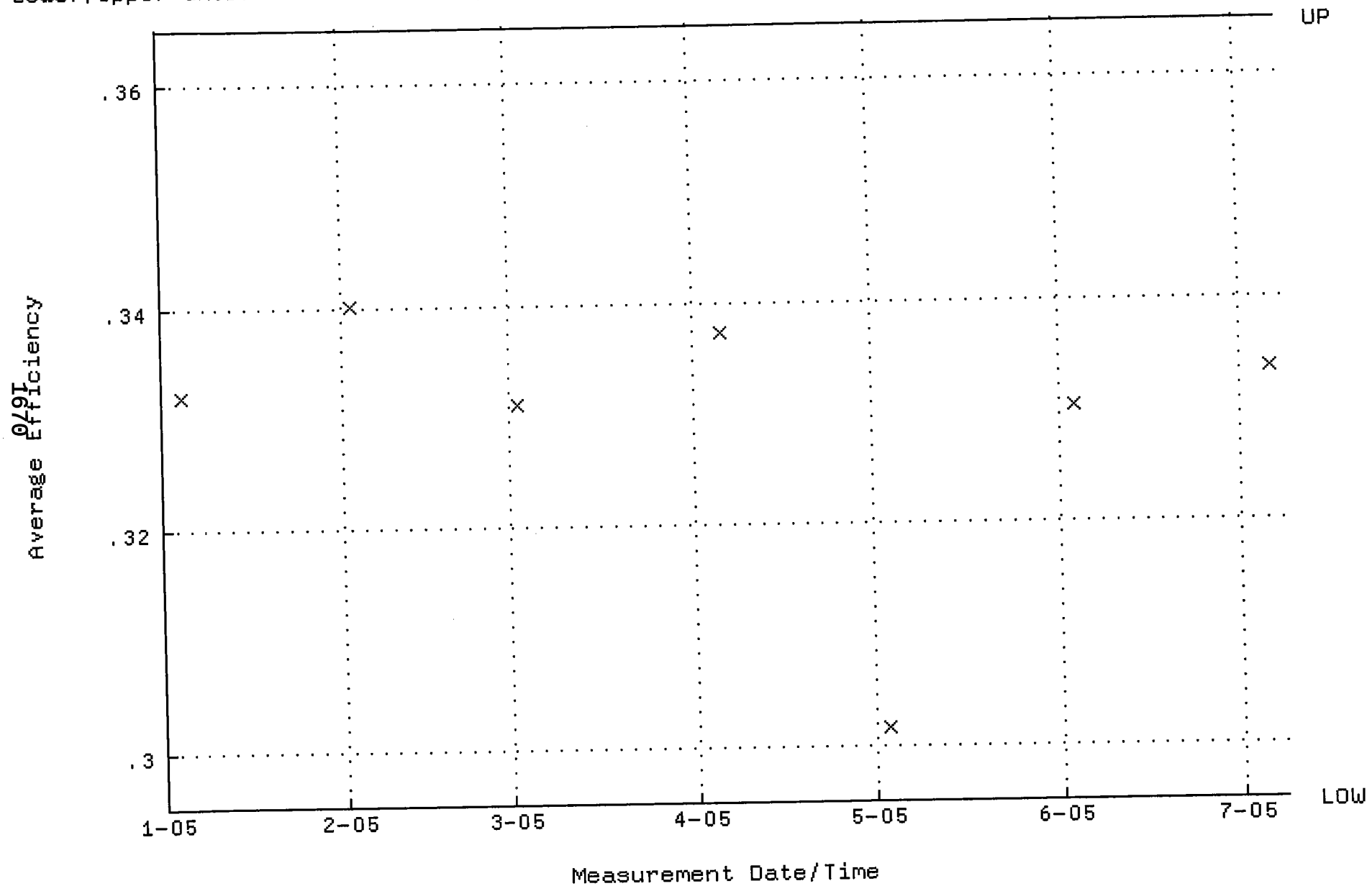
QA filename : DKA100:[ENV_ALPHA.QA.W]W061.QAF;6
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 12:11:49 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



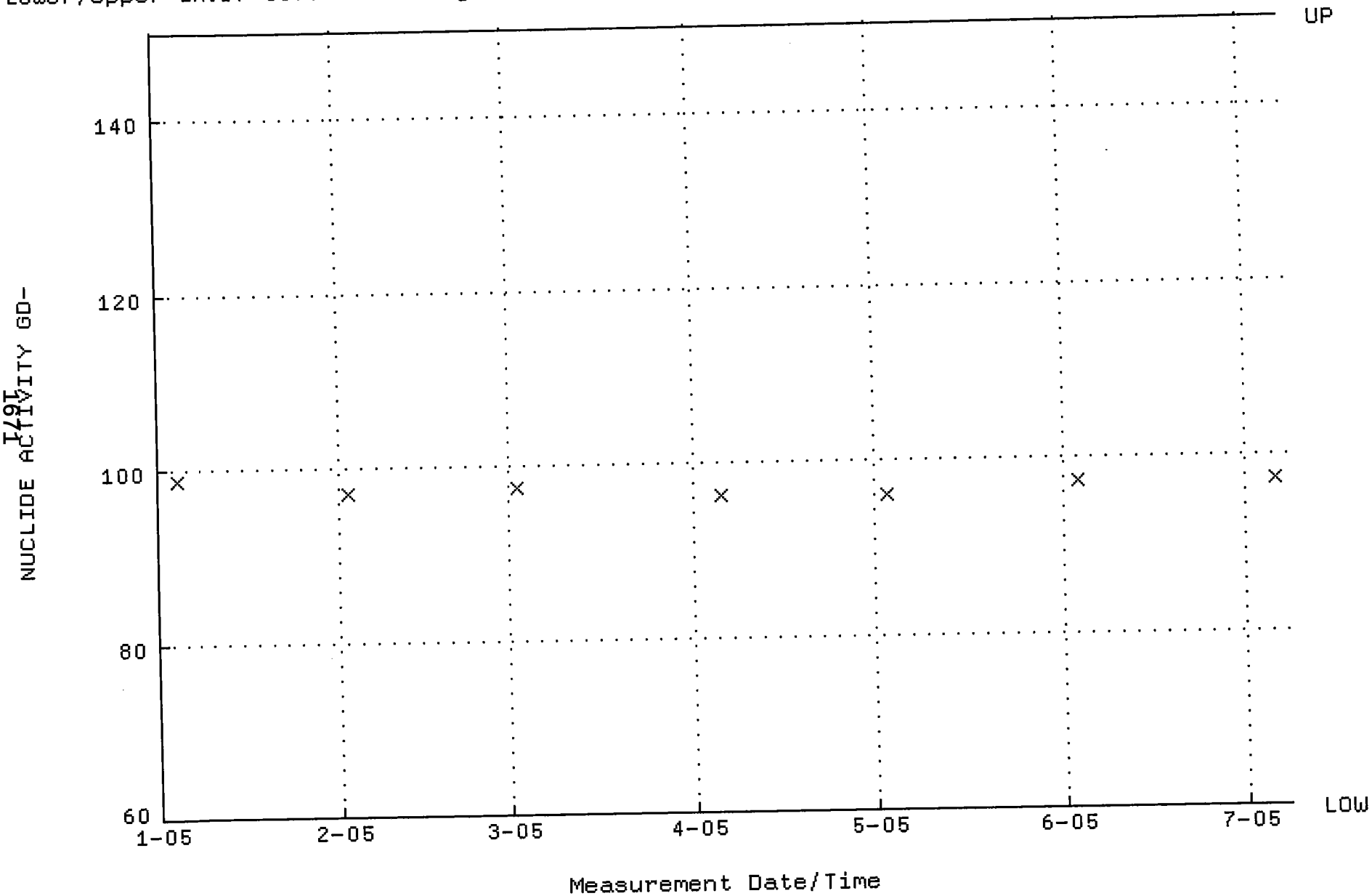
QA filename : DKA100:[ENV_ALPHA.QA.B]B061.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:05 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



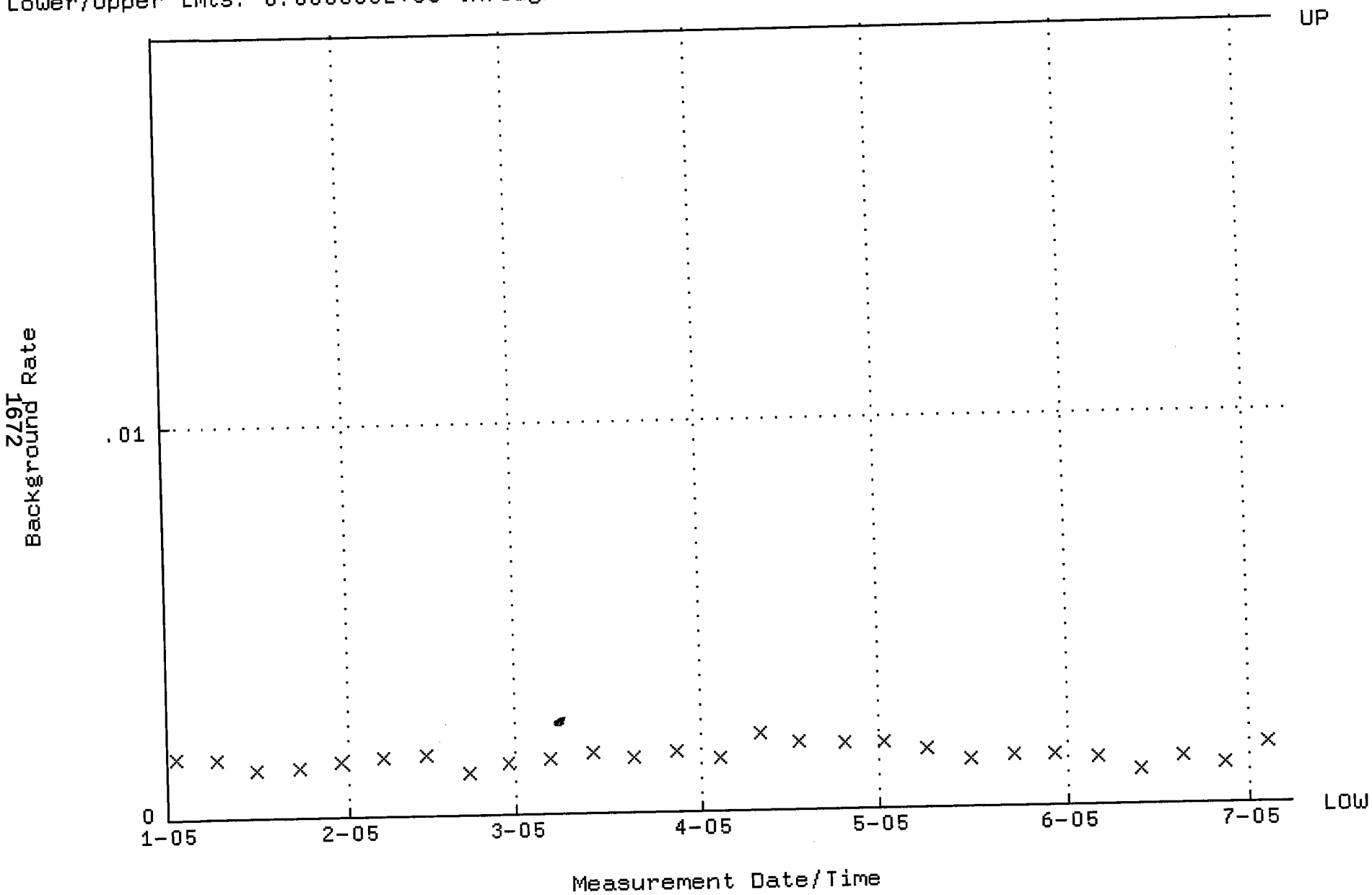
QA filename : DKA100:[ENV_ALPHA.QA.W]W062.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 12:11:49 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.295000 through 0.365000



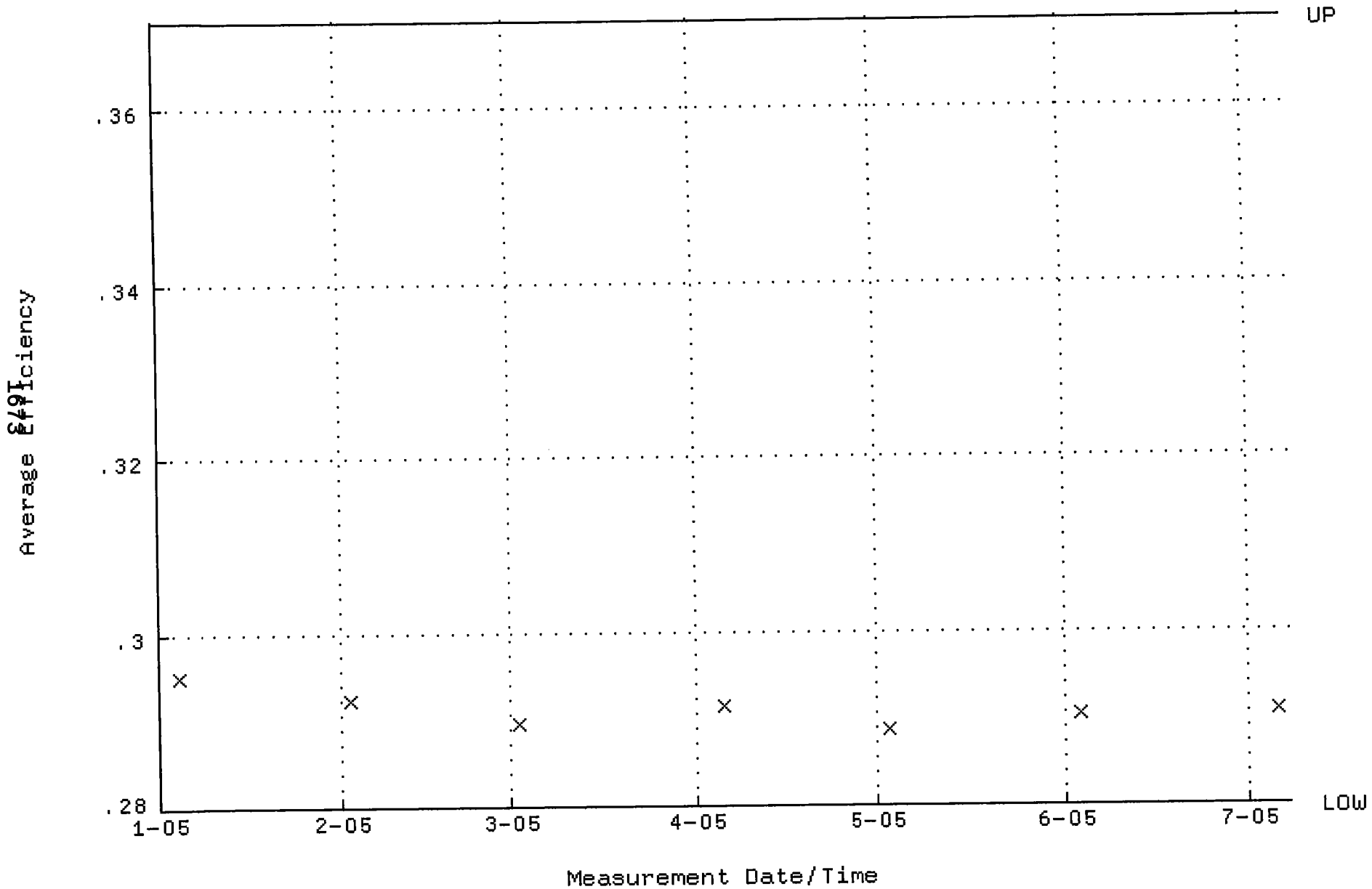
QA filename : DKA100:[ENV_ALPHA.QA.W]W062.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 12:11:49 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



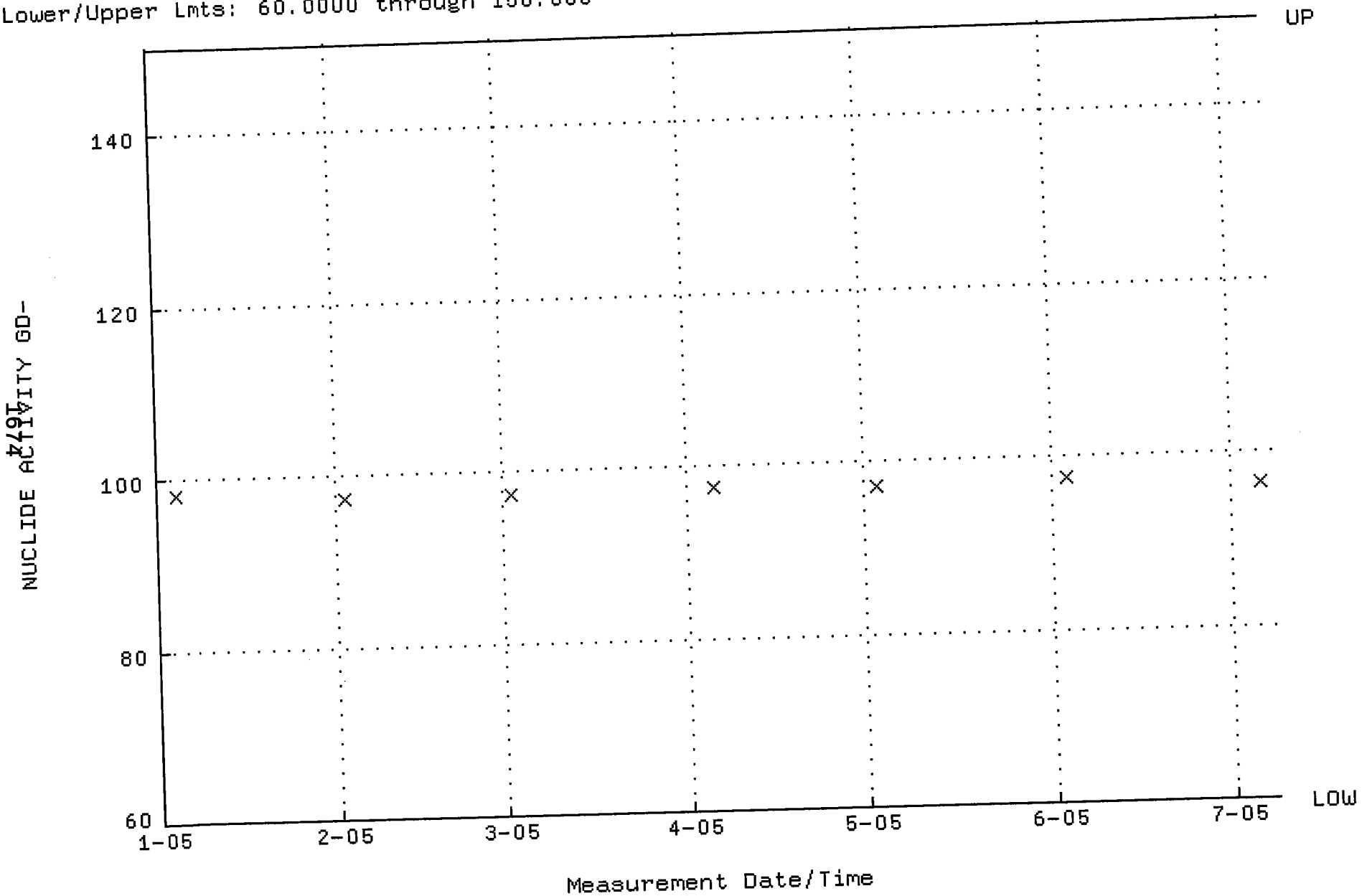
QA filename : DKA100:[ENV_ALPHA.QA.B]B062.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:05 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



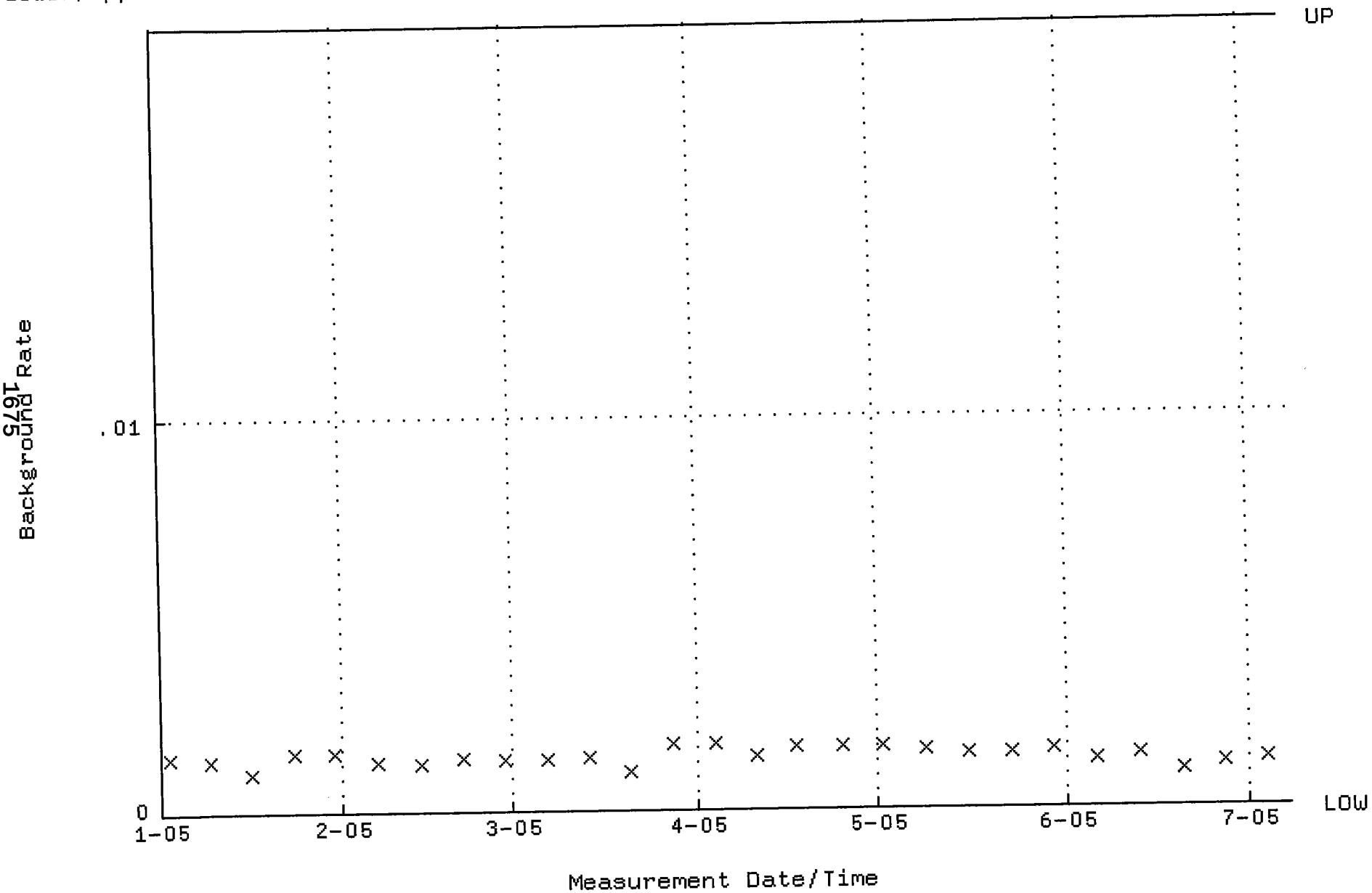
QA filename : DKA100:[ENV_ALPHA.QA.W]W064.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 12:11:49 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



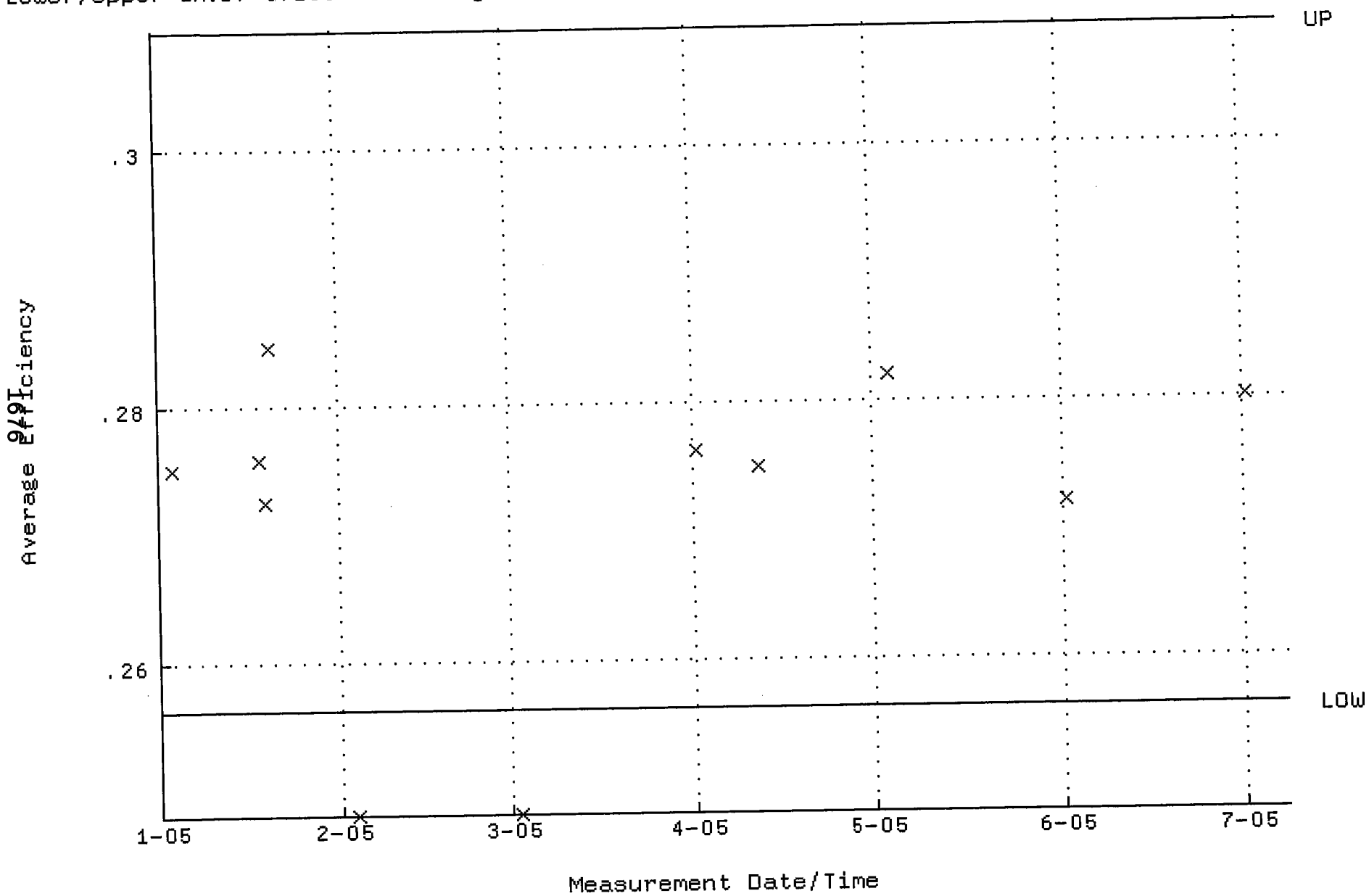
QA filename : DKA100:[ENV_ALPHA.QA.W]W064.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 12:11:49 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



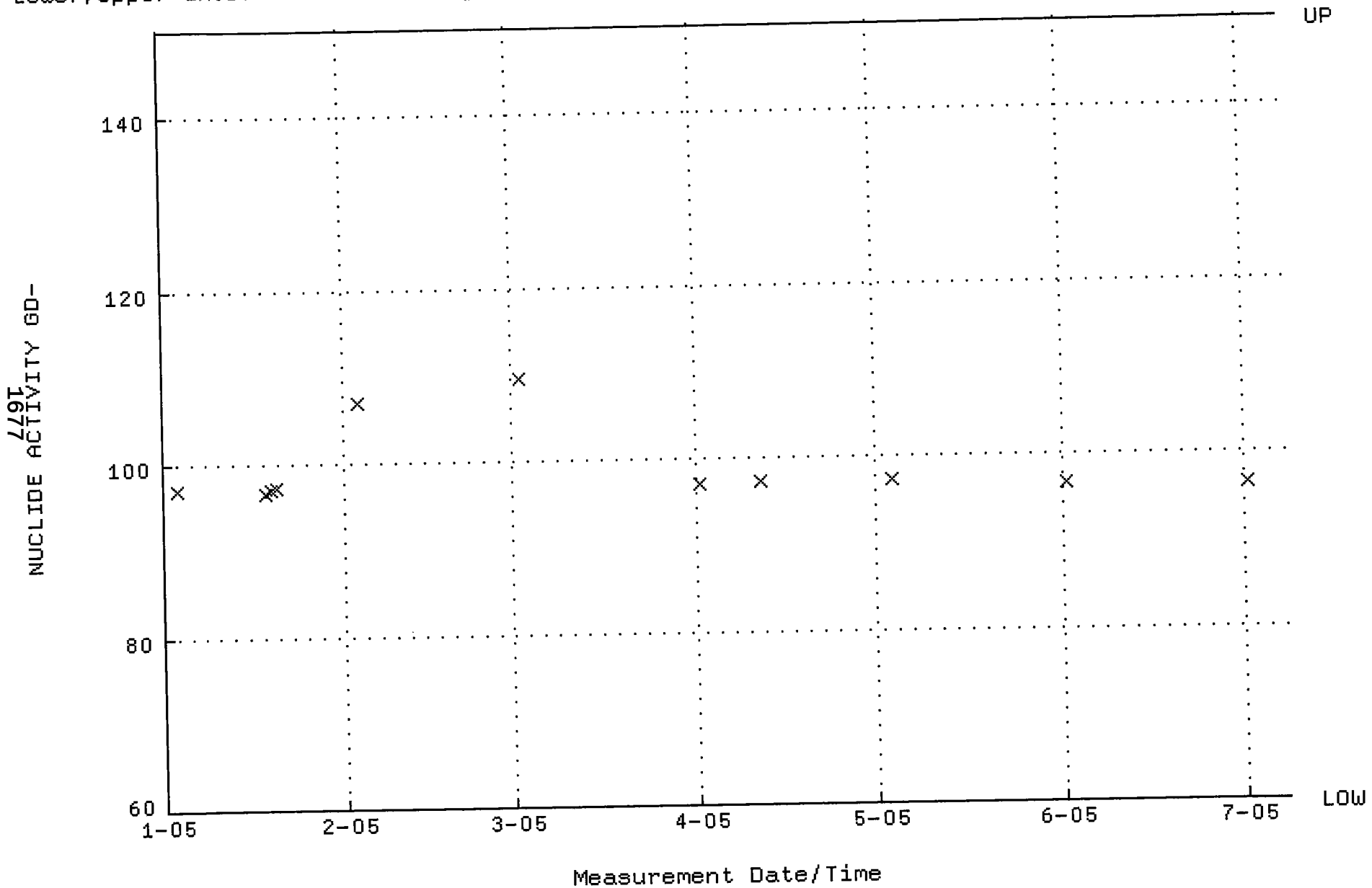
QA filename : DKA100:[ENV_ALPHA.QA.B]B064.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:05 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



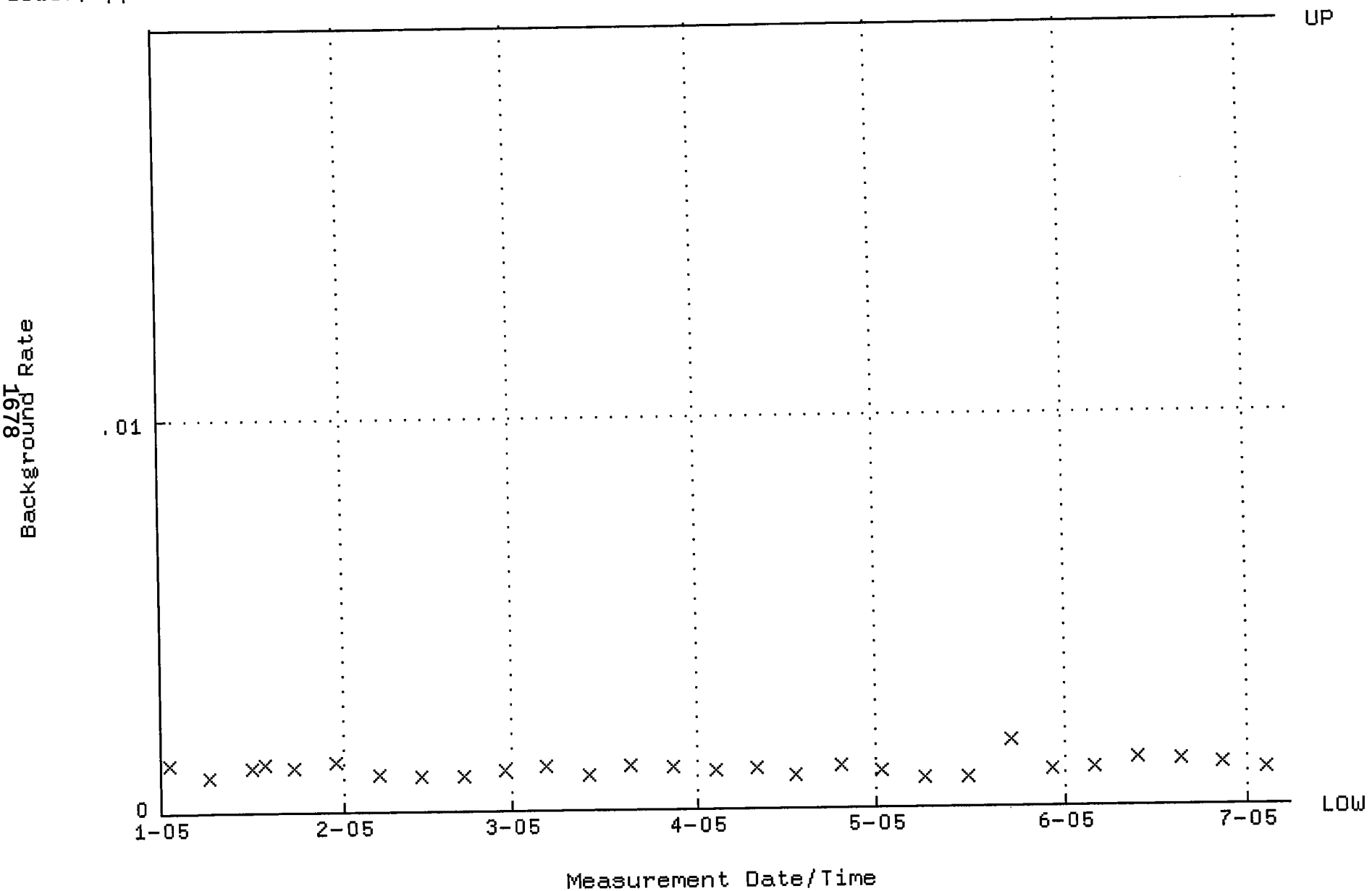
QA filename : DKA100:[ENV_ALPHA.QA.W]W065.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:21 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.256334 through 0.309266



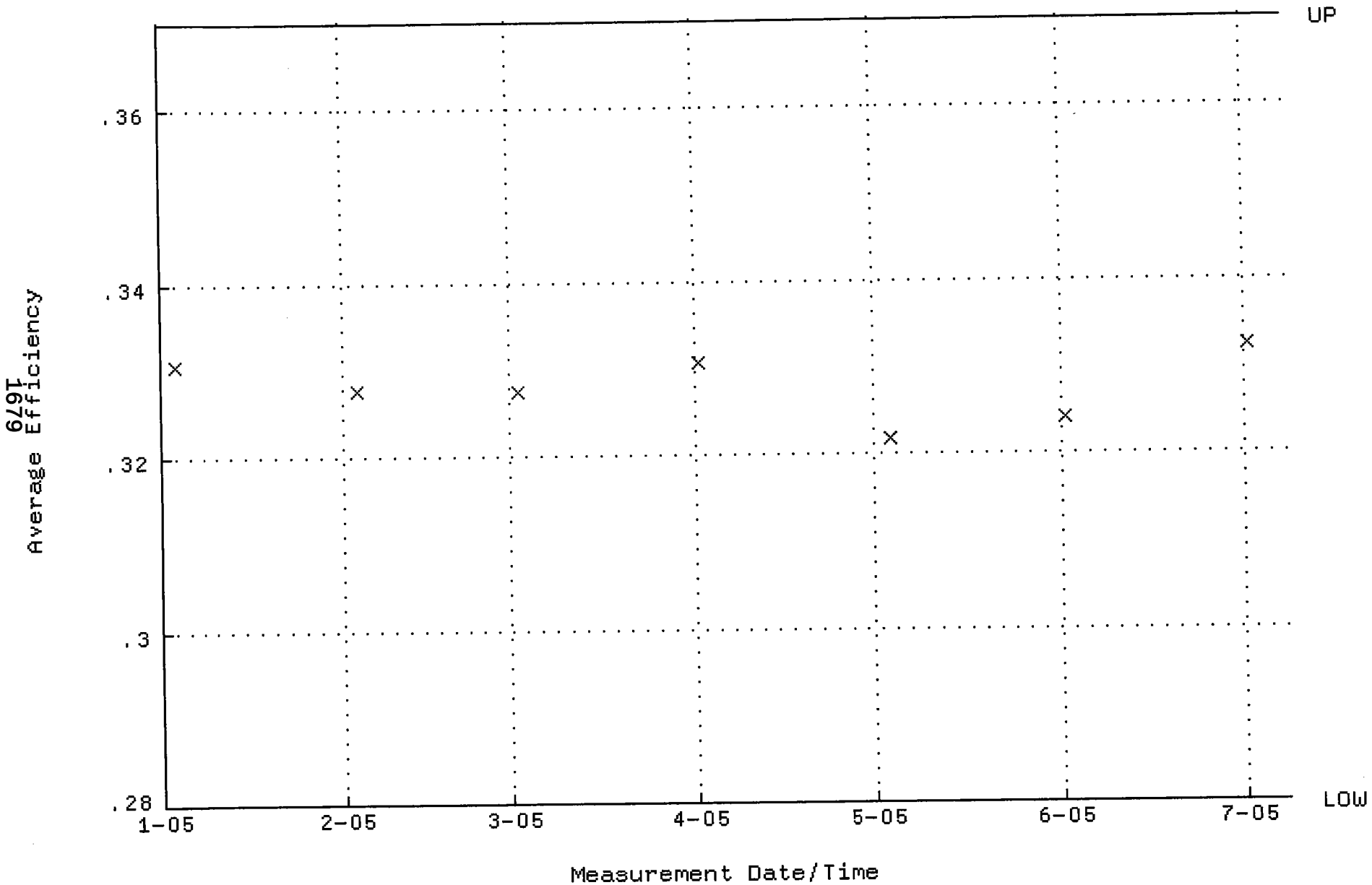
QA filename : DKA100:[ENV_ALPHA.QA.W]W065.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:21 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



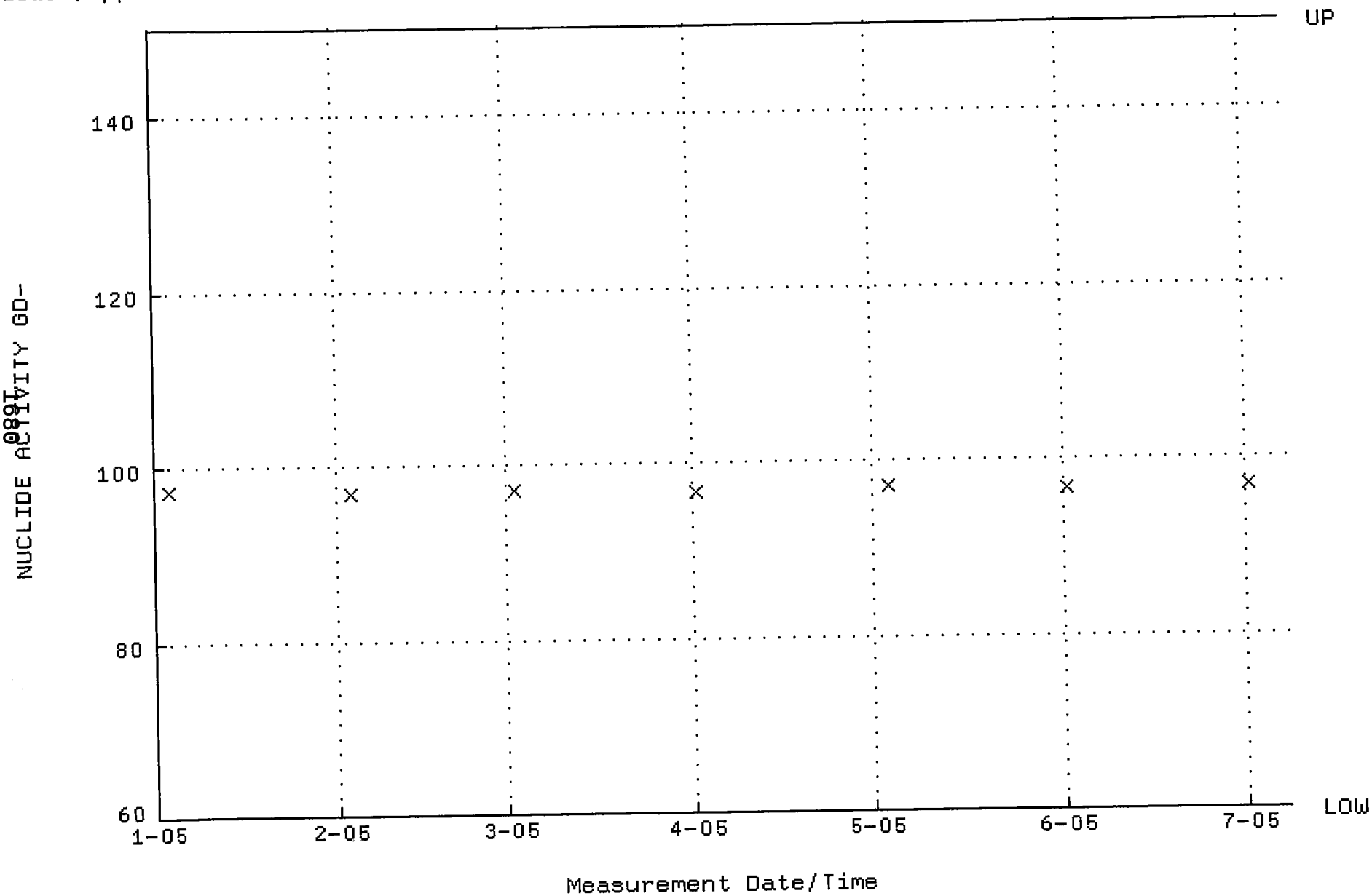
QA filename : DKA100:[ENV_ALPHA.QA.B]B065.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



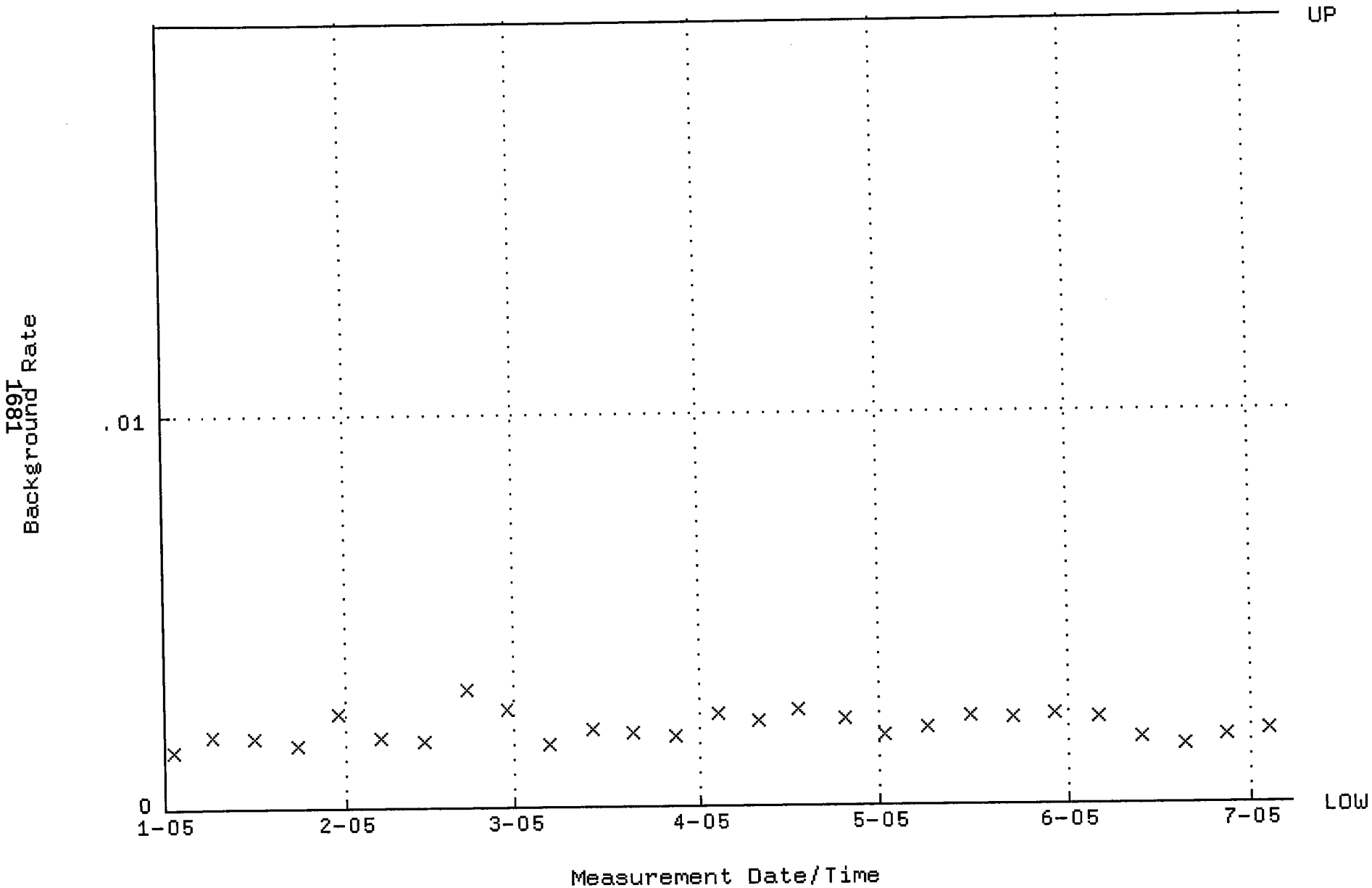
QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:21 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



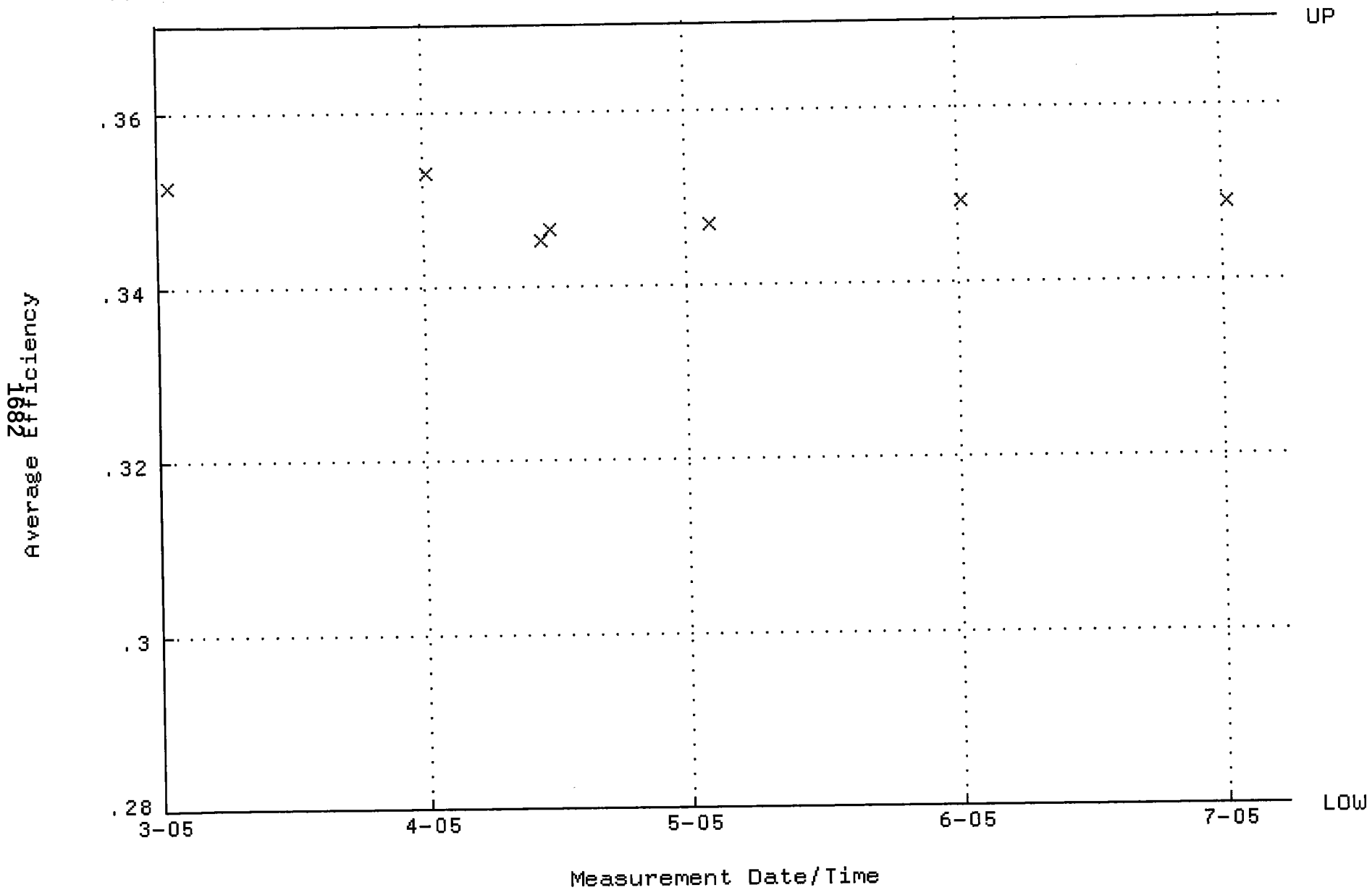
QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:21 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



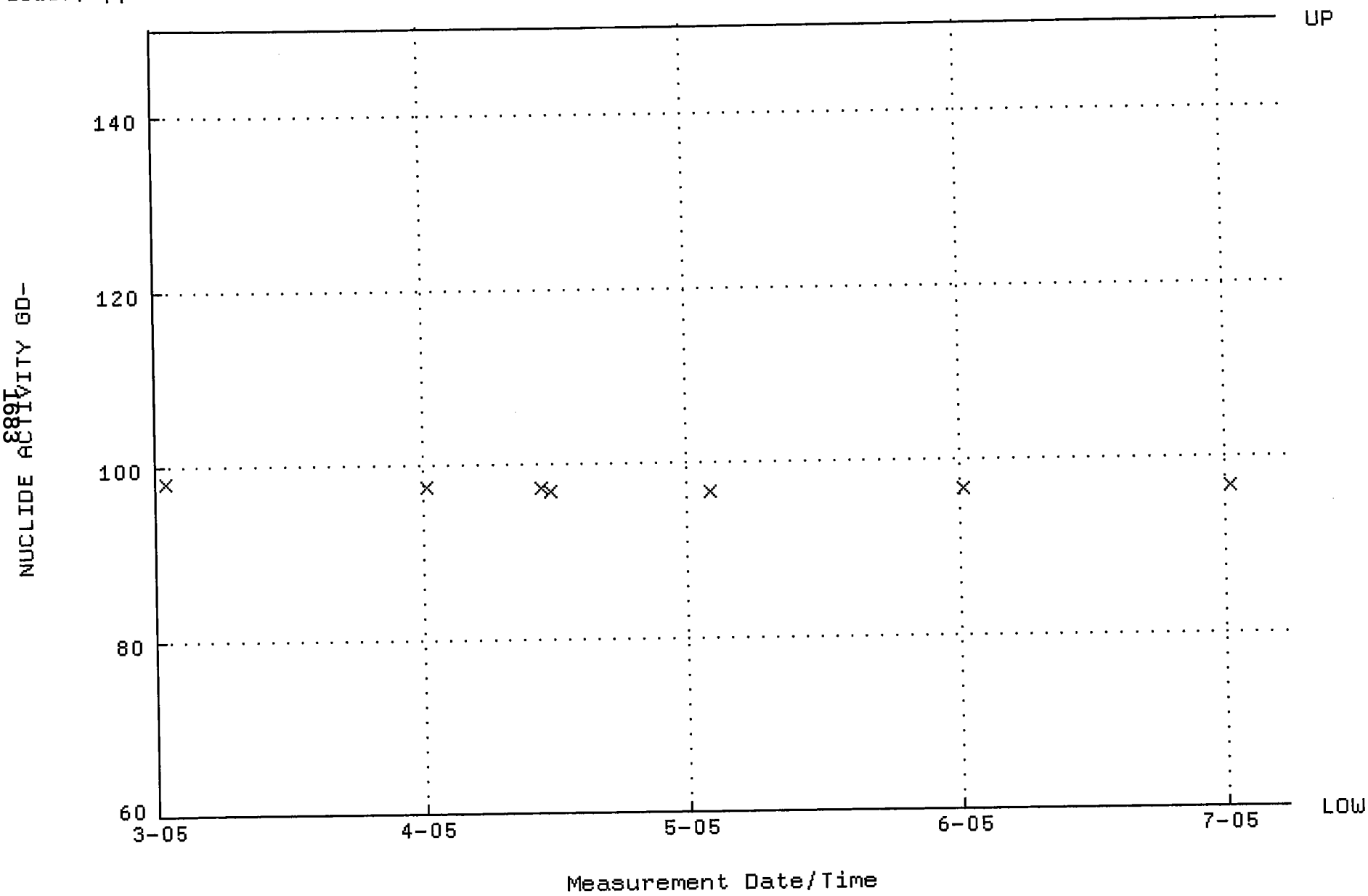
QA filename : DKA100:[ENV_ALPHA.QA.B]B069.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



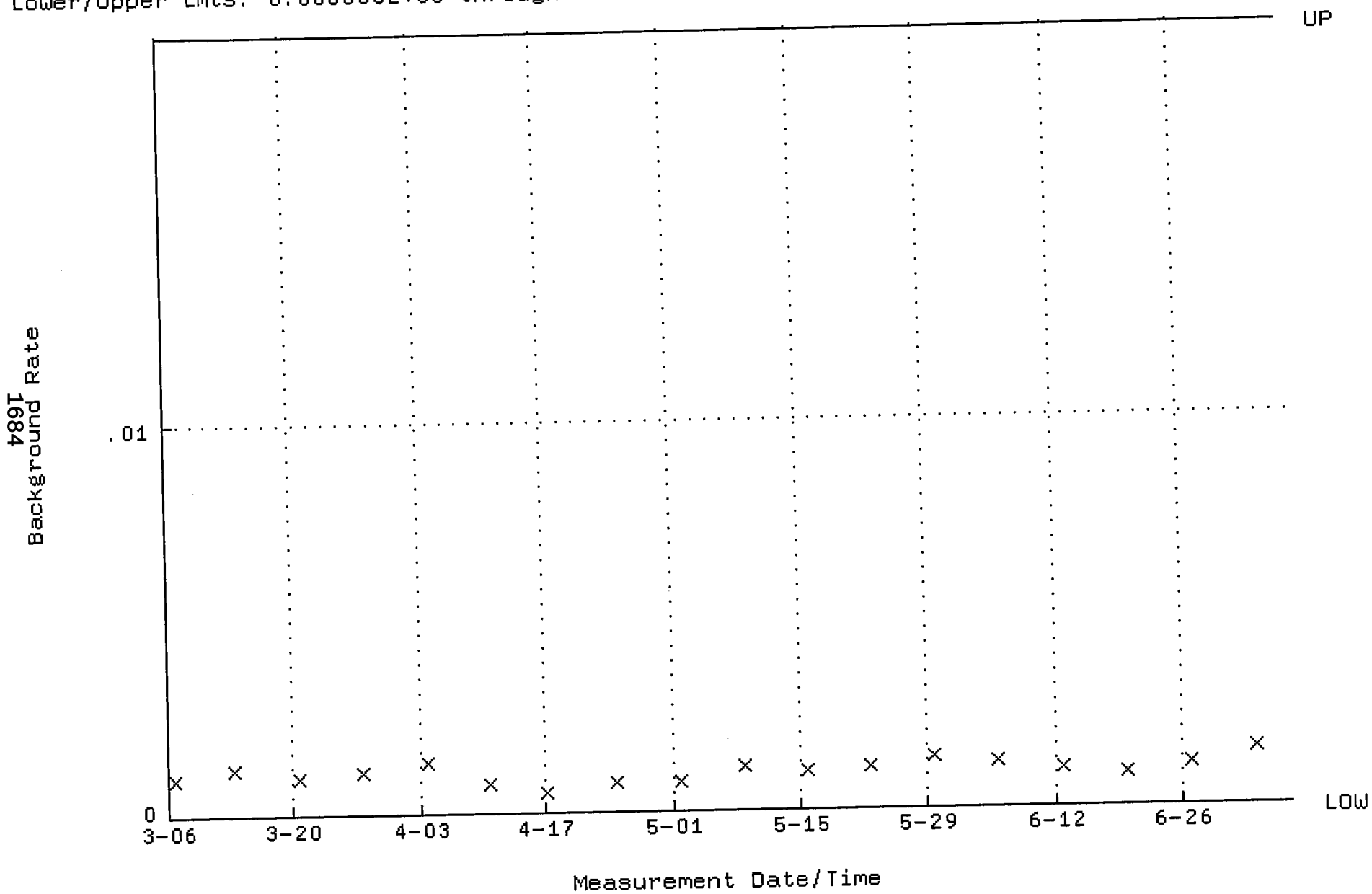
QA filename : DKA100:[ENV_ALPHA.QA.W]W070.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 2-MAR-2005 08:07:45 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



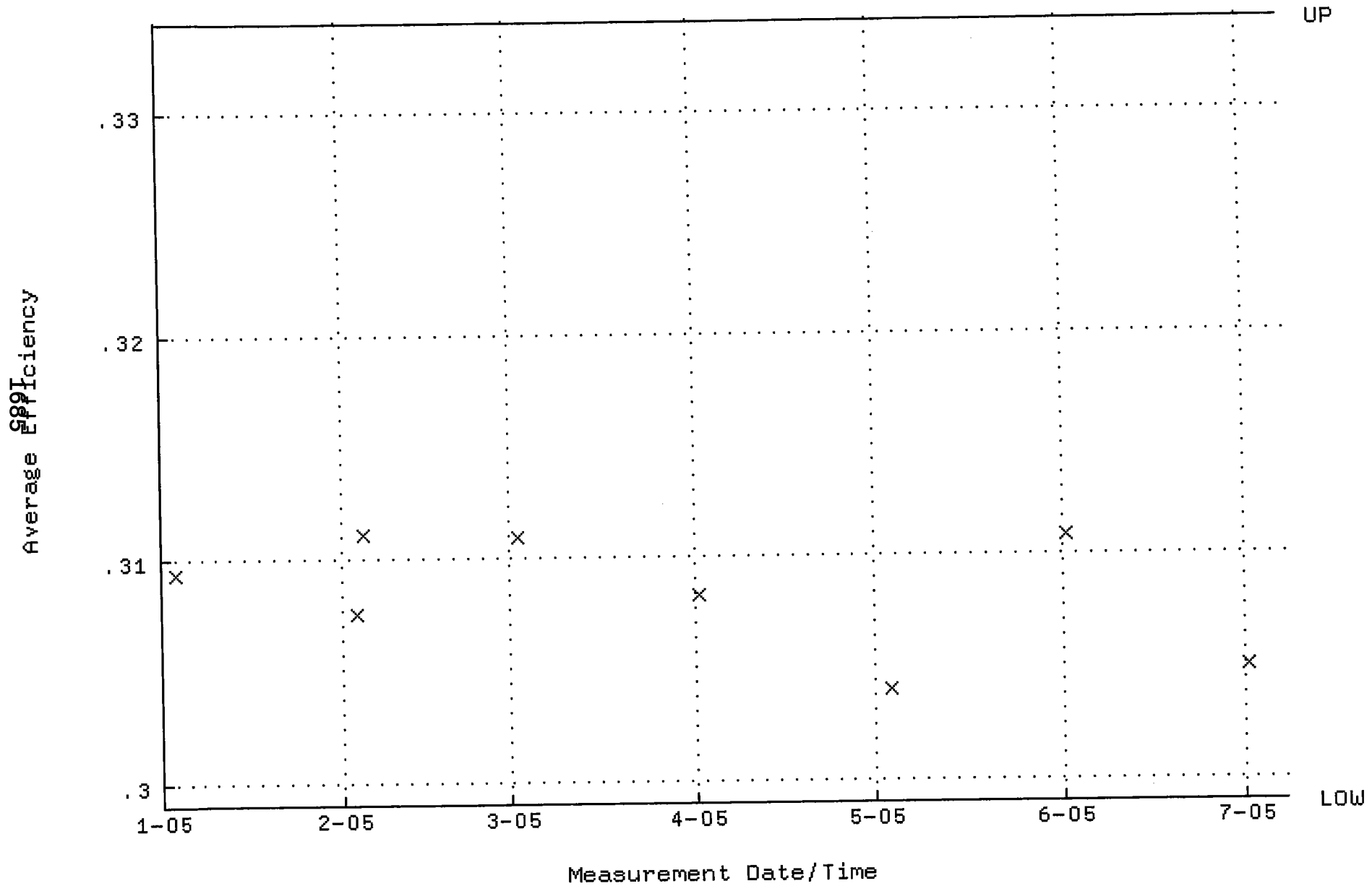
QA filename : DKA100:[ENV_ALPHA.QA.W]W070.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 2-MAR-2005 08:07:45 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



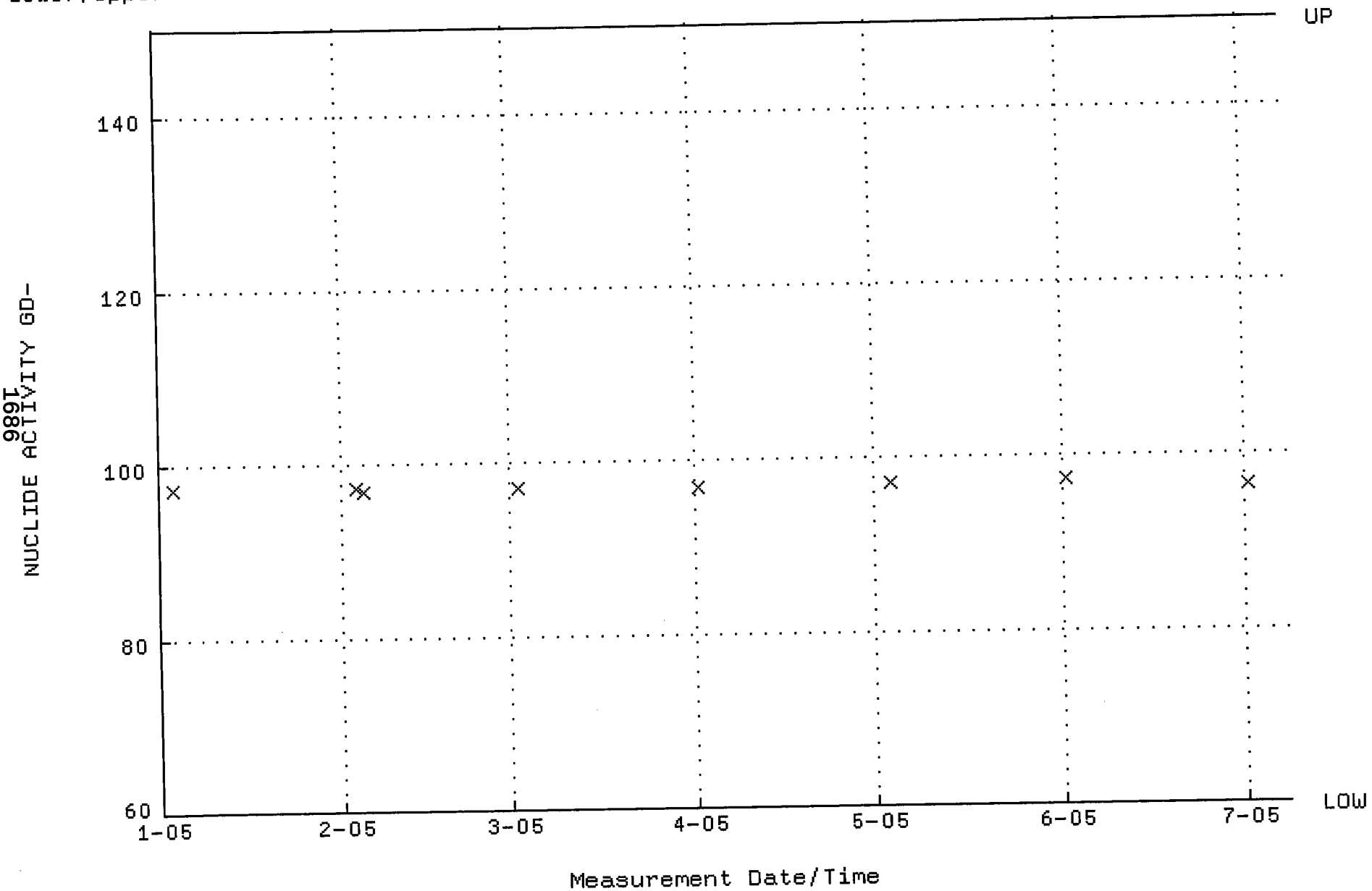
QA filename : DKA100:[ENV_ALPHA.QA.B]B070.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 6-MAR-2005 18:32:42 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



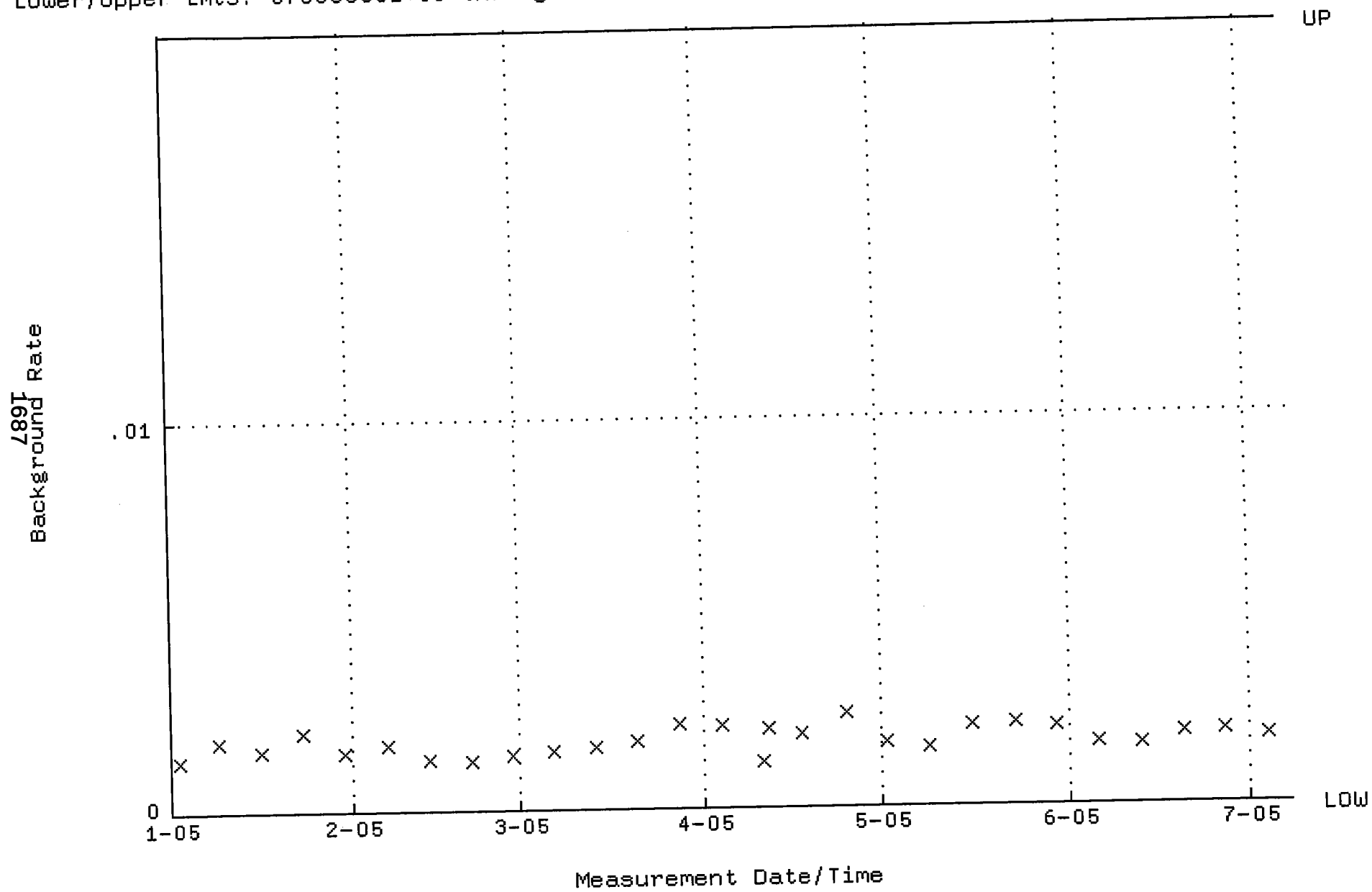
QA filename : DKA100:[ENV_ALPHA.QA.W]W071.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.299000 through 0.334000



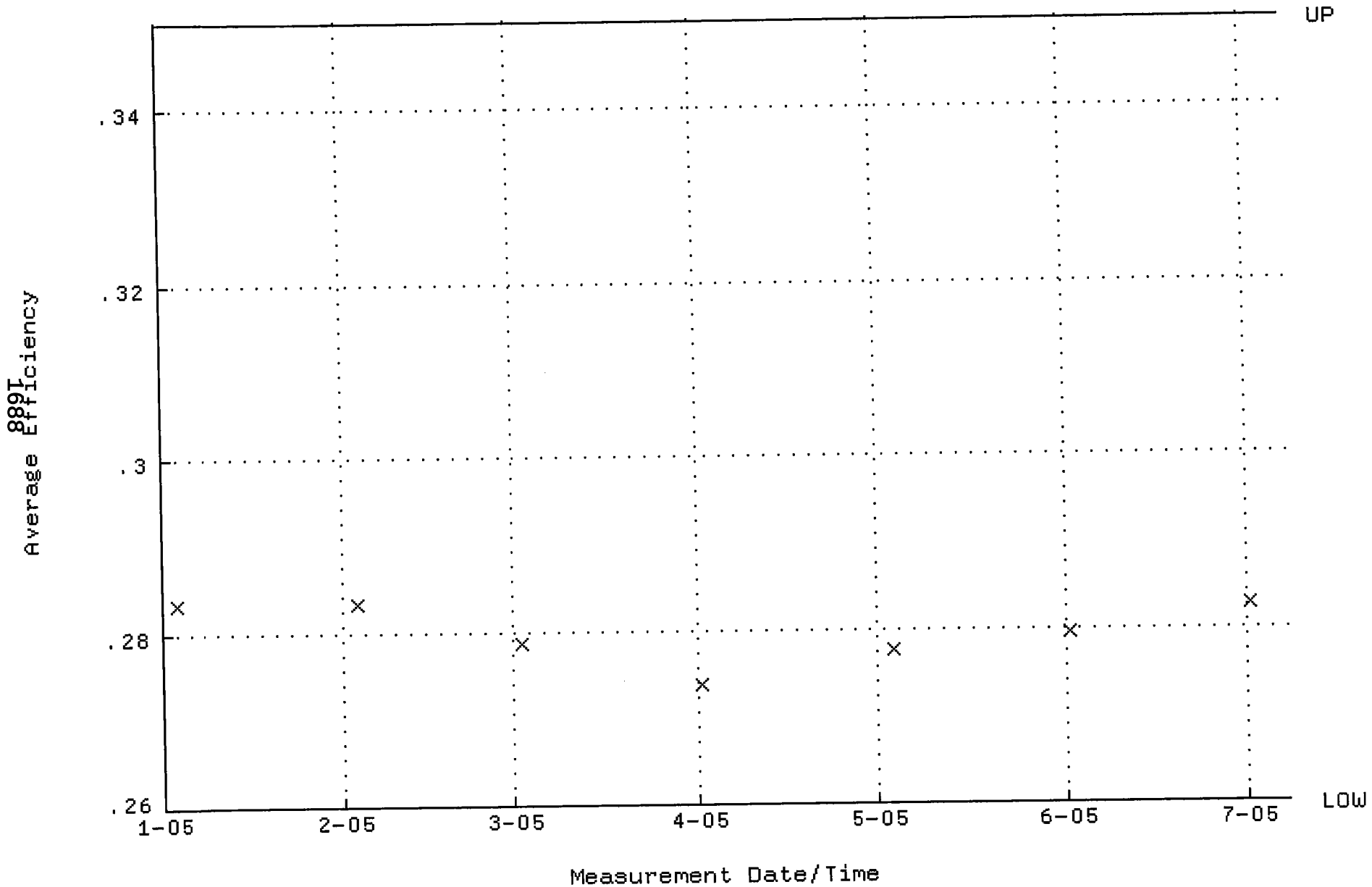
QA filename : DKA100:[ENV_ALPHA.QA.W]W071.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



QA filename : DKA100:[ENV_ALPHA.QA.B]B071.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

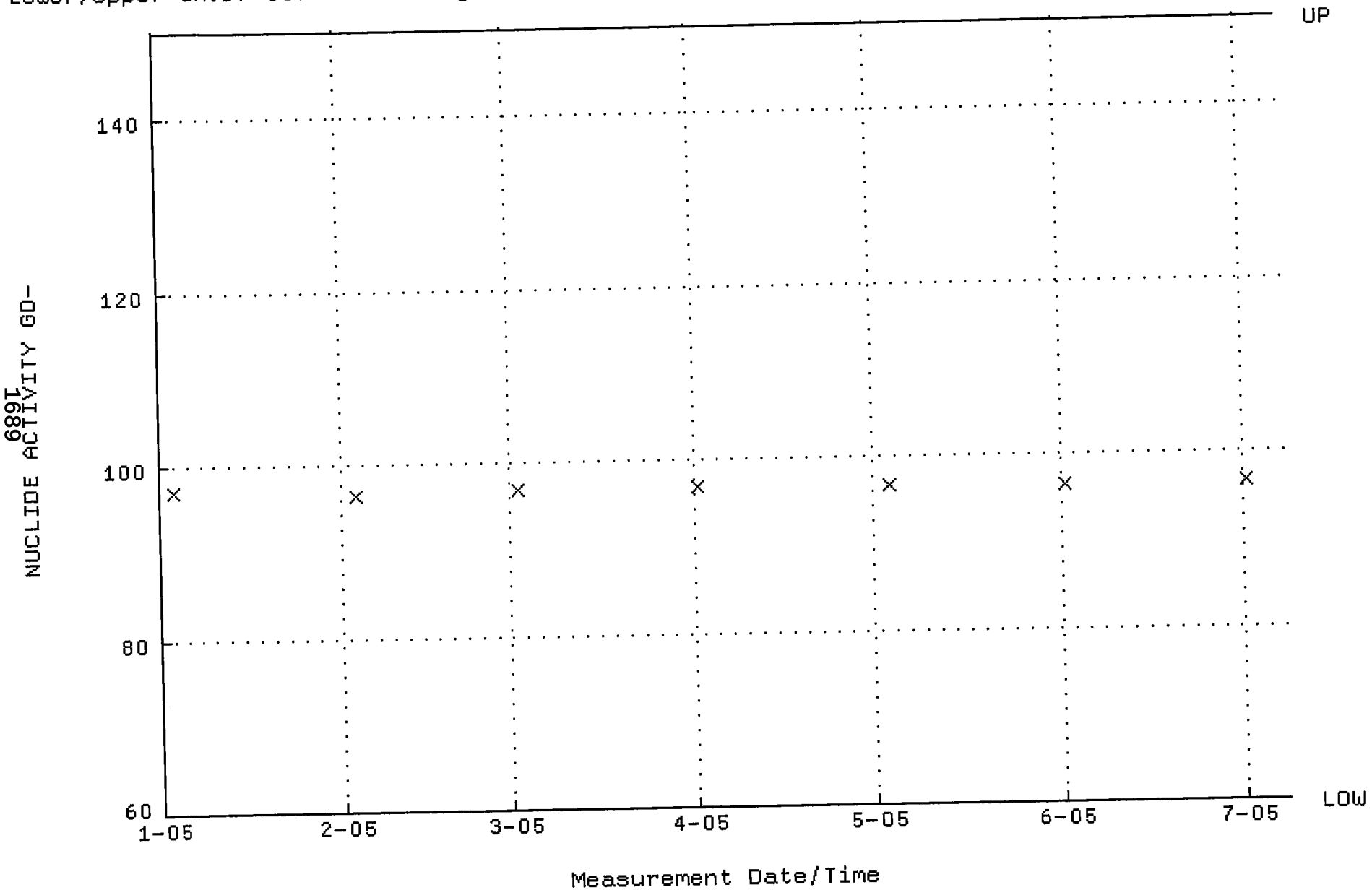


QA filename : DKA100:[ENV_ALPHA.QA.W]W072.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.260000 through 0.350000

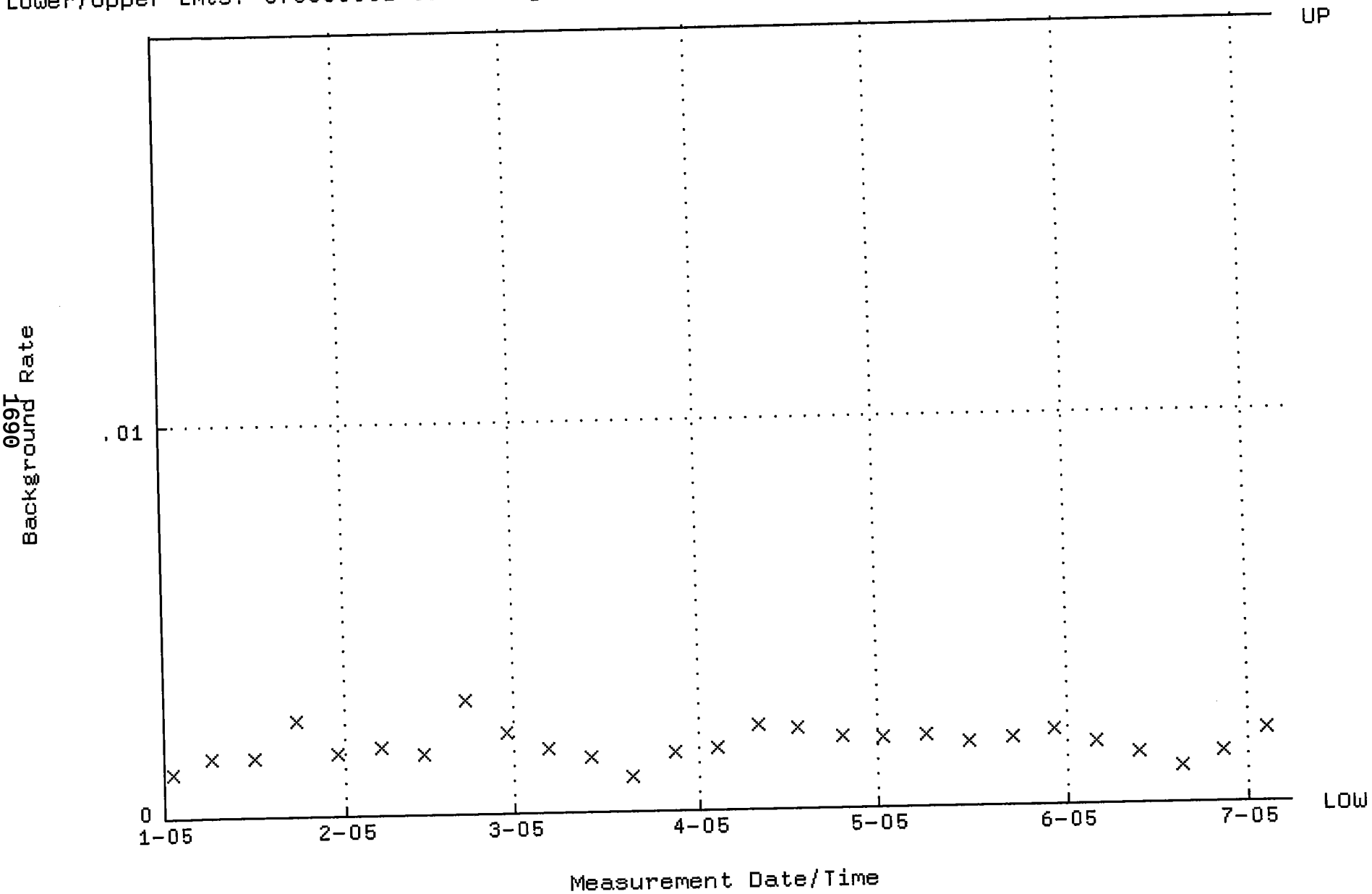


889I

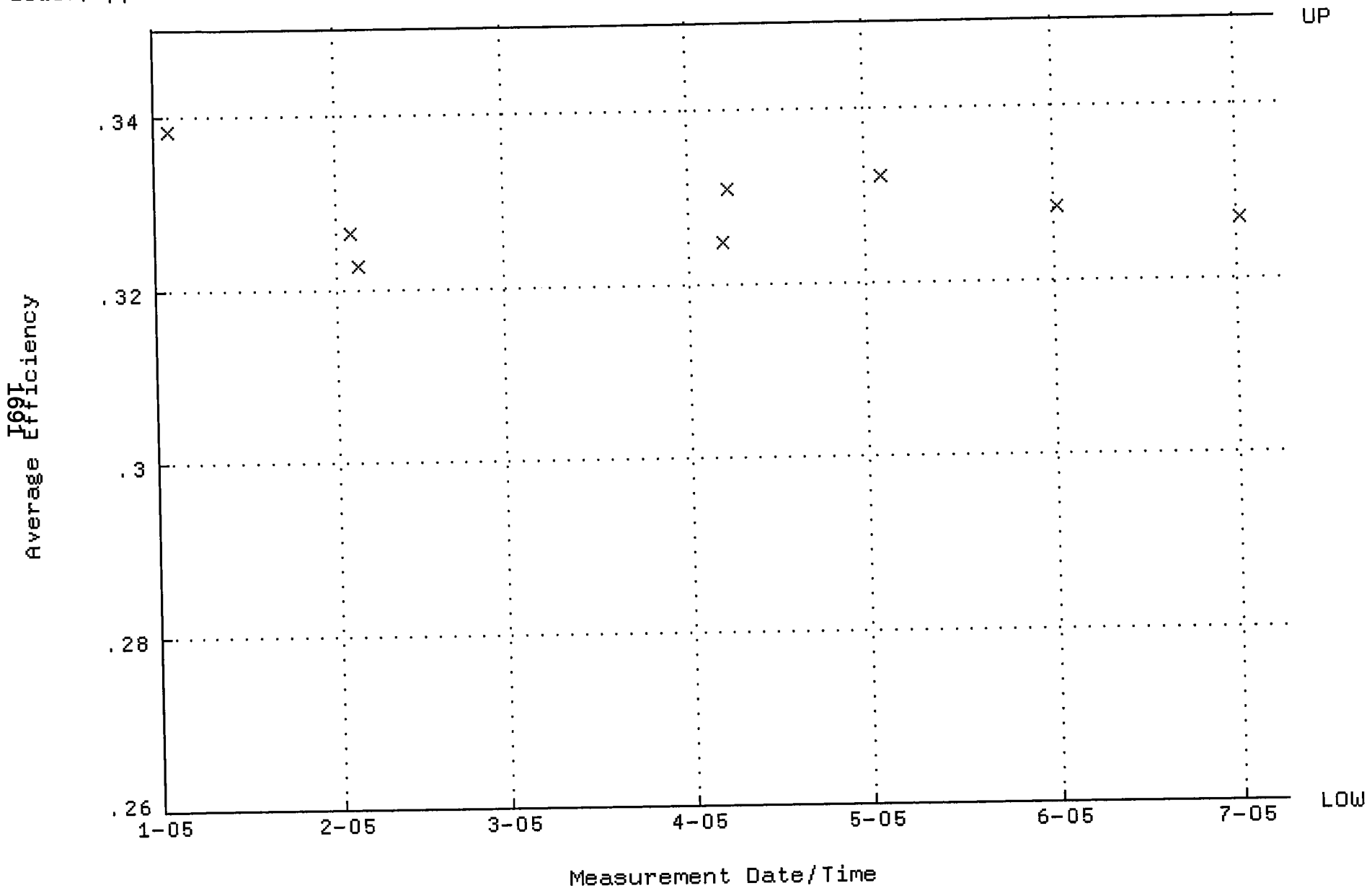
QA filename : DKA100:[ENV_ALPHA.QA.W]W072.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



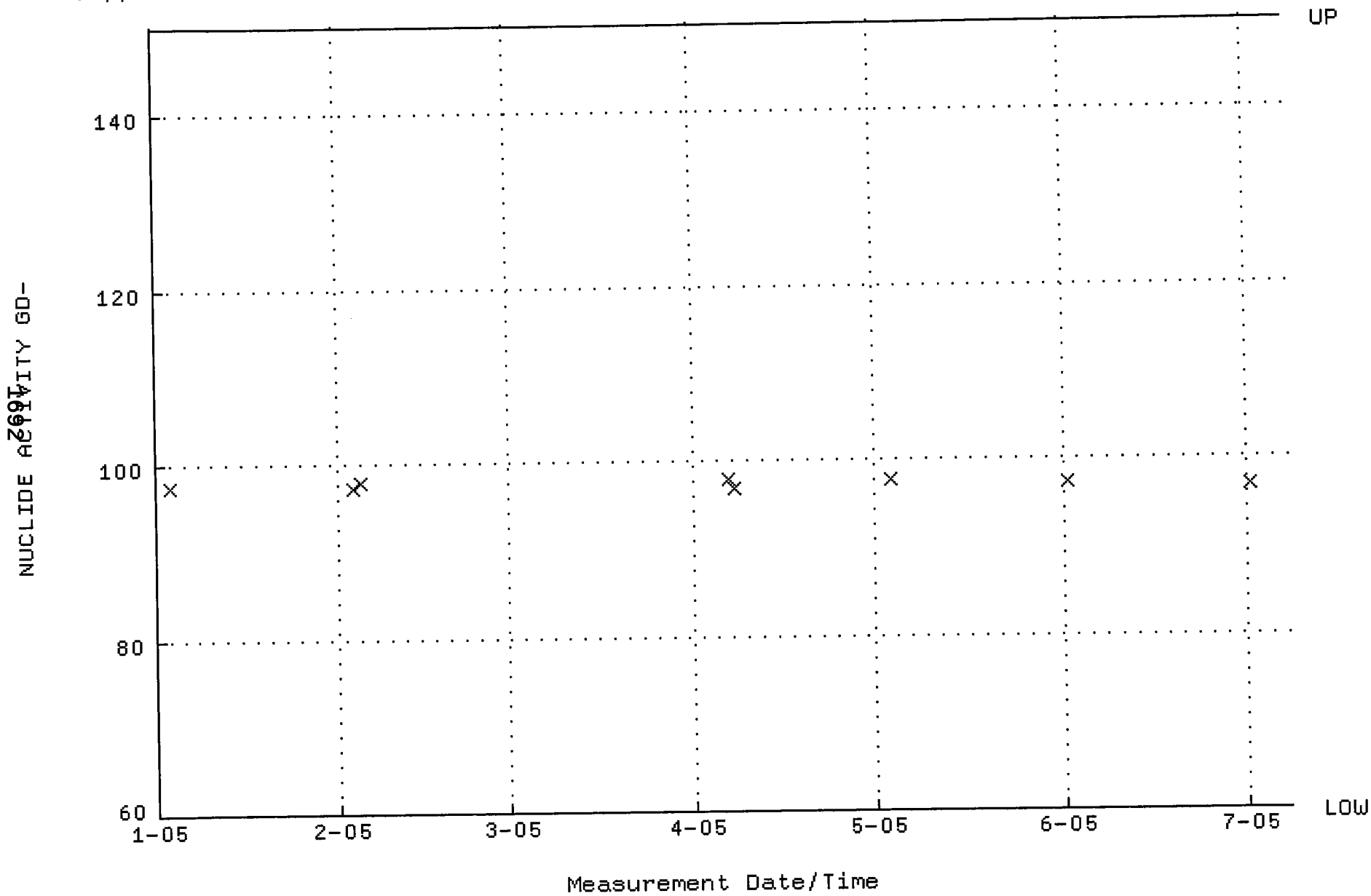
QA filename : DKA100:[ENV_ALPHA.QA.B]B072.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



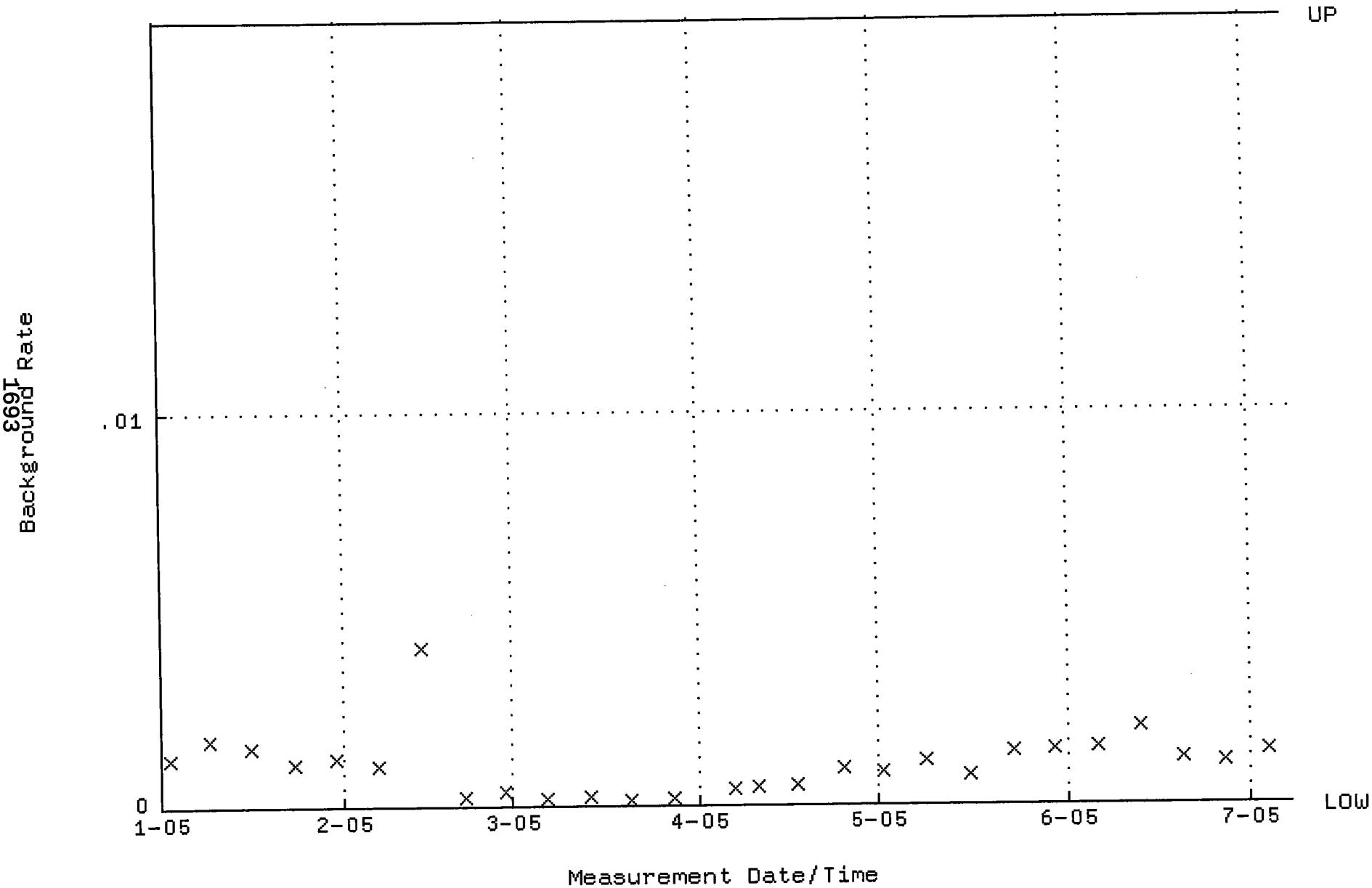
QA filename : DKA100:[ENV_ALPHA.QA.W]W073.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.260000 through 0.350000



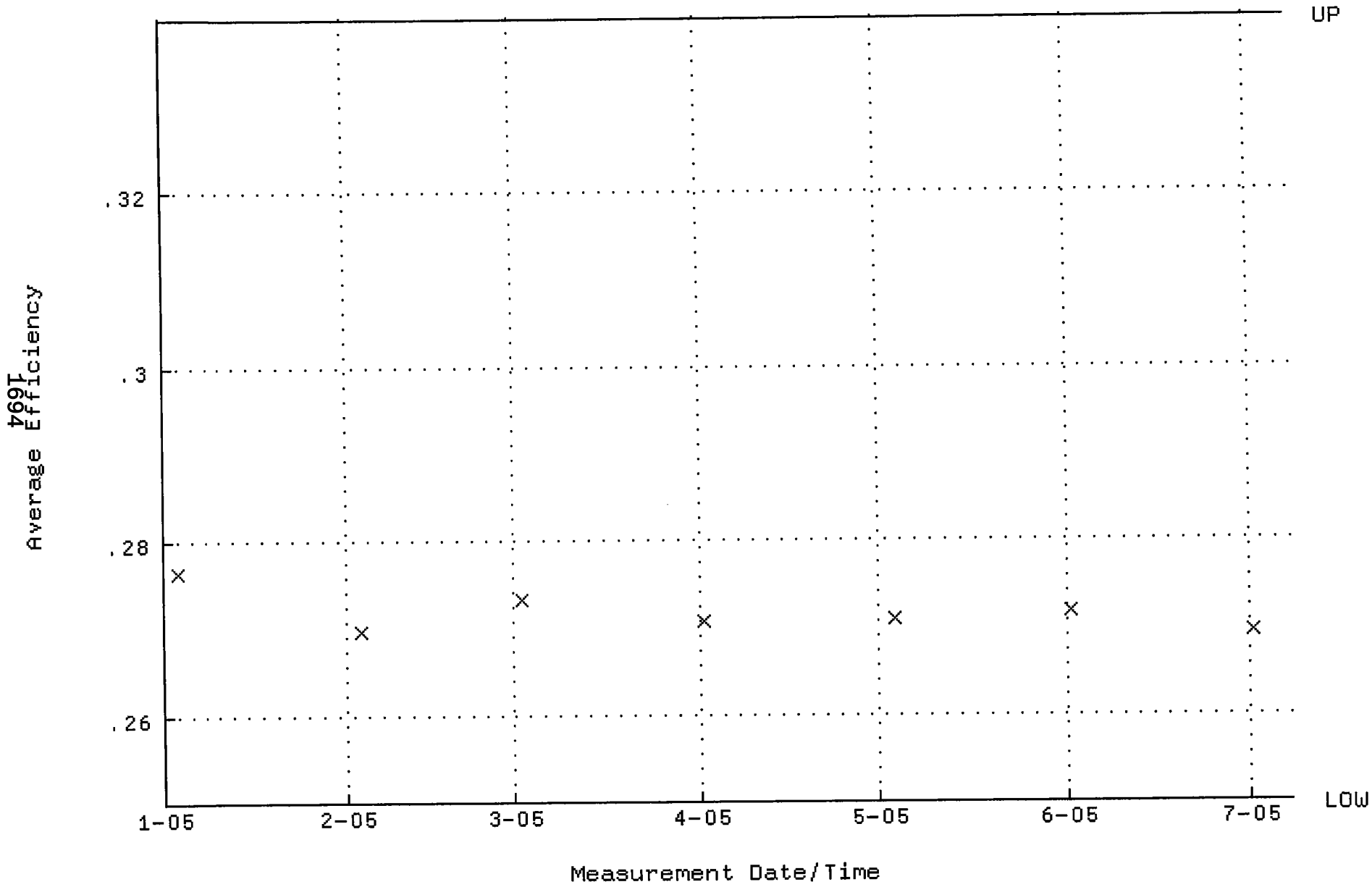
QA filename : DKA100:[ENV_ALPHA.QA.W]W073.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



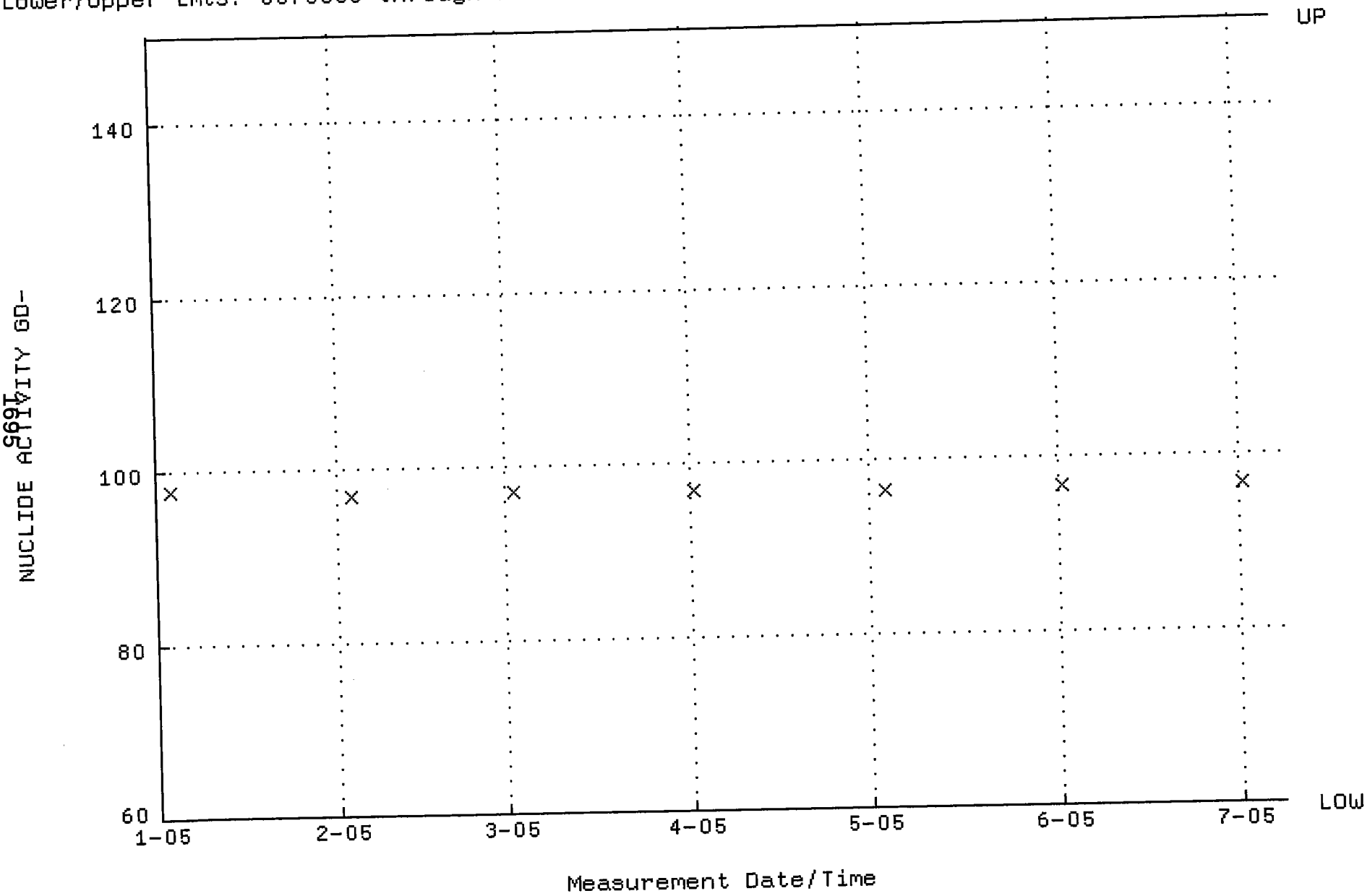
QA filename : DKA100:[ENV_ALPHA.QA.B]B073.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



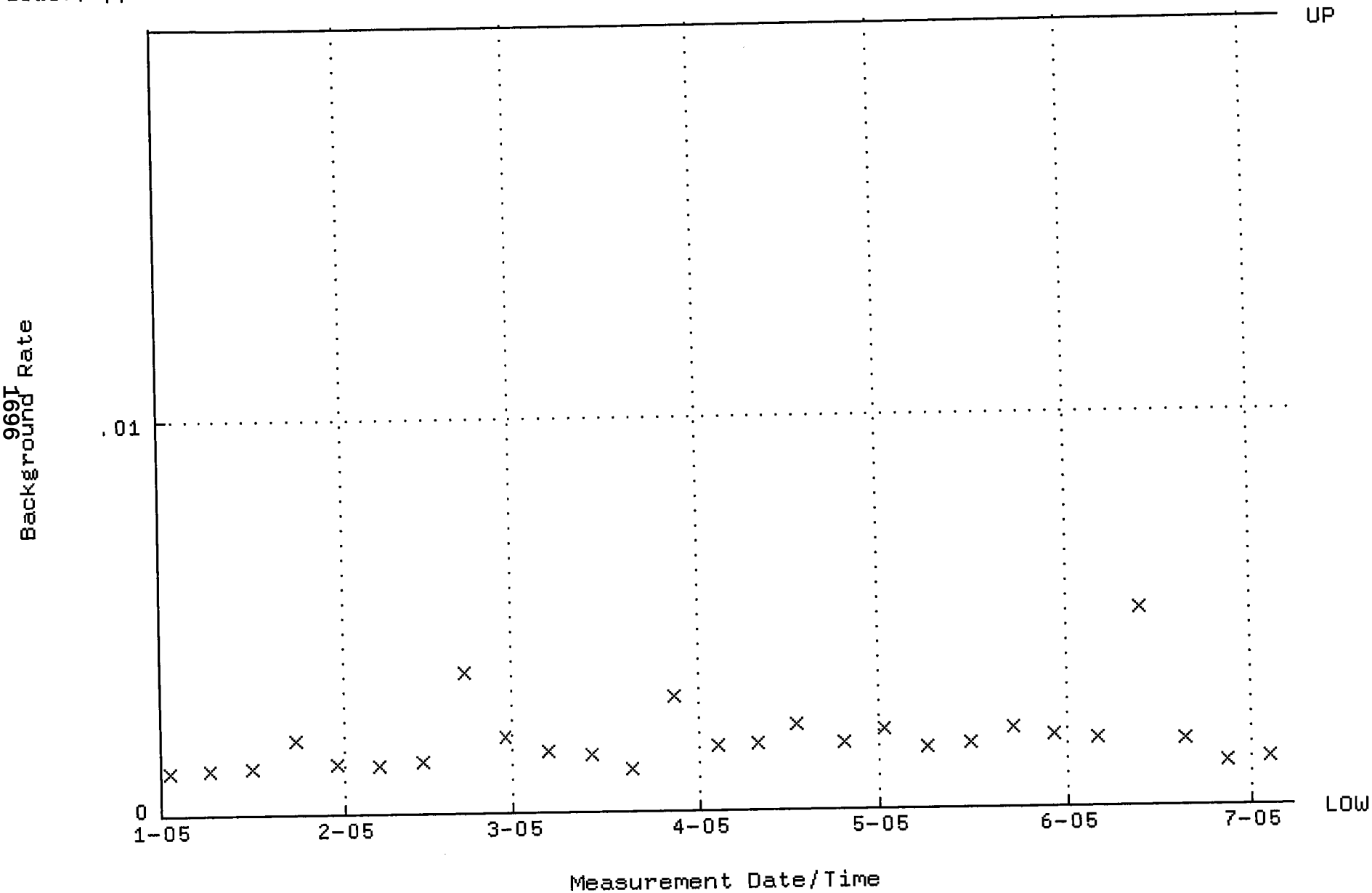
QA filename : DKA100:[ENV_ALPHA.QA.W]W074.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.250000 through 0.340000



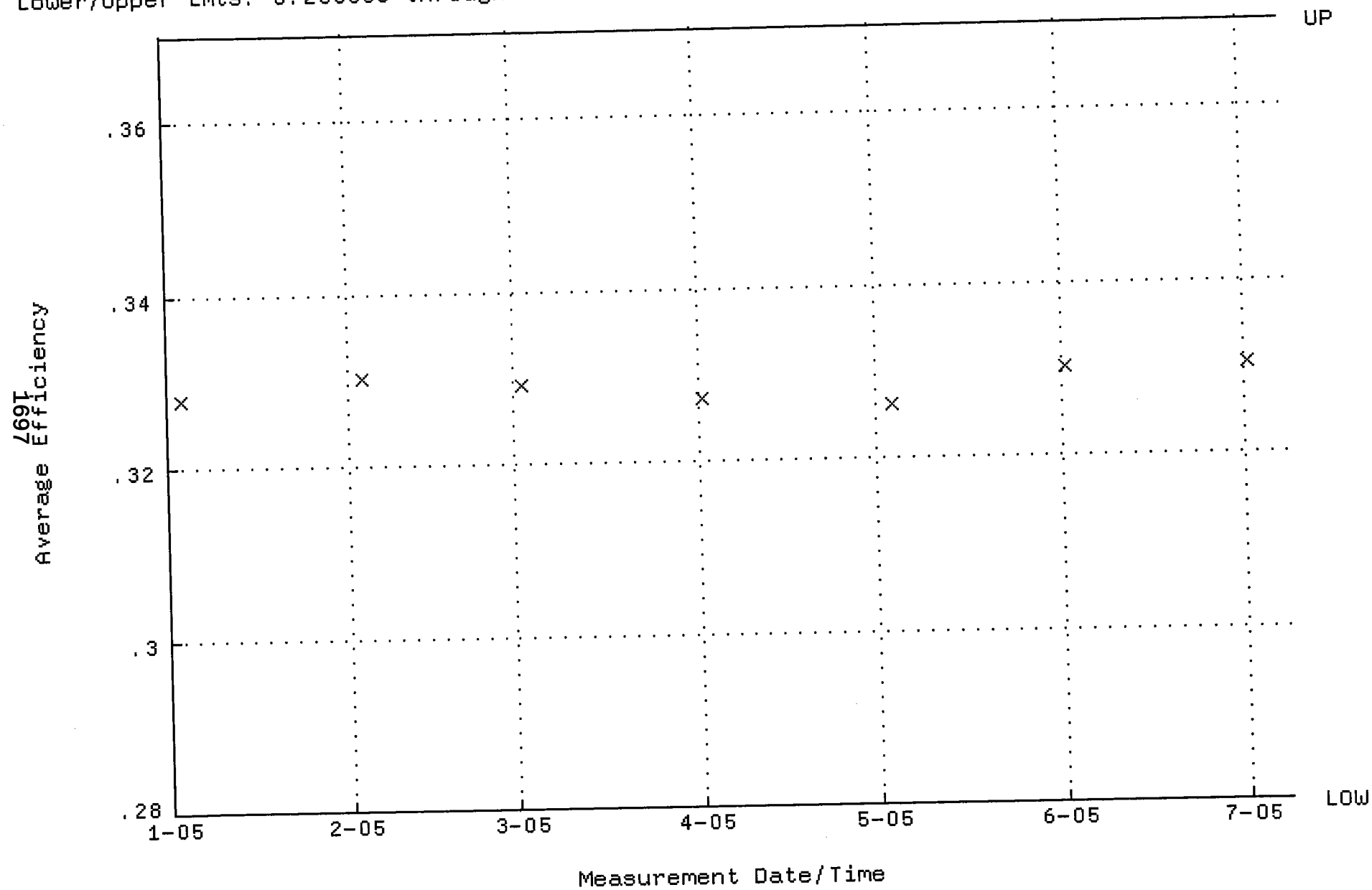
QA filename : DKA100:[ENV_ALPHA.QA.W]W074.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



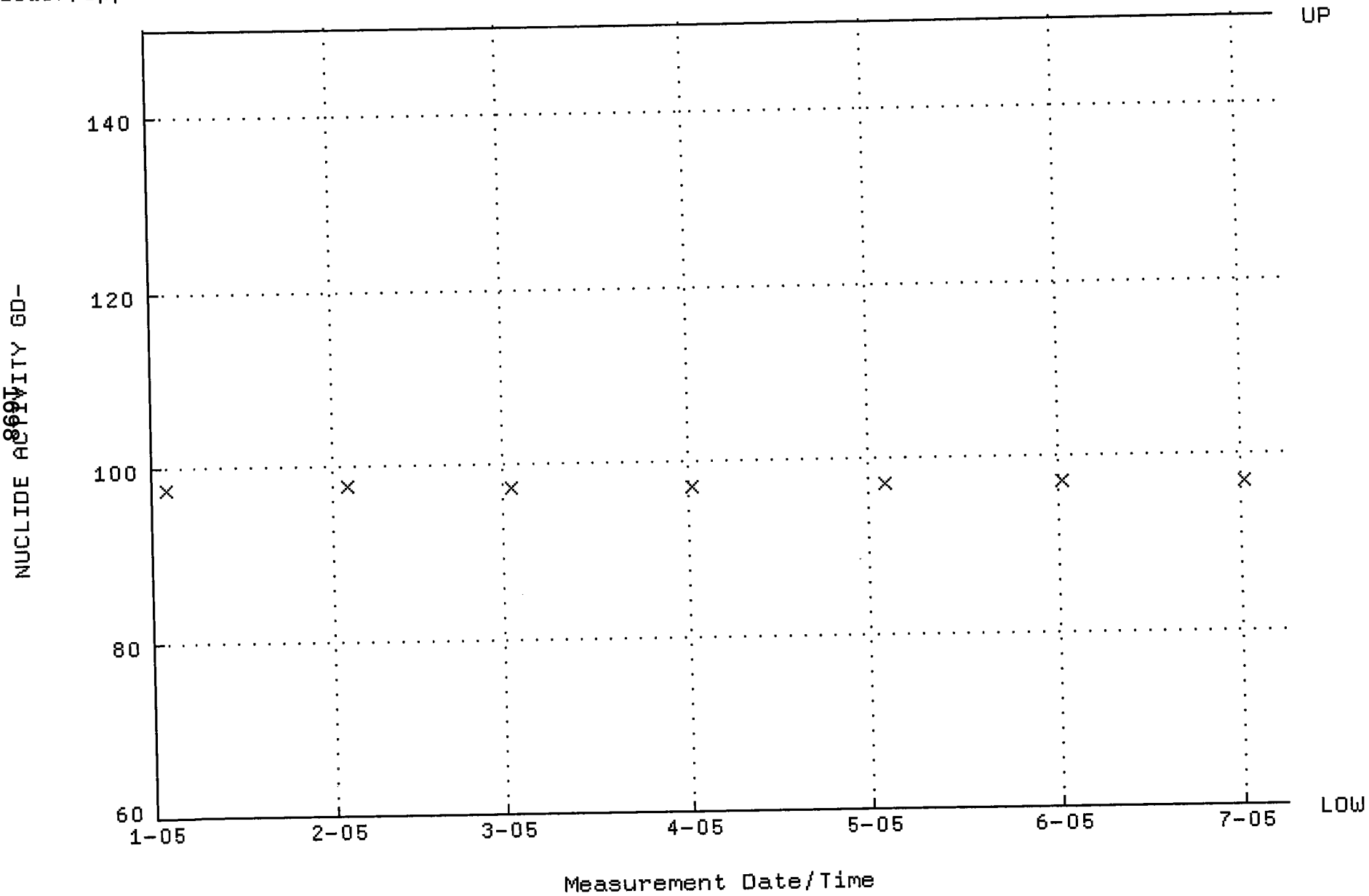
QA filename : DKA100:[ENV_ALPHA.QA.B]B074.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



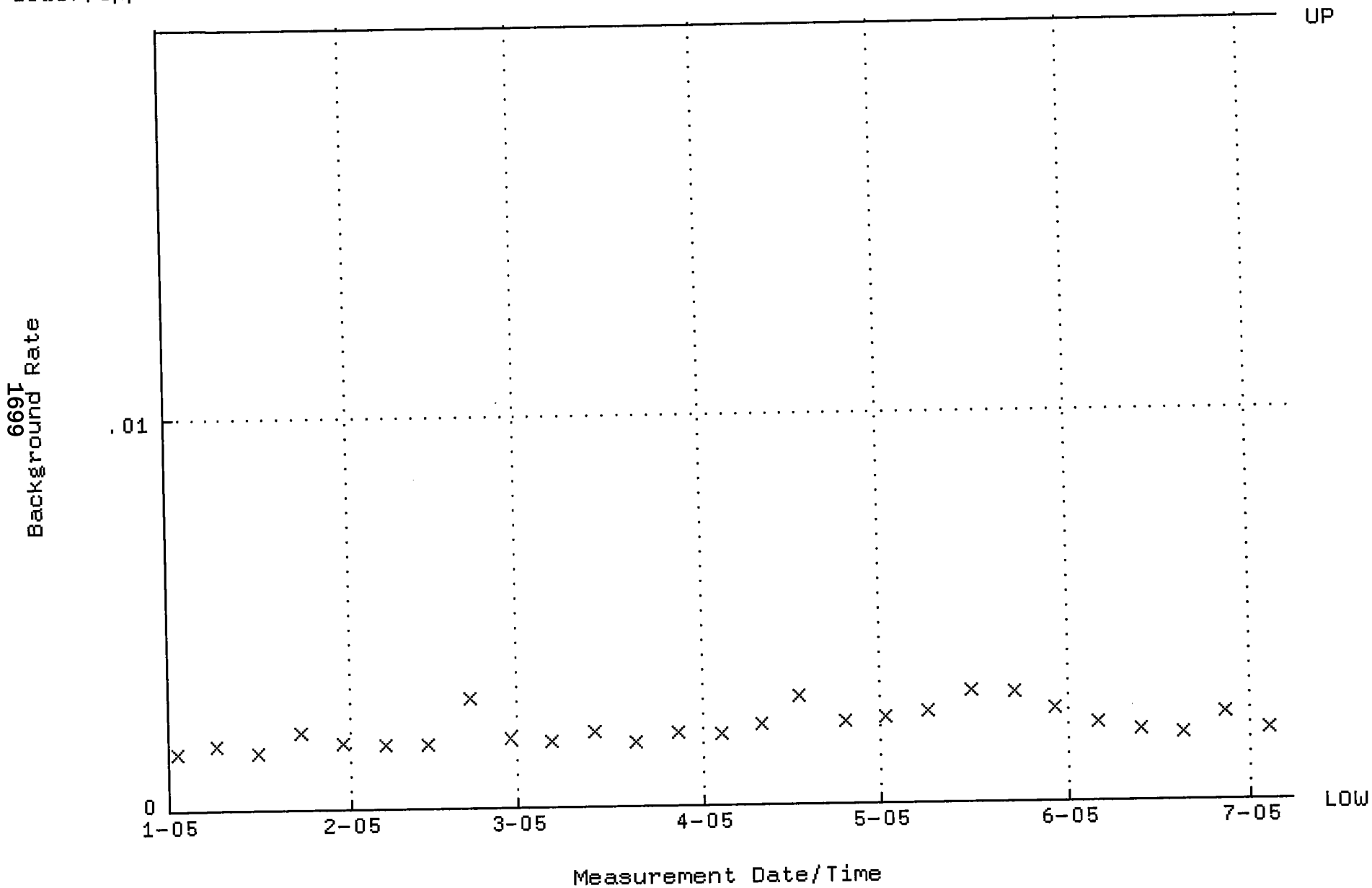
QA filename : DKA100:[ENV_ALPHA.QA.W]W075.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



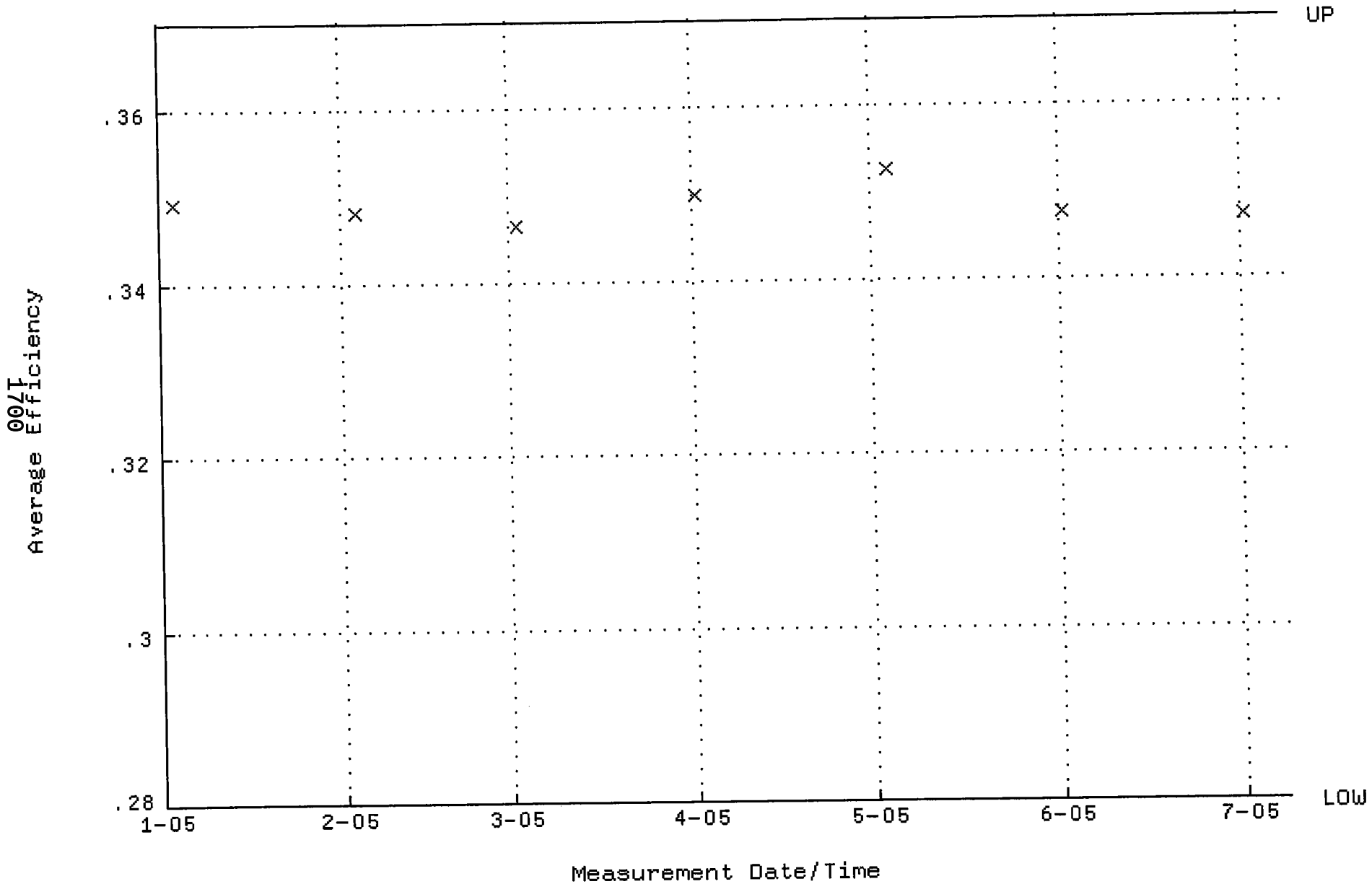
QA filename : DKA100:[ENV_ALPHA.QA.W]W075.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:22 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



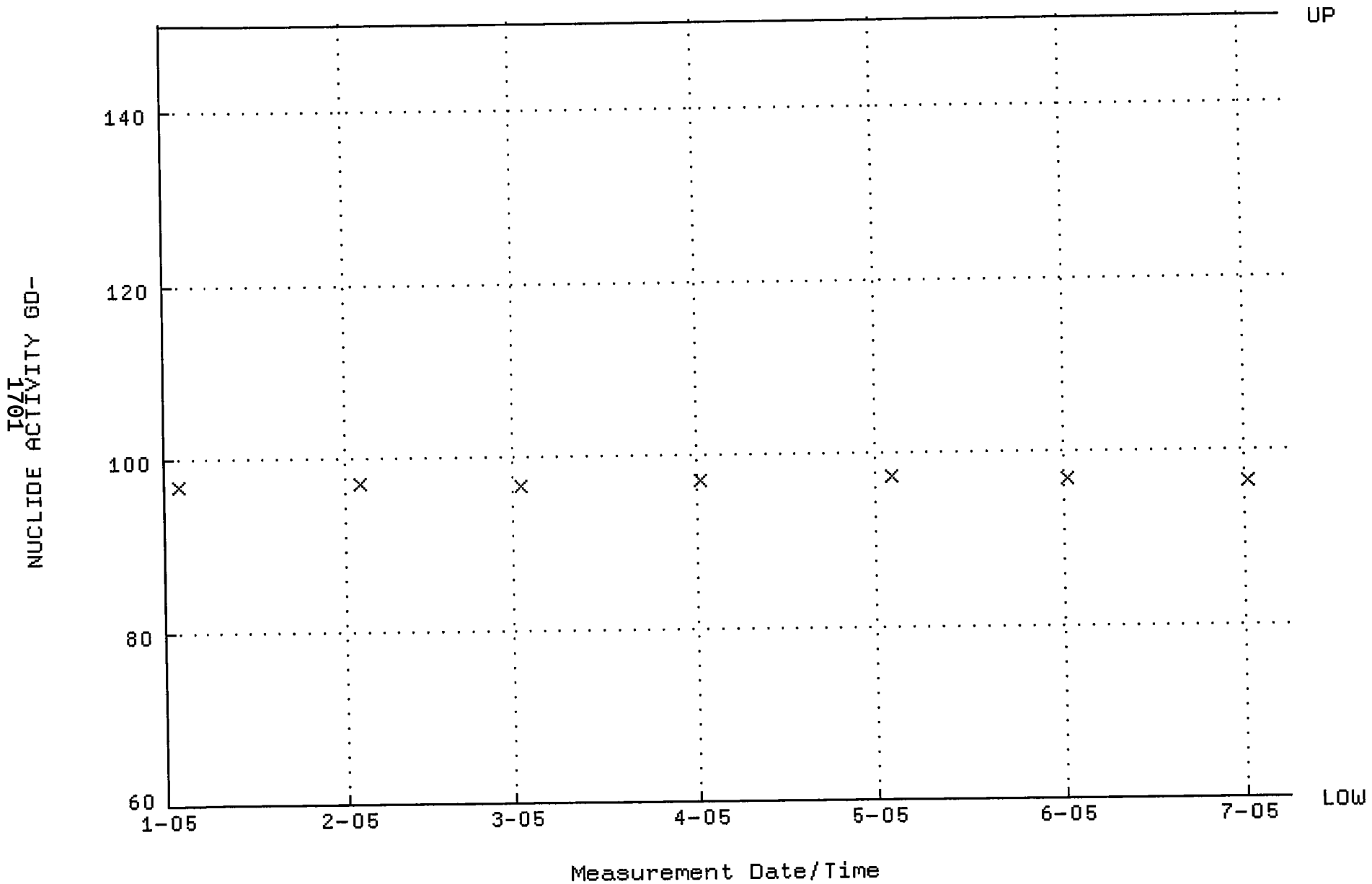
QA filename : DKA100:[ENV_ALPHA.QA.B]B075.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



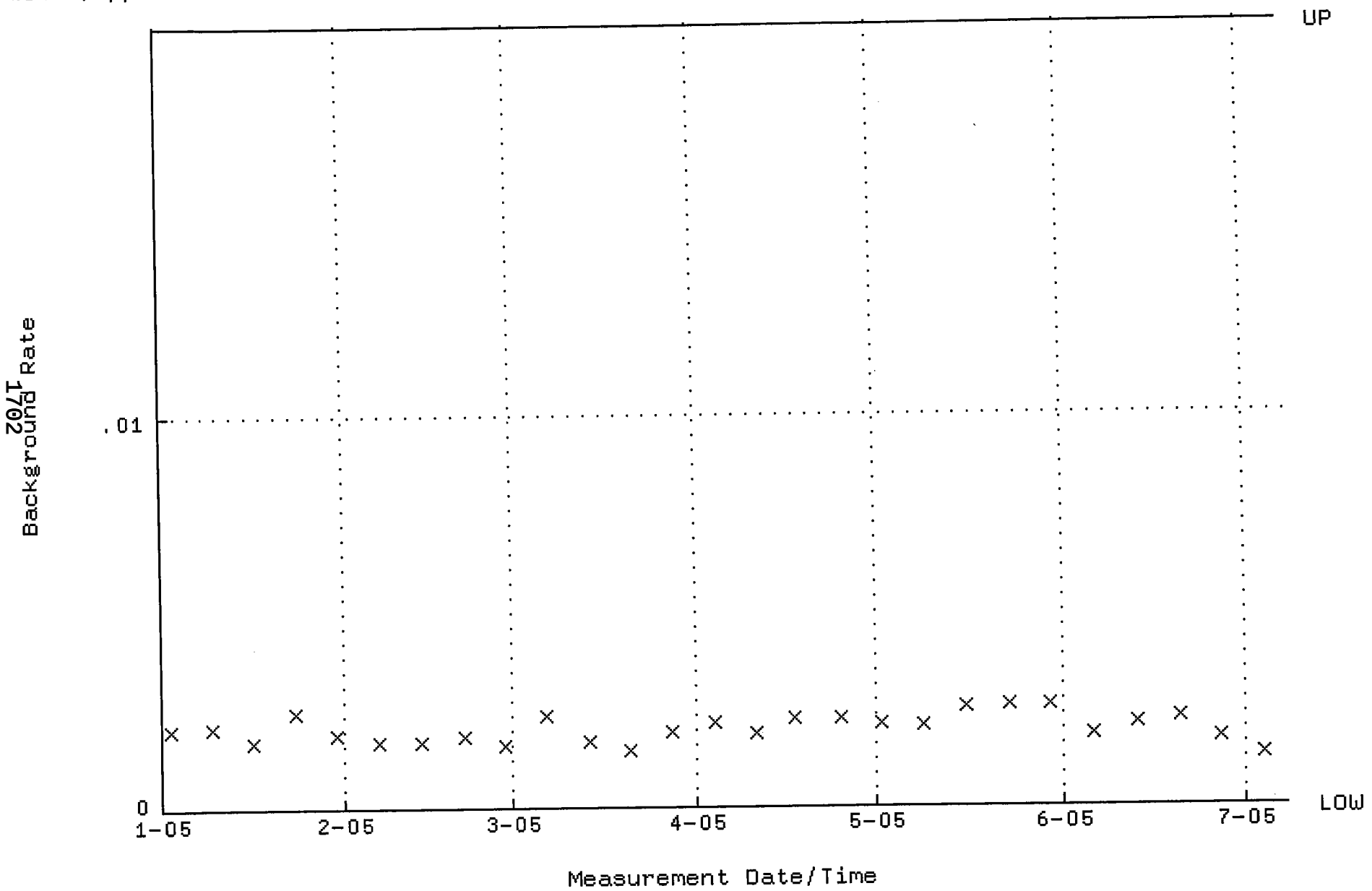
QA filename : DKA100:[ENV_ALPHA.QA.W]W079.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:23 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



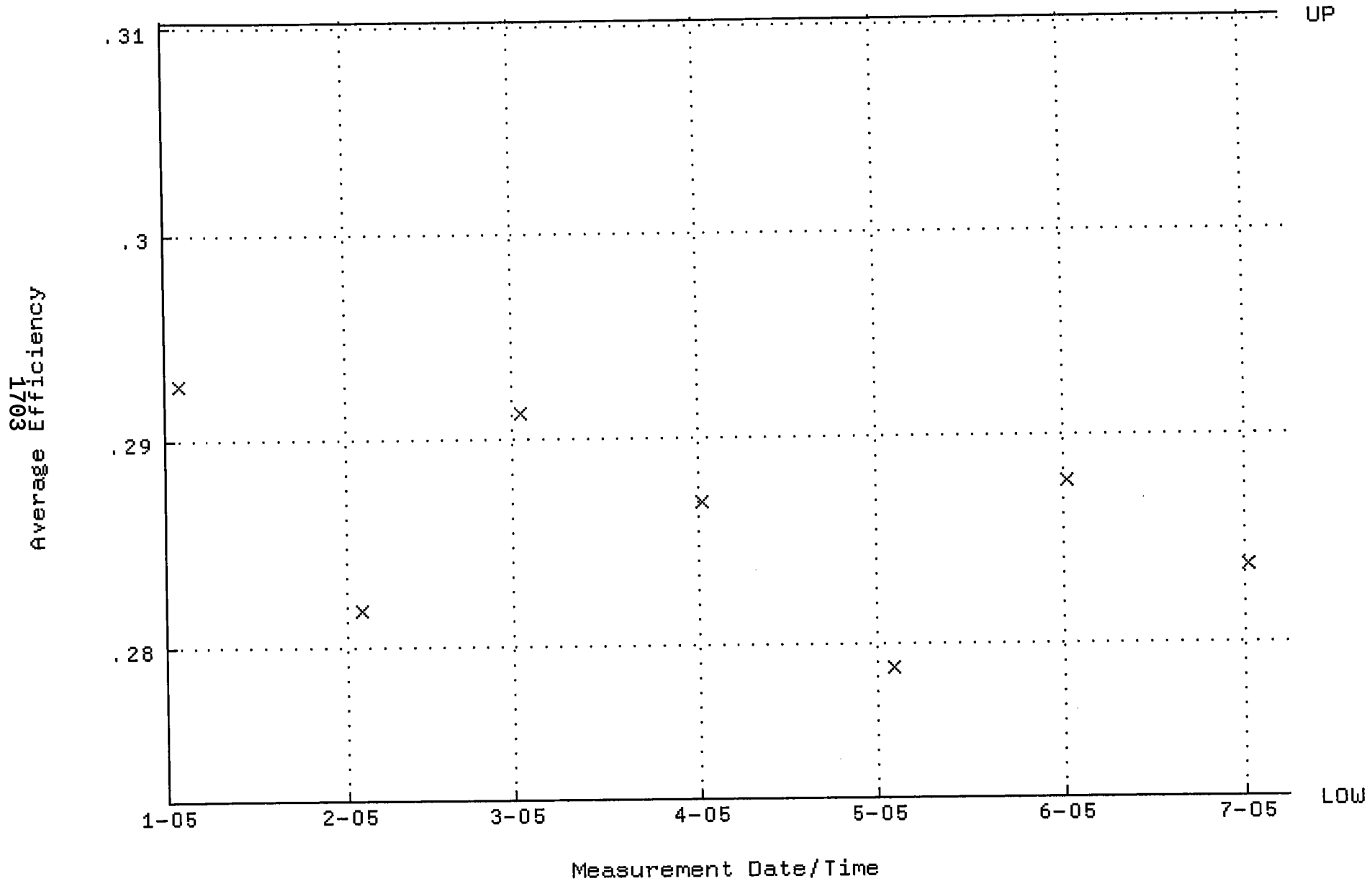
QA filename : DKA100:[ENV_ALPHA.QA.W]W079.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:23 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



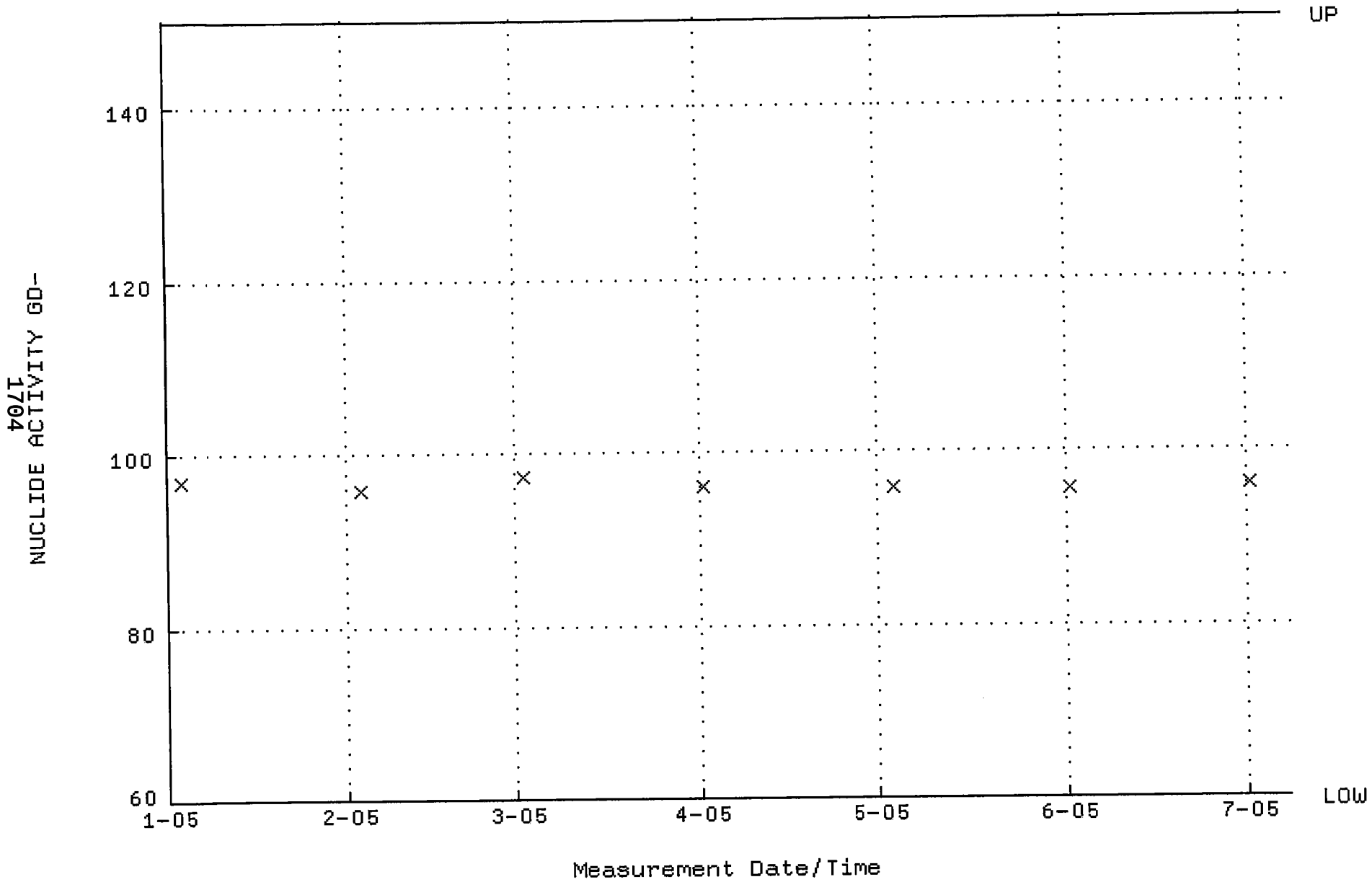
QA filename : DKA100:[ENV_ALPHA.QA.B]B079.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:08 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



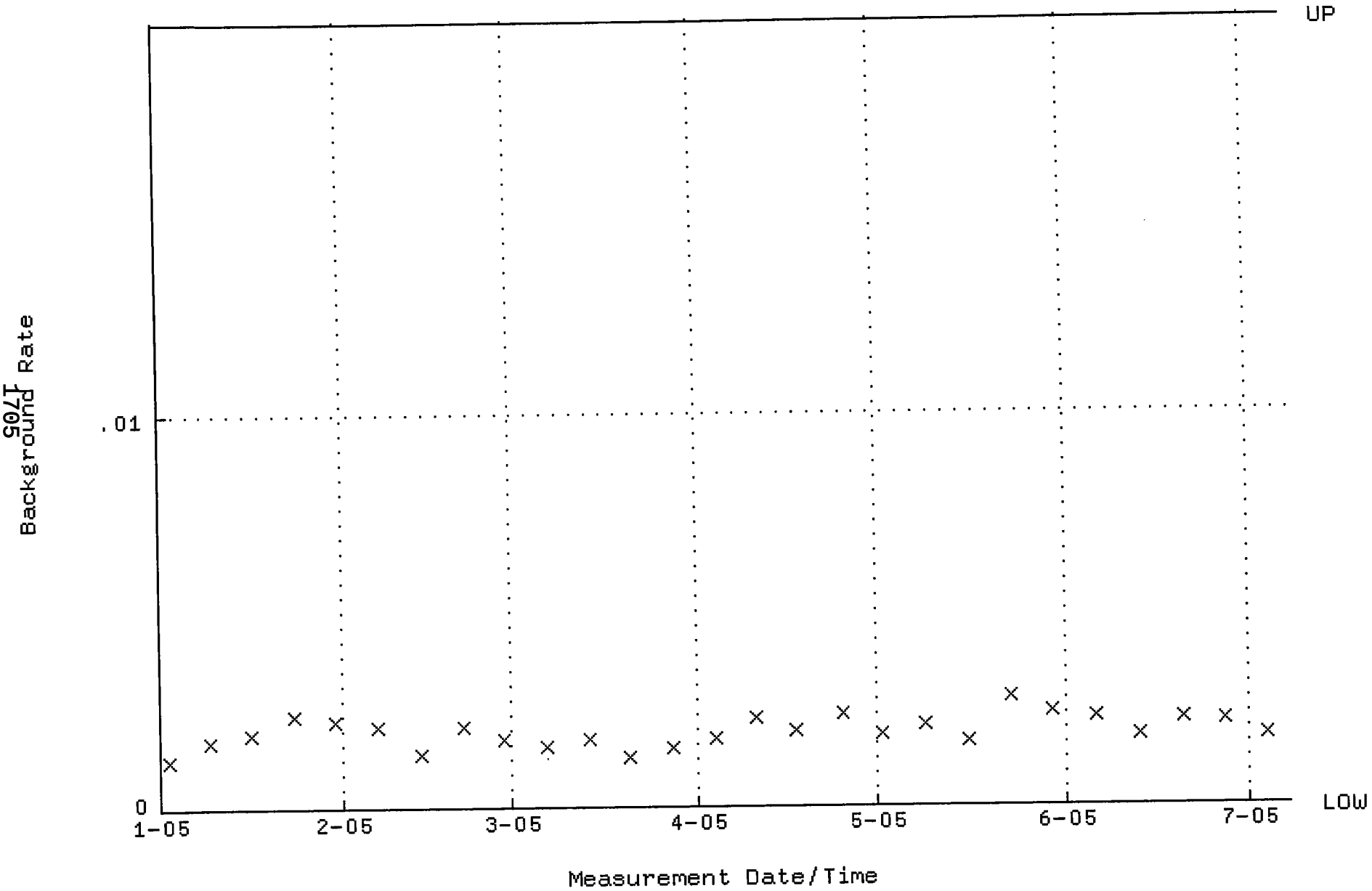
QA filename : DKA100:[ENV_ALPHA.QA.W]W081.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:23 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.272497 through 0.310303



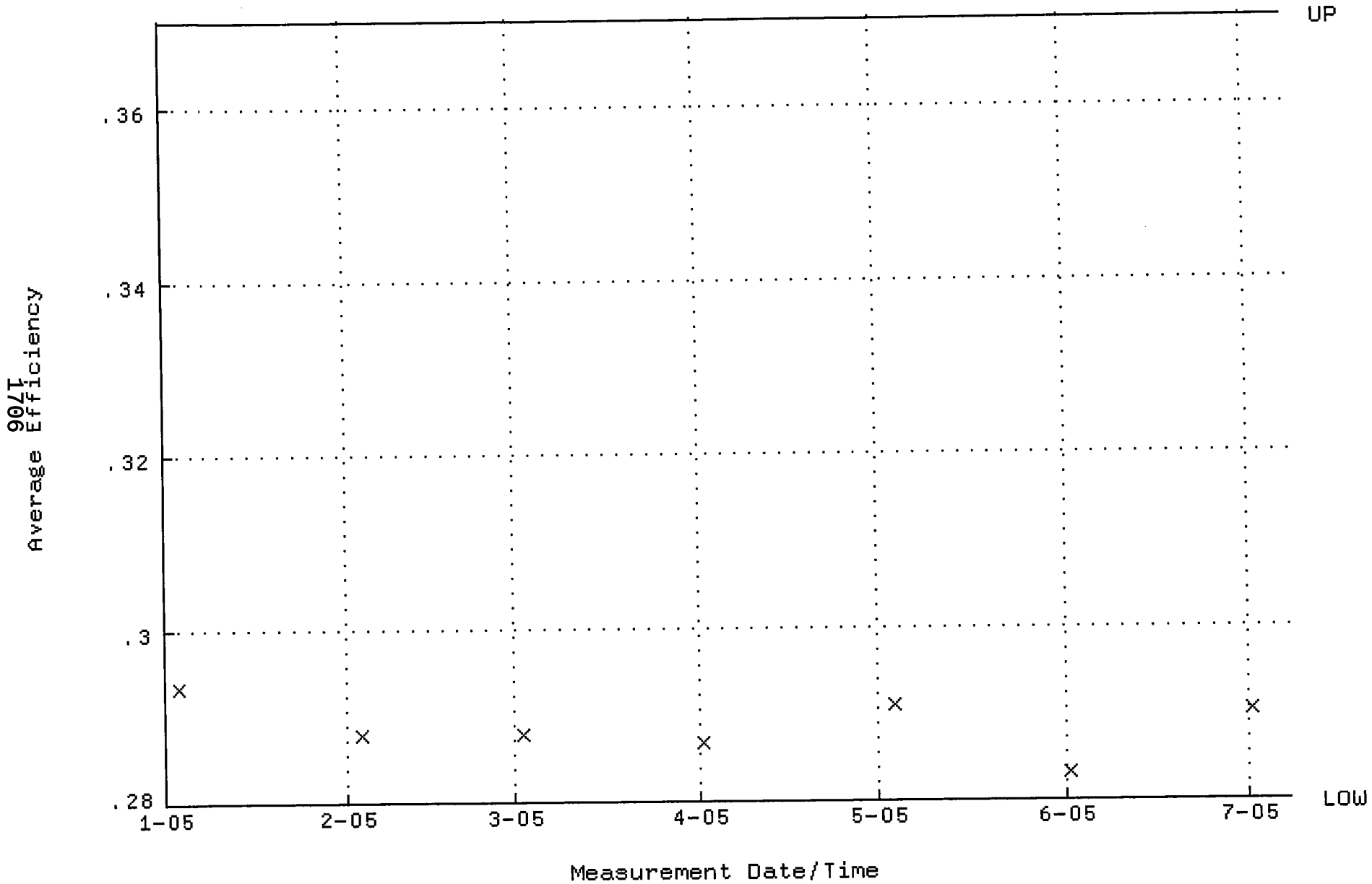
QA filename : DKA100:[ENV_ALPHA.QA.W]W081.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:23 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



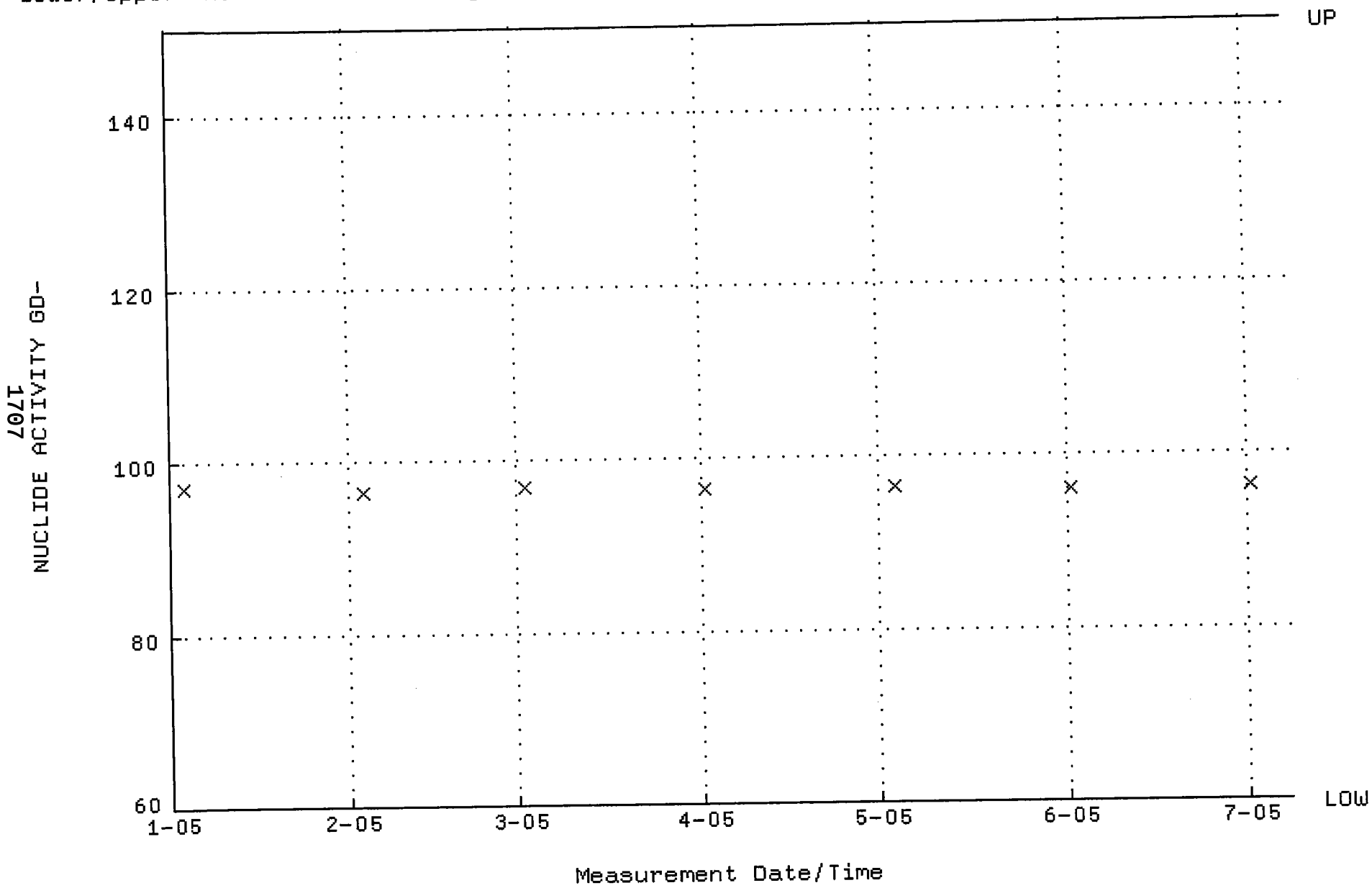
QA filename : DKA100:[ENV_ALPHA.QA.B]B081.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:08 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



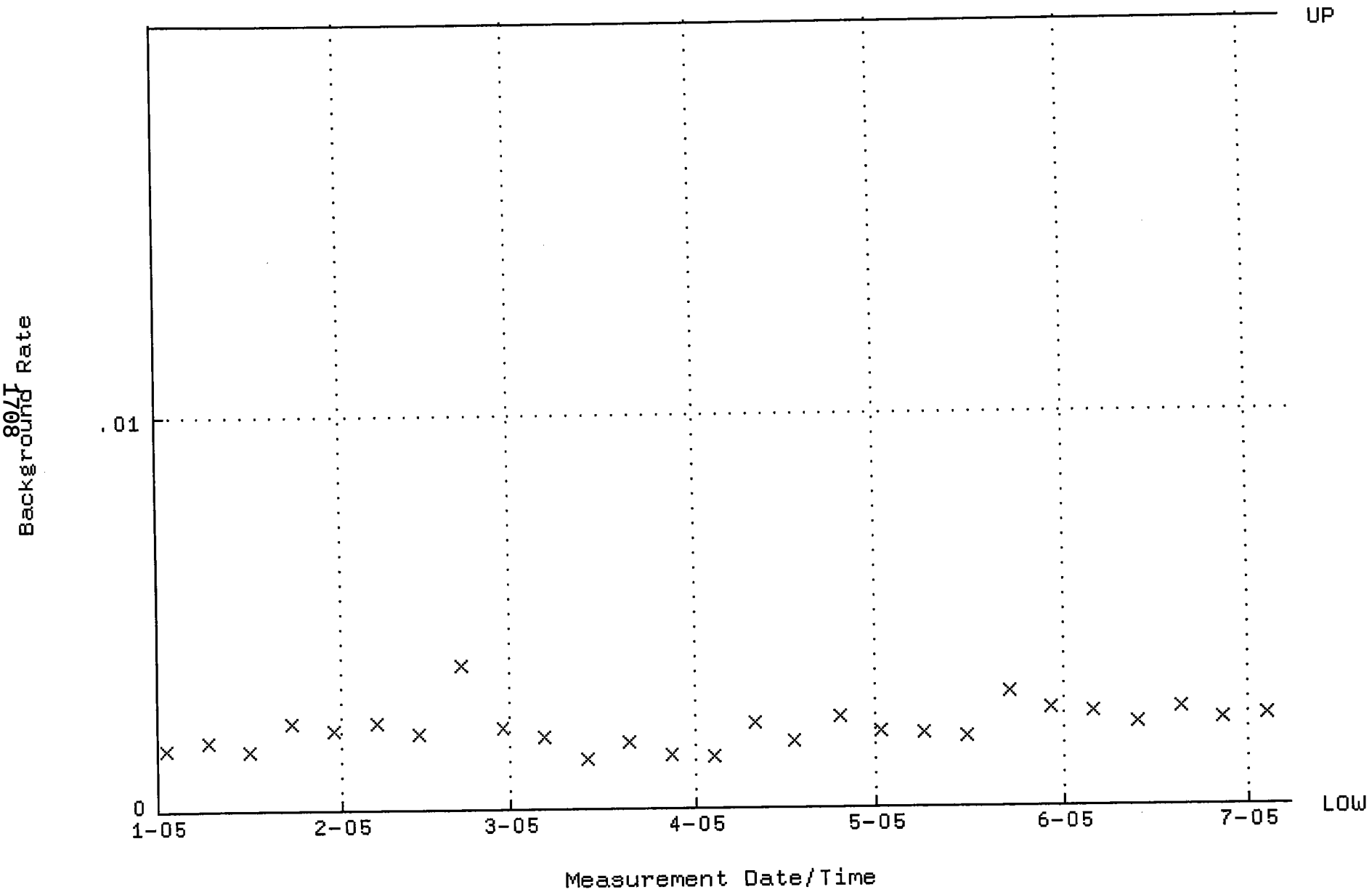
QA filename : DKA100:[ENV_ALPHA.QA.W]W082.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:23 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



QA filename : DKA100:[ENV_ALPHA.QA.W]W082.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:23 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000

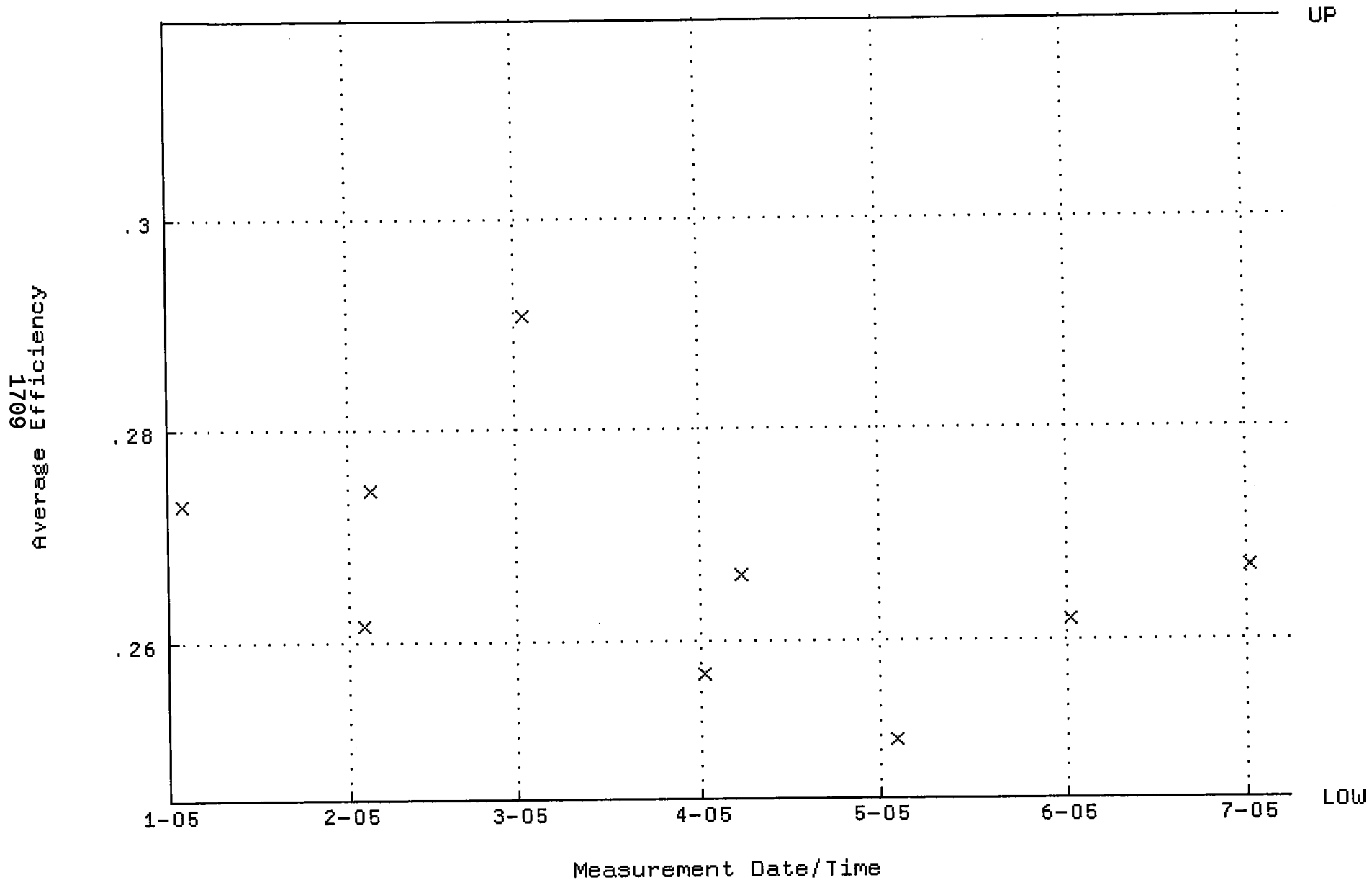


QA filename : DKA100:[ENV_ALPHA.QA.B]B082.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:08 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

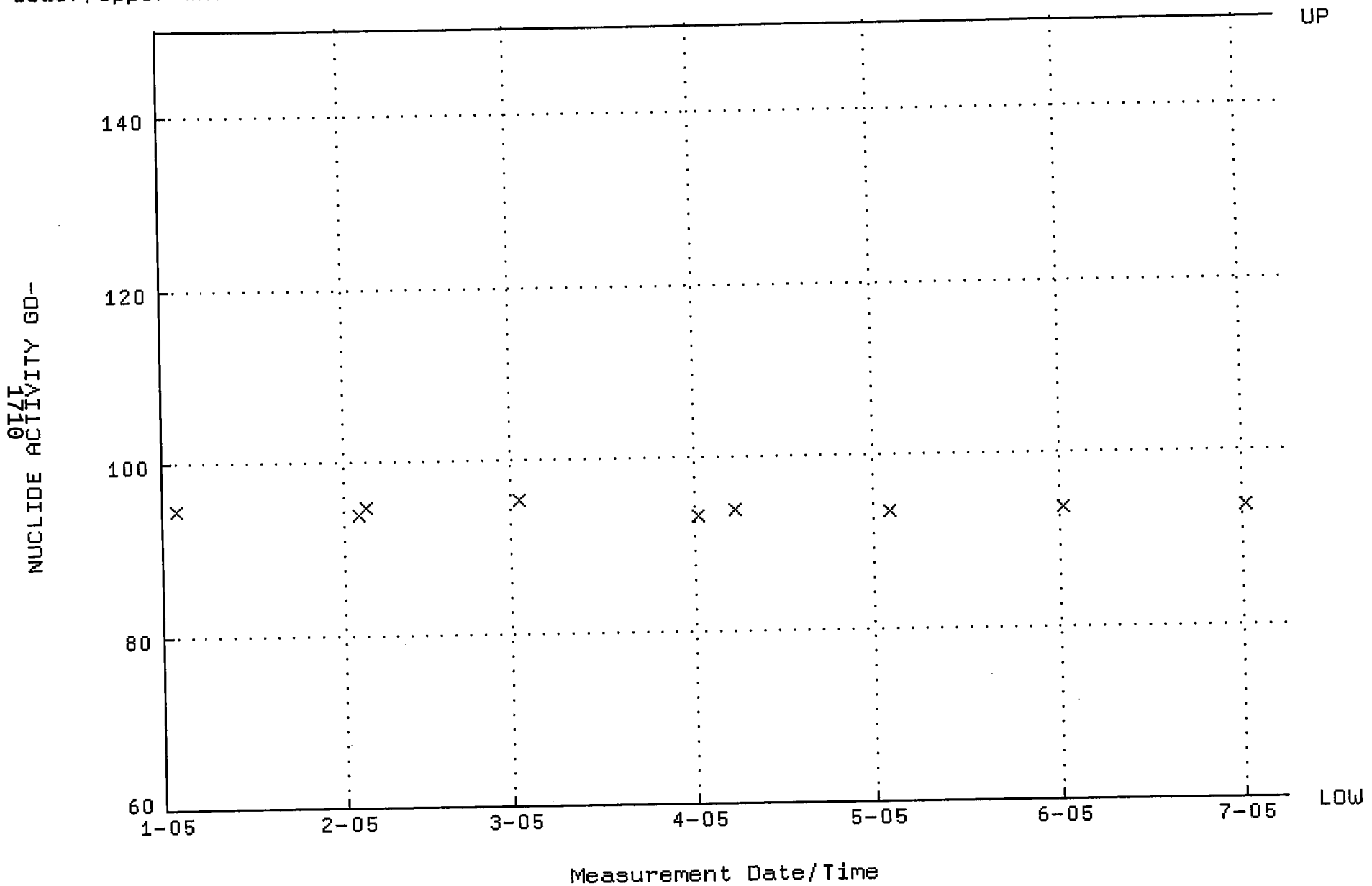


B082

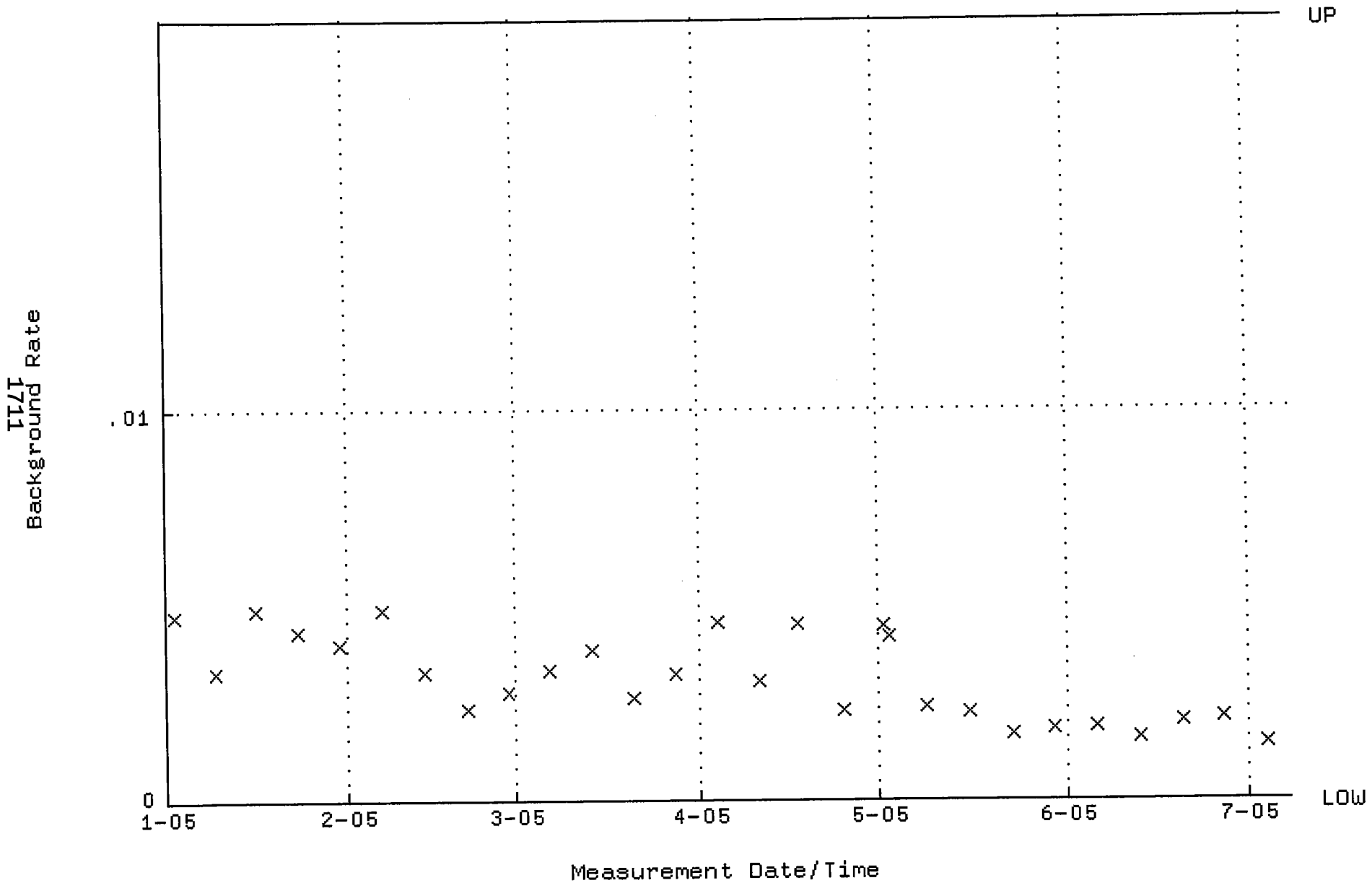
QA filename : DKA100:[ENV_ALPHA.QA.W]W084.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.245030 through 0.318770



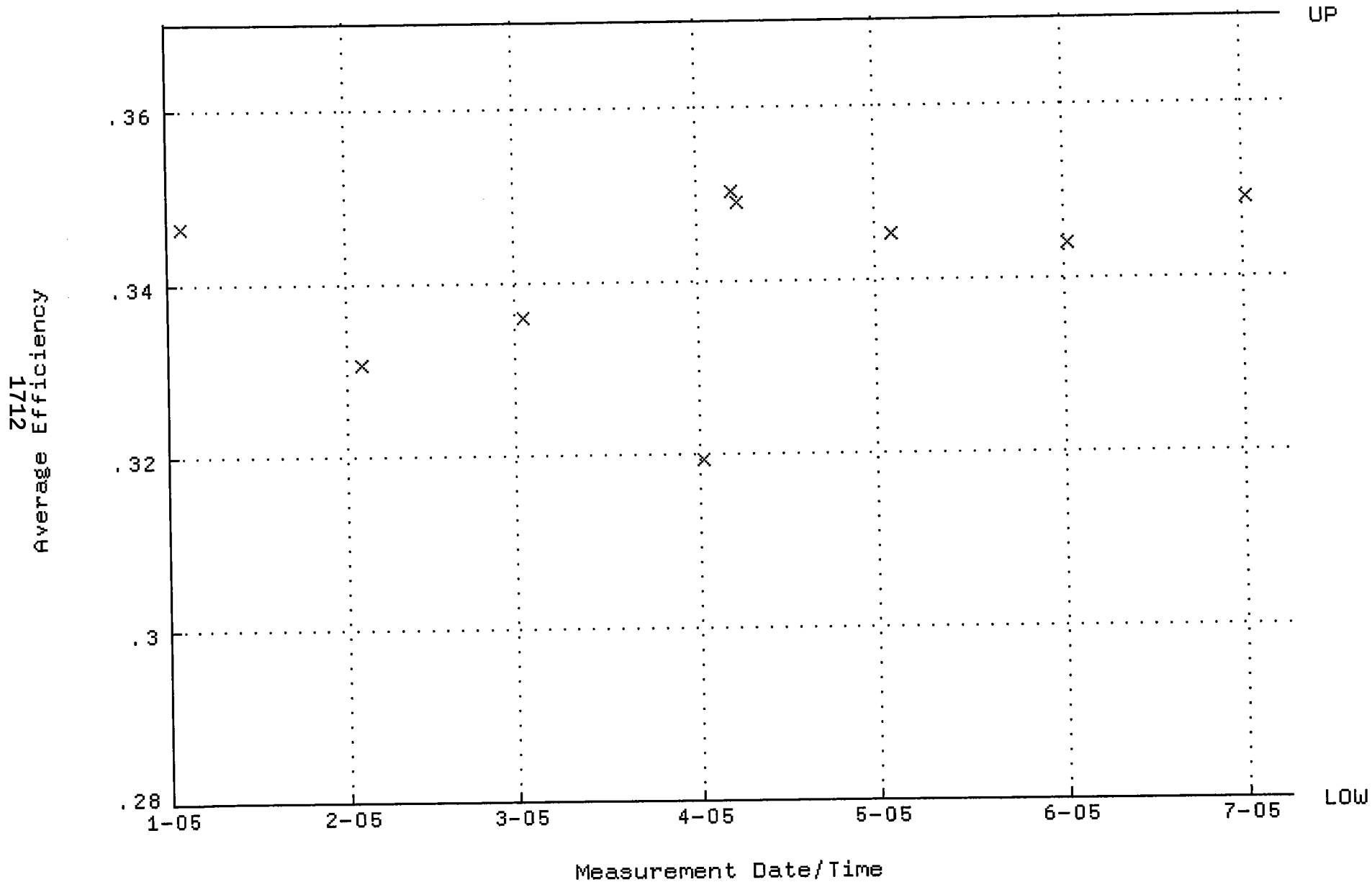
QA filename : DKA100:[ENV_ALPHA.QA.W]W084.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



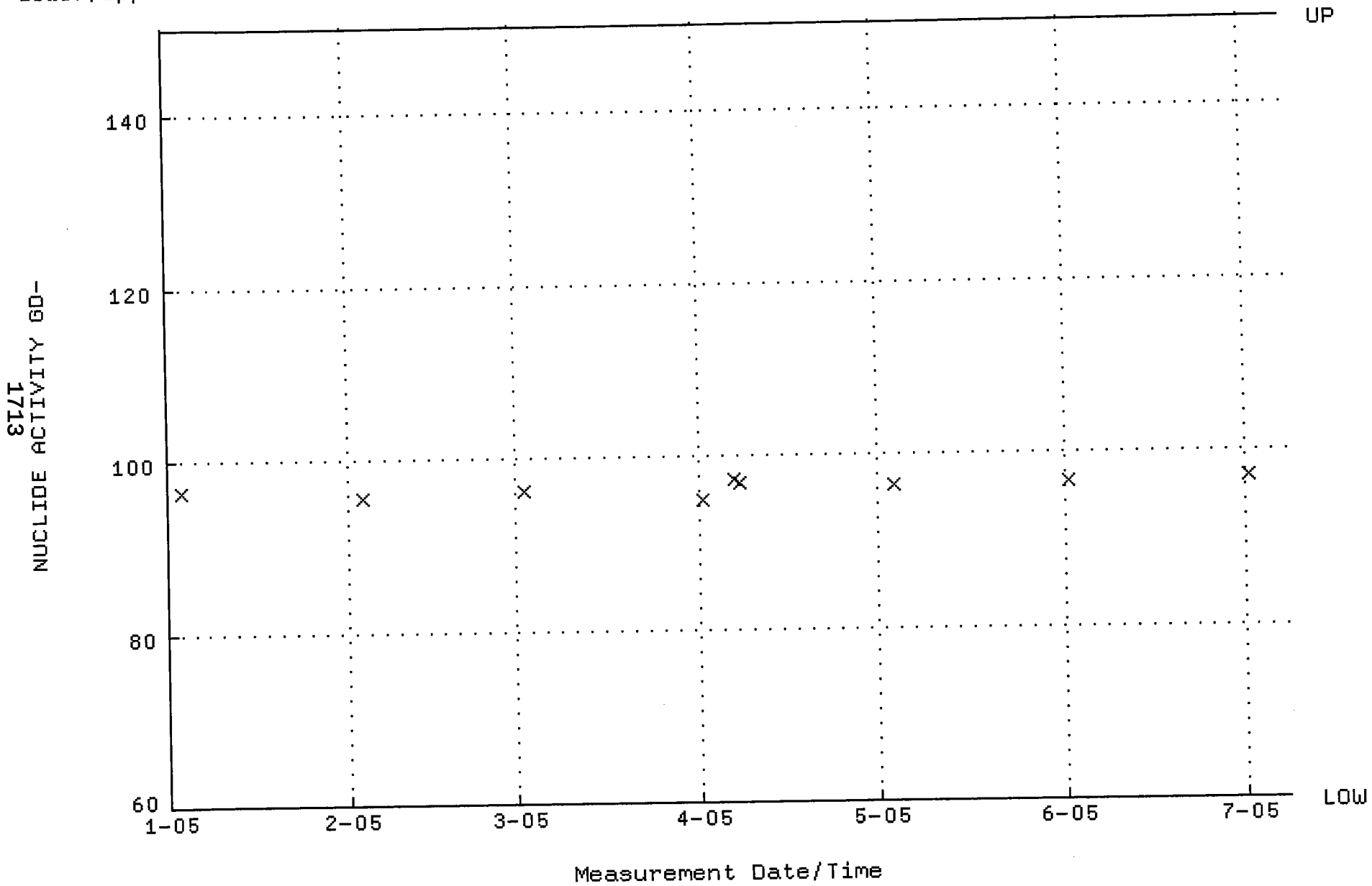
QA filename : DKA100:[ENV_ALPHA.QA.B]B084.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



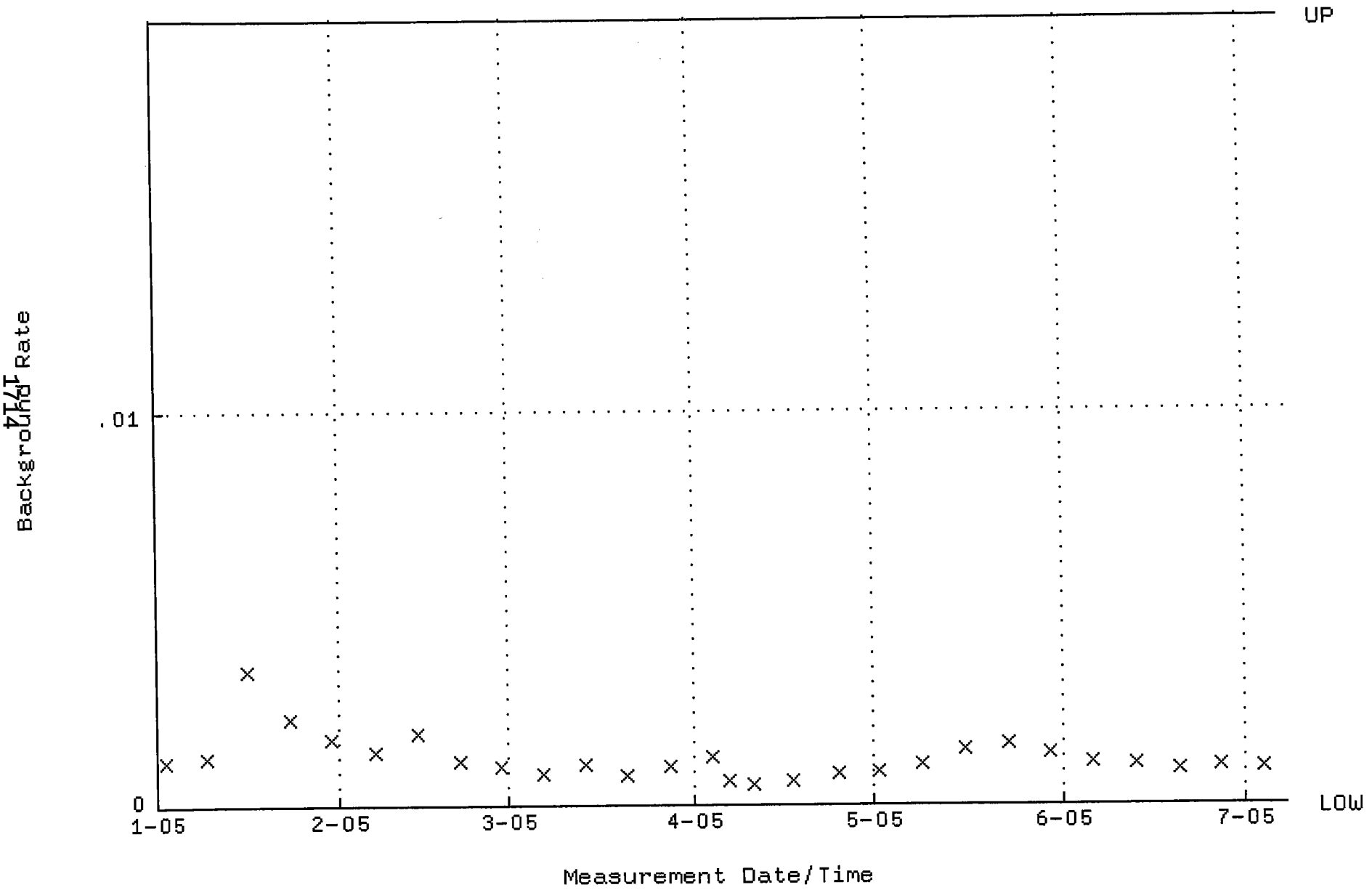
QA filename : DKA100:[ENV_ALPHA.QA.W]W085.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



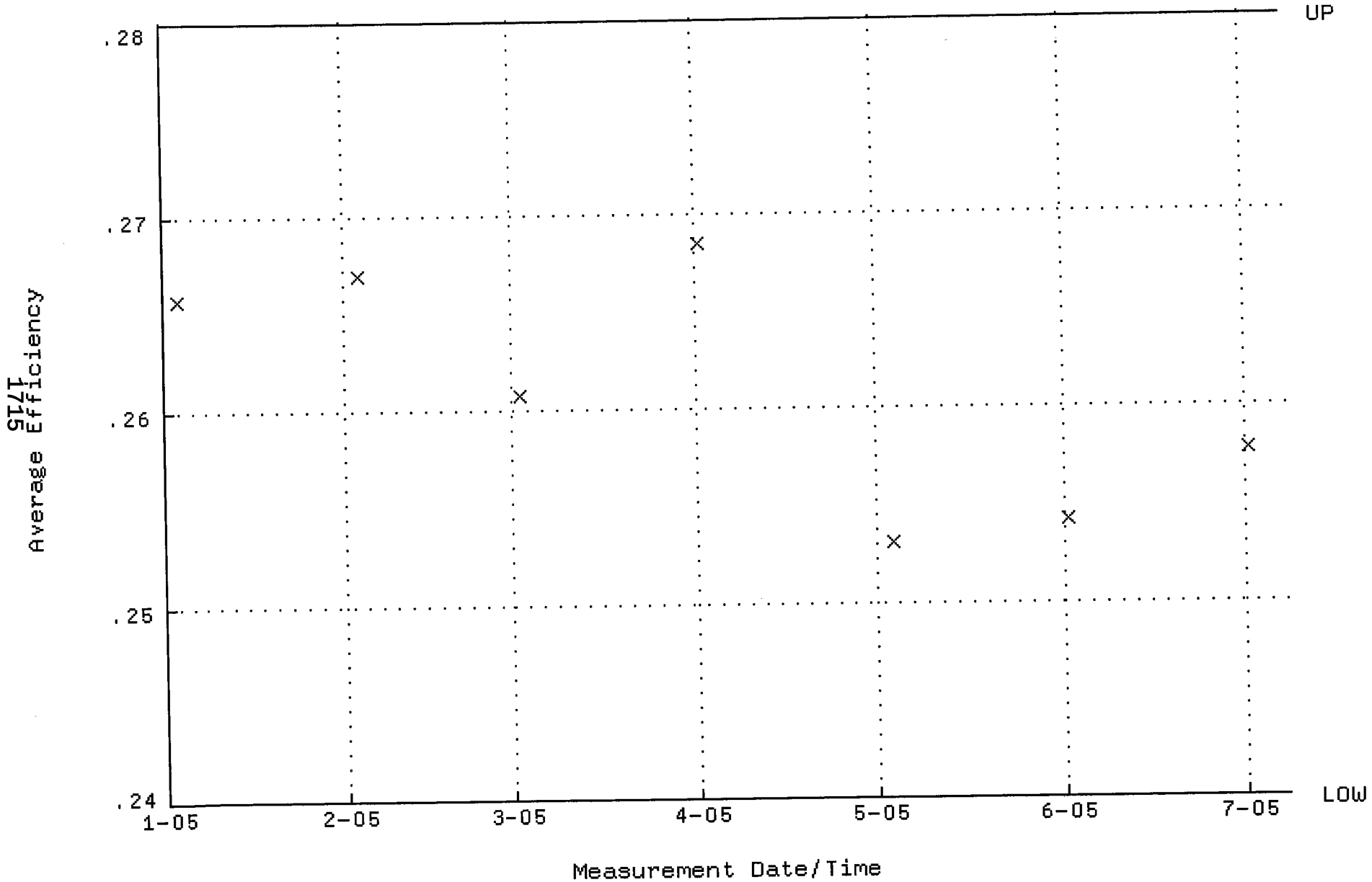
QA filename : DKA100:[ENV_ALPHA.QA.W]W085.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



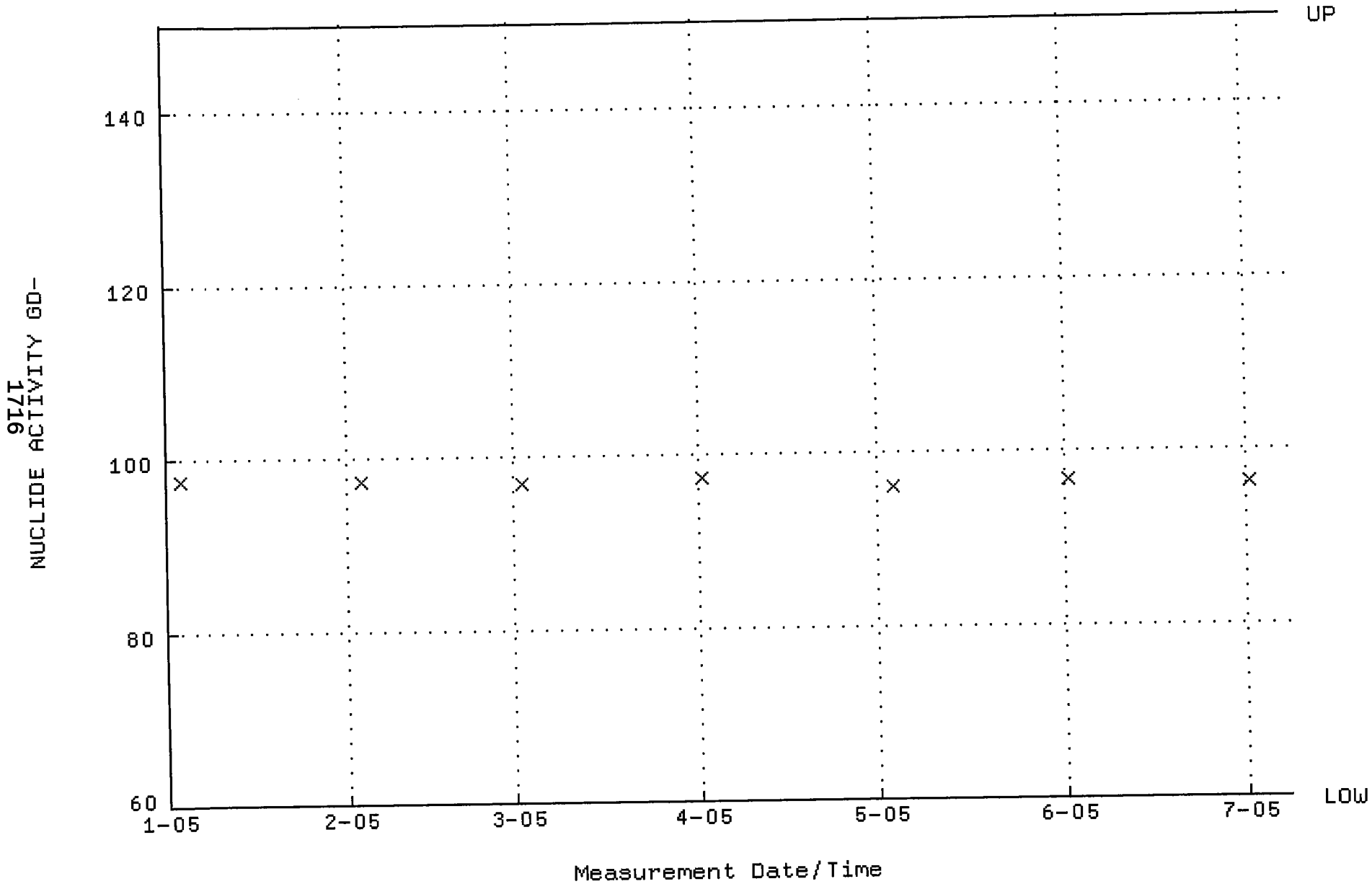
QA filename : DKA100:[ENV_ALPHA.QA.B]B085.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



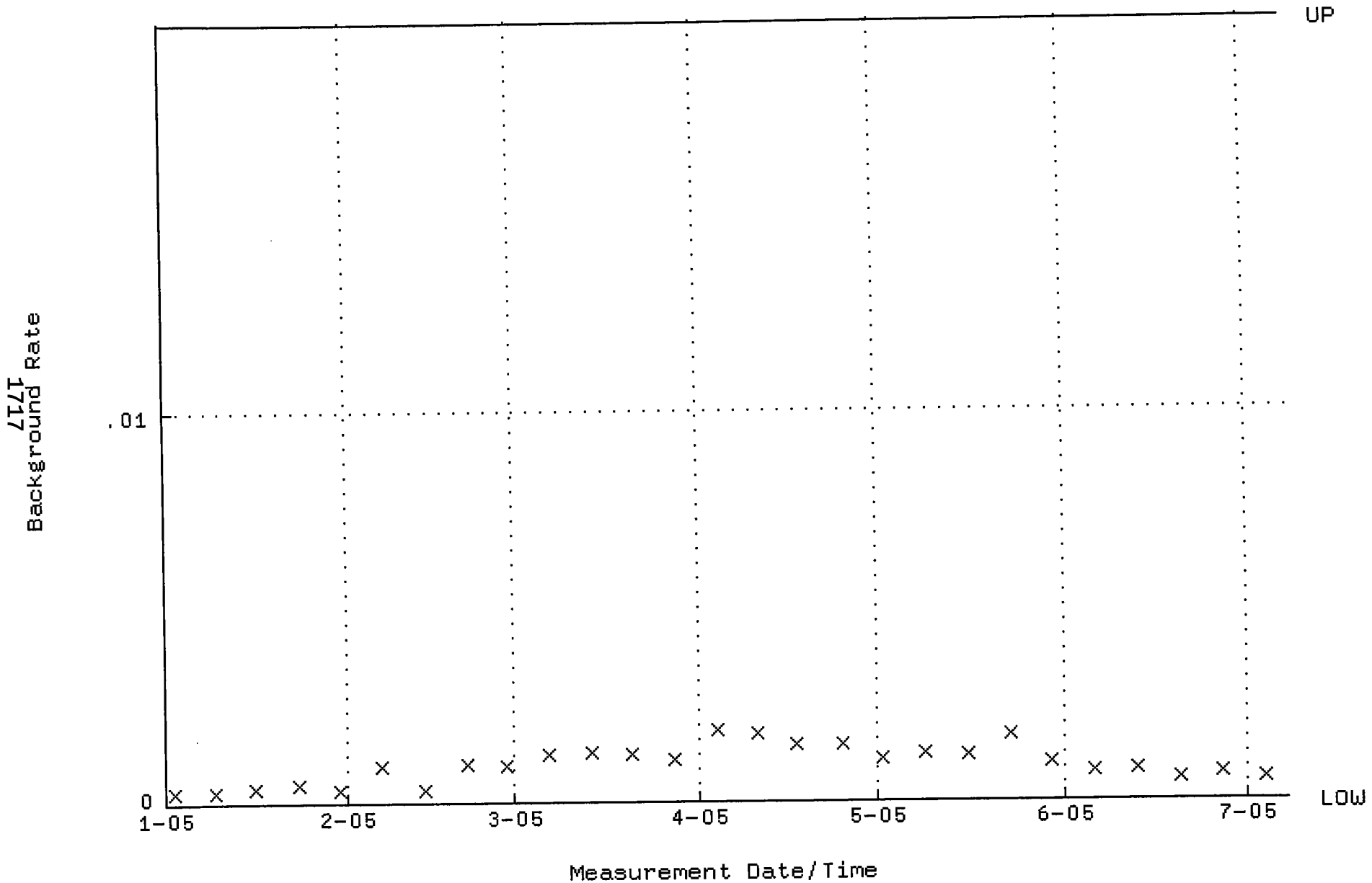
QA filename : DKA100:[ENV_ALPHA.QA.W]W086.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.240000 through 0.280000



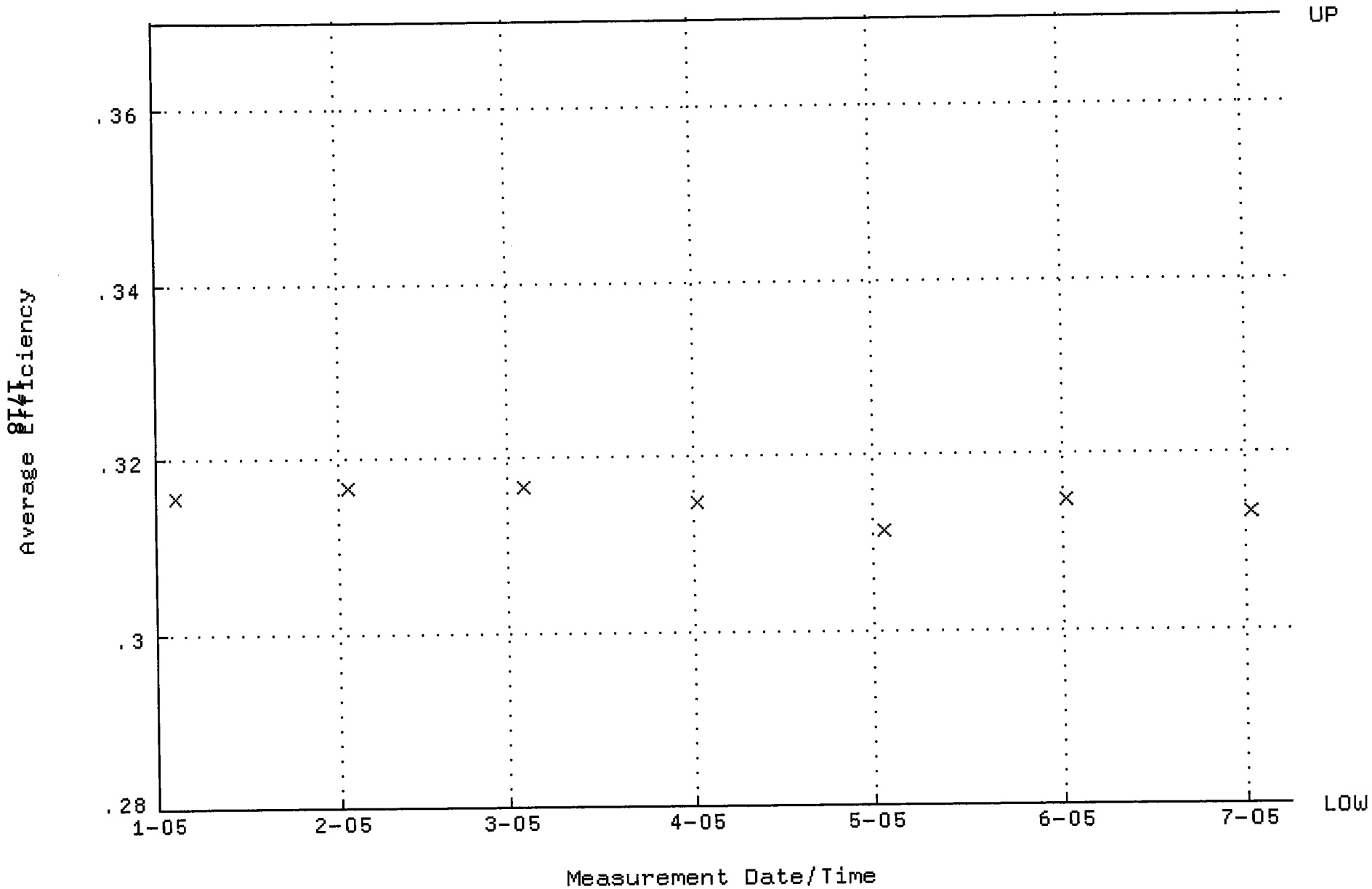
QA filename : DKA100:[ENV_ALPHA.QA.W]W086.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



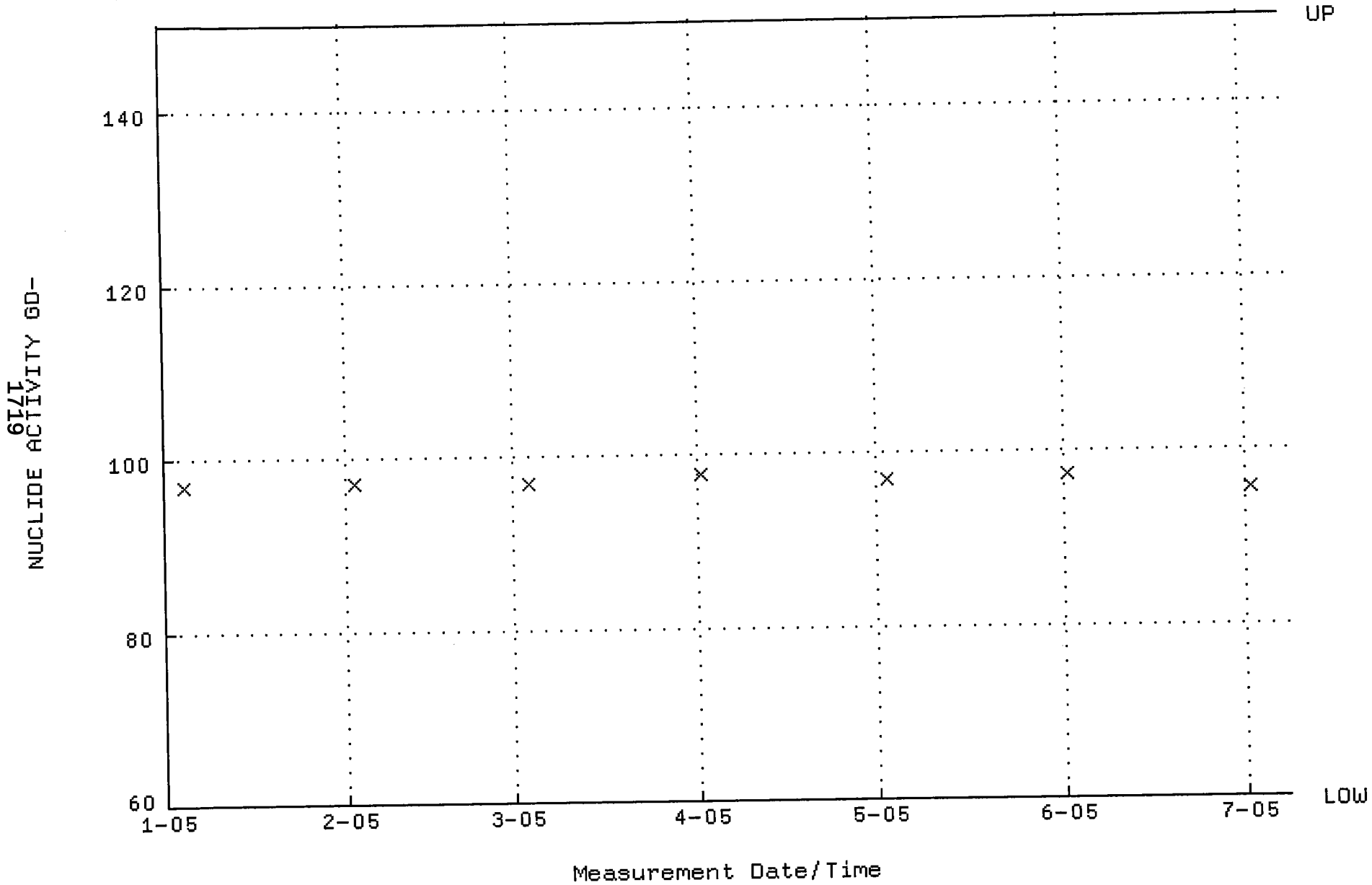
QA filename : DKA100:[ENV_ALPHA.QA.B]B086.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



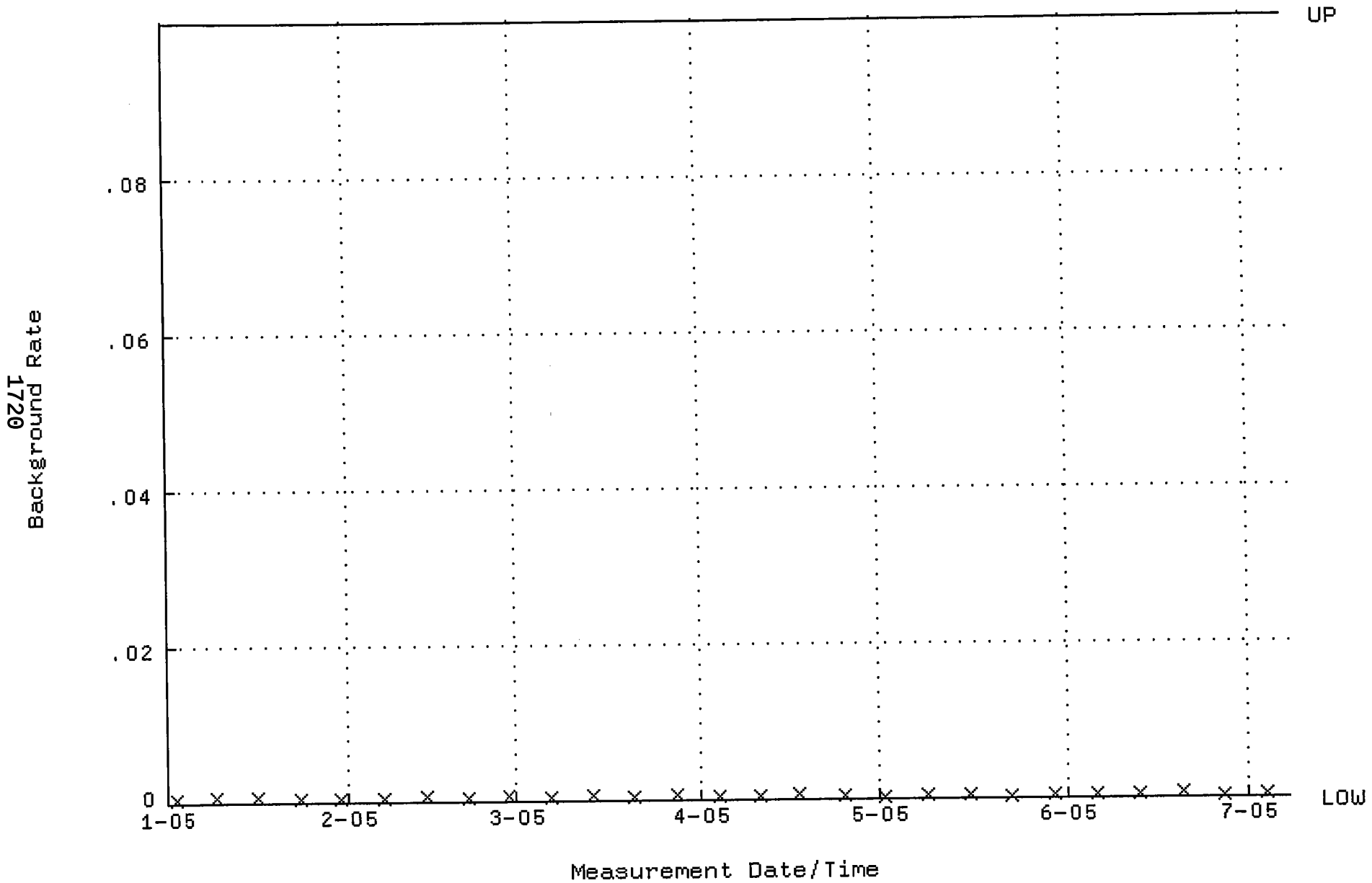
QA filename : DKA100:[ENV_ALPHA.QA.W]W094.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 07:29:29 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



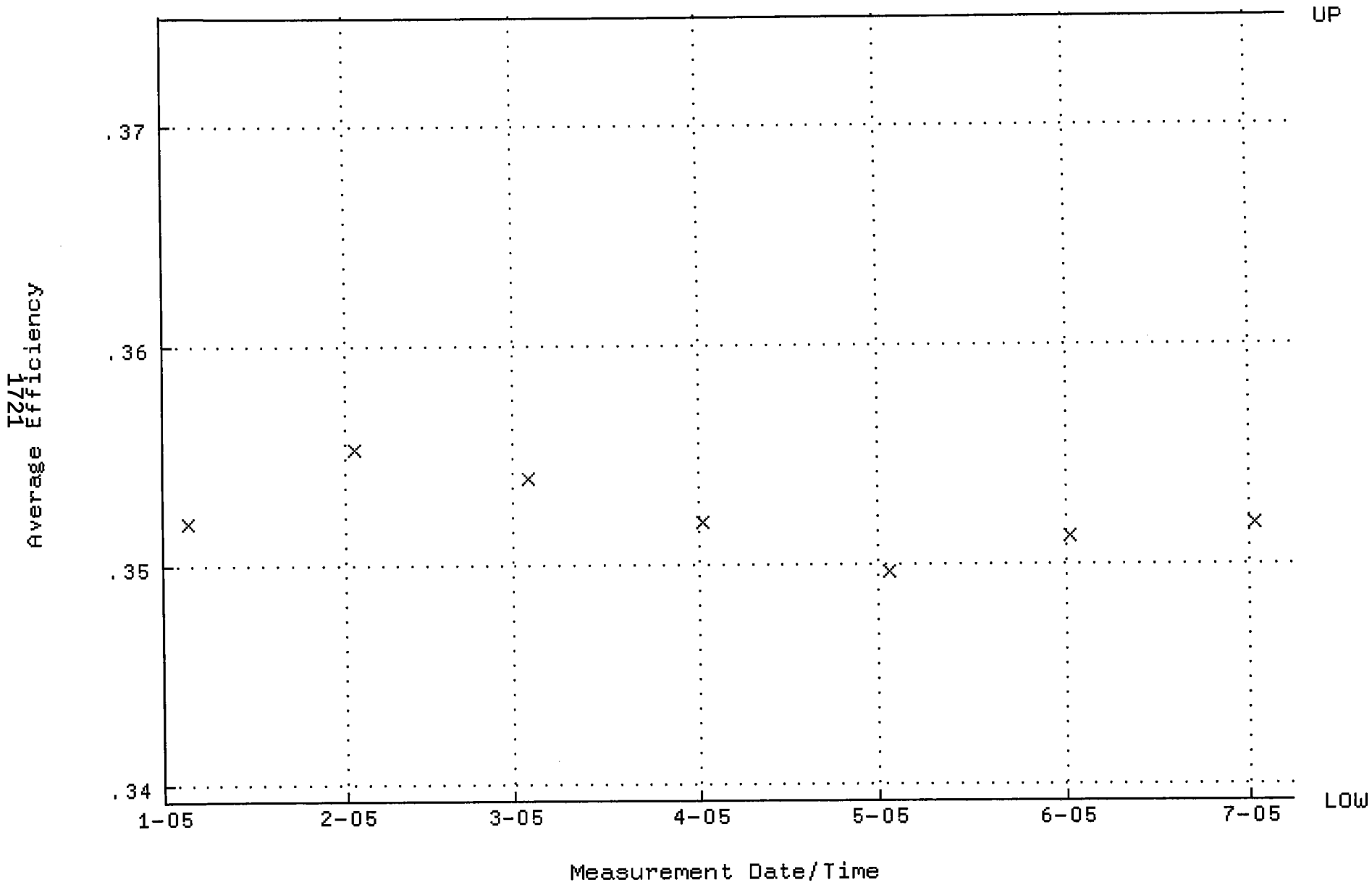
QA filename : DKA100:[ENV_ALPHA.QA.W]W094.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 07:29:29 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



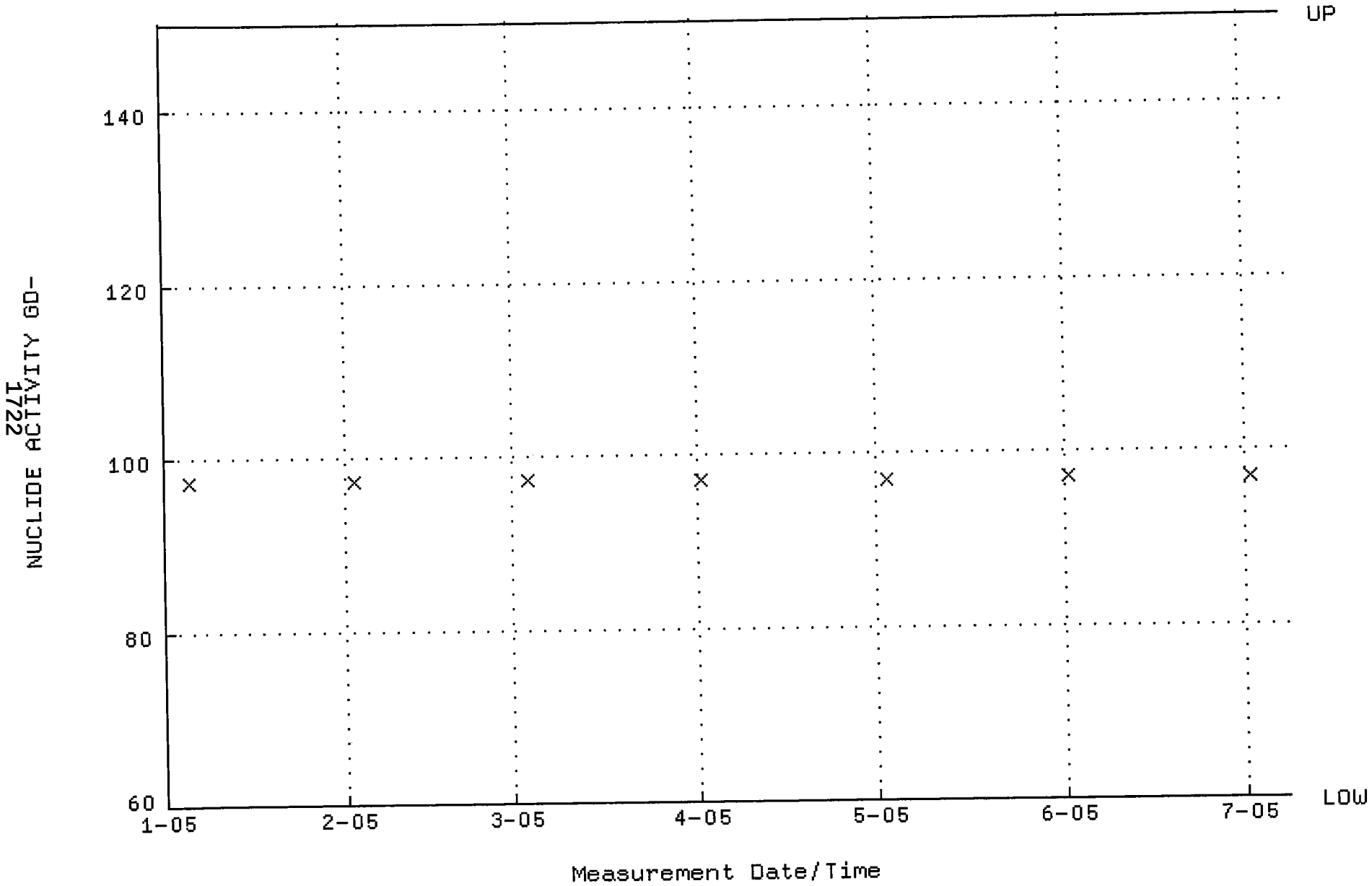
QA filename : DKA100:[ENV_ALPHA.QA.B]B094.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:10 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



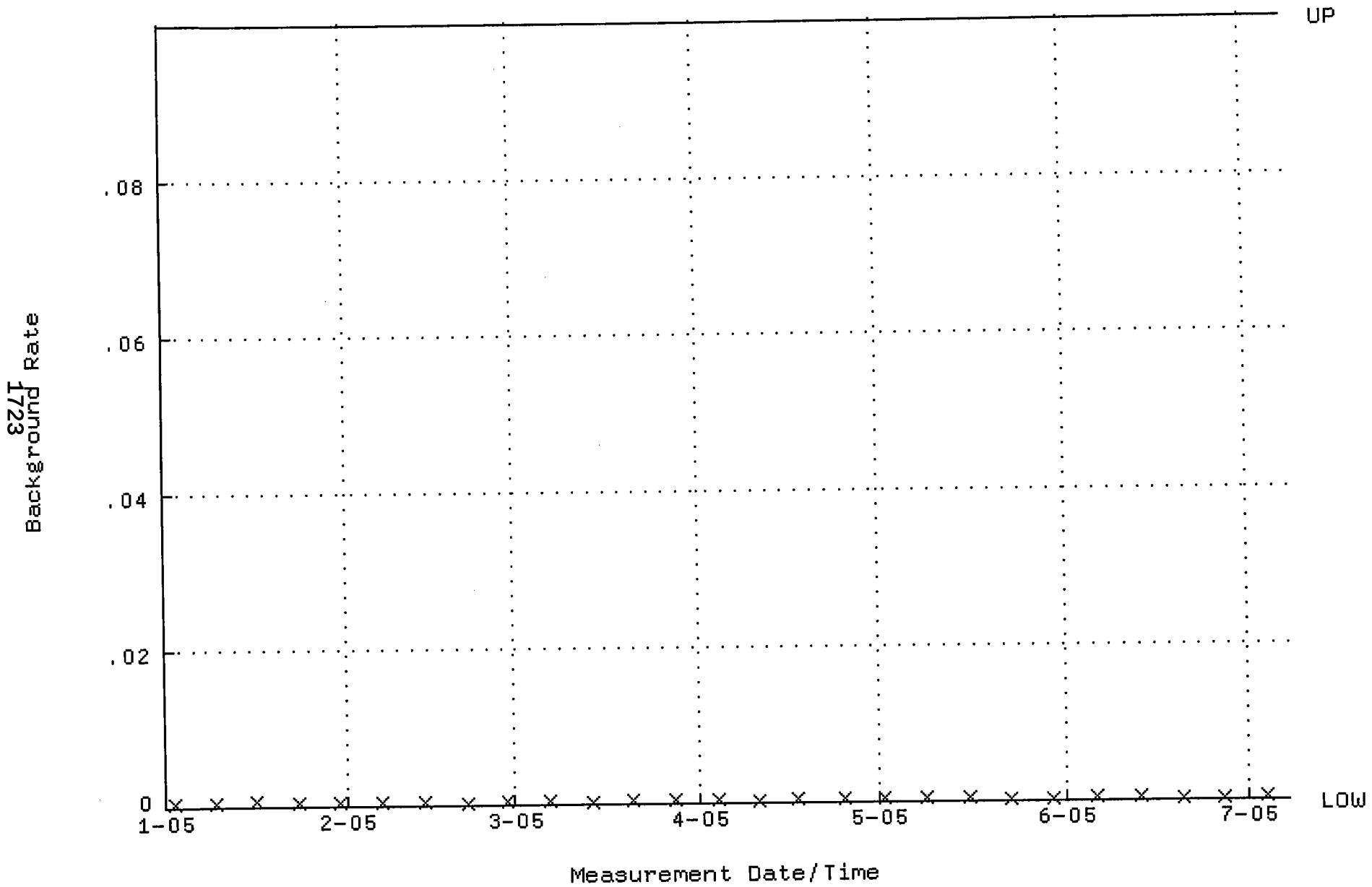
QA filename : DKA100:[ENV_ALPHA.QA.W]W101.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.339200 through 0.375000



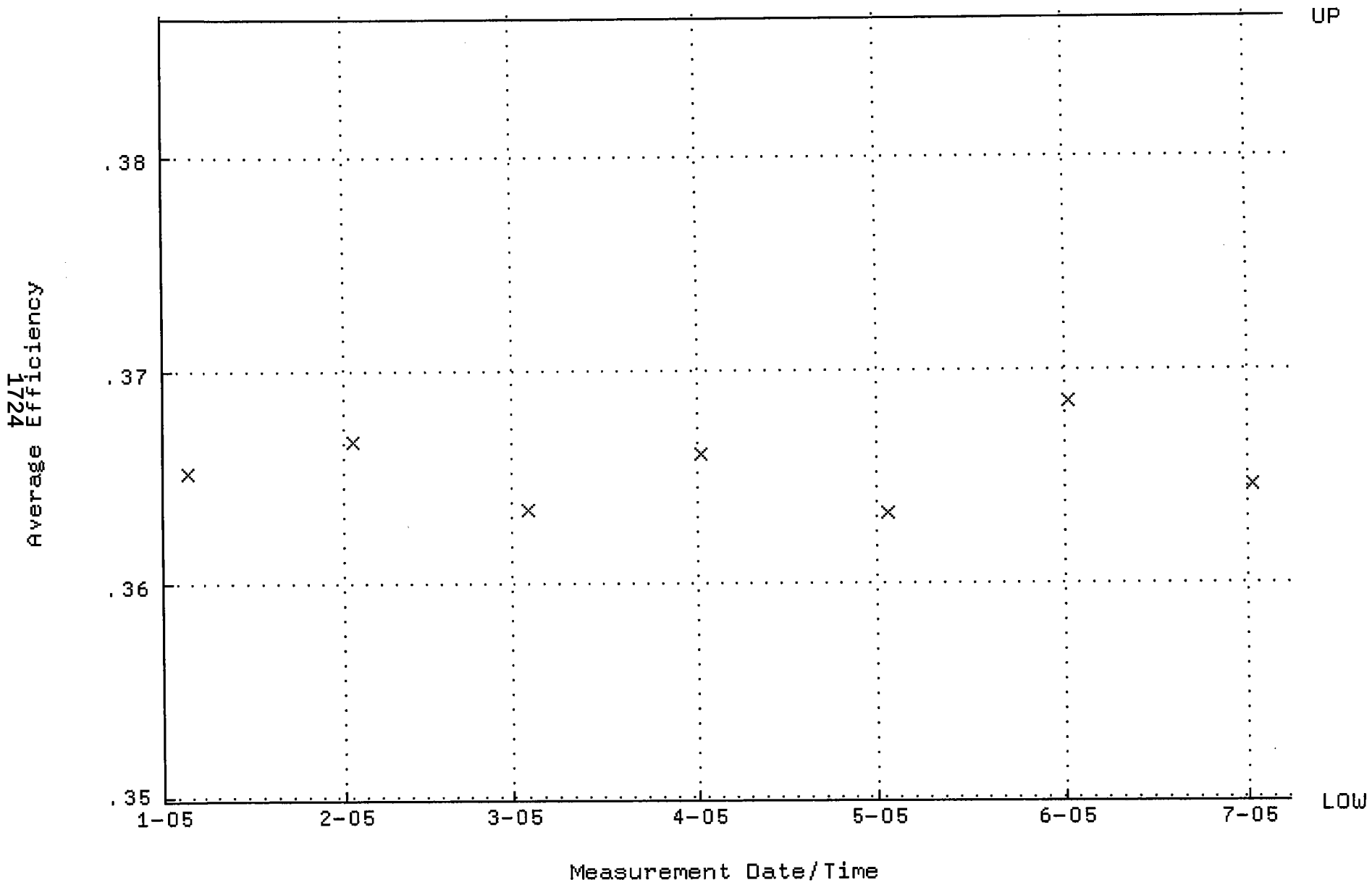
QA filename : DKA100:[ENV_ALPHA.QA.W]W101.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



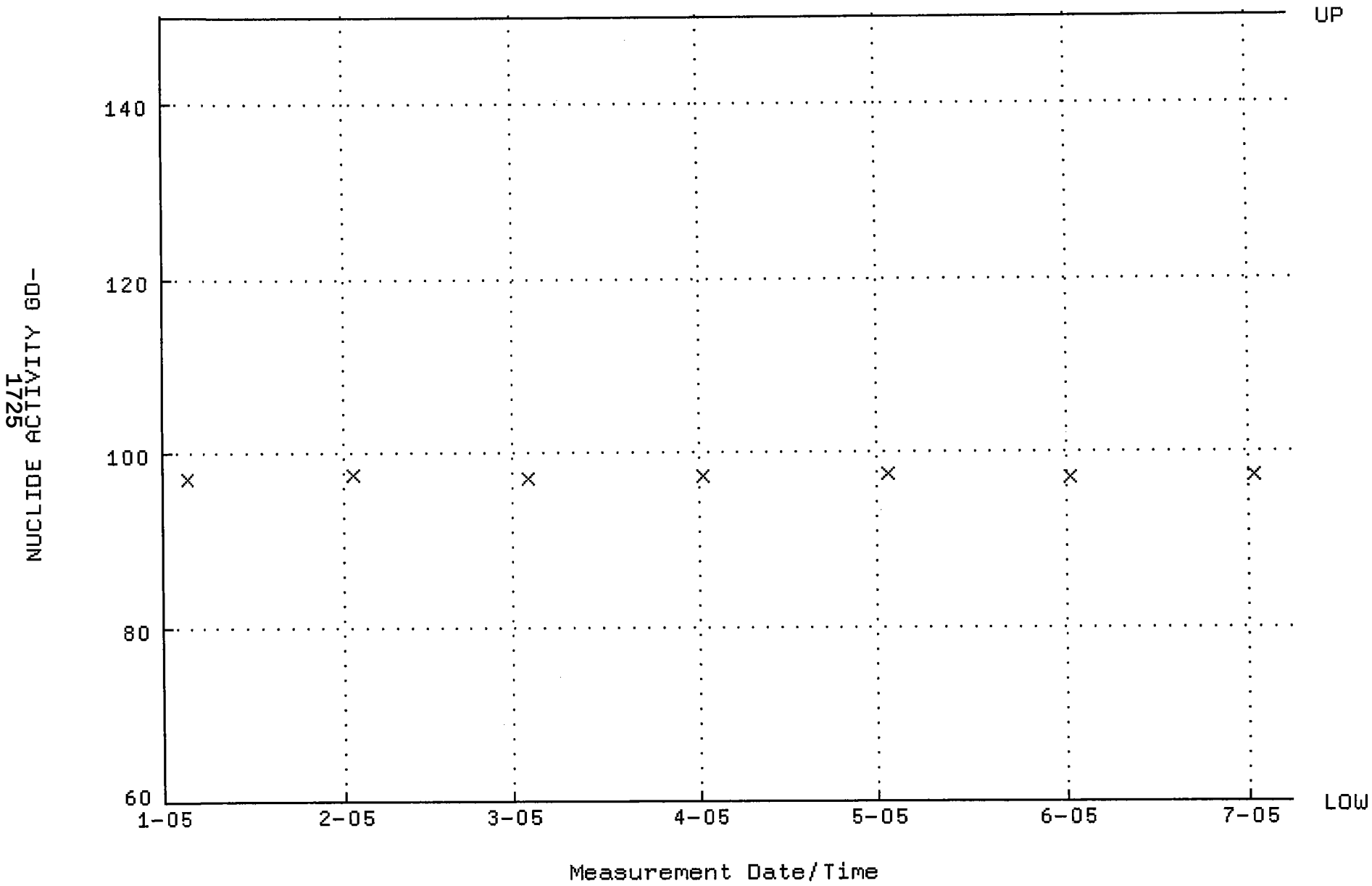
QA filename : DKA100:[ENV_ALPHA.QA.B]B101.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:12 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



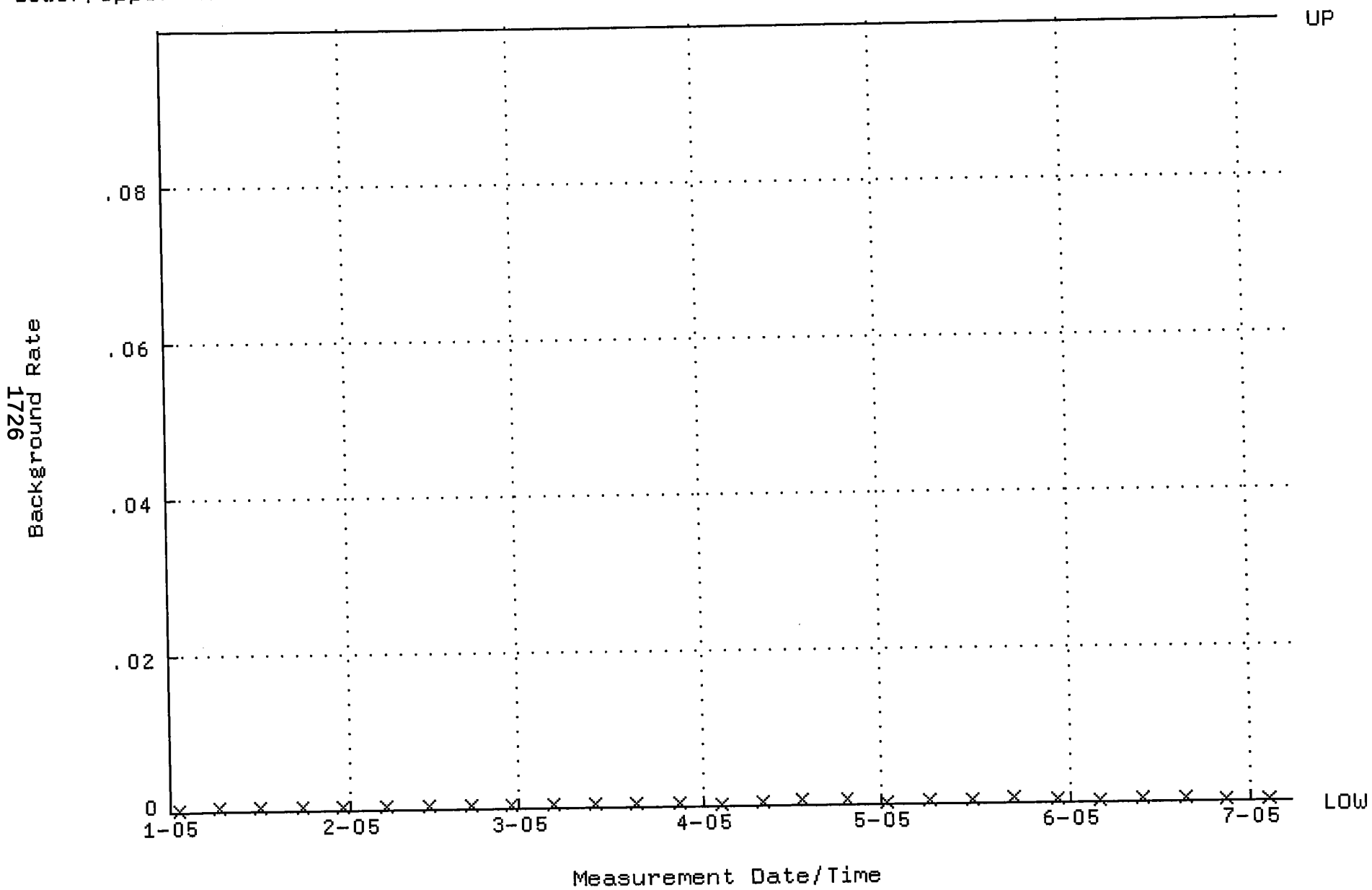
QA filename : DKA100:[ENV_ALPHA.QA.W]W102.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.349800 through 0.386600



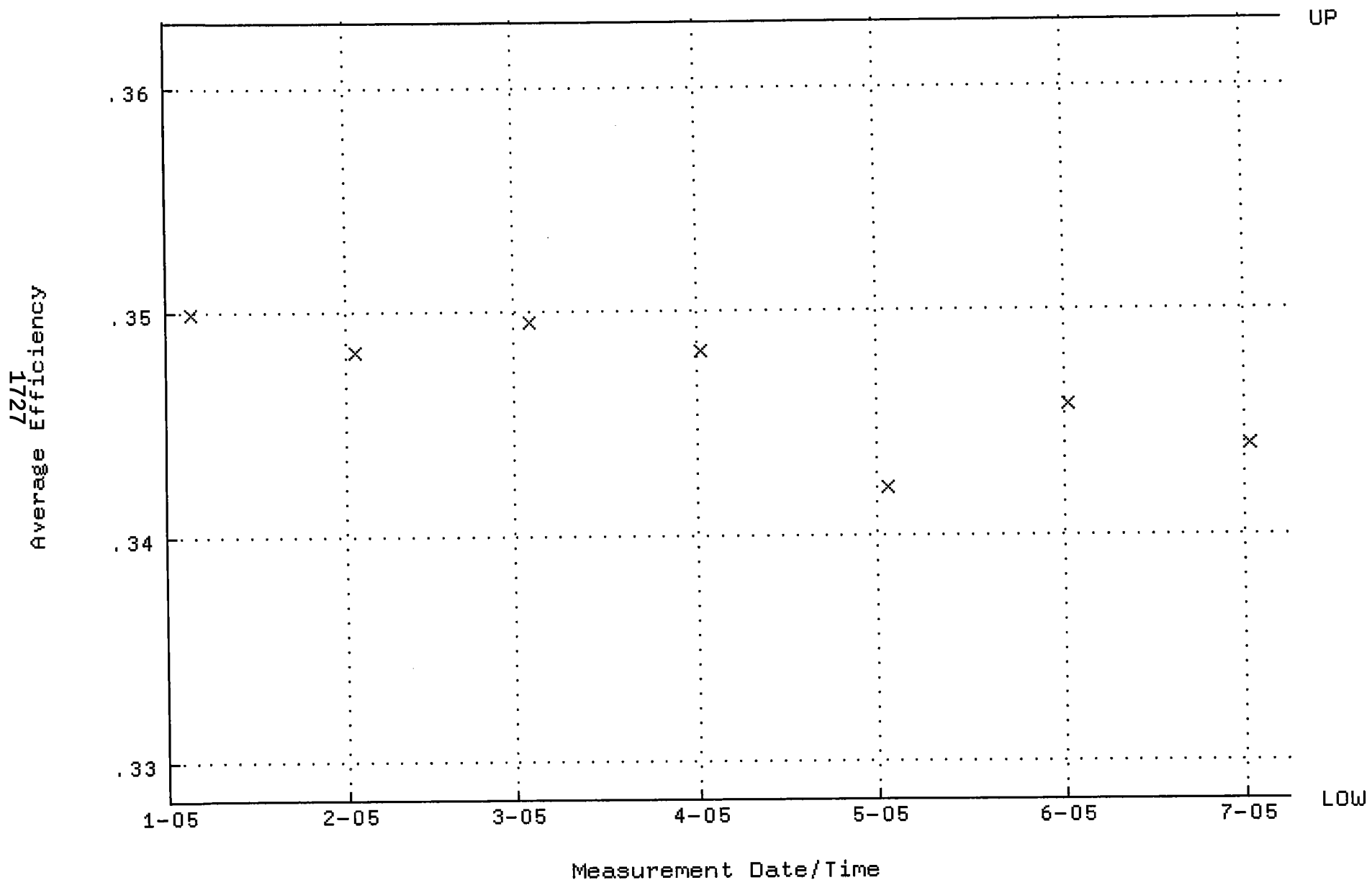
QA filename : DKA100:[ENV_ALPHA.QA.W]W102.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



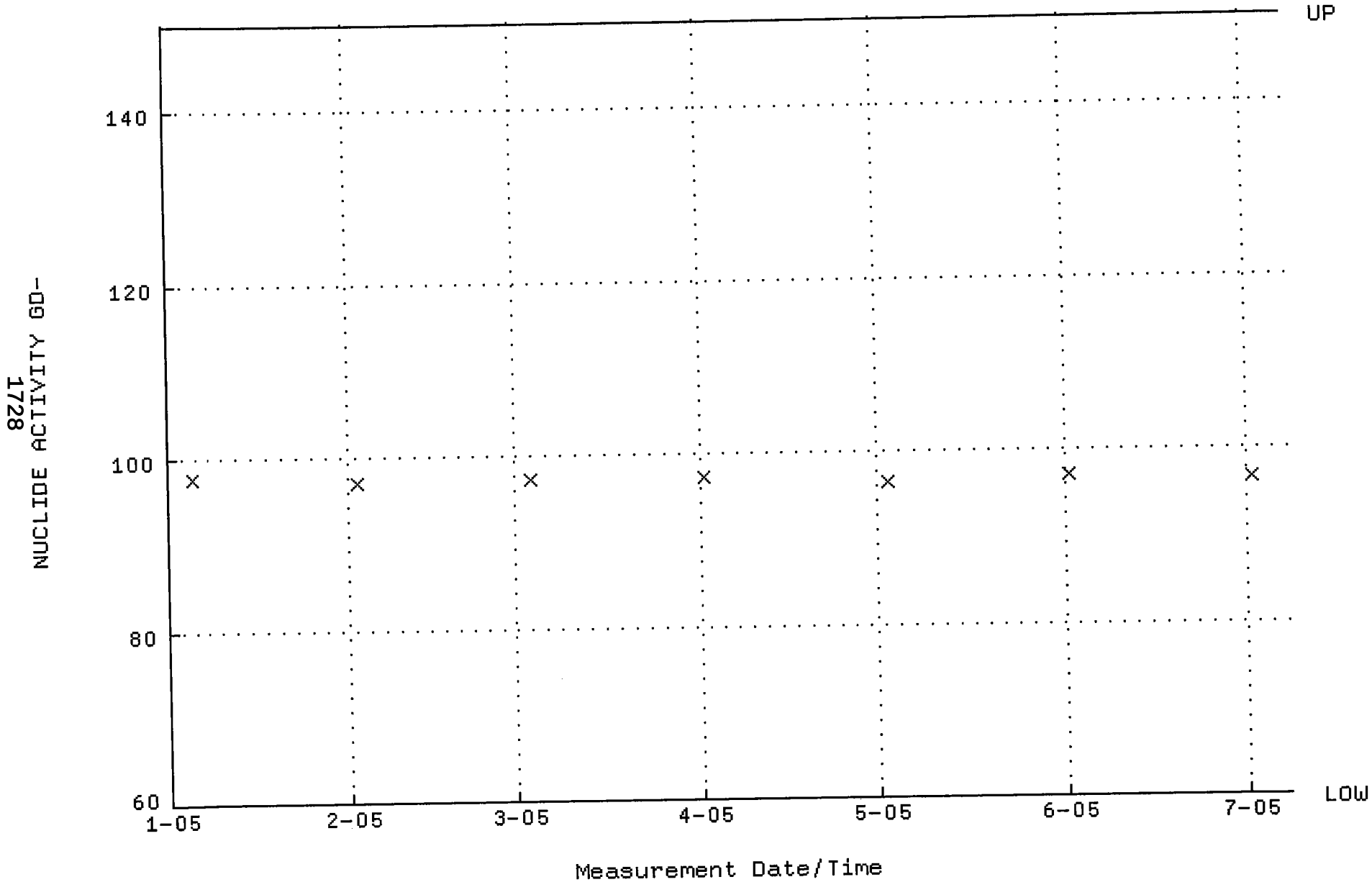
QA filename : DKA100:[ENV_ALPHA.QA.B]B102.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:12 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



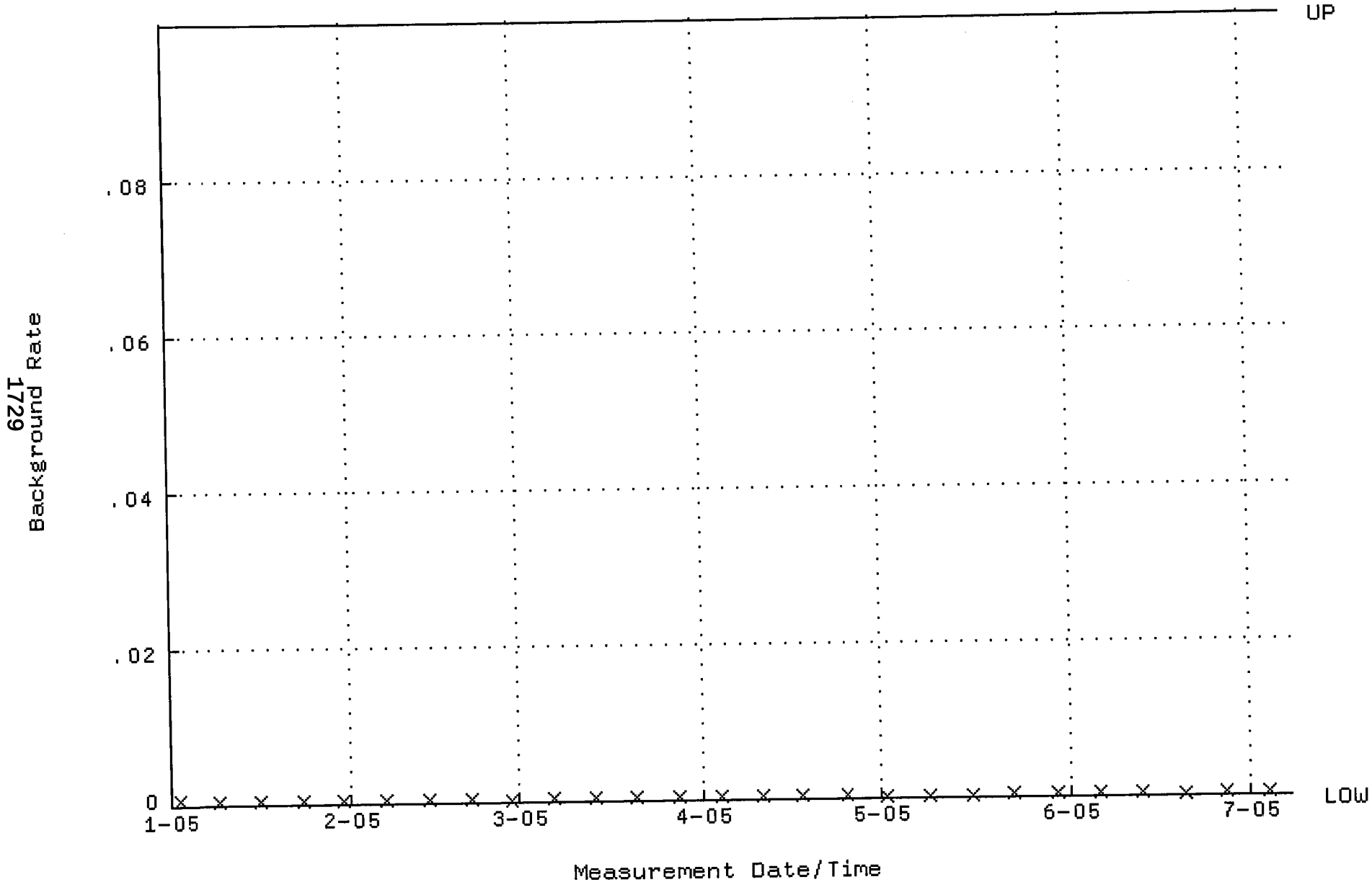
QA filename : DKA100:[ENV_ALPHA.QA.W]W106.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.328300 through 0.362900



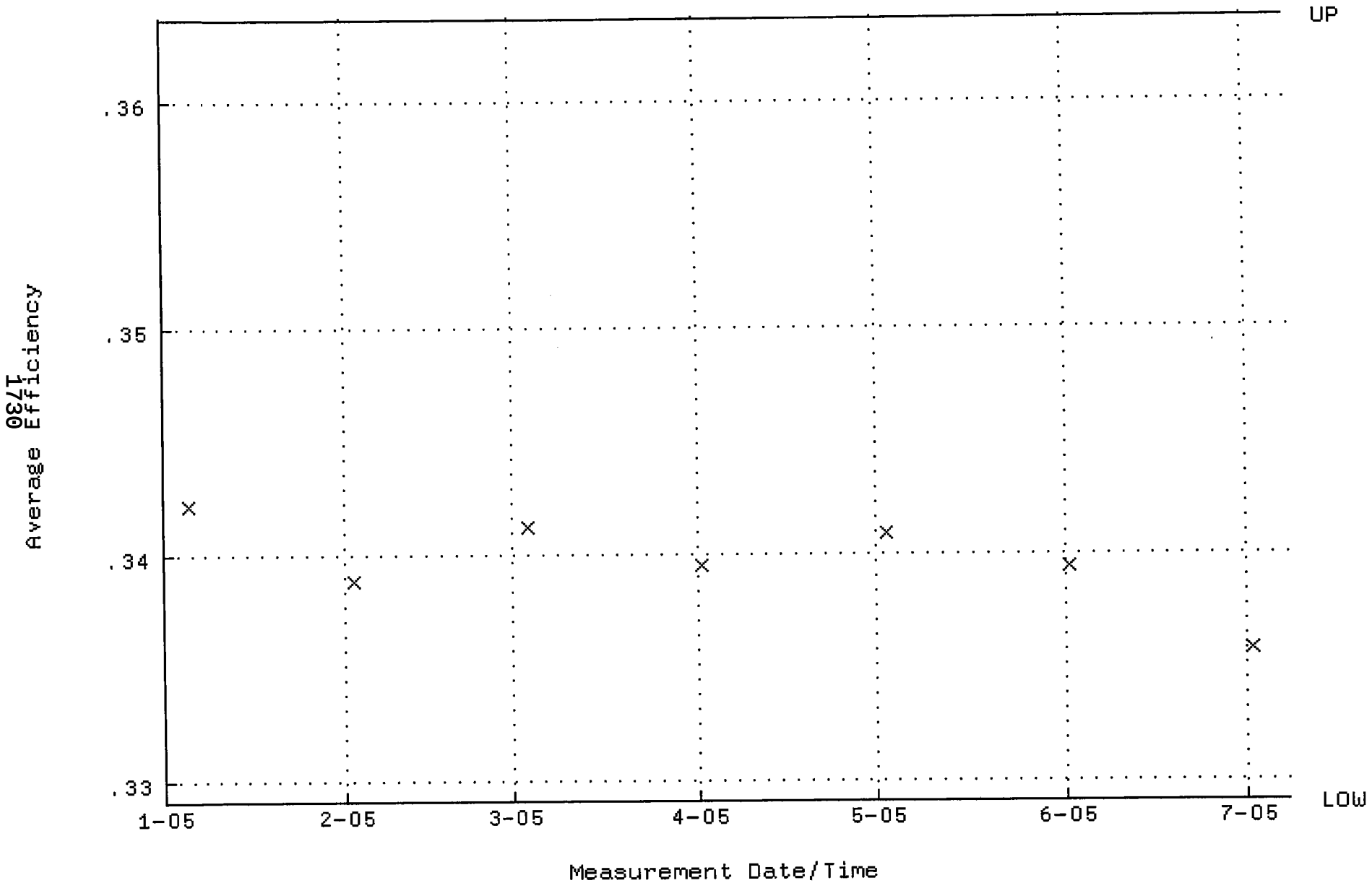
QA filename : DKA100:[ENV_ALPHA.QA.W]W106.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



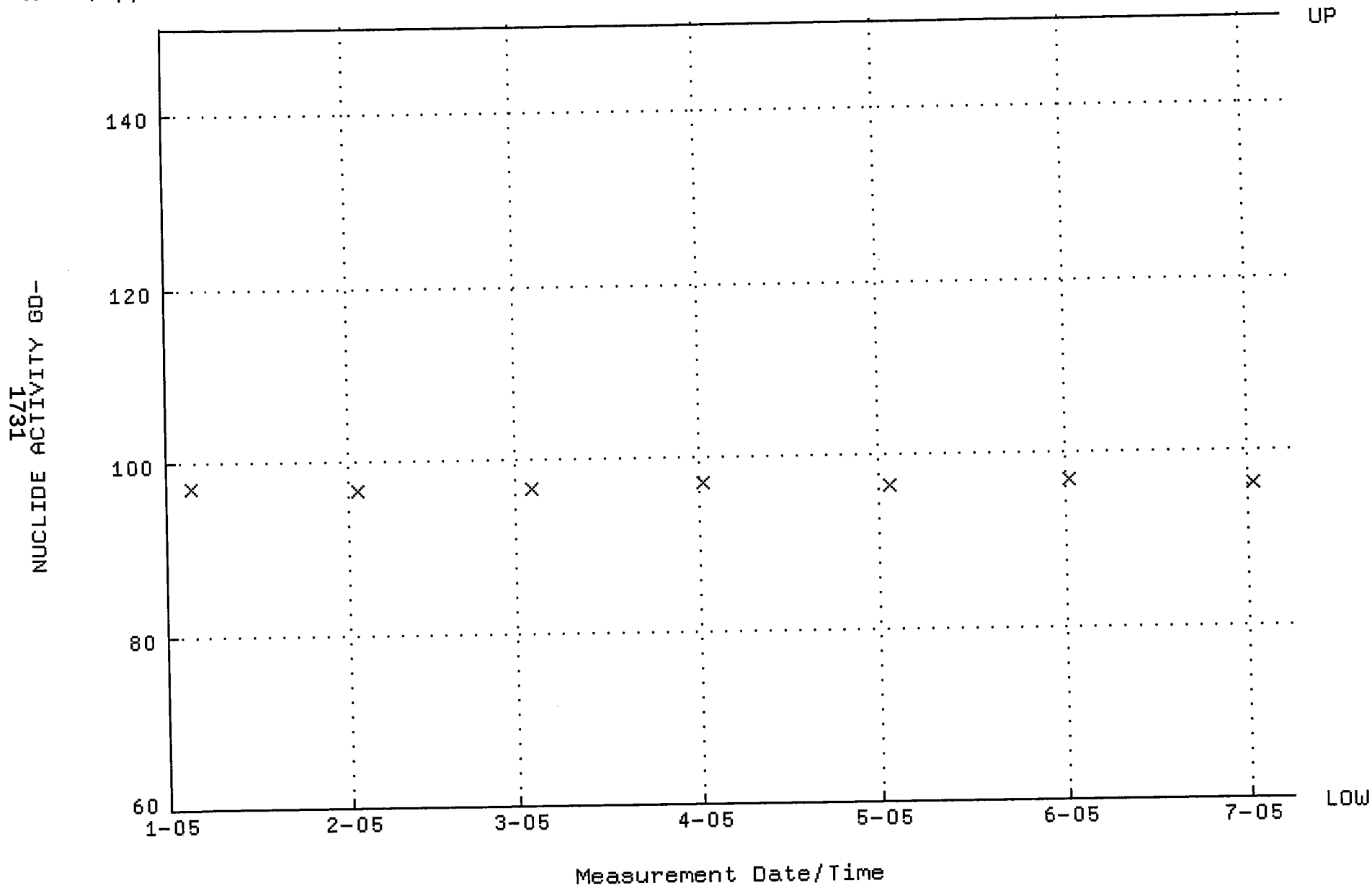
QA filename : DKA100:[ENV_ALPHA.QA.B]B106.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:12 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



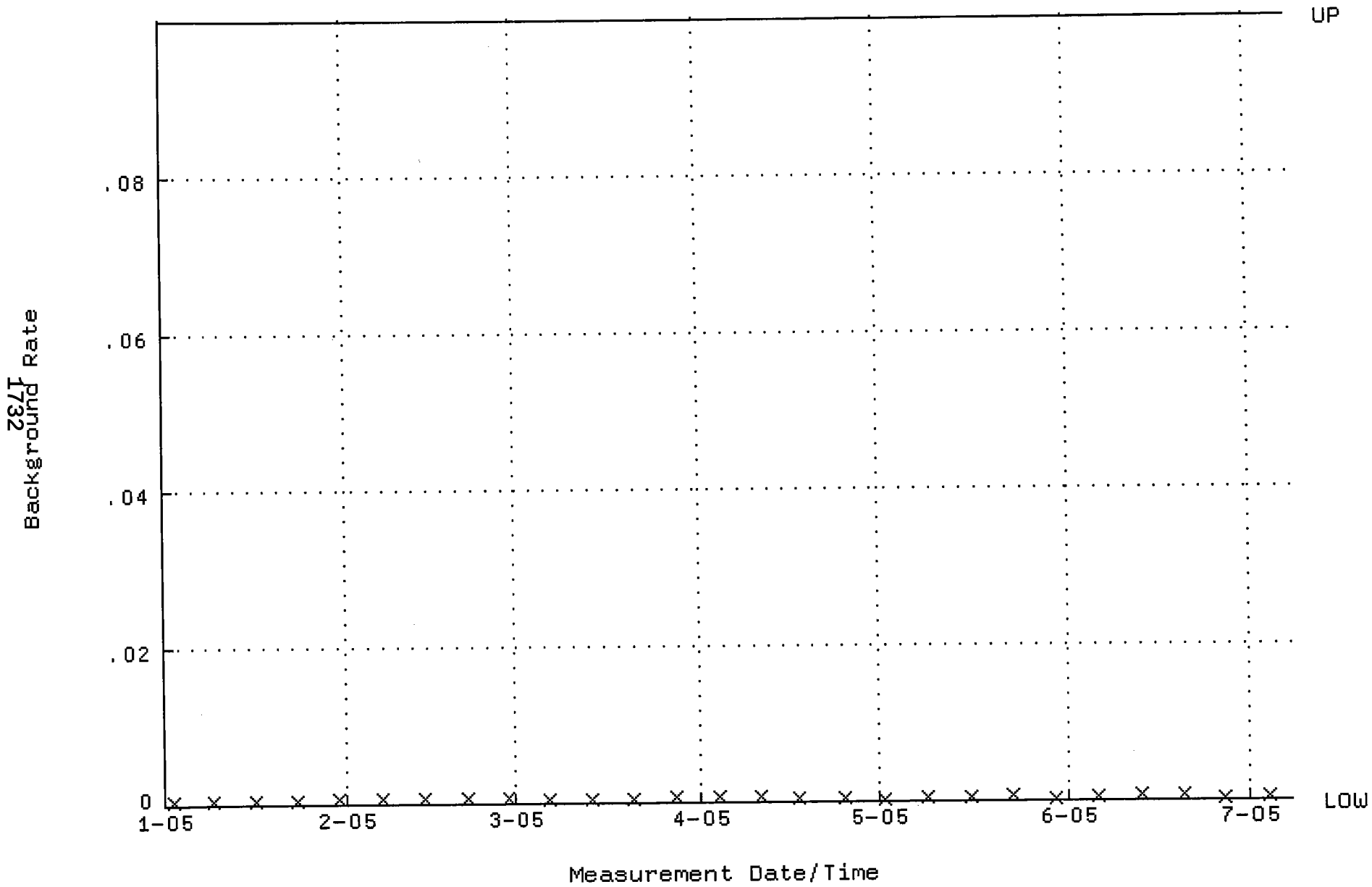
QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:34 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.329100 through 0.363700



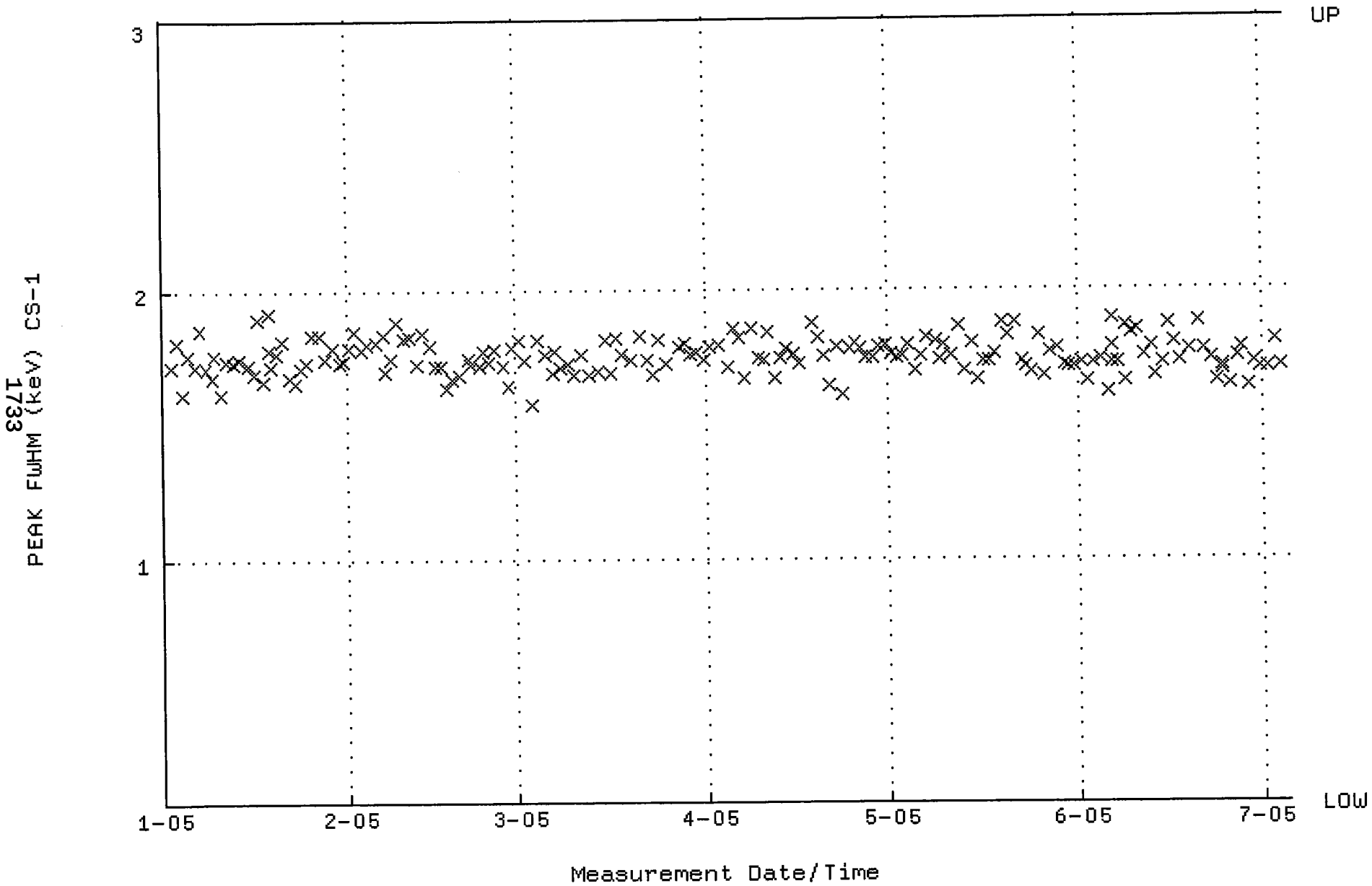
QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:34 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



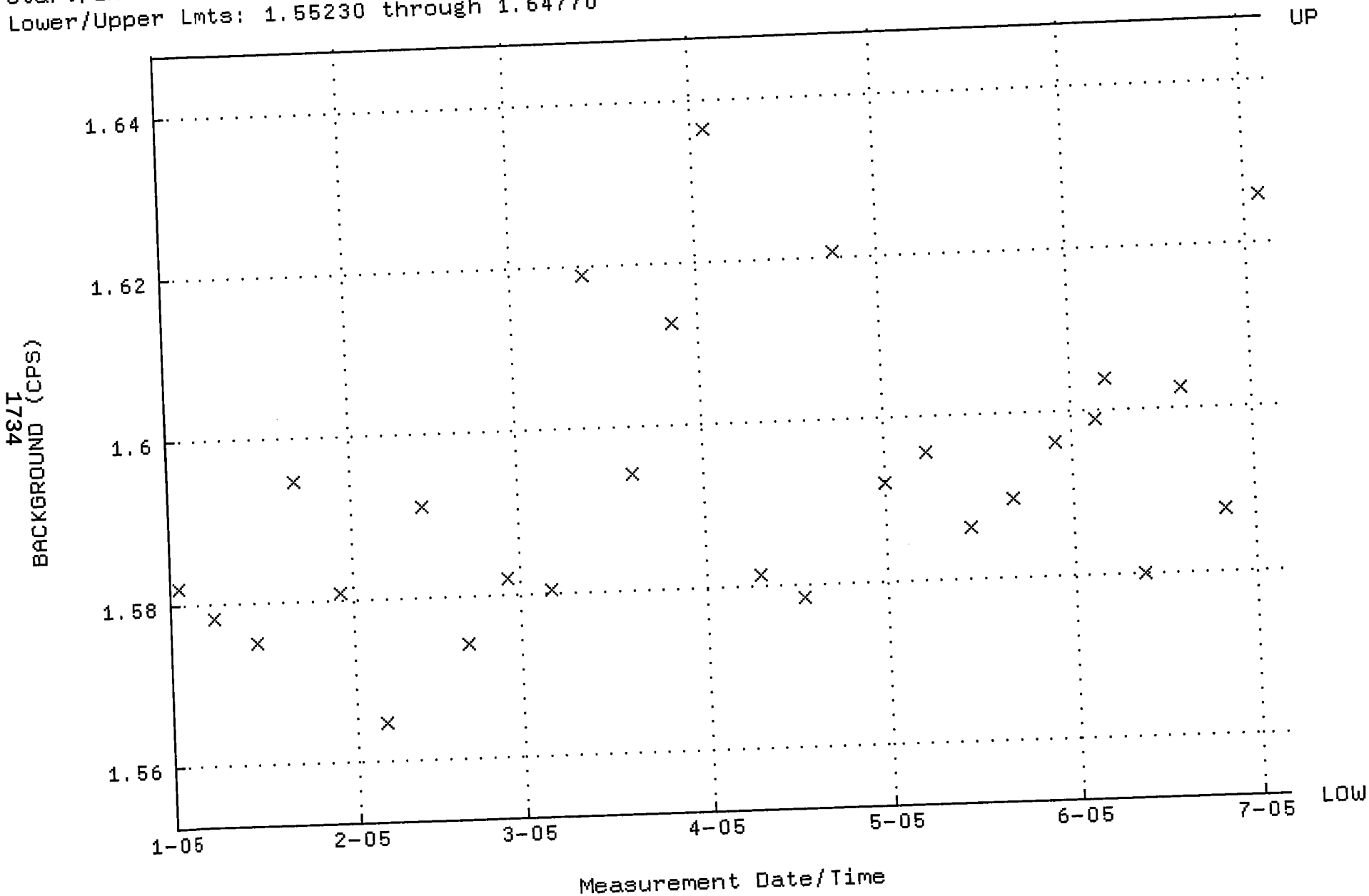
QA filename : DKA100:[ENV_ALPHA.QA.B]B109.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:13 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



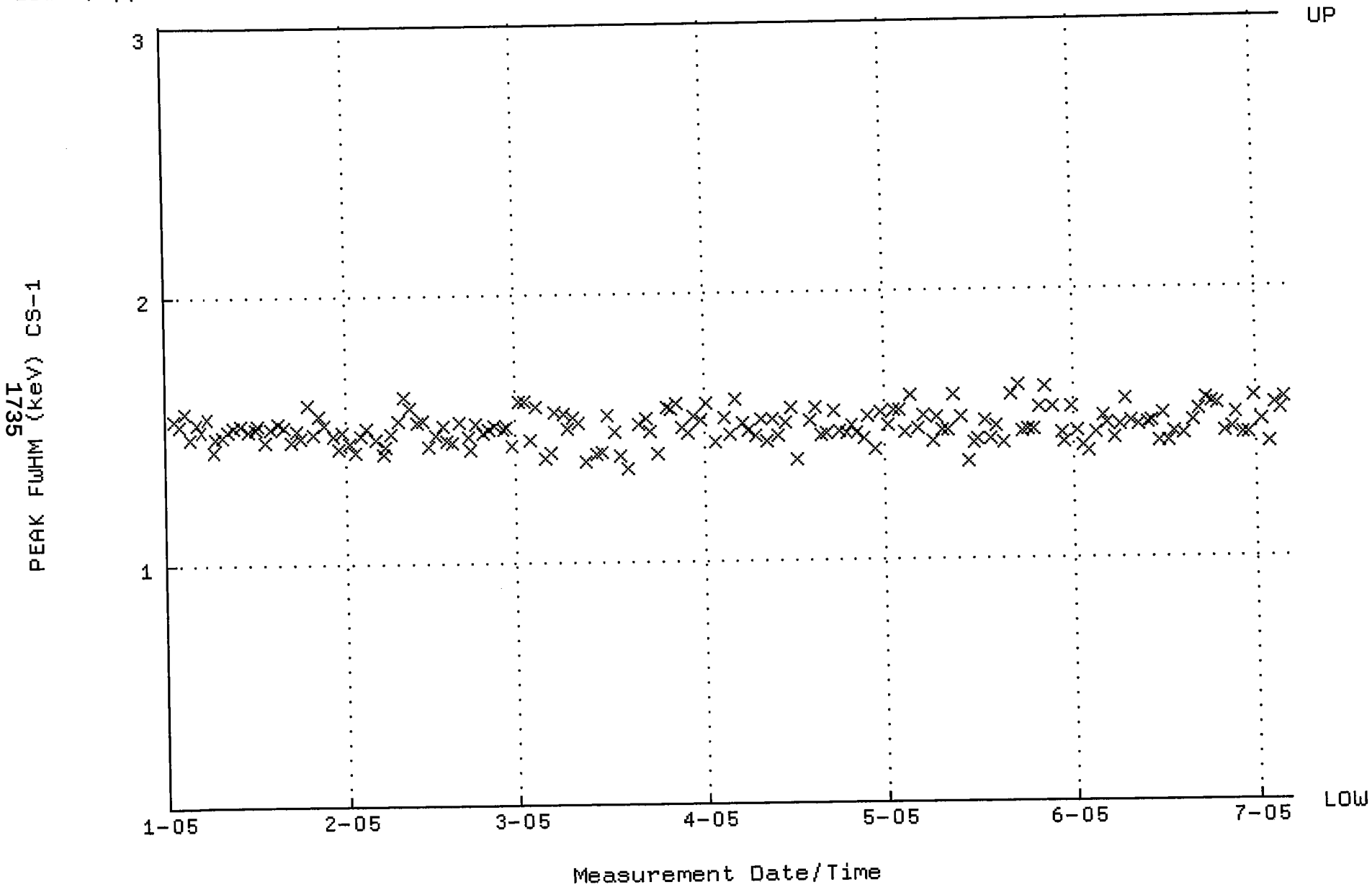
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA3.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 14:41:41 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



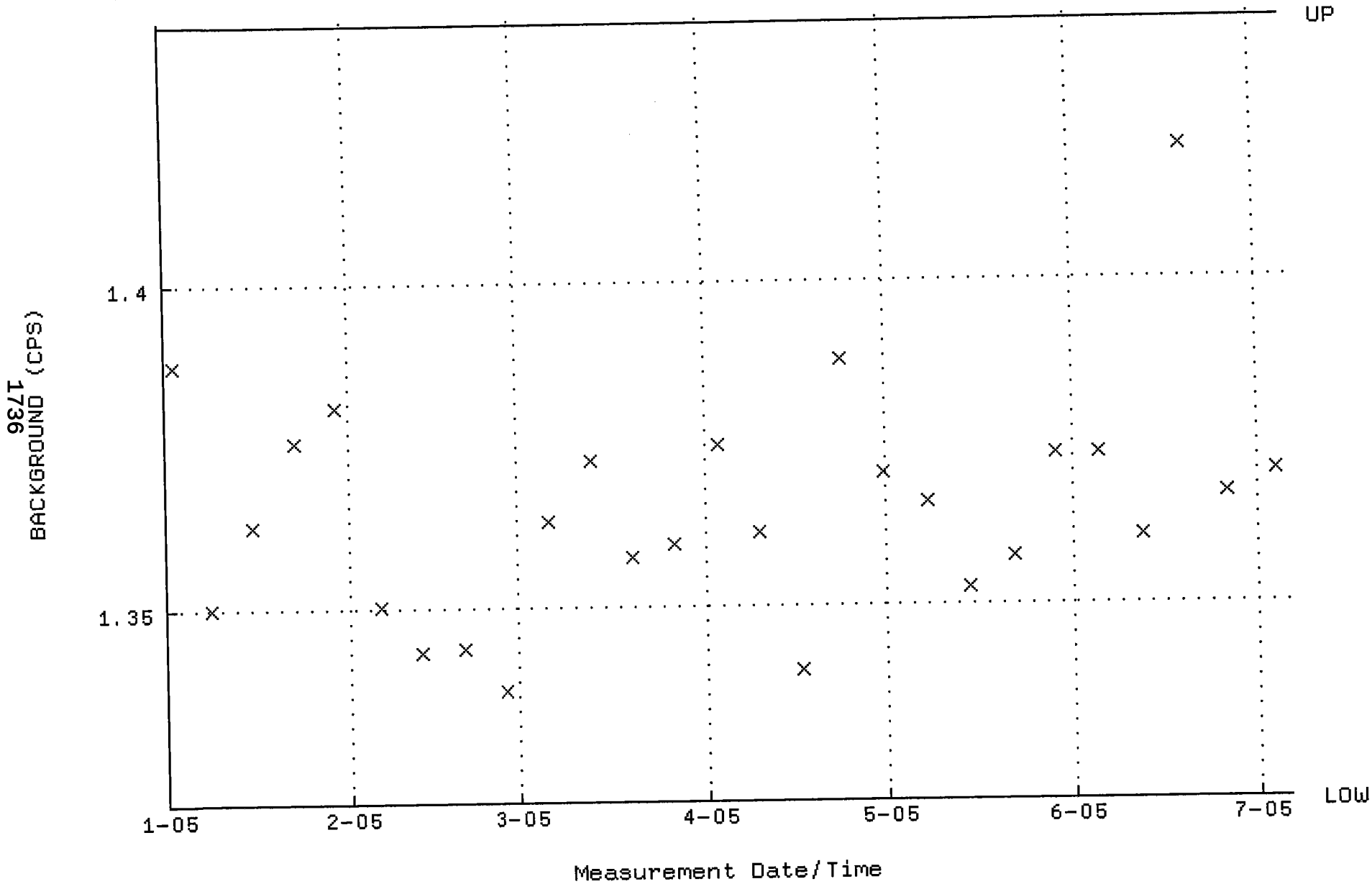
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA3.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:07:37 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.55230 through 1.64770



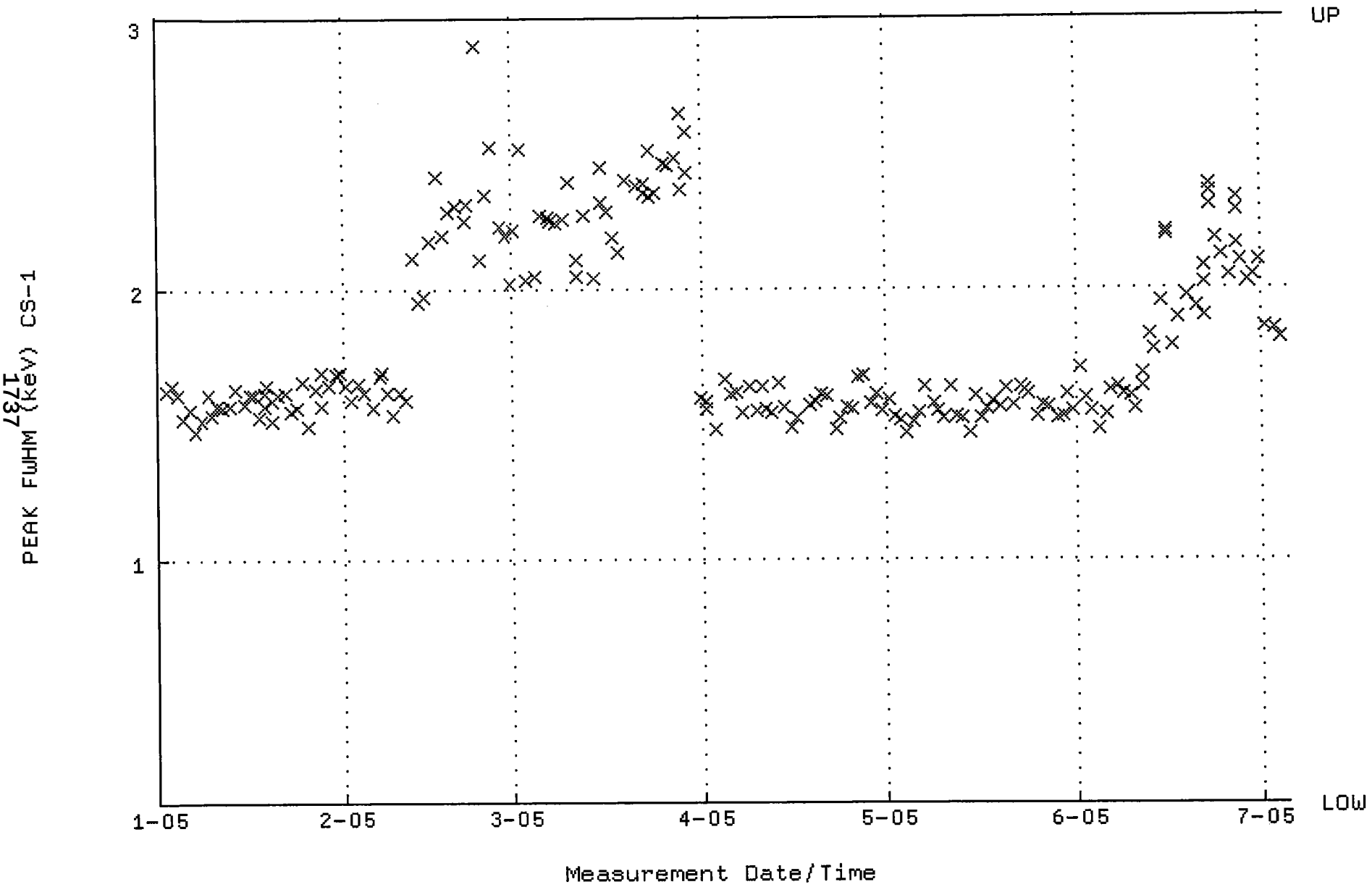
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA8.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 14:28:50 through 5-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



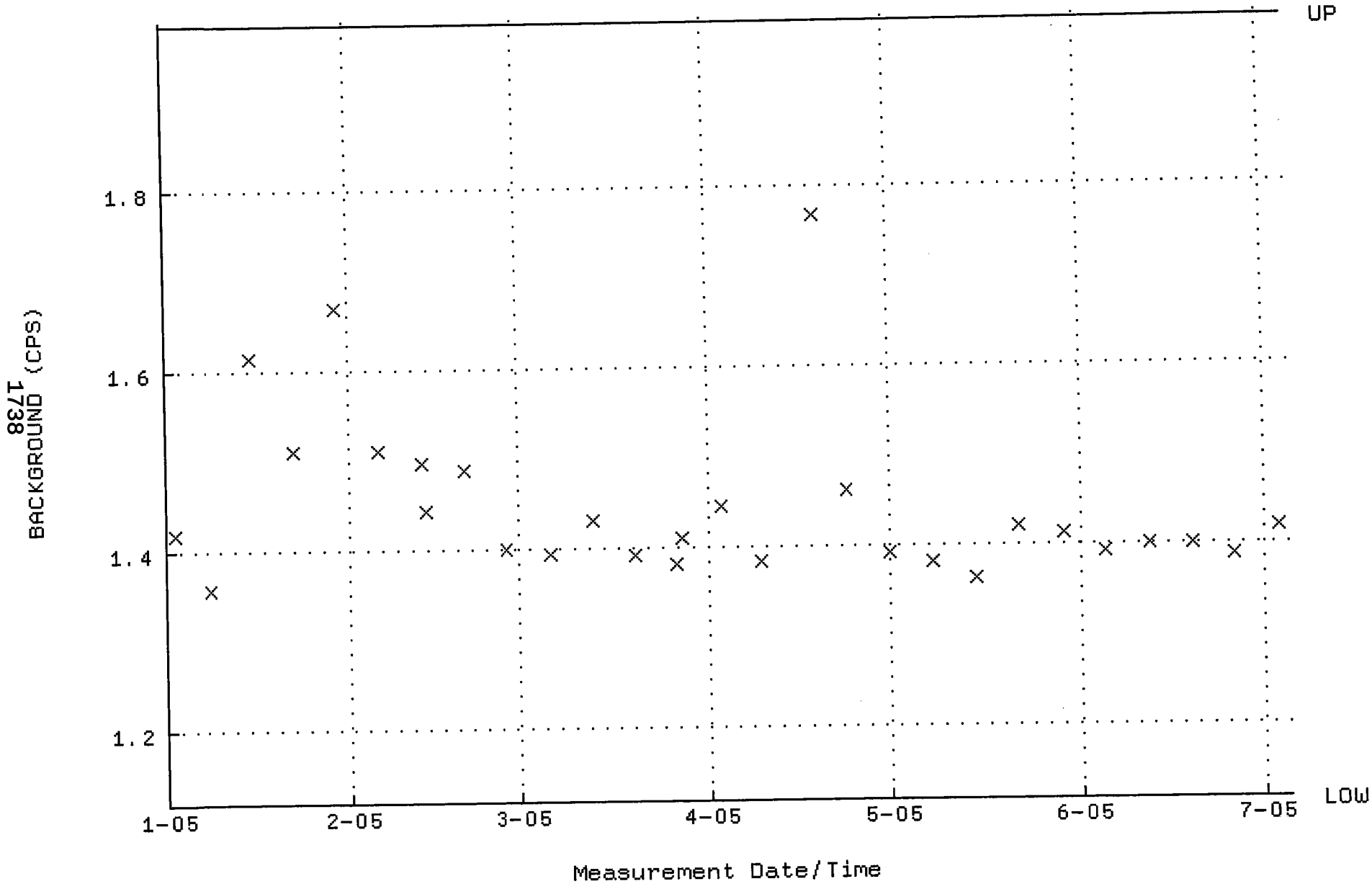
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA8.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:08:48 through 5-JUL-2005 12:00:00
Lower/Upper Lmts: 1.32000 through 1.44000



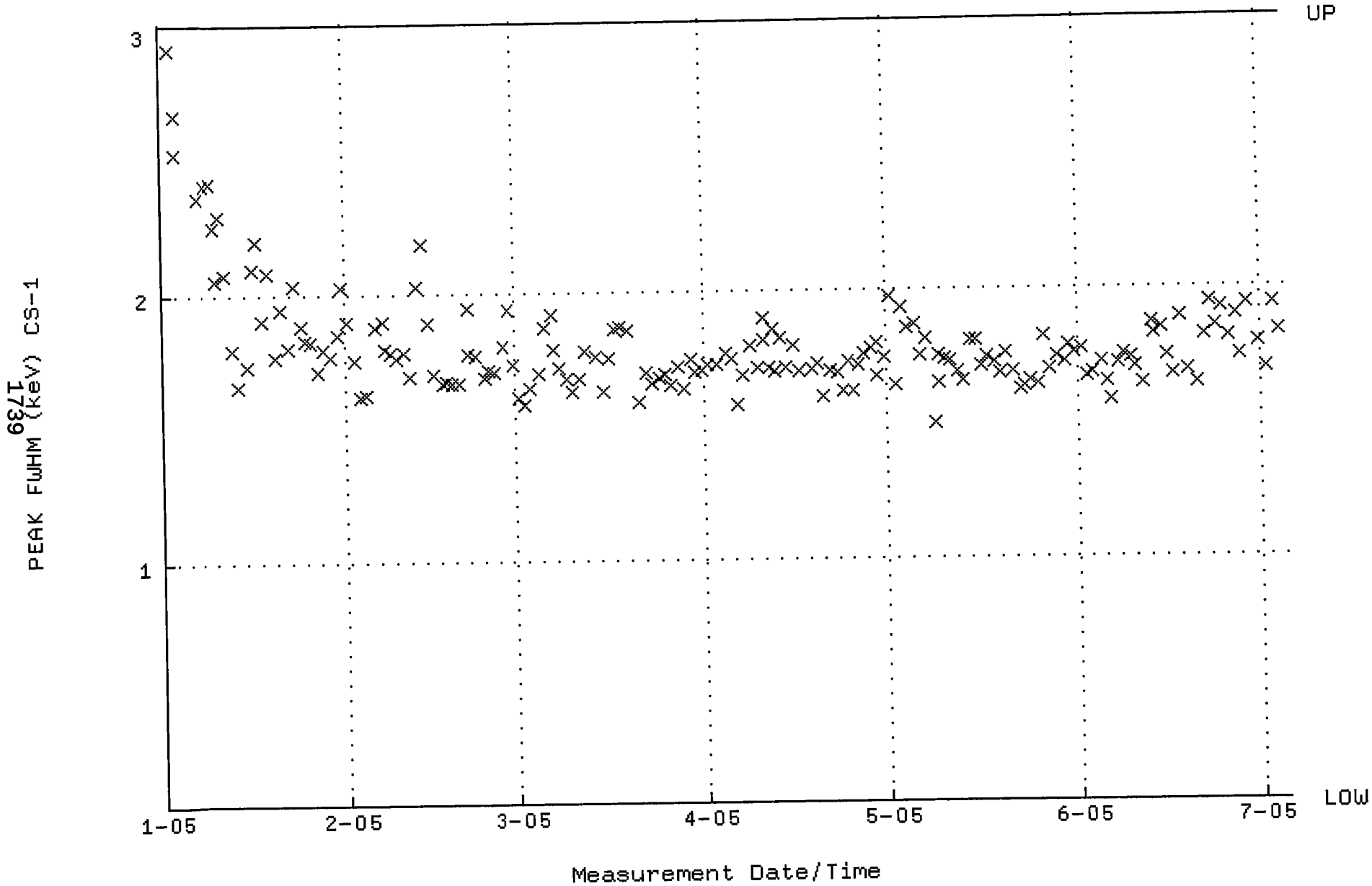
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA10.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 14:41:47 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



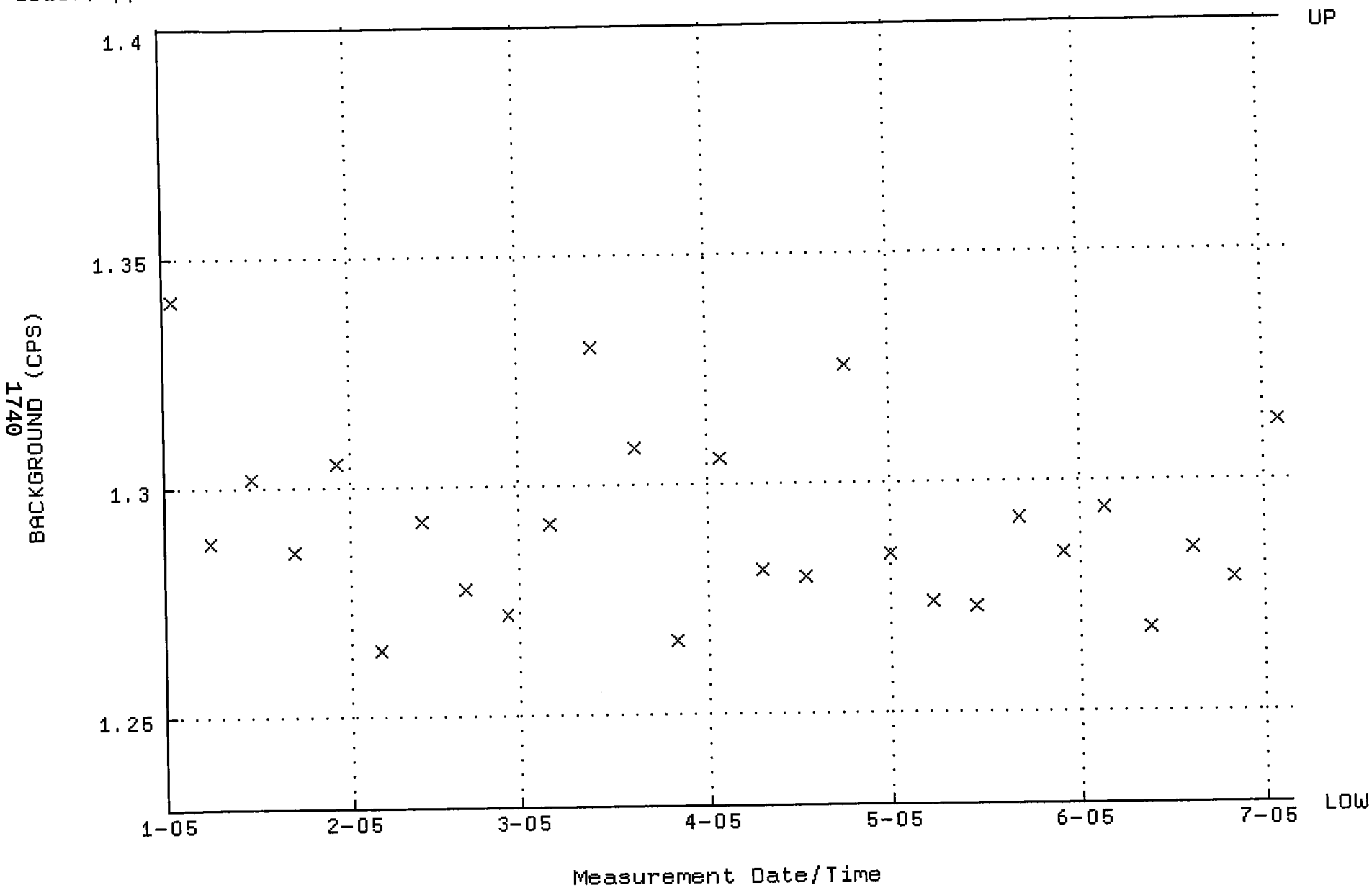
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA10.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:09:02 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.11730 through 1.98700



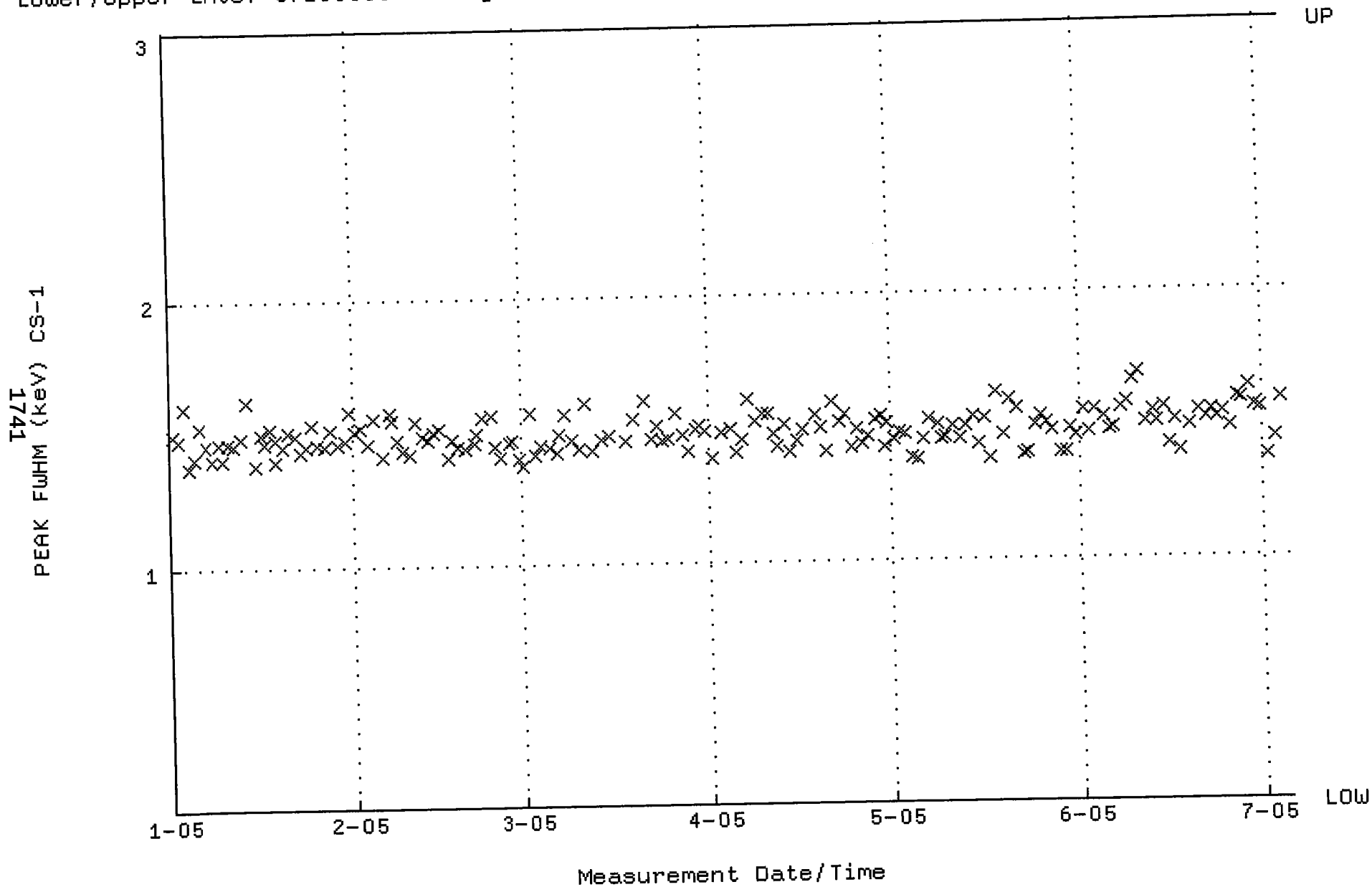
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA11.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 14:55:33 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



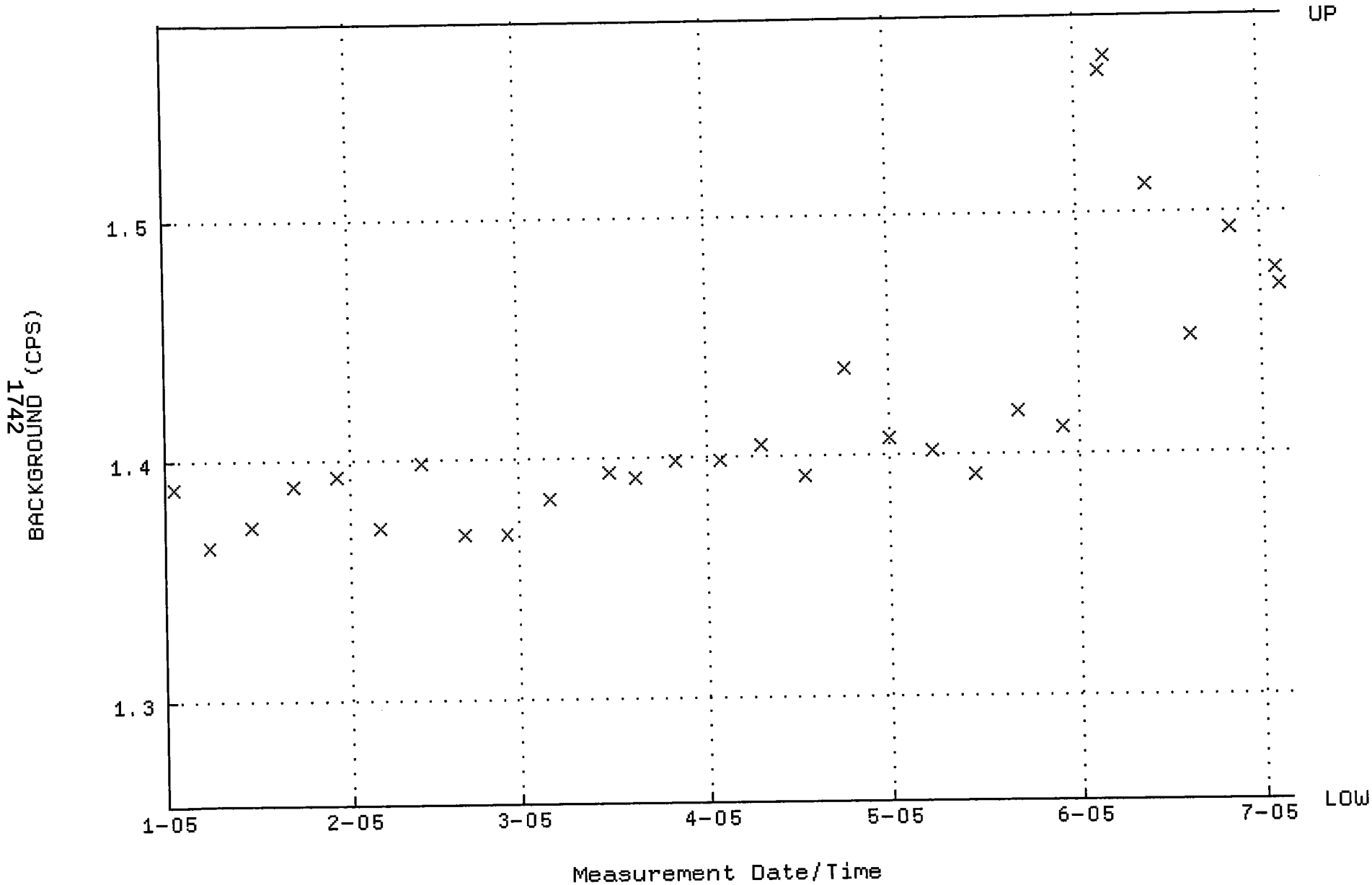
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA11.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:13:54 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.23000 through 1.40000



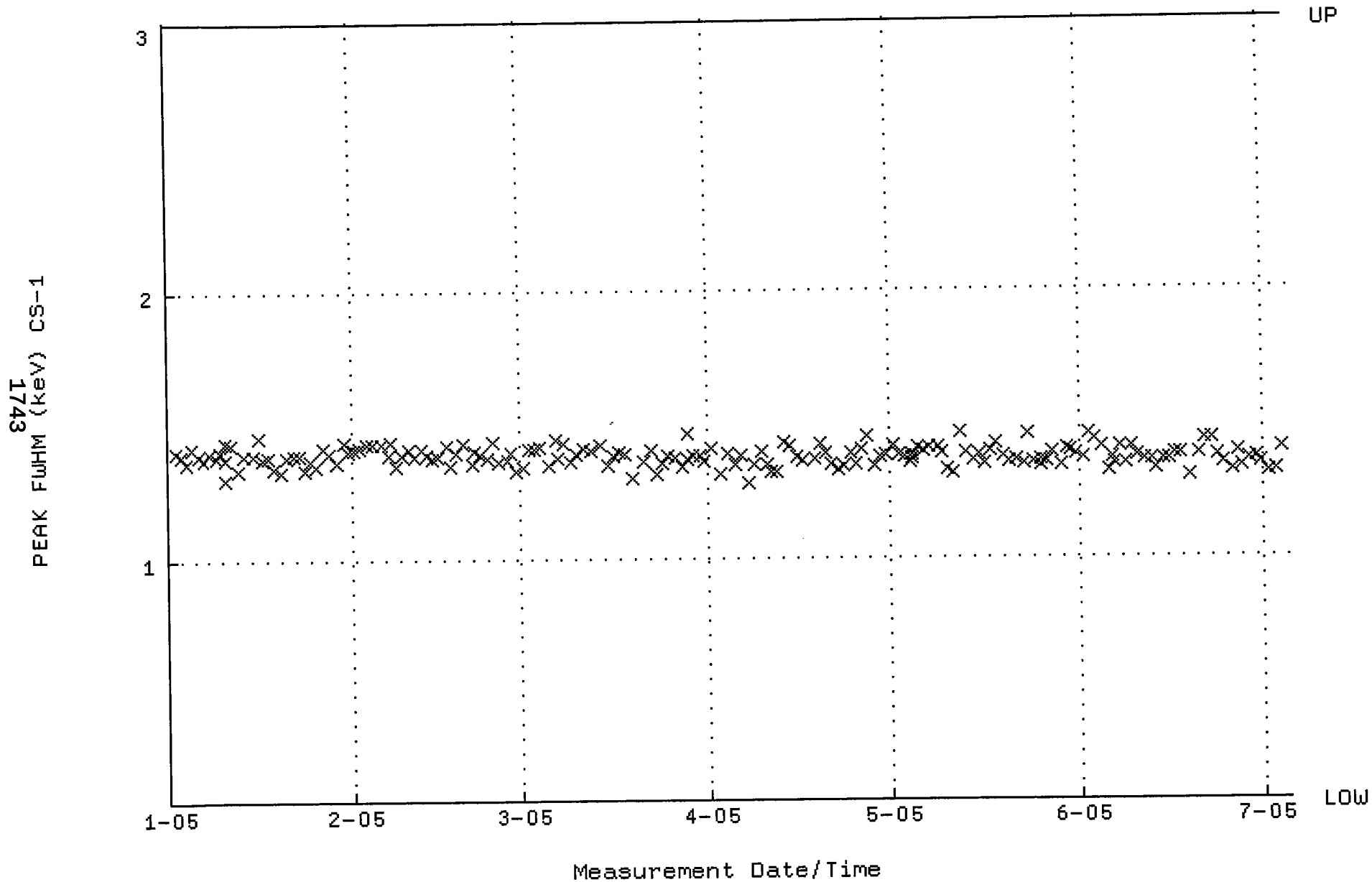
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA16.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 1-JAN-2005 15:49:42 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



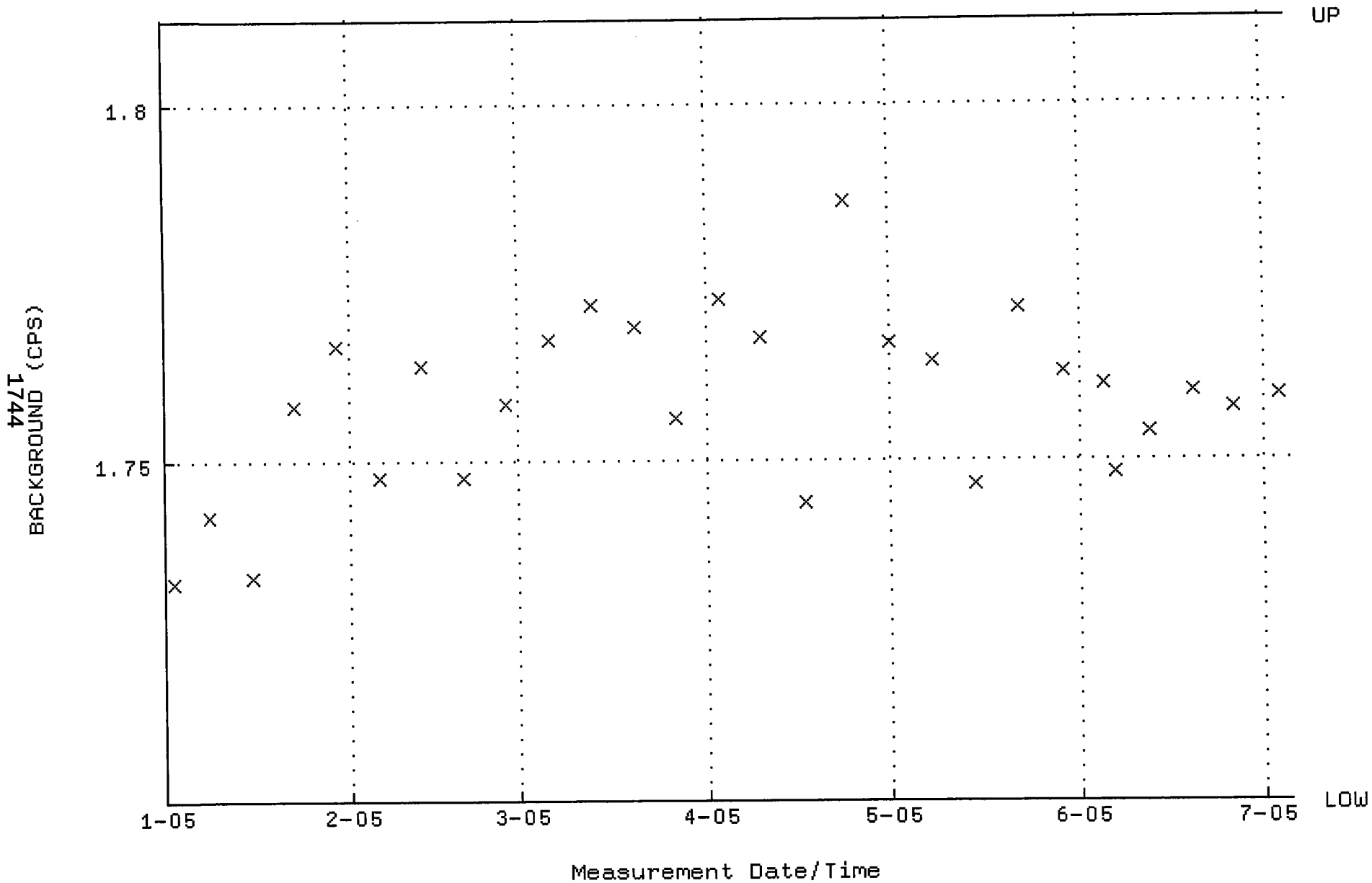
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA16.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:14:38 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.25600 through 1.58211



QA filename : DKA100:[ENV_ALPHA]QC_GAMMA17.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 14:42:01 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA17.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:14:47 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.70200 through 1.81200



STANDARDS DATA

0718

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 • U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

69416-278

Tc-99 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 25430.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ISOTOPE:	Tc-99
ACTIVITY (dps):	3.660 E4
HALF-LIFE:	2.111 E5 years
CALIBRATION DATE:	October 28, 2004 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	2.2%

Impurities: γ-impurities <0.1%

5.00994 grams 0.3M NH_4OH with 225 µg/g $TcO_4(-I)$.

P O NUMBER 3248RD, Item 2

PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 10-28-2004

RECEIVED 11/04

RC-S-039-002

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0718
Prepared By:	Amanda Fehr
Carrier Conc:	DI Water
Reference Date:	10/28/2004
Ampoule Mass (g):	5.00994 g
Uncertainty:	+/- 2.2 %
LogBook No:	RC-S-039-002

A Solution Material Info	
Isotope:	Technetium-99
Prepared By:	Amanda Fehr
Prep Date:	12/21/2004
Verification Date:	02/04/2005
Expiration Date:	02/04/2006
Primary Code:	0718-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.7462 g
Density(g/mL):	0.9976

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.7462 g) * (36600 dps) * (60 dpm/dps) / (5.00994 g * 100 mL) = 20803.9521 dpm/mL
(4.7462 g) * (36600 dps) * (60 dpm/dps) / (0.9976 g/mL)/ (5.00994 g * 100 mL) = 20853.8621 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/31/2005	Amanda Fehr	62.93	500	0718-B	2624.67 dpm/mL	02/04/2005	02/04/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Tc-99 Standard 0718-B

Analyst: A. Fehr Date: 2/04/05	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
	0718-B N1	1263.7000	26.1000	1237.6000	0.95172709	0.5000	2600.745551
	0718-B N2	1291.2000	26.1000	1265.1000	0.95172709	0.5000	2658.535227
	0718-B N3	1244.2000	26.1000	1218.1000	0.95172709	0.5000	2559.767418
						Average =	2606.349399
Mean Value (Counting) =	2606.349399		**99.3019846**	**% of known**			
Stdev =	49.62179332		0.01903881				
Certificate Value =	2624.7						
Lower Limit =	2507.105812						
Upper Limit =	2705.592985						
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**				
Two sigma =	99.24358664						
10 % of Mean =	260.6349399						
Rule 2 (Pass/Fail)	**Pass**						

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

The analyst prepared three standard verification sources for Tc-99 source 0718-B by transferring portions of the standard into tared glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 14 for Tc-99 source standard verification. The Tc-99 efficiency calibration which was used for verification calculations was performed on 2/4/05 using source 0247-A
(Tc-99). Calibration data is recorded in this logbook under Tc-99 0247-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 2/7/05
2/10/05

1748

Tracer Log

BXD 6/27/05

Source Code	T6C0641
Activity	1.0004
Supplier	Lowcountry Diagnostics
Solvent/Carrier	Sodium Pertechnetate
Reference Date	6/27/05

Isotope	Tc99M
Prep Date	6/27/05
Primary Code	TC0641A
Prepared By	BXD
Expiration Date	6/28/05

Mass of Parent (g) 0.3578 Dilution (ml) 100

Show calculation converting parent activity:

$$\frac{1.0004\ \text{mCi}}{5\text{mL}} \times \frac{\text{mL}}{\text{g}} \times \frac{0.3578\ \text{g}}{100\ \text{mL}} \times \frac{1000\ \mu\text{Ci}}{1\ \text{mCi}} = 0.7159\ \frac{\mu\text{Ci}}{\text{mL}}$$

Reviewed By: JKS 6/27/05 Date: _____

LOW COUNTRY DIAGNOSTICS
44-A FOLLY ROAD BLVD. CHARLESTON, SC 29407
8435561113

CAUTION
RADIOACTIVE MATERIAL

Rx#:325930
Monday
Use as directed by
Dr.: COLEMAN
Lic# 362
Run:1 Box:1

Patient: Per Phys Order
c/o
GENERAL ENGINEERING LAB
CHARLESTON, SC 29414

Procedure **CALIBRATION SOURCE**
Pharmaceutical: **TC99M NA TCO4-**

1.0004 mCi @ 17:00 27-Jun-2005
0.07 ml 14.1 mCi/ml

Mo-99 < 0.15 uCi/mCi at 14 hours post calibration time
PRODUCT OF FISSION MO-99

1 LOT: 6-06/27/05
Exp:06/28/05 @06:0(

Page: RC-S-038-

Tracer Log

Source Code	Tc0043
Activity	1.0004 uCi
Supplier	Lowcountry Diagnostics
Solvent/Carrier	Sodium Pertechnetate
Reference Date	6/30/05

Isotope	Tc99M
Prep Date	6/30/05
Primary Code	Tc0043A
Prepared By	ESD
Expiration Date	~~6/1~~ 7/1/05 ESD 6/30/05

Mass of Parent (g) .3618 Dilution (ml) 100

Show calculation converting parent activity:

$$\frac{1.0004\ \text{mCi}}{5\ \text{mL}} \left| \frac{\text{mL}}{\text{g}} \right| \frac{.3618\ \text{g}}{100\ \text{mL}} \left| \frac{1000\ \mu\text{Ci}}{1\ \text{mCi}} \right| = .7239\ \frac{\mu\text{Ci}}{\text{mL}}$$

Reviewed By: BXF Date: 6-30-05

LOW COUNTRY DIAGNOSTICS
44-A FOLLY ROAD BLVD. CHARLESTON, SC 29407
8435561113

CAUTION
RADIOACTIVE MATERIAL

Rx#:326683
Thursday
Use as directed by
Dr.: COLEMAN
Lic# 362
Run:1 Box:1

Patient: Per Phys Order
c/o
GENERAL ENGINEERING LAB
CHARLESTON, SC 29414

Procedure **CALIBRATION SOURCE**
Pharmaceutical: **TC99M NA TCO4-**

1.0004 mCi @ 17:00 30-Jun-2005
0.07 ml 14.1 mCi/ml

Mo-99 < 0.15 uCi/mCi at 14 hours post calibration time
PRODUCT OF FISSION MO-99

1 LOT: 6-06/30/05
Exp:07/01/05 @06:00

Page: RC-S-038-

Amersham International plc
Amersham Laboratories

0134

NAMAS
CALIBRATION
No. 0146

Certificate of calibration of standardized tritium labeled water

Description

Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY·64

Chemical form: water Batch: 111

Measurement

Reference time: 1200 GMT on 1 March 1996

Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water

which is equivalent to: 13.19 microcuries per gram of water

or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement
This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy

The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than ±2.5%

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99·7% confidence level, and the estimated systematic uncertainties.

Purity

No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data

Half-life of tritium: 12·43 ± 0·11 years

Maximum beta energy of tritium: 18·6 keV

Remarks:

The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = $3{\cdot}7 \times 10^{10}$ becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = $3{\cdot}7 \times 10^4$ Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27·027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved signatory

RC-5-024-061

W. F. Case

W.F. Case

1751

Amersham
The Health Science Group

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Albee
Carrier Conc:	DI WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Albee
Prep Date:	02/21/2001
Verification Date:	07/20/2004
Expiration Date:	07/20/2005
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (100 mL) = 985535.5200 dpm/mL
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (1.0004 g/mL) / (100 mL) = 985180.3116 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/21/2001	Angela Albee	.5368	100	0134-B	5288.42 dpm/mL	02/21/2001	02/21/2002
05/10/2001	Angela Albee	5.2817	1000	0134-C-103	5203.4505 dpm/mL	05/08/2003	05/08/2004
05/10/2001	Angela Albee	5.2817	1000	0134-C-203	5203.4505 dpm/mL	05/10/2002	05/10/2003
05/10/2001	Angela Albee	5.2817	1000	0134-C-303	5203.4505 dpm/mL	05/10/2002	05/10/2003
03/11/2002	Angela Albee	1.6362	250	0134-D	6447.84 dpm/mL	03/12/2002	03/12/2003
01/16/2003	Angela Albee	6.4157	100	0134-E	63206.501 dpm/mL	01/16/2003	01/16/2004
01/16/2003	Angela Albee	3.2108	250	0134-F	12652.925 dpm/mL	01/16/2003	01/16/2004
07/28/2003	Angela Albee	2.91	500	0134-G	5733.749 dpm/mL	08/01/2003	08/01/2004
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/20/2004	07/20/2005

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

ANALYTICS

0781

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

70361-278

5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solution sources. The Am-241 was calibrated by 4 pi alpha liquid scintillation counting. All other radionuclides were calibrated using a germanium gamma spectrometer system. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Analytics maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Rev. 1, February, 1979.

Calibration date: April 1, 2005 12:00 EST

ISOTOPE	GAMMA-RAY ENERGY	HALF-LIFE		GAMMA-RAYS PER SECOND	TOTAL UNCERTAINTY %
Am-241	59.5	432	y	3372	4.5
Cd-109	88	462.6	d	4698	3.3
Co-57	122	271.79	d	2450	3.0
Ce-139	166	137.6	d	3496	2.8
Hg-203	279	46.61	d	7565	2.7
Sn-113	392	115.1	d	4711	2.6
Cs-137	662	30.07	y	3109	3.0
Y-88	898	106.6	d	12320	2.6
Co-60	1173	5.2714	y	5769	2.7
Co-60	1332	5.2714	y	5830	2.6
Y-88	1836	106.6	d	12860	2.6

5.32720 grams 4M HCl solution.
P O NUMBER 2704RD, Item 1

SOURCE PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 04-11-2005

This standard will expire one year after the calibration date.

U.S. DEPARTMENT OF COMMERCE
National Institute of Standards & Technology
Gaithersburg, MD 20899

Certificate of Participation

Analytics, Incorporated
Atlanta, Georgia

is a participant for the period January 1, 2005, through December 31, 2005, in a radioactivity measurements assurance program conducted by the National Institute of Standards and Technology, in cooperation with the Nuclear Energy Institute. Continued participation is evidenced by dated Reports of Traceability issued for particular radionuclides, which indicate the deviation of the participant's reported value from that measured by the National Institute of Standards and Technology. The significance of these Reports is addressed below.*

For the Director,

Michael P. Unterweger, Acting Leader
Radioactivity Group
Physics Laboratory

*As guidance for the proper use of Reports of Traceability, it should be emphasized that the National Institute of Standards and Technology is concerned only with fostering good measurements capability and consistency with the national measurements system. The assurance of the proper application of that capability to the ultimate consumer products is the responsibility of each manufacturer of these products and of the Federal regulatory agencies.

A continuing traceability program in radioactivity demonstrates, to the degree established by the periodic assays of calibrated radioactivity samples, a continuing competence to maintain the methods and standards necessary for accurate measurement. Such a program cannot, however, endorse each and every measurement nor the final product, any more than a spot check can vouch for every unchecked item. Care should be taken, therefore, not to imply such endorsement. The proper use of this Report is governed by section 200.114 of Title 15 of the Code of Federal Regulations. These regulations may be met if Reports are quoted only in their entirety. Excerpts out of context may be misleading.

RC-S-039-065b

ANALYTICS

1380 Seaboard Industrial Blvd.
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ANALYSIS OF UNCERTAINTY FOR MIXED GAMMA STANDARDS

BATCH 120

CALIBRATION DATE: April 1, 2005 12:00 EST

Isotope	Energy (keV)	Calibration Method[1]	Statistics[2]	Calibration[2]	Peak Fitting[2]	Geometry[2]	Impurities[2]	Weighing[2]	Combined Standard Uncertainty[2]	Relative Expanded Uncertinty[2] (k=2)
Cd-109	88	HPGe	0.16	1.1	0.88	0.8	0	0.2	1.64	3.3
Co-57	122	HPGe	0.23	1.1	0.71	0.7	0	0.2	1.52	3.0
Ce-139	166	HPGe	0.17	1.0	0.58	0.7	0	0.2	1.38	2.8
Hg-203	279	HPGe	0.11	1.1	0.34	0.7	0	0.2	1.37	2.7
Sn-113	392	HPGe	0.21	1.0	0.35	0.7	0	0.2	1.30	2.6
Cs-137	662	HPGe	0.36	1.1	0.60	0.7	0	0.2	1.49	3.0
Y-88	898	HPGe	0.19	1.0	0.33	0.7	0	0.2	1.29	2.6
Co-60	1173	HPGe	0.31	.97	0.45	0.7	0	0.2	1.33	2.7
Co-60	1332	HPGe	0.33	.93	0.48	0.7	0	0.2	1.32	2.6
Y-88	1836	HPGe	0.24	1.0	0.35	0.7	0	0.2	1.31	2.6

Optional Additional Isotopes

Pb-210	46.5	4π LS	0.33	1.1	0	0.9	0.30	0.2	1.50	3.0
Am-241	59.5	4π LS	0.33	1.1	0	0.9	0.30	0.2	1.50	3.0
Sr-85	514	IC	0.30	1.1	0	0.7	0.17	0.2	1.36	2.7
Cs-134	605	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Cs-134	796	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Mn-54	835	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Zn-65	1116	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7

[1]Calibration Methods:

4π LS (4 pi Liquid Scintillation Counting)
HPGe (High Purity Germanium Gamma Ray Spectrometer)
IC (Gamma Ray Ionization Chamber)

[2]As Percent (%)from counting data

No interfering gamma emitting impurities were detected during calibration. Depending on the resolution and energy dispersion (keV/channel) of the measuring system, the following spectral conflicts may occur: (1) between the 88 keV gamma-ray and the X-rays emitted in the decay of Hg-203, (2) between the 1333 keV gamma-ray and the 1325 keV single escape peak from the 1836 keV gamma-ray.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0781
Prepared By:	Amanda Fehr
Carrier Conc:	4M HCL
Reference Date:	04/01/2005
Ampoule Mass (g):	5.3272 g
Uncertainty:	+/- 3 %
LogBook No:	RC-S-039-065

A Solution Material Info	
Isotope:	Mixed Gamma
Prepared By:	Amanda Fehr
Prep Date:	04/26/2005
Verification Date:	04/27/2005
Expiration Date:	04/27/2006
Primary Code:	0781-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.1233 g
Density(g/mL):	5.4962

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dpm)) * (conversion dpm to dpm) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dpm)) * (conversion dpm to dpm) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.1233 g) * (219149.436 dpm) * (1 dpm/dpm) / (5.3272 g * 100 mL) = 2107.6143 dpm/mL
(5.1233 g) * (219149.436 dpm) * (1 dpm/dpm) / (5.4962 g/mL)/ (5.3272 g * 100 mL) = 383.4709 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Mixed Gamma Standard 0781-A (AM-241 & Cs-137)

A. Fehr
4/29/2005

Am-241	Isotope	Result		Cs-137	Isotope	Result	
	Mixed Gamma N1	9796			Mixed Gamma N1	3753	
	Mixed Gamma N2	9930			Mixed Gamma N2	4015	
	Mixed Gamma N3	10290			Mixed Gamma N3	3878	
Mean Value (Counting) =	10005.33	**102.47**	**Pass**		3882.00	**102.39**	**Pass**
Stdev =	255.471		**Rule 3 (Pass/Fail)**		131.046		**Rule 3 (Pass/I**
Certificate Value =	9764.6				3791.3		
Lower Limit =	9494.391719				3619.908413		
Upper Limit =	10516.27495				4144.091587		
Rule 1 (Pass/Fail)	**Pass**				**Pass**		
Two sigma =	510.9416144				262.091587		
10 % of Mean =	1000.53333333				388.20000000		
Rule 2 (Pass/Fail)	**Pass**				**Pass**		

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

Amanda L. Fehr 4/29/05

Angela A. Johnson 5/6/05

Verification for Mixed Gamma Standard 0781-A (Co-60)

A. Fehr 4/29/2005	**Isotope**	**Result** **pCi/L**	
	Mixed Gamma N1	6132	
	Mixed Gamma N2	6073	
	Mixed Gamma N3	6240	
Mean Value (Counting) =	6148.33	pCi/L	**102.365 Pass**
Stdev =	84.690	pCi/L	**Rule 3 (Pass/Fail)**
Certificate Value =	6006.3	pCi/L	
Lower Limit =	5978.954074	pCi/L	
Upper Limit =	6317.712592	pCi/L	
Rule 1 Pass/Fail	**Pass**		
Two sigma =	169.3792589		
10 % of Mean =	614.8333333		
Rule 2 (Pass/Fail)	**Pass**		

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

Amanda L. Fehr 4/29/05

Angela A. Johnson 5/6/05

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution:	5.3739 g (in a 5 ml Flame Sealed Ampoule)	
b. Chemical form:	Am(NO3)3 in 2N HNO3	
c. Carrier content:	None added	
d. Density:	1.0651	g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under:	228, 278	keV.
Branching ratio(s) used:	0.108, 0.1420	gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration:	±3.0%
b. Random uncertainty in assay:	±0.4%
c. Random uncertainty in weighing(s):	±0.0%
d. Total uncertainty at the 99% confidence level:	±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Kuen
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ **1. STANDARD WIPE TEST**

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **2. SOAK TEST**

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **3. SOAK TEST -- BERYLLIUM WINDOW**

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **4. GAS SOURCE TEST (Radioactive Gas)**

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ **5. OTHER LEAK TEST**

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **6. LEAK TEST NOT APPLICABLE**

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Genie Bost
Prep Date:	01/05/1994
Verification Date:	09/10/2004
Expiration Date:	09/10/2005
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996

02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
07/20/1995	Theresa Parrotte	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
09/11/1995	Theresa Parrotte	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Parrotte	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/28/2000	Angela Albee	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
04/13/2001	Angela Albee	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
08/23/2001	Angela Albee	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002

08/23/2001	Angela Albee	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Albee	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Albee	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2005	03/14/2006
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Tim Chandler	.011	1000	445-96-2-Z	22.7877 dpm/mL	05/04/2005	05/04/2006
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2004	09/10/2005
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

0533

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65338-278

Am-241 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Am-241
ACTIVITY (dps):	3.920 E4
HALF-LIFE:	4.322 E2 years
CALIBRATION DATE:	January 15, 2003 12:00 EST
TOTAL UNCERTAINTY*:	3.2%
SYSTEMATIC:	2.2%
RANDOM:	1.0%

*99% confidence level.

5.10649 grams 1M HCl solution.

Impurities: γ-impurities <0.1%
α-impurities <0.1%

P O NUMBER 3213 RD, Item 1

SOURCE PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: UM Mc 1-16-03

RC-S-035-048a

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0533
Prepared By:	Angela Albee
Carrier Conc:	1 M HCL
Reference Date:	01/15/2003
Ampoule Mass (g):	5.10649 g
Uncertainty:	+/- 3.2 %
LogBook No:	RC S 035 048

A Solution Material Info	
Isotope:	Americium-241
Prepared By:	Angela Albee
Prep Date:	02/05/2003
Verification Date:	05/02/2005
Expiration Date:	05/02/2006
Primary Code:	0533-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8225 g
Density(g/mL):	1.0139

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.8225 g) * (39200 dps) * (59.9 dpm/dps) / (5.10649 g * 100 mL) = 22174.9495 dpm/mL
(4.8225 g) * (39200 dps) * (59.9 dpm/dps) / (1.0139 g/mL)/ (5.10649 g * 100 mL) = 21870.7064 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/20/2003	Angela Albee	1.0151	100	0533-B	222.38 dpm/mL	03/01/2005	03/01/2006
02/20/2003	Angela Albee	.6819	250	0533-C	59.754 dpm/mL	02/20/2004	02/20/2005
05/07/2003	Tim Chandler	.1245	100	0533-D	27.2745 dpm/mL	05/03/2004	05/03/2005
09/10/2004	Amanda Fehr	.6933	250	0533-E	60.753 dpm/mL	09/10/2004	09/10/2005
12/17/2004	Brenda Burke	.0093	100	0533-F	2.0374 dpm/mL	12/20/2004	12/20/2005
12/21/2004	Brenda Burke	.009273	100	0533-G	2.0315 dpm/mL	12/23/2004	12/23/2005
04/28/2005	Brenda Burke	.1347	100	0533-H	29.4598 dpm/mL	05/02/2005	05/02/2006

0757

National Institute of Standards & Technology

Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

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*Notes and references are on pages 5 to 7.

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Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution usually contains strong acid or base and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

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*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994** [b]*
Massic activity of the solution [c]	**26.31 Bq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72%** [d] [e]
Solution density	**(1.105 ± 0.002) g·mL^{-1} at 20 °C** [f]

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) Bq·g^{-1} [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three 4πα liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

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EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

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*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	$^{239}Pu + ^{240}Pu$ <0.000 001 [u]	$^{239}Pu + ^{240}Pu$ 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	$^{238}Pu + ^{241}Am$ <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

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[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 s−1•g−1 for energies less than 3.1 MeV,
0.03 s−1•g−1 for energies between 3.1 and 4.4 MeV, and
0.003 s−1•g−1 for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5 × 10-5 s−1•g−1 for energies between 19 and 39 keV,
7 × 10-5 s−1•g−1 for energies between 49 and 92 keV,
2 × 10-5 s−1•g−1 for energies between 106 and 507 keV,
1 × 10-5 s−1•g−1 for energies between 515 and 1456 keV, and
5 × 10-6 s−1•g−1 for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i|\cdot(x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i|\cdot(x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i|\cdot u(x_i)/y = |\partial y/\partial x_i|\cdot(x_i/y)\cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i|\cdot(x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

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[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}•{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

RC-S-039-0419

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0757
Prepared By:	Amanda Fehr
Carrier Conc:	19% HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC-S-039-039

A Solution Material Info	
Isotope:	Plutonium-242
Prepared By:	Amanda Fehr
Prep Date:	05/26/2005
Verification Date:	05/31/2005
Expiration Date:	05/31/2006
Primary Code:	0757-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.329 g
Density(g/mL):	1.0173

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.329 g) * (26.31 bq/g) * (60 dpm/bq) / (100 mL) = 84.1236 dpm/mL
(5.329 g) * (26.31 bq/g) * (60 dpm/bq) / (1.0173 g/mL) / (100 mL) = 82.6937 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Plutonium-242 Standard 0757-A

	Isotope	Value pCi/L	Uncertainty pCi/L
Analyst: A. Fehr			
Date: 5/31/05	0756-A N1	3.600	0.374
	0756-A N2	3.530	0.363
	0756-A N3	3.710	0.404
Mean Value (Counting) =	3.613	95.36%	**Pass**
Stdev =	0.090737717		**Rule 3 (Pass/Fail)**
Target =	3.79		
Lower Limit =	3.431857899		
Upper Limit =	3.794808768		
Rule 1 (Pass/Fail)	**Pass**		
Two sigma =	0.181475435		
10 % of Mean =	0.361333333		
Rule 2 (Pass/Fail)	**Pass**		

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for standard **0757-A** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **Pu239** standard **0338-N** and 50 micrograms of neodymium carrier in a disposable centrifuge tube containing 4 mL of 2 M HCl and 6 mL of DI water. Five drops of 25% Hydrazine was add to each centrifuge tube and swirled. After 10 minutes, two mL of 48% HF was added to precipitate neodymium(and plutonium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for **Pu-242** were calculated by comparison to **Pu-239** certified values.

Amanda L. Fehr 6/2/05

0338

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

60513-278

Pu-239 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 24148.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Pu-239
ACTIVITY (dps):	3.674 E4
HALF-LIFE:	24131 years
CALIBRATION DATE:	October 30, 2000 12:00 EST
TOTAL UNCERTAINTY*:	5.0%

*99% confidence level.

5.45541 grams 3M HNO_3 solution.

Impurities detected (activity in dps/vial on Oct. 30, 2000):

Am-241 297.28
Pu-240 1208.8
Pu-241 2010.7
Pu-242 0.17

See reverse side for additional information.

P O NUMBER 2528RD, Item 1

PREPARED BY: M. Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 11/13/00

RC-S-028-167

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0338
Prepared By:	Penet Melton
Carrier Conc:	3 M HNO3
Reference Date:	10/30/2000
Ampoule Mass (g):	5.45541 g
Uncertainty:	+/- 5 %
LogBook No:	RC S 028 167

A Solution Material Info	
Isotope:	Plutonium-239
Prepared By:	Penet Melton
Prep Date:	12/01/2000
Verification Date:	05/20/2005
Expiration Date:	05/20/2006
Primary Code:	0338-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.1674 g
Density(g/mL):	1.0120

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.1674 g) * (36740 dps) * (59.9 dpm/dps) / (5.45541 g * 100 mL) = 20845.4205 dpm/mL
(5.1674 g) * (36740 dps) * (59.9 dpm/dps) / (1.0120 g/mL)/ (5.45541 g * 100 mL) = 20598.2002 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/15/2000	Angela Albee	.1183	100	0338-B	24.4083 dpm/mL	12/15/2000	12/15/2001
12/15/2000	Angela Albee	1.0107	100	0338-C	208.5336 dpm/mL	12/15/2000	12/15/2001
01/29/2001	Tim Chandler	10.0017	100	0338-D	2063.61 dpm/mL	12/15/2000	12/15/2001
10/29/2001	Tim Chandler	.3032	250	0338-E	25.0232 dpm/mL	10/16/2003	10/16/2004
12/04/2001	Tim Chandler	10.0308	100	0338-F	2069.614 dpm/mL	10/25/2002	10/25/2003
01/13/2003	Tim Chandler	3	1000	0338-F-1	6.209 dpm/mL	01/13/2003	01/13/2004
10/16/2002	Tim Chandler	.02908	100	0338-G	5.9628 dpm/ml	10/16/2002	10/16/2003

10/16/2002	Tim Chandler	.0478	100	0338-H	9.8624 dpm/mL	10/16/2002	10/16/2003
12/30/2002	Tim Chandler	10.0252	100	0338-I	2068.458 dpm/mL	10/24/2003	10/24/2004
12/31/2002	Tim Chandler	.162	500	0338-J	6.685 dpm/mL	12/31/2002	12/31/2003
08/12/2003	Amanda Fehr	.2282	100	0338-K	47.084 dpm/mL	08/12/2003	08/12/2004
12/09/2003	Amanda Fehr	.2409	100	0338-L	50.2764 dpm/mL	12/09/2003	12/09/2004
03/18/2004	Tim Chandler	10.0192	500	0338-M	413.4441 dpm/ml	03/18/2004	03/18/2005
04/26/2004	Amanda Fehr	.643	250	0338-N	53.067 dpm/mL	04/26/2005	04/26/2006
05/26/2004	Brenda Burke	.355	250	0338-O	29.298 dpm/mL	05/20/2005	05/20/2006
12/20/2004	Brenda Burke	.01957	100	0338-P	4.0371 dpm/mL	12/20/2004	12/20/2005
03/16/2005	Brenda Burke	10.0395	100	0338-Q	2071.4087 dpm/mL	03/16/2005	03/16/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Plutonium-239 Standard *0338-N*

Analyst: A.Fehr	**Isotope**	**Value**	**Uncertainty**
Date: 4/27/05	0338-L #1	2.390	0.2920
	0338-L #2	2.520	0.3040
	0338-L #3	2.640	0.3140

Mean Value (Counting) =	2.517	1.052955	**Pass**
Stdev =	0.125033329		**Rule 3 (Pass/Fail)**

Target =	2.39
Lower Limit =	2.266600009
Upper Limit =	2.766733324
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.250066658
10 % of Mean =	0.251666667
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three Pu-239 standard verification sources for standard ***0338-N*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Pu-242*** standard ***0756-A*** and was diluted in a disposable centrifuge tube with 4 mL of 2 M HCl, and 6 mL of DI water, 50 micrograms of Nd carrier and 4 drops of hydrazine dihydrachloride were added to the centrifuge tube and waited 10 minutes. Two mL of 48% HF was added to precipitate Nd(and ***Plutonium***) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for ***Pu-239*** were calculated by comparison to ***Pu-242*** certified values.

Amanda L. Fehr 4/27/05

Angela A. Johnson
5/6/05

ANALYTICS

0688

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 • U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

68509-278

U-232 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 23236.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	U-232
ACTIVITY (dps):	3.779 E3
CALIBRATION DATE:	June 18, 2004 12:00 EST
HALF-LIFE:	68.9 years
RELATIVE EXPANDED UNCERTAINTY (k=2):	3.3%

Impurities: Am-241 <0.15%
U-233 <0.3%

RECEIVED Lab

5.20343 grams 1M HNO_3 solution.

P O NUMBER 3243 RD, Item 1

SOURCE PREPARED BY: M. Dimitrova
M. Dimitrova, Radiochemist

Q A APPROVED: 6/23/04

RC-S-037-087

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0688
Prepared By:	Amanda Fehr
Carrier Conc:	1M HNO3
Reference Date:	06/18/2004
Ampoule Mass (g):	5.20343 g
Uncertainty:	+/- 3.3 %
LogBook No:	RC-S-037-087

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Amanda Fehr
Prep Date:	06/25/2004
Verification Date:	05/31/2005
Expiration Date:	05/31/2006
Primary Code:	0688-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.9894 g
Density(g/mL):	1.0276

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.9894 g) * (3779 dps) * (59.9 dpm/dps) / (5.20343 g * 100 mL) = 2170.5126 dpm/mL
(4.9894 g) * (3779 dps) * (59.9 dpm/dps) / (1.0276 g/mL)/ (5.20343 g * 100 mL) = 2112.2178 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
06/18/2004	Brenda Burke	2.203	250	0688-B	18.6439 g/mL	06/28/2005	06/28/2006
07/06/2004	Tim Chandler	2.2243	250	0688-C	18.8242 dpm/mL	07/14/2004	07/14/2005
07/06/2004	Amanda Fehr	26.03	1000	0688-D	55.0728 dpm/mL	07/06/2004	07/06/2005
04/19/2005	Amanda Fehr	26.01	1000	0688-E	55.0305 dpm/mL	05/04/2005	05/04/2006
05/27/2005	Brenda Burke	.612	250	0688-F	5.17934 dpm/mL	05/31/2005	05/31/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Uranium-232 Standard *0688-E*

Analyst: A.Fehr	**Isotope**	**Value**		**Uncertainty**	
Date: 5/4/05	0688-E N1	2.57	pCi/L	0.364	pCi/L
	0688-E N2	2.40	pCi/L	0.355	pCi/L
	0688-E N3	2.44	pCi/L	0.300	pCi/L
Mean Value (Counting) =	2.470	pCi/L		**1.0046795**	**% of known**
Stdev =	0.088881944	pCi/L			
Target =	2.46	pCi/L			
Lower Limit =	2.292236112	pCi/L			
Upper Limit =	2.647763888	pCi/L			
Rule 1 Pass/Fail	**Pass**	**Pass**		**Pass**	
Two sigma =	0.177763888				
10 % of Mean =	0.247				
Rule 2 (Pass/Fail)	**Pass**				

The analyst prepared three standard verification sources for standard **0688-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **0389-G** and 50 micrograms of Nd carrier in a disposable centrifuge tube. Each standard was diluted to 4 mL with 2 M HCl, and 2 mL of DI water. One mL of TiCl3 was added. Two mL of 48% HF was added to precipitate Nd(and **Uranium**) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for **U-232** were calculated by comparison to **U-238** certified values.

Reference SOP RAD M-001

Amanda L. Fehr 5/4/05

Angela J. Johnson 5/6/05

0389

National Institute of Standards & Technology

Certificate

Standard Reference Material 4321C
Natural Uranium Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive natural uranium nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains uranium-238, uranium-235, and uranium-234 with a total activity of approximately 2600 Bq. Uranium decays by alpha-particle emission. The progeny of uranium-238, uranium-235, and uranium-234 have a total activity of approximately 2600 Bq and decay by alpha- and beta-particle emission. None of the alpha or beta particles escape from the SRM ampoule. During the decay process X-rays and gamma rays with energies from 11 keV to 2.0 MeV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains nitric acid (HNO_3) with a concentration of 1 mole per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least August 2007.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, J.M.R. Hutchinson, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by N.M. Trahey.

Gaithersburg, Maryland 20899
November 1997

Thomas E. Gills, Chief
Standard Reference Materials Program

*Notes and references are on pages 5 and 6.

RC-S-034-051a

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 and

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PROPERTIES OF SRM 4321C

(Certified values are shown in bold type)

Source identification number	NIST SRM 4321C		
Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution density	**(1.053 ± 0.001) g·mL^{-1} at 21.4 °C** [b]*		
Solution mass	**(5.258 ± 0.002) g** [b]		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O HNO_3 $UO_2(NO_3)_2$	53 1.0 0.09	0.91 0.06 0.03
Radiological Properties:			
Radionuclide	**Natural Uranium (Mixture of U-238, U-235, and U-234)**		
Reference time	**1200 EST, 1 August 1997**		
Massic activity of the solution [c]	**U-238: 242.0 Bq·g^{-1}** **U-235: 11.14 Bq·g^{-1}** **U-234: 233.1 Bq·g^{-1}**		
Relative expanded uncertainty (k=2)	**U-238: 0.60%** [d] [e] **U-235: 0.62%** [d] [e] **U-234: 0.98%** [d] [e]		
Mass fraction of uranium	**(0.01960 ± 0.00010) g·g^{-1}** [b]		
Photon-emitting impurities	None detected [f]		
Half lives used	Uranium-238: (4.468 ± 0.003) × 10^9 a [g] Uranium-235: (7.038 ± 0.005) × 10^8 a [g] Uranium-234: (2.455 ± 0.006) × 10^5 a [g]		
Measuring instruments	Mass spectrometer, silicon surface-barrier detector, and 4π(α+ß) liquid-scintillation counting systems.		

*Notes and references are on pages 5 and 6.

RC-5-034-051c

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [h]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [i]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [j]
Isotopic uranium atom fraction in SRM 960	Standard deviation of the mean for repeated mass-spectrometric measurements (A)	U-238: 0.001 U-235: 0.07 U-234: 0.31	1.0 1.0 1.0	0.001 0.07 0.31
Half life	Standard uncertainty of the half life (A)	U-238: 0.07 U-235: 0.07 U-234: 0.25	1.0 1.0 1.0	0.07 0.07 0.25
Uranium mass fraction in SRM 960	Certificate value (B)	0.003	1.0	0.003
Quantitative dissolution	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Photon-emitting impurities	Limit of detection (B) [k]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)			U-238: U-235: U-234:	0.30 0.31 0.49
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)			U-238: U-235: U-234:	0.60 0.62 0.98

*Notes and references are on pages 5 and

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NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The stated uncertainty is two times the standard uncertainty.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process.

The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y.

The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty.

The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each standard uncertainty component, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic count rate is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] Estimated limits of detection for photon-emitting impurities are:
1.4 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 8 and 59 keV,
1.1 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 67 and 88 keV,
0.5 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 102 and 197 keV,
0.3 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 205 and 762 keV,
0.2 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 770 and 996 keV, and
0.1 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 1006 and 1900 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of uranium-238, uranium-235, uranium-234, or their progeny.

[g] The stated uncertainty is the standard uncertainty. See reference [5].

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[h] Relative standard uncertainty of the input quantity x_i.

[i] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[j] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[k] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i = 100\%$. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of U-238)}•{(Bq of impurity)/(Bq of U-238)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, U.S.A. 1-212-642-4900.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993. Available from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, U.S.A. 1-212-642-4900. (Listed under ISO miscellaneous publications as "ISO Guide to the Expression 1993".)

[3] B. N. Taylor and C. E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), August 1997.

RC-S-03

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0389
Prepared By:	Angela Albee
Carrier Conc:	0.5 M HNO3
Reference Date:	08/01/1997
Ampoule Mass (g):	5 g
Uncertainty:	+/- .6 %
LogBook No:	RC S 034 051

A Solution Material Info	
Isotope:	Uranium-238
Prepared By:	Angela Albee
Prep Date:	07/31/2001
Verification Date:	07/27/2004
Expiration Date:	07/27/2005
Primary Code:	0389-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.6846 g
Density(g/mL):	1.0142

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.6846 g) * (242 bq/g) * (60 dpm/bq) / (100 mL) = 680.2039 dpm/mL
(4.6846 g) * (242 bq/g) * (60 dpm/bq) / (1.0142 g/mL) / (100 mL) = 670.6699 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/31/2001	Lonnie Morris	20.2428	250	0389-B	54.305 dpm/mL	07/01/2002	07/01/2003
10/31/2002	Lonnie Morris	8.2354	100	0389-C	55.232 dpm/mL	10/31/2002	10/31/2003
02/12/2003	Angela Albee	20.2039	250	0389-D	54.201 dpm/mL	02/02/2004	02/02/2005
01/13/2004	Amanda Fehr	8.2215	100	0389-E	55.14 dpm/mL	01/13/2004	01/13/2005
06/17/2004	Brenda Burke	8.505	250	0389-F	22.8162 dpm/mL	07/22/2004	07/22/2005
07/22/2004	Amanda Fehr	20.12	250	0389-G	53.9755 dpm/mL	07/27/2004	07/27/2005
12/17/2004	Brenda Burke	.6296	100	0389-H	4.2225 dpm/mL	12/20/2004	12/20/2005

Verification for Uranium-238 Standard *0389-G*

Analyst: A. Fehr	Isotope	Value		Uncertainty	
Date: 7/29/04	0389-G N1	2.48	pCi/L	0.355	pCi/L
	0389-G N2	2.41	pCi/L	0.258	pCi/L
	0389-G N3	2.55	pCi/L	0.398	pCi/L
Mean Value (Counting) =	2.480	pCi/S		**1.0200183**	**% of known**
Stdev =	0.07	pCi/S			
Target =	2.43	pCi/L			
Lower Limit =	2.34	pCi/L			
Upper Limit =	2.62	pCi/L			
Rule 1 Pass/Fail	**Pass**	**Pass**		**Pass**	
Two sigma =	0.14				
10 % of Mean =	0.248				
Rule 2 (Pass/Fail)	**Pass**				

The analyst prepared three standard verification sources for standard **0389-G** using 0.2 mL for each source. Each standard was combined with 0.2 mL of **U-232** standard **0688-D** and was diluted to 10 mL with 1M HCL. 50 micrograms of neodymium carrier, and 1 mL of Titanium Chloride were added. Two mL of 48% HF was then added to precipitate neodymium (and **uranium**) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for **U-238** were calculated by comparison to **U-232** certified values.

Reference SOP RAD M-001

Amanda L. Fehr 7/29/04

8/9/04

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

0159

Radionuclide	Th-230	Customer:	GENERAL ENGINEERING LABS
Half Life:	(7.54 ± 0.03) x 10^4 years	P.O.No.:	2507 RD
Catalog No.:	7230	Reference Date:	1 Sep 99 12:00 PST.
Source No.:	678-28-1	Contained Radioactivity:	Th-230: 9.740 μCi (360.4 kBq)

Description of Solution

a. Mass of solution: 4.89252 grams in 5 mL flame sealed ampoule
b. Chemical form: Thorium nitrate in 0.1M nitric acid
c. Carrier content: 10 μg Th/mL of solution
d. Density: 1.0016 gram/ml @ 20°C.

Radioimpurities

Am-241: See Technical Data Sheet

Radioactive Daughters

Ra-226: See Technical Data Sheet

Radionuclide Concentration

Th-230: 1.991 μCi/gram of solution (73.67 kBq/gram of solution)

Method of Calibration

Weighed aliquots of the solution were assayed using a liquid scintillation counter.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration:	±2.0%
b. Random uncertainty in assay:	±0.8%
c. Random uncertainty in weighing(s):	±0.0%
d. Total uncertainty at the 99% confidence level:	±2.2%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay(and later NIST certification) of Standard Reference Materials. (As in NRC Regulatory Guide 4.15)

2. Nuclear data were taken from Table of Radioactive Isotopes (1986), edited by Virginia Shirley.

Daniel James Van Dalsem
QUALITY CONTROL

26-Aug-99
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 N. KEYSTONE STREET
BURBANK, CALIFORNIA 91504
818·843·7000 FAX 818·843·6168

RC-5-024-102

0159

ISOTOPE PRODUCTS LABORATORIES

Corporate and
Manufacturing
18000 W. Keystone Street
Burbank, California
91504
818-843-7000
FAX 818-843-6163

Th-230 TECHNICAL DATA

The Th-230 used to prepare your order was taken from Isotope Products Laboratories Lot #6481 and had the following composition as of December 15, 1994.

NUCLIDE	ATOM%	ACTIVITY%
Th-229	<0.001	$<1.23 \times 10^{-2}$
Th-230	83.71	99.79
Th-232	16.29	1.08×10^{-4}
Ra-226 (daughter Th-230)	----	0.15
Am-241	----	0.05

Isotopic composition provided by Oak Ridge National Laboratory.

No other alpha emitting nuclides were detected.

If you have any questions, please contact Technical Service.

RC-S-024-102A

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0159
Prepared By:	Joe Davis
Carrier Conc:	0.1M HNO3
Reference Date:	09/01/1999
Ampoule Mass (g):	4.89252 g
Uncertainty:	+/- 2.2 %
LogBook No:	RC S 023 102

A Solution Material Info	
Isotope:	Thorium-230
Prepared By:	Joe Davis
Prep Date:	09/21/1999
Verification Date:	06/19/2004
Expiration Date:	06/19/2005
Primary Code:	0159-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.7484 g
Density(g/mL):	0.9992

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.7484 g) * (1.991 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 209880.2297 dpm/mL
(4.7484 g) * (1.991 uCi/g) * (2220000 dpm/uCi) / (0.9992 g/mL) / (100 mL) = 210051.8397 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/29/2001	Angela Albee	.0992	100	0159-H	208.37 dpm/mL	01/29/2001	01/29/2002
02/28/2001	Angela Albee	1.0451	1000	0159-I-102	219.525 dpm/mL	03/06/2002	03/06/2003
02/28/2001	Angela Albee	1.0451	1000	0159-I-202	219.525 dpm/mL	03/12/2002	03/12/2003
09/21/1999	Joe Davis	.1172	100	0159-B	246.18 dpm/mL	09/21/1999	09/21/2000
09/23/1999	Joe Davis	.1016	100	0159-C	213.41 dpm/mL	09/23/1999	09/23/2000
01/10/2000	Joe Davis	.1008	100	0159-D	211.56 dpm/mL	01/10/2000	01/10/2001
02/16/2000	Richard Kinney	.2422	500	0159-E	101.75 dpm/mL	02/16/2000	02/16/2001
03/20/2000	Joe Davis	.0998	100	0159-F	209.63 dpm/mL	03/20/2000	03/20/2001
07/28/2000	Robert Timm	1.0046	1000	0159-G	211.02 dpm/mL	07/28/2000	07/28/2001
05/10/2001	Angela Albee	.0987	1000	0159-J	210.1569 dpm/mL	05/10/2001	05/10/2002
08/31/2001	Lonnie Morris	.0416	100	0159-K	87.31 dpm/mL	09/23/2002	09/23/2003
06/07/2002	Angela Albee	1.0002	1000	0159-L	207.278 dpm/mL	06/07/2002	06/07/2003
01/16/2003	Angela Albee	4.5144	1000	0159-M	947.483 dpm/mL	01/16/2003	01/16/2004
02/27/2003	Angela Albee	1.1079	1000	0159-N	232.526 dpm/mL	02/27/2004	02/27/2005
06/23/2004	Amanda Fehr	1.14	1000	0159-O	239.459 dpm/mL	07/03/2005	07/03/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Th-230 Standard 0159-O

A. Fehr
7/3/2005

Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Amt Used (mL)	Source DPM/mL
0159-N N1	258.0000	23.3000	234.7000	0.9696	1.0000	242.0585809
0159-N N2	259.3000	23.3000	236.0000	0.9696	1.0000	243.3993399
0159-N N3	255.4000	23.3000	232.1000	0.9696	1.0000	239.3770627

Mean Value (Counting) =	241.6116612	dpm/mL	**100.903182**	**% of known**
Stdev =	2.048043318	dpm/mL	0.00847659	
Certificate Value =	239.449	dpm/mL		
Lower Limit =	237.5155745	dpm/mL		
Upper Limit =	245.7077478	dpm/mL		
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**	
Two sigma =	4.096086636			
10 % of Mean =	24.16116612			
Rule 2 (Pass/Fail)	**Pass**			

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

The analyst prepared three standard verification sources for Th-230 source 0159-O by transferring 1.0 mL portions of the standard to glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 26 for alpha source standard verification. The alpha efficiency calibration which was used for verification calculations was performed using NIST source 0556-A (Th-230). Calibration data is recorded in this logbook under Th-230 0556-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 7/13/05

Angela A. Johnson 7/15/05

0133

Certificate of calibration of absolutely standardised radioactive solution

P 3574

UKAS ACCREDITED CALIBRATION LABORATORY No. 0146

Measurement

Reference time for solution number **S6/7/19**: **1200 GMT on 1 April 1996**

Radioactive concentration of strontium-90:	477.1	kilobecquerels per gram of solution
which is equivalent to:	12.89	microcuries per gram of solution
Mass of solution:	5.0669	grams
Total activity of strontium-90:	2.417	megabecquerels
which is equivalent to:	65.3	microcuries

Method of measurement used (see page 3 of the certificate): K

Calibration dates: 25 March 1996 to 27 March 1996

The calibration date is provided for added information only, and must not be confused with the reference date on pages 1 and 2 of the certificate. It is the reference date that must be used in all calculations relating to the values of activity.

Accuracy

Expanded uncertainty in the radioactive concentration quoted above: ± 0.80 %

Combined Type A uncertainty : ± 0.05 %

Combined Type B uncertainty : ± 0.40 %

Radionuclidic purity

The estimated activities of any radioactive impurities found by high-resolution gamma ray spectrometry, or in any other examination of the solution, are listed below expressed as percentages of the activity of the principal radionuclide at the reference time.

Other radionuclides 0.0005(3) %

Chemical composition

0.1 M HCl containing 100 micrograms of strontium and 100 micrograms of yttrium per ml.

Physical data

Recommended half life: 29.12 ± 0.24 years (1 year = 365.25 days)

Strontium-90: 100% beta particle emission.
Yttrium-90: 100% beta particle emission. Half life 64.1 ± 0.1 hours.

The activity of the yttrium-90 is equal to the activity of the strontium-90.

Remarks

This product meets the quality assurance requirements for achieving traceability to NIST as defined in ANSI N42.22-1995.

Tests made over a period of 2 years on standardised solutions of strontium-90 stored in glass ampoules have shown that loss of strontium-90 from solution is negligible other than by radioactive decay.

21-5-073-060

Nycomed Amersham plc
Amersham Laboratories

Certificate of calibration of absolutely standardised radioactive solution

P 35374

NAMAS
CALIBRATION
No. 0146

ISSUED BY:	Nycomed Amersham plc Radiation & Radioactivity Calibration Laboratory Amersham Laboratories White Lion Road Amersham Buckinghamshire HP7 9LL	ISSUED FOR:	AEA Technology plc Isotrak Amersham Laboratories White Lion Road Amersham Buckinghamshire HP7 9LL

Description Principal radionuclide: Strontium-90

Product code: SIZ64
Solution number: S6/7/19

Measurement Reference time: 1200 GMT on 1 April 1996

Nuclear data Nuclear data quoted on this certificate are taken from the Joint European File, Version 2.2.

Expression of uncertainties The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k = 2.00$, which for a t-distribution with $\nu_{eff} = \infty$ effective degrees of freedom corresponds to a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Unless indicated, all other uncertainties are expressed at the confidence level associated with one standard uncertainty.

The format used for the uncertainties in the values of radionuclidic purity is illustrated by the following examples;

6.5(21)	=	6.5 ± 2.1
6.54(21)	=	6.54 ± 0.21
6.543(21)	=	6.543 ± 0.021

Approved Signatory W. F. Case

Date of issue 11 May 1999

1797

LC-S-073-060A

Nycomed

Certificate of calibration of absolutely standardised radioactive solution

P 35474

UKAS ACCREDITED CALIBRATION LABORATORY No. 0146

Methods of measurement

The measurement techniques listed below are currently in use at Nycomed Amersham for the absolute standardisation of radioactive solutions. The methods used for this standardisation are indicated on page 2 of the certificate.

Using a gas flow proportional counter

A	4 pi beta counting
B	4 pi alpha counting
C	4 pi internal conversion electron counting
D	4 pi coincidence counting
E	4 pi anticoincidence counting
F	4 pi coincidence and anticoincidence counting

Using a liquid scintillation counter

G	4 pi coincidence counting
H	4 pi anticoincidence counting
J	4 pi coincidence and anticoincidence counting
K	4 pi efficiency tracing

SI unit of radioactivity

The S.I. unit of radioactivity is the becquerel

1 becquerel (Bq) = 1 nuclear transformation per second, therefore

1 curie (Ci) = 3.7×10^{10} becquerels exactly

Useful conversion factors are:

1 microcurie (μCi)	=	3.7×10^{4} Bq	=	37 kilobecquerels (kBq)
1 millicurie (mCi)	=	3.7×10^{7} Bq	=	37 megabecquerels (MBq)
1 kilobecquerel (kBq)	=	27.027 nanocuries (nCi)		
1 megabecquerel (MBq)	=	27.027 microcuries (μCi)		

RC-5-023-060B

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0133
Prepared By:	Joe Davis
Carrier Conc:	0.1 M HCL
Reference Date:	04/01/1996
Ampoule Mass (g):	5.0669 g
Uncertainty:	+/- .8 %
LogBook No:	RC S 023 060

A Solution Material Info	
Isotope:	Strontium-90
Prepared By:	Joe Davis
Prep Date:	09/25/1999
Verification Date:	05/26/2004
Expiration Date:	05/26/2005
Primary Code:	0133-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8374 g
Density(g/mL):	1.0041

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.8374 g) * (12.89 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 1384260.7092 dpm/mL
(4.8374 g) * (12.89 uCi/g) * (2220000 dpm/uCi) / (1.0041 g/mL) / (100 mL) = 1378622.1492 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
09/06/2000	Joe Davis	.0899	1000	0133-F	124.445 dpm/mL	09/06/2000	09/06/2001
12/05/1999	Joe Davis	.9937	100	0133-C	13699.37 dpm/mL	12/05/1999	12/05/2000
12/05/1999	Joe Davis	.0995	100	0133-B	1371.73 dpm/mL	12/05/1999	12/05/2000
02/16/2000	Richard Kinney	.0349	500	0133-D	96.23 dpm/mL	02/16/2000	02/16/2001
03/09/2000	Richard Kinney	.0282	250	0133-E	155.51 dpm/mL	03/09/2000	03/09/2001
10/13/2000	Robert Timm	.3194	1000	0133-G-104	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	1.0865	100	0133-H	14978.73 dpm/mL	10/09/2002	10/09/2003
10/13/2000	Robert Timm	.3194	1000	0133-G-204	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	.3194	1000	0133-G-304	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	.3194	1000	0133-G-404	440.332 dpm/mL	10/09/2001	10/09/2002
05/10/2001	Angela Albee	1.0005	1000	0133-I	1379.311 dpm/mL	05/11/2001	05/11/2002
05/06/2002	Angela Albee	.3738	1000	0133-J	515.329 dpm/mL	05/09/2002	05/09/2003
06/07/2002	Angela Albee	.1816	1000	0133-K	250.358 dpm/mL	06/07/2002	06/07/2003
01/16/2003	Angela Albee	.2964	1000	0133-L	408.624 dpm/mL	01/16/2003	01/16/2004
04/18/2003	Lonnie Morris	.3247	1000	0133-M	447.6386 dpm/mL	04/16/2004	04/16/2005
10/31/2002	Angela Albee	10.11	1000	0133-G		10/31/2002	10/31/2003
05/25/2004	Amanda Fehr	.361	1000	0133-N	497.6826 dpm/mL	05/25/2005	05/25/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Sr-90 Standard 0133-N

A. Fehr 5/24/2005	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Vol. Used (mL)	Source DPM/mL
	0133-N N1	847.5000	30.2000	817.3000	1.99637882	1.0000	409.3912406
	0133-N N2	844.0000	30.2000	813.8000	1.99637882	1.0000	407.6380664
	0133-N N3	846.7000	30.2000	816.5000	1.99637882	1.0000	408.9905151
						Average =	408.673274

Mean Value (Counting) =	408.673274	dpm/mL	**100.350716**	**Pass**
Stdev =	0.918632917	dpm/mL	0.00224784	**Rule 3 (Pass/Fail)**

Certificate Value =	407.245	dpm/mL
Lower Limit =	406.8360082	dpm/mL
Upper Limit =	410.5105399	dpm/mL
Rule 1 Pass/Fail	**Pass**	
Two sigma =	1.837265833	
10 % of Mean =	40.8673274	
Rule 2 (Pass/Fail)	**Pass**	

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

1801

The analyst prepared three standard verification sources for Sr-90 source 0133-N by transferring 1.0 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 17 for Sr-90 source standard verification. The Sr-90 efficiency calibration which was used for verification calculations was performed on 5/24/05 using source
0717-A (Sr-90). Calibration data is recorded in this logbook under Sr-90 0418. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 5/24/05
Heather Acree 6/15/05

STANDARDIZATION OF STRONTIUM CARRIER

DATE:	5/23/2005	EXP. DATE:	11/13/2006
LOT NUMBER	1005753		

STRONTIUM PRECIPITATES

	1	2	3	4
Weight of carrier added	1.0324	1.0327	1.0291	1.0318
Aliquot (1.00 mL)				
Crucible + ppt.	17.2738	20.0436	18.1282	17.3798
Crucible	17.2559	20.0258	18.1105	17.3619
Wt. of ppt., g	0.0179	0.0178	0.0177	0.0179
mg Sr/mL	17.90	17.80	17.70	17.90
mg Sr/g	17.34	17.24	17.20	17.35

Must weigh carrier added

Average	**Std. Dev.**	
17.83	± 0.10	0.00537126
17.28	± 0.07	0.00428424
mg Sr/ 0.5 mL		**8.91**
mg Sr/g		17.28

0.5% of Mean Value = 0.089125 Pass

A satisfactory standardization is obtained when results give a standard deviation of less than 0.5% of the mean value.

0321

National Institute of Standards & Technology

Certificate

Standard Reference Material 4967
Radioactivity Standard

Radionuclide	Radium-226 [1]*
Source identification	SRM 4967
Source description	Liquid in a 5-mL, flame-sealed NIST borosilicate-glass ampoule [2]
Solution composition	Approximately 1.4 mol•L^{-1} HCl[3] containing 1.74 mg $BaCl_2$ per gram of solution[4] and Ra^{+2} [5]
Solution density	1.019 ± 0.001 g•mL^{-1} at 22 °C [6]
Solution mass	5.1167 ± 0.0027 g [7]
Radium-226 activity concentration	2729 Bq•g^{-1} [8]
Reference time	1200 EST 9 September 1991
Overall uncertainty	1.18 percent [9]
Half life	1600 ± 7 years [10]
Calibration method	NIST pressurized "4π"γ ionization chamber "A" calibrated with the national radium standards[11]; and confirmatory measurements [12]

This standard reference material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, Dale D. Hoppes, Group Leader.

Gaithersburg, MD
January 1992

William P. Reed, Chief
Standard Reference Materials Program

*Notes on back

RC-S-027-150

NOTES

(1) This standard was prepared by gravimetric dilutions of the "1947 series" of ^{226}Ra standards which were recalibrated at NIST (NBS) in 1967. The "age" of the radium, with accompanying in-growth of ^{210}Pb, is at least 44.3 years.

(2) Approximately five milliliters of solution. Ampoule specifications:

body diameter	16.5 ± 0.5 mm
wall thickness	0.60 ± 0.04 mm
barium content	less than 2.5 percent
lead oxide content	less than 0.02 percent
other heavy elements	trace quantities

(3) Corresponding to a 14.9% (by weight) solution of NIST, high-purity, vacuum-distilled hydrochloric acid (nominal 10 $mol \cdot L^{-1}$) in doubly-distilled water.

(4) The $BaCl_2$ reagent used to prepare the carrier solution was measured in a NaI(Tl) well counter and found to contain ≤ 0.01 Bq ^{226}Ra per gram of $BaCl_2$.

(5) The atom ratio of barium carrier to radium in the solution is approximately 2.5×10^4.

(6) The uncertainty in the density is three times the standard deviation of the mean for three independent gravimetric determinations. Confirmatory measurements based on the total master solution mass and individually dispensed masses in known volumes were in agreement.

(7) Mean mass of the dispensed solution in the ampoule. The uncertainty is three times the standard deviation of 19 individually weighed masses of solution from which the mean mass was calculated.

(8) Corresponding to 7.461×10^{-8} g ^{226}Ra per gram of solution assuming a conversion factor of 36.576 $kBq \cdot \mu g^{-1}$.

(9) The overall uncertainty, 1.18 percent, was formed by taking three times the quadratic combination of the standard deviation of the mean, or approximations thereof, for the following component uncertainties:

a) four ion chamber "A" measurements on samples of 2 dilutions	0.051 percent
b) twenty-two comparative ion chamber "A" measurements on 8 "1947(1967 recalibrated) series" of ^{226}Ra standards	0.040 percent
c) ion chamber calibration for the "1947(1967 recalibrated) series" [with respect to the "radiation balance" primary measurements on the "1957 series" and national radium standards (see note 11)]	0.34 percent
d) gravimetric dilution factor	0.1 percent
e) half-life correction	0.0046 percent
f) ^{226}Ra mass to activity conversion	0.16 percent

(10) NCRP Report No. 58, 2nd ed., Appendix A3 (Feb. 1985).

(11) For further details on NIST (NBS) radium series calibrations see W.B. Mann, et al., J. Res. NBS 62, 21-26 (1959). The 1967 recalibration of the "1947 series" and "1957 series" intercomparisons were made with chamber "A".

(12) For confirmation, this ^{226}Ra standard series was also directly compared against preparations of the "1947" (1967 recalibration)", "1978", and "1984" ^{226}Ra series by ^{222}Rn analyses with the NIST pulse-ionization-chamber Primary Radon Measurement System [R. Collé, et al., J. Res. NIST 95 155-165 (1990); J.M.R. Hutchinson, et al., Appl. Rad. Isot. 43, 175-189 (1992)], by liquid scintillation counting, and by NaI(Tl) well-crystal and Ge γ-spectrometry.

For further information please contact R. Collé, (301) 975-5527.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0321
Prepared By:	Angela Albee
Carrier Conc:	1 M HCL
Reference Date:	09/09/1991
Ampoule Mass (g):	5.1167 g
Uncertainty:	+/- 1.18 %
LogBook No:	RC S 027 150

A Solution Material Info	
Isotope:	Radium-226
Prepared By:	Angela Albee
Prep Date:	02/20/2002
Verification Date:	05/20/2005
Expiration Date:	05/20/2006
Primary Code:	0321-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8303 g
Density(g/mL):	1.0099

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.8303 g) * (2729 bq/g) * (60 dpm/bq) / (100 mL) = 7909.1332 dpm/mL
(4.8303 g) * (2729 bq/g) * (60 dpm/bq) / (1.0099 g/mL) / (100 mL) = 7831.6081 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/20/2002	Angela Albee	3.1119	100	0321-B	243.712 dpm/mL	02/20/2002	02/20/2003
02/20/2002	Angela Albee	15.194	100	0321-C	1189.9345 dpm/mL	02/20/2002	02/20/2003
02/04/2003	Angela Albee	3.1704	100	0321-D	248.293 dpm/mL	02/04/2003	02/04/2004
06/10/2003	Angela Albee	1.5178	100	0321-E	118.868 dpm/mL	06/10/2003	06/10/2004
12/30/2003	Amanda Fehr	3.3464	100	0321-F	262.1 dpm/mL	01/12/2004	01/12/2005
09/13/2004	Amanda Fehr	3.6239	100	0321-G	283.81 dpm/mL	09/13/2004	09/13/2005
05/18/2005	Amanda Fehr	3.4427	100	0321-H	269.6188 dpm/mL	05/20/2005	05/20/2006

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Verification for Ra-226 Standard 0321-H

A. Fehr
5/20/2005

Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
0321-H N1	1170.1000	34.2000	1135.9000	4.20643586	1.0000	270.0385881
0321-H N2	1137.8000	34.2000	1103.6000	4.20643586	1.0000	262.3598783
0321-H N3	1149.6000	34.2000	1115.4000	4.20643586	1.0000	265.1651036
					Average =	265.8545233

Mean Value (Counting) =	265.8545233	**99.1905663**	**Pass**
Stdev =	3.885501322	0.01461514	**Rule 3 (Pass/Fail)**

Certificate Value =	268.0
Lower Limit =	258.0835207
Upper Limit =	273.625526
Rule 1 Pass/Fail	**Pass**
Two sigma =	7.771002644
10 % of Mean =	26.58545233
Rule 2 (Pass/Fail)	**Pass**

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for Ra-226 source 0321-H by transferring portions of the standard into tared glass liquid scintillation vials. One mL of DI Water and 10 mL Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Green using source standard verification. The Ra-226 efficiency calibration which was used for verification calculations was performed on 5/20/05 using source 0299-A (Ra-226). Calibration data is recorded in this logbook under Ra-226 (0299-A). Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 5/20/05
Angela A. Johnson 5/24/05

RUNLOGS

Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138436004	SAMPLE	SCP	1039		29-JUN-2005 16:15	435429		
138675001	SAMPLE	SCP	1042		29-JUN-2005 16:15	435429		
138373001	SAMPLE	SCP	1083		29-JUN-2005 16:16	435429		
138373002	SAMPLE	SCP	1084		29-JUN-2005 16:16	435429		
138373003	SAMPLE	SCP	1085		29-JUN-2005 16:16	435429		
138436003	SAMPLE	SCP	1086		29-JUN-2005 16:16	435429		
138675002	SAMPLE	SCP	1048		30-JUN-2005 14:00	435429		
138800001	SAMPLE	SCP	1053		30-JUN-2005 14:00	435429		
138800002	SAMPLE	SCP	1054		30-JUN-2005 14:00	435429		
138800003	SAMPLE	SCP	1058		30-JUN-2005 14:00	435429		
138800004	SAMPLE	SCP	1059		30-JUN-2005 14:00	435429		
138851001	SAMPLE	SCP	1061		30-JUN-2005 14:00	435429		
138851002	SAMPLE	SCP	1062		30-JUN-2005 14:00	435429		
138851003	SAMPLE	SCP	1064		30-JUN-2005 14:00	435429		
138851004	SAMPLE	SCP	1065		30-JUN-2005 14:00	435429		
138905005	SAMPLE	SCP	1068		30-JUN-2005 14:00	435429		
1200870937	MB	SCP	1069		30-JUN-2005 14:00	435429		
1200870938	DUP	SCP	1070		30-JUN-2005 14:00	435429		
1200870939	LCS	SCP	1071		30-JUN-2005 14:00	435429		
138905001	SAMPLE	SCP	1087		30-JUN-2005 14:00	435429		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138373001	SAMPLE	SCP	1072		30-JUN-2005 14:00	435430		
138373002	SAMPLE	SCP	1073		30-JUN-2005 14:00	435430		
138373003	SAMPLE	SCP	1074		30-JUN-2005 14:00	435430		
138436003	SAMPLE	SCP	1075		30-JUN-2005 14:00	435430		
138436004	SAMPLE	SCP	1077		30-JUN-2005 14:00	435430		
138675001	SAMPLE	SCP	1078		30-JUN-2005 14:00	435430		
138675002	SAMPLE	SCP	1079		30-JUN-2005 14:00	435430		
138800001	SAMPLE	SCP	1081		30-JUN-2005 14:00	435430		
138800002	SAMPLE	SCP	1082		30-JUN-2005 14:00	435430		
138800003	SAMPLE	SCP	1083		30-JUN-2005 14:00	435430		
138800004	SAMPLE	SCP	1084		30-JUN-2005 14:00	435430		
138851001	SAMPLE	SCP	1085		30-JUN-2005 14:00	435430		
138851002	SAMPLE	SCP	1086		30-JUN-2005 14:00	435430		
138851003	SAMPLE	SCP	1101		01-JUL-2005 22:01	435430		
138851004	SAMPLE	SCP	1102		01-JUL-2005 22:01	435430		
138905001	SAMPLE	SCP	1103		01-JUL-2005 22:01	435430		
138905005	SAMPLE	SCP	1105		01-JUL-2005 22:01	435430		
1200870940	MB	SCP	1106		01-JUL-2005 22:01	435430		
1200870941	DUP	SCP	1109		01-JUL-2005 22:01	435430		
1200870942	LCS	SCP	1094		05-JUL-2005 14:15	435430		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138373001	SAMPLE	SCP	1019		29-JUN-2005 15:13	435431		
138373002	SAMPLE	SCP	1020		29-JUN-2005 15:13	435431		
138373003	SAMPLE	SCP	1021		29-JUN-2005 15:13	435431		
138436003	SAMPLE	SCP	1022		29-JUN-2005 15:13	435431		
138436004	SAMPLE	SCP	1023		29-JUN-2005 15:13	435431		
138675001	SAMPLE	SCP	1024		29-JUN-2005 15:13	435431		
138675002	SAMPLE	SCP	1065		29-JUN-2005 16:16	435431		
138800001	SAMPLE	SCP	1068		29-JUN-2005 16:16	435431		
138800002	SAMPLE	SCP	1069		29-JUN-2005 16:16	435431		
138800003	SAMPLE	SCP	1070		29-JUN-2005 16:16	435431		
138800004	SAMPLE	SCP	1071		29-JUN-2005 16:16	435431		
138851001	SAMPLE	SCP	1072		29-JUN-2005 16:16	435431		
138851002	SAMPLE	SCP	1073		29-JUN-2005 16:16	435431		
138851003	SAMPLE	SCP	1074		29-JUN-2005 16:16	435431		
138851004	SAMPLE	SCP	1075		29-JUN-2005 16:16	435431		
138905001	SAMPLE	SCP	1077		29-JUN-2005 16:16	435431		
138905005	SAMPLE	SCP	1078		29-JUN-2005 16:16	435431		
1200870943	MB	SCP	1079		29-JUN-2005 16:16	435431		
1200870944	DUP	SCP	1081		29-JUN-2005 16:16	435431		
1200870945	LCS	SCP	1082		29-JUN-2005 16:16	435431		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138533001	SAMPLE	AKB	GAMMA10		29-JUN-2005 23:06	435282	2L_MB	18-JAN-2005
138533002	SAMPLE	AKB	GAMMA17		29-JUN-2005 23:08	435282	2L_MB	06-DEC-2004
138659014	SAMPLE	AKB	GAMMA4		30-JUN-2005 15:42	435282	2L_MB	18-JAN-2005
138659015	SAMPLE	AKB	GAMMA7		30-JUN-2005 15:43	435282	2L_MB	03-JAN-2005
138675001	SAMPLE	AKB	GAMMA8		30-JUN-2005 15:44	435282	2L_MB	04-OCT-2004
138799002	SAMPLE	AKB	GAMMA11		30-JUN-2005 15:45	435282	2L_MB	18-JAN-2005
138800001	SAMPLE	AKB	GAMMA16		30-JUN-2005 15:49	435282	2L_MB	08-DEC-2004
138800002	SAMPLE	AKB	GAMMA2		30-JUN-2005 22:54	435282	2L_MB	18-JAN-2005
138800003	SAMPLE	AKB	GAMMA10		30-JUN-2005 22:56	435282	2L_MB	18-JAN-2005
138800004	SAMPLE	AKB	GAMMA1		30-JUN-2005 22:56	435282	2L_MB	18-JAN-2005
138851001	SAMPLE	AKB	GAMMA3		30-JUN-2005 23:31	435282	2L_MB	24-MAR-2005
138675002	SAMPLE	AKB	GAMMA11		30-JUN-2005 23:54	435282	2L_MB	18-JAN-2005
138851002	SAMPLE	AKB	GAMMA16		30-JUN-2005 23:54	435282	2L_MB	08-DEC-2004
138851003	SAMPLE	AKB	GAMMA10		01-JUL-2005 15:14	435282	2L_MB	18-JAN-2005
138851004	SAMPLE	AKB	GAMMA11		01-JUL-2005 15:14	435282	2L_MB	18-JAN-2005
1200870617	LCS	AKB	GAMMA3		01-JUL-2005 19:24	435282	2L_MB	24-MAR-2005
138905001	SAMPLE	AKB	GAMMA1		01-JUL-2005 20:59	435282	2L_MB	18-JAN-2005
138905005	SAMPLE	AKB	GAMMA6		01-JUL-2005 21:00	435282	2L_MB	06-DEC-2004
1200870615	MB	AKB	GAMMA3		01-JUL-2005 21:01	435282	2L_MB	24-MAR-2005
1200870616	DUP	AKB	GAMMA17		05-JUL-2005 08:13	435282	2L_MB	06-DEC-2004

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138533002	SAMPLE	SXE1	LB4100F1		07-JUL-2005 11:45	435482	2 inch Planchett	19-JUL-2004
138675001	SAMPLE	SXE1	LB4100F2		07-JUL-2005 11:45	435482	2 inch Planchett	19-JUL-2004
138675002	SAMPLE	SXE1	LB4100F3		07-JUL-2005 11:45	435482	2 inch Planchett	19-JUL-2004
138788004	SAMPLE	SXE1	LB4100F4		07-JUL-2005 11:45	435482	2 inch Planchett	19-JUL-2004
138799002	SAMPLE	SXE1	LB4100A1		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138800001	SAMPLE	SXE1	LB4100A2		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138851001	SAMPLE	SXE1	LB4100C1		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138851002	SAMPLE	SXE1	LB4100C2		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138851003	SAMPLE	SXE1	LB4100C3		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138851004	SAMPLE	SXE1	LB4100C4		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138905001	SAMPLE	SXE1	LB4100D1		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138905005	SAMPLE	SXE1	LB4100D2		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
1200874003	MB	SXE1	LB4100D3		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
1200874004	DUP	SXE1	LB4100D4		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138800002	SAMPLE	SXE1	LB4100B1		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138800003	SAMPLE	SXE1	LB4100B3		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
138800004	SAMPLE	SXE1	LB4100B4		07-JUL-2005 12:18	435482	2 inch Planchett	19-JUL-2004
1200874006	MSD	SXE1	LB4100E3		07-JUL-2005 12:58	435482	2 inch Planchett	19-JUL-2004
1200874007	LCS	SXE1	LB4100E4		07-JUL-2005 12:58	435482	2 inch Planchett	19-JUL-2004
138533001	SAMPLE	SXE1	LB4100H1		07-JUL-2005 21:31	435482	2 inch Planchett	19-JUL-2004
1200874005	MS	SXE1	LB4100D1		08-JUL-2005 10:10	435482	2 inch Planchett	19-JUL-2004

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138436003	SAMPLE	EXW1	PIC4D		30-JUN-2005 08:26	435484	Tuffryn Filter	02-NOV-2004
1200871075	LCS	EXW1	PIC1C		30-JUN-2005 10:46	435484	Tuffryn Filter	02-NOV-2004
138436004	SAMPLE	EXW1	PIC1A		30-JUN-2005 12:51	435484	Tuffryn Filter	02-NOV-2004
138450001	SAMPLE	EXW1	PIC1B		30-JUN-2005 12:51	435484	Tuffryn Filter	02-NOV-2004
138450002	SAMPLE	EXW1	PIC1C		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138450003	SAMPLE	EXW1	PIC1D		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138450004	SAMPLE	EXW1	PIC2A		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138659014	SAMPLE	EXW1	PIC2B		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138659015	SAMPLE	EXW1	PIC2C		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138675001	SAMPLE	EXW1	PIC2D		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138675002	SAMPLE	EXW1	PIC3A		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138800001	SAMPLE	EXW1	PIC3B		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138800002	SAMPLE	EXW1	PIC3D		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138800003	SAMPLE	EXW1	PIC4A		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
138800004	SAMPLE	EXW1	PIC4B		30-JUN-2005 12:52	435484	Tuffryn Filter	02-NOV-2004
1200871074	MS	EXW1	PIC4D		30-JUN-2005 16:26	435484	Tuffryn Filter	02-NOV-2004
138851001	SAMPLE	EXW1	PIC1A		30-JUN-2005 20:03	435484	Tuffryn Filter	02-NOV-2004
138851002	SAMPLE	EXW1	PIC1B		30-JUN-2005 20:03	435484	Tuffryn Filter	02-NOV-2004
138851003	SAMPLE	EXW1	PIC1C		30-JUN-2005 20:03	435484	Tuffryn Filter	02-NOV-2004
138851004	SAMPLE	EXW1	PIC1D		30-JUN-2005 20:03	435484	Tuffryn Filter	02-NOV-2004
138905001	SAMPLE	EXW1	PIC2A		30-JUN-2005 20:03	435484	Tuffryn Filter	02-NOV-2004
138905005	SAMPLE	EXW1	PIC2B		30-JUN-2005 20:03	435484	Tuffryn Filter	02-NOV-2004
1200871072	MB	EXW1	PIC2C		30-JUN-2005 20:04	435484	Tuffryn Filter	02-NOV-2004
1200871073	DUP	EXW1	PIC2D		30-JUN-2005 20:04	435484	Tuffryn Filter	02-NOV-2004

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138259002	SAMPLE	LAG1	LSCPINK		06-JUL-2005 12:44	435237	13mL Trisafe/10ml sample	08-APR-2005
138369001	SAMPLE	LAG1	LSCPINK		06-JUL-2005 14:17	435237	13mL Trisafe/10ml sample	08-APR-2005
138533001	SAMPLE	LAG1	LSCPINK		06-JUL-2005 15:49	435237	13mL Trisafe/10ml sample	08-APR-2005
138788004	SAMPLE	LAG1	LSCPINK		06-JUL-2005 17:22	435237	13mL Trisafe/10ml sample	08-APR-2005
138799002	SAMPLE	LAG1	LSCPINK		06-JUL-2005 18:55	435237	13mL Trisafe/10ml sample	08-APR-2005
138800003	SAMPLE	LAG1	LSCPINK		06-JUL-2005 20:27	435237	13mL Trisafe/10ml sample	08-APR-2005
138800004	SAMPLE	LAG1	LSCPINK		06-JUL-2005 22:00	435237	13mL Trisafe/10ml sample	08-APR-2005
138851003	SAMPLE	LAG1	LSCPINK		06-JUL-2005 23:32	435237	13mL Trisafe/10ml sample	08-APR-2005
138851004	SAMPLE	LAG1	LSCPINK		07-JUL-2005 01:05	435237	13mL Trisafe/10ml sample	08-APR-2005
138905005	SAMPLE	LAG1	LSCPINK		07-JUL-2005 02:37	435237	13mL Trisafe/10ml sample	08-APR-2005
1200870537	MB	LAG1	LSCPINK		07-JUL-2005 04:10	435237	13mL Trisafe/10ml sample	08-APR-2005
1200870538	DUP	LAG1	LSCPINK		07-JUL-2005 05:42	435237	13mL Trisafe/10ml sample	08-APR-2005
1200870539	MS	LAG1	LSCPINK		07-JUL-2005 07:15	435237	13mL Trisafe/10ml sample	08-APR-2005
1200870540	LCS	LAG1	LSCPINK		07-JUL-2005 07:47	435237	13mL Trisafe/10ml sample	08-APR-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138259002	SAMPLE	BXD1	LSCBLUE		04-JUL-2005 23:31	435379	5ml DI/10ml ultima gold	20-JUN-2005
138259003	SAMPLE	BXD1	LSCBLUE		05-JUL-2005 00:34	435379	5ml DI/10ml ultima gold	20-JUN-2005
138436004	SAMPLE	BXD1	LSCBLUE		05-JUL-2005 01:36	435379	5ml DI/10ml ultima gold	20-JUN-2005
138851003	SAMPLE	BXD1	LSCBLUE		05-JUL-2005 02:39	435379	5ml DI/10ml ultima gold	20-JUN-2005
1200870805	MB	BXD1	LSCBLUE		05-JUL-2005 03:42	435379	5ml DI/10ml ultima gold	20-JUN-2005
1200870806	DUP	BXD1	LSCBLUE		05-JUL-2005 04:44	435379	5ml DI/10ml ultima gold	20-JUN-2005
1200870807	MS	BXD1	LSCBLUE		05-JUL-2005 05:46	435379	5ml DI/10ml ultima gold	20-JUN-2005
1200870808	LCS	BXD1	LSCBLUE		05-JUL-2005 06:35	435379	5ml DI/10ml ultima gold	20-JUN-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138851004	SAMPLE	EGD1	LSCBLUE		05-JUL-2005 19:04	438136	5ml DI/10ml ultima gold	20-JUN-2005
139551002	SAMPLE	EGD1	LSCBLUE		05-JUL-2005 20:07	438136	5ml DI/10ml ultima gold	20-JUN-2005
1200877105	MB	EGD1	LSCBLUE		05-JUL-2005 21:09	438136	5ml DI/10ml ultima gold	20-JUN-2005
1200877106	DUP	EGD1	LSCBLUE		05-JUL-2005 22:12	438136	5ml DI/10ml ultima gold	20-JUN-2005
1200877107	MS	EGD1	LSCBLUE		05-JUL-2005 23:14	438136	5ml DI/10ml ultima gold	20-JUN-2005
1200877108	LCS	EGD1	LSCBLUE		06-JUL-2005 00:00	438136	5ml DI/10ml ultima gold	20-JUN-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138436003	SAMPLE	AB1	LUCAS2		01-JUL-2005 13:35	437415	Lucas Cell	09-MAY-2005
138436004	SAMPLE	AB1	LUCAS3		01-JUL-2005 13:35	437415	Lucas Cell	26-OCT-2004
138851001	SAMPLE	AB1	LUCAS4		01-JUL-2005 13:35	437415	Lucas Cell	23-SEP-2004
138851002	SAMPLE	AB1	LUCAS5		01-JUL-2005 13:35	437415	Lucas Cell	08-NOV-2004
138851003	SAMPLE	AB1	LUCAS6		01-JUL-2005 13:35	437415	Lucas Cell	22-NOV-2004
138851004	SAMPLE	AB1	LUCAS1		01-JUL-2005 14:25	437415	Lucas Cell	09-DEC-2004
139405001	SAMPLE	AB1	LUCAS2		01-JUL-2005 14:25	437415	Lucas Cell	09-MAY-2005
139405002	SAMPLE	AB1	LUCAS3		01-JUL-2005 14:25	437415	Lucas Cell	26-OCT-2004
1200875441	MB	AB1	LUCAS4		01-JUL-2005 14:25	437415	Lucas Cell	23-SEP-2004
1200875442	DUP	AB1	LUCAS5		01-JUL-2005 14:25	437415	Lucas Cell	08-NOV-2004
1200875443	MS	AB1	LUCAS6		01-JUL-2005 14:25	437415	Lucas Cell	22-NOV-2004
1200875444	LCS	AB1	LUCAS1		01-JUL-2005 15:00	437415	Lucas Cell	09-DEC-2004

Version 1.0 11/28/99
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Memorandum-Revised

Date: 08/18/05

To: William Turney

From: Mark Mensik

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WG-02537-GE
SDG: 139405
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

Sample GU05050GMC401	The result for 1,4-dioxane should be **qualified J, V7b** due to an initial calibration relative response factor <0.01. The result for isobutyl alcohol should be **qualified UJ, V7b, VWQ9** due to an initial calibration slope <0.05 and continuing calibration verification recovery. The 1,2-dibromoethane result should be **qualified R, VWQ5** due to calibration problems. The result for cis-1,3-dichloropropene should be **qualified UJ, VWQ3** due to low matrix spike duplicate recovery.
Sample GU05050GMC401-FTB	The result for 1,4-dioxane should be **qualified R, V7b** due to a relative response factor <0.01. The result for acetone should be **qualified R, VWQ5, VWQ9** due to calibration problems and continuing calibration verification recovery. The results for acrolein, propionitrile, isobutyl alcohol and acetonitrile should be **qualified UJ, V7b, VWQ9** due to an initial calibration slope or response factor <0.05 and continuing calibration verification recovery. The results for vinyl acetate, 2-hexanone, 2-butanone and methacrylonitrile should be **qualified UJ**, **VWQ9** due to continuing calibration verification recovery. The result for cis-1,3-dichloropropene should be **qualified UJ, VWQ3** due to matrix spike duplicate recovery.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using method SW846 8260B DOE-AL (VOCs). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct with the following exception. The VOC order suite code listed on the COCs for the trip blank was "GW: VOA FTB", while the code listed for the field sample was "WG VOA w/MS+TICs". These codes do not contain identical target analytes. GEL analyzed the trip blank and the field sample based on the "WG VOA w/MS+TICs" order suite code. GEL did not document this discrepancy. No sample data should be qualified based on this discrepancy.

Holding Times and Preservation

The samples were analyzed within the prescribed holding time and properly preserved.

Instrument Tune

All instrument tune requirements were met.

Calibration

The samples in this SDG were assigned to the same batch, but were analyzed on separate instruments under separate calibrations. All initial and continuing calibration QC acceptance criteria were met with the following exceptions.

The initial calibration for sample GU05050GMC401-FTB had a negative intercept whose absolute value was >3X MDL for acetone. The associated acetone result was non-detect (ND) and should be **qualified R**. The initial calibration for sample GU05050GMC401-FTB had positive intercepts for 1,1dichloroethylene; iodomethane; acetonitrile; 2-butanone; bromoform and 1,2-dibromo-3-chloropropane that were >3X MDL. None of these compounds were detected in this sample and thus should not be qualified.

The initial calibration for 1,4-dioxane associated with sample GU05050GMC401-FTB had a RF < 0.01. The 1,4-Dioxane result was ND for this sample, and should be **qualified R**. The initial calibration associated with sample GU05050GMC401-FTB had slopes or response factors $\geq$ 0.01 but < 0.05 for acrolein, acetonitrile, isobutyl alcohol and propionitrile. All associated sample results were ND for this sample and should be **qualified UJ**.

The continuing calibration verification (CCV) percent differences (%Ds) associated with sample GU05050GMC401-FTB were >20%, with positive bias, for dichlorodifluoromethane and allyl chloride. The associated sample results were ND for these compounds and should not be qualified.

The CCV %Ds associated with sample GU05050GMC401-FTB were >20% but ≤40%, with negative bias, for acrolein: acetone; acetonitrile; propionitrile; 1,2-dibromo-3-chloropropane; 4-methyl-2-pentanone; naphthalene and isobutyl alcohol. Acrolein, acetonitrile; isobutyl alcohol and propionitrile were ND and had other calibration infractions, and thus should be **qualified UJ**. Acetone was ND and had other calibration infractions and would be qualified UJ, however it was further qualified R due to an intercept infraction. The 1,2-dibromo-3-chloropropane; 4-Methyl-2-pentanone and naphthalene results were ND and no other calibration infractions applied to these compounds, therefore results for these compounds should not be qualified.

The CCV %Ds for sample GU05050GMC401-FTB were >40% but ≤60%, with negative bias, for 2-butanone, vinyl acetate, 2-hexanone, and methacrylonitrile. All associated sample results were ND and should be **qualified UJ**.

The initial calibration for 1,4-dioxane in sample GU05050GMC401 had a response factor (RF) < 0.01. 1,4-Dioxane was detected above the reporting limit in this sample, and should be **qualified J**.

The initial calibration associated with sample GU05050GMC401 had a slope ≥ 0.01 but < 0.05 for isobutyl alcohol. The sample result was ND and should be **qualified UJ**.

The initial calibration associated with sample GU05050GMC401 had a 1,2-dibromomethane intercept that was negative and had an absolute value >3XMDL. The associated sample result for 1,2-dibromomethane was ND and should be **qualified R**.

The CCV %Ds for sample GU05050GMC401 were >20% but ≤40%, with negative bias, for chloromethane; acetone; isobutyl alcohol; 1,2-dibromo-3-chloropropane; acetonitrile; carbon disulfide; 2-butanone; dibromomethane; 4-methyl-2-pentanone; cis-1,3-dichloropropene; trans-1,3-dichloropropene; 2-hexanone; isopropylbenzene; 1,1,2,2-tetrachloroethane; 1,2,3-trichloropropane; n-propylbenzene; naphthalene; vinyl acetate and methacrylonitrile. Isobutyl alcohol was ND, but had a slope infraction for the initial calibration, thus should be **qualified UJ**. All other associated sample results were ND and had no other calibration infractions and, thus should not be qualified.

Blanks

No target analytes were detected in the method blank. Carbon disulfide was detected in the trip blank (GU05050GMC401-FTB). Since all associated field sample results were non-detects for this compound, no sample data should be qualified. No other target analytes were detected in the trip blank.

Surrogates

All surrogate standards met QC acceptance criteria.

Internal Standards

All internal standards met QC acceptance criteria.

Laboratory Control Sample (LCS)

As previously noted, the samples in this SDG were assigned to the same batch, but were analyzed on separate instruments under separate calibrations. GEL used the daily CCV associated to each sample as the LCS, therefore, each sample has a different associated LCS and are evaluated as such. All target analytes were included in the LCS. The LCS met QC acceptance criteria with the following exceptions.

The %Rs for the LCS associated with sample GU05050GMC401 were >10% but outside the acceptance limits for dibromomethane, 2-hexanone and methacrylonitrile. These were the only compound failures for the 78 compounds reported; therefore no sample results should be qualified with respect to the LCS for this sample.

The %Rs for the LCS associated with sample GU05050GMC401-FTB were >10% but outside the acceptance limits for allyl chloride, 2-butanone, 2-hexanone, vinyl acetate, and 4-methyl-2-pentanone. These were the only compound failures for the 78 compounds reported; therefore no sample results should be qualified with respect to the LCS for this sample.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS/MSD analyses met all QC acceptance criteria with the following exceptions. The MSD %R for cis-1,3-dichloropropene was below the lower acceptance limit but > 10%. Cis-1,3-dichloropropene was not detected in either sample in this SDG, thus all associated sample results should be **qualified UJ**. The relative percent difference results were acceptable for all MS/MSD analytes. A sample of a similar matrix from a different SDG from LANL WQH was used for the MS/MSD. No sample results should be

qualified as a result of this. It should be noted that the MS/MSD spike solution did not contain 10 of the target compounds. No sample results should be qualified as a result of this.

Detection Limits/Dilutions

Detection limits were not reported in the data package. The samples were not diluted.

Tentatively Identified Compounds (TICs)

TICs were requested and reported, but not assessed for validation. No TICs were detected.

Other QC

No other specific issues that affect data quality were identified.

Peer Reviewer: Cheryl Schloesslin Level II 08/08/05

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Memorandum

Date: 08/03/05

To: William Turney

From: Mark Mensik

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WG-02537-GE
SDG: 139405
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

Sample GU05050GMC401	The result for 1,4-dioxane should be **qualified J, V7b** due to an initial calibration relative response factor <0.01. The result for isobutyl alcohol should be **qualified UJ, V7b, VWQ9** due to an initial calibration slope <0.05 and continuing calibration verification recovery. The 1,2-dibromoethane result should be **qualified R, VWQ5** due to calibration problems. The result for cis-1,3-dichloropropene should be **qualified UJ, VWQ3** due to low matrix spike duplicate recovery.
Sample GU05050GMC401-FTB	The result for 1,4-dioxane should be **qualified R, V7b** due to a relative response factor <0.01. The result for acetone should be **qualified R, VWQ5, VWQ9** due to calibration problems and continuing calibration verification recovery. The results for acrolein, propionitrile, isobutyl alcohol and acetonitrile should be **qualified UJ, V7b, VWQ9** due to an initial calibration slope or response factor <0.05 and continuing calibration verification recovery. The results for vinyl acetate, 2-hexanone, 2-butanone and methacrylonitrile should be **qualified UJ**, **VWQ9** due to continuing calibration verification recovery. The result for cis-1,3-dichloropropene should be **qualified UJ, VWQ3** due to matrix spike duplicate recovery.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using method SW846 8260B DOE-AL (VOCs). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct with the following exception. The VOC order suite code listed on the COCs for the trip blank was "GW: VOA FTB", while the code listed for the field sample was "WG VOA w/MS+TICs". These codes do not contain identical target analytes. GEL analyzed the trip blank and the field sample based on the "WG VOA w/MS+TICs" order suite code. GEL did not document this discrepancy. No sample data should be qualified based on this discrepancy.

Holding Times and Preservation

The samples were analyzed within the prescribed holding time and properly preserved.

Instrument Tune

All instrument tune requirements were met.

Calibration

The samples in this SDG were assigned to the same batch, but were analyzed on separate instruments under separate calibrations. All initial and continuing calibration QC acceptance criteria were met with the following exceptions.

The initial calibration for sample GU05050GMC401-FTB had a negative intercept whose absolute value was >3X MDL for acetone. The associated acetone result was non-detect (ND) and should be **qualified R**. The initial calibration for sample GU05050GMC401-FTB had positive intercepts for 1,1dichloroethylene; iodomethane; acetonitrile; 2-butanone; bromoform and 1,2-dibromo-3-chloropropane that were >3X MDL. None of these compounds were detected in this sample and thus should not be qualified.

The initial calibration for 1,4-dioxane associated with sample GU05050GMC401-FTB had a RF < 0.01. The 1,4-Dioxane result was ND for this sample, and should be **qualified R**. The initial calibration associated with sample GU05050GMC401-FTB had slopes or response factors $\geq$ 0.01 but < 0.05 for acrolein, acetonitrile, isobutyl alcohol and propionitrile. All associated sample results were ND for this sample and should be **qualified UJ**.

The continuing calibration verification (CCV) percent differences (%Ds) associated with sample GU05050GMC401-FTB were >20%, with positive bias, for dichlorodifluoromethane and allyl chloride. The associated sample results were ND for these compounds and should not be qualified.

The CCV %Ds associated with sample GU05050GMC401-FTB were >20% but ≤40%, with negative bias, for acrolein: acetone; acetonitrile; propionitrile; 1,2-dibromo-3-chloropropane; 4-methyl-2-pentanone; naphthalene and isobutyl alcohol. Acrolein, acetonitrile; isobutyl alcohol and propionitrile were ND and had other calibration infractions, and thus should be **qualified UJ**. Acetone was ND and had other calibration infractions and would be qualified UJ, however it was further qualified R due to an intercept infraction. The 1,2-dibromo-3-chloropropane; 4-Methyl-2-pentanone and naphthalene results were ND and no other calibration infractions applied to these compounds, therefore results for these compounds should not be qualified.

The CCV %Ds for sample GU05050GMC401-FTB were >40% but ≤60%, with negative bias, for 2-butanone, vinyl acetate, 2-hexanone, and methacrylonitrile. All associated sample results were ND and should be **qualified UJ**.

The initial calibration for 1,4-dioxane in sample GU05050GMC401 had a response factor (RF) < 0.01. 1,4-Dioxane was detected above the reporting limit in this sample, and should be **qualified J**.

The initial calibration associated with sample GU05050GMC401 had a slope ≥ 0.01 but < 0.05 for isobutyl alcohol. The sample result was ND and should be **qualified UJ**.

The CCV %Ds for sample GU05050GMC401 were >20% but ≤40%, with negative bias, for chloromethane; acetone; isobutyl alcohol; 1,2-dibromo-3-chloropropane; acetonitrile; carbon disulfide; 2-butanone; dibromomethane; 4-methyl-2-pentanone; cis-1,3-dichloropropene; trans-1,3-dichloropropene; 2-hexanone; isopropylbenzene; 1,1,2,2-tetrachloroethane; 1,2,3-trichloropropane; n-propylbenzene; naphthalene; vinyl acetate and methacrylonitrile. Isobutyl alcohol was ND, but had a slope infraction for the initial calibration, thus should be **qualified UJ**. All other associated sample results were ND and had no other calibration infractions and, thus should not be qualified.

Blanks

No target analytes were detected in the method blank. Carbon disulfide was detected in the trip blank (GU05050GMC401-FTB). Since all associated field sample results were non-detects for this compound, no sample data should be qualified. No other target analytes were detected in the trip blank.

Surrogates

All surrogate standards met QC acceptance criteria.

Internal Standards

All internal standards met QC acceptance criteria.

Laboratory Control Sample (LCS)

As previously noted, the samples in this SDG were assigned to the same batch, but were analyzed on separate instruments under separate calibrations. GEL used the daily CCV associated to each sample as the LCS, therefore, each sample has a different associated LCS and are evaluated as such. All target analytes were included in the LCS. The LCS met QC acceptance criteria with the following exceptions.

The %Rs for the LCS associated with sample GU05050GMC401 were >10% but outside the acceptance limits for dibromomethane, 2-hexanone and methacrylonitrile. These were the only compound failures for the 78 compounds reported; therefore no sample results should be qualified with respect to the LCS for this sample.

The %Rs for the LCS associated with sample GU05050GMC401-FTB were >10% but outside the acceptance limits for allyl chloride, 2-butanone, 2-hexanone, vinyl acetate, and 4-methyl-2-pentanone. These were the only compound failures for the 78 compounds reported; therefore no sample results should be qualified with respect to the LCS for this sample.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS/MSD analyses met all QC acceptance criteria with the following exceptions. The MSD %R for cis-1,3-dichloropropene was below the lower acceptance limit but > 10%. Cis-1,3-dichloropropene was not detected in either sample in this SDG, thus all associated sample results should be **qualified UJ**. The relative percent difference results were acceptable for all MS/MSD analytes. A sample of a similar matrix from a different SDG from LANL WQH was used for the MS/MSD. No sample results should be qualified as a result of this. It should be noted that the MS/MSD spike solution did not contain 10 of the target compounds. No sample results should be qualified as a result of this.

Detection Limits/Dilutions

Detection limits were not reported in the data package. The samples were not diluted.

Tentatively Identified Compounds (TICs)

TICs were requested and reported, but not assessed for validation. No TICs were detected.

Other QC

No other specific issues that affect data quality were identified.

Peer Reviewer: Cheryl Schloesslin Level II 08/08/05

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Memorandum

Date: 08/03/05

To: William Turney

From: Mark Mensik

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WG-02537-GE
SDG: 139405
Laboratory: GEL
Analysis: SVOCs

Data Qualifiers (see following sections for detailed explanations)

Sample GU05050GMC401 The result for benzidine should be **qualified UJ, SWQ1** due to poor replicate precision.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using method EPA 8270C (SVOCs). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding time and properly preserved.

Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration QC acceptance criteria were met with the following exceptions. The initial calibrations for 2,4-dinitrotoluene, 2-methyl-4,6-dinitrophenol, and dinoseb had intercepts >3X the MDLs. All associated sample results were not detected (ND) and should not be qualified.

The CCV %Ds for benzidine; bis(2-chloroethyl)ether; bis(2-chloroisopropyl)ether; 4-chlorophenylpnenylether; and 4-bromophenylpnenylether were >20%, with positive bias. All associated sample results were ND and should not be qualified.

The CCV %Ds for benzoic acid and dinoseb were >20% but ≤ 40%, with negative bias. All associated sample results were ND and no other calibration infractions occurred, thus the associated sample results should not be qualified.

Blanks

No target analytes were detected in the method blank.

Surrogates

All surrogate recoveries met QC acceptance criteria.

Internal Standards

All internal standards met QC acceptance criteria.

Laboratory Control Sample (LCS)

All LCS recoveries met QC acceptance criteria with the following exception. The %R for hexachlorocyclopentadiene was >10% but less than the lower acceptance limit. This was the only compound failure for the 72 compounds reported; therefore no sample results should be qualified.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS/MSD analyses met all QC acceptance criteria with the following exceptions. The benzidine MS %R and the 1,2-diphenylhydrazine MSD %R were above the upper acceptance limits. The associated sample results were ND and thus should not be qualified with respect to the spike recoveries. The relative percent difference (RPD) for the MS/MSD was above the acceptance limits for benzidine. The associated sample result was ND and thus should be **qualified UJ**. A sample of a similar matrix from a different SDG from LANL WQH was used for the MS/MSD. No sample results should be qualified as a result of this.

Detection Limits/Dilutions

Detection limits were not reported in the data package. The sample was not diluted.

Tentatively Identified Compounds (TICs)

TICs were requested and reported, but not assessed for validation.

Other QC

Gel permeation chromatography (GPC) cleanup was not performed. No sample results were qualified as a result of this.

Dinoseb was not present in the LCS or MS/MSD samples. No sample results were qualified as a result of this. No other specific issues that affect data quality were identified.

Peer Reviewer: Cheryl Schloesslin Level II 08/08/05

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Memorandum

Date: 08/03/05

To: William Turney

From: Mark Mensik

Subject: Radiochemical Data Review and Validation – LANL ESH
COC: WG-02537-GE
SDG: 139405
Laboratory: GEL
Analysis: Isotopic-Am, -Pu, -U; Sr-90; gamma spec; gross alpha/beta; tritium; Ra-226; Tc-99

Data Qualifiers (see following sections for detailed explanations)

Sample GF05050GMC401	The results for alpha spectrometry analytes Am-241, Pu-238, Pu-239/240, U-235/236 and U-238; gross alpha/beta; Sr-90; Ra-226; and all gamma spectroscopy analytes should be **qualified BD, R5** due to reported values < the MDC or 2-sigma TPU. The result for alpha spectrometry analyte U-234 should be **qualified J, RWQ2, R7** due to reported values <3 times the MDC and lack of matrix-specific precision data.
Sample GU05050GMC401	The results for alpha spectrometry analytes Am-241, Pu-238, Pu-239/240, U-235/236 and U-238; gross alpha; Sr-90; Tc-99 and all gamma spectroscopy analytes should be **qualified BD, R5** due to reported values < the MDC or 2-sigma TPU. The results for alpha spectrometry analyte U-234 and gross beta should be **qualified J, RWQ2** due to reported values <3X the MDC.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using methods EPA 900.0 (Gross Alpha/Beta), EPA 901.1 (Gamma Spectroscopy), EPA 903.1 (Ra-226), EPA 905.0 (Sr-90), EPA 906.0 (Tritium), DOE EML HASL-300 Tc-02-RC Modified (Tc-99), and DOE EML HASL-300 (Isotopic-Am, -Pu, and -U). Data were reported for all required analytes.

It should be noted that client sample identification numbers beginning with GF and GU indicate samples that are filtered and unfiltered respectively. For the purposes of data validation, these sample types are considered to be separate matrices.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This data validation was performed according to DOE-AL Model Data Validation Procedure, Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding times and properly preserved.

Calibration

The case narratives stated that the instruments used were properly calibrated.

Quantification

All sample results which were < the associated 2-sigma total propagated uncertainty (TPU) and/or < the associated minimal detectable concentration (MDC) should be **qualified BD**. All sample results which were <3X the associated MDC should be **qualified J**.

Blanks

No target analytes were detected in the method blanks at concentrations > the MDC and 2-sigma TPU.

Tracer/Carrier Recovery

All tracer/carrier recoveries met QC acceptance criteria.

Laboratory Control Sample

All LCS recoveries met QC acceptance criteria.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS/MSD analyses met all QC acceptance criteria where a matrix spike is required. It should be noted that matrix QC samples were performed on LANL WQH samples of a similar matrix from another SDG. The matrix spike analyses for gross alpha, gross beta and Sr-90 were performed on unfiltered samples only. All associated results for sample GF05050GMC401 were previously qualified BD and should not be further qualified. The matrix spike analysis for Ra-226 was performed on a filtered sample only. The Ra-226 result for sample GU05050GMC401 was previously qualified BD and should not be further qualified.

Laboratory Replicate

All replicate acceptance criteria were met with the following exceptions.

The replicate analyses for all alpha spectrometry analytes, Gross A/B and Sr-90 were performed on unfiltered samples from other LANL SDGs, thus these analytes do not have matrix specific QC for the filtered sample. The results for alpha spectrometry analytes Am-241, Pu-238, Pu-239/240, U-235/236 and U-238; Gross A/B and Sr-90 were previously qualified BD (see Quantification section) for the filtered sample (GF05050GMC401) and no further qualifiers should be applied to these results. Alpha spectrometry analyte U-234 was detected in sample GF05050GMC401 and should be **qualified J** due to lack of matrix-specific precision information. The replicate analyses for Ra-226 were performed on a filtered sample from another LANL SDG, thus this analyte does not have matrix specific QC for the unfiltered sample. The Ra-226 result for sample GU05050GMC401 was previously qualified BD (see Quantification section) and should not be further qualified.

The replicate analyses for gamma spectroscopy were performed on filtered samples from other LANL SDGs, thus these analytes do not have matrix specific QC for the unfiltered sample. All gamma

spectroscopy results had been previously qualified BD (see Quantification section) for the unfiltered sample (GU05050GMC401) and no further qualifiers should be applied to the results.

It should be noted that for all other analytes the matrix QC samples were performed on LANL WQH samples of similar matrix from another SDG.

Detection Limits/Dilutions

The required detection limits were met for all analytes and all detection limits were properly reported. The samples were not diluted.

Other QC

The gross alpha/beta planchets were counted for beta activity before being flamed. After flaming, the planchets were counted for alpha activity. No sample data should be qualified based on this. No other specific issues that affect data quality were identified.

Peer Reviewer: Cheryl Schloesslin Level II 08/09/05

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Fax: 505-299-6744
Email: minteer@aol.com

Memorandum

Date: 08/03/05

To: William Turney

From: Mark Mensik

Subject: Inorganic Data Review and Validation – LANL WQH
COC: WG-02537-GE
SDG: 139405
Laboratory: GEL
Analysis: Metals

Data Qualifiers (see following sections for detailed explanations)

All Samples	The results for B should be **qualified U, I4a** due to blank contamination. The results for silica should be **qualified J, I14b** due to lack of matrix accuracy information.
Sample GU05050GMC401	The results for Al, Cr, Fe and Ni should be **qualified J, I10** due to poor replicate precision.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using methods SW846 6010B (ICP-AES), SW846 6020 (ICP-MS) and SW846 7470A (CVAA). Data were reported for all required analytes.

See the attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding times and properly preserved.

ICP-MS Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration QC acceptance criteria were met.

Blanks

B, Sn and Mo were detected in one or more of the blanks at concentration >MDL but <RDL. All associated B results were detects at concentrations <5x the highest associated blank concentration and should be **qualified U.** All associated Sn results were non-detects and should not be qualified. All associated Mo results were >5X the blank concentration and should not be qualified.

Internal Standards

All ICP-MS internal standards intensities met QC acceptance criteria.

ICP Interference Check Sample (ICS A and AB) Analyses

The results of the ICS A and AB analyses were not applicable because the concentrations of Al, Ca, Fe, and Mg in the samples were < those in the ICS solutions. No sample data should be qualified as a result.

Laboratory Control Sample (LCS)

All LCS recoveries met QC acceptance criteria.

Matrix Spike (MS)

All MS recoveries met QC acceptance criteria. The silica spike recoveries for both the filtered and unfiltered matrices were NA due to sample results >4X the spike added. All silica results were detects and should be qualified J due to lack of matrix accuracy information.

Laboratory Replicate

The replicate analyses met all QC acceptance criteria with the following exceptions. The concentrations of Al and Ni were > RDL, but <5X the RDL for sample GU05050GMC401. The absolute difference between the sample and the replicate was >RDL, therefore Al and Ni should be **qualified J** for sample GU05050GMC401.

The concentrations of Cr and Fe were >5X the RDL for sample GU05050GMC401. The relative percent difference (RPD) was >20% between the sample and the replicate, therefore Cr and Fe should be **qualified J** for sample GU05050GMC401.

ICP Serial Dilution

The serial dilution (SD) analyses met all QC acceptance criteria.

Reporting Limit Verification

All CRA/CRI recoveries met QC acceptance criteria.

Detection Limits/Dilutions

All detection limits were properly reported. The samples were diluted by a factor of 5 for SiO_2. No other dilutions were required.

Other QC

No other specific issues that affect data quality were identified.

Peer Reviewer: Cheryl Schloesslin Level II 08/09/05

Analytical Quality Associates, Inc.
616 Maxine NE
Albuquerque, NM 87123
Phone: 505-299-5201
Fax: 505-299-6744
Email: minteer@aol.com

Memorandum

Date: 08/03/05

To: William Turney

From: Mark Mensik

Subject: Inorganic Data Review and Validation – LANL ESH
COC: WG-02537-GE
SDG: 139405
Laboratory: GEL
Analysis: General Chemistry

Data Qualifiers (see following sections for detailed explanations)

Sample GU05050GMC401	The result for pH should be **qualified J, I9** due to analysis performed outside 2X the holding time. The result for TOC should be **qualified J-, IWQ6** due to calibration problems. The result for TKN should be **qualified NJ-**, **IWQ2** due to an associated negative blank. The result for Total Phosphorus should be **qualified U**, **I4a** due to blank contamination.
Sample GF05050GMC401	The result for pH should be **qualified J, I9** due to analysis performed outside 2X the holding time. The result for Total Phosphorus should be **qualified U, I4a** due to blank contamination. The result for perchlorate should be **qualified J-, I16c** due to low initial calibration recovery.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using methods EPA 300.0 (Ion Chromatography-Bromide, Chloride, Fluoride, Sulfate), EPA 310.1 (Total Alkalinity and Carbonate), EPA 314.0 (Perchlorate), EPA 351.2 (TKN), EPA 353.1 (Nitrate/Nitrite), EPA 365.4 (Total Phosphorus), SW846 9060 (Total Organic Carbon), SW846 9050A (Conductivity), EPA 150.1 (pH), SW846 9012A (Total Cyanide), EPA 160.1 (TDS), EPA 160.2 (TSS) and SM2430B (Hardness). Data were reported for all required analytes.

It should be noted that client sample identification numbers beginning with GF and GU indicate samples that are filtered and unfiltered respectively. For the purposes of data validation, these sample types are considered to be separate matrices.

See the attached Data Assessment Worksheets for supporting documentation on the data review and validation. This validation was performed according to DOE-AL Model Data Validation Procedure Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding times and properly preserved with the following exceptions. The pH analysis for all samples was performed beyond 2X the method specified holding time. The associated sample results should be **qualified J**.

Calibration

All initial and continuing calibration QC acceptance criteria were met with the following exceptions. The initial calibrations for TOC had a negative intercept with an absolute value >3X the MDL. The TOC result for sample GU05050GMC401 was detected at <3X the absolute value of the negative intercept, and should be **qualified J-**. The initial calibration for sulfate had an intercept >3X the MDL. All associated sulfate results were >3X the intercept value and should not be qualified.

The initial calibration verification recovery for perchlorate recovered <75%. The perchlorate result for sample GF05050GMC401 should be **qualified J-**.

Blanks

Total phosphorus was detected in one or more of the blanks at concentrations > the MDL. All associated total phosphorous results were <5X the highest blank concentration and should be **qualified U**.

TKN and TOC had negative blank results whose absolute values were > the MDL. The associated TOC result was >5XMDL and should not be qualified. All associated TKN results were <5XMDL and should be **qualified NJ-**.

Laboratory Control Sample (LCS)

All LCS recoveries met QC acceptance criteria.

Matrix Spike (MS)

All MS recoveries met QC acceptance criteria. It should be noted that the matrix spike analyses for total cyanide and perchlorate were performed on samples of similar matrix from other LANL WQH SDGs. No sample results should be qualified as a result of this.

Laboratory Replicate

The replicate analyses met all QC acceptance criteria. It should be noted that the replicate analyses for total cyanide and perchlorate were performed on samples of similar matrix from other LANL WQH SDGs. No sample results should be qualified as a result of this.

Detection Limits/Dilutions

All detection limits were properly reported. The samples required dilutions for the following analyses in all samples for which the test was requested. Nitrate/nitrite required a 10X dilution and perchlorate and chloride each required a 2X dilution.

Other QC

No other specific issues that affect data quality were identified.

Peer Reviewer:	Cheryl Schloesslin	Level II	08/09/05

Analytical Quality Associates, Inc.
616 Maxine NE
Albuquerque, NM 87123
Phone: 505-299-5201
Fax: 505-299-6744
Email: minteer@aol.com

Memorandum

Date: 08/03/05

To: William Turney

From: Mark Mensik

Subject: LC/MS/MS Organic Data Review and Validation – LANL WQH
COC: WG-02537-GE
SDG: 139405
Laboratory: GEL
Analysis: Perchlorate

Data Qualifiers (see following sections for detailed explanations)

GF05050GMC401 The perchlorate result should be **qualified J, LMS1** due to lack of matrix information.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using method EPA 8321A Modified (perchlorate by LC/MS/MS). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-AL Model Data Validation Procedure (MDVP) Rev. 3.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding time and properly preserved.

Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration QC acceptance criteria were met.

Blanks

No target analytes were detected in any of the blanks.

Reporting Limit Verification (CRI)

The CRI percent recovery met QC acceptance criteria. It should be noted that the CRI spiked concentration was at the RDL, not 2X the RDL as stated in the MDVP. No sample data should be qualified as a result.

Internal Standard

Internal standard retention time acceptance criteria were met for perchlorate-O(18). Recovery of perchlorate-O(18) met matrix spike recovery acceptance criteria.

Laboratory Control Sample (LCS)

The LCS recovery met QC acceptance criteria.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A sample from a different LANL WQH SDG was used for the MS/MSD. This sample was analyzed undiluted. For sample GF05050GMC401 a 200X dilution was necessary to obtain a concentration within the linear range of the instrument. The quality control sample is considered a dissimilar matrix to sample GF05050GMC401 due to the relative difference in dilution factors. The perchlorate result for sample GF05050GMC401 should be **qualified J** due to matrix QC analysis on a dissimilar matrix.

Detection Limits/Dilutions

All detection limits were properly reported. The sample in this SDG was diluted by a factor of 200.

Perchlorate Chlorine Ratios

The sample ratios met QC acceptance criteria.

Interference Check Standard (ICS)

The ICS recovery met QC acceptance criteria.

Other QC

No other specific issues that affect data quality were identified.

Peer Reviewer: Cheryl Schloesslin Level II 08/08/05

AQA Nonconformance Report

NCR No. 08-18-05CAS

Pg 1 of 1

SECTION 1

Document Title: LANL ESH 139405 VOC GEL	Project or Program: Data Validation
Originator/Date: Cheryl Schloesslin 8/18/05	Contract No.: 40461-001-02-8L

DESCRIPTION OF NONCONFORMANCE

Requirement: Add description of intercept violation.

Condition Found: 1,2-dibromomethane qualified, but qualification not described in calibration section.

Assigned to: Cheryl Schloesslin Response Due 8/18/05

SECTION 2

DISPOSITION: Accept-As-Is_____ Reject_____ Administrative Action__X____

Justification: Validation oversight.

Instructions: (Identify what Administrative Actions and/or Corrective Actions will occur.)

Revise and re-issue DV report.

Responsible Employee___Cheryl Schloesslin_____ Corrective Action Due Date 8/18/05_____

SECTION 3

VERIFICATION AND CLOSURE: Disposition Completed As Directed ____X___ Other (Specify)_____

Cheryl A. Schloesslin

Cheryl Ann Schloesslin

Originator or QA Coordinator (Signature/Date)_____ _____8/18/05_____

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GENERAL NARRATIVE

CASE NARRATIVE
for
Los Alamos National Laboratory
ESH-18
SDG 139405
Chain of Custody WG-02537-GE

July 13, 2005

Laboratory Identification:

General Engineering Laboratories, LLC

Mailing Address:

P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:

2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:

(843) 556-8171

Summary:

Sample receipt

The samples for Los Alamos National Laboratory for ESH-18 arrived at General Engineering Laboratories, LLC, (GEL) Charleston, South Carolina on June 25, 2005 for environmental analyses. All sample containers arrived without any visible signs of tampering. The sample containers were delivered with chain of custody documentation and signatures. The sample containers were received at 3°C, 4°C, 19°C and 20°C temperature.

The laboratory received the following samples:

Laboratory Identification	Sample Description
139405001	GF05050GMC401
139405002	GU05050GMC401
139405003	GU05050GMC401-FTB

Internal Chain of Custody:

Custody was maintained for the samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Review Qualifier Flag Sheet, Volatiles, Semi-Volatiles, Perchlorate by LC-MS/MS, Metals, General Chemistry, and Radiochemistry Analysis.

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

Valerie S. Davis

Project Manager

CHAIN
OF
CUSTODY

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

1394057

Matrix: Ground Water Coc Id: WG-02537-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/23/05 @ 8:50	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Turney Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:turney@lanl.gov

Analysis Request

Sample Id: **GF05050GMC401** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
GW: CN	250 ml poly	1	NAOH and <4C				
GW: Rad ~~w/MS~~	1.0 gal poly	~~NB 4~~ 2	HN03				
Geninorg II Order WG	1.0 L poly	1	<4C				
P+N	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
Total Containers:	~~10~~ 8						

Sample Id: **GU05050GMC401** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW, SW, RO: H-3 w/ MS	1.0 L amber glass	1	Not Preserved				
GW, SW, RO: SSC	500 ml poly	1	<4C				
GW: Rad w/MS	1.0 gal poly	NB 4 2	HN03				
GW: SVOA w/MS+TICs	1.0 L amber glass	~~3~~ 1	<4C				
Geninorg II Order WG	1.0 L poly	1	<4C				
TC99	1.0 L poly	1	HCL				
TKN+TOC	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1 2	HN03				
WG VOA w/MS+TICs	40 ml amber glass	NB 6 3	HCl and <4C				
Total Containers:	~~20~~ 12						

Sample Id: **GU05050GMC401-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW: VOA FTB	40 ml amber glass	1	HCl and <4C				
Total Containers:	1						

Grand Total: ~~31~~ 23

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02537-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/23/05 @ 9:50	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Turney Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:turney@lanl.gov

Analysis Request

Technique:

Comments:

Chain of Custody

Sampling Team: Max Mars, Jim Jadon, Alex Mora, Ed Pulliam

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
Max Mars (sampler)	6/24/05	8:05		6/24/05	8:05	
				6-25-05	0915	

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 24JUN05
Actual Wgt: 86 LB MA
System#: 00141[illegible]
Account: S 17[illegible]

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

REF: 7h20w5n442004239

FedEx Express

Delivery Address Barcode

20

BILL SENDER

PRIORITY SATURDAY

TRK# 6954 7789 7426

Form 0201

Deliver By 25JUN05

CHS A1

29407 -SC-US X0 CHSA

Part # 156146-434 NRIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 24JUN05
Actual Wgt: 53 0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

REF: 7h20w5n442004239

FedEx Express

CLS011105/05/10

Delivery Address Barcode

4C

BILL SENDER

PRIORITY SATURDAY

TRK# 6954 7789 7404

Form 0201

Deliver By: 25JUN05

CHS A1

29407 -SC-US X0 CHSA

Part # 156146-434 NRIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 24JUN05
Actual Wgt: 50.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

FedEx Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

3C

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7448

Form 0201

CHS A1

29407 -SC-US X0 CHSA

Part # 156148-434 NRIT 10-04

ORIGIN ID: SAFA (505) 6[illegible]
JOYLENE VALDEZ
LOS ALAMOS NATL [illegible]
TA00 BLDG 1237

LOS ALAMOS, NM 87545
UNITED STATES US

System#: 0014[illegible]
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

FedEx Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

3C

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7437

Form 0201

CHS A1

29407 -SC-US X0 CHSA

Part # 156148-434 NRIT 10-04

LOS ALAMOS NATL LAB
TA00 BLDG 1237

LOS ALAMOS, NM 87545
UNITED STATES US

System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx
Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

40

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7460 Form 0201

CHS A1

29407 -SC-US X0 CHSA

Part # 156148-434 NRIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 24JUN05
Actual Wgt: 84.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx
Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

19c

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7459 Form 0201

CHS A1

29407 -SC-US X0 CHSA

Part # 156148-434 NRIT 10-04

COOLER RECEIPT CHECKLIST

SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: LANL/ESH	**SDG/ARCOC/Work Order:** WG-025370-6E
Date Received: 6-25-05	**PM(A) Review (ensure non-conforming items are resolved prior to signing):** Valin Jain
Received By: MK	

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓			Circle Temp device serial # ice bags blue ice dry ice none other(describe) 3°C 4°C 19°C 20°C
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?			✓	Circle Applicable: seals broken damaged container leaking container other (describe) 2 SAMPLES ARRIVED WITH LIDS OFF GF32R101-1 GAL RAD GU32R101-1 GAL RAD
5	Samples requiring chemical preservation at proper pH?			✓	Sample ID's, containers affected and observed pH: GU32R101 - 1 GAL RAD PH=6
6	VOA vials free of headspace (defined as < 6mm bubble)?	✓			Sample ID's and containers affected:
7	Samples received within holding time?	✓			Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?			✓	Sample ID's affected: NO DATE OR TIME ON SAMPLES
10	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
11	COC form is properly signed in relinquished/received sections?	✓			
12	Air Bill ,Tracking #'s, & Additional Comments				FED EX #'s 6954 7789 7448-3C 7437-3C 7460-4C 7404-4C 7426-20C 7459-19C ↑ NO ICE

Radiological Information	NRD	RAD	RSO	RAD1	RSO/RAD Receipt #
What is the radiological classification of the samples?	✓				Comments:
Radioactivity Screening Results (maximum observed CPM)	6 cpm				If >2 x area background is observed on a non-radioactive sample, contact the RSO to investigate.
PM (or PMA) review of Receiving Rad classification: VSD Initials 6/27/05 Date					

DATA REVIEW QUALIFIER FLAG DEFINITION SHEET

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR ORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
A	The TIC is suspected aldol-condensation product.	COA, Form 1, and EDD
B	Analyte was detected in the associated method blank as well as in the sample.	COA, Form 1, and EDD
C	Pesticide analyte has been confirmed by GC/MS.	COA, Form 1, and EDD
D	Analyte(s) quantified in an analysis performed at a secondary dilution factor.	COA, Form 1, and EDD
E	Identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.	COA, Form 1, and EDD
J	This flag indicates an estimated value concerning either, (1) estimating a concentration for tentatively identified compounds (TICs), or (2) analyte detected at a level less than the RDL or PQL and greater than or equal to the MDL.	COA, Form 1, and EDD
N	Presumptive evidence based upon a mass spectral library search to make a tentative identification of the analyte.	COA, Form 1, and EDD
NJ	Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard.	COA, Form 1, and EDD
P	- Pesticide/PCB target analyte that is greater than 25% difference for the detected concentrations between the two GC columns. - HPLC target analyte that is greater than 40% difference for the detected concentrations between detectors or columns.	Form 1 and EDD
U	Compound analyzed for but not detected (sample quantitation limit has been adjusted to reflect dilutions and percent moisture).	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	COA, Form 1, and EDD
**	Laboratory Control Sample recovery outside of acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR INORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
E	The qualifier that is used when the percent difference between the parent sample and its serial dilution's concentration exceeds 10%. The sample's concentration must be greater than 50 times the IDL/MDL for ICP or 100 times the absolute value of the preparation blank's concentration for ICP-MS. However, if analyzing ILMO 4.0 (ICP-MS), the parent sample's concentration must be 20 times the CRDL before the "E" flag is applied.	Form 1 and EDD
*	The qualifier that is used to indicate the duplicate sample analysis for an analyte is out of control.	Form 1 and EDD
J	The qualifier is used to indicate that the reported result fell above the IDL/MDL but below the CRDL.	Form 1 and EDD
N	This qualifier is used to indicate that the matrix or pre-digested spike sample recovery for an analyte is not within the specified control limit.	Form 1 and EDD
U	Analyte analyzed for but not detected above the PQL/CRDL.	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	Form 1 and EDD
**	Laboratory Control Sample (LCS) recovery for an analyte is outside of specified acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.
Any recoveries falling outside the acceptance range will be flagged with a **.
All flags do not apply to QC Summary and Certificate of Analysis packages.

GC/MS VOLATILE ANALYSIS

GC/MS Volatile Organics
Los Alamos National Laboratory (ESHL)
SDG 139405

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometer
Analytical Method:	SW846 8260B DOE-AL
Prep Method:	SW846 5030B
Analytical Batch Number:	439994

Sample Analysis

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

Sample ID	Client ID
139405002	GU05050GMC401
139405003	GU05050GMC401-FTB
1200881394	Method Blank (MB)
1200881397	Laboratory Control Sample (LCS)
1200881398	Laboratory Control Sample (LCS)
1200889456	Method Blank (MB)
1200889457	Laboratory Control Sample (LCS)
1200889458	Laboratory Control Sample (LCS)
1200881395	139349008(GU05060PCCR01) Matrix Spike (MS)
1200881396	139349008(GU05060PCCR01) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 9.

Calibration Information

Due to the limited capacity of software all of the current initial calibration files are not displayed here. If necessary, a calibration history will be inserted in the package prior to the appropriate Form 6.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

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

Laboratory Control Sample (LCS) Recovery
VBLK01LCS recoveries were not all within the acceptance limits. However, the failures were less than 5% of the requested analyte list. This satisfies the client criteria. VBLK02LCS recoveries were not within the acceptance limits. Due to lack of sample availability, the data for this LCS and its associated blank and sample are reported. The client was notified. See NCR 220344.

QC Sample Designation
Sample 139349008(GU05060PCCR01) was designated for spike analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the required acceptance limits. The failures were less than 5% of the requested analyte list. This satisfies the client criteria. See NCR 220344.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

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

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 220344 was generated for this SDG.

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

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on a Volatile Organic Analysis by Gas Chromatography/Mass Spectroscopy.

The Volatile-GC/MS analysis was performed on a HP Mass Spectrometer.

Instrument ID	System Configuration	Column ID	Column Description	P & T Trap
VOA1.I	HP6890/HP5973	RESTEK	RTX-Volatiles, 30m x 0.25 mm, 1.0um	Trap 10
VOA3.I	HP6890/HP5973	J&W1	DB-624, 60m x 0.25mm, 1.4um	Trap 10

Certification Statement

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

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Erin Lambert Date: 7/18/05

Roadmap for ESHL 139405 VOA

This roadmap was analyzed by Patricia Murphy on 07-14-2005, 09:31.
This roadmap was reviewed by Patricia Murphy on 07-18-2005, 13:50.
This roadmap was reviewed by Erin Haubert on 07-18-2005, 15:11.
This roadmap was packaged by LySandra Gathers on 07-18-2005, 15:53.
This roadmap was validated by Erin Haubert on 07-18-2005, 16:33.
This roadmap was validated by Erin Haubert on 07-18-2005, 16:47.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	comment
■	N	/chem/VOA1.i/070605v1.b/1r312.d	139405002	GU05050GMC401	06-JUL-2005	12:48	139405.sub	1	
☐	N	/chem/VOA1.i/070605v1.b/1r313.d	139405003	GU05050GMC401-FTB	06-JUL-2005	13:14	139405.sub	1	
☐	N	/chem/VOA3.i/070705v3.b/3r412.d	139405002	GU05050GMC401	07-JUL-2005	13:53	139405.sub	1	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA1.i/070605v1.b/1r302-ESHL.d	1200889457	VBLK02LCS	lcs	06-JUL-2005	07:52	139405.sub	1	
☐	N	/chem/VOA1.i/070605v1.b/1r304-ESHL.d	1200889458	VBLK02SLCS	lcs	06-JUL-2005	09:21	139405.sub	1	
☐	N	/chem/VOA1.i/070605v1.b/1r306-ESHL.d	1200889456	VBLK02	mb	06-JUL-2005	10:12	139405.sub	1	
☐	N	/chem/VOA3.i/070705v3.b/3r402ESHL2.d	1200881397	VBLK01LCS	lcs	07-JUL-2005	09:20	139405.sub	1	
☐	N	/chem/VOA3.i/070705v3.b/3r405ESHL2.d	1200881398	VBLK01SLCS	lcs	07-JUL-2005	10:42	139405.sub	1	
☐	N	/chem/VOA3.i/070705v3.b/3r408ESHL2.d	1200881394	VBLK01	mb	07-JUL-2005	12:04	139405.sub	1	

SAMPLE DATA SUMMARY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	2.6	
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	53.3	

1E

EPA SAMPLE NO.

GU05050GMC401

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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FORM I VOA-TIC OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	6.1	
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05050G
MC401-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WATER Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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7.					
8.					
9.					
10.					
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FORM I VOA-TIC OLM03.0

QUALITY CONTROL SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

	EPA SAMPLE NO.	SMC1 (DBF)#	SMC2 (TOL)#	SMC3 (BFB)#	OTHER	TOT OUT
01	VBLK02LCS	98	101	101		0
02	VBLK02SLCS	92	101	97		0
03	VBLK02	107	102	98		0
04	GU05050GMC401-FTB	103	103	94		0
05	VBLK01LCS	90	83	76		0
06	VBLK01SLCS	88	84	78		0
07	VBLK01	86	85	81		0
08	GU05050GMC401	85	84	80		0
09						
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	QC LIMITS
SMC1 (DBF) = Dibromofluoromethane	(85-120)
SMC2 (TOL) = Toluene-d8	(79-122)
SMC3 (BFB) = Bromofluorobenzene	(75-119)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	43.0	86	50-142
Chloromethane	50.0	0.0	35.2	70	52-134
Vinyl chloride	50.0	0.0	41.0	82	60-128
Bromomethane	50.0	0.0	44.2	88	60-120
Chloroethane	50.0	0.0	45.0	90	68-129
Trichlorofluoromethane	50.0	0.0	45.2	90	66-136
1,1-Dichloroethylene	50.0	0.0	40.7	81	71-125
Acetone	250	0.0	191	76	62-134
Iodomethane	250	0.0	207	83	77-134
Carbon disulfide	250	0.0	184	74	74-142
Acetonitrile	1250	0.0	806	64	58-136
Methylene chloride	50.0	0.0	41.6	83	71-120
trans-1,2-Dichloroethyl	50.0	0.0	42.7	85	77-128
1,1-Dichloroethane	50.0	0.0	43.6	87	72-120
Vinyl acetate	250	0.0	175	70	66-142
2-Butanone	250	0.0	175	70	62-138
cis-1,2-Dichloroethylen	50.0	0.0	42.8	86	79-120
2,2-Dichloropropane	50.0	0.0	46.1	92	78-135
Bromochloromethane	50.0	0.0	44.1	88	78-124
Chloroform	50.0	0.0	42.3	85	80-121
1,1,1-Trichloroethane	50.0	0.0	46.5	93	71-123
1,1-Dichloropropene	50.0	0.0	41.8	84	78-123
Carbon tetrachloride	50.0	0.0	52.9	106	77-132
1,2-Dichloroethane	50.0	0.0	42.4	85	76-128
Benzene	50.0	0.0	41.9	84	69-120
Trichloroethylene	50.0	0.0	44.4	89	78-118
1,2-Dichloropropane	50.0	0.0	44.0	88	73-119
Dibromomethane	50.0	0.0	39.7	79*	82-123

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	44.8	90	87-134
cis-1,3-Dichloropropyle	50.0	0.0	39.8	80	79-125
4-Methyl-2-pentanone	250	0.0	175	70	64-135
Toluene	50.0	0.0	41.4	83	75-120
trans-1,3-Dichloropropy	50.0	0.0	37.9	76	73-126
1,1,2-Trichloroethane	50.0	0.0	40.3	81	78-120
1,3-Dichloropropane	50.0	0.0	41.1	82	78-115
2-Hexanone	250	0.0	159	64*	66-141
Tetrachloroethylene	50.0	0.0	44.4	89	69-124
Dibromochloromethane	50.0	0.0	47.0	94	78-133
1,2-Dibromoethane	50.0	0.0	44.3	89	80-120
Chlorobenzene	50.0	0.0	43.8	88	80-118
1,1,1,2-Tetrachloroetha	50.0	0.0	47.0	94	82-122
Ethylbenzene	50.0	0.0	41.7	83	79-120
o-Xylene	50.0	0.0	42.0	84	80-119
m,p-Xylenes	100	0.0	84.6	85	78-116
Xylenes (total)	150	0.0	126	84	80-117
Styrene	50.0	0.0	40.9	82	78-117
Bromoform	50.0	0.0	45.3	91	74-136
Isopropylbenzene	50.0	0.0	38.4	77	75-120
1,1,2,2-Tetrachloroetha	50.0	0.0	38.5	77	72-129
1,2,3-Trichloropropane	50.0	0.0	38.4	77	72-127
Bromobenzene	50.0	0.0	42.5	85	79-118
n-Propylbenzene	50.0	0.0	39.2	78	74-122
2-Chlorotoluene	50.0	0.0	40.8	82	76-118
1,3,5-Trimethylbenzene	50.0	0.0	40.7	81	73-117
1,2,4-Trimethylbenzene	50.0	0.0	40.1	80	75-117
4-Chlorotoluene	50.0	0.0	40.0	80	76-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
tert-Butylbenzene	50.0	0.0	40.7	81	72-121
sec-Butylbenzene	50.0	0.0	40.3	81	72-124
4-Isopropyltoluene	50.0	0.0	42.3	85	75-124
1,3-Dichlorobenzene	50.0	0.0	43.6	87	75-118
1,4-Dichlorobenzene	50.0	0.0	41.6	83	75-120
n-Butylbenzene	50.0	0.0	42.5	85	71-130
1,2-Dichlorobenzene	50.0	0.0	42.7	85	78-116
1,2-Dibromo-3-chloropro	50.0	0.0	37.1	74	63-139
1,2,4-Trichlorobenzene	50.0	0.0	52.8	106	71-135
Hexachlorobutadiene	50.0	0.0	45.2	90	65-128
Naphthalene	50.0	0.0	39.9	80	63-138
1,2,3-Trichlorobenzene	50.0	0.0	47.7	95	70-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 2 out of 68 outside limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Acrolein	250	0.0	232	93	56-148
Isobutyl alcohol	2500	0.0	1950	78	57-137
Allyl chloride	250	0.0	262	105	65-126
Acrylonitrile	250	0.0	248	99	57-126
2-Chloro-1,3-butadiene	50.0	0.0	54.9	110	50-148
Methacrylonitrile	250	0.0	151	60*	64-118
Propionitrile	250	0.0	225	90	58-129
Methyl methacrylate	250	0.0	230	92	68-122
Ethyl methacrylate	250	0.0	212	85	68-120
1,4-Dioxane	2500	0.0	2250	90	60-131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 10 outside limits

COMMENTS: _____

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FORM III VOA-1 OLM03.0

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	67.4	135	50-142
Chloromethane	50.0	0.0	49.3	99	52-134
Vinyl chloride	50.0	0.0	56.3	113	60-128
Bromomethane	50.0	0.0	50.4	101	60-120
Chloroethane	50.0	0.0	48.0	96	68-129
Trichlorofluoromethane	50.0	0.0	48.0	96	66-136
1,1-Dichloroethylene	50.0	0.0	42.1	84	71-125
Acetone	250	0.0	164	66	62-134
Iodomethane	250	0.0	253	101	77-134
Carbon disulfide	250	0.0	267	107	74-142
Acetonitrile	1250	0.0	821	66	58-136
Methylene chloride	50.0	0.0	47.0	94	71-120
trans-1,2-Dichloroethyl	50.0	0.0	47.5	95	77-128
1,1-Dichloroethane	50.0	0.0	42.7	85	72-120
Vinyl acetate	250	0.0	141	56*	66-142
2-Butanone	250	0.0	130	52*	62-138
cis-1,2-Dichloroethylen	50.0	0.0	42.5	85	79-120
2,2-Dichloropropane	50.0	0.0	45.0	90	78-135
Bromochloromethane	50.0	0.0	45.2	90	78-124
Chloroform	50.0	0.0	45.0	90	80-121
1,1,1-Trichloroethane	50.0	0.0	48.9	98	71-123
1,1-Dichloropropene	50.0	0.0	46.8	94	78-123
Carbon tetrachloride	50.0	0.0	51.9	104	77-132
1,2-Dichloroethane	50.0	0.0	40.6	81	76-128
Benzene	50.0	0.0	50.0	100	69-120
Trichloroethylene	50.0	0.0	45.8	92	78-118
1,2-Dichloropropane	50.0	0.0	40.5	81	73-119
Dibromomethane	50.0	0.0	46.6	93	82-123

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	49.9	100	87-134
cis-1,3-Dichloropropyle	50.0	0.0	45.8	92	79-125
4-Methyl-2-pentanone	250	0.0	155	62*	64-135
Toluene	50.0	0.0	45.2	90	75-120
trans-1,3-Dichloropropy	50.0	0.0	42.7	85	73-126
1,1,2-Trichloroethane	50.0	0.0	48.8	98	78-120
1,3-Dichloropropane	50.0	0.0	46.2	92	78-115
2-Hexanone	250	0.0	146	58*	66-141
Tetrachloroethylene	50.0	0.0	52.2	104	69-124
Dibromochloromethane	50.0	0.0	54.9	110	78-133
1,2-Dibromoethane	50.0	0.0	47.0	94	80-120
Chlorobenzene	50.0	0.0	45.6	91	80-118
1,1,1,2-Tetrachloroetha	50.0	0.0	52.1	104	82-122
Ethylbenzene	50.0	0.0	45.2	90	79-120
o-Xylene	50.0	0.0	45.7	91	80-119
m,p-Xylenes	100	0.0	91.7	92	78-116
Xylenes (total)	150	0.0	137	91	80-117
Styrene	50.0	0.0	46.8	94	78-117
Bromoform	50.0	0.0	48.3	97	74-136
Isopropylbenzene	50.0	0.0	45.4	91	75-120
1,1,2,2-Tetrachloroetha	50.0	0.0	44.9	90	72-129
1,2,3-Trichloropropane	50.0	0.0	41.7	83	72-127
Bromobenzene	50.0	0.0	46.7	93	79-118
n-Propylbenzene	50.0	0.0	46.0	92	74-122
2-Chlorotoluene	50.0	0.0	44.9	90	76-118
1,3,5-Trimethylbenzene	50.0	0.0	45.5	91	73-117
1,2,4-Trimethylbenzene	50.0	0.0	44.7	89	75-117
4-Chlorotoluene	50.0	0.0	46.4	93	76-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
tert-Butylbenzene	50.0	0.0	43.8	88	72-121
sec-Butylbenzene	50.0	0.0	45.4	91	72-124
4-Isopropyltoluene	50.0	0.0	45.0	90	75-124
1,3-Dichlorobenzene	50.0	0.0	46.7	93	75-118
1,4-Dichlorobenzene	50.0	0.0	46.3	93	75-120
n-Butylbenzene	50.0	0.0	45.3	91	71-130
1,2-Dichlorobenzene	50.0	0.0	47.1	94	78-116
1,2-Dibromo-3-chloropro	50.0	0.0	35.0	70	63-139
1,2,4-Trichlorobenzene	50.0	0.0	47.4	95	71-135
Hexachlorobutadiene	50.0	0.0	48.7	97	65-128
Naphthalene	50.0	0.0	35.2	70	63-138
1,2,3-Trichlorobenzene	50.0	0.0	42.6	85	70-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 4 out of 68 outside limits

COMMENTS: _____
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3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Acrolein	250	0.0	162	65	30-140
Isobutyl alcohol	2500	0.0	1680	67	60-140
Allyl chloride	250	0.0	344	138*	60-126
Acrylonitrile	250	0.0	209	84	53-130
2-Chloro-1,3-butadiene	50.0	0.0	43.2	86	61-138
Methacrylonitrile	250	0.0	146	58	55-129
Propionitrile	250	0.0	169	68	52-132
Methyl methacrylate	250	0.0	242	97	62-125
Ethyl methacrylate	250	0.0	230	92	64-121
1,4-Dioxane	2500	0.0	2230	89	58-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 10 outside limits

COMMENTS: _____
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FORM III VOA-1 OLM03.0

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139349

Matrix Spike - EPA Sample No.: GU05060PCCR0

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	46.9	94	47-138
Chloromethane	50.0	0.0	38.9	78	43-140
Vinyl chloride	50.0	0.0	43.6	87	53-119
Bromomethane	50.0	0.0	46.9	94	57-120
Chloroethane	50.0	0.0	46.8	94	63-122
Trichlorofluoromethane	50.0	0.0	47.7	95	57-127
1,1-Dichloroethylene	50.0	0.0	42.4	85	60-122
Acetone	250	0.0	183	73	56-128
Iodomethane	250	0.0	206	82	72-126
Carbon disulfide	250	0.0	192	77	66-136
Acetonitrile	1250	0.0	893	71	58-128
Methylene chloride	50.0	0.0	39.8	80	69-120
trans-1,2-Dichloroethyl	50.0	0.0	42.5	85	72-120
1,1-Dichloroethane	50.0	0.0	44.6	89	67-120
Vinyl acetate	250	0.0	159	64	55-133
2-Butanone	250	0.0	169	68	62-126
cis-1,2-Dichloroethylen	50.0	0.0	42.6	85	75-116
2,2-Dichloropropane	50.0	0.0	44.0	88	62-126
Bromochloromethane	50.0	0.0	43.7	87	79-122
Chloroform	50.0	0.0	43.4	87	73-121
1,1,1-Trichloroethane	50.0	0.0	47.2	94	61-122
1,1-Dichloropropene	50.0	0.0	41.6	83	67-116
Carbon tetrachloride	50.0	0.0	54.6	109	66-131
1,2-Dichloroethane	50.0	0.0	43.3	87	71-127
Benzene	50.0	0.0	42.1	84	64-120
Trichloroethylene	50.0	0.0	43.7	87	71-120
1,2-Dichloropropane	50.0	0.0	43.4	87	70-130
Dibromomethane	50.0	0.0	39.8	80	78-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139349

Matrix Spike - EPA Sample No.: GU05060PCCR0

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	45.3	91	85-133
cis-1,3-Dichloropropyle	50.0	0.0	37.5	75	72-120
4-Methyl-2-pentanone	250	0.0	172	69	62-133
Toluene	50.0	0.0	42.0	84	68-120
trans-1,3-Dichloropropy	50.0	0.0	36.3	73	67-121
1,1,2-Trichloroethane	50.0	0.0	41.0	82	74-120
1,3-Dichloropropane	50.0	0.0	41.4	83	74-117
2-Hexanone	250	0.0	156	62	58-140
Tetrachloroethylene	50.0	0.0	44.8	90	60-120
Dibromochloromethane	50.0	0.0	48.4	97	77-133
1,2-Dibromoethane	50.0	0.0	42.5	85	74-121
Chlorobenzene	50.0	0.0	44.1	88	72-116
1,1,1,2-Tetrachloroetha	50.0	0.0	48.4	97	72-127
Ethylbenzene	50.0	0.0	42.2	84	70-120
o-Xylene	50.0	0.0	42.6	85	72-117
m,p-Xylenes	100	0.0	84.4	84	69-120
Styrene	50.0	0.0	40.9	82	68-116
Bromoform	50.0	0.0	47.3	95	70-134
Isopropylbenzene	50.0	0.0	39.7	79	64-120
1,1,2,2-Tetrachloroetha	50.0	0.0	39.7	79	63-130
1,2,3-Trichloropropane	50.0	0.0	40.0	80	66-126
Bromobenzene	50.0	0.0	43.0	86	74-115
n-Propylbenzene	50.0	0.0	39.9	80	64-116
2-Chlorotoluene	50.0	0.0	41.9	84	67-115
1,3,5-Trimethylbenzene	50.0	0.0	41.2	82	66-120
1,2,4-Trimethylbenzene	50.0	0.0	40.6	81	65-120
4-Chlorotoluene	50.0	0.0	40.2	80	66-120
tert-Butylbenzene	50.0	0.0	41.6	83	65-116

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139349

Matrix Spike - EPA Sample No.: GU05060PCCR0

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50.0	0.0	41.3	83	64-118
4-Isopropyltoluene	50.0	0.0	42.9	86	65-118
1,3-Dichlorobenzene	50.0	0.0	43.6	87	66-115
1,4-Dichlorobenzene	50.0	0.0	41.7	83	67-116
n-Butylbenzene	50.0	0.0	42.7	85	60-121
1,2-Dichlorobenzene	50.0	0.0	43.3	87	72-115
1,2-Dibromo-3-chloropro	50.0	0.0	39.4	79	55-138
1,2,4-Trichlorobenzene	50.0	0.0	51.7	103	60-130
Hexachlorobutadiene	50.0	0.0	44.6	89	57-119
Naphthalene	50.0	0.0	40.5	81	62-132
1,2,3-Trichlorobenzene	50.0	0.0	47.4	95	66-129

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139349

Matrix Spike - EPA Sample No.: GU05060PCCR0

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0	47.9	96	2	30	47-138
Chloromethane	50.0	36.8	74	5	30	43-140
Vinyl chloride	50.0	43.1	86	1	30	53-119
Bromomethane	50.0	50.0	100	6	30	57-120
Chloroethane	50.0	46.8	94	0	30	63-122
Trichlorofluoromethane	50.0	47.9	96	1	30	57-127
1,1-Dichloroethylene	50.0	42.6	85	0	30	60-122
Acetone	250	189	76	4	30	56-128
Iodomethane	250	207	83	1	30	72-126
Carbon disulfide	250	193	77	0	30	66-136
Acetonitrile	1250	926	74	4	30	58-128
Methylene chloride	50.0	40.6	81	1	30	69-120
trans-1,2-Dichloroethyl	50.0	42.6	85	0	30	72-120
1,1-Dichloroethane	50.0	45.2	90	1	30	67-120
Vinyl acetate	250	163	65	2	30	55-133
2-Butanone	250	179	72	6	30	62-126
cis-1,2-Dichloroethylen	50.0	43.7	87	2	30	75-116
2,2-Dichloropropane	50.0	44.4	89	1	30	62-126
Bromochloromethane	50.0	43.8	88	1	30	79-122
Chloroform	50.0	43.8	88	1	30	73-121
1,1,1-Trichloroethane	50.0	47.4	95	1	30	61-122
1,1-Dichloropropene	50.0	42.2	84	1	30	67-116
Carbon tetrachloride	50.0	54.9	110	1	30	66-131
1,2-Dichloroethane	50.0	43.1	86	1	30	71-127
Benzene	50.0	42.3	85	1	30	64-120
Trichloroethylene	50.0	44.2	88	1	30	71-120
1,2-Dichloropropane	50.0	44.2	88	1	30	70-130
Dibromomethane	50.0	39.4	79	1	30	78-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139349

Matrix Spike - EPA Sample No.: GU05060PCCR0

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Bromodichloromethane	50.0	45.8	92	1	30	85-133
cis-1,3-Dichloropropyle	50.0	34.5	69*	8	30	72-120
4-Methyl-2-pentanone	250	184	74	7	30	62-133
Toluene	50.0	42.2	84	0	30	68-120
trans-1,3-Dichloropropy	50.0	33.9	68	7	30	67-121
1,1,2-Trichloroethane	50.0	42.6	85	4	30	74-120
1,3-Dichloropropane	50.0	40.6	81	2	30	74-117
2-Hexanone	250	167	67	8	30	58-140
Tetrachloroethylene	50.0	44.4	89	1	30	60-120
Dibromochloromethane	50.0	49.0	98	1	30	77-133
1,2-Dibromoethane	50.0	40.4	81	5	30	74-121
Chlorobenzene	50.0	44.0	88	0	30	72-116
1,1,1,2-Tetrachloroetha	50.0	49.0	98	1	30	72-127
Ethylbenzene	50.0	42.2	84	0	30	70-120
o-Xylene	50.0	42.7	85	0	30	72-117
m,p-Xylenes	100	85.0	85	1	30	69-120
Styrene	50.0	41.0	82	0	30	68-116
Bromoform	50.0	49.8	100	5	30	70-134
Isopropylbenzene	50.0	40.5	81	2	30	64-120
1,1,2,2-Tetrachloroetha	50.0	42.1	84	6	30	63-130
1,2,3-Trichloropropane	50.0	41.4	83	4	30	66-126
Bromobenzene	50.0	44.5	89	3	30	74-115
n-Propylbenzene	50.0	40.7	81	1	30	64-116
2-Chlorotoluene	50.0	42.9	86	2	30	67-115
1,3,5-Trimethylbenzene	50.0	42.2	84	2	30	66-120
1,2,4-Trimethylbenzene	50.0	41.2	82	1	30	65-120
4-Chlorotoluene	50.0	41.7	83	4	30	66-120
tert-Butylbenzene	50.0	42.5	85	2	30	65-116

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139349

Matrix Spike - EPA Sample No.: GU05060PCCR0

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
sec-Butylbenzene	50.0	42.2	84	1	30	64-118
4-Isopropyltoluene	50.0	43.5	87	1	30	65-118
1,3-Dichlorobenzene	50.0	44.1	88	1	30	66-115
1,4-Dichlorobenzene	50.0	42.4	85	2	30	67-116
n-Butylbenzene	50.0	43.7	87	2	30	60-121
1,2-Dichlorobenzene	50.0	44.6	89	2	30	72-115
1,2-Dibromo-3-chloropro	50.0	39.9	80	1	30	55-138
1,2,4-Trichlorobenzene	50.0	51.5	103	0	30	60-130
Hexachlorobutadiene	50.0	45.6	91	2	30	57-119
Naphthalene	50.0	44.0	88	8	30	62-132
1,2,3-Trichlorobenzene	50.0	47.4	95	0	30	66-129

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 67 outside limits
Spike Recovery: 1 out of 134 outside limits

COMMENTS: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: 3R408ESHL2 Lab Sample ID: 1200881394

Date Analyzed: 07/07/05 Time Analyzed: 1204

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK01LCS	1200881397	3R402ESHL2	0920
02	VBLK01SLCS	1200881398	3R405ESHL2	1042
03	GU05050GMC401	139405002	3R412	1353
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4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: 1R306-ESHL Lab Sample ID: 1200889456

Date Analyzed: 07/06/05 Time Analyzed: 1012

GC Column: RTX-VOLATILESID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK02LCS	1200889457	1R302-ESHL	0752
02	VBLK02SLCS	1200889458	1R304-ESHL	0921
03	GU05050GMC401-FTB	139405003	1R313	1314
04				
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: 1Q111 BFB Injection Date: 06/27/05

Instrument ID: VOA1 BFB Injection Time: 1839

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.3
75	30.0 - 60.0% of mass 95	46.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 100.0% of mass 95	72.7
175	5.0 - 9.0% of mass 174	5.1 (7.0)1
176	95.0 - 101.0% of mass 174	73.2 (100.7)1
177	5.0 - 9.0% of mass 176	5.3 (7.2)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0005	W1VM050627-01	1Q113	06/27/05	1930
02	VSTD001	W1VM050627-02	1Q115	06/27/05	2021
03	VSTD002	W1VM050627-03	1Q116	06/27/05	2047
04	VSTD005	W1VM050627-04	1Q117	06/27/05	2112
05	VSTD010	W1VM050627-05	1Q118	06/27/05	2138
06	VSTD020	W1VM050627-06	1Q119	06/27/05	2203
07	VSTD050	W1VM050627-07	1Q120	06/27/05	2229
08	VSTD100	W1VM050627-08	1Q121	06/27/05	2255
09	VSTD005S	UVM050525-01E	1Q123	06/27/05	2346
10	VSTD010S	UVM050525-02E	1Q124	06/28/05	0012
11	VSTD025S	UVM050525-03E	1Q125	06/28/05	0037
12	VSTD050S	UVM050525-04E	1Q126	06/28/05	0103
13	VSTD100S	UVM050525-05E	1Q127	06/28/05	0128
14	VSTD250S	UVM050525-06E	1Q129	06/28/05	0219
15	VSTD500S	UVM050525-07E	1Q130	06/28/05	0245
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: 1Q701 BFB Injection Date: 07/03/05

Instrument ID: VOA1 BFB Injection Time: 1059

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.6
75	30.0 - 60.0% of mass 95	43.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	84.2
175	5.0 - 9.0% of mass 174	6.3 (7.5)1
176	95.0 - 101.0% of mass 174	83.3 (98.9)1
177	5.0 - 9.0% of mass 176	5.1 (6.2)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	UVM050605-01E	1Q703	07/03/05	1151
02					
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: 3Q101 BFB Injection Date: 06/27/05

Instrument ID: VOA3 BFB Injection Time: 1036

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.2
75	30.0 - 60.0% of mass 95	47.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	81.9
175	5.0 - 9.0% of mass 174	5.8 (7.1)1
176	95.0 - 101.0% of mass 174	79.6 (97.3)1
177	5.0 - 9.0% of mass 176	5.4 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0005	UVM050216-01E	3Q103	06/27/05	1118
02	VSTD001	W3VM050627-01	3Q105	06/27/05	1213
03	VSTD002	W3VM050627-02	3Q106	06/27/05	1241
04	VSTD005	W3VM050627-03	3Q107	06/27/05	1308
05	VSTD010	W3VM050627-04	3Q108	06/27/05	1335
06	VSTD020	W3VM050627-05	3Q109	06/27/05	1403
07	VSTD050	W3VM050627-06	3Q110	06/27/05	1430
08	VSTD100	W3VM050627-07	3Q111	06/27/05	1457
09	VSTD005S	UVM050615-01A	3Q113	06/27/05	1552
10	VSTD010S	UVM050615-02A	3Q114	06/27/05	1619
11	VSTD025S	UVM050615-03AI	3Q115	06/27/05	1647
12	VSTD050S	UVM050615-04A	3Q116	06/27/05	1714
13	VSTD100S	UVM050615-05A	3Q117	06/27/05	1742
14	VSTD250S	UVM050615-06A	3Q118	06/27/05	1809
15	VSTD500S	UVM0504615-07A	3Q119	06/27/05	1836
16	VSTD050	UVM050605-01C	3Q121	06/27/05	1931
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: 1R301 BFB Injection Date: 07/06/05

Instrument ID: VOA1 BFB Injection Time: 0657

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 60.0% of mass 95	49.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	84.2
175	5.0 - 9.0% of mass 174	6.3 (7.5)1
176	95.0 - 101.0% of mass 174	80.9 (96.1)1
177	5.0 - 9.0% of mass 176	5.7 (7.1)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK02LCS	1200889457	1R302-ESHL	07/06/05	0752
02	VSTD050	UVM050605-01E	1R302FL	07/06/05	0752
03	VBLK02SLCS	1200889458	1R304-ESHL	07/06/05	0921
04	VSTD250	UVM050531-01B	1R304	07/06/05	0921
05	VBLK02	1200889456	1R306-ESHL	07/06/05	1012
06	GU05050GMC401-FTB	139405003	1R313	07/06/05	1314
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: 3R402BFB BFB Injection Date: 07/07/05

Instrument ID: VOA3 BFB Injection Time: 0920

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.0
75	30.0 - 60.0% of mass 95	47.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	80.0
175	5.0 - 9.0% of mass 174	5.5 (6.9)1
176	95.0 - 101.0% of mass 174	76.8 (96.0)1
177	5.0 - 9.0% of mass 176	5.3 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	UVM050605-01E	3R402	07/07/05	0920
02	VBLK01LCS	1200881397	3R402ESHL2	07/07/05	0920
03	VSTD250S	UVM050531-01B	3R405	07/07/05	1042
04	VBLK01SLCS	1200881398	3R405ESHL2	07/07/05	1042
05	VBLK01	1200881394	3R408ESHL2	07/07/05	1204
06	GU05050GMC401	139405002	3R412	07/07/05	1353
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8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID (Standard): 1R302FL Date Analyzed: 07/06/05

Instrument ID: VOA1 Time Analyzed: 0752

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) N

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1826812	5.11	1251917	8.13	584370	10.83
	UPPER LIMIT	3653624	5.61	2503834	8.63	1168740	11.33
	LOWER LIMIT	913406	4.61	625958	7.63	292185	10.33
	EPA SAMPLE NO.						
01	VBLK02SLCS	1856367	5.11	1276632	8.13	609403	10.83
02	VBLK02	1736035	5.10	1224465	8.13	589443	10.82
03	GU05050GMC401-FTB	1550752	5.11	1066564	8.13	513595	10.83
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IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID (Standard): 3R402 Date Analyzed: 07/07/05

Instrument ID: VOA3 Time Analyzed: 0920

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	2392709	10.42	1556191	13.73	760028	16.22
	UPPER LIMIT	4785418	10.92	3112382	14.23	1520056	16.72
	LOWER LIMIT	1196354	9.92	778096	13.23	380014	15.72
	EPA SAMPLE NO.						
01	VBLK01LCS	2392709	10.42	1556191	13.73	760028	16.22
02	VBLK01SLCS	2342610	10.42	1497926	13.73	709539	16.22
03	VBLK01	2302958	10.42	1478038	13.74	674924	16.22
04	GU05050GMC401	2276231	10.42	1461521	13.74	673057	16.22
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IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SAMPLE
DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	2.6	
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	53.3	

1E

EPA SAMPLE NO.

GU05050GMC401

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 139405002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R412

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM I VOA-TIC OLM03.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r412.d
Lab Smp Id: 139405002 Client Smp ID: GU05050GMC401
Inj Date : 07-JUL-2005 13:53
Operator : PAM Inst ID: VOA3.i
Smp Info : |139405002|439994|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.420	10.420	(1.000)	2276231	50.0000	
* 61 Chlorobenzene-d5	117	13.737	13.733	(1.000)	1461521	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	673057	50.0000	
$ 35 Dibromofluoromethane	113	9.641	9.641	(0.925)	617238	42.7155	42.7
$ 47 Toluene-d8	98	12.141	12.141	(0.884)	1981711	42.1253	42.1
$ 71 Bromofluorobenzene	95	14.971	14.971	(0.923)	684644	40.0320	40.0
4 Chloromethane	50	5.011	5.007	(0.481)	52696	2.55033	2.6
97 1,4-Dioxane	88	11.182	11.176	(1.073)	9375	53.3048	53.3

General Engineering Laboratories, LLC

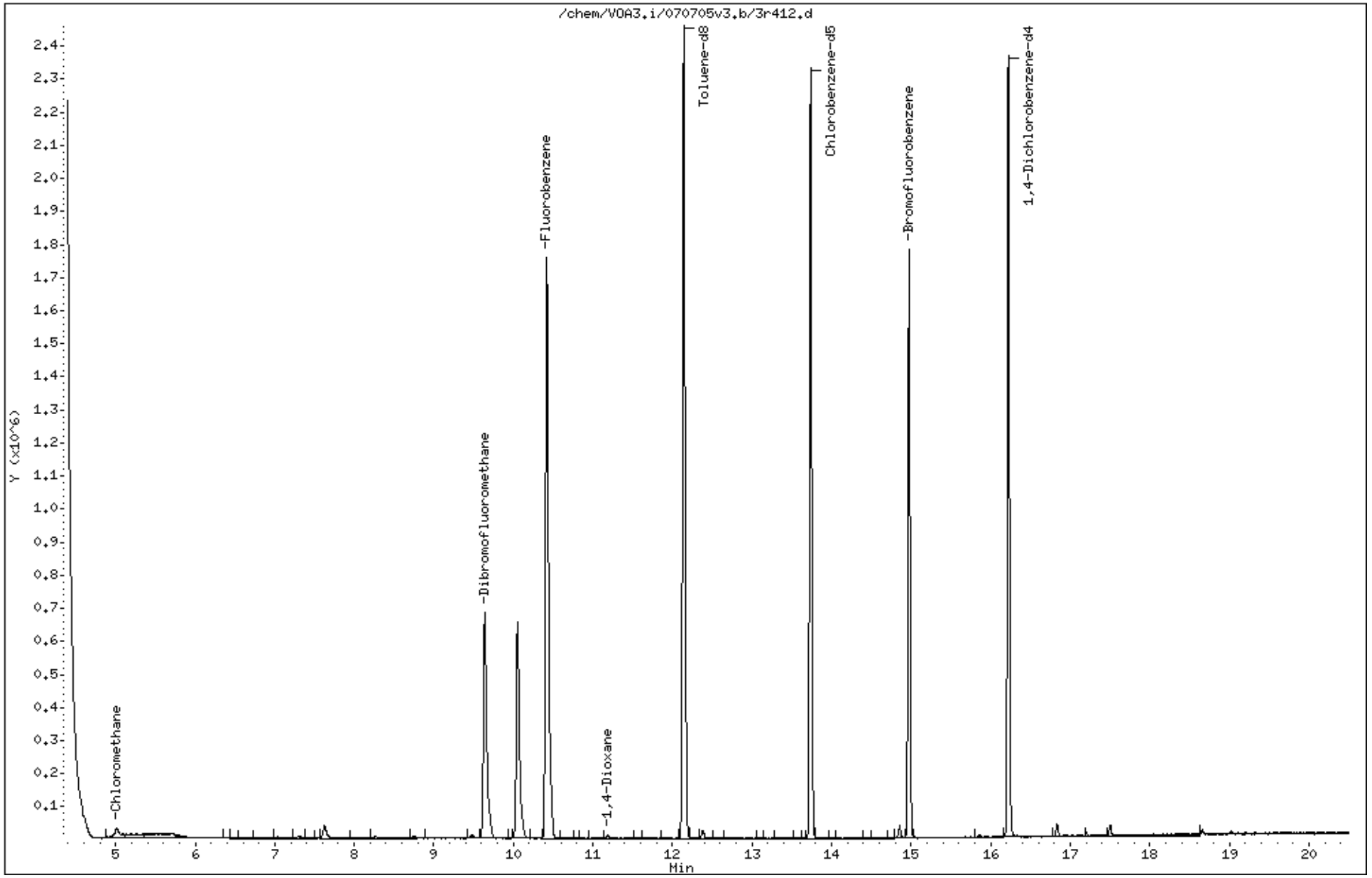
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r412.d
Lab Smp Id: 139405002 Client Smp ID: GU05050GMC401
Inj Date : 07-JUL-2005 13:53
Operator : PAM Inst ID: VOA3.i
Smp Info : |139405002|439994|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA3.i/070705v3.b/3r412.d
Date : 07-JUL-2005 13:53
Client ID: GU05050GMC401
Sample Info: |13940500214399941|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25



Data File: /chem/VOA3.i/070705v3.b/3r412.d

Date : 07-JUL-2005 13:53

Client ID: GU05050GMC401

Instrument: VOA3.i

Sample Info: |139405002|439994|1|VOAF|1|

Purge Volume: 5.0

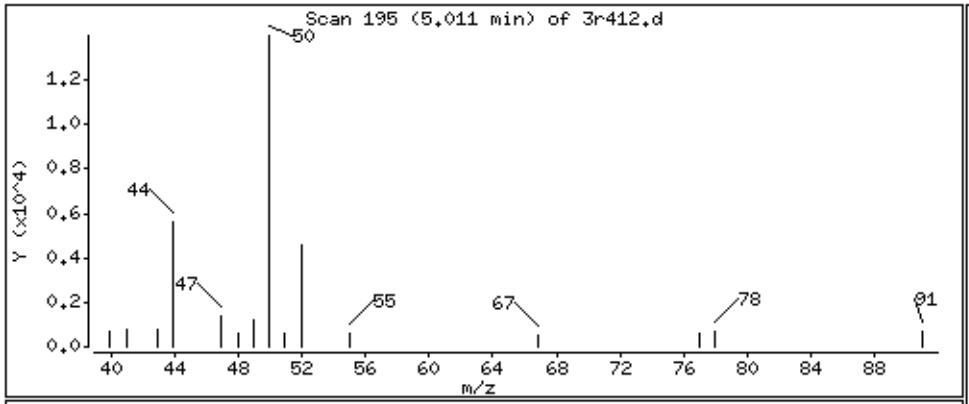
Operator: PAM

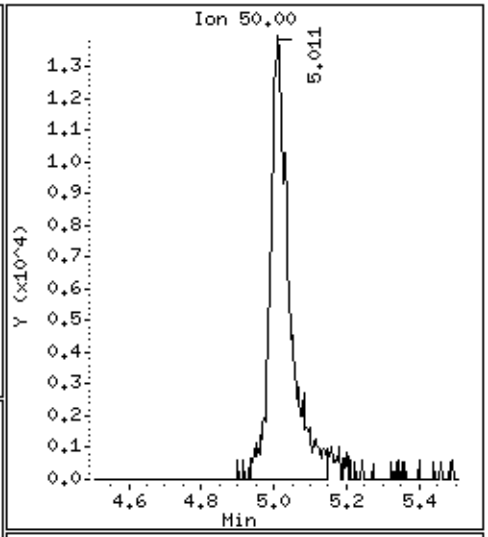
Column phase: DB-624

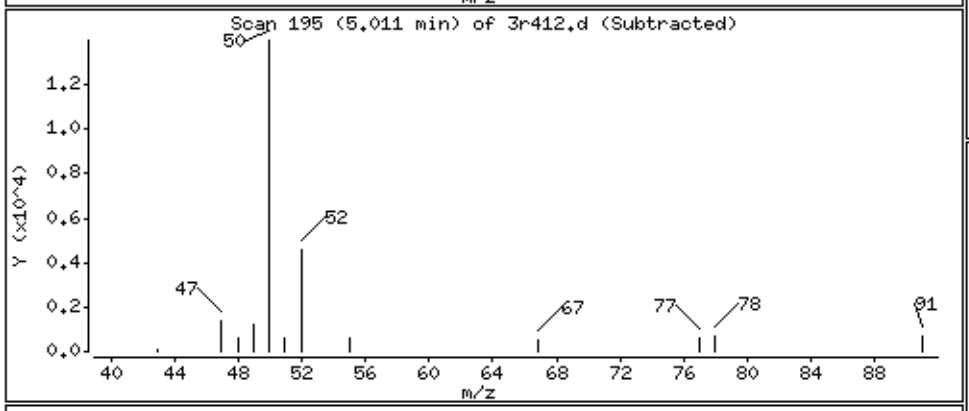
Column diameter: 0.25

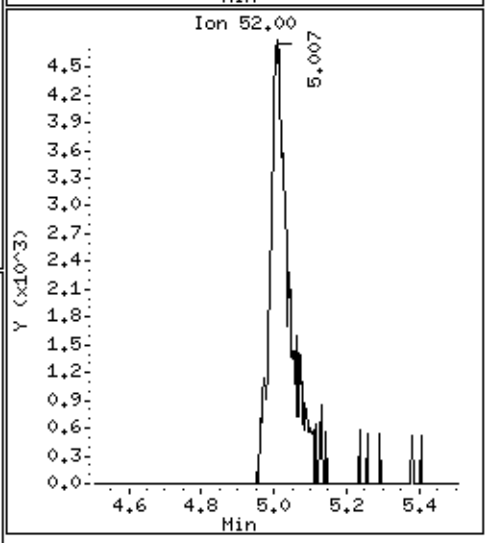
4 Chloromethane

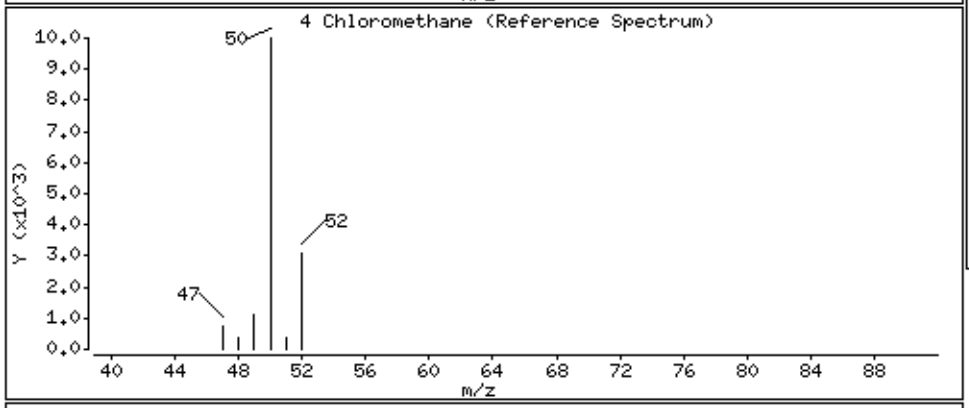
Concentration: 2.6 ug/l

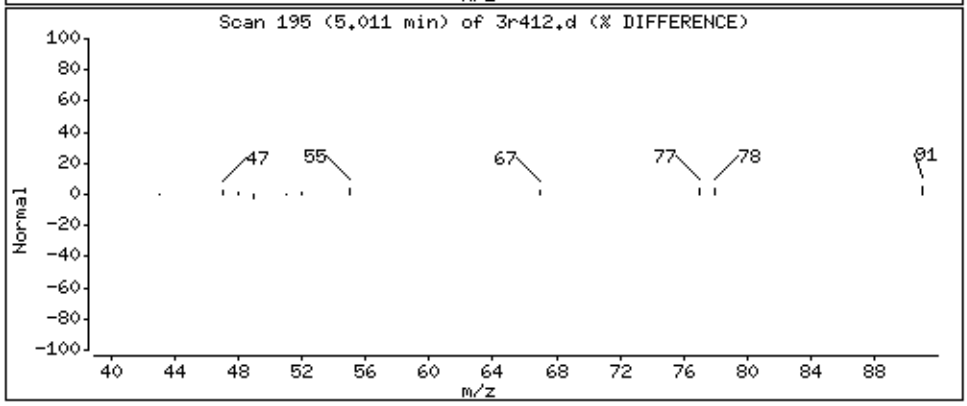












Data File: /chem/VOA3.i/070705v3.b/3r412.d

Date : 07-JUL-2005 13:53

Client ID: GU05050GMC401

Instrument: VOA3.i

Sample Info: |139405002|439994|1|VOAF|1|

Purge Volume: 5.0

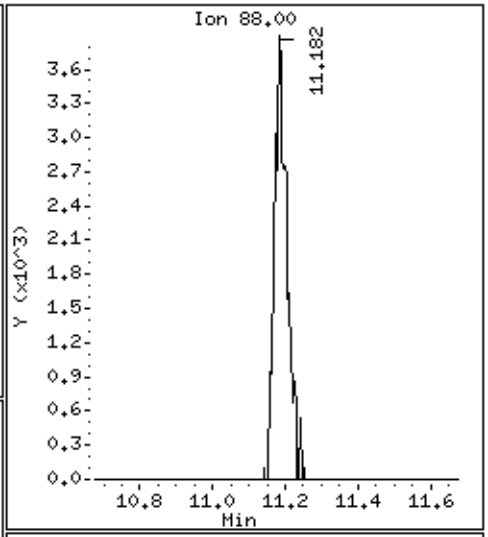
Operator: PAM

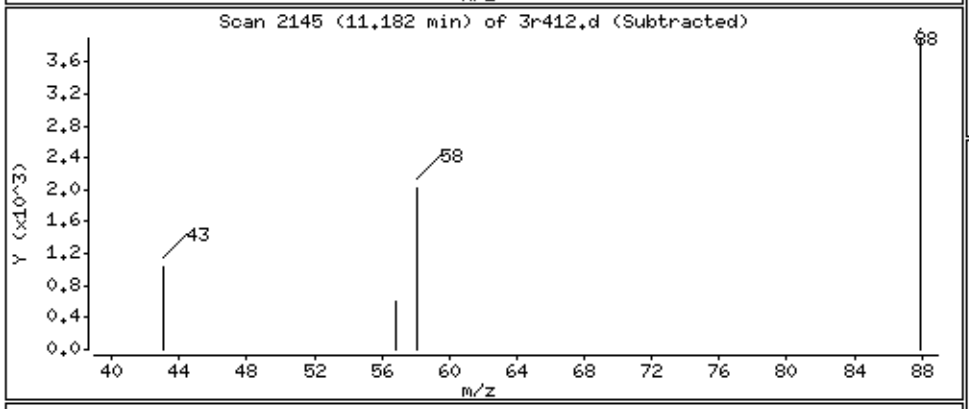
Column phase: DB-624

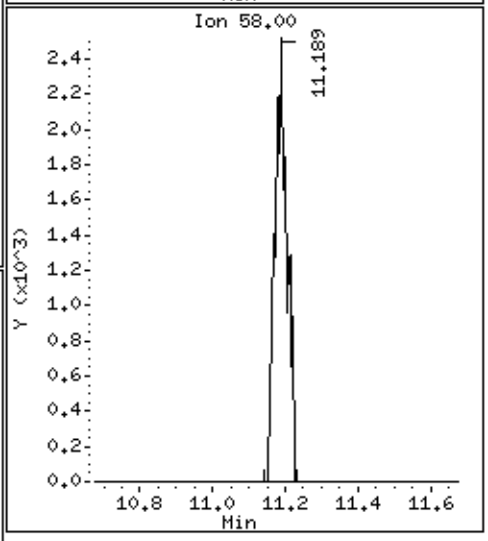
Column diameter: 0.25

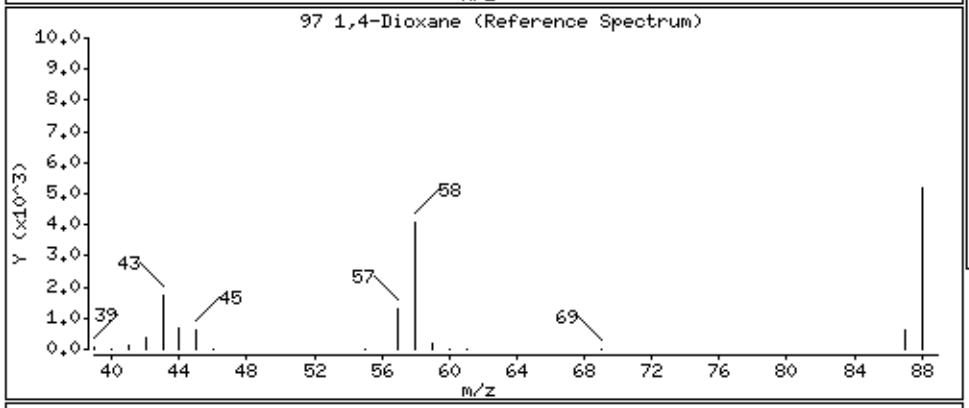
97 1,4-Dioxane

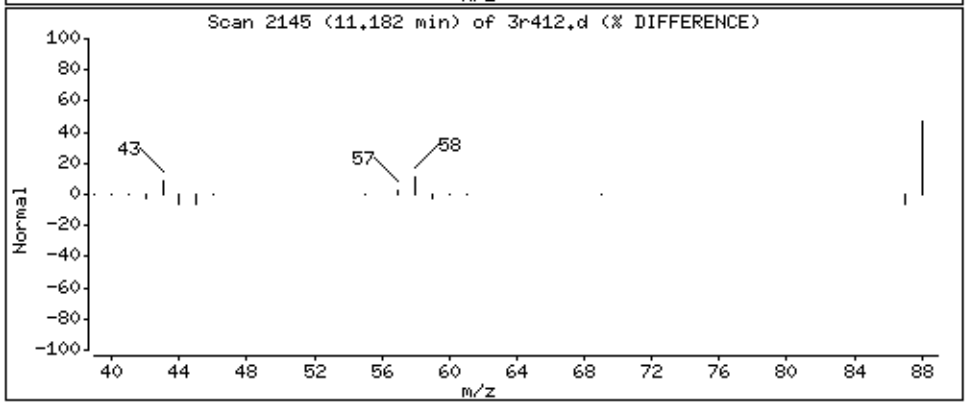
Concentration: 53.3 ug/l











1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
75-71-8	Dichlorodifluoromethane		1.0	U
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-69-4	Trichlorofluoromethane		1.0	U
107-02-8	Acrolein		5.0	U
75-35-4	1,1-Dichloroethylene		1.0	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		6.1	
75-05-8	Acetonitrile		25.0	U
78-83-1	Isobutyl alcohol		50.0	U
107-05-1	Allyl chloride		5.0	U
75-09-2	Methylene chloride		5.0	U
107-13-1	Acrylonitrile		5.0	U
156-60-5	trans-1,2-Dichloroethylene		1.0	U
75-34-3	1,1-Dichloroethane		1.0	U
108-05-4	Vinyl acetate		5.0	U
126-99-8	2-Chloro-1,3-butadiene		1.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethylene		1.0	U
594-20-7	2,2-Dichloropropane		1.0	U
126-98-7	Methacrylonitrile		5.0	U
107-12-0	Propionitrile		5.0	U
74-97-5	Bromochloromethane		1.0	U
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
563-58-6	1,1-Dichloropropene		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		1.0	U
79-01-6	Trichloroethylene		1.0	U

FORM I VOA OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
GU05050G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05050G
MC401-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WATER Lab Sample ID: 139405003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R313

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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7.					
8.					
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10.					
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FORM I VOA-TIC OLM03.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070605v1.b/1r313.d
Lab Smp Id: 139405003 Client Smp ID: GU05050GMC401-FTB
Inj Date : 06-JUL-2005 13:14
Operator : PS Inst ID: VOA1.i
Smp Info : |139405003|439994|1|VOAF|1|
Misc Info : ESHL 5.0ML PH2
Comment :
Method : /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m
Meth Date : 15-Jul-2005 07:49 kel00587 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	5.107	5.106	(1.000)	1550752	50.0000	
* 61 Chlorobenzene-d5	117	8.131	8.129	(1.000)	1066564	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	10.828	10.827	(1.000)	513595	50.0000	
$ 35 Dibromofluoromethane	113	4.407	4.406	(0.863)	362039	51.6003	51.6
$ 47 Toluene-d8	98	6.581	6.585	(0.809)	1600663	51.5540	51.6
$ 71 Bromofluorobenzene	95	9.488	9.486	(0.876)	540026	47.2755	47.3
14 Carbon disulfide	76	3.275	3.284	(0.641)	97077	6.08464	6.1

General Engineering Laboratories, LLC

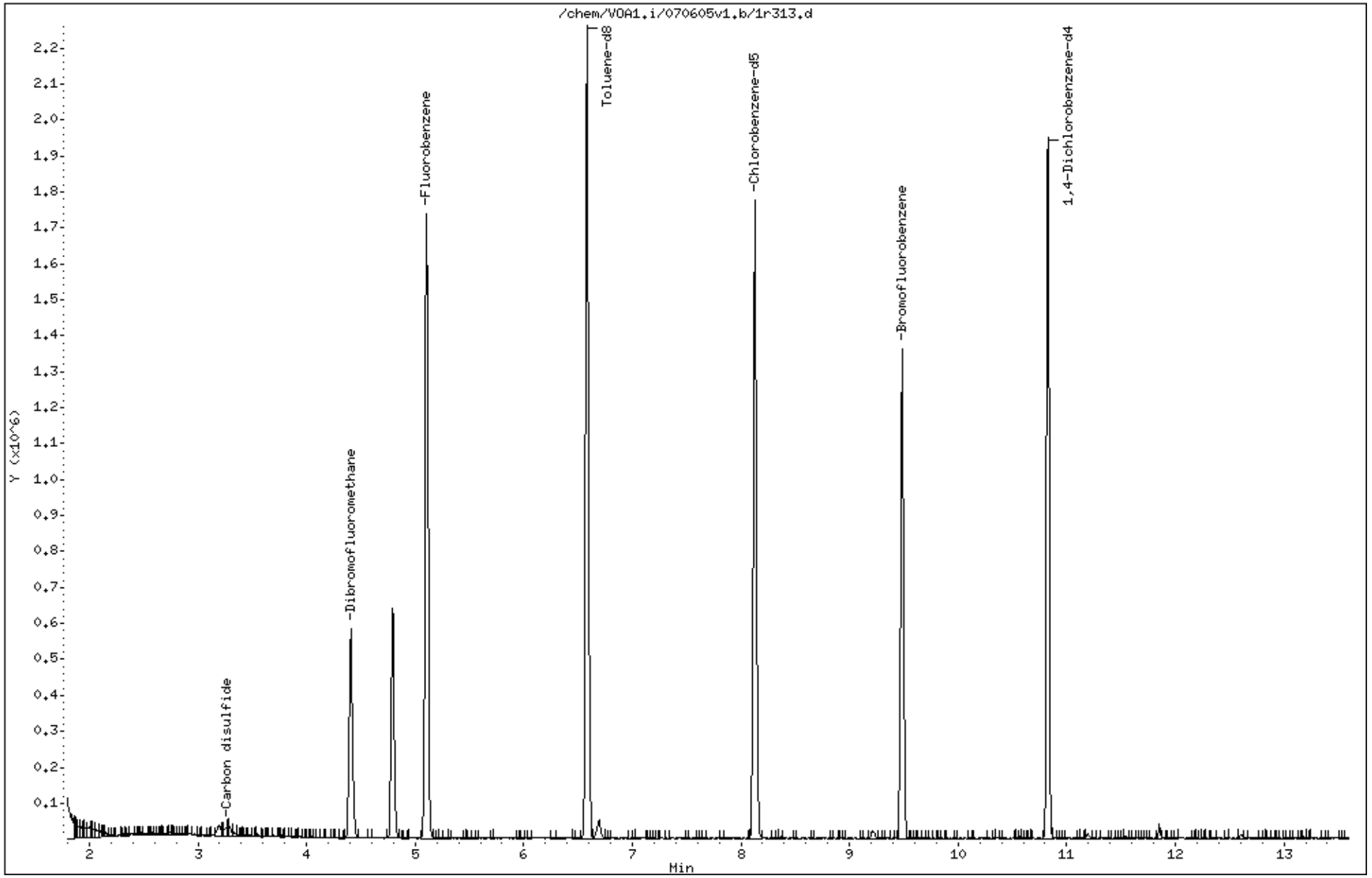
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070605v1.b/1r313.d
Lab Smp Id: 139405003 Client Smp ID: GU05050GMC401-FTB
Inj Date : 06-JUL-2005 13:14
Operator : PS Inst ID: VOA1.i
Smp Info : |139405003|439994|1|VOAF|1|
Misc Info : ESHL 5.0ML PH2
Comment :
Method : /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m
Meth Date : 15-Jul-2005 07:49 kel00587 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: kilroy

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA1.i/070605v1.b/1r313.d
Date : 06-JUL-2005 13:14
Client ID: GU05050GMC401-FTB
Sample Info: |139405003|439994|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PS
Column diameter: 0.25



Data File: /chem/VOA1.i/070605v1.b/1r313.d

Date : 06-JUL-2005 13:14

Client ID: GU05050GMC401-FTB

Instrument: VOA1.i

Sample Info: |139405003|439994|1|VOAF|1|

Purge Volume: 5.0

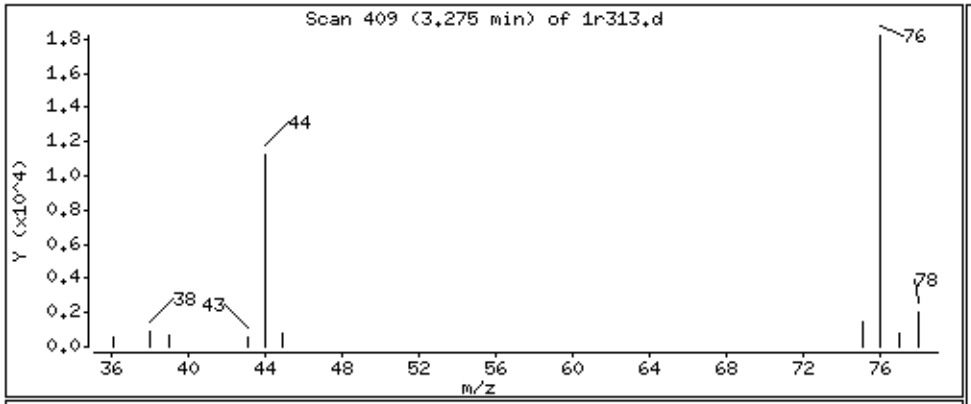
Operator: PS

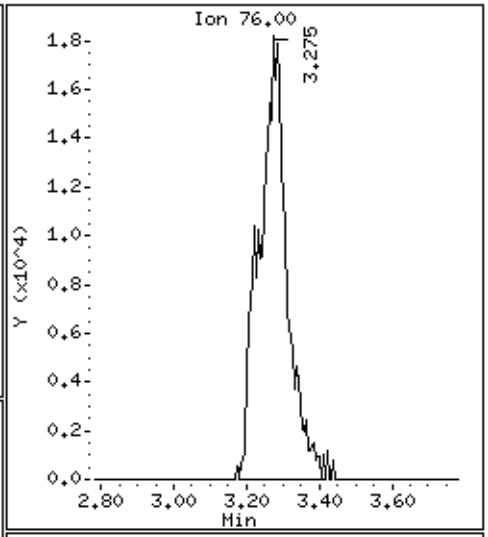
Column phase: RTX-Volatiles

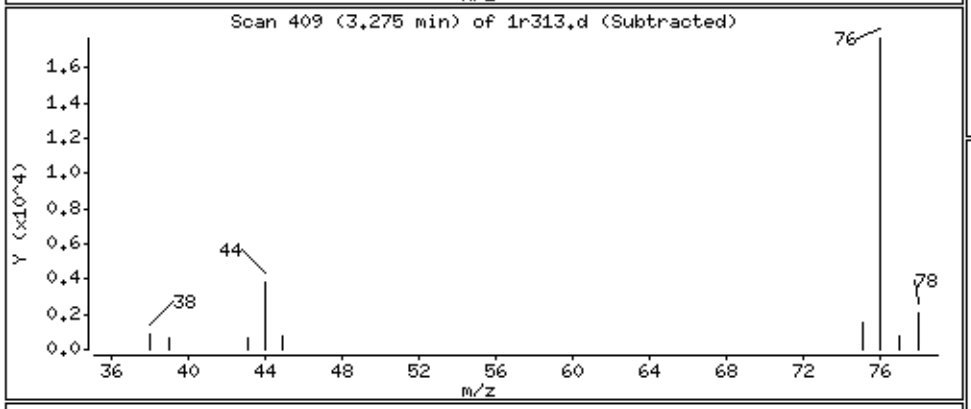
Column diameter: 0.25

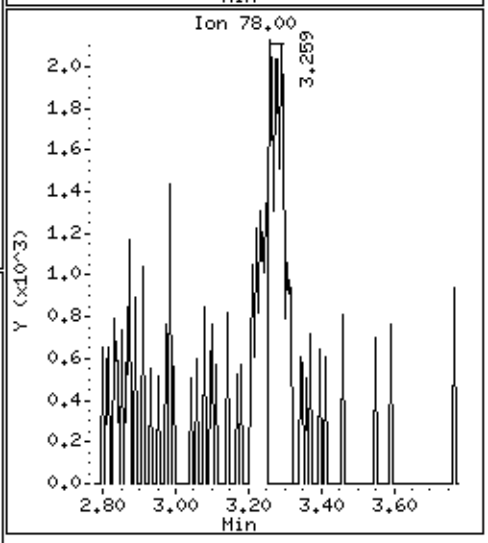
14 Carbon disulfide

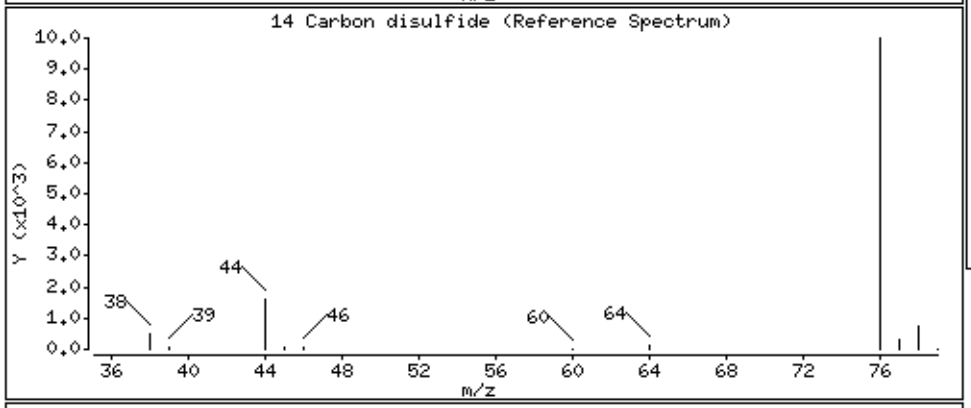
Concentration: 6.1 ug/l

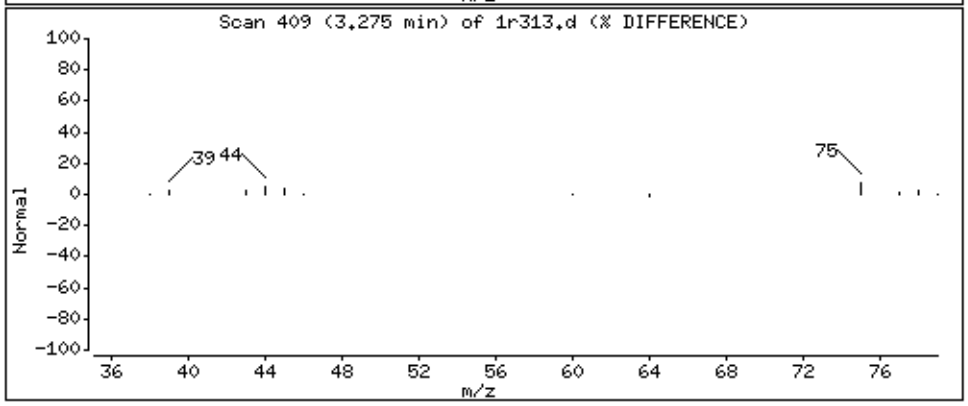












STANDARDS DATA

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
Dibromofluoromethane (surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropane		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Report Date: 28-Jun-2005 11:05

Calibration History

Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Start Cal Date: 21-JUN-2005 21:33
End Cal Date : 28-JUN-2005 02:45

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
27-JUN-2005 23:46	ICALsubS	/chem/VOA1.i/062705v1.b/1q123.d
22-JUN-2005 00:54	BTEXMN+	/chem/VOA1.i/062105v1.b/1p222.d
27-JUN-2005 20:21	CALsubL+	/chem/VOA1.i/062705v1.b/1q115.d
Cal Level: 2 , Cal Amount: 2.00000		
28-JUN-2005 00:12	ICALsubS	/chem/VOA1.i/062705v1.b/1q124.d
22-JUN-2005 01:20	BTEXMN+	/chem/VOA1.i/062105v1.b/1p223.d
27-JUN-2005 20:47	CALsubL+	/chem/VOA1.i/062705v1.b/1q116.d
Cal Level: 3 , Cal Amount: 5.00000		
28-JUN-2005 00:37	ICALsubS	/chem/VOA1.i/062705v1.b/1q125.d
22-JUN-2005 01:46	BTEXMN+	/chem/VOA1.i/062105v1.b/1p224.d
27-JUN-2005 21:12	CALsubL+	/chem/VOA1.i/062705v1.b/1q117.d
Cal Level: 4 , Cal Amount: 10.00000		
28-JUN-2005 01:03	ICALsubS	/chem/VOA1.i/062705v1.b/1q126.d
22-JUN-2005 02:12	BTEXMN+	/chem/VOA1.i/062105v1.b/1p225.d
27-JUN-2005 21:38	CALsubL+	/chem/VOA1.i/062705v1.b/1q118.d
Cal Level: 5 , Cal Amount: 20.00000		
28-JUN-2005 01:28	ICALsubS	/chem/VOA1.i/062705v1.b/1q127.d
22-JUN-2005 02:38	BTEXMN+	/chem/VOA1.i/062105v1.b/1p226.d
27-JUN-2005 22:03	CALsubL+	/chem/VOA1.i/062705v1.b/1q119.d
Cal Level: 6 , Cal Amount: 50.00000		
28-JUN-2005 02:19	ICALsubS	/chem/VOA1.i/062705v1.b/1q129.d
22-JUN-2005 03:04	BTEXMN+	/chem/VOA1.i/062105v1.b/1p227.d
27-JUN-2005 22:29	CALsubL+	/chem/VOA1.i/062705v1.b/1q120.d
Cal Level: 7 , Cal Amount: 100.00000		
28-JUN-2005 02:45	ICALsubS	/chem/VOA1.i/062705v1.b/1q130.d
22-JUN-2005 03:30	BTEXMN+	/chem/VOA1.i/062105v1.b/1p228.d

27-JUN-2005 22:55	CALsubL+	/chem/VOA1.i/062705v1.b/1q121.d

Cal Level: 8 , Cal Amount: 200.00000		
22-JUN-2005 00:01	BTEXMN+	/chem/VOA1.i/062105v1.b/1p220.d
22-JUN-2005 00:01	CALsubL+	/chem/VOA1.i/062105v1.b/1p220.d
27-JUN-2005 19:30	BENZENE+	/chem/VOA1.i/062705v1.b/1q113.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
28-JUN-2005 04:27	CALsubS	/chem/VOA1.i/062705v1.b/1q134.d

Ccal Level: 6 , Ccal Amount: 50.0		
28-JUN-2005 04:02	CALsubL+	/chem/VOA1.i/062705v1.b/1q133.d

Ccal Level: 6 , Ccal Amount: 50.0		
28-JUN-2005 03:36	CALsubL+	/chem/VOA1.i/062705v1.b/1q132.d

Ccal Level: 6 , Ccal Amount: 50.0		
28-JUN-2005 02:19	ICALsubS	/chem/VOA1.i/062705v1.b/1q129.d

Ccal Level: 6 , Ccal Amount: 50.0		
27-JUN-2005 22:29	CALsubL+	/chem/VOA1.i/062705v1.b/1q120.d

Ccal Level: 6 , Ccal Amount: 50.0		
28-JUN-2005 01:54	ICALsubS	/chem/VOA1.i/062605v1.b/1q128.d

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 21:33
End Cal Date : 28-JUN-2005 02:45
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Calibration File Names:
Level 1: /chem/VOA1.i/062705v1.b/1q123.d
Level 2: /chem/VOA1.i/062705v1.b/1q124.d
Level 3: /chem/VOA1.i/062705v1.b/1q125.d
Level 4: /chem/VOA1.i/062705v1.b/1q126.d
Level 5: /chem/VOA1.i/062705v1.b/1q127.d
Level 6: /chem/VOA1.i/062705v1.b/1q129.d
Level 7: /chem/VOA1.i/062705v1.b/1q130.d
Level 8: /chem/VOA1.i/062105v1.b/1p220.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.93174	0.77824	0.73813	0.66712	0.71333	0.75319					
	0.69514	+++++					AVRG		0.75384		11.50061
M 2 1,2-Dichloroethylene (total)	0.27339	0.26063	0.22024	0.19117	0.22474	0.24317					
	0.25485	+++++					AVRG		0.23831		11.81879
M 135 1,3-Dichloropropylene	0.49064	0.50055	0.48887	0.45632	0.49338	0.54364					
	0.53455	+++++					AVRG		0.50113		5.90404
3 Dichlorodifluoromethane	1756	9859	23026	47697	91881	+++++					
	+++++	+++++					LINR	0.00715	0.17531		0.99852
4 Chloromethane	17206	27613	64525	116567	225260	461048					
	1042584	+++++					LINR	-0.01421	0.37143		0.99719

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 21:33
End Cal Date : 28-JUN-2005 02:45
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	200 Level 8										
5 Vinyl chloride	0.22034	0.25897	0.22340	0.25188	0.25378	0.24099						
	0.26411	+++++					AVRG		0.24478		7.02658	
6 Bromomethane	7175	11314	22194	40933	67861	152654						
	331978	+++++					LINR	-0.02592	0.11792		0.99894	
7 Chloroethane	0.11845	0.15808	0.12615	0.11958	0.12518	0.11639						
	0.12161	+++++					AVRG		0.12649		11.35491	
8 Trichlorofluoromethane	1005	5762	14265	45016	88002	198390						
	440061	+++++					LINR	0.01835	0.16015		0.99874	<-
134 Ethyl Ether	5639	14513	23788	74932	135444	259233						
	533767	+++++					LINR	-0.03286	0.19252		0.99553	
9 Acrolein	3845	10011	20455	58358	108094	359239						
	488573	+++++					LINR	0.05512	0.04397		0.99122	
12 Trichlorotrifluoroethane	0.06231	0.06714	0.04901	0.06298	0.05834	0.06024						
	0.05084	+++++					AVRG		0.05869		11.23122	<-
10 Acetone	20607	31563	49448	108575	217026	444308						
	849687	+++++					LINR	-0.25325	0.06140		0.99636	
11 1,1-Dichloroethylene	14007	23916	37559	106012	205643	574889						
	+++++	+++++					LINR	0.02099	0.43735		0.99698	

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 21:33
End Cal Date : 28-JUN-2005 02:45
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
13 Iodomethane	45543	82152	129825	370014	719469	1953524					
	+++++	+++++					LINR	0.09206	0.29724		0.99787
15 Acetonitrile	26270	49580	75219	196928	428237	1127048					
	+++++	+++++					LINR	0.48047	0.03441		0.99751
128 Methyl acetate	37355	68240	98408	280936	572215	1581661					
	+++++	+++++					LINR	0.11158	0.24119		0.99679
14 Carbon disulfide	0.55957	0.54193	0.51016	0.45433	0.49073	0.55791					
	0.48623	+++++					AVRG		0.51441		7.80522
16 Allyl chloride	4163	10552	22216	72162	128982	435748					
	652913	+++++					LINR	0.14423	0.05790		0.99686
17 Methylene chloride	+++++	22596	30866	71153	112467	274965					
	+++++	+++++					LINR	-0.02938	0.20092		0.99904
18 Acrylonitrile	0.08010	0.08772	0.09516	0.09678	0.08267	0.09060					
	0.09841	+++++					AVRG		0.09021		7.84264
20 tert-Butyl methyl ether	0.69143	0.60054	0.61280	0.52545	0.56752	0.61124					
	0.69248	+++++					AVRG		0.61449		9.93115
21 trans-1,2-Dichloroethylene	0.23465	0.22025	0.17843	0.17400	0.19544	0.21737					
	0.24847	+++++					AVRG		0.20980		13.41258

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-JUN-2005 21:33
End Cal Date : 28-JUN-2005 02:45
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
23 Vinyl acetate	0.66029	0.67560	0.66239	0.57517	0.58756	0.72386					
	0.76074	+++++					AVRG		0.66366		10.07515
22 1,1-Dichloroethane	0.46100	0.50483	0.47709	0.42101	0.45506	0.55135					
	0.55850	+++++					AVRG		0.48983		10.43107
24 2-Chloro-1,3-butadiene	0.52587	0.53443	0.52867	0.50807	0.44739	0.49336					
	0.52956	+++++					AVRG		0.50962		6.09041
26 Ethyl acetate	0.37624	0.39098	0.38673	0.39067	0.33640	0.30775					
	0.32187	+++++					AVRG		0.35866		9.92746
30 2-Butanone	32632	55097	131209	182274	453471	1280583					
	2662051	+++++					LINR	0.10979	0.19544		0.99843
31 cis-1,2-Dichloroethylene	0.31214	0.30102	0.26205	0.20833	0.25403	0.26897					
	0.26124	+++++					AVRG		0.26683		12.67819
28 Propionitrile	4026	14228	35630	70457	114893	300128					
	531710	+++++					LINR	0.05905	0.04531		0.99719
25 2,2-Dichloropropane	0.32135	0.36945	0.32099	0.25265	0.30291	0.33007					
	0.31921	+++++					AVRG		0.31666		11.01565
27 Methacrylonitrile	0.25719	0.24429	0.26298	0.25053	0.22116	0.20223					
	0.21165	+++++					AVRG		0.23572		10.11355

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	200 Level 8									
29 Bromochloromethane	0.08642	0.12562	0.11581	0.08629	0.11631	0.12126					
	0.11764	+++++					AVRG		0.10991		14.95434
32 Chloroform	0.48512	0.42544	0.42428	0.35338	0.40698	0.43328					
	0.42703	+++++					AVRG		0.42221		9.21766
72 Tetrahydrofuran	45878	56658	107540	196696	322064	795583					
	+++++	+++++					LINR	-0.19505	0.34390		0.99908
36 1,1,1-Trichloroethane	0.28257	0.33891	0.33552	0.30174	0.31337	0.34496					
	0.34278	+++++					AVRG		0.32284		7.44089
19 Isobutyl alcohol	0.01243	0.01109	0.01226	0.01188	0.01130	0.01229					
	0.01219	+++++					AVRG		0.01192		4.42904
34 1,1-Dichloropropene	0.39163	0.37292	0.35066	0.31039	0.35716	0.36752					
	0.35842	+++++					AVRG		0.35838		6.98985
129 Cyclohexane	0.84216	0.89858	0.84512	0.71852	0.79124	0.84615					
	0.79336	+++++					AVRG		0.81930		7.01356
33 Carbon tetrachloride	0.21236	0.23295	0.22268	0.22124	0.25429	0.27976					
	0.29324	+++++					AVRG		0.24522		12.78221
37 1,2-Dichloroethane	0.43755	0.44286	0.40019	0.38576	0.40808	0.41148					
	0.42741	+++++					AVRG		0.41619		4.96665

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
38 Benzene	1.32598	1.11912	1.05496	0.99826	1.02256	1.07524					
	1.05190	1.01344					AVRG		1.08268		9.73899
131 n-Butyl alcohol	0.00941	0.00930	0.01077	0.01029	0.01141	0.01293					
	0.01333	0.00990					AVRG		0.01092		14.05474
39 Trichloroethylene	0.34512	0.31197	0.25535	0.23488	0.25349	0.26856					
	0.25581	+++++					AVRG		0.27503		14.20015
42 Methyl methacrylate	0.16406	0.16279	0.15764	0.14788	0.13562	0.15918					
	0.17463	+++++					AVRG		0.15740		7.94513
41 1,2-Dichloropropane	0.36913	0.37038	0.31710	0.31235	0.33885	0.34414					
	0.33276	+++++					AVRG		0.34067		6.70292
130 Methylcyclohexane	0.55062	0.53657	0.54161	0.50878	0.53586	0.55180					
	0.51643	+++++					AVRG		0.53452		3.05854
97 1,4-Dioxane	0.00247	0.00225	0.00267	0.00234	0.00213	0.00242					
	0.00275	+++++					AVRG		0.00243		9.06680
43 Dibromomethane	0.16335	0.12451	0.13271	0.12679	0.14314	0.14609					
	0.14410	+++++					AVRG		0.14010		9.56016
45 Bromodichloromethane	0.25388	0.30276	0.28187	0.26850	0.29182	0.32086					
	0.31602	+++++					AVRG		0.29082		8.45042

General Engineering Laboratories, LLC

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Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
48 2-Nitropropane	0.04377	0.05312	0.05102	0.05649	0.05005	+++++					
	+++++	+++++					AVRG		0.05089		9.20403
44 2-Chloroethylvinyl ether	0.12638	0.13065	0.12549	0.12898	0.13218	0.13905					
	0.13734	+++++					AVRG		0.13144		3.93917
46 cis-1,3-Dichloropropylene	0.33981	0.36395	0.35668	0.33240	0.37324	0.38821					
	0.38210	+++++					AVRG		0.36234		5.76419
49 4-Methyl-2-pentanone	0.23241	0.22919	0.20892	0.19762	0.21064	0.22702					
	0.21837	+++++					AVRG		0.21774		5.82589
50 Toluene	1.31138	1.16928	1.00080	0.97108	1.01349	1.03401					
	1.00555	+++++					AVRG		1.07222		11.50485
51 Ethyl methacrylate	0.42754	0.44988	0.45442	0.46329	0.41189	0.48509					
	0.42135	+++++					AVRG		0.44478		5.81561
53 trans-1,3-Dichloropropylene	0.46668	0.45772	0.46061	0.41537	0.44321	0.50034					
	0.50497	+++++					AVRG		0.46413		6.73021
54 1,1,2-Trichloroethane	0.25354	0.27439	0.21181	0.20864	0.23931	0.25054					
	0.24581	+++++					AVRG		0.24058		9.73039
55 2-Hexanone	0.45839	0.41911	0.39862	0.35925	0.39196	0.42720					
	0.41217	+++++					AVRG		0.40953		7.56227

General Engineering Laboratories, LLC

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Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
52 1,3-Dichloropropane	0.50033	0.53283	0.50857	0.45493	0.47228	0.51455					
	0.48691	+++++					AVRG		0.49577		5.34244
56 Tetrachloroethylene	0.28789	0.35053	0.30391	0.27556	0.27361	0.29669					
	0.28402	+++++					AVRG		0.29603		8.89978
57 Dibromochloromethane	0.19993	0.23950	0.25950	0.22215	0.24699	0.29656					
	+++++	+++++					AVRG		0.24410		13.52736
59 1,2-Dibromoethane	0.22160	0.30004	0.29090	0.26599	0.26665	0.31016					
	0.29476	+++++					AVRG		0.27859		10.78840
62 Chlorobenzene	1.12279	1.22370	0.99944	0.98117	1.01599	1.06873					
	1.02477	+++++					AVRG		1.06237		8.04575
58 Ethylbenzene	2.31262	2.20007	1.90907	1.74686	1.85265	1.97850					
	1.86158	+++++					AVRG		1.98019		10.28127
60 1,1,1,2-Tetrachloroethane	0.23720	0.24223	0.25165	0.25079	0.28286	0.32032					
	0.31933	+++++					AVRG		0.27205		13.12851
63 m,p-Xylenes	0.94091	0.80794	0.74725	0.67680	0.73082	0.76108					
	0.70380	+++++					AVRG		0.76694		11.39017
64 o-Xylene	0.91339	0.71883	0.71987	0.64775	0.67835	0.73743					
	0.67783	+++++					AVRG		0.72764		12.03711

General Engineering Laboratories, LLC

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Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	1.28130	1.24572	1.15011	1.11645	1.13418	1.22191					
	1.15293	+++++					AVRG		1.18609		5.31471
66 Bromoform	1220	3405	9348	20996	39375	134937					
	300777	+++++					LINR	0.05153	0.34691		0.99716
67 Isopropylbenzene	3.98336	3.97694	3.67051	3.53927	3.73782	3.90447					
	3.62159	+++++					AVRG		3.77628		4.74134
68 cis-1,4-Dichloro-2-butene	0.35432	0.35320	0.38073	0.37798	0.34215	0.41750					
	0.38839	+++++					AVRG		0.37347		6.90688
70 Cyclohexanone	0.02435	0.02396	0.02547	0.02252	0.02482	+++++					
	+++++	+++++					AVRG		0.02422		4.57304
73 1,1,2,2-Tetrachloroethane	0.87152	0.80507	0.72691	0.71345	0.76202	0.76521					
	0.77508	+++++					AVRG		0.77418		6.79059
69 trans-1,4-Dichloro-2-butene	0.21005	0.25286	0.23711	0.24483	0.22333	0.27113					
	0.25751	+++++					AVRG		0.24240		8.59898
74 1,2,3-Trichloropropane	0.24863	0.24845	0.20263	0.20123	0.22667	0.22306					
	0.22867	+++++					AVRG		0.22562		8.47006
75 Bromobenzene	1.02204	0.94508	0.82496	0.78414	0.81803	0.81499					
	0.79028	+++++					AVRG		0.85707		10.55093

General Engineering Laboratories, LLC

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Start Cal Date : 21-JUN-2005 21:33
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Integrator : HP RTE
Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
76 n-Propylbenzene	5.36019	4.82972	4.54167	4.36443	4.68224	4.73045					
	4.46183	+++++					AVRG		4.71008		6.97511
78 1,3,5-Trimethylbenzene	3.56995	3.36538	3.26823	3.06873	3.26860	3.33020					
	3.18367	+++++					AVRG		3.29354		4.74893
77 2-Chlorotoluene	3.69579	3.25654	3.13806	2.87154	2.87318	3.01051					
	2.92959	+++++					AVRG		3.11074		9.47106
80 4-Chlorotoluene	3.13436	2.90173	2.91707	2.65424	2.88176	2.87624					
	2.70457	+++++					AVRG		2.86714		5.46199
81 tert-Butylbenzene	3.68120	3.25211	3.14112	2.95959	3.13455	3.25530					
	3.12874	+++++					AVRG		3.22180		6.99370
79 1,2,4-Trimethylbenzene	3.75747	3.30297	3.31636	3.03385	3.23507	3.32916					
	3.18455	+++++					AVRG		3.30849		6.73917
82 Pentachloroethane	12527	32516	76191	171747	333828	1045529					
	1907975	+++++					LINR	0.06501	0.43596		0.99595
83 sec-Butylbenzene	4.57977	4.41889	4.07824	4.00180	4.26258	4.42059					
	4.18125	+++++					AVRG		4.27759		4.83855
84 4-Isopropyltoluene	3.74842	3.63637	3.29785	3.20703	3.42928	3.41549					
	3.29143	+++++					AVRG		3.43227		5.71100

General Engineering Laboratories, LLC

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Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	1.82645	1.85993	1.60963	1.50069	1.56419	1.58703					
	1.52756	+++++					AVRG		1.63935		8.79245
87 1,4-Dichlorobenzene	1.99236	1.82062	1.57159	1.47707	1.49992	1.60951					
	1.52902	+++++					AVRG		1.64287		11.67713
88 Benzyl chloride	33132	81069	199362	495662	927387	2950781					
	5600846	+++++					LINR	0.10977	1.27425		0.99749
89 n-Butylbenzene	3.55229	3.15326	3.16287	2.90983	3.17494	3.25156					
	3.06436	+++++					AVRG		3.18130		6.16919
90 1,2-Dichlorobenzene	1.59038	1.58754	1.48587	1.32178	1.41696	1.44990					
	1.44435	+++++					AVRG		1.47097		6.47302
91 bis(2-Chloroisopropyl)ether	0.79279	0.72846	0.76707	0.72695	0.65426	0.77578					
	0.72571	+++++					AVRG		0.73872		6.21505
92 1,2-Dibromo-3-chloropropane	703	1368	4421	7932	19877	56491					
	123848	+++++					LINR	0.03894	0.14247		0.99885
93 1,2,4-Trichlorobenzene	1.18930	1.01786	1.00938	0.91513	0.94814	0.95089					
	0.92673	+++++					AVRG		0.99392		9.51447
94 Hexachlorobutadiene	0.80136	0.62390	0.62527	0.59207	0.61796	0.66241					
	0.62616	+++++					AVRG		0.64987		10.75411

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Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	2.79157	2.57281	2.37457	2.12183	2.39295	2.54276					
	2.49247	+++++					AVRG		2.46985		8.36388
96 1,2,3-Trichlorobenzene	1.07919	1.07920	0.95129	0.87991	0.93564	0.95460					
	0.94584	+++++					AVRG		0.97510		7.73492
$ 35 Dibromofluoromethane	+++++	+++++	0.23121	0.19034	0.23967	0.23266					
	0.23723	+++++					AVRG		0.22622		8.99403
$ 47 Toluene-d8	+++++	1.60313	1.46499	1.36605	1.40680	1.49657					
	1.39562	+++++					AVRG		1.45553		5.95223
$ 71 Bromofluorobenzene	+++++	+++++	1.12799	1.09204	1.13829	1.12278					
	1.07920	+++++					AVRG		1.11206		2.26480

General Engineering Laboratories, LLC

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Target Version : 3.50
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Method file : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Cal Date : 30-Jun-2005 07:39 eh1

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q113.d
Lab Smp Id: W1VM050627-01 Client Smp ID: VSTD0005
Inj Date : 27-JUN-2005 19:30
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-01|ICAL|1|VOAF|1|
Misc Info : ICAL8 5.0ML 0.5PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 11-Jul-2005 10:49 eh1 Quant Type: ISTD
Cal Date : 22-JUN-2005 00:01 Cal File: 1p220.d
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BENZENE+.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

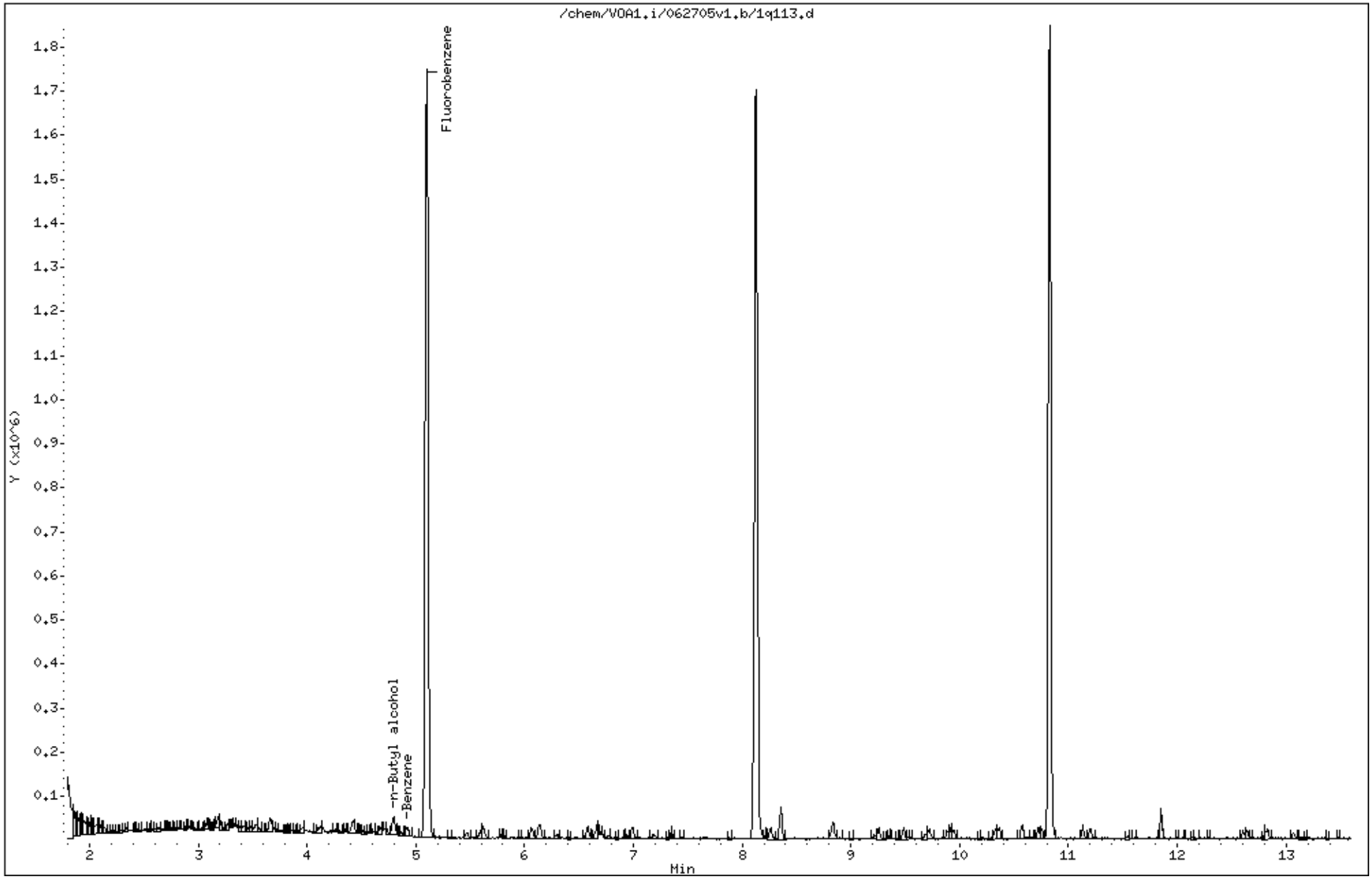
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
38 Benzene	78	4.929	4.929	(0.966)	14931	0.50000	0.47(a)
131 n-Butyl alcohol	56	4.796	4.796	(0.940)	14587	50.0000	45.3(a)
* 40 Fluorobenzene	96	5.100	5.100	(1.000)	1473297	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA1.i/062705v1.b/1q113.d
Date : 27-JUN-2005 19:30
Client ID: VSTD0005
Sample Info: |W1VM050627-01|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PAM
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q115.d
Lab Smp Id: W1VM050627-02 Client Smp ID: VSTD001
Inj Date : 27-JUN-2005 20:21
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-02|ICAL|1|VOAF|1|
Misc Info : ICAL1 5.0ML 1.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 27-JUN-2005 23:46 Cal File: 1q123.d
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				52499	3.00000	3.7
M 2 1,2-Dichloroethylene (total)	96				15552	2.00000	2.3
M 135 1,3-Dichloropropylene	75				18430	2.00000	1.9(a)
3 Dichlorodifluoromethane	85	1.858	1.849	(0.364)	1756	1.00000	0.71(Ta)
4 Chloromethane	50	1.943	1.966	(0.381)	17206	1.00000	0.92(a)
5 Vinyl chloride	62	2.061	2.079	(0.404)	6267	1.00000	0.90(a)
6 Bromomethane	94	2.296	2.314	(0.450)	7175	1.00000	0.84(aQ)
7 Chloroethane	64	2.349	2.351	(0.460)	3369	1.00000	0.94(aQ)
8 Trichlorofluoromethane	101	2.590	2.591	(0.507)	1005	1.00000	1.1(Q)
134 Ethyl Ether	59	2.696	2.698	(0.528)	5639	1.00000	(aQ)
15 Acetonitrile	41	2.899	2.896	(0.568)	26270	25.0000	50.9
11 1,1-Dichloroethylene	61	2.937	2.939	(0.575)	14007	1.00000	2.2
128 Methyl acetate	43	3.076	3.072	(0.602)	37355	5.00000	11.0
13 Iodomethane	142	3.092	3.104	(0.606)	45543	5.00000	10
17 Methylene chloride	84	3.193	3.200	(0.625)	20415	1.00000	2.1(a)
14 Carbon disulfide	76	3.295	3.281	(0.645)	79578	5.00000	5.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 tert-Butyl methyl ether	73	3.354	3.345	(0.657)	19666	1.00000	1.1
	21 trans-1,2-Dichloroethylene	96	3.439	3.441	(0.674)	6674	1.00000	1.1
	23 Vinyl acetate	43	3.674	3.671	(0.720)	93901	5.00000	5.0
	22 1,1-Dichloroethane	63	3.695	3.708	(0.724)	13112	1.00000	0.94(a)
	30 2-Butanone	43	3.973	3.964	(0.778)	32632	5.00000	11.4
	31 cis-1,2-Dichloroethylene	96	4.144	4.141	(0.812)	8878	1.00000	1.2
	25 2,2-Dichloropropane	77	4.128	4.130	(0.809)	9140	1.00000	1.0(Q)
	32 Chloroform	83	4.251	4.263	(0.833)	13798	1.00000	1.1
	29 Bromochloromethane	128	4.369	4.370	(0.856)	2458	1.00000	0.79(aQ)
$	35 Dibromofluoromethane	113	4.411	4.408	(0.864)	8043	1.00000	1.2
	36 1,1,1-Trichloroethane	97	4.604	4.605	(0.902)	8037	1.00000	0.88(a)
	129 Cyclohexane	56	4.689	4.691	(0.918)	23953	1.00000	1.0
	34 1,1-Dichloropropene	75	4.737	4.739	(0.928)	11139	1.00000	1.1
	131 n-Butyl alcohol	56	4.796	4.792	(0.939)	26760	100.000	86.2
	33 Carbon tetrachloride	117	4.828	4.835	(0.946)	6040	1.00000	0.87(a)
	37 1,2-Dichloroethane	62	4.871	4.867	(0.954)	12445	1.00000	1.0
	38 Benzene	78	4.935	4.931	(0.967)	37714	1.00000	1.2
*	40 Fluorobenzene	96	5.106	5.102	(1.000)	1422120	50.0000	
	39 Trichloroethylene	95	5.474	5.471	(1.072)	9816	1.00000	1.2
	41 1,2-Dichloropropane	63	5.592	5.594	(1.095)	10499	1.00000	1.1(Q)
	130 Methylcyclohexane	83	5.629	5.626	(1.103)	15661	1.00000	1.0
	45 Bromodichloromethane	83	5.784	5.786	(1.133)	7221	1.00000	0.87(a)
	43 Dibromomethane	93	5.806	5.813	(1.137)	4646	1.00000	1.2
	44 2-Chloroethylvinyl ether	63	6.073	6.069	(1.189)	17973	5.00000	4.8(a)
	49 4-Methyl-2-pentanone	58	6.137	6.133	(0.755)	21825	5.00000	5.3
	46 cis-1,3-Dichloropropylene	75	6.286	6.299	(1.231)	9665	1.00000	0.94(a)
$	47 Toluene-d8	98	6.586	6.582	(0.810)	37727	1.00000	1.4
	50 Toluene	92	6.655	6.662	(0.819)	24630	1.00000	1.2
	53 trans-1,3-Dichloropropylene	75	6.773	6.780	(0.833)	8765	1.00000	1.0
	54 1,1,2-Trichloroethane	83	6.938	6.935	(0.853)	4762	1.00000	1.0
	55 2-Hexanone	43	6.992	6.988	(0.860)	43047	5.00000	5.6
	52 1,3-Dichloropropane	76	7.200	7.191	(0.886)	9397	1.00000	1.0
	56 Tetrachloroethylene	164	7.355	7.357	(0.905)	5407	1.00000	0.97(a)
	57 Dibromochloromethane	129	7.467	7.453	(0.918)	3755	1.00000	0.82(a)
	59 1,2-Dibromoethane	107	7.670	7.672	(0.943)	4162	1.00000	0.80(a)
*	61 Chlorobenzene-d5	117	8.129	8.126	(1.000)	939088	50.0000	
	62 Chlorobenzene	112	8.172	8.169	(1.005)	21088	1.00000	1.0
	60 1,1,1,2-Tetrachloroethane	131	8.204	8.217	(1.009)	4455	1.00000	0.87(a)
	58 Ethylbenzene	91	8.263	8.265	(1.016)	43435	1.00000	1.2
	63 m,p-Xylenes	106	8.359	8.356	(1.028)	35344	2.00000	2.4
	64 o-Xylene	106	8.835	8.831	(1.087)	17155	1.00000	1.2
	65 Styrene	104	8.851	8.847	(1.089)	24065	1.00000	1.1
	66 Bromoform	173	9.128	9.136	(0.843)	1220	1.00000	3.0(T)
	67 Isopropylbenzene	105	9.251	9.258	(0.854)	35198	1.00000	1.0
	73 1,1,2,2-Tetrachloroethane	83	9.363	9.360	(0.865)	7701	1.00000	1.1
$	71 Bromofluorobenzene	95	9.486	9.483	(0.876)	15835	1.00000	1.6
	74 1,2,3-Trichloropropane	110	9.518	9.531	(0.879)	2197	1.00000	1.1(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	9.689	9.691	(0.895)	9031	1.00000	1.2
76	n-Propylbenzene	91	9.721	9.723	(0.898)	47364	1.00000	1.1
77	2-Chlorotoluene	91	9.887	9.889	(0.913)	32657	1.00000	1.2
78	1,3,5-Trimethylbenzene	105	9.924	9.915	(0.917)	31545	1.00000	1.1
80	4-Chlorotoluene	91	9.951	9.948	(0.919)	27696	1.00000	1.1
81	tert-Butylbenzene	119	10.325	10.332	(0.954)	32528	1.00000	1.1
79	1,2,4-Trimethylbenzene	105	10.362	10.364	(0.957)	33202	1.00000	1.1
83	sec-Butylbenzene	105	10.571	10.573	(0.976)	40468	1.00000	1.1
84	4-Isopropyltoluene	119	10.726	10.722	(0.991)	33122	1.00000	1.1
85	1,3-Dichlorobenzene	146	10.752	10.754	(0.993)	16139	1.00000	1.1
* 86	1,4-Dichlorobenzene-d4	152	10.827	10.824	(1.000)	441813	50.0000	
87	1,4-Dichlorobenzene	146	10.854	10.856	(1.002)	17605	1.00000	1.2
89	n-Butylbenzene	91	11.132	11.133	(1.028)	31389	1.00000	1.1
90	1,2-Dichlorobenzene	146	11.212	11.208	(1.036)	14053	1.00000	1.1
92	1,2-Dibromo-3-chloropropane	75	11.869	11.871	(1.096)	703	1.00000	2.5
93	1,2,4-Trichlorobenzene	180	12.638	12.640	(1.167)	10509	1.00000	1.2
94	Hexachlorobutadiene	225	12.809	12.811	(1.183)	7081	1.00000	1.2
95	Naphthalene	128	12.831	12.832	(1.185)	24667	1.00000	1.1
96	1,2,3-Trichlorobenzene	180	13.071	13.073	(1.207)	9536	1.00000	1.1

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q115.d

Date : 27-JUN-2005 20:21

Client ID: VSTD001

Instrument: VOA1.i

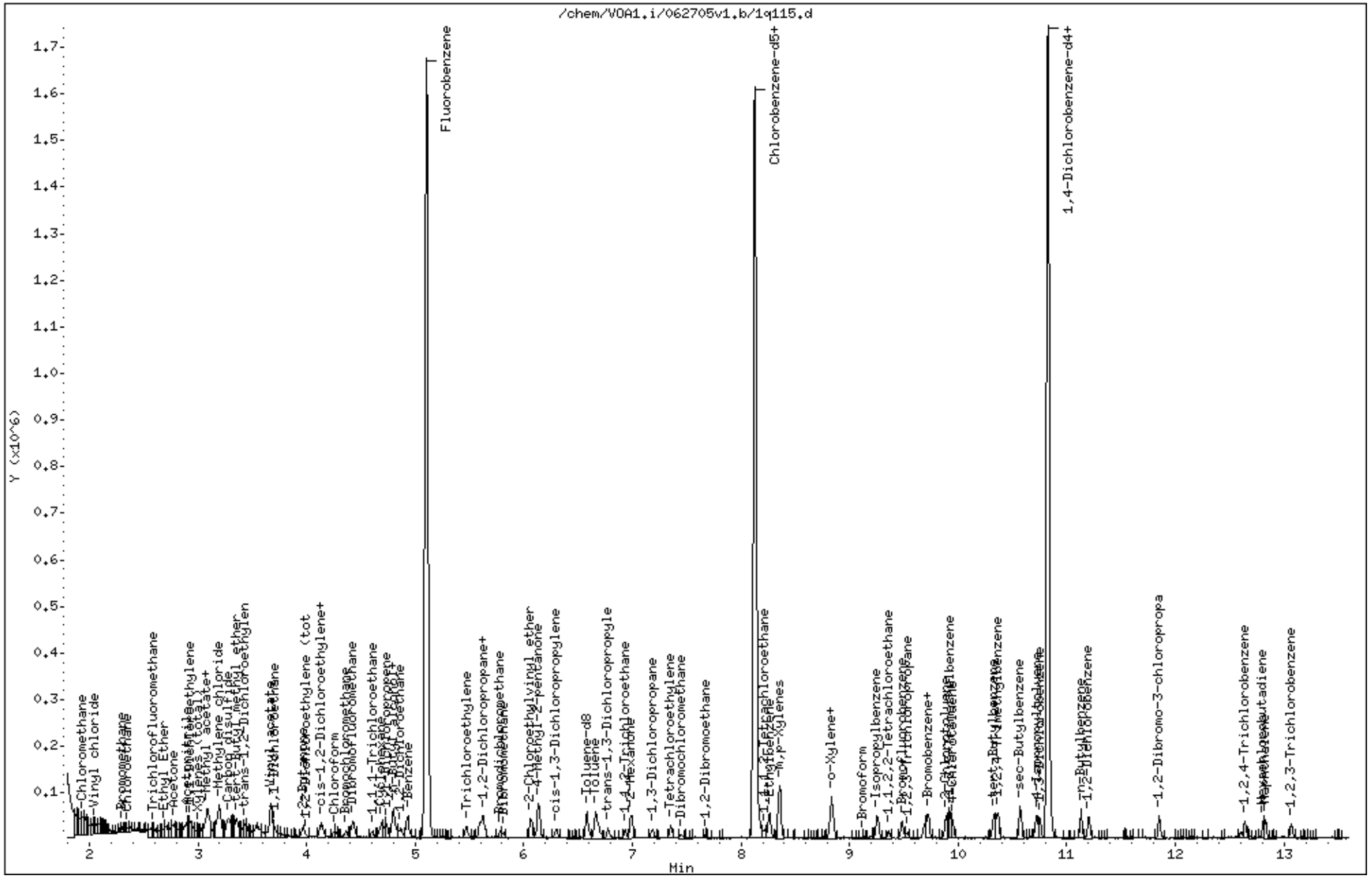
Sample Info: |W1VM050627-02|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: PAM

Column phase: RTX-Volatiles

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q116.d
Lab Smp Id: W1VM050627-03 Client Smp ID: VSTD002
Inj Date : 27-JUN-2005 20:47
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-03|ICAL|1|VOAF|1|
Misc Info : ICAL2 5.0ML 2.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 00:12 Cal File: 1q124.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				88932	6.00000	6.2
M 2 1,2-Dichloroethylene (total)	96				29645	4.00000	4.4
M 135 1,3-Dichloropropylene	75				38133	4.00000	4.0
3 Dichlorodifluoromethane	85	1.837	1.849	(0.360)	9859	2.00000	2.3
4 Chloromethane	50	1.938	1.966	(0.380)	27613	2.00000	1.9
5 Vinyl chloride	62	2.061	2.079	(0.404)	14728	2.00000	2.1
6 Bromomethane	94	2.291	2.314	(0.449)	11314	2.00000	2.1(Q)
7 Chloroethane	64	2.350	2.351	(0.460)	8990	2.00000	2.5(Q)
8 Trichlorofluoromethane	101	2.590	2.591	(0.507)	5762	2.00000	2.2(Q)
134 Ethyl Ether	59	2.708	2.698	(0.530)	14513	2.00000	1.0
10 Acetone	43	2.782	2.768	(0.545)	31563	10.0000	5.4
15 Acetonitrile	41	2.895	2.896	(0.567)	49580	50.0000	74.7
11 1,1-Dichloroethylene	61	2.937	2.939	(0.575)	23916	2.00000	3.0
128 Methyl acetate	43	3.076	3.072	(0.602)	68240	10.0000	15.5
13 Iodomethane	142	3.092	3.104	(0.606)	82152	10.0000	14.3
17 Methylene chloride	84	3.199	3.200	(0.626)	22596	2.00000	2.5(a)

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	14	Carbon disulfide	76	3.285	3.281	(0.643)	154101	10.0000	10.5
	20	tert-Butyl methyl ether	73	3.354	3.345	(0.657)	34153	2.00000	2.0
	21	trans-1,2-Dichloroethylene	96	3.439	3.441	(0.674)	12526	2.00000	2.1
	23	Vinyl acetate	43	3.675	3.671	(0.720)	192110	10.0000	10.2
	22	1,1-Dichloroethane	63	3.707	3.708	(0.726)	28710	2.00000	2.1
	30	2-Butanone	43	3.974	3.964	(0.778)	55097	10.0000	15.4
	31	cis-1,2-Dichloroethylene	96	4.145	4.141	(0.812)	17119	2.00000	2.2
	25	2,2-Dichloropropane	77	4.129	4.130	(0.809)	21011	2.00000	2.3
	32	Chloroform	83	4.262	4.263	(0.835)	24195	2.00000	2.0
	29	Bromochloromethane	128	4.374	4.370	(0.857)	7144	2.00000	2.3
$	35	Dibromofluoromethane	113	4.406	4.408	(0.863)	15585	2.00000	2.4
	36	1,1,1-Trichloroethane	97	4.609	4.605	(0.903)	19274	2.00000	2.1
	129	Cyclohexane	56	4.695	4.691	(0.919)	51103	2.00000	2.2
	34	1,1-Dichloropropene	75	4.743	4.739	(0.929)	21208	2.00000	2.1
	131	n-Butyl alcohol	56	4.796	4.792	(0.939)	52879	200.000	170
	33	Carbon tetrachloride	117	4.834	4.835	(0.947)	13248	2.00000	1.9
	37	1,2-Dichloroethane	62	4.871	4.867	(0.954)	25186	2.00000	2.1
	38	Benzene	78	4.930	4.931	(0.965)	63645	2.00000	2.1
*	40	Fluorobenzene	96	5.106	5.102	(1.000)	1421769	50.0000	
	39	Trichloroethylene	95	5.475	5.471	(1.072)	17742	2.00000	2.3
	41	1,2-Dichloropropane	63	5.592	5.594	(1.095)	21064	2.00000	2.2(Q)
	130	Methylcyclohexane	83	5.624	5.626	(1.101)	30515	2.00000	2.0
	45	Bromodichloromethane	83	5.785	5.786	(1.133)	17218	2.00000	2.1
	43	Dibromomethane	93	5.817	5.813	(1.139)	7081	2.00000	1.8
	44	2-Chloroethylvinyl ether	63	6.073	6.069	(1.189)	37150	10.0000	9.9
	49	4-Methyl-2-pentanone	58	6.132	6.133	(0.754)	43651	10.0000	10.5
	46	cis-1,3-Dichloropropylene	75	6.298	6.299	(1.233)	20698	2.00000	2.0
$	47	Toluene-d8	98	6.581	6.582	(0.809)	61065	2.00000	2.2
	50	Toluene	92	6.661	6.662	(0.819)	44539	2.00000	2.2
	53	trans-1,3-Dichloropropylene	75	6.784	6.780	(0.834)	17435	2.00000	2.0
	54	1,1,2-Trichloroethane	83	6.939	6.935	(0.853)	10452	2.00000	2.3
	55	2-Hexanone	43	6.992	6.988	(0.860)	79821	10.0000	10.2
	52	1,3-Dichloropropane	76	7.190	7.191	(0.884)	20296	2.00000	2.1
	56	Tetrachloroethylene	164	7.361	7.357	(0.905)	13352	2.00000	2.4
	57	Dibromochloromethane	129	7.457	7.453	(0.917)	9123	2.00000	2.0
	59	1,2-Dibromoethane	107	7.676	7.672	(0.944)	11429	2.00000	2.2
*	61	Chlorobenzene-d5	117	8.130	8.126	(1.000)	952278	50.0000	
	62	Chlorobenzene	112	8.167	8.169	(1.005)	46612	2.00000	2.3
	60	1,1,1,2-Tetrachloroethane	131	8.215	8.217	(1.010)	9227	2.00000	1.8(Q)
	58	Ethylbenzene	91	8.263	8.265	(1.016)	83803	2.00000	2.2
	63	m,p-Xylenes	106	8.360	8.356	(1.028)	61551	4.00000	4.2
	64	o-Xylene	106	8.824	8.831	(1.085)	27381	2.00000	2.0
	65	Styrene	104	8.846	8.847	(1.088)	47451	2.00000	2.1
	66	Bromoform	173	9.134	9.136	(0.844)	3405	2.00000	3.7(Q)
	67	Isopropylbenzene	105	9.257	9.258	(0.855)	70927	2.00000	2.1
	73	1,1,2,2-Tetrachloroethane	83	9.364	9.360	(0.865)	14358	2.00000	2.1
$	71	Bromofluorobenzene	95	9.481	9.483	(0.876)	25188	2.00000	2.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	9.524	9.531	(0.880)	4431	2.00000	2.2(Q)
75	Bromobenzene	156	9.695	9.691	(0.895)	16855	2.00000	2.2
76	n-Propylbenzene	91	9.722	9.723	(0.898)	86136	2.00000	2.0
77	2-Chlorotoluene	91	9.887	9.889	(0.913)	58079	2.00000	2.1
78	1,3,5-Trimethylbenzene	105	9.914	9.915	(0.916)	60020	2.00000	2.0
80	4-Chlorotoluene	91	9.946	9.948	(0.919)	51751	2.00000	2.0
81	tert-Butylbenzene	119	10.331	10.332	(0.954)	58000	2.00000	2.0
79	1,2,4-Trimethylbenzene	105	10.363	10.364	(0.957)	58907	2.00000	2.0
83	sec-Butylbenzene	105	10.577	10.573	(0.977)	78809	2.00000	2.1
84	4-Isopropyltoluene	119	10.721	10.722	(0.990)	64853	2.00000	2.1
85	1,3-Dichlorobenzene	146	10.753	10.754	(0.993)	33171	2.00000	2.3
* 86	1,4-Dichlorobenzene-d4	152	10.828	10.824	(1.000)	445864	50.0000	
87	1,4-Dichlorobenzene	146	10.854	10.856	(1.002)	32470	2.00000	2.2
89	n-Butylbenzene	91	11.132	11.133	(1.028)	56237	2.00000	2.0
90	1,2-Dichlorobenzene	146	11.207	11.208	(1.035)	28313	2.00000	2.2
92	1,2-Dibromo-3-chloropropane	75	11.875	11.871	(1.097)	1368	2.00000	3.0(Q)
93	1,2,4-Trichlorobenzene	180	12.644	12.640	(1.168)	18153	2.00000	2.0
94	Hexachlorobutadiene	225	12.810	12.811	(1.183)	11127	2.00000	1.9
95	Naphthalene	128	12.836	12.832	(1.186)	45885	2.00000	2.1
96	1,2,3-Trichlorobenzene	180	13.066	13.073	(1.207)	19247	2.00000	2.2

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q116.d
Date : 27-JUN-2005 20:47
Client ID: VSTD002
Sample Info: IW1VM050627-03ICAL11VOAF11
Purge Volume: 5.0
Column phase: RTX-Volatiles
Instrument: VOA1.i
Operator: PAM
Column diameter: 0.25
Y (x10^6)
Min
Fluorobenzene
Chlorobenzene-d5+
1,4-Dichlorobenzene-d4+
-Chloromethane
-Vinyl chloride
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Ethyl Ether
-Acetone
-Methyl acetate+
-Methylene chloride
-Carbon disulfide
-trans-1,2-Dichloroethylen
-Vinyl acetate
-1,1-Dichloroethane
-cis-1,2-Dichloroethylene+
-Chloroform
-1,1,1-Trichloroethane
-Benzene
-Trichloroethylene
-1,2-Dichloropropane+
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-1,3-Dichloropropane
-Tetrachloroethylene
-Dibromochloromethane
-1,2-Dibromoethane
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene
-1,1,2,2-Tetrachloroethane
-n-Propylbenzene
-sec-Butylbenzene
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-1,2,3-Trichlorobenzene

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q117.d
Lab Smp Id: W1VM050627-04 Client Smp ID: VSTD005
Inj Date : 27-JUN-2005 21:12
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-04|ICAL|1|VOAF|1|
Misc Info : ICAL3 5.0ML 5.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 00:37 Cal File: 1q125.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

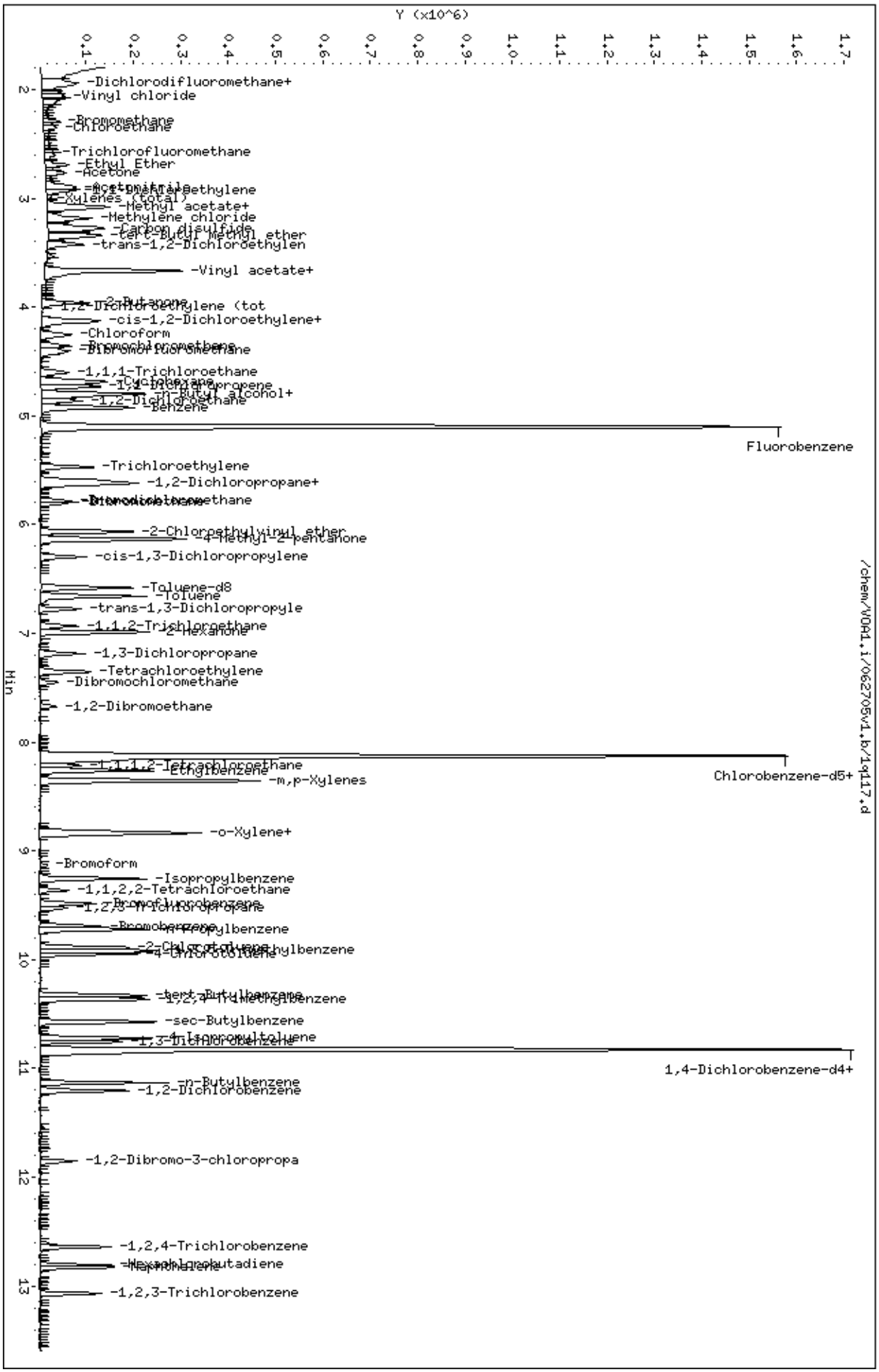
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				206636	15.0000	14.7
M 2 1,2-Dichloroethylene (total)	96				59594	10.0000	9.2
M 135 1,3-Dichloropropylene	75				91238	10.0000	9.9
3 Dichlorodifluoromethane	85	1.847	1.849	(0.362)	23026	5.00000	5.2
4 Chloromethane	50	1.943	1.966	(0.381)	64525	5.00000	5.7
5 Vinyl chloride	62	2.066	2.079	(0.405)	30225	5.00000	4.6
6 Bromomethane	94	2.290	2.314	(0.449)	22194	5.00000	5.7
7 Chloroethane	64	2.344	2.351	(0.460)	17067	5.00000	5.0
8 Trichlorofluoromethane	101	2.584	2.591	(0.507)	14265	5.00000	4.2(Q)
134 Ethyl Ether	59	2.696	2.698	(0.529)	23788	5.00000	2.9
10 Acetone	43	2.766	2.768	(0.542)	49448	25.0000	17.1
15 Acetonitrile	41	2.888	2.896	(0.566)	75219	125.000	105
11 1,1-Dichloroethylene	61	2.926	2.939	(0.574)	37559	5.00000	4.2
128 Methyl acetate	43	3.070	3.072	(0.602)	98408	25.0000	20.6
13 Iodomethane	142	3.086	3.104	(0.605)	129825	25.0000	20.7
17 Methylene chloride	84	3.188	3.200	(0.625)	30866	5.00000	4.2(a)

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	14	Carbon disulfide	76	3.278	3.281	(0.643)	345106	25.0000	24.8
	20	tert-Butyl methyl ether	73	3.343	3.345	(0.655)	82907	5.00000	5.0
	21	trans-1,2-Dichloroethylene	96	3.428	3.441	(0.672)	24140	5.00000	4.2
	23	Vinyl acetate	43	3.663	3.671	(0.718)	448082	25.0000	25.0
	22	1,1-Dichloroethane	63	3.700	3.708	(0.726)	64547	5.00000	4.9
	30	2-Butanone	43	3.962	3.964	(0.777)	131209	25.0000	30.3
	31	cis-1,2-Dichloroethylene	96	4.138	4.141	(0.811)	35454	5.00000	4.9
	25	2,2-Dichloropropane	77	4.117	4.130	(0.807)	43428	5.00000	5.1
	32	Chloroform	83	4.256	4.263	(0.834)	57402	5.00000	5.0
	29	Bromochloromethane	128	4.358	4.370	(0.854)	15668	5.00000	5.3
$	35	Dibromofluoromethane	113	4.406	4.408	(0.864)	31281	5.00000	5.1
	36	1,1,1-Trichloroethane	97	4.603	4.605	(0.903)	45393	5.00000	5.2
	129	Cyclohexane	56	4.689	4.691	(0.919)	114339	5.00000	5.2
	34	1,1-Dichloropropene	75	4.737	4.739	(0.929)	47442	5.00000	4.9
	131	n-Butyl alcohol	56	4.801	4.792	(0.941)	145770	500.000	493
	33	Carbon tetrachloride	117	4.828	4.835	(0.947)	30127	5.00000	4.5
	37	1,2-Dichloroethane	62	4.865	4.867	(0.954)	54143	5.00000	4.8
	38	Benzene	78	4.929	4.931	(0.966)	142729	5.00000	4.9
*	40	Fluorobenzene	96	5.100	5.102	(1.000)	1352928	50.0000	
	39	Trichloroethylene	95	5.469	5.471	(1.072)	34547	5.00000	4.6
	41	1,2-Dichloropropane	63	5.597	5.594	(1.097)	42901	5.00000	4.6(Q)
	130	Methylcyclohexane	83	5.624	5.626	(1.103)	73276	5.00000	5.1
	45	Bromodichloromethane	83	5.779	5.786	(1.133)	38135	5.00000	4.8
	43	Dibromomethane	93	5.811	5.813	(1.139)	17955	5.00000	4.7
	44	2-Chloroethylvinyl ether	63	6.067	6.069	(1.190)	84892	25.0000	23.9
	49	4-Methyl-2-pentanone	58	6.136	6.133	(0.755)	97479	25.0000	24.0
	46	cis-1,3-Dichloropropylene	75	6.302	6.299	(1.236)	48256	5.00000	4.9
$	47	Toluene-d8	98	6.580	6.582	(0.809)	136707	5.00000	5.0
	50	Toluene	92	6.660	6.662	(0.819)	93390	5.00000	4.7
	53	trans-1,3-Dichloropropylene	75	6.778	6.780	(0.834)	42982	5.00000	5.0
	54	1,1,2-Trichloroethane	83	6.927	6.935	(0.852)	19765	5.00000	4.4(Q)
	55	2-Hexanone	43	6.991	6.988	(0.860)	185986	25.0000	24.3
	52	1,3-Dichloropropane	76	7.189	7.191	(0.884)	47458	5.00000	5.1
	56	Tetrachloroethylene	164	7.354	7.357	(0.905)	28360	5.00000	5.1
	57	Dibromochloromethane	129	7.451	7.453	(0.917)	24215	5.00000	5.3
	59	1,2-Dibromoethane	107	7.675	7.672	(0.944)	27146	5.00000	5.2
*	61	Chlorobenzene-d5	117	8.129	8.126	(1.000)	933157	50.0000	
	62	Chlorobenzene	112	8.166	8.169	(1.005)	93263	5.00000	4.7
	60	1,1,1,2-Tetrachloroethane	131	8.209	8.217	(1.010)	23483	5.00000	4.6
	58	Ethylbenzene	91	8.263	8.265	(1.016)	178146	5.00000	4.8
	63	m,p-Xylenes	106	8.353	8.356	(1.028)	139461	10.0000	9.7
	64	o-Xylene	106	8.829	8.831	(1.086)	67175	5.00000	4.9
	65	Styrene	104	8.840	8.847	(1.087)	107323	5.00000	4.8
	66	Bromoform	173	9.139	9.136	(0.844)	9348	5.00000	5.7(Q)
	67	Isopropylbenzene	105	9.256	9.258	(0.855)	159620	5.00000	4.8
	73	1,1,2,2-Tetrachloroethane	83	9.363	9.360	(0.865)	31611	5.00000	4.7
$	71	Bromofluorobenzene	95	9.481	9.483	(0.876)	49053	5.00000	5.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	9.523	9.531	(0.880)	8812	5.00000	4.5
75	Bromobenzene	156	9.694	9.691	(0.895)	35875	5.00000	4.8
76	n-Propylbenzene	91	9.721	9.723	(0.898)	197504	5.00000	4.8
77	2-Chlorotoluene	91	9.887	9.889	(0.913)	136465	5.00000	5.0
78	1,3,5-Trimethylbenzene	105	9.919	9.915	(0.916)	142126	5.00000	5.0
80	4-Chlorotoluene	91	9.951	9.948	(0.919)	126855	5.00000	5.1
81	tert-Butylbenzene	119	10.330	10.332	(0.954)	136598	5.00000	4.9
79	1,2,4-Trimethylbenzene	105	10.362	10.364	(0.957)	144219	5.00000	5.0
83	sec-Butylbenzene	105	10.570	10.573	(0.976)	177351	5.00000	4.8
84	4-Isopropyltoluene	119	10.720	10.722	(0.990)	143414	5.00000	4.8
85	1,3-Dichlorobenzene	146	10.757	10.754	(0.994)	69998	5.00000	4.9
* 86	1,4-Dichlorobenzene-d4	152	10.827	10.824	(1.000)	434871	50.0000	
87	1,4-Dichlorobenzene	146	10.859	10.856	(1.003)	68344	5.00000	4.8
89	n-Butylbenzene	91	11.131	11.133	(1.028)	137544	5.00000	5.0
90	1,2-Dichlorobenzene	146	11.206	11.208	(1.035)	64616	5.00000	5.0
92	1,2-Dibromo-3-chloropropane	75	11.874	11.871	(1.097)	4421	5.00000	5.5
93	1,2,4-Trichlorobenzene	180	12.638	12.640	(1.167)	43895	5.00000	5.1
94	Hexachlorobutadiene	225	12.809	12.811	(1.183)	27191	5.00000	4.8
95	Naphthalene	128	12.830	12.832	(1.185)	103263	5.00000	4.8
96	1,2,3-Trichlorobenzene	180	13.071	13.073	(1.207)	41369	5.00000	4.9

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.



Data File: /chem/VOA1.i/062705v1.b/1q117.d
Date : 27-JUN-2005 21:12
Client ID: VSTD005
Sample Info: IW1VM050627-04|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PAM
Column diameter: 0.25

Page 1

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q118.d
Lab Smp Id: W1VM050627-05 Client Smp ID: VSTD010
Inj Date : 27-JUN-2005 21:38
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-05|ICAL|1|VOAF|1|
Misc Info : ICAL4 5.0ML 10.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 01:03 Cal File: 1q126.d
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

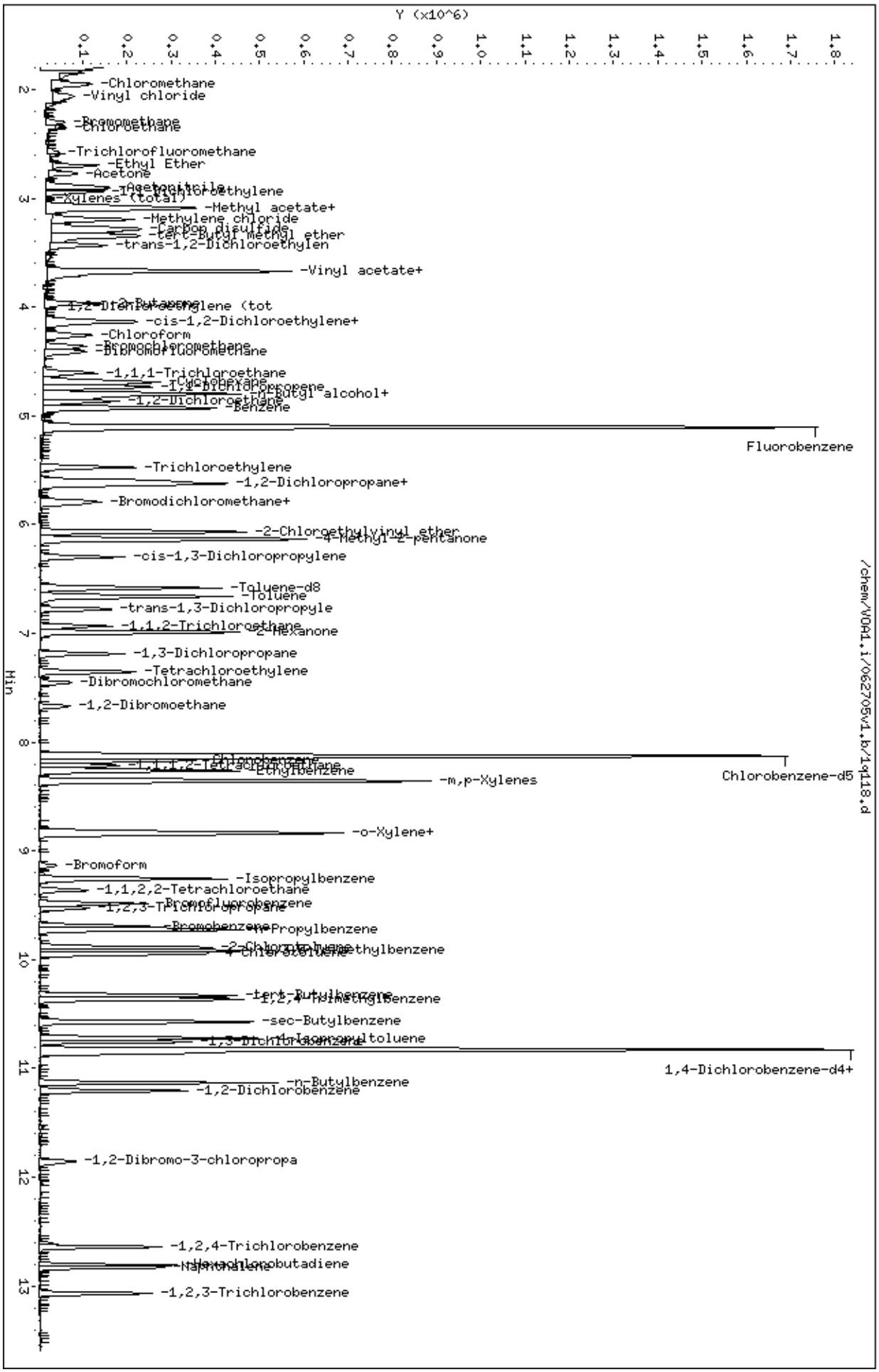
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				390954	30.0000	26.6
M 2 1,2-Dichloroethylene (total)	96				111734	20.0000	16.1
M 135 1,3-Dichloropropylene	75				178281	20.0000	18.1
3 Dichlorodifluoromethane	85	1.852	1.849	(0.363)	47697	10.0000	9.7
4 Chloromethane	50	1.949	1.966	(0.382)	116567	10.0000	10.0
5 Vinyl chloride	62	2.066	2.079	(0.405)	73610	10.0000	10.3
6 Bromomethane	94	2.301	2.314	(0.451)	40933	10.0000	10.6
7 Chloroethane	64	2.349	2.351	(0.460)	34946	10.0000	9.4
8 Trichlorofluoromethane	101	2.579	2.591	(0.505)	45016	10.0000	10.5(Q)
134 Ethyl Ether	59	2.702	2.698	(0.529)	74932	10.0000	11.7
10 Acetone	43	2.777	2.768	(0.544)	108575	50.0000	47.8
15 Acetonitrile	41	2.899	2.896	(0.568)	196928	250.000	220
11 1,1-Dichloroethylene	61	2.942	2.939	(0.576)	106012	10.0000	9.3
128 Methyl acetate	43	3.076	3.072	(0.602)	280936	50.0000	45.4
13 Iodomethane	142	3.097	3.104	(0.607)	370014	50.0000	47.2
17 Methylene chloride	84	3.199	3.200	(0.626)	71153	10.0000	10.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	14 Carbon disulfide	76	3.284	3.281	(0.643)	663875	50.0000	44.2
	20 tert-Butyl methyl ether	73	3.348	3.345	(0.656)	153560	10.0000	8.6
	21 trans-1,2-Dichloroethylene	96	3.439	3.441	(0.674)	50851	10.0000	8.3
	23 Vinyl acetate	43	3.669	3.671	(0.719)	840453	50.0000	43.3
	22 1,1-Dichloroethane	63	3.717	3.708	(0.728)	123037	10.0000	8.6
	30 2-Butanone	43	3.968	3.964	(0.777)	182274	50.0000	37.4
	31 cis-1,2-Dichloroethylene	96	4.133	4.141	(0.810)	60883	10.0000	7.8
	25 2,2-Dichloropropane	77	4.139	4.130	(0.811)	73835	10.0000	8.0
	32 Chloroform	83	4.256	4.263	(0.834)	103273	10.0000	8.4
	29 Bromochloromethane	128	4.358	4.370	(0.854)	25217	10.0000	7.8
$	35 Dibromofluoromethane	113	4.411	4.408	(0.864)	55625	10.0000	8.4
	36 1,1,1-Trichloroethane	97	4.609	4.605	(0.903)	88182	10.0000	9.3
	129 Cyclohexane	56	4.689	4.691	(0.918)	209984	10.0000	8.8
	34 1,1-Dichloropropene	75	4.742	4.739	(0.929)	90708	10.0000	8.7
	131 n-Butyl alcohol	56	4.796	4.792	(0.939)	300610	1000.00	942
	33 Carbon tetrachloride	117	4.833	4.835	(0.947)	64655	10.0000	9.0
	37 1,2-Dichloroethane	62	4.871	4.867	(0.954)	112735	10.0000	9.3
	38 Benzene	78	4.929	4.931	(0.965)	291736	10.0000	9.2
*	40 Fluorobenzene	96	5.106	5.102	(1.000)	1461217	50.0000	
	39 Trichloroethylene	95	5.474	5.471	(1.072)	68642	10.0000	8.5
	41 1,2-Dichloropropane	63	5.592	5.594	(1.095)	91282	10.0000	9.2(Q)
	130 Methylcyclohexane	83	5.629	5.626	(1.103)	148689	10.0000	9.5
	45 Bromodichloromethane	83	5.790	5.786	(1.134)	78468	10.0000	9.2
	43 Dibromomethane	93	5.811	5.813	(1.138)	37054	10.0000	9.0
	44 2-Chloroethylvinyl ether	63	6.067	6.069	(1.188)	188469	50.0000	49.1
	49 4-Methyl-2-pentanone	58	6.131	6.133	(0.754)	193025	50.0000	45.4
	46 cis-1,3-Dichloropropylene	75	6.297	6.299	(1.233)	97141	10.0000	9.2
$	47 Toluene-d8	98	6.585	6.582	(0.810)	266852	10.0000	9.4
	50 Toluene	92	6.655	6.662	(0.819)	189695	10.0000	9.0
	53 trans-1,3-Dichloropropylene	75	6.783	6.780	(0.834)	81140	10.0000	8.9
	54 1,1,2-Trichloroethane	83	6.933	6.935	(0.853)	40756	10.0000	8.7
	55 2-Hexanone	43	6.992	6.988	(0.860)	350885	50.0000	43.9
	52 1,3-Dichloropropane	76	7.189	7.191	(0.884)	88868	10.0000	9.2
	56 Tetrachloroethylene	164	7.355	7.357	(0.905)	53830	10.0000	9.3
	57 Dibromochloromethane	129	7.456	7.453	(0.917)	43395	10.0000	9.1
	59 1,2-Dibromoethane	107	7.670	7.672	(0.943)	51959	10.0000	9.5
*	61 Chlorobenzene-d5	117	8.129	8.126	(1.000)	976726	50.0000	
	62 Chlorobenzene	112	8.172	8.169	(1.005)	191667	10.0000	9.2
	60 1,1,1,2-Tetrachloroethane	131	8.215	8.217	(1.010)	48990	10.0000	9.2
	58 Ethylbenzene	91	8.263	8.265	(1.016)	341241	10.0000	8.8
	63 m,p-Xylenes	106	8.359	8.356	(1.028)	264419	20.0000	17.6
	64 o-Xylene	106	8.829	8.831	(1.086)	126535	10.0000	8.9
	65 Styrene	104	8.845	8.847	(1.088)	218094	10.0000	9.4
	66 Bromoform	173	9.139	9.136	(0.844)	20996	10.0000	9.3(Q)
	67 Isopropylbenzene	105	9.257	9.258	(0.855)	316540	10.0000	9.4
	73 1,1,2,2-Tetrachloroethane	83	9.363	9.360	(0.865)	63808	10.0000	9.2
$	71 Bromofluorobenzene	95	9.486	9.483	(0.876)	97668	10.0000	9.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	9.529	9.531	(0.880)	17997	10.0000	8.9
75	Bromobenzene	156	9.695	9.691	(0.895)	70131	10.0000	9.1
76	n-Propylbenzene	91	9.727	9.723	(0.898)	390339	10.0000	9.3
77	2-Chlorotoluene	91	9.887	9.889	(0.913)	256820	10.0000	9.2
78	1,3,5-Trimethylbenzene	105	9.919	9.915	(0.916)	274456	10.0000	9.3
80	4-Chlorotoluene	91	9.946	9.948	(0.919)	237386	10.0000	9.2
81	tert-Butylbenzene	119	10.330	10.332	(0.954)	264695	10.0000	9.2
79	1,2,4-Trimethylbenzene	105	10.368	10.364	(0.958)	271337	10.0000	9.2
83	sec-Butylbenzene	105	10.571	10.573	(0.976)	357907	10.0000	9.4
84	4-Isopropyltoluene	119	10.720	10.722	(0.990)	286825	10.0000	9.3
85	1,3-Dichlorobenzene	146	10.758	10.754	(0.994)	134216	10.0000	9.2
* 86	1,4-Dichlorobenzene-d4	152	10.827	10.824	(1.000)	447182	50.0000	
87	1,4-Dichlorobenzene	146	10.859	10.856	(1.003)	132104	10.0000	9.0
89	n-Butylbenzene	91	11.132	11.133	(1.028)	260245	10.0000	9.1
90	1,2-Dichlorobenzene	146	11.206	11.208	(1.035)	118215	10.0000	9.0
92	1,2-Dibromo-3-chloropropane	75	11.880	11.871	(1.097)	7932	10.0000	8.2
93	1,2,4-Trichlorobenzene	180	12.643	12.640	(1.168)	81846	10.0000	9.2
94	Hexachlorobutadiene	225	12.809	12.811	(1.183)	52953	10.0000	9.1
95	Naphthalene	128	12.830	12.832	(1.185)	189769	10.0000	8.6
96	1,2,3-Trichlorobenzene	180	13.071	13.073	(1.207)	78696	10.0000	9.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.



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Client ID: VSTD010
Sample Info: IW1VM050627-05|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q119.d
Lab Smp Id: W1VM050627-06 Client Smp ID: VSTD020
Inj Date : 27-JUN-2005 22:03
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-06|ICAL|1|VOAF|1|
Misc Info : ICAL5 5.0ML 20.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 01:28 Cal File: 1q127.d
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

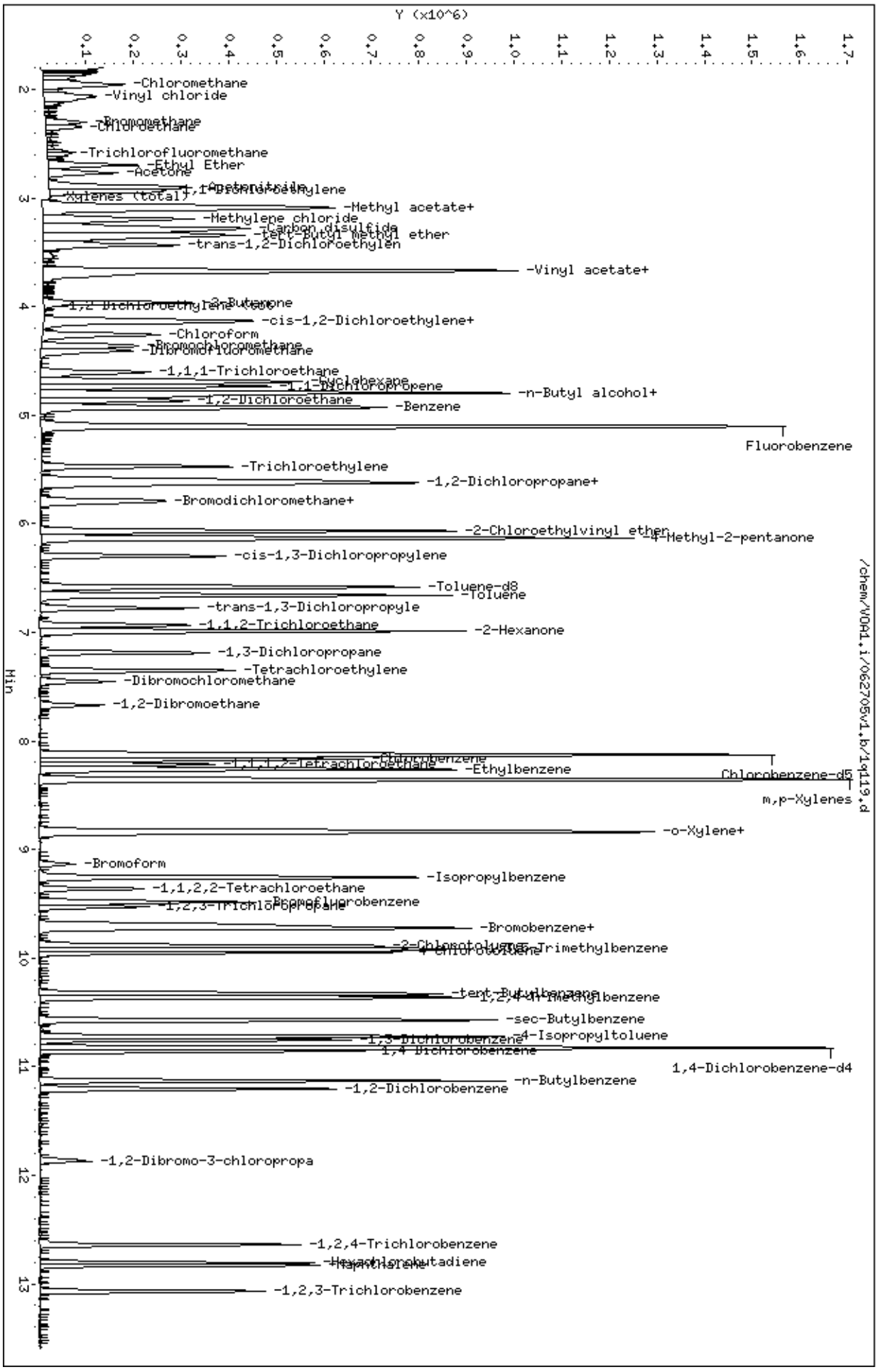
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				781144	60.0000	56.8
M 2 1,2-Dichloroethylene (total)	96				238934	40.0000	37.7
M 135 1,3-Dichloropropylene	75				360189	40.0000	39.7
3 Dichlorodifluoromethane	85	1.844	1.849	(0.361)	91881	20.0000	20.1
4 Chloromethane	50	1.956	1.966	(0.383)	225260	20.0000	22.1
5 Vinyl chloride	62	2.057	2.079	(0.403)	134907	20.0000	20.7
6 Bromomethane	94	2.303	2.314	(0.451)	67861	20.0000	20.4
7 Chloroethane	64	2.357	2.351	(0.461)	66546	20.0000	19.8(Q)
8 Trichlorofluoromethane	101	2.586	2.591	(0.506)	88002	20.0000	21.6(Q)
134 Ethyl Ether	59	2.693	2.698	(0.527)	135444	20.0000	24.8
10 Acetone	43	2.773	2.768	(0.543)	217026	100.000	120
15 Acetonitrile	41	2.901	2.896	(0.568)	428237	500.000	492
11 1,1-Dichloroethylene	61	2.944	2.939	(0.576)	205643	20.0000	18.7
128 Methyl acetate	43	3.072	3.072	(0.602)	572215	100.000	94.8
13 Iodomethane	142	3.099	3.104	(0.607)	719469	100.000	95.7
17 Methylene chloride	84	3.195	3.200	(0.626)	112467	20.0000	19.6

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
14	Carbon disulfide	76	3.281	3.281	(0.642)	1304315	100.000	95.4
20	tert-Butyl methyl ether	73	3.345	3.345	(0.655)	301683	20.0000	18.5
21	trans-1,2-Dichloroethylene	96	3.430	3.441	(0.672)	103894	20.0000	18.6
23	Vinyl acetate	43	3.671	3.671	(0.719)	1561681	100.000	88.5
22	1,1-Dichloroethane	63	3.708	3.708	(0.726)	241901	20.0000	18.6
30	2-Butanone	43	3.970	3.964	(0.777)	453471	100.000	92.8
31	cis-1,2-Dichloroethylene	96	4.141	4.141	(0.811)	135040	20.0000	19.0
25	2,2-Dichloropropane	77	4.130	4.130	(0.809)	161021	20.0000	19.1(Q)
32	Chloroform	83	4.258	4.263	(0.834)	216341	20.0000	19.3
29	Bromochloromethane	128	4.360	4.370	(0.854)	61828	20.0000	21.2
$ 35	Dibromofluoromethane	113	4.408	4.408	(0.863)	127403	20.0000	21.2
36	1,1,1-Trichloroethane	97	4.606	4.605	(0.902)	166581	20.0000	19.4
129	Cyclohexane	56	4.691	4.691	(0.918)	420610	20.0000	19.3
34	1,1-Dichloropropene	75	4.739	4.739	(0.928)	189862	20.0000	19.9
131	n-Butyl alcohol	56	4.798	4.792	(0.939)	606472	2000.00	2090
33	Carbon tetrachloride	117	4.830	4.835	(0.946)	135175	20.0000	20.7
37	1,2-Dichloroethane	62	4.867	4.867	(0.953)	216927	20.0000	19.6
38	Benzene	78	4.931	4.931	(0.965)	543577	20.0000	18.9
* 40	Fluorobenzene	96	5.108	5.102	(1.000)	1328956	50.0000	
39	Trichloroethylene	95	5.476	5.471	(1.072)	134752	20.0000	18.4
41	1,2-Dichloropropane	63	5.594	5.594	(1.095)	180128	20.0000	19.9(Q)
130	Methylcyclohexane	83	5.621	5.626	(1.100)	284854	20.0000	20.0
45	Bromodichloromethane	83	5.786	5.786	(1.133)	155125	20.0000	20.1
43	Dibromomethane	93	5.808	5.813	(1.137)	76091	20.0000	20.4
44	2-Chloroethylvinyl ether	63	6.069	6.069	(1.188)	351326	100.000	100
49	4-Methyl-2-pentanone	58	6.128	6.133	(0.754)	384441	100.000	96.7
46	cis-1,3-Dichloropropylene	75	6.299	6.299	(1.233)	198406	20.0000	20.6
$ 47	Toluene-d8	98	6.582	6.582	(0.809)	513513	20.0000	19.3
50	Toluene	92	6.662	6.662	(0.819)	369946	20.0000	18.9
53	trans-1,3-Dichloropropylene	75	6.775	6.780	(0.833)	161783	20.0000	19.1
54	1,1,2-Trichloroethane	83	6.940	6.935	(0.853)	87352	20.0000	19.9
55	2-Hexanone	43	6.988	6.988	(0.859)	715367	100.000	95.7
52	1,3-Dichloropropane	76	7.191	7.191	(0.884)	172392	20.0000	19.0
56	Tetrachloroethylene	164	7.357	7.357	(0.905)	99873	20.0000	18.5
57	Dibromochloromethane	129	7.453	7.453	(0.917)	90157	20.0000	20.2
59	1,2-Dibromoethane	107	7.672	7.672	(0.944)	97332	20.0000	19.1
* 61	Chlorobenzene-d5	117	8.131	8.126	(1.000)	912554	50.0000	
62	Chlorobenzene	112	8.169	8.169	(1.005)	370858	20.0000	19.1
60	1,1,1,2-Tetrachloroethane	131	8.217	8.217	(1.010)	103249	20.0000	20.8
58	Ethylbenzene	91	8.265	8.265	(1.016)	676258	20.0000	18.7
63	m,p-Xylenes	106	8.356	8.356	(1.028)	533530	40.0000	38.1
64	o-Xylene	106	8.831	8.831	(1.086)	247614	20.0000	18.6
65	Styrene	104	8.847	8.847	(1.088)	413999	20.0000	19.1
66	Bromoform	173	9.136	9.136	(0.844)	39375	20.0000	16.4(Q)
67	Isopropylbenzene	105	9.253	9.258	(0.855)	611227	20.0000	19.8
73	1,1,2,2-Tetrachloroethane	83	9.360	9.360	(0.865)	124609	20.0000	19.7
$ 71	Bromofluorobenzene	95	9.483	9.483	(0.876)	186139	20.0000	20.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	9.536	9.531	(0.881)	37067	20.0000	20.1
75	Bromobenzene	156	9.697	9.691	(0.896)	133769	20.0000	19.1
76	n-Propylbenzene	91	9.723	9.723	(0.898)	765665	20.0000	19.9
77	2-Chlorotoluene	91	9.884	9.889	(0.913)	469838	20.0000	18.5
78	1,3,5-Trimethylbenzene	105	9.916	9.915	(0.916)	534499	20.0000	19.8
80	4-Chlorotoluene	91	9.948	9.948	(0.919)	471240	20.0000	20.1
81	tert-Butylbenzene	119	10.327	10.332	(0.954)	512578	20.0000	19.4
79	1,2,4-Trimethylbenzene	105	10.364	10.364	(0.958)	529016	20.0000	19.6
83	sec-Butylbenzene	105	10.573	10.573	(0.977)	697040	20.0000	19.9
84	4-Isopropyltoluene	119	10.722	10.722	(0.991)	560773	20.0000	20.0
85	1,3-Dichlorobenzene	146	10.754	10.754	(0.994)	255785	20.0000	19.1
* 86	1,4-Dichlorobenzene-d4	152	10.824	10.824	(1.000)	408813	50.0000	
87	1,4-Dichlorobenzene	146	10.856	10.856	(1.003)	245275	20.0000	18.2
89	n-Butylbenzene	91	11.128	11.133	(1.028)	519183	20.0000	20.0
90	1,2-Dichlorobenzene	146	11.203	11.208	(1.035)	231708	20.0000	19.3
92	1,2-Dibromo-3-chloropropane	75	11.871	11.871	(1.097)	19877	20.0000	19.0
93	1,2,4-Trichlorobenzene	180	12.646	12.640	(1.168)	155045	20.0000	19.1
94	Hexachlorobutadiene	225	12.806	12.811	(1.183)	101052	20.0000	19.0
95	Naphthalene	128	12.832	12.832	(1.186)	391307	20.0000	19.4
96	1,2,3-Trichlorobenzene	180	13.068	13.073	(1.207)	153001	20.0000	19.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.



Data File: /chem/VOA1.i/062705v1.b/1q119.d
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Client ID: VSTD020
Sample Info: IW1VM050627-06|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q120.d
Lab Smp Id: W1VM050627-07 Client Smp ID: VSTD050
Inj Date : 27-JUN-2005 22:29
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-07|ICAL|1|VOAF|1|
Misc Info : ICAL6 5.0ML 50.0PPB
Comment :
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Meth Date : 30-Jun-2005 07:25 eh1 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

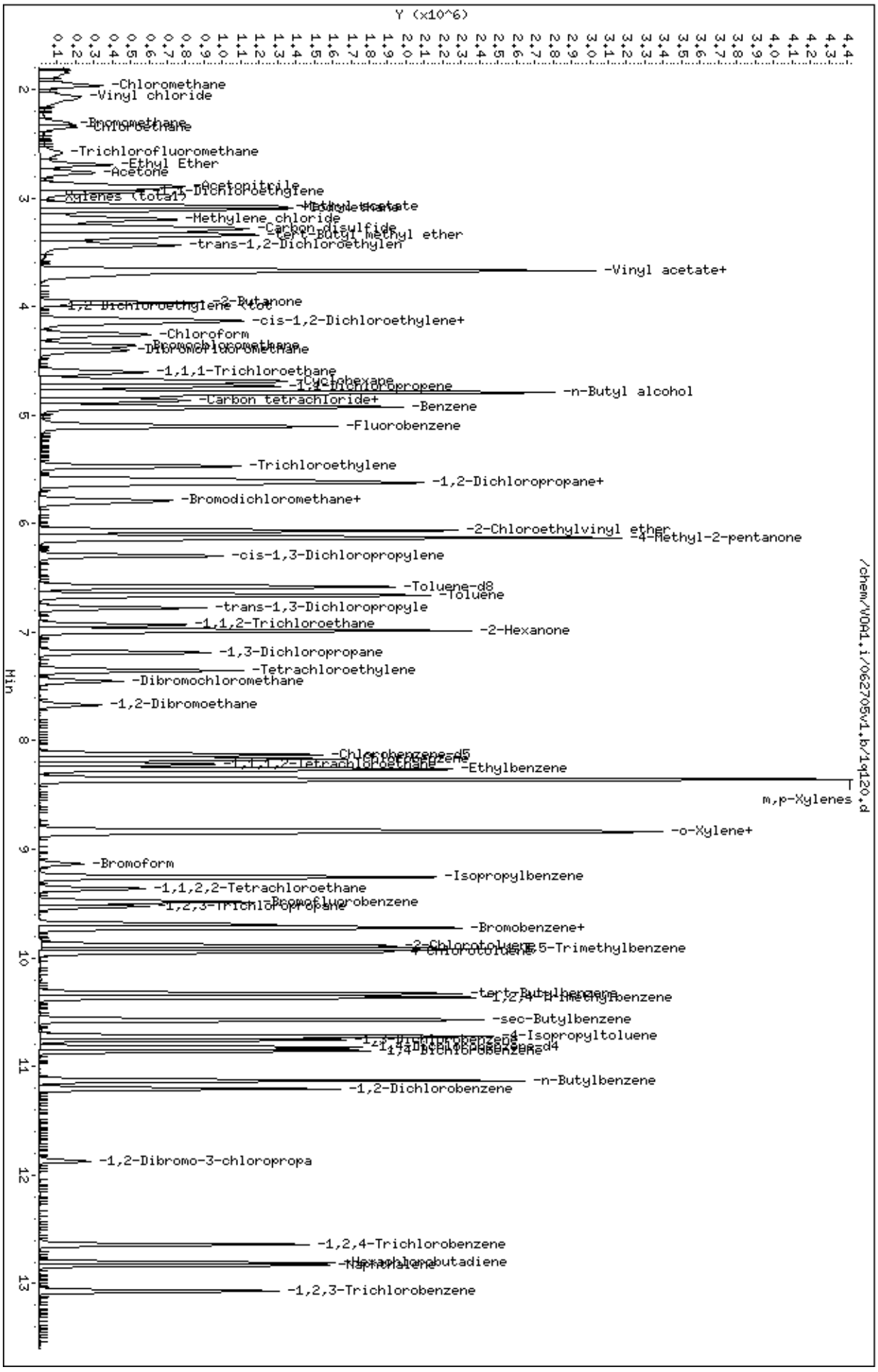
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1984494	150.000	150
M 2 1,2-Dichloroethylene (total)	96				645794	100.000	102
M 135 1,3-Dichloropropylene	75				954911	100.000	107
3 Dichlorodifluoromethane	85	1.845	1.845	(0.361)	157980	50.0000	34.3
4 Chloromethane	50	1.968	1.968	(0.386)	461048	50.0000	46.0
5 Vinyl chloride	62	2.069	2.069	(0.405)	320004	50.0000	49.2
6 Bromomethane	94	2.310	2.310	(0.453)	152654	50.0000	47.4
7 Chloroethane	64	2.347	2.347	(0.460)	154551	50.0000	46.0
8 Trichlorofluoromethane	101	2.593	2.593	(0.508)	198390	50.0000	47.6
134 Ethyl Ether	59	2.700	2.700	(0.529)	259233	50.0000	49.0
10 Acetone	43	2.769	2.769	(0.543)	444308	250.000	260
15 Acetonitrile	41	2.897	2.897	(0.568)	1127048	1250.00	1260
11 1,1-Dichloroethylene	61	2.945	2.945	(0.577)	574889	50.0000	50.5
128 Methyl acetate	43	3.074	3.074	(0.602)	1581661	250.000	252
13 Iodomethane	142	3.106	3.106	(0.609)	1953524	250.000	252

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	3.196	3.196	(0.626)	274965	50.0000	50.1
	14 Carbon disulfide	76	3.282	3.282	(0.643)	3704135	250.000	271
	20 tert-Butyl methyl ether	73	3.346	3.346	(0.656)	811636	50.0000	49.7
	21 trans-1,2-Dichloroethylene	96	3.437	3.437	(0.673)	288638	50.0000	51.8
	23 Vinyl acetate	43	3.667	3.667	(0.718)	4805912	250.000	273
	22 1,1-Dichloroethane	63	3.709	3.709	(0.727)	732113	50.0000	56.3
	30 2-Butanone	43	3.966	3.966	(0.777)	1280583	250.000	252
	31 cis-1,2-Dichloroethylene	96	4.142	4.142	(0.812)	357156	50.0000	50.4
	25 2,2-Dichloropropane	77	4.126	4.126	(0.808)	438291	50.0000	52.1
	32 Chloroform	83	4.265	4.265	(0.836)	575327	50.0000	51.3
	29 Bromochloromethane	128	4.361	4.361	(0.854)	161016	50.0000	55.2
$	35 Dibromofluoromethane	113	4.409	4.409	(0.864)	308932	50.0000	51.4
	36 1,1,1-Trichloroethane	97	4.607	4.607	(0.903)	458057	50.0000	53.4
	129 Cyclohexane	56	4.692	4.692	(0.919)	1123558	50.0000	51.6
	34 1,1-Dichloropropene	75	4.735	4.735	(0.928)	488012	50.0000	51.3
	131 n-Butyl alcohol	56	4.794	4.794	(0.939)	1716756	5000.00	5920
	33 Carbon tetrachloride	117	4.831	4.831	(0.947)	371480	50.0000	57.0
	37 1,2-Dichloroethane	62	4.869	4.869	(0.954)	546390	50.0000	49.4
	38 Benzene	78	4.927	4.927	(0.965)	1427764	50.0000	49.6
*	40 Fluorobenzene	96	5.104	5.104	(1.000)	1327853	50.0000	
	39 Trichloroethylene	95	5.472	5.472	(1.072)	356610	50.0000	48.8
	41 1,2-Dichloropropane	63	5.595	5.595	(1.096)	456968	50.0000	50.5
	130 Methylcyclohexane	83	5.622	5.622	(1.102)	732703	50.0000	51.6
	45 Bromodichloromethane	83	5.782	5.782	(1.133)	426061	50.0000	55.2
	43 Dibromomethane	93	5.809	5.809	(1.138)	193990	50.0000	52.1
	44 2-Chloroethylvinyl ether	63	6.065	6.065	(1.188)	923175	250.000	264
	49 4-Methyl-2-pentanone	58	6.129	6.129	(0.754)	996893	250.000	261
	46 cis-1,3-Dichloropropylene	75	6.300	6.300	(1.234)	515486	50.0000	53.6
$	47 Toluene-d8	98	6.583	6.583	(0.810)	1314375	50.0000	51.4
	50 Toluene	92	6.658	6.658	(0.819)	908122	50.0000	48.2
	53 trans-1,3-Dichloropropylene	75	6.776	6.776	(0.834)	439425	50.0000	53.9
	54 1,1,2-Trichloroethane	83	6.936	6.936	(0.853)	220037	50.0000	52.1
	55 2-Hexanone	43	6.984	6.984	(0.859)	1875956	250.000	261
	52 1,3-Dichloropropane	76	7.187	7.187	(0.884)	451908	50.0000	51.9
	56 Tetrachloroethylene	164	7.353	7.353	(0.905)	260572	50.0000	50.1
	57 Dibromochloromethane	129	7.454	7.454	(0.917)	260457	50.0000	60.7
	59 1,2-Dibromoethane	107	7.668	7.668	(0.943)	272402	50.0000	55.7
*	61 Chlorobenzene-d5	117	8.127	8.127	(1.000)	878256	50.0000	
	62 Chlorobenzene	112	8.170	8.170	(1.005)	938615	50.0000	50.3
	60 1,1,1,2-Tetrachloroethane	131	8.218	8.218	(1.011)	281325	50.0000	58.9
	58 Ethylbenzene	91	8.266	8.266	(1.017)	1737629	50.0000	50.0
	63 m,p-Xylenes	106	8.357	8.357	(1.028)	1336840	100.000	99.2
	64 o-Xylene	106	8.827	8.827	(1.086)	647654	50.0000	50.7
	65 Styrene	104	8.843	8.843	(1.088)	1073154	50.0000	51.5
	66 Bromoform	173	9.132	9.132	(0.844)	134937	50.0000	48.8
	67 Isopropylbenzene	105	9.254	9.254	(0.855)	1642016	50.0000	51.7
	73 1,1,2,2-Tetrachloroethane	83	9.361	9.361	(0.865)	321806	50.0000	49.4

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
$	71 Bromofluorobenzene	95	9.484	9.484	(0.876)	472183	50.0000	50.5
	74 1,2,3-Trichloropropane	110	9.532	9.532	(0.881)	93807	50.0000	49.4
	75 Bromobenzene	156	9.693	9.693	(0.895)	342744	50.0000	47.5
	76 n-Propylbenzene	91	9.725	9.725	(0.898)	1989382	50.0000	50.2
	77 2-Chlorotoluene	91	9.885	9.885	(0.913)	1266063	50.0000	48.4
	78 1,3,5-Trimethylbenzene	105	9.917	9.917	(0.916)	1400509	50.0000	50.6
	80 4-Chlorotoluene	91	9.944	9.944	(0.919)	1209598	50.0000	50.2
	81 tert-Butylbenzene	119	10.328	10.328	(0.954)	1369008	50.0000	50.5
	79 1,2,4-Trimethylbenzene	105	10.366	10.366	(0.958)	1400070	50.0000	50.3
	83 sec-Butylbenzene	105	10.574	10.574	(0.977)	1859069	50.0000	51.7
	84 4-Isopropyltoluene	119	10.724	10.724	(0.991)	1436378	50.0000	49.8
	85 1,3-Dichlorobenzene	146	10.756	10.756	(0.994)	667421	50.0000	48.4
*	86 1,4-Dichlorobenzene-d4	152	10.825	10.825	(1.000)	420548	50.0000	
	87 1,4-Dichlorobenzene	146	10.857	10.857	(1.003)	676876	50.0000	49.0
	89 n-Butylbenzene	91	11.130	11.130	(1.028)	1367435	50.0000	51.1
	90 1,2-Dichlorobenzene	146	11.204	11.204	(1.035)	609754	50.0000	49.3
	92 1,2-Dibromo-3-chloropropane	75	11.872	11.872	(1.097)	56491	50.0000	49.1
	93 1,2,4-Trichlorobenzene	180	12.641	12.641	(1.168)	399894	50.0000	47.8
	94 Hexachlorobutadiene	225	12.807	12.807	(1.183)	278575	50.0000	51.0
	95 Naphthalene	128	12.834	12.834	(1.186)	1069354	50.0000	51.5
	96 1,2,3-Trichlorobenzene	180	13.069	13.069	(1.207)	401456	50.0000	48.9



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Sample Info: IW1VM050627-07ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q121.d
Lab Smp Id: W1VM050627-08 Client Smp ID: VSTD100
Inj Date : 27-JUN-2005 22:55
Operator : PAM Inst ID: VOA1.i
Smp Info : |W1VM050627-08|ICAL|1|VOAF|1|
Misc Info : ICAL7 5.0ML 100.0PPB
Comment :
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Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 02:45 Cal File: 1q130.d
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

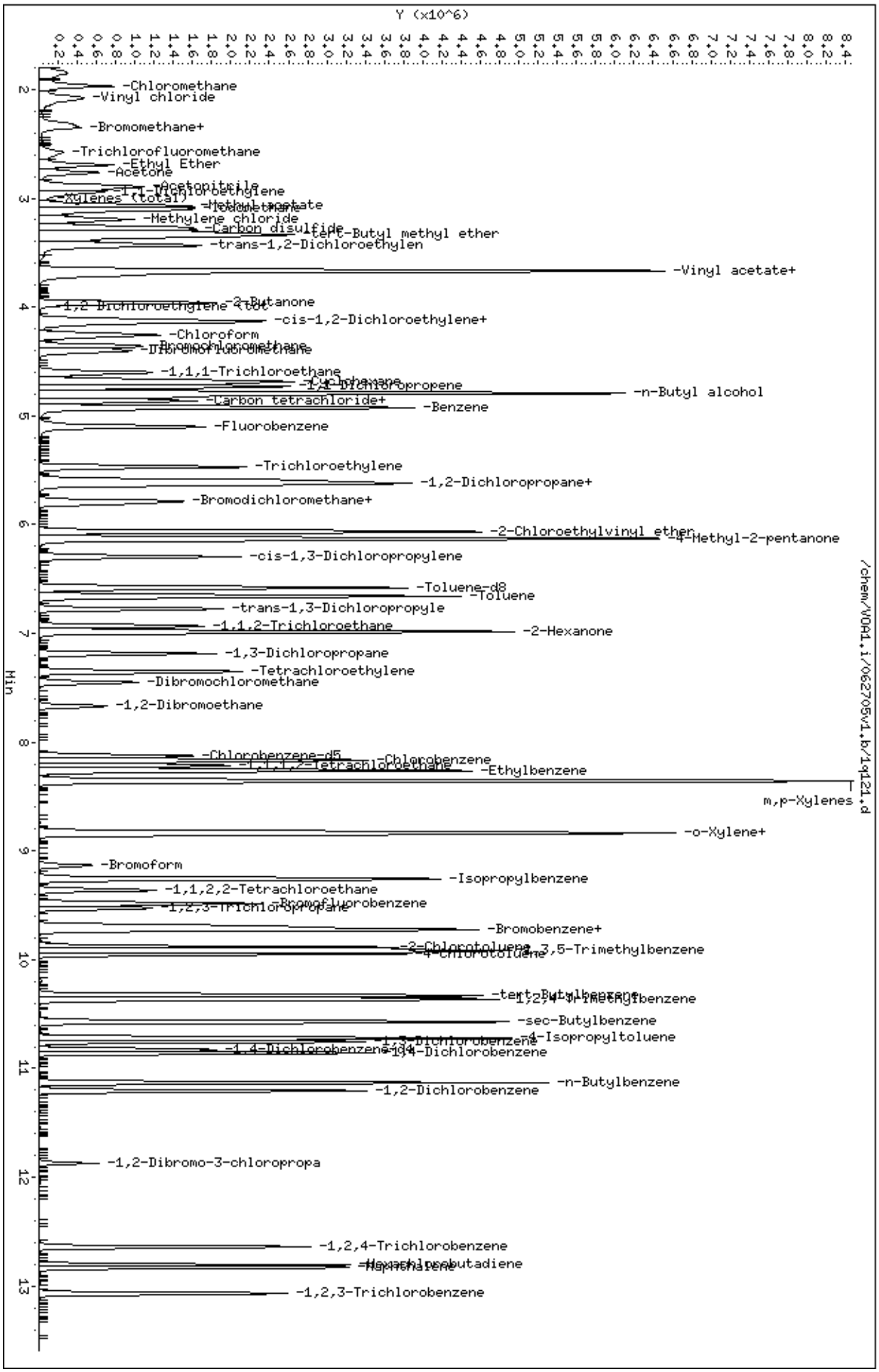
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				3886588	300.000	277
M 2 1,2-Dichloroethylene (total)	96				1402449	200.000	216
M 135 1,3-Dichloropropylene	75				1992460	200.000	214
3 Dichlorodifluoromethane	85	1.847	1.849	(0.362)	494506	100.000	103(AQ)
4 Chloromethane	50	1.970	1.966	(0.386)	1042584	100.000	101(A)
5 Vinyl chloride	62	2.077	2.079	(0.407)	726686	100.000	108(A)
6 Bromomethane	94	2.317	2.314	(0.454)	331978	100.000	101(A)
7 Chloroethane	64	2.349	2.351	(0.461)	334615	100.000	96.1(Q)
8 Trichlorofluoromethane	101	2.579	2.591	(0.506)	440061	100.000	101(AQ)
134 Ethyl Ether	59	2.691	2.698	(0.528)	533767	100.000	99.1
10 Acetone	43	2.766	2.768	(0.542)	849687	500.000	490
15 Acetonitrile	41	2.894	2.896	(0.567)	1486358	2500.00	1590
11 1,1-Dichloroethylene	61	2.942	2.939	(0.577)	837914	100.000	70.7
128 Methyl acetate	43	3.071	3.072	(0.602)	1944835	500.000	299
13 Iodomethane	142	3.103	3.104	(0.608)	2529314	500.000	314
17 Methylene chloride	84	3.193	3.200	(0.626)	339217	100.000	59.9

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
14	Carbon disulfide	76	3.279	3.281	(0.643)	6689222	500.000	473
20	tert-Butyl methyl ether	73	3.338	3.345	(0.654)	1905357	100.000	113(A)
21	trans-1,2-Dichloroethylene	96	3.434	3.441	(0.673)	683654	100.000	118(A)
23	Vinyl acetate	43	3.669	3.671	(0.719)	10465786	500.000	573(A)
22	1,1-Dichloroethane	63	3.701	3.708	(0.726)	1536703	100.000	114(A)
30	2-Butanone	43	3.963	3.964	(0.777)	2662051	500.000	500(A)
31	cis-1,2-Dichloroethylene	96	4.139	4.141	(0.811)	718795	100.000	97.9
25	2,2-Dichloropropane	77	4.123	4.130	(0.808)	878295	100.000	101(AQ)
32	Chloroform	83	4.257	4.263	(0.835)	1174958	100.000	101(A)
29	Bromochloromethane	128	4.358	4.370	(0.854)	323673	100.000	107(A)
$ 35	Dibromofluoromethane	113	4.406	4.408	(0.864)	652734	100.000	105
36	1,1,1-Trichloroethane	97	4.604	4.605	(0.903)	943154	100.000	106(A)
129	Cyclohexane	56	4.684	4.691	(0.918)	2182909	100.000	96.8
34	1,1-Dichloropropene	75	4.732	4.739	(0.928)	986173	100.000	100(A)
131	n-Butyl alcohol	56	4.791	4.792	(0.939)	3669014	10000.0	12200(A)
33	Carbon tetrachloride	117	4.828	4.835	(0.947)	806841	100.000	120(A)
37	1,2-Dichloroethane	62	4.866	4.867	(0.954)	1176003	100.000	103(A)
38	Benzene	78	4.924	4.931	(0.965)	2894276	100.000	97.2
* 40	Fluorobenzene	96	5.101	5.102	(1.000)	1375741	50.0000	
39	Trichloroethylene	95	5.469	5.471	(1.072)	703866	100.000	93.0
41	1,2-Dichloropropane	63	5.592	5.594	(1.096)	915581	100.000	97.7(Q)
130	Methylcyclohexane	83	5.624	5.626	(1.103)	1420936	100.000	96.6
45	Bromodichloromethane	83	5.784	5.786	(1.134)	869512	100.000	109(A)
43	Dibromomethane	93	5.806	5.813	(1.138)	396491	100.000	103(A)
44	2-Chloroethylvinyl ether	63	6.068	6.069	(1.190)	1889428	500.000	522(A)
49	4-Methyl-2-pentanone	58	6.132	6.133	(0.754)	2034901	500.000	501(A)
46	cis-1,3-Dichloropropylene	75	6.297	6.299	(1.235)	1051347	100.000	105(A)
$ 47	Toluene-d8	98	6.580	6.582	(0.809)	2601005	100.000	95.9
50	Toluene	92	6.661	6.662	(0.819)	1874028	100.000	93.8
53	trans-1,3-Dichloropropylene	75	6.778	6.780	(0.834)	941113	100.000	109(A)
54	1,1,2-Trichloroethane	83	6.933	6.935	(0.853)	458111	100.000	102(A)
55	2-Hexanone	43	6.986	6.988	(0.859)	3840763	500.000	503(A)
52	1,3-Dichloropropane	76	7.189	7.191	(0.884)	907449	100.000	98.2
56	Tetrachloroethylene	164	7.350	7.357	(0.904)	529333	100.000	95.9
57	Dibromochloromethane	129	7.451	7.453	(0.917)	575468	100.000	126(A)
59	1,2-Dibromoethane	107	7.670	7.672	(0.943)	549342	100.000	106(A)
* 61	Chlorobenzene-d5	117	8.130	8.126	(1.000)	931845	50.0000	
62	Chlorobenzene	112	8.167	8.169	(1.005)	1909859	100.000	96.5
60	1,1,1,2-Tetrachloroethane	131	8.215	8.217	(1.010)	595129	100.000	117(A)
58	Ethylbenzene	91	8.263	8.265	(1.016)	3469407	100.000	94.0
63	m,p-Xylenes	106	8.359	8.356	(1.028)	2623326	200.000	184
64	o-Xylene	106	8.829	8.831	(1.086)	1263262	100.000	93.2
65	Styrene	104	8.845	8.847	(1.088)	2148712	100.000	97.2
66	Bromoform	173	9.134	9.136	(0.844)	300777	100.000	101(AQ)
67	Isopropylbenzene	105	9.257	9.258	(0.855)	3188657	100.000	95.9
73	1,1,2,2-Tetrachloroethane	83	9.358	9.360	(0.864)	682425	100.000	100(A)
$ 71	Bromofluorobenzene	95	9.487	9.483	(0.876)	950190	100.000	97.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	9.529	9.531	(0.880)	201335	100.000	101(AQ)
75	Bromobenzene	156	9.690	9.691	(0.895)	695805	100.000	92.2
76	n-Propylbenzene	91	9.722	9.723	(0.898)	3928457	100.000	94.7
77	2-Chlorotoluene	91	9.887	9.889	(0.913)	2579377	100.000	94.2
78	1,3,5-Trimethylbenzene	105	9.919	9.915	(0.916)	2803089	100.000	96.7
80	4-Chlorotoluene	91	9.946	9.948	(0.919)	2381256	100.000	94.3
81	tert-Butylbenzene	119	10.331	10.332	(0.954)	2754723	100.000	97.1
79	1,2,4-Trimethylbenzene	105	10.363	10.364	(0.957)	2803864	100.000	96.2
83	sec-Butylbenzene	105	10.571	10.573	(0.976)	3681416	100.000	97.7
84	4-Isopropyltoluene	119	10.721	10.722	(0.990)	2897962	100.000	95.9
85	1,3-Dichlorobenzene	146	10.758	10.754	(0.994)	1344949	100.000	93.2
* 86	1,4-Dichlorobenzene-d4	152	10.827	10.824	(1.000)	440229	50.0000	
87	1,4-Dichlorobenzene	146	10.859	10.856	(1.003)	1346241	100.000	93.1
89	n-Butylbenzene	91	11.132	11.133	(1.028)	2698038	100.000	96.3
90	1,2-Dichlorobenzene	146	11.207	11.208	(1.035)	1271687	100.000	98.2
92	1,2-Dibromo-3-chloropropane	75	11.874	11.871	(1.097)	123848	100.000	101(A)
93	1,2,4-Trichlorobenzene	180	12.644	12.640	(1.168)	815947	100.000	93.2
94	Hexachlorobutadiene	225	12.809	12.811	(1.183)	551305	100.000	96.4
95	Naphthalene	128	12.831	12.832	(1.185)	2194519	100.000	101(A)
96	1,2,3-Trichlorobenzene	180	13.071	13.073	(1.207)	832775	100.000	97.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.



Data File: /chem/VOA1.i/062705v1.b/1q121.d
Date : 27-JUN-2005 22:55
Client ID: VSTD100
Sample Info: IW1VM050627-08|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q123.d
Lab Smp Id: UVM050525-01E Client Smp ID: VSTD005S
Inj Date : 27-JUN-2005 23:46
Operator : PAM Inst ID: VOA1.i
Smp Info : |UVM050525-01E|ICAL|1|VOAF|1|
Misc Info : ICAL1 5.0ML 5.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:26 ps Quant Type: ISTD
Cal Date : 27-JUN-2005 23:46 Cal File: 1q123.d
Als bottle: 13 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

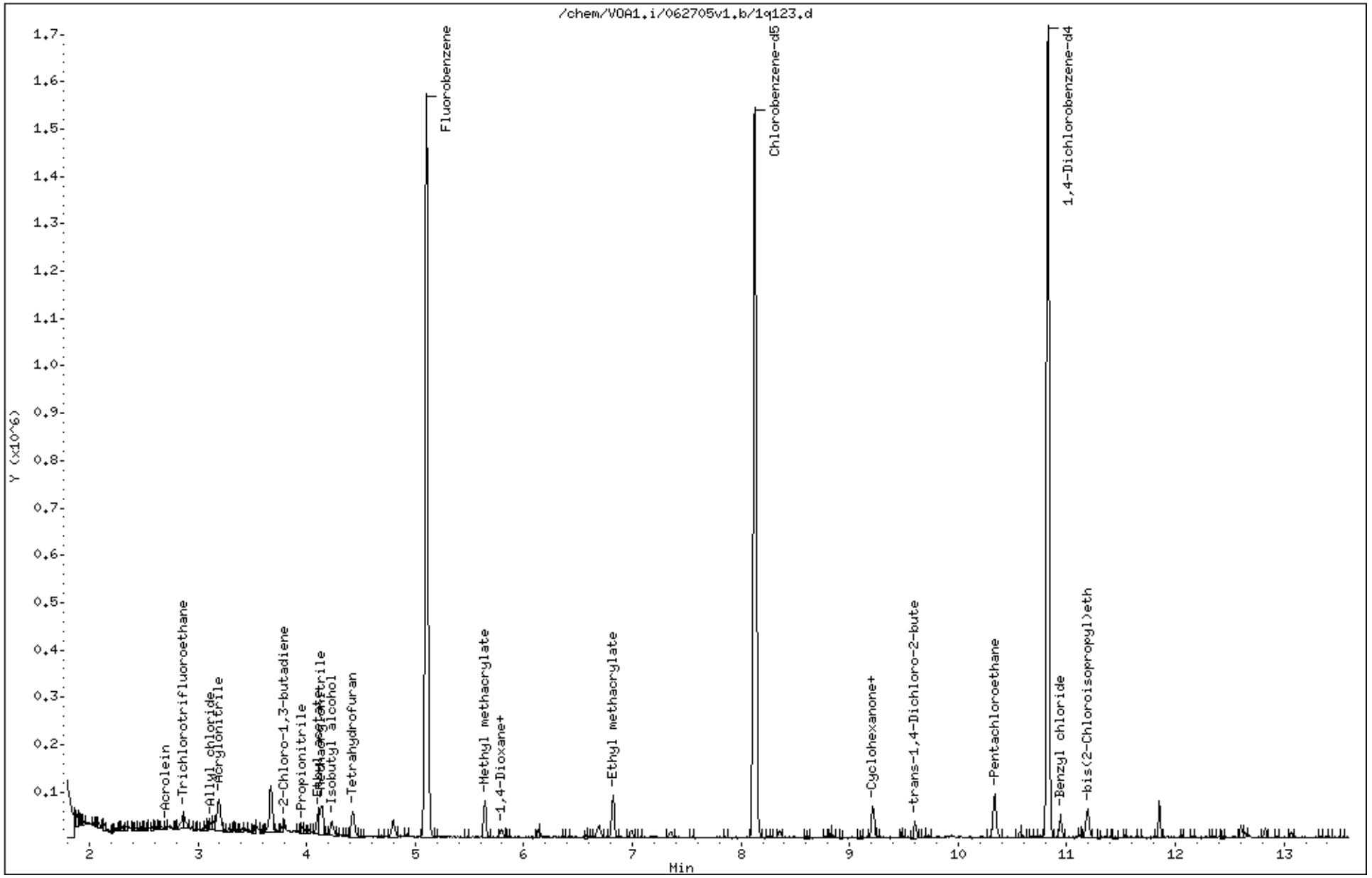
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.734	2.734	(0.535)	3845	5.00000	6.1(aQ)
12	Trichlorotrifluoroethane	85	2.862	2.862	(0.561)	8223	5.00000	5.3
16	Allyl chloride	76	3.124	3.124	(0.612)	4163	5.00000	9.9(Q)
18	Acrylonitrile	53	3.210	3.210	(0.629)	10571	5.00000	4.4(aQ)
24	2-Chloro-1,3-butadiene	53	3.797	3.797	(0.744)	13880	1.00000	1.0
28	Propionitrile	54	3.958	3.958	(0.775)	4026	5.00000	6.3
26	Ethyl acetate	43	4.107	4.107	(0.804)	49653	5.00000	5.2
27	Methacrylonitrile	41	4.145	4.145	(0.812)	33942	5.00000	5.4
19	Isobutyl alcohol	41	4.235	4.235	(0.829)	16407	50.0000	52.2
72	Tetrahydrofuran	42	4.428	4.428	(0.409)	45878	5.00000	5.6
* 40	Fluorobenzene	96	5.106	5.106	(1.000)	1319718	50.0000	
42	Methyl methacrylate	69	5.646	5.646	(1.106)	21651	5.00000	5.2
97	1,4-Dioxane	88	5.790	5.790	(1.134)	3255	50.0000	50.7
48	2-Nitropropane	43	5.795	5.795	(1.135)	5776	5.00000	4.3(a)
51	Ethyl methacrylate	69	6.821	6.821	(0.839)	37905	5.00000	4.8(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	8.130	8.130	(1.000)	886577	50.0000	
70 Cyclohexanone	55	9.214	9.214	(1.133)	10792	25.0000	91.6
68 cis-1,4-Dichloro-2-butene	53	9.225	9.225	(0.852)	15362	5.00000	4.7(a)
69 trans-1,4-Dichloro-2-butene	53	9.604	9.604	(0.887)	9107	5.00000	4.3(a)
82 Pentachloroethane	167	10.347	10.347	(0.956)	12527	5.00000	6.6(Q)
* 86 1,4-Dichlorobenzene-d4	152	10.828	10.828	(1.000)	433558	50.0000	
88 Benzyl chloride	91	10.945	10.945	(1.011)	33132	5.00000	8.5
91 bis(2-Chloroisopropyl)ether	45	11.191	11.191	(1.034)	34372	5.00000	5.4

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q123.d
Date : 27-JUN-2005 23:46
Client ID: VSTD005S
Instrument: VOA1.i
Sample Info: |UVM050525-01E|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: PAM
Column phase: RTX-Volatiles
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q124.d
Lab Smp Id: UVM050525-02E Client Smp ID: VSTD010S
Inj Date : 28-JUN-2005 00:12
Operator : PAM Inst ID: VOA1.i
Smp Info : |UVM050525-02E|ICAL|1|VOAF|1|
Misc Info : ICAL2 5.0ML 10PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 00:12 Cal File: 1q124.d
Als bottle: 14 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.731	2.729	(0.535)	10011	10.0000	10.6
12	Trichlorotrifluoroethane	85	2.859	2.873	(0.560)	19373	10.0000	11.4
16	Allyl chloride	76	3.142	3.140	(0.616)	10552	10.0000	13.5(Q)
18	Acrylonitrile	53	3.212	3.210	(0.629)	25311	10.0000	9.7(aQ)
24	2-Chloro-1,3-butadiene	53	3.794	3.792	(0.744)	30841	2.00000	2.1
28	Propionitrile	54	3.960	3.958	(0.776)	14228	10.0000	13.8
26	Ethyl acetate	43	4.104	4.102	(0.804)	112812	10.0000	10.9
27	Methacrylonitrile	41	4.141	4.139	(0.812)	70486	10.0000	10.4
19	Isobutyl alcohol	41	4.227	4.230	(0.828)	31986	100.000	93.0
72	Tetrahydrofuran	42	4.435	4.417	(0.410)	56658	10.0000	8.0
* 40	Fluorobenzene	96	5.103	5.102	(1.000)	1442698	50.0000	
42	Methyl methacrylate	69	5.648	5.641	(1.107)	46971	10.0000	10.3
97	1,4-Dioxane	88	5.798	5.795	(1.136)	6484	100.000	92.4
48	2-Nitropropane	43	5.792	5.795	(1.135)	15328	10.0000	10.4
51	Ethyl methacrylate	69	6.823	6.821	(0.840)	86635	10.0000	10.1
* 61	Chlorobenzene-d5	117	8.127	8.126	(1.000)	962858	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	70 Cyclohexanone	55	9.211	9.204	(1.133)	23069	50.0000	104
	68 cis-1,4-Dichloro-2-butene	53	9.216	9.220	(0.851)	32700	10.0000	9.4
	69 trans-1,4-Dichloro-2-butene	53	9.606	9.604	(0.887)	23410	10.0000	10.4
	82 Pentachloroethane	167	10.338	10.336	(0.955)	32516	10.0000	11.3(Q)
*	86 1,4-Dichlorobenzene-d4	152	10.824	10.824	(1.000)	462904	50.0000	
	88 Benzyl chloride	91	10.942	10.945	(1.011)	81069	10.0000	12.4
	91 bis(2-Chloroisopropyl)ether	45	11.193	11.196	(1.034)	67441	10.0000	9.9

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q124.d

Date : 28-JUN-2005 00:12

Client ID: VSTD010S

Sample Info: |UVM050525-02E|ICAL|1|VOAF|1|

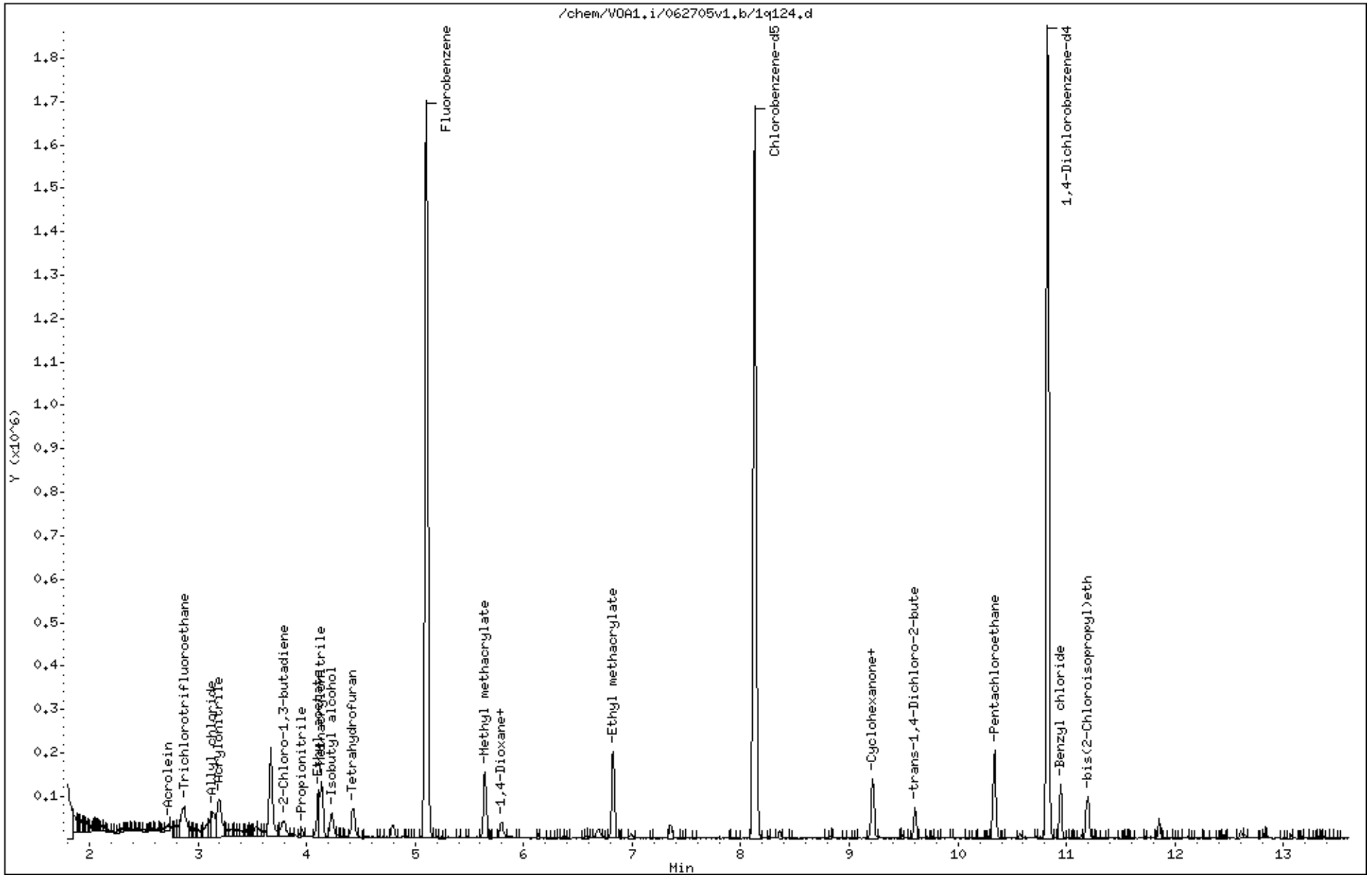
Purge Volume: 5.0

Column phase: RTX-Volatiles

Instrument: VOA1.i

Operator: PAM

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q125.d
Lab Smp Id: UVM050525-03E Client Smp ID: VSTD025S
Inj Date : 28-JUN-2005 00:37
Operator : PAM Inst ID: VOA1.i
Smp Info : |UVM050525-03E|ICAL|1|VOAF|1|
Misc Info : ICAL3 5.0ML 25.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 00:37 Cal File: 1q125.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

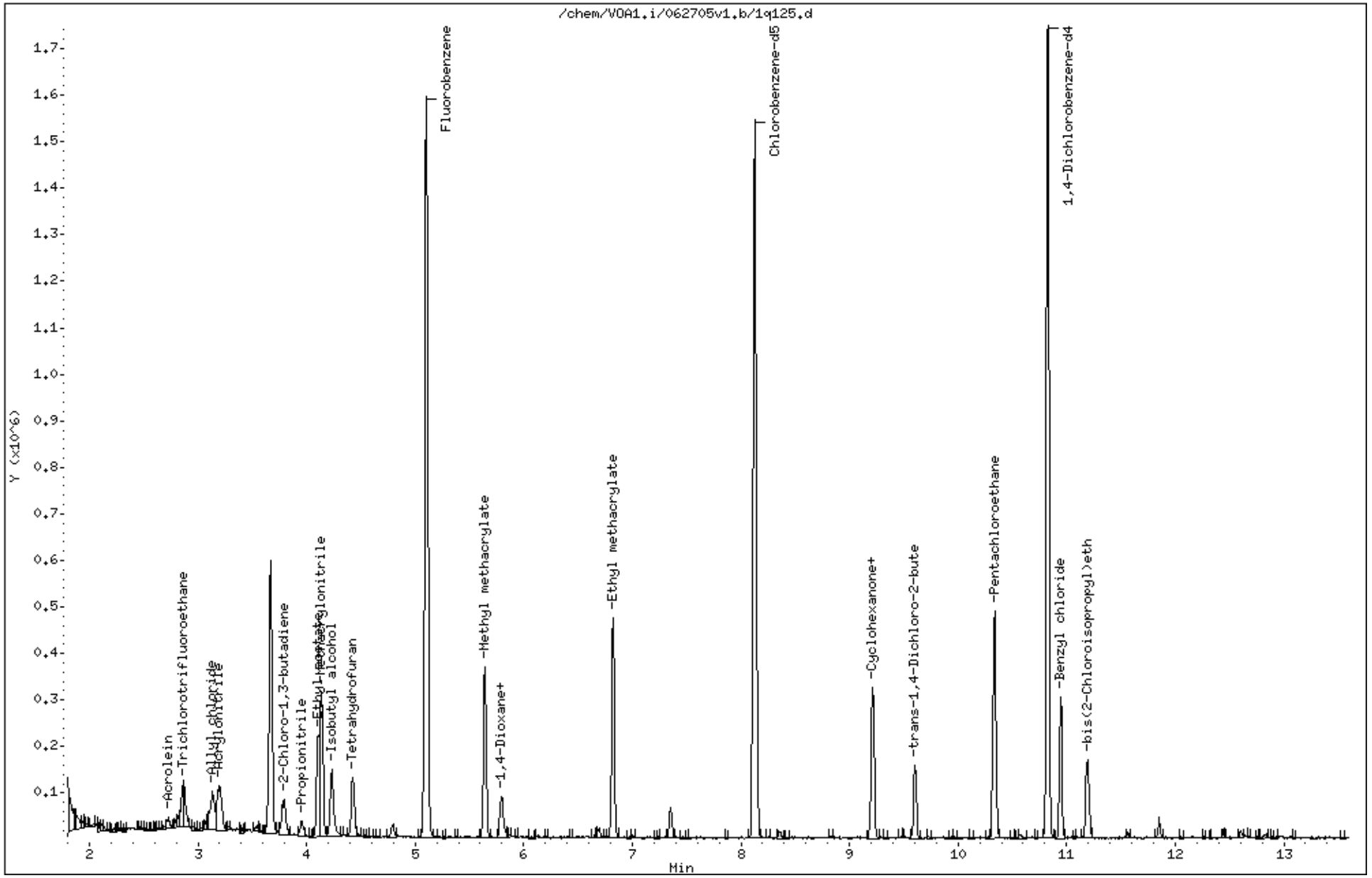
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.725	2.729	(0.534)	20455	25.0000	20.0
12	Trichlorotrifluoroethane	85	2.875	2.873	(0.563)	33071	25.0000	20.9
16	Allyl chloride	76	3.147	3.140	(0.617)	22216	25.0000	21.4(Q)
18	Acrylonitrile	53	3.206	3.210	(0.628)	64206	25.0000	26.4
24	2-Chloro-1,3-butadiene	53	3.788	3.792	(0.742)	71342	5.00000	5.2
28	Propionitrile	54	3.954	3.958	(0.775)	35630	25.0000	32.1
26	Ethyl acetate	43	4.103	4.102	(0.804)	260937	25.0000	27.0
27	Methacrylonitrile	41	4.141	4.139	(0.812)	177437	25.0000	27.9
19	Isobutyl alcohol	41	4.231	4.230	(0.829)	82741	250.000	257
72	Tetrahydrofuran	42	4.424	4.417	(0.408)	107540	25.0000	27.1
* 40	Fluorobenzene	96	5.102	5.102	(1.000)	1349452	50.0000	
42	Methyl methacrylate	69	5.642	5.641	(1.106)	106362	25.0000	25.0
97	1,4-Dioxane	88	5.802	5.795	(1.137)	18009	250.000	274
48	2-Nitropropane	43	5.786	5.795	(1.134)	34422	25.0000	25.1
51	Ethyl methacrylate	69	6.822	6.821	(0.840)	208382	25.0000	25.5
* 61	Chlorobenzene-d5	117	8.126	8.126	(1.000)	917132	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	70 Cyclohexanone	55	9.205	9.204	(1.133)	58402	125.000	146
	68 cis-1,4-Dichloro-2-butene	53	9.221	9.220	(0.852)	80769	25.0000	25.5
	69 trans-1,4-Dichloro-2-butene	53	9.600	9.604	(0.887)	50301	25.0000	24.4
	82 Pentachloroethane	167	10.338	10.336	(0.955)	76191	25.0000	23.8(Q)
*	86 1,4-Dichlorobenzene-d4	152	10.829	10.824	(1.000)	424283	50.0000	
	88 Benzyl chloride	91	10.947	10.945	(1.011)	199362	25.0000	23.9
	91 bis(2-Chloroisopropyl)ether	45	11.192	11.196	(1.034)	162728	25.0000	26.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q125.d
Date : 28-JUN-2005 00:37
Client ID: VSTD025S
Instrument: VOA1.i
Sample Info: |UVM050525-03E|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: PAM
Column phase: RTX-Volatiles
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q126.d
Lab Smp Id: UVM050525-04E Client Smp ID: VSTD050S
Inj Date : 28-JUN-2005 01:03
Operator : PAM Inst ID: VOA1.i
Smp Info : |UVM050525-04E|ICAL|1|VOAF|1|
Misc Info : ICAL4 5.0ML 50.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 01:03 Cal File: 1q126.d
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

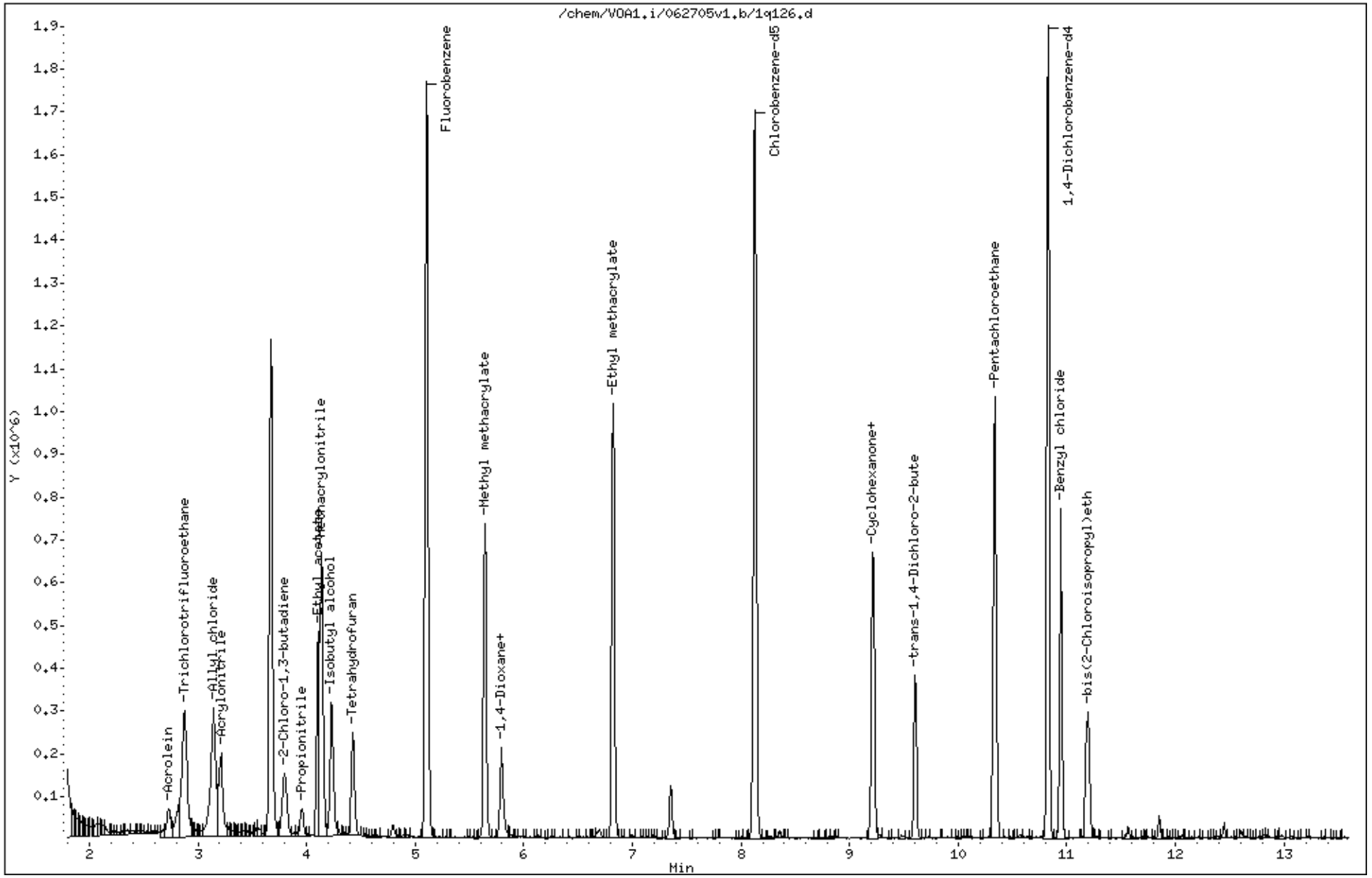
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	9 Acrolein	56	2.733	2.729	(0.535)	58358	50.0000	47.6
	12 Trichlorotrifluoroethane	85	2.878	2.873	(0.564)	93197	50.0000	53.6
	16 Allyl chloride	76	3.145	3.140	(0.616)	72162	50.0000	49.3(Q)
	18 Acrylonitrile	53	3.220	3.210	(0.631)	143204	50.0000	53.6
	24 2-Chloro-1,3-butadiene	53	3.802	3.792	(0.745)	150363	10.0000	10
	28 Propionitrile	54	3.951	3.958	(0.774)	70457	50.0000	55.5
	26 Ethyl acetate	43	4.106	4.102	(0.804)	578084	50.0000	54.5
	27 Methacrylonitrile	41	4.138	4.139	(0.811)	370723	50.0000	53.1
	19 Isobutyl alcohol	41	4.229	4.230	(0.828)	175864	500.000	498
	72 Tetrahydrofuran	42	4.427	4.417	(0.409)	196696	50.0000	52.9
*	40 Fluorobenzene	96	5.105	5.102	(1.000)	1479736	50.0000	
	42 Methyl methacrylate	69	5.640	5.641	(1.105)	218827	50.0000	47.0
	97 1,4-Dioxane	88	5.789	5.795	(1.134)	34671	500.000	481
	48 2-Nitropropane	43	5.794	5.795	(1.135)	83584	50.0000	55.5
	51 Ethyl methacrylate	69	6.820	6.821	(0.839)	455015	50.0000	52.1
*	61 Chlorobenzene-d5	117	8.129	8.126	(1.000)	982133	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	70 Cyclohexanone	55	9.208	9.204	(1.133)	110573	250.000	197
	68 cis-1,4-Dichloro-2-butene	53	9.219	9.220	(0.851)	172475	50.0000	50.6
	69 trans-1,4-Dichloro-2-butene	53	9.603	9.604	(0.887)	111717	50.0000	50.5
	82 Pentachloroethane	167	10.335	10.336	(0.955)	171747	50.0000	46.4
*	86 1,4-Dichlorobenzene-d4	152	10.827	10.824	(1.000)	456311	50.0000	
	88 Benzyl chloride	91	10.944	10.945	(1.011)	495662	50.0000	48.1
	91 bis(2-Chloroisopropyl)ether	45	11.195	11.196	(1.034)	331717	50.0000	49.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q126.d
Date : 28-JUN-2005 01:03
Client ID: VSTD050S
Instrument: VOA1.i
Sample Info: |UVM050525-04E|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: PAM
Column phase: RTX-Volatiles
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q127.d
Lab Smp Id: UVM050525-05E Client Smp ID: VSTD100S
Inj Date : 28-JUN-2005 01:28
Operator : PAM Inst ID: VOA1.i
Smp Info : |UVM050525-05E|ICAL|1|VOAF|1|
Misc Info : ICAL5 5.0ML 100PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 01:28 Cal File: 1q127.d
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

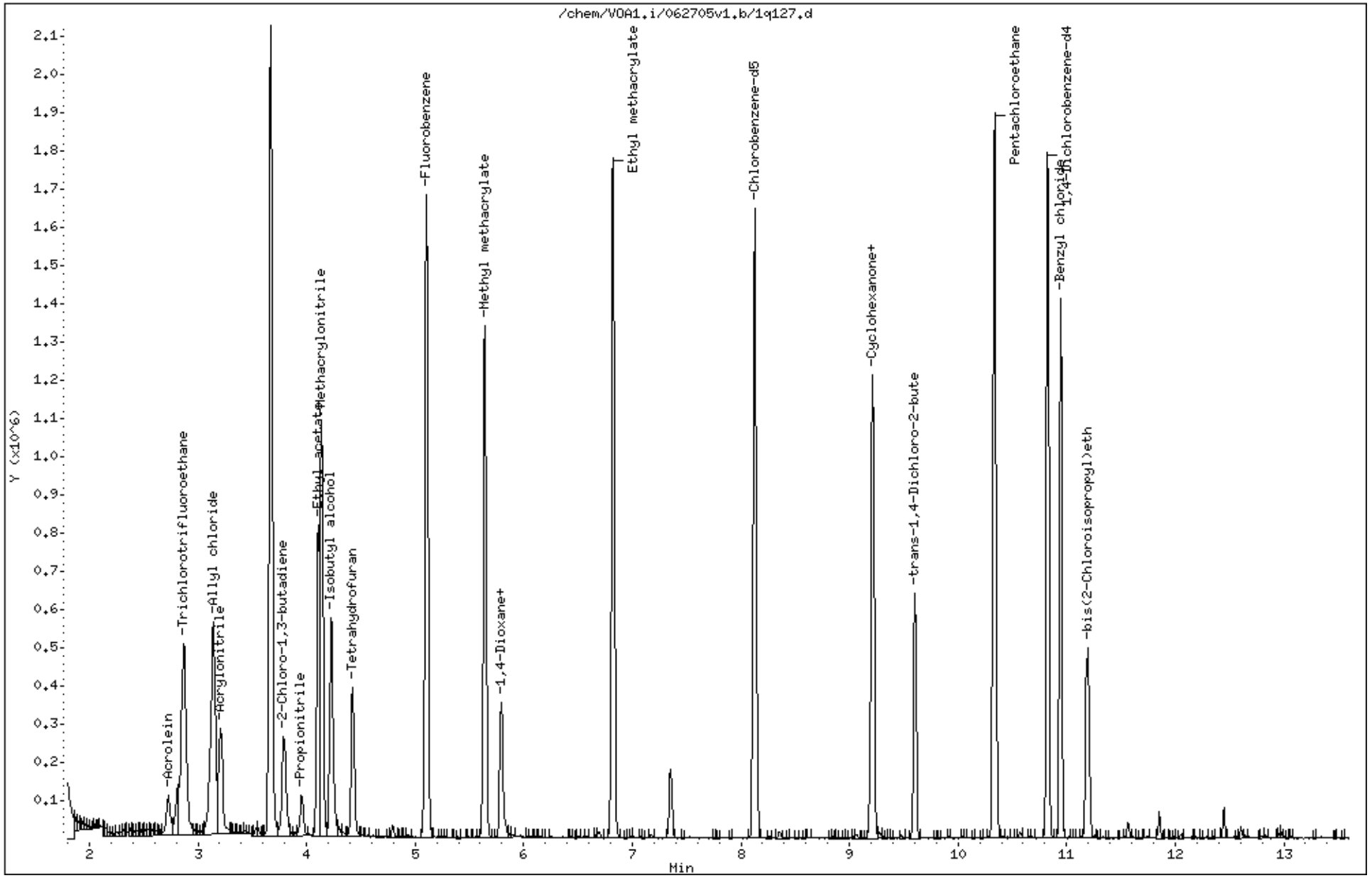
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.725	2.729	(0.534)	108094	100.000	88.8
12	Trichlorotrifluoroethane	85	2.875	2.873	(0.563)	166697	100.000	99.4
16	Allyl chloride	76	3.142	3.140	(0.615)	128982	100.000	85.2(Q)
18	Acrylonitrile	53	3.211	3.210	(0.629)	236231	100.000	91.6
24	2-Chloro-1,3-butadiene	53	3.788	3.792	(0.742)	255675	20.0000	17.6
28	Propionitrile	54	3.954	3.958	(0.774)	114893	100.000	91.7
26	Ethyl acetate	43	4.103	4.102	(0.803)	961253	100.000	93.8
27	Methacrylonitrile	41	4.141	4.139	(0.811)	631963	100.000	93.8
19	Isobutyl alcohol	41	4.226	4.230	(0.827)	322806	1000.00	948
72	Tetrahydrofuran	42	4.424	4.417	(0.409)	322064	100.000	95.3
* 40	Fluorobenzene	96	5.108	5.102	(1.000)	1428719	50.0000	
42	Methyl methacrylate	69	5.642	5.641	(1.105)	387528	100.000	86.2
97	1,4-Dioxane	88	5.797	5.795	(1.135)	60896	1000.00	876
48	2-Nitropropane	43	5.792	5.795	(1.134)	143022	100.000	98.4
51	Ethyl methacrylate	69	6.823	6.821	(0.840)	780523	100.000	92.6
* 61	Chlorobenzene-d5	117	8.126	8.126	(1.000)	947492	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
70	Cyclohexanone	55	9.205	9.204	(1.133)	235144	500.000	340
68	cis-1,4-Dichloro-2-butene	53	9.216	9.220	(0.851)	304944	100.000	91.6
69	trans-1,4-Dichloro-2-butene	53	9.606	9.604	(0.887)	199042	100.000	92.1
82	Pentachloroethane	167	10.338	10.336	(0.955)	333828	100.000	89.2
* 86	1,4-Dichlorobenzene-d4	152	10.824	10.824	(1.000)	445626	50.0000	
88	Benzyl chloride	91	10.947	10.945	(1.011)	927387	100.000	87.1
91	bis(2-Chloroisopropyl)ether	45	11.198	11.196	(1.035)	583112	100.000	88.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q127.d
Date : 28-JUN-2005 01:28
Client ID: VSTD100S
Instrument: VOA1.i
Sample Info: |UVM050525-05E|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: PAM
Column phase: RTX-Volatiles
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q129.d
Lab Smp Id: UVM050525-06E Client Smp ID: VSTD250S
Inj Date : 28-JUN-2005 02:19
Operator : PAM Inst ID: VOA1.i
Smp Info : |UVM050525-06E|ICAL|1|VOAF|1|
Misc Info : ICAL6 5.0ML 250.0PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 19 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

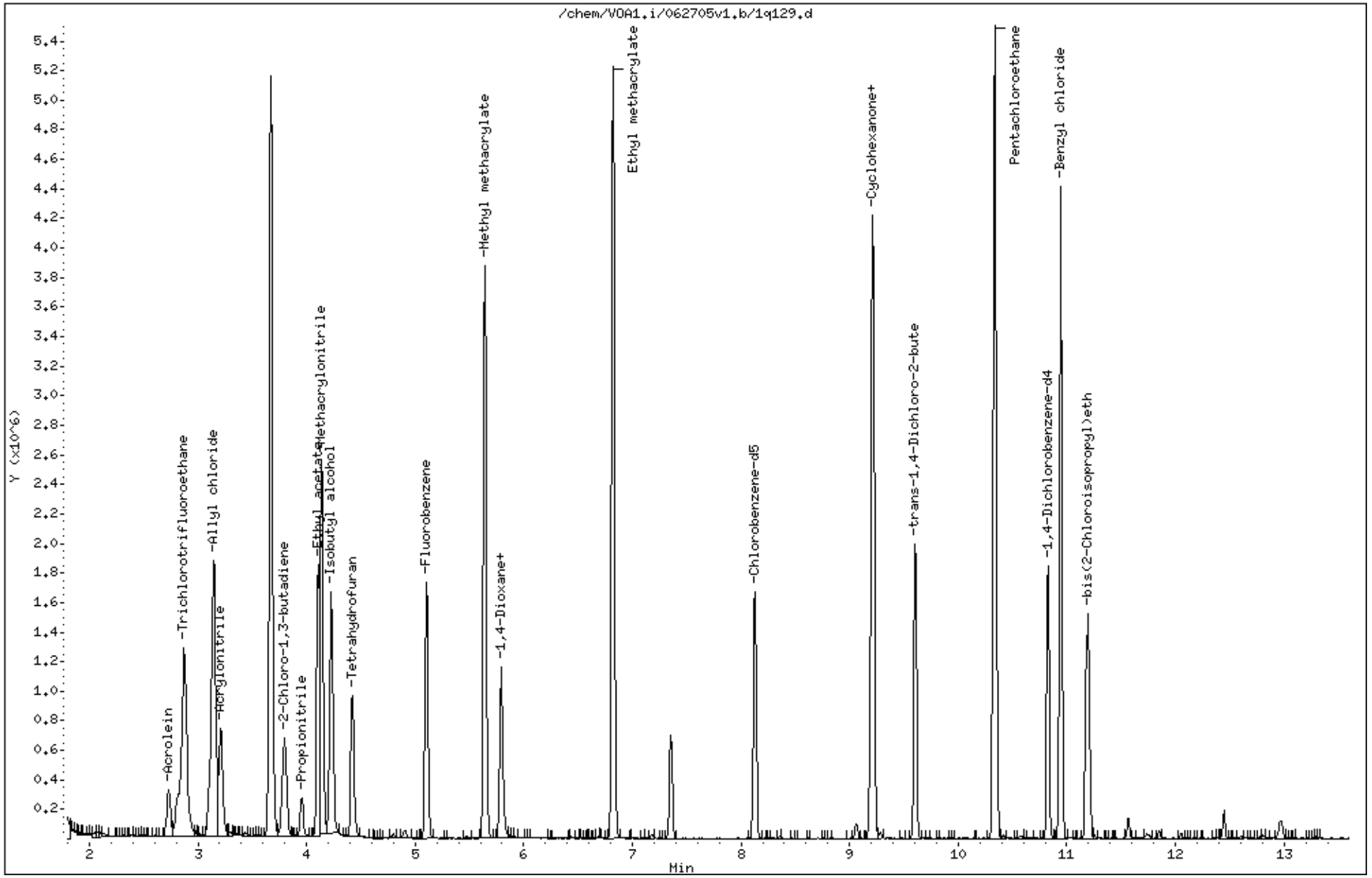
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.729	2.729	(0.534)	359239	250.000	285
12	Trichlorotrifluoroethane	85	2.873	2.873	(0.563)	435347	250.000	256
16	Allyl chloride	76	3.145	3.140	(0.616)	435748	250.000	268
18	Acrylonitrile	53	3.215	3.210	(0.630)	654779	250.000	251
24	2-Chloro-1,3-butadiene	53	3.797	3.792	(0.744)	713106	50.0000	48.4
28	Propionitrile	54	3.957	3.958	(0.775)	300128	250.000	232
26	Ethyl acetate	43	4.107	4.102	(0.804)	2224068	250.000	214
27	Methacrylonitrile	41	4.139	4.139	(0.811)	1461486	250.000	214
19	Isobutyl alcohol	41	4.230	4.230	(0.828)	888049	2500.00	2580
72	Tetrahydrofuran	42	4.422	4.417	(0.408)	795583	250.000	251
* 40	Fluorobenzene	96	5.106	5.102	(1.000)	1445395	50.0000	
42	Methyl methacrylate	69	5.640	5.641	(1.105)	1150422	250.000	253
97	1,4-Dioxane	88	5.790	5.795	(1.134)	175216	2500.00	2490
48	2-Nitropropane	43	5.795	5.795	(1.135)	529718	250.000	360
51	Ethyl methacrylate	69	6.821	6.821	(0.839)	2312170	250.000	273
* 61	Chlorobenzene-d5	117	8.129	8.126	(1.000)	953300	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	9.203	9.204	(1.132)	1161610	1250.00	1360
68	cis-1,4-Dichloro-2-butene	53	9.219	9.220	(0.851)	926084	250.000	279
69	trans-1,4-Dichloro-2-butene	53	9.604	9.604	(0.887)	601409	250.000	280
82	Pentachloroethane	167	10.336	10.336	(0.955)	1045529	250.000	274
* 86	1,4-Dichlorobenzene-d4	152	10.827	10.824	(1.000)	443634	50.0000	
88	Benzyl chloride	91	10.945	10.945	(1.011)	2950781	250.000	266
91	bis(2-Chloroisopropyl)ether	45	11.196	11.196	(1.034)	1720814	250.000	262

Data File: /chem/VOA1.i/062705v1.b/1q129.d
Date : 28-JUN-2005 02:19
Client ID: VSTD250S
Instrument: VOA1.i
Sample Info: |UVM050525-06E|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: PAM
Column phase: RTX-Volatiles
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/062705v1.b/1q130.d
Lab Smp Id: UVM050525-07E Client Smp ID: VSTD500S
Inj Date : 28-JUN-2005 02:45
Operator : PAM Inst ID: VOA1.i
Smp Info : |UVM050525-07E|ICAL|1|VOAF|1|
Misc Info : ICAL7 5.0ML 500PPB
Comment :
Method : /chem/VOA1.i/062705v1.b/VOA1-8260B-062705.m
Meth Date : 28-Jun-2005 11:29 ps Quant Type: ISTD
Cal Date : 28-JUN-2005 02:45 Cal File: 1q130.d
Als bottle: 20 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

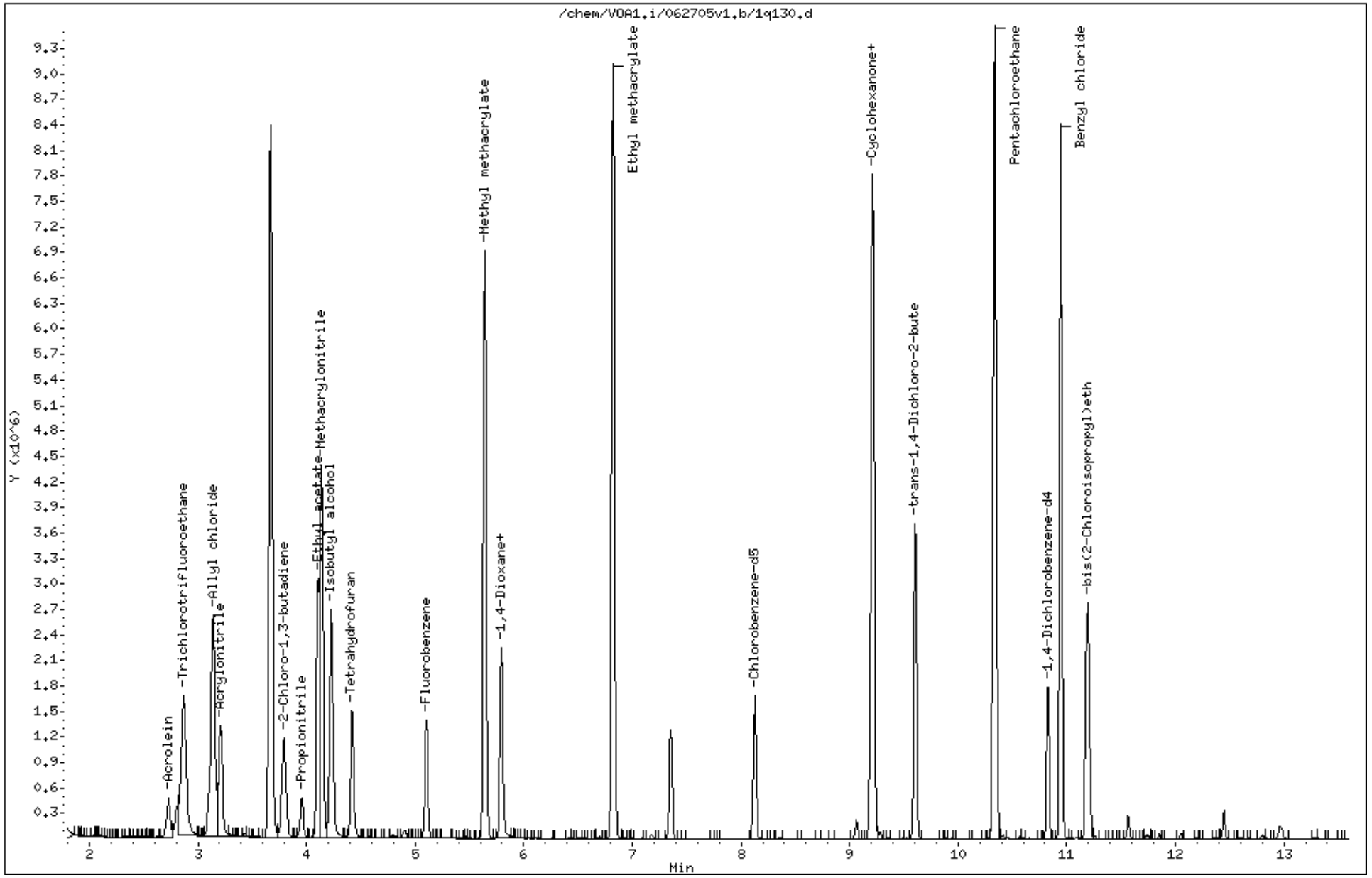
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.729	2.729	(0.534)	488573	500.000	482
12	Trichlorotrifluoroethane	85	2.873	2.873	(0.563)	589974	500.000	433
16	Allyl chloride	76	3.140	3.140	(0.615)	652913	500.000	493(Q)
18	Acrylonitrile	53	3.210	3.210	(0.629)	1142082	500.000	545(A)
24	2-Chloro-1,3-butadiene	53	3.792	3.792	(0.743)	1229083	100.000	104(A)
28	Propionitrile	54	3.958	3.958	(0.775)	531710	500.000	508(A)
26	Ethyl acetate	43	4.102	4.102	(0.803)	3735255	500.000	449
27	Methacrylonitrile	41	4.139	4.139	(0.811)	2456118	500.000	449
19	Isobutyl alcohol	41	4.230	4.230	(0.828)	1414244	5000.00	5110(A)
72	Tetrahydrofuran	42	4.417	4.417	(0.408)	1151873	500.000	362
* 40	Fluorobenzene	96	5.106	5.102	(1.000)	1160478	50.0000	
42	Methyl methacrylate	69	5.641	5.641	(1.105)	2026526	500.000	555(A)
97	1,4-Dioxane	88	5.795	5.795	(1.135)	319292	5000.00	5650(A)
48	2-Nitropropane	43	5.795	5.795	(1.135)	1065712	500.000	902(A)
51	Ethyl methacrylate	69	6.821	6.821	(0.839)	4038372	500.000	474
* 61	Chlorobenzene-d5	117	8.130	8.126	(1.000)	958446	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
70	Cyclohexanone	55	9.204	9.204	(1.132)	2162921	2500.00	2460
68	cis-1,4-Dichloro-2-butene	53	9.220	9.220	(0.851)	1749115	500.000	520(A)
69	trans-1,4-Dichloro-2-butene	53	9.604	9.604	(0.887)	1159671	500.000	531(A)
82	Pentachloroethane	167	10.336	10.336	(0.955)	1907975	500.000	489
* 86	1,4-Dichlorobenzene-d4	152	10.828	10.824	(1.000)	450348	50.0000	
88	Benzyl chloride	91	10.945	10.945	(1.011)	5600846	500.000	493
91	bis(2-Chloroisopropyl)ether	45	11.196	11.196	(1.034)	3268199	500.000	491

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA1.i/062705v1.b/1q130.d
Date : 28-JUN-2005 02:45
Client ID: VSTD500S
Instrument: VOA1.i
Sample Info: |UVM050525-07E|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: PAM
Column phase: RTX-Volatiles
Column diameter: 0.25



Report Date: 28-Jun-2005 11:52

Calibration History

Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Start Cal Date: 27-JUN-2005 11:18
End Cal Date : 27-JUN-2005 18:36

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
27-JUN-2005 15:52	ICALsubS	/chem/VOA3.i/062705v3.b/3q113.d
27-JUN-2005 12:13	CALsubL+	/chem/VOA3.i/062705v3.b/3q105.d
Cal Level: 2 , Cal Amount: 2.00000		
27-JUN-2005 16:19	ICALsubS	/chem/VOA3.i/062705v3.b/3q114.d
27-JUN-2005 12:41	CALsubL+	/chem/VOA3.i/062705v3.b/3q106.d
Cal Level: 3 , Cal Amount: 5.00000		
27-JUN-2005 16:47	ICALsubS	/chem/VOA3.i/062705v3.b/3q115.d
27-JUN-2005 13:08	CALsubL+	/chem/VOA3.i/062705v3.b/3q107.d
Cal Level: 4 , Cal Amount: 10.00000		
27-JUN-2005 17:14	ICALsubS	/chem/VOA3.i/062705v3.b/3q116.d
27-JUN-2005 13:35	CALsubL+	/chem/VOA3.i/062705v3.b/3q108.d
Cal Level: 5 , Cal Amount: 20.00000		
27-JUN-2005 17:42	ICALsubS	/chem/VOA3.i/062705v3.b/3q117.d
27-JUN-2005 14:03	CALsubL+	/chem/VOA3.i/062705v3.b/3q109.d
Cal Level: 6 , Cal Amount: 50.00000		
27-JUN-2005 18:09	ICALsubS	/chem/VOA3.i/062705v3.b/3q118.d
27-JUN-2005 14:30	CALsubL+	/chem/VOA3.i/062705v3.b/3q110.d
Cal Level: 7 , Cal Amount: 100.00000		
27-JUN-2005 18:36	ICALsubS	/chem/VOA3.i/062705v3.b/3q119.d
27-JUN-2005 14:57	CALsubL+	/chem/VOA3.i/062705v3.b/3q111.d
Cal Level: 8 , Cal Amount: 0.50000		
27-JUN-2005 11:18	BENZENE+	/chem/VOA3.i/062705v3.b/3q103.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
27-JUN-2005 14:30	CALsubL+	/chem/VOA3.i/062705v3.b/3q110.d
Ccal Level: 6 , Ccal Amount: 50.0		
27-JUN-2005 20:52	CALsubS+SS	/chem/VOA3.i/062705v3.b/3q124.d
Ccal Level: 6 , Ccal Amount: 50.0		
27-JUN-2005 19:31	CALsubL+	/chem/VOA3.i/062705v3.b/3q121.d
Ccal Level: 6 , Ccal Amount: 50.0		
27-JUN-2005 20:25	CALsubL+	/chem/VOA3.i/062705v3.b/3q123.d
Ccal Level: 6 , Ccal Amount: 50.0		
27-JUN-2005 19:58	CALsubL+	/chem/VOA3.i/062705v3.b/3q122.d
Ccal Level: 6 , Ccal Amount: 50.0		
27-JUN-2005 18:09	ICALsubS	/chem/VOA3.i/062705v3.b/3q118.d

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 27-JUN-2005 11:18
End Cal Date : 27-JUN-2005 18:36
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Cal Date : 28-Jun-2005 13:55 pat01082

Calibration File Names:
Level 1: /chem/VOA3.i/062705v3.b/3q113.d
Level 2: /chem/VOA3.i/062705v3.b/3q114.d
Level 3: /chem/VOA3.i/062705v3.b/3q115.d
Level 4: /chem/VOA3.i/062705v3.b/3q116.d
Level 5: /chem/VOA3.i/062705v3.b/3q117.d
Level 6: /chem/VOA3.i/062705v3.b/3q118.d
Level 7: /chem/VOA3.i/062705v3.b/3q119.d
Level 8: /chem/VOA3.i/062705v3.b/3q103.d

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
M 1 Xylenes (total)	0.80411	0.78137	0.73846	0.69353	0.67023	0.72030					
	0.68579	+++++					AVRG		0.72769		6.89823
M 2 1,2-Dichloroethylene (total)	0.46063	0.42193	0.38151	0.35986	0.34070	0.37298					
	0.37148	+++++					AVRG		0.38701		10.54330
3 Dichlorodifluoromethane	14186	43623	91248	182483	358048	+++++					
	+++++	+++++					LINR	-0.00019	0.43353		0.99907
4 Chloromethane	0.49138	0.53952	0.47376	0.41972	0.40455	0.39429					
	+++++	+++++					AVRG		0.45387		12.57498
5 Vinyl chloride	0.36613	0.40780	0.39047	0.37135	0.38060	0.33651					
	0.38892	+++++					AVRG		0.37740		5.99696

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Start Cal Date : 27-JUN-2005 11:18
End Cal Date : 27-JUN-2005 18:36
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Cal Date : 28-Jun-2005 13:55 pat01082

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
6 Bromomethane	0.45230	0.39501	0.39365	0.36709	0.41158	0.43293					
	0.48264	+++++					AVRG		0.41932		9.39986
7 Chloroethane	0.23932	0.23817	0.25922	0.25580	0.25480	0.23885					
	0.25570	+++++					AVRG		0.24884		3.82237
8 Trichlorofluoromethane	0.54048	0.57007	0.55533	0.54060	0.55320	0.52049					
	0.56027	+++++					AVRG		0.54864		2.96126
134 Ethyl Ether	0.24789	0.25687	0.28722	0.27382	0.27306	0.27523					
	0.28189	+++++					AVRG		0.27086		5.09969
9 Acrolein	0.07430	0.06253	0.05347	0.04916	0.05323	0.05288					
	0.06118	+++++					AVRG		0.05811		14.80089
12 Trichlorotrifluoroethane	0.13678	0.12126	0.11986	0.11210	0.11165	0.10349					
	0.10643	+++++					AVRG		0.11594		9.68418
10 Acetone	31296	41610	124435	216621	427778	1014262					
	2024259	+++++					LINR	-0.07014	0.09772		0.99976
11 1,1-Dichloroethylene	0.64564	0.64895	0.63074	0.59741	0.55807	0.61341					
	0.59002	+++++					AVRG		0.61204		5.35946
13 Iodomethane	0.55131	0.51276	0.48974	0.46841	0.43705	0.43904					
	+++++	+++++					AVRG		0.48305		9.19056

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Cal Date : 28-Jun-2005 13:55 pat01082

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
15 Acetonitrile	0.06606	0.05246	0.05193	0.04967	0.05101	0.05204					
	0.05099	+++++					AVRG		0.05345		10.54482
128 Methyl acetate	117103	125707	219958	531345	805147	2483124					
	5431918	+++++					LINR	0.11568	0.26232		0.99645
14 Carbon disulfide	1.34043	1.29082	1.25997	1.19597	1.14332	1.24916					
	1.22029	+++++					AVRG		1.24285		5.16963
16 Allyl chloride	0.17132	0.15527	0.15302	0.14947	0.15542	0.15420					
	0.16569	+++++					AVRG		0.15777		4.92416
17 Methylene chloride	+++++	112098	152575	226017	375566	832443					
	1619985	+++++					LINR	-0.09252	0.37495		0.99989
18 Acrylonitrile	0.09136	0.10318	0.10593	0.10280	0.10632	0.10389					
	0.10858	+++++					AVRG		0.10315		5.40919
20 tert-Butyl methyl ether	16424	29687	66498	118080	208805	465700					
	839290	+++++					LINR	-0.06045	0.20251		0.99542
21 trans-1,2-Dichloroethylene	0.42438	0.42232	0.37418	0.35228	0.33113	0.36562					
	0.36535	+++++					AVRG		0.37647		9.25668
23 Vinyl acetate	0.37888	0.33877	0.36117	0.36317	0.35721	0.39761					
	0.40275	+++++					AVRG		0.37137		6.18342

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Cal Date : 28-Jun-2005 13:55 pat01082

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
22 1,1-Dichloroethane	0.63270	0.63263	0.63061	0.59518	0.57342	0.62492					
	0.61140	+++++					AVRG		0.61441		3.69879
24 2-Chloro-1,3-butadiene	0.36216	0.37954	0.38456	0.36335	0.37469	0.35938					
	0.37257	+++++					AVRG		0.37089		2.56853
30 2-Butanone	0.11593	0.15026	0.14215	0.12985	0.13287	0.13030					
	0.12922	+++++					AVRG		0.13294		8.15112
26 Ethyl acetate	0.35210	0.31476	0.31908	0.31272	0.31600	0.30538					
	0.31581	+++++					AVRG		0.31941		4.70792
31 cis-1,2-Dichloroethylene	0.49687	0.42154	0.38883	0.36744	0.35027	0.38034					
	0.37761	+++++					AVRG		0.39756		12.30231
25 2,2-Dichloropropane	8298	15552	32239	57546	105203	294387					
	614754	+++++					LINR	0.01049	0.14866		0.99902
28 Propionitrile	0.04271	0.04625	0.04689	0.04519	0.04712	0.04650					
	0.04851	+++++					AVRG		0.04617		3.94743
27 Methacrylonitrile	0.29549	0.31709	0.28446	0.27804	0.27621	0.26906					
	0.27897	+++++					AVRG		0.28562		5.63449
29 Bromochloromethane	0.15764	0.17236	0.15609	0.14479	0.13871	0.14641					
	0.14470	+++++					AVRG		0.15153		7.49833

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
32 Chloroform	0.72274	0.67081	0.63161	0.59713	0.57711	0.62852					
	0.61858	+++++					AVRG		0.63522		7.62947
72 Tetrahydrofuran	49381	68054	128980	226687	431436	981642					
	1971032	+++++					LINR	-0.09836	0.33023		0.99838
36 1,1,1-Trichloroethane	0.48934	0.45597	0.44017	0.41600	0.40860	0.46138					
	0.46385	+++++					AVRG		0.44790		6.34230
19 Isobutyl alcohol	40699	52330	136944	253712	511535	1221362					
	2452224	+++++					LINR	0.03436	0.01214		0.99931
129 Cyclohexane	0.78323	0.66038	0.61483	0.54705	0.52783	0.57639					
	0.56525	+++++					AVRG		0.61071		14.40176
34 1,1-Dichloropropene	0.49721	0.47703	0.45960	0.42558	0.41006	0.45301					
	0.43946	+++++					AVRG		0.45171		6.60681
33 Carbon tetrachloride	0.29308	0.27780	0.28670	0.26851	0.27619	0.32754					
	0.34589	+++++					AVRG		0.29653		9.78903
37 1,2-Dichloroethane	0.44616	0.45996	0.45575	0.42214	0.41945	0.43653					
	0.41604	+++++					AVRG		0.43658		4.10809
38 Benzene	1.52405	1.38263	1.32912	1.22492	1.17861	1.29041					
	1.24156	1.53219					AVRG		1.33794		9.95403

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
131 n-Butyl alcohol	0.01150	0.01127	0.01094	0.00959	0.01025	0.02163					
	0.01067	0.01106					AVRG		0.01076		5.62340
39 Trichloroethylene	0.38050	0.35661	0.34722	0.30633	0.30400	0.32859					
	0.31988	+++++					AVRG		0.33473		8.39632
42 Methyl methacrylate	0.20600	0.20017	0.20104	0.19484	0.20221	0.19779					
	0.20117	+++++					AVRG		0.20046		1.74481
41 1,2-Dichloropropane	0.29308	0.32081	0.31757	0.29827	0.29746	0.31645					
	0.30759	+++++					AVRG		0.30732		3.64396
130 Methylcyclohexane	0.66395	0.62774	0.58401	0.50940	0.50681	0.55426					
	0.52501	+++++					AVRG		0.56731		10.73301
44 2-Chloroethylvinyl ether	0.02165	0.02079	0.01863	0.01982	0.01740	0.01587					
	+++++	+++++					AVRG		0.01903		11.36645
97 1,4-Dioxane	0.00366	0.00389	0.00390	0.00369	0.00395	0.00393					
	0.00403	+++++					AVRG		0.00386		3.54551
43 Dibromomethane	0.20193	0.18901	0.17998	0.16231	0.15474	0.15209					
	0.14028	+++++					AVRG		0.16862		13.18237
45 Bromodichloromethane	0.43774	0.41014	0.40996	0.38261	0.37532	0.41329					
	0.41128	+++++					AVRG		0.40576		5.13879

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Cal Date : 28-Jun-2005 13:55 pat01082

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
48 2-Nitropropane	0.07492	0.07910	0.08214	0.08473	0.08938	0.09085					
	0.09880	+++++					AVRG		0.08570		9.34740
46 cis-1,3-Dichloropropylene	0.34182	0.33970	0.32378	0.29815	0.28337	0.28039					
	0.24485	+++++					AVRG		0.30172		11.77757
49 4-Methyl-2-pentanone	0.17805	0.17949	0.16620	0.15374	0.15761	0.16562					
	0.15900	+++++					AVRG		0.16567		6.01803
50 Toluene	1.26942	1.20195	1.10835	1.04947	1.02006	1.10966					
	1.07624	+++++					AVRG		1.11931		7.83637
53 trans-1,3-Dichloropropylene	0.43724	0.41805	0.40569	0.38499	0.37138	0.37853					
	0.34909	+++++					AVRG		0.39214		7.65909
51 Ethyl methacrylate	0.57114	0.57006	0.58229	0.57043	0.58395	0.56105					
	0.58066	+++++					AVRG		0.57423		1.45010
54 1,1,2-Trichloroethane	0.41051	0.39859	0.35654	0.33785	0.33376	0.36136					
	0.35689	+++++					AVRG		0.36508		7.95916
55 2-Hexanone	0.38494	0.33026	0.31568	0.27811	0.28891	0.29136					
	0.27966	+++++					AVRG		0.30985		12.35193
52 1,3-Dichloropropane	0.63426	0.64907	0.63884	0.61510	0.59764	0.60758					
	0.57701	+++++					AVRG		0.61708		4.11618

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Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
56 Tetrachloroethylene	0.37850	0.35659	0.34469	0.32893	0.31365	0.34803					
	0.34274	+++++					AVRG		0.34474		5.93608
57 Dibromochloromethane	0.38494	0.38452	0.38106	0.37147	0.38095	0.42228					
	0.43178	+++++					AVRG		0.39386		5.90362
59 1,2-Dibromoethane	9109	18071	43957	72933	133481	301557					
	528001	+++++					LINR	-0.05424	0.21855		0.99470
62 Chlorobenzene	1.19653	1.20487	1.13477	1.07158	1.03728	1.12876					
	1.10429	+++++					AVRG		1.12544		5.45110
60 1,1,1,2-Tetrachloroethane	0.38947	0.37167	0.35724	0.35516	0.36196	0.40351					
	0.40448	+++++					AVRG		0.37765		5.65145
58 Ethylbenzene	2.22139	2.07506	1.94708	1.81904	1.76530	1.89452					
	1.79720	+++++					AVRG		1.93137		8.57519
63 m,p-Xylenes	0.79822	0.79353	0.74065	0.70062	0.67571	0.72510					
	0.69043	+++++					AVRG		0.73204		6.64044
64 o-Xylene	0.81586	0.75705	0.73409	0.67936	0.65926	0.71070					
	0.67652	+++++					AVRG		0.71898		7.63434
65 Styrene	1.32347	1.29914	1.23889	1.15544	1.14016	1.21988					
	1.16210	+++++					AVRG		1.21987		5.91421

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	0.5000 Level 8										
66 Bromoform	0.43628	0.42920	0.43546	0.40427	0.41978	0.47482						
	0.50671	+++++					AVRG		0.44379		7.91266	
67 Isopropylbenzene	4.20789	3.94094	3.75990	3.46967	3.36624	3.60626						
	3.46186	+++++					AVRG		3.68754		8.19908	
68 cis-1,4-Dichloro-2-butene	0.11009	0.11722	0.11398	0.12412	0.13186	0.13819						
	0.15036	+++++					AVRG		0.12654		11.41701	
70 Cyclohexanone	22859	28772	68245	130598	297798	+++++						
	+++++	+++++					LINR	0.10320	0.02289		0.99062	<-
73 1,1,2,2-Tetrachloroethane	1.23952	1.14154	1.04306	0.91631	0.94453	0.98040						
	0.99998	+++++					AVRG		1.03791		11.10208	
69 trans-1,4-Dichloro-2-butene	5071	10124	26604	58407	120550	333774						
	719712	+++++					LINR	0.21913	0.12344		0.99594	
74 1,2,3-Trichloropropane	0.29931	0.30743	0.29515	0.26845	0.26919	0.27783						
	0.28065	+++++					AVRG		0.28544		5.36186	
75 Bromobenzene	1.04849	1.04795	1.02348	0.92693	0.88156	0.94420						
	0.94100	+++++					AVRG		0.97338		6.78985	
76 n-Propylbenzene	5.58636	5.13482	4.89259	4.50550	4.25683	4.58835						
	4.33861	+++++					AVRG		4.75759		10.02897	

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
77 2-Chlorotoluene	3.49859	3.54276	3.28969	3.03205	2.86257	3.10537					
	2.97613	+++++					AVRG		3.18675		8.24907
78 1,3,5-Trimethylbenzene	3.63481	3.48287	3.37433	3.08176	2.95030	3.28584					
	3.13424	+++++					AVRG		3.27775		7.31831
80 4-Chlorotoluene	3.51285	3.31290	3.07335	2.74756	2.62641	2.83869					
	2.74656	+++++					AVRG		2.97976		11.10504
81 tert-Butylbenzene	3.66250	3.55351	3.33298	3.05695	2.93436	3.26372					
	3.10318	+++++					AVRG		3.27246		8.12590
79 1,2,4-Trimethylbenzene	3.65860	3.67142	3.37655	3.07711	2.98963	3.29013					
	3.15755	+++++					AVRG		3.31730		8.13320
82 Pentachloroethane	0.46038	0.47080	0.48552	0.51219	0.54242	0.55299					
	0.55182	+++++					AVRG		0.51087		7.68367
83 sec-Butylbenzene	4.63761	4.49924	4.33512	3.99332	3.86386	4.22292					
	4.01337	+++++					AVRG		4.22364		6.74178
84 4-Isopropyltoluene	3.72112	3.68212	3.52693	3.14820	3.12559	3.43476					
	3.30756	+++++					AVRG		3.42091		7.00209
85 1,3-Dichlorobenzene	2.05594	2.01752	1.91451	1.68941	1.62433	1.75541					
	1.73001	+++++					AVRG		1.82674		9.23968

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	100 Level 7	0.5000 Level 8									
87 1,4-Dichlorobenzene	2.40060	2.08500	1.95554	1.68922	1.64195	1.76045					
	1.74409	+++++					AVRG		1.89670		14.32111
88 Benzyl chloride	45844	91823	249602	543243	1160380	3348358					
	7002024	+++++					LINR	0.22144	1.20615		0.99718
89 n-Butylbenzene	3.87616	3.64823	3.43819	2.95613	2.95901	3.32277					
	3.19558	+++++					AVRG		3.34230		10.26173
90 1,2-Dichlorobenzene	1.97212	1.91660	1.84766	1.60043	1.56161	1.67379					
	1.64480	+++++					AVRG		1.74530		9.39267
91 bis(2-Chloroisopropyl)ether	0.51091	0.51807	0.51214	0.49194	0.51924	0.49298					
	0.52527	+++++					AVRG		0.51008		2.53707
92 1,2-Dibromo-3-chloropropane	2838	5684	11703	19164	39678	101633					
	197843	+++++					LINR	-0.00241	0.17429		0.99971
93 1,2,4-Trichlorobenzene	18632	35212	82373	120347	249791	655036					
	1321525	+++++					LINR	0.00577	1.16092		0.99936
94 Hexachlorobutadiene	0.67133	0.74352	0.71942	0.58975	0.60597	0.66049					
	0.66697	+++++					AVRG		0.66536		8.30894
95 Naphthalene	4.10516	3.75487	3.50123	2.79386	2.99046	3.12594					
	3.16757	+++++					AVRG		3.34845		13.78940

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Method file : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Cal Date : 28-Jun-2005 13:55 pat01082

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
96 1,2,3-Trichlorobenzene	1.44439	1.44288	1.38118	1.08418	1.16432	1.23885					
	1.24793	+++++					AVRG		1.28625		10.90159
$ 35 Dibromofluoromethane	+++++	+++++	0.35069	0.31087	0.29321	0.31694					
	0.31534	+++++					AVRG		0.31741		6.57207
$ 47 Toluene-d8	+++++	+++++	1.79413	1.58977	1.50466	1.60185					
	1.55657	+++++					AVRG		1.60939		6.82978
$ 71 Bromofluorobenzene	+++++	+++++	1.52891	1.26976	1.16475	1.20945					
	1.17965	+++++					AVRG		1.27050		11.80259

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 27-JUN-2005 11:18
End Cal Date : 27-JUN-2005 18:36
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Cal Date : 28-Jun-2005 13:55 pat01082

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q103.d
Lab Smp Id: UVM050216-01E Client Smp ID: VSTD0005
Inj Date : 27-JUN-2005 11:18
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050216-01E|ICAL|1|VOAF|1||
Misc Info : VSTD0005 5uL N/A UVM050216-01E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:27 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 11:18 Cal File: 3q103.d
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BENZENE+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

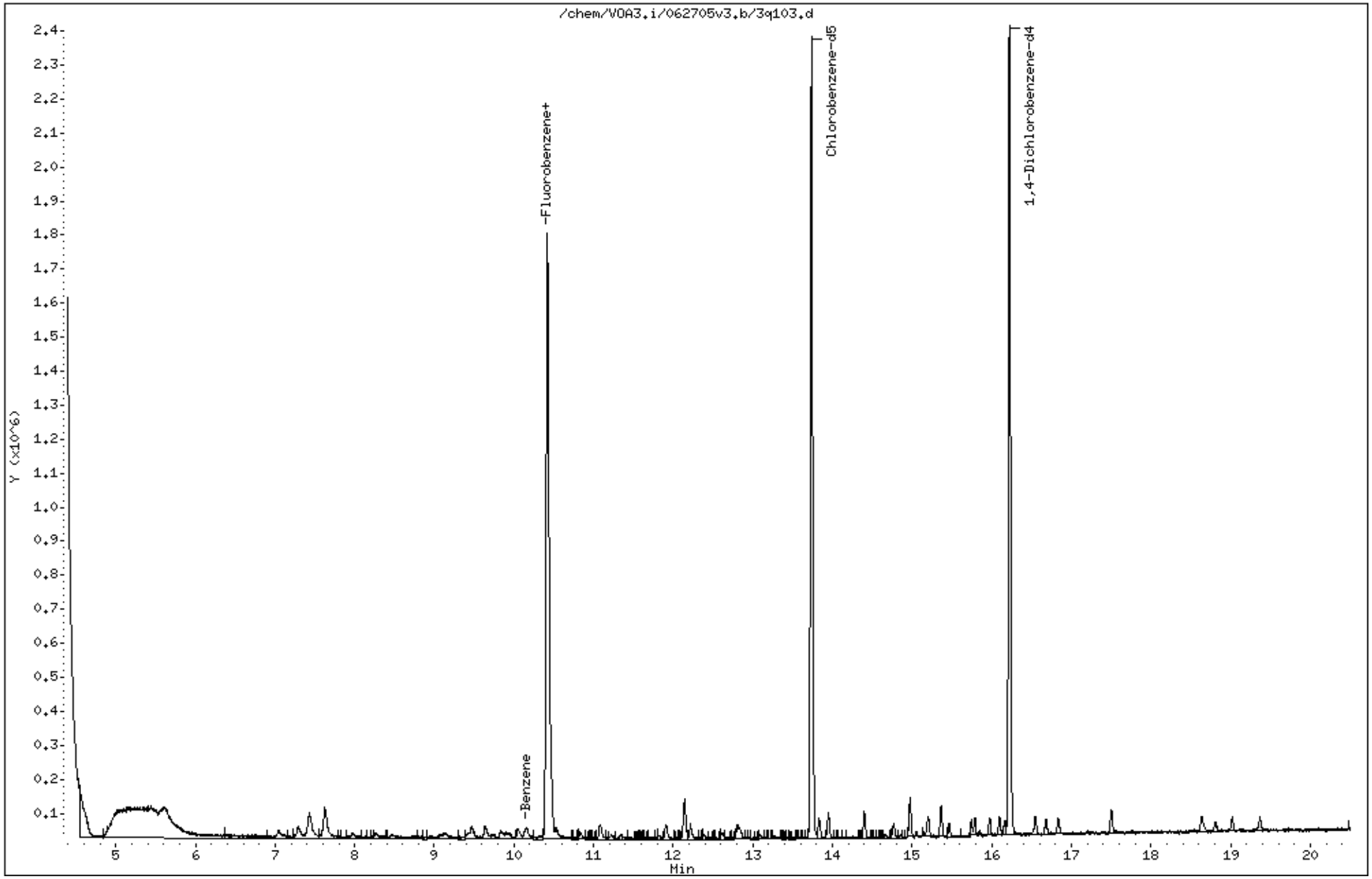
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 40 Fluorobenzene	96	10.419	10.419	(1.000)	2345864	50.0000	
* 61 Chlorobenzene-d5	117	13.736	13.736	(1.000)	1471454	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	689282	50.0000	
38 Benzene	78	10.157	10.157	(0.975)	35943	0.50000	0.57(a)
131 n-Butyl alcohol	56	10.527	10.527	(1.010)	25952	50.0000	51.4

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA3.i/062705v3.b/3q103.d
Date : 27-JUN-2005 11:18
Client ID: VSTD0005
Instrument: VOA3.i
Sample Info: |UVM050216-01E|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: PAM
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q105.d
Lab Smp Id: W3VM050627-01 Client Smp ID: VSTD001
Inj Date : 27-JUN-2005 12:13
Operator : PAM Inst ID: VOA3.i
Smp Info : |W3VM050627-01|ICAL|1|VOAF|1||
Misc Info : VSTD001 1uL+5uL UVM050216-04E+UVM050525-02E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 18:59 ps Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

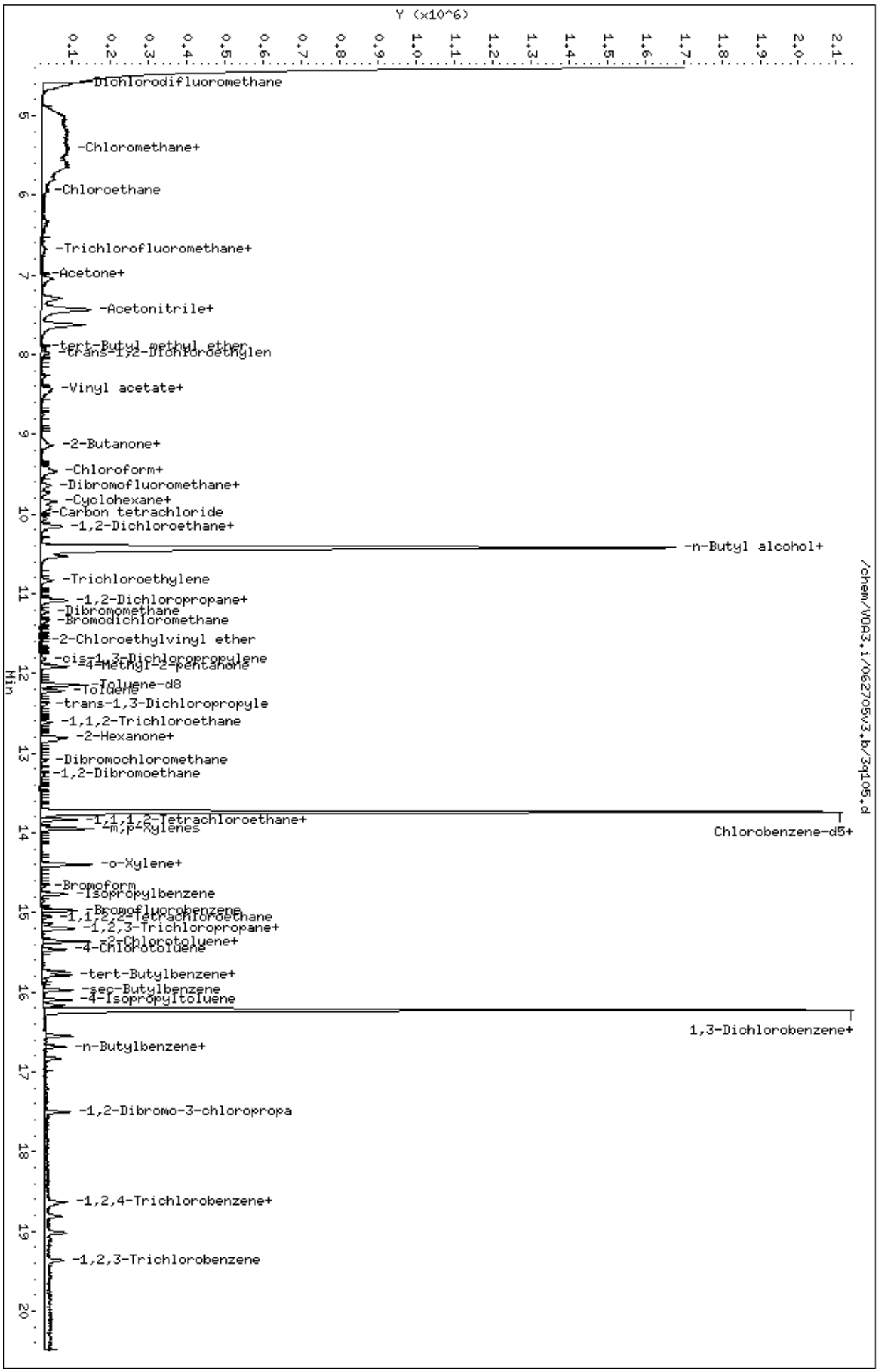
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				64440	3.00000	3.5
M 2 1,2-Dichloroethylene (total)	96				39791	2.00000	2.6
3 Dichlorodifluoromethane	85	4.660	4.660	(0.447)	14186	1.00000	1.0
4 Chloromethane	50	5.014	5.014	(0.481)	21224	1.00000	1.1
5 Vinyl chloride	62	5.220	5.220	(0.501)	15814	1.00000	1.2
6 Bromomethane	94	5.803	5.803	(0.557)	19536	1.00000	1.3
7 Chloroethane	64	5.942	5.942	(0.570)	10337	1.00000	1.1
8 Trichlorofluoromethane	101	6.328	6.328	(0.607)	23345	1.00000	1.2
134 Ethyl Ether	59	6.673	6.673	(0.640)	10707	1.00000	0.96
15 Acetonitrile	41	7.417	7.417	(0.712)	71332	25.0000	30.6
11 1,1-Dichloroethylene	61	7.037	7.037	(0.675)	27887	1.00000	1.2
128 Methyl acetate	43	7.436	7.436	(0.714)	117103	5.00000	2.2(a)
13 Iodomethane	142	7.300	7.300	(0.700)	119064	5.00000	5.6
14 Carbon disulfide	76	7.433	7.433	(0.713)	289484	5.00000	6.2
20 tert-Butyl methyl ether	73	7.926	7.926	(0.761)	16424	1.00000	17.2(Q)

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
21	trans-1,2-Dichloroethylene	96	7.977	7.977	(0.766)	18330	1.00000	1.3
23	Vinyl acetate	43	8.426	8.426	(0.809)	81825	5.00000	4.5(a)
22	1,1-Dichloroethane	63	8.477	8.477	(0.814)	27328	1.00000	1.1
30	2-Butanone	43	9.088	9.088	(0.872)	25037	5.00000	4.3(a)
31	cis-1,2-Dichloroethylene	96	9.139	9.139	(0.877)	21461	1.00000	1.3(Q)
25	2,2-Dichloropropane	77	9.148	9.148	(0.878)	8298	1.00000	10.0
32	Chloroform	83	9.455	9.455	(0.907)	31217	1.00000	1.2
29	Bromochloromethane	128	9.423	9.423	(0.904)	6809	1.00000	1.1
$ 35	Dibromofluoromethane	113	9.642	9.642	(0.925)	25075	1.00000	2.2
36	1,1,1-Trichloroethane	97	9.730	9.730	(0.934)	21136	1.00000	1.2
129	Cyclohexane	56	9.835	9.835	(0.944)	33830	1.00000	1.4(Q)
34	1,1-Dichloropropene	75	9.908	9.908	(0.951)	21476	1.00000	1.2
131	n-Butyl alcohol	56	10.531	10.531	(1.011)	49661	100.000	87.0
33	Carbon tetrachloride	117	9.946	9.946	(0.954)	12659	1.00000	0.99(a)
37	1,2-Dichloroethane	62	10.142	10.142	(0.973)	19271	1.00000	1.1
38	Benzene	78	10.154	10.154	(0.974)	65828	1.00000	1.2
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2159639	50.0000	
39	Trichloroethylene	95	10.825	10.825	(1.039)	16435	1.00000	1.2
41	1,2-Dichloropropane	63	11.088	11.088	(1.064)	12659	1.00000	1.0
130	Methylcyclohexane	83	11.082	11.082	(1.063)	28678	1.00000	1.2(Q)
45	Bromodichloromethane	83	11.345	11.345	(1.089)	18907	1.00000	1.1
43	Dibromomethane	93	11.231	11.231	(1.078)	8722	1.00000	1.2
44	2-Chloroethylvinyl ether	63	11.582	11.582	(1.111)	4676	5.00000	5.8
49	4-Methyl-2-pentanone	58	11.914	11.914	(0.867)	23781	5.00000	5.2(Q)
46	cis-1,3-Dichloropropylene	75	11.813	11.813	(1.134)	14764	1.00000	1.00
$ 47	Toluene-d8	98	12.142	12.142	(0.884)	84485	1.00000	2.4
50	Toluene	92	12.215	12.215	(0.889)	33910	1.00000	1.2
53	trans-1,3-Dichloropropylene	75	12.386	12.386	(0.902)	11680	1.00000	0.98(a)
54	1,1,2-Trichloroethane	83	12.614	12.614	(0.918)	10966	1.00000	1.2
55	2-Hexanone	43	12.804	12.804	(0.932)	51414	5.00000	5.8
52	1,3-Dichloropropane	76	12.816	12.816	(0.933)	16943	1.00000	1.1
56	Tetrachloroethylene	164	12.835	12.835	(0.935)	10111	1.00000	1.2
57	Dibromochloromethane	129	13.092	13.092	(0.953)	10283	1.00000	1.0
59	1,2-Dibromoethane	107	13.266	13.266	(0.966)	9109	1.00000	4.6
* 61	Chlorobenzene-d5	117	13.734	13.734	(1.000)	1335652	50.0000	
62	Chlorobenzene	112	13.769	13.769	(1.003)	31963	1.00000	1.1
60	1,1,1,2-Tetrachloroethane	131	13.823	13.823	(1.006)	10404	1.00000	1.1
58	Ethylbenzene	91	13.835	13.835	(1.007)	59340	1.00000	1.2
63	m,p-Xylenes	106	13.949	13.949	(1.016)	42646	2.00000	2.3
64	o-Xylene	106	14.399	14.399	(1.048)	21794	1.00000	1.2
65	Styrene	104	14.399	14.399	(1.048)	35354	1.00000	1.1
66	Bromoform	173	14.665	14.665	(0.904)	5262	1.00000	0.97(a)
67	Isopropylbenzene	105	14.766	14.766	(0.910)	50752	1.00000	1.2
73	1,1,2,2-Tetrachloroethane	83	15.051	15.051	(0.928)	14950	1.00000	1.2
$ 71	Bromofluorobenzene	95	14.975	14.975	(0.923)	37033	1.00000	2.9
74	1,2,3-Trichloropropane	110	15.149	15.149	(0.934)	3610	1.00000	1.1(Q)
75	Bromobenzene	156	15.190	15.190	(0.936)	12646	1.00000	1.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
76	n-Propylbenzene	91	15.206	15.206	(0.937)	67378	1.00000	1.2
77	2-Chlorotoluene	91	15.358	15.358	(0.947)	42197	1.00000	1.2
78	1,3,5-Trimethylbenzene	105	15.367	15.367	(0.947)	43840	1.00000	1.2
80	4-Chlorotoluene	91	15.462	15.462	(0.953)	42369	1.00000	1.2
81	tert-Butylbenzene	119	15.744	15.744	(0.971)	44174	1.00000	1.2
79	1,2,4-Trimethylbenzene	105	15.788	15.788	(0.973)	44127	1.00000	1.2
83	sec-Butylbenzene	105	15.972	15.972	(0.985)	55935	1.00000	1.2
84	4-Isopropyltoluene	119	16.095	16.095	(0.992)	44881	1.00000	1.2
85	1,3-Dichlorobenzene	146	16.165	16.165	(0.996)	24797	1.00000	1.2
* 86	1,4-Dichlorobenzene-d4	152	16.222	16.222	(1.000)	603058	50.0000	
87	1,4-Dichlorobenzene	146	16.250	16.250	(1.002)	28954	1.00000	1.3
89	n-Butylbenzene	91	16.548	16.548	(1.020)	46751	1.00000	1.2
90	1,2-Dichlorobenzene	146	16.681	16.681	(1.028)	23786	1.00000	1.2
93	1,2,4-Trichlorobenzene	180	18.634	18.634	(1.149)	18632	1.00000	3.7
94	Hexachlorobutadiene	225	18.814	18.814	(1.160)	8097	1.00000	1.2
95	Naphthalene	128	19.017	19.017	(1.172)	49513	1.00000	1.5
96	1,2,3-Trichlorobenzene	180	19.368	19.368	(1.194)	17421	1.00000	1.4

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.



Data File: /chem/VOA3.i/062705v3.b/3q105.d
Date : 27-JUN-2005 12:13
Client ID: VSTD001
Sample Info: IW3VM050627-01|ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q106.d
Lab Smp Id: W3VM050627-02 Client Smp ID: VSTD002
Inj Date : 27-JUN-2005 12:41
Operator : PAM Inst ID: VOA3.i
Smp Info : |W3VM050627-02|ICAL|1|VOAF|1||
Misc Info : VSTD002 2uL+5uL UVM050216-04E+UVM050525-03E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 11:53 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 16:19 Cal File: 3q114.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1	Xylenes (total)	106				122613	6.00000	6.4
M 2	1,2-Dichloroethylene (total)	96				71026	4.00000	4.4
3	Dichlorodifluoromethane	85	4.648	4.660	(0.446)	43623	2.00000	2.4
4	Chloromethane	50	5.012	5.014	(0.481)	45410	2.00000	2.4
5	Vinyl chloride	62	5.221	5.220	(0.501)	34324	2.00000	2.2
6	Bromomethane	94	5.800	5.803	(0.557)	33247	2.00000	1.9
7	Chloroethane	64	5.943	5.942	(0.570)	20046	2.00000	1.9
8	Trichlorofluoromethane	101	6.323	6.328	(0.607)	47982	2.00000	2.1
134	Ethyl Ether	59	6.661	6.673	(0.639)	21620	2.00000	1.9
10	Acetone	43	7.047	7.050	(0.676)	41610	10.0000	6.0(H)
15	Acetonitrile	41	7.405	7.417	(0.711)	110381	50.0000	49.1
11	1,1-Dichloroethylene	61	7.051	7.037	(0.677)	54621	2.00000	2.1
128	Methyl acetate	43	7.437	7.436	(0.714)	125707	10.0000	17.2
13	Iodomethane	142	7.291	7.300	(0.700)	215790	10.0000	10.6
17	Methylene chloride	84	7.627	7.626	(0.732)	112098	2.00000	2.5(a)
14	Carbon disulfide	76	7.430	7.433	(0.713)	543231	10.0000	10.4

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	20 tert-Butyl methyl ether	73	7.927	7.926	(0.761)	29687	2.00000	0.46(a)
	21 trans-1,2-Dichloroethylene	96	7.975	7.977	(0.765)	35546	2.00000	2.2
	23 Vinyl acetate	43	8.424	8.426	(0.809)	142570	10.0000	9.1
	22 1,1-Dichloroethane	63	8.475	8.477	(0.813)	53247	2.00000	2.0
	30 2-Butanone	43	9.079	9.088	(0.871)	63237	10.0000	11.3
	31 cis-1,2-Dichloroethylene	96	9.130	9.139	(0.876)	35480	2.00000	2.1
	25 2,2-Dichloropropane	77	9.155	9.148	(0.879)	15552	2.00000	2.3
	32 Chloroform	83	9.450	9.455	(0.907)	56461	2.00000	2.1
	29 Bromochloromethane	128	9.412	9.423	(0.903)	14507	2.00000	2.3
$	35 Dibromofluoromethane	113	9.643	9.642	(0.926)	36894	2.00000	2.8
	36 1,1,1-Trichloroethane	97	9.741	9.730	(0.935)	38378	2.00000	2.0
	129 Cyclohexane	56	9.842	9.835	(0.945)	55583	2.00000	2.2
	34 1,1-Dichloropropene	75	9.909	9.908	(0.951)	40151	2.00000	2.1
	131 n-Butyl alcohol	56	10.526	10.531	(1.010)	94871	200.000	186
	33 Carbon tetrachloride	117	9.943	9.946	(0.954)	23382	2.00000	1.9
	37 1,2-Dichloroethane	62	10.133	10.142	(0.973)	38714	2.00000	2.1
	38 Benzene	78	10.159	10.154	(0.975)	116373	2.00000	2.1
*	40 Fluorobenzene	96	10.418	10.420	(1.000)	2104203	50.0000	
	39 Trichloroethylene	95	10.830	10.825	(1.039)	30015	2.00000	2.1
	41 1,2-Dichloropropane	63	11.083	11.088	(1.064)	27002	2.00000	2.1
	130 Methylcyclohexane	83	11.083	11.082	(1.064)	52836	2.00000	2.2
	45 Bromodichloromethane	83	11.346	11.345	(1.089)	34521	2.00000	2.0
	43 Dibromomethane	93	11.228	11.231	(1.078)	15909	2.00000	2.2
	44 2-Chloroethylvinyl ether	63	11.573	11.582	(1.111)	8748	10.0000	10.9
	49 4-Methyl-2-pentanone	58	11.912	11.914	(0.867)	46943	10.0000	10.8
	46 cis-1,3-Dichloropropylene	75	11.814	11.813	(1.134)	28592	2.00000	2.2
$	47 Toluene-d8	98	12.140	12.142	(0.884)	120034	2.00000	2.8
	50 Toluene	92	12.216	12.215	(0.889)	62870	2.00000	2.1
	53 trans-1,3-Dichloropropylene	75	12.384	12.386	(0.902)	21867	2.00000	2.1
	54 1,1,2-Trichloroethane	83	12.615	12.614	(0.918)	20849	2.00000	2.2
	55 2-Hexanone	43	12.801	12.804	(0.932)	86374	10.0000	10.6
	52 1,3-Dichloropropane	76	12.811	12.816	(0.933)	33951	2.00000	2.1
	56 Tetrachloroethylene	164	12.843	12.835	(0.935)	18652	2.00000	2.1
	57 Dibromochloromethane	129	13.093	13.092	(0.953)	20113	2.00000	2.0
	59 1,2-Dibromoethane	107	13.270	13.266	(0.966)	18071	2.00000	0.45(a)
*	61 Chlorobenzene-d5	117	13.735	13.734	(1.000)	1307672	50.0000	
	62 Chlorobenzene	112	13.767	13.769	(1.002)	63023	2.00000	2.1
	60 1,1,1,2-Tetrachloroethane	131	13.821	13.823	(1.006)	19441	2.00000	2.0
	58 Ethylbenzene	91	13.833	13.835	(1.007)	108540	2.00000	2.1
	63 m,p-Xylenes	106	13.947	13.949	(1.015)	83014	4.00000	4.3
	64 o-Xylene	106	14.393	14.399	(1.048)	39599	2.00000	2.1
	65 Styrene	104	14.400	14.399	(1.048)	67954	2.00000	2.1
	66 Bromoform	173	14.666	14.665	(0.904)	10585	2.00000	1.9
	67 Isopropylbenzene	105	14.767	14.766	(0.910)	97193	2.00000	2.1
	73 1,1,2,2-Tetrachloroethane	83	15.055	15.051	(0.928)	28153	2.00000	2.2
$	71 Bromofluorobenzene	95	14.970	14.975	(0.923)	52421	2.00000	3.3
	74 1,2,3-Trichloropropane	110	15.144	15.149	(0.934)	7582	2.00000	2.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	15.185	15.190	(0.936)	25845	2.00000	2.2
76	n-Propylbenzene	91	15.207	15.206	(0.938)	126637	2.00000	2.2
77	2-Chlorotoluene	91	15.362	15.358	(0.947)	87373	2.00000	2.2
78	1,3,5-Trimethylbenzene	105	15.362	15.367	(0.947)	85896	2.00000	2.1
80	4-Chlorotoluene	91	15.463	15.462	(0.953)	81704	2.00000	2.2
81	tert-Butylbenzene	119	15.742	15.744	(0.971)	87638	2.00000	2.2
79	1,2,4-Trimethylbenzene	105	15.786	15.788	(0.973)	90546	2.00000	2.2
83	sec-Butylbenzene	105	15.973	15.972	(0.985)	110962	2.00000	2.1
84	4-Isopropyltoluene	119	16.096	16.095	(0.992)	90810	2.00000	2.2
85	1,3-Dichlorobenzene	146	16.163	16.165	(0.996)	49757	2.00000	2.2
* 86	1,4-Dichlorobenzene-d4	152	16.220	16.222	(1.000)	616560	50.0000	
87	1,4-Dichlorobenzene	146	16.248	16.250	(1.002)	51421	2.00000	2.2
89	n-Butylbenzene	91	16.543	16.548	(1.020)	89974	2.00000	2.2
90	1,2-Dichlorobenzene	146	16.682	16.681	(1.028)	47268	2.00000	2.2
92	1,2-Dibromo-3-chloropropane	75	17.562	17.558	(1.083)	5684	2.00000	2.3
93	1,2,4-Trichlorobenzene	180	18.635	18.634	(1.149)	35212	2.00000	2.2
94	Hexachlorobutadiene	225	18.809	18.814	(1.160)	18337	2.00000	2.2
95	Naphthalene	128	19.018	19.017	(1.173)	92604	2.00000	2.2
96	1,2,3-Trichlorobenzene	180	19.363	19.368	(1.194)	35585	2.00000	2.2

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /chem/VOA3.i/062705v3.b/3q106.d

Date : 27-JUN-2005 12:41

Client ID: VSTD002

Instrument: VOA3.i

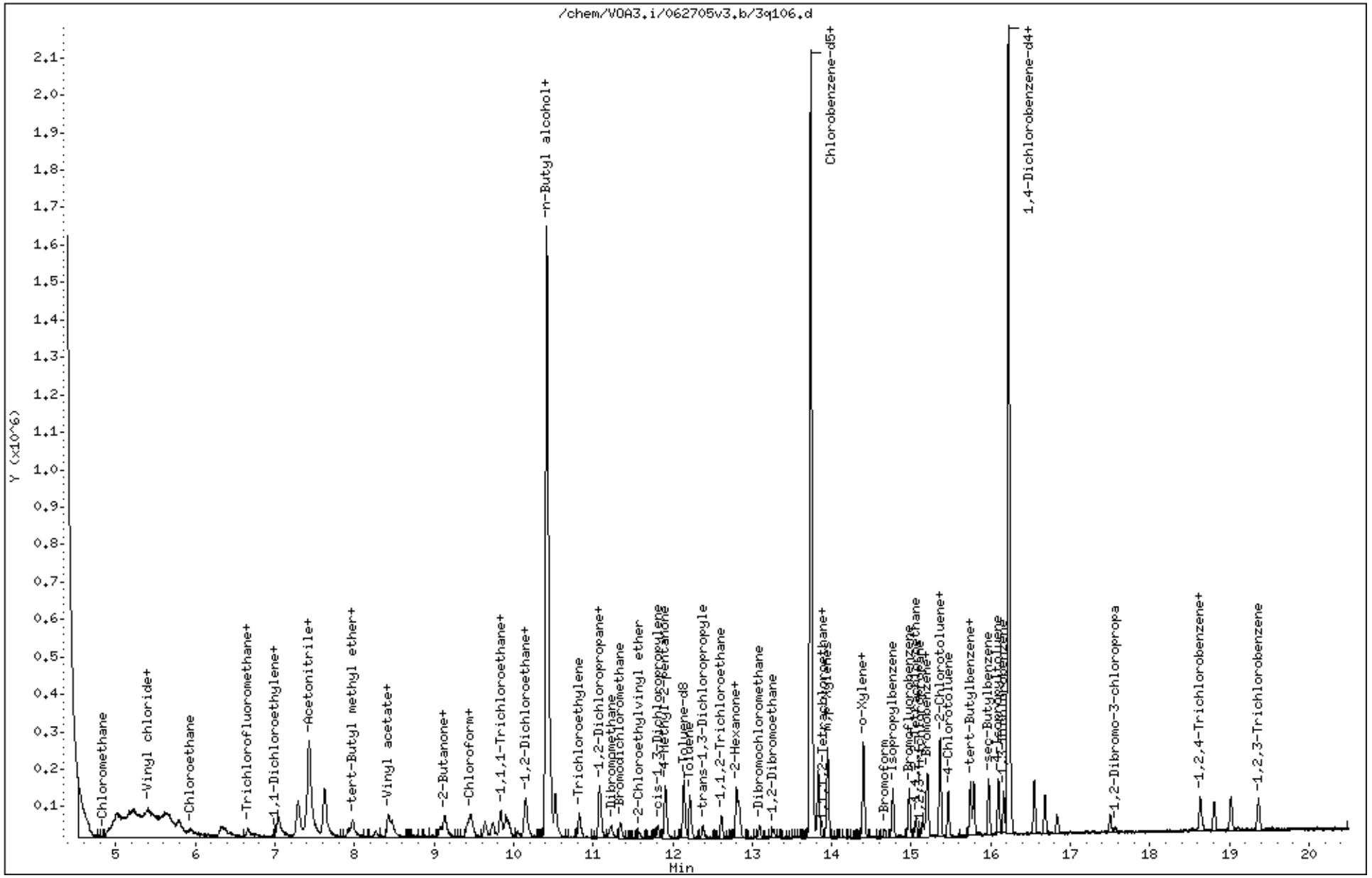
Sample Info: |W3VM050627-02|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: PAM

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q107.d
Lab Smp Id: W3VM050627-03 Client Smp ID: VSTD005
Inj Date : 27-JUN-2005 13:08
Operator : PAM Inst ID: VOA3.i
Smp Info : |W3VM050627-03|ICAL|1|VOAF|1||
Misc Info : VSTD005 5uL+5uL UVM050216-04E+UVM050525-04E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 11:53 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 16:47 Cal File: 3q115.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

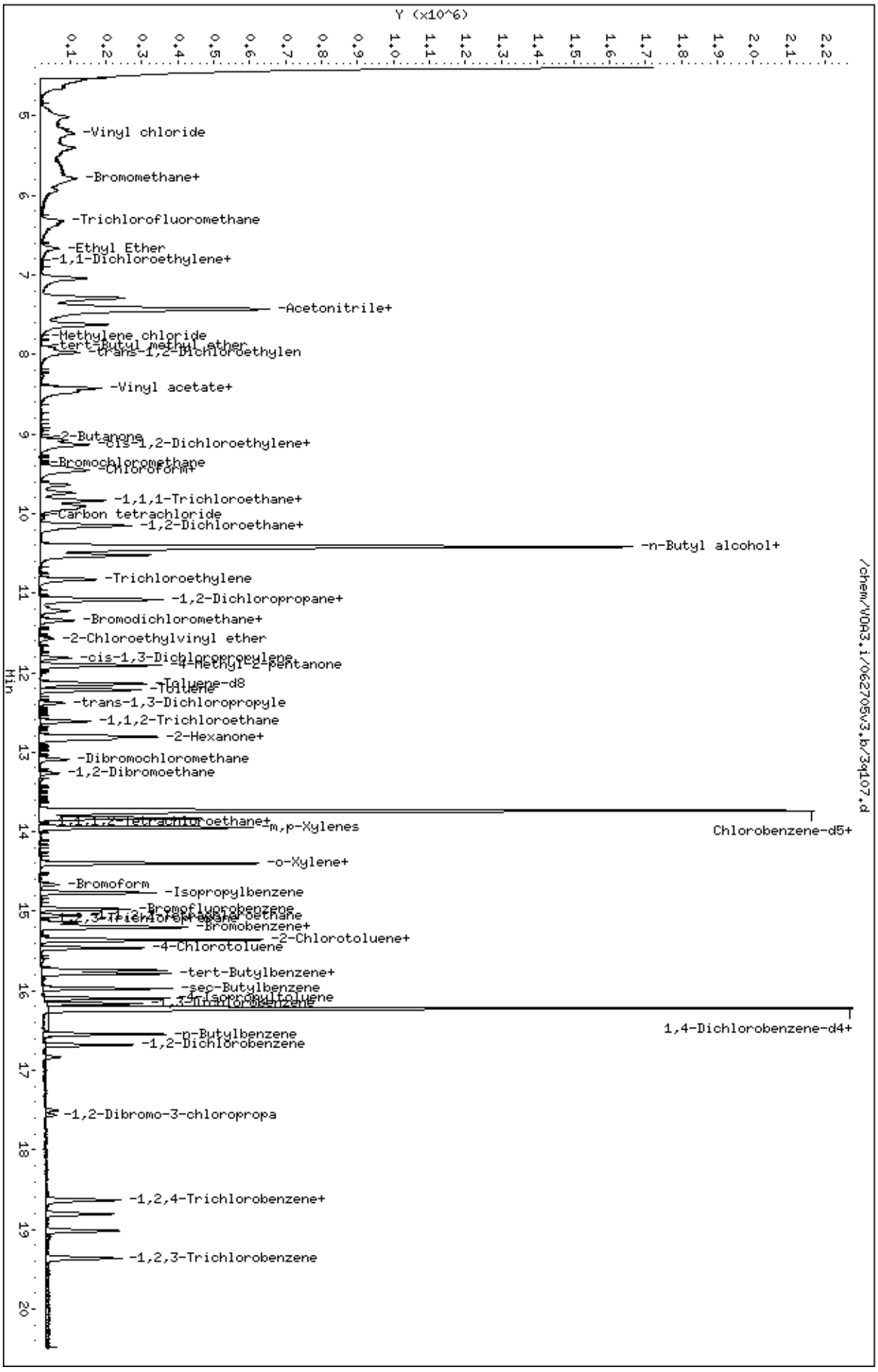
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				299130	15.0000	15.2
M 2 1,2-Dichloroethylene (total)	96				164379	10.0000	9.8
3 Dichlorodifluoromethane	85	4.657	4.660	(0.447)	91248	5.00000	5.0
4 Chloromethane	50	5.011	5.014	(0.481)	102065	5.00000	5.2
5 Vinyl chloride	62	5.217	5.220	(0.501)	84120	5.00000	5.2
6 Bromomethane	94	5.790	5.803	(0.556)	84805	5.00000	4.7
7 Chloroethane	64	5.942	5.942	(0.570)	55844	5.00000	5.2
8 Trichlorofluoromethane	101	6.318	6.328	(0.606)	119638	5.00000	5.1
134 Ethyl Ether	59	6.663	6.673	(0.639)	61877	5.00000	5.3
10 Acetone	43	7.046	7.050	(0.676)	124435	25.0000	14.8(H)
15 Acetonitrile	41	7.398	7.417	(0.710)	279697	125.000	121
11 1,1-Dichloroethylene	61	7.043	7.037	(0.676)	135883	5.00000	5.2
128 Methyl acetate	43	7.439	7.436	(0.714)	219958	25.0000	25.2
13 Iodomethane	142	7.290	7.300	(0.700)	527529	25.0000	25.3
17 Methylene chloride	84	7.625	7.626	(0.732)	152575	5.00000	4.8(a)
14 Carbon disulfide	76	7.432	7.433	(0.713)	1357206	25.0000	25.3

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	20	tert-Butyl methyl ether	73	7.926	7.926	(0.761)	66498	5.00000	4.6
	21	trans-1,2-Dichloroethylene	96	7.977	7.977	(0.766)	80611	5.00000	5.0
	23	Vinyl acetate	43	8.426	8.426	(0.809)	389040	25.0000	24.3
	22	1,1-Dichloroethane	63	8.470	8.477	(0.813)	135854	5.00000	5.1
	30	2-Butanone	43	9.078	9.088	(0.871)	153123	25.0000	26.7
	31	cis-1,2-Dichloroethylene	96	9.135	9.139	(0.877)	83768	5.00000	4.9
	25	2,2-Dichloropropane	77	9.154	9.148	(0.878)	32239	5.00000	4.7
	32	Chloroform	83	9.455	9.455	(0.907)	136070	5.00000	5.0
	29	Bromochloromethane	128	9.414	9.423	(0.903)	33627	5.00000	5.2
$	35	Dibromofluoromethane	113	9.642	9.642	(0.925)	75551	5.00000	5.5
	36	1,1,1-Trichloroethane	97	9.743	9.730	(0.935)	94827	5.00000	4.9
	129	Cyclohexane	56	9.838	9.835	(0.944)	132455	5.00000	5.0
	34	1,1-Dichloropropene	75	9.907	9.908	(0.951)	99014	5.00000	5.1
	131	n-Butyl alcohol	56	10.528	10.531	(1.010)	235790	500.000	452
	33	Carbon tetrachloride	117	9.942	9.946	(0.954)	61765	5.00000	4.8
	37	1,2-Dichloroethane	62	10.135	10.142	(0.973)	98185	5.00000	5.2
	38	Benzene	78	10.157	10.154	(0.975)	286337	5.00000	5.0
*	40	Fluorobenzene	96	10.420	10.420	(1.000)	2154342	50.0000	
	39	Trichloroethylene	95	10.828	10.825	(1.039)	74802	5.00000	5.2
	41	1,2-Dichloropropane	63	11.082	11.088	(1.063)	68416	5.00000	5.2
	130	Methylcyclohexane	83	11.085	11.082	(1.064)	125815	5.00000	5.1
	45	Bromodichloromethane	83	11.344	11.345	(1.089)	88320	5.00000	5.0
	43	Dibromomethane	93	11.230	11.231	(1.078)	38774	5.00000	5.3
	44	2-Chloroethylvinyl ether	63	11.575	11.582	(1.111)	20067	25.0000	24.5
	49	4-Methyl-2-pentanone	58	11.908	11.914	(0.867)	112202	25.0000	25.1
	46	cis-1,3-Dichloropropylene	75	11.819	11.813	(1.134)	69753	5.00000	5.4
$	47	Toluene-d8	98	12.142	12.142	(0.884)	242249	5.00000	5.6
	50	Toluene	92	12.218	12.215	(0.889)	149653	5.00000	5.0
	53	trans-1,3-Dichloropropylene	75	12.382	12.386	(0.901)	54777	5.00000	5.2
	54	1,1,2-Trichloroethane	83	12.614	12.614	(0.918)	48141	5.00000	4.9
	55	2-Hexanone	43	12.800	12.804	(0.932)	213121	25.0000	25.5
	52	1,3-Dichloropropane	76	12.813	12.816	(0.933)	86259	5.00000	5.2
	56	Tetrachloroethylene	164	12.838	12.835	(0.935)	46541	5.00000	5.0
	57	Dibromochloromethane	129	13.091	13.092	(0.953)	51452	5.00000	4.8
	59	1,2-Dibromoethane	107	13.266	13.266	(0.966)	43957	5.00000	4.7
*	61	Chlorobenzene-d5	117	13.737	13.734	(1.000)	1350234	50.0000	
	62	Chlorobenzene	112	13.766	13.769	(1.002)	153221	5.00000	5.0
	60	1,1,1,2-Tetrachloroethane	131	13.826	13.823	(1.006)	48236	5.00000	4.7
	58	Ethylbenzene	91	13.835	13.835	(1.007)	262901	5.00000	5.0
	63	m,p-Xylenes	106	13.946	13.949	(1.015)	200010	10.0000	10.1
	64	o-Xylene	106	14.399	14.399	(1.048)	99120	5.00000	5.1
	65	Styrene	104	14.402	14.399	(1.048)	167279	5.00000	5.1
	66	Bromoform	173	14.665	14.665	(0.904)	27351	5.00000	4.9
	67	Isopropylbenzene	105	14.766	14.766	(0.910)	236157	5.00000	5.1
	73	1,1,2,2-Tetrachloroethane	83	15.057	15.051	(0.928)	65514	5.00000	5.0
$	71	Bromofluorobenzene	95	14.972	14.975	(0.923)	96030	5.00000	6.0
	74	1,2,3-Trichloropropane	110	15.142	15.149	(0.934)	18538	5.00000	5.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	15.187	15.190	(0.936)	64284	5.00000	5.2
76	n-Propylbenzene	91	15.206	15.206	(0.938)	307300	5.00000	5.1
77	2-Chlorotoluene	91	15.361	15.358	(0.947)	206623	5.00000	5.2
78	1,3,5-Trimethylbenzene	105	15.364	15.367	(0.947)	211939	5.00000	5.1
80	4-Chlorotoluene	91	15.462	15.462	(0.953)	193035	5.00000	5.2
81	tert-Butylbenzene	119	15.741	15.744	(0.971)	209342	5.00000	5.1
79	1,2,4-Trimethylbenzene	105	15.785	15.788	(0.973)	212079	5.00000	5.1
83	sec-Butylbenzene	105	15.972	15.972	(0.985)	272286	5.00000	5.1
84	4-Isopropyltoluene	119	16.095	16.095	(0.992)	221524	5.00000	5.2
85	1,3-Dichlorobenzene	146	16.162	16.165	(0.996)	120249	5.00000	5.2
* 86	1,4-Dichlorobenzene-d4	152	16.219	16.222	(1.000)	628093	50.0000	
87	1,4-Dichlorobenzene	146	16.250	16.250	(1.002)	122826	5.00000	5.2
89	n-Butylbenzene	91	16.548	16.548	(1.020)	215950	5.00000	5.1
90	1,2-Dichlorobenzene	146	16.681	16.681	(1.028)	116050	5.00000	5.3
92	1,2-Dibromo-3-chloropropane	75	17.564	17.558	(1.083)	11703	5.00000	4.6
93	1,2,4-Trichlorobenzene	180	18.634	18.634	(1.149)	82373	5.00000	5.0
94	Hexachlorobutadiene	225	18.808	18.814	(1.160)	45186	5.00000	5.4
95	Naphthalene	128	19.023	19.017	(1.173)	219910	5.00000	5.2
96	1,2,3-Trichlorobenzene	180	19.365	19.368	(1.194)	86751	5.00000	5.4

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.



Data File: /chem/VOA3.i/062705v3.b/3q107.d
Date : 27-JUN-2005 13:08
Client ID: VSTD005
Sample Info: IW3VM050627-03ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q108.d
Lab Smp Id: W3VM050627-04 Client Smp ID: VSTD010
Inj Date : 27-JUN-2005 13:35
Operator : PAM Inst ID: VOA3.i
Smp Info : |W3VM050627-04|ICAL|1|VOAF|1||
Misc Info : VSTD010 5uL+5uL UVM050216-05E+UVM050525-05E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 11:53 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 17:14 Cal File: 3q116.d
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

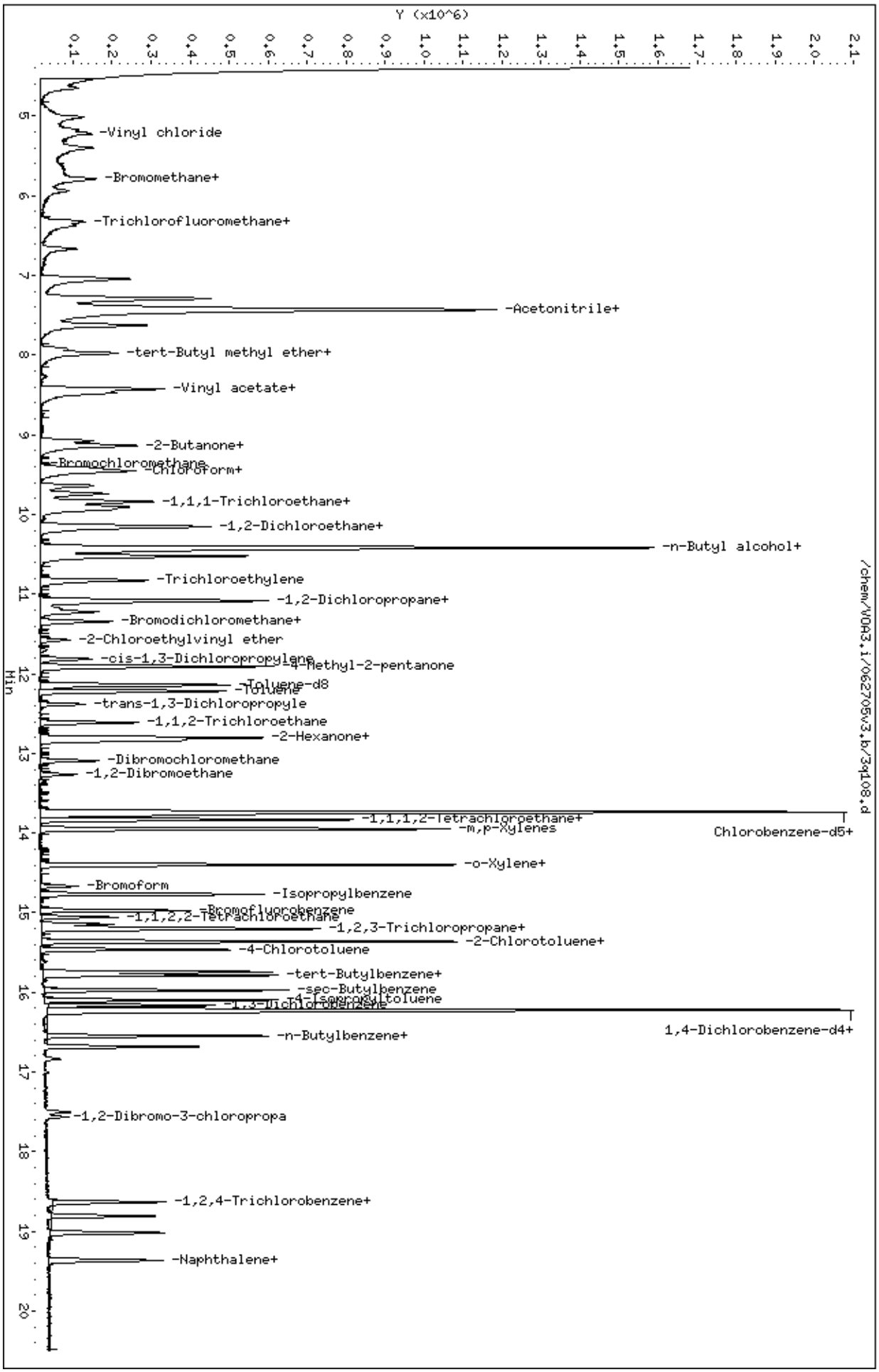
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				526477	30.0000	28.6
M 2 1,2-Dichloroethylene (total)	96				302648	20.0000	18.6
3 Dichlorodifluoromethane	85	4.652	4.660	(0.447)	182483	10.0000	10.2
4 Chloromethane	50	5.013	5.014	(0.481)	176496	10.0000	9.2
5 Vinyl chloride	62	5.219	5.220	(0.501)	156154	10.0000	9.8
6 Bromomethane	94	5.789	5.803	(0.556)	154365	10.0000	8.8
7 Chloroethane	64	5.941	5.942	(0.570)	107565	10.0000	10.3
8 Trichlorofluoromethane	101	6.327	6.328	(0.607)	227328	10.0000	9.8
134 Ethyl Ether	59	6.665	6.673	(0.640)	115143	10.0000	10.1
10 Acetone	43	7.036	7.050	(0.675)	216621	50.0000	24.9(H)
15 Acetonitrile	41	7.396	7.417	(0.710)	522127	250.000	232
11 1,1-Dichloroethylene	61	7.045	7.037	(0.676)	251216	10.0000	9.8
128 Methyl acetate	43	7.441	7.436	(0.714)	531345	50.0000	54.0
13 Iodomethane	142	7.289	7.300	(0.700)	984840	50.0000	48.5
17 Methylene chloride	84	7.624	7.626	(0.732)	226017	10.0000	9.7
14 Carbon disulfide	76	7.428	7.433	(0.713)	2514563	50.0000	48.1

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	20	tert-Butyl methyl ether	73	7.928	7.926	(0.761)	118080	10.0000	10.8
	21	trans-1,2-Dichloroethylene	96	7.979	7.977	(0.766)	148136	10.0000	9.4
	23	Vinyl acetate	43	8.425	8.426	(0.809)	763583	50.0000	48.9
	22	1,1-Dichloroethane	63	8.476	8.477	(0.813)	250276	10.0000	9.7
	30	2-Butanone	43	9.080	9.088	(0.872)	273020	50.0000	48.8
	31	cis-1,2-Dichloroethylene	96	9.131	9.139	(0.876)	154512	10.0000	9.2
	25	2,2-Dichloropropane	77	9.153	9.148	(0.878)	57546	10.0000	8.6
	32	Chloroform	83	9.457	9.455	(0.908)	251098	10.0000	9.4
	29	Bromochloromethane	128	9.413	9.423	(0.903)	60886	10.0000	9.6
$	35	Dibromofluoromethane	113	9.637	9.642	(0.925)	130724	10.0000	9.8
	36	1,1,1-Trichloroethane	97	9.739	9.730	(0.935)	174930	10.0000	9.3
	129	Cyclohexane	56	9.840	9.835	(0.944)	230039	10.0000	9.0
	34	1,1-Dichloropropene	75	9.906	9.908	(0.951)	178959	10.0000	9.4
	131	n-Butyl alcohol	56	10.524	10.531	(1.010)	403468	1000.00	792
	33	Carbon tetrachloride	117	9.944	9.946	(0.954)	112910	10.0000	9.0
	37	1,2-Dichloroethane	62	10.137	10.142	(0.973)	177512	10.0000	9.7
	38	Benzene	78	10.156	10.154	(0.975)	515087	10.0000	9.2
*	40	Fluorobenzene	96	10.419	10.420	(1.000)	2102537	50.0000	
	39	Trichloroethylene	95	10.827	10.825	(1.039)	128815	10.0000	9.2
	41	1,2-Dichloropropane	63	11.084	11.088	(1.064)	125423	10.0000	9.7
	130	Methylcyclohexane	83	11.084	11.082	(1.064)	214206	10.0000	9.0
	45	Bromodichloromethane	83	11.343	11.345	(1.089)	160892	10.0000	9.4
	43	Dibromomethane	93	11.223	11.231	(1.077)	68251	10.0000	9.6
	44	2-Chloroethylvinyl ether	63	11.574	11.582	(1.111)	41674	50.0000	52.1
	49	4-Methyl-2-pentanone	58	11.910	11.914	(0.867)	194508	50.0000	46.4
	46	cis-1,3-Dichloropropylene	75	11.815	11.813	(1.134)	125374	10.0000	9.9
$	47	Toluene-d8	98	12.141	12.142	(0.884)	402277	10.0000	9.9
	50	Toluene	92	12.217	12.215	(0.889)	265560	10.0000	9.4
	53	trans-1,3-Dichloropropylene	75	12.385	12.386	(0.902)	97419	10.0000	9.8
	54	1,1,2-Trichloroethane	83	12.612	12.614	(0.918)	85490	10.0000	9.2
	55	2-Hexanone	43	12.799	12.804	(0.932)	351861	50.0000	44.9
	52	1,3-Dichloropropane	76	12.812	12.816	(0.933)	155645	10.0000	10
	56	Tetrachloroethylene	164	12.840	12.835	(0.935)	83234	10.0000	9.5
	57	Dibromochloromethane	129	13.090	13.092	(0.953)	93998	10.0000	9.4
	59	1,2-Dibromoethane	107	13.264	13.266	(0.966)	72933	10.0000	10.5
*	61	Chlorobenzene-d5	117	13.736	13.734	(1.000)	1265207	50.0000	
	62	Chlorobenzene	112	13.771	13.769	(1.003)	271155	10.0000	9.5
	60	1,1,1,2-Tetrachloroethane	131	13.825	13.823	(1.006)	89870	10.0000	9.4
	58	Ethylbenzene	91	13.834	13.835	(1.007)	460293	10.0000	9.4
	63	m,p-Xylenes	106	13.948	13.949	(1.015)	354572	20.0000	19.1
	64	o-Xylene	106	14.394	14.399	(1.048)	171905	10.0000	9.4
	65	Styrene	104	14.401	14.399	(1.048)	292374	10.0000	9.5
	66	Bromoform	173	14.667	14.665	(0.904)	47782	10.0000	9.1
	67	Isopropylbenzene	105	14.768	14.766	(0.910)	410095	10.0000	9.4
	73	1,1,2,2-Tetrachloroethane	83	15.056	15.051	(0.928)	108302	10.0000	8.8
$	71	Bromofluorobenzene	95	14.970	14.975	(0.923)	150078	10.0000	10
	74	1,2,3-Trichloropropane	110	15.145	15.149	(0.934)	31729	10.0000	9.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	15.186	15.190	(0.936)	109558	10.0000	9.5
76	n-Propylbenzene	91	15.208	15.206	(0.938)	532524	10.0000	9.5
77	2-Chlorotoluene	91	15.360	15.358	(0.947)	358371	10.0000	9.5
78	1,3,5-Trimethylbenzene	105	15.363	15.367	(0.947)	364246	10.0000	9.4
80	4-Chlorotoluene	91	15.464	15.462	(0.953)	324746	10.0000	9.2
81	tert-Butylbenzene	119	15.743	15.744	(0.971)	361314	10.0000	9.3
79	1,2,4-Trimethylbenzene	105	15.787	15.788	(0.973)	363697	10.0000	9.3
83	sec-Butylbenzene	105	15.974	15.972	(0.985)	471987	10.0000	9.4
84	4-Isopropyltoluene	119	16.097	16.095	(0.992)	372099	10.0000	9.2
85	1,3-Dichlorobenzene	146	16.164	16.165	(0.996)	199679	10.0000	9.2
* 86	1,4-Dichlorobenzene-d4	152	16.221	16.222	(1.000)	590971	50.0000	
87	1,4-Dichlorobenzene	146	16.252	16.250	(1.002)	199656	10.0000	8.9
89	n-Butylbenzene	91	16.547	16.548	(1.020)	349397	10.0000	8.8
90	1,2-Dichlorobenzene	146	16.683	16.681	(1.028)	189162	10.0000	9.2
92	1,2-Dibromo-3-chloropropane	75	17.566	17.558	(1.083)	19164	10.0000	8.1
93	1,2,4-Trichlorobenzene	180	18.632	18.634	(1.149)	120347	10.0000	7.7
94	Hexachlorobutadiene	225	18.806	18.814	(1.159)	69705	10.0000	8.9
95	Naphthalene	128	19.019	19.017	(1.172)	330218	10.0000	8.3
96	1,2,3-Trichlorobenzene	180	19.367	19.368	(1.194)	128144	10.0000	8.4

QC Flag Legend

H - Operator selected an alternate compound hit.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Client ID: VSTD010
Sample Info: IW3VM050627-04|ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25
Page 1
Y (x10^6)
Min
/chem/VOA3.i/062705v3.b/3q108.d
-Vinyl chloride
-Bromomethane+
-Trichlorofluoromethane+
-Acetonitrile+
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone+
-Bromochloromethane
-Chloroform+
-1,1,1-Trichloroethane+
-1,2-Dichloroethane+
-n-Butyl alcohol+
-Trichloroethylene
-1,2-Dichloropropane+
-Bromodichloromethane+
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
Chlorobenzene-d5+
-o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
-1,2,3-Trichloropropane+
-2-Chlorotoluene+
-4-Chlorotoluene
-tert-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene+
-Naphthalene+

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q109.d
Lab Smp Id: W3VM050627-05 Client Smp ID: VSTD020
Inj Date : 27-JUN-2005 14:03
Operator : PAM Inst ID: VOA3.i
Smp Info : |W3VM050627-05|ICAL|1|VOAF|1||
Misc Info : VSTD020 5uL+5uL UVM050216-06E+UVM050525-06E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 11:53 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 17:42 Cal File: 3q117.d
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

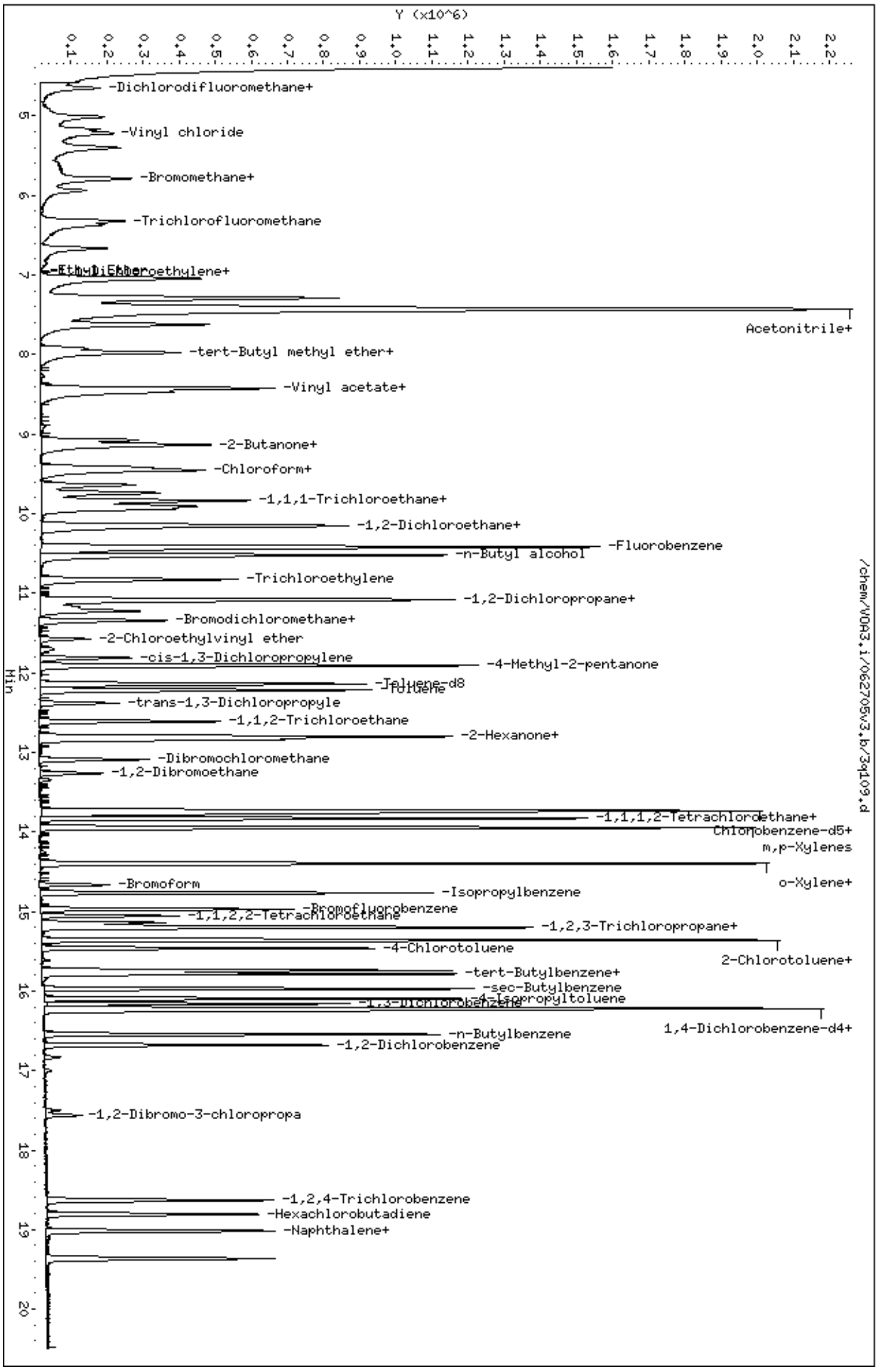
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				994759	60.0000	55.3
M 2 1,2-Dichloroethylene (total)	96				562665	40.0000	35.2
3 Dichlorodifluoromethane	85	4.650	4.660	(0.446)	358048	20.0000	20.3
4 Chloromethane	50	5.014	5.014	(0.481)	334055	20.0000	17.8
5 Vinyl chloride	62	5.223	5.220	(0.501)	314278	20.0000	20.2
6 Bromomethane	94	5.790	5.803	(0.556)	339863	20.0000	19.6
7 Chloroethane	64	5.939	5.942	(0.570)	210403	20.0000	20.5
8 Trichlorofluoromethane	101	6.325	6.328	(0.607)	456803	20.0000	20.2
134 Ethyl Ether	59	6.667	6.673	(0.640)	225482	20.0000	20.2
10 Acetone	43	7.034	7.050	(0.675)	427778	100.000	41.5(H)
15 Acetonitrile	41	7.398	7.417	(0.710)	1052987	500.000	477
11 1,1-Dichloroethylene	61	7.046	7.037	(0.676)	460822	20.0000	18.2
128 Methyl acetate	43	7.436	7.436	(0.714)	805147	100.000	80.1
13 Iodomethane	142	7.290	7.300	(0.700)	1804474	100.000	90.5
17 Methylene chloride	84	7.626	7.626	(0.732)	375566	20.0000	19.6
14 Carbon disulfide	76	7.429	7.433	(0.713)	4720488	100.000	92.0

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	20	tert-Butyl methyl ether	73	7.926	7.926	(0.761)	208805	20.0000	22.0
	21	trans-1,2-Dichloroethylene	96	7.980	7.977	(0.766)	273429	20.0000	17.6
	23	Vinyl acetate	43	8.426	8.426	(0.809)	1474835	100.000	96.2
	22	1,1-Dichloroethane	63	8.474	8.477	(0.813)	473501	20.0000	18.7
	30	2-Butanone	43	9.078	9.088	(0.871)	548577	100.000	99.8
	31	cis-1,2-Dichloroethylene	96	9.132	9.139	(0.877)	289236	20.0000	17.6
	25	2,2-Dichloropropane	77	9.151	9.148	(0.878)	105203	20.0000	16.0
	32	Chloroform	83	9.458	9.455	(0.908)	476546	20.0000	18.2
	29	Bromochloromethane	128	9.420	9.423	(0.904)	114543	20.0000	18.3
$	35	Dibromofluoromethane	113	9.639	9.642	(0.925)	242117	20.0000	18.5
	36	1,1,1-Trichloroethane	97	9.740	9.730	(0.935)	337402	20.0000	18.2
	129	Cyclohexane	56	9.841	9.835	(0.945)	435854	20.0000	17.3
	34	1,1-Dichloropropene	75	9.908	9.908	(0.951)	338610	20.0000	18.2
	131	n-Butyl alcohol	56	10.525	10.531	(1.010)	846043	2000.00	1690
	33	Carbon tetrachloride	117	9.939	9.946	(0.954)	228061	20.0000	18.6
	37	1,2-Dichloroethane	62	10.139	10.142	(0.973)	346363	20.0000	19.2
	38	Benzene	78	10.158	10.154	(0.975)	973234	20.0000	17.6
*	40	Fluorobenzene	96	10.417	10.420	(1.000)	2064374	50.0000	
	39	Trichloroethylene	95	10.829	10.825	(1.039)	251029	20.0000	18.2
	41	1,2-Dichloropropane	63	11.082	11.088	(1.064)	245630	20.0000	19.4
	130	Methylcyclohexane	83	11.082	11.082	(1.064)	418500	20.0000	17.9
	45	Bromodichloromethane	83	11.345	11.345	(1.089)	309923	20.0000	18.5
	43	Dibromomethane	93	11.227	11.231	(1.078)	127773	20.0000	18.4
	44	2-Chloroethylvinyl ether	63	11.572	11.582	(1.111)	71831	100.000	91.4
	49	4-Methyl-2-pentanone	58	11.911	11.914	(0.867)	389881	100.000	95.1
	46	cis-1,3-Dichloropropylene	75	11.813	11.813	(1.134)	233994	20.0000	18.8
$	47	Toluene-d8	98	12.142	12.142	(0.884)	744411	20.0000	18.7
	50	Toluene	92	12.218	12.215	(0.890)	504663	20.0000	18.2
	53	trans-1,3-Dichloropropylene	75	12.383	12.386	(0.902)	183735	20.0000	18.9
	54	1,1,2-Trichloroethane	83	12.614	12.614	(0.918)	165126	20.0000	18.3
	55	2-Hexanone	43	12.797	12.804	(0.932)	714675	100.000	93.2
	52	1,3-Dichloropropane	76	12.810	12.816	(0.933)	295674	20.0000	19.4
	56	Tetrachloroethylene	164	12.842	12.835	(0.935)	155176	20.0000	18.2
	57	Dibromochloromethane	129	13.092	13.092	(0.953)	188468	20.0000	19.3
	59	1,2-Dibromoethane	107	13.266	13.266	(0.966)	133481	20.0000	22.0
*	61	Chlorobenzene-d5	117	13.734	13.734	(1.000)	1236845	50.0000	
	62	Chlorobenzene	112	13.769	13.769	(1.003)	513182	20.0000	18.4
	60	1,1,1,2-Tetrachloroethane	131	13.826	13.823	(1.007)	179075	20.0000	19.2
	58	Ethylbenzene	91	13.832	13.835	(1.007)	873359	20.0000	18.3
	63	m,p-Xylenes	106	13.949	13.949	(1.016)	668596	40.0000	36.9
	64	o-Xylene	106	14.396	14.399	(1.048)	326163	20.0000	18.3
	65	Styrene	104	14.402	14.399	(1.049)	564079	20.0000	18.7
	66	Bromoform	173	14.665	14.665	(0.904)	98682	20.0000	18.9
	67	Isopropylbenzene	105	14.766	14.766	(0.910)	791336	20.0000	18.2
	73	1,1,2,2-Tetrachloroethane	83	15.057	15.051	(0.928)	222041	20.0000	18.2
$	71	Bromofluorobenzene	95	14.972	14.975	(0.923)	273809	20.0000	18.3
	74	1,2,3-Trichloropropane	110	15.143	15.149	(0.933)	63281	20.0000	18.9(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	15.187	15.190	(0.936)	207237	20.0000	18.1
76	n-Propylbenzene	91	15.206	15.206	(0.937)	1000697	20.0000	17.9
77	2-Chlorotoluene	91	15.361	15.358	(0.947)	672934	20.0000	18.0
78	1,3,5-Trimethylbenzene	105	15.364	15.367	(0.947)	693558	20.0000	18.0
80	4-Chlorotoluene	91	15.462	15.462	(0.953)	617417	20.0000	17.6
81	tert-Butylbenzene	119	15.744	15.744	(0.971)	689810	20.0000	17.9
79	1,2,4-Trimethylbenzene	105	15.785	15.788	(0.973)	702804	20.0000	18.0
83	sec-Butylbenzene	105	15.972	15.972	(0.985)	908317	20.0000	18.3
84	4-Isopropyltoluene	119	16.095	16.095	(0.992)	734766	20.0000	18.3
85	1,3-Dichlorobenzene	146	16.162	16.165	(0.996)	381848	20.0000	17.8
* 86	1,4-Dichlorobenzene-d4	152	16.222	16.222	(1.000)	587701	50.0000	
87	1,4-Dichlorobenzene	146	16.247	16.250	(1.002)	385991	20.0000	17.3
89	n-Butylbenzene	91	16.548	16.548	(1.020)	695606	20.0000	17.7
90	1,2-Dichlorobenzene	146	16.681	16.681	(1.028)	367105	20.0000	17.9
92	1,2-Dibromo-3-chloropropane	75	17.564	17.558	(1.083)	39678	20.0000	16.8
93	1,2,4-Trichlorobenzene	180	18.631	18.634	(1.148)	249791	20.0000	16.1
94	Hexachlorobutadiene	225	18.808	18.814	(1.159)	142451	20.0000	18.2
95	Naphthalene	128	19.020	19.017	(1.172)	702998	20.0000	17.9
96	1,2,3-Trichlorobenzene	180	19.365	19.368	(1.194)	273709	20.0000	18.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.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Date : 27-JUN-2005 14:03
Client ID: VSTD020
Sample Info: IW3VM050627-05|ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25
/chem/VOA3.i/062705v3.b/3q109.d
Y (x10^6)
Min
-Dichlorodifluoromethane+
-Vinyl chloride
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether
-Trichloroethylene+
Acetonitrile+
-tert-Butyl methyl ether+
-Vinyl acetate+
-2-Butanone+
-Chloroform+
-1,1,1-Trichloroethane+
-1,2-Dichloroethane+
-Fluorobenzene
-n-Butyl alcohol
-Trichloroethylene
-1,2-Dichloropropane+
-Bromodichloromethane+
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropylene
-4-Methyl-2-pentanone
-Toluene-d8
Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone+
-Dibromochloromethane
-1,2-Dibromoethane
-1,1,1,2-Tetrachloroethane+
Chlorobenzene-d5+
m,p-Xylenes
o-Xylene+
-Bromoform
-Isopropylbenzene
-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane
-1,2,3-Trichloropropane+
-4-Chlorotoluene
2-Chlorotoluene+
-tert-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q110.d
Lab Smp Id: W3VM050627-06 Client Smp ID: VSTD050
Inj Date : 27-JUN-2005 14:30
Operator : PAM Inst ID: VOA3.i
Smp Info : |W3VM050627-06|ICAL|1|VOAF|1||
Misc Info : VSTD050 5uL+5uL UVM050216-07E+UVM050525-07E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 11:53 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 18:09 Cal File: 3q118.d
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

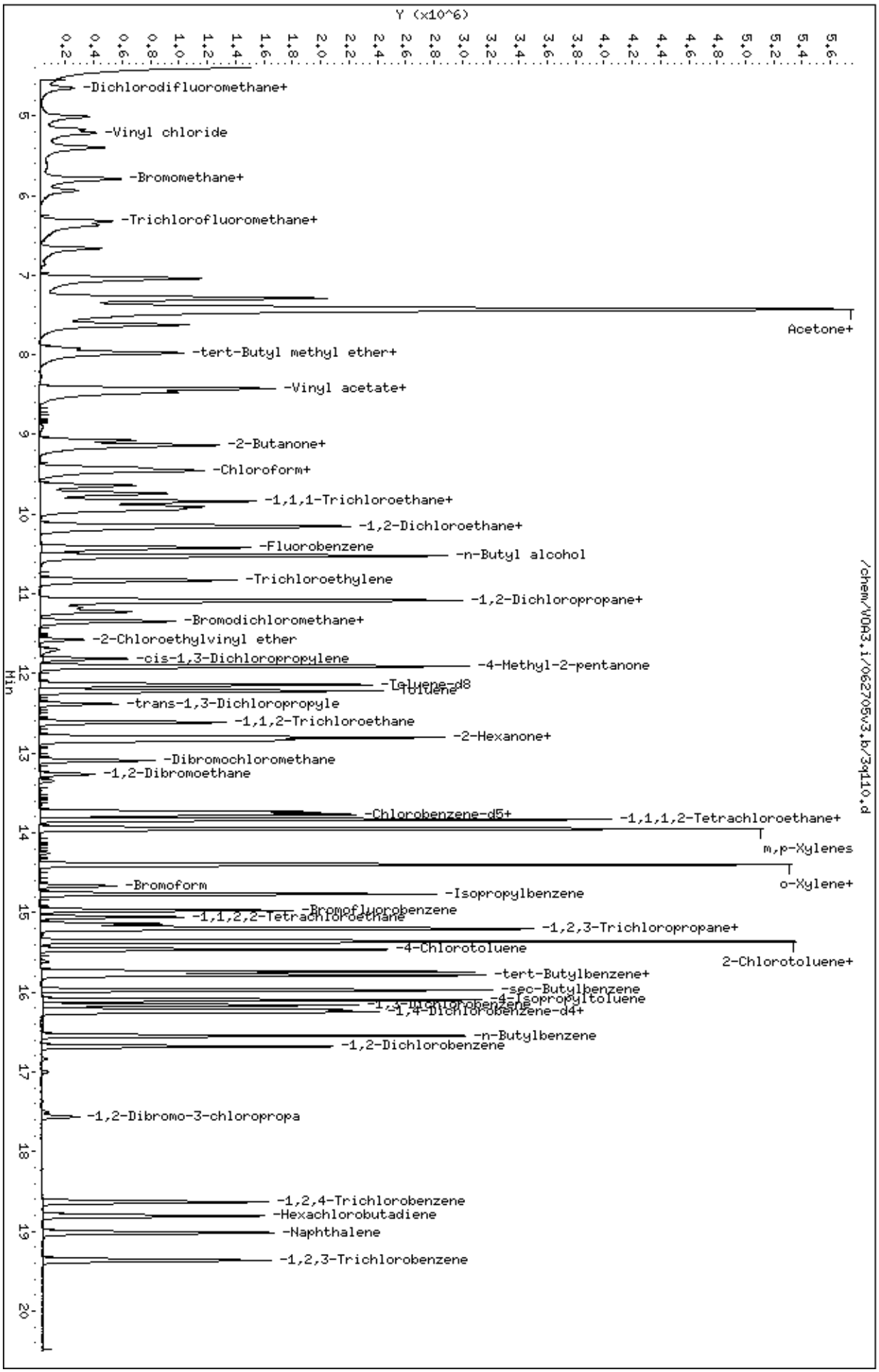
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2600164	150.000	148
M 2 1,2-Dichloroethylene (total)	96				1501187	100.000	96.4
3 Dichlorodifluoromethane	85	4.650	4.660	(0.446)	553956	50.0000	32.2
4 Chloromethane	50	5.011	5.014	(0.481)	793488	50.0000	43.4
5 Vinyl chloride	62	5.220	5.220	(0.501)	677197	50.0000	44.6
6 Bromomethane	94	5.793	5.803	(0.556)	871232	50.0000	51.6
7 Chloroethane	64	5.938	5.942	(0.570)	480663	50.0000	48.0
8 Trichlorofluoromethane	101	6.324	6.328	(0.607)	1047439	50.0000	47.4
134 Ethyl Ether	59	6.666	6.673	(0.640)	553884	50.0000	50.8
10 Acetone	43	7.036	7.050	(0.675)	1014262	250.000	110
15 Acetonitrile	41	7.394	7.417	(0.710)	2618256	1250.00	1220
11 1,1-Dichloroethylene	61	7.043	7.037	(0.676)	1234448	50.0000	50.1
128 Methyl acetate	43	7.435	7.436	(0.714)	2483124	250.000	241
13 Iodomethane	142	7.290	7.300	(0.700)	4417696	250.000	227
17 Methylene chloride	84	7.625	7.626	(0.732)	832443	50.0000	50.5
14 Carbon disulfide	76	7.429	7.433	(0.713)	12569149	250.000	251

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	20	tert-Butyl methyl ether	73	7.923	7.926	(0.760)	465700	50.0000	54.1
	21	trans-1,2-Dichloroethylene	96	7.976	7.977	(0.766)	735789	50.0000	48.6
	23	Vinyl acetate	43	8.423	8.426	(0.808)	4000790	250.000	268
	22	1,1-Dichloroethane	63	8.473	8.477	(0.813)	1257604	50.0000	50.8
	30	2-Butanone	43	9.075	9.088	(0.871)	1311077	250.000	245
	31	cis-1,2-Dichloroethylene	96	9.135	9.139	(0.877)	765398	50.0000	47.8
	25	2,2-Dichloropropane	77	9.151	9.148	(0.878)	294387	50.0000	45.8
	32	Chloroform	83	9.458	9.455	(0.908)	1264855	50.0000	49.5
	29	Bromochloromethane	128	9.417	9.423	(0.904)	294633	50.0000	48.3
$	35	Dibromofluoromethane	113	9.638	9.642	(0.925)	637819	50.0000	49.9
	36	1,1,1-Trichloroethane	97	9.736	9.730	(0.934)	928483	50.0000	51.5
	129	Cyclohexane	56	9.837	9.835	(0.944)	1159951	50.0000	47.2
	34	1,1-Dichloropropene	75	9.907	9.908	(0.951)	911650	50.0000	50.1
	131	n-Butyl alcohol	56	10.524	10.531	(1.010)	2176120	2500.00	4460
	33	Carbon tetrachloride	117	9.942	9.946	(0.954)	659143	50.0000	55.2
	37	1,2-Dichloroethane	62	10.135	10.142	(0.973)	878491	50.0000	50.0
	38	Benzene	78	10.157	10.154	(0.975)	2596847	50.0000	48.2
*	40	Fluorobenzene	96	10.420	10.420	(1.000)	2012424	50.0000	
	39	Trichloroethylene	95	10.825	10.825	(1.039)	661271	50.0000	49.1
	41	1,2-Dichloropropane	63	11.081	11.088	(1.063)	636840	50.0000	51.5
	130	Methylcyclohexane	83	11.085	11.082	(1.064)	1115416	50.0000	48.8
	45	Bromodichloromethane	83	11.344	11.345	(1.089)	831712	50.0000	50.9
	43	Dibromomethane	93	11.221	11.231	(1.077)	306061	50.0000	45.1
	44	2-Chloroethylvinyl ether	63	11.575	11.582	(1.111)	159730	250.000	208
	49	4-Methyl-2-pentanone	58	11.911	11.914	(0.867)	996433	250.000	250
	46	cis-1,3-Dichloropropylene	75	11.816	11.813	(1.134)	564265	50.0000	46.5
$	47	Toluene-d8	98	12.142	12.142	(0.884)	1927471	50.0000	49.8
	50	Toluene	92	12.218	12.215	(0.889)	1335227	50.0000	49.6
	53	trans-1,3-Dichloropropylene	75	12.382	12.386	(0.901)	455475	50.0000	48.3
	54	1,1,2-Trichloroethane	83	12.610	12.614	(0.918)	434814	50.0000	49.5
	55	2-Hexanone	43	12.800	12.804	(0.932)	1752959	250.000	235
	52	1,3-Dichloropropane	76	12.813	12.816	(0.933)	731089	50.0000	49.2
	56	Tetrachloroethylene	164	12.841	12.835	(0.935)	418772	50.0000	50.5
	57	Dibromochloromethane	129	13.091	13.092	(0.953)	508125	50.0000	53.6
	59	1,2-Dibromoethane	107	13.265	13.266	(0.966)	301557	50.0000	54.6
*	61	Chlorobenzene-d5	117	13.737	13.734	(1.000)	1203278	50.0000	
	62	Chlorobenzene	112	13.768	13.769	(1.002)	1358216	50.0000	50.1
	60	1,1,1,2-Tetrachloroethane	131	13.825	13.823	(1.006)	485529	50.0000	53.4
	58	Ethylbenzene	91	13.835	13.835	(1.007)	2279637	50.0000	49.0
	63	m,p-Xylenes	106	13.949	13.949	(1.015)	1744992	100.000	99.0
	64	o-Xylene	106	14.398	14.399	(1.048)	855171	50.0000	49.4
	65	Styrene	104	14.402	14.399	(1.048)	1467850	50.0000	50.0
	66	Bromoform	173	14.664	14.665	(0.904)	271814	50.0000	53.5
	67	Isopropylbenzene	105	14.769	14.766	(0.910)	2064407	50.0000	48.9
	73	1,1,2,2-Tetrachloroethane	83	15.057	15.051	(0.928)	561232	50.0000	47.2
$	71	Bromofluorobenzene	95	14.971	14.975	(0.923)	692351	50.0000	47.6
	74	1,2,3-Trichloropropane	110	15.142	15.149	(0.933)	159042	50.0000	48.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	15.186	15.190	(0.936)	540511	50.0000	48.5
76	n-Propylbenzene	91	15.209	15.206	(0.938)	2626607	50.0000	48.2
77	2-Chlorotoluene	91	15.361	15.358	(0.947)	1777675	50.0000	48.7
78	1,3,5-Trimethylbenzene	105	15.364	15.367	(0.947)	1880985	50.0000	50.1
80	4-Chlorotoluene	91	15.465	15.462	(0.953)	1625010	50.0000	47.6
81	tert-Butylbenzene	119	15.743	15.744	(0.971)	1868320	50.0000	49.9
79	1,2,4-Trimethylbenzene	105	15.785	15.788	(0.973)	1883437	50.0000	49.6
83	sec-Butylbenzene	105	15.975	15.972	(0.985)	2417416	50.0000	50.0
84	4-Isopropyltoluene	119	16.098	16.095	(0.992)	1966230	50.0000	50.2
85	1,3-Dichlorobenzene	146	16.164	16.165	(0.996)	1004888	50.0000	48.0
* 86	1,4-Dichlorobenzene-d4	152	16.221	16.222	(1.000)	572451	50.0000	
87	1,4-Dichlorobenzene	146	16.250	16.250	(1.002)	1007769	50.0000	46.4
89	n-Butylbenzene	91	16.547	16.548	(1.020)	1902123	50.0000	49.7
90	1,2-Dichlorobenzene	146	16.684	16.681	(1.028)	958165	50.0000	48.0
92	1,2-Dibromo-3-chloropropane	75	17.567	17.558	(1.083)	101633	50.0000	44.2
93	1,2,4-Trichlorobenzene	180	18.633	18.634	(1.149)	655036	50.0000	43.4
94	Hexachlorobutadiene	225	18.810	18.814	(1.160)	378100	50.0000	49.6
95	Naphthalene	128	19.019	19.017	(1.172)	1789449	50.0000	46.7
96	1,2,3-Trichlorobenzene	180	19.364	19.368	(1.194)	709179	50.0000	48.2



Data File: /chem/VOA3.i/062705v3.b/3q110.d
Date : 27-JUN-2005 14:30
Client ID: VSTD050
Sample Info: IW3VM050627-061ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q111.d
Lab Smp Id: W3VM050627-07 Client Smp ID: VSTD100
Inj Date : 27-JUN-2005 14:57
Operator : PAM Inst ID: VOA3.i
Smp Info : |W3VM050627-07|ICAL|1|VOAF|1||
Misc Info : VSTD100 5uL+5uL UVM050216-08D+UVM050525-08E
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 11:53 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 18:36 Cal File: 3q119.d
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				4990449	300.000	283
M 2 1,2-Dichloroethylene (total)	96				3073148	200.000	192
3 Dichlorodifluoromethane	85	4.652	4.660	(0.447)	1753186	100.000	99.3
4 Chloromethane	50	5.010	5.014	(0.481)	2213198	100.000	118(A)
5 Vinyl chloride	62	5.219	5.220	(0.501)	1608695	100.000	103(A)
6 Bromomethane	94	5.792	5.803	(0.556)	1996388	100.000	115(A)
7 Chloroethane	64	5.937	5.942	(0.570)	1057660	100.000	103(A)
8 Trichlorofluoromethane	101	6.324	6.328	(0.607)	2317482	100.000	102(A)
134 Ethyl Ether	59	6.665	6.673	(0.640)	1165985	100.000	104(A)
10 Acetone	43	7.036	7.050	(0.675)	2024259	500.000	308(H)
15 Acetonitrile	41	7.393	7.417	(0.710)	5273035	2500.00	2380
11 1,1-Dichloroethylene	61	7.042	7.037	(0.676)	2440526	100.000	96.4
128 Methyl acetate	43	7.435	7.436	(0.714)	5431918	500.000	506(A)
13 Iodomethane	142	7.289	7.300	(0.700)	8296944	500.000	415
17 Methylene chloride	84	7.624	7.626	(0.732)	1619985	100.000	99.8
14 Carbon disulfide	76	7.428	7.433	(0.713)	25237695	500.000	491

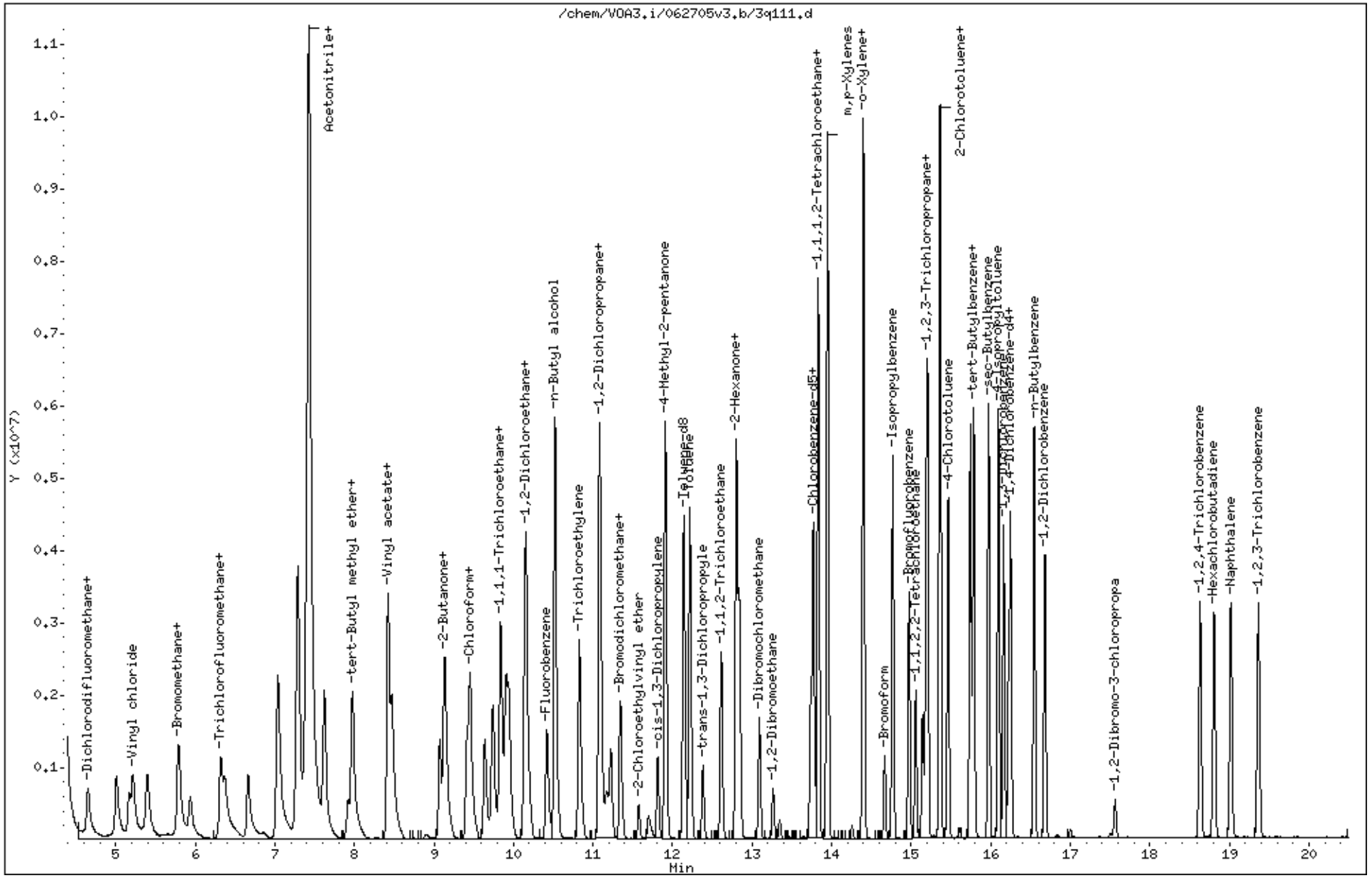
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	20	tert-Butyl methyl ether	73	7.925	7.926	(0.761)	839290	100.000	97.2
	21	trans-1,2-Dichloroethylene	96	7.976	7.977	(0.765)	1511199	100.000	97.0
	23	Vinyl acetate	43	8.425	8.426	(0.809)	8329585	500.000	542(A)
	22	1,1-Dichloroethane	63	8.473	8.477	(0.813)	2528984	100.000	99.5
	30	2-Butanone	43	9.074	9.088	(0.871)	2672558	500.000	485
	31	cis-1,2-Dichloroethylene	96	9.131	9.139	(0.876)	1561949	100.000	95.0
	25	2,2-Dichloropropane	77	9.156	9.148	(0.879)	614754	100.000	93.0
	32	Chloroform	83	9.454	9.455	(0.907)	2558670	100.000	97.4
	29	Bromochloromethane	128	9.419	9.423	(0.904)	598545	100.000	95.5
$	35	Dibromofluoromethane	113	9.641	9.642	(0.925)	1304355	100.000	99.3
	36	1,1,1-Trichloroethane	97	9.742	9.730	(0.935)	1918632	100.000	104(A)
	129	Cyclohexane	56	9.840	9.835	(0.944)	2338095	100.000	92.5
	34	1,1-Dichloropropene	75	9.906	9.908	(0.951)	1817780	100.000	97.3
	131	n-Butyl alcohol	56	10.524	10.531	(1.010)	4414477	10000.0	8810
	33	Carbon tetrachloride	117	9.941	9.946	(0.954)	1430705	100.000	117(A)
	37	1,2-Dichloroethane	62	10.138	10.142	(0.973)	1720897	100.000	95.3
	38	Benzene	78	10.156	10.154	(0.975)	5135555	100.000	92.8
*	40	Fluorobenzene	96	10.419	10.420	(1.000)	2068179	50.0000	
	39	Trichloroethylene	95	10.828	10.825	(1.039)	1323118	100.000	95.6
	41	1,2-Dichloropropane	63	11.084	11.088	(1.064)	1272288	100.000	100(A)
	130	Methylcyclohexane	83	11.084	11.082	(1.064)	2171610	100.000	92.5
	45	Bromodichloromethane	83	11.343	11.345	(1.089)	1701204	100.000	101(A)
	43	Dibromomethane	93	11.223	11.231	(1.077)	580230	100.000	83.2
	44	2-Chloroethylvinyl ether	63	11.574	11.582	(1.111)	241408	500.000	307
	49	4-Methyl-2-pentanone	58	11.910	11.914	(0.867)	1928367	500.000	480
	46	cis-1,3-Dichloropropylene	75	11.815	11.813	(1.134)	1012780	100.000	81.2
$	47	Toluene-d8	98	12.141	12.142	(0.884)	3775677	100.000	96.7
	50	Toluene	92	12.220	12.215	(0.890)	2610576	100.000	96.2
	53	trans-1,3-Dichloropropylene	75	12.382	12.386	(0.901)	846772	100.000	89.0
	54	1,1,2-Trichloroethane	83	12.613	12.614	(0.918)	865689	100.000	97.8
	55	2-Hexanone	43	12.799	12.804	(0.932)	3391786	500.000	451
	52	1,3-Dichloropropane	76	12.812	12.816	(0.933)	1399619	100.000	93.5
	56	Tetrachloroethylene	164	12.840	12.835	(0.935)	831366	100.000	99.4
	57	Dibromochloromethane	129	13.091	13.092	(0.953)	1047331	100.000	110(A)
	59	1,2-Dibromoethane	107	13.265	13.266	(0.966)	528001	100.000	96.9
*	61	Chlorobenzene-d5	117	13.736	13.734	(1.000)	1212817	50.0000	
	62	Chlorobenzene	112	13.771	13.769	(1.003)	2678594	100.000	98.1
	60	1,1,1,2-Tetrachloroethane	131	13.825	13.823	(1.006)	981111	100.000	107(A)
	58	Ethylbenzene	91	13.834	13.835	(1.007)	4359345	100.000	93.0
	63	m,p-Xylenes	106	13.948	13.949	(1.015)	3349449	200.000	189
	64	o-Xylene	106	14.398	14.399	(1.048)	1641000	100.000	94.1
	65	Styrene	104	14.401	14.399	(1.048)	2818819	100.000	95.3
	66	Bromoform	173	14.667	14.665	(0.904)	575763	100.000	114(A)
	67	Isopropylbenzene	105	14.768	14.766	(0.910)	3933641	100.000	93.9
	73	1,1,2,2-Tetrachloroethane	83	15.056	15.051	(0.928)	1136259	100.000	96.3
$	71	Bromofluorobenzene	95	14.974	14.975	(0.923)	1340411	100.000	92.8
	74	1,2,3-Trichloropropane	110	15.145	15.149	(0.934)	318892	100.000	98.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	15.186	15.190	(0.936)	1069233	100.000	96.7
76	n-Propylbenzene	91	15.208	15.206	(0.938)	4929866	100.000	91.2
77	2-Chlorotoluene	91	15.360	15.358	(0.947)	3381715	100.000	93.4
78	1,3,5-Trimethylbenzene	105	15.363	15.367	(0.947)	3561363	100.000	95.6
80	4-Chlorotoluene	91	15.464	15.462	(0.953)	3120861	100.000	92.2
81	tert-Butylbenzene	119	15.743	15.744	(0.971)	3526072	100.000	94.8
79	1,2,4-Trimethylbenzene	105	15.784	15.788	(0.973)	3587857	100.000	95.2
83	sec-Butylbenzene	105	15.974	15.972	(0.985)	4560305	100.000	95.0
84	4-Isopropyltoluene	119	16.097	16.095	(0.992)	3758310	100.000	96.7
85	1,3-Dichlorobenzene	146	16.161	16.165	(0.996)	1965768	100.000	94.7
* 86	1,4-Dichlorobenzene-d4	152	16.221	16.222	(1.000)	568139	50.0000	
87	1,4-Dichlorobenzene	146	16.249	16.250	(1.002)	1981769	100.000	92.0
89	n-Butylbenzene	91	16.544	16.548	(1.020)	3631066	100.000	95.6
90	1,2-Dichlorobenzene	146	16.683	16.681	(1.028)	1868953	100.000	94.2
92	1,2-Dibromo-3-chloropropane	75	17.560	17.558	(1.083)	197843	100.000	86.7
93	1,2,4-Trichlorobenzene	180	18.629	18.634	(1.148)	1321525	100.000	88.2
94	Hexachlorobutadiene	225	18.810	18.814	(1.160)	757865	100.000	100(A)
95	Naphthalene	128	19.016	19.017	(1.172)	3599236	100.000	94.6
96	1,2,3-Trichlorobenzene	180	19.364	19.368	(1.194)	1418000	100.000	97.0

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: /chem/VOA3.i/062705v3.b/3q111.d
Date : 27-JUN-2005 14:57
Client ID: VSTD100
Instrument: VOA3.i
Sample Info: |W3VM050627-07|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: PAM
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q113.d
Lab Smp Id: UVM050615-01A Client Smp ID: VSTD005S
Inj Date : 27-JUN-2005 15:52
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050615-01A|ICAL|1|VOAF|1||
Misc Info : VSTD005S 5uL N/A UVM050615-01A
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:29 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 13 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

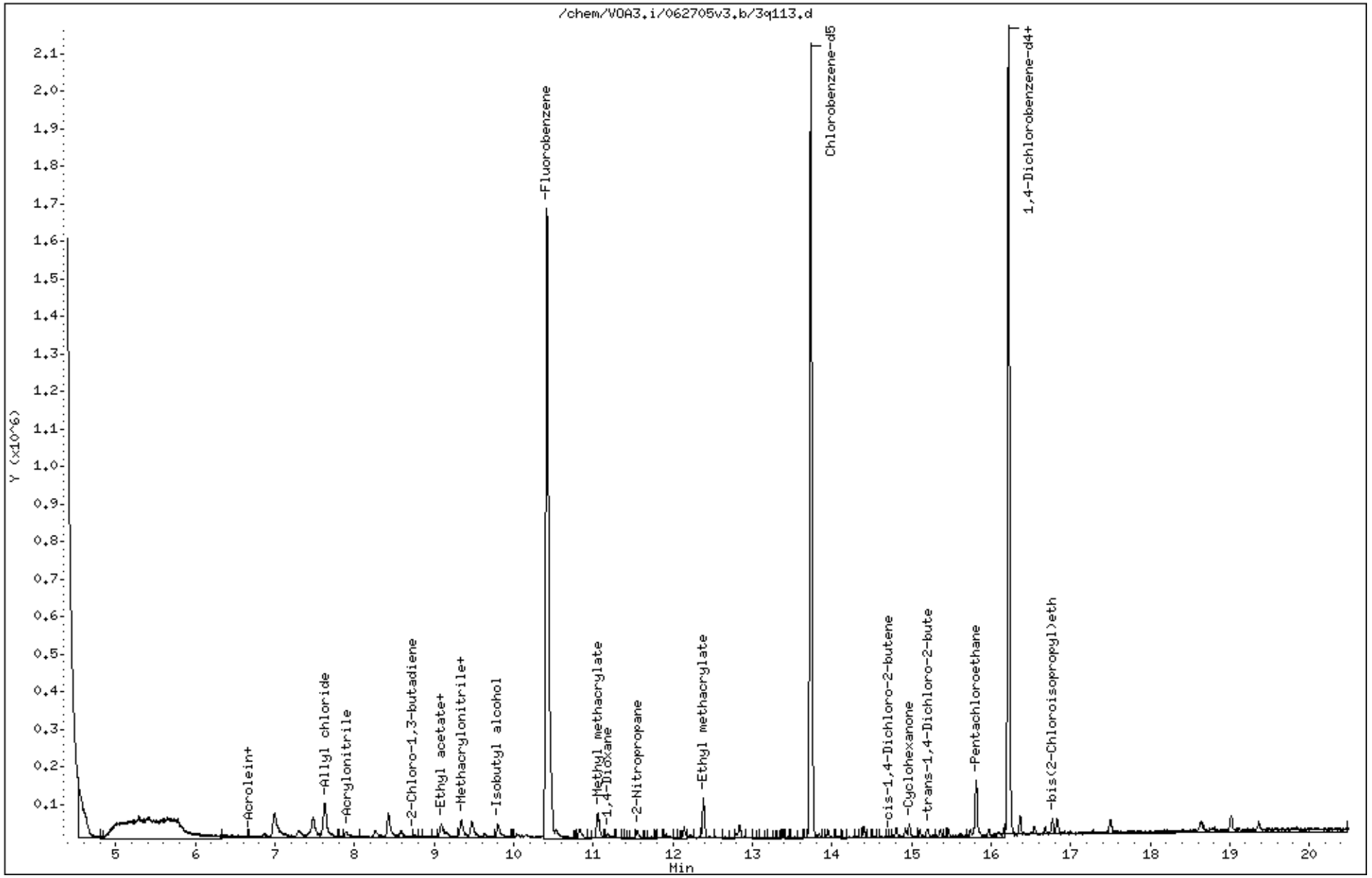
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.863	6.863	(0.659)	15868	5.00000	6.4(a)
12	Trichlorotrifluoroethane	85	6.999	6.999	(0.672)	29211	5.00000	5.9
16	Allyl chloride	76	7.483	7.483	(0.718)	36587	5.00000	5.4(Q)
18	Acrylonitrile	53	7.888	7.888	(0.757)	19512	5.00000	4.4(a)
24	2-Chloro-1,3-butadiene	53	8.594	8.594	(0.825)	15469	1.00000	0.98(a)
26	Ethyl acetate	43	9.097	9.097	(0.873)	75196	5.00000	5.5
28	Propionitrile	54	9.157	9.157	(0.879)	9122	5.00000	4.6(a)
27	Methacrylonitrile	41	9.347	9.347	(0.897)	63106	5.00000	5.2
72	Tetrahydrofuran	42	9.474	9.474	(0.584)	49381	5.00000	7.2
19	Isobutyl alcohol	41	9.809	9.809	(0.941)	40699	50.0000	80.2(Q)
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2135633	50.0000	
42	Methyl methacrylate	69	11.060	11.060	(1.061)	43995	5.00000	5.1
97	1,4-Dioxane	88	11.183	11.183	(1.073)	7809	50.0000	47.3(a)
48	2-Nitropropane	43	11.553	11.553	(1.109)	16000	5.00000	4.4(a)
51	Ethyl methacrylate	69	12.389	12.389	(0.902)	75235	5.00000	5.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	13.734	13.734	(1.000)	1317267	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.807	14.807	(0.913)	6791	5.00000	4.3(a)
70 Cyclohexanone	55	14.924	14.924	(1.087)	22859	25.0000	100
69 trans-1,4-Dichloro-2-butene	53	15.108	15.108	(0.931)	5071	5.00000	14.3
82 Pentachloroethane	167	15.820	15.820	(0.975)	28399	5.00000	4.5(a)
* 86 1,4-Dichlorobenzene-d4	152	16.222	16.222	(1.000)	616861	50.0000	
88 Benzyl chloride	91	16.367	16.367	(1.009)	45844	5.00000	14.2
91 bis(2-Chloroisopropyl)ether	45	16.773	16.773	(1.034)	31516	5.00000	5.0

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA3.i/062705v3.b/3q113.d
Date : 27-JUN-2005 15:52
Client ID: VSTD005S
Instrument: VOA3.i
Sample Info: |UVM050615-01A|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: PAM
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q114.d
Lab Smp Id: UVM050615-02A Client Smp ID: VSTD010S
Inj Date : 27-JUN-2005 16:19
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050615-02A|ICAL|1|VOAF|1||
Misc Info : VSTD010S 5uL N/A UVM050615-02B
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:29 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 16:19 Cal File: 3q114.d
Als bottle: 14 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.862	6.862	(0.659)	26147	10.0000	10.8
12	Trichlorotrifluoroethane	85	6.995	6.995	(0.671)	50707	10.0000	10.4
16	Allyl chloride	76	7.482	7.482	(0.718)	64932	10.0000	9.8
18	Acrylonitrile	53	7.894	7.894	(0.758)	43148	10.0000	10.0
24	2-Chloro-1,3-butadiene	53	8.587	8.587	(0.824)	31743	2.00000	2.0
26	Ethyl acetate	43	9.090	9.090	(0.872)	131624	10.0000	9.8
28	Propionitrile	54	9.157	9.157	(0.879)	19339	10.0000	10.0
27	Methacrylonitrile	41	9.343	9.343	(0.897)	132602	10.0000	11.1
72	Tetrahydrofuran	42	9.473	9.473	(0.584)	68054	10.0000	12.1
19	Isobutyl alcohol	41	9.802	9.802	(0.941)	52330	100.000	105
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2090896	50.0000	
42	Methyl methacrylate	69	11.059	11.059	(1.061)	83708	10.0000	10
97	1,4-Dioxane	88	11.179	11.179	(1.073)	16276	100.000	101
48	2-Nitropropane	43	11.553	11.553	(1.109)	33080	10.0000	9.2
51	Ethyl methacrylate	69	12.385	12.385	(0.902)	146569	10.0000	9.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	13.733	13.733	(1.000)	1285549	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.813	14.813	(0.913)	14167	10.0000	9.3
70 Cyclohexanone	55	14.927	14.927	(1.087)	28772	50.0000	106
69 trans-1,4-Dichloro-2-butene	53	15.104	15.104	(0.931)	10124	10.0000	17.7
82 Pentachloroethane	167	15.816	15.816	(0.975)	56899	10.0000	9.2
* 86 1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	604283	50.0000	
88 Benzyl chloride	91	16.370	16.370	(1.009)	91823	10.0000	17.4
91 bis(2-Chloroisopropyl)ether	45	16.772	16.772	(1.034)	62612	10.0000	10.2

Data File: /chem/VOA3.i/062705v3.b/3q114.d

Date : 27-JUN-2005 16:19

Client ID: VSTD010S

Instrument: VOA3.i

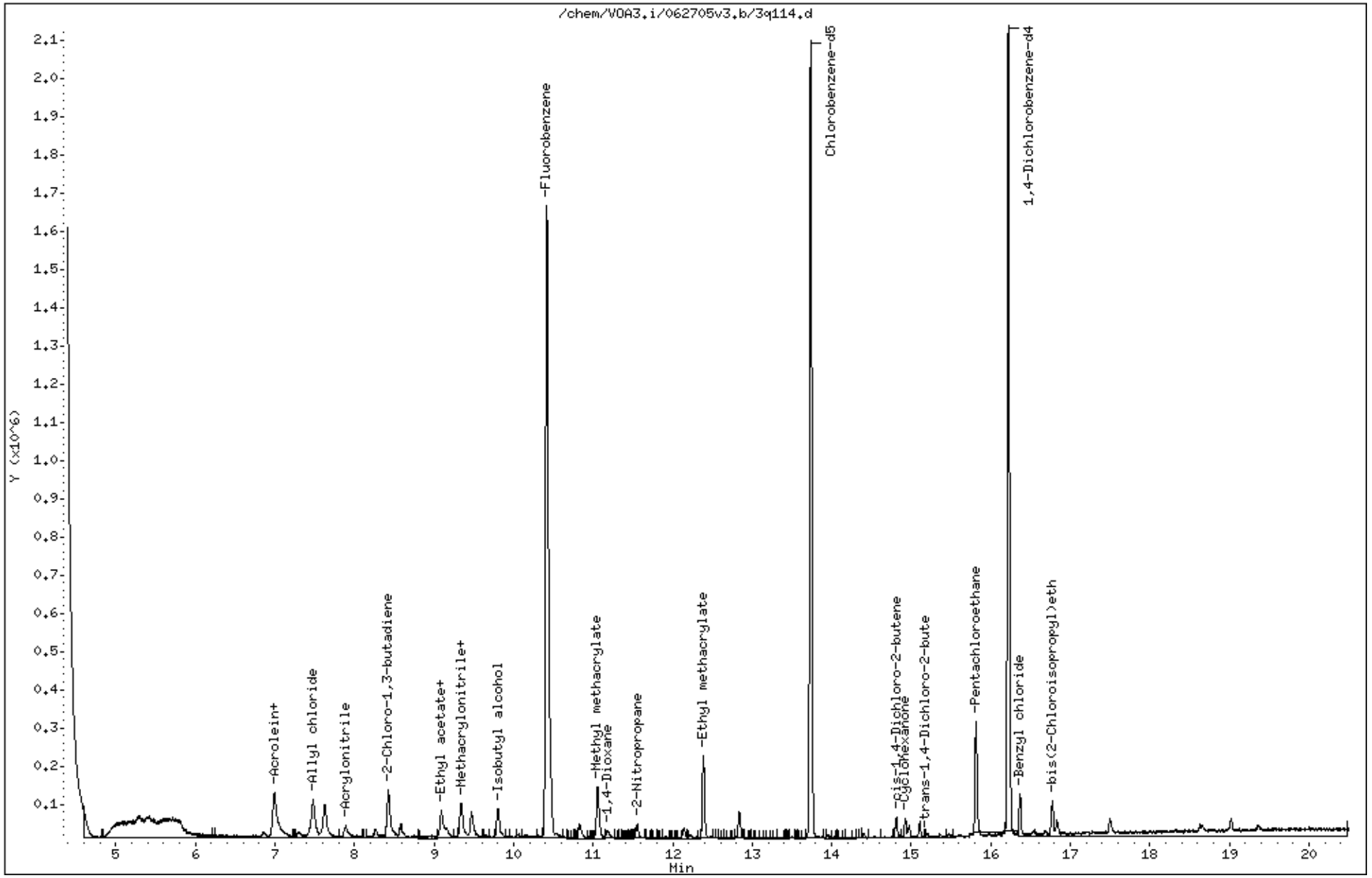
Sample Info: |UVM050615-02A|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: PAM

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q115.d
Lab Smp Id: UVM050615-03AICAL Client Smp ID: VSTD025S
Inj Date : 27-JUN-2005 16:47
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050615-03A|ICAL|1|VOAF|1||
Misc Info : VSTD025S 5uL N/A UVM050615-03B
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:29 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 16:47 Cal File: 3q115.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.865	6.865	(0.659)	55601	25.0000	23.0
12	Trichlorotrifluoroethane	85	7.001	7.001	(0.672)	124635	25.0000	25.8
16	Allyl chloride	76	7.482	7.482	(0.718)	159119	25.0000	24.2
18	Acrylonitrile	53	7.887	7.887	(0.757)	110149	25.0000	25.7
24	2-Chloro-1,3-butadiene	53	8.584	8.584	(0.824)	79977	5.00000	5.2
26	Ethyl acetate	43	9.093	9.093	(0.873)	331795	25.0000	25.0
28	Propionitrile	54	9.160	9.160	(0.879)	48755	25.0000	25.4
27	Methacrylonitrile	41	9.337	9.337	(0.896)	295801	25.0000	24.9
72	Tetrahydrofuran	42	9.473	9.473	(0.584)	128980	25.0000	26.9
19	Isobutyl alcohol	41	9.802	9.802	(0.941)	136944	250.000	273
* 40	Fluorobenzene	96	10.419	10.419	(1.000)	2079714	50.0000	
42	Methyl methacrylate	69	11.056	11.056	(1.061)	209058	25.0000	25.1
97	1,4-Dioxane	88	11.176	11.176	(1.073)	40597	250.000	253
48	2-Nitropropane	43	11.553	11.553	(1.109)	85417	25.0000	24.0
51	Ethyl methacrylate	69	12.388	12.388	(0.902)	374169	25.0000	25.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	13.736	13.736	(1.000)	1285160	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.813	14.813	(0.913)	34966	25.0000	22.5
70 Cyclohexanone	55	14.926	14.926	(1.087)	68245	125.000	140
69 trans-1,4-Dichloro-2-butene	53	15.107	15.107	(0.931)	26604	25.0000	28.5
82 Pentachloroethane	167	15.816	15.816	(0.975)	148947	25.0000	23.8
* 86 1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	613554	50.0000	
88 Benzyl chloride	91	16.367	16.367	(1.009)	249602	25.0000	27.9
91 bis(2-Chloroisopropyl)ether	45	16.772	16.772	(1.034)	157114	25.0000	25.1

Data File: /chem/VOA3.i/062705v3.b/3q115.d

Date : 27-JUN-2005 16:47

Client ID: VSTD025S

Instrument: VOA3.i

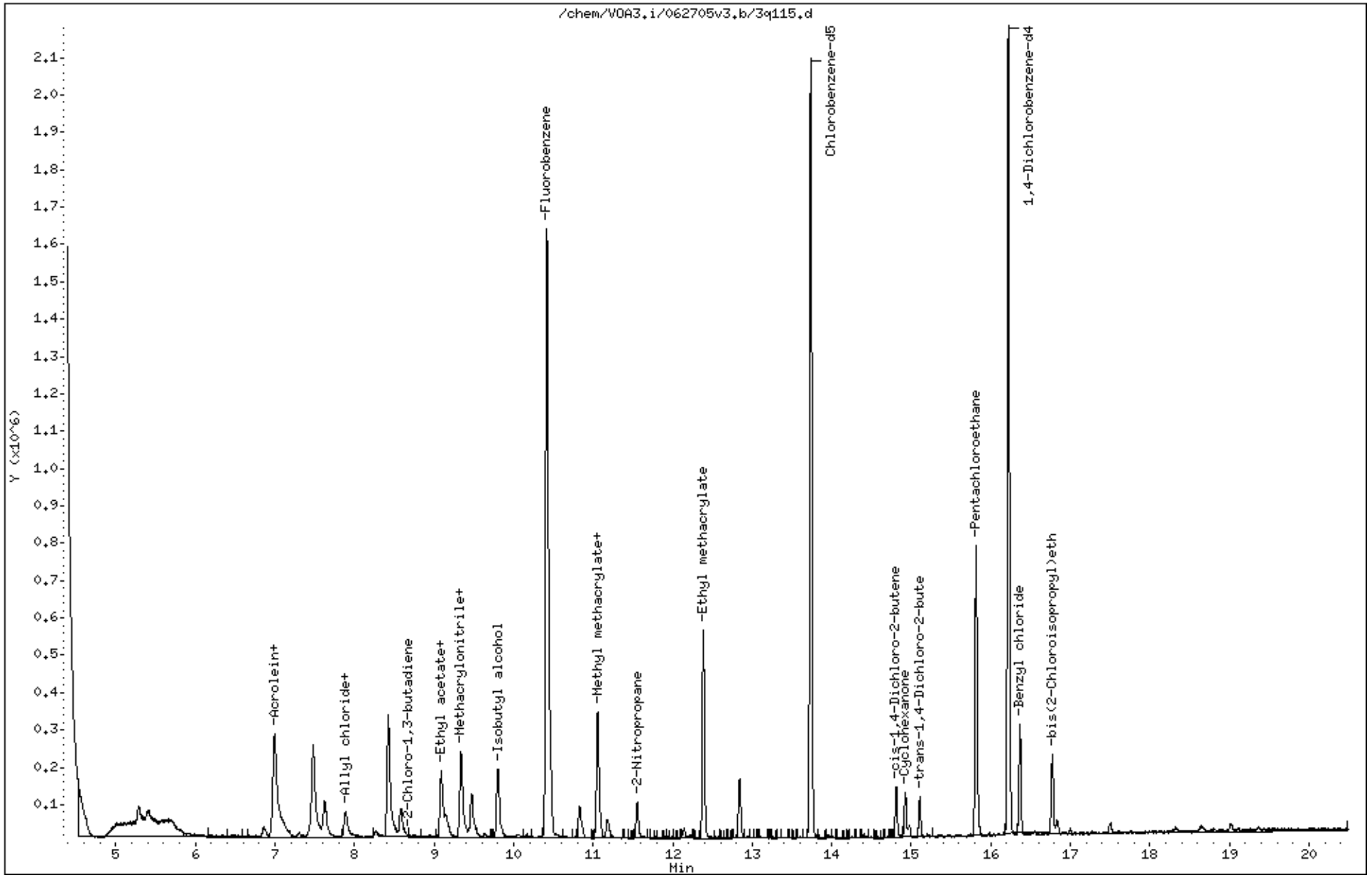
Sample Info: |UVM050615-03A|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: PAM

Column phase: DB-624

Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q116.d
Lab Smp Id: UVM050615-04A Client Smp ID: VSTD050S
Inj Date : 27-JUN-2005 17:14
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050615-04A|ICAL|1|VOAF|1||
Misc Info : VSTD050S 5uL N/A UVM050615-04B
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:29 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 17:14 Cal File: 3q116.d
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

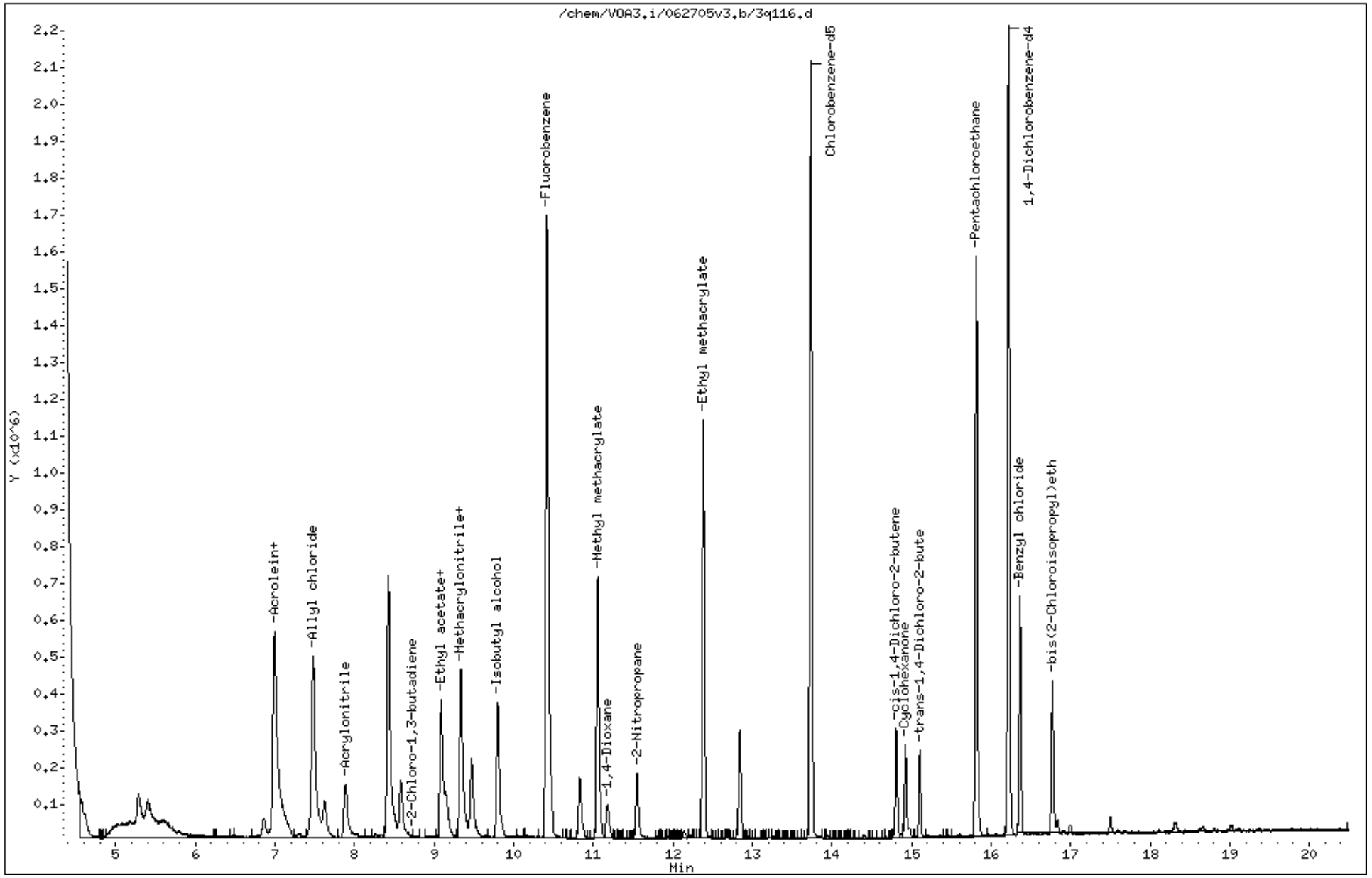
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.859	6.859	(0.658)	105984	50.0000	42.3
12	Trichlorotrifluoroethane	85	6.995	6.995	(0.671)	241661	50.0000	48.3
16	Allyl chloride	76	7.483	7.483	(0.718)	322225	50.0000	47.4
18	Acrylonitrile	53	7.885	7.885	(0.757)	221604	50.0000	49.8
24	2-Chloro-1,3-butadiene	53	8.581	8.581	(0.824)	156656	10.0000	9.8
26	Ethyl acetate	43	9.088	9.088	(0.872)	674149	50.0000	49.0
28	Propionitrile	54	9.157	9.157	(0.879)	97407	50.0000	48.9
27	Methacrylonitrile	41	9.338	9.338	(0.896)	599380	50.0000	48.7
72	Tetrahydrofuran	42	9.474	9.474	(0.584)	226687	50.0000	49.9
19	Isobutyl alcohol	41	9.803	9.803	(0.941)	253712	500.000	486
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2155735	50.0000	
42	Methyl methacrylate	69	11.056	11.056	(1.061)	420031	50.0000	48.6
97	1,4-Dioxane	88	11.183	11.183	(1.073)	79556	500.000	478
48	2-Nitropropane	43	11.550	11.550	(1.108)	182650	50.0000	49.4
51	Ethyl methacrylate	69	12.386	12.386	(0.902)	758330	50.0000	49.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	61 Chlorobenzene-d5	117	13.734	13.734	(1.000)	1329410	50.0000	
	68 cis-1,4-Dichloro-2-butene	53	14.813	14.813	(0.913)	77748	50.0000	49.0
	70 Cyclohexanone	55	14.924	14.924	(1.087)	130598	250.000	192
	69 trans-1,4-Dichloro-2-butene	53	15.107	15.107	(0.931)	58407	50.0000	48.7
	82 Pentachloroethane	167	15.816	15.816	(0.975)	320828	50.0000	50.1
*	86 1,4-Dichlorobenzene-d4	152	16.222	16.222	(1.000)	626390	50.0000	
	88 Benzyl chloride	91	16.367	16.367	(1.009)	543243	50.0000	47.0
	91 bis(2-Chloroisopropyl)ether	45	16.772	16.772	(1.034)	308149	50.0000	48.2

Data File: /chem/VOA3.i/062705v3.b/3q116.d
Date : 27-JUN-2005 17:14
Client ID: VSTD050S
Instrument: VOA3.i
Sample Info: |UVM050615-04A|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: PAM
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q117.d
Lab Smp Id: UVM050615-05A Client Smp ID: VSTD100S
Inj Date : 27-JUN-2005 17:42
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050615-05A|ICAL|1|VOAF|1||
Misc Info : VSTD100S 5uL N/A UVM050615-05B
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:29 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 17:42 Cal File: 3q117.d
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

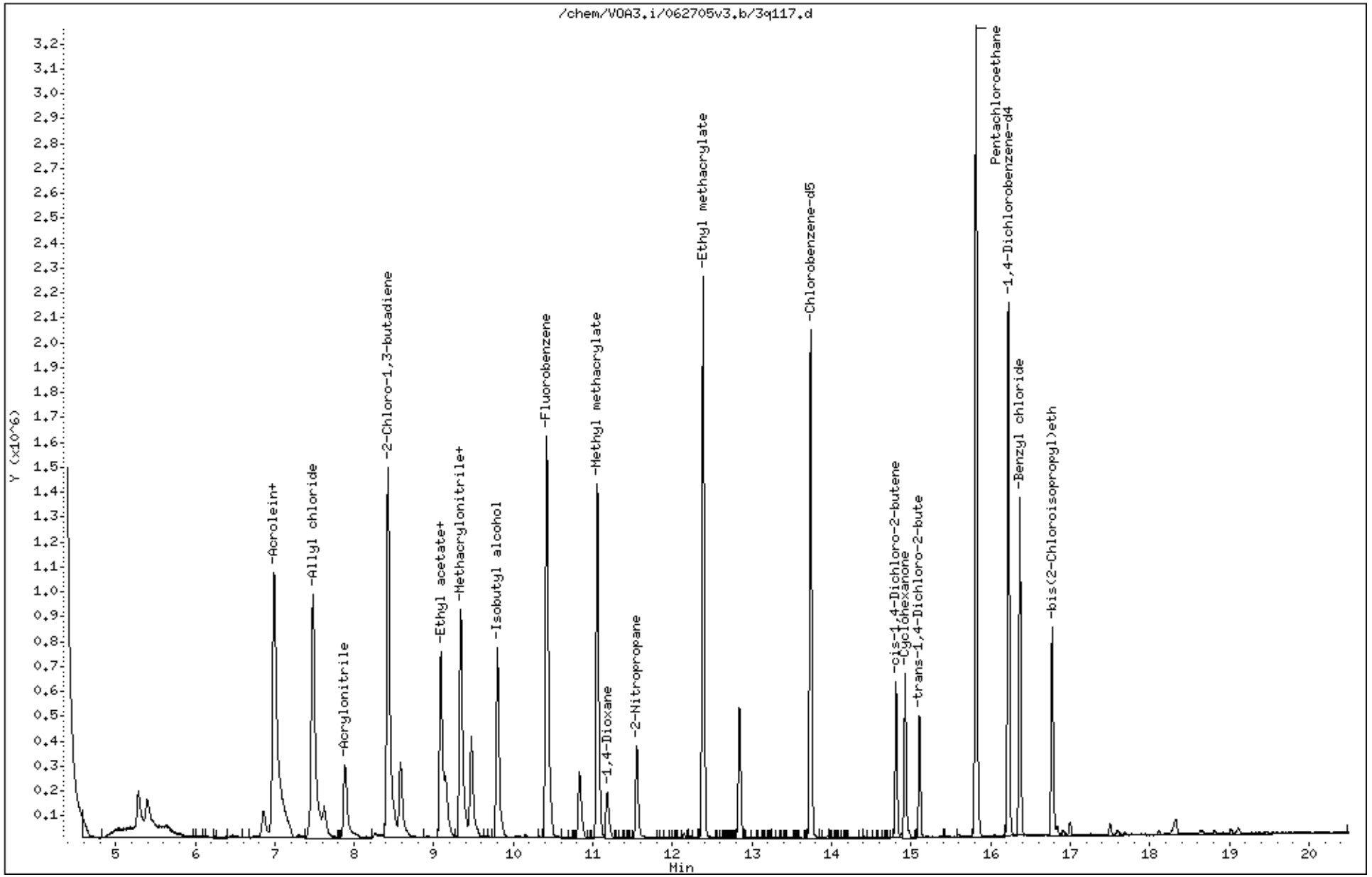
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.856	6.856	(0.658)	222270	100.000	91.6
12	Trichlorotrifluoroethane	85	6.992	6.992	(0.671)	466198	100.000	96.3
16	Allyl chloride	76	7.479	7.479	(0.718)	648963	100.000	98.5
18	Acrylonitrile	53	7.884	7.884	(0.757)	443936	100.000	103
24	2-Chloro-1,3-butadiene	53	8.581	8.581	(0.824)	312916	20.0000	20.2
26	Ethyl acetate	43	9.087	9.087	(0.872)	1319502	100.000	98.9
28	Propionitrile	54	9.154	9.154	(0.878)	196769	100.000	102
27	Methacrylonitrile	41	9.337	9.337	(0.896)	1153338	100.000	96.7
72	Tetrahydrofuran	42	9.470	9.470	(0.584)	431436	100.000	103
19	Isobutyl alcohol	41	9.799	9.799	(0.940)	511535	1000.00	1010
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2087809	50.0000	
42	Methyl methacrylate	69	11.053	11.053	(1.061)	844343	100.000	101
97	1,4-Dioxane	88	11.176	11.176	(1.073)	164812	1000.00	1020
48	2-Nitropropane	43	11.553	11.553	(1.109)	373230	100.000	104
51	Ethyl methacrylate	69	12.385	12.385	(0.902)	1499304	100.000	102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	61 Chlorobenzene-d5	117	13.737	13.737	(1.000)	1283752	50.0000	
	68 cis-1,4-Dichloro-2-butene	53	14.810	14.810	(0.913)	159117	100.000	104
	70 Cyclohexanone	55	14.923	14.923	(1.086)	297798	500.000	344
	69 trans-1,4-Dichloro-2-butene	53	15.107	15.107	(0.931)	120550	100.000	91.9
	82 Pentachloroethane	167	15.816	15.816	(0.975)	654571	100.000	106
*	86 1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	603378	50.0000	
	88 Benzyl chloride	91	16.367	16.367	(1.009)	1160380	100.000	90.8
	91 bis(2-Chloroisopropyl)ether	45	16.772	16.772	(1.034)	626593	100.000	102

Data File: /chem/VOA3.i/062705v3.b/3q117.d
Date : 27-JUN-2005 17:42
Client ID: VSTD100S
Instrument: VOA3.i
Sample Info: |UVM050615-05A|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: PAM
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q118.d
Lab Smp Id: UVM050615-06A Client Smp ID: VSTD250S
Inj Date : 27-JUN-2005 18:09
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050615-06A|ICAL|1|VOAF|1||
Misc Info : VSTD250S 5uL N/A UVM050615-06B
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:29 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 18:09 Cal File: 3q118.d
Als bottle: 18 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

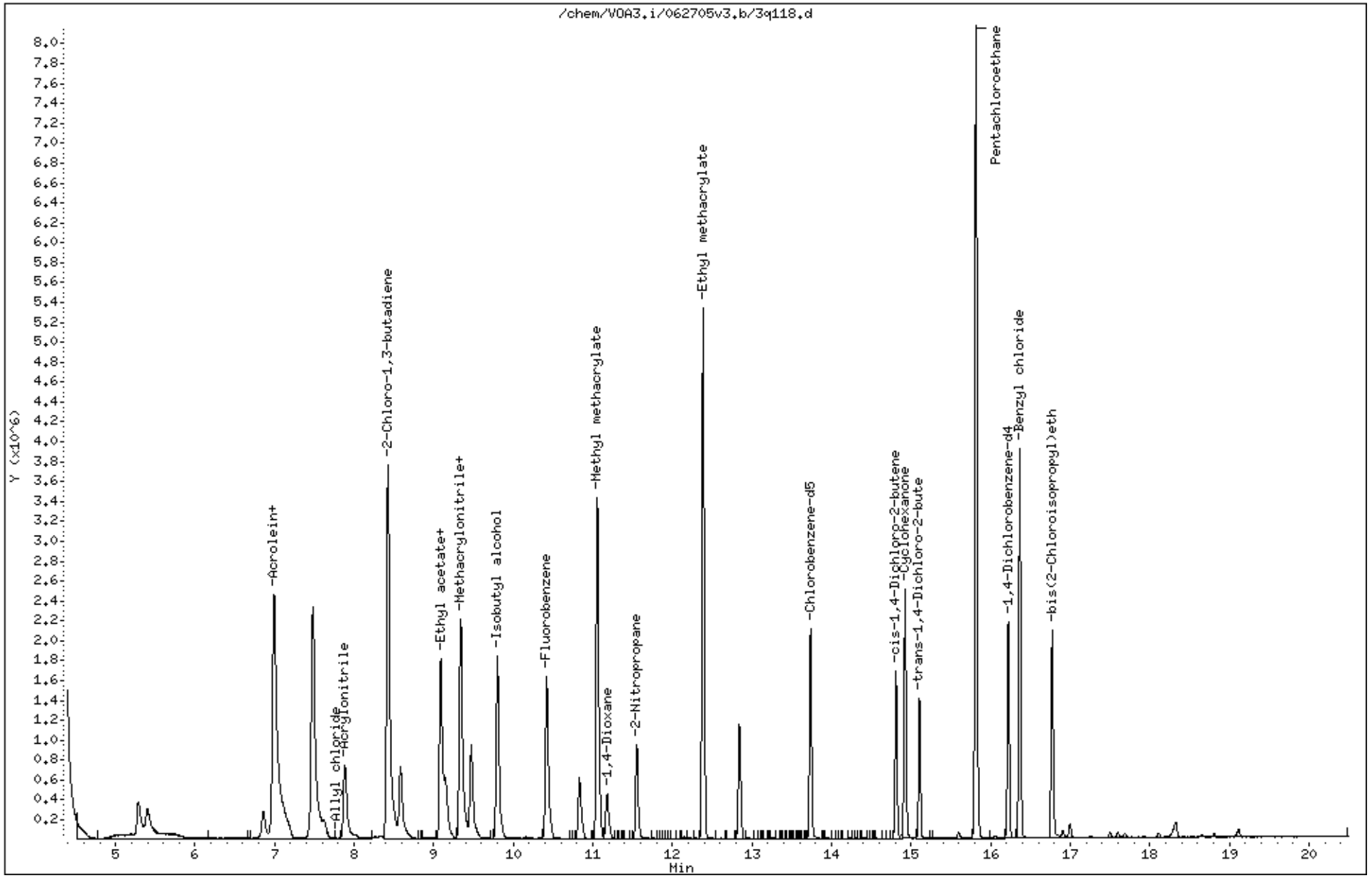
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.856	6.856	(0.658)	554641	250.000	228
12	Trichlorotrifluoroethane	85	6.992	6.992	(0.671)	1085479	250.000	223
16	Allyl chloride	76	7.483	7.483	(0.718)	1617275	250.000	244
18	Acrylonitrile	53	7.885	7.885	(0.757)	1089616	250.000	252
24	2-Chloro-1,3-butadiene	53	8.581	8.581	(0.824)	753861	50.0000	48.4
26	Ethyl acetate	43	9.088	9.088	(0.872)	3202953	250.000	239
28	Propionitrile	54	9.154	9.154	(0.878)	487669	250.000	252
27	Methacrylonitrile	41	9.341	9.341	(0.896)	2822041	250.000	236
72	Tetrahydrofuran	42	9.467	9.467	(0.584)	981642	250.000	234
19	Isobutyl alcohol	41	9.800	9.800	(0.940)	1221362	2500.00	2400
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2097700	50.0000	
42	Methyl methacrylate	69	11.056	11.056	(1.061)	2074511	250.000	247
97	1,4-Dioxane	88	11.180	11.180	(1.073)	411920	2500.00	2540
48	2-Nitropropane	43	11.553	11.553	(1.109)	952918	250.000	265
51	Ethyl methacrylate	69	12.382	12.382	(0.901)	3645905	250.000	244

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	13.737	13.737	(1.000)	1299682	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.807	14.807	(0.913)	429836	250.000	273
70 Cyclohexanone	55	14.924	14.924	(1.086)	1166670	1250.00	1100
69 trans-1,4-Dichloro-2-butene	53	15.104	15.104	(0.931)	333774	250.000	228
82 Pentachloroethane	167	15.816	15.816	(0.975)	1720102	250.000	271
* 86 1,4-Dichlorobenzene-d4	152	16.222	16.222	(1.000)	622115	50.0000	
88 Benzyl chloride	91	16.367	16.367	(1.009)	3348358	250.000	234
91 bis(2-Chloroisopropyl)ether	45	16.772	16.772	(1.034)	1533449	250.000	242

Data File: /chem/VOA3.i/062705v3.b/3q118.d
Date : 27-JUN-2005 18:09
Client ID: VSTD250S
Instrument: VOA3.i
Sample Info: |UVM050615-06A|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: PAM
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q119.d
Lab Smp Id: UVM0504615-07A Client Smp ID: VSTD500S
Inj Date : 27-JUN-2005 18:36
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM0504615-07A|ICAL|1|VOAF|1||
Misc Info : VSTD500S 5uL N/A UVM050615-07B
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 09:29 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 18:36 Cal File: 3q119.d
Als bottle: 19 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.853	6.853	(0.658)	1225256	500.000	526(A)
12	Trichlorotrifluoroethane	85	6.996	6.996	(0.671)	2131507	500.000	459
16	Allyl chloride	76	7.483	7.483	(0.718)	3318138	500.000	525(A)
18	Acrylonitrile	53	7.882	7.882	(0.756)	2174481	500.000	526(A)
24	2-Chloro-1,3-butadiene	53	8.585	8.585	(0.824)	1492271	100.000	100(A)
26	Ethyl acetate	43	9.088	9.088	(0.872)	6324568	500.000	494
28	Propionitrile	54	9.151	9.151	(0.878)	971486	500.000	525(A)
27	Methacrylonitrile	41	9.338	9.338	(0.896)	5586744	500.000	488
72	Tetrahydrofuran	42	9.471	9.471	(0.584)	1971032	500.000	506(A)
19	Isobutyl alcohol	41	9.800	9.800	(0.940)	2452224	5000.00	5040(A)
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2002668	50.0000	
42	Methyl methacrylate	69	11.056	11.056	(1.061)	4028738	500.000	502(A)
97	1,4-Dioxane	88	11.177	11.177	(1.073)	806187	5000.00	5210(A)
48	2-Nitropropane	43	11.553	11.553	(1.109)	1978649	500.000	576(A)
51	Ethyl methacrylate	69	12.386	12.386	(0.902)	7019369	500.000	506(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	13.737	13.737	(1.000)	1208868	50.0000	
68 cis-1,4-Dichloro-2-butene	53	14.810	14.810	(0.913)	877345	500.000	594(A)
70 Cyclohexanone	55	14.927	14.927	(1.087)	2645268	2500.00	2560
69 trans-1,4-Dichloro-2-butene	53	15.105	15.105	(0.931)	719712	500.000	510(A)
82 Pentachloroethane	167	15.817	15.817	(0.975)	3219801	500.000	540(A)
* 86 1,4-Dichlorobenzene-d4	152	16.222	16.222	(1.000)	583492	50.0000	
88 Benzyl chloride	91	16.364	16.364	(1.009)	7002024	500.000	508(A)
91 bis(2-Chloroisopropyl)ether	45	16.773	16.773	(1.034)	3064933	500.000	515(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA3.i/062705v3.b/3q119.d

Date : 27-JUN-2005 18:36

Client ID: VSTD500S

Instrument: VOA3.i

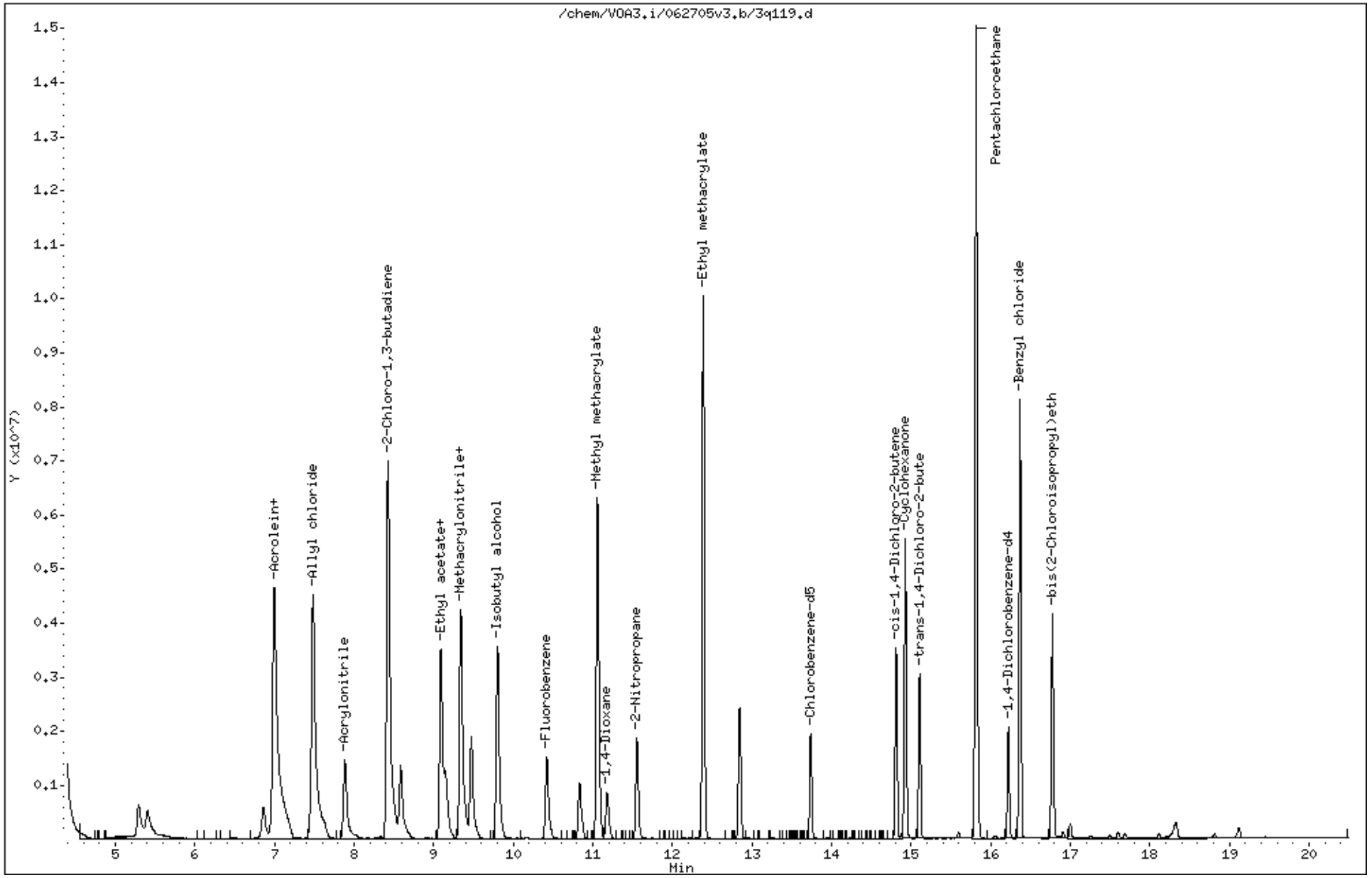
Sample Info: |UVM0504615-07A|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: PAM

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA3.i Injection Date: 27-JUN-2005 19:31
Lab File ID: 3q121.d Init. Cal. Date(s): 27-JUN-2005 27-JUN-2005
Analysis Type: WATER Init. Cal. Times: 11:18 18:36
Lab Sample ID: UVM050605-01C Quant Type: ISTD
Method: /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.72769	0.61946	0.61946	0.050	-14.87244	40.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.38701	0.32747	0.32747	0.050	-15.38448	40.00000	Averaged
3 Dichlorodifluoromethane	40.05127	50.00000	0.34735	0.050	-19.89746	40.00000	Linear
4 Chloromethane	0.45387	0.37724	0.37724	0.100	-16.88416	40.00000	Averaged|spcc
5 Vinyl chloride	0.37740	0.30784	0.30784	0.050	-18.43111	20.00000	Averaged|ccc
6 Bromomethane	0.41932	0.35986	0.35986	0.050	-14.17953	40.00000	Averaged
7 Chloroethane	0.24884	0.22533	0.22533	0.050	-9.44537	40.00000	Averaged
8 Trichlorofluoromethane	0.54864	0.47833	0.47833	0.050	-12.81487	40.00000	Averaged
134 Ethyl Ether	0.27086	0.21424	0.21424	0.010	-20.90447	40.00000	Averaged
10 Acetone	209	250	0.08297	0.050	-16.48892	40.00000	Linear
15 Acetonitrile	0.05345	0.04321	0.04321	0.010	-19.16067	40.00000	Averaged
11 1,1-Dichloroethylene	0.61204	0.50212	0.50212	0.050	-17.95875	20.00000	Averaged|ccc
128 Methyl acetate	247	250	0.25263	0.010	-1.37786	40.00000	Linear
13 Iodomethane	0.48305	0.38048	0.38048	0.050	-21.23508	40.00000	Averaged
17 Methylene chloride	42.05500	50.00000	0.35006	0.050	-15.89000	40.00000	Linear
14 Carbon disulfide	1.24285	0.89551	0.89551	0.050	-27.94724	40.00000	Averaged
20 tert-Butyl methyl ether	44.71851	50.00000	0.19336	0.050	-10.56298	40.00000	Linear
21 trans-1,2-Dichloroethylene	0.37647	0.31619	0.31619	0.050	-16.01005	40.00000	Averaged
23 Vinyl acetate	0.37137	0.27971	0.27971	0.010	-24.68000	40.00000	Averaged
22 1,1-Dichloroethane	0.61441	0.53906	0.53906	0.100	-12.26403	40.00000	Averaged|spcc
30 2-Butanone	0.13294	0.10581	0.10581	0.030	-20.41210	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.39756	0.33875	0.33875	0.050	-14.79210	40.00000	Averaged
25 2,2-Dichloropropane	45.23724	50.00000	0.13294	0.050	-9.52551	40.00000	Linear
32 Chloroform	0.63522	0.53773	0.53773	0.010	-15.34658	20.00000	Averaged|ccc
29 Bromochloromethane	0.15153	0.12821	0.12821	0.010	-15.39010	40.00000	Averaged
$ 35 Dibromofluoromethane	0.31741	0.27269	0.27269	0.010	-14.08907	40.00000	Averaged
36 1,1,1-Trichloroethane	0.44790	0.39837	0.39837	0.010	-11.05768	40.00000	Averaged
129 Cyclohexane	0.61071	0.46474	0.46474	0.010	-23.90157	40.00000	Averaged
34 1,1-Dichloropropene	0.45171	0.36600	0.36600	0.010	-18.97480	40.00000	Averaged
131 n-Butyl alcohol	0.01076	0.00895	0.00895	0.008	-16.83183	40.00000	Averaged
33 Carbon tetrachloride	0.29653	0.27814	0.27814	0.010	-6.20358	40.00000	Averaged
37 1,2-Dichloroethane	0.43658	0.37166	0.37166	0.010	-14.86989	40.00000	Averaged
38 Benzene	1.33794	1.12035	1.12035	0.010	-16.26300	40.00000	Averaged
39 Trichloroethylene	0.33473	0.28512	0.28512	0.010	-14.82278	40.00000	Averaged
41 1,2-Dichloropropane	0.30732	0.26892	0.26892	0.010	-12.49361	20.00000	Averaged|ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA3.i Injection Date: 27-JUN-2005 19:31
Lab File ID: 3q121.d Init. Cal. Date(s): 27-JUN-2005 27-JUN-2005
Analysis Type: WATER Init. Cal. Times: 11:18 18:36
Lab Sample ID: UVM050605-01C Quant Type: ISTD
Method: /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	130 Methylcyclohexane	0.56731	0.43166	0.43166	0.010	-23.91082	40.00000	Averaged	
	45 Bromodichloromethane	0.40576	0.35893	0.35893	0.010	-11.54249	40.00000	Averaged	
	43 Dibromomethane	0.16862	0.13136	0.13136	0.010	-22.09449	40.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.01903	0.01296	0.01296	0.010	-31.86655	40.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16567	0.13038	0.13038	0.010	-21.30137	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.30172	0.22786	0.22786	0.010	-24.47924	40.00000	Averaged	
$	47 Toluene-d8	1.60939	1.39407	1.39407	0.010	-13.37948	40.00000	Averaged	
	50 Toluene	1.11931	0.96955	0.96955	0.010	-13.37952	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.39214	0.30131	0.30131	0.010	-23.16412	40.00000	Averaged	
	54 1,1,2-Trichloroethane	0.36508	0.30875	0.30875	0.010	-15.42918	40.00000	Averaged	
	55 2-Hexanone	0.30985	0.23216	0.23216	0.010	-25.07386	40.00000	Averaged	
	52 1,3-Dichloropropane	0.61708	0.52230	0.52230	0.010	-15.35930	40.00000	Averaged	
	56 Tetrachloroethylene	0.34474	0.29138	0.29138	0.010	-15.47720	40.00000	Averaged	
	57 Dibromochloromethane	0.39386	0.37560	0.37560	0.010	-4.63535	40.00000	Averaged	
	59 1,2-Dibromoethane	45.17667	50.00000	0.20932	0.010	-9.64666	40.00000	Linear	
	62 Chlorobenzene	1.12544	0.98418	0.98418	0.300	-12.55210	40.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.37765	0.35130	0.35130	0.010	-6.97657	40.00000	Averaged	
	58 Ethylbenzene	1.93137	1.64213	1.64213	0.010	-14.97621	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.73204	0.62027	0.62027	0.010	-15.26809	40.00000	Averaged	
	64 o-Xylene	0.71898	0.61785	0.61785	0.010	-14.06677	40.00000	Averaged	
	65 Styrene	1.21987	1.03618	1.03618	0.010	-15.05865	40.00000	Averaged	
	66 Bromoform	0.44379	0.42862	0.42862	0.100	-3.41982	40.00000	Averaged	spcc
	67 Isopropylbenzene	3.68754	3.01981	3.01981	0.010	-18.10774	40.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	1.03791	0.87923	0.87923	0.300	-15.28780	40.00000	Averaged	spcc
$	71 Bromofluorobenzene	1.27050	1.02449	1.02449	0.010	-19.36310	40.00000	Averaged	
	74 1,2,3-Trichloropropane	0.28544	0.24050	0.24050	0.010	-15.74251	40.00000	Averaged	
	75 Bromobenzene	0.97338	0.84712	0.84712	0.010	-12.97162	40.00000	Averaged	
	76 n-Propylbenzene	4.75759	3.96182	3.96182	0.010	-16.72627	40.00000	Averaged	
	77 2-Chlorotoluene	3.18675	2.72883	2.72883	0.010	-14.36954	40.00000	Averaged	
	78 1,3,5-Trimethylbenzene	3.27775	2.73550	2.73550	0.010	-16.54332	40.00000	Averaged	
	80 4-Chlorotoluene	2.97976	2.45225	2.45225	0.010	-17.70324	40.00000	Averaged	
	81 tert-Butylbenzene	3.27246	2.83141	2.83141	0.010	-13.47740	40.00000	Averaged	
	79 1,2,4-Trimethylbenzene	3.31730	2.79341	2.79341	0.010	-15.79261	40.00000	Averaged	
	83 sec-Butylbenzene	4.22364	3.62211	3.62211	0.010	-14.24191	40.00000	Averaged	
	84 4-Isopropyltoluene	3.42091	2.91494	2.91494	0.010	-14.79056	40.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA3.i Injection Date: 27-JUN-2005 19:31
Lab File ID: 3q121.d Init. Cal. Date(s): 27-JUN-2005 27-JUN-2005
Analysis Type: WATER Init. Cal. Times: 11:18 18:36
Lab Sample ID: UVM050605-01C Quant Type: ISTD
Method: /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.82674	1.51234	1.51234	0.010	-17.21084	40.00000	Averaged
87 1,4-Dichlorobenzene	1.89670	1.50655	1.50655	0.010	-20.56970	40.00000	Averaged
89 n-Butylbenzene	3.34230	2.71532	2.71532	0.010	-18.75915	40.00000	Averaged
90 1,2-Dichlorobenzene	1.74530	1.46317	1.46317	0.010	-16.16533	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	43.96025	50.00000	0.15366	0.010	-12.07950	40.00000	Linear
93 1,2,4-Trichlorobenzene	41.37510	50.00000	0.95396	0.010	-17.24979	40.00000	Linear
94 Hexachlorobutadiene	0.66536	0.52873	0.52873	0.010	-20.53360	40.00000	Averaged
95 Naphthalene	3.34845	2.56685	2.56685	0.010	-23.34200	40.00000	Averaged
96 1,2,3-Trichlorobenzene	1.28625	1.03238	1.03238	0.010	-19.73746	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 16.14160
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/062705v3.b/3q121.d
Lab Smp Id: UVM050605-01C Client Smp ID: VSTD050
Inj Date : 27-JUN-2005 19:31
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050605-01C|LONGICV|1|VOAF|1||
Misc Info : O2SI N/A N/A VSTD050
Comment :
Method : /chem/VOA3.i/062705v3.b/VOA3-8260B-062705.m
Meth Date : 28-Jun-2005 14:44 eh1 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

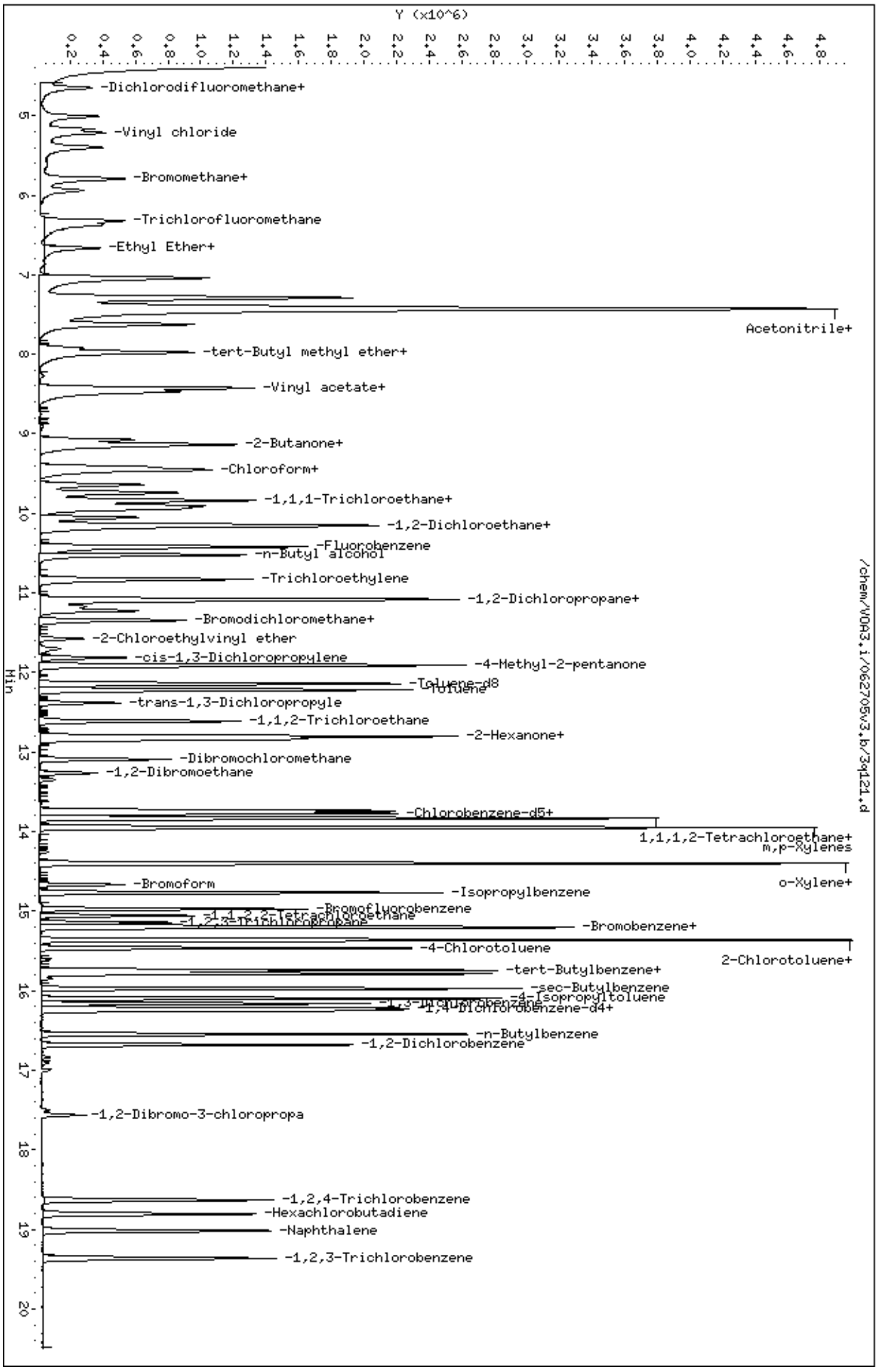
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1	Xylenes (total)	106				2442666	150.000	128
M 2	1,2-Dichloroethylene (total)	96				1412583	100.000	84.6
3	Dichlorodifluoromethane	85	4.650	4.650	(0.446)	749162	50.0000	40.0
4	Chloromethane	50	5.010	5.010	(0.481)	813632	50.0000	41.6
5	Vinyl chloride	62	5.216	5.216	(0.501)	663946	50.0000	40.8
6	Bromomethane	94	5.792	5.792	(0.556)	776141	50.0000	42.9
7	Chloroethane	64	5.941	5.941	(0.570)	485999	50.0000	45.3
8	Trichlorofluoromethane	101	6.321	6.321	(0.607)	1031662	50.0000	43.6
134	Ethyl Ether	59	6.666	6.666	(0.640)	462061	50.0000	39.5
10	Acetone	43	7.036	7.036	(0.675)	894794	250.000	209
15	Acetonitrile	41	7.394	7.394	(0.710)	2329847	1250.00	1010
11	1,1-Dichloroethylene	61	7.042	7.042	(0.676)	1082973	50.0000	41.0
128	Methyl acetate	43	7.435	7.435	(0.714)	2724380	250.000	246
13	Iodomethane	142	7.289	7.289	(0.700)	4103036	250.000	197
17	Methylene chloride	84	7.628	7.628	(0.732)	755012	50.0000	42.0

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	14	Carbon disulfide	76	7.429	7.429	(0.713)	9657136	250.000	180
	20	tert-Butyl methyl ether	73	7.922	7.922	(0.760)	417031	50.0000	44.7
	21	trans-1,2-Dichloroethylene	96	7.976	7.976	(0.765)	681966	50.0000	42.0
	23	Vinyl acetate	43	8.426	8.426	(0.809)	3016423	250.000	188
	22	1,1-Dichloroethane	63	8.476	8.476	(0.813)	1162637	50.0000	43.9
	30	2-Butanone	43	9.071	9.071	(0.871)	1141003	250.000	199
	31	cis-1,2-Dichloroethylene	96	9.131	9.131	(0.876)	730617	50.0000	42.6
	25	2,2-Dichloropropane	77	9.154	9.154	(0.878)	286730	50.0000	45.2
	32	Chloroform	83	9.454	9.454	(0.907)	1159780	50.0000	42.3
	29	Bromochloromethane	128	9.419	9.419	(0.904)	276524	50.0000	42.3
$	35	Dibromofluoromethane	113	9.638	9.638	(0.925)	588137	50.0000	43.0
	36	1,1,1-Trichloroethane	97	9.745	9.745	(0.935)	859212	50.0000	44.5
	129	Cyclohexane	56	9.840	9.840	(0.944)	1002351	50.0000	38.0
	34	1,1-Dichloropropene	75	9.904	9.904	(0.950)	789386	50.0000	40.5
	131	n-Butyl alcohol	56	10.524	10.524	(1.010)	965307	2500.00	2080
	33	Carbon tetrachloride	117	9.942	9.942	(0.954)	599881	50.0000	46.9
	37	1,2-Dichloroethane	62	10.135	10.135	(0.973)	801594	50.0000	42.6
	38	Benzene	78	10.157	10.157	(0.975)	2416359	50.0000	41.9
*	40	Fluorobenzene	96	10.420	10.420	(1.000)	2156795	50.0000	
	39	Trichloroethylene	95	10.828	10.828	(1.039)	614939	50.0000	42.6
	41	1,2-Dichloropropane	63	11.084	11.084	(1.064)	580014	50.0000	43.8
	130	Methylcyclohexane	83	11.084	11.084	(1.064)	931010	50.0000	38.0
	45	Bromodichloromethane	83	11.344	11.344	(1.089)	774136	50.0000	44.2
	43	Dibromomethane	93	11.227	11.227	(1.077)	283325	50.0000	39.0
	44	2-Chloroethylvinyl ether	63	11.578	11.578	(1.111)	139804	250.000	170
	49	4-Methyl-2-pentanone	58	11.910	11.910	(0.867)	856868	250.000	197
	46	cis-1,3-Dichloropropylene	75	11.815	11.815	(1.134)	491457	50.0000	37.8
$	47	Toluene-d8	98	12.145	12.145	(0.884)	1832362	50.0000	43.3
	50	Toluene	92	12.217	12.217	(0.889)	1274379	50.0000	43.3
	53	trans-1,3-Dichloropropylene	75	12.382	12.382	(0.901)	396038	50.0000	38.4
	54	1,1,2-Trichloroethane	83	12.610	12.610	(0.918)	405819	50.0000	42.3
	55	2-Hexanone	43	12.800	12.800	(0.932)	1525728	250.000	187
	52	1,3-Dichloropropane	76	12.812	12.812	(0.933)	686508	50.0000	42.3
	56	Tetrachloroethylene	164	12.841	12.841	(0.935)	382991	50.0000	42.3
	57	Dibromochloromethane	129	13.091	13.091	(0.953)	493692	50.0000	47.7
	59	1,2-Dibromoethane	107	13.265	13.265	(0.966)	275132	50.0000	45.2
*	61	Chlorobenzene-d5	117	13.737	13.737	(1.000)	1314401	50.0000	
	62	Chlorobenzene	112	13.768	13.768	(1.002)	1293601	50.0000	43.7
	60	1,1,1,2-Tetrachloroethane	131	13.825	13.825	(1.006)	461748	50.0000	46.5
	58	Ethylbenzene	91	13.835	13.835	(1.007)	2158413	50.0000	42.5
	63	m,p-Xylenes	106	13.949	13.949	(1.015)	1630569	100.000	84.7
	64	o-Xylene	106	14.398	14.398	(1.048)	812097	50.0000	43.0
	65	Styrene	104	14.398	14.398	(1.048)	1361951	50.0000	42.5
	66	Bromoform	173	14.667	14.667	(0.904)	261600	50.0000	48.3
	67	Isopropylbenzene	105	14.768	14.768	(0.910)	1843096	50.0000	40.9
	73	1,1,2,2-Tetrachloroethane	83	15.056	15.056	(0.928)	536627	50.0000	42.4
$	71	Bromofluorobenzene	95	14.971	14.971	(0.923)	625285	50.0000	40.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	15.145	15.145	(0.934)	146786	50.0000	42.1
75	Bromobenzene	156	15.186	15.186	(0.936)	517025	50.0000	43.5
76	n-Propylbenzene	91	15.205	15.205	(0.937)	2418037	50.0000	41.6
77	2-Chlorotoluene	91	15.360	15.360	(0.947)	1665498	50.0000	42.8
78	1,3,5-Trimethylbenzene	105	15.363	15.363	(0.947)	1669570	50.0000	41.7
80	4-Chlorotoluene	91	15.465	15.465	(0.953)	1496692	50.0000	41.1
81	tert-Butylbenzene	119	15.743	15.743	(0.971)	1728111	50.0000	43.3
79	1,2,4-Trimethylbenzene	105	15.784	15.784	(0.973)	1704915	50.0000	42.1
83	sec-Butylbenzene	105	15.974	15.974	(0.985)	2210702	50.0000	42.9
84	4-Isopropyltoluene	119	16.098	16.098	(0.992)	1779088	50.0000	42.6
85	1,3-Dichlorobenzene	146	16.161	16.161	(0.996)	923036	50.0000	41.4
* 86	1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	610335	50.0000	
87	1,4-Dichlorobenzene	146	16.250	16.250	(1.002)	919503	50.0000	39.7
89	n-Butylbenzene	91	16.547	16.547	(1.020)	1657252	50.0000	40.6
90	1,2-Dichlorobenzene	146	16.680	16.680	(1.028)	893021	50.0000	41.9
92	1,2-Dibromo-3-chloropropane	75	17.563	17.563	(1.083)	93782	50.0000	44.0
93	1,2,4-Trichlorobenzene	180	18.630	18.630	(1.148)	582236	50.0000	41.4
94	Hexachlorobutadiene	225	18.810	18.810	(1.160)	322705	50.0000	39.7
95	Naphthalene	128	19.016	19.016	(1.172)	1566641	50.0000	38.3
96	1,2,3-Trichlorobenzene	180	19.364	19.364	(1.194)	630096	50.0000	40.1



Data File: /chem/VOA3.i/062705v3.b/3q121.d
Date : 27-JUN-2005 19:31
Client ID: VSTD050
Sample Info: IUWM050605-01C|LONGICV|1|VOAF1|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 03-JUL-2005 11:51
Lab File ID: 1q703.d Init. Cal. Date(s): 21-JUN-2005 28-JUN-2005
Analysis Type: WATER Init. Cal. Times: 21:33 02:45
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA1.i/070305v1.b/VOA1-8260B-062705.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.75384	0.76130	0.76130	0.050	0.98926	40.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.23831	0.26425	0.26425	0.050	10.88420	40.00000	Averaged
M 135 1,3-Dichloropropylene	0.50113	0.48273	0.48273	0.050	-3.67349	40.00000	Averaged
3 Dichlorodifluoromethane	68.99530	50.00000	0.24065	0.050	37.99060	40.00000	Linear
4 Chloromethane	50.27881	50.00000	0.37878	0.100	0.55763	40.00000	Linear|spcc
5 Vinyl chloride	0.24478	0.28453	0.28453	0.050	16.23569	20.00000	Averaged|ccc
6 Bromomethane	55.60139	50.00000	0.13418	0.050	11.20278	40.00000	Linear
7 Chloroethane	0.12649	0.12951	0.12951	0.050	2.38907	40.00000	Averaged
8 Trichlorofluoromethane	46.26494	50.00000	0.14525	0.050	-7.47012	40.00000	Linear
134 Ethyl Ether	49.64015	50.00000	0.19746	0.010	-0.71971	40.00000	Linear
10 Acetone	268	250	0.06892	0.050	7.18481	40.00000	Linear
15 Acetonitrile	947	1250	0.02542	0.010	-24.20562	40.00000	Linear
11 1,1-Dichloroethylene	43.94821	50.00000	0.37524	0.050	-12.10359	20.00000	Linear|ccc
128 Methyl acetate	198	250	0.18590	0.010	-20.69178	40.00000	Linear
13 Iodomethane	259	250	0.30278	0.050	3.70420	40.00000	Linear
17 Methylene chloride	47.90284	50.00000	0.19839	0.050	-4.19431	40.00000	Linear
14 Carbon disulfide	0.51441	0.56924	0.56924	0.050	10.65796	40.00000	Averaged
20 tert-Butyl methyl ether	0.61449	0.58728	0.58728	0.050	-4.42907	40.00000	Averaged
21 trans-1,2-Dichloroethylene	0.20980	0.22973	0.22973	0.050	9.49974	40.00000	Averaged
23 Vinyl acetate	0.66366	0.48416	0.48416	0.010	-27.04761	40.00000	Averaged
22 1,1-Dichloroethane	0.48983	0.46330	0.46330	0.100	-5.41676	40.00000	Averaged|spcc
30 2-Butanone	177	250	0.13439	0.030	-29.03850	40.00000	Linear
31 cis-1,2-Dichloroethylene	0.26683	0.29877	0.29877	0.050	11.97279	40.00000	Averaged
25 2,2-Dichloropropane	0.31666	0.32213	0.32213	0.050	1.72648	40.00000	Averaged
32 Chloroform	0.42221	0.45332	0.45332	0.010	7.36743	20.00000	Averaged|ccc
29 Bromochloromethane	0.10991	0.12025	0.12025	0.010	9.40760	40.00000	Averaged
$ 35 Dibromofluoromethane	0.22622	0.24104	0.24104	0.010	6.55098	40.00000	Averaged
36 1,1,1-Trichloroethane	0.32284	0.35047	0.35047	0.010	8.56008	40.00000	Averaged
129 Cyclohexane	0.81930	0.65072	0.65072	0.010	-20.57706	40.00000	Averaged
34 1,1-Dichloropropene	0.35838	0.37498	0.37498	0.010	4.62936	40.00000	Averaged
131 n-Butyl alcohol	0.01092	0.00348	0.00348	0.001	-68.11337	40.00000	Averaged|<-
33 Carbon tetrachloride	0.24522	0.27037	0.27037	0.010	10.25913	40.00000	Averaged
37 1,2-Dichloroethane	0.41619	0.36512	0.36512	0.010	-12.27022	40.00000	Averaged
38 Benzene	1.08268	1.17046	1.17046	0.010	8.10731	40.00000	Averaged
39 Trichloroethylene	0.27503	0.28198	0.28198	0.010	2.52718	40.00000	Averaged
41 1,2-Dichloropropane	0.34067	0.30705	0.30705	0.010	-9.86972	20.00000	Averaged|ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 03-JUL-2005 11:51
Lab File ID: 1q703.d Init. Cal. Date(s): 21-JUN-2005 28-JUN-2005
Analysis Type: WATER Init. Cal. Times: 21:33 02:45
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA1.i/070305v1.b/VOA1-8260B-062705.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.53452	0.54586	0.54586	0.010	2.12109	40.00000	Averaged
45 Bromodichloromethane	0.29082	0.32612	0.32612	0.010	12.14031	40.00000	Averaged
43 Dibromomethane	0.14010	0.15009	0.15009	0.010	7.12969	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.13144	0.05649	0.05649	0.001	-57.01911	40.00000	Averaged<-
49 4-Methyl-2-pentanone	0.21774	0.16218	0.16218	0.010	-25.51509	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.36234	0.35956	0.35956	0.010	-0.76597	40.00000	Averaged
$ 47 Toluene-d8	1.45553	1.50508	1.50508	0.010	3.40459	40.00000	Averaged
50 Toluene	1.07222	1.08613	1.08613	0.010	1.29695	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.46413	0.43467	0.43467	0.010	-6.34667	40.00000	Averaged
54 1,1,2-Trichloroethane	0.24058	0.26220	0.26220	0.010	8.98857	40.00000	Averaged
55 2-Hexanone	0.40953	0.29570	0.29570	0.010	-27.79544	40.00000	Averaged
52 1,3-Dichloropropane	0.49577	0.51302	0.51302	0.010	3.47910	40.00000	Averaged
56 Tetrachloroethylene	0.29603	0.34113	0.34113	0.010	15.23372	40.00000	Averaged
57 Dibromochloromethane	0.24410	0.30791	0.30791	0.010	26.14067	40.00000	Averaged
59 1,2-Dibromoethane	0.27859	0.30506	0.30506	0.010	9.50341	40.00000	Averaged
62 Chlorobenzene	1.06237	1.07026	1.07026	0.300	0.74246	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.27205	0.30494	0.30494	0.010	12.08803	40.00000	Averaged
58 Ethylbenzene	1.98019	2.00704	2.00704	0.010	1.35569	20.00000	Averaged ccc
63 m,p-Xylenes	0.76694	0.77512	0.77512	0.010	1.06590	40.00000	Averaged
64 o-Xylene	0.72764	0.73366	0.73366	0.010	0.82770	40.00000	Averaged
65 Styrene	1.18609	1.24385	1.24385	0.010	4.87005	40.00000	Averaged
66 Bromoform	52.20531	50.00000	0.34434	0.100	4.41061	40.00000	Linear spcc
67 Isopropylbenzene	3.77628	3.59016	3.59016	0.010	-4.92869	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.77418	0.77812	0.77812	0.300	0.50931	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	1.11206	1.07306	1.07306	0.010	-3.50662	40.00000	Averaged
74 1,2,3-Trichloropropane	0.22562	0.21501	0.21501	0.010	-4.70166	40.00000	Averaged
75 Bromobenzene	0.85707	0.84148	0.84148	0.010	-1.81961	40.00000	Averaged
76 n-Propylbenzene	4.71008	4.49674	4.49674	0.010	-4.52930	40.00000	Averaged
77 2-Chlorotoluene	3.11074	2.97840	2.97840	0.010	-4.25452	40.00000	Averaged
78 1,3,5-Trimethylbenzene	3.29354	3.20179	3.20179	0.010	-2.78580	40.00000	Averaged
80 4-Chlorotoluene	2.86714	2.79001	2.79001	0.010	-2.69021	40.00000	Averaged
81 tert-Butylbenzene	3.22180	2.96061	2.96061	0.010	-8.10694	40.00000	Averaged
79 1,2,4-Trimethylbenzene	3.30849	3.12107	3.12107	0.010	-5.66476	40.00000	Averaged
83 sec-Butylbenzene	4.27759	4.19443	4.19443	0.010	-1.94409	40.00000	Averaged
84 4-Isopropyltoluene	3.43227	3.30306	3.30306	0.010	-3.76441	40.00000	Averaged

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 03-JUL-2005 11:51
Lab File ID: 1q703.d Init. Cal. Date(s): 21-JUN-2005 28-JUN-2005
Analysis Type: WATER Init. Cal. Times: 21:33 02:45
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA1.i/070305v1.b/VOA1-8260B-062705.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.63935	1.66772	1.66772	0.010	1.73036	40.00000	Averaged
87 1,4-Dichlorobenzene	1.64287	1.62889	1.62889	0.010	-0.85074	40.00000	Averaged
89 n-Butylbenzene	3.18130	3.11792	3.11792	0.010	-1.99242	40.00000	Averaged
90 1,2-Dichlorobenzene	1.47097	1.49199	1.49199	0.010	1.42929	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	41.75105	50.00000	0.11341	0.010	-16.49790	40.00000	Linear
93 1,2,4-Trichlorobenzene	0.99392	1.06330	1.06330	0.010	6.98057	40.00000	Averaged
94 Hexachlorobutadiene	0.64987	0.69306	0.69306	0.010	6.64487	40.00000	Averaged
95 Naphthalene	2.46985	2.21085	2.21085	0.010	-10.48661	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.97510	0.97719	0.97719	0.010	0.21447	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.50624
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070305v1.b/1q703.d
Lab Smp Id: UVM050605-01E Client Smp ID: VSTD050
Inj Date : 03-JUL-2005 11:51
Operator : PS Inst ID: VOA1.i
Smp Info : |UVM050605-01E|CCV/LCS|1|VOAF|1|
Misc Info : UVM050605-01E 5.0ML N/A
Comment :
Method : /chem/VOA1.i/070305v1.b/VOA1-8260B-062705.m
Meth Date : 06-Jul-2005 13:39 eh1 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

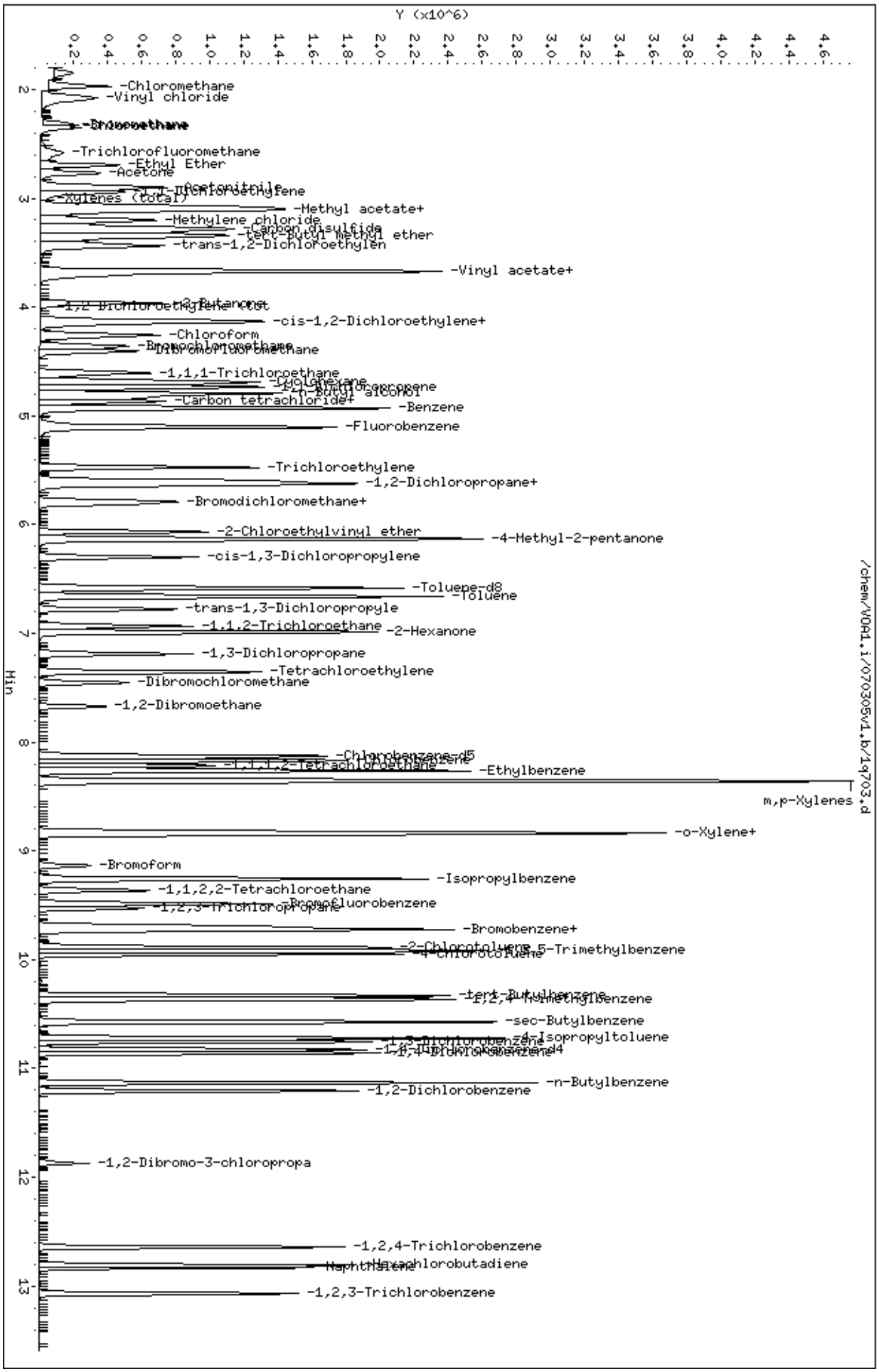
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2301038	150.000	151
M 2 1,2-Dichloroethylene (total)	96				786022	100.000	111
M 135 1,3-Dichloropropylene	75				972698	100.000	96.4
3 Dichlorodifluoromethane	85	1.852	1.852	(0.363)	357910	50.0000	69.0
4 Chloromethane	50	1.970	1.970	(0.386)	563346	50.0000	50.3
5 Vinyl chloride	62	2.071	2.071	(0.406)	423161	50.0000	58.1
6 Bromomethane	94	2.317	2.317	(0.454)	199562	50.0000	55.6
7 Chloroethane	64	2.354	2.354	(0.461)	192620	50.0000	51.2
8 Trichlorofluoromethane	101	2.584	2.584	(0.506)	216026	50.0000	46.3
134 Ethyl Ether	59	2.696	2.696	(0.528)	293677	50.0000	49.6
10 Acetone	43	2.771	2.771	(0.543)	512481	250.000	268
15 Acetonitrile	41	2.899	2.899	(0.568)	945051	1250.00	947
11 1,1-Dichloroethylene	61	2.942	2.942	(0.576)	558074	50.0000	43.9
128 Methyl acetate	43	3.075	3.075	(0.602)	1382398	250.000	198
13 Iodomethane	142	3.107	3.107	(0.609)	2251563	250.000	259

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	17 Methylene chloride	84	3.204	3.204	(0.627)	295057	50.0000	47.9
	14 Carbon disulfide	76	3.278	3.278	(0.642)	4232985	250.000	277
	20 tert-Butyl methyl ether	73	3.348	3.348	(0.656)	873431	50.0000	47.8
	21 trans-1,2-Dichloroethylene	96	3.439	3.439	(0.674)	341671	50.0000	54.7
	23 Vinyl acetate	43	3.668	3.668	(0.719)	3600305	250.000	182
	22 1,1-Dichloroethane	63	3.700	3.700	(0.725)	689046	50.0000	47.3
	30 2-Butanone	43	3.968	3.968	(0.777)	999393	250.000	177
	31 cis-1,2-Dichloroethylene	96	4.133	4.133	(0.810)	444351	50.0000	56.0
	25 2,2-Dichloropropane	77	4.128	4.128	(0.808)	479088	50.0000	50.9
	32 Chloroform	83	4.256	4.256	(0.834)	674202	50.0000	53.7
	29 Bromochloromethane	128	4.358	4.358	(0.854)	178835	50.0000	54.7
$	35 Dibromofluoromethane	113	4.406	4.406	(0.863)	358487	50.0000	53.3
	36 1,1,1-Trichloroethane	97	4.603	4.603	(0.902)	521238	50.0000	54.3
	129 Cyclohexane	56	4.694	4.694	(0.919)	967779	50.0000	39.7
	34 1,1-Dichloropropene	75	4.737	4.737	(0.928)	557684	50.0000	52.3
	131 n-Butyl alcohol	56	4.796	4.796	(0.939)	517749	5000.00	1590
	33 Carbon tetrachloride	117	4.833	4.833	(0.947)	402113	50.0000	55.1
	37 1,2-Dichloroethane	62	4.870	4.870	(0.954)	543030	50.0000	43.9
	38 Benzene	78	4.929	4.929	(0.965)	1740770	50.0000	54.0
*	40 Fluorobenzene	96	5.105	5.105	(1.000)	1487253	50.0000	
	39 Trichloroethylene	95	5.474	5.474	(1.072)	419371	50.0000	51.3
	41 1,2-Dichloropropane	63	5.592	5.592	(1.095)	456661	50.0000	45.1
	130 Methylcyclohexane	83	5.629	5.629	(1.103)	811834	50.0000	51.1
	45 Bromodichloromethane	83	5.784	5.784	(1.133)	485025	50.0000	56.1
	43 Dibromomethane	93	5.811	5.811	(1.138)	223219	50.0000	53.6
	44 2-Chloroethylvinyl ether	63	6.067	6.067	(1.188)	420101	250.000	107
	49 4-Methyl-2-pentanone	58	6.131	6.131	(0.754)	817002	250.000	186
	46 cis-1,3-Dichloropropylene	75	6.302	6.302	(1.234)	534764	50.0000	49.6
$	47 Toluene-d8	98	6.585	6.585	(0.810)	1516381	50.0000	51.7
	50 Toluene	92	6.660	6.660	(0.819)	1094283	50.0000	50.6
	53 trans-1,3-Dichloropropylene	75	6.778	6.778	(0.834)	437934	50.0000	46.8
	54 1,1,2-Trichloroethane	83	6.932	6.932	(0.853)	264169	50.0000	54.5
	55 2-Hexanone	43	6.986	6.986	(0.859)	1489582	250.000	180
	52 1,3-Dichloropropane	76	7.189	7.189	(0.884)	516870	50.0000	51.7
	56 Tetrachloroethylene	164	7.354	7.354	(0.905)	343688	50.0000	57.6
	57 Dibromochloromethane	129	7.451	7.451	(0.917)	310226	50.0000	63.1
	59 1,2-Dibromoethane	107	7.675	7.675	(0.944)	307351	50.0000	54.8
*	61 Chlorobenzene-d5	117	8.129	8.129	(1.000)	1007506	50.0000	
	62 Chlorobenzene	112	8.166	8.166	(1.005)	1078290	50.0000	50.4
	60 1,1,1,2-Tetrachloroethane	131	8.215	8.215	(1.010)	307229	50.0000	56.0
	58 Ethylbenzene	91	8.263	8.263	(1.016)	2022102	50.0000	50.7
	63 m,p-Xylenes	106	8.359	8.359	(1.028)	1561873	100.000	101
	64 o-Xylene	106	8.829	8.829	(1.086)	739165	50.0000	50.4
	65 Styrene	104	8.845	8.845	(1.088)	1253186	50.0000	52.4
	66 Bromoform	173	9.139	9.139	(0.844)	170613	50.0000	52.2
	67 Isopropylbenzene	105	9.256	9.256	(0.855)	1778870	50.0000	47.5
	73 1,1,2,2-Tetrachloroethane	83	9.363	9.363	(0.865)	385547	50.0000	50.2

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
$	71	Bromofluorobenzene	95	9.486	9.486	(0.876)	531687	50.0000	48.2
	74	1,2,3-Trichloropropane	110	9.529	9.529	(0.880)	106536	50.0000	47.6
	75	Bromobenzene	156	9.694	9.694	(0.895)	416940	50.0000	49.1
	76	n-Propylbenzene	91	9.726	9.726	(0.898)	2228069	50.0000	47.7
	77	2-Chlorotoluene	91	9.887	9.887	(0.913)	1475751	50.0000	47.9
	78	1,3,5-Trimethylbenzene	105	9.919	9.919	(0.916)	1586437	50.0000	48.6
	80	4-Chlorotoluene	91	9.951	9.951	(0.919)	1382406	50.0000	48.6
	81	tert-Butylbenzene	119	10.330	10.330	(0.954)	1466938	50.0000	45.9
	79	1,2,4-Trimethylbenzene	105	10.367	10.367	(0.958)	1546445	50.0000	47.2
	83	sec-Butylbenzene	105	10.570	10.570	(0.976)	2078277	50.0000	49.0
	84	4-Isopropyltoluene	119	10.725	10.725	(0.991)	1636617	50.0000	48.1
	85	1,3-Dichlorobenzene	146	10.757	10.757	(0.994)	826330	50.0000	50.9
*	86	1,4-Dichlorobenzene-d4	152	10.827	10.827	(1.000)	495485	50.0000	
	87	1,4-Dichlorobenzene	146	10.859	10.859	(1.003)	807093	50.0000	49.6
	89	n-Butylbenzene	91	11.131	11.131	(1.028)	1544881	50.0000	49.0
	90	1,2-Dichlorobenzene	146	11.206	11.206	(1.035)	739259	50.0000	50.7
	92	1,2-Dibromo-3-chloropropane	75	11.874	11.874	(1.097)	56195	50.0000	41.8
	93	1,2,4-Trichlorobenzene	180	12.643	12.643	(1.168)	526849	50.0000	53.5
	94	Hexachlorobutadiene	225	12.809	12.809	(1.183)	343400	50.0000	53.3
	95	Naphthalene	128	12.830	12.830	(1.185)	1095442	50.0000	44.8
	96	1,2,3-Trichlorobenzene	180	13.071	13.071	(1.207)	484182	50.0000	50.1



Data File: /chem/VOA1.i/070305v1.b/1q703.d
Date : 03-JUL-2005 11:51
Client ID: VSTD050
Sample Info: IUWM050605-01EICCV/LCS1I1VOAF1I1
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PS
Column diameter: 0.25

Page 1

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 06-JUL-2005 07:52
Lab File ID: 1r302FL.d Init. Cal. Date(s): 21-JUN-2005 28-JUN-2005
Analysis Type: Init. Cal. Times: 21:33 02:45
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.75384	0.69068	0.69068	0.050	-8.37876	40.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.23831	0.21295	0.21295	0.050	-10.64521	40.00000	Averaged
M 135 1,3-Dichloropropylene	0.50113	0.44045	0.44045	0.050	-12.11009	40.00000	Averaged
3 Dichlorodifluoromethane	67.36884	50.00000	0.23495	0.050	34.73768	40.00000	Linear
4 Chloromethane	49.31703	50.00000	0.37164	0.100	-1.36594	40.00000	Linear|spcc
5 Vinyl chloride	0.24478	0.27545	0.27545	0.050	12.52659	20.00000	Averaged|ccc
6 Bromomethane	50.45641	50.00000	0.12205	0.050	0.91283	40.00000	Linear
7 Chloroethane	0.12649	0.12143	0.12143	0.050	-4.00430	40.00000	Averaged
8 Trichlorofluoromethane	47.95863	50.00000	0.15068	0.050	-4.08275	40.00000	Linear
134 Ethyl Ether	34.80852	50.00000	0.14035	0.010	-30.38295	40.00000	Linear
10 Acetone	164	250	0.04343	0.050	-34.32014	40.00000	Linear|<-
15 Acetonitrile	821	1250	0.02193	0.010	-34.34233	40.00000	Linear
11 1,1-Dichloroethylene	42.14133	50.00000	0.35943	0.050	-15.71735	20.00000	Linear|ccc
128 Methyl acetate	185	250	0.17283	0.010	-26.11152	40.00000	Linear
13 Iodomethane	253	250	0.29528	0.050	1.18159	40.00000	Linear
17 Methylene chloride	47.03926	50.00000	0.19492	0.050	-5.92149	40.00000	Linear
14 Carbon disulfide	0.51441	0.54948	0.54948	0.050	6.81775	40.00000	Averaged
20 tert-Butyl methyl ether	0.61449	0.54458	0.54458	0.050	-11.37740	40.00000	Averaged
21 trans-1,2-Dichloroethylene	0.20980	0.19926	0.19926	0.050	-5.02344	40.00000	Averaged
23 Vinyl acetate	0.66366	0.37454	0.37454	0.010	-43.56431	40.00000	Averaged|<-
22 1,1-Dichloroethane	0.48983	0.41873	0.41873	0.100	-14.51643	40.00000	Averaged|spcc
30 2-Butanone	130	250	0.09768	0.030	-47.82413	40.00000	Linear|<-
31 cis-1,2-Dichloroethylene	0.26683	0.22663	0.22663	0.050	-15.06553	40.00000	Averaged
25 2,2-Dichloropropane	0.31666	0.28500	0.28500	0.050	-9.99781	40.00000	Averaged
32 Chloroform	0.42221	0.37960	0.37960	0.010	-10.09322	20.00000	Averaged|ccc
29 Bromochloromethane	0.10991	0.09941	0.09941	0.010	-9.55390	40.00000	Averaged
$ 35 Dibromofluoromethane	0.22622	0.22077	0.22077	0.010	-2.40998	40.00000	Averaged
36 1,1,1-Trichloroethane	0.32284	0.31548	0.31548	0.010	-2.27779	40.00000	Averaged
129 Cyclohexane	0.81930	0.58287	0.58287	0.010	-28.85775	40.00000	Averaged
34 1,1-Dichloropropene	0.35838	0.33530	0.33530	0.010	-6.44247	40.00000	Averaged
131 n-Butyl alcohol	0.01092	0.00323	0.00323	0.001	-70.42303	40.00000	Averaged|<-
33 Carbon tetrachloride	0.24522	0.25454	0.25454	0.010	3.80379	40.00000	Averaged
37 1,2-Dichloroethane	0.41619	0.33780	0.33780	0.010	-18.83614	40.00000	Averaged
38 Benzene	1.08268	1.08216	1.08216	0.010	-0.04843	40.00000	Averaged
39 Trichloroethylene	0.27503	0.25209	0.25209	0.010	-8.33995	40.00000	Averaged
41 1,2-Dichloropropane	0.34067	0.27602	0.27602	0.010	-18.97937	20.00000	Averaged|ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 06-JUL-2005 07:52
Lab File ID: 1r302FL.d Init. Cal. Date(s): 21-JUN-2005 28-JUN-2005
Analysis Type: Init. Cal. Times: 21:33 02:45
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.53452	0.49415	0.49415	0.010	-7.55312	40.00000	Averaged	
45 Bromodichloromethane	0.29082	0.29029	0.29029	0.010	-0.18206	40.00000	Averaged	
43 Dibromomethane	0.14010	0.13054	0.13054	0.010	-6.81984	40.00000	Averaged	
44 2-Chloroethylvinyl ether	0.13144	0.01074	0.01074	0.001	-91.82846	40.00000	Averaged	<-
49 4-Methyl-2-pentanone	0.21774	0.13510	0.13510	0.010	-37.95513	40.00000	Averaged	
46 cis-1,3-Dichloropropylene	0.36234	0.33178	0.33178	0.010	-8.43486	40.00000	Averaged	
$ 47 Toluene-d8	1.45553	1.47257	1.47257	0.010	1.17048	40.00000	Averaged	
50 Toluene	1.07222	0.97032	0.97032	0.010	-9.50371	20.00000	Averaged	ccc
53 trans-1,3-Dichloropropylene	0.46413	0.39676	0.39676	0.010	-14.51489	40.00000	Averaged	
54 1,1,2-Trichloroethane	0.24058	0.23457	0.23457	0.010	-2.49545	40.00000	Averaged	
55 2-Hexanone	0.40953	0.23917	0.23917	0.010	-41.59788	40.00000	Averaged	<-
52 1,3-Dichloropropane	0.49577	0.45832	0.45832	0.010	-7.55417	40.00000	Averaged	
56 Tetrachloroethylene	0.29603	0.30922	0.30922	0.010	4.45643	40.00000	Averaged	
57 Dibromochloromethane	0.24410	0.26810	0.26810	0.010	9.83077	40.00000	Averaged	
59 1,2-Dibromoethane	0.27859	0.26187	0.26187	0.010	-6.00160	40.00000	Averaged	
62 Chlorobenzene	1.06237	0.97004	0.97004	0.300	-8.69083	40.00000	Averaged	spcc
60 1,1,1,2-Tetrachloroethane	0.27205	0.28372	0.28372	0.010	4.28927	40.00000	Averaged	
58 Ethylbenzene	1.98019	1.79148	1.79148	0.010	-9.52983	20.00000	Averaged	ccc
63 m,p-Xylenes	0.76694	0.70344	0.70344	0.010	-8.28045	40.00000	Averaged	
64 o-Xylene	0.72764	0.66516	0.66516	0.010	-8.58600	40.00000	Averaged	
65 Styrene	1.18609	1.11037	1.11037	0.010	-6.38381	40.00000	Averaged	
66 Bromoform	48.30413	50.00000	0.31727	0.100	-3.39173	40.00000	Linear	spcc
67 Isopropylbenzene	3.77628	3.42620	3.42620	0.010	-9.27057	40.00000	Averaged	
73 1,1,2,2-Tetrachloroethane	0.77418	0.69511	0.69511	0.300	-10.21363	40.00000	Averaged	spcc
$ 71 Bromofluorobenzene	1.11206	1.12215	1.12215	0.010	0.90725	40.00000	Averaged	
74 1,2,3-Trichloropropane	0.22562	0.18827	0.18827	0.010	-16.55672	40.00000	Averaged	
75 Bromobenzene	0.85707	0.80038	0.80038	0.010	-6.61524	40.00000	Averaged	
76 n-Propylbenzene	4.71008	4.33221	4.33221	0.010	-8.02247	40.00000	Averaged	
77 2-Chlorotoluene	3.11074	2.79647	2.79647	0.010	-10.10270	40.00000	Averaged	
78 1,3,5-Trimethylbenzene	3.29354	2.99575	2.99575	0.010	-9.04159	40.00000	Averaged	
80 4-Chlorotoluene	2.86714	2.66179	2.66179	0.010	-7.16225	40.00000	Averaged	
81 tert-Butylbenzene	3.22180	2.82127	2.82127	0.010	-12.43178	40.00000	Averaged	
79 1,2,4-Trimethylbenzene	3.30849	2.96080	2.96080	0.010	-10.50910	40.00000	Averaged	
83 sec-Butylbenzene	4.27759	3.88088	3.88088	0.010	-9.27418	40.00000	Averaged	
84 4-Isopropyltoluene	3.43227	3.08583	3.08583	0.010	-10.09351	40.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 06-JUL-2005 07:52
Lab File ID: 1r302FL.d Init. Cal. Date(s): 21-JUN-2005 28-JUN-2005
Analysis Type: Init. Cal. Times: 21:33 02:45
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.63935	1.53273	1.53273	0.010	-6.50400	40.00000	Averaged
87 1,4-Dichlorobenzene	1.64287	1.52231	1.52231	0.010	-7.33849	40.00000	Averaged
89 n-Butylbenzene	3.18130	2.88231	2.88231	0.010	-9.39827	40.00000	Averaged
90 1,2-Dichlorobenzene	1.47097	1.38457	1.38457	0.010	-5.87334	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	35.01982	50.00000	0.09423	0.010	-29.96035	40.00000	Linear
93 1,2,4-Trichlorobenzene	0.99392	0.94277	0.94277	0.010	-5.14640	40.00000	Averaged
94 Hexachlorobutadiene	0.64987	0.63263	0.63263	0.010	-2.65332	40.00000	Averaged
95 Naphthalene	2.46985	1.74169	1.74169	0.010	-29.48189	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.97510	0.83119	0.83119	0.010	-14.75776	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 13.76700
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070605v1.b/1r302FL.d
Lab Smp Id: UVM050605-01E Client Smp ID: VSTD050
Inj Date : 06-JUL-2005 07:52
Operator : PS Inst ID: VOA1.i
Smp Info : |UVM050605-01E|CCV/LCS|1|VOAF|1|
Misc Info : UVM050605-01D 5.0ML
Comment :
Method : /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m
Meth Date : 18-Jul-2005 14:43 eh1 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: kilroy

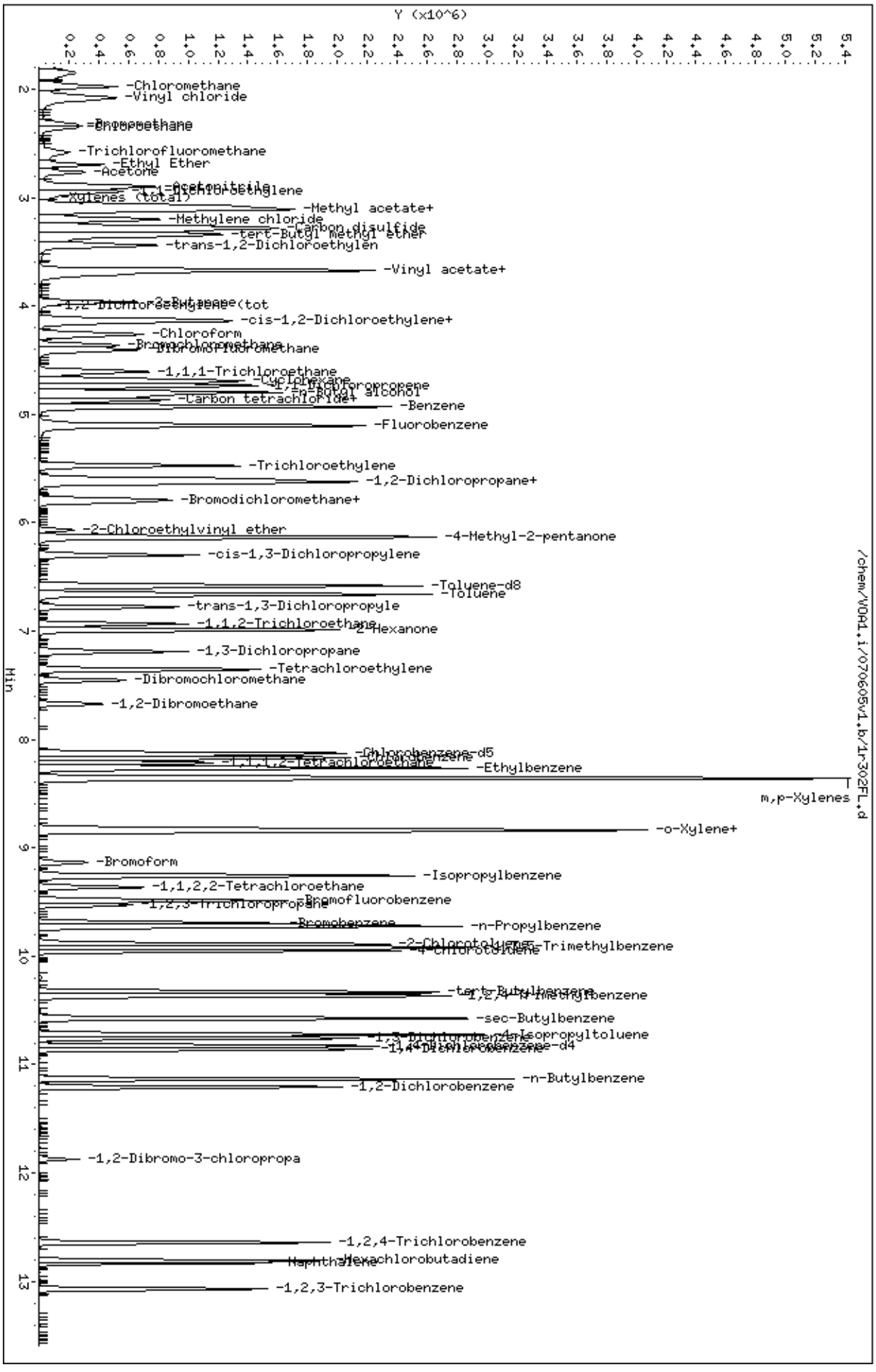
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2594016	150.000	137
M 2 1,2-Dichloroethylene (total)	96				778022	100.000	90.0
M 135 1,3-Dichloropropylene	75				1102806	100.000	88.5
3 Dichlorodifluoromethane	85	1.852	1.852	(0.363)	429208	50.0000	67.4
4 Chloromethane	50	1.975	1.975	(0.387)	678913	50.0000	49.3
5 Vinyl chloride	62	2.077	2.077	(0.407)	503188	50.0000	56.3
6 Bromomethane	94	2.322	2.322	(0.455)	222959	50.0000	50.4
7 Chloroethane	64	2.360	2.360	(0.462)	221824	50.0000	48.0
8 Trichlorofluoromethane	101	2.584	2.584	(0.506)	275258	50.0000	48.0(Q)
134 Ethyl Ether	59	2.696	2.696	(0.528)	256401	50.0000	34.8
10 Acetone	43	2.771	2.771	(0.543)	396731	250.000	164
15 Acetonitrile	41	2.899	2.899	(0.568)	1001532	1250.00	821
11 1,1-Dichloroethylene	61	2.947	2.947	(0.577)	656617	50.0000	42.1
128 Methyl acetate	43	3.076	3.076	(0.602)	1578619	250.000	185
13 Iodomethane	142	3.108	3.108	(0.609)	2697134	250.000	253
17 Methylene chloride	84	3.199	3.199	(0.626)	356083	50.0000	47.0
14 Carbon disulfide	76	3.284	3.284	(0.643)	5018992	250.000	267
20 tert-Butyl methyl ether	73	3.343	3.343	(0.655)	994847	50.0000	44.3
21 trans-1,2-Dichloroethylene	96	3.439	3.439	(0.674)	364016	50.0000	47.5
23 Vinyl acetate	43	3.674	3.674	(0.720)	3421075	250.000	141
22 1,1-Dichloroethane	63	3.706	3.706	(0.726)	764937	50.0000	42.7
30 2-Butanone	43	3.968	3.968	(0.777)	892217	250.000	130
31 cis-1,2-Dichloroethylene	96	4.144	4.144	(0.812)	414006	50.0000	42.5
25 2,2-Dichloropropane	77	4.128	4.128	(0.809)	520647	50.0000	45.0
32 Chloroform	83	4.262	4.262	(0.835)	693456	50.0000	45.0
29 Bromochloromethane	128	4.363	4.363	(0.855)	181595	50.0000	45.2

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
$	35 Dibromofluoromethane	113	4.406	4.406	(0.863)	403302	50.0000	48.8
	36 1,1,1-Trichloroethane	97	4.604	4.604	(0.902)	576326	50.0000	48.9
	129 Cyclohexane	56	4.694	4.694	(0.919)	1064797	50.0000	35.6
	34 1,1-Dichloropropene	75	4.737	4.737	(0.928)	612523	50.0000	46.8
	131 n-Butyl alcohol	56	4.796	4.796	(0.939)	589893	5000.00	1480
	33 Carbon tetrachloride	117	4.833	4.833	(0.947)	465003	50.0000	51.9
	37 1,2-Dichloroethane	62	4.871	4.871	(0.954)	617090	50.0000	40.6
	38 Benzene	78	4.929	4.929	(0.965)	1976901	50.0000	50.0
*	40 Fluorobenzene	96	5.106	5.106	(1.000)	1826812	50.0000	
	39 Trichloroethylene	95	5.474	5.474	(1.072)	460520	50.0000	45.8
	41 1,2-Dichloropropane	63	5.597	5.597	(1.096)	504229	50.0000	40.5
	130 Methylcyclohexane	83	5.624	5.624	(1.101)	902720	50.0000	46.2
	45 Bromodichloromethane	83	5.784	5.784	(1.133)	530298	50.0000	49.9
	43 Dibromomethane	93	5.811	5.811	(1.138)	238481	50.0000	46.6
	44 2-Chloroethylvinyl ether	63	6.067	6.067	(1.188)	98105	250.000	20.4
	49 4-Methyl-2-pentanone	58	6.131	6.131	(0.754)	845646	250.000	155
	46 cis-1,3-Dichloropropylene	75	6.297	6.297	(1.233)	606095	50.0000	45.8
$	47 Toluene-d8	98	6.585	6.585	(0.810)	1843530	50.0000	50.6
	50 Toluene	92	6.660	6.660	(0.819)	1214764	50.0000	45.2
	53 trans-1,3-Dichloropropylene	75	6.778	6.778	(0.834)	496711	50.0000	42.7
	54 1,1,2-Trichloroethane	83	6.938	6.938	(0.853)	293666	50.0000	48.8
	55 2-Hexanone	43	6.991	6.991	(0.860)	1497119	250.000	146
	52 1,3-Dichloropropane	76	7.189	7.189	(0.884)	573778	50.0000	46.2
	56 Tetrachloroethylene	164	7.355	7.355	(0.905)	387122	50.0000	52.2
	57 Dibromochloromethane	129	7.451	7.451	(0.917)	335641	50.0000	54.9
	59 1,2-Dibromoethane	107	7.675	7.675	(0.944)	327835	50.0000	47.0
*	61 Chlorobenzene-d5	117	8.129	8.129	(1.000)	1251917	50.0000	
	62 Chlorobenzene	112	8.172	8.172	(1.005)	1214410	50.0000	45.6
	60 1,1,1,2-Tetrachloroethane	131	8.215	8.215	(1.010)	355198	50.0000	52.1
	58 Ethylbenzene	91	8.263	8.263	(1.016)	2242788	50.0000	45.2
	63 m,p-Xylenes	106	8.359	8.359	(1.028)	1761290	100.000	91.7
	64 o-Xylene	106	8.829	8.829	(1.086)	832726	50.0000	45.7
	65 Styrene	104	8.845	8.845	(1.088)	1390090	50.0000	46.8
	66 Bromoform	173	9.139	9.139	(0.844)	185402	50.0000	48.3
	67 Isopropylbenzene	105	9.262	9.262	(0.855)	2002167	50.0000	45.4
	73 1,1,2,2-Tetrachloroethane	83	9.363	9.363	(0.865)	406199	50.0000	44.9
$	71 Bromofluorobenzene	95	9.486	9.486	(0.876)	655750	50.0000	50.4
	74 1,2,3-Trichloropropane	110	9.524	9.524	(0.880)	110017	50.0000	41.7
	75 Bromobenzene	156	9.695	9.695	(0.895)	467716	50.0000	46.7
	76 n-Propylbenzene	91	9.727	9.727	(0.898)	2531615	50.0000	46.0
	77 2-Chlorotoluene	91	9.887	9.887	(0.913)	1634176	50.0000	44.9
	78 1,3,5-Trimethylbenzene	105	9.919	9.919	(0.916)	1750626	50.0000	45.5
	80 4-Chlorotoluene	91	9.946	9.946	(0.919)	1555468	50.0000	46.4
	81 tert-Butylbenzene	119	10.330	10.330	(0.954)	1648667	50.0000	43.8
	79 1,2,4-Trimethylbenzene	105	10.368	10.368	(0.958)	1730202	50.0000	44.7
	83 sec-Butylbenzene	105	10.576	10.576	(0.977)	2267869	50.0000	45.4
	84 4-Isopropyltoluene	119	10.726	10.726	(0.991)	1803266	50.0000	45.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
85	1,3-Dichlorobenzene	146	10.758	10.758	(0.994)	895681	50.0000	46.7
* 86	1,4-Dichlorobenzene-d4	152	10.827	10.827	(1.000)	584370	50.0000	
87	1,4-Dichlorobenzene	146	10.859	10.859	(1.003)	889592	50.0000	46.3
89	n-Butylbenzene	91	11.132	11.132	(1.028)	1684338	50.0000	45.3
90	1,2-Dichlorobenzene	146	11.206	11.206	(1.035)	809102	50.0000	47.1
92	1,2-Dibromo-3-chloropropane	75	11.874	11.874	(1.097)	55068	50.0000	35.0
93	1,2,4-Trichlorobenzene	180	12.643	12.643	(1.168)	550925	50.0000	47.4
94	Hexachlorobutadiene	225	12.809	12.809	(1.183)	369691	50.0000	48.7
95	Naphthalene	128	12.830	12.830	(1.185)	1017793	50.0000	35.2
96	1,2,3-Trichlorobenzene	180	13.071	13.071	(1.207)	485725	50.0000	42.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: /chem/VOA1.i/070605v1.b/1r302FL.d
Date : 06-JUL-2005 07:52
Client ID: VSTD050
Sample Info: IUWM050605-01EICCV/LCS1I1VOAF1I1
Column phase: RTX-Volatiles
Instrument: VOA1.i
Operator: PS
Column diameter: 0.25
Page 1
Y (x10^6)
Min
/chem/VOA1.i/070605v1.b/1r302FL.d
-Chloromethane
-Vinyl chloride
-Trichlorofluoromethane
-Ethyl Ether
-Acetone
-Methyl acetate+
-Methylene chloride
-tert-Butyl methyl ether
-trans-1,2-Dichloroethylen
-Vinyl acetate+
-cis-1,2-Dichloroethylene+
-Chloroform
-1,1,1-Trichloroethane
-Carbon tetrachloride+
-Benzene
-Fluorobenzene
-Trichloroethylene
-1,2-Dichloropropane+
-Bromodichloromethane+
-2-Chloroethylvinyl ether
-4-Methyl-2-pentanone
-cis-1,3-Dichloropropylene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone
-1,3-Dichloropropane
-Tetrachloroethylene
-Dibromochloromethane
-1,2-Dibromoethane
-Ethylbenzene
m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene
-1,1,2,2-Tetrachloroethane
-n-Propylbenzene
-sec-Butylbenzene
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-1,2,3-Trichlorobenzene

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA1.i Injection Date: 06-JUL-2005 09:21
Lab File ID: 1r304.d Init. Cal. Date(s): 21-JUN-2005 28-JUN-2005
Analysis Type: WATER Init. Cal. Times: 21:33 02:45
Lab Sample ID: UVM050531-01B Quant Type: ISTD
Method: /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	9 Acrolein	162	250	0.02800	0.001	-35.21586	40.00000	Linear	
	12 Trichlorotrifluoroethane	0.05869	0.05835	0.05835	0.050	-0.58333	40.00000	Averaged	
	16 Allyl chloride	344	250	0.07809	0.010	37.75694	40.00000	Linear	
	18 Acrylonitrile	0.09021	0.07549	0.07549	0.010	-16.31690	40.00000	Averaged	
	24 2-Chloro-1,3-butadiene	0.50962	0.44044	0.44044	0.010	-13.57561	40.00000	Averaged	
	28 Propionitrile	169	250	0.03003	0.010	-32.55685	40.00000	Linear	
	26 Ethyl acetate	0.35866	0.21157	0.21157	0.010	-41.01170	40.00000	Averaged	<-
	27 Methacrylonitrile	0.23572	0.13739	0.13739	0.010	-41.71310	40.00000	Averaged	<-
	19 Isobutyl alcohol	0.01192	0.00799	0.00799	0.005	-32.94733	40.00000	Averaged	
	72 Tetrahydrofuran	145	250	0.21307	0.010	-41.94294	40.00000	Linear	<-
	42 Methyl methacrylate	0.15740	0.15267	0.15267	0.010	-3.00726	40.00000	Averaged	
	51 Ethyl methacrylate	0.44478	0.40943	0.40943	0.010	-7.94797	40.00000	Averaged	
	97 1,4-Dioxane	0.00243	0.00217	0.00217	0.001	-10.93389	40.00000	Averaged	
	48 2-Nitropropane	0.05089	0.04389	0.04389	0.010	-13.74804	40.00000	Averaged	
	70 Cyclohexanone	0.02422	0.01218	0.01218	0.010	-49.72990	40.00000	Averaged	<-
	68 cis-1,4-Dichloro-2-butene	0.37347	0.26528	0.26528	0.010	-28.96950	40.00000	Averaged	
	69 trans-1,4-Dichloro-2-butene	0.24240	0.23364	0.23364	0.010	-3.61613	40.00000	Averaged	
	82 Pentachloroethane	238	250	0.40972	0.010	-4.71790	40.00000	Linear	
	88 Benzyl chloride	198	250	0.97930	0.010	-20.95148	40.00000	Linear	
	91 bis(2-Chloroisopropyl)ether	0.73872	0.32571	0.32571	0.010	-55.90826	40.00000	Averaged	<-
$	35 Dibromofluoromethane	0.22622	0.20865	0.20865	0.010	-7.76512	40.00000	Averaged	
$	47 Toluene-d8	1.45553	1.47695	1.47695	0.010	1.47161	40.00000	Averaged	
$	71 Bromofluorobenzene	1.11206	1.07604	1.07604	0.010	-3.23870	40.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 21.98375
Maximun Average %D/Drift = 20.00000
* Failed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070605v1.b/1r304.d
Lab Smp Id: UVM050531-01B Client Smp ID: VSTD250
Inj Date : 06-JUL-2005 09:21
Operator : PS Inst ID: VOA1.i
Smp Info : |UVM050531-01B|SHORT|1|VOAF|1|
Misc Info : UVM050531-01B 5.0ML N/A
Comment :
Method : /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m
Meth Date : 18-Jul-2005 14:56 eh1 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

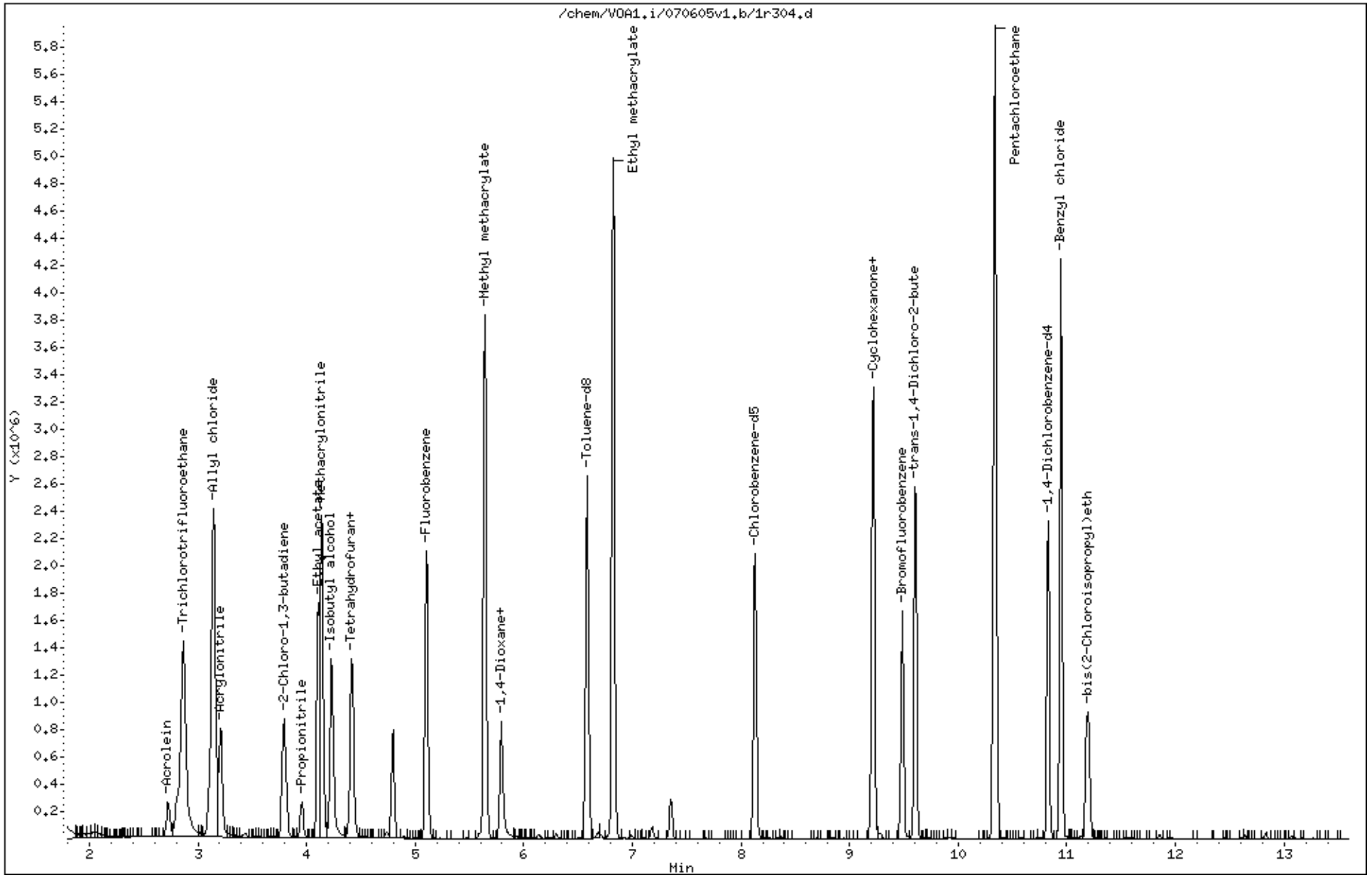
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.723	2.723	(0.533)	259895	250.000	162
12	Trichlorotrifluoroethane	85	2.867	2.867	(0.562)	541616	250.000	248
16	Allyl chloride	76	3.140	3.140	(0.615)	724835	250.000	344
18	Acrylonitrile	53	3.215	3.215	(0.630)	700664	250.000	209
24	2-Chloro-1,3-butadiene	53	3.792	3.792	(0.743)	817615	50.0000	43.2
28	Propionitrile	54	3.957	3.957	(0.775)	278697	250.000	169
26	Ethyl acetate	43	4.107	4.107	(0.804)	1963745	250.000	147
27	Methacrylonitrile	41	4.139	4.139	(0.811)	1275255	250.000	146
19	Isobutyl alcohol	41	4.230	4.230	(0.828)	741842	2500.00	1680
72	Tetrahydrofuran	42	4.422	4.422	(0.408)	649239	250.000	145
42	Methyl methacrylate	69	5.640	5.640	(1.105)	1417026	250.000	242
* 40	Fluorobenzene	96	5.106	5.106	(1.000)	1856367	50.0000	
51	Ethyl methacrylate	69	6.826	6.826	(0.840)	2613454	250.000	230
97	1,4-Dioxane	88	5.795	5.795	(1.135)	201156	2500.00	2230
48	2-Nitropropane	43	5.795	5.795	(1.135)	407404	250.000	216

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	61 Chlorobenzene-d5	117	8.129	8.129	(1.000)	1276632	50.0000	
	70 Cyclohexanone	55	9.203	9.203	(1.132)	388621	1250.00	628
	68 cis-1,4-Dichloro-2-butene	53	9.219	9.219	(0.851)	808302	250.000	178
	69 trans-1,4-Dichloro-2-butene	53	9.604	9.604	(0.887)	711893	250.000	241
	82 Pentachloroethane	167	10.336	10.336	(0.955)	1248429	250.000	238
*	86 1,4-Dichlorobenzene-d4	152	10.827	10.827	(1.000)	609403	50.0000	
	88 Benzyl chloride	91	10.950	10.950	(1.011)	2983954	250.000	198
	91 bis(2-Chloroisopropyl)ether	45	11.185	11.185	(1.033)	992453	250.000	110
$	35 Dibromofluoromethane	113	4.406	4.406	(0.863)	387338	50.0000	46.1
$	47 Toluene-d8	98	6.585	6.585	(0.810)	1885520	50.0000	50.7
$	71 Bromofluorobenzene	95	9.486	9.486	(0.876)	655744	50.0000	48.4

Data File: /chem/VOA1.i/070605v1.b/1r304.d
Date : 06-JUL-2005 09:21
Client ID: VSTD250
Instrument: VOA1.i
Sample Info: |UVM050531-01B|SHORT|1|VOAF|1|
Purge Volume: 5.0
Operator: PS
Column phase: RTX-Volatiles
Column diameter: 0.25



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA3.i Injection Date: 07-JUL-2005 09:20
Lab File ID: 3r402.d Init. Cal. Date(s): 27-JUN-2005 27-JUN-2005
Analysis Type: WATER Init. Cal. Times: 11:18 18:36
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.72769	0.61396	0.61396	0.050	-15.62812	40.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.38701	0.33094	0.33094	0.050	-14.48729	40.00000	Averaged	
	3 Dichlorodifluoromethane	42.98599	50.00000	0.37280	0.050	-14.02802	40.00000	Linear	
	4 Chloromethane	0.45387	0.31976	0.31976	0.100	-29.54852	40.00000	Averaged	spcc
	5 Vinyl chloride	0.37740	0.30949	0.30949	0.050	-17.99485	20.00000	Averaged	ccc
	6 Bromomethane	0.41932	0.37103	0.37103	0.050	-11.51639	40.00000	Averaged	
	7 Chloroethane	0.24884	0.22407	0.22407	0.050	-9.95132	40.00000	Averaged	
	8 Trichlorofluoromethane	0.54864	0.49649	0.49649	0.050	-9.50482	40.00000	Averaged	
	134 Ethyl Ether	0.27086	0.21105	0.21105	0.010	-22.07887	40.00000	Averaged	
	10 Acetone	191	250	0.07594	0.050	-23.68457	40.00000	Linear	
	15 Acetonitrile	0.05345	0.03444	0.03444	0.010	-35.55970	40.00000	Averaged	
	11 1,1-Dichloroethylene	0.61204	0.49872	0.49872	0.050	-18.51518	20.00000	Averaged	ccc
	128 Methyl acetate	214	250	0.21866	0.010	-14.33069	40.00000	Linear	
	13 Iodomethane	0.48305	0.39966	0.39966	0.050	-17.26257	40.00000	Averaged	
	17 Methylene chloride	41.58972	50.00000	0.34657	0.050	-16.82056	40.00000	Linear	
	14 Carbon disulfide	1.24285	0.91658	0.91658	0.050	-26.25141	40.00000	Averaged	
	20 tert-Butyl methyl ether	43.84401	50.00000	0.18981	0.050	-12.31198	40.00000	Linear	
	21 trans-1,2-Dichloroethylene	0.37647	0.32147	0.32147	0.050	-14.60800	40.00000	Averaged	
	23 Vinyl acetate	0.37137	0.26029	0.26029	0.010	-29.90898	40.00000	Averaged	
	22 1,1-Dichloroethane	0.61441	0.53558	0.53558	0.100	-12.83034	40.00000	Averaged	spcc
	30 2-Butanone	0.13294	0.09296	0.09296	0.030	-30.07777	40.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.39756	0.34042	0.34042	0.050	-14.37298	40.00000	Averaged	
	25 2,2-Dichloropropane	46.07332	50.00000	0.13543	0.050	-7.85335	40.00000	Linear	
	32 Chloroform	0.63522	0.53742	0.53742	0.010	-15.39597	20.00000	Averaged	ccc
	29 Bromochloromethane	0.15153	0.13373	0.13373	0.010	-11.74686	40.00000	Averaged	
$	35 Dibromofluoromethane	0.31741	0.28423	0.28423	0.010	-10.45291	40.00000	Averaged	
	36 1,1,1-Trichloroethane	0.44790	0.41670	0.41670	0.010	-6.96662	40.00000	Averaged	
	129 Cyclohexane	0.61071	0.46469	0.46469	0.010	-23.90916	40.00000	Averaged	
	34 1,1-Dichloropropene	0.45171	0.37808	0.37808	0.010	-16.30148	40.00000	Averaged	
	131 n-Butyl alcohol	0.01076	0.00738	0.00738	0.008	-31.41869	40.00000	Averaged	<-
	33 Carbon tetrachloride	0.29653	0.31397	0.31397	0.010	5.88007	40.00000	Averaged	
	37 1,2-Dichloroethane	0.43658	0.37044	0.37044	0.010	-15.14988	40.00000	Averaged	
	38 Benzene	1.33794	1.12024	1.12024	0.010	-16.27086	40.00000	Averaged	
	39 Trichloroethylene	0.33473	0.29702	0.29702	0.010	-11.26689	40.00000	Averaged	
	41 1,2-Dichloropropane	0.30732	0.27017	0.27017	0.010	-12.08684	20.00000	Averaged	ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA3.i Injection Date: 07-JUL-2005 09:20
Lab File ID: 3r402.d Init. Cal. Date(s): 27-JUN-2005 27-JUN-2005
Analysis Type: WATER Init. Cal. Times: 11:18 18:36
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	130 Methylcyclohexane	0.56731	0.44754	0.44754	0.010	-21.11296	40.00000	Averaged	
	45 Bromodichloromethane	0.40576	0.36331	0.36331	0.010	-10.46186	40.00000	Averaged	
	43 Dibromomethane	0.16862	0.13396	0.13396	0.010	-20.55544	40.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.01903	0.01211	0.01211	0.010	-36.33334	40.00000	Averaged	
	49 4-Methyl-2-pentanone	0.16567	0.11586	0.11586	0.010	-30.06423	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.30172	0.24021	0.24021	0.010	-20.38713	40.00000	Averaged	
$	47 Toluene-d8	1.60939	1.33528	1.33528	0.010	-17.03235	40.00000	Averaged	
	50 Toluene	1.11931	0.92753	0.92753	0.010	-17.13331	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.39214	0.29715	0.29715	0.010	-24.22451	40.00000	Averaged	
	54 1,1,2-Trichloroethane	0.36508	0.29418	0.29418	0.010	-19.41846	40.00000	Averaged	
	55 2-Hexanone	0.30985	0.19727	0.19727	0.010	-36.33276	40.00000	Averaged	
	52 1,3-Dichloropropane	0.61708	0.50701	0.50701	0.010	-17.83598	40.00000	Averaged	
	56 Tetrachloroethylene	0.34474	0.30647	0.30647	0.010	-11.10084	40.00000	Averaged	
	57 Dibromochloromethane	0.39386	0.37049	0.37049	0.010	-5.93338	40.00000	Averaged	
	59 1,2-Dibromoethane	44.34035	50.00000	0.20567	0.010	-11.31930	40.00000	Linear	
	62 Chlorobenzene	1.12544	0.98705	0.98705	0.300	-12.29692	40.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.37765	0.35541	0.35541	0.010	-5.88784	40.00000	Averaged	
	58 Ethylbenzene	1.93137	1.61013	1.61013	0.010	-16.63268	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.73204	0.61922	0.61922	0.010	-15.41207	40.00000	Averaged	
	64 o-Xylene	0.71898	0.60346	0.60346	0.010	-16.06806	40.00000	Averaged	
	65 Styrene	1.21987	0.99727	0.99727	0.010	-18.24826	40.00000	Averaged	
	66 Bromoform	0.44379	0.40192	0.40192	0.100	-9.43619	40.00000	Averaged	spcc
	67 Isopropylbenzene	3.68754	2.82997	2.82997	0.010	-23.25592	40.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	1.03791	0.79959	0.79959	0.300	-22.96163	40.00000	Averaged	spcc
$	71 Bromofluorobenzene	1.27050	0.97297	0.97297	0.010	-23.41881	40.00000	Averaged	
	74 1,2,3-Trichloropropane	0.28544	0.21933	0.21933	0.010	-23.15901	40.00000	Averaged	
	75 Bromobenzene	0.97338	0.82702	0.82702	0.010	-15.03603	40.00000	Averaged	
	76 n-Propylbenzene	4.75759	3.73305	3.73305	0.010	-21.53489	40.00000	Averaged	
	77 2-Chlorotoluene	3.18675	2.60371	2.60371	0.010	-18.29557	40.00000	Averaged	
	78 1,3,5-Trimethylbenzene	3.27775	2.67096	2.67096	0.010	-18.51214	40.00000	Averaged	
	80 4-Chlorotoluene	2.97976	2.38370	2.38370	0.010	-20.00372	40.00000	Averaged	
	81 tert-Butylbenzene	3.27246	2.66481	2.66481	0.010	-18.56862	40.00000	Averaged	
	79 1,2,4-Trimethylbenzene	3.31730	2.66361	2.66361	0.010	-19.70547	40.00000	Averaged	
	83 sec-Butylbenzene	4.22364	3.40269	3.40269	0.010	-19.43694	40.00000	Averaged	
	84 4-Isopropyltoluene	3.42091	2.89637	2.89637	0.010	-15.33339	40.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA3.i Injection Date: 07-JUL-2005 09:20
Lab File ID: 3r402.d Init. Cal. Date(s): 27-JUN-2005 27-JUN-2005
Analysis Type: WATER Init. Cal. Times: 11:18 18:36
Lab Sample ID: UVM050605-01E Quant Type: ISTD
Method: /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.82674	1.59423	1.59423	0.010	-12.72828	40.00000	Averaged
87 1,4-Dichlorobenzene	1.89670	1.57691	1.57691	0.010	-16.86060	40.00000	Averaged
89 n-Butylbenzene	3.34230	2.84253	2.84253	0.010	-14.95308	40.00000	Averaged
90 1,2-Dichlorobenzene	1.74530	1.49144	1.49144	0.010	-14.54522	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	37.10665	50.00000	0.12977	0.010	-25.78671	40.00000	Linear
93 1,2,4-Trichlorobenzene	52.81510	50.00000	1.21958	0.010	5.63021	40.00000	Linear
94 Hexachlorobutadiene	0.66536	0.60127	0.60127	0.010	-9.63160	40.00000	Averaged
95 Naphthalene	3.34845	2.67446	2.67446	0.010	-20.12850	40.00000	Averaged
96 1,2,3-Trichlorobenzene	1.28625	1.22801	1.22801	0.010	-4.52762	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 17.38246
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r402.d
Lab Smp Id: UVM050605-01E Client Smp ID: VSTD050
Inj Date : 07-JUL-2005 09:20
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050605-01E|CCV/LCS|1|VOAF|1|
Misc Info : VBLK01LCS VSTD050
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 11:47 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

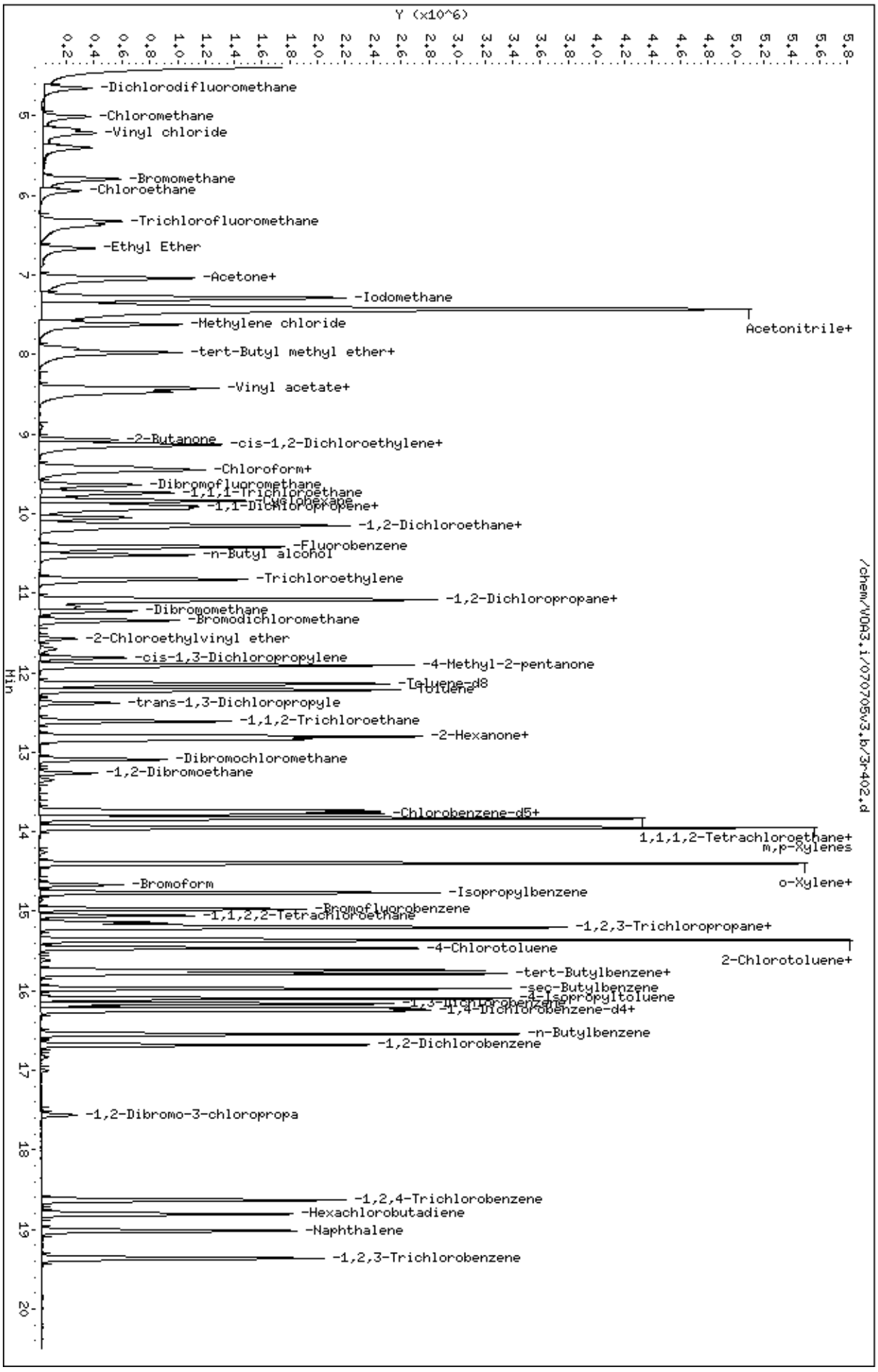
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2866333	150.000	126
M 2 1,2-Dichloroethylene (total)	96				1583710	100.000	85.5
3 Dichlorodifluoromethane	85	4.653	4.653	(0.447)	891991	50.0000	43.0
4 Chloromethane	50	5.007	5.007	(0.481)	765095	50.0000	35.2
5 Vinyl chloride	62	5.219	5.219	(0.501)	740509	50.0000	41.0
6 Bromomethane	94	5.795	5.795	(0.556)	887756	50.0000	44.2
7 Chloroethane	64	5.941	5.941	(0.570)	536146	50.0000	45.0
8 Trichlorofluoromethane	101	6.327	6.327	(0.607)	1187959	50.0000	45.2
134 Ethyl Ether	59	6.663	6.663	(0.639)	504991	50.0000	39.0
10 Acetone	43	7.036	7.036	(0.675)	908549	250.000	191
15 Acetonitrile	41	7.394	7.394	(0.710)	2060361	1250.00	806
11 1,1-Dichloroethylene	61	7.042	7.042	(0.676)	1193282	50.0000	40.7
128 Methyl acetate	43	7.435	7.435	(0.714)	2615889	250.000	214
13 Iodomethane	142	7.289	7.289	(0.700)	4781405	250.000	207
17 Methylene chloride	84	7.625	7.625	(0.732)	829248	50.0000	41.6

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	14	Carbon disulfide	76	7.429	7.429	(0.713)	10965603	250.000	184
	20	tert-Butyl methyl ether	73	7.926	7.926	(0.761)	454172	50.0000	43.8
	21	trans-1,2-Dichloroethylene	96	7.979	7.979	(0.766)	769190	50.0000	42.7
	23	Vinyl acetate	43	8.422	8.422	(0.808)	3114048	250.000	175
	22	1,1-Dichloroethane	63	8.473	8.473	(0.813)	1281483	50.0000	43.6
	30	2-Butanone	43	9.074	9.074	(0.871)	1112080	250.000	175
	31	cis-1,2-Dichloroethylene	96	9.131	9.131	(0.876)	814520	50.0000	42.8
	25	2,2-Dichloropropane	77	9.150	9.150	(0.878)	324041	50.0000	46.1
	32	Chloroform	83	9.457	9.457	(0.908)	1285888	50.0000	42.3
	29	Bromochloromethane	128	9.416	9.416	(0.904)	319980	50.0000	44.1
$	35	Dibromofluoromethane	113	9.641	9.641	(0.925)	680084	50.0000	44.8
	36	1,1,1-Trichloroethane	97	9.739	9.739	(0.935)	997038	50.0000	46.5
	129	Cyclohexane	56	9.840	9.840	(0.944)	1111879	50.0000	38.0
	34	1,1-Dichloropropene	75	9.904	9.904	(0.950)	904624	50.0000	41.8
	131	n-Butyl alcohol	56	10.521	10.521	(1.010)	883070	2500.00	1710
	33	Carbon tetrachloride	117	9.942	9.942	(0.954)	751232	50.0000	52.9
	37	1,2-Dichloroethane	62	10.135	10.135	(0.973)	886349	50.0000	42.4
	38	Benzene	78	10.157	10.157	(0.975)	2680413	50.0000	41.9
*	40	Fluorobenzene	96	10.420	10.420	(1.000)	2392709	50.0000	
	39	Trichloroethylene	95	10.828	10.828	(1.039)	710682	50.0000	44.4
	41	1,2-Dichloropropane	63	11.084	11.084	(1.064)	646448	50.0000	44.0
	130	Methylcyclohexane	83	11.084	11.084	(1.064)	1070824	50.0000	39.4
	45	Bromodichloromethane	83	11.341	11.341	(1.088)	869304	50.0000	44.8
	43	Dibromomethane	93	11.223	11.223	(1.077)	320525	50.0000	39.7
	44	2-Chloroethylvinyl ether	63	11.575	11.575	(1.111)	144928	250.000	159
	49	4-Methyl-2-pentanone	58	11.907	11.907	(0.867)	901532	250.000	175
	46	cis-1,3-Dichloropropylene	75	11.812	11.812	(1.134)	574756	50.0000	39.8
$	47	Toluene-d8	98	12.141	12.141	(0.884)	2077946	50.0000	41.5
	50	Toluene	92	12.217	12.217	(0.890)	1443421	50.0000	41.4
	53	trans-1,3-Dichloropropylene	75	12.382	12.382	(0.902)	462420	50.0000	37.9
	54	1,1,2-Trichloroethane	83	12.613	12.613	(0.918)	457807	50.0000	40.3
	55	2-Hexanone	43	12.797	12.797	(0.932)	1534952	250.000	159
	52	1,3-Dichloropropane	76	12.812	12.812	(0.933)	789011	50.0000	41.1
	56	Tetrachloroethylene	164	12.841	12.841	(0.935)	476922	50.0000	44.4
	57	Dibromochloromethane	129	13.094	13.094	(0.953)	576553	50.0000	47.0
	59	1,2-Dibromoethane	107	13.262	13.262	(0.966)	320055	50.0000	44.3
*	61	Chlorobenzene-d5	117	13.733	13.733	(1.000)	1556191	50.0000	
	62	Chlorobenzene	112	13.768	13.768	(1.003)	1536034	50.0000	43.8
	60	1,1,1,2-Tetrachloroethane	131	13.825	13.825	(1.007)	553087	50.0000	47.0
	58	Ethylbenzene	91	13.835	13.835	(1.007)	2505676	50.0000	41.7
	63	m,p-Xylenes	106	13.949	13.949	(1.016)	1927239	100.000	84.6
	64	o-Xylene	106	14.398	14.398	(1.048)	939094	50.0000	42.0
	65	Styrene	104	14.401	14.401	(1.049)	1551938	50.0000	40.9
	66	Bromoform	173	14.667	14.667	(0.904)	305468	50.0000	45.3
	67	Isopropylbenzene	105	14.768	14.768	(0.910)	2150856	50.0000	38.4
	73	1,1,2,2-Tetrachloroethane	83	15.056	15.056	(0.928)	607708	50.0000	38.5
$	71	Bromofluorobenzene	95	14.971	14.971	(0.923)	739482	50.0000	38.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	15.142	15.142	(0.933)	166698	50.0000	38.4
75	Bromobenzene	156	15.186	15.186	(0.936)	628560	50.0000	42.5
76	n-Propylbenzene	91	15.205	15.205	(0.937)	2837219	50.0000	39.2
77	2-Chlorotoluene	91	15.360	15.360	(0.947)	1978895	50.0000	40.8
78	1,3,5-Trimethylbenzene	105	15.363	15.363	(0.947)	2030008	50.0000	40.7
80	4-Chlorotoluene	91	15.465	15.465	(0.953)	1811677	50.0000	40.0
81	tert-Butylbenzene	119	15.743	15.743	(0.971)	2025327	50.0000	40.7
79	1,2,4-Trimethylbenzene	105	15.784	15.784	(0.973)	2024416	50.0000	40.1
83	sec-Butylbenzene	105	15.974	15.974	(0.985)	2586142	50.0000	40.3
84	4-Isopropyltoluene	119	16.098	16.098	(0.992)	2201320	50.0000	42.3
85	1,3-Dichlorobenzene	146	16.161	16.161	(0.996)	1211658	50.0000	43.6
* 86	1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	760028	50.0000	
87	1,4-Dichlorobenzene	146	16.250	16.250	(1.002)	1198492	50.0000	41.6
89	n-Butylbenzene	91	16.544	16.544	(1.020)	2160399	50.0000	42.5
90	1,2-Dichlorobenzene	146	16.680	16.680	(1.028)	1133537	50.0000	42.7
92	1,2-Dibromo-3-chloropropane	75	17.566	17.566	(1.083)	98626	50.0000	37.1
93	1,2,4-Trichlorobenzene	180	18.633	18.633	(1.149)	926914	50.0000	52.8
94	Hexachlorobutadiene	225	18.807	18.807	(1.159)	456983	50.0000	45.2
95	Naphthalene	128	19.019	19.019	(1.172)	2032662	50.0000	39.9
96	1,2,3-Trichlorobenzene	180	19.361	19.361	(1.194)	933325	50.0000	47.7



Data File: /chem/VOA3.i/070705v3.b/3r402.d
Date : 07-JUL-2005 09:20
Client ID: VSTD050
Sample Info: IUWM050605-01EICCW/LCS1I1VOAF1I1
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

Page 1

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA3.i Injection Date: 07-JUL-2005 10:42
Lab File ID: 3r405.d Init. Cal. Date(s): 27-JUN-2005 27-JUN-2005
Analysis Type: WATER Init. Cal. Times: 11:18 18:36
Lab Sample ID: UVM050531-01B Quant Type: ISTD
Method: /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	9 Acrolein	0.05811	0.05393	0.05393	0.001	-7.18462	40.00000	Averaged	
	12 Trichlorotrifluoroethane	0.11594	0.12744	0.12744	0.050	9.92141	40.00000	Averaged	
	16 Allyl chloride	0.15777	0.16536	0.16536	0.010	4.81186	40.00000	Averaged	
	18 Acrylonitrile	0.10315	0.10241	0.10241	0.010	-0.71952	40.00000	Averaged	
	24 2-Chloro-1,3-butadiene	0.37089	0.40761	0.40761	0.010	9.90061	40.00000	Averaged	
	28 Propionitrile	0.04617	0.04161	0.04161	0.010	-9.85997	40.00000	Averaged	
	26 Ethyl acetate	0.31941	0.25342	0.25342	0.010	-20.65948	40.00000	Averaged	
	27 Methacrylonitrile	0.28562	0.17431	0.17431	0.010	-38.96966	40.00000	Averaged	
	19 Isobutyl alcohol	1953	2500	0.00947	0.005	-21.88534	40.00000	Linear	
	72 Tetrahydrofuran	196	250	0.26506	0.010	-21.70219	40.00000	Linear	
	42 Methyl methacrylate	0.20046	0.18462	0.18462	0.010	-7.90290	40.00000	Averaged	
	51 Ethyl methacrylate	0.57423	0.48700	0.48700	0.010	-15.19078	40.00000	Averaged	
	97 1,4-Dioxane	0.00386	0.00347	0.00347	0.002	-10.14017	40.00000	Averaged	
	48 2-Nitropropane	0.08570	0.06930	0.06930	0.010	-19.14090	40.00000	Averaged	
	70 Cyclohexanone	659	1250	0.01196	0.010	-47.31884	40.00000	Linear	<-
	68 cis-1,4-Dichloro-2-butene	0.12654	0.11782	0.11782	0.010	-6.89161	40.00000	Averaged	
	69 trans-1,4-Dichloro-2-butene	266	250	0.12571	0.010	6.22188	40.00000	Linear	
	82 Pentachloroethane	0.51087	0.49464	0.49464	0.010	-3.17770	40.00000	Averaged	
	88 Benzyl chloride	234	250	1.07499	0.010	-6.44541	40.00000	Linear	
	91 bis(2-Chloroisopropyl)ether	0.51008	0.31778	0.31778	0.010	-37.69895	40.00000	Averaged	
$	35 Dibromofluoromethane	0.31741	0.27945	0.27945	0.010	-11.95965	40.00000	Averaged	
$	47 Toluene-d8	1.60939	1.35042	1.35042	0.010	-16.09143	40.00000	Averaged	
$	71 Bromofluorobenzene	1.27050	0.99465	0.99465	0.010	-21.71240	40.00000	Averaged	

Average %D / Drift Results.

Calculated Average %D/Drift = 15.45684
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r405.d
Lab Smp Id: UVM050531-01B Client Smp ID: VSTD250S
Inj Date : 07-JUL-2005 10:42
Operator : PAM Inst ID: VOA3.i
Smp Info : |UVM050531-01B|SHORT|1|VOAF|1|
Misc Info : VSTD250S VBLK01SLCS
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 11:42 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

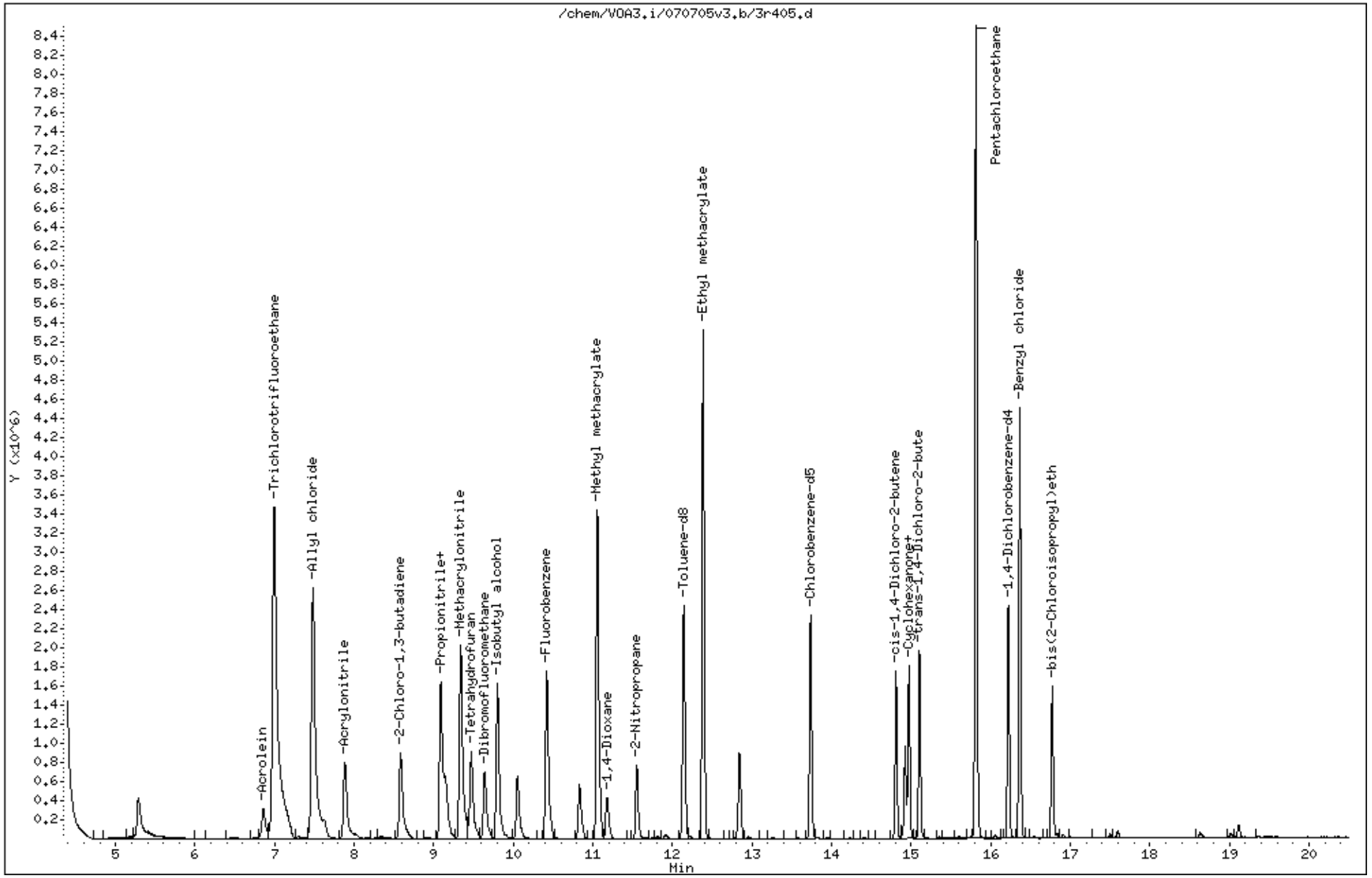
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	6.859	6.859	(0.658)	631717	250.000	232
12	Trichlorotrifluoroethane	85	6.992	6.992	(0.671)	1492723	250.000	275
16	Allyl chloride	76	7.480	7.480	(0.718)	1936874	250.000	262
18	Acrylonitrile	53	7.885	7.885	(0.757)	1199510	250.000	248
24	2-Chloro-1,3-butadiene	53	8.581	8.581	(0.824)	954878	50.0000	55.0
28	Propionitrile	54	9.154	9.154	(0.878)	487422	250.000	225
26	Ethyl acetate	43	9.087	9.087	(0.872)	2968304	250.000	198
27	Methacrylonitrile	41	9.338	9.338	(0.896)	2041738	250.000	152
19	Isobutyl alcohol	41	9.800	9.800	(0.940)	1109761	2500.00	1950
72	Tetrahydrofuran	42	9.470	9.470	(0.584)	940353	250.000	196
42	Methyl methacrylate	69	11.053	11.053	(1.061)	2162455	250.000	230
* 40	Fluorobenzene	96	10.420	10.420	(1.000)	2342610	50.0000	
51	Ethyl methacrylate	69	12.385	12.385	(0.902)	3647426	250.000	212
97	1,4-Dioxane	88	11.176	11.176	(1.073)	406624	2500.00	2250
48	2-Nitropropane	43	11.550	11.550	(1.108)	811713	250.000	202

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
*	61 Chlorobenzene-d5	117	13.734	13.734	(1.000)	1497926	50.0000	
	70 Cyclohexanone	55	14.924	14.924	(1.087)	447986	1250.00	658
	68 cis-1,4-Dichloro-2-butene	53	14.810	14.810	(0.913)	418002	250.000	233
	69 trans-1,4-Dichloro-2-butene	53	15.104	15.104	(0.931)	445985	250.000	266
	82 Pentachloroethane	167	15.816	15.816	(0.975)	1754827	250.000	242
*	86 1,4-Dichlorobenzene-d4	152	16.222	16.222	(1.000)	709539	50.0000	
	88 Benzyl chloride	91	16.367	16.367	(1.009)	3813729	250.000	234
	91 bis(2-Chloroisopropyl)ether	45	16.772	16.772	(1.034)	1127404	250.000	156
$	35 Dibromofluoromethane	113	9.638	9.638	(0.925)	654640	50.0000	44.0
$	47 Toluene-d8	98	12.139	12.139	(0.884)	2022830	50.0000	42.0
$	71 Bromofluorobenzene	95	14.971	14.971	(0.923)	705741	50.0000	39.1

Data File: /chem/VOA3.i/070705v3.b/3r405.d
Date : 07-JUL-2005 10:42
Client ID: VSTD250S
Instrument: VOA3.i
Sample Info: |UVM050531-01B|SHORT|1|VOAF|1|
Purge Volume: 5.0
Operator: PAM
Column phase: DB-624
Column diameter: 0.25



QUALITY CONTROL DATA

Data File: /chem/VOA3.i/062705v3.b/3q101.d

Date : 27-JUN-2005 10:36

Client ID: BFB01

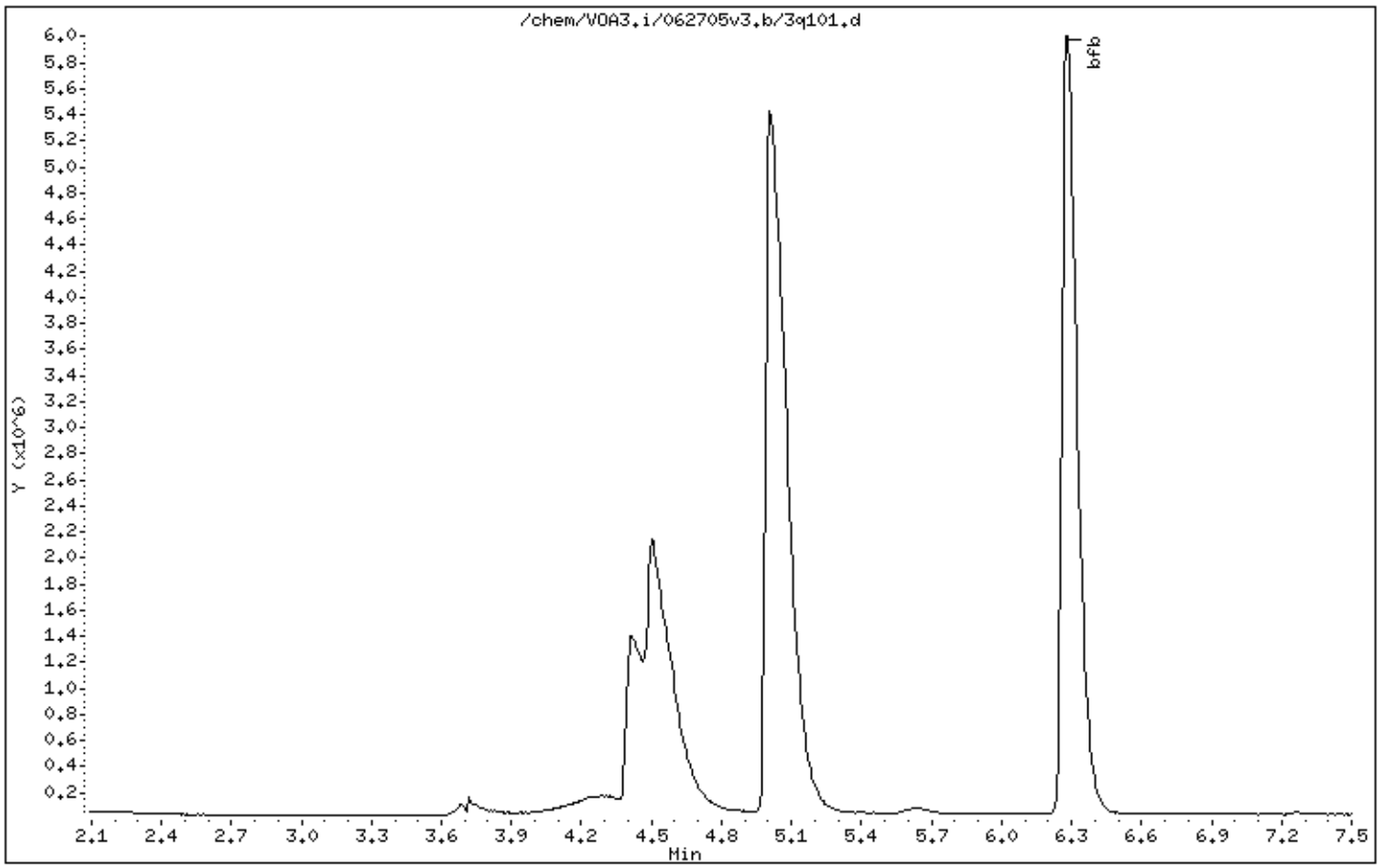
Instrument: VOA3.i

Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA3.i/062705v3.b/3q101.d

Date : 27-JUN-2005 10:36

Client ID: BFB01

Instrument: VOA3.i

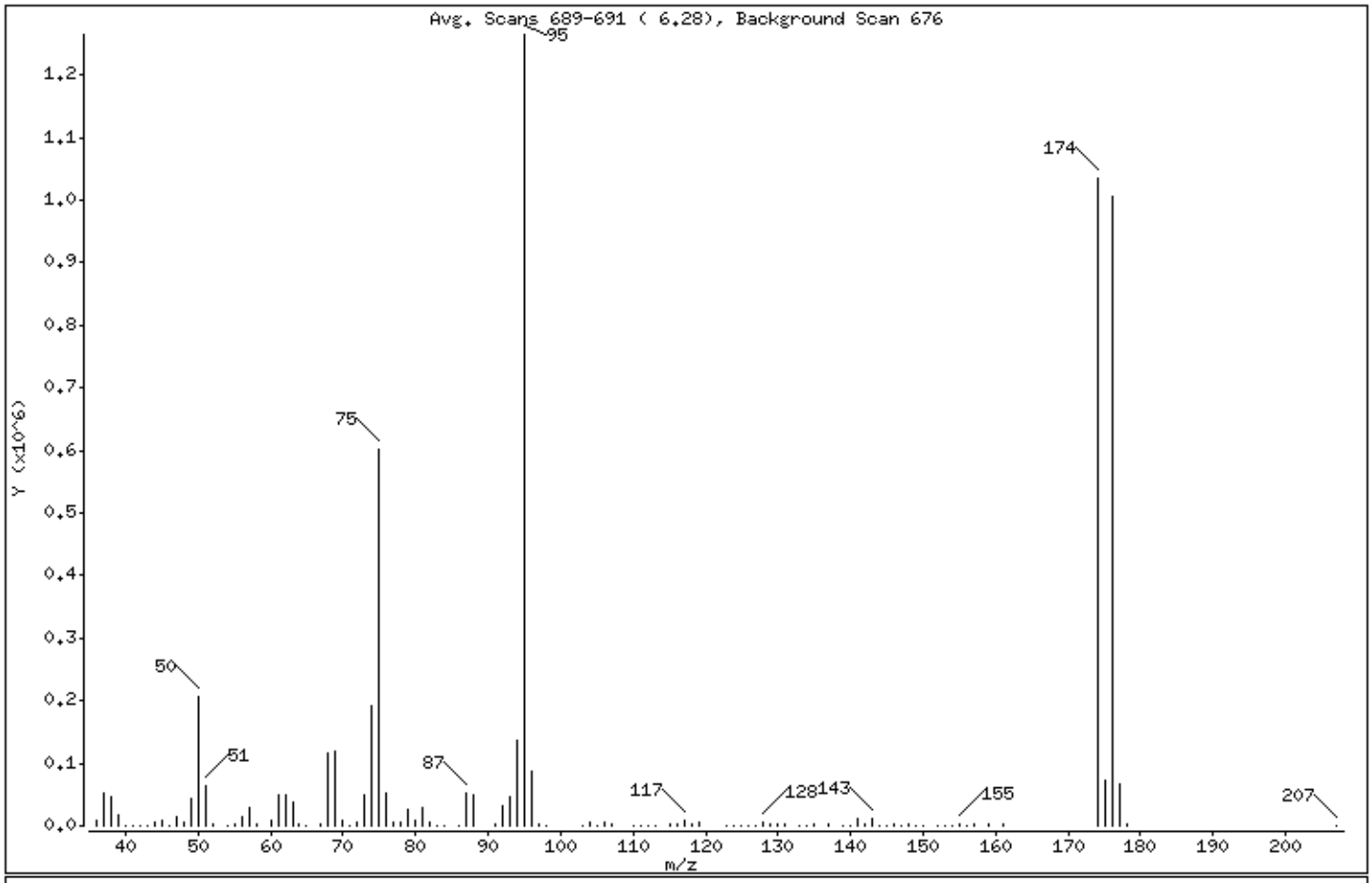
Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.24
75	30.00 - 60.00% of mass 95	47.62
96	5.00 - 9.00% of mass 95	6.94
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	81.88
175	5.00 - 9.00% of mass 174	5.78 (7.06)
176	95.00 - 101.00% of mass 174	79.64 (97.26)
177	5.00 - 9.00% of mass 176	5.36 (6.73)

Date : 27-JUN-2005 10:36

Client ID: BFB01 Instrument: VOA3.i

Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: db624 Column diameter: 0.25

Data File: 3q101.d
Spectrum: Avg. Scans 689-691 (6.28), Background Scan 676
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9886	67.00	2490	98.00	355	139.00	172
37.00	53392	68.00	116912	103.00	597	140.00	733
38.00	47920	69.00	117808	104.00	4830	141.00	12219
39.00	17872	70.00	9870	105.00	1445	142.00	1477
40.00	541	71.00	549	106.00	5028	143.00	12412
41.00	228	72.00	5770	107.00	1504	144.00	910
42.00	29	73.00	50488	110.00	744	145.00	1125
43.00	156	74.00	193152	111.00	1218	146.00	1907
44.00	4591	75.00	602176	112.00	695	147.00	947
45.00	9320	76.00	51496	113.00	968	148.00	2912
46.00	688	77.00	6584	115.00	1557	149.00	905
47.00	13857	78.00	4917	116.00	4008	150.00	1375
48.00	6325	79.00	27544	117.00	7562	152.00	766
49.00	42976	80.00	8160	118.00	4293	153.00	1080
50.00	205440	81.00	28192	119.00	6256	154.00	805
51.00	62912	82.00	5419	123.00	594	155.00	2929
52.00	2846	83.00	885	124.00	829	156.00	201
54.00	177	84.00	180	125.00	182	157.00	2216
55.00	2694	86.00	1316	126.00	626	159.00	1521
56.00	15215	87.00	51592	127.00	362	161.00	1516
57.00	28928	88.00	49080	128.00	4540	174.00	1035520
58.00	1611	91.00	3458	129.00	2364	175.00	73088
60.00	9290	92.00	31344	130.00	4359	176.00	1007168
61.00	49472	93.00	47272	131.00	1964	177.00	67784
62.00	49824	94.00	137344	133.00	179	178.00	2056
63.00	38240	95.00	1264640	134.00	168	207.00	4
64.00	3658	96.00	87744	135.00	2284		
65.00	628	97.00	2616	137.00	2232		

Data File: /chem/VOA1.i/062705v1.b/1q111.d

Date : 27-JUN-2005 18:39

Client ID: BFB01

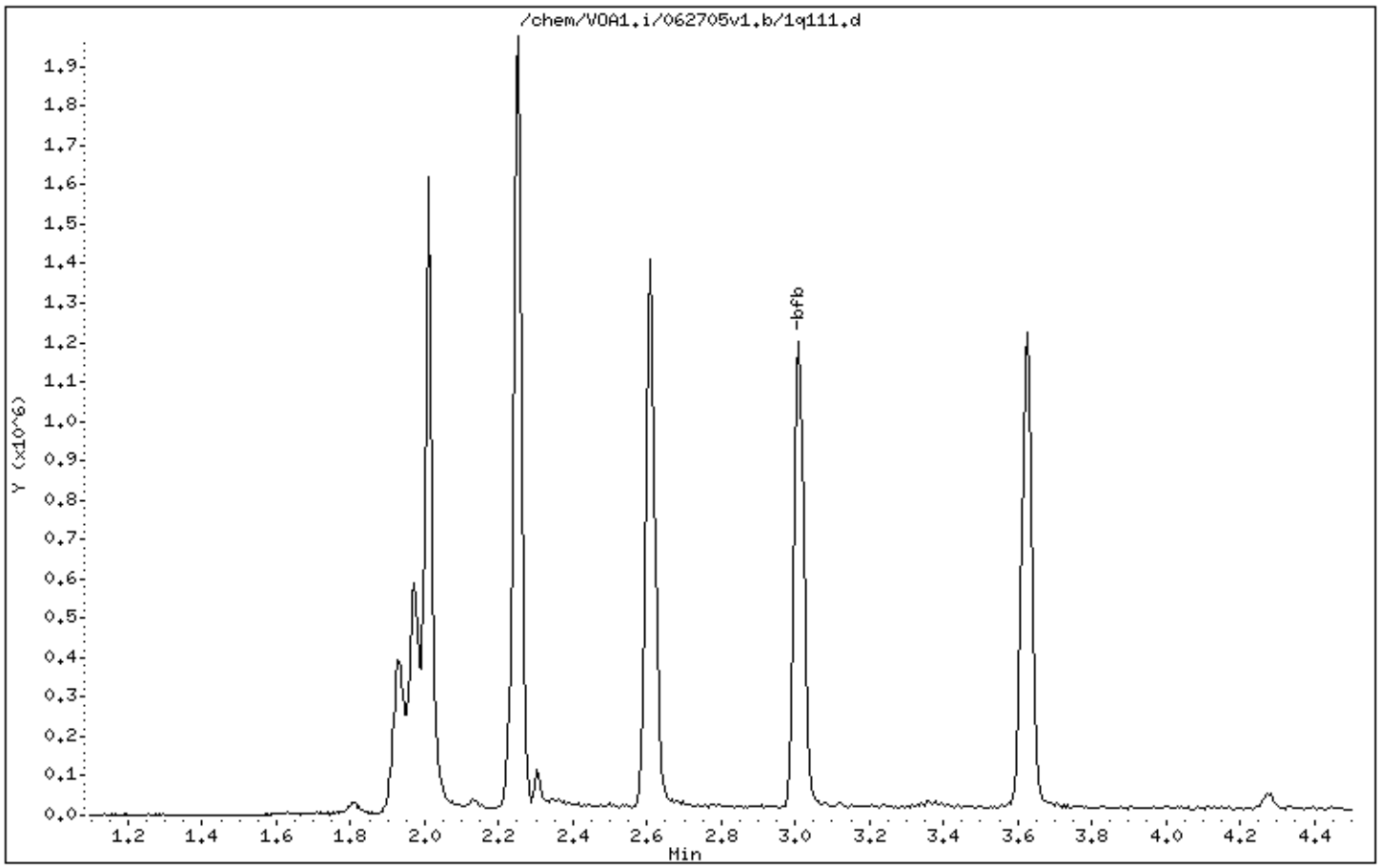
Instrument: VOA1.i

Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles

Column diameter: 0.25



Data File: /chem/VOA1.i/062705v1.b/1q111.d

Date : 27-JUN-2005 18:39

Client ID: BFB01

Instrument: VOA1.i

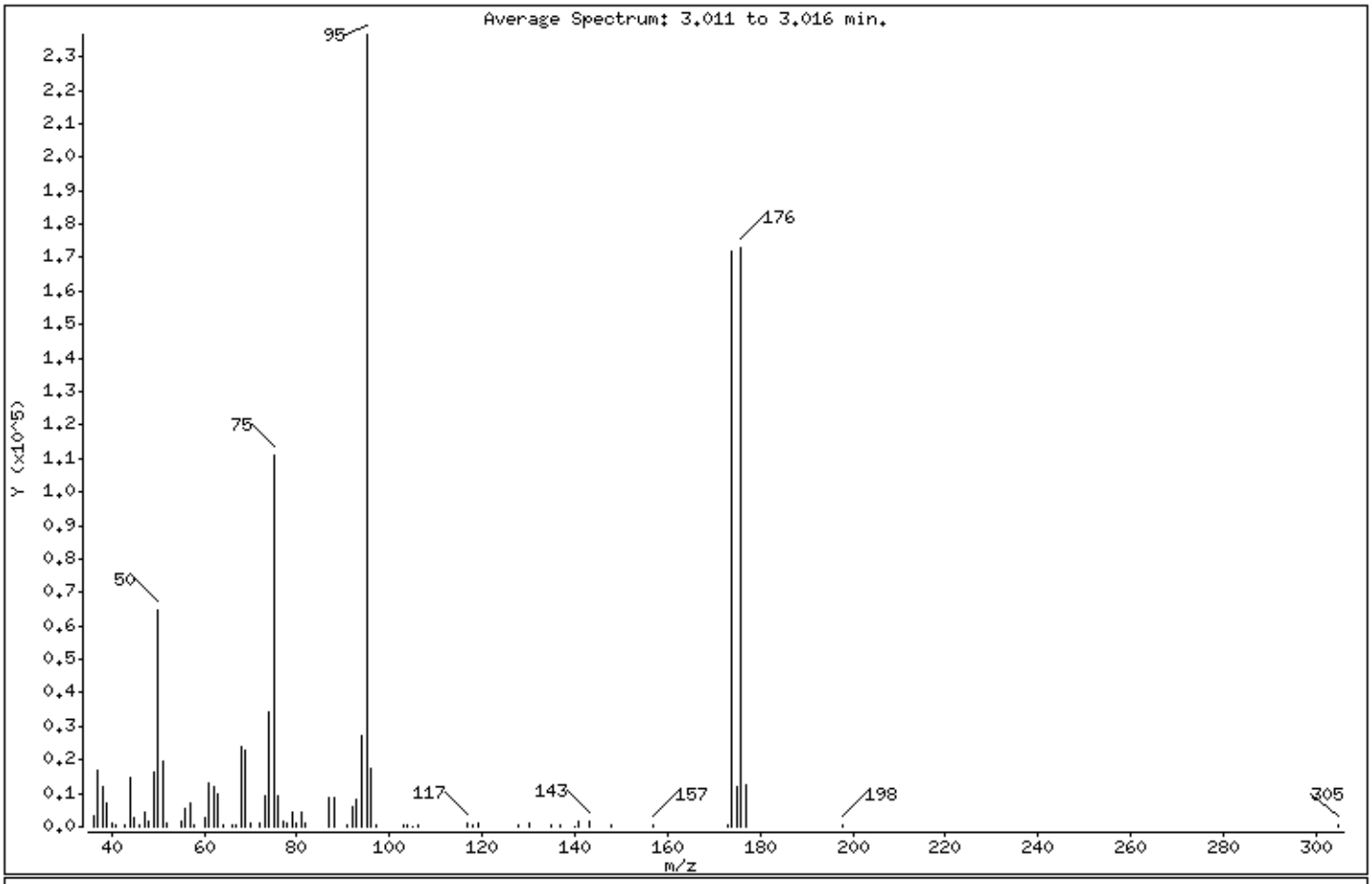
Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.28
75	30.00 - 60.00% of mass 95	46.81
96	5.00 - 9.00% of mass 95	7.30
173	Less than 2.00% of mass 174	0.28 (0.38)
174	50.00 - 100.00% of mass 95	72.71
175	5.00 - 9.00% of mass 174	5.08 (6.99)
176	95.00 - 101.00% of mass 174	73.21 (100.69)
177	5.00 - 9.00% of mass 176	5.28 (7.21)

Date : 27-JUN-2005 18:39

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM050513-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1q111.d
Spectrum: Average Spectrum: 3.011 to 3.016 min.
Location of Maximum: 95.00
Number of points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3433	58.00	309	80.00	1203	128.00	683
37.00	16760	60.00	2774	81.00	4560	130.00	1031
38.00	12215	61.00	12796	82.00	875	135.00	318
39.00	7338	62.00	12152	87.00	8722	137.00	445
40.00	907	63.00	9792	88.00	8803	140.00	251
41.00	404	64.00	793	91.00	336	141.00	1582
43.00	559	66.00	358	92.00	6224	143.00	1903
44.00	14502	67.00	614	93.00	8025	148.00	449
45.00	2895	68.00	23936	94.00	27328	157.00	774
46.00	684	69.00	22984	95.00	236608	173.00	660
47.00	4537	70.00	1109	96.00	17256	174.00	172032
48.00	1696	72.00	1206	97.00	807	175.00	12028
49.00	16440	73.00	9052	103.00	286	176.00	173184
50.00	64544	74.00	34168	104.00	367	177.00	12494
51.00	19720	75.00	110744	105.00	266	198.00	281
52.00	948	76.00	9442	106.00	662	305.00	290
55.00	1761	77.00	1602	117.00	1029		
56.00	5614	78.00	1322	118.00	449		
57.00	7309	79.00	4116	119.00	964		

Data File: /chem/VOA1.i/070305v1.b/1q701.d

Date : 03-JUL-2005 10:59

Client ID: BFB01

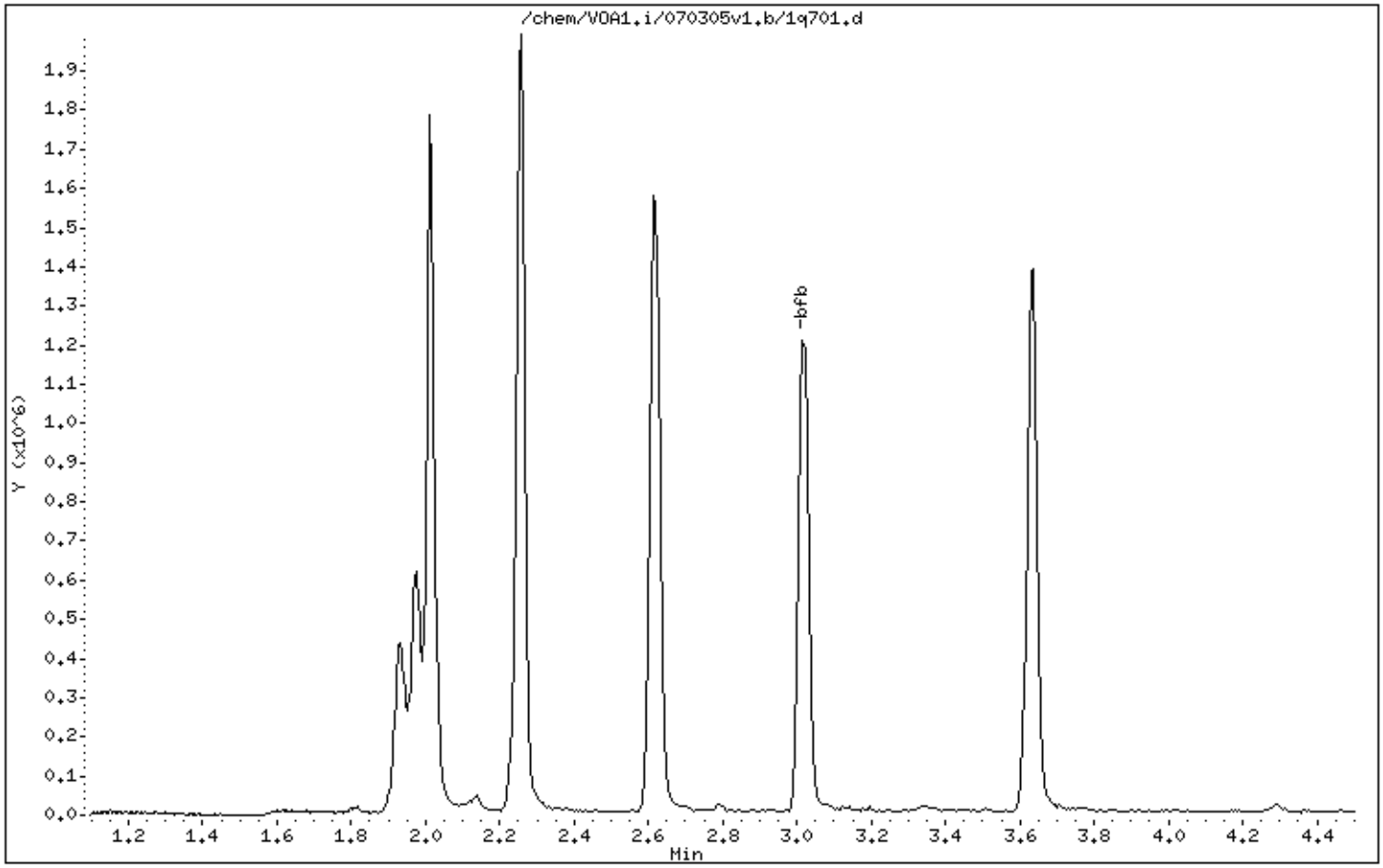
Instrument: VOA1.i

Sample Info: |UVM050622-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles

Column diameter: 0.25



Data File: /chem/VOA1.i/070305v1.b/1q701.d

Date : 03-JUL-2005 10:59

Client ID: BFB01

Instrument: VOA1.i

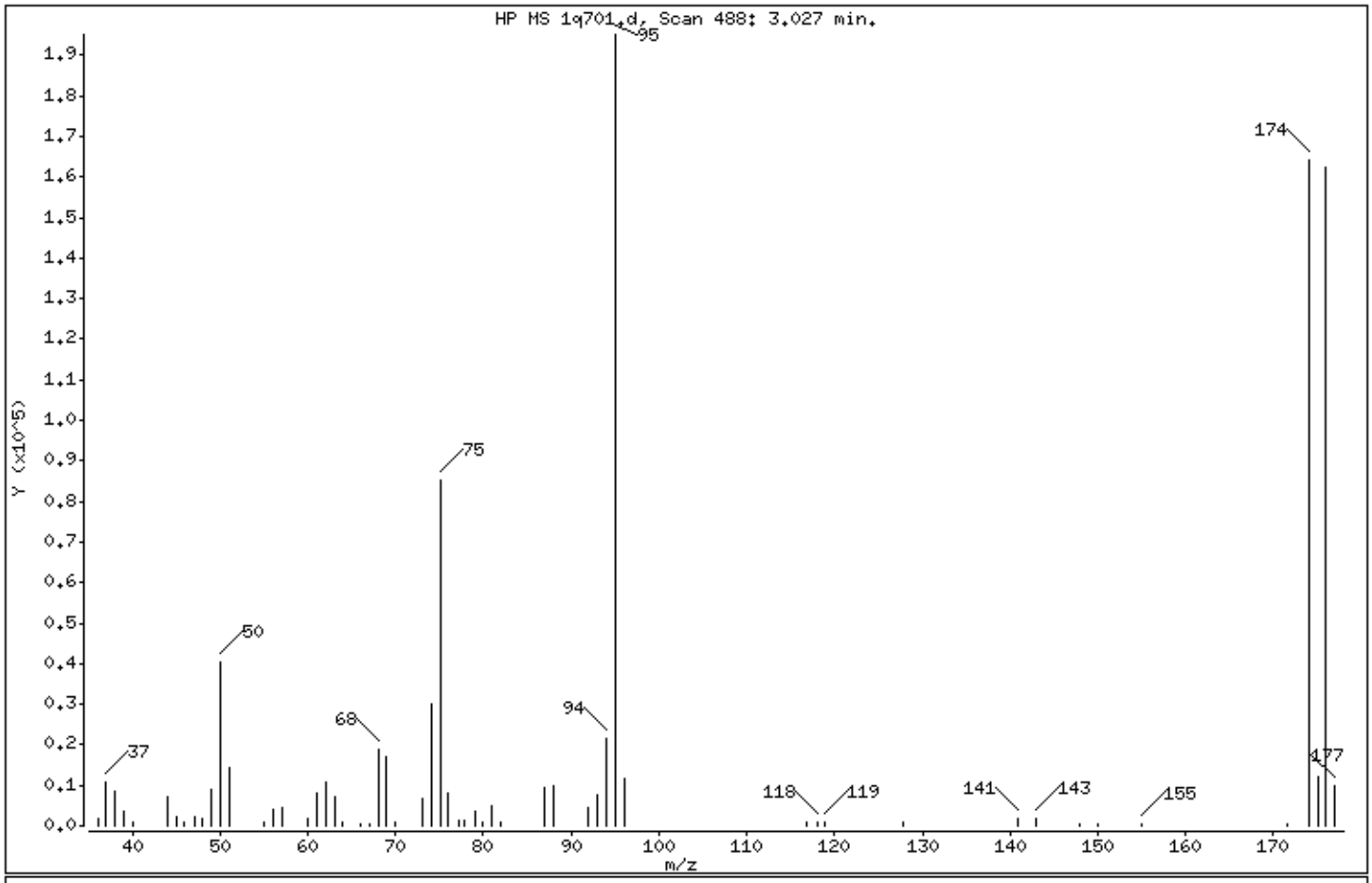
Sample Info: |UVM050622-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.63
75	30.00 - 60.00% of mass 95	43.67
96	5.00 - 9.00% of mass 95	5.95
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	84.19
175	5.00 - 9.00% of mass 174	6.29 (7.47)
176	95.00 - 101.00% of mass 174	83.31 (98.95)
177	5.00 - 9.00% of mass 176	5.13 (6.16)

Date : 03-JUL-2005 10:59

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM050622-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1q701.d
Spectrum: HP MS 1q701.d, Scan 488: 3.027 min.
Location of Maximum: 95.00
Number of points: 57

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	1805	57.00	4677	77.10	1189	118.90	996
37.00	10670	60.00	1819	77.90	1280	127.90	735
38.10	8462	61.00	8083	79.00	3754	140.80	1733
39.00	3447	62.10	10968	80.00	873	142.90	1651
40.10	893	63.00	7016	80.90	4756	148.00	658
44.10	7109	63.90	1004	82.00	1060	150.00	632
45.10	2061	66.00	548	87.00	9586	155.00	569
45.90	774	67.00	508	88.00	9739	171.50	610
47.20	2433	68.00	19056	92.00	4468	174.00	164288
48.00	1713	69.00	17016	93.00	7732	175.00	12266
49.00	8997	70.00	969	94.00	21392	176.00	162560
50.10	40248	73.00	6714	95.00	195136	177.00	10016
51.10	14534	74.00	29952	96.00	11606		
55.10	796	75.10	85216	116.90	710		
56.00	4015	76.00	7933	118.00	735		

Data File: /chem/VOA1.i/070605v1.b/1r301.d

Date : 06-JUL-2005 06:57

Client ID: BFB01

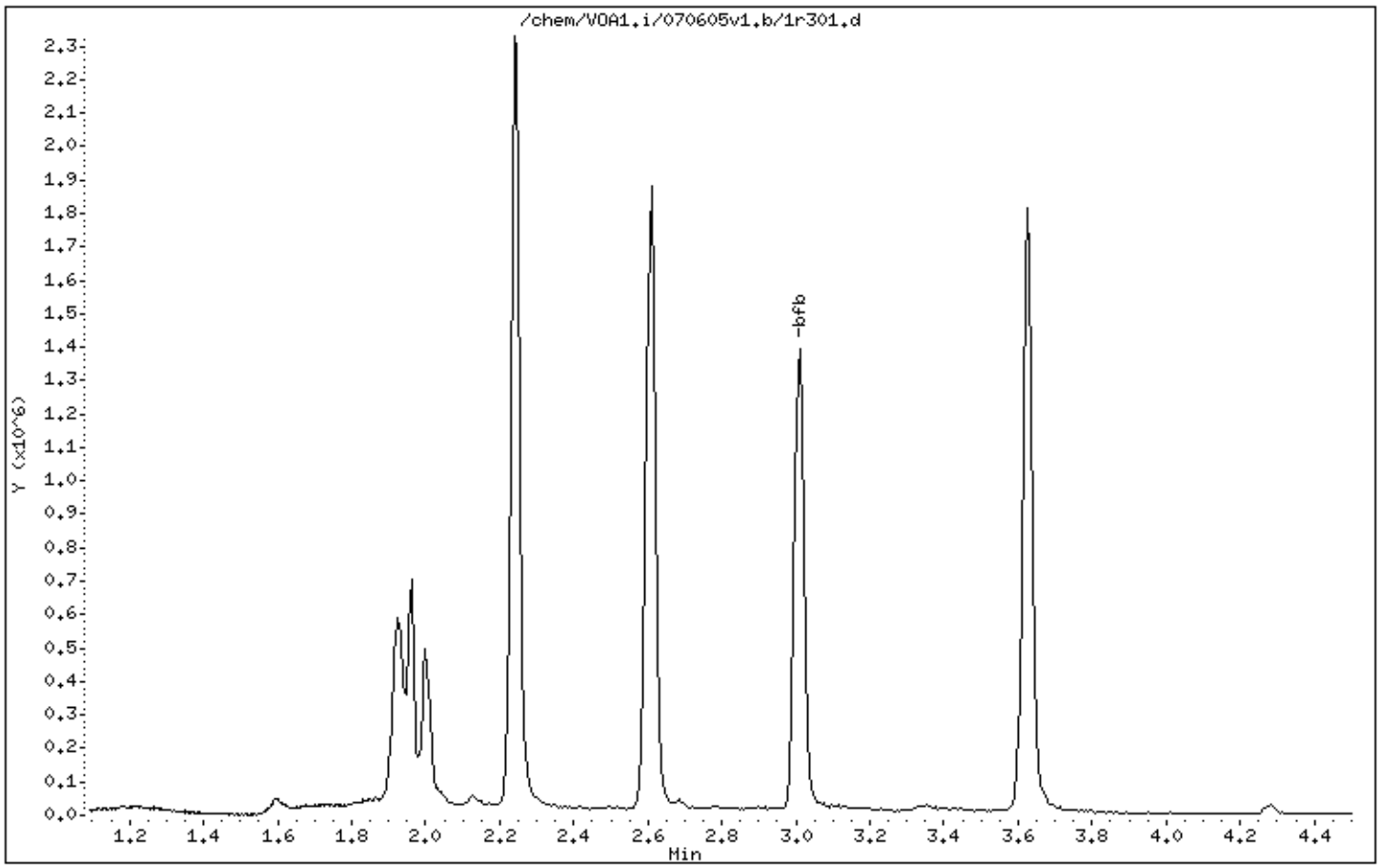
Instrument: VOA1.i

Sample Info: |UVM050622-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles

Column diameter: 0.25



Data File: /chem/VOA1.i/070605v1.b/1r301.d

Date : 06-JUL-2005 06:57

Client ID: BFB01

Instrument: VOA1.i

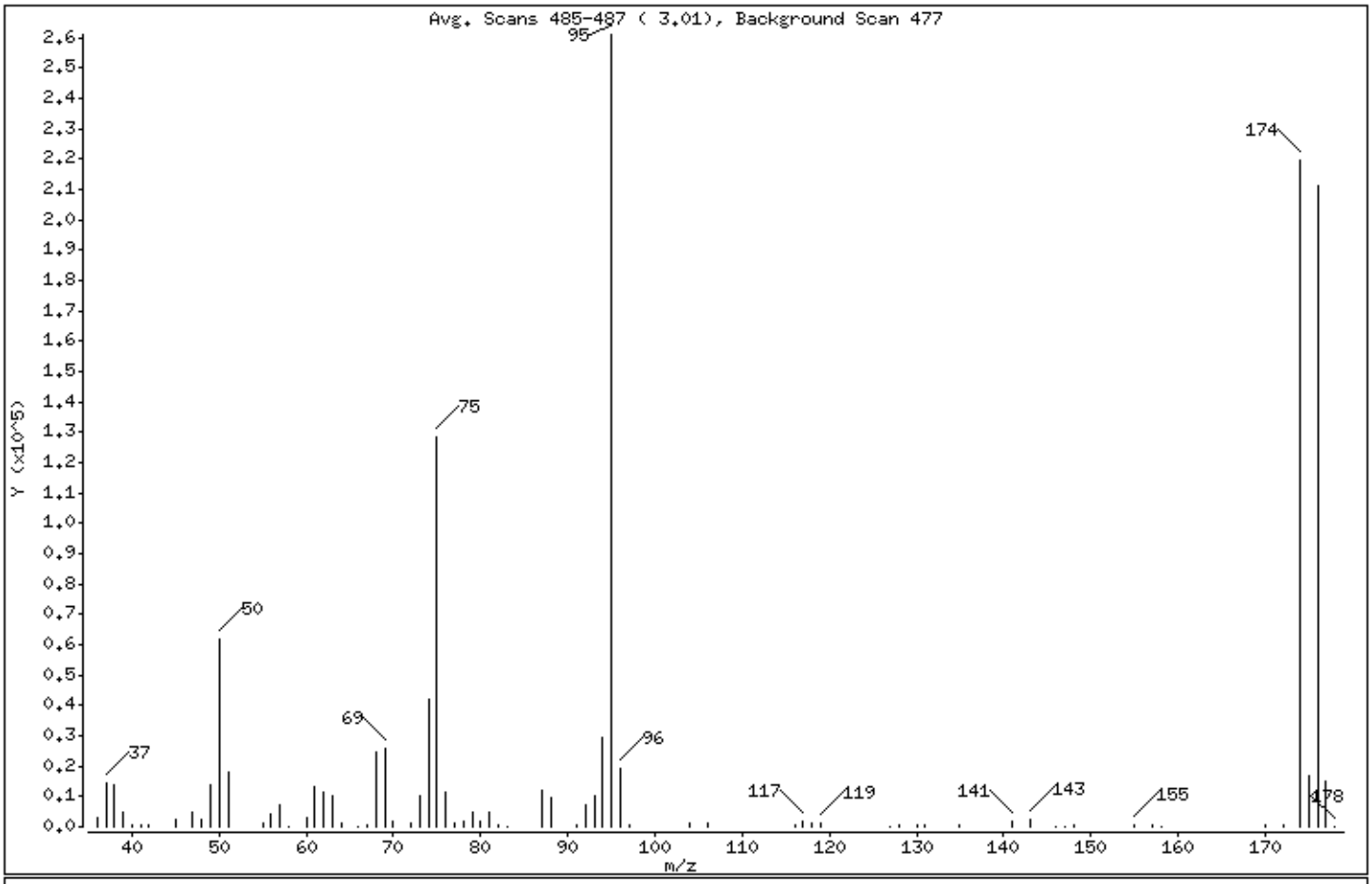
Sample Info: |UVM050622-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.64
75	30.00 - 60.00% of mass 95	49.19
96	5.00 - 9.00% of mass 95	7.31
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	84.22
175	5.00 - 9.00% of mass 174	6.35 (7.54)
176	95.00 - 101.00% of mass 174	80.93 (96.09)
177	5.00 - 9.00% of mass 176	5.72 (7.07)

Date : 06-JUL-2005 06:57

Client ID: BFB01 Instrument: VOA1.i

Sample Info: |UVM050622-02|BFB|1|VOAF|1|

Operator: PAM

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 1r301.d
Spectrum: Avg. Scans 485-487 (3.01), Background Scan 477
Location of Maximum: 95.00
Number of points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2975	62.00	11652	83.00	180	131.00	367
37.00	14609	63.00	10127	87.00	12060	135.00	685
38.00	13896	64.00	1240	88.00	9675	141.00	2031
39.00	4870	66.00	197	91.00	424	143.00	2169
40.00	530	67.00	383	92.00	7053	146.00	185
41.00	300	68.00	24456	93.00	10122	147.00	188
42.00	461	69.00	26048	94.00	29248	148.00	701
45.00	2318	70.00	1910	95.00	260928	155.00	525
47.00	4559	72.00	1072	96.00	19080	157.00	465
48.00	2512	73.00	10447	97.00	441	158.00	181
49.00	14016	74.00	41768	104.00	1131	170.00	749
50.00	61696	75.00	128368	106.00	1014	172.00	587
51.00	17792	76.00	11345	116.00	781	174.00	219776
55.00	1167	77.00	1437	117.00	1537	175.00	16560
56.00	3973	78.00	1904	118.00	1346	176.00	211136
57.00	7178	79.00	4628	119.00	975	177.00	14920
58.00	204	80.00	1748	127.00	239	178.00	199
60.00	3063	81.00	4866	128.00	531		
61.00	13424	82.00	403	130.00	803		

Data File: /chem/VOA3.i/070705v3.b/3r402BFB.d

Date : 07-JUL-2005 09:20

Client ID: BFB01

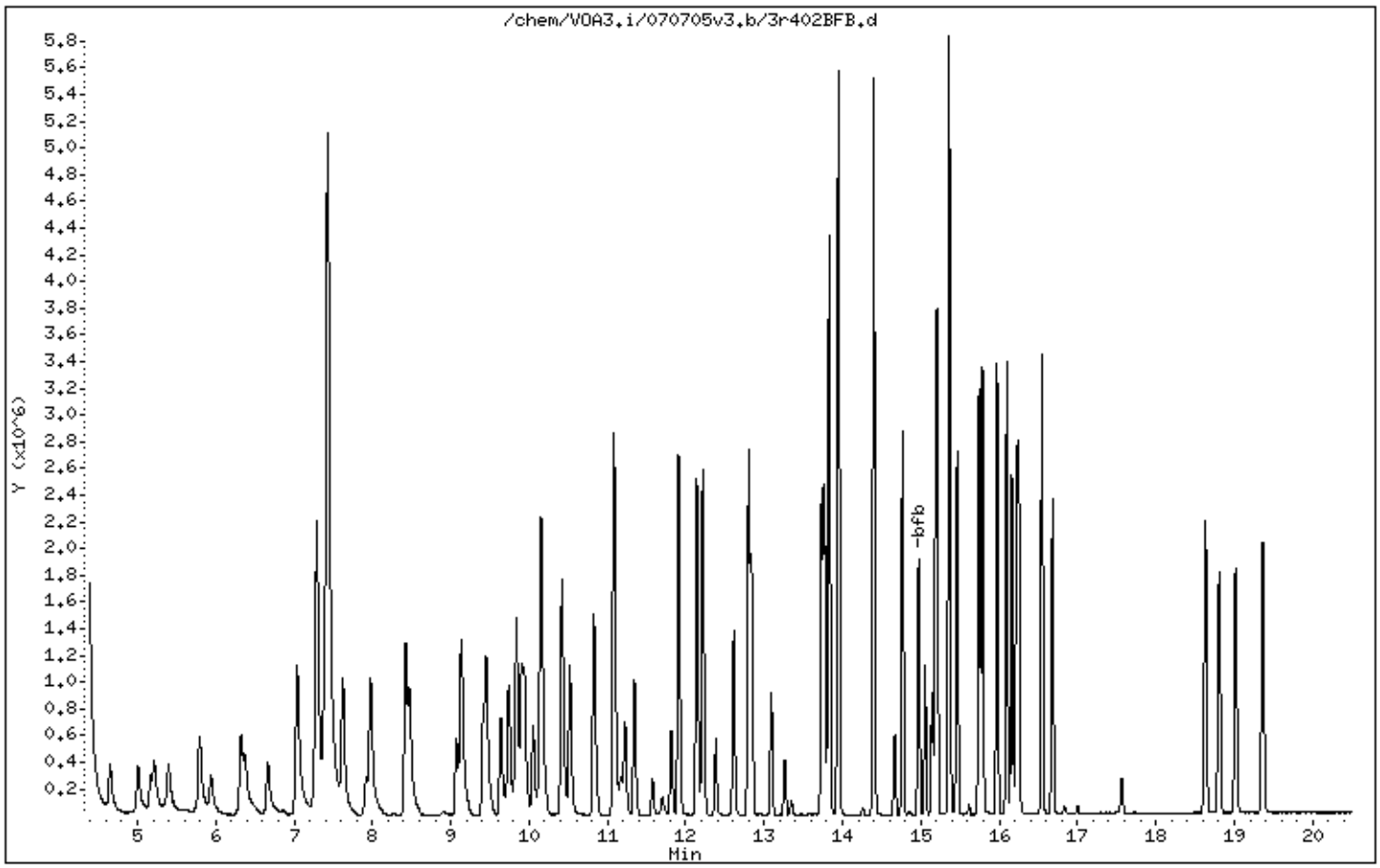
Instrument: VOA3.i

Sample Info: |UVM050605-01E|BFB|1|VOAF|1|

Operator: PAM

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA3.i/070705v3.b/3r402BFB.d

Date : 07-JUL-2005 09:20

Client ID: BFB01

Instrument: VOA3.i

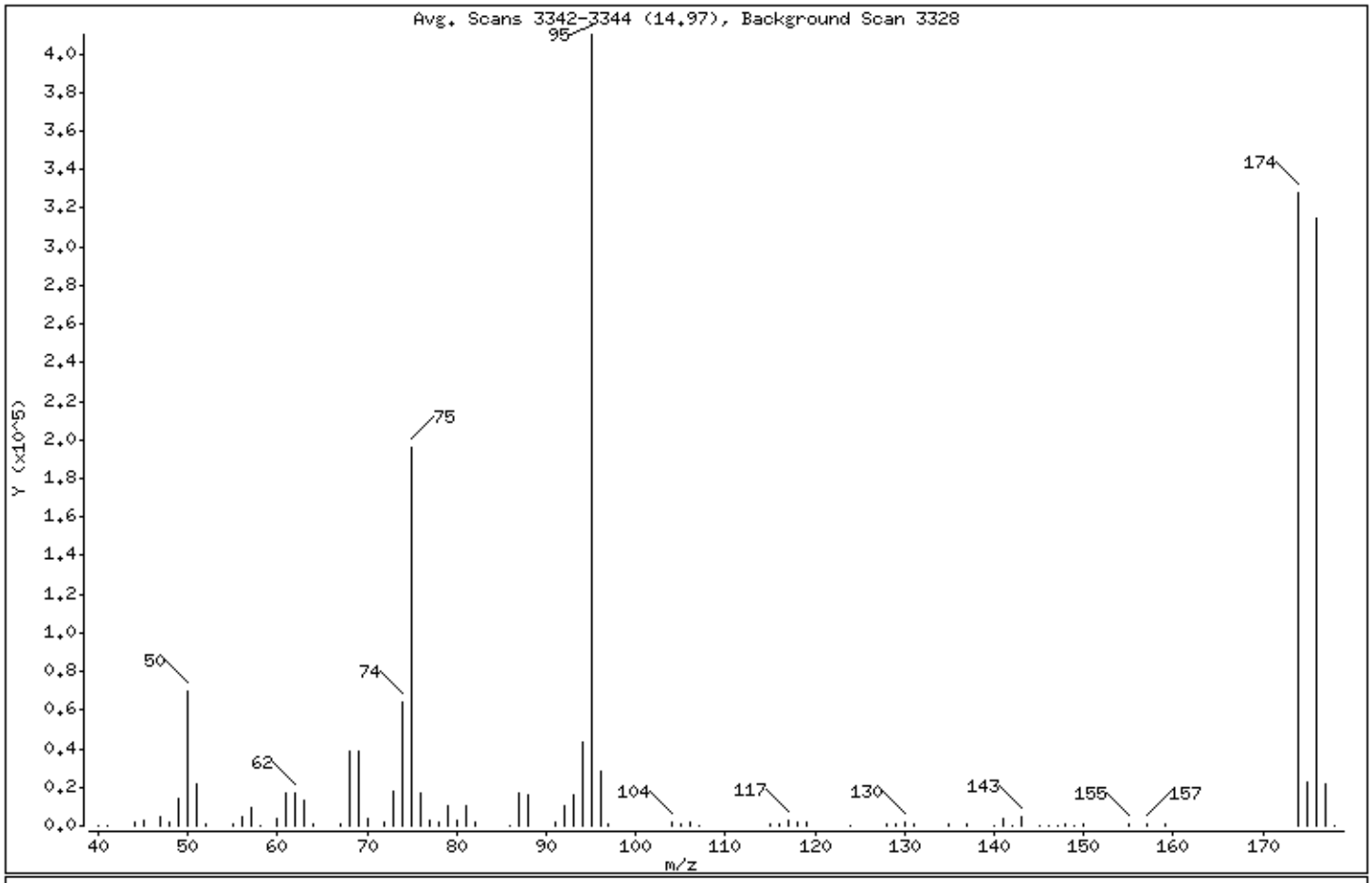
Sample Info: |UVM050605-01E|BFB|1|VOAF|1|

Operator: PAM

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.98
75	30.00 - 60.00% of mass 95	47.86
96	5.00 - 9.00% of mass 95	6.93
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	80.05
175	5.00 - 9.00% of mass 174	5.53 (6.91)
176	95.00 - 101.00% of mass 174	76.85 (96.00)
177	5.00 - 9.00% of mass 176	5.30 (6.90)

Date : 07-JUL-2005 09:20

Client ID: BFB01 Instrument: VOA3.i

Sample Info: |UVM050605-01E|BFB|1|VOAF|1|

Operator: PAM

Column phase: db624 Column diameter: 0.25

Data File: 3r402BFB.d
Spectrum: Avg. Scans 3342-3344 (14.97), Background Scan 3328
Location of Maximum: 95.00
Number of points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
40.00	381	68.00	38992	94.00	43776	140.00	169
41.00	92	69.00	39096	95.00	409984	141.00	3756
44.00	2104	70.00	3548	96.00	28432	142.00	348
45.00	3296	72.00	1754	97.00	1018	143.00	4341
47.00	4922	73.00	18328	104.00	2008	145.00	418
48.00	2090	74.00	64160	105.00	805	146.00	286
49.00	13971	75.00	196224	106.00	1651	147.00	219
50.00	69600	76.00	16848	107.00	350	148.00	837
51.00	21288	77.00	2439	115.00	478	149.00	188
52.00	750	78.00	1955	116.00	1394	150.00	596
55.00	1338	79.00	9941	117.00	2359	155.00	1122
56.00	5174	80.00	2801	118.00	1632	157.00	820
57.00	9675	81.00	10479	119.00	2149	159.00	555
58.00	436	82.00	2279	124.00	167	174.00	328192
60.00	3369	86.00	219	128.00	1354	175.00	22688
61.00	16792	87.00	17336	129.00	804	176.00	315072
62.00	17032	88.00	16211	130.00	1547	177.00	21728
63.00	13320	91.00	1623	131.00	514	178.00	467
64.00	1266	92.00	10833	135.00	931		
67.00	1144	93.00	15918	137.00	866		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881394

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R408ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
75-71-8	Dichlorodifluoromethane		1.0	U
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-69-4	Trichlorofluoromethane		1.0	U
107-02-8	Acrolein		5.0	U
75-35-4	1,1-Dichloroethylene		1.0	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		5.0	U
75-05-8	Acetonitrile		25.0	U
78-83-1	Isobutyl alcohol		50.0	U
107-05-1	Allyl chloride		5.0	U
75-09-2	Methylene chloride		5.0	U
107-13-1	Acrylonitrile		5.0	U
156-60-5	trans-1,2-Dichloroethylene		1.0	U
75-34-3	1,1-Dichloroethane		1.0	U
108-05-4	Vinyl acetate		5.0	U
126-99-8	2-Chloro-1,3-butadiene		1.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethylene		1.0	U
594-20-7	2,2-Dichloropropane		1.0	U
126-98-7	Methacrylonitrile		5.0	U
107-12-0	Propionitrile		5.0	U
74-97-5	Bromochloromethane		1.0	U
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
563-58-6	1,1-Dichloropropene		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		1.0	U
79-01-6	Trichloroethylene		1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881394

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R408ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881394

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R408ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
135-98-8	sec-Butylbenzene		1.0	U
99-87-6	4-Isopropyltoluene		1.0	U
541-73-1	1,3-Dichlorobenzene		1.0	U
106-46-7	1,4-Dichlorobenzene		1.0	U
104-51-8	n-Butylbenzene		1.0	U
95-50-1	1,2-Dichlorobenzene		1.0	U
96-12-8	1,2-Dibromo-3-chloropropane		1.0	U
120-82-1	1,2,4-Trichlorobenzene		1.0	U
87-68-3	Hexachlorobutadiene		1.0	U
91-20-3	Naphthalene		1.0	U
87-61-6	1,2,3-Trichlorobenzene		1.0	U
123-91-1	1,4-Dioxane		50.0	U

1E

EPA SAMPLE NO.

VBLK01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881394

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R408ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC OLM03.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r408ESHL2.d
Lab Smp Id: 1200881394 Client Smp ID: VBLK01
Inj Date : 07-JUL-2005 12:04
Operator : PAM Inst ID: VOA3.i
Smp Info : |1200881394|439994|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.419	10.420	(1.000)	2302958	50.0000	
* 61 Chlorobenzene-d5	117	13.736	13.733	(1.000)	1478038	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.220	16.221	(1.000)	674924	50.0000	
$ 35 Dibromofluoromethane	113	9.640	9.641	(0.925)	630353	43.1168	43.1
$ 47 Toluene-d8	98	12.141	12.141	(0.884)	2013279	42.3181	42.3
$ 71 Bromofluorobenzene	95	14.973	14.971	(0.923)	694469	40.4941	40.5

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r408ESHL2.d
Lab Smp Id: 1200881394 Client Smp ID: VBLK01
Inj Date : 07-JUL-2005 12:04
Operator : PAM Inst ID: VOA3.i
Smp Info : |1200881394|439994|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: kilroy

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA3.i/070705v3.b/3r408ESHL2.d

Date : 07-JUL-2005 12:04

Client ID: VBLK01

Instrument: VOA3.i

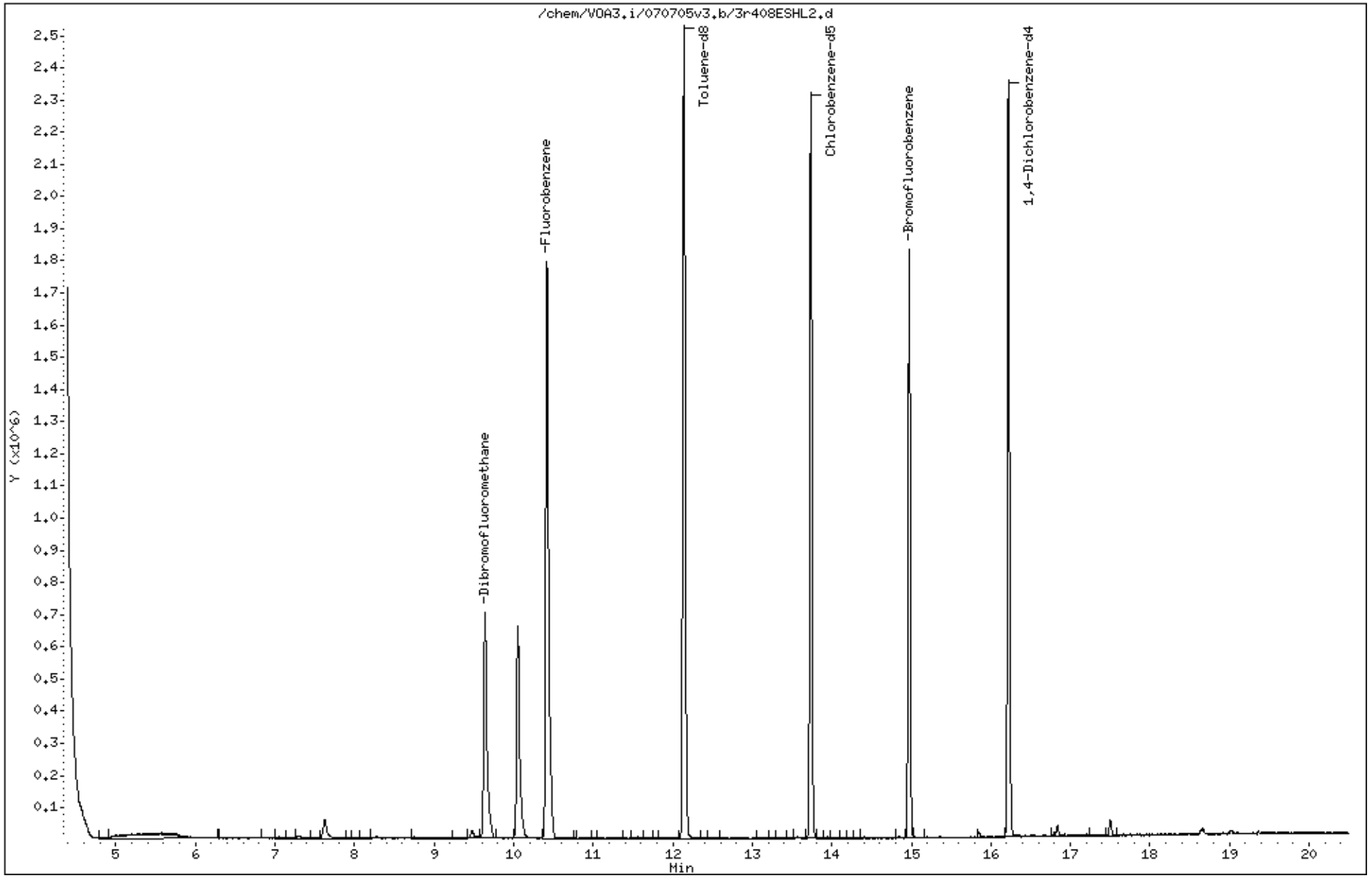
Sample Info: |1200881394|43994|1|VOAF|1|

Purge Volume: 5.0

Operator: PAM

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889456

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R306-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889456

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R306-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889456

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R306-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK02

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889456

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R306-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC OLM03.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070605v1.b/1r306-ESHL.d
Lab Smp Id: 1200889456 Client Smp ID: VBLK02
Inj Date : 06-JUL-2005 10:12
Operator : PS Inst ID: VOA1.i
Smp Info : |1200889456|439994|1|VOAF|1|
Misc Info : BLANK 5.0ML N/A
Comment :
Method : /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m
Meth Date : 15-Jul-2005 07:49 kel00587 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: prdsvr07

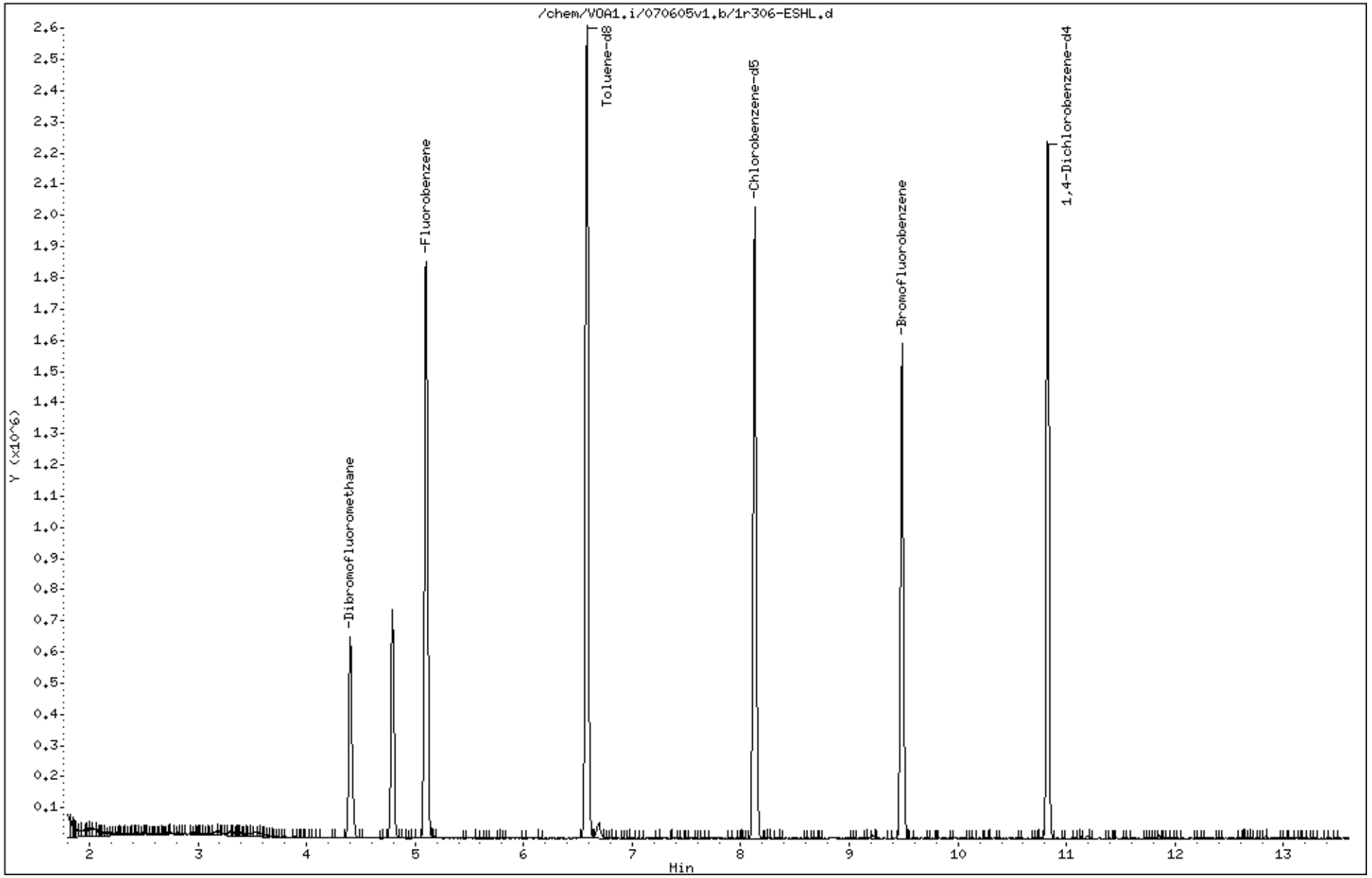
Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	5.103	5.106	(1.000)	1736035	50.0000	
* 61 Chlorobenzene-d5	117	8.127	8.129	(1.000)	1224465	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	10.825	10.827	(1.000)	589443	50.0000	
$ 35 Dibromofluoromethane	113	4.403	4.406	(0.863)	421819	53.7040	53.7
$ 47 Toluene-d8	98	6.583	6.585	(0.810)	1821985	51.1149	51.1
$ 71 Bromofluorobenzene	95	9.484	9.486	(0.876)	640285	48.8398	48.8

Data File: /chem/VOA1.i/070605v1.b/1r306-ESHL.d
Date : 06-JUL-2005 10:12
Client ID: VBLK02
Instrument: VOA1.i
Sample Info: |1200889456|439994|1|VOAF|1|
Purge Volume: 5.0
Operator: PS
Column phase: RTX-Volatiles
Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881397

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R402ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	43.0	E
74-87-3	Chloromethane	35.2	
75-01-4	Vinyl chloride	41.0	
74-83-9	Bromomethane	44.2	
75-00-3	Chloroethane	45.0	
75-69-4	Trichlorofluoromethane	45.2	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	40.7	
67-64-1	Acetone	191	
74-88-4	Iodomethane	207	
75-15-0	Carbon disulfide	184	
75-05-8	Acetonitrile	806	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	41.6	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	42.7	
75-34-3	1,1-Dichloroethane	43.6	
108-05-4	Vinyl acetate	175	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	175	
156-59-2	cis-1,2-Dichloroethylene	42.8	
594-20-7	2,2-Dichloropropane	46.1	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	44.1	
67-66-3	Chloroform	42.3	
71-55-6	1,1,1-Trichloroethane	46.5	
563-58-6	1,1-Dichloropropene	41.8	
56-23-5	Carbon tetrachloride	52.9	
107-06-2	1,2-Dichloroethane	42.4	
71-43-2	Benzene	41.9	
79-01-6	Trichloroethylene	44.4	

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881397

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R402ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	44.0	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	39.7	
75-27-4	Bromodichloromethane	44.8	
10061-01-5	cis-1,3-Dichloropropylene	39.8	
108-10-1	4-Methyl-2-pentanone	175	
108-88-3	Toluene	41.4	
10061-02-6	trans-1,3-Dichloropropylene	37.9	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	40.3	
142-28-9	1,3-Dichloropropane	41.1	
591-78-6	2-Hexanone	159	
127-18-4	Tetrachloroethylene	44.4	
124-48-1	Dibromochloromethane	47.0	
106-93-4	1,2-Dibromoethane	44.3	
108-90-7	Chlorobenzene	43.8	
630-20-6	1,1,1,2-Tetrachloroethane	47.0	
100-41-4	Ethylbenzene	41.7	
95-47-6	o-Xylene	42.0	
----------	m,p-Xylenes	84.6	
1330-20-7	Xylenes (total)	126	
100-42-5	Styrene	40.9	
75-25-2	Bromoform	45.3	
98-82-8	Isopropylbenzene	38.4	
79-34-5	1,1,2,2-Tetrachloroethane	38.5	
96-18-4	1,2,3-Trichloropropane	38.4	
108-86-1	Bromobenzene	42.5	
103-65-1	n-Propylbenzene	39.2	
95-49-8	2-Chlorotoluene	40.8	
108-67-8	1,3,5-Trimethylbenzene	40.7	
95-63-6	1,2,4-Trimethylbenzene	40.1	
106-43-4	4-Chlorotoluene	40.0	
98-06-6	tert-Butylbenzene	40.7	

FORM I VOA OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881397

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R402ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	40.3	
99-87-6	4-Isopropyltoluene	42.3	
541-73-1	1,3-Dichlorobenzene	43.6	
106-46-7	1,4-Dichlorobenzene	41.6	
104-51-8	n-Butylbenzene	42.5	
95-50-1	1,2-Dichlorobenzene	42.7	
96-12-8	1,2-Dibromo-3-chloropropane	37.1	
120-82-1	1,2,4-Trichlorobenzene	52.8	
87-68-3	Hexachlorobutadiene	45.2	
91-20-3	Naphthalene	39.9	
87-61-6	1,2,3-Trichlorobenzene	47.7	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r402ESHL2.d
Lab Smp Id: 1200881397 Client Smp ID: VBLK01LCS
Inj Date : 07-JUL-2005 09:20
Operator : PAM Inst ID: VOA3.i
Smp Info : |1200881397|439994|1|VOAF|1|
Misc Info : VBLK01LCS VSTD050
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

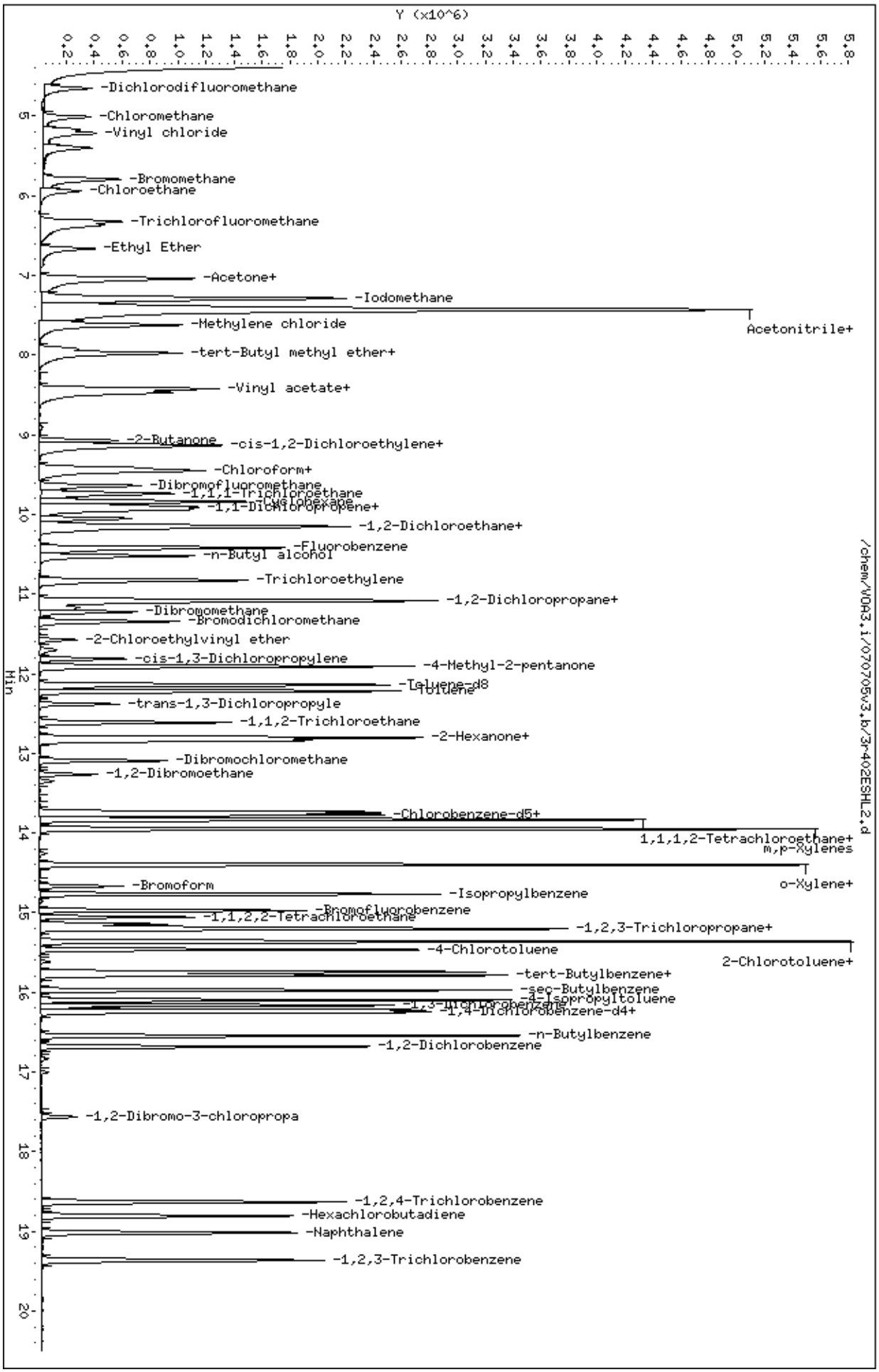
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.420	10.420	(1.000)	2392709	50.0000	
* 61 Chlorobenzene-d5	117	13.733	13.733	(1.000)	1556191	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	760028	50.0000	
$ 35 Dibromofluoromethane	113	9.641	9.641	(0.925)	680084	44.7735	44.8
$ 47 Toluene-d8	98	12.141	12.141	(0.884)	2077946	41.4838	41.5
$ 71 Bromofluorobenzene	95	14.971	14.971	(0.923)	739482	38.2906	38.3
3 Dichlorodifluoromethane	85	4.653	4.653	(0.447)	891991	42.9860	43.0(A)
4 Chloromethane	50	5.007	5.007	(0.481)	765095	35.2257	35.2
5 Vinyl chloride	62	5.219	5.219	(0.501)	740509	41.0026	41.0
6 Bromomethane	94	5.795	5.795	(0.556)	887756	44.2418	44.2
7 Chloroethane	64	5.941	5.941	(0.570)	536146	45.0243	45.0
8 Trichlorofluoromethane	101	6.327	6.327	(0.607)	1187959	45.2476	45.2
11 1,1-Dichloroethylene	61	7.042	7.042	(0.676)	1193282	40.7424	40.7
10 Acetone	43	7.036	7.036	(0.675)	908549	190.789	191
14 Carbon disulfide	76	7.429	7.429	(0.713)	10965603	184.371	184

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17	Methylene chloride	84	7.625	7.625	(0.732)	829248	41.5897	41.6
21	trans-1,2-Dichloroethylene	96	7.979	7.979	(0.766)	769190	42.6960	42.7
22	1,1-Dichloroethane	63	8.473	8.473	(0.813)	1281483	43.5848	43.6
31	cis-1,2-Dichloroethylene	96	9.131	9.131	(0.876)	814520	42.8135	42.8
32	Chloroform	83	9.457	9.457	(0.908)	1285888	42.3020	42.3
37	1,2-Dichloroethane	62	10.135	10.135	(0.973)	886349	42.4251	42.4
30	2-Butanone	43	9.074	9.074	(0.871)	1112080	174.806	175
36	1,1,1-Trichloroethane	97	9.739	9.739	(0.935)	997038	46.5167	46.5
87	1,4-Dichlorobenzene	146	16.250	16.250	(1.002)	1198492	41.5697	41.6
93	1,2,4-Trichlorobenzene	180	18.633	18.633	(1.149)	926914	52.8151	52.8
85	1,3-Dichlorobenzene	146	16.161	16.161	(0.996)	1211658	43.6359	43.6
90	1,2-Dichlorobenzene	146	16.680	16.680	(1.028)	1133537	42.7274	42.7
95	Naphthalene	128	19.019	19.019	(1.172)	2032662	39.9358	39.9
94	Hexachlorobutadiene	225	18.807	18.807	(1.159)	456983	45.1842	45.2
33	Carbon tetrachloride	117	9.942	9.942	(0.954)	751232	52.9400	52.9
38	Benzene	78	10.157	10.157	(0.975)	2680413	41.8646	41.9
39	Trichloroethylene	95	10.828	10.828	(1.039)	710682	44.3666	44.4
41	1,2-Dichloropropane	63	11.084	11.084	(1.064)	646448	43.9566	44.0
45	Bromodichloromethane	83	11.341	11.341	(1.088)	869304	44.7691	44.8
46	cis-1,3-Dichloropropylene	75	11.812	11.812	(1.134)	574756	39.8064	39.8
53	trans-1,3-Dichloropropylene	75	12.382	12.382	(0.902)	462420	37.8877	37.9
54	1,1,2-Trichloroethane	83	12.613	12.613	(0.918)	457807	40.2908	40.3
57	Dibromochloromethane	129	13.094	13.094	(0.953)	576553	47.0333	47.0
49	4-Methyl-2-pentanone	58	11.907	11.907	(0.867)	901532	174.839	175
50	Toluene	92	12.217	12.217	(0.890)	1443421	41.4333	41.4
56	Tetrachloroethylene	164	12.841	12.841	(0.935)	476922	44.4496	44.4
55	2-Hexanone	43	12.797	12.797	(0.932)	1534952	159.168	159(R)
59	1,2-Dibromoethane	107	13.262	13.262	(0.966)	320055	44.3404	44.3
62	Chlorobenzene	112	13.768	13.768	(1.003)	1536034	43.8515	43.8
58	Ethylbenzene	91	13.835	13.835	(1.007)	2505676	41.6837	41.7
63	m,p-Xylenes	106	13.949	13.949	(1.016)	1927239	84.5879	84.6
65	Styrene	104	14.401	14.401	(1.049)	1551938	40.8759	40.9
64	o-Xylene	106	14.398	14.398	(1.048)	939094	41.9660	42.0
67	Isopropylbenzene	105	14.768	14.768	(0.910)	2150856	38.3720	38.4
66	Bromoform	173	14.667	14.667	(0.904)	305468	45.2819	45.3
73	1,1,2,2-Tetrachloroethane	83	15.056	15.056	(0.928)	607708	38.5192	38.5
92	1,2-Dibromo-3-chloropropane	75	17.566	17.566	(1.083)	98626	37.1066	37.1
M 1	Xylenes (total)	106				2866333	126.554	126
60	1,1,1,2-Tetrachloroethane	131	13.825	13.825	(1.007)	553087	47.0561	47.0
34	1,1-Dichloropropene	75	9.904	9.904	(0.950)	904624	41.8493	41.8
52	1,3-Dichloropropane	76	12.812	12.812	(0.933)	789011	41.0820	41.1
80	4-Chlorotoluene	91	15.465	15.465	(0.953)	1811677	39.9981	40.0
15	Acetonitrile	41	7.394	7.394	(0.710)	2060361	805.504	806
13	Iodomethane	142	7.289	7.289	(0.700)	4781405	206.844	207
43	Dibromomethane	93	11.223	11.223	(1.077)	320525	39.7223	39.7(R)
29	Bromochloromethane	128	9.416	9.416	(0.904)	319980	44.1266	44.1
75	Bromobenzene	156	15.186	15.186	(0.936)	628560	42.4820	42.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81 tert-Butylbenzene	119	15.743	15.743	(0.971)	2025327	40.7157	40.7
83 sec-Butylbenzene	105	15.974	15.974	(0.985)	2586142	40.2815	40.3
76 n-Propylbenzene	91	15.205	15.205	(0.937)	2837219	39.2326	39.2
89 n-Butylbenzene	91	16.544	16.544	(1.020)	2160399	42.5235	42.5
23 Vinyl acetate	43	8.422	8.422	(0.808)	3114048	175.228	175
84 4-Isopropyltoluene	119	16.098	16.098	(0.992)	2201320	42.3333	42.3
77 2-Chlorotoluene	91	15.360	15.360	(0.947)	1978895	40.8522	40.8
25 2,2-Dichloropropane	77	9.150	9.150	(0.878)	324041	46.0733	46.1
78 1,3,5-Trimethylbenzene	105	15.363	15.363	(0.947)	2030008	40.7439	40.7
96 1,2,3-Trichlorobenzene	180	19.361	19.361	(1.194)	933325	47.7362	47.7
79 1,2,4-Trimethylbenzene	105	15.784	15.784	(0.973)	2024416	40.1473	40.1
74 1,2,3-Trichloropropane	110	15.142	15.142	(0.933)	166698	38.4205	38.4

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.



Data File: /chem/VOA3.i/070705v3.b/3r402ESHL2.d
Date : 07-JUL-2005 09:20
Client ID: VBLK01LCS
Sample Info: 1120088139714399941|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

Page 1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881398

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R405ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	232	
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	1950	
107-05-1	Allyl chloride	262	
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	248	
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	54.9	
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	151	
107-12-0	Propionitrile	225	
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881398

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R405ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
78-87-5	1,2-Dichloropropane		1.0	U
80-62-6	Methyl methacrylate		230	
74-95-3	Dibromomethane		1.0	U
75-27-4	Bromodichloromethane		1.0	U
10061-01-5	cis-1,3-Dichloropropylene		1.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		1.0	U
10061-02-6	trans-1,3-Dichloropropylene		1.0	U
97-63-2	Ethyl methacrylate		212	
79-00-5	1,1,2-Trichloroethane		1.0	U
142-28-9	1,3-Dichloropropane		1.0	U
591-78-6	2-Hexanone		5.0	U
127-18-4	Tetrachloroethylene		1.0	U
124-48-1	Dibromochloromethane		1.0	U
106-93-4	1,2-Dibromoethane		1.0	U
108-90-7	Chlorobenzene		1.0	U
630-20-6	1,1,1,2-Tetrachloroethane		1.0	U
100-41-4	Ethylbenzene		1.0	U
95-47-6	o-Xylene		1.0	U
----------	m,p-Xylenes		2.0	U
1330-20-7	Xylenes (total)		1.0	U
100-42-5	Styrene		1.0	U
75-25-2	Bromoform		1.0	U
98-82-8	Isopropylbenzene		1.0	U
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U
96-18-4	1,2,3-Trichloropropane		1.0	U
108-86-1	Bromobenzene		1.0	U
103-65-1	n-Propylbenzene		1.0	U
95-49-8	2-Chlorotoluene		1.0	U
108-67-8	1,3,5-Trimethylbenzene		1.0	U
95-63-6	1,2,4-Trimethylbenzene		1.0	U
106-43-4	4-Chlorotoluene		1.0	U
98-06-6	tert-Butylbenzene		1.0	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200881398

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 3R405ESHL2

Level: (low/med) LOW Date Received: 07/07/05

% Moisture: not dec. _____ Date Analyzed: 07/07/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	2250	

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r405ESHL2.d
Lab Smp Id: 1200881398 Client Smp ID: VBLK01SLCS
Inj Date : 07-JUL-2005 10:42
Operator : PAM Inst ID: VOA3.i
Smp Info : |1200881398|439994|1|VOAF|1|
Misc Info : VSTD250S VBLK01SLCS
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.420	10.420	(1.000)	2342610	50.0000	
* 61 Chlorobenzene-d5	117	13.734	13.733	(1.000)	1497926	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.222	16.221	(1.000)	709539	50.0000	
$ 35 Dibromofluoromethane	113	9.638	9.641	(0.925)	654678	44.0227	44.0
$ 47 Toluene-d8	98	12.139	12.141	(0.884)	2022454	41.9465	41.9
$ 71 Bromofluorobenzene	95	14.971	14.971	(0.923)	705741	39.1438	39.1
97 1,4-Dioxane	88	11.176	11.176	(1.073)	406624	2246.49	2250
42 Methyl methacrylate	69	11.053	11.053	(1.061)	2162455	230.243	230
51 Ethyl methacrylate	69	12.385	12.385	(0.902)	3647426	212.023	212
24 2-Chloro-1,3-butadiene	53	8.581	8.581	(0.824)	954737	54.9422	54.9
27 Methacrylonitrile	41	9.338	9.338	(0.896)	2025066	151.330	151(R)
19 Isobutyl alcohol	41	9.800	9.800	(0.940)	1107901	1949.60	1950
16 Allyl chloride	76	7.480	7.480	(0.718)	1936874	262.030	262
18 Acrylonitrile	53	7.885	7.885	(0.757)	1199382	248.175	248
9 Acrolein	56	6.859	6.859	(0.658)	631717	232.038	232

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
28 Propionitrile	54	9.154	9.154	(0.878)	486507	224.927	225

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA3.i/070705v3.b/3r405ESHL2.d

Page 1

Date : 07-JUL-2005 10:42

Client ID: VBLK01SLCS

Instrument: VOA3.i

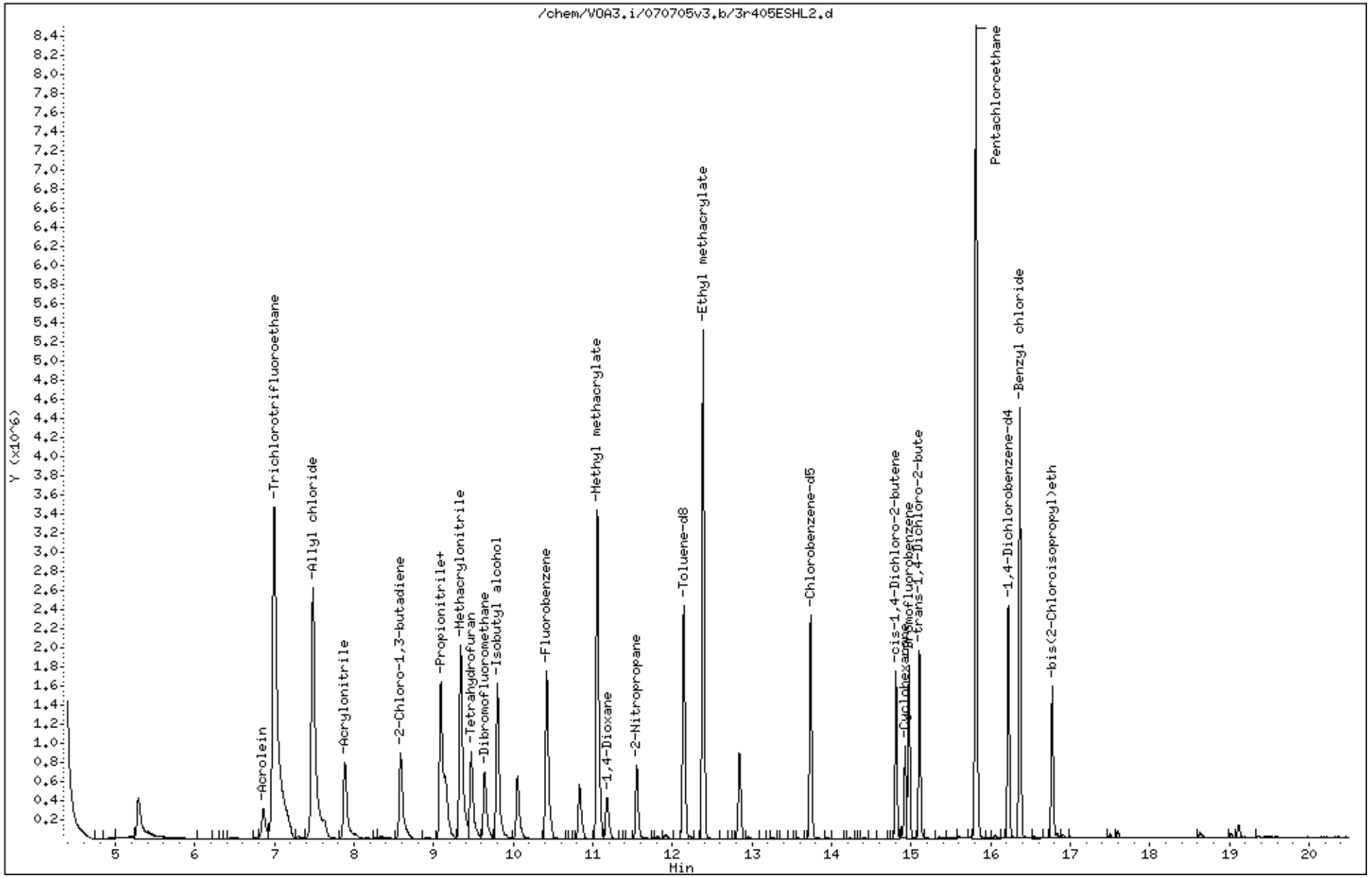
Sample Info: |1200881398|439994|1|VOAF|1|

Purge Volume: 5.0

Operator: PAM

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889457

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R302-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	67.4	E
74-87-3	Chloromethane	49.3	
75-01-4	Vinyl chloride	56.3	
74-83-9	Bromomethane	50.4	
75-00-3	Chloroethane	48.0	
75-69-4	Trichlorofluoromethane	48.0	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	42.1	
67-64-1	Acetone	164	
74-88-4	Iodomethane	253	E
75-15-0	Carbon disulfide	267	
75-05-8	Acetonitrile	821	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	47.0	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	47.5	
75-34-3	1,1-Dichloroethane	42.7	
108-05-4	Vinyl acetate	141	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	130	
156-59-2	cis-1,2-Dichloroethylene	42.5	
594-20-7	2,2-Dichloropropane	45.0	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	45.2	
67-66-3	Chloroform	45.0	
71-55-6	1,1,1-Trichloroethane	48.9	
563-58-6	1,1-Dichloropropene	46.8	
56-23-5	Carbon tetrachloride	51.9	
107-06-2	1,2-Dichloroethane	40.6	
71-43-2	Benzene	50.0	
79-01-6	Trichloroethylene	45.8	

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889457

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R302-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	40.5	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	46.6	
75-27-4	Bromodichloromethane	49.9	
10061-01-5	cis-1,3-Dichloropropylene	45.8	
108-10-1	4-Methyl-2-pentanone	155	
108-88-3	Toluene	45.2	
10061-02-6	trans-1,3-Dichloropropylene	42.7	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	48.8	
142-28-9	1,3-Dichloropropane	46.2	
591-78-6	2-Hexanone	146	
127-18-4	Tetrachloroethylene	52.2	
124-48-1	Dibromochloromethane	54.9	E
106-93-4	1,2-Dibromoethane	47.0	
108-90-7	Chlorobenzene	45.6	
630-20-6	1,1,1,2-Tetrachloroethane	52.1	
100-41-4	Ethylbenzene	45.2	
95-47-6	o-Xylene	45.7	
----------	m,p-Xylenes	91.7	
1330-20-7	Xylenes (total)	137	
100-42-5	Styrene	46.8	
75-25-2	Bromoform	48.3	
98-82-8	Isopropylbenzene	45.4	
79-34-5	1,1,2,2-Tetrachloroethane	44.9	
96-18-4	1,2,3-Trichloropropane	41.7	
108-86-1	Bromobenzene	46.7	
103-65-1	n-Propylbenzene	46.0	
95-49-8	2-Chlorotoluene	44.9	
108-67-8	1,3,5-Trimethylbenzene	45.5	
95-63-6	1,2,4-Trimethylbenzene	44.7	
106-43-4	4-Chlorotoluene	46.4	
98-06-6	tert-Butylbenzene	43.8	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889457

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R302-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	45.4	
99-87-6	4-Isopropyltoluene	45.0	
541-73-1	1,3-Dichlorobenzene	46.7	
106-46-7	1,4-Dichlorobenzene	46.3	
104-51-8	n-Butylbenzene	45.3	
95-50-1	1,2-Dichlorobenzene	47.1	
96-12-8	1,2-Dibromo-3-chloropropane	35.0	
120-82-1	1,2,4-Trichlorobenzene	47.4	
87-68-3	Hexachlorobutadiene	48.7	
91-20-3	Naphthalene	35.2	
87-61-6	1,2,3-Trichlorobenzene	42.6	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070605v1.b/1r302-ESHL.d
Lab Smp Id: 1200889457 Client Smp ID: VBLK02LCS
Inj Date : 06-JUL-2005 07:52
Operator : PS Inst ID: VOA1.i
Smp Info : |1200889457|439994|1|VOAF|1|
Misc Info : UVM050605-01D 5.0ML
Comment :
Method : /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m
Meth Date : 15-Jul-2005 07:49 kel00587 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

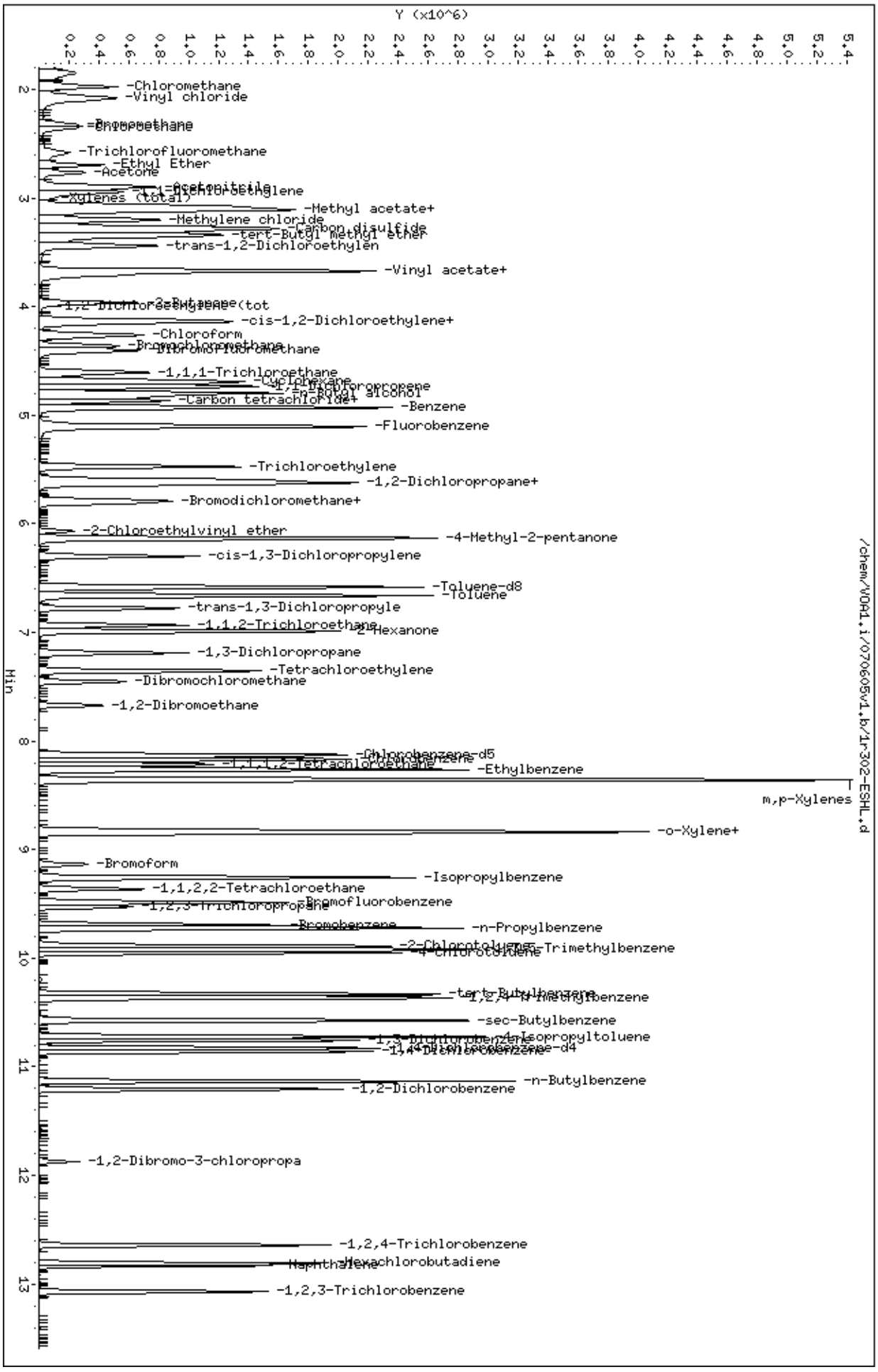
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	5.106	5.106	(1.000)	1826812	50.0000	
* 61 Chlorobenzene-d5	117	8.129	8.129	(1.000)	1251917	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	10.827	10.827	(1.000)	584370	50.0000	
$ 35 Dibromofluoromethane	113	4.406	4.406	(0.863)	403302	48.7950	48.8
$ 47 Toluene-d8	98	6.585	6.585	(0.810)	1843530	50.5852	50.6
$ 71 Bromofluorobenzene	95	9.486	9.486	(0.876)	655750	50.4536	50.4
3 Dichlorodifluoromethane	85	1.852	1.852	(0.363)	429208	67.3688	67.4(A)
4 Chloromethane	50	1.975	1.975	(0.387)	678913	49.3170	49.3
5 Vinyl chloride	62	2.077	2.077	(0.407)	503188	56.2633	56.3
6 Bromomethane	94	2.322	2.322	(0.455)	222959	50.4564	50.4
7 Chloroethane	64	2.360	2.360	(0.462)	221824	47.9978	48.0
8 Trichlorofluoromethane	101	2.584	2.584	(0.506)	275258	47.9586	48.0(Q)
11 1,1-Dichloroethylene	61	2.947	2.947	(0.577)	656617	42.1413	42.1
10 Acetone	43	2.771	2.771	(0.543)	396731	164.200	164
14 Carbon disulfide	76	3.284	3.284	(0.643)	5018992	267.044	267

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17	Methylene chloride	84	3.199	3.199	(0.626)	356083	47.0393	47.0
21	trans-1,2-Dichloroethylene	96	3.439	3.439	(0.674)	364016	47.4883	47.5
22	1,1-Dichloroethane	63	3.706	3.706	(0.726)	764937	42.7418	42.7
31	cis-1,2-Dichloroethylene	96	4.144	4.144	(0.812)	414006	42.4672	42.5
32	Chloroform	83	4.262	4.262	(0.835)	693456	44.9534	45.0
37	1,2-Dichloroethane	62	4.871	4.871	(0.954)	617090	40.5819	40.6
30	2-Butanone	43	3.968	3.968	(0.777)	892217	130.440	130(R)
36	1,1,1-Trichloroethane	97	4.604	4.604	(0.902)	576326	48.8611	48.9
87	1,4-Dichlorobenzene	146	10.859	10.859	(1.003)	889592	46.3308	46.3
93	1,2,4-Trichlorobenzene	180	12.643	12.643	(1.168)	550925	47.4268	47.4
85	1,3-Dichlorobenzene	146	10.758	10.758	(0.994)	895681	46.7480	46.7
90	1,2-Dichlorobenzene	146	11.206	11.206	(1.035)	809102	47.0633	47.1
95	Naphthalene	128	12.830	12.830	(1.185)	1017793	35.2591	35.2
94	Hexachlorobutadiene	225	12.809	12.809	(1.183)	369691	48.6733	48.7
33	Carbon tetrachloride	117	4.833	4.833	(0.947)	465003	51.9019	51.9
38	Benzene	78	4.929	4.929	(0.965)	1976901	49.9758	50.0
39	Trichloroethylene	95	5.474	5.474	(1.072)	460520	45.8300	45.8
41	1,2-Dichloropropane	63	5.597	5.597	(1.096)	504229	40.5103	40.5
45	Bromodichloromethane	83	5.784	5.784	(1.133)	530298	49.9090	49.9
46	cis-1,3-Dichloropropylene	75	6.297	6.297	(1.233)	606095	45.7826	45.8
53	trans-1,3-Dichloropropylene	75	6.778	6.778	(0.834)	496711	42.7426	42.7
54	1,1,2-Trichloroethane	83	6.938	6.938	(0.853)	293666	48.7523	48.8
57	Dibromochloromethane	129	7.451	7.451	(0.917)	335641	54.9154	54.9(A)
49	4-Methyl-2-pentanone	58	6.131	6.131	(0.754)	845646	155.112	155(R)
50	Toluene	92	6.660	6.660	(0.819)	1214764	45.2481	45.2
56	Tetrachloroethylene	164	7.355	7.355	(0.905)	387122	52.2282	52.2
55	2-Hexanone	43	6.991	6.991	(0.860)	1497119	146.005	146(R)
59	1,2-Dibromoethane	107	7.675	7.675	(0.944)	327835	46.9992	47.0
62	Chlorobenzene	112	8.172	8.172	(1.005)	1214410	45.6546	45.6
58	Ethylbenzene	91	8.263	8.263	(1.016)	2242788	45.2351	45.2
63	m,p-Xylenes	106	8.359	8.359	(1.028)	1761290	91.7195	91.7
65	Styrene	104	8.845	8.845	(1.088)	1390090	46.8081	46.8
64	o-Xylene	106	8.829	8.829	(1.086)	832726	45.7070	45.7
67	Isopropylbenzene	105	9.262	9.262	(0.855)	2002167	45.3647	45.4
66	Bromoform	173	9.139	9.139	(0.844)	185402	48.3041	48.3
73	1,1,2,2-Tetrachloroethane	83	9.363	9.363	(0.865)	406199	44.8932	44.9
92	1,2-Dibromo-3-chloropropane	75	11.874	11.874	(1.097)	55068	35.0198	35.0
M 1	Xylenes (total)	106				2594016	137.427	137
60	1,1,1,2-Tetrachloroethane	131	8.215	8.215	(1.010)	355198	52.1446	52.1
34	1,1-Dichloropropene	75	4.737	4.737	(0.928)	612523	46.7788	46.8
52	1,3-Dichloropropane	76	7.189	7.189	(0.884)	573778	46.2229	46.2
80	4-Chlorotoluene	91	9.946	9.946	(0.919)	1555468	46.4189	46.4
15	Acetonitrile	41	2.899	2.899	(0.568)	1001532	820.721	821
13	Iodomethane	142	3.108	3.108	(0.609)	2697134	252.954	253(A)
43	Dibromomethane	93	5.811	5.811	(1.138)	238481	46.5901	46.6
29	Bromochloromethane	128	4.363	4.363	(0.855)	181595	45.2231	45.2
75	Bromobenzene	156	9.695	9.695	(0.895)	467716	46.6924	46.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
81 tert-Butylbenzene	119	10.330	10.330	(0.954)	1648667	43.7841	43.8
83 sec-Butylbenzene	105	10.576	10.576	(0.977)	2267869	45.3629	45.4
76 n-Propylbenzene	91	9.727	9.727	(0.898)	2531615	45.9888	46.0
89 n-Butylbenzene	91	11.132	11.132	(1.028)	1684338	45.3009	45.3
23 Vinyl acetate	43	3.674	3.674	(0.720)	3421075	141.089	141(R)
84 4-Isopropyltoluene	119	10.726	10.726	(0.991)	1803266	44.9532	45.0
77 2-Chlorotoluene	91	9.887	9.887	(0.913)	1634176	44.9486	44.9
25 2,2-Dichloropropane	77	4.128	4.128	(0.809)	520647	45.0011	45.0
78 1,3,5-Trimethylbenzene	105	9.919	9.919	(0.916)	1750626	45.4792	45.5
96 1,2,3-Trichlorobenzene	180	13.071	13.071	(1.207)	485725	42.6211	42.6
79 1,2,4-Trimethylbenzene	105	10.368	10.368	(0.958)	1730202	44.7455	44.7
74 1,2,3-Trichloropropane	110	9.524	9.524	(0.880)	110017	41.7216	41.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.



Data File: /chem/VOA1.i/070605v1.b/1r302-ESHL.d
Date : 06-JUL-2005 07:52
Client ID: VBLK02LCS
Sample Info: 1120088945714399941|1|VOAF|1|
Purge Volume: 5.0
Column phase: RTX-Volatiles

Instrument: VOA1.i
Operator: PS
Column diameter: 0.25

Page 1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889458

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R304-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
75-71-8	Dichlorodifluoromethane		1.0	U
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-69-4	Trichlorofluoromethane		1.0	U
107-02-8	Acrolein		162	
75-35-4	1,1-Dichloroethylene		1.0	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		5.0	U
75-05-8	Acetonitrile		25.0	U
78-83-1	Isobutyl alcohol		1680	
107-05-1	Allyl chloride		344	
75-09-2	Methylene chloride		5.0	U
107-13-1	Acrylonitrile		209	
156-60-5	trans-1,2-Dichloroethylene		1.0	U
75-34-3	1,1-Dichloroethane		1.0	U
108-05-4	Vinyl acetate		5.0	U
126-99-8	2-Chloro-1,3-butadiene		43.2	
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethylene		1.0	U
594-20-7	2,2-Dichloropropane		1.0	U
126-98-7	Methacrylonitrile		146	
107-12-0	Propionitrile		169	
74-97-5	Bromochloromethane		1.0	U
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
563-58-6	1,1-Dichloropropene		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		1.0	U
79-01-6	Trichloroethylene		1.0	U

FORM I VOA OLM03.0

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889458

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R304-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	242	
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	230	
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) WATER Lab Sample ID: 1200889458

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1R304-ESHL

Level: (low/med) LOW Date Received: 07/06/05

% Moisture: not dec. _____ Date Analyzed: 07/06/05

GC Column: RTX-VOLATILES ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	2230	

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA1.i/070605v1.b/1r304-ESHL.d
Lab Smp Id: 1200889458 Client Smp ID: VBLK02SLCS
Inj Date : 06-JUL-2005 09:21
Operator : PS Inst ID: VOA1.i
Smp Info : |1200889458|439994|1|VOAF|1|
Misc Info : UVM050531-01B 5.0ML N/A
Comment :
Method : /chem/VOA1.i/070605v1.b/VOA1-8260B-062705.m
Meth Date : 15-Jul-2005 07:49 kel00587 Quant Type: ISTD
Cal Date : 28-JUN-2005 02:19 Cal File: 1q129.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

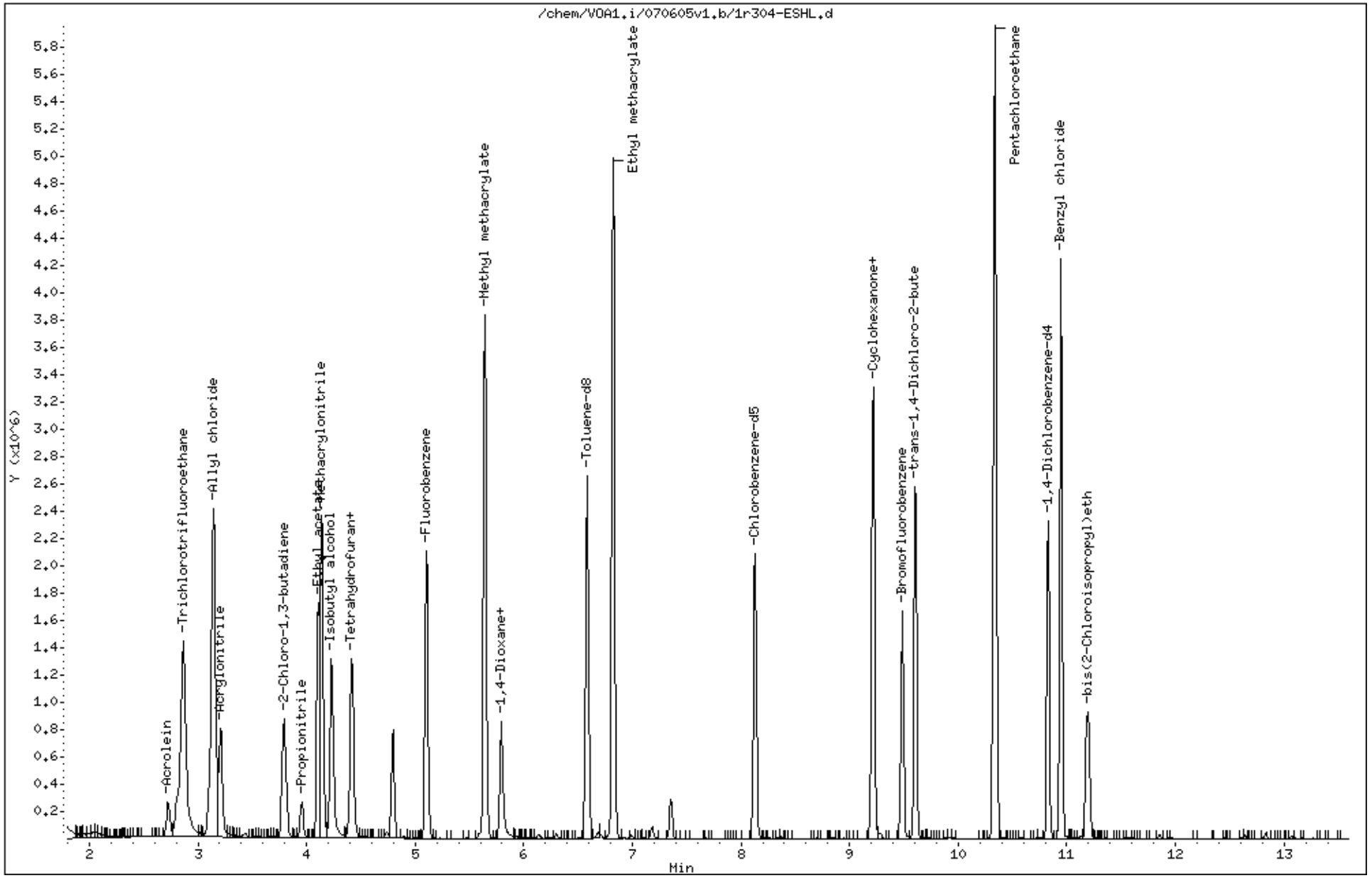
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	5.106	5.106	(1.000)	1856367	50.0000	
* 61 Chlorobenzene-d5	117	8.129	8.129	(1.000)	1276632	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	10.827	10.827	(1.000)	609403	50.0000	
$ 35 Dibromofluoromethane	113	4.406	4.406	(0.863)	387338	46.1174	46.1
$ 47 Toluene-d8	98	6.585	6.585	(0.810)	1885520	50.7358	50.7
$ 71 Bromofluorobenzene	95	9.486	9.486	(0.876)	655744	48.3807	48.4
97 1,4-Dioxane	88	5.795	5.795	(1.135)	201156	2226.65	2230
42 Methyl methacrylate	69	5.640	5.640	(1.105)	1417026	242.482	242
51 Ethyl methacrylate	69	6.826	6.826	(0.840)	2613454	230.130	230
24 2-Chloro-1,3-butadiene	53	3.792	3.792	(0.743)	817615	43.2122	43.2
27 Methacrylonitrile	41	4.139	4.139	(0.811)	1275255	145.717	146
19 Isobutyl alcohol	41	4.230	4.230	(0.828)	741842	1676.32	1680
16 Allyl chloride	76	3.140	3.140	(0.615)	723865	343.941	344(R)
18 Acrylonitrile	53	3.215	3.215	(0.630)	700664	209.208	209
9 Acrolein	56	2.723	2.723	(0.533)	259895	161.960	162

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
28 Propionitrile	54	3.957	3.957	(0.775)	278697	168.608	169

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA1.i/070605v1.b/1r304-ESHL.d
Date : 06-JUL-2005 09:21
Client ID: VBLK02SLCS
Instrument: VOA1.i
Sample Info: |1200889458|439994|1|VOAF|1|
Purge Volume: 5.0
Operator: PS
Column phase: RTX-Volatiles
Column diameter: 0.25



MISCELLANEOUS DATA

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r409.d
Lab Smp Id: 139349008 Client Smp ID: GU05060PCCR01
Inj Date : 07-JUL-2005 12:31
Operator : PAM Inst ID: VOA3.i
Smp Info : |139349008|439994|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139349.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

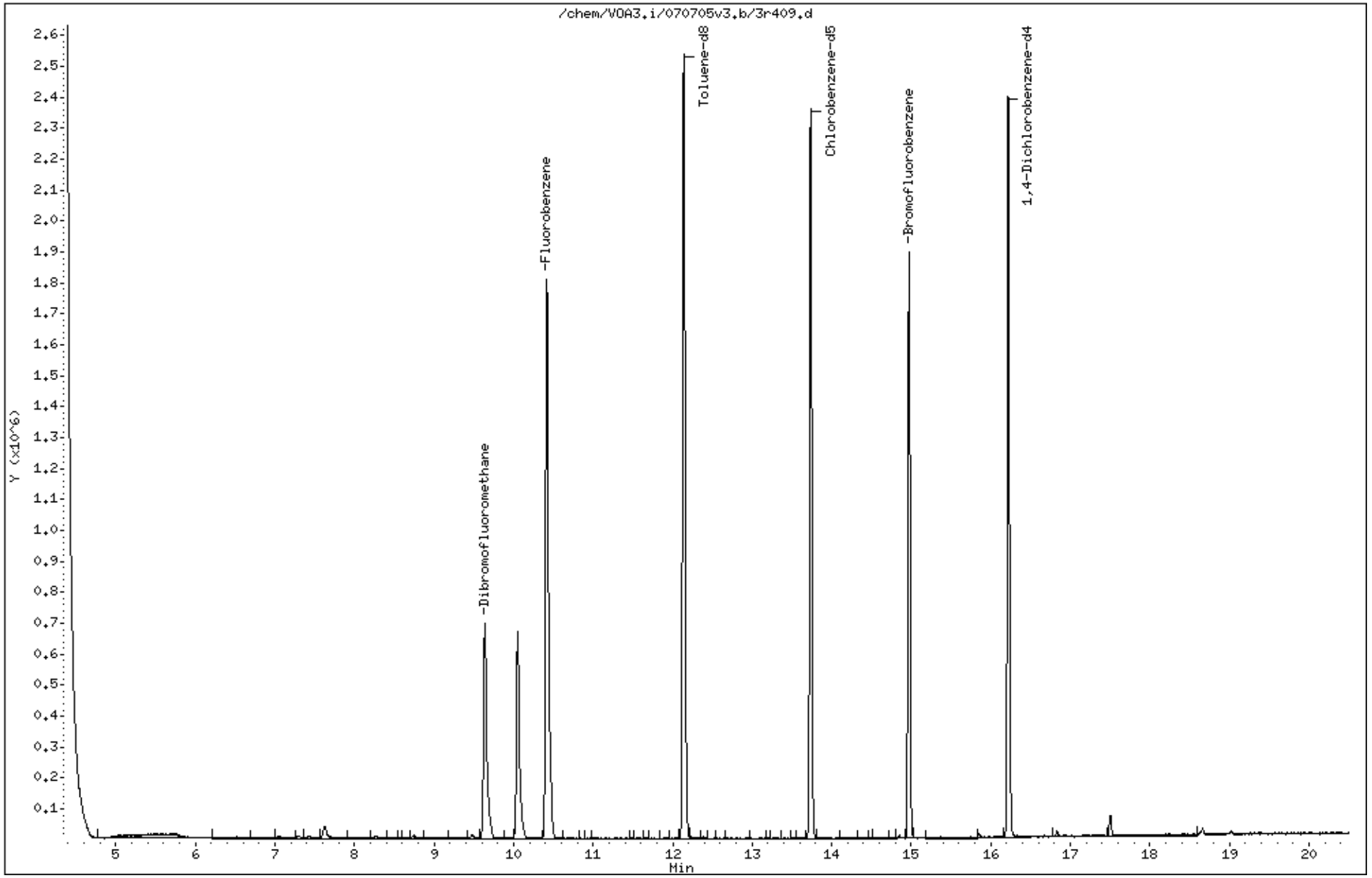
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.420	10.420	(1.000)	2295837	50.0000	
* 61 Chlorobenzene-d5	117	13.737	13.733	(1.000)	1503544	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.222	16.221	(1.000)	695193	50.0000	
$ 35 Dibromofluoromethane	113	9.638	9.641	(0.925)	641668	44.0269	44.0
$ 47 Toluene-d8	98	12.139	12.141	(0.884)	2036332	42.0765	42.1
$ 71 Bromofluorobenzene	95	14.972	14.971	(0.923)	718150	40.6541	40.6

Data File: /chem/VOA3.i/070705v3.b/3r409.d
Date : 07-JUL-2005 12:31
Client ID: GU05060PCCR01
Sample Info: |139349008|439994|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r413.d
Lab Smp Id: 1200881395 Client Smp ID: GU05060PCCR01MS
Inj Date : 07-JUL-2005 14:20
Operator : PAM Inst ID: VOA3.i
Smp Info : |1200881395|439994|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MS139349008
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139349.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

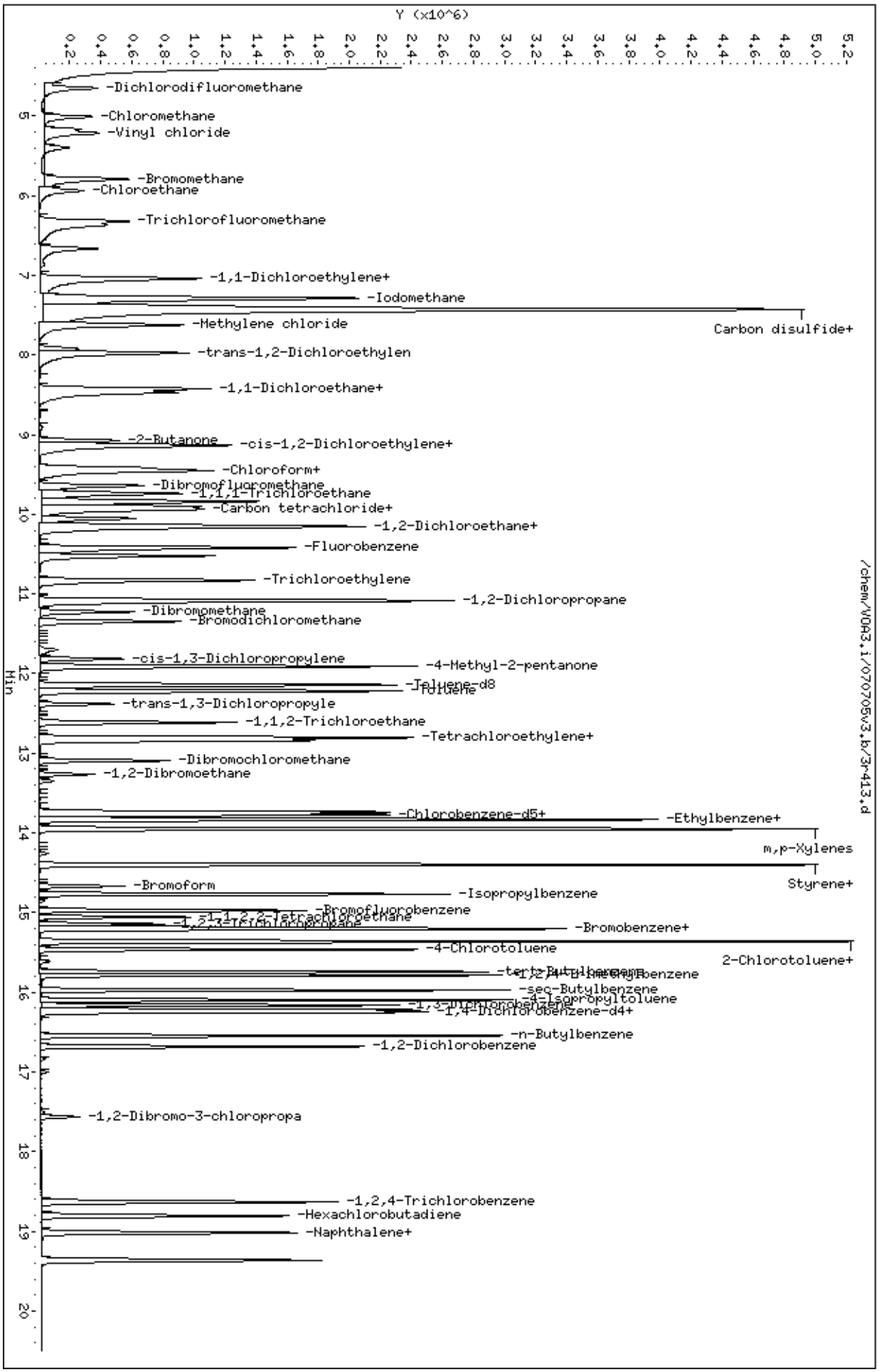
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.421	10.420	(1.000)	2199060	50.0000	
* 61 Chlorobenzene-d5	117	13.735	13.733	(1.000)	1389459	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.222	16.221	(1.000)	661659	50.0000	
$ 35 Dibromofluoromethane	113	9.642	9.641	(0.925)	629195	45.0710	45.1
$ 47 Toluene-d8	98	12.143	12.141	(0.884)	1888207	42.2193	42.2
$ 71 Bromofluorobenzene	95	14.975	14.971	(0.923)	661680	39.3557	39.4
3 Dichlorodifluoromethane	85	4.645	4.653	(0.446)	893833	46.8688	46.9(A)
4 Chloromethane	50	5.009	5.007	(0.481)	777486	38.9485	38.9
5 Vinyl chloride	62	5.221	5.219	(0.501)	724387	43.6420	43.6
6 Bromomethane	94	5.794	5.795	(0.556)	865440	46.9277	46.9
7 Chloroethane	64	5.936	5.941	(0.570)	512003	46.7832	46.8
8 Trichlorofluoromethane	101	6.322	6.327	(0.607)	1150746	47.6899	47.7
11 1,1-Dichloroethylene	61	7.041	7.042	(0.676)	1141581	42.4095	42.4
10 Acetone	43	7.034	7.036	(0.675)	801984	183.102	183
14 Carbon disulfide	76	7.427	7.429	(0.713)	10500490	192.098	192

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17	Methylene chloride	84	7.626	7.625	(0.732)	732732	39.8068	39.8
21	trans-1,2-Dichloroethylene	96	7.977	7.979	(0.766)	703583	42.4935	42.5
22	1,1-Dichloroethane	63	8.471	8.473	(0.813)	1206521	44.6488	44.6
31	cis-1,2-Dichloroethylene	96	9.130	9.131	(0.876)	744389	42.5728	42.6
32	Chloroform	83	9.452	9.457	(0.907)	1212624	43.4047	43.4
37	1,2-Dichloroethane	62	10.136	10.135	(0.973)	831826	43.3215	43.3
30	2-Butanone	43	9.076	9.074	(0.871)	986797	168.772	169
36	1,1,1-Trichloroethane	97	9.737	9.739	(0.934)	930914	47.2563	47.2
87	1,4-Dichlorobenzene	146	16.248	16.250	(1.002)	1046999	41.7142	41.7
93	1,2,4-Trichlorobenzene	180	18.634	18.633	(1.149)	790573	51.7494	51.7
85	1,3-Dichlorobenzene	146	16.162	16.161	(0.996)	1053639	43.5864	43.6
90	1,2-Dichlorobenzene	146	16.681	16.680	(1.028)	1000766	43.3310	43.3
95	Naphthalene	128	19.020	19.019	(1.172)	1795818	40.5279	40.5
94	Hexachlorobutadiene	225	18.808	18.807	(1.159)	392424	44.5695	44.6
33	Carbon tetrachloride	117	9.943	9.942	(0.954)	712701	54.6475	54.6
38	Benzene	78	10.158	10.157	(0.975)	2476029	42.0778	42.1
39	Trichloroethylene	95	10.829	10.828	(1.039)	643139	43.6856	43.7
41	1,2-Dichloropropane	63	11.082	11.084	(1.063)	586701	43.4070	43.4
45	Bromodichloromethane	83	11.348	11.341	(1.089)	807820	45.2662	45.3
46	cis-1,3-Dichloropropylene	75	11.817	11.812	(1.134)	497717	37.5064	37.5
53	trans-1,3-Dichloropropylene	75	12.383	12.382	(0.902)	395227	36.2682	36.3
54	1,1,2-Trichloroethane	83	12.611	12.613	(0.918)	415789	40.9839	41.0
57	Dibromochloromethane	129	13.092	13.094	(0.953)	530173	48.4397	48.4
49	4-Methyl-2-pentanone	58	11.908	11.907	(0.867)	794016	172.467	172
50	Toluene	92	12.219	12.217	(0.890)	1307368	42.0312	42.0
56	Tetrachloroethylene	164	12.842	12.841	(0.935)	429195	44.8014	44.8
55	2-Hexanone	43	12.798	12.797	(0.932)	1347022	156.442	156
59	1,2-Dibromoethane	107	13.266	13.262	(0.966)	274881	42.5486	42.5
62	Chlorobenzene	112	13.770	13.768	(1.003)	1378676	44.0822	44.1
58	Ethylbenzene	91	13.833	13.835	(1.007)	2264588	42.1937	42.2
63	m,p-Xylenes	106	13.950	13.949	(1.016)	1716244	84.3663	84.4
65	Styrene	104	14.403	14.401	(1.049)	1386609	40.9038	40.9
64	o-Xylene	106	14.396	14.398	(1.048)	851013	42.5933	42.6
67	Isopropylbenzene	105	14.767	14.768	(0.910)	1937640	39.7075	39.7
66	Bromoform	173	14.668	14.667	(0.904)	277635	47.2747	47.3
73	1,1,2,2-Tetrachloroethane	83	15.058	15.056	(0.928)	545889	39.7450	39.7
92	1,2-Dibromo-3-chloropropane	75	17.564	17.566	(1.083)	91163	39.4055	39.4
60	1,1,1,2-Tetrachloroethane	131	13.826	13.825	(1.007)	508456	48.4500	48.4
34	1,1-Dichloropropene	75	9.908	9.904	(0.951)	825932	41.5736	41.6
52	1,3-Dichloropropane	76	12.814	12.812	(0.933)	709413	41.3699	41.4
80	4-Chlorotoluene	91	15.463	15.465	(0.953)	1586934	40.2451	40.2
15	Acetonitrile	41	7.392	7.394	(0.709)	2098596	892.701	893
13	Iodomethane	142	7.287	7.289	(0.699)	4385234	206.411	206
43	Dibromomethane	93	11.225	11.223	(1.077)	295043	39.7842	39.8
29	Bromochloromethane	128	9.421	9.416	(0.904)	291434	43.7292	43.7
75	Bromobenzene	156	15.187	15.186	(0.936)	553941	43.0048	43.0
81	tert-Butylbenzene	119	15.745	15.743	(0.971)	1803004	41.6350	41.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	15.972	15.974	(0.985)	2307526	41.2853	41.3
76 n-Propylbenzene	91	15.206	15.205	(0.937)	2510336	39.8732	39.9
89 n-Butylbenzene	91	16.545	16.544	(1.020)	1889609	42.7230	42.7
23 Vinyl acetate	43	8.424	8.422	(0.808)	2597542	159.035	159
84 4-Isopropyltoluene	119	16.096	16.098	(0.992)	1940648	42.8688	42.9
77 2-Chlorotoluene	91	15.362	15.360	(0.947)	1768098	41.9271	41.9
25 2,2-Dichloropropane	77	9.155	9.150	(0.878)	284517	44.0395	44.0
78 1,3,5-Trimethylbenzene	105	15.365	15.363	(0.947)	1789314	41.2522	41.2
96 1,2,3-Trichlorobenzene	180	19.365	19.361	(1.194)	806269	47.3686	47.4
79 1,2,4-Trimethylbenzene	105	15.786	15.784	(0.973)	1784051	40.6405	40.6
74 1,2,3-Trichloropropane	110	15.146	15.142	(0.934)	150991	39.9742	40.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: /chem/VOA3.i/070705v3.b/3r413.d
Date : 07-JUL-2005 14:20
Client ID: GU0506PCCR01MS
Sample Info: 1120088139514399941|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA3.i/070705v3.b/3r414.d
Lab Smp Id: 1200881396 Client Smp ID: GU05060PCCR01MSD
Inj Date : 07-JUL-2005 14:48
Operator : PAM Inst ID: VOA3.i
Smp Info : |1200881396|439994|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MSD139349008
Comment :
Method : /chem/VOA3.i/070705v3.b/VOA3-8260B-062705.m
Meth Date : 07-Jul-2005 15:17 pat01082 Quant Type: ISTD
Cal Date : 27-JUN-2005 15:52 Cal File: 3q113.d
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139349.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

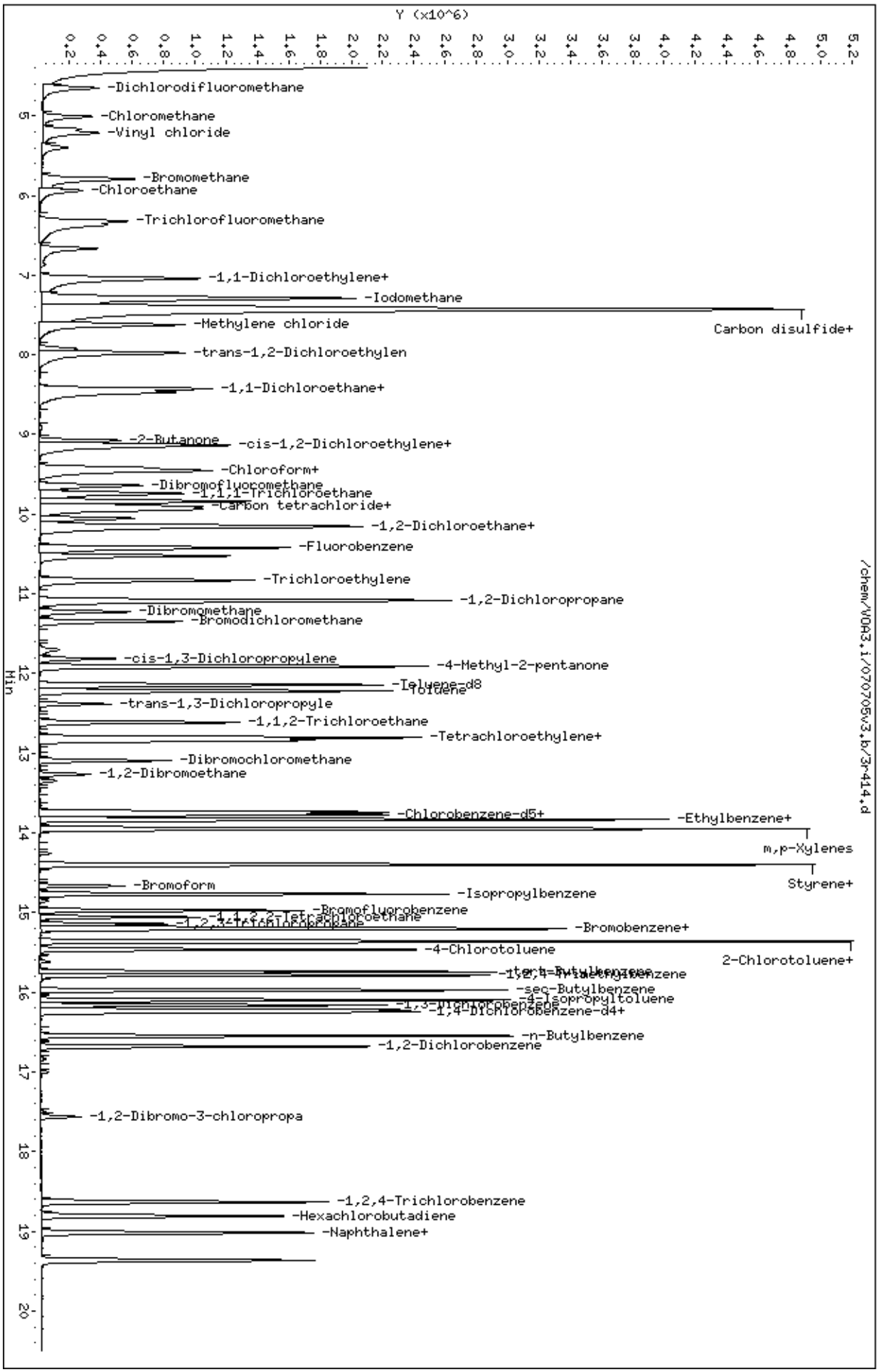
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.423	10.420	(1.000)	2179907	50.0000	
* 61 Chlorobenzene-d5	117	13.737	13.733	(1.000)	1365743	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.221	16.221	(1.000)	641434	50.0000	
$ 35 Dibromofluoromethane	113	9.641	9.641	(0.925)	621393	44.9032	44.9
$ 47 Toluene-d8	98	12.141	12.141	(0.884)	1837961	41.8095	41.8
$ 71 Bromofluorobenzene	95	14.974	14.971	(0.923)	648036	39.7595	39.8
3 Dichlorodifluoromethane	85	4.650	4.653	(0.446)	906418	47.9465	47.9(A)
4 Chloromethane	50	5.007	5.007	(0.480)	728658	36.8231	36.8
5 Vinyl chloride	62	5.213	5.219	(0.500)	708843	43.0807	43.1
6 Bromomethane	94	5.792	5.795	(0.556)	914147	50.0043	50.0
7 Chloroethane	64	5.941	5.941	(0.570)	508364	46.8588	46.8
8 Trichlorofluoromethane	101	6.321	6.327	(0.606)	1144938	47.8661	47.9
11 1,1-Dichloroethylene	61	7.046	7.042	(0.676)	1136201	42.5805	42.6
10 Acetone	43	7.039	7.036	(0.675)	819907	188.949	189
14 Carbon disulfide	76	7.429	7.429	(0.713)	10479268	193.394	193

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17	Methylene chloride	84	7.625	7.625	(0.732)	739605	40.6176	40.6
21	trans-1,2-Dichloroethylene	96	7.976	7.979	(0.765)	698675	42.5677	42.6
22	1,1-Dichloroethane	63	8.473	8.473	(0.813)	1211969	45.2445	45.2
31	cis-1,2-Dichloroethylene	96	9.135	9.131	(0.876)	757593	43.7086	43.7
32	Chloroform	83	9.454	9.457	(0.907)	1214099	43.8393	43.8
37	1,2-Dichloroethane	62	10.138	10.135	(0.973)	820863	43.1261	43.1
30	2-Butanone	43	9.078	9.074	(0.871)	1035288	178.621	179
36	1,1,1-Trichloroethane	97	9.739	9.739	(0.934)	925990	47.4193	47.4
87	1,4-Dichlorobenzene	146	16.250	16.250	(1.002)	1031362	42.3868	42.4
93	1,2,4-Trichlorobenzene	180	18.633	18.633	(1.149)	762455	51.4840	51.5
85	1,3-Dichlorobenzene	146	16.164	16.161	(0.996)	1032769	44.0701	44.1
90	1,2-Dichlorobenzene	146	16.680	16.680	(1.028)	998394	44.5913	44.6
95	Naphthalene	128	19.016	19.019	(1.172)	1889576	43.9884	44.0
94	Hexachlorobutadiene	225	18.807	18.807	(1.159)	388968	45.5699	45.6
33	Carbon tetrachloride	117	9.942	9.942	(0.954)	710061	54.9234	54.9
38	Benzene	78	10.157	10.157	(0.974)	2466149	42.2782	42.3
39	Trichloroethylene	95	10.831	10.828	(1.039)	645567	44.2358	44.2
41	1,2-Dichloropropane	63	11.084	11.084	(1.063)	592130	44.1936	44.2
45	Bromodichloromethane	83	11.344	11.341	(1.088)	811109	45.8498	45.8
46	cis-1,3-Dichloropropylene	75	11.815	11.812	(1.134)	453815	34.4985	34.5(R)
53	trans-1,3-Dichloropropylene	75	12.382	12.382	(0.901)	362951	33.8848	33.9
54	1,1,2-Trichloroethane	83	12.616	12.613	(0.918)	424843	42.6035	42.6
57	Dibromochloromethane	129	13.094	13.094	(0.953)	527190	49.0035	49.0
49	4-Methyl-2-pentanone	58	11.910	11.907	(0.867)	830818	183.594	184
50	Toluene	92	12.217	12.217	(0.889)	1289368	42.1723	42.2
56	Tetrachloroethylene	164	12.841	12.841	(0.935)	418257	44.4178	44.4
55	2-Hexanone	43	12.800	12.797	(0.932)	1411296	166.753	167
59	1,2-Dibromoethane	107	13.265	13.262	(0.966)	257523	40.4267	40.4
62	Chlorobenzene	112	13.768	13.768	(1.002)	1351858	43.9753	44.0
58	Ethylbenzene	91	13.835	13.835	(1.007)	2225256	42.1808	42.2
63	m,p-Xylenes	106	13.949	13.949	(1.015)	1700634	85.0506	85.0
65	Styrene	104	14.398	14.401	(1.048)	1367977	41.0549	41.0
64	o-Xylene	106	14.398	14.398	(1.048)	837838	42.6621	42.7
67	Isopropylbenzene	105	14.768	14.768	(0.910)	1916769	40.5182	40.5
66	Bromoform	173	14.667	14.667	(0.904)	283289	49.7585	49.8
73	1,1,2,2-Tetrachloroethane	83	15.056	15.056	(0.928)	560698	42.1103	42.1
92	1,2-Dibromo-3-chloropropane	75	17.563	17.566	(1.083)	89406	39.8662	39.9
60	1,1,1,2-Tetrachloroethane	131	13.825	13.825	(1.006)	505441	48.9990	49.0
34	1,1-Dichloropropene	75	9.907	9.904	(0.950)	831143	42.2034	42.2
52	1,3-Dichloropropane	76	12.812	12.812	(0.933)	685034	40.6420	40.6
80	4-Chlorotoluene	91	15.462	15.465	(0.953)	1592943	41.6712	41.7
15	Acetonitrile	41	7.394	7.394	(0.709)	2158308	926.168	926
13	Iodomethane	142	7.289	7.289	(0.699)	4367058	207.361	207
43	Dibromomethane	93	11.224	11.223	(1.077)	289879	39.4313	39.4
29	Bromochloromethane	128	9.419	9.416	(0.904)	289365	43.8002	43.8
75	Bromobenzene	156	15.186	15.186	(0.936)	556242	44.5450	44.5
81	tert-Butylbenzene	119	15.743	15.743	(0.971)	1782889	42.4686	42.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	15.974	15.974	(0.985)	2286102	42.1916	42.2
76 n-Propylbenzene	91	15.208	15.205	(0.938)	2483857	40.6965	40.7
89 n-Butylbenzene	91	16.547	16.544	(1.020)	1872163	43.6632	43.7
23 Vinyl acetate	43	8.426	8.422	(0.808)	2638015	162.932	163
84 4-Isopropyltoluene	119	16.095	16.098	(0.992)	1911164	43.5486	43.5
77 2-Chlorotoluene	91	15.360	15.360	(0.947)	1755619	42.9438	42.9
25 2,2-Dichloropropane	77	9.154	9.150	(0.878)	284581	44.4317	44.4
78 1,3,5-Trimethylbenzene	105	15.363	15.363	(0.947)	1776855	42.2566	42.2
96 1,2,3-Trichlorobenzene	180	19.364	19.361	(1.194)	782804	47.4401	47.4
79 1,2,4-Trimethylbenzene	105	15.784	15.784	(0.973)	1755278	41.2458	41.2
74 1,2,3-Trichloropropane	110	15.139	15.142	(0.933)	151584	41.3966	41.4

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.



Data File: /chem/VOA3.i/070705v3.b/3r414.d
Date : 07-JUL-2005 14:48
Client ID: GU0506OPCCR01MSD
Sample Info: 1120088139614399941|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA3.i
Operator: PAM
Column diameter: 0.25

Page 1

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
13–JUL–05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B DOE–AL	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
439994	See Below		

Potentially affected work order(s)(SDG): 139349,139405

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
VBLK02LCS recoveries analyzed on VOA 1 were not all within the acceptance limits.	The LCS recoveries were outside the of client acceptance limits. The client was contacted. Due to lack of sample availability the data results are reported.
VBLK02LCS and MSD recoveries analyzed on VOA 3 were not all within the acceptance limits.	The failures were not within the acceptance limits. However, the failures were less than 5% of the requested analyte lists. This satisfes the client criteria.

Originator's Name:
Patricia Murphy 13–JUL–05

Data Validator/Group Leader:
Erin Haubert 14–JUL–05

Quality Review:

Director:

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 6/27/05 Method 8260 Operator: PS

REVIEWED BY: [illegible]
DATE: 6/29/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2106

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 6/27/05

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 062705V1

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM050605-01C		5		
IS	UVM050513-01	1	1	1	
SS	UVM050606-02	1	1	1	
LCS/MS	UVM050605-01C			5	
BFB	UVM050513-02				1
SHORT	UVM050531-01A		5		
DHEC	N/A				

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable (O/X)	Comments
6/27/05 9:18	1Q101.D	UVM050513-02	N/A	BFB	5.0ML	1	N/A	1	w	PS	X	
6/27/05 9:44	1Q102.D	UVM050605-01C	N/A	CCV	5.0ML	1	N/A	2	w	PS	X	TEST-DUSE
6/27/05 10:56	1Q103.D	UVM050605-01C	N/A	CCV	5.0ML	1	N/A	3	w	PS	X	TEST-DUSE DESORB 160c
6/27/05 13:37	1Q104.D	UVM050605-01C	N/A	CCV	5.0ML	1	N/A	4	w	PS	X	TEST-DUSE DESORB 160c
6/27/05 14:48	1Q105.D	UVM050513-02	N/A	BFB	5.0ML	1	N/A	1	w	PS	X	
6/27/05 15:14	1Q106.D	UVM050216-04E	N/A	CCV	5.0ML	1	N/A	2	w	PS	X	TEST-DUSE-LOW LEVEL STD
6/27/05 15:40	1Q107.D	UVM050216-04E	N/A	CCV	5.0ML	1	N/A	3	w	PS	X	TEST-DUSE-LOW LEVEL STD
6/27/05 16:33	1Q108.D	UVM050216-04E	N/A	CCV	5.0ML	1	N/A	4	w	PS	X	TEST-DUSE-LOW LEVEL STD
6/27/05 17:16	1Q109.D	UVM050216-04E	N/A	CCV	5.0ML	1	N/A	5	w	PS	X	TEST-DUSE-LOW LEVEL STD
6/27/05 17:59	1Q110.D	UVM050216-04E	N/A	CCV	5.0ML	1	N/A	6	w	PS	X	TEST-DUSE-LOW LEVEL STD
6/27/05 18:39	1Q111.D	UVM050513-02	N/A	BFB	5.0ML	1	N/A	1	w	PS	O	
6/27/05 19:04	1Q112.D	BLANK	BLANK	BLANK	5.0ML	1	N/A	2	w	PS		
6/27/05 19:30	1Q113.D	W1VM050627-01	ICAL8	0.5	5.0ML	1	N/A	3	w	PS	O	UVM050216-01E+UVM050525-01E
6/27/05 19:56	1Q114.D	W1VM050627-02	ICAL1	1	5.0ML	1	N/A	4	w	PS	X	02E
6/27/05 20:21	1Q115.D	W1VM050627-02	ICAL1	1	5.0ML	1	N/A	5	w	PS	O	02E
6/27/05 20:47	1Q116.D	W1VM050627-03	ICAL2	2	5.0ML	1	N/A	6	w	PS	O	03E
6/27/05 21:12	1Q117.D	W1VM050627-04	ICAL3	5	5.0ML	1	N/A	7	w	PS	O	UVM050216-04E+UVM050525-04E
6/27/05 21:38	1Q118.D	W1VM050627-05	ICAL4	10	5.0ML	1	N/A	8	w	PS	O	UVM050216-05E+UVM050525-05E
6/27/05 22:03	1Q119.D	W1VM050627-06	ICAL5	20	5.0ML	1	N/A	9	w	PS	O	UVM050216-06E+UVM050525-06E
6/27/05 22:29	1Q120.D	W1VM050627-07	ICAL6	50	5.0ML	1	N/A	10	w	PS	O	UVM050216-07E+UVM050525-07E
6/27/05 22:55	1Q121.D	W1VM050627-08	ICAL7	100	5.0ML	1	N/A	11	w	PS	O	UVM050216-08E+UVM050525-08E
6/27/05 23:20	1Q122.D	BLANK	BLANK	BLANK	5.0ML	1	N/A	12	w	PS	X	
6/27/05 23:46	1Q123.D	UVM050525-01E	ICAL1	5	5.0ML	1	N/A	13	w	PS	O	
6/28/05 0:12	1Q124.D	UVM050525-02E	ICAL2	10	5.0ML	1	N/A	14	w	PS	O	
6/28/05 0:37	1Q125.D	UVM050525-03E	ICAL3	25	5.0ML	1	N/A	15	w	PS	O	
6/28/05 1:03	1Q126.D	UVM050525-04E	ICAL4	50	5.0ML	1	N/A	16	w	PS	O	
6/28/05 1:28	1Q127.D	UVM050525-05E	ICAL5	100	5.0ML	1	N/A	17	w	PS	O	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 6/27/05 Method 8260 Operator: PS

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2106

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 6/27/05

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 062705V1

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM050605-01C		5		
IS	UVM050513-01	1	1	1	
SS	UVM050606-02	1	1	1	
LCS/MS	UVM050605-01C			5	
BFB	UVM050513-02				1
SHORT	UVM050531-01A		5		
DHEC	N/A				

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable (O/X)	Comments
6/28/05 1:54	1Q128.D	UVM050525-06E	ICAL6	250	5.0ML	1	N/A	18	w	PS	Ø X	cal 6/29/05
6/28/05 2:19	1Q129.D	UVM050525-06E	ICAL6	250	5.0ML	1	N/A	19	w	PS	O	
6/28/05 2:45	1Q130.D	UVM050525-07E	ICAL7	500	5.0ML	1	N/A	20	w	PS	O	
6/28/05 3:11	1Q131.D	BLANK	BLANK	BLANK	5.0ML	1	N/A	21	w	PS	X	
6/28/05 3:36	1Q132.D	UVM050605-01C	O2SI	ICV	5.0ML	1	N/A	22	w	PS	X	
6/28/05 4:02	1Q133.D	W1VM050627-09	ABSICV	ICV	5.0ML	1	N/A	23	w	PS	O	UVM050510-01C+IVM050624-01
6/28/05 4:27	1Q134.D	UVM050531-01A	SHORTICV	ICV	5.0ML	1	N/A	24	w	PS	O	

PS 6/29/05

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 6/27/2005 Method 8260 Operator: PAM

REVIEWED BY: EW
DATE: 6/28/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2153

CALIBRATION & CC INFORMATION:

Initial Calibration Date: ~~6/18/2005~~ 6/27/05 EW 6/28/05

(See pg. 67 for ICAL Std. Scl. Ids)

Sequence Number: 062705V3

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM050605-01C		5		
IS	UVM050622-01	1	1	1	
SS	UVM050622-02	1	1	1	
LCS/MS	N/A			5	
BFB	UVM050513-02				1
SHORT	UVM050531-01A		5		
DHEC	N/A			5	

Purge Amount

5	Water Purge Vol:
5	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
X	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
6/27/2005	10:36	3Q101.D	UVM050513-02		BFB	1uL+5uL	1		1	N/A	PAM	O	
6/27/2005	10:51	3Q102.D	BLANK	BLANK	ICAL	5ML	1	N/A	2	N/A	PAM	X	CLEAN UP BLANK
6/27/2005	11:18	3Q103.D	UVM050216-01E	VSTD0005	ICAL	5uL	1	N/A	3	N/A	PAM	O	UVM050216-01E
6/27/2005	11:46	3Q104.D	W3VM050627-01		ICAL	1uL+5uL	1		4	N/A	PAM	X	UVM050216-04E+UVM050525-02E
6/27/2005	12:13	3Q105.D	W3VM050627-01	VSTD001	ICAL	1uL+5uL	1		5	N/A	PAM	O	UVM050216-04E+UVM050525-02E
6/27/2005	12:41	3Q106.D	W3VM050627-02	VSTD002	ICAL	2uL+5uL	1		6	N/A	PAM	O	UVM050216-04E+UVM050525-03E
6/27/2005	13:08	3Q107.D	W3VM050627-03	VSTD005	ICAL	5uL+5uL	1		7	N/A	PAM	O	UVM050216-04E+UVM050525-04E
6/27/2005	13:35	3Q108.D	W3VM050627-04	VSTD010	ICAL	5uL+5uL	1		8	N/A	PAM	O	UVM050216-05E+UVM050525-06E
6/27/2005	14:03	3Q109.D	W3VM050627-05	VSTD020	ICAL	5uL+5uL	1		9	N/A	PAM	O	UVM050216-06E+UVM05052
6/27/2005	14:30	3Q110.D	W3VM050627-06	VSTD050	ICAL	5uL+5uL	1		10	N/A	PAM	O	UVM050216-07E+UVM050525-07E
6/27/2005	14:57	3Q111.D	W3VM050627-07	VSTD100	ICAL	5uL+5uL	1		11	N/A	PAM	O	UVM050216-08D+UVM050525-08E
6/27/2005	15:25	3Q112.D	BLANK	BLANK	ICAL	N/A	1	N/A	12	N/A	PAM	X	CLEAN UP BLANK
6/27/2005	15:52	3Q113.D	UVM050615-01A	VSTD005S	ICAL	5uL	1	N/A	13	N/A	PAM	O	UVM050615-01A
6/27/2005	16:19	3Q114.D	UVM050615-02A	VSTD010S	ICAL	5uL	1	N/A	14	N/A	PAM	O	UVM050615-02B
6/27/2005	16:47	3Q115.D	UVM050615-03AICA	VSTD025S	1	5uL	VOAF	N/A	15	N/A	PAM	O	UVM050615-03B
6/27/2005	17:14	3Q116.D	UVM050615-04A	VSTD050S	ICAL	5uL	1	N/A	16	N/A	PAM	O	UVM050615-04B
6/27/2005	17:42	3Q117.D	UVM050615-05A	VSTD100S	ICAL	5uL	1	N/A	17	N/A	PAM	O	UVM050615-05B
6/27/2005	18:09	3Q118.D	UVM050615-06A	VSTD250S	ICAL	5uL	1	N/A	18	N/A	PAM	O	UVM050615-06B
6/27/2005	18:36	3Q119.D	UVM0504615-07A	VSTD500S	ICAL	5uL	1	N/A	19	N/A	PAM	O	UVM050615-07B
6/27/2005	19:03	3Q120.D	BLANK	BLANK	BLANK	5ML	1	N/A	20	N/A	PAM	X	CLEAN UP BLANK
6/27/2005	19:31	3Q121.D	UVM050605-01C	O2SI	LONGICV	5ML	1	N/A	21	N/A	PAM	O	ICV LONG
6/27/2005	19:58	3Q122.D	UVM050605-01C	O2SI	LONGICV	5ML	1	N/A	22	N/A	PAM	X	VSTD050
6/27/2005	20:25	3Q123.D	W3VM050627-01	ABSO	LONGICV	5ML	1	N/A	23	N/A	PAM	X	UVM050510-01C+IVM050624-01
6/27/2005	20:52	3Q124.D	UVM050531-01A		SHORTICV	5ML	1		24	N/A	PAM	O	ICV SHORT
6/27/2005	21:20	3Q125.D	12008---		BLANK	5ML	1		25	N/A	PAM	X	
6/27/2005	21:47	3Q126.D	12008---		BLANK	5ML	1		26	N/A	PAM	X	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA1

Date: 7/6/05 Method 8260B Operator: PS

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2024

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 6/27/05

(See pg. 87 for ICAL Std. Sci. Ids)

Sequence Number: 070605V1

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM050605-01E		5		
IS	UVM050513-01	1	1	1	
SS	UVM050606-02	1	1	1	
LCS/MS	UVM050605-01E			5	
BFB	UVM050622-02				1
SHORT	UVM050531-01B		5		
DHEC				5	

Purge Amount	
5	Water Purge Vol:ML
	Soil Purge Wt.:G
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable (O/X)	Comments
6 Jul 2005 06:57	1R301.D	UVM050622-02		BFB		1		1		PS	O	
6 Jul 2005 07:52	1R302.D	UVM050605-01E		CCV/LCS		1		2			O	
6 Jul 2005 08:18	1R303.D	UVM050605-01E		CCV/LCS		1		3			X	DUSE
6 Jul 2005 09:21	1R304.D	UVM050531-01B		SHORT		1		4			O	
6 Jul 2005 09:46	1R305.D	BLANK	BLANK		5.0ML	1	N/A	5	w		X	clean up BLK.
6 Jul 2005 10:12	1R306.D	BLANK	BLANK		5.0ML	1	N/A	6	w		O	
6 Jul 2005 10:40	1R307.D	139158006	[redacted]	439430	0.1ML	50	PH2	7	w			
6 Jul 2005 11:05	1R308.D	139283005	[redacted]	439430	0.1ML	50	PH2	8	w			
6 Jul 2005 11:31	1R309.D	139349008	ESHL	439994	5.0ML	1	PH2	9	w		X	
6 Jul 2005 11:57	1R310.D	139349009	ESHL	439994	5.0ML	1	PH2	10	w		X	
6 Jul 2005 12:23	1R311.D	139349010	ESHL	439994	5.0ML	1	PH2	11	w		X	
6 Jul 2005 12:48	1R312.D	139405002	ESHL	439994	5.0ML	1	PH2	12	w		X	
6 Jul 2005 13:14	1R313.D	139405003	ESHL	439994	5.0ML	1	PH2	13	w		O	
6 Jul 2005 13:40	1R314.D	1200881395	ESHL	439994	5.0ML	1	PH2	14	w		X	139349008MS
6 Jul 2005 14:05	1R315.D	1200881396	ESHL	439994	5.0ML	1	PH2	15	w		X	139349008MSD
6 Jul 2005 14:31	1R316.D	BLANK	BLANK		5.0ML	1	N/A	16	w			
6 Jul 2005 14:56	1R317.D	139410001	[redacted]	439501	0.1ML	1	PH2	17	w			
6 Jul 2005 15:22	1R318.D	139410002	[redacted]	439501	0.1ML	1	PH2	18	w			
6 Jul 2005 15:48	1R319.D	139410003	[redacted]	439501	0.1ML	1	PH2	19	w			
6 Jul 2005 16:14	1R320.D	139410004	[redacted]	439501	0.1ML	1	PH2	20	w			
	1R321.D	No MS or GC data present										

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 7/7/2005 Method 8260 Operator: PAM

REVIEWED BY: DAB
DATE: 7-13-05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2153

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 6/27/2005

(See pg. 76 for ICAL Std. Sci. Ids)

Sequence Number: 070705V3

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM050605-01E		5		
IS	UVNO50622-01	1	1	1	
SS	UVNO50622-02	1	1	1	
LCS/MS	UVM050605-01E			5	
BFB	UVM050622-02				1
SHORT	UVM050531-01B		5		
DHEC	UVM050628-02A			5	

Purge Amount

5	Water Purge Vol:
5	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
X	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
7 Jul 2005	09:05	3R401.D	UVM050622-02		BFB	1UL	1	N/A	1		PAM	O	DO Revised 7-13-05 DAB
7 Jul 2005	09:20	3R402.D	UVM050605-01E		CCV/LCS	5ML	1	N/A	2		PAM	O	
7 Jul 2005	09:47	3R403.D	UVM050605-01E		CCV/LCS	5ML	1	N/A	3		PAM	X	NOT NEEDED
7 Jul 2005	10:14	3R404.D	UVM050628-02A		DHEC	5ML	1	N/A	4		PAM	O	
7 Jul 2005	10:42	3R405.D	UVM050531-01B		SHORT	5ML	1	N/A	5		PAM	O	
7 Jul 2005	11:09	3R406.D	12008		BLANK	5ML	1	N/A	6		PAM	X	CLEAN UP BLANK
7 Jul 2005	11:37	3R407.D	12008		BLANK	5ML	1	N/A	7		PAM	X	CLEAN UP BLANK
7 Jul 2005	12:04	3R408.D	12008		BLANK	5ML	1	N/A	8		PAM	O	
7 Jul 2005	12:31	3R409.D	139349008	ESHL	439994	5ML	1	PH2	9	W	PAM	O	
7 Jul 2005	12:58	3R410.D	139349009	ESHL	439994	5ML	1	PH2	10	W	PAM	O	
7 Jul 2005	13:26	3R411.D	139349010	ESHL	439994	5ML	1	PH2	11	W	PAM	O	
7 Jul 2005	13:53	3R412.D	139405002	ESHL	439994	5ML	1	PH2	12	W	PAM	O	
7 Jul 2005	14:20	3R413.D	1200881395	ESHL	439994	5ML	1	PH2	13	W	PAM	O	MS139349008
7 Jul 2005	14:48	3R414.D	1200881396	ESHL	439994	5ML	1	PH2	14	W	PAM	O	MSD139349008
7 Jul 2005	15:15	3R415.D	12008		BLANK	5ML	7-13-05 1	N/A	15	W	PAM	X	CLEAN UP BLANK
7 Jul 2005	15:42	3R416.D	120081707		440394	500UL	DAB 10	N/A	16	W	PAM	O	TBLK01
7 Jul 2005	16:10	3R417.D	139834001		440394	500UL	10	N/A	17	W	PAM	O	
7 Jul 2005	16:37	3R418.D	139834002		440394	500UL	10	N/A	18	W	PAM	O	
7 Jul 2005	17:04	3R419.D	139834003		440394	500UL	10	N/A	19	W	PAM	O	
7 Jul 2005	17:31	3R420.D	1200882375		440394	500UL	10	N/A	20	W	PAM	O	MS139834001
7 Jul 2005	17:59	3R421.D	1200882376		440394	500UL	10	N/A	21	W	PAM	O	MSD139834001
7 Jul 2005	18:26	3R422.D	BLANK		BLANK	5ML	1	N/A	22	W	PAM	X	CLEAN UP BLANK
7 Jul 2005	18:53	3R423.D	139390001		440403	5G	1	N/A	23	s	PAM	O	
7 Jul 2005	19:20	3R424.D	139390002		440403	5G	1	N/A	24	s	PAM	O	
7 Jul 2005	19:47	3R425.D	139390003		440403	5G	1	N/A	25	s	PAM	O	
7 Jul 2005	20:14	3R426.D	139390004		440403	5G	1	N/A	26	s	PAM	O	
7 Jul 2005	20:41	3R427.D	1200882399		440403	5G	1	N/A	27	s	PAM	O	MS139390001
7 Jul 2005	21:08	3R428.D	1200882400		440403	5G	1	N/A	28	s	PAM	O	MSD139390001

GC/MS SEMIVOLATILE ANALYSIS

Semi-Volatile Case Narrative
Los Alamos National Laboratory (ESHL)
SDG 139405

Method/Analysis Information

Procedure:	**Semi-volatile Analysis by Gas Chromatograph/Mass Spectrometer**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3510C
Analytical Batch Number:	437183
Prep Batch Number:	437182

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
139405002	GU05050GMC401
1200874922	Method Blank (MB)
1200874923	Laboratory Control Sample (LCS)
1200874936	139406004(GU0506G32R101) Matrix Spike (MS)
1200874938	139406004(GU0506G32R101) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

Procedures for preparation, analysis, and reporting of analytical data are documented by General Engineering Laboratories, LLC (GEL) as Standard Operating Procedure (SOP) GL-OA-E-009, Rev. 14.

Calibration Information

Due to software limitations, the files displayed at the beginning of the Form 6 are only the last files uploaded for each individual level. A complete listing of all files used in the current ICAL are shown on the Calibration History that is included with each Level 4 or higher package. The last file by date in each level is the one currently uploaded for that level.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration

Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

When calibrations are performed for Appendix IX compounds some of the compounds may not be calibrated exactly according to the criteria in Method 8270C. If the %RSD is greater than 15% or the correlation coefficient is less that 0.99 then the analyte is quantitated using the response factor. If the analyte is detected then the sample is re-analyzed for that analyte on an instrument that is compliant with the criteria in the method.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS fialed recovery for hexachlorocyclepentadiene. The failure is less than 5% of the spiking analytes. See NCR 219602.

QC Sample Designation
Sample 139406004 (GU0506G32R101), form another ESHL SDG, was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS recoveries were not within the acceptance limits for all analytes. The failures were less than 5% of the spiked analytes. This is acceptable per the client.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were not within the acceptance limits for all analytes. The failures were less than 5% of the spiked analytes. This is acceptable per the client.

MS/MSD Relative Percent Difference (RPD) Statement
The relative percent differences (RPD) were not within the acceptance limits. The failures were attributed to laboratory error. The failures were less than 5% of the spiked analytes. This is acceptable per the client.

Internal Standard (ISTD) Acceptance

The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information:

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information:

Nonconformance (NCR) Documentation
Nonconformance report 219602 was generated for this SDG.

The LCS failed recovery for Hexachlorocyclopentadiene at 26%; the limits are 27%-72%. The failures were less than 5% of the spiked analytes.

The MS, 1200874936, recoveries were not within the acceptance limits for all analytes. The failures were less than 5% of the spiked analytes. This is acceptable per the client.

The MSD, 1200874938, recoveries were not within the acceptance limits. The failures were less than 5% of the spiked analytes. This is acceptable per the client.

The RPD values for MS/MSD was not within the acceptance limits for multiple spiked analytes. The failures were attributed to laboratory error. The failures were less than 5% of the spiked analytes. This is acceptable per the client.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually

generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The laboratory utilizes a HP 6890 Series gas chromatograph and a HP 5973 Mass Selective Detector. The configuration is equipped with the electronic pressure control. All MS interfaces are capillary direct.

Chromatographic Columns

Chromatographic separation of semi-volatile components is accomplished through analysis on one or more of the following columns (all with dimensions of 30 meters x 0.25 millimeters ID and 0.25 micron film except J&W DB-5MS2 which is 25 meters x 0.20 mm ID and 0.33 micron film):

Column ID	Column Description
J&W	DB-5.625(5% Phenyl)-methylpolysiloxane (identified by a DB-5.625 designation on quantitation reports and reconstructed ion chromatograms)
J&W DB-5MS	Similar to the J&W DB-5.625 with low bleed characteristics (identified by a DB-5MS designation)
Alltech	EC-5 (SE-54) 5% Phenyl, 95% Methylpolysiloxane (identified by a HP-5MS designation)
HP	HP-5MS 5% Phenylmethylsiloxane (identified by a HP-5MS designation)
Phenomenex	ZB-5 5% Phenyl Polysiloxane (identified by a ZB-5 designation)
J&W DB-5MS2	Similar to the J&W DB-5.625 with low bleed characteristics (identified by a DB-5MS2 designation)

Instrument Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

The Semi-Volatiles-GC/MS analysis was performed on a HP Mass Spectrometer.

Instrument ID	System Configuration	Column ID	Column Description

MSD6.I	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ **Date:** 07-19-05

Roadmap for ESHL 139405 SVOA

This roadmap was analyzed by Lynne Sigmon on 07-12-2005, 16:49.
This roadmap was reviewed by Cameron Bearden on 07-12-2005, 17:55.
This roadmap was packaged by Sherri Brown on 07-14-2005, 13:09.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/MSD6.i/s070805.s.b/s6g0828.d	139405002	09-JUL-2005	02:49	139405.sub	GU05050GMC401	1	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/MSD6.i/s070805.s.b/s6g0814-4.d	1200874922	mb	08-JUL-2005	21:53	139405.sub	SBLK01	1	
☐	N	/chem/MSD6.i/s070805.s.b/s6g0815-4.d	1200874923	lcs	08-JUL-2005	22:14	139405.sub	SBLK01LCS	1	<5% fail

SAMPLE DATA SUMMARY

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.1	U
111-44-4	bis(2-Chloroethyl) ether	10.1	U
95-57-8	2-Chlorophenol	10.1	U
541-73-1	1,3-Dichlorobenzene	10.1	U
106-46-7	1,4-Dichlorobenzene	10.1	U
100-51-6	Benzyl alcohol	10.1	U
95-50-1	1,2-Dichlorobenzene	10.1	U
108-60-1	bis(2-Chloroisopropyl)ether	10.1	U
95-48-7	o-Cresol	10.1	U
98-86-2	Acetophenone	10.1	U
621-64-7	N-Nitrosodipropylamine	10.1	U
65794-96-9	m,p-Cresols	10.1	U
67-72-1	Hexachloroethane	10.1	U
98-95-3	Nitrobenzene	10.1	U
78-59-1	Isophorone	10.1	U
88-75-5	2-Nitrophenol	10.1	U
105-67-9	2,4-Dimethylphenol	10.1	U
111-91-1	bis(2-Chloroethoxy)methane	10.1	U
120-83-2	2,4-Dichlorophenol	10.1	U
65-85-0	Benzoic acid	20.2	U
120-82-1	1,2,4-Trichlorobenzene	10.1	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.1	U
87-68-3	Hexachlorobutadiene	10.1	U
59-50-7	4-Chloro-3-methylphenol	10.1	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.1	U
88-06-2	2,4,6-Trichlorophenol	10.1	U
95-95-4	2,4,5-Trichlorophenol	10.1	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.1	U
99-09-2	m-Nitroaniline	10.1	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.1	U
606-20-2	2,6-Dinitrotoluene	10.1	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.2	U
132-64-9	Dibenzofuran	10.1	U
121-14-2	2,4-Dinitrotoluene	10.1	U
84-66-2	Diethylphthalate	10.1	U
100-02-7	4-Nitrophenol	10.1	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.1	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.1	U
100-01-6	p-Nitroaniline	10.1	U
122-39-4	Diphenylamine	10.1	U
122-66-7	1,2-Diphenylhydrazine	10.1	U
101-55-3	4-Bromophenylphenylether	10.1	U
118-74-1	Hexachlorobenzene	10.1	U
1912-24-9	Atrazine	10.1	U
87-86-5	Pentachlorophenol	10.1	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.1	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	50.5	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.1	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.1	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.1	U
117-84-0	Di-n-octylphthalate	10.1	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

FORM I SV-2 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.1	U
86-74-8	Carbazole	10.1	U

1F

EPA SAMPLE NO.

GU05050GMC401

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WATER Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-91-1	1,4-DIOXANE	2.23	5.6	NJ
2.	15714-13-3	P-MENTH-8(10)-EN-9-OL, CIS-	7.44	6.6	NJ
3.		UNKNOWN	7.50	4.6	J
4.		UNKNOWN	7.59	4.7	J
5.		UNKNOWN	7.63	5.0	J
6.		UNKNOWN	7.73	4.2	J
7.		UNKNOWN	7.83	4.4	J
8.		UNKNOWN	7.91	6.6	J
9.		UNKNOWN	8.03	5.2	J
10.					
11.					
12.					
13.					
14.					
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30.					

FORM I SV-TIC OLM03.0

QUALITY CONTROL SUMMARY

2C
GROUND WATER SVOA SURROGATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

	EPA SAMPLE NO.	S1 (2FP)#	S2 (PHL)#	S3 (NBZ)#	S4 (FBP)#	S5 (TBP)#	S6 (TPH)#	TOT OUT
01	SBLK01	39	27	74	70	72	101	0
02	SBLK01LCS	42	31	85	80	96	105	0
03	GU05050GMC401	37	27	64	67	85	92	0
04								
05								
06								
07								
08								
09								
10								
11								
12								
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27								
28								
29								
30								

	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(13- 67)
S2 (PHL) = Phenol-d5	(10- 70)
S3 (NBZ) = Nitrobenzene-d5	(43-100)
S4 (FBP) = 2-Fluorobiphenyl	(36- 97)
S5 (TBP) = 2,4,6-Tribromophenol	(33-111)
S6 (TPH) = p-Terphenyl-d14	(50-126)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139406

Matrix Spike - EPA Sample No.: GU0506G32R10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
N-Methyl-N-nitrosomethy	100	0.0	76.5	76	37- 83
Aniline	100	0.0	76.2	76	48- 92
Phenol	200	0.0	100	50	23- 64
bis(2-Chloroethyl) ethe	100	0.0	85.6	86	35- 99
2-Chlorophenol	200	0.0	150	75	46- 93
1,3-Dichlorobenzene	100	0.0	60.9	61	39- 86
1,4-Dichlorobenzene	100	0.0	63.8	64	42- 88
Benzyl alcohol	100	0.0	70.5	70	40-101
1,2-Dichlorobenzene	100	0.0	66.2	66	39- 93
bis(2-Chloroisopropyl)e	100	0.0	85.7	86	53- 96
o-Cresol	200	0.0	159	80	31- 98
N-Nitrosodipropylamine	100	0.0	88.1	88	58- 98
m,p-Cresols	200	0.0	150	75	27- 90
Hexachloroethane	100	0.0	60.4	60	27- 92
Nitrobenzene	100	0.0	83.4	83	47-109
Isophorone	100	0.0	79.4	79	52-100
2-Nitrophenol	200	0.0	167	84	47-107
2,4-Dimethylphenol	200	0.0	139	70	49- 96
bis(2-Chloroethoxy)meth	100	0.0	79.4	79	51- 97
2,4-Dichlorophenol	200	0.0	158	79	48-104
Benzoic acid	200	0.0	69.2	35	20- 86
1,2,4-Trichlorobenzene	100	0.0	63.9	64	36- 96
Naphthalene	100	0.0	69.4	69	43- 92
4-Chloroaniline	100	0.0	86.2	86	41-115
Hexachlorobutadiene	100	0.0	57.4	57	31- 97
4-Chloro-3-methylphenol	200	0.0	169	84	43-116
2-Methylnaphthalene	100	0.0	73.1	73	52- 94
1-Methylnaphthalene	100	0.0	75.2	75	48- 98

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139406

Matrix Spike - EPA Sample No.: GU0506G32R10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Hexachlorocyclopentadie	100	0.0	36.8	37	31- 84
2,4,6-Trichlorophenol	200	0.0	163	82	40-105
2,4,5-Trichlorophenol	200	0.0	162	81	49-102
2-Chloronaphthalene	100	0.0	76.5	76	48- 97
o-Nitroaniline	100	0.0	91.6	92	62-112
m-Nitroaniline	100	0.0	86.7	87	58-111
Dimethylphthalate	100	0.0	88.4	88	69-103
2,6-Dinitrotoluene	100	0.0	90.4	90	66-127
Acenaphthylene	100	0.0	79.8	80	54-100
Acenaphthene	100	0.0	85.2	85	56-109
2,4-Dinitrophenol	200	0.0	172	86	30-133
Dibenzofuran	100	0.0	84.9	85	59- 99
2,4-Dinitrotoluene	100	0.0	96.6	97	53-118
Diethylphthalate	100	0.0	93.7	94	63-111
4-Nitrophenol	200	0.0	106	53	21- 88
Fluorene	100	0.0	90.8	91	27-135
4-Chlorophenylphenyleth	100	0.0	87.3	87	59-100
2-Methyl-4,6-dinitrophe	200	0.0	186	93	45-130
p-Nitroaniline	100	0.0	90.9	91	50-121
Diphenylamine	100	0.0	85.8	86	62-104
1,2-Diphenylhydrazine	100	0.0	99.3	99	63-108
4-Bromophenylphenylethe	100	0.0	98.2	98	59-114
Hexachlorobenzene	100	0.0	90.8	91	61-109
Atrazine	100	0.0	88.3	88	10-150
Pentachlorophenol	200	0.0	148	74	34-117
Phenanthrene	100	0.0	87.2	87	65-105
Anthracene	100	0.0	88.7	89	64-105
Di-n-butylphthalate	100	0.0	97.1	97	61-119

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139406

Matrix Spike - EPA Sample No.: GU0506G32R10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Fluoranthene	100	0.0	84.0	84	55-115
Benzidine	100	0.0	63.9	64*	10- 60
Pyrene	100	0.0	94.0	94	50-130
Butylbenzylphthalate	100	0.0	86.1	86	58-123
Benzo(a)anthracene	100	0.0	84.1	84	68-105
3,3'-Dichlorobenzidine	100	0.0	84.5	84	46-109
Chrysene	100	0.0	90.4	90	61-107
bis(2-Ethylhexyl)phthal	100	0.0	84.8	85	54-131
Di-n-octylphthalate	100	0.0	77.8	78	46-137
Benzo(b)fluoranthene	100	0.0	88.7	89	47-121
Benzo(k)fluoranthene	100	0.0	86.3	86	63-124
Benzo(a)pyrene	100	0.0	87.5	88	52-114
Indeno(1,2,3-cd)pyrene	100	0.0	95.7	96	43-110
Dibenzo(a,h)anthracene	100	0.0	96.7	97	41-109
Benzo(ghi)perylene	100	0.0	94.9	95	41-126

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139406

Matrix Spike - EPA Sample No.: GU0506G32R10

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
N-Methyl-N-nitrosomethy	100	76.8	77	1	21	37- 83
Aniline	100	74.9	75	1	24	48- 92
Phenol	200	102	51	2	23	23- 64
bis(2-Chloroethyl) ethe	100	76.2	76	12	30	35- 99
2-Chlorophenol	200	152	76	1	26	46- 93
1,3-Dichlorobenzene	100	60.9	61	0	24	39- 86
1,4-Dichlorobenzene	100	63.8	64	0	27	42- 88
Benzyl alcohol	100	69.1	69	1	30	40-101
1,2-Dichlorobenzene	100	66.2	66	0	22	39- 93
bis(2-Chloroisopropyl)e	100	84.4	84	2	24	53- 96
o-Cresol	200	163	82	2	25	31- 98
N-Nitrosodipropylamine	100	89.3	89	1	28	58- 98
m,p-Cresols	200	151	76	1	24	27- 90
Hexachloroethane	100	59.9	60	0	28	27- 92
Nitrobenzene	100	83.6	84	1	20	47-109
Isophorone	100	84.1	84	6	24	52-100
2-Nitrophenol	200	175	88	5	19	47-107
2,4-Dimethylphenol	200	144	72	3	23	49- 96
bis(2-Chloroethoxy)meth	100	81.3	81	2	20	51- 97
2,4-Dichlorophenol	200	165	82	4	29	48-104
Benzoic acid	200	81.4	41	16	35	20- 86
1,2,4-Trichlorobenzene	100	65.3	65	2	21	36- 96
Naphthalene	100	69.0	69	0	20	43- 92
4-Chloroaniline	100	87.1	87	1	18	41-115
Hexachlorobutadiene	100	57.4	57	0	26	31- 97
4-Chloro-3-methylphenol	200	184	92	9	22	43-116
2-Methylnaphthalene	100	73.6	74	1	17	52- 94
1-Methylnaphthalene	100	75.1	75	0	18	48- 98

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139406

Matrix Spike - EPA Sample No.: GU0506G32R10

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Hexachlorocyclopentadie	100	37.8	38	3	31	31- 84
2,4,6-Trichlorophenol	200	169	84	2	24	40-105
2,4,5-Trichlorophenol	200	172	86	6	24	49-102
2-Chloronaphthalene	100	79.8	80	5	22	48- 97
o-Nitroaniline	100	99.4	99	7	19	62-112
m-Nitroaniline	100	92.6	93	7	16	58-111
Dimethylphthalate	100	93.1	93	6	19	69-103
2,6-Dinitrotoluene	100	97.7	98	8	17	66-127
Acenaphthylene	100	84.2	84	5	22	54-100
Acenaphthene	100	88.3	88	3	23	56-109
2,4-Dinitrophenol	200	184	92	7	35	30-133
Dibenzofuran	100	87.8	88	3	20	59- 99
2,4-Dinitrotoluene	100	102	102	5	19	53-118
Diethylphthalate	100	98.7	99	5	20	63-111
4-Nitrophenol	200	110	55	4	26	21- 88
Fluorene	100	95.6	96	5	21	27-135
4-Chlorophenylphenyleth	100	90.7	91	4	21	59-100
2-Methyl-4,6-dinitrophe	200	206	103	10	28	45-130
p-Nitroaniline	100	97.2	97	6	20	50-121
Diphenylamine	100	96.5	96	11	19	62-104
1,2-Diphenylhydrazine	100	110	110*	10	14	63-108
4-Bromophenylphenylethe	100	107	107	9	15	59-114
Hexachlorobenzene	100	98.6	99	8	27	61-109
Atrazine	100	94.4	94	6	30	10-150
Pentachlorophenol	200	159	80	8	26	34-117
Phenanthrene	100	91.4	91	4	21	65-105
Anthracene	100	93.4	93	4	21	64-105
Di-n-butylphthalate	100	98.8	99	2	16	61-119

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139406

Matrix Spike - EPA Sample No.: GU0506G32R10

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Fluoranthene	100	83.4	83	1	24	55-115
Benzidine	100	48.2	48	28*	23	10- 60
Pyrene	100	107	107	13	31	50-130
Butylbenzylphthalate	100	94.2	94	9	23	58-123
Benzo(a)anthracene	100	82.5	82	2	28	68-105
3,3'-Dichlorobenzidine	100	83.9	84	0	27	46-109
Chrysene	100	96.9	97	7	19	61-107
bis(2-Ethylhexyl)phthal	100	88.9	89	4	21	54-131
Di-n-octylphthalate	100	85.7	86	10	28	46-137
Benzo(b)fluoranthene	100	87.0	87	2	23	47-121
Benzo(k)fluoranthene	100	100	100	15	20	63-124
Benzo(a)pyrene	100	92.3	92	4	22	52-114
Indeno(1,2,3-cd)pyrene	100	92.6	93	3	23	43-110
Dibenzo(a,h)anthracene	100	92.6	93	4	23	41-109
Benzo(ghi)perylene	100	91.0	91	4	32	41-126

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 71 outside limits
Spike Recovery: 2 out of 142 outside limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: SBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Phenol	100	0.0	33.2	33	18- 42
bis(2-Chloroethyl) ethe	50.0	0.0	43.5	87	37- 97
2-Chlorophenol	100	0.0	75.9	76	45- 90
1,3-Dichlorobenzene	50.0	0.0	29.2	58	35- 84
1,4-Dichlorobenzene	50.0	0.0	30.8	62	38- 85
Benzyl alcohol	50.0	0.0	34.7	69	38- 87
1,2-Dichlorobenzene	50.0	0.0	31.8	64	36- 88
bis(2-Chloroisopropyl)e	50.0	0.0	42.0	84	40-106
o-Cresol	100	0.0	74.8	75	42- 79
Acetophenone	50.0	0.0	44.9	90	50- 95
N-Nitrosodipropylamine	50.0	0.0	46.6	93	48-104
m,p-Cresols	100	0.0	66.2	66	34- 75
Hexachloroethane	50.0	0.0	28.8	58	30- 86
Nitrobenzene	50.0	0.0	43.6	87	46-101
Isophorone	50.0	0.0	42.7	85	52- 94
2-Nitrophenol	100	0.0	87.9	88	54- 92
2,4-Dimethylphenol	100	0.0	75.2	75	41- 95
bis(2-Chloroethoxy)meth	50.0	0.0	43.9	88	50- 94
2,4-Dichlorophenol	100	0.0	85.9	86	50- 95
Benzoic acid	100	0.0	18.6	19	10- 37
1,2,4-Trichlorobenzene	50.0	0.0	31.6	63	37- 87
Naphthalene	50.0	0.0	34.2	68	41- 87
4-Chloroaniline	50.0	0.0	43.0	86	44-110
Hexachlorobutadiene	50.0	0.0	28.2	56	26- 91
4-Chloro-3-methylphenol	100	0.0	86.5	86	53-102
2-Methylnaphthalene	50.0	0.0	36.2	72	45- 91
1-Methylnaphthalene	50.0	0.0	36.5	73	45- 92
Hexachlorocyclopentadie	50.0	0.0	13.0	26*	27- 72

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: SBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2,4,6-Trichlorophenol	100	0.0	87.2	87	44-105
2,4,5-Trichlorophenol	100	0.0	88.0	88	50-102
2-Chloronaphthalene	50.0	0.0	37.6	75	50- 92
o-Nitroaniline	50.0	0.0	49.0	98	55-121
m-Nitroaniline	50.0	0.0	45.1	90	50-118
Dimethylphthalate	50.0	0.0	47.1	94	63-106
2,6-Dinitrotoluene	50.0	0.0	48.6	97	72-115
Acenaphthylene	50.0	0.0	40.0	80	52- 99
Acenaphthene	50.0	0.0	41.6	83	50-109
2,4-Dinitrophenol	100	0.0	83.4	83	28-126
Dibenzofuran	50.0	0.0	42.2	84	55- 98
2,4-Dinitrotoluene	50.0	0.0	50.4	101	51-116
Diethylphthalate	50.0	0.0	49.6	99	62-109
4-Nitrophenol	100	0.0	35.4	35	13- 53
Fluorene	50.0	0.0	45.2	90	54-108
4-Chlorophenylphenyleth	50.0	0.0	42.2	84	57- 98
2-Methyl-4,6-dinitrophe	100	0.0	93.7	94	48-124
p-Nitroaniline	50.0	0.0	47.3	95	40-127
Diphenylamine	50.0	0.0	46.1	92	57-110
1,2-Diphenylhydrazine	50.0	0.0	51.6	103	65-113
4-Bromophenylphenylethe	50.0	0.0	48.8	98	51-115
Hexachlorobenzene	50.0	0.0	45.4	91	58-108
Atrazine	50.0	0.0	44.6	89	10-150
Pentachlorophenol	100	0.0	74.2	74	41-111
Phenanthrene	50.0	0.0	44.2	88	58-105
Anthracene	50.0	0.0	44.9	90	62-106
Di-n-butylphthalate	50.0	0.0	49.3	99	59-120
Fluoranthene	50.0	0.0	42.6	85	55-114

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix Spike - EPA Sample No.: SBLK01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Benzidine	50.0	0.0	28.7	57	10- 76
Pyrene	50.0	0.0	49.1	98	56-122
Butylbenzylphthalate	50.0	0.0	43.9	88	55-126
Benzo(a)anthracene	50.0	0.0	44.6	89	61-110
3,3'-Dichlorobenzidine	50.0	0.0	45.1	90	41-121
Chrysene	50.0	0.0	47.9	96	62-106
bis(2-Ethylhexyl)phthal	50.0	0.0	43.5	87	53-130
Di-n-octylphthalate	50.0	0.0	39.9	80	52-133
Benzo(b)fluoranthene	50.0	0.0	43.8	88	59-116
Benzo(k)fluoranthene	50.0	0.0	49.8	100	66-116
Benzo(a)pyrene	50.0	0.0	44.2	88	55-119
Indeno(1,2,3-cd)pyrene	50.0	0.0	49.0	98	45-122
Dibenzo(a,h)anthracene	50.0	0.0	50.3	101	47-120
Benzo(ghi)perylene	50.0	0.0	48.0	96	50-124
Carbazole	50.0	0.0	40.8	82	54-106

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 71 outside limits

COMMENTS: _____

4B

SVOA METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: S6G0814-4 Lab Sample ID: 1200874922

Instrument ID: MSD6 Date Extracted: 06/28/05

Matrix: (soil/water) GROUND WATER Date Analyzed: 07/08/05

Level:(low/med) LOW Time Analyzed: 2153

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK01LCS	1200874923	S6G0815-4	07/08/05
02	GU05050GMC401	139405002	S6G0828	07/09/05
03				
04				
05				
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5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: S6F2901 DFTPP Injection Date: 06/29/05

Instrument ID: MSD6 DFTPP Injection Time: 0959

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	40.1
68	Less than 2.0% of mass 69	0.5 (1.2)1
69	Mass 69 relative abundance	41.7
70	Less than 2.0% of mass 69	0.4 (0.9)1
127	40.0 - 60.0% of mass 198	47.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	23.6
365	Greater than 1.0% of mass 198	3.72
441	Present, but less than mass 443	11.5
442	Greater than 40.0% of mass 198	79.0
443	17.0 - 23.0% of mass 442	15.4 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNAICAL001	UBN050610-01	S6F2903	06/29/05	1047
02	BNAICAL010	UBN050610-02	S6F2904	06/29/05	1108
03	BNAICAL020	UBN050610-03	S6F2905	06/29/05	1130
04	BNAICAL040	UBN050610-04	S6F2906	06/29/05	1151
05	BNAICAL050	UBN050610-05	S6F2907	06/29/05	1213
06	BNAICAL080	UBN050610-06	S6F2908	06/29/05	1234
07	BNAICAL100	UBN050610-07	S6F2909	06/29/05	1255
08	BNAICAL120	UBN050610-08	S6F2910	06/29/05	1317
09	BNAICV	UBN050603-04	S6F2912	06/29/05	1400
10	ANBZICAL001	UBN050607-01	S6F2914	06/29/05	1443
11	ANBZICAL010	UBN050607-02	S6F2915	06/29/05	1505
12	ANBZICAL020	UBN050607-03	S6F2916	06/29/05	1526
13	ANBZICAL040	UBN050607-04	S6F2917	06/29/05	1547
14	ANBZICAL050	UBN050607-05	S6F2918	06/29/05	1608
15	ANBZICAL080	UBN050607-06	S6F2919	06/29/05	1630
16	ANBZICAL100	UBN050607-07	S6F2920	06/29/05	1651
17	ANBZICAL120	UBN050607-08	S6F2921	06/29/05	1713
18					
19					
20					
21					
22					

5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: S6F2933 DFTPP Injection Date: 06/29/05

Instrument ID: MSD6 DFTPP Injection Time: 2123

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	34.7
68	Less than 2.0% of mass 69	0.7 (1.8)1
69	Mass 69 relative abundance	37.3
70	Less than 2.0% of mass 69	0.3 (0.8)1
127	40.0 - 60.0% of mass 198	45.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	26.1
365	Greater than 1.0% of mass 198	4.07
441	Present, but less than mass 443	13.4
442	Greater than 40.0% of mass 198	93.0
443	17.0 - 23.0% of mass 442	18.0 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	168ICAL010	UBN050520-05	S6F2935	06/29/05	2200
02	168ICAL020	UBN050520-06	S6F2936	06/29/05	2221
03	168ICAL040	UBN050520-07	S6F2937	06/29/05	2242
04	168 ICAL050	UBN050520-08	S6F2938	06/29/05	2303
05	168 ICAL080	UBN050520-09	S6F2939	06/29/05	2324
06	168 ICAL100	UBN050520-10	S6F2940	06/29/05	2345
07	168 ICAL120	UBN050520-11	S6F2941	06/30/05	0007
08					
09					
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20					
21					
22					

5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID: S6G0801 DFTPP Injection Date: 07/08/05

Instrument ID: MSD6 DFTPP Injection Time: 1716

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.7
68	Less than 2.0% of mass 69	0.2 (0.5)1
69	Mass 69 relative abundance	41.0
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	48.1
197	Less than 1.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	26.7
365	Greater than 1.0% of mass 198	4.20
441	Present, but less than mass 443	14.3
442	Greater than 40.0% of mass 198	94.8
443	17.0 - 23.0% of mass 442	18.9 (19.9)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ANBZCVS	UBN050707-02.2	S6G0803	07/08/05	1801
02	BNA CVS	UBN050707-01.2	S6G0804	07/08/05	1822
03	168 CVS	UBN050621-02	S6G0806	07/08/05	1904
04	SBLK01	1200874922	S6G0814-4	07/08/05	2153
05	SBLK01LCS	1200874923	S6G0815-4	07/08/05	2214
06	GU05050GMC401	139405002	S6G0828	07/09/05	0249
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8B
SVOA INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID (Standard): S6G0804 Date Analyzed: 07/08/05

Instrument ID: MSD6 Time Analyzed: 1822

		IS1(DCB)		IS2(NPT)		IS3(ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	131338	3.94	567746	4.81	311298	6.06
	UPPER LIMIT	262676	4.44	1135492	5.31	622596	6.56
	LOWER LIMIT	65669	3.44	283873	4.31	155649	5.56
	EPA SAMPLE NO.						
01	SBLK01	125041	3.94	497899	4.81	288221	6.07
02	SBLK01LCS	116305	3.94	508285	4.82	272837	6.06
03	GU05050GMC401	111705	3.94	436346	4.81	255581	6.06
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SVOA INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Lab File ID (Standard): S6G0804 Date Analyzed: 07/08/05

Instrument ID: MSD6 Time Analyzed: 1822

		IS4(PHN)		IS5(CRY)		IS6(PRY)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	524376	7.05	400392	8.77	291662	10.32
	UPPER LIMIT	1048752	7.55	800784	9.27	583324	10.82
	LOWER LIMIT	262188	6.55	200196	8.27	145831	9.82
	EPA SAMPLE NO.						
01	SBLK01	473159	7.05	361043	8.73	287761	10.28
02	SBLK01LCS	445212	7.05	328035	8.74	258216	10.28
03	GU05050GMC401	433440	7.05	394470	8.74	343648	10.29
04							
05							
06							
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.1	U
111-44-4	bis(2-Chloroethyl) ether	10.1	U
95-57-8	2-Chlorophenol	10.1	U
541-73-1	1,3-Dichlorobenzene	10.1	U
106-46-7	1,4-Dichlorobenzene	10.1	U
100-51-6	Benzyl alcohol	10.1	U
95-50-1	1,2-Dichlorobenzene	10.1	U
108-60-1	bis(2-Chloroisopropyl)ether	10.1	U
95-48-7	o-Cresol	10.1	U
98-86-2	Acetophenone	10.1	U
621-64-7	N-Nitrosodipropylamine	10.1	U
65794-96-9	m,p-Cresols	10.1	U
67-72-1	Hexachloroethane	10.1	U
98-95-3	Nitrobenzene	10.1	U
78-59-1	Isophorone	10.1	U
88-75-5	2-Nitrophenol	10.1	U
105-67-9	2,4-Dimethylphenol	10.1	U
111-91-1	bis(2-Chloroethoxy)methane	10.1	U
120-83-2	2,4-Dichlorophenol	10.1	U
65-85-0	Benzoic acid	20.2	U
120-82-1	1,2,4-Trichlorobenzene	10.1	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.1	U
87-68-3	Hexachlorobutadiene	10.1	U
59-50-7	4-Chloro-3-methylphenol	10.1	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.1	U
88-06-2	2,4,6-Trichlorophenol	10.1	U
95-95-4	2,4,5-Trichlorophenol	10.1	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.1	U
99-09-2	m-Nitroaniline	10.1	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.1	U
606-20-2	2,6-Dinitrotoluene	10.1	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.2	U
132-64-9	Dibenzofuran	10.1	U
121-14-2	2,4-Dinitrotoluene	10.1	U
84-66-2	Diethylphthalate	10.1	U
100-02-7	4-Nitrophenol	10.1	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.1	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.1	U
100-01-6	p-Nitroaniline	10.1	U
122-39-4	Diphenylamine	10.1	U
122-66-7	1,2-Diphenylhydrazine	10.1	U
101-55-3	4-Bromophenylphenylether	10.1	U
118-74-1	Hexachlorobenzene	10.1	U
1912-24-9	Atrazine	10.1	U
87-86-5	Pentachlorophenol	10.1	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.1	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	50.5	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.1	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.1	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.1	U
117-84-0	Di-n-octylphthalate	10.1	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

FORM I SV-2 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.1	U
86-74-8	Carbazole	10.1	U

1F

EPA SAMPLE NO.

GU05050GMC401

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WATER Lab Sample ID: 139405002

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: S6G0828

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-91-1	1,4-DIOXANE	2.23	5.6	NJ
2.	15714-13-3	P-MENTH-8(10)-EN-9-OL, CIS-	7.44	6.6	NJ
3.		UNKNOWN	7.50	4.6	J
4.		UNKNOWN	7.59	4.7	J
5.		UNKNOWN	7.63	5.0	J
6.		UNKNOWN	7.73	4.2	J
7.		UNKNOWN	7.83	4.4	J
8.		UNKNOWN	7.91	6.6	J
9.		UNKNOWN	8.03	5.2	J
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s070805.s.b/s6g0828.d
Lab Smp Id: 139405002 Client Smp ID: GU05050GMC401
Inj Date : 09-JUL-2005 02:49
Operator : EED Inst ID: MSD6.i
Smp Info : |139405002|437183|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 11-Jul-2005 13:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	990.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.943	3.943	(1.000)	111705	40.0000	
* 29 Naphthalene-d8	136	4.813	4.813	(1.000)	436346	40.0000	
* 46 Acenaphthene-d10	164	6.064	6.064	(1.000)	255581	40.0000	
* 67 Phenanthrene-d10	188	7.045	7.051	(1.000)	433440	40.0000	
* 91 Chrysene-d12	240	8.743	8.767	(1.000)	394470	40.0000	
* 98 Perylene-d12	264	10.289	10.318	(1.000)	343648	40.0000	
$ 3 2-Fluorophenol	112	3.115	3.115	(0.790)	112379	36.6605	37.0
$ 5 Phenol-d5	99	3.649	3.649	(0.926)	93165	26.9055	27.2
$ 20 Nitrobenzene-d5	82	4.307	4.308	(0.895)	92306	32.1649	32.5
$ 39 2-Fluorobiphenyl	172	5.559	5.559	(0.917)	217773	33.6931	34.0
$ 60 2,4,6-Tribromophenol	329	6.599	6.599	(1.088)	91602	84.9559	85.8
$ 81 p-Terphenyl-d14	244	7.968	7.980	(0.911)	343965	46.0894	46.6

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s070805.s.b/s6g0828.d
Lab Smp Id: 139405002 Client Smp ID: GU05050GMC401
Inj Date : 09-JUL-2005 02:49
Operator : EED Inst ID: MSD6.i
Smp Info : |139405002|437183|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 11-Jul-2005 13:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	990.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

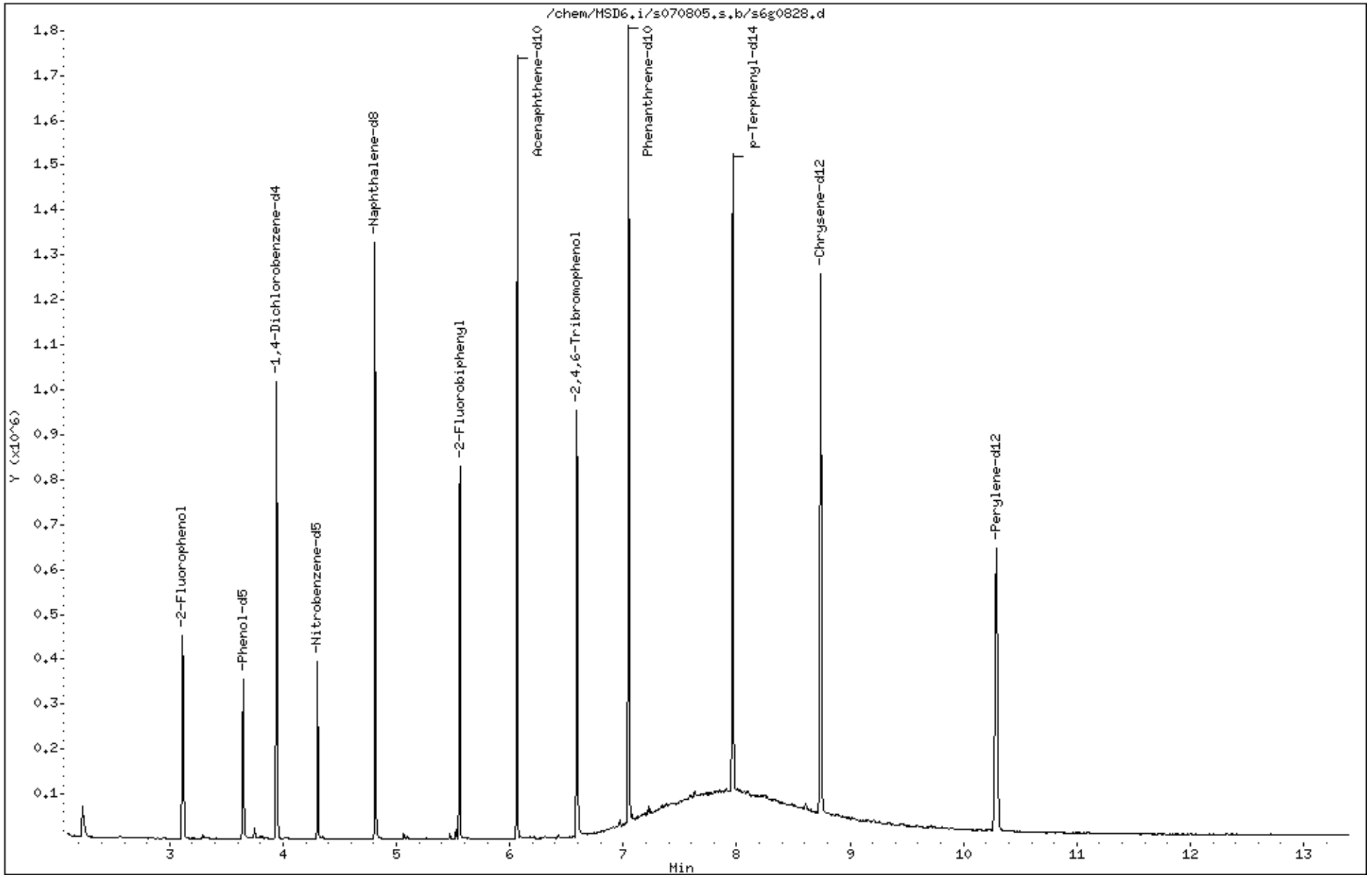
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.943	690275	40.000
* 67 Phenanthrene-d10	7.045	1206004	40.000
* 91 Chrysene-d12	8.743	1082303	40.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
1,4-Dioxane					CAS #: 123-91-1		
2.228	95437	5.53039575	5.6	90	Nist98.l	107978	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
p-Menth-8(10)-en-9-ol, cis-				CAS #: 15714-13-3			
7.439	196465	6.51623340	6.6	81	Nist98.l	14099	67
Unknown				CAS #:			
7.498	135890	4.50713078	4.6	0		0	67
Unknown				CAS #:			
7.592	141697	4.69971474	4.7	0		0	67
Unknown				CAS #:			
7.633	148821	4.93601753	5.0	0		0	67
Unknown				CAS #:			
7.727	126497	4.19558625	4.2	0		0	67
Unknown				CAS #:			
7.833	132110	4.38173687	4.4	0		0	67
Unknown				CAS #:			
7.909	175756	6.49563179	6.6	0		0	91
Unknown				CAS #:			
8.027	140232	5.18270629	5.2	0		0	91

Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d
Date : 09-JUL-2005 02:49
Client ID: GU05050GMC401
Sample Info: |139405002|437183|1|SVMFI1|ESHL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

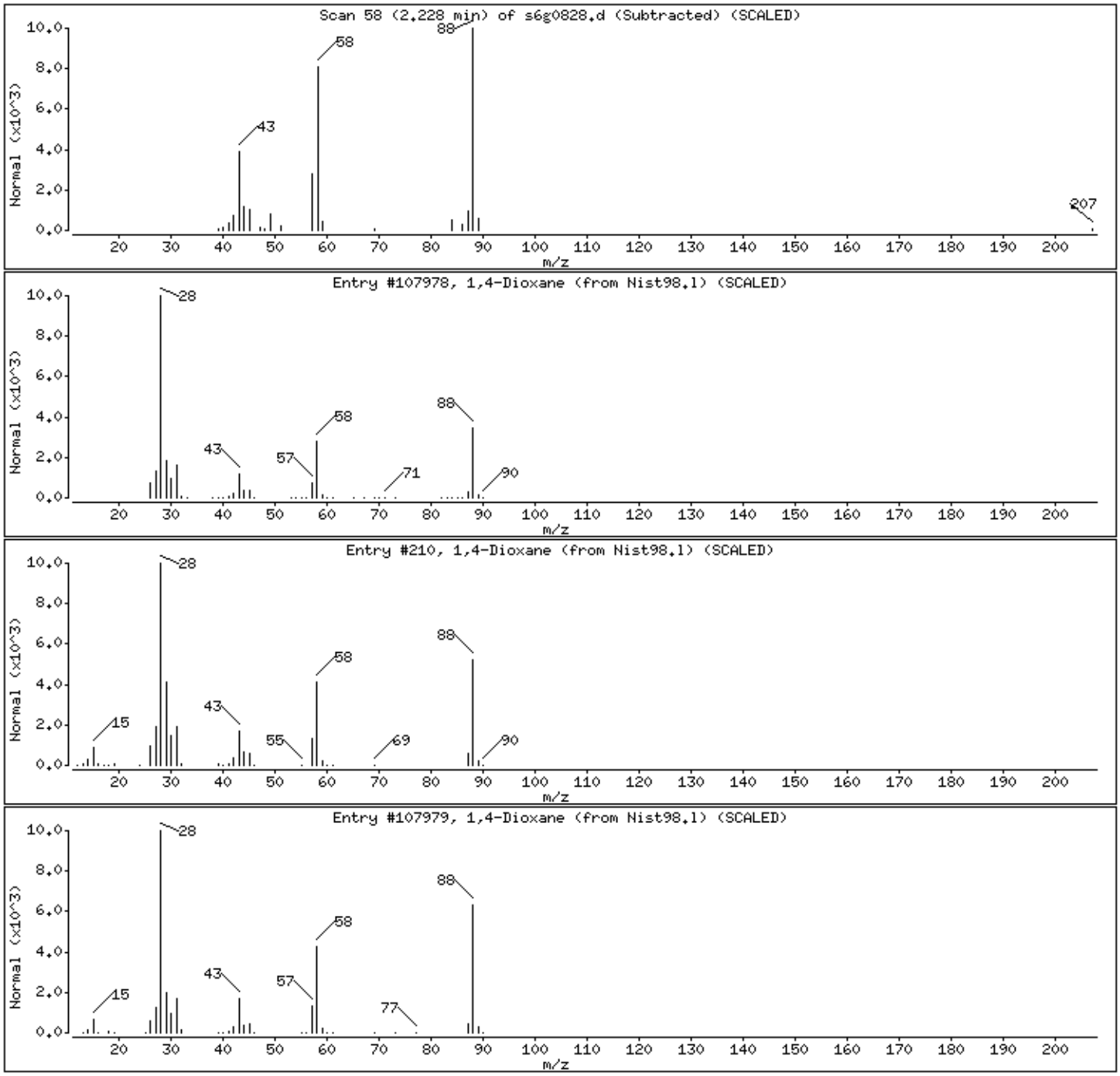
Client ID: GU05050GMC401 Instrument: MSD6.i

Sample Info: |139405002|437183|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: EED

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Dioxane	123-91-1	Nist98.l	107978	90	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	210	90	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	107979	87	C4H8O2	88



Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

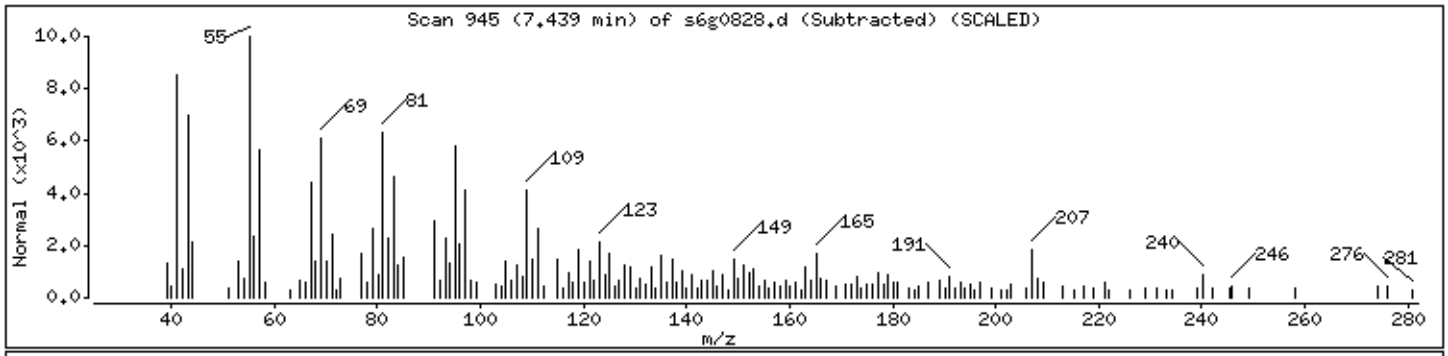
Client ID: GU05050GMC401 Instrument: MSD6.i

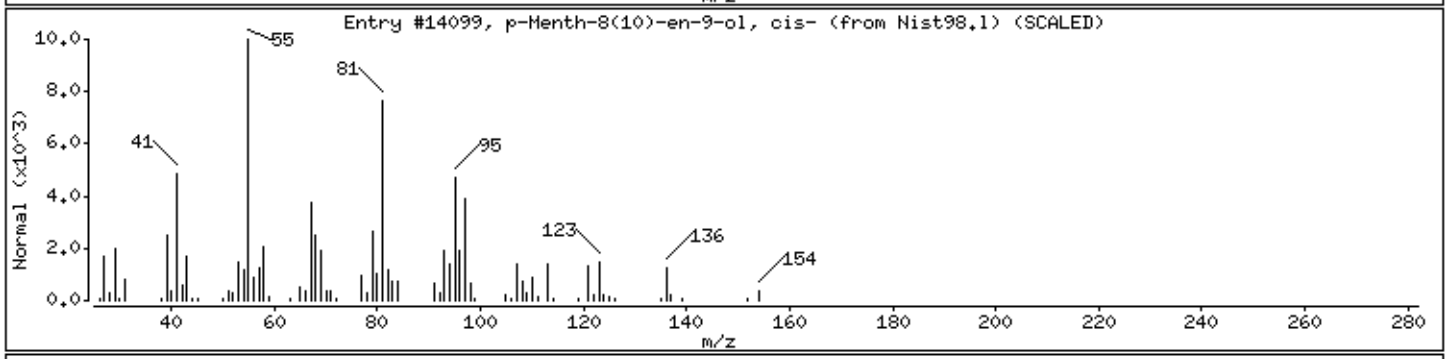
Sample Info: |139405002|437183|1|SVMF|1|ESHL

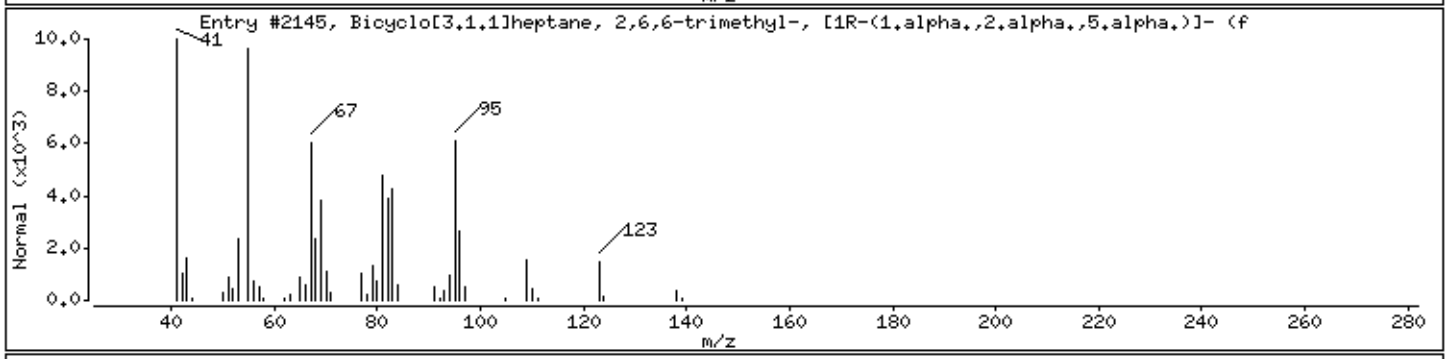
Volume Injected (uL): 0.5 Operator: EED

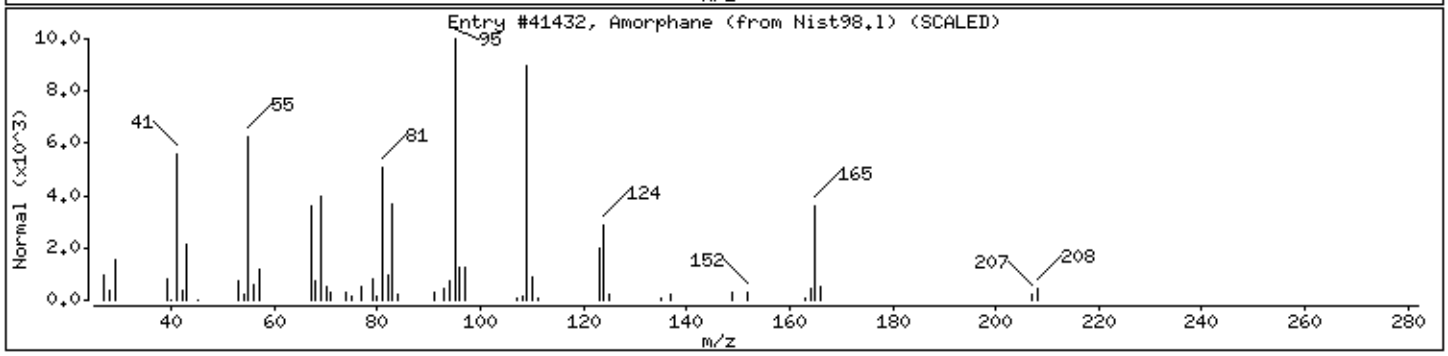
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
p-Menth-8(10)-en-9-ol, cis-	15714-13-3	Nist98.l	14099	81	C10H18O	154
Bicyclo[3.1.1]heptane, 2,6,6-trimethyl-,	4863-59-6	Nist98.l	2145	55	C10H18	138
Amorphane	34315-85-0	Nist98.l	41432	55	C15H28	208









Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

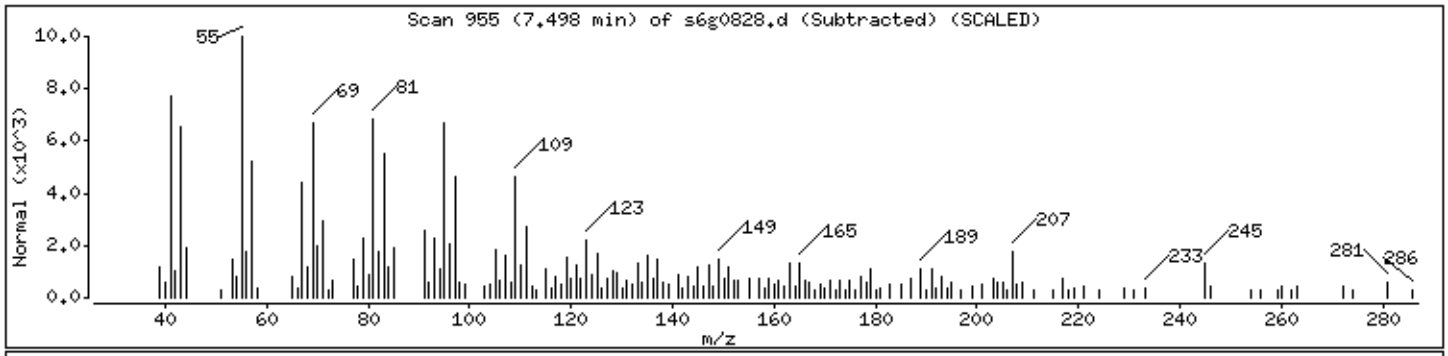
Client ID: GU05050GMC401 Instrument: MSD6.i

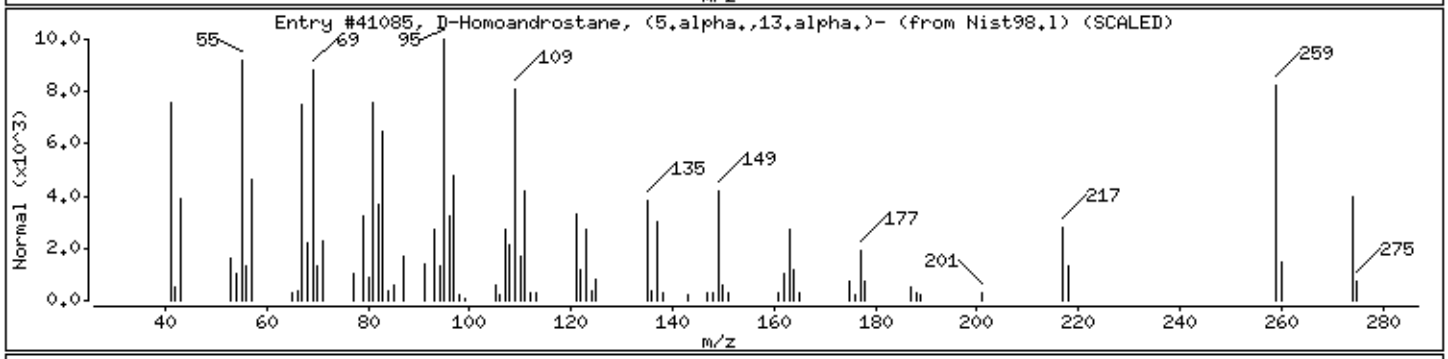
Sample Info: |139405002|437183|1|SVMF|1|ESHL

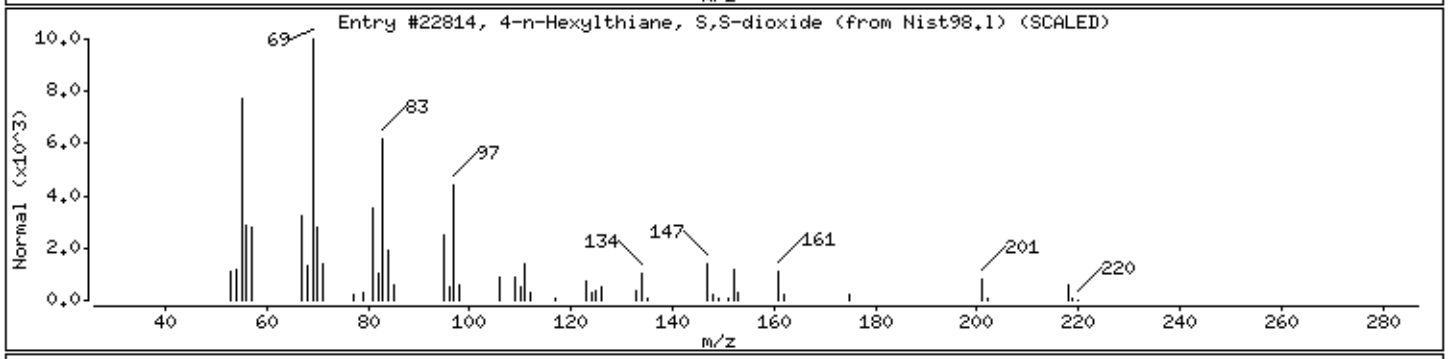
Volume Injected (uL): 0.5 Operator: EED

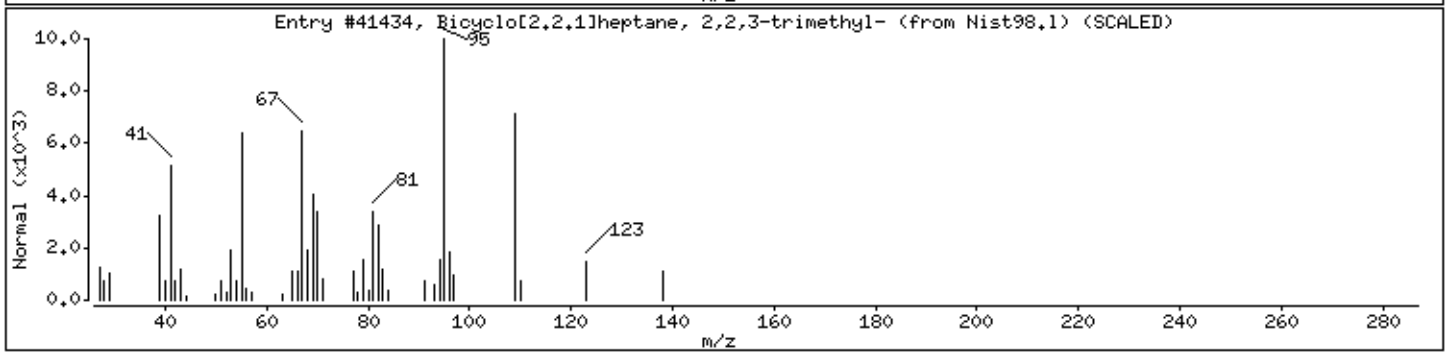
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	Nist98.l	41085	68	C20H34	274
4-n-Hexylthiane, S,S-dioxide	1000215-67-3	Nist98.l	22814	53	C11H22O2S	218
Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-	473-19-8	Nist98.l	41434	50	C10H18	138









Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

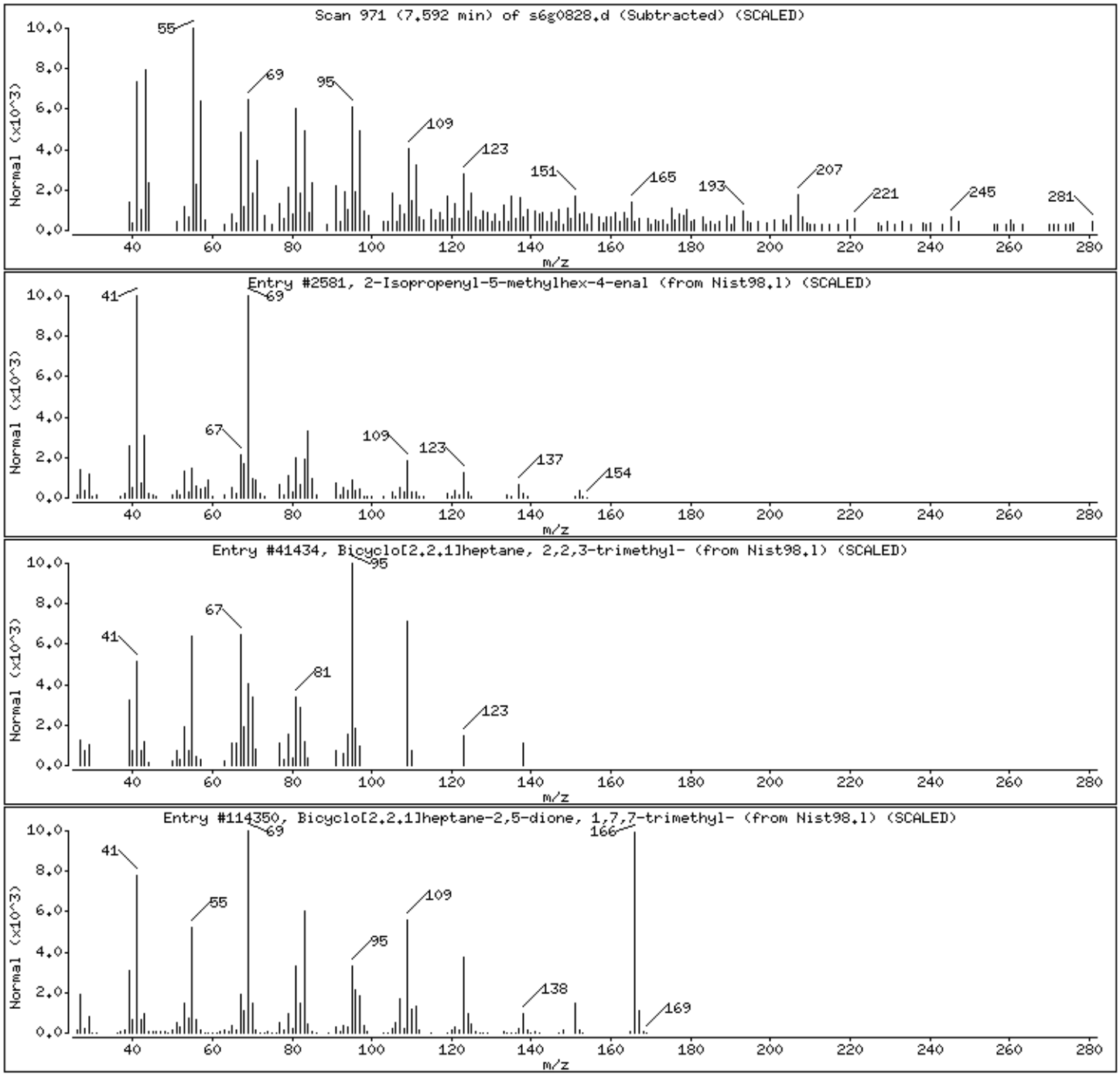
Client ID: GU05050GMC401 Instrument: MSD6.i

Sample Info: |139405002|437183|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: EED

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Isopropenyl-5-methylhex-4-enal	75697-98-2	Nist98.l	2581	52	C10H16O	152
Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-	473-19-8	Nist98.l	41434	50	C10H18	138
Bicyclo[2.2.1]heptane-2,5-dione, 1,7,7-t	4230-32-4	Nist98.l	114350	49	C10H14O2	166



Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

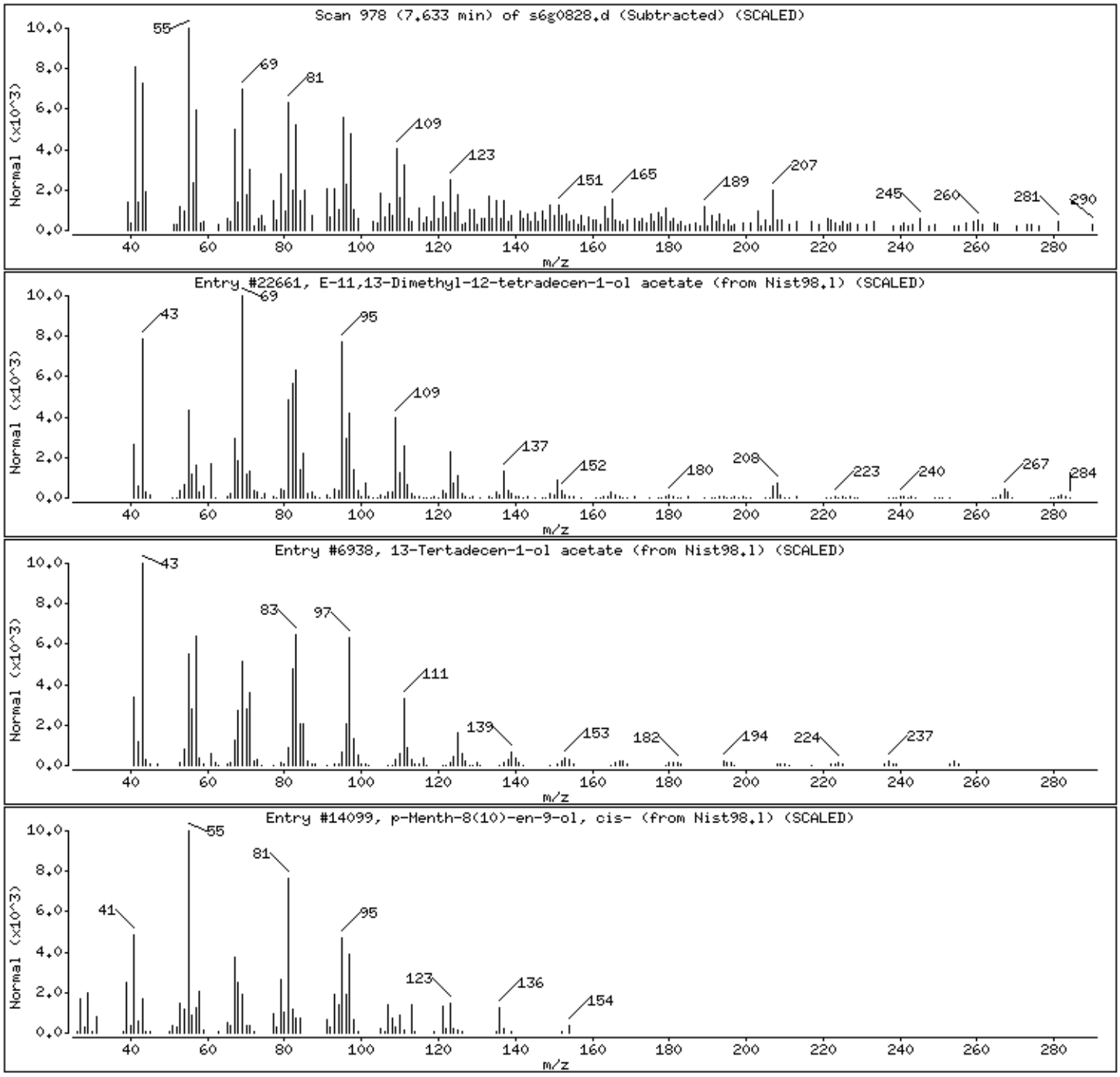
Client ID: GU05050GMC401 Instrument: MSD6.i

Sample Info: |139405002|437183|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: EED

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
E-11,13-Dimethyl-12-tetradecen-1-ol acet	1000130-81-0	Nist98.l	22661	58	C18H34O2	282
13-Tertadecen-1-ol acetate	1000130-79-8	Nist98.l	6938	50	C16H30O2	254
p-Menth-8(10)-en-9-ol, cis-	15714-13-3	Nist98.l	14099	47	C10H18O	154



Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

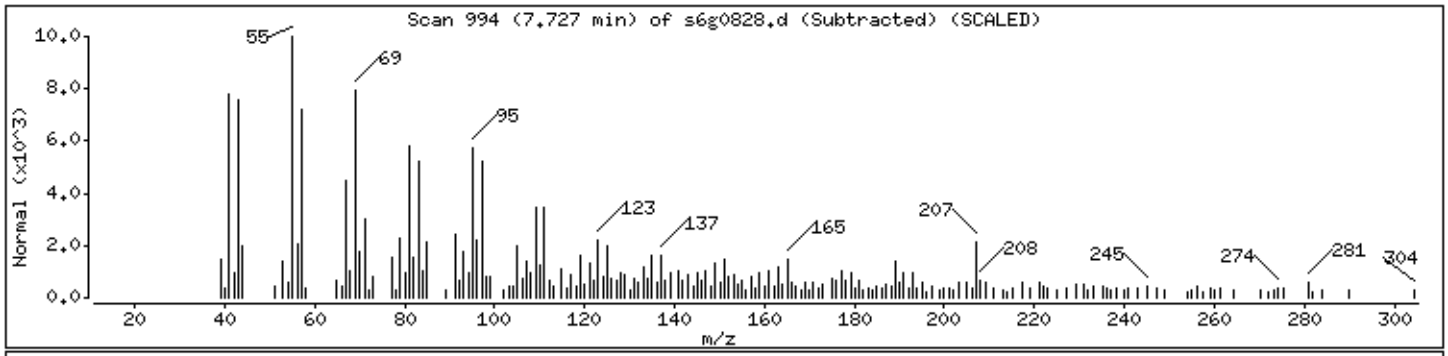
Client ID: GU05050GMC401 Instrument: MSD6.i

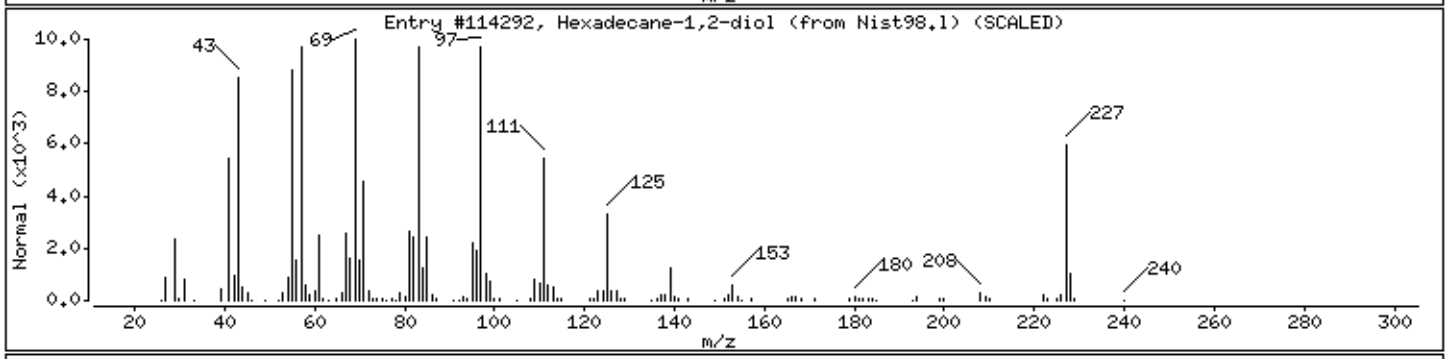
Sample Info: |139405002|437183|1|SVMF|1|ESHL

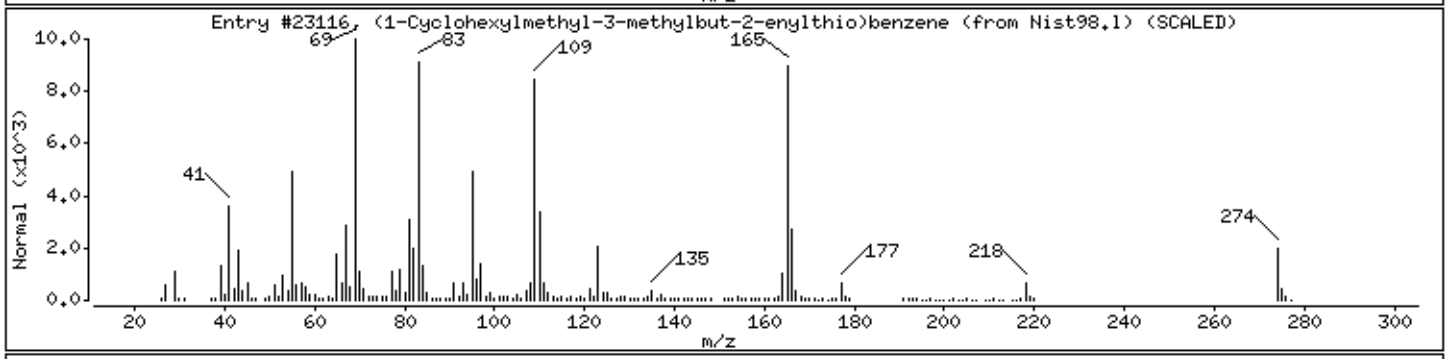
Volume Injected (uL): 0.5 Operator: EED

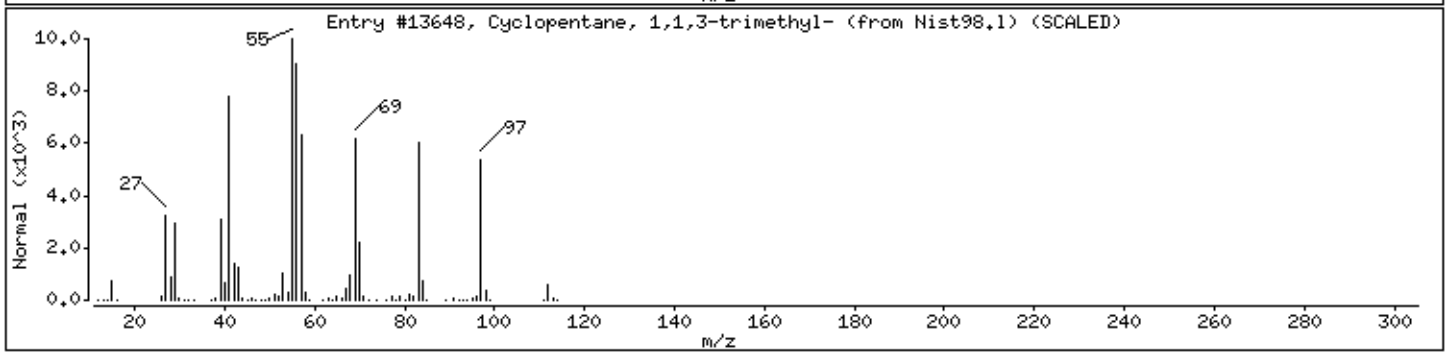
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hexadecane-1,2-diol	6920-24-7	Nist98.l	114292	53	C16H34O2	258
(1-Cyclohexylmethyl-3-methylbut-2-enylth	1000191-26-0	Nist98.l	23116	46	C18H26S	274
Cyclopentane, 1,1,3-trimethyl-	4516-69-2	Nist98.l	13648	42	C8H16	112









Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

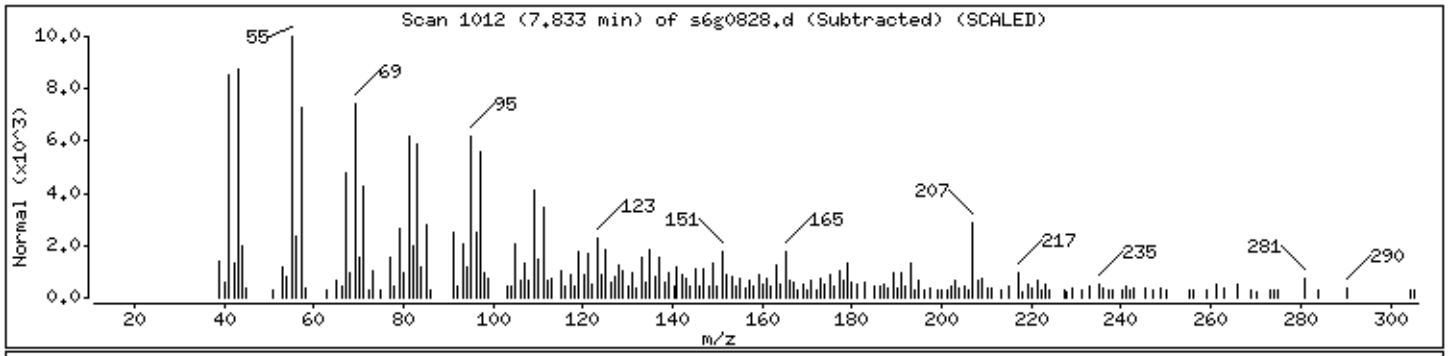
Client ID: GU05050GMC401 Instrument: MSD6.i

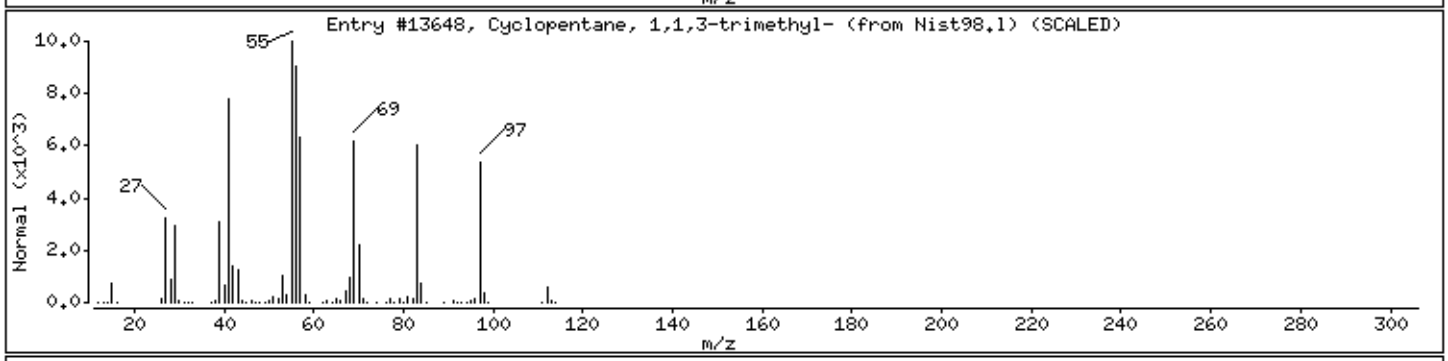
Sample Info: |139405002|437183|1|SVMF|1|ESHL

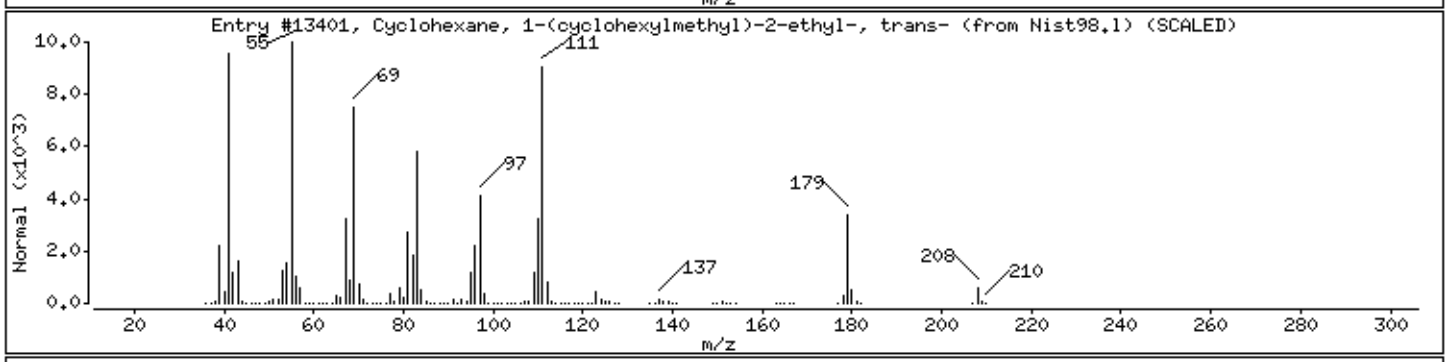
Volume Injected (uL): 0.5 Operator: EED

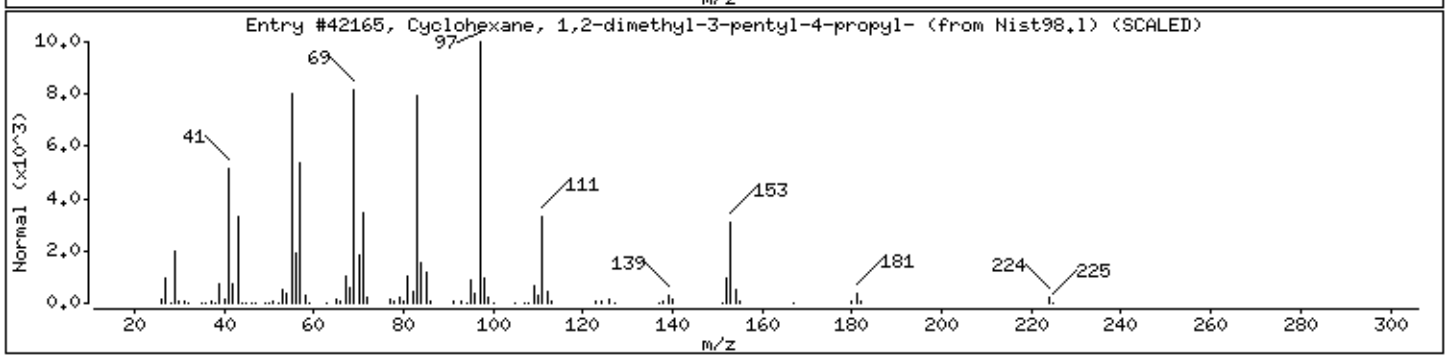
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopentane, 1,1,3-trimethyl-	4516-69-2	Nist98.l	13648	60	C8H16	112
Cyclohexane, 1-(cyclohexylmethyl)-2-ethy	54934-92-8	Nist98.l	13401	60	C15H28	208
Cyclohexane, 1,2-dimethyl-3-pentyl-4-pro	62376-17-4	Nist98.l	42165	50	C16H32	224









Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

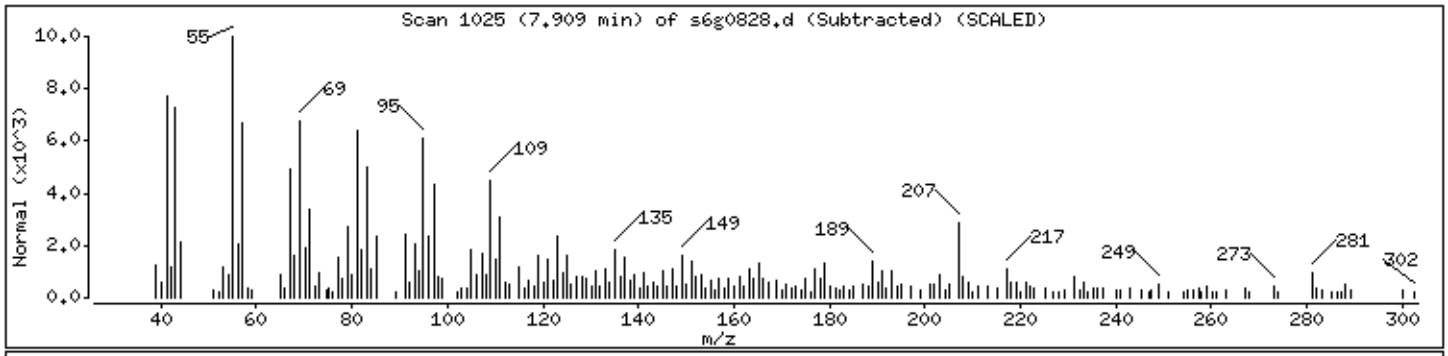
Client ID: GU05050GMC401 Instrument: MSD6.i

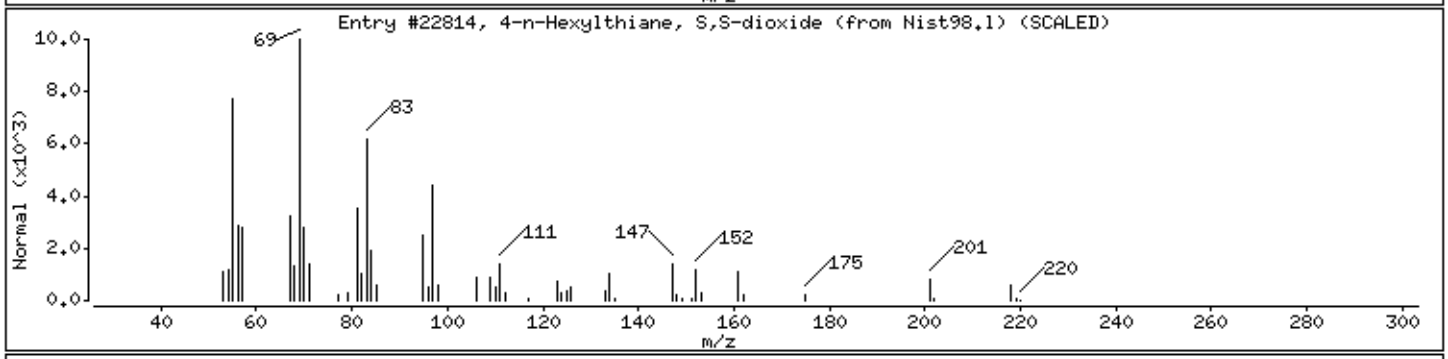
Sample Info: |139405002|437183|1|SVMF|1|ESHL

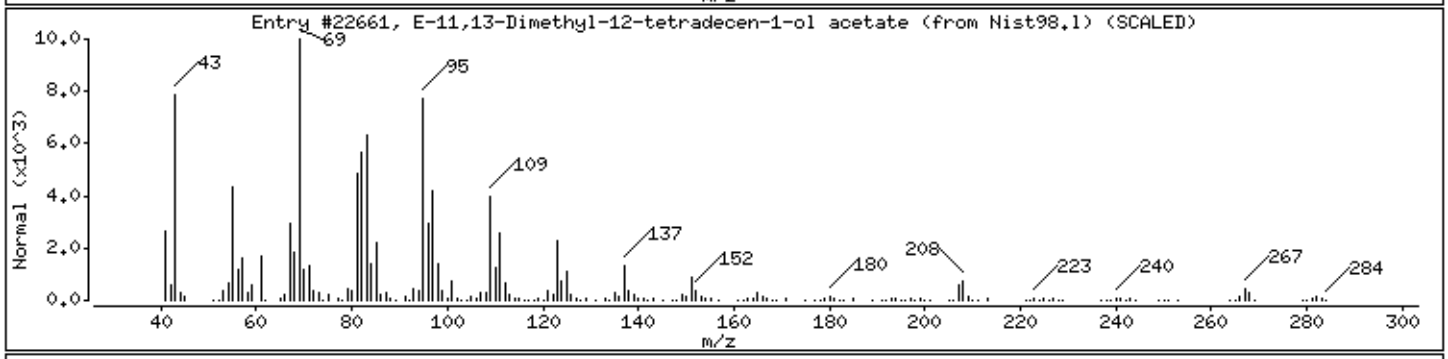
Volume Injected (uL): 0.5 Operator: EED

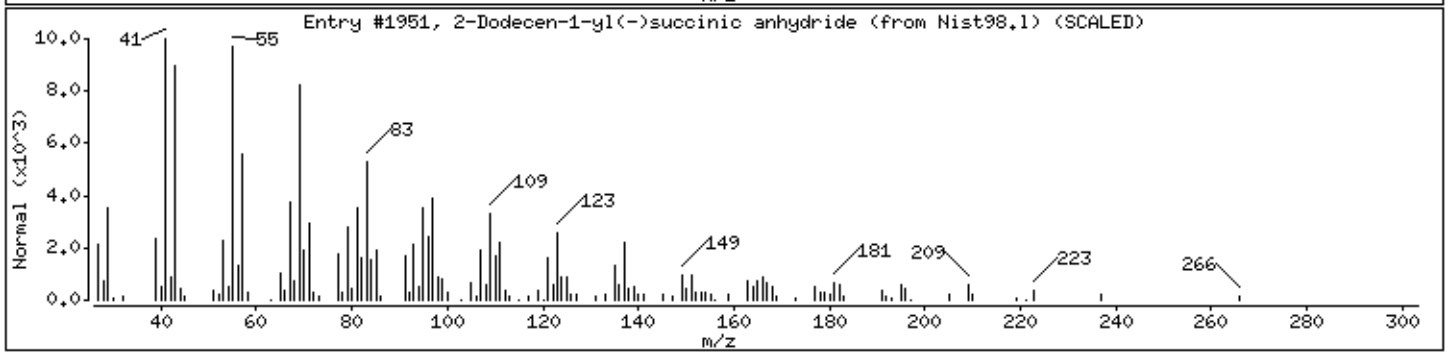
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4-n-Hexylthiane, S,S-dioxide	1000215-67-3	Nist98.l	22814	59	C11H22O2S	218
E-11,13-Dimethyl-12-tetradecen-1-ol acet	1000130-81-0	Nist98.l	22661	58	C18H34O2	282
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	Nist98.l	1951	49	C16H26O3	266









Data File: /chem/MSD6.i/s070805.s.b/s6g0828.d

Date : 09-JUL-2005 02:49

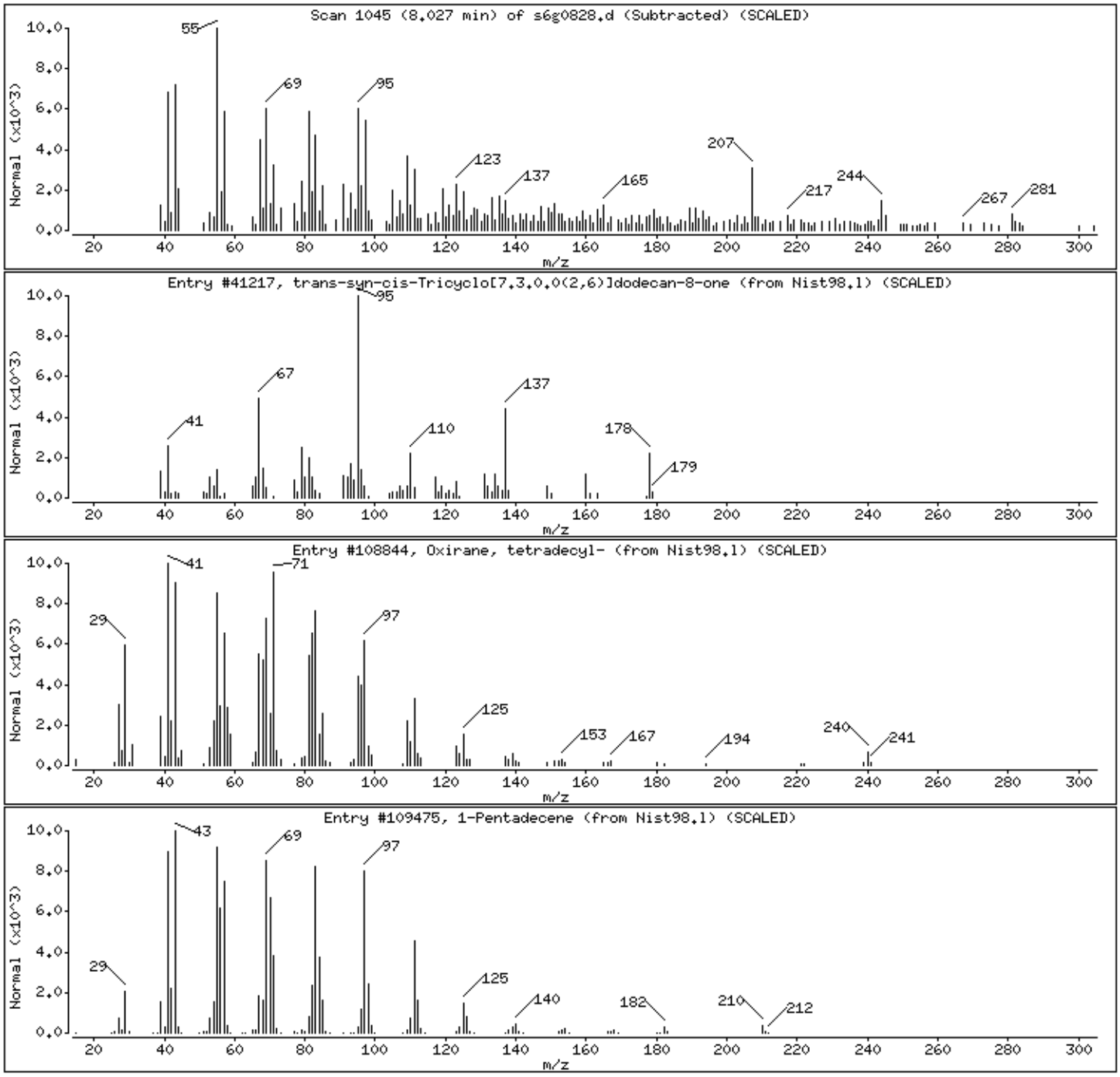
Client ID: GU05050GMC401 Instrument: MSD6.i

Sample Info: |139405002|437183|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: EED

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans-syn-cis-Tricyclo[7.3.0.0(2,6)]dode	73306-77-1	Nist98.l	41217	40	C12H18O	178
Oxirane, tetradecyl-	7320-37-8	Nist98.l	108844	38	C16H32O	240
1-Pentadecene	13360-61-7	Nist98.l	109475	35	C15H30	210



STANDARDS DATA

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine		10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

Caprolactam		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate		10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate		10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate		10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine	10	20	50	100	150	200	250	300
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate		10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene	10	20	50	100	150	200	250	300

Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120

Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	2000	2500		
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology

(04/04)

Report Date: 11-Jul-2005 12:59

Calibration History

Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Start Cal Date: 29-JUN-2005 10:47
End Cal Date : 30-JUN-2005 05:04

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
29-JUN-2005 14:43	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2914.d
29-JUN-2005 10:47	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2903.d
Cal Level: 2 , Cal Amount: 10.00000		
30-JUN-2005 03:38	HEXMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2951.d
30-JUN-2005 00:49	AP9MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2943.d
29-JUN-2005 22:00	168MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2935.d
29-JUN-2005 18:38	167xMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2925.d
29-JUN-2005 15:05	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2915.d
29-JUN-2005 11:08	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2904.d
Cal Level: 3 , Cal Amount: 20.00000		
30-JUN-2005 04:00	HEXMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2952.d
30-JUN-2005 01:10	AP9MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2944.d
29-JUN-2005 22:21	168MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2936.d
29-JUN-2005 18:59	167xMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2926.d
29-JUN-2005 15:26	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2916.d
29-JUN-2005 11:30	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2905.d
Cal Level: 4 , Cal Amount: 40.00000		
30-JUN-2005 04:21	HEXMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2953.d
30-JUN-2005 01:31	AP9MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2945.d
29-JUN-2005 22:42	168MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2937.d
29-JUN-2005 19:21	167xMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2927.d
29-JUN-2005 15:47	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2917.d
29-JUN-2005 11:51	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2906.d
Cal Level: 5 , Cal Amount: 50.00000		
30-JUN-2005 04:42	HEXMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2954.d
30-JUN-2005 01:52	AP9MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2946.d
29-JUN-2005 23:03	168MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2938.d
29-JUN-2005 19:42	167xMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2928.d
29-JUN-2005 16:08	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2918.d
29-JUN-2005 12:13	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2907.d
Cal Level: 6 , Cal Amount: 80.00000		

30-JUN-2005 05:04	HEXMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2955.d
30-JUN-2005 02:13	AP9MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2947.d

29-JUN-2005 23:24	168MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2939.d
29-JUN-2005 20:03	167xMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2929.d
29-JUN-2005 16:30	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2919.d
29-JUN-2005 12:34	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2908.d

Cal Level: 7 , Cal Amount: 100.00000		
30-JUN-2005 02:34	AP9MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2948.d
29-JUN-2005 23:45	168MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2940.d
29-JUN-2005 20:24	167xMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2930.d
29-JUN-2005 16:51	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2920.d
29-JUN-2005 12:55	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2909.d

Cal Level: 8 , Cal Amount: 120.00000		
30-JUN-2005 02:56	AP9MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2949.d
30-JUN-2005 00:07	168MIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2941.d
29-JUN-2005 20:46	167xMIX-O2SI	/chem/MSD6.i/s062905.s.b/s6f2931.d
29-JUN-2005 17:13	ANIL+BNZ+AT	/chem/MSD6.i/s062905.s.b/s6f2921.d
29-JUN-2005 13:17	BNAICAL-NAB	/chem/MSD6.i/s062905.s.b/s6f2910.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
08-JUL-2005 19:25	AP9MIX-O2SI	/chem/MSD6.i/s070805.s.b/s6g0807.d

Ccal Level: 4 , Ccal Amount: 40.0		
08-JUL-2005 19:04	168MIX-O2SI	/chem/MSD6.i/s070805.s.b/s6g0806.d

Ccal Level: 4 , Ccal Amount: 40.0		
08-JUL-2005 18:43	167xMIX-O2SI	/chem/MSD6.i/s070805.s.b/s6g0805.d

Ccal Level: 4 , Ccal Amount: 40.0		
08-JUL-2005 18:22	BNAICAL-NAB	/chem/MSD6.i/s070805.s.b/s6g0804.d

Ccal Level: 4 , Ccal Amount: 40.0		
08-JUL-2005 18:01	ANIL+BNZ+AT	/chem/MSD6.i/s070805.s.b/s6g0803.d

Ccal Level: 4 , Ccal Amount: 40.0		
08-JUL-2005 17:32	BNAICAL-NAB	/chem/MSD6.i/s070805.s.b/s6g0802.d

Ccal Level: 4 , Ccal Amount: 40.0		
08-JUL-2005 16:43	BNAICAL-NAB	/chem/MSD6.i/s070805.s.b/s6g0802.d

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Method file : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Cal Date : 08-Jul-2005 23:27 eri00936

Calibration File Names:
Level 1: /chem/MSD6.i/s062905.s.b/s6f2914.d
Level 2: /chem/MSD6.i/s062905.s.b/s6f2951.d
Level 3: /chem/MSD6.i/s062905.s.b/s6f2952.d
Level 4: /chem/MSD6.i/s062905.s.b/s6f2953.d
Level 5: /chem/MSD6.i/s062905.s.b/s6f2954.d
Level 6: /chem/MSD6.i/s062905.s.b/s6f2955.d
Level 7: /chem/MSD6.i/s062905.s.b/s6f2948.d
Level 8: /chem/MSD6.i/s062905.s.b/s6f2949.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.51716	0.53745	0.56612	0.62189	0.62976					
	0.61181	0.60553					AVRG		0.58424		7.56473
2 Pyridine	+++++	1.01567	1.05395	1.10497	1.20462	1.21044					
	1.18670	1.16573					AVRG		1.13458		6.81435
4 Aniline	+++++	1.76906	1.82952	1.77568	1.82731	1.72476					
	1.77315	1.65672					AVRG		1.76517		3.39804
209 Benzaldehyde	+++++	0.91333	0.97827	0.97066	0.97525	0.93624					
	0.95796	0.87769					AVRG		0.94420		3.97549
6 Phenol	+++++	1.28163	1.22999	1.24743	1.32171	1.26734					
	1.19711	1.16346					AVRG		1.24409		4.26490

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	+++++	1.09187	1.24814	1.38008	1.16865	1.13539					
	1.19579	1.20511					AVRG		1.20358		7.70137
8 2-Chlorophenol	+++++	1.04167	0.98212	1.04468	1.12493	1.10241					
	1.06962	1.02414					AVRG		1.05565		4.55907
203 n-Decane	+++++	1.36213	1.27890	1.24499	1.27248	1.17072					
	1.11054	1.05525					AVRG		1.21357		8.79236
9 1,3-Dichlorobenzene	+++++	1.24522	1.19464	1.22840	1.27470	1.23082					
	1.18266	1.13695					AVRG		1.21334		3.75270
11 1,4-Dichlorobenzene	+++++	1.24198	1.18653	1.18966	1.26277	1.19917					
	1.15134	1.10166					AVRG		1.19045		4.52250
12 Benzyl alcohol	+++++	0.65095	0.64915	0.67098	0.73203	0.70141					
	0.68357	0.65828					AVRG		0.67805		4.46511
13 1,2-Dichlorobenzene	+++++	1.21609	1.14441	1.14714	1.18920	1.10738					
	1.04271	0.99355					AVRG		1.12007		7.05606
14 bis(2-Chloroisopropyl)ether	+++++	1.78480	1.64427	1.66639	1.73861	1.64821					
	1.59343	1.52608					AVRG		1.65740		5.19609
15 o-Cresol	+++++	0.85729	0.82019	0.82661	0.86954	0.82504					
	0.78709	0.75823					AVRG		0.82057		4.66980

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.36451	1.30234	1.34718	1.43333	1.39514					
	1.34346	1.30433					AVRG		1.35576		3.48158
17 N-Nitrosodipropylamine	+++++	0.76273	0.73694	0.76071	0.80944	0.79904					
	0.78901	0.76537					AVRG		0.77475		3.27227
18 m,p-Cresols	+++++	1.18448	1.12006	1.17781	1.23751	1.20390					
	1.19822	1.15898					AVRG		1.18299		3.12648
19 Hexachloroethane	+++++	0.44400	0.42512	0.44919	0.47864	0.46615					
	0.45755	0.44155					AVRG		0.45174		3.88080
21 Nitrobenzene	+++++	0.23443	0.23911	0.24208	0.25695	0.23472					
	0.22823	0.21929					AVRG		0.23640		4.96965
22 Isophorone	+++++	0.53455	0.50696	0.50140	0.51554	0.47295					
	0.46082	0.43736					AVRG		0.48994		6.95490
23 2-Nitrophenol	+++++	0.11005	0.12349	0.13785	0.13145	0.11698					
	0.11601	0.10937					AVRG		0.12074		8.91216
24 2,4-Dimethylphenol	+++++	0.32904	0.28396	0.26322	0.27736	0.24959					
	0.23713	0.22417					AVRG		0.26636		13.08214
25 bis(2-Chloroethoxy)methane	+++++	0.33253	0.31774	0.30846	0.31693	0.29021					
	0.27847	0.25964					AVRG		0.30057		8.50104

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.21191	0.20806	0.20936	0.22306	0.20368					
	0.19538	0.18622					AVRG		0.20538		5.79085
27 Benzoic acid	+++++	+++++	0.11062	0.13631	0.15992	0.16042					
	0.16735	0.16405					AVRG		0.14978		14.75879
28 1,2,4-Trichlorobenzene	+++++	0.25440	0.24499	0.24112	0.24897	0.22735					
	0.22001	0.20435					AVRG		0.23445		7.64814
30 Naphthalene	0.87449	0.86402	0.81239	0.76372	0.78022	0.68667					
	0.62757	0.57905					AVRG		0.74852		14.43294
204 alpha-Terpineol	+++++	0.24459	0.23412	0.22488	0.23364	0.20805					
	0.20005	0.18612					AVRG		0.21878		9.68188
31 4-Chloroaniline	+++++	0.36423	0.39177	0.38548	0.39406	0.37214					
	0.38020	0.35329					AVRG		0.37731		3.95940
189 Caprolactam	+++++	0.07251	0.07547	0.07763	0.08544	0.07739					
	0.07964	0.07676					AVRG		0.07783		5.15220
32 Hexachlorobutadiene	+++++	0.17022	0.16672	0.16292	0.16939	0.15509					
	0.14803	0.13887					AVRG		0.15875		7.49488
33 4-Chloro-3-methylphenol	+++++	0.21370	0.20956	0.20887	0.22040	0.20533					
	0.19921	0.18958					AVRG		0.20666		4.84099

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.52037	0.53197	0.49931	0.48535	0.50075	0.43814					
	0.41295	0.38401					AVRG		0.47160		11.35135
35 1-Methylnaphthalene	0.50792	0.50381	0.47087	0.45827	0.47056	0.41135					
	0.38440	0.36385					AVRG		0.44638		12.06171
36 Hexachlorocyclopentadiene	+++++	0.27546	0.29919	0.31503	0.33834	0.33172					
	0.32586	0.31789					AVRG		0.31478		6.81803
208 1,1'Biphenyl	+++++	1.17679	1.15149	1.12973	1.18162	1.09207					
	0.99743	0.94566					AVRG		1.09640		8.35998
205 2,3-Dichloroaniline	+++++	0.50143	0.52094	0.50713	0.51990	0.49800					
	0.49495	0.47366					AVRG		0.50229		3.22449
37 2,4,6-Trichlorophenol	+++++	0.26767	0.27958	0.30035	0.33046	0.33021					
	0.31139	0.30070					AVRG		0.30291		7.82843
38 2,4,5-Trichlorophenol	+++++	0.27277	0.29294	0.31384	0.33985	0.32547					
	0.32147	0.31345					AVRG		0.31140		7.12280
40 2-Chloronaphthalene	0.88707	0.89795	0.88562	0.89149	0.92898	0.87674					
	0.82454	0.78767					AVRG		0.87251		5.14317
42 o-Nitroaniline	+++++	0.18183	0.22636	0.24363	0.24328	0.25767					
	0.27260	0.26959					AVRG		0.24214		12.85449

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	100 Level 7	120 Level 8										
41 m-Nitroaniline	+++++	0.16508	0.20826	0.22592	0.22463	0.24296						
	0.26046	0.25700					AVRG		0.22633		14.50208	
43 Dimethylphthalate	+++++	1.05265	1.02952	1.04530	1.10026	1.03232						
	0.97355	0.91666					AVRG		1.02147		5.82085	
44 2,6-Dinitrotoluene	+++++	14110	37157	88751	127204	206487						
	276018	309113					LINR	0.12759	0.23878		0.99859	
45 Acenaphthylene	1.30098	1.45233	1.45399	1.42093	1.50370	1.35023						
	1.25551	1.18124					AVRG		1.36486		8.21421	
47 Acenaphthene	0.88811	0.88809	0.86644	0.85922	0.90699	0.83409						
	0.76707	0.72554					AVRG		0.84194		7.59312	
48 2,4-Dinitrophenol	+++++	+++++	8730	23958	40469	72578						
	101823	120140					LINR	0.37819	0.09953		0.99682	<-
49 Dibenzofuran	+++++	1.24916	1.23747	1.22503	1.28673	1.17156						
	1.09025	1.03840					AVRG		1.18552		7.65905	
50 2,4-Dinitrotoluene	+++++	14785	42603	105105	157918	260276						
	347073	396875					LINR	0.17288	0.30877		0.99848	
51 Diethylphthalate	+++++	1.01919	1.00226	0.99556	1.06910	0.99051						
	0.92225	0.86903					AVRG		0.98113		6.70461	

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	100 Level 7	120 Level 8										
52 4-Nitrophenol	+++++	10795	30024	68738	105177	160855						
	218517	251558					LINR	0.13739	0.19207		0.99797	
53 Fluorene	0.97501	1.07925	1.04699	0.99402	1.00201	0.88174						
	0.80206	0.74619					AVRG		0.94091		12.62671	
54 4-Chlorophenylphenylether	+++++	0.50395	0.50463	0.51363	0.54351	0.50985						
	0.49656	0.47263					AVRG		0.50639		4.17936	
55 2-Methyl-4,6-dinitrophenol	+++++	5571	17354	47733	77947	131353						
	190318	219912					LINR	0.27040	0.10534		0.99570	
56 p-Nitroaniline	+++++	15575	46189	94832	102081	194494						
	288681	343479					LINR	0.21108	0.25774		0.99208	
57 N-Nitroso-diphenylamine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
133 Diphenylamine	+++++	0.53761	0.55050	0.54882	0.56131	0.52234						
	0.49991	0.46756					AVRG		0.52686		6.29832	
58 1,2-Diphenylhydrazine	+++++	0.58893	0.61677	0.62249	0.63104	0.59415						
	0.55586	0.52341					AVRG		0.59038		6.58684	
59 Tributylphosphate	+++++	1.19275	1.20425	1.16012	1.20622	1.03673						
	0.89976	0.82128					AVRG		1.07444		14.79299	

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	100 Level 7	120 Level 8										
61 4-Bromophenylphenylether	+++++	0.16470	0.16937	0.17405	0.18452	0.17963						
	0.17177	0.16825					AVRG		0.17318		3.97085	
62 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
63 Hexachlorobenzene	+++++	0.21838	0.21729	0.22215	0.23568	0.22579						
	0.21675	0.20449					AVRG		0.22008		4.33097	
207 Atrazine	+++++	0.04821	0.05442	0.05465	0.05441	0.05563						
	0.05649	0.05343					AVRG		0.05389		4.99177	
64 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
65 Pentachlorophenol	+++++	14615	36384	86758	129686	205431						
	272202	299063					LINR	0.09760	0.14014		0.99619	
206 n-Octadecane	+++++	0.46057	0.44339	0.42667	0.43800	0.39630						
	0.35599	0.32946					AVRG		0.40720		11.97641	
66 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
68 Phenanthrene	0.94700	0.93010	0.90432	0.88393	0.89618	0.81047						
	0.74347	0.69341					AVRG		0.85111		10.83068	

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	100 Level 7	120 Level 8										
69 Anthracene	0.81830	0.91673	0.89986	0.88177	0.91941	0.83898						
	0.72776	0.70113					AVRG		0.83799		10.06976	
70 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
71 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
72 Di-n-butylphthalate	+++++	1.04466	1.01530	0.99214	1.02181	0.90240						
	0.79837	0.73602					AVRG		0.93010		13.05261	
73 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
74 Heptachlor epoxide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
75 Endrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
76 Fluoranthene	0.85165	0.98028	0.95944	0.91942	0.96002	0.86056						
	0.78144	0.73378					AVRG		0.88083		10.20805	
77 Benzidine	0.46453	0.54042	0.61697	0.59488	0.60693	0.52966						
	0.47596	0.44623					AVRG		0.53445		12.62444	

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Integrator : HP RTE
Method file : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Cal Date : 08-Jul-2005 23:27 eri00936

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
78 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
79 Pyrene	1.05469	1.10244	1.05067	1.13245	1.12898	1.09149						
	0.96620	0.94276					AVRG		1.05871		6.72145	
80 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
82 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
83 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
84 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
85 Butylbenzylphthalate	+++++	0.45483	0.45497	0.49050	0.52286	0.51410						
	0.48672	0.46732					AVRG		0.48447		5.61274	
86 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
87 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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	100 Level 7	120 Level 8										
88 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
89 Benzo(a)anthracene	1.02037	0.92736	0.91631	0.93613	1.00287	0.97731						
	0.91980	0.88887					AVRG		0.94863		4.87440	
90 3,3'-Dichlorobenzidine	0.23994	0.26714	0.34045	0.30885	0.30897	0.29918						
	0.30343	0.28321					AVRG		0.29389		10.35058	
92 Chrysene	0.87692	0.90428	0.83102	0.84840	0.91730	0.85869						
	0.81431	0.79374					AVRG		0.85558		5.00353	
93 bis(2-Ethylhexyl)phthalate	0.46861	0.55913	0.55611	0.58319	0.66443	0.62986						
	0.60975	0.58284					AVRG		0.58174		10.04573	
94 Di-n-octylphthalate	+++++	1.07772	0.94910	1.12505	1.36491	1.26689						
	1.20434	1.10502					AVRG		1.15615		11.75223	
95 Benzo(b)fluoranthene	0.92184	1.00262	0.90446	0.97376	1.06723	1.11854						
	1.06330	0.98087					AVRG		1.00408		7.40946	
96 Benzo(k)fluoranthene	0.88396	0.95442	0.94862	1.00719	1.16462	1.00676						
	1.00178	0.99296					AVRG		0.99504		8.07877	
97 Benzo(a)pyrene	0.68444	0.75653	0.74657	0.78590	0.88329	0.85777						
	0.85110	0.82618					AVRG		0.79897		8.44405	

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	100 Level 7	120 Level 8										
99 Indeno(1,2,3-cd)pyrene	0.61632	0.58604	0.70177	0.67154	0.67013	0.73467						
	0.68089	0.68615					AVRG		0.66844		7.03625	
100 Dibenzo(a,h)anthracene	0.47064	0.47132	0.58355	0.55613	0.56811	0.62348						
	0.57963	0.59462					AVRG		0.55593		10.07620	
101 Benzo(ghi)perylene	0.55045	0.48620	0.58722	0.54324	0.53365	0.58869						
	0.52937	0.52797					AVRG		0.54335		6.15250	
102 1,4-Dioxane	+++++	0.50054	0.51195	0.51911	0.50788	0.49500						
	+++++	0.48805					AVRG		0.50376		2.26955	<-
103 Methyl methacrylate	+++++	0.26369	0.27225	0.27557	0.26700	0.27581						
	0.26517	0.26764					AVRG		0.26959		1.83152	<-
104 Ethyl methacrylate	+++++	1.05502	1.09290	1.08147	1.06229	1.06559						
	1.04217	1.03117					AVRG		1.06151		2.01223	<-
105 2-Picoline	+++++	1.43104	1.48020	1.45119	1.40350	1.42823						
	1.37461	1.36200					AVRG		1.41868		2.94466	<-
106 N-Nitrosomethylethylamine	+++++	0.57360	0.59787	0.59666	0.59102	0.60897						
	0.60600	0.60463					AVRG		0.59696		2.01333	<-
107 Methyl methanesulfonate	+++++	0.66001	0.68136	0.64795	0.64399	0.64481						
	0.63888	0.60371					AVRG		0.64582		3.62887	<-

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	100 Level 7	120 Level 8										
108 N-Nitrosodiethylamine	+++++	0.55515	0.60108	0.59424	0.58282	0.59563						
	0.58728	0.58148					AVRG		0.58538		2.58073	<-
109 Ethyl Methanesulfonate	+++++	0.90522	0.93481	0.91403	0.89638	0.90584						
	0.90360	0.89386					AVRG		0.90768		1.50606	<-
110 Pentachloroethane	+++++	0.48366	0.50817	0.50477	0.48965	0.49703						
	0.48196	0.47307					AVRG		0.49119		2.60074	<-
111 N-Nitrosopyrrolidine	+++++	0.56044	0.61253	0.60949	0.60780	0.62587						
	0.63640	0.62376					AVRG		0.61090		4.00962	<-
113 N-Nitrosomorpholine	+++++	0.67355	0.71138	0.67959	0.67818	0.69054						
	0.68028	0.65575					AVRG		0.68132		2.48260	<-
114 o-Toluidine	+++++	1.98622	2.06277	1.94957	1.91918	1.89824						
	1.83508	1.76678					AVRG		1.91684		5.07298	<-
115 N-Nitrosopiperidine	+++++	0.14252	0.15133	0.15068	0.15132	0.14764						
	0.14469	0.14619					AVRG		0.14777		2.36573	<-
116 a,a-Dimethylphenethylamine	+++++	0.69839	0.81336	0.82447	0.82107	0.83268						
	0.85641	0.81201					AVRG		0.80834		6.27820	<-
117 Triethylphosphorothioate	+++++	0.17130	0.17702	0.17502	0.17290	0.16987						
	0.16880	0.16481					AVRG		0.17139		2.37615	<-

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	100 Level 7	120 Level 8										
118 2,6-Dichlorophenol	+++++	0.24685	0.26187	0.26195	0.25490	0.26045						
	0.24928	0.24019					AVRG		0.25364		3.34054	<-
119 Hexachloropropene	+++++	0.20510	0.22158	0.22445	0.22283	0.22367						
	0.22374	0.21009					AVRG		0.21878		3.57734	<-
120 p-Phenylenediamine	+++++	0.27410	0.29963	0.31813	0.30883	0.31127						
	0.32148	0.32141					AVRG		0.30783		5.45927	<-
121 N-Nitrosodi-n-butylamine	+++++	0.21124	0.23148	0.22961	0.22542	0.23106						
	0.22739	0.21854					AVRG		0.22496		3.33137	<-
122 Safrole	+++++	0.25799	0.27413	0.27100	0.26077	0.25800						
	0.25613	0.24047					AVRG		0.25978		4.23149	<-
123 1,2,4,5-Tetrachlorobenzene	+++++	0.58740	0.58344	0.57275	0.55452	0.54599						
	0.50956	0.51743					AVRG		0.55301		5.57510	<-
124 Isosafrole	+++++	0.48447	0.50201	0.48877	0.48337	0.47258						
	0.45801	0.45714					AVRG		0.47805		3.44534	<-
125 1,4-Naphthoquinone	+++++	0.29948	0.37127	0.39501	0.40332	0.42065						
	0.41444	0.40300					AVRG		0.38674		10.75418	<-
126 m-Dinitrobenzene	+++++	11333	29881	60706	80799	136457						
	199128	216550					LINR	0.15627	0.17622		0.99863	<-

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	100 Level 7	120 Level 8										
127 Pentachlorobenzene	+++++	0.53986	0.55059	0.52561	0.51752	0.51460						
	0.48736	0.47488					AVRG		0.51578		5.23438	<-
128 1-Naphthylamine	+++++	1.10501	1.12338	1.06057	1.03690	0.99565						
	0.95302	0.90186					AVRG		1.02520		7.83291	<-
129 2-Naphthylamine	+++++	1.13268	1.13738	1.01920	0.99895	0.94888						
	0.93451	0.86754					AVRG		1.00559		10.03316	<-
130 2,3,4,6-Tetrachlorophenol	+++++	0.22759	0.26074	0.26852	0.27205	0.27746						
	0.27379	0.26261					AVRG		0.26325		6.38739	<-
131 5-Nitro-o-toluidine	+++++	0.21951	0.28054	0.28367	0.29990	0.30362						
	0.31889	0.30734					AVRG		0.28764		11.42372	<-
132 Thionazin	+++++	0.16540	0.18489	0.18959	0.19652	0.19483						
	0.18453	0.18220					AVRG		0.18542		5.57589	<-
134 Sulfotepp	+++++	0.13201	0.13825	0.14158	0.14207	0.14402						
	0.14203	0.14317					AVRG		0.14045		2.94522	<-
135 Phorate	+++++	0.42694	0.44994	0.44933	0.43342	0.40793						
	0.39794	0.37770					AVRG		0.42046		6.44425	<-
136 1,3,5-Trinitrobenzene	+++++	8089	21411	56530	68410	133057						
	185152	233362					LINR	0.29695	0.11733		0.99028	<-

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	100 Level 7	120 Level 8										
137 Phenacetin	+++++	0.26549	0.31869	0.31716	0.32249	0.32888						
	0.33340	0.31454					AVRG		0.31438		7.17736	<-
138 Diallate	+++++	0.24928	0.27125	0.27268	0.27162	0.26495						
	0.26314	0.25464					AVRG		0.26394		3.43054	<-
139 Dimethoate	+++++	0.21265	0.25243	0.26505	0.27392	0.27213						
	0.26086	0.25512					AVRG		0.25602		8.09823	<-
140 4-Aminobiphenyl	+++++	0.72720	0.72750	0.71783	0.69316	0.65818						
	0.62639	0.59132					AVRG		0.67737		7.91668	<-
141 Pentachloronitrobenzene	+++++	0.07094	0.07892	0.08070	0.07893	0.08062						
	0.07946	0.07653					AVRG		0.07802		4.37642	<-
142 Pronamide	+++++	0.29614	0.32278	0.30956	0.30150	0.28513						
	0.27007	0.25715					AVRG		0.29176		7.79686	<-
143 Dinoseb	+++++	11810	36117	68787	103764	182650						
	+++++	+++++					LINR	0.19883	0.14649		0.99196	<-
144 Disulfoton	+++++	0.34533	0.36623	0.35810	0.36810	0.35446						
	0.33639	0.32408					AVRG		0.35038		4.59389	<-
145 Methyl parathion	+++++	15175	39497	95008	150455	257779						
	282327	368389					LINR	0.17032	0.18407		0.99724	<-

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	100 Level 7	120 Level 8										
146 4-Nitroquinoline-1-oxide	+++++	0.03067	0.03816	0.03038	0.03069	0.02642						
	0.02662	+++++					AVRG		0.03049		13.94577	<-
147 Methapyrilene	+++++	0.48235	0.56526	0.45531	0.48410	0.41873						
	0.43682	+++++					AVRG		0.47376		10.88015	<-
148 Isodrin	+++++	0.09839	0.10374	0.10171	0.10757	0.10479						
	0.09510	0.09688					AVRG		0.10117		4.49323	<-
149 Aramite	+++++	0.03701	0.04435	0.03857	0.04230	0.04242						
	0.04683	0.03893					AVRG		0.04149		8.42634	<-
150 Kepone	+++++	0.09203	0.10191	0.09259	0.11466	0.11130						
	0.08418	0.08742					AVRG		0.09773		12.08484	<-
151 p-(Dimethylamino)azobenzene	+++++	0.29683	0.33596	0.38677	0.37483	0.37299						
	0.35312	0.37460					AVRG		0.35644		8.75677	<-
152 Chlorobenzilate	+++++	0.31465	0.35162	0.39188	0.36818	0.37335						
	0.40791	0.37696					AVRG		0.36922		8.10736	<-
153 3,3'-Dimethylbenzidine	+++++	0.54532	0.60105	0.55468	0.56624	0.52583						
	0.52900	0.48354					AVRG		0.54367		6.74786	<-
154 Famphur	+++++	0.43167	0.46900	0.49079	0.49651	0.48894						
	0.47499	0.44829					AVRG		0.47146		5.08281	<-

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	100 Level 7	120 Level 8										
155 2-Acetylaminofluorene	+++++	31299	99622	102176	171095	288075						
	456548	378779					LINR	0.11393	0.31981		0.99610	<-
157 7,12Dimethylbenz(a)anthracene	+++++	0.47348	0.55069	0.63423	0.62631	0.62633						
	0.63964	0.62035					AVRG		0.59586		10.35960	<-
158 3-Methylcholanthrene	+++++	0.42667	0.48861	0.47551	0.51225	0.53030						
	0.54450	0.53867					AVRG		0.50236		8.37157	<-
166 Maleic anhydride	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
167 a,a,a-Trichlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
26 Phthalic anhydride	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
169 2,3-Dimethylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
170 2,6-Dimethylnapthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
171 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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	100 Level 7	120 Level 8										
172 1-Methyl fluorene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
173 Carbazole	0.89823	0.89580	0.96564	0.88080	0.88398	0.83308						
	0.78882	0.72371					AVRG		0.85876		8.72132	
174 Hexachlorophene	+++++	0.03525	0.05441	0.06285	0.05888	0.05609						
	+++++	+++++					AVRG		0.05350		19.97719	<-
175 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
176 Dibenz(a,h)acridine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
177 Dibenz(a,j)acridine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
178 Dibenzo(a,i)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
179 Dibenzo(a,e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
180 7-H-Dibenzo(c,g)carbazole	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Cal Date : 08-Jul-2005 23:27 eri00936

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
181 Dibenzo(a,h)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
182 4,6-Dinitro-2-cyclohexylpheno	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
184 p-Benzoquinone	+++++	0.54454	0.61973	0.66831	0.66424	0.65620						
	0.65136	0.62987					AVRG		0.63346		6.79232	<-
185 (2,3-Dibromopropyl)phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
186 2,6-Toluene diisocyanate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
191 Parathion	+++++	6480	18292	43550	71783	122597						
	124928	171590					LINR	0.17100	0.08513		0.99171	<-
192 Methoxychlor	+++++	0.50488	0.56725	0.58586	0.63394	0.63877						
	0.60715	0.58858					AVRG		0.58949		7.70669	<-
193 Hexamethyleneimine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
195 4-Chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 10:47
End Cal Date : 30-JUN-2005 05:04
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Cal Date : 08-Jul-2005 23:27 eri00936

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
197 Anthraquinone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
199 2-Aminoanthraquinone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
200 2-Methyl anthracene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
201 N,N-Dimethyl formamide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
202 bis(2-Chloromethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
210 m-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
211 p-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
212 Cis Diallate	+++++	0.26872	0.27681	0.29420	0.29397	0.30151						
	0.30811	0.30522					AVRG		0.29265		5.03630	<-
213 Trans Diallate	+++++	0.29327	0.31912	0.32080	0.31956	0.31170						
	0.30958	0.29957					AVRG		0.31051		3.43054	<-

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 10:47
End Cal Date : 30-JUN-2005 05:04
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Cal Date : 08-Jul-2005 23:27 eri00936

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
214 1,4-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
215 2-Ethoxyethanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
216 Methylenebis(2-chloroaniline)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 3 2-Fluorophenol	+++++	1.08855	1.04451	1.08195	1.16172	1.14568						
	1.09749	1.06384					AVRG		1.09768		3.84872	
$ 5 Phenol-d5	+++++	1.24890	1.17474	1.24152	1.29912	1.27523						
	1.24107	1.19897					AVRG		1.23994		3.41559	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.26023	0.26161	0.26926	0.28731	0.27020						
	0.25128	0.24163					AVRG		0.26307		5.56434	
$ 39 2-Fluorobiphenyl	+++++	1.08017	1.05370	1.04073	1.08115	1.00534						
	0.93237	0.88750					AVRG		1.01157		7.42819	

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-JUN-2005 10:47
End Cal Date : 30-JUN-2005 05:04
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Cal Date : 08-Jul-2005 23:27 eri00936

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	120 Level 8									
$ 60 2,4,6-Tribromophenol	+++++	0.13237	0.14688	0.16678	0.18740	0.18185					
	0.18518	0.18079					AVRG		0.16875		12.66322
$ 81 p-Terphenyl-d14	+++++	0.74931	0.74305	0.79338	0.81684	0.78136					
	0.71579	0.69760					AVRG		0.75676		5.65239

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

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Data file : /chem/MSD6.i/s062905.s.b/s6f2903.d
Lab Smp Id: UBN050610-01 Client Smp ID: BNAICAL001
Inj Date : 29-JUN-2005 10:47
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-01|1 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 01-Jul-2005 10:29 hnm Quant Type: ISTD
Cal Date : 29-JUN-2005 14:43 Cal File: s6f2914.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.963	3.963	(1.000)	163699	40.0000	
* 29 Naphthalene-d8	136	4.832	4.832	(1.000)	604190	40.0000	
* 46 Acenaphthene-d10	164	6.084	6.084	(1.000)	344325	40.0000	
* 67 Phenanthrene-d10	188	7.065	7.065	(1.000)	534912	40.0000	
* 91 Chrysene-d12	240	8.757	8.757	(1.000)	446427	40.0000	
* 98 Perylene-d12	264	10.314	10.314	(1.000)	355854	40.0000	
30 Naphthalene	128	4.850	4.850	(1.004)	13209	1.00000	1.2
34 2-Methylnaphthalene	142	5.332	5.332	(1.103)	7860	1.00000	1.1
35 1-Methylnaphthalene	142	5.402	5.402	(1.118)	7672	1.00000	1.1
40 2-Chloronaphthalene	162	5.684	5.684	(0.934)	7636	1.00000	1.0
45 Acenaphthylene	152	5.984	5.984	(0.984)	11199	1.00000	0.95
47 Acenaphthene	154	6.102	6.102	(1.003)	7645	1.00000	1.0
53 Fluorene	166	6.454	6.454	(1.061)	8393	1.00000	1.0

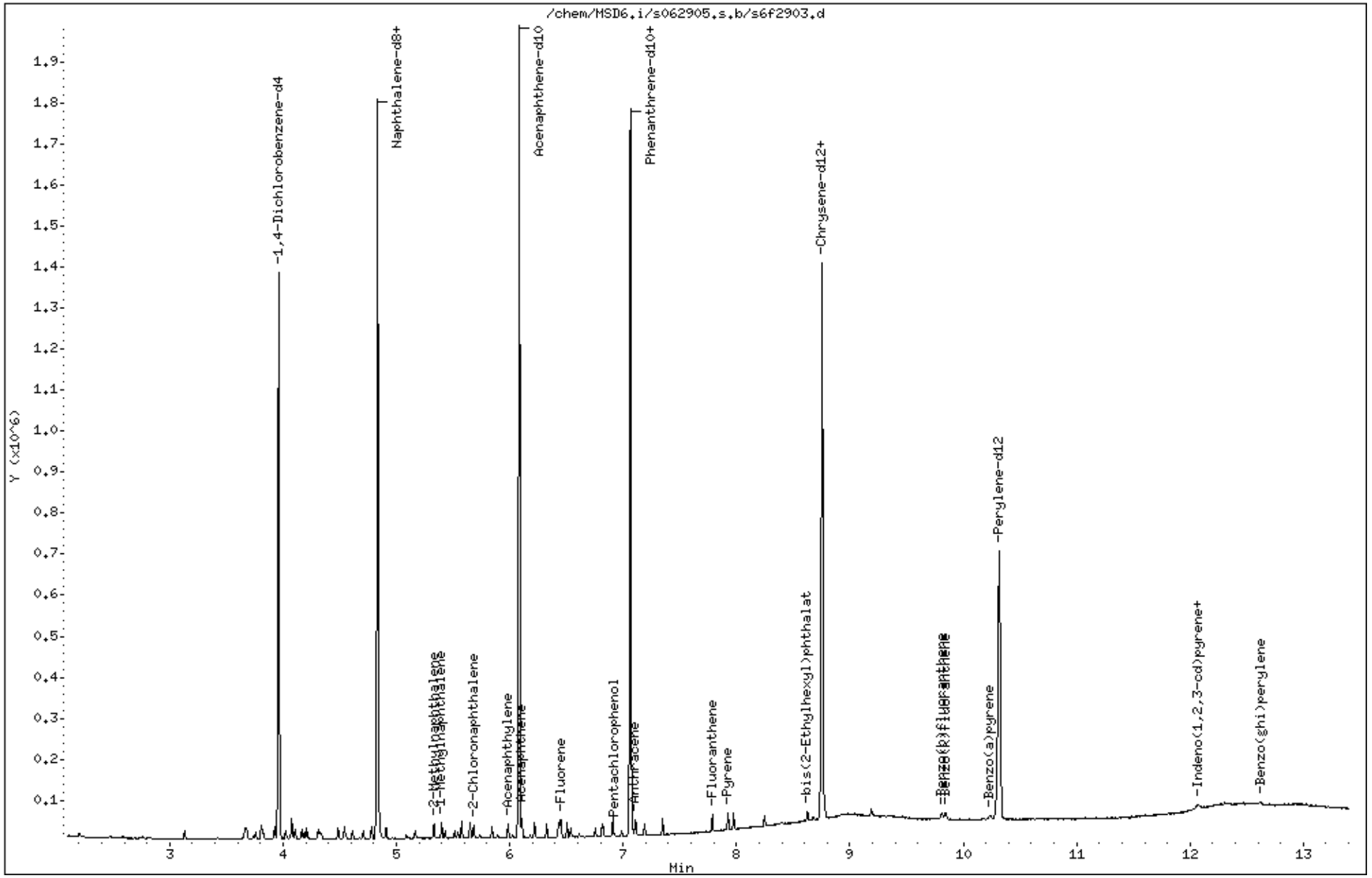
						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
65 Pentachlorophenol	266	6.930	6.930	(0.981)	676	1.00000	4.3
68 Phenanthrene	178	7.077	7.077	(1.002)	12664	1.00000	1.1
69 Anthracene	178	7.106	7.106	(1.006)	10943	1.00000	0.98
76 Fluoranthene	202	7.788	7.788	(1.102)	11389	1.00000	0.97
79 Pyrene	202	7.929	7.929	(0.905)	11771	1.00000	1.00
89 Benzo(a)anthracene	228	8.746	8.746	(0.999)	11388	1.00000	1.1
92 Chrysene	228	8.781	8.781	(1.003)	9787	1.00000	1.0
93 bis(2-Ethylhexyl)phthalate	149	8.622	8.622	(0.985)	5230	1.00000	0.80
95 Benzo(b)fluoranthene	252	9.815	9.815	(0.952)	8201	1.00000	0.92
96 Benzo(k)fluoranthene	252	9.844	9.844	(0.954)	7864	1.00000	0.89
97 Benzo(a)pyrene	252	10.244	10.244	(0.993)	6089	1.00000	0.86
99 Indeno(1,2,3-cd)pyrene	276	12.065	12.065	(1.170)	5483	1.00000	0.92
100 Dibenzo(a,h)anthracene	278	12.077	12.077	(1.171)	4187	1.00000	0.85(T)
101 Benzo(ghi)perylene	276	12.623	12.623	(1.224)	4897	1.00000	1.0(T)

QC Flag Legend

T - Target compound detected outside RT window.

Data File: /chem/MSD6.i/s062905.s.b/s6f2903.d
Date : 29-JUN-2005 10:47
Client ID: BNAICAL001
Sample Info: !UBN050610-01!1 PPM!1!SVMF!1!BNA ICAL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



General Engineering Laboratories, LLC

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Data file : /chem/MSD6.i/s062905.s.b/s6f2904.d
Lab Smp Id: UBN050610-02 Client Smp ID: BNAICAL010
Inj Date : 29-JUN-2005 11:08
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-02|10 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 01-Jul-2005 11:27 hnm Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.964	3.964	(1.000)	186766	40.0000	
*	29 Naphthalene-d8	136	4.833	4.833	(1.000)	720662	40.0000	
*	46 Acenaphthene-d10	164	6.085	6.085	(1.000)	409279	40.0000	
*	67 Phenanthrene-d10	188	7.066	7.066	(1.000)	651772	40.0000	
*	91 Chrysene-d12	240	8.752	8.752	(1.000)	599034	40.0000	
*	98 Perylene-d12	264	10.315	10.315	(1.000)	475745	40.0000	
$	3 2-Fluorophenol	112	3.135	3.135	(0.791)	50826	10.0000	9.9
$	5 Phenol-d5	99	3.664	3.664	(0.924)	58313	10.0000	10.1
$	20 Nitrobenzene-d5	82	4.322	4.322	(0.894)	46884	10.0000	9.9
$	39 2-Fluorobiphenyl	172	5.573	5.573	(0.916)	110523	10.0000	10.7
$	60 2,4,6-Tribromophenol	329	6.613	6.613	(1.087)	13544	10.0000	7.8
$	81 p-Terphenyl-d14	244	7.976	7.976	(0.911)	112215	10.0000	9.9
	1 N-Methyl-N-nitrosomethylamine	74	2.418	2.418	(0.610)	24147	10.0000	8.8

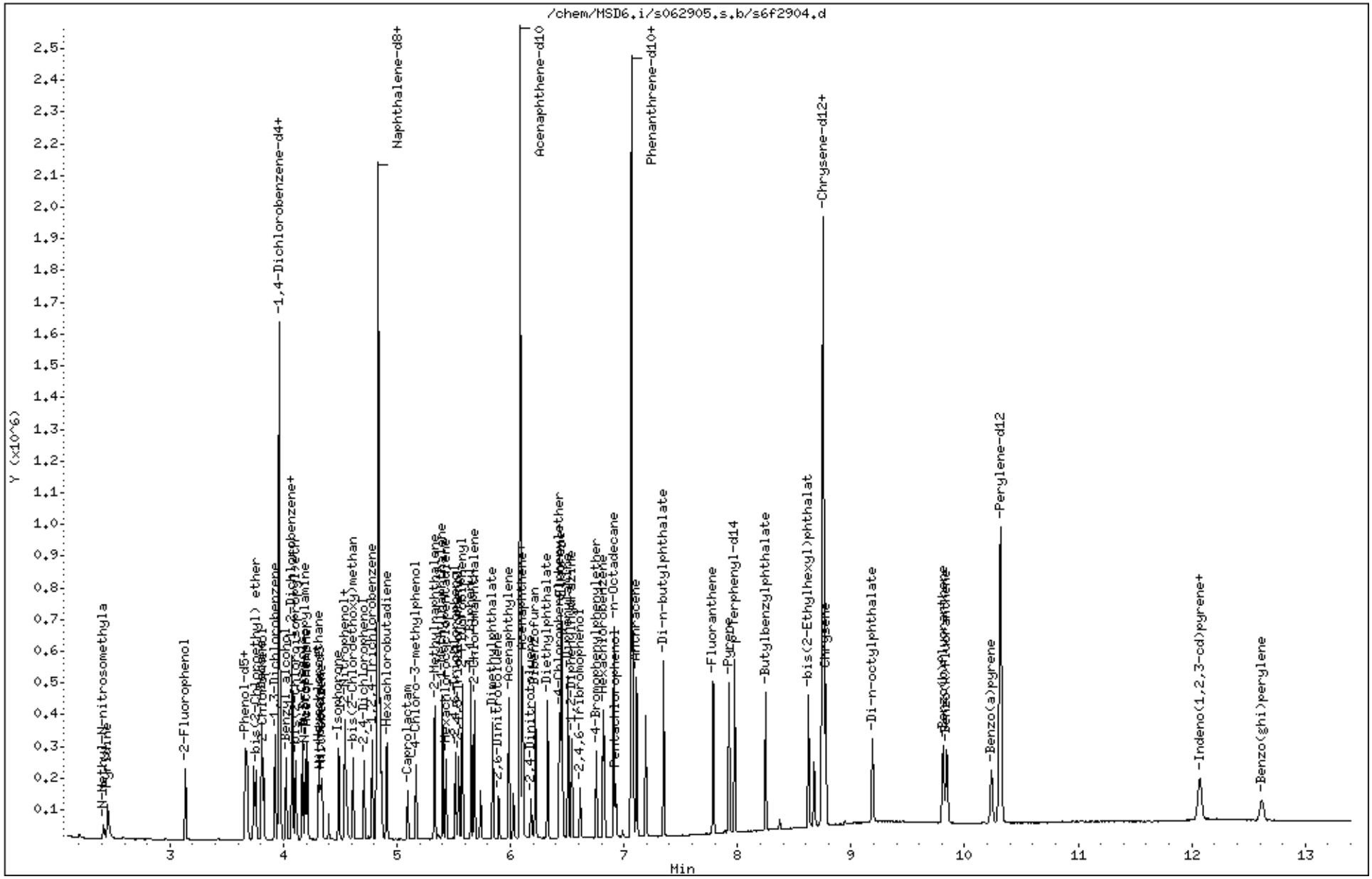
		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
2	Pyridine	79	2.454	2.454	(0.619)	47423	10.0000	9.0
6	Phenol	94	3.676	3.676	(0.927)	59841	10.0000	10.3
7	bis(2-Chloroethyl) ether	93	3.758	3.758	(0.948)	50981	10.0000	9.1
8	2-Chlorophenol	128	3.822	3.822	(0.964)	48637	10.0000	9.9
203	n-Decane	43	3.805	3.805	(0.960)	63600	10.0000	11.2
9	1,3-Dichlorobenzene	146	3.928	3.928	(0.991)	58141	10.0000	10.3
11	1,4-Dichlorobenzene	146	3.975	3.975	(1.003)	57990	10.0000	10.4
12	Benzyl alcohol	108	4.022	4.022	(1.015)	30394	10.0000	9.6
13	1,2-Dichlorobenzene	146	4.081	4.081	(1.030)	56781	10.0000	10.8
14	bis(2-Chloroisopropyl)ether	45	4.105	4.105	(1.036)	83335	10.0000	10.8
15	o-Cresol	107	4.075	4.075	(1.028)	40028	10.0000	10.4
16	Acetophenone	105	4.210	4.210	(1.062)	63711	10.0000	10.1
17	N-Nitrosodipropylamine	70	4.193	4.193	(1.058)	35613	10.0000	9.8
18	m,p-Cresols	107	4.169	4.169	(1.052)	55305	10.0000	10.0
19	Hexachloroethane	117	4.310	4.310	(1.087)	20731	10.0000	9.8
21	Nitrobenzene	77	4.340	4.340	(0.898)	42236	10.0000	9.9
22	Isophorone	82	4.486	4.486	(0.928)	96307	10.0000	10.9
23	2-Nitrophenol	139	4.557	4.557	(0.943)	19828	10.0000	9.1
24	2,4-Dimethylphenol	122	4.539	4.539	(0.939)	59282	10.0000	12.4
25	bis(2-Chloroethoxy)methane	93	4.610	4.610	(0.954)	59911	10.0000	11.1
26	2,4-Dichlorophenol	162	4.710	4.710	(0.974)	38179	10.0000	10.3
27	Benzoic acid	105	4.557	4.557	(0.943)	17011	10.0000	6.3(Q)
28	1,2,4-Trichlorobenzene	180	4.780	4.780	(0.989)	45834	10.0000	10.8
30	Naphthalene	128	4.851	4.851	(1.004)	155667	10.0000	11.5(Q)
204	alpha-Terpineol	59	4.821	4.821	(0.998)	44067	10.0000	11.2
189	Caprolactam	113	5.092	5.092	(1.053)	13064	10.0000	9.3
32	Hexachlorobutadiene	225	4.915	4.915	(1.017)	30668	10.0000	10.7
33	4-Chloro-3-methylphenol	107	5.168	5.168	(1.069)	38502	10.0000	10.3
34	2-Methylnaphthalene	142	5.332	5.332	(1.103)	95842	10.0000	11.3
35	1-Methylnaphthalene	142	5.403	5.403	(1.118)	90769	10.0000	11.3
36	Hexachlorocyclopentadiene	237	5.432	5.432	(0.893)	28185	10.0000	8.8
208	1,1'Biphenyl	154	5.656	5.656	(0.930)	120409	10.0000	10.7
37	2,4,6-Trichlorophenol	196	5.515	5.515	(0.906)	27388	10.0000	8.8
38	2,4,5-Trichlorophenol	196	5.544	5.544	(0.911)	27910	10.0000	8.8
40	2-Chloronaphthalene	162	5.685	5.685	(0.934)	91878	10.0000	10.3
43	Dimethylphthalate	163	5.844	5.844	(0.960)	107707	10.0000	10.3
44	2,6-Dinitrotoluene	165	5.902	5.902	(0.970)	14110	10.0000	10.9
45	Acenaphthylene	152	5.985	5.985	(0.984)	148602	10.0000	10.6
47	Acenaphthene	154	6.108	6.108	(1.004)	90869	10.0000	10.5
48	2,4-Dinitrophenol	184	6.096	6.096	(1.002)	2883	10.0000	18.0(Q)
49	Dibenzofuran	168	6.220	6.220	(1.022)	127814	10.0000	10.5
50	2,4-Dinitrotoluene	165	6.184	6.184	(1.016)	14785	10.0000	11.6
51	Diethylphthalate	149	6.325	6.325	(1.040)	104283	10.0000	10.4
52	4-Nitrophenol	139	6.108	6.108	(1.004)	10795	10.0000	11.0
53	Fluorene	166	6.455	6.455	(1.061)	110429	10.0000	11.5
54	4-Chlorophenylphenylether	204	6.431	6.431	(1.057)	51564	10.0000	10
55	2-Methyl-4,6-dinitrophenol	198	6.461	6.461	(0.914)	5571	10.0000	14.1(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.508	6.508	(0.921)	87600	10.0000	10.2
58	1,2-Diphenylhydrazine	77	6.537	6.537	(0.925)	95962	10.0000	10
59	Tributylphosphate	99	6.449	6.449	(1.060)	122042	10.0000	11.1
61	4-Bromophenylphenylether	248	6.760	6.760	(0.957)	26836	10.0000	9.5
63	Hexachlorobenzene	284	6.813	6.813	(0.964)	35583	10.0000	9.9
65	Pentachlorophenol	266	6.931	6.931	(0.981)	14615	10.0000	10.3
206	n-Octadecane	57	6.913	6.913	(0.978)	75047	10.0000	11.3
68	Phenanthrene	178	7.077	7.077	(1.002)	151554	10.0000	10.9
69	Anthracene	178	7.107	7.107	(1.006)	149375	10.0000	10.9
72	Di-n-butylphthalate	149	7.348	7.348	(1.040)	170220	10.0000	11.2
76	Fluoranthene	202	7.788	7.788	(1.102)	159730	10.0000	11.1
79	Pyrene	202	7.929	7.929	(0.906)	165100	10.0000	10.4
85	Butylbenzylphthalate	149	8.247	8.247	(0.942)	68115	10.0000	9.4
89	Benzo(a)anthracene	228	8.746	8.746	(0.999)	138880	10.0000	9.8
92	Chrysene	228	8.776	8.776	(1.003)	135424	10.0000	10.6
93	bis(2-Ethylhexyl)phthalate	149	8.623	8.623	(0.985)	83734	10.0000	9.6
94	Di-n-octylphthalate	149	9.193	9.193	(0.891)	128180	10.0000	9.3
95	Benzo(b)fluoranthene	252	9.810	9.810	(0.951)	119248	10.0000	10
96	Benzo(k)fluoranthene	252	9.839	9.839	(0.954)	113515	10.0000	9.6
97	Benzo(a)pyrene	252	10.239	10.239	(0.993)	89979	10.0000	9.5
99	Indeno(1,2,3-cd)pyrene	276	12.066	12.066	(1.170)	69701	10.0000	8.8
100	Dibenzo(a,h)anthracene	278	12.078	12.078	(1.171)	56057	10.0000	8.5(T)
101	Benzo(ghi)perylene	276	12.618	12.618	(1.223)	57827	10.0000	8.9(T)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s062905.s.b/s6f2904.d
Date : 29-JUN-2005 11:08
Client ID: BNAICAL010
Instrument: MSD6.i
Sample Info: !UBN050610-02!10 PPM!1!SVMF!1!BNA ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2905.d
Lab Smp Id: UBN050610-03 Client Smp ID: BNAICAL020
Inj Date : 29-JUN-2005 11:30
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-03|20 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:00 Cal File: s6f2952.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	214659	40.0000	
* 29 Naphthalene-d8	136	4.837	4.837	(1.000)	824440	40.0000	
* 46 Acenaphthene-d10	164	6.082	6.082	(1.000)	447048	40.0000	
* 67 Phenanthrene-d10	188	7.064	7.064	(1.000)	716612	40.0000	
* 91 Chrysene-d12	240	8.756	8.756	(1.000)	668677	40.0000	
* 98 Perylene-d12	264	10.313	10.313	(1.000)	566823	40.0000	
$ 3 2-Fluorophenol	112	3.133	3.133	(0.791)	112107	20.0000	19.0
$ 5 Phenol-d5	99	3.667	3.667	(0.926)	126084	20.0000	18.9
$ 20 Nitrobenzene-d5	82	4.326	4.326	(0.894)	107841	20.0000	19.9
$ 39 2-Fluorobiphenyl	172	5.577	5.577	(0.917)	235528	20.0000	20.8
$ 60 2,4,6-Tribromophenol	329	6.611	6.611	(1.087)	32832	20.0000	17.4
$ 81 p-Terphenyl-d14	244	7.974	7.974	(0.911)	248430	20.0000	19.6
1 N-Methyl-N-nitrosomethylamine	74	2.416	2.416	(0.610)	57684	20.0000	18.4

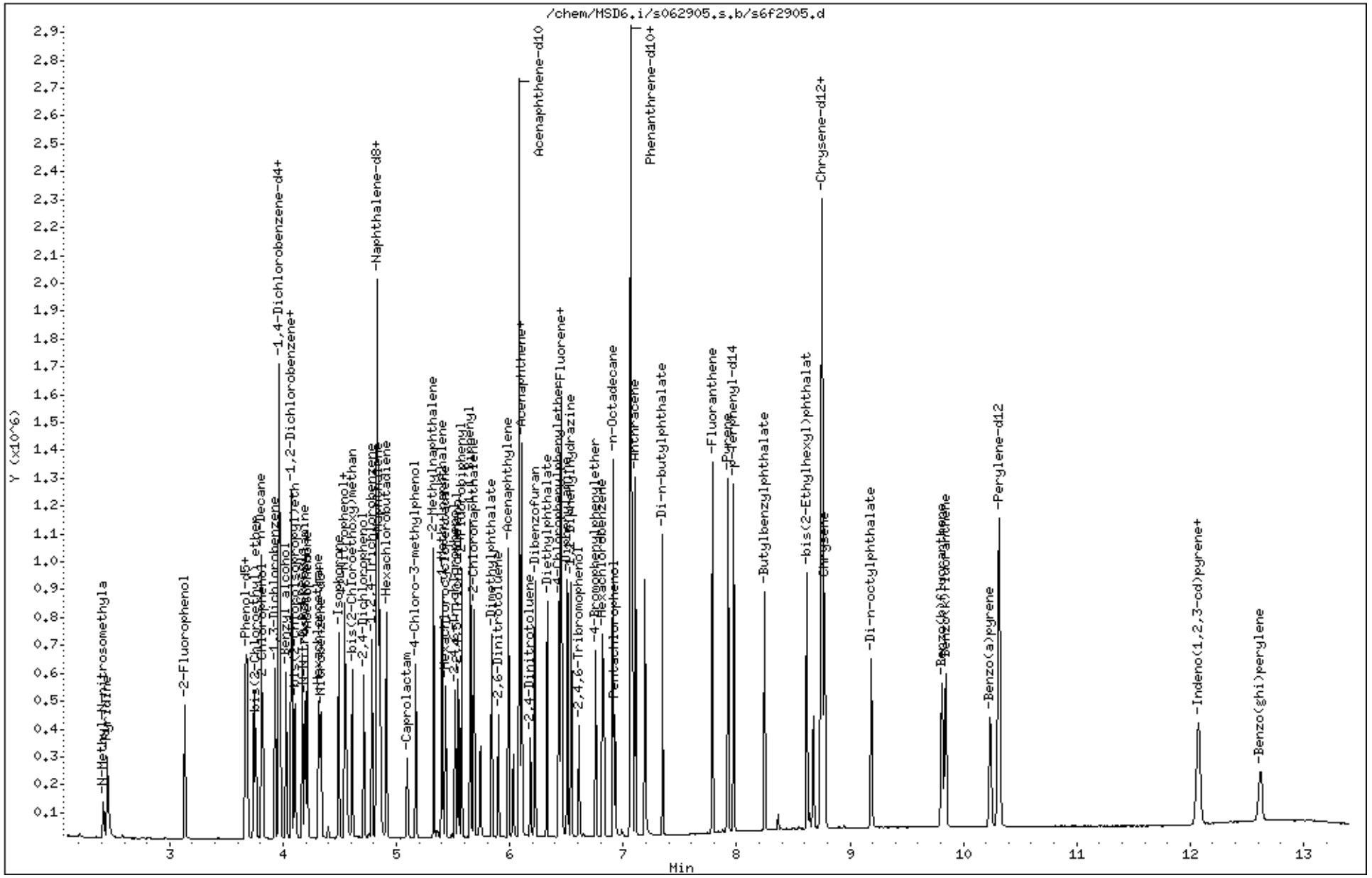
						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
2 Pyridine	79	2.451	2.451	(0.619)	113120	20.0000	18.5
6 Phenol	94	3.673	3.673	(0.927)	132014	20.0000	19.8
7 bis(2-Chloroethyl) ether	93	3.761	3.761	(0.950)	133962	20.0000	20.7
8 2-Chlorophenol	128	3.826	3.826	(0.966)	105410	20.0000	18.6
203 n-Decane	43	3.808	3.808	(0.961)	137264	20.0000	21.1
9 1,3-Dichlorobenzene	146	3.932	3.932	(0.993)	128220	20.0000	19.7
11 1,4-Dichlorobenzene	146	3.973	3.973	(1.003)	127350	20.0000	19.9
12 Benzyl alcohol	108	4.026	4.026	(1.016)	69673	20.0000	19.1
13 1,2-Dichlorobenzene	146	4.079	4.079	(1.030)	122829	20.0000	20.4
14 bis(2-Chloroisopropyl)ether	45	4.108	4.108	(1.037)	176479	20.0000	19.8
15 o-Cresol	107	4.079	4.079	(1.030)	88031	20.0000	20.0
16 Acetophenone	105	4.214	4.214	(1.064)	139780	20.0000	19.2
17 N-Nitrosodipropylamine	70	4.196	4.196	(1.059)	79095	20.0000	19.0
18 m,p-Cresols	107	4.173	4.173	(1.053)	120215	20.0000	19.7(Q)
19 Hexachloroethane	117	4.314	4.314	(1.089)	45628	20.0000	18.8
21 Nitrobenzene	77	4.337	4.337	(0.897)	98567	20.0000	20.2
22 Isophorone	82	4.490	4.490	(0.928)	208977	20.0000	20.7
23 2-Nitrophenol	139	4.555	4.555	(0.942)	50904	20.0000	20.4
24 2,4-Dimethylphenol	122	4.543	4.543	(0.939)	117056	20.0000	21.3
25 bis(2-Chloroethoxy)methane	93	4.613	4.613	(0.954)	130979	20.0000	21.1
26 2,4-Dichlorophenol	162	4.713	4.713	(0.974)	85768	20.0000	20.3
27 Benzoic acid	105	4.566	4.566	(0.944)	45599	20.0000	14.8(Q)
28 1,2,4-Trichlorobenzene	180	4.784	4.784	(0.989)	100988	20.0000	20.9
30 Naphthalene	128	4.848	4.848	(1.002)	334882	20.0000	21.7(Q)
204 alpha-Terpineol	59	4.819	4.819	(0.996)	96507	20.0000	21.4
189 Caprolactam	113	5.101	5.101	(1.055)	31110	20.0000	19.4
32 Hexachlorobutadiene	225	4.913	4.913	(1.016)	68727	20.0000	21.0
33 4-Chloro-3-methylphenol	107	5.172	5.172	(1.069)	86383	20.0000	20.4
34 2-Methylnaphthalene	142	5.330	5.330	(1.102)	205825	20.0000	21.2
35 1-Methylnaphthalene	142	5.407	5.407	(1.118)	194104	20.0000	21.1
36 Hexachlorocyclopentadiene	237	5.436	5.436	(0.894)	66876	20.0000	19.0
208 1,1'Biphenyl	154	5.653	5.653	(0.929)	257385	20.0000	21.0
37 2,4,6-Trichlorophenol	196	5.518	5.518	(0.907)	62492	20.0000	18.4
38 2,4,5-Trichlorophenol	196	5.542	5.542	(0.911)	65479	20.0000	18.8
40 2-Chloronaphthalene	162	5.683	5.683	(0.934)	197957	20.0000	20.3
43 Dimethylphthalate	163	5.841	5.841	(0.960)	230122	20.0000	20.2
44 2,6-Dinitrotoluene	165	5.900	5.900	(0.970)	37157	20.0000	19.0
45 Acenaphthylene	152	5.988	5.988	(0.985)	325001	20.0000	21.3
47 Acenaphthene	154	6.106	6.106	(1.004)	193671	20.0000	20.6
48 2,4-Dinitrophenol	184	6.100	6.100	(1.003)	8730	20.0000	23.0(Q)
49 Dibenzofuran	168	6.223	6.223	(1.023)	276605	20.0000	20.9
50 2,4-Dinitrotoluene	165	6.182	6.182	(1.016)	42603	20.0000	19.3
51 Diethylphthalate	149	6.329	6.329	(1.041)	224029	20.0000	20.4
52 4-Nitrophenol	139	6.106	6.106	(1.004)	30024	20.0000	19.5
53 Fluorene	166	6.458	6.458	(1.062)	234027	20.0000	22.2
54 4-Chlorophenylphenylether	204	6.435	6.435	(1.058)	112797	20.0000	19.9
55 2-Methyl-4,6-dinitrophenol	198	6.464	6.464	(0.915)	17354	20.0000	20.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.511	6.511	(0.922)	197247	20.0000	20.9
58	1,2-Diphenylhydrazine	77	6.541	6.541	(0.926)	220992	20.0000	20.9
59	Tributylphosphate	99	6.447	6.447	(1.060)	269179	20.0000	22.4
61	4-Bromophenylphenylether	248	6.758	6.758	(0.957)	60687	20.0000	19.6
63	Hexachlorobenzene	284	6.817	6.817	(0.965)	77855	20.0000	19.7
65	Pentachlorophenol	266	6.928	6.928	(0.981)	36384	20.0000	18.4
206	n-Octadecane	57	6.911	6.911	(0.978)	158870	20.0000	21.8
68	Phenanthrene	178	7.081	7.081	(1.002)	324025	20.0000	21.2
69	Anthracene	178	7.111	7.111	(1.007)	322427	20.0000	21.5
72	Di-n-butylphthalate	149	7.346	7.346	(1.040)	363788	20.0000	21.8
76	Fluoranthene	202	7.786	7.786	(1.102)	343772	20.0000	21.8
79	Pyrene	202	7.927	7.927	(0.905)	351279	20.0000	19.8
85	Butylbenzylphthalate	149	8.244	8.244	(0.942)	152114	20.0000	18.8
89	Benzo(a)anthracene	228	8.744	8.744	(0.999)	306359	20.0000	19.3
92	Chrysene	228	8.773	8.773	(1.002)	277841	20.0000	19.4
93	bis(2-Ethylhexyl)phthalate	149	8.620	8.620	(0.985)	185930	20.0000	19.1
94	Di-n-octylphthalate	149	9.190	9.190	(0.891)	268986	20.0000	16.4
95	Benzo(b)fluoranthene	252	9.813	9.813	(0.952)	256333	20.0000	18.0
96	Benzo(k)fluoranthene	252	9.843	9.843	(0.954)	268851	20.0000	19.1
97	Benzo(a)pyrene	252	10.236	10.236	(0.993)	211587	20.0000	18.7
99	Indeno(1,2,3-cd)pyrene	276	12.069	12.069	(1.170)	198889	20.0000	21.0
100	Dibenzo(a,h)anthracene	278	12.075	12.075	(1.171)	165386	20.0000	21.0(T)
101	Benzo(ghi)perylene	276	12.622	12.622	(1.224)	166425	20.0000	21.6(T)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s062905.s.b/s6f2905.d
Date : 29-JUN-2005 11:30
Client ID: BNAICAL020
Instrument: MSD6.i
Sample Info: !UBN050610-03!20 PPM!1!SVMF!1!BNA ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2906.d
Lab Smp Id: UBN050610-04 Client Smp ID: BNAICAL040
Inj Date : 29-JUN-2005 11:51
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-04|40 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 01-Jul-2005 10:48 hnm Quant Type: ISTD
Cal Date : 30-JUN-2005 04:21 Cal File: s6f2953.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	208923	40.0000	
* 29 Naphthalene-d8	136	4.837	4.837	(1.000)	855450	40.0000	
* 46 Acenaphthene-d10	164	6.082	6.082	(1.000)	451251	40.0000	
* 67 Phenanthrene-d10	188	7.064	7.064	(1.000)	723823	40.0000	
* 91 Chrysene-d12	240	8.756	8.756	(1.000)	599620	40.0000	
* 98 Perylene-d12	264	10.313	10.313	(1.000)	437180	40.0000	
$ 3 2-Fluorophenol	112	3.133	3.133	(0.791)	226044	40.0000	39.4
$ 5 Phenol-d5	99	3.668	3.668	(0.926)	259382	40.0000	40.0
$ 20 Nitrobenzene-d5	82	4.326	4.326	(0.894)	230339	40.0000	40.9
$ 39 2-Fluorobiphenyl	172	5.577	5.577	(0.917)	469632	40.0000	41.2
$ 60 2,4,6-Tribromophenol	329	6.617	6.617	(1.088)	75258	40.0000	39.5
$ 81 p-Terphenyl-d14	244	7.974	7.974	(0.911)	475728	40.0000	41.9
1 N-Methyl-N-nitrosomethylamine	74	2.416	2.416	(0.610)	118275	40.0000	38.8

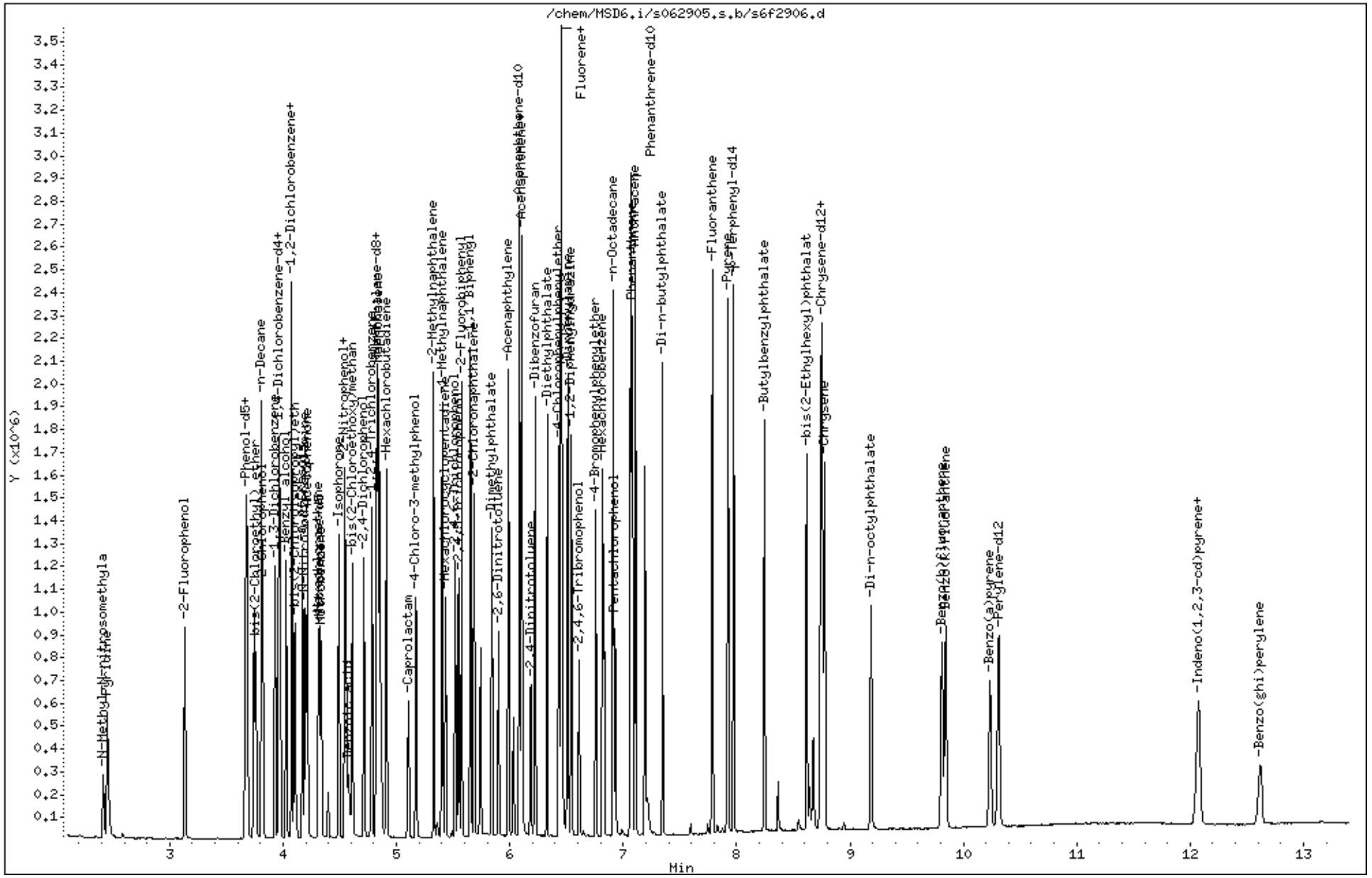
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
2	Pyridine	79	2.451	2.451	(0.619)	230854	40.0000	38.9
6	Phenol	94	3.679	3.679	(0.929)	260617	40.0000	40.1
7	bis(2-Chloroethyl) ether	93	3.762	3.762	(0.950)	288331	40.0000	45.9
8	2-Chlorophenol	128	3.826	3.826	(0.966)	218257	40.0000	39.6
203	n-Decane	43	3.809	3.809	(0.961)	260107	40.0000	41.0
9	1,3-Dichlorobenzene	146	3.932	3.932	(0.993)	256641	40.0000	40.5
11	1,4-Dichlorobenzene	146	3.973	3.973	(1.003)	248547	40.0000	40.0
12	Benzyl alcohol	108	4.026	4.026	(1.016)	140183	40.0000	39.6
13	1,2-Dichlorobenzene	146	4.079	4.079	(1.030)	239664	40.0000	41.0
14	bis(2-Chloroisopropyl)ether	45	4.108	4.108	(1.037)	348148	40.0000	40.2
15	o-Cresol	107	4.079	4.079	(1.030)	172697	40.0000	40.3
16	Acetophenone	105	4.214	4.214	(1.064)	281456	40.0000	39.7
17	N-Nitrosodipropylamine	70	4.196	4.196	(1.059)	158930	40.0000	39.3
18	m,p-Cresols	107	4.173	4.173	(1.053)	246072	40.0000	39.8(H)
19	Hexachloroethane	117	4.308	4.308	(1.087)	93847	40.0000	39.8
21	Nitrobenzene	77	4.337	4.337	(0.897)	207086	40.0000	41.0
22	Isophorone	82	4.490	4.490	(0.928)	428925	40.0000	40.9
23	2-Nitrophenol	139	4.555	4.555	(0.942)	117921	40.0000	45.7
24	2,4-Dimethylphenol	122	4.543	4.543	(0.939)	225174	40.0000	39.5
25	bis(2-Chloroethoxy)methane	93	4.614	4.614	(0.954)	263869	40.0000	41.0
26	2,4-Dichlorophenol	162	4.713	4.713	(0.974)	179098	40.0000	40.8
27	Benzoic acid	105	4.584	4.584	(0.948)	116605	40.0000	36.4
28	1,2,4-Trichlorobenzene	180	4.784	4.784	(0.989)	206262	40.0000	41.1
30	Naphthalene	128	4.849	4.849	(1.002)	653324	40.0000	40.8(Q)
204	alpha-Terpineol	59	4.819	4.819	(0.996)	192376	40.0000	41.1
189	Caprolactam	113	5.107	5.107	(1.056)	66407	40.0000	39.9
32	Hexachlorobutadiene	225	4.913	4.913	(1.016)	139372	40.0000	41.0
33	4-Chloro-3-methylphenol	107	5.172	5.172	(1.069)	178678	40.0000	40.6
34	2-Methylnaphthalene	142	5.330	5.330	(1.102)	415196	40.0000	41.2
35	1-Methylnaphthalene	142	5.407	5.407	(1.118)	392025	40.0000	41.1
36	Hexachlorocyclopentadiene	237	5.436	5.436	(0.894)	142159	40.0000	40.0
208	1,1'Biphenyl	154	5.654	5.654	(0.929)	509791	40.0000	41.2
37	2,4,6-Trichlorophenol	196	5.518	5.518	(0.907)	135533	40.0000	39.7
38	2,4,5-Trichlorophenol	196	5.548	5.548	(0.912)	141622	40.0000	40.3
40	2-Chloronaphthalene	162	5.689	5.689	(0.935)	402287	40.0000	40.9
43	Dimethylphthalate	163	5.847	5.847	(0.961)	471691	40.0000	40.9
44	2,6-Dinitrotoluene	165	5.900	5.900	(0.970)	88751	40.0000	38.0
45	Acenaphthylene	152	5.988	5.988	(0.985)	641198	40.0000	41.6
47	Acenaphthene	154	6.106	6.106	(1.004)	387722	40.0000	40.8
48	2,4-Dinitrophenol	184	6.100	6.100	(1.003)	23958	40.0000	36.5
49	Dibenzofuran	168	6.223	6.223	(1.023)	552798	40.0000	41.3
50	2,4-Dinitrotoluene	165	6.188	6.188	(1.017)	105105	40.0000	37.1
51	Diethylphthalate	149	6.329	6.329	(1.041)	449246	40.0000	40.6
52	4-Nitrophenol	139	6.112	6.112	(1.005)	68738	40.0000	37.2
53	Fluorene	166	6.458	6.458	(1.062)	448554	40.0000	42.2
54	4-Chlorophenylphenylether	204	6.435	6.435	(1.058)	231777	40.0000	40.6
55	2-Methyl-4,6-dinitrophenol	198	6.464	6.464	(0.915)	47733	40.0000	35.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.511	6.511	(0.922)	397248	40.0000	41.7
58	1,2-Diphenylhydrazine	77	6.541	6.541	(0.926)	450571	40.0000	42.2
59	Tributylphosphate	99	6.453	6.453	(1.061)	523504	40.0000	43.2
61	4-Bromophenylphenylether	248	6.758	6.758	(0.957)	125984	40.0000	40.2
63	Hexachlorobenzene	284	6.817	6.817	(0.965)	160798	40.0000	40.4
65	Pentachlorophenol	266	6.934	6.934	(0.982)	86758	40.0000	38.1
206	n-Octadecane	57	6.911	6.911	(0.978)	308831	40.0000	41.9
68	Phenanthrene	178	7.081	7.081	(1.002)	639807	40.0000	41.5
69	Anthracene	178	7.111	7.111	(1.007)	638249	40.0000	42.1
72	Di-n-butylphthalate	149	7.346	7.346	(1.040)	718136	40.0000	42.7
76	Fluoranthene	202	7.786	7.786	(1.102)	665500	40.0000	41.8
79	Pyrene	202	7.927	7.927	(0.905)	679041	40.0000	42.8
85	Butylbenzylphthalate	149	8.245	8.245	(0.942)	294111	40.0000	40.5
89	Benzo(a)anthracene	228	8.744	8.744	(0.999)	561325	40.0000	39.5
92	Chrysene	228	8.773	8.773	(1.002)	508716	40.0000	39.7
93	bis(2-Ethylhexyl)phthalate	149	8.621	8.621	(0.985)	349692	40.0000	40.1
94	Di-n-octylphthalate	149	9.191	9.191	(0.891)	491851	40.0000	38.9
95	Benzo(b)fluoranthene	252	9.807	9.807	(0.951)	425708	40.0000	38.8
96	Benzo(k)fluoranthene	252	9.843	9.843	(0.954)	440322	40.0000	40.5
97	Benzo(a)pyrene	252	10.236	10.236	(0.993)	343580	40.0000	39.3
99	Indeno(1,2,3-cd)pyrene	276	12.070	12.070	(1.170)	293585	40.0000	40.2
100	Dibenzo(a,h)anthracene	278	12.075	12.075	(1.171)	243128	40.0000	40.0(T)
101	Benzo(ghi)perylene	276	12.622	12.622	(1.224)	237495	40.0000	40.0(T)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s062905.s.b/s6f2906.d
Date : 29-JUN-2005 11:51
Client ID: BNAICAL040
Instrument: MSD6.i
Sample Info: !UBN050610-04!40 PPM!1!SVMF!1!BNA ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2907.d
Lab Smp Id: UBN050610-05 Client Smp ID: BNAICAL050
Inj Date : 29-JUN-2005 12:13
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-05|50 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:42 Cal File: s6f2954.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	210823	40.0000	
* 29 Naphthalene-d8	136	4.836	4.836	(1.000)	883280	40.0000	
* 46 Acenaphthene-d10	164	6.082	6.082	(1.000)	459175	40.0000	
* 67 Phenanthrene-d10	188	7.063	7.063	(1.000)	762496	40.0000	
* 91 Chrysene-d12	240	8.755	8.755	(1.000)	670090	40.0000	
* 98 Perylene-d12	264	10.307	10.307	(1.000)	481002	40.0000	
$ 3 2-Fluorophenol	112	3.138	3.138	(0.792)	306147	50.0000	52.9
$ 5 Phenol-d5	99	3.673	3.673	(0.927)	342356	50.0000	52.4
$ 20 Nitrobenzene-d5	82	4.325	4.325	(0.894)	317219	50.0000	54.6
$ 39 2-Fluorobiphenyl	172	5.577	5.577	(0.917)	620544	50.0000	53.4
$ 60 2,4,6-Tribromophenol	329	6.617	6.617	(1.088)	107560	50.0000	55.5
$ 81 p-Terphenyl-d14	244	7.974	7.974	(0.911)	684198	50.0000	54.0
1 N-Methyl-N-nitrosomethylamine	74	2.416	2.416	(0.610)	163885	50.0000	53.2

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
2	Pyridine	79	2.451	2.451	(0.619)	317453	50.0000	53.0
6	Phenol	94	3.679	3.679	(0.929)	348308	50.0000	53.1
7	bis(2-Chloroethyl) ether	93	3.761	3.761	(0.950)	307974	50.0000	48.5
8	2-Chlorophenol	128	3.826	3.826	(0.966)	296452	50.0000	53.3
203	n-Decane	43	3.808	3.808	(0.961)	335335	50.0000	52.4
9	1,3-Dichlorobenzene	146	3.932	3.932	(0.993)	335920	50.0000	52.5
11	1,4-Dichlorobenzene	146	3.973	3.973	(1.003)	332777	50.0000	53.0
12	Benzyl alcohol	108	4.026	4.026	(1.016)	192910	50.0000	54.0
13	1,2-Dichlorobenzene	146	4.079	4.079	(1.030)	313389	50.0000	53.1
14	bis(2-Chloroisopropyl)ether	45	4.108	4.108	(1.037)	458175	50.0000	52.4
15	o-Cresol	107	4.079	4.079	(1.030)	229149	50.0000	53.0
16	Acetophenone	105	4.214	4.214	(1.064)	377724	50.0000	52.9
17	N-Nitrosodipropylamine	70	4.202	4.202	(1.061)	213311	50.0000	52.2
18	m,p-Cresols	107	4.178	4.178	(1.055)	326119	50.0000	54.5(Q)
19	Hexachloroethane	117	4.314	4.314	(1.089)	126136	50.0000	53.0
21	Nitrobenzene	77	4.343	4.343	(0.898)	283697	50.0000	54.3
22	Isophorone	82	4.496	4.496	(0.930)	569204	50.0000	52.6
23	2-Nitrophenol	139	4.554	4.554	(0.942)	145130	50.0000	54.4
24	2,4-Dimethylphenol	122	4.543	4.543	(0.939)	306236	50.0000	52.1
25	bis(2-Chloroethoxy)methane	93	4.613	4.613	(0.954)	349926	50.0000	52.7
26	2,4-Dichlorophenol	162	4.713	4.713	(0.974)	246285	50.0000	54.3
27	Benzoic acid	105	4.590	4.590	(0.949)	176565	50.0000	53.4(Q)
28	1,2,4-Trichlorobenzene	180	4.784	4.784	(0.989)	274887	50.0000	53.1
30	Naphthalene	128	4.848	4.848	(1.002)	861446	50.0000	52.1(Q)
204	alpha-Terpineol	59	4.825	4.825	(0.998)	257964	50.0000	53.4
189	Caprolactam	113	5.119	5.119	(1.058)	94339	50.0000	54.9
32	Hexachlorobutadiene	225	4.913	4.913	(1.016)	187020	50.0000	53.4
33	4-Chloro-3-methylphenol	107	5.177	5.177	(1.070)	243339	50.0000	53.6
34	2-Methylnaphthalene	142	5.330	5.330	(1.102)	552876	50.0000	53.1
35	1-Methylnaphthalene	142	5.406	5.406	(1.118)	519547	50.0000	52.7
36	Hexachlorocyclopentadiene	237	5.436	5.436	(0.894)	194197	50.0000	53.7
208	1,1'Biphenyl	154	5.659	5.659	(0.930)	678211	50.0000	53.9
37	2,4,6-Trichlorophenol	196	5.518	5.518	(0.907)	189675	50.0000	54.5
38	2,4,5-Trichlorophenol	196	5.547	5.547	(0.912)	195063	50.0000	54.6
40	2-Chloronaphthalene	162	5.688	5.688	(0.935)	533204	50.0000	53.2
43	Dimethylphthalate	163	5.847	5.847	(0.961)	631516	50.0000	53.8
44	2,6-Dinitrotoluene	165	5.906	5.906	(0.971)	127204	50.0000	51.5
45	Acenaphthylene	152	5.988	5.988	(0.985)	863078	50.0000	55.1
47	Acenaphthene	154	6.106	6.106	(1.004)	520585	50.0000	53.9
48	2,4-Dinitrophenol	184	6.100	6.100	(1.003)	40469	50.0000	50.5(Q)
49	Dibenzofuran	168	6.223	6.223	(1.023)	738540	50.0000	54.3
50	2,4-Dinitrotoluene	165	6.188	6.188	(1.017)	157918	50.0000	51.5
51	Diethylphthalate	149	6.329	6.329	(1.041)	613631	50.0000	54.5
52	4-Nitrophenol	139	6.111	6.111	(1.005)	105177	50.0000	53.2
53	Fluorene	166	6.458	6.458	(1.062)	575122	50.0000	53.2
54	4-Chlorophenylphenylether	204	6.435	6.435	(1.058)	311955	50.0000	53.7
55	2-Methyl-4,6-dinitrophenol	198	6.470	6.470	(0.916)	77947	50.0000	49.6

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
133	Diphenylamine	169	6.511	6.511 (0.922)	534994	50.0000	53.3
58	1,2-Diphenylhydrazine	77	6.540	6.540 (0.926)	601458	50.0000	53.4
59	Tributylphosphate	99	6.452	6.452 (1.061)	692330	50.0000	56.1
61	4-Bromophenylphenylether	248	6.758	6.758 (0.957)	175869	50.0000	53.3
63	Hexachlorobenzene	284	6.816	6.816 (0.965)	224633	50.0000	53.5
65	Pentachlorophenol	266	6.934	6.934 (0.982)	129686	50.0000	52.4
206	n-Octadecane	57	6.911	6.911 (0.978)	417463	50.0000	53.8
68	Phenanthrene	178	7.081	7.081 (1.002)	854166	50.0000	52.6
69	Anthracene	178	7.110	7.110 (1.007)	876308	50.0000	54.8
72	Di-n-butylphthalate	149	7.351	7.351 (1.041)	973906	50.0000	54.9
76	Fluoranthene	202	7.786	7.786 (1.102)	915012	50.0000	54.5
79	Pyrene	202	7.927	7.927 (0.905)	945645	50.0000	53.3
85	Butylbenzylphthalate	149	8.244	8.244 (0.942)	437958	50.0000	54.0
89	Benzo(a)anthracene	228	8.744	8.744 (0.999)	840018	50.0000	52.8
92	Chrysene	228	8.779	8.779 (1.003)	768340	50.0000	53.6
93	bis(2-Ethylhexyl)phthalate	149	8.620	8.620 (0.985)	556531	50.0000	57.1
94	Di-n-octylphthalate	149	9.184	9.184 (0.891)	820657	50.0000	59.0
95	Benzo(b)fluoranthene	252	9.813	9.813 (0.952)	641672	50.0000	53.1
96	Benzo(k)fluoranthene	252	9.842	9.842 (0.955)	700228	50.0000	58.5
97	Benzo(a)pyrene	252	10.236	10.236 (0.993)	531082	50.0000	55.3
99	Indeno(1,2,3-cd)pyrene	276	12.069	12.069 (1.171)	402918	50.0000	50.1
100	Dibenzo(a,h)anthracene	278	12.081	12.081 (1.172)	341577	50.0000	51.1(T)
101	Benzo(ghi)perylene	276	12.621	12.621 (1.225)	320858	50.0000	49.1(T)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s062905.s.b/s6f2907.d

Date : 29-JUN-2005 12:13

Client ID: BNAICAL050

Instrument: MSD6.i

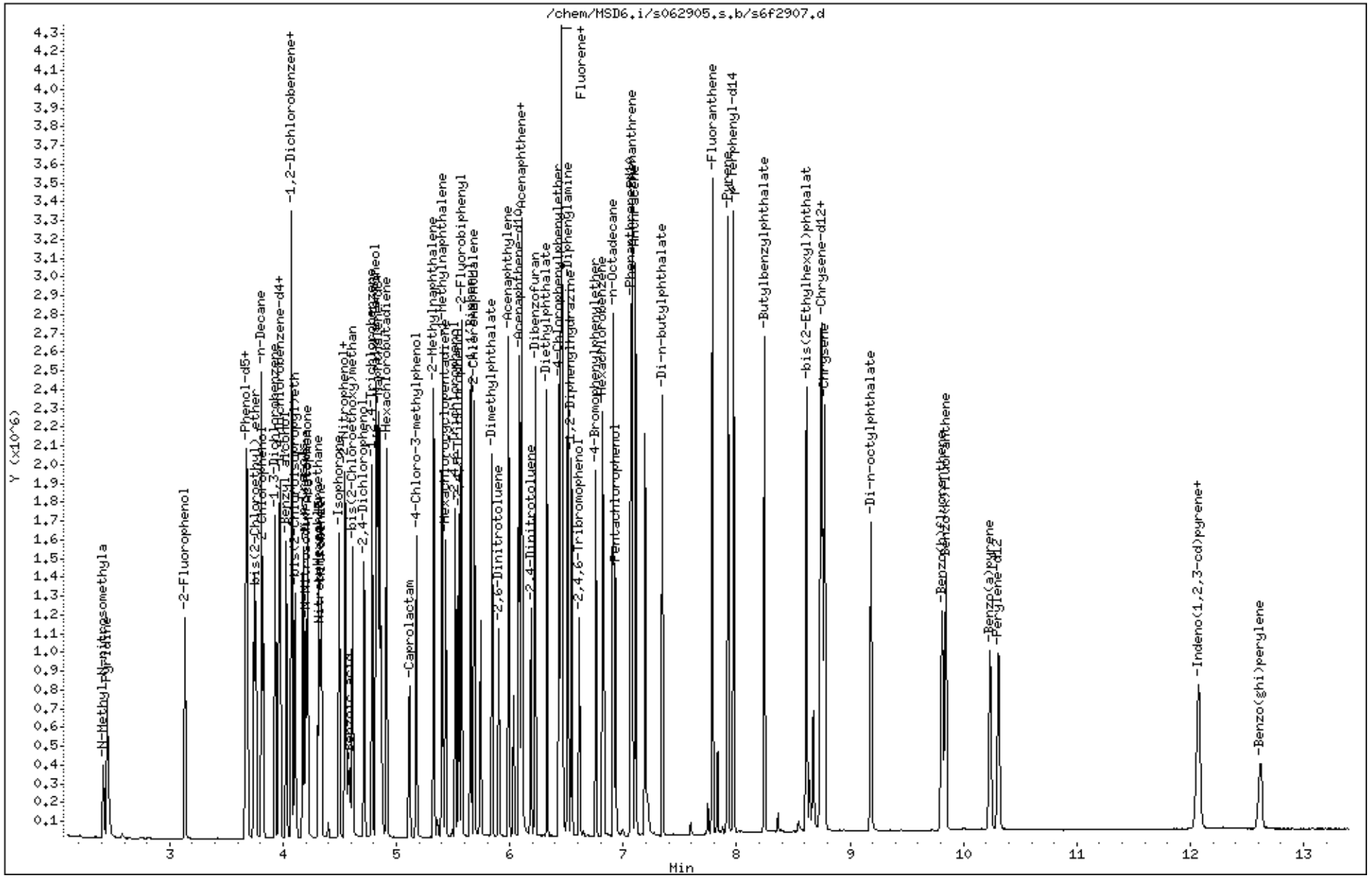
Sample Info: !UBN050610-05!50 PPM!1!SVMF!1!BNA ICAL

Volume Injected (uL): 0.5

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2908.d
Lab Smp Id: UBN050610-06 Client Smp ID: BNAICAL080
Inj Date : 29-JUN-2005 12:34
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-06|80 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 05:04 Cal File: s6f2955.d
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	206989	40.0000	
*	29 Naphthalene-d8	136	4.837	4.837	(1.000)	920290	40.0000	
*	46 Acenaphthene-d10	164	6.082	6.082	(1.000)	456613	40.0000	
*	67 Phenanthrene-d10	188	7.064	7.064	(1.000)	745337	40.0000	
*	91 Chrysene-d12	240	8.756	8.756	(1.000)	604876	40.0000	
*	98 Perylene-d12	264	10.313	10.313	(1.000)	439552	40.0000	
$	3 2-Fluorophenol	112	3.139	3.139	(0.792)	474287	80.0000	83.5
$	5 Phenol-d5	99	3.673	3.673	(0.927)	527916	80.0000	82.3
$	20 Nitrobenzene-d5	82	4.331	4.331	(0.896)	497320	80.0000	82.2
$	39 2-Fluorobiphenyl	172	5.577	5.577	(0.917)	918104	80.0000	79.5
$	60 2,4,6-Tribromophenol	329	6.617	6.617	(1.088)	166069	80.0000	86.2
$	81 p-Terphenyl-d14	244	7.974	7.974	(0.911)	945252	80.0000	82.6
	1 N-Methyl-N-nitrosomethylamine	74	2.416	2.416	(0.610)	260706	80.0000	86.2

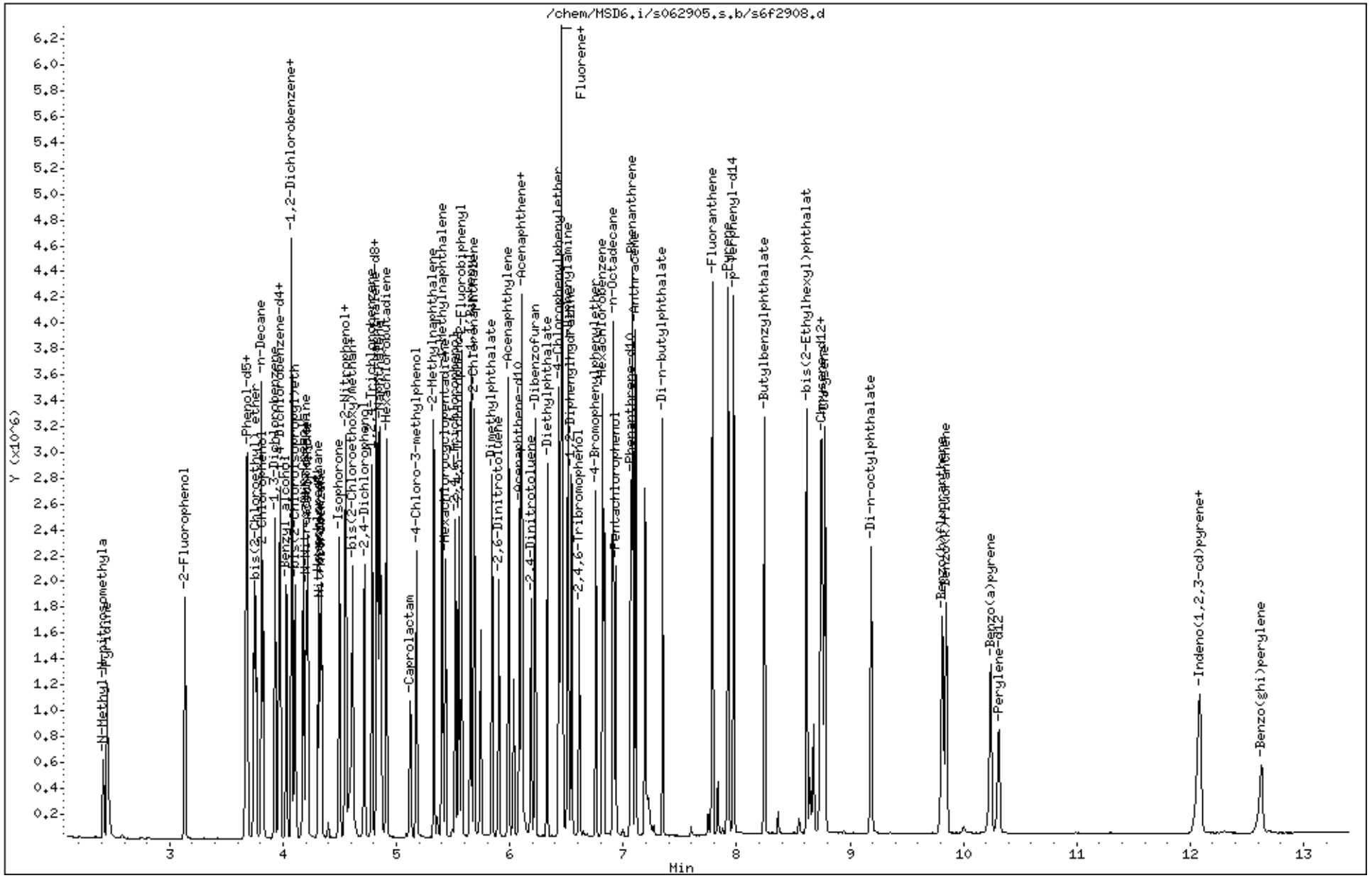
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
2	Pyridine	79	2.445	2.445	(0.617)	501094	80.0000	85.2
6	Phenol	94	3.679	3.679	(0.929)	524649	80.0000	81.5
7	bis(2-Chloroethyl) ether	93	3.762	3.762	(0.950)	470026	80.0000	75.5
8	2-Chlorophenol	128	3.826	3.826	(0.966)	456373	80.0000	83.5
203	n-Decane	43	3.809	3.809	(0.961)	484652	80.0000	77.2
9	1,3-Dichlorobenzene	146	3.932	3.932	(0.993)	509532	80.0000	81.2
11	1,4-Dichlorobenzene	146	3.973	3.973	(1.003)	496430	80.0000	80.6
12	Benzyl alcohol	108	4.026	4.026	(1.016)	290368	80.0000	82.8
13	1,2-Dichlorobenzene	146	4.079	4.079	(1.030)	458430	80.0000	79.1
14	bis(2-Chloroisopropyl)ether	45	4.108	4.108	(1.037)	682324	80.0000	79.6
15	o-Cresol	107	4.079	4.079	(1.030)	341549	80.0000	80.4
16	Acetophenone	105	4.220	4.220	(1.065)	577558	80.0000	82.3
17	N-Nitrosodipropylamine	70	4.202	4.202	(1.061)	330785	80.0000	82.5
18	m,p-Cresols	107	4.179	4.179	(1.055)	498389	80.0000	84.9
19	Hexachloroethane	117	4.314	4.314	(1.089)	192976	80.0000	82.6
21	Nitrobenzene	77	4.343	4.343	(0.898)	432021	80.0000	79.4
22	Isophorone	82	4.496	4.496	(0.930)	870507	80.0000	77.2
23	2-Nitrophenol	139	4.555	4.555	(0.942)	215319	80.0000	77.5
24	2,4-Dimethylphenol	122	4.549	4.549	(0.940)	459396	80.0000	75.0
25	bis(2-Chloroethoxy)methane	93	4.613	4.613	(0.954)	534148	80.0000	77.2
26	2,4-Dichlorophenol	162	4.719	4.719	(0.976)	374881	80.0000	79.3
27	Benzoic acid	105	4.602	4.602	(0.951)	295261	80.0000	85.7
28	1,2,4-Trichlorobenzene	180	4.784	4.784	(0.989)	418465	80.0000	77.6
30	Naphthalene	128	4.854	4.854	(1.004)	1263866	80.0000	73.4
204	alpha-Terpineol	59	4.825	4.825	(0.998)	382930	80.0000	76.1
189	Caprolactam	113	5.125	5.125	(1.060)	142438	80.0000	79.5
32	Hexachlorobutadiene	225	4.913	4.913	(1.016)	285455	80.0000	78.2
33	4-Chloro-3-methylphenol	107	5.178	5.178	(1.070)	377926	80.0000	79.9
34	2-Methylnaphthalene	142	5.330	5.330	(1.102)	806426	80.0000	74.3
35	1-Methylnaphthalene	142	5.407	5.407	(1.118)	757124	80.0000	73.7
36	Hexachlorocyclopentadiene	237	5.436	5.436	(0.894)	302938	80.0000	84.3
208	1,1'Biphenyl	154	5.659	5.659	(0.930)	997310	80.0000	79.7
37	2,4,6-Trichlorophenol	196	5.518	5.518	(0.907)	301553	80.0000	87.2
38	2,4,5-Trichlorophenol	196	5.548	5.548	(0.912)	297229	80.0000	83.6
40	2-Chloronaphthalene	162	5.689	5.689	(0.935)	800665	80.0000	80.4
43	Dimethylphthalate	163	5.847	5.847	(0.961)	942739	80.0000	80.8
44	2,6-Dinitrotoluene	165	5.906	5.906	(0.971)	206487	80.0000	80.8
45	Acenaphthylene	152	5.988	5.988	(0.985)	1233067	80.0000	79.1
47	Acenaphthene	154	6.106	6.106	(1.004)	761711	80.0000	79.2
48	2,4-Dinitrophenol	184	6.100	6.100	(1.003)	72578	80.0000	79.0
49	Dibenzofuran	168	6.223	6.223	(1.023)	1069900	80.0000	79.0
50	2,4-Dinitrotoluene	165	6.188	6.188	(1.017)	260276	80.0000	80.8
51	Diethylphthalate	149	6.329	6.329	(1.041)	904556	80.0000	80.8
52	4-Nitrophenol	139	6.112	6.112	(1.005)	160855	80.0000	78.8
53	Fluorene	166	6.458	6.458	(1.062)	805230	80.0000	75.0
54	4-Chlorophenylphenylether	204	6.435	6.435	(1.058)	465604	80.0000	80.5
55	2-Methyl-4,6-dinitrophenol	198	6.470	6.470	(0.916)	131353	80.0000	77.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.511	6.511	(0.922)	778636	80.0000	79.3
58	1,2-Diphenylhydrazine	77	6.541	6.541	(0.926)	885684	80.0000	80.5
59	Tributylphosphate	99	6.452	6.452	(1.061)	946766	80.0000	77.2
61	4-Bromophenylphenylether	248	6.758	6.758	(0.957)	267766	80.0000	83.0
63	Hexachlorobenzene	284	6.817	6.817	(0.965)	336576	80.0000	82.1
65	Pentachlorophenol	266	6.934	6.934	(0.982)	205431	80.0000	82.6
206	n-Octadecane	57	6.911	6.911	(0.978)	590760	80.0000	77.8
68	Phenanthrene	178	7.081	7.081	(1.002)	1208154	80.0000	76.2
69	Anthracene	178	7.111	7.111	(1.007)	1250650	80.0000	80.1
72	Di-n-butylphthalate	149	7.346	7.346	(1.040)	1345183	80.0000	77.6
76	Fluoranthene	202	7.786	7.786	(1.102)	1282819	80.0000	78.2
79	Pyrene	202	7.927	7.927	(0.905)	1320429	80.0000	82.5
85	Butylbenzylphthalate	149	8.245	8.245	(0.942)	621937	80.0000	84.9
89	Benzo(a)anthracene	228	8.744	8.744	(0.999)	1182307	80.0000	82.4
92	Chrysene	228	8.779	8.779	(1.003)	1038804	80.0000	80.3
93	bis(2-Ethylhexyl)phthalate	149	8.621	8.621	(0.985)	761972	80.0000	86.6
94	Di-n-octylphthalate	149	9.190	9.190	(0.891)	1113727	80.0000	87.6
95	Benzo(b)fluoranthene	252	9.813	9.813	(0.952)	983311	80.0000	89.1
96	Benzo(k)fluoranthene	252	9.848	9.848	(0.955)	885050	80.0000	80.9
97	Benzo(a)pyrene	252	10.242	10.242	(0.993)	754073	80.0000	85.9
99	Indeno(1,2,3-cd)pyrene	276	12.075	12.075	(1.171)	645849	80.0000	87.9
100	Dibenzo(a,h)anthracene	278	12.087	12.087	(1.172)	548101	80.0000	89.7(T)
101	Benzo(ghi)perylene	276	12.628	12.628	(1.224)	517520	80.0000	86.6(T)

QC Flag Legend

T - Target compound detected outside RT window.

Data File: /chem/MSD6.i/s062905.s.b/s6f2908.d
Date : 29-JUN-2005 12:34
Client ID: BNAICAL080
Instrument: MSD6.i
Sample Info: !UBN050610-06!80 PPM!1!SVMF!1!BNA ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2909.d
Lab Smp Id: UBN050610-07 Client Smp ID: BNAICAL100
Inj Date : 29-JUN-2005 12:55
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-07|100 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 02:34 Cal File: s6f2948.d
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	214976	40.0000	
* 29 Naphthalene-d8	136	4.837	4.837	(1.000)	966378	40.0000	
* 46 Acenaphthene-d10	164	6.082	6.082	(1.000)	479516	40.0000	
* 67 Phenanthrene-d10	188	7.064	7.064	(1.000)	791107	40.0000	
* 91 Chrysene-d12	240	8.762	8.762	(1.000)	654949	40.0000	
* 98 Perylene-d12	264	10.313	10.313	(1.000)	493155	40.0000	
$ 3 2-Fluorophenol	112	3.139	3.139	(0.792)	589834	100.000	100
$ 5 Phenol-d5	99	3.673	3.673	(0.927)	667002	100.000	100
$ 20 Nitrobenzene-d5	82	4.331	4.331	(0.896)	607078	100.000	95.5
$ 39 2-Fluorobiphenyl	172	5.577	5.577	(0.917)	1117711	100.000	92.2
$ 60 2,4,6-Tribromophenol	329	6.617	6.617	(1.088)	221992	100.000	110
$ 81 p-Terphenyl-d14	244	7.980	7.980	(0.911)	1172014	100.000	94.6
1 N-Methyl-N-nitrosomethylamine	74	2.416	2.416	(0.610)	328811	100.000	105

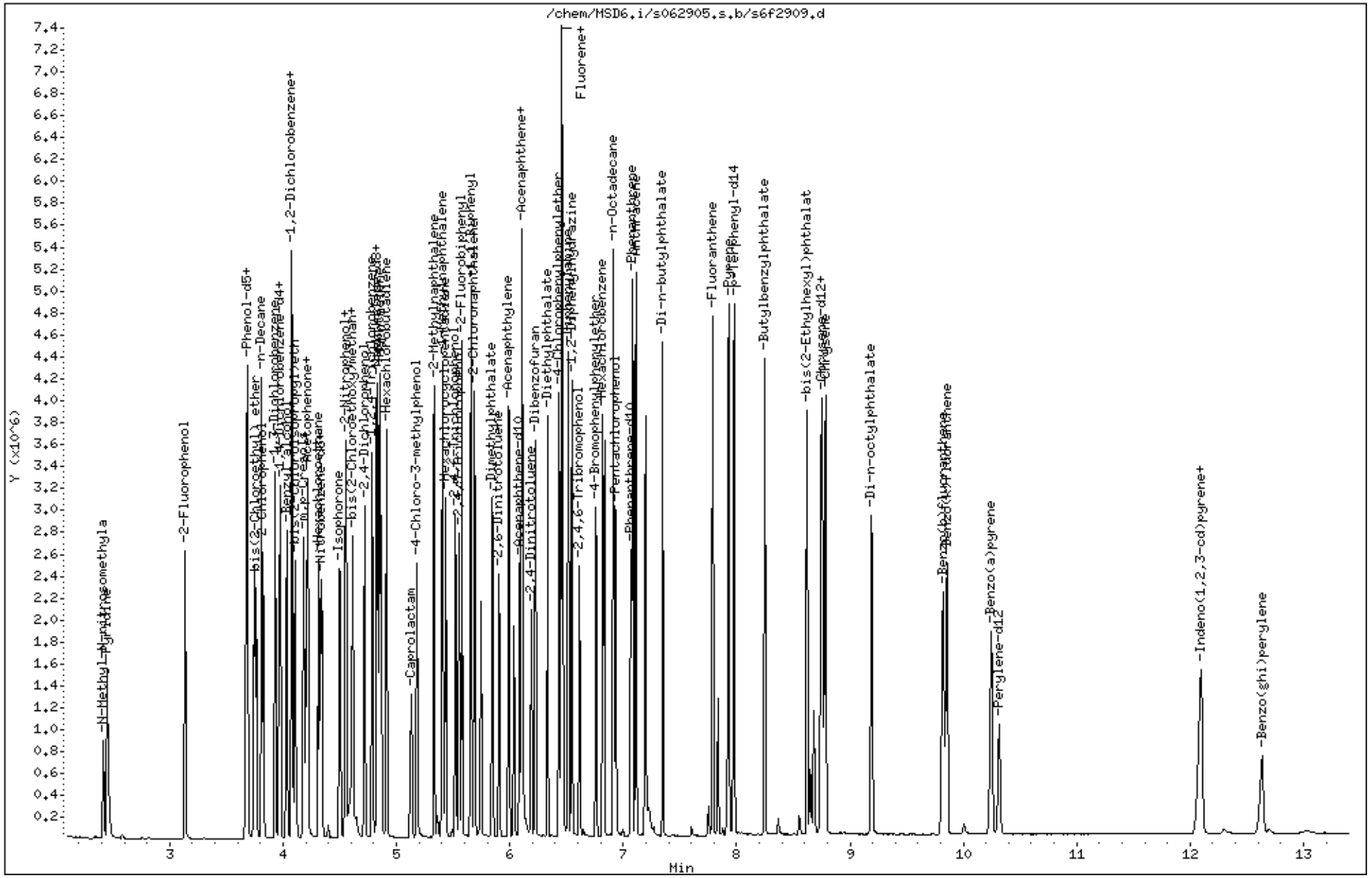
		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
2	Pyridine	79	2.445	2.445	(0.617)	637778	100.000	104
6	Phenol	94	3.685	3.685	(0.930)	643373	100.000	96.2
7	bis(2-Chloroethyl) ether	93	3.762	3.762	(0.950)	642668	100.000	99.4
8	2-Chlorophenol	128	3.826	3.826	(0.966)	574856	100.000	101
203	n-Decane	43	3.809	3.809	(0.961)	596850	100.000	91.5
9	1,3-Dichlorobenzene	146	3.932	3.932	(0.993)	635608	100.000	97.5
11	1,4-Dichlorobenzene	146	3.973	3.973	(1.003)	618774	100.000	96.7
12	Benzyl alcohol	108	4.032	4.032	(1.018)	367378	100.000	101
13	1,2-Dichlorobenzene	146	4.079	4.079	(1.030)	560395	100.000	93.1
14	bis(2-Chloroisopropyl)ether	45	4.108	4.108	(1.037)	856374	100.000	96.1
15	o-Cresol	107	4.079	4.079	(1.030)	423012	100.000	95.9
16	Acetophenone	105	4.220	4.220	(1.065)	722030	100.000	99.1
17	N-Nitrosodipropylamine	70	4.208	4.208	(1.062)	424045	100.000	102
18	m,p-Cresols	107	4.185	4.185	(1.056)	643969	100.000	106(Q)
19	Hexachloroethane	117	4.314	4.314	(1.089)	245906	100.000	101
21	Nitrobenzene	77	4.343	4.343	(0.898)	551386	100.000	96.5
22	Isophorone	82	4.496	4.496	(0.930)	1113322	100.000	94.0
23	2-Nitrophenol	139	4.561	4.561	(0.943)	280269	100.000	96.1
24	2,4-Dimethylphenol	122	4.549	4.549	(0.940)	572898	100.000	89.0
25	bis(2-Chloroethoxy)methane	93	4.619	4.619	(0.955)	672765	100.000	92.6
26	2,4-Dichlorophenol	162	4.719	4.719	(0.976)	472018	100.000	95.1
27	Benzoic acid	105	4.608	4.608	(0.953)	404300	100.000	112(Q)
28	1,2,4-Trichlorobenzene	180	4.784	4.784	(0.989)	531542	100.000	93.8
30	Naphthalene	128	4.854	4.854	(1.004)	1516178	100.000	83.8
204	alpha-Terpineol	59	4.825	4.825	(0.998)	483303	100.000	91.4
189	Caprolactam	113	5.136	5.136	(1.062)	192396	100.000	102
32	Hexachlorobutadiene	225	4.913	4.913	(1.016)	357624	100.000	93.2(A)
33	4-Chloro-3-methylphenol	107	5.183	5.183	(1.072)	481282	100.000	96.9
34	2-Methylnaphthalene	142	5.336	5.336	(1.103)	997659	100.000	87.6
35	1-Methylnaphthalene	142	5.407	5.407	(1.118)	928680	100.000	86.1
36	Hexachlorocyclopentadiene	237	5.436	5.436	(0.894)	390635	100.000	104
208	1,1'Biphenyl	154	5.659	5.659	(0.930)	1195705	100.000	91.0
37	2,4,6-Trichlorophenol	196	5.518	5.518	(0.907)	373290	100.000	103
38	2,4,5-Trichlorophenol	196	5.554	5.554	(0.913)	385373	100.000	103
40	2-Chloronaphthalene	162	5.689	5.689	(0.935)	988452	100.000	94.5
43	Dimethylphthalate	163	5.847	5.847	(0.961)	1167083	100.000	95.3
44	2,6-Dinitrotoluene	165	5.906	5.906	(0.971)	276018	100.000	102
45	Acenaphthylene	152	5.994	5.994	(0.986)	1505088	100.000	92.0
47	Acenaphthene	154	6.112	6.112	(1.005)	919552	100.000	91.1
48	2,4-Dinitrophenol	184	6.106	6.106	(1.004)	101823	100.000	100(AQ)
49	Dibenzofuran	168	6.229	6.229	(1.024)	1306986	100.000	92.0
50	2,4-Dinitrotoluene	165	6.194	6.194	(1.018)	347073	100.000	101
51	Diethylphthalate	149	6.335	6.335	(1.042)	1105585	100.000	94.0
52	4-Nitrophenol	139	6.118	6.118	(1.006)	218517	100.000	100
53	Fluorene	166	6.458	6.458	(1.062)	961507	100.000	85.2
54	4-Chlorophenylphenylether	204	6.435	6.435	(1.058)	595269	100.000	98.0
55	2-Methyl-4,6-dinitrophenol	198	6.476	6.476	(0.917)	190318	100.000	102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.517	6.517	(0.923)	988704	100.000	94.9
58	1,2-Diphenylhydrazine	77	6.547	6.547	(0.927)	1099368	100.000	94.2
59	Tributylphosphate	99	6.458	6.458	(1.062)	1078629	100.000	83.7
61	4-Bromophenylphenylether	248	6.764	6.764	(0.958)	339712	100.000	99.2
63	Hexachlorobenzene	284	6.817	6.817	(0.965)	428690	100.000	98.5
65	Pentachlorophenol	266	6.934	6.934	(0.982)	272202	100.000	102
206	n-Octadecane	57	6.917	6.917	(0.979)	704070	100.000	87.4
68	Phenanthrene	178	7.081	7.081	(1.002)	1470408	100.000	87.4
69	Anthracene	178	7.116	7.116	(1.007)	1439338	100.000	86.8
72	Di-n-butylphthalate	149	7.351	7.351	(1.041)	1578983	100.000	85.8
76	Fluoranthene	202	7.792	7.792	(1.103)	1545511	100.000	88.7
79	Pyrene	202	7.933	7.933	(0.905)	1582026	100.000	91.3
85	Butylbenzylphthalate	149	8.250	8.250	(0.942)	796945	100.000	100
89	Benzo(a)anthracene	228	8.750	8.750	(0.999)	1506049	100.000	97.0
92	Chrysene	228	8.785	8.785	(1.003)	1333331	100.000	95.2
93	bis(2-Ethylhexyl)phthalate	149	8.626	8.626	(0.985)	998387	100.000	105(A)
94	Di-n-octylphthalate	149	9.191	9.191	(0.891)	1484812	100.000	104
95	Benzo(b)fluoranthene	252	9.819	9.819	(0.952)	1310933	100.000	106
96	Benzo(k)fluoranthene	252	9.854	9.854	(0.956)	1235088	100.000	101
97	Benzo(a)pyrene	252	10.248	10.248	(0.994)	1049311	100.000	106
99	Indeno(1,2,3-cd)pyrene	276	12.093	12.093	(1.173)	839461	100.000	102(A)
100	Dibenzo(a,h)anthracene	278	12.099	12.099	(1.173)	714615	100.000	104(TA)
101	Benzo(ghi)perylene	276	12.634	12.634	(1.225)	652656	100.000	97.4(T)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s062905.s.b/s6f2909.d
Date : 29-JUN-2005 12:55
Client ID: BNAICAL100
Instrument: MSD6.i
Sample Info: IUBN050610-07I100 PPMI1ISVMFI1IBNA ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2910.d
Lab Smp Id: UBN050610-08 Client Smp ID: BNAICAL120
Inj Date : 29-JUN-2005 13:17
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050610-08|120 PPM|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 02:56 Cal File: s6f2949.d
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	204777	40.0000	
* 29 Naphthalene-d8	136	4.836	4.836	(1.000)	943912	40.0000	
* 46 Acenaphthene-d10	164	6.088	6.088	(1.000)	458111	40.0000	
* 67 Phenanthrene-d10	188	7.069	7.069	(1.000)	761156	40.0000	
* 91 Chrysene-d12	240	8.767	8.767	(1.000)	609375	40.0000	
* 98 Perylene-d12	264	10.324	10.324	(1.000)	487668	40.0000	
$ 3 2-Fluorophenol	112	3.138	3.138	(0.792)	653547	120.000	116
$ 5 Phenol-d5	99	3.673	3.673	(0.927)	736564	120.000	116
$ 20 Nitrobenzene-d5	82	4.331	4.331	(0.896)	684227	120.000	110
$ 39 2-Fluorobiphenyl	172	5.577	5.577	(0.916)	1219727	120.000	105
$ 60 2,4,6-Tribromophenol	329	6.617	6.617	(1.087)	248469	120.000	128(A)
$ 81 p-Terphenyl-d14	244	7.980	7.980	(0.910)	1275302	120.000	111
1 N-Methyl-N-nitrosomethylamine	74	2.416	2.416	(0.610)	371994	120.000	124(A)

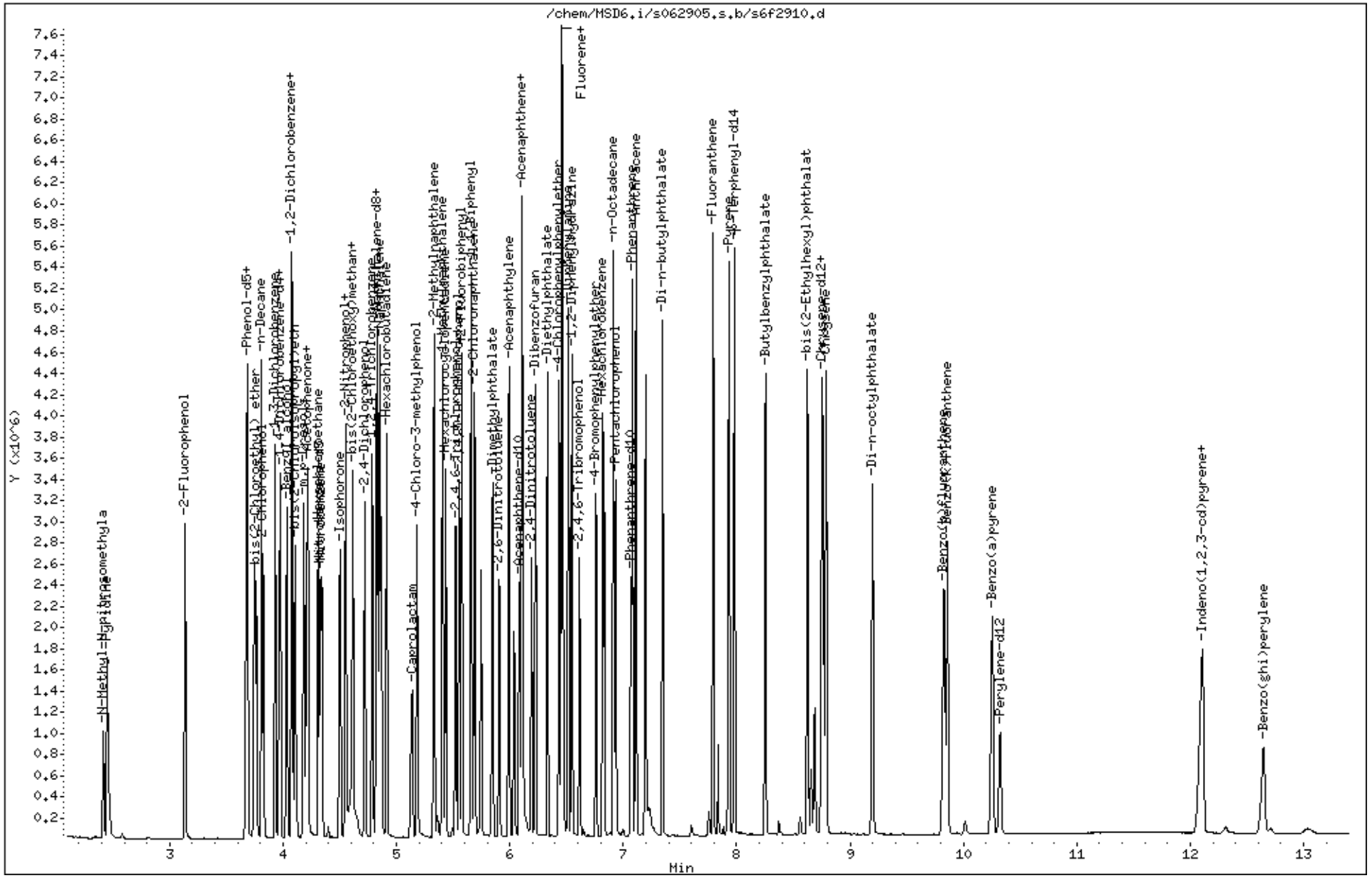
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
2	Pyridine	79	2.445	2.445	(0.617)	716147	120.000	123(A)
6	Phenol	94	3.685	3.685	(0.930)	714752	120.000	112
7	bis(2-Chloroethyl) ether	93	3.761	3.761	(0.950)	740334	120.000	120(A)
8	2-Chlorophenol	128	3.826	3.826	(0.966)	629160	120.000	116
203	n-Decane	43	3.808	3.808	(0.961)	648275	120.000	104
9	1,3-Dichlorobenzene	146	3.932	3.932	(0.993)	698465	120.000	112
11	1,4-Dichlorobenzene	146	3.979	3.979	(1.004)	676786	120.000	111
12	Benzyl alcohol	108	4.032	4.032	(1.018)	404403	120.000	116
13	1,2-Dichlorobenzene	146	4.079	4.079	(1.030)	610368	120.000	106
14	bis(2-Chloroisopropyl)ether	45	4.108	4.108	(1.037)	937521	120.000	110
15	o-Cresol	107	4.084	4.084	(1.031)	465805	120.000	111
16	Acetophenone	105	4.220	4.220	(1.065)	801290	120.000	115
17	N-Nitrosodipropylamine	70	4.208	4.208	(1.062)	470189	120.000	118
18	m,p-Cresols	107	4.184	4.184	(1.056)	711995	120.000	122(AQ)
19	Hexachloroethane	117	4.314	4.314	(1.089)	271255	120.000	117
21	Nitrobenzene	77	4.349	4.349	(0.899)	620968	120.000	111
22	Isophorone	82	4.502	4.502	(0.931)	1238499	120.000	107
23	2-Nitrophenol	139	4.560	4.560	(0.943)	309708	120.000	109
24	2,4-Dimethylphenol	122	4.549	4.549	(0.940)	634797	120.000	101(A)
25	bis(2-Chloroethoxy)methane	93	4.619	4.619	(0.955)	735242	120.000	104
26	2,4-Dichlorophenol	162	4.719	4.719	(0.976)	527312	120.000	109
27	Benzoic acid	105	4.613	4.613	(0.954)	464536	120.000	131(A)
28	1,2,4-Trichlorobenzene	180	4.784	4.784	(0.989)	578653	120.000	104(A)
30	Naphthalene	128	4.854	4.854	(1.004)	1639730	120.000	92.8
204	alpha-Terpineol	59	4.831	4.831	(0.999)	527054	120.000	102
189	Caprolactam	113	5.142	5.142	(1.063)	217358	120.000	118
32	Hexachlorobutadiene	225	4.913	4.913	(1.016)	393240	120.000	105(A)
33	4-Chloro-3-methylphenol	107	5.183	5.183	(1.072)	536840	120.000	111
34	2-Methylnaphthalene	142	5.336	5.336	(1.103)	1087412	120.000	97.7
35	1-Methylnaphthalene	142	5.406	5.406	(1.118)	1030321	120.000	97.8
36	Hexachlorocyclopentadiene	237	5.436	5.436	(0.893)	436880	120.000	121(A)
208	1,1'Biphenyl	154	5.659	5.659	(0.930)	1299648	120.000	104
37	2,4,6-Trichlorophenol	196	5.524	5.524	(0.907)	413263	120.000	119
38	2,4,5-Trichlorophenol	196	5.553	5.553	(0.912)	430781	120.000	121(A)
40	2-Chloronaphthalene	162	5.688	5.688	(0.934)	1082525	120.000	108
43	Dimethylphthalate	163	5.853	5.853	(0.961)	1259799	120.000	108
44	2,6-Dinitrotoluene	165	5.912	5.912	(0.971)	309113	120.000	118
45	Acenaphthylene	152	5.994	5.994	(0.985)	1623418	120.000	104
47	Acenaphthene	154	6.111	6.111	(1.004)	997133	120.000	103
48	2,4-Dinitrophenol	184	6.106	6.106	(1.003)	120140	120.000	120(AQ)
49	Dibenzofuran	168	6.229	6.229	(1.023)	1427112	120.000	105
50	2,4-Dinitrotoluene	165	6.194	6.194	(1.017)	396875	120.000	119
51	Diethylphthalate	149	6.335	6.335	(1.041)	1194339	120.000	106
52	4-Nitrophenol	139	6.117	6.117	(1.005)	251558	120.000	120
53	Fluorene	166	6.458	6.458	(1.061)	1025511	120.000	95.2
54	4-Chlorophenylphenylether	204	6.435	6.435	(1.057)	649549	120.000	112
55	2-Methyl-4,6-dinitrophenol	198	6.476	6.476	(0.916)	219912	120.000	120(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.517	6.517	(0.922)	1067652	120.000	106
58	1,2-Diphenylhydrazine	77	6.546	6.546	(0.926)	1195190	120.000	106
59	Tributylphosphate	99	6.458	6.458	(1.061)	1128716	120.000	91.7
61	4-Bromophenylphenylether	248	6.764	6.764	(0.957)	384184	120.000	116
63	Hexachlorobenzene	284	6.816	6.816	(0.964)	466947	120.000	112
65	Pentachlorophenol	266	6.934	6.934	(0.981)	299063	120.000	116
206	n-Octadecane	57	6.916	6.916	(0.978)	752319	120.000	97.1
68	Phenanthrene	178	7.081	7.081	(1.002)	1583380	120.000	97.8
69	Anthracene	178	7.116	7.116	(1.007)	1601012	120.000	100
72	Di-n-butylphthalate	149	7.351	7.351	(1.040)	1680677	120.000	95.0
76	Fluoranthene	202	7.792	7.792	(1.102)	1675566	120.000	100
79	Pyrene	202	7.933	7.933	(0.905)	1723476	120.000	107
85	Butylbenzylphthalate	149	8.256	8.256	(0.942)	854315	120.000	116
89	Benzo(a)anthracene	228	8.755	8.755	(0.999)	1624964	120.000	112
92	Chrysene	228	8.791	8.791	(1.003)	1451053	120.000	111
93	bis(2-Ethylhexyl)phthalate	149	8.626	8.626	(0.984)	1065511	120.000	120(A)
94	Di-n-octylphthalate	149	9.202	9.202	(0.891)	1616646	120.000	115
95	Benzo(b)fluoranthene	252	9.831	9.831	(0.952)	1435023	120.000	117
96	Benzo(k)fluoranthene	252	9.860	9.860	(0.955)	1452705	120.000	120
97	Benzo(a)pyrene	252	10.260	10.260	(0.994)	1208707	120.000	124(A)
99	Indeno(1,2,3-cd)pyrene	276	12.099	12.099	(1.172)	1003840	120.000	123(A)
100	Dibenzo(a,h)anthracene	278	12.110	12.110	(1.173)	869932	120.000	128(TA)
101	Benzo(ghi)perylene	276	12.651	12.651	(1.225)	772422	120.000	116(TA)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s062905.s.b/s6f2910.d
Date : 29-JUN-2005 13:17
Client ID: BNAICAL120
Instrument: MSD6.i
Sample Info: !UBN050610-08!120 PPM!1!SVMF!1!BNA ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2914.d
Lab Smp Id: UBN050607-01 Client Smp ID: ANBZICAL001
Inj Date : 29-JUN-2005 14:43
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-01|1 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 01-Jul-2005 10:58 hnm Quant Type: ISTD
Cal Date : 29-JUN-2005 14:43 Cal File: s6f2914.d
Als bottle: 12 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

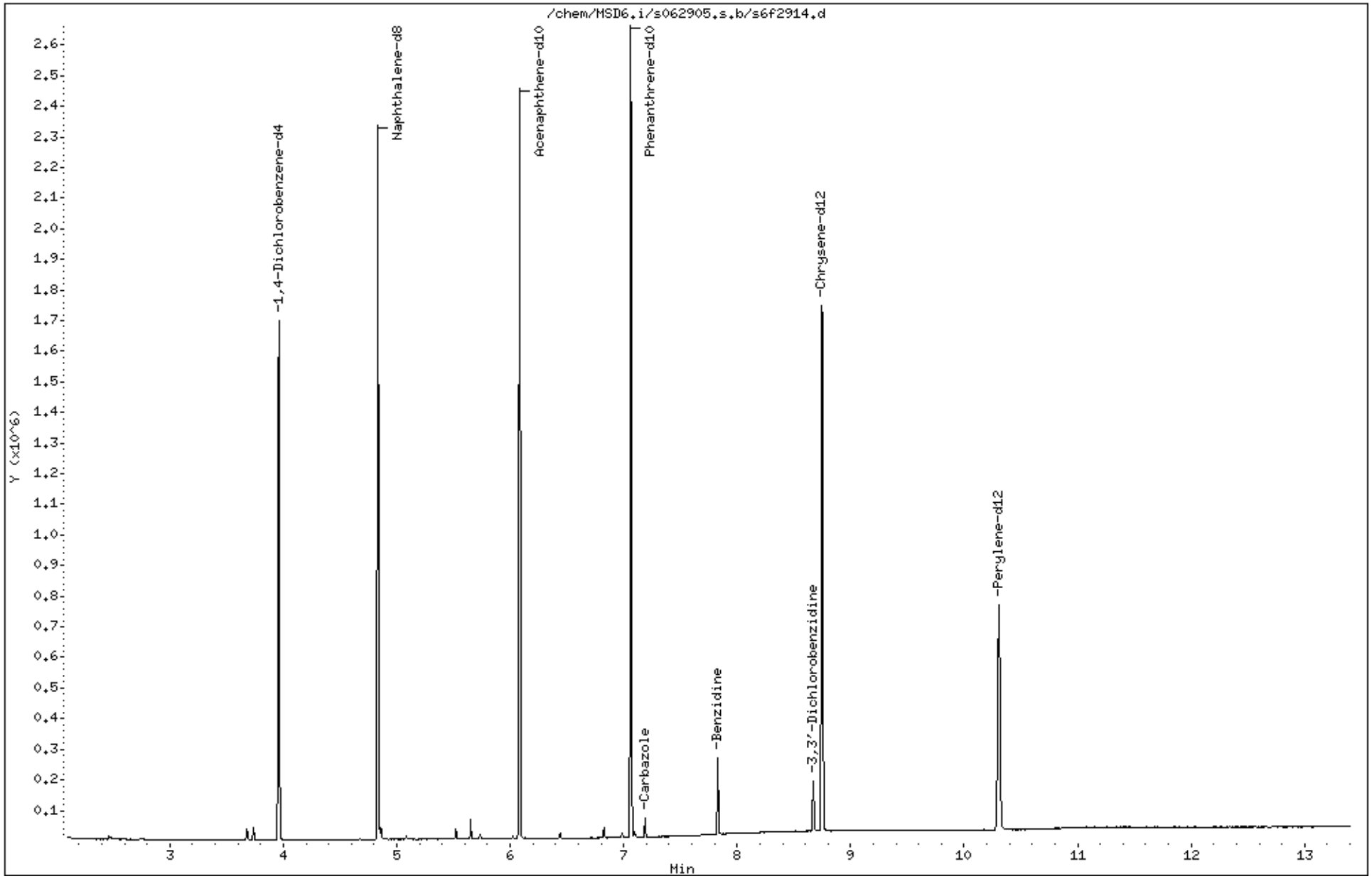
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.964	3.965	(1.000)	221524	40.0000	
* 29 Naphthalene-d8	136	4.833	4.835	(1.000)	804738	40.0000	
* 46 Acenaphthene-d10	164	6.079	6.086	(1.000)	462016	40.0000	
* 67 Phenanthrene-d10	188	7.060	7.061	(1.000)	726406	40.0000	
* 91 Chrysene-d12	240	8.752	8.759	(1.000)	576459	40.0000	
* 98 Perylene-d12	264	10.304	10.316	(1.000)	380426	40.0000	
77 Benzidine	184	7.830	7.828	(0.895)	66946	10.0000	8.7
90 3,3'-Dichlorobenzidine	252	8.676	8.680	(0.991)	34579	10.0000	8.2
173 Carbazole	167	7.190	7.193	(1.018)	16312	1.00000	1.0

Data File: /chem/MSD6.i/s062905.s.b/s6f2914.d
Date : 29-JUN-2005 14:43
Client ID: ANBZICAL001
Sample Info: !UBN050607-01!1 PPM!1!SVMF!1!ANBZ ICAL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2915.d
Lab Smp Id: UBN050607-02 Client Smp ID: ANBZICAL010
Inj Date : 29-JUN-2005 15:05
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-02|10 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:59 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 13 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

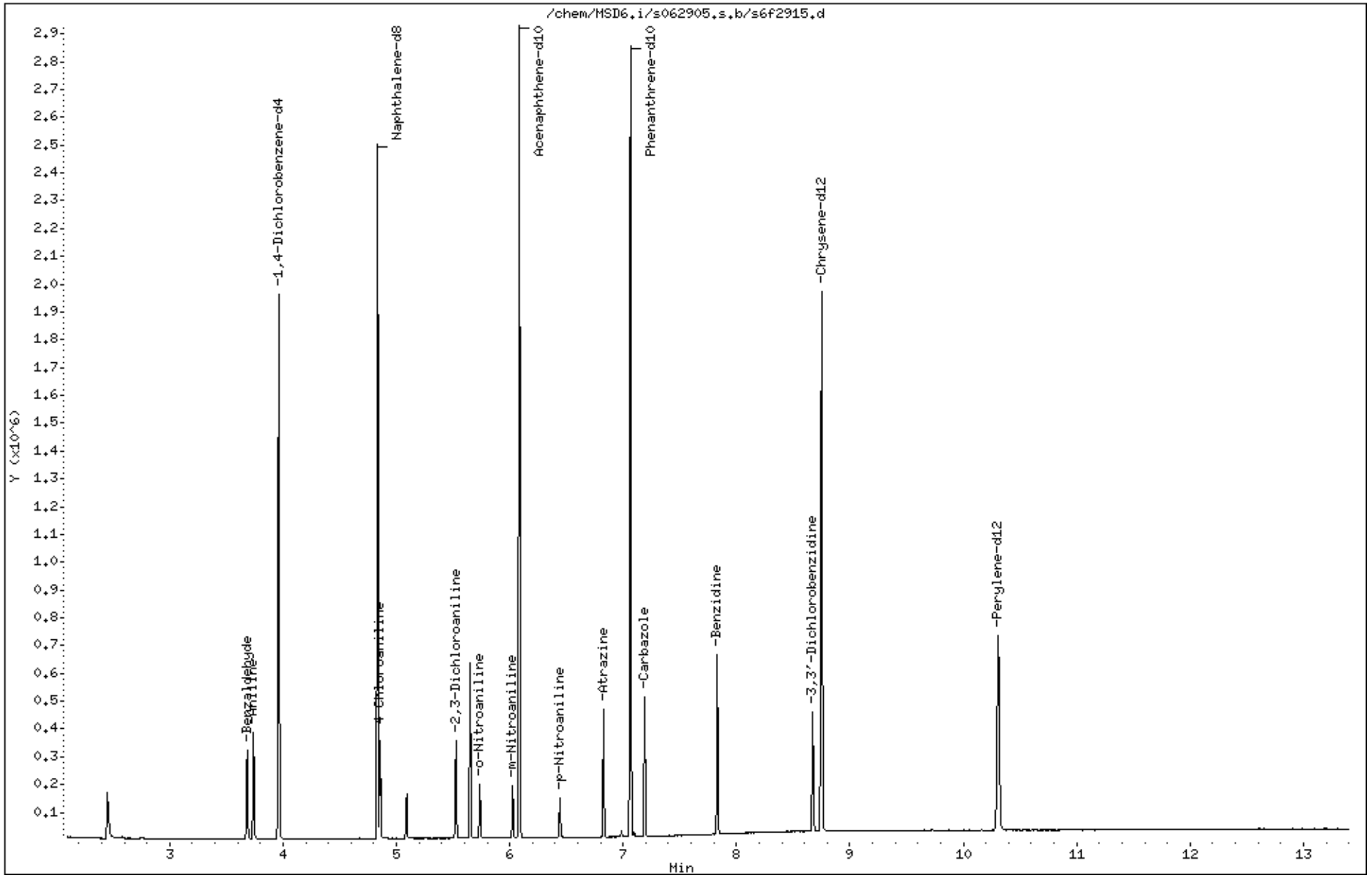
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.962	3.962	(1.000)	226079	40.0000	
* 29 Naphthalene-d8	136	4.832	4.832	(1.000)	832970	40.0000	
* 46 Acenaphthene-d10	164	6.083	6.083	(1.000)	475438	40.0000	
* 67 Phenanthrene-d10	188	7.064	7.064	(1.000)	754506	40.0000	
* 91 Chrysene-d12	240	8.751	8.751	(1.000)	576277	40.0000	
* 98 Perylene-d12	264	10.308	10.308	(1.000)	348941	40.0000	
4 Aniline	93	3.739	3.739	(0.944)	99987	10.0000	10.0
209 Benzaldehyde	77	3.686	3.686	(0.930)	51621	10.0000	9.7
31 4-Chloroaniline	127	4.861	4.861	(1.006)	75849	10.0000	9.6
205 2,3-Dichloroaniline	161	5.525	5.525	(0.908)	59600	10.0000	10
42 o-Nitroaniline	65	5.737	5.737	(0.943)	21612	10.0000	7.5
41 m-Nitroaniline	138	6.024	6.024	(0.990)	19621	10.0000	7.3
56 p-Nitroaniline	138	6.442	6.442	(1.059)	15575	10.0000	13.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
207 Atrazine	173	6.823	6.823	(0.966)	9093	10.0000	8.9
77 Benzidine	184	7.828	7.828	(0.895)	155715	20.0000	20.2
90 3,3'-Dichlorobenzidine	252	8.674	8.674	(0.991)	76974	20.0000	18.2
173 Carbazole	167	7.194	7.194	(1.018)	168971	10.0000	10.4

Data File: /chem/MSD6.i/s062905.s.b/s6f2915.d
Date : 29-JUN-2005 15:05
Client ID: ANBZICAL010
Instrument: MSD6.i
Sample Info: IUBN050607-02I10 PPMI1ISVMFI1IANBZ ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2916.d
Lab Smp Id: UBN050607-03 Client Smp ID: ANBZICAL020
Inj Date : 29-JUN-2005 15:26
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-03|20 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:59 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:00 Cal File: s6f2952.d
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

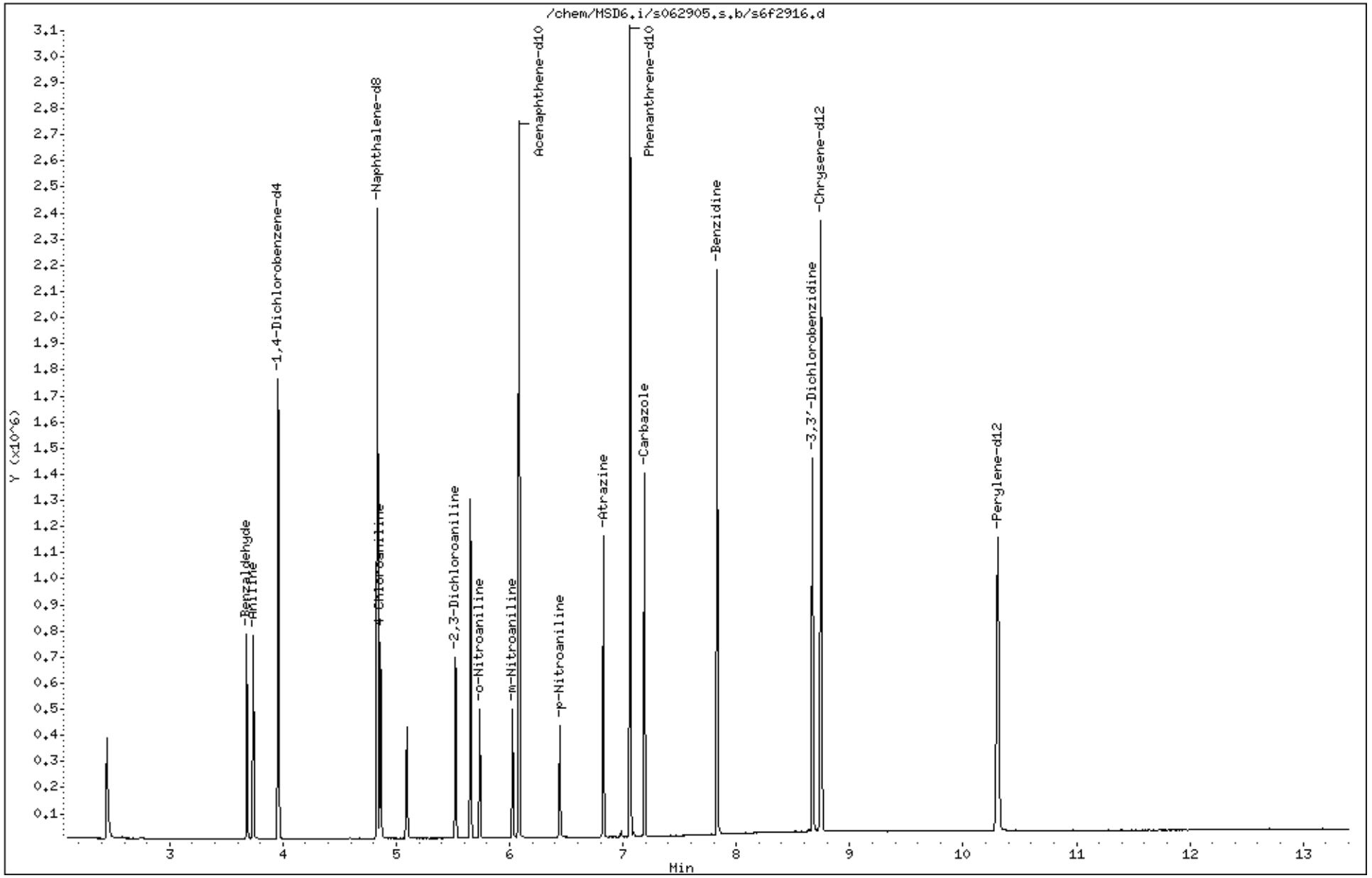
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.959	3.959	(1.000)	233405	40.0000	
* 29 Naphthalene-d8	136	4.834	4.834	(1.000)	863461	40.0000	
* 46 Acenaphthene-d10	164	6.080	6.080	(1.000)	501627	40.0000	
* 67 Phenanthrene-d10	188	7.061	7.061	(1.000)	809134	40.0000	
* 91 Chrysene-d12	240	8.747	8.747	(1.000)	731083	40.0000	
* 98 Perylene-d12	264	10.304	10.304	(1.000)	585248	40.0000	
4 Aniline	93	3.741	3.741	(0.945)	213510	20.0000	20.7
209 Benzaldehyde	77	3.682	3.682	(0.930)	114166	20.0000	20.7
31 4-Chloroaniline	127	4.857	4.857	(1.005)	169137	20.0000	20.8
205 2,3-Dichloroaniline	161	5.527	5.527	(0.909)	130659	20.0000	20.7
42 o-Nitroaniline	65	5.739	5.739	(0.944)	56773	20.0000	18.7
41 m-Nitroaniline	138	6.027	6.027	(0.991)	52234	20.0000	18.4
56 p-Nitroaniline	138	6.444	6.444	(1.060)	46189	20.0000	22.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
207 Atrazine	173	6.826	6.826	(0.967)	22018	20.0000	20.2
77 Benzidine	184	7.830	7.830	(0.895)	563823	50.0000	57.7
90 3,3'-Dichlorobenzidine	252	8.677	8.677	(0.992)	311117	50.0000	57.9
173 Carbazole	167	7.190	7.190	(1.018)	390666	20.0000	22.5

Data File: /chem/MSD6.i/s062905.s.b/s6f2916.d
Date : 29-JUN-2005 15:26
Client ID: ANBZICAL020
Instrument: MSD6.i
Sample Info: IUBN050607-03I20 PPMI1ISVMFI1IANBZ ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2917.d
Lab Smp Id: UBN050607-04 Client Smp ID: ANBZICAL040
Inj Date : 29-JUN-2005 15:47
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-04|40 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:59 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:21 Cal File: s6f2953.d
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

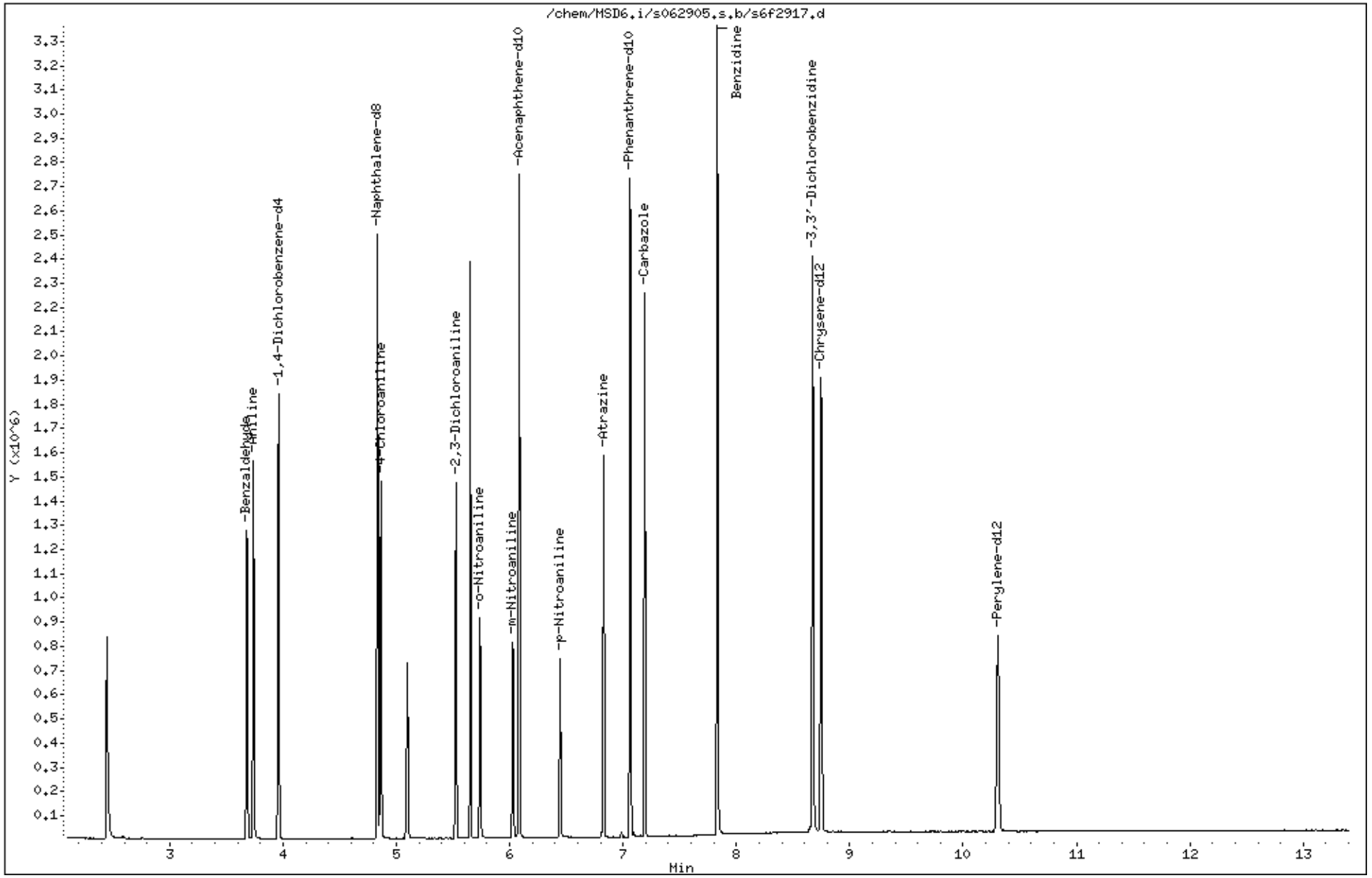
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.964	3.964	(1.000)	230435	40.0000	
* 29 Naphthalene-d8	136	4.833	4.833	(1.000)	829487	40.0000	
* 46 Acenaphthene-d10	164	6.085	6.085	(1.000)	488533	40.0000	
* 67 Phenanthrene-d10	188	7.060	7.060	(1.000)	779618	40.0000	
* 91 Chrysene-d12	240	8.746	8.746	(1.000)	627170	40.0000	
* 98 Perylene-d12	264	10.309	10.309	(1.000)	429832	40.0000	
4 Aniline	93	3.740	3.740	(0.944)	409178	40.0000	40.2
209 Benzaldehyde	77	3.682	3.682	(0.929)	223673	40.0000	41.1
31 4-Chloroaniline	127	4.862	4.862	(1.006)	319749	40.0000	40.9
205 2,3-Dichloroaniline	161	5.526	5.526	(0.908)	247751	40.0000	40.4
42 o-Nitroaniline	65	5.738	5.738	(0.943)	119020	40.0000	40.2
41 m-Nitroaniline	138	6.032	6.032	(0.991)	110371	40.0000	39.9
56 p-Nitroaniline	138	6.449	6.449	(1.060)	94832	40.0000	38.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
207 Atrazine	173	6.831	6.831	(0.968)	42609	40.0000	40.6
77 Benzidine	184	7.830	7.830	(0.895)	932735	100.000	111
90 3,3'-Dichlorobenzidine	252	8.676	8.676	(0.992)	484246	100.000	105
173 Carbazole	167	7.195	7.195	(1.019)	686685	40.0000	41.0

Data File: /chem/MSD6.i/s062905.s.b/s6f2917.d
Date : 29-JUN-2005 15:47
Client ID: ANBZICAL040
Instrument: MSD6.i
Sample Info: IUBN050607-04|40 PPM|1|SVMF|1|ANBZ ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2918.d
Lab Smp Id: UBN050607-05 Client Smp ID: ANBZICAL050
Inj Date : 29-JUN-2005 16:08
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-05|50 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 20:59 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:42 Cal File: s6f2954.d
Als bottle: 16 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

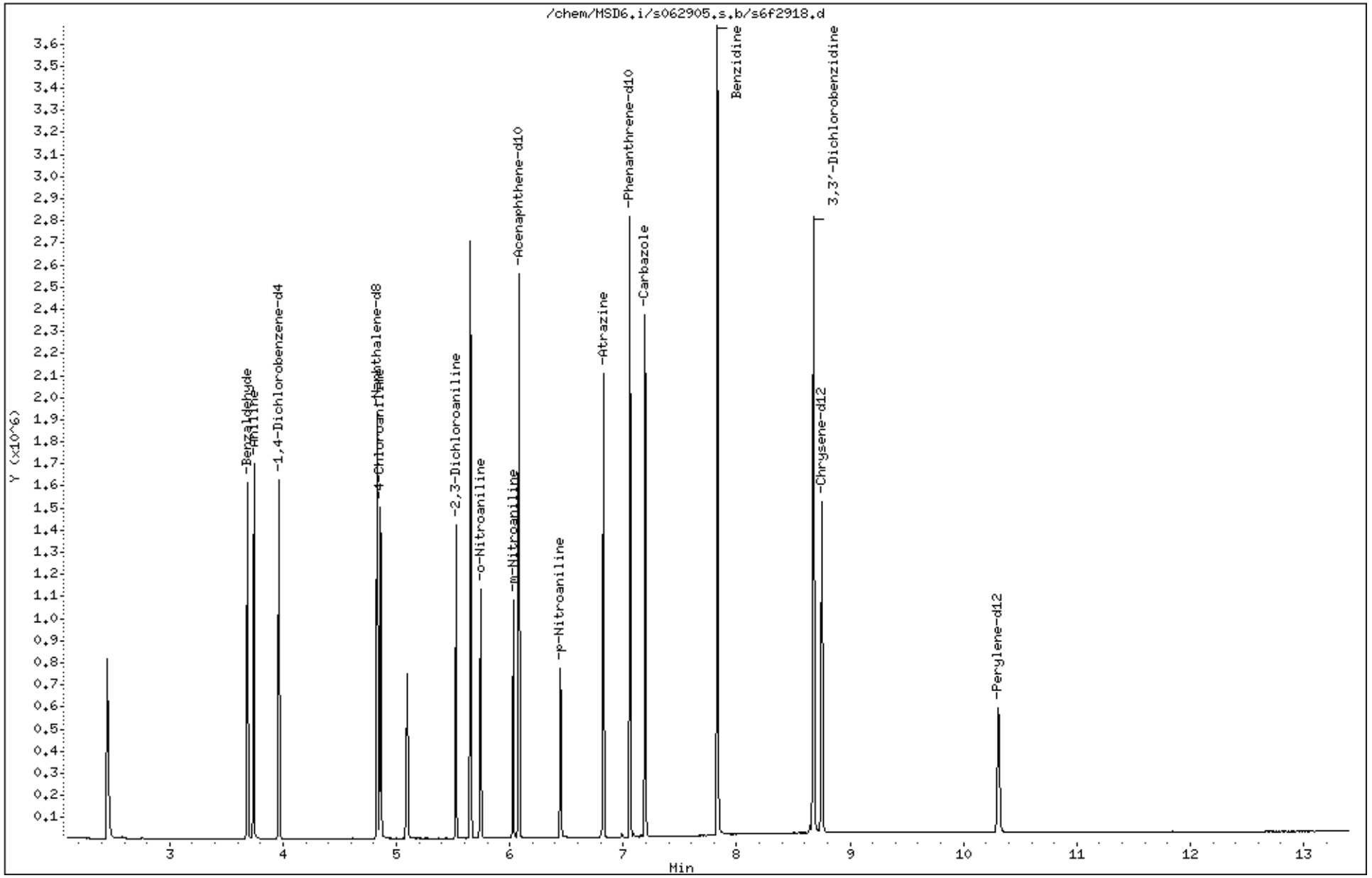
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.960	3.960	(1.000)	199692	40.0000	
* 29 Naphthalene-d8	136	4.829	4.829	(1.000)	730260	40.0000	
* 46 Acenaphthene-d10	164	6.081	6.081	(1.000)	424900	40.0000	
* 67 Phenanthrene-d10	188	7.062	7.062	(1.000)	671909	40.0000	
* 91 Chrysene-d12	240	8.748	8.748	(1.000)	499065	40.0000	
* 98 Perylene-d12	264	10.305	10.305	(1.000)	284047	40.0000	
4 Aniline	93	3.742	3.742	(0.945)	456125	50.0000	51.8
209 Benzaldehyde	77	3.683	3.683	(0.930)	243436	50.0000	51.6
31 4-Chloroaniline	127	4.859	4.859	(1.006)	359707	50.0000	52.2
205 2,3-Dichloroaniline	161	5.528	5.528	(0.909)	276133	50.0000	51.8
42 o-Nitroaniline	65	5.740	5.740	(0.944)	129211	50.0000	50.2
41 m-Nitroaniline	138	6.028	6.028	(0.991)	119307	50.0000	49.6
56 p-Nitroaniline	138	6.445	6.445	(1.060)	102081	50.0000	45.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
207 Atrazine	173	6.827	6.827	(0.967)	45695	50.0000	50.5
77 Benzidine	184	7.832	7.832	(0.895)	1135874	150.000	170
90 3,3'-Dichlorobenzidine	252	8.678	8.678	(0.992)	578240	150.000	158
173 Carbazole	167	7.191	7.191	(1.018)	742439	50.0000	51.5

Data File: /chem/MSD6.i/s062905.s.b/s6f2918.d
Date : 29-JUN-2005 16:08
Client ID: ANBZICAL050
Instrument: MSD6.i
Sample Info: IUBN050607-05I50 PPMI1ISVMFI1IANBZ ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2919.d
Lab Smp Id: UBN050607-06 Client Smp ID: ANBZICAL080
Inj Date : 29-JUN-2005 16:30
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-06|80 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:00 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 05:04 Cal File: s6f2955.d
Als bottle: 17 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

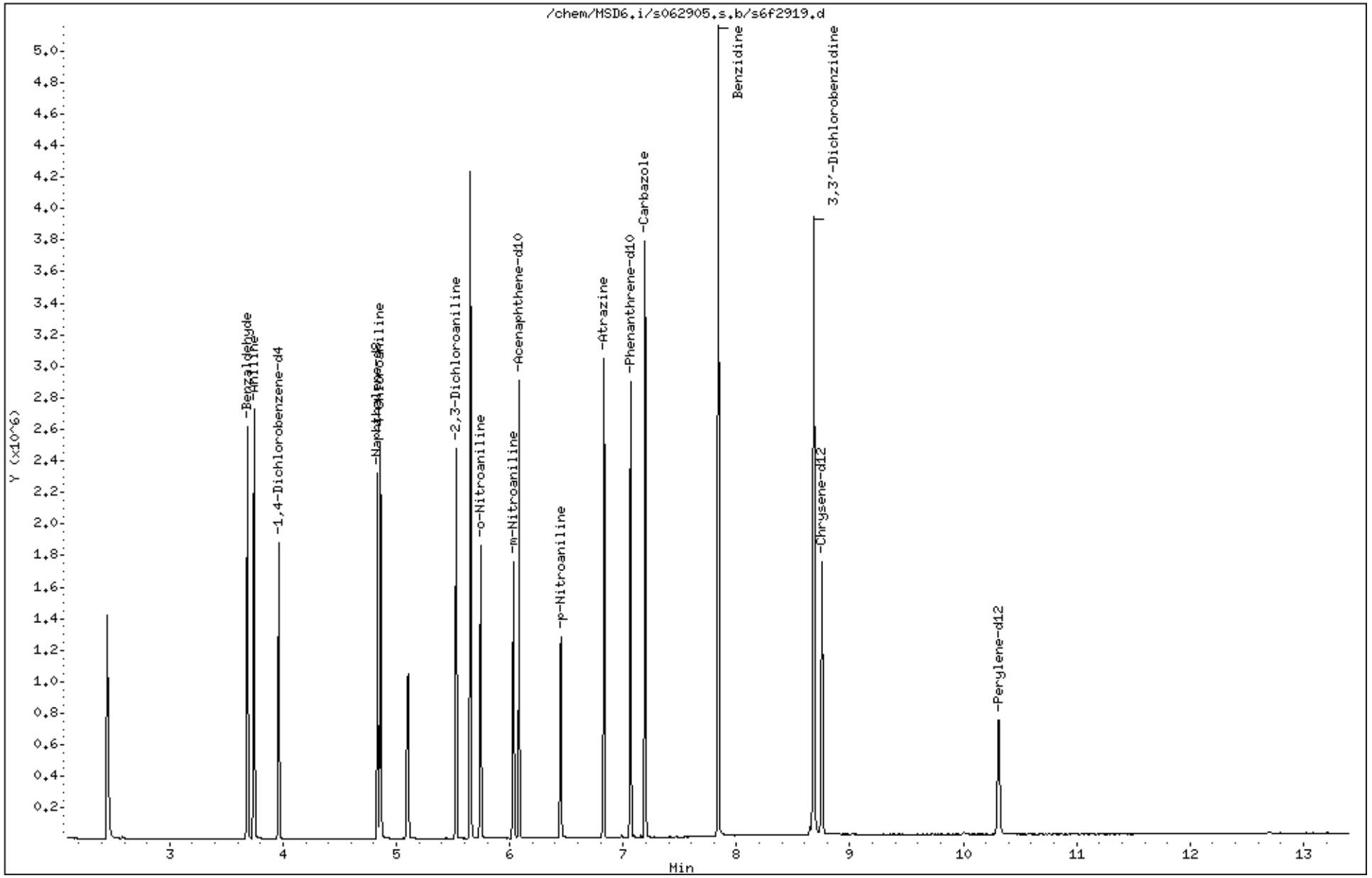
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	213903	40.0000	
* 29 Naphthalene-d8	136	4.831	4.831	(1.000)	780032	40.0000	
* 46 Acenaphthene-d10	164	6.083	6.083	(1.000)	456091	40.0000	
* 67 Phenanthrene-d10	188	7.064	7.064	(1.000)	719592	40.0000	
* 91 Chrysene-d12	240	8.756	8.756	(1.000)	587441	40.0000	
* 98 Perylene-d12	264	10.313	10.313	(1.000)	377897	40.0000	
4 Aniline	93	3.744	3.744	(0.945)	737863	80.0000	78.2
209 Benzaldehyde	77	3.685	3.685	(0.930)	400529	80.0000	79.3
31 4-Chloroaniline	127	4.860	4.860	(1.006)	580556	80.0000	78.9
205 2,3-Dichloroaniline	161	5.524	5.524	(0.908)	454269	80.0000	79.3
42 o-Nitroaniline	65	5.742	5.742	(0.944)	235039	80.0000	85.1
41 m-Nitroaniline	138	6.030	6.030	(0.991)	221627	80.0000	85.9
56 p-Nitroaniline	138	6.453	6.453	(1.061)	194494	80.0000	74.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
207 Atrazine	173	6.829	6.829	(0.967)	80056	80.0000	82.6
77 Benzidine	184	7.839	7.839	(0.895)	1555722	200.000	198
90 3,3'-Dichlorobenzidine	252	8.685	8.685	(0.992)	878742	200.000	204
173 Carbazole	167	7.193	7.193	(1.018)	1198954	80.0000	77.6

Data File: /chem/MSD6.i/s062905.s.b/s6f2919.d
Date : 29-JUN-2005 16:30
Client ID: ANBZICAL080
Instrument: MSD6.i
Sample Info: IUBN050607-06|80 PPM|1|SVMF|1|ANBZ ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2920.d
Lab Smp Id: UBN050607-07 Client Smp ID: ANBZICAL100
Inj Date : 29-JUN-2005 16:51
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-07|100 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:00 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 02:34 Cal File: s6f2948.d
Als bottle: 18 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

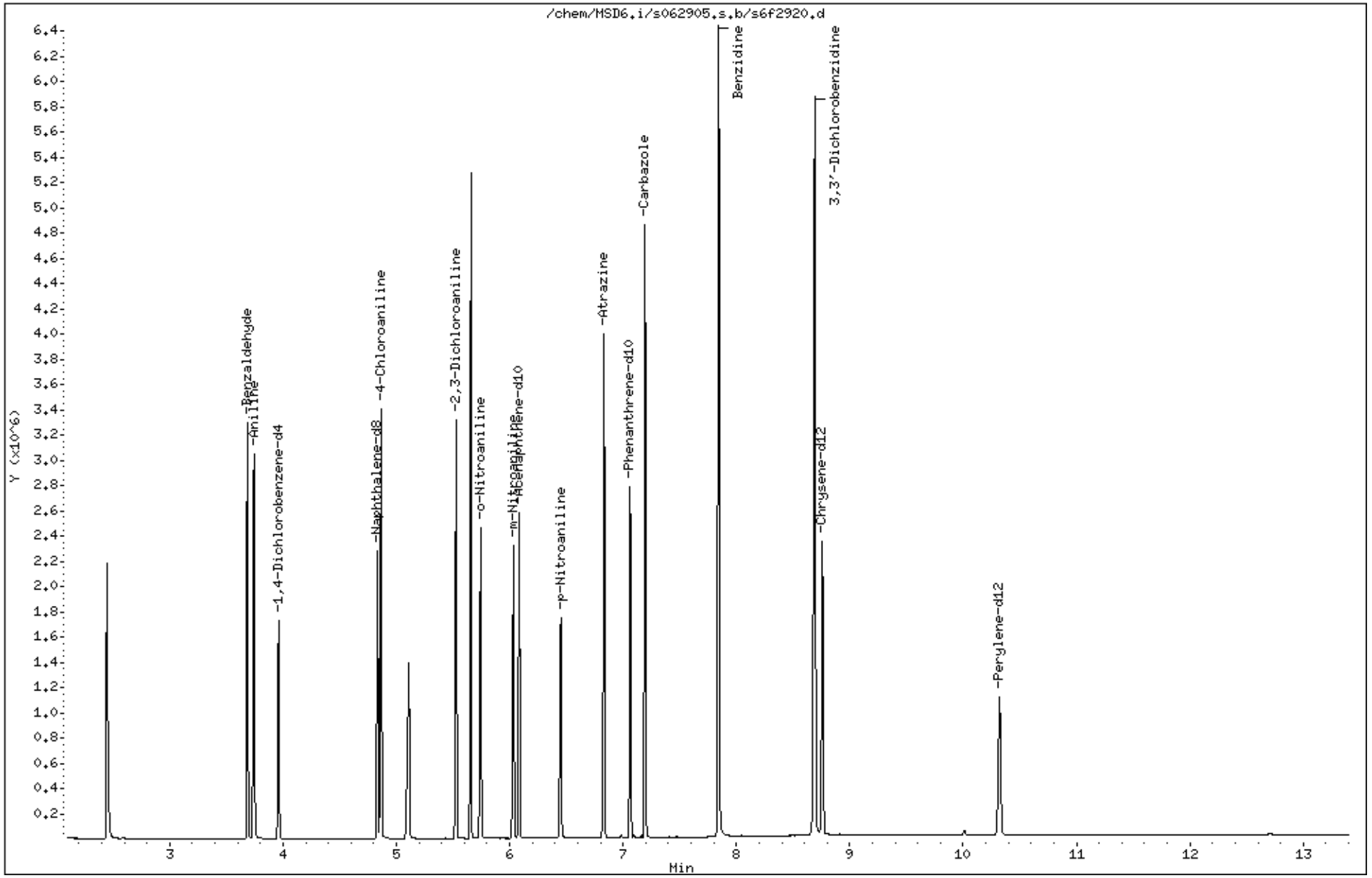
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.964	3.964	(1.000)	217103	40.0000	
* 29 Naphthalene-d8	136	4.834	4.834	(1.000)	794765	40.0000	
* 46 Acenaphthene-d10	164	6.085	6.085	(1.000)	476806	40.0000	
* 67 Phenanthrene-d10	188	7.061	7.061	(1.000)	782311	40.0000	
* 91 Chrysene-d12	240	8.759	8.759	(1.000)	747872	40.0000	
* 98 Perylene-d12	264	10.322	10.322	(1.000)	574177	40.0000	
4 Aniline	93	3.747	3.747	(0.945)	962393	100.000	100
209 Benzaldehyde	77	3.688	3.688	(0.930)	519940	100.000	101
31 4-Chloroaniline	127	4.863	4.863	(1.006)	755417	100.000	101
205 2,3-Dichloroaniline	161	5.527	5.527	(0.908)	589990	100.000	98.5
42 o-Nitroaniline	65	5.745	5.745	(0.944)	324945	100.000	112
41 m-Nitroaniline	138	6.032	6.032	(0.991)	310473	100.000	115
56 p-Nitroaniline	138	6.455	6.455	(1.061)	288681	100.000	102

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
207 Atrazine	173	6.832	6.832	(0.968)	110480	100.000	105
77 Benzidine	184	7.842	7.842	(0.895)	2224732	250.000	223
90 3,3'-Dichlorobenzidine	252	8.694	8.694	(0.993)	1418295	250.000	258
173 Carbazole	167	7.196	7.196	(1.019)	1542750	100.000	91.8

Data File: /chem/MSD6.i/s062905.s.b/s6f2920.d
Date : 29-JUN-2005 16:51
Client ID: ANBZICAL100
Sample Info: !UBN050607-07!100 PPM!1!SVMF!1!ANBZ ICAL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2921.d
Lab Smp Id: UBN050607-08 Client Smp ID: ANBZICAL120
Inj Date : 29-JUN-2005 17:13
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050607-08|120 PPM|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:00 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 02:56 Cal File: s6f2949.d
Als bottle: 19 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.963	3.963	(1.000)	215849	40.0000	
* 29 Naphthalene-d8	136	4.832	4.832	(1.000)	794913	40.0000	
* 46 Acenaphthene-d10	164	6.084	6.084	(1.000)	467703	40.0000	
* 67 Phenanthrene-d10	188	7.065	7.065	(1.000)	778160	40.0000	
* 91 Chrysene-d12	240	8.757	8.757	(1.000)	708426	40.0000	
* 98 Perylene-d12	264	10.314	10.314	(1.000)	494017	40.0000	
4 Aniline	93	3.745	3.745	(0.945)	1072805	120.000	113
209 Benzaldehyde	77	3.687	3.687	(0.930)	568344	120.000	112
31 4-Chloroaniline	127	4.862	4.862	(1.006)	842513	120.000	112
205 2,3-Dichloroaniline	161	5.531	5.531	(0.909)	664602	120.000	113
42 o-Nitroaniline	65	5.743	5.743	(0.944)	378265	120.000	134(A)
41 m-Nitroaniline	138	6.037	6.037	(0.992)	360604	120.000	136(A)
56 p-Nitroaniline	138	6.454	6.454	(1.061)	343479	120.000	122(A)

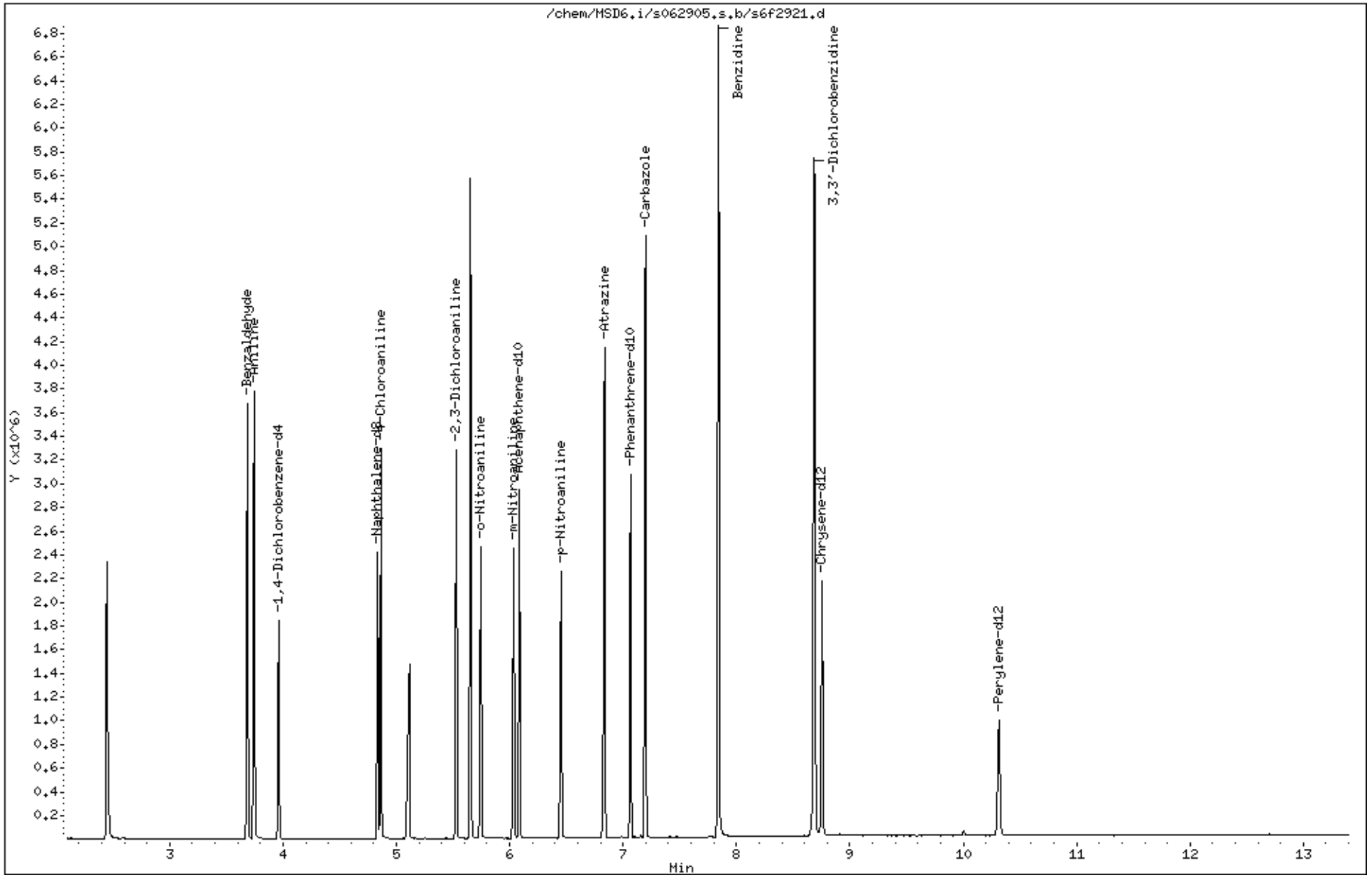
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
207 Atrazine	173	6.836	6.836	(0.968)	124728	120.000	119
77 Benzidine	184	7.840	7.840	(0.895)	2370927	300.000	250(A)
90 3,3'-Dichlorobenzidine	252	8.692	8.692	(0.993)	1504734	300.000	289
173 Carbazole	167	7.200	7.200	(1.019)	1689485	120.000	101

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD6.i/s062905.s.b/s6f2921.d
Date : 29-JUN-2005 17:13
Client ID: ANBZICAL120
Sample Info: !UBN050607-08!120 PPM!1!SVMF!1!ANBZ ICAL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2935.d
Lab Smp Id: UBN050520-05 Client Smp ID: 168ICAL010
Inj Date : 29-JUN-2005 22:00
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050520-05|10 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:03 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 30 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.964	3.964	(1.000)	212232	40.0000	
* 29 Naphthalene-d8	136	4.834	4.834	(1.000)	789315	40.0000	
* 46 Acenaphthene-d10	164	6.079	6.079	(1.000)	454977	40.0000	
* 67 Phenanthrene-d10	188	7.060	7.060	(1.000)	739066	40.0000	
* 91 Chrysene-d12	240	8.753	8.753	(1.000)	645610	40.0000	
* 98 Perylene-d12	264	10.310	10.310	(1.000)	531675	40.0000	
103 Methyl methacrylate	100	2.243	2.243	(0.566)	13991	10.0000	9.8
104 Ethyl methacrylate	69	2.636	2.636	(0.665)	55977	10.0000	9.9
105 2-Picoline	93	2.842	2.842	(0.717)	75928	10.0000	10.1
106 N-Nitrosomethylethylamine	88	2.883	2.883	(0.727)	30434	10.0000	9.6
107 Methyl methanesulfonate	80	3.042	3.042	(0.767)	35019	10.0000	10.2
108 N-Nitrosodiethylamine	102	3.283	3.283	(0.828)	29455	10.0000	9.5
109 Ethyl Methanesulfonate	79	3.435	3.435	(0.867)	48029	10.0000	10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
110	Pentachloroethane	167	3.788	3.788	(0.956)	25662	10.0000	9.8
111	N-Nitrosopyrrolidine	100	4.193	4.193	(1.058)	29736	10.0000	9.2
113	N-Nitrosomorpholine	56	4.217	4.217	(1.064)	35737	10.0000	9.9
114	o-Toluidine	106	4.234	4.234	(1.068)	105385	10.0000	10.4
116	a,a-Dimethylphenethylamine	58	4.693	4.693	(0.971)	137813	10.0000	8.6
118	2,6-Dichlorophenol	162	4.869	4.869	(1.007)	48710	10.0000	9.7
119	Hexachloropropene	213	4.904	4.904	(1.015)	40472	10.0000	9.4
121	N-Nitrosodi-n-butylamine	84	5.069	5.069	(1.049)	41683	10.0000	9.4
122	Safrole	162	5.239	5.239	(1.084)	50909	10.0000	9.9
123	1,2,4,5-Tetrachlorobenzene	216	5.445	5.445	(0.896)	66813	10.0000	10.6
124	Isosafrole	162	5.609	5.609	(0.923)	55106	10.0000	10.1
125	1,4-Naphthoquinone	158	5.803	5.803	(0.955)	34064	10.0000	7.7
126	m-Dinitrobenzene	168	5.880	5.880	(0.967)	11333	10.0000	11.9
127	Pentachlorobenzene	250	6.191	6.191	(1.018)	61406	10.0000	10.5
128	1-Naphthylamine	143	6.267	6.267	(1.031)	125688	10.0000	10.8
129	2-Naphthylamine	143	6.320	6.320	(1.040)	128836	10.0000	11.3
130	2,3,4,6-Tetrachlorophenol	232	6.291	6.291	(1.035)	25887	10.0000	8.6
131	5-Nitro-o-toluidine	152	6.444	6.444	(1.060)	24968	10.0000	7.6
137	Phenacetin	108	6.679	6.679	(0.946)	49053	10.0000	8.4
140	4-Aminobiphenyl	169	6.919	6.919	(0.980)	134362	10.0000	10.7
141	Pentachloronitrobenzene	237	6.937	6.937	(0.983)	13108	10.0000	9.1
142	Pronamide	173	6.925	6.925	(0.981)	54717	10.0000	10.2
143	Dinoseb	211	7.013	7.013	(0.993)	11810	10.0000	12.3
146	4-Nitroquinoline-1-oxide	101	7.525	7.525	(1.066)	5667	10.0000	10.0
147	Methapyrilene	58	7.536	7.536	(1.067)	89122	10.0000	10.2
149	Aramite	185	7.924	7.924	(1.122)	6838	10.0000	8.9
151	p-(Dimethylamino)azobenzene	120	8.053	8.053	(0.920)	47909	10.0000	8.3
153	3,3'-Dimethylbenzidine	212	8.265	8.265	(0.944)	88016	10.0000	10.0
155	2-Acetylaminofluorene	181	8.447	8.447	(0.965)	31299	10.0000	10.6
157	7,12Dimethylbenz(a)anthracene	256	9.775	9.775	(0.948)	62934	10.0000	7.9
158	3-Methylcholanthrene	268	10.691	10.691	(1.037)	56712	10.0000	8.5

Data File: /chem/MSD6.i/s062905.s.b/s6f2935.d

Date : 29-JUN-2005 22:00

Client ID: 168ICAL010

Instrument: MSD6.i

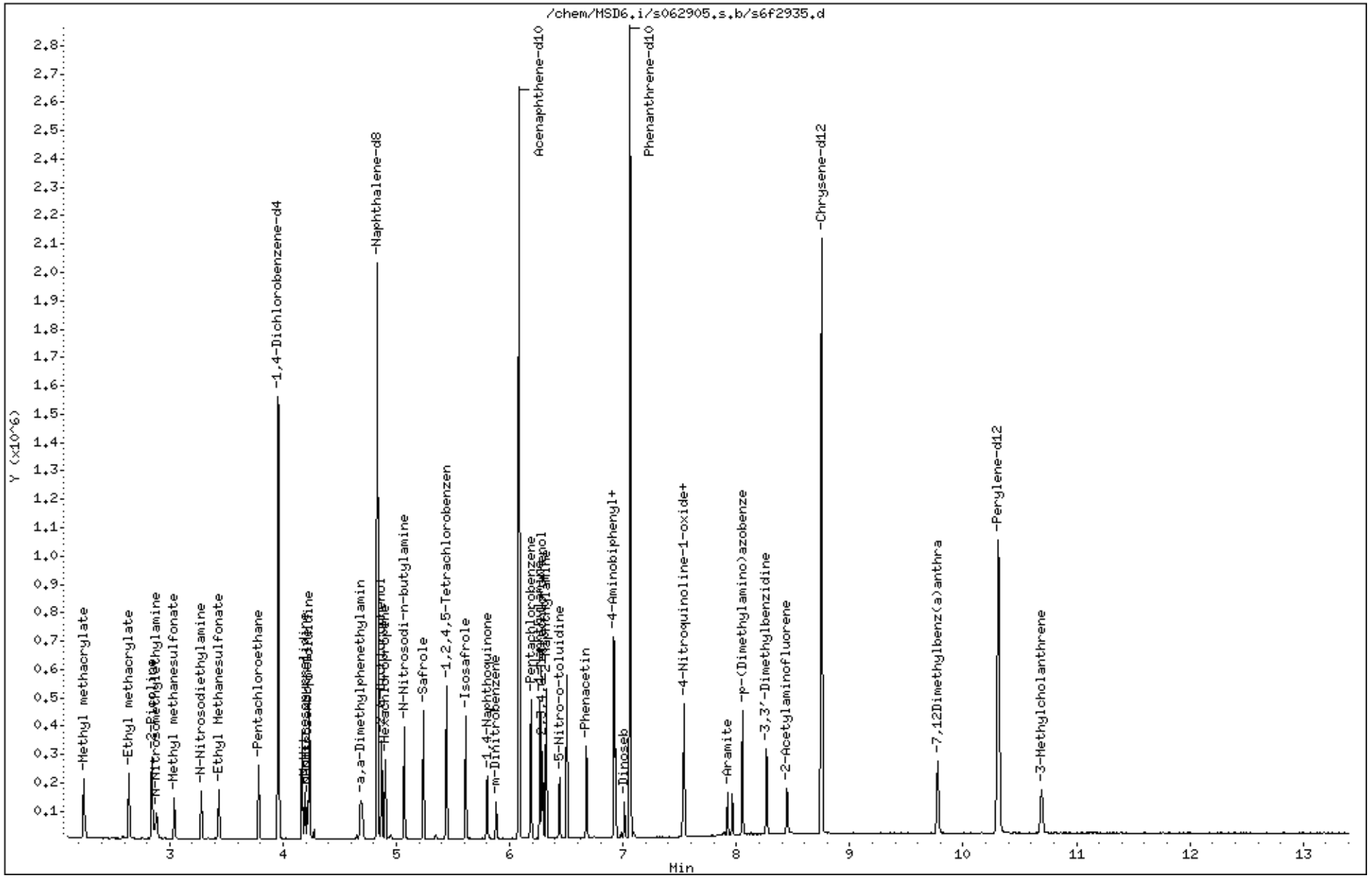
Sample Info: IUBN050520-05I10 PPMI1ISVMFI1I168 ICAL

Volume Injected (uL): 0.5

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2936.d
Lab Smp Id: UBN050520-06 Client Smp ID: 168ICAL020
Inj Date : 29-JUN-2005 22:21
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050520-06|20 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:03 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:00 Cal File: s6f2952.d
Als bottle: 31 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

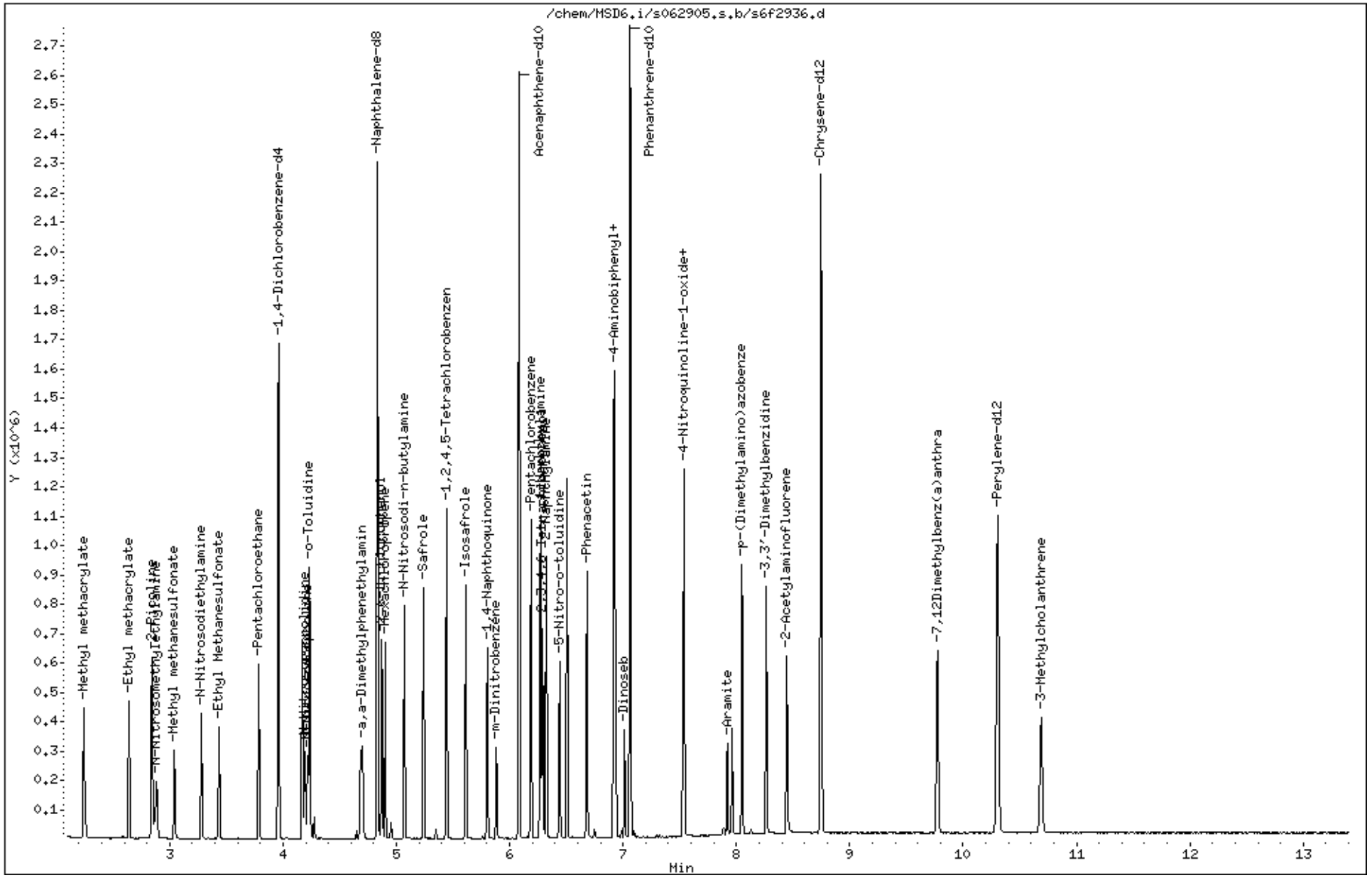
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.964	3.964	(1.000)	216319	40.0000	
* 29 Naphthalene-d8	136	4.833	4.833	(1.000)	810471	40.0000	
* 46 Acenaphthene-d10	164	6.079	6.079	(1.000)	477847	40.0000	
* 67 Phenanthrene-d10	188	7.060	7.060	(1.000)	769774	40.0000	
* 91 Chrysene-d12	240	8.746	8.746	(1.000)	686664	40.0000	
* 98 Perylene-d12	264	10.303	10.303	(1.000)	559899	40.0000	
103 Methyl methacrylate	100	2.242	2.242	(0.566)	29446	20.0000	20.2
104 Ethyl methacrylate	69	2.636	2.636	(0.665)	118207	20.0000	20.6
105 2-Picoline	93	2.842	2.842	(0.717)	160098	20.0000	20.9
106 N-Nitrosomethylethylamine	88	2.883	2.883	(0.727)	64665	20.0000	20.0
107 Methyl methanesulfonate	80	3.041	3.041	(0.767)	73696	20.0000	21.1
108 N-Nitrosodiethylamine	102	3.282	3.282	(0.828)	65012	20.0000	20.5
109 Ethyl Methanesulfonate	79	3.441	3.441	(0.868)	101109	20.0000	20.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
110	Pentachloroethane	167	3.787	3.787	(0.956)	54963	20.0000	20.7
111	N-Nitrosopyrrolidine	100	4.199	4.199	(1.059)	66251	20.0000	20.0
113	N-Nitrosomorpholine	56	4.216	4.216	(1.064)	76942	20.0000	20.9
114	o-Toluidine	106	4.234	4.234	(1.068)	223108	20.0000	21.5
116	a,a-Dimethylphenethylamine	58	4.698	4.698	(0.972)	329602	20.0000	20.1
118	2,6-Dichlorophenol	162	4.869	4.869	(1.007)	106121	20.0000	20.6
119	Hexachloropropene	213	4.904	4.904	(1.015)	89791	20.0000	20.2
121	N-Nitrosodi-n-butylamine	84	5.068	5.068	(1.049)	93805	20.0000	20.6
122	Safrole	162	5.245	5.245	(1.085)	111086	20.0000	21.1
123	1,2,4,5-Tetrachlorobenzene	216	5.444	5.444	(0.896)	139398	20.0000	21.1
124	Isosafrole	162	5.609	5.609	(0.923)	119943	20.0000	21.0
125	1,4-Naphthoquinone	158	5.803	5.803	(0.955)	88705	20.0000	19.2
126	m-Dinitrobenzene	168	5.879	5.879	(0.967)	29881	20.0000	20.4
127	Pentachlorobenzene	250	6.191	6.191	(1.018)	131550	20.0000	21.4
128	1-Naphthylamine	143	6.273	6.273	(1.032)	268401	20.0000	21.9
129	2-Naphthylamine	143	6.320	6.320	(1.040)	271747	20.0000	22.6
130	2,3,4,6-Tetrachlorophenol	232	6.290	6.290	(1.035)	62298	20.0000	19.8
131	5-Nitro-o-toluidine	152	6.443	6.443	(1.060)	67027	20.0000	19.5
137	Phenacetin	108	6.684	6.684	(0.947)	122659	20.0000	20.3
140	4-Aminobiphenyl	169	6.919	6.919	(0.980)	280006	20.0000	21.5
141	Pentachloronitrobenzene	237	6.937	6.937	(0.983)	30377	20.0000	20.2
142	Pronamide	173	6.925	6.925	(0.981)	124232	20.0000	22.1
143	Dinoseb	211	7.013	7.013	(0.993)	36117	20.0000	20.8
146	4-Nitroquinoline-1-oxide	101	7.524	7.524	(1.066)	14687	20.0000	25.0
147	Methapyrilene	58	7.536	7.536	(1.067)	217560	20.0000	23.9
149	Aramite	185	7.924	7.924	(1.122)	17068	20.0000	21.4
151	p-(Dimethylamino)azobenzene	120	8.047	8.047	(0.920)	115346	20.0000	18.8
153	3,3'-Dimethylbenzidine	212	8.265	8.265	(0.945)	206361	20.0000	22.1
155	2-Acetylaminofluorene	181	8.447	8.447	(0.966)	99622	20.0000	22.7
157	7,12Dimethylbenz(a)anthracene	256	9.775	9.775	(0.949)	154164	20.0000	18.5
158	3-Methylcholanthrene	268	10.691	10.691	(1.038)	136785	20.0000	19.4

Data File: /chem/MSD6.i/s062905.s.b/s6f2936.d
Date : 29-JUN-2005 22:21
Client ID: 168ICAL020
Sample Info: !UBN050520-06!20 PPM!1!SVMF!1!168 ICAL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2937.d
Lab Smp Id: UBN050520-07 Client Smp ID: 168ICAL040
Inj Date : 29-JUN-2005 22:42
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050520-07|40 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:03 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:21 Cal File: s6f2953.d
Als bottle: 32 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

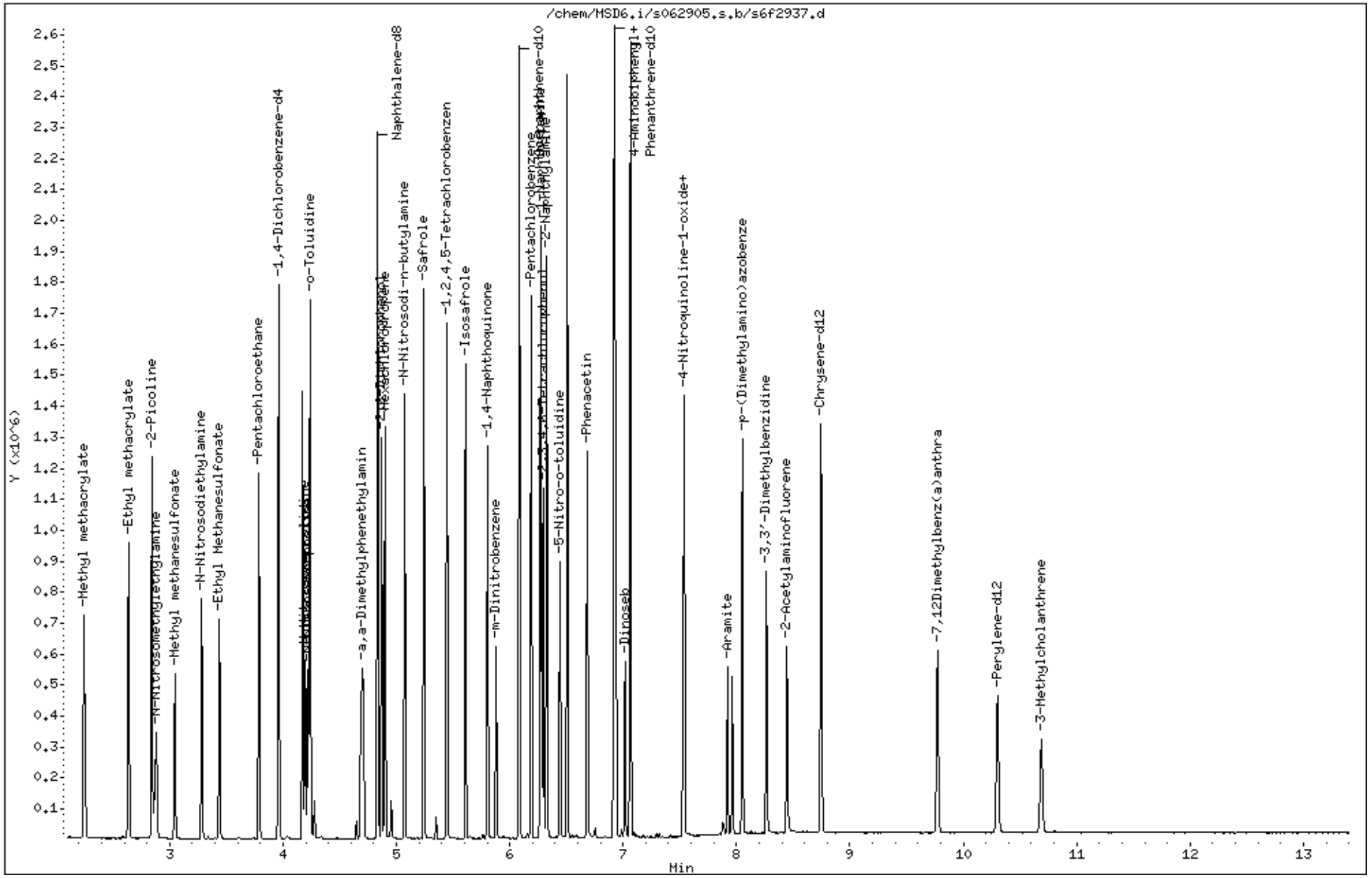
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.962	3.962	(1.000)	202062	40.0000	
* 29 Naphthalene-d8	136	4.832	4.832	(1.000)	737841	40.0000	
* 46 Acenaphthene-d10	164	6.083	6.083	(1.000)	427642	40.0000	
* 67 Phenanthrene-d10	188	7.064	7.064	(1.000)	660531	40.0000	
* 91 Chrysene-d12	240	8.745	8.745	(1.000)	412007	40.0000	
* 98 Perylene-d12	264	10.302	10.302	(1.000)	224879	40.0000	
103 Methyl methacrylate	100	2.241	2.241	(0.566)	55682	40.0000	40.9
104 Ethyl methacrylate	69	2.640	2.640	(0.666)	218524	40.0000	40.8
105 2-Picoline	93	2.840	2.840	(0.717)	293231	40.0000	40.9
106 N-Nitrosomethylethylamine	88	2.887	2.887	(0.729)	120562	40.0000	40.0
107 Methyl methanesulfonate	80	3.046	3.046	(0.769)	130927	40.0000	40.1
108 N-Nitrosodiethylamine	102	3.281	3.281	(0.828)	120073	40.0000	40.6
109 Ethyl Methanesulfonate	79	3.439	3.439	(0.868)	184690	40.0000	40.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
110	Pentachloroethane	167	3.786	3.786	(0.956)	101994	40.0000	41.1
111	N-Nitrosopyrrolidine	100	4.197	4.197	(1.059)	123155	40.0000	39.9
113	N-Nitrosomorpholine	56	4.221	4.221	(1.065)	137320	40.0000	39.9
114	o-Toluidine	106	4.238	4.238	(1.070)	393935	40.0000	40.7
116	a,a-Dimethylphenethylamine	58	4.703	4.703	(0.973)	608329	40.0000	40.8
118	2,6-Dichlorophenol	162	4.873	4.873	(1.008)	193276	40.0000	41.3
119	Hexachloropropene	213	4.902	4.902	(1.015)	165612	40.0000	41.0
121	N-Nitrosodi-n-butylamine	84	5.073	5.073	(1.050)	169413	40.0000	40.8
122	Safrole	162	5.243	5.243	(1.085)	199952	40.0000	41.7
123	1,2,4,5-Tetrachlorobenzene	216	5.449	5.449	(0.896)	244931	40.0000	41.4
124	Isosafrole	162	5.613	5.613	(0.923)	209020	40.0000	40.9
125	1,4-Naphthoquinone	158	5.801	5.801	(0.954)	168925	40.0000	40.8
126	m-Dinitrobenzene	168	5.883	5.883	(0.967)	60706	40.0000	38.5
127	Pentachlorobenzene	250	6.189	6.189	(1.017)	224773	40.0000	40.8
128	1-Naphthylamine	143	6.271	6.271	(1.031)	453545	40.0000	41.4
129	2-Naphthylamine	143	6.324	6.324	(1.040)	435851	40.0000	40.5
130	2,3,4,6-Tetrachlorophenol	232	6.295	6.295	(1.035)	114830	40.0000	40.8
131	5-Nitro-o-toluidine	152	6.448	6.448	(1.060)	121310	40.0000	39.4
137	Phenacetin	108	6.683	6.683	(0.946)	209494	40.0000	40.4
140	4-Aminobiphenyl	169	6.918	6.918	(0.979)	474151	40.0000	42.4
141	Pentachloronitrobenzene	237	6.935	6.935	(0.982)	53302	40.0000	41.4
142	Pronamide	173	6.929	6.929	(0.981)	204473	40.0000	42.4
143	Dinoseb	211	7.017	7.017	(0.993)	68787	40.0000	36.4
146	4-Nitroquinoline-1-oxide	101	7.529	7.529	(1.066)	20069	40.0000	39.8
147	Methapyrilene	58	7.540	7.540	(1.067)	300748	40.0000	38.4
149	Aramite	185	7.922	7.922	(1.121)	25479	40.0000	37.2
151	p-(Dimethylamino)azobenzene	120	8.052	8.052	(0.921)	159350	40.0000	43.4
153	3,3'-Dimethylbenzidine	212	8.263	8.263	(0.945)	228532	40.0000	40.8
155	2-Acetylaminofluorene	181	8.445	8.445	(0.966)	102176	40.0000	35.6
157	7,12Dimethylbenz(a)anthracene	256	9.773	9.773	(0.949)	142625	40.0000	42.6
158	3-Methylcholanthrene	268	10.690	10.690	(1.038)	106933	40.0000	37.9

Data File: /chem/MSD6.i/s062905.s.b/s6f2937.d
Date : 29-JUN-2005 22:42
Client ID: 168ICAL040
Instrument: MSD6.i
Sample Info: IUBN050520-07I40 PPMI1ISVMFI1I168 ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s062905.s.b/s6f2938.d
Lab Smp Id: UBN050520-08 Client Smp ID: 168 ICAL050
Inj Date : 29-JUN-2005 23:03
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050520-08|50 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:03 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 04:42 Cal File: s6f2954.d
Als bottle: 33 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.959	3.959	(1.000)	202796	40.0000	
*	29 Naphthalene-d8	136	4.835	4.835	(1.000)	752213	40.0000	
*	46 Acenaphthene-d10	164	6.080	6.080	(1.000)	436932	40.0000	
*	67 Phenanthrene-d10	188	7.061	7.061	(1.000)	695660	40.0000	
*	91 Chrysene-d12	240	8.748	8.748	(1.000)	479827	40.0000	
*	98 Perylene-d12	264	10.305	10.305	(1.000)	294541	40.0000	
	103 Methyl methacrylate	100	2.244	2.244	(0.567)	67683	50.0000	49.5
	104 Ethyl methacrylate	69	2.637	2.637	(0.666)	269285	50.0000	50.0
	105 2-Picoline	93	2.837	2.837	(0.717)	355780	50.0000	49.5
	106 N-Nitrosomethylethylamine	88	2.884	2.884	(0.728)	149820	50.0000	49.5
	107 Methyl methanesulfonate	80	3.043	3.043	(0.768)	163249	50.0000	49.8
	108 N-Nitrosodiethylamine	102	3.284	3.284	(0.829)	147741	50.0000	49.8
	109 Ethyl Methanesulfonate	79	3.442	3.442	(0.869)	227229	50.0000	49.4
	110 Pentachloroethane	167	3.789	3.789	(0.957)	124124	50.0000	49.8
	111 N-Nitrosopyrrolidine	100	4.200	4.200	(1.061)	154075	50.0000	49.7(Q)
	113 N-Nitrosomorpholine	56	4.224	4.224	(1.067)	171914	50.0000	49.8
	114 o-Toluidine	106	4.241	4.241	(1.071)	486503	50.0000	50.1
	116 a,a-Dimethylphenethylamine	58	4.700	4.700	(0.972)	772029	50.0000	50.8
	118 2,6-Dichlorophenol	162	4.876	4.876	(1.008)	239673	50.0000	50.2
	119 Hexachloropropene	213	4.905	4.905	(1.015)	209518	50.0000	50.9
	121 N-Nitrosodi-n-butylamine	84	5.070	5.070	(1.049)	211959	50.0000	50.1
	122 Safrole	162	5.246	5.246	(1.085)	245190	50.0000	50.2
	123 1,2,4,5-Tetrachlorobenzene	216	5.446	5.446	(0.896)	302858	50.0000	50.1
	124 Isosafrole	162	5.610	5.610	(0.923)	264001	50.0000	50.6
	125 1,4-Naphthoquinone	158	5.804	5.804	(0.955)	220279	50.0000	52.1
	126 m-Dinitrobenzene	168	5.886	5.886	(0.968)	80799	50.0000	48.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127	Pentachlorobenzene	250	6.192	6.192	(1.018)	282654	50.0000	50.2
128	1-Naphthylamine	143	6.274	6.274	(1.032)	566318	50.0000	50.6
129	2-Naphthylamine	143	6.327	6.327	(1.041)	545592	50.0000	49.7
130	2,3,4,6-Tetrachlorophenol	232	6.292	6.292	(1.035)	148583	50.0000	51.7
131	5-Nitro-o-toluidine	152	6.445	6.445	(1.060)	163795	50.0000	52.1
137	Phenacetin	108	6.685	6.685	(0.947)	280428	50.0000	51.3
140	4-Aminobiphenyl	169	6.920	6.920	(0.980)	602751	50.0000	51.2
141	Pentachloronitrobenzene	237	6.938	6.938	(0.983)	68637	50.0000	50.6
142	Pronamide	173	6.926	6.926	(0.981)	262181	50.0000	51.7
143	Dinoseb	211	7.014	7.014	(0.993)	103764	50.0000	48.7
146	4-Nitroquinoline-1-oxide	101	7.526	7.526	(1.066)	26690	50.0000	50.3
147	Methapyrilene	58	7.537	7.537	(1.067)	420964	50.0000	51.1
149	Aramite	185	7.925	7.925	(1.122)	36783	50.0000	51.0
151	p-(Dimethylamino)azobenzene	120	8.049	8.049	(0.920)	224819	50.0000	52.6
153	3,3'-Dimethylbenzidine	212	8.266	8.266	(0.945)	339622	50.0000	52.1
155	2-Acetylaminofluorene	181	8.448	8.448	(0.966)	171095	50.0000	49.2
157	7,12Dimethylbenz(a)anthracene	256	9.776	9.776	(0.949)	230591	50.0000	52.6
158	3-Methylcholanthrene	268	10.693	10.693	(1.038)	188599	50.0000	51.0(Q)

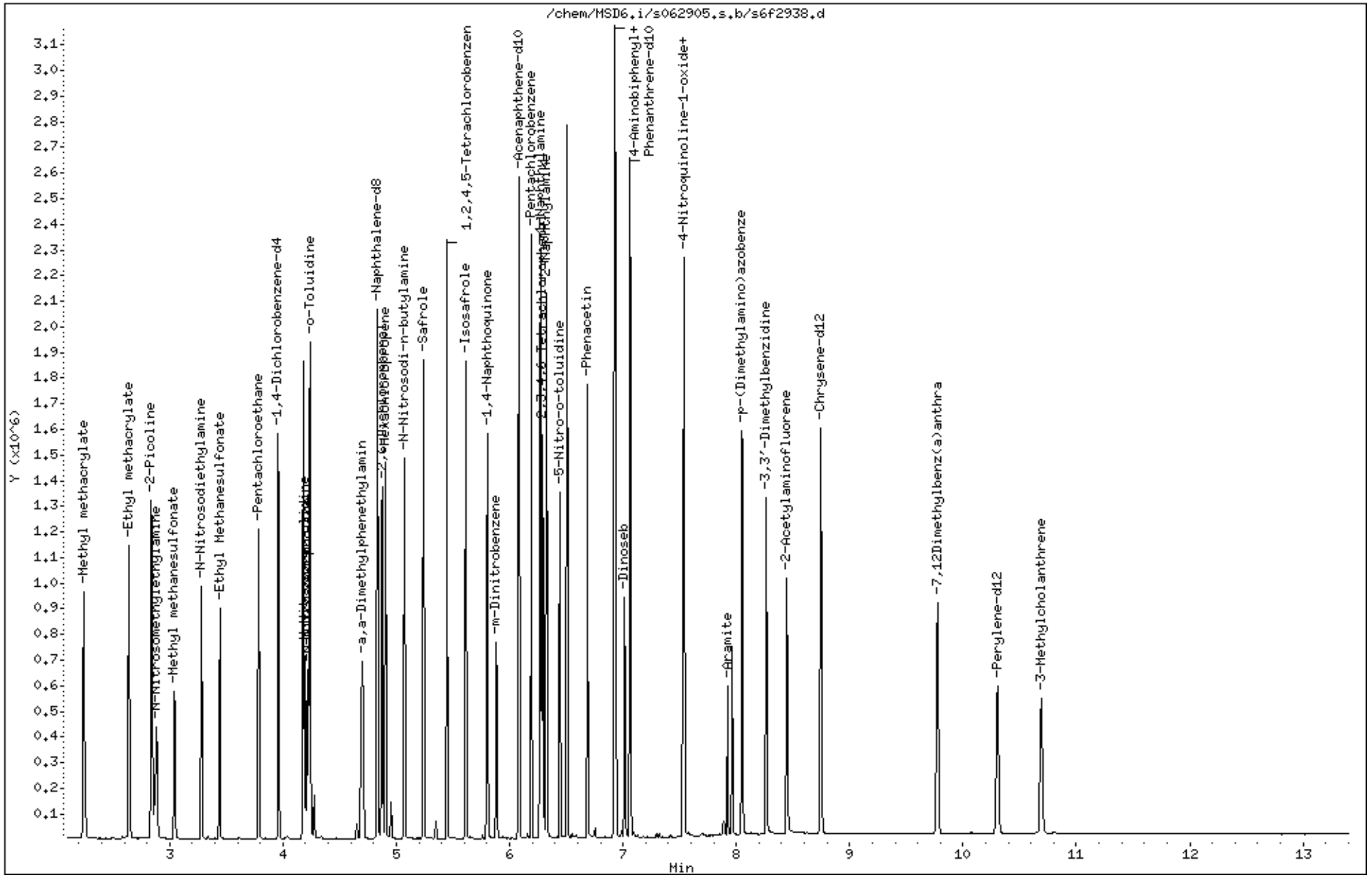
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s062905.s.b/s6f2938.d
Date : 29-JUN-2005 23:03
Client ID: 168 ICAL050
Sample Info: !UBN050520-08!50 PPM!1!SVMF!1!168 ICAL

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20

Column phase: J & W DB-5MS



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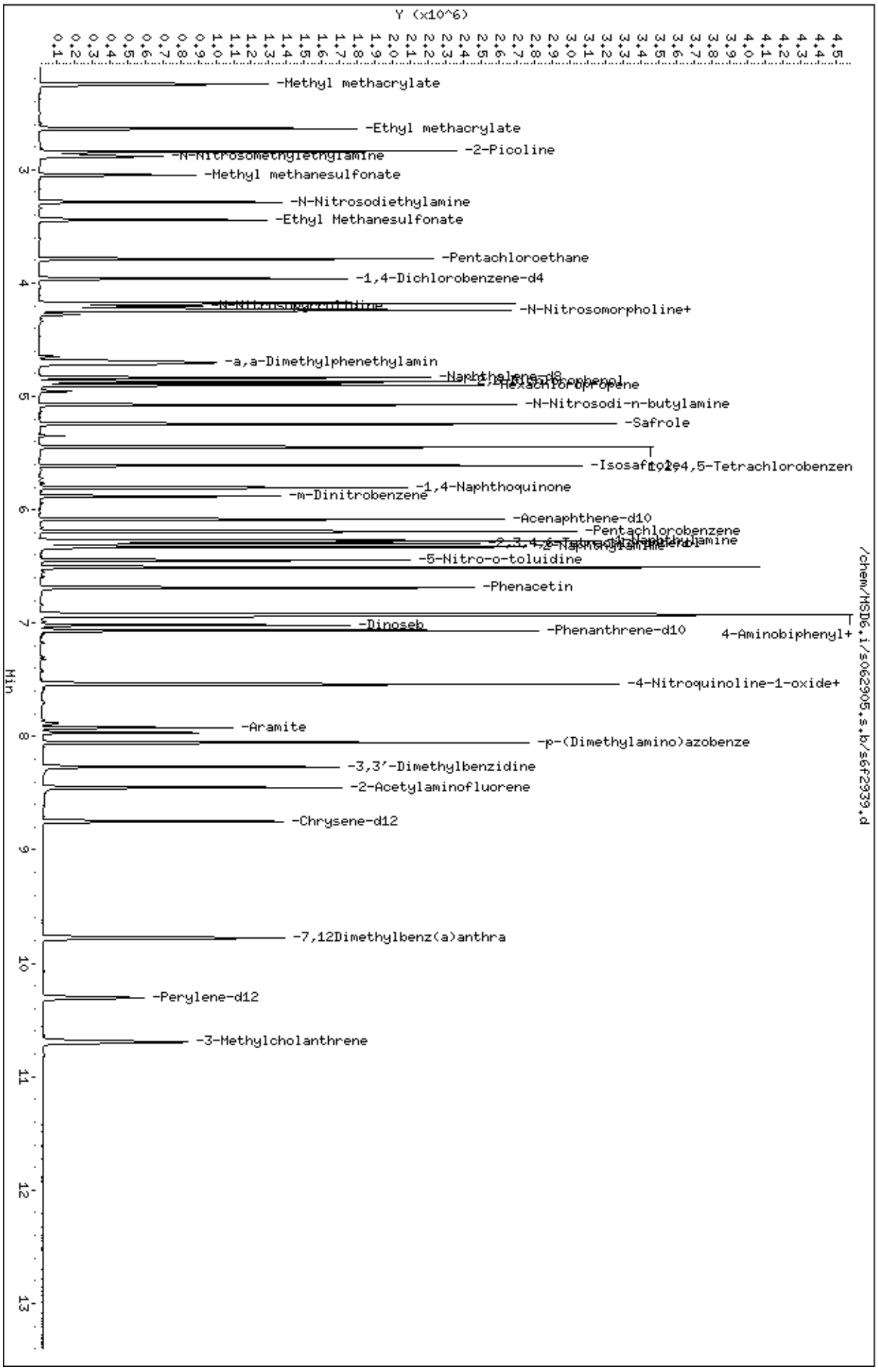
Data file : /chem/MSD6.i/s062905.s.b/s6f2939.d
Lab Smp Id: UBN050520-09 Client Smp ID: 168 ICAL080
Inj Date : 29-JUN-2005 23:24
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050520-09|80 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:03 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 05:04 Cal File: s6f2955.d
Als bottle: 34 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.962	3.962 (1.000)	195277	40.0000	
*	29 Naphthalene-d8	136	4.832	4.832 (1.000)	724438	40.0000	
*	46 Acenaphthene-d10	164	6.083	6.083 (1.000)	424797	40.0000	
*	67 Phenanthrene-d10	188	7.064	7.064 (1.000)	674967	40.0000	
*	91 Chrysene-d12	240	8.751	8.751 (1.000)	466638	40.0000	
*	98 Perylene-d12	264	10.302	10.302 (1.000)	288870	40.0000	
	103 Methyl methacrylate	100	2.247	2.247 (0.567)	107717	80.0000	81.8
	104 Ethyl methacrylate	69	2.640	2.640 (0.666)	416171	80.0000	80.3
	105 2-Picoline	93	2.840	2.840 (0.717)	557801	80.0000	80.5
	106 N-Nitrosomethylethylamine	88	2.887	2.887 (0.729)	237835	80.0000	81.6
	107 Methyl methanesulfonate	80	3.046	3.046 (0.769)	251834	80.0000	79.9
	108 N-Nitrosodiethylamine	102	3.287	3.287 (0.829)	232627	80.0000	81.4
	109 Ethyl Methanesulfonate	79	3.445	3.445 (0.870)	353778	80.0000	79.8
	110 Pentachloroethane	167	3.786	3.786 (0.956)	194116	80.0000	81.0
	111 N-Nitrosopyrrolidine	100	4.203	4.203 (1.061)	244436	80.0000	82.0
	113 N-Nitrosomorpholine	56	4.227	4.227 (1.067)	269692	80.0000	81.1
	114 o-Toluidine	106	4.238	4.238 (1.070)	741365	80.0000	79.2
	116 a,a-Dimethylphenethylamine	58	4.702	4.702 (0.973)	1206453	80.0000	82.4
	118 2,6-Dichlorophenol	162	4.873	4.873 (1.008)	377353	80.0000	82.1
	119 Hexachloropropene	213	4.902	4.902 (1.015)	324064	80.0000	81.8
	121 N-Nitrosodi-n-butylamine	84	5.073	5.073 (1.050)	334773	80.0000	82.2
	122 Safrole	162	5.243	5.243 (1.085)	373812	80.0000	79.4
	123 1,2,4,5-Tetrachlorobenzene	216	5.449	5.449 (0.896)	463868	80.0000	79.0
	124 Isosafrole	162	5.613	5.613 (0.923)	401505	80.0000	79.1
	125 1,4-Naphthoquinone	158	5.807	5.807 (0.955)	357384	80.0000	87.0
	126 m-Dinitrobenzene	168	5.883	5.883 (0.967)	136457	80.0000	79.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127	Pentachlorobenzene	250	6.195	6.195	(1.018)	437204	80.0000	79.8
128	1-Naphthylamine	143	6.277	6.277	(1.032)	845900	80.0000	77.7
129	2-Naphthylamine	143	6.324	6.324	(1.040)	806167	80.0000	75.5
130	2,3,4,6-Tetrachlorophenol	232	6.295	6.295	(1.035)	235725	80.0000	84.3
131	5-Nitro-o-toluidine	152	6.447	6.447	(1.060)	257953	80.0000	84.4
137	Phenacetin	108	6.688	6.688	(0.947)	443970	80.0000	83.7
140	4-Aminobiphenyl	169	6.923	6.923	(0.980)	888503	80.0000	77.7
141	Pentachloronitrobenzene	237	6.941	6.941	(0.983)	108829	80.0000	82.7
142	Pronamide	173	6.929	6.929	(0.981)	384910	80.0000	78.2
143	Dinoseb	211	7.017	7.017	(0.993)	182650	80.0000	81.8
146	4-Nitroquinoline-1-oxide	101	7.529	7.529	(1.066)	35665	80.0000	69.3
147	Methapyrilene	58	7.540	7.540	(1.067)	565261	80.0000	70.7
149	Aramite	185	7.922	7.922	(1.121)	57260	80.0000	81.8
151	p-(Dimethylamino)azobenzene	120	8.052	8.052	(0.920)	348099	80.0000	83.7
153	3,3'-Dimethylbenzidine	212	8.269	8.269	(0.945)	490744	80.0000	77.4
155	2-Acetylaminofluorene	181	8.451	8.451	(0.966)	288075	80.0000	81.8
157	7,12Dimethylbenz(a)anthracene	256	9.779	9.779	(0.949)	361856	80.0000	84.1
158	3-Methylcholanthrene	268	10.695	10.695	(1.038)	306373	80.0000	84.4


Data File: /chem/MSD6.i/s062905.s.b/s6f2939.d
Date : 29-JUN-2005 23:24
Client ID: 168 ICAL080
Sample Info: IUBN050520-09180 PPMI1ISWMFI1168 ICAL
Column phase: J & W DB-5MS
Instrument: MSD6.i
Operator: EED
Column diameter: 0.20
Page 1
Y (x10^6)
Min
-Methyl methacrylate
-Ethyl methacrylate
-2-Picoline
-N-Nitrosomethylethylamine
-Methyl methanesulfonate
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Pentachloroethane
-1,4-Dichlorobenzene-d4
-N-Nitrosomorpholine+
-a,a-Dimethylphenethylamin
-Naphthalene-d8
-Hexachloropropene
-N-Nitrosodi-n-butylamine
-Safrole
-Isosafrole
-1,4-Naphthoquinone
-m-Dinitrobenzene
-Acenaphthene-d10
-Pentachlorobenzene
-5-Nitro-o-toluidine
-Phenacetin
-Dinoseb
-Phenanthrene-d10
4-Aminobiphenyl+
-4-Nitroquinoline-1-oxide+
-Aramite
-p-(Dimethylamino)azobenze
-3,3'-Dimethylbenzidine
-2-Acetylaminofluorene
-Chrysene-d12
-7,12Dimethylbenz(a)anthra
-Perylene-d12
-3-Methylcholanthrene
/chem/MSD6.i/s062905.s.b/s6f2939.d

General Engineering Laboratories, LLC

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Data file : /chem/MSD6.i/s062905.s.b/s6f2940.d
Lab Smp Id: UBN050520-10 Client Smp ID: 168 ICAL100
Inj Date : 29-JUN-2005 23:45
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050520-10|100 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:04 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 02:34 Cal File: s6f2948.d
Als bottle: 35 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

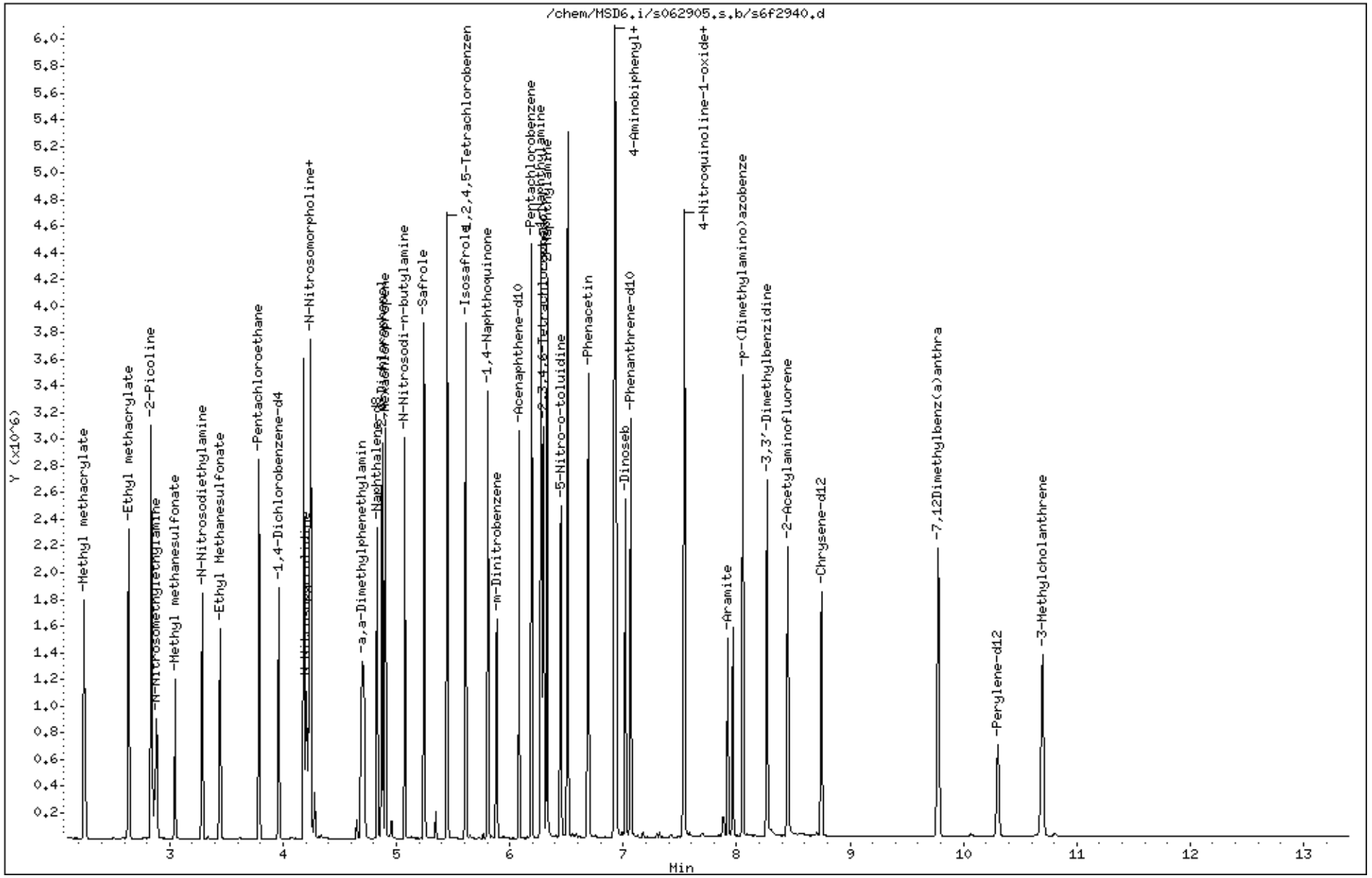
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.961	3.961	(1.000)	210853	40.0000	
* 29 Naphthalene-d8	136	4.831	4.831	(1.000)	790850	40.0000	
* 46 Acenaphthene-d10	164	6.082	6.082	(1.000)	472085	40.0000	
* 67 Phenanthrene-d10	188	7.063	7.063	(1.000)	758353	40.0000	
* 91 Chrysene-d12	240	8.750	8.750	(1.000)	584984	40.0000	
* 98 Perylene-d12	264	10.307	10.307	(1.000)	366255	40.0000	
103 Methyl methacrylate	100	2.240	2.240	(0.565)	139778	100.000	98.4
104 Ethyl methacrylate	69	2.639	2.639	(0.666)	549362	100.000	98.2
105 2-Picoline	93	2.839	2.839	(0.717)	724600	100.000	96.9
106 N-Nitrosomethylethylamine	88	2.886	2.886	(0.729)	319441	100.000	102
107 Methyl methanesulfonate	80	3.050	3.050	(0.770)	336776	100.000	98.9
108 N-Nitrosodiethylamine	102	3.285	3.285	(0.829)	309577	100.000	100
109 Ethyl Methanesulfonate	79	3.444	3.444	(0.869)	476317	100.000	99.6
110 Pentachloroethane	167	3.785	3.785	(0.956)	254056	100.000	98.1
111 N-Nitrosopyrrolidine	100	4.208	4.208	(1.062)	335468	100.000	104
113 N-Nitrosomorpholine	56	4.231	4.231	(1.068)	358598	100.000	99.8
114 o-Toluidine	106	4.243	4.243	(1.071)	967329	100.000	95.7
116 a,a-Dimethylphenethylamine	58	4.701	4.701	(0.973)	1693236	100.000	106
118 2,6-Dichlorophenol	162	4.878	4.878	(1.010)	492849	100.000	98.3
119 Hexachloropropene	213	4.901	4.901	(1.015)	442370	100.000	102
121 N-Nitrosodi-n-butylamine	84	5.077	5.077	(1.051)	449580	100.000	101
122 Safrole	162	5.242	5.242	(1.085)	506399	100.000	98.6
123 1,2,4,5-Tetrachlorobenzene	216	5.448	5.448	(0.896)	601392	100.000	92.1
124 Isosafrole	162	5.612	5.612	(0.923)	540547	100.000	95.8
125 1,4-Naphthoquinone	158	5.806	5.806	(0.955)	489123	100.000	107
126 m-Dinitrobenzene	168	5.888	5.888	(0.968)	199128	100.000	102

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127	Pentachlorobenzene	250	6.194	6.194	(1.018)	575186	100.000	94.5
128	1-Naphthylamine	143	6.276	6.276	(1.032)	1124769	100.000	93.0
129	2-Naphthylamine	143	6.329	6.329	(1.041)	1102922	100.000	92.9
130	2,3,4,6-Tetrachlorophenol	232	6.294	6.294	(1.035)	323131	100.000	104
131	5-Nitro-o-toluidine	152	6.452	6.452	(1.061)	376360	100.000	111
137	Phenacetin	108	6.693	6.693	(0.948)	632091	100.000	106
140	4-Aminobiphenyl	169	6.922	6.922	(0.980)	1187564	100.000	92.5
141	Pentachloronitrobenzene	237	6.940	6.940	(0.983)	150656	100.000	102
142	Pronamide	173	6.934	6.934	(0.982)	512028	100.000	92.6
143	Dinoseb	211	7.016	7.016	(0.993)	293391	100.000	114
146	4-Nitroquinoline-1-oxide	101	7.528	7.528	(1.066)	50477	100.000	87.3
147	Methapyrilene	58	7.539	7.539	(1.067)	828168	100.000	92.2
149	Aramite	185	7.921	7.921	(1.121)	88782	100.000	113
151	p-(Dimethylamino)azobenzene	120	8.056	8.056	(0.921)	516417	100.000	99.1
153	3,3'-Dimethylbenzidine	212	8.268	8.268	(0.945)	773641	100.000	97.3
155	2-Acetylaminofluorene	181	8.450	8.450	(0.966)	456548	100.000	102
157	7,12Dimethylbenz(a)anthracene	256	9.778	9.778	(0.949)	585680	100.000	107
158	3-Methylcholanthrene	268	10.700	10.700	(1.038)	498564	100.000	108

Data File: /chem/MSD6.i/s062905.s.b/s6f2940.d
Date : 29-JUN-2005 23:45
Client ID: 168 ICAL100
Sample Info: !UBN050520-10!100 PPM!1!SVMF!1!168 ICAL

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20

Column phase: J & W DB-5MS



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Data file : /chem/MSD6.i/s062905.s.b/s6f2941.d
Lab Smp Id: UBN050520-11 Client Smp ID: 168 ICAL120
Inj Date : 30-JUN-2005 00:07
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050520-11|120 PPM|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 30-Jun-2005 21:04 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 02:56 Cal File: s6f2949.d
Als bottle: 36 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

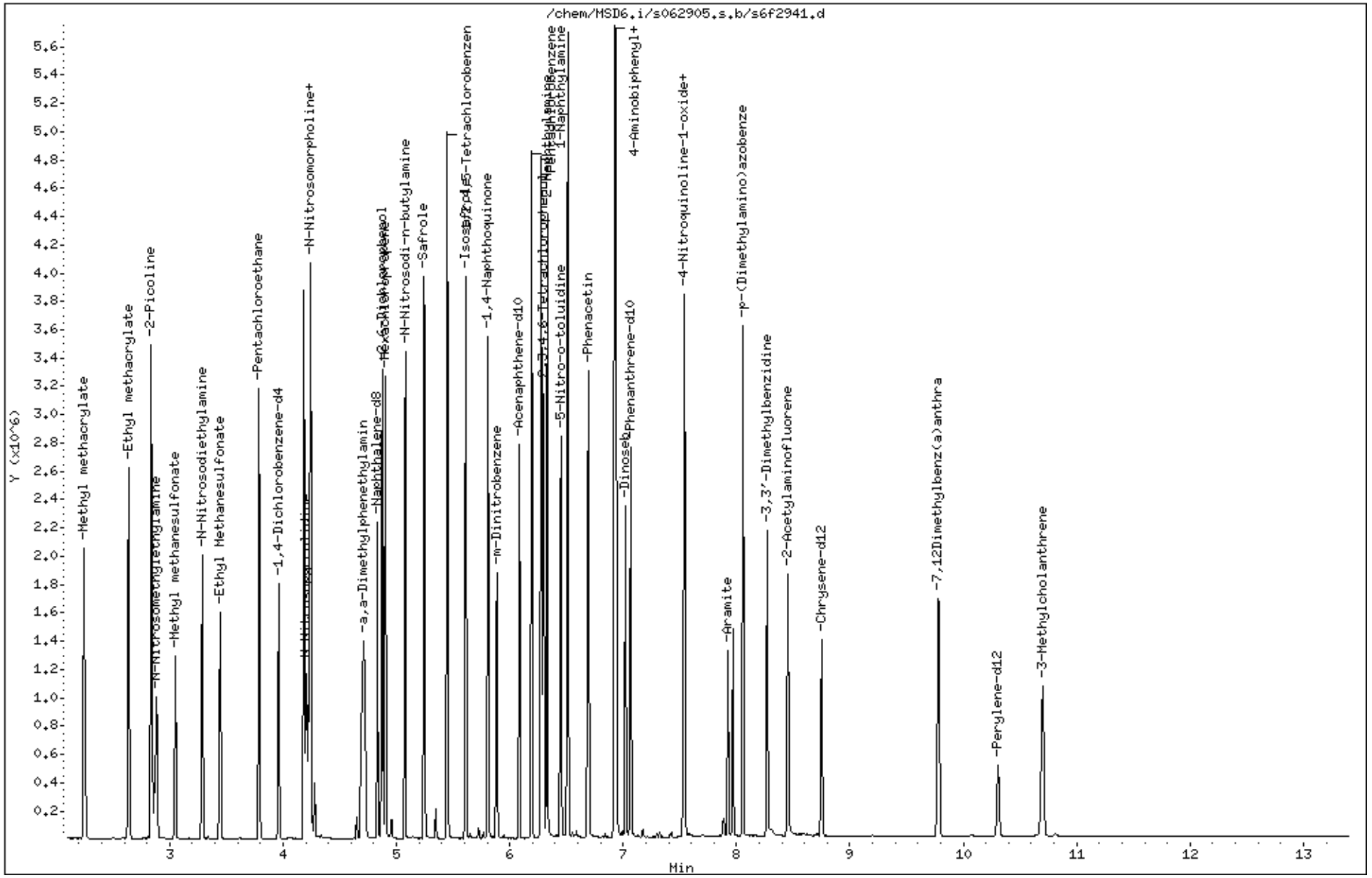
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)	
* 10 1,4-Dichlorobenzene-d4	152	3.962	3.962	(1.000)	201211	40.0000		
* 29 Naphthalene-d8	136	4.831	4.831	(1.000)	759361	40.0000		
* 46 Acenaphthene-d10	164	6.083	6.083	(1.000)	432907	40.0000		
* 67 Phenanthrene-d10	188	7.064	7.064	(1.000)	681092	40.0000		
* 91 Chrysene-d12	240	8.750	8.750	(1.000)	417609	40.0000		
* 98 Perylene-d12	264	10.307	10.307	(1.000)	251600	40.0000		
103 Methyl methacrylate	100	2.240	2.240	(0.565)	161559	120.000	119	
104 Ethyl methacrylate	69	2.640	2.640	(0.666)	622447	120.000	116	
105 2-Picoline	93	2.839	2.839	(0.717)	822151	120.000	115	
106 N-Nitrosomethylethylamine	88	2.886	2.886	(0.729)	364976	120.000	122(A)	
107 Methyl methanesulfonate	80	3.051	3.051	(0.770)	364417	120.000	112	
108 N-Nitrosodiethylamine	102	3.286	3.286	(0.829)	351002	120.000	119	
109 Ethyl Methanesulfonate	79	3.444	3.444	(0.869)	539563	120.000	118	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
110	Pentachloroethane	167	3.785	3.785	(0.956)	285562	120.000	116
111	N-Nitrosopyrrolidine	100	4.208	4.208	(1.062)	376523	120.000	122(A)
113	N-Nitrosomorpholine	56	4.232	4.232	(1.068)	395831	120.000	115
114	o-Toluidine	106	4.244	4.244	(1.071)	1066488	120.000	111
116	a,a-Dimethylphenethylamine	58	4.714	4.714	(0.976)	1849821	120.000	120(A)
118	2,6-Dichlorophenol	162	4.878	4.878	(1.010)	547180	120.000	114
119	Hexachloropropene	213	4.902	4.902	(1.015)	478613	120.000	115
121	N-Nitrosodi-n-butylamine	84	5.078	5.078	(1.051)	497852	120.000	116
122	Safrole	162	5.248	5.248	(1.086)	547819	120.000	111
123	1,2,4,5-Tetrachlorobenzene	216	5.448	5.448	(0.896)	671998	120.000	112
124	Isosafrole	162	5.613	5.613	(0.923)	593696	120.000	115
125	1,4-Naphthoquinone	158	5.806	5.806	(0.955)	523380	120.000	125(A)
126	m-Dinitrobenzene	168	5.889	5.889	(0.968)	216550	120.000	120
127	Pentachlorobenzene	250	6.194	6.194	(1.018)	616742	120.000	110
128	1-Naphthylamine	143	6.276	6.276	(1.032)	1171263	120.000	106
129	2-Naphthylamine	143	6.329	6.329	(1.041)	1126691	120.000	104
130	2,3,4,6-Tetrachlorophenol	232	6.294	6.294	(1.035)	341055	120.000	120
131	5-Nitro-o-toluidine	152	6.453	6.453	(1.061)	399149	120.000	128(A)
137	Phenacetin	108	6.694	6.694	(0.948)	642682	120.000	120(A)
140	4-Aminobiphenyl	169	6.923	6.923	(0.980)	1208233	120.000	105
141	Pentachloronitrobenzene	237	6.940	6.940	(0.983)	156370	120.000	118
142	Pronamide	173	6.934	6.934	(0.982)	525430	120.000	106
143	Dinoseb	211	7.017	7.017	(0.993)	289938	120.000	124(A)
146	4-Nitroquinoline-1-oxide	101	7.528	7.528	(1.066)	44726	120.000	86.1
147	Methapyrilene	58	7.540	7.540	(1.067)	686682	120.000	85.1
149	Aramite	185	7.927	7.927	(1.122)	79541	120.000	113
151	p-(Dimethylamino)azobenzene	120	8.057	8.057	(0.921)	469310	120.000	126(A)
153	3,3'-Dimethylbenzidine	212	8.268	8.268	(0.945)	605795	120.000	107
155	2-Acetylaminofluorene	181	8.456	8.456	(0.966)	378779	120.000	118
157	7,12Dimethylbenz(a)anthracene	256	9.784	9.784	(0.949)	468241	120.000	125(A)
158	3-Methylcholanthrene	268	10.701	10.701	(1.038)	406589	120.000	129(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD6.i/s062905.s.b/s6f2941.d
Date : 30-JUN-2005 00:07
Client ID: 168 ICAL120
Instrument: MSD6.i
Sample Info: !UBN050520-11!120 PPM!1!SVMF!1!168 ICAL
Volume Injected (uL): 0.5
Operator: EED
Column phase: J & W DB-5MS
Column diameter: 0.20



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 29-JUN-2005 14:00
Lab File ID: s6f2912.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050603-04 Quant Type: ISTD
Method: /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.09768	1.00825	1.00825	0.000	-8.14647	60.00000	Averaged	
$ 5 Phenol-d5	1.23994	1.21962	1.21962	0.000	-1.63839	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.26307	0.28225	0.28225	0.000	7.29009	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	1.01157	1.08500	1.08500	0.000	7.25904	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.16875	0.17138	0.17138	0.000	1.56076	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.75676	0.86347	0.86347	0.000	14.10079	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.58424	0.61517	0.61517	0.000	5.29287	60.00000	Averaged	
2 Pyridine	1.13458	1.16065	1.16065	0.000	2.29737	60.00000	Averaged	
6 Phenol	1.24409	1.24370	1.24370	0.001	-0.03151	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	1.20358	1.14533	1.14533	0.000	-4.83964	60.00000	Averaged	
8 2-Chlorophenol	1.05565	1.06802	1.06802	0.000	1.17187	60.00000	Averaged	
203 n-Decane	1.21357	1.19724	1.19724	0.000	-1.34582	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.21334	1.22306	1.22306	0.000	0.80110	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.19045	1.23694	1.23694	0.001	3.90552	20.00000	Averaged	ccc
12 Benzyl alcohol	0.67805	0.63957	0.63957	0.000	-5.67574	60.00000	Averaged	
13 1,2-Dichlorobenzene	1.12007	1.13037	1.13037	0.000	0.92004	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	1.65740	1.78478	1.78478	0.000	7.68564	60.00000	Averaged	
15 o-Cresol	0.82057	0.81092	0.81092	0.000	-1.17621	60.00000	Averaged	
16 Acetophenone	1.35576	1.39607	1.39607	0.000	2.97382	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.77475	0.78775	0.78775	0.050	1.67803	60.00000	Averaged	spcc
18 m,p-Cresols	1.18299	1.27494	1.27494	0.000	7.77250	60.00000	Averaged	
19 Hexachloroethane	0.45174	0.46197	0.46197	0.000	2.26376	60.00000	Averaged	
21 Nitrobenzene	0.23640	0.25774	0.25774	0.000	9.02829	60.00000	Averaged	
22 Isophorone	0.48994	0.48856	0.48856	0.000	-0.28203	60.00000	Averaged	
23 2-Nitrophenol	0.12074	0.13113	0.13113	0.001	8.60377	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	0.26636	0.26441	0.26441	0.000	-0.73162	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.30057	0.33668	0.33668	0.000	12.01586	60.00000	Averaged	
26 2,4-Dichlorophenol	0.20538	0.22230	0.22230	0.001	8.23676	20.00000	Averaged	ccc
27 Benzoic acid	0.14978	0.11747	0.11747	0.000	-21.56684	60.00000	Averaged	
28 1,2,4-Trichlorobenzene	0.23445	0.25802	0.25802	0.000	10.04997	60.00000	Averaged	
30 Naphthalene	0.74852	0.78930	0.78930	0.000	5.44794	60.00000	Averaged	
204 alpha-Terpineol	0.21878	0.22277	0.22277	0.000	1.82435	60.00000	Averaged	
189 Caprolactam	0.07783	0.08525	0.08525	0.000	9.52557	60.00000	Averaged	
32 Hexachlorobutadiene	0.15875	0.16016	0.16016	0.001	0.89209	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.20666	0.21905	0.21905	0.001	5.99429	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.47160	0.51467	0.51467	0.000	9.13102	60.00000	Averaged	

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 29-JUN-2005 14:00
Lab File ID: s6f2912.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050603-04 Quant Type: ISTD
Method: /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.44638	0.49074	0.49074	0.000	9.93725	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.31478	0.33376	0.33376	0.050	6.02778	60.00000	Averaged spcc
208 1,1'Biphenyl	1.09640	1.19222	1.19222	0.000	8.73957	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.30291	0.30832	0.30832	0.001	1.78831	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31140	0.32101	0.32101	0.000	3.08588	60.00000	Averaged
40 2-Chloronaphthalene	0.87251	0.92818	0.92818	0.000	6.38069	60.00000	Averaged
43 Dimethylphthalate	1.02147	1.03339	1.03339	0.000	1.16717	60.00000	Averaged
44 2,6-Dinitrotoluene	40.91485	40.00000	0.21377	0.000	2.28711	60.00000	Linear
45 Acenaphthylene	1.36486	1.44964	1.44964	0.000	6.21133	60.00000	Averaged
47 Acenaphthene	0.84194	0.87320	0.87320	0.001	3.71198	20.00000	Averaged ccc
48 2,4-Dinitrophenol	42.99627	40.00000	0.06934	0.050	7.49067	60.00000	Linear spcc
49 Dibenzofuran	1.18552	1.26593	1.26593	0.000	6.78326	60.00000	Averaged
50 2,4-Dinitrotoluene	41.96014	40.00000	0.27052	0.000	4.90036	60.00000	Linear
51 Diethylphthalate	0.98113	1.04265	1.04265	0.000	6.27076	60.00000	Averaged
52 4-Nitrophenol	39.15261	40.00000	0.16161	0.050	-2.11848	60.00000	Linear spcc
53 Fluorene	0.94091	0.99029	0.99029	0.000	5.24844	60.00000	Averaged
54 4-Chlorophenylphenylether	0.50639	0.58337	0.58337	0.000	15.20181	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	44.56619	40.00000	0.08888	0.000	11.41547	60.00000	Linear
133 Diphenylamine	0.52686	0.56556	0.56556	0.001	7.34434	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.59038	0.66854	0.66854	0.000	13.23874	60.00000	Averaged
59 Tributylphosphate	1.07444	1.18159	1.18159	0.000	9.97223	60.00000	Averaged
61 4-Bromophenylphenylether	0.17318	0.22023	0.22023	0.000	27.16750	60.00000	Averaged
63 Hexachlorobenzene	0.22008	0.23418	0.23418	0.000	6.40946	60.00000	Averaged
65 Pentachlorophenol	39.51824	40.00000	0.12478	0.001	-1.20439	20.00000	Linear ccc
206 n-Octadecane	0.40720	0.44524	0.44524	0.000	9.34311	60.00000	Averaged
68 Phenanthrene	0.85111	0.89456	0.89456	0.000	5.10487	60.00000	Averaged
69 Anthracene	0.83799	0.89533	0.89533	0.000	6.84247	60.00000	Averaged
72 Di-n-butylphthalate	0.93010	1.01297	1.01297	0.000	8.91027	60.00000	Averaged
76 Fluoranthene	0.88083	0.91479	0.91479	0.001	3.85610	20.00000	Averaged ccc
79 Pyrene	1.05871	1.18756	1.18756	0.000	12.17098	60.00000	Averaged
85 Butylbenzylphthalate	0.48447	0.48373	0.48373	0.000	-0.15375	60.00000	Averaged
89 Benzo(a)anthracene	0.94863	0.96207	0.96207	0.000	1.41715	60.00000	Averaged
92 Chrysene	0.85558	0.87124	0.87124	0.000	1.83005	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.58174	0.57241	0.57241	0.000	-1.60350	60.00000	Averaged
94 Di-n-octylphthalate	1.15615	1.11075	1.11075	0.001	-3.92650	20.00000	Averaged ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 29-JUN-2005 14:00
Lab File ID: s6f2912.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050603-04 Quant Type: ISTD
Method: /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
95 Benzo(b)fluoranthene	1.00408	0.98879	0.98879	0.000	-1.52284	60.00000	Averaged	
96 Benzo(k)fluoranthene	0.99504	1.05082	1.05082	0.000	5.60619	60.00000	Averaged	
97 Benzo(a)pyrene	0.79897	0.83315	0.83315	0.001	4.27794	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	0.66844	0.69958	0.69958	0.000	4.65930	60.00000	Averaged	
100 Dibenzo(a,h)anthracene	0.55593	0.57497	0.57497	0.000	3.42427	60.00000	Averaged	
101 Benzo(ghi)perylene	0.54335	0.56912	0.56912	0.000	4.74276	60.00000	Averaged	

General Engineering Laboratories, LLC

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Data file : /chem/MSD6.i/s062905.s.b/s6f2912.d
Lab Smp Id: UBN050603-04 Client Smp ID: BNAICV
Inj Date : 29-JUN-2005 14:00
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050603-04|40 PPM|1|SVMF|1|BNA ICV
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s062905.s.b/MSD6-8270-062905.m
Meth Date : 08-Jul-2005 02:21 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

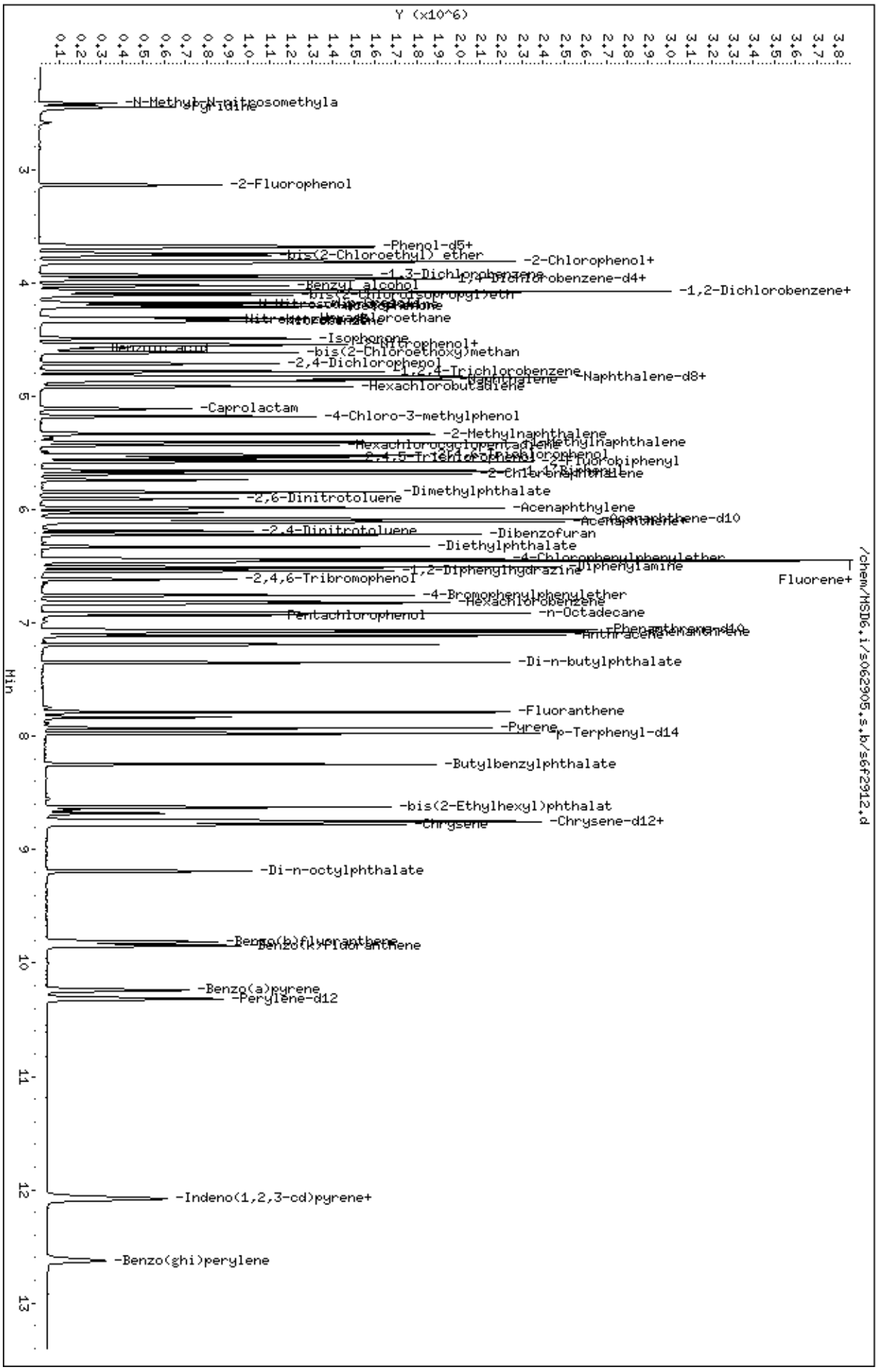
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.965	3.965	(1.000)	231381	40.0000	
* 29 Naphthalene-d8	136	4.835	4.835	(1.000)	916519	40.0000	
* 46 Acenaphthene-d10	164	6.086	6.086	(1.000)	492218	40.0000	
* 67 Phenanthrene-d10	188	7.061	7.061	(1.000)	790593	40.0000	
* 91 Chrysene-d12	240	8.759	8.759	(1.000)	628321	40.0000	
* 98 Perylene-d12	264	10.316	10.316	(1.000)	438307	40.0000	
$ 3 2-Fluorophenol	112	3.137	3.137	(0.791)	233291	40.0000	36.7
$ 5 Phenol-d5	99	3.665	3.665	(0.924)	282197	40.0000	39.3
$ 20 Nitrobenzene-d5	82	4.329	4.329	(0.895)	258689	40.0000	42.9
$ 39 2-Fluorobiphenyl	172	5.575	5.575	(0.916)	534055	40.0000	42.9
$ 60 2,4,6-Tribromophenol	329	6.615	6.615	(1.087)	84358	40.0000	40.6
$ 81 p-Terphenyl-d14	244	7.978	7.978	(0.911)	542537	40.0000	45.6
1 N-Methyl-N-nitrosomethylamine	74	2.414	2.414	(0.609)	142338	40.0000	42.1

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
2	Pyridine	79	2.449	2.449	(0.618)	268552	40.0000	40.9
6	Phenol	94	3.677	3.677	(0.927)	287769	40.0000	40.0
7	bis(2-Chloroethyl) ether	93	3.759	3.759	(0.948)	265007	40.0000	38.1
8	2-Chlorophenol	128	3.824	3.824	(0.964)	247120	40.0000	40.5
203	n-Decane	43	3.806	3.806	(0.960)	277019	40.0000	39.5
9	1,3-Dichlorobenzene	146	3.930	3.930	(0.991)	282993	40.0000	40.3
11	1,4-Dichlorobenzene	146	3.977	3.977	(1.003)	286204	40.0000	41.6
12	Benzyl alcohol	108	4.024	4.024	(1.015)	147984	40.0000	37.7
13	1,2-Dichlorobenzene	146	4.077	4.077	(1.028)	261547	40.0000	40.4
14	bis(2-Chloroisopropyl)ether	45	4.106	4.106	(1.036)	412965	40.0000	43.1
15	o-Cresol	107	4.077	4.077	(1.028)	187631	40.0000	39.5
16	Acetophenone	105	4.212	4.212	(1.062)	323025	40.0000	41.2
17	N-Nitrosodipropylamine	70	4.200	4.200	(1.059)	182270	40.0000	40.7
18	m,p-Cresols	107	4.177	4.177	(1.053)	294997	40.0000	43.1(H)
19	Hexachloroethane	117	4.312	4.312	(1.087)	106891	40.0000	40.9
21	Nitrobenzene	77	4.341	4.341	(0.898)	236227	40.0000	43.6
22	Isophorone	82	4.494	4.494	(0.930)	447773	40.0000	39.9
23	2-Nitrophenol	139	4.553	4.553	(0.942)	120184	40.0000	43.4
24	2,4-Dimethylphenol	122	4.541	4.541	(0.939)	242334	40.0000	39.7
25	bis(2-Chloroethoxy)methane	93	4.611	4.611	(0.954)	308578	40.0000	44.8
26	2,4-Dichlorophenol	162	4.717	4.717	(0.976)	203740	40.0000	43.3
27	Benzoic acid	105	4.576	4.576	(0.947)	107667	40.0000	31.4
28	1,2,4-Trichlorobenzene	180	4.782	4.782	(0.989)	236478	40.0000	44.0
30	Naphthalene	128	4.852	4.852	(1.004)	723405	40.0000	42.2(Q)
204	alpha-Terpineol	59	4.823	4.823	(0.998)	204173	40.0000	40.7
189	Caprolactam	113	5.111	5.111	(1.057)	78131	40.0000	43.8
32	Hexachlorobutadiene	225	4.911	4.911	(1.016)	146794	40.0000	40.4
33	4-Chloro-3-methylphenol	107	5.175	5.175	(1.070)	200765	40.0000	42.4
34	2-Methylnaphthalene	142	5.334	5.334	(1.103)	471702	40.0000	43.6
35	1-Methylnaphthalene	142	5.404	5.404	(1.118)	449769	40.0000	44.0
36	Hexachlorocyclopentadiene	237	5.434	5.434	(0.893)	164282	40.0000	42.4
208	1,1'Biphenyl	154	5.657	5.657	(0.930)	586831	40.0000	43.5
37	2,4,6-Trichlorophenol	196	5.516	5.516	(0.906)	151763	40.0000	40.7
38	2,4,5-Trichlorophenol	196	5.545	5.545	(0.911)	158006	40.0000	41.2
40	2-Chloronaphthalene	162	5.687	5.687	(0.934)	456867	40.0000	42.6
43	Dimethylphthalate	163	5.845	5.845	(0.960)	508652	40.0000	40.5
44	2,6-Dinitrotoluene	165	5.904	5.904	(0.970)	105222	40.0000	40.9
45	Acenaphthylene	152	5.986	5.986	(0.984)	713539	40.0000	42.5
47	Acenaphthene	154	6.110	6.110	(1.004)	429803	40.0000	41.5
48	2,4-Dinitrophenol	184	6.098	6.098	(1.002)	34131	40.0000	43.0
49	Dibenzofuran	168	6.221	6.221	(1.022)	623115	40.0000	42.7
50	2,4-Dinitrotoluene	165	6.186	6.186	(1.016)	133154	40.0000	42.0
51	Diethylphthalate	149	6.327	6.327	(1.040)	513212	40.0000	42.5
52	4-Nitrophenol	139	6.110	6.110	(1.004)	79549	40.0000	39.2
53	Fluorene	166	6.456	6.456	(1.061)	487440	40.0000	42.1
54	4-Chlorophenylphenylether	204	6.433	6.433	(1.057)	287147	40.0000	46.1
55	2-Methyl-4,6-dinitrophenol	198	6.468	6.468	(0.916)	70267	40.0000	44.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.509	6.509	(0.922)	447126	40.0000	42.9
58	1,2-Diphenylhydrazine	77	6.538	6.538	(0.926)	528541	40.0000	45.3
59	Tributylphosphate	99	6.450	6.450	(1.060)	581600	40.0000	44.0
61	4-Bromophenylphenylether	248	6.756	6.756	(0.957)	174114	40.0000	50.9
63	Hexachlorobenzene	284	6.815	6.815	(0.965)	185142	40.0000	42.6
65	Pentachlorophenol	266	6.932	6.932	(0.982)	98647	40.0000	39.5
206	n-Octadecane	57	6.909	6.909	(0.978)	352006	40.0000	43.7
68	Phenanthrene	178	7.079	7.079	(1.002)	707232	40.0000	42.0
69	Anthracene	178	7.108	7.108	(1.007)	707845	40.0000	42.7
72	Di-n-butylphthalate	149	7.349	7.349	(1.041)	800850	40.0000	43.6
76	Fluoranthene	202	7.790	7.790	(1.103)	723227	40.0000	41.5
79	Pyrene	202	7.931	7.931	(0.905)	746171	40.0000	44.9
85	Butylbenzylphthalate	149	8.248	8.248	(0.942)	303936	40.0000	39.9
89	Benzo(a)anthracene	228	8.748	8.748	(0.999)	604490	40.0000	40.6
92	Chrysene	228	8.777	8.777	(1.002)	547418	40.0000	40.7
93	bis(2-Ethylhexyl)phthalate	149	8.624	8.624	(0.985)	359658	40.0000	39.4
94	Di-n-octylphthalate	149	9.194	9.194	(0.891)	486850	40.0000	38.4
95	Benzo(b)fluoranthene	252	9.811	9.811	(0.951)	433392	40.0000	39.4
96	Benzo(k)fluoranthene	252	9.846	9.846	(0.954)	460583	40.0000	42.2
97	Benzo(a)pyrene	252	10.240	10.240	(0.993)	365177	40.0000	41.7
99	Indeno(1,2,3-cd)pyrene	276	12.073	12.073	(1.170)	306632	40.0000	41.9
100	Dibenzo(a,h)anthracene	278	12.085	12.085	(1.171)	252014	40.0000	41.4(T)
101	Benzo(ghi)perylene	276	12.625	12.625	(1.224)	249449	40.0000	41.9(T)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.


Data File: /chem/MSD6.i/s062905.s.b/s6f2912.d
Date : 29-JUN-2005 14:00
Client ID: BNAICV
Sample Info: IUBN050603-04140 PPMIISWMFIIIBNA ICV
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS
Instrument: MSD6.i
Operator: EED
Column diameter: 0.20
Page 1
Y (x10^6)
Min
-N-Methyl-N-nitrosomethyla
-2-Fluorophenol
-Phenol-d5+
-bis(2-Chloroethyl) ether
-2-Chlorophenol+
-1,3-Dichlorobenzene
-Benzyl alcohol
-1,2-Dichlorobenzene+
-Isophorone
-2-Nitrophenol+
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol
-Naphthalene-d8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-methylphenol
-2-Methylnaphthalene
-2-Fluorobiphenyl
-Dimethylphthalate
-2,6-Dinitrotoluene
-Acenaphthylene
-Dibenzofuran
-2,4-Dinitrotoluene
-Diethylphthalate
-4-Chlorophenylphenylether
-Diphenylamine
-2,4,6-Tribromophenol
-4-Bromophenylphenylether
-Hexachlorobenzene
-n-Octadecane
Pentachlorophenol
-Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-bis(2-Ethylhexyl)phthalat
-Chrysene-d12+
-Di-n-octylphthalate
-Benzo(a)pyrene
-Perylene-d12
-Indeno(1,2,3-cd)pyrene+
-Benzo(ghi)perylene
/chem/MSD6.i/s062905.s.b/s6f2912.d
Fluorene+
p-Terphenyl-d14

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-JUL-2005 18:01
Lab File ID: s6g0803.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050707-02.2 Quant Type: ISTD
Method: /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Aniline	1.76517	1.63260	1.63260	0.000	-7.51075	60.00000	Averaged
209 Benzaldehyde	0.94420	0.93124	0.93124	0.000	-1.37228	60.00000	Averaged
31 4-Chloroaniline	0.37731	0.34657	0.34657	0.000	-8.14721	60.00000	Averaged
205 2,3-Dichloroaniline	0.50229	0.49990	0.49990	0.000	-0.47477	60.00000	Averaged
42 o-Nitroaniline	0.24214	0.25179	0.25179	0.000	3.98829	60.00000	Averaged
41 m-Nitroaniline	0.22633	0.22252	0.22252	0.000	-1.68400	60.00000	Averaged
56 p-Nitroaniline	40.31562	40.00000	0.20537	0.000	0.78905	60.00000	Linear
207 Atrazine	0.05389	0.05206	0.05206	0.000	-3.38761	60.00000	Averaged
77 Benzidine	0.53445	0.65855	0.65855	0.000	23.22069	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.29389	0.35199	0.35199	0.000	19.76888	60.00000	Averaged
173 Carbazole	0.85876	0.82753	0.82753	0.000	-3.63666	60.00000	Averaged

General Engineering Laboratories, LLC

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Data file : /chem/MSD6.i/s070805.s.b/s6g0803.d
Lab Smp Id: UBN050707-02.2 Client Smp ID: ANBZCVS
Inj Date : 08-JUL-2005 18:01
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050707-02.2|40 ppm|1|SVMF|1|ANBZ CVS
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 11-Jul-2005 13:00 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

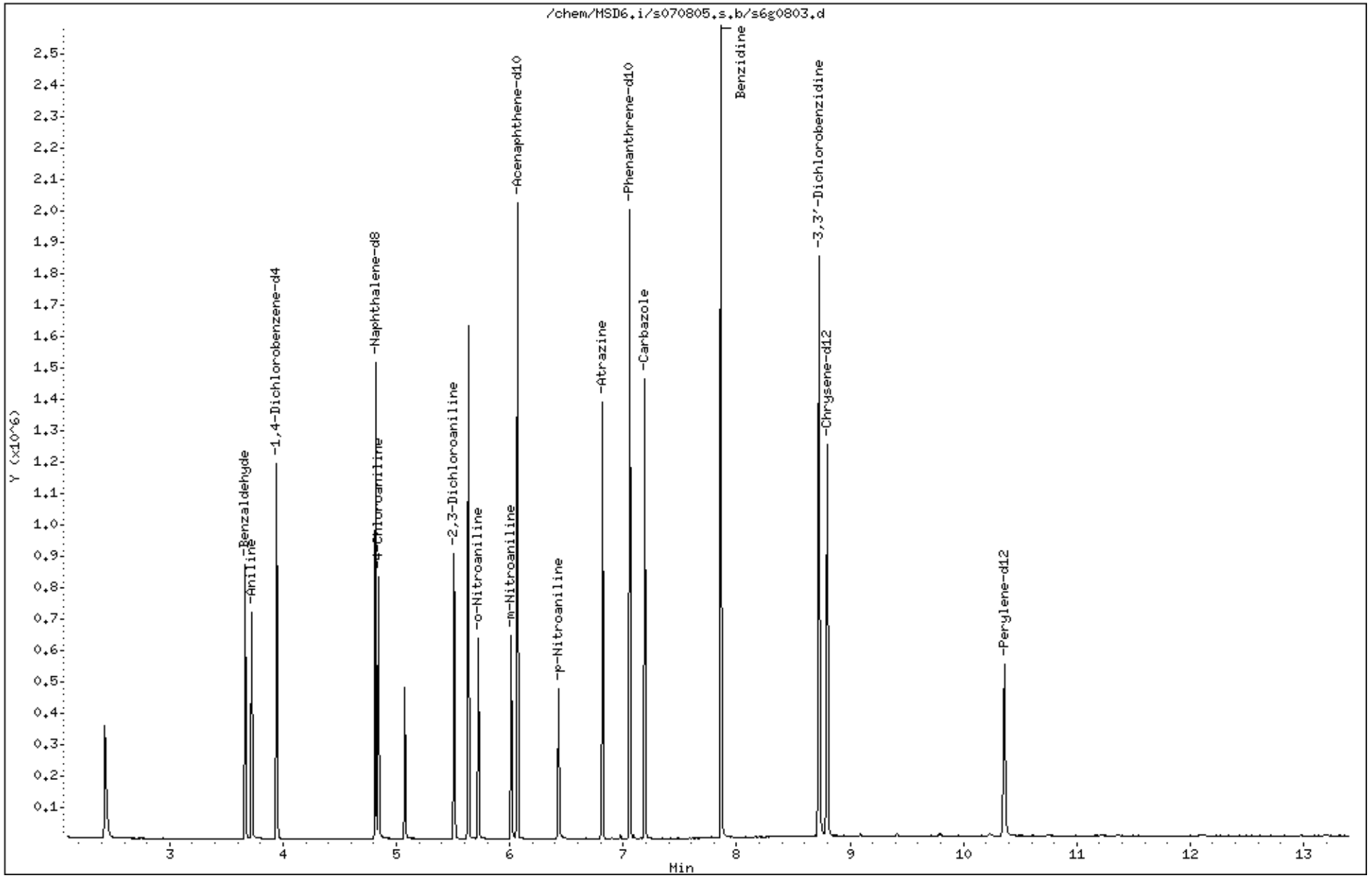
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.944	3.944	(1.000)	132723	40.0000	
* 29 Naphthalene-d8	136	4.813	4.813	(1.000)	515687	40.0000	
* 46 Acenaphthene-d10	164	6.065	6.065	(1.000)	314934	40.0000	
* 67 Phenanthrene-d10	188	7.058	7.058	(1.000)	522060	40.0000	
* 91 Chrysene-d12	240	8.797	8.797	(1.000)	420645	40.0000	
* 98 Perylene-d12	264	10.365	10.365	(1.000)	305311	40.0000	
4 Aniline	93	3.726	3.726	(0.945)	216683	40.0000	37.0
209 Benzaldehyde	77	3.667	3.667	(0.930)	123597	40.0000	39.4
31 4-Chloroaniline	127	4.843	4.843	(1.006)	178721	40.0000	36.7
205 2,3-Dichloroaniline	161	5.506	5.506	(0.908)	157437	40.0000	39.8
42 o-Nitroaniline	65	5.724	5.724	(0.944)	79298	40.0000	41.6
41 m-Nitroaniline	138	6.012	6.012	(0.991)	70079	40.0000	39.3
56 p-Nitroaniline	138	6.429	6.429	(1.060)	64679	40.0000	40.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
207 Atrazine	173	6.817	6.817	(0.966)	27181	40.0000	38.6
77 Benzidine	184	7.862	7.862	(0.894)	692542	100.000	123
90 3,3'-Dichlorobenzidine	252	8.726	8.726	(0.992)	370162	100.000	120
173 Carbazole	167	7.193	7.193	(1.019)	432018	40.0000	38.5

Data File: /chem/MSD6.i/s070805.s.b/s6g0803.d
Date : 08-JUL-2005 18:01
Client ID: ANBZCVS
Sample Info: |UBN050707-02.2|40 ppm|1|SVMF|1|ANBZ CVS
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-JUL-2005 18:22
Lab File ID: s6g0804.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050707-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.09768	1.01589	1.01589	0.000	-7.45087	60.00000	Averaged	
$ 5 Phenol-d5	1.23994	1.26701	1.26701	0.000	2.18320	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.26307	0.30939	0.30939	0.000	17.60535	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	1.01157	1.14500	1.14500	0.000	13.19100	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.16875	0.17927	0.17927	0.000	6.23165	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.75676	0.94152	0.94152	0.000	24.41430	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.58424	0.65023	0.65023	0.000	11.29439	60.00000	Averaged	
2 Pyridine	1.13458	1.12426	1.12426	0.000	-0.90988	60.00000	Averaged	
6 Phenol	1.24409	1.28291	1.28291	0.001	3.12012	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	1.20358	1.44896	1.44896	0.000	20.38757	60.00000	Averaged	
8 2-Chlorophenol	1.05565	1.11730	1.11730	0.000	5.83992	60.00000	Averaged	
203 n-Decane	1.21357	1.47663	1.47663	0.000	21.67571	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.21334	1.32094	1.32094	0.000	8.86764	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.19045	1.34523	1.34523	0.001	13.00239	20.00000	Averaged	ccc
12 Benzyl alcohol	0.67805	0.63699	0.63699	0.000	-6.05601	60.00000	Averaged	
13 1,2-Dichlorobenzene	1.12007	1.26186	1.26186	0.000	12.65906	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	1.65740	2.18844	2.18844	0.000	32.04026	60.00000	Averaged	
15 o-Cresol	0.82057	0.88568	0.88568	0.000	7.93530	60.00000	Averaged	
16 Acetophenone	1.35576	1.57714	1.57714	0.000	16.32950	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.77475	0.89072	0.89072	0.050	14.96865	60.00000	Averaged	spcc
18 m,p-Cresols	1.18299	1.27858	1.27858	0.000	8.08007	60.00000	Averaged	
19 Hexachloroethane	0.45174	0.51303	0.51303	0.000	13.56615	60.00000	Averaged	
21 Nitrobenzene	0.23640	0.27489	0.27489	0.000	16.27934	60.00000	Averaged	
22 Isophorone	0.48994	0.51003	0.51003	0.000	4.10102	60.00000	Averaged	
23 2-Nitrophenol	0.12074	0.13538	0.13538	0.001	12.12222	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	0.26636	0.24805	0.24805	0.000	-6.87356	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.30057	0.33781	0.33781	0.000	12.39065	60.00000	Averaged	
26 2,4-Dichlorophenol	0.20538	0.22579	0.22579	0.001	9.93774	20.00000	Averaged	ccc
27 Benzoic acid	0.14978	0.11042	0.11042	0.000	-26.27939	60.00000	Averaged	
28 1,2,4-Trichlorobenzene	0.23445	0.26528	0.26528	0.000	13.14556	60.00000	Averaged	
30 Naphthalene	0.74852	0.79505	0.79505	0.000	6.21629	60.00000	Averaged	
204 alpha-Terpineol	0.21878	0.22430	0.22430	0.000	2.52170	60.00000	Averaged	
189 Caprolactam	0.07783	0.08198	0.08198	0.000	5.33012	60.00000	Averaged	
32 Hexachlorobutadiene	0.15875	0.16985	0.16985	0.001	6.99571	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.20666	0.22384	0.22384	0.001	8.31275	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.47160	0.53330	0.53330	0.000	13.08129	60.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-JUL-2005 18:22
Lab File ID: s6g0804.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050707-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.44638	0.49966	0.49966	0.000	11.93643	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.31478	0.25588	0.25588	0.050	-18.71146	60.00000	Averaged spcc
208 1,1'Biphenyl	1.09640	1.17816	1.17816	0.000	7.45774	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.30291	0.30275	0.30275	0.001	-0.05048	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.31140	0.31467	0.31467	0.000	1.05138	60.00000	Averaged
40 2-Chloronaphthalene	0.87251	0.98094	0.98094	0.000	12.42773	60.00000	Averaged
43 Dimethylphthalate	1.02147	1.10536	1.10536	0.000	8.21274	60.00000	Averaged
44 2,6-Dinitrotoluene	45.34398	40.00000	0.24021	0.000	13.35995	60.00000	Linear
45 Acenaphthylene	1.36486	1.47995	1.47995	0.000	8.43194	60.00000	Averaged
47 Acenaphthene	0.84194	0.90907	0.90907	0.001	7.97253	20.00000	Averaged ccc
48 2,4-Dinitrophenol	36.75293	40.00000	0.05381	0.050	-8.11768	60.00000	Linear spcc
49 Dibenzofuran	1.18552	1.38909	1.38909	0.000	17.17148	60.00000	Averaged
50 2,4-Dinitrotoluene	47.06681	40.00000	0.30994	0.000	17.66703	60.00000	Linear
51 Diethylphthalate	0.98113	1.14995	1.14995	0.000	17.20725	60.00000	Averaged
52 4-Nitrophenol	39.38414	40.00000	0.16273	0.050	-1.53965	60.00000	Linear spcc
53 Fluorene	0.94091	1.10537	1.10537	0.000	17.47834	60.00000	Averaged
54 4-Chlorophenylphenylether	0.50639	0.61914	0.61914	0.000	22.26539	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	40.10106	40.00000	0.07712	0.000	0.25265	60.00000	Linear
133 Diphenylamine	0.52686	0.58815	0.58815	0.001	11.63250	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.59038	0.70239	0.70239	0.000	18.97232	60.00000	Averaged
59 Tributylphosphate	1.07444	1.41680	1.41680	0.000	31.86383	60.00000	Averaged
61 4-Bromophenylphenylether	0.17318	0.23270	0.23270	0.000	34.36531	60.00000	Averaged
63 Hexachlorobenzene	0.22008	0.25038	0.25038	0.000	13.76894	60.00000	Averaged
65 Pentachlorophenol	33.38953	40.00000	0.10330	0.001	-16.52618	20.00000	Linear ccc
206 n-Octadecane	0.40720	0.48829	0.48829	0.000	19.91576	60.00000	Averaged
68 Phenanthrene	0.85111	0.92613	0.92613	0.000	8.81375	60.00000	Averaged
69 Anthracene	0.83799	0.91513	0.91513	0.000	9.20447	60.00000	Averaged
72 Di-n-butylphthalate	0.93010	1.09968	1.09968	0.000	18.23256	60.00000	Averaged
76 Fluoranthene	0.88083	0.90746	0.90746	0.001	3.02403	20.00000	Averaged ccc
79 Pyrene	1.05871	1.21466	1.21466	0.000	14.73011	60.00000	Averaged
85 Butylbenzylphthalate	0.48447	0.51866	0.51866	0.000	7.05708	60.00000	Averaged
89 Benzo(a)anthracene	0.94863	0.98366	0.98366	0.000	3.69245	60.00000	Averaged
92 Chrysene	0.85558	0.90741	0.90741	0.000	6.05716	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	0.58174	0.61201	0.61201	0.000	5.20264	60.00000	Averaged
94 Di-n-octylphthalate	1.15615	1.16868	1.16868	0.001	1.08414	20.00000	Averaged ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-JUL-2005 18:22
Lab File ID: s6g0804.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050707-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
95 Benzo(b)fluoranthene	1.00408	1.05971	1.05971	0.000	5.54102	60.00000	Averaged
96 Benzo(k)fluoranthene	0.99504	1.10451	1.10451	0.000	11.00181	60.00000	Averaged
97 Benzo(a)pyrene	0.79897	0.90240	0.90240	0.001	12.94496	20.00000	Averaged ccc
99 Indeno(1,2,3-cd)pyrene	0.66844	0.71397	0.71397	0.000	6.81120	60.00000	Averaged
100 Dibenzo(a,h)anthracene	0.55593	0.59400	0.59400	0.000	6.84632	60.00000	Averaged
101 Benzo(ghi)perylene	0.54335	0.54224	0.54224	0.000	-0.20346	60.00000	Averaged

General Engineering Laboratories, LLC

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Data file : /chem/MSD6.i/s070805.s.b/s6g0804.d
Lab Smp Id: UBN050707-01.2 Client Smp ID: BNA CVS
Inj Date : 08-JUL-2005 18:22
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050707-01.2|40 ppm|1|SVMF|1|BNA CVS
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 12-Jul-2005 00:53 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

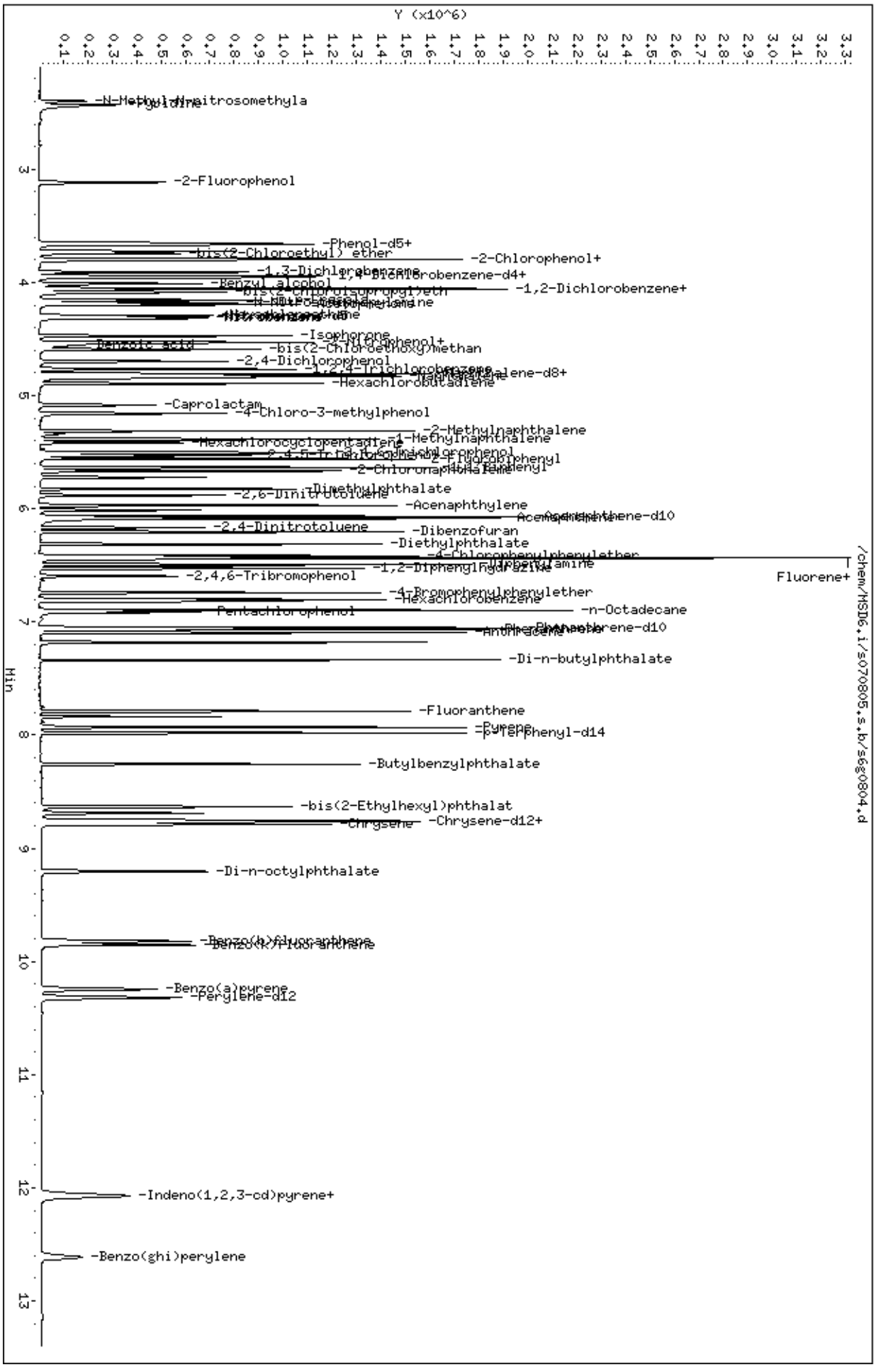
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.943	3.943	(1.000)	131338	40.0000	
* 29 Naphthalene-d8	136	4.813	4.813	(1.000)	567746	40.0000	
* 46 Acenaphthene-d10	164	6.064	6.064	(1.000)	311298	40.0000	
* 67 Phenanthrene-d10	188	7.051	7.051	(1.000)	524376	40.0000	
* 91 Chrysene-d12	240	8.767	8.767	(1.000)	400392	40.0000	
* 98 Perylene-d12	264	10.318	10.318	(1.000)	291662	40.0000	
$ 3 2-Fluorophenol	112	3.115	3.115	(0.790)	133425	40.0000	37.0
$ 5 Phenol-d5	99	3.649	3.649	(0.926)	166406	40.0000	40.9
$ 20 Nitrobenzene-d5	82	4.308	4.308	(0.895)	175654	40.0000	47.0
$ 39 2-Fluorobiphenyl	172	5.559	5.559	(0.917)	356437	40.0000	45.3
$ 60 2,4,6-Tribromophenol	329	6.599	6.599	(1.088)	55805	40.0000	42.5
$ 81 p-Terphenyl-d14	244	7.980	7.980	(0.910)	376977	40.0000	49.8
1 N-Methyl-N-nitrosomethylamine	74	2.398	2.398	(0.608)	85400	40.0000	44.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
2	Pyridine	79	2.427	2.427	(0.616)	147658	40.0000	39.6
6	Phenol	94	3.661	3.661	(0.928)	168495	40.0000	41.2(Q)
7	bis(2-Chloroethyl) ether	93	3.743	3.743	(0.949)	190303	40.0000	48.2
8	2-Chlorophenol	128	3.808	3.808	(0.966)	146744	40.0000	42.3
203	n-Decane	43	3.790	3.790	(0.961)	193937	40.0000	48.7
9	1,3-Dichlorobenzene	146	3.908	3.908	(0.991)	173489	40.0000	43.5
11	1,4-Dichlorobenzene	146	3.955	3.955	(1.003)	176680	40.0000	45.2
12	Benzyl alcohol	108	4.008	4.008	(1.016)	83661	40.0000	37.6
13	1,2-Dichlorobenzene	146	4.061	4.061	(1.030)	165730	40.0000	45.1
14	bis(2-Chloroisopropyl)ether	45	4.090	4.090	(1.037)	287425	40.0000	52.8
15	o-Cresol	107	4.061	4.061	(1.030)	116324	40.0000	43.2
16	Acetophenone	105	4.196	4.196	(1.064)	207139	40.0000	46.5
17	N-Nitrosodipropylamine	70	4.178	4.178	(1.060)	116985	40.0000	46.0
18	m,p-Cresols	107	4.155	4.155	(1.054)	167926	40.0000	43.2
19	Hexachloroethane	117	4.290	4.290	(1.088)	67380	40.0000	45.4
21	Nitrobenzene	77	4.319	4.319	(0.897)	156065	40.0000	46.5
22	Isophorone	82	4.472	4.472	(0.929)	289569	40.0000	41.6
23	2-Nitrophenol	139	4.537	4.537	(0.943)	76861	40.0000	44.8
24	2,4-Dimethylphenol	122	4.525	4.525	(0.940)	140828	40.0000	37.2
25	bis(2-Chloroethoxy)methane	93	4.595	4.595	(0.955)	191791	40.0000	45.0
26	2,4-Dichlorophenol	162	4.695	4.695	(0.976)	128192	40.0000	44.0
27	Benzoic acid	105	4.560	4.560	(0.948)	62688	40.0000	29.5
28	1,2,4-Trichlorobenzene	180	4.766	4.766	(0.990)	150609	40.0000	45.2
30	Naphthalene	128	4.830	4.830	(1.004)	451385	40.0000	42.5(Q)
204	alpha-Terpineol	59	4.807	4.807	(0.999)	127343	40.0000	41.0
189	Caprolactam	113	5.089	5.089	(1.057)	46545	40.0000	42.1
32	Hexachlorobutadiene	225	4.895	4.895	(1.017)	96434	40.0000	42.8
33	4-Chloro-3-methylphenol	107	5.159	5.159	(1.072)	127086	40.0000	43.3
34	2-Methylnaphthalene	142	5.312	5.312	(1.104)	302777	40.0000	45.2
35	1-Methylnaphthalene	142	5.389	5.389	(1.120)	283680	40.0000	44.8
36	Hexachlorocyclopentadiene	237	5.418	5.418	(0.893)	79656	40.0000	32.5
208	1,1'Biphenyl	154	5.635	5.635	(0.929)	366760	40.0000	43.0
37	2,4,6-Trichlorophenol	196	5.500	5.500	(0.907)	94247	40.0000	40.0
38	2,4,5-Trichlorophenol	196	5.530	5.530	(0.912)	97957	40.0000	40.4
40	2-Chloronaphthalene	162	5.665	5.665	(0.934)	305365	40.0000	45.0
43	Dimethylphthalate	163	5.829	5.829	(0.961)	344095	40.0000	43.3
44	2,6-Dinitrotoluene	165	5.882	5.882	(0.970)	74777	40.0000	45.3
45	Acenaphthylene	152	5.970	5.970	(0.984)	460705	40.0000	43.4
47	Acenaphthene	154	6.088	6.088	(1.004)	282991	40.0000	43.2
48	2,4-Dinitrophenol	184	6.082	6.082	(1.003)	16750	40.0000	36.8
49	Dibenzofuran	168	6.205	6.205	(1.023)	432420	40.0000	46.9
50	2,4-Dinitrotoluene	165	6.170	6.170	(1.017)	96483	40.0000	47.1
51	Diethylphthalate	149	6.311	6.311	(1.041)	357978	40.0000	46.9
52	4-Nitrophenol	139	6.094	6.094	(1.005)	50656	40.0000	39.4
53	Fluorene	166	6.440	6.440	(1.062)	344098	40.0000	47.0
54	4-Chlorophenylphenylether	204	6.417	6.417	(1.058)	192738	40.0000	48.9
55	2-Methyl-4,6-dinitrophenol	198	6.446	6.446	(0.914)	40440	40.0000	40.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
133	Diphenylamine	169	6.493	6.493	(0.921)	308412	40.0000	44.6
58	1,2-Diphenylhydrazine	77	6.523	6.523	(0.925)	368315	40.0000	47.6
59	Tributylphosphate	99	6.434	6.434	(1.061)	441048	40.0000	52.7
61	4-Bromophenylphenylether	248	6.740	6.740	(0.956)	122021	40.0000	53.7
63	Hexachlorobenzene	284	6.799	6.799	(0.964)	131292	40.0000	45.5
65	Pentachlorophenol	266	6.916	6.916	(0.981)	54170	40.0000	33.4
206	n-Octadecane	57	6.899	6.899	(0.978)	256050	40.0000	48.0
68	Phenanthrene	178	7.063	7.063	(1.002)	485638	40.0000	43.5
69	Anthracene	178	7.098	7.098	(1.007)	479871	40.0000	43.7
72	Di-n-butylphthalate	149	7.339	7.339	(1.041)	576646	40.0000	47.3
76	Fluoranthene	202	7.786	7.786	(1.104)	475851	40.0000	41.2
79	Pyrene	202	7.933	7.933	(0.905)	486339	40.0000	45.9
85	Butylbenzylphthalate	149	8.256	8.256	(0.942)	207668	40.0000	42.8
89	Benzo(a)anthracene	228	8.755	8.755	(0.999)	393848	40.0000	41.5
92	Chrysene	228	8.785	8.785	(1.002)	363318	40.0000	42.4
93	bis(2-Ethylhexyl)phthalate	149	8.638	8.638	(0.985)	245042	40.0000	42.1
94	Di-n-octylphthalate	149	9.208	9.208	(0.892)	340860	40.0000	40.4
95	Benzo(b)fluoranthene	252	9.819	9.819	(0.952)	309078	40.0000	42.2
96	Benzo(k)fluoranthene	252	9.854	9.854	(0.955)	322144	40.0000	44.4
97	Benzo(a)pyrene	252	10.248	10.248	(0.993)	263196	40.0000	45.2
99	Indeno(1,2,3-cd)pyrene	276	12.069	12.069	(1.170)	208237	40.0000	42.7
100	Dibenzo(a,h)anthracene	278	12.075	12.075	(1.170)	173246	40.0000	42.7(T)
101	Benzo(ghi)perylene	276	12.615	12.615	(1.223)	158152	40.0000	39.9(T)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.



Data File: /chem/MSD6.i/s070805.s.b/s6g0804.d
Date : 08-JUL-2005 18:22
Client ID: BNA CVS
Sample Info: IUBN050707-01,2140 ppm|1|SVMF11|BNA CVS
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-JUL-2005 19:04
Lab File ID: s6g0806.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050621-02 Quant Type: ISTD
Method: /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
103 Methyl methacrylate	0.26959	0.24941	0.24941	0.000	-7.48368	60.00000	Averaged
104 Ethyl methacrylate	1.06151	1.02307	1.02307	0.000	-3.62131	60.00000	Averaged
105 2-Picoline	1.41868	1.32020	1.32020	0.000	-6.94199	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.59696	0.54794	0.54794	0.000	-8.21188	60.00000	Averaged
107 Methyl methanesulfonate	0.64582	0.67113	0.67113	0.000	3.91955	60.00000	Averaged
108 N-Nitrosodiethylamine	0.58538	0.55029	0.55029	0.000	-5.99562	60.00000	Averaged
109 Ethyl Methanesulfonate	0.90768	0.91182	0.91182	0.000	0.45682	60.00000	Averaged
110 Pentachloroethane	0.49119	0.47306	0.47306	0.000	-3.69079	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.61090	0.57039	0.57039	0.000	-6.63079	60.00000	Averaged
113 N-Nitrosomorpholine	0.68132	0.71461	0.71461	0.000	4.88521	60.00000	Averaged
114 o-Toluidine	1.91684	1.90298	1.90298	0.000	-0.72262	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.80834	0.70221	0.70221	0.000	-13.12949	60.00000	Averaged
118 2,6-Dichlorophenol	0.25364	0.24294	0.24294	0.000	-4.21941	60.00000	Averaged
119 Hexachloropropene	0.21878	0.18030	0.18030	0.000	-17.58729	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.22496	0.22202	0.22202	0.000	-1.30978	60.00000	Averaged
122 Safrole	0.25978	0.25522	0.25522	0.000	-1.75851	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.55301	0.55298	0.55298	0.000	-0.00640	60.00000	Averaged
124 Isosafrole	0.47805	0.46787	0.46787	0.000	-2.12932	60.00000	Averaged
125 1,4-Naphthoquinone	0.38674	0.38620	0.38620	0.000	-0.13862	60.00000	Averaged
126 m-Dinitrobenzene	40.63760	40.00000	0.15149	0.000	1.59399	60.00000	Linear
127 Pentachlorobenzene	0.51578	0.52243	0.52243	0.000	1.29082	60.00000	Averaged
128 1-Naphthylamine	1.02520	1.04381	1.04381	0.000	1.81507	60.00000	Averaged
129 2-Naphthylamine	1.00559	1.00212	1.00212	0.000	-0.34513	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.26325	0.23464	0.23464	0.000	-10.86990	60.00000	Averaged
131 5-Nitro-o-toluidine	0.28764	0.31158	0.31158	0.000	8.32310	60.00000	Averaged
137 Phenacetin	0.31438	0.31127	0.31127	0.000	-0.98919	60.00000	Averaged
140 4-Aminobiphenyl	0.67737	0.66479	0.66479	0.000	-1.85734	60.00000	Averaged
141 Pentachloronitrobenzene	0.07802	0.08895	0.08895	0.000	14.01330	60.00000	Averaged
142 Pronamide	0.29176	0.31659	0.31659	0.000	8.51097	60.00000	Averaged
143 Dinoseb	31.00597	40.00000	0.08442	0.000	-22.48508	60.00000	Linear
146 4-Nitroquinoline-1-oxide	0.03049	0.02204	0.02204	0.000	-27.71020	60.00000	Averaged
147 Methapyrilene	0.47376	0.53331	0.53331	0.000	12.56870	60.00000	Averaged
149 Aramite	0.04149	0.03614	0.03614	0.000	-12.87661	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.35644	0.31735	0.31735	0.000	-10.96796	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.54367	0.52087	0.52087	0.000	-4.19268	60.00000	Averaged
155 2-Acetylaminofluorene	43.03040	40.00000	0.30760	0.000	7.57599	60.00000	Linear

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-JUL-2005 19:04
Lab File ID: s6g0806.d Init. Cal. Date(s): 29-JUN-2005 30-JUN-2005
Analysis Type: WATER Init. Cal. Times: 10:47 05:04
Lab Sample ID: UBN050621-02 Quant Type: ISTD
Method: /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
157 7,12Dimethylbenz(a)anthrace	0.59586	0.59274	0.59274	0.000	-0.52400	60.00000	Averaged
158 3-Methylcholanthrene	0.50236	0.50416	0.50416	0.000	0.35896	60.00000	Averaged

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s070805.s.b/s6g0806.d
Lab Smp Id: UBN050621-02 Client Smp ID: 168 CVS
Inj Date : 08-JUL-2005 19:04
Operator : EED Inst ID: MSD6.i
Smp Info : |UBN050621-02|40 ppm|1|SVMF|1|168 CVS
Misc Info : |MSD8270_LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 11-Jul-2005 13:01 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

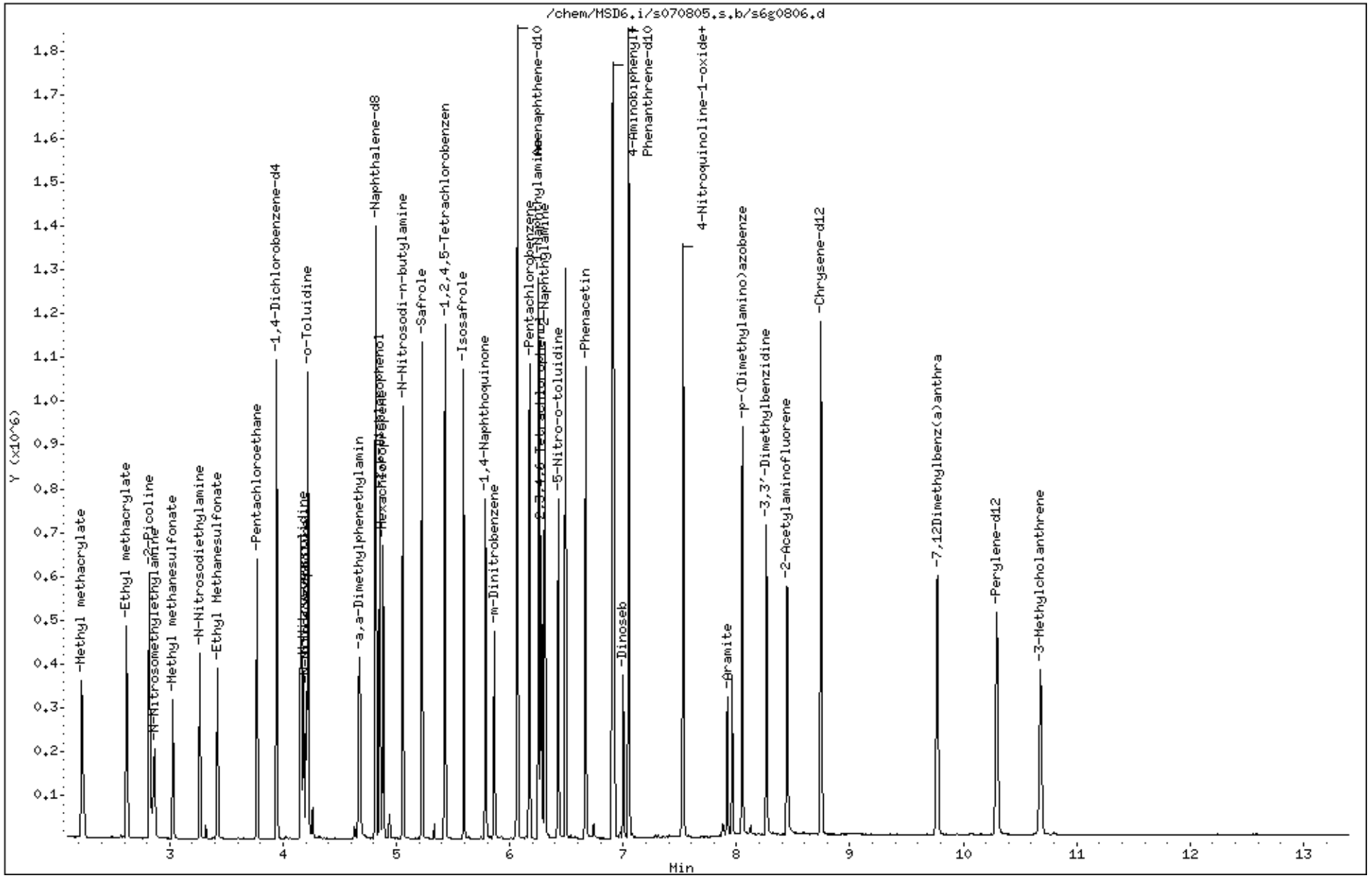
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.944	3.944	(1.000)	119011	40.0000	
* 29 Naphthalene-d8	136	4.814	4.814	(1.000)	470885	40.0000	
* 46 Acenaphthene-d10	164	6.065	6.065	(1.000)	276697	40.0000	
* 67 Phenanthrene-d10	188	7.046	7.046	(1.000)	462788	40.0000	
* 91 Chrysene-d12	240	8.744	8.744	(1.000)	365483	40.0000	
* 98 Perylene-d12	264	10.295	10.295	(1.000)	263037	40.0000	
103 Methyl methacrylate	100	2.222	2.222	(0.564)	29683	40.0000	37.0
104 Ethyl methacrylate	69	2.622	2.622	(0.665)	121757	40.0000	38.6
105 2-Picoline	93	2.822	2.822	(0.715)	157118	40.0000	37.2
106 N-Nitrosomethylethylamine	88	2.869	2.869	(0.727)	65211	40.0000	36.7
107 Methyl methanesulfonate	80	3.027	3.027	(0.768)	79872	40.0000	41.6
108 N-Nitrosodiethylamine	102	3.262	3.262	(0.827)	65490	40.0000	37.6
109 Ethyl Methanesulfonate	79	3.421	3.421	(0.867)	108517	40.0000	40.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
110	Pentachloroethane	167	3.768	3.768	(0.955)	56299	40.0000	38.5
111	N-Nitrosopyrrolidine	100	4.179	4.179	(1.060)	67883	40.0000	37.3
113	N-Nitrosomorpholine	56	4.202	4.202	(1.066)	85046	40.0000	42.0
114	o-Toluidine	106	4.220	4.220	(1.070)	226476	40.0000	39.7
116	a,a-Dimethylphenethylamine	58	4.678	4.678	(0.972)	330661	40.0000	34.7
118	2,6-Dichlorophenol	162	4.855	4.855	(1.009)	114396	40.0000	38.3
119	Hexachloropropene	213	4.884	4.884	(1.015)	84902	40.0000	33.0
121	N-Nitrosodi-n-butylamine	84	5.054	5.054	(1.050)	104544	40.0000	39.5
122	Safrole	162	5.225	5.225	(1.085)	120177	40.0000	39.3
123	1,2,4,5-Tetrachlorobenzene	216	5.430	5.430	(0.895)	153007	40.0000	40.0
124	Isosafrole	162	5.595	5.595	(0.922)	129459	40.0000	39.1
125	1,4-Naphthoquinone	158	5.783	5.783	(0.954)	106861	40.0000	39.9
126	m-Dinitrobenzene	168	5.865	5.865	(0.967)	41918	40.0000	40.6
127	Pentachlorobenzene	250	6.177	6.177	(1.018)	144556	40.0000	40.5
128	1-Naphthylamine	143	6.253	6.253	(1.031)	288818	40.0000	40.7
129	2-Naphthylamine	143	6.306	6.306	(1.040)	277284	40.0000	39.9
130	2,3,4,6-Tetrachlorophenol	232	6.277	6.277	(1.035)	64923	40.0000	35.6
131	5-Nitro-o-toluidine	152	6.429	6.429	(1.060)	86213	40.0000	43.3
137	Phenacetin	108	6.670	6.670	(0.947)	144051	40.0000	39.6
140	4-Aminobiphenyl	169	6.905	6.905	(0.980)	307656	40.0000	39.2
141	Pentachloronitrobenzene	237	6.923	6.923	(0.982)	41164	40.0000	45.6
142	Pronamide	173	6.911	6.911	(0.981)	146516	40.0000	43.4
143	Dinoseb	211	6.999	6.999	(0.993)	39070	40.0000	31.0
146	4-Nitroquinoline-1-oxide	101	7.516	7.516	(1.067)	10201	40.0000	28.9
147	Methapyrilene	58	7.528	7.528	(1.068)	246809	40.0000	45.0
149	Aramite	185	7.922	7.922	(1.124)	16727	40.0000	34.8
151	p-(Dimethylamino)azobenzene	120	8.051	8.051	(0.921)	115985	40.0000	35.6
153	3,3'-Dimethylbenzidine	212	8.262	8.262	(0.945)	190370	40.0000	38.3
155	2-Acetylaminofluorene	181	8.450	8.450	(0.966)	112423	40.0000	43.0
157	7,12Dimethylbenz(a)anthracene	256	9.772	9.772	(0.949)	155912	40.0000	39.8
158	3-Methylcholanthrene	268	10.683	10.683	(1.038)	132613	40.0000	40.1

Data File: /chem/MSD6.i/s070805.s.b/s6g0806.d
Date : 08-JUL-2005 19:04
Client ID: 168 CVS
Sample Info: !UBN050621-02!40 ppm!1!SVMF!1!168 CVS
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



QUALITY CONTROL DATA

Data File: /chem/MSD6.i/s062905.s.b/s6f2901.d

Date : 29-JUN-2005 09:59

Client ID: DFTPP

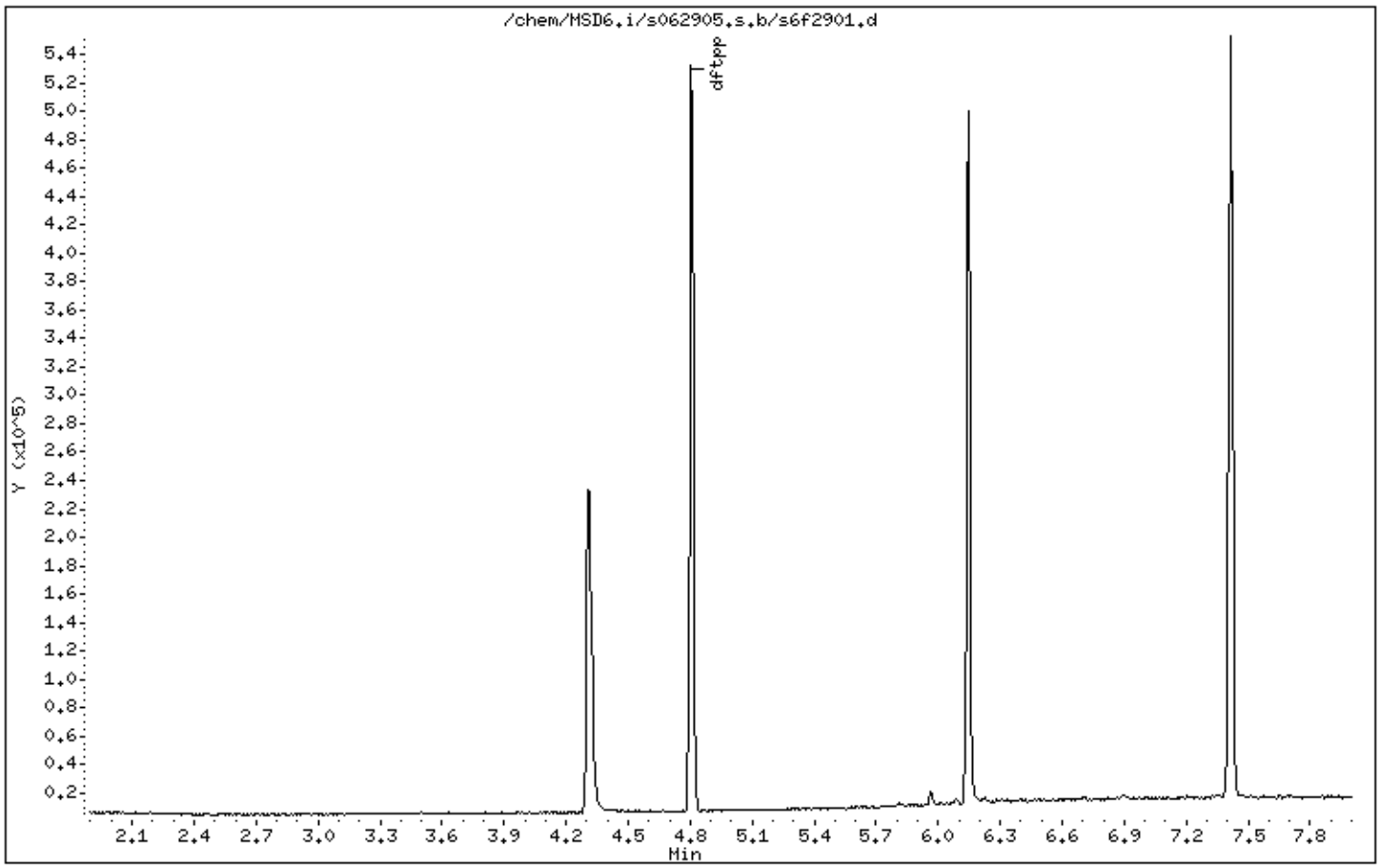
Instrument: MSD6.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s062905.s.b/s6f2901.d

Date : 29-JUN-2005 09:59

Client ID: DFTPP

Instrument: MSD6.i

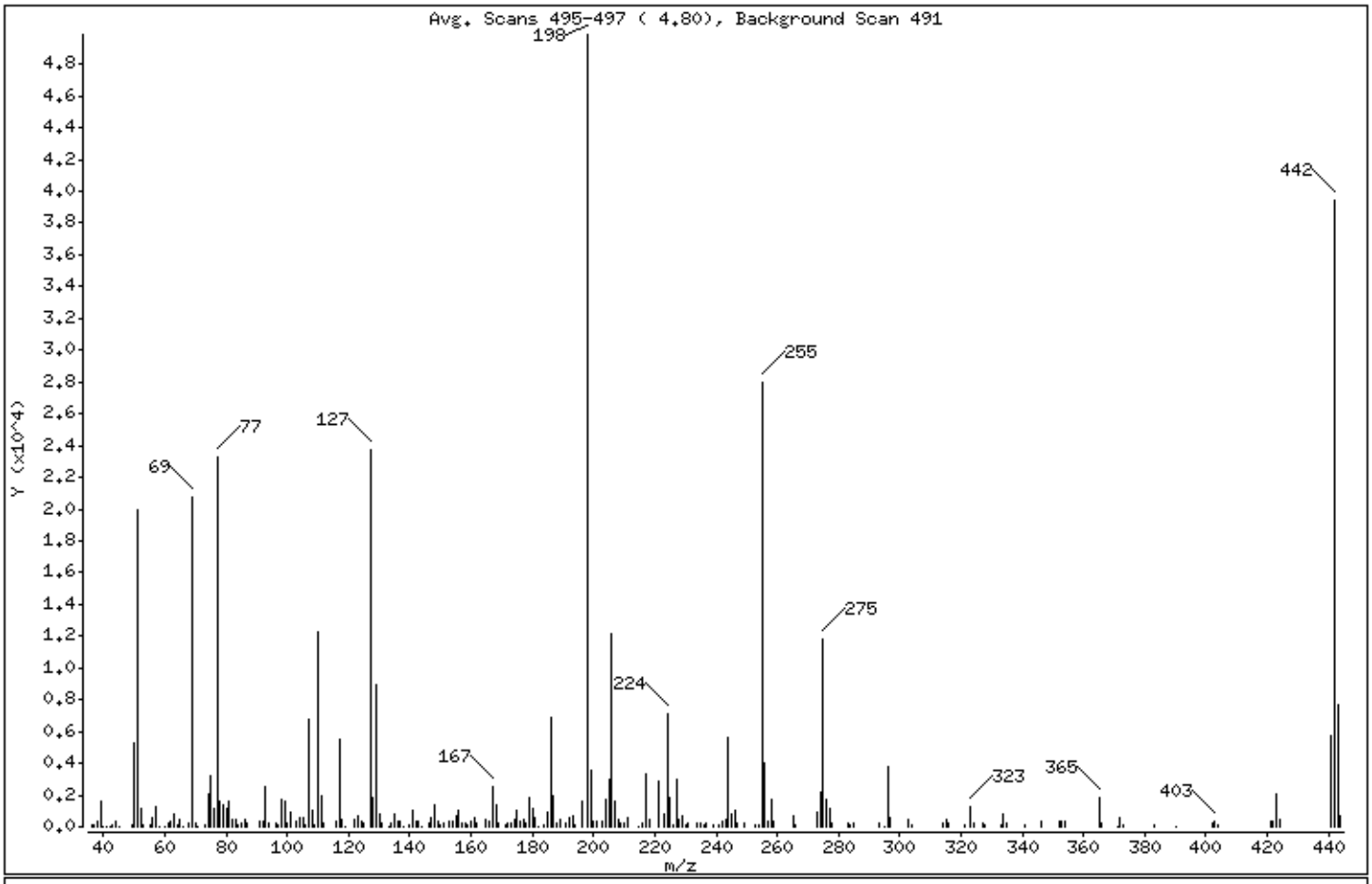
Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.08
68	Less than 2.00% of mass 69	0.50 (1.20)
69	Mass 69 relative abundance	41.71
70	Less than 2.00% of mass 69	0.38 (0.90)
127	40.00 - 60.00% of mass 198	47.66
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.04
275	10.00 - 30.00% of mass 198	23.58
365	Greater than 1.00% of mass 198	3.72
441	Present, but less than mass 443	11.47
442	Greater than 40.00% of mass 198	79.04
443	17.00 - 23.00% of mass 442	15.45 (19.55)

Date : 29-JUN-2005 09:59

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6f2901.d
Spectrum: Avg. Scans 495-497 (4.80), Background Scan 491
Location of Maximum: 198.00
Number of points: 231

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	142	106.00	123	177.00	458	254.00	67
37.00	98	107.00	6732	178.00	189	255.00	27928
38.00	334	108.00	1055	179.00	1794	256.00	4067
39.00	1622	109.00	138	180.00	1197	257.00	314
40.00	50	110.00	12243	181.00	566	258.00	1689
41.00	26	111.00	1950	182.00	48	259.00	309
42.00	39	112.00	224	184.00	155	265.00	697
43.00	105	116.00	359	185.00	907	266.00	157
44.00	294	117.00	5472	186.00	6865	273.00	929
45.00	55	118.00	423	187.00	1954	274.00	2126
49.00	170	119.00	48	188.00	180	275.00	11758
50.00	5218	122.00	473	189.00	408	276.00	1749
51.00	19984	123.00	691	191.00	233	277.00	1127
52.00	1111	124.00	311	192.00	596	278.00	238
53.00	141	125.00	279	193.00	734	283.00	188
55.00	108	127.00	23768	194.00	109	284.00	96
56.00	532	128.00	1849	196.00	1597	285.00	207
57.00	1309	129.00	8950	198.00	49864	293.00	209
58.00	43	130.00	799	199.00	3510	295.00	43
60.00	47	131.00	210	200.00	290	296.00	3794
61.00	281	133.00	42	201.00	301	297.00	532
62.00	304	134.00	278	203.00	344	303.00	408
63.00	793	135.00	817	204.00	1772	304.00	125
64.00	102	136.00	362	205.00	3002	314.00	189
65.00	474	137.00	401	206.00	12094	315.00	417
66.00	42	138.00	48	207.00	1628	316.00	251
68.00	249	140.00	132	208.00	467	321.00	113
69.00	20792	141.00	1066	209.00	209	323.00	1217
70.00	188	142.00	354	210.00	250	324.00	194
71.00	46	143.00	312	211.00	580	327.00	244
73.00	134	144.00	43	215.00	55	328.00	117
74.00	2057	146.00	259	216.00	260	333.00	109
75.00	3167	147.00	623	217.00	3331	334.00	803
76.00	1105	148.00	1346	218.00	468	335.00	224
77.00	23264	149.00	339	221.00	2813	341.00	122

Date : 29-JUN-2005 09:59

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6f2901.d
Spectrum: Avg. Scans 495-497 (4.80), Background Scan 491
Location of Maximum: 198.00
Number of points: 231

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	1636	150.00	88	223.00	775	346.00	331
79.00	1350	151.00	190	224.00	7152	352.00	340
80.00	1093	153.00	356	225.00	1810	353.00	289
81.00	1574	154.00	305	226.00	167	354.00	386
82.00	486	155.00	692	227.00	3026	365.00	1853
83.00	429	156.00	1077	228.00	443	366.00	261
84.00	97	157.00	241	229.00	668	371.00	49
85.00	249	158.00	189	230.00	92	372.00	582
86.00	444	159.00	151	231.00	269	373.00	101
87.00	200	160.00	388	234.00	215	383.00	153
91.00	374	161.00	580	235.00	200	390.00	53
92.00	399	162.00	180	236.00	110	402.00	189
93.00	2556	165.00	450	237.00	224	403.00	360
94.00	233	166.00	357	239.00	94	404.00	72
96.00	203	167.00	2506	241.00	103	421.00	338
97.00	93	168.00	1417	242.00	327	422.00	316
98.00	1732	169.00	227	243.00	423	423.00	2057
99.00	1614	171.00	98	244.00	5655	424.00	451
100.00	191	172.00	225	245.00	757	441.00	5720
101.00	873	173.00	260	246.00	1086	442.00	39408
103.00	332	174.00	450	247.00	225	443.00	7704
104.00	562	175.00	983	249.00	228	444.00	698
105.00	588	176.00	295	253.00	72		

Data File: /chem/MSD6.i/s062905.s.b/s6f2933.d

Date : 29-JUN-2005 21:23

Client ID: DFTPP

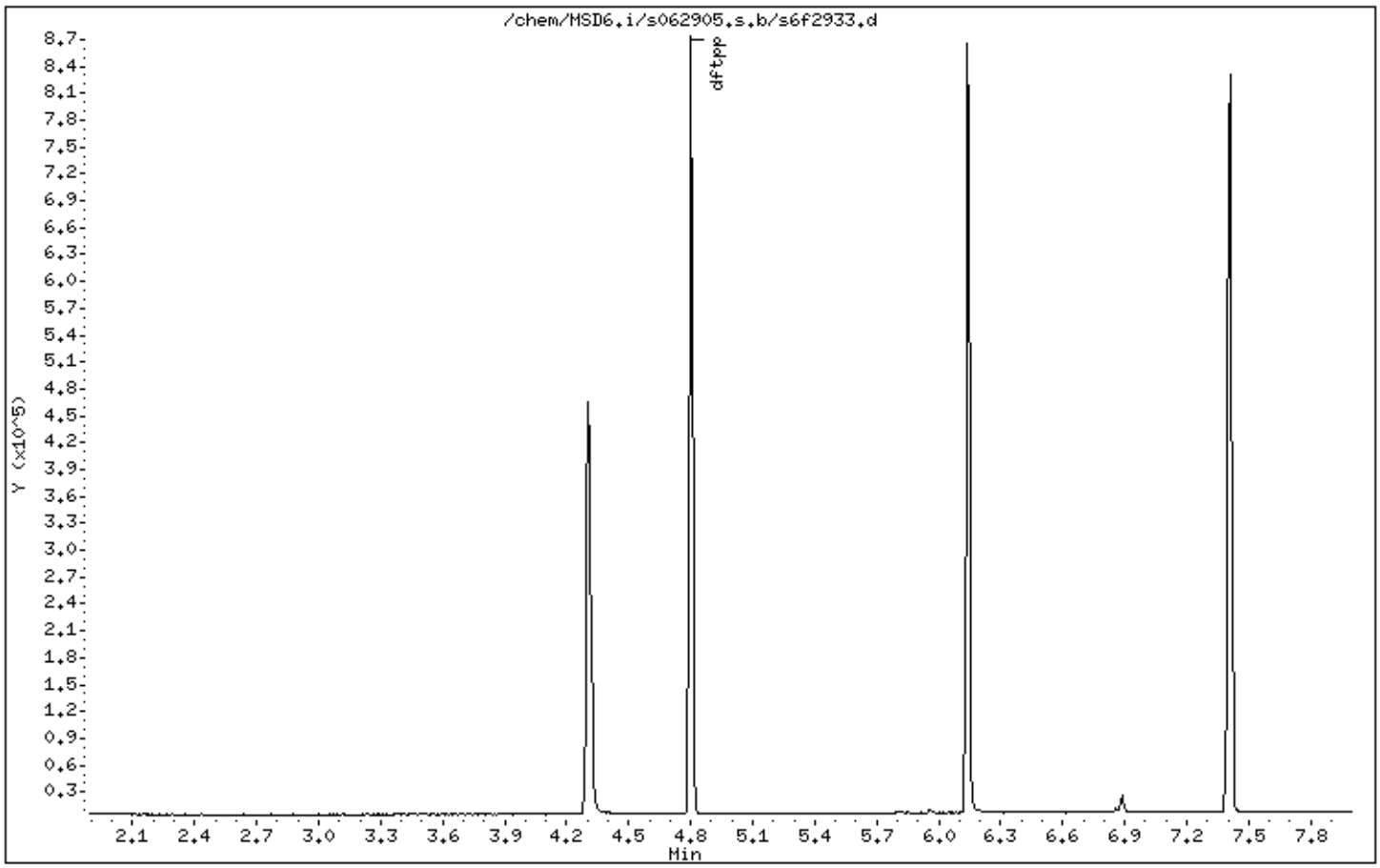
Instrument: MSD6.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s062905.s.b/s6f2933.d

Date : 29-JUN-2005 21:23

Client ID: DFTPP

Instrument: MSD6.i

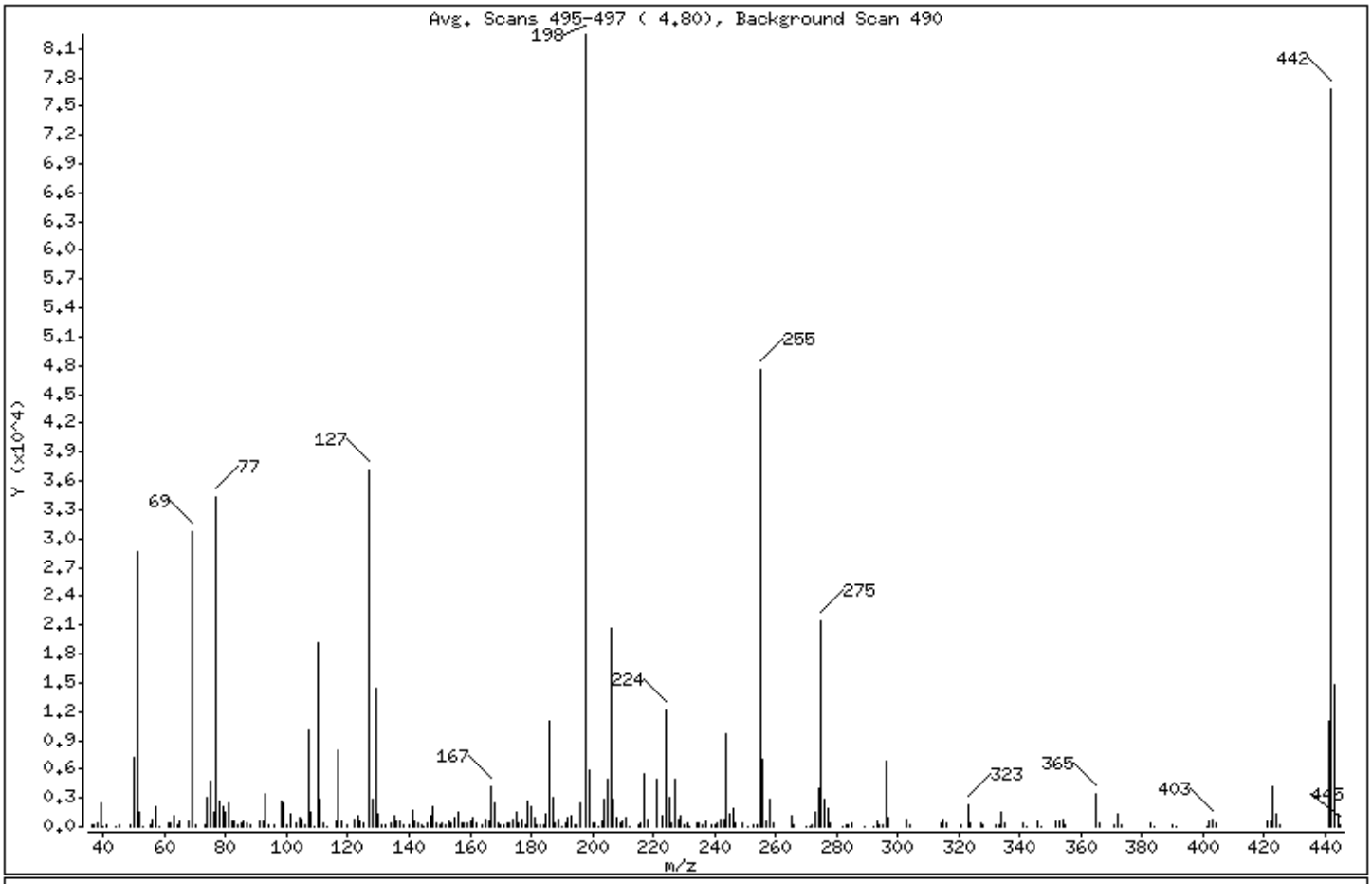
Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	34.69
68	Less than 2.00% of mass 69	0.67 (1.80)
69	Mass 69 relative abundance	37.28
70	Less than 2.00% of mass 69	0.28 (0.76)
127	40.00 - 60.00% of mass 198	45.10
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.10
275	10.00 - 30.00% of mass 198	26.08
365	Greater than 1.00% of mass 198	4.07
441	Present, but less than mass 443	13.38
442	Greater than 40.00% of mass 198	93.02
443	17.00 - 23.00% of mass 442	18.04 (19.39)

Date : 29-JUN-2005 21:23

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6f2933.d
Spectrum: Avg. Scans 495-497 (4.80), Background Scan 490
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	146	120.00	99	189.00	678	272.00	113
37.00	124	122.00	670	190.00	50	273.00	1606
38.00	370	123.00	1070	191.00	353	274.00	3941
39.00	2379	124.00	492	192.00	920	275.00	21504
40.00	62	125.00	448	193.00	1170	276.00	2926
41.00	178	127.00	37192	194.00	249	277.00	1817
44.00	40	128.00	2783	195.00	130	278.00	304
45.00	160	129.00	14390	196.00	2543	282.00	54
49.00	164	130.00	1328	198.00	82464	283.00	271
50.00	7262	131.00	236	199.00	5857	284.00	201
51.00	28608	132.00	147	200.00	440	285.00	349
52.00	1500	134.00	395	201.00	470	289.00	43
53.00	53	135.00	1118	202.00	78	292.00	86
55.00	221	136.00	489	203.00	619	293.00	502
56.00	818	137.00	601	204.00	2914	294.00	173
57.00	2001	138.00	102	205.00	4997	295.00	120
58.00	41	140.00	196	206.00	20688	296.00	6747
61.00	374	141.00	1769	207.00	2853	297.00	1018
62.00	403	142.00	646	208.00	894	303.00	723
63.00	1150	143.00	427	209.00	331	304.00	207
64.00	192	144.00	103	210.00	495	314.00	378
65.00	618	145.00	42	211.00	971	315.00	744
68.00	554	146.00	353	212.00	57	316.00	441
69.00	30736	147.00	1073	215.00	229	321.00	245
70.00	235	148.00	2116	216.00	419	323.00	2325
73.00	234	149.00	463	217.00	5516	324.00	394
74.00	2989	150.00	114	218.00	810	327.00	455
75.00	4755	151.00	314	221.00	4898	328.00	219
76.00	1561	152.00	122	223.00	1221	332.00	141
77.00	34376	153.00	603	224.00	12081	333.00	240
78.00	2572	154.00	452	225.00	2959	334.00	1480
79.00	2152	155.00	1033	226.00	330	335.00	406
80.00	1588	156.00	1518	227.00	4939	341.00	357
81.00	2494	157.00	342	228.00	740	342.00	44
82.00	494	158.00	332	229.00	1079	346.00	524

Date : 29-JUN-2005 21:23

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050605-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6f2933.d
Spectrum: Avg. Scans 495-497 (4.80), Background Scan 490
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	560	159.00	304	230.00	106	347.00	45
84.00	108	160.00	635	231.00	469	352.00	646
85.00	465	161.00	883	232.00	61	353.00	493
86.00	638	162.00	296	234.00	308	354.00	684
87.00	369	164.00	123	235.00	398	355.00	248
88.00	120	165.00	671	236.00	280	365.00	3355
91.00	547	166.00	577	237.00	536	366.00	444
92.00	641	167.00	4139	239.00	172	371.00	100
93.00	3496	168.00	2420	240.00	191	372.00	1306
94.00	267	169.00	373	241.00	303	373.00	279
96.00	267	170.00	126	242.00	667	383.00	323
98.00	2726	171.00	192	243.00	676	384.00	89
99.00	2523	172.00	355	244.00	9620	390.00	167
100.00	231	173.00	395	245.00	1263	391.00	56
101.00	1304	174.00	852	246.00	1823	401.00	47
103.00	372	175.00	1482	247.00	413	402.00	580
104.00	878	176.00	416	249.00	287	403.00	746
105.00	717	177.00	706	251.00	42	404.00	312
106.00	133	178.00	237	253.00	200	421.00	576
107.00	10031	179.00	2724	254.00	182	422.00	532
108.00	1586	180.00	2113	255.00	47584	423.00	4199
109.00	77	181.00	911	256.00	7100	424.00	1241
110.00	19240	182.00	160	257.00	650	425.00	165
111.00	2876	183.00	99	258.00	2833	441.00	11032
112.00	374	184.00	201	259.00	453	442.00	76712
113.00	45	185.00	1401	265.00	1149	443.00	14874
116.00	572	186.00	11009	266.00	215	444.00	1416
117.00	7951	187.00	3086	270.00	49	445.00	101
118.00	589	188.00	403	271.00	46		

Data File: /chem/MSD6.i/s070805.s.b/s6g0801.d

Date : 08-JUL-2005 17:16

Client ID: DFTPP

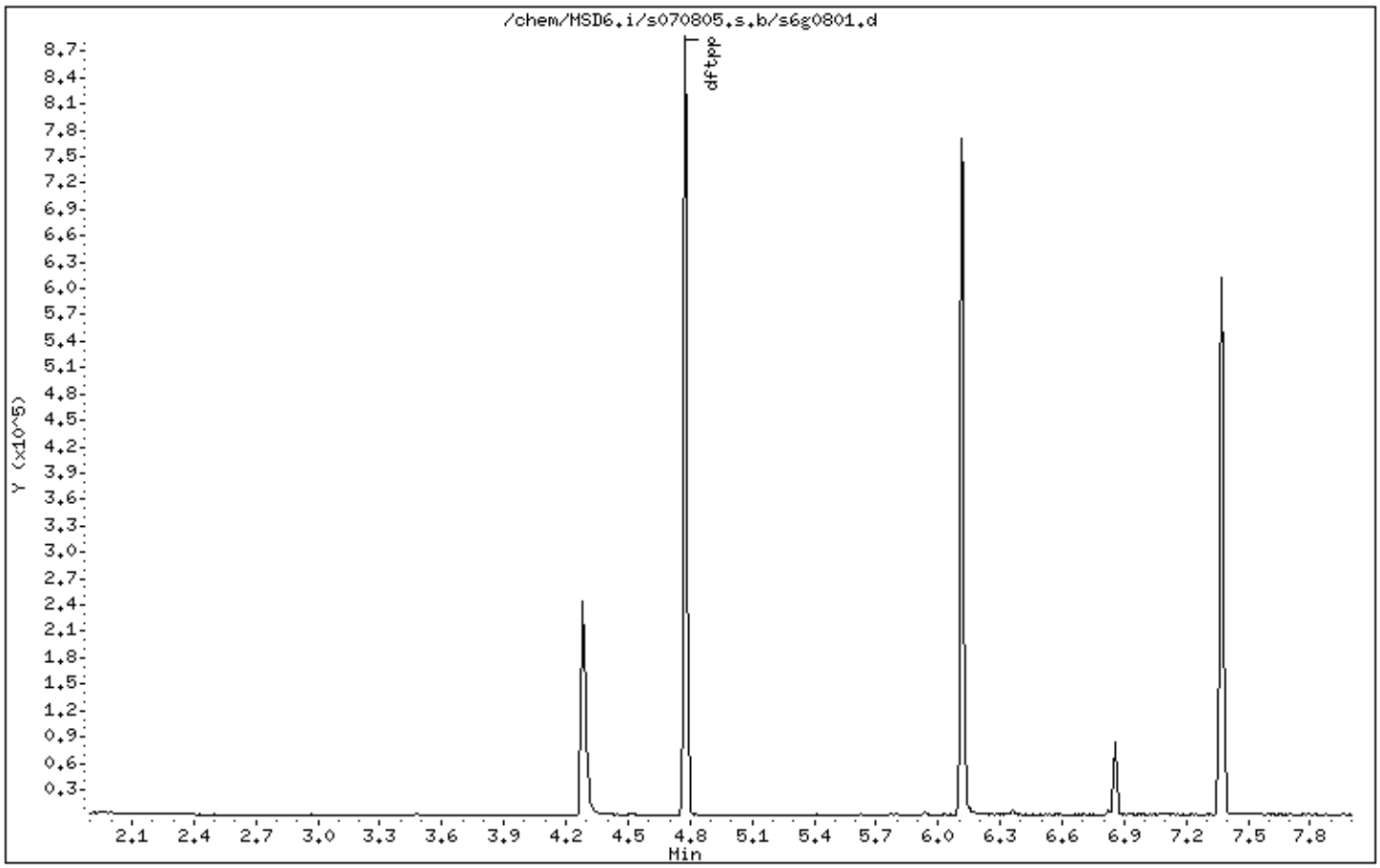
Instrument: MSD6.i

Sample Info: |WBN050706-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s070805.s.b/s6g0801.d

Date : 08-JUL-2005 17:16

Client ID: DFTPP

Instrument: MSD6.i

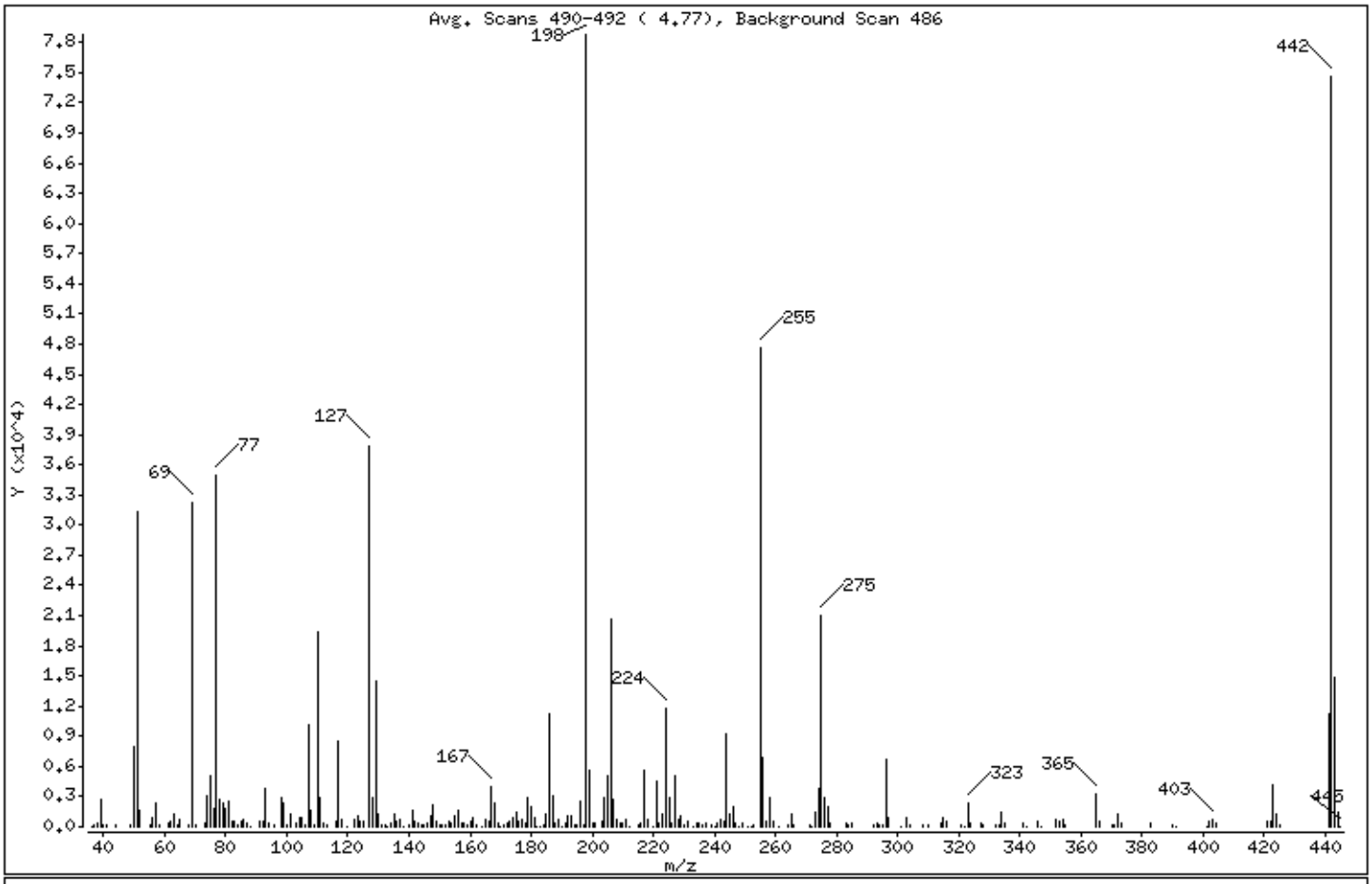
Sample Info: |WBN050706-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	39.69
68	Less than 2.00% of mass 69	0.21 (0.51)
69	Mass 69 relative abundance	40.97
70	Less than 2.00% of mass 69	0.19 (0.46)
127	40.00 - 60.00% of mass 198	48.11
197	Less than 1.00% of mass 198	0.18
199	5.00 - 9.00% of mass 198	7.03
275	10.00 - 30.00% of mass 198	26.72
365	Greater than 1.00% of mass 198	4.20
441	Present, but less than mass 443	14.33
442	Greater than 40.00% of mass 198	94.82
443	17.00 - 23.00% of mass 442	18.87 (19.90)

Date : 08-JUL-2005 17:16

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050706-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6g0801.d
Spectrum: Avg. Scans 490-492 (4.77), Background Scan 486
Location of Maximum: 198.00
Number of points: 260

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	56	125.00	467	194.00	202	275.00	21048
37.00	171	127.00	37896	195.00	117	276.00	2882
38.00	428	128.00	2843	196.00	2472	277.00	1941
39.00	2640	129.00	14552	197.00	140	278.00	340
40.00	209	130.00	1295	198.00	78776	283.00	344
41.00	116	131.00	270	199.00	5535	284.00	116
44.00	112	132.00	151	200.00	448	285.00	400
49.00	161	133.00	51	201.00	411	292.00	117
50.00	7927	134.00	398	203.00	604	293.00	425
51.00	31264	135.00	1246	204.00	2918	294.00	93
52.00	1586	136.00	481	205.00	5056	295.00	93
55.00	197	137.00	634	206.00	20712	296.00	6791
56.00	854	138.00	44	207.00	2772	297.00	945
57.00	2282	140.00	156	208.00	764	301.00	47
58.00	103	141.00	1716	209.00	278	303.00	855
61.00	425	142.00	628	210.00	299	304.00	201
62.00	472	143.00	424	211.00	798	308.00	91
63.00	1236	144.00	92	212.00	55	310.00	112
64.00	231	145.00	93	215.00	203	314.00	312
65.00	689	146.00	290	216.00	314	315.00	858
68.00	165	147.00	1056	217.00	5562	316.00	471
69.00	32272	148.00	2151	218.00	752	321.00	271
70.00	148	149.00	526	220.00	58	322.00	45
73.00	272	150.00	103	221.00	4550	323.00	2284
74.00	3143	151.00	237	222.00	332	324.00	397
75.00	5108	152.00	130	223.00	1199	327.00	434
76.00	1747	153.00	556	224.00	11805	328.00	222
77.00	34984	154.00	413	225.00	2864	332.00	134
78.00	2650	155.00	1132	226.00	400	333.00	190
79.00	2295	156.00	1598	227.00	5023	334.00	1363
80.00	1772	157.00	311	228.00	752	335.00	347
81.00	2512	158.00	352	229.00	1085	341.00	321
82.00	610	159.00	258	230.00	113	342.00	47
83.00	614	160.00	551	231.00	498	346.00	540
84.00	104	161.00	907	233.00	46	347.00	42

Date : 08-JUL-2005 17:16

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050706-01|50 NG|1|SVMF|1|DFTPP|

Operator: EED

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6g0801.d
Spectrum: Avg. Scans 490-492 (4.77), Background Scan 486
Location of Maximum: 198.00
Number of points: 260

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	494	162.00	209	234.00	385	352.00	722
86.00	690	164.00	49	235.00	379	353.00	469
87.00	326	165.00	675	236.00	164	354.00	685
88.00	59	166.00	583	237.00	412	355.00	122
91.00	565	167.00	4042	239.00	228	365.00	3310
92.00	628	168.00	2381	240.00	66	366.00	504
93.00	3856	169.00	345	241.00	310	370.00	91
94.00	287	170.00	45	242.00	670	371.00	216
96.00	204	171.00	180	243.00	617	372.00	1259
98.00	2958	172.00	383	244.00	9221	373.00	316
99.00	2444	173.00	469	245.00	1255	383.00	351
100.00	199	174.00	822	246.00	1986	390.00	155
101.00	1353	175.00	1446	247.00	347	391.00	53
103.00	434	176.00	483	248.00	43	401.00	49
104.00	858	177.00	695	249.00	329	402.00	507
105.00	946	178.00	286	251.00	44	403.00	720
106.00	257	179.00	2823	252.00	51	404.00	286
107.00	10230	180.00	1950	253.00	240	421.00	602
108.00	1640	181.00	881	255.00	47552	422.00	494
109.00	229	182.00	87	256.00	6824	423.00	4220
110.00	19440	183.00	43	257.00	525	424.00	1194
111.00	2957	184.00	252	258.00	2919	425.00	172
112.00	427	185.00	1338	259.00	531	441.00	11290
113.00	95	186.00	11178	261.00	46	442.00	74696
116.00	570	187.00	3118	264.00	96	443.00	14868
117.00	8584	188.00	378	265.00	1194	444.00	1490
118.00	714	189.00	723	266.00	216	445.00	49
120.00	50	190.00	88	271.00	108		
122.00	691	191.00	363	272.00	76		
123.00	1057	192.00	1056	273.00	1519		
124.00	594	193.00	1069	274.00	3781		

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200874922

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6G0814-4

Level: (low/med) LOW Date Received: 06/28/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.0	U
111-44-4	bis(2-Chloroethyl) ether	10.0	U
95-57-8	2-Chlorophenol	10.0	U
541-73-1	1,3-Dichlorobenzene	10.0	U
106-46-7	1,4-Dichlorobenzene	10.0	U
100-51-6	Benzyl alcohol	10.0	U
95-50-1	1,2-Dichlorobenzene	10.0	U
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U
95-48-7	o-Cresol	10.0	U
98-86-2	Acetophenone	10.0	U
621-64-7	N-Nitrosodipropylamine	10.0	U
65794-96-9	m,p-Cresols	10.0	U
67-72-1	Hexachloroethane	10.0	U
98-95-3	Nitrobenzene	10.0	U
78-59-1	Isophorone	10.0	U
88-75-5	2-Nitrophenol	10.0	U
105-67-9	2,4-Dimethylphenol	10.0	U
111-91-1	bis(2-Chloroethoxy)methane	10.0	U
120-83-2	2,4-Dichlorophenol	10.0	U
65-85-0	Benzoic acid	20.0	U
120-82-1	1,2,4-Trichlorobenzene	10.0	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.0	U
87-68-3	Hexachlorobutadiene	10.0	U
59-50-7	4-Chloro-3-methylphenol	10.0	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.0	U
88-06-2	2,4,6-Trichlorophenol	10.0	U
95-95-4	2,4,5-Trichlorophenol	10.0	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.0	U
99-09-2	m-Nitroaniline	10.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200874922

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6G0814-4

Level: (low/med) LOW Date Received: 06/28/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	10.0	U
606-20-2	2,6-Dinitrotoluene	10.0	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.0	U
132-64-9	Dibenzofuran	10.0	U
121-14-2	2,4-Dinitrotoluene	10.0	U
84-66-2	Diethylphthalate	10.0	U
100-02-7	4-Nitrophenol	10.0	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.0	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.0	U
100-01-6	p-Nitroaniline	10.0	U
122-39-4	Diphenylamine	10.0	U
122-66-7	1,2-Diphenylhydrazine	10.0	U
101-55-3	4-Bromophenylphenylether	10.0	U
118-74-1	Hexachlorobenzene	10.0	U
1912-24-9	Atrazine	10.0	U
87-86-5	Pentachlorophenol	10.0	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.0	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	50.0	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.0	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.0	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.0	U
117-84-0	Di-n-octylphthalate	10.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U
207-08-9	Benzo(k)fluoranthene	1.0	U

FORM I SV-2 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200874922

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6G0814-4

Level: (low/med) LOW Date Received: 06/28/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
88-85-7	Dinoseb	10.0	U
86-74-8	Carbazole	10.0	U

1F

EPA SAMPLE NO.

SBLK01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WATER Lab Sample ID: 1200874922

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6G0814-4

Level: (low/med) LOW Date Received: 06/28/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s070805.s.b/s6g0814-4.d
Lab Smp Id: 1200874922 Client Smp ID: SBLK01
Inj Date : 08-JUL-2005 21:53
Operator : EED Inst ID: MSD6.i
Smp Info : |1200874922|437183|1|SVMF|1|MB
Misc Info : |MSD82709LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 11-Jul-2005 13:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.944	3.943	(1.000)	125041	40.0000	
* 29 Naphthalene-d8	136	4.814	4.813	(1.000)	497899	40.0000	
* 46 Acenaphthene-d10	164	6.065	6.064	(1.000)	288221	40.0000	
* 67 Phenanthrene-d10	188	7.046	7.051	(1.000)	473159	40.0000	
* 91 Chrysene-d12	240	8.733	8.767	(1.000)	361043	40.0000	
* 98 Perylene-d12	264	10.278	10.318	(1.000)	287761	40.0000	
$ 3 2-Fluorophenol	112	3.116	3.115	(0.790)	135147	39.3858	39.4
$ 5 Phenol-d5	99	3.650	3.649	(0.926)	106165	27.3899	27.4
$ 20 Nitrobenzene-d5	82	4.308	4.308	(0.895)	120575	36.8213	36.8
$ 39 2-Fluorobiphenyl	172	5.560	5.559	(0.917)	256424	35.1802	35.2
$ 60 2,4,6-Tribromophenol	329	6.594	6.599	(1.087)	87388	71.8693	71.9
$ 81 p-Terphenyl-d14	244	7.963	7.980	(0.912)	344475	50.4312	50.4

General Engineering Laboratories, LLC

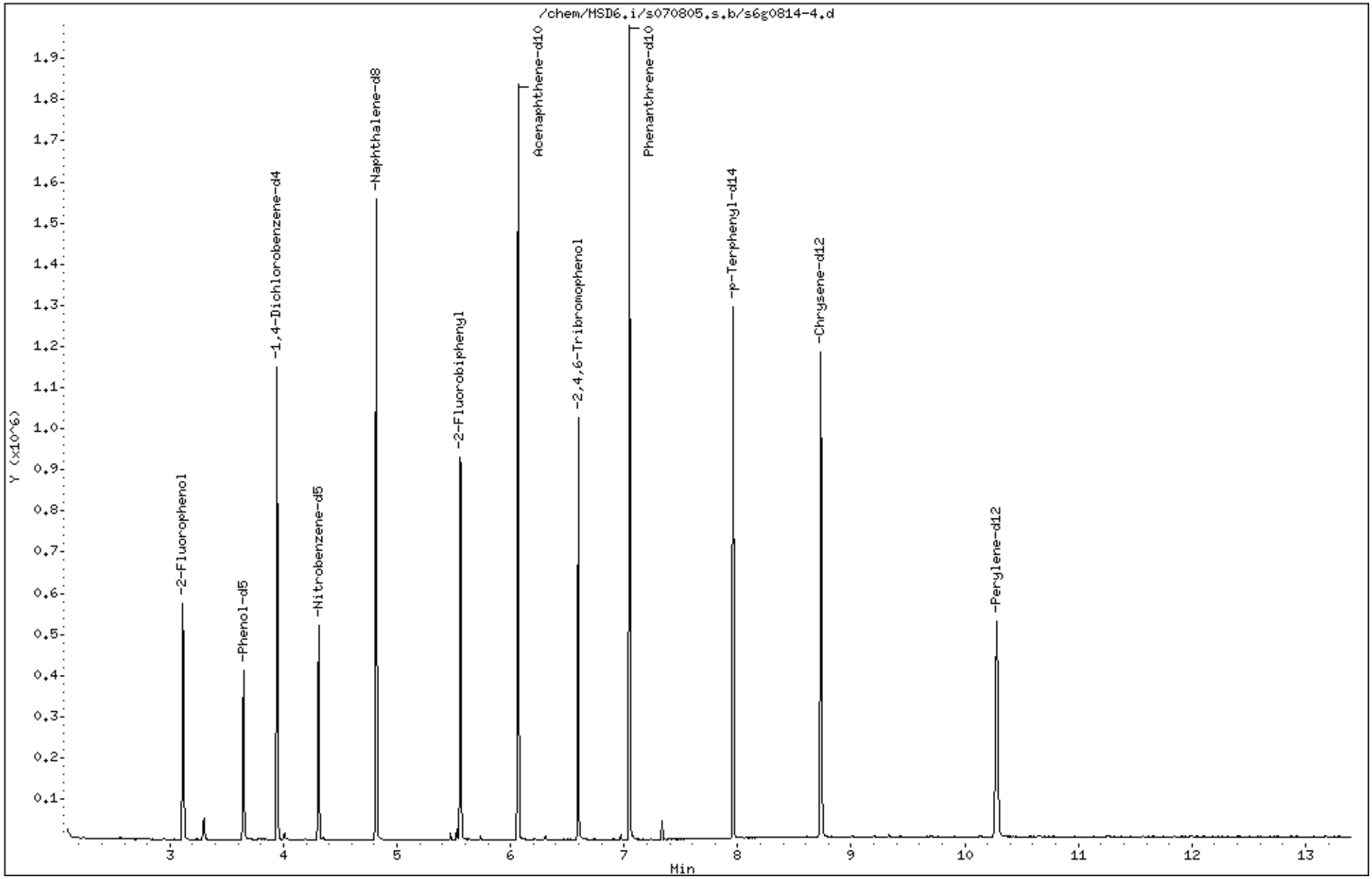
General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s070805.s.b/s6g0814-4.d
Lab Smp Id: 1200874922 Client Smp ID: SBLK01
Inj Date : 08-JUL-2005 21:53
Operator : EED Inst ID: MSD6.i
Smp Info : |1200874922|437183|1|SVMF|1|MB
Misc Info : |MSD82709LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 11-Jul-2005 13:58 llo00884 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: hpclp1

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/MSD6.i/s070805.s.b/s6g0814-4.d
Date : 08-JUL-2005 21:53
Client ID: SBLK01
Sample Info: |120087492|437183|1|SVMF|1|MB
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: EED
Column diameter: 0.20



1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200874923

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6G0815-4

Level: (low/med) LOW Date Received: 06/28/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	33.2	
111-44-4	bis(2-Chloroethyl) ether	43.5	
95-57-8	2-Chlorophenol	75.9	
541-73-1	1,3-Dichlorobenzene	29.2	
106-46-7	1,4-Dichlorobenzene	30.8	
100-51-6	Benzyl alcohol	34.7	
95-50-1	1,2-Dichlorobenzene	31.8	
108-60-1	bis(2-Chloroisopropyl)ether	42.0	
95-48-7	o-Cresol	74.8	
98-86-2	Acetophenone	44.9	
621-64-7	N-Nitrosodipropylamine	46.6	
65794-96-9	m,p-Cresols	66.2	
67-72-1	Hexachloroethane	28.8	
98-95-3	Nitrobenzene	43.6	
78-59-1	Isophorone	42.7	
88-75-5	2-Nitrophenol	87.9	
105-67-9	2,4-Dimethylphenol	75.2	
111-91-1	bis(2-Chloroethoxy)methane	43.9	
120-83-2	2,4-Dichlorophenol	85.9	
65-85-0	Benzoic acid	18.6	J
120-82-1	1,2,4-Trichlorobenzene	31.6	
91-20-3	Naphthalene	34.2	
106-47-8	4-Chloroaniline	43.0	
87-68-3	Hexachlorobutadiene	28.2	
59-50-7	4-Chloro-3-methylphenol	86.5	
91-57-6	2-Methylnaphthalene	36.2	
90-12-0	1-Methylnaphthalene	36.5	
77-47-4	Hexachlorocyclopentadiene	13.0	
88-06-2	2,4,6-Trichlorophenol	87.2	
95-95-4	2,4,5-Trichlorophenol	88.0	
91-58-7	2-Chloronaphthalene	37.6	
88-74-4	o-Nitroaniline	49.0	
99-09-2	m-Nitroaniline	45.1	

FORM I SV-1 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200874923

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6G0815-4

Level: (low/med) LOW Date Received: 06/28/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
131-11-3	Dimethylphthalate	47.1	
606-20-2	2,6-Dinitrotoluene	48.6	
208-96-8	Acenaphthylene	40.0	
83-32-9	Acenaphthene	41.6	
51-28-5	2,4-Dinitrophenol	83.4	
132-64-9	Dibenzofuran	42.2	
121-14-2	2,4-Dinitrotoluene	50.4	
84-66-2	Diethylphthalate	49.6	
100-02-7	4-Nitrophenol	35.4	
86-73-7	Fluorene	45.2	
7005-72-3	4-Chlorophenylphenylether	42.2	
534-52-1	2-Methyl-4,6-dinitrophenol	93.7	
100-01-6	p-Nitroaniline	47.3	
122-39-4	Diphenylamine	46.1	
122-66-7	1,2-Diphenylhydrazine	51.6	
101-55-3	4-Bromophenylphenylether	48.8	
118-74-1	Hexachlorobenzene	45.4	
1912-24-9	Atrazine	44.6	
87-86-5	Pentachlorophenol	74.2	
85-01-8	Phenanthrene	44.2	
120-12-7	Anthracene	44.9	
84-74-2	Di-n-butylphthalate	49.3	
206-44-0	Fluoranthene	42.6	
92-87-5	Benzidine	28.7	J
129-00-0	Pyrene	49.1	
85-68-7	Butylbenzylphthalate	43.9	
56-55-3	Benzo(a)anthracene	44.6	
91-94-1	3,3'-Dichlorobenzidine	45.1	
218-01-9	Chrysene	47.9	
117-81-7	bis(2-Ethylhexyl)phthalate	43.5	
117-84-0	Di-n-octylphthalate	39.9	
205-99-2	Benzo(b)fluoranthene	43.8	
207-08-9	Benzo(k)fluoranthene	49.8	

FORM I SV-2 OLM03.0

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 139405

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200874923

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6G0815-4

Level: (low/med) LOW Date Received: 06/28/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/28/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 07/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
50-32-8	Benzo(a)pyrene	44.2	
193-39-5	Indeno(1,2,3-cd)pyrene	49.0	
53-70-3	Dibenzo(a,h)anthracene	50.3	
191-24-2	Benzo(ghi)perylene	48.0	
88-85-7	Dinoseb	10.0	U
86-74-8	Carbazole	40.8	

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s070805.s.b/s6g0815-4.d
Lab Smp Id: 1200874923 Client Smp ID: SBLK01LCS
Inj Date : 08-JUL-2005 22:14
Operator : EED Inst ID: MSD6.i
Smp Info : |1200874923|437183|1|SVMF|1|LCS
Misc Info : |MSD82709LF|WBN050609-01|
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s070805.s.b/MSD6-8270-062905.m
Meth Date : 12-Jul-2005 00:53 eri00936 Quant Type: ISTD
Cal Date : 30-JUN-2005 03:38 Cal File: s6f2951.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 139405.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.944	3.943	(1.000)	116305	40.0000	
* 29 Naphthalene-d8	136	4.819	4.813	(1.000)	508285	40.0000	
* 46 Acenaphthene-d10	164	6.065	6.064	(1.000)	272837	40.0000	
* 67 Phenanthrene-d10	188	7.046	7.051	(1.000)	445212	40.0000	
* 91 Chrysene-d12	240	8.738	8.767	(1.000)	328035	40.0000	
* 98 Perylene-d12	264	10.283	10.318	(1.000)	258216	40.0000	
$ 3 2-Fluorophenol	112	3.115	3.115	(0.790)	134665	42.1931	42.2
$ 5 Phenol-d5	99	3.650	3.649	(0.926)	112242	31.1328	31.1
$ 20 Nitrobenzene-d5	82	4.308	4.308	(0.894)	141737	42.3993	42.4
$ 39 2-Fluorobiphenyl	172	5.559	5.559	(0.917)	275247	39.8919	39.9
$ 60 2,4,6-Tribromophenol	329	6.599	6.599	(1.088)	110825	96.2834	96.3
$ 81 p-Terphenyl-d14	244	7.962	7.980	(0.911)	324397	52.2706	52.3
6 Phenol	94	3.662	3.661	(0.928)	120311	33.2593	33.2(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
8	2-Chlorophenol	128	3.808	3.808	(0.966)	232885	75.8722	75.9
11	1,4-Dichlorobenzene	146	3.955	3.955	(1.003)	106526	30.7757	30.8
17	N-Nitrosodipropylamine	70	4.179	4.178	(1.060)	104893	46.5637	46.6
28	1,2,4-Trichlorobenzene	180	4.766	4.766	(0.989)	94033	31.5627	31.6
33	4-Chloro-3-methylphenol	107	5.160	5.159	(1.071)	227085	86.4723	86.5
47	Acenaphthene	154	6.088	6.088	(1.004)	238941	41.6068	41.6
50	2,4-Dinitrotoluene	165	6.170	6.170	(1.017)	91625	50.4202	50.4
52	4-Nitrophenol	139	6.094	6.094	(1.005)	39242	35.4490	35.4
65	Pentachlorophenol	266	6.917	6.916	(0.982)	109645	74.1974	74.2
79	Pyrene	202	7.915	7.933	(0.906)	426083	49.0747	49.1
7	bis(2-Chloroethyl) ether	93	3.744	3.743	(0.949)	152292	43.5176	43.5
9	1,3-Dichlorobenzene	146	3.914	3.908	(0.993)	102938	29.1779	29.2
12	Benzyl alcohol	108	4.008	4.008	(1.016)	68490	34.7396	34.7
13	1,2-Dichlorobenzene	146	4.061	4.061	(1.030)	103741	31.8543	31.8
14	bis(2-Chloroisopropyl)ether	45	4.090	4.090	(1.037)	202524	42.0253	42.0
15	o-Cresol	107	4.061	4.061	(1.030)	178470	74.8017	74.8
16	Acetophenone	105	4.196	4.196	(1.064)	177192	44.9494	44.9
18	m,p-Cresols	107	4.155	4.155	(1.054)	227826	66.2343	66.2
19	Hexachloroethane	117	4.290	4.290	(1.088)	37852	28.8177	28.8
21	Nitrobenzene	77	4.320	4.319	(0.896)	130861	43.5626	43.6
22	Isophorone	82	4.478	4.472	(0.929)	266092	42.7407	42.7
23	2-Nitrophenol	139	4.537	4.537	(0.941)	134905	87.9266	87.9
24	2,4-Dimethylphenol	122	4.525	4.525	(0.939)	254613	75.2266	75.2
25	bis(2-Chloroethoxy)methane	93	4.596	4.595	(0.954)	167596	43.8806	43.9
26	2,4-Dichlorophenol	162	4.696	4.695	(0.974)	224096	85.8671	85.9
27	Benzoic acid	105	4.555	4.560	(0.945)	35364	18.5812	18.6(aQ)
30	Naphthalene	128	4.831	4.830	(1.002)	324884	34.1570	34.2(Q)
31	4-Chloroaniline	127	4.843	4.843	(1.005)	205975	42.9606	43.0
32	Hexachlorobutadiene	225	4.895	4.895	(1.016)	56862	28.1881	28.2
34	2-Methylnaphthalene	142	5.313	5.312	(1.102)	217274	36.2562	36.2
35	1-Methylnaphthalene	142	5.389	5.389	(1.118)	206962	36.4872	36.5
36	Hexachlorocyclopentadiene	237	5.418	5.418	(0.893)	27909	12.9983	13.0(R)
37	2,4,6-Trichlorophenol	196	5.501	5.500	(0.907)	180102	87.1695	87.2
38	2,4,5-Trichlorophenol	196	5.530	5.530	(0.912)	186952	88.0177	88.0
40	2-Chloronaphthalene	162	5.671	5.665	(0.935)	223907	37.6231	37.6
42	o-Nitroaniline	65	5.724	5.724	(0.944)	80883	48.9729	49.0
41	m-Nitroaniline	138	6.012	6.012	(0.991)	69611	45.0911	45.1
43	Dimethylphthalate	163	5.830	5.829	(0.961)	328119	47.0939	47.1
44	2,6-Dinitrotoluene	165	5.883	5.882	(0.970)	70933	48.6563	48.6
45	Acenaphthylene	152	5.971	5.970	(0.984)	372181	39.9780	40.0
48	2,4-Dinitrophenol	184	6.082	6.082	(1.003)	46370	83.4337	83.4(Q)
49	Dibenzofuran	168	6.206	6.205	(1.023)	341582	42.2420	42.2
51	Diethylphthalate	149	6.311	6.311	(1.041)	331939	49.6009	49.6
53	Fluorene	166	6.441	6.440	(1.062)	290396	45.2480	45.2
54	4-Chlorophenylphenylether	204	6.417	6.417	(1.058)	145917	42.2450	42.2
55	2-Methyl-4,6-dinitrophenol	198	6.452	6.446	(0.916)	97206	93.7255	93.7
56	p-Nitroaniline	138	6.435	6.429	(1.061)	68260	47.2702	47.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
133	Diphenylamine	169	6.494	6.493	(0.922)	270312	46.0957	46.1
58	1,2-Diphenylhydrazine	77	6.523	6.523	(0.926)	338791	51.5578	51.6
61	4-Bromophenylphenylether	248	6.740	6.740	(0.957)	94172	48.8551	48.8
63	Hexachlorobenzene	284	6.799	6.799	(0.965)	111111	45.3606	45.4
207	Atrazine	173	6.811	6.817	(0.967)	26727	44.5586	44.6
68	Phenanthrene	178	7.063	7.063	(1.002)	418299	44.1564	44.2
69	Anthracene	178	7.093	7.098	(1.007)	418653	44.8855	44.9
72	Di-n-butylphthalate	149	7.334	7.339	(1.041)	510009	49.2654	49.3
76	Fluoranthene	202	7.774	7.786	(1.103)	417823	42.6183	42.6
77	Benzidine	184	7.821	7.862	(0.895)	125897	28.7242	28.7(a)
85	Butylbenzylphthalate	149	8.233	8.256	(0.942)	174602	43.9461	43.9
89	Benzo(a)anthracene	228	8.726	8.755	(0.999)	346600	44.5525	44.6(H)
90	3,3'-Dichlorobenzidine	252	8.662	8.726	(0.991)	108758	45.1241	45.1
92	Chrysene	228	8.761	8.785	(1.003)	336350	47.9369	47.9
93	bis(2-Ethylhexyl)phthalate	149	8.609	8.638	(0.985)	207569	43.5085	43.5
94	Di-n-octylphthalate	149	9.173	9.208	(0.892)	297785	39.8994	39.9
95	Benzo(b)fluoranthene	252	9.790	9.819	(0.952)	283968	43.8106	43.8(H)
96	Benzo(k)fluoranthene	252	9.819	9.854	(0.955)	320109	49.8350	49.8
97	Benzo(a)pyrene	252	10.213	10.248	(0.993)	228056	44.2166	44.2(H)
99	Indeno(1,2,3-cd)pyrene	276	12.028	12.069	(1.170)	211642	49.0476	49.0
100	Dibenzo(a,h)anthracene	278	12.034	12.075	(1.170)	180528	50.3034	50.3
101	Benzo(ghi)perylene	276	12.569	12.615	(1.222)	168536	48.0496	48.0
173	Carbazole	167	7.181	7.193	(1.019)	390128	40.8160	40.8

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s070805.s.b/s6g0815-4.d

Date : 08-JUL-2005 22:14

Client ID: SBLK01LCS

Instrument: MSD6.i

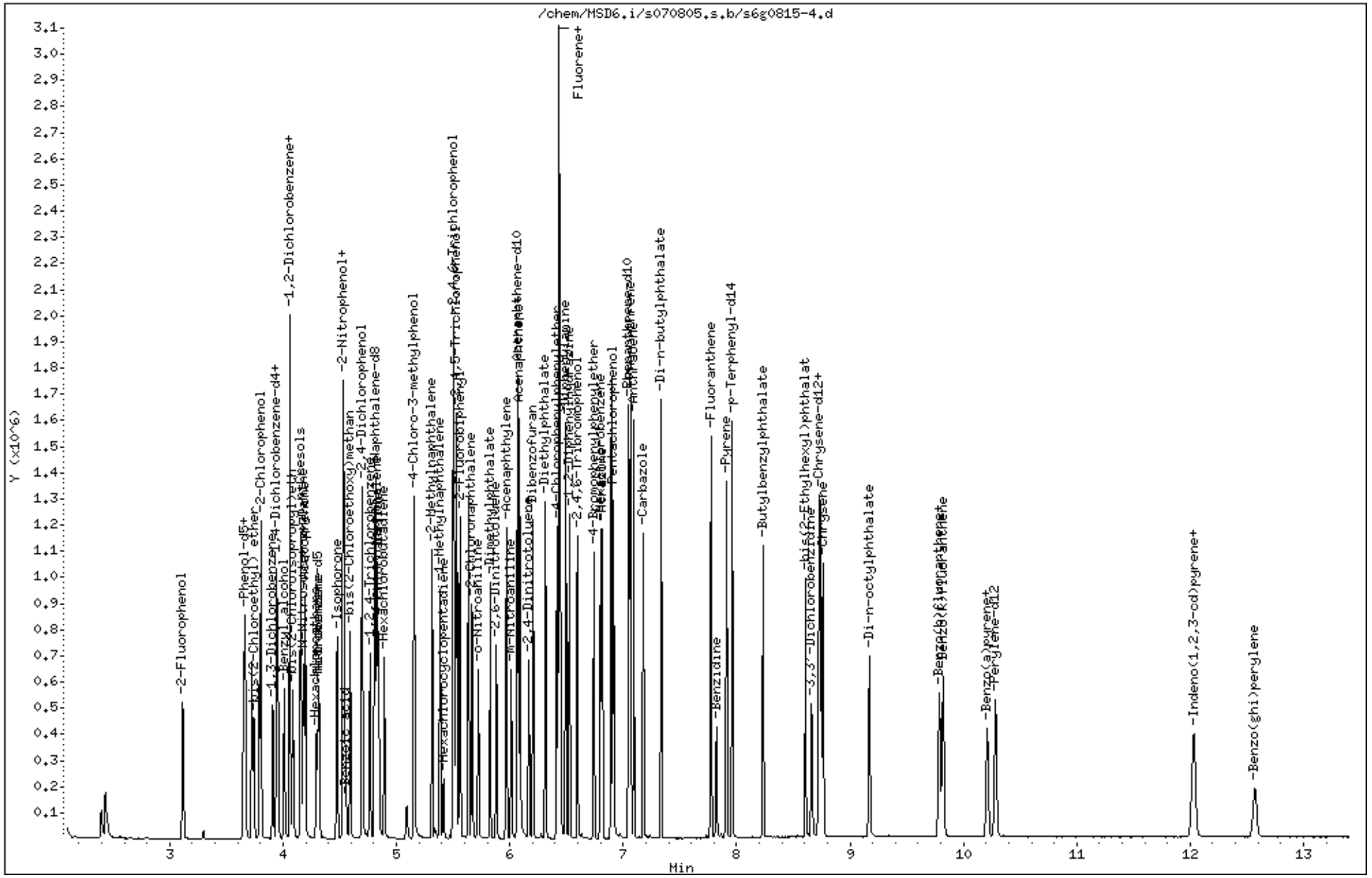
Sample Info: |120087492|437183|1|SVMF|1|LCS

Volume Injected (uL): 0.5

Operator: EED

Column phase: J & W DB-5MS

Column diameter: 0.20



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD 6

DATE:06/29/05 METHOD: 8270,625 OPERATOR:EED REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 5 on pg.5
Multiplier Voltage: Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT LOT 309966
DFTPP Solution ID: WBN050605-01 Internal Std ID: WBN050609-01
Sequence Number:s062905 Initial Calibration Date(s):062905 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6f2901.d	WBN050605-01	EED	29-JUN-2005 09:59		s062105.s	1.0	DFTPP	
s6f2903.d	UBN050610-01	EED	29-JUN-2005 10:47	1 PPM	s062905.s	1.0	BNA ICAL	
s6f2904.d	UBN050610-02	EED	29-JUN-2005 11:08	10 PPM	s062905.s	1.0	BNA ICAL	
s6f2905.d	UBN050610-03	EED	29-JUN-2005 11:30	20 PPM	s062905.s	1.0	BNA ICAL	
s6f2906.d	UBN050610-04	EED	29-JUN-2005 11:51	40 PPM	s062905.s	1.0	BNA ICAL	
s6f2907.d	UBN050610-05	EED	29-JUN-2005 12:13	50 PPM	s062905.s	1.0	BNA ICAL	
s6f2908.d	UBN050610-06	EED	29-JUN-2005 12:34	80 PPM	s062905.s	1.0	BNA ICAL	
s6f2909.d	UBN050610-07	EED	29-JUN-2005 12:55	100 PPM	s062905.s	1.0	BNA ICAL	
s6f2910.d	UBN050610-08	EED	29-JUN-2005 13:17	120 PPM	s062905.s	1.0	BNA ICAL	
s6f2911.d	INSTRUMENT BLANK	EED	29-JUN-2005 13:39		s062905.s	1.0		
s6f2912.d	UBN050603-04	EED	29-JUN-2005 14:00	40 PPM	s062905.s	1.0	BNA ICV	pass
s6f2914.d	UBN050607-01	EED	29-JUN-2005 14:43	1 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2915.d	UBN050607-02	EED	29-JUN-2005 15:05	10 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2916.d	UBN050607-03	EED	29-JUN-2005 15:26	20 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2917.d	UBN050607-04	EED	29-JUN-2005 15:47	40 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2918.d	UBN050607-05	EED	29-JUN-2005 16:08	50 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2919.d	UBN050607-06	EED	29-JUN-2005 16:30	80 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2920.d	UBN050607-07	EED	29-JUN-2005 16:51	100 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2921.d	UBN050607-08	EED	29-JUN-2005 17:13	120 PPM	s062905.s	1.0	ANBZ ICAL	
s6f2922.d	INSTRUMENT BLANK	EED	29-JUN-2005 17:34		s062905.s	1.0		
s6f2923.d	UBN050527-03.1	EED	29-JUN-2005 17:56	40 PPM	s062905.s	1.0	ANBZ ICV	

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6f2924.d	INSTRUMENT BLANK	EED	29-JUN-2005 18:17		s062905.s	1.0		
s6f2925.d	UBN050516-01	EED	29-JUN-2005 18:38	10 PPM	s062905.s	1.0	167 ICAL	
s6f2926.d	UBN050516-02	EED	29-JUN-2005 18:59	20 PPM	s062905.s	1.0	167 ICAL	
s6f2927.d	UBN050516-03	EED	29-JUN-2005 19:21	40 PPM	s062905.s	1.0	167 ICAL	
s6f2928.d	UBN050516-04	EED	29-JUN-2005 19:42	50 PPM	s062905.s	1.0	167 ICAL	
s6f2929.d	UBN050516-05	EED	29-JUN-2005 20:03	80 PPM	s062905.s	1.0	167 ICAL	
s6f2930.d	UBN050516-06	EED	29-JUN-2005 20:24	100 PPM	s062905.s	1.0	167 ICAL	
s6f2931.d	UBN050516-07	EED	29-JUN-2005 20:46	120 PPM	s062905.s	1.0	167 ICAL	
s6f2932.d	INSTRUMENT BLANK	EED	29-JUN-2005 21:07		s062905.s	1.0		
s6f2933.d	WBN050605-01	EED	29-JUN-2005 21:23		s062905.s	1.0	DFTPP	
s6f2934.d	INSTRUMENT BLANK	EED	29-JUN-2005 21:38		s062905.s	1.0		
s6f2935.d	UBN050520-05	EED	29-JUN-2005 22:00	10 PPM	s062905.s	1.0	168 ICAL	
s6f2936.d	UBN050520-06	EED	29-JUN-2005 22:21	20 PPM	s062905.s	1.0	168 ICAL	
s6f2937.d	UBN050520-07	EED	29-JUN-2005 22:42	40 PPM	s062905.s	1.0	168 ICAL	
s6f2938.d	UBN050520-08	EED	29-JUN-2005 23:03	50 PPM	s062905.s	1.0	168 ICAL	
s6f2939.d	UBN050520-09	EED	29-JUN-2005 23:24	80 PPM	s062905.s	1.0	168 ICAL	
s6f2940.d	UBN050520-10	EED	29-JUN-2005 23:45	100 PPM	s062905.s	1.0	168 ICAL	
s6f2941.d	UBN050520-11	EED	30-JUN-2005 00:07	120 PPM	s062905.s	1.0	168 ICAL	
s6f2942.d	INSTRUMENT BLANK	EED	30-JUN-2005 00:28		s062905.s	1.0		
s6f2943.d	UBN050606-06	EED	30-JUN-2005 00:49	10 PPM	s062905.s	1.0	AP9 ICAL	

Instrument Batch: /chem/MSD6.i/s062905.s.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6f2944.d	UBN050606-07	EED	30-JUN-2005 01:10	20 PPM	s062905.s	1.0	AP9 ICAL	
s6f2945.d	UBN050606-08	EED	30-JUN-2005 01:31	40 PPM	s062905.s	1.0	AP9 ICAL	
s6f2946.d	UBN050606-09	EED	30-JUN-2005 01:52	50 PPM	s062905.s	1.0	AP9 ICAL	
s6f2947.d	UBN050606-10	EED	30-JUN-2005 02:13	80 PPM	s062905.s	1.0	AP9 ICAL	
s6f2948.d	UBN050606-11	EED	30-JUN-2005 02:34	100 PPM	s062905.s	1.0	AP9 ICAL	

s6f2949.d	UBN050606-12	EED	30-JUN-2005 02:56	120 PPM	s062905.s	1.0	AP9 ICAL	
s6f2950.d	INSTRUMENT BLANK	EED	30-JUN-2005 03:17		s062905.s	1.0		
s6f2951.d	UBN050606-01	EED	30-JUN-2005 03:38	500 PPM	s062905.s	1.0	HEX ICAL	fails
s6f2952.d	UBN050606-02	EED	30-JUN-2005 04:00	1000 PPM	s062905.s	1.0	HEX ICAL	fails
s6f2953.d	UBN050606-03	EED	30-JUN-2005 04:21	1250 PPM	s062905.s	1.0	HEX ICAL	fails
s6f2954.d	UBN050606-04	EED	30-JUN-2005 04:42	2000 PPM	s062905.s	1.0	HEX ICAL	fails
s6f2955.d	UBN050606-05	EED	30-JUN-2005 05:04	2500 PPM	s062905.s	1.0	HEX ICAL	fails
s6f2956.d	INSTRUMENT BLANK	EED	30-JUN-2005 05:25		s062905.s	1.0		

CARE ICAL DID NOT RUN because instrument did not recognize the 8270ext method.

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD 6

DATE:070805 METHOD: 8270,625 OPERATOR:EED REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 5 on pg. 5
Multiplier Voltage: 1129 Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT LOT 309986
DFTPP Solution ID: WBN050706-01 Internal Std ID: WBN050628-01
Sequence Number:s070805 Initial Calibration Date(s):062905 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6g0801.d	WBN050706-01	EED	08-JUL-2005 17:16		s070805.s	1.0	DFTPP	
s6g0802.d	UBN050707-01.2	EED	08-JUL-2005 17:32	40 ppm	s070805.s	1.0	BNA CVS	DUSE
s6g0803.d	UBN050707-02.2	EED	08-JUL-2005 18:01	40 ppm	s070805.s	1.0	ANBZ CVS	
s6g0804.d	UBN050707-01.2	EED	08-JUL-2005 18:22	40 ppm	s070805.s	1.0	BNA CVS	pass
s6g0805.d	UBN050621-01	EED	08-JUL-2005 18:43	40 ppm	s070805.s	1.0	167 CVS	
s6g0806.d	UBN050621-02	EED	08-JUL-2005 19:04	40 ppm	s070805.s	1.0	168 CVS	
s6g0807.d	UBN050621-03	EED	08-JUL-2005 19:25	40 ppm	s070805.s	1.0	AP9 CVS	
s6g0808.d	INSTRUMENT BLANK	EED	08-JUL-2005 19:46		s070805.s	1.0		
s6g0809.d	139515001	EED	08-JUL-2005 20:07	437830	P4-11-351	1000.0	PERM	DUSE no hits rr
s6g0810.d	139518002	EED	08-JUL-2005 20:28	437830	P3-11-96	100.0	PERM	DUSE no hits rr
s6g0811.d	139518003	EED	08-JUL-2005 20:49	437830	P3-11-96	100.0	PERM	DUSE no hits rr
s6g0812.d	139357015	EED	08-JUL-2005 21:10	439273	139357	1.0	GEEL	RX OF S8F3023 USE THIS DATA
s6g0813.d	139357016	EED	08-JUL-2005 21:31	439273	139357	1.0	GEEL	RX OF S8F3024 USE THIS DATA
s6g0814-1.d	1200874922	EED	08-JUL-2005 21:53	437183	138991-1	1.0	MB	
s6g0814-2.d	1200874922	EED	08-JUL-2005 21:53	437183	139349	1.0	MB	
s6g0814-3.d	1200874922	EED	08-JUL-2005 21:53	437183	E0100503001VZ	1.0	MB	
s6g0814-4.d	1200874922	EED	08-JUL-2005 21:53	437183	139405	1.0	MB	
s6g0814-5.d	1200874922	EED	08-JUL-2005 21:53	437183	139406	1.0	MB	
s6g0814-6.d	1200874922	EED	08-JUL-2005 21:53	437183	139409	1.0	MB	
s6g0814.d	1200874922	EED	08-JUL-2005 21:53	437183	s070805.s	1.0	MB	
s6g0815-1.d	1200874923	EED	08-JUL-2005 22:14	437183	138991-1	1.0	LCS	<5% fail

s6g0815-2.d	1200874923	EED	08-JUL-2005 22:14	437183	139349		1.0	LCS	<5% fail
s6g0815-3.d	1200874923	EED	08-JUL-2005 22:14	437183	E0100503001VZ		1.0	LCS	
s6g0815-4.d	1200874923	EED	08-JUL-2005 22:14	437183	139405		1.0	LCS	<5% fail
s6g0815-5.d	1200874923	EED	08-JUL-2005 22:14	437183	139406		1.0	LCS	<5% fail
s6g0815-6.d	1200874923	EED	08-JUL-2005 22:14	437183	139409		1.0	LCS	<5% fail
s6g0815.d	1200874923	EED	08-JUL-2005 22:14	437183	s070805.s		1.0	LCS	<5% fail
s6g0816.d	138993006	EED	08-JUL-2005 22:35	437183	138991-1		1.0	CAST	
s6g0817.d	139349006	EED	08-JUL-2005 22:56	437183	139349		1.0	ESHL	
s6g0818.d	1200874932	EED	08-JUL-2005 23:17	437183	139349		1.0	9006MS	fail spike msd confirms
s6g0819.d	1200874933	EED	08-JUL-2005 23:38	437183	139349		1.0	9006MSD	fail spike ms confirms
s6g0820.d	139349007	EED	08-JUL-2005 23:59	437183	139349		1.0	ESHL	
s6g0821.d	139395001	EED	09-JUL-2005 00:20	437183	E0100503001VZ		1.0	INEL	
s6g0822.d	1200876065	EED	09-JUL-2005 00:41	437183	E0100503001VZ		1.0	5001MS	
s6g0823.d	1200876066	EED	09-JUL-2005 01:03	437183	E0100503001VZ		1.0	5001MSD	
s6g0824.d	139395002	EED	09-JUL-2005 01:24	437183	E0100503001VZ		1.0	INEL	
s6g0825.d	139395003	EED	09-JUL-2005 01:45	437183	E0100503001VZ		1.0	INEL	
s6g0826.d	139395004	EED	09-JUL-2005 02:06	437183	E0100503001VZ		1.0	INEL	
s6g0827.d	139395005	EED	09-JUL-2005 02:28	437183	E0100503001VZ		1.0	INEL	
s6g0828.d	139405002	EED	09-JUL-2005 02:49	437183	139405		1.0	ESHL	

Instrument Batch: /chem/MSD6.i/s070805.s.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6g0829.d	139406004	EED	09-JUL-2005 03:10	437183	139406		1.0	ESHL	
s6g0830.d	1200874936	EED	09-JUL-2005 03:31	437183	139406		1.0	6004MS	fail spike msd confirms
s6g0831.d	1200874938	EED	09-JUL-2005 03:53	437183	139406		1.0	6004MSD	fail spike ms confirms
s6g0832.d	139409004	EED	09-JUL-2005 04:14	437183	139409		1.0	ESHL	
s6g0833.d	1200874937	EED	09-JUL-2005 04:35	437183	139409		1.0	9004MS	fail spike msd confirms
s6g0834.d	1200874939	EED	09-JUL-2005 04:57	437183	139409		1.0	9004MSD	fail spike ms confirms

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater and Other Aqueous Samples

Batch ID: 437182 **Verified by:** _____

Analyst: Ryan Mylott

Method: SW846 3510C

Lab SOP: GL−OA−E−013 REV# 14

Instrument: Semi−Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Sec Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1200874922 MB	28−JUN−2005 09:00:00	1000	7	<2	>11	1	0.001
1200874923 LCS	28−JUN−2005 09:00:00	1000	7	<2	>11	1	0.001
138993006	28−JUN−2005 09:00:00	1030	6	<2	>11	1	0.00097
139349006	28−JUN−2005 09:00:00	1000	6	<2	>11	1	0.001
1200874932 MS (139349006)	28−JUN−2005 09:00:00	500	6	<2	>11	1	0.002
1200874933 MSD (139349006)	28−JUN−2005 09:00:00	500	6	<2	>11	1	0.002
139349007	28−JUN−2005 09:00:00	1000	6	<2	>11	1	0.001
139395001	28−JUN−2005 09:00:00	100	8	<2	>11	1	0.01
1200876065 MS (139395001)	28−JUN−2005 09:00:00	100	8	<2	>11	1	0.01
1200876066 MSD (139395001)	28−JUN−2005 09:00:00	100	8	<2	>11	1	0.01
139395002	28−JUN−2005 09:00:00	100	8	<2	>11	1	0.01
139395003	28−JUN−2005 09:00:00	100	8	<2	>11	1	0.01
139395004	28−JUN−2005 09:00:00	100	7	<2	>11	1	0.01
139395005	28−JUN−2005 09:00:00	100	7	<2	>11	1	0.01
139405002	28−JUN−2005 09:00:00	990	6	<2	>11	1	0.00101
139406004	28−JUN−2005 09:00:00	960	6	<2	>11	1	0.00104
1200874936 MS (139406004)	28−JUN−2005 09:00:00	500	6	<2	>11	1	0.002
1200874938 MSD (139406004)	28−JUN−2005 09:00:00	500	6	<2	>11	1	0.002
139409004	28−JUN−2005 09:00:00	1020	6	<2	>11	1	0.00098
1200874937 MS (139409004)	28−JUN−2005 09:00:00	500	6	<2	>11	1	0.002
1200874939 MSD (139409004)	28−JUN−2005 09:00:00	500	6	<2	>11	1	0.002

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1200874923	BNA LCS for all spikes	UE050624−01	1	mL
MS	1200874932	BNA LCS for all spikes	UE050624−01	1	mL
MS	1200874936	BNA LCS for all spikes	UE050624−01	1	mL
MS	1200874937	BNA LCS for all spikes	UE050624−01	1	mL
MS	1200876065	BNA LCS for all spikes	UE050624−01	1	mL
MSD	1200874933	BNA LCS for all spikes	UE050624−01	1	mL
MSD	1200874938	BNA LCS for all spikes	UE050624−01	1	mL
MSD	1200874939	BNA LCS for all spikes	UE050624−01	1	mL
MSD	1200876066	BNA LCS for all spikes	UE050624−01	1	mL
SURR	All	BNA for all SurrogateS	UE050615−02	1	mL
REGNT	All	Methylene Chloride	316291−A	360	mL
SOURC	All	SODIUM SULFATE	243217	30	g

Comments:

Samples ending in # 9006, 9006 MS and MSD, 9007, 9004, and 9004 MS MSD were all emulsive in both the acid and base phases of the extraction.

Samples ending in # 95001−95005, and 95001 MS MSD were all emulsive during the base phase of the extraction.

Final Solvent: CH2Cl2

Verified By: CLB

NCR Report No.: 219602
Revision No.: 1

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
12–JUL–05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Liquid	CAST, ESHL, INEL
Batch ID:	**Sample Numbers:**		
437183	See Below		

Potentially affected work order(s)(SDG): 138993(138991–1),139349,139395(E0100503001VZ),139405,139406,139409

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS failed recovery for Hexachlorocyclopentadiene at 26%; the limits are 27%–72%.	1. The failures were less than 5% of the spiked analytes. This is acceptable per ESHL and CAST.
2. The MS, 1200874932, recoveries were not within the acceptance limits.	2. The failures were confirmed by the MSD and were attributed to matrix interferences in the sample.
3. The MSD, 1200874933, recoveries were not within the acceptance limits.	3. The failures were confirmed by the MS and were attributed to matrix interferences in the sample.
4. The MS recoveries, 1200874937, were not within the acceptance limits.	4. The failures were confirmed by the MSD and were attributed to matrix interferences in the sample.
5. The MSD, 1200874939, recoveries were not within the acceptance limits.	5. The failures were confirmed by the MSD and were attributed to matrix interferences in the sample.
6. The MS, 1200874936, recoveries were not within the acceptance limits for all analytes.	6. The failures were less than 5% of the spiked analytes. This is acceptable per the client.
7. The MSD, 1200874938, recoveries were not within the acceptance limits.	7. The failures were less than 5% of the spiked analytes. This is acceptable per the client.
8. The RPD values for MS/MSD pairs 1200874932/1200874933, 1200874936/1200874938, and 1200874937/1200874939 were not within the acceptance limits for multiple spiked analytes.	8. The failures were attributed to laboratory error. The failures were less than 5% of the spiked analytes. This is acceptable per the client.

Originator's Name:

Lynne Sigmon 12–JUL–05

Data Validator/Group Leader:

Quality Review:

Director:

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (ESHL)
SDG 139405

Method/Analysis Information

Procedure:	**Definitive Low Level Analysis Using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) By SW-846 Method 8321 Modified (8321M)**
Analytical Method:	SW846 8321A Modified
Prep Method:	SW846 8321A Modified
Analytical Batch Number:	438025
Prep Batch Number:	438024

Sample Analysis

Sample ID	Client ID
139405001	GF05050GMC401
1200876913	Interference Check Sample (ICS)
1200876904	Method Blank (MB)
1200876905	Laboratory Control Sample (LCS)
1200876906	139551001(GF0506G33R201) Matrix Spike (MS)
1200876907	139551001(GF0506G33R201) Matrix Spike Duplicate (MSD)
1200876911	139409001(GF05060PEGR01) Matrix Spike (MS)
1200876912	139409001(GF05060PEGR01) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 6.

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Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards and may be based off of the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
A laboratory control sample duplicate (LCSD) was not extracted.

LCS/LCSD Relative Percent Difference (RPD) Statement
A laboratory control sample duplicate (LCSD) was not extracted.

First QC Sample Designation
Sample 139551001 (GF0506G33R201) from SDG 139545-1 was chosen for matrix spike analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The matrix spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The matrix spike duplicate recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Second QC Sample Designation
Sample 139409001 (GF05060PEGR01) from SDG 139409 was chosen for matrix spike analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The matrix spike recoveries were within the established acceptance limits.

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Matrix Spike Duplicate (MSD) Recovery Statement
The matrix spike duplicate recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 139405001 (GF05050GMC401) was diluted due to over range target analytes.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The sample was originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

Due to software limitations, all initial calibration blanks must be designated as IPB001 in order for the forms to be correct.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards Prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

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Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a liquid chromatography (HPLC) instrument configuration for explosives analyses. The chromatographic hardware system consists of a Waters Model 2795 with programmable gradient pumping and a 50 ul loop injector. The HPLC is coupled to a Micromass Model Quattro Micro MS/MS. The MS/MS is fitted with a negative Electrospray (ES-) interface.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Herbert M. Mauer **Date:** 07/15/05

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SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 438024

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05050GMC401

Date Received: 25-JUN-05

GEL Job No (SDG): 139405

GEL Sample ID: 139405001

Date Filtered: 01-JUL-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	10	40	145	ug/L		200	05-JUL-05 19:50	per07050044b
	Perchlorate Isotope Ratio			2.86			200	05-JUL-05 19:50	per07050044b
14797-73-0	Perchlorate-101	10	40	149	ug/L		200	05-JUL-05 19:50	per07050044b
	Perchlorate-O(18)	0	0	95.2	ug/L		200	05-JUL-05 19:50	per07050044b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 139405

Extract Batch Code: 438024

Date Filtered: 01-JUL-05

Matrix: GROUND WATER

Sample ID: 1200876905

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.184	ug/L	92		85 - 115
Perchlorate Isotope Ratio		2.93				-
Perchlorate-101	0.200	.184	ug/L	92		85 - 115
Perchlorate-O(18)		.465	ug/L			-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 139405

Extract Batch Code: 438024

Date Filtered: 01-JUL-05

Matrix: SURFACE WATE

Sample ID: 1200876913

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.223	ug/L	111		80 - 120
Perchlorate Isotope Ratio		2.88				
Perchlorate-101	0.200	.226	ug/L	113		80 - 120
Perchlorate-O(18)		.563	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010011b
Date: 01-Jul-2005
Time: 21:08:21
ID: 1200876913 ES+L 438025 ICS LOL 11
Vial: 1:4,A

5 7+4

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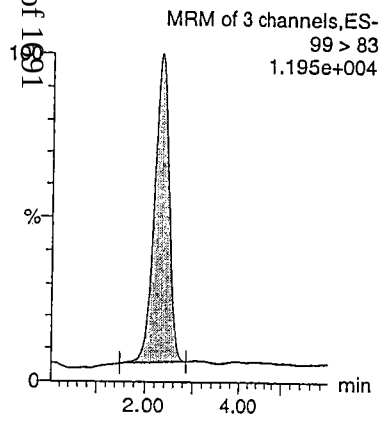
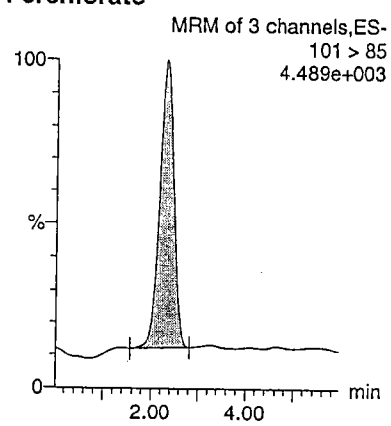
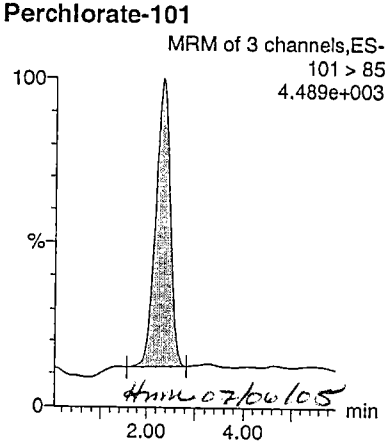
Perchlorate



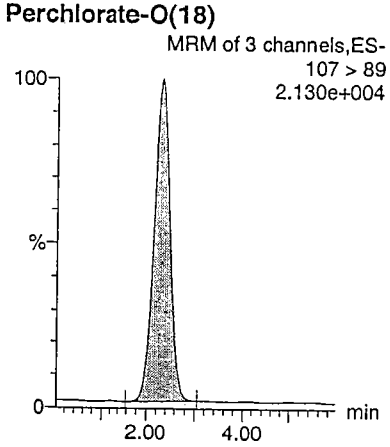
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D..	Mod.Ti..	S/N	Conc.	%Rec	Ratio
1	1200876913	Perchlorate	99 > 83	2.32	4096.755		4096.755	4096.755	bb			294.6	0.2228	111.4	2.88
2	1200876913	Perchlorate-101	101 > 85	2.31	1420.293		1420.293	1420.293	bb			261.2	0.2261	113.0	
3	1200876913	Perchlorate-O(18)	107 > 89	2.31	8295.133		8295.133	8295.133	bb			1250.6	0.5626	112.5	

MM= Manually Modified

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Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 139405

Extract Batch Code: 438024

Date Extracted: 01-JUL-05

GEL MS/PS ID: 1200876906

Client ID: GF0506G33R201

GEL MSD/PSD ID: 1200876907

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.361	ug/L	0.548	93	.551	95	.667	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		2.87		2.94		0		-
Perchlorate-101	0.200	0.352	ug/L	0.559	103	.548	98	1.85	30	75 - 125
Perchlorate-O(18)	0	0.493	ug/L	0.501		.502		.23		-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 139405

Extract Batch Code: 438024

Date Extracted: 01-JUL-05

GEL MS/PS ID: 1200876911

Client ID: GF05060PEGR01

GEL MSD/PSD ID: 1200876912

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.069	ug/L	0.272	102	.27	100	.892	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		2.98		2.9		0		-
Perchlorate-101	0.200	0.076	ug/L	0.267	96	.272	98	1.76	30	75 - 125
Perchlorate-O(18)	0	0.509	ug/L	0.529		.52		1.61		-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	01-JUL-05	per07010001b	IPB001
Perchlorate Isotope Ratio	0.00		NA	01-JUL-05	per07010001b	IPB001
Perchlorate-101	0.00	0	NA	01-JUL-05	per07010001b	IPB001
Perchlorate	0.00	0	NA	01-JUL-05	per07010002b	IPB001
Perchlorate Isotope Ratio	0.00		NA	01-JUL-05	per07010002b	IPB001
Perchlorate-101	0.00	0	NA	01-JUL-05	per07010002b	IPB001
Perchlorate	0.00	0	NA	05-JUL-05	per07050001b	IPB001
Perchlorate Isotope Ratio	0.00		NA	05-JUL-05	per07050001b	IPB001
Perchlorate-101	0.00	0	NA	05-JUL-05	per07050001b	IPB001
Perchlorate	0.00	0	NA	05-JUL-05	per07050002b	IPB001
Perchlorate Isotope Ratio	0.00		NA	05-JUL-05	per07050002b	IPB001
Perchlorate-101	0.00	0	NA	05-JUL-05	per07050002b	IPB001

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Dataset: C:\Masslynx\Perchlorate.PRO\per070105b.qld, Time: Sat Jul 02 09:48:50 2005

Method: C:\Masslynx\Perchlorate.PRO\MethDB\per070105b.mdb, Time: Sat Jul 02 09:36:17 2005
Calibration: Untitled, Time: Sat Jul 02 09:48:49 2005

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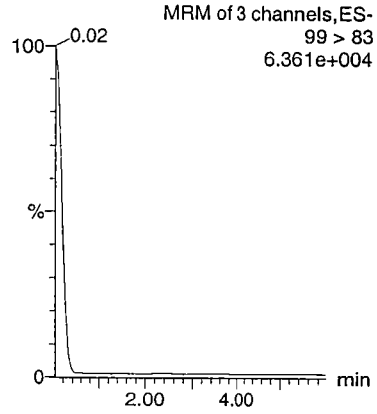
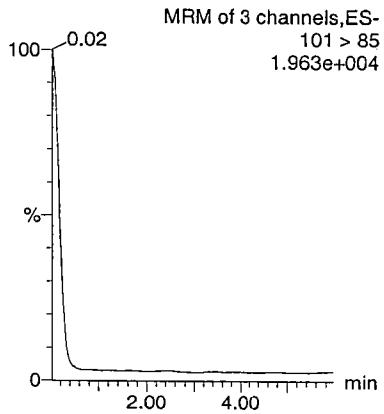
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010001b
Date: 01-Jul-2005
Time: 19:59:10
ID: IPB001
Vial: 1:1,A

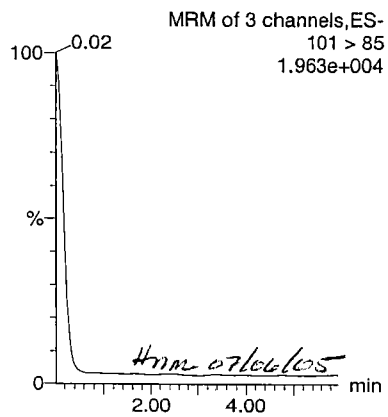
Perchlorate



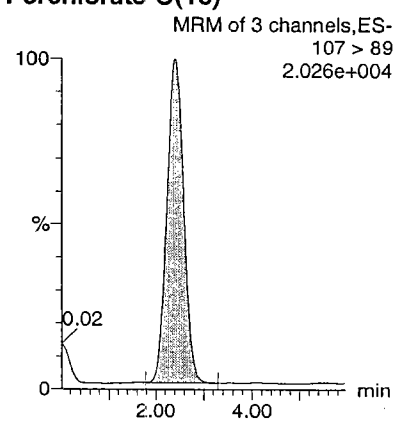
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB001	Perchlorate	99 > 83												
2	IPB001	Perchlorate-101	101 > 85												
3	IPB001	Perchlorate-O(18)	107 > 89	2.41	8079.587		8079.587	8079.587	bb			1850.1	0.5480	109.6	

MM= Manually Modified

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010002b
Date: 01-Jul-2005
Time: 20:09:16
ID: IPB001
Vial: 1:1,A

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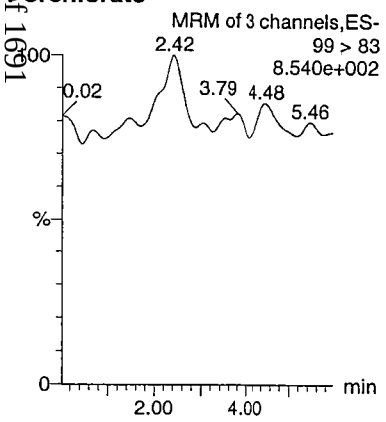
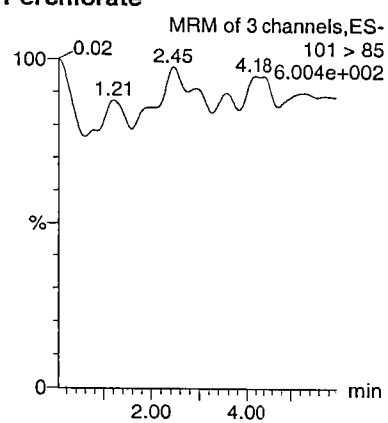
Perchlorate



Perchlorate



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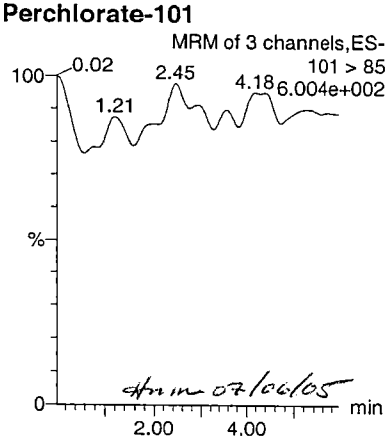
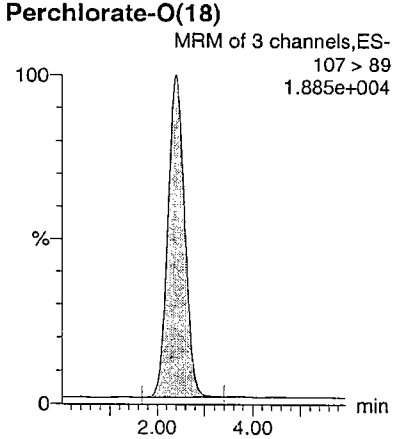


Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc	%Rec	Ratio
1	IPB001	Perchlorate	99 > 83												
2	IPB001	Perchlorate-101	101 > 85												
3	IPB001	Perchlorate-O(18)	107 > 89	2.41	7621.490		7621.490	7621.490	bb			571.2	0.5169	103.4	

MM= Manually Modified

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Dataset: C:\Masslynx\Perchlorate.PRO\per070505b1.qld, Time: Tue Jul 05 20:16:33 2005

Method: C:\Masslynx\Perchlorate.PRO\MethDB\per070505b.mdb, Time: Tue Jul 05 15:55:33 2005
Calibration: Untitled, Time: Tue Jul 05 20:15:25 2005

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050001b
Date: 05-Jul-2005
Time: 14:49:13
ID: IPB001
Vial: 1:1,A

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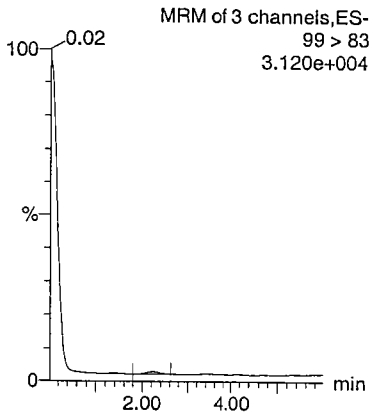
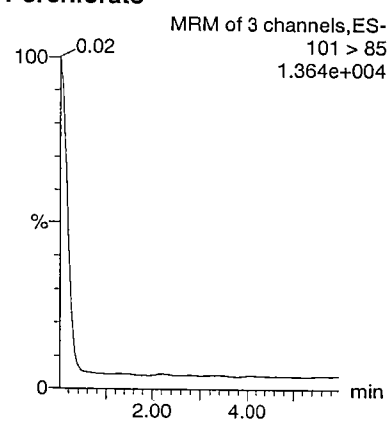
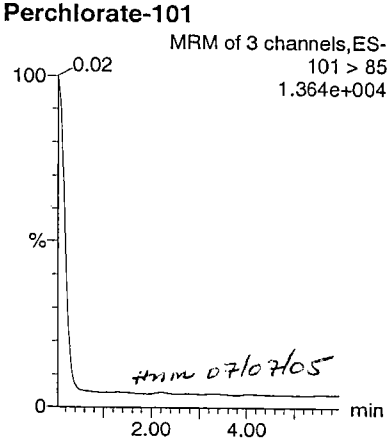


Perchlorate



Perchlorate-101



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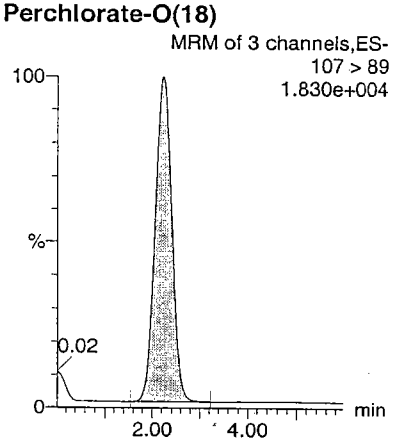

#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB001	Perchlorate	99 > 83	2.24	81.645		81.645	81.645	bb			16.8	0.0052		
2	IPB001	Perchlorate-101	101 > 85												
3	IPB001	Perchlorate-O(18)	107 > 89	2.22	7272.441		7272.441	7272.441	bb			5395.3	0.5713	114.3	

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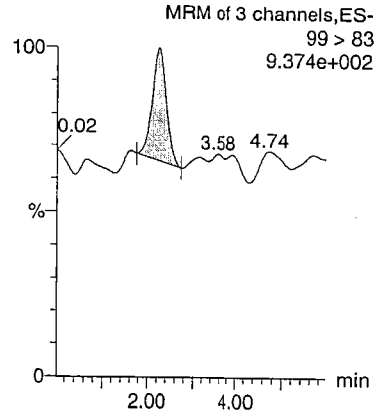
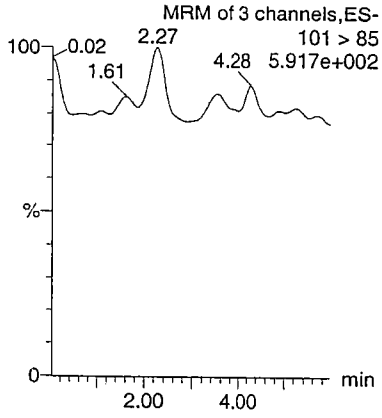
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050002b
Date: 05-Jul-2005
Time: 14:56:40
ID: IPB001
Vial: 1:1,A

Perchlorate



Perchlorate



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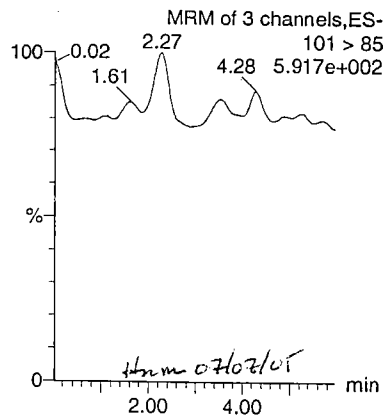
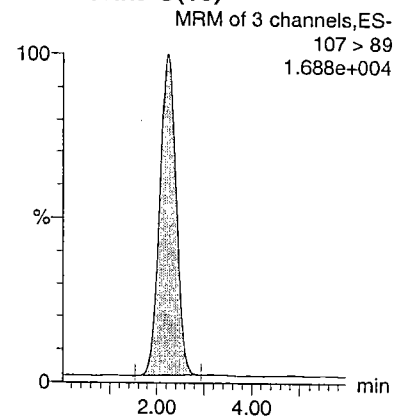


Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB001	Perchlorate	99 > 83	2.24	117.801		117.801	117.801	bb			19.2	0.0076		
2	IPB001	Perchlorate-101	101 > 85												
3	IPB001	Perchlorate-O(18)	107 > 89	2.22	6687.212		6687.212	6687.212	bb			3237.3	0.5253	105.1	

MM= Manually Modified

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	01-JUL-05	per07010009b	IPB002
Perchlorate Isotope Ratio	0.00		NA	01-JUL-05	per07010009b	IPB002
Perchlorate-101	0.00	0	NA	01-JUL-05	per07010009b	IPB002
Perchlorate	0.00	0	NA	01-JUL-05	per07010022b	IPB003
Perchlorate Isotope Ratio	0.00		NA	01-JUL-05	per07010022b	IPB003
Perchlorate-101	0.00	0	NA	01-JUL-05	per07010022b	IPB003
Perchlorate	0.00	0	NA	05-JUL-05	per07050009b	IPB002
Perchlorate Isotope Ratio	0.00		NA	05-JUL-05	per07050009b	IPB002
Perchlorate-101	0.00	0	NA	05-JUL-05	per07050009b	IPB002
Perchlorate	0.00	0	NA	05-JUL-05	per07050022b	IPB003
Perchlorate Isotope Ratio	0.00		NA	05-JUL-05	per07050022b	IPB003
Perchlorate-101	0.00	0	NA	05-JUL-05	per07050022b	IPB003
Perchlorate	0.00	0	NA	05-JUL-05	per07050035b	IPB004

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate Isotope Ratio	0.00		NA	05-JUL-05	per07050035b	IPB004
Perchlorate-101	0.00	0	NA	05-JUL-05	per07050035b	IPB004
Perchlorate	0.00	0	NA	05-JUL-05	per07050046b	IPB005
Perchlorate Isotope Ratio	0.00		NA	05-JUL-05	per07050046b	IPB005
Perchlorate-101	0.00	0	NA	05-JUL-05	per07050046b	IPB005

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010009b
Date: 01-Jul-2005
Time: 20:55:12
ID: IPB002
Vial: 1:1,A

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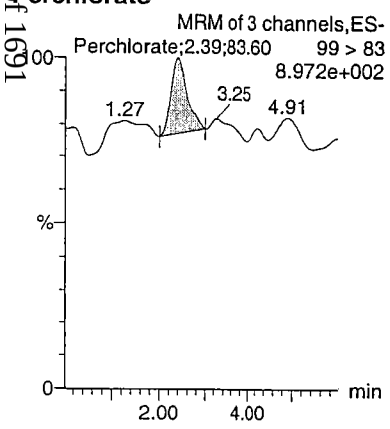
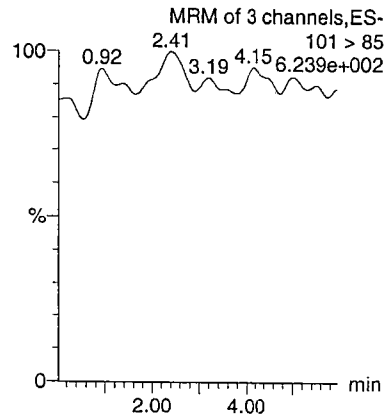
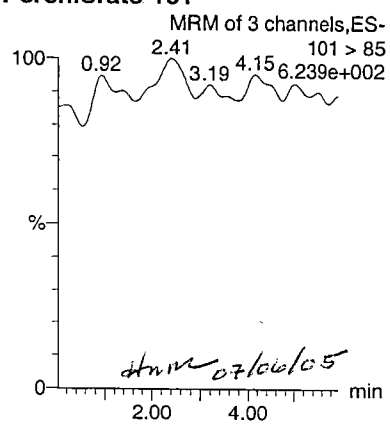
Perchlorate



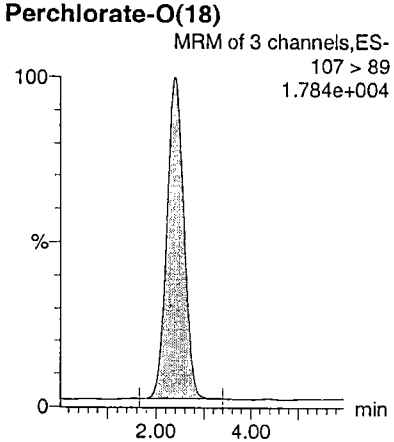
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB002	Perchlorate	99 > 83	2.39	83.598		83.598	83.598	bb			16.8	0.0045		
2	IPB002	Perchlorate-101	101 > 85												
3	IPB002	Perchlorate-O(18)	107 > 89	2.39	7156.342		7156.342	7156.342	bb			1673.0	0.4854	97.1	

MM= Manually Modified

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010022b
Date: 01-Jul-2005
Time: 22:21:22
ID: IPB003
Vial: 1:1,A

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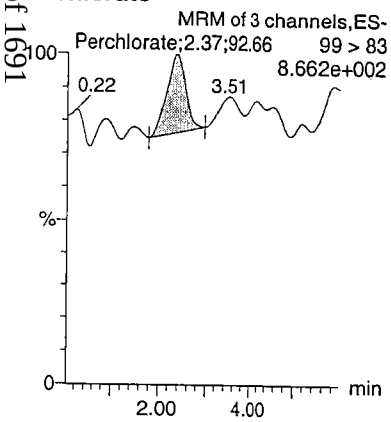
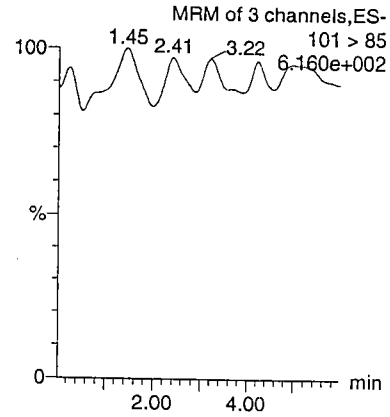
Perchlorate



Perchlorate



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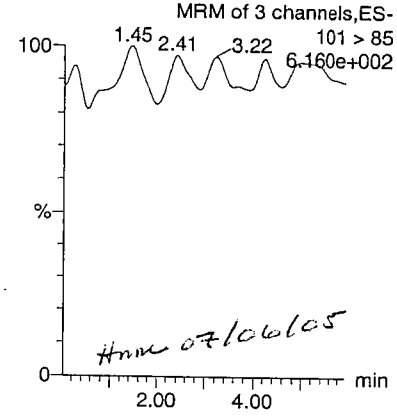
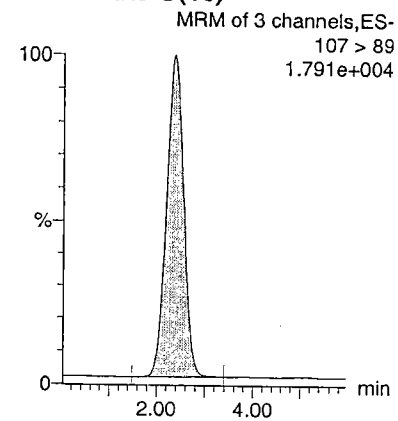


Hmm 07/06/05

Perchlorate-O(18)



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1	IPB003	Perchlorate	99 > 83	2.37	92.664		92.664	92.664	bb			10.1	0.0050		
2	IPB003	Perchlorate-101	101 > 85												
3	IPB003	Perchlorate-O(18)	107 > 89	2.37	7207.414		7207.414	7207.414	bb			3061.3	0.4888	97.8	

MM= Manually Modified

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050009b
Date: 05-Jul-2005
Time: 15:42:36
ID: IPB002
Vial: 1:1,A

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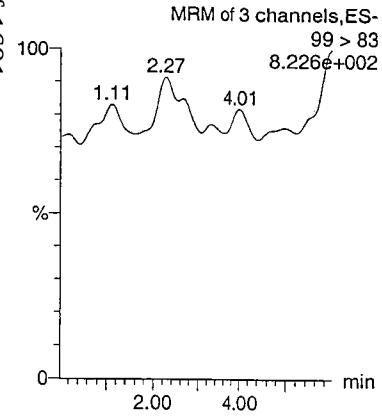
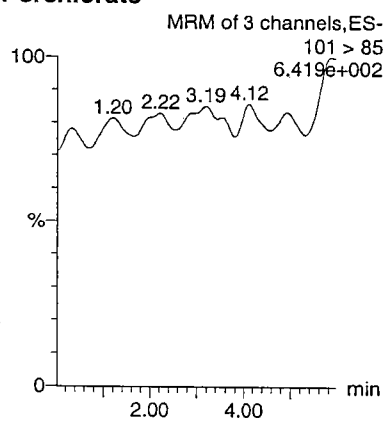
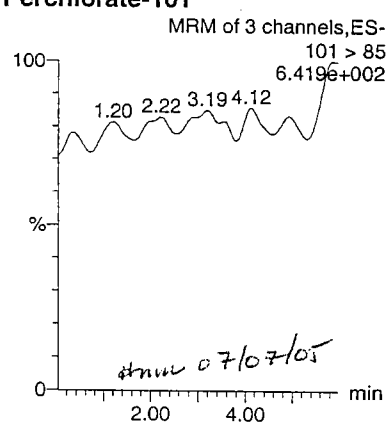
Perchlorate



Perchlorate

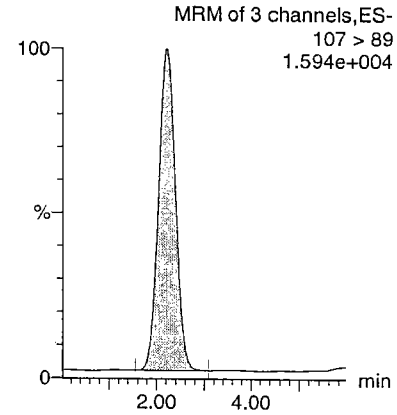


Perchlorate-101



dmw 07/07/05

Perchlorate-O(18)



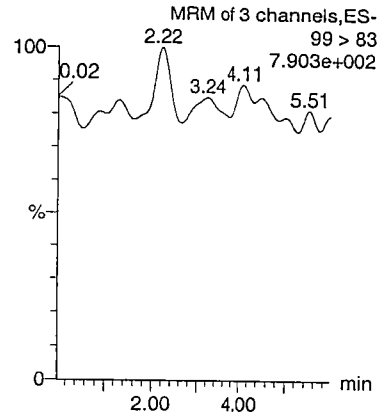
#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB002	Perchlorate	99 > 83												
2	IPB002	Perchlorate-101	101 > 85												
3	IPB002	Perchlorate-O(18)	107 > 89	2.21	6310.304		6310.304	6310.304	bb			3305.7	0.4957	99.1	

MM= Manually Modified

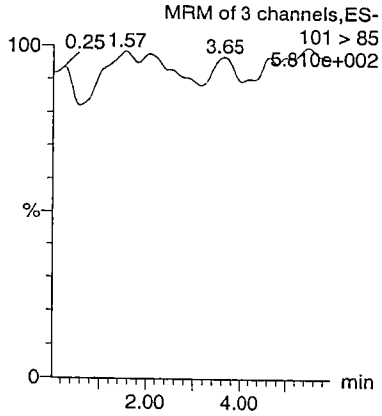
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050022b
Date: 05-Jul-2005
Time: 17:25:06
ID: IPB003
Vial: 1:1,A

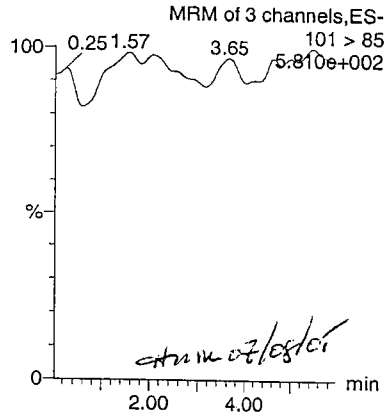
Perchlorate



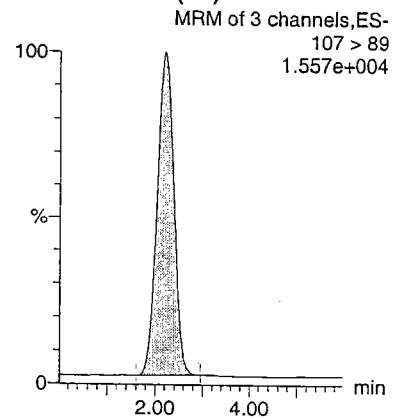
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB003	Perchlorate	99 > 83												
2	IPB003	Perchlorate-101	101 > 85												
3	IPB003	Perchlorate-O(18)	107 > 89	2.21	6102.345		6102.345	6102.345	bb			3283.4	0.4794	95.9	

MM= Manually Modified

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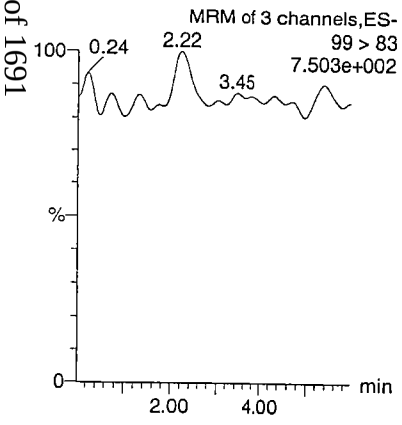
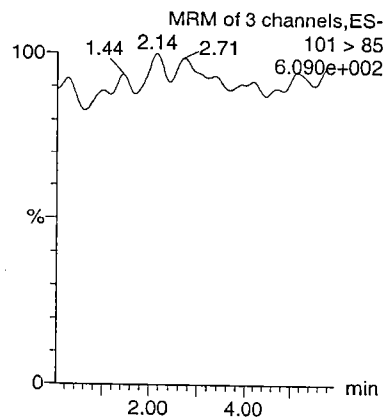
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050035b
Date: 05-Jul-2005
Time: 18:50:26
ID: IPB004
Vial: 1:1,A

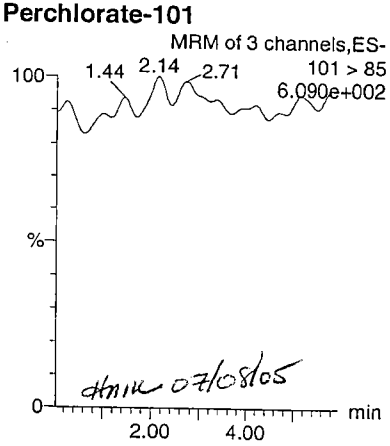
Perchlorate



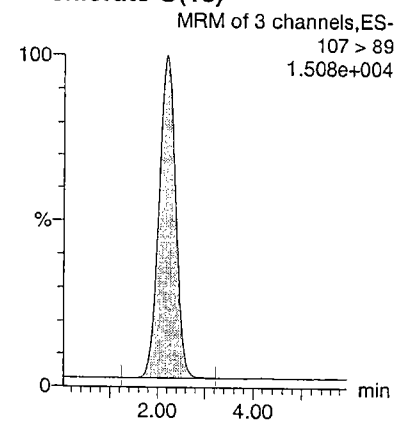
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB004	Perchlorate	99 > 83												
2	IPB004	Perchlorate-101	101 > 85												
3	IPB004	Perchlorate-O(18)	107 > 89	2.18	5983.461		5983.461	5983.461	bb			2620.1	0.4700	94.0	

MM= Manually Modified

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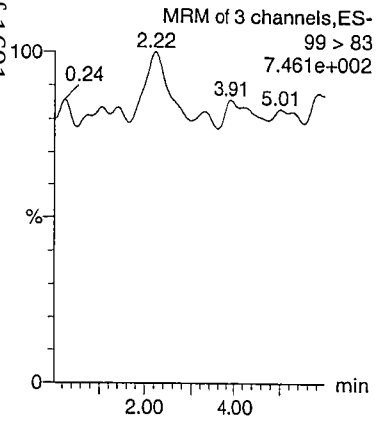
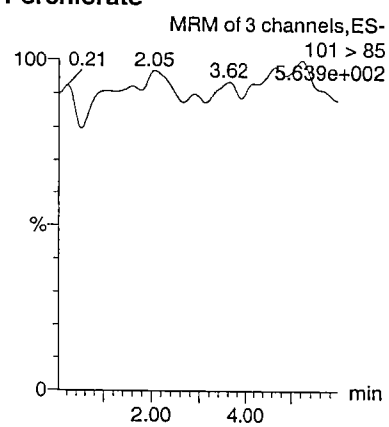
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050046b
Date: 05-Jul-2005
Time: 20:03:30
ID: IPB005
Vial: 1:1,A

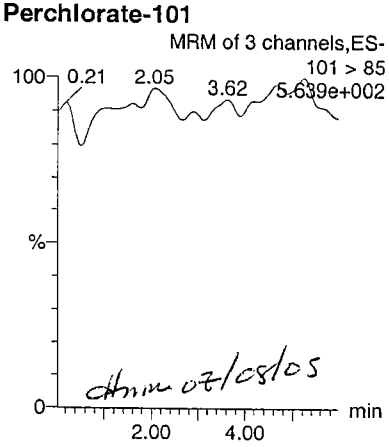
Perchlorate



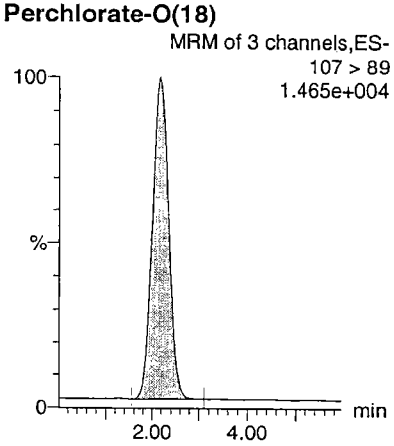
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	IPB005	Perchlorate	99 > 83												
2	IPB005	Perchlorate-101	101 > 85												
3	IPB005	Perchlorate-O(18)	107 > 89	2.17	5811.071		5811.071	5811.071	bb			3106.3	0.4565	91.3	

MM= Manually Modified

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Nairb.ref

```
;Positive ion monoisotopic and average masses from solution
;of NaI/RbI (2.0/0.05ug/ul) in 50/50 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
;Updated 20 April '95
22.9898      100
84.9118      100
172.8840     100
322.7782     100
472.6725     100
622.5667     100
772.4610     100
;922.3552     100
;1072.2494    100
;1222.1437    100
;1372.0379    100
;1521.9321    100
;1671.8264    100
;1821.7206    100
;1971.6149    100
;2121.5091    100
;2271.4033    100
;2421.2976    100
;2571.1918    100
;2721.0861    100
;2870.9803    100
;3020.8745    100
;3170.7688    100
;3320.6630    100
;3470.5572    100
;3620.4515    100
;3770.3457    100
;3920.2400    100
```

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Quattro Micro (VHH's)

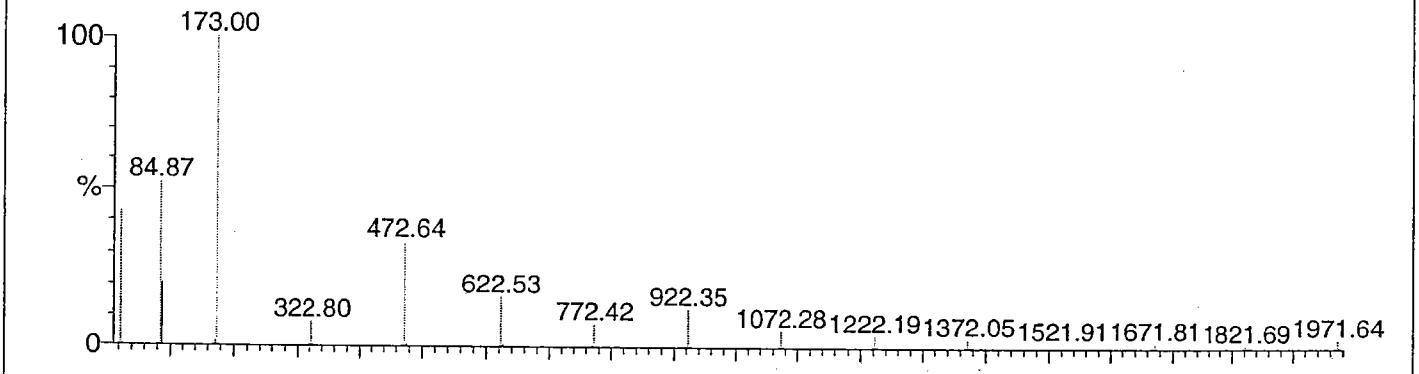
QHH125_Cent_060705.cal

Calibration Report - MS1 Static

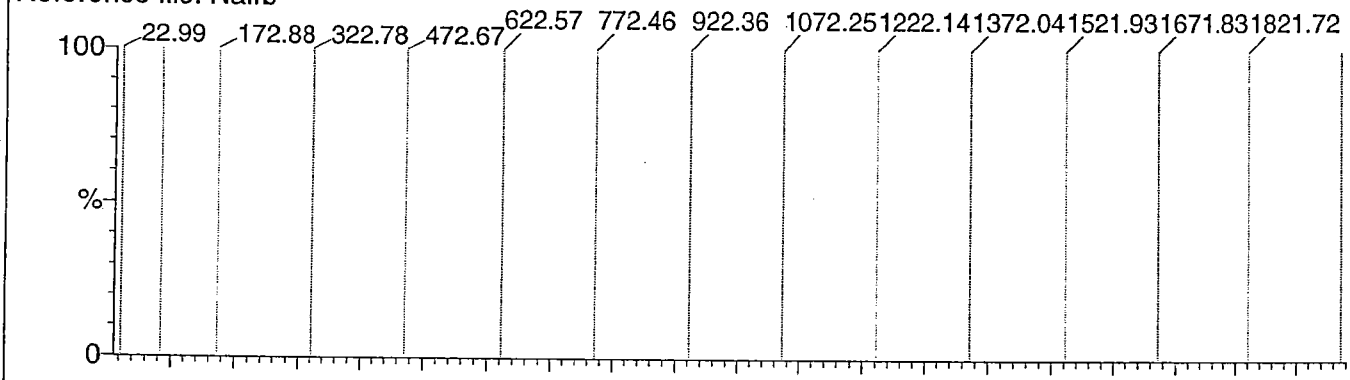
Printed: Tue Jun 07 12:16:55 2005

Data file: STATMS1 - Calibrated

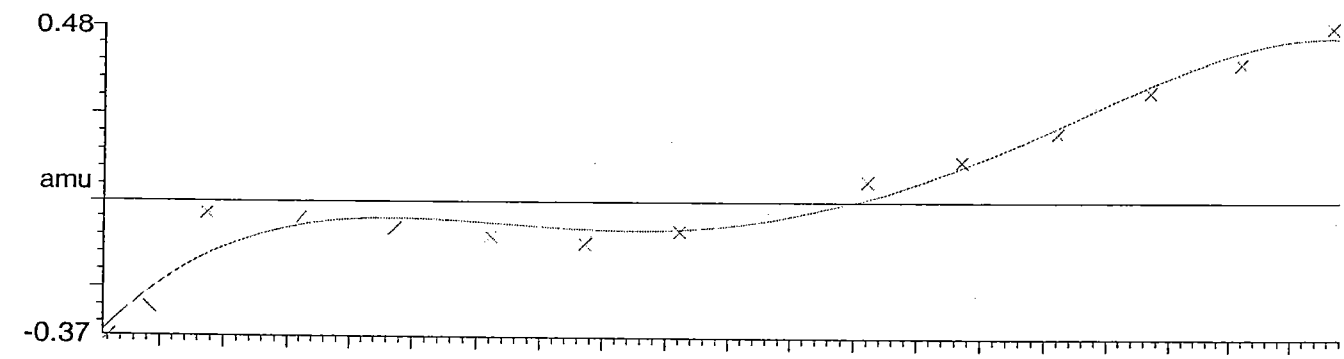
15 matches of 15 tested references



Reference file: Nairb

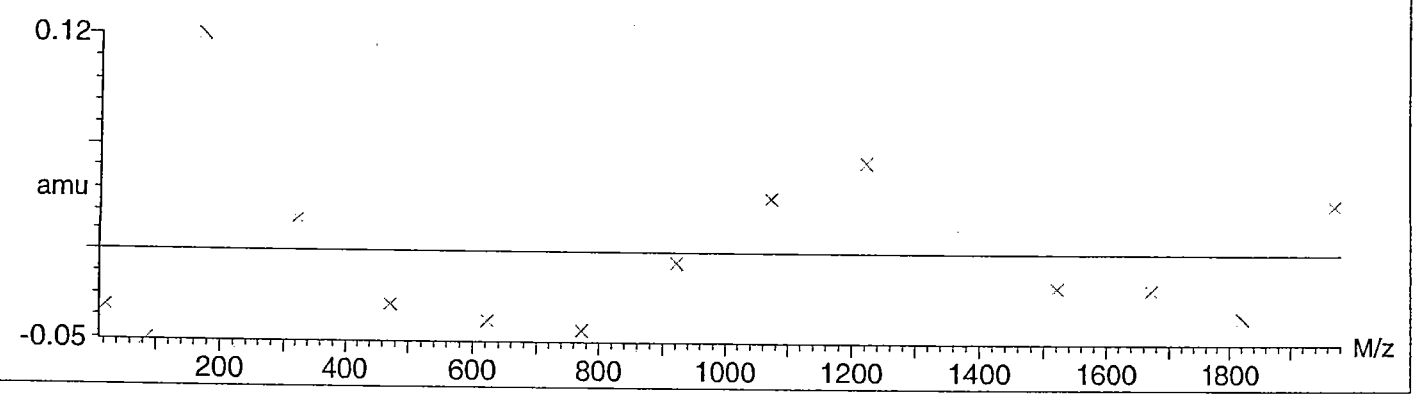


Mass difference (Raw - Ref mass)



Residuals

Mean residual = -3.725290e-9 ± 0.042178



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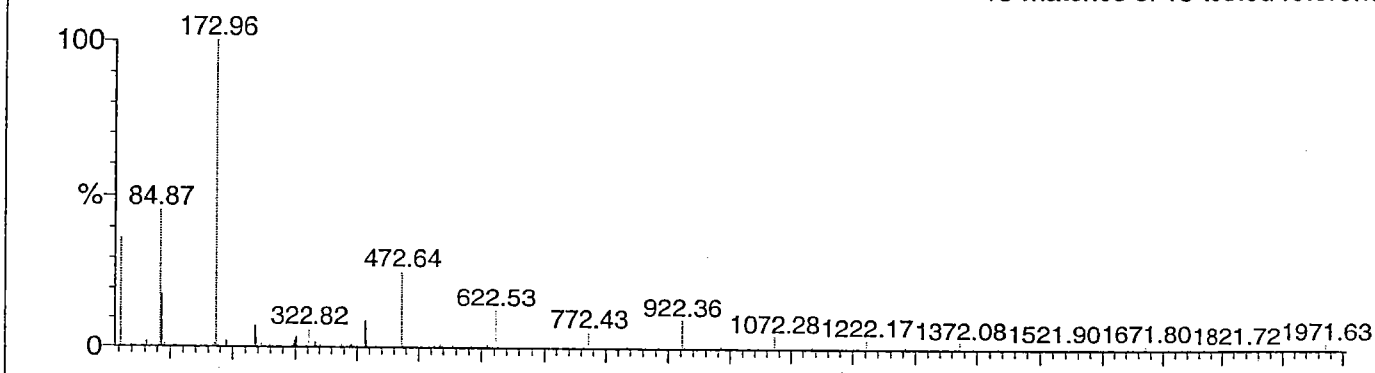
Calibration Report - MS1 Scanning

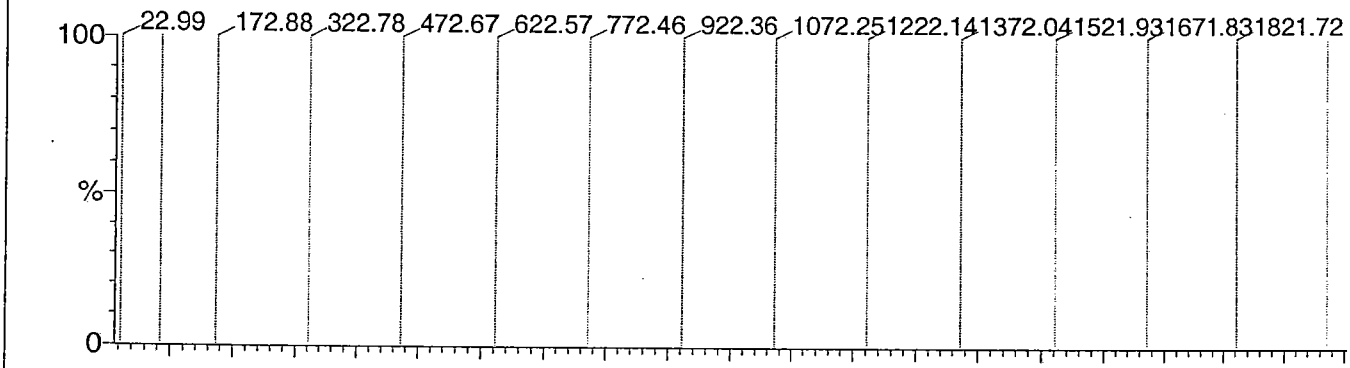
Printed: Tue Jun 07 12:17:59 2005

Data file: SCNMS1 - Calibrated

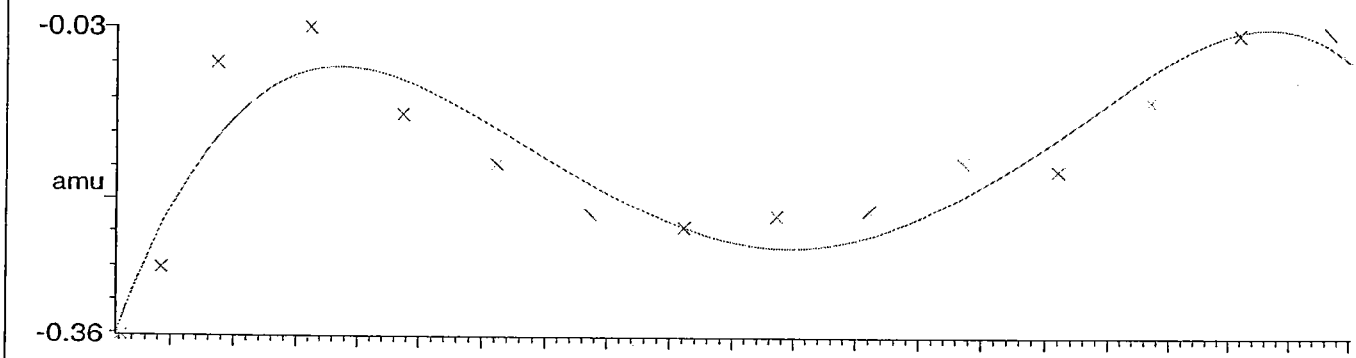
15 matches of 15 tested references



Reference file: Nairb

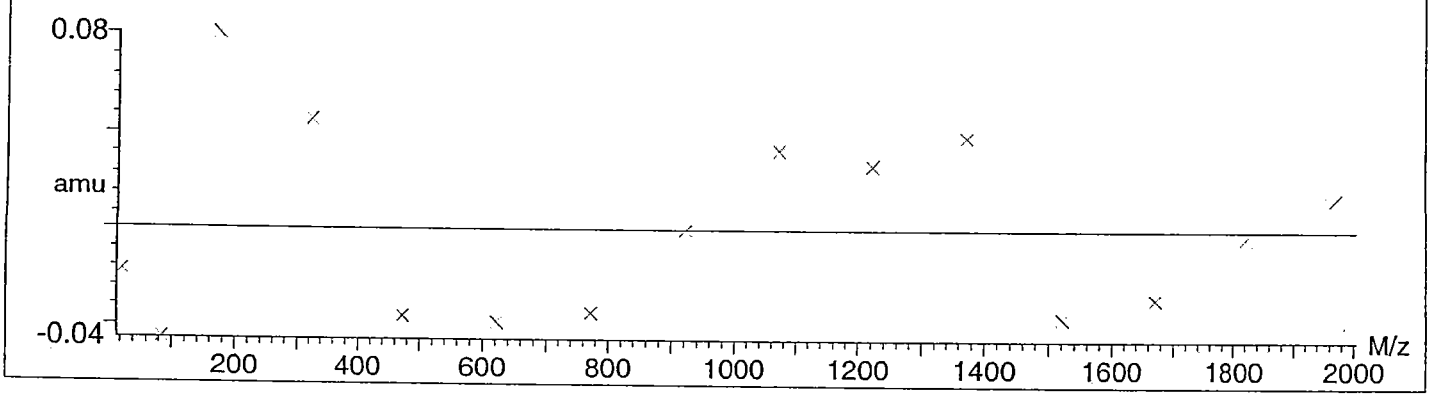


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 5.670396e-10 ± 0.036123



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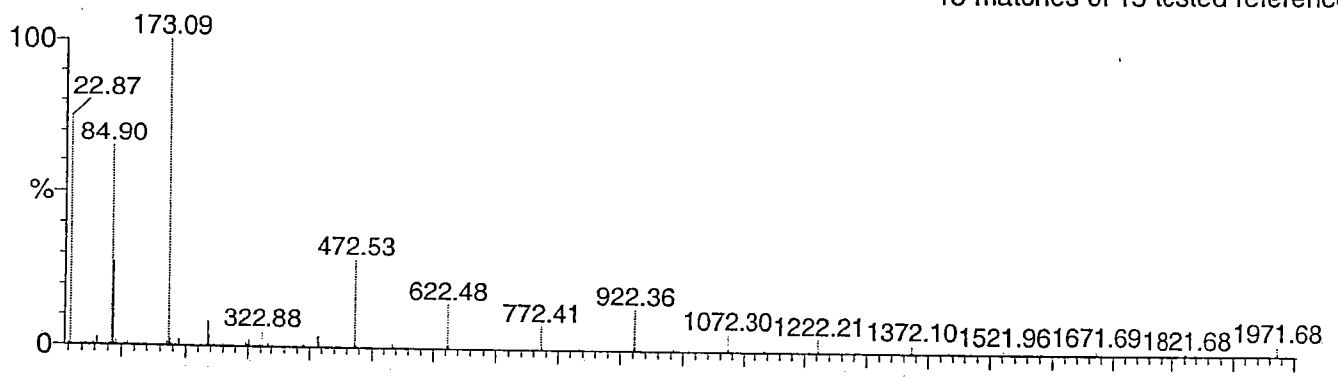
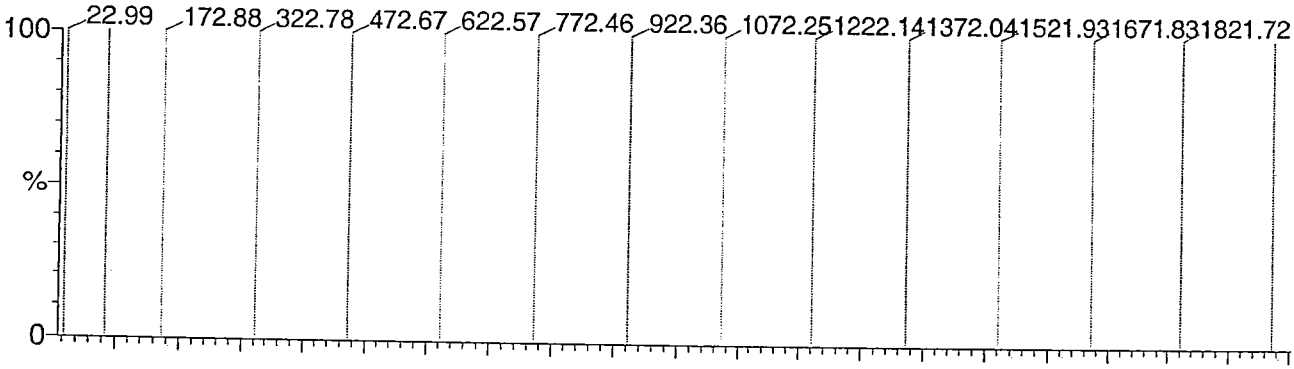
Printed: Tue Jun 07 12:19:07 2005

Data file: FASTMS1 - Calibrated

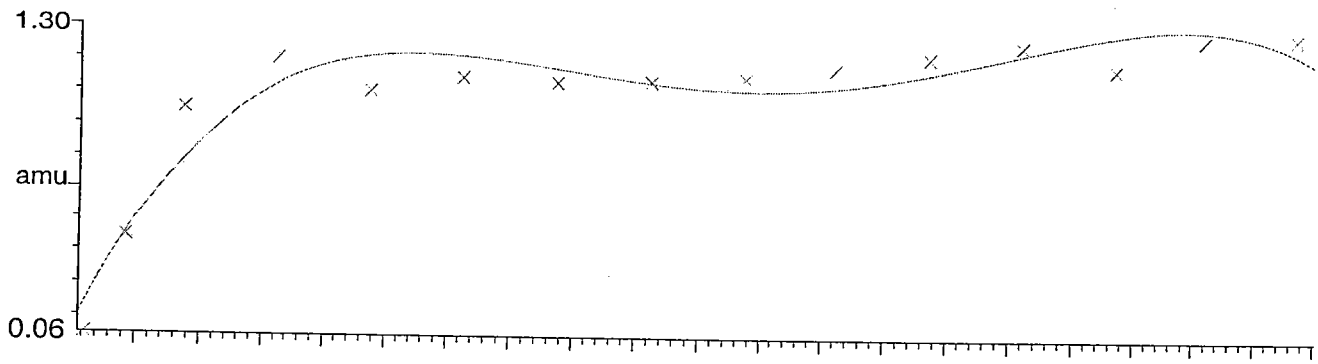
15 matches of 15 tested references



Reference file: Nairb

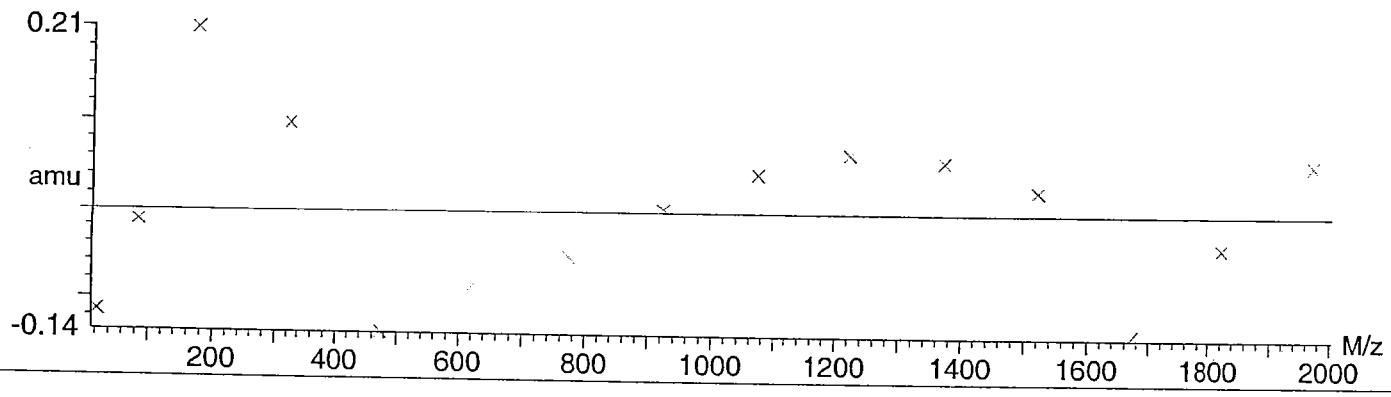


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.104409e-10 ± 0.094301



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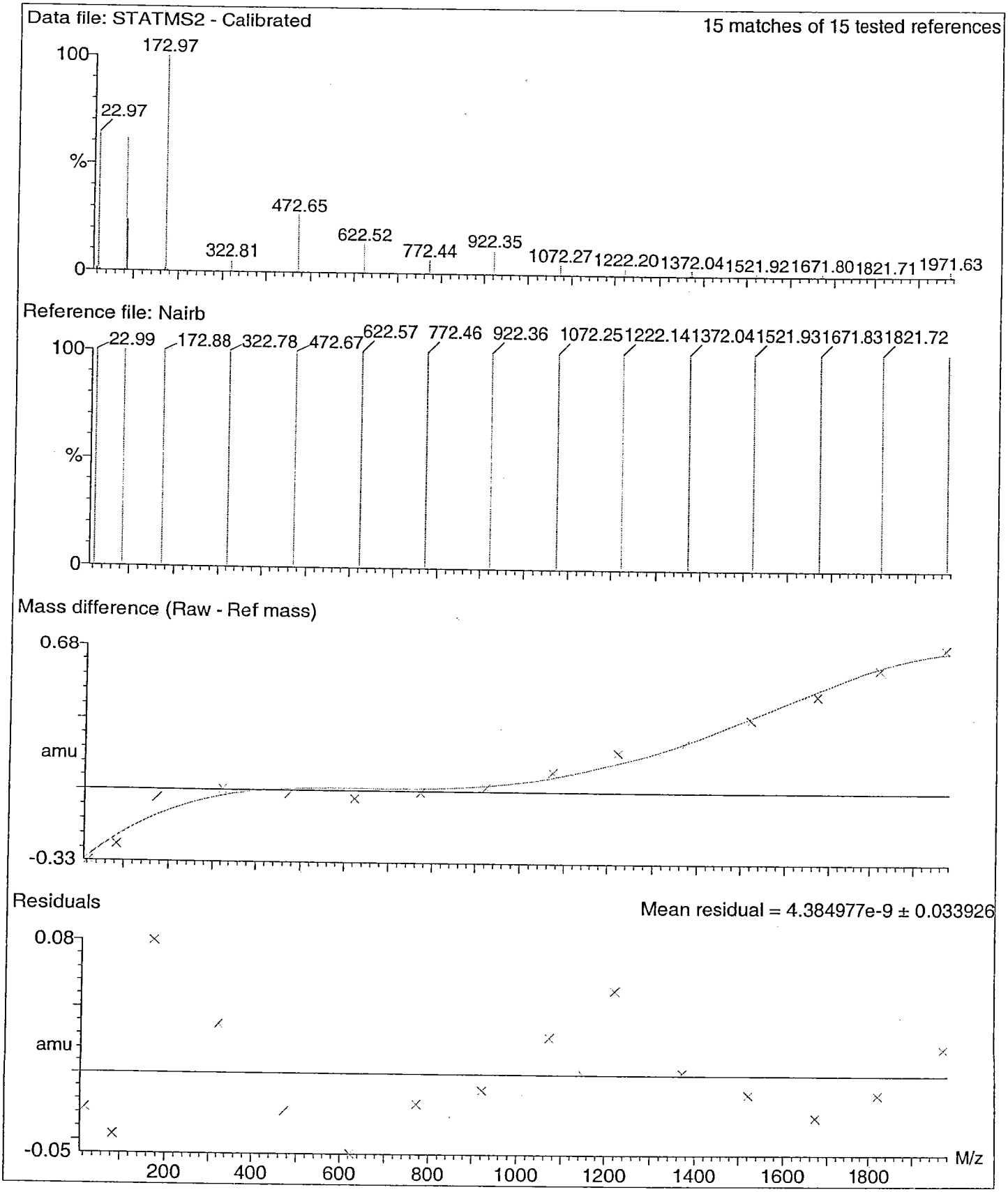
Calibration Report - MS2 Static

Printed: Tue Jun 07 12:20:11 2005



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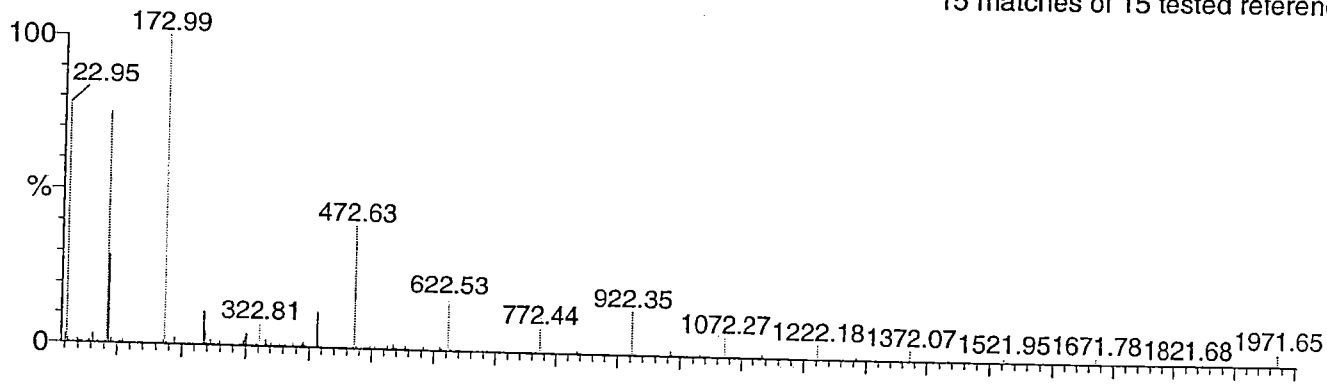
Calibration Report - MS2 Scanning

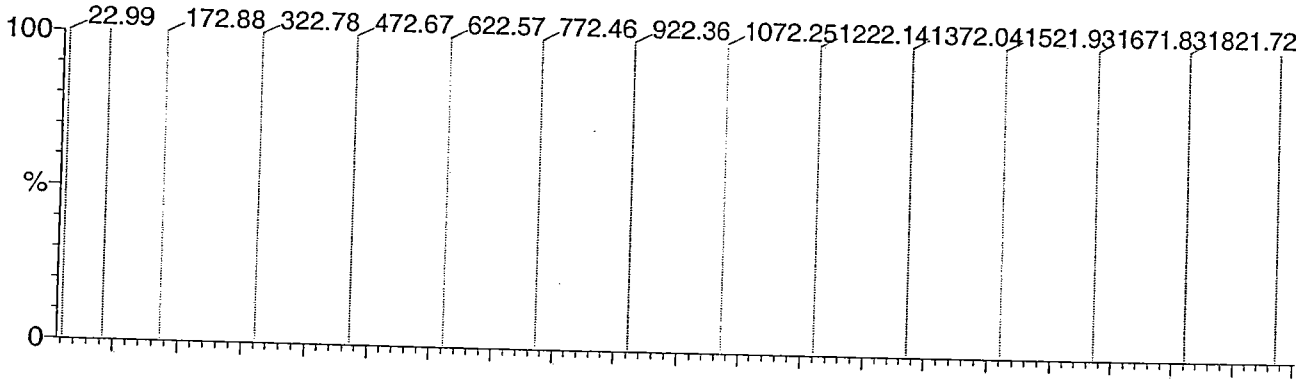
Printed: Tue Jun 07 12:21:16 2005

Data file: SCNMS2 - Calibrated

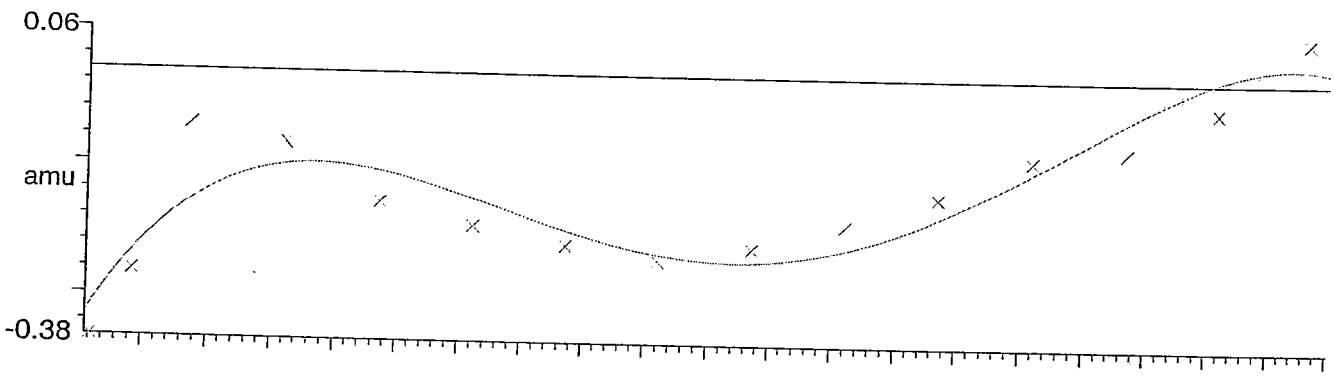
15 matches of 15 tested references



Reference file: Nairb

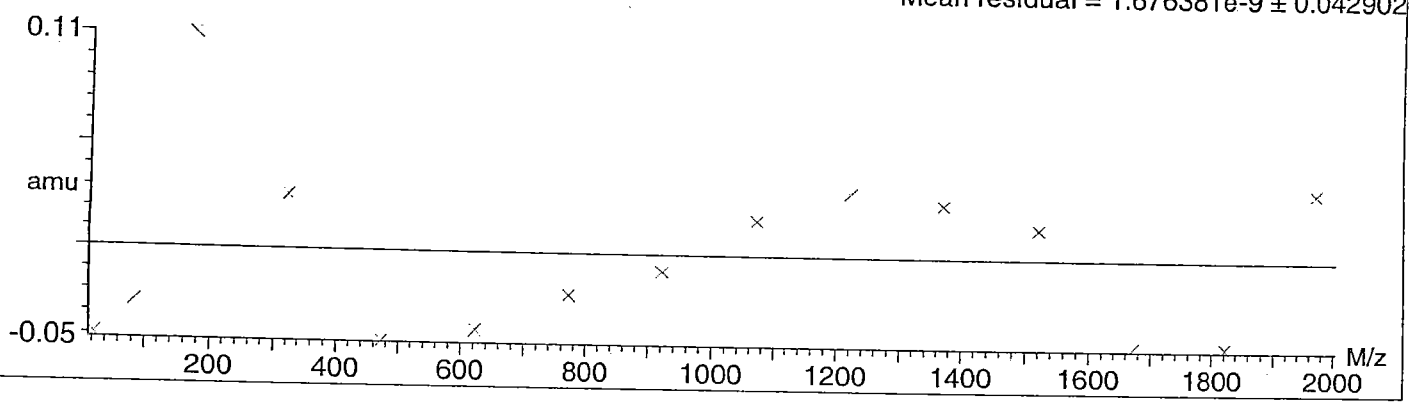


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 1.676381e-9 ± 0.042902

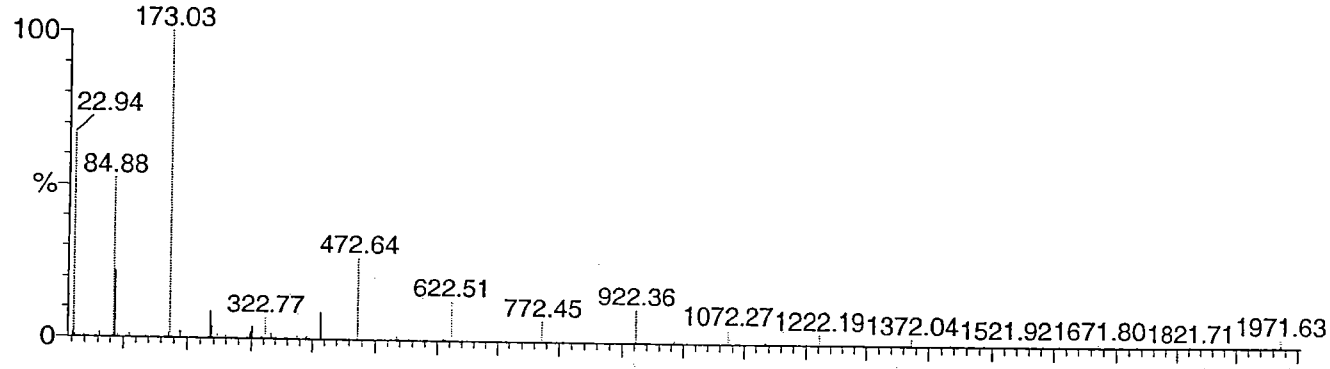


PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

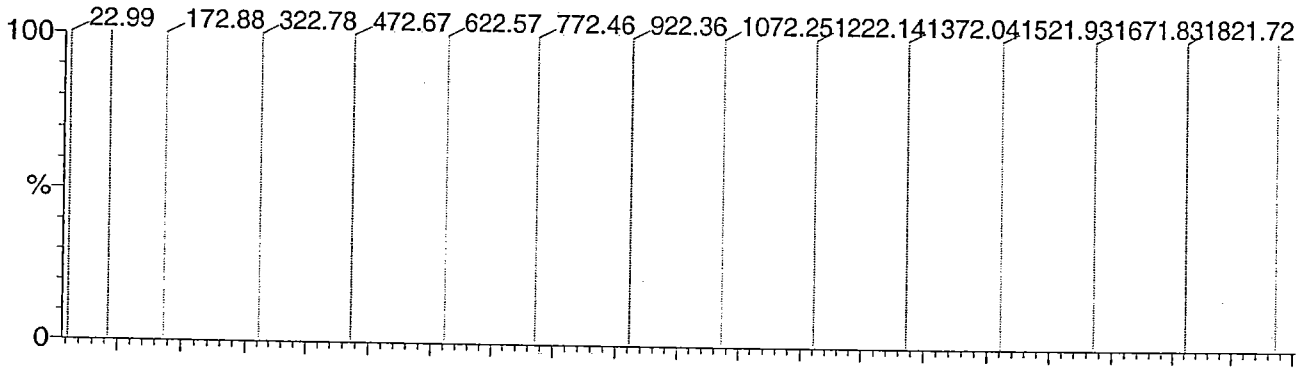
Printed: Tue Jun 07 12:22:24 2005

Data file: FASTMS2 - Calibrated

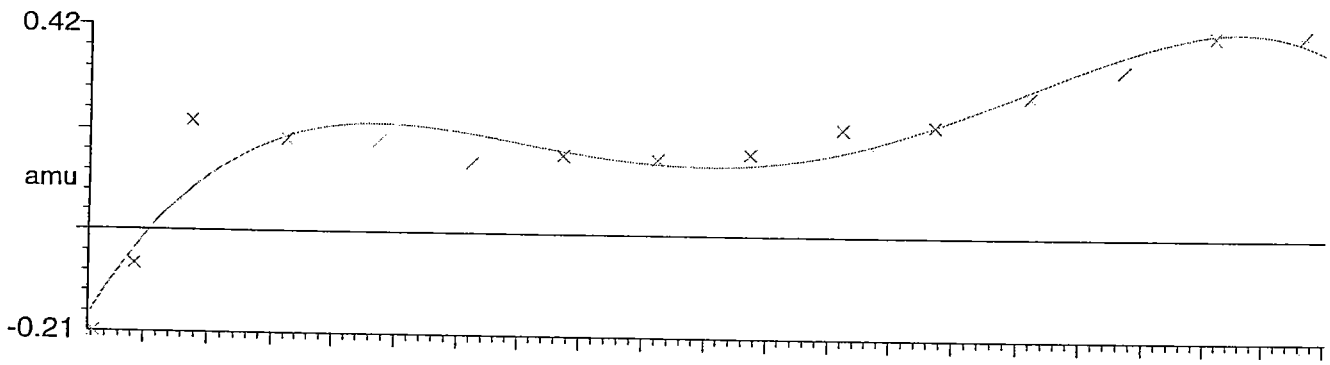
15 matches of 15 tested references



Reference file: Nairb

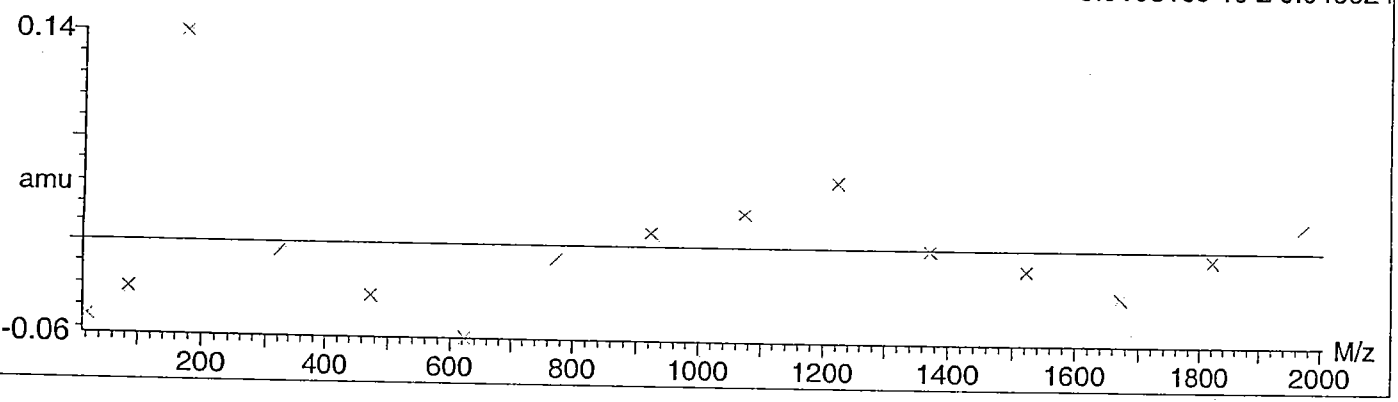


Mass difference (Raw - Ref mass)



Residuals

Mean residual = -3.919316e-10 ± 0.046624



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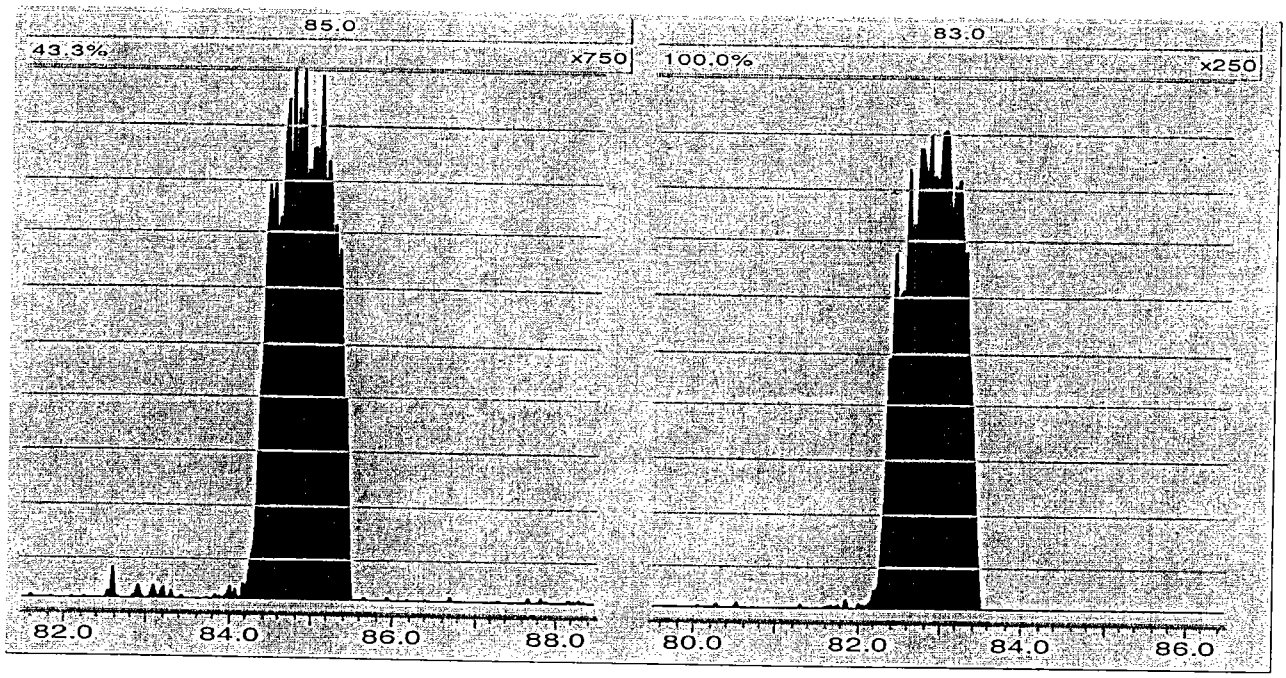
Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\PERCHLORATE.PRO\ACQUDB\perchlorate04.ipr

Printed : Fri Jul 01 19:46:45 2005



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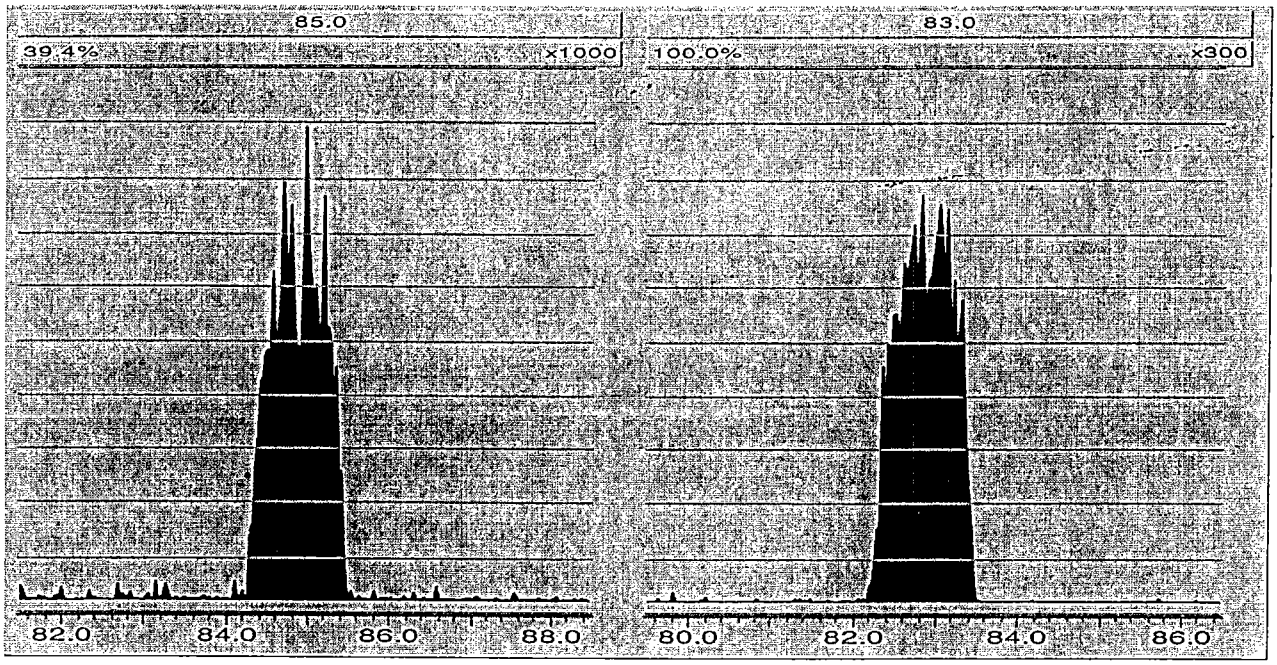
Quattro Micro Tune Parameters

Parameter File: C:\Masslynx\Perchlorate.PRO\ACQUDB\perchlorate04.ipr

Printed : Tue Jul 05 14:36:08 2005



Perchlorate RT Standard Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Instrument ID: LCMSMS **Run Date:** 01-JUL-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

	Retention Time Marker (Area)	RT(min)	Q
mid-level Standard	**7209.5**	**2.39**	
Upper Limit	**14419**	**2.89**	
Lower Limit	**3604.75**	**1.89**	
1200876904	6851.91	2.38	
1200876905	6855.9	2.38	
1200876913	8295.13	2.31	

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Perchlorate RT Standard Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Instrument ID: LCMSMS **Run Date:** 05-JUL-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

	Retention Time Marker (Area)	RT(min)	Q
mid-level Standard	**6113.72**	**2.22**	
Upper Limit	**12227.44**	**2.72**	
Lower Limit	**3056.86**	**1.72**	
139405001	6061.15	2.17	

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SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 438024

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05050GMC401

Date Received: 25-JUN-05

GEL Job No (SDG): 139405

GEL Sample ID: 139405001

Date Filtered: 01-JUL-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	10	40	145	ug/L		200	05-JUL-05 19:50	per07050044b
	Perchlorate Isotope Ratio			2.86			200	05-JUL-05 19:50	per07050044b
14797-73-0	Perchlorate-101	10	40	149	ug/L		200	05-JUL-05 19:50	per07050044b
	Perchlorate-O(18)	0	0	95.2	ug/L		200	05-JUL-05 19:50	per07050044b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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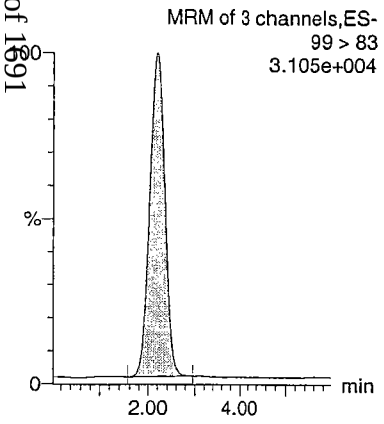
Dataset: C:\Masslynx\Perchlorate.PRO\per070505b1.qld, Time: Tue Jul 05 20:16:33 2005

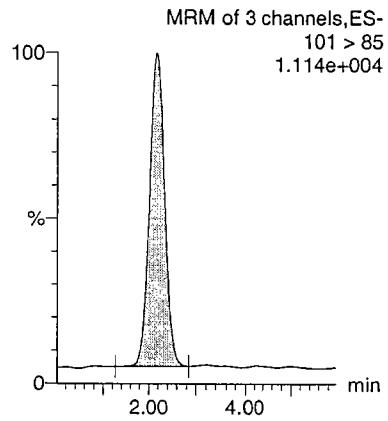
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050044b
Date: 05-Jul-2005
Time: 19:50:22
ID: 139405001 | ESAL | 438525 | LIMS# 200 |
Vial: 1:3,A

Page 56 of 1691

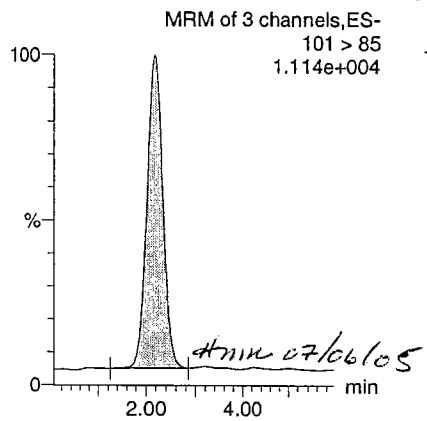
Perchlorate



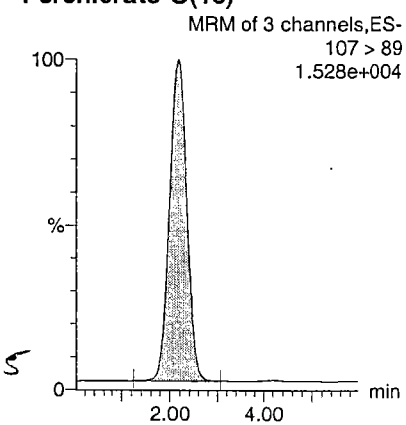
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	139405001	Perchlorate	99 > 83	2.18	11297.784		11297.784	11297.784	bb			2022.5	0.7256		2.86
2	139405001	Perchlorate-101	101 > 85	2.18	3954.537		3954.537	3954.537	bb			1125.6	0.7466		
3	139405001	Perchlorate-O(18)	107 > 89	2.17	6061.150		6061.150	6061.150	bb			2877.1	0.4761	95.2	

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 01-JUL-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination: .9998

Calibration Curve: 18386.3X + 0

Response Type: External Standard

Curve Type: Linear Null

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 01-JUL-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination: .9994

Calibration Curve: 6282.71X + 0

Response Type: External Standard

Curve Type: Linear Null

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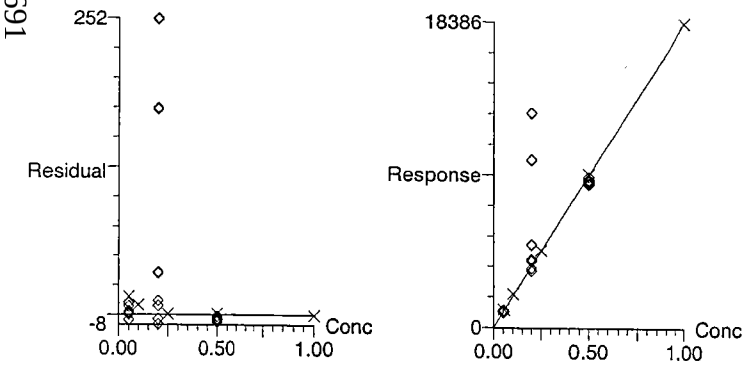
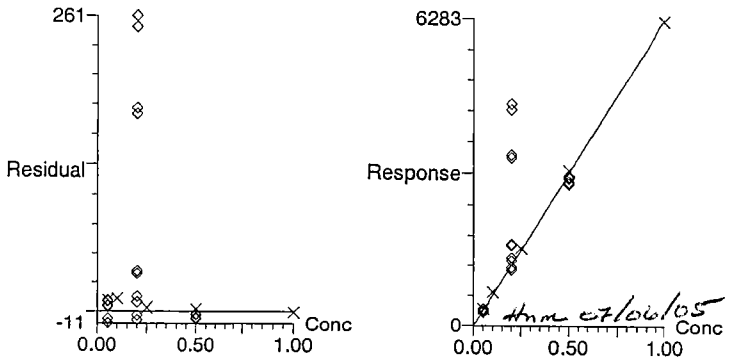
Dataset: C:\Masslynx\Perchlorate.PRO\per070105b.qld, Time: Sat Jul 02 09:48:50 2005

Method: C:\Masslynx\Perchlorate.PRO\MethDB\per070105b.mdb, Time: Sat Jul 02 09:36:17 2005
Calibration: Untitled, Time: Sat Jul 02 09:48:49 2005

Compound name: Perchlorate
Coefficient of Determination: 0.999752
Calibration curve: 18386.3 * x
Response type: External Std, Area
Curve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



Compound name: Perchlorate-101
Coefficient of Determination: 0.999403
Calibration curve: 6282.71 * x
Response type: External Std, Area
Curve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



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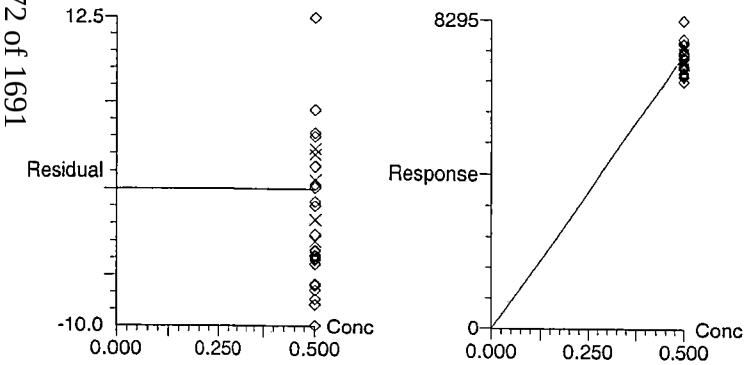
Dataset: C:\Masslynx\Perchlorate.PRO\per070105b.qld, Time: Sat Jul 02 09:48:50 2005

Compound name: Perchlorate-O(18)
Coefficient of Determination: 0.000000
Calibration curve: 14744.2 * x
Response type: External Std, Area
Curve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010003b
Date: 01-Jul-2005
Time: 20:15:50
ID: WCL050621-01
Vial: 1:1,B

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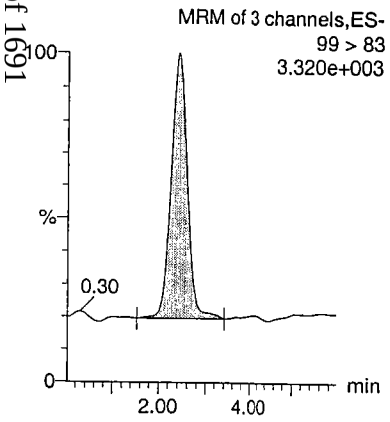
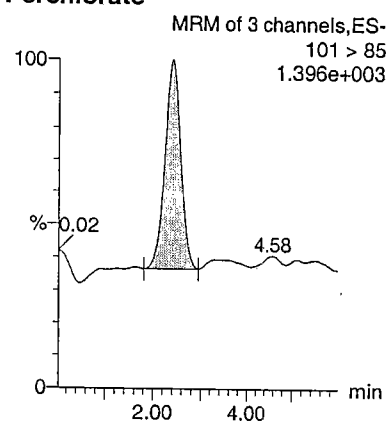
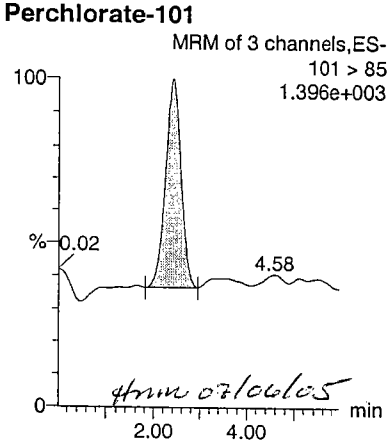
Perchlorate



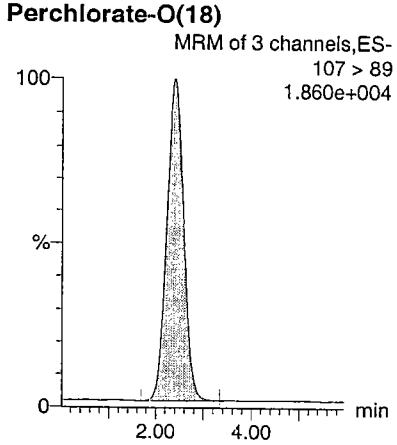
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050621-01	Perchlorate	99 > 83	2.41	1058.509		1058.509	1058.509	bb			246.7	0.0576	115.1	3.06
2	WCL050621-01	Perchlorate-101	101 > 85	2.41	345.810		345.810	345.810	bb			62.9	0.0550	110.1	
3	WCL050621-01	Perchlorate-O(18)	107 > 89	2.39	7553.108		7553.108	7553.108	bb			2752.8	0.5123	102.5	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010004b
Date: 01-Jul-2005
Time: 20:22:24
ID: WCL050621-02
Vial: 1:1,C

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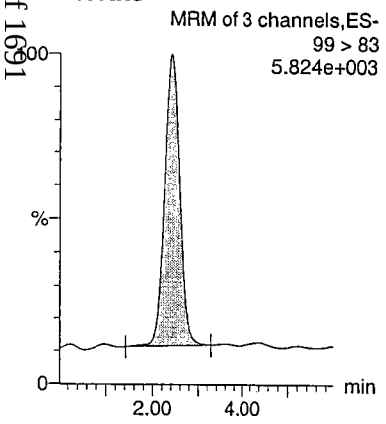
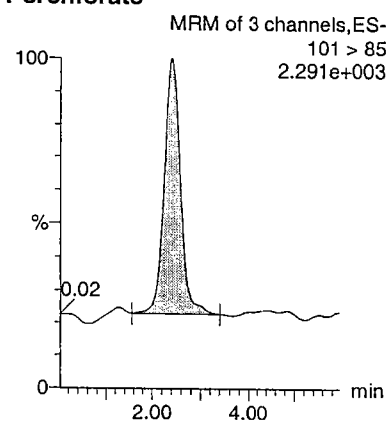
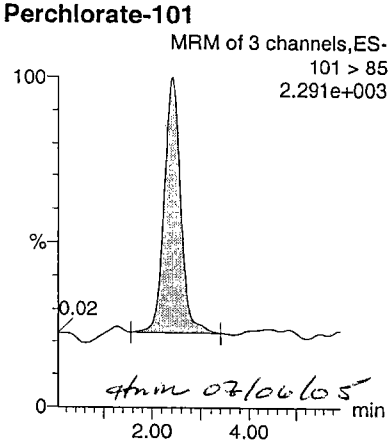
Perchlorate



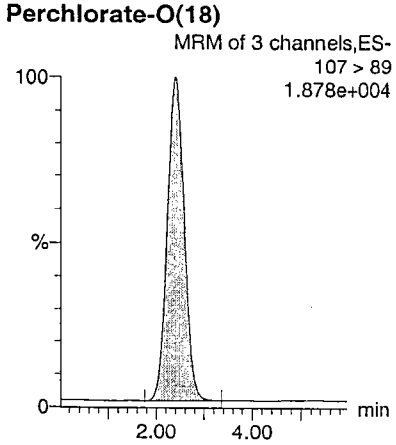
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050621-02	Perchlorate	99 > 83	2.42	1988.111		1988.111	1988.111	bb			252.9	0.1081	108.1	2.85
2	WCL050621-02	Perchlorate-101	101 > 85	2.41	698.784		698.784	698.784	bb			57.9	0.1112	111.2	
3	WCL050621-02	Perchlorate-O(18)	107 > 89	2.41	7583.614		7583.614	7583.614	bb			1486.0	0.5143	102.9	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010005b
Date: 01-Jul-2005
Time: 20:28:57
ID: WCL050621-03
Vial: 1:1,D

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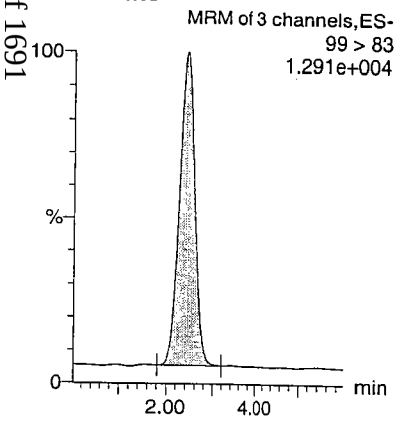
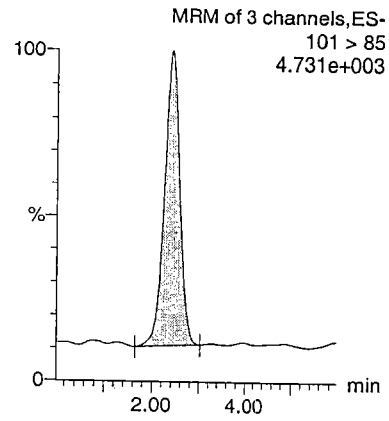
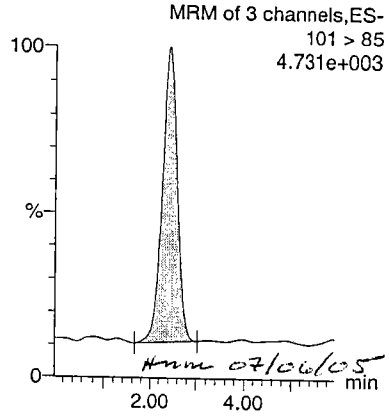
Perchlorate



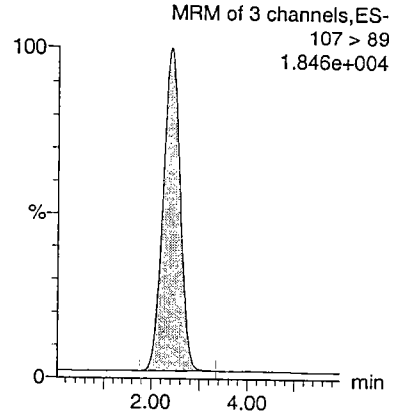
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc	%Rec	Ratio
1	WCL050621-03	Perchlorate	99 > 83	2.42	4618.277		4618.277	4618.277	bb			841.8	0.2512	100.5	2.85
2	WCL050621-03	Perchlorate-101	101 > 85	2.41	1621.676		1621.676	1621.676	bb			245.5	0.2581	103.2	
3	WCL050621-03	Perchlorate-O(18)	107 > 89	2.39	7419.129		7419.129	7419.129	bb			4460.0	0.5032	100.6	

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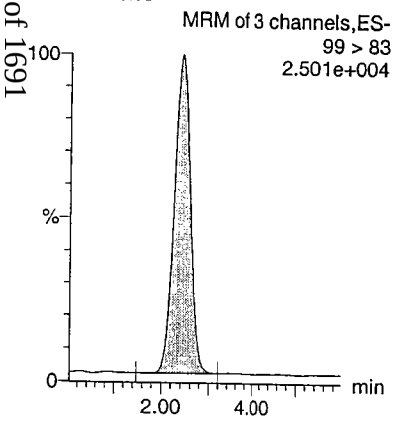
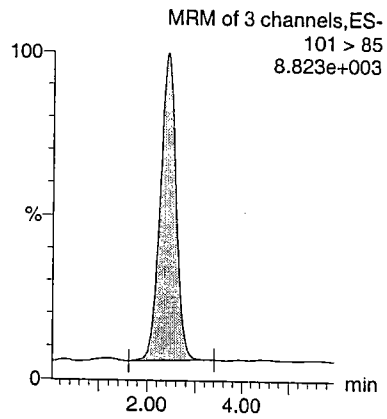
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010006b
Date: 01-Jul-2005
Time: 20:35:31
ID: WCL050621-04
Vial: 1:1,E

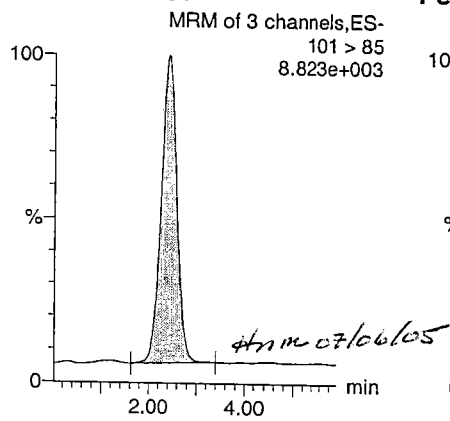
Perchlorate



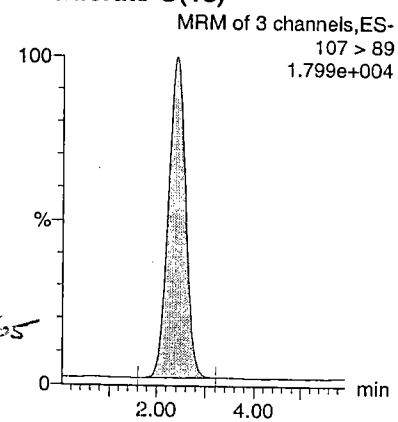
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc	%Rec	Ratio
1	WCL050621-04	Perchlorate	99 > 83	2.41	9255.914		9255.914	9255.914	bb			2345.5	0.5034	100.7	2.90
2	WCL050621-04	Perchlorate-101	101 > 85	2.41	3194.866		3194.866	3194.866	bb			495.9	0.5085	101.7	
3	WCL050621-04	Perchlorate-O(18)	107 > 89	2.39	7209.496		7209.496	7209.496	bb			3443.9	0.4890	97.8	

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Dataset: C:\Masslynx\Perchlorate.PRO\per070105b.qld, Time: Sat Jul 02 09:48:50 2005

Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010007b
Date: 01-Jul-2005
Time: 20:42:04
ID: WCL050621-05
Vial: 1:1,F

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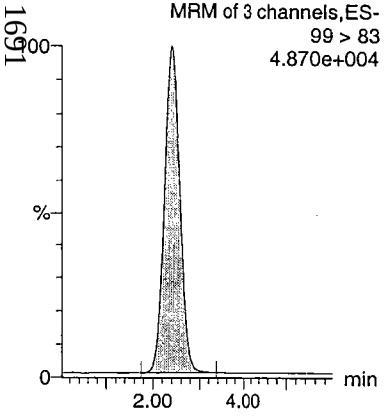
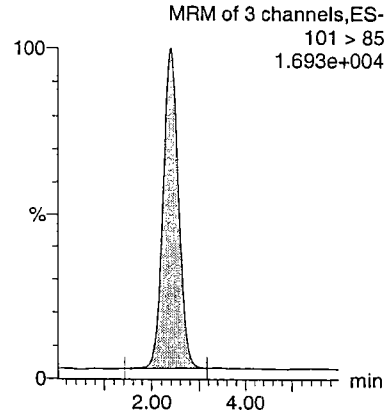
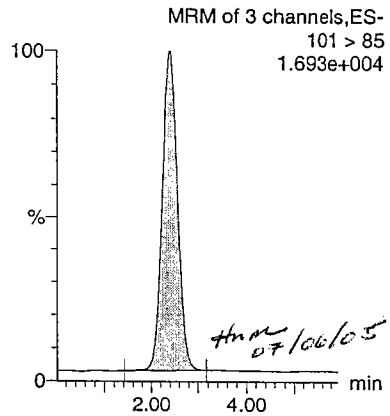
Perchlorate



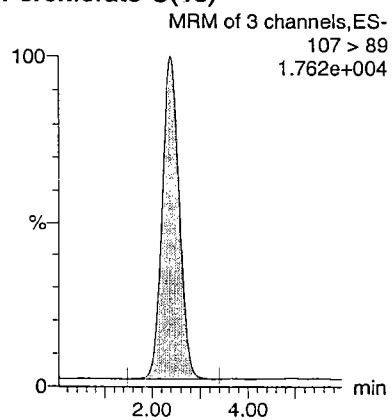
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050621-05	Perchlorate	99 > 83	2.41	18327.643		18327.643	18327.643	bb			4950.2	0.9968	99.7	2.94
2	WCL050621-05	Perchlorate-101	101 > 85	2.41	6234.575		6234.575	6234.575	bb			1344.2	0.9923	99.2	
3	WCL050621-05	Perchlorate-O(18)	107 > 89	2.39	7095.071		7095.071	7095.071	bb			1429.5	0.4812	96.2	

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 05-JUL-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination: .9998

Calibration Curve: 15569.6X + 0

Response Type: External Standard

Curve Type: Linear Null

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 05-JUL-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination: .9995

Calibration Curve: 5296.68X + 0

Response Type: External Standard

Curve Type: Linear Null

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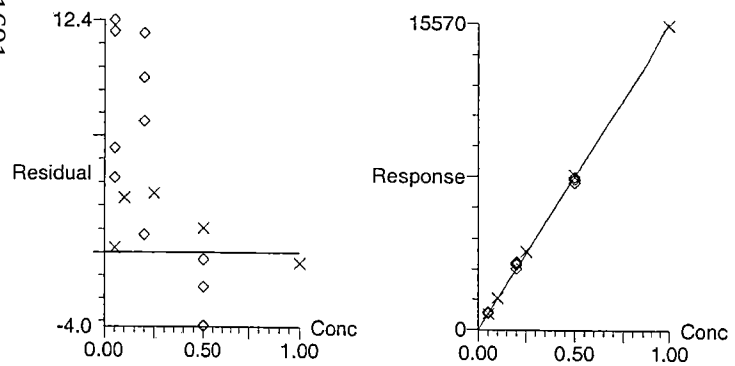
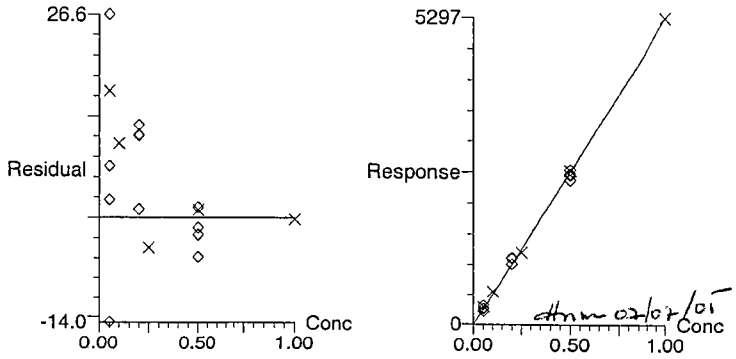
Dataset: C:\Masslynx\Perchlorate.PRO\per070505b1.qld, Time: Tue Jul 05 20:16:33 2005

Method: C:\Masslynx\Perchlorate.PRO\MethDB\per070505b.mdb, Time: Tue Jul 05 15:55:33 2005
Calibration: Untitled, Time: Tue Jul 05 20:15:25 2005

Compound name: Perchlorate
Coefficient of Determination: 0.999765
Calibration curve: 15569.6 * x
Response type: External Std, Area
Curve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



Compound name: Perchlorate-101
Coefficient of Determination: 0.999517
Calibration curve: 5296.68 * x
Response type: External Std, Area
Curve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



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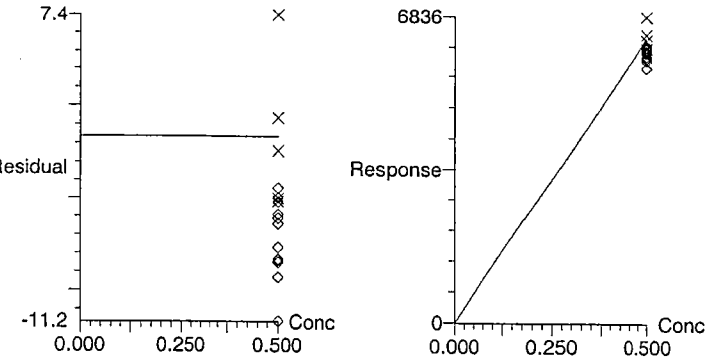
Dataset: C:\Masslynx\Perchlorate.PRO\per070505b1.qld, Time: Tue Jul 05 20:16:33 2005

Compound name: Perchlorate-O(18)
Coefficient of Determination: 0.000000
Calibration curve: 12729.9 * x
Response type: External Std, Area
Curve type: Linear, Origin: Force, Weighting: Null, Axis trans: None



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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050003b
Date: 05-Jul-2005
Time: 15:03:14
ID: WCL050703-01
Vial: 1:1,B

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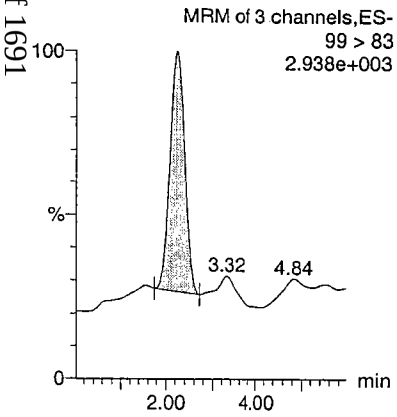
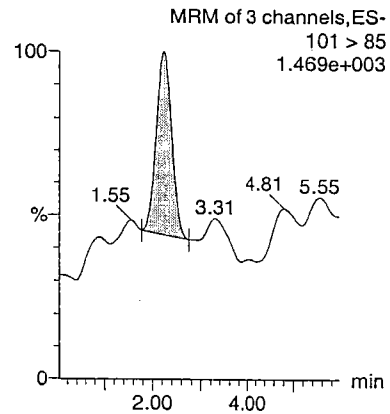
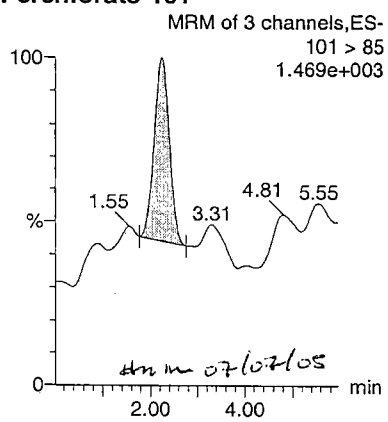
Perchlorate



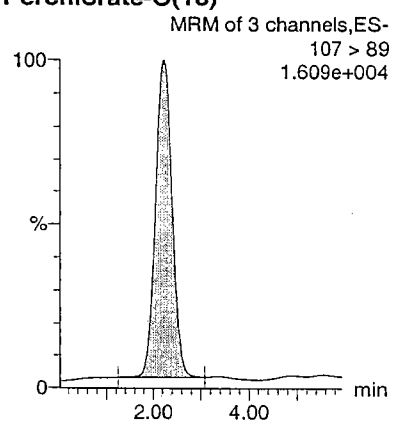
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-01	Perchlorate	99 > 83	2.24	780.336		780.336	780.336	bb			231.8	0.0501	100.2	2.53
2	WCL050703-01	Perchlorate-101	101 > 85	2.24	308.798		308.798	308.798	bb			20.3	0.0583	116.6	
3	WCL050703-01	Perchlorate-O(18)	107 > 89	2.22	6311.829		6311.829	6311.829	bb			1455.4	0.4958	99.2	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050004b
Date: 05-Jul-2005
Time: 15:09:48
ID: WCL050703-02
Vial: 1:1,C

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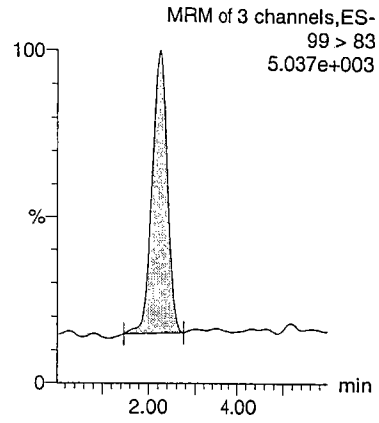
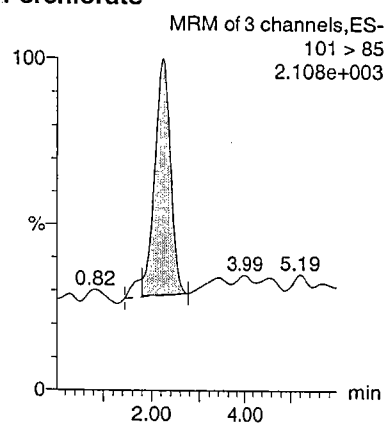
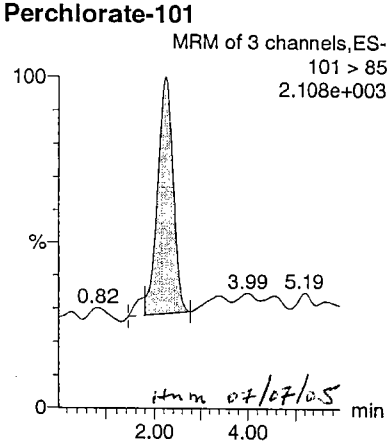
Perchlorate



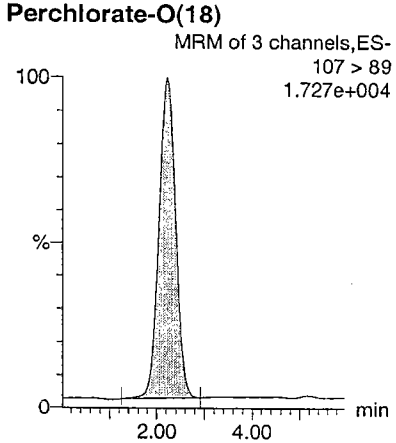
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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1	WCL050703-02	Perchlorate	99 > 83	2.24	1601.593		1601.593	1601.593	bb			198.6	0.1029	102.9	2.78
2	WCL050703-02	Perchlorate-101	101 > 85	2.24	580.768		580.768	580.768	MM	05-Jul-05	20:14:48	51.6	0.1096	109.6	
3	WCL050703-02	Perchlorate-O(18)	107 > 89	2.22	6836.433		6836.433	6836.433	bb			944.0	0.5370	107.4	

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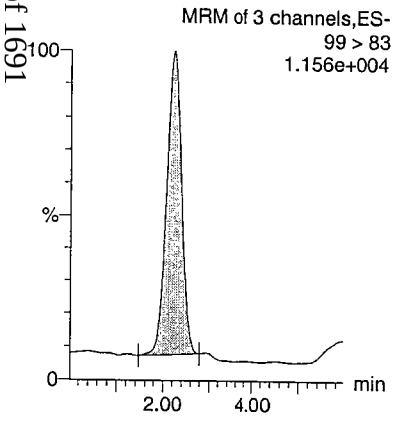
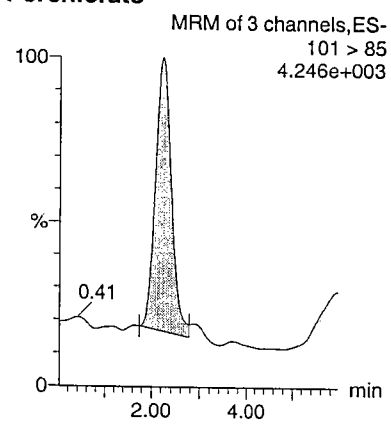
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050005b
Date: 05-Jul-2005
Time: 15:16:21
ID: WCL050703-03
Vial: 1:1,D

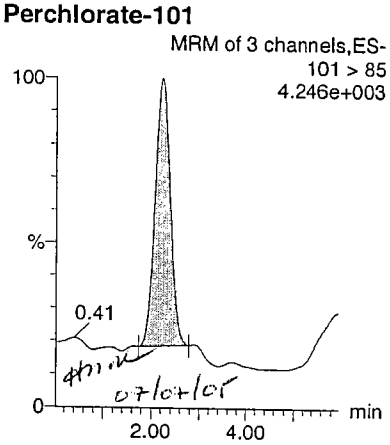
Perchlorate



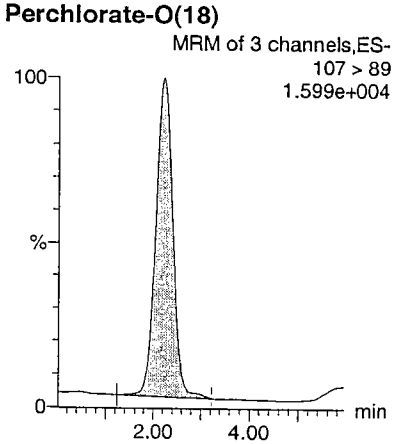
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-03	Perchlorate	99 > 83	2.22	4013.094		4013.094	4013.094	bb			576.3	0.2578	103.1	2.96
2	WCL050703-03	Perchlorate-101	101 > 85	2.22	1271.762		1271.762	1271.762	bb			408.6	0.2401	96.0	
3	WCL050703-03	Perchlorate-O(18)	107 > 89	2.21	6436.255		6436.255	6436.255	bb			498.4	0.5056	101.1	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050006b
Date: 05-Jul-2005
Time: 15:22:55
ID: WCL050703-04
Vial: 1:1,E

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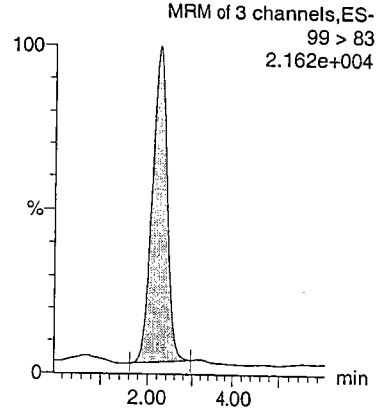
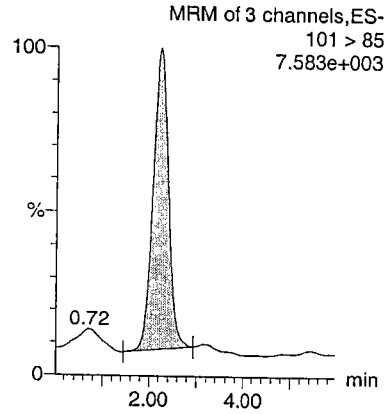
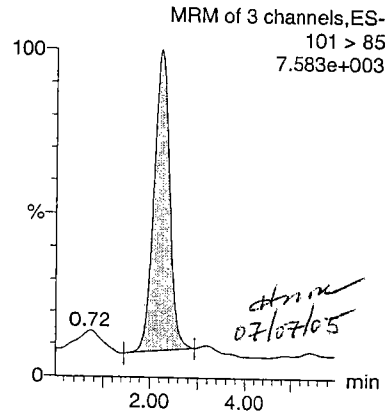
Perchlorate



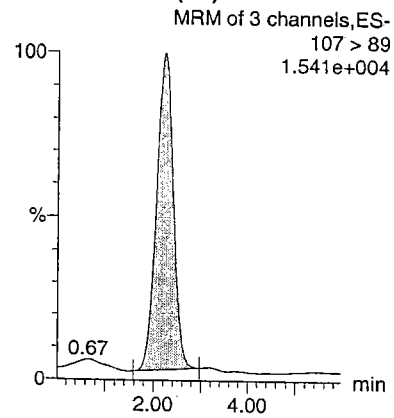
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-04	Perchlorate	99 > 83	2.24	7885.292		7885.292	7885.292	bb			2099.1	0.5065	101.3	2.95
2	WCL050703-04	Perchlorate-101	101 > 85	2.22	2674.977		2674.977	2674.977	bb			810.4	0.5050	101.0	
3	WCL050703-04	Perchlorate-O(18)	107 > 89	2.22	6113.718		6113.718	6113.718	bb			1531.6	0.4803	96.1	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050007b
Date: 05-Jul-2005
Time: 15:29:28
ID: WCL050703-05
Vial: 1:1,F

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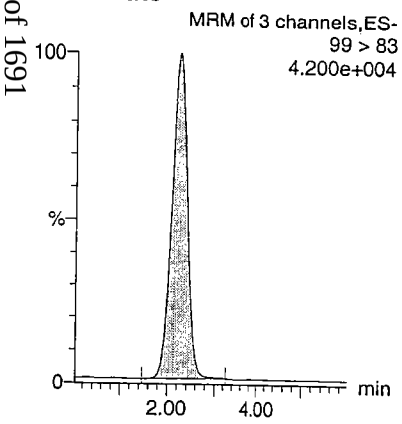
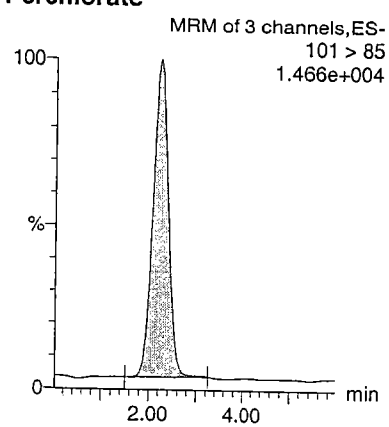
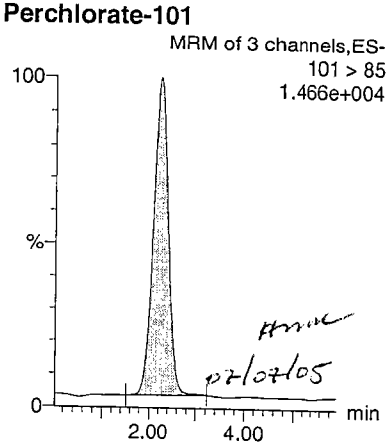
Perchlorate



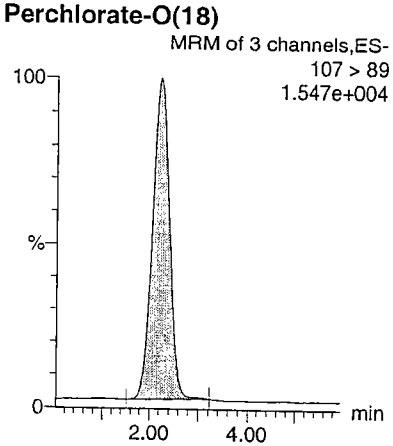
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-05	Perchlorate	99 > 83	2.24	15484.614		15484.614	15484.614	bb			871.2	0.9945	99.5	2.93
2	WCL050703-05	Perchlorate-101	101 > 85	2.22	5289.159		5289.159	5289.159	bb			680.7	0.9986	99.9	
3	WCL050703-05	Perchlorate-O(18)	107 > 89	2.22	6126.497		6126.497	6126.497	bb			1600.6	0.4813	96.3	

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Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.55	01-JUL-05 20:48	per07010008b
Perchlorate Isotope Ratio		2.95		01-JUL-05 20:48	per07010008b
Perchlorate-101	.5	.49	97.73	01-JUL-05 20:48	per07010008b
Perchlorate	.5	.5	99.62	05-JUL-05 15:36	per07050008b
Perchlorate Isotope Ratio		2.89		05-JUL-05 15:36	per07050008b
Perchlorate-101	.5	.51	101.36	05-JUL-05 15:36	per07050008b

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010008b
Date: 01-Jul-2005
Time: 20:48:38
ID: WCL050621-06ICV
Vial: 1:2,A

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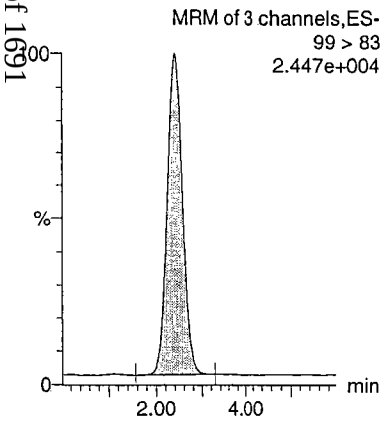
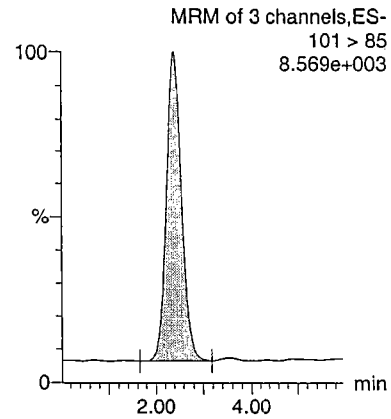
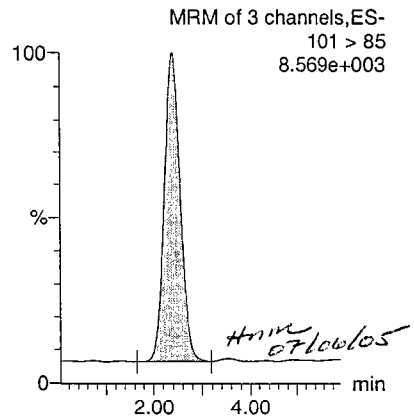
Perchlorate



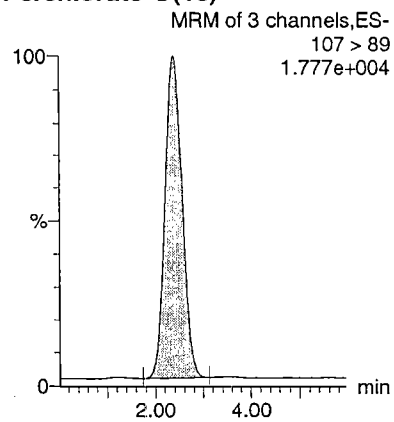
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050621-06ICV	Perchlorate	99 > 83	2.41	9059.922		9059.922	9059.922	bb			2401.2	0.4928	98.6	2.95
2	WCL050621-06ICV	Perchlorate-101	101 > 85	2.39	3069.902		3069.902	3069.902	bb			433.8	0.4886	97.7	
3	WCL050621-06ICV	Perchlorate-O(18)	107 > 89	2.39	7131.968		7131.968	7131.968	bb			1549.6	0.4837	96.7	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050008b
Date: 05-Jul-2005
Time: 15:36:03
ID: WCL050703-06ICV
Vial: 1:2,A

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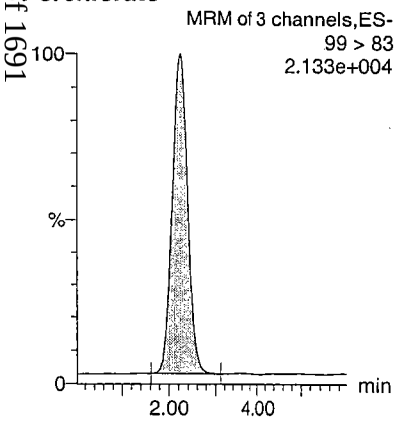
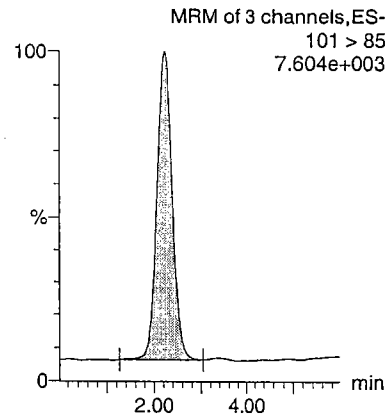
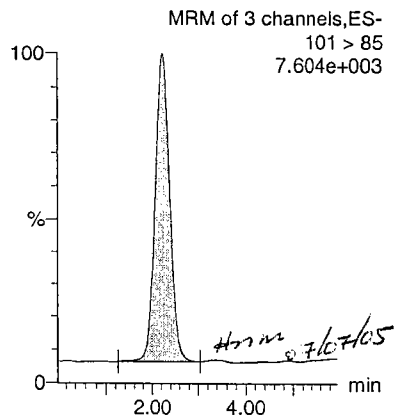
Perchlorate



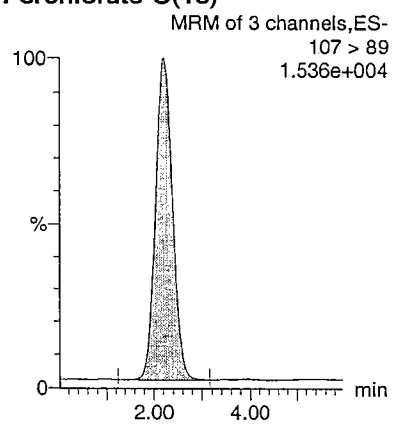
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-06ICV	Perchlorate	99 > 83	2.22	7755.573		7755.573	7755.573	bb			1804.9	0.4981	99.6	2.89
2	WCL050703-06ICV	Perchlorate-101	101 > 85	2.22	2684.368		2684.368	2684.368	bb			382.3	0.5068	101.4	
3	WCL050703-06ICV	Perchlorate-O(18)	107 > 89	2.21	6127.171		6127.171	6127.171	bb			3409.4	0.4813	96.3	

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.49	98.88	01-JUL-05 22:14	per07010021b
Perchlorate Isotope Ratio		2.95		01-JUL-05 22:14	per07010021b
Perchlorate-101	.5	.49	97.95	01-JUL-05 22:14	per07010021b
Perchlorate	.5	.48	96.01	05-JUL-05 17:18	per07050021b
Perchlorate Isotope Ratio		2.89		05-JUL-05 17:18	per07050021b
Perchlorate-101	.5	.49	97.78	05-JUL-05 17:18	per07050021b
Perchlorate	.5	.49	98.14	05-JUL-05 18:43	per07050034b
Perchlorate Isotope Ratio		2.92		05-JUL-05 18:43	per07050034b
Perchlorate-101	.5	.49	98.72	05-JUL-05 18:43	per07050034b
Perchlorate	.5	.48	96.06	05-JUL-05 19:56	per07050045b
Perchlorate Isotope Ratio		2.98		05-JUL-05 19:56	per07050045b
Perchlorate-101	.5	.47	94.85	05-JUL-05 19:56	per07050045b

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010021b
Date: 01-Jul-2005
Time: 22:14:49
ID: WCL050621-06CCV
Vial: 1:2,A

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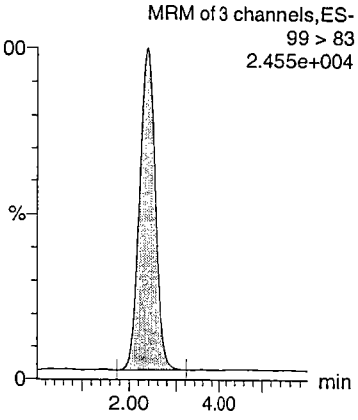
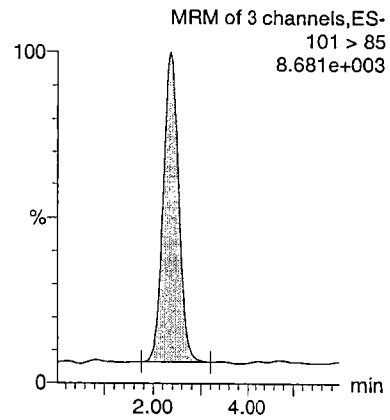
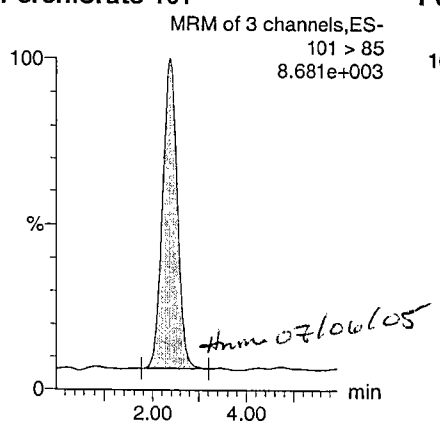
Perchlorate



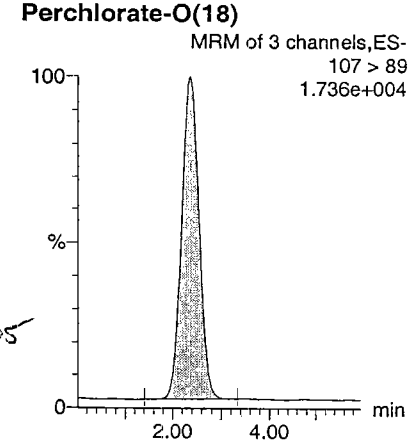
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050621-06CCV	Perchlorate	99 > 83	2.38	9090.078		9090.078	9090.078	bb			602.7	0.4944	98.9	2.95
2	WCL050621-06CCV	Perchlorate-101	101 > 85	2.37	3077.031		3077.031	3077.031	bb			542.5	0.4898	98.0	
3	WCL050621-06CCV	Perchlorate-O(18)	107 > 89	2.37	6992.607		6992.607	6992.607	bb			2370.2	0.4743	94.9	

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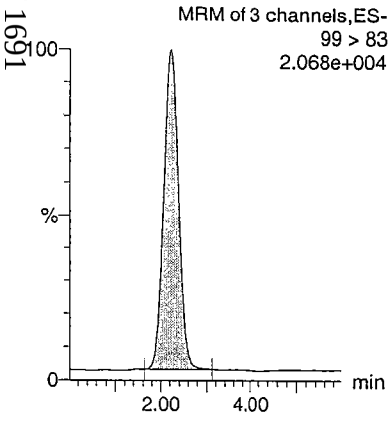
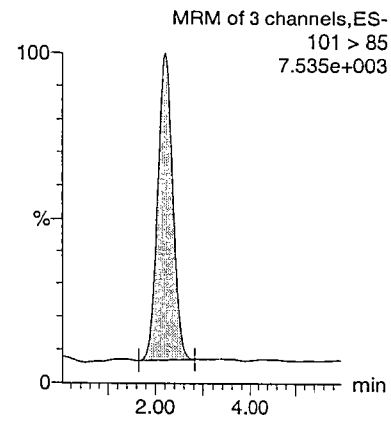
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050021b
Date: 05-Jul-2005
Time: 17:18:31
ID: WCL050703-06CCV
Vial: 1:2,A

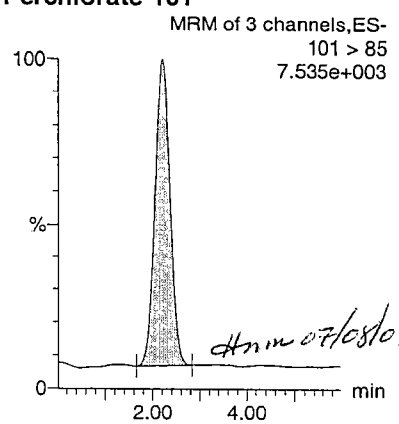
Perchlorate



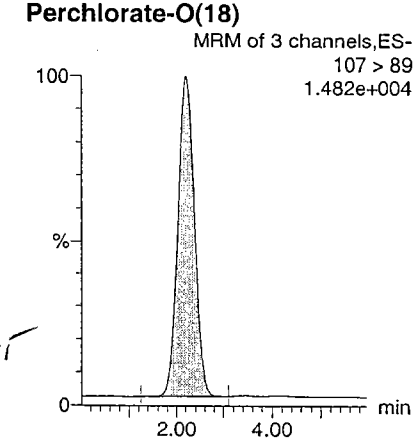
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-06CCV	Perchlorate	99 > 83	2.22	7474.363		7474.363	7474.363	bb			1262.9	0.4801	96.0	2.89
2	WCL050703-06CCV	Perchlorate-101	101 > 85	2.21	2589.418		2589.418	2589.418	bb			594.4	0.4889	97.8	
3	WCL050703-06CCV	Perchlorate-O(18)	107 > 89	2.21	5820.756		5820.756	5820.756	bb			1281.7	0.4573	91.5	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050034b
Date: 05-Jul-2005
Time: 18:43:53
ID: WCL050703-06CCV
Vial: 1:2,A

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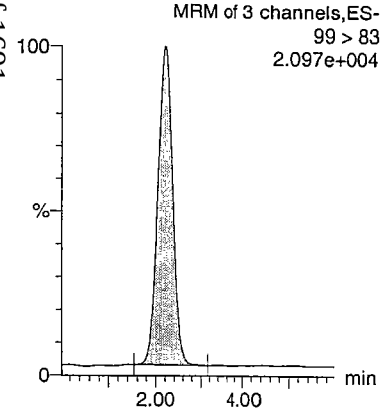
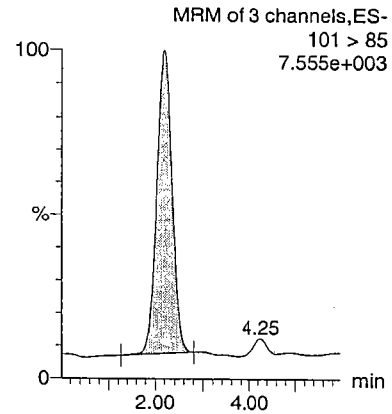
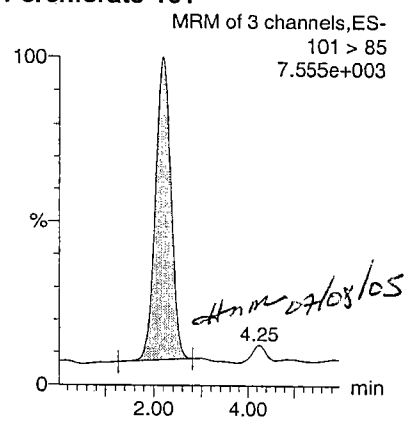
Perchlorate



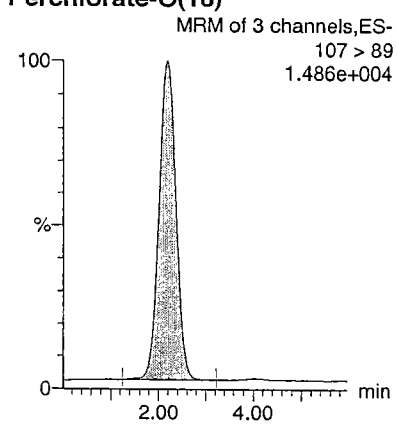
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-06CCV	Perchlorate	99 > 83	2.21	7640.026		7640.026	7640.026	bb			2588.2	0.4907	98.1	2.92
2	WCL050703-06CCV	Perchlorate-101	101 > 85	2.19	2614.364		2614.364	2614.364	bb			397.4	0.4936	98.7	
3	WCL050703-06CCV	Perchlorate-O(18)	107 > 89	2.18	5935.873		5935.873	5935.873	bb			1470.0	0.4663	93.3	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050045b
Date: 05-Jul-2005
Time: 19:56:56
ID: WCL050703-06CCV
Vial: 1:2,A

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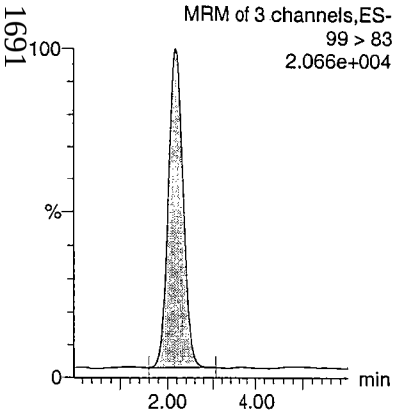
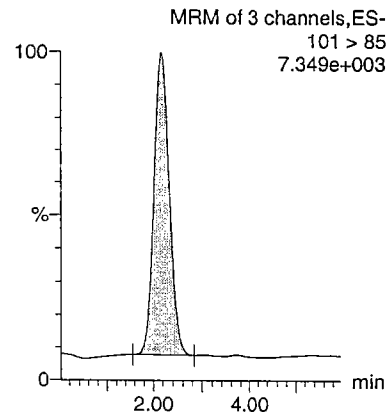
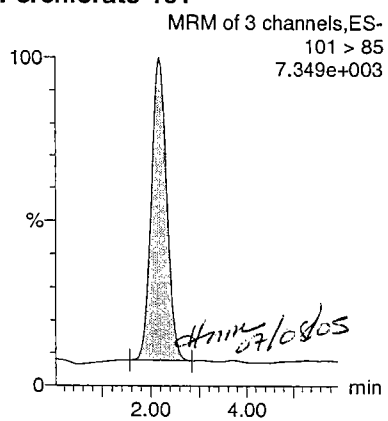
Perchlorate



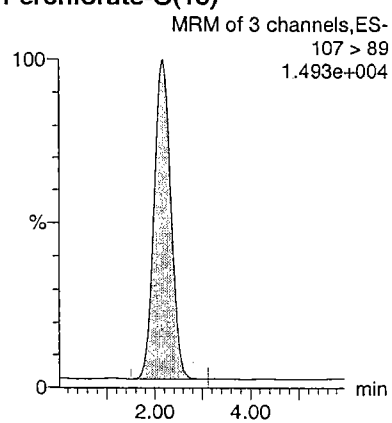
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-06CCV	Perchlorate	99 > 83	2.18	7477.990		7477.990	7477.990	bb			1519.7	0.4803	96.1	2.98
2	WCL050703-06CCV	Perchlorate-101	101 > 85	2.18	2511.991		2511.991	2511.991	bb			479.1	0.4743	94.9	
3	WCL050703-06CCV	Perchlorate-O(18)	107 > 89	2.17	5887.669		5887.669	5887.669	bb			2090.9	0.4625	92.5	

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 139405

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	109.59	01-JUL-05 21:01	per07010010b
Perchlorate Isotope Ratio		2.95		01-JUL-05 21:01	per07010010b
Perchlorate-101	.05	.05	108.74	01-JUL-05 21:01	per07010010b
Perchlorate	.05	.05	106.71	01-JUL-05 22:27	per07010023b
Perchlorate Isotope Ratio		2.87		01-JUL-05 22:27	per07010023b
Perchlorate-101	.05	.05	108.89	01-JUL-05 22:27	per07010023b
Perchlorate	.05	.06	112.38	05-JUL-05 16:04	per07050010b
Perchlorate Isotope Ratio		2.61		05-JUL-05 16:04	per07050010b
Perchlorate-101	.05	.06	126.58	05-JUL-05 16:04	per07050010b
Perchlorate	.05	.06	111.75	05-JUL-05 17:31	per07050023b
Perchlorate Isotope Ratio		3.21		05-JUL-05 17:31	per07050023b

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Perchlorate MDL Verification

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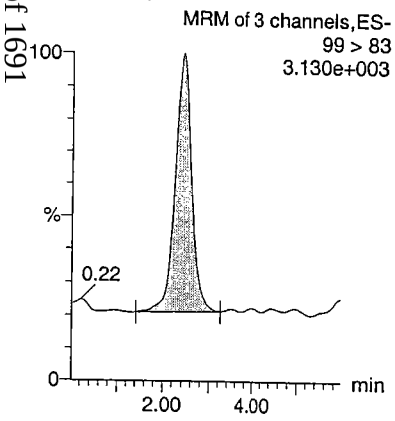
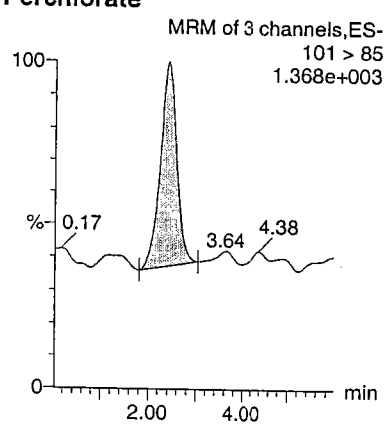
Perchlorate-101	.05	.05	102.33	05-JUL-05 17:31	per07050023b
Perchlorate	.05	.05	105.52	05-JUL-05 18:57	per07050036b
Perchlorate Isotope Ratio		3.61		05-JUL-05 18:57	per07050036b
Perchlorate-101	.05	.04	85.97	05-JUL-05 18:57	per07050036b
Perchlorate	.05	.05	103.96	05-JUL-05 20:10	per07050047b
Perchlorate Isotope Ratio		2.86		05-JUL-05 20:10	per07050047b
Perchlorate-101	.05	.05	106.7	05-JUL-05 20:10	per07050047b

Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010010b
Date: 01-Jul-2005
Time: 21:01:45
ID: WCL050621-07CRI
Vial: 1:2,B

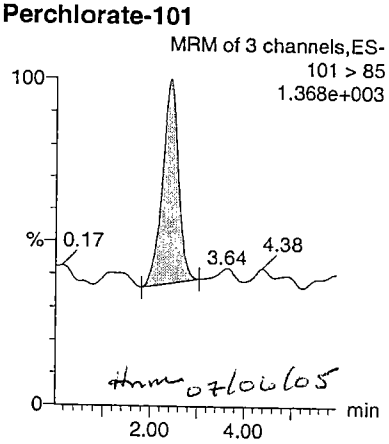
Perchlorate



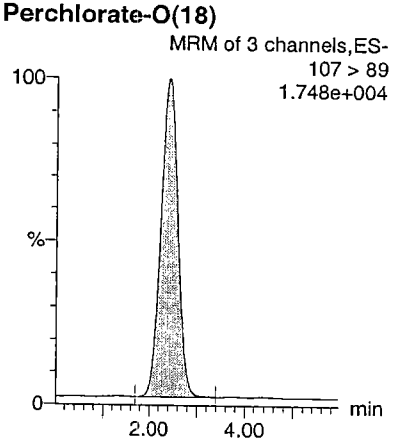
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc	%Rec	Ratio
1	WCL050621-07CRI	Perchlorate	99 > 83	2.42	1007.503		1007.503	1007.503	bb			159.2	0.0548	109.6	2.95
2	WCL050621-07CRI	Perchlorate-101	101 > 85	2.41	341.598		341.598	341.598	bb			54.3	0.0544	108.7	
3	WCL050621-07CRI	Perchlorate-O(18)	107 > 89	2.41	7040.485		7040.485	7040.485	bb			1689.6	0.4775	95.5	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010023b
Date: 01-Jul-2005
Time: 22:27:56
ID: WCL050621-07CRI
Vial: 1:2,B

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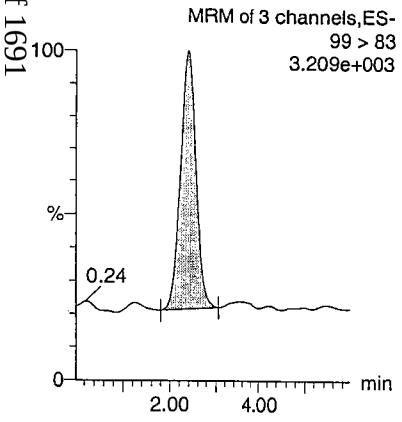
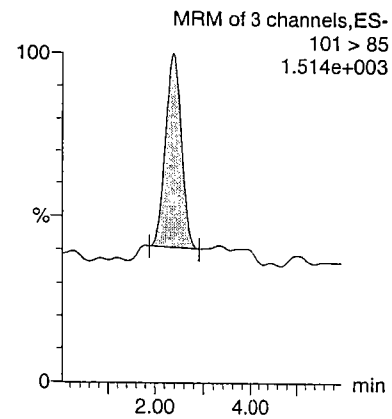
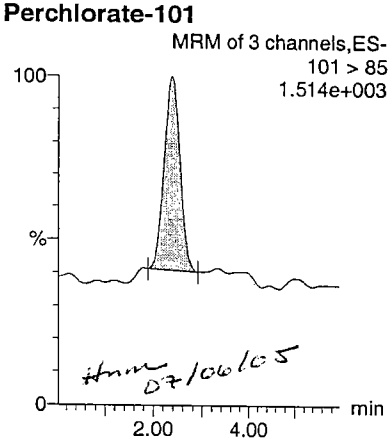
Perchlorate



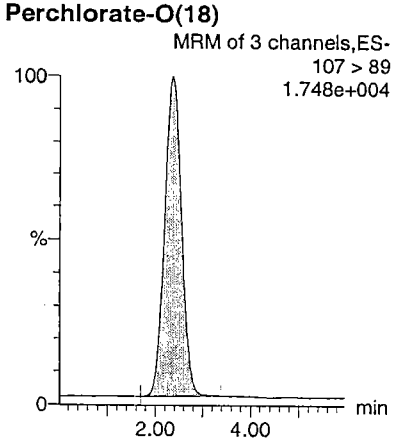
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Tr...	S/N	Conc.	%Rec	Ratio
1	WCL050621-07CRI	Perchlorate	99 > 83	2.38	980.977		980.977	980.977	bb			112.0	0.0534	106.7	2.87
2	WCL050621-07CRI	Perchlorate-101	101 > 85	2.38	342.063		342.063	342.063	bb			48.1	0.0544	108.9	
3	WCL050621-07CRI	Perchlorate-O(18)	107 > 89	2.37	7001.805		7001.805	7001.805	bb			1777.5	0.4749	95.0	

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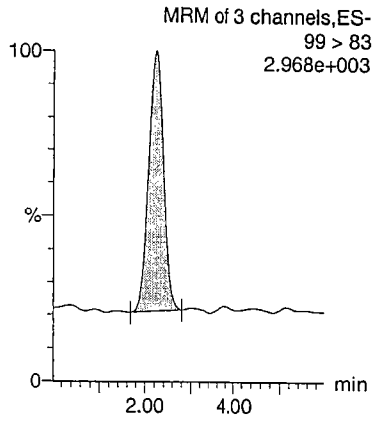
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050010b
Date: 05-Jul-2005
Time: 16:04:14
ID: WCL050703-07CRI
Vial: 1:2,B

Perchlorate



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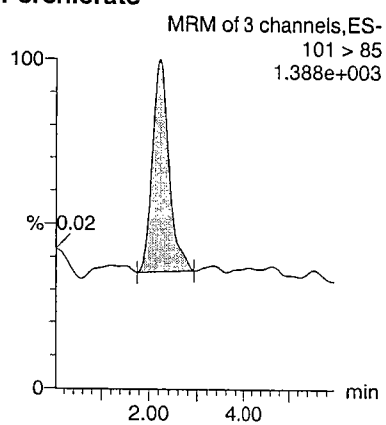

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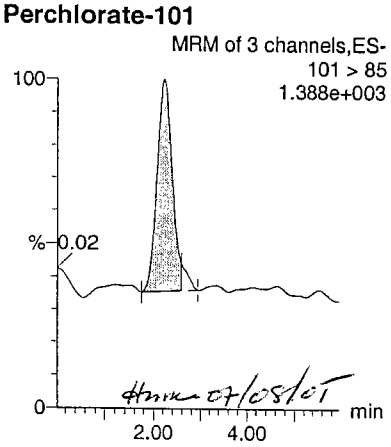
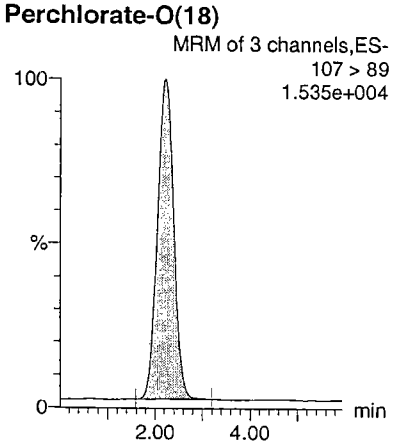


Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-07CRI	Perchlorate	99 > 83	2.24	874.826		874.826	874.826	bb			119.7	0.0562	112.4	2.47
2	WCL050703-07CRI	Perchlorate-101	101 > 85	2.22	335.236		335.236	335.236	MM	05-Jul-05	20:14:25	209.2	0.0633	126.6	
3	WCL050703-07CRI	Perchlorate-O(18)	107 > 89	2.22	6048.549		6048.549	6048.549	bb			3044.4	0.4751	95.0	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050023b
Date: 05-Jul-2005
Time: 17:31:40
ID: WCL050703-07CRI
Vial: 1:2,B

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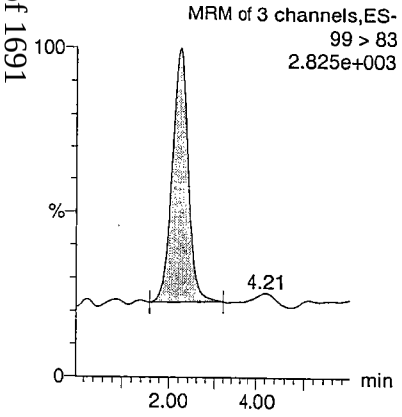
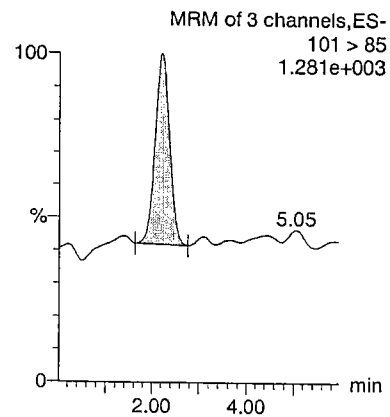
Perchlorate



Perchlorate



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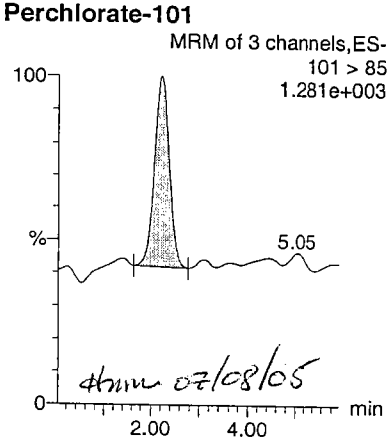
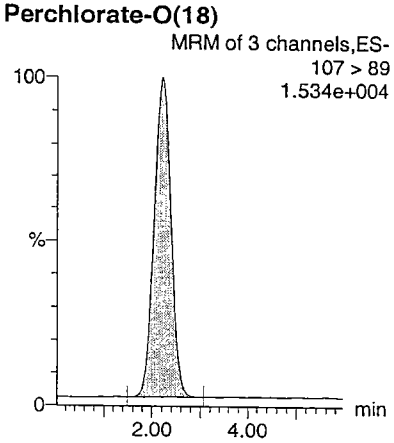


4hmm 07/08/05

Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-07CRI	Perchlorate	99 > 83	2.22	869.989		869.989	869.989	bb			81.9	0.0559	111.8	3.21
2	WCL050703-07CRI	Perchlorate-101	101 > 85	2.22	271.004		271.004	271.004	bb			53.7	0.0512	102.3	
3	WCL050703-07CRI	Perchlorate-O(18)	107 > 89	2.21	6027.221		6027.221	6027.221	bb			4097.8	0.4735	94.7	

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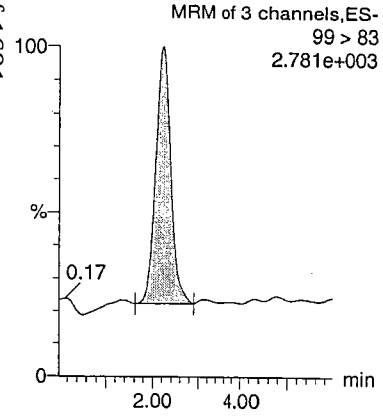
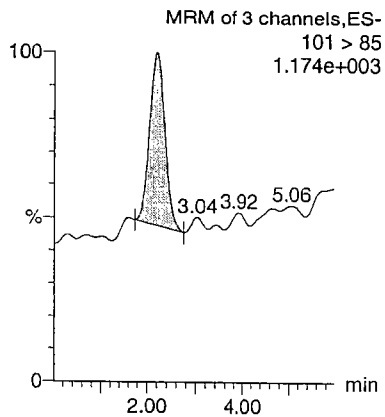
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050036b
Date: 05-Jul-2005
Time: 18:57:00
ID: WCL050703-07CRI
Vial: 1:2,B

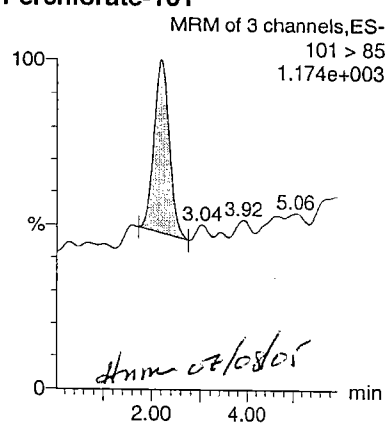
Perchlorate



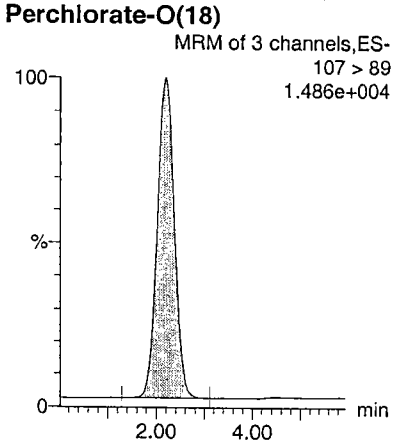
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-07CRI	Perchlorate	99 > 83	2.21	821.487		821.487	821.487	bb			267.2	0.0528	105.5	3.61
2	WCL050703-07CRI	Perchlorate-101	101 > 85	2.19	227.675		227.675	227.675	bb			38.0	0.0430	86.0	
3	WCL050703-07CRI	Perchlorate-O(18)	107 > 89	2.19	5890.617		5890.617	5890.617	bb			1966.5	0.4627	92.5	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07050047b
Date: 05-Jul-2005
Time: 20:10:03
ID: WCL050703-07CRI
Vial: 1:2,B

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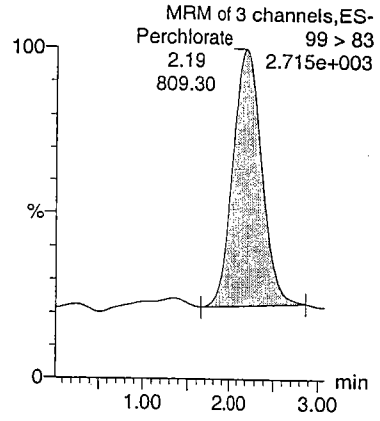
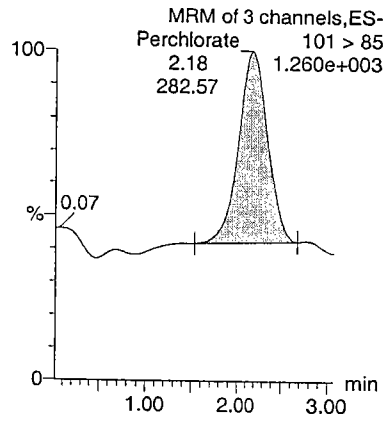
Perchlorate



Perchlorate



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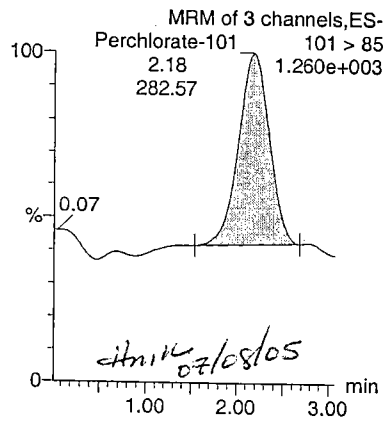
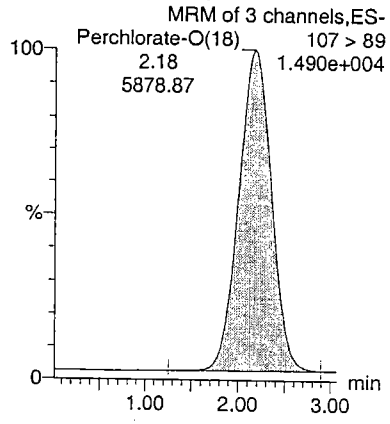


Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	WCL050703-07CRI	Perchlorate	99 > 83	2.19	809.301		809.301	809.301	bb			110.1	0.0520	104.0	2.86
2	WCL050703-07CRI	Perchlorate-101	101 > 85	2.18	282.574		282.574	282.574	bb			42.7	0.0533	106.7	
3	WCL050703-07CRI	Perchlorate-O(18)	107 > 89	2.18	5878.873		5878.873	5878.873	bb			1877.5	0.4618	92.4	

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QUALITY CONTROL DATA

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A

Matrix: GROUND WATER

Extraction Batch ID: 438024

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 01-JUL-05

GEL Job No (SDG): 139405

GEL Sample ID: 1200876904

Date Filtered: 01-JUL-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1.00	01-JUL-05 21:15	per07010012b
	Perchlorate Isotope Ratio						1.00	01-JUL-05 21:15	per07010012b
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1.00	01-JUL-05 21:15	per07010012b
	Perchlorate-O(18)	0	0	0.465	ug/L		1.00	01-JUL-05 21:15	per07010012b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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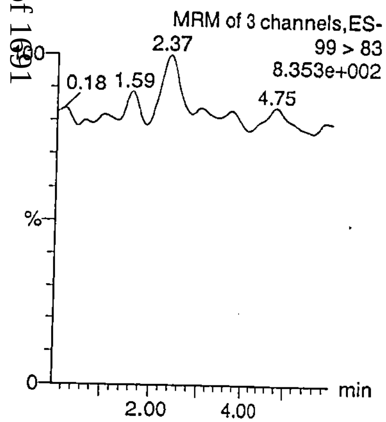
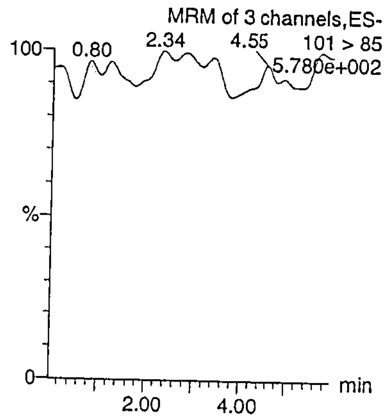
Dataset: C:\Masslynx\Perchlorate.PRO\per070105b.qld, Time: Sat Jul 02 09:48:50 2005

Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010012b
Date: 01-Jul-2005
Time: 21:15:46
ID: 1200876904 / ESHL / 43B025 / MS / UCL / 1
Vial: 1:4,B

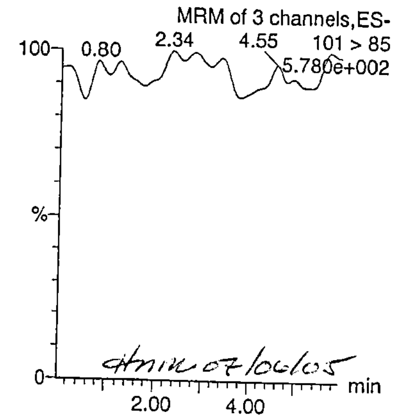
Perchlorate



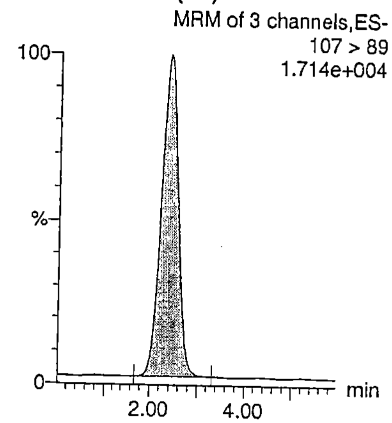
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	1200876904	Perchlorate	99 > 83												
2	1200876904	Perchlorate-101	101 > 85												
3	1200876904	Perchlorate-O(18)	107 > 89	2.38	6851.910		6851.910	6851.910	bb			3216.8	0.4647	92.9	

MM= Manually Modified

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A

Matrix: GROUND WATER

Extraction Batch ID: 438024

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 01-JUL-05

GEL Job No (SDG): 139405

GEL Sample ID: 1200876905

Date Filtered: 01-JUL-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.184	ug/L	J	1.00	01-JUL-05 21:22	per07010013b
	Perchlorate Isotope Ratio			2.93			1.00	01-JUL-05 21:22	per07010013b
14797-73-0	Perchlorate-101	.05	.2	0.184	ug/L	J	1.00	01-JUL-05 21:22	per07010013b
	Perchlorate-O(18)	0	0	0.465	ug/L		1.00	01-JUL-05 21:22	per07010013b

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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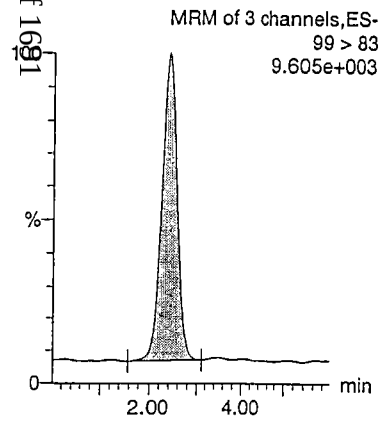
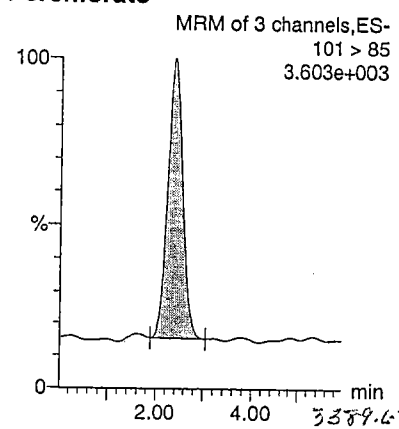
Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010013b
Date: 01-Jul-2005
Time: 21:22:20
ID: 1200876905 | ESWL | 438025 | LCS | 040 | 1.1
Vial: 1:4,C

7-1-05

Perchlorate

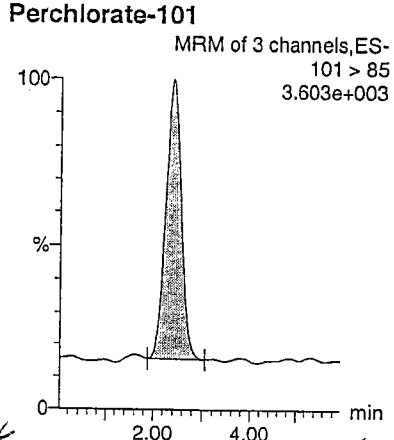


Perchlorate

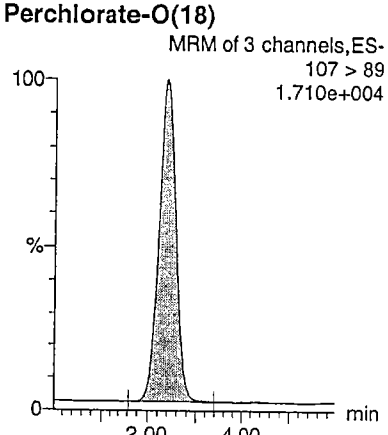


3389.676
15386.3 = 0.1844 dmw 07/06/05

Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	1200876905	Perchlorate	99 > 83	2.39	3389.676		3389.676	3389.676	bb			399.8	0.1844	92.2	2.93
2	1200876905	Perchlorate-101	101 > 85	2.39	1156.581		1156.581	1156.581	bb			95.7	0.1841	92.0	
3	1200876905	Perchlorate-O(18)	107 > 89	2.38	6855.899		6855.899	6855.899	bb			1353.3	0.4650	93.0	

MM= Manually Modified

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MISCELLANEOUS DATA

Prep Logbook

Sample Preparation for Perchlorate Analysis using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry

Batch ID: 438024 **Verified by:** _____
Analyst: Lloyd O Fox
Method: SW846 8321A Modified

Lab SOP: GL-OA-E-057 REV# 1
Instrument: MicroMass QuatroMicro

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1200876904 MB	01-JUL-2005 20:02:56	10	10	1
1200876905 LCS	01-JUL-2005 20:02:56	10	10	1
139136001	01-JUL-2005 20:02:56	10	10	1
139136002	01-JUL-2005 20:02:56	10	10	1
139136003	01-JUL-2005 20:02:56	10	10	1
139136004	01-JUL-2005 20:02:56	10	10	1
139193001	01-JUL-2005 20:02:56	10	10	1
139193002	01-JUL-2005 20:02:56	10	10	1
139193003	01-JUL-2005 20:02:56	10	10	1
139193004	01-JUL-2005 20:02:56	10	10	1
139197001	01-JUL-2005 20:02:56	10	10	1
139349001	01-JUL-2005 20:02:56	10	10	1
139349009	01-JUL-2005 20:02:56	10	10	1
139405001	01-JUL-2005 20:02:56	10	10	1
139406001	01-JUL-2005 20:02:56	10	10	1
139409001	01-JUL-2005 20:02:56	10	10	1
1200876911 MS (139409001)	01-JUL-2005 20:02:56	10	10	1
1200876912 MSD (139409001)	01-JUL-2005 20:02:56	10	10	1
139524001	01-JUL-2005 20:02:56	10	10	1
139524002	01-JUL-2005 20:02:56	10	10	1
139545001	01-JUL-2005 20:02:56	10	10	1
139551001	01-JUL-2005 20:02:56	10	10	1
1200876906 MS (139551001)	01-JUL-2005 20:02:56	10	10	1
1200876907 MSD (139551001)	01-JUL-2005 20:02:56	10	10	1
1200876913 ICS	01-JUL-2005 20:02:56	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1200876913	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
LCS	1200876905	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MS	1200876906	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MS	1200876911	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MSD	1200876907	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
MSD	1200876912	10 ug/L CCV Second Source	UCL050421-01	.2	mL	
RGNT	All	O2SI HPLC Grade Water	316678	10	mL	
RGNT	All	500 ppm carbonate, bicarbonate, chloride, sulfate	316918	10	mL	

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GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS2

Date: 07/01/05 Method: 8321A-Modified Reviewed BY: HMC
Extr. Injection Volume: 50uL Int. Std.: UCL0500113-01 Date: 07/06/05
Sequence Number: per070105b Mobile Phase Lot#:: 278368, 316678 SOP: GL-OA-E-056Rev.6
Initial Calibration Date: 070105 Standard-Samp Reagent Lot#:: 316678 Alt Check Std. ID: WCL050621-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per07010001b	IPB001	MAP	7/1/05 19:59			1			B
per07010002b	IPB001	MAP	7/1/05 20:09			1			B
per07010003b	WCLICAL-01	MAP	7/1/05 20:15			1		USE	I
per07010004b	WCLICAL-02	MAP	7/1/05 20:22			1		USE	I
per07010005b	WCLICAL-03	MAP	7/1/05 20:28			1		USE	I
per07010006b	WCLICAL-04	MAP	7/1/05 20:35			1		USE	I
per07010007b	WCLICAL-05	MAP	7/1/05 20:42			1		USE	I
per07010008b	WCLICV	MAP	7/1/05 20:48			1		USE	C
per07010009b	IPB002	MAP	7/1/05 20:55			1			B
per07010010b	WCLCRI	MAP	7/1/05 21:01			1		USE	C
per07010011b	1200876913	MAP	7/1/05 21:08	438025	Various	1	ESHL	USE	S
per07010012b	1200876904	MAP	7/1/05 21:15	438025	Various	1	ESHL	USE	S
per07010013b	1200876905	MAP	7/1/05 21:22	438025	Various	1	ESHL	USE	S
per07010014b	139136001	MAP	7/1/05 21:28	438025	139136	1	ESHL	USE	S
per07010015b	139136002	MAP	7/1/05 21:35	438025	139136	1	ESHL	USE	S
per07010016b	139136003	MAP	7/1/05 21:42	438025	139136	1	ESHL	USE	S
per07010017b	139136004	MAP	7/1/05 21:48	438025	139136	1	ESHL	USE	S
per07010018b	139193001	MAP	7/1/05 21:55	438025	139193	1	ESHL	USE	S
per07010019b	139193002	MAP	7/1/05 22:01	438025	139193	1	ESHL	USE	S
per07010020b	139193003	MAP	7/1/05 22:08	438025	139193	1	ESHL	USE	S
per07010021b	WCLCCV	MAP	7/1/05 22:14			1		USE	C
per07010022b	IPB003	MAP	7/1/05 22:21			1			B
per07010023b	WCLCRI	MAP	7/1/05 22:27			1		USE	C
per07010024b	139193004	MAP	7/1/05 22:34	438025	139193	1	ESHL	USE	S
per07010025b	139197001	MAP	7/1/05 22:41	438025	139197	1	ESHL	USE	S
per07010026b	139349001	MAP	7/1/05 22:47	438025	139349	1	ESHL	USE	S
per07010027b	139349009	MAP	7/1/05 22:54	438025	139349	1	ESHL	USE	S
per07010028b	139405001	MAP	7/1/05 23:00	438025	139405	1	ESHL	DUSE-DL	S
per07010029b	139406001	MAP	7/1/05 23:07	438025	139406	1	ESHL	DUSE	S

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per07010030b	139409001	MAP	7/1/05 23:13	438025	139409	1	ESHL	USE	S
per07010031b	1200876911	MAP	7/1/05 23:20	438025	139409	1	ESHL	USE	S
per07010032b	1200876912	MAP	7/1/05 23:26	438025	139409	1	ESHL	USE	S
per07010033b	WCLCCV	MAP	7/1/05 23:33			1		USE	C
per07010034b	IPB004	MAP	7/1/05 23:40			1			B
per07010035b	WCLCRI	MAP	7/1/05 23:46			1		USE	C
per07010036b	139524001	MAP	7/1/05 23:53	438025	139524	1	ESHL	USE	S
per07010037b	139524002	MAP	7/2/05 0:00	438025	139524	1	ESHL	USE	S
per07010038b	139545001	MAP	7/2/05 0:07	438025	139545	1	ESHL	USE	S
per07010039b	139551001	MAP	7/2/05 0:13	438025	139545-1	1	ESHL	USE	S
per07010040b	1200876906	MAP	7/2/05 0:20	438025	139545-1	1	ESHL	USE	S
per07010041b	1200876907	MAP	7/2/05 0:26	438025	139545-1	1	ESHL	USE	S
per07010042b	WCLCCV	MAP	7/2/05 0:33			1		USE	C
per07010043b	IPB005	MAP	7/2/05 0:40			1			B
per07010044b	WCLCRI	MAP	7/2/05 0:46			1		USE	C
per07010045b	1200877793	MAP	7/2/05 0:53	438466	Various	1	LANL	USE	S
per07010046b	1200877789	MAP	7/2/05 1:00	438466	Various	1	LANL	USE	S
per07010047b	1200877790	MAP	7/2/05 1:07	438466	Various	1	LANL	USE	S
per07010048b	138911001	MAP	7/2/05 1:13	438466	3396S	1	LANL	USE	S
per07010049b	138911002	MAP	7/2/05 1:20	438466	3396S	1	LANL	USE	S
per07010050b	138911003	MAP	7/2/05 1:27	438466	3396S	1	LANL	USE	S
per07010051b	138911004	MAP	7/2/05 1:33	438466	3396S	1	LANL	USE	S
per07010052b	138911005	MAP	7/2/05 1:40	438466	3396S	1	LANL	USE	S
per07010053b	138913001	MAP	7/2/05 1:46	438466	3398S	1	LANL	USE	S
per07010054b	138913002	MAP	7/2/05 1:53	438466	3398S	1	LANL	USE	S
per07010055b	WCLCCV	MAP	7/2/05 1:59			1		USE	C
per07010056b	IPB006	MAP	7/2/05 2:06			1			B
per07010057b	WCLCRI	MAP	7/2/05 2:12			1		USE	C
per07010058b	138913003	MAP	7/2/05 2:19	438466	3398S	1	LANL	USE	S
per07010059b	138913004	MAP	7/2/05 2:26	438466	3398S	1	LANL	USE	S
per07010060b	138913005	MAP	7/2/05 2:32	438466	3398S	1	LANL	USE	S
per07010061b	138987001	MAP	7/2/05 2:39	438466	3409S	1	LANL	USE	S
per07010062b	138987002	MAP	7/2/05 2:45	438466	3409S	1	LANL	USE	S
per07010063b	139421001	MAP	7/2/05 2:52	438466	3424S	1	LANL	USE	S
per07010064b	1200877791	MAP	7/2/05 2:58	438466	3424S	1	LANL	USE	S
per07010065b	1200877792	MAP	7/2/05 3:05	438466	3424S	1	LANL	USE	S
per07010066b	139421002	MAP	7/2/05 3:12	438466	3424S	1	LANL	USE	S

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per07010067b	139421003	MAP	7/2/05 3:18	438466	3424S	1	LANL	USE	S
per07010068b	WCLCCV	MAP	7/2/05 3:25			1		USE	C
per07010069b	IPB007	MAP	7/2/05 3:31			1			B
per07010070b	WCLCRI	MAP	7/2/05 3:38			1		USE	C
per07010071b	139421004	MAP	7/2/05 3:44	438466	3424S	1	LANL	USE	S
per07010072b	139421005	MAP	7/2/05 3:52	438466	3424S	1	LANL	USE	S
per07010073b	139421006	MAP	7/2/05 3:58	438466	3424S	1	LANL	USE	S
per07010074b	139421007	MAP	7/2/05 4:05	438466	3424S	1	LANL	USE	S
per07010075b	WCLCCV	MAP	7/2/05 4:12			1		USE	C
per07010076b	IPB008	MAP	7/2/05 4:18			1			B
per07010077b	WCLCRI	MAP	7/2/05 4:25			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS2

Date:070505
Extr. Injection Volume: 50uL
Sequence Number:
Initial Calibration Date:070505

Method:8321A-Modified
Int. Std.:UCL050705-01
Mobile Phase Lot#::278368,316678
Standard-Samp Reagent Lot#::316678

Reviewed BY:_____
Date:_____
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID:WCL050703-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per07050001b	IPB001	MAP	7/5/05 14:49			1			B
per07050002b	IPB001	MAP	7/5/05 14:56			1			B
per07050003b	WCLICAL-01	MAP	7/5/05 15:03			1			I
per07050004b	WCLICAL-02	MAP	7/5/05 15:09			1			I
per07050005b	WCLICAL-03	MAP	7/5/05 15:16			1			I
per07050006b	WCLICAL-04	MAP	7/5/05 15:22			1			I
per07050007b	WCLICAL-05	MAP	7/5/05 15:29			1			I
per07050008b	WCLICV	MAP	7/5/05 15:36			1			C
per07050009b	IPB002	MAP	7/5/05 15:42			1			B
per07050010b	WCLCRI	MAP	7/5/05 16:04			1			C
per07050011b	139405001	MAP	7/5/05 16:12	438025	139405	100	ESHL	DUSE	S
per07050012b	139406001	MAP	7/5/05 16:19	438025	139406	1	ESHL	DUSE	S
per07050013b	1200880121	MAP	7/5/05 16:25	438469	3421S	1	LANL	USE	S
per07050014b	1200877798	MAP	7/5/05 16:32	438469	3421S	1	LANL	USE	S
per07050015b	1200877799	MAP	7/5/05 16:39	438469	3421S	1	LANL	USE	S
per07050016b	139418001	MAP	7/5/05 16:45	438469	3421S	1	LANL	USE	S
per07050017b	1200877800	MAP	7/5/05 16:52	438469	3421S	1	LANL	USE	S
per07050018b	1200877801	MAP	7/5/05 16:58	438469	3421S	1	LANL	USE	S
per07050019b	139418002	MAP	7/5/05 17:05	438469	3421S	1	LANL	USE	S
per07050020b	139418003	MAP	7/5/05 17:11	438469		1	LANL	USE	S
per07050021b	WCLCCV	MAP	7/5/05 17:18			1		USE	C
per07050022b	IPB003	MAP	7/5/05 17:25			1			B
per07050023b	WCLCRI	MAP	7/5/05 17:31			1			C
per07050024b	139418004	MAP	7/5/05 17:38	438469	3421S	1	LANL	USE	S
per07050025b	139418005	MAP	7/5/05 17:44	438469	3421S	1	LANL	USE	S
per07050026b	139418006	MAP	7/5/05 17:51	438469	3421S	1	LANL	USE	S
per07050027b	139418007	MAP	7/5/05 17:57	438469	3421S	1	LANL	USE	S
per07050028b	139418008	MAP	7/5/05 18:04	438469	3421S	1	LANL	USE	S
per07050029b	139418009	MAP	7/5/05 18:11	438469	3421S	1	LANL	USE	S

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per07050030b	139418010	MAP	7/5/05 18:17	438469	3421S	1	LANL	USE	S
per07050031b	139418011	MAP	7/5/05 18:24	438469	3421S	1	LANL	USE	S
per07050032b	139418012	MAP	7/5/05 18:30	438469	3421S	1	LANL	USE	S
per07050033b	139418013	MAP	7/5/05 18:37	438469	3421S	1	LANL	USE	S
per07050034b	WCLCCV	MAP	7/5/05 18:43			1		USE	C
per07050035b	IPB004	MAP	7/5/05 18:50			1			B
per07050036b	WCLCRI	MAP	7/5/05 18:57			1			C
per07050037b	139418014	MAP	7/5/05 19:03	438469	3421S	1	LANL	USE	S
per07050038b	139418015	MAP	7/5/05 19:11	438469	3421S	1	LANL	USE	S
per07050039b	139418016	MAP	7/5/05 19:17	438469	3421S	1	LANL	USE	S
per07050040b	139418017	MAP	7/5/05 19:24	438469	3421S	1	LANL	USE	S
per07050041b	139418018	MAP	7/5/05 19:30	438469	3421S	1	LANL	USE	S
per07050042b	139418019	MAP	7/5/05 19:37	438469	3421S	1	LANL	USE	S
per07050043b	139406001	MAP	7/5/05 19:43	438025	139406	1	ESHL	USE	S
per07050044b	139405001	MAP	7/5/05 19:50	438025	139405	200	ESHL	USE	S
per07050045b	WCLCCV	MAP	7/5/05 19:56			1			C
per07050046b	IPB005	MAP	7/5/05 20:03			1			B
per07050047b	WCLCRI	MAP	7/5/05 20:10			1			C
per07050048b	1200880018	MAP	7/5/05 20:16	439432	3436S	1	LANL	USE	S
per07050049b	1200880014	MAP	7/5/05 20:24	439432	3436S	1	LANL	USE	S
per07050050b	1200880015	MAP	7/5/05 20:30	439432	3436S	1	LANL	USE	S
per07050051b	139695001	MAP	7/5/05 20:37	439432	3436S	1	LANL	USE	S
per07050052b	1200880016	MAP	7/5/05 20:43	439432	3436S	1	LANL	USE	S
per07050053b	1200880017	MAP	7/5/05 20:50	439432	3436S	1	LANL	USE	S
per07050054b	139695002	MAP	7/5/05 20:56	439432	3436S	1	LANL	USE	S
per07050055b	139695003	MAP	7/5/05 21:03	439432	3436S	1	LANL	USE	S
per07050056b	139695004	MAP	7/5/05 21:10	439432	3436S	1	LANL	USE	S
per07050057b	139695005	MAP	7/5/05 21:16	439432	3436S	1	LANL	USE	S
per07050058b	WCLCCV	MAP	7/5/05 21:23			1			C
per07050059b	IPB006	MAP	7/5/05 21:29			1			B
per07050060b	WCLCRI	MAP	7/5/05 21:36			1			C
per07050061b	139695006	MAP	7/5/05 21:42	439432	3436S	1	LANL	USE	S
per07050062b	139695007	MAP	7/5/05 21:49	439432	3436S	1	LANL	USE	S
per07050063b	139695008	MAP	7/5/05 21:56	439432	3436S	1	LANL	USE	S
per07050064b	139695009	MAP	7/5/05 22:02	439432	3436S	1	LANL	USE	S
per07050065b	139695010	MAP	7/5/05 22:09	439432	3436S	1	LANL	USE	S
per07050066b	139695011	MAP	7/5/05 22:15	439432	3436S	1	LANL	USE	S

per07050067b	139695012	MAP	7/5/05 22:22	439432	3436S	1	LANL	USE	S
per07050068b	139695013	MAP	7/5/05 22:28	439432	3436S	1	LANL	USE	S
per07050069b	139695014	MAP	7/5/05 22:35	439432	3436S	1	LANL	USE	S
per07050070b	139695015	MAP	7/5/05 22:41	439432	3436S	1	LANL	USE	S
per07050071b	WCLCCV	MAP	7/5/05 22:48			1			C
per07050072b	IPB007	MAP	7/5/05 22:55			1			B
per07050073b	WCLCRI	MAP	7/5/05 23:01			1			C
per07050074b	139695016	MAP	7/5/05 23:08	439432	3436S	1	LANL	USE	S
per07050075b	139695017	MAP	7/5/05 23:14	439432	3436S	1	LANL	USE	S
per07050076b	139695018	MAP	7/5/05 23:21	439432	3436S	1	LANL	USE	S
per07050077b	WCLCCV	MAP	7/5/05 23:27			1		USE	C
per07050078b	IPB008	MAP	7/5/05 23:34			1			B
per07050079b	WCLCRI	MAP	7/5/05 23:41			1			C
per07050080b	1200880023	MAP	7/5/05 23:47	439435	VARIOUS	1	LANL	USE	S
per07050081b	1200880019	MAP	7/5/05 23:55	439435	VARIOUS	1	LANL	USE	S
per07050082b	1200880020	MAP	7/6/05 0:01	439435	VARIOUS	1	LANL	USE	S
per07050083b	139689001	MAP	7/6/05 0:08	439435	3434S	1	LANL	USE	S
per07050084b	139689002	MAP	7/6/05 0:14	439435	3434S	1	LANL	USE	S
per07050085b	139689003	MAP	7/6/05 0:21	439435	3434S	1	LANL	USE	S
per07050086b	139689004	MAP	7/6/05 0:27	439435	3434S	1	LANL	USE	S
per07050087b	139757001	MAP	7/6/05 0:34	439435	3441S	1	LANL	USE	S
per07050088b	139757002	MAP	7/6/05 0:40	439435	3441S	1	LANL	USE	S
per07050089b	139757003	MAP	7/6/05 0:47	439435	3441S	1	LANL	USE	S
per07050090b	WCLCCV	MAP	7/6/05 0:54			1			C
per07050091b	IPB009	MAP	7/6/05 1:00			1			B
per07050092b	WCLCRI	MAP	7/6/05 1:07			1			C
per07050093b	139757004	MAP	7/6/05 1:13	439435	3441S	1	LANL	USE	S
per07050094b	139757005	MAP	7/6/05 1:20	439435	3441S	1	LANL	USE	S
per07050095b	139759001	MAP	7/6/05 1:26	439435	3444S	1	LANL	USE	S
per07050096b	1200880021	MAP	7/6/05 1:33	439435	3444S	1	LANL	USE	S
per07050097b	1200880022	MAP	7/6/05 1:40	439435	3444S	1	LANL	USE	S
per07050098b	139759002	MAP	7/6/05 1:46	439435	3444S	1	LANL	USE	S
per07050099b	139759003	MAP	7/6/05 1:53	439435	3444S	1	LANL	USE	S
per07050100b	WCLCCV	MAP	7/6/05 1:59			1			C
per07050101b	IPB010	MAP	7/6/05 2:06			1			B
per07050102b	WCLCRI	MAP	7/6/05 2:12			1			C

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010040b
Date: 02-Jul-2005
Time: 00:20:23
ID: 1200876906 (ESHL 438027 ms lcs 11
Vial: 1:7,F

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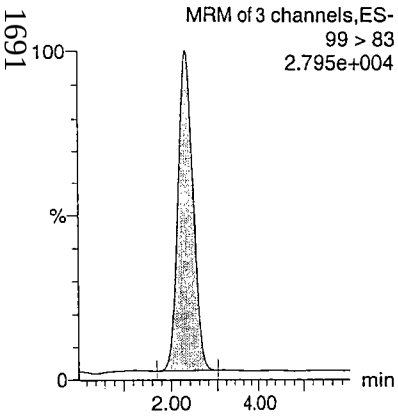
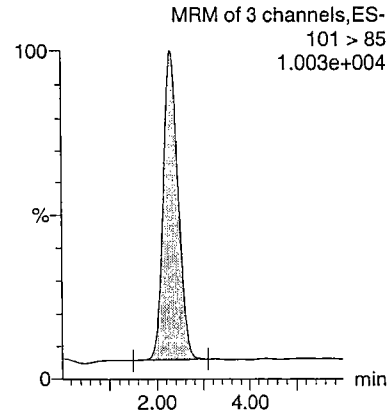
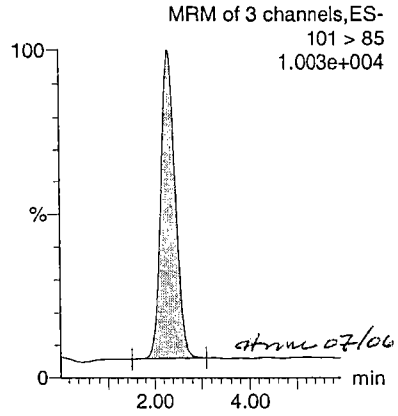
Perchlorate



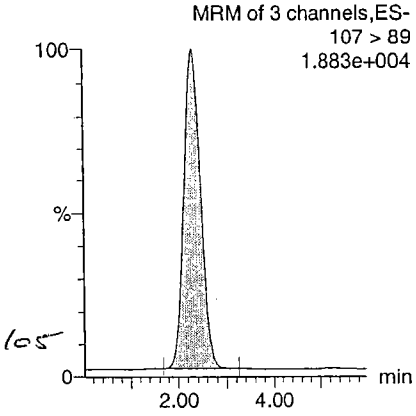
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	1200876906	Perchlorate	99 > 83	2.32	10072.524		10072.524	10072.524	bb			1609.5	0.5478	273.9	2.87
2	1200876906	Perchlorate-101	101 > 85	2.32	3510.399		3510.399	3510.399	bb			1387.8	0.5587	279.4	
3	1200876906	Perchlorate-O(18)	107 > 89	2.31	7380.740		7380.740	7380.740	bb			1702.2	0.5006	100.1	

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Quantify Sample Report
General Engineering Labs, LLC., Analyst : Michael Penny

Dataset: C:\Masslynx\Perchlorate.PRO\per070105b.qld, Time: Sat Jul 02 09:48:50 2005

Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010041b
Date: 02-Jul-2005
Time: 00:26:57
ID: 1200876907 | ES4L | 438025 | MSD | 4a | 1 |
Vial: 1:8,A

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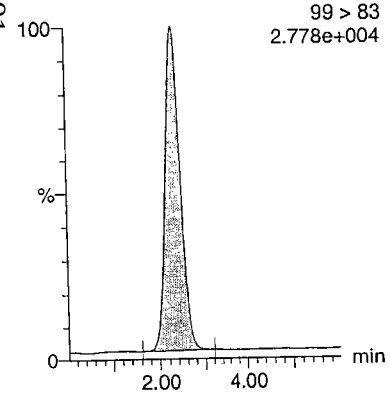
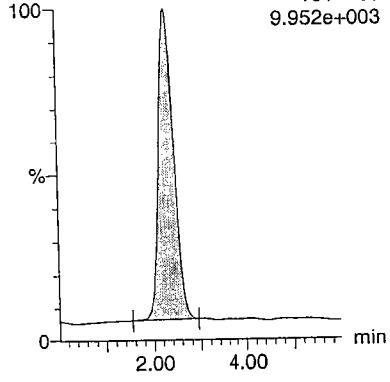
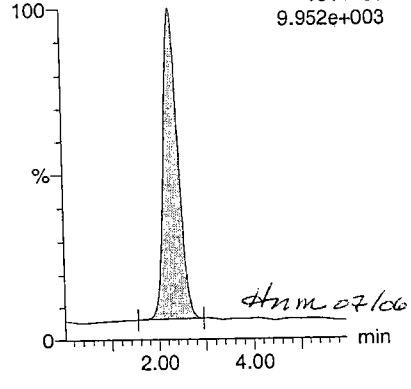
Perchlorate
MRM of 3 channels,ES-
99 > 83
2.778e+004



Perchlorate
MRM of 3 channels,ES-
101 > 85
9.952e+003

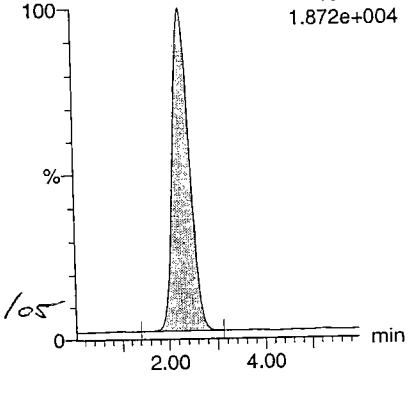


Perchlorate-101
MRM of 3 channels,ES-
101 > 85
9.952e+003



hmm 07/06/05

Perchlorate-O(18)
MRM of 3 channels,ES-
107 > 89
1.872e+004



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1	1200876907	Perchlorate	99 > 83	2.32	10139.955		10139.955	10139.955	bb			2181.2	0.5515	275.7	2.94
2	1200876907	Perchlorate-101	101 > 85	2.32	3445.965		3445.965	3445.965	bb			668.2	0.5485	274.2	
3	1200876907	Perchlorate-O(18)	107 > 89	2.31	7397.755		7397.755	7397.755	bb			2631.2	0.5017	100.3	

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Dataset: C:\Masslynx\Perchlorate.PRO\per070105b.qld, Time: Sat Jul 02 09:48:50 2005

Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010031b
Date: 01-Jul-2005
Time: 23:20:25
ID: 1200876911 (ESHL) 438023 (MS) (WBL) 11
Vial: 1:6,F

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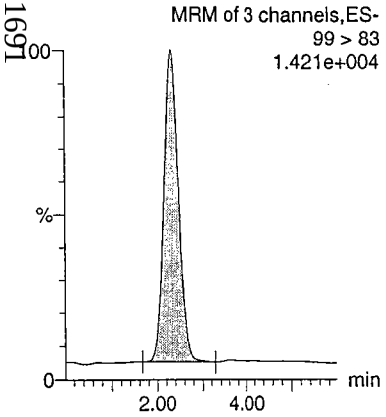
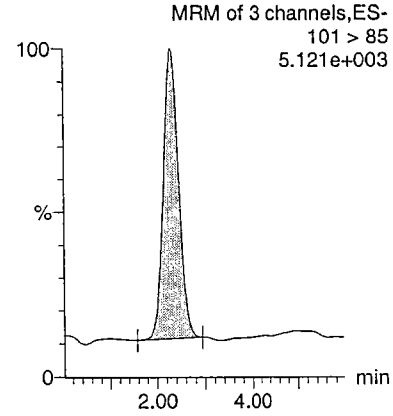
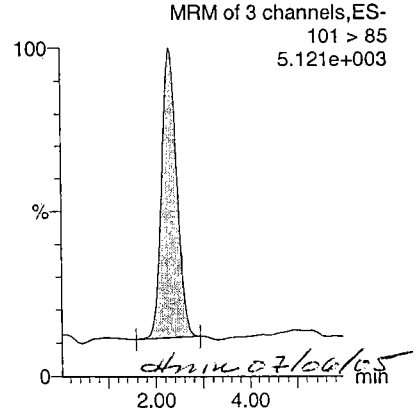
Perchlorate



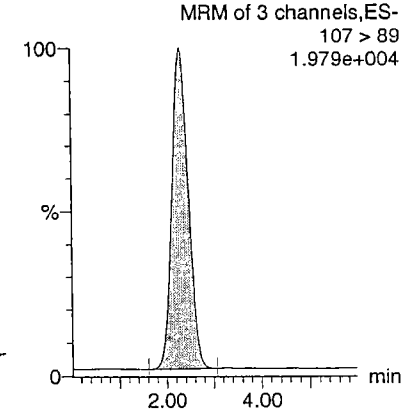
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc	%Rec	Ratio
1	1200876911	Perchlorate	99 > 83	2.32	5001.326		5001.326	5001.326	bb			847.1	0.2720	136.0	2.98
2	1200876911	Perchlorate-101	101 > 85	2.31	1677.440		1677.440	1677.440	bb			297.2	0.2670	133.5	
3	1200876911	Perchlorate-O(18)	107 > 89	2.31	7793.837		7793.837	7793.837	bb			2935.2	0.5286	105.7	

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Name: C:\MASSLYNX\PERCHLORATE.PRO\Data\per07010032b
Date: 01-Jul-2005
Time: 23:26:59
ID: 1200876912 |ESHL|438025|MSD|LLOQ|1|
Vial: 1:7,A

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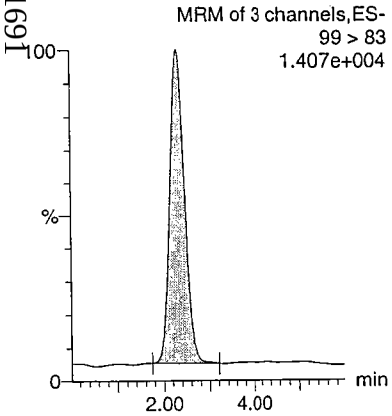
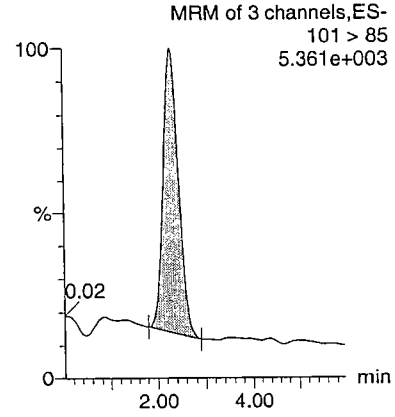
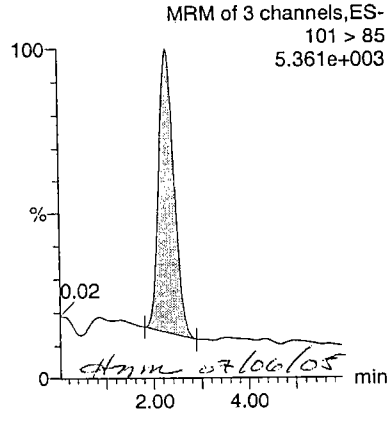
Perchlorate



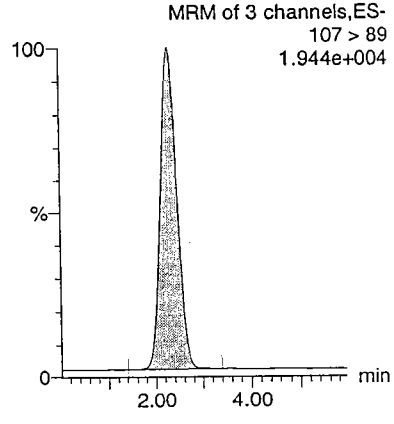
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	ID	Name	Trace	RT	Area	IS Area	Abs:Resp	Response	Flags	Mod.D...	Mod.Ti...	S/N	Conc.	%Rec	Ratio
1	1200876912	Perchlorate	99 > 83	2.32	4956.915		4956.915	4956.915	bb			659.7	0.2696	134.8	2.90
2	1200876912	Perchlorate-101	101 > 85	2.31	1707.304		1707.304	1707.304	bb			251.4	0.2717	135.9	
3	1200876912	Perchlorate-O(18)	107 > 89	2.31	7669.534		7669.534	7669.534	bb			4683.7	0.5202	104.0	

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Isotope Ratio Criteria

Average Isotope Ratio
2.93

Standard Deviation
0.19

Sample Between the MDL and RDL (0.050-0.20ug/L)
Control Limits : 2.36-3.50

Sample Above the RDL (0.20ug/L)
Control Limits : 2.55-3.31

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Metals Analysis

Metals Fractional Narrative
Los Alamos National Laboratory (ESHL)
SDG 139405

Method/Analysis Information

Analytical Batch:	437221, 437237, 437374
Prep Batch :	437220, 437236, 437372
Standard Operating Procedures:	GL-GC-E-107 REV# 1, GL-MA-E-013 REV# 13, GL-MA-E-014 REV# 10, GL-MA-E-010 REV# 16, GL-MA-E-006 REV# 9
Analytical Method:	SW846 6010B, SW846 6020, SW846 7470A
Prep Method :	SW846 3005A, SW846 7470A Prep

Sample Analysis

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200875012	Method Blank (MB) in batch 437221
1200875019	Laboratory Control Sample (LCS) in batch 437221
1200875015	139405001(GF05050GMC401L) Serial Dilution (SD) in batch 437221
1200875016	139405002(GU05050GMC401L) Serial Dilution (SD) in batch 437221
1200875013	139405001(GF05050GMC401D) Sample Duplicate (DUP) in batch 437221
1200875014	139405002(GU05050GMC401D) Sample Duplicate (DUP) in batch 437221
1200875017	139405001(GF05050GMC401S) Matrix Spike (MS) in batch 437221
1200875018	139405002(GU05050GMC401S) Matrix Spike (MS) in batch 437221
1200875069	Method Blank (MB) in batch 437237
1200875076	Laboratory Control Sample (LCS) in batch 437237
1200875072	139405001(GF05050GMC401L) Serial Dilution (SD) in batch 437237
1200875073	139405002(GU05050GMC401L) Serial Dilution (SD) in batch 437237
1200875070	139405001(GF05050GMC401D) Sample Duplicate (DUP) in batch 437237
1200875071	139405002(GU05050GMC401D) Sample Duplicate (DUP) in batch 437237
1200875074	139405001(GF05050GMC401S) Matrix Spike (MS) in batch 437237

1200875075	139405002(GU05050GMC401S) Matrix Spike (MS) in batch 437237
1200875346	Method Blank (MB) in batch 437374
1200875353	Laboratory Control Sample (LCS) in batch 437374
1200875349	139405001(GF05050GMC401L) Serial Dilution (SD) in batch 437374
1200875350	139405002(GU05050GMC401L) Serial Dilution (SD) in batch 437374
1200875347	139405001(GF05050GMC401D) Sample Duplicate (DUP) in batch 437374
1200875348	139405002(GU05050GMC401D) Sample Duplicate (DUP) in batch 437374
1200875351	139405001(GF05050GMC401S) Matrix Spike (MS) in batch 437374
1200875352	139405002(GU05050GMC401S) Matrix Spike (MS) in batch 437374

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The ICP analysis was performed on a P E 4300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 1.4L/min, argon gas flows of 15 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The ICP-MS analysis was performed on a Perkin Elmer ICP-MS ELAN 9000. The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, and tantalum were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Mercury analysis was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 254 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80mL/min.

The analysis was performed on a No instrument-calculation method..

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria for all applicable analytes.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

ICSA/ICSAB statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
Samples 139405001 (GF05050GMC401) and 139405002 (GU05050GMC401) were selected as the quality control (QC) samples for this SDG.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is 5X the contract required detection limit (RL). In cases were either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of +/-RL is used to evaluate the DUP results. All applicable analytes did not meet these requirements. Cr, Fe, and Ni in batch 437221 did not meet acceptance criteria due to possible sample non-homogeneity. See NCR #216466 located in the Miscellaneous Section.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL for CVAA, 50X the IDL for ICP, and 100X the IDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Re-prep/Re-analysis
No samples in this SDG required repreparation and/or reanalysis.

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

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Nonconformance Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. NCR #216466 was generated for this SDG. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: [signature] for GWH **Date:** 7/15/05

Sample Data Summary

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 139405 **METHOD TYPE:** SW846

SAMPLE ID: 139405001 **CLIENT ID:** GF05050GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 25–JUN–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7429–90–5	Aluminum	68	ug/L	U	*	P	68	OPTIMA2	062905–2
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS5	050710–4
7440–38–2	Arsenic	6	ug/L	U		P	6	OPTIMA2	062905–2
7440–39–3	Barium	14.8	ug/L			P	1	OPTIMA2	062905–2
7440–41–7	Beryllium	0.10	ug/L	U		MS	0.1	ICPMS5	050711–5
7440–42–8	Boron	40.6	ug/L	J		P	10	OPTIMA2	062905–2
7440–43–9	Cadmium	0.140	ug/L	J		MS	0.1	ICPMS5	050711–5
7440–70–2	Calcium	32700	ug/L			P	36	OPTIMA2	062905–2
7440–47–3	Chromium	25	ug/L		*	P	1	OPTIMA2	062905–2
7440–48–4	Cobalt	1	ug/L	U		P	1	OPTIMA2	062905–2
7440–50–8	Copper	30.5	ug/L			P	3	OPTIMA2	062905–2
7439–89–6	Iron	18	ug/L	U	*	P	18	OPTIMA2	062905–2
7439–92–1	Lead	0.50	ug/L	U		MS	0.5	ICPMS5	050711–5
7439–95–4	Magnesium	5340	ug/L			P	85	OPTIMA2	062905–2
7439–96–5	Manganese	15.9	ug/L			MS	1	ICPMS5	050711–5
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	MER536	063005W1–1
7439–98–7	Molybdenum	1.4	ug/L			MS	0.1	ICPMS5	050711–5
7440–02–0	Nickel	4.1	ug/L	J	*	P	1	OPTIMA2	062905–2
7440–09–7	Potassium	714	ug/L			P	50	OPTIMA2	062905–2
7782–49–2	Selenium	6	ug/L	U		P	6	OPTIMA2	062905–2
7631–86–9	Silica	59	mg/L			P	0.16	OPTIMA2	071405–3
7440–22–4	Silver	1	ug/L	U		P	1	OPTIMA2	062905–2
7440–23–5	Sodium	19800	ug/L			P	45	OPTIMA2	062905–2
7440–24–6	Strontium	161	ug/L			P	1	OPTIMA2	062905–2
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS5	050711–5
7440–31–5	Tin	2.5	ug/L	U		P	2.5	OPTIMA2	062905–2

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 139405 **METHOD TYPE:** SW846

SAMPLE ID: 139405001 **CLIENT ID:** GF05050GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 25–JUN–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440–62–2	Vanadium	1	ug/L	U		P	1	OPTIMA2	062905–2
7440–66–6	Zinc	141	ug/L			P	2	OPTIMA2	062905–2

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 139405 **METHOD TYPE:** SW846

SAMPLE ID: 139405002 **CLIENT ID:** GU05050GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 25–JUN–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7429–90–5	Aluminum	499	ug/L		*	P	68	OPTIMA2	062905–2
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS5	050710–4
7440–38–2	Arsenic	6	ug/L	U		P	6	OPTIMA2	062905–2
7440–39–3	Barium	21.7	ug/L			P	1	OPTIMA2	062905–2
7440–41–7	Beryllium	0.10	ug/L	U		MS	0.1	ICPMS5	050711–5
7440–42–8	Boron	37.9	ug/L	J		P	10	OPTIMA2	062905–2
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS5	050711–5
7440–70–2	Calcium	34000	ug/L			P	36	OPTIMA2	062905–2
7440–47–3	Chromium	135	ug/L		*	P	1	OPTIMA2	062905–2
7440–48–4	Cobalt	1.3	ug/L	J		P	1	OPTIMA2	062905–2
7440–50–8	Copper	97.1	ug/L			P	3	OPTIMA2	062905–2
7439–89–6	Iron	1150	ug/L		*	P	18	OPTIMA2	062905–2
7439–92–1	Lead	4.8	ug/L			MS	0.5	ICPMS5	050711–5
7439–95–4	Magnesium	5500	ug/L			P	85	OPTIMA2	062905–2
7439–96–5	Manganese	23.3	ug/L			MS	1	ICPMS5	050711–5
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	MER536	063005W1–1
7439–98–7	Molybdenum	4.3	ug/L			MS	0.1	ICPMS5	050711–5
7440–02–0	Nickel	35.8	ug/L		*	P	1	OPTIMA2	062905–2
7440–09–7	Potassium	817	ug/L			P	50	OPTIMA2	062905–2
7782–49–2	Selenium	6	ug/L	U		P	6	OPTIMA2	062905–2
7631–86–9	Silica	54.8	mg/L			P	0.16	OPTIMA2	071405–3
7440–22–4	Silver	1	ug/L	U		P	1	OPTIMA2	062905–2
7440–23–5	Sodium	20500	ug/L			P	45	OPTIMA2	062905–2
7440–24–6	Strontium	169	ug/L			P	1	OPTIMA2	062905–2
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS5	050711–5
7440–31–5	Tin	2.5	ug/L	U		P	2.5	OPTIMA2	062905–2

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 139405 **METHOD TYPE:** SW846

SAMPLE ID: 139405002 **CLIENT ID:** GU05050GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 25–JUN–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440–62–2	Vanadium	1.9	ug/L	J		P	1	OPTIMA2	062905–2
7440–66–6	Zinc	137	ug/L			P	2	OPTIMA2	062905–2

Comments:

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	4965.8	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Arsenic	505.1	ug/L	500	ug/L	101	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Barium	495.71	ug/L	500	ug/L	99.1	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Boron	504.35	ug/L	500	ug/L	100.9	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Calcium	5016.7	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Chromium	501.63	ug/L	500	ug/L	100.3	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Cobalt	509.48	ug/L	500	ug/L	101.9	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Copper	507.29	ug/L	500	ug/L	101.5	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Iron	5102.1	ug/L	5000	ug/L	102	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Magnesium	5091.5	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Nickel	503.16	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Potassium	2515.6	ug/L	2500	ug/L	100.6	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Selenium	2440	ug/L	2500	ug/L	97.6	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Silver	249.87	ug/L	250	ug/L	100	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Sodium	2570.1	ug/L	2500	ug/L	102.8	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Strontium	511.04	ug/L	500	ug/L	102.2	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Tin	491.95	ug/L	500	ug/L	98.4	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Vanadium	497.81	ug/L	500	ug/L	99.6	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Zinc	483.48	ug/L	500	ug/L	96.7	90.0 – 110.0	P	29–JUN–05 17:43	062905–2
	Mercury	5.05	ug/L	5	ug/L	101	90.0 – 110.0	AV	30–JUN–05 09:53	063005W1–1
	Antimony	48.68	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	11–JUL–05 05:55	050710–4
	Beryllium	49.09	ug/L	50	ug/L	98.2	90.0 – 110.0	MS	11–JUL–05 12:26	050711–5
	Cadmium	48.86	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	11–JUL–05 12:26	050711–5
	Lead	50.54	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	11–JUL–05 12:26	050711–5
	Manganese	52.79	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	11–JUL–05 12:26	050711–5
	Molybdenum	48.06	ug/L	50	ug/L	96.1	90.0 – 110.0	MS	11–JUL–05 12:26	050711–5
	Thallium	50.42	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	11–JUL–05 12:26	050711–5
	Silica	10290	ug/L	10700	ug/L	96.2	90.0 – 110.0	P	14–JUL–05 18:01	071405–3
CCV01										
	Aluminum	5000.6	ug/L	5000	ug/L	100	90.0 – 110.0	P	29–JUN–05 18:12	062905–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	503.43	ug/L	500	ug/L	100.7	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Barium	494.94	ug/L	500	ug/L	99	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Boron	496.37	ug/L	500	ug/L	99.3	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Calcium	5014.3	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Chromium	494.52	ug/L	500	ug/L	98.9	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Cobalt	495.91	ug/L	500	ug/L	99.2	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Copper	497.42	ug/L	500	ug/L	99.5	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Iron	5162.7	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Magnesium	5184	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Nickel	500.38	ug/L	500	ug/L	100.1	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Potassium	5062.9	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Selenium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Silver	503.07	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Sodium	10135	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Strontium	503.16	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Tin	500.18	ug/L	500	ug/L	100	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Vanadium	500.32	ug/L	500	ug/L	100.1	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Zinc	493.05	ug/L	500	ug/L	98.6	90.0 – 110.0	P	29–JUN–05 18:12	062905–2
	Mercury	5.1	ug/L	5	ug/L	101.9	80.0 – 120.0	AV	30–JUN–05 09:59	063005W1–1
	Antimony	48.62	ug/L	50	ug/L	97.3	90.0 – 110.0	MS	11–JUL–05 06:21	050710–4
	Beryllium	50.43	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	11–JUL–05 12:52	050711–5
	Cadmium	48.85	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	11–JUL–05 12:52	050711–5
	Lead	49.96	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	11–JUL–05 12:52	050711–5
	Manganese	52.57	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	11–JUL–05 12:52	050711–5
	Molybdenum	48.16	ug/L	50	ug/L	96.3	90.0 – 110.0	MS	11–JUL–05 12:52	050711–5
	Thallium	49.41	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	11–JUL–05 12:52	050711–5
	Silica	5323.2	ug/L	5350	ug/L	99.5	90.0 – 110.0	P	14–JUL–05 18:31	071405–3
CCV02										
	Aluminum	4943.8	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Arsenic	502.59	ug/L	500	ug/L	100.5	90.0 – 110.0	P	29–JUN–05 18:43	062905–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	495.52	ug/L	500	ug/L	99.1	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Boron	493.04	ug/L	500	ug/L	98.6	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Calcium	4974.6	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Chromium	495.72	ug/L	500	ug/L	99.1	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Cobalt	496.83	ug/L	500	ug/L	99.4	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Copper	502.95	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Iron	5158.4	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Magnesium	5162.5	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Nickel	500.6	ug/L	500	ug/L	100.1	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Potassium	5016.8	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Selenium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Silver	503.1	ug/L	500	ug/L	100.6	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Sodium	10122	ug/L	10000	ug/L	101.2	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Strontium	501.64	ug/L	500	ug/L	100.3	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Tin	498.98	ug/L	500	ug/L	99.8	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Vanadium	500.8	ug/L	500	ug/L	100.2	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Zinc	493.11	ug/L	500	ug/L	98.6	90.0 – 110.0	P	29–JUN–05 18:43	062905–2
	Mercury	5.06	ug/L	5	ug/L	101.2	80.0 – 120.0	AV	30–JUN–05 10:23	063005W1–1
	Antimony	49.49	ug/L	50	ug/L	99	90.0 – 110.0	MS	11–JUL–05 07:23	050710–4
	Beryllium	46.26	ug/L	50	ug/L	92.5	90.0 – 110.0	MS	11–JUL–05 13:54	050711–5
	Cadmium	49.97	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	11–JUL–05 13:54	050711–5
	Lead	50.51	ug/L	50	ug/L	101	90.0 – 110.0	MS	11–JUL–05 13:54	050711–5
	Manganese	51.47	ug/L	50	ug/L	103	90.0 – 110.0	MS	11–JUL–05 13:54	050711–5
	Molybdenum	50.46	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	11–JUL–05 13:54	050711–5
	Thallium	50.35	ug/L	50	ug/L	100.7	90.0 – 110.0	MS	11–JUL–05 13:54	050711–5
	Silica	5346.2	ug/L	5350	ug/L	99.9	90.0 – 110.0	P	14–JUL–05 18:51	071405–3
CCV03										
	Aluminum	4739.1	ug/L	5000	ug/L	94.8	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Arsenic	478.89	ug/L	500	ug/L	95.8	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Barium	473.38	ug/L	500	ug/L	94.7	90.0 – 110.0	P	29–JUN–05 19:53	062905–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Boron	674.41	ug/L	500	ug/L	134.9	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Calcium	4771.5	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Chromium	472.78	ug/L	500	ug/L	94.6	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Cobalt	474.09	ug/L	500	ug/L	94.8	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Copper	478.79	ug/L	500	ug/L	95.8	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Iron	4942.5	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Magnesium	4952.3	ug/L	5000	ug/L	99.1	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Nickel	477.15	ug/L	500	ug/L	95.4	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Potassium	4815.7	ug/L	5000	ug/L	96.3	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Selenium	481	ug/L	500	ug/L	96.2	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Silver	480.08	ug/L	500	ug/L	96	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Sodium	9770.9	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Strontium	481.4	ug/L	500	ug/L	96.3	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Tin	476.14	ug/L	500	ug/L	95.2	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Vanadium	477.53	ug/L	500	ug/L	95.5	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Zinc	470.43	ug/L	500	ug/L	94.1	90.0 – 110.0	P	29–JUN–05 19:53	062905–2
	Mercury	5	ug/L	5	ug/L	100	80.0 – 120.0	AV	30–JUN–05 10:39	063005W1–1
	Silica	5385.2	ug/L	5350	ug/L	100.7	90.0 – 110.0	P	14–JUL–05 20:07	071405–3
CCV04										
	Aluminum	4677.5	ug/L	5000	ug/L	93.6	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Arsenic	475.61	ug/L	500	ug/L	95.1	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Barium	468.29	ug/L	500	ug/L	93.7	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Boron	483.23	ug/L	500	ug/L	96.7	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Calcium	4703.8	ug/L	5000	ug/L	94.1	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Chromium	468.05	ug/L	500	ug/L	93.6	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Cobalt	468.99	ug/L	500	ug/L	93.8	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Copper	466.86	ug/L	500	ug/L	93.4	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Iron	4867.9	ug/L	5000	ug/L	97.4	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Magnesium	4845	ug/L	5000	ug/L	96.9	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Nickel	472.9	ug/L	500	ug/L	94.6	90.0 – 110.0	P	29–JUN–05 20:58	062905–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Potassium	4749.5	ug/L	5000	ug/L	95	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Selenium	474	ug/L	500	ug/L	94.8	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Silver	476.33	ug/L	500	ug/L	95.3	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Sodium	9646	ug/L	10000	ug/L	96.5	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Strontium	473.26	ug/L	500	ug/L	94.7	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Tin	473.55	ug/L	500	ug/L	94.7	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Vanadium	473.13	ug/L	500	ug/L	94.6	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Zinc	465.66	ug/L	500	ug/L	93.1	90.0 – 110.0	P	29–JUN–05 20:58	062905–2
	Mercury	4.92	ug/L	5	ug/L	98.4	80.0 – 120.0	AV	30–JUN–05 11:07	063005W1–1
	Silica	5419.3	ug/L	5350	ug/L	101.3	90.0 – 110.0	P	14–JUL–05 21:34	071405–3
CCV05										
	Aluminum	4492.1	ug/L	5000	ug/L	89.8	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Arsenic	467.75	ug/L	500	ug/L	93.6	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Barium	459.72	ug/L	500	ug/L	91.9	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Boron	471.06	ug/L	500	ug/L	94.2	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Calcium	4585.2	ug/L	5000	ug/L	91.7	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Chromium	458.15	ug/L	500	ug/L	91.6	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Cobalt	459.36	ug/L	500	ug/L	91.9	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Copper	457.7	ug/L	500	ug/L	91.5	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Iron	4766.7	ug/L	5000	ug/L	95.3	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Magnesium	4759.6	ug/L	5000	ug/L	95.2	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Nickel	462.32	ug/L	500	ug/L	92.5	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Potassium	4579.9	ug/L	5000	ug/L	91.6	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Selenium	462	ug/L	500	ug/L	92.4	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Silver	467.06	ug/L	500	ug/L	93.4	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Sodium	9389.7	ug/L	10000	ug/L	93.9	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Strontium	458.24	ug/L	500	ug/L	91.7	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Tin	464.24	ug/L	500	ug/L	92.9	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Vanadium	463.6	ug/L	500	ug/L	92.7	90.0 – 110.0	P	29–JUN–05 21:23	062905–2
	Zinc	456.77	ug/L	500	ug/L	91.4	90.0 – 110.0	P	29–JUN–05 21:23	062905–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Mercury	4.85	ug/L	5	ug/L	97	80.0 – 120.0	AV	30–JUN–05 11:31	063005W1–1
CCV06										
	Aluminum	4681.9	ug/L	5000	ug/L	93.6	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Arsenic	470.51	ug/L	500	ug/L	94.1	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Barium	467.3	ug/L	500	ug/L	93.5	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Boron	479.6	ug/L	500	ug/L	95.9	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Calcium	4726.2	ug/L	5000	ug/L	94.5	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Chromium	467.12	ug/L	500	ug/L	93.4	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Cobalt	468.56	ug/L	500	ug/L	93.7	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Copper	474.69	ug/L	500	ug/L	94.9	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Iron	4917.4	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Magnesium	4878.7	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Nickel	470.82	ug/L	500	ug/L	94.2	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Potassium	4730.1	ug/L	5000	ug/L	94.6	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Selenium	466	ug/L	500	ug/L	93.2	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Silver	475.52	ug/L	500	ug/L	95.1	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Sodium	9631.9	ug/L	10000	ug/L	96.3	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Strontium	474.48	ug/L	500	ug/L	94.9	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Tin	467.47	ug/L	500	ug/L	93.5	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Vanadium	472.37	ug/L	500	ug/L	94.5	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Zinc	464.86	ug/L	500	ug/L	93	90.0 – 110.0	P	29–JUN–05 21:35	062905–2
	Mercury	4.92	ug/L	5	ug/L	98.3	80.0 – 120.0	AV	30–JUN–05 11:55	063005W1–1
CCV07										
	Aluminum	4642.1	ug/L	5000	ug/L	92.8	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Arsenic	471.82	ug/L	500	ug/L	94.4	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Barium	468.4	ug/L	500	ug/L	93.7	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Boron	474.52	ug/L	500	ug/L	94.9	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Calcium	4672.4	ug/L	5000	ug/L	93.5	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Chromium	467.84	ug/L	500	ug/L	93.6	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Cobalt	468.26	ug/L	500	ug/L	93.7	90.0 – 110.0	P	29–JUN–05 22:49	062905–2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Copper	475.02	ug/L	500	ug/L	95	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Iron	4874.1	ug/L	5000	ug/L	97.5	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Magnesium	4847.4	ug/L	5000	ug/L	97	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Nickel	471.65	ug/L	500	ug/L	94.3	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Potassium	4718.1	ug/L	5000	ug/L	94.4	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Selenium	465	ug/L	500	ug/L	93	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Silver	475.98	ug/L	500	ug/L	95.2	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Sodium	9668	ug/L	10000	ug/L	96.7	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Strontium	473.92	ug/L	500	ug/L	94.8	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Tin	469.24	ug/L	500	ug/L	93.9	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Vanadium	472.52	ug/L	500	ug/L	94.5	90.0 – 110.0	P	29–JUN–05 22:49	062905–2
	Zinc	465.71	ug/L	500	ug/L	93.1	90.0 – 110.0	P	29–JUN–05 22:49	062905–2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.2354	ug/L	.2	ug/L	117.71	70.0 – 130.0	AV	30–JUN–05 09:57	063005W1–1
	Antimony	1.88	ug/L	2	ug/L	94	70.0 – 130.0	MS	11–JUL–05 06:05	050710–4
	Cadmium	.967	ug/L	1	ug/L	96.7	70.0 – 130.0	MS	11–JUL–05 12:36	050711–5
	Manganese	5.81	ug/L	5	ug/L	116.22	70.0 – 130.0	MS	11–JUL–05 12:36	050711–5
	Lead	2.12	ug/L	2	ug/L	106.05	70.0 – 130.0	MS	11–JUL–05 12:36	050711–5
	Molybdenum	.441	ug/L	.5	ug/L	88.2	70.0 – 130.0	MS	11–JUL–05 12:36	050711–5
	Thallium	1.08	ug/L	1	ug/L	107.8	70.0 – 130.0	MS	11–JUL–05 12:36	050711–5
	Beryllium	.481	ug/L	.5	ug/L	96.2	70.0 – 130.0	MS	11–JUL–05 12:36	050711–5
PQL01										
	Aluminum	194.94	ug/L	200	ug/L	97.47	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Magnesium	319.54	ug/L	300	ug/L	106.51	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Potassium	147.66	ug/L	150	ug/L	98.44	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Sodium	138.03	ug/L	150	ug/L	92.02	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Cobalt	5.09	ug/L	5	ug/L	101.7	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Vanadium	4.48	ug/L	5	ug/L	89.51	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Barium	5.01	ug/L	5	ug/L	100.25	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Strontium	4.91	ug/L	5	ug/L	98.2	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Tin	12.92	ug/L	10	ug/L	129.24	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Boron	55.35	ug/L	50	ug/L	110.71	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Selenium	15.2	ug/L	15	ug/L	101.33	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Calcium	100.1	ug/L	100	ug/L	100.1	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Zinc	9.13	ug/L	10	ug/L	91.29	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Copper	9.56	ug/L	10	ug/L	95.63	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Chromium	4.9	ug/L	5	ug/L	98.1	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Arsenic	18.46	ug/L	15	ug/L	123.03	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Silver	5.08	ug/L	5	ug/L	101.62	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Nickel	4.79	ug/L	5	ug/L	95.87	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Iron	109.61	ug/L	100	ug/L	109.61	70.0 – 130.0	P	29–JUN–05 17:55	062905–2
	Silica	203.19	ug/L	213	ug/L	95.39	70.0 – 130.0	P	14–JUL–05 18:14	071405–3

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 139405

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
ICB01									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 17:49	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 17:49	062905–2
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 17:49	062905–2
	Boron	10.0	+/–50	U	10.0	50.0	P	29–JUN–05 17:49	062905–2
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 17:49	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 17:49	062905–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 17:49	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 17:49	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 17:49	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 17:49	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 17:49	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 17:49	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 17:49	062905–2
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 17:49	062905–2
	Sodium	45.0	+/–150	U	45.0	150	P	29–JUN–05 17:49	062905–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 17:49	062905–2
	Tin	2.5	+/–10	U	2.5	10.0	P	29–JUN–05 17:49	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 17:49	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 17:49	062905–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	30–JUN–05 09:55	063005W1–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	11–JUL–05 06:00	050710–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	11–JUL–05 12:31	050711–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	11–JUL–05 12:31	050711–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	11–JUL–05 12:31	050711–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	11–JUL–05 12:31	050711–5
	Molybdenum	0.1	+/–.5	U	0.1	0.5	MS	11–JUL–05 12:31	050711–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	11–JUL–05 12:31	050711–5
	Silica	32.0	+/–213	U	32.0	213	P	14–JUL–05 18:07	071405–3
CCB01									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 18:19	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 18:19	062905–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 139405

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:19	062905–2
	Boron	10.0	+/–50	U	10.0	50.0	P	29–JUN–05 18:19	062905–2
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 18:19	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:19	062905–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:19	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 18:19	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 18:19	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 18:19	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:19	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 18:19	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 18:19	062905–2
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:19	062905–2
	Sodium	45.0	+/–150	U	45.0	150	P	29–JUN–05 18:19	062905–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:19	062905–2
	Tin	3.22	+/–10	J	2.5	10.0	P	29–JUN–05 18:19	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:19	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 18:19	062905–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	30–JUN–05 10:01	063005W1–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	11–JUL–05 06:26	050710–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	11–JUL–05 12:57	050711–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	11–JUL–05 12:57	050711–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	11–JUL–05 12:57	050711–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	11–JUL–05 12:57	050711–5
	Molybdenum	0.161	+/–.5	J	0.1	0.5	MS	11–JUL–05 12:57	050711–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	11–JUL–05 12:57	050711–5
	Silica	32.0	+/–213	U	32.0	213	P	14–JUL–05 18:38	071405–3
CCB02									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 18:49	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 18:49	062905–2
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:49	062905–2
	Boron	10.0	+/–50	U	10.0	50.0	P	29–JUN–05 18:49	062905–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 139405

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 18:49	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:49	062905–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:49	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 18:49	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 18:49	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 18:49	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:49	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 18:49	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 18:49	062905–2
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:49	062905–2
	Sodium	45.0	+/–150	U	45.0	150	P	29–JUN–05 18:49	062905–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:49	062905–2
	Tin	3.51	+/–10	J	2.5	10.0	P	29–JUN–05 18:49	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 18:49	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 18:49	062905–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	30–JUN–05 10:25	063005W1–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	11–JUL–05 07:29	050710–4
	Beryllium	0.1	+/–.5	U	0.1	0.5	MS	11–JUL–05 13:59	050711–5
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	11–JUL–05 13:59	050711–5
	Lead	0.5	+/–2	U	0.5	2.0	MS	11–JUL–05 13:59	050711–5
	Manganese	1.0	+/–5	U	1.0	5.0	MS	11–JUL–05 13:59	050711–5
	Molybdenum	0.1	+/–.5	U	0.1	0.5	MS	11–JUL–05 13:59	050711–5
	Thallium	0.4	+/–1	U	0.4	1.0	MS	11–JUL–05 13:59	050711–5
	Silica	32.0	+/–213	U	32.0	213	P	14–JUL–05 18:57	071405–3
CCB03									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 19:59	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 19:59	062905–2
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 19:59	062905–2
	Boron	136.6	+/–50		10.0	50.0	P	29–JUN–05 19:59	062905–2
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 19:59	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 19:59	062905–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 139405

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 19:59	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 19:59	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 19:59	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 19:59	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 19:59	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 19:59	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 19:59	062905–2
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 19:59	062905–2
	Sodium	45.0	+/–150	U	45.0	150	P	29–JUN–05 19:59	062905–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 19:59	062905–2
	Tin	3.5	+/–10	J	2.5	10.0	P	29–JUN–05 19:59	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 19:59	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 19:59	062905–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	30–JUN–05 10:41	063005W1–1
	Silica	32.0	+/–213	U	32.0	213	P	14–JUL–05 20:13	071405–3
CCB04									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 21:04	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 21:04	062905–2
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:04	062905–2
	Boron	21.93	+/–50	J	10.0	50.0	P	29–JUN–05 21:04	062905–2
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 21:04	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:04	062905–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:04	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 21:04	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 21:04	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 21:04	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:04	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 21:04	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 21:04	062905–2
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:04	062905–2
	Sodium	51.12	+/–150	J	45.0	150	P	29–JUN–05 21:04	062905–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 139405

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:04	062905–2
	Tin	2.5	+/–10	U	2.5	10.0	P	29–JUN–05 21:04	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:04	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 21:04	062905–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	30–JUN–05 11:09	063005W1–1
	Silica	32.0	+/–213	U	32.0	213	P	14–JUL–05 21:40	071405–3
CCB05									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 21:29	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 21:29	062905–2
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:29	062905–2
	Boron	17.54	+/–50	J	10.0	50.0	P	29–JUN–05 21:29	062905–2
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 21:29	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:29	062905–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:29	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 21:29	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 21:29	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 21:29	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:29	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 21:29	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 21:29	062905–2
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:29	062905–2
	Sodium	45.0	+/–150	U	45.0	150	P	29–JUN–05 21:29	062905–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:29	062905–2
	Tin	2.74	+/–10	J	2.5	10.0	P	29–JUN–05 21:29	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:29	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 21:29	062905–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	30–JUN–05 11:33	063005W1–1
CCB06									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 21:41	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 21:41	062905–2
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:41	062905–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 139405

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Boron	16.89	+/–50	J	10.0	50.0	P	29–JUN–05 21:41	062905–2
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 21:41	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:41	062905–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:41	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 21:41	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 21:41	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 21:41	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:41	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 21:41	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 21:41	062905–2
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:41	062905–2
	Sodium	45.0	+/–150	U	45.0	150	P	29–JUN–05 21:41	062905–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:41	062905–2
	Tin	3.03	+/–10	J	2.5	10.0	P	29–JUN–05 21:41	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 21:41	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 21:41	062905–2
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	30–JUN–05 11:57	063005W1–1
CCB07									
	Aluminum	68.0	+/–200	U	68.0	200	P	29–JUN–05 22:55	062905–2
	Arsenic	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 22:55	062905–2
	Barium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 22:55	062905–2
	Boron	11.2	+/–50	J	10.0	50.0	P	29–JUN–05 22:55	062905–2
	Calcium	36.0	+/–100	U	36.0	100	P	29–JUN–05 22:55	062905–2
	Chromium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 22:55	062905–2
	Cobalt	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 22:55	062905–2
	Copper	3.0	+/–10	U	3.0	10.0	P	29–JUN–05 22:55	062905–2
	Iron	18.0	+/–100	U	18.0	100	P	29–JUN–05 22:55	062905–2
	Magnesium	85.0	+/–300	U	85.0	300	P	29–JUN–05 22:55	062905–2
	Nickel	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 22:55	062905–2
	Potassium	50.0	+/–150	U	50.0	150	P	29–JUN–05 22:55	062905–2
	Selenium	6.0	+/–15	U	6.0	15.0	P	29–JUN–05 22:55	062905–2

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 139405

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Silver	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 22:55	062905–2
	Sodium	45.0	+/–150	U	45.0	150	P	29–JUN–05 22:55	062905–2
	Strontium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 22:55	062905–2
	Tin	2.55	+/–10	J	2.5	10.0	P	29–JUN–05 22:55	062905–2
	Vanadium	1.0	+/–5	U	1.0	5.0	P	29–JUN–05 22:55	062905–2
	Zinc	2.0	+/–10	U	2.0	10.0	P	29–JUN–05 22:55	062905–2

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 139405
Contract: ESHL00701
Matrix: GROUND WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1200875012								
	Silica	0.032	mg/L	+/-0.213	U	P	0.032	0.213
	Silver	1	ug/L	+/-5.0	U	P	1	5
	Sodium	45	ug/L	+/-150	U	P	45	150
	Strontium	1	ug/L	+/-5.0	U	P	1	5
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Barium	1	ug/L	+/-5.0	U	P	1	5
	Calcium	36	ug/L	+/-100	U	P	36	100
	Cobalt	1	ug/L	+/-5.0	U	P	1	5
	Iron	18	ug/L	+/-100	U	P	18	100
	Selenium	6	ug/L	+/-15.0	U	P	6	15
	Potassium	50	ug/L	+/-150	U	P	50	150
	Nickel	1	ug/L	+/-5.0	U	P	1	5
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Copper	3	ug/L	+/-10.0	U	P	3	10
	Chromium	1	ug/L	+/-5.0	U	P	1	5
	Boron	12.92	ug/L	+/-50.0	J	P	10	50
	Arsenic	6	ug/L	+/-15.0	U	P	6	15
	Tin	2.5	ug/L	+/-10.0	U	P	2.5	10
	Vanadium	1	ug/L	+/-5.0	U	P	1	5
	Zinc	2	ug/L	+/-10.0	U	P	2	10
1200875069								
	Antimony	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Beryllium	0.1	ug/L	+/-0.5	U	MS	0.1	0.5
	Cadmium	0.1	ug/L	+/-1.0	U	MS	0.1	1
	Lead	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Manganese	1	ug/L	+/-5.0	U	MS	1	5
	Molybdenum	0.101	ug/L	+/-0.5	J	MS	0.1	0.5
	Thallium	0.4	ug/L	+/-1.0	U	MS	0.4	1
1200875346								
	Mercury	0.05	ug/L	+/-0.2	U	AV	0.05	0.2

METALS
–4–
Interference Check Sample

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	506550	ug/L	500000	ug/L	101	80.0 – 120.0	29–JUN–05 18:01	062905–2
	Arsenic	–6.72	ug/L					29–JUN–05 18:01	062905–2
	Barium	0.918	ug/L					29–JUN–05 18:01	062905–2
	Boron	13.67	ug/L					29–JUN–05 18:01	062905–2
	Calcium	474310	ug/L	500000	ug/L	94.9	80.0 – 120.0	29–JUN–05 18:01	062905–2
	Chromium	1.33	ug/L					29–JUN–05 18:01	062905–2
	Cobalt	–1.41	ug/L					29–JUN–05 18:01	062905–2
	Copper	–1.35	ug/L					29–JUN–05 18:01	062905–2
	Iron	186060	ug/L	200000	ug/L	93	80.0 – 120.0	29–JUN–05 18:01	062905–2
	Magnesium	501490	ug/L	500000	ug/L	100	80.0 – 120.0	29–JUN–05 18:01	062905–2
	Nickel	–5.46	ug/L					29–JUN–05 18:01	062905–2
	Potassium	–28.09	ug/L					29–JUN–05 18:01	062905–2
	Selenium	–4.55	ug/L					29–JUN–05 18:01	062905–2
	Silver	–0.499	ug/L					29–JUN–05 18:01	062905–2
	Sodium	14.37	ug/L					29–JUN–05 18:01	062905–2
	Strontium	5.04	ug/L					29–JUN–05 18:01	062905–2
	Tin	8.51	ug/L					29–JUN–05 18:01	062905–2
	Vanadium	0.145	ug/L					29–JUN–05 18:01	062905–2
	Zinc	0.772	ug/L					29–JUN–05 18:01	062905–2
ICSAB01									
	Aluminum	508420	ug/L	500000	ug/L	102	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Arsenic	466.11	ug/L	500	ug/L	93.2	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Barium	465.14	ug/L	500	ug/L	93	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Boron	510.77	ug/L	500	ug/L	102	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Calcium	475010	ug/L	500000	ug/L	95	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Chromium	474.07	ug/L	500	ug/L	94.8	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Cobalt	429.76	ug/L	500	ug/L	86	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Copper	500.64	ug/L	500	ug/L	100	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Iron	184010	ug/L	200000	ug/L	92	80.0 – 120.0	29–JUN–05 18:07	062905–2

METALS
–4–
Interference Check Sample

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Magnesium	498820	ug/L	500000	ug/L	99.8	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Nickel	416.55	ug/L	500	ug/L	83.3	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Potassium	5528.4	ug/L	5000	ug/L	111	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Selenium	2260	ug/L	2500	ug/L	90.4	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Silver	246.79	ug/L	250	ug/L	98.7	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Sodium	5275	ug/L	5000	ug/L	106	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Strontium	514.08	ug/L	500	ug/L	103	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Tin	444.33	ug/L	500	ug/L	88.9	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Vanadium	491.73	ug/L	500	ug/L	98.4	80.0 – 120.0	29–JUN–05 18:07	062905–2
	Zinc	463.19	ug/L	500	ug/L	92.6	80.0 – 120.0	29–JUN–05 18:07	062905–2

METALS
–4–
Interference Check Sample

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Silica	22.03	ug/L					14–JUL–05 18:20	071405–3
ICSAB01									
	Silica	10434	ug/L	10700	ug/L	97.5	80.0 – 120.0	14–JUL–05 18:26	071405–3

METALS
–4–
Interference Check Sample

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.559	ug/L					11–JUL–05 06:10	050710–4
ICSAB01									
	Antimony	21.17	ug/L	22.3	ug/L	94.9	80.0 – 120.0	11–JUL–05 06:16	050710–4

METALS
–4–
Interference Check Sample

SDG No: 139405

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Beryllium	0.018	ug/L					11–JUL–05 12:41	050711–5
	Cadmium	0.364	ug/L					11–JUL–05 12:41	050711–5
	Lead	0.379	ug/L					11–JUL–05 12:41	050711–5
	Manganese	3.1	ug/L					11–JUL–05 12:41	050711–5
	Molybdenum	1824.23	ug/L	2000	ug/L	91.2	80.0 – 120.0	11–JUL–05 12:41	050711–5
	Thallium	0.019	ug/L					11–JUL–05 12:41	050711–5
ICSAB01									
	Beryllium	19.31	ug/L	20	ug/L	96.5	80.0 – 120.0	11–JUL–05 12:47	050711–5
	Cadmium	19.74	ug/L	20	ug/L	98.7	80.0 – 120.0	11–JUL–05 12:47	050711–5
	Lead	19.96	ug/L	20.8	ug/L	96	80.0 – 120.0	11–JUL–05 12:47	050711–5
	Manganese	23.9	ug/L	21.9	ug/L	109	80.0 – 120.0	11–JUL–05 12:47	050711–5
	Molybdenum	1849.66	ug/L	2000	ug/L	92.5	80.0 – 120.0	11–JUL–05 12:47	050711–5
	Thallium	19.91	ug/L	20	ug/L	99.6	80.0 – 120.0	11–JUL–05 12:47	050711–5

METALS
–5a–

Matrix Spike Summary

SDG NO. 139405 **Client ID** GF05050GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 139405001 **Spike ID:** 1200875017

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75–125	478		6	U	500	94.7		P
Barium	ug/L	75–125	472		14.8		500	91.4		P
Boron	ug/L	75–125	493		40.6	J	500	90.4		P
Calcium	ug/L		37000		32700		5000	86.5	N/A	P
Chromium	ug/L	75–125	477		25		500	90.5		P
Cobalt	ug/L	75–125	443		1	U	500	88.4		P
Copper	ug/L	75–125	493		30.5		500	92.4		P
Iron	ug/L	75–125	4720		18	U	5000	94.3		P
Magnesium	ug/L	75–125	9830		5340		5000	89.8		P
Nickel	ug/L	75–125	453		4.06	J	500	89.7		P
Potassium	ug/L	75–125	5450		714		5000	94.6		P
Selenium	ug/L	75–125	437		6	U	500	86.9		P
Silica	mg/L		76.2		59		10.7	160	N/A	P
Silver	ug/L	75–125	459		1	U	500	91.8		P
Sodium	ug/L	75–125	24500		19800		5000	94.4		P
Strontium	ug/L	75–125	628		161		500	93.4		P
Tin	ug/L	75–125	461		2.5	U	500	92.2		P
Vanadium	ug/L	75–125	465		1	U	500	92.8		P
Zinc	ug/L	75–125	578		141		500	87.3		P
Aluminum	ug/L	75–125	4560		68	U	5000	90.8		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 139405 **Client ID** GU05050GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 139405002 **Spike ID:** 1200875018

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Selenium	ug/L	75–125	439		6	U	500	87		P
Silica	mg/L		78.4		54.8		10.7	221	N/A	P
Silver	ug/L	75–125	469		1	U	500	93.7		P
Sodium	ug/L		25000		20500		5000	89.3	N/A	P
Strontium	ug/L	75–125	642		169		500	94.6		P
Tin	ug/L	75–125	473		2.5	U	500	94.7		P
Vanadium	ug/L	75–125	475		1.86	J	500	94.7		P
Zinc	ug/L	75–125	575		137		500	87.6		P
Aluminum	ug/L	75–125	5180		499		5000	93.7		P
Arsenic	ug/L	75–125	490		6	U	500	97.2		P
Barium	ug/L	75–125	488		21.7		500	93.3		P
Boron	ug/L	75–125	502		37.9	J	500	92.8		P
Calcium	ug/L		38100		34000		5000	82.6	N/A	P
Chromium	ug/L	75–125	557		135		500	84.4		P
Cobalt	ug/L	75–125	453		1.34	J	500	90.4		P
Copper	ug/L	75–125	573		97.1		500	95.1		P
Iron	ug/L	75–125	5710		1150		5000	91.1		P
Magnesium	ug/L	75–125	10200		5500		5000	94.2		P
Nickel	ug/L	75–125	470		35.8		500	86.7		P
Potassium	ug/L	75–125	5700		817		5000	97.6		P

METALS
–5a–

Matrix Spike Summary

SDG NO. 139405 **Client ID** GF05050GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 139405001 **Spike ID:** 1200875074

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	101		0.5	U	100	101		MS
Beryllium	ug/L	75–125	54.3		0.1	U	50	109		MS
Cadmium	ug/L	75–125	5.87		0.135	J	5	115		MS
Lead	ug/L	75–125	22.1		0.5	U	20	109		MS
Manganese	ug/L	75–125	64.1		15.9		50	96.5		MS
Molybdenum	ug/L	75–125	53.3		1.42		50	104		MS
Thallium	ug/L	75–125	51.7		0.4	U	50	103		MS

METALS
-5a-

Matrix Spike Summary

SDG NO. 139405 **Client ID** GU05050GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 139405002 **Spike ID:** 1200875075

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	99.9		0.5	U	100	99.7		MS
Beryllium	ug/L	75-125	49.5		0.1	U	50	98.9		MS
Cadmium	ug/L	75-125	5.57		0.1	U	5	111		MS
Lead	ug/L	75-125	25.9		4.8		20	106		MS
Manganese	ug/L	75-125	67.9		23.3		50	89.2		MS
Molybdenum	ug/L	75-125	55.6		4.25		50	103		MS
Thallium	ug/L	75-125	50.8		0.4	U	50	101		MS

METALS
–5a–

Matrix Spike Summary

SDG NO. 139405 **Client ID** GF05050GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 139405001 **Spike ID:** 1200875351

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.03		0.05	U	2	102		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 139405 **Client ID** GU05050GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 139405002 **Spike ID:** 1200875352

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.02		0.05	U	2	101		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 139405

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF05050GMC401D

Sample ID: 139405001 **Duplicate ID:** 1200875013 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/–5	14.8		14.6		1.34		P
Boron	ug/L	+/–50	40.6	J	36.6	J	10.5		P
Calcium	ug/L	+/–20%	32700		32800		.266		P
Chromium	ug/L	+/–5	25		24.6		1.58		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L	+/–10	30.5		30.4		.5		P
Iron	ug/L		18	U	18	U			P
Magnesium	ug/L	+/–20%	5340		5400		1.15		P
Nickel	ug/L	+/–5	4.06	J	4.36	J	7		P
Potassium	ug/L	+/–150	714		716		.252		P
Selenium	ug/L		6	U	6	U			P
Silica	mg/L	+/–20%	59		55.9		5.49		P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–20%	19800		19900		.439		P
Strontium	ug/L	+/–20%	161		161		.118		P
Tin	ug/L		2.5	U	2.5	U			P
Vanadium	ug/L		1	U	1	U			P
Zinc	ug/L	+/–20%	141		146		3.15		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 139405

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05050GMC401D

Sample ID: 139405002 **Duplicate ID:** 1200875014 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/–200	499		268		60.2	*	P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/–5	21.7		19.4		11.5		P
Boron	ug/L	+/–50	37.9	J	33.9	J	11		P
Calcium	ug/L	+/–20%	34000		33000		2.76		P
Chromium	ug/L	+/–20%	135		74.7		57.4	*	P
Cobalt	ug/L		1.34	J	1	U	200		P
Copper	ug/L	+/–20%	97.1		88.6		9.07		P
Iron	ug/L	+/–20%	1150		601		62.8	*	P
Magnesium	ug/L	+/–20%	5500		5370		2.52		P
Nickel	ug/L	+/–20%	35.8		17.4		69.2	*	P
Potassium	ug/L	+/–20%	817		759		7.45		P
Selenium	ug/L		6	U	6	U			P
Silica	mg/L	+/–20%	54.8		64.4		16.1		P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/–20%	20500		19900		3.13		P
Strontium	ug/L	+/–20%	169		163		3.32		P
Tin	ug/L		2.5	U	2.5	U			P
Vanadium	ug/L	+/–5	1.86	J	1.28	J	36.8		P
Zinc	ug/L	+/–20%	137		125		9.03		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 139405

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF05050GMC401D

Sample ID: 139405001 **Duplicate ID:** 1200875070 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.135	J	0.1	U	200		MS
Lead	ug/L		0.5	U	0.5	U			MS
Manganese	ug/L	+/–5	15.9		16.1		1.27		MS
Molybdenum	ug/L	+/–.5	1.42		1.45		1.96		MS
Thallium	ug/L		0.4	U	0.4	U			MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 139405

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05050GMC401D

Sample ID: 139405002 **Duplicate ID:** 1200875071 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Beryllium	ug/L		0.1	U	0.1	U			MS
Cadmium	ug/L		0.1	U	0.121	J	200		MS
Lead	ug/L	+/–2	4.8		4.81		.354		MS
Manganese	ug/L	+/–5	23.3		22.9		1.7		MS
Molybdenum	ug/L	+/–20%	4.25		4.05		4.8		MS
Thallium	ug/L		0.4	U	0.4	U			MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 139405

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF05050GMC401D

Sample ID: 139405001 **Duplicate ID:** 1200875347 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 139405

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05050GMC401D

Sample ID: 139405002 **Duplicate ID:** 1200875348 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 139405
Contract: ESHL00701
Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200875019								
	Arsenic	ug/L	500	471		94.3	80–120	P
	Barium	ug/L	500	460		91.9	80–120	P
	Aluminum	ug/L	5000	4590		91.7	80–120	P
	Boron	ug/L	500	463		92.5	80–120	P
	Calcium	ug/L	5000	4700		94	80–120	P
	Chromium	ug/L	500	456		91.1	80–120	P
	Cobalt	ug/L	500	457		91.4	80–120	P
	Copper	ug/L	500	465		93	80–120	P
	Iron	ug/L	5000	4810		96.2	80–120	P
	Magnesium	ug/L	5000	4800		96	80–120	P
	Nickel	ug/L	500	454		90.7	80–120	P
	Potassium	ug/L	5000	4700		93.9	80–120	P
	Selenium	ug/L	500	438		87.6	80–120	P
	Silica	mg/L	10.7	10.3		95.8	80–120	P
	Silver	ug/L	500	459		91.8	80–120	P
	Sodium	ug/L	5000	4800		96	80–120	P
	Strontium	ug/L	500	467		93.4	80–120	P
	Tin	ug/L	500	466		93.2	80–120	P
	Vanadium	ug/L	500	461		92.1	80–120	P
	Zinc	ug/L	500	445		88.9	80–120	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 139405

Contract: ESHL00701

Aqueous LCS Source: o2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200875076								
	Antimony	ug/L	50	51.1		102	80–120	MS
	Beryllium	ug/L	50	55.4		111	80–120	MS
	Cadmium	ug/L	50	51.4		103	80–120	MS
	Lead	ug/L	50	54.4		109	80–120	MS
	Manganese	ug/L	50	53.9		108	80–120	MS
	Molybdenum	ug/L	50	51.3		103	80–120	MS
	Thallium	ug/L	50	52.9		106	80–120	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 139405

Contract: ESHL00701

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200875353								
	Mercury	ug/L	2	2		100	80–120	AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 139405 **Client ID** GF05050GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 139405001 **Serial Dilution ID:** 1200875015

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	6	U	30	U				P
Barium	14.8		15.35	J	3.72			P
Boron	40.6	J	68.5	J	68.7			P
Calcium	32700		33200		1.53		10	P
Chromium	25		23.45	J	6.2			P
Cobalt	1	U	5	U				P
Copper	30.5		24.1	J	21			P
Iron	18	U	90	U				P
Magnesium	5340		5450		2.06		10	P
Nickel	4.06	J	5	U	100			P
Potassium	714		635	J	11.1			P
Selenium	6	U	30	U				P
Silica	11800		12350		4.66		10	P
Silver	1	U	5	U				P
Sodium	19800		20250		2.27		10	P
Strontium	161		162		.621		10	P
Tin	2.5	U	12.5	U				P
Vanadium	1	U	5	U				P
Zinc	141		148.5		5.32		10	P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 139405 **Client ID** GU05050GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 139405002 **Serial Dilution ID:** 1200875016

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	499		413	J	17.2			P
Arsenic	6	U	30	U				P
Barium	21.7		22.45	J	3.46			P
Boron	37.9	J	53	J	39.8			P
Calcium	34000		33650		1.03		10	P
Chromium	135		134		.741		10	P
Cobalt	1.34	J	5	U	100			P
Copper	97.1		89		8.34			P
Iron	1150		1150		0		10	P
Magnesium	5500		5550		.909		10	P
Nickel	35.8		33.15		7.4			P
Potassium	817		825		.979			P
Selenium	6	U	30	U				P
Silica	11000		11450		4.09		10	P
Silver	1	U	5	U				P
Sodium	20500		20450		.244		10	P
Strontium	169		165.5		2.07		10	P
Tin	2.5	U	12.5	U				P
Vanadium	1.86	J	5	U	100			P
Zinc	137		137		0		10	P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 139405 **Client ID** GF05050GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 139405001 **Serial Dilution ID:** 1200875072

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.135	J	.5	U	100			MS
Lead	.5	U	2.5	U				MS
Manganese	15.9		17.25	J	8.49			MS
Molybdenum	1.42		1.545	J	8.8			MS
Thallium	.4	U	2	U				MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 139405 **Client ID** GU05050GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 139405002 **Serial Dilution ID:** 1200875073

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Beryllium	.1	U	.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	4.8		5.15	J	7.29			MS
Manganese	23.3		25.45		9.23			MS
Molybdenum	4.25		4.25		0			MS
Thallium	.4	U	2	U				MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 139405 **Client ID** GF05050GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 139405001 **Serial Dilution ID:** 1200875349

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 139405 **Client ID** GU05050GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 139405002 **Serial Dilution ID:** 1200875350

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 139405 **Method Type:** P

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 437220							
1200875012	MB for batch 437220	MB	GROUND WATER	28-JUN-05	50mL	50mL	
1200875019	LCS for batch 437220	LCS	GROUND WATER	28-JUN-05	50mL	50mL	
1200875017	GF05050GMC401S	MS	GROUND WATER	28-JUN-05	50mL	50mL	
1200875018	GU05050GMC401S	MS	GROUND WATER	28-JUN-05	50mL	50mL	
1200875013	GF05050GMC401D	DUP	GROUND WATER	28-JUN-05	50mL	50mL	
1200875014	GU05050GMC401D	DUP	GROUND WATER	28-JUN-05	50mL	50mL	
139405001	GF05050GMC401	SAMPLE	GROUND WATER	28-JUN-05	50mL	50mL	
139405002	GU05050GMC401	SAMPLE	GROUND WATER	28-JUN-05	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 139405 **Method Type:** MS

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	437236						
1200875069	MB for batch 437236	MB	GROUND WATER	06-JUL-05	50mL	50mL	
1200875076	LCS for batch 437236	LCS	GROUND WATER	06-JUL-05	50mL	50mL	
1200875074	GF05050GMC401S	MS	GROUND WATER	06-JUL-05	50mL	50mL	
1200875075	GU05050GMC401S	MS	GROUND WATER	06-JUL-05	50mL	50mL	
1200875070	GF05050GMC401D	DUP	GROUND WATER	06-JUL-05	50mL	50mL	
1200875071	GU05050GMC401D	DUP	GROUND WATER	06-JUL-05	50mL	50mL	
139405001	GF05050GMC401	SAMPLE	GROUND WATER	06-JUL-05	50mL	50mL	
139405002	GU05050GMC401	SAMPLE	GROUND WATER	06-JUL-05	50mL	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 139405 **Method Type:** AV

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	437372						
1200875346	MB for batch 437372	MB	GROUND WATER	29–JUN–05	20mL	20mL	
1200875353	LCS for batch 437372	LCS	GROUND WATER	29–JUN–05	20mL	20mL	
1200875351	GF05050GMC401S	MS	GROUND WATER	29–JUN–05	20mL	20mL	
1200875352	GU05050GMC401S	MS	GROUND WATER	29–JUN–05	20mL	20mL	
1200875347	GF05050GMC401D	DUP	GROUND WATER	29–JUN–05	20mL	20mL	
1200875348	GU05050GMC401D	DUP	GROUND WATER	29–JUN–05	20mL	20mL	
139405001	GF05050GMC401	SAMPLE	GROUND WATER	29–JUN–05	20mL	20mL	
139405002	GU05050GMC401	SAMPLE	GROUND WATER	29–JUN–05	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: OPTIMA2
Start Date: 29–JUN–05 **End Date:** 29–JUN–05

Client Sdg: 139405
Method P
Data File: 062905–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
S0	1	17:15	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
S0.1	1	17:22	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
S0.5	1	17:27	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
SCAL	1	17:33	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
S10	1	17:39	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
ICV01	1	17:43	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
ICB01	1	17:49	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
PQL01	1	17:55	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
ICSA01	1	18:01	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
ICSAB01	1	18:07	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCV01	1	18:12	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCB01	1	18:19	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCV02	1	18:43	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCB02	1	18:49	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
ZZZZZZ	1	18:55																												
ZZZZZZ	1	19:02																												
ZZZZZZ	1	19:08																												
ZZZZZZ	1	19:14																												
ZZZZZZ	1	19:21																												
ZZZZZZ	1	19:27																												
ZZZZZZ	1	19:34																												
ZZZZZZ	1	19:40																												
ZZZZZZ	5	19:46																												
CCV03	1	19:53	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCB03	1	19:59	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
ZZZZZZ	1	20:05																												
ZZZZZZ	1	20:12																												
ZZZZZZ	1	20:18																												
ZZZZZZ	1	20:25																												
ZZZZZZ	1	20:31																												
ZZZZZZ	1	20:38																												
ZZZZZZ	1	20:45																												
ZZZZZZ	1	20:51																												
CCV04	1	20:58	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCB04	1	21:04	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
ZZZZZZ	1	21:10																												
ZZZZZZ	1	21:17																												
CCV05	1	21:23	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCB05	1	21:29	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X
CCV06	1	21:35	X		X	X		X		X	X	X	X	X		X				X	X	X		X	X	X		X	X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																														
CCB06	1	21:41	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875012	1	21:47	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875019	1	21:53	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
139405001	1	22:00	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875012	1	22:06	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875015	5	22:13	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875017	1	22:19	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
139405002	1	22:25	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875014	1	22:31	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875016	5	22:37	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
1200875018	1	22:43	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
CCV07	1	22:49	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X
CCB07	1	22:55	X		X	X		X		X	X	X	X		X		X				X	X	X		X	X	X		X	X	X

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 11–JUL–05
End Date: 11–JUL–05
Client Sdg: 139405
Method MS
Data File: 050710–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
Blank	1	05:40:00		X																											
Standard 1	1	05:45:00		X																											
Standard 2	1	05:50:00		X																											
ICV01	1	05:55:00		X																											
ICB01	1	06:00:00		X																											
CRDL01	1	06:05:00		X																											
ICSA01	1	06:10:00		X																											
ICSAB01	1	06:16:00		X																											
CCV01	1	06:21:00		X																											
CCB01	1	06:26:00		X																											
1200875069	1	06:31:00		X																											
1200875076	1	06:36:00		X																											
139405001	1	06:42:00		X																											
1200875070	1	06:47:00		X																											
1200875074	1	06:52:00		X																											
1200875072	5	06:57:00		X																											
139405002	1	07:02:00		X																											
1200875071	1	07:08:00		X																											
1200875075	1	07:13:00		X																											
1200875073	5	07:18:00		X																											
CCV02	1	07:23:00		X																											
CCB02	1	07:29:00		X																											

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 11–JUL–05 **End Date:** 11–JUL–05

Client Sdg: 139405
Method MS
Data File: 050711–4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
Blank	1	12:11:00					X		X							X		X		X								X			
Standard 1	1	12:16:00					X		X							X		X		X								X			
Standard 2	1	12:21:00					X		X							X		X		X								X			
ICV01	1	12:26:00					X		X							X		X		X								X			
ICB01	1	12:31:00					X		X							X		X		X								X			
CRDL01	1	12:36:00					X		X							X		X		X								X			
ICSA01	1	12:41:00					X		X							X		X		X								X			
ICSAB01	1	12:47:00					X		X							X		X		X								X			
CCV01	1	12:52:00					X		X							X		X		X								X			
CCB01	1	12:57:00					X		X							X		X		X								X			
1200875069	1	13:02:00					X		X							X		X		X								X			
1200875076	1	13:07:00					X		X							X		X		X								X			
139405001	1	13:13:00					X		X							X		X		X								X			
1200875070	1	13:18:00					X		X							X		X		X								X			
1200875074	1	13:23:00					X		X							X		X		X								X			
1200875072	5	13:28:00					X		X							X		X		X								X			
139405002	1	13:33:00					X		X							X		X		X								X			
1200875071	1	13:39:00					X		X							X		X		X								X			
1200875075	1	13:44:00					X		X							X		X		X								X			
1200875073	5	13:49:00					X		X							X		X		X								X			
CCV02	1	13:54:00					X		X							X		X		X								X			
CCB02	1	13:59:00					X		X							X		X		X								X			

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: OPTIMA2
Start Date: 14–JUL–05 **End Date:** 14–JUL–05

Client Sdg: 139405
Method P
Data File: 071405–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
S0	1	17:32																						X							
S0.1	1	17:40																						X							
S0.5	1	17:45																						X							
SCAL	1	17:51																						X							
S10	1	17:57																						X							
ICV01	1	18:01																						X							
ICB01	1	18:07																						X							
PQL01	1	18:14																						X							
ICSA01	1	18:20																						X							
ICSAB01	1	18:26																						X							
CCV01	1	18:31																						X							
CCB01	1	18:38																						X							
ZZZZZZ	1	18:45																													
CCV02	1	18:51																						X							
CCB02	1	18:57																						X							
ZZZZZZ	1	19:03																													
ZZZZZZ	1	19:10																													
ZZZZZZ	1	19:17																													
ZZZZZZ	1	19:23																													
ZZZZZZ	1	19:29																													
ZZZZZZ	5	19:35																													
ZZZZZZ	1	19:42																													
ZZZZZZ	1	19:48																													
ZZZZZZ	1	19:54																													
ZZZZZZ	1	20:00																													
CCV03	1	20:07																						X							
CCB03	1	20:13																						X							
1200875012	1	20:30																						X							
1200875019	1	20:37																						X							
139405001	5	20:43																						X							
1200875013	5	20:50																						X							
1200875015	25	20:56																						X							
1200875017	5	21:02																						X							
139405002	5	21:09																						X							
1200875014	5	21:15																						X							
1200875016	25	21:21																						X							
1200875018	5	21:27																						X							
CCV04	1	21:34																						X							
CCB04	1	21:40																						X							

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: MER536
Start Date: 30–JUN–05 **End Date:** 30–JUN–05

Client Sdg: 139405
Method AV
Data File: 063005W1–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	V	Zn
SCalib Blank	1	09:41																	X												
S0.2	1	09:43																	X												
S0.5	1	09:45																	X												
S2.0	1	09:47																	X												
S5.0	1	09:49																	X												
S10	1	09:51																	X												
ICV01	1	09:53																	X												
ICB01	1	09:55																	X												
CRDL01	1	09:57																	X												
CCV01	1	09:59																	X												
CCB01	1	10:01																	X												
ZZZZZZ	1	10:03																													
ZZZZZZ	1	10:05																													
ZZZZZZ	1	10:07																													
ZZZZZZ	1	10:09																													
ZZZZZZ	1	10:11																													
ZZZZZZ	1	10:13																													
ZZZZZZ	5	10:15																													
ZZZZZZ	1	10:17																													
ZZZZZZ	1	10:19																													
ZZZZZZ	1	10:21																													
CCV02	1	10:23																	X												
CCB02	1	10:25																	X												
ZZZZZZ	1	10:27																													
ZZZZZZ	1	10:29																													
ZZZZZZ	1	10:31																													
ZZZZZZ	1	10:33																													
ZZZZZZ	1	10:35																													
ZZZZZZ	1	10:37																													
CCV03	1	10:39																	X												
CCB03	1	10:41																	X												
ZZZZZZ	1	10:47																													
ZZZZZZ	1	10:49																													
ZZZZZZ	1	10:51																													
ZZZZZZ	1	10:53																													
ZZZZZZ	1	10:55																													
ZZZZZZ	5	10:57																													
ZZZZZZ	1	10:59																													
ZZZZZZ	1	11:01																													
ZZZZZZ	1	11:03																													

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																														
ZZZZZZ	1	11:05																														
CCV04	1	11:07																	X													
CCB04	1	11:09																	X													
ZZZZZZ	1	11:11																														
ZZZZZZ	1	11:13																														
ZZZZZZ	1	11:15																														
ZZZZZZ	1	11:17																														
ZZZZZZ	1	11:19																														
ZZZZZZ	1	11:21																														
ZZZZZZ	1	11:23																														
ZZZZZZ	5	11:25																														
1200875346	1	11:27																	X													
1200875353	1	11:29																	X													
CCV05	1	11:31																	X													
CCB05	1	11:33																	X													
139405001	1	11:35																	X													
1200875347	1	11:37																	X													
1200875351	1	11:39																	X													
1200875349	5	11:41																	X													
139405002	1	11:43																	X													
1200875348	1	11:45																	X													
1200875352	1	11:47																	X													
1200875350	5	11:49																	X													
ZZZZZZ	1	11:51																														
ZZZZZZ	1	11:53																														
CCV06	1	11:55																	X													
CCB06	1	11:57																	X													

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 139405

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
ICP	Aluminum	308.215	68.0	200
	Antimony	206.838	4.0	10
	Arsenic	193.696	6.0	15
	Barium	493.409	1.0	5
	Beryllium	313.042	1.0	5
	Boron	249.678	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	36.0	100
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.754	3.0	10
	Iron	259.94	18.0	100
	Lead	220.353	2.5	10
	Magnesium	279.078	85.0	300
	Manganese	257.61	2.0	10
	Molybdenum	202.03	2.0	10
	Nickel	231.604	1.0	5
	Potassium	766.491	50.0	150
	Selenium	196.026	6.0	15
	Silica		32.0	213
	Silver	328.068	1.0	5
	Sodium	588.995	45.0	150
	Strontium	421.552	1.0	5

METALS
-10-
Instrument Detection Limits

SDG NO. 139405

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
ICP	Thallium	190.864	5.0	20
	Tin	283.991	2.5	10
	Vanadium	292.402	1.0	5
	Zinc	213.856	2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 139405

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Aluminum		5.0	15
	Antimony		0.5	2
	Arsenic		1.5	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		20.0	100
	Chromium		1.0	3
	Cobalt		0.1	1
	Copper		0.2	1
	Iron		10.0	25
	Lead		0.5	2
	Magnesium		5.0	15
	Manganese		1.0	5
	Molybdenum		0.1	.5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Strontium		2.0	10
	Thallium		0.4	1

METALS
–10–
Instrument Detection Limits

SDG NO. 139405

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Tin		1.0	5
	Vanadium		2.0	30
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 139405

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY	Mercury		0.05	.2

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 139405
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31–OCT–04,31–JAN–05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02788	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00788	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	–0.11381	–0.11530	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	–0.29437	0.00000	0.00000	0.00000
Phosphorous	214.914	–0.21788	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	–0.05565	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.14330	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	–0.21119	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 139405
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31–OCT–04,31–JAN–05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Calcium	Chromium	Cobalt
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	12.5725	0.00000
Arsenic	188.979	0.00000	0.00000	–0.00610	–10.0253	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	–0.13503	0.00000
Boron	249.677	0.00000	0.00000	0.00000	–3.57994	3.32232
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	–0.28465	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	–0.13964	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	–0.15932
Iron	238.204	0.00000	0.00000	0.00000	0.00000	–12.0418
Lead	220.353	0.00000	0.00000	–0.00050	–0.32526	–0.75979
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	1.25498
Phosphorous	214.914	0.00000	–7.07130	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.03806	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	–0.00274	0.00000	0.33245
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.01452	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.34753	3.63617
Tin	189.927	0.00000	0.00000	–0.05621	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	–0.02110	0.27477	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	–2.30557	0.00000
Zinc	213.857	0.00000	0.00000	0.02982	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 139405
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31–OCT–04,31–JAN–05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Copper	Iron	Lead	Magnesium	Manganese
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	–0.11987	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.01181	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.13460	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.08993	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.01997	0.00000	0.00000	0.00000
Copper	324.752	0.00000	–0.03415	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.65243	0.01790	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.84343	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	–0.11793	0.00000	0.01200	0.00000
Molybdenum	202.031	0.00000	–0.03161	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	131.38	1.15709	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.01842	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.02692	0.00000	0.03209	0.00000
Silica	251.611	0.00000	–0.24167	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	–0.11584	0.00000	0.00000	0.00000
Silver	328.068	0.00000	–0.19832	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	–0.05179	0.00000	0.00000	–2.75621
Tin	189.927	0.00000	0.00000	0.00000	–0.01428	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.12457	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	–0.02556	0.00000	0.00000	0.00000
Zinc	213.857	1.97688	0.12881	0.00000	0.02624	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 139405
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31-OCT-04,31-JAN-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Molybdenum	Nickel	Phosphorous	Potassium	Selenium
Aluminum	396.153	43.4438	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-6.65235	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	1.99823	0.00000	0.00000	0.00000	0.00000
Barium	233.527	-0.26656	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	-2.14824	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	-0.79197	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.23510	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	-1.48397	0.17229	0.00000	0.00000	0.00000
Copper	324.752	0.64433	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	-1.48239	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	-32.6995	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	-2.19782	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	8.95841	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.34727	0.00000	0.00000	0.00000	0.00000
Silica	251.611	28.9491	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	13.4583	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.15092	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	-8.02414	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.21035	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.04247	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-9.59083	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	-0.14560	5.72240	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: OPTIMA2
GEL Job No: 139405
Effective Dates: 31-OCT-04,31-JAN-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silica	Silicon	Silver	Strontium	Sulfur
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Molybdenum	202.031	0.00000	0.00000	0.00000	-1.06421	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	19.1407	0.00000
Thallium	190.801	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
–11–
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 139405
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31–OCT–04,31–JAN–05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Thallium	Tin	Titanium	Uranium	Vanadium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	–3.55679	0.00000	–0.78780	–2.58355
Arsenic	188.979	0.00000	0.00000	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	–0.16423	–0.66126
Beryllium	313.107	0.00000	0.00000	0.00000	–0.18887	0.00000
Boron	249.677	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	–0.22683	0.00000
Calcium	317.933	0.00000	0.00000	0.00000	–5.57052	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.66386	–0.32132
Cobalt	228.616	0.00000	0.00000	2.14745	0.20189	0.00000
Copper	324.752	0.00000	0.00000	0.00000	0.76698	–0.25907
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.00000	0.00000	0.00000	1.26434	0.00000
Magnesium	279.077	0.00000	0.00000	0.00000	6.18572	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.12465	–0.14849
Molybdenum	202.031	0.00000	0.00000	0.00000	0.00000	–0.26514
Nickel	231.604	0.44153	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.00000	–5.10353	0.00000	3.33008	–1.39563
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	–2.70128	0.52990
Silica	251.611	0.00000	8.53667	0.00000	0.00000	0.00000
Silicon	251.611	0.00000	4.29884	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.21905	–2.45525
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.801	0.00000	0.00000	–6.24213	–0.54613	–0.43913
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.00000	0.50502	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	–9.85543
Vanadium	292.402	0.00000	0.00000	0.68159	–1.06136	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	–0.12650

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 139405
Contract: ESHL00701
Instrument: OPTIMA2
Effective Dates: 31-OCT-04,31-JAN-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Zinc
Parmname	Wavelength	
Aluminum	396.153	0.00000
Antimony	206.836	0.00000
Arsenic	188.979	0.00000
Barium	233.527	0.00000
Beryllium	313.107	0.00000
Boron	249.677	0.00000
Cadmium	226.502	0.00000
Calcium	317.933	0.00000
Chromium	267.716	0.00000
Cobalt	228.616	0.00000
Copper	324.752	0.00000
Iron	238.204	0.00000
Lead	220.353	0.00000
Magnesium	279.077	0.00000
Manganese	257.61	0.00000
Molybdenum	202.031	0.00000
Nickel	231.604	0.00000
Phosphorous	214.914	0.00000
Potassium	766.49	0.00000
Selenium	196.026	0.00000
Silica	251.611	0.00000
Silicon	251.611	0.00000
Silver	328.068	0.00000
Strontium	421.552	0.00000
Sulfur	181.975	0.00000
Thallium	190.801	0.00000
Tin	189.927	0.00000
Titanium	334.94	0.00000
Uranium	409.014	0.00000
Vanadium	292.402	0.00000
Zinc	213.857	0.00000

METALS
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Linear Ranges

SDG NO. 139405

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID OPTIMA2

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		1000000	ug/L	01–MAY–05
Antimony		50000	ug/L	01–MAY–05
Arsenic		50000	ug/L	01–MAY–05
Barium		25000	ug/L	01–MAY–05
Beryllium		10000	ug/L	01–MAY–05
Boron		50000	ug/L	01–MAY–05
Cadmium		25000	ug/L	01–MAY–05
Calcium		1000000	ug/L	01–MAY–05
Chromium		50000	ug/L	01–MAY–05
Cobalt		50000	ug/L	01–MAY–05
Copper		25000	ug/L	01–MAY–05
Iron		500000	ug/L	01–MAY–05
Lead		50000	ug/L	01–MAY–05
Magnesium		1000000	ug/L	01–MAY–05
Manganese		10000	ug/L	01–MAY–05
Molybdenum		50000	ug/L	01–MAY–05
Nickel		50000	ug/L	01–MAY–05
Potassium		500000	ug/L	01–MAY–05
Selenium		50000	ug/L	01–MAY–05
Silica		107000	ug/L	01–MAY–05
Silver		5000	ug/L	01–MAY–05
Sodium		500000	ug/L	01–MAY–05
Strontium		10000	ug/L	01–MAY–05
Thallium		50000	ug/L	01–MAY–05
Tin		50000	ug/L	01–MAY–05
Vanadium		50000	ug/L	01–MAY–05
Zinc		10000	ug/L	01–MAY–05

METALS
–12–
Linear Ranges

SDG NO. 139405

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		200000	ug/L	01–MAY–05
Antimony		2500	ug/L	01–MAY–05
Arsenic		5000	ug/L	01–MAY–05
Barium		10000	ug/L	01–MAY–05
Beryllium		5000	ug/L	01–MAY–05
Boron		1000	ug/L	01–MAY–05
Cadmium		10000	ug/L	01–MAY–05
Calcium		200000	ug/L	01–MAY–05
Chromium		10000	ug/L	01–MAY–05
Cobalt		10000	ug/L	01–MAY–05
Copper		10000	ug/L	01–MAY–05
Iron		200000	ug/L	01–MAY–05
Lead		10000	ug/L	01–MAY–05
Magnesium		200000	ug/L	01–MAY–05
Manganese		10000	ug/L	01–MAY–05
Molybdenum		5000	ug/L	01–MAY–05
Nickel		10000	ug/L	01–MAY–05
Potassium		200000	ug/L	01–MAY–05
Selenium		2500	ug/L	01–MAY–05
Silver		100	ug/L	01–MAY–05
Sodium		100000	ug/L	01–MAY–05
Strontium		10000	ug/L	01–MAY–05
Thallium		10000	ug/L	01–MAY–05
Tin		5000	ug/L	01–MAY–05
Vanadium		10000	ug/L	01–MAY–05
Zinc		5000	ug/L	01–MAY–05

Raw Data

6/29/2005 17:12:40 Hg ReAlign... Actual peak offset (nm): -0.004
Drift (nm): -0.000 Slit adjustment: 0

Analysis Begun

Start Time: 6/29/2005 17:15:47 **Plasma On Time: 6/29/2005 16:45:06**
Logged In Analyst: Administrator **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N2061001Autosampler Model: AS-93plus

Sample Information File: C:\pe\Sample Information\062905.sif
Batch ID:
Results Data Set: 062905
Results Library: C:\pe\Results\results.mdb

Method Loaded
Method Name: General Eng.2AZ **Method Last Saved: 6/8/2005 09:55:36**
IEC File: 011105AIEC.iec **MSF File:**
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 6/29/2005 17:15:48**
Nebulizer Back Pressure: 252.0 kPa **Nebulizer Flow: 0.65 L/min**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc RADIAL	45699.9	45699.9	101	%	17:17:15
1	Al 396.153Radial†	74.1	73.6	[0.00]	µg/L	17:17:15
1	Ca 317.933Radial†	165.4	164.2	[0.00]	µg/L	17:17:35
1	Fe 238.204 Radial†	42.8	42.5	[0.00]	µg/L	17:17:35
1	K 766.490 Radial†	1115.2	1107.2	[0.00]	µg/L	17:17:15
1	Mg 279.077 IEC†	2.2	2.2	[0.00]	µg/L	17:17:35
1	Na 589.592 Radial†	942.9	936.1	[0.00]	µg/L	17:17:15
1	Sr 421.552†	-25.7	-25.5	[0.00]	µg/L	17:17:15
1	Sc 361.383	1124309.6	1124309.6	100.66	%	17:18:34
1	Y 371.029	610560.3	610560.3	100.67	%	17:18:34
1	Ag 328.068†	-658.2	-653.9	[0.00]	µg/L	17:18:39
1	As 188.979†	-27.6	-27.4	[0.00]	µg/L	17:18:59
1	B 249.677†	41.4	41.1	[0.00]	µg/L	17:18:59
1	Ba 233.527†	-141.5	-140.5	[0.00]	µg/L	17:18:59
1	Be 313.107†	220.7	219.2	[0.00]	µg/L	17:18:39
1	Cd 226.502†	-28.6	-28.4	[0.00]	µg/L	17:18:59
1	Co 228.616†	-131.6	-130.8	[0.00]	µg/L	17:18:59
1	Cr 267.716†	71.7	71.2	[0.00]	µg/L	17:18:59
1	Cu 324.752†	3764.9	3740.2	[0.00]	µg/L	17:18:39
1	Mn 257.610†	353.4	351.1	[0.00]	µg/L	17:18:59
1	Mo 202.031†	0.1	0.1	[0.00]	µg/L	17:18:59
1	Ni 231.604†	176.9	175.7	[0.00]	µg/L	17:18:59
1	P 214.914†	183.0	181.8	[0.00]	µg/L	17:18:59
1	Pb 220.353†	-8.8	-8.8	[0.00]	µg/L	17:18:59
1	S 181.975 Axial†	34.4	34.2	[0.00]	µg/L	17:18:59
1	Sb 206.836†	37.8	37.5	[0.00]	µg/L	17:18:59
1	Se 196.026†	-45.1	-44.8	[0.00]	µg/L	17:18:59
1	SiO2 †	1258.5	1250.2	[0.00]	µg/L	17:18:39
1	Sn 189.927†	-4.5	-4.5	[0.00]	µg/L	17:18:59
1	Ti 334.940†	379.8	377.3	[0.00]	µg/L	17:18:39
1	Tl 190.801†	-45.3	-45.0	[0.00]	µg/L	17:18:59
1	U 409.014†	318.7	316.6	[0.00]	µg/L	17:18:39
1	V 292.402†	-95.8	-95.2	[0.00]	µg/L	17:18:39
1	Zn 213.857†	403.1	400.5	[0.00]	µg/L	17:18:59
1	Si 251.611†	1259.0	1250.8	[0.00]	µg/L	17:20:06
2	Sc RADIAL	45443.7	45443.7	100	%	17:17:40
2	Al 396.153Radial†	79.4	79.2	[0.00]	µg/L	17:17:40
2	Ca 317.933Radial†	159.9	159.6	[0.00]	µg/L	17:18:00
2	Fe 238.204 Radial†	41.5	41.4	[0.00]	µg/L	17:18:00
2	K 766.490 Radial†	1085.4	1083.6	[0.00]	µg/L	17:17:40
2	Mg 279.077 IEC†	1.9	1.9	[0.00]	µg/L	17:18:00
2	Na 589.592 Radial†	965.6	964.0	[0.00]	µg/L	17:17:40
2	Sr 421.552†	-35.7	-35.7	[0.00]	µg/L	17:17:40
2	Sc 361.383	1119280.7	1119280.7	100.21	%	17:19:04
2	Y 371.029	607671.0	607671.0	100.19	%	17:19:04
2	Ag 328.068†	-621.6	-620.3	[0.00]	µg/L	17:19:10
2	As 188.979†	-39.0	-38.9	[0.00]	µg/L	17:19:30
2	B 249.677†	43.8	43.7	[0.00]	µg/L	17:19:30
2	Ba 233.527†	-136.6	-136.3	[0.00]	µg/L	17:19:30
2	Be 313.107†	177.5	177.1	[0.00]	µg/L	17:19:10
2	Cd 226.502†	-22.2	-22.2	[0.00]	µg/L	17:19:30
2	Co 228.616†	-145.3	-145.0	[0.00]	µg/L	17:19:30
2	Cr 267.716†	76.1	75.9	[0.00]	µg/L	17:19:30
2	Cu 324.752†	3765.7	3757.8	[0.00]	µg/L	17:19:10
2	Mn 257.610†	366.0	365.2	[0.00]	µg/L	17:19:30
2	Mo 202.031†	3.8	3.8	[0.00]	µg/L	17:19:30
2	Ni 231.604†	176.9	176.5	[0.00]	µg/L	17:19:30
2	P 214.914†	194.4	194.0	[0.00]	µg/L	17:19:30
2	Pb 220.353†	-20.2	-20.1	[0.00]	µg/L	17:19:30
2	S 181.975 Axial†	30.9	30.9	[0.00]	µg/L	17:19:30
2	Sb 206.836†	37.8	37.7	[0.00]	µg/L	17:19:30
2	Se 196.026†	-33.4	-33.4	[0.00]	µg/L	17:19:30
2	SiO2 †	1270.5	1267.9	[0.00]	µg/L	17:19:10
2	Sn 189.927†	-12.6	-12.6	[0.00]	µg/L	17:19:30
2	Ti 334.940†	406.2	405.3	[0.00]	µg/L	17:19:10
2	Tl 190.801†	-49.3	-49.2	[0.00]	µg/L	17:19:30
2	U 409.014†	302.5	301.8	[0.00]	µg/L	17:19:10
2	V 292.402†	-118.5	-118.2	[0.00]	µg/L	17:19:10
2	Zn 213.857†	423.3	422.4	[0.00]	µg/L	17:19:30
2	Si 251.611†	1240.6	1238.0	[0.00]	µg/L	17:20:12

3	Sc RADIAL	44964.2	44964.2	99.1 %	17:18:06
3	Al 396.153Radial†	123.8	125.0	[0.00] µg/L	17:18:06
3	Ca 317.933Radial†	168.0	169.6	[0.00] µg/L	17:18:26
3	Fe 238.204 Radial†	40.1	40.4	[0.00] µg/L	17:18:26
3	K 766.490 Radial†	1013.8	1022.9	[0.00] µg/L	17:18:06
3	Mg 279.077 IEC†	6.7	6.8	[0.00] µg/L	17:18:26
3	Na 589.592 Radial†	952.2	960.8	[0.00] µg/L	17:18:06
3	Sr 421.552†	-10.6	-10.7	[0.00] µg/L	17:18:06
3	Sc 361.383	1107201.3	1107201.3	99.129 %	17:19:35
3	Y 371.029	601326.0	601326.0	99.144 %	17:19:35
3	Ag 328.068†	-717.2	-723.5	[0.00] µg/L	17:19:41
3	As 188.979†	-27.3	-27.5	[0.00] µg/L	17:20:01
3	B 249.677†	36.3	36.6	[0.00] µg/L	17:20:01
3	Ba 233.527†	-134.5	-135.7	[0.00] µg/L	17:20:01
3	Be 313.107†	239.7	241.8	[0.00] µg/L	17:19:41
3	Cd 226.502†	-22.0	-22.2	[0.00] µg/L	17:20:01
3	Co 228.616†	-129.9	-131.0	[0.00] µg/L	17:20:01
3	Cr 267.716†	82.3	83.1	[0.00] µg/L	17:20:01
3	Cu 324.752†	3790.9	3824.2	[0.00] µg/L	17:19:41
3	Mn 257.610†	364.6	367.8	[0.00] µg/L	17:20:01
3	Mo 202.031†	-0.7	-0.7	[0.00] µg/L	17:20:01
3	Ni 231.604†	172.0	173.5	[0.00] µg/L	17:20:01
3	P 214.914†	184.0	185.6	[0.00] µg/L	17:20:01
3	Pb 220.353†	-6.4	-6.5	[0.00] µg/L	17:20:01
3	S 181.975 Axial†	29.4	29.6	[0.00] µg/L	17:20:01
3	Sb 206.836†	36.0	36.3	[0.00] µg/L	17:20:01
3	Se 196.026†	-27.5	-27.7	[0.00] µg/L	17:20:01
3	SiO2 †	1258.5	1269.6	[0.00] µg/L	17:19:41
3	Sn 189.927†	-13.0	-13.1	[0.00] µg/L	17:20:01
3	Ti 334.940†	410.8	414.4	[0.00] µg/L	17:19:41
3	Tl 190.801†	-39.0	-39.3	[0.00] µg/L	17:20:01
3	U 409.014†	254.5	256.7	[0.00] µg/L	17:19:41
3	V 292.402†	-62.0	-62.6	[0.00] µg/L	17:19:41
3	Zn 213.857†	412.8	416.5	[0.00] µg/L	17:20:01
3	Si 251.611†	1255.0	1266.0	[0.00] µg/L	17:20:17

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1116930.6	8792.95	0.79%	100.00	%
Sc RADIAL	45369.3	373.48	0.82%	100	%
Y 371.029	606519.1	4723.68	0.78%	100.00	%
Ag 328.068†	-665.9	52.61	7.90%	[0.00]	µg/L
Al 396.153Radial†	92.6	28.17	30.43%	[0.00]	µg/L
As 188.979†	-31.3	6.63	21.20%	[0.00]	µg/L
B 249.677†	40.5	3.59	8.87%	[0.00]	µg/L
Ba 233.527†	-137.5	2.64	1.92%	[0.00]	µg/L
Be 313.107†	212.7	32.83	15.43%	[0.00]	µg/L
Ca 317.933Radial†	164.5	4.98	3.03%	[0.00]	µg/L
Cd 226.502†	-24.2	3.59	14.83%	[0.00]	µg/L
Co 228.616†	-135.6	8.14	6.00%	[0.00]	µg/L
Cr 267.716†	76.7	5.96	7.77%	[0.00]	µg/L
Cu 324.752†	3774.1	44.33	1.17%	[0.00]	µg/L
Fe 238.204 Radial†	41.4	1.03	2.48%	[0.00]	µg/L
K 766.490 Radial†	1071.2	43.44	4.06%	[0.00]	µg/L
Mg 279.077 IEC†	3.6	2.76	75.93%	[0.00]	µg/L
Mn 257.610†	361.4	9.00	2.49%	[0.00]	µg/L
Mo 202.031†	1.1	2.39	224.37%	[0.00]	µg/L
Na 589.592 Radial†	953.6	15.26	1.60%	[0.00]	µg/L
Ni 231.604†	175.2	1.56	0.89%	[0.00]	µg/L
P 214.914†	187.1	6.21	3.32%	[0.00]	µg/L
Pb 220.353†	-11.8	7.30	61.86%	[0.00]	µg/L
S 181.975 Axial†	31.6	2.35	7.45%	[0.00]	µg/L
Sb 206.836†	37.2	0.79	2.13%	[0.00]	µg/L
Se 196.026†	-35.3	8.69	24.64%	[0.00]	µg/L
SiO2 †	1262.6	10.70	0.85%	[0.00]	µg/L
Si 251.611†	1251.6	14.02	1.12%	[0.00]	µg/L
Sn 189.927†	-10.0	4.81	47.92%	[0.00]	µg/L
Sr 421.552†	-24.0	12.55	52.33%	[0.00]	µg/L
Ti 334.940†	399.0	19.33	4.84%	[0.00]	µg/L

Tl 190.801†	-44.5	4.97	11.16%	[0.00] µg/L
U 409.014†	291.7	31.21	10.70%	[0.00] µg/L
V 292.402†	-92.0	27.95	30.38%	[0.00] µg/L
Zn 213.857†	413.1	11.35	2.75%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Nebulizer Back Pressure: 252.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 6/29/2005 17:22:05
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	46250.9	46250.9	102	%	17:23:30
1	K 766.490 Radial†	3502.6	2364.6	[1000]	µg/L	17:23:30
1	Sr 421.552†	26274.3	25797.4	[100]	µg/L	17:23:30
1	Sc 361.383	1153346.5	1153346.5	103.26	%	17:23:48
1	Y 371.029	623988.2	623988.2	102.88	%	17:23:48
1	Ag 328.068†	13307.2	13552.9	[100]	µg/L	17:23:53
1	As 188.979†	174.8	200.5	[100]	µg/L	17:24:14
1	B 249.677†	1632.8	1540.8	[100]	µg/L	17:24:14
1	Ba 233.527†	9771.9	9600.9	[100]	µg/L	17:23:53
1	Be 313.107†	154242.2	149159.4	[100]	µg/L	17:23:48
1	Cd 226.502†	2949.8	2880.9	[100]	µg/L	17:24:14
1	Co 228.616†	3380.7	3409.5	[100]	µg/L	17:24:14
1	Cr 267.716†	3900.0	3700.1	[100]	µg/L	17:24:14
1	Cu 324.752†	30561.4	25822.3	[100]	µg/L	17:23:53
1	Mn 257.610†	60404.8	58136.2	[100]	µg/L	17:23:53
1	Mo 202.031†	810.8	784.2	[100]	µg/L	17:24:14
1	Ni 231.604†	1859.7	1625.7	[100]	µg/L	17:24:14
1	P 214.914†	804.3	591.7	[500]	µg/L	17:24:14
1	Pb 220.353†	393.9	393.3	[100]	µg/L	17:24:14
1	S 181.975 Axial†	118.7	83.4	[200]	µg/L	17:24:14
1	Sb 206.836†	240.7	195.9	[100]	µg/L	17:24:14
1	Se 196.026†	84.1	116.7	[100]	µg/L	17:24:14
1	SiO2 †	16368.1	14588.8	[1069.5]	µg/L	17:23:53
1	Sn 189.927†	388.1	385.9	[100]	µg/L	17:24:14
1	Ti 334.940†	80046.6	77120.3	[100]	µg/L	17:23:53
1	Tl 190.801†	229.2	266.5	[100]	µg/L	17:24:14
1	U 409.014†	1956.6	1603.1	[100]	µg/L	17:23:53
1	V 292.402†	6873.0	6748.0	[100]	µg/L	17:23:53
1	Zn 213.857†	4966.4	4396.4	[100]	µg/L	17:24:14
1	Si 251.611†	16264.6	14499.5	[500]	µg/L	17:25:22
2	Sc RADIAL	46796.5	46796.5	103	%	17:23:35
2	K 766.490 Radial†	3443.2	2267.0	[1000]	µg/L	17:23:35
2	Sr 421.552†	26522.7	25737.7	[100]	µg/L	17:23:35
2	Sc 361.383	1159618.4	1159618.4	103.82	%	17:24:19
2	Y 371.029	628115.8	628115.8	103.56	%	17:24:19
2	Ag 328.068†	13334.6	13509.6	[100]	µg/L	17:24:24
2	As 188.979†	177.6	202.3	[100]	µg/L	17:24:45
2	B 249.677†	1661.5	1559.9	[100]	µg/L	17:24:45
2	Ba 233.527†	9697.0	9477.5	[100]	µg/L	17:24:24
2	Be 313.107†	155240.9	149313.5	[100]	µg/L	17:24:19
2	Cd 226.502†	2959.0	2874.3	[100]	µg/L	17:24:45
2	Co 228.616†	3411.7	3421.7	[100]	µg/L	17:24:45
2	Cr 267.716†	3942.1	3720.2	[100]	µg/L	17:24:45
2	Cu 324.752†	30529.8	25631.8	[100]	µg/L	17:24:24
2	Mn 257.610†	60037.6	57466.1	[100]	µg/L	17:24:24
2	Mo 202.031†	817.1	786.0	[100]	µg/L	17:24:45
2	Ni 231.604†	1872.3	1628.1	[100]	µg/L	17:24:45
2	P 214.914†	807.0	590.1	[500]	µg/L	17:24:45
2	Pb 220.353†	401.1	398.2	[100]	µg/L	17:24:45
2	S 181.975 Axial†	122.6	86.5	[200]	µg/L	17:24:45
2	Sb 206.836†	238.2	192.3	[100]	µg/L	17:24:45
2	Se 196.026†	80.7	113.0	[100]	µg/L	17:24:45
2	SiO2 †	16344.2	14480.0	[1069.5]	µg/L	17:24:24
2	Sn 189.927†	394.9	390.4	[100]	µg/L	17:24:45
2	Ti 334.940†	79909.3	76568.7	[100]	µg/L	17:24:24
2	Tl 190.801†	227.8	264.0	[100]	µg/L	17:24:45
2	U 409.014†	1876.2	1515.4	[100]	µg/L	17:24:24
2	V 292.402†	6852.6	6692.3	[100]	µg/L	17:24:24

2	Zn 213.857†	4994.3	4397.3	[100] µg/L	17:24:45
2	Si 251.611†	16231.6	14382.6	[500] µg/L	17:25:27
3	Sc RADIAL	45640.8	45640.8	101 %	17:23:40
3	K 766.490 Radial†	3516.3	2424.1	[1000] µg/L	17:23:40
3	Sr 421.552†	25916.4	25786.2	[100] µg/L	17:23:40
3	Sc 361.383	1162947.9	1162947.9	104.12 %	17:24:50
3	Y 371.029	629738.1	629738.1	103.83 %	17:24:50
3	Ag 328.068†	13151.3	13296.8	[100] µg/L	17:24:56
3	As 188.979†	180.7	204.8	[100] µg/L	17:25:16
3	B 249.677†	1651.9	1546.1	[100] µg/L	17:25:16
3	Ba 233.527†	9640.9	9396.9	[100] µg/L	17:24:56
3	Be 313.107†	155228.8	148873.8	[100] µg/L	17:24:50
3	Cd 226.502†	2960.0	2867.1	[100] µg/L	17:25:16
3	Co 228.616†	3403.0	3403.9	[100] µg/L	17:25:16
3	Cr 267.716†	3932.8	3700.5	[100] µg/L	17:25:16
3	Cu 324.752†	30255.2	25283.9	[100] µg/L	17:24:56
3	Mn 257.610†	59527.5	56810.6	[100] µg/L	17:24:56
3	Mo 202.031†	821.3	787.8	[100] µg/L	17:25:16
3	Ni 231.604†	1859.5	1610.7	[100] µg/L	17:25:16
3	P 214.914†	804.9	585.9	[500] µg/L	17:25:16
3	Pb 220.353†	393.6	389.8	[100] µg/L	17:25:16
3	S 181.975 Axial†	117.7	81.5	[200] µg/L	17:25:16
3	Sb 206.836†	245.6	198.7	[100] µg/L	17:25:16
3	Se 196.026†	82.6	114.6	[100] µg/L	17:25:16
3	SiO2 †	16197.5	14294.0	[1069.5] µg/L	17:24:56
3	Sn 189.927†	395.4	389.8	[100] µg/L	17:25:16
3	Ti 334.940†	79243.4	75708.7	[100] µg/L	17:24:56
3	Tl 190.801†	237.3	272.4	[100] µg/L	17:25:16
3	U 409.014†	1901.9	1535.0	[100] µg/L	17:24:56
3	V 292.402†	6802.3	6625.2	[100] µg/L	17:24:56
3	Zn 213.857†	4999.8	4388.8	[100] µg/L	17:25:16
3	Si 251.611†	15985.2	14101.1	[500] µg/L	17:25:32

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1158637.6	4875.30	0.42%	103.73	%
Sc RADIAL	46229.4	578.15	1.25%	102	%
Y 371.029	627280.7	2964.54	0.47%	103.42	%
Ag 328.068†	13453.1	137.11	1.02%	[100]	µg/L
As 188.979†	202.6	2.14	1.06%	[100]	µg/L
B 249.677†	1548.9	9.86	0.64%	[100]	µg/L
Ba 233.527†	9491.8	102.76	1.08%	[100]	µg/L
Be 313.107†	149115.6	223.10	0.15%	[100]	µg/L
Cd 226.502†	2874.1	6.89	0.24%	[100]	µg/L
Co 228.616†	3411.7	9.08	0.27%	[100]	µg/L
Cr 267.716†	3706.9	11.48	0.31%	[100]	µg/L
Cu 324.752†	25579.4	273.01	1.07%	[100]	µg/L
K 766.490 Radial†	2351.9	79.34	3.37%	[1000]	µg/L
Mn 257.610†	57471.0	662.80	1.15%	[100]	µg/L
Mo 202.031†	786.0	1.80	0.23%	[100]	µg/L
Ni 231.604†	1621.5	9.43	0.58%	[100]	µg/L
P 214.914†	589.3	3.01	0.51%	[500]	µg/L
Pb 220.353†	393.8	4.20	1.07%	[100]	µg/L
S 181.975 Axial†	83.8	2.53	3.02%	[200]	µg/L
Sb 206.836†	195.6	3.22	1.65%	[100]	µg/L
Se 196.026†	114.8	1.88	1.64%	[100]	µg/L
SiO2 †	14454.3	149.05	1.03%	[1069.5]	µg/L
Si 251.611†	14327.7	204.80	1.43%	[500]	µg/L
Sn 189.927†	388.7	2.44	0.63%	[100]	µg/L
Sr 421.552†	25773.8	31.71	0.12%	[100]	µg/L
Ti 334.940†	76465.9	711.35	0.93%	[100]	µg/L
Tl 190.801†	267.6	4.36	1.63%	[100]	µg/L
U 409.014†	1551.2	46.03	2.97%	[100]	µg/L
V 292.402†	6688.5	61.52	0.92%	[100]	µg/L
Zn 213.857†	4394.2	4.67	0.11%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/29/2005 17:27:21
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	48182.4	48182.4	106	%	17:28:44
1	Al 396.153Radial†	18438.8	17269.7	[5000]	µg/L	17:28:44
1	Ca 317.933Radial†	24427.2	22836.5	[5000]	µg/L	17:29:04
1	K 766.490 Radial†	13400.5	11546.8	[5000]	µg/L	17:28:44
1	Mg 279.077 IEC†	1989.3	1869.5	[5000]	µg/L	17:29:04
1	Sr 421.552†	130739.2	123130.0	[500]	µg/L	17:28:44
1	Sc 361.383	1172328.8	1172328.8	104.96	%	17:30:04
1	Y 371.029	631482.0	631482.0	104.12	%	17:30:04
1	Ag 328.068†	69240.6	66634.5	[500]	µg/L	17:30:09
1	As 188.979†	971.1	956.5	[500]	µg/L	17:30:29
1	B 249.677†	7866.9	7454.7	[500]	µg/L	17:30:09
1	Ba 233.527†	48952.1	46776.3	[500]	µg/L	17:30:09
1	Be 313.107†	767342.1	730868.7	[500]	µg/L	17:30:04
1	Cd 226.502†	14305.0	13653.2	[500]	µg/L	17:30:09
1	Co 228.616†	16781.0	16123.6	[500]	µg/L	17:30:09
1	Cr 267.716†	18470.5	17520.9	[500]	µg/L	17:30:09
1	Cu 324.752†	133831.8	123733.5	[500]	µg/L	17:30:04
1	Mn 257.610†	288957.3	274941.3	[500]	µg/L	17:30:04
1	Mo 202.031†	4126.5	3930.4	[500]	µg/L	17:30:29
1	Ni 231.604†	8190.7	7628.5	[500]	µg/L	17:30:09
1	P 214.914†	3255.6	2914.6	[2500]	µg/L	17:30:29
1	Pb 220.353†	1996.6	1914.0	[500]	µg/L	17:30:29
1	S 181.975 Axial†	467.1	413.5	[1000]	µg/L	17:30:29
1	Sb 206.836†	1119.6	1029.5	[500]	µg/L	17:30:29
1	Se 196.026†	558.2	567.1	[500]	µg/L	17:30:29
1	SiO2 †	80483.0	75417.2	[5347.5]	µg/L	17:30:09
1	Sn 189.927†	2034.6	1948.5	[500]	µg/L	17:30:29
1	Ti 334.940†	397081.3	377918.3	[500]	µg/L	17:30:04
1	Tl 190.801†	1296.8	1280.0	[500]	µg/L	17:30:29
1	U 409.014†	8323.9	7638.8	[500]	µg/L	17:30:09
1	V 292.402†	34476.8	32939.6	[500]	µg/L	17:30:09
1	Zn 213.857†	22071.0	20615.0	[500]	µg/L	17:30:09
1	Si 251.611†	78950.2	73967.8	[2500]	µg/L	17:31:38
2	Sc RADIAL	47512.8	47512.8	105	%	17:29:10
2	Al 396.153Radial†	18224.6	17309.8	[5000]	µg/L	17:29:10
2	Ca 317.933Radial†	24620.3	23345.0	[5000]	µg/L	17:29:30
2	K 766.490 Radial†	13262.0	11592.4	[5000]	µg/L	17:29:10
2	Mg 279.077 IEC†	2011.1	1916.7	[5000]	µg/L	17:29:30
2	Sr 421.552†	128971.0	123176.4	[500]	µg/L	17:29:10
2	Sc 361.383	1166552.0	1166552.0	104.44	%	17:30:35
2	Y 371.029	628358.2	628358.2	103.60	%	17:30:35
2	Ag 328.068†	70398.2	68069.6	[500]	µg/L	17:30:41
2	As 188.979†	966.7	956.9	[500]	µg/L	17:31:01
2	B 249.677†	8001.2	7620.4	[500]	µg/L	17:30:41
2	Ba 233.527†	49684.7	47708.8	[500]	µg/L	17:30:41
2	Be 313.107†	763544.7	730853.2	[500]	µg/L	17:30:35
2	Cd 226.502†	14470.2	13878.9	[500]	µg/L	17:30:41
2	Co 228.616†	17015.4	16427.2	[500]	µg/L	17:30:41
2	Cr 267.716†	18728.3	17854.9	[500]	µg/L	17:30:41
2	Cu 324.752†	132726.5	123306.7	[500]	µg/L	17:30:35
2	Mn 257.610†	287644.8	275047.9	[500]	µg/L	17:30:35
2	Mo 202.031†	4090.8	3915.7	[500]	µg/L	17:31:01
2	Ni 231.604†	8350.8	7820.4	[500]	µg/L	17:30:41
2	P 214.914†	3219.2	2895.1	[2500]	µg/L	17:31:01
2	Pb 220.353†	1985.1	1912.4	[500]	µg/L	17:31:01
2	S 181.975 Axial†	461.2	410.1	[1000]	µg/L	17:31:01
2	Sb 206.836†	1106.3	1022.1	[500]	µg/L	17:31:01
2	Se 196.026†	553.9	565.6	[500]	µg/L	17:31:01

2	SiO2 †	81780.5	77039.2	[5347.5]	µg/L	17:30:41
2	Sn 189.927†	2021.1	1945.2	[500]	µg/L	17:31:01
2	Ti 334.940†	394892.3	377695.8	[500]	µg/L	17:30:35
2	Tl 190.801†	1288.3	1278.0	[500]	µg/L	17:31:01
2	U 409.014†	8514.7	7860.8	[500]	µg/L	17:30:41
2	V 292.402†	35130.4	33728.1	[500]	µg/L	17:30:41
2	Zn 213.857†	22476.7	21107.5	[500]	µg/L	17:30:41
2	Si 251.611†	78702.0	74102.7	[2500]	µg/L	17:31:43
3	Sc RADIAL	47717.2	47717.2	105	%	17:29:35
3	Al 396.153Radial†	18380.6	17383.6	[5000]	µg/L	17:29:35
3	Ca 317.933Radial†	24661.7	23283.8	[5000]	µg/L	17:29:55
3	K 766.490 Radial†	13426.3	11694.4	[5000]	µg/L	17:29:35
3	Mg 279.077 IEC†	2004.9	1902.7	[5000]	µg/L	17:29:55
3	Sr 421.552†	130030.0	123655.7	[500]	µg/L	17:29:35
3	Sc 361.383	1177030.9	1177030.9	105.38	%	17:31:07
3	Y 371.029	634294.1	634294.1	104.58	%	17:31:07
3	Ag 328.068†	68880.0	66028.8	[500]	µg/L	17:31:12
3	As 188.979†	966.9	948.7	[500]	µg/L	17:31:32
3	B 249.677†	7849.4	7408.1	[500]	µg/L	17:31:12
3	Ba 233.527†	48406.5	46072.3	[500]	µg/L	17:31:12
3	Be 313.107†	769275.4	729782.8	[500]	µg/L	17:31:07
3	Cd 226.502†	14153.7	13455.3	[500]	µg/L	17:31:12
3	Co 228.616†	16659.7	15944.7	[500]	µg/L	17:31:12
3	Cr 267.716†	18281.4	17271.2	[500]	µg/L	17:31:12
3	Cu 324.752†	133972.9	123358.0	[500]	µg/L	17:31:07
3	Mn 257.610†	289481.2	274338.6	[500]	µg/L	17:31:07
3	Mo 202.031†	4096.6	3886.3	[500]	µg/L	17:31:32
3	Ni 231.604†	8155.3	7563.6	[500]	µg/L	17:31:12
3	P 214.914†	3223.5	2871.8	[2500]	µg/L	17:31:32
3	Pb 220.353†	1974.0	1885.1	[500]	µg/L	17:31:32
3	S 181.975 Axial†	459.4	404.4	[1000]	µg/L	17:31:32
3	Sb 206.836†	1115.6	1021.5	[500]	µg/L	17:31:32
3	Se 196.026†	543.4	550.9	[500]	µg/L	17:31:32
3	SiO2 †	79735.7	74401.7	[5347.5]	µg/L	17:31:12
3	Sn 189.927†	2012.2	1919.5	[500]	µg/L	17:31:32
3	Ti 334.940†	398050.0	377326.2	[500]	µg/L	17:31:07
3	Tl 190.801†	1295.0	1273.3	[500]	µg/L	17:31:32
3	U 409.014†	8330.7	7613.6	[500]	µg/L	17:31:12
3	V 292.402†	34284.2	32625.6	[500]	µg/L	17:31:12
3	Zn 213.857†	21936.1	20402.9	[500]	µg/L	17:31:12
3	Si 251.611†	78615.0	73349.2	[2500]	µg/L	17:31:49

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1171970.6	5248.62	0.45%	104.93	%
Sc RADIAL	47804.2	343.13	0.72%	105	%
Y 371.029	631378.1	2969.33	0.47%	104.10	%
Ag 328.068†	66911.0	1048.09	1.57%	[500]	µg/L
Al 396.153Radial†	17321.0	57.77	0.33%	[5000]	µg/L
As 188.979†	954.0	4.59	0.48%	[500]	µg/L
B 249.677†	7494.4	111.55	1.49%	[500]	µg/L
Ba 233.527†	46852.5	820.92	1.75%	[500]	µg/L
Be 313.107†	730501.6	622.53	0.09%	[500]	µg/L
Ca 317.933Radial†	23155.1	277.60	1.20%	[5000]	µg/L
Cd 226.502†	13662.5	212.00	1.55%	[500]	µg/L
Co 228.616†	16165.2	243.94	1.51%	[500]	µg/L
Cr 267.716†	17549.0	292.84	1.67%	[500]	µg/L
Cu 324.752†	123466.1	233.02	0.19%	[500]	µg/L
K 766.490 Radial†	11611.2	75.58	0.65%	[5000]	µg/L
Mg 279.077 IEC†	1896.3	24.24	1.28%	[5000]	µg/L
Mn 257.610†	274775.9	382.46	0.14%	[500]	µg/L
Mo 202.031†	3910.8	22.46	0.57%	[500]	µg/L
Ni 231.604†	7670.8	133.53	1.74%	[500]	µg/L
P 214.914†	2893.8	21.44	0.74%	[2500]	µg/L
Pb 220.353†	1903.8	16.28	0.85%	[500]	µg/L
S 181.975 Axial†	409.3	4.58	1.12%	[1000]	µg/L
Sb 206.836†	1024.4	4.48	0.44%	[500]	µg/L
Se 196.026†	561.2	8.96	1.60%	[500]	µg/L
SiO2 †	75619.4	1330.32	1.76%	[5347.5]	µg/L

Si 251.611†	73806.6	401.76	0.54%	[2500] µg/L
Sn 189.927†	1937.7	15.84	0.82%	[500] µg/L
Sr 421.552†	123320.7	291.04	0.24%	[500] µg/L
Ti 334.940†	377646.8	299.08	0.08%	[500] µg/L
Tl 190.801†	1277.1	3.42	0.27%	[500] µg/L
U 409.014†	7704.4	136.03	1.77%	[500] µg/L
V 292.402†	33097.7	568.00	1.72%	[500] µg/L
Zn 213.857†	20708.4	361.48	1.75%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/29/2005 17:33:40
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	47173.6	47173.6	104	%	17:35:09
1	Al 396.153Radial†	36444.4	34957.9	[10000]	µg/L	17:35:04
1	Ca 317.933Radial†	48871.1	46837.4	[10000]	µg/L	17:35:09
1	Fe 238.204 Radial†	9716.1	9303.1	[10000]	µg/L	17:35:09
1	K 766.490 Radial†	25498.4	23451.9	[10000]	µg/L	17:35:04
1	Mg 279.077 IEC†	3990.1	3833.8	[10000]	µg/L	17:35:09
1	Na 589.592 Radial†	70814.3	67152.2	[10000]	µg/L	17:35:04
1	Sr 421.552†	257403.8	247582.6	[1000]	µg/L	17:35:04
1	Sc 361.383	1162042.8	1162042.8	104.04	%	17:35:40
1	Y 371.029	624118.8	624118.8	102.90	%	17:35:40
1	Ag 328.068†	137227.4	132565.9	[1000]	µg/L	17:35:46
1	As 188.979†	1979.4	1933.8	[1000]	µg/L	17:36:06
1	B 249.677†	15664.3	15015.7	[1000]	µg/L	17:35:46
1	Ba 233.527†	97783.5	94124.9	[1000]	µg/L	17:35:46
1	Be 313.107†	1524980.8	1465566.0	[1000]	µg/L	17:35:40
1	Cd 226.502†	28373.3	27296.0	[1000]	µg/L	17:35:46
1	Co 228.616†	33493.8	32329.1	[1000]	µg/L	17:35:46
1	Cr 267.716†	36784.7	35279.9	[1000]	µg/L	17:35:46
1	Cu 324.752†	263266.6	249272.2	[1000]	µg/L	17:35:40
1	Mn 257.610†	572770.0	550172.8	[1000]	µg/L	17:35:40
1	Mo 202.031†	7858.1	7552.0	[1000]	µg/L	17:35:46
1	Ni 231.604†	16064.3	15265.5	[1000]	µg/L	17:35:46
1	P 214.914†	6327.2	5894.4	[5000]	µg/L	17:36:06
1	Pb 220.353†	3993.4	3850.1	[1000]	µg/L	17:36:06
1	S 181.975 Axial†	896.6	830.3	[2000]	µg/L	17:36:06
1	Sb 206.836†	2173.1	2051.6	[1000]	µg/L	17:36:06
1	Se 196.026†	1131.6	1122.9	[1000]	µg/L	17:36:06
1	SiO2 †	156616.6	149274.0	[10695]	µg/L	17:35:40
1	Sn 189.927†	4049.3	3902.1	[1000]	µg/L	17:36:06
1	Ti 334.940†	781788.9	751039.7	[1000]	µg/L	17:35:40
1	Tl 190.801†	2626.7	2569.3	[1000]	µg/L	17:36:06
1	U 409.014†	16357.9	15431.1	[1000]	µg/L	17:35:46
1	V 292.402†	69457.4	66852.9	[1000]	µg/L	17:35:46
1	Zn 213.857†	43520.3	41417.7	[1000]	µg/L	17:35:46
1	Si 251.611†	158662.5	151251.4	[5000]	µg/L	17:37:18
2	Sc RADIAL	47173.6	47173.6	104	%	17:35:20
2	Al 396.153Radial†	36497.2	35008.6	[10000]	µg/L	17:35:15
2	Ca 317.933Radial†	48847.1	46814.3	[10000]	µg/L	17:35:20
2	Fe 238.204 Radial†	9683.0	9271.2	[10000]	µg/L	17:35:20
2	K 766.490 Radial†	25473.9	23428.3	[10000]	µg/L	17:35:15
2	Mg 279.077 IEC†	3981.0	3825.1	[10000]	µg/L	17:35:20
2	Na 589.592 Radial†	71041.5	67370.7	[10000]	µg/L	17:35:15
2	Sr 421.552†	258236.1	248382.9	[1000]	µg/L	17:35:15
2	Sc 361.383	1166250.0	1166250.0	104.42	%	17:36:13
2	Y 371.029	626467.6	626467.6	103.29	%	17:36:13
2	Ag 328.068†	138189.7	133011.6	[1000]	µg/L	17:36:18
2	As 188.979†	1967.7	1915.8	[1000]	µg/L	17:36:39
2	B 249.677†	15919.4	15205.7	[1000]	µg/L	17:36:18
2	Ba 233.527†	98546.2	94516.3	[1000]	µg/L	17:36:18
2	Be 313.107†	1533058.6	1468014.5	[1000]	µg/L	17:36:13
2	Cd 226.502†	28606.1	27420.6	[1000]	µg/L	17:36:18
2	Co 228.616†	33728.5	32437.7	[1000]	µg/L	17:36:18
2	Cr 267.716†	37036.3	35393.4	[1000]	µg/L	17:36:18
2	Cu 324.752†	264160.4	249215.2	[1000]	µg/L	17:36:13
2	Mn 257.610†	576044.1	551322.4	[1000]	µg/L	17:36:13
2	Mo 202.031†	7916.6	7580.8	[1000]	µg/L	17:36:18
2	Ni 231.604†	16165.4	15306.5	[1000]	µg/L	17:36:18
2	P 214.914†	6311.2	5857.2	[5000]	µg/L	17:36:39

2	Pb 220.353†	3982.1	3825.5	[1000] µg/L	17:36:39
2	S 181.975 Axial†	892.4	823.1	[2000] µg/L	17:36:39
2	Sb 206.836†	2198.9	2068.7	[1000] µg/L	17:36:39
2	Se 196.026†	1137.2	1124.4	[1000] µg/L	17:36:39
2	SiO2 †	157932.0	149990.7	[10695] µg/L	17:36:13
2	Sn 189.927†	4051.6	3890.3	[1000] µg/L	17:36:39
2	Ti 334.940†	786865.0	753190.3	[1000] µg/L	17:36:13
2	Tl 190.801†	2643.4	2576.1	[1000] µg/L	17:36:39
2	U 409.014†	16478.6	15490.0	[1000] µg/L	17:36:18
2	V 292.402†	69948.9	67082.9	[1000] µg/L	17:36:18
2	Zn 213.857†	43834.6	41567.8	[1000] µg/L	17:36:18
2	Si 251.611†	158621.7	150662.2	[5000] µg/L	17:37:23
3	Sc RADIAL	48171.1	48171.1	106 %	17:35:30
3	Al 396.153Radial†	36136.6	33942.1	[10000] µg/L	17:35:25
3	Ca 317.933Radial†	49996.9	46924.4	[10000] µg/L	17:35:30
3	Fe 238.204 Radial†	9962.5	9341.6	[10000] µg/L	17:35:30
3	K 766.490 Radial†	25167.8	22632.7	[10000] µg/L	17:35:25
3	Mg 279.077 IEC†	4063.3	3823.3	[10000] µg/L	17:35:30
3	Na 589.592 Radial†	70287.7	65245.9	[10000] µg/L	17:35:25
3	Sr 421.552†	255649.4	240803.7	[1000] µg/L	17:35:25
3	Sc 361.383	1177404.1	1177404.1	105.41 %	17:36:46
3	Y 371.029	632008.5	632008.5	104.20 %	17:36:46
3	Ag 328.068†	138908.4	132439.7	[1000] µg/L	17:36:51
3	As 188.979†	1992.4	1921.3	[1000] µg/L	17:37:11
3	B 249.677†	16032.6	15168.7	[1000] µg/L	17:36:51
3	Ba 233.527†	98996.2	94049.1	[1000] µg/L	17:36:51
3	Be 313.107†	1547242.4	1467560.6	[1000] µg/L	17:36:46
3	Cd 226.502†	28713.9	27263.3	[1000] µg/L	17:36:51
3	Co 228.616†	33885.7	32280.8	[1000] µg/L	17:36:51
3	Cr 267.716†	37272.3	35281.1	[1000] µg/L	17:36:51
3	Cu 324.752†	267420.6	249911.3	[1000] µg/L	17:36:46
3	Mn 257.610†	581627.1	551392.4	[1000] µg/L	17:36:46
3	Mo 202.031†	7971.7	7561.2	[1000] µg/L	17:36:51
3	Ni 231.604†	16273.3	15262.2	[1000] µg/L	17:36:51
3	P 214.914†	6343.4	5830.4	[5000] µg/L	17:37:11
3	Pb 220.353†	4004.3	3810.4	[1000] µg/L	17:37:11
3	S 181.975 Axial†	896.1	818.5	[2000] µg/L	17:37:11
3	Sb 206.836†	2217.2	2066.1	[1000] µg/L	17:37:11
3	Se 196.026†	1147.2	1123.6	[1000] µg/L	17:37:11
3	SiO2 †	159939.1	150461.8	[10695] µg/L	17:36:46
3	Sn 189.927†	4082.0	3882.4	[1000] µg/L	17:37:11
3	Ti 334.940†	794579.8	753369.8	[1000] µg/L	17:36:46
3	Tl 190.801†	2655.3	2563.4	[1000] µg/L	17:37:11
3	U 409.014†	16502.3	15363.0	[1000] µg/L	17:36:51
3	V 292.402†	70300.4	66781.6	[1000] µg/L	17:36:51
3	Zn 213.857†	44038.6	41363.6	[1000] µg/L	17:36:51
3	Si 251.611†	157200.4	147874.7	[5000] µg/L	17:37:29

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	1168565.6	7938.12	0.68%	104.62	%
Sc RADIAL	47506.1	575.93	1.21%	105	%
Y 371.029	627531.6	4051.02	0.65%	103.46	%
Ag 328.068†	132672.4	300.47	0.23%	[1000]	µg/L
Al 396.153Radial†	34636.2	601.62	1.74%	[10000]	µg/L
As 188.979†	1923.6	9.23	0.48%	[1000]	µg/L
B 249.677†	15130.0	100.74	0.67%	[1000]	µg/L
Ba 233.527†	94230.1	250.72	0.27%	[1000]	µg/L
Be 313.107†	1467047.0	1302.51	0.09%	[1000]	µg/L
Ca 317.933Radial†	46858.7	58.05	0.12%	[10000]	µg/L
Cd 226.502†	27326.6	83.00	0.30%	[1000]	µg/L
Co 228.616†	32349.2	80.36	0.25%	[1000]	µg/L
Cr 267.716†	35318.2	65.14	0.18%	[1000]	µg/L
Cu 324.752†	249466.2	386.50	0.15%	[1000]	µg/L
Fe 238.204 Radial†	9305.3	35.25	0.38%	[10000]	µg/L
K 766.490 Radial†	23171.0	466.31	2.01%	[10000]	µg/L
Mg 279.077 IEC†	3827.4	5.63	0.15%	[10000]	µg/L
Mn 257.610†	550962.5	684.81	0.12%	[1000]	µg/L
Mo 202.031†	7564.6	14.70	0.19%	[1000]	µg/L

Na 589.592 Radial†	66589.6	1168.80	1.76%	[10000] µg/L
Ni 231.604†	15278.1	24.70	0.16%	[1000] µg/L
P 214.914†	5860.7	32.13	0.55%	[5000] µg/L
Pb 220.353†	3828.7	20.03	0.52%	[1000] µg/L
S 181.975 Axial†	824.0	5.90	0.72%	[2000] µg/L
Sb 206.836†	2062.1	9.23	0.45%	[1000] µg/L
Se 196.026†	1123.6	0.71	0.06%	[1000] µg/L
SiO2 †	149908.8	598.10	0.40%	[10695] µg/L
Si 251.611†	149929.4	1803.66	1.20%	[5000] µg/L
Sn 189.927†	3891.6	9.93	0.26%	[1000] µg/L
Sr 421.552†	245589.8	4164.10	1.70%	[1000] µg/L
Ti 334.940†	752533.3	1296.59	0.17%	[1000] µg/L
Tl 190.801†	2569.6	6.35	0.25%	[1000] µg/L
U 409.014†	15428.1	63.56	0.41%	[1000] µg/L
V 292.402†	66905.8	157.41	0.24%	[1000] µg/L
Zn 213.857†	41449.7	105.79	0.26%	[1000] µg/L

Sequence No.: 5
Sample ID: S10
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 6/29/2005 17:39:17
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	46391.7	46391.7	102	%	17:40:51
1	Al 396.153Radial†	180804.8	176727.2	[50000]	µg/L	17:40:46
1	Ca 317.933Radial†	242125.6	236624.7	[50000]	µg/L	17:40:51
1	Fe 238.204 Radial†	18481.5	18032.7	[20000]	µg/L	17:40:51
1	Mg 279.077 IEC†	19194.2	18767.5	[50000]	µg/L	17:40:51
1	Na 589.592 Radial†	136792.1	132823.6	[20000]	µg/L	17:40:51
1	Sc 361.383	1135514.9	1135514.9	101.66	%	17:41:20
1	Y 371.029	609393.9	609393.9	100.47	%	17:41:20
2	Sc RADIAL	46204.5	46204.5	102	%	17:41:01
2	Al 396.153Radial†	178070.9	174759.5	[50000]	µg/L	17:40:56
2	Ca 317.933Radial†	241320.0	236793.5	[50000]	µg/L	17:41:01
2	Fe 238.204 Radial†	18454.3	18079.3	[20000]	µg/L	17:41:01
2	Mg 279.077 IEC†	19129.8	18780.4	[50000]	µg/L	17:41:01
2	Na 589.592 Radial†	136311.6	132894.1	[20000]	µg/L	17:41:01
2	Sc 361.383	1152815.7	1152815.7	103.21	%	17:41:27
2	Y 371.029	618544.1	618544.1	101.98	%	17:41:27
3	Sc RADIAL	46330.4	46330.4	102	%	17:41:12
3	Al 396.153Radial†	177470.7	173696.3	[50000]	µg/L	17:41:07
3	Ca 317.933Radial†	242471.4	237276.7	[50000]	µg/L	17:41:12
3	Fe 238.204 Radial†	18529.1	18103.3	[20000]	µg/L	17:41:12
3	Mg 279.077 IEC†	19205.3	18803.2	[50000]	µg/L	17:41:12
3	Na 589.592 Radial†	136942.7	133148.1	[20000]	µg/L	17:41:12
3	Sc 361.383	1136257.3	1136257.3	101.73	%	17:41:33
3	Y 371.029	610160.6	610160.6	100.60	%	17:41:33

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1141529.3	9781.35	0.86%	102.20	%
Sc RADIAL	46308.9	95.49	0.21%	102	%
Y 371.029	612699.5	5076.08	0.83%	101.02	%
Al 396.153Radial†	175061.0	1537.82	0.88%	[50000]	µg/L
Ca 317.933Radial†	236898.3	338.39	0.14%	[50000]	µg/L
Fe 238.204 Radial†	18071.8	35.87	0.20%	[20000]	µg/L
Mg 279.077 IEC†	18783.7	18.07	0.10%	[50000]	µg/L
Na 589.592 Radial†	132955.3	170.70	0.13%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	132.9	0.00000	0.999993	
Al 396.153Radial	3	Lin Thru 0	0.0	3.499	0.00000	0.999997	
As 188.979	3	Lin Thru 0	0.0	1.921	0.00000	0.999983	
B 249.677	3	Lin Thru 0	0.0	15.10	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	94.13	0.00000	0.999997	
Be 313.107	3	Lin Thru 0	0.0	1466	0.00000	0.999997	
Ca 317.933Radial	3	Lin Thru 0	0.0	4.735	0.00000	0.999995	
Cd 226.502	3	Lin Thru 0	0.0	27.34	0.00000	0.999989	
Co 228.616	3	Lin Thru 0	0.0	32.36	0.00000	0.999988	
Cr 267.716	3	Lin Thru 0	0.0	35.29	0.00000	0.999987	
Cu 324.752	3	Lin Thru 0	0.0	249.0	0.00000	0.999989	
Fe 238.204 Radial	2	Lin Thru 0	0.0	0.9090	0.00000	0.999930	
K 766.490 Radial	3	Lin Thru 0	0.0	2.318	0.00000	0.999999	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.3760	0.00000	0.999993	
Mn 257.610	3	Lin Thru 0	0.0	550.9	0.00000	0.999992	
Mo 202.031	3	Lin Thru 0	0.0	7.618	0.00000	0.999906	

Na 589.592 Radial	2	Lin Thru 0	0.0	6.650	0.00000	1.000000
Ni 231.604	3	Lin Thru 0	0.0	15.30	0.00000	0.999984
P 214.914	3	Lin Thru 0	0.0	1.169	0.00000	0.999987
Pb 220.353	3	Lin Thru 0	0.0	3.825	0.00000	0.999994
S 181.975 Axial	3	Lin Thru 0	0.0	0.4115	0.00000	0.999995
Sb 206.836	3	Lin Thru 0	0.0	2.059	0.00000	0.999987
Se 196.026	3	Lin Thru 0	0.0	1.124	0.00000	0.999998
SiO2	3	Lin Thru 0	0.0	14.04	0.00000	0.999988
Si 251.611	3	Lin Thru 0	0.0	29.88	0.00000	0.999974
Sn 189.927	3	Lin Thru 0	0.0	3.888	0.00000	0.999999
Sr 421.552	3	Lin Thru 0	0.0	245.9	0.00000	0.999989
Ti 334.940	3	Lin Thru 0	0.0	753.2	0.00000	0.999998
Tl 190.801	3	Lin Thru 0	0.0	2.567	0.00000	0.999990
U 409.014	3	Lin Thru 0	0.0	15.42	0.00000	1.000000
V 292.402	3	Lin Thru 0	0.0	66.76	0.00000	0.999991
Zn 213.857	3	Lin Thru 0	0.0	41.46	0.00000	0.999986

Sequence No.: 6
Sample ID: ICV
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 6/29/2005 17:43:23
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	47407.1	47407.1	104	%			17:44:46
1	Al 396.153Radial†	18282.3	17403.9	4948.8	µg/L	4948.8	ppb	17:44:46
1	Ca 317.933Radial†	24966.1	23728.5	5014.2	µg/L	5014.2	ppb	17:45:06
1	Fe 238.204 Radial†	4873.0	4622.1	5091.1	µg/L	5091.1	ppb	17:45:06
1	K 766.490 Radial†	7256.6	5873.4	2533.4	µg/L	2533.4	ppb	17:44:46
1	Mg 279.077 IEC†	1999.2	1909.7	5088.4	µg/L	5088.4	ppb	17:45:06
1	Na 589.592 Radial†	18828.0	17065.1	2564.7	µg/L	2564.7	ppb	17:44:46
1	Sr 421.552†	131112.9	125500.8	510.31	µg/L	510.31	ppb	17:44:46
1	Sc 361.383	1178858.5	1178858.5	105.54	%			17:46:07
1	Y 371.029	636505.1	636505.1	104.94	%			17:46:07
1	Ag 328.068†	34078.5	32954.2	250.07	µg/L	250.07	ppb	17:46:07
1	As 188.979†	979.2	959.0	505.97	µg/L	505.97	ppb	17:46:27
1	B 249.677†	8069.1	7604.7	503.98	µg/L	503.98	ppb	17:46:07
1	Ba 233.527†	49050.4	46611.2	495.69	µg/L	495.69	ppb	17:46:07
1	Be 313.107†	385078.0	364636.3	248.89	µg/L	248.89	ppb	17:46:07
1	Cd 226.502†	14035.4	13322.3	487.49	µg/L	487.49	ppb	17:46:07
1	Co 228.616†	17255.4	16484.5	508.92	µg/L	508.92	ppb	17:46:27
1	Cr 267.716†	18767.9	17705.2	501.57	µg/L	501.57	ppb	17:46:07
1	Cu 324.752†	137772.8	126761.2	508.72	µg/L	508.72	ppb	17:46:07
1	Mn 257.610†	294282.2	278461.6	506.04	µg/L	506.04	ppb	17:46:07
1	Mo 202.031†	4092.5	3876.4	509.69	µg/L	509.69	ppb	17:46:27
1	Ni 231.604†	8286.5	7676.0	502.16	µg/L	502.16	ppb	17:46:27
1	P 214.914†	3226.9	2870.2	2368.7	µg/L	2368.7	ppb	17:46:27
1	Pb 220.353†	1987.6	1895.0	496.15	µg/L	496.15	ppb	17:46:27
1	S 181.975 Axial†	1095.5	1006.3	2439.1	µg/L	2439.1	ppb	17:46:27
1	Sb 206.836†	1116.1	1020.3	496.04	µg/L	496.04	ppb	17:46:27
1	Se 196.026†	2858.3	2743.4	2440	µg/L	2440	ppb	17:46:27
1	SiO2 †	151243.5	142035.8	10102	µg/L	10102	ppb	17:46:07
1	Sn 189.927†	2005.1	1909.8	491.65	µg/L	491.65	ppb	17:46:27
1	Ti 334.940†	402384.5	380847.4	505.37	µg/L	505.37	ppb	17:46:07
1	Tl 190.801†	1306.2	1282.1	502.29	µg/L	502.29	ppb	17:46:27
1	U 409.014†	8587.6	7844.8	510.71	µg/L	510.71	ppb	17:46:07
1	V 292.402†	34532.7	32810.6	498.05	µg/L	498.05	ppb	17:46:07
1	Zn 213.857†	21827.1	20267.3	484.27	µg/L	484.27	ppb	17:46:07
1	Si 251.611†	149889.5	140763.9	4700	µg/L	4700	ppb	17:47:28
2	Sc RADIAL	47396.7	47396.7	104	%			17:45:12
2	Al 396.153Radial†	18312.7	17436.7	4958.3	µg/L	4958.3	ppb	17:45:12
2	Ca 317.933Radial†	24870.9	23642.6	4996.0	µg/L	4996.0	ppb	17:45:32
2	Fe 238.204 Radial†	4878.4	4628.2	5097.8	µg/L	5097.8	ppb	17:45:32
2	K 766.490 Radial†	7218.4	5838.4	2518.3	µg/L	2518.3	ppb	17:45:12
2	Mg 279.077 IEC†	1989.8	1901.1	5065.5	µg/L	5065.5	ppb	17:45:32
2	Na 589.592 Radial†	18819.7	17061.1	2564.1	µg/L	2564.1	ppb	17:45:12
2	Sr 421.552†	131198.1	125609.9	510.76	µg/L	510.76	ppb	17:45:12
2	Sc 361.383	1179342.4	1179342.4	105.59	%			17:46:34
2	Y 371.029	637119.9	637119.9	105.05	%			17:46:34
2	Ag 328.068†	34077.0	32939.5	249.96	µg/L	249.96	ppb	17:46:34
2	As 188.979†	977.6	957.1	504.97	µg/L	504.97	ppb	17:46:55
2	B 249.677†	8083.4	7615.1	504.67	µg/L	504.67	ppb	17:46:34
2	Ba 233.527†	49143.1	46680.0	496.42	µg/L	496.42	ppb	17:46:34
2	Be 313.107†	385284.9	364682.5	248.92	µg/L	248.92	ppb	17:46:34
2	Cd 226.502†	14120.2	13397.2	490.23	µg/L	490.23	ppb	17:46:34
2	Co 228.616†	17241.0	16464.1	508.29	µg/L	508.29	ppb	17:46:55
2	Cr 267.716†	18814.7	17742.2	502.62	µg/L	502.62	ppb	17:46:34
2	Cu 324.752†	137578.9	126524.1	507.76	µg/L	507.76	ppb	17:46:34
2	Mn 257.610†	294444.0	278500.4	506.11	µg/L	506.11	ppb	17:46:34
2	Mo 202.031†	4083.5	3866.3	508.36	µg/L	508.36	ppb	17:46:55
2	Ni 231.604†	8287.1	7673.3	501.99	µg/L	501.99	ppb	17:46:55
2	P 214.914†	3231.2	2873.0	2371.3	µg/L	2371.3	ppb	17:46:55

2	Pb 220.353†	1986.3	1893.0	495.62 µg/L	495.62 ppb	17:46:55
2	S 181.975 Axial†	1086.9	997.8	2418.4 µg/L	2418.4 ppb	17:46:55
2	Sb 206.836†	1119.6	1023.1	497.38 µg/L	497.38 ppb	17:46:55
2	Se 196.026†	2853.8	2738.0	2440 µg/L	2440 ppb	17:46:55
2	SiO2 †	151167.9	141905.4	10093 µg/L	10093 ppb	17:46:34
2	Sn 189.927†	2000.8	1905.0	490.42 µg/L	490.42 ppb	17:46:55
2	Ti 334.940†	402341.3	380650.1	505.10 µg/L	505.10 ppb	17:46:34
2	Tl 190.801†	1291.2	1267.3	496.56 µg/L	496.56 ppb	17:46:55
2	U 409.014†	8642.4	7893.3	513.85 µg/L	513.85 ppb	17:46:34
2	V 292.402†	34538.2	32802.4	497.92 µg/L	497.92 ppb	17:46:34
2	Zn 213.857†	21816.8	20249.1	483.83 µg/L	483.83 ppb	17:46:34
2	Si 251.611†	151050.6	141805.3	4740 µg/L	4740 ppb	17:47:33
3	Sc RADIAL	47185.3	47185.3	104 %		17:45:37
3	Al 396.153Radial†	18348.1	17549.4	4990.3 µg/L	4990.3 ppb	17:45:37
3	Ca 317.933Radial†	24975.6	23850.0	5039.8 µg/L	5039.8 ppb	17:45:57
3	Fe 238.204 Radial†	4875.0	4646.0	5117.4 µg/L	5117.4 ppb	17:45:57
3	K 766.490 Radial†	7130.1	5784.5	2495.0 µg/L	2495.0 ppb	17:45:37
3	Mg 279.077 IEC†	2002.4	1921.7	5120.5 µg/L	5120.5 ppb	17:45:57
3	Na 589.592 Radial†	18856.5	17177.2	2581.5 µg/L	2581.5 ppb	17:45:37
3	Sr 421.552†	130945.7	125930.0	512.06 µg/L	512.06 ppb	17:45:37
3	Sc 361.383	1177888.5	1177888.5	105.46 %		17:47:02
3	Y 371.029	635860.2	635860.2	104.84 %		17:47:02
3	Ag 328.068†	33982.3	32889.5	249.58 µg/L	249.58 ppb	17:47:02
3	As 188.979†	975.2	956.0	504.38 µg/L	504.38 ppb	17:47:22
3	B 249.677†	8069.5	7611.5	504.41 µg/L	504.41 ppb	17:47:02
3	Ba 233.527†	48942.2	46546.9	495.01 µg/L	495.01 ppb	17:47:02
3	Be 313.107†	384359.6	364255.6	248.63 µg/L	248.63 ppb	17:47:02
3	Cd 226.502†	14043.2	13340.6	488.16 µg/L	488.16 ppb	17:47:02
3	Co 228.616†	17319.4	16558.6	511.22 µg/L	511.22 ppb	17:47:22
3	Cr 267.716†	18720.0	17674.5	500.70 µg/L	500.70 ppb	17:47:02
3	Cu 324.752†	136784.8	125931.9	505.39 µg/L	505.39 ppb	17:47:02
3	Mn 257.610†	293880.7	278310.4	505.77 µg/L	505.77 ppb	17:47:02
3	Mo 202.031†	4111.4	3897.5	512.46 µg/L	512.46 ppb	17:47:22
3	Ni 231.604†	8330.7	7724.3	505.33 µg/L	505.33 ppb	17:47:22
3	P 214.914†	3244.0	2889.0	2385.3 µg/L	2385.3 ppb	17:47:22
3	Pb 220.353†	1995.0	1903.6	498.41 µg/L	498.41 ppb	17:47:22
3	S 181.975 Axial†	1091.8	1003.7	2432.6 µg/L	2432.6 ppb	17:47:22
3	Sb 206.836†	1133.8	1037.9	504.64 µg/L	504.64 ppb	17:47:22
3	Se 196.026†	2857.8	2745.2	2440 µg/L	2440 ppb	17:47:22
3	SiO2 †	150793.3	141726.9	10080 µg/L	10080 ppb	17:47:02
3	Sn 189.927†	2012.1	1918.0	493.78 µg/L	493.78 ppb	17:47:22
3	Ti 334.940†	401468.1	380292.4	504.63 µg/L	504.63 ppb	17:47:02
3	Tl 190.801†	1313.3	1289.8	505.29 µg/L	505.29 ppb	17:47:22
3	U 409.014†	8544.8	7810.9	508.50 µg/L	508.50 ppb	17:47:02
3	V 292.402†	34460.8	32769.4	497.46 µg/L	497.46 ppb	17:47:02
3	Zn 213.857†	21725.4	20188.0	482.34 µg/L	482.34 ppb	17:47:02
3	Si 251.611†	150881.0	141821.0	4740 µg/L	4740 ppb	17:47:38

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1178696.5	105.53	%	0.066				0.06%
Sc RADIAL	47329.7	104	%	0.3				0.26%
Y 371.029	636495.0	104.94	%	0.104				0.10%
Ag 328.068†	32927.7	249.87	µg/L	0.253	249.87	ppb	0.253	0.10%
QC value within limits for Ag 328.068 Recovery = 99.95%								
Al 396.153Radial†	17463.3	4965.8	µg/L	21.72	4965.8	ppb	21.72	0.44%
QC value within limits for Al 396.153Radial Recovery = 99.32%								
As 188.979†	957.4	505.10	µg/L	0.804	505.10	ppb	0.804	0.16%
QC value within limits for As 188.979 Recovery = 101.02%								
B 249.677†	7610.5	504.35	µg/L	0.350	504.35	ppb	0.350	0.07%
QC value within limits for B 249.677 Recovery = 100.87%								
Ba 233.527†	46612.7	495.71	µg/L	0.707	495.71	ppb	0.707	0.14%
QC value within limits for Ba 233.527 Recovery = 99.14%								
Be 313.107†	364524.8	248.81	µg/L	0.160	248.81	ppb	0.160	0.06%
QC value within limits for Be 313.107 Recovery = 99.52%								
Ca 317.933Radial†	23740.3	5016.7	µg/L	21.99	5016.7	ppb	21.99	0.44%
QC value within limits for Ca 317.933Radial Recovery = 100.33%								
Cd 226.502†	13353.4	488.63	µg/L	1.428	488.63	ppb	1.428	0.29%
QC value within limits for Cd 226.502 Recovery = 97.73%								

Co 228.616†	16502.4	509.48 µg/L	1.541	509.48 ppb	1.541	0.30%
QC value within limits for Co 228.616 Recovery = 101.90%						
Cr 267.716†	17707.3	501.63 µg/L	0.961	501.63 ppb	0.961	0.19%
QC value within limits for Cr 267.716 Recovery = 100.33%						
Cu 324.752†	126405.7	507.29 µg/L	1.715	507.29 ppb	1.715	0.34%
QC value within limits for Cu 324.752 Recovery = 101.46%						
Fe 238.204 Radial†	4632.1	5102.1 µg/L	13.64	5102.1 ppb	13.64	0.27%
QC value within limits for Fe 238.204 Radial Recovery = 102.04%						
K 766.490 Radial†	5832.1	2515.6 µg/L	19.32	2515.6 ppb	19.32	0.77%
QC value within limits for K 766.490 Radial Recovery = 100.62%						
Mg 279.077 IEC†	1910.8	5091.5 µg/L	27.61	5091.5 ppb	27.61	0.54%
QC value within limits for Mg 279.077 IEC Recovery = 101.83%						
Mn 257.610†	278424.1	505.97 µg/L	0.181	505.97 ppb	0.181	0.04%
QC value within limits for Mn 257.610 Recovery = 101.19%						
Mo 202.031†	3880.1	510.17 µg/L	2.093	510.17 ppb	2.093	0.41%
QC value within limits for Mo 202.031 Recovery = 102.03%						
Na 589.592 Radial†	17101.1	2570.1 µg/L	9.90	2570.1 ppb	9.90	0.39%
QC value within limits for Na 589.592 Radial Recovery = 102.80%						
Ni 231.604†	7691.2	503.16 µg/L	1.879	503.16 ppb	1.879	0.37%
QC value within limits for Ni 231.604 Recovery = 100.63%						
P 214.914†	2877.4	2375.1 µg/L	8.93	2375.1 ppb	8.93	0.38%
QC value within limits for P 214.914 Recovery = 95.00%						
Pb 220.353†	1897.2	496.73 µg/L	1.485	496.73 ppb	1.485	0.30%
QC value within limits for Pb 220.353 Recovery = 99.35%						
S 181.975 Axial†	1002.6	2430.0 µg/L	10.58	2430.0 ppb	10.58	0.44%
QC value within limits for S 181.975 Axial Recovery = 97.20%						
Sb 206.836†	1027.1	499.36 µg/L	4.628	499.36 ppb	4.628	0.93%
QC value within limits for Sb 206.836 Recovery = 99.87%						
Se 196.026†	2742.2	2440 µg/L	3.3	2440 ppb	3.3	0.14%
QC value within limits for Se 196.026 Recovery = 97.66%						
SiO2 †	141889.4	10092 µg/L	11.1	10092 ppb	11.1	0.11%
QC value within limits for SiO2 Recovery = 94.36%						
Si 251.611†	141463.4	4730 µg/L	20.3	4730 ppb	20.3	0.43%
QC value within limits for Si 251.611 Recovery = 94.52%						
Sn 189.927†	1910.9	491.95 µg/L	1.701	491.95 ppb	1.701	0.35%
QC value within limits for Sn 189.927 Recovery = 98.39%						
Sr 421.552†	125680.2	511.04 µg/L	0.907	511.04 ppb	0.907	0.18%
QC value within limits for Sr 421.552 Recovery = 102.21%						
Ti 334.940†	380596.6	505.03 µg/L	0.372	505.03 ppb	0.372	0.07%
QC value within limits for Ti 334.940 Recovery = 101.01%						
Tl 190.801†	1279.7	501.38 µg/L	4.435	501.38 ppb	4.435	0.88%
QC value within limits for Tl 190.801 Recovery = 100.28%						
U 409.014†	7849.7	511.02 µg/L	2.689	511.02 ppb	2.689	0.53%
QC value within limits for U 409.014 Recovery = 102.20%						
V 292.402†	32794.1	497.81 µg/L	0.312	497.81 ppb	0.312	0.06%
QC value within limits for V 292.402 Recovery = 99.56%						
Zn 213.857†	20234.8	483.48 µg/L	1.014	483.48 ppb	1.014	0.21%
QC value within limits for Zn 213.857 Recovery = 96.70%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 6/29/2005 17:49:27
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	45337.8	45337.8	99.9	%			17:50:51
1	Al 396.153Radial†	83.1	-9.4	-2.7187	µg/L	-2.7187	ppb	17:50:51
1	Ca 317.933Radial†	170.3	5.9	1.3006	µg/L	1.3006	ppb	17:51:11
1	Fe 238.204 Radial†	44.5	3.1	3.4309	µg/L	3.4309	ppb	17:51:11
1	K 766.490 Radial†	1075.6	5.1	2.1961	µg/L	2.1961	ppb	17:50:51
1	Mg 279.077 IEC†	3.1	-0.5	-1.3285	µg/L	-1.3285	ppb	17:51:11
1	Na 589.592 Radial†	904.7	-48.2	-7.2554	µg/L	-7.2554	ppb	17:50:51
1	Sr 421.552†	-71.2	-47.2	-0.1921	µg/L	-0.1921	ppb	17:50:51
1	Sc 361.383	1134849.9	1134849.9	101.60	%			17:52:09
1	Y 371.029	616183.8	616183.8	101.59	%			17:52:09
1	Ag 328.068†	-649.3	26.8	0.2011	µg/L	0.2011	ppb	17:52:15
1	As 188.979†	-28.9	2.8	1.4763	µg/L	1.4763	ppb	17:52:35
1	B 249.677†	194.4	150.9	9.9885	µg/L	9.9885	ppb	17:52:35
1	Ba 233.527†	-133.9	5.7	0.0625	µg/L	0.0625	ppb	17:52:35
1	Be 313.107†	311.7	94.1	0.0659	µg/L	0.0659	ppb	17:52:15
1	Cd 226.502†	-27.9	-3.2	-0.1145	µg/L	-0.1145	ppb	17:52:35
1	Co 228.616†	-132.9	4.8	0.1463	µg/L	0.1463	ppb	17:52:35
1	Cr 267.716†	73.6	-4.3	-0.1268	µg/L	-0.1268	ppb	17:52:35
1	Cu 324.752†	3780.5	-53.2	-0.2207	µg/L	-0.2207	ppb	17:52:15
1	Mn 257.610†	402.6	34.8	0.0626	µg/L	0.0626	ppb	17:52:35
1	Mo 202.031†	4.3	3.1	0.4097	µg/L	0.4097	ppb	17:52:35
1	Ni 231.604†	184.2	6.0	0.3966	µg/L	0.3966	ppb	17:52:35
1	P 214.914†	186.8	-3.3	-2.8318	µg/L	-2.8318	ppb	17:52:35
1	Pb 220.353†	-9.1	2.9	0.7406	µg/L	0.7406	ppb	17:52:35
1	S 181.975 Axial†	33.0	0.9	2.2190	µg/L	2.2190	ppb	17:52:35
1	Sb 206.836†	53.3	15.3	7.4325	µg/L	7.4325	ppb	17:52:35
1	Se 196.026†	-28.8	6.9	6.16	µg/L	6.16	ppb	17:52:35
1	SiO2 †	1616.9	328.8	23.405	µg/L	23.405	ppb	17:52:15
1	Sn 189.927†	-1.6	8.5	2.1860	µg/L	2.1860	ppb	17:52:35
1	Ti 334.940†	804.9	393.2	0.5175	µg/L	0.5175	ppb	17:52:15
1	Tl 190.801†	-40.3	4.8	1.8963	µg/L	1.8963	ppb	17:52:35
1	U 409.014†	438.1	139.4	9.0395	µg/L	9.0395	ppb	17:52:15
1	V 292.402†	-75.2	17.9	0.2818	µg/L	0.2818	ppb	17:52:15
1	Zn 213.857†	389.6	-29.6	-0.7173	µg/L	-0.7173	ppb	17:52:35
1	Si 251.611†	1481.9	206.9	6.92	µg/L	6.92	ppb	17:53:42
2	Sc RADIAL	45798.2	45798.2	101	%			17:51:16
2	Al 396.153Radial†	90.1	-3.4	-1.0217	µg/L	-1.0217	ppb	17:51:16
2	Ca 317.933Radial†	176.2	10.1	2.1480	µg/L	2.1480	ppb	17:51:36
2	Fe 238.204 Radial†	42.6	0.8	0.8848	µg/L	0.8848	ppb	17:51:36
2	K 766.490 Radial†	1129.5	47.7	20.578	µg/L	20.578	ppb	17:51:16
2	Mg 279.077 IEC†	5.2	1.5	4.0574	µg/L	4.0574	ppb	17:51:36
2	Na 589.592 Radial†	937.8	-24.6	-3.6985	µg/L	-3.6985	ppb	17:51:16
2	Sr 421.552†	-18.3	5.9	0.0240	µg/L	0.0240	ppb	17:51:16
2	Sc 361.383	1146091.2	1146091.2	102.61	%			17:52:40
2	Y 371.029	622508.5	622508.5	102.64	%			17:52:40
2	Ag 328.068†	-691.8	-8.4	-0.0628	µg/L	-0.0628	ppb	17:52:45
2	As 188.979†	-18.9	12.9	6.7001	µg/L	6.7001	ppb	17:53:06
2	B 249.677†	196.1	150.7	9.9772	µg/L	9.9772	ppb	17:53:06
2	Ba 233.527†	-151.5	-10.1	-0.1062	µg/L	-0.1062	ppb	17:53:06
2	Be 313.107†	233.8	15.2	0.0111	µg/L	0.0111	ppb	17:52:45
2	Cd 226.502†	-32.1	-7.1	-0.2576	µg/L	-0.2576	ppb	17:53:06
2	Co 228.616†	-137.3	1.8	0.0560	µg/L	0.0560	ppb	17:53:06
2	Cr 267.716†	65.6	-12.8	-0.3663	µg/L	-0.3663	ppb	17:53:06
2	Cu 324.752†	3692.2	-175.8	-0.7098	µg/L	-0.7098	ppb	17:52:45
2	Mn 257.610†	401.3	29.7	0.0534	µg/L	0.0534	ppb	17:53:06
2	Mo 202.031†	10.2	8.9	1.1707	µg/L	1.1707	ppb	17:53:06
2	Ni 231.604†	181.0	1.1	0.0766	µg/L	0.0766	ppb	17:53:06
2	P 214.914†	194.7	2.6	2.3559	µg/L	2.3559	ppb	17:53:06

2	Pb 220.353†	-10.1	2.0	0.5157 µg/L	0.5157 ppb	17:53:06
2	S 181.975 Axial†	36.0	3.6	8.6399 µg/L	8.6399 ppb	17:53:06
2	Sb 206.836†	47.6	9.2	4.5263 µg/L	4.5263 ppb	17:53:06
2	Se 196.026†	-33.2	2.9	2.60 µg/L	2.60 ppb	17:53:06
2	SiO2 †	1543.6	241.8	17.183 µg/L	17.183 ppb	17:52:45
2	Sn 189.927†	1.5	11.5	2.9633 µg/L	2.9633 ppb	17:53:06
2	Ti 334.940†	703.7	286.8	0.3789 µg/L	0.3789 ppb	17:52:45
2	Tl 190.801†	-39.7	5.8	2.2793 µg/L	2.2793 ppb	17:53:06
2	U 409.014†	363.6	62.6	4.0621 µg/L	4.0621 ppb	17:52:45
2	V 292.402†	-77.2	16.8	0.2659 µg/L	0.2659 ppb	17:52:45
2	Zn 213.857†	391.4	-31.7	-0.7632 µg/L	-0.7632 ppb	17:53:06
2	Si 251.611†	1506.2	216.3	7.22 µg/L	7.22 ppb	17:53:47
3	Sc RADIAL	45686.6	45686.6	101 %		17:51:41
3	Al 396.153Radial†	81.3	-11.8	-3.4180 µg/L	-3.4180 ppb	17:51:41
3	Ca 317.933Radial†	180.4	14.7	3.1573 µg/L	3.1573 ppb	17:52:02
3	Fe 238.204 Radial†	43.2	1.5	1.6164 µg/L	1.6164 ppb	17:52:02
3	K 766.490 Radial†	1119.5	40.5	17.466 µg/L	17.466 ppb	17:51:41
3	Mg 279.077 IEC†	9.5	5.8	15.468 µg/L	15.468 ppb	17:52:02
3	Na 589.592 Radial†	906.3	-53.6	-8.0651 µg/L	-8.0651 ppb	17:51:41
3	Sr 421.552†	-60.7	-36.3	-0.1475 µg/L	-0.1475 ppb	17:51:41
3	Sc 361.383	1147012.7	1147012.7	102.69 %		17:53:11
3	Y 371.029	622749.6	622749.6	102.68 %		17:53:11
3	Ag 328.068†	-612.2	69.8	0.5245 µg/L	0.5245 ppb	17:53:16
3	As 188.979†	-24.1	7.8	4.0606 µg/L	4.0606 ppb	17:53:37
3	B 249.677†	171.2	126.2	8.3591 µg/L	8.3591 ppb	17:53:37
3	Ba 233.527†	-130.3	10.7	0.1150 µg/L	0.1150 ppb	17:53:37
3	Be 313.107†	352.7	130.8	0.0907 µg/L	0.0907 ppb	17:53:16
3	Cd 226.502†	-20.0	4.7	0.1750 µg/L	0.1750 ppb	17:53:37
3	Co 228.616†	-137.0	2.1	0.0642 µg/L	0.0642 ppb	17:53:37
3	Cr 267.716†	77.4	-1.3	-0.0434 µg/L	-0.0434 ppb	17:53:37
3	Cu 324.752†	3777.7	-95.4	-0.3898 µg/L	-0.3898 ppb	17:53:16
3	Mn 257.610†	382.2	10.8	0.0187 µg/L	0.0187 ppb	17:53:37
3	Mo 202.031†	6.8	5.5	0.7263 µg/L	0.7263 ppb	17:53:37
3	Ni 231.604†	180.6	0.6	0.0431 µg/L	0.0431 ppb	17:53:37
3	P 214.914†	185.6	-6.4	-5.4734 µg/L	-5.4734 ppb	17:53:37
3	Pb 220.353†	-2.2	9.7	2.5181 µg/L	2.5181 ppb	17:53:37
3	S 181.975 Axial†	33.5	1.1	2.6807 µg/L	2.6807 ppb	17:53:37
3	Sb 206.836†	49.3	10.8	5.2736 µg/L	5.2736 ppb	17:53:37
3	Se 196.026†	-26.9	9.1	8.10 µg/L	8.10 ppb	17:53:37
3	SiO2 †	1511.4	209.2	14.879 µg/L	14.879 ppb	17:53:16
3	Sn 189.927†	-3.8	6.3	1.6272 µg/L	1.6272 ppb	17:53:37
3	Ti 334.940†	705.3	287.8	0.3782 µg/L	0.3782 ppb	17:53:16
3	Tl 190.801†	-34.9	10.5	4.0830 µg/L	4.0830 ppb	17:53:37
3	U 409.014†	426.2	123.3	7.9971 µg/L	7.9971 ppb	17:53:16
3	V 292.402†	-72.7	21.2	0.3323 µg/L	0.3323 ppb	17:53:16
3	Zn 213.857†	400.8	-22.8	-0.5506 µg/L	-0.5506 ppb	17:53:37
3	Si 251.611†	1521.8	230.3	7.69 µg/L	7.69 ppb	17:53:53

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1142651.3	102.30	%	0.606				0.59%
Sc RADIAL	45607.6	101	%	0.5				0.53%
Y 371.029	620480.6	102.30	%	0.614				0.60%
Ag 328.068†	29.4	0.2209	µg/L	0.29413	0.2209	ppb	0.29413	133.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-8.2	-2.3862	µg/L	1.23228	-2.3862	ppb	1.23228	51.64%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.8	4.0790	µg/L	2.61194	4.0790	ppb	2.61194	64.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	142.6	9.4416	µg/L	0.93753	9.4416	ppb	0.93753	9.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	2.1	0.0238	µg/L	0.11558	0.0238	ppb	0.11558	486.56%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	80.0	0.0559	µg/L	0.04074	0.0559	ppb	0.04074	72.89%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.2	2.2020	µg/L	0.92951	2.2020	ppb	0.92951	42.21%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.8	-0.0657	µg/L	0.22039	-0.0657	ppb	0.22039	335.60%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	2.9	0.0888 µg/L	0.04991	0.0888 ppb	0.04991	56.18%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-6.1	-0.1788 µg/L	0.16765	-0.1788 ppb	0.16765	93.75%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-108.2	-0.4401 µg/L	0.24839	-0.4401 ppb	0.24839	56.44%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.8	1.9774 µg/L	1.31085	1.9774 ppb	1.31085	66.29%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	31.1	13.413 µg/L	9.8380	13.413 ppb	9.8380	73.35%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.3	6.0656 µg/L	8.57631	6.0656 ppb	8.57631	141.39%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	25.1	0.0449 µg/L	0.02313	0.0449 ppb	0.02313	51.52%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.9	0.7689 µg/L	0.38228	0.7689 ppb	0.38228	49.72%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-42.1	-6.3397 µg/L	2.32289	-6.3397 ppb	2.32289	36.64%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	2.6	0.1721 µg/L	0.19515	0.1721 ppb	0.19515	113.40%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-2.4	-1.9831 µg/L	3.98305	-1.9831 ppb	3.98305	200.85%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.8	1.2581 µg/L	1.09692	1.2581 ppb	1.09692	87.19%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.9	4.5132 µg/L	3.58125	4.5132 ppb	3.58125	79.35%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	11.8	5.7441 µg/L	1.50915	5.7441 ppb	1.50915	26.27%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.3	5.62 µg/L	2.785	5.62 ppb	2.785	49.57%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	259.9	18.489 µg/L	4.4106	18.489 ppb	4.4106	23.85%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	217.9	7.28 µg/L	0.392	7.28 ppb	0.392	5.39%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	8.8	2.2588 µg/L	0.67102	2.2588 ppb	0.67102	29.71%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-25.9	-0.1052 µg/L	0.11407	-0.1052 ppb	0.11407	108.41%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	322.6	0.4249 µg/L	0.08021	0.4249 ppb	0.08021	18.88%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	7.1	2.7529 µg/L	1.16775	2.7529 ppb	1.16775	42.42%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	108.5	7.0329 µg/L	2.62504	7.0329 ppb	2.62504	37.32%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	18.6	0.2933 µg/L	0.03467	0.2933 ppb	0.03467	11.82%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-28.0	-0.6771 µg/L	0.11187	-0.6771 ppb	0.11187	16.52%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 6/29/2005 17:55:41
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	46356.3	46356.3	102	%			17:57:09
1	Al 396.153Radial†	779.8	670.6	191.10	µg/L	191.10	ppb	17:57:09
1	Ca 317.933Radial†	653.0	474.6	100.54	µg/L	100.54	ppb	17:57:29
1	Fe 238.204 Radial†	146.7	102.1	112.42	µg/L	112.42	ppb	17:57:29
1	K 766.490 Radial†	1426.3	324.7	140.04	µg/L	140.04	ppb	17:57:09
1	Mg 279.077 IEC†	125.6	119.3	317.20	µg/L	317.20	ppb	17:57:29
1	Na 589.592 Radial†	1927.3	932.6	140.21	µg/L	140.21	ppb	17:57:09
1	Sr 421.552†	1186.5	1185.2	4.8187	µg/L	4.8187	ppb	17:57:09
1	Sc 361.383	1139423.9	1139423.9	102.01	%			17:58:27
1	Y 371.029	618037.0	618037.0	101.90	%			17:58:27
1	Ag 328.068†	-17.7	648.5	4.8996	µg/L	4.8996	ppb	17:58:32
1	As 188.979†	11.6	42.7	22.287	µg/L	22.287	ppb	17:58:53
1	B 249.677†	884.6	826.7	54.737	µg/L	54.737	ppb	17:58:32
1	Ba 233.527†	339.5	470.3	5.0102	µg/L	5.0102	ppb	17:58:53
1	Be 313.107†	7585.0	7222.5	4.9375	µg/L	4.9375	ppb	17:58:32
1	Cd 226.502†	115.8	137.7	5.0475	µg/L	5.0475	ppb	17:58:53
1	Co 228.616†	32.5	167.5	5.1682	µg/L	5.1682	ppb	17:58:53
1	Cr 267.716†	257.8	175.9	4.9492	µg/L	4.9492	ppb	17:58:53
1	Cu 324.752†	6369.9	2470.1	9.8766	µg/L	9.8766	ppb	17:58:32
1	Mn 257.610†	6134.9	5652.4	10.264	µg/L	10.264	ppb	17:58:32
1	Mo 202.031†	86.4	83.6	10.985	µg/L	10.985	ppb	17:58:53
1	Ni 231.604†	256.9	76.6	5.0165	µg/L	5.0165	ppb	17:58:53
1	P 214.914†	360.8	166.5	140.54	µg/L	140.54	ppb	17:58:53
1	Pb 220.353†	29.7	40.9	10.652	µg/L	10.652	ppb	17:58:53
1	S 181.975 Axial†	76.9	43.8	106.40	µg/L	106.40	ppb	17:58:53
1	Sb 206.836†	64.2	25.8	12.654	µg/L	12.654	ppb	17:58:53
1	Se 196.026†	-21.2	14.5	13.0	µg/L	13.0	ppb	17:58:53
1	SiO2 †	4106.8	2763.2	196.50	µg/L	196.50	ppb	17:58:32
1	Sn 189.927†	37.5	46.8	12.052	µg/L	12.052	ppb	17:58:53
1	Ti 334.940†	4333.0	3848.5	5.0829	µg/L	5.0829	ppb	17:58:32
1	Tl 190.801†	11.0	55.3	21.590	µg/L	21.590	ppb	17:58:53
1	U 409.014†	1155.3	840.7	54.516	µg/L	54.516	ppb	17:58:32
1	V 292.402†	193.7	281.9	4.4001	µg/L	4.4001	ppb	17:58:32
1	Zn 213.857†	817.7	388.4	9.3005	µg/L	9.3005	ppb	17:58:53
1	Si 251.611†	4156.7	2823.1	94.3	µg/L	94.3	ppb	18:00:00
2	Sc RADIAL	46662.2	46662.2	103	%			17:57:34
2	Al 396.153Radial†	780.8	666.6	189.96	µg/L	189.96	ppb	17:57:34
2	Ca 317.933Radial†	664.7	481.8	102.08	µg/L	102.08	ppb	17:57:54
2	Fe 238.204 Radial†	143.4	98.0	107.87	µg/L	107.87	ppb	17:57:54
2	K 766.490 Radial†	1480.7	368.5	158.93	µg/L	158.93	ppb	17:57:34
2	Mg 279.077 IEC†	127.9	120.7	320.98	µg/L	320.98	ppb	17:57:54
2	Na 589.592 Radial†	1908.3	901.9	135.59	µg/L	135.59	ppb	17:57:34
2	Sr 421.552†	1224.2	1214.2	4.9366	µg/L	4.9366	ppb	17:57:34
2	Sc 361.383	1147752.9	1147752.9	102.76	%			17:58:58
2	Y 371.029	622509.1	622509.1	102.64	%			17:58:58
2	Ag 328.068†	6.6	672.3	5.0780	µg/L	5.0780	ppb	17:59:03
2	As 188.979†	-2.8	28.6	14.940	µg/L	14.940	ppb	17:59:24
2	B 249.677†	902.3	837.6	55.461	µg/L	55.461	ppb	17:59:03
2	Ba 233.527†	342.3	470.6	5.0144	µg/L	5.0144	ppb	17:59:24
2	Be 313.107†	7678.0	7259.1	4.9632	µg/L	4.9632	ppb	17:59:03
2	Cd 226.502†	114.8	135.9	4.9825	µg/L	4.9825	ppb	17:59:24
2	Co 228.616†	32.2	166.9	5.1506	µg/L	5.1506	ppb	17:59:24
2	Cr 267.716†	254.4	170.8	4.8029	µg/L	4.8029	ppb	17:59:24
2	Cu 324.752†	6344.9	2400.4	9.5936	µg/L	9.5936	ppb	17:59:03
2	Mn 257.610†	6200.5	5672.6	10.300	µg/L	10.300	ppb	17:59:03
2	Mo 202.031†	86.8	83.4	10.954	µg/L	10.954	ppb	17:59:24
2	Ni 231.604†	258.7	76.5	5.0100	µg/L	5.0100	ppb	17:59:24
2	P 214.914†	365.2	168.2	142.08	µg/L	142.08	ppb	17:59:24

2	Pb 220.353†	21.9	33.1	8.6050 µg/L	8.6050 ppb	17:59:24
2	S 181.975 Axial†	73.2	39.7	96.440 µg/L	96.440 ppb	17:59:24
2	Sb 206.836†	61.4	22.5	11.092 µg/L	11.092 ppb	17:59:24
2	Se 196.026†	-21.6	14.3	12.8 µg/L	12.8 ppb	17:59:24
2	SiO2 †	4114.8	2741.8	194.97 µg/L	194.97 ppb	17:59:03
2	Sn 189.927†	45.0	53.9	13.871 µg/L	13.871 ppb	17:59:24
2	Ti 334.940†	4477.8	3958.6	5.2272 µg/L	5.2272 ppb	17:59:03
2	Tl 190.801†	16.8	60.8	23.773 µg/L	23.773 ppb	17:59:24
2	U 409.014†	1225.1	900.5	58.388 µg/L	58.388 ppb	17:59:03
2	V 292.402†	214.9	301.1	4.6919 µg/L	4.6919 ppb	17:59:03
2	Zn 213.857†	816.7	381.7	9.1386 µg/L	9.1386 ppb	17:59:24
2	Si 251.611†	4108.0	2746.1	91.7 µg/L	91.7 ppb	18:00:05
3	Sc RADIAL	46693.7	46693.7	103 %		17:57:59
3	Al 396.153Radial†	831.0	714.8	203.76 µg/L	203.76 ppb	17:57:59
3	Ca 317.933Radial†	643.9	461.1	97.677 µg/L	97.677 ppb	17:58:19
3	Fe 238.204 Radial†	144.1	98.6	108.53 µg/L	108.53 ppb	17:58:19
3	K 766.490 Radial†	1446.1	333.9	144.01 µg/L	144.01 ppb	17:57:59
3	Mg 279.077 IEC†	127.8	120.5	320.44 µg/L	320.44 ppb	17:58:19
3	Na 589.592 Radial†	1928.1	919.8	138.28 µg/L	138.28 ppb	17:57:59
3	Sr 421.552†	1234.5	1223.5	4.9742 µg/L	4.9742 ppb	17:57:59
3	Sc 361.383	1159948.8	1159948.8	103.85 %		17:59:29
3	Y 371.029	629414.1	629414.1	103.77 %		17:59:29
3	Ag 328.068†	32.4	697.1	5.2647 µg/L	5.2647 ppb	17:59:34
3	As 188.979†	3.6	34.7	18.137 µg/L	18.137 ppb	17:59:55
3	B 249.677†	918.1	843.6	55.860 µg/L	55.860 ppb	17:59:34
3	Ba 233.527†	345.9	470.6	5.0128 µg/L	5.0128 ppb	17:59:55
3	Be 313.107†	7565.0	7071.8	4.8341 µg/L	4.8341 ppb	17:59:34
3	Cd 226.502†	119.8	139.6	5.1152 µg/L	5.1152 ppb	17:59:55
3	Co 228.616†	25.3	160.0	4.9363 µg/L	4.9363 ppb	17:59:55
3	Cr 267.716†	262.8	176.3	4.9624 µg/L	4.9624 ppb	17:59:55
3	Cu 324.752†	6313.6	2305.4	9.2175 µg/L	9.2175 ppb	17:59:34
3	Mn 257.610†	6168.4	5578.3	10.129 µg/L	10.129 ppb	17:59:34
3	Mo 202.031†	85.1	80.9	10.625 µg/L	10.625 ppb	17:59:55
3	Ni 231.604†	251.0	66.4	4.3540 µg/L	4.3540 ppb	17:59:55
3	P 214.914†	372.9	172.0	145.37 µg/L	145.37 ppb	17:59:55
3	Pb 220.353†	26.5	37.3	9.7280 µg/L	9.7280 ppb	17:59:55
3	S 181.975 Axial†	74.2	39.8	96.765 µg/L	96.765 ppb	17:59:55
3	Sb 206.836†	63.0	23.5	11.518 µg/L	11.518 ppb	17:59:55
3	Se 196.026†	-13.8	22.0	19.7 µg/L	19.7 ppb	17:59:55
3	SiO2 †	4083.0	2669.0	189.80 µg/L	189.80 ppb	17:59:34
3	Sn 189.927†	41.4	49.9	12.847 µg/L	12.847 ppb	17:59:55
3	Ti 334.940†	4477.2	3912.2	5.1690 µg/L	5.1690 ppb	17:59:34
3	Tl 190.801†	8.2	52.4	20.461 µg/L	20.461 ppb	17:59:55
3	U 409.014†	1125.8	792.4	51.380 µg/L	51.380 ppb	17:59:34
3	V 292.402†	193.1	278.0	4.3346 µg/L	4.3346 ppb	17:59:34
3	Zn 213.857†	817.0	373.6	8.9481 µg/L	8.9481 ppb	17:59:55
3	Si 251.611†	4077.8	2675.0	89.4 µg/L	89.4 ppb	18:00:10

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1149041.8	102.87	%	0.924				0.90%
Sc RADIAL	46570.7	103	%	0.4				0.40%
Y 371.029	623320.1	102.77	%	0.945				0.92%
Ag 328.068†	672.6	5.0808	µg/L	0.18252	5.0808	ppb	0.18252	3.59%
QC value within limits for Ag 328.068 Recovery = 101.62%								
Al 396.153Radial†	684.0	194.94	µg/L	7.659	194.94	ppb	7.659	3.93%
QC value within limits for Al 396.153Radial Recovery = 97.47%								
As 188.979†	35.3	18.455	µg/L	3.6838	18.455	ppb	3.6838	19.96%
QC value within limits for As 188.979 Recovery = 123.03%								
B 249.677†	836.0	55.353	µg/L	0.5693	55.353	ppb	0.5693	1.03%
QC value within limits for B 249.677 Recovery = 110.71%								
Ba 233.527†	470.5	5.0125	µg/L	0.00214	5.0125	ppb	0.00214	0.04%
QC value within limits for Ba 233.527 Recovery = 100.25%								
Be 313.107†	7184.5	4.9116	µg/L	0.06835	4.9116	ppb	0.06835	1.39%
QC value within limits for Be 313.107 Recovery = 98.23%								
Ca 317.933Radial†	472.5	100.10	µg/L	2.234	100.10	ppb	2.234	2.23%
QC value within limits for Ca 317.933Radial Recovery = 100.10%								
Cd 226.502†	137.8	5.0484	µg/L	0.06637	5.0484	ppb	0.06637	1.31%
QC value within limits for Cd 226.502 Recovery = 100.97%								

Co 228.616†	164.8	5.0850 µg/L	0.12912	5.0850 ppb	0.12912	2.54%
QC value within limits for Co 228.616 Recovery = 101.70%						
Cr 267.716†	174.4	4.9048 µg/L	0.08852	4.9048 ppb	0.08852	1.80%
QC value within limits for Cr 267.716 Recovery = 98.10%						
Cu 324.752†	2392.0	9.5625 µg/L	0.33062	9.5625 ppb	0.33062	3.46%
QC value within limits for Cu 324.752 Recovery = 95.63%						
Fe 238.204 Radial†	99.6	109.61 µg/L	2.455	109.61 ppb	2.455	2.24%
QC value within limits for Fe 238.204 Radial Recovery = 109.61%						
K 766.490 Radial†	342.3	147.66 µg/L	9.959	147.66 ppb	9.959	6.74%
QC value within limits for K 766.490 Radial Recovery = 98.44%						
Mg 279.077 IEC†	120.2	319.54 µg/L	2.043	319.54 ppb	2.043	0.64%
QC value within limits for Mg 279.077 IEC Recovery = 106.51%						
Mn 257.610†	5634.4	10.231 µg/L	0.0898	10.231 ppb	0.0898	0.88%
QC value within limits for Mn 257.610 Recovery = 102.31%						
Mo 202.031†	82.6	10.855 µg/L	0.1993	10.855 ppb	0.1993	1.84%
QC value within limits for Mo 202.031 Recovery = 108.55%						
Na 589.592 Radial†	918.1	138.03 µg/L	2.324	138.03 ppb	2.324	1.68%
QC value within limits for Na 589.592 Radial Recovery = 92.02%						
Ni 231.604†	73.2	4.7935 µg/L	0.38063	4.7935 ppb	0.38063	7.94%
QC value within limits for Ni 231.604 Recovery = 95.87%						
P 214.914†	168.9	142.66 µg/L	2.464	142.66 ppb	2.464	1.73%
QC value within limits for P 214.914 Recovery = 95.11%						
Pb 220.353†	37.1	9.6615 µg/L	1.02494	9.6615 ppb	1.02494	10.61%
QC value within limits for Pb 220.353 Recovery = 96.62%						
S 181.975 Axial†	41.1	99.869 µg/L	5.6599	99.869 ppb	5.6599	5.67%
QC value within limits for S 181.975 Axial Recovery = 99.87%						
Sb 206.836†	23.9	11.754 µg/L	0.8077	11.754 ppb	0.8077	6.87%
QC value within limits for Sb 206.836 Recovery = 117.54%						
Se 196.026†	16.9	15.2 µg/L	3.90	15.2 ppb	3.90	25.66%
QC value within limits for Se 196.026 Recovery = 101.29%						
SiO2 †	2724.6	193.75 µg/L	3.510	193.75 ppb	3.510	1.81%
QC value within limits for SiO2 Recovery = 90.96%						
Si 251.611†	2748.1	91.8 µg/L	2.48	91.8 ppb	2.48	2.70%
QC value within limits for Si 251.611 Recovery = 91.80%						
Sn 189.927†	50.2	12.924 µg/L	0.9119	12.924 ppb	0.9119	7.06%
QC value within limits for Sn 189.927 Recovery = 129.24%						
Sr 421.552†	1207.7	4.9098 µg/L	0.08113	4.9098 ppb	0.08113	1.65%
QC value within limits for Sr 421.552 Recovery = 98.20%						
Ti 334.940†	3906.4	5.1597 µg/L	0.07257	5.1597 ppb	0.07257	1.41%
QC value within limits for Ti 334.940 Recovery = 103.19%						
Tl 190.801†	56.2	21.942 µg/L	1.6837	21.942 ppb	1.6837	7.67%
QC value within limits for Tl 190.801 Recovery = 109.71%						
U 409.014†	844.5	54.761 µg/L	3.5108	54.761 ppb	3.5108	6.41%
QC value within limits for U 409.014 Recovery = 109.52%						
V 292.402†	287.0	4.4755 µg/L	0.19021	4.4755 ppb	0.19021	4.25%
QC value within limits for V 292.402 Recovery = 89.51%						
Zn 213.857†	381.2	9.1291 µg/L	0.17639	9.1291 ppb	0.17639	1.93%
QC value within limits for Zn 213.857 Recovery = 91.29%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: ICSA
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 6/29/2005 18:01:59
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	44367.0	44367.0	97.8	%			18:03:31
1	Al 396.153Radial†	1727459.0	1766390.8	504760	µg/L	504760	ppb	18:03:25
1	Ca 317.933Radial†	2189935.3	2239243.0	472920	µg/L	472920	ppb	18:03:25
1	Fe 238.204 Radial†	165262.9	168954.9	185870	µg/L	185870	ppb	18:03:31
1	K 766.490 Radial†	1006.6	-41.9	-18.066	µg/L	-18.066	ppb	18:03:31
1	Mg 279.077 IEC†	184164.5	188321.3	500730	µg/L	500730	ppb	18:03:31
1	Na 589.592 Radial†	981.3	49.9	7.5126	µg/L	7.5126	ppb	18:03:31
1	Sr 421.552†	2836.4	2924.5	5.0256	µg/L	5.0256	ppb	18:03:31
1	Sc 361.383	1058369.3	1058369.3	94.757	%			18:04:02
1	Y 371.029	563662.7	563662.7	92.934	%			18:04:02
1	Ag 328.068†	-4802.8	-4402.7	-0.3381	µg/L	-0.3381	ppb	18:04:02
1	As 188.979†	-58.8	-30.8	-5.9546	µg/L	-5.9546	ppb	18:04:22
1	B 249.677†	638.0	632.8	16.864	µg/L	16.864	ppb	18:04:02
1	Ba 233.527†	131.2	275.9	0.7348	µg/L	0.7348	ppb	18:04:22
1	Be 313.107†	-1120.9	-1395.6	-0.9484	µg/L	-0.9484	ppb	18:04:02
1	Cd 226.502†	295.8	336.4	-0.3243	µg/L	-0.3243	ppb	18:04:22
1	Co 228.616†	-50.2	82.6	-1.1437	µg/L	-1.1437	ppb	18:04:22
1	Cr 267.716†	122.8	52.8	1.4879	µg/L	1.4879	ppb	18:04:22
1	Cu 324.752†	1753.0	-1924.0	-1.3911	µg/L	-1.3911	ppb	18:04:02
1	Mn 257.610†	-7722.5	-8511.2	0.4556	µg/L	0.4556	ppb	18:04:02
1	Mo 202.031†	-27.4	-30.0	1.9456	µg/L	1.9456	ppb	18:04:22
1	Ni 231.604†	86.3	-84.1	-5.5028	µg/L	-5.5028	ppb	18:04:22
1	P 214.914†	239.1	65.2	11.401	µg/L	11.401	ppb	18:04:22
1	Pb 220.353†	-235.7	-237.0	-4.9811	µg/L	-4.9811	ppb	18:04:22
1	S 181.975 Axial†	59.2	31.0	2.6298	µg/L	2.6298	ppb	18:04:22
1	Sb 206.836†	59.3	25.4	17.401	µg/L	17.401	ppb	18:04:22
1	Se 196.026†	-54.4	-22.1	-14.2	µg/L	-14.2	ppb	18:04:22
1	SiO2 †	1441.9	259.2	63.600	µg/L	63.600	ppb	18:04:22
1	Sn 189.927†	-154.3	-152.8	8.7998	µg/L	8.7998	ppb	18:04:22
1	Ti 334.940†	-7808.4	-8639.5	-1.5006	µg/L	-1.5006	ppb	18:04:02
1	Tl 190.801†	-60.2	-19.0	-5.2384	µg/L	-5.2384	ppb	18:04:22
1	U 409.014†	539.0	277.2	-5.2123	µg/L	-5.2123	ppb	18:04:02
1	V 292.402†	-378.2	-307.2	0.3808	µg/L	0.3808	ppb	18:04:22
1	Zn 213.857†	2480.4	2204.5	0.8304	µg/L	0.8304	ppb	18:04:22
1	Si 251.611†	1388.7	213.9	28.8	µg/L	28.8	ppb	18:05:21
2	Sc RADIAL	44055.6	44055.6	97.1	%			18:03:42
2	Al 396.153Radial†	1732887.8	1784467.2	509930	µg/L	509930	ppb	18:03:37
2	Ca 317.933Radial†	2194559.9	2259833.9	477270	µg/L	477270	ppb	18:03:37
2	Fe 238.204 Radial†	164420.5	169281.8	186230	µg/L	186230	ppb	18:03:42
2	K 766.490 Radial†	977.0	-65.1	-28.067	µg/L	-28.067	ppb	18:03:42
2	Mg 279.077 IEC†	183304.0	188766.2	501910	µg/L	501910	ppb	18:03:42
2	Na 589.592 Radial†	1072.4	150.8	22.683	µg/L	22.683	ppb	18:03:42
2	Sr 421.552†	2824.0	2932.2	4.9936	µg/L	4.9936	ppb	18:03:42
2	Sc 361.383	1056964.2	1056964.2	94.631	%			18:04:29
2	Y 371.029	562596.0	562596.0	92.758	%			18:04:29
2	Ag 328.068†	-4856.6	-4466.2	-0.7516	µg/L	-0.7516	ppb	18:04:29
2	As 188.979†	-60.2	-32.4	-6.8852	µg/L	-6.8852	ppb	18:04:49
2	B 249.677†	565.9	557.6	11.839	µg/L	11.839	ppb	18:04:29
2	Ba 233.527†	168.1	315.2	1.1466	µg/L	1.1466	ppb	18:04:49
2	Be 313.107†	-1082.7	-1356.8	-0.9228	µg/L	-0.9228	ppb	18:04:29
2	Cd 226.502†	310.5	352.4	0.2352	µg/L	0.2352	ppb	18:04:49
2	Co 228.616†	-72.8	58.6	-1.8902	µg/L	-1.8902	ppb	18:04:49
2	Cr 267.716†	114.4	44.1	1.2443	µg/L	1.2443	ppb	18:04:49
2	Cu 324.752†	1782.6	-1890.3	-1.2400	µg/L	-1.2400	ppb	18:04:29
2	Mn 257.610†	-7774.7	-8577.2	0.3647	µg/L	0.3647	ppb	18:04:29
2	Mo 202.031†	-23.4	-25.8	2.5067	µg/L	2.5067	ppb	18:04:49
2	Ni 231.604†	90.6	-79.5	-5.1981	µg/L	-5.1981	ppb	18:04:49
2	P 214.914†	237.7	64.1	11.464	µg/L	11.464	ppb	18:04:49

2	Pb 220.353†	-242.1	-244.0	-6.2434 µg/L	-6.2434 ppb	18:04:49
2	S 181.975 Axial†	56.1	27.7	-5.9668 µg/L	-5.9668 ppb	18:04:49
2	Sb 206.836†	43.9	9.2	9.6122 µg/L	9.6122 ppb	18:04:49
2	Se 196.026†	-40.4	-7.5	-0.930 µg/L	-0.930 ppb	18:04:49
2	SiO2 †	1402.0	218.9	60.801 µg/L	60.801 ppb	18:04:49
2	Sn 189.927†	-150.4	-148.9	10.199 µg/L	10.199 ppb	18:04:49
2	Ti 334.940†	-7978.3	-8829.9	-1.6591 µg/L	-1.6591 ppb	18:04:29
2	Tl 190.801†	-65.9	-25.1	-7.6109 µg/L	-7.6109 ppb	18:04:49
2	U 409.014†	467.0	201.8	-10.144 µg/L	-10.144 ppb	18:04:29
2	V 292.402†	-386.0	-315.9	0.2588 µg/L	0.2588 ppb	18:04:49
2	Zn 213.857†	2488.4	2216.5	0.8755 µg/L	0.8755 ppb	18:04:49
2	Si 251.611†	1761.7	610.1	42.1 µg/L	42.1 ppb	18:05:27
3	Sc RADIAL	44409.0	44409.0	97.9 %		18:03:53
3	Al 396.153Radial†	1729759.0	1767070.7	504960 µg/L	504960 ppb	18:03:48
3	Ca 317.933Radial†	2191278.8	2238498.6	472760 µg/L	472760 ppb	18:03:48
3	Fe 238.204 Radial†	165604.7	169144.3	186080 µg/L	186080 ppb	18:03:53
3	K 766.490 Radial†	962.0	-88.4	-38.127 µg/L	-38.127 ppb	18:03:53
3	Mg 279.077 IEC†	184747.6	188738.9	501840 µg/L	501840 ppb	18:03:53
3	Na 589.592 Radial†	1017.5	85.9	12.924 µg/L	12.924 ppb	18:03:53
3	Sr 421.552†	2853.2	2938.9	5.0865 µg/L	5.0865 ppb	18:03:53
3	Sc 361.383	1058457.3	1058457.3	94.765 %		18:04:55
3	Y 371.029	563492.8	563492.8	92.906 %		18:04:55
3	Ag 328.068†	-4816.6	-4416.8	-0.4084 µg/L	-0.4084 ppb	18:04:55
3	As 188.979†	-61.3	-33.4	-7.3187 µg/L	-7.3187 ppb	18:05:16
3	B 249.677†	573.3	564.5	12.312 µg/L	12.312 ppb	18:04:55
3	Ba 233.527†	143.8	289.2	0.8724 µg/L	0.8724 ppb	18:05:16
3	Be 313.107†	-1053.3	-1324.2	-0.9003 µg/L	-0.9003 ppb	18:04:55
3	Cd 226.502†	323.1	365.2	0.7139 µg/L	0.7139 ppb	18:05:16
3	Co 228.616†	-51.7	81.0	-1.1981 µg/L	-1.1981 ppb	18:05:16
3	Cr 267.716†	115.1	44.8	1.2620 µg/L	1.2620 ppb	18:05:16
3	Cu 324.752†	1744.4	-1933.3	-1.4181 µg/L	-1.4181 ppb	18:04:55
3	Mn 257.610†	-7709.5	-8496.8	0.4934 µg/L	0.4934 ppb	18:04:55
3	Mo 202.031†	-32.8	-35.7	1.2096 µg/L	1.2096 ppb	18:05:16
3	Ni 231.604†	84.0	-86.5	-5.6649 µg/L	-5.6649 ppb	18:05:16
3	P 214.914†	244.6	70.9	16.126 µg/L	16.126 ppb	18:05:16
3	Pb 220.353†	-224.5	-225.1	-1.8550 µg/L	-1.8550 ppb	18:05:16
3	S 181.975 Axial†	56.3	27.8	-5.0176 µg/L	-5.0176 ppb	18:05:16
3	Sb 206.836†	58.3	24.4	16.896 µg/L	16.896 ppb	18:05:16
3	Se 196.026†	-37.6	-4.4	1.48 µg/L	1.48 ppb	18:05:16
3	SiO2 †	1414.0	229.6	61.571 µg/L	61.571 ppb	18:05:16
3	Sn 189.927†	-162.6	-161.6	6.5373 µg/L	6.5373 ppb	18:05:16
3	Ti 334.940†	-7980.7	-8820.6	-1.7425 µg/L	-1.7425 ppb	18:04:55
3	Tl 190.801†	-52.5	-11.0	-2.1022 µg/L	-2.1022 ppb	18:05:16
3	U 409.014†	486.8	222.0	-8.8161 µg/L	-8.8161 ppb	18:04:55
3	V 292.402†	-415.0	-345.9	-0.2056 µg/L	-0.2056 ppb	18:05:16
3	Zn 213.857†	2473.7	2197.3	0.6107 µg/L	0.6107 ppb	18:05:16
3	Si 251.611†	1354.1	177.3	27.6 µg/L	27.6 ppb	18:05:32

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1057930.3	94.718	%	0.0750				0.08%
Sc RADIAL	44277.2	97.6	%	0.43				0.44%
Y 371.029	563250.5	92.866	%	0.0945				0.10%
Ag 328.068†	-4428.6	-0.4994	µg/L	0.22126	-0.4994	ppb	0.22126	44.31%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1772642.9	506550	µg/L	2927.8	506550	ppb	2927.8	0.58%
QC value within limits for Al 396.153Radial Recovery = 101.31%								
As 188.979†	-32.2	-6.7195	µg/L	0.69699	-6.7195	ppb	0.69699	10.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	585.0	13.672	µg/L	2.7750	13.672	ppb	2.7750	20.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	293.4	0.9179	µg/L	0.20963	0.9179	ppb	0.20963	22.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1358.8	-0.9238	µg/L	0.02403	-0.9238	ppb	0.02403	2.60%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2245858.5	474310	µg/L	2557.3	474310	ppb	2557.3	0.54%
QC value within limits for Ca 317.933Radial Recovery = 94.86%								
Cd 226.502†	351.3	0.2083	µg/L	0.51959	0.2083	ppb	0.51959	249.48%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	74.1	-1.4107 µg/L	0.41615	-1.4107 ppb	0.41615	29.50%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	47.2	1.3314 µg/L	0.13584	1.3314 ppb	0.13584	10.20%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1915.9	-1.3497 µg/L	0.09599	-1.3497 ppb	0.09599	7.11%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	169127.0	186060 µg/L	180.6	186060 ppb	180.6	0.10%
QC value within limits for Fe 238.204 Radial Recovery = 93.03%						
K 766.490 Radial†	-65.1	-28.087 µg/L	10.0302	-28.087 ppb	10.0302	35.71%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	188608.8	501490 µg/L	663.1	501490 ppb	663.1	0.13%
QC value within limits for Mg 279.077 IEC Recovery = 100.30%						
Mn 257.610†	-8528.4	0.4379 µg/L	0.06616	0.4379 ppb	0.06616	15.11%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-30.5	1.8873 µg/L	0.65051	1.8873 ppb	0.65051	34.47%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	95.5	14.373 µg/L	7.6884	14.373 ppb	7.6884	53.49%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-83.4	-5.4552 µg/L	0.23700	-5.4552 ppb	0.23700	4.34%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	66.8	12.997 µg/L	2.7100	12.997 ppb	2.7100	20.85%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-235.4	-4.3598 µg/L	2.25918	-4.3598 ppb	2.25918	51.82%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	28.8	-2.7849 µg/L	4.71318	-2.7849 ppb	4.71318	169.24%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	19.7	14.636 µg/L	4.3584	14.636 ppb	4.3584	29.78%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-11.3	-4.55 µg/L	8.442	-4.55 ppb	8.442	185.56%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	235.9	61.991 µg/L	1.4457	61.991 ppb	1.4457	2.33%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	333.8	32.8 µg/L	8.04	32.8 ppb	8.04	24.48%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-154.4	8.5122 µg/L	1.84786	8.5122 ppb	1.84786	21.71%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	2931.9	5.0353 µg/L	0.04719	5.0353 ppb	0.04719	0.94%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-8763.3	-1.6341 µg/L	0.12288	-1.6341 ppb	0.12288	7.52%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-18.4	-4.9838 µg/L	2.76313	-4.9838 ppb	2.76313	55.44%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	233.7	-8.0575 µg/L	2.55192	-8.0575 ppb	2.55192	31.67%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-323.0	0.1447 µg/L	0.30943	0.1447 ppb	0.30943	213.89%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2206.1	0.7722 µg/L	0.14167	0.7722 ppb	0.14167	18.35%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSAB
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 6/29/2005 18:07:21
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	44220.9	44220.9	97.5	%			18:08:54
1	Al 396.153Radial†	1720413.9	1764999.1	504340	µg/L	504340	ppb	18:08:48
1	Ca 317.933Radial†	2174162.6	2230459.5	471060	µg/L	471060	ppb	18:08:48
1	Fe 238.204 Radial†	162937.7	167127.6	183870	µg/L	183870	ppb	18:08:54
1	K 766.490 Radial†	13516.8	12796.6	5519.6	µg/L	5519.6	ppb	18:08:54
1	Mg 279.077 IEC†	182603.3	187341.7	498140	µg/L	498140	ppb	18:08:54
1	Na 589.592 Radial†	35104.1	35062.1	5271.1	µg/L	5271.1	ppb	18:08:54
1	Sr 421.552†	124699.0	127961.3	513.55	µg/L	513.55	ppb	18:08:54
1	Sc 361.383	1065940.0	1065940.0	95.435	%			18:09:26
1	Y 371.029	567824.4	567824.4	93.620	%			18:09:26
1	Ag 328.068†	26256.9	28178.8	245.67	µg/L	245.67	ppb	18:09:26
1	As 188.979†	803.1	872.7	470.05	µg/L	470.05	ppb	18:09:46
1	B 249.677†	7677.9	8004.8	506.46	µg/L	506.46	ppb	18:09:26
1	Ba 233.527†	41756.7	43891.7	464.67	µg/L	464.67	ppb	18:09:26
1	Be 313.107†	322483.2	337696.9	230.50	µg/L	230.50	ppb	18:09:26
1	Cd 226.502†	11788.6	12376.7	440.68	µg/L	440.68	ppb	18:09:46
1	Co 228.616†	13288.1	14059.3	430.43	µg/L	430.43	ppb	18:09:46
1	Cr 267.716†	16059.5	16751.0	474.55	µg/L	474.55	ppb	18:09:46
1	Cu 324.752†	120460.3	122448.6	497.55	µg/L	497.55	ppb	18:09:26
1	Mn 257.610†	233121.2	243911.5	458.49	µg/L	458.49	ppb	18:09:26
1	Mo 202.031†	3412.5	3574.6	475.73	µg/L	475.73	ppb	18:09:46
1	Ni 231.604†	6244.2	6367.7	416.69	µg/L	416.69	ppb	18:09:46
1	P 214.914†	2887.0	2838.0	2303.7	µg/L	2303.7	ppb	18:09:46
1	Pb 220.353†	1360.8	1437.7	432.87	µg/L	432.87	ppb	18:09:46
1	S 181.975 Axial†	1029.0	1046.6	2464.9	µg/L	2464.9	ppb	18:09:46
1	Sb 206.836†	981.5	991.2	486.77	µg/L	486.77	ppb	18:09:46
1	Se 196.026†	2398.6	2548.6	2270	µg/L	2270	ppb	18:09:46
1	SiO2 †	128038.2	132900.5	9496.3	µg/L	9496.3	ppb	18:09:26
1	Sn 189.927†	1464.4	1544.5	445.09	µg/L	445.09	ppb	18:09:46
1	Ti 334.940†	341274.7	357201.0	483.83	µg/L	483.83	ppb	18:09:26
1	Tl 190.801†	964.4	1055.0	415.93	µg/L	415.93	ppb	18:09:46
1	U 409.014†	7157.0	7207.6	447.07	µg/L	447.07	ppb	18:09:26
1	V 292.402†	30570.0	32124.3	492.09	µg/L	492.09	ppb	18:09:46
1	Zn 213.857†	20931.5	21519.7	463.89	µg/L	463.89	ppb	18:09:46
1	Si 251.611†	127890.6	132756.9	4460	µg/L	4460	ppb	18:10:46
2	Sc RADIAL	44644.3	44644.3	98.4	%			18:09:05
2	Al 396.153Radial†	1751404.5	1779753.2	508560	µg/L	508560	ppb	18:09:00
2	Ca 317.933Radial†	2217949.4	2253802.5	475990	µg/L	475990	ppb	18:09:00
2	Fe 238.204 Radial†	164519.9	167150.1	183890	µg/L	183890	ppb	18:09:05
2	K 766.490 Radial†	13702.6	12853.9	5544.3	µg/L	5544.3	ppb	18:09:05
2	Mg 279.077 IEC†	184566.3	187559.9	498720	µg/L	498720	ppb	18:09:05
2	Na 589.592 Radial†	35475.9	35098.4	5276.6	µg/L	5276.6	ppb	18:09:05
2	Sr 421.552†	126066.6	128137.8	514.20	µg/L	514.20	ppb	18:09:05
2	Sc 361.383	1062176.6	1062176.6	95.098	%			18:09:53
2	Y 371.029	566523.8	566523.8	93.406	%			18:09:53
2	Ag 328.068†	26392.6	28419.0	247.48	µg/L	247.48	ppb	18:09:53
2	As 188.979†	786.6	858.4	462.48	µg/L	462.48	ppb	18:10:13
2	B 249.677†	7685.2	8040.9	508.85	µg/L	508.85	ppb	18:09:53
2	Ba 233.527†	41676.0	43961.9	465.41	µg/L	465.41	ppb	18:09:53
2	Be 313.107†	321894.0	338274.6	230.89	µg/L	230.89	ppb	18:09:53
2	Cd 226.502†	11730.6	12359.5	440.05	µg/L	440.05	ppb	18:10:13
2	Co 228.616†	13225.8	14043.2	429.93	µg/L	429.93	ppb	18:10:13
2	Cr 267.716†	16002.2	16750.3	474.53	µg/L	474.53	ppb	18:10:13
2	Cu 324.752†	121101.4	123569.9	502.05	µg/L	502.05	ppb	18:09:53
2	Mn 257.610†	232367.1	243984.0	458.62	µg/L	458.62	ppb	18:09:53
2	Mo 202.031†	3402.9	3577.3	476.08	µg/L	476.08	ppb	18:10:13
2	Ni 231.604†	6247.8	6394.7	418.46	µg/L	418.46	ppb	18:10:13
2	P 214.914†	2877.0	2838.1	2304.2	µg/L	2304.2	ppb	18:10:13

2	Pb 220.353†	1356.7	1438.4	433.52 µg/L	433.52 ppb	18:10:13
2	S 181.975 Axial†	1012.0	1032.6	2430.2 µg/L	2430.2 ppb	18:10:13
2	Sb 206.836†	995.9	1010.1	495.95 µg/L	495.95 ppb	18:10:13
2	Se 196.026†	2368.1	2525.5	2250 µg/L	2250 ppb	18:10:13
2	SiO2 †	127997.4	133332.9	9527.1 µg/L	9527.1 ppb	18:09:53
2	Sn 189.927†	1453.4	1538.4	443.97 µg/L	443.97 ppb	18:10:13
2	Ti 334.940†	340586.3	357744.2	484.66 µg/L	484.66 ppb	18:09:53
2	Tl 190.801†	950.8	1044.3	411.79 µg/L	411.79 ppb	18:10:13
2	U 409.014†	7200.4	7279.9	451.75 µg/L	451.75 ppb	18:09:53
2	V 292.402†	30479.1	32142.2	492.37 µg/L	492.37 ppb	18:10:13
2	Zn 213.857†	20872.6	21535.5	464.05 µg/L	464.05 ppb	18:10:13
2	Si 251.611†	127347.4	132660.4	4450 µg/L	4450 ppb	18:10:51
3	Sc RADIAL	43913.2	43913.2	96.8 %		18:09:16
3	Al 396.153Radial†	1735620.8	1793077.9	512370 µg/L	512370 ppb	18:09:11
3	Ca 317.933Radial†	2190705.8	2263180.8	477970 µg/L	477970 ppb	18:09:11
3	Fe 238.204 Radial†	162157.2	167492.5	184270 µg/L	184270 ppb	18:09:16
3	K 766.490 Radial†	13426.9	12800.9	5521.5 µg/L	5521.5 ppb	18:09:16
3	Mg 279.077 IEC†	181865.5	187892.2	499600 µg/L	499600 ppb	18:09:16
3	Na 589.592 Radial†	34899.9	35103.5	5277.3 µg/L	5277.3 ppb	18:09:16
3	Sr 421.552†	124083.0	128221.3	514.51 µg/L	514.51 ppb	18:09:16
3	Sc 361.383	1063231.6	1063231.6	95.192 %		18:10:20
3	Y 371.029	567115.5	567115.5	93.503 %		18:10:20
3	Ag 328.068†	26381.0	28379.2	247.24 µg/L	247.24 ppb	18:10:20
3	As 188.979†	793.5	864.8	465.79 µg/L	465.79 ppb	18:10:40
3	B 249.677†	7810.5	8164.5	516.98 µg/L	516.98 ppb	18:10:20
3	Ba 233.527†	41711.7	43955.9	465.34 µg/L	465.34 ppb	18:10:20
3	Be 313.107†	322348.9	338416.6	230.99 µg/L	230.99 ppb	18:10:20
3	Cd 226.502†	11723.1	12339.4	439.29 µg/L	439.29 ppb	18:10:40
3	Co 228.616†	13207.9	14010.6	428.91 µg/L	428.91 ppb	18:10:40
3	Cr 267.716†	15970.5	16700.4	473.12 µg/L	473.12 ppb	18:10:40
3	Cu 324.752†	121285.3	123636.8	502.33 µg/L	502.33 ppb	18:10:20
3	Mn 257.610†	232642.9	244031.2	458.74 µg/L	458.74 ppb	18:10:20
3	Mo 202.031†	3405.8	3576.8	476.03 µg/L	476.03 ppb	18:10:40
3	Ni 231.604†	6196.4	6334.1	414.50 µg/L	414.50 ppb	18:10:40
3	P 214.914†	2877.2	2835.4	2302.5 µg/L	2302.5 ppb	18:10:40
3	Pb 220.353†	1374.6	1455.8	438.49 µg/L	438.49 ppb	18:10:40
3	S 181.975 Axial†	1017.2	1037.1	2440.5 µg/L	2440.5 ppb	18:10:40
3	Sb 206.836†	1003.7	1017.2	499.47 µg/L	499.47 ppb	18:10:40
3	Se 196.026†	2361.9	2516.4	2250 µg/L	2250 ppb	18:10:40
3	SiO2 †	128140.6	133349.8	9528.4 µg/L	9528.4 ppb	18:10:20
3	Sn 189.927†	1454.0	1537.5	443.92 µg/L	443.92 ppb	18:10:40
3	Ti 334.940†	341524.6	358374.5	485.54 µg/L	485.54 ppb	18:10:20
3	Tl 190.801†	937.0	1028.8	405.77 µg/L	405.77 ppb	18:10:40
3	U 409.014†	7107.1	7174.3	444.85 µg/L	444.85 ppb	18:10:20
3	V 292.402†	30406.4	32034.1	490.74 µg/L	490.74 ppb	18:10:40
3	Zn 213.857†	20802.1	21439.6	461.62 µg/L	461.62 ppb	18:10:40
3	Si 251.611†	127543.2	132733.3	4460 µg/L	4460 ppb	18:10:57

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1063782.7	95.242	%	0.1738				0.18%
Sc RADIAL	44259.5	97.6	%	0.81				0.83%
Y 371.029	567154.6	93.510	%	0.1074				0.11%
Ag 328.068†	28325.7	246.79	µg/L	0.985	246.79	ppb	0.985	0.40%
QC value within limits for Ag 328.068 Recovery = 98.72%								
Al 396.153Radial†	1779276.7	508420	µg/L	4013.6	508420	ppb	4013.6	0.79%
QC value within limits for Al 396.153Radial Recovery = 101.68%								
As 188.979†	865.3	466.11	µg/L	3.792	466.11	ppb	3.792	0.81%
QC value within limits for As 188.979 Recovery = 93.22%								
B 249.677†	8070.0	510.77	µg/L	5.515	510.77	ppb	5.515	1.08%
QC value within limits for B 249.677 Recovery = 102.15%								
Ba 233.527†	43936.5	465.14	µg/L	0.412	465.14	ppb	0.412	0.09%
QC value within limits for Ba 233.527 Recovery = 93.03%								
Be 313.107†	338129.4	230.79	µg/L	0.260	230.79	ppb	0.260	0.11%
QC value within limits for Be 313.107 Recovery = 92.32%								
Ca 317.933Radial†	2249147.6	475010	µg/L	3558.6	475010	ppb	3558.6	0.75%
QC value within limits for Ca 317.933Radial Recovery = 95.00%								
Cd 226.502†	12358.5	440.01	µg/L	0.697	440.01	ppb	0.697	0.16%
QC value within limits for Cd 226.502 Recovery = 88.00%								

Co 228.616†	14037.7	429.76 µg/L	0.772	429.76 ppb	0.772	0.18%
QC value within limits for Co 228.616 Recovery = 85.95%						
Cr 267.716†	16733.9	474.07 µg/L	0.822	474.07 ppb	0.822	0.17%
QC value within limits for Cr 267.716 Recovery = 94.81%						
Cu 324.752†	123218.4	500.64 µg/L	2.685	500.64 ppb	2.685	0.54%
QC value within limits for Cu 324.752 Recovery = 100.13%						
Fe 238.204 Radial†	167256.8	184010 µg/L	225.0	184010 ppb	225.0	0.12%
QC value within limits for Fe 238.204 Radial Recovery = 92.01%						
K 766.490 Radial†	12817.1	5528.4 µg/L	13.77	5528.4 ppb	13.77	0.25%
QC value within limits for K 766.490 Radial Recovery = 110.57%						
Mg 279.077 IEC†	187597.9	498820 µg/L	737.0	498820 ppb	737.0	0.15%
QC value within limits for Mg 279.077 IEC Recovery = 99.76%						
Mn 257.610†	243975.5	458.62 µg/L	0.124	458.62 ppb	0.124	0.03%
QC value within limits for Mn 257.610 Recovery = 91.72%						
Mo 202.031†	3576.2	475.95 µg/L	0.187	475.95 ppb	0.187	0.04%
QC value within limits for Mo 202.031 Recovery = 95.19%						
Na 589.592 Radial†	35088.0	5275.0 µg/L	3.39	5275.0 ppb	3.39	0.06%
QC value within limits for Na 589.592 Radial Recovery = 105.50%						
Ni 231.604†	6365.5	416.55 µg/L	1.981	416.55 ppb	1.981	0.48%
QC value within limits for Ni 231.604 Recovery = 83.31%						
P 214.914†	2837.2	2303.4 µg/L	0.86	2303.4 ppb	0.86	0.04%
QC value within limits for P 214.914 Recovery = 92.14%						
Pb 220.353†	1443.9	434.96 µg/L	3.075	434.96 ppb	3.075	0.71%
QC value within limits for Pb 220.353 Recovery = 86.99%						
S 181.975 Axial†	1038.8	2445.2 µg/L	17.82	2445.2 ppb	17.82	0.73%
QC value within limits for S 181.975 Axial Recovery = 97.81%						
Sb 206.836†	1006.2	494.06 µg/L	6.557	494.06 ppb	6.557	1.33%
QC value within limits for Sb 206.836 Recovery = 98.81%						
Se 196.026†	2530.2	2260 µg/L	14.6	2260 ppb	14.6	0.65%
QC value within limits for Se 196.026 Recovery = 90.33%						
SiO2 †	133194.4	9517.2 µg/L	18.17	9517.2 ppb	18.17	0.19%
QC value within limits for SiO2 Recovery = 88.99%						
Si 251.611†	132716.9	4450 µg/L	1.7	4450 ppb	1.7	0.04%
QC value within limits for Si 251.611 Recovery = 89.10%						
Sn 189.927†	1540.1	444.33 µg/L	0.663	444.33 ppb	0.663	0.15%
QC value within limits for Sn 189.927 Recovery = 88.87%						
Sr 421.552†	128106.8	514.08 µg/L	0.488	514.08 ppb	0.488	0.09%
QC value within limits for Sr 421.552 Recovery = 102.82%						
Ti 334.940†	357773.2	484.68 µg/L	0.853	484.68 ppb	0.853	0.18%
QC value within limits for Ti 334.940 Recovery = 96.94%						
Tl 190.801†	1042.7	411.16 µg/L	5.111	411.16 ppb	5.111	1.24%
QC value within limits for Tl 190.801 Recovery = 82.23%						
U 409.014†	7220.6	447.89 µg/L	3.522	447.89 ppb	3.522	0.79%
QC value within limits for U 409.014 Recovery = 89.58%						
V 292.402†	32100.2	491.73 µg/L	0.868	491.73 ppb	0.868	0.18%
QC value within limits for V 292.402 Recovery = 98.35%						
Zn 213.857†	21498.2	463.19 µg/L	1.362	463.19 ppb	1.362	0.29%
QC value within limits for Zn 213.857 Recovery = 92.64%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCV
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/29/2005 18:12:44
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	46106.8	46106.8	102	%			18:14:08
1	Al 396.153Radial†	17935.1	17555.6	4992.1	µg/L	4992.1	ppb	18:14:08
1	Ca 317.933Radial†	24425.2	23870.0	5044.0	µg/L	5044.0	ppb	18:14:28
1	Fe 238.204 Radial†	4829.2	4710.5	5188.1	µg/L	5188.1	ppb	18:14:28
1	K 766.490 Radial†	13045.1	11765.1	5074.7	µg/L	5074.7	ppb	18:14:08
1	Mg 279.077 IEC†	1994.1	1958.5	5218.4	µg/L	5218.4	ppb	18:14:28
1	Na 589.592 Radial†	69501.6	67436.2	10139	µg/L	10139	ppb	18:14:08
1	Sr 421.552†	125692.3	123705.6	503.01	µg/L	503.01	ppb	18:14:08
1	Sc 361.383	1178291.4	1178291.4	105.49	%			18:15:27
1	Y 371.029	636145.5	636145.5	104.88	%			18:15:27
1	Ag 328.068†	68567.8	65662.9	496.16	µg/L	496.16	ppb	18:15:33
1	As 188.979†	968.7	949.5	500.85	µg/L	500.85	ppb	18:15:53
1	B 249.677†	7821.8	7374.0	488.71	µg/L	488.71	ppb	18:15:33
1	Ba 233.527†	48116.0	45747.9	486.51	µg/L	486.51	ppb	18:15:33
1	Be 313.107†	772143.6	731720.6	499.27	µg/L	499.27	ppb	18:15:27
1	Cd 226.502†	14122.2	13411.0	490.72	µg/L	490.72	ppb	18:15:33
1	Co 228.616†	16526.4	15801.4	487.82	µg/L	487.82	ppb	18:15:33
1	Cr 267.716†	18180.8	17157.3	486.05	µg/L	486.05	ppb	18:15:33
1	Cu 324.752†	135049.9	124243.0	498.62	µg/L	498.62	ppb	18:15:27
1	Mn 257.610†	290780.2	275276.1	500.27	µg/L	500.27	ppb	18:15:27
1	Mo 202.031†	4100.1	3885.5	510.87	µg/L	510.87	ppb	18:15:53
1	Ni 231.604†	8111.8	7514.1	491.61	µg/L	491.61	ppb	18:15:33
1	P 214.914†	3237.1	2881.4	2379.9	µg/L	2379.9	ppb	18:15:53
1	Pb 220.353†	1995.8	1903.7	498.43	µg/L	498.43	ppb	18:15:53
1	S 181.975 Axial†	466.4	410.6	991.48	µg/L	991.48	ppb	18:15:53
1	Sb 206.836†	1110.3	1015.3	493.86	µg/L	493.86	ppb	18:15:53
1	Se 196.026†	551.8	558.3	498	µg/L	498	ppb	18:15:53
1	SiO2 †	79245.4	73856.0	5245.4	µg/L	5245.4	ppb	18:15:33
1	Sn 189.927†	2014.6	1919.8	494.23	µg/L	494.23	ppb	18:15:53
1	Ti 334.940†	400038.6	378807.2	502.67	µg/L	502.67	ppb	18:15:27
1	Tl 190.801†	1289.3	1266.7	496.32	µg/L	496.32	ppb	18:15:53
1	U 409.014†	8286.2	7562.9	492.39	µg/L	492.39	ppb	18:15:33
1	V 292.402†	34131.0	32445.6	492.54	µg/L	492.54	ppb	18:15:33
1	Zn 213.857†	21855.8	20304.5	485.23	µg/L	485.23	ppb	18:15:33
1	Si 251.611†	78916.7	73555.5	2450	µg/L	2450	ppb	18:17:02
2	Sc RADIAL	46829.5	46829.5	103	%			18:14:33
2	Al 396.153Radial†	18241.0	17579.6	4998.3	µg/L	4998.3	ppb	18:14:33
2	Ca 317.933Radial†	24578.1	23647.3	4997.0	µg/L	4997.0	ppb	18:14:53
2	Fe 238.204 Radial†	4864.3	4671.2	5145.0	µg/L	5145.0	ppb	18:14:53
2	K 766.490 Radial†	13192.7	11710.1	5050.9	µg/L	5050.9	ppb	18:14:33
2	Mg 279.077 IEC†	2004.4	1938.3	5164.9	µg/L	5164.9	ppb	18:14:53
2	Na 589.592 Radial†	70495.3	67343.5	10125	µg/L	10125	ppb	18:14:33
2	Sr 421.552†	127659.6	123702.9	503.00	µg/L	503.00	ppb	18:14:33
2	Sc 361.383	1158034.9	1158034.9	103.68	%			18:15:59
2	Y 371.029	624983.1	624983.1	103.04	%			18:15:59
2	Ag 328.068†	69327.2	67532.3	510.26	µg/L	510.26	ppb	18:16:04
2	As 188.979†	968.3	965.2	509.22	µg/L	509.22	ppb	18:16:24
2	B 249.677†	7889.0	7568.6	501.62	µg/L	501.62	ppb	18:16:04
2	Ba 233.527†	48821.1	47225.7	502.23	µg/L	502.23	ppb	18:16:04
2	Be 313.107†	760983.7	733759.9	500.67	µg/L	500.67	ppb	18:15:59
2	Cd 226.502†	14335.9	13851.2	506.84	µg/L	506.84	ppb	18:16:04
2	Co 228.616†	16785.2	16325.0	504.02	µg/L	504.02	ppb	18:16:04
2	Cr 267.716†	18444.9	17713.5	501.81	µg/L	501.81	ppb	18:16:04
2	Cu 324.752†	132444.6	123969.5	497.50	µg/L	497.50	ppb	18:15:59
2	Mn 257.610†	286637.2	276101.7	501.76	µg/L	501.76	ppb	18:15:59
2	Mo 202.031†	4135.1	3987.2	524.23	µg/L	524.23	ppb	18:16:24
2	Ni 231.604†	8234.6	7767.1	508.16	µg/L	508.16	ppb	18:16:04
2	P 214.914†	3258.2	2955.4	2443.4	µg/L	2443.4	ppb	18:16:24

2	Pb 220.353†	2003.9	1944.6	509.13 µg/L	509.13 ppb	18:16:24
2	S 181.975 Axial†	469.6	421.4	1017.8 µg/L	1017.8 ppb	18:16:24
2	Sb 206.836†	1111.4	1034.8	503.30 µg/L	503.30 ppb	18:16:24
2	Se 196.026†	555.7	571.3	509 µg/L	509 ppb	18:16:24
2	SiO2 †	80431.2	76313.7	5420.0 µg/L	5420.0 ppb	18:16:04
2	Sn 189.927†	2024.1	1962.3	505.16 µg/L	505.16 ppb	18:16:24
2	Ti 334.940†	393148.3	378794.5	502.64 µg/L	502.64 ppb	18:15:59
2	Tl 190.801†	1300.0	1298.4	508.64 µg/L	508.64 ppb	18:16:24
2	U 409.014†	8414.5	7824.1	509.41 µg/L	509.41 ppb	18:16:04
2	V 292.402†	34580.2	33444.8	507.69 µg/L	507.69 ppb	18:16:04
2	Zn 213.857†	22127.5	20929.0	500.21 µg/L	500.21 ppb	18:16:04
2	Si 251.611†	78964.2	74909.8	2500 µg/L	2500 ppb	18:17:07
3	Sc RADIAL	46805.1	46805.1	103 %		18:14:59
3	Al 396.153Radial†	18276.8	17623.5	5011.3 µg/L	5011.3 ppb	18:14:59
3	Ca 317.933Radial†	24589.4	23670.6	5001.9 µg/L	5001.9 ppb	18:15:19
3	Fe 238.204 Radial†	4871.3	4680.4	5155.1 µg/L	5155.1 ppb	18:15:19
3	K 766.490 Radial†	13214.6	11738.0	5063.0 µg/L	5063.0 ppb	18:14:59
3	Mg 279.077 IEC†	2005.0	1939.8	5168.8 µg/L	5168.8 ppb	18:15:19
3	Na 589.592 Radial†	70557.0	67438.9	10140 µg/L	10140 ppb	18:14:59
3	Sr 421.552†	127709.1	123815.3	503.46 µg/L	503.46 ppb	18:14:59
3	Sc 361.383	1179320.1	1179320.1	105.59 %		18:16:30
3	Y 371.029	636453.0	636453.0	104.94 %		18:16:30
3	Ag 328.068†	69556.5	66542.6	502.79 µg/L	502.79 ppb	18:16:36
3	As 188.979†	968.0	948.1	500.22 µg/L	500.22 ppb	18:16:56
3	B 249.677†	7989.1	7526.0	498.79 µg/L	498.79 ppb	18:16:36
3	Ba 233.527†	49108.3	46647.9	496.08 µg/L	496.08 ppb	18:16:36
3	Be 313.107†	774799.8	733597.9	500.56 µg/L	500.56 ppb	18:16:30
3	Cd 226.502†	14361.1	13625.6	498.58 µg/L	498.58 ppb	18:16:36
3	Co 228.616†	16816.8	16062.8	495.90 µg/L	495.90 ppb	18:16:36
3	Cr 267.716†	18555.6	17497.2	495.68 µg/L	495.68 ppb	18:16:36
3	Cu 324.752†	134520.4	123629.8	496.15 µg/L	496.15 ppb	18:16:30
3	Mn 257.610†	291630.8	275841.3	501.29 µg/L	501.29 ppb	18:16:30
3	Mo 202.031†	4137.5	3917.5	515.08 µg/L	515.08 ppb	18:16:56
3	Ni 231.604†	8276.2	7663.2	501.36 µg/L	501.36 ppb	18:16:36
3	P 214.914†	3278.7	2918.1	2411.8 µg/L	2411.8 ppb	18:16:56
3	Pb 220.353†	2020.1	1925.0	504.03 µg/L	504.03 ppb	18:16:56
3	S 181.975 Axial†	474.2	417.6	1008.5 µg/L	1008.5 ppb	18:16:56
3	Sb 206.836†	1129.8	1032.9	502.33 µg/L	502.33 ppb	18:16:56
3	Se 196.026†	557.4	563.1	502 µg/L	502 ppb	18:16:56
3	SiO2 †	80660.6	75130.9	5336.0 µg/L	5336.0 ppb	18:16:36
3	Sn 189.927†	2044.8	1946.7	501.15 µg/L	501.15 ppb	18:16:56
3	Ti 334.940†	400438.1	378854.7	502.73 µg/L	502.73 ppb	18:16:30
3	Tl 190.801†	1309.9	1285.1	503.49 µg/L	503.49 ppb	18:16:56
3	U 409.014†	8389.0	7653.5	498.31 µg/L	498.31 ppb	18:16:36
3	V 292.402†	34731.8	32986.4	500.71 µg/L	500.71 ppb	18:16:36
3	Zn 213.857†	22248.8	20658.6	493.72 µg/L	493.72 ppb	18:16:36
3	Si 251.611†	79071.2	73636.5	2460 µg/L	2460 ppb	18:17:12

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1171882.2	104.92	%	1.075				1.02%
Sc RADIAL	46580.5	103	%	0.9				0.88%
Y 371.029	632527.2	104.29	%	1.077				1.03%
Ag 328.068†	66579.3	503.07	µg/L	7.051	503.07	ppb	7.051	1.40%
QC value within limits for Ag 328.068 Recovery = 100.61%								
Al 396.153Radial†	17586.2	5000.6	µg/L	9.80	5000.6	ppb	9.80	0.20%
QC value within limits for Al 396.153Radial Recovery = 100.01%								
As 188.979†	954.3	503.43	µg/L	5.027	503.43	ppb	5.027	1.00%
QC value within limits for As 188.979 Recovery = 100.69%								
B 249.677†	7489.5	496.37	µg/L	6.788	496.37	ppb	6.788	1.37%
QC value within limits for B 249.677 Recovery = 99.27%								
Ba 233.527†	46540.5	494.94	µg/L	7.921	494.94	ppb	7.921	1.60%
QC value within limits for Ba 233.527 Recovery = 98.99%								
Be 313.107†	733026.2	500.17	µg/L	0.776	500.17	ppb	0.776	0.16%
QC value within limits for Be 313.107 Recovery = 100.03%								
Ca 317.933Radial†	23729.3	5014.3	µg/L	25.82	5014.3	ppb	25.82	0.51%
QC value within limits for Ca 317.933Radial Recovery = 100.29%								
Cd 226.502†	13629.3	498.71	µg/L	8.063	498.71	ppb	8.063	1.62%
QC value within limits for Cd 226.502 Recovery = 99.74%								

Co 228.616†	16063.0	495.91 µg/L	8.100	495.91 ppb	8.100	1.63%
QC value within limits for Co 228.616 Recovery = 99.18%						
Cr 267.716†	17456.0	494.52 µg/L	7.943	494.52 ppb	7.943	1.61%
QC value within limits for Cr 267.716 Recovery = 98.90%						
Cu 324.752†	123947.4	497.42 µg/L	1.236	497.42 ppb	1.236	0.25%
QC value within limits for Cu 324.752 Recovery = 99.48%						
Fe 238.204 Radial†	4687.4	5162.7 µg/L	22.53	5162.7 ppb	22.53	0.44%
QC value within limits for Fe 238.204 Radial Recovery = 103.25%						
K 766.490 Radial†	11737.7	5062.9 µg/L	11.88	5062.9 ppb	11.88	0.23%
QC value within limits for K 766.490 Radial Recovery = 101.26%						
Mg 279.077 IEC†	1945.5	5184.0 µg/L	29.85	5184.0 ppb	29.85	0.58%
QC value within limits for Mg 279.077 IEC Recovery = 103.68%						
Mn 257.610†	275739.7	501.11 µg/L	0.764	501.11 ppb	0.764	0.15%
QC value within limits for Mn 257.610 Recovery = 100.22%						
Mo 202.031†	3930.1	516.73 µg/L	6.830	516.73 ppb	6.830	1.32%
QC value within limits for Mo 202.031 Recovery = 103.35%						
Na 589.592 Radial†	67406.2	10135 µg/L	8.2	10135 ppb	8.2	0.08%
QC value within limits for Na 589.592 Radial Recovery = 101.35%						
Ni 231.604†	7648.1	500.38 µg/L	8.315	500.38 ppb	8.315	1.66%
QC value within limits for Ni 231.604 Recovery = 100.08%						
P 214.914†	2918.3	2411.7 µg/L	31.76	2411.7 ppb	31.76	1.32%
QC value within limits for P 214.914 Recovery = 96.47%						
Pb 220.353†	1924.4	503.86 µg/L	5.355	503.86 ppb	5.355	1.06%
QC value within limits for Pb 220.353 Recovery = 100.77%						
S 181.975 Axial†	416.5	1005.9 µg/L	13.36	1005.9 ppb	13.36	1.33%
QC value within limits for S 181.975 Axial Recovery = 100.59%						
Sb 206.836†	1027.7	499.83 µg/L	5.189	499.83 ppb	5.189	1.04%
QC value within limits for Sb 206.836 Recovery = 99.97%						
Se 196.026†	564.2	503 µg/L	5.8	503 ppb	5.8	1.16%
QC value within limits for Se 196.026 Recovery = 100.58%						
SiO2 †	75100.2	5333.8 µg/L	87.33	5333.8 ppb	87.33	1.64%
QC value within limits for SiO2 Recovery = 99.74%						
Si 251.611†	74033.9	2470 µg/L	25.3	2470 ppb	25.3	1.02%
QC value within limits for Si 251.611 Recovery = 98.79%						
Sn 189.927†	1942.9	500.18 µg/L	5.531	500.18 ppb	5.531	1.11%
QC value within limits for Sn 189.927 Recovery = 100.04%						
Sr 421.552†	123741.3	503.16 µg/L	0.261	503.16 ppb	0.261	0.05%
QC value within limits for Sr 421.552 Recovery = 100.63%						
Ti 334.940†	378818.8	502.68 µg/L	0.044	502.68 ppb	0.044	0.01%
QC value within limits for Ti 334.940 Recovery = 100.54%						
Tl 190.801†	1283.4	502.82 µg/L	6.184	502.82 ppb	6.184	1.23%
QC value within limits for Tl 190.801 Recovery = 100.56%						
U 409.014†	7680.2	500.04 µg/L	8.640	500.04 ppb	8.640	1.73%
QC value within limits for U 409.014 Recovery = 100.01%						
V 292.402†	32958.9	500.32 µg/L	7.585	500.32 ppb	7.585	1.52%
QC value within limits for V 292.402 Recovery = 100.06%						
Zn 213.857†	20630.7	493.05 µg/L	7.509	493.05 ppb	7.509	1.52%
QC value within limits for Zn 213.857 Recovery = 98.61%						

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/29/2005 18:19:00
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	44334.2	44334.2	97.7	%			18:20:26
1	Al 396.153Radial†	129.4	39.8	11.360	µg/L	11.360	ppb	18:20:26
1	Ca 317.933Radial†	176.6	16.2	3.4714	µg/L	3.4714	ppb	18:20:46
1	Fe 238.204 Radial†	44.6	4.2	4.6698	µg/L	4.6698	ppb	18:20:46
1	K 766.490 Radial†	1127.5	82.6	35.629	µg/L	35.629	ppb	18:20:26
1	Mg 279.077 IEC†	11.5	8.1	21.518	µg/L	21.518	ppb	18:20:46
1	Na 589.592 Radial†	839.5	-94.5	-14.217	µg/L	-14.217	ppb	18:20:26
1	Sr 421.552†	-4.0	19.9	0.0808	µg/L	0.0808	ppb	18:20:26
1	Sc 361.383	1134616.8	1134616.8	101.58	%			18:21:44
1	Y 371.029	616697.1	616697.1	101.68	%			18:21:44
1	Ag 328.068†	-548.5	125.9	0.9469	µg/L	0.9469	ppb	18:21:49
1	As 188.979†	-27.9	3.8	1.9612	µg/L	1.9612	ppb	18:22:10
1	B 249.677†	163.6	120.6	7.9846	µg/L	7.9846	ppb	18:22:10
1	Ba 233.527†	-134.1	5.5	0.0596	µg/L	0.0596	ppb	18:22:10
1	Be 313.107†	283.9	66.8	0.0471	µg/L	0.0471	ppb	18:21:49
1	Cd 226.502†	-31.2	-6.5	-0.2347	µg/L	-0.2347	ppb	18:22:10
1	Co 228.616†	-144.6	-6.8	-0.2125	µg/L	-0.2125	ppb	18:22:10
1	Cr 267.716†	86.6	8.5	0.2350	µg/L	0.2350	ppb	18:22:10
1	Cu 324.752†	3993.5	157.2	0.6255	µg/L	0.6255	ppb	18:21:49
1	Mn 257.610†	383.4	16.0	0.0285	µg/L	0.0285	ppb	18:22:10
1	Mo 202.031†	2.5	1.4	0.1805	µg/L	0.1805	ppb	18:22:10
1	Ni 231.604†	173.9	-4.1	-0.2648	µg/L	-0.2648	ppb	18:22:10
1	P 214.914†	193.5	3.3	2.7125	µg/L	2.7125	ppb	18:22:10
1	Pb 220.353†	-5.5	6.4	1.6650	µg/L	1.6650	ppb	18:22:10
1	S 181.975 Axial†	33.3	1.2	2.9014	µg/L	2.9014	ppb	18:22:10
1	Sb 206.836†	48.4	10.4	5.0914	µg/L	5.0914	ppb	18:22:10
1	Se 196.026†	-35.4	0.4	0.401	µg/L	0.401	ppb	18:22:10
1	SiO2 †	1316.3	33.2	2.3526	µg/L	2.3526	ppb	18:21:49
1	Sn 189.927†	4.2	14.2	3.6491	µg/L	3.6491	ppb	18:22:10
1	Ti 334.940†	752.2	341.4	0.4494	µg/L	0.4494	ppb	18:21:49
1	Tl 190.801†	-40.5	4.6	1.8078	µg/L	1.8078	ppb	18:22:10
1	U 409.014†	418.6	120.3	7.8024	µg/L	7.8024	ppb	18:21:49
1	V 292.402†	-81.9	11.3	0.1804	µg/L	0.1804	ppb	18:21:49
1	Zn 213.857†	363.3	-55.5	-1.3382	µg/L	-1.3382	ppb	18:22:10
1	Si 251.611†	1321.1	48.9	1.63	µg/L	1.63	ppb	18:23:17
2	Sc RADIAL	45398.3	45398.3	100	%			18:20:51
2	Al 396.153Radial†	104.0	11.4	3.2578	µg/L	3.2578	ppb	18:20:51
2	Ca 317.933Radial†	190.9	26.4	5.5974	µg/L	5.5974	ppb	18:21:11
2	Fe 238.204 Radial†	50.9	9.4	10.387	µg/L	10.387	ppb	18:21:11
2	K 766.490 Radial†	1041.0	-30.9	-13.338	µg/L	-13.338	ppb	18:20:51
2	Mg 279.077 IEC†	8.6	4.9	13.109	µg/L	13.109	ppb	18:21:11
2	Na 589.592 Radial†	835.0	-119.2	-17.919	µg/L	-17.919	ppb	18:20:51
2	Sr 421.552†	-43.7	-19.7	-0.0802	µg/L	-0.0802	ppb	18:20:51
2	Sc 361.383	1135871.8	1135871.8	101.70	%			18:22:15
2	Y 371.029	617340.2	617340.2	101.78	%			18:22:15
2	Ag 328.068†	-620.2	56.0	0.4226	µg/L	0.4226	ppb	18:22:20
2	As 188.979†	-22.5	9.2	4.7750	µg/L	4.7750	ppb	18:22:41
2	B 249.677†	169.5	126.3	8.3574	µg/L	8.3574	ppb	18:22:41
2	Ba 233.527†	-130.2	9.5	0.1014	µg/L	0.1014	ppb	18:22:41
2	Be 313.107†	291.3	73.8	0.0513	µg/L	0.0513	ppb	18:22:20
2	Cd 226.502†	-23.9	0.7	0.0278	µg/L	0.0278	ppb	18:22:41
2	Co 228.616†	-139.4	-1.5	-0.0488	µg/L	-0.0488	ppb	18:22:41
2	Cr 267.716†	80.8	2.7	0.0732	µg/L	0.0732	ppb	18:22:41
2	Cu 324.752†	3956.7	116.7	0.4653	µg/L	0.4653	ppb	18:22:20
2	Mn 257.610†	375.8	8.2	0.0153	µg/L	0.0153	ppb	18:22:41
2	Mo 202.031†	-0.0	-1.1	-0.1411	µg/L	-0.1411	ppb	18:22:41
2	Ni 231.604†	180.2	1.9	0.1267	µg/L	0.1267	ppb	18:22:41
2	P 214.914†	201.9	11.4	9.6694	µg/L	9.6694	ppb	18:22:41

2	Pb 220.353†	0.0	11.8	3.0917 µg/L	3.0917 ppb	18:22:41
2	S 181.975 Axial†	32.6	0.5	1.2935 µg/L	1.2935 ppb	18:22:41
2	Sb 206.836†	53.3	15.2	7.4205 µg/L	7.4205 ppb	18:22:41
2	Se 196.026†	-31.0	4.8	4.27 µg/L	4.27 ppb	18:22:41
2	SiO2 †	1333.2	48.5	3.4502 µg/L	3.4502 ppb	18:22:20
2	Sn 189.927†	4.7	14.7	3.7745 µg/L	3.7745 ppb	18:22:41
2	Ti 334.940†	672.0	261.8	0.3452 µg/L	0.3452 ppb	18:22:20
2	Tl 190.801†	-36.1	9.0	3.4972 µg/L	3.4972 ppb	18:22:41
2	U 409.014†	373.7	75.7	4.9081 µg/L	4.9081 ppb	18:22:20
2	V 292.402†	-80.4	12.9	0.1972 µg/L	0.1972 ppb	18:22:20
2	Zn 213.857†	368.4	-50.9	-1.2301 µg/L	-1.2301 ppb	18:22:41
2	Si 251.611†	1313.2	39.7	1.33 µg/L	1.33 ppb	18:23:22
3	Sc RADIAL	44108.2	44108.2	97.2 %		18:21:16
3	Al 396.153Radial†	139.2	50.6	14.466 µg/L	14.466 ppb	18:21:16
3	Ca 317.933Radial†	189.7	30.6	6.4850 µg/L	6.4850 ppb	18:21:36
3	Fe 238.204 Radial†	43.5	3.3	3.6339 µg/L	3.6339 ppb	18:21:36
3	K 766.490 Radial†	1083.7	43.5	18.762 µg/L	18.762 ppb	18:21:16
3	Mg 279.077 IEC†	5.1	1.6	4.3246 µg/L	4.3246 ppb	18:21:36
3	Na 589.592 Radial†	843.6	-85.9	-12.915 µg/L	-12.915 ppb	18:21:16
3	Sr 421.552†	-39.8	-17.0	-0.0692 µg/L	-0.0692 ppb	18:21:16
3	Sc 361.383	1131821.1	1131821.1	101.33 %		18:22:46
3	Y 371.029	614998.7	614998.7	101.40 %		18:22:46
3	Ag 328.068†	-664.5	10.1	0.0764 µg/L	0.0764 ppb	18:22:51
3	As 188.979†	-18.9	12.6	6.5371 µg/L	6.5371 ppb	18:23:11
3	B 249.677†	165.5	122.9	8.1342 µg/L	8.1342 ppb	18:23:11
3	Ba 233.527†	-140.4	-1.0	-0.0103 µg/L	-0.0103 ppb	18:23:11
3	Be 313.107†	278.5	62.1	0.0428 µg/L	0.0428 ppb	18:22:51
3	Cd 226.502†	-28.0	-3.4	-0.1233 µg/L	-0.1233 ppb	18:23:11
3	Co 228.616†	-134.8	2.6	0.0787 µg/L	0.0787 ppb	18:23:11
3	Cr 267.716†	65.2	-12.4	-0.3541 µg/L	-0.3541 ppb	18:23:11
3	Cu 324.752†	3998.8	172.1	0.6895 µg/L	0.6895 ppb	18:22:51
3	Mn 257.610†	374.8	8.5	0.0156 µg/L	0.0156 ppb	18:23:11
3	Mo 202.031†	1.2	0.1	0.0118 µg/L	0.0118 ppb	18:23:11
3	Ni 231.604†	188.9	11.2	0.7321 µg/L	0.7321 ppb	18:23:11
3	P 214.914†	199.6	9.8	8.2992 µg/L	8.2992 ppb	18:23:11
3	Pb 220.353†	-12.6	-0.7	-0.1712 µg/L	-0.1712 ppb	18:23:11
3	S 181.975 Axial†	33.5	1.5	3.6420 µg/L	3.6420 ppb	18:23:11
3	Sb 206.836†	47.6	9.8	4.7614 µg/L	4.7614 ppb	18:23:11
3	Se 196.026†	-30.3	5.4	4.81 µg/L	4.81 ppb	18:23:11
3	SiO2 †	1327.1	47.1	3.3496 µg/L	3.3496 ppb	18:22:51
3	Sn 189.927†	-1.3	8.7	2.2429 µg/L	2.2429 ppb	18:23:11
3	Ti 334.940†	709.2	300.9	0.3986 µg/L	0.3986 ppb	18:22:51
3	Tl 190.801†	-39.2	5.8	2.2657 µg/L	2.2657 ppb	18:23:11
3	U 409.014†	331.0	34.9	2.2618 µg/L	2.2618 ppb	18:22:51
3	V 292.402†	-94.4	-1.1	-0.0155 µg/L	-0.0155 ppb	18:22:51
3	Zn 213.857†	374.3	-43.7	-1.0611 µg/L	-1.0611 ppb	18:23:11
3	Si 251.611†	1362.3	92.9	3.10 µg/L	3.10 ppb	18:23:27

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1134103.2	101.54	%	0.186				0.18%
Sc RADIAL	44613.6	98.3	%	1.52				1.54%
Y 371.029	616345.3	101.62	%	0.199				0.20%
Ag 328.068†	64.0	0.4820	µg/L	0.43827	0.4820	ppb	0.43827	90.93%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	33.9	9.6948	µg/L	5.78694	9.6948	ppb	5.78694	59.69%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	8.5	4.4244	µg/L	2.30797	4.4244	ppb	2.30797	52.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	123.2	8.1587	µg/L	0.18759	8.1587	ppb	0.18759	2.30%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.6	0.0502	µg/L	0.05644	0.0502	ppb	0.05644	112.35%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	67.6	0.0470	µg/L	0.00424	0.0470	ppb	0.00424	9.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	24.4	5.1846	µg/L	1.54863	5.1846	ppb	1.54863	29.87%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-3.0	-0.1101	µg/L	0.13177	-0.1101	ppb	0.13177	119.71%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-1.9	-0.0609 µg/L	0.14596	-0.0609 ppb	0.14596	239.77%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-0.4	-0.0153 µg/L	0.30437	-0.0153 ppb	0.30437	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	148.7	0.5934 µg/L	0.11547	0.5934 ppb	0.11547	19.46%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	5.7	6.2303 µg/L	3.63713	6.2303 ppb	3.63713	58.38%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	31.7	13.684 µg/L	24.8751	13.684 ppb	24.8751	181.78%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	4.9	12.984 µg/L	8.5975	12.984 ppb	8.5975	66.22%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	10.9	0.0198 µg/L	0.00751	0.0198 ppb	0.00751	37.99%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.1	0.0171 µg/L	0.16085	0.0171 ppb	0.16085	943.11%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-99.9	-15.017 µg/L	2.5959	-15.017 ppb	2.5959	17.29%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	3.0	0.1980 µg/L	0.50226	0.1980 ppb	0.50226	253.62%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	8.2	6.8937 µg/L	3.68523	6.8937 ppb	3.68523	53.46%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	5.9	1.5285 µg/L	1.63571	1.5285 ppb	1.63571	107.01%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.1	2.6123 µg/L	1.20064	2.6123 ppb	1.20064	45.96%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	11.8	5.7577 µg/L	1.44942	5.7577 ppb	1.44942	25.17%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.5	3.16 µg/L	2.404	3.16 ppb	2.404	76.10%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	42.9	3.0508 µg/L	0.60674	3.0508 ppb	0.60674	19.89%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	60.5	2.02 µg/L	0.951	2.02 ppb	0.951	47.06%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	12.5	3.2222 µg/L	0.85036	3.2222 ppb	0.85036	26.39%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-5.6	-0.0229 µg/L	0.08994	-0.0229 ppb	0.08994	393.18%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	301.4	0.3977 µg/L	0.05213	0.3977 ppb	0.05213	13.11%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	6.5	2.5236 µg/L	0.87373	2.5236 ppb	0.87373	34.62%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	77.0	4.9907 µg/L	2.77120	4.9907 ppb	2.77120	55.53%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	7.7	0.1207 µg/L	0.11825	0.1207 ppb	0.11825	97.96%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-50.0	-1.2098 µg/L	0.13968	-1.2098 ppb	0.13968	11.55%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analysis Begun

Start Time: 6/29/2005 18:43:21 Plasma On Time: 6/29/2005 16:45:06
Logged In Analyst: Administrator Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N2061001Autosampler Model: AS-93plus

Sample Information File: C:\pe\Sample Information\062905.sif
Batch ID:
Results Data Set: 062905
Results Library: C:\pe\Results\results.mdb

Method Loaded
Method Name: General Eng.2AZ Method Last Saved: 6/8/2005 09:55:36
IEC File: 011105AIEC.iec MSF File:
Method Description:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Se 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 6/29/2005 18:43:21
Nebulizer Back Pressure: 253.0 kPa Nebulizer Flow: 0.65 L/min
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	46803.1	46803.1	103	%			18:44:48
1	Al 396.153Radial†	17943.9	17301.6	4919.4	µg/L	4919.4	ppb	18:44:48
1	Ca 317.933Radial†	24273.6	23365.5	4937.5	µg/L	4937.5	ppb	18:45:08

1	Fe 238.204 Radial†	4846.0	4656.1	5128.4 µg/L	5128.4 ppb	18:45:08
1	K 766.490 Radial†	13034.5	11564.0	4987.9 µg/L	4987.9 ppb	18:44:48
1	Mg 279.077 IEC†	1987.2	1922.6	5123.1 µg/L	5123.1 ppb	18:45:08
1	Na 589.592 Radial†	70144.4	67041.9	10080 µg/L	10080 ppb	18:44:48
1	Sr 421.552†	126793.1	122932.8	499.87 µg/L	499.87 ppb	18:44:48
1	Sc 361.383	1163541.0	1163541.0	104.17 %		18:46:07
1	Y 371.029	628025.4	628025.4	103.55 %		18:46:07
1	Ag 328.068†	69404.2	67289.8	508.43 µg/L	508.43 ppb	18:46:13
1	As 188.979†	957.0	949.9	501.20 µg/L	501.20 ppb	18:46:33
1	B 249.677†	7848.5	7493.6	496.63 µg/L	496.63 ppb	18:46:13
1	Ba 233.527†	48960.4	47136.6	501.28 µg/L	501.28 ppb	18:46:13
1	Be 313.107†	763619.8	732817.1	500.02 µg/L	500.02 ppb	18:46:07
1	Cd 226.502†	14358.5	13807.5	505.24 µg/L	505.24 ppb	18:46:13
1	Co 228.616†	16847.5	16308.2	503.49 µg/L	503.49 ppb	18:46:13
1	Cr 267.716†	18480.4	17663.3	500.39 µg/L	500.39 ppb	18:46:13
1	Cu 324.752†	135606.6	126400.3	507.27 µg/L	507.27 ppb	18:46:13
1	Mn 257.610†	286969.9	275112.8	499.97 µg/L	499.97 ppb	18:46:07
1	Mo 202.031†	4068.2	3904.1	513.32 µg/L	513.32 ppb	18:46:33
1	Ni 231.604†	8296.3	7788.7	509.55 µg/L	509.55 ppb	18:46:13
1	P 214.914†	3226.3	2909.9	2403.0 µg/L	2403.0 ppb	18:46:33
1	Pb 220.353†	1972.4	1905.2	498.81 µg/L	498.81 ppb	18:46:33
1	S 181.975 Axial†	461.1	411.1	992.77 µg/L	992.77 ppb	18:46:33
1	Sb 206.836†	1087.4	1006.7	489.52 µg/L	489.52 ppb	18:46:33
1	Se 196.026†	556.9	569.9	508 µg/L	508 ppb	18:46:33
1	SiO2 †	80325.8	75845.4	5387.0 µg/L	5387.0 ppb	18:46:13
1	Sn 189.927†	2008.4	1938.0	498.90 µg/L	498.90 ppb	18:46:33
1	Ti 334.940†	393585.7	377420.0	500.82 µg/L	500.82 ppb	18:46:07
1	Tl 190.801†	1287.5	1280.4	501.63 µg/L	501.63 ppb	18:46:33
1	U 409.014†	8370.4	7743.3	504.17 µg/L	504.17 ppb	18:46:13
1	V 292.402†	34689.2	33391.5	506.78 µg/L	506.78 ppb	18:46:13
1	Zn 213.857†	22178.5	20877.0	498.93 µg/L	498.93 ppb	18:46:13
1	Si 251.611†	79015.8	74599.0	2490 µg/L	2490 ppb	18:47:41
2	Sc RADIAL	46272.8	46272.8	102 %		18:45:13
2	Al 396.153Radial†	17885.4	17443.6	4959.8 µg/L	4959.8 ppb	18:45:13
2	Ca 317.933Radial†	24381.2	23740.7	5016.7 µg/L	5016.7 ppb	18:45:33
2	Fe 238.204 Radial†	4855.2	4718.9	5197.4 µg/L	5197.4 ppb	18:45:33
2	K 766.490 Radial†	12961.2	11636.9	5019.4 µg/L	5019.4 ppb	18:45:13
2	Mg 279.077 IEC†	1990.3	1947.8	5190.0 µg/L	5190.0 ppb	18:45:33
2	Na 589.592 Radial†	69768.8	67452.9	10142 µg/L	10142 ppb	18:45:13
2	Sr 421.552†	126053.3	123615.9	502.65 µg/L	502.65 ppb	18:45:13
2	Sc 361.383	1167412.1	1167412.1	104.52 %		18:46:39
2	Y 371.029	630093.1	630093.1	103.89 %		18:46:39
2	Ag 328.068†	68903.7	66590.1	503.16 µg/L	503.16 ppb	18:46:44
2	As 188.979†	972.4	961.6	507.27 µg/L	507.27 ppb	18:47:04
2	B 249.677†	7808.8	7430.6	492.48 µg/L	492.48 ppb	18:46:44
2	Ba 233.527†	48554.7	46592.6	495.50 µg/L	495.50 ppb	18:46:44
2	Be 313.107†	765116.8	731818.7	499.34 µg/L	499.34 ppb	18:46:39
2	Cd 226.502†	14273.9	13680.9	500.60 µg/L	500.60 ppb	18:46:44
2	Co 228.616†	16659.0	16074.2	496.26 µg/L	496.26 ppb	18:46:44
2	Cr 267.716†	18374.9	17503.6	495.86 µg/L	495.86 ppb	18:46:44
2	Cu 324.752†	135143.3	125525.4	503.76 µg/L	503.76 ppb	18:46:44
2	Mn 257.610†	287746.8	274942.6	499.67 µg/L	499.67 ppb	18:46:39
2	Mo 202.031†	4119.8	3940.6	518.11 µg/L	518.11 ppb	18:47:04
2	Ni 231.604†	8134.5	7607.5	497.72 µg/L	497.72 ppb	18:46:44
2	P 214.914†	3249.7	2922.1	2413.8 µg/L	2413.8 ppb	18:47:04
2	Pb 220.353†	1999.0	1924.4	503.84 µg/L	503.84 ppb	18:47:04
2	S 181.975 Axial†	464.3	412.6	996.54 µg/L	996.54 ppb	18:47:04
2	Sb 206.836†	1113.8	1028.5	500.22 µg/L	500.22 ppb	18:47:04
2	Se 196.026†	548.8	560.3	499 µg/L	499 ppb	18:47:04
2	SiO2 †	79583.6	74879.7	5318.0 µg/L	5318.0 ppb	18:46:44
2	Sn 189.927†	2026.4	1948.9	501.71 µg/L	501.71 ppb	18:47:04
2	Ti 334.940†	395045.7	377564.0	501.01 µg/L	501.01 ppb	18:46:39
2	Tl 190.801†	1298.4	1286.8	504.11 µg/L	504.11 ppb	18:47:04
2	U 409.014†	8413.9	7758.4	505.11 µg/L	505.11 ppb	18:46:44
2	V 292.402†	34390.2	32995.1	500.88 µg/L	500.88 ppb	18:46:44
2	Zn 213.857†	21991.4	20627.3	492.98 µg/L	492.98 ppb	18:46:44
2	Si 251.611†	78697.9	74043.2	2470 µg/L	2470 ppb	18:47:47
3	Sc RADIAL	46849.8	46849.8	103 %		18:45:39
3	Al 396.153Radial†	18080.4	17416.5	4952.3 µg/L	4952.3 ppb	18:45:39
3	Ca 317.933Radial†	24455.2	23517.9	4969.6 µg/L	4969.6 ppb	18:45:59
3	Fe 238.204 Radial†	4870.6	4675.2	5149.3 µg/L	5149.3 ppb	18:45:59

3	K 766.490 Radial†	13179.4	11691.7	5043.0 µg/L	5043.0 ppb	18:45:39
3	Mg 279.077 IEC†	2009.0	1941.9	5174.3 µg/L	5174.3 ppb	18:45:59
3	Na 589.592 Radial†	70654.2	67467.7	10144 µg/L	10144 ppb	18:45:39
3	Sr 421.552†	127565.4	123558.0	502.41 µg/L	502.41 ppb	18:45:39
3	Sc 361.383	1174982.4	1174982.4	105.20 %		18:47:10
3	Y 371.029	634285.0	634285.0	104.58 %		18:47:10
3	Ag 328.068†	68591.7	65868.7	497.71 µg/L	497.71 ppb	18:47:15
3	As 188.979†	962.7	946.4	499.29 µg/L	499.29 ppb	18:47:36
3	B 249.677†	7820.2	7393.4	490.00 µg/L	490.00 ppb	18:47:15
3	Ba 233.527†	48304.8	46055.7	489.79 µg/L	489.79 ppb	18:47:15
3	Be 313.107†	770795.9	732500.8	499.80 µg/L	499.80 ppb	18:47:10
3	Cd 226.502†	14147.7	13473.0	492.99 µg/L	492.99 ppb	18:47:15
3	Co 228.616†	16579.9	15896.3	490.76 µg/L	490.76 ppb	18:47:15
3	Cr 267.716†	18309.5	17328.2	490.90 µg/L	490.90 ppb	18:47:15
3	Cu 324.752†	134463.6	124046.2	497.83 µg/L	497.83 ppb	18:47:15
3	Mn 257.610†	289779.2	275100.8	499.95 µg/L	499.95 ppb	18:47:10
3	Mo 202.031†	4096.7	3893.2	511.88 µg/L	511.88 ppb	18:47:36
3	Ni 231.604†	8135.9	7558.7	494.53 µg/L	494.53 ppb	18:47:15
3	P 214.914†	3237.5	2890.5	2387.8 µg/L	2387.8 ppb	18:47:36
3	Pb 220.353†	1996.5	1909.7	500.01 µg/L	500.01 ppb	18:47:36
3	S 181.975 Axial†	465.3	410.8	991.93 µg/L	991.93 ppb	18:47:36
3	Sb 206.836†	1118.2	1025.8	498.91 µg/L	498.91 ppb	18:47:36
3	Se 196.026†	543.3	551.8	492 µg/L	492 ppb	18:47:36
3	SiO2 †	79227.6	74050.7	5259.2 µg/L	5259.2 ppb	18:47:15
3	Sn 189.927†	2017.7	1928.0	496.34 µg/L	496.34 ppb	18:47:36
3	Ti 334.940†	398038.7	377974.0	501.56 µg/L	501.56 ppb	18:47:10
3	Tl 190.801†	1283.9	1265.0	495.66 µg/L	495.66 ppb	18:47:36
3	U 409.014†	8250.0	7550.7	491.61 µg/L	491.61 ppb	18:47:15
3	V 292.402†	34187.8	32590.7	494.73 µg/L	494.73 ppb	18:47:15
3	Zn 213.857†	21890.5	20395.9	487.43 µg/L	487.43 ppb	18:47:15
3	Si 251.611†	78790.2	73645.9	2460 µg/L	2460 ppb	18:47:52

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1168645.2	104.63	%	0.521				0.50%
Sc RADIAL	46641.9	103	%	0.7				0.69%
Y 371.029	630801.2	104.00	%	0.526				0.51%
Ag 328.068†	66582.9	503.10	µg/L	5.359	503.10	ppb	5.359	1.07%
QC value within limits for Ag 328.068 Recovery = 100.62%								
Al 396.153Radial†	17387.2	4943.8	µg/L	21.47	4943.8	ppb	21.47	0.43%
QC value within limits for Al 396.153Radial Recovery = 98.88%								
As 188.979†	952.6	502.59	µg/L	4.166	502.59	ppb	4.166	0.83%
QC value within limits for As 188.979 Recovery = 100.52%								
B 249.677†	7439.2	493.04	µg/L	3.351	493.04	ppb	3.351	0.68%
QC value within limits for B 249.677 Recovery = 98.61%								
Ba 233.527†	46595.0	495.52	µg/L	5.747	495.52	ppb	5.747	1.16%
QC value within limits for Ba 233.527 Recovery = 99.10%								
Be 313.107†	732378.9	499.72	µg/L	0.348	499.72	ppb	0.348	0.07%
QC value within limits for Be 313.107 Recovery = 99.94%								
Ca 317.933Radial†	23541.4	4974.6	µg/L	39.85	4974.6	ppb	39.85	0.80%
QC value within limits for Ca 317.933Radial Recovery = 99.49%								
Cd 226.502†	13653.8	499.61	µg/L	6.187	499.61	ppb	6.187	1.24%
QC value within limits for Cd 226.502 Recovery = 99.92%								
Co 228.616†	16092.9	496.83	µg/L	6.384	496.83	ppb	6.384	1.28%
QC value within limits for Co 228.616 Recovery = 99.37%								
Cr 267.716†	17498.3	495.72	µg/L	4.750	495.72	ppb	4.750	0.96%
QC value within limits for Cr 267.716 Recovery = 99.14%								
Cu 324.752†	125323.9	502.95	µg/L	4.775	502.95	ppb	4.775	0.95%
QC value within limits for Cu 324.752 Recovery = 100.59%								
Fe 238.204 Radial†	4683.4	5158.4	µg/L	35.41	5158.4	ppb	35.41	0.69%
QC value within limits for Fe 238.204 Radial Recovery = 103.17%								
K 766.490 Radial†	11630.9	5016.8	µg/L	27.64	5016.8	ppb	27.64	0.55%
QC value within limits for K 766.490 Radial Recovery = 100.34%								
Mg 279.077 IEC†	1937.4	5162.5	µg/L	35.01	5162.5	ppb	35.01	0.68%
QC value within limits for Mg 279.077 IEC Recovery = 103.25%								
Mn 257.610†	275052.1	499.86	µg/L	0.169	499.86	ppb	0.169	0.03%
QC value within limits for Mn 257.610 Recovery = 99.97%								
Mo 202.031†	3912.7	514.44	µg/L	3.260	514.44	ppb	3.260	0.63%
QC value within limits for Mo 202.031 Recovery = 102.89%								

Na 589.592 Radial†	67320.8	10122 µg/L	36.3	10122 ppb	36.3	0.36%
QC value within limits for Na 589.592 Radial Recovery = 101.22%						
Ni 231.604†	7651.6	500.60 µg/L	7.912	500.60 ppb	7.912	1.58%
QC value within limits for Ni 231.604 Recovery = 100.12%						
P 214.914†	2907.5	2401.5 µg/L	13.06	2401.5 ppb	13.06	0.54%
QC value within limits for P 214.914 Recovery = 96.06%						
Pb 220.353†	1913.1	500.89 µg/L	2.626	500.89 ppb	2.626	0.52%
QC value within limits for Pb 220.353 Recovery = 100.18%						
S 181.975 Axial†	411.5	993.75 µg/L	2.456	993.75 ppb	2.456	0.25%
QC value within limits for S 181.975 Axial Recovery = 99.37%						
Sb 206.836†	1020.3	496.21 µg/L	5.836	496.21 ppb	5.836	1.18%
QC value within limits for Sb 206.836 Recovery = 99.24%						
Se 196.026†	560.7	500 µg/L	8.1	500 ppb	8.1	1.61%
QC value within limits for Se 196.026 Recovery = 99.94%						
SiO2 †	74925.3	5321.4 µg/L	63.97	5321.4 ppb	63.97	1.20%
QC value within limits for SiO2 Recovery = 99.51%						
Si 251.611†	74096.0	2470 µg/L	16.0	2470 ppb	16.0	0.65%
QC value within limits for Si 251.611 Recovery = 98.87%						
Sn 189.927†	1938.3	498.98 µg/L	2.683	498.98 ppb	2.683	0.54%
QC value within limits for Sn 189.927 Recovery = 99.80%						
Sr 421.552†	123368.9	501.64 µg/L	1.540	501.64 ppb	1.540	0.31%
QC value within limits for Sr 421.552 Recovery = 100.33%						
Ti 334.940†	377652.7	501.13 µg/L	0.387	501.13 ppb	0.387	0.08%
QC value within limits for Ti 334.940 Recovery = 100.23%						
Tl 190.801†	1277.4	500.47 µg/L	4.347	500.47 ppb	4.347	0.87%
QC value within limits for Tl 190.801 Recovery = 100.09%						
U 409.014†	7684.1	500.30 µg/L	7.536	500.30 ppb	7.536	1.51%
QC value within limits for U 409.014 Recovery = 100.06%						
V 292.402†	32992.4	500.80 µg/L	6.024	500.80 ppb	6.024	1.20%
QC value within limits for V 292.402 Recovery = 100.16%						
Zn 213.857†	20633.4	493.11 µg/L	5.753	493.11 ppb	5.753	1.17%
QC value within limits for Zn 213.857 Recovery = 98.62%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Nebulizer Back Pressure: 253.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/29/2005 18:49:40
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	44525.6	44525.6	98.1	%			18:51:07
1	Al 396.153Radial†	129.4	39.3	11.196	µg/L	11.196	ppb	18:51:07
1	Ca 317.933Radial†	165.5	4.2	0.9244	µg/L	0.9244	ppb	18:51:27
1	Fe 238.204 Radial†	40.3	-0.4	-0.4468	µg/L	-0.4468	ppb	18:51:27
1	K 766.490 Radial†	1146.1	96.6	41.667	µg/L	41.667	ppb	18:51:07
1	Mg 279.077 IEC†	1.5	-2.1	-5.4854	µg/L	-5.4854	ppb	18:51:27
1	Na 589.592 Radial†	781.2	-157.6	-23.700	µg/L	-23.700	ppb	18:51:07
1	Sr 421.552†	-5.0	18.9	0.0769	µg/L	0.0769	ppb	18:51:07
1	Sc 361.383	1096424.4	1096424.4	98.164	%			18:52:25
1	Y 371.029	595510.7	595510.7	98.185	%			18:52:25
1	Ag 328.068†	-575.5	79.7	0.5969	µg/L	0.5969	ppb	18:52:30
1	As 188.979†	-21.1	9.8	5.1065	µg/L	5.1065	ppb	18:52:51
1	B 249.677†	155.1	117.5	7.7830	µg/L	7.7830	ppb	18:52:51
1	Ba 233.527†	-150.2	-15.5	-0.1641	µg/L	-0.1641	ppb	18:52:51
1	Be 313.107†	287.8	80.5	0.0563	µg/L	0.0563	ppb	18:52:30
1	Cd 226.502†	-18.1	5.8	0.2130	µg/L	0.2130	ppb	18:52:51
1	Co 228.616†	-142.3	-9.4	-0.2914	µg/L	-0.2914	ppb	18:52:51
1	Cr 267.716†	74.4	-1.0	-0.0320	µg/L	-0.0320	ppb	18:52:51
1	Cu 324.752†	3866.9	165.1	0.6571	µg/L	0.6571	ppb	18:52:30
1	Mn 257.610†	388.4	34.3	0.0614	µg/L	0.0614	ppb	18:52:51
1	Mo 202.031†	4.8	3.8	0.5037	µg/L	0.5037	ppb	18:52:51
1	Ni 231.604†	184.4	12.6	0.8255	µg/L	0.8255	ppb	18:52:51
1	P 214.914†	184.7	1.1	0.7837	µg/L	0.7837	ppb	18:52:51
1	Pb 220.353†	-11.0	0.6	0.1536	µg/L	0.1536	ppb	18:52:51
1	S 181.975 Axial†	32.5	1.6	3.8444	µg/L	3.8444	ppb	18:52:51
1	Sb 206.836†	51.5	15.3	7.4659	µg/L	7.4659	ppb	18:52:51
1	Se 196.026†	-30.0	4.8	4.25	µg/L	4.25	ppb	18:52:51
1	SiO2 †	1351.9	114.6	8.1395	µg/L	8.1395	ppb	18:52:30
1	Sn 189.927†	1.6	11.6	2.9955	µg/L	2.9955	ppb	18:52:51
1	Ti 334.940†	777.6	393.1	0.5183	µg/L	0.5183	ppb	18:52:30
1	Tl 190.801†	-38.5	5.2	2.0478	µg/L	2.0478	ppb	18:52:51
1	U 409.014†	395.7	111.4	7.2191	µg/L	7.2191	ppb	18:52:30
1	V 292.402†	-114.0	-24.1	-0.3494	µg/L	-0.3494	ppb	18:52:30
1	Zn 213.857†	381.2	-24.8	-0.6035	µg/L	-0.6035	ppb	18:52:51
1	Si 251.611†	1358.8	132.7	4.43	µg/L	4.43	ppb	18:53:58
2	Sc RADIAL	44466.4	44466.4	98.0	%			18:51:32
2	Al 396.153Radial†	101.0	10.5	2.9895	µg/L	2.9895	ppb	18:51:32
2	Ca 317.933Radial†	168.3	7.3	1.5543	µg/L	1.5543	ppb	18:51:52
2	Fe 238.204 Radial†	46.0	5.5	6.0312	µg/L	6.0312	ppb	18:51:52
2	K 766.490 Radial†	1135.4	87.2	37.603	µg/L	37.603	ppb	18:51:32
2	Mg 279.077 IEC†	1.8	-1.8	-4.7722	µg/L	-4.7722	ppb	18:51:52
2	Na 589.592 Radial†	813.2	-123.9	-18.625	µg/L	-18.625	ppb	18:51:32
2	Sr 421.552†	-35.1	-11.9	-0.0482	µg/L	-0.0482	ppb	18:51:32
2	Sc 361.383	1125515.9	1125515.9	100.77	%			18:52:56
2	Y 371.029	611120.8	611120.8	100.76	%			18:52:56
2	Ag 328.068†	-602.9	67.6	0.5096	µg/L	0.5096	ppb	18:53:01
2	As 188.979†	-23.5	8.0	4.1443	µg/L	4.1443	ppb	18:53:21
2	B 249.677†	131.0	89.5	5.9280	µg/L	5.9280	ppb	18:53:21
2	Ba 233.527†	-143.2	-4.6	-0.0479	µg/L	-0.0479	ppb	18:53:21
2	Be 313.107†	248.2	33.7	0.0235	µg/L	0.0235	ppb	18:53:01
2	Cd 226.502†	-21.8	2.6	0.0959	µg/L	0.0959	ppb	18:53:21
2	Co 228.616†	-151.3	-14.5	-0.4500	µg/L	-0.4500	ppb	18:53:21
2	Cr 267.716†	72.9	-4.4	-0.1254	µg/L	-0.1254	ppb	18:53:21
2	Cu 324.752†	3880.5	76.9	0.3065	µg/L	0.3065	ppb	18:53:01
2	Mn 257.610†	373.9	9.7	0.0179	µg/L	0.0179	ppb	18:53:21
2	Mo 202.031†	2.8	1.8	0.2302	µg/L	0.2302	ppb	18:53:21
2	Ni 231.604†	173.2	-3.4	-0.2185	µg/L	-0.2185	ppb	18:53:21
2	P 214.914†	200.8	12.2	10.351	µg/L	10.351	ppb	18:53:21

2	Pb 220.353†	-16.4	-4.5	-1.1711 µg/L	-1.1711 ppb	18:53:21
2	S 181.975 Axial†	30.7	-1.1	-2.6215 µg/L	-2.6215 ppb	18:53:21
2	Sb 206.836†	54.3	16.7	8.1561 µg/L	8.1561 ppb	18:53:21
2	Se 196.026†	-32.1	3.4	3.05 µg/L	3.05 ppb	18:53:21
2	SiO2 †	1336.5	63.8	4.5269 µg/L	4.5269 ppb	18:53:01
2	Sn 189.927†	9.1	19.1	4.9130 µg/L	4.9130 ppb	18:53:21
2	Ti 334.940†	691.9	287.6	0.3805 µg/L	0.3805 ppb	18:53:01
2	Tl 190.801†	-32.5	12.3	4.7871 µg/L	4.7871 ppb	18:53:21
2	U 409.014†	339.0	44.7	2.8971 µg/L	2.8971 ppb	18:53:01
2	V 292.402†	-83.9	8.8	0.1362 µg/L	0.1362 ppb	18:53:01
2	Zn 213.857†	373.2	-42.8	-1.0321 µg/L	-1.0321 ppb	18:53:21
2	Si 251.611†	1366.4	104.4	3.49 µg/L	3.49 ppb	18:54:03
3	Sc RADIAL	45404.2	45404.2	100 %		18:51:57
3	Al 396.153Radial†	45.0	-47.7	-13.652 µg/L	-13.652 ppb	18:51:57
3	Ca 317.933Radial†	174.6	10.0	2.1200 µg/L	2.1200 ppb	18:52:17
3	Fe 238.204 Radial†	45.2	3.7	4.0535 µg/L	4.0535 ppb	18:52:17
3	K 766.490 Radial†	1130.5	58.4	25.181 µg/L	25.181 ppb	18:51:57
3	Mg 279.077 IEC†	1.0	-2.7	-7.0895 µg/L	-7.0895 ppb	18:52:17
3	Na 589.592 Radial†	806.0	-148.2	-22.290 µg/L	-22.290 ppb	18:51:57
3	Sr 421.552†	-50.8	-26.7	-0.1088 µg/L	-0.1088 ppb	18:51:57
3	Sc 361.383	1117770.0	1117770.0	100.08 %		18:53:27
3	Y 371.029	607306.5	607306.5	100.13 %		18:53:27
3	Ag 328.068†	-589.8	76.5	0.5759 µg/L	0.5759 ppb	18:53:32
3	As 188.979†	-29.4	1.9	0.9884 µg/L	0.9884 ppb	18:53:52
3	B 249.677†	131.1	90.6	5.9984 µg/L	5.9984 ppb	18:53:52
3	Ba 233.527†	-130.9	6.8	0.0723 µg/L	0.0723 ppb	18:53:52
3	Be 313.107†	260.3	47.4	0.0328 µg/L	0.0328 ppb	18:53:32
3	Cd 226.502†	-26.7	-2.5	-0.0892 µg/L	-0.0892 ppb	18:53:52
3	Co 228.616†	-143.2	-7.5	-0.2337 µg/L	-0.2337 ppb	18:53:52
3	Cr 267.716†	76.1	-0.7	-0.0219 µg/L	-0.0219 ppb	18:53:52
3	Cu 324.752†	3851.4	74.4	0.2967 µg/L	0.2967 ppb	18:53:32
3	Mn 257.610†	374.0	12.3	0.0226 µg/L	0.0226 ppb	18:53:52
3	Mo 202.031†	6.3	5.2	0.6808 µg/L	0.6808 ppb	18:53:52
3	Ni 231.604†	178.8	3.5	0.2298 µg/L	0.2298 ppb	18:53:52
3	P 214.914†	188.2	1.0	0.7678 µg/L	0.7678 ppb	18:53:52
3	Pb 220.353†	-24.3	-12.5	-3.2755 µg/L	-3.2755 ppb	18:53:52
3	S 181.975 Axial†	31.5	-0.1	-0.2698 µg/L	-0.2698 ppb	18:53:52
3	Sb 206.836†	45.4	8.2	4.0194 µg/L	4.0194 ppb	18:53:52
3	Se 196.026†	-36.0	-0.7	-0.655 µg/L	-0.655 ppb	18:53:52
3	SiO2 †	1341.1	77.6	5.4992 µg/L	5.4992 ppb	18:53:32
3	Sn 189.927†	0.2	10.2	2.6336 µg/L	2.6336 ppb	18:53:52
3	Ti 334.940†	728.2	328.7	0.4352 µg/L	0.4352 ppb	18:53:32
3	Tl 190.801†	-39.7	4.9	1.8974 µg/L	1.8974 ppb	18:53:52
3	U 409.014†	329.4	37.4	2.4265 µg/L	2.4265 ppb	18:53:32
3	V 292.402†	-91.7	0.4	0.0144 µg/L	0.0144 ppb	18:53:32
3	Zn 213.857†	377.5	-35.9	-0.8684 µg/L	-0.8684 ppb	18:53:52
3	Si 251.611†	1352.0	99.4	3.31 µg/L	3.31 ppb	18:54:08

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1113236.8	99.669	%	1.3489				1.35%
Sc RADIAL	44798.7	98.7	%	1.16				1.17%
Y 371.029	604646.0	99.691	%	1.3418				1.35%
Ag 328.068†	74.6	0.5608	µg/L	0.04555	0.5608	ppb	0.04555	8.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.7	0.1777	µg/L	12.66047	0.1777	ppb	12.66047	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	6.6	3.4131	µg/L	2.15422	3.4131	ppb	2.15422	63.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	99.2	6.5698	µg/L	1.05127	6.5698	ppb	1.05127	16.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.4	-0.0465	µg/L	0.11821	-0.0465	ppb	0.11821	253.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	53.9	0.0375	µg/L	0.01689	0.0375	ppb	0.01689	45.01%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	7.1	1.5329	µg/L	0.59808	1.5329	ppb	0.59808	39.02%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.0	0.0732	µg/L	0.15240	0.0732	ppb	0.15240	208.10%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-10.5	-0.3251 µg/L	0.11199	-0.3251 ppb	0.11199	34.45%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-2.0	-0.0597 µg/L	0.05706	-0.0597 ppb	0.05706	95.51%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	105.5	0.4201 µg/L	0.20533	0.4201 ppb	0.20533	48.87%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2.9	3.2126 µg/L	3.31984	3.2126 ppb	3.31984	103.34%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	80.7	34.817 µg/L	8.5890	34.817 ppb	8.5890	24.67%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-2.2	-5.7824 µg/L	1.18683	-5.7824 ppb	1.18683	20.52%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	18.8	0.0340 µg/L	0.02383	0.0340 ppb	0.02383	70.13%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.6	0.4716 µg/L	0.22703	0.4716 ppb	0.22703	48.14%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-143.2	-21.538 µg/L	2.6198	-21.538 ppb	2.6198	12.16%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	4.2	0.2789 µg/L	0.52375	0.2789 ppb	0.52375	187.77%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	4.7	3.9675 µg/L	5.52822	3.9675 ppb	5.52822	139.34%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-5.5	-1.4310 µg/L	1.72925	-1.4310 ppb	1.72925	120.85%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.1	0.3177 µg/L	3.27273	0.3177 ppb	3.27273	>999.9%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	13.4	6.5471 µg/L	2.21609	6.5471 ppb	2.21609	33.85%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.5	2.21 µg/L	2.556	2.21 ppb	2.556	115.45%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	85.3	6.0552 µg/L	1.86940	6.0552 ppb	1.86940	30.87%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	112.2	3.74 µg/L	0.600	3.74 ppb	0.600	16.02%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	13.7	3.5140 µg/L	1.22497	3.5140 ppb	1.22497	34.86%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-6.6	-0.0267 µg/L	0.09469	-0.0267 ppb	0.09469	354.49%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	336.5	0.4447 µg/L	0.06941	0.4447 ppb	0.06941	15.61%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	7.5	2.9108 µg/L	1.62673	2.9108 ppb	1.62673	55.89%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	64.5	4.1809 µg/L	2.64169	4.1809 ppb	2.64169	63.18%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-5.0	-0.0663 µg/L	0.25264	-0.0663 ppb	0.25264	381.27%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-34.5	-0.8347 µg/L	0.21624	-0.8347 ppb	0.21624	25.91%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV
Nebulizer Back Pressure: 252.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/29/2005 19:53:05
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48552.8	48552.8	107	%			19:54:29
1	Al 396.153Radial†	17910.6	16643.6	4732.4	µg/L	4732.4	ppb	19:54:29
1	Ca 317.933Radial†	24159.2	22410.7	4735.7	µg/L	4735.7	ppb	19:54:49
1	Fe 238.204 Radial†	4802.5	4446.1	4897.1	µg/L	4897.1	ppb	19:54:49
1	K 766.490 Radial†	13025.6	11100.3	4787.9	µg/L	4787.9	ppb	19:54:29
1	Mg 279.077 IEC†	1977.5	1844.2	4914.2	µg/L	4914.2	ppb	19:54:49
1	Na 589.592 Radial†	70349.7	64783.4	9740.4	µg/L	9740.4	ppb	19:54:29
1	Sr 421.552†	126317.5	118059.1	480.05	µg/L	480.05	ppb	19:54:29
1	Sc 361.383	1216561.8	1216561.8	108.92	%			19:55:48
1	Y 371.029	656713.2	656713.2	108.28	%			19:55:48
1	Ag 328.068†	68640.3	63684.8	481.19	µg/L	481.19	ppb	19:55:54
1	As 188.979†	950.3	903.7	476.83	µg/L	476.83	ppb	19:56:14
1	B 249.677†	11254.1	10292.0	681.89	µg/L	681.89	ppb	19:55:54
1	Ba 233.527†	48392.8	44567.2	473.96	µg/L	473.96	ppb	19:55:54
1	Be 313.107†	762507.0	699848.3	477.53	µg/L	477.53	ppb	19:55:48
1	Cd 226.502†	14141.2	13007.3	475.96	µg/L	475.96	ppb	19:55:54
1	Co 228.616†	16622.3	15396.6	475.34	µg/L	475.34	ppb	19:55:54
1	Cr 267.716†	18297.8	16722.6	473.74	µg/L	473.74	ppb	19:55:54
1	Cu 324.752†	134374.9	119596.1	479.96	µg/L	479.96	ppb	19:55:54
1	Mn 257.610†	287336.1	263443.1	478.76	µg/L	478.76	ppb	19:55:48
1	Mo 202.031†	4089.0	3753.0	493.44	µg/L	493.44	ppb	19:56:14
1	Ni 231.604†	8145.7	7303.4	477.82	µg/L	477.82	ppb	19:55:54
1	P 214.914†	3207.1	2757.3	2277.0	µg/L	2277.0	ppb	19:56:14
1	Pb 220.353†	1980.1	1829.7	479.06	µg/L	479.06	ppb	19:56:14
1	S 181.975 Axial†	468.1	398.2	961.68	µg/L	961.68	ppb	19:56:14
1	Sb 206.836†	1094.7	967.9	470.72	µg/L	470.72	ppb	19:56:14
1	Se 196.026†	545.4	536.0	478	µg/L	478	ppb	19:56:14
1	SiO2 †	80583.2	72721.2	5165.0	µg/L	5165.0	ppb	19:55:54
1	Sn 189.927†	1991.7	1838.7	473.34	µg/L	473.34	ppb	19:56:14
1	Ti 334.940†	393842.8	361189.8	479.28	µg/L	479.28	ppb	19:55:48
1	Tl 190.801†	1277.0	1216.9	476.77	µg/L	476.77	ppb	19:56:14
1	U 409.014†	8329.1	7355.2	478.88	µg/L	478.88	ppb	19:55:54
1	V 292.402†	34256.8	31543.3	478.82	µg/L	478.82	ppb	19:55:54
1	Zn 213.857†	21939.9	19730.0	471.53	µg/L	471.53	ppb	19:55:54
1	Si 251.611†	78285.4	70622.6	2360	µg/L	2360	ppb	19:57:22
2	Sc RADIAL	48099.9	48099.9	106	%			19:54:54
2	Al 396.153Radial†	17760.5	16659.7	4737.0	µg/L	4737.0	ppb	19:54:54
2	Ca 317.933Radial†	24077.2	22545.9	4764.3	µg/L	4764.3	ppb	19:55:14
2	Fe 238.204 Radial†	4804.4	4490.2	4945.6	µg/L	4945.6	ppb	19:55:14
2	K 766.490 Radial†	12986.2	11177.8	4821.3	µg/L	4821.3	ppb	19:54:54
2	Mg 279.077 IEC†	1976.2	1860.4	4957.2	µg/L	4957.2	ppb	19:55:14
2	Na 589.592 Radial†	70005.0	65077.2	9784.6	µg/L	9784.6	ppb	19:54:54
2	Sr 421.552†	125644.1	118535.3	481.99	µg/L	481.99	ppb	19:54:54
2	Sc 361.383	1213428.1	1213428.1	108.64	%			19:56:20
2	Y 371.029	655635.9	655635.9	108.10	%			19:56:20
2	Ag 328.068†	68876.1	64064.6	484.06	µg/L	484.06	ppb	19:56:25
2	As 188.979†	950.1	905.8	477.96	µg/L	477.96	ppb	19:56:45
2	B 249.677†	11188.6	10258.4	679.65	µg/L	679.65	ppb	19:56:25
2	Ba 233.527†	48684.9	44950.7	478.03	µg/L	478.03	ppb	19:56:25
2	Be 313.107†	761200.3	700453.3	477.94	µg/L	477.94	ppb	19:56:20
2	Cd 226.502†	14215.6	13109.4	479.69	µg/L	479.69	ppb	19:56:25
2	Co 228.616†	16703.7	15510.9	478.87	µg/L	478.87	ppb	19:56:25
2	Cr 267.716†	18367.6	16830.1	476.79	µg/L	476.79	ppb	19:56:25
2	Cu 324.752†	134759.3	120268.6	482.66	µg/L	482.66	ppb	19:56:25
2	Mn 257.610†	286707.4	263545.7	478.95	µg/L	478.95	ppb	19:56:20
2	Mo 202.031†	4073.9	3748.9	492.91	µg/L	492.91	ppb	19:56:45
2	Ni 231.604†	8186.9	7360.6	481.55	µg/L	481.55	ppb	19:56:25
2	P 214.914†	3209.2	2766.8	2284.7	µg/L	2284.7	ppb	19:56:45

2	Pb 220.353†	1968.7	1823.9	477.55 µg/L	477.55 ppb	19:56:45
2	S 181.975 Axial†	462.3	394.0	951.50 µg/L	951.50 ppb	19:56:45
2	Sb 206.836†	1108.9	983.6	478.30 µg/L	478.30 ppb	19:56:45
2	Se 196.026†	549.3	540.9	482 µg/L	482 ppb	19:56:45
2	SiO2 †	81013.6	73308.4	5206.9 µg/L	5206.9 ppb	19:56:25
2	Sn 189.927†	1998.3	1849.4	476.11 µg/L	476.11 ppb	19:56:45
2	Ti 334.940†	393127.5	361465.2	479.65 µg/L	479.65 ppb	19:56:20
2	Tl 190.801†	1275.0	1218.1	477.22 µg/L	477.22 ppb	19:56:45
2	U 409.014†	8344.7	7389.4	481.11 µg/L	481.11 ppb	19:56:25
2	V 292.402†	34338.2	31699.5	481.16 µg/L	481.16 ppb	19:56:25
2	Zn 213.857†	22034.3	19868.9	474.85 µg/L	474.85 ppb	19:56:25
2	Si 251.611†	79677.6	72089.6	2410 µg/L	2410 ppb	19:57:28
3	Sc RADIAL	47674.8	47674.8	105 %		19:55:20
3	Al 396.153Radial†	17644.3	16698.4	4748.0 µg/L	4748.0 ppb	19:55:20
3	Ca 317.933Radial†	24114.4	22783.7	4814.4 µg/L	4814.4 ppb	19:55:40
3	Fe 238.204 Radial†	4799.6	4526.0	4984.9 µg/L	4984.9 ppb	19:55:40
3	K 766.490 Radial†	12911.3	11215.7	4837.7 µg/L	4837.7 ppb	19:55:20
3	Mg 279.077 IEC†	1970.0	1871.1	4985.5 µg/L	4985.5 ppb	19:55:40
3	Na 589.592 Radial†	69408.8	65098.6	9787.8 µg/L	9787.8 ppb	19:55:20
3	Sr 421.552†	124577.6	118577.0	482.16 µg/L	482.16 ppb	19:55:20
3	Sc 361.383	1206684.4	1206684.4	108.04 %		19:56:51
3	Y 371.029	652016.3	652016.3	107.50 %		19:56:51
3	Ag 328.068†	67192.8	62860.9	474.99 µg/L	474.99 ppb	19:56:56
3	As 188.979†	953.2	913.6	481.89 µg/L	481.89 ppb	19:57:17
3	B 249.677†	10833.4	9987.1	661.70 µg/L	661.70 ppb	19:56:56
3	Ba 233.527†	47411.0	44022.1	468.16 µg/L	468.16 ppb	19:56:56
3	Be 313.107†	757009.7	700490.2	477.96 µg/L	477.96 ppb	19:56:51
3	Cd 226.502†	13805.0	12802.4	468.45 µg/L	468.45 ppb	19:56:56
3	Co 228.616†	16233.0	15161.2	468.07 µg/L	468.07 ppb	19:56:56
3	Cr 267.716†	17923.0	16513.2	467.80 µg/L	467.80 ppb	19:56:56
3	Cu 324.752†	131606.9	118043.9	473.73 µg/L	473.73 ppb	19:56:56
3	Mn 257.610†	285395.8	263806.5	479.43 µg/L	479.43 ppb	19:56:51
3	Mo 202.031†	4064.1	3760.7	494.46 µg/L	494.46 ppb	19:57:17
3	Ni 231.604†	7984.8	7215.6	472.09 µg/L	472.09 ppb	19:56:56
3	P 214.914†	3202.8	2777.5	2295.1 µg/L	2295.1 ppb	19:57:17
3	Pb 220.353†	1961.7	1827.6	478.51 µg/L	478.51 ppb	19:57:17
3	S 181.975 Axial†	461.4	395.5	955.19 µg/L	955.19 ppb	19:57:17
3	Sb 206.836†	1097.5	978.7	476.07 µg/L	476.07 ppb	19:57:17
3	Se 196.026†	546.4	541.0	482 µg/L	482 ppb	19:57:17
3	SiO2 †	78816.3	71691.4	5091.7 µg/L	5091.7 ppb	19:56:56
3	Sn 189.927†	1999.2	1860.6	478.99 µg/L	478.99 ppb	19:57:17
3	Ti 334.940†	391477.4	361960.1	480.31 µg/L	480.31 ppb	19:56:51
3	Tl 190.801†	1281.2	1230.4	482.06 µg/L	482.06 ppb	19:57:17
3	U 409.014†	8189.0	7288.2	474.49 µg/L	474.49 ppb	19:56:56
3	V 292.402†	33532.0	31129.8	472.62 µg/L	472.62 ppb	19:56:56
3	Zn 213.857†	21464.2	19454.5	464.92 µg/L	464.92 ppb	19:56:56
3	Si 251.611†	78337.9	71259.5	2380 µg/L	2380 ppb	19:57:33

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1212224.8	108.53	%	0.452				0.42%
Sc RADIAL	48109.2	106	%	1.0				0.91%
Y 371.029	654788.5	107.96	%	0.406				0.38%
Ag 328.068†	63536.8	480.08	µg/L	4.636	480.08	ppb	4.636	0.97%
QC value within limits for Ag 328.068 Recovery = 96.02%								
Al 396.153Radial†	16667.2	4739.1	µg/L	8.02	4739.1	ppb	8.02	0.17%
QC value within limits for Al 396.153Radial Recovery = 94.78%								
As 188.979†	907.7	478.89	µg/L	2.655	478.89	ppb	2.655	0.55%
QC value within limits for As 188.979 Recovery = 95.78%								
B 249.677†	10179.2	674.41	µg/L	11.068	674.41	ppb	11.068	1.64%
QC value greater than the upper limit for B 249.677 Recovery = 134.88%								
Ba 233.527†	44513.3	473.38	µg/L	4.961	473.38	ppb	4.961	1.05%
QC value within limits for Ba 233.527 Recovery = 94.68%								
Be 313.107†	700263.9	477.81	µg/L	0.246	477.81	ppb	0.246	0.05%
QC value within limits for Be 313.107 Recovery = 95.56%								
Ca 317.933Radial†	22580.1	4771.5	µg/L	39.87	4771.5	ppb	39.87	0.84%
QC value within limits for Ca 317.933Radial Recovery = 95.43%								
Cd 226.502†	12973.0	474.70	µg/L	5.725	474.70	ppb	5.725	1.21%
QC value within limits for Cd 226.502 Recovery = 94.94%								

Co 228.616†	15356.2	474.09 µg/L	5.510	474.09 ppb	5.510	1.16%
QC value within limits for Co 228.616 Recovery = 94.82%						
Cr 267.716†	16688.6	472.78 µg/L	4.569	472.78 ppb	4.569	0.97%
QC value within limits for Cr 267.716 Recovery = 94.56%						
Cu 324.752†	119302.9	478.79 µg/L	4.581	478.79 ppb	4.581	0.96%
QC value within limits for Cu 324.752 Recovery = 95.76%						
Fe 238.204 Radial†	4487.4	4942.5 µg/L	43.97	4942.5 ppb	43.97	0.89%
QC value within limits for Fe 238.204 Radial Recovery = 98.85%						
K 766.490 Radial†	11164.6	4815.7 µg/L	25.37	4815.7 ppb	25.37	0.53%
QC value within limits for K 766.490 Radial Recovery = 96.31%						
Mg 279.077 IEC†	1858.6	4952.3 µg/L	35.93	4952.3 ppb	35.93	0.73%
QC value within limits for Mg 279.077 IEC Recovery = 99.05%						
Mn 257.610†	263598.5	479.05 µg/L	0.344	479.05 ppb	0.344	0.07%
QC value within limits for Mn 257.610 Recovery = 95.81%						
Mo 202.031†	3754.2	493.60 µg/L	0.787	493.60 ppb	0.787	0.16%
QC value within limits for Mo 202.031 Recovery = 98.72%						
Na 589.592 Radial†	64986.4	9770.9 µg/L	26.48	9770.9 ppb	26.48	0.27%
QC value within limits for Na 589.592 Radial Recovery = 97.71%						
Ni 231.604†	7293.2	477.15 µg/L	4.764	477.15 ppb	4.764	1.00%
QC value within limits for Ni 231.604 Recovery = 95.43%						
P 214.914†	2767.2	2285.6 µg/L	9.11	2285.6 ppb	9.11	0.40%
QC value within limits for P 214.914 Recovery = 91.42%						
Pb 220.353†	1827.1	478.37 µg/L	0.766	478.37 ppb	0.766	0.16%
QC value within limits for Pb 220.353 Recovery = 95.67%						
S 181.975 Axial†	395.9	956.12 µg/L	5.153	956.12 ppb	5.153	0.54%
QC value within limits for S 181.975 Axial Recovery = 95.61%						
Sb 206.836†	976.7	475.03 µg/L	3.894	475.03 ppb	3.894	0.82%
QC value within limits for Sb 206.836 Recovery = 95.01%						
Se 196.026†	539.3	481 µg/L	2.5	481 ppb	2.5	0.53%
QC value within limits for Se 196.026 Recovery = 96.14%						
SiO2 †	72573.7	5154.5 µg/L	58.34	5154.5 ppb	58.34	1.13%
QC value within limits for SiO2 Recovery = 96.39%						
Si 251.611†	71323.9	2380 µg/L	24.6	2380 ppb	24.6	1.03%
QC value within limits for Si 251.611 Recovery = 95.18%						
Sn 189.927†	1849.6	476.14 µg/L	2.824	476.14 ppb	2.824	0.59%
QC value within limits for Sn 189.927 Recovery = 95.23%						
Sr 421.552†	118390.5	481.40 µg/L	1.170	481.40 ppb	1.170	0.24%
QC value within limits for Sr 421.552 Recovery = 96.28%						
Ti 334.940†	361538.4	479.75 µg/L	0.521	479.75 ppb	0.521	0.11%
QC value within limits for Ti 334.940 Recovery = 95.95%						
Tl 190.801†	1221.8	478.68 µg/L	2.930	478.68 ppb	2.930	0.61%
QC value within limits for Tl 190.801 Recovery = 95.74%						
U 409.014†	7344.3	478.16 µg/L	3.365	478.16 ppb	3.365	0.70%
QC value within limits for U 409.014 Recovery = 95.63%						
V 292.402†	31457.6	477.53 µg/L	4.416	477.53 ppb	4.416	0.92%
QC value within limits for V 292.402 Recovery = 95.51%						
Zn 213.857†	19684.5	470.43 µg/L	5.056	470.43 ppb	5.056	1.07%
QC value within limits for Zn 213.857 Recovery = 94.09%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCB
Nebulizer Back Pressure: 252.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/29/2005 19:59:21
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	44827.6	44827.6	98.8	%			20:00:47
1	Al 396.153Radial†	87.7	-3.8	-1.1523	µg/L	-1.1523	ppb	20:00:47
1	Ca 317.933Radial†	193.4	31.3	6.6305	µg/L	6.6305	ppb	20:01:08
1	Fe 238.204 Radial†	45.3	4.4	4.7966	µg/L	4.7966	ppb	20:01:08
1	K 766.490 Radial†	1136.2	78.7	33.955	µg/L	33.955	ppb	20:00:47
1	Mg 279.077 IEC†	9.1	5.5	14.734	µg/L	14.734	ppb	20:01:08
1	Na 589.592 Radial†	863.3	-79.9	-12.016	µg/L	-12.016	ppb	20:00:47
1	Sr 421.552†	-43.0	-19.5	-0.0793	µg/L	-0.0793	ppb	20:00:47
1	Sc 361.383	1156485.8	1156485.8	103.54	%			20:02:06
1	Y 371.029	628576.0	628576.0	103.64	%			20:02:06
1	Ag 328.068†	-684.9	4.4	0.0331	µg/L	0.0331	ppb	20:02:11
1	As 188.979†	-22.3	9.8	5.0847	µg/L	5.0847	ppb	20:02:32
1	B 249.677†	2266.4	2148.4	142.24	µg/L	142.24	ppb	20:02:11
1	Ba 233.527†	-141.8	0.6	0.0073	µg/L	0.0073	ppb	20:02:32
1	Be 313.107†	289.5	66.9	0.0464	µg/L	0.0464	ppb	20:02:11
1	Cd 226.502†	-29.2	-3.9	-0.1437	µg/L	-0.1437	ppb	20:02:32
1	Co 228.616†	-136.5	3.7	0.1156	µg/L	0.1156	ppb	20:02:32
1	Cr 267.716†	78.7	-0.8	-0.0254	µg/L	-0.0254	ppb	20:02:32
1	Cu 324.752†	3695.8	-204.6	-0.8257	µg/L	-0.8257	ppb	20:02:11
1	Mn 257.610†	402.3	27.2	0.0493	µg/L	0.0493	ppb	20:02:32
1	Mo 202.031†	12.4	10.9	1.4340	µg/L	1.4340	ppb	20:02:32
1	Ni 231.604†	181.1	-0.3	-0.0182	µg/L	-0.0182	ppb	20:02:32
1	P 214.914†	181.5	-11.8	-10.010	µg/L	-10.010	ppb	20:02:32
1	Pb 220.353†	-8.5	3.6	0.9410	µg/L	0.9410	ppb	20:02:32
1	S 181.975 Axial†	35.3	2.5	6.1118	µg/L	6.1118	ppb	20:02:32
1	Sb 206.836†	53.3	14.3	7.0005	µg/L	7.0005	ppb	20:02:32
1	Se 196.026†	-32.2	4.1	3.70	µg/L	3.70	ppb	20:02:32
1	SiO2 †	1803.4	479.1	34.079	µg/L	34.079	ppb	20:02:11
1	Sn 189.927†	5.0	14.8	3.8187	µg/L	3.8187	ppb	20:02:32
1	Ti 334.940†	761.4	336.4	0.4447	µg/L	0.4447	ppb	20:02:11
1	Tl 190.801†	-35.0	10.7	4.1764	µg/L	4.1764	ppb	20:02:32
1	U 409.014†	367.4	63.1	4.0892	µg/L	4.0892	ppb	20:02:11
1	V 292.402†	-92.7	2.4	0.0548	µg/L	0.0548	ppb	20:02:11
1	Zn 213.857†	379.6	-46.5	-1.1213	µg/L	-1.1213	ppb	20:02:32
1	Si 251.611†	1739.8	428.8	14.3	µg/L	14.3	ppb	20:03:39
2	Sc RADIAL	46023.1	46023.1	101	%			20:01:13
2	Al 396.153Radial†	78.3	-15.4	-4.4149	µg/L	-4.4149	ppb	20:01:13
2	Ca 317.933Radial†	183.3	16.2	3.4342	µg/L	3.4342	ppb	20:01:33
2	Fe 238.204 Radial†	42.4	0.4	0.4225	µg/L	0.4225	ppb	20:01:33
2	K 766.490 Radial†	1110.6	23.6	10.168	µg/L	10.168	ppb	20:01:13
2	Mg 279.077 IEC†	8.8	5.0	13.380	µg/L	13.380	ppb	20:01:33
2	Na 589.592 Radial†	893.6	-72.7	-10.933	µg/L	-10.933	ppb	20:01:13
2	Sr 421.552†	-69.1	-44.1	-0.1794	µg/L	-0.1794	ppb	20:01:13
2	Sc 361.383	1168001.2	1168001.2	104.57	%			20:02:37
2	Y 371.029	634499.9	634499.9	104.61	%			20:02:37
2	Ag 328.068†	-648.1	46.2	0.3477	µg/L	0.3477	ppb	20:02:42
2	As 188.979†	-27.9	4.6	2.3789	µg/L	2.3789	ppb	20:03:02
2	B 249.677†	2224.7	2087.0	138.16	µg/L	138.16	ppb	20:02:42
2	Ba 233.527†	-136.1	7.4	0.0788	µg/L	0.0788	ppb	20:03:02
2	Be 313.107†	308.9	82.7	0.0568	µg/L	0.0568	ppb	20:02:42
2	Cd 226.502†	-30.1	-4.6	-0.1675	µg/L	-0.1675	ppb	20:03:02
2	Co 228.616†	-140.6	1.2	0.0355	µg/L	0.0355	ppb	20:03:02
2	Cr 267.716†	69.1	-10.7	-0.3039	µg/L	-0.3039	ppb	20:03:02
2	Cu 324.752†	3773.7	-165.4	-0.6658	µg/L	-0.6658	ppb	20:02:42
2	Mn 257.610†	399.1	20.3	0.0365	µg/L	0.0365	ppb	20:03:02
2	Mo 202.031†	4.1	2.8	0.3694	µg/L	0.3694	ppb	20:03:02
2	Ni 231.604†	179.3	-3.7	-0.2436	µg/L	-0.2436	ppb	20:03:02
2	P 214.914†	188.8	-6.6	-5.5113	µg/L	-5.5113	ppb	20:03:02

2	Pb 220.353†	-13.6	-1.2	-0.3193 µg/L	-0.3193 ppb	20:03:02
2	S 181.975 Axial†	37.2	4.0	9.7517 µg/L	9.7517 ppb	20:03:02
2	Sb 206.836†	49.6	10.3	5.0038 µg/L	5.0038 ppb	20:03:02
2	Se 196.026†	-35.3	1.5	1.33 µg/L	1.33 ppb	20:03:02
2	SiO2 †	1784.8	444.2	31.626 µg/L	31.626 ppb	20:02:42
2	Sn 189.927†	-0.4	9.6	2.4804 µg/L	2.4804 ppb	20:03:02
2	Ti 334.940†	645.9	218.7	0.2895 µg/L	0.2895 ppb	20:02:42
2	Tl 190.801†	-35.1	10.9	4.2444 µg/L	4.2444 ppb	20:03:02
2	U 409.014†	336.3	29.9	1.9400 µg/L	1.9400 ppb	20:02:42
2	V 292.402†	-77.0	18.4	0.2802 µg/L	0.2802 ppb	20:02:42
2	Zn 213.857†	388.7	-41.4	-0.9965 µg/L	-0.9965 ppb	20:03:02
2	Si 251.611†	1946.1	609.5	20.4 µg/L	20.4 ppb	20:03:44
3	Sc RADIAL	45545.8	45545.8	100 %		20:01:38
3	Al 396.153Radial†	80.3	-12.6	-3.6201 µg/L	-3.6201 ppb	20:01:38
3	Ca 317.933Radial†	198.7	33.5	7.0631 µg/L	7.0631 ppb	20:01:58
3	Fe 238.204 Radial†	40.4	-1.2	-1.3683 µg/L	-1.3683 ppb	20:01:58
3	K 766.490 Radial†	1098.4	23.0	9.9043 µg/L	9.9043 ppb	20:01:38
3	Mg 279.077 IEC†	1.5	-2.2	-5.7222 µg/L	-5.7222 ppb	20:01:58
3	Na 589.592 Radial†	888.5	-68.6	-10.309 µg/L	-10.309 ppb	20:01:38
3	Sr 421.552†	-35.6	-11.5	-0.0468 µg/L	-0.0468 ppb	20:01:38
3	Sc 361.383	1177554.3	1177554.3	105.43 %		20:03:08
3	Y 371.029	639603.0	639603.0	105.45 %		20:03:08
3	Ag 328.068†	-690.9	10.6	0.0800 µg/L	0.0800 ppb	20:03:13
3	As 188.979†	-23.3	9.2	4.7865 µg/L	4.7865 ppb	20:03:33
3	B 249.677†	2103.3	1954.6	129.40 µg/L	129.40 ppb	20:03:13
3	Ba 233.527†	-139.7	5.0	0.0537 µg/L	0.0537 ppb	20:03:33
3	Be 313.107†	254.0	28.3	0.0192 µg/L	0.0192 ppb	20:03:13
3	Cd 226.502†	-22.4	3.0	0.1100 µg/L	0.1100 ppb	20:03:33
3	Co 228.616†	-140.3	2.5	0.0763 µg/L	0.0763 ppb	20:03:33
3	Cr 267.716†	73.4	-7.1	-0.2009 µg/L	-0.2009 ppb	20:03:33
3	Cu 324.752†	3675.7	-287.6	-1.1548 µg/L	-1.1548 ppb	20:03:13
3	Mn 257.610†	402.6	20.5	0.0373 µg/L	0.0373 ppb	20:03:33
3	Mo 202.031†	3.9	2.7	0.3484 µg/L	0.3484 ppb	20:03:33
3	Ni 231.604†	170.1	-13.9	-0.9071 µg/L	-0.9071 ppb	20:03:33
3	P 214.914†	192.1	-4.9	-3.9681 µg/L	-3.9681 ppb	20:03:33
3	Pb 220.353†	-7.6	4.6	1.2051 µg/L	1.2051 ppb	20:03:33
3	S 181.975 Axial†	35.5	2.1	5.1885 µg/L	5.1885 ppb	20:03:33
3	Sb 206.836†	44.8	5.3	2.6148 µg/L	2.6148 ppb	20:03:33
3	Se 196.026†	-35.9	1.3	1.13 µg/L	1.13 ppb	20:03:33
3	SiO2 †	1778.5	424.3	30.208 µg/L	30.208 ppb	20:03:13
3	Sn 189.927†	6.6	16.3	4.2012 µg/L	4.2012 ppb	20:03:33
3	Ti 334.940†	626.9	195.6	0.2601 µg/L	0.2601 ppb	20:03:13
3	Tl 190.801†	-40.2	6.4	2.4751 µg/L	2.4751 ppb	20:03:33
3	U 409.014†	300.4	-6.8	-0.4395 µg/L	-0.4395 ppb	20:03:13
3	V 292.402†	-85.2	11.2	0.1699 µg/L	0.1699 ppb	20:03:13
3	Zn 213.857†	378.7	-53.9	-1.2938 µg/L	-1.2938 ppb	20:03:33
3	Si 251.611†	1763.3	420.9	14.1 µg/L	14.1 ppb	20:03:49

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1167347.1	104.51	%	0.945				0.90%
Sc RADIAL	45465.5	100	%	1.3				1.32%
Y 371.029	634226.3	104.57	%	0.910				0.87%
Ag 328.068†	20.4	0.1536	µg/L	0.16969	0.1536	ppb	0.16969	110.46%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-10.6	-3.0625	µg/L	1.70130	-3.0625	ppb	1.70130	55.55%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.8	4.0834	µg/L	1.48363	4.0834	ppb	1.48363	36.33%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	2063.3	136.60	µg/L	6.558	136.60	ppb	6.558	4.80%
QC value greater than the upper limit for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.3	0.0466	µg/L	0.03628	0.0466	ppb	0.03628	77.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	59.3	0.0408	µg/L	0.01942	0.0408	ppb	0.01942	47.63%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	27.0	5.7092	µg/L	1.98209	5.7092	ppb	1.98209	34.72%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.8	-0.0670	µg/L	0.15380	-0.0670	ppb	0.15380	229.42%
QC value within limits for Cd 226.502 Recovery = Not calculated								

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Co 228.616†              2.5      0.0758 µg/L       0.04008      0.0758 ppb        0.04008  52.86%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -6.2     -0.1767 µg/L       0.14086     -0.1767 ppb        0.14086  79.70%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -219.2     -0.8821 µg/L       0.24931     -0.8821 ppb        0.24931  28.26%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       1.2      1.2836 µg/L       3.17136      1.2836 ppb        3.17136 247.07%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       41.8      18.009 µg/L       13.8099      18.009 ppb        13.8099  76.68%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          2.8      7.4640 µg/L      11.43961      7.4640 ppb       11.43961 153.26%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             22.7      0.0410 µg/L       0.00715      0.0410 ppb        0.00715  17.42%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              5.5      0.7173 µg/L       0.62082      0.7173 ppb        0.62082  86.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -73.7     -11.086 µg/L        0.8633     -11.086 ppb         0.8633   7.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -6.0     -0.3897 µg/L       0.46206     -0.3897 ppb        0.46206 118.58%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -7.8     -6.4963 µg/L       3.13885     -6.4963 ppb        3.13885  48.32%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              2.3      0.6090 µg/L       0.81465      0.6090 ppb        0.81465 133.78%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         2.9      7.0173 µg/L       2.41262      7.0173 ppb        2.41262  34.38%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†             10.0      4.8730 µg/L       2.19581      4.8730 ppb        2.19581  45.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              2.3        2.05 µg/L         1.428        2.05 ppb          1.428  69.63%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2 †                 449.2      31.971 µg/L        1.9584      31.971 ppb         1.9584   6.13%
   QC value within limits for SiO2   Recovery = Not calculated
Si 251.611†            486.4        16.3 µg/L          3.57        16.3 ppb           3.57  21.98%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             13.6      3.5001 µg/L       0.90355      3.5001 ppb        0.90355  25.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†            -25.0     -0.1018 µg/L       0.06910     -0.1018 ppb        0.06910  67.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            250.2      0.3315 µg/L       0.09919      0.3315 ppb        0.09919  29.93%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              9.3      3.6320 µg/L       1.00241      3.6320 ppb        1.00241  27.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              28.7      1.8632 µg/L       2.26535      1.8632 ppb        2.26535 121.58%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              10.7      0.1683 µg/L       0.11272      0.1683 ppb        0.11272  66.97%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            -47.3     -1.1372 µg/L       0.14926     -1.1372 ppb        0.14926  13.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 22
Sample ID: CCV
Nebulizer Back Pressure: 252.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/29/2005 20:58:15
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48660.6	48660.6	107	%			20:59:38
1	Al 396.153Radial†	17611.4	16327.6	4642.3	µg/L	4642.3	ppb	20:59:38
1	Ca 317.933Radial†	23955.8	22171.0	4685.0	µg/L	4685.0	ppb	20:59:58
1	Fe 238.204 Radial†	4770.4	4406.3	4853.2	µg/L	4853.2	ppb	20:59:58
1	K 766.490 Radial†	12887.2	10944.3	4720.7	µg/L	4720.7	ppb	20:59:38
1	Mg 279.077 IEC†	1938.7	1803.9	4806.8	µg/L	4806.8	ppb	20:59:58
1	Na 589.592 Radial†	69507.4	63852.3	9600.4	µg/L	9600.4	ppb	20:59:38
1	Sr 421.552†	124141.7	115768.9	470.74	µg/L	470.74	ppb	20:59:38
1	Sc 361.383	1212976.3	1212976.3	108.60	%			21:00:57
1	Y 371.029	655028.1	655028.1	108.00	%			21:00:57
1	Ag 328.068†	67804.3	63101.3	476.78	µg/L	476.78	ppb	21:01:03
1	As 188.979†	940.4	897.2	473.35	µg/L	473.35	ppb	21:01:23
1	B 249.677†	7950.6	7280.6	482.52	µg/L	482.52	ppb	21:01:03
1	Ba 233.527†	47659.5	44023.2	468.17	µg/L	468.17	ppb	21:01:03
1	Be 313.107†	748607.5	689118.7	470.21	µg/L	470.21	ppb	21:00:57
1	Cd 226.502†	13946.3	12866.3	470.80	µg/L	470.80	ppb	21:01:03
1	Co 228.616†	16324.1	15167.1	468.26	µg/L	468.26	ppb	21:01:03
1	Cr 267.716†	18033.3	16528.6	468.24	µg/L	468.24	ppb	21:01:03
1	Cu 324.752†	130213.1	116128.5	466.04	µg/L	466.04	ppb	21:00:57
1	Mn 257.610†	282053.9	259358.9	471.34	µg/L	471.34	ppb	21:00:57
1	Mo 202.031†	4027.7	3707.7	487.49	µg/L	487.49	ppb	21:01:23
1	Ni 231.604†	8019.6	7209.3	471.66	µg/L	471.66	ppb	21:01:03
1	P 214.914†	3165.1	2727.4	2253.7	µg/L	2253.7	ppb	21:01:23
1	Pb 220.353†	1956.4	1813.3	474.75	µg/L	474.75	ppb	21:01:23
1	S 181.975 Axial†	457.0	389.2	940.12	µg/L	940.12	ppb	21:01:23
1	Sb 206.836†	1073.1	951.0	462.53	µg/L	462.53	ppb	21:01:23
1	Se 196.026†	541.5	533.9	476	µg/L	476	ppb	21:01:23
1	SiO2 †	79399.2	71849.7	5103.1	µg/L	5103.1	ppb	21:01:03
1	Sn 189.927†	1978.3	1831.7	471.55	µg/L	471.55	ppb	21:01:23
1	Ti 334.940†	386458.4	355458.9	471.68	µg/L	471.68	ppb	21:00:57
1	Tl 190.801†	1275.9	1219.3	477.68	µg/L	477.68	ppb	21:01:23
1	U 409.014†	8244.7	7300.2	475.29	µg/L	475.29	ppb	21:01:03
1	V 292.402†	33782.9	31199.9	473.60	µg/L	473.60	ppb	21:01:03
1	Zn 213.857†	21609.0	19484.9	465.69	µg/L	465.69	ppb	21:01:03
1	Si 251.611†	77625.9	70227.8	2340	µg/L	2340	ppb	21:02:32
2	Sc RADIAL	48704.9	48704.9	107	%			21:00:03
2	Al 396.153Radial†	17836.8	16522.6	4697.9	µg/L	4697.9	ppb	21:00:03
2	Ca 317.933Radial†	23968.6	22162.6	4683.2	µg/L	4683.2	ppb	21:00:23
2	Fe 238.204 Radial†	4759.7	4392.3	4837.8	µg/L	4837.8	ppb	21:00:23
2	K 766.490 Radial†	13020.1	11057.2	4769.3	µg/L	4769.3	ppb	21:00:03
2	Mg 279.077 IEC†	1952.5	1815.1	4836.8	µg/L	4836.8	ppb	21:00:23
2	Na 589.592 Radial†	70073.4	64320.6	9670.8	µg/L	9670.8	ppb	21:00:03
2	Sr 421.552†	125326.8	116767.5	474.80	µg/L	474.80	ppb	21:00:03
2	Sc 361.383	1210400.7	1210400.7	108.37	%			21:01:29
2	Y 371.029	653334.0	653334.0	107.72	%			21:01:29
2	Ag 328.068†	67563.8	63012.2	476.11	µg/L	476.11	ppb	21:01:34
2	As 188.979†	948.3	906.3	478.12	µg/L	478.12	ppb	21:01:54
2	B 249.677†	7918.8	7266.8	481.61	µg/L	481.61	ppb	21:01:34
2	Ba 233.527†	47550.9	44016.4	468.10	µg/L	468.10	ppb	21:01:34
2	Be 313.107†	748703.5	690674.1	471.27	µg/L	471.27	ppb	21:01:29
2	Cd 226.502†	13881.1	12833.4	469.60	µg/L	469.60	ppb	21:01:34
2	Co 228.616†	16313.6	15189.4	468.95	µg/L	468.95	ppb	21:01:34
2	Cr 267.716†	17998.2	16531.6	468.33	µg/L	468.33	ppb	21:01:34
2	Cu 324.752†	130331.9	116493.3	467.50	µg/L	467.50	ppb	21:01:29
2	Mn 257.610†	282156.1	260005.9	472.51	µg/L	472.51	ppb	21:01:29
2	Mo 202.031†	4037.5	3724.6	489.71	µg/L	489.71	ppb	21:01:54
2	Ni 231.604†	8028.5	7233.3	473.24	µg/L	473.24	ppb	21:01:34
2	P 214.914†	3191.4	2757.8	2279.5	µg/L	2279.5	ppb	21:01:54

2	Pb 220.353†	1954.1	1815.0	475.23 µg/L	475.23 ppb	21:01:54
2	S 181.975 Axial†	460.4	393.3	949.93 µg/L	949.93 ppb	21:01:54
2	Sb 206.836†	1095.2	973.5	473.47 µg/L	473.47 ppb	21:01:54
2	Se 196.026†	539.3	533.0	475 µg/L	475 ppb	21:01:54
2	SiO2 †	79019.1	71654.5	5089.1 µg/L	5089.1 ppb	21:01:34
2	Sn 189.927†	1995.0	1851.0	476.50 µg/L	476.50 ppb	21:01:54
2	Ti 334.940†	386880.3	356605.5	473.20 µg/L	473.20 ppb	21:01:29
2	Tl 190.801†	1271.3	1217.7	477.03 µg/L	477.03 ppb	21:01:54
2	U 409.014†	8191.2	7266.9	473.13 µg/L	473.13 ppb	21:01:34
2	V 292.402†	33629.8	31124.9	472.50 µg/L	472.50 ppb	21:01:34
2	Zn 213.857†	21534.8	19458.7	465.05 µg/L	465.05 ppb	21:01:34
2	Si 251.611†	78384.8	71080.1	2370 µg/L	2370 ppb	21:02:37
3	Sc RADIAL	47795.5	47795.5	105 %		21:00:29
3	Al 396.153Radial†	17482.0	16502.0	4692.2 µg/L	4692.2 ppb	21:00:29
3	Ca 317.933Radial†	23820.1	22446.5	4743.3 µg/L	4743.3 ppb	21:00:49
3	Fe 238.204 Radial†	4742.7	4460.5	4912.8 µg/L	4912.8 ppb	21:00:49
3	K 766.490 Radial†	12750.6	11032.1	4758.5 µg/L	4758.5 ppb	21:00:29
3	Mg 279.077 IEC†	1937.8	1835.8	4891.5 µg/L	4891.5 ppb	21:00:49
3	Na 589.592 Radial†	68735.4	64292.7	9666.6 µg/L	9666.6 ppb	21:00:29
3	Sr 421.552†	122838.6	116627.0	474.23 µg/L	474.23 ppb	21:00:29
3	Sc 361.383	1217488.9	1217488.9	109.00 %		21:02:00
3	Y 371.029	657361.4	657361.4	108.38 %		21:02:00
3	Ag 328.068†	67956.6	63009.6	476.10 µg/L	476.10 ppb	21:02:06
3	As 188.979†	948.1	901.0	475.36 µg/L	475.36 ppb	21:02:26
3	B 249.677†	8030.4	7326.7	485.55 µg/L	485.55 ppb	21:02:06
3	Ba 233.527†	47878.9	44061.9	468.59 µg/L	468.59 ppb	21:02:06
3	Be 313.107†	750769.9	688547.5	469.82 µg/L	469.82 ppb	21:02:00
3	Cd 226.502†	14019.8	12886.1	471.52 µg/L	471.52 ppb	21:02:06
3	Co 228.616†	16437.6	15215.5	469.75 µg/L	469.75 ppb	21:02:06
3	Cr 267.716†	18075.4	16505.7	467.59 µg/L	467.59 ppb	21:02:06
3	Cu 324.752†	130968.7	116377.3	467.03 µg/L	467.03 ppb	21:02:00
3	Mn 257.610†	283026.6	259288.7	471.22 µg/L	471.22 ppb	21:02:00
3	Mo 202.031†	4040.7	3705.9	487.26 µg/L	487.26 ppb	21:02:26
3	Ni 231.604†	8084.7	7241.7	473.78 µg/L	473.78 ppb	21:02:06
3	P 214.914†	3196.3	2745.2	2268.7 µg/L	2268.7 ppb	21:02:26
3	Pb 220.353†	1964.8	1814.3	475.01 µg/L	475.01 ppb	21:02:26
3	S 181.975 Axial†	456.3	387.1	934.75 µg/L	934.75 ppb	21:02:26
3	Sb 206.836†	1100.2	972.1	472.80 µg/L	472.80 ppb	21:02:26
3	Se 196.026†	539.4	530.1	473 µg/L	473 ppb	21:02:26
3	SiO2 †	79734.2	71886.0	5105.7 µg/L	5105.7 ppb	21:02:06
3	Sn 189.927†	1990.1	1835.8	472.60 µg/L	472.60 ppb	21:02:26
3	Ti 334.940†	388355.2	355880.1	472.23 µg/L	472.23 ppb	21:02:00
3	Tl 190.801†	1277.5	1216.5	476.58 µg/L	476.58 ppb	21:02:26
3	U 409.014†	8394.7	7409.6	482.38 µg/L	482.38 ppb	21:02:06
3	V 292.402†	33886.5	31179.7	473.30 µg/L	473.30 ppb	21:02:06
3	Zn 213.857†	21715.5	19508.8	466.24 µg/L	466.24 ppb	21:02:06
3	Si 251.611†	77657.3	69991.7	2330 µg/L	2330 ppb	21:02:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1213622.0	108.66	%	0.321				0.30%
Sc RADIAL	48387.0	107	%	1.1				1.06%
Y 371.029	655241.2	108.03	%	0.333				0.31%
Ag 328.068†	63041.1	476.33	µg/L	0.392	476.33	ppb	0.392	0.08%
QC value within limits for Ag 328.068 Recovery = 95.27%								
Al 396.153Radial†	16450.7	4677.5	µg/L	30.58	4677.5	ppb	30.58	0.65%
QC value within limits for Al 396.153Radial Recovery = 93.55%								
As 188.979†	901.5	475.61	µg/L	2.393	475.61	ppb	2.393	0.50%
QC value within limits for As 188.979 Recovery = 95.12%								
B 249.677†	7291.4	483.23	µg/L	2.064	483.23	ppb	2.064	0.43%
QC value within limits for B 249.677 Recovery = 96.65%								
Ba 233.527†	44033.8	468.29	µg/L	0.261	468.29	ppb	0.261	0.06%
QC value within limits for Ba 233.527 Recovery = 93.66%								
Be 313.107†	689446.8	470.43	µg/L	0.750	470.43	ppb	0.750	0.16%
QC value within limits for Be 313.107 Recovery = 94.09%								
Ca 317.933Radial†	22260.0	4703.8	µg/L	34.15	4703.8	ppb	34.15	0.73%
QC value within limits for Ca 317.933Radial Recovery = 94.08%								
Cd 226.502†	12861.9	470.64	µg/L	0.972	470.64	ppb	0.972	0.21%
QC value within limits for Cd 226.502 Recovery = 94.13%								

Co 228.616†	15190.7	468.99 µg/L	0.748	468.99 ppb	0.748	0.16%
QC value within limits for Co 228.616 Recovery = 93.80%						
Cr 267.716†	16522.0	468.05 µg/L	0.404	468.05 ppb	0.404	0.09%
QC value within limits for Cr 267.716 Recovery = 93.61%						
Cu 324.752†	116333.0	466.86 µg/L	0.748	466.86 ppb	0.748	0.16%
QC value within limits for Cu 324.752 Recovery = 93.37%						
Fe 238.204 Radial†	4419.7	4867.9 µg/L	39.65	4867.9 ppb	39.65	0.81%
QC value within limits for Fe 238.204 Radial Recovery = 97.36%						
K 766.490 Radial†	11011.2	4749.5 µg/L	25.56	4749.5 ppb	25.56	0.54%
QC value within limits for K 766.490 Radial Recovery = 94.99%						
Mg 279.077 IEC†	1818.3	4845.0 µg/L	42.94	4845.0 ppb	42.94	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 96.90%						
Mn 257.610†	259551.2	471.69 µg/L	0.715	471.69 ppb	0.715	0.15%
QC value within limits for Mn 257.610 Recovery = 94.34%						
Mo 202.031†	3712.8	488.15 µg/L	1.356	488.15 ppb	1.356	0.28%
QC value within limits for Mo 202.031 Recovery = 97.63%						
Na 589.592 Radial†	64155.2	9646.0 µg/L	39.50	9646.0 ppb	39.50	0.41%
QC value within limits for Na 589.592 Radial Recovery = 96.46%						
Ni 231.604†	7228.1	472.90 µg/L	1.100	472.90 ppb	1.100	0.23%
QC value within limits for Ni 231.604 Recovery = 94.58%						
P 214.914†	2743.4	2267.3 µg/L	12.97	2267.3 ppb	12.97	0.57%
QC value within limits for P 214.914 Recovery = 90.69%						
Pb 220.353†	1814.2	475.00 µg/L	0.239	475.00 ppb	0.239	0.05%
QC value within limits for Pb 220.353 Recovery = 95.00%						
S 181.975 Axial†	389.9	941.60 µg/L	7.695	941.60 ppb	7.695	0.82%
QC value within limits for S 181.975 Axial Recovery = 94.16%						
Sb 206.836†	965.5	469.60 µg/L	6.135	469.60 ppb	6.135	1.31%
QC value within limits for Sb 206.836 Recovery = 93.92%						
Se 196.026†	532.3	474 µg/L	1.7	474 ppb	1.7	0.37%
QC value within limits for Se 196.026 Recovery = 94.89%						
SiO2 †	71796.7	5099.3 µg/L	8.92	5099.3 ppb	8.92	0.18%
QC value within limits for SiO2 Recovery = 95.36%						
Si 251.611†	70433.2	2350 µg/L	19.1	2350 ppb	19.1	0.81%
QC value within limits for Si 251.611 Recovery = 93.99%						
Sn 189.927†	1839.5	473.55 µg/L	2.609	473.55 ppb	2.609	0.55%
QC value within limits for Sn 189.927 Recovery = 94.71%						
Sr 421.552†	116387.8	473.26 µg/L	2.198	473.26 ppb	2.198	0.46%
QC value within limits for Sr 421.552 Recovery = 94.65%						
Ti 334.940†	355981.5	472.37 µg/L	0.771	472.37 ppb	0.771	0.16%
QC value within limits for Ti 334.940 Recovery = 94.47%						
Tl 190.801†	1217.8	477.10 µg/L	0.550	477.10 ppb	0.550	0.12%
QC value within limits for Tl 190.801 Recovery = 95.42%						
U 409.014†	7325.6	476.93 µg/L	4.835	476.93 ppb	4.835	1.01%
QC value within limits for U 409.014 Recovery = 95.39%						
V 292.402†	31168.1	473.13 µg/L	0.572	473.13 ppb	0.572	0.12%
QC value within limits for V 292.402 Recovery = 94.63%						
Zn 213.857†	19484.1	465.66 µg/L	0.597	465.66 ppb	0.597	0.13%
QC value within limits for Zn 213.857 Recovery = 93.13%						

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: CCB
Nebulizer Back Pressure: 252.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/29/2005 21:04:30
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	45865.8	45865.8	101	%			21:05:54
1	Al 396.153Radial†	125.0	31.1	8.8926	µg/L	8.8926	ppb	21:05:54
1	Ca 317.933Radial†	187.7	21.2	4.5188	µg/L	4.5188	ppb	21:06:15
1	Fe 238.204 Radial†	47.1	5.2	5.7061	µg/L	5.7061	ppb	21:06:15
1	K 766.490 Radial†	1116.9	33.6	14.482	µg/L	14.482	ppb	21:05:54
1	Mg 279.077 IEC†	9.1	5.4	14.292	µg/L	14.292	ppb	21:06:15
1	Na 589.592 Radial†	1347.2	379.0	56.991	µg/L	56.991	ppb	21:05:54
1	Sr 421.552†	-11.8	12.3	0.0499	µg/L	0.0499	ppb	21:05:54
1	Sc 361.383	1155181.8	1155181.8	103.42	%			21:07:13
1	Y 371.029	627614.5	627614.5	103.48	%			21:07:13
1	Ag 328.068†	-667.6	20.4	0.1524	µg/L	0.1524	ppb	21:07:18
1	As 188.979†	-27.2	5.0	2.5840	µg/L	2.5840	ppb	21:07:39
1	B 249.677†	388.8	335.5	22.209	µg/L	22.209	ppb	21:07:39
1	Ba 233.527†	-143.2	-0.9	-0.0089	µg/L	-0.0089	ppb	21:07:39
1	Be 313.107†	273.9	52.1	0.0369	µg/L	0.0369	ppb	21:07:18
1	Cd 226.502†	-23.7	1.3	0.0486	µg/L	0.0486	ppb	21:07:39
1	Co 228.616†	-137.4	2.7	0.0823	µg/L	0.0823	ppb	21:07:39
1	Cr 267.716†	84.2	4.6	0.1268	µg/L	0.1268	ppb	21:07:39
1	Cu 324.752†	3683.5	-212.6	-0.8589	µg/L	-0.8589	ppb	21:07:18
1	Mn 257.610†	402.8	28.1	0.0506	µg/L	0.0506	ppb	21:07:39
1	Mo 202.031†	0.1	-1.0	-0.1250	µg/L	-0.1250	ppb	21:07:39
1	Ni 231.604†	176.0	-5.1	-0.3332	µg/L	-0.3332	ppb	21:07:39
1	P 214.914†	179.3	-13.8	-11.667	µg/L	-11.667	ppb	21:07:39
1	Pb 220.353†	-11.1	1.1	0.2709	µg/L	0.2709	ppb	21:07:39
1	S 181.975 Axial†	33.8	1.2	2.8108	µg/L	2.8108	ppb	21:07:39
1	Sb 206.836†	46.1	7.4	3.6113	µg/L	3.6113	ppb	21:07:39
1	Se 196.026†	-28.5	7.7	6.86	µg/L	6.86	ppb	21:07:39
1	SiO2 †	1483.9	172.2	12.267	µg/L	12.267	ppb	21:07:18
1	Sn 189.927†	0.4	10.4	2.6779	µg/L	2.6779	ppb	21:07:39
1	Ti 334.940†	752.4	328.5	0.4326	µg/L	0.4326	ppb	21:07:18
1	Tl 190.801†	-36.0	9.7	3.7758	µg/L	3.7758	ppb	21:07:39
1	U 409.014†	414.5	109.0	7.0667	µg/L	7.0667	ppb	21:07:18
1	V 292.402†	-114.3	-18.5	-0.2709	µg/L	-0.2709	ppb	21:07:18
1	Zn 213.857†	377.3	-48.3	-1.1639	µg/L	-1.1639	ppb	21:07:39
1	Si 251.611†	1502.5	201.2	6.73	µg/L	6.73	ppb	21:08:46
2	Sc RADIAL	45695.9	45695.9	101	%			21:06:20
2	Al 396.153Radial†	59.8	-33.3	-9.5166	µg/L	-9.5166	ppb	21:06:20
2	Ca 317.933Radial†	182.9	17.2	3.6332	µg/L	3.6332	ppb	21:06:40
2	Fe 238.204 Radial†	43.4	1.6	1.8001	µg/L	1.8001	ppb	21:06:40
2	K 766.490 Radial†	1149.5	70.0	30.201	µg/L	30.201	ppb	21:06:20
2	Mg 279.077 IEC†	4.3	0.7	1.7490	µg/L	1.7490	ppb	21:06:40
2	Na 589.592 Radial†	1275.1	312.4	46.970	µg/L	46.970	ppb	21:06:20
2	Sr 421.552†	-62.6	-38.2	-0.1553	µg/L	-0.1553	ppb	21:06:20
2	Sc 361.383	1163937.4	1163937.4	104.21	%			21:07:44
2	Y 371.029	632159.3	632159.3	104.23	%			21:07:44
2	Ag 328.068†	-620.6	70.4	0.5300	µg/L	0.5300	ppb	21:07:49
2	As 188.979†	-20.9	11.2	5.8099	µg/L	5.8099	ppb	21:08:09
2	B 249.677†	396.8	340.3	22.531	µg/L	22.531	ppb	21:08:09
2	Ba 233.527†	-136.8	6.2	0.0667	µg/L	0.0667	ppb	21:08:09
2	Be 313.107†	317.6	92.1	0.0629	µg/L	0.0629	ppb	21:07:49
2	Cd 226.502†	-32.6	-7.1	-0.2593	µg/L	-0.2593	ppb	21:08:09
2	Co 228.616†	-140.2	1.1	0.0325	µg/L	0.0325	ppb	21:08:09
2	Cr 267.716†	70.2	-9.4	-0.2664	µg/L	-0.2664	ppb	21:08:09
2	Cu 324.752†	3701.4	-222.1	-0.8927	µg/L	-0.8927	ppb	21:07:49
2	Mn 257.610†	379.5	2.8	0.0052	µg/L	0.0052	ppb	21:08:09
2	Mo 202.031†	2.9	1.8	0.2299	µg/L	0.2299	ppb	21:08:09
2	Ni 231.604†	184.4	1.8	0.1161	µg/L	0.1161	ppb	21:08:09
2	P 214.914†	186.0	-8.6	-7.2058	µg/L	-7.2058	ppb	21:08:09

2	Pb 220.353†	-15.7	-3.3	-0.8523 µg/L	-0.8523 ppb	21:08:09
2	S 181.975 Axial†	31.0	-1.8	-4.4463 µg/L	-4.4463 ppb	21:08:09
2	Sb 206.836†	44.7	5.7	2.7929 µg/L	2.7929 ppb	21:08:09
2	Se 196.026†	-36.0	0.7	0.646 µg/L	0.646 ppb	21:08:09
2	SiO2 †	1463.8	142.1	10.112 µg/L	10.112 ppb	21:07:49
2	Sn 189.927†	-0.1	9.9	2.5479 µg/L	2.5479 ppb	21:08:09
2	Ti 334.940†	791.3	360.4	0.4782 µg/L	0.4782 ppb	21:07:49
2	Tl 190.801†	-45.0	1.3	0.5162 µg/L	0.5162 ppb	21:08:09
2	U 409.014†	317.1	12.6	0.8162 µg/L	0.8162 ppb	21:07:49
2	V 292.402†	-84.3	11.1	0.1682 µg/L	0.1682 ppb	21:07:49
2	Zn 213.857†	389.4	-39.5	-0.9518 µg/L	-0.9518 ppb	21:08:09
2	Si 251.611†	1470.2	159.2	5.32 µg/L	5.32 ppb	21:08:51
3	Sc RADIAL	46073.5	46073.5	102 %		21:06:45
3	Al 396.153Radial†	92.7	-1.3	-0.4243 µg/L	-0.4243 ppb	21:06:45
3	Ca 317.933Radial†	187.5	20.2	4.3077 µg/L	4.3077 ppb	21:07:05
3	Fe 238.204 Radial†	41.5	-0.6	-0.6566 µg/L	-0.6566 ppb	21:07:05
3	K 766.490 Radial†	1130.3	41.8	18.018 µg/L	18.018 ppb	21:06:45
3	Mg 279.077 IEC†	3.8	0.1	0.3090 µg/L	0.3090 ppb	21:07:05
3	Na 589.592 Radial†	1302.0	328.5	49.393 µg/L	49.393 ppb	21:06:45
3	Sr 421.552†	-49.8	-25.1	-0.1019 µg/L	-0.1019 ppb	21:06:45
3	Sc 361.383	1164236.2	1164236.2	104.24 %		21:08:15
3	Y 371.029	632518.4	632518.4	104.29 %		21:08:15
3	Ag 328.068†	-692.3	1.7	0.0130 µg/L	0.0130 ppb	21:08:20
3	As 188.979†	-25.4	6.9	3.5694 µg/L	3.5694 ppb	21:08:40
3	B 249.677†	373.6	317.9	21.047 µg/L	21.047 ppb	21:08:40
3	Ba 233.527†	-139.6	3.6	0.0402 µg/L	0.0402 ppb	21:08:40
3	Be 313.107†	263.9	40.5	0.0292 µg/L	0.0292 ppb	21:08:20
3	Cd 226.502†	-22.9	2.3	0.0863 µg/L	0.0863 ppb	21:08:40
3	Co 228.616†	-129.1	11.7	0.3617 µg/L	0.3617 ppb	21:08:40
3	Cr 267.716†	58.9	-20.3	-0.5803 µg/L	-0.5803 ppb	21:08:40
3	Cu 324.752†	3655.9	-266.7	-1.0779 µg/L	-1.0779 ppb	21:08:20
3	Mn 257.610†	378.6	1.8	0.0022 µg/L	0.0022 ppb	21:08:40
3	Mo 202.031†	7.6	6.2	0.8152 µg/L	0.8152 ppb	21:08:40
3	Ni 231.604†	177.9	-4.5	-0.2953 µg/L	-0.2953 ppb	21:08:40
3	P 214.914†	179.8	-14.7	-12.398 µg/L	-12.398 ppb	21:08:40
3	Pb 220.353†	-4.3	7.6	1.9897 µg/L	1.9897 ppb	21:08:40
3	S 181.975 Axial†	34.5	1.6	3.7853 µg/L	3.7853 ppb	21:08:40
3	Sb 206.836†	47.2	8.1	3.9753 µg/L	3.9753 ppb	21:08:40
3	Se 196.026†	-36.4	0.3	0.314 µg/L	0.314 ppb	21:08:40
3	SiO2 †	1483.2	160.4	11.397 µg/L	11.397 ppb	21:08:20
3	Sn 189.927†	-1.7	8.5	2.1739 µg/L	2.1739 ppb	21:08:40
3	Ti 334.940†	716.3	288.2	0.3784 µg/L	0.3784 ppb	21:08:20
3	Tl 190.801†	-37.7	8.3	3.2468 µg/L	3.2468 ppb	21:08:40
3	U 409.014†	445.5	135.7	8.8018 µg/L	8.8018 ppb	21:08:20
3	V 292.402†	-43.1	50.6	0.7740 µg/L	0.7740 ppb	21:08:20
3	Zn 213.857†	386.5	-42.4	-1.0182 µg/L	-1.0182 ppb	21:08:40
3	Si 251.611†	1452.4	141.8	4.73 µg/L	4.73 ppb	21:08:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1161118.5	103.96	%	0.461				0.44%
Sc RADIAL	45878.4	101	%	0.4				0.41%
Y 371.029	630764.1	104.00	%	0.451				0.43%
Ag 328.068†	30.8	0.2318	µg/L	0.26749	0.2318	ppb	0.26749	115.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-1.2	-0.3494	µg/L	9.20484	-0.3494	ppb	9.20484	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	7.7	3.9878	µg/L	1.65317	3.9878	ppb	1.65317	41.46%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	331.3	21.929	µg/L	0.7804	21.929	ppb	0.7804	3.56%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.0	0.0327	µg/L	0.03837	0.0327	ppb	0.03837	117.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	61.6	0.0430	µg/L	0.01767	0.0430	ppb	0.01767	41.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	19.5	4.1532	µg/L	0.46258	4.1532	ppb	0.46258	11.14%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.2	-0.0415	µg/L	0.18960	-0.0415	ppb	0.18960	457.04%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	5.2	0.1588 µg/L	0.17745	0.1588 ppb	0.17745	111.72%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-8.3	-0.2399 µg/L	0.35428	-0.2399 ppb	0.35428	147.65%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-233.8	-0.9432 µg/L	0.11794	-0.9432 ppb	0.11794	12.50%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	2.1	2.2832 µg/L	3.20878	2.2832 ppb	3.20878	140.54%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	48.5	20.900 µg/L	8.2466	20.900 ppb	8.2466	39.46%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	2.1	5.4500 µg/L	7.69118	5.4500 ppb	7.69118	141.12%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	10.9	0.0193 µg/L	0.02714	0.0193 ppb	0.02714	140.51%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.3	0.3067 µg/L	0.47477	0.3067 ppb	0.47477	154.79%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	339.9	51.118 µg/L	5.2284	51.118 ppb	5.2284	10.23%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-2.6	-0.1708 µg/L	0.24920	-0.1708 ppb	0.24920	145.91%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-12.4	-10.423 µg/L	2.8104	-10.423 ppb	2.8104	26.96%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	1.8	0.4694 µg/L	1.43138	0.4694 ppb	1.43138	304.92%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.3	0.7166 µg/L	4.49769	0.7166 ppb	4.49769	627.64%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	7.1	3.4598 µg/L	0.60556	3.4598 ppb	0.60556	17.50%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.9	2.61 µg/L	3.687	2.61 ppb	3.687	141.46%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	158.3	11.259 µg/L	1.0845	11.259 ppb	1.0845	9.63%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	167.4	5.60 µg/L	1.029	5.60 ppb	1.029	18.38%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	9.6	2.4665 µg/L	0.26163	2.4665 ppb	0.26163	10.61%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-17.0	-0.0691 µg/L	0.10651	-0.0691 ppb	0.10651	154.10%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	325.7	0.4298 µg/L	0.04997	0.4298 ppb	0.04997	11.63%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	6.4	2.5129 µg/L	1.74934	2.5129 ppb	1.74934	69.61%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	85.8	5.5615 µg/L	4.20018	5.5615 ppb	4.20018	75.52%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	14.4	0.2238 µg/L	0.52462	0.2238 ppb	0.52462	234.46%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-43.4	-1.0447 µg/L	0.10849	-1.0447 ppb	0.10849	10.38%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 26
Sample ID: CCV
Nebulizer Back Pressure: 251.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/29/2005 21:23:40
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48765.5	48765.5	107	%			21:25:04
1	Al 396.153Radial†	17036.1	15757.0	4479.5	µg/L	4479.5	ppb	21:25:04
1	Ca 317.933Radial†	23686.5	21872.4	4622.0	µg/L	4622.0	ppb	21:25:24
1	Fe 238.204 Radial†	4741.0	4369.4	4812.6	µg/L	4812.6	ppb	21:25:24
1	K 766.490 Radial†	12585.4	10637.7	4588.4	µg/L	4588.4	ppb	21:25:04
1	Mg 279.077 IEC†	1944.5	1805.5	4810.9	µg/L	4810.9	ppb	21:25:24
1	Na 589.592 Radial†	68122.5	62424.6	9385.7	µg/L	9385.7	ppb	21:25:04
1	Sr 421.552†	120876.6	112482.3	457.37	µg/L	457.37	ppb	21:25:04
1	Sc 361.383	1223763.0	1223763.0	109.56	%			21:26:23
1	Y 371.029	662253.0	662253.0	109.19	%			21:26:23
1	Ag 328.068†	68110.5	62830.5	474.73	µg/L	474.73	ppb	21:26:29
1	As 188.979†	945.6	894.4	471.83	µg/L	471.83	ppb	21:26:49
1	B 249.677†	7942.7	7208.8	477.76	µg/L	477.76	ppb	21:26:29
1	Ba 233.527†	47943.4	43895.5	466.82	µg/L	466.82	ppb	21:26:29
1	Be 313.107†	750071.1	684378.5	466.97	µg/L	466.97	ppb	21:26:23
1	Cd 226.502†	14027.8	12827.5	469.38	µg/L	469.38	ppb	21:26:29
1	Co 228.616†	16415.2	15117.8	466.74	µg/L	466.74	ppb	21:26:29
1	Cr 267.716†	18069.6	16415.4	465.03	µg/L	465.03	ppb	21:26:29
1	Cu 324.752†	131085.1	115867.5	464.99	µg/L	464.99	ppb	21:26:23
1	Mn 257.610†	282574.2	257544.5	468.04	µg/L	468.04	ppb	21:26:23
1	Mo 202.031†	4031.4	3678.4	483.62	µg/L	483.62	ppb	21:26:49
1	Ni 231.604†	8066.3	7186.9	470.19	µg/L	470.19	ppb	21:26:29
1	P 214.914†	3180.4	2715.7	2243.8	µg/L	2243.8	ppb	21:26:49
1	Pb 220.353†	1956.4	1797.4	470.58	µg/L	470.58	ppb	21:26:49
1	S 181.975 Axial†	462.5	390.6	943.60	µg/L	943.60	ppb	21:26:49
1	Sb 206.836†	1088.3	956.1	465.01	µg/L	465.01	ppb	21:26:49
1	Se 196.026†	538.0	526.3	469	µg/L	469	ppb	21:26:49
1	SiO2 †	80332.5	72057.0	5118.0	µg/L	5118.0	ppb	21:26:29
1	Sn 189.927†	1989.2	1825.6	469.96	µg/L	469.96	ppb	21:26:49
1	Ti 334.940†	387746.4	353497.8	469.07	µg/L	469.07	ppb	21:26:23
1	Tl 190.801†	1273.8	1207.1	472.88	µg/L	472.88	ppb	21:26:49
1	U 409.014†	8324.3	7305.9	475.65	µg/L	475.65	ppb	21:26:29
1	V 292.402†	33896.5	31029.4	471.00	µg/L	471.00	ppb	21:26:29
1	Zn 213.857†	21722.5	19413.0	463.97	µg/L	463.97	ppb	21:26:29
1	Si 251.611†	78437.7	70338.6	2350	µg/L	2350	ppb	21:27:58
2	Sc RADIAL	49754.4	49754.4	110	%			21:25:29
2	Al 396.153Radial†	17476.2	15843.3	4504.7	µg/L	4504.7	ppb	21:25:29
2	Ca 317.933Radial†	23830.4	21565.6	4557.1	µg/L	4557.1	ppb	21:25:49
2	Fe 238.204 Radial†	4753.0	4292.7	4728.0	µg/L	4728.0	ppb	21:25:49
2	K 766.490 Radial†	12828.4	10626.5	4583.6	µg/L	4583.6	ppb	21:25:29
2	Mg 279.077 IEC†	1954.5	1778.6	4739.3	µg/L	4739.3	ppb	21:25:49
2	Na 589.592 Radial†	69530.7	62448.9	9389.4	µg/L	9389.4	ppb	21:25:29
2	Sr 421.552†	123649.3	112775.3	458.57	µg/L	458.57	ppb	21:25:29
2	Sc 361.383	1250806.2	1250806.2	111.99	%			21:26:55
2	Y 371.029	675187.3	675187.3	111.32	%			21:26:55
2	Ag 328.068†	67663.6	61087.3	461.57	µg/L	461.57	ppb	21:27:00
2	As 188.979†	946.7	876.7	462.46	µg/L	462.46	ppb	21:27:20
2	B 249.677†	7896.6	7011.0	464.64	µg/L	464.64	ppb	21:27:00
2	Ba 233.527†	47706.5	42737.9	454.50	µg/L	454.50	ppb	21:27:00
2	Be 313.107†	752924.6	672125.3	458.61	µg/L	458.61	ppb	21:26:55
2	Cd 226.502†	13970.1	12499.1	457.36	µg/L	457.36	ppb	21:27:00
2	Co 228.616†	16353.1	14738.4	455.02	µg/L	455.02	ppb	21:27:00
2	Cr 267.716†	17989.3	15987.2	452.91	µg/L	452.91	ppb	21:27:00
2	Cu 324.752†	130591.1	112839.7	452.85	µg/L	452.85	ppb	21:26:55
2	Mn 257.610†	283517.8	252811.1	459.44	µg/L	459.44	ppb	21:26:55
2	Mo 202.031†	4019.9	3588.5	471.82	µg/L	471.82	ppb	21:27:20
2	Ni 231.604†	8004.2	6972.3	456.16	µg/L	456.16	ppb	21:27:00
2	P 214.914†	3182.6	2654.8	2193.9	µg/L	2193.9	ppb	21:27:20

2	Pb 220.353†	1956.1	1758.6	460.44 µg/L	460.44 ppb	21:27:20
2	S 181.975 Axial†	454.8	374.6	904.58 µg/L	904.58 ppb	21:27:20
2	Sb 206.836†	1093.1	938.9	456.64 µg/L	456.64 ppb	21:27:20
2	Se 196.026†	532.6	510.9	455 µg/L	455 ppb	21:27:20
2	SiO2 †	79510.8	69738.1	4953.2 µg/L	4953.2 ppb	21:27:00
2	Sn 189.927†	1983.0	1780.8	458.45 µg/L	458.45 ppb	21:27:20
2	Ti 334.940†	388899.9	346876.4	460.29 µg/L	460.29 ppb	21:26:55
2	Tl 190.801†	1269.6	1178.2	461.61 µg/L	461.61 ppb	21:27:20
2	U 409.014†	8178.3	7011.2	456.49 µg/L	456.49 ppb	21:27:00
2	V 292.402†	33700.2	30185.2	458.20 µg/L	458.20 ppb	21:27:00
2	Zn 213.857†	21634.2	18905.5	451.84 µg/L	451.84 ppb	21:27:00
2	Si 251.611†	77727.0	68156.2	2270 µg/L	2270 ppb	21:28:03
3	Sc RADIAL	49726.1	49726.1	110 %		21:25:54
3	Al 396.153Radial†	17419.1	15800.3	4492.2 µg/L	4492.2 ppb	21:25:54
3	Ca 317.933Radial†	23918.0	21657.9	4576.6 µg/L	4576.6 ppb	21:26:15
3	Fe 238.204 Radial†	4781.8	4321.4	4759.6 µg/L	4759.6 ppb	21:26:15
3	K 766.490 Radial†	12781.2	10590.1	4567.9 µg/L	4567.9 ppb	21:25:54
3	Mg 279.077 IEC†	1948.9	1774.5	4728.5 µg/L	4728.5 ppb	21:26:15
3	Na 589.592 Radial†	69525.1	62479.9	9394.1 µg/L	9394.1 ppb	21:25:54
3	Sr 421.552†	123632.8	112824.4	458.77 µg/L	458.77 ppb	21:25:54
3	Sc 361.383	1242431.9	1242431.9	111.24 %		21:27:26
3	Y 371.029	670617.8	670617.8	110.57 %		21:27:26
3	Ag 328.068†	67697.9	61525.4	464.88 µg/L	464.88 ppb	21:27:32
3	As 188.979†	954.2	889.1	468.96 µg/L	468.96 ppb	21:27:52
3	B 249.677†	7946.7	7103.6	470.78 µg/L	470.78 ppb	21:27:32
3	Ba 233.527†	47735.2	43050.9	457.83 µg/L	457.83 ppb	21:27:32
3	Be 313.107†	750259.7	674261.3	460.07 µg/L	460.07 ppb	21:27:26
3	Cd 226.502†	13970.0	12583.1	460.43 µg/L	460.43 ppb	21:27:32
3	Co 228.616†	16290.9	14780.9	456.33 µg/L	456.33 ppb	21:27:32
3	Cr 267.716†	18010.5	16114.5	456.51 µg/L	456.51 ppb	21:27:32
3	Cu 324.752†	130387.3	113442.5	455.26 µg/L	455.26 ppb	21:27:26
3	Mn 257.610†	282725.1	253804.9	461.25 µg/L	461.25 ppb	21:27:26
3	Mo 202.031†	4030.3	3622.2	476.23 µg/L	476.23 ppb	21:27:52
3	Ni 231.604†	8026.4	7040.4	460.62 µg/L	460.62 ppb	21:27:32
3	P 214.914†	3189.1	2679.8	2214.8 µg/L	2214.8 ppb	21:27:52
3	Pb 220.353†	1966.9	1780.0	466.05 µg/L	466.05 ppb	21:27:52
3	S 181.975 Axial†	457.8	380.0	917.87 µg/L	917.87 ppb	21:27:52
3	Sb 206.836†	1107.0	958.0	465.93 µg/L	465.93 ppb	21:27:52
3	Se 196.026†	536.1	517.2	461 µg/L	461 ppb	21:27:52
3	SiO2 †	79658.7	70349.6	4996.6 µg/L	4996.6 ppb	21:27:32
3	Sn 189.927†	1995.1	1803.6	464.30 µg/L	464.30 ppb	21:27:52
3	Ti 334.940†	387663.6	348105.6	461.92 µg/L	461.92 ppb	21:27:26
3	Tl 190.801†	1279.6	1194.9	468.10 µg/L	468.10 ppb	21:27:52
3	U 409.014†	8204.6	7084.1	461.23 µg/L	461.23 ppb	21:27:32
3	V 292.402†	33722.5	30408.1	461.59 µg/L	461.59 ppb	21:27:32
3	Zn 213.857†	21613.3	19016.9	454.50 µg/L	454.50 ppb	21:27:32
3	Si 251.611†	78102.6	68961.7	2300 µg/L	2300 ppb	21:28:08

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1239000.3	110.93	%	1.239				1.12%
Sc RADIAL	49415.4	109	%	1.2				1.14%
Y 371.029	669352.7	110.36	%	1.081				0.98%
Ag 328.068†	61814.4	467.06	µg/L	6.846	467.06	ppb	6.846	1.47%
QC value within limits for Ag 328.068 Recovery = 93.41%								
Al 396.153Radial†	15800.2	4492.1	µg/L	12.61	4492.1	ppb	12.61	0.28%
QC value less than the lower limit for Al 396.153Radial Recovery = 89.84%								
As 188.979†	886.7	467.75	µg/L	4.804	467.75	ppb	4.804	1.03%
QC value within limits for As 188.979 Recovery = 93.55%								
B 249.677†	7107.8	471.06	µg/L	6.563	471.06	ppb	6.563	1.39%
QC value within limits for B 249.677 Recovery = 94.21%								
Ba 233.527†	43228.1	459.72	µg/L	6.369	459.72	ppb	6.369	1.39%
QC value within limits for Ba 233.527 Recovery = 91.94%								
Be 313.107†	676921.7	461.88	µg/L	4.467	461.88	ppb	4.467	0.97%
QC value within limits for Be 313.107 Recovery = 92.38%								
Ca 317.933Radial†	21698.7	4585.2	µg/L	33.30	4585.2	ppb	33.30	0.73%
QC value within limits for Ca 317.933Radial Recovery = 91.70%								
Cd 226.502†	12636.6	462.39	µg/L	6.245	462.39	ppb	6.245	1.35%
QC value within limits for Cd 226.502 Recovery = 92.48%								

Co 228.616†	14879.0	459.36 µg/L	6.419	459.36 ppb	6.419	1.40%
QC value within limits for Co 228.616 Recovery = 91.87%						
Cr 267.716†	16172.4	458.15 µg/L	6.228	458.15 ppb	6.228	1.36%
QC value within limits for Cr 267.716 Recovery = 91.63%						
Cu 324.752†	114049.9	457.70 µg/L	6.429	457.70 ppb	6.429	1.40%
QC value within limits for Cu 324.752 Recovery = 91.54%						
Fe 238.204 Radial†	4327.8	4766.7 µg/L	42.73	4766.7 ppb	42.73	0.90%
QC value within limits for Fe 238.204 Radial Recovery = 95.33%						
K 766.490 Radial†	10618.1	4579.9 µg/L	10.73	4579.9 ppb	10.73	0.23%
QC value within limits for K 766.490 Radial Recovery = 91.60%						
Mg 279.077 IEC†	1786.2	4759.6 µg/L	44.79	4759.6 ppb	44.79	0.94%
QC value within limits for Mg 279.077 IEC Recovery = 95.19%						
Mn 257.610†	254720.2	462.91 µg/L	4.535	462.91 ppb	4.535	0.98%
QC value within limits for Mn 257.610 Recovery = 92.58%						
Mo 202.031†	3629.7	477.23 µg/L	5.964	477.23 ppb	5.964	1.25%
QC value within limits for Mo 202.031 Recovery = 95.45%						
Na 589.592 Radial†	62451.1	9389.7 µg/L	4.18	9389.7 ppb	4.18	0.04%
QC value within limits for Na 589.592 Radial Recovery = 93.90%						
Ni 231.604†	7066.5	462.32 µg/L	7.172	462.32 ppb	7.172	1.55%
QC value within limits for Ni 231.604 Recovery = 92.46%						
P 214.914†	2683.4	2217.5 µg/L	25.09	2217.5 ppb	25.09	1.13%
QC value less than the lower limit for P 214.914 Recovery = 88.70%						
Pb 220.353†	1778.7	465.69 µg/L	5.083	465.69 ppb	5.083	1.09%
QC value within limits for Pb 220.353 Recovery = 93.14%						
S 181.975 Axial†	381.7	922.02 µg/L	19.838	922.02 ppb	19.838	2.15%
QC value within limits for S 181.975 Axial Recovery = 92.20%						
Sb 206.836†	951.0	462.53 µg/L	5.117	462.53 ppb	5.117	1.11%
QC value within limits for Sb 206.836 Recovery = 92.51%						
Se 196.026†	518.1	462 µg/L	6.9	462 ppb	6.9	1.49%
QC value within limits for Se 196.026 Recovery = 92.36%						
SiO2 †	70714.9	5022.6 µg/L	85.43	5022.6 ppb	85.43	1.70%
QC value within limits for SiO2 Recovery = 93.92%						
Si 251.611†	69152.2	2310 µg/L	36.8	2310 ppb	36.8	1.60%
QC value within limits for Si 251.611 Recovery = 92.28%						
Sn 189.927†	1803.3	464.24 µg/L	5.756	464.24 ppb	5.756	1.24%
QC value within limits for Sn 189.927 Recovery = 92.85%						
Sr 421.552†	112694.0	458.24 µg/L	0.753	458.24 ppb	0.753	0.16%
QC value within limits for Sr 421.552 Recovery = 91.65%						
Ti 334.940†	349493.3	463.76 µg/L	4.670	463.76 ppb	4.670	1.01%
QC value within limits for Ti 334.940 Recovery = 92.75%						
Tl 190.801†	1193.4	467.53 µg/L	5.661	467.53 ppb	5.661	1.21%
QC value within limits for Tl 190.801 Recovery = 93.51%						
U 409.014†	7133.7	464.46 µg/L	9.981	464.46 ppb	9.981	2.15%
QC value within limits for U 409.014 Recovery = 92.89%						
V 292.402†	30540.9	463.60 µg/L	6.635	463.60 ppb	6.635	1.43%
QC value within limits for V 292.402 Recovery = 92.72%						
Zn 213.857†	19111.8	456.77 µg/L	6.375	456.77 ppb	6.375	1.40%
QC value within limits for Zn 213.857 Recovery = 91.35%						

QC Failed. Continue with analysis.

Sequence No.: 27
Sample ID: CCB
Nebulizer Back Pressure: 252.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/29/2005 21:29:56
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	46621.0	46621.0	103	%			21:31:20
1	Al 396.153Radial†	155.0	58.2	16.668	µg/L	16.668	ppb	21:31:20
1	Ca 317.933Radial†	186.9	17.5	3.7184	µg/L	3.7184	ppb	21:31:40
1	Fe 238.204 Radial†	39.9	-2.6	-2.8684	µg/L	-2.8684	ppb	21:31:40
1	K 766.490 Radial†	1182.6	79.6	34.340	µg/L	34.340	ppb	21:31:20
1	Mg 279.077 IEC†	2.7	-1.0	-2.8094	µg/L	-2.8094	ppb	21:31:40
1	Na 589.592 Radial†	1081.9	99.2	14.926	µg/L	14.926	ppb	21:31:20
1	Sr 421.552†	-29.5	-4.8	-0.0194	µg/L	-0.0194	ppb	21:31:20
1	Sc 361.383	1167369.6	1167369.6	104.52	%			21:32:38
1	Y 371.029	633962.2	633962.2	104.52	%			21:32:38
1	Ag 328.068†	-644.4	49.3	0.3688	µg/L	0.3688	ppb	21:32:43
1	As 188.979†	-32.5	0.1	0.0624	µg/L	0.0624	ppb	21:33:04
1	B 249.677†	326.4	271.8	17.994	µg/L	17.994	ppb	21:33:04
1	Ba 233.527†	-130.5	12.7	0.1356	µg/L	0.1356	ppb	21:33:04
1	Be 313.107†	303.0	77.2	0.0537	µg/L	0.0537	ppb	21:32:43
1	Cd 226.502†	-20.9	4.2	0.1546	µg/L	0.1546	ppb	21:33:04
1	Co 228.616†	-147.7	-5.7	-0.1805	µg/L	-0.1805	ppb	21:33:04
1	Cr 267.716†	68.2	-11.5	-0.3294	µg/L	-0.3294	ppb	21:33:04
1	Cu 324.752†	3634.4	-296.7	-1.1956	µg/L	-1.1956	ppb	21:32:43
1	Mn 257.610†	385.3	7.2	0.0121	µg/L	0.0121	ppb	21:33:04
1	Mo 202.031†	-2.8	-3.8	-0.4945	µg/L	-0.4945	ppb	21:33:04
1	Ni 231.604†	179.5	-3.5	-0.2266	µg/L	-0.2266	ppb	21:33:04
1	P 214.914†	199.8	4.1	3.6767	µg/L	3.6767	ppb	21:33:04
1	Pb 220.353†	-3.6	8.4	2.1851	µg/L	2.1851	ppb	21:33:04
1	S 181.975 Axial†	32.6	-0.4	-0.9612	µg/L	-0.9612	ppb	21:33:04
1	Sb 206.836†	51.3	11.9	5.7845	µg/L	5.7845	ppb	21:33:04
1	Se 196.026†	-39.8	-2.8	-2.52	µg/L	-2.52	ppb	21:33:04
1	SiO2 †	1501.5	174.1	12.414	µg/L	12.414	ppb	21:32:43
1	Sn 189.927†	-6.0	4.3	1.1187	µg/L	1.1187	ppb	21:33:04
1	Ti 334.940†	797.5	364.1	0.4807	µg/L	0.4807	ppb	21:32:43
1	Tl 190.801†	-41.8	4.5	1.7671	µg/L	1.7671	ppb	21:33:04
1	U 409.014†	395.0	86.2	5.5890	µg/L	5.5890	ppb	21:32:43
1	V 292.402†	-106.4	-9.8	-0.1469	µg/L	-0.1469	ppb	21:32:43
1	Zn 213.857†	390.9	-39.1	-0.9404	µg/L	-0.9404	ppb	21:33:04
1	Si 251.611†	1470.2	155.1	5.20	µg/L	5.20	ppb	21:34:11
2	Sc RADIAL	46598.3	46598.3	103	%			21:31:45
2	Al 396.153Radial†	112.1	16.6	4.7014	µg/L	4.7014	ppb	21:31:45
2	Ca 317.933Radial†	175.0	5.9	1.2929	µg/L	1.2929	ppb	21:32:05
2	Fe 238.204 Radial†	40.4	-2.1	-2.3432	µg/L	-2.3432	ppb	21:32:05
2	K 766.490 Radial†	1089.6	-10.4	-4.4683	µg/L	-4.4683	ppb	21:31:45
2	Mg 279.077 IEC†	1.5	-2.2	-5.8353	µg/L	-5.8353	ppb	21:32:05
2	Na 589.592 Radial†	1132.4	148.9	22.386	µg/L	22.386	ppb	21:31:45
2	Sr 421.552†	-71.1	-45.3	-0.1841	µg/L	-0.1841	ppb	21:31:45
2	Sc 361.383	1156406.7	1156406.7	103.53	%			21:33:09
2	Y 371.029	627713.7	627713.7	103.49	%			21:33:09
2	Ag 328.068†	-636.0	51.6	0.3845	µg/L	0.3845	ppb	21:33:14
2	As 188.979†	-24.3	7.8	4.0317	µg/L	4.0317	ppb	21:33:35
2	B 249.677†	321.7	270.3	17.895	µg/L	17.895	ppb	21:33:35
2	Ba 233.527†	-137.4	4.8	0.0521	µg/L	0.0521	ppb	21:33:35
2	Be 313.107†	339.1	114.9	0.0797	µg/L	0.0797	ppb	21:33:14
2	Cd 226.502†	-25.9	-0.8	-0.0271	µg/L	-0.0271	ppb	21:33:35
2	Co 228.616†	-134.9	5.2	0.1611	µg/L	0.1611	ppb	21:33:35
2	Cr 267.716†	71.7	-7.5	-0.2179	µg/L	-0.2179	ppb	21:33:35
2	Cu 324.752†	3610.4	-286.9	-1.1585	µg/L	-1.1585	ppb	21:33:14
2	Mn 257.610†	367.1	-6.8	-0.0136	µg/L	-0.0136	ppb	21:33:35
2	Mo 202.031†	7.6	6.2	0.8182	µg/L	0.8182	ppb	21:33:35
2	Ni 231.604†	173.5	-7.6	-0.4960	µg/L	-0.4960	ppb	21:33:35
2	P 214.914†	180.5	-12.8	-10.754	µg/L	-10.754	ppb	21:33:35

2	Pb 220.353†	-15.6	-3.3	-0.8670 µg/L	-0.8670 ppb	21:33:35
2	S 181.975 Axial†	32.2	-0.4	-1.0354 µg/L	-1.0354 ppb	21:33:35
2	Sb 206.836†	55.3	16.2	7.9030 µg/L	7.9030 ppb	21:33:35
2	Se 196.026†	-30.4	5.9	5.26 µg/L	5.26 ppb	21:33:35
2	SiO2 †	1489.4	176.0	12.501 µg/L	12.501 ppb	21:33:14
2	Sn 189.927†	8.0	17.7	4.5635 µg/L	4.5635 ppb	21:33:35
2	Ti 334.940†	715.0	291.6	0.3837 µg/L	0.3837 ppb	21:33:14
2	Tl 190.801†	-35.8	9.9	3.8670 µg/L	3.8670 ppb	21:33:35
2	U 409.014†	415.8	109.9	7.1211 µg/L	7.1211 ppb	21:33:14
2	V 292.402†	-142.9	-46.0	-0.6742 µg/L	-0.6742 ppb	21:33:14
2	Zn 213.857†	382.0	-44.1	-1.0597 µg/L	-1.0597 ppb	21:33:35
2	Si 251.611†	1445.7	144.8	4.83 µg/L	4.83 ppb	21:34:16
3	Sc RADIAL	46307.5	46307.5	102 %		21:32:10
3	Al 396.153Radial†	110.5	15.6	4.4747 µg/L	4.4747 ppb	21:32:10
3	Ca 317.933Radial†	175.2	7.2	1.5337 µg/L	1.5337 ppb	21:32:30
3	Fe 238.204 Radial†	40.7	-1.6	-1.7075 µg/L	-1.7075 ppb	21:32:30
3	K 766.490 Radial†	1138.6	44.3	19.117 µg/L	19.117 ppb	21:32:10
3	Mg 279.077 IEC†	0.5	-3.1	-8.2858 µg/L	-8.2858 ppb	21:32:30
3	Na 589.592 Radial†	1127.2	150.7	22.666 µg/L	22.666 ppb	21:32:10
3	Sr 421.552†	-49.9	-24.9	-0.1011 µg/L	-0.1011 ppb	21:32:10
3	Sc 361.383	1169046.6	1169046.6	104.67 %		21:33:40
3	Y 371.029	634907.8	634907.8	104.68 %		21:33:40
3	Ag 328.068†	-717.5	-19.6	-0.1480 µg/L	-0.1480 ppb	21:33:45
3	As 188.979†	-26.1	6.3	3.2872 µg/L	3.2872 ppb	21:34:05
3	B 249.677†	306.9	252.8	16.735 µg/L	16.735 ppb	21:34:05
3	Ba 233.527†	-130.6	12.7	0.1354 µg/L	0.1354 ppb	21:34:05
3	Be 313.107†	316.9	90.1	0.0617 µg/L	0.0617 ppb	21:33:45
3	Cd 226.502†	-28.8	-3.3	-0.1200 µg/L	-0.1200 ppb	21:34:05
3	Co 228.616†	-145.2	-3.1	-0.0984 µg/L	-0.0984 ppb	21:34:05
3	Cr 267.716†	63.6	-16.0	-0.4544 µg/L	-0.4544 ppb	21:34:05
3	Cu 324.752†	3648.1	-288.6	-1.1600 µg/L	-1.1600 ppb	21:33:45
3	Mn 257.610†	390.0	11.3	0.0202 µg/L	0.0202 ppb	21:34:05
3	Mo 202.031†	-0.6	-1.7	-0.2206 µg/L	-0.2206 ppb	21:34:05
3	Ni 231.604†	178.2	-5.0	-0.3263 µg/L	-0.3263 ppb	21:34:05
3	P 214.914†	184.0	-11.3	-9.4596 µg/L	-9.4596 ppb	21:34:05
3	Pb 220.353†	-11.5	0.8	0.2105 µg/L	0.2105 ppb	21:34:05
3	S 181.975 Axial†	31.9	-1.1	-2.7110 µg/L	-2.7110 ppb	21:34:05
3	Sb 206.836†	44.9	5.8	2.8153 µg/L	2.8153 ppb	21:34:05
3	Se 196.026†	-31.1	5.6	4.98 µg/L	4.98 ppb	21:34:05
3	SiO2 †	1507.5	177.7	12.662 µg/L	12.662 ppb	21:33:45
3	Sn 189.927†	-0.1	9.9	2.5519 µg/L	2.5519 ppb	21:34:05
3	Ti 334.940†	696.0	266.0	0.3524 µg/L	0.3524 ppb	21:33:45
3	Tl 190.801†	-39.3	7.0	2.7125 µg/L	2.7125 ppb	21:34:05
3	U 409.014†	333.2	26.6	1.7271 µg/L	1.7271 ppb	21:33:45
3	V 292.402†	-81.7	13.9	0.2066 µg/L	0.2066 ppb	21:33:45
3	Zn 213.857†	379.2	-50.8	-1.2213 µg/L	-1.2213 ppb	21:34:05
3	Si 251.611†	1428.0	112.8	3.78 µg/L	3.78 ppb	21:34:21

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1164274.3	104.24	%	0.615				0.59%
Sc RADIAL	46508.9	103	%	0.4				0.38%
Y 371.029	632194.6	104.23	%	0.645				0.62%
Ag 328.068†	27.1	0.2018	µg/L	0.30300	0.2018	ppb	0.30300	150.15%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	30.2	8.6146	µg/L	6.97520	8.6146	ppb	6.97520	80.97%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.7	2.4604	µg/L	2.10983	2.4604	ppb	2.10983	85.75%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	265.0	17.542	µg/L	0.7005	17.542	ppb	0.7005	3.99%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.1	0.1077	µg/L	0.04817	0.1077	ppb	0.04817	44.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	94.1	0.0650	µg/L	0.01330	0.0650	ppb	0.01330	20.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.2	2.1817	µg/L	1.33631	2.1817	ppb	1.33631	61.25%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	0.0	0.0025	µg/L	0.13966	0.0025	ppb	0.13966	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-1.2	-0.0393 µg/L	0.17830	-0.0393 ppb	0.17830	453.87%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-11.7	-0.3339 µg/L	0.11833	-0.3339 ppb	0.11833	35.44%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-290.7	-1.1714 µg/L	0.02100	-1.1714 ppb	0.02100	1.79%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-2.1	-2.3063 µg/L	0.58133	-2.3063 ppb	0.58133	25.21%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	37.9	16.329 µg/L	19.5536	16.329 ppb	19.5536	119.74%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-2.1	-5.6435 µg/L	2.74324	-5.6435 ppb	2.74324	48.61%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	3.9	0.0062 µg/L	0.01763	0.0062 ppb	0.01763	283.13%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.3	0.0344 µg/L	0.69248	0.0344 ppb	0.69248	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	133.0	19.993 µg/L	4.3902	19.993 ppb	4.3902	21.96%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-5.4	-0.3497 µg/L	0.13620	-0.3497 ppb	0.13620	38.95%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-6.7	-5.5123 µg/L	7.98426	-5.5123 ppb	7.98426	144.84%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	2.0	0.5095 µg/L	1.54786	0.5095 ppb	1.54786	303.79%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.6	-1.5692 µg/L	0.98955	-1.5692 ppb	0.98955	63.06%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	11.3	5.5009 µg/L	2.55572	5.5009 ppb	2.55572	46.46%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.9	2.57 µg/L	4.412	2.57 ppb	4.412	171.43%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	175.9	12.526 µg/L	0.1255	12.526 ppb	0.1255	1.00%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	137.6	4.60 µg/L	0.738	4.60 ppb	0.738	16.03%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	10.7	2.7447 µg/L	1.73049	2.7447 ppb	1.73049	63.05%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-25.0	-0.1015 µg/L	0.08232	-0.1015 ppb	0.08232	81.07%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	307.2	0.4056 µg/L	0.06691	0.4056 ppb	0.06691	16.50%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	7.1	2.7822 µg/L	1.05170	2.7822 ppb	1.05170	37.80%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	74.2	4.8124 µg/L	2.77963	4.8124 ppb	2.77963	57.76%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-14.0	-0.2048 µg/L	0.44324	-0.2048 ppb	0.44324	216.39%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-44.7	-1.0738 µg/L	0.14100	-1.0738 ppb	0.14100	13.13%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analysis Begun

Start Time: 6/29/2005 21:35:05 Plasma On Time: 6/29/2005 16:45:06
Logged In Analyst: Administrator Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N2061001Autosampler Model: AS-93plus

Sample Information File: C:\pe\Sample Information\062905.sif
Batch ID:
Results Data Set: 062905
Results Library: C:\pe\Results\results.mdb

Sequence No.: 1 Autosampler Location: 7
Sample ID: CCV Date Collected: 6/29/2005 21:35:05
Nebulizer Back Pressure: 252.0 kPa Nebulizer Flow: 0.65 L/min
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48020.8	48020.8	106	%			21:36:32
1	Al 396.153Radial†	17515.2	16455.5	4679.2	µg/L	4679.2	ppb	21:36:32
1	Ca 317.933Radial†	23889.4	22405.9	4734.6	µg/L	4734.6	ppb	21:36:52
1	Fe 238.204 Radial†	4779.1	4473.8	4927.4	µg/L	4927.4	ppb	21:36:52
1	K 766.490 Radial†	12698.7	10926.3	4712.9	µg/L	4712.9	ppb	21:36:32
1	Mg 279.077 IEC†	1942.5	1831.6	4880.2	µg/L	4880.2	ppb	21:36:52
1	Na 589.592 Radial†	68810.0	64057.0	9631.2	µg/L	9631.2	ppb	21:36:32
1	Sr 421.552†	123510.6	116714.9	474.59	µg/L	474.59	ppb	21:36:32
1	Sc 361.383	1226076.4	1226076.4	109.77	%			21:37:51
1	Y 371.029	661941.3	661941.3	109.14	%			21:37:51
1	Ag 328.068†	67903.8	62524.8	472.45	µg/L	472.45	ppb	21:37:57
1	As 188.979†	943.2	890.5	469.80	µg/L	469.80	ppb	21:38:17
1	B 249.677†	7908.3	7163.8	474.75	µg/L	474.75	ppb	21:37:57
1	Ba 233.527†	47753.9	43640.3	464.10	µg/L	464.10	ppb	21:37:57
1	Be 313.107†	754479.3	687102.6	468.83	µg/L	468.83	ppb	21:37:51
1	Cd 226.502†	13987.6	12766.6	467.14	µg/L	467.14	ppb	21:37:57
1	Co 228.616†	16423.5	15097.1	466.09	µg/L	466.09	ppb	21:37:57
1	Cr 267.716†	18065.2	16380.3	464.04	µg/L	464.04	ppb	21:37:57
1	Cu 324.752†	132815.8	117218.4	470.43	µg/L	470.43	ppb	21:37:57
1	Mn 257.610†	284006.4	258362.7	469.54	µg/L	469.54	ppb	21:37:51
1	Mo 202.031†	4022.0	3662.9	481.61	µg/L	481.61	ppb	21:38:17
1	Ni 231.604†	8064.4	7171.2	469.17	µg/L	469.17	ppb	21:37:57
1	P 214.914†	3189.0	2718.0	2244.9	µg/L	2244.9	ppb	21:38:17
1	Pb 220.353†	1953.7	1791.5	469.08	µg/L	469.08	ppb	21:38:17
1	S 181.975 Axial†	462.1	389.4	940.32	µg/L	940.32	ppb	21:38:17
1	Sb 206.836†	1080.6	947.3	460.69	µg/L	460.69	ppb	21:38:17
1	Se 196.026†	528.0	516.3	460	µg/L	460	ppb	21:38:17
1	SiO2 †	79064.7	70763.8	5026.0	µg/L	5026.0	ppb	21:37:57
1	Sn 189.927†	1982.2	1815.8	467.46	µg/L	467.46	ppb	21:38:17
1	Ti 334.940†	389956.3	354843.2	470.87	µg/L	470.87	ppb	21:37:51
1	Tl 190.801†	1264.2	1196.1	468.64	µg/L	468.64	ppb	21:38:17
1	U 409.014†	8168.0	7149.2	465.47	µg/L	465.47	ppb	21:37:57
1	V 292.402†	33883.8	30959.4	469.92	µg/L	469.92	ppb	21:37:57
1	Zn 213.857†	21631.9	19293.1	461.06	µg/L	461.06	ppb	21:37:57
1	Si 251.611†	77830.0	69649.9	2320	µg/L	2320	ppb	21:39:25
2	Sc RADIAL	48117.2	48117.2	106	%			21:36:57
2	Al 396.153Radial†	17595.4	16498.0	4691.4	µg/L	4691.4	ppb	21:36:57
2	Ca 317.933Radial†	23667.3	22151.2	4680.8	µg/L	4680.8	ppb	21:37:17
2	Fe 238.204 Radial†	4737.2	4425.2	4874.0	µg/L	4874.0	ppb	21:37:17
2	K 766.490 Radial†	12773.1	10972.4	4732.8	µg/L	4732.8	ppb	21:36:57
2	Mg 279.077 IEC†	1932.3	1818.3	4844.9	µg/L	4844.9	ppb	21:37:17
2	Na 589.592 Radial†	68880.1	63992.8	9621.6	µg/L	9621.6	ppb	21:36:57
2	Sr 421.552†	123592.6	116558.2	473.95	µg/L	473.95	ppb	21:36:57
2	Sc 361.383	1227865.9	1227865.9	109.93	%			21:38:23
2	Y 371.029	662946.6	662946.6	109.30	%			21:38:23
2	Ag 328.068†	68326.1	62818.9	474.65	µg/L	474.65	ppb	21:38:28

2	As 188.979†	945.9	891.7	470.47 µg/L	470.47 ppb	21:38:48
2	B 249.677†	7982.3	7220.6	478.52 µg/L	478.52 ppb	21:38:28
2	Ba 233.527†	48038.0	43835.4	466.17 µg/L	466.17 ppb	21:38:28
2	Be 313.107†	754022.8	685685.6	467.86 µg/L	467.86 ppb	21:38:23
2	Cd 226.502†	14060.2	12814.1	468.88 µg/L	468.88 ppb	21:38:28
2	Co 228.616†	16482.3	15128.7	467.06 µg/L	467.06 ppb	21:38:28
2	Cr 267.716†	18184.0	16464.3	466.43 µg/L	466.43 ppb	21:38:28
2	Cu 324.752†	134060.3	118174.2	474.26 µg/L	474.26 ppb	21:38:28
2	Mn 257.610†	284106.1	258076.2	469.01 µg/L	469.01 ppb	21:38:23
2	Mo 202.031†	4013.8	3650.1	479.92 µg/L	479.92 ppb	21:38:48
2	Ni 231.604†	8061.4	7157.8	468.29 µg/L	468.29 ppb	21:38:28
2	P 214.914†	3171.5	2697.8	2227.1 µg/L	2227.1 ppb	21:38:48
2	Pb 220.353†	1966.0	1800.2	471.33 µg/L	471.33 ppb	21:38:48
2	S 181.975 Axial†	455.4	382.7	924.15 µg/L	924.15 ppb	21:38:48
2	Sb 206.836†	1086.6	951.3	462.59 µg/L	462.59 ppb	21:38:48
2	Se 196.026†	533.5	520.6	464 µg/L	464 ppb	21:38:48
2	SiO2 †	79751.6	71283.6	5063.1 µg/L	5063.1 ppb	21:38:28
2	Sn 189.927†	1983.0	1813.9	466.96 µg/L	466.96 ppb	21:38:48
2	Ti 334.940†	389988.7	354355.0	470.22 µg/L	470.22 ppb	21:38:23
2	Tl 190.801†	1260.5	1191.1	466.67 µg/L	466.67 ppb	21:38:48
2	U 409.014†	8224.1	7189.3	468.09 µg/L	468.09 ppb	21:38:28
2	V 292.402†	33982.0	31003.8	470.58 µg/L	470.58 ppb	21:38:28
2	Zn 213.857†	21845.3	19458.5	465.06 µg/L	465.06 ppb	21:38:28
2	Si 251.611†	77610.8	69347.3	2310 µg/L	2310 ppb	21:39:31
3	Sc RADIAL	47897.4	47897.4	106 %		21:37:23
3	Al 396.153Radial†	17456.0	16442.1	4675.3 µg/L	4675.3 ppb	21:37:23
3	Ca 317.933Radial†	23970.9	22541.2	4763.2 µg/L	4763.2 ppb	21:37:43
3	Fe 238.204 Radial†	4789.3	4495.1	4950.9 µg/L	4950.9 ppb	21:37:43
3	K 766.490 Radial†	12743.7	10999.9	4744.6 µg/L	4744.6 ppb	21:37:23
3	Mg 279.077 IEC†	1949.7	1843.2	4911.0 µg/L	4911.0 ppb	21:37:43
3	Na 589.592 Radial†	68714.8	64134.4	9642.8 µg/L	9642.8 ppb	21:37:23
3	Sr 421.552†	123279.9	116797.0	474.92 µg/L	474.92 ppb	21:37:23
3	Sc 361.383	1214467.6	1214467.6	108.73 %		21:38:54
3	Y 371.029	655544.9	655544.9	108.08 %		21:38:54
3	Ag 328.068†	68270.0	63453.0	479.45 µg/L	479.45 ppb	21:38:59
3	As 188.979†	937.1	893.1	471.25 µg/L	471.25 ppb	21:39:20
3	B 249.677†	8010.4	7326.6	485.53 µg/L	485.53 ppb	21:38:59
3	Ba 233.527†	48070.3	44347.2	471.62 µg/L	471.62 ppb	21:38:59
3	Be 313.107†	745130.0	685074.0	467.45 µg/L	467.45 ppb	21:38:54
3	Cd 226.502†	14040.0	12936.6	473.37 µg/L	473.37 ppb	21:38:59
3	Co 228.616†	16494.3	15305.2	472.52 µg/L	472.52 ppb	21:38:59
3	Cr 267.716†	18157.0	16622.0	470.89 µg/L	470.89 ppb	21:38:59
3	Cu 324.752†	133979.5	119445.2	479.36 µg/L	479.36 ppb	21:38:59
3	Mn 257.610†	280745.3	257836.5	468.59 µg/L	468.59 ppb	21:38:54
3	Mo 202.031†	3995.4	3673.5	483.00 µg/L	483.00 ppb	21:39:20
3	Ni 231.604†	8085.1	7260.6	475.00 µg/L	475.00 ppb	21:38:59
3	P 214.914†	3141.5	2702.1	2229.8 µg/L	2229.8 ppb	21:39:20
3	Pb 220.353†	1945.8	1801.3	471.63 µg/L	471.63 ppb	21:39:20
3	S 181.975 Axial†	453.0	385.0	929.75 µg/L	929.75 ppb	21:39:20
3	Sb 206.836†	1087.2	962.7	468.14 µg/L	468.14 ppb	21:39:20
3	Se 196.026†	538.0	530.0	472 µg/L	472 ppb	21:39:20
3	SiO2 †	79789.7	72119.1	5122.5 µg/L	5122.5 ppb	21:38:59
3	Sn 189.927†	1965.7	1817.8	467.99 µg/L	467.99 ppb	21:39:20
3	Ti 334.940†	385908.0	354515.7	470.42 µg/L	470.42 ppb	21:38:54
3	Tl 190.801†	1258.5	1201.9	470.88 µg/L	470.88 ppb	21:39:20
3	U 409.014†	8298.8	7340.5	477.91 µg/L	477.91 ppb	21:38:59
3	V 292.402†	34044.1	31401.9	476.60 µg/L	476.60 ppb	21:38:59
3	Zn 213.857†	21763.9	19602.8	468.48 µg/L	468.48 ppb	21:38:59
3	Si 251.611†	77606.4	70122.1	2340 µg/L	2340 ppb	21:39:36

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1222803.3	109.48	%	0.651				0.59%
Sc RADIAL	48011.8	106	%	0.2				0.23%
Y 371.029	660144.2	108.84	%	0.662				0.61%
Ag 328.068†	62932.2	475.52	µg/L	3.580	475.52	ppb	3.580	0.75%
QC value within limits for Ag 328.068 Recovery = 95.10%								
Al 396.153Radial†	16465.2	4681.9	µg/L	8.41	4681.9	ppb	8.41	0.18%
QC value within limits for Al 396.153Radial Recovery = 93.64%								

As 188.979†	891.7	470.51 µg/L	0.724	470.51 ppb	0.724	0.15%
QC value within limits for As 188.979 Recovery = 94.10%						
B 249.677†	7237.0	479.60 µg/L	5.470	479.60 ppb	5.470	1.14%
QC value within limits for B 249.677 Recovery = 95.92%						
Ba 233.527†	43941.0	467.30 µg/L	3.882	467.30 ppb	3.882	0.83%
QC value within limits for Ba 233.527 Recovery = 93.46%						
Be 313.107†	685954.1	468.05 µg/L	0.708	468.05 ppb	0.708	0.15%
QC value within limits for Be 313.107 Recovery = 93.61%						
Ca 317.933Radial†	22366.1	4726.2 µg/L	41.85	4726.2 ppb	41.85	0.89%
QC value within limits for Ca 317.933Radial Recovery = 94.52%						
Cd 226.502†	12839.1	469.80 µg/L	3.211	469.80 ppb	3.211	0.68%
QC value within limits for Cd 226.502 Recovery = 93.96%						
Co 228.616†	15177.0	468.56 µg/L	3.466	468.56 ppb	3.466	0.74%
QC value within limits for Co 228.616 Recovery = 93.71%						
Cr 267.716†	16488.9	467.12 µg/L	3.476	467.12 ppb	3.476	0.74%
QC value within limits for Cr 267.716 Recovery = 93.42%						
Cu 324.752†	118279.3	474.69 µg/L	4.483	474.69 ppb	4.483	0.94%
QC value within limits for Cu 324.752 Recovery = 94.94%						
Fe 238.204 Radial†	4464.7	4917.4 µg/L	39.44	4917.4 ppb	39.44	0.80%
QC value within limits for Fe 238.204 Radial Recovery = 98.35%						
K 766.490 Radial†	10966.2	4730.1 µg/L	16.04	4730.1 ppb	16.04	0.34%
QC value within limits for K 766.490 Radial Recovery = 94.60%						
Mg 279.077 IEC†	1831.0	4878.7 µg/L	33.08	4878.7 ppb	33.08	0.68%
QC value within limits for Mg 279.077 IEC Recovery = 97.57%						
Mn 257.610†	258091.8	469.05 µg/L	0.477	469.05 ppb	0.477	0.10%
QC value within limits for Mn 257.610 Recovery = 93.81%						
Mo 202.031†	3662.1	481.51 µg/L	1.540	481.51 ppb	1.540	0.32%
QC value within limits for Mo 202.031 Recovery = 96.30%						
Na 589.592 Radial†	64061.4	9631.9 µg/L	10.65	9631.9 ppb	10.65	0.11%
QC value within limits for Na 589.592 Radial Recovery = 96.32%						
Ni 231.604†	7196.5	470.82 µg/L	3.649	470.82 ppb	3.649	0.77%
QC value within limits for Ni 231.604 Recovery = 94.16%						
P 214.914†	2706.0	2233.9 µg/L	9.59	2233.9 ppb	9.59	0.43%
QC value less than the lower limit for P 214.914 Recovery = 89.36%						
Pb 220.353†	1797.7	470.68 µg/L	1.394	470.68 ppb	1.394	0.30%
QC value within limits for Pb 220.353 Recovery = 94.14%						
S 181.975 Axial†	385.7	931.41 µg/L	8.214	931.41 ppb	8.214	0.88%
QC value within limits for S 181.975 Axial Recovery = 93.14%						
Sb 206.836†	953.8	463.81 µg/L	3.874	463.81 ppb	3.874	0.84%
QC value within limits for Sb 206.836 Recovery = 92.76%						
Se 196.026†	522.3	466 µg/L	6.3	466 ppb	6.3	1.34%
QC value within limits for Se 196.026 Recovery = 93.11%						
SiO2 †	71388.8	5070.5 µg/L	48.68	5070.5 ppb	48.68	0.96%
QC value within limits for SiO2 Recovery = 94.82%						
Si 251.611†	69706.4	2330 µg/L	13.0	2330 ppb	13.0	0.56%
QC value within limits for Si 251.611 Recovery = 93.02%						
Sn 189.927†	1815.8	467.47 µg/L	0.514	467.47 ppb	0.514	0.11%
QC value within limits for Sn 189.927 Recovery = 93.49%						
Sr 421.552†	116690.1	474.48 µg/L	0.493	474.48 ppb	0.493	0.10%
QC value within limits for Sr 421.552 Recovery = 94.90%						
Ti 334.940†	354571.3	470.50 µg/L	0.333	470.50 ppb	0.333	0.07%
QC value within limits for Ti 334.940 Recovery = 94.10%						
Tl 190.801†	1196.4	468.73 µg/L	2.107	468.73 ppb	2.107	0.45%
QC value within limits for Tl 190.801 Recovery = 93.75%						
U 409.014†	7226.4	470.49 µg/L	6.559	470.49 ppb	6.559	1.39%
QC value within limits for U 409.014 Recovery = 94.10%						
V 292.402†	31121.7	472.37 µg/L	3.678	472.37 ppb	3.678	0.78%
QC value within limits for V 292.402 Recovery = 94.47%						
Zn 213.857†	19451.5	464.86 µg/L	3.713	464.86 ppb	3.713	0.80%
QC value within limits for Zn 213.857 Recovery = 92.97%						

QC Failed. Continue with analysis.

Sequence No.: 2
Sample ID: CCB
Nebulizer Back Pressure: 251.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/29/2005 21:41:23
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	46020.7	46020.7	101	%			21:42:47
1	Al 396.153Radial†	104.6	10.5	2.9756	µg/L	2.9756	ppb	21:42:47
1	Ca 317.933Radial†	186.6	19.5	4.1402	µg/L	4.1402	ppb	21:43:08
1	Fe 238.204 Radial†	42.7	0.7	0.7732	µg/L	0.7732	ppb	21:43:08
1	K 766.490 Radial†	1072.0	-14.4	-6.2043	µg/L	-6.2043	ppb	21:42:47
1	Mg 279.077 IEC†	6.4	2.6	7.0011	µg/L	7.0011	ppb	21:43:08
1	Na 589.592 Radial†	1059.1	90.5	13.609	µg/L	13.609	ppb	21:42:47
1	Sr 421.552†	34.2	57.7	0.2346	µg/L	0.2346	ppb	21:42:47
1	Sc 361.383	1160877.6	1160877.6	103.93	%			21:44:06
1	Y 371.029	630663.2	630663.2	103.98	%			21:44:06
1	Ag 328.068†	-642.4	47.8	0.3592	µg/L	0.3592	ppb	21:44:11
1	As 188.979†	-20.5	11.5	5.9859	µg/L	5.9859	ppb	21:44:32
1	B 249.677†	317.1	264.6	17.517	µg/L	17.517	ppb	21:44:32
1	Ba 233.527†	-131.6	10.9	0.1170	µg/L	0.1170	ppb	21:44:32
1	Be 313.107†	308.6	84.3	0.0585	µg/L	0.0585	ppb	21:44:11
1	Cd 226.502†	-35.3	-9.7	-0.3543	µg/L	-0.3543	ppb	21:44:32
1	Co 228.616†	-132.0	8.6	0.2637	µg/L	0.2637	ppb	21:44:32
1	Cr 267.716†	76.1	-3.5	-0.1027	µg/L	-0.1027	ppb	21:44:32
1	Cu 324.752†	3753.9	-162.3	-0.6562	µg/L	-0.6562	ppb	21:44:11
1	Mn 257.610†	382.2	6.4	0.0109	µg/L	0.0109	ppb	21:44:32
1	Mo 202.031†	5.6	4.4	0.5726	µg/L	0.5726	ppb	21:44:32
1	Ni 231.604†	186.2	4.0	0.2606	µg/L	0.2606	ppb	21:44:32
1	P 214.914†	188.8	-5.4	-4.5529	µg/L	-4.5529	ppb	21:44:32
1	Pb 220.353†	-1.2	10.6	2.7673	µg/L	2.7673	ppb	21:44:32
1	S 181.975 Axial†	39.8	6.8	16.436	µg/L	16.436	ppb	21:44:32
1	Sb 206.836†	60.6	21.1	10.280	µg/L	10.280	ppb	21:44:32
1	Se 196.026†	-31.1	5.4	4.78	µg/L	4.78	ppb	21:44:32
1	SiO2 †	1489.5	170.6	12.127	µg/L	12.127	ppb	21:44:11
1	Sn 189.927†	0.8	10.8	2.7892	µg/L	2.7892	ppb	21:44:32
1	Ti 334.940†	784.1	355.5	0.4694	µg/L	0.4694	ppb	21:44:11
1	Tl 190.801†	-31.4	14.3	5.5823	µg/L	5.5823	ppb	21:44:32
1	U 409.014†	388.3	81.9	5.3085	µg/L	5.3085	ppb	21:44:11
1	V 292.402†	-83.0	12.1	0.1925	µg/L	0.1925	ppb	21:44:11
1	Zn 213.857†	392.1	-35.9	-0.8657	µg/L	-0.8657	ppb	21:44:32
1	Si 251.611†	1514.8	205.9	6.88	µg/L	6.88	ppb	21:45:39
2	Sc RADIAL	45625.7	45625.7	101	%			21:43:13
2	Al 396.153Radial†	105.4	12.2	3.4676	µg/L	3.4676	ppb	21:43:13
2	Ca 317.933Radial†	173.9	8.5	1.8281	µg/L	1.8281	ppb	21:43:33
2	Fe 238.204 Radial†	43.6	1.9	2.1183	µg/L	2.1183	ppb	21:43:33
2	K 766.490 Radial†	1085.4	8.1	3.4784	µg/L	3.4784	ppb	21:43:13
2	Mg 279.077 IEC†	1.6	-2.1	-5.5175	µg/L	-5.5175	ppb	21:43:33
2	Na 589.592 Radial†	1042.3	82.9	12.460	µg/L	12.460	ppb	21:43:13
2	Sr 421.552†	-37.8	-13.6	-0.0553	µg/L	-0.0553	ppb	21:43:13
2	Sc 361.383	1177942.8	1177942.8	105.46	%			21:44:37
2	Y 371.029	639861.6	639861.6	105.50	%			21:44:37
2	Ag 328.068†	-698.4	3.6	0.0264	µg/L	0.0264	ppb	21:44:42
2	As 188.979†	-22.7	9.7	5.0444	µg/L	5.0444	ppb	21:45:02
2	B 249.677†	312.6	256.0	16.946	µg/L	16.946	ppb	21:45:02
2	Ba 233.527†	-144.1	0.9	0.0111	µg/L	0.0111	ppb	21:45:02
2	Be 313.107†	309.9	81.1	0.0567	µg/L	0.0567	ppb	21:44:42
2	Cd 226.502†	-21.2	4.1	0.1529	µg/L	0.1529	ppb	21:45:02
2	Co 228.616†	-145.9	-2.8	-0.0875	µg/L	-0.0875	ppb	21:45:02
2	Cr 267.716†	65.1	-15.0	-0.4306	µg/L	-0.4306	ppb	21:45:02
2	Cu 324.752†	3640.4	-322.3	-1.3001	µg/L	-1.3001	ppb	21:44:42
2	Mn 257.610†	398.3	16.3	0.0289	µg/L	0.0289	ppb	21:45:02
2	Mo 202.031†	4.8	3.5	0.4576	µg/L	0.4576	ppb	21:45:02
2	Ni 231.604†	178.0	-6.5	-0.4230	µg/L	-0.4230	ppb	21:45:02
2	P 214.914†	196.8	-0.5	-0.2582	µg/L	-0.2582	ppb	21:45:02

2	Pb 220.353†	-7.1	5.0	1.3082 µg/L	1.3082 ppb	21:45:02
2	S 181.975 Axial†	32.1	-1.1	-2.6946 µg/L	-2.6946 ppb	21:45:02
2	Sb 206.836†	53.1	13.1	6.4157 µg/L	6.4157 ppb	21:45:02
2	Se 196.026†	-34.6	2.5	2.22 µg/L	2.22 ppb	21:45:02
2	SiO2 †	1467.0	128.5	9.1345 µg/L	9.1345 ppb	21:44:42
2	Sn 189.927†	-0.2	9.8	2.5314 µg/L	2.5314 ppb	21:45:02
2	Ti 334.940†	707.0	271.4	0.3567 µg/L	0.3567 ppb	21:44:42
2	Tl 190.801†	-37.3	9.1	3.5609 µg/L	3.5609 ppb	21:45:02
2	U 409.014†	430.5	116.5	7.5516 µg/L	7.5516 ppb	21:44:42
2	V 292.402†	-84.4	11.9	0.1901 µg/L	0.1901 ppb	21:44:42
2	Zn 213.857†	387.9	-45.3	-1.0877 µg/L	-1.0877 ppb	21:45:02
2	Si 251.611†	1450.2	123.5	4.12 µg/L	4.12 ppb	21:45:44
3	Sc RADIAL	45830.4	45830.4	101 %		21:43:38
3	Al 396.153Radial†	99.3	5.7	1.6481 µg/L	1.6481 ppb	21:43:38
3	Ca 317.933Radial†	184.3	18.0	3.8268 µg/L	3.8268 ppb	21:43:58
3	Fe 238.204 Radial†	41.3	-0.6	-0.6503 µg/L	-0.6503 ppb	21:43:58
3	K 766.490 Radial†	1197.3	114.0	49.178 µg/L	49.178 ppb	21:43:38
3	Mg 279.077 IEC†	6.8	3.1	8.1240 µg/L	8.1240 ppb	21:43:58
3	Na 589.592 Radial†	1074.3	109.9	16.531 µg/L	16.531 ppb	21:43:38
3	Sr 421.552†	-32.8	-8.5	-0.0345 µg/L	-0.0345 ppb	21:43:38
3	Sc 361.383	1167102.3	1167102.3	104.49 %		21:45:08
3	Y 371.029	634135.8	634135.8	104.55 %		21:45:08
3	Ag 328.068†	-638.3	55.0	0.4117 µg/L	0.4117 ppb	21:45:13
3	As 188.979†	-20.5	11.6	6.0456 µg/L	6.0456 ppb	21:45:33
3	B 249.677†	297.9	244.6	16.195 µg/L	16.195 ppb	21:45:33
3	Ba 233.527†	-131.2	11.9	0.1276 µg/L	0.1276 ppb	21:45:33
3	Be 313.107†	323.8	97.2	0.0674 µg/L	0.0674 ppb	21:45:13
3	Cd 226.502†	-32.8	-7.1	-0.2592 µg/L	-0.2592 ppb	21:45:33
3	Co 228.616†	-149.4	-7.4	-0.2298 µg/L	-0.2298 ppb	21:45:33
3	Cr 267.716†	82.6	2.3	0.0607 µg/L	0.0607 ppb	21:45:33
3	Cu 324.752†	3726.1	-208.1	-0.8404 µg/L	-0.8404 ppb	21:45:13
3	Mn 257.610†	379.0	1.3	0.0014 µg/L	0.0014 ppb	21:45:33
3	Mo 202.031†	-0.0	-1.1	-0.1413 µg/L	-0.1413 ppb	21:45:33
3	Ni 231.604†	174.7	-8.0	-0.5236 µg/L	-0.5236 ppb	21:45:33
3	P 214.914†	198.8	3.1	2.7851 µg/L	2.7851 ppb	21:45:33
3	Pb 220.353†	-13.4	-1.0	-0.2776 µg/L	-0.2776 ppb	21:45:33
3	S 181.975 Axial†	32.9	-0.1	-0.1510 µg/L	-0.1510 ppb	21:45:33
3	Sb 206.836†	45.7	6.5	3.1845 µg/L	3.1845 ppb	21:45:33
3	Se 196.026†	-34.2	2.6	2.30 µg/L	2.30 ppb	21:45:33
3	SiO2 †	1481.7	155.4	11.068 µg/L	11.068 ppb	21:45:13
3	Sn 189.927†	4.8	14.6	3.7649 µg/L	3.7649 ppb	21:45:33
3	Ti 334.940†	728.1	297.8	0.3924 µg/L	0.3924 ppb	21:45:13
3	Tl 190.801†	-39.4	6.8	2.6438 µg/L	2.6438 ppb	21:45:33
3	U 409.014†	400.8	91.9	5.9561 µg/L	5.9561 ppb	21:45:13
3	V 292.402†	-113.9	-17.0	-0.2497 µg/L	-0.2497 ppb	21:45:13
3	Zn 213.857†	382.6	-47.0	-1.1297 µg/L	-1.1297 ppb	21:45:33
3	Si 251.611†	1439.7	126.3	4.22 µg/L	4.22 ppb	21:45:49

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1168640.9	104.63	%	0.773				0.74%
Sc RADIAL	45825.6	101	%	0.4				0.43%
Y 371.029	634886.9	104.68	%	0.766				0.73%
Ag 328.068†	35.5	0.2658	µg/L	0.20894	0.2658	ppb	0.20894	78.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	9.5	2.6971	µg/L	0.94121	2.6971	ppb	0.94121	34.90%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	10.9	5.6920	µg/L	0.56162	5.6920	ppb	0.56162	9.87%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	255.1	16.886	µg/L	0.6631	16.886	ppb	0.6631	3.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.9	0.0852	µg/L	0.06440	0.0852	ppb	0.06440	75.57%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	87.5	0.0609	µg/L	0.00576	0.0609	ppb	0.00576	9.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.3	3.2651	µg/L	1.25427	3.2651	ppb	1.25427	38.41%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-4.2	-0.1535	µg/L	0.26960	-0.1535	ppb	0.26960	175.59%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-0.5	-0.0179 µg/L	0.25402	-0.0179 ppb	0.25402	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-5.4	-0.1575 µg/L	0.25022	-0.1575 ppb	0.25022	158.82%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-230.9	-0.9322 µg/L	0.33166	-0.9322 ppb	0.33166	35.58%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.7	0.7471 µg/L	1.38446	0.7471 ppb	1.38446	185.32%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	35.9	15.484 µg/L	29.5788	15.484 ppb	29.5788	191.03%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.2	3.2025 µg/L	7.57261	3.2025 ppb	7.57261	236.46%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	8.0	0.0137 µg/L	0.01399	0.0137 ppb	0.01399	101.81%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.3	0.2963 µg/L	0.38334	0.2963 ppb	0.38334	129.37%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	94.4	14.200 µg/L	2.0992	14.200 ppb	2.0992	14.78%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.5	-0.2287 µg/L	0.42671	-0.2287 ppb	0.42671	186.61%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.0	-0.6753 µg/L	3.68673	-0.6753 ppb	3.68673	545.91%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.9	1.2660 µg/L	1.52293	1.2660 ppb	1.52293	120.30%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.9	4.5302 µg/L	10.38899	4.5302 ppb	10.38899	229.33%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	13.6	6.6268 µg/L	3.55255	6.6268 ppb	3.55255	53.61%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.5	3.10 µg/L	1.456	3.10 ppb	1.456	46.89%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	151.5	10.776 µg/L	1.5173	10.776 ppb	1.5173	14.08%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	151.9	5.08 µg/L	1.562	5.08 ppb	1.562	30.77%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	11.8	3.0285 µg/L	0.65064	3.0285 ppb	0.65064	21.48%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	11.9	0.0483 µg/L	0.16168	0.0483 ppb	0.16168	334.82%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	308.2	0.4062 µg/L	0.05758	0.4062 ppb	0.05758	14.18%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	10.1	3.9290 µg/L	1.50343	3.9290 ppb	1.50343	38.26%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	96.7	6.2721 µg/L	1.15445	6.2721 ppb	1.15445	18.41%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2.4	0.0443 µg/L	0.25461	0.0443 ppb	0.25461	574.82%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-42.7	-1.0277 µg/L	0.14186	-1.0277 ppb	0.14186	13.80%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 3
Sample ID: 1200875012|437221|1
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 6/29/2005 21:47:38
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875012|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	48149.0	48149.0	106	%			21:49:03
1	Al 396.153Radial†	76.9	-20.2	-5.7518	µg/L	-5.7518	ppb	21:49:03
1	Ca 317.933Radial†	226.1	48.6	10.279	µg/L	10.279	ppb	21:49:24
1	Fe 238.204 Radial†	42.8	-1.1	-1.2157	µg/L	-1.2157	ppb	21:49:24
1	K 766.490 Radial†	1140.7	3.6	1.5500	µg/L	1.5500	ppb	21:49:03
1	Mg 279.077 IEC†	8.6	4.5	11.919	µg/L	11.919	ppb	21:49:24
1	Na 589.592 Radial†	952.1	-56.5	-8.4952	µg/L	-8.4952	ppb	21:49:03
1	Sr 421.552†	-58.6	-31.3	-0.1273	µg/L	-0.1273	ppb	21:49:03
1	Sc 361.383	1181020.8	1181020.8	105.74	%			21:50:22
1	Y 371.029	641046.2	641046.2	105.69	%			21:50:22
1	Ag 328.068†	-720.3	-15.4	-0.1159	µg/L	-0.1159	ppb	21:50:27
1	As 188.979†	-29.2	3.7	1.8997	µg/L	1.8997	ppb	21:50:48
1	B 249.677†	263.4	208.6	13.808	µg/L	13.808	ppb	21:50:48
1	Ba 233.527†	-134.6	10.3	0.1095	µg/L	0.1095	ppb	21:50:48
1	Be 313.107†	267.0	39.9	0.0276	µg/L	0.0276	ppb	21:50:27
1	Cd 226.502†	-31.7	-5.7	-0.2084	µg/L	-0.2084	ppb	21:50:48
1	Co 228.616†	-133.2	9.6	0.2946	µg/L	0.2946	ppb	21:50:48
1	Cr 267.716†	68.4	-12.1	-0.3443	µg/L	-0.3443	ppb	21:50:48
1	Cu 324.752†	3699.2	-275.6	-1.1085	µg/L	-1.1085	ppb	21:50:27
1	Mn 257.610†	397.0	14.0	0.0249	µg/L	0.0249	ppb	21:50:48
1	Mo 202.031†	-1.4	-2.4	-0.3088	µg/L	-0.3088	ppb	21:50:48
1	Ni 231.604†	179.0	-5.9	-0.3881	µg/L	-0.3881	ppb	21:50:48
1	P 214.914†	178.5	-18.3	-15.492	µg/L	-15.492	ppb	21:50:48
1	Pb 220.353†	-9.2	3.1	0.8135	µg/L	0.8135	ppb	21:50:48
1	S 181.975 Axial†	34.6	1.2	2.8408	µg/L	2.8408	ppb	21:50:48
1	Sb 206.836†	46.0	6.3	3.0818	µg/L	3.0818	ppb	21:50:48
1	Se 196.026†	-30.4	6.5	5.80	µg/L	5.80	ppb	21:50:48
1	SiO2 †	1889.8	524.7	37.381	µg/L	37.381	ppb	21:50:27
1	Sn 189.927†	-1.2	8.9	2.2955	µg/L	2.2955	ppb	21:50:48
1	Ti 334.940†	587.3	156.5	0.2067	µg/L	0.2067	ppb	21:50:27
1	Tl 190.801†	-41.7	5.1	1.9716	µg/L	1.9716	ppb	21:50:48
1	U 409.014†	351.2	40.5	2.6236	µg/L	2.6236	ppb	21:50:27
1	V 292.402†	-85.8	10.9	0.1619	µg/L	0.1619	ppb	21:50:27
1	Zn 213.857†	490.6	50.8	1.2293	µg/L	1.2293	ppb	21:50:48
1	Si 251.611†	1916.9	561.3	18.8	µg/L	18.8	ppb	21:51:55
2	Sc RADIAL	47587.1	47587.1	105	%			21:49:29
2	Al 396.153Radial†	113.3	15.4	4.4359	µg/L	4.4359	ppb	21:49:29
2	Ca 317.933Radial†	221.6	46.9	9.9243	µg/L	9.9243	ppb	21:49:49
2	Fe 238.204 Radial†	46.6	3.0	3.2611	µg/L	3.2611	ppb	21:49:49
2	K 766.490 Radial†	1114.7	-8.5	-3.6707	µg/L	-3.6707	ppb	21:49:29
2	Mg 279.077 IEC†	5.9	2.0	5.3201	µg/L	5.3201	ppb	21:49:49
2	Na 589.592 Radial†	946.9	-50.8	-7.6422	µg/L	-7.6422	ppb	21:49:29
2	Sr 421.552†	-26.8	-1.6	-0.0064	µg/L	-0.0064	ppb	21:49:29
2	Sc 361.383	1205188.2	1205188.2	107.90	%			21:50:53
2	Y 371.029	653582.8	653582.8	107.76	%			21:50:53
2	Ag 328.068†	-678.6	37.0	0.2787	µg/L	0.2787	ppb	21:50:58
2	As 188.979†	-30.9	2.6	1.3467	µg/L	1.3467	ppb	21:51:18
2	B 249.677†	250.5	191.7	12.688	µg/L	12.688	ppb	21:51:18
2	Ba 233.527†	-131.9	15.2	0.1627	µg/L	0.1627	ppb	21:51:18
2	Be 313.107†	303.6	68.6	0.0478	µg/L	0.0478	ppb	21:50:58
2	Cd 226.502†	-25.8	0.3	0.0105	µg/L	0.0105	ppb	21:51:18
2	Co 228.616†	-147.7	-1.3	-0.0445	µg/L	-0.0445	ppb	21:51:18
2	Cr 267.716†	76.9	-5.4	-0.1573	µg/L	-0.1573	ppb	21:51:18
2	Cu 324.752†	3689.8	-354.4	-1.4268	µg/L	-1.4268	ppb	21:50:58
2	Mn 257.610†	424.6	32.1	0.0580	µg/L	0.0580	ppb	21:51:18
2	Mo 202.031†	-5.0	-5.7	-0.7491	µg/L	-0.7491	ppb	21:51:18
2	Ni 231.604†	178.3	-10.0	-0.6520	µg/L	-0.6520	ppb	21:51:18
2	P 214.914†	193.2	-8.1	-6.7099	µg/L	-6.7099	ppb	21:51:18

2	Pb 220.353†	3.2	14.7	3.8498 µg/L	3.8498 ppb	21:51:18
2	S 181.975 Axial†	34.1	0.0	0.0900 µg/L	0.0900 ppb	21:51:18
2	Sb 206.836†	51.9	10.9	5.2954 µg/L	5.2954 ppb	21:51:18
2	Se 196.026†	-36.2	1.7	1.52 µg/L	1.52 ppb	21:51:18
2	SiO2 †	1914.6	511.9	36.483 µg/L	36.483 ppb	21:50:58
2	Sn 189.927†	-2.3	7.9	2.0452 µg/L	2.0452 ppb	21:51:18
2	Ti 334.940†	694.1	244.3	0.3220 µg/L	0.3220 ppb	21:50:58
2	Tl 190.801†	-43.9	3.8	1.4977 µg/L	1.4977 ppb	21:51:18
2	U 409.014†	403.1	81.9	5.3109 µg/L	5.3109 ppb	21:50:58
2	V 292.402†	-67.7	29.3	0.4364 µg/L	0.4364 ppb	21:50:58
2	Zn 213.857†	499.6	49.9	1.2089 µg/L	1.2089 ppb	21:51:18
2	Si 251.611†	1915.9	524.0	17.5 µg/L	17.5 ppb	21:52:00
3	Sc RADIAL	46788.8	46788.8	103 %		21:49:54
3	Al 396.153Radial†	101.6	5.9	1.7051 µg/L	1.7051 ppb	21:49:54
3	Ca 317.933Radial†	207.2	36.5	7.7156 µg/L	7.7156 ppb	21:50:14
3	Fe 238.204 Radial†	44.3	1.5	1.6782 µg/L	1.6782 ppb	21:50:14
3	K 766.490 Radial†	1042.5	-60.4	-26.039 µg/L	-26.039 ppb	21:49:54
3	Mg 279.077 IEC†	4.3	0.5	1.3088 µg/L	1.3088 ppb	21:50:14
3	Na 589.592 Radial†	1001.8	17.8	2.6751 µg/L	2.6751 ppb	21:49:54
3	Sr 421.552†	-63.9	-38.0	-0.1547 µg/L	-0.1547 ppb	21:49:54
3	Sc 361.383	1210712.0	1210712.0	108.40 %		21:51:24
3	Y 371.029	656447.0	656447.0	108.23 %		21:51:24
3	Ag 328.068†	-647.0	69.0	0.5199 µg/L	0.5199 ppb	21:51:29
3	As 188.979†	-20.7	12.2	6.3332 µg/L	6.3332 ppb	21:51:49
3	B 249.677†	244.7	185.3	12.263 µg/L	12.263 ppb	21:51:49
3	Ba 233.527†	-145.9	2.9	0.0309 µg/L	0.0309 ppb	21:51:49
3	Be 313.107†	265.0	31.8	0.0218 µg/L	0.0218 ppb	21:51:29
3	Cd 226.502†	-30.5	-3.9	-0.1435 µg/L	-0.1435 ppb	21:51:49
3	Co 228.616†	-130.5	15.2	0.4688 µg/L	0.4688 ppb	21:51:49
3	Cr 267.716†	69.3	-12.8	-0.3632 µg/L	-0.3632 ppb	21:51:49
3	Cu 324.752†	3686.7	-373.0	-1.4981 µg/L	-1.4981 ppb	21:51:29
3	Mn 257.610†	411.5	18.2	0.0332 µg/L	0.0332 ppb	21:51:49
3	Mo 202.031†	-1.3	-2.3	-0.2987 µg/L	-0.2987 ppb	21:51:49
3	Ni 231.604†	179.8	-9.3	-0.6108 µg/L	-0.6108 ppb	21:51:49
3	P 214.914†	188.3	-13.4	-11.203 µg/L	-11.203 ppb	21:51:49
3	Pb 220.353†	-6.7	5.6	1.4666 µg/L	1.4666 ppb	21:51:49
3	S 181.975 Axial†	35.0	0.7	1.7722 µg/L	1.7722 ppb	21:51:49
3	Sb 206.836†	52.1	10.9	5.3167 µg/L	5.3167 ppb	21:51:49
3	Se 196.026†	-35.3	2.7	2.42 µg/L	2.42 ppb	21:51:49
3	SiO2 †	1944.7	531.5	37.871 µg/L	37.871 ppb	21:51:29
3	Sn 189.927†	-7.4	3.2	0.8276 µg/L	0.8276 ppb	21:51:49
3	Ti 334.940†	586.6	142.1	0.1884 µg/L	0.1884 ppb	21:51:29
3	Tl 190.801†	-38.4	9.1	3.5299 µg/L	3.5299 ppb	21:51:49
3	U 409.014†	333.8	16.3	1.0557 µg/L	1.0557 ppb	21:51:29
3	V 292.402†	-72.4	25.2	0.3753 µg/L	0.3753 ppb	21:51:29
3	Zn 213.857†	488.8	37.8	0.9181 µg/L	0.9181 ppb	21:51:49
3	Si 251.611†	1933.5	532.1	17.8 µg/L	17.8 ppb	21:52:05

Mean Data: 1200875012|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1198973.7	107.35	%	1.414				1.32%
Sc RADIAL	47508.3	105	%	1.5				1.44%
Y 371.029	650358.7	107.23	%	1.350				1.26%
Ag 328.068†	30.2	0.2275	µg/L	0.32099	0.2275	ppb	0.32099	141.06%
Al 396.153Radial†	0.4	0.1297	µg/L	5.27341	0.1297	ppb	5.27341	>999.9%
As 188.979†	6.1	3.1932	µg/L	2.73336	3.1932	ppb	2.73336	85.60%
B 249.677†	195.2	12.920	µg/L	0.7981	12.920	ppb	0.7981	6.18%
Ba 233.527†	9.5	0.1010	µg/L	0.06631	0.1010	ppb	0.06631	65.63%
Be 313.107†	46.8	0.0324	µg/L	0.01363	0.0324	ppb	0.01363	42.03%
Ca 317.933Radial†	44.0	9.3062	µg/L	1.38887	9.3062	ppb	1.38887	14.92%
Cd 226.502†	-3.1	-0.1138	µg/L	0.11243	-0.1138	ppb	0.11243	98.81%
Co 228.616†	7.8	0.2397	µg/L	0.26105	0.2397	ppb	0.26105	108.93%
Cr 267.716†	-10.1	-0.2882	µg/L	0.11383	-0.2882	ppb	0.11383	39.49%
Cu 324.752†	-334.3	-1.3445	µg/L	0.20745	-1.3445	ppb	0.20745	15.43%
Fe 238.204 Radial†	1.1	1.2412	µg/L	2.27016	1.2412	ppb	2.27016	182.90%
K 766.490 Radial†	-21.8	-9.3867	µg/L	14.65605	-9.3867	ppb	14.65605	156.14%
Mg 279.077 IEC†	2.3	6.1827	µg/L	5.35752	6.1827	ppb	5.35752	86.65%
Mn 257.610†	21.5	0.0387	µg/L	0.01724	0.0387	ppb	0.01724	44.56%
Mo 202.031†	-3.4	-0.4522	µg/L	0.25722	-0.4522	ppb	0.25722	56.88%

Na 589.592 Radial†	-29.9	-4.4874 µg/L	6.21758	-4.4874 ppb	6.21758	138.56%
Ni 231.604†	-8.4	-0.5503 µg/L	0.14196	-0.5503 ppb	0.14196	25.80%
P 214.914†	-13.3	-11.135 µg/L	4.3913	-11.135 ppb	4.3913	39.44%
Pb 220.353†	7.8	2.0433 µg/L	1.59820	2.0433 ppb	1.59820	78.22%
S 181.975 Axial†	0.6	1.5677 µg/L	1.38679	1.5677 ppb	1.38679	88.46%
Sb 206.836†	9.4	4.5647 µg/L	1.28423	4.5647 ppb	1.28423	28.13%
Se 196.026†	3.6	3.25 µg/L	2.258	3.25 ppb	2.258	69.60%
SiO2 †	522.7	37.245 µg/L	0.7040	37.245 ppb	0.7040	1.89%
Si 251.611†	539.1	18.0 µg/L	0.65	18.0 ppb	0.65	3.62%
Sn 189.927†	6.7	1.7228 µg/L	0.78526	1.7228 ppb	0.78526	45.58%
Sr 421.552†	-23.6	-0.0961 µg/L	0.07888	-0.0961 ppb	0.07888	82.05%
Ti 334.940†	181.0	0.2390 µg/L	0.07239	0.2390 ppb	0.07239	30.28%
Tl 190.801†	6.0	2.3331 µg/L	1.06323	2.3331 ppb	1.06323	45.57%
U 409.014†	46.2	2.9967 µg/L	2.15199	2.9967 ppb	2.15199	71.81%
V 292.402†	21.8	0.3245 µg/L	0.14409	0.3245 ppb	0.14409	44.40%
Zn 213.857†	46.2	1.1188 µg/L	0.17406	1.1188 ppb	0.17406	15.56%

Sequence No.: 4
Sample ID: 1200875019|437221|1
Nebulizer Back Pressure: 252.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 6/29/2005 21:53:54
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875019|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	49113.2	49113.2	108	%			21:55:20
1	Al 396.153Radial†	17521.6	16093.4	4576.3	µg/L	4576.3	ppb	21:55:20
1	Ca 317.933Radial†	24200.3	22191.1	4689.2	µg/L	4689.2	ppb	21:55:40
1	Fe 238.204 Radial†	4758.8	4354.6	4796.1	µg/L	4796.1	ppb	21:55:40
1	K 766.490 Radial†	12953.9	10895.2	4699.5	µg/L	4699.5	ppb	21:55:20
1	Mg 279.077 IEC†	1945.2	1793.2	4778.0	µg/L	4778.0	ppb	21:55:40
1	Na 589.592 Radial†	35534.8	31872.4	4791.5	µg/L	4791.5	ppb	21:55:20
1	Sr 421.552†	124125.2	114687.2	466.34	µg/L	466.34	ppb	21:55:20
1	Sc 361.383	1233637.7	1233637.7	110.45	%			21:56:39
1	Y 371.029	665758.0	665758.0	109.77	%			21:56:39
1	Ag 328.068†	66036.2	60454.8	456.82	µg/L	456.82	ppb	21:56:45
1	As 188.979†	954.0	895.0	472.01	µg/L	472.01	ppb	21:57:05
1	B 249.677†	7721.4	6950.5	460.62	µg/L	460.62	ppb	21:56:45
1	Ba 233.527†	47299.4	42962.2	456.88	µg/L	456.88	ppb	21:56:45
1	Be 313.107†	745079.4	674379.2	460.15	µg/L	460.15	ppb	21:56:39
1	Cd 226.502†	13541.4	12284.5	449.50	µg/L	449.50	ppb	21:56:45
1	Co 228.616†	16102.1	14714.4	454.27	µg/L	454.27	ppb	21:56:45
1	Cr 267.716†	17769.3	16011.5	453.59	µg/L	453.59	ppb	21:56:45
1	Cu 324.752†	131784.1	115542.7	463.70	µg/L	463.70	ppb	21:56:45
1	Mn 257.610†	282145.8	255092.3	463.59	µg/L	463.59	ppb	21:56:39
1	Mo 202.031†	3944.5	3570.2	469.43	µg/L	469.43	ppb	21:57:05
1	Ni 231.604†	7831.7	6915.6	452.45	µg/L	452.45	ppb	21:56:45
1	P 214.914†	838.6	572.1	410.89	µg/L	410.89	ppb	21:57:05
1	Pb 220.353†	1942.5	1770.6	463.57	µg/L	463.57	ppb	21:57:05
1	S 181.975 Axial†	2109.0	1877.9	4557.5	µg/L	4557.5	ppb	21:57:05
1	Sb 206.836†	1116.0	973.2	473.33	µg/L	473.33	ppb	21:57:05
1	Se 196.026†	511.3	498.2	444	µg/L	444	ppb	21:57:05
1	SiO2 †	143399.9	128571.1	9144.4	µg/L	9144.4	ppb	21:56:45
1	Sn 189.927†	1998.6	1819.5	468.41	µg/L	468.41	ppb	21:57:05
1	Ti 334.940†	382991.9	346360.4	459.61	µg/L	459.61	ppb	21:56:39
1	Tl 190.801†	1239.2	1166.5	457.04	µg/L	457.04	ppb	21:57:05
1	U 409.014†	8203.3	7135.5	464.54	µg/L	464.54	ppb	21:56:45
1	V 292.402†	33223.7	30172.6	458.00	µg/L	458.00	ppb	21:56:45
1	Zn 213.857†	20919.0	18526.9	442.70	µg/L	442.70	ppb	21:56:45
1	Si 251.611†	140455.2	125916.0	4210	µg/L	4210	ppb	21:58:14
2	Sc RADIAL	48981.1	48981.1	108	%			21:55:45
2	Al 396.153Radial†	17486.4	16104.4	4579.6	µg/L	4579.6	ppb	21:55:45
2	Ca 317.933Radial†	24178.1	22230.8	4697.6	µg/L	4697.6	ppb	21:56:05
2	Fe 238.204 Radial†	4755.4	4363.3	4805.8	µg/L	4805.8	ppb	21:56:05
2	K 766.490 Radial†	12881.4	10860.3	4684.4	µg/L	4684.4	ppb	21:55:45
2	Mg 279.077 IEC†	1952.1	1804.5	4807.8	µg/L	4807.8	ppb	21:56:05
2	Na 589.592 Radial†	35433.0	31866.6	4790.6	µg/L	4790.6	ppb	21:55:45
2	Sr 421.552†	123792.8	114688.5	466.34	µg/L	466.34	ppb	21:55:45
2	Sc 361.383	1238828.6	1238828.6	110.91	%			21:57:11
2	Y 371.029	668851.1	668851.1	110.28	%			21:57:11
2	Ag 328.068†	66604.5	60716.6	458.80	µg/L	458.80	ppb	21:57:16
2	As 188.979†	944.7	883.0	465.80	µg/L	465.80	ppb	21:57:36
2	B 249.677†	7769.2	6964.2	461.52	µg/L	461.52	ppb	21:57:16
2	Ba 233.527†	47783.9	43219.5	459.62	µg/L	459.62	ppb	21:57:16
2	Be 313.107†	747393.2	673638.6	459.64	µg/L	459.64	ppb	21:57:11
2	Cd 226.502†	13654.1	12334.8	451.34	µg/L	451.34	ppb	21:57:16
2	Co 228.616†	16250.0	14786.6	456.50	µg/L	456.50	ppb	21:57:16
2	Cr 267.716†	17891.1	16053.9	454.80	µg/L	454.80	ppb	21:57:16
2	Cu 324.752†	132809.9	115967.6	465.41	µg/L	465.41	ppb	21:57:16
2	Mn 257.610†	283040.0	254828.1	463.11	µg/L	463.11	ppb	21:57:11
2	Mo 202.031†	3921.6	3534.7	464.76	µg/L	464.76	ppb	21:57:36
2	Ni 231.604†	7867.4	6918.0	452.60	µg/L	452.60	ppb	21:57:16
2	P 214.914†	841.8	571.8	410.40	µg/L	410.40	ppb	21:57:36

2	Pb 220.353†	1929.6	1751.5	458.59 µg/L	458.59 ppb	21:57:36
2	S 181.975 Axial†	2098.9	1860.8	4515.9 µg/L	4515.9 ppb	21:57:36
2	Sb 206.836†	1112.1	965.5	469.51 µg/L	469.51 ppb	21:57:36
2	Se 196.026†	499.8	485.9	433 µg/L	433 ppb	21:57:36
2	SiO2 †	144985.6	129456.7	9207.7 µg/L	9207.7 ppb	21:57:16
2	Sn 189.927†	1977.1	1792.6	461.50 µg/L	461.50 ppb	21:57:36
2	Ti 334.940†	384524.6	346289.2	459.51 µg/L	459.51 ppb	21:57:11
2	Tl 190.801†	1224.5	1148.5	450.04 µg/L	450.04 ppb	21:57:36
2	U 409.014†	8157.6	7063.2	459.86 µg/L	459.86 ppb	21:57:16
2	V 292.402†	33530.0	30322.7	460.20 µg/L	460.20 ppb	21:57:16
2	Zn 213.857†	21097.2	18608.1	444.66 µg/L	444.66 ppb	21:57:16
2	Si 251.611†	142961.4	127642.8	4260 µg/L	4260 ppb	21:58:19
3	Sc RADIAL	48714.3	48714.3	107 %		21:56:11
3	Al 396.153Radial†	17479.3	16186.4	4602.8 µg/L	4602.8 ppb	21:56:11
3	Ca 317.933Radial†	24152.2	22329.3	4718.4 µg/L	4718.4 ppb	21:56:31
3	Fe 238.204 Radial†	4746.4	4379.1	4823.1 µg/L	4823.1 ppb	21:56:31
3	K 766.490 Radial†	12854.8	10900.8	4701.9 µg/L	4701.9 ppb	21:56:11
3	Mg 279.077 IEC†	1946.1	1808.8	4819.4 µg/L	4819.4 ppb	21:56:31
3	Na 589.592 Radial†	35383.2	31999.9	4810.6 µg/L	4810.6 ppb	21:56:11
3	Sr 421.552†	123440.1	114987.9	467.56 µg/L	467.56 ppb	21:56:11
3	Sc 361.383	1238298.5	1238298.5	110.87 %		21:57:42
3	Y 371.029	668758.2	668758.2	110.26 %		21:57:42
3	Ag 328.068†	66952.8	61056.5	461.37 µg/L	461.37 ppb	21:57:48
3	As 188.979†	965.9	902.5	476.00 µg/L	476.00 ppb	21:58:08
3	B 249.677†	7833.5	7025.2	465.57 µg/L	465.57 ppb	21:57:48
3	Ba 233.527†	48050.0	43478.1	462.37 µg/L	462.37 ppb	21:57:48
3	Be 313.107†	747696.9	674201.0	460.03 µg/L	460.03 ppb	21:57:42
3	Cd 226.502†	13773.6	12447.8	455.48 µg/L	455.48 ppb	21:57:48
3	Co 228.616†	16360.9	14893.0	459.79 µg/L	459.79 ppb	21:57:48
3	Cr 267.716†	18038.0	16193.3	458.74 µg/L	458.74 ppb	21:57:48
3	Cu 324.752†	133066.2	116250.1	466.54 µg/L	466.54 ppb	21:57:48
3	Mn 257.610†	283131.8	255020.1	463.46 µg/L	463.46 ppb	21:57:42
3	Mo 202.031†	3975.7	3585.0	471.36 µg/L	471.36 ppb	21:58:08
3	Ni 231.604†	7913.7	6962.9	455.54 µg/L	455.54 ppb	21:57:48
3	P 214.914†	840.2	570.7	409.22 µg/L	409.22 ppb	21:58:08
3	Pb 220.353†	1951.3	1771.9	463.91 µg/L	463.91 ppb	21:58:08
3	S 181.975 Axial†	2125.5	1885.6	4576.3 µg/L	4576.3 ppb	21:58:08
3	Sb 206.836†	1137.8	989.1	481.00 µg/L	481.00 ppb	21:58:08
3	Se 196.026†	504.3	490.2	437 µg/L	437 ppb	21:58:08
3	SiO2 †	145679.9	130139.0	9256.1 µg/L	9256.1 ppb	21:57:48
3	Sn 189.927†	2006.4	1819.8	468.49 µg/L	468.49 ppb	21:58:08
3	Ti 334.940†	384552.0	346462.3	459.74 µg/L	459.74 ppb	21:57:42
3	Tl 190.801†	1249.1	1171.2	458.87 µg/L	458.87 ppb	21:58:08
3	U 409.014†	8262.5	7161.0	466.22 µg/L	466.22 ppb	21:57:48
3	V 292.402†	33764.4	30547.1	463.64 µg/L	463.64 ppb	21:57:48
3	Zn 213.857†	21172.4	18684.1	446.47 µg/L	446.47 ppb	21:57:48
3	Si 251.611†	144024.2	128656.5	4300 µg/L	4300 ppb	21:58:24

Mean Data: 1200875019|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1236921.6	110.74	%	0.256				0.23%
Sc RADIAL	48936.2	108	%	0.4				0.42%
Y 371.029	667789.1	110.10	%	0.290				0.26%
Ag 328.068†	60742.6	458.99	µg/L	2.279	458.99	ppb	2.279	0.50%
Al 396.153Radial†	16128.1	4586.2	µg/L	14.43	4586.2	ppb	14.43	0.31%
As 188.979†	893.5	471.27	µg/L	5.142	471.27	ppb	5.142	1.09%
B 249.677†	6980.0	462.57	µg/L	2.637	462.57	ppb	2.637	0.57%
Ba 233.527†	43219.9	459.62	µg/L	2.743	459.62	ppb	2.743	0.60%
Be 313.107†	674072.9	459.94	µg/L	0.264	459.94	ppb	0.264	0.06%
Ca 317.933Radial†	22250.4	4701.7	µg/L	15.03	4701.7	ppb	15.03	0.32%
Cd 226.502†	12355.7	452.11	µg/L	3.060	452.11	ppb	3.060	0.68%
Co 228.616†	14798.0	456.85	µg/L	2.778	456.85	ppb	2.778	0.61%
Cr 267.716†	16086.2	455.71	µg/L	2.696	455.71	ppb	2.696	0.59%
Cu 324.752†	115920.2	465.22	µg/L	1.431	465.22	ppb	1.431	0.31%
Fe 238.204 Radial†	4365.6	4808.3	µg/L	13.70	4808.3	ppb	13.70	0.28%
K 766.490 Radial†	10885.4	4695.2	µg/L	9.47	4695.2	ppb	9.47	0.20%
Mg 279.077 IEC†	1802.2	4801.7	µg/L	21.36	4801.7	ppb	21.36	0.44%
Mn 257.610†	254980.2	463.39	µg/L	0.247	463.39	ppb	0.247	0.05%
Mo 202.031†	3563.3	468.52	µg/L	3.395	468.52	ppb	3.395	0.72%

Na 589.592 Radial†	31913.0	4797.6 µg/L	11.32	4797.6 ppb	11.32	0.24%
Ni 231.604†	6932.2	453.53 µg/L	1.742	453.53 ppb	1.742	0.38%
P 214.914†	571.6	410.17 µg/L	0.857	410.17 ppb	0.857	0.21%
Pb 220.353†	1764.7	462.02 µg/L	2.979	462.02 ppb	2.979	0.64%
S 181.975 Axial†	1874.8	4549.9 µg/L	30.92	4549.9 ppb	30.92	0.68%
Sb 206.836†	976.0	474.61 µg/L	5.857	474.61 ppb	5.857	1.23%
Se 196.026†	491.4	438 µg/L	5.5	438 ppb	5.5	1.26%
SiO2 †	129388.9	9202.7 µg/L	55.98	9202.7 ppb	55.98	0.61%
Si 251.611†	127405.1	4260 µg/L	46.4	4260 ppb	46.4	1.09%
Sn 189.927†	1810.7	466.14 µg/L	4.015	466.14 ppb	4.015	0.86%
Sr 421.552†	114787.8	466.75 µg/L	0.704	466.75 ppb	0.704	0.15%
Ti 334.940†	346370.7	459.62 µg/L	0.114	459.62 ppb	0.114	0.02%
Tl 190.801†	1162.1	455.32 µg/L	4.660	455.32 ppb	4.660	1.02%
U 409.014†	7119.9	463.54 µg/L	3.294	463.54 ppb	3.294	0.71%
V 292.402†	30347.5	460.61 µg/L	2.844	460.61 ppb	2.844	0.62%
Zn 213.857†	18606.4	444.61 µg/L	1.883	444.61 ppb	1.883	0.42%

Sequence No.: 5
Sample ID: 139405001|437221|1
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 6/29/2005 22:00:17
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 139405001|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48910.8	48910.8	108	%			22:01:44
1	Al 396.153Radial†	175.3	70.0	19.854	µg/L	19.854	ppb	22:01:44
1	Ca 317.933Radial†	166406.7	154193.1	32565	µg/L	32565	ppb	22:01:44
1	Fe 238.204 Radial†	51.9	6.7	7.4217	µg/L	7.4217	ppb	22:02:04
1	K 766.490 Radial†	2978.3	1691.4	729.55	µg/L	729.55	ppb	22:01:44
1	Mg 279.077 IEC†	2176.2	2015.0	5359.4	µg/L	5359.4	ppb	22:02:04
1	Na 589.592 Radial†	142089.9	130847.8	19676	µg/L	19676	ppb	22:01:44
1	Sr 421.552†	42532.1	39476.4	160.07	µg/L	160.07	ppb	22:01:44
1	Sc 361.383	1236653.6	1236653.6	110.72	%			22:03:03
1	Y 371.029	666145.6	666145.6	109.83	%			22:03:03
1	Ag 328.068†	-623.5	102.7	0.7771	µg/L	0.7771	ppb	22:03:08
1	As 188.979†	-31.2	3.1	2.1086	µg/L	2.1086	ppb	22:03:28
1	B 249.677†	711.4	602.0	39.949	µg/L	39.949	ppb	22:03:28
1	Ba 233.527†	1377.4	1381.6	14.679	µg/L	14.679	ppb	22:03:28
1	Be 313.107†	201.2	-31.0	-0.0178	µg/L	-0.0178	ppb	22:03:08
1	Cd 226.502†	-10.7	14.5	0.5344	µg/L	0.5344	ppb	22:03:28
1	Co 228.616†	-115.0	31.7	0.9887	µg/L	0.9887	ppb	22:03:28
1	Cr 267.716†	1058.8	879.5	24.923	µg/L	24.923	ppb	22:03:28
1	Cu 324.752†	12501.8	7517.4	30.187	µg/L	30.187	ppb	22:03:08
1	Mn 257.610†	8740.2	7532.7	13.611	µg/L	13.611	ppb	22:03:08
1	Mo 202.031†	29.6	25.7	3.5411	µg/L	3.5411	ppb	22:03:28
1	Ni 231.604†	253.4	53.7	3.5103	µg/L	3.5103	ppb	22:03:28
1	P 214.914†	248.1	37.0	26.639	µg/L	26.639	ppb	22:03:28
1	Pb 220.353†	-8.9	3.8	0.9943	µg/L	0.9943	ppb	22:03:28
1	S 181.975 Axial†	4118.6	3688.3	8959.8	µg/L	8959.8	ppb	22:03:28
1	Sb 206.836†	36.8	-4.0	-2.3523	µg/L	-2.3523	ppb	22:03:28
1	Se 196.026†	-40.8	-1.5	-1.14	µg/L	-1.14	ppb	22:03:28
1	SiO2 †	702864.9	633556.6	45133	µg/L	45133	ppb	22:03:03
1	Sn 189.927†	-62.2	-46.1	-8.9703	µg/L	-8.9703	ppb	22:03:28
1	Ti 334.940†	-0.7	-399.6	0.1500	µg/L	0.1500	ppb	22:03:08
1	Tl 190.801†	-33.2	14.5	5.6730	µg/L	5.6730	ppb	22:03:28
1	U 409.014†	318.3	-4.3	-0.2718	µg/L	-0.2718	ppb	22:03:08
1	V 292.402†	-39.0	56.8	0.9470	µg/L	0.9470	ppb	22:03:28
1	Zn 213.857†	6902.0	5820.6	138.90	µg/L	138.90	ppb	22:03:08
1	Si 251.611†	706616.1	636955.6	21300	µg/L	21300	ppb	22:04:37
2	Sc RADIAL	49102.5	49102.5	108	%			22:02:09
2	Al 396.153Radial†	180.0	73.7	20.935	µg/L	20.935	ppb	22:02:09
2	Ca 317.933Radial†	168431.8	155461.7	32833	µg/L	32833	ppb	22:02:09
2	Fe 238.204 Radial†	48.3	3.1	3.4698	µg/L	3.4698	ppb	22:02:29
2	K 766.490 Radial†	2916.1	1623.2	700.13	µg/L	700.13	ppb	22:02:09
2	Mg 279.077 IEC†	2171.3	2002.6	5326.4	µg/L	5326.4	ppb	22:02:29
2	Na 589.592 Radial†	143580.9	131711.0	19806	µg/L	19806	ppb	22:02:09
2	Sr 421.552†	43090.8	39838.6	161.54	µg/L	161.54	ppb	22:02:09
2	Sc 361.383	1210703.8	1210703.8	108.40	%			22:03:34
2	Y 371.029	652643.5	652643.5	107.60	%			22:03:34
2	Ag 328.068†	-739.1	-15.9	-0.1184	µg/L	-0.1184	ppb	22:03:39
2	As 188.979†	-21.1	11.8	6.6136	µg/L	6.6136	ppb	22:03:59
2	B 249.677†	721.1	624.8	41.458	µg/L	41.458	ppb	22:03:59
2	Ba 233.527†	1372.0	1403.3	14.910	µg/L	14.910	ppb	22:03:59
2	Be 313.107†	181.9	-44.8	-0.0262	µg/L	-0.0262	ppb	22:03:39
2	Cd 226.502†	-10.5	14.5	0.5359	µg/L	0.5359	ppb	22:03:59
2	Co 228.616†	-120.9	24.0	0.7502	µg/L	0.7502	ppb	22:03:59
2	Cr 267.716†	1036.3	879.3	24.915	µg/L	24.915	ppb	22:03:59
2	Cu 324.752†	12318.5	7590.3	30.476	µg/L	30.476	ppb	22:03:39
2	Mn 257.610†	8703.7	7668.2	13.856	µg/L	13.856	ppb	22:03:39
2	Mo 202.031†	24.3	21.4	2.9809	µg/L	2.9809	ppb	22:03:59
2	Ni 231.604†	264.4	68.7	4.4963	µg/L	4.4963	ppb	22:03:59
2	P 214.914†	242.0	36.1	25.813	µg/L	25.813	ppb	22:03:59

2	Pb 220.353†	-7.0	5.3	1.3947 µg/L	1.3947 ppb	22:03:59
2	S 181.975 Axial†	4123.5	3772.5	9164.4 µg/L	9164.4 ppb	22:03:59
2	Sb 206.836†	42.7	2.2	0.6524 µg/L	0.6524 ppb	22:03:59
2	Se 196.026†	-32.9	4.9	4.60 µg/L	4.60 ppb	22:03:59
2	SiO2 †	701495.4	645899.6	46013 µg/L	46013 ppb	22:03:34
2	Sn 189.927†	-62.3	-47.5	-9.2855 µg/L	-9.2855 ppb	22:03:59
2	Ti 334.940†	-9.1	-407.4	0.1425 µg/L	0.1425 ppb	22:03:39
2	Tl 190.801†	-44.6	3.4	1.3438 µg/L	1.3438 ppb	22:03:59
2	U 409.014†	402.6	79.7	5.1700 µg/L	5.1700 ppb	22:03:39
2	V 292.402†	-56.2	40.1	0.6975 µg/L	0.6975 ppb	22:03:59
2	Zn 213.857†	6920.0	5970.9	142.51 µg/L	142.51 ppb	22:03:39
2	Si 251.611†	699947.1	644482.2	21600 µg/L	21600 ppb	22:04:43
3	Sc RADIAL	49005.5	49005.5	108 %		22:02:35
3	Al 396.153Radial†	172.8	67.4	19.097 µg/L	19.097 ppb	22:02:35
3	Ca 317.933Radial†	167565.3	154967.4	32728 µg/L	32728 ppb	22:02:35
3	Fe 238.204 Radial†	48.4	3.4	3.7180 µg/L	3.7180 ppb	22:02:55
3	K 766.490 Radial†	2943.1	1653.5	713.21 µg/L	713.21 ppb	22:02:35
3	Mg 279.077 IEC†	2168.2	2003.7	5329.3 µg/L	5329.3 ppb	22:02:55
3	Na 589.592 Radial†	143546.1	131941.2	19841 µg/L	19841 ppb	22:02:35
3	Sr 421.552†	43062.8	39891.5	161.75 µg/L	161.75 ppb	22:02:35
3	Sc 361.383	1214352.7	1214352.7	108.72 %		22:04:05
3	Y 371.029	654644.2	654644.2	107.93 %		22:04:05
3	Ag 328.068†	-704.1	18.3	0.1385 µg/L	0.1385 ppb	22:04:10
3	As 188.979†	-26.6	6.8	4.0437 µg/L	4.0437 ppb	22:04:31
3	B 249.677†	707.3	610.1	40.486 µg/L	40.486 ppb	22:04:31
3	Ba 233.527†	1378.6	1405.5	14.934 µg/L	14.934 ppb	22:04:31
3	Be 313.107†	156.6	-68.6	-0.0419 µg/L	-0.0419 ppb	22:04:10
3	Cd 226.502†	-17.0	8.6	0.3204 µg/L	0.3204 ppb	22:04:31
3	Co 228.616†	-128.4	17.5	0.5478 µg/L	0.5478 ppb	22:04:31
3	Cr 267.716†	1048.6	887.7	25.150 µg/L	25.150 ppb	22:04:31
3	Cu 324.752†	12458.5	7685.0	30.854 µg/L	30.854 ppb	22:04:10
3	Mn 257.610†	8781.3	7715.5	13.941 µg/L	13.941 ppb	22:04:10
3	Mo 202.031†	30.1	26.7	3.6721 µg/L	3.6721 ppb	22:04:31
3	Ni 231.604†	260.0	63.9	4.1856 µg/L	4.1856 ppb	22:04:31
3	P 214.914†	239.6	33.2	23.305 µg/L	23.305 ppb	22:04:31
3	Pb 220.353†	-1.3	10.6	2.7671 µg/L	2.7671 ppb	22:04:31
3	S 181.975 Axial†	4148.1	3783.7	9191.6 µg/L	9191.6 ppb	22:04:31
3	Sb 206.836†	40.9	0.5	-0.1965 µg/L	-0.1965 ppb	22:04:31
3	Se 196.026†	-34.6	3.4	3.32 µg/L	3.32 ppb	22:04:31
3	SiO2 †	708021.5	649957.5	46302 µg/L	46302 ppb	22:04:05
3	Sn 189.927†	-58.6	-43.8	-8.3607 µg/L	-8.3607 ppb	22:04:31
3	Ti 334.940†	-83.5	-475.8	0.0480 µg/L	0.0480 ppb	22:04:10
3	Tl 190.801†	-41.5	6.4	2.5058 µg/L	2.5058 ppb	22:04:31
3	U 409.014†	451.1	123.2	7.9885 µg/L	7.9885 ppb	22:04:10
3	V 292.402†	-59.4	37.3	0.6667 µg/L	0.6667 ppb	22:04:31
3	Zn 213.857†	6942.4	5972.3	142.55 µg/L	142.55 ppb	22:04:10
3	Si 251.611†	701103.7	643605.7	21500 µg/L	21500 ppb	22:04:49

Mean Data: 139405001|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1220570.0	109.28	%	1.258				1.15%
Sc RADIAL	49006.3	108	%	0.2				0.20%
Y 371.029	657811.1	108.46	%	1.201				1.11%
Ag 328.068†	35.0	0.2657	µg/L	0.46111	0.2657	ppb	0.46111	173.53%
Al 396.153Radial†	70.4	19.962	µg/L	0.9237	19.962	ppb	0.9237	4.63%
As 188.979†	7.2	4.2553	µg/L	2.25993	4.2553	ppb	2.25993	53.11%
B 249.677†	612.3	40.631	µg/L	0.7645	40.631	ppb	0.7645	1.88%
Ba 233.527†	1396.8	14.841	µg/L	0.1409	14.841	ppb	0.1409	0.95%
Be 313.107†	-48.1	-0.0287	µg/L	0.01223	-0.0287	ppb	0.01223	42.69%
Ca 317.933Radial†	154874.1	32709	µg/L	135.1	32709	ppb	135.1	0.41%
Cd 226.502†	12.6	0.4636	µg/L	0.12400	0.4636	ppb	0.12400	26.75%
Co 228.616†	24.4	0.7622	µg/L	0.22068	0.7622	ppb	0.22068	28.95%
Cr 267.716†	882.2	24.996	µg/L	0.1336	24.996	ppb	0.1336	0.53%
Cu 324.752†	7597.5	30.506	µg/L	0.3341	30.506	ppb	0.3341	1.10%
Fe 238.204 Radial†	4.4	4.8698	µg/L	2.21348	4.8698	ppb	2.21348	45.45%
K 766.490 Radial†	1656.0	714.29	µg/L	14.740	714.29	ppb	14.740	2.06%
Mg 279.077 IEC†	2007.1	5338.4	µg/L	18.27	5338.4	ppb	18.27	0.34%
Mn 257.610†	7638.8	13.803	µg/L	0.1716	13.803	ppb	0.1716	1.24%
Mo 202.031†	24.6	3.3980	µg/L	0.36715	3.3980	ppb	0.36715	10.80%

Na 589.592 Radial†	131500.0	19774	µg/L	86.7	19774	ppb	86.7	0.44%
Ni 231.604†	62.1	4.0640	µg/L	0.50409	4.0640	ppb	0.50409	12.40%
P 214.914†	35.4	25.252	µg/L	1.7365	25.252	ppb	1.7365	6.88%
Pb 220.353†	6.6	1.7187	µg/L	0.92974	1.7187	ppb	0.92974	54.09%
S 181.975 Axial†	3748.2	9105.2	µg/L	126.68	9105.2	ppb	126.68	1.39%
Sb 206.836†	-0.4	-0.6321	µg/L	1.54899	-0.6321	ppb	1.54899	245.04%
Se 196.026†	2.3	2.26	µg/L	3.014	2.26	ppb	3.014	133.42%
SiO2 †	643137.9	45816	µg/L	608.5	45816	ppb	608.5	1.33%
Si 251.611†	641681.2	21500	µg/L	137.7	21500	ppb	137.7	0.64%
Sn 189.927†	-45.8	-8.8721	µg/L	0.47015	-8.8721	ppb	0.47015	5.30%
Sr 421.552†	39735.5	161.12	µg/L	0.917	161.12	ppb	0.917	0.57%
Ti 334.940†	-427.6	0.1135	µg/L	0.05683	0.1135	ppb	0.05683	50.08%
Tl 190.801†	8.1	3.1742	µg/L	2.24064	3.1742	ppb	2.24064	70.59%
U 409.014†	66.2	4.2956	µg/L	4.19899	4.2956	ppb	4.19899	97.75%
V 292.402†	44.7	0.7704	µg/L	0.15375	0.7704	ppb	0.15375	19.96%
Zn 213.857†	5921.3	141.32	µg/L	2.095	141.32	ppb	2.095	1.48%

Sequence No.: 6
Sample ID: 1200875012|437221|1
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 6/29/2005 22:06:43
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875012|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	47283.5	47283.5	104	%			22:08:07
1	Al 396.153Radial†	108.5	11.5	3.1476	µg/L	3.1476	ppb	22:08:07
1	Ca 317.933Radial†	161467.3	154766.0	32686	µg/L	32686	ppb	22:08:07
1	Fe 238.204 Radial†	56.1	12.4	13.615	µg/L	13.615	ppb	22:08:27
1	K 766.490 Radial†	2818.8	1633.5	704.57	µg/L	704.57	ppb	22:08:07
1	Mg 279.077 IEC†	2176.9	2085.2	5546.0	µg/L	5546.0	ppb	22:08:27
1	Na 589.592 Radial†	138674.1	132106.3	19866	µg/L	19866	ppb	22:08:07
1	Sr 421.552†	41319.9	39671.1	160.86	µg/L	160.86	ppb	22:08:07
1	Sc 361.383	1219942.6	1219942.6	109.22	%			22:09:26
1	Y 371.029	658017.9	658017.9	108.49	%			22:09:26
1	Ag 328.068†	-693.3	31.1	0.2379	µg/L	0.2379	ppb	22:09:31
1	As 188.979†	-23.9	9.4	5.3752	µg/L	5.3752	ppb	22:09:52
1	B 249.677†	651.6	556.1	36.906	µg/L	36.906	ppb	22:09:52
1	Ba 233.527†	1371.9	1393.6	14.806	µg/L	14.806	ppb	22:09:52
1	Be 313.107†	139.8	-84.7	-0.0537	µg/L	-0.0537	ppb	22:09:31
1	Cd 226.502†	-16.4	9.2	0.3406	µg/L	0.3406	ppb	22:09:52
1	Co 228.616†	-136.4	10.7	0.3383	µg/L	0.3383	ppb	22:09:52
1	Cr 267.716†	1023.7	860.6	24.383	µg/L	24.383	ppb	22:09:52
1	Cu 324.752†	12270.7	7460.5	29.956	µg/L	29.956	ppb	22:09:31
1	Mn 257.610†	8694.6	7599.1	13.729	µg/L	13.729	ppb	22:09:31
1	Mo 202.031†	23.6	20.6	2.8707	µg/L	2.8707	ppb	22:09:52
1	Ni 231.604†	263.9	66.4	4.3451	µg/L	4.3451	ppb	22:09:52
1	P 214.914†	242.5	34.9	24.850	µg/L	24.850	ppb	22:09:52
1	Pb 220.353†	-2.9	9.2	2.3998	µg/L	2.3998	ppb	22:09:52
1	S 181.975 Axial†	4116.6	3737.4	9079.0	µg/L	9079.0	ppb	22:09:52
1	Sb 206.836†	40.5	-0.1	-0.4998	µg/L	-0.4998	ppb	22:09:52
1	Se 196.026†	-38.5	-0.0	0.230	µg/L	0.230	ppb	22:09:52
1	SiO2 †	681196.1	622413.3	44340	µg/L	44340	ppb	22:09:26
1	Sn 189.927†	-68.8	-52.9	-10.698	µg/L	-10.698	ppb	22:09:52
1	Ti 334.940†	-192.5	-575.2	-0.0827	µg/L	-0.0827	ppb	22:09:31
1	Tl 190.801†	-37.8	9.9	3.8646	µg/L	3.8646	ppb	22:09:52
1	U 409.014†	385.1	60.9	3.9473	µg/L	3.9473	ppb	22:09:31
1	V 292.402†	-49.7	46.5	0.7898	µg/L	0.7898	ppb	22:09:52
1	Zn 213.857†	7148.5	6131.8	146.39	µg/L	146.39	ppb	22:09:52
1	Si 251.611†	683586.0	624612.4	20900	µg/L	20900	ppb	22:11:01
2	Sc RADIAL	49321.0	49321.0	109	%			22:08:33
2	Al 396.153Radial†	162.7	57.1	16.193	µg/L	16.193	ppb	22:08:33
2	Ca 317.933Radial†	169194.8	155474.1	32835	µg/L	32835	ppb	22:08:33
2	Fe 238.204 Radial†	52.7	7.0	7.7384	µg/L	7.7384	ppb	22:08:53
2	K 766.490 Radial†	2949.6	1642.0	708.26	µg/L	708.26	ppb	22:08:33
2	Mg 279.077 IEC†	2146.0	1970.4	5240.9	µg/L	5240.9	ppb	22:08:53
2	Na 589.592 Radial†	144510.6	131978.5	19846	µg/L	19846	ppb	22:08:33
2	Sr 421.552†	43247.5	39806.4	161.41	µg/L	161.41	ppb	22:08:33
2	Sc 361.383	1225431.8	1225431.8	109.71	%			22:09:57
2	Y 371.029	660594.8	660594.8	108.92	%			22:09:57
2	Ag 328.068†	-718.0	11.5	0.0895	µg/L	0.0895	ppb	22:10:03
2	As 188.979†	-31.2	2.8	1.9509	µg/L	1.9509	ppb	22:10:23
2	B 249.677†	657.9	559.2	37.111	µg/L	37.111	ppb	22:10:23
2	Ba 233.527†	1356.9	1374.3	14.601	µg/L	14.601	ppb	22:10:23
2	Be 313.107†	193.0	-36.8	-0.0213	µg/L	-0.0213	ppb	22:10:03
2	Cd 226.502†	-13.7	11.7	0.4316	µg/L	0.4316	ppb	22:10:23
2	Co 228.616†	-123.6	22.9	0.7163	µg/L	0.7163	ppb	22:10:23
2	Cr 267.716†	1039.5	870.7	24.673	µg/L	24.673	ppb	22:10:23
2	Cu 324.752†	12481.5	7602.3	30.527	µg/L	30.527	ppb	22:10:03
2	Mn 257.610†	8713.6	7580.7	13.699	µg/L	13.699	ppb	22:10:03
2	Mo 202.031†	22.5	19.4	2.7193	µg/L	2.7193	ppb	22:10:23
2	Ni 231.604†	259.6	61.4	4.0146	µg/L	4.0146	ppb	22:10:23
2	P 214.914†	235.9	27.9	18.822	µg/L	18.822	ppb	22:10:23

2	Pb 220.353†	-1.7	10.3	2.6901 µg/L	2.6901 ppb	22:10:23
2	S 181.975 Axial†	4125.1	3728.3	9056.9 µg/L	9056.9 ppb	22:10:23
2	Sb 206.836†	43.1	2.1	0.5807 µg/L	0.5807 ppb	22:10:23
2	Se 196.026†	-35.3	3.1	3.04 µg/L	3.04 ppb	22:10:23
2	SiO2 †	685227.8	623294.3	44402 µg/L	44402 ppb	22:09:57
2	Sn 189.927†	-60.5	-45.1	-8.6894 µg/L	-8.6894 ppb	22:10:23
2	Ti 334.940†	-249.4	-626.3	-0.1467 µg/L	-0.1467 ppb	22:10:03
2	Tl 190.801†	-43.0	5.3	2.0958 µg/L	2.0958 ppb	22:10:23
2	U 409.014†	361.2	37.5	2.4361 µg/L	2.4361 ppb	22:10:03
2	V 292.402†	-47.1	49.0	0.8256 µg/L	0.8256 ppb	22:10:23
2	Zn 213.857†	7145.8	6100.0	145.63 µg/L	145.63 ppb	22:10:23
2	Si 251.611†	684380.5	622533.0	20800 µg/L	20800 ppb	22:11:07
3	Sc RADIAL	48689.9	48689.9	107 %		22:08:58
3	Al 396.153Radial†	153.3	50.2	14.184 µg/L	14.184 ppb	22:08:58
3	Ca 317.933Radial†	167195.9	155628.7	32868 µg/L	32868 ppb	22:08:58
3	Fe 238.204 Radial†	49.9	5.1	5.5785 µg/L	5.5785 ppb	22:09:18
3	K 766.490 Radial†	2979.5	1705.1	735.45 µg/L	735.45 ppb	22:08:58
3	Mg 279.077 IEC†	2188.5	2035.6	5414.2 µg/L	5414.2 ppb	22:09:18
3	Na 589.592 Radial†	142829.3	132134.7	19870 µg/L	19870 ppb	22:08:58
3	Sr 421.552†	42765.2	39872.6	161.68 µg/L	161.68 ppb	22:08:58
3	Sc 361.383	1222996.6	1222996.6	109.50 %		22:10:28
3	Y 371.029	658931.2	658931.2	108.64 %		22:10:28
3	Ag 328.068†	-703.7	23.2	0.1772 µg/L	0.1772 ppb	22:10:34
3	As 188.979†	-26.1	7.4	4.3456 µg/L	4.3456 ppb	22:10:54
3	B 249.677†	633.3	537.9	35.705 µg/L	35.705 ppb	22:10:54
3	Ba 233.527†	1346.1	1366.9	14.523 µg/L	14.523 ppb	22:10:54
3	Be 313.107†	129.6	-94.3	-0.0605 µg/L	-0.0605 ppb	22:10:34
3	Cd 226.502†	-13.7	11.7	0.4333 µg/L	0.4333 ppb	22:10:54
3	Co 228.616†	-128.6	18.1	0.5700 µg/L	0.5700 ppb	22:10:54
3	Cr 267.716†	1040.8	873.8	24.759 µg/L	24.759 ppb	22:10:54
3	Cu 324.752†	12471.3	7615.6	30.580 µg/L	30.580 ppb	22:10:34
3	Mn 257.610†	8777.8	7655.2	13.832 µg/L	13.832 ppb	22:10:34
3	Mo 202.031†	29.2	25.6	3.5350 µg/L	3.5350 ppb	22:10:54
3	Ni 231.604†	270.8	72.1	4.7174 µg/L	4.7174 ppb	22:10:54
3	P 214.914†	255.2	45.9	34.194 µg/L	34.194 ppb	22:10:54
3	Pb 220.353†	1.1	12.8	3.3619 µg/L	3.3619 ppb	22:10:54
3	S 181.975 Axial†	4109.7	3721.7	9040.9 µg/L	9040.9 ppb	22:10:54
3	Sb 206.836†	39.1	-1.5	-1.1367 µg/L	-1.1367 ppb	22:10:54
3	Se 196.026†	-31.1	6.9	6.38 µg/L	6.38 ppb	22:10:54
3	SiO2 †	683569.1	623023.1	44383 µg/L	44383 ppb	22:10:28
3	Sn 189.927†	-64.6	-49.0	-9.6697 µg/L	-9.6697 ppb	22:10:54
3	Ti 334.940†	-297.8	-671.0	-0.2052 µg/L	-0.2052 ppb	22:10:34
3	Tl 190.801†	-33.4	14.0	5.4875 µg/L	5.4875 ppb	22:10:54
3	U 409.014†	358.4	35.6	2.3136 µg/L	2.3136 ppb	22:10:34
3	V 292.402†	-52.9	43.7	0.7537 µg/L	0.7537 ppb	22:10:54
3	Zn 213.857†	7127.9	6096.6	145.54 µg/L	145.54 ppb	22:10:54
3	Si 251.611†	684497.6	623882.0	20900 µg/L	20900 ppb	22:11:12

Mean Data: 1200875012|437221|1

	Mean Corrected	Calib			Sample		
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	1222790.3	109.48	%	0.246			0.22%
Sc RADIAL	48431.5	107	%	2.3			2.15%
Y 371.029	659181.3	108.68	%	0.215			0.20%
Ag 328.068†	21.9	0.1682	µg/L	0.07460	0.1682 ppb	0.07460	44.36%
Al 396.153Radial†	39.6	11.175	µg/L	7.0240	11.175 ppb	7.0240	62.86%
As 188.979†	6.5	3.8905	µg/L	1.75691	3.8905 ppb	1.75691	45.16%
B 249.677†	551.1	36.574	µg/L	0.7595	36.574 ppb	0.7595	2.08%
Ba 233.527†	1378.2	14.643	µg/L	0.1465	14.643 ppb	0.1465	1.00%
Be 313.107†	-71.9	-0.0452	µg/L	0.02095	-0.0452 ppb	0.02095	46.35%
Ca 317.933Radial†	155289.6	32796	µg/L	97.1	32796 ppb	97.1	0.30%
Cd 226.502†	10.9	0.4018	µg/L	0.05299	0.4018 ppb	0.05299	13.19%
Co 228.616†	17.3	0.5416	µg/L	0.19060	0.5416 ppb	0.19060	35.19%
Cr 267.716†	868.4	24.605	µg/L	0.1968	24.605 ppb	0.1968	0.80%
Cu 324.752†	7559.5	30.354	µg/L	0.3457	30.354 ppb	0.3457	1.14%
Fe 238.204 Radial†	8.2	8.9773	µg/L	4.15901	8.9773 ppb	4.15901	46.33%
K 766.490 Radial†	1660.2	716.09	µg/L	16.865	716.09 ppb	16.865	2.36%
Mg 279.077 IEC†	2030.4	5400.4	µg/L	153.04	5400.4 ppb	153.04	2.83%
Mn 257.610†	7611.6	13.753	µg/L	0.0697	13.753 ppb	0.0697	0.51%
Mo 202.031†	21.9	3.0417	µg/L	0.43389	3.0417 ppb	0.43389	14.26%

Na 589.592 Radial†	132073.2	19861	µg/L	12.5	19861	ppb	12.5	0.06%
Ni 231.604†	66.6	4.3590	µg/L	0.35162	4.3590	ppb	0.35162	8.07%
P 214.914†	36.2	25.955	µg/L	7.7453	25.955	ppb	7.7453	29.84%
Pb 220.353†	10.8	2.8173	µg/L	0.49351	2.8173	ppb	0.49351	17.52%
S 181.975 Axial†	3729.1	9058.9	µg/L	19.15	9058.9	ppb	19.15	0.21%
Sb 206.836†	0.2	-0.3519	µg/L	0.86824	-0.3519	ppb	0.86824	246.70%
Se 196.026†	3.3	3.22	µg/L	3.081	3.22	ppb	3.081	95.79%
SiO2 †	622910.2	44375	µg/L	32.1	44375	ppb	32.1	0.07%
Si 251.611†	623675.8	20900	µg/L	35.3	20900	ppb	35.3	0.17%
Sn 189.927†	-49.0	-9.6856	µg/L	1.00436	-9.6856	ppb	1.00436	10.37%
Sr 421.552†	39783.4	161.31	µg/L	0.416	161.31	ppb	0.416	0.26%
Ti 334.940†	-624.2	-0.1449	µg/L	0.06130	-0.1449	ppb	0.06130	42.31%
Tl 190.801†	9.7	3.8160	µg/L	1.69636	3.8160	ppb	1.69636	44.45%
U 409.014†	44.7	2.8990	µg/L	0.90993	2.8990	ppb	0.90993	31.39%
V 292.402†	46.4	0.7897	µg/L	0.03594	0.7897	ppb	0.03594	4.55%
Zn 213.857†	6109.4	145.85	µg/L	0.469	145.85	ppb	0.469	0.32%

Sequence No.: 7
Sample ID: 1200875015|437221|5
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 6/29/2005 22:13:07
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875015|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48139.3	48139.3	106	%			22:14:31
1	Al 396.153Radial†	106.9	8.1	2.2964	µg/L	2.2964	ppb	22:14:31
1	Ca 317.933Radial†	33447.7	31358.7	6622.8	µg/L	6622.8	ppb	22:14:31
1	Fe 238.204 Radial†	44.1	0.1	0.1154	µg/L	0.1154	ppb	22:14:51
1	K 766.490 Radial†	1383.1	232.3	100.20	µg/L	100.20	ppb	22:14:31
1	Mg 279.077 IEC†	440.3	411.4	1094.1	µg/L	1094.1	ppb	22:14:51
1	Na 589.592 Radial†	29546.7	26893.0	4044.1	µg/L	4044.1	ppb	22:14:31
1	Sr 421.552†	8435.7	7974.2	32.333	µg/L	32.333	ppb	22:14:31
1	Sc 361.383	1209335.8	1209335.8	108.27	%			22:15:50
1	Y 371.029	654695.4	654695.4	107.94	%			22:15:50
1	Ag 328.068†	-654.0	61.9	0.4656	µg/L	0.4656	ppb	22:15:55
1	As 188.979†	-21.4	11.5	6.0664	µg/L	6.0664	ppb	22:16:15
1	B 249.677†	266.8	206.0	13.653	µg/L	13.653	ppb	22:16:15
1	Ba 233.527†	163.5	288.6	3.0664	µg/L	3.0664	ppb	22:16:15
1	Be 313.107†	212.3	-16.6	-0.0099	µg/L	-0.0099	ppb	22:15:55
1	Cd 226.502†	-22.0	3.9	0.1446	µg/L	0.1446	ppb	22:16:15
1	Co 228.616†	-135.5	10.4	0.3227	µg/L	0.3227	ppb	22:16:15
1	Cr 267.716†	256.3	160.0	4.5300	µg/L	4.5300	ppb	22:16:15
1	Cu 324.752†	5376.0	1191.1	4.7800	µg/L	4.7800	ppb	22:15:55
1	Mn 257.610†	2140.4	1615.5	2.9190	µg/L	2.9190	ppb	22:16:15
1	Mo 202.031†	4.6	3.2	0.4498	µg/L	0.4498	ppb	22:16:15
1	Ni 231.604†	190.2	0.5	0.0288	µg/L	0.0288	ppb	22:16:15
1	P 214.914†	203.9	1.2	0.1871	µg/L	0.1871	ppb	22:16:15
1	Pb 220.353†	-11.1	1.5	0.3940	µg/L	0.3940	ppb	22:16:15
1	S 181.975 Axial†	841.9	746.0	1812.1	µg/L	1812.1	ppb	22:16:15
1	Sb 206.836†	34.0	-5.8	-2.9036	µg/L	-2.9036	ppb	22:16:15
1	Se 196.026†	-33.4	4.4	3.99	µg/L	3.99	ppb	22:16:15
1	SiO2 †	152153.0	139264.4	9920.9	µg/L	9920.9	ppb	22:15:55
1	Sn 189.927†	-24.3	-12.4	-2.6034	µg/L	-2.6034	ppb	22:16:15
1	Ti 334.940†	257.1	-161.6	-0.0781	µg/L	-0.0781	ppb	22:15:55
1	Tl 190.801†	-36.3	10.9	4.2666	µg/L	4.2666	ppb	22:16:15
1	U 409.014†	385.9	64.7	4.1942	µg/L	4.1942	ppb	22:15:55
1	V 292.402†	-79.7	18.4	0.2958	µg/L	0.2958	ppb	22:16:15
1	Zn 213.857†	1796.8	1246.4	29.765	µg/L	29.765	ppb	22:16:15
1	Si 251.611†	148731.9	136115.7	4550	µg/L	4550	ppb	22:17:23
2	Sc RADIAL	48079.7	48079.7	106	%			22:14:56
2	Al 396.153Radial†	131.0	31.0	8.7762	µg/L	8.7762	ppb	22:14:56
2	Ca 317.933Radial†	33648.0	31586.7	6670.9	µg/L	6670.9	ppb	22:14:56
2	Fe 238.204 Radial†	44.4	0.4	0.4901	µg/L	0.4901	ppb	22:15:17
2	K 766.490 Radial†	1495.0	339.5	146.44	µg/L	146.44	ppb	22:14:56
2	Mg 279.077 IEC†	433.9	405.8	1079.3	µg/L	1079.3	ppb	22:15:17
2	Na 589.592 Radial†	29614.3	26991.2	4058.8	µg/L	4058.8	ppb	22:14:56
2	Sr 421.552†	8500.1	8044.9	32.620	µg/L	32.620	ppb	22:14:56
2	Sc 361.383	1207315.8	1207315.8	108.09	%			22:16:21
2	Y 371.029	653607.4	653607.4	107.76	%			22:16:21
2	Ag 328.068†	-644.3	69.8	0.5267	µg/L	0.5267	ppb	22:16:26
2	As 188.979†	-25.4	7.8	4.1583	µg/L	4.1583	ppb	22:16:46
2	B 249.677†	270.7	210.0	13.922	µg/L	13.922	ppb	22:16:46
2	Ba 233.527†	161.0	286.5	3.0439	µg/L	3.0439	ppb	22:16:46
2	Be 313.107†	250.4	19.0	0.0132	µg/L	0.0132	ppb	22:16:26
2	Cd 226.502†	-24.0	2.0	0.0745	µg/L	0.0745	ppb	22:16:46
2	Co 228.616†	-130.6	14.8	0.4601	µg/L	0.4601	ppb	22:16:46
2	Cr 267.716†	267.7	170.9	4.8442	µg/L	4.8442	ppb	22:16:46
2	Cu 324.752†	5356.6	1181.5	4.7456	µg/L	4.7456	ppb	22:16:26
2	Mn 257.610†	2139.9	1618.3	2.9251	µg/L	2.9251	ppb	22:16:46
2	Mo 202.031†	14.6	12.4	1.6680	µg/L	1.6680	ppb	22:16:46
2	Ni 231.604†	198.4	8.3	0.5463	µg/L	0.5463	ppb	22:16:46
2	P 214.914†	204.0	1.6	0.5925	µg/L	0.5925	ppb	22:16:46

2	Pb 220.353†	-9.7	2.8	0.7419 µg/L	0.7419 ppb	22:16:46
2	S 181.975 Axial†	844.1	749.3	1820.3 µg/L	1820.3 ppb	22:16:46
2	Sb 206.836†	39.9	-0.3	-0.2272 µg/L	-0.2272 ppb	22:16:46
2	Se 196.026†	-41.1	-2.7	-2.37 µg/L	-2.37 ppb	22:16:46
2	SiO2 †	153482.5	140729.6	10025 µg/L	10025 ppb	22:16:26
2	Sn 189.927†	-25.5	-13.5	-2.8809 µg/L	-2.8809 ppb	22:16:46
2	Ti 334.940†	207.8	-206.7	-0.1340 µg/L	-0.1340 ppb	22:16:26
2	Tl 190.801†	-47.3	0.8	0.3011 µg/L	0.3011 ppb	22:16:46
2	U 409.014†	281.1	-31.7	-2.0534 µg/L	-2.0534 ppb	22:16:26
2	V 292.402†	-79.0	18.9	0.3094 µg/L	0.3094 ppb	22:16:46
2	Zn 213.857†	1788.9	1241.9	29.652 µg/L	29.652 ppb	22:16:46
2	Si 251.611†	150870.9	138324.4	4630 µg/L	4630 ppb	22:17:28
3	Sc RADIAL	47788.6	47788.6	105 %		22:15:22
3	Al 396.153Radial†	150.4	50.2	14.348 µg/L	14.348 ppb	22:15:22
3	Ca 317.933Radial†	33260.6	31412.3	6634.1 µg/L	6634.1 ppb	22:15:22
3	Fe 238.204 Radial†	43.9	0.2	0.2401 µg/L	0.2401 ppb	22:15:42
3	K 766.490 Radial†	1454.7	309.8	133.64 µg/L	133.64 ppb	22:15:22
3	Mg 279.077 IEC†	432.9	407.3	1083.4 µg/L	1083.4 ppb	22:15:42
3	Na 589.592 Radial†	29278.4	26842.5	4036.5 µg/L	4036.5 ppb	22:15:22
3	Sr 421.552†	8366.2	7966.6	32.302 µg/L	32.302 ppb	22:15:22
3	Sc 361.383	1207422.8	1207422.8	108.10 %		22:16:52
3	Y 371.029	653636.9	653636.9	107.77 %		22:16:52
3	Ag 328.068†	-694.1	23.8	0.1796 µg/L	0.1796 ppb	22:16:57
3	As 188.979†	-24.1	8.9	4.7503 µg/L	4.7503 ppb	22:17:17
3	B 249.677†	264.8	204.5	13.554 µg/L	13.554 ppb	22:17:17
3	Ba 233.527†	166.4	291.4	3.0953 µg/L	3.0953 ppb	22:17:17
3	Be 313.107†	305.4	69.8	0.0475 µg/L	0.0475 ppb	22:16:57
3	Cd 226.502†	-21.2	4.6	0.1682 µg/L	0.1682 ppb	22:17:17
3	Co 228.616†	-136.5	9.3	0.2891 µg/L	0.2891 ppb	22:17:17
3	Cr 267.716†	262.4	166.0	4.7075 µg/L	4.7075 ppb	22:17:17
3	Cu 324.752†	5410.7	1231.1	4.9471 µg/L	4.9471 ppb	22:16:57
3	Mn 257.610†	2123.7	1603.2	2.8977 µg/L	2.8977 ppb	22:17:17
3	Mo 202.031†	-0.9	-1.9	-0.2165 µg/L	-0.2165 ppb	22:17:17
3	Ni 231.604†	194.0	4.2	0.2736 µg/L	0.2736 ppb	22:17:17
3	P 214.914†	195.4	-6.4	-6.2434 µg/L	-6.2434 ppb	22:17:17
3	Pb 220.353†	-17.9	-4.8	-1.2349 µg/L	-1.2349 ppb	22:17:17
3	S 181.975 Axial†	841.8	747.1	1815.0 µg/L	1815.0 ppb	22:17:17
3	Sb 206.836†	36.9	-3.1	-1.5850 µg/L	-1.5850 ppb	22:17:17
3	Se 196.026†	-39.0	-0.8	-0.689 µg/L	-0.689 ppb	22:17:17
3	SiO2 †	151980.0	139327.0	9925.4 µg/L	9925.4 ppb	22:16:57
3	Sn 189.927†	-28.6	-16.4	-3.6367 µg/L	-3.6367 ppb	22:17:17
3	Ti 334.940†	248.8	-168.9	-0.0835 µg/L	-0.0835 ppb	22:16:57
3	Tl 190.801†	-41.3	6.2	2.4335 µg/L	2.4335 ppb	22:17:17
3	U 409.014†	249.6	-60.9	-3.9465 µg/L	-3.9465 ppb	22:16:57
3	V 292.402†	-102.0	-2.3	-0.0295 µg/L	-0.0295 ppb	22:17:17
3	Zn 213.857†	1791.0	1243.7	29.698 µg/L	29.698 ppb	22:17:17
3	Si 251.611†	150050.6	137553.2	4600 µg/L	4600 ppb	22:17:34

Mean Data: 1200875015|437221|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1208024.8	108.16	%	0.102				0.09%
Sc RADIAL	48002.5	106	%	0.4				0.39%
Y 371.029	653979.9	107.83	%	0.102				0.09%
Ag 328.068†	51.8	0.3906	µg/L	0.18525	0.3906	ppb	0.18525	47.43%
Al 396.153Radial†	29.8	8.4735	µg/L	6.03146	8.4735	ppb	6.03146	71.18%
As 188.979†	9.4	4.9917	µg/L	0.97669	4.9917	ppb	0.97669	19.57%
B 249.677†	206.8	13.710	µg/L	0.1908	13.710	ppb	0.1908	1.39%
Ba 233.527†	288.8	3.0685	µg/L	0.02579	3.0685	ppb	0.02579	0.84%
Be 313.107†	24.0	0.0169	µg/L	0.02889	0.0169	ppb	0.02889	170.75%
Ca 317.933Radial†	31452.6	6642.6	µg/L	25.17	6642.6	ppb	25.17	0.38%
Cd 226.502†	3.5	0.1291	µg/L	0.04873	0.1291	ppb	0.04873	37.74%
Co 228.616†	11.5	0.3573	µg/L	0.09061	0.3573	ppb	0.09061	25.36%
Cr 267.716†	165.6	4.6939	µg/L	0.15756	4.6939	ppb	0.15756	3.36%
Cu 324.752†	1201.3	4.8242	µg/L	0.10779	4.8242	ppb	0.10779	2.23%
Fe 238.204 Radial†	0.3	0.2819	µg/L	0.19080	0.2819	ppb	0.19080	67.69%
K 766.490 Radial†	293.9	126.76	µg/L	23.877	126.76	ppb	23.877	18.84%
Mg 279.077 IEC†	408.1	1085.6	µg/L	7.65	1085.6	ppb	7.65	0.70%
Mn 257.610†	1612.3	2.9139	µg/L	0.01437	2.9139	ppb	0.01437	0.49%
Mo 202.031†	4.6	0.6337	µg/L	0.95563	0.6337	ppb	0.95563	150.79%

Na 589.592 Radial†	26908.9	4046.4	µg/L	11.37	4046.4	ppb	11.37	0.28%
Ni 231.604†	4.3	0.2829	µg/L	0.25890	0.2829	ppb	0.25890	91.51%
P 214.914†	-1.2	-1.8213	µg/L	3.83503	-1.8213	ppb	3.83503	210.57%
Pb 220.353†	-0.1	-0.0330	µg/L	1.05534	-0.0330	ppb	1.05534	>999.9%
S 181.975 Axial†	747.5	1815.8	µg/L	4.17	1815.8	ppb	4.17	0.23%
Sb 206.836†	-3.1	-1.5719	µg/L	1.33824	-1.5719	ppb	1.33824	85.13%
Se 196.026†	0.3	0.309	µg/L	3.2968	0.309	ppb	3.2968	>999.9%
SiO2 †	139773.7	9957.2	µg/L	58.99	9957.2	ppb	58.99	0.59%
Si 251.611†	137331.1	4600	µg/L	37.5	4600	ppb	37.5	0.82%
Sn 189.927†	-14.1	-3.0404	µg/L	0.53480	-3.0404	ppb	0.53480	17.59%
Sr 421.552†	7995.2	32.418	µg/L	0.1752	32.418	ppb	0.1752	0.54%
Ti 334.940†	-179.1	-0.0985	µg/L	0.03082	-0.0985	ppb	0.03082	31.27%
Tl 190.801†	6.0	2.3338	µg/L	1.98461	2.3338	ppb	1.98461	85.04%
U 409.014†	-9.3	-0.6019	µg/L	4.26000	-0.6019	ppb	4.26000	707.76%
V 292.402†	11.7	0.1919	µg/L	0.19187	0.1919	ppb	0.19187	99.98%
Zn 213.857†	1244.0	29.705	µg/L	0.0566	29.705	ppb	0.0566	0.19%

Sequence No.: 8
Sample ID: 1200875017|437221|1
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 6/29/2005 22:19:23
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875017|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	49336.9	49336.9	109	%			22:20:53
1	Al 396.153Radial†	17577.3	16071.1	4569.7	µg/L	4569.7	ppb	22:20:53
1	Ca 317.933Radial†	191021.8	175495.6	37066	µg/L	37066	ppb	22:20:48
1	Fe 238.204 Radial†	4727.6	4306.0	4742.4	µg/L	4742.4	ppb	22:20:53
1	K 766.490 Radial†	14876.8	12609.2	5438.7	µg/L	5438.7	ppb	22:20:53
1	Mg 279.077 IEC†	4038.7	3710.3	9877.1	µg/L	9877.1	ppb	22:20:53
1	Na 589.592 Radial†	178025.0	162754.9	24473	µg/L	24473	ppb	22:20:48
1	Sr 421.552†	167883.6	154406.6	627.40	µg/L	627.40	ppb	22:20:48
1	Sc 361.383	1237639.5	1237639.5	110.81	%			22:21:23
1	Y 371.029	665304.6	665304.6	109.69	%			22:21:23
1	Ag 328.068†	65739.3	59993.5	453.35	µg/L	453.35	ppb	22:21:28
1	As 188.979†	968.0	904.8	477.53	µg/L	477.53	ppb	22:21:48
1	B 249.677†	8155.3	7319.4	485.18	µg/L	485.18	ppb	22:21:28
1	Ba 233.527†	48313.1	43738.6	465.13	µg/L	465.13	ppb	22:21:28
1	Be 313.107†	749580.4	676259.9	461.43	µg/L	461.43	ppb	22:21:23
1	Cd 226.502†	13206.0	11942.2	436.98	µg/L	436.98	ppb	22:21:28
1	Co 228.616†	15495.1	14119.5	435.89	µg/L	435.89	ppb	22:21:28
1	Cr 267.716†	18456.1	16579.3	469.68	µg/L	469.68	ppb	22:21:28
1	Cu 324.752†	139818.7	122407.9	491.27	µg/L	491.27	ppb	22:21:23
1	Mn 257.610†	287906.5	259465.1	471.46	µg/L	471.46	ppb	22:21:23
1	Mo 202.031†	3995.6	3604.9	474.14	µg/L	474.14	ppb	22:21:48
1	Ni 231.604†	7811.5	6874.4	449.80	µg/L	449.80	ppb	22:21:48
1	P 214.914†	891.7	617.6	445.21	µg/L	445.21	ppb	22:21:48
1	Pb 220.353†	1895.1	1722.1	450.90	µg/L	450.90	ppb	22:21:48
1	S 181.975 Axial†	6219.9	5581.7	13555	µg/L	13555	ppb	22:21:48
1	Sb 206.836†	1115.0	969.1	471.04	µg/L	471.04	ppb	22:21:48
1	Se 196.026†	501.6	487.9	435	µg/L	435	ppb	22:21:48
1	SiO2 †	933289.5	841001.8	59897	µg/L	59897	ppb	22:21:23
1	Sn 189.927†	1950.0	1769.9	458.52	µg/L	458.52	ppb	22:21:48
1	Ti 334.940†	385570.2	347565.9	461.89	µg/L	461.89	ppb	22:21:23
1	Tl 190.801†	1208.0	1134.7	444.75	µg/L	444.75	ppb	22:21:48
1	U 409.014†	8072.5	6993.5	455.34	µg/L	455.34	ppb	22:21:28
1	V 292.402†	33431.1	30262.5	459.42	µg/L	459.42	ppb	22:21:28
1	Zn 213.857†	26926.4	23887.1	570.56	µg/L	570.56	ppb	22:21:28
1	Si 251.611†	912427.6	822185.5	27500	µg/L	27500	ppb	22:22:59
2	Sc RADIAL	49068.4	49068.4	108	%			22:21:04
2	Al 396.153Radial†	17399.1	15994.8	4547.6	µg/L	4547.6	ppb	22:21:04
2	Ca 317.933Radial†	188989.6	174577.8	36873	µg/L	36873	ppb	22:20:58
2	Fe 238.204 Radial†	4662.1	4269.2	4702.1	µg/L	4702.1	ppb	22:21:04
2	K 766.490 Radial†	14845.5	12655.1	5458.6	µg/L	5458.6	ppb	22:21:04
2	Mg 279.077 IEC†	3988.1	3683.8	9806.9	µg/L	9806.9	ppb	22:21:04
2	Na 589.592 Radial†	176930.6	162638.7	24456	µg/L	24456	ppb	22:20:58
2	Sr 421.552†	166879.5	154322.9	627.06	µg/L	627.06	ppb	22:20:58
2	Sc 361.383	1218652.0	1218652.0	109.11	%			22:21:54
2	Y 371.029	655357.5	655357.5	108.05	%			22:21:54
2	Ag 328.068†	66371.7	61497.5	464.68	µg/L	464.68	ppb	22:22:00
2	As 188.979†	959.4	910.6	480.67	µg/L	480.67	ppb	22:22:20
2	B 249.677†	8227.8	7500.6	497.21	µg/L	497.21	ppb	22:22:00
2	Ba 233.527†	48956.1	45007.2	478.62	µg/L	478.62	ppb	22:22:00
2	Be 313.107†	740115.3	678124.8	462.71	µg/L	462.71	ppb	22:21:54
2	Cd 226.502†	13403.2	12308.7	450.40	µg/L	450.40	ppb	22:22:00
2	Co 228.616†	15720.2	14543.6	449.01	µg/L	449.01	ppb	22:22:00
2	Cr 267.716†	18719.2	17080.0	483.87	µg/L	483.87	ppb	22:22:00
2	Cu 324.752†	138030.7	122735.2	492.57	µg/L	492.57	ppb	22:21:54
2	Mn 257.610†	284045.1	259974.3	472.38	µg/L	472.38	ppb	22:21:54
2	Mo 202.031†	3985.9	3652.1	480.34	µg/L	480.34	ppb	22:22:20
2	Ni 231.604†	7812.4	6985.0	457.03	µg/L	457.03	ppb	22:22:20
2	P 214.914†	897.4	635.4	460.27	µg/L	460.27	ppb	22:22:20

2	Pb 220.353†	1895.0	1748.7	457.85 µg/L	457.85 ppb	22:22:20
2	S 181.975 Axial†	6242.6	5689.9	13818 µg/L	13818 ppb	22:22:20
2	Sb 206.836†	1120.4	989.7	480.95 µg/L	480.95 ppb	22:22:20
2	Se 196.026†	498.6	492.3	439 µg/L	439 ppb	22:22:20
2	SiO2 †	925054.9	846577.5	60294 µg/L	60294 ppb	22:21:54
2	Sn 189.927†	1953.6	1800.6	466.40 µg/L	466.40 ppb	22:22:20
2	Ti 334.940†	380861.7	348672.0	463.35 µg/L	463.35 ppb	22:21:54
2	Tl 190.801†	1209.5	1153.0	451.85 µg/L	451.85 ppb	22:22:20
2	U 409.014†	8121.9	7152.3	465.70 µg/L	465.70 ppb	22:22:00
2	V 292.402†	33690.6	30970.4	470.12 µg/L	470.12 ppb	22:22:00
2	Zn 213.857†	27136.6	24458.4	584.31 µg/L	584.31 ppb	22:22:00
2	Si 251.611†	915098.6	837463.3	28000 µg/L	28000 ppb	22:23:06
3	Sc RADIAL	49462.5	49462.5	109 %		22:21:14
3	Al 396.153Radial†	17586.5	16038.6	4560.3 µg/L	4560.3 ppb	22:21:14
3	Ca 317.933Radial†	192000.6	175947.2	37162 µg/L	37162 ppb	22:21:09
3	Fe 238.204 Radial†	4717.2	4285.4	4719.9 µg/L	4719.9 ppb	22:21:14
3	K 766.490 Radial†	14918.9	12613.1	5440.4 µg/L	5440.4 ppb	22:21:14
3	Mg 279.077 IEC†	4017.2	3681.1	9799.6 µg/L	9799.6 ppb	22:21:14
3	Na 589.592 Radial†	179064.1	163292.1	24554 µg/L	24554 ppb	22:21:09
3	Sr 421.552†	168803.4	154858.1	629.23 µg/L	629.23 ppb	22:21:09
3	Sc 361.383	1230597.2	1230597.2	110.18 %		22:22:26
3	Y 371.029	662018.0	662018.0	109.15 %		22:22:26
3	Ag 328.068†	66255.6	60801.7	459.44 µg/L	459.44 ppb	22:22:31
3	As 188.979†	957.2	900.0	475.14 µg/L	475.14 ppb	22:22:52
3	B 249.677†	8285.1	7479.4	495.79 µg/L	495.79 ppb	22:22:31
3	Ba 233.527†	48789.3	44420.2	472.38 µg/L	472.38 ppb	22:22:31
3	Be 313.107†	747498.7	678241.8	462.79 µg/L	462.79 ppb	22:22:26
3	Cd 226.502†	13372.0	12161.1	444.99 µg/L	444.99 ppb	22:22:31
3	Co 228.616†	15651.7	14341.6	442.76 µg/L	442.76 ppb	22:22:31
3	Cr 267.716†	18707.2	16902.5	478.84 µg/L	478.84 ppb	22:22:31
3	Cu 324.752†	139871.1	123177.5	494.35 µg/L	494.35 ppb	22:22:26
3	Mn 257.610†	286987.4	260117.8	472.64 µg/L	472.64 ppb	22:22:26
3	Mo 202.031†	3986.4	3617.2	475.76 µg/L	475.76 ppb	22:22:52
3	Ni 231.604†	7790.6	6895.8	451.19 µg/L	451.19 ppb	22:22:52
3	P 214.914†	899.7	629.4	454.85 µg/L	454.85 ppb	22:22:52
3	Pb 220.353†	1894.9	1731.7	453.41 µg/L	453.41 ppb	22:22:52
3	S 181.975 Axial†	6228.6	5621.7	13652 µg/L	13652 ppb	22:22:52
3	Sb 206.836†	1133.3	991.4	481.78 µg/L	481.78 ppb	22:22:52
3	Se 196.026†	499.8	488.9	436 µg/L	436 ppb	22:22:52
3	SiO2 †	939143.7	851135.3	60618 µg/L	60618 ppb	22:22:26
3	Sn 189.927†	1933.9	1765.3	457.34 µg/L	457.34 ppb	22:22:52
3	Ti 334.940†	385257.3	349273.2	464.15 µg/L	464.15 ppb	22:22:26
3	Tl 190.801†	1210.3	1143.0	447.98 µg/L	447.98 ppb	22:22:52
3	U 409.014†	8149.1	7104.6	462.59 µg/L	462.59 ppb	22:22:31
3	V 292.402†	33683.4	30664.1	465.48 µg/L	465.48 ppb	22:22:31
3	Zn 213.857†	27123.2	24204.8	578.22 µg/L	578.22 ppb	22:22:31
3	Si 251.611†	917712.4	831694.4	27800 µg/L	27800 ppb	22:23:13

Mean Data: 1200875017|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1228962.9	110.03	%	0.859				0.78%
Sc RADIAL	49289.3	109	%	0.4				0.41%
Y 371.029	660893.4	108.96	%	0.836				0.77%
Ag 328.068†	60764.2	459.15	µg/L	5.673	459.15	ppb	5.673	1.24%
Al 396.153Radial†	16034.8	4559.2	µg/L	11.10	4559.2	ppb	11.10	0.24%
As 188.979†	905.1	477.78	µg/L	2.774	477.78	ppb	2.774	0.58%
B 249.677†	7433.1	492.73	µg/L	6.571	492.73	ppb	6.571	1.33%
Ba 233.527†	44388.7	472.05	µg/L	6.751	472.05	ppb	6.751	1.43%
Be 313.107†	677542.2	462.31	µg/L	0.760	462.31	ppb	0.760	0.16%
Ca 317.933Radial†	175340.2	37034	µg/L	147.4	37034	ppb	147.4	0.40%
Cd 226.502†	12137.3	444.12	µg/L	6.750	444.12	ppb	6.750	1.52%
Co 228.616†	14334.9	442.55	µg/L	6.560	442.55	ppb	6.560	1.48%
Cr 267.716†	16854.0	477.46	µg/L	7.193	477.46	ppb	7.193	1.51%
Cu 324.752†	122773.5	492.73	µg/L	1.549	492.73	ppb	1.549	0.31%
Fe 238.204 Radial†	4286.9	4721.5	µg/L	20.21	4721.5	ppb	20.21	0.43%
K 766.490 Radial†	12625.8	5445.9	µg/L	10.99	5445.9	ppb	10.99	0.20%
Mg 279.077 IEC†	3691.8	9827.9	µg/L	42.81	9827.9	ppb	42.81	0.44%
Mn 257.610†	259852.4	472.16	µg/L	0.621	472.16	ppb	0.621	0.13%
Mo 202.031†	3624.7	476.75	µg/L	3.216	476.75	ppb	3.216	0.67%

Na 589.592 Radial†	162895.2	24494 µg/L	52.4	24494 ppb	52.4	0.21%
Ni 231.604†	6918.4	452.67 µg/L	3.835	452.67 ppb	3.835	0.85%
P 214.914†	627.5	453.45 µg/L	7.627	453.45 ppb	7.627	1.68%
Pb 220.353†	1734.2	454.05 µg/L	3.520	454.05 ppb	3.520	0.78%
S 181.975 Axial†	5631.1	13675 µg/L	133.0	13675 ppb	133.0	0.97%
Sb 206.836†	983.4	477.92 µg/L	5.978	477.92 ppb	5.978	1.25%
Se 196.026†	489.7	437 µg/L	2.0	437 ppb	2.0	0.47%
SiO2 †	846238.2	60270 µg/L	361.5	60270 ppb	361.5	0.60%
Si 251.611†	830447.7	27800 µg/L	258.1	27800 ppb	258.1	0.93%
Sn 189.927†	1778.6	460.75 µg/L	4.927	460.75 ppb	4.927	1.07%
Sr 421.552†	154529.2	627.90 µg/L	1.169	627.90 ppb	1.169	0.19%
Ti 334.940†	348503.7	463.13 µg/L	1.147	463.13 ppb	1.147	0.25%
Tl 190.801†	1143.6	448.19 µg/L	3.558	448.19 ppb	3.558	0.79%
U 409.014†	7083.5	461.21 µg/L	5.314	461.21 ppb	5.314	1.15%
V 292.402†	30632.4	465.00 µg/L	5.370	465.00 ppb	5.370	1.15%
Zn 213.857†	24183.4	577.70 µg/L	6.889	577.70 ppb	6.889	1.19%

Sequence No.: 9
Sample ID: 139405002|437221|1
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 6/29/2005 22:25:01
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 139405002|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48288.7	48288.7	106	%			22:26:27
1	Al 396.153Radial†	1920.5	1711.8	488.86	µg/L	488.86	ppb	22:26:27
1	Ca 317.933Radial†	172106.3	161536.6	34116	µg/L	34116	ppb	22:26:27
1	Fe 238.204 Radial†	1163.2	1051.4	1156.7	µg/L	1156.7	ppb	22:26:47
1	K 766.490 Radial†	3190.7	1926.5	830.98	µg/L	830.98	ppb	22:26:27
1	Mg 279.077 IEC†	2223.7	2085.6	5546.4	µg/L	5546.4	ppb	22:26:47
1	Na 589.592 Radial†	146450.0	136642.3	20548	µg/L	20548	ppb	22:26:27
1	Sr 421.552†	44353.7	41696.1	169.07	µg/L	169.07	ppb	22:26:27
1	Sc 361.383	1193846.4	1193846.4	106.89	%			22:27:46
1	Y 371.029	643924.4	643924.4	106.17	%			22:27:46
1	Ag 328.068†	-616.6	89.1	0.8786	µg/L	0.8786	ppb	22:27:51
1	As 188.979†	-30.9	2.3	3.1418	µg/L	3.1418	ppb	22:28:11
1	B 249.677†	656.0	573.2	38.296	µg/L	38.296	ppb	22:28:11
1	Ba 233.527†	2077.9	2081.5	22.102	µg/L	22.102	ppb	22:28:11
1	Be 313.107†	226.3	-1.0	0.0178	µg/L	0.0178	ppb	22:27:51
1	Cd 226.502†	-7.6	17.1	0.5769	µg/L	0.5769	ppb	22:28:11
1	Co 228.616†	-107.5	35.0	1.0418	µg/L	1.0418	ppb	22:28:11
1	Cr 267.716†	5256.8	4841.4	137.19	µg/L	137.19	ppb	22:28:11
1	Cu 324.752†	30220.2	24499.1	98.421	µg/L	98.421	ppb	22:27:51
1	Mn 257.610†	12872.8	11682.1	21.277	µg/L	21.277	ppb	22:27:51
1	Mo 202.031†	50.3	46.0	6.2607	µg/L	6.2607	ppb	22:28:11
1	Ni 231.604†	778.1	552.7	36.141	µg/L	36.141	ppb	22:28:11
1	P 214.914†	271.6	67.0	40.201	µg/L	40.201	ppb	22:28:11
1	Pb 220.353†	12.8	23.7	6.2766	µg/L	6.2766	ppb	22:28:11
1	S 181.975 Axial†	4198.4	3896.3	9465.0	µg/L	9465.0	ppb	22:28:11
1	Sb 206.836†	52.1	11.6	3.3736	µg/L	3.3736	ppb	22:28:11
1	Se 196.026†	-34.6	2.9	2.84	µg/L	2.84	ppb	22:28:11
1	SiO2 †	719902.5	672258.9	47891	µg/L	47891	ppb	22:27:46
1	Sn 189.927†	-65.5	-51.2	-10.135	µg/L	-10.135	ppb	22:28:11
1	Ti 334.940†	14717.7	13370.5	18.434	µg/L	18.434	ppb	22:27:51
1	Tl 190.801†	-41.6	5.6	2.3123	µg/L	2.3123	ppb	22:28:11
1	U 409.014†	309.6	-2.1	-0.2694	µg/L	-0.2694	ppb	22:27:51
1	V 292.402†	-0.0	92.0	1.8035	µg/L	1.8035	ppb	22:28:11
1	Zn 213.857†	6717.4	5871.5	139.64	µg/L	139.64	ppb	22:28:11
1	Si 251.611†	718300.2	670770.7	22400	µg/L	22400	ppb	22:29:20
2	Sc RADIAL	48158.1	48158.1	106	%			22:26:52
2	Al 396.153Radial†	1962.8	1756.5	501.66	µg/L	501.66	ppb	22:26:52
2	Ca 317.933Radial†	170028.5	160017.7	33795	µg/L	33795	ppb	22:26:52
2	Fe 238.204 Radial†	1150.2	1042.1	1146.5	µg/L	1146.5	ppb	22:27:12
2	K 766.490 Radial†	3096.3	1845.7	796.13	µg/L	796.13	ppb	22:26:52
2	Mg 279.077 IEC†	2188.4	2058.1	5473.1	µg/L	5473.1	ppb	22:27:12
2	Na 589.592 Radial†	144953.2	135605.3	20392	µg/L	20392	ppb	22:26:52
2	Sr 421.552†	43961.5	41439.7	168.04	µg/L	168.04	ppb	22:26:52
2	Sc 361.383	1221157.3	1221157.3	109.33	%			22:28:17
2	Y 371.029	658713.2	658713.2	108.61	%			22:28:17
2	Ag 328.068†	-681.8	42.2	0.5244	µg/L	0.5244	ppb	22:28:22
2	As 188.979†	-27.4	6.2	5.1315	µg/L	5.1315	ppb	22:28:42
2	B 249.677†	667.9	570.4	38.096	µg/L	38.096	ppb	22:28:42
2	Ba 233.527†	2055.0	2017.1	21.417	µg/L	21.417	ppb	22:28:42
2	Be 313.107†	238.5	5.4	0.0218	µg/L	0.0218	ppb	22:28:22
2	Cd 226.502†	-3.2	21.3	0.7285	µg/L	0.7285	ppb	22:28:42
2	Co 228.616†	-96.7	47.1	1.4176	µg/L	1.4176	ppb	22:28:42
2	Cr 267.716†	5226.4	4703.6	133.29	µg/L	133.29	ppb	22:28:42
2	Cu 324.752†	30252.5	23896.3	95.999	µg/L	95.999	ppb	22:28:22
2	Mn 257.610†	12817.2	11361.8	20.695	µg/L	20.695	ppb	22:28:22
2	Mo 202.031†	51.8	46.3	6.2916	µg/L	6.2916	ppb	22:28:42
2	Ni 231.604†	783.9	541.8	35.425	µg/L	35.425	ppb	22:28:42
2	P 214.914†	273.3	62.9	37.056	µg/L	37.056	ppb	22:28:42

2	Pb 220.353†	15.2	25.8	6.8027 µg/L	6.8027 ppb	22:28:42
2	S 181.975 Axial†	4176.3	3788.3	9202.5 µg/L	9202.5 ppb	22:28:42
2	Sb 206.836†	46.3	5.1	0.2866 µg/L	0.2866 ppb	22:28:42
2	Se 196.026†	-37.0	1.4	1.49 µg/L	1.49 ppb	22:28:42
2	SiO2 †	724066.5	661004.3	47089 µg/L	47089 ppb	22:28:17
2	Sn 189.927†	-69.2	-53.2	-10.680 µg/L	-10.680 ppb	22:28:42
2	Ti 334.940†	14505.5	12868.4	17.762 µg/L	17.762 ppb	22:28:22
2	Tl 190.801†	-36.0	11.5	4.6210 µg/L	4.6210 ppb	22:28:42
2	U 409.014†	327.4	7.7	0.3658 µg/L	0.3658 ppb	22:28:22
2	V 292.402†	-1.4	90.8	1.7768 µg/L	1.7768 ppb	22:28:42
2	Zn 213.857†	6688.7	5704.7	135.64 µg/L	135.64 ppb	22:28:42
2	Si 251.611†	713620.2	651460.6	21800 µg/L	21800 ppb	22:29:26
3	Sc RADIAL	47967.4	47967.4	106 %		22:27:18
3	Al 396.153Radial†	1976.5	1776.9	507.51 µg/L	507.51 ppb	22:27:18
3	Ca 317.933Radial†	170321.1	160931.3	33988 µg/L	33988 ppb	22:27:18
3	Fe 238.204 Radial†	1146.1	1042.6	1147.0 µg/L	1147.0 ppb	22:27:38
3	K 766.490 Radial†	3153.2	1911.2	824.36 µg/L	824.36 ppb	22:27:18
3	Mg 279.077 IEC†	2186.0	2064.0	5488.8 µg/L	5488.8 ppb	22:27:38
3	Na 589.592 Radial†	145861.1	137007.0	20603 µg/L	20603 ppb	22:27:18
3	Sr 421.552†	44147.1	41779.9	169.42 µg/L	169.42 ppb	22:27:18
3	Sc 361.383	1215870.6	1215870.6	108.86 %		22:28:48
3	Y 371.029	656172.0	656172.0	108.19 %		22:28:48
3	Ag 328.068†	-736.1	-10.4	0.1271 µg/L	0.1271 ppb	22:28:53
3	As 188.979†	-29.3	4.3	4.1327 µg/L	4.1327 ppb	22:29:13
3	B 249.677†	651.1	557.6	37.249 µg/L	37.249 ppb	22:29:13
3	Ba 233.527†	2066.5	2035.9	21.619 µg/L	21.619 ppb	22:29:13
3	Be 313.107†	222.1	-8.7	0.0142 µg/L	0.0142 ppb	22:28:53
3	Cd 226.502†	-12.8	12.4	0.4080 µg/L	0.4080 ppb	22:29:13
3	Co 228.616†	-90.8	52.1	1.5693 µg/L	1.5693 ppb	22:29:13
3	Cr 267.716†	5232.0	4729.5	134.02 µg/L	134.02 ppb	22:29:13
3	Cu 324.752†	30331.3	24089.0	96.766 µg/L	96.766 ppb	22:28:53
3	Mn 257.610†	12860.7	11452.8	20.859 µg/L	20.859 ppb	22:28:53
3	Mo 202.031†	44.1	39.5	5.3979 µg/L	5.3979 ppb	22:29:13
3	Ni 231.604†	786.6	547.4	35.788 µg/L	35.788 ppb	22:29:13
3	P 214.914†	272.6	63.3	37.262 µg/L	37.262 ppb	22:29:13
3	Pb 220.353†	17.1	27.5	7.2496 µg/L	7.2496 ppb	22:29:13
3	S 181.975 Axial†	4175.0	3803.7	9239.9 µg/L	9239.9 ppb	22:29:13
3	Sb 206.836†	47.1	6.1	0.7388 µg/L	0.7388 ppb	22:29:13
3	Se 196.026†	-30.1	7.6	7.01 µg/L	7.01 ppb	22:29:13
3	SiO2 †	720009.1	660156.7	47029 µg/L	47029 ppb	22:28:48
3	Sn 189.927†	-60.8	-45.8	-8.7497 µg/L	-8.7497 ppb	22:29:13
3	Ti 334.940†	14663.4	13071.2	18.030 µg/L	18.030 ppb	22:28:53
3	Tl 190.801†	-40.5	7.3	2.9659 µg/L	2.9659 ppb	22:29:13
3	U 409.014†	493.0	161.1	10.312 µg/L	10.312 ppb	22:28:53
3	V 292.402†	14.6	105.4	1.9995 µg/L	1.9995 ppb	22:29:13
3	Zn 213.857†	6679.4	5722.8	136.06 µg/L	136.06 ppb	22:29:13
3	Si 251.611†	713644.7	654321.2	21900 µg/L	21900 ppb	22:29:32

Mean Data: 139405002|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1210291.4	108.36	%	1.297				1.20%
Sc RADIAL	48138.1	106	%	0.4				0.34%
Y 371.029	652936.5	107.65	%	1.304				1.21%
Ag 328.068†	40.3	0.5100	µg/L	0.37597	0.5100	ppb	0.37597	73.71%
Al 396.153Radial†	1748.4	499.34	µg/L	9.537	499.34	ppb	9.537	1.91%
As 188.979†	4.3	4.1354	µg/L	0.99485	4.1354	ppb	0.99485	24.06%
B 249.677†	567.1	37.881	µg/L	0.5557	37.881	ppb	0.5557	1.47%
Ba 233.527†	2044.8	21.713	µg/L	0.3520	21.713	ppb	0.3520	1.62%
Be 313.107†	-1.4	0.0179	µg/L	0.00382	0.0179	ppb	0.00382	21.28%
Ca 317.933Radial†	160828.5	33966	µg/L	161.5	33966	ppb	161.5	0.48%
Cd 226.502†	17.0	0.5711	µg/L	0.16034	0.5711	ppb	0.16034	28.07%
Co 228.616†	44.7	1.3429	µg/L	0.27157	1.3429	ppb	0.27157	20.22%
Cr 267.716†	4758.2	134.83	µg/L	2.077	134.83	ppb	2.077	1.54%
Cu 324.752†	24161.5	97.062	µg/L	1.2375	97.062	ppb	1.2375	1.27%
Fe 238.204 Radial†	1045.4	1150.1	µg/L	5.77	1150.1	ppb	5.77	0.50%
K 766.490 Radial†	1894.5	817.16	µg/L	18.508	817.16	ppb	18.508	2.26%
Mg 279.077 IEC†	2069.2	5502.8	µg/L	38.58	5502.8	ppb	38.58	0.70%
Mn 257.610†	11498.9	20.943	µg/L	0.3000	20.943	ppb	0.3000	1.43%
Mo 202.031†	43.9	5.9834	µg/L	0.50728	5.9834	ppb	0.50728	8.48%

Na 589.592 Radial†	136418.2	20514 µg/L	109.4	20514 ppb	109.4	0.53%
Ni 231.604†	547.3	35.785 µg/L	0.3583	35.785 ppb	0.3583	1.00%
P 214.914†	64.4	38.173 µg/L	1.7592	38.173 ppb	1.7592	4.61%
Pb 220.353†	25.7	6.7763 µg/L	0.48702	6.7763 ppb	0.48702	7.19%
S 181.975 Axial†	3829.4	9302.5 µg/L	141.98	9302.5 ppb	141.98	1.53%
Sb 206.836†	7.6	1.4663 µg/L	1.66713	1.4663 ppb	1.66713	113.69%
Se 196.026†	4.0	3.78 µg/L	2.880	3.78 ppb	2.880	76.17%
SiO2 †	664473.3	47336 µg/L	481.3	47336 ppb	481.3	1.02%
Si 251.611†	658850.8	22000 µg/L	348.7	22000 ppb	348.7	1.58%
Sn 189.927†	-50.1	-9.8546 µg/L	0.99493	-9.8546 ppb	0.99493	10.10%
Sr 421.552†	41638.6	168.84 µg/L	0.719	168.84 ppb	0.719	0.43%
Ti 334.940†	13103.4	18.075 µg/L	0.3386	18.075 ppb	0.3386	1.87%
Tl 190.801†	8.1	3.2997 µg/L	1.19000	3.2997 ppb	1.19000	36.06%
U 409.014†	55.6	3.4694 µg/L	5.93418	3.4694 ppb	5.93418	171.05%
V 292.402†	96.0	1.8599 µg/L	0.12163	1.8599 ppb	0.12163	6.54%
Zn 213.857†	5766.3	137.11 µg/L	2.196	137.11 ppb	2.196	1.60%

Sequence No.: 10
Sample ID: 1200875014|437221|1
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 6/29/2005 22:31:21
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875014|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48951.7	48951.7	108	%			22:32:49
1	Al 396.153Radial†	1123.4	948.6	270.89	µg/L	270.89	ppb	22:32:49
1	Ca 317.933Radial†	169362.1	156803.2	33116	µg/L	33116	ppb	22:32:49
1	Fe 238.204 Radial†	632.1	544.4	598.90	µg/L	598.90	ppb	22:33:09
1	K 766.490 Radial†	3069.7	1773.9	765.12	µg/L	765.12	ppb	22:32:49
1	Mg 279.077 IEC†	2180.3	2017.1	5364.7	µg/L	5364.7	ppb	22:33:09
1	Na 589.592 Radial†	143969.3	132479.6	19922	µg/L	19922	ppb	22:32:49
1	Sr 421.552†	43532.1	40370.3	163.70	µg/L	163.70	ppb	22:32:49
1	Sc 361.383	1220887.5	1220887.5	109.31	%			22:34:08
1	Y 371.029	658364.1	658364.1	108.55	%			22:34:08
1	Ag 328.068†	-675.9	47.5	0.4659	µg/L	0.4659	ppb	22:34:13
1	As 188.979†	-25.2	8.2	5.4256	µg/L	5.4256	ppb	22:34:33
1	B 249.677†	606.0	514.0	34.220	µg/L	34.220	ppb	22:34:33
1	Ba 233.527†	1843.6	1824.1	19.374	µg/L	19.374	ppb	22:34:33
1	Be 313.107†	214.0	-16.9	-0.0010	µg/L	-0.0010	ppb	22:34:13
1	Cd 226.502†	-9.4	15.7	0.5469	µg/L	0.5469	ppb	22:34:33
1	Co 228.616†	-115.1	30.3	0.9192	µg/L	0.9192	ppb	22:34:33
1	Cr 267.716†	2981.7	2651.1	75.125	µg/L	75.125	ppb	22:34:33
1	Cu 324.752†	27971.7	21815.9	87.626	µg/L	87.626	ppb	22:34:13
1	Mn 257.610†	9800.4	8604.5	15.626	µg/L	15.626	ppb	22:34:13
1	Mo 202.031†	33.4	29.5	4.0698	µg/L	4.0698	ppb	22:34:33
1	Ni 231.604†	483.1	266.8	17.446	µg/L	17.446	ppb	22:34:33
1	P 214.914†	270.5	60.3	36.761	µg/L	36.761	ppb	22:34:33
1	Pb 220.353†	-1.6	10.3	2.7165	µg/L	2.7165	ppb	22:34:33
1	S 181.975 Axial†	4105.0	3723.9	9046.2	µg/L	9046.2	ppb	22:34:33
1	Sb 206.836†	43.8	2.9	0.1359	µg/L	0.1359	ppb	22:34:33
1	Se 196.026†	-32.4	5.6	5.22	µg/L	5.22	ppb	22:34:33
1	SiO2 †	795654.3	726642.8	51765	µg/L	51765	ppb	22:34:08
1	Sn 189.927†	-61.3	-46.0	-8.8895	µg/L	-8.8895	ppb	22:34:33
1	Ti 334.940†	7208.1	6195.3	8.9026	µg/L	8.9026	ppb	22:34:13
1	Tl 190.801†	-50.6	-1.8	-0.6272	µg/L	-0.6272	ppb	22:34:33
1	U 409.014†	359.1	36.8	2.3145	µg/L	2.3145	ppb	22:34:13
1	V 292.402†	-25.3	68.8	1.2728	µg/L	1.2728	ppb	22:34:33
1	Zn 213.857†	6221.5	5278.6	125.57	µg/L	125.57	ppb	22:34:33
1	Si 251.611†	787792.0	719461.0	24100	µg/L	24100	ppb	22:35:42
2	Sc RADIAL	48778.9	48778.9	108	%			22:33:14
2	Al 396.153Radial†	1126.0	954.7	272.62	µg/L	272.62	ppb	22:33:14
2	Ca 317.933Radial†	168460.8	156520.8	33056	µg/L	33056	ppb	22:33:14
2	Fe 238.204 Radial†	633.4	547.7	602.56	µg/L	602.56	ppb	22:33:34
2	K 766.490 Radial†	3042.7	1758.8	758.61	µg/L	758.61	ppb	22:33:14
2	Mg 279.077 IEC†	2173.0	2017.4	5365.5	µg/L	5365.5	ppb	22:33:34
2	Na 589.592 Radial†	142812.1	131875.8	19831	µg/L	19831	ppb	22:33:14
2	Sr 421.552†	43140.2	40148.6	162.80	µg/L	162.80	ppb	22:33:14
2	Sc 361.383	1225510.3	1225510.3	109.72	%			22:34:39
2	Y 371.029	660696.4	660696.4	108.93	%			22:34:39
2	Ag 328.068†	-735.1	-4.1	0.0775	µg/L	0.0775	ppb	22:34:44
2	As 188.979†	-24.4	9.0	5.8224	µg/L	5.8224	ppb	22:35:04
2	B 249.677†	607.1	512.8	34.143	µg/L	34.143	ppb	22:35:04
2	Ba 233.527†	1856.8	1829.8	19.434	µg/L	19.434	ppb	22:35:04
2	Be 313.107†	234.1	0.6	0.0114	µg/L	0.0114	ppb	22:34:44
2	Cd 226.502†	-5.9	18.9	0.6646	µg/L	0.6646	ppb	22:35:04
2	Co 228.616†	-119.8	26.4	0.7996	µg/L	0.7996	ppb	22:35:04
2	Cr 267.716†	2982.0	2641.0	74.837	µg/L	74.837	ppb	22:35:04
2	Cu 324.752†	28540.1	22237.4	89.316	µg/L	89.316	ppb	22:34:44
2	Mn 257.610†	9928.8	8687.8	15.777	µg/L	15.777	ppb	22:34:44
2	Mo 202.031†	34.6	30.4	4.1890	µg/L	4.1890	ppb	22:35:04
2	Ni 231.604†	486.4	268.1	17.531	µg/L	17.531	ppb	22:35:04
2	P 214.914†	274.8	63.3	39.006	µg/L	39.006	ppb	22:35:04

2	Pb 220.353†	5.3	16.6	4.3633 µg/L	4.3633 ppb	22:35:04
2	S 181.975 Axial†	4107.3	3711.9	9016.9 µg/L	9016.9 ppb	22:35:04
2	Sb 206.836†	41.7	0.8	-0.8611 µg/L	-0.8611 ppb	22:35:04
2	Se 196.026†	-34.2	4.1	3.89 µg/L	3.89 ppb	22:35:04
2	SiO2 †	801332.8	729072.5	51938 µg/L	51938 ppb	22:34:39
2	Sn 189.927†	-64.9	-49.1	-9.6906 µg/L	-9.6906 ppb	22:35:04
2	Ti 334.940†	6888.3	5879.0	8.4802 µg/L	8.4802 ppb	22:34:44
2	Tl 190.801†	-40.4	7.7	3.0682 µg/L	3.0682 ppb	22:35:04
2	U 409.014†	401.5	74.2	4.7439 µg/L	4.7439 ppb	22:34:44
2	V 292.402†	-25.8	68.5	1.2705 µg/L	1.2705 ppb	22:35:04
2	Zn 213.857†	6224.3	5259.7	125.12 µg/L	125.12 ppb	22:35:04
2	Si 251.611†	787272.7	716269.1	24000 µg/L	24000 ppb	22:35:48
3	Sc RADIAL	48740.3	48740.3	107 %		22:33:40
3	Al 396.153Radial†	1084.5	916.9	261.79 µg/L	261.79 ppb	22:33:40
3	Ca 317.933Radial†	167782.9	156014.2	32949 µg/L	32949 ppb	22:33:40
3	Fe 238.204 Radial†	631.2	546.1	600.82 µg/L	600.82 ppb	22:34:00
3	K 766.490 Radial†	3023.2	1742.9	751.77 µg/L	751.77 ppb	22:33:40
3	Mg 279.077 IEC†	2171.9	2018.1	5367.1 µg/L	5367.1 ppb	22:34:00
3	Na 589.592 Radial†	143112.9	132261.2	19889 µg/L	19889 ppb	22:33:40
3	Sr 421.552†	43281.4	40311.9	163.46 µg/L	163.46 ppb	22:33:40
3	Sc 361.383	1225722.3	1225722.3	109.74 %		22:35:10
3	Y 371.029	661149.7	661149.7	109.01 %		22:35:10
3	Ag 328.068†	-745.7	-13.6	0.0064 µg/L	0.0064 ppb	22:35:15
3	As 188.979†	-34.5	-0.2	1.0312 µg/L	1.0312 ppb	22:35:35
3	B 249.677†	595.6	502.2	33.442 µg/L	33.442 ppb	22:35:35
3	Ba 233.527†	1839.9	1814.1	19.268 µg/L	19.268 ppb	22:35:35
3	Be 313.107†	183.9	-45.1	-0.0204 µg/L	-0.0204 ppb	22:35:15
3	Cd 226.502†	-15.4	10.2	0.3471 µg/L	0.3471 ppb	22:35:35
3	Co 228.616†	-114.6	31.1	0.9471 µg/L	0.9471 ppb	22:35:35
3	Cr 267.716†	2956.2	2617.0	74.160 µg/L	74.160 ppb	22:35:35
3	Cu 324.752†	28451.2	22151.9	88.975 µg/L	88.975 ppb	22:35:15
3	Mn 257.610†	9920.2	8678.3	15.760 µg/L	15.760 ppb	22:35:15
3	Mo 202.031†	38.0	33.6	4.6040 µg/L	4.6040 ppb	22:35:35
3	Ni 231.604†	480.5	262.6	17.174 µg/L	17.174 ppb	22:35:35
3	P 214.914†	275.3	63.8	39.471 µg/L	39.471 ppb	22:35:35
3	Pb 220.353†	12.5	23.1	6.0717 µg/L	6.0717 ppb	22:35:35
3	S 181.975 Axial†	4088.0	3693.6	8972.5 µg/L	8972.5 ppb	22:35:35
3	Sb 206.836†	41.1	0.3	-1.0764 µg/L	-1.0764 ppb	22:35:35
3	Se 196.026†	-31.3	6.7	6.24 µg/L	6.24 ppb	22:35:35
3	SiO2 †	802419.9	729936.7	51999 µg/L	51999 ppb	22:35:10
3	Sn 189.927†	-54.8	-39.9	-7.3228 µg/L	-7.3228 ppb	22:35:35
3	Ti 334.940†	6889.7	5879.2	8.4798 µg/L	8.4798 ppb	22:35:15
3	Tl 190.801†	-47.0	1.7	0.7145 µg/L	0.7145 ppb	22:35:35
3	U 409.014†	353.9	30.8	1.9274 µg/L	1.9274 ppb	22:35:15
3	V 292.402†	-23.4	70.6	1.3023 µg/L	1.3023 ppb	22:35:35
3	Zn 213.857†	6223.8	5258.2	125.09 µg/L	125.09 ppb	22:35:35
3	Si 251.611†	789057.5	717771.3	24000 µg/L	24000 ppb	22:35:54

Mean Data: 1200875014|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1224040.0	109.59	%	0.245				0.22%
Sc RADIAL	48823.6	108	%	0.2				0.23%
Y 371.029	660070.1	108.83	%	0.246				0.23%
Ag 328.068†	9.9	0.1833	µg/L	0.24734	0.1833	ppb	0.24734	134.94%
Al 396.153Radial†	940.1	268.43	µg/L	5.817	268.43	ppb	5.817	2.17%
As 188.979†	5.7	4.0931	µg/L	2.65910	4.0931	ppb	2.65910	64.97%
B 249.677†	509.7	33.935	µg/L	0.4287	33.935	ppb	0.4287	1.26%
Ba 233.527†	1822.7	19.358	µg/L	0.0842	19.358	ppb	0.0842	0.44%
Be 313.107†	-20.5	-0.0033	µg/L	0.01604	-0.0033	ppb	0.01604	485.76%
Ca 317.933Radial†	156446.1	33041	µg/L	84.4	33041	ppb	84.4	0.26%
Cd 226.502†	14.9	0.5195	µg/L	0.16047	0.5195	ppb	0.16047	30.89%
Co 228.616†	29.3	0.8887	µg/L	0.07835	0.8887	ppb	0.07835	8.82%
Cr 267.716†	2636.4	74.707	µg/L	0.4955	74.707	ppb	0.4955	0.66%
Cu 324.752†	22068.4	88.639	µg/L	0.8941	88.639	ppb	0.8941	1.01%
Fe 238.204 Radial†	546.1	600.76	µg/L	1.835	600.76	ppb	1.835	0.31%
K 766.490 Radial†	1758.5	758.50	µg/L	6.680	758.50	ppb	6.680	0.88%
Mg 279.077 IEC†	2017.5	5365.8	µg/L	1.27	5365.8	ppb	1.27	0.02%
Mn 257.610†	8656.9	15.721	µg/L	0.0828	15.721	ppb	0.0828	0.53%
Mo 202.031†	31.2	4.2876	µg/L	0.28043	4.2876	ppb	0.28043	6.54%

Na 589.592 Radial†	132205.5	19881 µg/L	46.0	19881 ppb	46.0	0.23%
Ni 231.604†	265.8	17.384 µg/L	0.1866	17.384 ppb	0.1866	1.07%
P 214.914†	62.5	38.412 µg/L	1.4491	38.412 ppb	1.4491	3.77%
Pb 220.353†	16.7	4.3838 µg/L	1.67766	4.3838 ppb	1.67766	38.27%
S 181.975 Axial†	3709.8	9011.9 µg/L	37.11	9011.9 ppb	37.11	0.41%
Sb 206.836†	1.3	-0.6005 µg/L	0.64680	-0.6005 ppb	0.64680	107.70%
Se 196.026†	5.5	5.12 µg/L	1.177	5.12 ppb	1.177	23.00%
SiO2 †	728550.7	51901 µg/L	121.7	51901 ppb	121.7	0.23%
Si 251.611†	717833.8	24000 µg/L	53.4	24000 ppb	53.4	0.22%
Sn 189.927†	-45.0	-8.6343 µg/L	1.20439	-8.6343 ppb	1.20439	13.95%
Sr 421.552†	40276.9	163.32 µg/L	0.467	163.32 ppb	0.467	0.29%
Ti 334.940†	5984.5	8.6209 µg/L	0.24396	8.6209 ppb	0.24396	2.83%
Tl 190.801†	2.5	1.0518 µg/L	1.87067	1.0518 ppb	1.87067	177.85%
U 409.014†	47.3	2.9953 µg/L	1.52668	2.9953 ppb	1.52668	50.97%
V 292.402†	69.3	1.2819 µg/L	0.01772	1.2819 ppb	0.01772	1.38%
Zn 213.857†	5265.5	125.26 µg/L	0.272	125.26 ppb	0.272	0.22%

Sequence No.: 11
Sample ID: 1200875016|437221|5
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 6/29/2005 22:37:44
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875016|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48440.1	48440.1	107	%			22:39:08
1	Al 396.153Radial†	408.2	289.8	82.771	µg/L	82.771	ppb	22:39:08
1	Ca 317.933Radial†	33981.2	31662.5	6686.9	µg/L	6686.9	ppb	22:39:08
1	Fe 238.204 Radial†	266.5	208.2	229.07	µg/L	229.07	ppb	22:39:28
1	K 766.490 Radial†	1520.6	353.0	152.25	µg/L	152.25	ppb	22:39:08
1	Mg 279.077 IEC†	444.0	412.3	1096.3	µg/L	1096.3	ppb	22:39:28
1	Na 589.592 Radial†	29954.4	27101.9	4075.5	µg/L	4075.5	ppb	22:39:08
1	Sr 421.552†	8641.7	8117.8	32.916	µg/L	32.916	ppb	22:39:08
1	Sc 361.383	1195292.9	1195292.9	107.02	%			22:40:26
1	Y 371.029	647128.1	647128.1	106.70	%			22:40:26
1	Ag 328.068†	-713.6	-0.9	0.0351	µg/L	0.0351	ppb	22:40:32
1	As 188.979†	-22.0	10.7	5.9488	µg/L	5.9488	ppb	22:40:52
1	B 249.677†	215.1	160.5	10.694	µg/L	10.694	ppb	22:40:52
1	Ba 233.527†	308.2	425.5	4.5177	µg/L	4.5177	ppb	22:40:52
1	Be 313.107†	228.0	0.3	0.0035	µg/L	0.0035	ppb	22:40:32
1	Cd 226.502†	-20.3	5.2	0.1804	µg/L	0.1804	ppb	22:40:52
1	Co 228.616†	-124.7	19.1	0.5818	µg/L	0.5818	ppb	22:40:52
1	Cr 267.716†	1117.3	967.3	27.412	µg/L	27.412	ppb	22:40:52
1	Cu 324.752†	8860.8	4505.8	18.104	µg/L	18.104	ppb	22:40:32
1	Mn 257.610†	2980.3	2423.5	4.4136	µg/L	4.4136	ppb	22:40:52
1	Mo 202.031†	6.8	5.3	0.7337	µg/L	0.7337	ppb	22:40:52
1	Ni 231.604†	296.9	102.2	6.6828	µg/L	6.6828	ppb	22:40:52
1	P 214.914†	211.3	10.3	5.6890	µg/L	5.6890	ppb	22:40:52
1	Pb 220.353†	-3.7	8.4	2.2082	µg/L	2.2082	ppb	22:40:52
1	S 181.975 Axial†	856.0	768.3	1866.4	µg/L	1866.4	ppb	22:40:52
1	Sb 206.836†	41.0	1.1	0.0904	µg/L	0.0904	ppb	22:40:52
1	Se 196.026†	-33.5	4.0	3.58	µg/L	3.58	ppb	22:40:52
1	SiO2 †	150197.9	139088.5	9908.5	µg/L	9908.5	ppb	22:40:32
1	Sn 189.927†	-26.7	-14.9	-3.2263	µg/L	-3.2263	ppb	22:40:52
1	Ti 334.940†	3207.0	2597.8	3.5839	µg/L	3.5839	ppb	22:40:32
1	Tl 190.801†	-45.5	2.0	0.8015	µg/L	0.8015	ppb	22:40:52
1	U 409.014†	272.7	-36.9	-2.4179	µg/L	-2.4179	ppb	22:40:32
1	V 292.402†	-73.4	23.4	0.4282	µg/L	0.4282	ppb	22:40:52
1	Zn 213.857†	1691.0	1167.1	27.765	µg/L	27.765	ppb	22:40:52
1	Si 251.611†	149200.5	138167.4	4620	µg/L	4620	ppb	22:42:00
2	Sc RADIAL	47733.5	47733.5	105	%			22:39:33
2	Al 396.153Radial†	356.7	246.4	70.360	µg/L	70.360	ppb	22:39:33
2	Ca 317.933Radial†	33446.8	31625.8	6679.2	µg/L	6679.2	ppb	22:39:33
2	Fe 238.204 Radial†	264.5	210.0	231.04	µg/L	231.04	ppb	22:39:53
2	K 766.490 Radial†	1575.7	426.5	183.95	µg/L	183.95	ppb	22:39:33
2	Mg 279.077 IEC†	444.4	418.8	1113.6	µg/L	1113.6	ppb	22:39:53
2	Na 589.592 Radial†	29456.7	27044.1	4066.8	µg/L	4066.8	ppb	22:39:33
2	Sr 421.552†	8541.9	8142.8	33.018	µg/L	33.018	ppb	22:39:33
2	Sc 361.383	1216030.1	1216030.1	108.87	%			22:40:57
2	Y 371.029	658343.2	658343.2	108.54	%			22:40:57
2	Ag 328.068†	-642.7	75.6	0.6098	µg/L	0.6098	ppb	22:41:03
2	As 188.979†	-36.9	-2.7	-1.0141	µg/L	-1.0141	ppb	22:41:23
2	B 249.677†	210.0	152.4	10.155	µg/L	10.155	ppb	22:41:23
2	Ba 233.527†	314.9	426.7	4.5314	µg/L	4.5314	ppb	22:41:23
2	Be 313.107†	229.7	-1.7	0.0029	µg/L	0.0029	ppb	22:41:03
2	Cd 226.502†	-22.4	3.7	0.1255	µg/L	0.1255	ppb	22:41:23
2	Co 228.616†	-113.1	31.7	0.9719	µg/L	0.9719	ppb	22:41:23
2	Cr 267.716†	1114.2	946.7	26.826	µg/L	26.826	ppb	22:41:23
2	Cu 324.752†	8867.4	4370.7	17.558	µg/L	17.558	ppb	22:41:03
2	Mn 257.610†	2985.0	2380.4	4.3347	µg/L	4.3347	ppb	22:41:23
2	Mo 202.031†	9.4	7.5	1.0319	µg/L	1.0319	ppb	22:41:23
2	Ni 231.604†	308.0	107.7	7.0401	µg/L	7.0401	ppb	22:41:23
2	P 214.914†	196.6	-6.6	-8.7276	µg/L	-8.7276	ppb	22:41:23

2	Pb 220.353†	-12.4	0.4	0.1160 µg/L	0.1160 ppb	22:41:23
2	S 181.975 Axial†	852.3	751.2	1824.9 µg/L	1824.9 ppb	22:41:23
2	Sb 206.836†	38.5	-1.8	-1.3122 µg/L	-1.3122 ppb	22:41:23
2	Se 196.026†	-38.1	0.2	0.263 µg/L	0.263 ppb	22:41:23
2	SiO2 †	152159.7	138497.0	9866.3 µg/L	9866.3 ppb	22:41:03
2	Sn 189.927†	-22.9	-11.0	-2.2241 µg/L	-2.2241 ppb	22:41:23
2	Ti 334.940†	3213.9	2553.0	3.5220 µg/L	3.5220 ppb	22:41:03
2	Tl 190.801†	-41.6	6.3	2.4727 µg/L	2.4727 ppb	22:41:23
2	U 409.014†	357.7	36.9	2.3631 µg/L	2.3631 ppb	22:41:03
2	V 292.402†	-76.4	21.8	0.4105 µg/L	0.4105 ppb	22:41:23
2	Zn 213.857†	1698.6	1147.1	27.280 µg/L	27.280 ppb	22:41:23
2	Si 251.611†	146959.3	133731.4	4480 µg/L	4480 ppb	22:42:05
3	Sc RADIAL	48156.4	48156.4	106 %		22:39:58
3	Al 396.153Radial†	450.5	331.8	94.762 µg/L	94.762 ppb	22:39:58
3	Ca 317.933Radial†	34408.8	32252.9	6811.7 µg/L	6811.7 ppb	22:39:58
3	Fe 238.204 Radial†	266.3	209.4	230.38 µg/L	230.38 ppb	22:40:19
3	K 766.490 Radial†	1526.3	366.7	158.19 µg/L	158.19 ppb	22:39:58
3	Mg 279.077 IEC†	446.2	416.7	1108.3 µg/L	1108.3 ppb	22:40:19
3	Na 589.592 Radial†	30128.9	27431.5	4125.0 µg/L	4125.0 ppb	22:39:58
3	Sr 421.552†	8735.4	8253.9	33.468 µg/L	33.468 ppb	22:39:58
3	Sc 361.383	1210362.7	1210362.7	108.37 %		22:41:28
3	Y 371.029	655284.4	655284.4	108.04 %		22:41:28
3	Ag 328.068†	-710.8	9.9	0.1161 µg/L	0.1161 ppb	22:41:34
3	As 188.979†	-24.2	8.9	5.0009 µg/L	5.0009 ppb	22:41:54
3	B 249.677†	221.7	164.2	10.934 µg/L	10.934 ppb	22:41:54
3	Ba 233.527†	300.8	415.1	4.4084 µg/L	4.4084 ppb	22:41:54
3	Be 313.107†	291.2	56.0	0.0423 µg/L	0.0423 ppb	22:41:34
3	Cd 226.502†	-32.3	-5.6	-0.2142 µg/L	-0.2142 ppb	22:41:54
3	Co 228.616†	-135.7	10.4	0.3125 µg/L	0.3125 ppb	22:41:54
3	Cr 267.716†	1088.5	927.8	26.289 µg/L	26.289 ppb	22:41:54
3	Cu 324.752†	8897.9	4437.0	17.823 µg/L	17.823 ppb	22:41:34
3	Mn 257.610†	2954.0	2364.6	4.3061 µg/L	4.3061 ppb	22:41:54
3	Mo 202.031†	11.9	9.9	1.3465 µg/L	1.3465 ppb	22:41:54
3	Ni 231.604†	292.2	94.4	6.1718 µg/L	6.1718 ppb	22:41:54
3	P 214.914†	197.1	-5.3	-7.6333 µg/L	-7.6333 ppb	22:41:54
3	Pb 220.353†	-6.4	5.9	1.5641 µg/L	1.5641 ppb	22:41:54
3	S 181.975 Axial†	839.9	743.5	1806.0 µg/L	1806.0 ppb	22:41:54
3	Sb 206.836†	42.6	2.1	0.5866 µg/L	0.5866 ppb	22:41:54
3	Se 196.026†	-47.1	-8.2	-7.24 µg/L	-7.24 ppb	22:41:54
3	SiO2 †	151591.0	138626.6	9875.5 µg/L	9875.5 ppb	22:41:34
3	Sn 189.927†	-20.2	-8.6	-1.6144 µg/L	-1.6144 ppb	22:41:54
3	Ti 334.940†	3202.4	2556.2	3.5289 µg/L	3.5289 ppb	22:41:34
3	Tl 190.801†	-41.2	6.5	2.5447 µg/L	2.5447 ppb	22:41:54
3	U 409.014†	366.0	46.0	2.9567 µg/L	2.9567 ppb	22:41:34
3	V 292.402†	-64.2	32.7	0.5769 µg/L	0.5769 ppb	22:41:54
3	Zn 213.857†	1690.8	1147.1	27.282 µg/L	27.282 ppb	22:41:54
3	Si 251.611†	146657.9	134085.3	4490 µg/L	4490 ppb	22:42:10

Mean Data: 1200875016|437221|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1207228.6	108.08	%	0.960				0.89%
Sc RADIAL	48110.0	106	%	0.8				0.74%
Y 371.029	653585.2	107.76	%	0.956				0.89%
Ag 328.068†	28.2	0.2537	µg/L	0.31107	0.2537	ppb	0.31107	122.62%
Al 396.153Radial†	289.3	82.631	µg/L	12.2016	82.631	ppb	12.2016	14.77%
As 188.979†	5.6	3.3118	µg/L	3.77627	3.3118	ppb	3.77627	114.02%
B 249.677†	159.0	10.594	µg/L	0.3990	10.594	ppb	0.3990	3.77%
Ba 233.527†	422.4	4.4859	µg/L	0.06740	4.4859	ppb	0.06740	1.50%
Be 313.107†	18.2	0.0162	µg/L	0.02259	0.0162	ppb	0.02259	139.18%
Ca 317.933Radial†	31847.0	6725.9	µg/L	74.34	6725.9	ppb	74.34	1.11%
Cd 226.502†	1.1	0.0306	µg/L	0.21377	0.0306	ppb	0.21377	699.28%
Co 228.616†	20.4	0.6221	µg/L	0.33155	0.6221	ppb	0.33155	53.30%
Cr 267.716†	947.2	26.842	µg/L	0.5619	26.842	ppb	0.5619	2.09%
Cu 324.752†	4437.8	17.828	µg/L	0.2731	17.828	ppb	0.2731	1.53%
Fe 238.204 Radial†	209.2	230.16	µg/L	1.003	230.16	ppb	1.003	0.44%
K 766.490 Radial†	382.1	164.79	µg/L	16.852	164.79	ppb	16.852	10.23%
Mg 279.077 IEC†	415.9	1106.1	µg/L	8.84	1106.1	ppb	8.84	0.80%
Mn 257.610†	2389.5	4.3515	µg/L	0.05571	4.3515	ppb	0.05571	1.28%
Mo 202.031†	7.6	1.0373	µg/L	0.30642	1.0373	ppb	0.30642	29.54%

Na 589.592 Radial†	27192.5	4089.1 µg/L	31.43	4089.1 ppb	31.43	0.77%
Ni 231.604†	101.4	6.6316 µg/L	0.43639	6.6316 ppb	0.43639	6.58%
P 214.914†	-0.5	-3.5573 µg/L	8.02618	-3.5573 ppb	8.02618	225.63%
Pb 220.353†	4.9	1.2961 µg/L	1.07150	1.2961 ppb	1.07150	82.67%
S 181.975 Axial†	754.3	1832.4 µg/L	30.92	1832.4 ppb	30.92	1.69%
Sb 206.836†	0.5	-0.2118 µg/L	0.98479	-0.2118 ppb	0.98479	465.07%
Se 196.026†	-1.3	-1.13 µg/L	5.543	-1.13 ppb	5.543	490.57%
SiO2 †	138737.4	9883.4 µg/L	22.16	9883.4 ppb	22.16	0.22%
Si 251.611†	135328.0	4530 µg/L	82.5	4530 ppb	82.5	1.82%
Sn 189.927†	-11.5	-2.3549 µg/L	0.81386	-2.3549 ppb	0.81386	34.56%
Sr 421.552†	8171.5	33.134 µg/L	0.2935	33.134 ppb	0.2935	0.89%
Ti 334.940†	2569.0	3.5449 µg/L	0.03393	3.5449 ppb	0.03393	0.96%
Tl 190.801†	4.9	1.9396 µg/L	0.98631	1.9396 ppb	0.98631	50.85%
U 409.014†	15.3	0.9673 µg/L	2.94665	0.9673 ppb	2.94665	304.62%
V 292.402†	26.0	0.4719 µg/L	0.09141	0.4719 ppb	0.09141	19.37%
Zn 213.857†	1153.7	27.442 µg/L	0.2790	27.442 ppb	0.2790	1.02%

Sequence No.: 12
Sample ID: 1200875018|437221|1
Nebulizer Back Pressure: 251.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 6/29/2005 22:43:59
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875018|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48195.5	48195.5	106	%			22:45:30
1	Al 396.153Radial†	19437.9	18205.4	5178.8	µg/L	5178.8	ppb	22:45:30
1	Ca 317.933Radial†	192325.2	180882.7	38204	µg/L	38204	ppb	22:45:25
1	Fe 238.204 Radial†	5549.7	5182.8	5707.3	µg/L	5707.3	ppb	22:45:30
1	K 766.490 Radial†	15160.3	13200.0	5693.6	µg/L	5693.6	ppb	22:45:30
1	Mg 279.077 IEC†	4078.1	3835.3	10209	µg/L	10209	ppb	22:45:30
1	Na 589.592 Radial†	178228.8	166823.8	25085	µg/L	25085	ppb	22:45:25
1	Sr 421.552†	168423.8	158571.3	644.32	µg/L	644.32	ppb	22:45:25
1	Sc 361.383	1206979.6	1206979.6	108.06	%			22:46:00
1	Y 371.029	649461.3	649461.3	107.08	%			22:46:00
1	Ag 328.068†	66157.7	61887.8	467.80	µg/L	467.80	ppb	22:46:05
1	As 188.979†	966.9	926.1	489.68	µg/L	489.68	ppb	22:46:25
1	B 249.677†	8152.1	7503.5	497.52	µg/L	497.52	ppb	22:46:05
1	Ba 233.527†	49344.5	45800.6	487.05	µg/L	487.05	ppb	22:46:05
1	Be 313.107†	750721.1	694499.3	473.89	µg/L	473.89	ppb	22:46:00
1	Cd 226.502†	13280.2	12313.6	450.52	µg/L	450.52	ppb	22:46:05
1	Co 228.616†	15716.8	14679.8	453.17	µg/L	453.17	ppb	22:46:05
1	Cr 267.716†	21248.4	19586.4	554.89	µg/L	554.89	ppb	22:46:05
1	Cu 324.752†	158115.0	142544.5	572.15	µg/L	572.15	ppb	22:46:00
1	Mn 257.610†	290280.6	268262.3	487.54	µg/L	487.54	ppb	22:46:00
1	Mo 202.031†	4025.1	3723.7	489.79	µg/L	489.79	ppb	22:46:25
1	Ni 231.604†	7907.5	7142.3	467.33	µg/L	467.33	ppb	22:46:05
1	P 214.914†	919.7	664.0	470.94	µg/L	470.94	ppb	22:46:25
1	Pb 220.353†	1911.7	1780.9	466.33	µg/L	466.33	ppb	22:46:25
1	S 181.975 Axial†	6290.6	5789.7	14060	µg/L	14060	ppb	22:46:25
1	Sb 206.836†	1133.7	1012.0	490.72	µg/L	490.72	ppb	22:46:25
1	Se 196.026†	500.7	498.6	445	µg/L	445	ppb	22:46:25
1	SiO2 †	990666.2	915493.1	65203	µg/L	65203	ppb	22:46:00
1	Sn 189.927†	1965.2	1828.6	473.73	µg/L	473.73	ppb	22:46:25
1	Ti 334.940†	397416.7	367367.7	488.17	µg/L	488.17	ppb	22:46:00
1	Tl 190.801†	1217.6	1171.3	459.13	µg/L	459.13	ppb	22:46:25
1	U 409.014†	8118.9	7221.5	470.09	µg/L	470.09	ppb	22:46:05
1	V 292.402†	33636.1	31218.7	474.13	µg/L	474.13	ppb	22:46:05
1	Zn 213.857†	26393.9	24011.6	573.19	µg/L	573.19	ppb	22:46:05
1	Si 251.611†	983507.4	908879.3	30400	µg/L	30400	ppb	22:47:36
2	Sc RADIAL	48262.9	48262.9	106	%			22:45:41
2	Al 396.153Radial†	19490.4	18229.2	5185.5	µg/L	5185.5	ppb	22:45:41
2	Ca 317.933Radial†	192662.2	180946.5	38218	µg/L	38218	ppb	22:45:35
2	Fe 238.204 Radial†	5551.2	5176.9	5700.8	µg/L	5700.8	ppb	22:45:41
2	K 766.490 Radial†	15198.9	13216.4	5700.7	µg/L	5700.7	ppb	22:45:41
2	Mg 279.077 IEC†	4086.0	3837.4	10215	µg/L	10215	ppb	22:45:41
2	Na 589.592 Radial†	177900.8	166280.9	25003	µg/L	25003	ppb	22:45:35
2	Sr 421.552†	168184.5	158124.7	642.50	µg/L	642.50	ppb	22:45:35
2	Sc 361.383	1192877.9	1192877.9	106.80	%			22:46:32
2	Y 371.029	642218.3	642218.3	105.89	%			22:46:32
2	Ag 328.068†	66299.6	62744.4	474.27	µg/L	474.27	ppb	22:46:37
2	As 188.979†	964.9	934.8	494.32	µg/L	494.32	ppb	22:46:57
2	B 249.677†	8242.8	7677.5	509.07	µg/L	509.07	ppb	22:46:37
2	Ba 233.527†	49557.8	46540.1	494.91	µg/L	494.91	ppb	22:46:37
2	Be 313.107†	742965.7	695450.3	474.54	µg/L	474.54	ppb	22:46:32
2	Cd 226.502†	13380.1	12552.4	459.26	µg/L	459.26	ppb	22:46:37
2	Co 228.616†	15736.2	14869.9	459.04	µg/L	459.04	ppb	22:46:37
2	Cr 267.716†	21359.6	19922.9	564.43	µg/L	564.43	ppb	22:46:37
2	Cu 324.752†	156440.0	142705.8	572.80	µg/L	572.80	ppb	22:46:32
2	Mn 257.610†	287381.0	268722.8	488.38	µg/L	488.38	ppb	22:46:32
2	Mo 202.031†	3996.8	3741.2	492.10	µg/L	492.10	ppb	22:46:57
2	Ni 231.604†	7962.8	7280.6	476.36	µg/L	476.36	ppb	22:46:37
2	P 214.914†	927.1	680.9	485.39	µg/L	485.39	ppb	22:46:57

2	Pb 220.353†	1912.7	1802.7	472.04 µg/L	472.04 ppb	22:46:57
2	S 181.975 Axial†	6264.6	5834.2	14168 µg/L	14168 ppb	22:46:57
2	Sb 206.836†	1131.0	1021.9	495.44 µg/L	495.44 ppb	22:46:57
2	Se 196.026†	494.9	498.7	445 µg/L	445 ppb	22:46:57
2	SiO2 †	983809.3	919910.3	65518 µg/L	65518 ppb	22:46:32
2	Sn 189.927†	1962.0	1847.1	478.48 µg/L	478.48 ppb	22:46:57
2	Ti 334.940†	393824.9	368352.1	489.48 µg/L	489.48 ppb	22:46:32
2	Tl 190.801†	1213.1	1180.3	462.65 µg/L	462.65 ppb	22:46:57
2	U 409.014†	8043.9	7240.0	471.33 µg/L	471.33 ppb	22:46:37
2	V 292.402†	33757.2	31699.9	481.39 µg/L	481.39 ppb	22:46:37
2	Zn 213.857†	26527.7	24425.6	583.12 µg/L	583.12 ppb	22:46:37
2	Si 251.611†	972344.4	909186.2	30400 µg/L	30400 ppb	22:47:43
3	Sc RADIAL	48362.4	48362.4	107 %		22:45:51
3	Al 396.153Radial†	19527.7	18226.5	5185.1 µg/L	5185.1 ppb	22:45:51
3	Ca 317.933Radial†	191309.6	179305.1	37871 µg/L	37871 ppb	22:45:46
3	Fe 238.204 Radial†	5572.7	5186.3	5711.1 µg/L	5711.1 ppb	22:45:51
3	K 766.490 Radial†	15236.8	13222.6	5703.3 µg/L	5703.3 ppb	22:45:51
3	Mg 279.077 IEC†	4093.2	3836.3	10212 µg/L	10212 ppb	22:45:51
3	Na 589.592 Radial†	177140.2	165223.4	24844 µg/L	24844 ppb	22:45:46
3	Sr 421.552†	167440.6	157101.7	638.35 µg/L	638.35 ppb	22:45:46
3	Sc 361.383	1218195.5	1218195.5	109.07 %		22:47:03
3	Y 371.029	655333.5	655333.5	108.05 %		22:47:03
3	Ag 328.068†	66257.8	61415.9	464.25 µg/L	464.25 ppb	22:47:08
3	As 188.979†	968.3	919.1	486.00 µg/L	486.00 ppb	22:47:29
3	B 249.677†	8243.3	7517.6	498.45 µg/L	498.45 ppb	22:47:08
3	Ba 233.527†	49347.5	45382.9	482.61 µg/L	482.61 ppb	22:47:08
3	Be 313.107†	760488.5	697058.7	475.63 µg/L	475.63 ppb	22:47:03
3	Cd 226.502†	13311.5	12229.2	447.43 µg/L	447.43 ppb	22:47:08
3	Co 228.616†	15675.0	14507.6	447.83 µg/L	447.83 ppb	22:47:08
3	Cr 267.716†	21328.3	19478.6	551.83 µg/L	551.83 ppb	22:47:08
3	Cu 324.752†	159901.2	142835.1	573.32 µg/L	573.32 ppb	22:47:03
3	Mn 257.610†	294026.1	269223.2	489.28 µg/L	489.28 ppb	22:47:03
3	Mo 202.031†	4030.2	3694.1	485.90 µg/L	485.90 ppb	22:47:29
3	Ni 231.604†	7940.1	7104.8	464.87 µg/L	464.87 ppb	22:47:08
3	P 214.914†	932.0	667.4	473.62 µg/L	473.62 ppb	22:47:29
3	Pb 220.353†	1939.0	1789.7	468.61 µg/L	468.61 ppb	22:47:29
3	S 181.975 Axial†	6281.9	5728.1	13911 µg/L	13911 ppb	22:47:29
3	Sb 206.836†	1129.9	998.8	484.29 µg/L	484.29 ppb	22:47:29
3	Se 196.026†	485.5	480.4	429 µg/L	429 ppb	22:47:29
3	SiO2 †	1008703.6	923590.6	65780 µg/L	65780 ppb	22:47:03
3	Sn 189.927†	1959.5	1806.6	468.05 µg/L	468.05 ppb	22:47:29
3	Ti 334.940†	402778.5	368897.7	490.20 µg/L	490.20 ppb	22:47:03
3	Tl 190.801†	1221.3	1164.3	456.45 µg/L	456.45 ppb	22:47:29
3	U 409.014†	8205.6	7231.8	470.73 µg/L	470.73 ppb	22:47:08
3	V 292.402†	33702.5	30992.9	470.70 µg/L	470.70 ppb	22:47:08
3	Zn 213.857†	26426.6	23816.7	568.51 µg/L	568.51 ppb	22:47:08
3	Si 251.611†	969295.7	887469.5	29700 µg/L	29700 ppb	22:47:50

Mean Data: 1200875018|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1206017.7	107.98	%	1.136				1.05%
Sc RADIAL	48273.6	106	%	0.2				0.17%
Y 371.029	649004.4	107.00	%	1.083				1.01%
Ag 328.068†	62016.0	468.77	µg/L	5.080	468.77	ppb	5.080	1.08%
Al 396.153Radial†	18220.4	5183.1	µg/L	3.74	5183.1	ppb	3.74	0.07%
As 188.979†	926.6	490.00	µg/L	4.167	490.00	ppb	4.167	0.85%
B 249.677†	7566.2	501.68	µg/L	6.413	501.68	ppb	6.413	1.28%
Ba 233.527†	45907.9	488.19	µg/L	6.230	488.19	ppb	6.230	1.28%
Be 313.107†	695669.5	474.69	µg/L	0.882	474.69	ppb	0.882	0.19%
Ca 317.933Radial†	180378.1	38098	µg/L	196.4	38098	ppb	196.4	0.52%
Cd 226.502†	12365.1	452.40	µg/L	6.138	452.40	ppb	6.138	1.36%
Co 228.616†	14685.8	453.35	µg/L	5.606	453.35	ppb	5.606	1.24%
Cr 267.716†	19662.6	557.05	µg/L	6.571	557.05	ppb	6.571	1.18%
Cu 324.752†	142695.1	572.76	µg/L	0.585	572.76	ppb	0.585	0.10%
Fe 238.204 Radial†	5182.0	5706.4	µg/L	5.19	5706.4	ppb	5.19	0.09%
K 766.490 Radial†	13213.0	5699.2	µg/L	5.02	5699.2	ppb	5.02	0.09%
Mg 279.077 IEC†	3836.3	10212	µg/L	2.8	10212	ppb	2.8	0.03%
Mn 257.610†	268736.1	488.40	µg/L	0.872	488.40	ppb	0.872	0.18%
Mo 202.031†	3719.7	489.26	µg/L	3.132	489.26	ppb	3.132	0.64%

Na 589.592 Radial†	166109.4	24977 µg/L	122.4	24977 ppb	122.4	0.49%
Ni 231.604†	7175.9	469.52 µg/L	6.049	469.52 ppb	6.049	1.29%
P 214.914†	670.8	476.65 µg/L	7.688	476.65 ppb	7.688	1.61%
Pb 220.353†	1791.1	468.99 µg/L	2.874	468.99 ppb	2.874	0.61%
S 181.975 Axial†	5784.0	14046 µg/L	129.4	14046 ppb	129.4	0.92%
Sb 206.836†	1010.9	490.15 µg/L	5.595	490.15 ppb	5.595	1.14%
Se 196.026†	492.6	439 µg/L	9.3	439 ppb	9.3	2.13%
SiO2 †	919664.6	65500 µg/L	288.9	65500 ppb	288.9	0.44%
Si 251.611†	901845.0	30200 µg/L	416.6	30200 ppb	416.6	1.38%
Sn 189.927†	1827.5	473.42 µg/L	5.226	473.42 ppb	5.226	1.10%
Sr 421.552†	157932.6	641.72 µg/L	3.061	641.72 ppb	3.061	0.48%
Ti 334.940†	368205.8	489.28 µg/L	1.026	489.28 ppb	1.026	0.21%
Tl 190.801†	1171.9	459.41 µg/L	3.112	459.41 ppb	3.112	0.68%
U 409.014†	7231.1	470.72 µg/L	0.622	470.72 ppb	0.622	0.13%
V 292.402†	31303.8	475.41 µg/L	5.455	475.41 ppb	5.455	1.15%
Zn 213.857†	24084.6	574.94 µg/L	7.459	574.94 ppb	7.459	1.30%

Sequence No.: 13
Sample ID: CCV
Nebulizer Back Pressure: 252.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/29/2005 22:49:38
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	48973.5	48973.5	108	%			22:51:02
1	Al 396.153Radial†	17459.2	16081.7	4572.2	µg/L	4572.2	ppb	22:51:02
1	Ca 317.933Radial†	23719.6	21809.5	4608.7	µg/L	4608.7	ppb	22:51:22
1	Fe 238.204 Radial†	4758.0	4366.4	4809.3	µg/L	4809.3	ppb	22:51:22
1	K 766.490 Radial†	12838.1	10822.0	4667.9	µg/L	4667.9	ppb	22:51:02
1	Mg 279.077 IEC†	1939.8	1793.4	4779.0	µg/L	4779.0	ppb	22:51:22
1	Na 589.592 Radial†	69602.3	63526.3	9551.4	µg/L	9551.4	ppb	22:51:02
1	Sr 421.552†	124082.3	114974.3	467.51	µg/L	467.51	ppb	22:51:02
1	Sc 361.383	1220087.9	1220087.9	109.24	%			22:52:21
1	Y 371.029	659190.3	659190.3	108.68	%			22:52:21
1	Ag 328.068†	68018.7	62933.7	475.51	µg/L	475.51	ppb	22:52:27
1	As 188.979†	947.9	899.0	474.30	µg/L	474.30	ppb	22:52:47
1	B 249.677†	7857.1	7152.3	474.03	µg/L	474.03	ppb	22:52:27
1	Ba 233.527†	47813.8	43908.7	466.96	µg/L	466.96	ppb	22:52:27
1	Be 313.107†	752037.4	688240.6	469.61	µg/L	469.61	ppb	22:52:21
1	Cd 226.502†	14016.4	12855.5	470.41	µg/L	470.41	ppb	22:52:27
1	Co 228.616†	16370.0	15121.5	466.85	µg/L	466.85	ppb	22:52:27
1	Cr 267.716†	18085.6	16479.7	466.86	µg/L	466.86	ppb	22:52:27
1	Cu 324.752†	133469.1	118410.4	475.21	µg/L	475.21	ppb	22:52:27
1	Mn 257.610†	283336.3	259019.1	470.72	µg/L	470.72	ppb	22:52:21
1	Mo 202.031†	4030.8	3689.0	485.02	µg/L	485.02	ppb	22:52:47
1	Ni 231.604†	8083.4	7224.8	472.67	µg/L	472.67	ppb	22:52:27
1	P 214.914†	3161.5	2707.0	2234.9	µg/L	2234.9	ppb	22:52:47
1	Pb 220.353†	1949.6	1796.6	470.37	µg/L	470.37	ppb	22:52:47
1	S 181.975 Axial†	464.2	393.4	950.18	µg/L	950.18	ppb	22:52:47
1	Sb 206.836†	1089.1	959.9	466.83	µg/L	466.83	ppb	22:52:47
1	Se 196.026†	535.6	525.6	469	µg/L	469	ppb	22:52:47
1	SiO2 †	93441.2	84278.3	5988.6	µg/L	5988.6	ppb	22:52:27
1	Sn 189.927†	1986.1	1828.2	470.64	µg/L	470.64	ppb	22:52:47
1	Ti 334.940†	389422.0	356097.8	472.53	µg/L	472.53	ppb	22:52:21
1	Tl 190.801†	1267.4	1204.7	471.98	µg/L	471.98	ppb	22:52:47
1	U 409.014†	8189.9	7205.7	469.16	µg/L	469.16	ppb	22:52:27
1	V 292.402†	33832.2	31063.7	471.53	µg/L	471.53	ppb	22:52:27
1	Zn 213.857†	21702.3	19454.3	464.94	µg/L	464.94	ppb	22:52:27
1	Si 251.611†	88489.4	79756.1	2660	µg/L	2660	ppb	22:53:55
2	Sc RADIAL	47556.3	47556.3	105	%			22:51:27
2	Al 396.153Radial†	17495.7	16598.5	4720.1	µg/L	4720.1	ppb	22:51:27
2	Ca 317.933Radial†	23680.5	22427.0	4739.1	µg/L	4739.1	ppb	22:51:47
2	Fe 238.204 Radial†	4744.9	4485.2	4940.0	µg/L	4940.0	ppb	22:51:47
2	K 766.490 Radial†	12783.7	11124.6	4798.4	µg/L	4798.4	ppb	22:51:27
2	Mg 279.077 IEC†	1938.8	1846.1	4918.6	µg/L	4918.6	ppb	22:51:47
2	Na 589.592 Radial†	69347.0	65204.2	9803.7	µg/L	9803.7	ppb	22:51:27
2	Sr 421.552†	123906.3	118232.1	480.75	µg/L	480.75	ppb	22:51:27
2	Sc 361.383	1225499.8	1225499.8	109.72	%			22:52:53
2	Y 371.029	661613.0	661613.0	109.08	%			22:52:53
2	Ag 328.068†	68252.4	62871.7	475.06	µg/L	475.06	ppb	22:52:58
2	As 188.979†	938.8	886.9	468.00	µg/L	468.00	ppb	22:53:18
2	B 249.677†	7853.8	7117.6	471.69	µg/L	471.69	ppb	22:52:58
2	Ba 233.527†	48127.1	44000.9	467.93	µg/L	467.93	ppb	22:52:58
2	Be 313.107†	751223.1	684458.2	467.03	µg/L	467.03	ppb	22:52:53
2	Cd 226.502†	14097.8	12873.1	471.04	µg/L	471.04	ppb	22:52:58
2	Co 228.616†	16494.0	15168.3	468.29	µg/L	468.29	ppb	22:52:58
2	Cr 267.716†	18161.7	16476.0	466.76	µg/L	466.76	ppb	22:52:58
2	Cu 324.752†	133524.3	117921.1	473.25	µg/L	473.25	ppb	22:52:58
2	Mn 257.610†	282805.2	257389.6	467.77	µg/L	467.77	ppb	22:52:53
2	Mo 202.031†	4008.3	3652.1	480.20	µg/L	480.20	ppb	22:53:18
2	Ni 231.604†	8075.3	7184.7	470.04	µg/L	470.04	ppb	22:52:58
2	P 214.914†	3156.1	2689.3	2220.0	µg/L	2220.0	ppb	22:53:18

2	Pb 220.353†	1936.2	1776.5	465.14 µg/L	465.14 ppb	22:53:18
2	S 181.975 Axial†	457.2	385.1	929.87 µg/L	929.87 ppb	22:53:18
2	Sb 206.836†	1103.6	968.7	471.03 µg/L	471.03 ppb	22:53:18
2	Se 196.026†	533.5	521.5	465 µg/L	465 ppb	22:53:18
2	SiO2 †	92407.0	82958.0	5894.7 µg/L	5894.7 ppb	22:52:58
2	Sn 189.927†	1980.0	1814.6	467.16 µg/L	467.16 ppb	22:53:18
2	Ti 334.940†	388461.7	353648.2	469.28 µg/L	469.28 ppb	22:52:53
2	Tl 190.801†	1272.1	1203.9	471.64 µg/L	471.64 ppb	22:53:18
2	U 409.014†	8202.9	7184.5	467.77 µg/L	467.77 ppb	22:52:58
2	V 292.402†	33967.4	31050.1	471.28 µg/L	471.28 ppb	22:52:58
2	Zn 213.857†	21787.1	19443.8	464.68 µg/L	464.68 ppb	22:52:58
2	Si 251.611†	87723.0	78699.9	2630 µg/L	2630 ppb	22:54:01
3	Sc RADIAL	48707.8	48707.8	107 %		22:51:53
3	Al 396.153Radial†	17596.7	16298.0	4634.1 µg/L	4634.1 ppb	22:51:53
3	Ca 317.933Radial†	23900.6	22097.9	4669.6 µg/L	4669.6 ppb	22:52:13
3	Fe 238.204 Radial†	4794.4	4424.4	4873.1 µg/L	4873.1 ppb	22:52:13
3	K 766.490 Radial†	12818.1	10868.3	4687.9 µg/L	4687.9 ppb	22:51:53
3	Mg 279.077 IEC†	1955.9	1818.2	4844.7 µg/L	4844.7 ppb	22:52:13
3	Na 589.592 Radial†	69920.5	64174.3	9648.8 µg/L	9648.8 ppb	22:51:53
3	Sr 421.552†	124992.2	116448.9	473.50 µg/L	473.50 ppb	22:51:53
3	Sc 361.383	1222241.8	1222241.8	109.43 %		22:53:24
3	Y 371.029	660408.2	660408.2	108.88 %		22:53:24
3	Ag 328.068†	68406.9	63178.7	477.37 µg/L	477.37 ppb	22:53:29
3	As 188.979†	947.2	896.8	473.18 µg/L	473.18 ppb	22:53:50
3	B 249.677†	7934.6	7210.4	477.86 µg/L	477.86 ppb	22:53:29
3	Ba 233.527†	48245.0	44225.6	470.32 µg/L	470.32 ppb	22:53:29
3	Be 313.107†	750459.0	685585.0	467.80 µg/L	467.80 ppb	22:53:24
3	Cd 226.502†	14095.3	12905.1	472.21 µg/L	472.21 ppb	22:53:29
3	Co 228.616†	16498.3	15212.3	469.65 µg/L	469.65 ppb	22:53:29
3	Cr 267.716†	18235.4	16587.5	469.91 µg/L	469.91 ppb	22:53:29
3	Cu 324.752†	134081.1	118754.3	476.59 µg/L	476.59 ppb	22:53:29
3	Mn 257.610†	282741.7	258018.6	468.91 µg/L	468.91 ppb	22:53:24
3	Mo 202.031†	4014.1	3667.2	482.17 µg/L	482.17 ppb	22:53:50
3	Ni 231.604†	8090.5	7218.2	472.23 µg/L	472.23 ppb	22:53:29
3	P 214.914†	3163.7	2703.9	2232.0 µg/L	2232.0 ppb	22:53:50
3	Pb 220.353†	1949.8	1793.6	469.60 µg/L	469.60 ppb	22:53:50
3	S 181.975 Axial†	459.3	388.2	937.47 µg/L	937.47 ppb	22:53:50
3	Sb 206.836†	1101.2	969.1	471.25 µg/L	471.25 ppb	22:53:50
3	Se 196.026†	527.4	517.2	461 µg/L	461 ppb	22:53:50
3	SiO2 †	91800.3	82628.0	5871.1 µg/L	5871.1 ppb	22:53:29
3	Sn 189.927†	1986.4	1825.3	469.91 µg/L	469.91 ppb	22:53:50
3	Ti 334.940†	388457.6	354588.2	470.52 µg/L	470.52 ppb	22:53:24
3	Tl 190.801†	1262.3	1198.0	469.36 µg/L	469.36 ppb	22:53:50
3	U 409.014†	8287.4	7281.6	474.09 µg/L	474.09 ppb	22:53:29
3	V 292.402†	34129.2	31280.6	474.76 µg/L	474.76 ppb	22:53:29
3	Zn 213.857†	21857.3	19560.9	467.50 µg/L	467.50 ppb	22:53:29
3	Si 251.611†	87608.8	78808.7	2630 µg/L	2630 ppb	22:54:06

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1222609.8	109.46	%	0.244				0.22%
Sc RADIAL	48412.6	107	%	1.7				1.56%
Y 371.029	660403.8	108.88	%	0.200				0.18%
Ag 328.068†	62994.7	475.98	µg/L	1.224	475.98	ppb	1.224	0.26%
QC value within limits for Ag 328.068 Recovery = 95.20%								
Al 396.153Radial†	16326.1	4642.1	µg/L	74.28	4642.1	ppb	74.28	1.60%
QC value within limits for Al 396.153Radial Recovery = 92.84%								
As 188.979†	894.3	471.82	µg/L	3.362	471.82	ppb	3.362	0.71%
QC value within limits for As 188.979 Recovery = 94.36%								
B 249.677†	7160.1	474.52	µg/L	3.115	474.52	ppb	3.115	0.66%
QC value within limits for B 249.677 Recovery = 94.90%								
Ba 233.527†	44045.1	468.40	µg/L	1.733	468.40	ppb	1.733	0.37%
QC value within limits for Ba 233.527 Recovery = 93.68%								
Be 313.107†	686094.6	468.14	µg/L	1.325	468.14	ppb	1.325	0.28%
QC value within limits for Be 313.107 Recovery = 93.63%								
Ca 317.933Radial†	22111.5	4672.4	µg/L	65.25	4672.4	ppb	65.25	1.40%
QC value within limits for Ca 317.933Radial Recovery = 93.45%								
Cd 226.502†	12877.9	471.22	µg/L	0.918	471.22	ppb	0.918	0.19%
QC value within limits for Cd 226.502 Recovery = 94.24%								

Co 228.616†	15167.4	468.26 µg/L	1.403	468.26 ppb	1.403	0.30%
QC value within limits for Co 228.616 Recovery = 93.65%						
Cr 267.716†	16514.4	467.84 µg/L	1.793	467.84 ppb	1.793	0.38%
QC value within limits for Cr 267.716 Recovery = 93.57%						
Cu 324.752†	118361.9	475.02 µg/L	1.678	475.02 ppb	1.678	0.35%
QC value within limits for Cu 324.752 Recovery = 95.00%						
Fe 238.204 Radial†	4425.3	4874.1 µg/L	65.37	4874.1 ppb	65.37	1.34%
QC value within limits for Fe 238.204 Radial Recovery = 97.48%						
K 766.490 Radial†	10938.3	4718.1 µg/L	70.30	4718.1 ppb	70.30	1.49%
QC value within limits for K 766.490 Radial Recovery = 94.36%						
Mg 279.077 IEC†	1819.2	4847.4 µg/L	69.87	4847.4 ppb	69.87	1.44%
QC value within limits for Mg 279.077 IEC Recovery = 96.95%						
Mn 257.610†	258142.4	469.13 µg/L	1.485	469.13 ppb	1.485	0.32%
QC value within limits for Mn 257.610 Recovery = 93.83%						
Mo 202.031†	3669.4	482.46 µg/L	2.423	482.46 ppb	2.423	0.50%
QC value within limits for Mo 202.031 Recovery = 96.49%						
Na 589.592 Radial†	64301.6	9668.0 µg/L	127.25	9668.0 ppb	127.25	1.32%
QC value within limits for Na 589.592 Radial Recovery = 96.68%						
Ni 231.604†	7209.2	471.65 µg/L	1.411	471.65 ppb	1.411	0.30%
QC value within limits for Ni 231.604 Recovery = 94.33%						
P 214.914†	2700.1	2228.9 µg/L	7.88	2228.9 ppb	7.88	0.35%
QC value less than the lower limit for P 214.914 Recovery = 89.16%						
Pb 220.353†	1788.9	468.37 µg/L	2.827	468.37 ppb	2.827	0.60%
QC value within limits for Pb 220.353 Recovery = 93.67%						
S 181.975 Axial†	388.9	939.17 µg/L	10.262	939.17 ppb	10.262	1.09%
QC value within limits for S 181.975 Axial Recovery = 93.92%						
Sb 206.836†	965.9	469.70 µg/L	2.495	469.70 ppb	2.495	0.53%
QC value within limits for Sb 206.836 Recovery = 93.94%						
Se 196.026†	521.5	465 µg/L	3.7	465 ppb	3.7	0.80%
QC value within limits for Se 196.026 Recovery = 92.96%						
SiO2 †	83288.1	5918.2 µg/L	62.13	5918.2 ppb	62.13	1.05%
QC value greater than the upper limit for SiO2 Recovery = 110.67%						
Si 251.611†	79088.2	2640 µg/L	19.4	2640 ppb	19.4	0.73%
QC value within limits for Si 251.611 Recovery = 105.57%						
Sn 189.927†	1822.7	469.24 µg/L	1.835	469.24 ppb	1.835	0.39%
QC value within limits for Sn 189.927 Recovery = 93.85%						
Sr 421.552†	116551.7	473.92 µg/L	6.633	473.92 ppb	6.633	1.40%
QC value within limits for Sr 421.552 Recovery = 94.78%						
Ti 334.940†	354778.1	470.78 µg/L	1.639	470.78 ppb	1.639	0.35%
QC value within limits for Ti 334.940 Recovery = 94.16%						
Tl 190.801†	1202.2	470.99 µg/L	1.425	470.99 ppb	1.425	0.30%
QC value within limits for Tl 190.801 Recovery = 94.20%						
U 409.014†	7223.9	470.34 µg/L	3.323	470.34 ppb	3.323	0.71%
QC value within limits for U 409.014 Recovery = 94.07%						
V 292.402†	31131.5	472.52 µg/L	1.943	472.52 ppb	1.943	0.41%
QC value within limits for V 292.402 Recovery = 94.50%						
Zn 213.857†	19486.3	465.71 µg/L	1.558	465.71 ppb	1.558	0.33%
QC value within limits for Zn 213.857 Recovery = 93.14%						

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: CCB
Nebulizer Back Pressure: 251.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/29/2005 22:55:54
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	46681.4	46681.4	103	%			22:57:21
1	Al 396.153Radial†	95.7	0.4	0.0845	µg/L	0.0845	ppb	22:57:21
1	Ca 317.933Radial†	182.7	13.1	2.7764	µg/L	2.7764	ppb	22:57:41
1	Fe 238.204 Radial†	40.6	-2.0	-2.1759	µg/L	-2.1759	ppb	22:57:41
1	K 766.490 Radial†	1086.7	-15.1	-6.5058	µg/L	-6.5058	ppb	22:57:21
1	Mg 279.077 IEC†	3.6	-0.1	-0.2779	µg/L	-0.2779	ppb	22:57:41
1	Na 589.592 Radial†	1083.0	99.0	14.878	µg/L	14.878	ppb	22:57:21
1	Sr 421.552†	-59.4	-33.8	-0.1375	µg/L	-0.1375	ppb	22:57:21
1	Sc 361.383	1163052.2	1163052.2	104.13	%			22:58:39
1	Y 371.029	631689.8	631689.8	104.15	%			22:58:39
1	Ag 328.068†	-645.9	45.6	0.3418	µg/L	0.3418	ppb	22:58:44
1	As 188.979†	-26.8	5.6	2.8968	µg/L	2.8968	ppb	22:59:05
1	B 249.677†	222.0	172.8	11.439	µg/L	11.439	ppb	22:59:05
1	Ba 233.527†	-141.1	2.0	0.0219	µg/L	0.0219	ppb	22:59:05
1	Be 313.107†	320.1	94.7	0.0649	µg/L	0.0649	ppb	22:58:44
1	Cd 226.502†	-23.5	1.6	0.0602	µg/L	0.0602	ppb	22:59:05
1	Co 228.616†	-123.1	17.4	0.5376	µg/L	0.5376	ppb	22:59:05
1	Cr 267.716†	77.9	-2.0	-0.0572	µg/L	-0.0572	ppb	22:59:05
1	Cu 324.752†	3639.4	-279.0	-1.1222	µg/L	-1.1222	ppb	22:58:44
1	Mn 257.610†	402.1	24.8	0.0446	µg/L	0.0446	ppb	22:59:05
1	Mo 202.031†	7.4	6.0	0.7885	µg/L	0.7885	ppb	22:59:05
1	Ni 231.604†	174.3	-7.9	-0.5138	µg/L	-0.5138	ppb	22:59:05
1	P 214.914†	194.7	-0.2	0.0502	µg/L	0.0502	ppb	22:59:05
1	Pb 220.353†	-8.1	4.1	1.0637	µg/L	1.0637	ppb	22:59:05
1	S 181.975 Axial†	31.6	-1.2	-3.0247	µg/L	-3.0247	ppb	22:59:05
1	Sb 206.836†	56.6	17.2	8.3568	µg/L	8.3568	ppb	22:59:05
1	Se 196.026†	-38.1	-1.3	-1.15	µg/L	-1.15	ppb	22:59:05
1	SiO2 †	5223.8	3754.0	267.40	µg/L	267.40	ppb	22:58:44
1	Sn 189.927†	0.8	10.8	2.7781	µg/L	2.7781	ppb	22:59:05
1	Ti 334.940†	812.2	381.0	0.5051	µg/L	0.5051	ppb	22:58:44
1	Tl 190.801†	-36.7	9.3	3.6175	µg/L	3.6175	ppb	22:59:05
1	U 409.014†	329.6	24.8	1.6074	µg/L	1.6074	ppb	22:58:44
1	V 292.402†	-108.5	-12.2	-0.1737	µg/L	-0.1737	ppb	22:58:44
1	Zn 213.857†	388.6	-39.9	-0.9576	µg/L	-0.9576	ppb	22:59:05
1	Si 251.611†	5040.8	3589.4	120	µg/L	120	ppb	23:00:12
2	Sc RADIAL	47043.7	47043.7	104	%			22:57:46
2	Al 396.153Radial†	61.6	-33.2	-9.4919	µg/L	-9.4919	ppb	22:57:46
2	Ca 317.933Radial†	184.2	13.2	2.7932	µg/L	2.7932	ppb	22:58:06
2	Fe 238.204 Radial†	41.1	-1.8	-1.9831	µg/L	-1.9831	ppb	22:58:06
2	K 766.490 Radial†	1132.8	21.3	9.1886	µg/L	9.1886	ppb	22:57:46
2	Mg 279.077 IEC†	8.4	4.5	11.882	µg/L	11.882	ppb	22:58:06
2	Na 589.592 Radial†	1057.7	66.4	9.9839	µg/L	9.9839	ppb	22:57:46
2	Sr 421.552†	-32.1	-7.0	-0.0285	µg/L	-0.0285	ppb	22:57:46
2	Sc 361.383	1162858.5	1162858.5	104.11	%			22:59:10
2	Y 371.029	631516.7	631516.7	104.12	%			22:59:10
2	Ag 328.068†	-668.3	24.0	0.1814	µg/L	0.1814	ppb	22:59:15
2	As 188.979†	-27.4	5.0	2.5778	µg/L	2.5778	ppb	22:59:36
2	B 249.677†	230.7	181.1	11.992	µg/L	11.992	ppb	22:59:36
2	Ba 233.527†	-136.4	6.5	0.0702	µg/L	0.0702	ppb	22:59:36
2	Be 313.107†	354.6	127.9	0.0874	µg/L	0.0874	ppb	22:59:15
2	Cd 226.502†	-21.4	3.7	0.1349	µg/L	0.1349	ppb	22:59:36
2	Co 228.616†	-134.8	6.1	0.1881	µg/L	0.1881	ppb	22:59:36
2	Cr 267.716†	78.1	-1.7	-0.0493	µg/L	-0.0493	ppb	22:59:36
2	Cu 324.752†	3625.1	-292.1	-1.1737	µg/L	-1.1737	ppb	22:59:15
2	Mn 257.610†	408.1	30.6	0.0552	µg/L	0.0552	ppb	22:59:36
2	Mo 202.031†	3.9	2.7	0.3580	µg/L	0.3580	ppb	22:59:36
2	Ni 231.604†	178.3	-4.0	-0.2596	µg/L	-0.2596	ppb	22:59:36
2	P 214.914†	188.1	-6.5	-5.3577	µg/L	-5.3577	ppb	22:59:36

2	Pb 220.353†	-8.1	4.1	1.0638 µg/L	1.0638 ppb	22:59:36
2	S 181.975 Axial†	30.7	-2.1	-5.1078 µg/L	-5.1078 ppb	22:59:36
2	Sb 206.836†	52.5	13.2	6.4350 µg/L	6.4350 ppb	22:59:36
2	Se 196.026†	-41.1	-4.2	-3.78 µg/L	-3.78 ppb	22:59:36
2	SiO2 †	5300.7	3828.7	272.74 µg/L	272.74 ppb	22:59:15
2	Sn 189.927†	-0.9	9.2	2.3668 µg/L	2.3668 ppb	22:59:36
2	Ti 334.940†	863.2	430.1	0.5708 µg/L	0.5708 ppb	22:59:15
2	Tl 190.801†	-37.4	8.6	3.3465 µg/L	3.3465 ppb	22:59:36
2	U 409.014†	312.9	8.8	0.5750 µg/L	0.5750 ppb	22:59:15
2	V 292.402†	-59.2	35.1	0.5292 µg/L	0.5292 ppb	22:59:15
2	Zn 213.857†	390.8	-37.7	-0.9073 µg/L	-0.9073 ppb	22:59:36
2	Si 251.611†	5026.5	3576.4	120 µg/L	120 ppb	23:00:17
3	Sc RADIAL	46545.0	46545.0	103 %		22:58:11
3	Al 396.153Radial†	73.7	-20.7	-5.9260 µg/L	-5.9260 ppb	22:58:11
3	Ca 317.933Radial†	174.9	6.1	1.2873 µg/L	1.2873 ppb	22:58:31
3	Fe 238.204 Radial†	42.9	0.4	0.4442 µg/L	0.4442 ppb	22:58:31
3	K 766.490 Radial†	1057.1	-40.8	-17.610 µg/L	-17.610 ppb	22:58:11
3	Mg 279.077 IEC†	4.8	1.1	2.8280 µg/L	2.8280 ppb	22:58:31
3	Na 589.592 Radial†	1060.8	80.4	12.095 µg/L	12.095 ppb	22:58:11
3	Sr 421.552†	-50.4	-25.1	-0.1021 µg/L	-0.1021 ppb	22:58:11
3	Sc 361.383	1171351.6	1171351.6	104.87 %		22:59:41
3	Y 371.029	636429.9	636429.9	104.93 %		22:59:41
3	Ag 328.068†	-733.4	-33.5	-0.2513 µg/L	-0.2513 ppb	22:59:46
3	As 188.979†	-28.3	4.3	2.2239 µg/L	2.2239 ppb	23:00:06
3	B 249.677†	203.5	153.6	10.167 µg/L	10.167 ppb	23:00:06
3	Ba 233.527†	-128.9	14.6	0.1558 µg/L	0.1558 ppb	23:00:06
3	Be 313.107†	279.6	53.9	0.0369 µg/L	0.0369 ppb	22:59:46
3	Cd 226.502†	-21.6	3.6	0.1331 µg/L	0.1331 ppb	23:00:06
3	Co 228.616†	-141.0	1.1	0.0343 µg/L	0.0343 ppb	23:00:06
3	Cr 267.716†	79.6	-0.9	-0.0246 µg/L	-0.0246 ppb	23:00:06
3	Cu 324.752†	3660.9	-283.3	-1.1380 µg/L	-1.1380 ppb	22:59:46
3	Mn 257.610†	399.9	20.0	0.0362 µg/L	0.0362 ppb	23:00:06
3	Mo 202.031†	1.1	-0.0	-0.0050 µg/L	-0.0050 ppb	23:00:06
3	Ni 231.604†	172.4	-10.8	-0.7090 µg/L	-0.7090 ppb	23:00:06
3	P 214.914†	190.4	-5.6	-4.6152 µg/L	-4.6152 ppb	23:00:06
3	Pb 220.353†	-6.5	5.6	1.4651 µg/L	1.4651 ppb	23:00:06
3	S 181.975 Axial†	29.4	-3.5	-8.4749 µg/L	-8.4749 ppb	23:00:06
3	Sb 206.836†	46.2	6.8	3.3349 µg/L	3.3349 ppb	23:00:06
3	Se 196.026†	-32.6	4.2	3.72 µg/L	3.72 ppb	23:00:06
3	SiO2 †	5112.2	3612.1	257.32 µg/L	257.32 ppb	22:59:46
3	Sn 189.927†	-0.3	9.7	2.5075 µg/L	2.5075 ppb	23:00:06
3	Ti 334.940†	834.4	396.6	0.5263 µg/L	0.5263 ppb	22:59:46
3	Tl 190.801†	-35.0	11.1	4.3368 µg/L	4.3368 ppb	23:00:06
3	U 409.014†	316.1	9.7	0.6302 µg/L	0.6302 ppb	22:59:46
3	V 292.402†	-82.2	13.6	0.2038 µg/L	0.2038 ppb	22:59:46
3	Zn 213.857†	392.1	-39.3	-0.9409 µg/L	-0.9409 ppb	23:00:06
3	Si 251.611†	4996.5	3512.7	118 µg/L	118 ppb	23:00:22

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1165754.1	104.37	%	0.434				0.42%
Sc RADIAL	46756.7	103	%	0.6				0.55%
Y 371.029	633212.1	104.40	%	0.460				0.44%
Ag 328.068†	12.0	0.0906	µg/L	0.30682	0.0906	ppb	0.30682	338.50%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-17.8	-5.1111	µg/L	4.83995	-5.1111	ppb	4.83995	94.69%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	4.9	2.5662	µg/L	0.33664	2.5662	ppb	0.33664	13.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	169.2	11.199	µg/L	0.9360	11.199	ppb	0.9360	8.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	7.7	0.0826	µg/L	0.06782	0.0826	ppb	0.06782	82.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	92.2	0.0631	µg/L	0.02528	0.0631	ppb	0.02528	40.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	10.8	2.2856	µg/L	0.86466	2.2856	ppb	0.86466	37.83%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	3.0	0.1094	µg/L	0.04262	0.1094	ppb	0.04262	38.96%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	8.2	0.2533 µg/L	0.25791	0.2533 ppb	0.25791	101.81%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1.5	-0.0437 µg/L	0.01701	-0.0437 ppb	0.01701	38.94%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-284.8	-1.1447 µg/L	0.02639	-1.1447 ppb	0.02639	2.31%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-1.2383 µg/L	1.46021	-1.2383 ppb	1.46021	117.92%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-11.5	-4.9758 µg/L	13.46469	-4.9758 ppb	13.46469	270.61%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.8	4.8108 µg/L	6.31792	4.8108 ppb	6.31792	131.33%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	25.1	0.0453 µg/L	0.00949	0.0453 ppb	0.00949	20.94%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.9	0.3805 µg/L	0.39720	0.3805 ppb	0.39720	104.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	81.9	12.319 µg/L	2.4548	12.319 ppb	2.4548	19.93%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-7.6	-0.4941 µg/L	0.22531	-0.4941 ppb	0.22531	45.60%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.1	-3.3076 µg/L	2.93150	-3.3076 ppb	2.93150	88.63%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.6	1.1975 µg/L	0.23170	1.1975 ppb	0.23170	19.35%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.3	-5.5358 µg/L	2.75019	-5.5358 ppb	2.75019	49.68%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.4	6.0422 µg/L	2.53389	6.0422 ppb	2.53389	41.94%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.5	-0.403 µg/L	3.8022	-0.403 ppb	3.8022	942.94%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	3731.6	265.82 µg/L	7.831	265.82 ppb	7.831	2.95%
QC value greater than the upper limit for SiO2 Recovery = Not calculated						
Si 251.611†	3559.5	119 µg/L	1.4	119 ppb	1.4	1.15%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated						
Sn 189.927†	9.9	2.5508 µg/L	0.20904	2.5508 ppb	0.20904	8.20%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-22.0	-0.0893 µg/L	0.05559	-0.0893 ppb	0.05559	62.22%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	402.6	0.5341 µg/L	0.03354	0.5341 ppb	0.03354	6.28%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	9.7	3.7669 µg/L	0.51177	3.7669 ppb	0.51177	13.59%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	14.4	0.9375 µg/L	0.58078	0.9375 ppb	0.58078	61.95%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	12.2	0.1864 µg/L	0.35179	0.1864 ppb	0.35179	188.68%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-39.0	-0.9353 µg/L	0.02564	-0.9353 ppb	0.02564	2.74%
QC value within limits for Zn 213.857 Recovery = Not calculated						

QC Failed. Continue with analysis.

User canceled analysis.

7/14/2005 17:14:06 Hg ReAlign... Actual peak offset (nm): -0.004
Drift (nm): -0.000 Slit adjustment: 0

Analysis Begun

Start Time: 7/14/2005 17:32:07
Logged In Analyst: Administrator
Spectrometer Model: Optima 4300 DV, S/N 077N2061001
Plasma On Time: 7/12/2005 15:54:31
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\Sample Information\071405.sif
Batch ID:
Results Data Set: 071405
Results Library: C:\pe\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AZ
IEC File: 071305IEC.iec
Method Description:
Method Last Saved: 7/14/2005 17:12:10
MSF File:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Al 396.153Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
B 249.677	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Ca 317.933Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Fe 238.204 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
K 766.490 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	No
Mg 279.077 IEC	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Na 589.592 Radial	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
P 214.914	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
S 181.975 Axial	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sc 361.383	Lin Thru 0	Peak Area	Axial	n/a	n/a
Sc RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Sc 196.026	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc RADIAL	Yes
Ti 334.940	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
U 409.014	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 213.857	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1
Sample ID: S0
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 8
Date Collected: 7/14/2005 17:32:07
Nebulizer Flow: 0.66 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0

	Net	Corrected	Calib.	Analysis

Repl#	Analyte	Intensity	Intensity	Conc.	Units	Time
1	Sc RADIAL	66846.3	66846.3	100	%	17:33:56
1	Al 396.153Radial†	69.2	69.1	[0.00]	µg/L	17:33:56
1	Ca 317.933Radial†	257.7	257.3	[0.00]	µg/L	17:34:16
1	Fe 238.204 Radial†	32.5	32.4	[0.00]	µg/L	17:34:16
1	K 766.490 Radial†	916.4	915.1	[0.00]	µg/L	17:33:56
1	Mg 279.077 IEC†	3.0	3.0	[0.00]	µg/L	17:34:16
1	Na 589.592 Radial†	482.0	481.3	[0.00]	µg/L	17:33:56
1	Sr 421.552†	-20.1	-20.1	[0.00]	µg/L	17:33:56
1	Sc 361.383	1315790.0	1315790.0	99.387	%	17:35:15
1	Y 371.029	721551.5	721551.5	99.412	%	17:35:15
1	Ag 328.068†	-645.6	-649.5	[0.00]	µg/L	17:35:20
1	As 188.979†	-19.3	-19.4	[0.00]	µg/L	17:35:40
1	B 249.677†	32.3	32.5	[0.00]	µg/L	17:35:40
1	Ba 233.527†	-121.3	-122.0	[0.00]	µg/L	17:35:40
1	Be 313.107†	410.3	412.9	[0.00]	µg/L	17:35:20
1	Cd 226.502†	-25.7	-25.9	[0.00]	µg/L	17:35:40
1	Co 228.616†	-114.3	-115.0	[0.00]	µg/L	17:35:40
1	Cr 267.716†	70.8	71.2	[0.00]	µg/L	17:35:40
1	Cu 324.752†	4206.6	4232.6	[0.00]	µg/L	17:35:20
1	Mn 257.610†	383.3	385.7	[0.00]	µg/L	17:35:40
1	Mo 202.031†	5.5	5.6	[0.00]	µg/L	17:35:40
1	Ni 231.604†	159.4	160.4	[0.00]	µg/L	17:35:40
1	P 214.914†	158.5	159.4	[0.00]	µg/L	17:35:40
1	Pb 220.353†	-14.2	-14.3	[0.00]	µg/L	17:35:40
1	S 181.975 Axial†	25.1	25.3	[0.00]	µg/L	17:35:40
1	Sb 206.836†	33.2	33.4	[0.00]	µg/L	17:35:40
1	Se 196.026†	-24.7	-24.8	[0.00]	µg/L	17:35:40
1	SiO2 †	765.7	770.5	[0.00]	µg/L	17:35:40
1	Sn 189.927†	-10.6	-10.7	[0.00]	µg/L	17:35:40
1	Ti 334.940†	461.2	464.1	[0.00]	µg/L	17:35:20
1	Tl 190.801†	-32.7	-32.9	[0.00]	µg/L	17:35:40
1	U 409.014†	187.5	188.7	[0.00]	µg/L	17:35:20
1	V 292.402†	-124.9	-125.7	[0.00]	µg/L	17:35:40
1	Zn 213.857†	365.4	367.6	[0.00]	µg/L	17:35:40
1	Si 251.611†	983.5	989.6	[0.00]	µg/L	17:37:02
2	Sc RADIAL	66354.4	66354.4	99.4	%	17:34:21
2	Al 396.153Radial†	70.3	70.7	[0.00]	µg/L	17:34:21
2	Ca 317.933Radial†	253.2	254.7	[0.00]	µg/L	17:34:41
2	Fe 238.204 Radial†	34.0	34.2	[0.00]	µg/L	17:34:41
2	K 766.490 Radial†	936.3	941.9	[0.00]	µg/L	17:34:21
2	Mg 279.077 IEC†	1.1	1.1	[0.00]	µg/L	17:34:41
2	Na 589.592 Radial†	504.3	507.3	[0.00]	µg/L	17:34:21
2	Sr 421.552†	3.7	3.7	[0.00]	µg/L	17:34:21
2	Sc 361.383	1319835.6	1319835.6	99.692	%	17:35:45
2	Y 371.029	723688.7	723688.7	99.706	%	17:35:45
2	Ag 328.068†	-713.5	-715.7	[0.00]	µg/L	17:35:51
2	As 188.979†	-25.3	-25.3	[0.00]	µg/L	17:36:11
2	B 249.677†	41.4	41.6	[0.00]	µg/L	17:36:11
2	Ba 233.527†	-120.3	-120.7	[0.00]	µg/L	17:36:11
2	Be 313.107†	366.9	368.0	[0.00]	µg/L	17:35:51
2	Cd 226.502†	-26.8	-26.9	[0.00]	µg/L	17:36:11
2	Co 228.616†	-120.9	-121.3	[0.00]	µg/L	17:36:11
2	Cr 267.716†	64.5	64.7	[0.00]	µg/L	17:36:11
2	Cu 324.752†	4173.0	4185.9	[0.00]	µg/L	17:35:51
2	Mn 257.610†	378.5	379.7	[0.00]	µg/L	17:36:11
2	Mo 202.031†	7.2	7.2	[0.00]	µg/L	17:36:11
2	Ni 231.604†	157.3	157.7	[0.00]	µg/L	17:36:11
2	P 214.914†	161.2	161.7	[0.00]	µg/L	17:36:11
2	Pb 220.353†	-16.1	-16.2	[0.00]	µg/L	17:36:11
2	S 181.975 Axial†	23.5	23.6	[0.00]	µg/L	17:36:11
2	Sb 206.836†	32.1	32.2	[0.00]	µg/L	17:36:11
2	Se 196.026†	-23.2	-23.3	[0.00]	µg/L	17:36:11
2	SiO2 †	750.8	753.1	[0.00]	µg/L	17:36:11
2	Sn 189.927†	-8.6	-8.7	[0.00]	µg/L	17:36:11
2	Ti 334.940†	404.3	405.6	[0.00]	µg/L	17:35:51
2	Tl 190.801†	-32.1	-32.2	[0.00]	µg/L	17:36:11
2	U 409.014†	280.5	281.4	[0.00]	µg/L	17:35:51
2	V 292.402†	-124.9	-125.3	[0.00]	µg/L	17:36:11
2	Zn 213.857†	370.3	371.4	[0.00]	µg/L	17:36:11
2	Si 251.611†	731.8	734.1	[0.00]	µg/L	17:37:23

3	Sc RADIAL	67048.8	67048.8	100 %	17:34:47
3	Al 396.153Radial†	62.7	62.4	[0.00] µg/L	17:34:47
3	Ca 317.933Radial†	259.2	258.0	[0.00] µg/L	17:35:07
3	Fe 238.204 Radial†	35.1	34.9	[0.00] µg/L	17:35:07
3	K 766.490 Radial†	972.7	968.3	[0.00] µg/L	17:34:47
3	Mg 279.077 IEC†	1.9	1.9	[0.00] µg/L	17:35:07
3	Na 589.592 Radial†	505.3	503.1	[0.00] µg/L	17:34:47
3	Sr 421.552†	-2.6	-2.6	[0.00] µg/L	17:34:47
3	Sc 361.383	1336106.6	1336106.6	100.92 %	17:36:16
3	Y 371.029	732222.1	732222.1	100.88 %	17:36:16
3	Ag 328.068†	-689.1	-682.8	[0.00] µg/L	17:36:21
3	As 188.979†	-28.9	-28.7	[0.00] µg/L	17:36:42
3	B 249.677†	25.5	25.3	[0.00] µg/L	17:36:42
3	Ba 233.527†	-126.3	-125.1	[0.00] µg/L	17:36:42
3	Be 313.107†	398.3	394.6	[0.00] µg/L	17:36:21
3	Cd 226.502†	-31.7	-31.4	[0.00] µg/L	17:36:42
3	Co 228.616†	-125.9	-124.8	[0.00] µg/L	17:36:42
3	Cr 267.716†	69.4	68.8	[0.00] µg/L	17:36:42
3	Cu 324.752†	4100.1	4062.7	[0.00] µg/L	17:36:21
3	Mn 257.610†	380.7	377.2	[0.00] µg/L	17:36:42
3	Mo 202.031†	4.0	4.0	[0.00] µg/L	17:36:42
3	Ni 231.604†	164.7	163.2	[0.00] µg/L	17:36:42
3	P 214.914†	164.7	163.2	[0.00] µg/L	17:36:42
3	Pb 220.353†	-17.9	-17.8	[0.00] µg/L	17:36:42
3	S 181.975 Axial†	25.3	25.0	[0.00] µg/L	17:36:42
3	Sb 206.836†	22.6	22.4	[0.00] µg/L	17:36:42
3	Se 196.026†	-25.6	-25.4	[0.00] µg/L	17:36:42
3	SiO2 †	756.4	749.5	[0.00] µg/L	17:36:42
3	Sn 189.927†	-5.5	-5.4	[0.00] µg/L	17:36:42
3	Ti 334.940†	424.1	420.3	[0.00] µg/L	17:36:21
3	Tl 190.801†	-36.0	-35.6	[0.00] µg/L	17:36:42
3	U 409.014†	208.6	206.7	[0.00] µg/L	17:36:21
3	V 292.402†	-131.4	-130.2	[0.00] µg/L	17:36:42
3	Zn 213.857†	372.1	368.7	[0.00] µg/L	17:36:42
3	Si 251.611†	724.7	718.1	[0.00] µg/L	17:37:43

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1323910.7	10753.85	0.81%	100.00	%
Sc RADIAL	66749.8	357.12	0.54%	100	%
Y 371.029	725820.7	5645.78	0.78%	100.00	%
Ag 328.068†	-682.7	33.08	4.85%	[0.00]	µg/L
Al 396.153Radial†	67.4	4.40	6.54%	[0.00]	µg/L
As 188.979†	-24.5	4.71	19.25%	[0.00]	µg/L
B 249.677†	33.1	8.17	24.70%	[0.00]	µg/L
Ba 233.527†	-122.6	2.27	1.85%	[0.00]	µg/L
Be 313.107†	391.8	22.56	5.76%	[0.00]	µg/L
Ca 317.933Radial†	256.7	1.72	0.67%	[0.00]	µg/L
Cd 226.502†	-28.1	2.95	10.52%	[0.00]	µg/L
Co 228.616†	-120.4	4.94	4.11%	[0.00]	µg/L
Cr 267.716†	68.2	3.32	4.86%	[0.00]	µg/L
Cu 324.752†	4160.4	87.75	2.11%	[0.00]	µg/L
Fe 238.204 Radial†	33.8	1.28	3.80%	[0.00]	µg/L
K 766.490 Radial†	941.8	26.62	2.83%	[0.00]	µg/L
Mg 279.077 IEC†	2.0	0.96	47.34%	[0.00]	µg/L
Mn 257.610†	380.8	4.37	1.15%	[0.00]	µg/L
Mo 202.031†	5.6	1.61	28.86%	[0.00]	µg/L
Na 589.592 Radial†	497.2	13.92	2.80%	[0.00]	µg/L
Ni 231.604†	160.4	2.71	1.69%	[0.00]	µg/L
P 214.914†	161.5	1.89	1.17%	[0.00]	µg/L
Pb 220.353†	-16.1	1.75	10.87%	[0.00]	µg/L
S 181.975 Axial†	24.6	0.94	3.80%	[0.00]	µg/L
Sb 206.836†	29.3	6.03	20.56%	[0.00]	µg/L
Se 196.026†	-24.5	1.10	4.47%	[0.00]	µg/L
SiO2 †	757.7	11.22	1.48%	[0.00]	µg/L
Si 251.611†	813.9	152.31	18.71%	[0.00]	µg/L
Sn 189.927†	-8.3	2.66	32.20%	[0.00]	µg/L
Sr 421.552†	-6.3	12.33	194.72%	[0.00]	µg/L
Ti 334.940†	430.0	30.42	7.07%	[0.00]	µg/L

Tl 190.801†	-33.6	1.80	5.35%	[0.00] µg/L
U 409.014†	225.6	49.15	21.79%	[0.00] µg/L
V 292.402†	-127.0	2.72	2.14%	[0.00] µg/L
Zn 213.857†	369.3	1.95	0.53%	[0.00] µg/L

Sequence No.: 2
Sample ID: S0.1
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 2
Date Collected: 7/14/2005 17:39:31
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 7/14/2005 17:40:14
Logged In Analyst: Administrator
Spectrometer Model: Optima 4300 DV, S/N 077N2061001Autosampler Model: AS-93plus

Plasma On Time: 7/12/2005 15:54:31
Technique: ICP Continuous

Sample Information File: C:\pe\Sample Information\071405.sif
Batch ID:
Results Data Set: 071405
Results Library: C:\pe\Results\Results.mdb

Sequence No.: 2
Sample ID: S0.1
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 7/14/2005 17:40:14
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	66736.4	66736.4	100.0	%	17:41:36
1	K 766.490 Radial†	3798.7	2857.7	[1000]	µg/L	17:41:36
1	Sr 421.552†	33923.9	33937.1	[100]	µg/L	17:41:36
1	Sc 361.383	1328676.1	1328676.1	100.36	%	17:41:55
1	Y 371.029	727807.7	727807.7	100.27	%	17:41:55
1	Ag 328.068†	14241.7	14873.2	[100]	µg/L	17:42:00
1	As 188.979†	162.4	186.2	[100]	µg/L	17:42:20
1	B 249.677†	1601.8	1563.0	[100]	µg/L	17:42:00
1	Ba 233.527†	9346.4	9435.5	[100]	µg/L	17:42:00
1	Be 313.107†	144732.8	143821.9	[100]	µg/L	17:41:55
1	Cd 226.502†	2723.1	2741.4	[100]	µg/L	17:42:20
1	Co 228.616†	3198.9	3307.8	[100]	µg/L	17:42:20
1	Cr 267.716†	3674.9	3593.5	[100]	µg/L	17:42:00
1	Cu 324.752†	33738.7	29457.3	[100]	µg/L	17:42:00
1	Mn 257.610†	58233.4	57643.7	[100]	µg/L	17:42:00
1	Mo 202.031†	801.5	793.1	[100]	µg/L	17:42:20
1	Ni 231.604†	1745.9	1579.2	[100]	µg/L	17:42:20
1	P 214.914†	726.0	562.0	[500]	µg/L	17:42:20
1	Pb 220.353†	372.4	387.1	[100]	µg/L	17:42:20
1	S 181.975 Axial†	107.9	82.9	[200]	µg/L	17:42:20
1	Sb 206.836†	239.2	209.0	[100]	µg/L	17:42:20
1	Se 196.026†	85.6	109.8	[100]	µg/L	17:42:20
1	SiO2 †	15179.6	14367.5	[1069.5]	µg/L	17:42:00
1	Sn 189.927†	352.9	359.9	[100]	µg/L	17:42:20
1	Ti 334.940†	80259.2	79541.4	[100]	µg/L	17:41:55
1	Tl 190.801†	230.8	263.6	[100]	µg/L	17:42:20
1	U 409.014†	2077.2	1844.1	[100]	µg/L	17:42:00
1	V 292.402†	6936.8	7039.0	[100]	µg/L	17:42:00
1	Zn 213.857†	4603.4	4217.7	[100]	µg/L	17:42:00
1	Si 251.611†	14921.6	14054.1	[500]	µg/L	17:43:28
2	Sc RADIAL	65701.2	65701.2	98.4	%	17:41:41
2	K 766.490 Radial†	3725.3	2843.0	[1000]	µg/L	17:41:41
2	Sr 421.552†	33257.9	33795.0	[100]	µg/L	17:41:41
2	Sc 361.383	1332074.2	1332074.2	100.62	%	17:42:26
2	Y 371.029	730149.9	730149.9	100.60	%	17:42:26
2	Ag 328.068†	14140.3	14736.3	[100]	µg/L	17:42:31
2	As 188.979†	156.4	179.9	[100]	µg/L	17:42:51

2	B 249.677†	1583.1	1540.3	[100] µg/L	17:42:31
2	Ba 233.527†	9254.6	9320.5	[100] µg/L	17:42:31
2	Be 313.107†	144815.6	143536.3	[100] µg/L	17:42:26
2	Cd 226.502†	2687.7	2699.3	[100] µg/L	17:42:51
2	Co 228.616†	3160.7	3261.7	[100] µg/L	17:42:51
2	Cr 267.716†	3647.6	3557.0	[100] µg/L	17:42:31
2	Cu 324.752†	33622.3	29255.9	[100] µg/L	17:42:31
2	Mn 257.610†	57541.8	56808.3	[100] µg/L	17:42:31
2	Mo 202.031†	801.4	790.9	[100] µg/L	17:42:51
2	Ni 231.604†	1728.1	1557.0	[100] µg/L	17:42:51
2	P 214.914†	724.7	558.8	[500] µg/L	17:42:51
2	Pb 220.353†	359.3	373.2	[100] µg/L	17:42:51
2	S 181.975 Axial†	106.4	81.1	[200] µg/L	17:42:51
2	Sb 206.836†	238.6	207.8	[100] µg/L	17:42:51
2	Se 196.026†	88.7	112.7	[100] µg/L	17:42:51
2	SiO2 †	14986.1	14136.6	[1069.5] µg/L	17:42:31
2	Sn 189.927†	349.8	355.9	[100] µg/L	17:42:51
2	Ti 334.940†	80294.1	79372.1	[100] µg/L	17:42:26
2	Tl 190.801†	227.7	259.9	[100] µg/L	17:42:51
2	U 409.014†	1993.1	1755.3	[100] µg/L	17:42:31
2	V 292.402†	6827.8	6913.0	[100] µg/L	17:42:31
2	Zn 213.857†	4554.1	4157.0	[100] µg/L	17:42:31
2	Si 251.611†	14866.3	13961.2	[500] µg/L	17:43:33
3	Sc RADIAL	66414.6	66414.6	99.5 %	17:41:47
3	K 766.490 Radial†	3728.4	2805.5	[1000] µg/L	17:41:47
3	Sr 421.552†	33657.1	33833.3	[100] µg/L	17:41:47
3	Sc 361.383	1334902.7	1334902.7	100.83 %	17:42:57
3	Y 371.029	730834.5	730834.5	100.69 %	17:42:57
3	Ag 328.068†	14075.6	14642.4	[100] µg/L	17:43:02
3	As 188.979†	160.9	184.0	[100] µg/L	17:43:23
3	B 249.677†	1595.0	1548.8	[100] µg/L	17:43:02
3	Ba 233.527†	9224.8	9271.4	[100] µg/L	17:43:02
3	Be 313.107†	144990.2	143404.5	[100] µg/L	17:42:57
3	Cd 226.502†	2716.3	2721.9	[100] µg/L	17:43:23
3	Co 228.616†	3192.9	3286.9	[100] µg/L	17:43:23
3	Cr 267.716†	3594.4	3496.6	[100] µg/L	17:43:02
3	Cu 324.752†	33771.4	29332.9	[100] µg/L	17:43:02
3	Mn 257.610†	57639.2	56783.8	[100] µg/L	17:43:02
3	Mo 202.031†	813.1	800.8	[100] µg/L	17:43:23
3	Ni 231.604†	1747.8	1573.0	[100] µg/L	17:43:23
3	P 214.914†	729.3	561.8	[500] µg/L	17:43:23
3	Pb 220.353†	358.8	372.0	[100] µg/L	17:43:23
3	S 181.975 Axial†	104.2	78.7	[200] µg/L	17:43:23
3	Sb 206.836†	241.5	210.2	[100] µg/L	17:43:23
3	Se 196.026†	95.1	118.8	[100] µg/L	17:43:23
3	SiO2 †	15011.4	14130.1	[1069.5] µg/L	17:43:02
3	Sn 189.927†	351.9	357.3	[100] µg/L	17:43:23
3	Ti 334.940†	80540.1	79446.9	[100] µg/L	17:42:57
3	Tl 190.801†	233.1	264.8	[100] µg/L	17:43:23
3	U 409.014†	1983.7	1741.8	[100] µg/L	17:43:02
3	V 292.402†	6844.9	6915.5	[100] µg/L	17:43:02
3	Zn 213.857†	4563.1	4156.3	[100] µg/L	17:43:02
3	Si 251.611†	14886.4	13949.9	[500] µg/L	17:43:38

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	1331884.3	3117.64	0.23%	100.60	%
Sc RADIAL	66284.1	529.84	0.80%	99.3	%
Y 371.029	729597.4	1587.27	0.22%	100.52	%
Ag 328.068†	14750.6	116.11	0.79%	[100]	µg/L
As 188.979†	183.4	3.23	1.76%	[100]	µg/L
B 249.677†	1550.7	11.46	0.74%	[100]	µg/L
Ba 233.527†	9342.5	84.21	0.90%	[100]	µg/L
Be 313.107†	143587.5	213.37	0.15%	[100]	µg/L
Cd 226.502†	2720.9	21.05	0.77%	[100]	µg/L
Co 228.616†	3285.5	23.11	0.70%	[100]	µg/L
Cr 267.716†	3549.0	48.98	1.38%	[100]	µg/L
Cu 324.752†	29348.7	101.66	0.35%	[100]	µg/L
K 766.490 Radial†	2835.4	26.95	0.95%	[1000]	µg/L

Mn 257.610†	57078.6	489.53	0.86%	[100]	µg/L
Mo 202.031†	794.9	5.23	0.66%	[100]	µg/L
Ni 231.604†	1569.7	11.43	0.73%	[100]	µg/L
P 214.914†	560.9	1.80	0.32%	[500]	µg/L
Pb 220.353†	377.4	8.42	2.23%	[100]	µg/L
S 181.975 Axial†	80.9	2.10	2.60%	[200]	µg/L
Sb 206.836†	209.0	1.20	0.57%	[100]	µg/L
Se 196.026†	113.8	4.62	4.06%	[100]	µg/L
SiO2 †	14211.4	135.23	0.95%	[1069.5]	µg/L
Si 251.611†	13988.4	57.19	0.41%	[500]	µg/L
Sn 189.927†	357.7	2.03	0.57%	[100]	µg/L
Sr 421.552†	33855.1	73.49	0.22%	[100]	µg/L
Ti 334.940†	79453.5	84.84	0.11%	[100]	µg/L
Tl 190.801†	262.7	2.53	0.96%	[100]	µg/L
U 409.014†	1780.4	55.60	3.12%	[100]	µg/L
V 292.402†	6955.8	72.00	1.04%	[100]	µg/L
Zn 213.857†	4177.0	35.24	0.84%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 7/14/2005 17:45:28
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	66224.3	66224.3	99.2	%	17:46:51
1	Al 396.153Radial†	22812.9	22926.5	[5000]	µg/L	17:46:51
1	Ca 317.933Radial†	28020.9	27986.6	[5000]	µg/L	17:47:11
1	K 766.490 Radial†	15045.4	14223.1	[5000]	µg/L	17:46:51
1	Mg 279.077 IEC†	2200.7	2216.1	[5000]	µg/L	17:47:11
1	Sr 421.552†	166342.3	167668.7	[500]	µg/L	17:46:51
1	Sc 361.383	1327685.8	1327685.8	100.29	%	17:48:11
1	Y 371.029	725733.3	725733.3	99.988	%	17:48:11
1	Ag 328.068†	74148.3	74620.2	[500]	µg/L	17:48:16
1	As 188.979†	911.2	933.1	[500]	µg/L	17:48:37
1	B 249.677†	8000.6	7944.7	[500]	µg/L	17:48:16
1	Ba 233.527†	47426.3	47414.0	[500]	µg/L	17:48:16
1	Be 313.107†	728452.7	725989.6	[500]	µg/L	17:48:11
1	Cd 226.502†	13323.1	13313.2	[500]	µg/L	17:48:16
1	Co 228.616†	16017.7	16092.5	[500]	µg/L	17:48:16
1	Cr 267.716†	18127.6	18007.8	[500]	µg/L	17:48:16
1	Cu 324.752†	148497.3	143914.7	[500]	µg/L	17:48:11
1	Mn 257.610†	278157.5	276985.7	[500]	µg/L	17:48:11
1	Mo 202.031†	3970.8	3953.9	[500]	µg/L	17:48:16
1	Ni 231.604†	7841.0	7658.3	[500]	µg/L	17:48:16
1	P 214.914†	3012.7	2842.7	[2500]	µg/L	17:48:37
1	Pb 220.353†	1864.0	1874.8	[500]	µg/L	17:48:37
1	S 181.975 Axial†	433.2	407.4	[1000]	µg/L	17:48:37
1	Sb 206.836†	1100.7	1068.2	[500]	µg/L	17:48:37
1	Se 196.026†	542.1	565.1	[500]	µg/L	17:48:37
1	SiO2 †	74035.9	73067.7	[5347.5]	µg/L	17:48:16
1	Sn 189.927†	1833.2	1836.3	[500]	µg/L	17:48:37
1	Ti 334.940†	400899.6	399329.8	[500]	µg/L	17:48:11
1	Tl 190.801†	1288.3	1318.2	[500]	µg/L	17:48:37
1	U 409.014†	9255.5	9003.6	[500]	µg/L	17:48:16
1	V 292.402†	35385.9	35412.3	[500]	µg/L	17:48:16
1	Zn 213.857†	21322.6	20892.8	[500]	µg/L	17:48:16
1	Si 251.611†	71488.4	70471.2	[2500]	µg/L	17:49:45
2	Sc RADIAL	66497.1	66497.1	99.6	%	17:47:17
2	Al 396.153Radial†	22933.5	22953.3	[5000]	µg/L	17:47:17
2	Ca 317.933Radial†	28184.8	28035.2	[5000]	µg/L	17:47:37
2	K 766.490 Radial†	15061.2	14176.7	[5000]	µg/L	17:47:17
2	Mg 279.077 IEC†	2205.1	2211.5	[5000]	µg/L	17:47:37
2	Sr 421.552†	167167.6	167809.2	[500]	µg/L	17:47:17
2	Sc 361.383	1346206.9	1346206.9	101.68	%	17:48:43
2	Y 371.029	735588.8	735588.8	101.35	%	17:48:43
2	Ag 328.068†	73759.6	73220.6	[500]	µg/L	17:48:48
2	As 188.979†	925.1	934.3	[500]	µg/L	17:49:08
2	B 249.677†	7978.5	7813.2	[500]	µg/L	17:48:48
2	Ba 233.527†	46985.0	46329.4	[500]	µg/L	17:48:48
2	Be 313.107†	735708.5	723131.7	[500]	µg/L	17:48:43
2	Cd 226.502†	13190.7	13000.3	[500]	µg/L	17:48:48
2	Co 228.616†	15824.3	15682.5	[500]	µg/L	17:48:48
2	Cr 267.716†	18029.7	17662.8	[500]	µg/L	17:48:48
2	Cu 324.752†	150618.1	143963.2	[500]	µg/L	17:48:43
2	Mn 257.610†	281037.5	276002.0	[500]	µg/L	17:48:43
2	Mo 202.031†	3915.5	3845.1	[500]	µg/L	17:48:48
2	Ni 231.604†	7786.7	7497.3	[500]	µg/L	17:48:48
2	P 214.914†	3040.1	2828.3	[2500]	µg/L	17:49:08
2	Pb 220.353†	1873.3	1858.4	[500]	µg/L	17:49:08
2	S 181.975 Axial†	434.8	402.9	[1000]	µg/L	17:49:08
2	Sb 206.836†	1112.5	1064.8	[500]	µg/L	17:49:08
2	Se 196.026†	546.3	561.8	[500]	µg/L	17:49:08

2	SiO2 †	73511.5	71536.3	[5347.5]	µg/L	17:48:48
2	Sn 189.927†	1844.2	1821.9	[500]	µg/L	17:49:08
2	Ti 334.940†	405942.0	398788.7	[500]	µg/L	17:48:43
2	Tl 190.801†	1304.4	1316.4	[500]	µg/L	17:49:08
2	U 409.014†	9091.9	8715.7	[500]	µg/L	17:48:48
2	V 292.402†	35100.2	34645.9	[500]	µg/L	17:48:48
2	Zn 213.857†	21114.7	20395.7	[500]	µg/L	17:48:48
2	Si 251.611†	72378.3	70365.7	[2500]	µg/L	17:49:50
3	Sc RADIAL	66332.2	66332.2	99.4	%	17:47:42
3	Al 396.153Radial†	22839.4	22915.8	[5000]	µg/L	17:47:42
3	Ca 317.933Radial†	28172.6	28093.3	[5000]	µg/L	17:48:03
3	K 766.490 Radial†	15034.7	14187.6	[5000]	µg/L	17:47:42
3	Mg 279.077 IEC†	2206.7	2218.6	[5000]	µg/L	17:48:03
3	Sr 421.552†	166911.6	167968.8	[500]	µg/L	17:47:42
3	Sc 361.383	1335678.6	1335678.6	100.89	%	17:49:14
3	Y 371.029	730021.8	730021.8	100.58	%	17:49:14
3	Ag 328.068†	73574.0	73608.4	[500]	µg/L	17:49:19
3	As 188.979†	915.2	931.6	[500]	µg/L	17:49:39
3	B 249.677†	8030.0	7926.2	[500]	µg/L	17:49:19
3	Ba 233.527†	46920.5	46629.7	[500]	µg/L	17:49:19
3	Be 313.107†	729907.0	723084.4	[500]	µg/L	17:49:14
3	Cd 226.502†	13138.9	13051.2	[500]	µg/L	17:49:19
3	Co 228.616†	15860.8	15841.4	[500]	µg/L	17:49:19
3	Cr 267.716†	18002.9	17776.1	[500]	µg/L	17:49:19
3	Cu 324.752†	149166.2	143691.6	[500]	µg/L	17:49:14
3	Mn 257.610†	278847.4	276009.8	[500]	µg/L	17:49:14
3	Mo 202.031†	3929.5	3889.3	[500]	µg/L	17:49:19
3	Ni 231.604†	7768.0	7539.1	[500]	µg/L	17:49:19
3	P 214.914†	3017.7	2829.7	[2500]	µg/L	17:49:39
3	Pb 220.353†	1870.8	1870.4	[500]	µg/L	17:49:39
3	S 181.975 Axial†	428.2	399.8	[1000]	µg/L	17:49:39
3	Sb 206.836†	1090.9	1051.9	[500]	µg/L	17:49:39
3	Se 196.026†	550.3	570.0	[500]	µg/L	17:49:39
3	SiO2 †	73467.9	72063.0	[5347.5]	µg/L	17:49:19
3	Sn 189.927†	1831.0	1823.2	[500]	µg/L	17:49:39
3	Ti 334.940†	402642.6	398665.2	[500]	µg/L	17:49:14
3	Tl 190.801†	1298.5	1320.7	[500]	µg/L	17:49:39
3	U 409.014†	9123.6	8817.6	[500]	µg/L	17:49:19
3	V 292.402†	35011.7	34830.2	[500]	µg/L	17:49:19
3	Zn 213.857†	21150.2	20594.6	[500]	µg/L	17:49:19
3	Si 251.611†	71160.9	69720.1	[2500]	µg/L	17:49:56

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sc 361.383	1336523.8	9289.43	0.70%	100.95	%
Sc RADIAL	66351.2	137.41	0.21%	99.4	%
Y 371.029	730448.0	4941.57	0.68%	100.64	%
Ag 328.068†	73816.4	722.59	0.98%	[500]	µg/L
Al 396.153Radial†	22931.9	19.30	0.08%	[5000]	µg/L
As 188.979†	933.0	1.32	0.14%	[500]	µg/L
B 249.677†	7894.7	71.16	0.90%	[500]	µg/L
Ba 233.527†	46791.1	560.02	1.20%	[500]	µg/L
Be 313.107†	724068.6	1663.84	0.23%	[500]	µg/L
Ca 317.933Radial†	28038.3	53.42	0.19%	[5000]	µg/L
Cd 226.502†	13121.6	167.93	1.28%	[500]	µg/L
Co 228.616†	15872.2	206.71	1.30%	[500]	µg/L
Cr 267.716†	17815.6	175.86	0.99%	[500]	µg/L
Cu 324.752†	143856.5	144.83	0.10%	[500]	µg/L
K 766.490 Radial†	14195.8	24.25	0.17%	[5000]	µg/L
Mg 279.077 IEC†	2215.4	3.61	0.16%	[5000]	µg/L
Mn 257.610†	276332.5	565.74	0.20%	[500]	µg/L
Mo 202.031†	3896.1	54.73	1.40%	[500]	µg/L
Ni 231.604†	7564.9	83.53	1.10%	[500]	µg/L
P 214.914†	2833.6	7.93	0.28%	[2500]	µg/L
Pb 220.353†	1867.9	8.49	0.45%	[500]	µg/L
S 181.975 Axial†	403.4	3.82	0.95%	[1000]	µg/L
Sb 206.836†	1061.7	8.59	0.81%	[500]	µg/L
Se 196.026†	565.6	4.13	0.73%	[500]	µg/L
SiO2 †	72222.3	778.04	1.08%	[5347.5]	µg/L

Si 251.611†	70185.6	406.66	0.58%	[2500] µg/L
Sn 189.927†	1827.1	7.96	0.44%	[500] µg/L
Sr 421.552†	167815.6	150.18	0.09%	[500] µg/L
Ti 334.940†	398927.9	353.47	0.09%	[500] µg/L
Tl 190.801†	1318.4	2.15	0.16%	[500] µg/L
U 409.014†	8845.6	145.96	1.65%	[500] µg/L
V 292.402†	34962.8	400.07	1.14%	[500] µg/L
Zn 213.857†	20627.7	250.16	1.21%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 7/14/2005 17:51:46
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	66110.1	66110.1	99.0	%	17:53:17
1	Al 396.153Radial†	45690.7	46065.4	[10000]	µg/L	17:53:12
1	Ca 317.933Radial†	55033.6	55309.5	[10000]	µg/L	17:53:17
1	Fe 238.204 Radial†	14495.4	14601.9	[10000]	µg/L	17:53:17
1	K 766.490 Radial†	28822.2	28159.3	[10000]	µg/L	17:53:17
1	Mg 279.077 IEC†	4329.7	4369.6	[10000]	µg/L	17:53:17
1	Na 589.592 Radial†	82666.4	82969.2	[10000]	µg/L	17:53:12
1	Sr 421.552†	332918.4	336146.5	[1000]	µg/L	17:53:12
1	Sc 361.383	1315590.1	1315590.1	99.372	%	17:53:48
1	Y 371.029	717212.6	717212.6	98.814	%	17:53:48
1	Ag 328.068†	145973.6	147579.5	[1000]	µg/L	17:53:54
1	As 188.979†	1833.0	1869.1	[1000]	µg/L	17:54:14
1	B 249.677†	15761.6	15828.1	[1000]	µg/L	17:53:54
1	Ba 233.527†	93132.2	93843.8	[1000]	µg/L	17:53:54
1	Be 313.107†	1430370.5	1439025.2	[1000]	µg/L	17:53:48
1	Cd 226.502†	25854.3	26045.8	[1000]	µg/L	17:53:54
1	Co 228.616†	31374.2	31693.0	[1000]	µg/L	17:53:54
1	Cr 267.716†	35543.4	35699.9	[1000]	µg/L	17:53:54
1	Cu 324.752†	290382.7	288058.9	[1000]	µg/L	17:53:48
1	Mn 257.610†	546748.7	549825.8	[1000]	µg/L	17:53:48
1	Mo 202.031†	7750.8	7794.3	[1000]	µg/L	17:53:54
1	Ni 231.604†	15095.0	15030.1	[1000]	µg/L	17:53:54
1	P 214.914†	5803.1	5678.3	[5000]	µg/L	17:54:14
1	Pb 220.353†	3687.1	3726.5	[1000]	µg/L	17:54:14
1	S 181.975 Axial†	831.8	812.5	[2000]	µg/L	17:54:14
1	Sb 206.836†	2168.6	2152.9	[1000]	µg/L	17:54:14
1	Se 196.026†	1078.1	1109.4	[1000]	µg/L	17:54:14
1	SiO2 †	144120.4	144274.2	[10695]	µg/L	17:53:54
1	Sn 189.927†	3675.0	3706.5	[1000]	µg/L	17:54:14
1	Ti 334.940†	794406.5	799000.8	[1000]	µg/L	17:53:48
1	Tl 190.801†	2562.5	2612.3	[1000]	µg/L	17:54:14
1	U 409.014†	18060.1	17948.8	[1000]	µg/L	17:53:54
1	V 292.402†	69608.7	70175.9	[1000]	µg/L	17:53:54
1	Zn 213.857†	41239.9	41131.5	[1000]	µg/L	17:53:54
1	Si 251.611†	143077.2	143168.1	[5000]	µg/L	17:55:25
2	Sc RADIAL	66847.5	66847.5	100	%	17:53:28
2	Al 396.153Radial†	45525.4	45391.5	[10000]	µg/L	17:53:23
2	Ca 317.933Radial†	55653.1	55315.1	[10000]	µg/L	17:53:28
2	Fe 238.204 Radial†	14643.6	14588.4	[10000]	µg/L	17:53:28
2	K 766.490 Radial†	29153.3	28168.9	[10000]	µg/L	17:53:28
2	Mg 279.077 IEC†	4382.8	4374.4	[10000]	µg/L	17:53:28
2	Na 589.592 Radial†	82315.8	81698.3	[10000]	µg/L	17:53:23
2	Sr 421.552†	331783.6	331305.2	[1000]	µg/L	17:53:23
2	Sc 361.383	1326691.5	1326691.5	100.21	%	17:54:21
2	Y 371.029	723323.5	723323.5	99.656	%	17:54:21
2	Ag 328.068†	146245.4	146621.6	[1000]	µg/L	17:54:26
2	As 188.979†	1823.0	1843.7	[1000]	µg/L	17:54:47
2	B 249.677†	15861.7	15795.3	[1000]	µg/L	17:54:26
2	Ba 233.527†	93171.3	93098.6	[1000]	µg/L	17:54:26
2	Be 313.107†	1439175.7	1435767.3	[1000]	µg/L	17:54:21
2	Cd 226.502†	25906.5	25880.2	[1000]	µg/L	17:54:26
2	Co 228.616†	31402.9	31457.5	[1000]	µg/L	17:54:26
2	Cr 267.716†	35582.8	35440.0	[1000]	µg/L	17:54:26
2	Cu 324.752†	293672.7	288896.8	[1000]	µg/L	17:54:21
2	Mn 257.610†	550091.4	548557.5	[1000]	µg/L	17:54:21
2	Mo 202.031†	7765.3	7743.5	[1000]	µg/L	17:54:26
2	Ni 231.604†	15149.4	14957.2	[1000]	µg/L	17:54:26
2	P 214.914†	5808.6	5634.9	[5000]	µg/L	17:54:47

2	Pb 220.353†	3663.2	3671.6	[1000] µg/L	17:54:47
2	S 181.975 Axial†	825.4	799.1	[2000] µg/L	17:54:47
2	Sb 206.836†	2177.7	2143.8	[1000] µg/L	17:54:47
2	Se 196.026†	1075.8	1098.0	[1000] µg/L	17:54:47
2	SiO2 †	144325.2	143265.1	[10695] µg/L	17:54:26
2	Sn 189.927†	3668.9	3669.4	[1000] µg/L	17:54:47
2	Ti 334.940†	800856.9	798748.4	[1000] µg/L	17:54:21
2	Tl 190.801†	2570.6	2598.8	[1000] µg/L	17:54:47
2	U 409.014†	18074.5	17811.0	[1000] µg/L	17:54:26
2	V 292.402†	69732.6	69713.4	[1000] µg/L	17:54:26
2	Zn 213.857†	41339.3	40883.4	[1000] µg/L	17:54:26
2	Si 251.611†	141622.4	140511.7	[5000] µg/L	17:55:30
3	Sc RADIAL	67792.4	67792.4	102 %	17:53:39
3	Al 396.153Radial†	45641.8	44872.4	[10000] µg/L	17:53:33
3	Ca 317.933Radial†	56472.8	55347.6	[10000] µg/L	17:53:39
3	Fe 238.204 Radial†	14878.3	14615.6	[10000] µg/L	17:53:39
3	K 766.490 Radial†	29565.9	28169.4	[10000] µg/L	17:53:39
3	Mg 279.077 IEC†	4452.7	4382.2	[10000] µg/L	17:53:39
3	Na 589.592 Radial†	82581.2	80813.9	[10000] µg/L	17:53:33
3	Sr 421.552†	332763.5	327652.2	[1000] µg/L	17:53:33
3	Sc 361.383	1332512.6	1332512.6	100.65 %	17:54:54
3	Y 371.029	726744.4	726744.4	100.13 %	17:54:54
3	Ag 328.068†	146765.3	146500.5	[1000] µg/L	17:54:59
3	As 188.979†	1841.7	1854.3	[1000] µg/L	17:55:19
3	B 249.677†	15965.0	15828.9	[1000] µg/L	17:54:59
3	Ba 233.527†	93963.7	93479.7	[1000] µg/L	17:54:59
3	Be 313.107†	1445972.5	1436246.4	[1000] µg/L	17:54:54
3	Cd 226.502†	26103.8	25963.4	[1000] µg/L	17:54:59
3	Co 228.616†	31628.7	31544.9	[1000] µg/L	17:54:59
3	Cr 267.716†	35769.4	35470.3	[1000] µg/L	17:54:59
3	Cu 324.752†	294551.6	288489.8	[1000] µg/L	17:54:54
3	Mn 257.610†	552762.9	548813.8	[1000] µg/L	17:54:54
3	Mo 202.031†	7870.6	7814.2	[1000] µg/L	17:54:59
3	Ni 231.604†	15260.6	15001.7	[1000] µg/L	17:54:59
3	P 214.914†	5817.6	5618.6	[5000] µg/L	17:55:19
3	Pb 220.353†	3677.5	3669.8	[1000] µg/L	17:55:19
3	S 181.975 Axial†	826.0	796.0	[2000] µg/L	17:55:19
3	Sb 206.836†	2196.8	2153.3	[1000] µg/L	17:55:19
3	Se 196.026†	1075.4	1092.9	[1000] µg/L	17:55:19
3	SiO2 †	144774.9	143082.6	[10695] µg/L	17:54:59
3	Sn 189.927†	3696.3	3680.7	[1000] µg/L	17:55:19
3	Ti 334.940†	804612.4	798988.4	[1000] µg/L	17:54:54
3	Tl 190.801†	2587.9	2604.8	[1000] µg/L	17:55:19
3	U 409.014†	18167.9	17825.1	[1000] µg/L	17:54:59
3	V 292.402†	70203.2	69877.1	[1000] µg/L	17:54:59
3	Zn 213.857†	41571.8	40934.2	[1000] µg/L	17:54:59
3	Si 251.611†	143041.8	141304.4	[5000] µg/L	17:55:36

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Calib Units
Sc 361.383	1324931.4	8597.41	0.65%	100.08	%
Sc RADIAL	66916.7	843.31	1.26%	100	%
Y 371.029	722426.8	4828.75	0.67%	99.532	%
Ag 328.068†	146900.5	591.08	0.40%	[1000]	µg/L
Al 396.153Radial†	45443.1	598.17	1.32%	[10000]	µg/L
As 188.979†	1855.7	12.78	0.69%	[1000]	µg/L
B 249.677†	15817.5	19.15	0.12%	[1000]	µg/L
Ba 233.527†	93474.0	372.64	0.40%	[1000]	µg/L
Be 313.107†	1437013.0	1758.99	0.12%	[1000]	µg/L
Ca 317.933Radial†	55324.1	20.57	0.04%	[10000]	µg/L
Cd 226.502†	25963.1	82.81	0.32%	[1000]	µg/L
Co 228.616†	31565.1	119.07	0.38%	[1000]	µg/L
Cr 267.716†	35536.7	142.16	0.40%	[1000]	µg/L
Cu 324.752†	288481.8	419.01	0.15%	[1000]	µg/L
Fe 238.204 Radial†	14602.0	13.64	0.09%	[10000]	µg/L
K 766.490 Radial†	28165.9	5.68	0.02%	[10000]	µg/L
Mg 279.077 IEC†	4375.4	6.38	0.15%	[10000]	µg/L
Mn 257.610†	549065.7	670.62	0.12%	[1000]	µg/L
Mo 202.031†	7784.0	36.49	0.47%	[1000]	µg/L

Na 589.592 Radial†	81827.1	1083.39	1.32%	[10000] µg/L
Ni 231.604†	14996.3	36.75	0.25%	[1000] µg/L
P 214.914†	5644.0	30.87	0.55%	[5000] µg/L
Pb 220.353†	3689.3	32.25	0.87%	[1000] µg/L
S 181.975 Axial†	802.5	8.76	1.09%	[2000] µg/L
Sb 206.836†	2150.0	5.37	0.25%	[1000] µg/L
Se 196.026†	1100.1	8.44	0.77%	[1000] µg/L
SiO2 †	143540.6	641.83	0.45%	[10695] µg/L
Si 251.611†	141661.4	1363.74	0.96%	[5000] µg/L
Sn 189.927†	3685.5	19.02	0.52%	[1000] µg/L
Sr 421.552†	331701.3	4260.98	1.28%	[1000] µg/L
Ti 334.940†	798912.5	142.30	0.02%	[1000] µg/L
Tl 190.801†	2605.3	6.76	0.26%	[1000] µg/L
U 409.014†	17861.6	75.82	0.42%	[1000] µg/L
V 292.402†	69922.2	234.52	0.34%	[1000] µg/L
Zn 213.857†	40983.0	131.05	0.32%	[1000] µg/L

Sequence No.: 5
Sample ID: S10
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 7/14/2005 17:57:27
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	65242.8	65242.8	97.7	%	17:58:57
1	Al 396.153Radial†	227402.4	232587.7	[50000]	µg/L	17:58:52
1	Ca 317.933Radial†	277764.6	283923.8	[50000]	µg/L	17:58:57
1	Fe 238.204 Radial†	28056.7	28670.9	[20000]	µg/L	17:58:57
1	Mg 279.077 IEC†	21453.7	21947.2	[50000]	µg/L	17:58:57
1	Na 589.592 Radial†	161115.4	164339.7	[20000]	µg/L	17:58:52
1	Sc 361.383	1305837.3	1305837.3	98.635	%	17:59:26
1	Y 371.029	710671.1	710671.1	97.913	%	17:59:26
2	Sc RADIAL	66022.7	66022.7	98.9	%	17:59:07
2	Al 396.153Radial†	226430.1	228856.6	[50000]	µg/L	17:59:02
2	Ca 317.933Radial†	280648.0	283482.2	[50000]	µg/L	17:59:07
2	Fe 238.204 Radial†	28257.3	28534.7	[20000]	µg/L	17:59:07
2	Mg 279.077 IEC†	21651.2	21887.7	[50000]	µg/L	17:59:07
2	Na 589.592 Radial†	160086.0	161351.9	[20000]	µg/L	17:59:02
2	Sc 361.383	1295765.2	1295765.2	97.874	%	17:59:33
2	Y 371.029	704920.6	704920.6	97.120	%	17:59:33
3	Sc RADIAL	65613.1	65613.1	98.3	%	17:59:18
3	Al 396.153Radial†	228095.9	231980.1	[50000]	µg/L	17:59:13
3	Ca 317.933Radial†	278940.0	283515.7	[50000]	µg/L	17:59:18
3	Fe 238.204 Radial†	28140.9	28594.6	[20000]	µg/L	17:59:18
3	Mg 279.077 IEC†	21557.8	21929.2	[50000]	µg/L	17:59:18
3	Na 589.592 Radial†	161092.7	163386.3	[20000]	µg/L	17:59:13
3	Sc 361.383	1300664.1	1300664.1	98.244	%	17:59:39
3	Y 371.029	707786.6	707786.6	97.515	%	17:59:39

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1300755.5	5036.71	0.39%	98.251	%
Sc RADIAL	65626.2	390.09	0.59%	98.3	%
Y 371.029	707792.8	2875.25	0.41%	97.516	%
Al 396.153Radial†	231141.4	2001.94	0.87%	[50000]	µg/L
Ca 317.933Radial†	283640.6	245.87	0.09%	[50000]	µg/L
Fe 238.204 Radial†	28600.1	68.27	0.24%	[20000]	µg/L
Mg 279.077 IEC†	21921.4	30.52	0.14%	[50000]	µg/L
Na 589.592 Radial†	163026.0	1526.10	0.94%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	147.1	0.00000	0.999998	
Al 396.153Radial	3	Lin Thru 0	0.0	4.619	0.00000	0.999994	
As 188.979	3	Lin Thru 0	0.0	1.858	0.00000	0.999997	
B 249.677	3	Lin Thru 0	0.0	15.81	0.00000	0.999998	
Ba 233.527	3	Lin Thru 0	0.0	93.50	0.00000	1.000000	
Be 313.107	3	Lin Thru 0	0.0	1439	0.00000	0.999995	
Ca 317.933Radial	3	Lin Thru 0	0.0	5.667	0.00000	0.999988	
Cd 226.502	3	Lin Thru 0	0.0	26.03	0.00000	0.999983	
Co 228.616	3	Lin Thru 0	0.0	31.61	0.00000	0.999991	
Cr 267.716	3	Lin Thru 0	0.0	35.56	0.00000	0.999999	
Cu 324.752	3	Lin Thru 0	0.0	288.4	0.00000	0.999998	
Fe 238.204 Radial	2	Lin Thru 0	0.0	1.436	0.00000	0.999965	
K 766.490 Radial	3	Lin Thru 0	0.0	2.821	0.00000	0.999995	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.4384	0.00000	0.999999	
Mn 257.610	3	Lin Thru 0	0.0	550.0	0.00000	0.999991	
Mo 202.031	3	Lin Thru 0	0.0	7.787	0.00000	0.999998	

Na 589.592 Radial	2	Lin Thru 0	0.0	8.158	0.00000	0.999999
Ni 231.604	3	Lin Thru 0	0.0	15.03	0.00000	0.999986
P 214.914	3	Lin Thru 0	0.0	1.130	0.00000	0.999998
Pb 220.353	3	Lin Thru 0	0.0	3.699	0.00000	0.999986
S 181.975 Axial	3	Lin Thru 0	0.0	0.4017	0.00000	0.999998
Sb 206.836	3	Lin Thru 0	0.0	2.144	0.00000	0.999985
Se 196.026	3	Lin Thru 0	0.0	1.107	0.00000	0.999934
SiO2	3	Lin Thru 0	0.0	13.44	0.00000	0.999996
Si 251.611	3	Lin Thru 0	0.0	28.28	0.00000	0.999993
Sn 189.927	3	Lin Thru 0	0.0	3.678	0.00000	0.999991
Sr 421.552	3	Lin Thru 0	0.0	332.5	0.00000	0.999988
Ti 334.940	3	Lin Thru 0	0.0	798.7	0.00000	1.000000
Tl 190.801	3	Lin Thru 0	0.0	2.612	0.00000	0.999988
U 409.014	3	Lin Thru 0	0.0	17.83	0.00000	0.999993
V 292.402	3	Lin Thru 0	0.0	69.92	0.00000	1.000000
Zn 213.857	3	Lin Thru 0	0.0	41.04	0.00000	0.999995

Sequence No.: 6
Sample ID: ICV
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 7/14/2005 18:01:29
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	66545.1	66545.1	99.7	%			18:02:56
1	Al 396.153Radial†	23081.3	23084.9	4972.7	µg/L	4972.7	ppb	18:02:56
1	Ca 317.933Radial†	28909.3	28741.6	5074.7	µg/L	5074.7	ppb	18:03:16
1	Fe 238.204 Radial†	7447.9	7437.0	5185.1	µg/L	5185.1	ppb	18:03:16
1	K 766.490 Radial†	8174.0	7257.4	2572.4	µg/L	2572.4	ppb	18:02:56
1	Mg 279.077 IEC†	2194.6	2199.3	5025.4	µg/L	5025.4	ppb	18:03:16
1	Na 589.592 Radial†	21156.3	20724.2	2539.0	µg/L	2539.0	ppb	18:02:56
1	Sr 421.552†	169730.0	170258.6	511.85	µg/L	511.85	ppb	18:02:56
1	Sc 361.383	1336604.8	1336604.8	100.96	%			18:04:17
1	Y 371.029	731590.5	731590.5	100.79	%			18:04:17
1	Ag 328.068†	35493.2	35838.8	245.86	µg/L	245.86	ppb	18:04:17
1	As 188.979†	935.1	950.7	518.36	µg/L	518.36	ppb	18:04:37
1	B 249.677†	8164.7	8054.1	509.93	µg/L	509.93	ppb	18:04:17
1	Ba 233.527†	46748.3	46426.9	497.09	µg/L	497.09	ppb	18:04:17
1	Be 313.107†	360489.4	356673.9	247.99	µg/L	247.99	ppb	18:04:17
1	Cd 226.502†	13434.7	13335.2	512.40	µg/L	512.40	ppb	18:04:37
1	Co 228.616†	16429.2	16393.5	518.12	µg/L	518.12	ppb	18:04:37
1	Cr 267.716†	18189.4	17948.4	504.65	µg/L	504.65	ppb	18:04:17
1	Cu 324.752†	152361.9	146754.5	508.58	µg/L	508.58	ppb	18:04:17
1	Mn 257.610†	279630.0	276593.4	503.50	µg/L	503.50	ppb	18:04:17
1	Mo 202.031†	4016.9	3973.2	511.07	µg/L	511.07	ppb	18:04:37
1	Ni 231.604†	7814.5	7579.9	504.80	µg/L	504.80	ppb	18:04:37
1	P 214.914†	3025.5	2835.4	2424.0	µg/L	2424.0	ppb	18:04:37
1	Pb 220.353†	1855.9	1854.3	502.25	µg/L	502.25	ppb	18:04:37
1	S 181.975 Axial†	1014.8	980.6	2434.6	µg/L	2434.6	ppb	18:04:37
1	Sb 206.836†	1095.7	1056.0	493.09	µg/L	493.09	ppb	18:04:37
1	Se 196.026†	2815.9	2813.7	2540	µg/L	2540	ppb	18:04:37
1	SiO2 †	140328.8	138238.4	10288	µg/L	10288	ppb	18:04:17
1	Sn 189.927†	1811.5	1802.6	490.11	µg/L	490.11	ppb	18:04:37
1	Ti 334.940†	401555.7	397312.1	497.18	µg/L	497.18	ppb	18:04:17
1	Tl 190.801†	1280.8	1302.2	500.11	µg/L	500.11	ppb	18:04:37
1	U 409.014†	9339.0	9024.7	508.32	µg/L	508.32	ppb	18:04:17
1	V 292.402†	34275.9	34077.4	493.26	µg/L	493.26	ppb	18:04:17
1	Zn 213.857†	20674.3	20108.7	485.25	µg/L	485.25	ppb	18:04:17
1	Si 251.611†	141798.3	139637.7	4940	µg/L	4940	ppb	18:05:38
2	Sc RADIAL	67357.7	67357.7	101	%			18:03:21
2	Al 396.153Radial†	23358.9	23080.7	4971.8	µg/L	4971.8	ppb	18:03:21
2	Ca 317.933Radial†	28972.4	28454.2	5024.0	µg/L	5024.0	ppb	18:03:42
2	Fe 238.204 Radial†	7472.0	7370.7	5138.9	µg/L	5138.9	ppb	18:03:42
2	K 766.490 Radial†	8210.7	7194.8	2550.3	µg/L	2550.3	ppb	18:03:21
2	Mg 279.077 IEC†	2197.1	2175.2	4970.5	µg/L	4970.5	ppb	18:03:42
2	Na 589.592 Radial†	21382.8	20692.6	2535.1	µg/L	2535.1	ppb	18:03:21
2	Sr 421.552†	171658.7	170115.9	511.42	µg/L	511.42	ppb	18:03:21
2	Sc 361.383	1341520.0	1341520.0	101.33	%			18:04:44
2	Y 371.029	733773.0	733773.0	101.10	%			18:04:44
2	Ag 328.068†	35698.7	35912.8	246.35	µg/L	246.35	ppb	18:04:44
2	As 188.979†	937.4	949.6	517.73	µg/L	517.73	ppb	18:05:04
2	B 249.677†	8224.2	8083.2	511.76	µg/L	511.76	ppb	18:04:44
2	Ba 233.527†	46950.0	46456.3	497.40	µg/L	497.40	ppb	18:04:44
2	Be 313.107†	361539.6	356402.1	247.80	µg/L	247.80	ppb	18:04:44
2	Cd 226.502†	13504.9	13355.7	513.19	µg/L	513.19	ppb	18:05:04
2	Co 228.616†	16514.5	16418.1	518.90	µg/L	518.90	ppb	18:05:04
2	Cr 267.716†	18174.5	17867.7	502.39	µg/L	502.39	ppb	18:04:44
2	Cu 324.752†	153176.2	147005.2	509.45	µg/L	509.45	ppb	18:04:44
2	Mn 257.610†	280235.9	276176.6	502.74	µg/L	502.74	ppb	18:04:44
2	Mo 202.031†	4025.8	3967.4	510.33	µg/L	510.33	ppb	18:05:04
2	Ni 231.604†	7849.5	7586.0	505.20	µg/L	505.20	ppb	18:05:04
2	P 214.914†	3046.0	2844.5	2432.1	µg/L	2432.1	ppb	18:05:04

2	Pb 220.353†	1865.3	1856.9	502.95 µg/L	502.95 ppb	18:05:04
2	S 181.975 Axial†	1023.8	985.7	2447.4 µg/L	2447.4 ppb	18:05:04
2	Sb 206.836†	1102.0	1058.2	494.18 µg/L	494.18 ppb	18:05:04
2	Se 196.026†	2830.5	2817.9	2550 µg/L	2550 ppb	18:05:04
2	SiO2 †	140956.4	138348.5	10296 µg/L	10296 ppb	18:04:44
2	Sn 189.927†	1833.0	1817.2	494.08 µg/L	494.08 ppb	18:05:04
2	Ti 334.940†	403220.8	397498.0	497.42 µg/L	497.42 ppb	18:04:44
2	Tl 190.801†	1288.1	1304.8	501.11 µg/L	501.11 ppb	18:05:04
2	U 409.014†	9273.4	8926.1	502.79 µg/L	502.79 ppb	18:04:44
2	V 292.402†	34322.0	33998.5	492.11 µg/L	492.11 ppb	18:04:44
2	Zn 213.857†	20742.3	20100.8	485.06 µg/L	485.06 ppb	18:04:44
2	Si 251.611†	139966.6	137315.4	4860 µg/L	4860 ppb	18:05:43
3	Sc RADIAL	67268.8	67268.8	101 %		18:03:47
3	Al 396.153Radial†	23375.2	23127.4	4982.1 µg/L	4982.1 ppb	18:03:47
3	Ca 317.933Radial†	28771.8	28293.2	4995.6 µg/L	4995.6 ppb	18:04:07
3	Fe 238.204 Radial†	7402.0	7311.0	5097.3 µg/L	5097.3 ppb	18:04:07
3	K 766.490 Radial†	8207.1	7202.0	2552.8 µg/L	2552.8 ppb	18:03:47
3	Mg 279.077 IEC†	2179.5	2160.6	4937.2 µg/L	4937.2 ppb	18:04:07
3	Na 589.592 Radial†	21363.3	20701.2	2536.2 µg/L	2536.2 ppb	18:03:47
3	Sr 421.552†	171640.0	170322.3	512.04 µg/L	512.04 ppb	18:03:47
3	Sc 361.383	1346790.1	1346790.1	101.73 %		18:05:11
3	Y 371.029	736451.9	736451.9	101.46 %		18:05:11
3	Ag 328.068†	35808.7	35883.1	246.14 µg/L	246.14 ppb	18:05:11
3	As 188.979†	940.8	949.3	517.54 µg/L	517.54 ppb	18:05:32
3	B 249.677†	8241.0	8067.9	510.81 µg/L	510.81 ppb	18:05:11
3	Ba 233.527†	47048.1	46371.5	496.49 µg/L	496.49 ppb	18:05:11
3	Be 313.107†	363061.2	356501.6	247.87 µg/L	247.87 ppb	18:05:11
3	Cd 226.502†	13487.2	13286.1	510.52 µg/L	510.52 ppb	18:05:32
3	Co 228.616†	16511.9	16351.7	516.80 µg/L	516.80 ppb	18:05:32
3	Cr 267.716†	18265.3	17886.8	502.92 µg/L	502.92 ppb	18:05:11
3	Cu 324.752†	153789.9	147016.9	509.49 µg/L	509.49 ppb	18:05:11
3	Mn 257.610†	281304.6	276144.9	502.68 µg/L	502.68 ppb	18:05:11
3	Mo 202.031†	4021.0	3947.1	507.72 µg/L	507.72 ppb	18:05:32
3	Ni 231.604†	7839.4	7545.8	502.53 µg/L	502.53 ppb	18:05:32
3	P 214.914†	3037.3	2824.2	2414.2 µg/L	2414.2 ppb	18:05:32
3	Pb 220.353†	1875.2	1859.4	503.62 µg/L	503.62 ppb	18:05:32
3	S 181.975 Axial†	1018.8	976.8	2425.3 µg/L	2425.3 ppb	18:05:32
3	Sb 206.836†	1107.9	1059.8	494.85 µg/L	494.85 ppb	18:05:32
3	Se 196.026†	2827.7	2804.2	2530 µg/L	2530 ppb	18:05:32
3	SiO2 †	141363.7	138204.6	10285 µg/L	10285 ppb	18:05:11
3	Sn 189.927†	1818.6	1795.9	488.30 µg/L	488.30 ppb	18:05:32
3	Ti 334.940†	404640.9	397336.9	497.21 µg/L	497.21 ppb	18:05:11
3	Tl 190.801†	1285.8	1297.5	498.32 µg/L	498.32 ppb	18:05:32
3	U 409.014†	9336.2	8952.0	504.24 µg/L	504.24 ppb	18:05:11
3	V 292.402†	34391.9	33934.7	491.17 µg/L	491.17 ppb	18:05:11
3	Zn 213.857†	20792.2	20069.7	484.32 µg/L	484.32 ppb	18:05:11
3	Si 251.611†	142714.4	139476.0	4930 µg/L	4930 ppb	18:05:48

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1341638.3	101.34	%	0.385				0.38%
Sc RADIAL	67057.2	100	%	0.7				0.66%
Y 371.029	733938.5	101.12	%	0.335				0.33%
Ag 328.068†	35878.2	246.12	µg/L	0.247	246.12	ppb	0.247	0.10%
QC value within limits for Ag 328.068 Recovery = 98.45%								
Al 396.153Radial†	23097.7	4975.5	µg/L	5.68	4975.5	ppb	5.68	0.11%
QC value within limits for Al 396.153Radial Recovery = 99.51%								
As 188.979†	949.8	517.88	µg/L	0.428	517.88	ppb	0.428	0.08%
QC value within limits for As 188.979 Recovery = 103.58%								
B 249.677†	8068.4	510.83	µg/L	0.917	510.83	ppb	0.917	0.18%
QC value within limits for B 249.677 Recovery = 102.17%								
Ba 233.527†	46418.2	496.99	µg/L	0.461	496.99	ppb	0.461	0.09%
QC value within limits for Ba 233.527 Recovery = 99.40%								
Be 313.107†	356525.9	247.89	µg/L	0.096	247.89	ppb	0.096	0.04%
QC value within limits for Be 313.107 Recovery = 99.15%								
Ca 317.933Radial†	28496.3	5031.4	µg/L	40.10	5031.4	ppb	40.10	0.80%
QC value within limits for Ca 317.933Radial Recovery = 100.63%								
Cd 226.502†	13325.7	512.04	µg/L	1.372	512.04	ppb	1.372	0.27%
QC value within limits for Cd 226.502 Recovery = 102.41%								

Co 228.616†	16387.8	517.94 µg/L	1.064	517.94 ppb	1.064	0.21%
QC value within limits for Co 228.616 Recovery = 103.59%						
Cr 267.716†	17901.0	503.32 µg/L	1.184	503.32 ppb	1.184	0.24%
QC value within limits for Cr 267.716 Recovery = 100.66%						
Cu 324.752†	146925.5	509.18 µg/L	0.515	509.18 ppb	0.515	0.10%
QC value within limits for Cu 324.752 Recovery = 101.84%						
Fe 238.204 Radial†	7372.9	5140.4 µg/L	43.88	5140.4 ppb	43.88	0.85%
QC value within limits for Fe 238.204 Radial Recovery = 102.81%						
K 766.490 Radial†	7218.1	2558.5 µg/L	12.14	2558.5 ppb	12.14	0.47%
QC value within limits for K 766.490 Radial Recovery = 102.34%						
Mg 279.077 IEC†	2178.4	4977.7 µg/L	44.55	4977.7 ppb	44.55	0.89%
QC value within limits for Mg 279.077 IEC Recovery = 99.55%						
Mn 257.610†	276305.0	502.97 µg/L	0.459	502.97 ppb	0.459	0.09%
QC value within limits for Mn 257.610 Recovery = 100.59%						
Mo 202.031†	3962.6	509.71 µg/L	1.758	509.71 ppb	1.758	0.34%
QC value within limits for Mo 202.031 Recovery = 101.94%						
Na 589.592 Radial†	20706.0	2536.8 µg/L	2.00	2536.8 ppb	2.00	0.08%
QC value within limits for Na 589.592 Radial Recovery = 101.47%						
Ni 231.604†	7570.6	504.18 µg/L	1.443	504.18 ppb	1.443	0.29%
QC value within limits for Ni 231.604 Recovery = 100.84%						
P 214.914†	2834.7	2423.4 µg/L	8.99	2423.4 ppb	8.99	0.37%
QC value within limits for P 214.914 Recovery = 96.94%						
Pb 220.353†	1856.9	502.94 µg/L	0.689	502.94 ppb	0.689	0.14%
QC value within limits for Pb 220.353 Recovery = 100.59%						
S 181.975 Axial†	981.0	2435.8 µg/L	11.13	2435.8 ppb	11.13	0.46%
QC value within limits for S 181.975 Axial Recovery = 97.43%						
Sb 206.836†	1058.0	494.04 µg/L	0.886	494.04 ppb	0.886	0.18%
QC value within limits for Sb 206.836 Recovery = 98.81%						
Se 196.026†	2811.9	2540 µg/L	6.3	2540 ppb	6.3	0.25%
QC value within limits for Se 196.026 Recovery = 101.68%						
SiO2 †	138263.8	10290 µg/L	5.6	10290 ppb	5.6	0.05%
QC value within limits for SiO2 Recovery = 96.21%						
Si 251.611†	138809.7	4910 µg/L	45.9	4910 ppb	45.9	0.93%
QC value within limits for Si 251.611 Recovery = 98.17%						
Sn 189.927†	1805.2	490.83 µg/L	2.958	490.83 ppb	2.958	0.60%
QC value within limits for Sn 189.927 Recovery = 98.17%						
Sr 421.552†	170232.2	511.77 µg/L	0.318	511.77 ppb	0.318	0.06%
QC value within limits for Sr 421.552 Recovery = 102.35%						
Ti 334.940†	397382.3	497.27 µg/L	0.128	497.27 ppb	0.128	0.03%
QC value within limits for Ti 334.940 Recovery = 99.45%						
Tl 190.801†	1301.5	499.85 µg/L	1.411	499.85 ppb	1.411	0.28%
QC value within limits for Tl 190.801 Recovery = 99.97%						
U 409.014†	8967.6	505.12 µg/L	2.866	505.12 ppb	2.866	0.57%
QC value within limits for U 409.014 Recovery = 101.02%						
V 292.402†	34003.5	492.18 µg/L	1.043	492.18 ppb	1.043	0.21%
QC value within limits for V 292.402 Recovery = 98.44%						
Zn 213.857†	20093.1	484.87 µg/L	0.488	484.87 ppb	0.488	0.10%
QC value within limits for Zn 213.857 Recovery = 96.97%						

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: ICB
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 7/14/2005 18:07:37
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	65268.8	65268.8	97.8	%			18:09:04
1	Al 396.153Radial†	90.5	25.2	5.3906	µg/L	5.3906	ppb	18:09:04
1	Ca 317.933Radial†	279.4	29.0	5.1015	µg/L	5.1015	ppb	18:09:25
1	Fe 238.204 Radial†	39.6	6.7	4.6382	µg/L	4.6382	ppb	18:09:25
1	K 766.490 Radial†	942.0	21.6	7.6539	µg/L	7.6539	ppb	18:09:04
1	Mg 279.077 IEC†	4.7	2.8	6.5145	µg/L	6.5145	ppb	18:09:25
1	Na 589.592 Radial†	561.1	76.6	9.3906	µg/L	9.3906	ppb	18:09:04
1	Sr 421.552†	13.9	20.6	0.0617	µg/L	0.0617	ppb	18:09:04
1	Sc 361.383	1301736.4	1301736.4	98.325	%			18:10:23
1	Y 371.029	715701.0	715701.0	98.606	%			18:10:23
1	Ag 328.068†	-658.0	13.5	0.0936	µg/L	0.0936	ppb	18:10:28
1	As 188.979†	-27.4	-3.4	-1.8451	µg/L	-1.8451	ppb	18:10:49
1	B 249.677†	181.5	151.5	9.5865	µg/L	9.5865	ppb	18:10:49
1	Ba 233.527†	-107.5	13.3	0.1414	µg/L	0.1414	ppb	18:10:49
1	Be 313.107†	428.5	44.0	0.0298	µg/L	0.0298	ppb	18:10:28
1	Cd 226.502†	-13.1	14.7	0.5644	µg/L	0.5644	ppb	18:10:49
1	Co 228.616†	-118.6	-0.3	-0.0058	µg/L	-0.0058	ppb	18:10:49
1	Cr 267.716†	69.5	2.5	0.0717	µg/L	0.0717	ppb	18:10:49
1	Cu 324.752†	4416.6	331.4	1.1517	µg/L	1.1517	ppb	18:10:28
1	Mn 257.610†	417.7	44.0	0.0810	µg/L	0.0810	ppb	18:10:49
1	Mo 202.031†	15.6	10.3	1.3187	µg/L	1.3187	ppb	18:10:49
1	Ni 231.604†	161.6	4.0	0.2682	µg/L	0.2682	ppb	18:10:49
1	P 214.914†	171.0	12.4	10.845	µg/L	10.845	ppb	18:10:49
1	Pb 220.353†	-11.0	4.9	1.3331	µg/L	1.3331	ppb	18:10:49
1	S 181.975 Axial†	25.9	1.7	4.1898	µg/L	4.1898	ppb	18:10:49
1	Sb 206.836†	42.5	13.8	6.4749	µg/L	6.4749	ppb	18:10:49
1	Se 196.026†	-23.4	0.7	0.651	µg/L	0.651	ppb	18:10:49
1	SiO2 †	825.4	81.8	6.0878	µg/L	6.0878	ppb	18:10:49
1	Sn 189.927†	2.0	10.3	2.7982	µg/L	2.7982	ppb	18:10:49
1	Ti 334.940†	506.7	85.4	0.1092	µg/L	0.1092	ppb	18:10:28
1	Tl 190.801†	-31.5	1.6	0.5927	µg/L	0.5927	ppb	18:10:49
1	U 409.014†	148.2	-74.9	-4.2027	µg/L	-4.2027	ppb	18:10:28
1	V 292.402†	-131.0	-6.2	-0.0803	µg/L	-0.0803	ppb	18:10:49
1	Zn 213.857†	370.0	7.1	0.1682	µg/L	0.1682	ppb	18:10:49
1	Si 251.611†	786.0	-14.6	-0.518	µg/L	-0.518	ppb	18:12:11
2	Sc RADIAL	65301.6	65301.6	97.8	%			18:09:30
2	Al 396.153Radial†	61.6	-4.5	-1.0050	µg/L	-1.0050	ppb	18:09:30
2	Ca 317.933Radial†	285.2	34.8	6.1238	µg/L	6.1238	ppb	18:09:50
2	Fe 238.204 Radial†	39.2	6.2	4.3091	µg/L	4.3091	ppb	18:09:50
2	K 766.490 Radial†	961.6	41.2	14.594	µg/L	14.594	ppb	18:09:30
2	Mg 279.077 IEC†	0.6	-1.4	-3.0578	µg/L	-3.0578	ppb	18:09:50
2	Na 589.592 Radial†	553.6	68.7	8.4172	µg/L	8.4172	ppb	18:09:30
2	Sr 421.552†	-25.6	-19.9	-0.0600	µg/L	-0.0600	ppb	18:09:30
2	Sc 361.383	1318010.5	1318010.5	99.554	%			18:10:54
2	Y 371.029	723720.6	723720.6	99.711	%			18:10:54
2	Ag 328.068†	-670.5	9.2	0.0645	µg/L	0.0645	ppb	18:10:59
2	As 188.979†	-17.3	7.1	3.8325	µg/L	3.8325	ppb	18:11:19
2	B 249.677†	161.2	128.8	8.1502	µg/L	8.1502	ppb	18:11:19
2	Ba 233.527†	-115.8	6.3	0.0667	µg/L	0.0667	ppb	18:11:19
2	Be 313.107†	379.7	-10.4	-0.0081	µg/L	-0.0081	ppb	18:10:59
2	Cd 226.502†	-17.7	10.2	0.3923	µg/L	0.3923	ppb	18:11:19
2	Co 228.616†	-119.9	-0.1	-0.0022	µg/L	-0.0022	ppb	18:11:19
2	Cr 267.716†	68.7	0.8	0.0251	µg/L	0.0251	ppb	18:11:19
2	Cu 324.752†	4341.3	200.4	0.6978	µg/L	0.6978	ppb	18:10:59
2	Mn 257.610†	398.0	18.9	0.0355	µg/L	0.0355	ppb	18:11:19
2	Mo 202.031†	11.3	5.8	0.7440	µg/L	0.7440	ppb	18:11:19
2	Ni 231.604†	163.1	3.4	0.2294	µg/L	0.2294	ppb	18:11:19
2	P 214.914†	168.0	7.3	6.3850	µg/L	6.3850	ppb	18:11:19

2	Pb 220.353†	-9.6	6.4	1.7396 µg/L	1.7396 ppb	18:11:19
2	S 181.975 Axial†	25.5	0.9	2.3486 µg/L	2.3486 ppb	18:11:19
2	Sb 206.836†	41.1	11.9	5.5746 µg/L	5.5746 ppb	18:11:19
2	Se 196.026†	-30.6	-6.3	-5.67 µg/L	-5.67 ppb	18:11:19
2	SiO2 †	803.6	49.5	3.6834 µg/L	3.6834 ppb	18:11:19
2	Sn 189.927†	-2.9	5.4	1.4611 µg/L	1.4611 ppb	18:11:19
2	Ti 334.940†	528.2	100.6	0.1282 µg/L	0.1282 ppb	18:10:59
2	Tl 190.801†	-31.3	2.1	0.8086 µg/L	0.8086 ppb	18:11:19
2	U 409.014†	148.6	-76.3	-4.2828 µg/L	-4.2828 ppb	18:10:59
2	V 292.402†	-122.3	4.2	0.0625 µg/L	0.0625 ppb	18:11:19
2	Zn 213.857†	381.4	13.9	0.3348 µg/L	0.3348 ppb	18:11:19
2	Si 251.611†	792.3	-18.0	-0.639 µg/L	-0.639 ppb	18:12:31
3	Sc RADIAL	65083.6	65083.6	97.5 %		18:09:55
3	Al 396.153Radial†	111.7	47.1	10.185 µg/L	10.185 ppb	18:09:55
3	Ca 317.933Radial†	286.5	37.1	6.5484 µg/L	6.5484 ppb	18:10:15
3	Fe 238.204 Radial†	38.8	5.9	4.1308 µg/L	4.1308 ppb	18:10:15
3	K 766.490 Radial†	998.2	82.0	29.077 µg/L	29.077 ppb	18:09:55
3	Mg 279.077 IEC†	1.4	-0.6	-1.2591 µg/L	-1.2591 ppb	18:10:15
3	Na 589.592 Radial†	474.6	-10.5	-1.2874 µg/L	-1.2874 ppb	18:09:55
3	Sr 421.552†	-13.7	-7.7	-0.0234 µg/L	-0.0234 ppb	18:09:55
3	Sc 361.383	1312462.5	1312462.5	99.135 %		18:11:25
3	Y 371.029	720595.7	720595.7	99.280 %		18:11:25
3	Ag 328.068†	-661.5	15.4	0.1058 µg/L	0.1058 ppb	18:11:30
3	As 188.979†	-20.4	3.9	2.1095 µg/L	2.1095 ppb	18:11:50
3	B 249.677†	141.7	109.9	6.9507 µg/L	6.9507 ppb	18:11:50
3	Ba 233.527†	-116.8	4.8	0.0517 µg/L	0.0517 ppb	18:11:50
3	Be 313.107†	417.9	29.8	0.0207 µg/L	0.0207 ppb	18:11:30
3	Cd 226.502†	-23.0	4.8	0.1858 µg/L	0.1858 ppb	18:11:50
3	Co 228.616†	-123.5	-4.2	-0.1323 µg/L	-0.1323 ppb	18:11:50
3	Cr 267.716†	65.9	-1.7	-0.0483 µg/L	-0.0483 ppb	18:11:50
3	Cu 324.752†	4313.3	190.5	0.6604 µg/L	0.6604 ppb	18:11:30
3	Mn 257.610†	411.3	34.1	0.0624 µg/L	0.0624 ppb	18:11:50
3	Mo 202.031†	7.8	2.3	0.2948 µg/L	0.2948 ppb	18:11:50
3	Ni 231.604†	156.7	-2.4	-0.1577 µg/L	-0.1577 ppb	18:11:50
3	P 214.914†	169.0	9.0	7.8858 µg/L	7.8858 ppb	18:11:50
3	Pb 220.353†	-15.2	0.8	0.2067 µg/L	0.2067 ppb	18:11:50
3	S 181.975 Axial†	23.1	-1.4	-3.4016 µg/L	-3.4016 ppb	18:11:50
3	Sb 206.836†	36.7	7.7	3.6041 µg/L	3.6041 ppb	18:11:50
3	Se 196.026†	-23.4	0.9	0.787 µg/L	0.787 ppb	18:11:50
3	SiO2 †	810.9	60.3	4.4850 µg/L	4.4850 ppb	18:11:50
3	Sn 189.927†	-1.3	6.9	1.8874 µg/L	1.8874 ppb	18:11:50
3	Ti 334.940†	589.5	164.7	0.2061 µg/L	0.2061 ppb	18:11:30
3	Tl 190.801†	-33.3	0.0	0.0076 µg/L	0.0076 ppb	18:11:50
3	U 409.014†	229.4	5.8	0.3241 µg/L	0.3241 ppb	18:11:30
3	V 292.402†	-117.4	8.6	0.1262 µg/L	0.1262 ppb	18:11:50
3	Zn 213.857†	370.4	4.3	0.1049 µg/L	0.1049 ppb	18:11:50
3	Si 251.611†	778.2	-28.9	-1.03 µg/L	-1.03 ppb	18:12:51

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1310736.5	99.005	%	0.6249				0.63%
Sc RADIAL	65218.0	97.7	%	0.18				0.18%
Y 371.029	720005.8	99.199	%	0.5569				0.56%
Ag 328.068†	12.7	0.0880	µg/L	0.02123	0.0880	ppb	0.02123	24.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	22.6	4.8569	µg/L	5.61416	4.8569	ppb	5.61416	115.59%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.5	1.3656	µg/L	2.91096	1.3656	ppb	2.91096	213.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	130.1	8.2291	µg/L	1.31970	8.2291	ppb	1.31970	16.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	8.1	0.0866	µg/L	0.04807	0.0866	ppb	0.04807	55.50%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	21.1	0.0141	µg/L	0.01975	0.0141	ppb	0.01975	139.60%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	33.7	5.9246	µg/L	0.74371	5.9246	ppb	0.74371	12.55%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.9	0.3808	µg/L	0.18957	0.3808	ppb	0.18957	49.78%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-1.5	-0.0468 µg/L	0.07410	-0.0468 ppb	0.07410	158.44%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	0.5	0.0162 µg/L	0.06047	0.0162 ppb	0.06047	374.42%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	240.8	0.8366 µg/L	0.27353	0.8366 ppb	0.27353	32.69%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	6.3	4.3594 µg/L	0.25739	4.3594 ppb	0.25739	5.90%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	48.3	17.108 µg/L	10.9304	17.108 ppb	10.9304	63.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.3	0.7325 µg/L	5.08749	0.7325 ppb	5.08749	694.50%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	32.3	0.0596 µg/L	0.02289	0.0596 ppb	0.02289	38.40%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.1	0.7858 µg/L	0.51326	0.7858 ppb	0.51326	65.31%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	44.9	5.5068 µg/L	5.90402	5.5068 ppb	5.90402	107.21%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	1.7	0.1133 µg/L	0.23548	0.1133 ppb	0.23548	207.85%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	9.6	8.3721 µg/L	2.26965	8.3721 ppb	2.26965	27.11%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.0	1.0932 µg/L	0.79415	1.0932 ppb	0.79415	72.65%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.4	1.0456 µg/L	3.95986	1.0456 ppb	3.95986	378.72%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	11.2	5.2178 µg/L	1.46826	5.2178 ppb	1.46826	28.14%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.6	-1.41 µg/L	3.691	-1.41 ppb	3.691	261.48%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	63.9	4.7521 µg/L	1.22426	4.7521 ppb	1.22426	25.76%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	-20.5	-0.728 µg/L	0.2646	-0.728 ppb	0.2646	36.37%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.5	2.0489 µg/L	0.68299	2.0489 ppb	0.68299	33.33%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-2.3	-0.0072 µg/L	0.06242	-0.0072 ppb	0.06242	861.77%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	116.9	0.1478 µg/L	0.05139	0.1478 ppb	0.05139	34.76%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.2	0.4696 µg/L	0.41446	0.4696 ppb	0.41446	88.25%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-48.5	-2.7205 µg/L	2.63699	-2.7205 ppb	2.63699	96.93%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	2.2	0.0361 µg/L	0.10572	0.0361 ppb	0.10572	292.58%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	8.4	0.2026 µg/L	0.11871	0.2026 ppb	0.11871	58.59%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: PQL
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 7/14/2005 18:14:40
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	65376.0	65376.0	97.9	%			18:16:07
1	Al 396.153Radial†	949.3	901.8	194.72	µg/L	194.72	ppb	18:16:07
1	Ca 317.933Radial†	817.1	577.6	102.21	µg/L	102.21	ppb	18:16:27
1	Fe 238.204 Radial†	189.6	159.7	111.29	µg/L	111.29	ppb	18:16:27
1	K 766.490 Radial†	1356.3	443.0	157.03	µg/L	157.03	ppb	18:16:07
1	Mg 279.077 IEC†	140.8	141.7	323.12	µg/L	323.12	ppb	18:16:27
1	Na 589.592 Radial†	1710.9	1249.6	153.15	µg/L	153.15	ppb	18:16:07
1	Sr 421.552†	1584.6	1624.2	4.8813	µg/L	4.8813	ppb	18:16:07
1	Sc 361.383	1317798.3	1317798.3	99.538	%			18:17:25
1	Y 371.029	724268.1	724268.1	99.786	%			18:17:25
1	Ag 328.068†	75.5	758.6	5.1817	µg/L	5.1817	ppb	18:17:30
1	As 188.979†	5.0	29.5	15.938	µg/L	15.938	ppb	18:17:51
1	B 249.677†	914.7	885.9	56.043	µg/L	56.043	ppb	18:17:51
1	Ba 233.527†	346.2	470.4	5.0451	µg/L	5.0451	ppb	18:17:51
1	Be 313.107†	7431.0	7073.6	4.9253	µg/L	4.9253	ppb	18:17:30
1	Cd 226.502†	106.4	135.0	5.1913	µg/L	5.1913	ppb	18:17:51
1	Co 228.616†	41.6	162.1	5.1212	µg/L	5.1212	ppb	18:17:51
1	Cr 267.716†	237.4	170.3	4.7559	µg/L	4.7559	ppb	18:17:51
1	Cu 324.752†	7285.2	3158.6	10.913	µg/L	10.913	ppb	18:17:30
1	Mn 257.610†	6032.3	5679.4	10.331	µg/L	10.331	ppb	18:17:30
1	Mo 202.031†	85.9	80.7	10.375	µg/L	10.375	ppb	18:17:51
1	Ni 231.604†	232.9	73.5	4.9042	µg/L	4.9042	ppb	18:17:51
1	P 214.914†	338.0	178.1	155.66	µg/L	155.66	ppb	18:17:51
1	Pb 220.353†	25.8	42.0	11.334	µg/L	11.334	ppb	18:17:51
1	S 181.975 Axial†	64.5	40.2	100.01	µg/L	100.01	ppb	18:17:51
1	Sb 206.836†	58.1	29.1	13.678	µg/L	13.678	ppb	18:17:51
1	Se 196.026†	-13.7	10.7	9.80	µg/L	9.80	ppb	18:17:51
1	SiO2 †	3471.4	2729.8	203.15	µg/L	203.15	ppb	18:17:30
1	Sn 189.927†	36.2	44.6	12.136	µg/L	12.136	ppb	18:17:51
1	Ti 334.940†	4486.6	4077.5	5.0803	µg/L	5.0803	ppb	18:17:30
1	Tl 190.801†	16.6	50.2	19.277	µg/L	19.277	ppb	18:17:51
1	U 409.014†	1132.8	912.5	51.199	µg/L	51.199	ppb	18:17:30
1	V 292.402†	229.6	357.7	5.2743	µg/L	5.2743	ppb	18:17:51
1	Zn 213.857†	790.3	424.7	10.275	µg/L	10.275	ppb	18:17:51
1	Si 251.611†	3517.1	2719.5	96.2	µg/L	96.2	ppb	18:18:58
2	Sc RADIAL	66175.0	66175.0	99.1	%			18:16:32
2	Al 396.153Radial†	980.1	921.2	198.93	µg/L	198.93	ppb	18:16:32
2	Ca 317.933Radial†	796.5	546.7	96.761	µg/L	96.761	ppb	18:16:52
2	Fe 238.204 Radial†	189.0	156.8	109.26	µg/L	109.26	ppb	18:16:52
2	K 766.490 Radial†	1335.2	405.0	143.56	µg/L	143.56	ppb	18:16:32
2	Mg 279.077 IEC†	135.5	134.7	307.09	µg/L	307.09	ppb	18:16:52
2	Na 589.592 Radial†	1654.1	1171.3	143.55	µg/L	143.55	ppb	18:16:32
2	Sr 421.552†	1587.3	1607.5	4.8310	µg/L	4.8310	ppb	18:16:32
2	Sc 361.383	1330991.9	1330991.9	100.53	%			18:17:56
2	Y 371.029	730945.7	730945.7	100.71	%			18:17:56
2	Ag 328.068†	35.4	717.9	4.9047	µg/L	4.9047	ppb	18:18:01
2	As 188.979†	3.9	28.3	15.320	µg/L	15.320	ppb	18:18:21
2	B 249.677†	912.3	874.4	55.316	µg/L	55.316	ppb	18:18:21
2	Ba 233.527†	339.2	460.1	4.9340	µg/L	4.9340	ppb	18:18:21
2	Be 313.107†	7389.1	6957.9	4.8447	µg/L	4.8447	ppb	18:18:01
2	Cd 226.502†	111.4	138.8	5.3400	µg/L	5.3400	ppb	18:18:21
2	Co 228.616†	33.3	153.5	4.8489	µg/L	4.8489	ppb	18:18:21
2	Cr 267.716†	238.0	168.5	4.7057	µg/L	4.7057	ppb	18:18:21
2	Cu 324.752†	7178.0	2979.4	10.293	µg/L	10.293	ppb	18:18:01
2	Mn 257.610†	5954.4	5541.9	10.081	µg/L	10.081	ppb	18:18:01
2	Mo 202.031†	84.2	78.2	10.051	µg/L	10.051	ppb	18:18:21
2	Ni 231.604†	232.2	70.6	4.7093	µg/L	4.7093	ppb	18:18:21
2	P 214.914†	331.0	167.8	146.63	µg/L	146.63	ppb	18:18:21

2	Pb 220.353†	17.9	33.9	9.1384 µg/L	9.1384 ppb	18:18:21
2	S 181.975 Axial†	65.7	40.7	101.24 µg/L	101.24 ppb	18:18:21
2	Sb 206.836†	63.1	33.4	15.706 µg/L	15.706 ppb	18:18:21
2	Se 196.026†	-8.9	15.7	14.3 µg/L	14.3 ppb	18:18:21
2	SiO2 †	3464.4	2688.3	200.06 µg/L	200.06 ppb	18:18:01
2	Sn 189.927†	28.6	36.7	9.9826 µg/L	9.9826 ppb	18:18:21
2	Ti 334.940†	4458.0	4004.3	4.9891 µg/L	4.9891 ppb	18:18:01
2	Tl 190.801†	14.6	48.2	18.483 µg/L	18.483 ppb	18:18:21
2	U 409.014†	1127.0	895.4	50.239 µg/L	50.239 ppb	18:18:01
2	V 292.402†	223.5	349.4	5.1513 µg/L	5.1513 ppb	18:18:21
2	Zn 213.857†	784.8	411.3	9.9521 µg/L	9.9521 ppb	18:18:21
2	Si 251.611†	3539.1	2706.4	95.7 µg/L	95.7 ppb	18:19:03
3	Sc RADIAL	66190.7	66190.7	99.2 %		18:16:57
3	Al 396.153Radial†	979.8	920.7	198.83 µg/L	198.83 ppb	18:16:57
3	Ca 317.933Radial†	820.1	570.3	100.93 µg/L	100.93 ppb	18:17:17
3	Fe 238.204 Radial†	187.6	155.3	108.21 µg/L	108.21 ppb	18:17:17
3	K 766.490 Radial†	1406.7	476.8	169.01 µg/L	169.01 ppb	18:16:57
3	Mg 279.077 IEC†	136.8	135.9	309.88 µg/L	309.88 ppb	18:17:17
3	Na 589.592 Radial†	1669.9	1186.8	145.46 µg/L	145.46 ppb	18:16:57
3	Sr 421.552†	1582.0	1601.7	4.8137 µg/L	4.8137 ppb	18:16:57
3	Sc 361.383	1314389.8	1314389.8	99.281 %		18:18:27
3	Y 371.029	722122.4	722122.4	99.490 %		18:18:27
3	Ag 328.068†	39.2	722.2	4.9330 µg/L	4.9330 ppb	18:18:32
3	As 188.979†	7.5	32.0	17.304 µg/L	17.304 ppb	18:18:52
3	B 249.677†	927.0	900.7	56.978 µg/L	56.978 ppb	18:18:52
3	Ba 233.527†	351.8	477.0	5.1147 µg/L	5.1147 ppb	18:18:52
3	Be 313.107†	7411.3	7073.1	4.9249 µg/L	4.9249 ppb	18:18:32
3	Cd 226.502†	103.7	132.5	5.0980 µg/L	5.0980 ppb	18:18:52
3	Co 228.616†	41.9	162.6	5.1362 µg/L	5.1362 ppb	18:18:52
3	Cr 267.716†	249.1	182.7	5.1061 µg/L	5.1061 ppb	18:18:52
3	Cu 324.752†	7193.2	3084.9	10.658 µg/L	10.658 ppb	18:18:32
3	Mn 257.610†	5987.3	5649.8	10.277 µg/L	10.277 ppb	18:18:32
3	Mo 202.031†	82.4	77.5	9.9565 µg/L	9.9565 ppb	18:18:52
3	Ni 231.604†	237.1	78.4	5.2291 µg/L	5.2291 ppb	18:18:52
3	P 214.914†	329.7	170.7	149.12 µg/L	149.12 ppb	18:18:52
3	Pb 220.353†	18.5	34.7	9.3438 µg/L	9.3438 ppb	18:18:52
3	S 181.975 Axial†	70.4	46.3	115.27 µg/L	115.27 ppb	18:18:52
3	Sb 206.836†	55.6	26.7	12.548 µg/L	12.548 ppb	18:18:52
3	Se 196.026†	-7.9	16.6	15.1 µg/L	15.1 ppb	18:18:52
3	SiO2 †	3505.2	2772.9	206.36 µg/L	206.36 ppb	18:18:32
3	Sn 189.927†	36.2	44.7	12.159 µg/L	12.159 ppb	18:18:52
3	Ti 334.940†	4450.2	4052.5	5.0492 µg/L	5.0492 ppb	18:18:32
3	Tl 190.801†	18.7	52.4	20.099 µg/L	20.099 ppb	18:18:52
3	U 409.014†	1120.7	903.2	50.678 µg/L	50.678 ppb	18:18:32
3	V 292.402†	209.0	337.6	4.9824 µg/L	4.9824 ppb	18:18:52
3	Zn 213.857†	791.9	428.4	10.364 µg/L	10.364 ppb	18:18:52
3	Si 251.611†	3477.4	2688.7	95.1 µg/L	95.1 ppb	18:19:08

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1321060.0	99.785	%	0.6623				0.66%
Sc RADIAL	65913.9	98.7	%	0.70				0.71%
Y 371.029	725778.7	99.994	%	0.6340				0.63%
Ag 328.068†	732.9	5.0065	µg/L	0.15242	5.0065	ppb	0.15242	3.04%
QC value within limits for Ag 328.068 Recovery = 100.13%								
Al 396.153Radial†	914.6	197.49	µg/L	2.401	197.49	ppb	2.401	1.22%
QC value within limits for Al 396.153Radial Recovery = 98.75%								
As 188.979†	29.9	16.187	µg/L	1.0150	16.187	ppb	1.0150	6.27%
QC value within limits for As 188.979 Recovery = 107.91%								
B 249.677†	887.0	56.112	µg/L	0.8331	56.112	ppb	0.8331	1.48%
QC value within limits for B 249.677 Recovery = 112.22%								
Ba 233.527†	469.1	5.0313	µg/L	0.09113	5.0313	ppb	0.09113	1.81%
QC value within limits for Ba 233.527 Recovery = 100.63%								
Be 313.107†	7034.9	4.8983	µg/L	0.04641	4.8983	ppb	0.04641	0.95%
QC value within limits for Be 313.107 Recovery = 97.97%								
Ca 317.933Radial†	564.9	99.966	µg/L	2.8486	99.966	ppb	2.8486	2.85%
QC value within limits for Ca 317.933Radial Recovery = 99.97%								
Cd 226.502†	135.4	5.2098	µg/L	0.12206	5.2098	ppb	0.12206	2.34%
QC value within limits for Cd 226.502 Recovery = 104.20%								

Co 228.616†	159.4	5.0354 µg/L	0.16172	5.0354 ppb	0.16172	3.21%
QC value within limits for Co 228.616 Recovery = 100.71%						
Cr 267.716†	173.8	4.8559 µg/L	0.21813	4.8559 ppb	0.21813	4.49%
QC value within limits for Cr 267.716 Recovery = 97.12%						
Cu 324.752†	3074.3	10.621 µg/L	0.3119	10.621 ppb	0.3119	2.94%
QC value within limits for Cu 324.752 Recovery = 106.21%						
Fe 238.204 Radial†	157.3	109.59 µg/L	1.567	109.59 ppb	1.567	1.43%
QC value within limits for Fe 238.204 Radial Recovery = 109.59%						
K 766.490 Radial†	441.6	156.53 µg/L	12.729	156.53 ppb	12.729	8.13%
QC value within limits for K 766.490 Radial Recovery = 104.35%						
Mg 279.077 IEC†	137.4	313.37 µg/L	8.565	313.37 ppb	8.565	2.73%
QC value within limits for Mg 279.077 IEC Recovery = 104.46%						
Mn 257.610†	5623.7	10.229 µg/L	0.1316	10.229 ppb	0.1316	1.29%
QC value within limits for Mn 257.610 Recovery = 102.29%						
Mo 202.031†	78.8	10.128 µg/L	0.2195	10.128 ppb	0.2195	2.17%
QC value within limits for Mo 202.031 Recovery = 101.28%						
Na 589.592 Radial†	1202.6	147.39 µg/L	5.083	147.39 ppb	5.083	3.45%
QC value within limits for Na 589.592 Radial Recovery = 98.26%						
Ni 231.604†	74.2	4.9475 µg/L	0.26257	4.9475 ppb	0.26257	5.31%
QC value within limits for Ni 231.604 Recovery = 98.95%						
P 214.914†	172.2	150.47 µg/L	4.662	150.47 ppb	4.662	3.10%
QC value within limits for P 214.914 Recovery = 100.31%						
Pb 220.353†	36.9	9.9388 µg/L	1.21268	9.9388 ppb	1.21268	12.20%
QC value within limits for Pb 220.353 Recovery = 99.39%						
S 181.975 Axial†	42.4	105.51 µg/L	8.475	105.51 ppb	8.475	8.03%
QC value within limits for S 181.975 Axial Recovery = 105.51%						
Sb 206.836†	29.7	13.977 µg/L	1.5998	13.977 ppb	1.5998	11.45%
QC value greater than the upper limit for Sb 206.836 Recovery = 139.77%						
Se 196.026†	14.3	13.1 µg/L	2.86	13.1 ppb	2.86	21.89%
QC value within limits for Se 196.026 Recovery = 87.15%						
SiO2 †	2730.3	203.19 µg/L	3.148	203.19 ppb	3.148	1.55%
QC value within limits for SiO2 Recovery = 95.40%						
Si 251.611†	2704.8	95.7 µg/L	0.55	95.7 ppb	0.55	0.57%
QC value within limits for Si 251.611 Recovery = 95.65%						
Sn 189.927†	42.0	11.426 µg/L	1.2500	11.426 ppb	1.2500	10.94%
QC value within limits for Sn 189.927 Recovery = 114.26%						
Sr 421.552†	1611.1	4.8420 µg/L	0.03513	4.8420 ppb	0.03513	0.73%
QC value within limits for Sr 421.552 Recovery = 96.84%						
Ti 334.940†	4044.7	5.0395 µg/L	0.04638	5.0395 ppb	0.04638	0.92%
QC value within limits for Ti 334.940 Recovery = 100.79%						
Tl 190.801†	50.3	19.286 µg/L	0.8079	19.286 ppb	0.8079	4.19%
QC value within limits for Tl 190.801 Recovery = 96.43%						
U 409.014†	903.7	50.706 µg/L	0.4806	50.706 ppb	0.4806	0.95%
QC value within limits for U 409.014 Recovery = 101.41%						
V 292.402†	348.2	5.1360 µg/L	0.14656	5.1360 ppb	0.14656	2.85%
QC value within limits for V 292.402 Recovery = 102.72%						
Zn 213.857†	421.5	10.197 µg/L	0.2168	10.197 ppb	0.2168	2.13%
QC value within limits for Zn 213.857 Recovery = 101.97%						

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: ICSA
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 7/14/2005 18:20:57
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	61902.1	61902.1	92.7	%			18:22:28
1	Al 396.153Radial†	2203469.0	2375962.9	514330	µg/L	514330	ppb	18:22:23
1	Ca 317.933Radial†	2477016.2	2670743.2	471290	µg/L	471290	ppb	18:22:23
1	Fe 238.204 Radial†	247131.8	266451.7	185550	µg/L	185550	ppb	18:22:28
1	K 766.490 Radial†	858.2	-16.3	-5.7911	µg/L	-5.7911	ppb	18:22:28
1	Mg 279.077 IEC†	206287.0	222440.0	507190	µg/L	507190	ppb	18:22:28
1	Na 589.592 Radial†	573.2	120.8	14.826	µg/L	14.826	ppb	18:22:28
1	Sr 421.552†	3573.5	3859.6	-2.6508	µg/L	-2.6508	ppb	18:22:28
1	Sc 361.383	1184100.1	1184100.1	89.440	%			18:23:01
1	Y 371.029	641075.0	641075.0	88.324	%			18:23:01
1	Ag 328.068†	-4747.8	-4625.7	1.2669	µg/L	1.2669	ppb	18:23:01
1	As 188.979†	-44.9	-25.7	8.8033	µg/L	8.8033	ppb	18:23:21
1	B 249.677†	692.7	741.4	21.912	µg/L	21.912	ppb	18:23:01
1	Ba 233.527†	181.3	325.3	1.2857	µg/L	1.2857	ppb	18:23:21
1	Be 313.107†	-787.4	-1272.2	-0.8803	µg/L	-0.8803	ppb	18:23:01
1	Cd 226.502†	404.3	480.0	2.6536	µg/L	2.6536	ppb	18:23:21
1	Co 228.616†	-54.4	59.5	-1.8093	µg/L	-1.8093	ppb	18:23:21
1	Cr 267.716†	104.3	48.3	1.3514	µg/L	1.3514	ppb	18:23:21
1	Cu 324.752†	2089.2	-1824.5	-0.0036	µg/L	-0.0036	ppb	18:23:01
1	Mn 257.610†	-7900.0	-9213.6	-0.9641	µg/L	-0.9641	ppb	18:23:01
1	Mo 202.031†	-22.7	-31.0	1.9016	µg/L	1.9016	ppb	18:23:21
1	Ni 231.604†	100.3	-48.3	-0.2956	µg/L	-0.2956	ppb	18:23:21
1	P 214.914†	248.6	116.5	61.430	µg/L	61.430	ppb	18:23:21
1	Pb 220.353†	-195.4	-202.4	3.2811	µg/L	3.2811	ppb	18:23:21
1	S 181.975 Axial†	54.4	36.2	16.035	µg/L	16.035	ppb	18:23:21
1	Sb 206.836†	61.2	39.1	5.8455	µg/L	5.8455	ppb	18:23:21
1	Se 196.026†	-46.3	-27.3	0.926	µg/L	0.926	ppb	18:23:21
1	SiO2 †	689.9	13.7	22.561	µg/L	22.561	ppb	18:23:21
1	Sn 189.927†	-143.0	-151.6	-33.964	µg/L	-33.964	ppb	18:23:21
1	Ti 334.940†	-7022.0	-8281.1	-0.4331	µg/L	-0.4331	ppb	18:23:01
1	Tl 190.801†	-61.1	-34.7	-8.7479	µg/L	-8.7479	ppb	18:23:21
1	U 409.014†	499.0	332.3	-4.5077	µg/L	-4.5077	ppb	18:23:01
1	V 292.402†	-515.6	-449.4	-1.4552	µg/L	-1.4552	ppb	18:23:21
1	Zn 213.857†	2424.4	2341.4	10.693	µg/L	10.693	ppb	18:23:21
1	Si 251.611†	829.6	113.7	25.6	µg/L	25.6	ppb	18:24:21
2	Sc RADIAL	61731.7	61731.7	92.5	%			18:22:40
2	Al 396.153Radial†	2230061.4	2411273.3	521980	µg/L	521980	ppb	18:22:35
2	Ca 317.933Radial†	2505003.4	2708375.8	477930	µg/L	477930	ppb	18:22:35
2	Fe 238.204 Radial†	246273.3	266258.8	185410	µg/L	185410	ppb	18:22:40
2	K 766.490 Radial†	756.0	-124.4	-44.080	µg/L	-44.080	ppb	18:22:40
2	Mg 279.077 IEC†	205586.1	222295.9	506860	µg/L	506860	ppb	18:22:40
2	Na 589.592 Radial†	545.4	92.5	11.362	µg/L	11.362	ppb	18:22:40
2	Sr 421.552†	3569.8	3866.3	-2.8316	µg/L	-2.8316	ppb	18:22:40
2	Sc 361.383	1189747.9	1189747.9	89.866	%			18:23:28
2	Y 371.029	644174.1	644174.1	88.751	%			18:23:28
2	Ag 328.068†	-4771.8	-4627.2	1.2334	µg/L	1.2334	ppb	18:23:28
2	As 188.979†	-60.8	-43.2	-0.6732	µg/L	-0.6732	ppb	18:23:48
2	B 249.677†	632.3	670.5	17.440	µg/L	17.440	ppb	18:23:28
2	Ba 233.527†	166.9	308.3	1.1042	µg/L	1.1042	ppb	18:23:48
2	Be 313.107†	-850.2	-1337.9	-0.9264	µg/L	-0.9264	ppb	18:23:28
2	Cd 226.502†	392.6	465.0	2.0841	µg/L	2.0841	ppb	18:23:48
2	Co 228.616†	-54.6	59.5	-1.8098	µg/L	-1.8098	ppb	18:23:48
2	Cr 267.716†	116.6	61.5	1.7232	µg/L	1.7232	ppb	18:23:48
2	Cu 324.752†	2190.9	-1722.5	0.3497	µg/L	0.3497	ppb	18:23:28
2	Mn 257.610†	-7963.6	-9242.4	-1.0279	µg/L	-1.0279	ppb	18:23:28
2	Mo 202.031†	-41.0	-51.3	-0.7112	µg/L	-0.7112	ppb	18:23:48
2	Ni 231.604†	82.5	-68.7	-1.6179	µg/L	-1.6179	ppb	18:23:48
2	P 214.914†	254.2	121.4	67.948	µg/L	67.948	ppb	18:23:48

2	Pb 220.353†	-191.8	-197.3	5.4838 µg/L	5.4838 ppb	18:23:48
2	S 181.975 Axial†	45.0	25.4	-11.812 µg/L	-11.812 ppb	18:23:48
2	Sb 206.836†	50.7	27.0	0.0292 µg/L	0.0292 ppb	18:23:48
2	Se 196.026†	-50.3	-31.5	-2.16 µg/L	-2.16 ppb	18:23:48
2	SiO2 †	700.0	21.3	23.105 µg/L	23.105 ppb	18:23:48
2	Sn 189.927†	-137.1	-144.3	-31.990 µg/L	-31.990 ppb	18:23:48
2	Ti 334.940†	-6986.2	-8204.0	-0.1949 µg/L	-0.1949 ppb	18:23:28
2	Tl 190.801†	-58.5	-31.6	-7.5463 µg/L	-7.5463 ppb	18:23:48
2	U 409.014†	451.6	276.9	-7.5990 µg/L	-7.5990 ppb	18:23:28
2	V 292.402†	-508.2	-438.5	-1.3303 µg/L	-1.3303 ppb	18:23:48
2	Zn 213.857†	2456.9	2364.6	11.115 µg/L	11.115 ppb	18:23:48
2	Si 251.611†	684.8	-51.9	19.7 µg/L	19.7 ppb	18:24:26
3	Sc RADIAL	61860.6	61860.6	92.7 %		18:22:52
3	Al 396.153Radial†	2218303.2	2393561.6	518140 µg/L	518140 ppb	18:22:47
3	Ca 317.933Radial†	2489802.0	2686329.3	474040 µg/L	474040 ppb	18:22:47
3	Fe 238.204 Radial†	247111.1	266607.9	185650 µg/L	185650 ppb	18:22:52
3	K 766.490 Radial†	817.8	-59.3	-21.014 µg/L	-21.014 ppb	18:22:52
3	Mg 279.077 IEC†	206373.1	222682.0	507740 µg/L	507740 ppb	18:22:52
3	Na 589.592 Radial†	570.8	118.7	14.567 µg/L	14.567 ppb	18:22:52
3	Sr 421.552†	3580.7	3870.1	-2.7027 µg/L	-2.7027 ppb	18:22:52
3	Sc 361.383	1205733.9	1205733.9	91.074 %		18:23:55
3	Y 371.029	653214.1	653214.1	89.997 %		18:23:55
3	Ag 328.068†	-4803.3	-4591.5	1.5186 µg/L	1.5186 ppb	18:23:55
3	As 188.979†	-52.8	-33.6	4.5801 µg/L	4.5801 ppb	18:24:15
3	B 249.677†	695.1	730.2	21.185 µg/L	21.185 ppb	18:23:55
3	Ba 233.527†	177.8	317.9	1.2050 µg/L	1.2050 ppb	18:24:15
3	Be 313.107†	-901.0	-1381.1	-0.9553 µg/L	-0.9553 ppb	18:23:55
3	Cd 226.502†	400.3	467.5	2.1639 µg/L	2.1639 ppb	18:24:15
3	Co 228.616†	-50.9	64.5	-1.6564 µg/L	-1.6564 ppb	18:24:15
3	Cr 267.716†	109.6	52.1	1.4555 µg/L	1.4555 ppb	18:24:15
3	Cu 324.752†	2176.8	-1770.2	0.1866 µg/L	0.1866 ppb	18:23:55
3	Mn 257.610†	-8032.1	-9200.2	-0.9337 µg/L	-0.9337 ppb	18:23:55
3	Mo 202.031†	-30.0	-38.6	0.9250 µg/L	0.9250 ppb	18:24:15
3	Ni 231.604†	83.8	-68.4	-1.6186 µg/L	-1.6186 ppb	18:24:15
3	P 214.914†	239.1	101.1	48.697 µg/L	48.697 ppb	18:24:15
3	Pb 220.353†	-196.8	-200.0	4.3314 µg/L	4.3314 ppb	18:24:15
3	S 181.975 Axial†	52.0	32.4	6.2584 µg/L	6.2584 ppb	18:24:15
3	Sb 206.836†	62.0	38.8	5.6228 µg/L	5.6228 ppb	18:24:15
3	Se 196.026†	-48.6	-28.9	-0.204 µg/L	-0.204 ppb	18:24:15
3	SiO2 †	676.2	-15.2	20.419 µg/L	20.419 ppb	18:24:15
3	Sn 189.927†	-135.8	-140.8	-31.033 µg/L	-31.033 ppb	18:24:15
3	Ti 334.940†	-6954.6	-8066.2	-0.1076 µg/L	-0.1076 ppb	18:23:55
3	Tl 190.801†	-70.5	-43.8	-12.223 µg/L	-12.223 ppb	18:24:15
3	U 409.014†	560.9	390.3	-1.2700 µg/L	-1.2700 ppb	18:23:55
3	V 292.402†	-510.8	-433.8	-1.2347 µg/L	-1.2347 ppb	18:24:15
3	Zn 213.857†	2456.0	2327.5	10.262 µg/L	10.262 ppb	18:24:15
3	Si 251.611†	687.4	-59.1	19.5 µg/L	19.5 ppb	18:24:31

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1193194.0	90.126	%	0.8476				0.94%
Sc RADIAL	61831.5	92.6	%	0.13				0.14%
Y 371.029	646154.4	89.024	%	0.8690				0.98%
Ag 328.068†	-4614.8	1.3396	µg/L	0.15590	1.3396	ppb	0.15590	11.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2393599.3	518150	µg/L	3822.0	518150	ppb	3822.0	0.74%
QC value within limits for Al 396.153Radial Recovery = 103.63%								
As 188.979†	-34.2	4.2367	µg/L	4.74756	4.2367	ppb	4.74756	112.06%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	714.0	20.179	µg/L	2.3993	20.179	ppb	2.3993	11.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	317.2	1.1983	µg/L	0.09094	1.1983	ppb	0.09094	7.59%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-1330.4	-0.9207	µg/L	0.03785	-0.9207	ppb	0.03785	4.11%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	2688482.8	474420	µg/L	3336.7	474420	ppb	3336.7	0.70%
QC value within limits for Ca 317.933Radial Recovery = 94.88%								
Cd 226.502†	470.9	2.3005	µg/L	0.30840	2.3005	ppb	0.30840	13.41%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	61.2	-1.7585 µg/L	0.08843	-1.7585 ppb	0.08843	5.03%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	54.0	1.5100 µg/L	0.19182	1.5100 ppb	0.19182	12.70%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1772.4	0.1776 µg/L	0.17680	0.1776 ppb	0.17680	99.56%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	266439.5	185540 µg/L	121.8	185540 ppb	121.8	0.07%
QC value within limits for Fe 238.204 Radial Recovery = 92.77%						
K 766.490 Radial†	-66.7	-23.628 µg/L	19.2777	-23.628 ppb	19.2777	81.59%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	222472.6	507260 µg/L	444.9	507260 ppb	444.9	0.09%
QC value within limits for Mg 279.077 IEC Recovery = 101.45%						
Mn 257.610†	-9218.7	-0.9752 µg/L	0.04806	-0.9752 ppb	0.04806	4.93%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-40.3	0.7051 µg/L	1.32018	0.7051 ppb	1.32018	187.22%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	110.7	13.585 µg/L	1.9296	13.585 ppb	1.9296	14.20%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-61.8	-1.1774 µg/L	0.76360	-1.1774 ppb	0.76360	64.86%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	113.0	59.358 µg/L	9.7913	59.358 ppb	9.7913	16.50%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-199.9	4.3654 µg/L	1.10173	4.3654 ppb	1.10173	25.24%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	31.3	3.4939 µg/L	14.12791	3.4939 ppb	14.12791	404.36%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	35.0	3.8325 µg/L	3.29563	3.8325 ppb	3.29563	85.99%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-29.2	-0.480 µg/L	1.5616	-0.480 ppb	1.5616	325.55%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	6.6	22.028 µg/L	1.4201	22.028 ppb	1.4201	6.45%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	0.9	21.6 µg/L	3.46	21.6 ppb	3.46	16.03%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-145.6	-32.329 µg/L	1.4945	-32.329 ppb	1.4945	4.62%
QC value less than the lower limit for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	3865.3	-2.7283 µg/L	0.09307	-2.7283 ppb	0.09307	3.41%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-8183.8	-0.2452 µg/L	0.16845	-0.2452 ppb	0.16845	68.70%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-36.7	-9.5057 µg/L	2.42868	-9.5057 ppb	2.42868	25.55%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	333.2	-4.4589 µg/L	3.16476	-4.4589 ppb	3.16476	70.98%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-440.6	-1.3401 µg/L	0.11058	-1.3401 ppb	0.11058	8.25%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2344.5	10.690 µg/L	0.4265	10.690 ppb	0.4265	3.99%
QC value within limits for Zn 213.857 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 10
Sample ID: ICSAB
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 7/14/2005 18:26:20
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	62865.0	62865.0	94.2	%			18:27:53
1	Al 396.153Radial†	2220534.8	2357689.9	510360	µg/L	510360	ppb	18:27:47
1	Ca 317.933Radial†	2489398.2	2642978.9	466400	µg/L	466400	ppb	18:27:47
1	Fe 238.204 Radial†	249244.7	264613.5	184270	µg/L	184270	ppb	18:27:53
1	K 766.490 Radial†	15318.9	15323.8	5431.6	µg/L	5431.6	ppb	18:27:53
1	Mg 279.077 IEC†	208792.4	221693.2	505500	µg/L	505500	ppb	18:27:53
1	Na 589.592 Radial†	40609.7	42622.0	5223.5	µg/L	5223.5	ppb	18:27:53
1	Sr 421.552†	162022.9	172041.8	503.25	µg/L	503.25	ppb	18:27:53
1	Sc 361.383	1202709.1	1202709.1	90.845	%			18:28:26
1	Y 371.029	651496.4	651496.4	89.760	%			18:28:26
1	Ag 328.068†	28304.3	31839.3	250.23	µg/L	250.23	ppb	18:28:26
1	As 188.979†	755.0	855.5	488.49	µg/L	488.49	ppb	18:28:46
1	B 249.677†	7891.2	8653.3	523.78	µg/L	523.78	ppb	18:28:46
1	Ba 233.527†	39429.3	43525.3	463.91	µg/L	463.91	ppb	18:28:26
1	Be 313.107†	302916.8	333051.1	231.57	µg/L	231.57	ppb	18:28:26
1	Cd 226.502†	10680.3	11784.6	437.51	µg/L	437.51	ppb	18:28:46
1	Co 228.616†	12333.9	13697.1	429.23	µg/L	429.23	ppb	18:28:46
1	Cr 267.716†	15231.7	16698.4	469.50	µg/L	469.50	ppb	18:28:46
1	Cu 324.752†	134706.3	144120.7	505.60	µg/L	505.60	ppb	18:28:26
1	Mn 257.610†	222445.5	244481.4	460.22	µg/L	460.22	ppb	18:28:26
1	Mo 202.031†	3254.9	3577.3	465.90	µg/L	465.90	ppb	18:28:46
1	Ni 231.604†	5790.6	6213.8	416.80	µg/L	416.80	ppb	18:28:46
1	P 214.914†	2634.4	2738.5	2300.7	µg/L	2300.7	ppb	18:28:46
1	Pb 220.353†	1243.7	1385.1	432.27	µg/L	432.27	ppb	18:28:46
1	S 181.975 Axial†	932.3	1001.6	2414.1	µg/L	2414.1	ppb	18:28:46
1	Sb 206.836†	1014.9	1087.9	495.67	µg/L	495.67	ppb	18:28:46
1	Se 196.026†	2257.8	2509.9	2290	µg/L	2290	ppb	18:28:46
1	SiO2 †	128427.9	140612.4	10485	µg/L	10485	ppb	18:28:26
1	Sn 189.927†	1327.7	1469.7	406.77	µg/L	406.77	ppb	18:28:46
1	Ti 334.940†	345793.4	380210.4	485.53	µg/L	485.53	ppb	18:28:26
1	Tl 190.801†	890.3	1013.6	394.24	µg/L	394.24	ppb	18:28:46
1	U 409.014†	7973.8	8551.8	459.41	µg/L	459.41	ppb	18:28:26
1	V 292.402†	30005.1	33155.9	484.34	µg/L	484.34	ppb	18:28:46
1	Zn 213.857†	19792.9	21418.2	472.47	µg/L	472.47	ppb	18:28:46
1	Si 251.611†	127667.5	139719.1	4960	µg/L	4960	ppb	18:29:46
2	Sc RADIAL	62847.9	62847.9	94.2	%			18:28:05
2	Al 396.153Radial†	2216191.3	2353715.4	509500	µg/L	509500	ppb	18:27:59
2	Ca 317.933Radial†	2485372.7	2639419.6	465770	µg/L	465770	ppb	18:27:59
2	Fe 238.204 Radial†	249242.8	264683.1	184320	µg/L	184320	ppb	18:28:05
2	K 766.490 Radial†	15234.3	15238.4	5401.4	µg/L	5401.4	ppb	18:28:05
2	Mg 279.077 IEC†	208945.0	221915.2	506010	µg/L	506010	ppb	18:28:05
2	Na 589.592 Radial†	40650.7	42677.3	5230.2	µg/L	5230.2	ppb	18:28:05
2	Sr 421.552†	161671.6	171715.3	502.29	µg/L	502.29	ppb	18:28:05
2	Sc 361.383	1195128.4	1195128.4	90.273	%			18:28:53
2	Y 371.029	647010.0	647010.0	89.142	%			18:28:53
2	Ag 328.068†	28106.6	31817.9	250.10	µg/L	250.10	ppb	18:28:53
2	As 188.979†	768.1	875.4	499.24	µg/L	499.24	ppb	18:29:13
2	B 249.677†	7912.6	8732.1	528.78	µg/L	528.78	ppb	18:29:13
2	Ba 233.527†	39210.4	43558.2	464.27	µg/L	464.27	ppb	18:28:53
2	Be 313.107†	301070.4	333120.8	231.62	µg/L	231.62	ppb	18:28:53
2	Cd 226.502†	10680.6	11859.6	440.39	µg/L	440.39	ppb	18:29:13
2	Co 228.616†	12287.3	13731.6	430.34	µg/L	430.34	ppb	18:29:13
2	Cr 267.716†	15237.1	16810.8	472.66	µg/L	472.66	ppb	18:29:13
2	Cu 324.752†	133184.8	143375.9	503.01	µg/L	503.01	ppb	18:28:53
2	Mn 257.610†	221015.3	244450.2	460.17	µg/L	460.17	ppb	18:28:53
2	Mo 202.031†	3295.1	3644.5	474.53	µg/L	474.53	ppb	18:29:13
2	Ni 231.604†	5797.9	6262.2	420.04	µg/L	420.04	ppb	18:29:13
2	P 214.914†	2664.9	2790.6	2347.0	µg/L	2347.0	ppb	18:29:13

2	Pb 220.353†	1256.6	1408.1	438.41 µg/L	438.41 ppb	18:29:13
2	S 181.975 Axial†	923.4	998.3	2406.0 µg/L	2406.0 ppb	18:29:13
2	Sb 206.836†	1020.6	1101.3	501.99 µg/L	501.99 ppb	18:29:13
2	Se 196.026†	2269.6	2538.7	2320 µg/L	2320 ppb	18:29:13
2	SiO2 †	126680.4	139573.3	10408 µg/L	10408 ppb	18:28:53
2	Sn 189.927†	1322.6	1473.4	407.77 µg/L	407.77 ppb	18:29:13
2	Ti 334.940†	342720.1	379220.3	484.27 µg/L	484.27 ppb	18:28:53
2	Tl 190.801†	900.7	1031.3	401.01 µg/L	401.01 ppb	18:29:13
2	U 409.014†	8018.0	8656.4	465.29 µg/L	465.29 ppb	18:28:53
2	V 292.402†	30015.9	33377.3	487.60 µg/L	487.60 ppb	18:29:13
2	Zn 213.857†	19794.0	21557.7	475.85 µg/L	475.85 ppb	18:29:13
2	Si 251.611†	127040.3	139915.7	4970 µg/L	4970 ppb	18:29:51
3	Sc RADIAL	61941.1	61941.1	92.8 %		18:28:17
3	Al 396.153Radial†	2219429.9	2391663.4	517710 µg/L	517710 ppb	18:28:11
3	Ca 317.933Radial†	2495214.3	2688668.5	474460 µg/L	474460 ppb	18:28:11
3	Fe 238.204 Radial†	246461.8	265561.5	184930 µg/L	184930 ppb	18:28:17
3	K 766.490 Radial†	15068.2	15296.2	5421.9 µg/L	5421.9 ppb	18:28:17
3	Mg 279.077 IEC†	206491.7	222520.2	507390 µg/L	507390 ppb	18:28:17
3	Na 589.592 Radial†	40020.0	42629.6	5224.4 µg/L	5224.4 ppb	18:28:17
3	Sr 421.552†	159277.2	171648.6	501.83 µg/L	501.83 ppb	18:28:17
3	Sc 361.383	1191852.7	1191852.7	90.025 %		18:29:20
3	Y 371.029	645505.3	645505.3	88.935 %		18:29:20
3	Ag 328.068†	28021.0	31808.4	250.15 µg/L	250.15 ppb	18:29:20
3	As 188.979†	767.8	877.3	500.38 µg/L	500.38 ppb	18:29:40
3	B 249.677†	7938.2	8784.7	532.02 µg/L	532.02 ppb	18:29:40
3	Ba 233.527†	39024.4	43470.9	463.33 µg/L	463.33 ppb	18:29:20
3	Be 313.107†	299811.2	332638.6	231.28 µg/L	231.28 ppb	18:29:20
3	Cd 226.502†	10719.9	11935.8	443.26 µg/L	443.26 ppb	18:29:40
3	Co 228.616†	12398.5	13892.6	435.42 µg/L	435.42 ppb	18:29:40
3	Cr 267.716†	15336.5	16967.5	477.08 µg/L	477.08 ppb	18:29:40
3	Cu 324.752†	133661.9	144311.4	506.28 µg/L	506.28 ppb	18:29:20
3	Mn 257.610†	220133.2	244143.2	459.67 µg/L	459.67 ppb	18:29:20
3	Mo 202.031†	3283.9	3642.1	474.25 µg/L	474.25 ppb	18:29:40
3	Ni 231.604†	5810.5	6293.9	422.19 µg/L	422.19 ppb	18:29:40
3	P 214.914†	2656.4	2789.3	2347.0 µg/L	2347.0 ppb	18:29:40
3	Pb 220.353†	1267.2	1423.7	443.52 µg/L	443.52 ppb	18:29:40
3	S 181.975 Axial†	924.7	1002.5	2415.3 µg/L	2415.3 ppb	18:29:40
3	Sb 206.836†	1030.9	1115.8	508.50 µg/L	508.50 ppb	18:29:40
3	Se 196.026†	2289.3	2567.5	2350 µg/L	2350 ppb	18:29:40
3	SiO2 †	126336.8	139577.3	10409 µg/L	10409 ppb	18:29:20
3	Sn 189.927†	1329.1	1484.7	410.86 µg/L	410.86 ppb	18:29:40
3	Ti 334.940†	341708.6	379140.1	484.36 µg/L	484.36 ppb	18:29:20
3	Tl 190.801†	910.4	1044.8	406.17 µg/L	406.17 ppb	18:29:40
3	U 409.014†	7820.9	8461.9	454.32 µg/L	454.32 ppb	18:29:20
3	V 292.402†	30165.4	33634.8	491.29 µg/L	491.29 ppb	18:29:40
3	Zn 213.857†	19887.1	21721.3	479.49 µg/L	479.49 ppb	18:29:40
3	Si 251.611†	126914.8	140163.1	4980 µg/L	4980 ppb	18:29:56

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1196563.4	90.381	%	0.4206				0.47%
Sc RADIAL	62551.3	93.7	%	0.79				0.84%
Y 371.029	648003.9	89.279	%	0.4294				0.48%
Ag 328.068†	31821.9	250.16	µg/L	0.065	250.16	ppb	0.065	0.03%
QC value within limits for Ag 328.068 Recovery = 100.06%								
Al 396.153Radial†	2367689.6	512520	µg/L	4514.9	512520	ppb	4514.9	0.88%
QC value within limits for Al 396.153Radial Recovery = 102.50%								
As 188.979†	869.4	496.04	µg/L	6.560	496.04	ppb	6.560	1.32%
QC value within limits for As 188.979 Recovery = 99.21%								
B 249.677†	8723.4	528.20	µg/L	4.153	528.20	ppb	4.153	0.79%
QC value within limits for B 249.677 Recovery = 105.64%								
Ba 233.527†	43518.2	463.84	µg/L	0.475	463.84	ppb	0.475	0.10%
QC value within limits for Ba 233.527 Recovery = 92.77%								
Be 313.107†	332936.8	231.49	µg/L	0.182	231.49	ppb	0.182	0.08%
QC value within limits for Be 313.107 Recovery = 92.59%								
Ca 317.933Radial†	2657022.3	468870	µg/L	4846.4	468870	ppb	4846.4	1.03%
QC value within limits for Ca 317.933Radial Recovery = 93.77%								
Cd 226.502†	11860.0	440.39	µg/L	2.876	440.39	ppb	2.876	0.65%
QC value within limits for Cd 226.502 Recovery = 88.08%								

Co 228.616†	13773.8	431.66 µg/L	3.300	431.66 ppb	3.300	0.76%
QC value within limits for Co 228.616 Recovery = 86.33%						
Cr 267.716†	16825.6	473.08 µg/L	3.804	473.08 ppb	3.804	0.80%
QC value within limits for Cr 267.716 Recovery = 94.62%						
Cu 324.752†	143936.0	504.96 µg/L	1.728	504.96 ppb	1.728	0.34%
QC value within limits for Cu 324.752 Recovery = 100.99%						
Fe 238.204 Radial†	264952.7	184510 µg/L	368.0	184510 ppb	368.0	0.20%
QC value within limits for Fe 238.204 Radial Recovery = 92.25%						
K 766.490 Radial†	15286.1	5418.3 µg/L	15.45	5418.3 ppb	15.45	0.29%
QC value within limits for K 766.490 Radial Recovery = 108.37%						
Mg 279.077 IEC†	222042.9	506300 µg/L	976.2	506300 ppb	976.2	0.19%
QC value within limits for Mg 279.077 IEC Recovery = 101.26%						
Mn 257.610†	244358.3	460.02 µg/L	0.307	460.02 ppb	0.307	0.07%
QC value within limits for Mn 257.610 Recovery = 92.00%						
Mo 202.031†	3621.3	471.56 µg/L	4.906	471.56 ppb	4.906	1.04%
QC value within limits for Mo 202.031 Recovery = 94.31%						
Na 589.592 Radial†	42643.0	5226.0 µg/L	3.66	5226.0 ppb	3.66	0.07%
QC value within limits for Na 589.592 Radial Recovery = 104.52%						
Ni 231.604†	6256.6	419.68 µg/L	2.715	419.68 ppb	2.715	0.65%
QC value within limits for Ni 231.604 Recovery = 83.94%						
P 214.914†	2772.8	2331.6 µg/L	26.71	2331.6 ppb	26.71	1.15%
QC value within limits for P 214.914 Recovery = 93.26%						
Pb 220.353†	1405.6	438.07 µg/L	5.636	438.07 ppb	5.636	1.29%
QC value within limits for Pb 220.353 Recovery = 87.61%						
S 181.975 Axial†	1000.8	2411.8 µg/L	5.03	2411.8 ppb	5.03	0.21%
QC value within limits for S 181.975 Axial Recovery = 96.47%						
Sb 206.836†	1101.6	502.05 µg/L	6.413	502.05 ppb	6.413	1.28%
QC value within limits for Sb 206.836 Recovery = 100.41%						
Se 196.026†	2538.7	2320 µg/L	26.3	2320 ppb	26.3	1.13%
QC value within limits for Se 196.026 Recovery = 92.81%						
SiO2 †	139921.0	10434 µg/L	44.5	10434 ppb	44.5	0.43%
QC value within limits for SiO2 Recovery = 97.56%						
Si 251.611†	139932.6	4970 µg/L	7.9	4970 ppb	7.9	0.16%
QC value within limits for Si 251.611 Recovery = 99.39%						
Sn 189.927†	1475.9	408.47 µg/L	2.130	408.47 ppb	2.130	0.52%
QC value within limits for Sn 189.927 Recovery = 81.69%						
Sr 421.552†	171801.9	502.46 µg/L	0.728	502.46 ppb	0.728	0.14%
QC value within limits for Sr 421.552 Recovery = 100.49%						
Ti 334.940†	379523.6	484.72 µg/L	0.702	484.72 ppb	0.702	0.14%
QC value within limits for Ti 334.940 Recovery = 96.94%						
Tl 190.801†	1029.9	400.47 µg/L	5.981	400.47 ppb	5.981	1.49%
QC value within limits for Tl 190.801 Recovery = 80.09%						
U 409.014†	8556.7	459.67 µg/L	5.488	459.67 ppb	5.488	1.19%
QC value within limits for U 409.014 Recovery = 91.93%						
V 292.402†	33389.3	487.74 µg/L	3.478	487.74 ppb	3.478	0.71%
QC value within limits for V 292.402 Recovery = 97.55%						
Zn 213.857†	21565.7	475.94 µg/L	3.510	475.94 ppb	3.510	0.74%
QC value within limits for Zn 213.857 Recovery = 95.19%						

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCV
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 7/14/2005 18:31:45
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	67133.1	67133.1	101	%			18:33:11
1	Al 396.153Radial†	23163.3	22963.6	4946.5	µg/L	4946.5	ppb	18:33:11
1	Ca 317.933Radial†	28509.9	28090.5	4959.8	µg/L	4959.8	ppb	18:33:31
1	Fe 238.204 Radial†	7494.5	7417.9	5171.5	µg/L	5171.5	ppb	18:33:31
1	K 766.490 Radial†	15173.2	14144.8	5013.7	µg/L	5013.7	ppb	18:33:11
1	Mg 279.077 IEC†	2237.5	2222.7	5078.8	µg/L	5078.8	ppb	18:33:31
1	Na 589.592 Radial†	82840.8	81870.7	10035	µg/L	10035	ppb	18:33:11
1	Sr 421.552†	167677.5	166726.6	501.23	µg/L	501.23	ppb	18:33:11
1	Sc 361.383	1351807.5	1351807.5	102.11	%			18:34:31
1	Y 371.029	739600.8	739600.8	101.90	%			18:34:31
1	Ag 328.068†	73981.8	73137.8	499.53	µg/L	499.53	ppb	18:34:36
1	As 188.979†	901.4	907.3	494.89	µg/L	494.89	ppb	18:34:56
1	B 249.677†	8147.0	7945.8	503.12	µg/L	503.12	ppb	18:34:36
1	Ba 233.527†	47374.1	46519.1	498.08	µg/L	498.08	ppb	18:34:36
1	Be 313.107†	738114.4	722490.4	502.17	µg/L	502.17	ppb	18:34:31
1	Cd 226.502†	13354.1	13106.6	503.62	µg/L	503.62	ppb	18:34:36
1	Co 228.616†	16015.3	15805.1	499.51	µg/L	499.51	ppb	18:34:36
1	Cr 267.716†	18170.0	17726.8	498.42	µg/L	498.42	ppb	18:34:36
1	Cu 324.752†	151020.6	143743.7	498.14	µg/L	498.14	ppb	18:34:31
1	Mn 257.610†	282044.7	275843.4	502.14	µg/L	502.14	ppb	18:34:31
1	Mo 202.031†	4047.5	3958.3	509.16	µg/L	509.16	ppb	18:34:56
1	Ni 231.604†	7979.4	7654.3	509.77	µg/L	509.77	ppb	18:34:56
1	P 214.914†	3021.9	2798.1	2392.7	µg/L	2392.7	ppb	18:34:56
1	Pb 220.353†	1857.4	1835.2	497.05	µg/L	497.05	ppb	18:34:56
1	S 181.975 Axial†	429.1	395.7	978.72	µg/L	978.72	ppb	18:34:56
1	Sb 206.836†	1088.1	1036.3	484.03	µg/L	484.03	ppb	18:34:56
1	Se 196.026†	541.1	554.5	502	µg/L	502	ppb	18:34:56
1	SiO2 †	74164.0	71875.8	5349.1	µg/L	5349.1	ppb	18:34:36
1	Sn 189.927†	1825.5	1796.1	488.35	µg/L	488.35	ppb	18:34:56
1	Ti 334.940†	406153.0	397341.4	497.22	µg/L	497.22	ppb	18:34:31
1	Tl 190.801†	1291.0	1297.9	498.53	µg/L	498.53	ppb	18:34:56
1	U 409.014†	9389.9	8970.5	505.33	µg/L	505.33	ppb	18:34:36
1	V 292.402†	35332.9	34730.8	502.57	µg/L	502.57	ppb	18:34:36
1	Zn 213.857†	21380.9	20570.4	496.49	µg/L	496.49	ppb	18:34:36
1	Si 251.611†	72505.4	70195.2	2480	µg/L	2480	ppb	18:36:05
2	Sc RADIAL	66743.8	66743.8	100.0	%			18:33:36
2	Al 396.153Radial†	23076.8	23011.5	4956.6	µg/L	4956.6	ppb	18:33:36
2	Ca 317.933Radial†	28692.5	28438.4	5021.1	µg/L	5021.1	ppb	18:33:57
2	Fe 238.204 Radial†	7533.8	7500.6	5229.1	µg/L	5229.1	ppb	18:33:57
2	K 766.490 Radial†	15078.4	14138.0	5011.3	µg/L	5011.3	ppb	18:33:36
2	Mg 279.077 IEC†	2262.1	2260.3	5164.8	µg/L	5164.8	ppb	18:33:57
2	Na 589.592 Radial†	82263.8	81774.0	10023	µg/L	10023	ppb	18:33:36
2	Sr 421.552†	166725.9	166747.2	501.29	µg/L	501.29	ppb	18:33:36
2	Sc 361.383	1342710.0	1342710.0	101.42	%			18:35:02
2	Y 371.029	734194.0	734194.0	101.15	%			18:35:02
2	Ag 328.068†	73275.6	72932.4	498.14	µg/L	498.14	ppb	18:35:08
2	As 188.979†	914.4	926.1	505.03	µg/L	505.03	ppb	18:35:28
2	B 249.677†	8040.6	7895.0	499.91	µg/L	499.91	ppb	18:35:08
2	Ba 233.527†	46943.1	46408.4	496.90	µg/L	496.90	ppb	18:35:08
2	Be 313.107†	733688.8	723024.6	502.54	µg/L	502.54	ppb	18:35:02
2	Cd 226.502†	13208.0	13051.2	501.49	µg/L	501.49	ppb	18:35:08
2	Co 228.616†	15902.4	15800.1	499.36	µg/L	499.36	ppb	18:35:08
2	Cr 267.716†	18010.1	17689.7	497.38	µg/L	497.38	ppb	18:35:08
2	Cu 324.752†	150268.3	144004.0	499.05	µg/L	499.05	ppb	18:35:02
2	Mn 257.610†	280306.2	276000.8	502.43	µg/L	502.43	ppb	18:35:02
2	Mo 202.031†	4071.6	4009.0	515.67	µg/L	515.67	ppb	18:35:28
2	Ni 231.604†	7999.2	7726.8	514.61	µg/L	514.61	ppb	18:35:28
2	P 214.914†	3022.9	2819.1	2411.1	µg/L	2411.1	ppb	18:35:28

2	Pb 220.353†	1868.7	1858.6	503.42 µg/L	503.42 ppb	18:35:28
2	S 181.975 Axial†	428.2	397.6	983.61 µg/L	983.61 ppb	18:35:28
2	Sb 206.836†	1096.7	1052.0	491.42 µg/L	491.42 ppb	18:35:28
2	Se 196.026†	542.1	559.0	506 µg/L	506 ppb	18:35:28
2	SiO2 †	73259.1	71475.8	5319.4 µg/L	5319.4 ppb	18:35:08
2	Sn 189.927†	1836.2	1818.7	494.50 µg/L	494.50 ppb	18:35:28
2	Ti 334.940†	403885.2	397800.5	497.80 µg/L	497.80 ppb	18:35:02
2	Tl 190.801†	1293.2	1308.7	502.68 µg/L	502.68 ppb	18:35:28
2	U 409.014†	9203.5	8849.1	498.51 µg/L	498.51 ppb	18:35:08
2	V 292.402†	35031.7	34668.3	501.73 µg/L	501.73 ppb	18:35:08
2	Zn 213.857†	21186.5	20520.6	495.24 µg/L	495.24 ppb	18:35:08
2	Si 251.611†	71513.0	69697.8	2460 µg/L	2460 ppb	18:36:10
3	Sc RADIAL	68162.8	68162.8	102 %		18:34:02
3	Al 396.153Radial†	23559.6	23003.8	4955.2 µg/L	4955.2 ppb	18:34:02
3	Ca 317.933Radial†	28761.9	27909.0	4927.7 µg/L	4927.7 ppb	18:34:22
3	Fe 238.204 Radial†	7556.7	7366.2	5135.5 µg/L	5135.5 ppb	18:34:22
3	K 766.490 Radial†	15371.4	14111.0	5001.8 µg/L	5001.8 ppb	18:34:02
3	Mg 279.077 IEC†	2260.1	2211.2	5052.7 µg/L	5052.7 ppb	18:34:22
3	Na 589.592 Radial†	84077.5	81837.3	10031 µg/L	10031 ppb	18:34:02
3	Sr 421.552†	170314.5	166790.3	501.42 µg/L	501.42 ppb	18:34:02
3	Sc 361.383	1353111.2	1353111.2	102.21 %		18:35:34
3	Y 371.029	740116.1	740116.1	101.97 %		18:35:34
3	Ag 328.068†	73504.5	72601.0	495.86 µg/L	495.86 ppb	18:35:39
3	As 188.979†	911.6	916.3	499.74 µg/L	499.74 ppb	18:35:59
3	B 249.677†	8038.2	7831.6	495.90 µg/L	495.90 ppb	18:35:39
3	Ba 233.527†	47121.1	46226.8	494.95 µg/L	494.95 ppb	18:35:39
3	Be 313.107†	739807.1	723450.1	502.83 µg/L	502.83 ppb	18:35:34
3	Cd 226.502†	13265.1	13006.9	499.80 µg/L	499.80 ppb	18:35:39
3	Co 228.616†	15932.3	15708.8	496.46 µg/L	496.46 ppb	18:35:39
3	Cr 267.716†	18049.8	17592.1	494.64 µg/L	494.64 ppb	18:35:39
3	Cu 324.752†	151869.7	144432.0	500.53 µg/L	500.53 ppb	18:35:34
3	Mn 257.610†	282467.1	275990.5	502.40 µg/L	502.40 ppb	18:35:34
3	Mo 202.031†	4063.7	3970.4	510.70 µg/L	510.70 ppb	18:35:59
3	Ni 231.604†	7994.4	7661.4	510.25 µg/L	510.25 ppb	18:35:59
3	P 214.914†	3027.1	2800.4	2394.4 µg/L	2394.4 ppb	18:35:59
3	Pb 220.353†	1866.6	1842.4	499.00 µg/L	499.00 ppb	18:35:59
3	S 181.975 Axial†	433.4	399.5	988.16 µg/L	988.16 ppb	18:35:59
3	Sb 206.836†	1091.1	1038.2	484.98 µg/L	484.98 ppb	18:35:59
3	Se 196.026†	543.6	556.4	504 µg/L	504 ppb	18:35:59
3	SiO2 †	73574.6	71229.2	5301.0 µg/L	5301.0 ppb	18:35:39
3	Sn 189.927†	1838.2	1806.8	491.25 µg/L	491.25 ppb	18:35:59
3	Ti 334.940†	407934.6	398701.3	498.93 µg/L	498.93 ppb	18:35:34
3	Tl 190.801†	1298.9	1304.5	501.07 µg/L	501.07 ppb	18:35:59
3	U 409.014†	9273.6	8847.9	498.44 µg/L	498.44 ppb	18:35:39
3	V 292.402†	35150.2	34518.7	499.54 µg/L	499.54 ppb	18:35:39
3	Zn 213.857†	21250.5	20422.7	492.89 µg/L	492.89 ppb	18:35:39
3	Si 251.611†	71708.0	69346.6	2450 µg/L	2450 ppb	18:36:16

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1349209.5	101.91	%	0.428				0.42%
Sc RADIAL	67346.6	101	%	1.1				1.09%
Y 371.029	737970.3	101.67	%	0.452				0.44%
Ag 328.068†	72890.4	497.84	µg/L	1.849	497.84	ppb	1.849	0.37%
QC value within limits for Ag 328.068 Recovery = 99.57%								
Al 396.153Radial†	22993.0	4952.8	µg/L	5.44	4952.8	ppb	5.44	0.11%
QC value within limits for Al 396.153Radial Recovery = 99.06%								
As 188.979†	916.6	499.89	µg/L	5.070	499.89	ppb	5.070	1.01%
QC value within limits for As 188.979 Recovery = 99.98%								
B 249.677†	7890.8	499.64	µg/L	3.617	499.64	ppb	3.617	0.72%
QC value within limits for B 249.677 Recovery = 99.93%								
Ba 233.527†	46384.8	496.64	µg/L	1.580	496.64	ppb	1.580	0.32%
QC value within limits for Ba 233.527 Recovery = 99.33%								
Be 313.107†	722988.4	502.51	µg/L	0.333	502.51	ppb	0.333	0.07%
QC value within limits for Be 313.107 Recovery = 100.50%								
Ca 317.933Radial†	28145.9	4969.6	µg/L	47.47	4969.6	ppb	47.47	0.96%
QC value within limits for Ca 317.933Radial Recovery = 99.39%								
Cd 226.502†	13054.9	501.64	µg/L	1.918	501.64	ppb	1.918	0.38%
QC value within limits for Cd 226.502 Recovery = 100.33%								

Co 228.616†	15771.3	498.44 µg/L	1.717	498.44 ppb	1.717	0.34%
QC value within limits for Co 228.616 Recovery = 99.69%						
Cr 267.716†	17669.5	496.81 µg/L	1.957	496.81 ppb	1.957	0.39%
QC value within limits for Cr 267.716 Recovery = 99.36%						
Cu 324.752†	144059.9	499.24 µg/L	1.206	499.24 ppb	1.206	0.24%
QC value within limits for Cu 324.752 Recovery = 99.85%						
Fe 238.204 Radial†	7428.2	5178.7 µg/L	47.23	5178.7 ppb	47.23	0.91%
QC value within limits for Fe 238.204 Radial Recovery = 103.57%						
K 766.490 Radial†	14131.3	5008.9 µg/L	6.34	5008.9 ppb	6.34	0.13%
QC value within limits for K 766.490 Radial Recovery = 100.18%						
Mg 279.077 IEC†	2231.4	5098.7 µg/L	58.65	5098.7 ppb	58.65	1.15%
QC value within limits for Mg 279.077 IEC Recovery = 101.97%						
Mn 257.610†	275944.9	502.32 µg/L	0.161	502.32 ppb	0.161	0.03%
QC value within limits for Mn 257.610 Recovery = 100.46%						
Mo 202.031†	3979.2	511.84 µg/L	3.402	511.84 ppb	3.402	0.66%
QC value within limits for Mo 202.031 Recovery = 102.37%						
Na 589.592 Radial†	81827.3	10029 µg/L	6.0	10029 ppb	6.0	0.06%
QC value within limits for Na 589.592 Radial Recovery = 100.29%						
Ni 231.604†	7680.8	511.54 µg/L	2.667	511.54 ppb	2.667	0.52%
QC value within limits for Ni 231.604 Recovery = 102.31%						
P 214.914†	2805.8	2399.4 µg/L	10.17	2399.4 ppb	10.17	0.42%
QC value within limits for P 214.914 Recovery = 95.98%						
Pb 220.353†	1845.4	499.82 µg/L	3.261	499.82 ppb	3.261	0.65%
QC value within limits for Pb 220.353 Recovery = 99.96%						
S 181.975 Axial†	397.6	983.50 µg/L	4.725	983.50 ppb	4.725	0.48%
QC value within limits for S 181.975 Axial Recovery = 98.35%						
Sb 206.836†	1042.2	486.81 µg/L	4.017	486.81 ppb	4.017	0.83%
QC value within limits for Sb 206.836 Recovery = 97.36%						
Se 196.026†	556.6	504 µg/L	2.0	504 ppb	2.0	0.40%
QC value within limits for Se 196.026 Recovery = 100.78%						
SiO2 †	71526.9	5323.2 µg/L	24.29	5323.2 ppb	24.29	0.46%
QC value within limits for SiO2 Recovery = 99.55%						
Si 251.611†	69746.5	2470 µg/L	15.1	2470 ppb	15.1	0.61%
QC value within limits for Si 251.611 Recovery = 98.66%						
Sn 189.927†	1807.2	491.37 µg/L	3.080	491.37 ppb	3.080	0.63%
QC value within limits for Sn 189.927 Recovery = 98.27%						
Sr 421.552†	166754.7	501.31 µg/L	0.098	501.31 ppb	0.098	0.02%
QC value within limits for Sr 421.552 Recovery = 100.26%						
Ti 334.940†	397947.7	497.98 µg/L	0.868	497.98 ppb	0.868	0.17%
QC value within limits for Ti 334.940 Recovery = 99.60%						
Tl 190.801†	1303.7	500.76 µg/L	2.090	500.76 ppb	2.090	0.42%
QC value within limits for Tl 190.801 Recovery = 100.15%						
U 409.014†	8889.2	500.76 µg/L	3.960	500.76 ppb	3.960	0.79%
QC value within limits for U 409.014 Recovery = 100.15%						
V 292.402†	34639.3	501.28 µg/L	1.566	501.28 ppb	1.566	0.31%
QC value within limits for V 292.402 Recovery = 100.26%						
Zn 213.857†	20504.6	494.87 µg/L	1.828	494.87 ppb	1.828	0.37%
QC value within limits for Zn 213.857 Recovery = 98.97%						

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 7/14/2005 18:38:03
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	64935.1	64935.1	97.3	%			18:39:27
1	Al 396.153Radial†	105.1	40.7	8.7698	µg/L	8.7698	ppb	18:39:27
1	Ca 317.933Radial†	298.3	50.0	8.8279	µg/L	8.8279	ppb	18:39:47
1	Fe 238.204 Radial†	42.3	9.6	6.7007	µg/L	6.7007	ppb	18:39:47
1	K 766.490 Radial†	949.1	33.8	11.987	µg/L	11.987	ppb	18:39:27
1	Mg 279.077 IEC†	3.6	1.6	3.7532	µg/L	3.7532	ppb	18:39:47
1	Na 589.592 Radial†	494.2	10.8	1.3190	µg/L	1.3190	ppb	18:39:27
1	Sr 421.552†	-36.8	-31.5	-0.0948	µg/L	-0.0948	ppb	18:39:27
1	Sc 361.383	1315599.0	1315599.0	99.372	%			18:40:45
1	Y 371.029	721382.2	721382.2	99.388	%			18:40:45
1	Ag 328.068†	-703.6	-25.4	-0.1722	µg/L	-0.1722	ppb	18:40:50
1	As 188.979†	-23.6	0.7	0.3861	µg/L	0.3861	ppb	18:41:11
1	B 249.677†	153.1	121.0	7.6503	µg/L	7.6503	ppb	18:41:11
1	Ba 233.527†	-121.4	0.4	0.0046	µg/L	0.0046	ppb	18:41:11
1	Be 313.107†	437.3	48.2	0.0338	µg/L	0.0338	ppb	18:40:50
1	Cd 226.502†	-24.6	3.3	0.1268	µg/L	0.1268	ppb	18:41:11
1	Co 228.616†	-119.7	-0.1	-0.0023	µg/L	-0.0023	ppb	18:41:11
1	Cr 267.716†	57.5	-10.4	-0.2934	µg/L	-0.2934	ppb	18:41:11
1	Cu 324.752†	4569.3	437.8	1.5167	µg/L	1.5167	ppb	18:40:50
1	Mn 257.610†	396.8	18.5	0.0342	µg/L	0.0342	ppb	18:41:11
1	Mo 202.031†	11.5	6.0	0.7714	µg/L	0.7714	ppb	18:41:11
1	Ni 231.604†	156.2	-3.3	-0.2146	µg/L	-0.2146	ppb	18:41:11
1	P 214.914†	162.0	1.5	1.0936	µg/L	1.0936	ppb	18:41:11
1	Pb 220.353†	-19.6	-3.7	-0.9882	µg/L	-0.9882	ppb	18:41:11
1	S 181.975 Axial†	26.2	1.7	4.3557	µg/L	4.3557	ppb	18:41:11
1	Sb 206.836†	42.8	13.8	6.4454	µg/L	6.4454	ppb	18:41:11
1	Se 196.026†	-26.5	-2.2	-1.98	µg/L	-1.98	ppb	18:41:11
1	SiO2 †	784.2	31.5	2.3401	µg/L	2.3401	ppb	18:41:11
1	Sn 189.927†	2.0	10.3	2.7923	µg/L	2.7923	ppb	18:41:11
1	Ti 334.940†	498.2	71.4	0.0889	µg/L	0.0889	ppb	18:40:50
1	Tl 190.801†	-27.7	5.7	2.1739	µg/L	2.1739	ppb	18:41:11
1	U 409.014†	250.9	26.9	1.5094	µg/L	1.5094	ppb	18:40:50
1	V 292.402†	-137.8	-11.7	-0.1580	µg/L	-0.1580	ppb	18:41:11
1	Zn 213.857†	378.2	11.4	0.2746	µg/L	0.2746	ppb	18:41:11
1	Si 251.611†	767.0	-42.1	-1.49	µg/L	-1.49	ppb	18:42:33
2	Sc RADIAL	65245.9	65245.9	97.7	%			18:39:52
2	Al 396.153Radial†	61.5	-4.5	-1.0234	µg/L	-1.0234	ppb	18:39:52
2	Ca 317.933Radial†	295.7	45.8	8.0855	µg/L	8.0855	ppb	18:40:12
2	Fe 238.204 Radial†	45.8	13.0	9.0594	µg/L	9.0594	ppb	18:40:12
2	K 766.490 Radial†	1013.4	95.0	33.689	µg/L	33.689	ppb	18:39:52
2	Mg 279.077 IEC†	7.6	5.8	13.214	µg/L	13.214	ppb	18:40:12
2	Na 589.592 Radial†	440.4	-46.7	-5.7232	µg/L	-5.7232	ppb	18:39:52
2	Sr 421.552†	-8.4	-2.3	-0.0071	µg/L	-0.0071	ppb	18:39:52
2	Sc 361.383	1323912.4	1323912.4	100.00	%			18:41:16
2	Y 371.029	725921.2	725921.2	100.01	%			18:41:16
2	Ag 328.068†	-641.2	41.4	0.2838	µg/L	0.2838	ppb	18:41:21
2	As 188.979†	-16.7	7.7	4.1563	µg/L	4.1563	ppb	18:41:41
2	B 249.677†	149.4	116.3	7.3569	µg/L	7.3569	ppb	18:41:41
2	Ba 233.527†	-110.9	11.7	0.1254	µg/L	0.1254	ppb	18:41:41
2	Be 313.107†	519.3	127.4	0.0887	µg/L	0.0887	ppb	18:41:21
2	Cd 226.502†	-26.8	1.3	0.0479	µg/L	0.0479	ppb	18:41:41
2	Co 228.616†	-127.9	-7.5	-0.2366	µg/L	-0.2366	ppb	18:41:41
2	Cr 267.716†	61.1	-7.1	-0.2012	µg/L	-0.2012	ppb	18:41:41
2	Cu 324.752†	4629.9	469.5	1.6270	µg/L	1.6270	ppb	18:41:21
2	Mn 257.610†	389.1	8.2	0.0158	µg/L	0.0158	ppb	18:41:41
2	Mo 202.031†	14.5	8.9	1.1407	µg/L	1.1407	ppb	18:41:41
2	Ni 231.604†	150.9	-9.5	-0.6289	µg/L	-0.6289	ppb	18:41:41
2	P 214.914†	168.8	7.4	6.2491	µg/L	6.2491	ppb	18:41:41

2	Pb 220.353†	-9.4	6.6	1.7910 µg/L	1.7910 ppb	18:41:41
2	S 181.975 Axial†	25.6	1.0	2.3872 µg/L	2.3872 ppb	18:41:41
2	Sb 206.836†	41.3	12.0	5.5969 µg/L	5.5969 ppb	18:41:41
2	Se 196.026†	-18.4	6.1	5.48 µg/L	5.48 ppb	18:41:41
2	SiO2 †	792.5	34.8	2.5938 µg/L	2.5938 ppb	18:41:41
2	Sn 189.927†	-5.9	2.4	0.6508 µg/L	0.6508 ppb	18:41:41
2	Ti 334.940†	516.8	86.8	0.1085 µg/L	0.1085 ppb	18:41:21
2	Tl 190.801†	-35.2	-1.6	-0.6198 µg/L	-0.6198 ppb	18:41:41
2	U 409.014†	239.6	14.0	0.7877 µg/L	0.7877 ppb	18:41:21
2	V 292.402†	-115.0	12.0	0.1833 µg/L	0.1833 ppb	18:41:41
2	Zn 213.857†	382.9	13.6	0.3311 µg/L	0.3311 ppb	18:41:41
2	Si 251.611†	773.4	-40.5	-1.43 µg/L	-1.43 ppb	18:42:53
3	Sc RADIAL	65697.3	65697.3	98.4 %		18:40:17
3	Al 396.153Radial†	99.1	33.3	7.1883 µg/L	7.1883 ppb	18:40:17
3	Ca 317.933Radial†	298.6	46.7	8.2359 µg/L	8.2359 ppb	18:40:37
3	Fe 238.204 Radial†	48.2	15.1	10.547 µg/L	10.547 ppb	18:40:37
3	K 766.490 Radial†	884.1	-43.5	-15.423 µg/L	-15.423 ppb	18:40:17
3	Mg 279.077 IEC†	11.3	9.4	21.496 µg/L	21.496 ppb	18:40:37
3	Na 589.592 Radial†	477.4	-12.2	-1.4955 µg/L	-1.4955 ppb	18:40:17
3	Sr 421.552†	8.8	15.3	0.0458 µg/L	0.0458 ppb	18:40:17
3	Sc 361.383	1318334.3	1318334.3	99.579 %		18:41:47
3	Y 371.029	722595.0	722595.0	99.556 %		18:41:47
3	Ag 328.068†	-695.7	-16.0	-0.1068 µg/L	-0.1068 ppb	18:41:52
3	As 188.979†	-22.6	1.7	0.9317 µg/L	0.9317 ppb	18:42:12
3	B 249.677†	137.5	105.0	6.6407 µg/L	6.6407 ppb	18:42:12
3	Ba 233.527†	-121.1	1.0	0.0111 µg/L	0.0111 ppb	18:42:12
3	Be 313.107†	412.8	22.7	0.0158 µg/L	0.0158 ppb	18:41:52
3	Cd 226.502†	-28.6	-0.6	-0.0248 µg/L	-0.0248 ppb	18:42:12
3	Co 228.616†	-122.7	-2.9	-0.0902 µg/L	-0.0902 ppb	18:42:12
3	Cr 267.716†	60.4	-7.6	-0.2136 µg/L	-0.2136 ppb	18:42:12
3	Cu 324.752†	4522.5	381.2	1.3220 µg/L	1.3220 ppb	18:41:52
3	Mn 257.610†	399.9	20.7	0.0387 µg/L	0.0387 ppb	18:42:12
3	Mo 202.031†	9.0	3.4	0.4393 µg/L	0.4393 ppb	18:42:12
3	Ni 231.604†	161.9	2.1	0.1438 µg/L	0.1438 ppb	18:42:12
3	P 214.914†	162.7	2.0	1.5151 µg/L	1.5151 ppb	18:42:12
3	Pb 220.353†	-18.1	-2.1	-0.5718 µg/L	-0.5718 ppb	18:42:12
3	S 181.975 Axial†	25.1	0.5	1.3435 µg/L	1.3435 ppb	18:42:12
3	Sb 206.836†	37.8	8.6	4.0334 µg/L	4.0334 ppb	18:42:12
3	Se 196.026†	-22.2	2.2	2.00 µg/L	2.00 ppb	18:42:12
3	SiO2 †	789.9	35.6	2.6466 µg/L	2.6466 ppb	18:42:12
3	Sn 189.927†	0.3	8.6	2.3366 µg/L	2.3366 ppb	18:42:12
3	Ti 334.940†	516.1	88.3	0.1108 µg/L	0.1108 ppb	18:41:52
3	Tl 190.801†	-35.8	-2.3	-0.8946 µg/L	-0.8946 ppb	18:42:12
3	U 409.014†	225.6	1.0	0.0518 µg/L	0.0518 ppb	18:41:52
3	V 292.402†	-130.4	-3.9	-0.0513 µg/L	-0.0513 ppb	18:42:12
3	Zn 213.857†	381.0	13.4	0.3206 µg/L	0.3206 ppb	18:42:12
3	Si 251.611†	767.4	-43.3	-1.53 µg/L	-1.53 ppb	18:43:13

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1319281.9	99.650	%	0.3200				0.32%
Sc RADIAL	65292.8	97.8	%	0.57				0.59%
Y 371.029	723299.5	99.653	%	0.3238				0.32%
Ag 328.068†	0.0	0.0016	µg/L	0.24660	0.0016	ppb	0.24660	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	23.2	4.9782	µg/L	5.25735	4.9782	ppb	5.25735	105.61%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	3.4	1.8247	µg/L	2.03756	1.8247	ppb	2.03756	111.66%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	114.1	7.2160	µg/L	0.51931	7.2160	ppb	0.51931	7.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.4	0.0471	µg/L	0.06792	0.0471	ppb	0.06792	144.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	66.1	0.0461	µg/L	0.03797	0.0461	ppb	0.03797	82.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	47.5	8.3831	µg/L	0.39250	8.3831	ppb	0.39250	4.68%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	1.3	0.0500	µg/L	0.07582	0.0500	ppb	0.07582	151.63%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	-3.5	-0.1097 µg/L	0.11833	-0.1097 ppb	0.11833	107.87%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-8.4	-0.2361 µg/L	0.05004	-0.2361 ppb	0.05004	21.19%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	429.5	1.4886 µg/L	0.15444	1.4886 ppb	0.15444	10.37%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	12.6	8.7691 µg/L	1.93953	8.7691 ppb	1.93953	22.12%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	28.4	10.084 µg/L	24.6110	10.084 ppb	24.6110	244.06%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	5.6	12.821 µg/L	8.8779	12.821 ppb	8.8779	69.24%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	15.8	0.0295 µg/L	0.01213	0.0295 ppb	0.01213	41.04%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.1	0.7838 µg/L	0.35088	0.7838 ppb	0.35088	44.77%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-16.0	-1.9666 µg/L	3.54464	-1.9666 ppb	3.54464	180.24%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.6	-0.2332 µg/L	0.38670	-0.2332 ppb	0.38670	165.80%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	3.6	2.9526 µg/L	2.86264	2.9526 ppb	2.86264	96.95%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	0.3	0.0770 µg/L	1.49890	0.0770 ppb	1.49890	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.1	2.6955 µg/L	1.52958	2.6955 ppb	1.52958	56.75%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	11.4	5.3586 µg/L	1.22351	5.3586 ppb	1.22351	22.83%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.0	1.83 µg/L	3.731	1.83 ppb	3.731	203.41%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	34.0	2.5268 µg/L	0.16384	2.5268 ppb	0.16384	6.48%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	-42.0	-1.49 µg/L	0.049	-1.49 ppb	0.049	3.33%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	7.1	1.9266 µg/L	1.12811	1.9266 ppb	1.12811	58.56%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-6.1	-0.0187 µg/L	0.07104	-0.0187 ppb	0.07104	379.29%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	82.2	0.1027 µg/L	0.01203	0.1027 ppb	0.01203	11.71%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.6	0.2198 µg/L	1.69787	0.2198 ppb	1.69787	772.31%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	14.0	0.7829 µg/L	0.72880	0.7829 ppb	0.72880	93.08%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-1.2	-0.0087 µg/L	0.17462	-0.0087 ppb	0.17462	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	12.8	0.3088 µg/L	0.03010	0.3088 ppb	0.03010	9.75%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	8	S0	Applied
2	2	S0.1	Applied
3	3	S0.5	Applied
4	4	SCAL	Applied
5	5	S10	Applied
6	9	ICV	QC Passed
7	10	ICB	QC Passed
8	11	PQL	QC Failed
9	13	ICSA	QC Failed
10	14	ICSAB	QC Passed
11	7	CCV	QC Passed
12	8	CCB	QC Passed

Sequence No.: 2
Sample ID: CCV
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 7/14/2005 18:51:35
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	66360.2	66360.2	99.4	%			18:53:02
1	Al 396.153Radial†	22912.6	22979.7	4949.9	µg/L	4949.9	ppb	18:53:02
1	Ca 317.933Radial†	28311.2	28220.7	4982.7	µg/L	4982.7	ppb	18:53:22
1	Fe 238.204 Radial†	7449.4	7459.3	5200.3	µg/L	5200.3	ppb	18:53:22
1	K 766.490 Radial†	15043.8	14190.4	5029.9	µg/L	5029.9	ppb	18:53:02
1	Mg 279.077 IEC†	2230.9	2242.0	5122.9	µg/L	5122.9	ppb	18:53:22
1	Na 589.592 Radial†	82227.3	82212.9	10077	µg/L	10077	ppb	18:53:02
1	Sr 421.552†	166236.8	167219.3	502.71	µg/L	502.71	ppb	18:53:02
1	Sc 361.383	1351679.9	1351679.9	102.10	%			18:54:22
1	Y 371.029	738939.6	738939.6	101.81	%			18:54:22
1	Ag 328.068†	73382.4	72557.5	495.58	µg/L	495.58	ppb	18:54:27
1	As 188.979†	910.2	915.9	499.52	µg/L	499.52	ppb	18:54:47
1	B 249.677†	8073.2	7874.3	498.59	µg/L	498.59	ppb	18:54:27
1	Ba 233.527†	47082.6	46237.9	495.07	µg/L	495.07	ppb	18:54:27
1	Be 313.107†	739339.0	723758.1	503.05	µg/L	503.05	ppb	18:54:22
1	Cd 226.502†	13239.7	12995.7	499.36	µg/L	499.36	ppb	18:54:27
1	Co 228.616†	15853.0	15647.7	494.53	µg/L	494.53	ppb	18:54:27
1	Cr 267.716†	17986.8	17549.0	493.43	µg/L	493.43	ppb	18:54:27
1	Cu 324.752†	151597.6	144322.8	500.16	µg/L	500.16	ppb	18:54:22
1	Mn 257.610†	282668.3	276480.2	503.30	µg/L	503.30	ppb	18:54:22
1	Mo 202.031†	4063.9	3974.9	511.28	µg/L	511.28	ppb	18:54:47
1	Ni 231.604†	7997.4	7672.7	511.00	µg/L	511.00	ppb	18:54:47
1	P 214.914†	3026.5	2802.9	2396.6	µg/L	2396.6	ppb	18:54:47
1	Pb 220.353†	1860.4	1838.3	497.91	µg/L	497.91	ppb	18:54:47
1	S 181.975 Axial†	429.2	395.8	979.03	µg/L	979.03	ppb	18:54:47
1	Sb 206.836†	1087.2	1035.5	483.74	µg/L	483.74	ppb	18:54:47
1	Se 196.026†	543.3	556.6	504	µg/L	504	ppb	18:54:47
1	SiO2 †	73580.2	71310.9	5307.1	µg/L	5307.1	ppb	18:54:27
1	Sn 189.927†	1833.5	1804.1	490.53	µg/L	490.53	ppb	18:54:47
1	Ti 334.940†	407567.4	398764.3	499.01	µg/L	499.01	ppb	18:54:22
1	Tl 190.801†	1298.8	1305.7	501.54	µg/L	501.54	ppb	18:54:47
1	U 409.014†	9208.6	8793.9	495.40	µg/L	495.40	ppb	18:54:27
1	V 292.402†	35086.1	34492.3	499.16	µg/L	499.16	ppb	18:54:27
1	Zn 213.857†	21202.6	20397.7	492.27	µg/L	492.27	ppb	18:54:27
1	Si 251.611†	72754.6	70446.0	2490	µg/L	2490	ppb	18:55:56
2	Sc RADIAL	66652.5	66652.5	99.9	%			18:53:27
2	Al 396.153Radial†	22995.3	22961.5	4945.8	µg/L	4945.8	ppb	18:53:27
2	Ca 317.933Radial†	28288.5	28073.1	4956.7	µg/L	4956.7	ppb	18:53:48
2	Fe 238.204 Radial†	7446.1	7423.2	5175.2	µg/L	5175.2	ppb	18:53:48
2	K 766.490 Radial†	15097.6	14177.9	5025.5	µg/L	5025.5	ppb	18:53:27
2	Mg 279.077 IEC†	2223.6	2224.9	5083.9	µg/L	5083.9	ppb	18:53:48
2	Na 589.592 Radial†	82576.4	82199.8	10075	µg/L	10075	ppb	18:53:27
2	Sr 421.552†	166708.0	166957.9	501.93	µg/L	501.93	ppb	18:53:27
2	Sc 361.383	1345039.3	1345039.3	101.60	%			18:54:53
2	Y 371.029	735454.7	735454.7	101.33	%			18:54:53
2	Ag 328.068†	73881.5	73403.6	501.34	µg/L	501.34	ppb	18:54:59
2	As 188.979†	914.0	924.1	503.98	µg/L	503.98	ppb	18:55:19
2	B 249.677†	8126.7	7966.0	504.40	µg/L	504.40	ppb	18:54:59
2	Ba 233.527†	47310.0	46689.4	499.91	µg/L	499.91	ppb	18:54:59
2	Be 313.107†	735647.6	723699.8	503.01	µg/L	503.01	ppb	18:54:53
2	Cd 226.502†	13298.2	13117.4	504.04	µg/L	504.04	ppb	18:54:59
2	Co 228.616†	15985.2	15854.4	501.07	µg/L	501.07	ppb	18:54:59
2	Cr 267.716†	18059.5	17707.6	497.88	µg/L	497.88	ppb	18:54:59
2	Cu 324.752†	151537.1	144996.3	502.48	µg/L	502.48	ppb	18:54:53
2	Mn 257.610†	281238.9	276440.2	503.22	µg/L	503.22	ppb	18:54:53
2	Mo 202.031†	4075.8	4006.2	515.30	µg/L	515.30	ppb	18:55:19
2	Ni 231.604†	7975.2	7689.5	512.12	µg/L	512.12	ppb	18:55:19
2	P 214.914†	3034.7	2825.6	2416.3	µg/L	2416.3	ppb	18:55:19

2	Pb 220.353†	1855.6	1842.5	499.04 µg/L	499.04 ppb	18:55:19
2	S 181.975 Axial†	430.5	399.2	987.47 µg/L	987.47 ppb	18:55:19
2	Sb 206.836†	1100.3	1053.7	492.23 µg/L	492.23 ppb	18:55:19
2	Se 196.026†	543.5	559.4	506 µg/L	506 ppb	18:55:19
2	SiO2 †	74134.0	72211.8	5374.1 µg/L	5374.1 ppb	18:54:59
2	Sn 189.927†	1833.1	1812.6	492.83 µg/L	492.83 ppb	18:55:19
2	Ti 334.940†	406100.4	399291.2	499.66 µg/L	499.66 ppb	18:54:53
2	Tl 190.801†	1301.7	1314.8	505.01 µg/L	505.01 ppb	18:55:19
2	U 409.014†	9349.5	8977.1	505.71 µg/L	505.71 ppb	18:54:59
2	V 292.402†	35309.4	34881.7	504.78 µg/L	504.78 ppb	18:54:59
2	Zn 213.857†	21327.8	20623.5	497.76 µg/L	497.76 ppb	18:54:59
2	Si 251.611†	71847.2	69904.6	2470 µg/L	2470 ppb	18:56:01
3	Sc RADIAL	66817.3	66817.3	100 %		18:53:53
3	Al 396.153Radial†	23132.5	23041.7	4963.0 µg/L	4963.0 ppb	18:53:53
3	Ca 317.933Radial†	28534.0	28248.4	4987.7 µg/L	4987.7 ppb	18:54:13
3	Fe 238.204 Radial†	7512.5	7471.1	5208.6 µg/L	5208.6 ppb	18:54:13
3	K 766.490 Radial†	15120.3	14163.3	5020.3 µg/L	5020.3 ppb	18:53:53
3	Mg 279.077 IEC†	2242.0	2237.8	5113.4 µg/L	5113.4 ppb	18:54:13
3	Na 589.592 Radial†	82588.4	82007.7	10051 µg/L	10051 ppb	18:53:53
3	Sr 421.552†	167295.9	167133.1	502.45 µg/L	502.45 ppb	18:53:53
3	Sc 361.383	1337871.8	1337871.8	101.05 %		18:55:25
3	Y 371.029	731729.2	731729.2	100.81 %		18:55:25
3	Ag 328.068†	73414.9	73331.4	500.85 µg/L	500.85 ppb	18:55:30
3	As 188.979†	915.8	930.7	507.53 µg/L	507.53 ppb	18:55:50
3	B 249.677†	8106.2	7988.6	505.84 µg/L	505.84 ppb	18:55:30
3	Ba 233.527†	46956.4	46589.0	498.83 µg/L	498.83 ppb	18:55:30
3	Be 313.107†	732496.6	724460.9	503.54 µg/L	503.54 ppb	18:55:25
3	Cd 226.502†	13199.8	13090.1	502.99 µg/L	502.99 ppb	18:55:30
3	Co 228.616†	15855.6	15810.5	499.68 µg/L	499.68 ppb	18:55:30
3	Cr 267.716†	18016.1	17759.8	499.35 µg/L	499.35 ppb	18:55:30
3	Cu 324.752†	150027.7	144301.8	500.07 µg/L	500.07 ppb	18:55:25
3	Mn 257.610†	279714.9	276415.2	503.18 µg/L	503.18 ppb	18:55:25
3	Mo 202.031†	4076.3	4028.2	518.13 µg/L	518.13 ppb	18:55:50
3	Ni 231.604†	8015.7	7771.7	517.59 µg/L	517.59 ppb	18:55:50
3	P 214.914†	3037.2	2844.1	2433.1 µg/L	2433.1 ppb	18:55:50
3	Pb 220.353†	1868.5	1865.1	505.15 µg/L	505.15 ppb	18:55:50
3	S 181.975 Axial†	429.2	400.1	989.80 µg/L	989.80 ppb	18:55:50
3	Sb 206.836†	1096.3	1055.5	493.10 µg/L	493.10 ppb	18:55:50
3	Se 196.026†	533.8	552.7	500 µg/L	500 ppb	18:55:50
3	SiO2 †	73509.3	71984.5	5357.2 µg/L	5357.2 ppb	18:55:30
3	Sn 189.927†	1843.6	1832.6	498.27 µg/L	498.27 ppb	18:55:50
3	Ti 334.940†	403407.2	398767.6	499.00 µg/L	499.00 ppb	18:55:25
3	Tl 190.801†	1293.1	1313.2	504.40 µg/L	504.40 ppb	18:55:50
3	U 409.014†	9300.9	8978.3	505.77 µg/L	505.77 ppb	18:55:30
3	V 292.402†	35043.5	34804.9	503.72 µg/L	503.72 ppb	18:55:30
3	Zn 213.857†	21212.8	20622.2	497.70 µg/L	497.70 ppb	18:55:30
3	Si 251.611†	72938.1	71363.1	2520 µg/L	2520 ppb	18:56:07

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1344863.7	101.58	%	0.522				0.51%
Sc RADIAL	66610.0	99.8	%	0.35				0.35%
Y 371.029	735374.5	101.32	%	0.497				0.49%
Ag 328.068†	73097.5	499.26	µg/L	3.195	499.26	ppb	3.195	0.64%
QC value within limits for Ag 328.068 Recovery = 99.85%								
Al 396.153Radial†	22994.3	4952.9	µg/L	8.99	4952.9	ppb	8.99	0.18%
QC value within limits for Al 396.153Radial Recovery = 99.06%								
As 188.979†	923.6	503.68	µg/L	4.014	503.68	ppb	4.014	0.80%
QC value within limits for As 188.979 Recovery = 100.74%								
B 249.677†	7942.9	502.95	µg/L	3.836	502.95	ppb	3.836	0.76%
QC value within limits for B 249.677 Recovery = 100.59%								
Ba 233.527†	46505.4	497.94	µg/L	2.540	497.94	ppb	2.540	0.51%
QC value within limits for Ba 233.527 Recovery = 99.59%								
Be 313.107†	723972.9	503.20	µg/L	0.295	503.20	ppb	0.295	0.06%
QC value within limits for Be 313.107 Recovery = 100.64%								
Ca 317.933Radial†	28180.8	4975.7	µg/L	16.62	4975.7	ppb	16.62	0.33%
QC value within limits for Ca 317.933Radial Recovery = 99.51%								
Cd 226.502†	13067.7	502.13	µg/L	2.455	502.13	ppb	2.455	0.49%
QC value within limits for Cd 226.502 Recovery = 100.43%								

Co 228.616†	15770.9	498.43 µg/L	3.448	498.43 ppb	3.448	0.69%
QC value within limits for Co 228.616 Recovery = 99.69%						
Cr 267.716†	17672.2	496.89 µg/L	3.085	496.89 ppb	3.085	0.62%
QC value within limits for Cr 267.716 Recovery = 99.38%						
Cu 324.752†	144540.3	500.90 µg/L	1.368	500.90 ppb	1.368	0.27%
QC value within limits for Cu 324.752 Recovery = 100.18%						
Fe 238.204 Radial†	7451.2	5194.7 µg/L	17.36	5194.7 ppb	17.36	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 103.89%						
K 766.490 Radial†	14177.2	5025.2 µg/L	4.81	5025.2 ppb	4.81	0.10%
QC value within limits for K 766.490 Radial Recovery = 100.50%						
Mg 279.077 IEC†	2234.9	5106.7 µg/L	20.34	5106.7 ppb	20.34	0.40%
QC value within limits for Mg 279.077 IEC Recovery = 102.13%						
Mn 257.610†	276445.2	503.23 µg/L	0.060	503.23 ppb	0.060	0.01%
QC value within limits for Mn 257.610 Recovery = 100.65%						
Mo 202.031†	4003.1	514.91 µg/L	3.441	514.91 ppb	3.441	0.67%
QC value within limits for Mo 202.031 Recovery = 102.98%						
Na 589.592 Radial†	82140.1	10068 µg/L	14.1	10068 ppb	14.1	0.14%
QC value within limits for Na 589.592 Radial Recovery = 100.68%						
Ni 231.604†	7711.3	513.57 µg/L	3.528	513.57 ppb	3.528	0.69%
QC value within limits for Ni 231.604 Recovery = 102.71%						
P 214.914†	2824.2	2415.3 µg/L	18.24	2415.3 ppb	18.24	0.76%
QC value within limits for P 214.914 Recovery = 96.61%						
Pb 220.353†	1848.6	500.70 µg/L	3.893	500.70 ppb	3.893	0.78%
QC value within limits for Pb 220.353 Recovery = 100.14%						
S 181.975 Axial†	398.3	985.43 µg/L	5.666	985.43 ppb	5.666	0.57%
QC value within limits for S 181.975 Axial Recovery = 98.54%						
Sb 206.836†	1048.3	489.69 µg/L	5.173	489.69 ppb	5.173	1.06%
QC value within limits for Sb 206.836 Recovery = 97.94%						
Se 196.026†	556.2	504 µg/L	3.1	504 ppb	3.1	0.61%
QC value within limits for Se 196.026 Recovery = 100.72%						
SiO2 †	71835.7	5346.2 µg/L	34.86	5346.2 ppb	34.86	0.65%
QC value within limits for SiO2 Recovery = 99.97%						
Si 251.611†	70571.2	2500 µg/L	26.1	2500 ppb	26.1	1.04%
QC value within limits for Si 251.611 Recovery = 99.83%						
Sn 189.927†	1816.4	493.88 µg/L	3.971	493.88 ppb	3.971	0.80%
QC value within limits for Sn 189.927 Recovery = 98.78%						
Sr 421.552†	167103.4	502.36 µg/L	0.400	502.36 ppb	0.400	0.08%
QC value within limits for Sr 421.552 Recovery = 100.47%						
Ti 334.940†	398941.0	499.22 µg/L	0.378	499.22 ppb	0.378	0.08%
QC value within limits for Ti 334.940 Recovery = 99.84%						
Tl 190.801†	1311.2	503.65 µg/L	1.854	503.65 ppb	1.854	0.37%
QC value within limits for Tl 190.801 Recovery = 100.73%						
U 409.014†	8916.4	502.30 µg/L	5.969	502.30 ppb	5.969	1.19%
QC value within limits for U 409.014 Recovery = 100.46%						
V 292.402†	34726.3	502.55 µg/L	2.987	502.55 ppb	2.987	0.59%
QC value within limits for V 292.402 Recovery = 100.51%						
Zn 213.857†	20547.8	495.91 µg/L	3.154	495.91 ppb	3.154	0.64%
QC value within limits for Zn 213.857 Recovery = 99.18%						

All analyte(s) passed QC.

Sequence No.: 3
Sample ID: CCB
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 7/14/2005 18:57:55
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	66565.8	66565.8	99.7	%			18:59:18
1	Al 396.153Radial†	94.8	27.6	5.9682	µg/L	5.9682	ppb	18:59:18
1	Ca 317.933Radial†	273.4	17.4	3.0640	µg/L	3.0640	ppb	18:59:39
1	Fe 238.204 Radial†	39.3	5.6	3.9059	µg/L	3.9059	ppb	18:59:39
1	K 766.490 Radial†	868.1	-71.3	-25.261	µg/L	-25.261	ppb	18:59:18
1	Mg 279.077 IEC†	4.7	2.7	6.1409	µg/L	6.1409	ppb	18:59:39
1	Na 589.592 Radial†	514.4	18.6	2.2793	µg/L	2.2793	ppb	18:59:18
1	Sr 421.552†	-20.7	-14.4	-0.0433	µg/L	-0.0433	ppb	18:59:18
1	Sc 361.383	1321729.9	1321729.9	99.835	%			19:00:37
1	Y 371.029	724858.5	724858.5	99.867	%			19:00:37
1	Ag 328.068†	-680.0	1.5	0.0123	µg/L	0.0123	ppb	19:00:42
1	As 188.979†	-25.5	-1.1	-0.6068	µg/L	-0.6068	ppb	19:01:03
1	B 249.677†	174.8	142.0	8.9815	µg/L	8.9815	ppb	19:01:03
1	Ba 233.527†	-113.6	8.8	0.0941	µg/L	0.0941	ppb	19:01:03
1	Be 313.107†	439.3	48.2	0.0332	µg/L	0.0332	ppb	19:00:42
1	Cd 226.502†	-23.5	4.5	0.1714	µg/L	0.1714	ppb	19:01:03
1	Co 228.616†	-119.0	1.2	0.0372	µg/L	0.0372	ppb	19:01:03
1	Cr 267.716†	67.7	-0.4	-0.0093	µg/L	-0.0093	ppb	19:01:03
1	Cu 324.752†	4619.3	466.5	1.6192	µg/L	1.6192	ppb	19:00:42
1	Mn 257.610†	411.9	31.8	0.0584	µg/L	0.0584	ppb	19:01:03
1	Mo 202.031†	7.3	1.8	0.2278	µg/L	0.2278	ppb	19:01:03
1	Ni 231.604†	153.3	-6.9	-0.4561	µg/L	-0.4561	ppb	19:01:03
1	P 214.914†	165.0	3.8	3.1535	µg/L	3.1535	ppb	19:01:03
1	Pb 220.353†	-12.4	3.7	1.0015	µg/L	1.0015	ppb	19:01:03
1	S 181.975 Axial†	21.4	-3.2	-7.8587	µg/L	-7.8587	ppb	19:01:03
1	Sb 206.836†	42.3	13.1	6.1094	µg/L	6.1094	ppb	19:01:03
1	Se 196.026†	-22.1	2.3	2.11	µg/L	2.11	ppb	19:01:03
1	SiO2 †	789.4	33.0	2.4551	µg/L	2.4551	ppb	19:01:03
1	Sn 189.927†	-1.9	6.4	1.7264	µg/L	1.7264	ppb	19:01:03
1	Ti 334.940†	537.5	108.5	0.1367	µg/L	0.1367	ppb	19:00:42
1	Tl 190.801†	-29.1	4.4	1.6970	µg/L	1.6970	ppb	19:01:03
1	U 409.014†	194.6	-30.7	-1.7186	µg/L	-1.7186	ppb	19:00:42
1	V 292.402†	-106.7	20.2	0.2887	µg/L	0.2887	ppb	19:01:03
1	Zn 213.857†	370.1	1.4	0.0342	µg/L	0.0342	ppb	19:01:03
1	Si 251.611†	770.8	-41.9	-1.48	µg/L	-1.48	ppb	19:02:25
2	Sc RADIAL	65880.0	65880.0	98.7	%			18:59:44
2	Al 396.153Radial†	59.4	-7.2	-1.5903	µg/L	-1.5903	ppb	18:59:44
2	Ca 317.933Radial†	268.1	15.0	2.6183	µg/L	2.6183	ppb	19:00:04
2	Fe 238.204 Radial†	39.1	5.8	4.0159	µg/L	4.0159	ppb	19:00:04
2	K 766.490 Radial†	913.7	-16.0	-5.6806	µg/L	-5.6806	ppb	18:59:44
2	Mg 279.077 IEC†	-0.6	-2.7	-6.0630	µg/L	-6.0630	ppb	19:00:04
2	Na 589.592 Radial†	500.6	10.0	1.2253	µg/L	1.2253	ppb	18:59:44
2	Sr 421.552†	-28.0	-22.1	-0.0665	µg/L	-0.0665	ppb	18:59:44
2	Sc 361.383	1328498.3	1328498.3	100.35	%			19:01:08
2	Y 371.029	728676.1	728676.1	100.39	%			19:01:08
2	Ag 328.068†	-668.0	17.0	0.1173	µg/L	0.1173	ppb	19:01:13
2	As 188.979†	-27.4	-2.9	-1.5535	µg/L	-1.5535	ppb	19:01:33
2	B 249.677†	166.2	132.5	8.3803	µg/L	8.3803	ppb	19:01:33
2	Ba 233.527†	-109.1	13.9	0.1477	µg/L	0.1477	ppb	19:01:33
2	Be 313.107†	419.3	26.0	0.0173	µg/L	0.0173	ppb	19:01:13
2	Cd 226.502†	-26.0	2.1	0.0805	µg/L	0.0805	ppb	19:01:33
2	Co 228.616†	-119.2	1.5	0.0499	µg/L	0.0499	ppb	19:01:33
2	Cr 267.716†	67.4	-1.0	-0.0263	µg/L	-0.0263	ppb	19:01:33
2	Cu 324.752†	4642.6	466.2	1.6195	µg/L	1.6195	ppb	19:01:13
2	Mn 257.610†	386.4	4.2	0.0088	µg/L	0.0088	ppb	19:01:33
2	Mo 202.031†	9.8	4.2	0.5418	µg/L	0.5418	ppb	19:01:33
2	Ni 231.604†	159.9	-1.0	-0.0671	µg/L	-0.0671	ppb	19:01:33
2	P 214.914†	165.2	3.2	2.5897	µg/L	2.5897	ppb	19:01:33

2	Pb 220.353†	-9.8	6.3	1.6997 µg/L	1.6997 ppb	19:01:33
2	S 181.975 Axial†	26.6	1.9	4.7085 µg/L	4.7085 ppb	19:01:33
2	Sb 206.836†	38.1	8.7	4.0508 µg/L	4.0508 ppb	19:01:33
2	Se 196.026†	-21.4	3.2	2.85 µg/L	2.85 ppb	19:01:33
2	SiO2 †	776.0	15.7	1.1633 µg/L	1.1633 ppb	19:01:33
2	Sn 189.927†	0.4	8.7	2.3599 µg/L	2.3599 ppb	19:01:33
2	Ti 334.940†	516.2	84.4	0.1077 µg/L	0.1077 ppb	19:01:13
2	Tl 190.801†	-30.4	3.3	1.2709 µg/L	1.2709 ppb	19:01:33
2	U 409.014†	157.2	-68.9	-3.8658 µg/L	-3.8658 ppb	19:01:13
2	V 292.402†	-120.1	7.4	0.1067 µg/L	0.1067 ppb	19:01:33
2	Zn 213.857†	377.6	7.1	0.1688 µg/L	0.1688 ppb	19:01:33
2	Si 251.611†	761.0	-55.5	-1.97 µg/L	-1.97 ppb	19:02:45
3	Sc RADIAL	66973.9	66973.9	100 %		19:00:09
3	Al 396.153Radial†	108.4	40.6	8.7741 µg/L	8.7741 ppb	19:00:09
3	Ca 317.933Radial†	272.5	14.9	2.6076 µg/L	2.6076 ppb	19:00:29
3	Fe 238.204 Radial†	41.2	7.2	5.0093 µg/L	5.0093 ppb	19:00:29
3	K 766.490 Radial†	961.0	16.0	5.6634 µg/L	5.6634 ppb	19:00:09
3	Mg 279.077 IEC†	4.3	2.3	5.1670 µg/L	5.1670 ppb	19:00:29
3	Na 589.592 Radial†	529.5	30.5	3.7399 µg/L	3.7399 ppb	19:00:09
3	Sr 421.552†	87.3	93.4	0.2808 µg/L	0.2808 ppb	19:00:09
3	Sc 361.383	1328288.7	1328288.7	100.33 %		19:01:39
3	Y 371.029	729061.4	729061.4	100.45 %		19:01:39
3	Ag 328.068†	-634.1	50.7	0.3466 µg/L	0.3466 ppb	19:01:44
3	As 188.979†	-25.4	-0.9	-0.4875 µg/L	-0.4875 ppb	19:02:04
3	B 249.677†	163.9	130.3	8.2390 µg/L	8.2390 ppb	19:02:04
3	Ba 233.527†	-115.1	7.9	0.0836 µg/L	0.0836 ppb	19:02:04
3	Be 313.107†	490.0	96.5	0.0663 µg/L	0.0663 ppb	19:01:44
3	Cd 226.502†	-20.3	7.9	0.3008 µg/L	0.3008 ppb	19:02:04
3	Co 228.616†	-115.8	5.0	0.1576 µg/L	0.1576 ppb	19:02:04
3	Cr 267.716†	53.9	-14.5	-0.4040 µg/L	-0.4040 ppb	19:02:04
3	Cu 324.752†	4609.4	433.8	1.5073 µg/L	1.5073 ppb	19:01:44
3	Mn 257.610†	388.5	6.3	0.0125 µg/L	0.0125 ppb	19:02:04
3	Mo 202.031†	7.8	2.2	0.2859 µg/L	0.2859 ppb	19:02:04
3	Ni 231.604†	157.8	-3.2	-0.2096 µg/L	-0.2096 ppb	19:02:04
3	P 214.914†	162.5	0.5	0.1902 µg/L	0.1902 ppb	19:02:04
3	Pb 220.353†	-8.8	7.3	1.9923 µg/L	1.9923 ppb	19:02:04
3	S 181.975 Axial†	22.3	-2.4	-5.9868 µg/L	-5.9868 ppb	19:02:04
3	Sb 206.836†	37.8	8.3	3.9046 µg/L	3.9046 ppb	19:02:04
3	Se 196.026†	-27.7	-3.1	-2.85 µg/L	-2.85 ppb	19:02:04
3	SiO2 †	787.3	27.0	2.0114 µg/L	2.0114 ppb	19:02:04
3	Sn 189.927†	-3.6	4.6	1.2588 µg/L	1.2588 ppb	19:02:04
3	Ti 334.940†	587.5	155.6	0.1970 µg/L	0.1970 ppb	19:01:44
3	Tl 190.801†	-31.2	2.5	0.9679 µg/L	0.9679 ppb	19:02:04
3	U 409.014†	155.6	-70.5	-3.9536 µg/L	-3.9536 ppb	19:01:44
3	V 292.402†	-128.8	-1.4	-0.0219 µg/L	-0.0219 ppb	19:02:04
3	Zn 213.857†	377.6	7.1	0.1707 µg/L	0.1707 ppb	19:02:04
3	Si 251.611†	760.1	-56.3	-1.99 µg/L	-1.99 ppb	19:03:05

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1326172.3	100.17	%	0.291				0.29%
Sc RADIAL	66473.2	99.6	%	0.83				0.83%
Y 371.029	727532.0	100.24	%	0.320				0.32%
Ag 328.068†	23.1	0.1588	µg/L	0.17097	0.1588	ppb	0.17097	107.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	20.3	4.3840	µg/L	5.36073	4.3840	ppb	5.36073	122.28%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.6	-0.8826	µg/L	0.58411	-0.8826	ppb	0.58411	66.18%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	134.9	8.5336	µg/L	0.39428	8.5336	ppb	0.39428	4.62%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.2	0.1085	µg/L	0.03439	0.1085	ppb	0.03439	31.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	56.9	0.0389	µg/L	0.02498	0.0389	ppb	0.02498	64.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.8	2.7633	µg/L	0.26046	2.7633	ppb	0.26046	9.43%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	4.8	0.1842	µg/L	0.11069	0.1842	ppb	0.11069	60.08%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	2.6	0.0816 µg/L	0.06616	0.0816 ppb	0.06616	81.11%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-5.3	-0.1465 µg/L	0.22315	-0.1465 ppb	0.22315	152.29%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	455.5	1.5820 µg/L	0.06470	1.5820 ppb	0.06470	4.09%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	6.2	4.3104 µg/L	0.60779	4.3104 ppb	0.60779	14.10%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	-23.8	-8.4262 µg/L	15.64411	-8.4262 ppb	15.64411	185.66%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.8	1.7483 µg/L	6.78229	1.7483 ppb	6.78229	387.94%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	14.1	0.0266 µg/L	0.02764	0.0266 ppb	0.02764	104.00%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.7	0.3518 µg/L	0.16705	0.3518 ppb	0.16705	47.48%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	19.7	2.4149 µg/L	1.26279	2.4149 ppb	1.26279	52.29%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-3.7	-0.2443 µg/L	0.19680	-0.2443 ppb	0.19680	80.57%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	2.5	1.9778 µg/L	1.57356	1.9778 ppb	1.57356	79.56%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	5.8	1.5645 µg/L	0.50904	1.5645 ppb	0.50904	32.54%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.2	-3.0457 µg/L	6.78019	-3.0457 ppb	6.78019	222.62%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	10.0	4.6883 µg/L	1.23291	4.6883 ppb	1.23291	26.30%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.8	0.703 µg/L	3.1001	0.703 ppb	3.1001	440.96%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	25.2	1.8766 µg/L	0.65638	1.8766 ppb	0.65638	34.98%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	-51.2	-1.81 µg/L	0.286	-1.81 ppb	0.286	15.78%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	6.6	1.7817 µg/L	0.55267	1.7817 ppb	0.55267	31.02%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	19.0	0.0570 µg/L	0.19414	0.0570 ppb	0.19414	340.67%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	116.2	0.1471 µg/L	0.04553	0.1471 ppb	0.04553	30.94%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	3.4	1.3119 µg/L	0.36631	1.3119 ppb	0.36631	27.92%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-56.7	-3.1793 µg/L	1.26578	-3.1793 ppb	1.26578	39.81%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	8.7	0.1245 µg/L	0.15609	0.1245 ppb	0.15609	125.37%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	5.2	0.1246 µg/L	0.07827	0.1246 ppb	0.07827	62.81%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	37	TEST_LCS|441429|1	Analyzed
2	7	CCV	QC Passed
3	8	CCB	QC Passed

Sequence No.: 11
Sample ID: CCV
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 7/14/2005 20:07:26
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	68061.1	68061.1	102	%			20:08:52
1	Al 396.153Radial†	23370.3	22852.7	4923.3	µg/L	4923.3	ppb	20:08:52
1	Ca 317.933Radial†	28604.5	27796.8	4907.9	µg/L	4907.9	ppb	20:09:12
1	Fe 238.204 Radial†	7554.5	7375.2	5141.7	µg/L	5141.7	ppb	20:09:12
1	K 766.490 Radial†	15566.5	14324.9	5077.5	µg/L	5077.5	ppb	20:08:52
1	Mg 279.077 IEC†	2246.1	2200.8	5028.2	µg/L	5028.2	ppb	20:09:12
1	Na 589.592 Radial†	87748.3	85560.5	10487	µg/L	10487	ppb	20:08:52
1	Sr 421.552†	170614.2	167333.6	503.06	µg/L	503.06	ppb	20:08:52
1	Sc 361.383	1354499.6	1354499.6	102.31	%			20:10:12
1	Y 371.029	738248.1	738248.1	101.71	%			20:10:12
1	Ag 328.068†	74259.3	73265.0	500.38	µg/L	500.38	ppb	20:10:17
1	As 188.979†	927.3	930.8	507.52	µg/L	507.52	ppb	20:10:37
1	B 249.677†	8205.2	7986.8	505.68	µg/L	505.68	ppb	20:10:17
1	Ba 233.527†	47178.1	46235.3	495.04	µg/L	495.04	ppb	20:10:17
1	Be 313.107†	737003.0	719967.3	500.41	µg/L	500.41	ppb	20:10:12
1	Cd 226.502†	13189.0	12919.2	496.42	µg/L	496.42	ppb	20:10:17
1	Co 228.616†	15945.2	15705.4	496.33	µg/L	496.33	ppb	20:10:17
1	Cr 267.716†	18111.1	17633.9	495.81	µg/L	495.81	ppb	20:10:17
1	Cu 324.752†	152742.7	145132.9	502.97	µg/L	502.97	ppb	20:10:12
1	Mn 257.610†	281436.1	274699.5	500.05	µg/L	500.05	ppb	20:10:12
1	Mo 202.031†	3930.0	3835.6	493.40	µg/L	493.40	ppb	20:10:17
1	Ni 231.604†	7761.1	7425.4	494.51	µg/L	494.51	ppb	20:10:17
1	P 214.914†	3063.3	2832.7	2422.7	µg/L	2422.7	ppb	20:10:37
1	Pb 220.353†	1871.2	1845.0	499.69	µg/L	499.69	ppb	20:10:37
1	S 181.975 Axial†	433.9	399.4	987.96	µg/L	987.96	ppb	20:10:37
1	Sb 206.836†	1130.3	1075.5	502.19	µg/L	502.19	ppb	20:10:37
1	Se 196.026†	548.7	560.8	508	µg/L	508	ppb	20:10:37
1	SiO2 †	74434.5	71995.8	5358.1	µg/L	5358.1	ppb	20:10:17
1	Sn 189.927†	1848.0	1814.6	493.36	µg/L	493.36	ppb	20:10:37
1	Ti 334.940†	407897.8	398256.2	498.37	µg/L	498.37	ppb	20:10:12
1	Tl 190.801†	1307.6	1311.6	503.80	µg/L	503.80	ppb	20:10:37
1	U 409.014†	9314.7	8878.8	500.18	µg/L	500.18	ppb	20:10:17
1	V 292.402†	35263.4	34594.1	500.46	µg/L	500.46	ppb	20:10:17
1	Zn 213.857†	21326.2	20475.4	494.26	µg/L	494.26	ppb	20:10:17
1	Si 251.611†	73232.5	70764.7	2500	µg/L	2500	ppb	20:11:46
2	Sc RADIAL	68371.0	68371.0	102	%			20:09:17
2	Al 396.153Radial†	23435.4	22812.3	4914.2	µg/L	4914.2	ppb	20:09:17
2	Ca 317.933Radial†	28407.6	27477.3	4851.5	µg/L	4851.5	ppb	20:09:38
2	Fe 238.204 Radial†	7512.3	7300.4	5089.7	µg/L	5089.7	ppb	20:09:38
2	K 766.490 Radial†	15569.9	14259.0	5054.2	µg/L	5054.2	ppb	20:09:17
2	Mg 279.077 IEC†	2230.3	2175.4	4970.8	µg/L	4970.8	ppb	20:09:38
2	Na 589.592 Radial†	87524.3	84951.7	10412	µg/L	10412	ppb	20:09:17
2	Sr 421.552†	171340.2	167283.7	502.91	µg/L	502.91	ppb	20:09:17
2	Sc 361.383	1351802.0	1351802.0	102.11	%			20:10:43
2	Y 371.029	737414.7	737414.7	101.60	%			20:10:43
2	Ag 328.068†	74513.8	73659.1	503.06	µg/L	503.06	ppb	20:10:49
2	As 188.979†	929.2	934.5	509.53	µg/L	509.53	ppb	20:11:09
2	B 249.677†	8225.3	8022.5	507.96	µg/L	507.96	ppb	20:10:49
2	Ba 233.527†	47428.8	46572.9	498.65	µg/L	498.65	ppb	20:10:49
2	Be 313.107†	736771.1	721177.7	501.25	µg/L	501.25	ppb	20:10:43
2	Cd 226.502†	13310.0	13063.4	501.96	µg/L	501.96	ppb	20:10:49
2	Co 228.616†	16039.8	15829.2	500.26	µg/L	500.26	ppb	20:10:49
2	Cr 267.716†	18158.4	17715.5	498.11	µg/L	498.11	ppb	20:10:49
2	Cu 324.752†	152108.3	144809.5	501.85	µg/L	501.85	ppb	20:10:43
2	Mn 257.610†	280952.5	274774.8	500.19	µg/L	500.19	ppb	20:10:43
2	Mo 202.031†	3983.4	3895.7	501.11	µg/L	501.11	ppb	20:10:49
2	Ni 231.604†	7828.0	7506.1	499.89	µg/L	499.89	ppb	20:10:49
2	P 214.914†	3054.4	2829.9	2420.5	µg/L	2420.5	ppb	20:11:09

2	Pb 220.353†	1882.5	1859.7	503.67 µg/L	503.67 ppb	20:11:09
2	S 181.975 Axial†	438.6	404.9	1001.7 µg/L	1001.7 ppb	20:11:09
2	Sb 206.836†	1127.3	1074.7	501.86 µg/L	501.86 ppb	20:11:09
2	Se 196.026†	549.1	562.2	509 µg/L	509 ppb	20:11:09
2	SiO2 †	74730.7	72431.1	5390.5 µg/L	5390.5 ppb	20:10:49
2	Sn 189.927†	1839.4	1809.7	492.04 µg/L	492.04 ppb	20:11:09
2	Ti 334.940†	406961.1	398134.4	498.21 µg/L	498.21 ppb	20:10:43
2	Tl 190.801†	1305.4	1312.1	503.96 µg/L	503.96 ppb	20:11:09
2	U 409.014†	9255.1	8838.5	497.95 µg/L	497.95 ppb	20:10:49
2	V 292.402†	35410.9	34807.3	503.58 µg/L	503.58 ppb	20:10:49
2	Zn 213.857†	21432.4	20621.0	497.79 µg/L	497.79 ppb	20:10:49
2	Si 251.611†	72621.9	70309.6	2490 µg/L	2490 ppb	20:11:51
3	Sc RADIAL	68014.9	68014.9	102 %		20:09:43
3	Al 396.153Radial†	23337.9	22836.4	4919.6 µg/L	4919.6 ppb	20:09:43
3	Ca 317.933Radial†	28532.7	27745.4	4898.8 µg/L	4898.8 ppb	20:10:03
3	Fe 238.204 Radial†	7544.3	7370.2	5138.3 µg/L	5138.3 ppb	20:10:03
3	K 766.490 Radial†	15480.5	14250.9	5051.3 µg/L	5051.3 ppb	20:09:43
3	Mg 279.077 IEC†	2247.0	2203.2	5033.9 µg/L	5033.9 ppb	20:10:03
3	Na 589.592 Radial†	87175.6	85057.0	10425 µg/L	10425 ppb	20:09:43
3	Sr 421.552†	170706.0	167537.3	503.67 µg/L	503.67 ppb	20:09:43
3	Sc 361.383	1351493.7	1351493.7	102.08 %		20:11:15
3	Y 371.029	737353.5	737353.5	101.59 %		20:11:15
3	Ag 328.068†	74734.7	73892.1	504.65 µg/L	504.65 ppb	20:11:20
3	As 188.979†	935.7	941.1	513.09 µg/L	513.09 ppb	20:11:40
3	B 249.677†	8259.9	8058.3	510.21 µg/L	510.21 ppb	20:11:20
3	Ba 233.527†	47349.0	46505.2	497.93 µg/L	497.93 ppb	20:11:20
3	Be 313.107†	736243.9	720825.9	501.01 µg/L	501.01 ppb	20:11:15
3	Cd 226.502†	13237.6	12995.5	499.35 µg/L	499.35 ppb	20:11:20
3	Co 228.616†	16027.3	15820.5	499.97 µg/L	499.97 ppb	20:11:20
3	Cr 267.716†	18148.6	17710.0	497.96 µg/L	497.96 ppb	20:11:20
3	Cu 324.752†	152317.7	145048.6	502.68 µg/L	502.68 ppb	20:11:15
3	Mn 257.610†	281320.4	275198.0	500.96 µg/L	500.96 ppb	20:11:15
3	Mo 202.031†	3948.9	3862.7	496.88 µg/L	496.88 ppb	20:11:20
3	Ni 231.604†	7812.9	7493.0	499.01 µg/L	499.01 ppb	20:11:20
3	P 214.914†	3055.8	2832.0	2422.1 µg/L	2422.1 ppb	20:11:40
3	Pb 220.353†	1872.4	1850.3	501.12 µg/L	501.12 ppb	20:11:40
3	S 181.975 Axial†	438.9	405.4	1002.7 µg/L	1002.7 ppb	20:11:40
3	Sb 206.836†	1132.1	1079.7	504.15 µg/L	504.15 ppb	20:11:40
3	Se 196.026†	544.2	557.6	505 µg/L	505 ppb	20:11:40
3	SiO2 †	74943.4	72656.2	5407.2 µg/L	5407.2 ppb	20:11:20
3	Sn 189.927†	1847.5	1818.1	494.32 µg/L	494.32 ppb	20:11:40
3	Ti 334.940†	407306.6	398563.9	498.75 µg/L	498.75 ppb	20:11:15
3	Tl 190.801†	1309.7	1316.5	505.67 µg/L	505.67 ppb	20:11:40
3	U 409.014†	9203.8	8790.4	495.24 µg/L	495.24 ppb	20:11:20
3	V 292.402†	35424.1	34828.2	503.83 µg/L	503.83 ppb	20:11:20
3	Zn 213.857†	21397.8	20591.9	497.07 µg/L	497.07 ppb	20:11:20
3	Si 251.611†	73217.8	70909.6	2510 µg/L	2510 ppb	20:11:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1352598.4	102.17	%	0.125				0.12%
Sc RADIAL	68149.0	102	%	0.3				0.28%
Y 371.029	737672.1	101.63	%	0.069				0.07%
Ag 328.068†	73605.4	502.70	µg/L	2.160	502.70	ppb	2.160	0.43%
QC value within limits for Ag 328.068 Recovery = 100.54%								
Al 396.153Radial†	22833.8	4919.0	µg/L	4.59	4919.0	ppb	4.59	0.09%
QC value within limits for Al 396.153Radial Recovery = 98.38%								
As 188.979†	935.4	510.04	µg/L	2.821	510.04	ppb	2.821	0.55%
QC value within limits for As 188.979 Recovery = 102.01%								
B 249.677†	8022.5	507.95	µg/L	2.262	507.95	ppb	2.262	0.45%
QC value within limits for B 249.677 Recovery = 101.59%								
Ba 233.527†	46437.8	497.21	µg/L	1.912	497.21	ppb	1.912	0.38%
QC value within limits for Ba 233.527 Recovery = 99.44%								
Be 313.107†	720657.0	500.89	µg/L	0.432	500.89	ppb	0.432	0.09%
QC value within limits for Be 313.107 Recovery = 100.18%								
Ca 317.933Radial†	27673.1	4886.1	µg/L	30.28	4886.1	ppb	30.28	0.62%
QC value within limits for Ca 317.933Radial Recovery = 97.72%								
Cd 226.502†	12992.7	499.24	µg/L	2.775	499.24	ppb	2.775	0.56%
QC value within limits for Cd 226.502 Recovery = 99.85%								

Co 228.616†	15785.1	498.85 µg/L	2.191	498.85 ppb	2.191	0.44%
QC value within limits for Co 228.616 Recovery = 99.77%						
Cr 267.716†	17686.5	497.29 µg/L	1.285	497.29 ppb	1.285	0.26%
QC value within limits for Cr 267.716 Recovery = 99.46%						
Cu 324.752†	144997.0	502.50 µg/L	0.584	502.50 ppb	0.584	0.12%
QC value within limits for Cu 324.752 Recovery = 100.50%						
Fe 238.204 Radial†	7348.6	5123.2 µg/L	29.10	5123.2 ppb	29.10	0.57%
QC value within limits for Fe 238.204 Radial Recovery = 102.46%						
K 766.490 Radial†	14278.2	5061.0 µg/L	14.39	5061.0 ppb	14.39	0.28%
QC value within limits for K 766.490 Radial Recovery = 101.22%						
Mg 279.077 IEC†	2193.1	5011.0 µg/L	34.92	5011.0 ppb	34.92	0.70%
QC value within limits for Mg 279.077 IEC Recovery = 100.22%						
Mn 257.610†	274890.8	500.40 µg/L	0.490	500.40 ppb	0.490	0.10%
QC value within limits for Mn 257.610 Recovery = 100.08%						
Mo 202.031†	3864.7	497.13 µg/L	3.861	497.13 ppb	3.861	0.78%
QC value within limits for Mo 202.031 Recovery = 99.43%						
Na 589.592 Radial†	85189.7	10442 µg/L	39.9	10442 ppb	39.9	0.38%
QC value within limits for Na 589.592 Radial Recovery = 104.42%						
Ni 231.604†	7474.8	497.80 µg/L	2.887	497.80 ppb	2.887	0.58%
QC value within limits for Ni 231.604 Recovery = 99.56%						
P 214.914†	2831.5	2421.8 µg/L	1.16	2421.8 ppb	1.16	0.05%
QC value within limits for P 214.914 Recovery = 96.87%						
Pb 220.353†	1851.7	501.50 µg/L	2.016	501.50 ppb	2.016	0.40%
QC value within limits for Pb 220.353 Recovery = 100.30%						
S 181.975 Axial†	403.2	997.47 µg/L	8.249	997.47 ppb	8.249	0.83%
QC value within limits for S 181.975 Axial Recovery = 99.75%						
Sb 206.836†	1076.6	502.73 µg/L	1.240	502.73 ppb	1.240	0.25%
QC value within limits for Sb 206.836 Recovery = 100.55%						
Se 196.026†	560.2	507 µg/L	2.2	507 ppb	2.2	0.43%
QC value within limits for Se 196.026 Recovery = 101.43%						
SiO2 †	72361.0	5385.2 µg/L	24.98	5385.2 ppb	24.98	0.46%
QC value within limits for SiO2 Recovery = 100.71%						
Si 251.611†	70661.3	2500 µg/L	11.1	2500 ppb	11.1	0.44%
QC value within limits for Si 251.611 Recovery = 99.95%						
Sn 189.927†	1814.1	493.24 µg/L	1.149	493.24 ppb	1.149	0.23%
QC value within limits for Sn 189.927 Recovery = 98.65%						
Sr 421.552†	167384.9	503.21 µg/L	0.404	503.21 ppb	0.404	0.08%
QC value within limits for Sr 421.552 Recovery = 100.64%						
Ti 334.940†	398318.2	498.44 µg/L	0.278	498.44 ppb	0.278	0.06%
QC value within limits for Ti 334.940 Recovery = 99.69%						
Tl 190.801†	1313.4	504.48 µg/L	1.037	504.48 ppb	1.037	0.21%
QC value within limits for Tl 190.801 Recovery = 100.90%						
U 409.014†	8835.9	497.79 µg/L	2.475	497.79 ppb	2.475	0.50%
QC value within limits for U 409.014 Recovery = 99.56%						
V 292.402†	34743.2	502.62 µg/L	1.880	502.62 ppb	1.880	0.37%
QC value within limits for V 292.402 Recovery = 100.52%						
Zn 213.857†	20562.7	496.37 µg/L	1.865	496.37 ppb	1.865	0.38%
QC value within limits for Zn 213.857 Recovery = 99.27%						

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 7/14/2005 20:13:45
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	65786.0	65786.0	98.6	%			20:15:10
1	Al 396.153Radial†	95.9	30.0	6.4909	µg/L	6.4909	ppb	20:15:10
1	Ca 317.933Radial†	269.7	16.9	2.9798	µg/L	2.9798	ppb	20:15:30
1	Fe 238.204 Radial†	39.2	5.9	4.1296	µg/L	4.1296	ppb	20:15:30
1	K 766.490 Radial†	1054.8	128.5	45.548	µg/L	45.548	ppb	20:15:10
1	Mg 279.077 IEC†	6.5	4.6	10.419	µg/L	10.419	ppb	20:15:30
1	Na 589.592 Radial†	1610.5	1136.8	139.36	µg/L	139.36	ppb	20:15:10
1	Sr 421.552†	2.9	9.3	0.0278	µg/L	0.0278	ppb	20:15:10
1	Sc 361.383	1309898.1	1309898.1	98.942	%			20:16:28
1	Y 371.029	718628.1	718628.1	99.009	%			20:16:28
1	Ag 328.068†	-627.5	48.5	0.3303	µg/L	0.3303	ppb	20:16:33
1	As 188.979†	-20.2	4.1	2.1965	µg/L	2.1965	ppb	20:16:54
1	B 249.677†	196.0	165.0	10.434	µg/L	10.434	ppb	20:16:54
1	Ba 233.527†	-113.5	7.9	0.0838	µg/L	0.0838	ppb	20:16:54
1	Be 313.107†	433.3	46.1	0.0317	µg/L	0.0317	ppb	20:16:33
1	Cd 226.502†	-15.0	12.9	0.4944	µg/L	0.4944	ppb	20:16:54
1	Co 228.616†	-114.8	4.3	0.1351	µg/L	0.1351	ppb	20:16:54
1	Cr 267.716†	68.2	0.7	0.0216	µg/L	0.0216	ppb	20:16:54
1	Cu 324.752†	4471.0	358.5	1.2448	µg/L	1.2448	ppb	20:16:33
1	Mn 257.610†	406.3	29.8	0.0548	µg/L	0.0548	ppb	20:16:54
1	Mo 202.031†	4.5	-1.1	-0.1349	µg/L	-0.1349	ppb	20:16:54
1	Ni 231.604†	156.5	-2.2	-0.1481	µg/L	-0.1481	ppb	20:16:54
1	P 214.914†	167.9	8.3	7.1293	µg/L	7.1293	ppb	20:16:54
1	Pb 220.353†	-19.3	-3.4	-0.9245	µg/L	-0.9245	ppb	20:16:54
1	S 181.975 Axial†	28.4	4.0	10.038	µg/L	10.038	ppb	20:16:54
1	Sb 206.836†	39.5	10.6	4.9185	µg/L	4.9185	ppb	20:16:54
1	Se 196.026†	-16.1	8.3	7.46	µg/L	7.46	ppb	20:16:54
1	SiO2 †	822.9	74.0	5.5115	µg/L	5.5115	ppb	20:16:54
1	Sn 189.927†	-9.6	-1.5	-0.3946	µg/L	-0.3946	ppb	20:16:54
1	Ti 334.940†	504.2	79.6	0.1007	µg/L	0.1007	ppb	20:16:33
1	Tl 190.801†	-34.3	-1.1	-0.4080	µg/L	-0.4080	ppb	20:16:54
1	U 409.014†	188.8	-34.7	-1.9488	µg/L	-1.9488	ppb	20:16:33
1	V 292.402†	-134.4	-8.8	-0.1285	µg/L	-0.1285	ppb	20:16:54
1	Zn 213.857†	376.2	11.0	0.2651	µg/L	0.2651	ppb	20:16:54
1	Si 251.611†	809.2	3.9	0.140	µg/L	0.140	ppb	20:18:16
2	Sc RADIAL	64934.3	64934.3	97.3	%			20:15:35
2	Al 396.153Radial†	95.8	31.1	6.6854	µg/L	6.6854	ppb	20:15:35
2	Ca 317.933Radial†	280.3	31.4	5.5176	µg/L	5.5176	ppb	20:15:55
2	Fe 238.204 Radial†	40.2	7.5	5.1899	µg/L	5.1899	ppb	20:15:55
2	K 766.490 Radial†	1055.1	142.9	50.647	µg/L	50.647	ppb	20:15:35
2	Mg 279.077 IEC†	5.1	3.3	7.4685	µg/L	7.4685	ppb	20:15:55
2	Na 589.592 Radial†	1574.0	1120.8	137.39	µg/L	137.39	ppb	20:15:35
2	Sr 421.552†	-16.2	-10.4	-0.0313	µg/L	-0.0313	ppb	20:15:35
2	Sc 361.383	1319947.9	1319947.9	99.701	%			20:16:59
2	Y 371.029	723391.6	723391.6	99.665	%			20:16:59
2	Ag 328.068†	-624.2	56.6	0.3873	µg/L	0.3873	ppb	20:17:04
2	As 188.979†	-17.7	6.7	3.6161	µg/L	3.6161	ppb	20:17:24
2	B 249.677†	184.5	152.0	9.6137	µg/L	9.6137	ppb	20:17:24
2	Ba 233.527†	-129.4	-7.2	-0.0776	µg/L	-0.0776	ppb	20:17:24
2	Be 313.107†	441.1	50.6	0.0343	µg/L	0.0343	ppb	20:17:04
2	Cd 226.502†	-22.4	5.6	0.2122	µg/L	0.2122	ppb	20:17:24
2	Co 228.616†	-121.8	-1.8	-0.0561	µg/L	-0.0561	ppb	20:17:24
2	Cr 267.716†	64.2	-3.8	-0.1043	µg/L	-0.1043	ppb	20:17:24
2	Cu 324.752†	4530.3	383.5	1.3329	µg/L	1.3329	ppb	20:17:04
2	Mn 257.610†	391.3	11.7	0.0223	µg/L	0.0223	ppb	20:17:24
2	Mo 202.031†	11.7	6.1	0.7858	µg/L	0.7858	ppb	20:17:24
2	Ni 231.604†	164.5	4.6	0.3095	µg/L	0.3095	ppb	20:17:24
2	P 214.914†	166.7	5.7	4.8560	µg/L	4.8560	ppb	20:17:24

2	Pb 220.353†	-15.7	0.3	0.0940 µg/L	0.0940 ppb	20:17:24
2	S 181.975 Axial†	24.0	-0.5	-1.2597 µg/L	-1.2597 ppb	20:17:24
2	Sb 206.836†	44.2	15.0	7.0156 µg/L	7.0156 ppb	20:17:24
2	Se 196.026†	-19.9	4.5	4.05 µg/L	4.05 ppb	20:17:24
2	SiO2 †	832.4	77.3	5.7482 µg/L	5.7482 ppb	20:17:24
2	Sn 189.927†	-1.0	7.2	1.9640 µg/L	1.9640 ppb	20:17:24
2	Ti 334.940†	452.8	24.2	0.0326 µg/L	0.0326 ppb	20:17:04
2	Tl 190.801†	-29.8	3.7	1.4181 µg/L	1.4181 ppb	20:17:24
2	U 409.014†	148.0	-77.1	-4.3245 µg/L	-4.3245 ppb	20:17:04
2	V 292.402†	-113.5	13.2	0.1917 µg/L	0.1917 ppb	20:17:24
2	Zn 213.857†	381.2	13.1	0.3147 µg/L	0.3147 ppb	20:17:24
2	Si 251.611†	815.3	3.9	0.135 µg/L	0.135 ppb	20:18:36
3	Sc RADIAL	65447.7	65447.7	98.0 %		20:16:00
3	Al 396.153Radial†	62.3	-3.9	-0.8621 µg/L	-0.8621 ppb	20:16:00
3	Ca 317.933Radial†	291.2	40.3	7.0829 µg/L	7.0829 ppb	20:16:20
3	Fe 238.204 Radial†	37.7	4.6	3.2160 µg/L	3.2160 ppb	20:16:20
3	K 766.490 Radial†	1014.7	93.2	33.022 µg/L	33.022 ppb	20:16:00
3	Mg 279.077 IEC†	13.2	11.5	26.155 µg/L	26.155 ppb	20:16:20
3	Na 589.592 Radial†	1552.7	1086.4	133.17 µg/L	133.17 ppb	20:16:00
3	Sr 421.552†	4.5	10.9	0.0325 µg/L	0.0325 ppb	20:16:00
3	Sc 361.383	1319448.2	1319448.2	99.663 %		20:17:30
3	Y 371.029	723620.8	723620.8	99.697 %		20:17:30
3	Ag 328.068†	-644.7	35.8	0.2454 µg/L	0.2454 ppb	20:17:35
3	As 188.979†	-18.3	6.1	3.2629 µg/L	3.2629 ppb	20:17:55
3	B 249.677†	183.7	151.3	9.5686 µg/L	9.5686 ppb	20:17:55
3	Ba 233.527†	-111.1	11.1	0.1188 µg/L	0.1188 ppb	20:17:55
3	Be 313.107†	458.8	68.5	0.0469 µg/L	0.0469 ppb	20:17:35
3	Cd 226.502†	-17.4	10.6	0.4069 µg/L	0.4069 ppb	20:17:55
3	Co 228.616†	-117.8	2.1	0.0677 µg/L	0.0677 ppb	20:17:55
3	Cr 267.716†	64.4	-3.6	-0.0995 µg/L	-0.0995 ppb	20:17:55
3	Cu 324.752†	4520.7	375.6	1.3053 µg/L	1.3053 ppb	20:17:35
3	Mn 257.610†	395.2	15.7	0.0290 µg/L	0.0290 ppb	20:17:55
3	Mo 202.031†	8.9	3.3	0.4277 µg/L	0.4277 ppb	20:17:55
3	Ni 231.604†	159.5	-0.4	-0.0229 µg/L	-0.0229 ppb	20:17:55
3	P 214.914†	161.4	0.5	0.2098 µg/L	0.2098 ppb	20:17:55
3	Pb 220.353†	-16.9	-0.8	-0.2233 µg/L	-0.2233 ppb	20:17:55
3	S 181.975 Axial†	26.4	1.9	4.6637 µg/L	4.6637 ppb	20:17:55
3	Sb 206.836†	34.2	4.9	2.3131 µg/L	2.3131 ppb	20:17:55
3	Se 196.026†	-24.6	-0.2	-0.198 µg/L	-0.198 ppb	20:17:55
3	SiO2 †	840.5	85.6	6.3735 µg/L	6.3735 ppb	20:17:55
3	Sn 189.927†	-5.7	2.5	0.6815 µg/L	0.6815 ppb	20:17:55
3	Ti 334.940†	602.2	174.3	0.2203 µg/L	0.2203 ppb	20:17:35
3	Tl 190.801†	-36.8	-3.4	-1.2849 µg/L	-1.2849 ppb	20:17:55
3	U 409.014†	158.6	-66.4	-3.7250 µg/L	-3.7250 ppb	20:17:35
3	V 292.402†	-118.8	7.9	0.1124 µg/L	0.1124 ppb	20:17:55
3	Zn 213.857†	373.9	5.9	0.1406 µg/L	0.1406 ppb	20:17:55
3	Si 251.611†	821.1	9.9	0.351 µg/L	0.351 ppb	20:18:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sc 361.383	1316431.4	99.435	%	0.4278				0.43%
Sc RADIAL	65389.4	98.0	%	0.64				0.66%
Y 371.029	721880.2	99.457	%	0.3883				0.39%
Ag 328.068†	47.0	0.3210	µg/L	0.07142	0.3210	ppb	0.07142	22.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	19.0	4.1047	µg/L	4.30247	4.1047	ppb	4.30247	104.82%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.6	3.0252	µg/L	0.73908	3.0252	ppb	0.73908	24.43%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	156.1	9.8721	µg/L	0.48717	9.8721	ppb	0.48717	4.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.9	0.0417	µg/L	0.10473	0.0417	ppb	0.10473	251.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	55.1	0.0376	µg/L	0.00813	0.0376	ppb	0.00813	21.60%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	29.5	5.1934	µg/L	2.07071	5.1934	ppb	2.07071	39.87%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.7	0.3712	µg/L	0.14443	0.3712	ppb	0.14443	38.91%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	1.5	0.0489 µg/L	0.09701	0.0489 ppb	0.09701	198.43%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-2.2	-0.0607 µg/L	0.07134	-0.0607 ppb	0.07134	117.44%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	372.5	1.2944 µg/L	0.04506	1.2944 ppb	0.04506	3.48%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	6.0	4.1785 µg/L	0.98788	4.1785 ppb	0.98788	23.64%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	121.5	43.072 µg/L	9.0697	43.072 ppb	9.0697	21.06%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	6.4	14.681 µg/L	10.0457	14.681 ppb	10.0457	68.43%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	19.0	0.0354 µg/L	0.01716	0.0354 ppb	0.01716	48.51%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.8	0.3596 µg/L	0.46411	0.3596 ppb	0.46411	129.08%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	1114.7	136.64 µg/L	3.160	136.64 ppb	3.160	2.31%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	0.7	0.0462 µg/L	0.23647	0.0462 ppb	0.23647	512.10%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	4.8	4.0650 µg/L	3.52694	4.0650 ppb	3.52694	86.76%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-1.3	-0.3513 µg/L	0.52117	-0.3513 ppb	0.52117	148.37%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.8	4.4807 µg/L	5.65114	4.4807 ppb	5.65114	126.12%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	10.2	4.7491 µg/L	2.35581	4.7491 ppb	2.35581	49.61%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	4.2	3.77 µg/L	3.838	3.77 ppb	3.838	101.74%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	79.0	5.8777 µg/L	0.44534	5.8777 ppb	0.44534	7.58%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	5.9	0.209 µg/L	0.1229	0.209 ppb	0.1229	58.90%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.8	0.7503 µg/L	1.18080	0.7503 ppb	1.18080	157.38%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	3.3	0.0097 µg/L	0.03555	0.0097 ppb	0.03555	368.31%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	92.7	0.1179 µg/L	0.09503	0.1179 ppb	0.09503	80.62%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.2	-0.0916 µg/L	1.37901	-0.0916 ppb	1.37901	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-59.4	-3.3328 µg/L	1.23547	-3.3328 ppb	1.23547	37.07%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	4.1	0.0585 µg/L	0.16674	0.0585 ppb	0.16674	284.79%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	10.0	0.2402 µg/L	0.08969	0.2402 ppb	0.08969	37.34%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

Analytical Sequence
Method: General Eng.2AZ

Seq.	Loc.	ID	Status
1	38	1200885042|441429|1	Analyzed
2	39	1200885043|441429|1	Analyzed
3	40	140314001|441429|1	Analyzed
4	41	1200885044|441429|1	Analyzed
5	42	1200885045|441429|1	Analyzed
6	43	1200885046|441429|5	Analyzed
7	44	140314002|441429|1	Analyzed
8	45	140314003|441429|1	Analyzed
9	46	140314004|441429|1	Analyzed
10	47	140316006|441429|1	Analyzed
11	7	CCV	QC Passed
12	8	CCB	QC Passed

Analysis Begun

Start Time: 7/14/2005 20:30:41 Plasma On Time: 7/12/2005 15:54:31
Logged In Analyst: Administrator Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N2061001Autosampler Model: AS-93plus

Sample Information File: C:\pe\Sample Information\071405.sif
Batch ID:
Results Data Set: 071405
Results Library: C:\pe\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 38
Sample ID: 1200875012|437221|1 Date Collected: 7/14/2005 20:30:41
Nebulizer Back Pressure: 256.0 kPa Nebulizer Flow: 0.65 L/min
Analyst: TLW Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: 1200875012|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	66047.1	66047.1	98.9	%			20:32:05
1	Al 396.153Radial†	79.7	13.1	2.8554	µg/L	2.8554	ppb	20:32:05
1	Ca 317.933Radial†	312.8	59.4	10.468	µg/L	10.468	ppb	20:32:25
1	Fe 238.204 Radial†	42.5	9.1	6.3410	µg/L	6.3410	ppb	20:32:25
1	K 766.490 Radial†	956.1	24.5	8.6719	µg/L	8.6719	ppb	20:32:05
1	Mg 279.077 IEC†	12.5	10.7	24.319	µg/L	24.319	ppb	20:32:25
1	Na 589.592 Radial†	1048.7	562.6	68.964	µg/L	68.964	ppb	20:32:05
1	Sr 421.552†	-8.5	-2.3	-0.0072	µg/L	-0.0072	ppb	20:32:05
1	Sc 361.383	1320960.7	1320960.7	99.777	%			20:33:23
1	Y 371.029	725240.7	725240.7	99.920	%			20:33:23
1	Ag 328.068†	-724.9	-43.8	-0.2965	µg/L	-0.2965	ppb	20:33:28
1	As 188.979†	-18.5	5.9	3.1723	µg/L	3.1723	ppb	20:33:49
1	B 249.677†	95.4	62.5	3.9538	µg/L	3.9538	ppb	20:33:49
1	Ba 233.527†	-120.9	1.4	0.0143	µg/L	0.0143	ppb	20:33:49
1	Be 313.107†	414.2	23.3	0.0157	µg/L	0.0157	ppb	20:33:28
1	Cd 226.502†	-28.9	-0.9	-0.0365	µg/L	-0.0365	ppb	20:33:49
1	Co 228.616†	-123.2	-3.2	-0.0998	µg/L	-0.0998	ppb	20:33:49
1	Cr 267.716†	74.1	6.1	0.1726	µg/L	0.1726	ppb	20:33:49
1	Cu 324.752†	4554.6	404.4	1.4049	µg/L	1.4049	ppb	20:33:28
1	Mn 257.610†	444.0	64.1	0.1174	µg/L	0.1174	ppb	20:33:49
1	Mo 202.031†	3.9	-1.6	-0.2100	µg/L	-0.2100	ppb	20:33:49
1	Ni 231.604†	156.7	-3.4	-0.2219	µg/L	-0.2219	ppb	20:33:49
1	P 214.914†	164.7	3.6	2.9565	µg/L	2.9565	ppb	20:33:49
1	Pb 220.353†	-12.5	3.6	0.9651	µg/L	0.9651	ppb	20:33:49
1	S 181.975 Axial†	26.7	2.1	5.2735	µg/L	5.2735	ppb	20:33:49
1	Sb 206.836†	44.8	15.6	7.2832	µg/L	7.2832	ppb	20:33:49
1	Se 196.026†	-31.4	-7.0	-6.32	µg/L	-6.32	ppb	20:33:49
1	SiO2 †	1105.8	350.6	26.088	µg/L	26.088	ppb	20:33:49
1	Sn 189.927†	2.4	10.7	2.9146	µg/L	2.9146	ppb	20:33:49
1	Ti 334.940†	513.7	84.9	0.1078	µg/L	0.1078	ppb	20:33:28
1	Tl 190.801†	-36.2	-2.7	-1.0203	µg/L	-1.0203	ppb	20:33:49
1	U 409.014†	174.9	-50.3	-2.8219	µg/L	-2.8219	ppb	20:33:28
1	V 292.402†	-129.4	-2.6	-0.0422	µg/L	-0.0422	ppb	20:33:49
1	Zn 213.857†	488.5	120.3	2.9287	µg/L	2.9287	ppb	20:33:49
1	Si 251.611†	1101.9	290.4	10.3	µg/L	10.3	ppb	20:35:11
2	Sc RADIAL	65525.6	65525.6	98.2	%			20:32:30
2	Al 396.153Radial†	90.2	24.5	5.3123	µg/L	5.3123	ppb	20:32:30
2	Ca 317.933Radial†	313.8	62.9	11.118	µg/L	11.118	ppb	20:32:50
2	Fe 238.204 Radial†	38.3	5.2	3.5904	µg/L	3.5904	ppb	20:32:50
2	K 766.490 Radial†	942.8	18.6	6.5937	µg/L	6.5937	ppb	20:32:30
2	Mg 279.077 IEC†	-2.5	-4.6	-10.501	µg/L	-10.501	ppb	20:32:50
2	Na 589.592 Radial†	1095.4	618.7	75.839	µg/L	75.839	ppb	20:32:30
2	Sr 421.552†	-47.6	-42.2	-0.1273	µg/L	-0.1273	ppb	20:32:30
2	Sc 361.383	1327948.5	1327948.5	100.30	%			20:33:54
2	Y 371.029	728953.4	728953.4	100.43	%			20:33:54
2	Ag 328.068†	-683.3	1.5	0.0099	µg/L	0.0099	ppb	20:33:59

2	As 188.979†	-19.1	5.4	2.9155 µg/L	2.9155 ppb	20:34:19
2	B 249.677†	88.9	55.6	3.5143 µg/L	3.5143 ppb	20:34:19
2	Ba 233.527†	-124.3	-1.3	-0.0134 µg/L	-0.0134 ppb	20:34:19
2	Be 313.107†	413.4	20.3	0.0145 µg/L	0.0145 ppb	20:33:59
2	Cd 226.502†	-26.3	1.8	0.0706 µg/L	0.0706 ppb	20:34:19
2	Co 228.616†	-126.6	-5.9	-0.1878 µg/L	-0.1878 ppb	20:34:19
2	Cr 267.716†	60.4	-8.0	-0.2274 µg/L	-0.2274 ppb	20:34:19
2	Cu 324.752†	4591.8	417.5	1.4463 µg/L	1.4463 ppb	20:33:59
2	Mn 257.610†	445.2	63.0	0.1149 µg/L	0.1149 ppb	20:34:19
2	Mo 202.031†	3.8	-1.8	-0.2274 µg/L	-0.2274 ppb	20:34:19
2	Ni 231.604†	156.7	-4.2	-0.2790 µg/L	-0.2790 ppb	20:34:19
2	P 214.914†	158.4	-3.5	-3.3248 µg/L	-3.3248 ppb	20:34:19
2	Pb 220.353†	-22.3	-6.2	-1.6809 µg/L	-1.6809 ppb	20:34:19
2	S 181.975 Axial†	22.9	-1.8	-4.4802 µg/L	-4.4802 ppb	20:34:19
2	Sb 206.836†	36.9	7.5	3.5000 µg/L	3.5000 ppb	20:34:19
2	Se 196.026†	-16.0	8.6	7.75 µg/L	7.75 ppb	20:34:19
2	SiO2 †	1114.0	352.9	26.264 µg/L	26.264 ppb	20:34:19
2	Sn 189.927†	-0.5	7.7	2.0984 µg/L	2.0984 ppb	20:34:19
2	Ti 334.940†	526.4	94.9	0.1181 µg/L	0.1181 ppb	20:33:59
2	Tl 190.801†	-32.5	1.2	0.4674 µg/L	0.4674 ppb	20:34:19
2	U 409.014†	262.8	36.4	2.0402 µg/L	2.0402 ppb	20:33:59
2	V 292.402†	-131.2	-3.8	-0.0548 µg/L	-0.0548 ppb	20:34:19
2	Zn 213.857†	481.3	110.6	2.6922 µg/L	2.6922 ppb	20:34:19
2	Si 251.611†	1097.4	280.1	9.90 µg/L	9.90 ppb	20:35:31
3	Sc RADIAL	66351.5	66351.5	99.4 %		20:32:55
3	Al 396.153Radial†	97.6	30.8	6.6585 µg/L	6.6585 ppb	20:32:55
3	Ca 317.933Radial†	309.0	54.1	9.5391 µg/L	9.5391 ppb	20:33:15
3	Fe 238.204 Radial†	41.5	7.9	5.4793 µg/L	5.4793 ppb	20:33:15
3	K 766.490 Radial†	988.4	52.6	18.650 µg/L	18.650 ppb	20:32:55
3	Mg 279.077 IEC†	8.8	6.8	15.624 µg/L	15.624 ppb	20:33:15
3	Na 589.592 Radial†	999.4	508.1	62.288 µg/L	62.288 ppb	20:32:55
3	Sr 421.552†	-28.0	-21.9	-0.0660 µg/L	-0.0660 ppb	20:32:55
3	Sc 361.383	1318915.7	1318915.7	99.623 %		20:34:25
3	Y 371.029	724061.3	724061.3	99.758 %		20:34:25
3	Ag 328.068†	-643.2	37.0	0.2530 µg/L	0.2530 ppb	20:34:30
3	As 188.979†	-23.0	1.4	0.7639 µg/L	0.7639 ppb	20:34:50
3	B 249.677†	83.1	50.4	3.1873 µg/L	3.1873 ppb	20:34:50
3	Ba 233.527†	-130.2	-8.1	-0.0866 µg/L	-0.0866 ppb	20:34:50
3	Be 313.107†	380.2	-10.1	-0.0073 µg/L	-0.0073 ppb	20:34:30
3	Cd 226.502†	-27.5	0.5	0.0166 µg/L	0.0166 ppb	20:34:50
3	Co 228.616†	-127.1	-7.2	-0.2279 µg/L	-0.2279 ppb	20:34:50
3	Cr 267.716†	75.8	7.9	0.2224 µg/L	0.2224 ppb	20:34:50
3	Cu 324.752†	4510.4	367.1	1.2742 µg/L	1.2742 ppb	20:34:30
3	Mn 257.610†	440.2	61.0	0.1116 µg/L	0.1116 ppb	20:34:50
3	Mo 202.031†	7.8	2.2	0.2829 µg/L	0.2829 ppb	20:34:50
3	Ni 231.604†	158.1	-1.8	-0.1143 µg/L	-0.1143 ppb	20:34:50
3	P 214.914†	173.0	12.2	10.557 µg/L	10.557 ppb	20:34:50
3	Pb 220.353†	-15.8	0.3	0.0717 µg/L	0.0717 ppb	20:34:50
3	S 181.975 Axial†	23.8	-0.7	-1.8059 µg/L	-1.8059 ppb	20:34:50
3	Sb 206.836†	40.0	10.8	5.0354 µg/L	5.0354 ppb	20:34:50
3	Se 196.026†	-24.9	-0.5	-0.453 µg/L	-0.453 ppb	20:34:50
3	SiO2 †	1105.9	352.5	26.229 µg/L	26.229 ppb	20:34:50
3	Sn 189.927†	-3.4	4.9	1.3279 µg/L	1.3279 ppb	20:34:50
3	Ti 334.940†	487.6	59.4	0.0754 µg/L	0.0754 ppb	20:34:30
3	Tl 190.801†	-34.4	-0.9	-0.3624 µg/L	-0.3624 ppb	20:34:50
3	U 409.014†	193.9	-31.0	-1.7373 µg/L	-1.7373 ppb	20:34:30
3	V 292.402†	-129.1	-2.6	-0.0355 µg/L	-0.0355 ppb	20:34:50
3	Zn 213.857†	486.2	118.8	2.8912 µg/L	2.8912 ppb	20:34:50
3	Si 251.611†	1093.8	284.0	10.0 µg/L	10.0 ppb	20:35:51

Mean Data: 1200875012|437221|1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1322608.3	99.902	%	0.3578				0.36%
Sc RADIAL	65974.7	98.8	%	0.63				0.63%
Y 371.029	726085.1	100.04	%	0.352				0.35%
Ag 328.068†	-1.8	-0.0112	µg/L	0.27533	-0.0112	ppb	0.27533	>999.9%
Al 396.153Radial†	22.8	4.9421	µg/L	1.92840	4.9421	ppb	1.92840	39.02%
As 188.979†	4.2	2.2839	µg/L	1.32260	2.2839	ppb	1.32260	57.91%
B 249.677†	56.2	3.5518	µg/L	0.38461	3.5518	ppb	0.38461	10.83%

Ba 233.527†	-2.6	-0.0285 µg/L	0.05217	-0.0285 ppb	0.05217	182.76%
Be 313.107†	11.1	0.0076 µg/L	0.01296	0.0076 ppb	0.01296	170.56%
Ca 317.933Radial†	58.8	10.375 µg/L	0.7937	10.375 ppb	0.7937	7.65%
Cd 226.502†	0.5	0.0169 µg/L	0.05354	0.0169 ppb	0.05354	317.11%
Co 228.616†	-5.4	-0.1718 µg/L	0.06556	-0.1718 ppb	0.06556	38.15%
Cr 267.716†	2.0	0.0559 µg/L	0.24660	0.0559 ppb	0.24660	441.28%
Cu 324.752†	396.3	1.3751 µg/L	0.08984	1.3751 ppb	0.08984	6.53%
Fe 238.204 Radial†	7.4	5.1369 µg/L	1.40689	5.1369 ppb	1.40689	27.39%
K 766.490 Radial†	31.9	11.305 µg/L	6.4453	11.305 ppb	6.4453	57.01%
Mg 279.077 IEC†	4.3	9.8141 µg/L	18.12252	9.8141 ppb	18.12252	184.66%
Mn 257.610†	62.7	0.1146 µg/L	0.00291	0.1146 ppb	0.00291	2.54%
Mo 202.031†	-0.4	-0.0515 µg/L	0.28971	-0.0515 ppb	0.28971	562.26%
Na 589.592 Radial†	563.1	69.030 µg/L	6.7761	69.030 ppb	6.7761	9.82%
Ni 231.604†	-3.1	-0.2051 µg/L	0.08361	-0.2051 ppb	0.08361	40.77%
P 214.914†	4.1	3.3964 µg/L	6.95152	3.3964 ppb	6.95152	204.68%
Pb 220.353†	-0.8	-0.2147 µg/L	1.34604	-0.2147 ppb	1.34604	627.02%
S 181.975 Axial†	-0.1	-0.3375 µg/L	5.03993	-0.3375 ppb	5.03993	>999.9%
Sb 206.836†	11.3	5.2729 µg/L	1.90278	5.2729 ppb	1.90278	36.09%
Se 196.026†	0.4	0.327 µg/L	7.0658	0.327 ppb	7.0658	>999.9%
SiO2 †	352.0	26.194 µg/L	0.0931	26.194 ppb	0.0931	0.36%
Si 251.611†	284.9	10.1 µg/L	0.18	10.1 ppb	0.18	1.82%
Sn 189.927†	7.8	2.1136 µg/L	0.79345	2.1136 ppb	0.79345	37.54%
Sr 421.552†	-22.1	-0.0668 µg/L	0.06004	-0.0668 ppb	0.06004	89.84%
Ti 334.940†	79.7	0.1004 µg/L	0.02225	0.1004 ppb	0.02225	22.15%
Tl 190.801†	-0.8	-0.3051 µg/L	0.74547	-0.3051 ppb	0.74547	244.34%
U 409.014†	-15.0	-0.8397 µg/L	2.55235	-0.8397 ppb	2.55235	303.98%
V 292.402†	-3.0	-0.0442 µg/L	0.00981	-0.0442 ppb	0.00981	22.22%
Zn 213.857†	116.6	2.8374 µg/L	0.12708	2.8374 ppb	0.12708	4.48%

Sequence No.: 2
Sample ID: 1200875019|437221|1
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 7/14/2005 20:37:40
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875019|437221|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	67538.3	67538.3	101	%			20:39:04
1	Al 396.153Radial†	23305.8	22966.3	4948.2	µg/L	4948.2	ppb	20:39:04
1	Ca 317.933Radial†	28744.8	28152.5	4970.7	µg/L	4970.7	ppb	20:39:24
1	Fe 238.204 Radial†	7412.5	7292.1	5083.9	µg/L	5083.9	ppb	20:39:24
1	K 766.490 Radial†	15498.5	14375.8	5095.6	µg/L	5095.6	ppb	20:39:04
1	Mg 279.077 IEC†	2205.5	2177.7	4975.7	µg/L	4975.7	ppb	20:39:24
1	Na 589.592 Radial†	42494.8	41501.4	5086.0	µg/L	5086.0	ppb	20:39:04
1	Sr 421.552†	168572.1	166610.4	500.88	µg/L	500.88	ppb	20:39:04
1	Sc 361.383	1359847.1	1359847.1	102.71	%			20:40:24
1	Y 371.029	743724.4	743724.4	102.47	%			20:40:24
1	Ag 328.068†	73683.2	72418.6	494.61	µg/L	494.61	ppb	20:40:29
1	As 188.979†	947.6	947.0	516.22	µg/L	516.22	ppb	20:40:49
1	B 249.677†	8065.4	7819.2	495.08	µg/L	495.08	ppb	20:40:29
1	Ba 233.527†	47382.6	46253.0	495.22	µg/L	495.22	ppb	20:40:29
1	Be 313.107†	735068.4	715251.0	497.13	µg/L	497.13	ppb	20:40:24
1	Cd 226.502†	13054.9	12737.9	489.45	µg/L	489.45	ppb	20:40:29
1	Co 228.616†	15888.8	15589.2	492.66	µg/L	492.66	ppb	20:40:29
1	Cr 267.716†	18083.3	17537.2	493.10	µg/L	493.10	ppb	20:40:29
1	Cu 324.752†	153690.0	145468.1	504.14	µg/L	504.14	ppb	20:40:24
1	Mn 257.610†	282232.6	274393.3	499.49	µg/L	499.49	ppb	20:40:24
1	Mo 202.031†	3897.2	3788.6	487.36	µg/L	487.36	ppb	20:40:29
1	Ni 231.604†	7676.4	7313.1	487.04	µg/L	487.04	ppb	20:40:29
1	P 214.914†	774.5	592.6	439.69	µg/L	439.69	ppb	20:40:49
1	Pb 220.353†	1860.5	1827.4	494.94	µg/L	494.94	ppb	20:40:49
1	S 181.975 Axial†	2036.5	1958.0	4867.9	µg/L	4867.9	ppb	20:40:49
1	Sb 206.836†	1178.6	1118.1	522.06	µg/L	522.06	ppb	20:40:49
1	Se 196.026†	522.4	533.1	483	µg/L	483	ppb	20:40:49
1	SiO2 †	142309.6	137791.2	10255	µg/L	10255	ppb	20:40:24
1	Sn 189.927†	1879.6	1838.2	499.80	µg/L	499.80	ppb	20:40:49
1	Ti 334.940†	405703.3	394551.9	493.73	µg/L	493.73	ppb	20:40:24
1	Tl 190.801†	1262.5	1262.7	485.04	µg/L	485.04	ppb	20:40:49
1	U 409.014†	9178.7	8710.6	490.73	µg/L	490.73	ppb	20:40:29
1	V 292.402†	35162.3	34360.2	497.04	µg/L	497.04	ppb	20:40:29
1	Zn 213.857†	20994.0	20069.9	484.43	µg/L	484.43	ppb	20:40:29
1	Si 251.611†	140887.7	136350.6	4820	µg/L	4820	ppb	20:41:58
2	Sc RADIAL	66553.9	66553.9	99.7	%			20:39:29
2	Al 396.153Radial†	23004.2	23004.5	4956.2	µg/L	4956.2	ppb	20:39:29
2	Ca 317.933Radial†	28740.6	28568.6	5044.1	µg/L	5044.1	ppb	20:39:50
2	Fe 238.204 Radial†	7425.3	7413.3	5168.3	µg/L	5168.3	ppb	20:39:50
2	K 766.490 Radial†	15291.8	14395.0	5102.4	µg/L	5102.4	ppb	20:39:29
2	Mg 279.077 IEC†	2218.9	2223.4	5079.8	µg/L	5079.8	ppb	20:39:50
2	Na 589.592 Radial†	42062.5	41689.2	5109.0	µg/L	5109.0	ppb	20:39:29
2	Sr 421.552†	166226.7	166722.4	501.21	µg/L	501.21	ppb	20:39:29
2	Sc 361.383	1355418.6	1355418.6	102.38	%			20:40:55
2	Y 371.029	741362.1	741362.1	102.14	%			20:40:55
2	Ag 328.068†	73799.6	72766.7	497.00	µg/L	497.00	ppb	20:41:01
2	As 188.979†	939.9	942.5	513.88	µg/L	513.88	ppb	20:41:21
2	B 249.677†	8089.0	7867.9	498.17	µg/L	498.17	ppb	20:41:01
2	Ba 233.527†	47530.4	46548.1	498.38	µg/L	498.38	ppb	20:41:01
2	Be 313.107†	733988.6	716534.6	498.03	µg/L	498.03	ppb	20:40:55
2	Cd 226.502†	13071.1	12795.3	491.65	µg/L	491.65	ppb	20:41:01
2	Co 228.616†	15952.6	15702.1	496.23	µg/L	496.23	ppb	20:41:01
2	Cr 267.716†	18219.7	17728.0	498.46	µg/L	498.46	ppb	20:41:01
2	Cu 324.752†	152841.5	145128.2	502.96	µg/L	502.96	ppb	20:40:55
2	Mn 257.610†	281494.4	274570.0	499.82	µg/L	499.82	ppb	20:40:55
2	Mo 202.031†	3920.7	3824.0	491.90	µg/L	491.90	ppb	20:41:01
2	Ni 231.604†	7713.3	7373.5	491.07	µg/L	491.07	ppb	20:41:01
2	P 214.914†	776.7	597.2	443.82	µg/L	443.82	ppb	20:41:21

2	Pb 220.353†	1846.4	1819.5	492.82 µg/L	492.82 ppb	20:41:21
2	S 181.975 Axial†	2009.1	1937.8	4817.6 µg/L	4817.6 ppb	20:41:21
2	Sb 206.836†	1177.5	1120.8	523.29 µg/L	523.29 ppb	20:41:21
2	Se 196.026†	514.6	527.2	477 µg/L	477 ppb	20:41:21
2	SiO2 †	141776.3	137722.9	10250 µg/L	10250 ppb	20:40:55
2	Sn 189.927†	1869.8	1834.6	498.81 µg/L	498.81 ppb	20:41:21
2	Ti 334.940†	404311.8	394483.3	493.65 µg/L	493.65 ppb	20:40:55
2	Tl 190.801†	1261.4	1265.7	486.19 µg/L	486.19 ppb	20:41:21
2	U 409.014†	9203.0	8763.5	493.72 µg/L	493.72 ppb	20:41:01
2	V 292.402†	35355.8	34660.9	501.40 µg/L	501.40 ppb	20:41:01
2	Zn 213.857†	21013.7	20155.9	486.49 µg/L	486.49 ppb	20:41:01
2	Si 251.611†	139996.9	135928.6	4810 µg/L	4810 ppb	20:42:03
3	Sc RADIAL	66631.3	66631.3	99.8 %		20:39:55
3	Al 396.153Radial†	22988.2	22961.7	4946.8 µg/L	4946.8 ppb	20:39:55
3	Ca 317.933Radial†	28719.1	28513.5	5034.4 µg/L	5034.4 ppb	20:40:15
3	Fe 238.204 Radial†	7412.7	7392.0	5153.5 µg/L	5153.5 ppb	20:40:15
3	K 766.490 Radial†	15263.9	14349.3	5086.2 µg/L	5086.2 ppb	20:39:55
3	Mg 279.077 IEC†	2203.8	2205.7	5039.6 µg/L	5039.6 ppb	20:40:15
3	Na 589.592 Radial†	42058.1	41635.6	5102.5 µg/L	5102.5 ppb	20:39:55
3	Sr 421.552†	166514.4	166816.8	501.50 µg/L	501.50 ppb	20:39:55
3	Sc 361.383	1354777.6	1354777.6	102.33 %		20:41:27
3	Y 371.029	740675.0	740675.0	102.05 %		20:41:27
3	Ag 328.068†	74038.1	73033.9	498.82 µg/L	498.82 ppb	20:41:32
3	As 188.979†	945.7	948.6	517.12 µg/L	517.12 ppb	20:41:52
3	B 249.677†	8101.9	7884.2	499.20 µg/L	499.20 ppb	20:41:32
3	Ba 233.527†	47683.5	46719.7	500.22 µg/L	500.22 ppb	20:41:32
3	Be 313.107†	732449.6	715369.9	497.22 µg/L	497.22 ppb	20:41:27
3	Cd 226.502†	13110.1	12839.4	493.34 µg/L	493.34 ppb	20:41:32
3	Co 228.616†	16011.6	15767.1	498.29 µg/L	498.29 ppb	20:41:32
3	Cr 267.716†	18191.3	17708.6	497.91 µg/L	497.91 ppb	20:41:32
3	Cu 324.752†	152863.4	145220.2	503.28 µg/L	503.28 ppb	20:41:27
3	Mn 257.610†	281090.0	274304.8	499.34 µg/L	499.34 ppb	20:41:27
3	Mo 202.031†	3936.9	3841.6	494.17 µg/L	494.17 ppb	20:41:32
3	Ni 231.604†	7700.7	7364.8	490.49 µg/L	490.49 ppb	20:41:32
3	P 214.914†	780.7	601.4	447.53 µg/L	447.53 ppb	20:41:52
3	Pb 220.353†	1871.0	1844.4	499.54 µg/L	499.54 ppb	20:41:52
3	S 181.975 Axial†	2036.0	1965.0	4885.2 µg/L	4885.2 ppb	20:41:52
3	Sb 206.836†	1184.8	1128.5	526.92 µg/L	526.92 ppb	20:41:52
3	Se 196.026†	521.1	533.7	483 µg/L	483 ppb	20:41:52
3	SiO2 †	141780.6	137792.7	10255 µg/L	10255 ppb	20:41:27
3	Sn 189.927†	1887.1	1852.4	503.65 µg/L	503.65 ppb	20:41:52
3	Ti 334.940†	403799.5	394169.5	493.25 µg/L	493.25 ppb	20:41:27
3	Tl 190.801†	1274.7	1279.2	491.37 µg/L	491.37 ppb	20:41:52
3	U 409.014†	9275.2	8838.3	497.92 µg/L	497.92 ppb	20:41:32
3	V 292.402†	35386.1	34706.9	502.08 µg/L	502.08 ppb	20:41:32
3	Zn 213.857†	21087.3	20237.6	488.49 µg/L	488.49 ppb	20:41:32
3	Si 251.611†	140460.5	136446.3	4830 µg/L	4830 ppb	20:42:09

Mean Data: 1200875019|437221|1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1356681.1	102.48	%	0.209				0.20%
Sc RADIAL	66907.8	100	%	0.8				0.82%
Y 371.029	741920.5	102.22	%	0.220				0.22%
Ag 328.068†	72739.8	496.81	µg/L	2.111	496.81	ppb	2.111	0.42%
Al 396.153Radial†	22977.5	4950.4	µg/L	5.07	4950.4	ppb	5.07	0.10%
As 188.979†	946.1	515.74	µg/L	1.675	515.74	ppb	1.675	0.32%
B 249.677†	7857.1	497.48	µg/L	2.142	497.48	ppb	2.142	0.43%
Ba 233.527†	46506.9	497.94	µg/L	2.528	497.94	ppb	2.528	0.51%
Be 313.107†	715718.5	497.46	µg/L	0.493	497.46	ppb	0.493	0.10%
Ca 317.933Radial†	28411.5	5016.4	µg/L	39.89	5016.4	ppb	39.89	0.80%
Cd 226.502†	12790.9	491.48	µg/L	1.954	491.48	ppb	1.954	0.40%
Co 228.616†	15686.2	495.73	µg/L	2.852	495.73	ppb	2.852	0.58%
Cr 267.716†	17657.9	496.49	µg/L	2.952	496.49	ppb	2.952	0.59%
Cu 324.752†	145272.1	503.46	µg/L	0.611	503.46	ppb	0.611	0.12%
Fe 238.204 Radial†	7365.8	5135.2	µg/L	45.09	5135.2	ppb	45.09	0.88%
K 766.490 Radial†	14373.4	5094.8	µg/L	8.14	5094.8	ppb	8.14	0.16%
Mg 279.077 IEC†	2202.3	5031.7	µg/L	52.51	5031.7	ppb	52.51	1.04%
Mn 257.610†	274422.7	499.55	µg/L	0.247	499.55	ppb	0.247	0.05%
Mo 202.031†	3818.1	491.14	µg/L	3.466	491.14	ppb	3.466	0.71%

Na 589.592 Radial†	41608.7	5099.2 µg/L	11.85	5099.2 ppb	11.85	0.23%
Ni 231.604†	7350.5	489.53 µg/L	2.176	489.53 ppb	2.176	0.44%
P 214.914†	597.1	443.68 µg/L	3.921	443.68 ppb	3.921	0.88%
Pb 220.353†	1830.5	495.76 µg/L	3.437	495.76 ppb	3.437	0.69%
S 181.975 Axial†	1953.6	4856.9 µg/L	35.14	4856.9 ppb	35.14	0.72%
Sb 206.836†	1122.4	524.09 µg/L	2.528	524.09 ppb	2.528	0.48%
Se 196.026†	531.3	481 µg/L	3.3	481 ppb	3.3	0.68%
SiO2 †	137768.9	10253 µg/L	3.0	10253 ppb	3.0	0.03%
Si 251.611†	136241.8	4820 µg/L	9.7	4820 ppb	9.7	0.20%
Sn 189.927†	1841.7	500.75 µg/L	2.560	500.75 ppb	2.560	0.51%
Sr 421.552†	166716.5	501.20 µg/L	0.310	501.20 ppb	0.310	0.06%
Ti 334.940†	394401.6	493.54 µg/L	0.257	493.54 ppb	0.257	0.05%
Tl 190.801†	1269.2	487.53 µg/L	3.368	487.53 ppb	3.368	0.69%
U 409.014†	8770.8	494.12 µg/L	3.608	494.12 ppb	3.608	0.73%
V 292.402†	34576.0	500.17 µg/L	2.734	500.17 ppb	2.734	0.55%
Zn 213.857†	20154.5	486.47 µg/L	2.029	486.47 ppb	2.029	0.42%

Sequence No.: 3
Sample ID: 139405001|437221|5
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 7/14/2005 20:43:57
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 139405001|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	67693.4	67693.4	101	%			20:45:24
1	Al 396.153Radial†	74.6	6.2	1.3039	µg/L	1.3039	ppb	20:45:24
1	Ca 317.933Radial†	40612.9	39790.1	7021.6	µg/L	7021.6	ppb	20:45:24
1	Fe 238.204 Radial†	38.4	4.0	2.8095	µg/L	2.8095	ppb	20:45:44
1	K 766.490 Radial†	1420.0	458.5	162.50	µg/L	162.50	ppb	20:45:24
1	Mg 279.077 IEC†	503.4	494.4	1127.6	µg/L	1127.6	ppb	20:45:44
1	Na 589.592 Radial†	35953.2	34954.8	4284.9	µg/L	4284.9	ppb	20:45:24
1	Sr 421.552†	11668.9	11512.5	34.408	µg/L	34.408	ppb	20:45:24
1	Sc 361.383	1344317.2	1344317.2	101.54	%			20:46:42
1	Y 371.029	736131.8	736131.8	101.42	%			20:46:42
1	Ag 328.068†	-653.2	39.4	0.2688	µg/L	0.2688	ppb	20:46:48
1	As 188.979†	-26.6	-1.7	-0.8361	µg/L	-0.8361	ppb	20:47:08
1	B 249.677†	222.1	185.6	11.762	µg/L	11.762	ppb	20:47:08
1	Ba 233.527†	191.0	310.7	3.3239	µg/L	3.3239	ppb	20:47:08
1	Be 313.107†	423.0	24.7	0.0181	µg/L	0.0181	ppb	20:46:48
1	Cd 226.502†	-14.8	13.4	0.5175	µg/L	0.5175	ppb	20:47:08
1	Co 228.616†	-120.5	1.6	0.0532	µg/L	0.0532	ppb	20:47:08
1	Cr 267.716†	270.9	198.6	5.5848	µg/L	5.5848	ppb	20:47:08
1	Cu 324.752†	6515.3	2256.0	7.8225	µg/L	7.8225	ppb	20:46:48
1	Mn 257.610†	2125.2	1712.1	3.1000	µg/L	3.1000	ppb	20:46:48
1	Mo 202.031†	10.7	4.9	0.6692	µg/L	0.6692	ppb	20:47:08
1	Ni 231.604†	179.2	16.1	1.1136	µg/L	1.1136	ppb	20:47:08
1	P 214.914†	182.6	18.4	14.961	µg/L	14.961	ppb	20:47:08
1	Pb 220.353†	-6.6	9.6	2.5953	µg/L	2.5953	ppb	20:47:08
1	S 181.975 Axial†	821.0	783.9	1950.9	µg/L	1950.9	ppb	20:47:08
1	Sb 206.836†	32.8	3.0	1.3005	µg/L	1.3005	ppb	20:47:08
1	Se 196.026†	-25.0	-0.1	-0.076	µg/L	-0.076	ppb	20:47:08
1	SiO2 †	161143.6	157939.8	11754	µg/L	11754	ppb	20:46:42
1	Sn 189.927†	-28.6	-19.9	-5.3954	µg/L	-5.3954	ppb	20:47:08
1	Ti 334.940†	445.2	8.5	0.1569	µg/L	0.1569	ppb	20:46:48
1	Tl 190.801†	-32.0	2.1	0.8037	µg/L	0.8037	ppb	20:47:08
1	U 409.014†	241.2	11.9	0.6704	µg/L	0.6704	ppb	20:46:48
1	V 292.402†	-112.2	16.5	0.2509	µg/L	0.2509	ppb	20:47:08
1	Zn 213.857†	1798.3	1401.8	33.918	µg/L	33.918	ppb	20:47:08
1	Si 251.611†	162069.4	158795.3	5620	µg/L	5620	ppb	20:48:16
2	Sc RADIAL	66808.0	66808.0	100	%			20:45:49
2	Al 396.153Radial†	136.5	69.0	14.872	µg/L	14.872	ppb	20:45:49
2	Ca 317.933Radial†	40108.3	39816.6	7026.2	µg/L	7026.2	ppb	20:45:49
2	Fe 238.204 Radial†	38.3	4.4	3.0762	µg/L	3.0762	ppb	20:46:09
2	K 766.490 Radial†	1364.8	421.9	149.54	µg/L	149.54	ppb	20:45:49
2	Mg 279.077 IEC†	505.5	503.1	1147.5	µg/L	1147.5	ppb	20:46:09
2	Na 589.592 Radial†	35413.8	34885.7	4276.5	µg/L	4276.5	ppb	20:45:49
2	Sr 421.552†	11470.6	11467.0	34.271	µg/L	34.271	ppb	20:45:49
2	Sc 361.383	1335299.3	1335299.3	100.86	%			20:47:13
2	Y 371.029	731873.6	731873.6	100.83	%			20:47:13
2	Ag 328.068†	-691.4	-2.8	-0.0174	µg/L	-0.0174	ppb	20:47:19
2	As 188.979†	-26.3	-1.6	-0.7468	µg/L	-0.7468	ppb	20:47:39
2	B 249.677†	226.9	191.8	12.155	µg/L	12.155	ppb	20:47:39
2	Ba 233.527†	184.3	305.3	3.2658	µg/L	3.2658	ppb	20:47:39
2	Be 313.107†	393.2	-1.9	-0.0007	µg/L	-0.0007	ppb	20:47:19
2	Cd 226.502†	-22.6	5.7	0.2180	µg/L	0.2180	ppb	20:47:39
2	Co 228.616†	-109.1	12.2	0.3885	µg/L	0.3885	ppb	20:47:39
2	Cr 267.716†	266.3	195.8	5.5066	µg/L	5.5066	ppb	20:47:39
2	Cu 324.752†	6520.0	2304.0	7.9899	µg/L	7.9899	ppb	20:47:19
2	Mn 257.610†	2103.6	1704.8	3.0866	µg/L	3.0866	ppb	20:47:19
2	Mo 202.031†	15.7	10.0	1.3221	µg/L	1.3221	ppb	20:47:39
2	Ni 231.604†	182.3	20.3	1.3966	µg/L	1.3966	ppb	20:47:39
2	P 214.914†	185.4	22.3	18.429	µg/L	18.429	ppb	20:47:39

2	Pb 220.353†	-15.5	0.7	0.2030 µg/L	0.2030 ppb	20:47:39
2	S 181.975 Axial†	817.1	785.6	1954.9 µg/L	1954.9 ppb	20:47:39
2	Sb 206.836†	30.8	1.2	0.4922 µg/L	0.4922 ppb	20:47:39
2	Se 196.026†	-33.2	-8.4	-7.53 µg/L	-7.53 ppb	20:47:39
2	SiO2 †	160782.9	158653.9	11807 µg/L	11807 ppb	20:47:13
2	Sn 189.927†	-20.0	-11.6	-3.1258 µg/L	-3.1258 ppb	20:47:39
2	Ti 334.940†	411.1	-22.4	0.1191 µg/L	0.1191 ppb	20:47:19
2	Tl 190.801†	-32.1	1.8	0.6762 µg/L	0.6762 ppb	20:47:39
2	U 409.014†	214.3	-13.1	-0.7327 µg/L	-0.7327 ppb	20:47:19
2	V 292.402†	-103.6	24.3	0.3673 µg/L	0.3673 ppb	20:47:39
2	Zn 213.857†	1796.7	1412.1	34.167 µg/L	34.167 ppb	20:47:39
2	Si 251.611†	161762.9	159569.3	5640 µg/L	5640 ppb	20:48:21
3	Sc RADIAL	67341.4	67341.4	101 %		20:46:14
3	Al 396.153Radial†	105.1	36.8	7.8765 µg/L	7.8765 ppb	20:46:14
3	Ca 317.933Radial†	40273.9	39663.4	6999.2 µg/L	6999.2 ppb	20:46:14
3	Fe 238.204 Radial†	39.9	5.7	3.9739 µg/L	3.9739 ppb	20:46:34
3	K 766.490 Radial†	1395.3	441.2	156.40 µg/L	156.40 ppb	20:46:14
3	Mg 279.077 IEC†	497.9	491.5	1121.2 µg/L	1121.2 ppb	20:46:34
3	Na 589.592 Radial†	35747.0	34935.7	4282.6 µg/L	4282.6 ppb	20:46:14
3	Sr 421.552†	11581.6	11486.2	34.329 µg/L	34.329 ppb	20:46:14
3	Sc 361.383	1344614.1	1344614.1	101.56 %		20:47:44
3	Y 371.029	736347.1	736347.1	101.45 %		20:47:44
3	Ag 328.068†	-675.7	17.4	0.1199 µg/L	0.1199 ppb	20:47:50
3	As 188.979†	-25.6	-0.8	-0.3153 µg/L	-0.3153 ppb	20:48:10
3	B 249.677†	222.2	185.7	11.768 µg/L	11.768 ppb	20:48:10
3	Ba 233.527†	187.1	306.9	3.2825 µg/L	3.2825 ppb	20:48:10
3	Be 313.107†	412.7	14.5	0.0104 µg/L	0.0104 ppb	20:47:50
3	Cd 226.502†	-17.8	10.5	0.4031 µg/L	0.4031 ppb	20:48:10
3	Co 228.616†	-110.0	12.0	0.3833 µg/L	0.3833 ppb	20:48:10
3	Cr 267.716†	263.3	191.0	5.3743 µg/L	5.3743 ppb	20:48:10
3	Cu 324.752†	6414.6	2155.5	7.4754 µg/L	7.4754 ppb	20:47:50
3	Mn 257.610†	2082.6	1669.7	3.0233 µg/L	3.0233 ppb	20:47:50
3	Mo 202.031†	18.6	12.8	1.6751 µg/L	1.6751 ppb	20:48:10
3	Ni 231.604†	180.4	17.2	1.1915 µg/L	1.1915 ppb	20:48:10
3	P 214.914†	169.1	5.0	3.2046 µg/L	3.2046 ppb	20:48:10
3	Pb 220.353†	-15.2	1.1	0.3078 µg/L	0.3078 ppb	20:48:10
3	S 181.975 Axial†	820.0	782.7	1947.9 µg/L	1947.9 ppb	20:48:10
3	Sb 206.836†	30.4	0.6	0.2063 µg/L	0.2063 ppb	20:48:10
3	Se 196.026†	-24.5	0.4	0.422 µg/L	0.422 ppb	20:48:10
3	SiO2 †	162355.2	159097.7	11840 µg/L	11840 ppb	20:47:44
3	Sn 189.927†	-21.2	-12.6	-3.4100 µg/L	-3.4100 ppb	20:48:10
3	Ti 334.940†	397.9	-38.2	0.0993 µg/L	0.0993 ppb	20:47:50
3	Tl 190.801†	-30.6	3.5	1.3333 µg/L	1.3333 ppb	20:48:10
3	U 409.014†	195.3	-33.3	-1.8661 µg/L	-1.8661 ppb	20:47:50
3	V 292.402†	-116.9	11.9	0.1915 µg/L	0.1915 ppb	20:48:10
3	Zn 213.857†	1793.4	1396.5	33.790 µg/L	33.790 ppb	20:48:10
3	Si 251.611†	161098.1	157803.7	5580 µg/L	5580 ppb	20:48:27

Mean Data: 139405001|437221|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1341410.2	101.32	%	0.400				0.39%
Sc RADIAL	67280.9	101	%	0.7				0.66%
Y 371.029	734784.2	101.23	%	0.348				0.34%
Ag 328.068†	18.0	0.1238	µg/L	0.14313	0.1238	ppb	0.14313	115.62%
Al 396.153Radial†	37.3	8.0175	µg/L	6.78512	8.0175	ppb	6.78512	84.63%
As 188.979†	-1.4	-0.6327	µg/L	0.27849	-0.6327	ppb	0.27849	44.01%
B 249.677†	187.7	11.895	µg/L	0.2251	11.895	ppb	0.2251	1.89%
Ba 233.527†	307.6	3.2907	µg/L	0.02990	3.2907	ppb	0.02990	0.91%
Be 313.107†	12.4	0.0093	µg/L	0.00947	0.0093	ppb	0.00947	102.27%
Ca 317.933Radial†	39756.7	7015.7	µg/L	14.46	7015.7	ppb	14.46	0.21%
Cd 226.502†	9.9	0.3795	µg/L	0.15113	0.3795	ppb	0.15113	39.82%
Co 228.616†	8.6	0.2750	µg/L	0.19210	0.2750	ppb	0.19210	69.86%
Cr 267.716†	195.1	5.4886	µg/L	0.10641	5.4886	ppb	0.10641	1.94%
Cu 324.752†	2238.5	7.7626	µg/L	0.26245	7.7626	ppb	0.26245	3.38%
Fe 238.204 Radial†	4.7	3.2866	µg/L	0.61004	3.2866	ppb	0.61004	18.56%
K 766.490 Radial†	440.5	156.15	µg/L	6.485	156.15	ppb	6.485	4.15%
Mg 279.077 IEC†	496.3	1132.1	µg/L	13.72	1132.1	ppb	13.72	1.21%
Mn 257.610†	1695.5	3.0700	µg/L	0.04094	3.0700	ppb	0.04094	1.33%
Mo 202.031†	9.2	1.2221	µg/L	0.51037	1.2221	ppb	0.51037	41.76%

Na 589.592 Radial†	34925.4	4281.3 µg/L	4.38	4281.3 ppb	4.38	0.10%
Ni 231.604†	17.9	1.2339 µg/L	0.14618	1.2339 ppb	0.14618	11.85%
P 214.914†	15.2	12.198 µg/L	7.9795	12.198 ppb	7.9795	65.42%
Pb 220.353†	3.8	1.0354 µg/L	1.35196	1.0354 ppb	1.35196	130.58%
S 181.975 Axial†	784.1	1951.2 µg/L	3.51	1951.2 ppb	3.51	0.18%
Sb 206.836†	1.6	0.6663 µg/L	0.56752	0.6663 ppb	0.56752	85.17%
Se 196.026†	-2.7	-2.40 µg/L	4.456	-2.40 ppb	4.456	185.99%
SiO2 †	158563.8	11801 µg/L	43.5	11801 ppb	43.5	0.37%
Si 251.611†	158722.8	5610 µg/L	31.3	5610 ppb	31.3	0.56%
Sn 189.927†	-14.7	-3.9771 µg/L	1.23652	-3.9771 ppb	1.23652	31.09%
Sr 421.552†	11488.6	34.336 µg/L	0.0688	34.336 ppb	0.0688	0.20%
Ti 334.940†	-17.4	0.1251 µg/L	0.02926	0.1251 ppb	0.02926	23.38%
Tl 190.801†	2.5	0.9377 µg/L	0.34845	0.9377 ppb	0.34845	37.16%
U 409.014†	-11.5	-0.6428 µg/L	1.27061	-0.6428 ppb	1.27061	197.67%
V 292.402†	17.6	0.2699 µg/L	0.08946	0.2699 ppb	0.08946	33.14%
Zn 213.857†	1403.5	33.959 µg/L	0.1914	33.959 ppb	0.1914	0.56%

Sequence No.: 4
Sample ID: 1200875013|437221|5
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 7/14/2005 20:50:16
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875013|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	67482.9	67482.9	101	%			20:51:40
1	Al 396.153Radial†	97.7	29.2	6.2776	µg/L	6.2776	ppb	20:51:40
1	Ca 317.933Radial†	40566.4	39869.0	7035.5	µg/L	7035.5	ppb	20:51:40
1	Fe 238.204 Radial†	40.9	6.6	4.5835	µg/L	4.5835	ppb	20:52:00
1	K 766.490 Radial†	1385.3	428.4	151.87	µg/L	151.87	ppb	20:51:40
1	Mg 279.077 IEC†	514.8	507.2	1156.9	µg/L	1156.9	ppb	20:52:00
1	Na 589.592 Radial†	36270.6	35379.4	4337.0	µg/L	4337.0	ppb	20:51:40
1	Sr 421.552†	11651.1	11530.8	34.463	µg/L	34.463	ppb	20:51:40
1	Sc 361.383	1340421.5	1340421.5	101.25	%			20:52:58
1	Y 371.029	734329.0	734329.0	101.17	%			20:52:58
1	Ag 328.068†	-657.6	33.2	0.2275	µg/L	0.2275	ppb	20:53:04
1	As 188.979†	-19.8	4.9	2.7527	µg/L	2.7527	ppb	20:53:24
1	B 249.677†	180.7	145.3	9.2144	µg/L	9.2144	ppb	20:53:24
1	Ba 233.527†	185.6	305.9	3.2727	µg/L	3.2727	ppb	20:53:24
1	Be 313.107†	357.8	-38.5	-0.0256	µg/L	-0.0256	ppb	20:53:04
1	Cd 226.502†	-23.4	5.0	0.1920	µg/L	0.1920	ppb	20:53:24
1	Co 228.616†	-126.7	-4.8	-0.1491	µg/L	-0.1491	ppb	20:53:24
1	Cr 267.716†	261.5	190.0	5.3432	µg/L	5.3432	ppb	20:53:24
1	Cu 324.752†	6383.9	2144.9	7.4359	µg/L	7.4359	ppb	20:53:04
1	Mn 257.610†	2075.3	1668.9	3.0210	µg/L	3.0210	ppb	20:53:04
1	Mo 202.031†	12.6	6.8	0.9131	µg/L	0.9131	ppb	20:53:24
1	Ni 231.604†	167.2	4.7	0.3627	µg/L	0.3627	ppb	20:53:24
1	P 214.914†	179.6	15.9	12.822	µg/L	12.822	ppb	20:53:24
1	Pb 220.353†	-22.1	-5.7	-1.5502	µg/L	-1.5502	ppb	20:53:24
1	S 181.975 Axial†	818.4	783.7	1950.4	µg/L	1950.4	ppb	20:53:24
1	Sb 206.836†	36.4	6.6	3.0078	µg/L	3.0078	ppb	20:53:24
1	Se 196.026†	-24.0	0.8	0.742	µg/L	0.742	ppb	20:53:24
1	SiO2 †	152829.9	150189.7	11177	µg/L	11177	ppb	20:52:58
1	Sn 189.927†	-22.0	-13.4	-3.6362	µg/L	-3.6362	ppb	20:53:24
1	Ti 334.940†	357.0	-77.4	0.0489	µg/L	0.0489	ppb	20:53:04
1	Tl 190.801†	-35.0	-1.0	-0.3739	µg/L	-0.3739	ppb	20:53:24
1	U 409.014†	268.6	39.7	2.2289	µg/L	2.2289	ppb	20:53:04
1	V 292.402†	-90.8	37.3	0.5524	µg/L	0.5524	ppb	20:53:24
1	Zn 213.857†	1817.9	1426.2	34.518	µg/L	34.518	ppb	20:53:24
1	Si 251.611†	154420.4	151704.4	5360	µg/L	5360	ppb	20:54:32
2	Sc RADIAL	66782.1	66782.1	100	%			20:52:05
2	Al 396.153Radial†	100.3	32.9	7.1029	µg/L	7.1029	ppb	20:52:05
2	Ca 317.933Radial†	40417.9	40141.7	7083.6	µg/L	7083.6	ppb	20:52:05
2	Fe 238.204 Radial†	39.8	6.0	4.1644	µg/L	4.1644	ppb	20:52:25
2	K 766.490 Radial†	1354.2	411.8	145.97	µg/L	145.97	ppb	20:52:05
2	Mg 279.077 IEC†	515.9	513.7	1171.6	µg/L	1171.6	ppb	20:52:25
2	Na 589.592 Radial†	36036.8	35522.2	4354.5	µg/L	4354.5	ppb	20:52:05
2	Sr 421.552†	11575.8	11576.5	34.599	µg/L	34.599	ppb	20:52:05
2	Sc 361.383	1342573.5	1342573.5	101.41	%			20:53:29
2	Y 371.029	735154.9	735154.9	101.29	%			20:53:29
2	Ag 328.068†	-713.8	-21.2	-0.1422	µg/L	-0.1422	ppb	20:53:34
2	As 188.979†	-22.6	2.2	1.2982	µg/L	1.2982	ppb	20:53:55
2	B 249.677†	177.4	141.8	8.9896	µg/L	8.9896	ppb	20:53:55
2	Ba 233.527†	184.8	304.8	3.2601	µg/L	3.2601	ppb	20:53:55
2	Be 313.107†	362.1	-34.8	-0.0237	µg/L	-0.0237	ppb	20:53:34
2	Cd 226.502†	-24.6	3.8	0.1463	µg/L	0.1463	ppb	20:53:55
2	Co 228.616†	-114.6	7.4	0.2354	µg/L	0.2354	ppb	20:53:55
2	Cr 267.716†	268.5	196.6	5.5293	µg/L	5.5293	ppb	20:53:55
2	Cu 324.752†	6371.5	2122.5	7.3619	µg/L	7.3619	ppb	20:53:34
2	Mn 257.610†	2093.0	1683.1	3.0471	µg/L	3.0471	ppb	20:53:34
2	Mo 202.031†	8.6	2.9	0.4077	µg/L	0.4077	ppb	20:53:55
2	Ni 231.604†	171.4	8.6	0.6147	µg/L	0.6147	ppb	20:53:55
2	P 214.914†	178.6	14.6	11.749	µg/L	11.749	ppb	20:53:55

2	Pb 220.353†	-11.3	4.9	1.3397 µg/L	1.3397 ppb	20:53:55
2	S 181.975 Axial†	817.9	781.9	1945.8 µg/L	1945.8 ppb	20:53:55
2	Sb 206.836†	34.2	4.4	1.9655 µg/L	1.9655 ppb	20:53:55
2	Se 196.026†	-24.7	0.2	0.195 µg/L	0.195 ppb	20:53:55
2	SiO2 †	152716.7	149836.2	11151 µg/L	11151 ppb	20:53:29
2	Sn 189.927†	-24.2	-15.6	-4.2145 µg/L	-4.2145 ppb	20:53:55
2	Ti 334.940†	307.4	-126.8	-0.0100 µg/L	-0.0100 ppb	20:53:34
2	Tl 190.801†	-33.0	1.1	0.4064 µg/L	0.4064 ppb	20:53:55
2	U 409.014†	196.8	-31.5	-1.7667 µg/L	-1.7667 ppb	20:53:34
2	V 292.402†	-103.8	24.7	0.3626 µg/L	0.3626 ppb	20:53:55
2	Zn 213.857†	1816.5	1422.0	34.411 µg/L	34.411 ppb	20:53:55
2	Si 251.611†	154901.8	151934.7	5370 µg/L	5370 ppb	20:54:37
3	Sc RADIAL	67003.8	67003.8	100 %		20:52:30
3	Al 396.153Radial†	113.3	45.5	9.8047 µg/L	9.8047 ppb	20:52:30
3	Ca 317.933Radial†	40399.3	39989.4	7056.7 µg/L	7056.7 ppb	20:52:30
3	Fe 238.204 Radial†	39.7	5.8	4.0133 µg/L	4.0133 ppb	20:52:50
3	K 766.490 Radial†	1368.7	421.7	149.48 µg/L	149.48 ppb	20:52:30
3	Mg 279.077 IEC†	516.1	512.1	1168.1 µg/L	1168.1 ppb	20:52:50
3	Na 589.592 Radial†	36091.2	35457.2	4346.5 µg/L	4346.5 ppb	20:52:30
3	Sr 421.552†	11586.6	11549.0	34.517 µg/L	34.517 ppb	20:52:30
3	Sc 361.383	1336455.4	1336455.4	100.95 %		20:54:00
3	Y 371.029	732356.2	732356.2	100.90 %		20:54:00
3	Ag 328.068†	-627.5	61.0	0.4167 µg/L	0.4167 ppb	20:54:05
3	As 188.979†	-25.2	-0.5	-0.1709 µg/L	-0.1709 ppb	20:54:26
3	B 249.677†	186.3	151.5	9.6012 µg/L	9.6012 ppb	20:54:26
3	Ba 233.527†	193.5	314.3	3.3622 µg/L	3.3622 ppb	20:54:26
3	Be 313.107†	416.5	20.7	0.0151 µg/L	0.0151 ppb	20:54:05
3	Cd 226.502†	-17.6	10.6	0.4074 µg/L	0.4074 ppb	20:54:26
3	Co 228.616†	-124.5	-3.0	-0.0931 µg/L	-0.0931 ppb	20:54:26
3	Cr 267.716†	265.1	194.4	5.4683 µg/L	5.4683 ppb	20:54:26
3	Cu 324.752†	6395.9	2175.5	7.5438 µg/L	7.5438 ppb	20:54:05
3	Mn 257.610†	2114.1	1713.4	3.1020 µg/L	3.1020 ppb	20:54:05
3	Mo 202.031†	12.0	6.3	0.8450 µg/L	0.8450 ppb	20:54:26
3	Ni 231.604†	171.8	9.8	0.6984 µg/L	0.6984 ppb	20:54:26
3	P 214.914†	169.9	6.8	4.7776 µg/L	4.7776 ppb	20:54:26
3	Pb 220.353†	-12.9	3.3	0.9044 µg/L	0.9044 ppb	20:54:26
3	S 181.975 Axial†	816.2	783.9	1950.8 µg/L	1950.8 ppb	20:54:26
3	Sb 206.836†	33.4	3.7	1.6510 µg/L	1.6510 ppb	20:54:26
3	Se 196.026†	-26.9	-2.2	-1.92 µg/L	-1.92 ppb	20:54:26
3	SiO2 †	152434.0	150245.5	11181 µg/L	11181 ppb	20:54:00
3	Sn 189.927†	-21.4	-12.9	-3.4985 µg/L	-3.4985 ppb	20:54:26
3	Ti 334.940†	331.2	-101.9	0.0199 µg/L	0.0199 ppb	20:54:05
3	Tl 190.801†	-31.2	2.7	1.0265 µg/L	1.0265 ppb	20:54:26
3	U 409.014†	224.9	-2.8	-0.1555 µg/L	-0.1555 ppb	20:54:05
3	V 292.402†	-105.3	22.7	0.3403 µg/L	0.3403 ppb	20:54:26
3	Zn 213.857†	1822.2	1435.8	34.748 µg/L	34.748 ppb	20:54:26
3	Si 251.611†	153818.3	151560.6	5360 µg/L	5360 ppb	20:54:42

Mean Data: 1200875013|437221|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1339816.8	101.20	%	0.234				0.23%
Sc RADIAL	67089.6	101	%	0.5				0.53%
Y 371.029	733946.7	101.12	%	0.198				0.20%
Ag 328.068†	24.3	0.1673	µg/L	0.28427	0.1673	ppb	0.28427	169.89%
Al 396.153Radial†	35.9	7.7284	µg/L	1.84489	7.7284	ppb	1.84489	23.87%
As 188.979†	2.2	1.2933	µg/L	1.46181	1.2933	ppb	1.46181	113.03%
B 249.677†	146.2	9.2684	µg/L	0.30936	9.2684	ppb	0.30936	3.34%
Ba 233.527†	308.3	3.2983	µg/L	0.05566	3.2983	ppb	0.05566	1.69%
Be 313.107†	-17.5	-0.0114	µg/L	0.02299	-0.0114	ppb	0.02299	201.45%
Ca 317.933Radial†	40000.0	7058.6	µg/L	24.11	7058.6	ppb	24.11	0.34%
Cd 226.502†	6.5	0.2486	µg/L	0.13943	0.2486	ppb	0.13943	56.09%
Co 228.616†	-0.1	-0.0023	µg/L	0.20770	-0.0023	ppb	0.20770	>999.9%
Cr 267.716†	193.7	5.4469	µg/L	0.09489	5.4469	ppb	0.09489	1.74%
Cu 324.752†	2147.6	7.4472	µg/L	0.09149	7.4472	ppb	0.09149	1.23%
Fe 238.204 Radial†	6.1	4.2537	µg/L	0.29544	4.2537	ppb	0.29544	6.95%
K 766.490 Radial†	420.7	149.10	µg/L	2.968	149.10	ppb	2.968	1.99%
Mg 279.077 IEC†	511.0	1165.5	µg/L	7.67	1165.5	ppb	7.67	0.66%
Mn 257.610†	1688.4	3.0567	µg/L	0.04133	3.0567	ppb	0.04133	1.35%
Mo 202.031†	5.3	0.7219	µg/L	0.27426	0.7219	ppb	0.27426	37.99%

Na 589.592 Radial†	35452.9	4346.0 µg/L	8.77	4346.0 ppb	8.77	0.20%
Ni 231.604†	7.7	0.5586 µg/L	0.17473	0.5586 ppb	0.17473	31.28%
P 214.914†	12.4	9.7827 µg/L	4.36756	9.7827 ppb	4.36756	44.65%
Pb 220.353†	0.8	0.2313 µg/L	1.55813	0.2313 ppb	1.55813	673.67%
S 181.975 Axial†	783.2	1949.0 µg/L	2.78	1949.0 ppb	2.78	0.14%
Sb 206.836†	4.9	2.2081 µg/L	0.71018	2.2081 ppb	0.71018	32.16%
Se 196.026†	-0.4	-0.328 µg/L	1.4059	-0.328 ppb	1.4059	428.85%
SiO2 †	150090.5	11170 µg/L	16.5	11170 ppb	16.5	0.15%
Si 251.611†	151733.2	5370 µg/L	6.7	5370 ppb	6.7	0.12%
Sn 189.927†	-14.0	-3.7831 µg/L	0.37990	-3.7831 ppb	0.37990	10.04%
Sr 421.552†	11552.1	34.526 µg/L	0.0684	34.526 ppb	0.0684	0.20%
Ti 334.940†	-102.0	0.0196 µg/L	0.02945	0.0196 ppb	0.02945	150.02%
Tl 190.801†	0.9	0.3530 µg/L	0.70174	0.3530 ppb	0.70174	198.78%
U 409.014†	1.8	0.1022 µg/L	2.01024	0.1022 ppb	2.01024	>999.9%
V 292.402†	28.2	0.4184 µg/L	0.11657	0.4184 ppb	0.11657	27.86%
Zn 213.857†	1428.0	34.559 µg/L	0.1725	34.559 ppb	0.1725	0.50%

Sequence No.: 5
Sample ID: 1200875015|437221|25
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 7/14/2005 20:56:31
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875015|437221|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	66525.0	66525.0	99.7	%			20:57:54
1	Al 396.153Radial†	90.7	23.6	5.0923	µg/L	5.0923	ppb	20:57:54
1	Ca 317.933Radial†	8252.7	8023.9	1415.9	µg/L	1415.9	ppb	20:57:54
1	Fe 238.204 Radial†	38.5	4.8	3.3243	µg/L	3.3243	ppb	20:58:14
1	K 766.490 Radial†	1044.9	106.6	37.792	µg/L	37.792	ppb	20:57:54
1	Mg 279.077 IEC†	103.9	102.2	233.12	µg/L	233.12	ppb	20:58:14
1	Na 589.592 Radial†	7568.5	7096.8	869.97	µg/L	869.97	ppb	20:57:54
1	Sr 421.552†	2319.2	2333.4	6.9741	µg/L	6.9741	ppb	20:57:54
1	Sc 361.383	1315992.1	1315992.1	99.402	%			20:59:13
1	Y 371.029	721992.6	721992.6	99.473	%			20:59:13
1	Ag 328.068†	-654.0	24.8	0.1696	µg/L	0.1696	ppb	20:59:18
1	As 188.979†	-29.7	-5.5	-2.9215	µg/L	-2.9215	ppb	20:59:38
1	B 249.677†	92.1	59.6	3.7727	µg/L	3.7727	ppb	20:59:38
1	Ba 233.527†	-57.4	64.9	0.6941	µg/L	0.6941	ppb	20:59:38
1	Be 313.107†	452.2	63.1	0.0438	µg/L	0.0438	ppb	20:59:18
1	Cd 226.502†	-27.2	0.7	0.0265	µg/L	0.0265	ppb	20:59:38
1	Co 228.616†	-123.1	-3.5	-0.1106	µg/L	-0.1106	ppb	20:59:38
1	Cr 267.716†	101.8	34.2	0.9615	µg/L	0.9615	ppb	20:59:38
1	Cu 324.752†	4700.9	568.8	1.9729	µg/L	1.9729	ppb	20:59:18
1	Mn 257.610†	747.1	370.7	0.6718	µg/L	0.6718	ppb	20:59:38
1	Mo 202.031†	9.2	3.7	0.4770	µg/L	0.4770	ppb	20:59:38
1	Ni 231.604†	162.1	2.7	0.1891	µg/L	0.1891	ppb	20:59:38
1	P 214.914†	164.3	3.8	3.0775	µg/L	3.0775	ppb	20:59:38
1	Pb 220.353†	-21.8	-5.9	-1.5915	µg/L	-1.5915	ppb	20:59:38
1	S 181.975 Axial†	184.2	160.7	399.96	µg/L	399.96	ppb	20:59:38
1	Sb 206.836†	26.2	-3.0	-1.4081	µg/L	-1.4081	ppb	20:59:38
1	Se 196.026†	-23.9	0.5	0.449	µg/L	0.449	ppb	20:59:38
1	SiO2 †	34130.5	33578.2	2498.9	µg/L	2498.9	ppb	20:59:18
1	Sn 189.927†	-11.3	-3.1	-0.8453	µg/L	-0.8453	ppb	20:59:38
1	Ti 334.940†	450.5	23.3	0.0591	µg/L	0.0591	ppb	20:59:18
1	Tl 190.801†	-31.4	2.0	0.7747	µg/L	0.7747	ppb	20:59:38
1	U 409.014†	211.8	-12.5	-0.6992	µg/L	-0.6992	ppb	20:59:18
1	V 292.402†	-117.8	8.5	0.1269	µg/L	0.1269	ppb	20:59:38
1	Zn 213.857†	656.5	291.2	7.0474	µg/L	7.0474	ppb	20:59:38
1	Si 251.611†	33593.1	32981.3	1170	µg/L	1170	ppb	21:00:46
2	Sc RADIAL	66584.3	66584.3	99.8	%			20:58:20
2	Al 396.153Radial†	83.2	16.0	3.4688	µg/L	3.4688	ppb	20:58:20
2	Ca 317.933Radial†	8224.1	7987.9	1409.6	µg/L	1409.6	ppb	20:58:20
2	Fe 238.204 Radial†	33.3	-0.4	-0.2831	µg/L	-0.2831	ppb	20:58:40
2	K 766.490 Radial†	1073.4	134.3	47.618	µg/L	47.618	ppb	20:58:20
2	Mg 279.077 IEC†	98.7	96.9	220.95	µg/L	220.95	ppb	20:58:40
2	Na 589.592 Radial†	7574.1	7095.7	869.83	µg/L	869.83	ppb	20:58:20
2	Sr 421.552†	2259.4	2271.3	6.7877	µg/L	6.7877	ppb	20:58:20
2	Sc 361.383	1323953.7	1323953.7	100.00	%			20:59:44
2	Y 371.029	726568.2	726568.2	100.10	%			20:59:44
2	Ag 328.068†	-657.3	25.4	0.1726	µg/L	0.1726	ppb	20:59:49
2	As 188.979†	-22.7	1.8	0.9710	µg/L	0.9710	ppb	21:00:09
2	B 249.677†	94.6	61.5	3.8961	µg/L	3.8961	ppb	21:00:09
2	Ba 233.527†	-59.4	63.2	0.6762	µg/L	0.6762	ppb	21:00:09
2	Be 313.107†	392.4	0.5	0.0007	µg/L	0.0007	ppb	20:59:49
2	Cd 226.502†	-24.7	3.3	0.1282	µg/L	0.1282	ppb	21:00:09
2	Co 228.616†	-112.3	8.0	0.2538	µg/L	0.2538	ppb	21:00:09
2	Cr 267.716†	110.3	42.0	1.1822	µg/L	1.1822	ppb	21:00:09
2	Cu 324.752†	4630.8	470.2	1.6303	µg/L	1.6303	ppb	20:59:49
2	Mn 257.610†	747.0	366.1	0.6630	µg/L	0.6630	ppb	21:00:09
2	Mo 202.031†	4.2	-1.3	-0.1646	µg/L	-0.1646	ppb	21:00:09
2	Ni 231.604†	161.0	0.6	0.0460	µg/L	0.0460	ppb	21:00:09
2	P 214.914†	166.9	5.4	4.5412	µg/L	4.5412	ppb	21:00:09

2	Pb 220.353†	-9.6	6.5	1.7589 µg/L	1.7589 ppb	21:00:09
2	S 181.975 Axial†	184.7	160.1	398.37 µg/L	398.37 ppb	21:00:09
2	Sb 206.836†	36.6	7.2	3.3521 µg/L	3.3521 ppb	21:00:09
2	Se 196.026†	-30.8	-6.3	-5.64 µg/L	-5.64 ppb	21:00:09
2	SiO2 †	33634.9	32876.1	2446.7 µg/L	2446.7 ppb	20:59:49
2	Sn 189.927†	-10.4	-2.1	-0.5683 µg/L	-0.5683 ppb	21:00:09
2	Ti 334.940†	438.7	8.7	0.0400 µg/L	0.0400 ppb	20:59:49
2	Tl 190.801†	-35.3	-1.7	-0.6462 µg/L	-0.6462 ppb	21:00:09
2	U 409.014†	238.2	12.6	0.7074 µg/L	0.7074 ppb	20:59:49
2	V 292.402†	-122.6	4.5	0.0645 µg/L	0.0645 ppb	21:00:09
2	Zn 213.857†	667.2	297.9	7.2130 µg/L	7.2130 ppb	21:00:09
2	Si 251.611†	33535.0	32720.0	1160 µg/L	1160 ppb	21:00:51
3	Sc RADIAL	66877.1	66877.1	100 %		20:58:45
3	Al 396.153Radial†	77.0	9.4	1.9978 µg/L	1.9978 ppb	20:58:45
3	Ca 317.933Radial†	8336.8	8064.2	1423.1 µg/L	1423.1 ppb	20:58:45
3	Fe 238.204 Radial†	41.0	7.1	4.9372 µg/L	4.9372 ppb	20:59:05
3	K 766.490 Radial†	1091.5	147.6	52.330 µg/L	52.330 ppb	20:58:45
3	Mg 279.077 IEC†	110.5	108.3	246.93 µg/L	246.93 ppb	20:59:05
3	Na 589.592 Radial†	7689.3	7177.4	879.84 µg/L	879.84 ppb	20:58:45
3	Sr 421.552†	2317.4	2319.3	6.9316 µg/L	6.9316 ppb	20:58:45
3	Sc 361.383	1332621.1	1332621.1	100.66 %		21:00:15
3	Y 371.029	730903.5	730903.5	100.70 %		21:00:15
3	Ag 328.068†	-696.0	-8.8	-0.0582 µg/L	-0.0582 ppb	21:00:20
3	As 188.979†	-23.4	1.2	0.6617 µg/L	0.6617 ppb	21:00:40
3	B 249.677†	94.4	60.7	3.8445 µg/L	3.8445 ppb	21:00:40
3	Ba 233.527†	-63.1	59.9	0.6413 µg/L	0.6413 ppb	21:00:40
3	Be 313.107†	402.0	7.5	0.0054 µg/L	0.0054 ppb	21:00:20
3	Cd 226.502†	-20.2	8.0	0.3091 µg/L	0.3091 ppb	21:00:40
3	Co 228.616†	-121.6	-0.4	-0.0122 µg/L	-0.0122 ppb	21:00:40
3	Cr 267.716†	116.9	47.9	1.3475 µg/L	1.3475 ppb	21:00:40
3	Cu 324.752†	4646.5	455.7	1.5801 µg/L	1.5801 ppb	21:00:20
3	Mn 257.610†	734.8	349.2	0.6326 µg/L	0.6326 ppb	21:00:40
3	Mo 202.031†	12.0	6.4	0.8243 µg/L	0.8243 ppb	21:00:40
3	Ni 231.604†	176.8	15.2	1.0256 µg/L	1.0256 ppb	21:00:40
3	P 214.914†	171.0	8.4	7.1954 µg/L	7.1954 ppb	21:00:40
3	Pb 220.353†	-22.9	-6.7	-1.7985 µg/L	-1.7985 ppb	21:00:40
3	S 181.975 Axial†	182.7	156.9	390.40 µg/L	390.40 ppb	21:00:40
3	Sb 206.836†	32.9	3.3	1.5378 µg/L	1.5378 ppb	21:00:40
3	Se 196.026†	-19.9	4.8	4.32 µg/L	4.32 ppb	21:00:40
3	SiO2 †	34045.6	33065.4	2460.8 µg/L	2460.8 ppb	21:00:20
3	Sn 189.927†	-9.5	-1.2	-0.3209 µg/L	-0.3209 ppb	21:00:40
3	Ti 334.940†	474.3	41.2	0.0813 µg/L	0.0813 ppb	21:00:20
3	Tl 190.801†	-35.8	-2.0	-0.7492 µg/L	-0.7492 ppb	21:00:40
3	U 409.014†	224.2	-2.8	-0.1585 µg/L	-0.1585 ppb	21:00:20
3	V 292.402†	-118.6	9.2	0.1412 µg/L	0.1412 ppb	21:00:40
3	Zn 213.857†	662.2	288.6	6.9786 µg/L	6.9786 ppb	21:00:40
3	Si 251.611†	33614.5	32580.9	1150 µg/L	1150 ppb	21:00:56

Mean Data: 1200875015|437221|25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1324189.0	100.02	%	0.628				0.63%
Sc RADIAL	66662.1	99.9	%	0.28				0.28%
Y 371.029	726488.1	100.09	%	0.614				0.61%
Ag 328.068†	13.8	0.0947	µg/L	0.13238	0.0947	ppb	0.13238	139.79%
Al 396.153Radial†	16.3	3.5197	µg/L	1.54790	3.5197	ppb	1.54790	43.98%
As 188.979†	-0.8	-0.4296	µg/L	2.16355	-0.4296	ppb	2.16355	503.61%
B 249.677†	60.6	3.8377	µg/L	0.06196	3.8377	ppb	0.06196	1.61%
Ba 233.527†	62.7	0.6706	µg/L	0.02685	0.6706	ppb	0.02685	4.00%
Be 313.107†	23.7	0.0166	µg/L	0.02368	0.0166	ppb	0.02368	142.47%
Ca 317.933Radial†	8025.3	1416.2	µg/L	6.74	1416.2	ppb	6.74	0.48%
Cd 226.502†	4.0	0.1546	µg/L	0.14318	0.1546	ppb	0.14318	92.62%
Co 228.616†	1.4	0.0437	µg/L	0.18852	0.0437	ppb	0.18852	431.45%
Cr 267.716†	41.4	1.1637	µg/L	0.19367	1.1637	ppb	0.19367	16.64%
Cu 324.752†	498.3	1.7278	µg/L	0.21379	1.7278	ppb	0.21379	12.37%
Fe 238.204 Radial†	3.8	2.6595	µg/L	2.67291	2.6595	ppb	2.67291	100.51%
K 766.490 Radial†	129.5	45.913	µg/L	7.4171	45.913	ppb	7.4171	16.15%
Mg 279.077 IEC†	102.4	233.67	µg/L	12.997	233.67	ppb	12.997	5.56%
Mn 257.610†	362.0	0.6558	µg/L	0.02061	0.6558	ppb	0.02061	3.14%
Mo 202.031†	2.9	0.3789	µg/L	0.50170	0.3789	ppb	0.50170	132.41%

Na 589.592 Radial†	7123.3	873.21 µg/L	5.741	873.21 ppb	5.741	0.66%
Ni 231.604†	6.2	0.4202 µg/L	0.52913	0.4202 ppb	0.52913	125.91%
P 214.914†	5.9	4.9380 µg/L	2.08743	4.9380 ppb	2.08743	42.27%
Pb 220.353†	-2.0	-0.5437 µg/L	1.99681	-0.5437 ppb	1.99681	367.28%
S 181.975 Axial†	159.2	396.25 µg/L	5.120	396.25 ppb	5.120	1.29%
Sb 206.836†	2.5	1.1606 µg/L	2.40246	1.1606 ppb	2.40246	207.00%
Se 196.026†	-0.3	-0.291 µg/L	5.0237	-0.291 ppb	5.0237	>999.9%
SiO2 †	33173.3	2468.8 µg/L	27.04	2468.8 ppb	27.04	1.10%
Si 251.611†	32760.7	1160 µg/L	7.2	1160 ppb	7.2	0.62%
Sn 189.927†	-2.1	-0.5782 µg/L	0.26233	-0.5782 ppb	0.26233	45.37%
Sr 421.552†	2308.0	6.8978 µg/L	0.09771	6.8978 ppb	0.09771	1.42%
Ti 334.940†	24.4	0.0601 µg/L	0.02068	0.0601 ppb	0.02068	34.38%
Tl 190.801†	-0.5	-0.2069 µg/L	0.85164	-0.2069 ppb	0.85164	411.62%
U 409.014†	-0.9	-0.0501 µg/L	0.70957	-0.0501 ppb	0.70957	>999.9%
V 292.402†	7.4	0.1108 µg/L	0.04079	0.1108 ppb	0.04079	36.80%
Zn 213.857†	292.6	7.0797 µg/L	0.12048	7.0797 ppb	0.12048	1.70%

Sequence No.: 6
Sample ID: 1200875017|437221|5
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 7/14/2005 21:02:45
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875017|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	66796.4	66796.4	100	%			21:04:08
1	Al 396.153Radial†	4685.9	4615.2	994.05	µg/L	994.05	ppb	21:04:08
1	Ca 317.933Radial†	45860.1	45571.4	8042.3	µg/L	8042.3	ppb	21:04:08
1	Fe 238.204 Radial†	1527.4	1492.5	1040.5	µg/L	1040.5	ppb	21:04:28
1	K 766.490 Radial†	4329.1	3384.3	1199.6	µg/L	1199.6	ppb	21:04:08
1	Mg 279.077 IEC†	945.9	943.2	2153.2	µg/L	2153.2	ppb	21:04:28
1	Na 589.592 Radial†	43634.9	43107.3	5284.0	µg/L	5284.0	ppb	21:04:08
1	Sr 421.552†	44725.4	44700.5	134.18	µg/L	134.18	ppb	21:04:08
1	Sc 361.383	1339144.4	1339144.4	101.15	%			21:05:27
1	Y 371.029	732868.7	732868.7	100.97	%			21:05:27
1	Ag 328.068†	14487.4	15005.3	102.48	µg/L	102.48	ppb	21:05:33
1	As 188.979†	174.3	196.8	107.36	µg/L	107.36	ppb	21:05:53
1	B 249.677†	1790.5	1737.1	110.00	µg/L	110.00	ppb	21:05:33
1	Ba 233.527†	9770.0	9781.5	104.73	µg/L	104.73	ppb	21:05:33
1	Be 313.107†	146955.7	144892.2	100.71	µg/L	100.71	ppb	21:05:27
1	Cd 226.502†	2699.0	2696.3	103.61	µg/L	103.61	ppb	21:05:53
1	Co 228.616†	3159.3	3243.7	102.52	µg/L	102.52	ppb	21:05:53
1	Cr 267.716†	3913.1	3800.3	106.85	µg/L	106.85	ppb	21:05:33
1	Cu 324.752†	36860.3	32280.6	111.87	µg/L	111.87	ppb	21:05:33
1	Mn 257.610†	60478.3	59409.4	108.13	µg/L	108.13	ppb	21:05:33
1	Mo 202.031†	827.0	812.0	104.48	µg/L	104.48	ppb	21:05:53
1	Ni 231.604†	1729.0	1548.9	103.21	µg/L	103.21	ppb	21:05:53
1	P 214.914†	291.1	126.4	93.037	µg/L	93.037	ppb	21:05:53
1	Pb 220.353†	372.3	384.2	104.04	µg/L	104.04	ppb	21:05:53
1	S 181.975 Axial†	1220.1	1181.6	2939.5	µg/L	2939.5	ppb	21:05:53
1	Sb 206.836†	263.8	231.5	108.04	µg/L	108.04	ppb	21:05:53
1	Se 196.026†	89.4	112.9	102	µg/L	102	ppb	21:05:53
1	SiO2 †	208181.9	205056.0	15261	µg/L	15261	ppb	21:05:27
1	Sn 189.927†	368.2	372.3	101.23	µg/L	101.23	ppb	21:05:53
1	Ti 334.940†	80873.3	79523.3	99.657	µg/L	99.657	ppb	21:05:27
1	Tl 190.801†	221.3	252.4	96.956	µg/L	96.956	ppb	21:05:53
1	U 409.014†	2114.8	1865.2	105.07	µg/L	105.07	ppb	21:05:33
1	V 292.402†	7077.0	7123.5	103.09	µg/L	103.09	ppb	21:05:33
1	Zn 213.857†	5950.1	5513.1	133.14	µg/L	133.14	ppb	21:05:33
1	Si 251.611†	207480.0	204305.9	7220	µg/L	7220	ppb	21:07:02
2	Sc RADIAL	63367.7	63367.7	94.9	%			21:04:34
2	Al 396.153Radial†	4811.2	5000.6	1077.5	µg/L	1077.5	ppb	21:04:34
2	Ca 317.933Radial†	46732.0	48969.5	8642.0	µg/L	8642.0	ppb	21:04:34
2	Fe 238.204 Radial†	1547.8	1596.6	1113.0	µg/L	1113.0	ppb	21:04:54
2	K 766.490 Radial†	4340.4	3630.3	1286.8	µg/L	1286.8	ppb	21:04:34
2	Mg 279.077 IEC†	941.0	989.2	2258.1	µg/L	2258.1	ppb	21:04:54
2	Na 589.592 Radial†	44263.4	46128.6	5654.4	µg/L	5654.4	ppb	21:04:34
2	Sr 421.552†	45534.1	47970.8	144.00	µg/L	144.00	ppb	21:04:34
2	Sc 361.383	1342987.4	1342987.4	101.44	%			21:05:59
2	Y 371.029	734813.0	734813.0	101.24	%			21:05:59
2	Ag 328.068†	14391.5	14869.8	101.57	µg/L	101.57	ppb	21:06:04
2	As 188.979†	175.9	197.8	107.94	µg/L	107.94	ppb	21:06:24
2	B 249.677†	1795.7	1737.1	109.99	µg/L	109.99	ppb	21:06:04
2	Ba 233.527†	9784.2	9767.9	104.58	µg/L	104.58	ppb	21:06:04
2	Be 313.107†	147696.6	145206.8	100.93	µg/L	100.93	ppb	21:05:59
2	Cd 226.502†	2708.1	2697.7	103.65	µg/L	103.65	ppb	21:06:24
2	Co 228.616†	3182.4	3257.6	102.96	µg/L	102.96	ppb	21:06:24
2	Cr 267.716†	3918.8	3794.9	106.70	µg/L	106.70	ppb	21:06:04
2	Cu 324.752†	36651.6	31970.6	110.80	µg/L	110.80	ppb	21:06:04
2	Mn 257.610†	60372.0	59133.6	107.63	µg/L	107.63	ppb	21:06:04
2	Mo 202.031†	828.2	810.9	104.35	µg/L	104.35	ppb	21:06:24
2	Ni 231.604†	1733.5	1548.4	103.18	µg/L	103.18	ppb	21:06:24
2	P 214.914†	305.0	139.2	104.52	µg/L	104.52	ppb	21:06:24

2	Pb 220.353†	373.9	384.7	104.21 µg/L	104.21 ppb	21:06:24
2	S 181.975 Axial†	1230.7	1188.6	2956.8 µg/L	2956.8 ppb	21:06:24
2	Sb 206.836†	273.3	240.1	112.06 µg/L	112.06 ppb	21:06:24
2	Se 196.026†	78.4	101.8	92.2 µg/L	92.2 ppb	21:06:24
2	SiO2 †	208634.7	204913.4	15250 µg/L	15250 ppb	21:05:59
2	Sn 189.927†	365.4	368.5	100.20 µg/L	100.20 ppb	21:06:24
2	Ti 334.940†	81163.9	79581.0	99.745 µg/L	99.745 ppb	21:05:59
2	Tl 190.801†	229.2	259.6	99.685 µg/L	99.685 ppb	21:06:24
2	U 409.014†	2043.3	1788.7	100.76 µg/L	100.76 ppb	21:06:04
2	V 292.402†	7042.3	7069.3	102.31 µg/L	102.31 ppb	21:06:04
2	Zn 213.857†	5967.2	5513.2	133.12 µg/L	133.12 ppb	21:06:04
2	Si 251.611†	205995.9	202255.9	7150 µg/L	7150 ppb	21:07:07
3	Sc RADIAL	66960.4	66960.4	100 %		21:04:59
3	Al 396.153Radial†	4693.1	4610.9	993.09 µg/L	993.09 ppb	21:04:59
3	Ca 317.933Radial†	45934.7	45533.5	8035.6 µg/L	8035.6 ppb	21:04:59
3	Fe 238.204 Radial†	1541.2	1502.5	1047.5 µg/L	1047.5 ppb	21:05:19
3	K 766.490 Radial†	4303.3	3348.0	1186.7 µg/L	1186.7 ppb	21:04:59
3	Mg 279.077 IEC†	947.6	942.6	2151.8 µg/L	2151.8 ppb	21:05:19
3	Na 589.592 Radial†	43812.0	43177.0	5292.6 µg/L	5292.6 ppb	21:04:59
3	Sr 421.552†	44873.6	44738.7	134.30 µg/L	134.30 ppb	21:04:59
3	Sc 361.383	1334931.8	1334931.8	100.83 %		21:06:30
3	Y 371.029	730893.8	730893.8	100.70 %		21:06:30
3	Ag 328.068†	14343.6	14907.8	101.82 µg/L	101.82 ppb	21:06:35
3	As 188.979†	169.4	192.4	105.01 µg/L	105.01 ppb	21:06:56
3	B 249.677†	1796.1	1748.1	110.70 µg/L	110.70 ppb	21:06:35
3	Ba 233.527†	9761.4	9803.4	104.96 µg/L	104.96 ppb	21:06:35
3	Be 313.107†	146735.3	145132.0	100.87 µg/L	100.87 ppb	21:06:30
3	Cd 226.502†	2703.0	2708.7	104.08 µg/L	104.08 ppb	21:06:56
3	Co 228.616†	3192.2	3286.2	103.87 µg/L	103.87 ppb	21:06:56
3	Cr 267.716†	3891.5	3791.2	106.60 µg/L	106.60 ppb	21:06:35
3	Cu 324.752†	36576.2	32113.8	111.30 µg/L	111.30 ppb	21:06:35
3	Mn 257.610†	60152.1	59274.7	107.88 µg/L	107.88 ppb	21:06:35
3	Mo 202.031†	830.0	817.5	105.19 µg/L	105.19 ppb	21:06:56
3	Ni 231.604†	1724.8	1550.2	103.29 µg/L	103.29 ppb	21:06:56
3	P 214.914†	304.5	140.5	105.65 µg/L	105.65 ppb	21:06:56
3	Pb 220.353†	368.5	381.5	103.34 µg/L	103.34 ppb	21:06:56
3	S 181.975 Axial†	1232.6	1197.8	2980.0 µg/L	2980.0 ppb	21:06:56
3	Sb 206.836†	259.0	227.5	106.18 µg/L	106.18 ppb	21:06:56
3	Se 196.026†	98.0	121.7	110 µg/L	110 ppb	21:06:56
3	SiO2 †	206633.1	204169.5	15195 µg/L	15195 ppb	21:06:30
3	Sn 189.927†	361.4	366.7	99.725 µg/L	99.725 ppb	21:06:56
3	Ti 334.940†	80702.8	79606.5	99.764 µg/L	99.764 ppb	21:06:30
3	Tl 190.801†	230.4	262.1	100.66 µg/L	100.66 ppb	21:06:56
3	U 409.014†	2038.0	1795.6	101.16 µg/L	101.16 ppb	21:06:35
3	V 292.402†	6975.6	7045.0	101.97 µg/L	101.97 ppb	21:06:35
3	Zn 213.857†	5955.7	5537.2	133.73 µg/L	133.73 ppb	21:06:35
3	Si 251.611†	209379.4	206836.8	7310 µg/L	7310 ppb	21:07:13

Mean Data: 1200875017|437221|5

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1339021.2	101.14	%	0.304				0.30%
Sc RADIAL	65708.2	98.4	%	3.04				3.09%
Y 371.029	732858.5	100.97	%	0.270				0.27%
Ag 328.068†	14927.6	101.96	µg/L	0.471	101.96	ppb	0.471	0.46%
Al 396.153Radial†	4742.2	1021.5	µg/L	48.45	1021.5	ppb	48.45	4.74%
As 188.979†	195.7	106.77	µg/L	1.549	106.77	ppb	1.549	1.45%
B 249.677†	1740.8	110.23	µg/L	0.405	110.23	ppb	0.405	0.37%
Ba 233.527†	9784.3	104.76	µg/L	0.192	104.76	ppb	0.192	0.18%
Be 313.107†	145077.0	100.84	µg/L	0.114	100.84	ppb	0.114	0.11%
Ca 317.933Radial†	46691.5	8240.0	µg/L	348.14	8240.0	ppb	348.14	4.23%
Cd 226.502†	2700.9	103.78	µg/L	0.262	103.78	ppb	0.262	0.25%
Co 228.616†	3262.5	103.11	µg/L	0.686	103.11	ppb	0.686	0.67%
Cr 267.716†	3795.5	106.72	µg/L	0.128	106.72	ppb	0.128	0.12%
Cu 324.752†	32121.7	111.32	µg/L	0.535	111.32	ppb	0.535	0.48%
Fe 238.204 Radial†	1530.5	1067.0	µg/L	40.00	1067.0	ppb	40.00	3.75%
K 766.490 Radial†	3454.2	1224.4	µg/L	54.43	1224.4	ppb	54.43	4.45%
Mg 279.077 IEC†	958.3	2187.7	µg/L	60.98	2187.7	ppb	60.98	2.79%
Mn 257.610†	59272.6	107.88	µg/L	0.247	107.88	ppb	0.247	0.23%
Mo 202.031†	813.5	104.67	µg/L	0.454	104.67	ppb	0.454	0.43%

Na 589.592 Radial†	44137.6	5410.3 µg/L	211.41	5410.3 ppb	211.41	3.91%
Ni 231.604†	1549.2	103.22 µg/L	0.057	103.22 ppb	0.057	0.06%
P 214.914†	135.4	101.07 µg/L	6.979	101.07 ppb	6.979	6.91%
Pb 220.353†	383.5	103.86 µg/L	0.460	103.86 ppb	0.460	0.44%
S 181.975 Axial†	1189.3	2958.8 µg/L	20.29	2958.8 ppb	20.29	0.69%
Sb 206.836†	233.0	108.76 µg/L	3.003	108.76 ppb	3.003	2.76%
Se 196.026†	112.1	102 µg/L	9.0	102 ppb	9.0	8.87%
SiO2 †	204713.0	15235 µg/L	35.4	15235 ppb	35.4	0.23%
Si 251.611†	204466.2	7230 µg/L	81.1	7230 ppb	81.1	1.12%
Sn 189.927†	369.2	100.39 µg/L	0.772	100.39 ppb	0.772	0.77%
Sr 421.552†	45803.3	137.49 µg/L	5.634	137.49 ppb	5.634	4.10%
Ti 334.940†	79570.3	99.722 µg/L	0.0566	99.722 ppb	0.0566	0.06%
Tl 190.801†	258.0	99.101 µg/L	1.9202	99.101 ppb	1.9202	1.94%
U 409.014†	1816.5	102.33 µg/L	2.381	102.33 ppb	2.381	2.33%
V 292.402†	7079.3	102.46 µg/L	0.574	102.46 ppb	0.574	0.56%
Zn 213.857†	5521.2	133.33 µg/L	0.346	133.33 ppb	0.346	0.26%

Sequence No.: 7
Sample ID: 139405002|437221|5
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 7/14/2005 21:09:01
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 139405002|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	67147.7	67147.7	101	%			21:10:28
1	Al 396.153Radial†	581.3	510.5	110.45	µg/L	110.45	ppb	21:10:28
1	Ca 317.933Radial†	41131.3	40630.8	7169.9	µg/L	7169.9	ppb	21:10:28
1	Fe 238.204 Radial†	384.9	348.8	242.91	µg/L	242.91	ppb	21:10:48
1	K 766.490 Radial†	1415.8	465.7	165.07	µg/L	165.07	ppb	21:10:28
1	Mg 279.077 IEC†	512.1	507.1	1156.4	µg/L	1156.4	ppb	21:10:48
1	Na 589.592 Radial†	36095.4	35384.2	4337.6	µg/L	4337.6	ppb	21:10:28
1	Sr 421.552†	11884.2	11820.1	35.329	µg/L	35.329	ppb	21:10:28
1	Sc 361.383	1325504.0	1325504.0	100.12	%			21:11:46
1	Y 371.029	725835.8	725835.8	100.00	%			21:11:46
1	Ag 328.068†	-681.6	1.9	0.0577	µg/L	0.0577	ppb	21:11:52
1	As 188.979†	-23.9	0.6	0.6988	µg/L	0.6988	ppb	21:12:12
1	B 249.677†	182.2	148.9	9.4941	µg/L	9.4941	ppb	21:12:12
1	Ba 233.527†	329.5	451.7	4.8285	µg/L	4.8285	ppb	21:12:12
1	Be 313.107†	398.9	6.6	0.0082	µg/L	0.0082	ppb	21:11:52
1	Cd 226.502†	-16.2	11.9	0.4417	µg/L	0.4417	ppb	21:12:12
1	Co 228.616†	-112.6	7.9	0.2416	µg/L	0.2416	ppb	21:12:12
1	Cr 267.716†	1121.2	1051.6	29.579	µg/L	29.579	ppb	21:12:12
1	Cu 324.752†	10460.3	6287.3	21.812	µg/L	21.812	ppb	21:11:52
1	Mn 257.610†	2913.7	2529.3	4.6142	µg/L	4.6142	ppb	21:11:52
1	Mo 202.031†	15.2	9.6	1.2759	µg/L	1.2759	ppb	21:12:12
1	Ni 231.604†	276.9	116.2	7.7759	µg/L	7.7759	ppb	21:12:12
1	P 214.914†	173.1	11.4	6.3336	µg/L	6.3336	ppb	21:12:12
1	Pb 220.353†	-12.0	4.1	1.1135	µg/L	1.1135	ppb	21:12:12
1	S 181.975 Axial†	821.9	796.3	1981.7	µg/L	1981.7	ppb	21:12:12
1	Sb 206.836†	29.3	-0.1	-0.5117	µg/L	-0.5117	ppb	21:12:12
1	Se 196.026†	-21.8	2.8	2.54	µg/L	2.54	ppb	21:12:12
1	SiO2 †	147798.6	146863.3	10930	µg/L	10930	ppb	21:11:46
1	Sn 189.927†	-18.5	-10.2	-2.7578	µg/L	-2.7578	ppb	21:12:12
1	Ti 334.940†	3453.6	3019.5	3.9247	µg/L	3.9247	ppb	21:11:52
1	Tl 190.801†	-35.7	-2.1	-0.7708	µg/L	-0.7708	ppb	21:12:12
1	U 409.014†	195.5	-30.3	-1.7301	µg/L	-1.7301	ppb	21:11:52
1	V 292.402†	-96.2	31.0	0.4996	µg/L	0.4996	ppb	21:12:12
1	Zn 213.857†	1723.4	1352.0	32.611	µg/L	32.611	ppb	21:12:12
1	Si 251.611†	149009.6	148016.5	5230	µg/L	5230	ppb	21:13:20
2	Sc RADIAL	66948.1	66948.1	100	%			21:10:53
2	Al 396.153Radial†	589.9	520.7	112.65	µg/L	112.65	ppb	21:10:53
2	Ca 317.933Radial†	41245.0	40866.2	7211.4	µg/L	7211.4	ppb	21:10:53
2	Fe 238.204 Radial†	396.7	361.7	251.85	µg/L	251.85	ppb	21:11:13
2	K 766.490 Radial†	1467.0	520.9	184.63	µg/L	184.63	ppb	21:10:53
2	Mg 279.077 IEC†	524.1	520.5	1187.0	µg/L	1187.0	ppb	21:11:13
2	Na 589.592 Radial†	36158.6	35554.3	4358.4	µg/L	4358.4	ppb	21:10:53
2	Sr 421.552†	11909.8	11880.9	35.510	µg/L	35.510	ppb	21:10:53
2	Sc 361.383	1347602.4	1347602.4	101.79	%			21:12:17
2	Y 371.029	737927.6	737927.6	101.67	%			21:12:17
2	Ag 328.068†	-701.3	-6.3	0.0037	µg/L	0.0037	ppb	21:12:22
2	As 188.979†	-25.2	-0.3	0.2275	µg/L	0.2275	ppb	21:12:43
2	B 249.677†	177.3	141.1	8.9988	µg/L	8.9988	ppb	21:12:43
2	Ba 233.527†	324.0	440.9	4.7128	µg/L	4.7128	ppb	21:12:43
2	Be 313.107†	418.7	19.5	0.0169	µg/L	0.0169	ppb	21:12:22
2	Cd 226.502†	-20.2	8.2	0.2985	µg/L	0.2985	ppb	21:12:43
2	Co 228.616†	-109.0	13.3	0.4120	µg/L	0.4120	ppb	21:12:43
2	Cr 267.716†	1122.7	1034.7	29.103	µg/L	29.103	ppb	21:12:43
2	Cu 324.752†	10520.6	6175.3	21.425	µg/L	21.425	ppb	21:12:22
2	Mn 257.610†	2895.5	2463.7	4.4958	µg/L	4.4958	ppb	21:12:22
2	Mo 202.031†	17.9	12.0	1.5893	µg/L	1.5893	ppb	21:12:43
2	Ni 231.604†	282.9	117.5	7.8650	µg/L	7.8650	ppb	21:12:43
2	P 214.914†	173.3	8.8	4.0520	µg/L	4.0520	ppb	21:12:43

2	Pb 220.353†	-5.0	11.2	3.0390 µg/L	3.0390 ppb	21:12:43
2	S 181.975 Axial†	836.6	797.2	1983.9 µg/L	1983.9 ppb	21:12:43
2	Sb 206.836†	34.7	4.8	1.7659 µg/L	1.7659 ppb	21:12:43
2	Se 196.026†	-23.0	1.9	1.73 µg/L	1.73 ppb	21:12:43
2	SiO2 †	150926.6	147515.5	10978 µg/L	10978 ppb	21:12:17
2	Sn 189.927†	-18.0	-9.4	-2.5520 µg/L	-2.5520 ppb	21:12:43
2	Ti 334.940†	3490.7	2999.3	3.9012 µg/L	3.9012 ppb	21:12:22
2	Tl 190.801†	-33.1	1.0	0.4134 µg/L	0.4134 ppb	21:12:43
2	U 409.014†	172.5	-56.1	-3.1739 µg/L	-3.1739 ppb	21:12:22
2	V 292.402†	-96.0	32.7	0.5247 µg/L	0.5247 ppb	21:12:43
2	Zn 213.857†	1728.1	1328.5	32.035 µg/L	32.035 ppb	21:12:43
2	Si 251.611†	150351.8	146894.6	5190 µg/L	5190 ppb	21:13:25
3	Sc RADIAL	66330.9	66330.9	99.4 %		21:11:18
3	Al 396.153Radial†	564.9	501.0	108.41 µg/L	108.41 ppb	21:11:18
3	Ca 317.933Radial†	40955.0	40956.9	7227.5 µg/L	7227.5 ppb	21:11:18
3	Fe 238.204 Radial†	392.5	361.1	251.46 µg/L	251.46 ppb	21:11:38
3	K 766.490 Radial†	1373.7	440.6	156.18 µg/L	156.18 ppb	21:11:18
3	Mg 279.077 IEC†	506.9	508.0	1158.6 µg/L	1158.6 ppb	21:11:38
3	Na 589.592 Radial†	35891.7	35621.1	4366.6 µg/L	4366.6 ppb	21:11:18
3	Sr 421.552†	11820.2	11901.2	35.571 µg/L	35.571 ppb	21:11:18
3	Sc 361.383	1351065.6	1351065.6	102.05 %		21:12:48
3	Y 371.029	739849.1	739849.1	101.93 %		21:12:48
3	Ag 328.068†	-714.3	-17.2	-0.0715 µg/L	-0.0715 ppb	21:12:53
3	As 188.979†	-24.1	0.9	0.8564 µg/L	0.8564 ppb	21:13:14
3	B 249.677†	172.0	135.4	8.6379 µg/L	8.6379 ppb	21:13:14
3	Ba 233.527†	316.1	432.4	4.6221 µg/L	4.6221 ppb	21:13:14
3	Be 313.107†	471.2	69.9	0.0521 µg/L	0.0521 ppb	21:12:53
3	Cd 226.502†	-22.5	6.0	0.2145 µg/L	0.2145 ppb	21:13:14
3	Co 228.616†	-113.0	9.6	0.2966 µg/L	0.2966 ppb	21:13:14
3	Cr 267.716†	1122.7	1031.9	29.025 µg/L	29.025 ppb	21:13:14
3	Cu 324.752†	10438.8	6068.6	21.054 µg/L	21.054 ppb	21:12:53
3	Mn 257.610†	2940.2	2500.3	4.5624 µg/L	4.5624 ppb	21:12:53
3	Mo 202.031†	14.4	8.5	1.1369 µg/L	1.1369 ppb	21:13:14
3	Ni 231.604†	283.1	117.0	7.8314 µg/L	7.8314 ppb	21:13:14
3	P 214.914†	187.4	22.2	16.009 µg/L	16.009 ppb	21:13:14
3	Pb 220.353†	-19.6	-3.2	-0.8408 µg/L	-0.8408 ppb	21:13:14
3	S 181.975 Axial†	834.0	792.6	1972.5 µg/L	1972.5 ppb	21:13:14
3	Sb 206.836†	39.1	9.0	3.7283 µg/L	3.7283 ppb	21:13:14
3	Se 196.026†	-31.7	-6.6	-5.88 µg/L	-5.88 ppb	21:13:14
3	SiO2 †	150957.9	147166.2	10952 µg/L	10952 ppb	21:12:48
3	Sn 189.927†	-24.2	-15.4	-4.1718 µg/L	-4.1718 ppb	21:13:14
3	Ti 334.940†	3553.2	3051.8	3.9667 µg/L	3.9667 ppb	21:12:53
3	Tl 190.801†	-32.5	1.7	0.6810 µg/L	0.6810 ppb	21:13:14
3	U 409.014†	193.5	-35.9	-2.0451 µg/L	-2.0451 ppb	21:12:53
3	V 292.402†	-108.6	20.6	0.3493 µg/L	0.3493 ppb	21:13:14
3	Zn 213.857†	1720.2	1316.3	31.739 µg/L	31.739 ppb	21:13:14
3	Si 251.611†	150461.2	146623.2	5190 µg/L	5190 ppb	21:13:30

Mean Data: 139405002|437221|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1341390.7	101.32	%	1.047				1.03%
Sc RADIAL	66808.9	100	%	0.6				0.64%
Y 371.029	734537.5	101.20	%	1.047				1.03%
Ag 328.068†	-7.2	-0.0034	µg/L	0.06489	-0.0034	ppb	0.06489	>999.9%
Al 396.153Radial†	510.8	110.50	µg/L	2.121	110.50	ppb	2.121	1.92%
As 188.979†	0.4	0.5942	µg/L	0.32724	0.5942	ppb	0.32724	55.07%
B 249.677†	141.8	9.0436	µg/L	0.42987	9.0436	ppb	0.42987	4.75%
Ba 233.527†	441.7	4.7211	µg/L	0.10346	4.7211	ppb	0.10346	2.19%
Be 313.107†	32.0	0.0257	µg/L	0.02323	0.0257	ppb	0.02323	90.28%
Ca 317.933Radial†	40818.0	7202.9	µg/L	29.70	7202.9	ppb	29.70	0.41%
Cd 226.502†	8.7	0.3182	µg/L	0.11484	0.3182	ppb	0.11484	36.08%
Co 228.616†	10.3	0.3167	µg/L	0.08697	0.3167	ppb	0.08697	27.46%
Cr 267.716†	1039.4	29.236	µg/L	0.2999	29.236	ppb	0.2999	1.03%
Cu 324.752†	6177.1	21.430	µg/L	0.3790	21.430	ppb	0.3790	1.77%
Fe 238.204 Radial†	357.2	248.74	µg/L	5.053	248.74	ppb	5.053	2.03%
K 766.490 Radial†	475.7	168.63	µg/L	14.558	168.63	ppb	14.558	8.63%
Mg 279.077 IEC†	511.9	1167.4	µg/L	17.07	1167.4	ppb	17.07	1.46%
Mn 257.610†	2497.8	4.5575	µg/L	0.05935	4.5575	ppb	0.05935	1.30%
Mo 202.031†	10.0	1.3340	µg/L	0.23175	1.3340	ppb	0.23175	17.37%

Na 589.592 Radial†	35519.9	4354.2 µg/L	14.97	4354.2 ppb	14.97	0.34%
Ni 231.604†	116.9	7.8241 µg/L	0.04499	7.8241 ppb	0.04499	0.58%
P 214.914†	14.1	8.7981 µg/L	6.34790	8.7981 ppb	6.34790	72.15%
Pb 220.353†	4.0	1.1039 µg/L	1.93991	1.1039 ppb	1.93991	175.74%
S 181.975 Axial†	795.4	1979.4 µg/L	6.04	1979.4 ppb	6.04	0.31%
Sb 206.836†	4.6	1.6608 µg/L	2.12198	1.6608 ppb	2.12198	127.77%
Se 196.026†	-0.7	-0.539 µg/L	4.6459	-0.539 ppb	4.6459	861.72%
SiO2 †	147181.7	10953 µg/L	24.3	10953 ppb	24.3	0.22%
Si 251.611†	147178.1	5200 µg/L	26.1	5200 ppb	26.1	0.50%
Sn 189.927†	-11.7	-3.1605 µg/L	0.88182	-3.1605 ppb	0.88182	27.90%
Sr 421.552†	11867.4	35.470 µg/L	0.1259	35.470 ppb	0.1259	0.35%
Ti 334.940†	3023.5	3.9309 µg/L	0.03316	3.9309 ppb	0.03316	0.84%
Tl 190.801†	0.2	0.1078 µg/L	0.77263	0.1078 ppb	0.77263	716.40%
U 409.014†	-40.8	-2.3164 µg/L	0.75913	-2.3164 ppb	0.75913	32.77%
V 292.402†	28.1	0.4579 µg/L	0.09487	0.4579 ppb	0.09487	20.72%
Zn 213.857†	1332.3	32.128 µg/L	0.4432	32.128 ppb	0.4432	1.38%

Sequence No.: 8
Sample ID: 1200875014|437221|5
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 7/14/2005 21:15:19
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875014|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	65780.3	65780.3	98.5	%			21:16:44
1	Al 396.153Radial†	358.0	295.9	63.983	µg/L	63.983	ppb	21:16:44
1	Ca 317.933Radial†	39827.7	40158.1	7086.5	µg/L	7086.5	ppb	21:16:44
1	Fe 238.204 Radial†	224.2	193.7	134.89	µg/L	134.89	ppb	21:17:04
1	K 766.490 Radial†	1371.5	450.0	159.49	µg/L	159.49	ppb	21:16:44
1	Mg 279.077 IEC†	513.1	518.6	1182.8	µg/L	1182.8	ppb	21:17:04
1	Na 589.592 Radial†	34818.8	34834.8	4270.2	µg/L	4270.2	ppb	21:16:44
1	Sr 421.552†	11405.2	11579.7	34.608	µg/L	34.608	ppb	21:16:44
1	Sc 361.383	1350303.8	1350303.8	101.99	%			21:18:02
1	Y 371.029	739033.3	739033.3	101.82	%			21:18:02
1	Ag 328.068†	-715.7	-19.1	-0.1050	µg/L	-0.1050	ppb	21:18:08
1	As 188.979†	-24.8	0.1	0.3076	µg/L	0.3076	ppb	21:18:28
1	B 249.677†	144.3	108.4	6.8994	µg/L	6.8994	ppb	21:18:28
1	Ba 233.527†	268.4	385.8	4.1258	µg/L	4.1258	ppb	21:18:28
1	Be 313.107†	382.5	-16.8	-0.0090	µg/L	-0.0090	ppb	21:18:08
1	Cd 226.502†	-21.0	7.4	0.2775	µg/L	0.2775	ppb	21:18:28
1	Co 228.616†	-119.2	3.5	0.1078	µg/L	0.1078	ppb	21:18:28
1	Cr 267.716†	664.5	583.3	16.404	µg/L	16.404	ppb	21:18:28
1	Cu 324.752†	9973.8	5618.4	19.485	µg/L	19.485	ppb	21:18:08
1	Mn 257.610†	2295.1	1869.4	3.4007	µg/L	3.4007	ppb	21:18:08
1	Mo 202.031†	17.6	11.6	1.5339	µg/L	1.5339	ppb	21:18:28
1	Ni 231.604†	213.7	49.1	3.3119	µg/L	3.3119	ppb	21:18:28
1	P 214.914†	182.2	17.2	11.917	µg/L	11.917	ppb	21:18:28
1	Pb 220.353†	-1.6	14.5	3.9187	µg/L	3.9187	ppb	21:18:28
1	S 181.975 Axial†	819.8	779.1	1938.9	µg/L	1938.9	ppb	21:18:28
1	Sb 206.836†	31.7	1.8	0.5673	µg/L	0.5673	ppb	21:18:28
1	Se 196.026†	-29.5	-4.5	-3.97	µg/L	-3.97	ppb	21:18:28
1	SiO2 †	177117.8	172898.2	12867	µg/L	12867	ppb	21:18:02
1	Sn 189.927†	-25.6	-16.9	-4.5701	µg/L	-4.5701	ppb	21:18:28
1	Ti 334.940†	1844.0	1378.0	1.8692	µg/L	1.8692	ppb	21:18:08
1	Tl 190.801†	-31.0	3.2	1.2383	µg/L	1.2383	ppb	21:18:28
1	U 409.014†	275.9	44.9	2.5052	µg/L	2.5052	ppb	21:18:08
1	V 292.402†	-95.6	33.3	0.5188	µg/L	0.5188	ppb	21:18:28
1	Zn 213.857†	1617.9	1217.0	29.365	µg/L	29.365	ppb	21:18:28
1	Si 251.611†	174345.9	170124.2	6020	µg/L	6020	ppb	21:19:36
2	Sc RADIAL	67449.7	67449.7	101	%			21:17:09
2	Al 396.153Radial†	358.6	287.4	62.189	µg/L	62.189	ppb	21:17:09
2	Ca 317.933Radial†	40929.8	40248.4	7102.4	µg/L	7102.4	ppb	21:17:09
2	Fe 238.204 Radial†	225.2	189.0	131.63	µg/L	131.63	ppb	21:17:29
2	K 766.490 Radial†	1374.7	418.7	148.40	µg/L	148.40	ppb	21:17:09
2	Mg 279.077 IEC†	507.6	500.3	1141.1	µg/L	1141.1	ppb	21:17:29
2	Na 589.592 Radial†	35893.3	35023.7	4293.4	µg/L	4293.4	ppb	21:17:09
2	Sr 421.552†	11822.0	11705.6	34.986	µg/L	34.986	ppb	21:17:09
2	Sc 361.383	1354436.9	1354436.9	102.31	%			21:18:33
2	Y 371.029	742054.9	742054.9	102.24	%			21:18:33
2	Ag 328.068†	-664.4	33.2	0.2499	µg/L	0.2499	ppb	21:18:38
2	As 188.979†	-26.1	-1.0	-0.3012	µg/L	-0.3012	ppb	21:18:59
2	B 249.677†	146.2	109.8	6.9873	µg/L	6.9873	ppb	21:18:59
2	Ba 233.527†	290.4	406.5	4.3463	µg/L	4.3463	ppb	21:18:59
2	Be 313.107†	385.1	-15.5	-0.0086	µg/L	-0.0086	ppb	21:18:38
2	Cd 226.502†	-20.3	8.2	0.3073	µg/L	0.3073	ppb	21:18:59
2	Co 228.616†	-118.6	4.5	0.1381	µg/L	0.1381	ppb	21:18:59
2	Cr 267.716†	665.6	582.4	16.379	µg/L	16.379	ppb	21:18:59
2	Cu 324.752†	10066.4	5679.1	19.698	µg/L	19.698	ppb	21:18:38
2	Mn 257.610†	2333.2	1899.8	3.4564	µg/L	3.4564	ppb	21:18:38
2	Mo 202.031†	11.2	5.4	0.7352	µg/L	0.7352	ppb	21:18:59
2	Ni 231.604†	214.2	49.0	3.3054	µg/L	3.3054	ppb	21:18:59
2	P 214.914†	179.4	13.9	8.9775	µg/L	8.9775	ppb	21:18:59

2	Pb 220.353†	-8.2	8.1	2.1963 µg/L	2.1963 ppb	21:18:59
2	S 181.975 Axial†	824.4	781.1	1943.9 µg/L	1943.9 ppb	21:18:59
2	Sb 206.836†	38.2	8.0	3.4796 µg/L	3.4796 ppb	21:18:59
2	Se 196.026†	-25.5	-0.5	-0.361 µg/L	-0.361 ppb	21:18:59
2	SiO2 †	177618.6	172857.8	12864 µg/L	12864 ppb	21:18:33
2	Sn 189.927†	-18.8	-10.1	-2.7410 µg/L	-2.7410 ppb	21:18:59
2	Ti 334.940†	1798.1	1327.6	1.8078 µg/L	1.8078 ppb	21:18:38
2	Tl 190.801†	-36.1	-1.7	-0.6453 µg/L	-0.6453 ppb	21:18:59
2	U 409.014†	224.1	-6.5	-0.3795 µg/L	-0.3795 ppb	21:18:38
2	V 292.402†	-112.5	17.1	0.2765 µg/L	0.2765 ppb	21:18:59
2	Zn 213.857†	1634.3	1228.2	29.637 µg/L	29.637 ppb	21:18:59
2	Si 251.611†	174551.5	169803.5	6000 µg/L	6000 ppb	21:19:41
3	Sc RADIAL	66922.9	66922.9	100 %		21:17:34
3	Al 396.153Radial†	352.3	284.0	61.437 µg/L	61.437 ppb	21:17:34
3	Ca 317.933Radial†	40547.0	40185.5	7091.3 µg/L	7091.3 ppb	21:17:34
3	Fe 238.204 Radial†	225.7	191.3	133.19 µg/L	133.19 ppb	21:17:54
3	K 766.490 Radial†	1434.5	489.0	173.32 µg/L	173.32 ppb	21:17:34
3	Mg 279.077 IEC†	505.5	502.2	1145.3 µg/L	1145.3 ppb	21:17:54
3	Na 589.592 Radial†	35609.8	35020.5	4293.0 µg/L	4293.0 ppb	21:17:34
3	Sr 421.552†	11664.9	11641.1	34.793 µg/L	34.793 ppb	21:17:34
3	Sc 361.383	1339694.6	1339694.6	101.19 %		21:19:04
3	Y 371.029	733685.3	733685.3	101.08 %		21:19:04
3	Ag 328.068†	-685.6	5.1	0.0593 µg/L	0.0593 ppb	21:19:09
3	As 188.979†	-22.2	2.6	1.6232 µg/L	1.6232 ppb	21:19:30
3	B 249.677†	153.8	118.9	7.5614 µg/L	7.5614 ppb	21:19:30
3	Ba 233.527†	281.9	401.2	4.2899 µg/L	4.2899 ppb	21:19:30
3	Be 313.107†	349.4	-46.5	-0.0300 µg/L	-0.0300 ppb	21:19:09
3	Cd 226.502†	-17.8	10.5	0.3945 µg/L	0.3945 ppb	21:19:30
3	Co 228.616†	-121.1	0.7	0.0181 µg/L	0.0181 ppb	21:19:30
3	Cr 267.716†	661.7	585.6	16.471 µg/L	16.471 ppb	21:19:30
3	Cu 324.752†	10083.7	5804.6	20.133 µg/L	20.133 ppb	21:19:09
3	Mn 257.610†	2346.4	1937.9	3.5257 µg/L	3.5257 ppb	21:19:09
3	Mo 202.031†	12.1	6.3	0.8547 µg/L	0.8547 ppb	21:19:30
3	Ni 231.604†	226.3	63.2	4.2508 µg/L	4.2508 ppb	21:19:30
3	P 214.914†	184.1	20.5	14.747 µg/L	14.747 ppb	21:19:30
3	Pb 220.353†	-7.2	9.0	2.4378 µg/L	2.4378 ppb	21:19:30
3	S 181.975 Axial†	816.6	782.4	1946.9 µg/L	1946.9 ppb	21:19:30
3	Sb 206.836†	30.3	0.6	-0.0008 µg/L	-0.0008 ppb	21:19:30
3	Se 196.026†	-25.0	-0.2	-0.149 µg/L	-0.149 ppb	21:19:30
3	SiO2 †	175907.5	173077.3	12881 µg/L	12881 ppb	21:19:04
3	Sn 189.927†	-27.9	-19.3	-5.2427 µg/L	-5.2427 ppb	21:19:30
3	Ti 334.940†	1771.1	1320.3	1.7981 µg/L	1.7981 ppb	21:19:09
3	Tl 190.801†	-30.1	3.8	1.4674 µg/L	1.4674 ppb	21:19:30
3	U 409.014†	234.8	6.4	0.3459 µg/L	0.3459 ppb	21:19:09
3	V 292.402†	-107.3	21.0	0.3342 µg/L	0.3342 ppb	21:19:30
3	Zn 213.857†	1631.9	1243.4	30.001 µg/L	30.001 ppb	21:19:30
3	Si 251.611†	174006.7	171142.6	6050 µg/L	6050 ppb	21:19:47

Mean Data: 1200875014|437221|5

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1348145.1	101.83	%	0.574				0.56%
Sc RADIAL	66717.6	100.0	%	1.28				1.28%
Y 371.029	738257.8	101.71	%	0.584				0.57%
Ag 328.068†	6.4	0.0680	µg/L	0.17763	0.0680	ppb	0.17763	261.09%
Al 396.153Radial†	289.1	62.536	µg/L	1.3079	62.536	ppb	1.3079	2.09%
As 188.979†	0.6	0.5432	µg/L	0.98362	0.5432	ppb	0.98362	181.08%
B 249.677†	112.4	7.1494	µg/L	0.35950	7.1494	ppb	0.35950	5.03%
Ba 233.527†	397.8	4.2540	µg/L	0.11458	4.2540	ppb	0.11458	2.69%
Be 313.107†	-26.3	-0.0159	µg/L	0.01227	-0.0159	ppb	0.01227	77.31%
Ca 317.933Radial†	40197.3	7093.4	µg/L	8.16	7093.4	ppb	8.16	0.12%
Cd 226.502†	8.7	0.3265	µg/L	0.06079	0.3265	ppb	0.06079	18.62%
Co 228.616†	2.9	0.0880	µg/L	0.06244	0.0880	ppb	0.06244	70.95%
Cr 267.716†	583.8	16.418	µg/L	0.0474	16.418	ppb	0.0474	0.29%
Cu 324.752†	5700.7	19.772	µg/L	0.3299	19.772	ppb	0.3299	1.67%
Fe 238.204 Radial†	191.3	133.23	µg/L	1.628	133.23	ppb	1.628	1.22%
K 766.490 Radial†	452.5	160.41	µg/L	12.487	160.41	ppb	12.487	7.78%
Mg 279.077 IEC†	507.0	1156.4	µg/L	22.92	1156.4	ppb	22.92	1.98%
Mn 257.610†	1902.4	3.4609	µg/L	0.06264	3.4609	ppb	0.06264	1.81%
Mo 202.031†	7.8	1.0412	µg/L	0.43080	1.0412	ppb	0.43080	41.37%

Na 589.592 Radial†	34959.6	4285.5 µg/L	13.26	4285.5 ppb	13.26	0.31%
Ni 231.604†	53.7	3.6227 µg/L	0.54396	3.6227 ppb	0.54396	15.02%
P 214.914†	17.2	11.880 µg/L	2.8850	11.880 ppb	2.8850	24.28%
Pb 220.353†	10.5	2.8509 µg/L	0.93258	2.8509 ppb	0.93258	32.71%
S 181.975 Axial†	780.9	1943.2 µg/L	4.07	1943.2 ppb	4.07	0.21%
Sb 206.836†	3.5	1.3487 µg/L	1.86716	1.3487 ppb	1.86716	138.44%
Se 196.026†	-1.7	-1.49 µg/L	2.150	-1.49 ppb	2.150	143.85%
SiO2 †	172944.5	12871 µg/L	8.7	12871 ppb	8.7	0.07%
Si 251.611†	170356.8	6020 µg/L	24.7	6020 ppb	24.7	0.41%
Sn 189.927†	-15.5	-4.1846 µg/L	1.29465	-4.1846 ppb	1.29465	30.94%
Sr 421.552†	11642.1	34.796 µg/L	0.1892	34.796 ppb	0.1892	0.54%
Ti 334.940†	1342.0	1.8250 µg/L	0.03856	1.8250 ppb	0.03856	2.11%
Tl 190.801†	1.8	0.6868 µg/L	1.15932	0.6868 ppb	1.15932	168.81%
U 409.014†	14.9	0.8239 µg/L	1.50055	0.8239 ppb	1.50055	182.13%
V 292.402†	23.8	0.3765 µg/L	0.12652	0.3765 ppb	0.12652	33.60%
Zn 213.857†	1229.5	29.668 µg/L	0.3193	29.668 ppb	0.3193	1.08%

Sequence No.: 9
Sample ID: 1200875016|437221|25
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 7/14/2005 21:21:35
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875016|437221|25

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	64097.9	64097.9	96.0	%			21:23:03
1	Al 396.153Radial†	182.4	122.5	26.508	µg/L	26.508	ppb	21:23:03
1	Ca 317.933Radial†	8422.7	8514.5	1502.5	µg/L	1502.5	ppb	21:23:03
1	Fe 238.204 Radial†	111.3	82.0	57.135	µg/L	57.135	ppb	21:23:23
1	K 766.490 Radial†	1044.4	145.8	51.690	µg/L	51.690	ppb	21:23:03
1	Mg 279.077 IEC†	109.3	111.8	254.95	µg/L	254.95	ppb	21:23:23
1	Na 589.592 Radial†	7694.6	7515.7	921.32	µg/L	921.32	ppb	21:23:03
1	Sr 421.552†	2381.9	2486.7	7.4327	µg/L	7.4327	ppb	21:23:03
1	Sc 361.383	1330412.5	1330412.5	100.49	%			21:24:21
1	Y 371.029	730204.3	730204.3	100.60	%			21:24:21
1	Ag 328.068†	-694.9	-8.8	-0.0491	µg/L	-0.0491	ppb	21:24:26
1	As 188.979†	-23.2	1.4	0.8236	µg/L	0.8236	ppb	21:24:47
1	B 249.677†	66.3	32.9	2.0944	µg/L	2.0944	ppb	21:24:47
1	Ba 233.527†	-34.0	88.8	0.9489	µg/L	0.9489	ppb	21:24:47
1	Be 313.107†	370.7	-22.9	-0.0153	µg/L	-0.0153	ppb	21:24:26
1	Cd 226.502†	-21.2	6.9	0.2622	µg/L	0.2622	ppb	21:24:47
1	Co 228.616†	-120.1	0.9	0.0259	µg/L	0.0259	ppb	21:24:47
1	Cr 267.716†	272.4	202.9	5.7065	µg/L	5.7065	ppb	21:24:47
1	Cu 324.752†	5515.0	1327.7	4.6062	µg/L	4.6062	ppb	21:24:26
1	Mn 257.610†	918.4	533.1	0.9731	µg/L	0.9731	ppb	21:24:47
1	Mo 202.031†	8.5	2.8	0.3754	µg/L	0.3754	ppb	21:24:47
1	Ni 231.604†	190.3	28.9	1.9346	µg/L	1.9346	ppb	21:24:47
1	P 214.914†	160.7	-1.5	-2.1554	µg/L	-2.1554	ppb	21:24:47
1	Pb 220.353†	-13.4	2.8	0.7511	µg/L	0.7511	ppb	21:24:47
1	S 181.975 Axial†	184.7	159.1	395.98	µg/L	395.98	ppb	21:24:47
1	Sb 206.836†	33.5	4.0	1.7799	µg/L	1.7799	ppb	21:24:47
1	Se 196.026†	-21.1	3.5	3.20	µg/L	3.20	ppb	21:24:47
1	SiO2 †	31785.2	30872.2	2297.6	µg/L	2297.6	ppb	21:24:26
1	Sn 189.927†	-9.8	-1.4	-0.3900	µg/L	-0.3900	ppb	21:24:47
1	Ti 334.940†	1018.8	583.9	0.7614	µg/L	0.7614	ppb	21:24:26
1	Tl 190.801†	-35.5	-1.8	-0.6665	µg/L	-0.6665	ppb	21:24:47
1	U 409.014†	218.2	-8.4	-0.4789	µg/L	-0.4789	ppb	21:24:26
1	V 292.402†	-110.8	16.7	0.2515	µg/L	0.2515	ppb	21:24:47
1	Zn 213.857†	657.8	285.3	6.8793	µg/L	6.8793	ppb	21:24:47
1	Si 251.611†	30919.5	29954.5	1060	µg/L	1060	ppb	21:25:54
2	Sc RADIAL	65518.0	65518.0	98.2	%			21:23:28
2	Al 396.153Radial†	198.4	134.8	29.164	µg/L	29.164	ppb	21:23:28
2	Ca 317.933Radial†	8350.6	8250.9	1456.0	µg/L	1456.0	ppb	21:23:28
2	Fe 238.204 Radial†	108.1	76.3	53.125	µg/L	53.125	ppb	21:23:48
2	K 766.490 Radial†	1023.2	100.7	35.689	µg/L	35.689	ppb	21:23:28
2	Mg 279.077 IEC†	111.9	112.0	255.50	µg/L	255.50	ppb	21:23:48
2	Na 589.592 Radial†	7620.9	7267.0	890.83	µg/L	890.83	ppb	21:23:28
2	Sr 421.552†	2367.3	2418.1	7.2276	µg/L	7.2276	ppb	21:23:28
2	Sc 361.383	1328367.0	1328367.0	100.34	%			21:24:52
2	Y 371.029	729002.9	729002.9	100.44	%			21:24:52
2	Ag 328.068†	-593.6	91.1	0.6301	µg/L	0.6301	ppb	21:24:57
2	As 188.979†	-21.0	3.6	1.9954	µg/L	1.9954	ppb	21:25:17
2	B 249.677†	77.4	44.1	2.8031	µg/L	2.8031	ppb	21:25:17
2	Ba 233.527†	-29.1	93.6	1.0007	µg/L	1.0007	ppb	21:25:17
2	Be 313.107†	405.8	12.6	0.0092	µg/L	0.0092	ppb	21:24:57
2	Cd 226.502†	-20.9	7.2	0.2747	µg/L	0.2747	ppb	21:25:17
2	Co 228.616†	-122.2	-1.4	-0.0468	µg/L	-0.0468	ppb	21:25:17
2	Cr 267.716†	281.6	212.5	5.9774	µg/L	5.9774	ppb	21:25:17
2	Cu 324.752†	5416.0	1237.4	4.2944	µg/L	4.2944	ppb	21:24:57
2	Mn 257.610†	912.3	528.3	0.9642	µg/L	0.9642	ppb	21:25:17
2	Mo 202.031†	7.4	1.8	0.2411	µg/L	0.2411	ppb	21:25:17
2	Ni 231.604†	185.8	24.7	1.6548	µg/L	1.6548	ppb	21:25:17
2	P 214.914†	171.6	9.6	7.7492	µg/L	7.7492	ppb	21:25:17

2	Pb 220.353†	-13.2	2.9	0.8033 µg/L	0.8033 ppb	21:25:17
2	S 181.975 Axial†	183.4	158.2	393.63 µg/L	393.63 ppb	21:25:17
2	Sb 206.836†	38.1	8.6	3.9205 µg/L	3.9205 ppb	21:25:17
2	Se 196.026†	-28.7	-4.1	-3.68 µg/L	-3.68 ppb	21:25:17
2	SiO2 †	31508.5	30645.1	2280.7 µg/L	2280.7 ppb	21:24:57
2	Sn 189.927†	-9.2	-0.9	-0.2412 µg/L	-0.2412 ppb	21:25:17
2	Ti 334.940†	1089.3	655.7	0.8511 µg/L	0.8511 ppb	21:24:57
2	Tl 190.801†	-31.1	2.6	0.9810 µg/L	0.9810 ppb	21:25:17
2	U 409.014†	190.8	-35.4	-1.9903 µg/L	-1.9903 ppb	21:24:57
2	V 292.402†	-105.9	21.5	0.3175 µg/L	0.3175 ppb	21:25:17
2	Zn 213.857†	652.3	280.8	6.7733 µg/L	6.7733 ppb	21:25:17
2	Si 251.611†	31140.9	30222.5	1070 µg/L	1070 ppb	21:25:59
3	Sc RADIAL	66002.3	66002.3	98.9 %		21:23:53
3	Al 396.153Radial†	187.4	122.2	26.430 µg/L	26.430 ppb	21:23:53
3	Ca 317.933Radial†	8435.6	8274.5	1460.2 µg/L	1460.2 ppb	21:23:53
3	Fe 238.204 Radial†	108.2	75.6	52.611 µg/L	52.611 ppb	21:24:13
3	K 766.490 Radial†	1054.5	124.7	44.184 µg/L	44.184 ppb	21:23:53
3	Mg 279.077 IEC†	107.8	107.0	243.94 µg/L	243.94 ppb	21:24:13
3	Na 589.592 Radial†	7743.3	7333.8	899.01 µg/L	899.01 ppb	21:23:53
3	Sr 421.552†	2345.3	2378.2	7.1076 µg/L	7.1076 ppb	21:23:53
3	Sc 361.383	1324085.2	1324085.2	100.01 %		21:25:23
3	Y 371.029	726433.8	726433.8	100.08 %		21:25:23
3	Ag 328.068†	-698.0	-15.3	-0.0943 µg/L	-0.0943 ppb	21:25:28
3	As 188.979†	-25.9	-1.5	-0.7178 µg/L	-0.7178 ppb	21:25:48
3	B 249.677†	67.1	34.0	2.1677 µg/L	2.1677 ppb	21:25:48
3	Ba 233.527†	-40.7	81.9	0.8754 µg/L	0.8754 ppb	21:25:48
3	Be 313.107†	411.8	19.9	0.0147 µg/L	0.0147 ppb	21:25:28
3	Cd 226.502†	-22.1	5.9	0.2242 µg/L	0.2242 ppb	21:25:48
3	Co 228.616†	-122.8	-2.4	-0.0774 µg/L	-0.0774 ppb	21:25:48
3	Cr 267.716†	282.9	214.7	6.0377 µg/L	6.0377 ppb	21:25:48
3	Cu 324.752†	5546.1	1385.0	4.8044 µg/L	4.8044 ppb	21:25:28
3	Mn 257.610†	915.5	534.5	0.9752 µg/L	0.9752 ppb	21:25:48
3	Mo 202.031†	7.6	2.0	0.2699 µg/L	0.2699 ppb	21:25:48
3	Ni 231.604†	174.5	14.1	0.9481 µg/L	0.9481 ppb	21:25:48
3	P 214.914†	162.8	1.3	0.3415 µg/L	0.3415 ppb	21:25:48
3	Pb 220.353†	-13.9	2.2	0.5935 µg/L	0.5935 ppb	21:25:48
3	S 181.975 Axial†	184.1	159.5	396.88 µg/L	396.88 ppb	21:25:48
3	Sb 206.836†	34.6	5.3	2.3652 µg/L	2.3652 ppb	21:25:48
3	Se 196.026†	-28.9	-4.4	-3.97 µg/L	-3.97 ppb	21:25:48
3	SiO2 †	31698.5	30936.6	2302.4 µg/L	2302.4 ppb	21:25:28
3	Sn 189.927†	-10.4	-2.1	-0.5751 µg/L	-0.5751 ppb	21:25:48
3	Ti 334.940†	1081.9	651.8	0.8451 µg/L	0.8451 ppb	21:25:28
3	Tl 190.801†	-33.3	0.3	0.1301 µg/L	0.1301 ppb	21:25:48
3	U 409.014†	231.3	5.7	0.3121 µg/L	0.3121 ppb	21:25:28
3	V 292.402†	-120.1	7.0	0.1118 µg/L	0.1118 ppb	21:25:48
3	Zn 213.857†	656.1	286.7	6.9212 µg/L	6.9212 ppb	21:25:48
3	Si 251.611†	31352.7	30534.7	1080 µg/L	1080 ppb	21:26:04

Mean Data: 1200875016|437221|25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Sc 361.383	1327621.6	100.28	%	0.244				0.24%
Sc RADIAL	65206.1	97.7	%	1.48				1.52%
Y 371.029	728547.0	100.38	%	0.265				0.26%
Ag 328.068†	22.3	0.1622	µg/L	0.40580	0.1622	ppb	0.40580	250.17%
Al 396.153Radial†	126.5	27.368	µg/L	1.5566	27.368	ppb	1.5566	5.69%
As 188.979†	1.2	0.7004	µg/L	1.36083	0.7004	ppb	1.36083	194.29%
B 249.677†	37.0	2.3551	µg/L	0.38975	2.3551	ppb	0.38975	16.55%
Ba 233.527†	88.1	0.9417	µg/L	0.06293	0.9417	ppb	0.06293	6.68%
Be 313.107†	3.2	0.0029	µg/L	0.01595	0.0029	ppb	0.01595	555.12%
Ca 317.933Radial†	8346.6	1472.9	µg/L	25.74	1472.9	ppb	25.74	1.75%
Cd 226.502†	6.7	0.2537	µg/L	0.02627	0.2537	ppb	0.02627	10.35%
Co 228.616†	-1.0	-0.0327	µg/L	0.05306	-0.0327	ppb	0.05306	162.11%
Cr 267.716†	210.0	5.9072	µg/L	0.17641	5.9072	ppb	0.17641	2.99%
Cu 324.752†	1316.7	4.5683	µg/L	0.25709	4.5683	ppb	0.25709	5.63%
Fe 238.204 Radial†	78.0	54.290	µg/L	2.4769	54.290	ppb	2.4769	4.56%
K 766.490 Radial†	123.7	43.854	µg/L	8.0052	43.854	ppb	8.0052	18.25%
Mg 279.077 IEC†	110.3	251.46	µg/L	6.520	251.46	ppb	6.520	2.59%
Mn 257.610†	532.0	0.9708	µg/L	0.00584	0.9708	ppb	0.00584	0.60%
Mo 202.031†	2.2	0.2955	µg/L	0.07074	0.2955	ppb	0.07074	23.94%

Na 589.592 Radial†	7372.2	903.72 µg/L	15.781	903.72 ppb	15.781	1.75%
Ni 231.604†	22.6	1.5125 µg/L	0.50844	1.5125 ppb	0.50844	33.62%
P 214.914†	3.1	1.9784 µg/L	5.15121	1.9784 ppb	5.15121	260.37%
Pb 220.353†	2.6	0.7160 µg/L	0.10922	0.7160 ppb	0.10922	15.25%
S 181.975 Axial†	158.9	395.50 µg/L	1.675	395.50 ppb	1.675	0.42%
Sb 206.836†	6.0	2.6886 µg/L	1.10633	2.6886 ppb	1.10633	41.15%
Se 196.026†	-1.7	-1.48 µg/L	4.058	-1.48 ppb	4.058	273.61%
SiO2 †	30818.0	2293.5 µg/L	11.40	2293.5 ppb	11.40	0.50%
Si 251.611†	30237.2	1070 µg/L	10.3	1070 ppb	10.3	0.96%
Sn 189.927†	-1.5	-0.4021 µg/L	0.16727	-0.4021 ppb	0.16727	41.60%
Sr 421.552†	2427.7	7.2560 µg/L	0.16437	7.2560 ppb	0.16437	2.27%
Ti 334.940†	630.5	0.8192 µg/L	0.05013	0.8192 ppb	0.05013	6.12%
Tl 190.801†	0.4	0.1482 µg/L	0.82388	0.1482 ppb	0.82388	555.95%
U 409.014†	-12.7	-0.7190 µg/L	1.16980	-0.7190 ppb	1.16980	162.69%
V 292.402†	15.1	0.2270 µg/L	0.10502	0.2270 ppb	0.10502	46.27%
Zn 213.857†	284.3	6.8580 µg/L	0.07623	6.8580 ppb	0.07623	1.11%

Sequence No.: 10
Sample ID: 1200875018|437221|5
Nebulizer Back Pressure: 256.0 kPa
Analyst: TLW
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 7/14/2005 21:27:53
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1200875018|437221|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	66007.6	66007.6	98.9	%			21:29:20
1	Al 396.153Radial†	5093.7	5083.6	1095.5	µg/L	1095.5	ppb	21:29:20
1	Ca 317.933Radial†	45576.3	45832.1	8088.3	µg/L	8088.3	ppb	21:29:20
1	Fe 238.204 Radial†	1787.5	1773.7	1236.4	µg/L	1236.4	ppb	21:29:40
1	K 766.490 Radial†	4266.8	3373.0	1195.6	µg/L	1195.6	ppb	21:29:20
1	Mg 279.077 IEC†	951.1	959.7	2190.7	µg/L	2190.7	ppb	21:29:40
1	Na 589.592 Radial†	43032.4	43019.1	5273.2	µg/L	5273.2	ppb	21:29:20
1	Sr 421.552†	44095.2	44597.4	133.87	µg/L	133.87	ppb	21:29:20
1	Sc 361.383	1347440.8	1347440.8	101.78	%			21:30:39
1	Y 371.029	737435.0	737435.0	101.60	%			21:30:39
1	Ag 328.068†	14170.4	14605.7	99.792	µg/L	99.792	ppb	21:30:44
1	As 188.979†	174.4	195.8	106.97	µg/L	106.97	ppb	21:31:04
1	B 249.677†	1754.5	1690.8	107.09	µg/L	107.09	ppb	21:30:44
1	Ba 233.527†	9750.8	9703.2	103.88	µg/L	103.88	ppb	21:30:44
1	Be 313.107†	146692.7	143739.2	99.908	µg/L	99.908	ppb	21:30:39
1	Cd 226.502†	2687.3	2668.5	102.52	µg/L	102.52	ppb	21:31:04
1	Co 228.616†	3165.2	3230.3	102.09	µg/L	102.09	ppb	21:31:04
1	Cr 267.716†	4368.6	4224.1	118.78	µg/L	118.78	ppb	21:30:44
1	Cu 324.752†	40230.6	35367.7	122.59	µg/L	122.59	ppb	21:30:44
1	Mn 257.610†	60036.8	58607.6	106.69	µg/L	106.69	ppb	21:30:44
1	Mo 202.031†	816.7	796.8	102.53	µg/L	102.53	ppb	21:31:04
1	Ni 231.604†	1783.3	1591.8	106.05	µg/L	106.05	ppb	21:31:04
1	P 214.914†	312.3	145.4	107.98	µg/L	107.98	ppb	21:31:04
1	Pb 220.353†	370.1	379.7	102.85	µg/L	102.85	ppb	21:31:04
1	S 181.975 Axial†	1229.5	1183.4	2944.1	µg/L	2944.1	ppb	21:31:04
1	Sb 206.836†	263.1	229.2	106.76	µg/L	106.76	ppb	21:31:04
1	Se 196.026†	87.1	110.1	99.7	µg/L	99.7	ppb	21:31:04
1	SiO2 †	215755.7	211230.3	15720	µg/L	15720	ppb	21:30:39
1	Sn 189.927†	375.0	376.7	102.44	µg/L	102.44	ppb	21:31:04
1	Ti 334.940†	82961.3	81082.6	101.61	µg/L	101.61	ppb	21:30:39
1	Tl 190.801†	220.9	250.6	96.277	µg/L	96.277	ppb	21:31:04
1	U 409.014†	2003.6	1743.0	98.174	µg/L	98.174	ppb	21:30:44
1	V 292.402†	6923.4	6929.5	100.31	µg/L	100.31	ppb	21:30:44
1	Zn 213.857†	5766.7	5296.7	127.81	µg/L	127.81	ppb	21:30:44
1	Si 251.611†	215250.2	210677.4	7450	µg/L	7450	ppb	21:32:13
2	Sc RADIAL	67722.7	67722.7	101	%			21:29:45
2	Al 396.153Radial†	5254.6	5111.8	1101.6	µg/L	1101.6	ppb	21:29:45
2	Ca 317.933Radial†	46456.2	45532.1	8035.4	µg/L	8035.4	ppb	21:29:45
2	Fe 238.204 Radial†	1784.1	1724.6	1202.2	µg/L	1202.2	ppb	21:30:05
2	K 766.490 Radial†	4432.6	3427.1	1214.8	µg/L	1214.8	ppb	21:29:45
2	Mg 279.077 IEC†	954.2	938.5	2142.2	µg/L	2142.2	ppb	21:30:05
2	Na 589.592 Radial†	44119.9	42988.8	5269.5	µg/L	5269.5	ppb	21:29:45
2	Sr 421.552†	45231.8	44588.3	133.84	µg/L	133.84	ppb	21:29:45
2	Sc 361.383	1343411.3	1343411.3	101.47	%			21:31:10
2	Y 371.029	735583.2	735583.2	101.35	%			21:31:10
2	Ag 328.068†	14097.4	14575.5	99.580	µg/L	99.580	ppb	21:31:15
2	As 188.979†	180.0	201.8	110.21	µg/L	110.21	ppb	21:31:35
2	B 249.677†	1737.3	1679.0	106.35	µg/L	106.35	ppb	21:31:15
2	Ba 233.527†	9731.3	9712.7	103.99	µg/L	103.99	ppb	21:31:15
2	Be 313.107†	146347.4	143831.3	99.973	µg/L	99.973	ppb	21:31:10
2	Cd 226.502†	2681.3	2670.4	102.60	µg/L	102.60	ppb	21:31:35
2	Co 228.616†	3165.5	3239.9	102.39	µg/L	102.39	ppb	21:31:35
2	Cr 267.716†	4354.8	4223.4	118.75	µg/L	118.75	ppb	21:31:15
2	Cu 324.752†	39997.4	35256.4	122.20	µg/L	122.20	ppb	21:31:15
2	Mn 257.610†	59565.7	58320.2	106.16	µg/L	106.16	ppb	21:31:15
2	Mo 202.031†	821.2	803.7	103.42	µg/L	103.42	ppb	21:31:35
2	Ni 231.604†	1785.5	1599.1	106.54	µg/L	106.54	ppb	21:31:35
2	P 214.914†	307.1	141.2	104.38	µg/L	104.38	ppb	21:31:35

2	Pb 220.353†	367.3	378.0	102.40 µg/L	102.40 ppb	21:31:35
2	S 181.975 Axial†	1230.3	1187.8	2955.1 µg/L	2955.1 ppb	21:31:35
2	Sb 206.836†	265.6	232.5	108.28 µg/L	108.28 ppb	21:31:35
2	Se 196.026†	77.0	100.4	91.0 µg/L	91.0 ppb	21:31:35
2	SiO2 †	214679.3	210805.4	15688 µg/L	15688 ppb	21:31:10
2	Sn 189.927†	365.6	368.6	100.22 µg/L	100.22 ppb	21:31:35
2	Ti 334.940†	82656.4	81026.6	101.54 µg/L	101.54 ppb	21:31:10
2	Tl 190.801†	228.6	258.9	99.444 µg/L	99.444 ppb	21:31:35
2	U 409.014†	2071.4	1815.8	102.26 µg/L	102.26 ppb	21:31:15
2	V 292.402†	6910.0	6936.7	100.43 µg/L	100.43 ppb	21:31:15
2	Zn 213.857†	5720.3	5268.0	127.11 µg/L	127.11 ppb	21:31:15
2	Si 251.611†	211889.6	208000.0	7360 µg/L	7360 ppb	21:32:18
3	Sc RADIAL	66659.4	66659.4	99.9 %		21:30:10
3	Al 396.153Radial†	5117.8	5057.3	1089.7 µg/L	1089.7 ppb	21:30:10
3	Ca 317.933Radial†	45848.1	45653.6	8056.8 µg/L	8056.8 ppb	21:30:10
3	Fe 238.204 Radial†	1776.4	1745.0	1216.4 µg/L	1216.4 ppb	21:30:30
3	K 766.490 Radial†	4343.5	3407.7	1207.9 µg/L	1207.9 ppb	21:30:10
3	Mg 279.077 IEC†	948.6	947.9	2163.8 µg/L	2163.8 ppb	21:30:30
3	Na 589.592 Radial†	43504.2	43066.0	5279.0 µg/L	5279.0 ppb	21:30:10
3	Sr 421.552†	44543.6	44610.4	133.91 µg/L	133.91 ppb	21:30:10
3	Sc 361.383	1329540.0	1329540.0	100.43 %		21:31:41
3	Y 371.029	727890.9	727890.9	100.29 %		21:31:41
3	Ag 328.068†	14153.2	14775.9	100.95 µg/L	100.95 ppb	21:31:46
3	As 188.979†	173.0	196.7	107.48 µg/L	107.48 ppb	21:32:07
3	B 249.677†	1740.6	1700.2	107.69 µg/L	107.69 ppb	21:31:46
3	Ba 233.527†	9713.6	9795.1	104.87 µg/L	104.87 ppb	21:31:46
3	Be 313.107†	144961.5	143956.0	100.06 µg/L	100.06 ppb	21:31:41
3	Cd 226.502†	2661.6	2678.4	102.91 µg/L	102.91 ppb	21:32:07
3	Co 228.616†	3152.8	3259.8	103.02 µg/L	103.02 ppb	21:32:07
3	Cr 267.716†	4341.5	4254.9	119.64 µg/L	119.64 ppb	21:31:46
3	Cu 324.752†	40122.6	35792.3	124.06 µg/L	124.06 ppb	21:31:46
3	Mn 257.610†	59747.2	59113.3	107.61 µg/L	107.61 ppb	21:31:46
3	Mo 202.031†	822.1	813.1	104.62 µg/L	104.62 ppb	21:32:07
3	Ni 231.604†	1768.3	1600.4	106.63 µg/L	106.63 ppb	21:32:07
3	P 214.914†	302.4	139.6	102.65 µg/L	102.65 ppb	21:32:07
3	Pb 220.353†	373.0	387.4	104.94 µg/L	104.94 ppb	21:32:07
3	S 181.975 Axial†	1221.1	1191.3	2963.8 µg/L	2963.8 ppb	21:32:07
3	Sb 206.836†	265.6	235.1	109.53 µg/L	109.53 ppb	21:32:07
3	Se 196.026†	78.8	102.9	93.3 µg/L	93.3 ppb	21:32:07
3	SiO2 †	212073.8	210418.2	15660 µg/L	15660 ppb	21:31:41
3	Sn 189.927†	359.6	366.4	99.625 µg/L	99.625 ppb	21:32:07
3	Ti 334.940†	81713.0	80937.1	101.43 µg/L	101.43 ppb	21:31:41
3	Tl 190.801†	224.0	256.6	98.577 µg/L	98.577 ppb	21:32:07
3	U 409.014†	2066.7	1832.3	103.19 µg/L	103.19 ppb	21:31:46
3	V 292.402†	6911.4	7009.1	101.48 µg/L	101.48 ppb	21:31:46
3	Zn 213.857†	5711.4	5318.0	128.32 µg/L	128.32 ppb	21:31:46
3	Si 251.611†	213687.9	211969.2	7500 µg/L	7500 ppb	21:32:24

Mean Data: 1200875018|437221|5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1340130.7	101.23	%	0.709				0.70%
Sc RADIAL	66796.6	100	%	1.3				1.30%
Y 371.029	733636.4	101.08	%	0.697				0.69%
Ag 328.068†	14652.3	100.11	µg/L	0.736	100.11	ppb	0.736	0.74%
Al 396.153Radial†	5084.2	1095.6	µg/L	5.92	1095.6	ppb	5.92	0.54%
As 188.979†	198.1	108.22	µg/L	1.742	108.22	ppb	1.742	1.61%
B 249.677†	1690.0	107.04	µg/L	0.672	107.04	ppb	0.672	0.63%
Ba 233.527†	9737.0	104.25	µg/L	0.542	104.25	ppb	0.542	0.52%
Be 313.107†	143842.1	99.980	µg/L	0.0761	99.980	ppb	0.0761	0.08%
Ca 317.933Radial†	45672.6	8060.2	µg/L	26.62	8060.2	ppb	26.62	0.33%
Cd 226.502†	2672.4	102.68	µg/L	0.204	102.68	ppb	0.204	0.20%
Co 228.616†	3243.3	102.50	µg/L	0.478	102.50	ppb	0.478	0.47%
Cr 267.716†	4234.1	119.06	µg/L	0.505	119.06	ppb	0.505	0.42%
Cu 324.752†	35472.1	122.95	µg/L	0.980	122.95	ppb	0.980	0.80%
Fe 238.204 Radial†	1747.8	1218.3	µg/L	17.17	1218.3	ppb	17.17	1.41%
K 766.490 Radial†	3402.6	1206.1	µg/L	9.71	1206.1	ppb	9.71	0.80%
Mg 279.077 IEC†	948.7	2165.6	µg/L	24.27	2165.6	ppb	24.27	1.12%
Mn 257.610†	58680.4	106.82	µg/L	0.731	106.82	ppb	0.731	0.68%
Mo 202.031†	804.5	103.53	µg/L	1.047	103.53	ppb	1.047	1.01%

Na 589.592 Radial†	43024.6	5273.9 µg/L	4.76	5273.9 ppb	4.76	0.09%
Ni 231.604†	1597.1	106.41 µg/L	0.312	106.41 ppb	0.312	0.29%
P 214.914†	142.1	105.00 µg/L	2.719	105.00 ppb	2.719	2.59%
Pb 220.353†	381.7	103.40 µg/L	1.357	103.40 ppb	1.357	1.31%
S 181.975 Axial†	1187.5	2954.3 µg/L	9.88	2954.3 ppb	9.88	0.33%
Sb 206.836†	232.3	108.19 µg/L	1.386	108.19 ppb	1.386	1.28%
Se 196.026†	104.5	94.7 µg/L	4.53	94.7 ppb	4.53	4.79%
SiO2 †	210818.0	15689 µg/L	30.2	15689 ppb	30.2	0.19%
Si 251.611†	210215.5	7430 µg/L	71.6	7430 ppb	71.6	0.96%
Sn 189.927†	370.5	100.76 µg/L	1.484	100.76 ppb	1.484	1.47%
Sr 421.552†	44598.7	133.87 µg/L	0.033	133.87 ppb	0.033	0.02%
Ti 334.940†	81015.4	101.52 µg/L	0.094	101.52 ppb	0.094	0.09%
Tl 190.801†	255.4	98.099 µg/L	1.6369	98.099 ppb	1.6369	1.67%
U 409.014†	1797.1	101.21 µg/L	2.670	101.21 ppb	2.670	2.64%
V 292.402†	6958.4	100.74 µg/L	0.642	100.74 ppb	0.642	0.64%
Zn 213.857†	5294.2	127.75 µg/L	0.608	127.75 ppb	0.608	0.48%

Sequence No.: 11
Sample ID: CCV
Nebulizer Back Pressure: 255.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 7/14/2005 21:34:12
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	66279.2	66279.2	99.3	%			21:35:36
1	Al 396.153Radial†	22949.6	23045.2	4964.0	µg/L	4964.0	ppb	21:35:36
1	Ca 317.933Radial†	28332.3	28276.7	4992.6	µg/L	4992.6	ppb	21:35:56
1	Fe 238.204 Radial†	7467.0	7486.2	5219.0	µg/L	5219.0	ppb	21:35:56
1	K 766.490 Radial†	15044.6	14209.7	5036.7	µg/L	5036.7	ppb	21:35:36
1	Mg 279.077 IEC†	2229.3	2243.1	5125.4	µg/L	5125.4	ppb	21:35:56
1	Na 589.592 Radial†	82674.3	82764.1	10144	µg/L	10144	ppb	21:35:36
1	Sr 421.552†	167074.3	168267.0	505.86	µg/L	505.86	ppb	21:35:36
1	Sc 361.383	1350909.8	1350909.8	102.04	%			21:36:56
1	Y 371.029	738556.7	738556.7	101.75	%			21:36:56
1	Ag 328.068†	73343.7	72560.6	495.60	µg/L	495.60	ppb	21:37:01
1	As 188.979†	923.1	929.1	506.62	µg/L	506.62	ppb	21:37:21
1	B 249.677†	7961.3	7769.1	491.94	µg/L	491.94	ppb	21:37:01
1	Ba 233.527†	46941.8	46126.2	493.87	µg/L	493.87	ppb	21:37:01
1	Be 313.107†	742381.1	727152.1	505.40	µg/L	505.40	ppb	21:36:56
1	Cd 226.502†	13225.4	12989.2	499.11	µg/L	499.11	ppb	21:37:01
1	Co 228.616†	15854.4	15657.9	494.85	µg/L	494.85	ppb	21:37:01
1	Cr 267.716†	17973.9	17546.5	493.35	µg/L	493.35	ppb	21:37:01
1	Cu 324.752†	151771.7	144578.0	501.04	µg/L	501.04	ppb	21:36:56
1	Mn 257.610†	283158.7	277118.6	504.46	µg/L	504.46	ppb	21:36:56
1	Mo 202.031†	4071.4	3984.4	512.51	µg/L	512.51	ppb	21:37:21
1	Ni 231.604†	8042.7	7721.5	514.26	µg/L	514.26	ppb	21:37:21
1	P 214.914†	3038.9	2816.7	2408.7	µg/L	2408.7	ppb	21:37:21
1	Pb 220.353†	1870.8	1849.5	500.95	µg/L	500.95	ppb	21:37:21
1	S 181.975 Axial†	428.2	395.1	977.17	µg/L	977.17	ppb	21:37:21
1	Sb 206.836†	1119.4	1067.7	498.80	µg/L	498.80	ppb	21:37:21
1	Se 196.026†	534.2	548.0	496	µg/L	496	ppb	21:37:21
1	SiO2 †	73848.7	71615.1	5329.7	µg/L	5329.7	ppb	21:37:01
1	Sn 189.927†	1858.0	1829.1	497.33	µg/L	497.33	ppb	21:37:21
1	Ti 334.940†	408944.9	400341.9	500.98	µg/L	500.98	ppb	21:36:56
1	Tl 190.801†	1289.8	1297.6	498.45	µg/L	498.45	ppb	21:37:21
1	U 409.014†	9255.3	8844.8	498.25	µg/L	498.25	ppb	21:37:01
1	V 292.402†	34991.1	34418.8	498.12	µg/L	498.12	ppb	21:37:01
1	Zn 213.857†	21208.6	20415.5	492.68	µg/L	492.68	ppb	21:37:01
1	Si 251.611†	72707.4	70440.3	2490	µg/L	2490	ppb	21:38:30
2	Sc RADIAL	66421.6	66421.6	99.5	%			21:36:01
2	Al 396.153Radial†	23004.5	23050.8	4965.1	µg/L	4965.1	ppb	21:36:01
2	Ca 317.933Radial†	28291.5	28174.6	4974.6	µg/L	4974.6	ppb	21:36:22
2	Fe 238.204 Radial†	7454.2	7457.2	5198.9	µg/L	5198.9	ppb	21:36:22
2	K 766.490 Radial†	14995.2	14127.5	5007.6	µg/L	5007.6	ppb	21:36:01
2	Mg 279.077 IEC†	2223.8	2232.8	5102.0	µg/L	5102.0	ppb	21:36:22
2	Na 589.592 Radial†	82633.1	82544.2	10117	µg/L	10117	ppb	21:36:01
2	Sr 421.552†	166876.6	167707.4	504.18	µg/L	504.18	ppb	21:36:01
2	Sc 361.383	1342435.3	1342435.3	101.40	%			21:37:27
2	Y 371.029	733987.8	733987.8	101.13	%			21:37:27
2	Ag 328.068†	74437.7	74093.2	506.04	µg/L	506.04	ppb	21:37:33
2	As 188.979†	912.8	924.6	504.30	µg/L	504.30	ppb	21:37:53
2	B 249.677†	8158.5	8012.8	507.37	µg/L	507.37	ppb	21:37:33
2	Ba 233.527†	47608.1	47073.8	504.02	µg/L	504.02	ppb	21:37:33
2	Be 313.107†	738778.7	728192.3	506.13	µg/L	506.13	ppb	21:37:27
2	Cd 226.502†	13392.0	13235.3	508.57	µg/L	508.57	ppb	21:37:33
2	Co 228.616†	16046.5	15945.5	503.95	µg/L	503.95	ppb	21:37:33
2	Cr 267.716†	18175.5	17856.5	502.07	µg/L	502.07	ppb	21:37:33
2	Cu 324.752†	151069.3	144824.3	501.89	µg/L	501.89	ppb	21:37:27
2	Mn 257.610†	281850.3	277580.1	505.30	µg/L	505.30	ppb	21:37:27
2	Mo 202.031†	4076.4	4014.6	516.39	µg/L	516.39	ppb	21:37:53
2	Ni 231.604†	8003.0	7732.2	514.96	µg/L	514.96	ppb	21:37:53
2	P 214.914†	3018.7	2815.6	2407.6	µg/L	2407.6	ppb	21:37:53

2	Pb 220.353†	1857.3	1847.7	500.47 µg/L	500.47 ppb	21:37:53
2	S 181.975 Axial†	426.3	395.8	978.95 µg/L	978.95 ppb	21:37:53
2	Sb 206.836†	1111.2	1066.6	498.19 µg/L	498.19 ppb	21:37:53
2	Se 196.026†	541.9	558.9	506 µg/L	506 ppb	21:37:53
2	SiO2 †	75053.6	73260.2	5452.2 µg/L	5452.2 ppb	21:37:33
2	Sn 189.927†	1849.5	1832.2	498.16 µg/L	498.16 ppb	21:37:53
2	Ti 334.940†	406724.1	400681.6	501.40 µg/L	501.40 ppb	21:37:27
2	Tl 190.801†	1290.5	1306.3	501.75 µg/L	501.75 ppb	21:37:53
2	U 409.014†	9353.7	8999.0	506.95 µg/L	506.95 ppb	21:37:33
2	V 292.402†	35382.9	35021.7	506.80 µg/L	506.80 ppb	21:37:33
2	Zn 213.857†	21448.3	20783.0	501.63 µg/L	501.63 ppb	21:37:33
2	Si 251.611†	73573.0	71743.8	2540 µg/L	2540 ppb	21:38:35
3	Sc RADIAL	66157.2	66157.2	99.1 %		21:36:27
3	Al 396.153Radial†	22898.3	23036.1	4961.8 µg/L	4961.8 ppb	21:36:27
3	Ca 317.933Radial†	28220.6	28216.7	4982.1 µg/L	4982.1 ppb	21:36:47
3	Fe 238.204 Radial†	7442.8	7475.6	5211.8 µg/L	5211.8 ppb	21:36:47
3	K 766.490 Radial†	15029.5	14222.4	5041.2 µg/L	5041.2 ppb	21:36:27
3	Mg 279.077 IEC†	2218.4	2236.3	5110.0 µg/L	5110.0 ppb	21:36:47
3	Na 589.592 Radial†	82296.8	82536.8	10116 µg/L	10116 ppb	21:36:27
3	Sr 421.552†	166225.6	167721.1	504.22 µg/L	504.22 ppb	21:36:27
3	Sc 361.383	1331742.9	1331742.9	100.59 %		21:37:59
3	Y 371.029	728098.2	728098.2	100.31 %		21:37:59
3	Ag 328.068†	74079.9	74326.9	507.64 µg/L	507.64 ppb	21:38:04
3	As 188.979†	915.0	934.1	509.41 µg/L	509.41 ppb	21:38:24
3	B 249.677†	8162.5	8081.4	511.71 µg/L	511.71 ppb	21:38:04
3	Ba 233.527†	47531.1	47374.2	507.24 µg/L	507.24 ppb	21:38:04
3	Be 313.107†	732627.5	727927.0	505.95 µg/L	505.95 ppb	21:37:59
3	Cd 226.502†	13365.7	13315.2	511.64 µg/L	511.64 ppb	21:38:04
3	Co 228.616†	16065.3	16091.2	508.56 µg/L	508.56 ppb	21:38:04
3	Cr 267.716†	18161.7	17986.6	505.73 µg/L	505.73 ppb	21:38:04
3	Cu 324.752†	149729.1	144688.1	501.41 µg/L	501.41 ppb	21:37:59
3	Mn 257.610†	279649.1	277623.6	505.38 µg/L	505.38 ppb	21:37:59
3	Mo 202.031†	4063.3	4033.8	518.86 µg/L	518.86 ppb	21:38:24
3	Ni 231.604†	7980.0	7772.6	517.65 µg/L	517.65 ppb	21:38:24
3	P 214.914†	3017.9	2838.7	2428.1 µg/L	2428.1 ppb	21:38:24
3	Pb 220.353†	1873.4	1878.5	508.77 µg/L	508.77 ppb	21:38:24
3	S 181.975 Axial†	425.2	398.1	984.77 µg/L	984.77 ppb	21:38:24
3	Sb 206.836†	1106.2	1070.4	499.98 µg/L	499.98 ppb	21:38:24
3	Se 196.026†	529.9	551.3	499 µg/L	499 ppb	21:38:24
3	SiO2 †	74777.1	73579.7	5475.9 µg/L	5475.9 ppb	21:38:04
3	Sn 189.927†	1842.7	1840.1	500.31 µg/L	500.31 ppb	21:38:24
3	Ti 334.940†	403287.3	400485.6	501.15 µg/L	501.15 ppb	21:37:59
3	Tl 190.801†	1296.4	1322.3	507.88 µg/L	507.88 ppb	21:38:24
3	U 409.014†	9401.5	9120.7	513.80 µg/L	513.80 ppb	21:38:04
3	V 292.402†	35398.7	35317.5	511.07 µg/L	511.07 ppb	21:38:04
3	Zn 213.857†	21393.2	20898.1	504.42 µg/L	504.42 ppb	21:38:04
3	Si 251.611†	73217.3	71972.8	2550 µg/L	2550 ppb	21:38:40

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1341696.0	101.34	%	0.725				0.72%
Sc RADIAL	66286.0	99.3	%	0.20				0.20%
Y 371.029	733547.6	101.06	%	0.722				0.71%
Ag 328.068†	73660.2	503.09	µg/L	6.539	503.09	ppb	6.539	1.30%
QC value within limits for Ag 328.068 Recovery = 100.62%								
Al 396.153Radial†	23044.0	4963.6	µg/L	1.69	4963.6	ppb	1.69	0.03%
QC value within limits for Al 396.153Radial Recovery = 99.27%								
As 188.979†	929.3	506.78	µg/L	2.560	506.78	ppb	2.560	0.51%
QC value within limits for As 188.979 Recovery = 101.36%								
B 249.677†	7954.4	503.67	µg/L	10.389	503.67	ppb	10.389	2.06%
QC value within limits for B 249.677 Recovery = 100.73%								
Ba 233.527†	46858.1	501.71	µg/L	6.973	501.71	ppb	6.973	1.39%
QC value within limits for Ba 233.527 Recovery = 100.34%								
Be 313.107†	727757.1	505.83	µg/L	0.377	505.83	ppb	0.377	0.07%
QC value within limits for Be 313.107 Recovery = 101.17%								
Ca 317.933Radial†	28222.7	4983.1	µg/L	9.03	4983.1	ppb	9.03	0.18%
QC value within limits for Ca 317.933Radial Recovery = 99.66%								
Cd 226.502†	13179.9	506.44	µg/L	6.532	506.44	ppb	6.532	1.29%
QC value within limits for Cd 226.502 Recovery = 101.29%								

Co 228.616†	15898.2	502.45 µg/L	6.979	502.45 ppb	6.979	1.39%
QC value within limits for Co 228.616 Recovery = 100.49%						
Cr 267.716†	17796.5	500.38 µg/L	6.358	500.38 ppb	6.358	1.27%
QC value within limits for Cr 267.716 Recovery = 100.08%						
Cu 324.752†	144696.8	501.45 µg/L	0.425	501.45 ppb	0.425	0.08%
QC value within limits for Cu 324.752 Recovery = 100.29%						
Fe 238.204 Radial†	7473.0	5209.9 µg/L	10.17	5209.9 ppb	10.17	0.20%
QC value within limits for Fe 238.204 Radial Recovery = 104.20%						
K 766.490 Radial†	14186.6	5028.5 µg/L	18.25	5028.5 ppb	18.25	0.36%
QC value within limits for K 766.490 Radial Recovery = 100.57%						
Mg 279.077 IEC†	2237.4	5112.5 µg/L	11.87	5112.5 ppb	11.87	0.23%
QC value within limits for Mg 279.077 IEC Recovery = 102.25%						
Mn 257.610†	277440.8	505.05 µg/L	0.508	505.05 ppb	0.508	0.10%
QC value within limits for Mn 257.610 Recovery = 101.01%						
Mo 202.031†	4010.9	515.92 µg/L	3.198	515.92 ppb	3.198	0.62%
QC value within limits for Mo 202.031 Recovery = 103.18%						
Na 589.592 Radial†	82615.0	10126 µg/L	15.8	10126 ppb	15.8	0.16%
QC value within limits for Na 589.592 Radial Recovery = 101.26%						
Ni 231.604†	7742.1	515.62 µg/L	1.791	515.62 ppb	1.791	0.35%
QC value within limits for Ni 231.604 Recovery = 103.12%						
P 214.914†	2823.7	2414.8 µg/L	11.56	2414.8 ppb	11.56	0.48%
QC value within limits for P 214.914 Recovery = 96.59%						
Pb 220.353†	1858.6	503.39 µg/L	4.664	503.39 ppb	4.664	0.93%
QC value within limits for Pb 220.353 Recovery = 100.68%						
S 181.975 Axial†	396.3	980.30 µg/L	3.975	980.30 ppb	3.975	0.41%
QC value within limits for S 181.975 Axial Recovery = 98.03%						
Sb 206.836†	1068.2	498.99 µg/L	0.910	498.99 ppb	0.910	0.18%
QC value within limits for Sb 206.836 Recovery = 99.80%						
Se 196.026†	552.7	500 µg/L	5.1	500 ppb	5.1	1.01%
QC value within limits for Se 196.026 Recovery = 100.08%						
SiO2 †	72818.3	5419.3 µg/L	78.45	5419.3 ppb	78.45	1.45%
QC value within limits for SiO2 Recovery = 101.34%						
Si 251.611†	71385.7	2520 µg/L	29.2	2520 ppb	29.2	1.16%
QC value within limits for Si 251.611 Recovery = 100.98%						
Sn 189.927†	1833.8	498.60 µg/L	1.540	498.60 ppb	1.540	0.31%
QC value within limits for Sn 189.927 Recovery = 99.72%						
Sr 421.552†	167898.5	504.75 µg/L	0.960	504.75 ppb	0.960	0.19%
QC value within limits for Sr 421.552 Recovery = 100.95%						
Ti 334.940†	400503.0	501.18 µg/L	0.210	501.18 ppb	0.210	0.04%
QC value within limits for Ti 334.940 Recovery = 100.24%						
Tl 190.801†	1308.7	502.69 µg/L	4.787	502.69 ppb	4.787	0.95%
QC value within limits for Tl 190.801 Recovery = 100.54%						
U 409.014†	8988.2	506.33 µg/L	7.792	506.33 ppb	7.792	1.54%
QC value within limits for U 409.014 Recovery = 101.27%						
V 292.402†	34919.3	505.33 µg/L	6.598	505.33 ppb	6.598	1.31%
QC value within limits for V 292.402 Recovery = 101.07%						
Zn 213.857†	20698.9	499.57 µg/L	6.135	499.57 ppb	6.135	1.23%
QC value within limits for Zn 213.857 Recovery = 99.91%						

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCB
Nebulizer Back Pressure: 256.0 kPa
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 7/14/2005 21:40:28
Nebulizer Flow: 0.65 L/min
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	65876.8	65876.8	98.7	%			21:41:52
1	Al 396.153Radial†	66.4	-0.1	-0.0527	µg/L	-0.0527	ppb	21:41:52
1	Ca 317.933Radial†	272.8	19.7	3.4748	µg/L	3.4748	ppb	21:42:12
1	Fe 238.204 Radial†	38.1	4.8	3.3174	µg/L	3.3174	ppb	21:42:12
1	K 766.490 Radial†	947.6	18.4	6.5174	µg/L	6.5174	ppb	21:41:52
1	Mg 279.077 IEC†	8.2	6.3	14.337	µg/L	14.337	ppb	21:42:12
1	Na 589.592 Radial†	623.6	134.6	16.496	µg/L	16.496	ppb	21:41:52
1	Sr 421.552†	21.1	27.7	0.0831	µg/L	0.0831	ppb	21:41:52
1	Sc 361.383	1317486.1	1317486.1	99.515	%			21:43:10
1	Y 371.029	722568.9	722568.9	99.552	%			21:43:10
1	Ag 328.068†	-624.6	55.1	0.3758	µg/L	0.3758	ppb	21:43:15
1	As 188.979†	-26.1	-1.8	-0.9521	µg/L	-0.9521	ppb	21:43:36
1	B 249.677†	126.8	94.3	5.9634	µg/L	5.9634	ppb	21:43:36
1	Ba 233.527†	-109.6	12.5	0.1332	µg/L	0.1332	ppb	21:43:36
1	Be 313.107†	464.0	74.4	0.0514	µg/L	0.0514	ppb	21:43:15
1	Cd 226.502†	-27.1	0.9	0.0323	µg/L	0.0323	ppb	21:43:36
1	Co 228.616†	-114.3	5.5	0.1747	µg/L	0.1747	ppb	21:43:36
1	Cr 267.716†	57.1	-10.9	-0.3049	µg/L	-0.3049	ppb	21:43:36
1	Cu 324.752†	4384.6	245.6	0.8526	µg/L	0.8526	ppb	21:43:15
1	Mn 257.610†	410.3	31.4	0.0575	µg/L	0.0575	ppb	21:43:36
1	Mo 202.031†	10.2	4.7	0.5986	µg/L	0.5986	ppb	21:43:36
1	Ni 231.604†	160.0	0.4	0.0295	µg/L	0.0295	ppb	21:43:36
1	P 214.914†	160.2	-0.5	-0.5444	µg/L	-0.5444	ppb	21:43:36
1	Pb 220.353†	-16.5	-0.5	-0.1336	µg/L	-0.1336	ppb	21:43:36
1	S 181.975 Axial†	25.9	1.4	3.5819	µg/L	3.5819	ppb	21:43:36
1	Sb 206.836†	39.2	10.0	4.6847	µg/L	4.6847	ppb	21:43:36
1	Se 196.026†	-22.7	1.7	1.54	µg/L	1.54	ppb	21:43:36
1	SiO2 †	969.4	216.4	16.105	µg/L	16.105	ppb	21:43:36
1	Sn 189.927†	-2.3	5.9	1.6134	µg/L	1.6134	ppb	21:43:36
1	Ti 334.940†	531.2	103.9	0.1309	µg/L	0.1309	ppb	21:43:15
1	Tl 190.801†	-35.0	-1.5	-0.5867	µg/L	-0.5867	ppb	21:43:36
1	U 409.014†	198.3	-26.3	-1.4738	µg/L	-1.4738	ppb	21:43:15
1	V 292.402†	-117.8	8.7	0.1276	µg/L	0.1276	ppb	21:43:36
1	Zn 213.857†	377.7	10.3	0.2476	µg/L	0.2476	ppb	21:43:36
1	Si 251.611†	960.1	150.9	5.33	µg/L	5.33	ppb	21:44:58
2	Sc RADIAL	66275.0	66275.0	99.3	%			21:42:17
2	Al 396.153Radial†	60.9	-6.0	-1.3253	µg/L	-1.3253	ppb	21:42:17
2	Ca 317.933Radial†	272.1	17.3	3.0302	µg/L	3.0302	ppb	21:42:37
2	Fe 238.204 Radial†	40.9	7.3	5.0958	µg/L	5.0958	ppb	21:42:37
2	K 766.490 Radial†	973.1	38.3	13.578	µg/L	13.578	ppb	21:42:17
2	Mg 279.077 IEC†	5.2	3.2	7.2666	µg/L	7.2666	ppb	21:42:37
2	Na 589.592 Radial†	592.6	99.6	12.213	µg/L	12.213	ppb	21:42:17
2	Sr 421.552†	27.1	33.7	0.1012	µg/L	0.1012	ppb	21:42:17
2	Sc 361.383	1317236.8	1317236.8	99.496	%			21:43:41
2	Y 371.029	722730.6	722730.6	99.574	%			21:43:41
2	Ag 328.068†	-636.5	42.9	0.2943	µg/L	0.2943	ppb	21:43:46
2	As 188.979†	-23.0	1.3	0.7228	µg/L	0.7228	ppb	21:44:06
2	B 249.677†	112.0	79.5	5.0249	µg/L	5.0249	ppb	21:44:06
2	Ba 233.527†	-111.2	10.8	0.1150	µg/L	0.1150	ppb	21:44:06
2	Be 313.107†	398.0	8.2	0.0048	µg/L	0.0048	ppb	21:43:46
2	Cd 226.502†	-22.1	5.8	0.2219	µg/L	0.2219	ppb	21:44:06
2	Co 228.616†	-110.2	9.5	0.3030	µg/L	0.3030	ppb	21:44:06
2	Cr 267.716†	66.5	-1.4	-0.0368	µg/L	-0.0368	ppb	21:44:06
2	Cu 324.752†	4238.2	99.3	0.3479	µg/L	0.3479	ppb	21:43:46
2	Mn 257.610†	389.1	10.2	0.0196	µg/L	0.0196	ppb	21:44:06
2	Mo 202.031†	8.2	2.7	0.3434	µg/L	0.3434	ppb	21:44:06
2	Ni 231.604†	164.1	4.5	0.3014	µg/L	0.3014	ppb	21:44:06
2	P 214.914†	161.6	1.0	0.8108	µg/L	0.8108	ppb	21:44:06

2	Pb 220.353†	-7.5	8.5	2.3106 µg/L	2.3106 ppb	21:44:06
2	S 181.975 Axial†	25.4	1.0	2.3700 µg/L	2.3700 ppb	21:44:06
2	Sb 206.836†	46.0	16.9	7.8744 µg/L	7.8744 ppb	21:44:06
2	Se 196.026†	-19.7	4.7	4.20 µg/L	4.20 ppb	21:44:06
2	SiO2 †	949.5	196.7	14.637 µg/L	14.637 ppb	21:44:06
2	Sn 189.927†	-4.9	3.3	0.9093 µg/L	0.9093 ppb	21:44:06
2	Ti 334.940†	534.1	106.8	0.1361 µg/L	0.1361 ppb	21:43:46
2	Tl 190.801†	-30.5	2.9	1.1193 µg/L	1.1193 ppb	21:44:06
2	U 409.014†	143.9	-81.0	-4.5429 µg/L	-4.5429 ppb	21:43:46
2	V 292.402†	-111.3	15.2	0.2157 µg/L	0.2157 ppb	21:44:06
2	Zn 213.857†	379.3	12.0	0.2888 µg/L	0.2888 ppb	21:44:06
2	Si 251.611†	928.5	119.3	4.22 µg/L	4.22 ppb	21:45:18
3	Sc RADIAL	62589.3	62589.3	93.8 %		21:42:42
3	Al 396.153Radial†	81.2	19.2	4.1178 µg/L	4.1178 ppb	21:42:42
3	Ca 317.933Radial†	278.3	40.1	7.0605 µg/L	7.0605 ppb	21:43:02
3	Fe 238.204 Radial†	39.0	7.8	5.4388 µg/L	5.4388 ppb	21:43:02
3	K 766.490 Radial†	985.3	109.1	38.659 µg/L	38.659 ppb	21:42:42
3	Mg 279.077 IEC†	5.6	4.0	9.1756 µg/L	9.1756 ppb	21:43:02
3	Na 589.592 Radial†	561.5	101.6	12.450 µg/L	12.450 ppb	21:42:42
3	Sr 421.552†	9.9	16.9	0.0505 µg/L	0.0505 ppb	21:42:42
3	Sc 361.383	1314504.5	1314504.5	99.290 %		21:44:12
3	Y 371.029	721824.2	721824.2	99.449 %		21:44:12
3	Ag 328.068†	-654.6	23.4	0.1613 µg/L	0.1613 ppb	21:44:17
3	As 188.979†	-19.4	4.9	2.6342 µg/L	2.6342 ppb	21:44:37
3	B 249.677†	114.6	82.3	5.2093 µg/L	5.2093 ppb	21:44:37
3	Ba 233.527†	-112.2	9.6	0.1031 µg/L	0.1031 ppb	21:44:37
3	Be 313.107†	448.0	59.3	0.0407 µg/L	0.0407 ppb	21:44:17
3	Cd 226.502†	-27.8	0.1	0.0019 µg/L	0.0019 ppb	21:44:37
3	Co 228.616†	-117.6	1.9	0.0610 µg/L	0.0610 ppb	21:44:37
3	Cr 267.716†	70.7	3.0	0.0855 µg/L	0.0855 ppb	21:44:37
3	Cu 324.752†	4311.7	182.1	0.6335 µg/L	0.6335 ppb	21:44:17
3	Mn 257.610†	396.5	18.5	0.0346 µg/L	0.0346 ppb	21:44:37
3	Mo 202.031†	11.9	6.4	0.8169 µg/L	0.8169 ppb	21:44:37
3	Ni 231.604†	153.9	-5.4	-0.3597 µg/L	-0.3597 ppb	21:44:37
3	P 214.914†	168.2	7.9	6.8910 µg/L	6.8910 ppb	21:44:37
3	Pb 220.353†	-9.2	6.8	1.8386 µg/L	1.8386 ppb	21:44:37
3	S 181.975 Axial†	23.0	-1.5	-3.6616 µg/L	-3.6616 ppb	21:44:37
3	Sb 206.836†	34.3	5.2	2.4390 µg/L	2.4390 ppb	21:44:37
3	Se 196.026†	-21.1	3.2	2.92 µg/L	2.92 ppb	21:44:37
3	SiO2 †	969.0	218.3	16.243 µg/L	16.243 ppb	21:44:37
3	Sn 189.927†	-5.6	2.6	0.7203 µg/L	0.7203 ppb	21:44:37
3	Ti 334.940†	507.5	81.1	0.1031 µg/L	0.1031 ppb	21:44:17
3	Tl 190.801†	-26.6	6.8	2.6101 µg/L	2.6101 ppb	21:44:37
3	U 409.014†	175.9	-48.4	-2.7125 µg/L	-2.7125 ppb	21:44:17
3	V 292.402†	-106.9	19.4	0.2824 µg/L	0.2824 ppb	21:44:37
3	Zn 213.857†	379.1	12.5	0.3051 µg/L	0.3051 ppb	21:44:37
3	Si 251.611†	921.0	113.7	4.02 µg/L	4.02 ppb	21:45:38

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1316409.1	99.433	%	0.1249				0.13%
Sc RADIAL	64913.7	97.2	%	3.03				3.12%
Y 371.029	722374.5	99.525	%	0.0666				0.07%
Ag 328.068†	40.5	0.2772	µg/L	0.10826	0.2772	ppb	0.10826	39.06%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.3	0.9133	µg/L	2.84723	0.9133	ppb	2.84723	311.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.5	0.8017	µg/L	1.79446	0.8017	ppb	1.79446	223.84%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	85.4	5.3992	µg/L	0.49720	5.3992	ppb	0.49720	9.21%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.0	0.1171	µg/L	0.01516	0.1171	ppb	0.01516	12.95%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	47.3	0.0323	µg/L	0.02438	0.0323	ppb	0.02438	75.44%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	25.7	4.5218	µg/L	2.20979	4.5218	ppb	2.20979	48.87%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	2.2	0.0854	µg/L	0.11921	0.0854	ppb	0.11921	139.62%
QC value within limits for Cd 226.502 Recovery = Not calculated								

Co 228.616†	5.6	0.1796 µg/L	0.12108	0.1796 ppb	0.12108	67.43%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-3.1	-0.0854 µg/L	0.19968	-0.0854 ppb	0.19968	233.85%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	175.7	0.6113 µg/L	0.25304	0.6113 ppb	0.25304	41.39%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	6.6	4.6173 µg/L	1.13876	4.6173 ppb	1.13876	24.66%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	55.3	19.585 µg/L	16.8916	19.585 ppb	16.8916	86.25%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	4.5	10.260 µg/L	3.6580	10.260 ppb	3.6580	35.65%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	20.0	0.0372 µg/L	0.01909	0.0372 ppb	0.01909	51.25%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.6	0.5863 µg/L	0.23698	0.5863 ppb	0.23698	40.42%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	111.9	13.720 µg/L	2.4073	13.720 ppb	2.4073	17.55%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-0.2	-0.0096 µg/L	0.33228	-0.0096 ppb	0.33228	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	2.8	2.3858 µg/L	3.96001	2.3858 ppb	3.96001	165.98%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.9	1.3385 µg/L	1.29661	1.3385 ppb	1.29661	96.87%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	0.3	0.7634 µg/L	3.87979	0.7634 ppb	3.87979	508.21%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	10.7	4.9994 µg/L	2.73134	4.9994 ppb	2.73134	54.63%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	3.2	2.89 µg/L	1.327	2.89 ppb	1.327	45.96%
QC value within limits for Se 196.026 Recovery = Not calculated						
SiO2 †	210.5	15.662 µg/L	0.8903	15.662 ppb	0.8903	5.68%
QC value within limits for SiO2 Recovery = Not calculated						
Si 251.611†	127.9	4.52 µg/L	0.708	4.52 ppb	0.708	15.65%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	4.0	1.0810 µg/L	0.47064	1.0810 ppb	0.47064	43.54%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	26.1	0.0782 µg/L	0.02568	0.0782 ppb	0.02568	32.82%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	97.3	0.1234 µg/L	0.01777	0.1234 ppb	0.01777	14.41%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.7	1.0476 µg/L	1.59961	1.0476 ppb	1.59961	152.69%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	-51.9	-2.9098 µg/L	1.54400	-2.9098 ppb	1.54400	53.06%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	14.4	0.2086 µg/L	0.07764	0.2086 ppb	0.07764	37.22%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	11.6	0.2805 µg/L	0.02961	0.2805 ppb	0.02961	10.56%
QC value within limits for Zn 213.857 Recovery = Not calculated						

All analyte(s) passed QC.

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2075	0.592
Be	9.0	9.0	2044	2080	0.641
Mg	24.0	23.9	5692	2100	0.683
Mg	25.0	25.0	5909	2115	0.570
Mg	26.0	26.0	6193	2100	0.617
Co	58.9	58.9	14185	2140	0.599
Rh	102.9	102.9	24868	2185	0.589
In	114.9	114.9	27786	2205	0.598
Ce	139.9	139.9	33868	2225	0.604
Pb	206.0	206.0	49948	2300	0.639
Pb	207.0	207.0	50159	2310	0.576
Pb	208.0	208.0	50451	2315	0.580
U	238.1	238.1	57730	2337	0.609

✓ EAQ 7/10/05

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Sunday, July 10, 2005 17:40:35
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.626
Tuning File: c:\elandata\Tuning\default2.lun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3582.6	3582.649	86.669	2.4
	Mg	24.0	21008.4	21008.436	106.158	0.5
	Co	58.9	48869.7	48869.652	475.050	1.0
	Rh	102.9	96093.7	96093.727	862.389	0.9
	In	114.9	103194.8	103194.821	1215.870	1.2
	Pb	208.0	43560.9	43560.920	505.658	1.2
⌈>	Ba	137.9	93122.5	93122.458	814.256	0.9
⌊	Ba++	69.0	2469.6	0.027	0.001	2.7
⌈>	Ce	139.9	121274.4	121274.401	723.527	0.6
⌊	CeO	155.9	2232.0	0.018	0.000	1.4
	Bkgd	220.0	22.4	22.400	4.709	21.0

Current Optimization File Data

Current Value	Description
0.95	Nebulizer Gas Flow
8.75	Lens Voltage
1400.00	ICP RF Power
-1734.38	Analog Stage Voltage
1000.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

EAQ 7/10/05

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.0	3845.9
Co	59	17	7.5	69821.2
In	115	17	8.5	180858.0

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, July 11, 2005 05:40:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\Blank.161

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7		ug/L		86	
|	Be	9		ug/L		38	
|	B	11		ug/L		348	
|	Na	23		ug/L		35711	
|	Mg	24		ug/L		1667	
|	Al	27		ug/L		7335	
|	P	31		ug/L		5123	
|	K	39		ug/L		978141	
|	Ca	43		ug/L		1197	
| >	Sc	45		ug/L		741312	
|	Ti	47		ug/L		817	
|	V	51		ug/L		7529	
|	Cr	52		ug/L		9439	
|	Cr	53		ug/L		235742	
|	Mn	55		ug/L		2910	
|	Fe	57		ug/L		15944	
|	Co	59		ug/L		203	
|	Ni	60		ug/L		104	
|	Cu	63		ug/L		199	
⌊	Cu	65		ug/L		147	
⌈	Zn	66		ug/L		401	
|	Zn	67		ug/L		19254	
|	Zn	68		ug/L		1330	
| >	Ge	74		ug/L		334240	
|	As	75		ug/L		2600	
|	Se	77		ug/L		15398	
|	Se	82		ug/L		-29	
⌊	Kr	83		ug/L		1272	
⌈	Sr	88		ug/L		248	
|	Y	89		ug/L		71	
|	Zr	90		ug/L		1861	
|	Mo	98		ug/L		181	
|	Ag	107		ug/L		81	
|	Cd	111		ug/L		20	
|	Cd	114		ug/L		48	
| >	In	115		ug/L		174744	
|	Sn	120		ug/L		250	
|	Sb	121		ug/L		245	
⌊	Sb	123		ug/L		182	
⌈	Ba	135		ug/L		39	
|	Ba	137		ug/L		60	
|	Ho	165		ug/L		27	
| >	Ta	181		ug/L		199103	
|	Tl	205		ug/L		120	
|	Pb	208		ug/L		283	
|	Bi	209		ug/L		33	
|	Th	232		ug/L		596	
⌊	U	238		ug/L		122	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	0.9997
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9998
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, July 11, 2005 05:45:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\Standard 1.162

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.197	14648	0.020
	Be	9	10.000	ug/L	1.097	4155	0.006
	B	11	20.000	ug/L	1.907	7566	0.010
	Na	23	1000.000	ug/L	5.885	2935981	3.958
	Mg	24	1000.000	ug/L	6.060	1706748	2.326
	Al	27	1000.000	ug/L	26.060	2252576	3.061
	P	31	1000.000	ug/L	1.394	181421	0.241
	K	39	1000.000	ug/L	7.624	5378184	6.017
	Ca	43	1000.000	ug/L	0.559	9454	0.011
>	Sc	45		ug/L		732931	732931.291
	Ti	47	10.000	ug/L	2.814	5201	0.006
	V	51	10.000	ug/L	12.342	56709	0.067
	Cr	52	10.000	ug/L	1.428	53458	0.060
	Cr	53		ug/L		246210	0.018
	Mn	55	10.000	ug/L	1.448	74607	0.098
	Fe	57	1000.000	ug/L	3.187	160055	0.197
	Co	59	10.000	ug/L	2.641	58305	0.079
	Ni	60	10.000	ug/L	1.535	12563	0.017
	Cu	63		ug/L		30423	0.041
	Cu	65	10.000	ug/L	3.558	15247	0.021
	Zn	66	10.000	ug/L	0.727	9494	0.027
	Zn	67		ug/L		21216	0.006
	Zn	68		ug/L		8267	0.021
>	Ge	74		ug/L		335694	335694.106
	As	75	10.000	ug/L	6.669	15432	0.038
	Se	77		ug/L		16450	0.003
	Se	82	10.000	ug/L	3.294	1110	0.003
	Kr	83		ug/L		1249	-0.000
	Sr	88	10.000	ug/L	0.775	122179	0.693
	Y	89		ug/L		85	0.000
	Zr	90	10.000	ug/L	8.366	82249	0.457
	Mo	98	10.000	ug/L	1.491	30433	0.172
	Ag	107	10.000	ug/L	1.617	48930	0.277
	Cd	111	10.000	ug/L	1.093	11285	0.064
	Cd	114		ug/L		25878	0.147
>	In	115		ug/L		176067	176067.428
	Sn	120	10.000	ug/L	1.082	44873	0.253
	Sb	121	10.000	ug/L	2.035	41284	0.233
	Sb	123		ug/L		31565	0.178
	Ba	135		ug/L		9918	0.050
	Ba	137	10.000	ug/L	0.603	16928	0.086
	Ho	165		ug/L		39	0.000
>	Ta	181		ug/L		196962	196962.491
	Tl	205	10.000	ug/L	0.881	89801	0.455
	Pb	208	10.000	ug/L	0.135	111033	0.562
	Bi	209		ug/L		46	0.000
	Th	232	10.000	ug/L	1.682	126517	0.639
	U	238	10.000	ug/L	1.872	125956	0.639

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, July 11, 2005 05:50:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\Standard 2.163

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.960**	**ug/L**	1.126	140897	0.191
	Be	9	**99.966**	**ug/L**	0.037	40114	0.054
	B	11	**199.948**	**ug/L**	1.785	71176	0.096
	Na	23	**10000.342**	**ug/L**	5.288	29331167	39.722
	Mg	24	**10014.962**	**ug/L**	10.358	20216993	27.399
	Al	27	**10016.884**	**ug/L**	3.783	27216020	36.893
	P	31	**9986.531**	**ug/L**	1.475	1567096	2.118
	K	39	**9985.980**	**ug/L**	2.723	39839754	52.698
	Ca	43	**9994.253**	**ug/L**	1.275	79853	0.107
>	Sc	45		**ug/L**		737579	737578.747
	Ti	47	**100.002**	**ug/L**	0.716	45125	0.060
	V	51	**99.959**	**ug/L**	2.597	483833	0.646
	Cr	52	**99.949**	**ug/L**	0.952	431843	0.573
	Cr	53		**ug/L**		259997	0.035
	Mn	55	**99.886**	**ug/L**	1.306	650231	0.878
	Fe	57	**9983.745**	**ug/L**	1.844	1262966	1.691
	Co	59	**99.882**	**ug/L**	0.796	522571	0.708
	Ni	60	**99.912**	**ug/L**	0.887	115309	0.156
	Cu	63		**ug/L**		274547	0.372
	Cu	65	**99.888**	**ug/L**	1.493	136681	0.185
	Zn	66	**99.959**	**ug/L**	1.669	85977	0.260
	Zn	67		**ug/L**		33183	0.043
	Zn	68		**ug/L**		66287	0.197
>	Ge	74		**ug/L**		329066	329065.862
	As	75	**99.897**	**ug/L**	1.542	116378	0.346
	Se	77		**ug/L**		21046	0.018
	Se	82	**99.964**	**ug/L**	0.385	10744	0.033
	Kr	83		**ug/L**		1213	-0.000
	Sr	88	**99.872**	**ug/L**	0.988	1055770	6.131
	Y	89		**ug/L**		287	0.001
	Zr	90	**99.775**	**ug/L**	2.310	641882	3.718
	Mo	98	**99.967**	**ug/L**	2.152	286433	1.663
	Ag	107	**99.919**	**ug/L**	2.404	441318	2.563
	Cd	111	**99.936**	**ug/L**	2.335	103489	0.601
	Cd	114		**ug/L**		241812	1.404
>	In	115		**ug/L**		172181	172181.135
	Sn	120	**99.952**	**ug/L**	2.936	416171	2.417
	Sb	121	**99.946**	**ug/L**	2.391	380504	2.209
	Sb	123		**ug/L**		294171	1.708
	Ba	135		**ug/L**		92951	0.464
	Ba	137	**99.934**	**ug/L**	1.125	160886	0.803
	Ho	165		**ug/L**		31	0.000
>	Ta	181		**ug/L**		200407	200406.639
	Tl	205	**99.841**	**ug/L**	0.758	786375	3.923
	Pb	208	**99.898**	**ug/L**	2.005	1021861	5.098
	Bi	209		**ug/L**		120	0.000
	Th	232	**99.803**	**ug/L**	0.803	1068582	5.329
	U	238	**99.805**	**ug/L**	1.042	1069072	5.334

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
Ta	181					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, July 11, 2005 05:55:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 1.164

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.631**	**ug/L**	2.822	69215	0.097
	Be	9	**50.827**	**ug/L**	1.418	19793	0.028
	B	11	**107.524**	**ug/L**	1.676	37263	0.052
	Na	23	**4907.051**	**ug/L**	1.631	13974043	19.491
	Mg	24	**5306.583**	**ug/L**	5.025	10377671	14.518
	Al	27	**5253.109**	**ug/L**	2.800	13839328	19.347
	P	31	**5324.484**	**ug/L**	0.351	812493	1.129
	K	39	**5415.077**	**ug/L**	1.427	21384574	28.577
	Ca	43	**4942.075**	**ug/L**	1.545	38869	0.053
>	Sc	45		**ug/L**		715210	715210.117
	Ti	47	**48.318**	**ug/L**	0.753	21550	0.029
	V	51	**52.434**	**ug/L**	0.858	249567	0.339
	Cr	52	**49.416**	**ug/L**	1.538	211595	0.283
	Cr	53		**ug/L**		137606	-0.126
	Mn	55	**51.529**	**ug/L**	1.625	326570	0.453
	Fe	57	**5126.887**	**ug/L**	1.896	636309	0.868
	Co	59	**49.997**	**ug/L**	0.312	253742	0.355
	Ni	60	**50.097**	**ug/L**	1.667	56106	0.078
	Cu	63		**ug/L**		132752	0.185
	Cu	65	**49.162**	**ug/L**	2.401	65284	0.091
	Zn	66	**49.028**	**ug/L**	1.264	41881	0.128
	Zn	67		**ug/L**		17542	-0.004
	Zn	68		**ug/L**		32421	0.096
>	Ge	74		**ug/L**		325211	325211.440
	As	75	**47.510**	**ug/L**	1.580	56027	0.164
	Se	77		**ug/L**		8468	-0.020
	Se	82	**48.485**	**ug/L**	2.490	5136	0.016
	Kr	83		**ug/L**		1197	-0.000
	Sr	88	**50.769**	**ug/L**	0.337	542143	3.117
	Y	89		**ug/L**		738	0.004
	Zr	90	**44.365**	**ug/L**	3.980	289268	1.653
	Mo	98	**48.603**	**ug/L**	1.609	140743	0.809
	Ag	107	**49.487**	**ug/L**	1.543	220795	1.270
	Cd	111	**49.775**	**ug/L**	0.963	52072	0.299
	Cd	114		**ug/L**		121328	0.698
>	In	115		**ug/L**		173870	173869.593
	Sn	120	**49.496**	**ug/L**	1.954	208277	1.197
	Sb	121	**48.679**	**ug/L**	2.193	187292	1.076
	Sb	123		**ug/L**		143720	0.826
	Ba	135		**ug/L**		45087	0.224
	Ba	137	**48.208**	**ug/L**	0.839	78020	0.387
	Ho	165		**ug/L**		89	0.000
>	Ta	181		**ug/L**		201365	201364.727
	Tl	205	**49.964**	**ug/L**	0.722	395446	1.963
	Pb	208	**49.253**	**ug/L**	0.962	506404	2.514
	Bi	209		**ug/L**		76	0.000
	Th	232	**50.779**	**ug/L**	0.508	546554	2.711
	U	238	**54.929**	**ug/L**	1.768	591191	2.936

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	101.263				
|	Be	9	101.654				
|	B	11	107.524				
|	Na	23	98.141				
|	Mg	24	106.132				
|	Al	27	104.022				
|	P	31	106.490				
|	K	39	108.302				
|	Ca	43	98.841				
|>	Sc	45			96.5		
|	Ti	47	96.636				
|	V	51	104.869				
|	Cr	52	98.831				
|	Cr	53					
|	Mn	55	103.058				
|	Fe	57	102.538				
|	Co	59	99.995				
|	Ni	60	100.193				
|	Cu	63					
⌊	Cu	65	98.325				
⌈	Zn	66	98.056				
|	Zn	67					
|	Zn	68					
|>	Ge	74			97.3		
|	As	75	95.021				
|	Se	77					
|	Se	82	96.969				
⌊	Kr	83					
⌈	Sr	88	101.538				
|	Y	89					
|	Zr	90	88.729				
|	Mo	98	97.206				
|	Ag	107	98.973				
|	Cd	111	99.550				
|	Cd	114					
|>	In	115			99.5		
|	Sn	120	98.992				
|	Sb	121	97.358				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	96.416				
|	Ho	165					
|>	Ta	181			101.1		
|	Tl	205	99.928				
|	Pb	208	98.507				
|	Bi	209					
|	Th	232	101.559				
⌊	U	238	109.857				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Zr	90	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, July 11, 2005 06:00:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 2.165

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.045**	**ug/L**	23.756	148	0.000
	Be	9	**-0.013**	**ug/L**	99.120	33	-0.000
	B	11	**1.949**	**ug/L**	24.984	1028	0.001
	Na	23	**-5.121**	**ug/L**	17.966	20348	-0.020
	Mg	24	**1.841**	**ug/L**	15.421	5334	0.005
	Al	27	**0.416**	**ug/L**	238.372	8336	0.002
	P	31	**0.788**	**ug/L**	293.729	5179	0.000
	K	39	**-13.948**	**ug/L**	39.525	912246	-0.074
	Ca	43	**-5.543**	**ug/L**	129.605	1139	-0.000
>	Sc	45		**ug/L**		732145	732144.949
	Ti	47	**-0.141**	**ug/L**	99.654	744	-0.000
	V	51	**-0.429**	**ug/L**	267.210	5366	-0.003
	Cr	52	**0.095**	**ug/L**	117.202	9717	0.001
	Cr	53		**ug/L**		204485	-0.039
	Mn	55	**0.001**	**ug/L**	397.533	2882	0.000
	Fe	57	**1.799**	**ug/L**	147.041	15966	0.000
	Co	59	**0.006**	**ug/L**	41.836	233	0.000
	Ni	60	**0.004**	**ug/L**	351.055	108	0.000
	Cu	63		**ug/L**		213	0.000
	Cu	65	**0.007**	**ug/L**	249.025	154	0.000
	Zn	66	**-0.031**	**ug/L**	96.664	375	-0.000
	Zn	67		**ug/L**		16536	-0.008
	Zn	68		**ug/L**		1226	-0.000
>	Ge	74		**ug/L**		336006	336006.104
	As	75	**0.835**	**ug/L**	36.860	3582	0.003
	Se	77		**ug/L**		13897	-0.005
	Se	82	**-0.005**	**ug/L**	1544.825	-30	-0.000
	Kr	83		**ug/L**		1235	-0.000
	Sr	88	**0.003**	**ug/L**	68.994	282	0.000
	Y	89		**ug/L**		63	-0.000
	Zr	90	**0.531**	**ug/L**	22.007	5282	0.020
	Mo	98	**0.045**	**ug/L**	38.703	310	0.001
	Ag	107	**0.015**	**ug/L**	32.125	147	0.000
	Cd	111	**0.014**	**ug/L**	56.538	35	0.000
	Cd	114		**ug/L**		54	0.000
>	In	115		**ug/L**		173625	173624.852
	Sn	120	**0.074**	**ug/L**	39.162	559	0.002
	Sb	121	**0.341**	**ug/L**	30.843	1551	0.008
	Sb	123		**ug/L**		1221	0.006
	Ba	135		**ug/L**		59	0.000
	Ba	137	**0.002**	**ug/L**	220.300	63	0.000
	Ho	165		**ug/L**		37	0.000
>	Ta	181		**ug/L**		198673	198672.935
	Tl	205	**0.047**	**ug/L**	12.675	489	0.002
	Pb	208	**0.009**	**ug/L**	28.706	374	0.000
	Bi	209		**ug/L**		32	-0.000
	Th	232	**0.320**	**ug/L**	30.073	3992	0.017
	U	238	**0.014**	**ug/L**	44.161	267	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		98.8			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		100.5			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		99.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		99.8			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, July 11, 2005 06:05:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 3.166

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.528**	**ug/L**	1.332	14474	0.020
	Be	9	**0.484**	**ug/L**	3.175	225	0.000
	B	11	**18.798**	**ug/L**	1.450	6797	0.009
	Na	23	**210.444**	**ug/L**	15.632	632550	0.836
	Mg	24	**11.442**	**ug/L**	15.791	24020	0.031
	Al	27	**10.863**	**ug/L**	28.366	35713	0.040
	P	31	**57.007**	**ug/L**	0.588	13599	0.012
	K	39	**227.351**	**ug/L**	0.383	1803029	1.200
	Ca	43	**73.525**	**ug/L**	24.720	1717	0.001
>	Sc	45		**ug/L**		715703	715702.962
	Ti	47	**7.881**	**ug/L**	0.704	4177	0.005
	V	51	**11.576**	**ug/L**	5.241	60812	0.075
	Cr	52	**2.415**	**ug/L**	6.360	19016	0.014
	Cr	53		**ug/L**		113307	-0.160
	Mn	55	**5.651**	**ug/L**	1.057	38348	0.050
	Fe	57	**26.165**	**ug/L**	7.408	18564	0.004
	Co	59	**1.068**	**ug/L**	1.304	5617	0.008
	Ni	60	**2.176**	**ug/L**	2.689	2535	0.003
	Cu	63		**ug/L**		3280	0.004
	Cu	65	**1.156**	**ug/L**	1.078	1675	0.002
	Zn	66	**9.935**	**ug/L**	1.875	8937	0.026
	Zn	67		**ug/L**		11200	-0.024
	Zn	68		**ug/L**		7228	0.018
>	Ge	74		**ug/L**		330421	330420.568
	As	75	**4.866**	**ug/L**	4.242	8135	0.017
	Se	77		**ug/L**		5268	-0.030
	Se	82	**5.189**	**ug/L**	4.544	533	0.002
	Kr	83		**ug/L**		1175	-0.000
	Sr	88	**10.684**	**ug/L**	0.460	116224	0.656
	Y	89		**ug/L**		934	0.005
	Zr	90	**1.469**	**ug/L**	4.614	11564	0.055
	Mo	98	**0.436**	**ug/L**	3.608	1467	0.007
	Ag	107	**1.018**	**ug/L**	1.524	4698	0.026
	Cd	111	**1.066**	**ug/L**	2.693	1154	0.006
	Cd	114		**ug/L**		2546	0.014
>	In	115		**ug/L**		176832	176831.537
	Sn	120	**5.066**	**ug/L**	2.169	21904	0.122
	Sb	121	**1.880**	**ug/L**	2.665	7593	0.042
	Sb	123		**ug/L**		5781	0.032
	Ba	135		**ug/L**		1933	0.009
	Ba	137	**1.995**	**ug/L**	3.142	3296	0.016
	Ho	165		**ug/L**		56	0.000
>	Ta	181		**ug/L**		201961	201961.282
	Tl	205	**1.103**	**ug/L**	1.388	8878	0.043
	Pb	208	**2.111**	**ug/L**	1.926	22047	0.108
	Bi	209		**ug/L**		38	0.000
	Th	232	**1.013**	**ug/L**	3.647	11526	0.054
	U	238	**0.226**	**ug/L**	4.720	2568	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	105.284				
|	Be	9	96.837				
|	B	11	125.320				
|	Na	23	84.177				
|	Mg	24	76.278				
|	Al	27	72.418				
|	P	31	114.014				
|	K	39	75.784				
|	Ca	43	73.525				
|>	Sc	45		96.5			
|	Ti	47	78.805				
|	V	51	115.760				
|	Cr	52	80.502				
|	Cr	53					
|	Mn	55	113.029				
|	Fe	57	104.660				
|	Co	59	106.828				
|	Ni	60	108.777				
|	Cu	63					
⌊	Cu	65	115.594				
⌈	Zn	66	99.349				
|	Zn	67					
|	Zn	68					
|>	Ge	74		98.9			
|	As	75	97.325				
|	Se	77					
|	Se	82	103.788				
⌊	Kr	83					
⌈	Sr	88	106.836				
|	Y	89					
|	Zr	90	73.468				
|	Mo	98	87.289				
|	Ag	107	101.787				
|	Cd	111	106.599				
|	Cd	114					
|>	In	115		101.2			
|	Sn	120	101.313				
|	Sb	121	93.977				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	99.750				
|	Ho	165					
|>	Ta	181		101.4			
|	Tl	205	110.340				
|	Pb	208	105.572				
|	Bi	209					
|	Th	232	101.294				
⌊	U	238	113.237				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, July 11, 2005 06:10:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 4.167

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.557**	**ug/L**	3.031	787	0.001
|	Be	9	**0.015**	**ug/L**	44.660	40	0.000
|	B	11	**6.040**	**ug/L**	0.630	2248	0.003
|	Na	23	**96609.115**	**ug/L**	2.631	256123944	383.735
|	Mg	24	**99859.745**	**ug/L**	3.767	182237682	273.196
|	Al	27	**99896.963**	**ug/L**	3.742	245542335	367.925
|	P	31	**139151.253**	**ug/L**	1.710	19687410	29.509
|	K	39	**109068.331**	**ug/L**	5.659	384629390	575.580
|	Ca	43	**96293.703**	**ug/L**	1.919	686457	1.028
|>	Sc	45		**ug/L**		667149	667148.809
|	Ti	47	**1716.884**	**ug/L**	1.524	688752	1.031
|	V	51	**1.196**	**ug/L**	8.675	11926	0.008
|	Cr	52	**0.064**	**ug/L**	183.524	8736	0.000
|	Cr	53		**ug/L**		89121	-0.185
|	Mn	55	**4.056**	**ug/L**	2.276	26389	0.036
|	Fe	57	**128161.655**	**ug/L**	0.655	14495212	21.706
|	Co	59	**0.298**	**ug/L**	0.393	1593	0.002
|	Ni	60	**2.089**	**ug/L**	4.018	2272	0.003
|	Cu	63		**ug/L**		5600	0.008
⌊	Cu	65	**2.528**	**ug/L**	1.147	3258	0.005
⌈	Zn	66	**6.865**	**ug/L**	0.986	5973	0.018
|	Zn	67		**ug/L**		9942	-0.026
|	Zn	68		**ug/L**		3511	0.007
|>	Ge	74		**ug/L**		313342	313341.912
|	As	75	**0.445**	**ug/L**	68.135	2920	0.002
|	Se	77		**ug/L**		4764	-0.031
|	Se	82	**-0.186**	**ug/L**	34.540	-46	-0.000
⌊	Kr	83		**ug/L**		1302	0.000
⌈	Sr	88	**1.680**	**ug/L**	2.229	17940	0.103
|	Y	89		**ug/L**		1298	0.007
|	Zr	90	**1.438**	**ug/L**	26.764	11060	0.054
|	Mo	98	**2412.161**	**ug/L**	2.894	6885512	40.128
|	Ag	107	**0.056**	**ug/L**	2.182	324	0.001
|	Cd	111	**0.151**	**ug/L**	108.522	174	0.001
|	Cd	114		**ug/L**		5623	0.032
|>	In	115		**ug/L**		171658	171657.713
|	Sn	120	**0.135**	**ug/L**	2.085	804	0.003
|	Sb	121	**0.559**	**ug/L**	2.967	2362	0.012
⌊	Sb	123		**ug/L**		1783	0.009
⌈	Ba	135		**ug/L**		460	0.002
|	Ba	137	**0.393**	**ug/L**	3.631	721	0.003
|	Ho	165		**ug/L**		92	0.000
|>	Ta	181		**ug/L**		208578	208577.834
|	Tl	205	**0.034**	**ug/L**	0.885	403	0.001
|	Pb	208	**0.392**	**ug/L**	1.145	4468	0.020
|	Bi	209		**ug/L**		1830	0.009
|	Th	232	**0.138**	**ug/L**	26.640	2155	0.007
⌊	U	238	**0.017**	**ug/L**	10.304	315	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11	302.014				
	Na	23	96.609				
	Mg	24	100.020				
	Al	27	99.897				
	P	31	139.165				
	K	39	109.068				
	Ca	43	96.294				
>	Sc	45			90.0		
	Ti	47	85.844				
	V	51	59.799				
	Cr	52	1.518				
	Cr	53					
	Mn	55	213.473				
	Fe	57	128.162				
	Co	59					
	Ni	60	149.235				
	Cu	63					
	Cu	65	133.063				
	Zn	66	122.585				
	Zn	67					
	Zn	68					
>	Ge	74			93.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	57.925				
	Y	89					
	Zr	90					
	Mo	98	120.608				
	Ag	107	18.507				
	Cd	111					
	Cd	114					
>	In	115			98.2		
	Sn	120	4.209				
	Sb	121	24.309				
	Sb	123					
	Ba	135					
	Ba	137	196.586				
	Ho	165					
>	Ta	181			104.8		
	Tl	205					
	Pb	208	48.992				
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	P	31	ICSA is out of limits
QC Std 4	Fe	57	ICSA is out of limits
QC Std 4	Mo	98	ICSA is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, July 11, 2005 06:16:07
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 5.168

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**20.995**	**ug/L**	0.656	26443	0.040
|	Be	9	**19.743**	**ug/L**	0.395	7091	0.011
|	B	11	**25.593**	**ug/L**	3.589	8390	0.012
|	Na	23	**96901.114**	**ug/L**	1.647	253112262	384.895
|	Mg	24	**94555.254**	**ug/L**	1.643	170135961	258.684
|	Al	27	**100701.491**	**ug/L**	3.323	243897411	370.888
|	P	31	**138622.430**	**ug/L**	1.004	19337319	29.397
|	K	39	**110801.741**	**ug/L**	3.676	385361738	584.727
|	Ca	43	**96199.172**	**ug/L**	0.322	676118	1.027
|>	Sc	45		**ug/L**		657606	657606.167
|	Ti	47	**1739.123**	**ug/L**	1.675	687740	1.045
|	V	51	**22.386**	**ug/L**	3.876	101829	0.145
|	Cr	52	**20.552**	**ug/L**	1.664	85815	0.118
|	Cr	53		**ug/L**		96129	-0.172
|	Mn	55	**24.533**	**ug/L**	1.628	144320	0.216
|	Fe	57	**129455.341**	**ug/L**	1.864	14430382	21.925
|	Co	59	**20.789**	**ug/L**	0.777	97112	0.147
|	Ni	60	**22.066**	**ug/L**	2.346	22780	0.034
|	Cu	63		**ug/L**		53749	0.081
⌊	Cu	65	**22.461**	**ug/L**	0.918	27502	0.042
⌈	Zn	66	**25.071**	**ug/L**	0.972	20794	0.065
|	Zn	67		**ug/L**		12105	-0.019
|	Zn	68		**ug/L**		14441	0.042
|>	Ge	74		**ug/L**		312999	312998.880
|	As	75	**19.538**	**ug/L**	2.689	23610	0.068
|	Se	77		**ug/L**		6175	-0.026
|	Se	82	**18.243**	**ug/L**	3.515	1843	0.006
⌊	Kr	83		**ug/L**		1301	0.000
⌈	Sr	88	**23.250**	**ug/L**	0.989	243300	1.427
|	Y	89		**ug/L**		942	0.005
|	Zr	90	**19.946**	**ug/L**	0.826	128395	0.743
|	Mo	98	**2451.976**	**ug/L**	0.503	6946292	40.790
|	Ag	107	**19.633**	**ug/L**	0.716	85852	0.504
|	Cd	111	**20.012**	**ug/L**	2.607	20517	0.120
|	Cd	114		**ug/L**		52906	0.310
|>	In	115		**ug/L**		170291	170290.599
|	Sn	120	**20.542**	**ug/L**	0.687	84816	0.497
|	Sb	121	**21.165**	**ug/L**	0.560	79906	0.468
⌊	Sb	123		**ug/L**		60433	0.354
⌈	Ba	135		**ug/L**		19083	0.091
|	Ba	137	**19.518**	**ug/L**	2.320	32993	0.157
|	Ho	165		**ug/L**		69	0.000
|>	Ta	181		**ug/L**		210121	210120.869
|	Tl	205	**19.555**	**ug/L**	0.794	161588	0.768
|	Pb	208	**19.793**	**ug/L**	0.568	212538	1.010
|	Bi	209		**ug/L**		1901	0.009
|	Th	232	**21.169**	**ug/L**	1.580	238108	1.130
⌊	U	238	**22.477**	**ug/L**	1.404	252528	1.201

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	104.973				
|	Be	9	98.715				
|	B	11	116.332				
|	Na	23	96.901				
|	Mg	24	94.707				
|	Al	27	100.701				
|	P	31	138.636				
|	K	39	110.802				
|	Ca	43	96.199				
|>	Sc	45			88.7		
|	Ti	47	86.956				
|	V	51	101.756				
|	Cr	52	84.924				
|	Cr	53					
|	Mn	55	112.022				
|	Fe	57	129.455				
|	Co	59	103.945				
|	Ni	60	103.113				
|	Cu	63					
⌊	Cu	65	102.562				
⌈	Zn	66	97.933				
|	Zn	67					
|	Zn	68					
|>	Ge	74			93.6		
|	As	75	97.690				
|	Se	77					
|	Se	82	91.217				
⌊	Kr	83					
⌈	Sr	88	101.528				
|	Y	89					
|	Zr	90	99.730				
|	Mo	98	122.599				
|	Ag	107	96.715				
|	Cd	111	100.060				
|	Cd	114					
|>	In	115			97.5		
|	Sn	120	88.543				
|	Sb	121	94.910				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	96.622				
|	Ho	165					
|>	Ta	181			105.5		
|	Tl	205	97.777				
|	Pb	208	95.161				
|	Bi	209					
|	Th	232	105.844				
⌊	U	238	112.384				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	P	31	ICSAB is out of limits
QC Std 5	Fe	57	ICSAB is out of limits
QC Std 5	Mo	98	ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, July 11, 2005 06:21:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 6.169

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**50.700**	**ug/L**	1.166	66168	0.097
|	Be	9	**51.159**	**ug/L**	1.096	19017	0.028
|	B	11	**105.470**	**ug/L**	1.208	34896	0.051
|	Na	23	**4664.084**	**ug/L**	0.819	12678937	18.526
|	Mg	24	**5204.971**	**ug/L**	3.625	9723644	14.240
|	Al	27	**5100.003**	**ug/L**	4.736	12825269	18.784
|	P	31	**5215.794**	**ug/L**	1.726	759718	1.106
|	K	39	**5532.685**	**ug/L**	6.854	20819292	29.197
|	Ca	43	**4910.534**	**ug/L**	0.705	36871	0.052
|>	Sc	45		**ug/L**		682596	682596.273
|	Ti	47	**48.673**	**ug/L**	0.768	20712	0.029
|	V	51	**53.064**	**ug/L**	3.486	240950	0.343
|	Cr	52	**50.353**	**ug/L**	0.964	205645	0.289
|	Cr	53		**ug/L**		106156	-0.163
|	Mn	55	**52.305**	**ug/L**	0.181	316394	0.460
|	Fe	57	**5290.619**	**ug/L**	2.148	626295	0.896
|	Co	59	**51.101**	**ug/L**	2.162	247511	0.362
|	Ni	60	**50.794**	**ug/L**	1.721	54292	0.079
|	Cu	63		**ug/L**		128228	0.188
⌊	Cu	65	**50.608**	**ug/L**	0.759	64159	0.094
⌈	Zn	66	**49.268**	**ug/L**	1.377	41101	0.128
|	Zn	67		**ug/L**		14164	-0.013
|	Zn	68		**ug/L**		31616	0.096
|>	Ge	74		**ug/L**		317622	317621.527
|	As	75	**47.759**	**ug/L**	0.373	54991	0.165
|	Se	77		**ug/L**		7650	-0.022
|	Se	82	**50.003**	**ug/L**	1.417	5173	0.016
⌊	Kr	83		**ug/L**		1139	-0.000
⌈	Sr	88	**50.546**	**ug/L**	1.190	545631	3.103
|	Y	89		**ug/L**		723	0.004
|	Zr	90	**45.334**	**ug/L**	2.448	298790	1.689
|	Mo	98	**49.750**	**ug/L**	0.714	145645	0.828
|	Ag	107	**49.243**	**ug/L**	2.330	222116	1.263
|	Cd	111	**49.525**	**ug/L**	0.765	52380	0.298
|	Cd	114		**ug/L**		120987	0.688
|>	In	115		**ug/L**		175767	175767.376
|	Sn	120	**48.698**	**ug/L**	1.129	207181	1.177
|	Sb	121	**48.623**	**ug/L**	0.647	189153	1.075
⌊	Sb	123		**ug/L**		144556	0.821
⌈	Ba	135		**ug/L**		45520	0.220
|	Ba	137	**47.479**	**ug/L**	0.679	79000	0.381
|	Ho	165		**ug/L**		70	0.000
|>	Ta	181		**ug/L**		207028	207028.422
|	Tl	205	**50.570**	**ug/L**	0.428	411516	1.987
|	Pb	208	**49.670**	**ug/L**	0.637	525065	2.535
|	Bi	209		**ug/L**		81	0.000
|	Th	232	**50.974**	**ug/L**	0.908	564117	2.722
⌊	U	238	**54.878**	**ug/L**	1.505	607354	2.933

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	101.400				
	Be	9	102.318				
	B	11	105.470				
	Na	23	93.282				
	Mg	24	104.099				
	Al	27	100.990				
	P	31	104.316				
	K	39	110.654				
	Ca	43	98.211				
>	Sc	45		92.1			
	Ti	47	97.347				
	V	51	106.129				
	Cr	52	100.706				
	Cr	53					
	Mn	55	104.610				
	Fe	57	105.812				
	Co	59	102.201				
	Ni	60	101.587				
	Cu	63					
	Cu	65	101.215				
	Zn	66	98.535				
	Zn	67					
	Zn	68					
>	Ge	74		95.0			
	As	75	95.518				
	Se	77					
	Se	82	100.006				
	Kr	83					
	Sr	88	101.092				
	Y	89					
	Zr	90	90.667				
	Mo	98	99.501				
	Ag	107	98.487				
	Cd	111	99.050				
	Cd	114					
>	In	115		100.6			
	Sn	120	97.396				
	Sb	121	97.247				
	Sb	123					
	Ba	135					
	Ba	137	94.957				
	Ho	165					
>	Ta	181		104.0			
	Tl	205	101.140				
	Pb	208	99.341				
	Bi	209					
	Th	232	101.947				
	U	238	109.756				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	K	39	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, July 11, 2005 06:26:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 7.170

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.077**	**ug/L**	18.451	185	0.000
|	Be	9	**-0.019**	**ug/L**	51.767	29	-0.000
|	B	11	**1.598**	**ug/L**	36.503	869	0.001
|	Na	23	**3.501**	**ug/L**	103.299	43736	0.014
|	Mg	24	**3.335**	**ug/L**	2.053	8002	0.009
|	Al	27	**2.996**	**ug/L**	66.044	14675	0.011
|	P	31	**4.297**	**ug/L**	35.040	5502	0.001
|	K	39	**-1.705**	**ug/L**	629.842	921830	-0.009
|	Ca	43	**9.187**	**ug/L**	144.446	1205	0.000
|>	Sc	45		**ug/L**		703703	703703.454
|	Ti	47	**-0.034**	**ug/L**	429.538	761	-0.000
|	V	51	**1.377**	**ug/L**	66.247	13363	0.009
|	Cr	52	**0.217**	**ug/L**	38.526	9834	0.001
|	Cr	53		**ug/L**		181292	-0.060
|	Mn	55	**-0.004**	**ug/L**	111.590	2735	-0.000
|	Fe	57	**8.174**	**ug/L**	52.651	16105	0.001
|	Co	59	**0.006**	**ug/L**	136.701	222	0.000
|	Ni	60	**0.014**	**ug/L**	81.201	115	0.000
|	Cu	63		**ug/L**		221	0.000
⌊	Cu	65	**0.011**	**ug/L**	108.227	154	0.000
⌈	Zn	66	**-0.049**	**ug/L**	26.042	357	-0.000
|	Zn	67		**ug/L**		14552	-0.014
|	Zn	68		**ug/L**		1022	-0.001
|>	Ge	74		**ug/L**		333024	333023.664
|	As	75	**0.692**	**ug/L**	37.929	3387	0.002
|	Se	77		**ug/L**		13029	-0.007
|	Se	82	**0.122**	**ug/L**	691.165	-16	0.000
⌊	Kr	83		**ug/L**		1231	-0.000
⌈	Sr	88	**0.005**	**ug/L**	32.684	298	0.000
|	Y	89		**ug/L**		67	-0.000
|	Zr	90	**0.547**	**ug/L**	22.015	5448	0.020
|	Mo	98	**0.270**	**ug/L**	14.998	970	0.004
|	Ag	107	**0.014**	**ug/L**	50.543	143	0.000
|	Cd	111	**0.008**	**ug/L**	24.347	29	0.000
|	Cd	114		**ug/L**		74	0.000
|>	In	115		**ug/L**		175570	175570.042
|	Sn	120	**0.075**	**ug/L**	28.161	568	0.002
|	Sb	121	**0.191**	**ug/L**	33.085	989	0.004
⌊	Sb	123		**ug/L**		810	0.004
⌈	Ba	135		**ug/L**		44	0.000
|	Ba	137	**0.002**	**ug/L**	120.075	64	0.000
|	Ho	165		**ug/L**		33	0.000
|>	Ta	181		**ug/L**		201691	201690.517
|	Tl	205	**0.041**	**ug/L**	17.419	449	0.002
|	Pb	208	**0.008**	**ug/L**	39.970	367	0.000
|	Bi	209		**ug/L**		34	0.000
|	Th	232	**0.217**	**ug/L**	33.599	2946	0.012
⌊	U	238	**0.011**	**ug/L**	27.059	243	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		94.9			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		99.6			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		100.5			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		101.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875069
Sample Date/Time: Monday, July 11, 2005 06:31:37
Sample Type:
Sample Description: ESHL 6020 MB
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875069.171

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.072**	**ug/L**	12.988	210	0.000
	Be	9	**-0.026**	**ug/L**	47.658	31	-0.000
	B	11	**1.287**	**ug/L**	10.015	902	0.001
	Na	23	**8.231**	**ug/L**	13.530	67158	0.033
	Mg	24	**1.812**	**ug/L**	62.288	6001	0.005
	Al	27	**7.036**	**ug/L**	20.602	29698	0.026
	P	31	**0.465**	**ug/L**	367.197	5817	0.000
	K	39	**-13.089**	**ug/L**	110.433	1038548	-0.069
	Ca	43	**101.513**	**ug/L**	12.204	2241	0.001
>	Sc	45		**ug/L**		830165	830164.652
	Ti	47	**1.133**	**ug/L**	7.194	1480	0.001
	V	51	**-17.468**	**ug/L**	30.344	-85479	-0.113
	Cr	52	**2.839**	**ug/L**	20.162	24056	0.016
	Cr	53		**ug/L**		634994	0.447
	Mn	55	**0.646**	**ug/L**	1.320	7973	0.006
	Fe	57	**14.558**	**ug/L**	9.757	19901	0.002
	Co	59	**0.013**	**ug/L**	43.448	302	0.000
	Ni	60	**0.063**	**ug/L**	3.640	199	0.000
	Cu	63		**ug/L**		654	0.001
	Cu	65	**0.136**	**ug/L**	17.642	373	0.000
	Zn	66	**16.575**	**ug/L**	0.587	16324	0.043
	Zn	67		**ug/L**		72968	0.141
	Zn	68		**ug/L**		14599	0.036
>	Ge	74		**ug/L**		368261	368260.865
	As	75	**0.776**	**ug/L**	444.801	3863	0.003
	Se	77		**ug/L**		53053	0.098
	Se	82	**1.630**	**ug/L**	29.048	165	0.001
	Kr	83		**ug/L**		1371	-0.000
	Sr	88	**0.073**	**ug/L**	2.527	1055	0.004
	Y	89		**ug/L**		100	0.000
	Zr	90	**1.046**	**ug/L**	29.407	8883	0.039
	Mo	98	**0.131**	**ug/L**	18.896	574	0.002
	Ag	107	**0.006**	**ug/L**	93.447	109	0.000
	Cd	111	**0.019**	**ug/L**	100.201	41	0.000
	Cd	114		**ug/L**		58	0.000
>	In	115		**ug/L**		178979	178978.909
	Sn	120	**0.091**	**ug/L**	22.411	652	0.002
	Sb	121	**0.243**	**ug/L**	30.884	1211	0.005
	Sb	123		**ug/L**		953	0.004
	Ba	135		**ug/L**		244	0.001
	Ba	137	**0.226**	**ug/L**	14.445	411	0.002
	Ho	165		**ug/L**		37	0.000
>	Ta	181		**ug/L**		194555	194555.230
	Tl	205	**0.017**	**ug/L**	17.331	245	0.001
	Pb	208	**0.097**	**ug/L**	3.950	1243	0.005
	Bi	209		**ug/L**		105	0.000
	Th	232	**0.083**	**ug/L**	32.612	1442	0.004
	U	238	**-0.000**	**ug/L**	593.327	117	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		112.0			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		110.2			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		102.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		97.7			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1200875076
Sample Date/Time: Monday, July 11, 2005 06:36:51
Sample Type:
Sample Description: ESHL 6020 LCS
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875076.172

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**45.448**	**ug/L**	1.421	71145	0.087
|	Be	9	**47.312**	**ug/L**	1.060	21093	0.026
|	B	11	**99.914**	**ug/L**	2.329	39666	0.048
|	Na	23	**1836.067**	**ug/L**	3.525	6009043	7.293
|	Mg	24	**1939.595**	**ug/L**	5.617	4346831	5.306
|	Al	27	**1913.690**	**ug/L**	7.198	5775927	7.048
|	P	31	**2120.916**	**ug/L**	0.761	373844	0.450
|	K	39	**2180.138**	**ug/L**	1.497	10497757	11.505
|	Ca	43	**2173.903**	**ug/L**	2.946	20311	0.023
|>	Sc	45		**ug/L**		818617	818617.092
|	Ti	47	**46.928**	**ug/L**	1.068	23982	0.028
|	V	51	**148.499**	**ug/L**	4.701	793640	0.960
|	Cr	52	**52.155**	**ug/L**	2.396	255055	0.299
|	Cr	53		**ug/L**		684452	0.518
|	Mn	55	**52.217**	**ug/L**	0.763	378811	0.459
|	Fe	57	**2170.620**	**ug/L**	0.952	318540	0.368
|	Co	59	**51.161**	**ug/L**	1.705	297172	0.363
|	Ni	60	**51.814**	**ug/L**	1.707	66417	0.081
|	Cu	63		**ug/L**		158674	0.194
⌊	Cu	65	**51.933**	**ug/L**	0.659	78953	0.096
⌈	Zn	66	**57.900**	**ug/L**	1.408	54984	0.151
|	Zn	67		**ug/L**		85959	0.180
|	Zn	68		**ug/L**		43827	0.117
|>	Ge	74		**ug/L**		362061	362061.303
|	As	75	**52.099**	**ug/L**	0.672	68127	0.180
|	Se	77		**ug/L**		56595	0.110
|	Se	82	**49.791**	**ug/L**	2.716	5872	0.016
⌊	Kr	83		**ug/L**		1328	-0.000
⌈	Sr	88	**53.979**	**ug/L**	0.216	576816	3.314
|	Y	89		**ug/L**		134	0.000
|	Zr	90	**51.627**	**ug/L**	1.635	336596	1.924
|	Mo	98	**51.253**	**ug/L**	2.383	148511	0.853
|	Ag	107	**53.044**	**ug/L**	0.727	236844	1.361
|	Cd	111	**51.102**	**ug/L**	2.072	53498	0.307
|	Cd	114		**ug/L**		125565	0.721
|>	In	115		**ug/L**		173992	173991.845
|	Sn	120	**50.558**	**ug/L**	2.038	212901	1.222
|	Sb	121	**51.085**	**ug/L**	1.421	196698	1.129
⌊	Sb	123		**ug/L**		150090	0.862
⌈	Ba	135		**ug/L**		47012	0.240
|	Ba	137	**52.178**	**ug/L**	2.495	81928	0.419
|	Ho	165		**ug/L**		71	0.000
|>	Ta	181		**ug/L**		195426	195426.438
|	Tl	205	**50.346**	**ug/L**	2.295	386641	1.978
|	Pb	208	**51.520**	**ug/L**	1.113	514042	2.629
|	Bi	209		**ug/L**		107	0.000
|	Th	232	**54.094**	**ug/L**	2.531	564898	2.888
⌊	U	238	**57.806**	**ug/L**	1.667	603808	3.090

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		110.4			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		108.3			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		99.6			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		98.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 139405001
Sample Date/Time: Monday, July 11, 2005 06:42:04
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\139405001.173

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**25.995**	**ug/L**	3.100	42642	0.050
|	Be	9	**-0.033**	**ug/L**	12.390	29	-0.000
|	B	11	**29.251**	**ug/L**	2.434	12441	0.014
|	Na	23	**18647.916**	**ug/L**	4.274	63507215	74.070
|	Mg	24	**4849.461**	**ug/L**	3.870	11369834	13.267
|	Al	27	**5.672**	**ug/L**	33.726	26358	0.021
|	P	31	**50.022**	**ug/L**	2.177	15016	0.011
|	K	39	**817.120**	**ug/L**	1.069	4826634	4.312
|	Ca	43	**34383.209**	**ug/L**	0.969	315858	0.367
|>	Sc	45		**ug/L**		857054	857054.389
|	Ti	47	**3.270**	**ug/L**	9.363	2629	0.002
|	V	51	**-19.175**	**ug/L**	4.827	-97469	-0.124
|	Cr	52	**26.085**	**ug/L**	5.586	139065	0.149
|	Cr	53		**ug/L**		695301	0.493
|	Mn	55	**15.404**	**ug/L**	0.294	119369	0.135
|	Fe	57	**100.969**	**ug/L**	5.559	33092	0.017
|	Co	59	**0.661**	**ug/L**	1.284	4249	0.005
|	Ni	60	**8.318**	**ug/L**	0.772	11266	0.013
|	Cu	63		**ug/L**		109436	0.127
⌊	Cu	65	**33.516**	**ug/L**	2.126	53411	0.062
⌈	Zn	66	**158.997**	**ug/L**	0.589	147296	0.414
|	Zn	67		**ug/L**		99900	0.224
|	Zn	68		**ug/L**		112529	0.313
|>	Ge	74		**ug/L**		354994	354993.864
|	As	75	**3.360**	**ug/L**	49.750	6886	0.012
|	Se	77		**ug/L**		58711	0.119
|	Se	82	**1.719**	**ug/L**	34.463	169	0.001
⌊	Kr	83		**ug/L**		1285	-0.000
⌈	Sr	88	**162.068**	**ug/L**	1.340	1652355	9.949
|	Y	89		**ug/L**		321	0.002
|	Zr	90	**0.945**	**ug/L**	36.177	7632	0.035
|	Mo	98	**1.355**	**ug/L**	2.584	3915	0.023
|	Ag	107	**0.014**	**ug/L**	23.790	136	0.000
|	Cd	111	**0.120**	**ug/L**	15.709	139	0.001
|	Cd	114		**ug/L**		374	0.002
|>	In	115		**ug/L**		166065	166064.884
|	Sn	120	**0.068**	**ug/L**	9.703	512	0.002
|	Sb	121	**0.155**	**ug/L**	6.169	803	0.003
⌊	Sb	123		**ug/L**		671	0.003
⌈	Ba	135		**ug/L**		14308	0.074
|	Ba	137	**15.998**	**ug/L**	2.170	24861	0.128
|	Ho	165		**ug/L**		42	0.000
|>	Ta	181		**ug/L**		193034	193034.397
|	Tl	205	**0.439**	**ug/L**	29.175	3448	0.017
|	Pb	208	**0.295**	**ug/L**	0.931	3180	0.015
|	Bi	209		**ug/L**		104	0.000
|	Th	232	**0.156**	**ug/L**	45.784	2185	0.008
⌊	U	238	**0.127**	**ug/L**	5.041	1427	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		115.6			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		106.2			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		95.0			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		97.0			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1200875070
Sample Date/Time: Monday, July 11, 2005 06:47:16
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875070.174

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**24.811**	**ug/L**	1.784	45061	0.047
	Be	9	**-0.039**	**ug/L**	15.234	29	-0.000
	B	11	**28.616**	**ug/L**	3.110	13483	0.014
	Na	23	**20386.896**	**ug/L**	6.066	76863372	80.978
	Mg	24	**4937.906**	**ug/L**	3.905	12815812	13.509
	Al	27	**5.235**	**ug/L**	14.505	27694	0.019
	P	31	**52.176**	**ug/L**	0.369	17056	0.011
	K	39	**946.833**	**ug/L**	12.902	5998391	4.997
	Ca	43	**35303.796**	**ug/L**	0.462	358987	0.377
>	Sc	45		**ug/L**		948848	948848.328
	Ti	47	**3.199**	**ug/L**	4.450	2870	0.002
	V	51	**151.361**	**ug/L**	14.867	939185	0.978
	Cr	52	**25.682**	**ug/L**	1.752	151744	0.147
	Cr	53		**ug/L**		1161216	0.904
	Mn	55	**15.228**	**ug/L**	0.942	130676	0.134
	Fe	57	**87.498**	**ug/L**	2.192	34472	0.015
	Co	59	**0.641**	**ug/L**	0.943	4575	0.005
	Ni	60	**7.793**	**ug/L**	0.673	11692	0.012
	Cu	63		**ug/L**		113932	0.120
	Cu	65	**31.879**	**ug/L**	1.154	56240	0.059
	Zn	66	**161.115**	**ug/L**	2.009	153977	0.419
	Zn	67		**ug/L**		145628	0.340
	Zn	68		**ug/L**		117407	0.317
>	Ge	74		**ug/L**		366284	366284.074
	As	75	**1.930**	**ug/L**	154.233	5265	0.007
	Se	77		**ug/L**		101129	0.230
	Se	82	**1.567**	**ug/L**	47.442	156	0.001
	Kr	83		**ug/L**		1301	-0.000
	Sr	88	**165.041**	**ug/L**	0.902	1635937	10.132
	Y	89		**ug/L**		345	0.002
	Zr	90	**0.401**	**ug/L**	16.021	4131	0.015
	Mo	98	**1.381**	**ug/L**	3.075	3875	0.023
	Ag	107	**0.006**	**ug/L**	29.113	99	0.000
	Cd	111	**0.100**	**ug/L**	3.867	116	0.001
	Cd	114		**ug/L**		246	0.001
>	In	115		**ug/L**		161449	161448.570
	Sn	120	**0.070**	**ug/L**	2.669	503	0.002
	Sb	121	**0.167**	**ug/L**	5.672	823	0.004
	Sb	123		**ug/L**		735	0.004
	Ba	135		**ug/L**		14378	0.076
	Ba	137	**16.428**	**ug/L**	0.849	24953	0.132
	Ho	165		**ug/L**		43	0.000
>	Ta	181		**ug/L**		188708	188707.774
	Tl	205	**0.137**	**ug/L**	15.879	1128	0.005
	Pb	208	**0.297**	**ug/L**	1.544	3124	0.015
	Bi	209		**ug/L**		119	0.000
	Th	232	**0.035**	**ug/L**	29.117	921	0.002
	U	238	**0.120**	**ug/L**	2.597	1323	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		128.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		109.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.4			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		94.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1200875074
Sample Date/Time: Monday, July 11, 2005 06:52:29
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875074.175

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**69.128**	**ug/L**	0.949	123252	0.132
Be	9	**44.007**	**ug/L**	1.597	22356	0.024
B	11	**121.599**	**ug/L**	2.705	54912	0.058
Na	23	**21411.366**	**ug/L**	5.076	79351283	85.047
Mg	24	**7936.066**	**ug/L**	14.476	20234789	21.711
Al	27	**1997.673**	**ug/L**	5.080	6874101	7.358
P	31	**2151.195**	**ug/L**	2.223	431944	0.456
K	39	**2902.991**	**ug/L**	5.306	15514344	15.320
Ca	43	**37217.285**	**ug/L**	2.921	371868	0.397
> Sc	45		**ug/L**		932805	932805.389
Ti	47	**46.476**	**ug/L**	1.322	27070	0.028
V	51	**187.452**	**ug/L**	11.936	1139128	1.211
Cr	52	**72.531**	**ug/L**	3.754	399518	0.416
Cr	53		**ug/L**		1050158	0.808
Mn	55	**61.474**	**ug/L**	2.024	507450	0.540
Fe	57	**2036.166**	**ug/L**	2.154	341700	0.345
Co	59	**45.546**	**ug/L**	2.118	301461	0.323
Ni	60	**51.979**	**ug/L**	0.874	75922	0.081
Cu	63		**ug/L**		262008	0.281
Cu	65	**75.802**	**ug/L**	1.515	131239	0.140
Zn	66	**208.103**	**ug/L**	0.547	198562	0.541
Zn	67		**ug/L**		119625	0.269
Zn	68		**ug/L**		152664	0.413
> Ge	74		**ug/L**		365867	365866.744
As	75	**39.974**	**ug/L**	8.458	53495	0.138
Se	77		**ug/L**		85114	0.187
Se	82	**10.901**	**ug/L**	3.582	1274	0.004
Kr	83		**ug/L**		1308	-0.000
Sr	88	**295.513**	**ug/L**	1.269	3003307	18.142
Y	89		**ug/L**		436	0.002
Zr	90	**52.374**	**ug/L**	1.352	324835	1.952
Mo	98	**51.776**	**ug/L**	1.385	142741	0.861
Ag	107	**50.482**	**ug/L**	0.862	214460	1.295
Cd	111	**5.676**	**ug/L**	1.280	5670	0.034
Cd	114		**ug/L**		12401	0.075
> In	115		**ug/L**		165532	165532.091
Sn	120	**50.764**	**ug/L**	0.894	203387	1.227
Sb	121	**101.301**	**ug/L**	1.227	370868	2.239
Sb	123		**ug/L**		286669	1.731
Ba	135		**ug/L**		60322	0.314
Ba	137	**68.215**	**ug/L**	0.719	105388	0.548
Ho	165		**ug/L**		78	0.000
> Ta	181		**ug/L**		192275	192274.583
Tl	205	**48.980**	**ug/L**	1.845	370150	1.925
Pb	208	**20.722**	**ug/L**	0.811	203599	1.058
Bi	209		**ug/L**		106	0.000
Th	232	**53.197**	**ug/L**	1.157	546697	2.840
U	238	**57.507**	**ug/L**	1.038	591050	3.074

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		125.8			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		109.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		96.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1200875072
Sample Date/Time: Monday, July 11, 2005 06:57:42
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 437237|5|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875072.176

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**5.849**	**ug/L**	1.600	8932	0.011
|	Be	9	**-0.004**	**ug/L**	162.504	39	-0.000
|	B	11	**7.848**	**ug/L**	7.348	3355	0.004
|	Na	23	**4720.015**	**ug/L**	19.194	14851768	18.748
|	Mg	24	**835.291**	**ug/L**	8.029	1809402	2.285
|	Al	27	**0.628**	**ug/L**	154.915	9670	0.002
|	P	31	**13.483**	**ug/L**	8.589	7732	0.003
|	K	39	**113.391**	**ug/L**	4.687	1517919	0.598
|	Ca	43	**7676.826**	**ug/L**	2.069	66108	0.082
|>	Sc	45		**ug/L**		791510	791509.787
|	Ti	47	**0.597**	**ug/L**	1.069	1156	0.000
|	V	51	**-15.901**	**ug/L**	15.826	-73399	-0.103
|	Cr	52	**2.184**	**ug/L**	14.235	19973	0.013
|	Cr	53		**ug/L**		541751	0.366
|	Mn	55	**3.614**	**ug/L**	2.192	28234	0.032
|	Fe	57	**-8.526**	**ug/L**	44.866	15875	-0.001
|	Co	59	**0.146**	**ug/L**	9.412	1034	0.001
|	Ni	60	**1.744**	**ug/L**	4.318	2268	0.003
|	Cu	63		**ug/L**		22045	0.028
⌊	Cu	65	**7.206**	**ug/L**	1.604	10726	0.013
⌈	Zn	66	**34.099**	**ug/L**	1.293	30728	0.089
|	Zn	67		**ug/L**		40887	0.062
|	Zn	68		**ug/L**		24716	0.068
|>	Ge	74		**ug/L**		341706	341705.887
|	As	75	**2.182**	**ug/L**	26.988	5241	0.008
|	Se	77		**ug/L**		39768	0.070
|	Se	82	**2.818**	**ug/L**	9.853	286	0.001
⌊	Kr	83		**ug/L**		1205	-0.000
⌈	Sr	88	**38.401**	**ug/L**	1.087	399945	2.357
|	Y	89		**ug/L**		118	0.000
|	Zr	90	**-0.183**	**ug/L**	3.635	651	-0.007
|	Mo	98	**0.288**	**ug/L**	2.404	987	0.005
|	Ag	107	**0.021**	**ug/L**	36.442	168	0.001
|	Cd	111	**0.029**	**ug/L**	8.569	50	0.000
|	Cd	114		**ug/L**		115	0.000
|>	In	115		**ug/L**		169556	169555.973
|	Sn	120	**0.020**	**ug/L**	35.006	326	0.000
|	Sb	121	**0.061**	**ug/L**	27.399	468	0.001
⌊	Sb	123		**ug/L**		351	0.001
⌈	Ba	135		**ug/L**		3092	0.015
|	Ba	137	**3.300**	**ug/L**	2.537	5378	0.027
|	Ho	165		**ug/L**		29	0.000
|>	Ta	181		**ug/L**		200695	200694.660
|	Tl	205	**0.434**	**ug/L**	25.180	3539	0.017
|	Pb	208	**0.064**	**ug/L**	10.430	939	0.003
|	Bi	209		**ug/L**		53	0.000
|	Th	232	**0.064**	**ug/L**	22.046	1283	0.003
⌊	U	238	**0.041**	**ug/L**	12.182	567	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45		106.8			
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		102.2			
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115		97.0			
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Ta	181		100.8			
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 139405002
Sample Date/Time: Monday, July 11, 2005 07:02:56
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\139405002.177

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**24.716**	**ug/L**	0.686	44702	0.047
|	Be	9	**-0.002**	**ug/L**	720.635	48	-0.000
|	B	11	**28.050**	**ug/L**	1.606	13171	0.013
|	Na	23	**19667.542**	**ug/L**	2.826	73851689	78.120
|	Mg	24	**5122.125**	**ug/L**	3.740	13240707	14.013
|	Al	27	**452.328**	**ug/L**	7.739	1583056	1.666
|	P	31	**76.137**	**ug/L**	1.519	21782	0.016
|	K	39	**985.770**	**ug/L**	1.982	6160881	5.202
|	Ca	43	**35718.555**	**ug/L**	0.807	361605	0.381
|>	Sc	45		**ug/L**		944712	944712.148
|	Ti	47	**19.219**	**ug/L**	0.123	11949	0.012
|	V	51	**131.406**	**ug/L**	6.620	811598	0.849
|	Cr	52	**130.132**	**ug/L**	1.110	716507	0.746
|	Cr	53		**ug/L**		1087706	0.833
|	Mn	55	**22.558**	**ug/L**	1.142	190968	0.198
|	Fe	57	**1274.805**	**ug/L**	0.907	224289	0.216
|	Co	59	**1.234**	**ug/L**	2.801	8528	0.009
|	Ni	60	**39.248**	**ug/L**	1.761	58095	0.061
|	Cu	63		**ug/L**		344735	0.365
⌊	Cu	65	**98.273**	**ug/L**	0.883	172248	0.182
⌈	Zn	66	**144.724**	**ug/L**	0.538	140448	0.377
|	Zn	67		**ug/L**		106573	0.229
|	Zn	68		**ug/L**		109704	0.291
|>	Ge	74		**ug/L**		371794	371794.383
|	As	75	**0.994**	**ug/L**	84.921	4182	0.003
|	Se	77		**ug/L**		86900	0.188
|	Se	82	**1.753**	**ug/L**	39.604	180	0.001
⌊	Kr	83		**ug/L**		1374	-0.000
⌈	Sr	88	**167.590**	**ug/L**	0.648	1739126	10.288
|	Y	89		**ug/L**		5036	0.029
|	Zr	90	**0.928**	**ug/L**	0.742	7642	0.035
|	Mo	98	**4.123**	**ug/L**	0.545	11767	0.069
|	Ag	107	**0.021**	**ug/L**	9.782	168	0.001
|	Cd	111	**0.032**	**ug/L**	32.804	53	0.000
|	Cd	114		**ug/L**		103	0.000
|>	In	115		**ug/L**		169021	169020.534
|	Sn	120	**0.531**	**ug/L**	3.063	2412	0.013
|	Sb	121	**0.158**	**ug/L**	2.754	828	0.003
⌊	Sb	123		**ug/L**		712	0.003
⌈	Ba	135		**ug/L**		22440	0.118
|	Ba	137	**25.499**	**ug/L**	2.571	38894	0.205
|	Ho	165		**ug/L**		209	0.001
|>	Ta	181		**ug/L**		189675	189674.501
|	Tl	205	**0.149**	**ug/L**	11.882	1225	0.006
|	Pb	208	**4.560**	**ug/L**	1.694	44409	0.233
|	Bi	209		**ug/L**		253	0.001
|	Th	232	**0.199**	**ug/L**	6.079	2578	0.011
⌊	U	238	**0.169**	**ug/L**	2.931	1826	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		127.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		111.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		96.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		95.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1200875071
Sample Date/Time: Monday, July 11, 2005 07:08:10
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875071.178

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**23.859**	**ug/L**	0.907	44688	0.046
|	Be	9	**-0.018**	**ug/L**	87.389	41	-0.000
|	B	11	**27.815**	**ug/L**	1.787	13527	0.013
|	Na	23	**20446.184**	**ug/L**	3.355	79482226	81.213
|	Mg	24	**5368.919**	**ug/L**	4.668	14373018	14.688
|	Al	27	**464.178**	**ug/L**	2.919	1682280	1.710
|	P	31	**77.318**	**ug/L**	2.973	22799	0.016
|	K	39	**1003.545**	**ug/L**	4.200	6472129	5.296
|	Ca	43	**35800.341**	**ug/L**	0.826	375308	0.382
|>	Sc	45		**ug/L**		978245	978245.171
|	Ti	47	**18.431**	**ug/L**	0.478	11910	0.011
|	V	51	**141.697**	**ug/L**	4.640	905477	0.916
|	Cr	52	**126.175**	**ug/L**	0.774	719742	0.723
|	Cr	53		**ug/L**		1156339	0.864
|	Mn	55	**22.214**	**ug/L**	0.553	194787	0.195
|	Fe	57	**1247.842**	**ug/L**	1.507	227772	0.211
|	Co	59	**1.188**	**ug/L**	2.237	8507	0.008
|	Ni	60	**37.578**	**ug/L**	0.213	57604	0.059
|	Cu	63		**ug/L**		348959	0.356
⌊	Cu	65	**96.951**	**ug/L**	1.446	175952	0.180
⌈	Zn	66	**147.573**	**ug/L**	1.850	148337	0.384
|	Zn	67		**ug/L**		115389	0.242
|	Zn	68		**ug/L**		114788	0.294
|>	Ge	74		**ug/L**		385142	385141.518
|	As	75	**1.508**	**ug/L**	42.117	5012	0.005
|	Se	77		**ug/L**		91954	0.193
|	Se	82	**1.537**	**ug/L**	32.796	161	0.001
⌊	Kr	83		**ug/L**		1369	-0.000
⌈	Sr	88	**167.429**	**ug/L**	0.205	1772480	10.278
|	Y	89		**ug/L**		5092	0.029
|	Zr	90	**1.017**	**ug/L**	15.312	8373	0.038
|	Mo	98	**4.042**	**ug/L**	0.334	11772	0.067
|	Ag	107	**0.025**	**ug/L**	26.639	191	0.001
|	Cd	111	**0.135**	**ug/L**	6.363	160	0.001
|	Cd	114		**ug/L**		343	0.002
|>	In	115		**ug/L**		172422	172422.354
|	Sn	120	**0.552**	**ug/L**	1.974	2546	0.013
|	Sb	121	**0.164**	**ug/L**	1.705	868	0.004
⌊	Sb	123		**ug/L**		744	0.003
⌈	Ba	135		**ug/L**		22833	0.119
|	Ba	137	**25.757**	**ug/L**	0.788	39630	0.207
|	Ho	165		**ug/L**		221	0.001
|>	Ta	181		**ug/L**		191319	191318.511
|	Tl	205	**0.093**	**ug/L**	10.209	814	0.004
|	Pb	208	**4.550**	**ug/L**	0.729	44691	0.232
|	Bi	209		**ug/L**		257	0.001
|	Th	232	**0.159**	**ug/L**	1.942	2201	0.009
⌊	U	238	**0.161**	**ug/L**	4.213	1760	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		132.0			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		115.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		96.1			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1200875075
Sample Date/Time: Monday, July 11, 2005 07:13:25
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875075.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**60.401**	**ug/L**	0.356	117343	0.115
	Be	9	**39.884**	**ug/L**	1.708	22082	0.022
	B	11	**114.855**	**ug/L**	1.626	56534	0.055
	Na	23	**23216.730**	**ug/L**	3.992	93754982	92.218
	Mg	24	**7425.485**	**ug/L**	8.765	20644112	20.315
	Al	27	**2900.897**	**ug/L**	2.378	10867248	10.684
	P	31	**2267.490**	**ug/L**	2.276	495683	0.481
	K	39	**3491.255**	**ug/L**	14.159	20066347	18.424
	Ca	43	**37285.288**	**ug/L**	2.157	405973	0.398
>	Sc	45		**ug/L**		1016197	1016196.895
	Ti	47	**61.196**	**ug/L**	0.818	38481	0.037
	V	51	**213.417**	**ug/L**	7.050	1411774	1.379
	Cr	52	**163.915**	**ug/L**	0.561	967462	0.939
	Cr	53		**ug/L**		1266361	0.928
	Mn	55	**66.559**	**ug/L**	0.438	598307	0.585
	Fe	57	**3052.793**	**ug/L**	0.746	547271	0.517
	Co	59	**44.186**	**ug/L**	0.286	318666	0.313
	Ni	60	**76.867**	**ug/L**	1.053	122252	0.120
	Cu	63		**ug/L**		498625	0.490
	Cu	65	**133.575**	**ug/L**	0.340	251763	0.248
	Zn	66	**192.476**	**ug/L**	0.879	197561	0.501
	Zn	67		**ug/L**		130934	0.275
	Zn	68		**ug/L**		155717	0.392
>	Ge	74		**ug/L**		393533	393532.772
	As	75	**40.668**	**ug/L**	6.989	58482	0.141
	Se	77		**ug/L**		99330	0.206
	Se	82	**10.937**	**ug/L**	3.038	1375	0.004
	Kr	83		**ug/L**		1379	-0.000
	Sr	88	**304.305**	**ug/L**	0.306	3259348	18.681
	Y	89		**ug/L**		5006	0.028
	Zr	90	**53.808**	**ug/L**	1.172	351683	2.005
	Mo	98	**54.367**	**ug/L**	1.616	157952	0.904
	Ag	107	**49.965**	**ug/L**	0.543	223708	1.282
	Cd	111	**5.524**	**ug/L**	0.250	5817	0.033
	Cd	114		**ug/L**		12282	0.070
>	In	115		**ug/L**		174461	174461.154
	Sn	120	**50.266**	**ug/L**	1.834	212243	1.215
	Sb	121	**99.878**	**ug/L**	1.485	385373	2.208
	Sb	123		**ug/L**		297254	1.703
	Ba	135		**ug/L**		70267	0.370
	Ba	137	**80.417**	**ug/L**	2.159	122654	0.646
	Ho	165		**ug/L**		272	0.001
>	Ta	181		**ug/L**		189860	189860.289
	Tl	205	**47.685**	**ug/L**	1.384	355845	1.874
	Pb	208	**24.255**	**ug/L**	0.780	235263	1.238
	Bi	209		**ug/L**		302	0.001
	Th	232	**51.049**	**ug/L**	1.067	518059	2.726
	U	238	**55.235**	**ug/L**	0.613	560603	2.952

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		137.1			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		117.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		95.4			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 1200875073
Sample Date/Time: Monday, July 11, 2005 07:18:40
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 437237|5|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\1200875073.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**5.403**	ug/L	0.913	9183	0.010
	Be	9	**-0.022**	ug/L	55.780	35	-0.000
	B	11	**7.622**	ug/L	8.304	3633	0.004
	Na	23	**4363.970**	ug/L	5.678	15295746	17.334
	Mg	24	**1262.522**	ug/L	4.895	3041002	3.454
	Al	27	**109.098**	ug/L	7.595	362215	0.402
	P	31	**16.870**	ug/L	8.194	9230	0.004
	K	39	**132.791**	ug/L	20.293	1778607	0.701
	Ca	43	**7863.708**	ug/L	1.725	75267	0.084
>	Sc	45		ug/L		880074	880074.375
	Ti	47	**3.962**	ug/L	2.497	3064	0.002
	V	51	**-18.558**	ug/L	18.912	-96676	-0.120
	Cr	52	**27.014**	ug/L	3.668	147420	0.155
	Cr	53		ug/L		641218	0.411
	Mn	55	**5.189**	ug/L	1.985	43577	0.046
	Fe	57	**259.039**	ug/L	2.625	57534	0.044
	Co	59	**0.266**	ug/L	4.832	1903	0.002
	Ni	60	**8.645**	ug/L	2.371	12016	0.014
	Cu	63		ug/L		73132	0.083
	Cu	65	**21.986**	ug/L	2.286	36033	0.041
	Zn	66	**31.405**	ug/L	2.334	30870	0.082
	Zn	67		ug/L		45030	0.063
	Zn	68		ug/L		25126	0.064
>	Ge	74		ug/L		372341	372340.685
	As	75	**0.359**	ug/L	312.770	3366	0.001
	Se	77		ug/L		46461	0.079
	Se	82	**2.226**	ug/L	19.991	239	0.001
	Kr	83		ug/L		1348	-0.000
	Sr	88	**39.993**	ug/L	0.999	449904	2.455
	Y	89		ug/L		1177	0.006
	Zr	90	**0.015**	ug/L	80.265	2055	0.001
	Mo	98	**0.837**	ug/L	1.537	2740	0.014
	Ag	107	**0.014**	ug/L	14.333	149	0.000
	Cd	111	**0.002**	ug/L	932.651	23	0.000
	Cd	114		ug/L		58	0.000
>	In	115		ug/L		183145	183144.932
	Sn	120	**0.110**	ug/L	1.204	749	0.003
	Sb	121	**0.040**	ug/L	29.387	418	0.001
	Sb	123		ug/L		331	0.001
	Ba	135		ug/L		5086	0.025
	Ba	137	**5.347**	ug/L	2.017	8846	0.043
	Ho	165		ug/L		74	0.000
>	Ta	181		ug/L		204617	204617.049
	Tl	205	**0.411**	ug/L	28.414	3426	0.016
	Pb	208	**0.941**	ug/L	2.488	10117	0.048
	Bi	209		ug/L		78	0.000
	Th	232	**0.080**	ug/L	32.978	1488	0.004
	U	238	**0.034**	ug/L	13.392	494	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		118.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		111.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		104.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		102.8			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, July 11, 2005 07:23:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 8.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**45.167**	**ug/L**	1.558	67473	0.086
	Be	9	**46.409**	**ug/L**	1.452	19744	0.025
	B	11	**99.685**	**ug/L**	1.573	37764	0.048
	Na	23	**5528.630**	**ug/L**	10.880	17186231	21.960
	Mg	24	**5270.750**	**ug/L**	4.109	11267503	14.420
	Al	27	**5372.634**	**ug/L**	2.268	15465559	19.788
	P	31	**5453.187**	**ug/L**	1.583	908695	1.156
	K	39	**5257.351**	**ug/L**	4.286	22702801	27.744
	Ca	43	**5044.796**	**ug/L**	0.674	43314	0.054
>	Sc	45		**ug/L**		781159	781158.693
	Ti	47	**47.844**	**ug/L**	1.389	23313	0.029
	V	51	**50.857**	**ug/L**	2.327	264604	0.329
	Cr	52	**48.053**	**ug/L**	1.767	225034	0.275
	Cr	53		**ug/L**		198661	-0.064
	Mn	55	**51.794**	**ug/L**	2.012	358556	0.455
	Fe	57	**5068.604**	**ug/L**	2.172	687341	0.858
	Co	59	**48.650**	**ug/L**	1.554	269673	0.345
	Ni	60	**48.726**	**ug/L**	2.098	59608	0.076
	Cu	63		**ug/L**		139507	0.178
	Cu	65	**46.987**	**ug/L**	1.483	68173	0.087
	Zn	66	**49.076**	**ug/L**	1.511	44827	0.128
	Zn	67		**ug/L**		21459	0.004
	Zn	68		**ug/L**		34792	0.096
>	Ge	74		**ug/L**		347816	347816.098
	As	75	**47.263**	**ug/L**	1.496	59622	0.164
	Se	77		**ug/L**		12317	-0.011
	Se	82	**48.639**	**ug/L**	1.754	5511	0.016
	Kr	83		**ug/L**		1279	-0.000
	Sr	88	**51.079**	**ug/L**	1.936	585096	3.136
	Y	89		**ug/L**		786	0.004
	Zr	90	**44.829**	**ug/L**	3.495	313628	1.671
	Mo	98	**48.553**	**ug/L**	0.984	150844	0.808
	Ag	107	**48.889**	**ug/L**	0.645	234026	1.254
	Cd	111	**48.964**	**ug/L**	0.902	54953	0.295
	Cd	114		**ug/L**		129556	0.694
>	In	115		**ug/L**		186517	186516.940
	Sn	120	**49.046**	**ug/L**	0.360	221431	1.186
	Sb	121	**49.493**	**ug/L**	0.762	204305	1.094
	Sb	123		**ug/L**		155931	0.835
	Ba	135		**ug/L**		50368	0.231
	Ba	137	**50.091**	**ug/L**	1.585	87863	0.402
	Ho	165		**ug/L**		70	0.000
>	Ta	181		**ug/L**		218248	218248.341
	Tl	205	**48.584**	**ug/L**	0.717	416784	1.909
	Pb	208	**47.929**	**ug/L**	0.727	534135	2.446
	Bi	209		**ug/L**		66	0.000
	Th	232	**48.537**	**ug/L**	1.520	566265	2.592
	U	238	**52.096**	**ug/L**	1.358	607820	2.784

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	90.334				
	Be	9	92.818				
	B	11	99.685				
	Na	23	110.573				
	Mg	24	105.415				
	Al	27	106.389				
	P	31	109.064				
	K	39	105.147				
	Ca	43	100.896				
>	Sc	45			105.4		
	Ti	47	95.687				
	V	51	101.714				
	Cr	52	96.106				
	Cr	53					
	Mn	55	103.588				
	Fe	57	101.372				
	Co	59	97.300				
	Ni	60	97.452				
	Cu	63					
	Cu	65	93.973				
	Zn	66	98.151				
	Zn	67					
	Zn	68					
>	Ge	74			104.1		
	As	75	94.525				
	Se	77					
	Se	82	97.278				
	Kr	83					
	Sr	88	102.158				
	Y	89					
	Zr	90	89.659				
	Mo	98	97.106				
	Ag	107	97.778				
	Cd	111	97.928				
	Cd	114					
>	In	115			106.7		
	Sn	120	98.092				
	Sb	121	98.985				
	Sb	123					
	Ba	135					
	Ba	137	100.181				
	Ho	165					
>	Ta	181			109.6		
	Tl	205	97.168				
	Pb	208	95.859				
	Bi	209					
	Th	232	97.073				
	U	238	104.191				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Na	23	CCV is out of limits (+/- 10%)
QC Std 8	Zr	90	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Monday, July 11, 2005 07:29:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: c:\elandata\Dataset\050710\QC Std 9.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.029**	**ug/L**	15.477	139	0.000
	Be	9	**-0.020**	**ug/L**	56.412	33	-0.000
	B	11	**1.721**	**ug/L**	34.598	1057	0.001
	Na	23	**-4.725**	**ug/L**	36.165	24021	-0.019
	Mg	24	**1.863**	**ug/L**	41.453	6001	0.005
	Al	27	**0.862**	**ug/L**	135.948	10671	0.003
	P	31	**3.380**	**ug/L**	27.291	6230	0.001
	K	39	**-16.400**	**ug/L**	20.616	1006949	-0.087
	Ca	43	**22.979**	**ug/L**	20.703	1519	0.000
>	Sc	45		**ug/L**		816753	816753.461
	Ti	47	**-0.091**	**ug/L**	29.662	855	-0.000
	V	51	**-0.797**	**ug/L**	79.274	4103	-0.005
	Cr	52	**-0.430**	**ug/L**	9.466	8389	-0.002
	Cr	53		**ug/L**		293501	0.041
	Mn	55	**0.118**	**ug/L**	18.651	4053	0.001
	Fe	57	**-17.693**	**ug/L**	8.311	15118	-0.003
	Co	59	**-0.001**	**ug/L**	478.261	217	-0.000
	Ni	60	**0.000**	**ug/L**	3664.409	115	0.000
	Cu	63		**ug/L**		235	0.000
	Cu	65	**0.000**	**ug/L**	3642.189	162	0.000
	Zn	66	**-0.022**	**ug/L**	64.892	415	-0.000
	Zn	67		**ug/L**		22184	0.003
	Zn	68		**ug/L**		1361	-0.000
>	Ge	74		**ug/L**		363726	363726.478
	As	75	**0.906**	**ug/L**	60.260	3971	0.003
	Se	77		**ug/L**		19348	0.007
	Se	82	**0.230**	**ug/L**	49.635	-4	0.000
	Kr	83		**ug/L**		1324	-0.000
	Sr	88	**0.008**	**ug/L**	17.248	363	0.001
	Y	89		**ug/L**		61	-0.000
	Zr	90	**0.589**	**ug/L**	26.993	6147	0.022
	Mo	98	**0.046**	**ug/L**	42.445	339	0.001
	Ag	107	**0.012**	**ug/L**	27.566	146	0.000
	Cd	111	**0.009**	**ug/L**	36.958	33	0.000
	Cd	114		**ug/L**		62	0.000
>	In	115		**ug/L**		188684	188683.841
	Sn	120	**0.074**	**ug/L**	43.926	605	0.002
	Sb	121	**0.216**	**ug/L**	39.464	1164	0.005
	Sb	123		**ug/L**		875	0.004
	Ba	135		**ug/L**		49	0.000
	Ba	137	**-0.001**	**ug/L**	595.117	62	-0.000
	Ho	165		**ug/L**		27	-0.000
>	Ta	181		**ug/L**		209103	209103.048
	Tl	205	**0.084**	**ug/L**	15.317	813	0.003
	Pb	208	**0.004**	**ug/L**	67.032	340	0.000
	Bi	209		**ug/L**		33	-0.000
	Th	232	**0.309**	**ug/L**	36.172	4069	0.017
	U	238	**0.011**	**ug/L**	35.113	252	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	0.9999
Al	27	Linear Thru Zero	0.9999
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	0.9999
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	0.9999
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	0.9999
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9999
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9997
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		110.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		108.0			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		105.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	603	2075	0.598
Be	9.0	9.0	2047	2080	0.634
Mg	24.0	24.0	5690	2100	0.661
Mg	25.0	25.0	5907	2115	0.570
Mg	26.0	26.0	6192	2100	0.613
Co	58.9	58.9	14183	2140	0.593
Rh	102.9	102.9	24873	2185	0.583
In	114.9	114.9	27791	2205	0.584
Ce	139.9	139.9	33873	2225	0.598
Pb	206.0	206.0	49948	2300	0.632
Pb	207.0	207.0	50159	2310	0.565
Pb	208.0	208.0	50451	2315	0.572
U	238.1	238.1	57735	2337	0.602

✓ SAS 7/11/05

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, July 11, 2005 12:05:32
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.633
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3906.3	3906.334	73.387	1.9
	Mg	24.0	26180.8	26180.770	271.760	1.0
	Co	58.9	58467.4	58467.405	389.551	0.7
	Rh	102.9	113176.6	113176.564	859.668	0.8
	In	114.9	137266.3	137266.341	901.936	0.7
	Pb	208.0	54078.4	54078.367	367.552	0.7
⌈>	Ba	137.9	117991.2	117991.179	1117.288	0.9
⌊	Ba++	69.0	3291.3	0.028	0.000	1.7
⌈>	Ce	139.9	150896.8	150896.809	1362.619	0.9
⌊	CeO	155.9	2431.9	0.016	0.001	3.6
	Bkgd	220.0	28.7	28.700	2.515	8.8

Current Optimization File Data

Current Value	Description
0.95	Nebulizer Gas Flow
8.75	Lens Voltage
1400.00	ICP RF Power
-1734.38	Analog Stage Voltage
1000.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

EAG 7/11/05

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	19	6.0	4440.4
Co	59	19	6.8	73300.2
In	115	19	7.5	183023.6

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, July 11, 2005 12:11:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\Blank.001

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7		ug/L		314	
|	Be	9		ug/L		29	
|	B	11		ug/L		1713	
|	Na	23		ug/L		19681	
|	Mg	24		ug/L		667	
|	Al	27		ug/L		3667	
|	P	31		ug/L		8963	
|	K	39		ug/L		1183400	
|	Ca	43		ug/L		1137	
| >	Sc	45		ug/L		1018309	
|	Ti	47		ug/L		939	
|	V	51		ug/L		25362	
|	Cr	52		ug/L		12187	
|	Cr	53		ug/L		238044	
|	Mn	55		ug/L		4696	
|	Fe	57		ug/L		15638	
|	Co	59		ug/L		233	
|	Ni	60		ug/L		440	
|	Cu	63		ug/L		390	
⌊	Cu	65		ug/L		203	
⌈	Zn	66		ug/L		620	
|	Zn	67		ug/L		17584	
|	Zn	68		ug/L		1712	
| >	Ge	74		ug/L		393199	
|	As	75		ug/L		3849	
|	Se	77		ug/L		15550	
|	Se	82		ug/L		-4	
⌊	Kr	83		ug/L		1287	
⌈	Sr	88		ug/L		229	
|	Y	89		ug/L		80	
|	Zr	90		ug/L		362	
|	Mo	98		ug/L		140	
|	Ag	107		ug/L		118	
|	Cd	111		ug/L		26	
|	Cd	114		ug/L		54	
| >	In	115		ug/L		208052	
|	Sn	120		ug/L		279	
|	Sb	121		ug/L		7054	
⌊	Sb	123		ug/L		5365	
⌈	Ba	135		ug/L		40	
|	Ba	137		ug/L		61	
|	Ho	165		ug/L		27	
| >	Ta	181		ug/L		219984	
|	Tl	205		ug/L		175	
|	Pb	208		ug/L		296	
|	Bi	209		ug/L		31	
|	Th	232		ug/L		1619	
⌊	U	238		ug/L		199	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Simple Linear	
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Simple Linear	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Zr	90	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Ta	181	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, July 11, 2005 12:16:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\Standard 1.002

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	10.000	ug/L	1.609	16062	0.015
	Be	9	10.000	ug/L	0.466	4872	0.005
	B	11	20.000	ug/L	5.109	10707	0.009
	Na	23	1000.000	ug/L	4.287	4006425	3.907
	Mg	24	1000.000	ug/L	1.750	2555269	2.502
	Al	27	1000.000	ug/L	1.948	3740489	3.661
	P	31	1000.000	ug/L	1.671	271999	0.258
	K	39	1000.000	ug/L	7.393	5879488	4.598
	Ca	43	1000.000	ug/L	2.116	12826	0.011
>	Sc	45		ug/L		1020765	1020764.675
	Ti	47	10.000	ug/L	2.237	7165	0.006
	V	51	10.000	ug/L	12.464	83896	0.057
	Cr	52	10.000	ug/L	2.354	68647	0.055
	Cr	53		ug/L		269035	0.030
	Mn	55	10.000	ug/L	0.579	93279	0.087
	Fe	57	1000.000	ug/L	1.864	190527	0.171
	Co	59	10.000	ug/L	1.575	69660	0.068
	Ni	60	10.000	ug/L	2.095	15471	0.015
	Cu	63		ug/L		36156	0.035
	Cu	65	10.000	ug/L	1.226	18046	0.017
	Zn	66	10.000	ug/L	0.554	11617	0.028
	Zn	67		ug/L		21630	0.010
	Zn	68		ug/L		9909	0.021
>	Ge	74		ug/L		393709	393709.230
	As	75	10.000	ug/L	5.254	17809	0.035
	Se	77		ug/L		17320	0.004
	Se	82	10.000	ug/L	3.189	1166	0.003
	Kr	83		ug/L		1334	0.000
	Sr	88	10.000	ug/L	0.739	131996	0.633
	Y	89		ug/L		94	0.000
	Zr	90	10.000	ug/L	0.461	74316	0.355
	Mo	98	10.000	ug/L	0.544	32718	0.156
	Ag	107	10.000	ug/L	1.154	54416	0.261
	Cd	111	10.000	ug/L	1.932	12655	0.061
	Cd	114		ug/L		29840	0.143
>	In	115		ug/L		208261	208261.459
	Sn	120	10.000	ug/L	0.158	52271	0.250
	Sb	121	10.000	ug/L	0.452	49606	0.204
	Sb	123		ug/L		37847	0.156
	Ba	135		ug/L		11617	0.054
	Ba	137	10.000	ug/L	1.519	20251	0.093
	Ho	165		ug/L		29	0.000
>	Ta	181		ug/L		216324	216324.448
	Tl	205	10.000	ug/L	0.764	94877	0.438
	Pb	208	10.000	ug/L	1.556	116068	0.535
	Bi	209		ug/L		43	0.000
	Th	232	10.000	ug/L	0.567	132064	0.603
	U	238	10.000	ug/L	1.033	131938	0.609

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181					
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, July 11, 2005 12:21:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\Standard 2.003

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.958**	**ug/L**	0.271	153621	0.148
	Be	9	**99.931**	**ug/L**	0.274	45950	0.044
	B	11	**199.939**	**ug/L**	1.010	90252	0.085
	Na	23	**9993.788**	**ug/L**	7.781	38102126	36.759
	Mg	24	**9999.109**	**ug/L**	3.709	25688871	24.800
	Al	27	**9996.938**	**ug/L**	5.718	36784234	35.512
	P	31	**9997.284**	**ug/L**	1.555	2607197	2.508
	K	39	**9997.310**	**ug/L**	8.451	47571496	44.766
	Ca	43	**9994.913**	**ug/L**	2.015	113964	0.109
>	Sc	45		**ug/L**		1035904	1035904.101
	Ti	47	**99.962**	**ug/L**	0.726	61795	0.059
	V	51	**100.007**	**ug/L**	1.587	624110	0.578
	Cr	52	**99.963**	**ug/L**	1.023	564549	0.533
	Cr	53		**ug/L**		326513	0.081
	Mn	55	**99.902**	**ug/L**	0.675	822904	0.790
	Fe	57	**9981.477**	**ug/L**	1.132	1510447	1.443
	Co	59	**99.912**	**ug/L**	0.466	647414	0.625
	Ni	60	**99.937**	**ug/L**	1.465	143795	0.138
	Cu	63		**ug/L**		340462	0.328
	Cu	65	**99.933**	**ug/L**	0.624	169741	0.164
	Zn	66	**99.947**	**ug/L**	1.765	105923	0.265
	Zn	67		**ug/L**		37930	0.051
	Zn	68		**ug/L**		80286	0.198
>	Ge	74		**ug/L**		397244	397243.710
	As	75	**99.936**	**ug/L**	1.686	136120	0.333
	Se	77		**ug/L**		26087	0.026
	Se	82	**100.036**	**ug/L**	0.607	12236	0.031
	Kr	83		**ug/L**		1293	-0.000
	Sr	88	**99.887**	**ug/L**	0.613	1168159	5.677
	Y	89		**ug/L**		356	0.001
	Zr	90	**99.963**	**ug/L**	0.349	704303	3.421
	Mo	98	**99.991**	**ug/L**	0.364	319003	1.550
	Ag	107	**99.941**	**ug/L**	1.903	506373	2.461
	Cd	111	**99.983**	**ug/L**	1.561	122619	0.596
	Cd	114		**ug/L**		284357	1.382
>	In	115		**ug/L**		205741	205740.908
	Sn	120	**99.958**	**ug/L**	0.595	493025	2.395
	Sb	121	**100.050**	**ug/L**	2.120	449764	2.152
	Sb	123		**ug/L**		347176	1.662
	Ba	135		**ug/L**		113279	0.525
	Ba	137	**99.974**	**ug/L**	0.735	196119	0.910
	Ho	165		**ug/L**		33	0.000
>	Ta	181		**ug/L**		215560	215559.975
	Tl	205	**99.858**	**ug/L**	0.937	825559	3.829
	Pb	208	**99.914**	**ug/L**	0.260	1062150	4.926
	Bi	209		**ug/L**		123	0.000
	Th	232	**99.817**	**ug/L**	0.783	1098643	5.089
	U	238	**99.809**	**ug/L**	1.082	1100561	5.104

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Li	7					
Be	9					
B	11					
Na	23					
Mg	24					
Al	27					
P	31					
K	39					
Ca	43					
> Sc	45					
Ti	47					
V	51					
Cr	52					
Cr	53					
Mn	55					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
Zn	67					
Zn	68					
> Ge	74					
As	75					
Se	77					
Se	82					
Kr	83					
Sr	88					
Y	89					
Zr	90					
Mo	98					
Ag	107					
Cd	111					
Cd	114					
> In	115					
Sn	120					
Sb	121					
Sb	123					
Ba	135					
Ba	137					
Ho	165					
> Ta	181					
Tl	205					
Pb	208					
Bi	209					
Th	232					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, July 11, 2005 12:26:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 1.004

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**48.634**	**ug/L**	1.120	72828	0.072
	Be	9	**49.093**	**ug/L**	1.400	21961	0.022
	B	11	**106.620**	**ug/L**	1.762	47581	0.046
	Na	23	**5384.616**	**ug/L**	9.174	19963367	19.805
	Mg	24	**4695.706**	**ug/L**	7.504	11728074	11.646
	Al	27	**4893.016**	**ug/L**	3.701	17510706	17.381
	P	31	**4766.420**	**ug/L**	0.794	1213155	1.196
	K	39	**5124.046**	**ug/L**	2.864	24280140	22.945
	Ca	43	**4944.371**	**ug/L**	1.051	55380	0.054
>	Sc	45		**ug/L**		1007123	1007122.534
	Ti	47	**49.995**	**ug/L**	0.580	30512	0.029
	V	51	**53.055**	**ug/L**	0.223	333678	0.306
	Cr	52	**49.984**	**ug/L**	0.282	280481	0.267
	Cr	53		**ug/L**		166660	-0.068
	Mn	55	**52.792**	**ug/L**	0.761	424953	0.417
	Fe	57	**5427.674**	**ug/L**	0.796	805550	0.785
	Co	59	**50.933**	**ug/L**	0.165	320976	0.318
	Ni	60	**50.467**	**ug/L**	0.199	70815	0.070
	Cu	63		**ug/L**		166256	0.165
	Cu	65	**49.959**	**ug/L**	1.084	82599	0.082
	Zn	66	**49.984**	**ug/L**	2.344	52911	0.133
	Zn	67		**ug/L**		19669	0.005
	Zn	68		**ug/L**		40754	0.099
>	Ge	74		**ug/L**		394514	394514.157
	As	75	**48.393**	**ug/L**	1.537	67449	0.161
	Se	77		**ug/L**		10672	-0.012
	Se	82	**49.423**	**ug/L**	1.553	6001	0.015
	Kr	83		**ug/L**		1306	0.000
	Sr	88	**52.119**	**ug/L**	0.949	622890	2.962
	Y	89		**ug/L**		888	0.004
	Zr	90	**45.750**	**ug/L**	3.245	329657	1.566
	Mo	98	**48.060**	**ug/L**	0.858	156740	0.745
	Ag	107	**49.696**	**ug/L**	0.628	257354	1.224
	Cd	111	**48.856**	**ug/L**	1.720	61239	0.291
	Cd	114		**ug/L**		144213	0.686
>	In	115		**ug/L**		210235	210234.819
	Sn	120	**49.681**	**ug/L**	0.703	250535	1.190
	Sb	121	**48.396**	**ug/L**	1.584	225996	1.041
	Sb	123		**ug/L**		176023	0.811
	Ba	135		**ug/L**		57367	0.260
	Ba	137	**49.221**	**ug/L**	1.473	98831	0.448
	Ho	165		**ug/L**		77	0.000
>	Ta	181		**ug/L**		220551	220551.090
	Tl	205	**50.418**	**ug/L**	1.418	426553	1.933
	Pb	208	**50.536**	**ug/L**	0.647	549787	2.492
	Bi	209		**ug/L**		76	0.000
	Th	232	**52.243**	**ug/L**	1.810	589051	2.664
	U	238	**55.276**	**ug/L**	1.675	623617	2.827

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	97.268				
	Be	9	98.187				
	B	11	106.620				
	Na	23	107.692				
	Mg	24	93.914				
	Al	27	96.891				
	P	31	95.328				
	K	39	102.481				
	Ca	43	98.887				
>	Sc	45		98.9			
	Ti	47	99.990				
	V	51	106.110				
	Cr	52	99.969				
	Cr	53					
	Mn	55	105.584				
	Fe	57	108.553				
	Co	59	101.866				
	Ni	60	100.934				
	Cu	63					
	Cu	65	99.918				
	Zn	66	99.967				
	Zn	67					
	Zn	68					
>	Ge	74		100.3			
	As	75	96.786				
	Se	77					
	Se	82	98.845				
	Kr	83					
	Sr	88	104.237				
	Y	89					
	Zr	90	91.499				
	Mo	98	96.120				
	Ag	107	99.391				
	Cd	111	97.712				
	Cd	114					
>	In	115		101.0			
	Sn	120	99.362				
	Sb	121	96.792				
	Sb	123					
	Ba	135					
	Ba	137	98.442				
	Ho	165					
>	Ta	181		100.3			
	Tl	205	100.836				
	Pb	208	101.072				
	Bi	209					
	Th	232	104.486				
	U	238	110.552				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	U	238	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, July 11, 2005 12:31:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 2.005

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.007**	**ug/L**	60.683	308	-0.000
	Be	9	**0.003**	**ug/L**	905.338	31	0.000
	B	11	**0.084**	**ug/L**	591.338	1774	0.000
	Na	23	**-0.251**	**ug/L**	574.913	19013	-0.001
	Mg	24	**0.773**	**ug/L**	75.616	2667	0.002
	Al	27	**0.892**	**ug/L**	58.196	7002	0.003
	P	31	**-5.907**	**ug/L**	13.485	7553	-0.001
	K	39	**-5.756**	**ug/L**	97.795	1172598	-0.026
	Ca	43	**3.521**	**ug/L**	59.247	1192	0.000
>	Sc	45		**ug/L**		1031688	1031688.384
	Ti	47	**0.058**	**ug/L**	123.448	987	0.000
	V	51	**-1.320**	**ug/L**	19.924	17820	-0.008
	Cr	52	**0.337**	**ug/L**	52.469	14194	0.002
	Cr	53		**ug/L**		261547	0.020
	Mn	55	**-0.039**	**ug/L**	35.827	4437	-0.000
	Fe	57	**9.485**	**ug/L**	32.426	17254	0.001
	Co	59	**0.001**	**ug/L**	183.468	244	0.000
	Ni	60	**0.147**	**ug/L**	7.065	657	0.000
	Cu	63		**ug/L**		535	0.000
	Cu	65	**-0.033**	**ug/L**	6.604	151	-0.000
	Zn	66	**-0.092**	**ug/L**	7.397	534	-0.000
	Zn	67		**ug/L**		18570	0.002
	Zn	68		**ug/L**		1616	-0.000
>	Ge	74		**ug/L**		400804	400803.718
	As	75	**-0.025**	**ug/L**	1618.400	3890	-0.000
	Se	77		**ug/L**		17832	0.005
	Se	82	**-0.171**	**ug/L**	189.284	-25	-0.000
	Kr	83		**ug/L**		1350	0.000
	Sr	88	**0.005**	**ug/L**	64.596	293	0.000
	Y	89		**ug/L**		72	-0.000
	Zr	90	**0.776**	**ug/L**	17.760	5997	0.027
	Mo	98	**0.021**	**ug/L**	85.545	210	0.000
	Ag	107	**0.012**	**ug/L**	29.390	180	0.000
	Cd	111	**0.010**	**ug/L**	44.545	38	0.000
	Cd	114		**ug/L**		54	-0.000
>	In	115		**ug/L**		211946	211946.415
	Sn	120	**0.066**	**ug/L**	43.096	620	0.002
	Sb	121	**-0.963**	**ug/L**	15.344	2795	-0.021
	Sb	123		**ug/L**		2176	-0.016
	Ba	135		**ug/L**		48	0.000
	Ba	137	**0.005**	**ug/L**	155.229	69	0.000
	Ho	165		**ug/L**		28	0.000
>	Ta	181		**ug/L**		215795	215794.821
	Tl	205	**0.015**	**ug/L**	34.261	295	0.001
	Pb	208	**0.001**	**ug/L**	283.187	299	0.000
	Bi	209		**ug/L**		38	0.000
	Th	232	**0.227**	**ug/L**	42.989	4083	0.012
	U	238	**0.006**	**ug/L**	91.979	261	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		101.3			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		101.9			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		101.9			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		98.1			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, July 11, 2005 12:36:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 3.006

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.379**	ug/L	1.152	15684	0.015
	Be	9	**0.481**	ug/L	13.384	242	0.000
	B	11	**17.148**	ug/L	5.108	9015	0.007
	Na	23	**276.514**	ug/L	0.548	1036985	1.017
	Mg	24	**16.146**	ug/L	1.508	40725	0.040
	Al	27	**15.242**	ug/L	14.041	57785	0.054
	P	31	**44.734**	ug/L	1.488	20037	0.011
	K	39	**287.913**	ug/L	9.412	2453077	1.289
	Ca	43	**94.319**	ug/L	8.661	2146	0.001
>	Sc	45		ug/L		1000592	1000592.280
	Ti	47	**8.286**	ug/L	3.249	5794	0.005
	V	51	**10.256**	ug/L	4.144	84188	0.059
	Cr	52	**2.593**	ug/L	7.654	25806	0.014
	Cr	53		ug/L		135822	-0.098
	Mn	55	**5.811**	ug/L	0.596	50583	0.046
	Fe	57	**36.040**	ug/L	2.186	20578	0.005
	Co	59	**1.086**	ug/L	2.134	7024	0.007
	Ni	60	**2.172**	ug/L	1.236	3443	0.003
	Cu	63		ug/L		4334	0.004
	Cu	65	**1.107**	ug/L	0.310	2013	0.002
	Zn	66	**9.916**	ug/L	0.723	11147	0.026
	Zn	67		ug/L		12216	-0.014
	Zn	68		ug/L		9055	0.018
>	Ge	74		ug/L		399868	399868.180
	As	75	**4.253**	ug/L	7.170	9578	0.014
	Se	77		ug/L		6581	-0.023
	Se	82	**4.310**	ug/L	16.298	527	0.001
	Kr	83		ug/L		1337	0.000
	Sr	88	**10.437**	ug/L	0.923	130611	0.593
	Y	89		ug/L		989	0.004
	Zr	90	**1.677**	ug/L	1.269	12999	0.057
	Mo	98	**0.441**	ug/L	2.260	1648	0.007
	Ag	107	**1.003**	ug/L	1.465	5552	0.025
	Cd	111	**0.967**	ug/L	2.405	1295	0.006
	Cd	114		ug/L		3035	0.014
>	In	115		ug/L		219827	219827.166
	Sn	120	**4.924**	ug/L	1.929	26226	0.118
	Sb	121	**0.374**	ug/L	3.338	9221	0.008
	Sb	123		ug/L		7050	0.006
	Ba	135		ug/L		2373	0.010
	Ba	137	**2.014**	ug/L	0.923	4155	0.018
	Ho	165		ug/L		56	0.000
>	Ta	181		ug/L		223397	223397.204
	Tl	205	**1.078**	ug/L	3.042	9415	0.041
	Pb	208	**2.121**	ug/L	1.022	23661	0.105
	Bi	209		ug/L		38	0.000
	Th	232	**0.954**	ug/L	3.002	12511	0.049
	U	238	**0.225**	ug/L	2.773	2772	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	103.790				
|	Be	9	96.248				
|	B	11	114.321				
|	Na	23	110.605				
|	Mg	24	107.642				
|	Al	27	101.613				
|	P	31	89.467				
|	K	39	95.971				
|	Ca	43	94.319				
|>	Sc	45		98.3			
|	Ti	47	82.861				
|	V	51	102.559				
|	Cr	52	86.430				
|	Cr	53					
|	Mn	55	116.227				
|	Fe	57	144.160				
|	Co	59	108.611				
|	Ni	60	108.622				
|	Cu	63					
⌊	Cu	65	110.680				
⌈	Zn	66	99.165				
|	Zn	67					
|	Zn	68					
|>	Ge	74		101.7			
|	As	75	85.064				
|	Se	77					
|	Se	82	86.190				
⌊	Kr	83					
⌈	Sr	88	104.366				
|	Y	89					
|	Zr	90	83.825				
|	Mo	98	88.112				
|	Ag	107	100.295				
|	Cd	111	96.725				
|	Cd	114					
|>	In	115		105.7			
|	Sn	120	98.478				
|	Sb	121	18.697				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	100.702				
|	Ho	165					
|>	Ta	181		101.6			
|	Tl	205	107.845				
|	Pb	208	106.056				
|	Bi	209					
|	Th	232	95.418				
⌊	U	238	112.490				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Fe	57	CRDL is out of limits
QC Std 3	Sb	121	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, July 11, 2005 12:41:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 4.007

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.467**	ug/L	0.904	960	0.001
	Be	9	**0.018**	ug/L	88.432	35	0.000
	B	11	**1.302**	ug/L	10.639	2149	0.001
	Na	23	**95168.921**	ug/L	5.722	336050017	350.046
	Mg	24	**101877.339**	ug/L	6.508	242553406	252.678
	Al	27	**93959.876**	ug/L	3.966	320378337	333.769
	P	31	**99826.099**	ug/L	1.652	24049312	25.044
	K	39	**100984.441**	ug/L	0.586	435174814	452.190
	Ca	43	**95637.974**	ug/L	2.034	1001374	1.042
>	Sc	45		ug/L		959913	959912.615
	Ti	47	**1745.970**	ug/L	0.934	985571	1.026
	V	51	**-0.475**	ug/L	170.561	21283	-0.003
	Cr	52	**1.841**	ug/L	9.433	20912	0.010
	Cr	53		ug/L		115013	-0.114
	Mn	55	**3.103**	ug/L	0.722	27971	0.025
	Fe	57	**94062.654**	ug/L	0.684	13065576	13.596
	Co	59	**0.317**	ug/L	3.929	2120	0.002
	Ni	60	**2.386**	ug/L	2.009	3586	0.003
	Cu	63		ug/L		7630	0.008
	Cu	65	**2.798**	ug/L	1.345	4589	0.005
	Zn	66	**6.973**	ug/L	2.098	7657	0.018
	Zn	67		ug/L		11485	-0.015
	Zn	68		ug/L		4279	0.007
>	Ge	74		ug/L		381526	381525.616
	As	75	**-0.027**	ug/L	1000.750	3700	-0.000
	Se	77		ug/L		6723	-0.022
	Se	82	**-0.648**	ug/L	85.799	-80	-0.000
	Kr	83		ug/L		1430	0.000
	Sr	88	**1.738**	ug/L	0.718	21309	0.099
	Y	89		ug/L		955	0.004
	Zr	90	**1.884**	ug/L	38.377	14094	0.064
	Mo	98	**1824.232**	ug/L	1.877	6032127	28.276
	Ag	107	**0.067**	ug/L	5.871	471	0.002
	Cd	111	**0.364**	ug/L	40.495	489	0.002
	Cd	114		ug/L		8160	0.038
>	In	115		ug/L		213338	213338.145
	Sn	120	**0.147**	ug/L	3.602	1036	0.004
	Sb	121	**-0.845**	ug/L	3.739	3354	-0.018
	Sb	123		ug/L		2592	-0.014
	Ba	135		ug/L		562	0.002
	Ba	137	**0.413**	ug/L	5.753	917	0.004
	Ho	165		ug/L		60	0.000
>	Ta	181		ug/L		227093	227092.724
	Tl	205	**0.019**	ug/L	23.690	345	0.001
	Pb	208	**0.379**	ug/L	2.308	4543	0.019
	Bi	209		ug/L		1957	0.008
	Th	232	**0.040**	ug/L	84.306	2133	0.002
	U	238	**0.005**	ug/L	36.407	269	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11	65.086				
|	Na	23	95.169				
|	Mg	24	102.041				
|	Al	27	93.960				
|	P	31	99.836				
|	K	39	100.984				
|	Ca	43	95.638				
|>	Sc	45		94.3			
|	Ti	47	87.298				
|	V	51	-23.729				
|	Cr	52	43.836				
|	Cr	53					
|	Mn	55	163.293				
|	Fe	57	94.063				
|	Co	59					
|	Ni	60	170.408				
|	Cu	63					
⌊	Cu	65	147.239				
⌈	Zn	66	124.527				
|	Zn	67					
|	Zn	68					
|>	Ge	74		97.0			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88	59.936				
|	Y	89					
|	Zr	90					
|	Mo	98	91.212				
|	Ag	107	22.241				
|	Cd	111					
|	Cd	114					
|>	In	115		102.5			
|	Sn	120	4.585				
|	Sb	121	-36.750				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	206.582				
|	Ho	165					
|>	Ta	181		103.2			
|	Tl	205					
|	Pb	208	47.316				
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, July 11, 2005 12:47:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 5.008

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**20.626**	**ug/L**	2.155	29509	0.031
|	Be	9	**19.308**	**ug/L**	1.547	8221	0.009
|	B	11	**20.817**	**ug/L**	3.358	10118	0.009
|	Na	23	**98534.899**	**ug/L**	2.769	346783010	362.427
|	Mg	24	**96692.440**	**ug/L**	1.938	229479605	239.818
|	Al	27	**97047.401**	**ug/L**	6.193	329765367	344.736
|	P	31	**100626.329**	**ug/L**	1.052	24161203	25.245
|	K	39	**99407.109**	**ug/L**	8.843	426840532	445.127
|	Ca	43	**95804.490**	**ug/L**	1.245	999908	1.044
|>	Sc	45		**ug/L**		956830	956829.627
|	Ti	47	**1751.404**	**ug/L**	1.393	985324	1.029
|	V	51	**21.817**	**ug/L**	5.277	144336	0.126
|	Cr	52	**22.917**	**ug/L**	2.002	128349	0.122
|	Cr	53		**ug/L**		125209	-0.103
|	Mn	55	**23.896**	**ug/L**	2.162	185126	0.189
|	Fe	57	**94426.789**	**ug/L**	1.304	13072396	13.648
|	Co	59	**21.204**	**ug/L**	1.548	127058	0.133
|	Ni	60	**22.142**	**ug/L**	0.082	29751	0.031
|	Cu	63		**ug/L**		69508	0.072
⌊	Cu	65	**22.132**	**ug/L**	1.939	34865	0.036
⌈	Zn	66	**25.009**	**ug/L**	1.323	26256	0.066
|	Zn	67		**ug/L**		14353	-0.008
|	Zn	68		**ug/L**		18481	0.043
|>	Ge	74		**ug/L**		386677	386676.957
|	As	75	**20.638**	**ug/L**	2.297	30368	0.069
|	Se	77		**ug/L**		8336	-0.018
|	Se	82	**19.379**	**ug/L**	3.016	2304	0.006
⌊	Kr	83		**ug/L**		1471	0.001
⌈	Sr	88	**23.345**	**ug/L**	1.082	285884	1.327
|	Y	89		**ug/L**		769	0.003
|	Zr	90	**21.519**	**ug/L**	0.345	158957	0.737
|	Mo	98	**1849.662**	**ug/L**	2.453	6173040	28.670
|	Ag	107	**19.486**	**ug/L**	0.817	103418	0.480
|	Cd	111	**19.743**	**ug/L**	1.720	25362	0.118
|	Cd	114		**ug/L**		66625	0.309
|>	In	115		**ug/L**		215302	215302.372
|	Sn	120	**20.751**	**ug/L**	0.612	107337	0.497
|	Sb	121	**19.989**	**ug/L**	0.850	99881	0.430
⌊	Sb	123		**ug/L**		76502	0.330
⌈	Ba	135		**ug/L**		24807	0.108
|	Ba	137	**20.590**	**ug/L**	0.862	42999	0.187
|	Ho	165		**ug/L**		54	0.000
|>	Ta	181		**ug/L**		229202	229201.983
|	Tl	205	**19.910**	**ug/L**	1.095	175174	0.763
|	Pb	208	**19.959**	**ug/L**	0.881	225844	0.984
|	Bi	209		**ug/L**		1937	0.008
|	Th	232	**21.538**	**ug/L**	1.039	253397	1.098
⌊	U	238	**22.582**	**ug/L**	0.898	264918	1.155

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	103.129				
|	Be	9	96.538				
|	B	11	94.621				
|	Na	23	98.535				
|	Mg	24	96.847				
|	Al	27	97.047				
|	P	31	100.636				
|	K	39	99.407				
|	Ca	43	95.804				
|>	Sc	45		94.0			
|	Ti	47	87.570				
|	V	51	99.167				
|	Cr	52	94.697				
|	Cr	53					
|	Mn	55	109.114				
|	Fe	57	94.427				
|	Co	59	106.018				
|	Ni	60	103.468				
|	Cu	63					
⌊	Cu	65	101.059				
⌈	Zn	66	97.691				
|	Zn	67					
|	Zn	68					
|>	Ge	74		98.3			
|	As	75	103.191				
|	Se	77					
|	Se	82	96.897				
⌊	Kr	83					
⌈	Sr	88	101.943				
|	Y	89					
|	Zr	90	107.596				
|	Mo	98	92.483				
|	Ag	107	95.988				
|	Cd	111	98.717				
|	Cd	114					
|>	In	115		103.5			
|	Sn	120	89.443				
|	Sb	121	89.638				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	101.933				
|	Ho	165					
|>	Ta	181		104.2			
|	Tl	205	99.552				
|	Pb	208	95.955				
|	Bi	209					
|	Th	232	107.692				
⌊	U	238	112.912				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, July 11, 2005 12:52:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 6.009

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.003**	**ug/L**	1.951	75509	0.076
	Be	9	**50.427**	**ug/L**	2.234	22306	0.022
	B	11	**105.440**	**ug/L**	1.571	46552	0.045
	Na	23	**4888.345**	**ug/L**	3.112	17924099	17.980
	Mg	24	**4812.014**	**ug/L**	1.995	11887554	11.935
	Al	27	**4716.005**	**ug/L**	5.415	16688055	16.752
	P	31	**4633.190**	**ug/L**	1.132	1166476	1.162
	K	39	**5012.400**	**ug/L**	3.874	23511086	22.445
	Ca	43	**5005.057**	**ug/L**	1.778	55427	0.055
>	Sc	45		**ug/L**		996025	996025.122
	Ti	47	**49.507**	**ug/L**	1.494	29890	0.029
	V	51	**52.630**	**ug/L**	1.071	327569	0.304
	Cr	52	**50.205**	**ug/L**	0.575	278559	0.268
	Cr	53		**ug/L**		133686	-0.100
	Mn	55	**52.569**	**ug/L**	0.454	418535	0.416
	Fe	57	**5487.385**	**ug/L**	1.134	805281	0.793
	Co	59	**50.928**	**ug/L**	1.171	317380	0.318
	Ni	60	**50.564**	**ug/L**	2.156	70160	0.070
	Cu	63		**ug/L**		164740	0.165
	Cu	65	**49.948**	**ug/L**	0.849	81672	0.082
	Zn	66	**48.822**	**ug/L**	0.881	52618	0.129
	Zn	67		**ug/L**		16876	-0.003
	Zn	68		**ug/L**		40337	0.096
>	Ge	74		**ug/L**		401476	401476.024
	As	75	**47.913**	**ug/L**	0.165	68006	0.160
	Se	77		**ug/L**		9733	-0.015
	Se	82	**49.314**	**ug/L**	1.179	6094	0.015
	Kr	83		**ug/L**		1311	-0.000
	Sr	88	**50.235**	**ug/L**	0.267	633072	2.855
	Y	89		**ug/L**		899	0.004
	Zr	90	**45.373**	**ug/L**	3.860	344585	1.553
	Mo	98	**48.157**	**ug/L**	2.351	165582	0.746
	Ag	107	**49.072**	**ug/L**	0.619	267938	1.208
	Cd	111	**48.846**	**ug/L**	1.304	64552	0.291
	Cd	114		**ug/L**		150629	0.679
>	In	115		**ug/L**		221663	221662.601
	Sn	120	**49.246**	**ug/L**	1.278	261835	1.180
	Sb	121	**48.433**	**ug/L**	1.334	238441	1.042
	Sb	123		**ug/L**		183404	0.802
	Ba	135		**ug/L**		59146	0.257
	Ba	137	**49.377**	**ug/L**	1.135	103491	0.449
	Ho	165		**ug/L**		70	0.000
>	Ta	181		**ug/L**		230252	230252.432
	Tl	205	**49.407**	**ug/L**	0.569	436401	1.895
	Pb	208	**49.959**	**ug/L**	1.564	567393	2.463
	Bi	209		**ug/L**		74	0.000
	Th	232	**51.452**	**ug/L**	0.815	605725	2.623
	U	238	**55.161**	**ug/L**	0.979	649733	2.821

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	102.006				
	Be	9	100.853				
	B	11	105.440				
	Na	23	97.767				
	Mg	24	96.240				
	Al	27	93.386				
	P	31	92.664				
	K	39	100.248				
	Ca	43	100.101				
>	Sc	45		97.8			
	Ti	47	99.014				
	V	51	105.260				
	Cr	52	100.411				
	Cr	53					
	Mn	55	105.137				
	Fe	57	109.748				
	Co	59	101.855				
	Ni	60	101.128				
	Cu	63					
	Cu	65	99.896				
	Zn	66	97.644				
	Zn	67					
	Zn	68					
>	Ge	74		102.1			
	As	75	95.827				
	Se	77					
	Se	82	98.627				
	Kr	83					
	Sr	88	100.470				
	Y	89					
	Zr	90	90.747				
	Mo	98	96.314				
	Ag	107	98.144				
	Cd	111	97.691				
	Cd	114					
>	In	115		106.5			
	Sn	120	98.492				
	Sb	121	96.866				
	Sb	123					
	Ba	135					
	Ba	137	98.754				
	Ho	165					
>	Ta	181		104.7			
	Tl	205	98.815				
	Pb	208	99.918				
	Bi	209					
	Th	232	102.904				
	U	238	110.322				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	U		238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, July 11, 2005 12:57:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 7.010

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.098**	**ug/L**	18.979	457	0.000
	Be	9	**0.007**	**ug/L**	29.038	32	0.000
	B	11	**-0.642**	**ug/L**	91.951	1420	-0.000
	Na	23	**7.077**	**ug/L**	31.696	45741	0.026
	Mg	24	**2.936**	**ug/L**	27.033	8002	0.007
	Al	27	**2.149**	**ug/L**	40.520	11338	0.008
	P	31	**-3.553**	**ug/L**	47.196	7974	-0.001
	K	39	**1.558**	**ug/L**	882.848	1178055	0.007
	Ca	43	**6.951**	**ug/L**	35.489	1202	0.000
>	Sc	45		**ug/L**		1007779	1007778.696
	Ti	47	**0.009**	**ug/L**	919.295	934	0.000
	V	51	**-0.276**	**ug/L**	461.753	23470	-0.002
	Cr	52	**-0.021**	**ug/L**	248.771	11949	-0.000
	Cr	53		**ug/L**		234938	-0.001
	Mn	55	**-0.100**	**ug/L**	3.395	3848	-0.001
	Fe	57	**18.962**	**ug/L**	4.415	18238	0.003
	Co	59	**-0.001**	**ug/L**	202.083	224	-0.000
	Ni	60	**-0.054**	**ug/L**	30.159	360	-0.000
	Cu	63		**ug/L**		371	-0.000
	Cu	65	**-0.024**	**ug/L**	9.177	161	-0.000
	Zn	66	**-0.130**	**ug/L**	2.558	494	-0.000
	Zn	67		**ug/L**		16732	-0.003
	Zn	68		**ug/L**		1387	-0.001
>	Ge	74		**ug/L**		401281	401280.694
	As	75	**0.342**	**ug/L**	62.897	4385	0.001
	Se	77		**ug/L**		16816	0.002
	Se	82	**0.824**	**ug/L**	73.165	98	0.000
	Kr	83		**ug/L**		1306	-0.000
	Sr	88	**0.002**	**ug/L**	110.752	265	0.000
	Y	89		**ug/L**		71	-0.000
	Zr	90	**0.736**	**ug/L**	17.915	5810	0.025
	Mo	98	**0.161**	**ug/L**	18.533	685	0.003
	Ag	107	**0.008**	**ug/L**	53.573	166	0.000
	Cd	111	**-0.002**	**ug/L**	892.904	24	-0.000
	Cd	114		**ug/L**		48	-0.000
>	In	115		**ug/L**		215715	215714.711
	Sn	120	**0.060**	**ug/L**	44.734	602	0.001
	Sb	121	**-1.263**	**ug/L**	5.601	1453	-0.027
	Sb	123		**ug/L**		1156	-0.020
	Ba	135		**ug/L**		53	0.000
	Ba	137	**-0.001**	**ug/L**	542.035	59	-0.000
	Ho	165		**ug/L**		27	0.000
>	Ta	181		**ug/L**		217616	217616.197
	Tl	205	**0.009**	**ug/L**	45.228	250	0.000
	Pb	208	**-0.002**	**ug/L**	174.246	272	-0.000
	Bi	209		**ug/L**		28	-0.000
	Th	232	**0.140**	**ug/L**	53.405	3164	0.007
	U	238	**0.000**	**ug/L**	1944.314	200	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		99.0			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		102.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		103.7			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		98.9			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875069
Sample Date/Time: Monday, July 11, 2005 13:02:34
Sample Type:
Sample Description: ESHL 6020 MB
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875069.011

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.218**	**ug/L**	7.262	677	0.000
|	Be	9	**-0.002**	**ug/L**	647.934	30	-0.000
|	B	11	**-0.623**	**ug/L**	12.649	1518	-0.000
|	Na	23	**17.807**	**ug/L**	14.636	90958	0.065
|	Mg	24	**3.629**	**ug/L**	34.229	10337	0.009
|	Al	27	**11.518**	**ug/L**	8.481	47747	0.041
|	P	31	**-4.593**	**ug/L**	15.628	8201	-0.001
|	K	39	**10.894**	**ug/L**	79.139	1298107	0.049
|	Ca	43	**88.195**	**ug/L**	4.661	2228	0.001
|>	Sc	45		**ug/L**		1072130	1072129.689
|	Ti	47	**1.384**	**ug/L**	4.350	1860	0.001
|	V	51	**-7.880**	**ug/L**	88.998	-22149	-0.046
|	Cr	52	**2.557**	**ug/L**	5.799	27449	0.014
|	Cr	53		**ug/L**		732993	0.450
|	Mn	55	**0.475**	**ug/L**	2.557	8969	0.004
|	Fe	57	**38.462**	**ug/L**	8.026	22422	0.006
|	Co	59	**0.019**	**ug/L**	15.133	373	0.000
|	Ni	60	**0.029**	**ug/L**	39.315	506	0.000
|	Cu	63		**ug/L**		923	0.000
⌊	Cu	65	**0.149**	**ug/L**	8.082	476	0.000
⌈	Zn	66	**17.255**	**ug/L**	1.193	19425	0.046
|	Zn	67		**ug/L**		73043	0.133
|	Zn	68		**ug/L**		17275	0.038
|>	Ge	74		**ug/L**		410327	410327.219
|	As	75	**1.955**	**ug/L**	51.425	6686	0.007
|	Se	77		**ug/L**		61630	0.111
|	Se	82	**1.953**	**ug/L**	34.354	243	0.001
⌊	Kr	83		**ug/L**		1365	0.000
⌈	Sr	88	**0.082**	**ug/L**	4.041	1175	0.005
|	Y	89		**ug/L**		109	0.000
|	Zr	90	**1.180**	**ug/L**	26.760	8611	0.040
|	Mo	98	**0.101**	**ug/L**	17.258	457	0.002
|	Ag	107	**0.016**	**ug/L**	52.089	197	0.000
|	Cd	111	**0.017**	**ug/L**	109.057	46	0.000
|	Cd	114		**ug/L**		59	0.000
|>	In	115		**ug/L**		204431	204430.771
|	Sn	120	**0.094**	**ug/L**	15.783	733	0.002
|	Sb	121	**-1.223**	**ug/L**	3.555	1554	-0.026
⌊	Sb	123		**ug/L**		1243	-0.020
⌈	Ba	135		**ug/L**		277	0.001
|	Ba	137	**0.244**	**ug/L**	1.624	483	0.002
|	Ho	165		**ug/L**		30	0.000
|>	Ta	181		**ug/L**		193301	193301.417
|	Tl	205	**0.002**	**ug/L**	66.304	168	0.000
|	Pb	208	**0.106**	**ug/L**	6.734	1266	0.005
|	Bi	209		**ug/L**		101	0.000
|	Th	232	**0.022**	**ug/L**	96.846	1636	0.001
⌊	U	238	**-0.006**	**ug/L**	9.475	118	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		105.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		104.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		98.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		87.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875076
Sample Date/Time: Monday, July 11, 2005 13:07:48
Sample Type:
Sample Description: ESHL 6020 LCS
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875076.012

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**51.449**	**ug/L**	0.219	80570	0.076
|	Be	9	**55.441**	**ug/L**	1.306	25941	0.025
|	B	11	**114.549**	**ug/L**	1.443	53339	0.049
|	Na	23	**2201.565**	**ug/L**	8.280	8549500	8.098
|	Mg	24	**2043.544**	**ug/L**	6.589	5338110	5.068
|	Al	27	**2056.042**	**ug/L**	7.016	7697659	7.304
|	P	31	**2067.951**	**ug/L**	0.775	555828	0.519
|	K	39	**2144.460**	**ug/L**	8.460	11343549	9.602
|	Ca	43	**2243.121**	**ug/L**	1.279	26923	0.024
|>	Sc	45		**ug/L**		1053489	1053488.929
|	Ti	47	**48.698**	**ug/L**	0.318	31114	0.029
|	V	51	**46.180**	**ug/L**	8.981	307070	0.267
|	Cr	52	**53.387**	**ug/L**	1.245	312508	0.285
|	Cr	53		**ug/L**		777515	0.504
|	Mn	55	**53.867**	**ug/L**	0.621	453470	0.426
|	Fe	57	**2358.744**	**ug/L**	1.978	375318	0.341
|	Co	59	**53.186**	**ug/L**	1.376	350566	0.333
|	Ni	60	**53.571**	**ug/L**	0.199	78604	0.074
|	Cu	63		**ug/L**		184299	0.175
⌊	Cu	65	**52.696**	**ug/L**	0.292	91127	0.086
⌈	Zn	66	**59.366**	**ug/L**	1.694	64510	0.157
|	Zn	67		**ug/L**		85246	0.165
|	Zn	68		**ug/L**		51008	0.121
|>	Ge	74		**ug/L**		405681	405681.427
|	As	75	**52.629**	**ug/L**	3.403	75099	0.175
|	Se	77		**ug/L**		64189	0.119
|	Se	82	**52.136**	**ug/L**	1.319	6511	0.016
⌊	Kr	83		**ug/L**		1329	0.000
⌈	Sr	88	**55.399**	**ug/L**	0.827	631576	3.148
|	Y	89		**ug/L**		136	0.000
|	Zr	90	**52.954**	**ug/L**	1.138	363808	1.812
|	Mo	98	**51.333**	**ug/L**	1.659	159686	0.796
|	Ag	107	**54.183**	**ug/L**	0.835	267652	1.334
|	Cd	111	**51.379**	**ug/L**	0.886	61431	0.306
|	Cd	114		**ug/L**		144576	0.721
|>	In	115		**ug/L**		200540	200539.653
|	Sn	120	**51.914**	**ug/L**	0.154	249715	1.244
|	Sb	121	**51.318**	**ug/L**	1.082	228181	1.104
⌊	Sb	123		**ug/L**		175253	0.848
⌈	Ba	135		**ug/L**		55991	0.291
|	Ba	137	**54.646**	**ug/L**	0.928	95656	0.497
|	Ho	165		**ug/L**		73	0.000
|>	Ta	181		**ug/L**		192302	192301.960
|	Tl	205	**52.870**	**ug/L**	0.832	390002	2.027
|	Pb	208	**54.445**	**ug/L**	0.458	516439	2.684
|	Bi	209		**ug/L**		98	0.000
|	Th	232	**57.345**	**ug/L**	1.393	563657	2.924
⌊	U	238	**61.033**	**ug/L**	1.895	600360	3.121

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		103.5			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		103.2			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		96.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		87.4			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 139405001
Sample Date/Time: Monday, July 11, 2005 13:13:02
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\139405001.013

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**29.053**	**ug/L**	2.666	49007	0.043
	Be	9	**0.004**	**ug/L**	311.764	35	0.000
	B	11	**31.610**	**ug/L**	1.402	17186	0.014
	Na	23	**22883.928**	**ug/L**	8.275	95308980	84.171
	Mg	24	**5765.179**	**ug/L**	5.235	16184562	14.299
	Al	27	**8.290**	**ug/L**	10.132	37382	0.029
	P	31	**44.048**	**ug/L**	1.034	22462	0.011
	K	39	**842.194**	**ug/L**	3.111	5582510	3.771
	Ca	43	**36218.369**	**ug/L**	0.465	447767	0.395
>	Sc	45		**ug/L**		1131428	1131427.532
	Ti	47	**4.537**	**ug/L**	3.499	4060	0.003
	V	51	**0.031**	**ug/L**	10055.425	28376	0.000
	Cr	52	**28.148**	**ug/L**	5.582	183423	0.150
	Cr	53		**ug/L**		842982	0.511
	Mn	55	**15.903**	**ug/L**	1.842	147466	0.126
	Fe	57	**159.580**	**ug/L**	3.869	43475	0.023
	Co	59	**0.701**	**ug/L**	0.853	5220	0.004
	Ni	60	**8.434**	**ug/L**	1.293	13703	0.012
	Cu	63		**ug/L**		130044	0.115
	Cu	65	**34.279**	**ug/L**	1.864	63750	0.056
	Zn	66	**166.161**	**ug/L**	2.515	177174	0.441
	Zn	67		**ug/L**		100640	0.207
	Zn	68		**ug/L**		132728	0.327
>	Ge	74		**ug/L**		400736	400735.749
	As	75	**2.003**	**ug/L**	21.447	6606	0.007
	Se	77		**ug/L**		74114	0.145
	Se	82	**1.690**	**ug/L**	24.341	205	0.001
	Kr	83		**ug/L**		1317	0.000
	Sr	88	**165.906**	**ug/L**	0.603	1818758	9.428
	Y	89		**ug/L**		368	0.002
	Zr	90	**1.130**	**ug/L**	28.913	7816	0.039
	Mo	98	**1.417**	**ug/L**	1.663	4366	0.022
	Ag	107	**0.012**	**ug/L**	3.530	167	0.000
	Cd	111	**0.135**	**ug/L**	16.215	179	0.001
	Cd	114		**ug/L**		431	0.002
>	In	115		**ug/L**		192883	192882.556
	Sn	120	**0.078**	**ug/L**	8.916	619	0.002
	Sb	121	**-1.292**	**ug/L**	1.021	1179	-0.028
	Sb	123		**ug/L**		957	-0.021
	Ba	135		**ug/L**		17182	0.092
	Ba	137	**17.243**	**ug/L**	1.767	29206	0.157
	Ho	165		**ug/L**		38	0.000
>	Ta	181		**ug/L**		185829	185828.825
	Tl	205	**0.324**	**ug/L**	33.130	2466	0.012
	Pb	208	**0.315**	**ug/L**	1.724	3131	0.016
	Bi	209		**ug/L**		104	0.000
	Th	232	**0.079**	**ug/L**	77.136	2124	0.004
	U	238	**0.136**	**ug/L**	4.936	1460	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		111.1			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		101.9			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		92.7			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		84.5			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875070
Sample Date/Time: Monday, July 11, 2005 13:18:13
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875070.014

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**29.367**	**ug/L**	0.997	50791	0.043
|	Be	9	**-0.001**	**ug/L**	1262.124	33	-0.000
|	B	11	**33.630**	**ug/L**	2.756	18621	0.014
|	Na	23	**22710.862**	**ug/L**	2.627	96918929	83.534
|	Mg	24	**5779.362**	**ug/L**	6.300	16628957	14.334
|	Al	27	**10.183**	**ug/L**	22.269	46076	0.036
|	P	31	**46.950**	**ug/L**	0.789	23874	0.012
|	K	39	**781.081**	**ug/L**	0.749	5405696	3.498
|	Ca	43	**35932.671**	**ug/L**	0.262	455478	0.392
|>	Sc	45		**ug/L**		1160063	1160063.469
|	Ti	47	**4.858**	**ug/L**	3.583	4380	0.003
|	V	51	**13.931**	**ug/L**	67.193	122029	0.080
|	Cr	52	**29.337**	**ug/L**	3.014	195338	0.156
|	Cr	53		**ug/L**		1261899	0.854
|	Mn	55	**16.106**	**ug/L**	1.368	153048	0.127
|	Fe	57	**163.697**	**ug/L**	4.963	45253	0.024
|	Co	59	**0.704**	**ug/L**	2.627	5372	0.004
|	Ni	60	**8.295**	**ug/L**	1.860	13825	0.011
|	Cu	63		**ug/L**		131381	0.113
⌊	Cu	65	**33.774**	**ug/L**	0.582	64394	0.055
⌈	Zn	66	**169.823**	**ug/L**	0.103	177661	0.450
|	Zn	67		**ug/L**		137484	0.305
|	Zn	68		**ug/L**		132835	0.334
|>	Ge	74		**ug/L**		393065	393064.792
|	As	75	**5.250**	**ug/L**	28.904	10715	0.017
|	Se	77		**ug/L**		107153	0.233
|	Se	82	**1.925**	**ug/L**	24.499	229	0.001
⌊	Kr	83		**ug/L**		1302	0.000
⌈	Sr	88	**172.259**	**ug/L**	1.181	1774716	9.790
|	Y	89		**ug/L**		348	0.002
|	Zr	90	**0.589**	**ug/L**	13.323	3973	0.020
|	Mo	98	**1.445**	**ug/L**	1.791	4180	0.022
|	Ag	107	**0.009**	**ug/L**	13.384	141	0.000
|	Cd	111	**0.082**	**ug/L**	21.255	110	0.000
|	Cd	114		**ug/L**		283	0.001
|>	In	115		**ug/L**		181282	181282.377
|	Sn	120	**0.075**	**ug/L**	7.465	568	0.002
|	Sb	121	**-1.293**	**ug/L**	0.549	1103	-0.028
⌊	Sb	123		**ug/L**		968	-0.020
⌈	Ba	135		**ug/L**		16171	0.090
|	Ba	137	**17.007**	**ug/L**	0.196	27809	0.155
|	Ho	165		**ug/L**		29	0.000
|>	Ta	181		**ug/L**		179413	179413.093
|	Tl	205	**0.095**	**ug/L**	11.020	798	0.004
|	Pb	208	**0.329**	**ug/L**	2.940	3149	0.016
|	Bi	209		**ug/L**		123	0.001
|	Th	232	**-0.039**	**ug/L**	18.268	964	-0.002
⌊	U	238	**0.131**	**ug/L**	0.721	1365	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		113.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		87.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		81.6			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875074
Sample Date/Time: Monday, July 11, 2005 13:23:26
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875074.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**79.037**	**ug/L**	1.919	134619	0.117
Be	9	**54.255**	**ug/L**	1.288	27647	0.024
B	11	**149.732**	**ug/L**	1.709	75347	0.064
Na	23	**26000.762**	**ug/L**	9.922	109691190	95.635
Mg	24	**7939.584**	**ug/L**	3.078	22592445	19.692
Al	27	**2034.299**	**ug/L**	9.163	8294448	7.226
P	31	**2067.045**	**ug/L**	1.650	605126	0.519
K	39	**2819.588**	**ug/L**	2.141	15820544	12.626
Ca	43	**38269.696**	**ug/L**	1.219	479712	0.417
> Sc	45		ug/L		1147450	1147449.545
Ti	47	**49.370**	**ug/L**	2.003	34338	0.029
V	51	**55.037**	**ug/L**	17.920	393228	0.318
Cr	52	**76.482**	**ug/L**	1.489	481653	0.408
Cr	53		ug/L		1148450	0.767
Mn	55	**64.138**	**ug/L**	1.162	587061	0.507
Fe	57	**2274.422**	**ug/L**	0.770	394822	0.329
Co	59	**48.539**	**ug/L**	1.661	348490	0.304
Ni	60	**54.307**	**ug/L**	1.001	86780	0.075
Cu	63		ug/L		299701	0.261
Cu	65	**78.881**	**ug/L**	1.546	148446	0.129
Zn	66	**219.692**	**ug/L**	1.155	228937	0.583
Zn	67		ug/L		117002	0.254
Zn	68		ug/L		170197	0.430
> Ge	74		ug/L		391880	391879.969
As	75	**42.192**	**ug/L**	3.355	58901	0.141
Se	77		ug/L		89130	0.188
Se	82	**10.656**	**ug/L**	4.724	1282	0.003
Kr	83		ug/L		1344	0.000
Sr	88	**225.562**	**ug/L**	1.287	2365434	12.819
Y	89		ug/L		483	0.002
Zr	90	**55.668**	**ug/L**	0.934	351894	1.905
Mo	98	**53.296**	**ug/L**	1.053	152549	0.826
Ag	107	**52.175**	**ug/L**	1.041	237146	1.285
Cd	111	**5.866**	**ug/L**	0.994	6474	0.035
Cd	114		ug/L		13798	0.075
> In	115		ug/L		184529	184528.638
Sn	120	**52.542**	**ug/L**	0.955	232541	1.259
Sb	121	**104.004**	**ug/L**	1.232	419069	2.237
Sb	123		ug/L		322407	1.721
Ba	135		ug/L		68372	0.371
Ba	137	**70.388**	**ug/L**	0.926	118148	0.640
Ho	165		ug/L		80	0.000
> Ta	181		ug/L		184420	184420.245
Tl	205	**51.672**	**ug/L**	0.209	365562	1.981
Pb	208	**22.051**	**ug/L**	0.608	200742	1.087
Bi	209		ug/L		98	0.000
Th	232	**57.210**	**ug/L**	1.460	539309	2.917
U	238	**62.125**	**ug/L**	0.440	586106	3.177

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		112.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		99.7			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		88.7			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		83.8			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875072
Sample Date/Time: Monday, July 11, 2005 13:28:39
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 437237|5|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875072.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**6.194**	**ug/L**	0.779	10089	0.009
	Be	9	**-0.002**	**ug/L**	491.181	30	-0.000
	B	11	**6.136**	**ug/L**	8.928	4582	0.003
	Na	23	**4901.013**	**ug/L**	9.735	19212058	18.027
	Mg	24	**1207.442**	**ug/L**	4.567	3187814	2.995
	Al	27	**4.275**	**ug/L**	48.602	20015	0.015
	P	31	**6.782**	**ug/L**	13.731	11178	0.002
	K	39	**152.750**	**ug/L**	8.826	1964832	0.684
	Ca	43	**7721.950**	**ug/L**	0.412	90742	0.084
>	Sc	45		**ug/L**		1064362	1064361.919
	Ti	47	**0.956**	**ug/L**	5.238	1579	0.001
	V	51	**-14.006**	**ug/L**	2.553	-59584	-0.081
	Cr	52	**3.186**	**ug/L**	5.200	30823	0.017
	Cr	53		**ug/L**		630466	0.359
	Mn	55	**3.447**	**ug/L**	1.937	33912	0.027
	Fe	57	**20.515**	**ug/L**	4.898	19501	0.003
	Co	59	**0.154**	**ug/L**	4.559	1271	0.001
	Ni	60	**1.725**	**ug/L**	1.383	3002	0.002
	Cu	63		**ug/L**		26434	0.024
	Cu	65	**7.428**	**ug/L**	0.235	13161	0.012
	Zn	66	**35.235**	**ug/L**	1.365	37368	0.093
	Zn	67		**ug/L**		41963	0.062
	Zn	68		**ug/L**		29577	0.071
>	Ge	74		**ug/L**		393251	393251.275
	As	75	**1.577**	**ug/L**	27.893	5911	0.005
	Se	77		**ug/L**		44020	0.072
	Se	82	**1.946**	**ug/L**	12.153	232	0.001
	Kr	83		**ug/L**		1302	0.000
	Sr	88	**40.114**	**ug/L**	1.652	452639	2.280
	Y	89		**ug/L**		136	0.000
	Zr	90	**0.057**	**ug/L**	4.512	731	0.002
	Mo	98	**0.309**	**ug/L**	4.274	1085	0.005
	Ag	107	**0.013**	**ug/L**	27.959	176	0.000
	Cd	111	**0.018**	**ug/L**	28.773	46	0.000
	Cd	114		**ug/L**		117	0.000
>	In	115		**ug/L**		198479	198479.242
	Sn	120	**0.023**	**ug/L**	15.439	374	0.001
	Sb	121	**-1.431**	**ug/L**	0.574	621	-0.031
	Sb	123		**ug/L**		504	-0.023
	Ba	135		**ug/L**		3622	0.018
	Ba	137	**3.388**	**ug/L**	1.482	6337	0.031
	Ho	165		**ug/L**		30	0.000
>	Ta	181		**ug/L**		203741	203740.934
	Tl	205	**0.320**	**ug/L**	28.661	2664	0.012
	Pb	208	**0.066**	**ug/L**	0.861	937	0.003
	Bi	209		**ug/L**		51	0.000
	Th	232	**-0.019**	**ug/L**	125.037	1305	-0.001
	U	238	**0.043**	**ug/L**	10.542	635	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		104.5			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		100.0			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		95.4			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		92.6			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
V 51 Lower	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 139405002
Sample Date/Time: Monday, July 11, 2005 13:33:53
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\139405002.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**27.931**	**ug/L**	1.111	48351	0.041
	Be	9	**0.028**	**ug/L**	28.824	48	0.000
	B	11	**32.034**	**ug/L**	0.537	17841	0.014
	Na	23	**23776.372**	**ug/L**	3.185	101534116	87.453
	Mg	24	**6216.857**	**ug/L**	10.516	17890464	15.419
	Al	27	**623.539**	**ug/L**	4.761	2574456	2.215
	P	31	**69.699**	**ug/L**	4.039	30507	0.017
	K	39	**952.168**	**ug/L**	3.279	6296631	4.264
	Ca	43	**36036.190**	**ug/L**	1.217	457005	0.393
>	Sc	45		**ug/L**		1160637	1160637.293
	Ti	47	**21.007**	**ug/L**	0.534	15396	0.012
	V	51	**9.616**	**ug/L**	32.244	93400	0.056
	Cr	52	**135.936**	**ug/L**	0.634	855146	0.725
	Cr	53		**ug/L**		1195385	0.796
	Mn	55	**23.281**	**ug/L**	0.997	218958	0.184
	Fe	57	**1443.341**	**ug/L**	0.771	259950	0.209
	Co	59	**1.315**	**ug/L**	1.516	9806	0.008
	Ni	60	**40.693**	**ug/L**	1.798	65898	0.056
	Cu	63		**ug/L**		386797	0.333
	Cu	65	**101.350**	**ug/L**	0.169	192874	0.166
	Zn	66	**152.154**	**ug/L**	1.088	160200	0.404
	Zn	67		**ug/L**		104578	0.220
	Zn	68		**ug/L**		121201	0.302
>	Ge	74		**ug/L**		395447	395446.543
	As	75	**4.233**	**ug/L**	55.409	9435	0.014
	Se	77		**ug/L**		89110	0.186
	Se	82	**1.958**	**ug/L**	10.739	235	0.001
	Kr	83		**ug/L**		1313	0.000
	Sr	88	**173.272**	**ug/L**	1.450	1841686	9.847
	Y	89		**ug/L**		5296	0.028
	Zr	90	**1.219**	**ug/L**	2.739	8126	0.042
	Mo	98	**4.247**	**ug/L**	0.937	12435	0.066
	Ag	107	**0.021**	**ug/L**	5.070	200	0.001
	Cd	111	**0.033**	**ug/L**	30.216	60	0.000
	Cd	114		**ug/L**		110	0.000
>	In	115		**ug/L**		187027	187026.813
	Sn	120	**0.575**	**ug/L**	2.342	2828	0.014
	Sb	121	**-1.317**	**ug/L**	0.798	1042	-0.028
	Sb	123		**ug/L**		866	-0.021
	Ba	135		**ug/L**		25571	0.137
	Ba	137	**25.972**	**ug/L**	1.299	43945	0.236
	Ho	165		**ug/L**		231	0.001
>	Ta	181		**ug/L**		185775	185774.664
	Tl	205	**0.109**	**ug/L**	15.067	927	0.004
	Pb	208	**4.797**	**ug/L**	1.319	44185	0.237
	Bi	209		**ug/L**		236	0.001
	Th	232	**0.124**	**ug/L**	10.255	2545	0.006
	U	238	**0.172**	**ug/L**	0.930	1803	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		114.0			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		100.6			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		89.9			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		84.4			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875071
Sample Date/Time: Monday, July 11, 2005 13:39:07
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875071.018

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**26.887**	**ug/L**	1.303	46319	0.040
|	Be	9	**0.010**	**ug/L**	267.905	38	0.000
|	B	11	**32.765**	**ug/L**	3.116	18105	0.014
|	Na	23	**26165.538**	**ug/L**	10.409	111193809	96.241
|	Mg	24	**6327.685**	**ug/L**	3.919	18119829	15.694
|	Al	27	**610.177**	**ug/L**	3.469	2506514	2.167
|	P	31	**71.844**	**ug/L**	3.707	30966	0.018
|	K	39	**938.007**	**ug/L**	3.307	6190200	4.200
|	Ca	43	**36099.017**	**ug/L**	1.369	455383	0.393
|>	Sc	45		**ug/L**		1154588	1154588.160
|	Ti	47	**20.906**	**ug/L**	0.674	15246	0.012
|	V	51	**13.330**	**ug/L**	45.556	117381	0.077
|	Cr	52	**130.715**	**ug/L**	2.658	818415	0.697
|	Cr	53		**ug/L**		1246538	0.846
|	Mn	55	**22.888**	**ug/L**	0.518	214230	0.181
|	Fe	57	**1406.119**	**ug/L**	0.642	252377	0.203
|	Co	59	**1.270**	**ug/L**	2.129	9433	0.008
|	Ni	60	**38.757**	**ug/L**	1.927	62454	0.054
|	Cu	63		**ug/L**		383228	0.332
⌊	Cu	65	**101.570**	**ug/L**	0.770	192278	0.166
⌈	Zn	66	**152.203**	**ug/L**	0.713	162059	0.404
|	Zn	67		**ug/L**		111907	0.235
|	Zn	68		**ug/L**		124252	0.306
|>	Ge	74		**ug/L**		399902	399902.235
|	As	75	**6.018**	**ug/L**	22.808	11934	0.020
|	Se	77		**ug/L**		92420	0.192
|	Se	82	**1.762**	**ug/L**	9.793	213	0.001
⌊	Kr	83		**ug/L**		1312	0.000
⌈	Sr	88	**172.078**	**ug/L**	0.714	1841864	9.779
|	Y	89		**ug/L**		5283	0.028
|	Zr	90	**1.190**	**ug/L**	1.218	8000	0.041
|	Mo	98	**4.048**	**ug/L**	1.577	11942	0.063
|	Ag	107	**0.024**	**ug/L**	3.252	218	0.001
|	Cd	111	**0.121**	**ug/L**	15.895	159	0.001
|	Cd	114		**ug/L**		365	0.002
|>	In	115		**ug/L**		188324	188323.989
|	Sn	120	**0.562**	**ug/L**	1.361	2788	0.013
|	Sb	121	**-1.320**	**ug/L**	0.561	1036	-0.028
⌊	Sb	123		**ug/L**		886	-0.021
⌈	Ba	135		**ug/L**		25450	0.136
|	Ba	137	**25.818**	**ug/L**	2.100	43977	0.235
|	Ho	165		**ug/L**		233	0.001
|>	Ta	181		**ug/L**		187047	187046.650
|	Tl	205	**0.065**	**ug/L**	4.879	612	0.002
|	Pb	208	**4.814**	**ug/L**	1.259	44638	0.237
|	Bi	209		**ug/L**		260	0.001
|	Th	232	**0.091**	**ug/L**	3.547	2248	0.005
⌊	U	238	**0.170**	**ug/L**	1.309	1794	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		113.4			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		101.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		90.5			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		85.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875075
Sample Date/Time: Monday, July 11, 2005 13:44:22
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 437237|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875075.019

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**66.519**	**ug/L**	0.683	113602	0.098
|	Be	9	**49.484**	**ug/L**	0.939	25274	0.022
|	B	11	**143.508**	**ug/L**	2.682	72452	0.061
|	Na	23	**28569.793**	**ug/L**	2.330	120853503	105.084
|	Mg	24	**8646.956**	**ug/L**	9.598	24656729	21.446
|	Al	27	**2821.115**	**ug/L**	2.188	11528126	10.021
|	P	31	**2066.925**	**ug/L**	6.905	606427	0.519
|	K	39	**2748.782**	**ug/L**	5.955	15490949	12.309
|	Ca	43	**37424.466**	**ug/L**	0.769	470183	0.408
|>	Sc	45		**ug/L**		1149900	1149899.943
|	Ti	47	**64.221**	**ug/L**	2.057	44447	0.038
|	V	51	**66.233**	**ug/L**	9.717	468455	0.383
|	Cr	52	**169.124**	**ug/L**	1.101	1050764	0.902
|	Cr	53		**ug/L**		1318038	0.913
|	Mn	55	**67.891**	**ug/L**	0.815	622463	0.537
|	Fe	57	**3341.032**	**ug/L**	0.880	572967	0.483
|	Co	59	**46.751**	**ug/L**	1.110	336415	0.292
|	Ni	60	**81.144**	**ug/L**	0.575	129700	0.112
|	Cu	63		**ug/L**		525580	0.457
⌊	Cu	65	**142.007**	**ug/L**	0.846	267651	0.233
⌈	Zn	66	**196.910**	**ug/L**	1.917	208498	0.522
|	Zn	67		**ug/L**		127452	0.275
|	Zn	68		**ug/L**		160947	0.400
|>	Ge	74		**ug/L**		398052	398051.786
|	As	75	**43.701**	**ug/L**	3.645	61833	0.146
|	Se	77		**ug/L**		97075	0.204
|	Se	82	**10.443**	**ug/L**	2.319	1276	0.003
⌊	Kr	83		**ug/L**		1358	0.000
⌈	Sr	88	**228.236**	**ug/L**	0.661	2371785	12.971
|	Y	89		**ug/L**		5142	0.028
|	Zr	90	**56.440**	**ug/L**	1.012	353511	1.932
|	Mo	98	**55.591**	**ug/L**	1.056	157658	0.862
|	Ag	107	**51.127**	**ug/L**	1.131	230252	1.259
|	Cd	111	**5.571**	**ug/L**	1.930	6093	0.033
|	Cd	114		**ug/L**		13083	0.071
|>	In	115		**ug/L**		182836	182836.173
|	Sn	120	**52.608**	**ug/L**	1.247	230694	1.261
|	Sb	121	**102.962**	**ug/L**	1.671	411120	2.215
⌊	Sb	123		**ug/L**		320016	1.725
⌈	Ba	135		**ug/L**		77756	0.421
|	Ba	137	**79.253**	**ug/L**	0.747	133287	0.721
|	Ho	165		**ug/L**		260	0.001
|>	Ta	181		**ug/L**		184785	184784.583
|	Tl	205	**50.802**	**ug/L**	1.038	360123	1.948
|	Pb	208	**25.931**	**ug/L**	0.929	236484	1.278
|	Bi	209		**ug/L**		328	0.002
|	Th	232	**54.262**	**ug/L**	0.413	512610	2.767
⌊	U	238	**58.741**	**ug/L**	0.745	555286	3.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		112.9			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		101.2			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		87.9			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		84.0			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1200875073
Sample Date/Time: Monday, July 11, 2005 13:49:36
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 437237|5|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\1200875073.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**5.477**	**ug/L**	0.575	8882	0.008
	Be	9	**0.013**	**ug/L**	80.316	36	0.000
	B	11	**5.979**	**ug/L**	5.419	4471	0.003
	Na	23	**5251.825**	**ug/L**	6.774	20392687	19.317
	Mg	24	**1406.334**	**ug/L**	2.258	3680590	3.488
	Al	27	**137.612**	**ug/L**	0.233	519615	0.489
	P	31	**12.249**	**ug/L**	2.812	12531	0.003
	K	39	**181.797**	**ug/L**	12.064	2085716	0.814
	Ca	43	**7864.624**	**ug/L**	1.510	91601	0.086
>	Sc	45		**ug/L**		1055202	1055202.470
	Ti	47	**4.587**	**ug/L**	2.580	3818	0.003
	V	51	**-16.048**	**ug/L**	9.325	-71590	-0.093
	Cr	52	**27.986**	**ug/L**	3.587	170055	0.149
	Cr	53		**ug/L**		695038	0.425
	Mn	55	**5.086**	**ug/L**	0.995	47291	0.040
	Fe	57	**304.110**	**ug/L**	2.277	62586	0.044
	Co	59	**0.281**	**ug/L**	0.703	2098	0.002
	Ni	60	**8.846**	**ug/L**	2.806	13379	0.012
	Cu	63		**ug/L**		79246	0.075
	Cu	65	**22.823**	**ug/L**	1.113	39655	0.037
	Zn	66	**31.736**	**ug/L**	0.921	33575	0.084
	Zn	67		**ug/L**		44329	0.068
	Zn	68		**ug/L**		27013	0.065
>	Ge	74		**ug/L**		391556	391556.473
	As	75	**1.909**	**ug/L**	58.889	6323	0.006
	Se	77		**ug/L**		46566	0.079
	Se	82	**1.663**	**ug/L**	12.996	197	0.001
	Kr	83		**ug/L**		1303	0.000
	Sr	88	**41.308**	**ug/L**	0.951	464675	2.348
	Y	89		**ug/L**		1191	0.006
	Zr	90	**0.260**	**ug/L**	7.032	2105	0.009
	Mo	98	**0.850**	**ug/L**	3.230	2740	0.013
	Ag	107	**0.005**	**ug/L**	105.642	135	0.000
	Cd	111	**0.003**	**ug/L**	539.379	28	0.000
	Cd	114		**ug/L**		42	-0.000
>	In	115		**ug/L**		197859	197859.050
	Sn	120	**0.129**	**ug/L**	4.283	879	0.003
	Sb	121	**-1.453**	**ug/L**	0.778	522	-0.031
	Sb	123		**ug/L**		422	-0.024
	Ba	135		**ug/L**		5663	0.028
	Ba	137	**5.265**	**ug/L**	0.729	9652	0.048
	Ho	165		**ug/L**		74	0.000
>	Ta	181		**ug/L**		200351	200350.842
	Tl	205	**0.315**	**ug/L**	31.553	2578	0.012
	Pb	208	**1.026**	**ug/L**	1.519	10407	0.051
	Bi	209		**ug/L**		92	0.000
	Th	232	**-0.009**	**ug/L**	256.646	1387	-0.000
	U	238	**0.033**	**ug/L**	13.799	519	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			103.6		
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			99.6		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.1		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181			91.1		
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
V 51 Lower	V	51	Sample is out of limits (<-PQL)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, July 11, 2005 13:54:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 6.021

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**43.100**	**ug/L**	1.274	63120	0.064
|	Be	9	**46.261**	**ug/L**	0.939	20231	0.021
|	B	11	**101.584**	**ug/L**	3.059	44384	0.043
|	Na	23	**5238.369**	**ug/L**	4.277	18997398	19.268
|	Mg	24	**5300.134**	**ug/L**	9.139	12930448	13.145
|	Al	27	**5243.465**	**ug/L**	5.102	18333356	18.626
|	P	31	**5057.512**	**ug/L**	1.361	1257724	1.269
|	K	39	**5200.855**	**ug/L**	6.293	24060410	23.288
|	Ca	43	**5003.923**	**ug/L**	0.495	54781	0.055
|>	Sc	45		**ug/L**		984559	984559.196
|	Ti	47	**49.799**	**ug/L**	1.104	29712	0.029
|	V	51	**52.609**	**ug/L**	3.377	323559	0.304
|	Cr	52	**48.915**	**ug/L**	1.971	268533	0.261
|	Cr	53		**ug/L**		224737	-0.006
|	Mn	55	**51.474**	**ug/L**	1.485	405123	0.407
|	Fe	57	**5279.553**	**ug/L**	1.077	766357	0.763
|	Co	59	**49.150**	**ug/L**	0.798	302786	0.307
|	Ni	60	**48.219**	**ug/L**	1.990	66156	0.067
|	Cu	63		**ug/L**		153277	0.155
⌊	Cu	65	**47.360**	**ug/L**	1.013	76552	0.078
⌈	Zn	66	**49.046**	**ug/L**	2.308	49915	0.130
|	Zn	67		**ug/L**		22729	0.015
|	Zn	68		**ug/L**		39464	0.100
|>	Ge	74		**ug/L**		379163	379163.465
|	As	75	**47.508**	**ug/L**	2.711	63709	0.158
|	Se	77		**ug/L**		13346	-0.004
|	Se	82	**48.109**	**ug/L**	1.150	5614	0.015
⌊	Kr	83		**ug/L**		1209	-0.000
⌈	Sr	88	**53.755**	**ug/L**	6.283	586134	3.055
|	Y	89		**ug/L**		818	0.004
|	Zr	90	**48.108**	**ug/L**	8.959	315993	1.647
|	Mo	98	**50.457**	**ug/L**	5.828	150165	0.782
|	Ag	107	**50.203**	**ug/L**	5.732	237236	1.236
|	Cd	111	**49.968**	**ug/L**	6.021	57148	0.298
|	Cd	114		**ug/L**		134733	0.702
|>	In	115		**ug/L**		192258	192257.628
|	Sn	120	**51.897**	**ug/L**	5.928	238787	1.243
|	Sb	121	**51.249**	**ug/L**	5.653	218024	1.102
⌊	Sb	123		**ug/L**		167766	0.849
⌈	Ba	135		**ug/L**		56710	0.259
|	Ba	137	**49.218**	**ug/L**	1.688	98120	0.448
|	Ho	165		**ug/L**		64	0.000
|>	Ta	181		**ug/L**		219040	219040.065
|	Tl	205	**50.351**	**ug/L**	1.328	423027	1.931
|	Pb	208	**50.511**	**ug/L**	1.980	545634	2.490
|	Bi	209		**ug/L**		71	0.000
|	Th	232	**52.388**	**ug/L**	1.853	586595	2.671
⌊	U	238	**55.850**	**ug/L**	2.503	625649	2.856

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	86.199				
	Be	9	92.523				
	B	11	101.584				
	Na	23	104.767				
	Mg	24	106.003				
	Al	27	103.831				
	P	31	101.150				
	K	39	104.017				
	Ca	43	100.078				
>	Sc	45		96.7			
	Ti	47	99.597				
	V	51	105.218				
	Cr	52	97.831				
	Cr	53					
	Mn	55	102.947				
	Fe	57	105.591				
	Co	59	98.301				
	Ni	60	96.439				
	Cu	63					
	Cu	65	94.720				
	Zn	66	98.093				
	Zn	67					
	Zn	68					
>	Ge	74		96.4			
	As	75	95.017				
	Se	77					
	Se	82	96.218				
	Kr	83					
	Sr	88	107.510				
	Y	89					
	Zr	90	96.215				
	Mo	98	100.915				
	Ag	107	100.406				
	Cd	111	99.936				
	Cd	114					
>	In	115		92.4			
	Sn	120	103.795				
	Sb	121	102.498				
	Sb	123					
	Ba	135					
	Ba	137	98.436				
	Ho	165					
>	Ta	181		99.6			
	Tl	205	100.702				
	Pb	208	101.022				
	Bi	209					
	Th	232	104.775				
	U	238	111.700				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Li	7	CCV is out of limits (+/- 10%)
QC Std 6	U	238	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, July 11, 2005 13:59:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\050711\QC Std 7.022

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	-0.086	ug/L	10.771	186	-0.000
	Be	9	0.001	ug/L	447.821	30	0.000
	B	11	-0.905	ug/L	75.299	1323	-0.000
	Na	23	0.336	ug/L	417.131	21016	0.001
	Mg	24	0.527	ug/L	75.621	2000	0.001
	Al	27	1.005	ug/L	67.603	7335	0.004
	P	31	-3.546	ug/L	37.061	8082	-0.001
	K	39	0.208	ug/L	4886.369	1188141	0.001
	Ca	43	25.695	ug/L	36.082	1427	0.000
>	Sc	45		ug/L		1021657	1021656.739
	Ti	47	0.056	ug/L	94.642	976	0.000
	V	51	-1.925	ug/L	85.254	14092	-0.011
	Cr	52	-0.332	ug/L	45.509	10424	-0.002
	Cr	53		ug/L		346737	0.106
	Mn	55	-0.042	ug/L	44.107	4369	-0.000
	Fe	57	2.171	ug/L	88.808	16009	0.000
	Co	59	-0.005	ug/L	46.868	203	-0.000
	Ni	60	-0.091	ug/L	10.196	313	-0.000
	Cu	63		ug/L		410	0.000
	Cu	65	-0.032	ug/L	34.091	151	-0.000
	Zn	66	-0.147	ug/L	8.056	467	-0.000
	Zn	67		ug/L		23055	0.014
	Zn	68		ug/L		1690	-0.000
>	Ge	74		ug/L		393357	393356.768
	As	75	0.946	ug/L	93.292	5084	0.003
	Se	77		ug/L		21929	0.016
	Se	82	-0.148	ug/L	194.785	-22	-0.000
	Kr	83		ug/L		1270	-0.000
	Sr	88	0.008	ug/L	32.675	308	0.000
	Y	89		ug/L		83	0.000
	Zr	90	0.807	ug/L	18.459	5892	0.028
	Mo	98	0.020	ug/L	45.793	197	0.000
	Ag	107	-0.001	ug/L	343.225	108	-0.000
	Cd	111	0.001	ug/L	279.148	26	0.000
	Cd	114		ug/L		46	-0.000
>	In	115		ug/L		200677	200676.719
	Sn	120	0.059	ug/L	41.335	553	0.001
	Sb	121	-1.286	ug/L	7.161	1254	-0.028
	Sb	123		ug/L		933	-0.021
	Ba	135		ug/L		44	0.000
	Ba	137	-0.001	ug/L	165.920	58	-0.000
	Ho	165		ug/L		24	-0.000
>	Ta	181		ug/L		214094	214094.452
	Tl	205	0.052	ug/L	7.818	600	0.002
	Pb	208	-0.001	ug/L	135.189	277	-0.000
	Bi	209		ug/L		32	0.000
	Th	232	0.199	ug/L	45.408	3763	0.010
	U	238	-0.002	ug/L	118.057	170	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9998
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	0.9999
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		100.3			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		100.0			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		96.5			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		97.3			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: WATER1
Method Description: 7470A, 245.2, ILM04 ANALYST NOR1
Element: Hg

Date: 06/30/2005
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: 063005W1.SIF Results Data Set Name: 063005W1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 06/30/2005
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0045	0.0045	09:41:01	No
2			0.0045	0.0045	09:41:36	No
Mean:			0.0045			
SD :			0.0000			
%RSD:			1.0275			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 06/30/2005
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0033	0.0078	09:42:58	No
2			0.0033	0.0078	09:43:33	No
Mean:			0.0033			
SD :			0.0000			
%RSD:			0.3757			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.01661

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 06/30/2005
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0076	0.0121	09:44:56	No
2			0.0076	0.0121	09:45:31	No
Mean:			0.0076			
SD :			0.0000			
%RSD:			0.2743			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99700 Slope: 0.01545

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 06/30/2005
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0289	0.0334	09:46:56	No
2			0.0289	0.0334	09:47:30	No
Mean:			0.0289			
SD :			0.0000			
%RSD:			0.1182			

[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99958 Slope: 0.01452

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 06/30/2005
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0700	0.0745	09:48:56	No
2			0.0697	0.0742	09:49:31	No
Mean:			0.0699			
SD :			0.0002			
%RSD:			0.2918			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99976 Slope: 0.01406

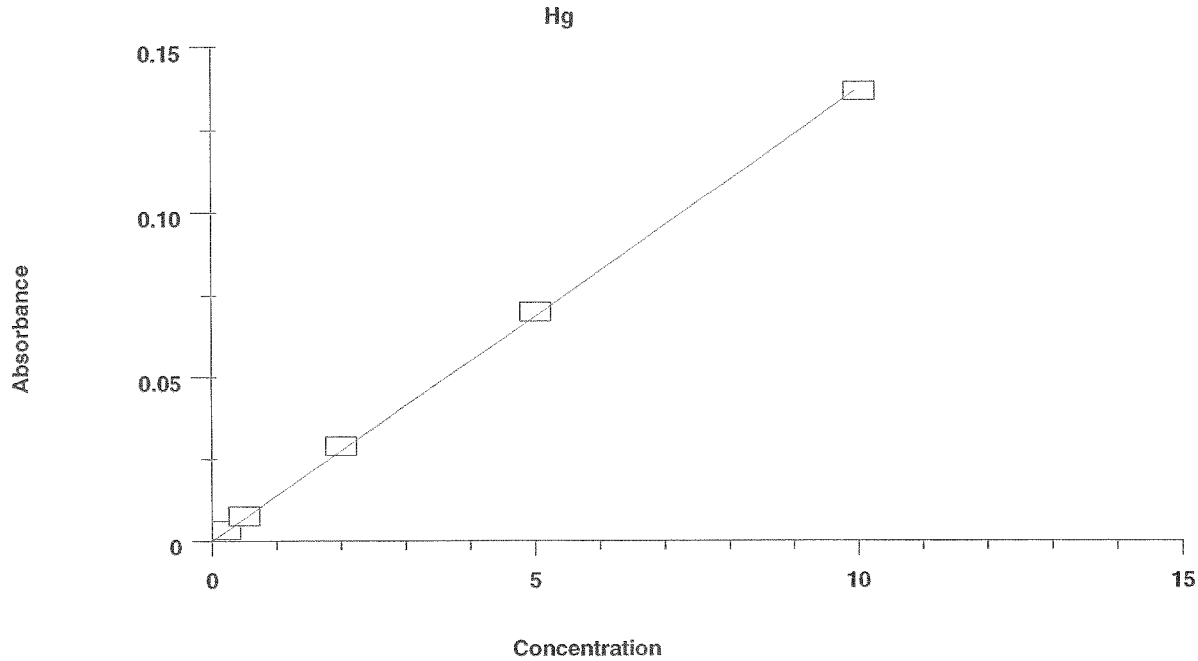
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 06/30/2005
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.1364	0.1409	09:50:57	No
2			0.1357	0.1402	09:51:31	No
Mean:			0.1360			
SD :			0.0005			
%RSD:			0.3697			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99976 Slope: 0.01371

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0045	---	----	----	----
S0.2	0.0033	0.200	0.242	0.0000	0.4
S0.5	0.0076	0.500	0.556	0.0000	0.3
S2.0	0.0289	2.000	2.107	0.0000	0.1
S5.0	0.0699	5.000	5.097	0.0002	0.3
S10	0.1361	10.000	9.923	0.0005	0.4
Correlation Coefficient: 0.99976		Slope:	0.01371	----	




```
================================================================================
Element: Hg    Seq. No.: 7        AS Loc.: 9   Date: 06/30/2005
Sample ID: ICV
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.057     5.057    0.0693     0.0738   09:52:59  No
 2        5.045     5.045    0.0692     0.0737   09:53:34  No
Mean:     5.051     5.051    0.0692
SD  :    0.0080    0.0080    0.0001
%RSD:       0.2       0.2    0.1589
QC value within specified limits.

================================================================================
Element: Hg    Seq. No.: 8        AS Loc.: 10   Date: 06/30/2005
Sample ID: ICB
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.005     0.005    0.0001     0.0046   09:54:56  No
 2        0.001     0.001    0.0000     0.0045   09:55:31  No
Mean:     0.003     0.003    0.0000
SD  :    0.0026    0.0026    0.0000
%RSD:     100.0     100.0  100.0285
QC value within specified limits.

================================================================================
Element: Hg    Seq. No.: 9        AS Loc.: 11   Date: 06/30/2005
Sample ID: CRDL
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.239     0.239    0.0033     0.0078   09:56:54  No
 2        0.232     0.232    0.0032     0.0077   09:57:29  No
Mean:     0.235     0.235    0.0032
SD  :    0.0053    0.0053    0.0001
%RSD:       2.2       2.2    2.2340
```

QC value within specified limits.

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 06/30/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.093	5.093	0.0698	0.0743	09:58:55	No
2	5.098	5.098	0.0699	0.0744	09:59:30	No
Mean:	5.095	5.095	0.0699			
SD :	0.0033	0.0033	0.0000			
%RSD:						

QC value within specified limits.

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 06/30/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0003	0.0048	10:00:58	No
2	0.013	0.013	0.0002	0.0047	10:01:32	No
Mean:	0.016	0.016	0.0002			
SD :	0.0042	0.0042	0.0001			
%RSD:	26.8	26.8	26.8288			

QC value within specified limits.

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 06/30/2005
Sample ID: 1200873755|i||437325|TB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.073	0.073	0.0010	0.0055	10:02:58	No
2	0.068	0.068	0.0009	0.0054	10:03:33	No
Mean:	0.071	0.071	0.0010			
SD :	0.0037	0.0037	0.0001			
%RSD:	5.2	5.2	5.2342			

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 06/30/2005
Sample ID: 1200875202|i|||MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.098	0.098	0.0013	0.0058	10:04:56	No
2	0.087	0.087	0.0012	0.0057	10:05:31	No
Mean:	0.092	0.092	0.0013			
SD :	0.0074	0.0074	0.0001			
%RSD:	8.0	8.0	8.0124			

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 06/30/2005
Sample ID: 1200875203|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.037	2.037	0.0279	0.0324	10:06:57	No
2	2.036	2.036	0.0279	0.0324	10:07:31	No
Mean:	2.036	2.036	0.0279			
SD :	0.0002	0.0002	0.0000			
%RSD:						

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 06/30/2005
Sample ID: 138741001|i|

%RSD: 2.1 2.1 2.0819

==========

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 06/30/2005
Sample ID: 138741004|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0013	0.0058	10:20:44	No
2	0.091	0.091	0.0013	0.0058	10:21:18	No
Mean:	0.094	0.094	0.0013			
SD :	0.0037	0.0037	0.0001			
%RSD:	4.0	4.0	3.9502			

==========

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 06/30/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.059	5.059	0.0694	0.0739	10:22:44	No
2	5.057	5.057	0.0693	0.0738	10:23:19	No
Mean:	5.058	5.058	0.0693			
SD :	0.0015	0.0015	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 06/30/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0003	0.0048	10:24:47	No
2	0.015	0.015	0.0002	0.0047	10:25:22	No
Mean:	0.019	0.019	0.0003			
SD :	0.0054	0.0054	0.0001			
%RSD:	27.9	27.9	27.8933			

QC value within specified limits.

==========

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 06/30/2005
Sample ID: 138741005|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.103	0.103	0.0014	0.0059	10:26:47	No
2	0.096	0.096	0.0013	0.0058	10:27:22	No
Mean:	0.099	0.099	0.0014			
SD :	0.0045	0.0045	0.0001			
%RSD:	4.5	4.5	4.4959			

==========

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 06/30/2005
Sample ID: 138741006|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0013	0.0058	10:28:46	No
2	0.091	0.091	0.0012	0.0058	10:29:21	No
Mean:	0.094	0.094	0.0013			
SD :	0.0037	0.0037	0.0001			
%RSD:	3.9	3.9	3.9319			

==========

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 06/30/2005
Sample ID: 138741007|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.079	0.079	0.0011	0.0056	10:30:45	No
2	0.074	0.074	0.0010	0.0055	10:31:21	No
Mean:	0.077	0.077	0.0010			
SD :	0.0042	0.0042	0.0001			
%RSD:	5.5	5.5	5.4858			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 06/30/2005
Sample ID: 138748001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.093	0.093	0.0013	0.0058	10:32:45	No
2	0.082	0.082	0.0011	0.0056	10:33:21	No
Mean:	0.088	0.088	0.0012			
SD :	0.0078	0.0078	0.0001			
%RSD:	8.9	8.9	8.9146			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 06/30/2005
Sample ID: 138748002|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.096	0.096	0.0013	0.0058	10:34:46	No
2	0.089	0.089	0.0012	0.0057	10:35:21	No
Mean:	0.092	0.092	0.0013			
SD :	0.0051	0.0051	0.0001			
%RSD:	5.6	5.6	5.5553			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 06/30/2005
Sample ID: 138748003|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.088	0.088	0.0012	0.0057	10:36:46	No
2	0.084	0.084	0.0011	0.0057	10:37:21	No
Mean:	0.086	0.086	0.0012			
SD :	0.0030	0.0030	0.0000			
%RSD:	3.5	3.5	3.5313			

Element: Hg Seq. No.: 30 AS Loc.: 7 Date: 06/30/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.999	4.999	0.0685	0.0730	10:38:47	No
2	4.999	4.999	0.0685	0.0730	10:39:21	No
Mean:	4.999	4.999	0.0685			
SD :	0.0001	0.0001	0.0000			
%RSD:						

QC value within specified limits.

Element: Hg Seq. No.: 31 AS Loc.: 8 Date: 06/30/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0002	0.0047	10:40:49	No
2	0.004	0.004	0.0001	0.0046	10:41:24	No
Mean:	0.008	0.008	0.0001			

SD :	0.0054	0.0054	0.0001
%RSD:	71.5	71.5	71.5118

QC value within specified limits.

```
SD  :    0.0070    0.0070    0.0001
%RSD:      57.4      57.4   57.3615

================================================================================
Element: Hg    Seq. No.: 38       AS Loc.: 18   Date: 06/30/2005
Sample ID: 138990002|i|
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1        0.093     0.093    0.0013     0.0058   10:59:04  No
 2        0.090     0.090    0.0012     0.0057   10:59:39  No
Mean:     0.092     0.092    0.0013
SD  :    0.0021    0.0021    0.0000
%RSD:       2.3       2.3    2.2545

================================================================================
Element: Hg    Seq. No.: 39       AS Loc.: 19   Date: 06/30/2005
Sample ID: 138990003|i|
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1      -0.006    -0.006   -0.0001     0.0044   11:01:00  No
 2      -0.006    -0.006   -0.0001     0.0044   11:01:34  No
Mean:   -0.006    -0.006   -0.0001
SD  :    0.0001    0.0001    0.0000
%RSD:       1.1       1.1    1.1405

================================================================================
Element: Hg    Seq. No.: 40       AS Loc.: 20   Date: 06/30/2005
Sample ID: 1200873510|i||437383|TB
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1        0.007     0.007    0.0001     0.0046   11:02:57  No
 2       -0.002    -0.002    0.0000     0.0045   11:03:31  No
Mean:     0.002     0.002    0.0000
SD  :    0.0063    0.0063    0.0001
%RSD:     272.4     272.4  272.3647

================================================================================
Element: Hg    Seq. No.: 41       AS Loc.: 21   Date: 06/30/2005
Sample ID: 1200875375|i|||MB
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1      -0.004    -0.004   -0.0001     0.0044   11:04:54  No
 2      -0.005    -0.005   -0.0001     0.0044   11:05:29  No
Mean:   -0.005    -0.005   -0.0001
SD  :    0.0009    0.0009    0.0000
%RSD:      18.4      18.4   18.4426

================================================================================
Element: Hg    Seq. No.: 42       AS Loc.: 7   Date: 06/30/2005
Sample ID: CCV
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1        4.926     4.926    0.0675     0.0720   11:06:53  No
 2        4.912     4.912    0.0673     0.0718   11:07:28  No
Mean:     4.919     4.919    0.0674
SD  :    0.0103    0.0103    0.0001
%RSD:       0.2       0.2    0.2086
QC value within specified limits.

================================================================================
Element: Hg    Seq. No.: 43       AS Loc.: 8   Date: 06/30/2005
Sample ID: CCB
```

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0045	11:08:56	No
2	-0.007	-0.007	-0.0001	0.0044	11:09:31	No
Mean:	-0.003	-0.003	0.0000			
SD :	0.0061	0.0061	0.0001			
%RSD:	190.5	190.5	190.4864			

QC value within specified limits.

Element: Hg Seq. No.: 44 AS Loc.: 22 Date: 06/30/2005
Sample ID: 1200875376|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.051	2.051	0.0281	0.0326	11:10:56	No
2	2.033	2.033	0.0279	0.0324	11:11:31	No
Mean:	2.042	2.042	0.0280			
SD :	0.0127	0.0127	0.0002			
%RSD:	0.6	0.6	0.6200			

Element: Hg Seq. No.: 45 AS Loc.: 23 Date: 06/30/2005
Sample ID: 139138001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0046	11:12:54	No
2	0.002	0.002	0.0000	0.0045	11:13:30	No
Mean:	0.004	0.004	0.0001			
SD :	0.0040	0.0040	0.0001			
%RSD:	89.5	89.5	89.4669			

Element: Hg Seq. No.: 46 AS Loc.: 24 Date: 06/30/2005
Sample ID: 139138002|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.022	-0.022	-0.0003	0.0042	11:14:53	No
2	-0.022	-0.022	-0.0003	0.0042	11:15:28	No
Mean:	-0.022	-0.022	-0.0003			
SD :	0.0001	0.0001	0.0000			
%RSD:	0.4	0.4	0.4101			

Element: Hg Seq. No.: 47 AS Loc.: 25 Date: 06/30/2005
Sample ID: 139138003|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0003	0.0042	11:16:52	No
2	0.019	0.019	0.0003	0.0048	11:17:27	No
Mean:	-0.001	-0.001	0.0000			
SD :	0.0285	0.0285	0.0004			
%RSD:	2223	2223	2222.6245			

Element: Hg Seq. No.: 48 AS Loc.: 26 Date: 06/30/2005
Sample ID: 139138004|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0004	0.0041	11:18:51	No
2	-0.030	-0.030	-0.0004	0.0041	11:19:26	No
Mean:	-0.029	-0.029	-0.0004			

SD :	0.0011	0.0011	0.0000
%RSD:	3.6	3.6	3.6366

Element: Hg Seq. No.: 49 AS Loc.: 27 Date: 06/30/2005
Sample ID: 1200875377|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0005	0.0040	11:20:51	No
2	-0.035	-0.035	-0.0005	0.0040	11:21:25	No
Mean:	-0.035	-0.035	-0.0005			
SD :	0.0012	0.0012	0.0000			
%RSD:	3.3	3.3	3.3142			

Element: Hg Seq. No.: 50 AS Loc.: 28 Date: 06/30/2005
Sample ID: 1200873507|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.886	0.886	0.0121	0.0166	11:22:51	No
2	0.888	0.888	0.0122	0.0167	11:23:26	No
Mean:	0.887	0.887	0.0122			
SD :	0.0014	0.0014	0.0000			
%RSD:	0.2	0.2	0.1571			

Element: Hg Seq. No.: 51 AS Loc.: 29 Date: 06/30/2005
Sample ID: 1200875380|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.044	-0.044	-0.0006	0.0039	11:24:53	No
2	-0.046	-0.046	-0.0006	0.0039	11:25:27	No
Mean:	-0.045	-0.045	-0.0006			
SD :	0.0012	0.0012	0.0000			
%RSD:	2.7	2.7	2.7458			

Element: Hg Seq. No.: 52 AS Loc.: 30 Date: 06/30/2005
Sample ID: 1200875346|i||437374|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0004	0.0041	11:26:54	No
2	-0.036	-0.036	-0.0005	0.0040	11:27:29	No
Mean:	-0.035	-0.035	-0.0005			
SD :	0.0026	0.0026	0.0000			
%RSD:	7.7	7.7	7.6631			

Element: Hg Seq. No.: 53 AS Loc.: 31 Date: 06/30/2005
Sample ID: 1200875353|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.002	2.002	0.0275	0.0320	11:28:56	No
2	2.002	2.002	0.0275	0.0320	11:29:31	No
Mean:	2.002	2.002	0.0275			
SD :	0.0000	0.0000	0.0000			
%RSD:						

Element: Hg Seq. No.: 54 AS Loc.: 7 Date: 06/30/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.855	4.855	0.0666	0.0711	11:30:58	No
2	4.840	4.840	0.0664	0.0709	11:31:32	No
Mean:	4.848	4.848	0.0665			
SD :	0.0101	0.0101	0.0001			
%RSD:	0.2	0.2	0.2088			

QC value within specified limits.

==========

Element: Hg Seq. No.: 55 AS Loc.: 8 Date: 06/30/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.022	-0.022	-0.0003	0.0042	11:33:00	No
2	-0.025	-0.025	-0.0003	0.0042	11:33:35	No
Mean:	-0.023	-0.023	-0.0003			
SD :	0.0022	0.0022	0.0000			
%RSD:	9.4	9.4	9.4152			

QC value within specified limits.

==========

Element: Hg Seq. No.: 56 AS Loc.: 32 Date: 06/30/2005
Sample ID: 139405001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0004	0.0041	11:34:59	No
2	-0.032	-0.032	-0.0004	0.0041	11:35:33	No
Mean:	-0.031	-0.031	-0.0004			
SD :	0.0009	0.0009	0.0000			
%RSD:	2.9	2.9	2.9454			

==========

Element: Hg Seq. No.: 57 AS Loc.: 33 Date: 06/30/2005
Sample ID: 1200875347|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0004	0.0041	11:36:54	No
2	-0.034	-0.034	-0.0005	0.0040	11:37:28	No
Mean:	-0.032	-0.032	-0.0004			
SD :	0.0020	0.0020	0.0000			
%RSD:	6.1	6.1	6.0955			

==========

Element: Hg Seq. No.: 58 AS Loc.: 34 Date: 06/30/2005
Sample ID: 1200875351|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.031	2.031	0.0278	0.0324	11:38:49	No
2	2.033	2.033	0.0279	0.0324	11:39:23	No
Mean:	2.032	2.032	0.0279			
SD :	0.0017	0.0017	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 59 AS Loc.: 35 Date: 06/30/2005
Sample ID: 1200875349|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.052	-0.052	-0.0007	0.0038	11:40:44	No
2	-0.054	-0.054	-0.0007	0.0038	11:41:19	No
Mean:	-0.053	-0.053	-0.0007			

```
SD  :    0.0016    0.0016    0.0000
%RSD:       3.1       3.1    3.0869

================================================================================
Element: Hg    Seq. No.: 60       AS Loc.: 36   Date: 06/30/2005
Sample ID: 139405002|i|
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1       -0.041    -0.041   -0.0006     0.0039   11:42:41  No
 2       -0.042    -0.042   -0.0006     0.0039   11:43:16  No
Mean:    -0.041    -0.041   -0.0006
SD  :    0.0009    0.0009    0.0000
%RSD:       2.1       2.1    2.1061

================================================================================
Element: Hg    Seq. No.: 61       AS Loc.: 37   Date: 06/30/2005
Sample ID: 1200875348|i|||DUP
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1       -0.040    -0.040   -0.0005     0.0040   11:44:38  No
 2       -0.039    -0.039   -0.0005     0.0040   11:45:12  No
Mean:    -0.039    -0.039   -0.0005
SD  :    0.0005    0.0005    0.0000
%RSD:       1.4       1.4    1.4011

================================================================================
Element: Hg    Seq. No.: 62       AS Loc.: 38   Date: 06/30/2005
Sample ID: 1200875352|i|||MS
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1        2.010     2.010    0.0276     0.0321   11:46:34  No
 2        2.020     2.020    0.0277     0.0322   11:47:09  No
Mean:    2.015     2.015    0.0276
SD  :   0.0072    0.0072    0.0001
%RSD:       0.4       0.4    0.3583

================================================================================
Element: Hg    Seq. No.: 63       AS Loc.: 39   Date: 06/30/2005
Sample ID: 1200875350|i|5||SDILT
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1       -0.046    -0.046   -0.0006     0.0039   11:48:32  No
 2       -0.049    -0.049   -0.0007     0.0038   11:49:08  No
Mean:    -0.047    -0.047   -0.0006
SD  :    0.0020    0.0020    0.0000
%RSD:       4.2       4.2    4.1619

================================================================================
Element: Hg    Seq. No.: 64       AS Loc.: 40   Date: 06/30/2005
Sample ID: 1200876272|i||437750|MB
--------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time   Peak
 #     µg/L        µg/L       Signal     Height           Stored
 1       -0.006    -0.006   -0.0001     0.0044   11:50:32  No
 2       -0.002    -0.002    0.0000     0.0045   11:51:07  No
Mean:    -0.004    -0.004   -0.0001
SD  :    0.0026    0.0026    0.0000
%RSD:      65.1      65.1   65.1195

================================================================================
Element: Hg    Seq. No.: 65       AS Loc.: 41   Date: 06/30/2005
Sample ID: 1200876273|i|||LCS
--------------------------------------------------------------------------------
```

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.039	2.039	0.0280	0.0325	11:52:31	No
2	2.041	2.041	0.0280	0.0325	11:53:06	No
Mean:	2.040	2.040	0.0280			
SD :	0.0015	0.0015	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 66 AS Loc.: 7 Date: 06/30/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.904	4.904	0.0672	0.0717	11:54:31	No
2	4.929	4.929	0.0676	0.0721	11:55:06	No
Mean:	4.917	4.917	0.0674			
SD :	0.0178	0.0178	0.0002			
%RSD:	0.4	0.4	0.3612			

QC value within specified limits.

==========

Element: Hg Seq. No.: 67 AS Loc.: 8 Date: 06/30/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0002	0.0043	11:56:34	No
2	-0.014	-0.014	-0.0002	0.0043	11:57:09	No
Mean:	-0.013	-0.013	-0.0002			
SD :	0.0012	0.0012	0.0000			
%RSD:	9.3	9.3	9.2532			

QC value within specified limits.

==========

Element: Hg Seq. No.: 68 AS Loc.: 42 Date: 06/30/2005
Sample ID: 1200876274|i|||LCSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.031	2.031	0.0279	0.0324	11:58:35	No
2	2.022	2.022	0.0277	0.0322	11:59:10	No
Mean:	2.027	2.027	0.0278			
SD :	0.0069	0.0069	0.0001			
%RSD:	0.3	0.3	0.3409			

==========

Element: Hg Seq. No.: 69 AS Loc.: 43 Date: 06/30/2005
Sample ID: 138993003|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	0.0044	12:00:36	No
2	-0.017	-0.017	-0.0002	0.0043	12:01:11	No
Mean:	-0.014	-0.014	-0.0002			
SD :	0.0046	0.0046	0.0001			
%RSD:	32.7	32.7	32.6760			

==========

Element: Hg Seq. No.: 70 AS Loc.: 44 Date: 06/30/2005
Sample ID: 1200875279|i||437347|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0002	0.0043	12:02:36	No
2	-0.026	-0.026	-0.0004	0.0041	12:03:11	No
Mean:	-0.022	-0.022	-0.0003			

Miscellaneous

Prep LogBook

Analyst: MXW1 Verified by:_____

Batch: 437220

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200875019	UI316123-01	.25	mL
LCS	1200875019	UI316125-06	.25	mL
MS	1200875017	UI316123-01	.25	mL
MS	1200875017	UI316125-06	.25	mL
MS	1200875018	UI316123-01	.25	mL
MS	1200875018	UI316125-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200875012		SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
LCS	1200875019		SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	139405001		SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
DUP	1200875013	139405001	SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200875015	139405001	SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
MS	1200875017	139405001	SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	139405002		SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
DUP	1200875014	139405002	SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200875016	139405002	SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER
MS	1200875018	139405002	SW846 3005A	28-JUN-2005 08:00	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
314189	2.5 mL	HYDROCHLORIC ACID
314199	1 mL	Nitric Acid CONC.

Comments

Prep LogBook

Analyst: ETL Verified by:_____

Batch: 437372

Lab SOP: GL-MA-E-010 REV# 16

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200875353	WHG050629-13	.2	mL
MS	1200875351	WHG050629-13	.2	mL
MS	1200875352	WHG050629-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200875346		SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
LCS	1200875353		SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
SAMPLE	139405001		SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
DUP	1200875347	139405001	SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
SDILT	1200875349	139405001	SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
MS	1200875351	139405001	SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
SAMPLE	139405002		SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
DUP	1200875348	139405002	SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
SDILT	1200875350	139405002	SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER
MS	1200875352	139405002	SW846 7470A Prep	29-JUN-2005 11:30	20 mL	20 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
312539	1 mL	Sulfuric Acid, Concentrated
312532-1	.5 mL	NITRIC ACID
317568-C	1.5 mL	5% Potassium Persulfate
317564-C	3 mL	5% KMnO4 solution
317566-C	1 mL	Hg reducing agent
WHG050629-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG050629-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG050629-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG050629-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG050629-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG050629-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments Digestion Start Date: 29-JUN-05 11:30
Digestion End Date: 29-JUN-05 13:30

Prep LogBook

Analyst: FGA Verified by:_____

Batch: 437236

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200875076	UI050610A	.5	mL
MS	1200875074	UI050608-02	.5	mL
MS	1200875075	UI050608-02	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200875069		SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
LCS	1200875076		SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	139405001		SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1200875070	139405001	SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200875072	139405001	SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
MS	1200875074	139405001	SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	139405002		SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1200875071	139405002	SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200875073	139405002	SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER
MS	1200875075	139405002	SW846 3005A	06-JUL-2005 11:00	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
314189	2.5 mL	HYDROCHLORIC ACID
309968	1 mL	Nitric Acid CONC.

Comments

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-JUN-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3005/6010B	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
437221	See Below		

Potentially affected work order(s)(SDG): 139405

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1200875014DUP	1. The %RPDs for Chromium, Iron and Nickel between the parent sample and the duplicate are outside the acceptancee limits. The %RPDs for the other elements in the sublist pass criteria. The data is qualified and reported.

Originator's Name:

Tammy Woodie 30-JUN-05

Data Validator/Group Leader:

Quality Review:

Director:

General Chemistry Analysis

General Chemistry Narrative
Los Alamos National Laboratory (ESHL)
SDG 139405

Method/Analysis Information

Product: **Carbon, Total Organic**

Analytical Batch: 437540 **Method:** SW846 9060

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9060:

Sample ID	Client ID
139405002	GU05050GMC401
1200875735	Method Blank (MB)
1200875737	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200875739	139405002(GU05050GMC401) Post Spike (PS)
1200875740	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-093 REV# 5.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Carbon analysis was performed on a O-I Analytical Model 1010 Total Organic Carbon Analyzer.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 139405002 (GU05050GMC401) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
A 15 mg/L Total Inorganic Carbon check standard is analyzed with each analytical run to prove that the instrument is effectively sparging away the inorganic carbon.

Method/Analysis Information

Product:	**Specific Conductivity**		
Analytical Batch:	439386	**Method:**	SW846 9050A

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9050A:

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200879888	139405001(GF05050GMC401) Sample Duplicate (DUP)
1200879889	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200879890	139406001(GF0506G32R101) Sample Duplicate (DUP)
1200879891	139409001(GF05060PEGR01) Sample Duplicate (DUP)
1200879892	139524001(GF05060PUOR01) Sample Duplicate (DUP)
1200879893	139545001(GF0506G32R301) Sample Duplicate (DUP)
1200879894	139551001(GF0506G33R201) Sample Duplicate (DUP)
1200879895	139551002(GU0506G33R201) Sample Duplicate (DUP)
1200879896	139713001(GF05060PBJZ01) Sample Duplicate (DUP)
1200879897	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-009 REV# 6.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Conductivity analysis was performed on a Orion 160 Conductivity Meter.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139405001 (GF05050GMC401), 139405002 (GU05050GMC401), 139406001 (GF0506G32R101), 139409001 (GF05060PEGR01), 139524001 (GF05060PUOR01), 139545001 (GF0506G32R301), 139551001 (GF0506G33R201), 139551002 (GU0506G33R201) and 139713001 (GF05060PBJZ01) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **pH**

Analytical Batch: 437861 **Method:** EPA 150.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 150.1:

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200876541	139405001(GF05050GMC401) Sample Duplicate (DUP)
1200876542	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200876543	139406001(GF0506G32R101) Sample Duplicate (DUP)
1200876544	139409001(GF05060PEGR01) Sample Duplicate (DUP)
1200876545	Laboratory Control Sample (LCS)
1200876663	139524001(GF05060PUOR01) Sample Duplicate (DUP)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 9.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Electrode analysis was performed on a Orion EA940 pH/Ion Selective Electrode Meter .

Initial Calibration
All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139405001 (GF05050GMC401), 139405002 (GU05050GMC401), 139406001 (GF0506G32R101), 139409001 (GF05060PEGR01) and 139524001 (GF05060PUOR01) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
The following samples from this sample group were received by the lab outside of the method specified holding time: 139405001 (GF05050GMC401) and 139405002 (GU05050GMC401).

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	437476	**Method:**	SW846 9012A
Prep Batch :	437474	**Method:**	SW846 9010B Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
139405001	GF05050GMC401
1200875592	Method Blank (MB)
1200875593	Laboratory Control Sample (LCS)
1200875594	139409001(GF05060PEGR01) Sample Duplicate (DUP)
1200875595	139409001(GF05060PEGR01) Matrix Spike (MS)
1200875602	139193001(GF05060GSTS01) Sample Duplicate (DUP)
1200875603	139193001(GF05060GSTS01) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Flow Injection analysis was performed on a Lachat QuickChem FIA+.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139193001 (GF05060GSTS01) and 139409001 (GF05060PEGR01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate for this sample group are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable for sample 1200875602 (GF05060GSTS01).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Ion Chromatography**		
Analytical Batch:	437414	**Method:**	EPA 300.0

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200875449	Method Blank (MB)
1200875450	139349001(GF05060PCCR01) Sample Duplicate (DUP)
1200875451	139406001(GF0506G32R101) Sample Duplicate (DUP)
1200875452	139349001(GF05060PCCR01) Post Spike (PS)
1200875453	139406001(GF0506G32R101) Post Spike (PS)
1200875454	Laboratory Control Sample (LCS)
1200875455	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200875456	139405002(GU05050GMC401) Post Spike (PS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Ion Chromatography analysis was performed on a Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139349001 (GF05060PCCR01), 139405002 (GU05050GMC401) and 139406001 (GF0506G32R101) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recoveries of 116% and 120% for Sulfate and Chloride respectively were outside of the required acceptance limits due to matrix interference. The recoveries for the 1x PS are107 and 101% respectively for Bromide and Fluoride. These confirm matrix interference for Sulfate on the neat run. The recoveries for the 2x run are 104%, 106% and 110% for Fluoride, Bromide, and Sulfate respectively. These recoveries confirm matrix interference for the 2x Chloride run. 1200875456 (GU05050GMC401) and 139405002 (GU05050GMC401).
The spike recovery of 113% for Sulfate was outside of the required acceptance limits due to matrix interference. The recoveries for this PS at a 2x dilution are 102%, 105%, 106%, 103%, 102% and 106 % for Fluoride, Chloride, Orthophosphate, Nitrite, Nitrate, and Bromide respectively. 1200875452 (GF05060PCCR01).

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for samples 1200875450 (GF05060PCCR01), 1200875452 (GF05060PCCR01), 1200875455 (GU05050GMC401), 1200875456 (GU05050GMC401), 139405001 (GF05050GMC401) and 139405002 (GU05050GMC401).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
NCR ID 215526 was submitted for PS failures. 1200875452 (GF05060PCCR01) and 1200875456 (GU05050GMC401).

Manual Integrations
The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1200875449 (MB).

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Perchlorate**		
Analytical Batch:	437404	**Method:**	EPA 314.0 DOE-AL

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 314.0 DOE-AL:

Sample ID	Client ID
139405001	GF05050GMC401
1200875405	Method Blank (MB)
1200875406	139349001(GF05060PCCR01) Sample Duplicate (DUP)
1200875407	139406001(GF0506G32R101) Sample Duplicate (DUP)
1200875408	139349001(GF05060PCCR01) Post Spike (PS)
1200875409	139406001(GF0506G32R101) Post Spike (PS)
1200875410	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-096 REV# 4.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Ion Chromatography analysis was performed on a Dionex Ion Chromatograph.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139349001 (GF05060PCCR01) and 139406001 (GF0506G32R101) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for sample 139405001 (GF05050GMC401).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
Manual integrations were not required for the samples in this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Kjeldahl Nitrogen**		
Analytical Batch:	437638	**Method:**	EPA 351.2
Prep Batch :	437634	**Method:**	EPA 351.2 Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 351.2:

Sample ID	Client ID
139405002	GU05050GMC401
1200876012	Method Blank (MB)
1200876013	Laboratory Control Sample (LCS)
1200876014	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200876015	139405002(GU05050GMC401) Matrix Spike (MS)
1200876019	139406001(GF0506G32R101) Sample Duplicate (DUP)
1200876020	139409001(GF05060PEGR01) Sample Duplicate (DUP)
1200876021	139406001(GF0506G32R101) Matrix Spike (MS)
1200876022	139409001(GF05060PEGR01) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-104 REV# 1.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139405002 (GU05050GMC401), 139406001 (GF0506G32R101) and 139409001 (GF05060PEGR01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery for sample 1200876022 (GF05060PEGR01) was outside of the required acceptance limits due to matrix interference.

Duplicate Relative Percent Difference (RPD) Statement
The values for the samples and duplicates for this sample group are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable for samples 1200876014 (GU05050GMC401), 1200876019 (GF0506G32R101), 1200876020 (GF05060PEGR01) and 139405002 (GU05050GMC401).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 216136 1200876022 (GF05060PEGR01).

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Nitrate + Nitrite**		
Analytical Batch:	437623	**Method:**	EPA 353.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 353.1:

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200875979	Method Blank (MB)
1200875980	Laboratory Control Sample (LCS)
1200875981	139405001(GF05050GMC401) Sample Duplicate (DUP)
1200875982	139405001(GF05050GMC401) Post Spike (PS)
1200875987	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200875988	139409001(GF05060PEGR01) Sample Duplicate (DUP)
1200875990	139405002(GU05050GMC401) Post Spike (PS)
1200875991	139409001(GF05060PEGR01) Post Spike (PS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-108 REV# 0.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Konelab 20.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139405001 (GF05050GMC401), 139405002 (GU05050GMC401) and 139409001 (GF05060PEGR01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for samples 1200875981 (GF05050GMC401), 1200875982 (GF05050GMC401), 1200875987 (GU05050GMC401), 1200875990 (GU05050GMC401), 139405001 (GF05050GMC401) and 139405002 (GU05050GMC401).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Phosphorus**		
Analytical Batch:	437643	**Method:**	EPA 365.4
Prep Batch :	437641	**Method:**	EPA 365.4 Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 365.4:

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200876031	Method Blank (MB)
1200876032	Laboratory Control Sample (LCS)
1200876033	139405001(GF05050GMC401) Sample Duplicate (DUP)
1200876034	139405001(GF05050GMC401) Matrix Spike (MS)
1200876035	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200876036	139409001(GF05060PEGR01) Sample Duplicate (DUP)
1200876037	139405002(GU05050GMC401) Matrix Spike (MS)
1200876038	139409001(GF05060PEGR01) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-103 REV# 2.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139405001 (GF05050GMC401), 139405002 (GU05050GMC401) and 139409001 (GF05060PEGR01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the samples and duplicates for this sample group are less than 5 times the Practical Quantitation Limit (PQL) and within one PQL value of each other; therefore, the RPD is not applicable for samples 1200876033 (GF05050GMC401) and 139405001 (GF05050GMC401).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The original matrix QC failed and was re-analyzed with passing results for the following samples: 1200876035 (GU05050GMC401), 1200876037 (GU05050GMC401) and 139405002 (GU05050GMC401).

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Solids, Total Dissolved**		
Analytical Batch:	437838	**Method:**	EPA 160.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 160.1:

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200876468	Method Blank (MB)
1200876469	139405001(GF05050GMC401) Sample Duplicate (DUP)
1200876470	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200876471	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-001 REV# 7.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Solids analysis was performed on a Sartorius Balance.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139405001 (GF05050GMC401) and 139405002 (GU05050GMC401) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Solids, Total Suspended**		
Analytical Batch:	437449	**Method:**	EPA 160.2

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 160.2:

Sample ID	Client ID
139405002	GU05050GMC401
1200875539	Method Blank (MB)
1200875540	Laboratory Control Sample (LCS)
1200875863	139405002(GU05050GMC401) Sample Duplicate (DUP)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-012 REV# 6.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Solids analysis was performed on a Sartorius Balance.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 139405002 (GU05050GMC401) was designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Alkalinity**

Analytical Batch: 438643 **Method:** EPA 310.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 310.1:

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200878199	Laboratory Control Sample (LCS)
1200878200	139405001(GF05050GMC401) Sample Duplicate (DUP)
1200878201	139405001(GF05050GMC401) Matrix Spike (MS)
1200878202	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200878203	139405002(GU05050GMC401) Matrix Spike (MS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-033 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Titration analysis was performed on a Titration.

Initial Standardization
The titrant was properly standardized

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 139405001 (GF05050GMC401) and 139405002 (GU05050GMC401) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer:_____ **Date:** 12 July 05

Sample Data Summary

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 139405 GEL Work Order: 139405

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GF05050GMC401
Sample ID: 139405001
Matrix: Ground Water
Collect Date: 23-JUN-05 08:50
Receive Date: 25-JUN-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
9050A Specific Conductivity Federal											
Conductivity		269	1.00	1.00	umhos/cm	1	JAR2	07/05/05	2145	439386	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 19.9C	H	6.93	0.010	0.100	SU	1	JAR2	06/28/05	1724	437861	2
Flow Injection Analysis Federal											
SW9012A Cyanide, Total Federal											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	ADF	06/29/05	1334	437476	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.340	0.041	0.200	mg/L	1	BJB	06/27/05	1738	437414	4
Fluoride		0.235	0.030	0.100	mg/L	1					
Sulfate		31.8	0.057	0.400	mg/L	1					
Chloride		20.7	0.106	0.400	mg/L	2	MAR1	06/28/05	1310	437414	5
EPA 314.0 Perchlorate by IC											
Perchlorate		151	8.00	24.0	ug/L	2	MAR1	06/29/05	1040	437404	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		13.0	0.170	0.500	mg/L	10	JXM	06/28/05	1223	437623	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.075	0.010	0.050	mg/L	1	JXM	06/30/05	1120	437643	8
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		322	2.38	10.0	mg/L		JLD1	06/29/05	1317	437838	9
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		48.7	1.45	2.00	mg/L		NXS1	06/30/05	1659	438643	10
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXA2	06/29/05	1905	437641
SW846 9010B Prep	SW846 9010B Prep	GXA2	06/27/05	2313	437474

The following Analytical Methods were performed

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Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GF05050GMC401
Sample ID: 139405001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9050A	
2	EPA 150.1	
3	SW846 9012A	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 314.0 DOE-AL	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 160.1	
10	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GU05050GMC401
Sample ID: 139405002
Matrix: Ground Water
Collect Date: 23-JUN-05 08:50
Receive Date: 25-JUN-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis Federal											
SW 9060 Total Organic Carbon											
Total Organic Carbon Average		1.05	0.074	0.200	mg/L	1	TSM	06/29/05	1817	437540	1
Conductivity Analysis Federal											
9050A Specific Conductivity Federal											
Conductivity		278	1.00	1.00	umhos/cm	1	JAR2	07/05/05	2149	439386	2
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 22.2C	H	6.97	0.010	0.100	SU	1	JAR2	06/28/05	1730	437861	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.330	0.041	0.200	mg/L	1	BJB	06/27/05	1839	437414	4
Fluoride		0.209	0.030	0.100	mg/L	1					
Sulfate		31.7	0.057	0.400	mg/L	1					
Chloride		20.3	0.106	0.400	mg/L	2	MAR1	06/28/05	1331	437414	5
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		13.2	0.170	0.500	mg/L	10	JXM	06/28/05	1234	437623	6
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.136	0.010	0.050	mg/L	1	JXM	06/30/05	1355	437643	7
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl	J	0.050	0.010	0.100	mg/L	1	JXM	06/30/05	1008	437638	8
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		329	2.38	10.0	mg/L		JLD1	06/29/05	1317	437838	9
EPA 160.2 Total Suspended Liq											
Total Suspended Solids		17.3	1.27	5.56	mg/L		JLD1	06/28/05	1211	437449	10
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		49.7	1.45	2.00	mg/L		NXS1	06/30/05	1710	438643	11
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	GXA2	06/29/05	1907	437634
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXA2	06/29/05	1905	437641

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Contact: Billy Turney
Project: **Groundwater**

Report Date: July 12, 2005

Client Sample ID: GU05050GMC401
Sample ID: 139405002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9060	
2	SW846 9050A	
3	EPA 150.1	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 353.1	
7	EPA 365.4	
8	EPA 351.2	
9	EPA 160.1	
10	EPA 160.2	
11	EPA 310.1	

Quality Control Summary

QC Summary

Report Date: July 12, 2005

Los Alamos National Labs
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico

Contact: **Billy Turney**

Workorder: **139405**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Carbon Analysis Federal												
Batch 437540												
QC1200875737 139405002 DUP												
Total Organic Carbon Average			1.05		1.06	mg/L	2		(0%-20%)	TSM	06/29/05	18:50
QC1200875740 LCS												
Total Organic Carbon Average	10.0				9.63	mg/L		96	(85%-115%)		06/29/05	11:39
QC1200875735 MB												
Total Organic Carbon Average				U	ND	mg/L					06/29/05	11:29
QC1200875739 139405002 PS												
Total Organic Carbon Average	10.0		1.05		11.1	mg/L		100	(80%-120%)		06/29/05	19:10
Conductivity Analysis Federal												
Batch 439386												
QC1200879888 139405001 DUP												
Conductivity			269		278	umhos/cm	3		(0%-10%)	JAR2	07/05/05	21:48
QC1200879889 139405002 DUP												
Conductivity			278		280	umhos/cm	1		(0%-10%)		07/05/05	21:50
QC1200879890 139406001 DUP												
Conductivity			133		137	umhos/cm	3		(0%-10%)		07/05/05	21:51
QC1200879891 139409001 DUP												
Conductivity			110		110	umhos/cm	1		(0%-10%)		07/05/05	21:54
QC1200879892 139524001 DUP												
Conductivity			138		140	umhos/cm	2		(0%-10%)		07/05/05	21:56
QC1200879893 139545001 DUP												
Conductivity			110		112	umhos/cm	2		(0%-10%)		07/05/05	21:59
QC1200879894 139551001 DUP												
Conductivity			121		121	umhos/cm	0		(0%-10%)		07/05/05	22:01
QC1200879895 139551002 DUP												
Conductivity			123		124	umhos/cm	1		(0%-10%)		07/05/05	22:02
QC1200879896 139713001 DUP												
Conductivity			580		578	umhos/cm	0		(0%-10%)		07/05/05	22:04
QC1200879897 LCS												
Conductivity	1410				1450	umhos/cm		102	(95%-105%)		07/05/05	21:43
Electrode Analysis Federal												
Batch 437861												
QC1200876541 139405001 DUP												
pH		H	6.93	H	6.94	SU	0		(0%-10%)	JAR2	06/28/05	17:26
QC1200876542 139405002 DUP												
pH		H	6.97	H	6.98	SU	0		(0%-10%)		06/28/05	17:32
QC1200876543 139406001 DUP												
pH		H	8.01	H	8.02	SU	0		(0%-10%)		06/28/05	17:35
QC1200876544 139409001 DUP												
pH		H	7.69	H	7.70	SU	0		(0%-10%)		06/28/05	17:38
QC1200876663 139524001 DUP												
pH		H	7.90	H	7.89	SU	0		(0%-10%)		06/28/05	17:42
QC1200876545 LCS												
pH	7.00				7.04	SU		101	(95%-105%)		06/28/05	17:22

QC Summary

Workorder: 139405

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis Federal											
Batch 437476											
QC1200875594 139409001 DUP											
Cyanide, Total		U	ND	U	ND	ug/L	N/A		(+/-5.00)	ADF	06/29/05 13:37
QC1200875602 139193001 DUP											
Cyanide, Total		U	ND	U	ND	ug/L	N/A		(+/-5.00)		06/29/05 13:17
QC1200875593 LCS											
Cyanide, Total	50.0				54.2	ug/L		108	(90%-110%)		06/29/05 13:12
QC1200875592 MB											
Cyanide, Total				U	ND	ug/L					06/29/05 13:11
QC1200875595 139409001 MS											
Cyanide, Total	100	U	ND		110	ug/L		110	(73%-117%)		06/29/05 13:42
QC1200875603 139193001 MS											
Cyanide, Total	100	U	ND		110	ug/L		110	(73%-117%)		06/29/05 13:18
Ion Chromatography Federal											
Batch 437404											
QC1200875406 139349001 DUP											
Perchlorate		U	ND	U	ND	ug/L	N/A		(+/-12.0)	MAR1	06/28/05 17:35
QC1200875407 139406001 DUP											
Perchlorate		U	ND	U	ND	ug/L	N/A		(+/-12.0)		06/28/05 19:21
QC1200875410 LCS											
Perchlorate	50.0				49.1	ug/L		98	(90%-110%)		06/28/05 17:05
QC1200875405 MB											
Perchlorate				U	ND	ug/L					06/28/05 16:49
QC1200875408 139349001 PS											
Perchlorate	10.0	U	ND	J	9.65	ug/L		97	(86%-126%)		06/28/05 17:50
QC1200875409 139406001 PS											
Perchlorate	10.0	U	ND	J	9.93	ug/L		99	(86%-126%)		06/28/05 19:36
Batch 437414											
QC1200875450 139349001 DUP											
Bromide		U	ND	U	ND	mg/L	N/A		(+/-0.200)	BJB	06/27/05 16:36
Chloride			2.18		2.17	mg/L	0 ^		(+/-1.00)		
Fluoride			0.129		0.134	mg/L	4 ^		(+/-0.100)		
Sulfate			38.9		38.8	mg/L	0		(0%-20%)	MAR1	06/28/05 12:09
QC1200875451 139406001 DUP											
Bromide		U	ND	U	ND	mg/L	N/A		(+/-0.200)	BJB	06/27/05 20:01
Chloride			2.88		2.96	mg/L	3		(0%-20%)		
Fluoride			0.322		0.331	mg/L	3 ^		(+/-0.100)		
Sulfate			5.66		5.68	mg/L	0		(0%-20%)		
QC1200875455 139405002 DUP											
Bromide			0.330		0.333	mg/L	1 ^		(+/-0.200)		06/27/05 19:00
Chloride			20.3		20.6	mg/L	1		(0%-20%)	MAR1	06/28/05 13:51
Fluoride			0.209		0.208	mg/L	0 ^		(+/-0.100)	BJB	06/27/05 19:00
Sulfate			31.7		31.7	mg/L	0		(0%-20%)		
QC1200875454 LCS											
Bromide	2.50				2.75	mg/L		110	(90%-110%)		06/27/05 15:56
Chloride	10.0				10.5	mg/L		105	(90%-110%)		
Fluoride	5.00				5.37	mg/L		107	(90%-110%)		
Sulfate	20.0				21.8	mg/L		109	(90%-110%)		
QC1200875449 MB											
Bromide				U	ND	mg/L					06/27/05 15:35

QC Summary

Workorder: 139405

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography Federal												
Batch 437414												
Chloride				U	ND	mg/L						
Fluoride				U	ND	mg/L				BJB	06/27/05	15:35
Sulfate				U	ND	mg/L						
QC1200875452 139349001 PS												
Bromide	2.50	U	ND		2.66	mg/L		106	(90%-110%)		06/27/05	16:57
Chloride	10.0		2.18		12.6	mg/L		104	(90%-110%)			
Fluoride	5.00		0.129		5.13	mg/L		100	(90%-110%)			
Sulfate	20.0		19.5		42.0	mg/L		113*	(90%-110%)	MAR1	06/28/05	12:29
QC1200875453 139406001 PS												
Bromide	2.50	U	ND		2.68	mg/L		107	(90%-110%)	BJB	06/27/05	20:22
Chloride	10.0		2.88		13.7	mg/L		108	(90%-110%)			
Fluoride	5.00		0.322		5.49	mg/L		103	(90%-110%)			
Sulfate	20.0		5.66		26.6	mg/L		104	(90%-110%)			
QC1200875456 139405002 PS												
Bromide	2.50		0.330		3.01	mg/L		107	(90%-110%)		06/27/05	19:20
Chloride	10.0		10.2		22.1	mg/L		120*	(90%-110%)	MAR1	06/28/05	14:11
Fluoride	5.00		0.209		5.24	mg/L		101	(90%-110%)	BJB	06/27/05	19:20
Sulfate	20.0		31.7		54.9	mg/L		116*	(90%-110%)			
Nutrient Analysis												
Batch 437623												
QC1200875980 LCS												
Nitrogen, Nitrate/Nitrite	1.00				0.962	mg/L		96	(90%-110%)	JXM	06/28/05	12:23
QC1200875979 MB												
Nitrogen, Nitrate/Nitrite				U	ND	mg/L						
Nutrient Analysis Federal												
Batch 437623												
QC1200875981 139405001 DUP												
Nitrogen, Nitrate/Nitrite			13.0		13.1	mg/L	1		(0%-20%)	JXM	06/28/05	12:23
QC1200875987 139405002 DUP												
Nitrogen, Nitrate/Nitrite			13.2		13.2	mg/L	0		(0%-20%)		06/28/05	12:34
QC1200875988 139409001 DUP												
Nitrogen, Nitrate/Nitrite		J	0.0324	J	0.0302	mg/L	N/A ^		(+/-0.050)			
QC1200875982 139405001 PS												
Nitrogen, Nitrate/Nitrite	1.00		1.30		2.31	mg/L		101	(80%-120%)		06/28/05	12:23
QC1200875990 139405002 PS												
Nitrogen, Nitrate/Nitrite	1.00		1.32		2.31	mg/L		100	(80%-120%)		06/28/05	12:34
QC1200875991 139409001 PS												
Nitrogen, Nitrate/Nitrite	1.00	J	0.0324		0.889	mg/L		86	(80%-120%)			
Batch 437638												
QC1200876014 139405002 DUP												
Nitrogen, Total Kjeldahl		J	0.050	U	ND	mg/L	N/A		(+/-0.100)	JXM	06/30/05	10:09
QC1200876019 139406001 DUP												
Nitrogen, Total Kjeldahl		U	ND	U	ND	mg/L	N/A		(+/-0.100)		06/30/05	10:12
QC1200876020 139409001 DUP												
Nitrogen, Total Kjeldahl		U	ND	U	ND	mg/L	N/A		(+/-0.100)		06/30/05	10:18
QC1200876013 LCS												
Nitrogen, Total Kjeldahl	1.00				1.03	mg/L		103	(90%-110%)		06/30/05	10:07
QC1200876012 MB												
Nitrogen, Total Kjeldahl				U	ND	mg/L					06/30/05	10:06

QC Summary

Workorder: 139405

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis Federal												
Batch 437638												
QC1200876015 139405002 MS												
Nitrogen, Total Kjeldahl	1.00	J	0.050		1.07	mg/L		102	(90%-110%)	JXM	06/30/05	10:10
QC1200876021 139406001 MS												
Nitrogen, Total Kjeldahl	1.00	U	ND		1.09	mg/L		109	(90%-110%)		06/30/05	10:13
QC1200876022 139409001 MS												
Nitrogen, Total Kjeldahl	1.00	U	ND		1.21	mg/L		121*	(90%-110%)		06/30/05	10:19
Batch 437643												
QC1200876033 139405001 DUP												
Phosphorus, Total as P			0.075		0.096	mg/L	25 ^		(+/-0.050)	JXM	06/30/05	11:21
QC1200876035 139405002 DUP												
Phosphorus, Total as P			0.136		0.132	mg/L	3 ^		(+/-0.050)		06/30/05	13:56
QC1200876036 139409001 DUP												
Phosphorus, Total as P			0.264		0.281	mg/L	6		(0%-20%)		06/30/05	11:31
QC1200876032 LCS												
Phosphorus, Total as P	1.00				0.964	mg/L		96	(80%-115%)		06/30/05	11:18
QC1200876031 MB												
Phosphorus, Total as P				J	0.035	mg/L						
QC1200876034 139405001 MS												
Phosphorus, Total as P	1.00		0.075		1.02	mg/L		95	(80%-115%)		06/30/05	11:22
QC1200876037 139405002 MS												
Phosphorus, Total as P	1.00		0.136		1.09	mg/L		96	(80%-115%)		06/30/05	13:56
QC1200876038 139409001 MS												
Phosphorus, Total as P	1.00		0.264		1.21	mg/L		95	(80%-115%)		06/30/05	11:32
Solids Analysis Federal												
Batch 437449												
QC1200875863 139405002 DUP												
Total Suspended Solids			17.3		19.1	mg/L	10 ^		(+/-5.56)	JLD1	06/28/05	12:11
QC1200875540 LCS												
Total Suspended Solids	500				488	mg/L		98	(95%-105%)			
QC1200875539 MB												
Total Suspended Solids				U	ND	mg/L						
Batch 437838												
QC1200876469 139405001 DUP												
Total Dissolved Solids			322		317	mg/L	2		(0%-10%)	JLD1	06/29/05	13:17
QC1200876470 139405002 DUP												
Total Dissolved Solids			329		326	mg/L	1		(0%-10%)			
QC1200876471 LCS												
Total Dissolved Solids	300				289	mg/L		96	(95%-105%)			
QC1200876468 MB												
Total Dissolved Solids				U	ND	mg/L						
Titration Analysis Federal												
Batch 438643												
QC1200878200 139405001 DUP												
Alkalinity, Total as CaCO3			48.7		47.6	mg/L	2		(0%-20%)	NXS1	06/30/05	17:05
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A		(+/-2.00)			
QC1200878202 139405002 DUP												
Alkalinity, Total as CaCO3			49.7		48.7	mg/L	2		(0%-20%)		06/30/05	17:15
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A		(+/-2.00)			
QC1200878199 LCS												

QC Summary

Workorder: 139405

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration Analysis Federal											
Batch 438643											
Alkalinity, Total as CaCO3	1000			1080	mg/L		108	(90%-110%)		06/30/05	14:04
QC1200878201 139405001 MS											
Alkalinity, Total as CaCO3	100	48.7		158	mg/L		109	(80%-120%)	NXS1	06/30/05	17:07
QC1200878203 139405002 MS											
Alkalinity, Total as CaCO3	100	49.7		157	mg/L		107	(80%-120%)		06/30/05	17:18

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

**	Indicates the analyte is a surrogate compound.
<	Result is less than amount reported.
>	Result is greater than amount reported.
B	Target analyte was detected in the sample as well as the associated blank.
BD	Results below the MDC or low tracer recovery.
E	Concentration of the target analyte exceeds the instrument calibration range.
H	Analytical holding time exceeded.
J	Indicates an estimated value.
P	The response between the confirmation and the primary columns is >40% Different.
R	Sample results are rejected.
U	Target analyte was analyzed for but not detected above the MDL or LOD.
UI	Uncertain identification for gamma spectroscopy.
X	Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y	QC Samples were not spiked with this compound.
Z	Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h	Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Carbon Analysis

Method: SW846 9060 Concentration Units:mg/L

Instrument: O-I Analytical Model 1010 Total Organic Carbon Analyzer

Parmname: Total Organic Carbon
Average

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	29-JUN-2005 10:14:00	XJ007.rlt	9.884	10	98.8	(90%-110%)	Yes
CCV	29-JUN-2005 12:23:00	XJ014.rlt	9.65	10	96.5	(90%-110%)	Yes
CCV	29-JUN-2005 16:59:00	XJ025.rlt	9.708	10	97.1	(90%-110%)	Yes
CCV	29-JUN-2005 20:07:00	XJ035.rlt	9.833	10	98.3	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	29-JUN-2005 10:43:00	XJ009.rlt	0.003	0.2	Yes
CCB	29-JUN-2005 12:59:00	XJ016.rlt	0.001	0.2	Yes
CCB	29-JUN-2005 17:35:00	XJ027.rlt	-0.08	0.2	Yes
CCB	29-JUN-2005 20:43:00	XJ037.rlt	-0.064	0.2	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Flow Injection Analysis

Method: SW846 9012A Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	29-JUN-2005 12:42:51	OM_6-29-2005_12-34-25	162	150	108	(90%-110%)	Yes
CCV	29-JUN-2005 13:00:36	OM_6-29-2005_12-34-25	104	100	104	(90%-110%)	Yes
CCV	29-JUN-2005 13:13:21	OM_6-29-2005_12-34-25	105	100	105	(90%-110%)	Yes
CCV	29-JUN-2005 13:25:47	OM_6-29-2005_12-34-25	104	100	104	(90%-110%)	Yes
CCV	29-JUN-2005 13:38:22	OM_6-29-2005_12-34-25	104	100	104	(90%-110%)	Yes
CCV	29-JUN-2005 13:51:15	OM_6-29-2005_12-34-25	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	29-JUN-2005 12:44:51	OM_6-29-2005_12-34-25	-2.12	5	Yes
CCB	29-JUN-2005 13:02:33	OM_6-29-2005_12-34-25	-1.66	5	Yes
CCB	29-JUN-2005 13:15:10	OM_6-29-2005_12-34-25	-0.678	5	Yes
CCB	29-JUN-2005 13:27:38	OM_6-29-2005_12-34-25	-1.04	5	Yes
CCB	29-JUN-2005 13:40:12	OM_6-29-2005_12-34-25	-1.22	5	Yes
CCB	29-JUN-2005 13:53:09	OM_6-29-2005_12-34-25	-1.67	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Bromide

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	2.689	2.5	108	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	4.128	3.75	110	(90%-110%)	Yes
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	2.747	2.5	110	(90%-110%)	Yes
ICV	28-JUN-2005 11:07:39	AZF8KC01.D02	2.668	2.5	107	(90%-110%)	Yes
CCV	28-JUN-2005 14:31:53	AZF8KC01.D12	3.947	3.75	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.2	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.2	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.2	Yes
ICB	28-JUN-2005 11:28:08	AZF8KC01.D03	0	0.2	Yes
CCB	28-JUN-2005 14:52:11	AZF8KC01.D13	0	0.2	Yes

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	10.112	10	101	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	16.308	15	109	(90%-110%)	Yes
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	10.735	10	107	(90%-110%)	Yes
ICV	28-JUN-2005 11:07:39	AZF8KC01.D02	9.889	10	98.9	(90%-110%)	Yes
CCV	28-JUN-2005 14:31:53	AZF8KC01.D12	15.724	15	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.2	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.2	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.2	Yes
ICB	28-JUN-2005 11:28:08	AZF8KC01.D03	0	0.2	Yes
CCB	28-JUN-2005 14:52:11	AZF8KC01.D13	0	0.2	Yes

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	5.304	5	106	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	8.04	7.5	107	(90%-110%)	Yes
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	5.42	5	108	(90%-110%)	Yes
ICV	28-JUN-2005 11:07:39	AZF8KC01.D02	5.153	5	103	(90%-110%)	Yes
CCV	28-JUN-2005 14:31:53	AZF8KC01.D12	7.716	7.5	103	(90%-110%)	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.1	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.1	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.1	Yes
ICB	28-JUN-2005 11:28:08	AZF8KC01.D03	0	0.1	Yes
CCB	28-JUN-2005 14:52:11	AZF8KC01.D13	0	0.1	Yes

Parmname: Sulfate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	27-JUN-2005 14:34:18	AZF7KC01.D02	21.275	20	106	(90%-110%)	Yes
CCV	27-JUN-2005 17:58:55	AZF7KC01.D12	32.946	30	110	(90%-110%)	Yes
CCV	27-JUN-2005 20:42:46	AZF7KC01.D20	21.851	20	109	(90%-110%)	Yes
ICV	28-JUN-2005 11:07:39	AZF8KC01.D02	20.715	20	104	(90%-110%)	Yes
CCV	28-JUN-2005 14:31:53	AZF8KC01.D12	31.457	30	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	27-JUN-2005 14:54:47	AZF7KC01.D03	0	0.4	Yes
CCB	27-JUN-2005 18:19:24	AZF7KC01.D13	0	0.4	Yes
CCB	27-JUN-2005 21:03:15	AZF7KC01.D21	0	0.4	Yes
ICB	28-JUN-2005 11:28:08	AZF8KC01.D03	0	0.4	Yes
CCB	28-JUN-2005 14:52:11	AZF8KC01.D13	0	0.4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Ion Chromatography

Method: EPA 314.0 DOE-AL Concentration Units:ug/L

Instrument: Dionex Ion Chromatograph

Parmname: Perchlorate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	28-JUN-2005 10:31:30	050628_002.DXD	24.36907	50	48.7	(90%-110%)	No
CCV	28-JUN-2005 16:19:41	050628_025.DXD	24.43292	25	97.7	(90%-110%)	Yes
CCV	28-JUN-2005 18:36:00	050628_034.DXD	25.30484	25	101	(90%-110%)	Yes
CCV	28-JUN-2005 20:06:52	050628_040.DXD	74.9741	75	100	(90%-110%)	Yes
CCV	29-JUN-2005 10:10:18	050628_070.DXD	74.83779	75	99.8	(90%-110%)	Yes
CCV	29-JUN-2005 11:10:54	050628_074.DXD	24.44456	25	97.8	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	28-JUN-2005 10:46:39	050628_003.DXD	0	4	Yes
CCB	28-JUN-2005 16:34:50	050628_026.DXD	0	4	Yes
CCB	28-JUN-2005 18:51:09	050628_035.DXD	0	4	Yes
CCB	28-JUN-2005 20:22:01	050628_041.DXD	0	4	Yes
CCB	29-JUN-2005 10:25:27	050628_071.DXD	0	4	Yes
CCB	29-JUN-2005 11:26:04	050628_075.DXD	0	4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Nutrient Analysis

Method: EPA 351.2 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Nitrogen, Total Kjeldahl

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	30-JUN-2005 10:02:33	OM_6-30-2005_09-55-39	0.909	1	90.9	(90%-110%)	Yes
CCV	30-JUN-2005 10:14:44	OM_6-30-2005_09-55-39	1.058	1	106	(90%-110%)	Yes
CCV	30-JUN-2005 10:25:09	OM_6-30-2005_09-55-39	1.075	1	108	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	30-JUN-2005 10:04:29	OM_6-30-2005_09-55-39	-0.005	0.1	Yes
CCB	30-JUN-2005 10:16:40	OM_6-30-2005_09-55-39	-0.004	0.1	Yes
CCB	30-JUN-2005 10:27:05	OM_6-30-2005_09-55-39	-0.012	0.1	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Nutrient Analysis

Method: EPA 353.1 Concentration Units:mg/L

Instrument: Konelab 20

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	28-JUN-2005 09:09:47	Kone2005_06_28_13_44_50.dat	0.94211	1	94.2	(90%-110%)	Yes
CCV	28-JUN-2005 12:23:00	Kone2005_06_28_13_44_50.dat	1.01973	1	102	(90%-110%)	Yes
CCV	28-JUN-2005 12:34:17	Kone2005_06_28_13_44_50.dat	1.05694	1	106	(90%-110%)	Yes
CCV	28-JUN-2005 12:36:25	Kone2005_06_28_13_44_50.dat	0.96465	1	96.5	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	28-JUN-2005 09:09:48	Kone2005_06_28_13_44_50.dat	-0.00157	0.02	Yes
CCB	28-JUN-2005 12:23:01	Kone2005_06_28_13_44_50.dat	-0.00247	0.02	Yes
CCB	28-JUN-2005 12:34:18	Kone2005_06_28_13_44_50.dat	-0.00508	0.02	Yes
CCB	28-JUN-2005 12:36:26	Kone2005_06_28_13_44_50.dat	-0.00327	0.02	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 12-JUL-2005 16:14

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 139405

Nutrient Analysis

Method: EPA 365.4 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Phosphorus, Total as P

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	30-JUN-2005 11:13:55	OM_6-30-2005_11-06-08	1.006	1	101	(85%-115%)	Yes
CCV	30-JUN-2005 11:26:22	OM_6-30-2005_11-06-08	0.999	1	99.9	(85%-115%)	Yes
CCV	30-JUN-2005 11:38:45	OM_6-30-2005_11-06-08	0.994	1	99.4	(85%-115%)	Yes
CCV	30-JUN-2005 11:45:22	OM_6-30-2005_11-06-08	0.997	1	99.7	(85%-115%)	Yes
ICV	30-JUN-2005 13:51:04	OM_6-30-2005_13-42-32	0.975	1	97.5	(85%-115%)	Yes
CCV	30-JUN-2005 13:57:40	OM_6-30-2005_13-42-32	0.994	1	99.4	(85%-115%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	30-JUN-2005 11:16:00	OM_6-30-2005_11-06-08	0.018	0.05	Yes
CCB	30-JUN-2005 11:28:26	OM_6-30-2005_11-06-08	0.018	0.05	Yes
CCB	30-JUN-2005 11:40:51	OM_6-30-2005_11-06-08	0.018	0.05	Yes
CCB	30-JUN-2005 11:47:27	OM_6-30-2005_11-06-08	0.018	0.05	Yes
ICB	30-JUN-2005 13:53:09	OM_6-30-2005_13-42-32	0.011	0.05	Yes
CCB	30-JUN-2005 13:59:45	OM_6-30-2005_13-42-32	0.012	0.05	Yes

Alkalinity

Alkalinity LogBook

Analyst: NXS1
Batch: 438643
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 30-JUN-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200878199	WAL050512-02	1000	107.916
MS	1200878201	WAL050512-02	100	108.974
MS	1200878203	WAL050512-02	100	106.858
MS	1200878205	WAL050512-02	100	106.858

Type	Sample Id	Rpd(%)	Parmname
DUP	1200878200	2.198	Alkalinity, Total as CaCO3
DUP	1200878202	2.151	Alkalinity, Total as CaCO3
DUP	1200878204	2.817	Alkalinity, Total as CaCO3

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
LCS	1200878199		14:04	8.31	5	mL	0.02116	0	5.1	1079.2							mg/L
SAMPLE	139108001		14:09	6.78	50	mL	0.02116	0	1.8	38.088					0.021559		mg/L
DUP	1200878204	139108001	14:14	6.8	50	mL	0.02116	0	1.75	37.030	37.005				0.021948		mg/L
MS	1200878205	139108001	14:18	8.76	50	mL	0.02116	0	6.85	144.95							mg/L
SAMPLE	139123002		14:24	8.24	50	mL	0.02116	0	18.7	395.69							mg/L
SAMPLE	139136001		15:20	7.26	50	mL	0.02116	0	1.35	28.566					0.048764		mg/L
SAMPLE	139136002		15:43	6.5	50	mL	0.02116	0	1.5	31.740					0.009432		mg/L
SAMPLE	139136003		15:46	6.42	50	mL	0.02116	0	1.55	32.798					0.008107		mg/L
SAMPLE	139136004		15:50	7.06	50	mL	0.02116	0	2.1	44.436					0.04790		mg/L
SAMPLE	139193001		15:55	6.74	50	mL	0.02116	0	1.7	35.972					0.018571		mg/L
SAMPLE	139193002		15:59	7.36	50	mL	0.02116	0	2.9	61.364					0.13183		mg/L
SAMPLE	139193003		16:06	6.39	50	mL	0.02116	0	2.55	53.958					0.012447		mg/L
SAMPLE	139193004		16:12	8.04	50	mL	0.02116	0	6.8	143.89					1.4673		mg/L
SAMPLE	139374001		16:20	6.81	50	mL	0.02116	0	7.35	155.53	155.43				0.094332		mg/L
SAMPLE	139374002		16:26	7.57	50	mL	0.02116	0	9.9	209.48	208.74				0.72900		mg/L
SAMPLE	139374003		16:35	7.48	50	mL	0.02116	0	12.75	269.79	269.01				0.76366		mg/L
SAMPLE	139374004		16:44	7.55	50	mL	0.02116	0	11.7	247.57	246.73				0.82291		mg/L
SAMPLE	139405001		16:59	7.09	50	mL	0.02116	0	2.3	48.668					0.05621		mg/L
DUP	1200878200	139405001	17:05	7.1	50	mL	0.02116	0	2.25	47.610	47.547				0.056267		mg/L
MS	1200878201	139405001	17:07	8.9	50	mL	0.02116	0	7.45	157.64							mg/L
SAMPLE	139405002		17:10	7.37	50	mL	0.02116	0	2.35	49.726					0.10931		mg/L
DUP	1200878202	139405002	17:15	7.37	50	mL	0.02116	0	2.3	48.668	48.549				0.10698		mg/L
MS	1200878203	139405002	17:18	8.9	50	mL	0.02116	0	7.4	156.58							mg/L

Alkalinity LogBook

Analyst: NXS1
Batch: 438643
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 30-JUN-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200878199	WAL050512-02	1000	107.916
MS	1200878201	WAL050512-02	100	108.974
MS	1200878203	WAL050512-02	100	106.858
MS	1200878205	WAL050512-02	100	106.858

Type	Sample Id	Rpd(%)	Parmname
DUP	1200878200	2.198	Alkalinity, Total as CaCO3
DUP	1200878202	2.151	Alkalinity, Total as CaCO3
DUP	1200878204	2.817	Alkalinity, Total as CaCO3

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
SAMPLE	139406001		17:22	8.08	50	mL	0.02116	0	3.75	79.350					0.88606		mg/L
SAMPLE	139442001		17:25	7.42	50	mL	0.02116	0	3.9	82.524							mg/L
SAMPLE	139545001		17:31	7.09	50	mL	0.02116	0	2.85	60.306					0.069653		mg/L
SAMPLE	139559001		17:34	5.89	50	mL	0.02116	0	0.7	14.812							mg/L

Comments:

Alkalinity Titrant Standardization Logbook

Date	Time	Analyst	Balance ID	Na2CO3 Std. ID	Na2CO3, 0.05 N g Na2C03/L	H2SO4 N (approx.)	mL NA2CO3 titrated	mL acid to pH 3.7	Actual Normality
6/21/2005	14:15	NXS	BAL745	243145	2.5002	0.02	15.00	33.40	0.02119
					2.5002	0.02	15.00	33.45	0.02115
					2.5002	0.02	15.00	33.45	0.02115
									0.02116

Calculation: $\frac{(gNa2CO3)(mL\ Na2CO3\ titrated)}{(mLacid)(53)}$

Comments:

pH Calibration

Buffer	Standard ID	Value	Temp	Date	Time
pH 4.00	UPH215026-01	3.99	23.2'C	30-Jun-05	14:00
pH 7.00	UPH050217-02	7.03	23.2'C	30-Jun-05	14:00
pH 10.00	UPH050217-02	10.00	23.2'C	30-Jun-05	14:00
pH 2.00	UPH240737-01	2.05	23.2'C	30-Jun-05	14:00
pH 12.00	040512-A	12.05	23.2'C	30-Jun-05	14:00
pH 7.00 (LCS)	UPH213969-02	7.03	23.2'C	30-Jun-05	14:00

Analyst: NXS/JAR2

Sheet Created :	30-Jun-05	14:00

The acceptance range for 040512-A is 12.00 +/- 0.10.

Carbon, Total Organic

SEQUENCE

06/29/05CAL Wed Jun 29 11:18:37 2005

Pos/ Vial	Sample Name	Method	Run Type	# Rep	Vol (mL)	# Blk	Dil Fact	Ovr Rng	Remarks
1	ICAL-01	2:00 react	Std. 1	1	5.000	0	1.00	No	437540
2	ICAL-02	2:00 react	Std. 2	1	5.000	0	1.00	No	437540
3	ICAL-03	2:00 react	Std. 3	1	5.000	0	1.00	No	437540
4	ICAL-04	2:00 react	Std. 4	1	5.000	0	1.00	No	437540
5	ICAL-05	2:00 react	Std. 5	1	5.000	2	1.00	No	437540
6	ICV	2:00 react	Chk. 2	1	5.000	0	1.00	No	437540
7	ICB	2:00 react	Chk. 5	1	5.000	2	1.00	No	437540
8	TIC	2:00 react	Sample	1	5.000	0	1.00	No	437540
9	1200875735	2:00 react	Chk. 5	1	5.000	0	1.00	No	437540
10	1200875740	2:00 react	Chk. 2	1	5.000	0	1.00	No	437540
11	137644007	2:00 react	Sample	4	5.000	0	1.00	No	437540
12	CCV	2:00 react	Chk. 2	1	5.000	0	1.00	No	437540
13	CCB	2:00 react	Chk. 5	1	5.000	3	1.00	No	437540
14	139042001	2:00 react	Sample	4	5.000	0	1.00	No	437540
15	1200875736	2:00 react	Sample	2	5.000	0	1.00	No	437540
16	1200875738	2:00 react	Sample	1	5.000	0	1.00	No	437540
17	139042002	2:00 react	Sample	4	5.000	0	1.00	No	437540
18	139042003	2:00 react	Sample	4	5.000	0	1.00	No	437540
19	139042004	2:00 react	Sample	4	5.000	0	1.00	No	437540
20	139266001	2:00 react	Sample	4	5.000	0	1.00	No	437540
21	139266002	2:00 react	Sample	4	5.000	0	1.00	No	437540
22	CCV	2:00 react	Chk. 2	1	5.000	0	1.00	No	437540
23	CCB	2:00 react	Chk. 5	1	5.000	3	1.00	No	437540
24	139266003	2:00 react	Sample	4	5.000	0	1.00	No	437540
25	139405002	2:00 react	Sample	4	5.000	0	1.00	No	437540
26	1200875737	2:00 react	Sample	2	5.000	0	1.00	No	437540
27	1200875739	2:00 react	Sample	1	5.000	0	1.00	No	437540
28	139442001	2:00 react	Sample	2	5.000	0	1.00	No	437775
29	1200876343	2:00 react	Sample	2	5.000	0	1.00	No	437775
30	1200876344	2:00 react	Sample	1	5.000	0	1.00	No	437775
31	CCV	2:00 react	Chk. 2	1	5.000	0	1.00	No	437775
32	CCB	2:00 react	Chk. 5	1	5.000	3	1.00	No	437775
33	139034011	2:00 react	Sample	2	5.000	0	1.00	No	436679
34	1200873780	2:00 react	Sample	2	5.000	0	1.00	No	436679
35	1200873782	2:00 react	Sample	1	5.000	0	1.00	No	436679
36	139123001	2:00 react	Sample	2	5.000	0	1.00	No	436679
37	139141001	2:00 react	Sample	4	5.000	0	1.00	No	436679
38	139141002	2:00 react	Sample	4	5.000	0	1.00	No	436679
39	1200873781	2:00 react	Sample	2	5.000	0	1.00	No	436679
40	1200873783	2:00 react	Sample	1	5.000	0	1.00	No	436679
41	CCV	2:00 react	Chk. 2	1	5.000	0	1.00	No	436679
42	CCB	2:00 react	Chk. 5	1	5.000	3	1.00	No	436679
43	139141003	2:00 react	Sample	4	5.000	0	1.00	No	436679
44	139188026	2:00 react	Sample	2	5.000	0	1.00	No	436679

TSM 6/30/05
GL-GC-E093

****
** SEQUENCE **
****

06/29/05CAL Wed Jun 29 11:18:37 2005

Pos/ Vial	Sample Name	Method	Run Type	# Rep	Vol (mL)	# Blk	Dil Fact	Ovr Rng	Remarks
45	139188027	2:00 react	Sample	2	5.000	0	1.00	No	436679
46	CCV	2:00 react	Chk. 2	1	5.000	0	1.00	No	436679
47	CCB	2:00 react	Chk. 5	1	5.000	5	1.00	No	436679

TSM 6/30/05
GL-GC-E-093

Pos#	Remarks
1	437540|1|1|WTC050629-01
2	437540|1|1|WTC050629-02
3	437540|1|1|WTC050629-03
4	437540|1|1|WTC050629-04
5	437540|1|1|
6	437540|1|1|WTC050629-05
7	437540|1|1|
8	437540|1|1|WIC050629-01
9	437540|1|1|METH BLK
10	437540|1|1|WTC050629-05:LCS
11	437540|10|1|
12	437540|1|1|WTC050629-02
13	437540|1|1|
14	437540|1|1|
15	437540|1|1|139042001:DUP
16	437540|1|1|139042001:PS
17	437540|1|1|
18	437540|1|1|
19	437540|1|1|
20	437540|1|1|
21	437540|1|1|
22	437540|1|1|WTC050629-02
23	437540|1|1|
24	437540|1|1|
25	437540|1|1|
26	437540|1|1|139405002:DUP
27	437540|1|1|139405002:PS
28	437775|1|1|
29	437775|1|1|139442001:DUP
30	437775|1|1|139442001:PS
31	437775|1|1|WTC050629-02
32	437775|1|1|
33	436679|1|1|
34	436679|1|1|139034011:DUP
35	436679|1|1|139034011:PS
36	436679|1|1|
37	436679|1|1|
38	436679|1|1|
39	436679|1|1|139141002:DUP
40	436679|1|1|139141002:PS
41	436679|1|1|WTC050629-02
42	436679|1|1|
43	436679|1|1|
44	436679|1|1|
45	436679|1|1|
46	436679|1|1|WTC050629-02
47	436679|1|1|

TSM 6/30/05
GL-GC-G-093

```
**********************************************************************
**                    OI Analytical Model 1010 TOC                  **
**                              RUN SETUP                           **
**********************************************************************

Operator:    Unknown
Data Path:  C:\PROGRA~1\OIANAL~1\TOCREP~1\DATA10
WinTOC Version:  5.2                          Firmware Version:    5.2
WinTOC Revision:  rev 241                        Firmware Revision:  rev 364

Report To File:  Enabled                      Naming Mode:  Automatic
Prefix:  XJ    Index:   11
```


TSM 6/30/05
GL-GC-E-093

****
** CALIBRATION **
****

06/29/05 Wed Jun 29 10:04:46 2005

Std. #	Used	Conc. (ppm)	Volume (mL)
1	Yes	20.000	5.000
2	Yes	10.000	5.000
3	Yes	1.000	5.000
4	Yes	0.200	5.000
5	Yes	0.000	5.000

RF (ugC/k-cts):	1.141
R-Squared:	0.9998
Offset (cts):	2044
Offset (ugC):	-2.333
Calibration Mode:	TOC
Allow Editing:	No

Rep	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
1	88324	44113	6813	2913	2033
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-

(* = unused)

TSM 6/30/05
GL-GC-E-093

****
** CONFIGURATION **
****

Analysis Mode: TOC Spl Intro: Autosampler 53
Remote Start : OFF

Loop Size: 5 mL

Actual Volume	1mL	5mL	10mL	25mL
Loop A (uL):	1000	4900	10000	25000
Loop B (uL):	1000	4900	10000	25000

Tray Type: 53 Vial Vial Option: Septum Piercing
Needle Depth: 94 % Preacid Volume (uL): 100
Wash Needle Depth: 94 % Preacid Purge Time (min:sec): 0:30

	TIC	TOC	TC
Blank	----	----	----
Average:	83	821	784

Linearization Coeff: 53000

Sample Transfer Times (sec)

	Initial Fill			Loop Fill			Sample Inject
	Non-AS	AS	AS w/Sep	Non-AS	AS	AS w/Sep	(all)
1mL:	6.0	4.5	3.5	1.2	1.2	1.0	4.5
5mL:	8.1	8.2	7.8	5.1	6.1	5.2	9.3
10mL:	14.2	12.2	11.0	10.5	10.5	11.0	16.5
25mL:	35.0	35.0	32.0	n/a	n/a	n/a	38.0

Analog Concentration Signal indicates TOC
Analog Conc. Signal Timer is OFF, Timer duration (h:m:s): 00:00:00
Min Signal Range: 0.000 ppmC, Max Signal Range: 0.000 ppmC

Alarms DISABLED
Alarm Relay Timer is OFF, Timer duration (h:m:s): 00:00:00

Conc. Alarm Setpoints (ppm C)

	Low	High
TIC:	0.000	0.000
TOC:	0.000	0.000
TC:	0.000	0.000

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Std1	Name: ICAL-01						Data File: XI645						
	Remarks: 437130|1|1|WTC050627-01												
1	Std1	1	27Jun2005	08:58	-	-	-	92387	98.000	20.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.075												
	R-Squared: 1.0000												
	Offset (cts): 0												
	Offset (ugC): 0.000												
** Std2	Name: ICAL-02						Data File: XI646						
	Remarks: 437130|1|1|WTC050627-02												
2	Std2	1	27Jun2005	09:08	-	-	-	45513	49.000	10.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.045												
	R-Squared: 1.0000												
	Offset (cts): -1360												
	Offset (ugC): 1.423												
** Std3	Name: ICAL-03						Data File: XI647						
	Remarks: 437130|1|1|WTC050627-03												
3	Std3	1	27Jun2005	09:18	-	-	-	6974	4.900	1.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.088												
	R-Squared: 0.9993												
	Offset (cts): 1770												
	Offset (ugC): -1.927												
** Std4	Name: ICAL-04						Data File: XI648						
	Remarks: 437130|1|1|WTC050627-04												
4	Std4	1	27Jun2005	09:28	-	-	-	3435	0.980	0.200	-	-	-
** Calibration:	RF (ugC/k-cts): 1.094												
	R-Squared: 0.9995												
	Offset (cts): 2135												
	Offset (ugC): -2.336												
5	Blk	1	27Jun2005	09:37	-	-	-	1705	-	-	-	-	-
5	Blk	2	27Jun2005	09:44	-	-	-	1386	-	-	-	-	-
5	Blk	3	27Jun2005	09:54	-	-	-	1168	-	-	-	-	-
** Std5	Name: ICAL-05						Data File: XI650						
	Remarks: 437130|1|1|											
5	Std5	1	27Jun2005	10:04	-	-	-	2182	0.000	0.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.094												
	R-Squared: 0.9996												
	Offset (cts): 2150												
	Offset (ugC): -2.353												
** Chk2	Name: ICV						Data File: XI651						

```
            Remarks: 437130|1|1|WTC050627-05

6    Chk2   1 27Jun2005 10:15      -       -          -    44976  46.853      9.562      -       -          -

7    Blk    1 27Jun2005 10:23      -       -          -     1284      -          -       -       -          -
7    Blk    2 27Jun2005 10:31      -       -          -     1162      -          -       -       -          -
7    Blk    3 27Jun2005 10:41      -       -          -     1018      -          -       -       -          -


** Chk5     Name:    ICB                          Data File: XI653
            Remarks: 437130|1|1|

7    Chk5   1 27Jun2005 10:51      -       -          -     2255   0.114      0.023      -       -          -

8    Blk    1 27Jun2005 10:59      -       -          -     1101      -          -       -       -          -
8    Blk    2 27Jun2005 11:07      -       -          -     1011      -          -       -       -          -
8    Blk    3 27Jun2005 11:17      -       -          -     1054      -          -       -       -          -


** Spl      Name:    TIC                          Data File: XI655
            Remarks: 437130|1|1|WIC050627-01

8    Spl    1 27Jun2005 11:27      -       -          -     2291   1.352      0.276      -       -          -
```

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Std1	Name: ICAL-01						Data File: XJ001						
	Remarks: 437540|1|1|WTC050629-01												
1	Std1	1	29Jun2005	09:05	-	-	-	88324	98.000	20.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.127												
	R-Squared: 1.0000												
	Offset (cts): 0												
	Offset (ugC): 0.000												
** Std2	Name: ICAL-02						Data File: XJ002						
	Remarks: 437540|1|1|WTC050629-02												
2	Std2	1	29Jun2005	09:16	-	-	-	44113	49.000	10.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.108												
	R-Squared: 1.0000												
	Offset (cts): -97												
	Offset (ugC): 0.109												
** Std3	Name: ICAL-03						Data File: XJ003						
	Remarks: 437540|1|1|WTC050629-03												
3	Std3	1	29Jun2005	09:26	-	-	-	6813	4.900	1.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.141												
	R-Squared: 0.9997												
	Offset (cts): 2045												
	Offset (ugC): -2.335												
** Std4	Name: ICAL-04						Data File: XJ004						
	Remarks: 437540|1|1|WTC050629-04												
4	Std4	1	29Jun2005	09:36	-	-	-	2913	0.980	0.200	-	-	-
** Calibration:	RF (ugC/k-cts): 1.141												
	R-Squared: 0.9998												
	Offset (cts): 2049												
	Offset (ugC): -2.339												
5	Blk	1	29Jun2005	09:44	-	-	-	1273	-	-	-	-	-
5	Blk	2	29Jun2005	09:54	-	-	-	927	-	-	-	-	-
** Std5	Name: ICAL-05						Data File: XJ006						
	Remarks: 437540|1|1|											
5	Std5	1	29Jun2005	10:04	-	-	-	2033	0.000	0.000	-	-	-
** Calibration:	RF (ugC/k-cts): 1.141												
	R-Squared: 0.9998												
	Offset (cts): 2044												
	Offset (ugC): -2.333												
** Chk2	Name: ICV						Data File: XJ007						
	Remarks: 437540|1|1|WTC050629-05												

```
6    Chk2   1 29Jun2005 10:14      -       -          -    44487  48.432      9.884      -       -          -

7    Blk    1 29Jun2005 10:23      -       -          -     1128      -          -       -       -          -
7    Blk    2 29Jun2005 10:33      -       -          -      964      -          -       -       -          -


** Chk5     Name:    ICB                          Data File: XJ009
            Remarks: 437540|1|1|

7    Chk5   1 29Jun2005 10:43      -       -          -     2057   0.014      0.003      -       -          -


** Spl      Name:    TIC                          Data File: XJ010
            Remarks: 437540|1|1|WIC050629-01

8    Spl    1 29Jun2005 10:53      -       -          -     2008   1.143      0.233      -       -          -
```

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Chk5	Name: 1200875735						Data File: XJ011						
	Remarks: 437540|1|1|METH BLK												
9	Chk5	1	29Jun2005	11:29	-	-	-	2173	0.147	0.030	-	-	-
** Chk2	Name: 1200875740						Data File: XJ012						
	Remarks: 437540|1|1|WTC050629-05:LCS												
10	Chk2	1	29Jun2005	11:39	-	-	-	43378	47.166	9.626	-	-	-
** Spl	Name: 137644007						Data File: XJ013						
	Remarks: 437540|10|1|											
11	Spl	1	29Jun2005	11:48	-	-	-	3679	3.050	0.623	-	-	-
11	Spl	2	29Jun2005	11:55	-	-	-	3333	2.655	0.542	-	-	-
11	Spl	3	29Jun2005	12:03	-	-	-	3352	2.677	0.546	-	-	-
11	Spl	4	29Jun2005	12:13	-	-	-	3185	2.486	0.507	-	-	-
11	Spl	Avg						3387	2.717	0.554			
11	Spl	SDev						208.334					
11	Spl	%RSD						6.15					
** Chk2	Name: CCV						Data File: XJ014						
	Remarks: 437540|1|1|WTC050629-02												
12	Chk2	1	29Jun2005	12:23	-	-	-	43482	47.285	9.650	-	-	-
13	Blk	1	29Jun2005	12:31	-	-	-	976	-	-	-	-	-
13	Blk	2	29Jun2005	12:39	-	-	-	863	-	-	-	-	-
13	Blk	3	29Jun2005	12:49	-	-	-	785	-	-	-	-	-
** Chk5	Name: CCB						Data File: XJ016						
	Remarks: 437540|1|1|											
13	Chk5	1	29Jun2005	12:59	-	-	-	2049	0.005	0.001	-	-	-
** Spl	Name: 139042001						Data File: XJ017						
	Remarks: 437540|1|1|											
14	Spl	1	29Jun2005	13:08	-	-	-	3690	3.213	0.656	-	-	-
14	Spl	2	29Jun2005	13:15	-	-	-	3486	2.981	0.608	-	-	-
14	Spl	3	29Jun2005	13:23	-	-	-	3376	2.855	0.583	-	-	-
14	Spl	4	29Jun2005	13:33	-	-	-	3215	2.671	0.545	-	-	-
14	Spl	Avg						3441	2.930	0.598			
14	Spl	SDev						199.436					
14	Spl	%RSD						5.79					
** Spl	Name: 1200875736						Data File: XJ018						
	Remarks: 437540|1|1|139042001:DUP												
15	Spl	1	29Jun2005	13:41	-	-	-	2852	2.257	0.461	-	-	-
15	Spl	2	29Jun2005	13:51	-	-	-	2590	1.958	0.400	-	-	-
15	Spl	Avg						2721	2.108	0.430			
15	Spl	SDev						185.262					
15	Spl	%RSD						6.81					

```
** Spl      Name:    1200875738                  Data File: XJ019
           Remarks: 437540|1|1|139042001:PS

16   Spl    1 29Jun2005 14:01      -       -          -    45749  51.208     10.450      -       -          -


** Spl      Name:    139042002                   Data File: XJ020
           Remarks: 437540|1|1|

17   Spl    1 29Jun2005 14:09      -       -          -     5415   5.182      1.058      -       -          -
17   Spl    2 29Jun2005 14:17      -       -          -     5406   5.172      1.055      -       -          -
17   Spl    3 29Jun2005 14:25      -       -          -     5371   5.132      1.047      -       -          -
17   Spl    4 29Jun2005 14:35      -       -          -     5098   4.820      0.984      -       -          -
17   Spl  Avg                                           5322   5.076      1.036
17   Spl  SDev                                       150.865
17   Spl  %RSD                                          2.83


** Spl      Name:    139042003                   Data File: XJ021
           Remarks: 437540|1|1|

18   Spl    1 29Jun2005 14:43      -       -          -     3734   3.264      0.666      -       -          -
18   Spl    2 29Jun2005 14:51      -       -          -     3628   3.143      0.641      -       -          -
18   Spl    3 29Jun2005 14:58      -       -          -     3737   3.267      0.667      -       -          -
18   Spl    4 29Jun2005 15:08      -       -          -     3521   3.021      0.616      -       -          -
18   Spl  Avg                                           3655   3.173      0.648
18   Spl  SDev                                       102.713
18   Spl  %RSD                                          2.81


** Spl      Name:    139042004                   Data File: XJ022
           Remarks: 437540|1|1|

19   Spl    1 29Jun2005 15:16      -       -          -     4973   4.677      0.955      -       -          -
19   Spl    2 29Jun2005 15:24      -       -          -     4912   4.608      0.940      -       -          -
19   Spl    3 29Jun2005 15:32      -       -          -     4916   4.612      0.941      -       -          -
19   Spl    4 29Jun2005 15:42      -       -          -     4751   4.424      0.903      -       -          -
19   Spl  Avg                                           4888   4.580      0.935
19   Spl  SDev                                        95.488
19   Spl  %RSD                                          1.95


** Spl      Name:    139266001                   Data File: XJ023
           Remarks: 437540|1|1|

20   Spl    1 29Jun2005 15:50      -       -          -     2396   1.737      0.354      -       -          -
20   Spl    2 29Jun2005 15:58      -       -          -     2154   1.461      0.298      -       -          -
20   Spl    3 29Jun2005 16:06      -       -          -     2110   1.410      0.288      -       -          -
20   Spl    4 29Jun2005 16:15      -       -          -     2120   1.422      0.290      -       -          -
20   Spl  Avg                                           2195   1.507      0.308
20   Spl  SDev                                       135.317
20   Spl  %RSD                                          6.16


** Spl      Name:    139266002                   Data File: XJ024
           Remarks: 437540|1|1|

21   Spl    1 29Jun2005 16:23      -       -          -    18749  20.397      4.163      -       -          -
21   Spl    2 29Jun2005 16:31      -       -          -    18634  20.266      4.136      -       -          -
21   Spl    3 29Jun2005 16:39      -       -          -    18803  20.459      4.175      -       -          -
21   Spl    4 29Jun2005 16:49      -       -          -    18829  20.489      4.181      -       -          -
21   Spl  Avg                                          18753  20.403      4.164
21   Spl  SDev                                        86.508
```

```
21   Spl  %RSD                                          0.46


** Chk2     Name:    CCV                          Data File: XJ025
            Remarks: 437540|1|1|WTC050629-02

22   Chk2   1 29Jun2005 16:59      -       -          -    43731  47.569      9.708      -       -          -

23   Blk    1 29Jun2005 17:07      -       -          -      931      -          -        -       -          -
23   Blk    2 29Jun2005 17:15      -       -          -      833      -          -        -       -          -
23   Blk    3 29Jun2005 17:25      -       -          -      820      -          -        -       -          -


** Chk5     Name:    CCB                          Data File: XJ027
            Remarks: 437540|1|1|

23   Chk5   1 29Jun2005 17:35      -       -          -     1701  -0.392     -0.080      -       -          -


** Spl      Name:    139266003                    Data File: XJ028
            Remarks: 437540|1|1|

24   Spl    1 29Jun2005 17:43      -       -          -     4460   4.107      0.838      -       -          -
24   Spl    2 29Jun2005 17:51      -       -          -     4514   4.168      0.851      -       -          -
24   Spl    3 29Jun2005 17:59      -       -          -     4423   4.065      0.830      -       -          -
24   Spl    4 29Jun2005 18:09      -       -          -     4234   3.849      0.785      -       -          -
24   Spl  Avg                                          4407   4.047      0.826
24   Spl  SDev                                       121.711
24   Spl  %RSD                                          2.76


** Spl      Name:    139405002                    Data File: XJ029
            Remarks: 437540|1|1|

25   Spl    1 29Jun2005 18:17      -       -          -     5358   5.132      1.047      -       -          -
25   Spl    2 29Jun2005 18:25      -       -          -     5311   5.078      1.036      -       -          -
25   Spl    3 29Jun2005 18:32      -       -          -     5557   5.359      1.094      -       -          -
25   Spl    4 29Jun2005 18:42      -       -          -     5176   4.924      1.005      -       -          -
25   Spl  Avg                                          5350   5.123      1.046
25   Spl  SDev                                       157.807
25   Spl  %RSD                                          2.95


** Spl      Name:    1200875737                   Data File: XJ030
            Remarks: 437540|1|1|139405002:DUP

26   Spl    1 29Jun2005 18:50      -       -          -     5387   5.165      1.054      -       -          -
26   Spl    2 29Jun2005 19:00      -       -          -     5457   5.245      1.070      -       -          -
26   Spl  Avg                                          5422   5.205      1.062
26   Spl  SDev                                        49.497
26   Spl  %RSD                                          0.91


** Spl      Name:    1200875739                   Data File: XJ031
            Remarks: 437540|1|1|139405002:PS

27   Spl    1 29Jun2005 19:10      -       -          -    48469  54.326     11.087      -       -          -


** Spl      Name:    139442001                    Data File: XJ032
            Remarks: 437775|1|1|

28   Spl    1 29Jun2005 19:18      -       -          -    40074  44.747      9.132      -       -          -
28   Spl    2 29Jun2005 19:28      -       -          -    40601  45.348      9.255      -       -          -
28   Spl  Avg                                         40337  45.047      9.193
```

```
28   Spl  SDev                                        372.645
28   Spl  %RSD                                          0.92


** Spl      Name:    1200876343                   Data File: XJ033
            Remarks: 437775|1|1|139442001:DUP

29   Spl    1 29Jun2005 19:37      -       -          -    40804  45.580      9.302      -       -          -
29   Spl    2 29Jun2005 19:46      -       -          -    40903  45.693      9.325      -       -          -
29   Spl  Avg                                           40853  45.636      9.314
29   Spl  SDev                                        70.004
29   Spl  %RSD                                          0.17


** Spl      Name:    1200876344                   Data File: XJ034
            Remarks: 437775|1|1|139442001:PS

30   Spl    1 29Jun2005 19:56      -       -          -    85009  96.023     19.596      -       -          -


** Chk2     Name:    CCV                          Data File: XJ035
            Remarks: 437775|1|1|WTC050629-02

31   Chk2   1 29Jun2005 20:07      -       -          -    44269  48.183      9.833      -       -          -

32   Blk    1 29Jun2005 20:15      -       -          -     1208      -          -      -       -          -
32   Blk    2 29Jun2005 20:23      -       -          -     1185      -          -      -       -          -
32   Blk    3 29Jun2005 20:33      -       -          -      828      -          -      -       -          -


** Chk5     Name:    CCB                          Data File: XJ037
            Remarks: 437775|1|1|

32   Chk5   1 29Jun2005 20:43      -       -          -     1769  -0.314     -0.064      -       -          -


** Spl      Name:    139034011                    Data File: XJ038
            Remarks: 436679|1|1|

33   Spl    1 29Jun2005 20:51      -       -          -     6554   6.254      1.276      -       -          -
33   Spl    2 29Jun2005 21:01      -       -          -     6362   6.035      1.232      -       -          -
33   Spl  Avg                                            6458   6.145      1.254
33   Spl  SDev                                        135.765
33   Spl  %RSD                                          2.10


** Spl      Name:    1200873780                   Data File: XJ039
            Remarks: 436679|1|1|139034011:DUP

34   Spl    1 29Jun2005 21:09      -       -          -     6594   6.300      1.286      -       -          -
34   Spl    2 29Jun2005 21:19      -       -          -     6687   6.406      1.307      -       -          -
34   Spl  Avg                                            6640   6.353      1.297
34   Spl  SDev                                         65.761
34   Spl  %RSD                                          0.99


** Spl      Name:    1200873782                   Data File: XJ040
            Remarks: 436679|1|1|139034011:PS

35   Spl    1 29Jun2005 21:29      -       -          -    51435  57.469     11.728      -       -          -


** Spl      Name:    139123001                    Data File: XJ041
            Remarks: 436679|1|1|
```

```
36   Spl    1 29Jun2005 21:37      -       -          -     5584   5.148      1.051      -       -          -
36   Spl    2 29Jun2005 21:47      -       -          -     6036   5.663      1.156      -       -          -
36   Spl  Avg                                           5810   5.405      1.103
36   Spl  SDev                                       319.612
36   Spl  %RSD                                         5.50


** Spl      Name:    139141001                  Data File: XJ042
            Remarks: 436679|1|1|

37   Spl    1 29Jun2005 21:55      -       -          -     3524   2.797      0.571      -       -          -
37   Spl    2 29Jun2005 22:03      -       -          -     3506   2.776      0.567      -       -          -
37   Spl    3 29Jun2005 22:11      -       -          -     3521   2.793      0.570      -       -          -
37   Spl    4 29Jun2005 22:20      -       -          -     3423   2.682      0.547      -       -          -
37   Spl  Avg                                           3493   2.762      0.564
37   Spl  SDev                                        47.655
37   Spl  %RSD                                         1.36


** Spl      Name:    139141002                  Data File: XJ043
            Remarks: 436679|1|1|

38   Spl    1 29Jun2005 22:29      -       -          -     2239   1.331      0.271      -       -          -
38   Spl    2 29Jun2005 22:36      -       -          -     2255   1.349      0.275      -       -          -
38   Spl    3 29Jun2005 22:44      -       -          -     2073   1.141      0.233      -       -          -
38   Spl    4 29Jun2005 22:54      -       -          -     1981   1.036      0.212      -       -          -
38   Spl  Avg                                           2137   1.214      0.248
38   Spl  SDev                                       132.615
38   Spl  %RSD                                         6.21


** Spl      Name:    1200873781                 Data File: XJ044
            Remarks: 436679|1|1|139141002:DUP

39   Spl    1 29Jun2005 23:02      -       -          -     2263   1.358      0.277      -       -          -
39   Spl    2 29Jun2005 23:12      -       -          -     2191   1.276      0.260      -       -          -
39   Spl  Avg                                           2227   1.317      0.269
39   Spl  SDev                                        50.912
39   Spl  %RSD                                         2.29


** Spl      Name:    1200873783                 Data File: XJ045
            Remarks: 436679|1|1|139141002:PS

40   Spl    1 29Jun2005 23:22      -       -          -    45763  50.996     10.407      -       -          -


** Chk2     Name:    CCV                        Data File: XJ046
            Remarks: 436679|1|1|WTC050629-02

41   Chk2   1 29Jun2005 23:32      -       -          -    44120  48.013      9.799      -       -          -

42   Blk    1 29Jun2005 23:41      -       -          -     1016      -          -       -       -          -
42   Blk    2 29Jun2005 23:49      -       -          -      849      -          -       -       -          -
42   Blk    3 29Jun2005 23:58      -       -          -      826      -          -       -       -          -


** Chk5     Name:    CCB                        Data File: XJ048
            Remarks: 436679|1|1|

42   Chk5   1 30Jun2005 00:09      -       -          -     1887  -0.180     -0.037      -       -          -


** Spl      Name:    139141003                  Data File: XJ049
            Remarks: 436679|1|1|
```

43	Spl	1 30Jun2005 00:17	-	-	-	9793	10.151	2.072	-	-	-
43	Spl	2 30Jun2005 00:25	-	-	-	9633	9.969	2.034	-	-	-
43	Spl	3 30Jun2005 00:33	-	-	-	9877	10.247	2.091	-	-	-
43	Spl	4 30Jun2005 00:42	-	-	-	9508	9.826	2.005	-	-	-
43	Spl	Avg				9702	10.048	2.051			
43	Spl	SDev				164.622					
43	Spl	%RSD				1.70					

** Spl Name: 139188026 Data File: XJ050
Remarks: 436679|1|1|

44	Spl	1 30Jun2005 00:51	-	-	-	9555	9.880	2.016	-	-	-
44	Spl	2 30Jun2005 01:00	-	-	-	9217	9.494	1.938	-	-	-
44	Spl	Avg				9386	9.687	1.977			
44	Spl	SDev				239.002					
44	Spl	%RSD				2.55					

** Spl Name: 139188027 Data File: XJ051
Remarks: 436679|1|1|

45	Spl	1 30Jun2005 01:09	-	-	-	3620	3.107	0.634	-	-	-
45	Spl	2 30Jun2005 01:18	-	-	-	3874	3.397	0.693	-	-	-
45	Spl	Avg				3747	3.252	0.664			
45	Spl	SDev				179.605					
45	Spl	%RSD				4.79					

** Chk2 Name: CCV Data File: XJ052
Remarks: 436679|1|1|WTC050629-02

46	Chk2	1 30Jun2005 01:29	-	-	-	43821	47.672	9.729	-	-	-

47	Blk	1 30Jun2005 01:37	-	-	-	1107	-	-	-	-	-
47	Blk	2 30Jun2005 01:45	-	-	-	913	-	-	-	-	-
47	Blk	3 30Jun2005 01:53	-	-	-	740	-	-	-	-	-
47	Blk	4 30Jun2005 02:01	-	-	-	728	-	-	-	-	-
47	Blk	5 30Jun2005 02:11	-	-	-	705	-	-	-	-	-

** Chk5 Name: CCB Data File: XJ054
Remarks: 436679|1|1|

47	Chk5	1 30Jun2005 02:21	-	-	-	1625	-0.479	-0.098	-	-	-

Cyanide, Total

Prep LogBook

Analyst: GXA2 Verified by:_____

Batch: 437474

Lab SOP: GL-GC-E-067 REV# 7

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200875593	URF050613-01	.025	mL
MS	1200875595	URF050613-01	.05	mL
MS	1200875597	URF050613-01	.05	mL
MS	1200875599	URF050613-01	.05	mL
MS	1200875601	URF050613-01	.05	mL
MS	1200875603	URF050613-01	.05	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200875592		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	SURFACE WATER
LCS	1200875593		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	SURFACE WATER
SAMPLE	139193001		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
DUP	1200875602	139193001	EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
MS	1200875603	139193001	EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
SAMPLE	139193002		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
SAMPLE	139193003		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
SAMPLE	139193004		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
SAMPLE	139305004		SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WASTE WATER
DUP	1200875596	139305004	SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WASTE WATER
MS	1200875597	139305004	SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WASTE WATER
SAMPLE	139323001		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	WASTE WATER
SAMPLE	139349001		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	SURFACE WATER
SAMPLE	139349009		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	SURFACE WATER
SAMPLE	139401001		SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER
DUP	1200875598	139401001	SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER
MS	1200875599	139401001	SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER
SAMPLE	139401002		SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER
SAMPLE	139405001		SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
SAMPLE	139406001		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	GROUND WATER
SAMPLE	139409001		EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	SURFACE WATER
DUP	1200875594	139409001	EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	SURFACE WATER
MS	1200875595	139409001	EPA 335.3	27-JUN-2005 23:13	50 mL	50 mL	1	SURFACE WATER
SAMPLE	139417001		SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER
DUP	1200875600	139417001	SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER
MS	1200875601	139417001	SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER
SAMPLE	139417002		SW846 9010B Prep	27-JUN-2005 23:13	50 mL	50 mL	1	WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
315882-C	50 mL	0.25N Sodium Hydroxide Solution
305807-C	2.5 mL	Bismuth Nitrate Solution
313695-C	5 mL	50% H2SO4 CN Prep
314709-C	2 mL	51% Magnesium Chloride Solution
315296-C	2.5 mL	Sulfamic Acid Solution

Comments

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	adf	6/29/2005 12:36:14	OM_6-29-2005_12-34-25
150 ppb		1	adf	6/29/2005 12:37:07	OM_6-29-2005_12-34-25
100 ppb		1	adf	6/29/2005 12:38:03	OM_6-29-2005_12-34-25
50 ppb		1	adf	6/29/2005 12:38:59	OM_6-29-2005_12-34-25
10 ppb		1	adf	6/29/2005 12:39:57	OM_6-29-2005_12-34-25
CRDL 5.0 ppb		1	adf	6/29/2005 12:40:55	OM_6-29-2005_12-34-25
ICAL-00		1	adf	6/29/2005 12:41:53	OM_6-29-2005_12-34-25
ICV		1	adf	6/29/2005 12:42:51	OM_6-29-2005_12-34-25
ICB		1	adf	6/29/2005 12:44:51	OM_6-29-2005_12-34-25
CRDL		1	adf	6/29/2005 12:46:49	OM_6-29-2005_12-34-25
1200875702	437512	1	adf	6/29/2005 12:59:43	OM_6-29-2005_12-34-25
CCV		1	adf	6/29/2005 13:00:36	OM_6-29-2005_12-34-25
CCB		1	adf	6/29/2005 13:02:33	OM_6-29-2005_12-34-25
1200875705	437512	1	adf	6/29/2005 13:04:28	OM_6-29-2005_12-34-25
139103001	437512	1	adf	6/29/2005 13:05:20	OM_6-29-2005_12-34-25
1200875703	437512	1	adf	6/29/2005 13:06:12	OM_6-29-2005_12-34-25
1200875704	437512	1	adf	6/29/2005 13:07:05	OM_6-29-2005_12-34-25
139103002	437512	1	adf	6/29/2005 13:07:57	OM_6-29-2005_12-34-25
139104001	437512	1	adf	6/29/2005 13:08:51	OM_6-29-2005_12-34-25
139104002	437512	1	adf	6/29/2005 13:09:46	OM_6-29-2005_12-34-25
139104003	437512	1	adf	6/29/2005 13:10:40	OM_6-29-2005_12-34-25
CCV		1	adf	6/29/2005 13:13:21	OM_6-29-2005_12-34-25
CCB		1	adf	6/29/2005 13:15:10	OM_6-29-2005_12-34-25
CCV		1	adf	6/29/2005 13:25:47	OM_6-29-2005_12-34-25
CCB		1	adf	6/29/2005 13:27:38	OM_6-29-2005_12-34-25
CCV		1	adf	6/29/2005 13:38:22	OM_6-29-2005_12-34-25
CCB		1	adf	6/29/2005 13:40:12	OM_6-29-2005_12-34-25
CCV		1	adf	6/29/2005 13:51:15	OM_6-29-2005_12-34-25
CCB		1	adf	6/29/2005 13:53:09	OM_6-29-2005_12-34-25
CCV		1	adf	6/29/2005 14:04:23	OM_6-29-2005_12-34-25
CCB		1	adf	6/29/2005 14:06:17	OM_6-29-2005_12-34-25

Author: adf Date : 6/29/2005

Original Run Filename: OM_6-29-2005_12-34-25.OMN created 6/29/2005 12:34:25
Original Run Author's Signature: [adf]
Current Run Filename: OM_6-29-2005_12-34-25.OMN last modified 6/29/2005 14:18:32
Current Run Author's Signature: [adf]

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN050628-01	1	S1	200	8.67	6/29/2005@12:36:14			200 ppb
WCN050628-02	1	S2	150	6.64	6/29/2005@12:37:07			150 ppb
WCN050628-03	1	S3	100	4.45	6/29/2005@12:38:03			100 ppb
WCN050628-04	1	S4	50.0	2.23	6/29/2005@12:38:59			50 ppb
WCN050628-05	1	S5	10.0	0.518	6/29/2005@12:39:57			10 ppb
WCN050628-06	1	S6	5.00	0.302	6/29/2005@12:40:55			CRDL 5.0 ppb
0.0	1	S7	0.00	0.0162	6/29/2005@12:41:53			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99989 > 0.99500					
		Message	Pass					
		Action	None					
WCN050628-07	1	S8	162	7.11	6/29/2005@12:42:51			ICV
		Known Conc:	150					
DQM Test: > + Concentration Limit								
		Result:	162 < 165					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	162 > 135					
		Message	ICV Passed					
		Action	Continue					
DQM Test: > + Percent Relative Difference								
		Result:	8.2 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	8.2 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB/CCB	1	S7	-2.12	-0.0204	6/29/2005@12:44:51			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.12 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.12 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN050628-06	1	S6	5.37	0.304	6/29/2005@12:46:49			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	5.37 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	5.37 > 2.50					
		Message	CRDL Passed					
		Action	Continue					
1200875689|437508|MB	1	1	4.20	0.254	6/29/2005@12:48:50			
1200875690||LCS	1	2	19.8	0.930	6/29/2005@12:52:10	50.00		
139103001	1	3	1.55	0.139	6/29/2005@12:53:07			
1200875691||DUP	1	4	0.483	0.0926	6/29/2005@12:54:03			
1200875692||MS	1	5	5.48	0.309	6/29/2005@12:55:00			
139103002	1	6	0.912	0.111	6/29/2005@12:55:57			
139104001	1	7	3.21	0.211	6/29/2005@12:56:54			
139104002	1	8	1.74	0.147	6/29/2005@12:57:51			
139104003	1	9	2.27	0.170	6/29/2005@12:58:47			

1200875702|437512|MB	1	10	-1.06	0.0255	6/29/2005@12:59:43			
WCN050628-03	1	S3	104	4.58	6/29/2005@13:00:36			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	104 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	104 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-1.66	-3.56e-4	6/29/2005@13:02:33			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.66 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.66 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1200875705||LCS	1	11	0.386	0.0883	6/29/2005@13:04:28			
139103001	1	12	55.7	2.48	6/29/2005@13:05:20			
1200875703||DUP	1	13	237	10.3	6/29/2005@13:06:12			
1200875704||MS	1	14	24.2	1.12	6/29/2005@13:07:05			
139103002	1	15	20.1	0.942	6/29/2005@13:07:57			
139104001	1	16	34.5	1.57	6/29/2005@13:08:51			
139104002	1	17	16.8	0.801	6/29/2005@13:09:46			
139104003	1	18	18.6	0.879	6/29/2005@13:10:40			
1200875592|437476|MB	1	19	-0.149	0.0652	6/29/2005@13:11:33			
1200875593||LCS	1	20	54.2	2.42	6/29/2005@13:12:27			
WCN050628-03	1	S3	105	4.60	6/29/2005@13:13:21			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	105 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	105 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-0.678	0.0422	6/29/2005@13:15:10			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.678 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.678 > -5.00					
		Message	CCB Passed					
		Action	Continue					
139193001	1	21	-0.491	0.0504	6/29/2005@13:17:00			
1200875602||DUP	1	22	-0.772	0.0382	6/29/2005@13:17:53			
1200875603||MS	1	23	110	4.82	6/29/2005@13:18:46			
139193002	1	24	-0.140	0.0656	6/29/2005@13:19:39			
139193003	1	25	-0.415	0.0536	6/29/2005@13:20:32			
139193004	1	26	-0.365	0.0558	6/29/2005@13:21:25			
139305004	1	27	15.7	0.751	6/29/2005@13:22:18			
1200875596||DUP	1	28	14.8	0.711	6/29/2005@13:23:10			
1200875597||MS	1	29	126	5.55	6/29/2005@13:24:03			
139323001	1	30	9.04	0.464	6/29/2005@13:24:55			
WCN050628-03	1	S3	104	4.59	6/29/2005@13:25:47			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	104 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

		Result:	104 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-1.04	0.0265	6/29/2005@13:27:38			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.04 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.04 > -5.00					
		Message	CCB Passed					
		Action	Continue					
139349001	1	31	-0.608	0.0453	6/29/2005@13:29:29			
139349009	1	32	0.0603	0.0742	6/29/2005@13:30:22			
139401001	1	33	-0.362	0.0559	6/29/2005@13:31:16			
1200875598||DUP	1	34	0.118	0.0767	6/29/2005@13:32:10			
1200875599||MS	1	35	109	4.80	6/29/2005@13:33:03			
139401002	1	36	-0.121	0.0664	6/29/2005@13:33:57			
139405001	1	37	0.675	0.101	6/29/2005@13:34:50			
139406001	1	38	62.4	2.78	6/29/2005@13:35:44			
139409001	1	39	-0.513	0.0494	6/29/2005@13:36:37			
1200875594||DUP	1	40	-0.486	0.0506	6/29/2005@13:37:29			
WCN050628-03	1	S3	104	4.59	6/29/2005@13:38:22			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	104 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	104 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-1.22	0.0186	6/29/2005@13:40:12			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.22 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.22 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1200875595||MS	1	41	110	4.82	6/29/2005@13:42:01			
139417001	1	42	-0.746	0.0393	6/29/2005@13:42:54			
1200875600||DUP	1	43	-1.00	0.0281	6/29/2005@13:43:47			
1200875601||MS	1	44	113	4.99	6/29/2005@13:44:39			
139417002	1	45	-0.195	0.0632	6/29/2005@13:45:34			
1200873424|436542|MB	1	46	-0.357	0.0561	6/29/2005@13:46:32			
1200873425||LCS	1	47	53.8	2.40	6/29/2005@13:47:29			
139136001	1	48	1.21	0.124	6/29/2005@13:48:26			
1200873426||DUP	1	49	0.615	0.0983	6/29/2005@13:49:23			
1200873427||MS	1	50	117	5.16	6/29/2005@13:50:20			
WCN050628-03	1	S3	105	4.61	6/29/2005@13:51:15			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	105 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	105 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-1.67	-6.60e-4	6/29/2005@13:53:09			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.67 < 5.00					
		Message	CCB Passed					

		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.67 > -5.00					
		Message	CCB Passed					
		Action	Continue					
139136002	1	51	-0.155	0.0649	6/29/2005@13:55:03			
139136003	1	52	0.689	0.101	6/29/2005@13:55:59			
139136004	1	53	1.73	0.147	6/29/2005@13:56:55			
1200875585|437469|MB	1	54	3.82	0.237	6/29/2005@13:57:52			
1200875586||LCS	1	55	64.7	2.88	6/29/2005@13:58:48			
138659001	1	56	-0.396	0.0545	6/29/2005@13:59:44			
1200870041||DUP	1	57	1.22	0.125	6/29/2005@14:00:40			
1200870042||MS	1	58	0.268	0.0832	6/29/2005@14:01:36			
138659002	1	59	117	5.16	6/29/2005@14:02:32			
138659003	1	60	1.61	0.141	6/29/2005@14:03:28			
WCN050628-03	1	S3	105	4.62	6/29/2005@14:04:23			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	105 < 110					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	105 > 89.4					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-1.05	0.0262	6/29/2005@14:06:17			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.05 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.05 > -5.00					
		Message	CCB Passed					
		Action	Continue					
138659004	1	61	0.232	0.0817	6/29/2005@14:08:08			
138659005	1	62	1.99	0.158	6/29/2005@14:09:02			
138659014	1	63	1.57	0.140	6/29/2005@14:09:56			
138700004	1	64	16.2	0.773	6/29/2005@14:10:51			
1200870039||DUP	1	65	15.1	0.725	6/29/2005@14:11:45			
1200870044||MS	1	66	143	6.26	6/29/2005@14:12:42			
138711002	1	67	0.448	0.0910	6/29/2005@14:13:38			
138788004	1	68	0.731	0.103	6/29/2005@14:14:35			
138788005	1	69	6.68	0.361	6/29/2005@14:15:31			
1200870040||DUP	1	70	7.91	0.415	6/29/2005@14:16:28			
WCN050628-03	1	S3	312	13.6	6/29/2005@14:17:23			CCV
		Known Conc:	100					
DQM Test: > + Concentration Limit								
		Result:	312 > 110					
		Message	CCV Failed					
		Action	Stop Run					
DQM Test: < - Concentration Limit								
		Result:	312 > 89.4					
		Message	CCV Passed					
		Action	Continue					

Analyte Properties Table for OM_6-29-2005_12-34-25.OMN

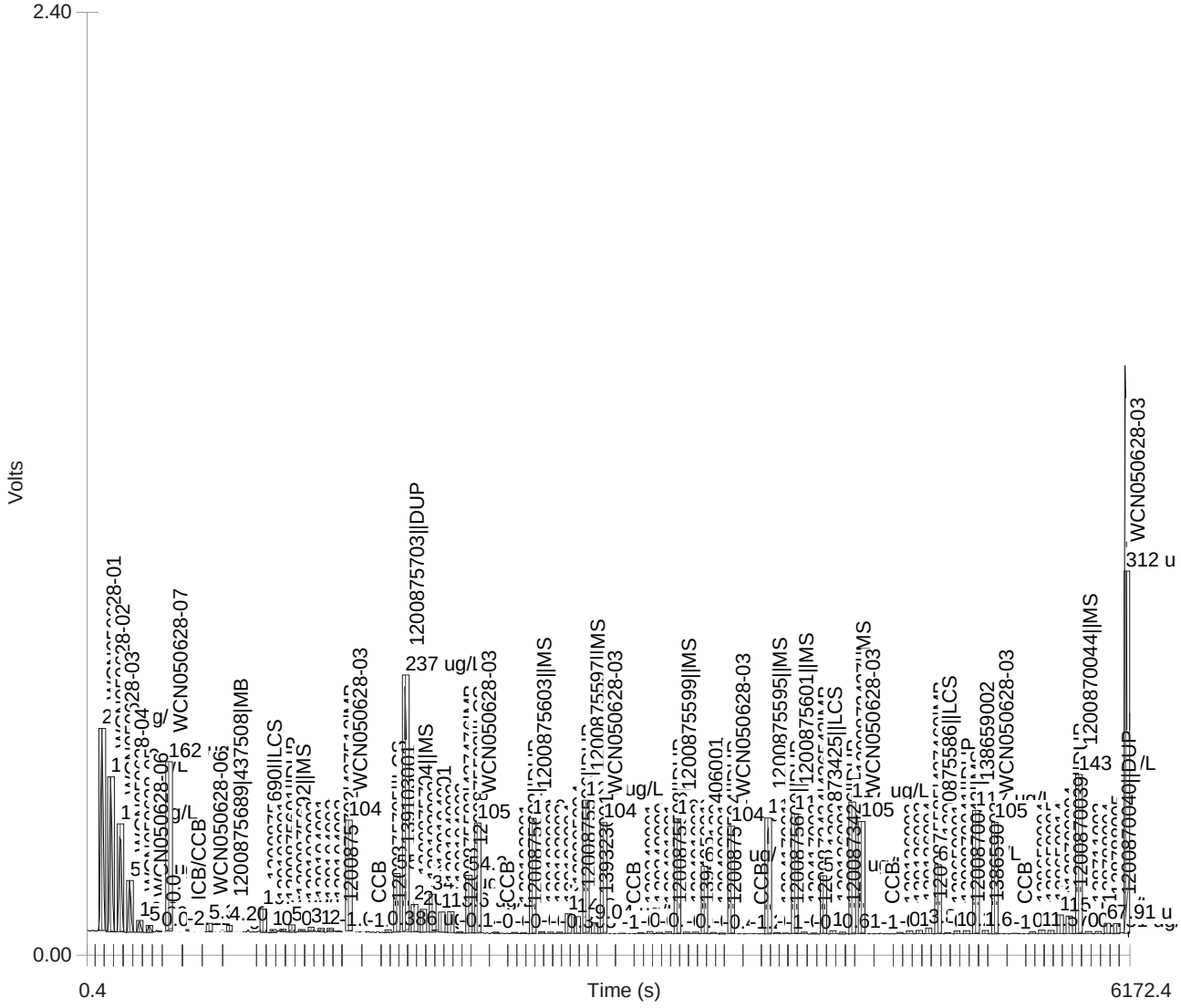
Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A

Author: adf

Date : 6/29/2005

Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

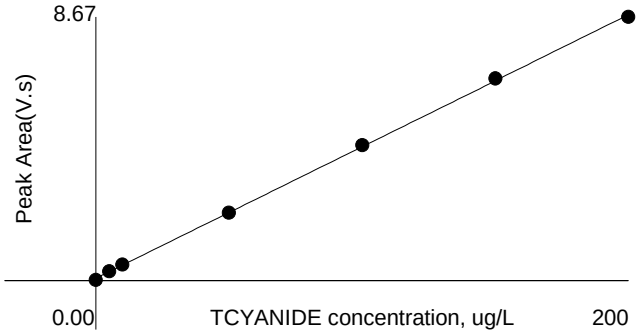


Author: adf Date : 6/29/2005

Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	8.67	0.515	0.8	6/29/2005	12:37:20
2	150	1	6.64	0.394	-1.0	6/29/2005	12:38:15
3	100	1	4.45	0.275	-1.0	6/29/2005	12:39:20
4	50.0	1	2.23	0.132	0.4	6/29/2005	12:40:07
5	10.0	1	0.518	0.0297	-2.4	6/29/2005	12:41:05
6	5.00	1	0.302	0.0173	-4.4	6/29/2005	12:42:03
7	0.00	1	0.0162	5.20e-4		6/29/2005	12:43:01

Figure 1: TCYANIDE



Area = 0.0433 * Conc + 0.0723
Conc = 23.1 * Area - 1.65
Correlation Coefficient (r) = 0.99989

No Weighting

Ion Chromatography

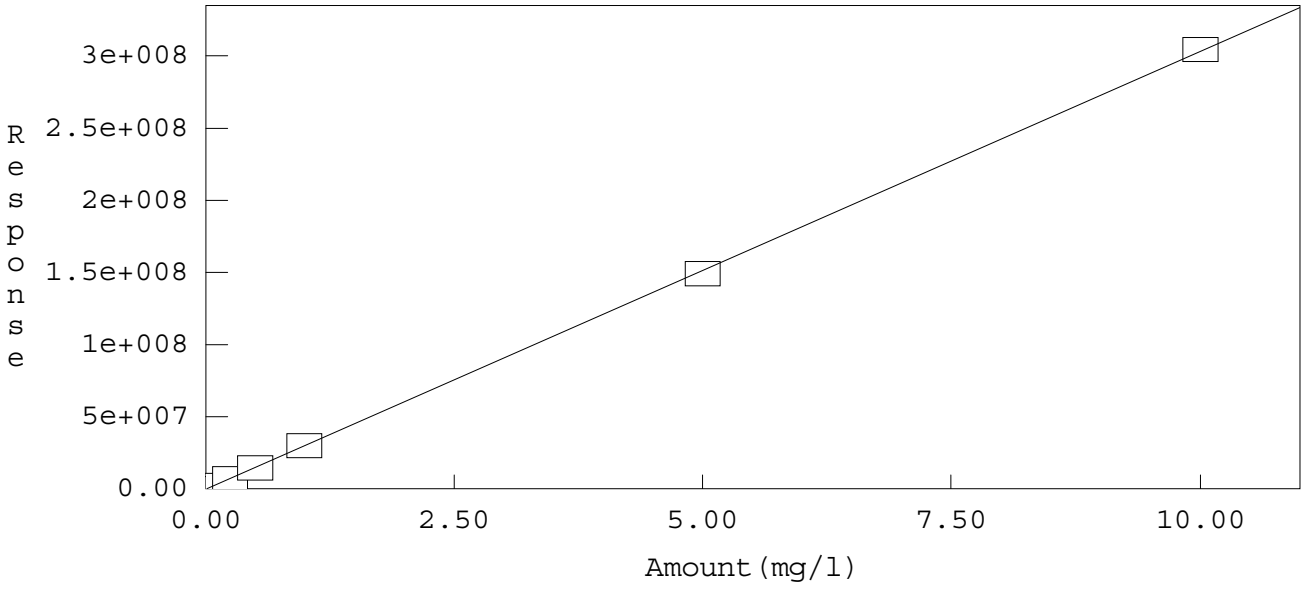
METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			BJB	05/27/2005 14:57:33	AZE7KC01.R01
AUTOCAL7:			BJB	05/27/2005 15:17:51	AZE7KC01.R02
AUTOCAL6:			BJB	05/27/2005 15:38:09	AZE7KC01.R03
AUTOCAL5:			BJB	05/27/2005 15:58:29	AZE7KC01.R04
AUTOCAL4:			BJB	05/27/2005 16:18:56	AZE7KC01.R05
AUTOCAL3:			BJB	05/27/2005 16:39:24	AZE7KC01.R06
AUTOCAL2:			BJB	05/27/2005 16:59:52	AZE7KC01.R07
AUTOCAL1:			BJB	05/27/2005 17:20:10	AZE7KC01.R08
AUTOCAL7:			BJB	05/27/2005 17:40:39	AZE7KC01.R09
AUTOCAL6:			BJB	05/27/2005 18:01:06	AZE7KC01.R10
WIC050527-02ICV:1		1	BJB	05/27/2005 18:21:24	AZE7KC01.R11
ICB:			BJB	05/27/2005 18:41:53	AZE7KC01.R12
1200856010:1	429373	1	BJB	05/27/2005 19:02:22	AZE7KC01.R13
1200856013:1	429373	1	BJB	05/27/2005 19:22:40	AZE7KC01.R14
137441001:1	429373	1	BJB	05/27/2005 19:42:58	AZE7KC01.R15
137441002:1	429373	1	BJB	05/27/2005 20:03:15	AZE7KC01.R16
137441003:1	429373	1	BJB	05/27/2005 20:23:33	AZE7KC01.R17
137441004:1	429373	1	BJB	05/27/2005 20:43:51	AZE7KC01.R18
1200856011:1	429373	1	BJB	05/27/2005 21:04:08	AZE7KC01.R19
1200856012:1	429373	1	BJB	05/27/2005 21:24:26	AZE7KC01.R20
137441005:1	429373	1	BJB	05/27/2005 21:44:44	AZE7KC01.R21
137441006:1	429373	1	BJB	05/27/2005 22:05:01	AZE7KC01.R22
WIC050527-02CCV:1		1	BJB	05/27/2005 22:25:19	AZE7KC01.R23
CCB:			BJB	05/27/2005 22:45:37	AZE7KC01.R24
137441007:1	429373	1	BJB	05/27/2005 23:05:54	AZE7KC01.R25
137441008:1	429373	1	BJB	05/27/2005 23:26:12	AZE7KC01.R26
WIC050527-02CVH:1		1	BJB	05/27/2005 23:46:30	AZE7KC01.R27
CCB:			BJB	05/28/2005 00:06:47	AZE7KC01.R28
1200856014:1	429374	1	BJB	05/28/2005 00:27:05	AZE7KC01.R29
1200856019:1	429374	1	BJB	05/28/2005 00:47:23	AZE7KC01.R30
1200856129:1	429374	1	BJB	05/28/2005 01:07:40	AZE7KC01.R31
137455001:1	429374	1	BJB	05/28/2005 01:27:58	AZE7KC01.R32
137455002:1	429374	1	BJB	05/28/2005 01:48:27	AZE7KC01.R33
137455003:1	429374	1	BJB	05/28/2005 02:08:44	AZE7KC01.R34
137455004:1	429374	1	BJB	05/28/2005 02:29:02	AZE7KC01.R35
137455005:1	429374	1	BJB	05/28/2005 02:49:20	AZE7KC01.R36
137455006:1	429374	1	BJB	05/28/2005 03:09:37	AZE7KC01.R37
137455007:1	429374	1	BJB	05/28/2005 03:29:55	AZE7KC01.R38
WIC050527-02CCV:1		1	BJB	05/28/2005 03:50:24	AZE7KC01.R39
CCB:			BJB	05/28/2005 04:10:41	AZE7KC01.R40
137455008:1	429374	1	BJB	05/28/2005 04:30:59	AZE7KC01.R41
137455009:1	429374	1	BJB	05/28/2005 04:51:28	AZE7KC01.R42
137455010:1	429374	1	BJB	05/28/2005 05:11:46	AZE7KC01.R43
137455011:1	429374	1	BJB	05/28/2005 05:32:15	AZE7KC01.R44
137455012:1	429374	1	BJB	05/28/2005 05:52:32	AZE7KC01.R45
137455013:1	429374	1	BJB	05/28/2005 06:12:50	AZE7KC01.R46
137455014:1	429374	1	BJB	05/28/2005 06:33:19	AZE7KC01.R47
137455015:1	429374	1	BJB	05/28/2005 06:53:36	AZE7KC01.R48
WIC050527-02CVH:1		1	BJB	05/28/2005 07:13:54	AZE7KC01.R49
CCB:			BJB	05/28/2005 07:34:12	AZE7KC01.R50
136854001:2	428261	5	BJB	05/28/2005 07:54:53	AZE7KC01.R51
1200853347:2	428261	5	BJB	05/28/2005 08:15:11	AZE7KC01.R52
1200853349:2	428261	5	BJB	05/28/2005 08:35:29	AZE7KC01.R53
136854002:2	428261	5	BJB	05/28/2005 08:55:46	AZE7KC01.R54
136854003:3	428261	5	BJB	05/28/2005 09:16:04	AZE7KC01.R55

```
136908001:2          428261   2     BJB   05/28/2005 09:36:21 AZE7KC01.R56
1200853348:2         428261   2     BJB   05/28/2005 09:56:39 AZE7KC01.R57
1200853350:2         428261   2     BJB   05/28/2005 10:16:57 AZE7KC01.R58
WIC050527-02CCV:1             1     BJB   05/28/2005 10:37:38 AZE7KC01.R59
CCB:                          1     BJB   05/28/2005 10:58:07 AZE7KC01.R60
BLK:                          1     BJB   05/28/2005 19:00:05 AZE7KC01.R61
WIC050527-02CVH:1             1     BJB   05/28/2005 19:20:23 AZE7KC01.R62
CCB:                          1     BJB   05/28/2005 19:40:52 AZE7KC01.R63
1200856440:1         429554   1     BJB   05/28/2005 20:01:21 AZE7KC01.R64
1200856443:1         429554   1     BJB   05/28/2005 20:21:50 AZE7KC01.R65
137521001:1          429554   1     BJB   05/28/2005 20:42:08 AZE7KC01.R66
1200856441:1         429554   1     BJB   05/28/2005 21:02:25 AZE7KC01.R67
1200856442:1         429554   1     BJB   05/28/2005 21:22:43 AZE7KC01.R68
137521002:1          429554   1     BJB   05/28/2005 21:43:01 AZE7KC01.R69
137521003:1          429554   1     BJB   05/28/2005 22:03:30 AZE7KC01.R70
137521004:1          429554   1     BJB   05/28/2005 22:23:47 AZE7KC01.R71
WIC050527-02CCV:1             1     BJB   05/28/2005 22:44:05 AZE7KC01.R72
CCB:                          1     BJB   05/28/2005 23:04:34 AZE7KC01.R73
```

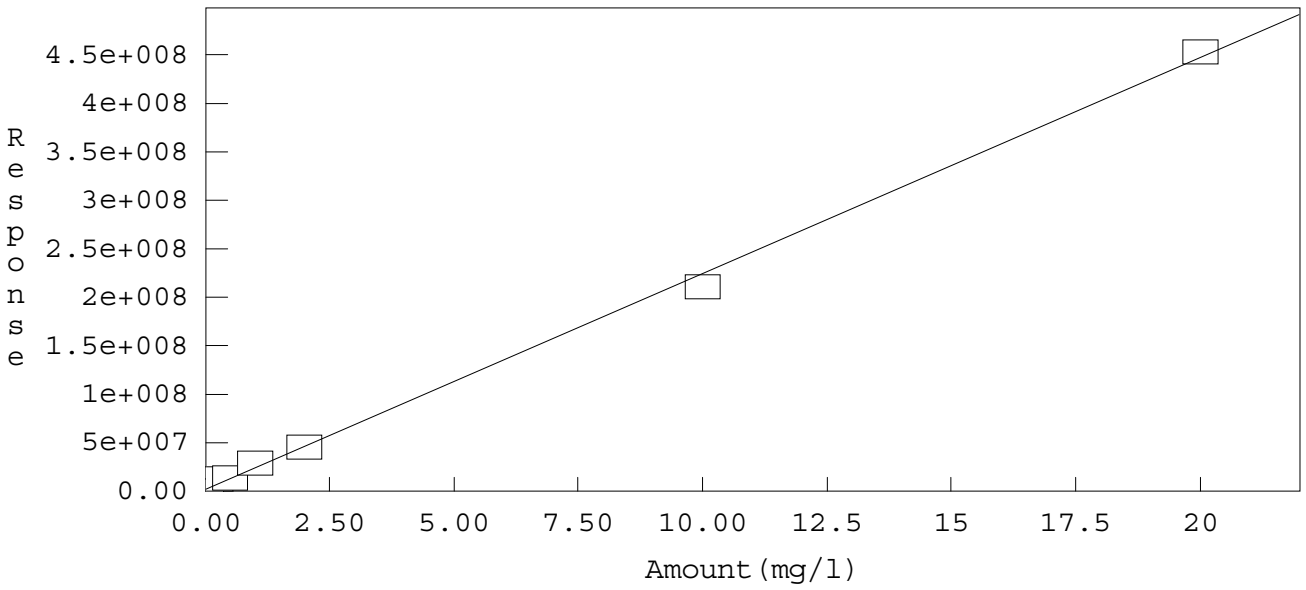
Method: MAY27.MET - Last Updated: 18:01 on Fri, 27 May 2005

Component: Fluoride
Fit Type: Linear
r^2 = 0.999918
Amt = Resp * 3.291e-008 + 0.02083
Resp = Amt * 3.038e+007 + -6.329e+005
Standardization: External
Calibration: Area



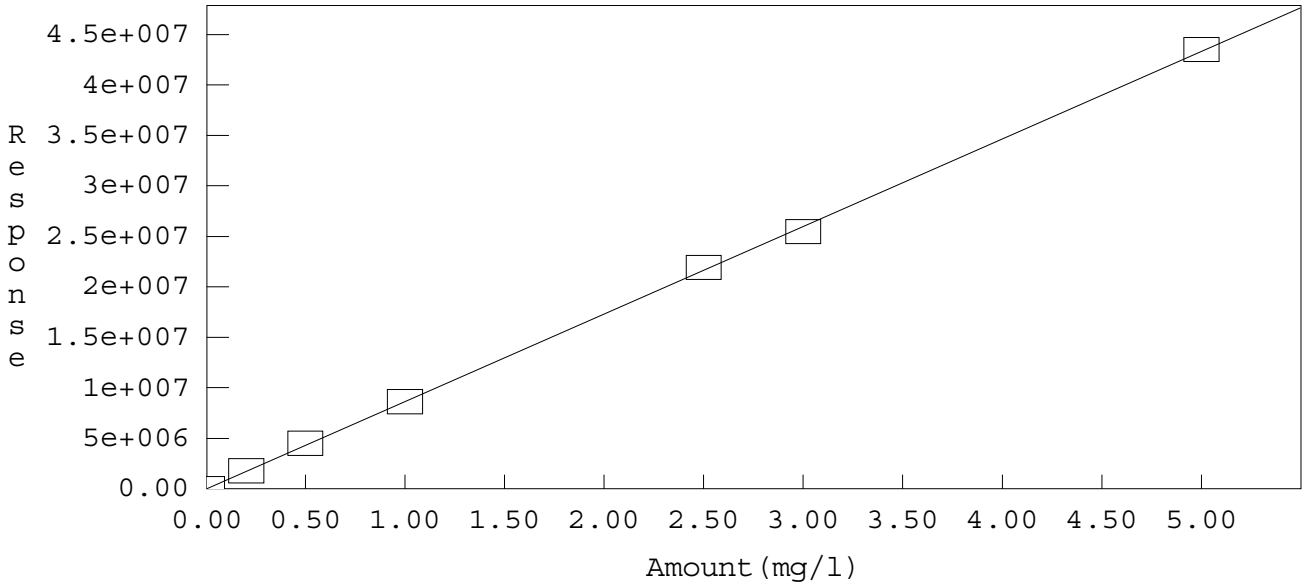
Method: C:\DX\METHOD\MAY27.MET

Component: Chloride
Fit Type: Linear
r^2 = 0.998265
Amt = Resp * 4.498e-008 + -0.1021
Resp = Amt * 2.223e+007 + 2.27e+006
Standardization: External
Calibration: Area



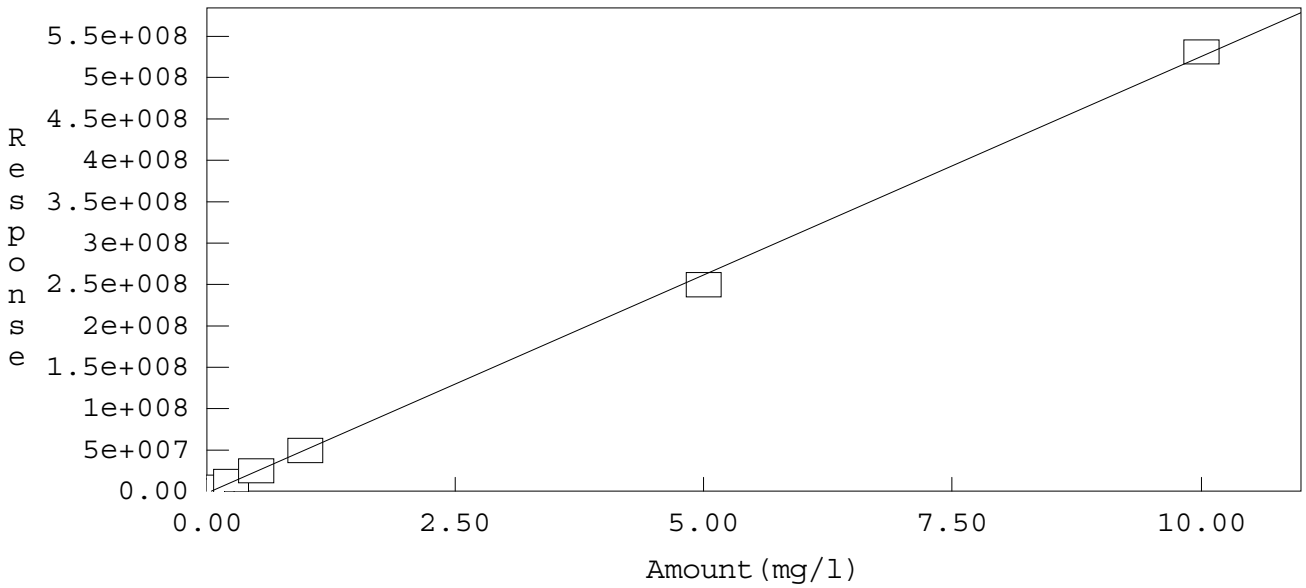
Method: C:\DX\METHOD\MAY27.MET

Component: Bromide
Fit Type: Linear
r^2 = 0.999740
Amt = Resp * 1.155e-007 + -0.004011
Resp = Amt * 8.656e+006 + 3.472e+004
Standardization: External
Calibration: Area



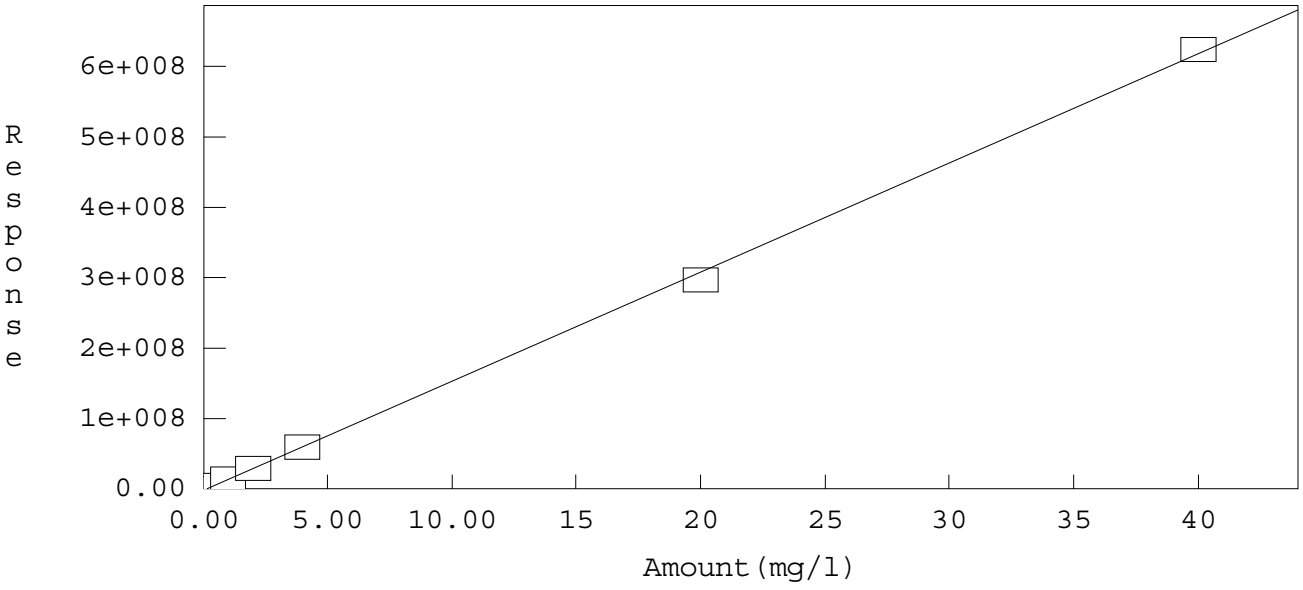
Method: C:\DX\METHOD\MAY27.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.999213
Amt = Resp * 1.894e-008 + 0.05062
Resp = Amt * 5.279e+007 + -2.672e+006
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\MAY27.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999485
Amt = Resp * 6.44e-008 + 0.1721
Resp = Amt * 1.553e+007 + -2.672e+006
Standardization: External
Calibration: Area

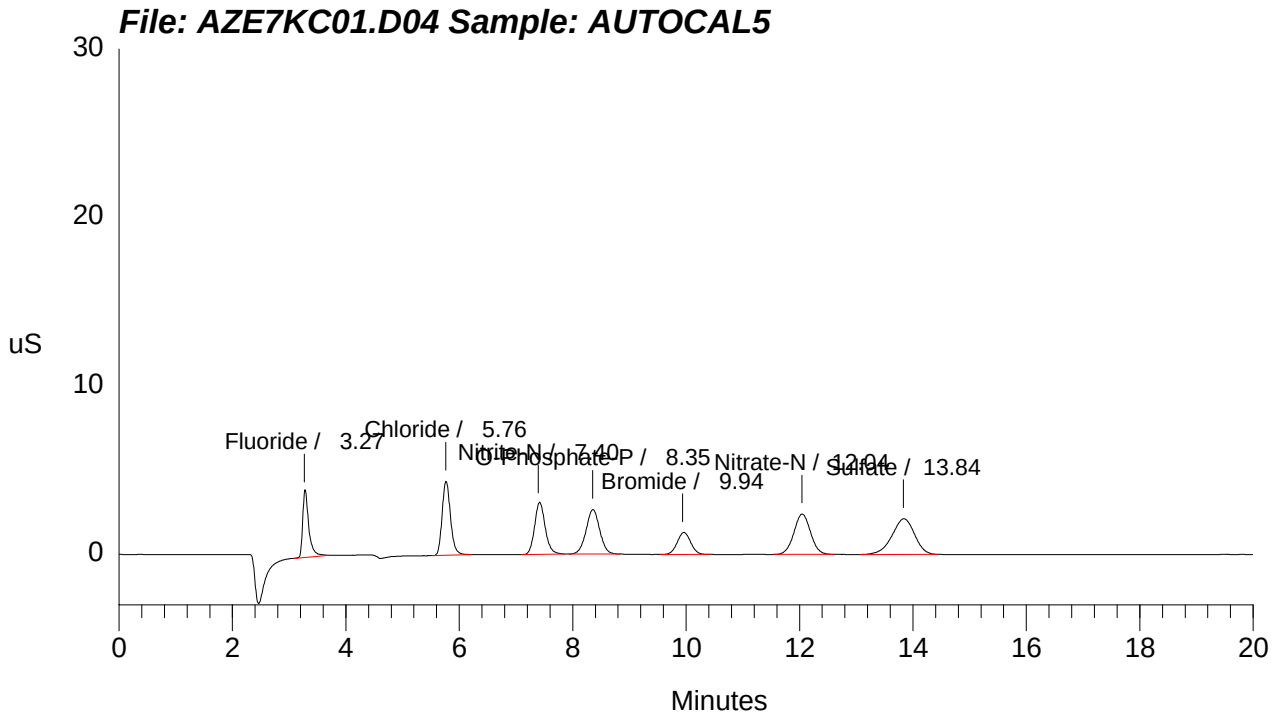


```
================================================================================
| Sample Name: AUTOCAL5                        Date: 05/27/2005 15:58:29       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D04                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 4                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	1.000	3829726	29992980	1	0.00
2	5.76	Chloride	2.000	4403140	45441250	1	0.00
3	7.40	Nitrite-N	1.000	3003109	40330948	1	0.00
4	8.35	O-Phosphate-P	2.500	2643095	44224432	1	0.00
5	9.94	Bromide	2.500	1291728	21921150	1	0.00
6	12.04	Nitrate-N	1.000	2398169	49159414	1	0.00
7	13.84	Sulfate	4.000	2125440	59326984	1	0.00
		Totals	14.000	19694406	290397158		

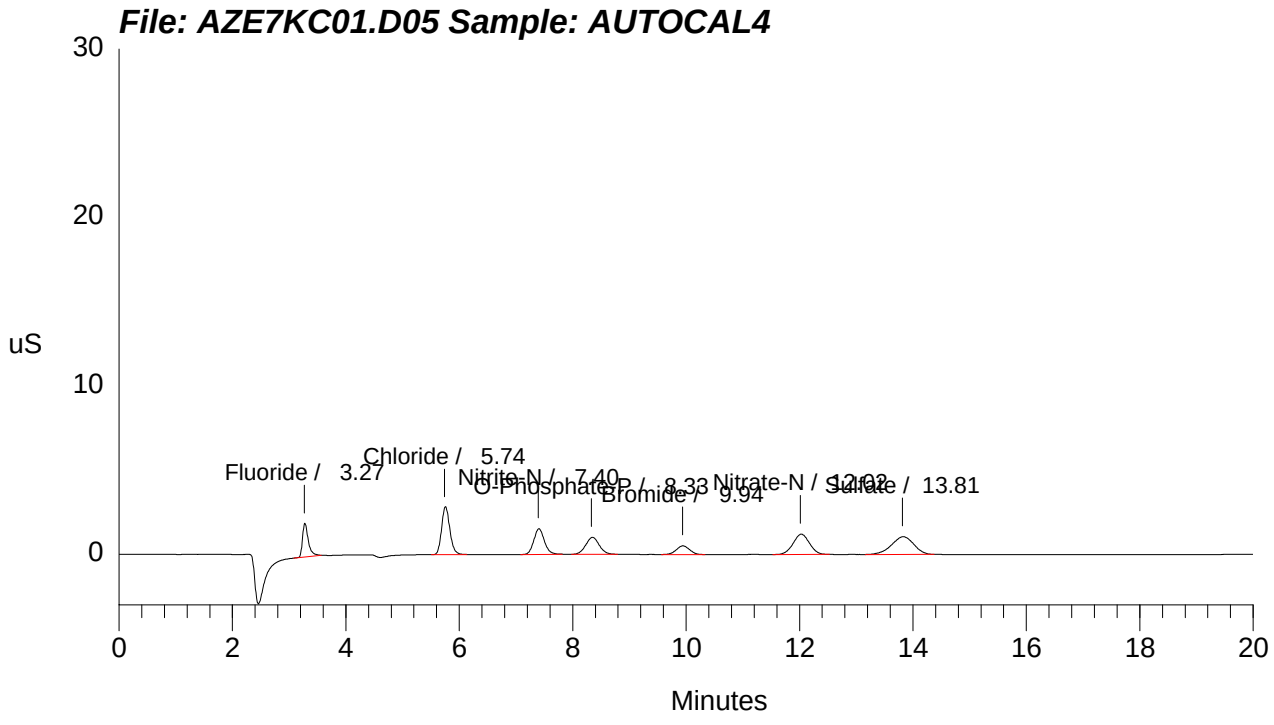


```
================================================================================
| Sample Name: AUTOCAL4                        Date: 05/27/2005 16:18:56       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D05                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.500	1965077	14425310	1	0.00
2	5.74	Chloride	1.000	2779406	29107304	1	0.00
3	7.40	Nitrite-N	0.500	1520305	19862106	1	0.00
4	8.33	O-Phosphate-P	1.000	996524	16828380	1	0.00
5	9.94	Bromide	1.000	520037	8645016	1	0.00
6	12.02	Nitrate-N	0.500	1205544	24610088	1	0.00
7	13.81	Sulfate	2.000	1049141	29058306	1	0.00
		Totals	6.500	10036034	142536510		

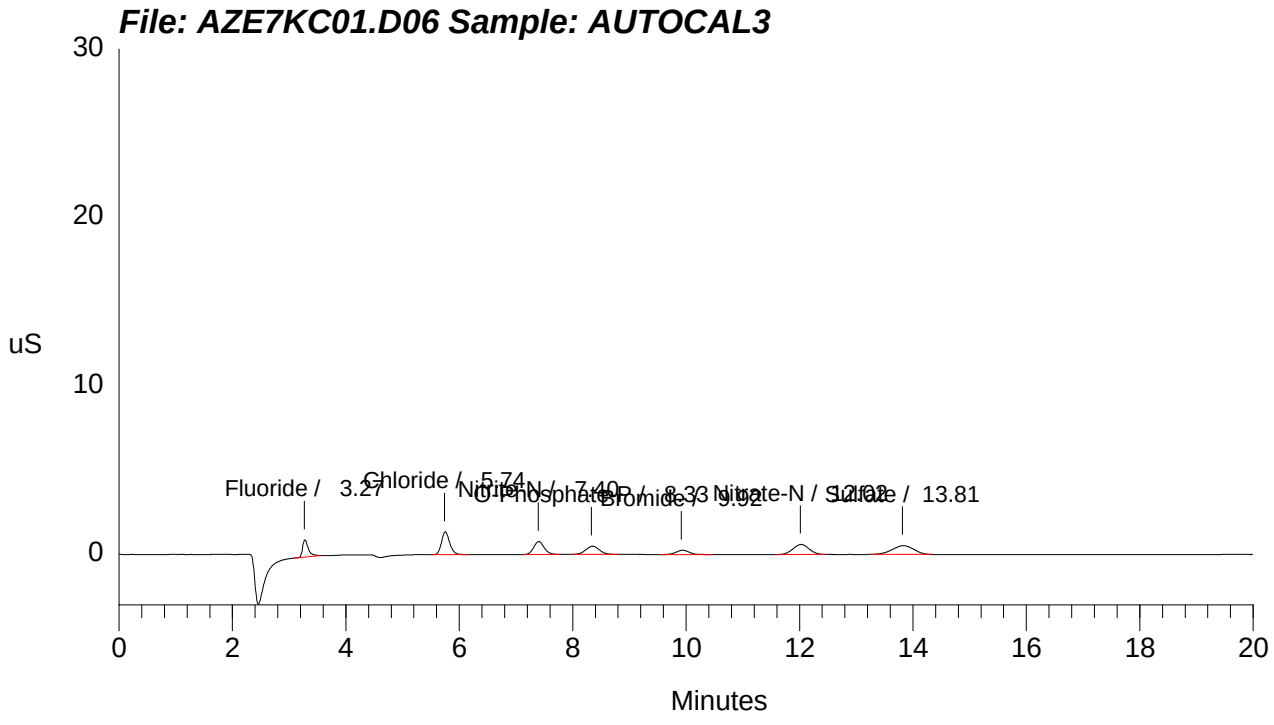


```
================================================================================
| Sample Name: AUTOCAL3                        Date: 05/27/2005 16:39:24       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D06                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 6                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.250    1003116    7181875    1   0.00
   2    5.74 Chloride                  0.500    1342491   13923902    1   0.00
   3    7.40 Nitrite-N                 0.250     766362    9868560    1   0.00
   4    8.33 O-Phosphate-P             0.500     477490    8127246    1   0.00
   5    9.92 Bromide                   0.500     256968    4536316    1   0.00
   6   12.02 Nitrate-N                 0.250     596358   11966890    1   0.00
   7   13.81 Sulfate                   1.000     522179   14052078    1   0.00
                                     ----------------------------------
                      Totals          3.250    4964963   69656867
```

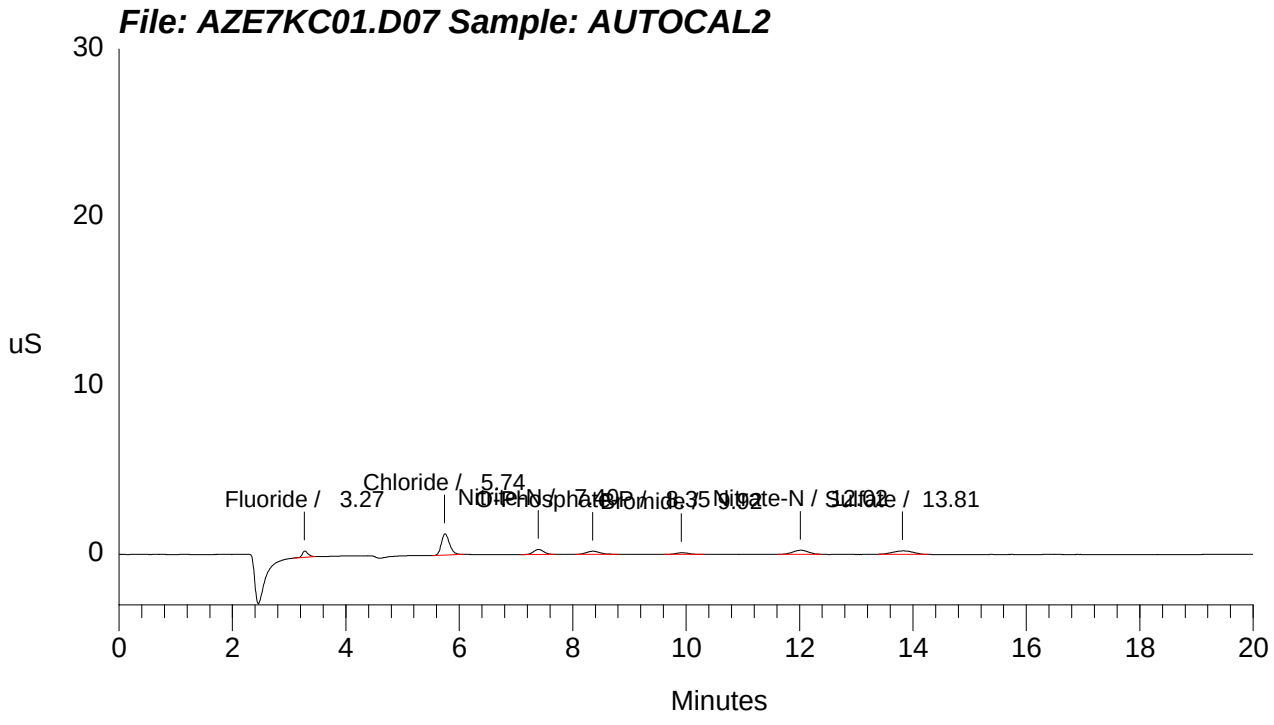


```
================================================================================
| Sample Name: AUTOCAL2                        Date: 05/27/2005 16:59:52       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D07                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 7                   Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.100     374400    2587112    1   0.00
   2    5.74 Chloride                  0.200    1256437   12888266    1   0.00
   3    7.40 Nitrite-N                 0.100     303909    3876850    1   0.00
   4    8.35 O-Phosphate-P             0.200     189088    3255854    1   0.00
   5    9.92 Bromide                   0.200     103634    1776920    1   0.00
   6   12.02 Nitrate-N                 0.100     245192    4870006    1   0.00
   7   13.81 Sulfate                   0.400     205498    5156446    1   0.00
                                    ----------------------------------
                      Totals         1.300    2678158   34411454
```



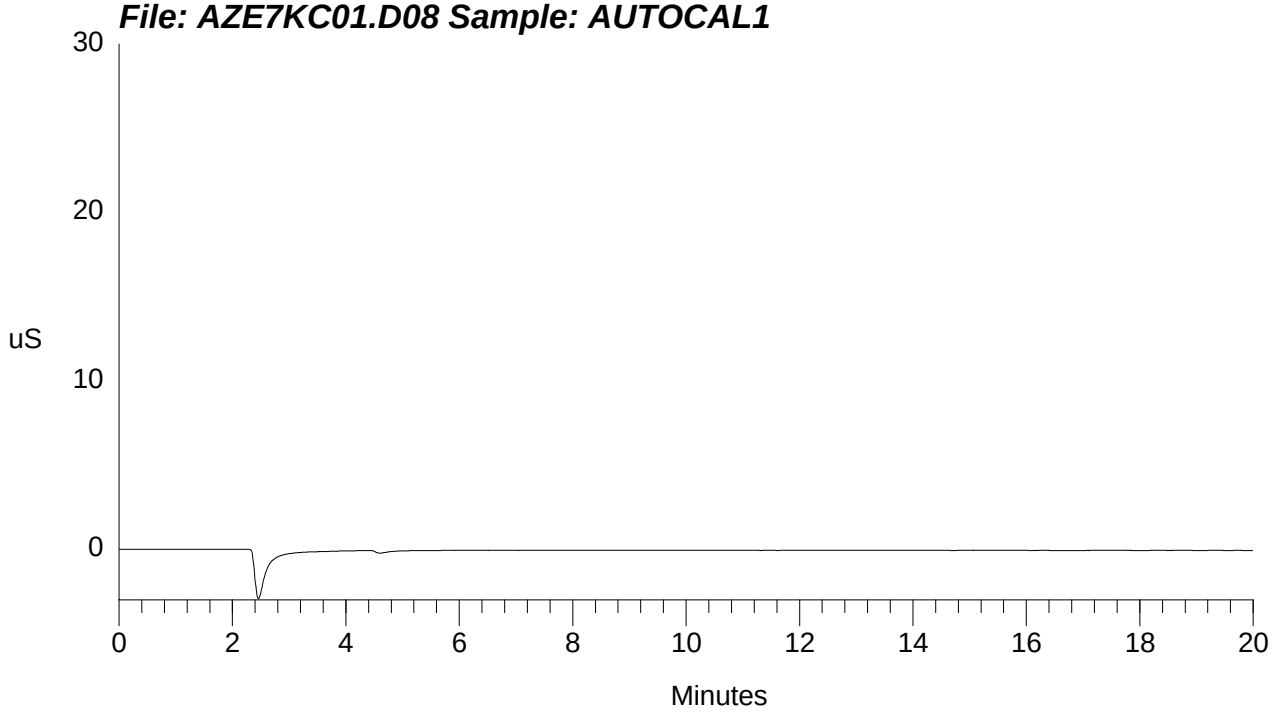
```
================================================================================
| Sample Name: AUTOCAL1                        Date: 05/27/2005 17:20:10       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D08                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                         Totals       0.000          0          0
```

File: AZE7KC01.D08 Sample: AUTOCAL1

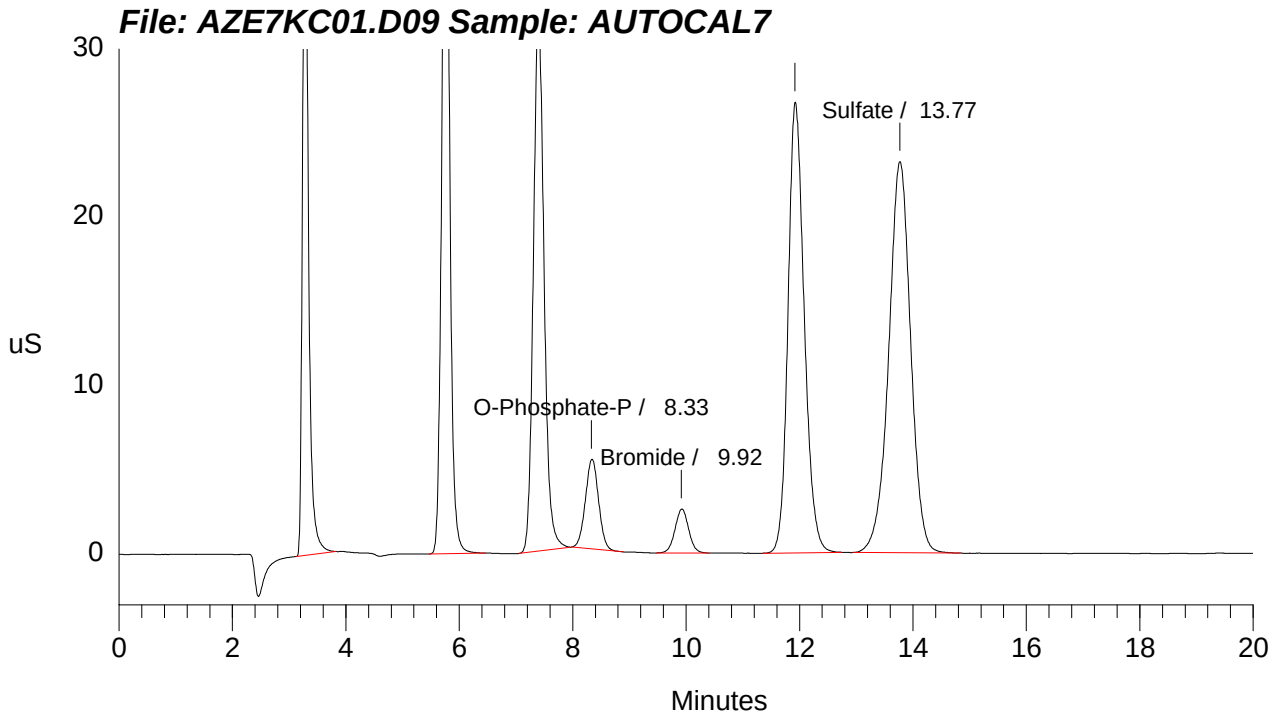


```
================================================================================
| Sample Name: AUTOCAL7                        Date: 05/27/2005 17:40:39       |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D09                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                  10.000   38862375  304251052    1   0.00
   2    5.74 Chloride                  20.000   45004294  453020880    1   0.00
   3    7.40 Nitrite-N                 10.000   31528382  416218956    1   0.00
   4    8.33 O-Phosphate-P              5.000    5309069   86127660    1   0.00
   5    9.92 Bromide                    5.000    2605014   43489084    1   0.00
   6   11.92 Nitrate-N                 10.000   26755220  530841028    1   0.00
   7   13.77 Sulfate                   40.000   23212113  623815988    1   0.00
                                    ----------------------------------
                        Totals       100.000  173276467 2457764648
```

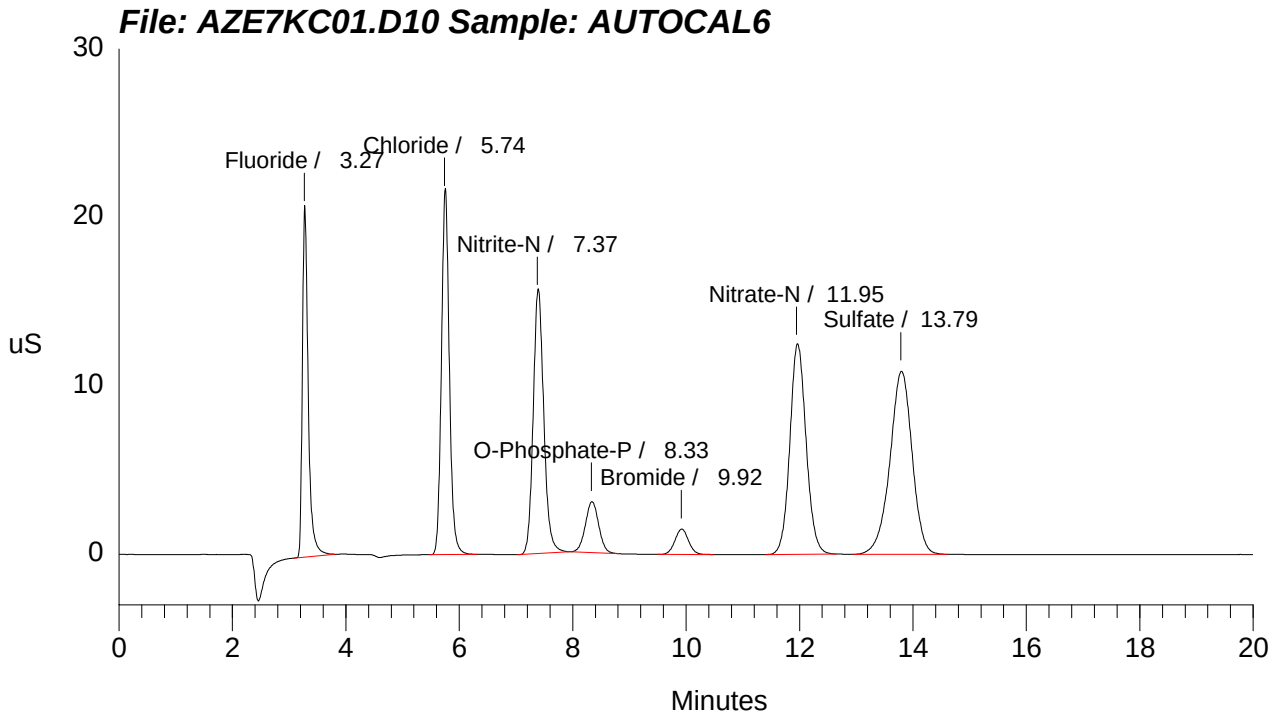


```
================================================================================
| Sample Name: AUTOCAL6                          Date: 05/27/2005 18:01:06     |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D10                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.000	20492027	149091320	1	0.00
2	5.74	Chloride	10.000	21248244	210793510	1	0.00
3	7.37	Nitrite-N	5.000	15305035	203278544	1	0.00
4	8.33	O-Phosphate-P	3.000	3017303	49605101	1	0.00
5	9.92	Bromide	3.000	1511281	25482654	1	0.00
6	11.95	Nitrate-N	5.000	12384561	249424298	1	0.00
7	13.79	Sulfate	20.000	10864758	296485316	1	0.00
		Totals	51.000	84823210	1184160743		

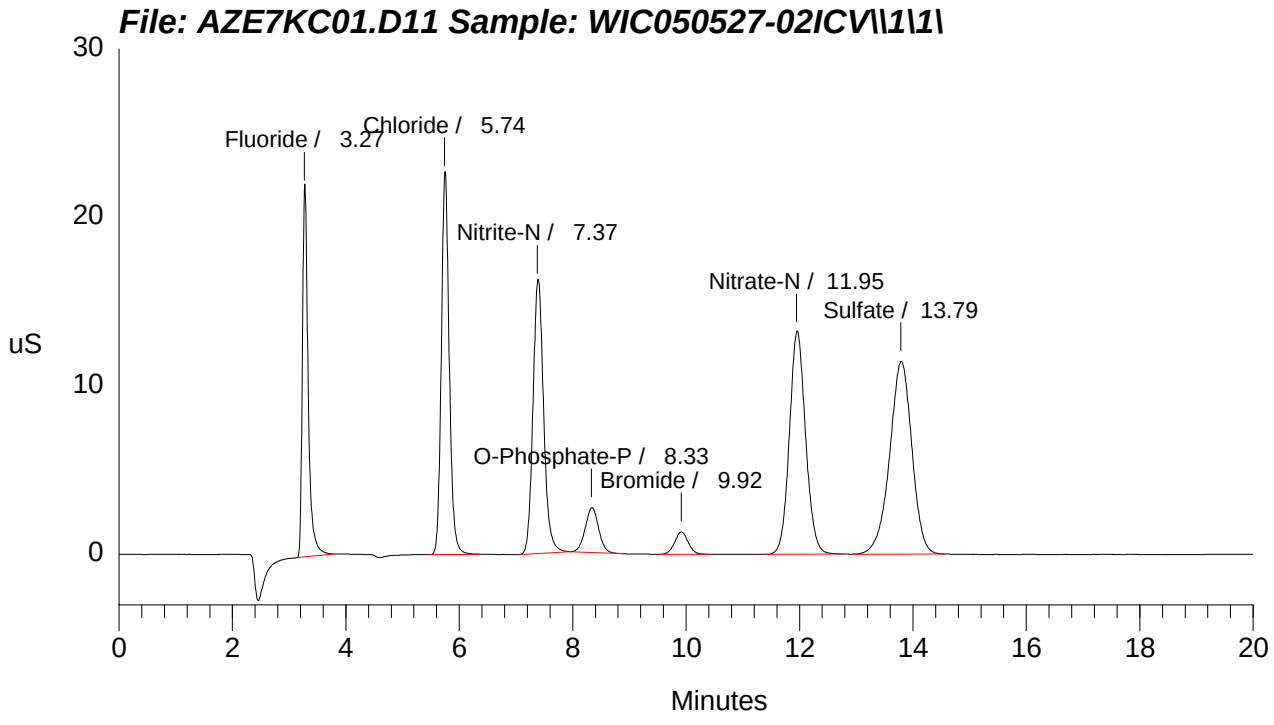


```
================================================================================
| Sample Name: WIC050527-02ICV\\1\1\          Date: 05/27/2005 18:21:24      |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D11                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 11                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  5.157   21704095  156055451    1   0.00
   2    5.74 Chloride                  9.806   22441795  220287470    1   0.00
   3    7.37 Nitrite-N                 5.134   15974152  212330573    1   0.00
   4    8.33 O-Phosphate-P             2.560    2651670   43810432    1   0.00
   5    9.92 Bromide                   2.545    1330915   22065294    1   0.00
   6   11.95 Nitrate-N                 5.042   13142800  263499216    1   0.00
   7   13.79 Sulfate                  20.277   11429901  312193452    1   0.00
                                    ---------------------------------
                         Totals       50.520   88675328 1230241888
```



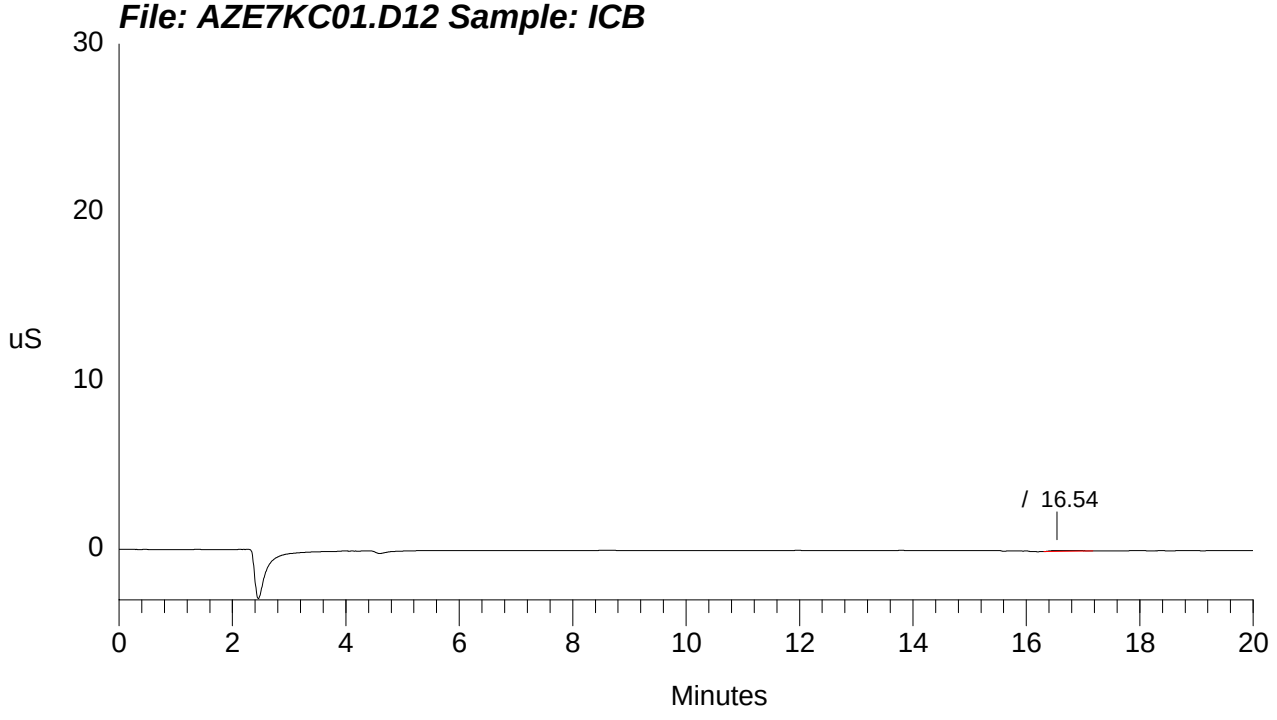
```
================================================================================
| Sample Name: ICB                              Date: 05/27/2005 18:41:53      |
| Data File  : C:\TMP\HORIZON\AZE7KC01.D12                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 12                 Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                  ----------------------------------
                        Totals          0.000          0          0
```

File: AZE7KC01.D12 Sample: ICB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

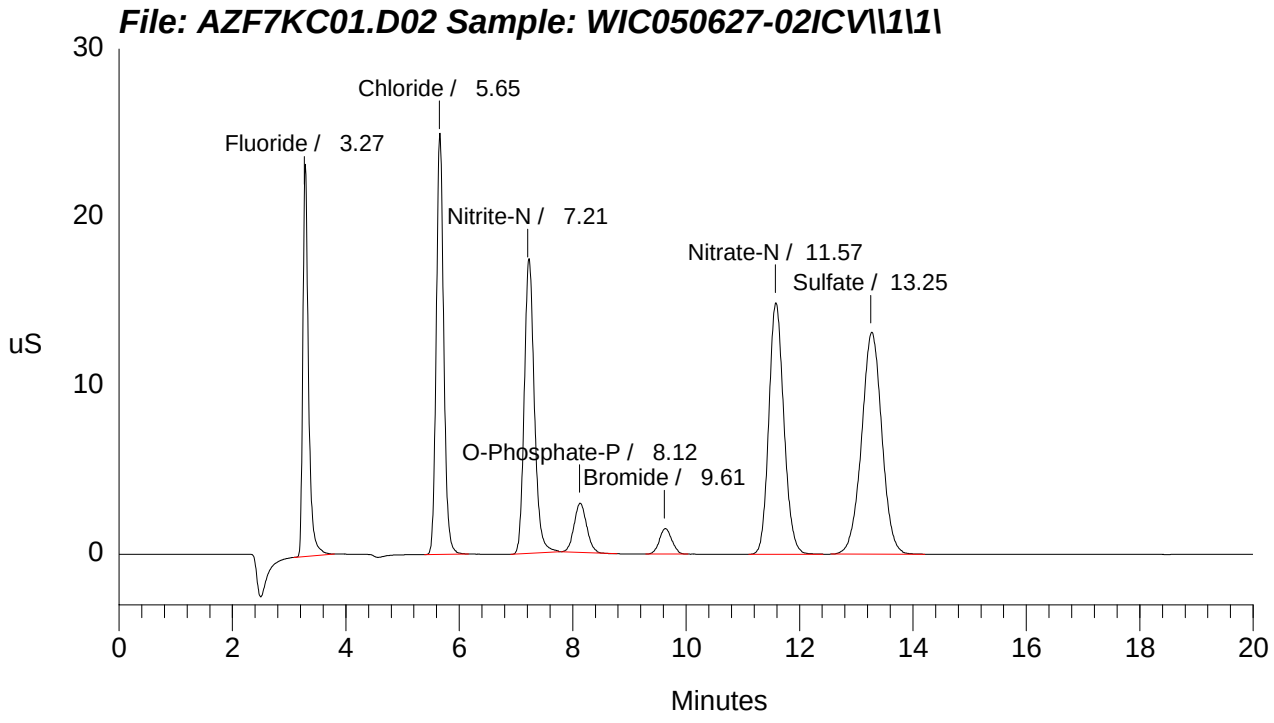
SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			BJB	06/27/2005 14:13:49	AZF7KC01.R01
WIC050627-02ICV:1		1	BJB	06/27/2005 14:34:18	AZF7KC01.R02
ICB:			BJB	06/27/2005 14:54:47	AZF7KC01.R03
LCR:			BJB	06/27/2005 15:15:04	AZF7KC01.R04
1200875449:1	437414	1	BJB	06/27/2005 15:35:33	AZF7KC01.R05
1200875454:1	437414	1	BJB	06/27/2005 15:56:02	AZF7KC01.R06
139349001:1	437414	1	BJB	06/27/2005 16:16:31	AZF7KC01.R07
1200875450:1	437414	1	BJB	06/27/2005 16:36:59	AZF7KC01.R08
1200875452:1	437414	1	BJB	06/27/2005 16:57:28	AZF7KC01.R09
139349009:1	437414	1	BJB	06/27/2005 17:17:57	AZF7KC01.R10
139405001:1	437414	1	BJB	06/27/2005 17:38:26	AZF7KC01.R11
WIC050627-02CVH:1		1	BJB	06/27/2005 17:58:55	AZF7KC01.R12
CCB:			BJB	06/27/2005 18:19:24	AZF7KC01.R13
139405002:1	437414	1	BJB	06/27/2005 18:39:53	AZF7KC01.R14
1200875455:1	437414	1	BJB	06/27/2005 19:00:22	AZF7KC01.R15
1200875456:1	437414	1	BJB	06/27/2005 19:20:51	AZF7KC01.R16
139406001:1	437414	1	BJB	06/27/2005 19:41:19	AZF7KC01.R17
1200875451:1	437414	1	BJB	06/27/2005 20:01:48	AZF7KC01.R18
1200875453:1	437414	1	BJB	06/27/2005 20:22:17	AZF7KC01.R19
WIC050627-02CCV:1		1	BJB	06/27/2005 20:42:46	AZF7KC01.R20
CCB:			BJB	06/27/2005 21:03:15	AZF7KC01.R21
LCR:			BJB	06/27/2005 21:23:43	AZF7KC01.R22
138851001:4	436313	2	BJB	06/27/2005 21:44:13	AZF7KC01.R23
138851002:4	436313	2	BJB	06/27/2005 22:04:42	AZF7KC01.R24
138851003:4	436313	2	BJB	06/27/2005 22:25:12	AZF7KC01.R25
1200872865:4	436313	2	BJB	06/27/2005 22:45:42	AZF7KC01.R26
1200872868:4	436313	2	BJB	06/27/2005 23:06:11	AZF7KC01.R27
138851004:4	436313	2	BJB	06/27/2005 23:26:40	AZF7KC01.R28
138903001:3	436313	20	BJB	06/27/2005 23:46:57	AZF7KC01.R29
1200872866:3	436313	20	BJB	06/28/2005 00:07:26	AZF7KC01.R30
1200872869:3	436313	20	BJB	06/28/2005 00:27:55	AZF7KC01.R31
WIC050627-02CVH:1		1	BJB	06/28/2005 00:48:24	AZF7KC01.R32
CCB:			BJB	06/28/2005 01:08:53	AZF7KC01.R33

```
================================================================================
| Sample Name: WIC050627-02ICV\\1\1\          Date: 06/27/2005 14:34:18      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D02                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.304	21440465	160511748	1	0.00
2	5.65	Chloride	10.112	24611763	227104270	1	0.00
3	7.21	Nitrite-N	5.223	16934789	216050905	1	0.00
4	8.12	O-Phosphate-P	2.636	2899593	45112115	1	0.00
5	9.61	Bromide	2.689	1484425	23311524	1	0.00
6	11.57	Nitrate-N	5.274	14881120	275779182	1	0.00
7	13.25	Sulfate	21.275	13054914	327691054	1	0.00
		Totals	52.513	95307070	1275560798		



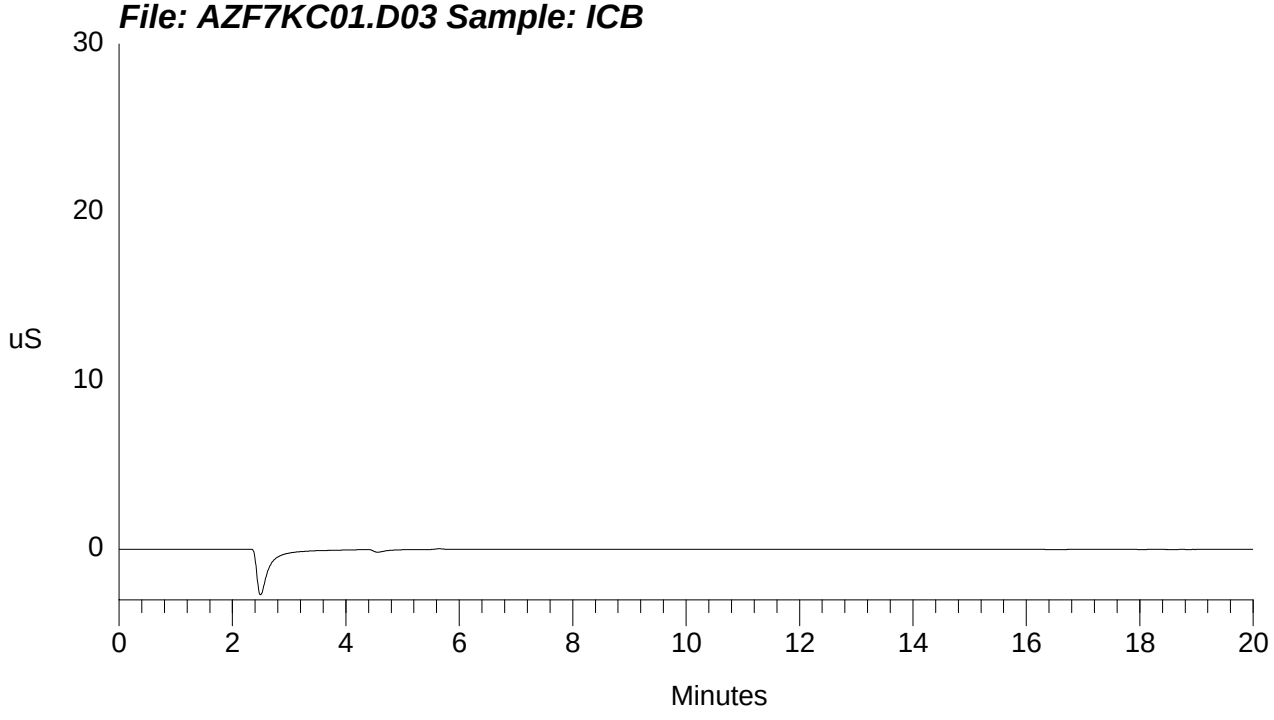
```
================================================================================
| Sample Name: ICB                          Date: 06/27/2005 14:54:47          |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D03                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                  Detector:CDM-2        |
| Analyst    : BJB           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                         Totals       0.000          0          0
```

File: AZF7KC01.D03 Sample: ICB



Data Reprocessed On 07/05/2005 11:25:53

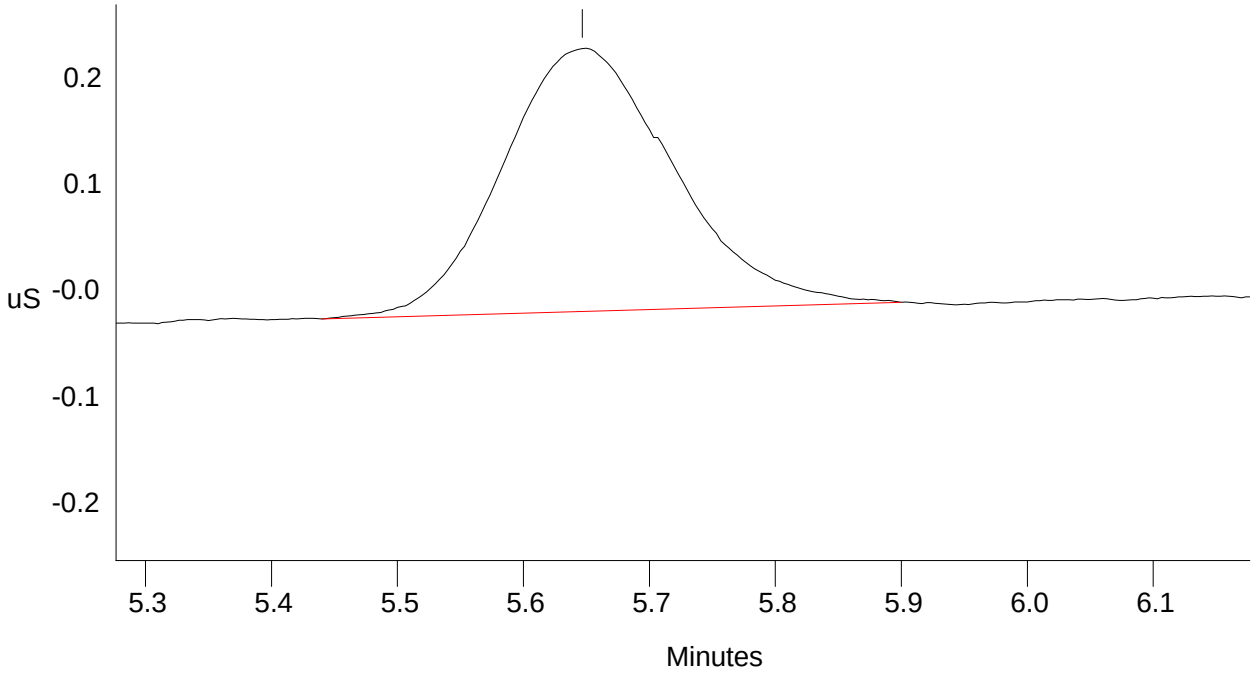
Sample Name: 1200875449\437414\1\1\MB		Date: 06/27/2005 15:35:33	
Data File : C:\TMP\HORIZON\AZF7KC01.D05			
Method : C:\DX\METHOD\MAY27.MET			
ACI Address: 1 System: 1 Inject#: 5			Detector:CDM-2
Analyst : BJB	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	5.28	6.18	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.65	Chloride	0.003	247090	2333182	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
2	8.17	O-Phosphate-P	0.043	28917	470864	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.046	276008	2804046		

File: AZF7KC01.D05 Sample: 1200875449\437414\1\1\MB



Data Reprocessed On 07/05/2005 11:26:11

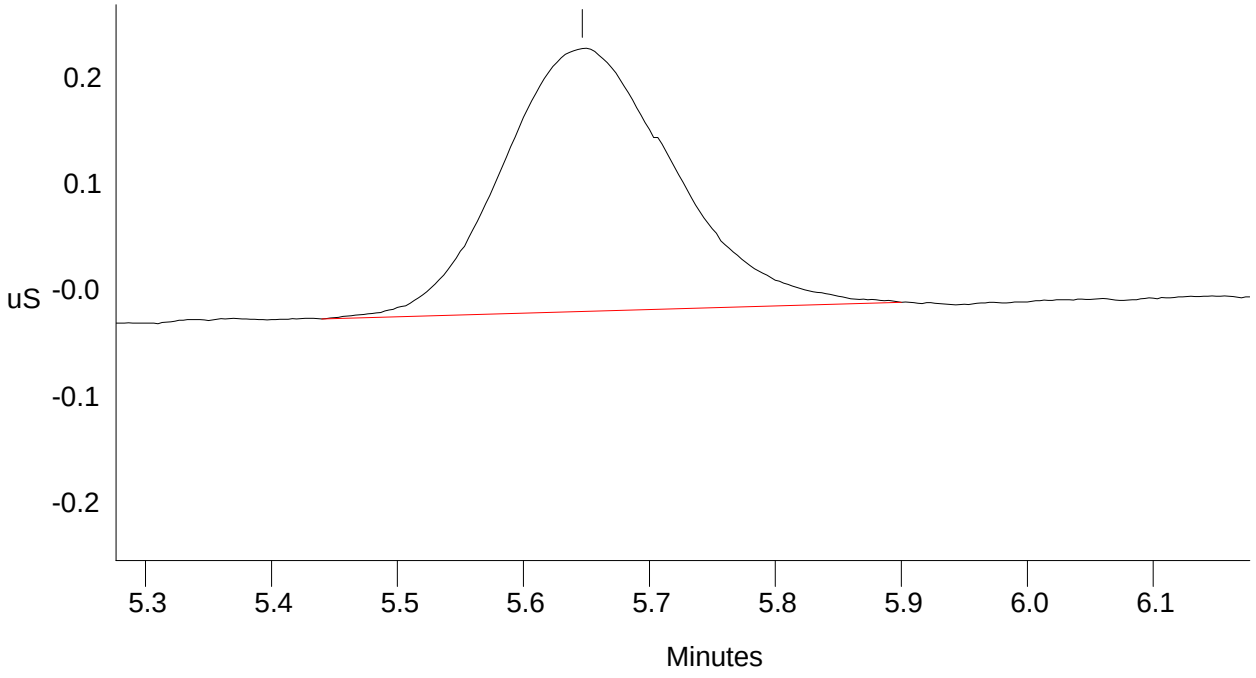
Sample Name: 1200875449\437414\1\1\MB		Date: 06/27/2005 15:35:33	
Data File : C:\TMP\HORIZON\AZF7KC01.D05			
Method : C:\DX\METHOD\MAY27.MET			
ACI Address: 1 System: 1 Inject#: 5			Detector:CDM-2
Analyst : BJB	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	5.28	6.18		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.65	Chloride	0.003	247090	2333182	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
2	8.17	O-Phosphate-P	0.043	28917	470864	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.046	276008	2804046		

File: AZF7KC01.D05 Sample: 1200875449\437414\1\1\MB



Data Reprocessed On 07/05/2005 11:26:24

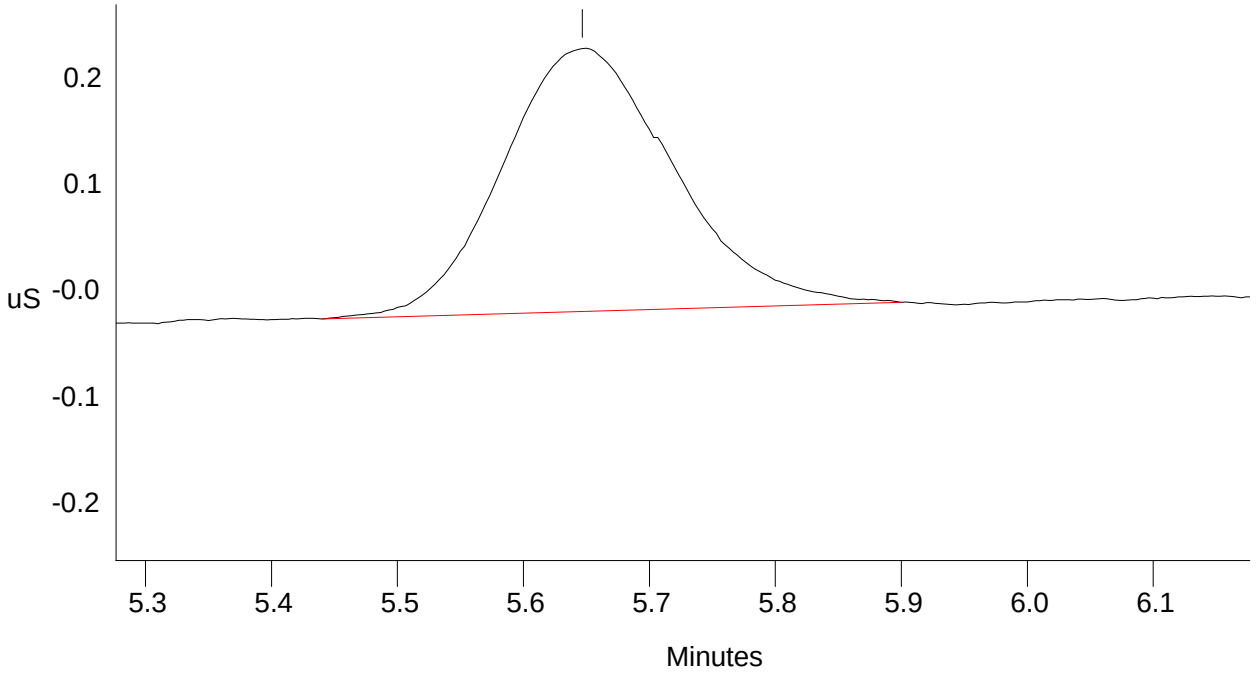
Sample Name:	1200875449\437414\1\1\MB
Data File :	C:\TMP\HORIZON\AZF7KC01.D05
Method :	C:\DX\METHOD\MAY27.MET
ACI Address: 1 System: 1 Inject#: 5	Detector:CDM-2
Analyst : BJB	Column: AS9-HC;GL-GC-E-086;300;9056
Date: 06/27/2005 15:35:33	

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	5.28	6.18	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.65	Chloride	0.003	247090	2333182	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
2	8.17	O-Phosphate-P	0.043	28917	470864	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.046	276008	2804046		

File: AZF7KC01.D05 Sample: 1200875449\437414\1\1\MB



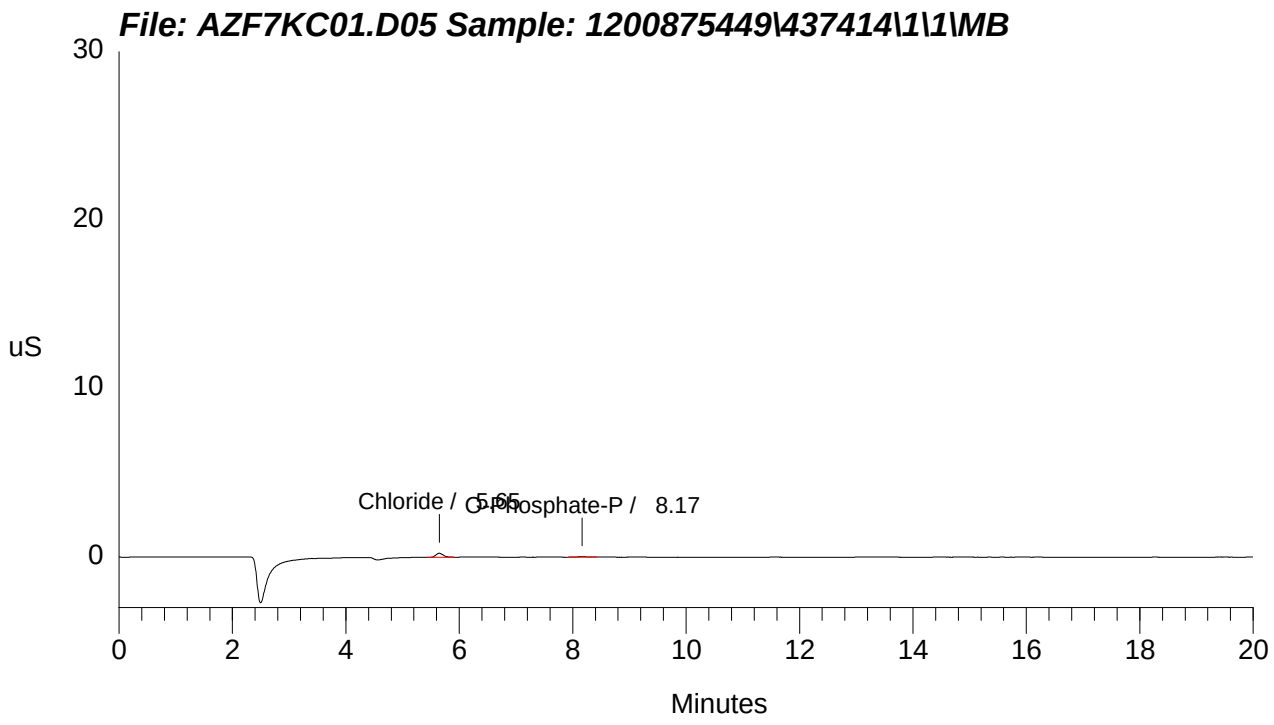
Data Reprocessed On 07/05/2005 11:31:00

Sample Name: 1200875449\437414\1\1\MB		Date: 06/27/2005 15:35:33	
Data File : C:\TMP\HORIZON\AZF7KC01.D05			
Method : C:\DX\METHOD\MAY27.MET			
ACI Address: 1 System: 1 Inject#: 5		Detector:CDM-2	
Analyst : BJB	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
1	5.65	Chloride	0.003	247090	2333182	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
2	8.17	O-Phosphate-P	0.043	28917	470864	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.046	276008	2804046		



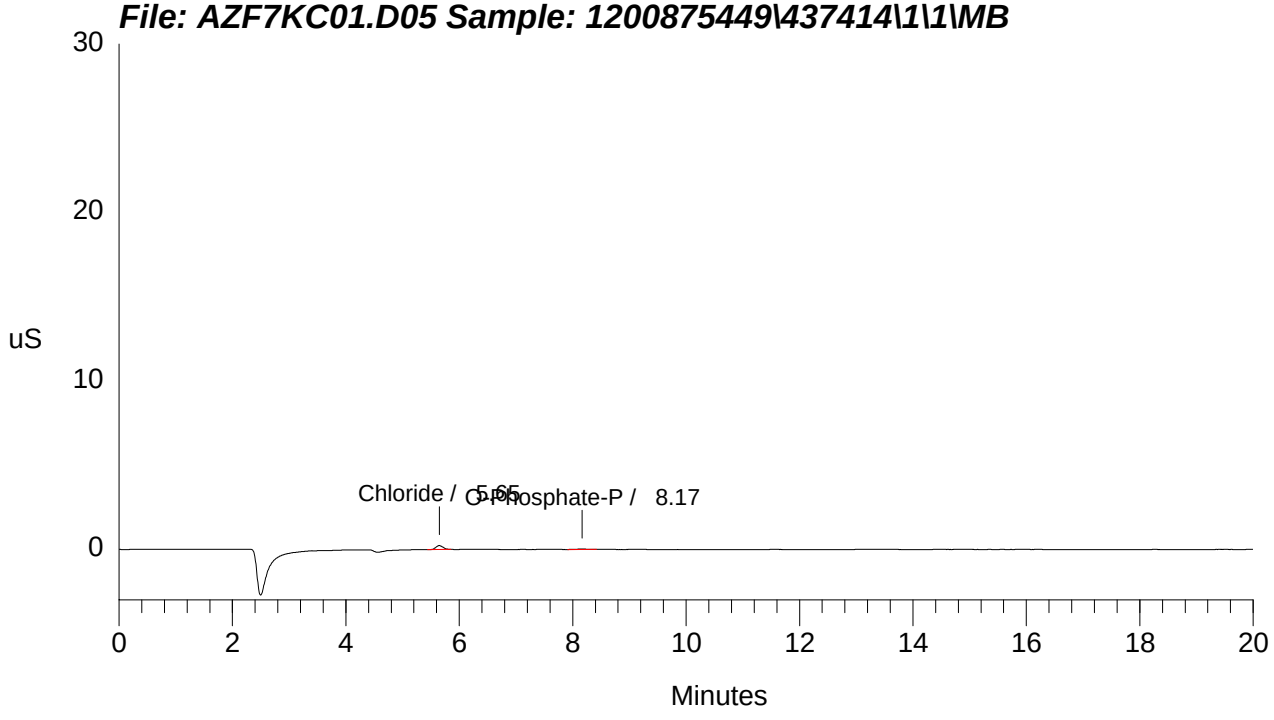
```
================================================================================
| Sample Name: 1200875449\437414\1\1\MB       Date: 06/27/2005 15:35:33         |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D05                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 5                   Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   1    5.65 Chloride                 -0.001     244230    2253492    1   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   2    8.17 O-Phosphate-P             0.043      28917     470864    1   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.042     273147    2724356
```

File: AZF7KC01.D05 Sample: 1200875449\437414\1\1\MB

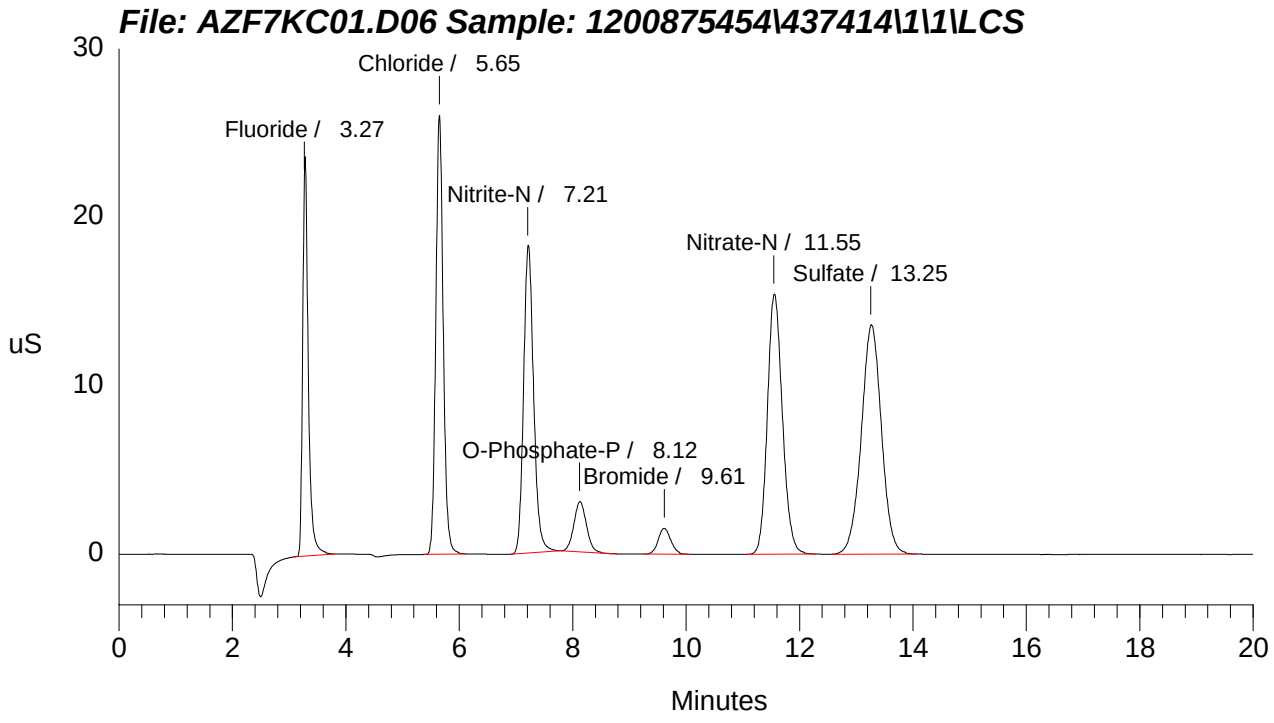


```
================================================================================
| Sample Name: 1200875454\437414\1\1\LCS      Date: 06/27/2005 15:56:02      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D06                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 6                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.366	22297386	162405259	1	0.00
2	5.65	Chloride	10.505	26061063	235839990	1	0.00
3	7.21	Nitrite-N	5.433	18210146	224757443	1	0.00
4	8.12	O-Phosphate-P	2.680	2973457	45865169	1	0.00
5	9.61	Bromide	2.750	1540713	23835518	1	0.00
6	11.55	Nitrate-N	5.443	15420039	284686784	1	0.00
7	13.25	Sulfate	21.842	13572968	336488962	1	0.00
		Totals	54.018	100075772	1313879125		

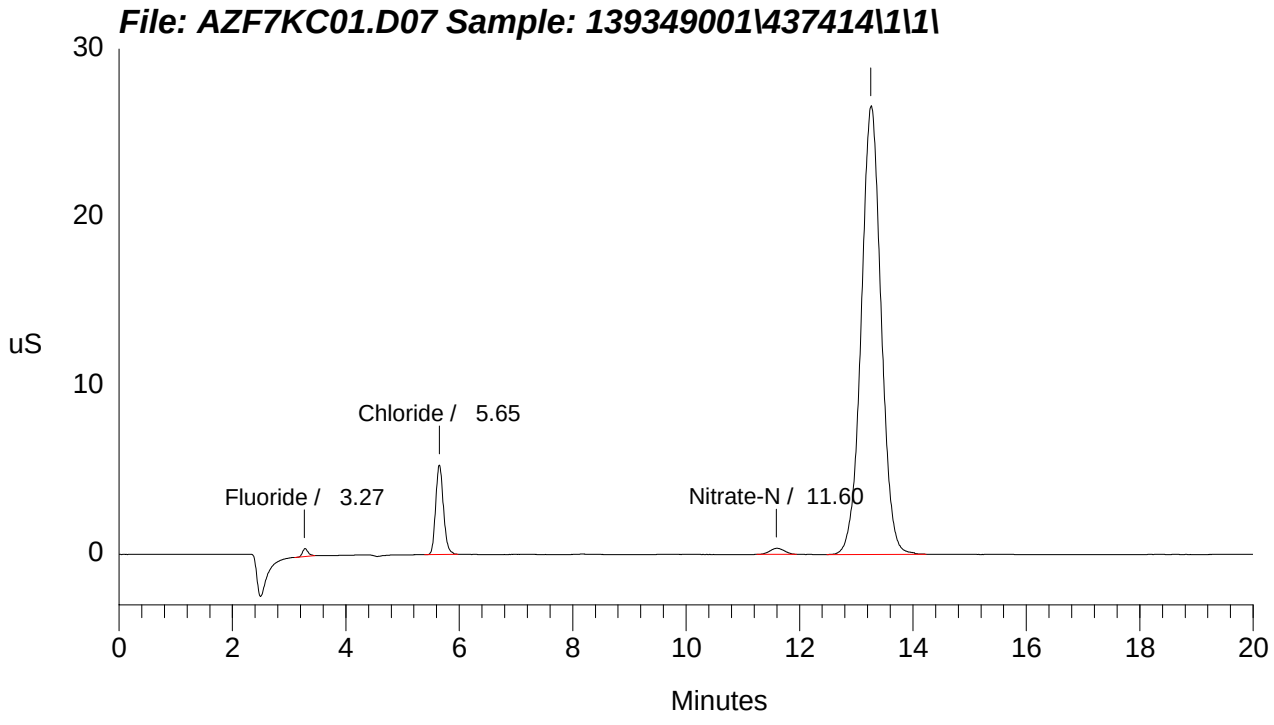


```
================================================================================
| Sample Name: 139349001\437414\1\1\          Date: 06/27/2005 16:16:31      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D07                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 7                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.129	465941	3294915	1	0.00
2	5.65	Chloride	2.183	5315564	50799786	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.60	Nitrate-N	0.175	365060	6562788	1	0.00
4	13.25	Sulfate	41.929	26572668	648412380	1	0.00
		Totals	44.416	32719233	709069869		

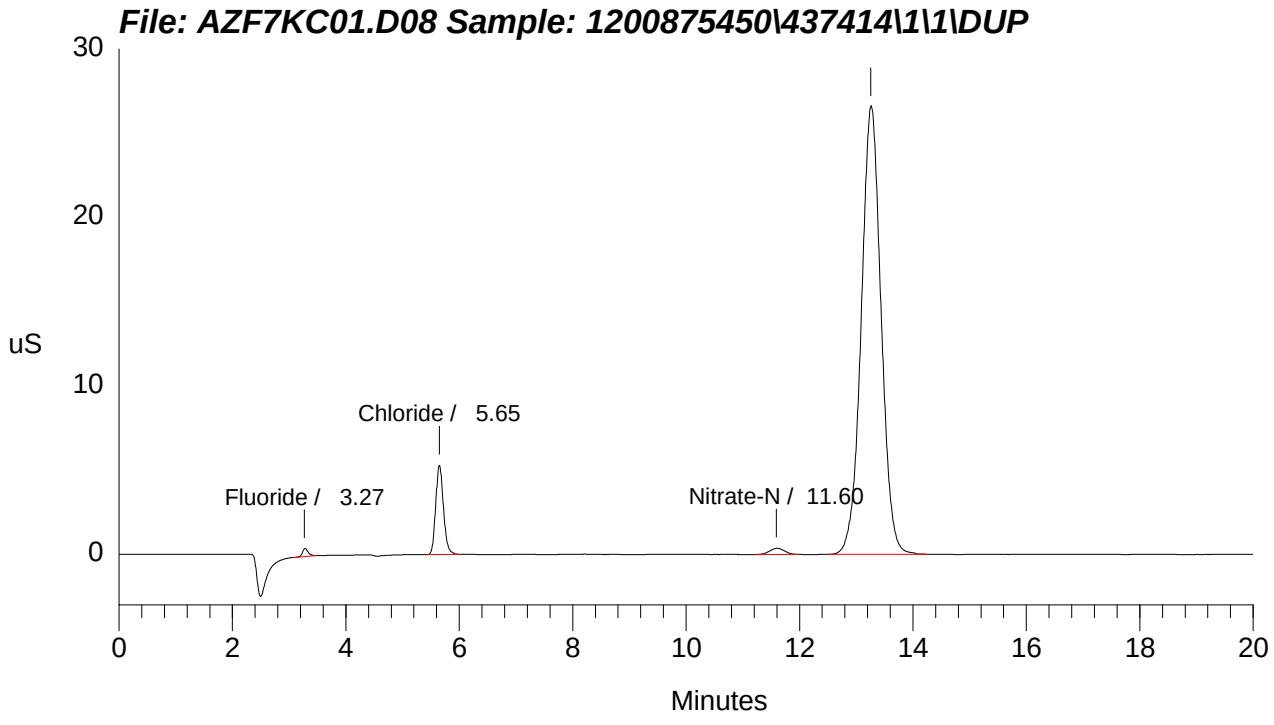


```
================================================================================
| Sample Name: 1200875450\437414\1\1\DUP      Date: 06/27/2005 16:36:59      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D08                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                   0.134     474162    3442972     1   0.00
   2    5.65 Chloride                   2.174    5304949   50603690     1   0.00
   0    0.00 Nitrite-N                  0.000          0          0     0   0.00
   0    0.00 O-Phosphate-P              0.000          0          0     0   0.00
   0    0.00 Bromide                    0.000          0          0     0   0.00
   3   11.60 Nitrate-N                  0.180     372980    6844540     1   0.00
   4   13.25 Sulfate                   41.853   26566629  647236502     1   0.00
                                     ----------------------------------
                        Totals         44.342   32718721  708127704
```

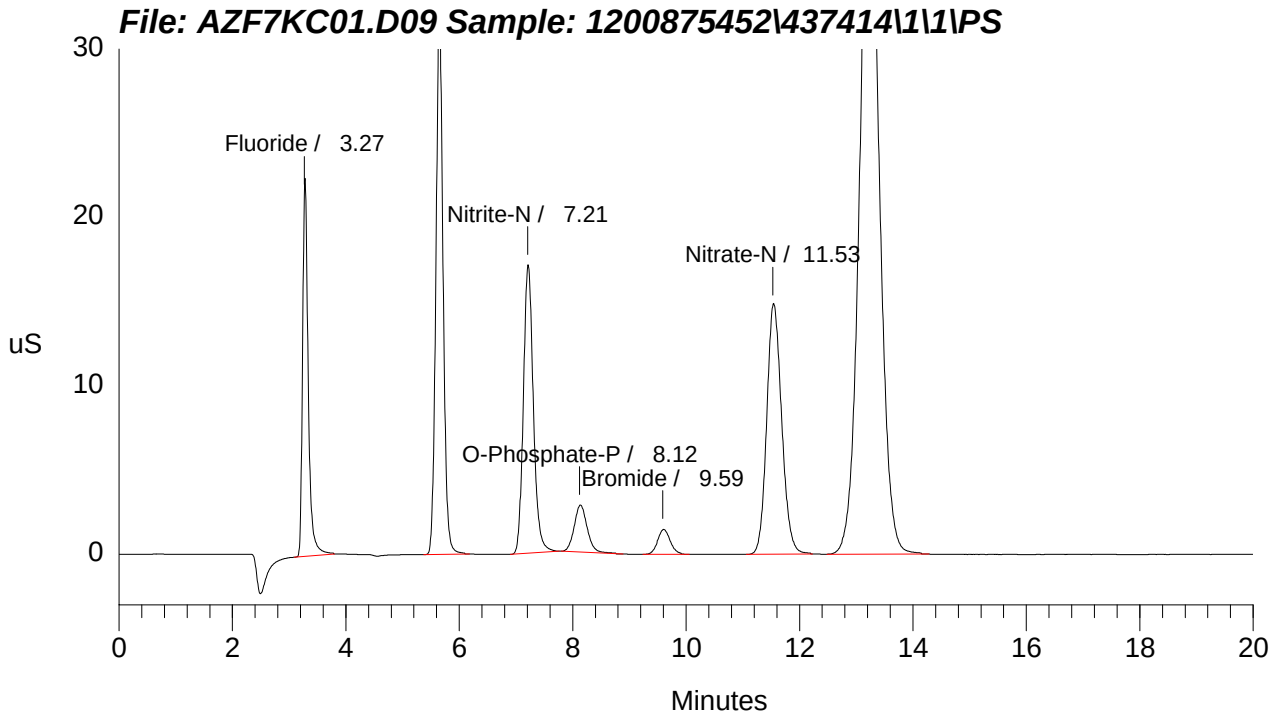


```
================================================================================
| Sample Name: 1200875452\437414\1\1\PS       Date: 06/27/2005 16:57:28         |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D09                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2        |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.125	21431569	155086656	1	0.00
2	5.65	Chloride	12.587	31375168	282138668	1	0.00
3	7.21	Nitrite-N	5.054	17082976	209038562	1	0.00
4	8.12	O-Phosphate-P	2.632	2763697	45041119	1	0.00
5	9.59	Bromide	2.658	1468283	23046768	1	0.00
6	11.53	Nitrate-N	5.217	14716335	272750238	1	0.00
7	13.21	Sulfate	65.469	41593686	1013948990	1	0.00
		Totals	98.743	130431714	2001051001		

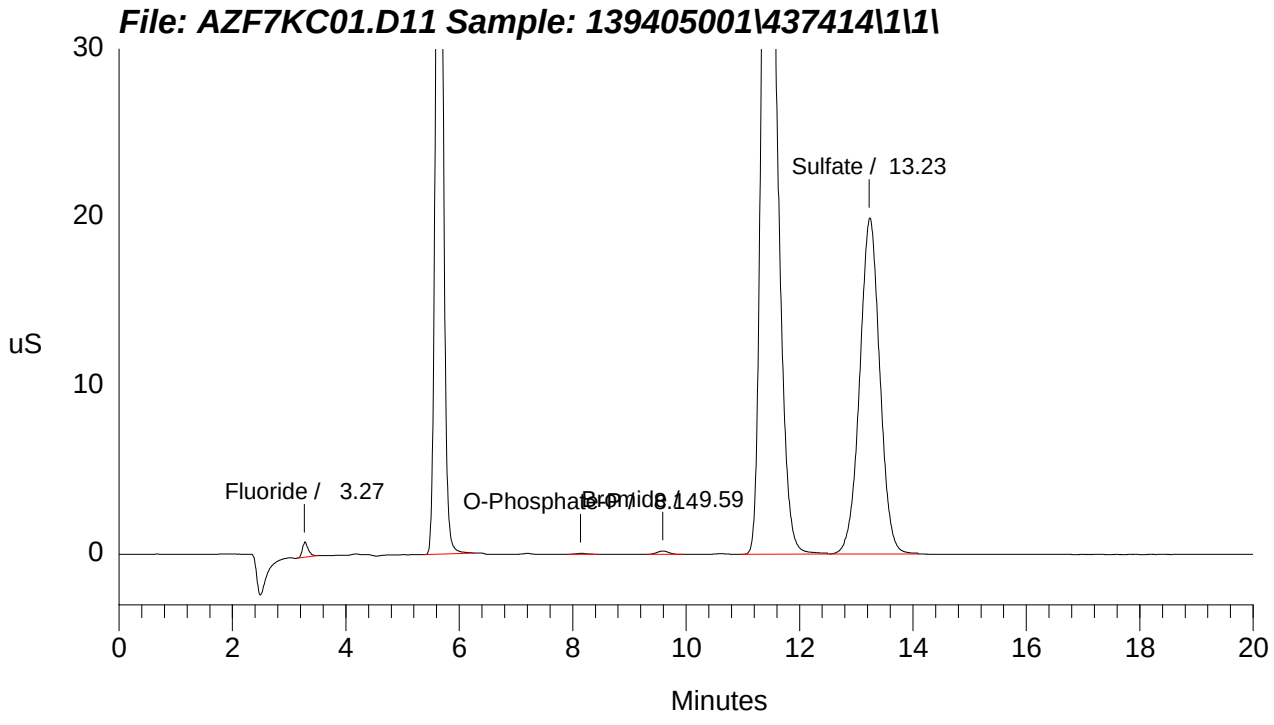


```
================================================================================
| Sample Name: 139405001\437414\1\1\          Date: 06/27/2005 17:38:26      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D11                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 11                 Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                   0.235     844332    6494403    1   0.00
   2    5.65 Chloride                  22.683   57181278  506601962    1   0.00
   0    0.00 Nitrite-N                  0.000          0          0    0   0.00
   3    8.14 O-Phosphate-P              0.072      61689     976798    1   0.00
   4    9.59 Bromide                    0.340     201401    2973838    1   0.00
   5   11.43 Nitrate-N                 18.378   51605315  967578180    1   0.00
   6   13.23 Sulfate                   31.753   19902671  490394866    1   0.00
                                  ------------------------------------
                        Totals        73.460  129796686 1975020047
```

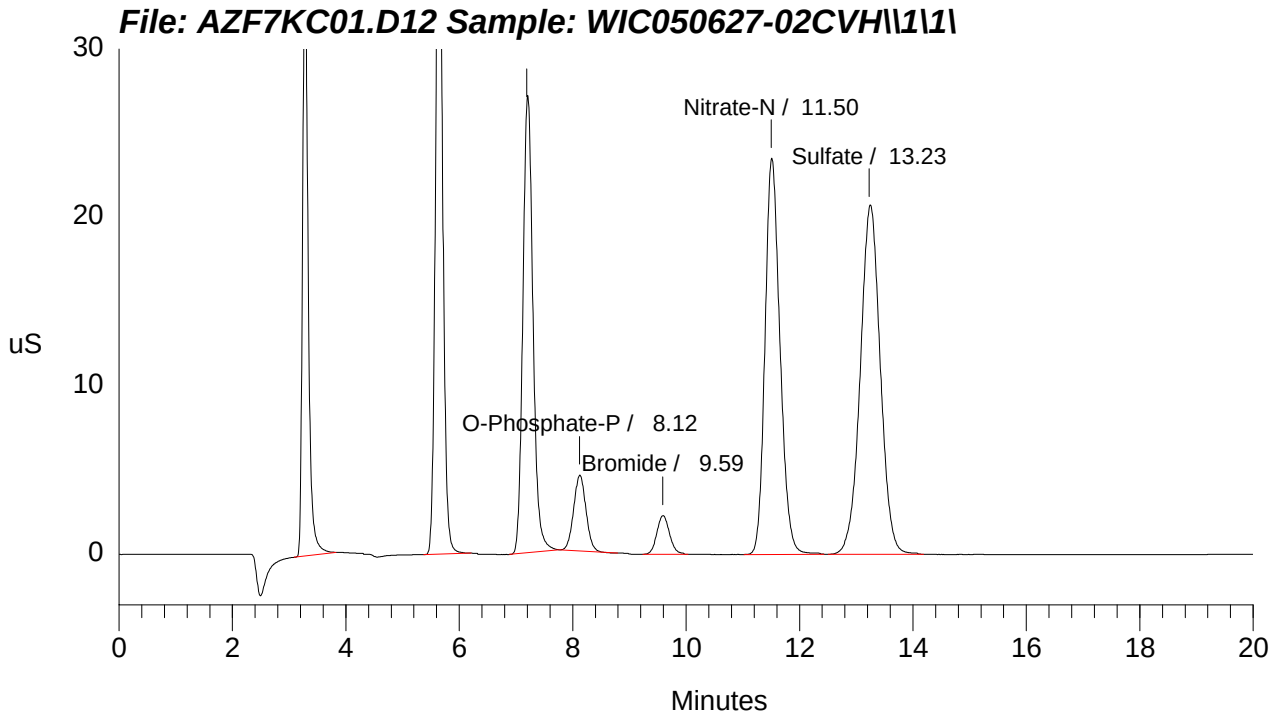


```
================================================================================
| Sample Name: WIC050627-02CVH\\1\1\          Date: 06/27/2005 17:58:55      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D12                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 12                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                   8.040   33694050  243644570    1   0.00
   2    5.62 Chloride                  16.308   38261722  364860234    1   0.00
   3    7.19 Nitrite-N                  8.105   26417106  335758465    1   0.00
   4    8.12 O-Phosphate-P              3.962    4489276   67943914    1   0.00
   5    9.59 Bromide                    4.128    2291119   35770974    1   0.00
   6   11.50 Nitrate-N                  8.235   23491280  432086176    1   0.00
   7   13.23 Sulfate                   32.946   20580325  508925648    1   0.00
                                      ----------------------------------
                        Totals         81.724  149224878 1988989981
```



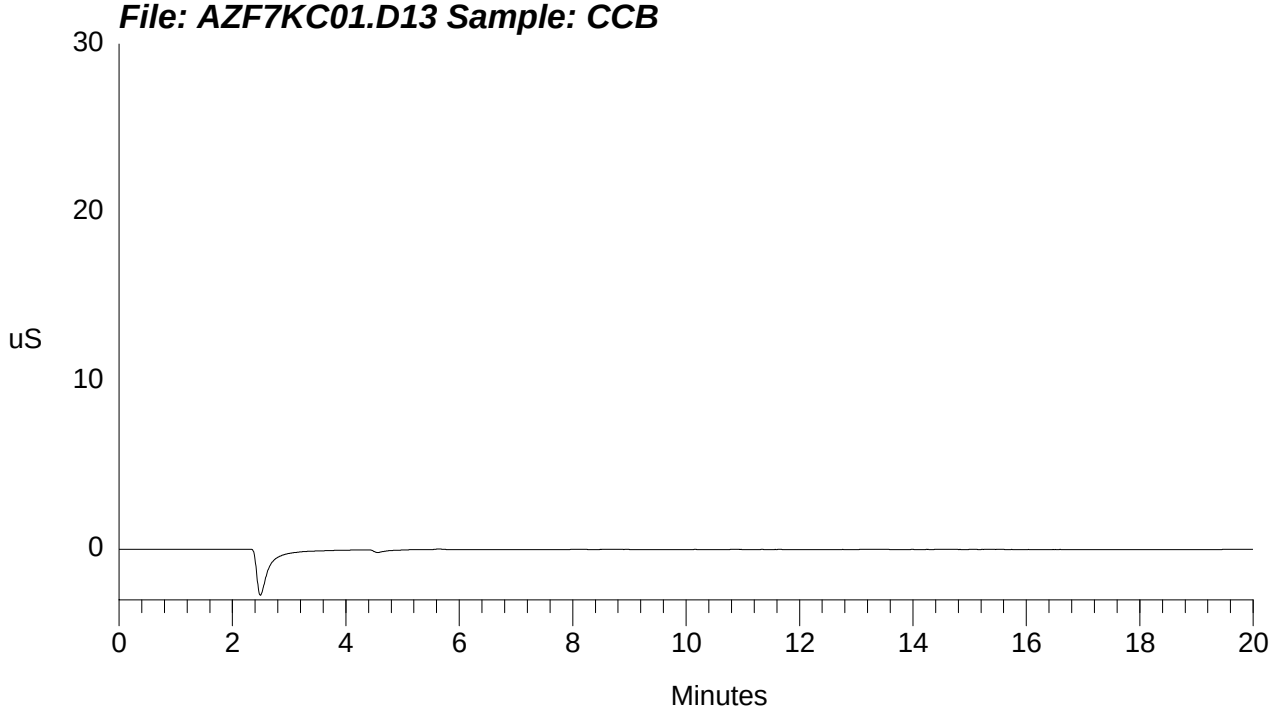
```
================================================================================
| Sample Name: CCB                          Date: 06/27/2005 18:19:24          |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D13                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 13              Detector:CDM-2           |
| Analyst    : BJB           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF7KC01.D13 Sample: CCB

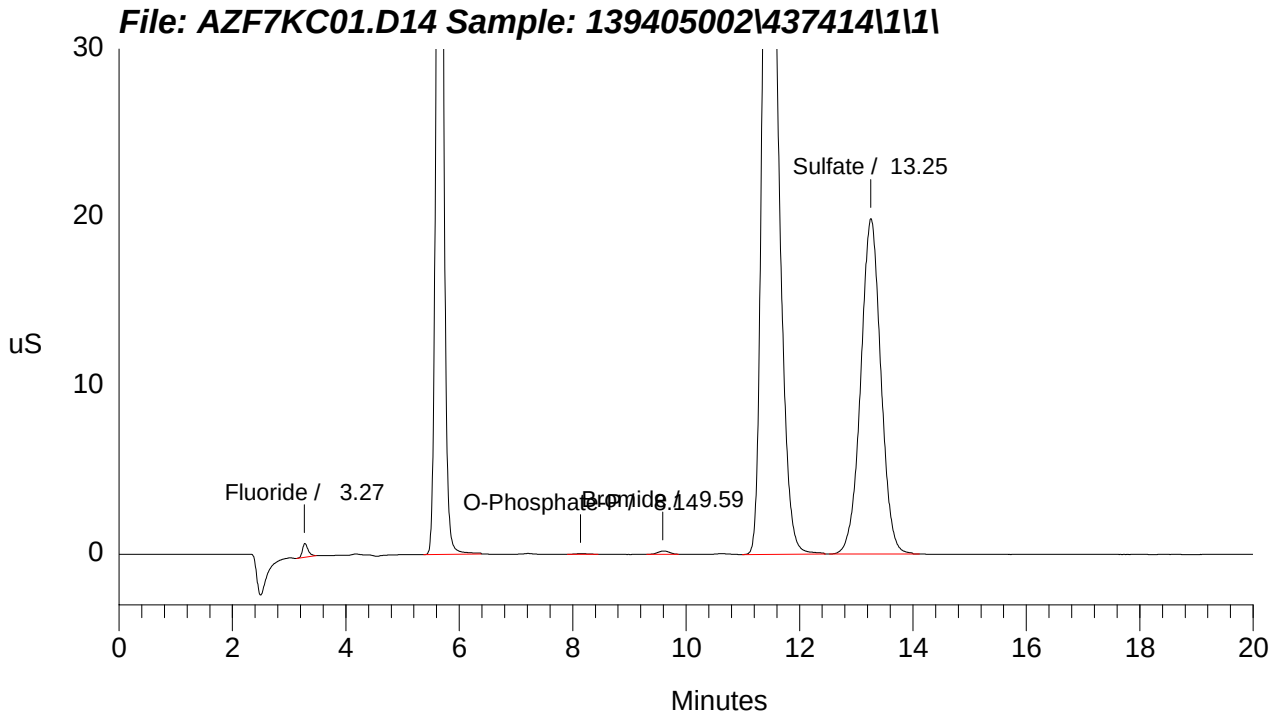


```
================================================================================
| Sample Name: 139405002\437414\1\1\          Date: 06/27/2005 18:39:53      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D14                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 14                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                    Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                   0.209     811227    5709010    1   0.00
   2    5.65 Chloride                  22.686   56553610  506679204    1   0.00
   0    0.00 Nitrite-N                  0.000          0          0    0   0.00
   3    8.14 O-Phosphate-P              0.060      47715     775044    1   0.00
   4    9.59 Bromide                    0.330     197490    2891924    1   0.00
   5   11.46 Nitrate-N                 18.379   51590039  967632960    1   0.00
   6   13.25 Sulfate                   31.725   19904486  489957370    1   0.00
                                  ----------------------------------
                        Totals        73.390  129104567 1973645512
```

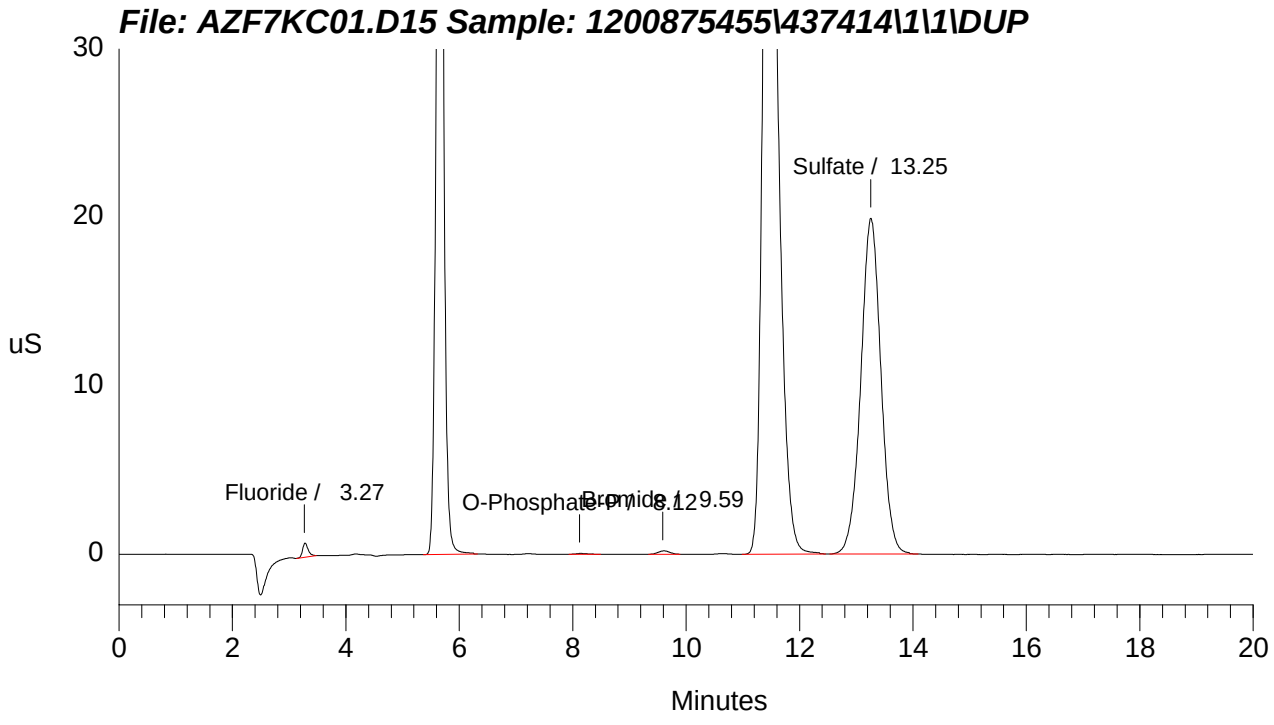


```
================================================================================
| Sample Name: 1200875455\437414\1\1\DUP      Date: 06/27/2005 19:00:22      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D15                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 15                  Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.208	805351	5686342	1	0.00
2	5.65	Chloride	22.473	56119553	501942912	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
3	8.12	O-Phosphate-P	0.064	54293	842980	1	0.00
4	9.59	Bromide	0.333	197959	2914458	1	0.00
5	11.46	Nitrate-N	18.339	51576702	965519028	1	0.00
6	13.25	Sulfate	31.728	19924952	490010386	1	0.00
		Totals	73.146	128678810	1966916106		

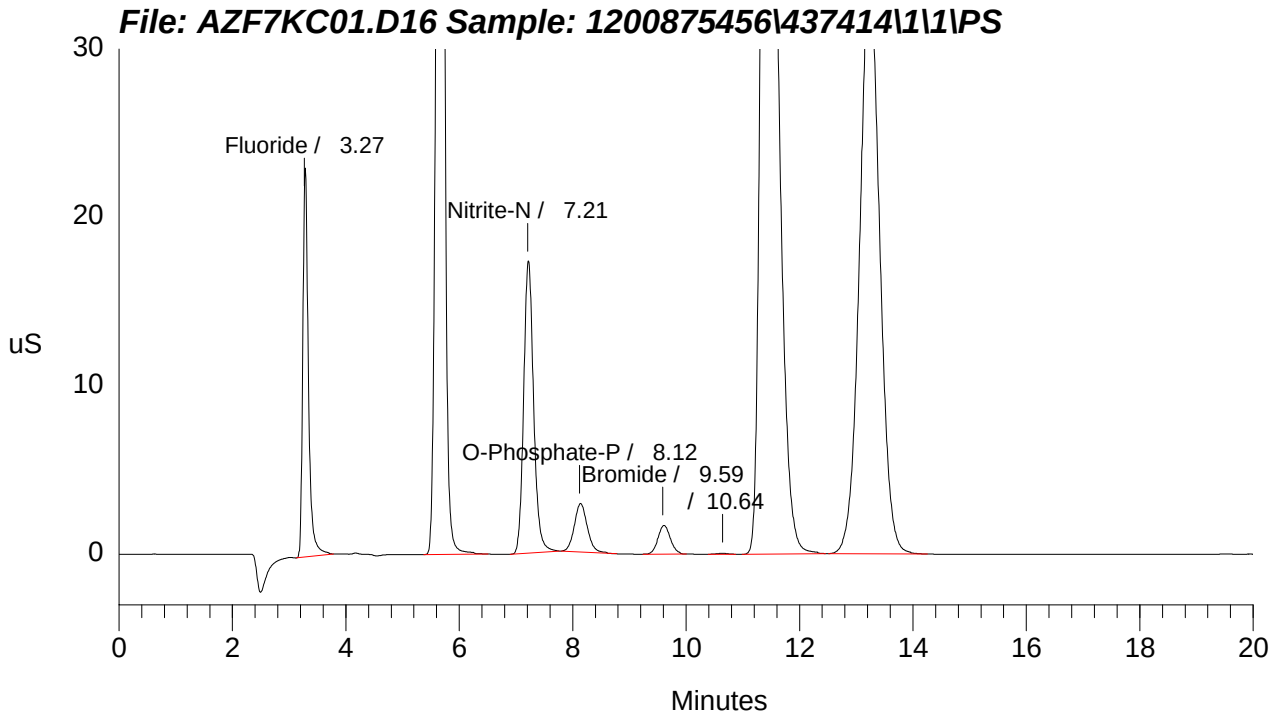


```
================================================================================
| Sample Name: 1200875456\437414\1\1\PS       Date: 06/27/2005 19:20:51     |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D16                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 16                 Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.243	21371909	158678062	1	0.00
2	5.65	Chloride	35.425	85697157	789903958	1	0.00
3	7.21	Nitrite-N	5.103	17251497	211054234	1	0.00
4	8.12	O-Phosphate-P	2.673	2826317	45756599	1	0.00
5	9.59	Bromide	3.010	1670215	26092014	1	0.00
7	11.41	Nitrate-N	24.519	66310850	1291794512	1	0.00
8	13.23	Sulfate	54.889	34869473	849657110	1	0.00
		Totals	130.863	229997419	3372936489		



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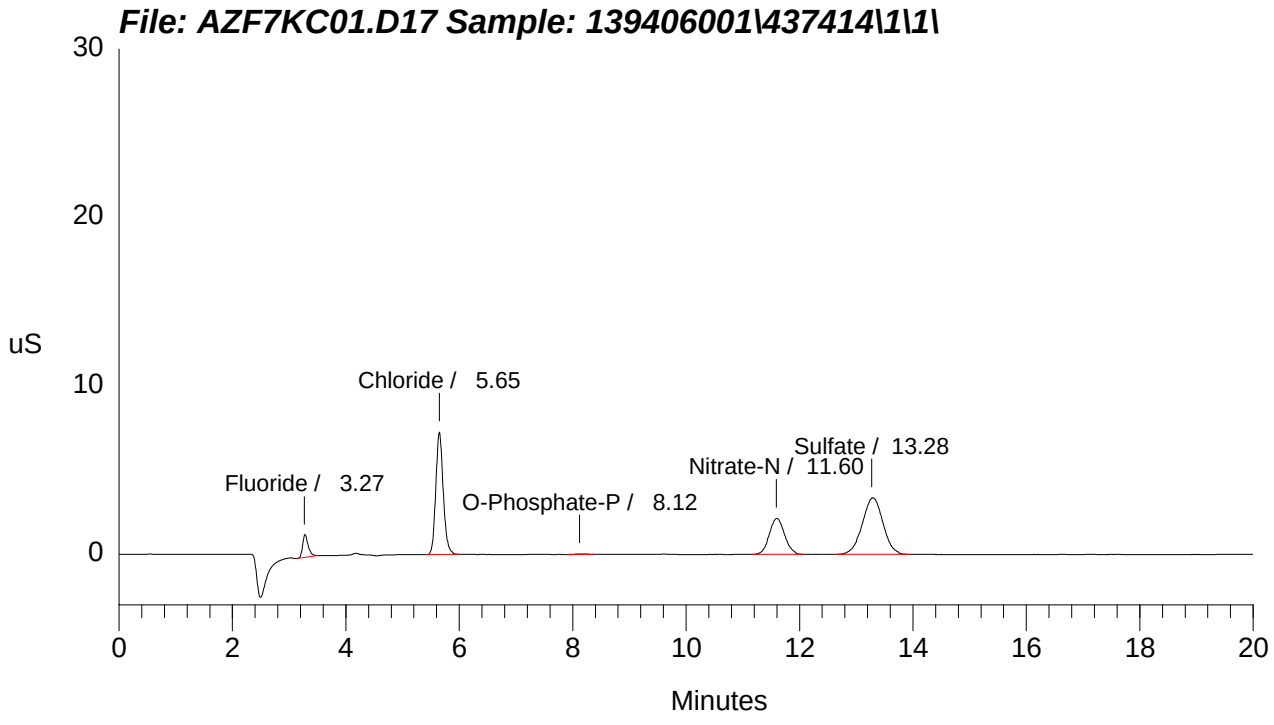
================================================================================
| Sample Name: 139406001\437414\1\1\          Date: 06/27/2005 19:41:19      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D17                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 17                 Detector:CDM-2       |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.322    1308786    9140807    1   0.00
   2    5.65 Chloride                  2.883    7269009   66369626    1   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   3    8.12 O-Phosphate-P             0.046      35326     520852    1   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   4   11.60 Nitrate-N                 0.810    2139107   40077222    1   0.00
   5   13.28 Sulfate                   5.661    3341759   85236046    1   0.00
                                    ----------------------------------
                      Totals         9.721   14093986  201344553
```

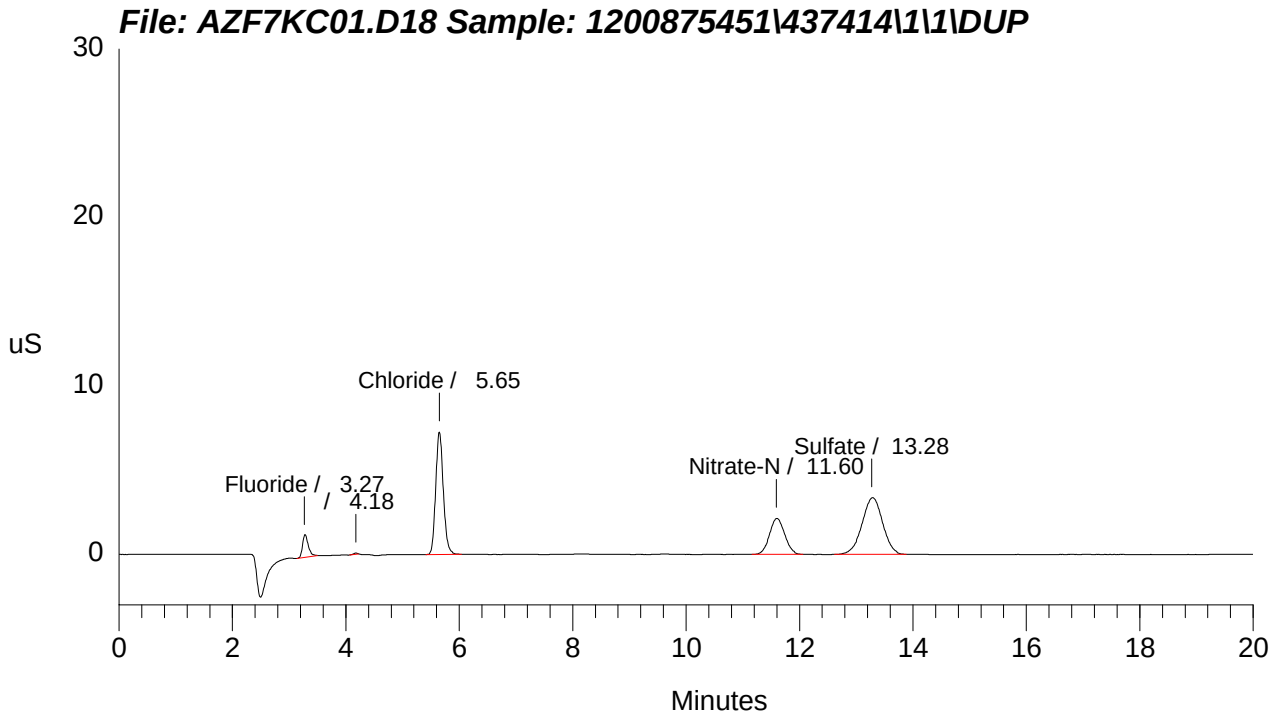


```
================================================================================
| Sample Name: 1200875451\437414\1\1\DUP      Date: 06/27/2005 20:01:48      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D18                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 18                 Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1    3.27 Fluoride                  0.331    1294854    9413350     1   0.00
   3    5.65 Chloride                  2.956    7276446   67993674     1   0.00
   0    0.00 Nitrite-N                 0.000          0          0     0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0     0   0.00
   0    0.00 Bromide                   0.000          0          0     0   0.00
   4   11.60 Nitrate-N                 0.811    2140647   40168006     1   0.00
   5   13.28 Sulfate                   5.680    3364649   85534596     1   0.00
                                  ----------------------------------
                      Totals         9.779   14076595  203109626
```

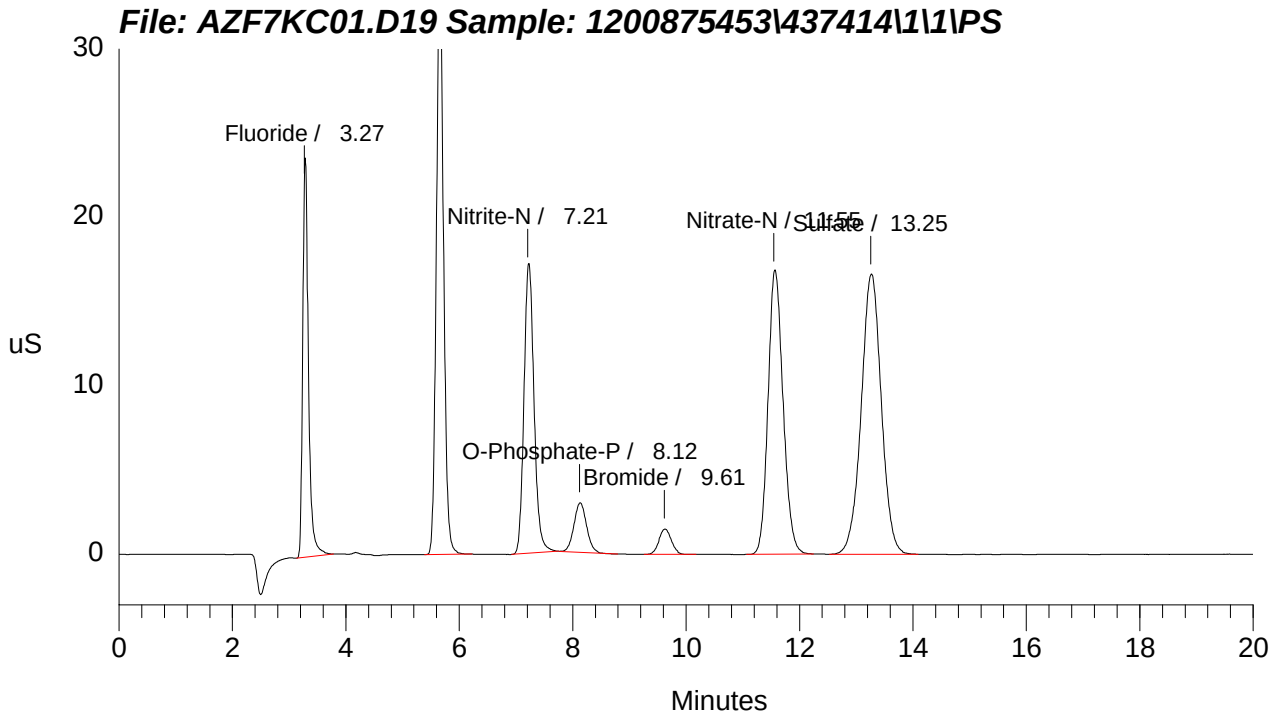


```
================================================================================
| Sample Name: 1200875453\437414\1\1\PS       Date: 06/27/2005 20:22:17     |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D19                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 19                 Detector:CDM-2     |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.489	22124174	166135257	1	0.00
2	5.65	Chloride	13.677	33637386	306370476	1	0.00
3	7.21	Nitrite-N	5.120	16928653	211765527	1	0.00
4	8.12	O-Phosphate-P	2.656	2916326	45449956	1	0.00
5	9.61	Bromide	2.677	1497204	23207170	1	0.00
6	11.55	Nitrate-N	5.934	16740304	310623880	1	0.00
7	13.25	Sulfate	26.557	16560075	409711810	1	0.00
		Totals	62.110	110404121	1473264076		

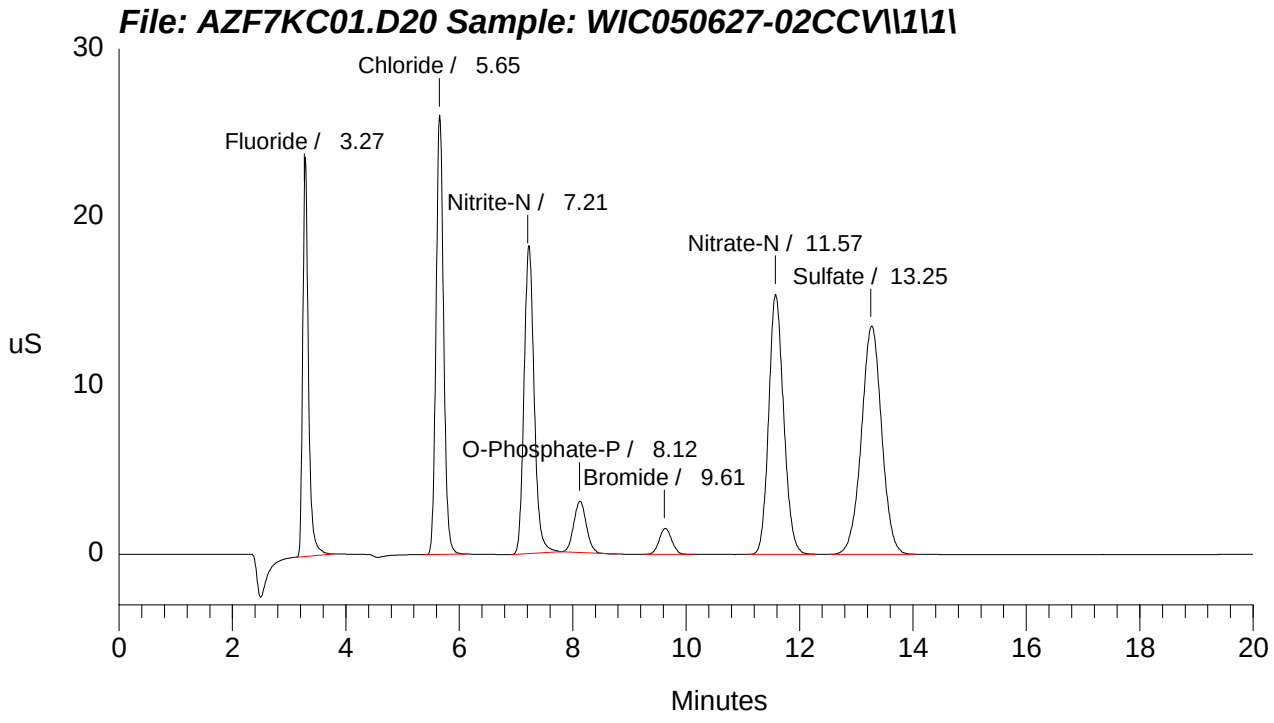


```
================================================================================
| Sample Name: WIC050627-02CCV\\1\1\          Date: 06/27/2005 20:42:46      |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D20                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 20                  Detector:CDM-2      |
| Analyst    : BJB            Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1    3.27 Fluoride                  5.420   21598513  164047701    1   0.00
   2    5.65 Chloride                 10.735   25939906  240944492    1   0.00
   3    7.21 Nitrite-N                 5.487   17784664  227002112    1   0.00
   4    8.12 O-Phosphate-P             2.752    3044877   47108315    1   0.00
   5    9.61 Bromide                   2.747    1512996   23818020    1   0.00
   6   11.57 Nitrate-N                 5.416   15406524  283241540    1   0.00
   7   13.25 Sulfate                  21.851   13445952  336629156    1   0.00
                                    ----------------------------------
                        Totals        54.407   98733432 1322791336
```



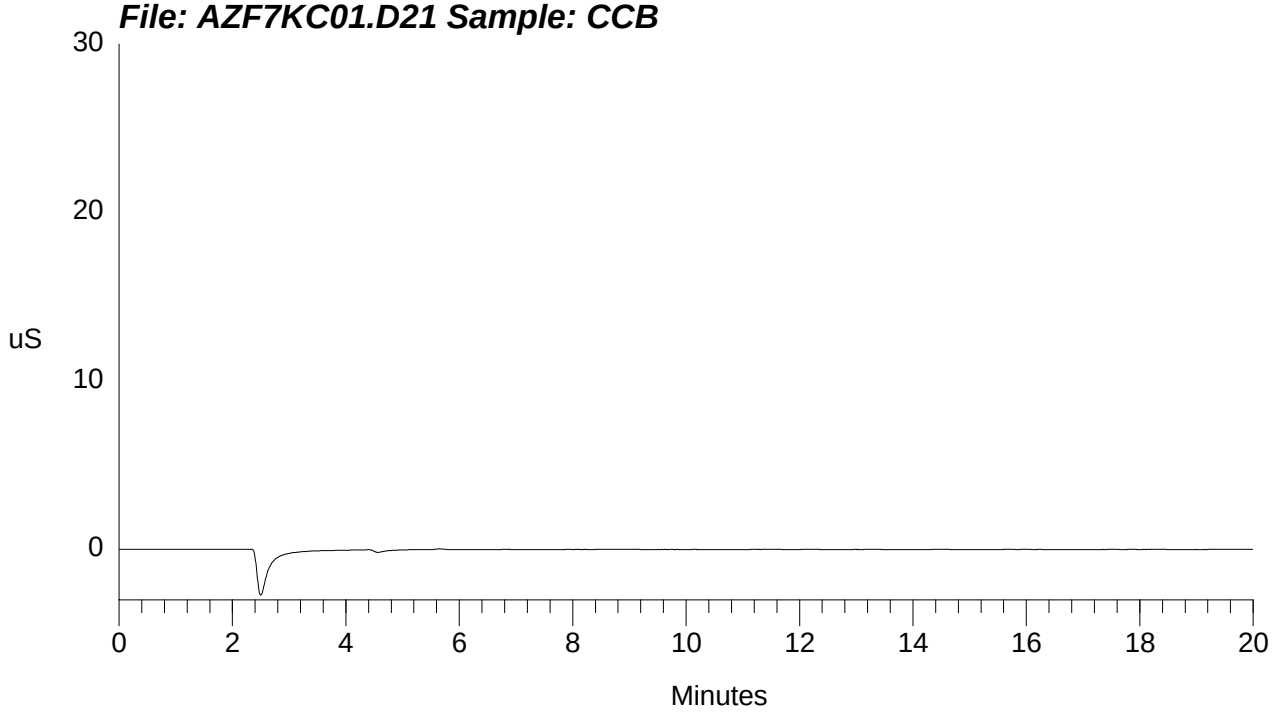
```
================================================================================
| Sample Name: CCB                          Date: 06/27/2005 21:03:15          |
| Data File  : C:\TMP\HORIZON\AZF7KC01.D21                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 21              Detector:CDM-2           |
| Analyst    : BJB           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF7KC01.D21 Sample: CCB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

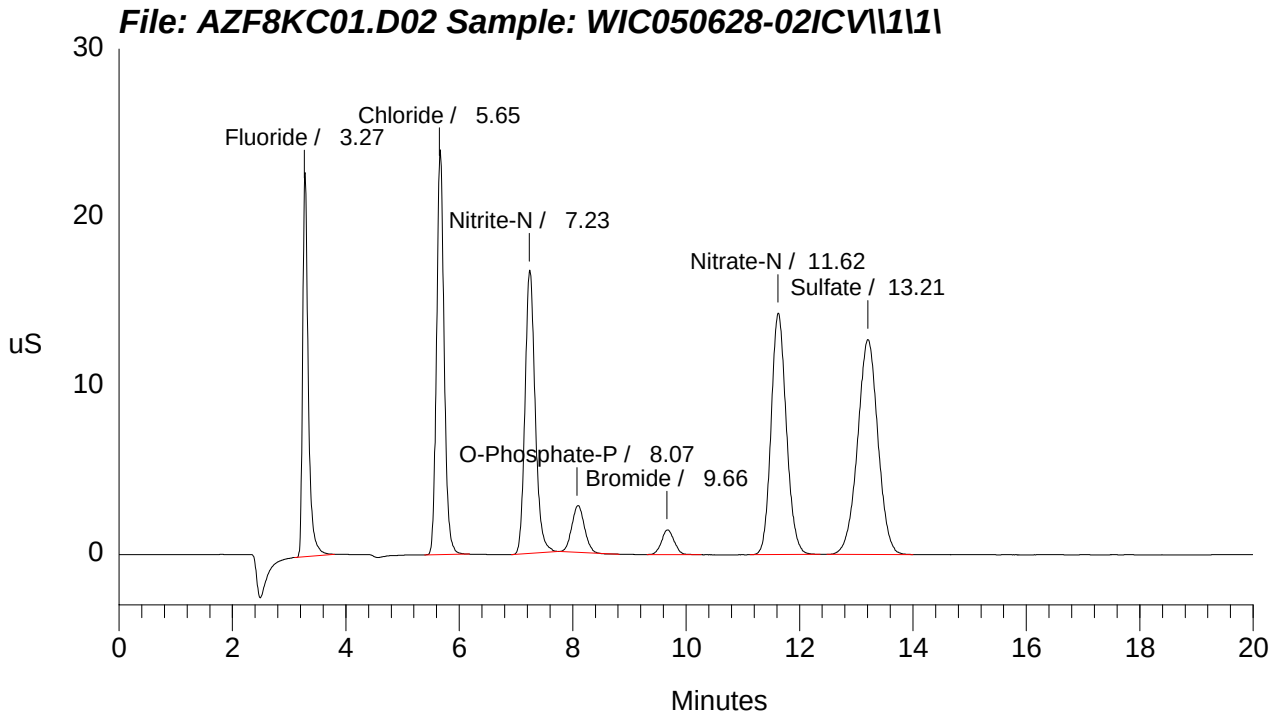
SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			MAR1	06/28/2005 10:47:10	AZF8KC01.R01
WIC050628-02ICV:1		1	MAR1	06/28/2005 11:07:39	AZF8KC01.R02
ICB:			MAR1	06/28/2005 11:28:08	AZF8KC01.R03
139349001:2	437414	2	MAR1	06/28/2005 11:48:37	AZF8KC01.R04
1200875450:2	437414	2	MAR1	06/28/2005 12:09:05	AZF8KC01.R05
1200875452:2	437414	2	MAR1	06/28/2005 12:29:34	AZF8KC01.R06
139349009:2	437414	2	MAR1	06/28/2005 12:50:03	AZF8KC01.R07
139405001:2	437414	2	MAR1	06/28/2005 13:10:32	AZF8KC01.R08
139405002:2	437414	2	MAR1	06/28/2005 13:31:00	AZF8KC01.R09
1200875455:2	437414	2	MAR1	06/28/2005 13:51:18	AZF8KC01.R10
1200875456:2	437414	2	MAR1	06/28/2005 14:11:35	AZF8KC01.R11
WIC050628-02CVH:1		1	MAR1	06/28/2005 14:31:53	AZF8KC01.R12
CCB:			MAR1	06/28/2005 14:52:11	AZF8KC01.R13
1200875411:1	437405	1	MAR1	06/28/2005 15:12:29	AZF8KC01.R14
1200875420:1	437405	1	MAR1	06/28/2005 15:32:58	AZF8KC01.R15
138991034:1	437405	1	MAR1	06/28/2005 15:53:16	AZF8KC01.R16
138991035:1	437405	1	MAR1	06/28/2005 16:13:45	AZF8KC01.R17
138991036:1	437405	1	MAR1	06/28/2005 16:34:14	AZF8KC01.R18
138991037:1	437405	1	MAR1	06/28/2005 16:54:31	AZF8KC01.R19
1200875412:1	437405	1	MAR1	06/28/2005 17:15:00	AZF8KC01.R20
1200875414:1	437405	1	MAR1	06/28/2005 17:35:29	AZF8KC01.R21
1200875417:1	437405	1	MAR1	06/28/2005 17:55:46	AZF8KC01.R22
138991038:1	437405	1	MAR1	06/28/2005 18:16:15	AZF8KC01.R23
WIC050628-02CCV:1		1	MAR1	06/28/2005 18:36:44	AZF8KC01.R24
CCB:			MAR1	06/28/2005 18:57:13	AZF8KC01.R25
138991039:1	437405	1	MAR1	06/28/2005 19:17:42	AZF8KC01.R26
138991040:1	437405	1	MAR1	06/28/2005 19:38:11	AZF8KC01.R27
139413001:1	437405	1	MAR1	06/28/2005 19:58:39	AZF8KC01.R28
1200875413:1	437405	1	MAR1	06/28/2005 20:19:08	AZF8KC01.R29
1200875416:1	437405	1	MAR1	06/28/2005 20:39:26	AZF8KC01.R30
1200875419:1	437405	1	MAR1	06/28/2005 20:59:54	AZF8KC01.R31
139413002:1	437405	1	MAR1	06/28/2005 21:20:23	AZF8KC01.R32
139413003:1	437405	1	MAR1	06/28/2005 21:40:53	AZF8KC01.R33
WIC050628-02CVH:1		1	MAR1	06/28/2005 22:01:23	AZF8KC01.R34
CCB:			MAR1	06/28/2005 22:21:53	AZF8KC01.R35
139413004:1	437405	1	MAR1	06/28/2005 22:42:23	AZF8KC01.R36
139413005:1	437405	1	MAR1	06/28/2005 23:02:53	AZF8KC01.R37
139413006:1	437405	1	MAR1	06/28/2005 23:23:22	AZF8KC01.R38
139413007:1	437405	1	MAR1	06/28/2005 23:43:50	AZF8KC01.R39
WIC050628-02CCV:1		1	MAR1	06/29/2005 00:04:19	AZF8KC01.R40
CCB:			MAR1	06/29/2005 00:24:37	AZF8KC01.R41

```
================================================================================
| Sample Name: WIC050628-02ICV\\1\1\          Date: 06/28/2005 11:07:39      |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D02                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.153	21836536	155934488	1	0.00
2	5.65	Chloride	9.889	23028861	222149618	1	0.00
3	7.23	Nitrite-N	5.063	16698929	209390839	1	0.00
4	8.07	O-Phosphate-P	2.516	2723635	43043226	1	0.00
5	9.66	Bromide	2.668	1462332	23130678	1	0.00
6	11.62	Nitrate-N	5.133	14327606	268329114	1	0.00
7	13.21	Sulfate	20.715	12760225	318996982	1	0.00
		Totals	51.137	92838123	1240974945		



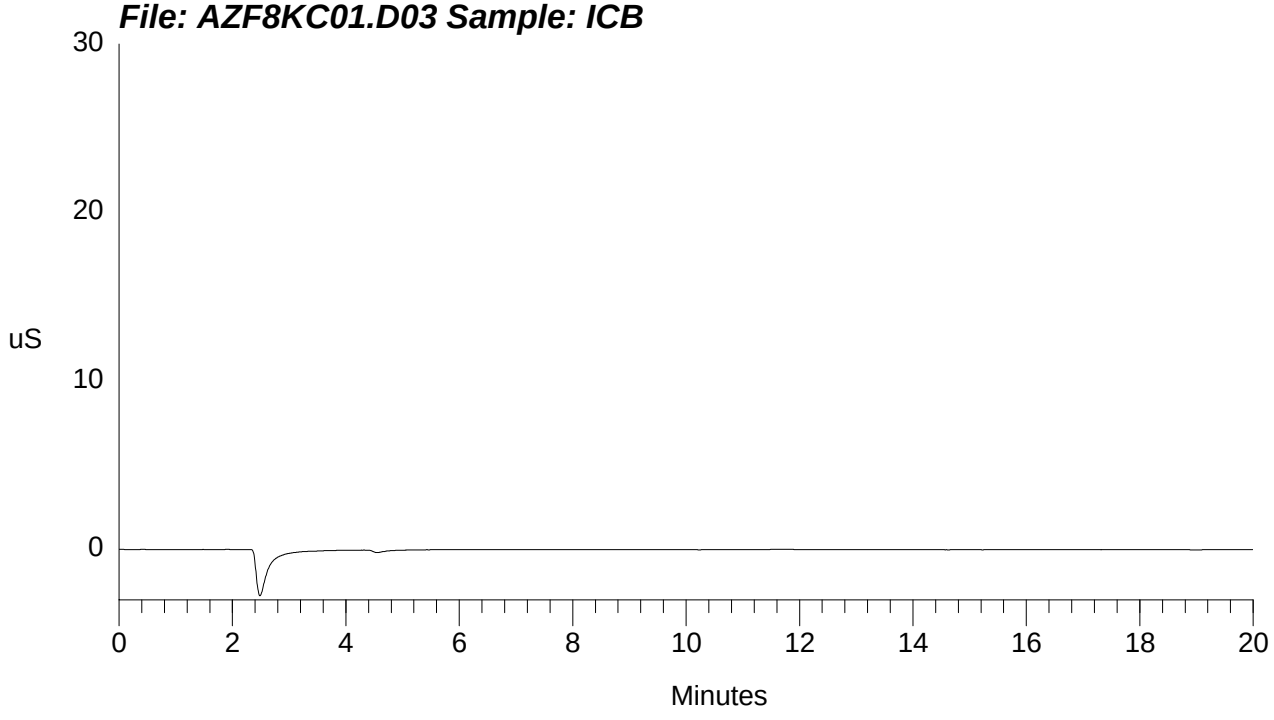
```
================================================================================
| Sample Name: ICB                          Date: 06/28/2005 11:28:08          |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D03                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                 Detector:CDM-2         |
| Analyst    : MAR1          Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF8KC01.D03 Sample: ICB

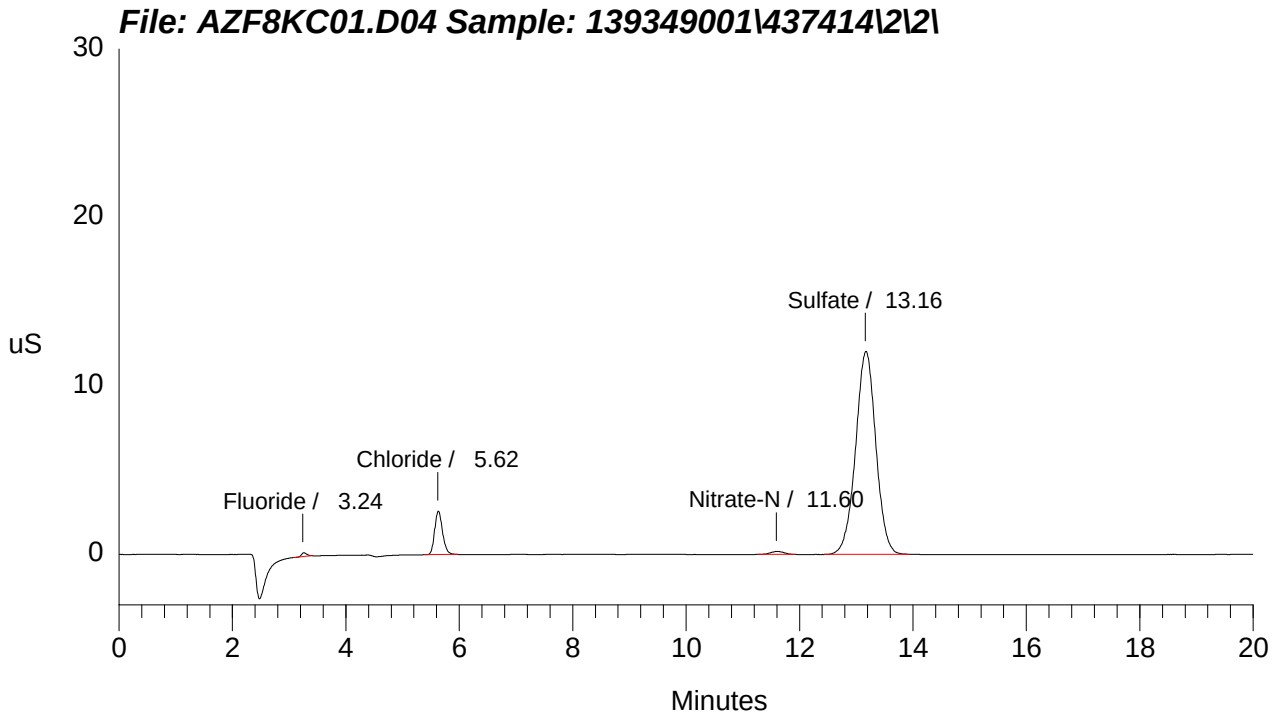


```
================================================================================
| Sample Name: 139349001\437414\2\2\          Date: 06/28/2005 11:48:37      |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D04                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 4                   Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                    Code
--------------------------------------------------------------------------------
   1    3.24 Fluoride                   0.072     225875    1544519     1   0.00
   2    5.62 Chloride                   1.032    2579706   25216190     1   0.00
   0    0.00 Nitrite-N                  0.000          0          0     0   0.00
   0    0.00 O-Phosphate-P              0.000          0          0     0   0.00
   0    0.00 Bromide                    0.000          0          0     0   0.00
   3   11.60 Nitrate-N                  0.111     179960    3204262     1   0.00
   4   13.16 Sulfate                   19.467   12008913  299607998     1   0.00
                                      ---------------------------------
                        Totals         20.682   14994453  329572969
```



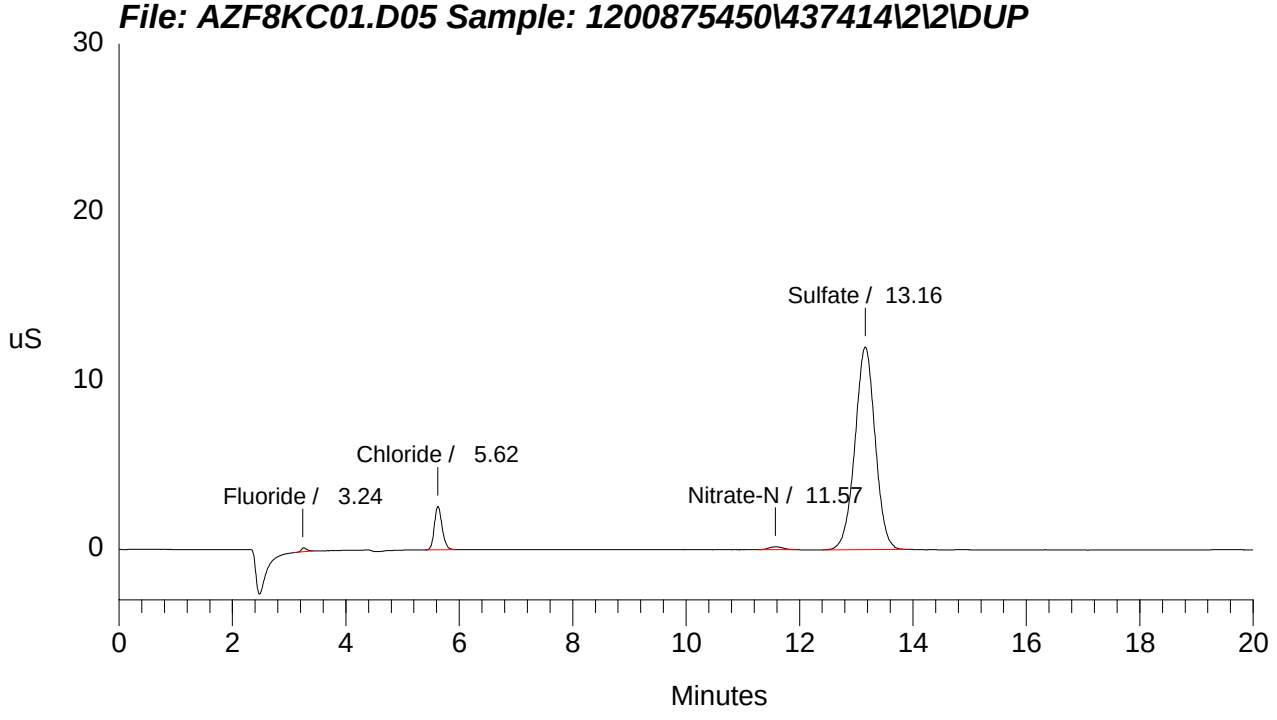
```
================================================================================
| Sample Name: 1200875450\437414\2\2\DUP      Date: 06/28/2005 12:09:05      |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D05                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.076	235519	1673064	1	0.00
2	5.62	Chloride	1.012	2590964	24765020	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.57	Nitrate-N	0.113	181698	3306280	1	0.00
4	13.16	Sulfate	19.404	12025791	298643292	1	0.00
		Totals	20.605	15033973	328387656		

File: AZF8KC01.D05 Sample: 1200875450\437414\2\2\DUP

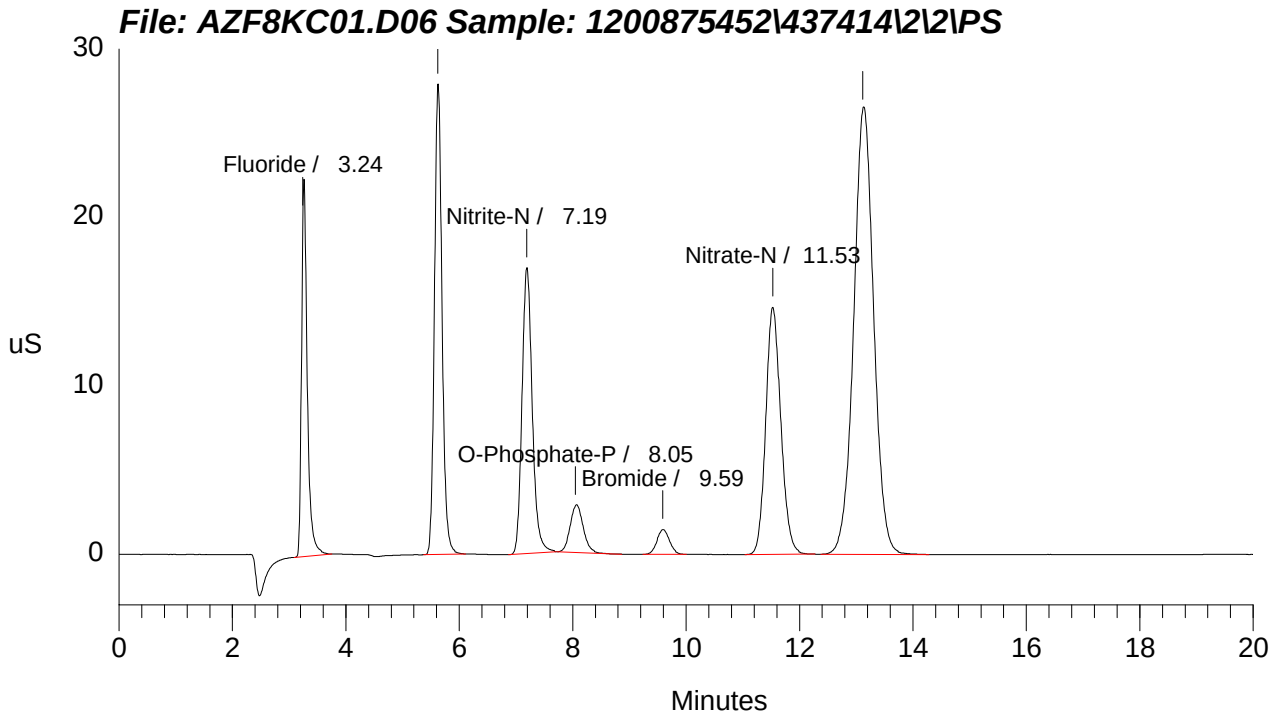


```
================================================================================
| Sample Name: 1200875452\437414\2\2\PS       Date: 06/28/2005 12:29:34         |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D06                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 6                    Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
-------------------------------------------------------------------------------
   1    3.24 Fluoride                   5.175   20204539  156601503    1   0.00
   2    5.62 Chloride                  11.568   27919815  259473516    1   0.00
   3    7.19 Nitrite-N                  5.142   16941250  212677553    1   0.00
   4    8.05 O-Phosphate-P              2.643    2780920   45229468    1   0.00
   5    9.59 Bromide                    2.647    1472766   22951502    1   0.00
   6   11.53 Nitrate-N                  5.203   14671256  272000414    1   0.00
   7   13.11 Sulfate                   42.011   26368680  649680546    1   0.00
                                  ----------------------------------
                         Totals        74.389  110359226 1618614502
```

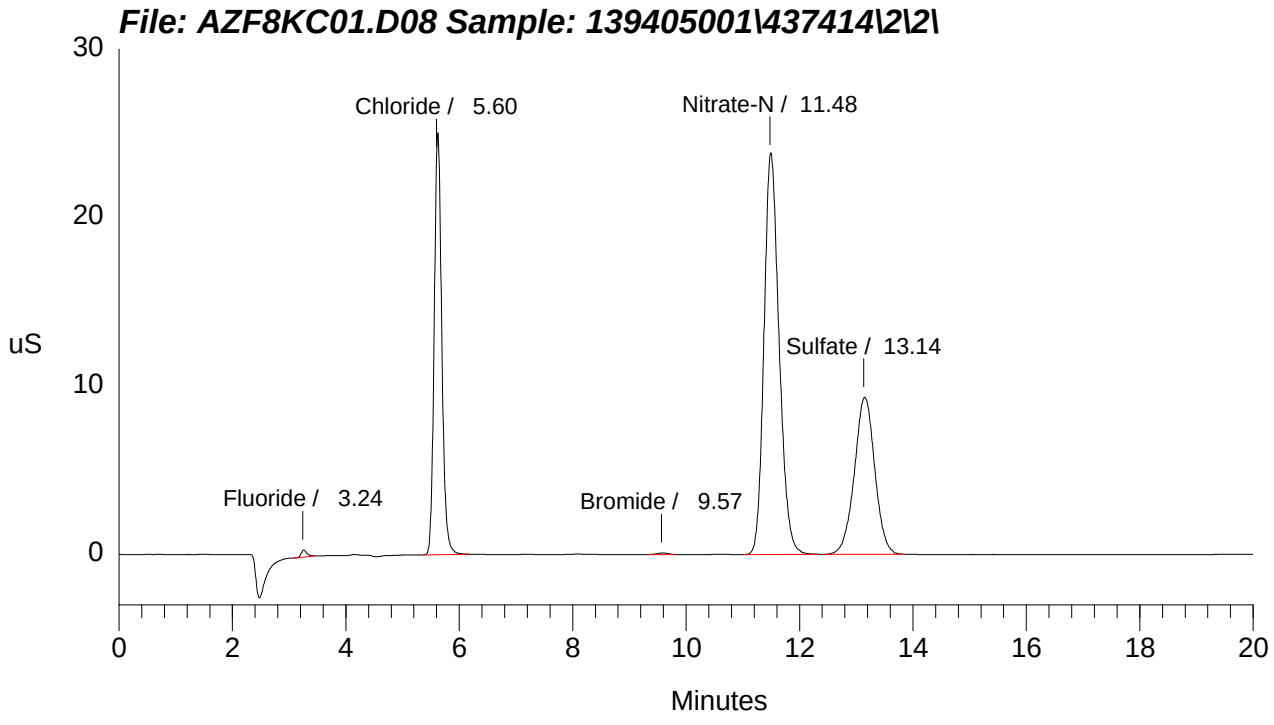


```
================================================================================
| Sample Name: 139405001\437414\2\2\          Date: 06/28/2005 13:10:32      |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D08                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                     Code
-------------------------------------------------------------------------------
   1    3.24 Fluoride                   0.118     401943    2938035    1   0.00
   2    5.60 Chloride                  10.352   23550579  232436916    1   0.00
   0    0.00 Nitrite-N                  0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P              0.000          0          0    0   0.00
   3    9.57 Bromide                    0.148      90480    1311942    1   0.00
   4   11.48 Nitrate-N                  8.415   23674535  441603076    1   0.00
   5   13.14 Sulfate                   15.197    9290743  233302584    1   0.00
                                  ----------------------------------
                        Totals        34.229   57008279  911592553
```

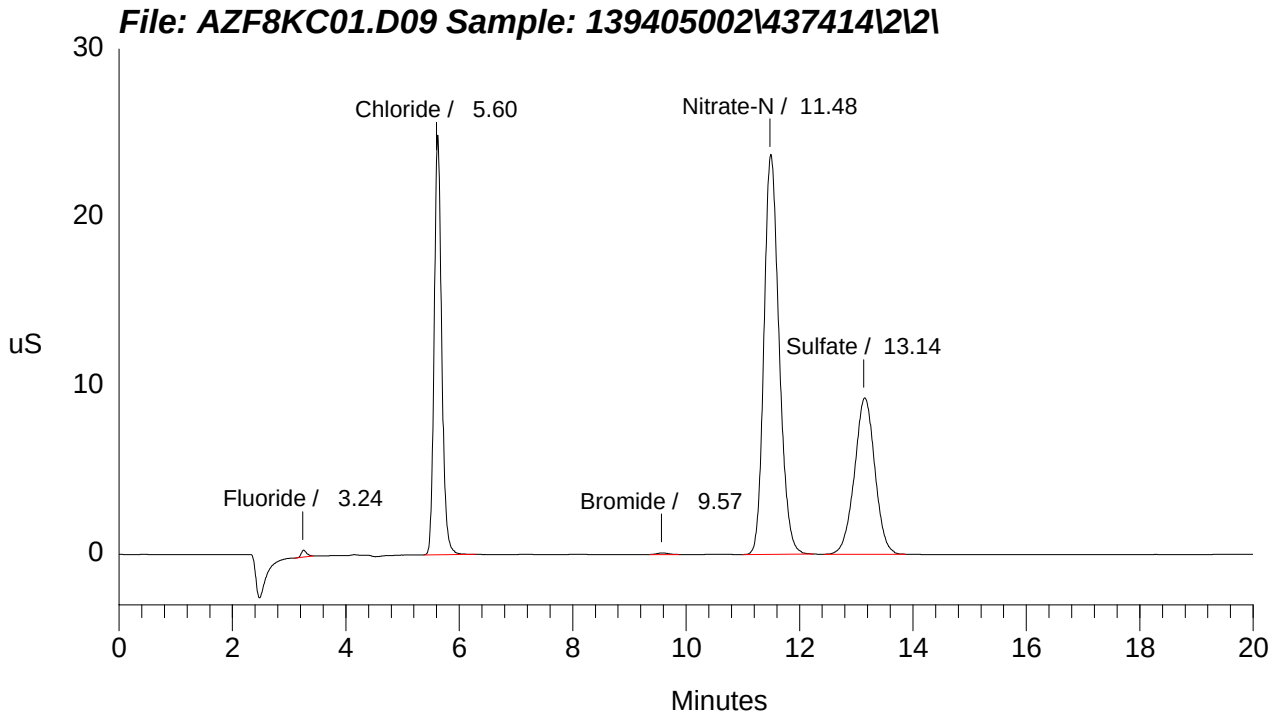


```
================================================================================
| Sample Name: 139405002\437414\2\2\          Date: 06/28/2005 13:31:00      |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D09                                   |
| Method     : C:\DX\METHOD\MAY27.MET                                        |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                        mg/l                    Code
-------------------------------------------------------------------------------
   1    3.24 Fluoride                   0.114     403354    2819703     1   0.00
   2    5.60 Chloride                  10.164   23378862  228250110     1   0.00
   0    0.00 Nitrite-N                  0.000          0          0     0   0.00
   0    0.00 O-Phosphate-P              0.000          0          0     0   0.00
   3    9.57 Bromide                    0.158      95644    1402196     1   0.00
   4   11.48 Nitrate-N                  8.394   23550077  440470084     1   0.00
   5   13.14 Sulfate                   15.123    9246424  232158090     1   0.00
                                  ----------------------------------
                        Totals        33.952   56674361  905100183
```

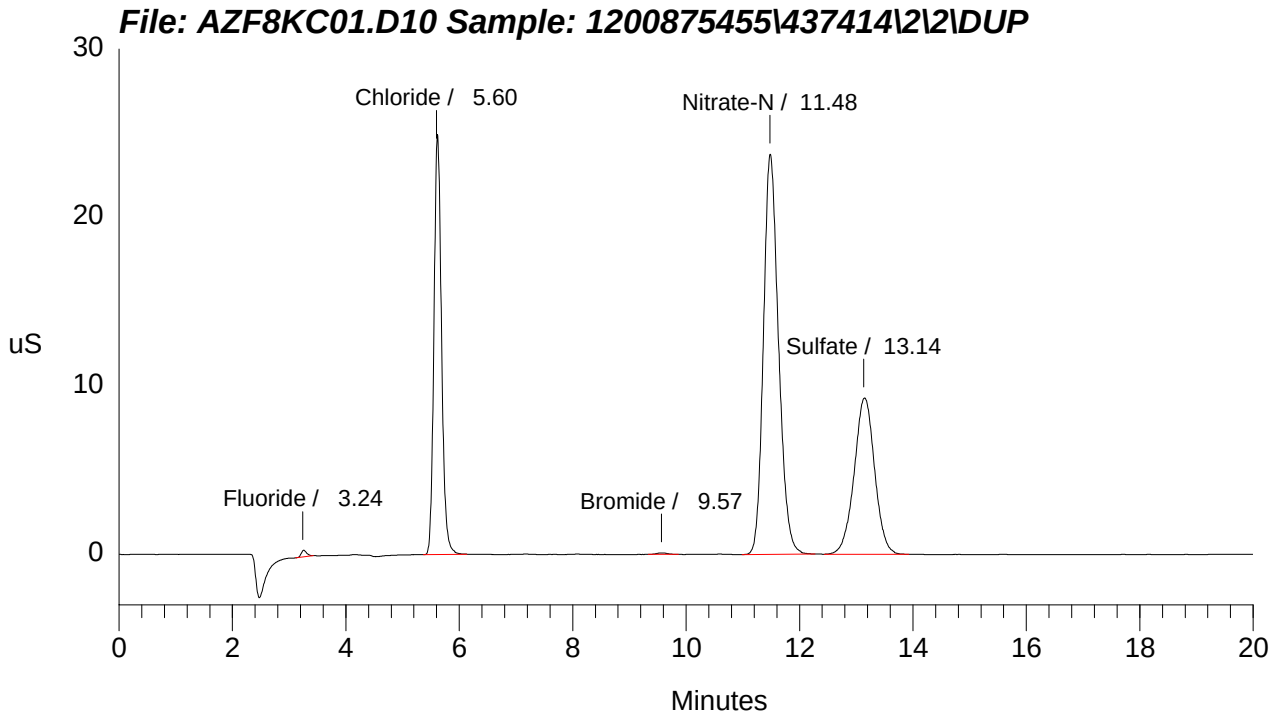


```
================================================================================
| Sample Name: 1200875455\437414\2\2\DUP      Date: 06/28/2005 13:51:18      |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D10                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.112	393687	2774254	1	0.00
2	5.60	Chloride	10.297	24065643	231210078	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
3	9.57	Bromide	0.155	91329	1379360	1	0.00
4	11.48	Nitrate-N	8.377	23748268	439573448	1	0.00
5	13.14	Sulfate	15.172	9269846	232927796	1	0.00
		Totals	34.114	57568773	907864936		

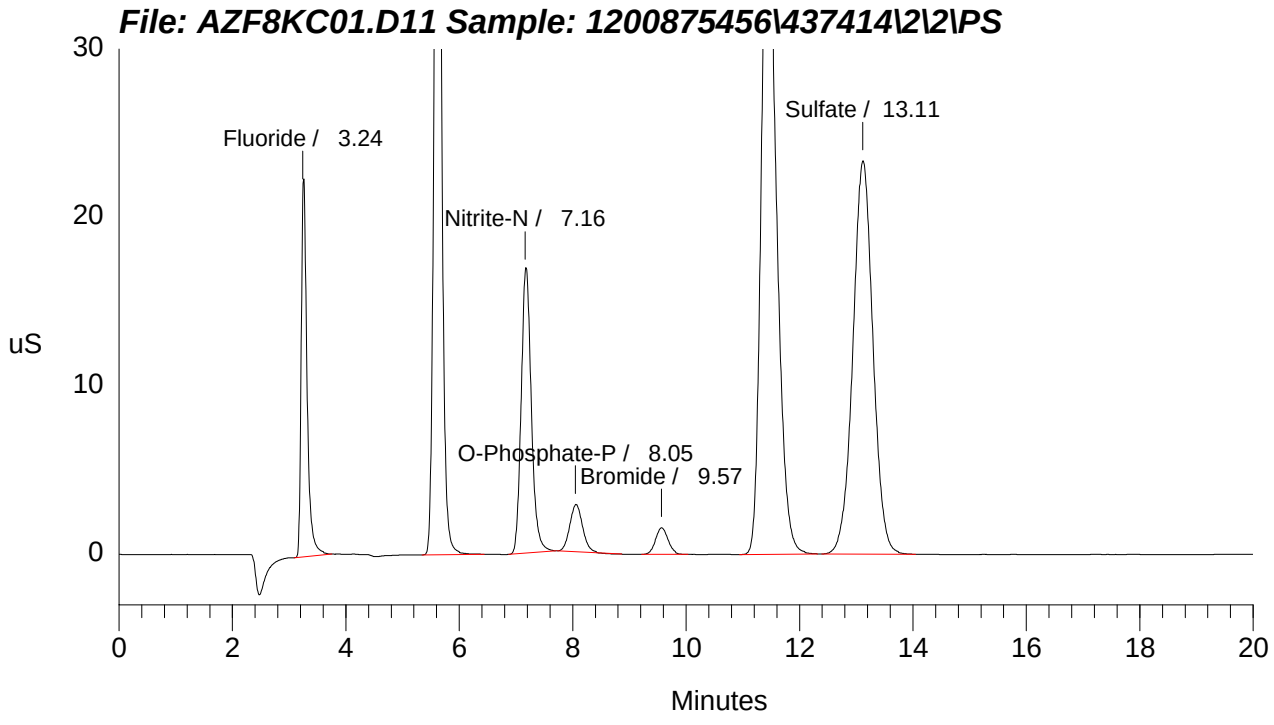


```
================================================================================
| Sample Name: 1200875456\437414\2\2\PS       Date: 06/28/2005 14:11:35     |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D11                                  |
| Method     : C:\DX\METHOD\MAY27.MET                                       |
| ACI Address: 1  System: 1  Inject#: 11                 Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.289	21782778	160073763	1	0.00
2	5.60	Chloride	22.114	51535730	493954436	1	0.00
3	7.16	Nitrite-N	5.093	16778991	210664142	1	0.00
4	8.05	O-Phosphate-P	2.583	2803837	44198265	1	0.00
5	9.57	Bromide	2.841	1583493	24627280	1	0.00
6	11.43	Nitrate-N	14.257	40148868	750005854	1	0.00
7	13.11	Sulfate	37.098	23328908	573387724	1	0.00
		Totals	89.275	157962604	2256911464		

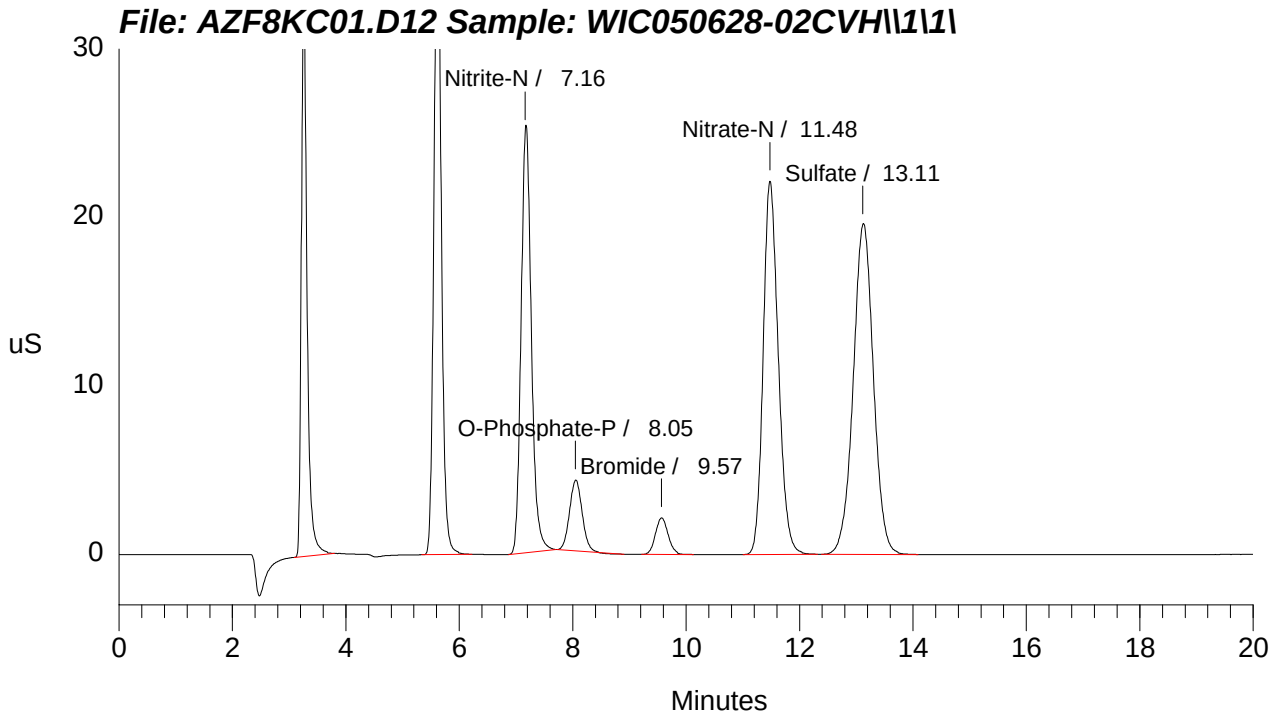


```
================================================================================
| Sample Name: WIC050628-02CVH\\1\1\          Date: 06/28/2005 14:31:53      |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D12                                    |
| Method     : C:\DX\METHOD\MAY27.MET                                         |
| ACI Address: 1  System: 1  Inject#: 12                  Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056             |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1    3.24 Fluoride                  7.716   30739728  233814140    1   0.00
   2    5.60 Chloride                 15.724   36869537  351875634    1   0.00
   3    7.16 Nitrite-N                 7.671   25050859  317756035    1   0.00
   4    8.05 O-Phosphate-P             3.758    4203486   64422266    1   0.00
   5    9.57 Bromide                   3.947    2180427   34203694    1   0.00
   6   11.48 Nitrate-N                 7.831   22157335  410766134    1   0.00
   7   13.11 Sulfate                  31.457   19570472  485801002    1   0.00
                                    ----------------------------------
                          Totals      78.105  140771844 1898638905
```



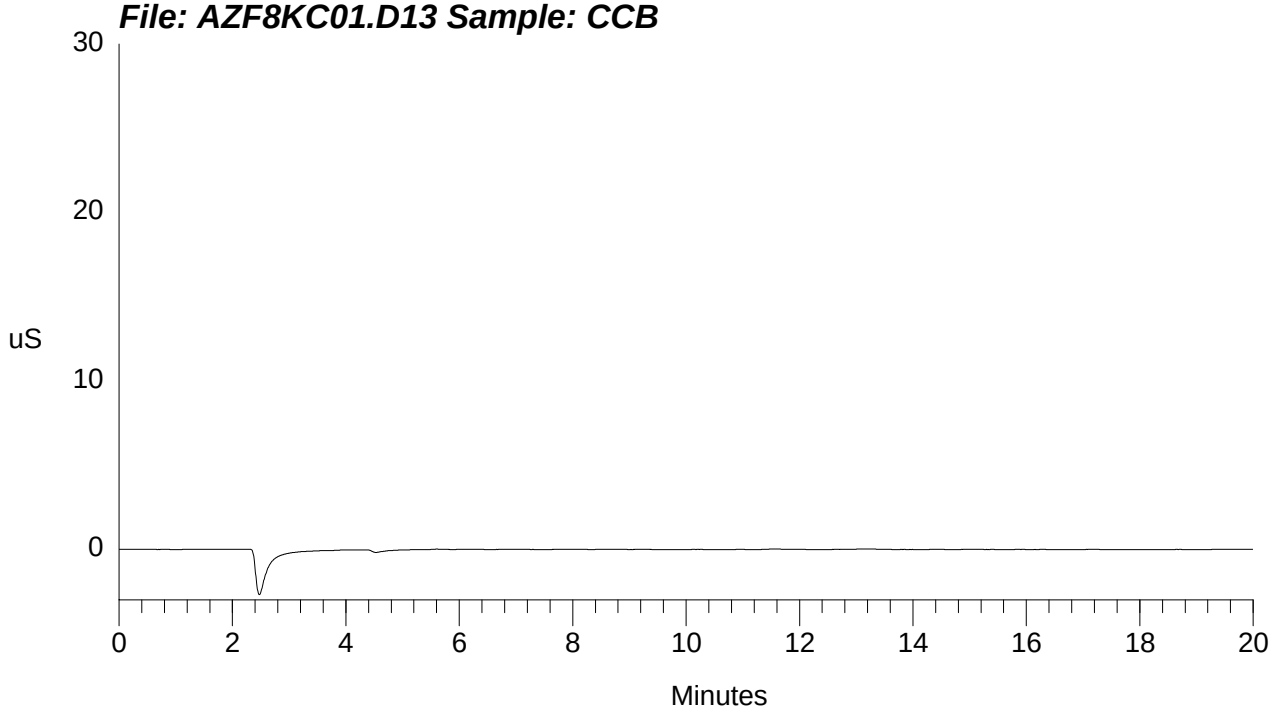
```
================================================================================
| Sample Name: CCB                          Date: 06/28/2005 14:52:11          |
| Data File  : C:\TMP\HORIZON\AZF8KC01.D13                                     |
| Method     : C:\DX\METHOD\MAY27.MET                                          |
| ACI Address: 1  System: 1  Inject#: 13              Detector:CDM-2           |
| Analyst    : MAR1          Column: AS9-HC;GL-GC-E-086;300;9056               |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                  0.000          0          0    0   0.00
   0    0.00 Chloride                  0.000          0          0    0   0.00
   0    0.00 Nitrite-N                 0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0    0.00 Bromide                   0.000          0          0    0   0.00
   0    0.00 Nitrate-N                 0.000          0          0    0   0.00
   0    0.00 Sulfate                   0.000          0          0    0   0.00
                                    ----------------------------------
                        Totals         0.000          0          0
```

File: AZF8KC01.D13 Sample: CCB



Nitrate + Nitrite

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
TON0	437623	NO3NO2	06/28/2005 08:50:48	JXM	1	
TON.02	437623	NO3NO2	06/28/2005 08:50:49	JXM	1	
TON.05	437623	NO3NO2	06/28/2005 08:50:50	JXM	1	
TON.1	437623	NO3NO2	06/28/2005 08:50:51	JXM	1	
TON.5	437623	NO3NO2	06/28/2005 08:50:52	JXM	1	
TON1	437623	NO3NO2	06/28/2005 08:50:53	JXM	1	
TON2	437623	NO3NO2	06/28/2005 08:50:54	JXM	1	
TON5	437623	NO3NO2	06/28/2005 08:50:55	JXM	1	
icv	437623	NO3NO2	06/28/2005 08:50:57	JXM	1	WTR050628-08
icb	437623	NO3NO2	06/28/2005 08:50:58	JXM	1	WTR050628-10
TON0	437623	NO3NO2	06/28/2005 09:09:38	JXM	1	
TON.02	437623	NO3NO2	06/28/2005 09:09:39	JXM	1	
TON.05	437623	NO3NO2	06/28/2005 09:09:40	JXM	1	
TON.1	437623	NO3NO2	06/28/2005 09:09:41	JXM	1	
TON.5	437623	NO3NO2	06/28/2005 09:09:42	JXM	1	
TON1	437623	NO3NO2	06/28/2005 09:09:43	JXM	1	
TON2	437623	NO3NO2	06/28/2005 09:09:44	JXM	1	
TON5	437623	NO3NO2	06/28/2005 09:09:45	JXM	1	
icv	437623	NO3NO2	06/28/2005 09:09:47	JXM	1	WTR050628-08
icb	437623	NO3NO2	06/28/2005 09:09:48	JXM	1	WTR050628-10
TON-CCV	437623	NO3NO2	06/28/2005 11:13:17	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 11:13:18	JXM	1	WTR050628-10
1200875979	437623	NO3NO2	06/28/2005 11:13:19	JXM	1	
1200875980	437623	NO3NO2	06/28/2005 11:13:20	JXM	1	
139364001	437623	NO3NO2	06/28/2005 11:13:21	JXM	1	
139366001	437623	NO3NO2	06/28/2005 11:13:22	JXM	1	
139366002	437623	NO3NO2	06/28/2005 11:13:23	JXM	1	
139374001	437623	NO3NO2	06/28/2005 11:13:24	JXM	1	
139374002	437623	NO3NO2	06/28/2005 11:13:25	JXM	1	
139405001	437623	NO3NO2	06/28/2005 11:13:26	JXM	1	
1200875981	437623	NO3NO2	06/28/2005 11:13:27	JXM	1	
1200875982	437623	NO3NO2	06/28/2005 11:13:28	JXM	1	
TON-CCV	437623	NO3NO2	06/28/2005 11:24:33	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 11:24:34	JXM	1	WTR050628-10
139405002	437623	NO3NO2	06/28/2005 11:24:35	JXM	1	
1200875987	437623	NO3NO2	06/28/2005 11:24:36	JXM	1	
1200875990	437623	NO3NO2	06/28/2005 11:24:37	JXM	1	
139406001	437623	NO3NO2	06/28/2005 11:24:38	JXM	1	
139409001	437623	NO3NO2	06/28/2005 11:24:39	JXM	1	
1200875988	437623	NO3NO2	06/28/2005 11:24:40	JXM	1	
1200875991	437623	NO3NO2	06/28/2005 11:24:41	JXM	1	
129442001	437623	NO3NO2	06/28/2005 11:24:42	JXM	1	
TON-CCV	437623	NO3NO2	06/28/2005 11:26:41	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 11:26:42	JXM	1	WTR050628-10
139366002	437623	NO3NO2	06/28/2005 11:35:47	JXM	10	
139405001	437623	NO3NO2	06/28/2005 11:35:48	JXM	10	
1200875981	437623	NO3NO2	06/28/2005 11:35:49	JXM	10	
1200875982	437623	NO3NO2	06/28/2005 11:35:50	JXM	10	
TON-CCV	437623	NO3NO2	06/28/2005 11:37:43	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 11:37:44	JXM	1	WTR050628-10
139405002	437623	NO3NO2	06/28/2005 11:45:53	JXM	10	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
1200875987	437623	NO3NO2	06/28/2005 11:45:54	JXM	10	
1200875990	437623	NO3NO2	06/28/2005 11:45:55	JXM	10	
TON-CCV	437623	NO3NO2	06/28/2005 11:47:52	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 11:47:53	JXM	1	WTR050628-10
TON-CCV	437623	NO3NO2	06/28/2005 12:23:00	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 12:23:01	JXM	1	WTR050628-10
1200875979	437623	NO3NO2	06/28/2005 12:23:02	JXM	1	
1200875980	437623	NO3NO2	06/28/2005 12:23:03	JXM	1	
139364001	437623	NO3NO2	06/28/2005 12:23:04	JXM	1	
139366001	437623	NO3NO2	06/28/2005 12:23:05	JXM	1	
139366002	437623	NO3NO2	06/28/2005 12:23:06	JXM	10	
139374001	437623	NO3NO2	06/28/2005 12:23:07	JXM	1	
139374002	437623	NO3NO2	06/28/2005 12:23:08	JXM	1	
139405001	437623	NO3NO2	06/28/2005 12:23:09	JXM	10	
1200875981	437623	NO3NO2	06/28/2005 12:23:10	JXM	10	
1200875982	437623	NO3NO2	06/28/2005 12:23:11	JXM	10	
TON-CCV	437623	NO3NO2	06/28/2005 12:34:17	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 12:34:18	JXM	1	WTR050628-10
139405002	437623	NO3NO2	06/28/2005 12:34:19	JXM	10	
1200875987	437623	NO3NO2	06/28/2005 12:34:20	JXM	10	
1200875990	437623	NO3NO2	06/28/2005 12:34:21	JXM	10	
139406001	437623	NO3NO2	06/28/2005 12:34:22	JXM	1	
139409001	437623	NO3NO2	06/28/2005 12:34:23	JXM	1	
1200875988	437623	NO3NO2	06/28/2005 12:34:24	JXM	1	
1200875991	437623	NO3NO2	06/28/2005 12:34:25	JXM	1	
139442001	437623	NO3NO2	06/28/2005 12:34:26	JXM	1	
TON-CCV	437623	NO3NO2	06/28/2005 12:36:25	JXM	1	WTR050628-04
TON-CCB	437623	NO3NO2	06/28/2005 12:36:26	JXM	1	WTR050628-10

Laboratory
Analyzer User

30.06.2005 11:03

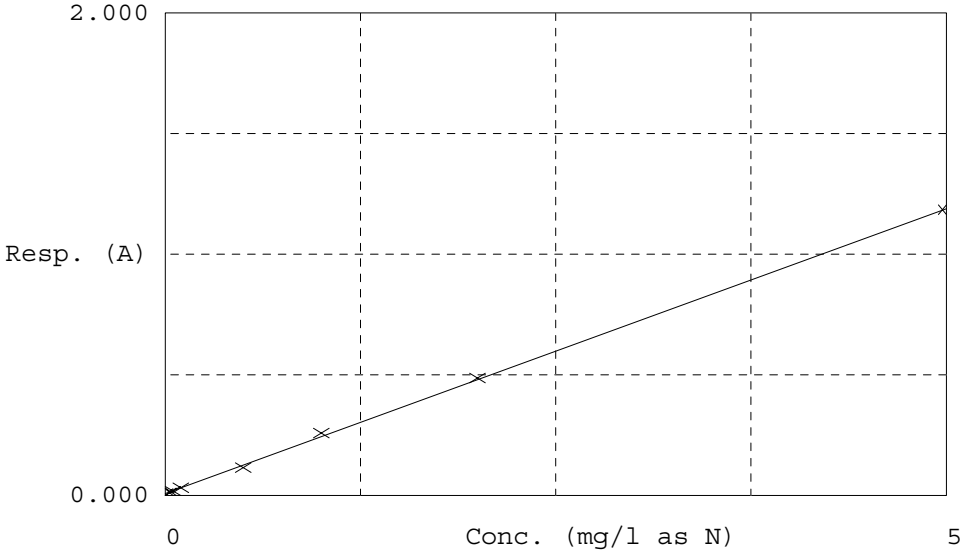
Test NO3NO2

Accepted 30.06.2005 11:03

Factor 4.235
Bias 0.009

Coeff. of det. 0.999649

Errors QC rule violated



	Calibrator	Response	Calc. con.	Conc.	Errors
1	TON0	0.008	-0.002073	0.000000	
2	TON.02	0.011	0.011612	0.020000	
3	TON.05	0.018	0.037691	0.050000	
4	TON.1	0.032	0.099096	0.100000	
5	TON.5	0.116	0.453174	0.500000	
6	TON1	0.260	1.062420	1.000000	
7	TON2	0.487	2.026179	2.000000	
8	TON5	1.185	4.981902	5.000000	
9	icb(control)	0.007	-0.006746	0.000000	Test limit low
10	icv(control)	0.228	0.927711	1.000000	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
TON0	NO3NO2	06/28/2005 08:50:48	0.00833	-0.023742	mg/l as N	1		0
TON.02	NO3NO2	06/28/2005 08:50:49	0.01407	-0.003213	mg/l as N	1		0.02
TON.05	NO3NO2	06/28/2005 08:50:50	0.02103	0.021714	mg/l as N	1		0.05
TON.1	NO3NO2	06/28/2005 08:50:51	0.03272	0.063558	mg/l as N	1		0.1
TON.5	NO3NO2	06/28/2005 08:50:52	0.14425	0.462788	mg/l as N	1		0.5
TON1	NO3NO2	06/28/2005 08:50:53	0.33601	1.149233	mg/l as N	1		1
TON2	NO3NO2	06/28/2005 08:50:54	0.58517	2.041137	mg/l as N	1		2
TON5	NO3NO2	06/28/2005 08:50:55	1.40017	4.958524	mg/l as N	1		5
icv	NO3NO2	06/28/2005 08:50:57	0.28484	0.966055	mg/l as N	1		1
icb	NO3NO2	06/28/2005 08:50:58	0.00782	-0.025567	mg/l as N	1		0
TON0	NO3NO2	06/28/2005 09:09:38	0.00864	0.001513	mg/l as N	1		0
TON.02	NO3NO2	06/28/2005 09:09:39	0.01325	0.018745	mg/l as N	1		0.02
TON.05	NO3NO2	06/28/2005 09:09:40	0.01994	0.043791	mg/l as N	1		0.05
TON.1	NO3NO2	06/28/2005 09:09:41	0.02984	0.080847	mg/l as N	1		0.1
TON.5	NO3NO2	06/28/2005 09:09:42	0.13035	0.456945	mg/l as N	1		0.5
TON1	NO3NO2	06/28/2005 09:09:43	0.30045	1.093475	mg/l as N	1		1
TON2	NO3NO2	06/28/2005 09:09:44	0.53763	1.981041	mg/l as N	1		2
TON5	NO3NO2	06/28/2005 09:09:45	1.34268	4.993644	mg/l as N	1		5
icv	NO3NO2	06/28/2005 09:09:47	0.26	0.942108	mg/l as N	1		1
icb	NO3NO2	06/28/2005 09:09:48	0.00782	-0.001574	mg/l as N	1		0
TON-CCV	NO3NO2	06/28/2005 11:13:17	0.31802	1.159232	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:13:18	0.00883	0.002204	mg/l as N	1		0
1200875979	NO3NO2	06/28/2005 11:13:19	0.01854	0.038567	mg/l as N	1	1	
1200875980	NO3NO2	06/28/2005 11:13:20	0.29764	1.082962	mg/l as N	1	1	
139364001	NO3NO2	06/28/2005 11:13:21	0.00973	0.005584	mg/l as N	1	1	
139366001	NO3NO2	06/28/2005 11:13:22	0.73484	2.719009	mg/l as N	1	1	
139366002	NO3NO2	06/28/2005 11:13:23	2.82605	10.544559	mg/l as N	1	10	
139374001	NO3NO2	06/28/2005 11:13:24	0.00261	-0.021046	mg/l as N	1	1	
139374002	NO3NO2	06/28/2005 11:13:25	0.00268	-0.020792	mg/l as N	1	1	
139405001	NO3NO2	06/28/2005 11:13:26	2.81567	10.505716	mg/l as N	1	10	
1200875981	NO3NO2	06/28/2005 11:13:27	2.84383	10.611077	mg/l as N	1	10	
1200875982	NO3NO2	06/28/2005 11:13:28	3.03457	11.324867	mg/l as N	1	10	
TON-CCV	NO3NO2	06/28/2005 11:24:33	0.31917	1.163529	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:24:34	0.00652	-0.006417	mg/l as N	1		0
139405002	NO3NO2	06/28/2005 11:24:35	2.72393	10.162414	mg/l as N	1	10	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
1200875987	NO3NO2	06/28/2005 11:24:36	2.71913	10.144443	mg/l as N	1	10	
1200875990	NO3NO2	06/28/2005 11:24:37	2.76624	10.320734	mg/l as N	1	10	
139406001	NO3NO2	06/28/2005 11:24:38	0.20549	0.738123	mg/l as N	1	1	
139409001	NO3NO2	06/28/2005 11:24:39	0.01762	0.035112	mg/l as N	1	1	
1200875988	NO3NO2	06/28/2005 11:24:40	0.01774	0.035576	mg/l as N	1	1	
1200875991	NO3NO2	06/28/2005 11:24:41	0.27772	1.008414	mg/l as N	1	1	
129442001	NO3NO2	06/28/2005 11:24:42	0.00778	-0.001713	mg/l as N	1	1	
TON-CCV	NO3NO2	06/28/2005 11:26:41	0.29728	1.081621	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:26:42	0.00623	-0.007521	mg/l as N	1		0
139366002	NO3NO2	06/28/2005 11:35:47	0.36537	13.364178	mg/l as N	10	10	
139405001	NO3NO2	06/28/2005 11:35:48	0.36007	13.165823	mg/l as N	10	10	
1200875981	NO3NO2	06/28/2005 11:35:49	0.35872	13.115582	mg/l as N	10	10	
1200875982	NO3NO2	06/28/2005 11:35:50	0.37873	13.864288	mg/l as N	10	10	
TON-CCV	NO3NO2	06/28/2005 11:37:43	0.30291	1.102705	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:37:44	0.007	-0.004627	mg/l as N	1		0
139405002	NO3NO2	06/28/2005 11:45:53	0.36385	13.307211	mg/l as N	10	10	
1200875987	NO3NO2	06/28/2005 11:45:54	0.35171	12.853052	mg/l as N	10	10	
1200875990	NO3NO2	06/28/2005 11:45:55	0.3683	13.473777	mg/l as N	10	10	
TON-CCV	NO3NO2	06/28/2005 11:47:52	0.30051	1.093725	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:47:53	0.00734	-0.003354	mg/l as N	1		0
TON-CCV	NO3NO2	06/28/2005 12:23:00	0.28074	1.01973	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 12:23:01	0.00758	-0.002471	mg/l as N	1		0
1200875979	NO3NO2	06/28/2005 12:23:02	0.00726	-0.003676	mg/l as N	1	1	
1200875980	NO3NO2	06/28/2005 12:23:03	0.26519	0.961536	mg/l as N	1	1	
139364001	NO3NO2	06/28/2005 12:23:04	0.00965	0.005293	mg/l as N	1	1	
139366001	NO3NO2	06/28/2005 12:23:05	0.66247	2.448192	mg/l as N	1	1	
139366002	NO3NO2	06/28/2005 12:23:06	0.36486	13.345375	mg/l as N	1	10	
139374001	NO3NO2	06/28/2005 12:23:07	0.00346	-0.017877	mg/l as N	1	1	
139374002	NO3NO2	06/28/2005 12:23:08	0.00305	-0.019405	mg/l as N	1	1	
139405001	NO3NO2	06/28/2005 12:23:09	0.35622	13.022036	mg/l as N	1	10	
1200875981	NO3NO2	06/28/2005 12:23:10	0.35823	13.097005	mg/l as N	1	10	
1200875982	NO3NO2	06/28/2005 12:23:11	0.62522	23.08802	mg/l as N	1	10	
TON-CCV	NO3NO2	06/28/2005 12:34:17	0.29068	1.05694	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 12:34:18	0.00688	-0.005075	mg/l as N	1		0
139405002	NO3NO2	06/28/2005 12:34:19	0.36067	13.188503	mg/l as N	1	10	
1200875987	NO3NO2	06/28/2005 12:34:20	0.36065	13.187655	mg/l as N	1	10	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
1200875990	NO3NO2	06/28/2005 12:34:21	0.62678	23.146391	mg/l as N	1	10	
139406001	NO3NO2	06/28/2005 12:34:22	0.18498	0.661403	mg/l as N	1	1	
139409001	NO3NO2	06/28/2005 12:34:23	0.01689	0.032382	mg/l as N	1	1	
1200875988	NO3NO2	06/28/2005 12:34:24	0.01631	0.030223	mg/l as N	1	1	
1200875991	NO3NO2	06/28/2005 12:34:25	0.24576	0.888825	mg/l as N	1	1	
129442001	NO3NO2	06/28/2005 12:34:26	0.00903	0.002982	mg/l as N	1	1	
TON-CCV	NO3NO2	06/28/2005 12:36:25	0.26602	0.964653	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 12:36:26	0.00736	-0.003274	mg/l as N	1		0

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
TON0	NO3NO2	06/28/2005 08:50:48	0.00833	-0.023742	mg/l as N	1		0
TON.02	NO3NO2	06/28/2005 08:50:49	0.01407	-0.003213	mg/l as N	1		0.02
TON.05	NO3NO2	06/28/2005 08:50:50	0.02103	0.021714	mg/l as N	1		0.05
TON.1	NO3NO2	06/28/2005 08:50:51	0.03272	0.063558	mg/l as N	1		0.1
TON.5	NO3NO2	06/28/2005 08:50:52	0.14425	0.462788	mg/l as N	1		0.5
TON1	NO3NO2	06/28/2005 08:50:53	0.33601	1.149233	mg/l as N	1		1
TON2	NO3NO2	06/28/2005 08:50:54	0.58517	2.041137	mg/l as N	1		2
TON5	NO3NO2	06/28/2005 08:50:55	1.40017	4.958524	mg/l as N	1		5
icv	NO3NO2	06/28/2005 08:50:57	0.28484	0.966055	mg/l as N	1		1
icb	NO3NO2	06/28/2005 08:50:58	0.00782	-0.025567	mg/l as N	1		0
TON0	NO3NO2	06/28/2005 09:09:38	0.00864	0.001513	mg/l as N	1		0
TON.02	NO3NO2	06/28/2005 09:09:39	0.01325	0.018745	mg/l as N	1		0.02
TON.05	NO3NO2	06/28/2005 09:09:40	0.01994	0.043791	mg/l as N	1		0.05
TON.1	NO3NO2	06/28/2005 09:09:41	0.02984	0.080847	mg/l as N	1		0.1
TON.5	NO3NO2	06/28/2005 09:09:42	0.13035	0.456945	mg/l as N	1		0.5
TON1	NO3NO2	06/28/2005 09:09:43	0.30045	1.093475	mg/l as N	1		1
TON2	NO3NO2	06/28/2005 09:09:44	0.53763	1.981041	mg/l as N	1		2
TON5	NO3NO2	06/28/2005 09:09:45	1.34268	4.993644	mg/l as N	1		5
icv	NO3NO2	06/28/2005 09:09:47	0.26	0.942108	mg/l as N	1		1
icb	NO3NO2	06/28/2005 09:09:48	0.00782	-0.001574	mg/l as N	1		0
TON-CCV	NO3NO2	06/28/2005 11:13:17	0.31802	1.159232	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:13:18	0.00883	0.002204	mg/l as N	1		0
1200875979	NO3NO2	06/28/2005 11:13:19	0.01854	0.038567	mg/l as N	1	1	
1200875980	NO3NO2	06/28/2005 11:13:20	0.29764	1.082962	mg/l as N	1	1	
139364001	NO3NO2	06/28/2005 11:13:21	0.00973	0.005584	mg/l as N	1	1	
139366001	NO3NO2	06/28/2005 11:13:22	0.73484	2.719009	mg/l as N	1	1	
139366002	NO3NO2	06/28/2005 11:13:23	2.82605	10.544559	mg/l as N	1	10	
139374001	NO3NO2	06/28/2005 11:13:24	0.00261	-0.021046	mg/l as N	1	1	
139374002	NO3NO2	06/28/2005 11:13:25	0.00268	-0.020792	mg/l as N	1	1	
139405001	NO3NO2	06/28/2005 11:13:26	2.81567	10.505716	mg/l as N	1	10	
1200875981	NO3NO2	06/28/2005 11:13:27	2.84383	10.611077	mg/l as N	1	10	
1200875982	NO3NO2	06/28/2005 11:13:28	3.03457	11.324867	mg/l as N	1	10	
TON-CCV	NO3NO2	06/28/2005 11:24:33	0.31917	1.163529	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:24:34	0.00652	-0.006417	mg/l as N	1		0
139405002	NO3NO2	06/28/2005 11:24:35	2.72393	10.162414	mg/l as N	1	10	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
1200875987	NO3NO2	06/28/2005 11:24:36	2.71913	10.144443	mg/l as N	1	10	
1200875990	NO3NO2	06/28/2005 11:24:37	2.76624	10.320734	mg/l as N	1	10	
139406001	NO3NO2	06/28/2005 11:24:38	0.20549	0.738123	mg/l as N	1	1	
139409001	NO3NO2	06/28/2005 11:24:39	0.01762	0.035112	mg/l as N	1	1	
1200875988	NO3NO2	06/28/2005 11:24:40	0.01774	0.035576	mg/l as N	1	1	
1200875991	NO3NO2	06/28/2005 11:24:41	0.27772	1.008414	mg/l as N	1	1	
139442001	NO3NO2	06/28/2005 11:24:42	0.00778	-0.001713	mg/l as N	1	1	
TON-CCV	NO3NO2	06/28/2005 11:26:41	0.29728	1.081621	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:26:42	0.00623	-0.007521	mg/l as N	1		0
139366002	NO3NO2	06/28/2005 11:35:47	0.36537	13.364178	mg/l as N	10	10	
139405001	NO3NO2	06/28/2005 11:35:48	0.36007	13.165823	mg/l as N	10	10	
1200875981	NO3NO2	06/28/2005 11:35:49	0.35872	13.115582	mg/l as N	10	10	
1200875982	NO3NO2	06/28/2005 11:35:50	0.37873	13.864288	mg/l as N	10	10	
TON-CCV	NO3NO2	06/28/2005 11:37:43	0.30291	1.102705	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:37:44	0.007	-0.004627	mg/l as N	1		0
139405002	NO3NO2	06/28/2005 11:45:53	0.36385	13.307211	mg/l as N	10	10	
1200875987	NO3NO2	06/28/2005 11:45:54	0.35171	12.853052	mg/l as N	10	10	
1200875990	NO3NO2	06/28/2005 11:45:55	0.3683	13.473777	mg/l as N	10	10	
TON-CCV	NO3NO2	06/28/2005 11:47:52	0.30051	1.093725	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 11:47:53	0.00734	-0.003354	mg/l as N	1		0
TON-CCV	NO3NO2	06/28/2005 12:23:00	0.28074	1.01973	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 12:23:01	0.00758	-0.002471	mg/l as N	1		0
1200875979	NO3NO2	06/28/2005 12:23:02	0.00726	-0.003676	mg/l as N	1	1	
1200875980	NO3NO2	06/28/2005 12:23:03	0.26519	0.961536	mg/l as N	1	1	
139364001	NO3NO2	06/28/2005 12:23:04	0.00965	0.005293	mg/l as N	1	1	
139366001	NO3NO2	06/28/2005 12:23:05	0.66247	2.448192	mg/l as N	1	1	
139366002	NO3NO2	06/28/2005 12:23:06	0.36486	13.345375	mg/l as N	1	10	
139374001	NO3NO2	06/28/2005 12:23:07	0.00346	-0.017877	mg/l as N	1	1	
139374002	NO3NO2	06/28/2005 12:23:08	0.00305	-0.019405	mg/l as N	1	1	
139405001	NO3NO2	06/28/2005 12:23:09	0.35622	13.022036	mg/l as N	1	10	
1200875981	NO3NO2	06/28/2005 12:23:10	0.35823	13.097005	mg/l as N	1	10	
1200875982	NO3NO2	06/28/2005 12:23:11	0.62522	23.08802	mg/l as N	1	10	
TON-CCV	NO3NO2	06/28/2005 12:34:17	0.29068	1.05694	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 12:34:18	0.00688	-0.005075	mg/l as N	1		0
139405002	NO3NO2	06/28/2005 12:34:19	0.36067	13.188503	mg/l as N	1	10	
1200875987	NO3NO2	06/28/2005 12:34:20	0.36065	13.187655	mg/l as N	1	10	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
1200875990	NO3NO2	06/28/2005 12:34:21	0.62678	23.146391	mg/l as N	1	10	
139406001	NO3NO2	06/28/2005 12:34:22	0.18498	0.661403	mg/l as N	1	1	
139409001	NO3NO2	06/28/2005 12:34:23	0.01689	0.032382	mg/l as N	1	1	
1200875988	NO3NO2	06/28/2005 12:34:24	0.01631	0.030223	mg/l as N	1	1	
1200875991	NO3NO2	06/28/2005 12:34:25	0.24576	0.888825	mg/l as N	1	1	
139442001	NO3NO2	06/28/2005 12:34:26	0.00903	0.002982	mg/l as N	1	1	
TON-CCV	NO3NO2	06/28/2005 12:36:25	0.26602	0.964653	mg/l as N	1		1
TON-CCB	NO3NO2	06/28/2005 12:36:26	0.00736	-0.003274	mg/l as N	1		0

Perchlorate

METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	MAR1	6/10/2005 11:34:47	050610_001.DXD
AUTOCAL6		1	MAR1	6/10/2005 11:49:54	050610_002.DXD
AUTOCAL5		1	MAR1	6/10/2005 12:05:02	050610_003.DXD
AUTOCAL4		1	MAR1	6/10/2005 12:20:12	050610_004.DXD
AUTOCAL3		1	MAR1	6/10/2005 12:35:20	050610_005.DXD
AUTOCAL2		1	MAR1	6/10/2005 12:50:29	050610_006.DXD
AUTOCAL1		1	MAR1	6/10/2005 13:05:37	050610_007.DXD
WPC050610-03ICV		1	MAR1	6/10/2005 13:20:46	050610_008.DXD
ICB		1	MAR1	6/10/2005 13:35:55	050610_009.DXD
IPC-25-TREATED		1	MAR1	6/10/2005 13:51:04	050610_010.DXD
MRL-4-TREATED		1	MAR1	6/10/2005 14:06:13	050610_011.DXD
PQL		1	MAR1	6/10/2005 14:21:22	050610_012.DXD
WPC050610-03CVH		1	MAR1	6/10/2005 14:36:32	050610_013.DXD
CCB		1	MAR1	6/10/2005 14:51:40	050610_014.DXD
1200855228	429053	1	MAR1	6/10/2005 15:06:48	050610_015.DXD
1200855231	429053	1	MAR1	6/10/2005 15:21:56	050610_016.DXD
137321001	429053	1	MAR1	6/10/2005 15:37:04	050610_017.DXD
137321002	429053	1	MAR1	6/10/2005 15:52:12	050610_018.DXD
137321003	429053	1	MAR1	6/10/2005 16:07:20	050610_019.DXD
137322001	429053	1	MAR1	6/10/2005 16:22:29	050610_020.DXD
1200855229	429053	1	MAR1	6/10/2005 16:37:37	050610_021.DXD
1200855230	429053	1	MAR1	6/10/2005 16:52:46	050610_022.DXD
137322002	429053	1	MAR1	6/10/2005 17:07:56	050610_023.DXD
137322003	429053	1	MAR1	6/10/2005 17:23:04	050610_024.DXD
WPC050610-03CVL		1	MAR1	6/10/2005 17:38:12	050610_025.DXD
CCB		1	MAR1	6/10/2005 17:53:20	050610_026.DXD
1200857210	429874	1	MAR1	6/10/2005 18:08:29	050610_027.DXD
1200857215	429874	1	MAR1	6/10/2005 18:23:38	050610_028.DXD
137274001	429874	1	MAR1	6/10/2005 18:38:48	050610_029.DXD
1200857211	429874	1	MAR1	6/10/2005 18:53:57	050610_030.DXD
1200857213	429874	1	MAR1	6/10/2005 19:09:05	050610_031.DXD
137274002	429874	1	MAR1	6/10/2005 19:24:14	050610_032.DXD
137274003	429874	1	MAR1	6/10/2005 19:39:23	050610_033.DXD
137274004	429874	1	MAR1	6/10/2005 19:54:31	050610_034.DXD
137274005	429874	1	MAR1	6/10/2005 20:09:39	050610_035.DXD
WPC050610-03CVH		1	MAR1	6/10/2005 20:24:48	050610_036.DXD
CCB		1	MAR1	6/10/2005 20:39:56	050610_037.DXD
137408001	429874	1	MAR1	6/10/2005 20:55:05	050610_038.DXD
1200857212	429874	1	MAR1	6/10/2005 21:10:14	050610_039.DXD
1200857214	429874	1	MAR1	6/10/2005 21:25:22	050610_040.DXD
137408002	429874	1	MAR1	6/10/2005 21:40:30	050610_041.DXD
137408003	429874	1	MAR1	6/10/2005 21:55:38	050610_042.DXD
137408004	429874	1	MAR1	6/10/2005 22:10:47	050610_043.DXD
137408005	429874	1	MAR1	6/10/2005 22:25:55	050610_044.DXD
137516001	429874	1	MAR1	6/10/2005 22:41:05	050610_045.DXD
137516002	429874	1	MAR1	6/10/2005 22:56:13	050610_046.DXD
137516003	429874	1	MAR1	6/10/2005 23:11:21	050610_047.DXD
WPC050610-03CVL		1	MAR1	6/10/2005 23:26:29	050610_048.DXD
CCB		1	MAR1	6/10/2005 23:41:37	050610_049.DXD
1200862170	431843	1	MAR1	6/10/2005 23:56:45	050610_050.DXD
1200862175	431843	1	MAR1	6/11/2005 00:11:54	050610_051.DXD
137866001	431843	1	MAR1	6/11/2005 00:27:02	050610_052.DXD
1200862171	431843	1	MAR1	6/11/2005 00:42:11	050610_053.DXD
1200862173	431843	1	MAR1	6/11/2005 00:57:20	050610_054.DXD
137881003	431843	1	MAR1	6/11/2005 01:12:30	050610_055.DXD

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1200862172           431843   1     MAR1  6/11/2005 01:27:38 050610_056.DXD
1200862174           431843   1     MAR1  6/11/2005 01:42:46 050610_057.DXD
WPC050610-03CVH              1     MAR1  6/11/2005 01:57:54 050610_058.DXD
CCB                          1     MAR1  6/11/2005 02:13:03 050610_059.DXD
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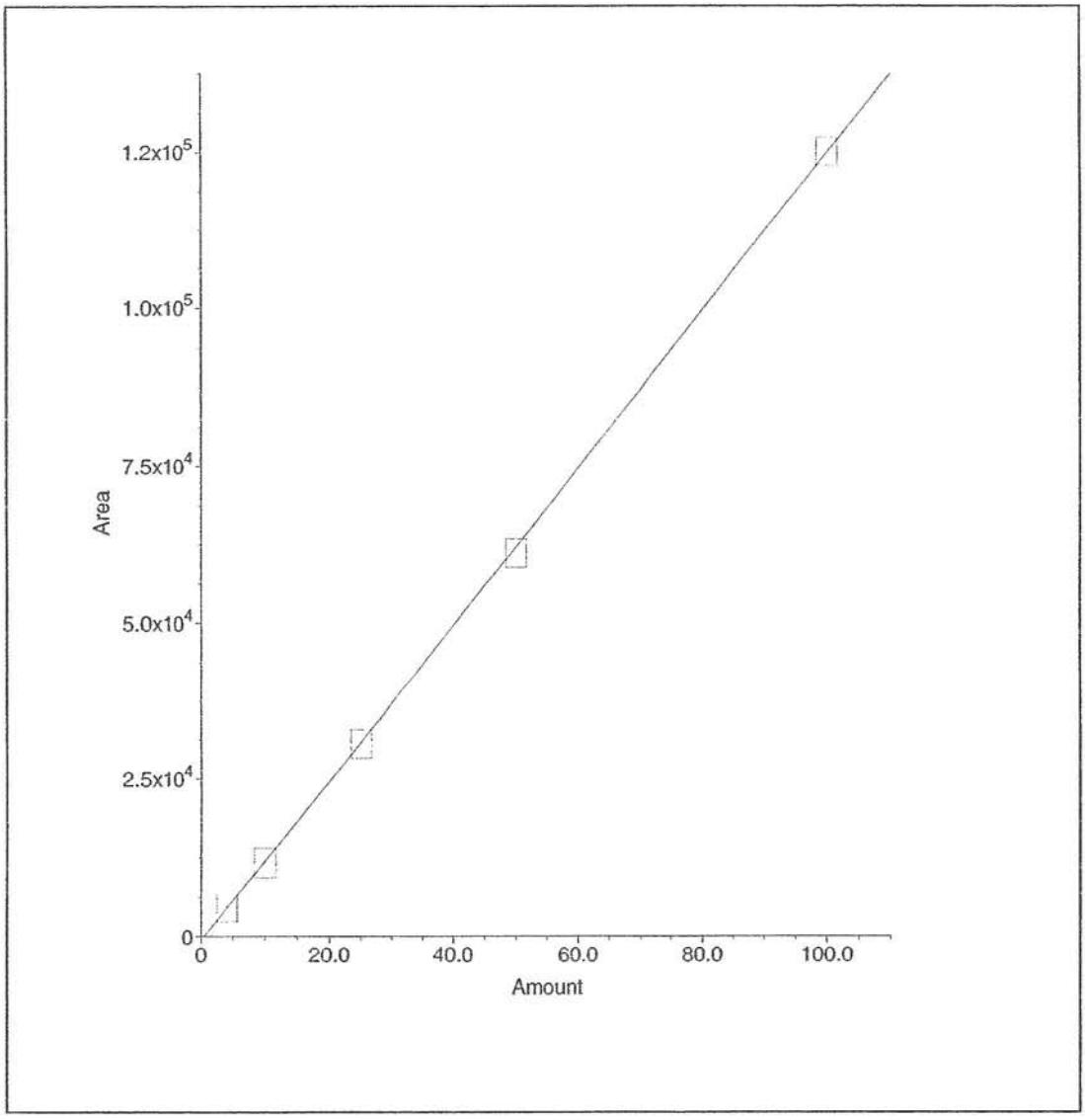
2. Component:Perchlorate
Standard:External Fit Type:Linear
Origin:Ignore Calibration:Area
r^2=0.999882
Amt=0.0007971*Resp+0.4239



4-13-05

KMM 6-13-05

IC: 3 **IC Calibration Spreadsheet**

Date: 6/13/2005 **Perchlorate**

Conc., ug/L	Area
100	125382
50	61338
25	30679
10	11798
4	4702
0	0
CORR:	0.999941
R2	0.999883
INT.	0.425159
Area	62727
Conc. ug/L	50.427

KMM
6-13-05

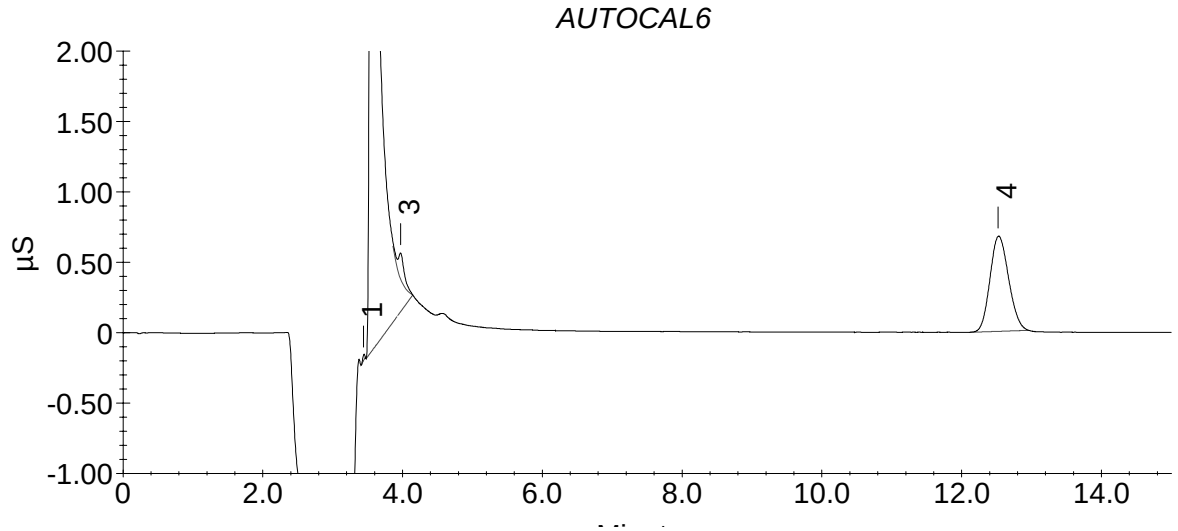
Calibration Update Report

Sample Name : AUTOCAL6
Data File Name : C:\PEAKNET\DATA\050610_002.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 11:49:54
Calibration Date : 6/10/2005 12:04:58
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak	3.55		529738	
4	Perchlorate	12.52	128819	125382	125382



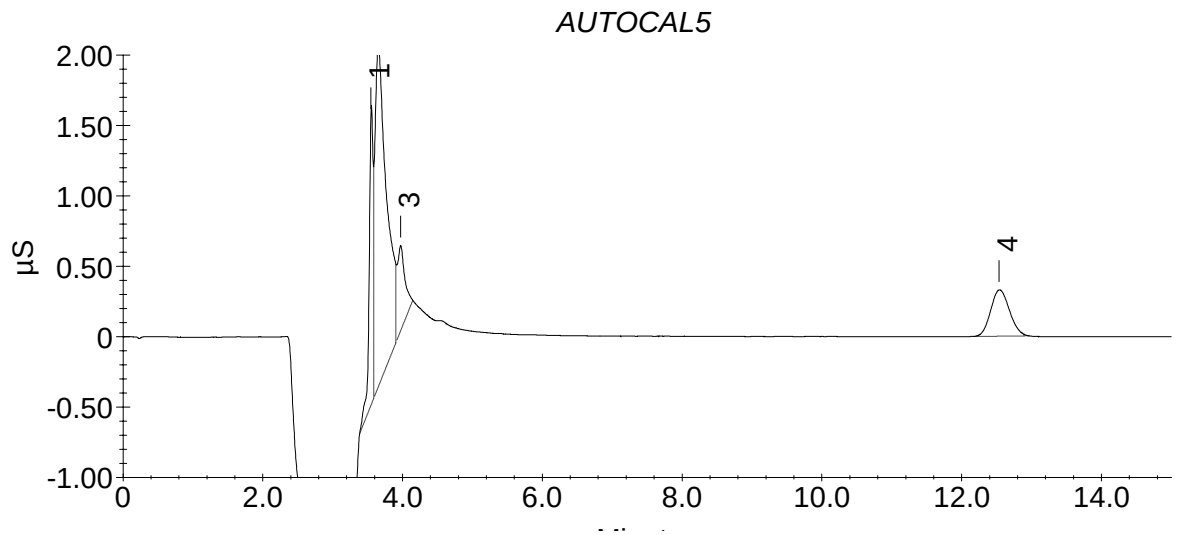
Calibration Update Report

Sample Name : AUTOCAL5
Data File Name : C:\PEAKNET\DATA\050610_003.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:05:02
Calibration Date : 6/10/2005 12:20:07
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak	3.65		268083	
4	Perchlorate	12.53	64372	61338	61338



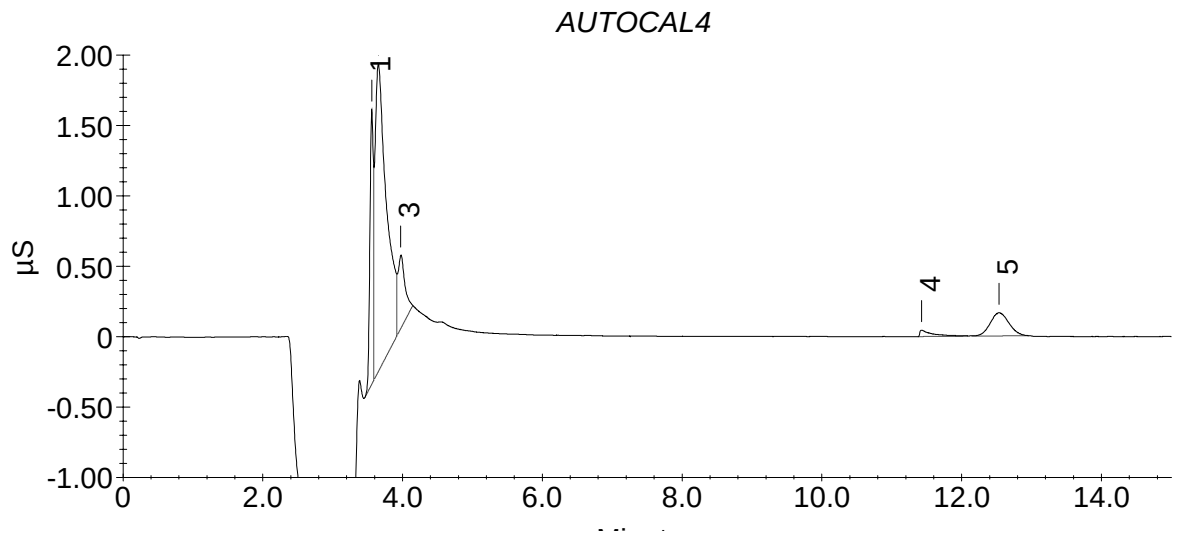
Calibration Update Report

Sample Name : AUTOCAL4
Data File Name : C:\PEAKNET\DATA\050610_004.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:20:12
Calibration Date : 6/10/2005 12:35:16
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak	3.65		240815	
5	Perchlorate	12.53	30005	30679	30679



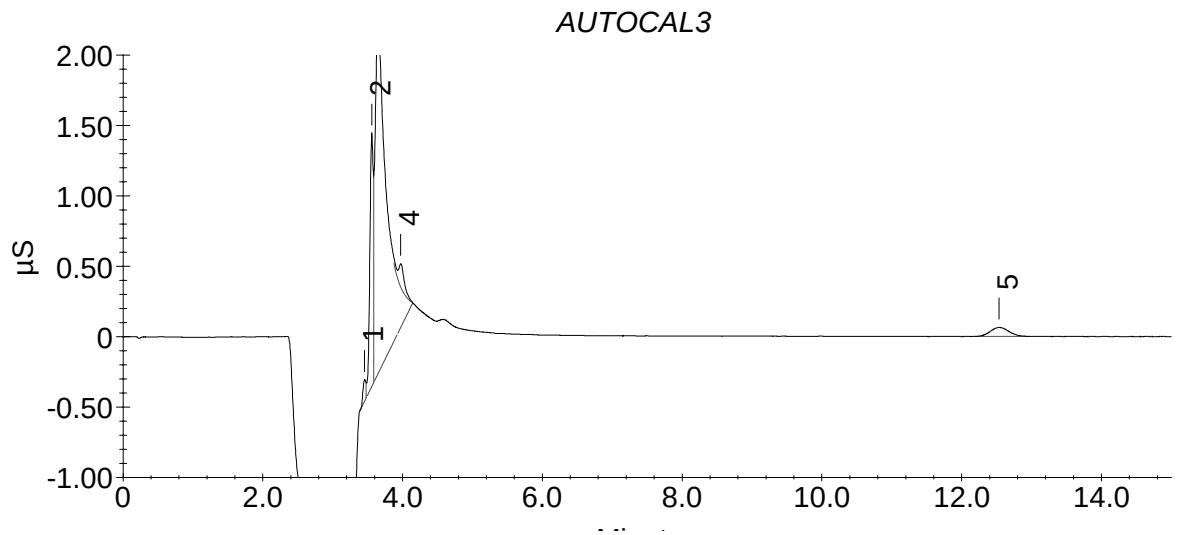
Calibration Update Report

Sample Name : AUTOCAL3
Data File Name : C:\PEAKNET\DATA\050610_005.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:35:20
Calibration Date : 6/10/2005 12:50:24
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
3	Solvent peak	3.64		285639	
5	Perchlorate	12.53	12271	11798	11798



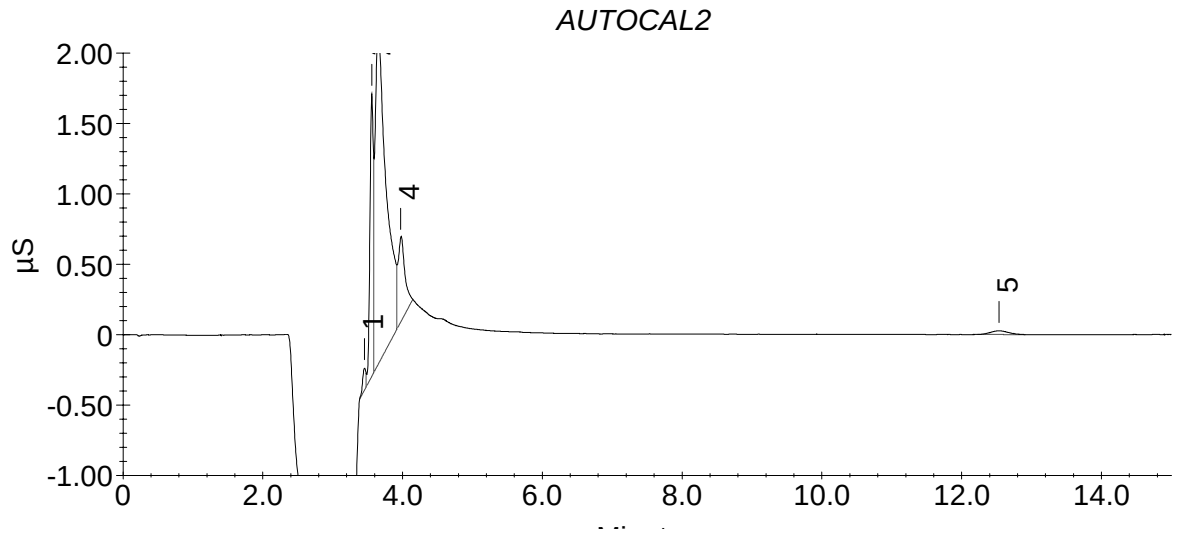
Calibration Update Report

Sample Name : AUTOCAL2
Data File Name : C:\PEAKNET\DATA\050610_006.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 12:50:29
Calibration Date : 6/10/2005 13:05:33
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
3	Solvent peak	3.65		254031	
5	Perchlorate	12.53	4883	4702	4702



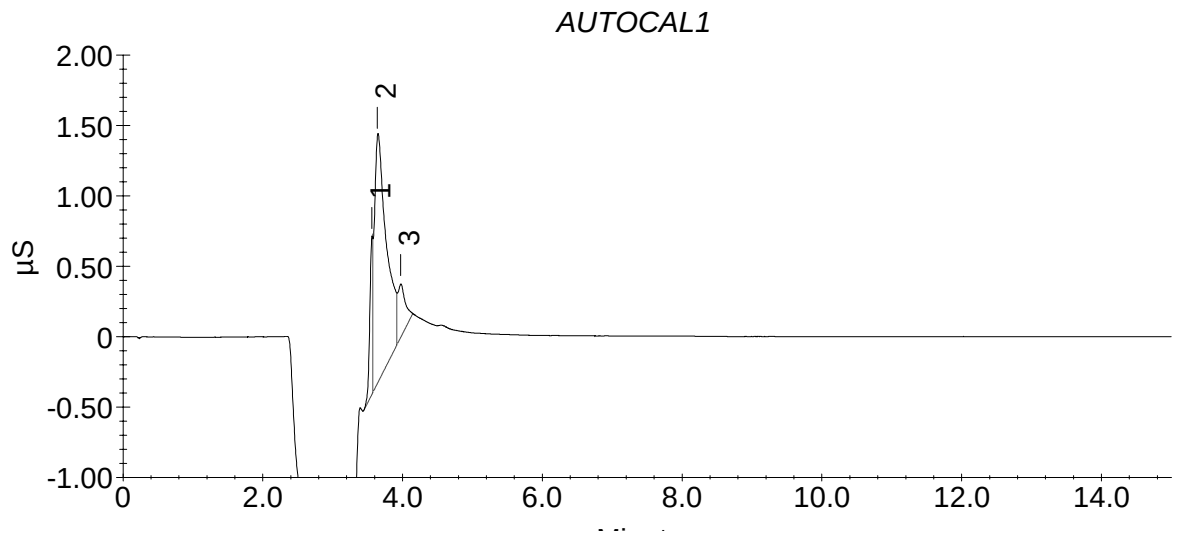
Calibration Update Report

Sample Name : AUTOCAL1
Data File Name : C:\PEAKNET\DATA\050610_007.DXD

Method File Name : c:\peaknet\method\050610.met
Schedule File Name : c:\peaknet\schedule\050610.sch
Date Time Collected : 6/10/2005 13:05:37
Calibration Date : 6/10/2005 13:20:42
System Operator : MAR1

Peak Information : All Components

Peak #	Component	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak Perchlorate	3.64		203971	



Sample Analysis Report

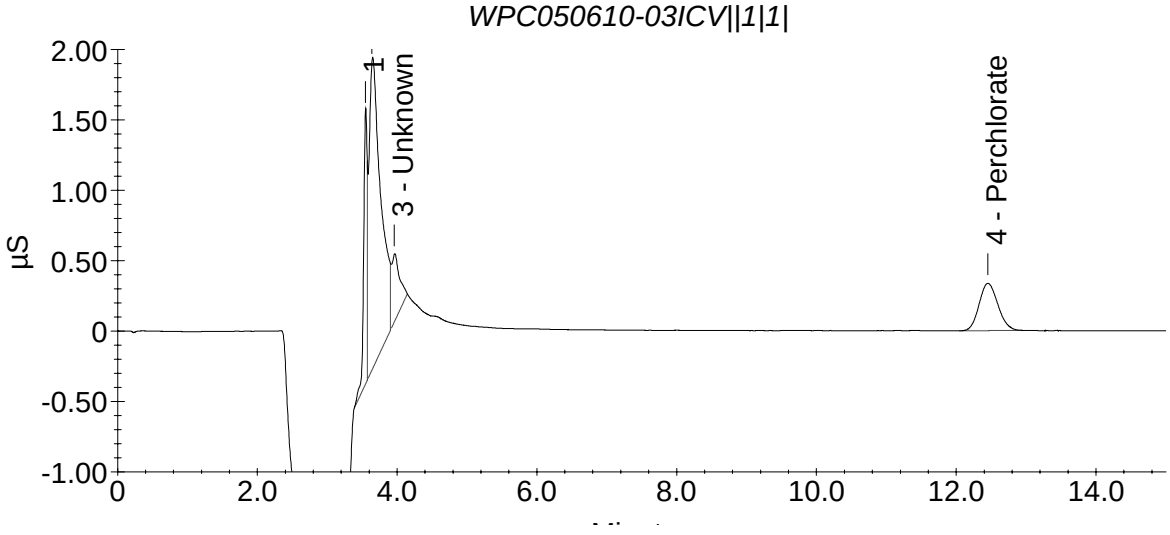
Sample Name : WPC050610-03ICV||1|1|
Data File Name : C:\PEAKNET\DATA\050610_008.DXD

Method : ...\050610.met	Inject# : 8	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/10/2005 13:20:46	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.64	0.00	251202	21880
4	Perchlorate	12.45	50.43	62727	3359



Sample Analysis Report

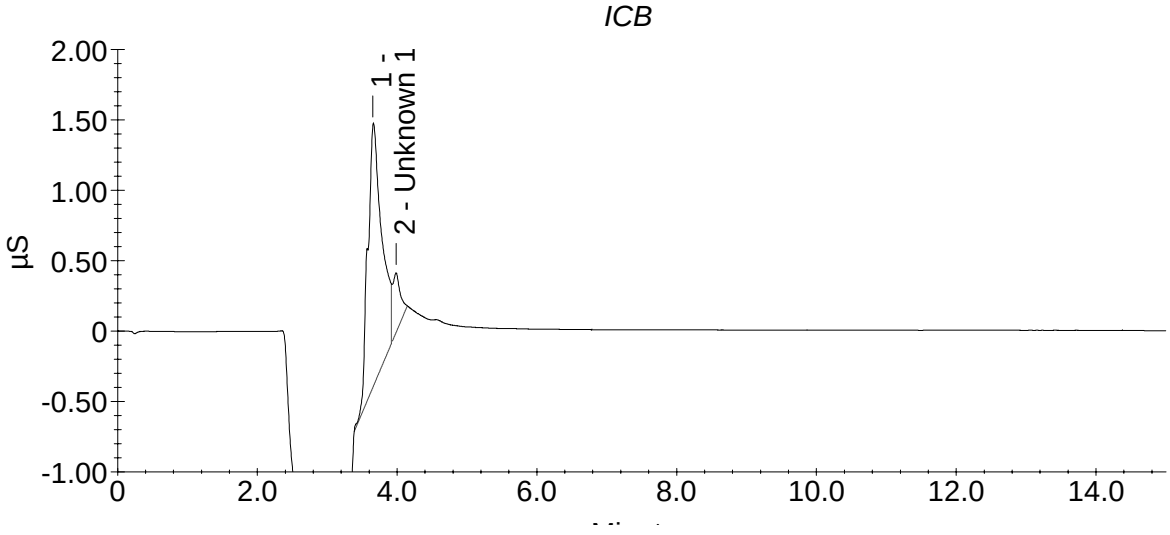
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\050610_009.DXD

Method : ...\050610.met	Inject# : 9	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/10/2005 13:35:55	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.65	0.00	258303	18625



METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	MAR1	6/28/2005 10:16:24	050628_001.DXD
WPC050610-03ICV		1	MAR1	6/28/2005 10:31:30	050628_002.DXD
ICB		1	MAR1	6/28/2005 10:46:39	050628_003.DXD
IPC-25-TREATED		1	MAR1	6/28/2005 11:01:47	050628_004.DXD
PQL		1	MAR1	6/28/2005 11:16:56	050628_005.DXD
WPC050610-03CVH		1	MAR1	6/28/2005 11:32:05	050628_006.DXD
CCB		1	MAR1	6/28/2005 11:47:15	050628_007.DXD
1200873276	436486	1	MAR1	6/28/2005 12:02:23	050628_008.DXD
1200873279	436486	1	MAR1	6/28/2005 12:17:32	050628_009.DXD
139136001	436486	1	MAR1	6/28/2005 12:32:41	050628_010.DXD
1200873277	436486	1	MAR1	6/28/2005 12:47:49	050628_011.DXD
1200873278	436486	1	MAR1	6/28/2005 13:02:58	050628_012.DXD
139136002	436486	1	MAR1	6/28/2005 13:18:06	050628_013.DXD
139136003	436486	1	MAR1	6/28/2005 13:33:14	050628_014.DXD
139136004	436486	1	MAR1	6/28/2005 13:48:22	050628_015.DXD
139193001	436486	1	MAR1	6/28/2005 14:03:28	050628_016.DXD
139193002	436486	1	MAR1	6/28/2005 14:18:34	050628_017.DXD
WPC050610-03CVL		1	MAR1	6/28/2005 14:33:38	050628_018.DXD
CCB		1	MAR1	6/28/2005 14:48:47	050628_019.DXD
139193003	436486	1	MAR1	6/28/2005 15:03:56	050628_020.DXD
139193004	436486	1	MAR1	6/28/2005 15:19:05	050628_021.DXD
139288001	436486	1	MAR1	6/28/2005 15:34:14	050628_022.DXD
1200874361	436486	1	MAR1	6/28/2005 15:49:24	050628_023.DXD
1200874362	436486	1	MAR1	6/28/2005 16:04:32	050628_024.DXD
WPC050610-03CVL		1	MAR1	6/28/2005 16:19:41	050628_025.DXD
CCB		1	MAR1	6/28/2005 16:34:50	050628_026.DXD
1200875405	437404	1	MAR1	6/28/2005 16:49:59	050628_027.DXD
1200875410	437404	1	MAR1	6/28/2005 17:05:08	050628_028.DXD
139349001	437404	1	MAR1	6/28/2005 17:20:16	050628_029.DXD
1200875406	437404	1	MAR1	6/28/2005 17:35:25	050628_030.DXD
1200875408	437404	1	MAR1	6/28/2005 17:50:33	050628_031.DXD
139349009	437404	1	MAR1	6/28/2005 18:05:42	050628_032.DXD
139405001	437404	1	MAR1	6/28/2005 18:20:50	050628_033.DXD
WPC050610-03CVL		1	MAR1	6/28/2005 18:36:00	050628_034.DXD
CCB		1	MAR1	6/28/2005 18:51:09	050628_035.DXD
139406001	437404	1	MAR1	6/28/2005 19:06:17	050628_036.DXD
1200875407	437404	1	MAR1	6/28/2005 19:21:26	050628_037.DXD
1200875409	437404	1	MAR1	6/28/2005 19:36:35	050628_038.DXD
139409001	437404	1	MAR1	6/28/2005 19:51:44	050628_039.DXD
WPC050610-03CVH		1	MAR1	6/28/2005 20:06:52	050628_040.DXD
CCB		1	MAR1	6/28/2005 20:22:01	050628_041.DXD
1200875306	437357	1	MAR1	6/28/2005 20:37:09	050628_042.DXD
1200875309	437357	1	MAR1	6/28/2005 20:52:18	050628_043.DXD
139348001	437357	1	MAR1	6/28/2005 21:07:26	050628_044.DXD
1200875307	437357	1	MAR1	6/28/2005 21:22:34	050628_045.DXD
1200875308	437357	1	MAR1	6/28/2005 21:37:43	050628_046.DXD
139348002	437357	1	MAR1	6/28/2005 21:52:53	050628_047.DXD
139348003	437357	1	MAR1	6/28/2005 22:08:02	050628_048.DXD
139348004	437357	1	MAR1	6/28/2005 22:23:10	050628_049.DXD
139348005	437357	1	MAR1	6/28/2005 22:38:19	050628_050.DXD
139348006	437357	1	MAR1	6/28/2005 22:53:29	050628_051.DXD
WPC050610-03CVL		1	MAR1	6/28/2005 23:08:37	050628_052.DXD
CCB		1	MAR1	6/28/2005 23:23:46	050628_053.DXD
139348007	437357	1	MAR1	6/28/2005 23:38:55	050628_054.DXD
139348008	437357	1	MAR1	6/28/2005 23:54:03	050628_055.DXD

139348009	437357	1	MAR1	6/29/2005	00:09:12 050628_056.DXD
139348010	437357	1	MAR1	6/29/2005	00:24:20 050628_057.DXD
WPC050610-03CVH		1	MAR1	6/29/2005	00:39:29 050628_058.DXD
CCB		1	MAR1	6/29/2005	00:54:39 050628_059.DXD
1200876652	437914	1	MAR1	6/29/2005	01:09:47 050628_060.DXD
1200876655	437914	1	MAR1	6/29/2005	01:24:56 050628_061.DXD
139524001	437914	1	MAR1	6/29/2005	01:40:05 050628_062.DXD
1200876653	437914	1	MAR1	6/29/2005	01:55:14 050628_063.DXD
1200876654	437914	1	MAR1	6/29/2005	02:10:23 050628_064.DXD
139524002	437914	1	MAR1	6/29/2005	02:25:32 050628_065.DXD
WPC050610-03CVL		1	MAR1	6/29/2005	02:40:41 050628_066.DXD
CCB		1	MAR1	6/29/2005	02:55:50 050628_067.DXD
WPC050610-03CVL		1	MAR1	6/29/2005	06:22:34 050628_068.DXD
CCB		1	MAR1	6/29/2005	06:37:39 050628_069.DXD
WPC050610-03CVH		1	MAR1	6/29/2005	10:10:18 050628_070.DXD
CCB		1	MAR1	6/29/2005	10:25:27 050628_071.DXD
139405001	437404	2	MAR1	6/29/2005	10:40:36 050628_072.DXD
1200875307	437357	1	MAR1	6/29/2005	10:55:45 050628_073.DXD
WPC050610-03CVL		1	MAR1	6/29/2005	11:10:54 050628_074.DXD
CCB		1	MAR1	6/29/2005	11:26:04 050628_075.DXD
139348001	437357	1	MAR1	6/29/2005	11:46:36 050628_076.DXD
1200875307	437357	1	MAR1	6/29/2005	12:01:41 050628_077.DXD
WPC050610-03CVH		1	MAR1	6/29/2005	12:16:45 050628_078.DXD
CCB		1	MAR1	6/29/2005	12:31:54 050628_079.DXD

Sample Analysis Report

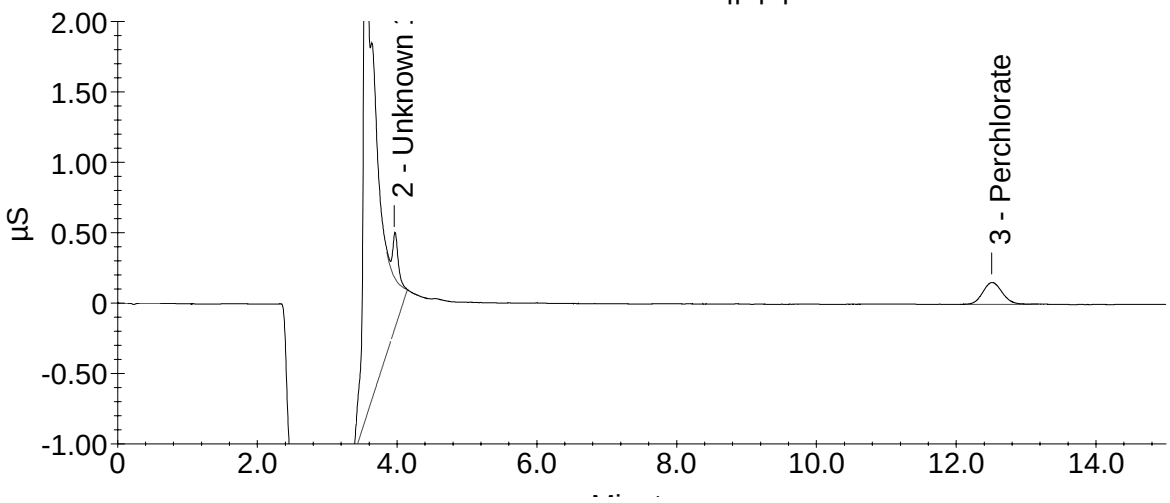
Sample Name : WPC050728-03ICV||1|1|
Data File Name : C:\PEAKNET\DATA\050628_002.DXD
Date Time Updated : 6/29/2005 14:28:25

Method : ...\050610.met	Inject# : 2	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 10:31:30	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.55	0.00	541237	53244
3	Perchlorate	12.51	24.37	30039	1548



Sample Analysis Report

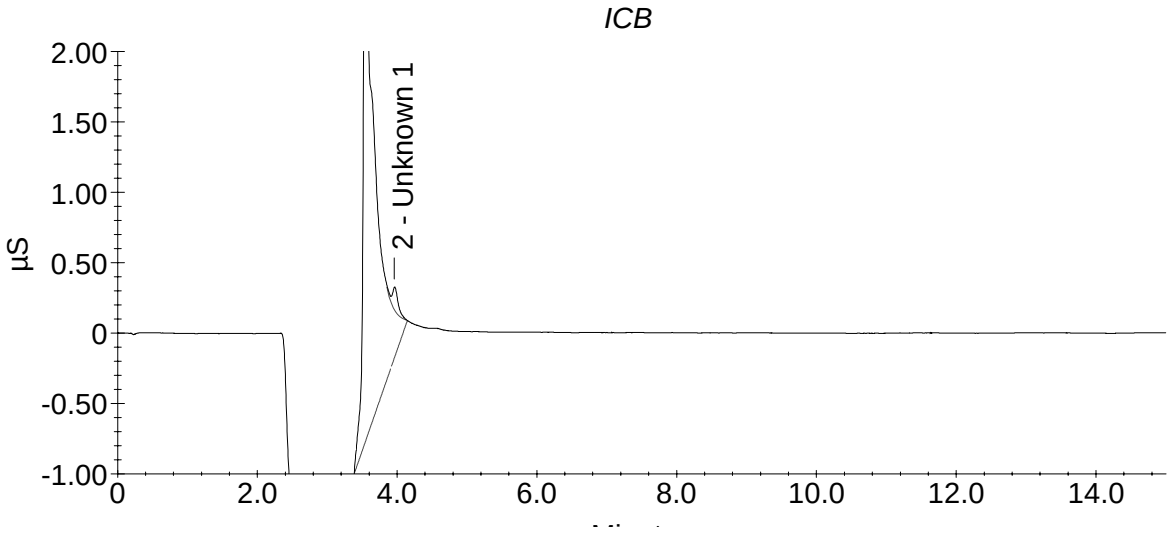
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\050628_003.DXD
Date Time Updated : 6/28/2005 11:01:43

Method : ...\050610.met	Inject# : 3	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 10:46:39	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.55	0.00	507609	52337



Sample Analysis Report

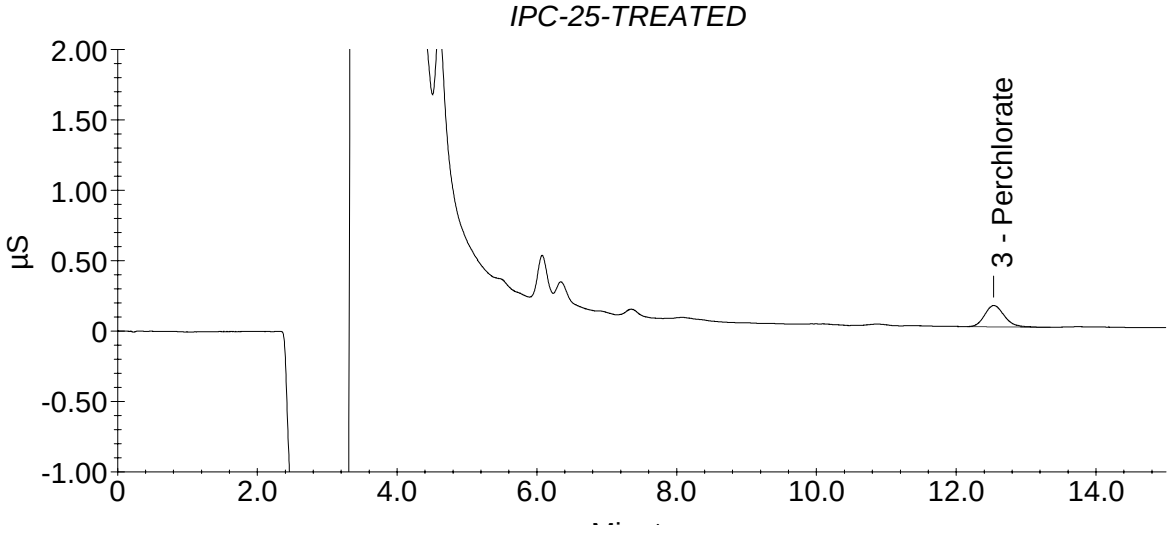
Sample Name : IPC-25-TREATED
Data File Name : C:\PEAKNET\DATA\050628_004.DXD
Date Time Updated : 6/28/2005 11:16:52

Method : ...\050610.met	Inject# : 4	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 11:01:47	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.83	0.00	185441331	19389570
3	Perchlorate	12.53	23.97	29540	1516



Sample Analysis Report

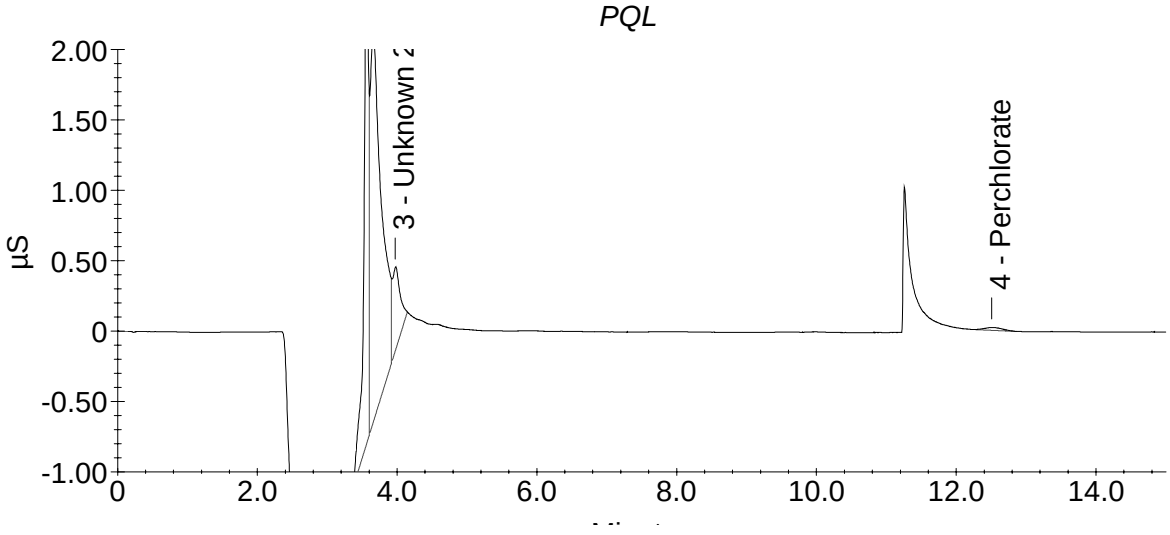
Sample Name : PQL
Data File Name : C:\PEAKNET\DATA\050628_005.DXD
Date Time Updated : 6/28/2005 13:18:17

Method : ...\050610.met	Inject# : 5	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 11:16:56	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	299917	27846
4	Perchlorate	12.51	3.33	3652	205



Sample Analysis Report

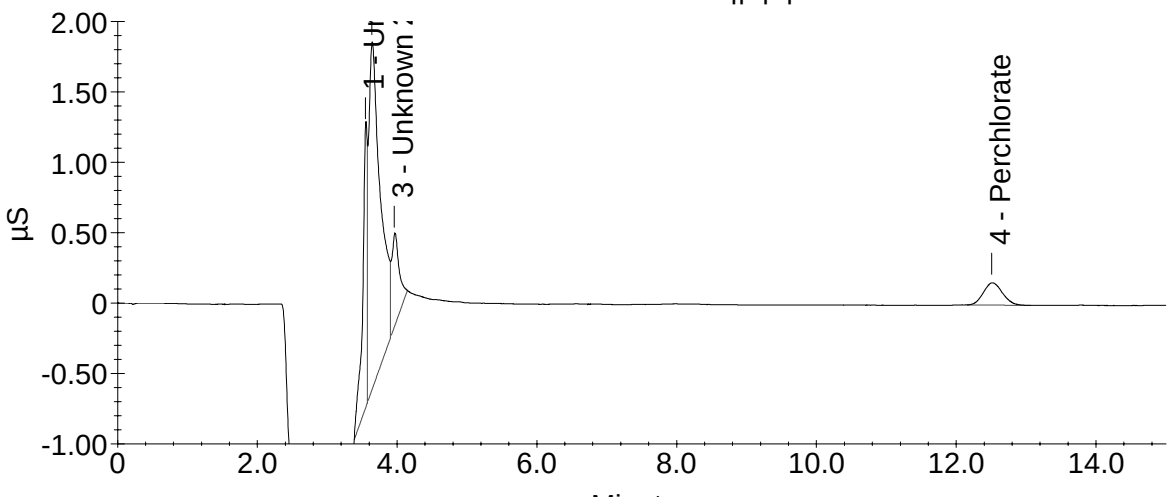
Sample Name : WPC050610-03CVL||1|1|
Data File Name : C:\PEAKNET\DATA\050628_025.DXD
Date Time Updated : 6/29/2005 09:47:52

Method : ...\050610.met	Inject# : 25	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 16:19:41	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.64	0.00	276445	24656
4	Perchlorate	12.51	24.43	30119	1580



Sample Analysis Report

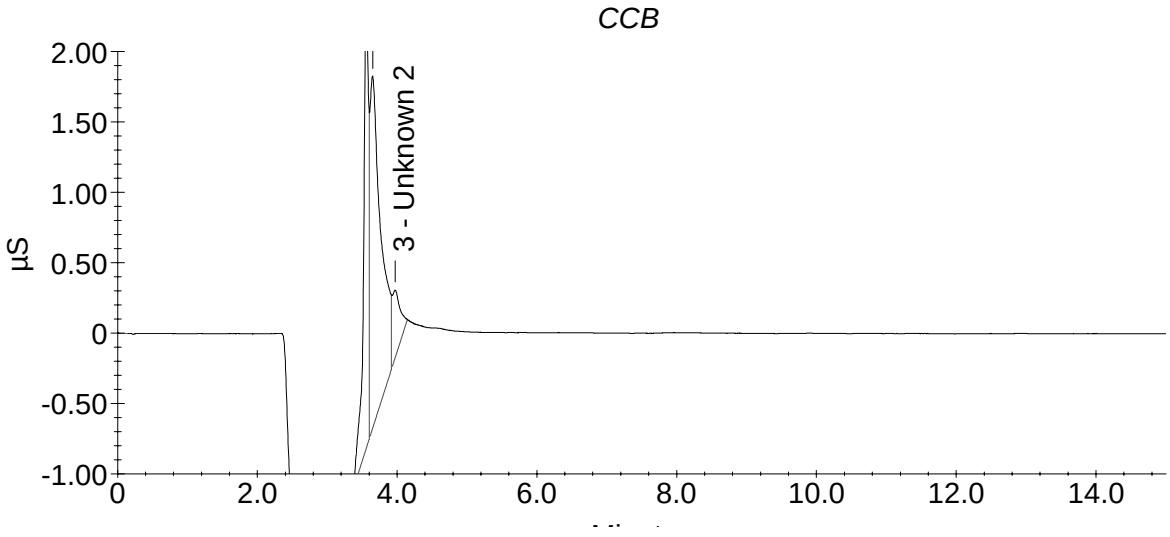
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050628_026.DXD
Date Time Updated : 6/28/2005 16:49:55

Method : ...\050610.met	Inject# : 26	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 16:34:50	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.65	0.00	260134	24918



Sample Analysis Report

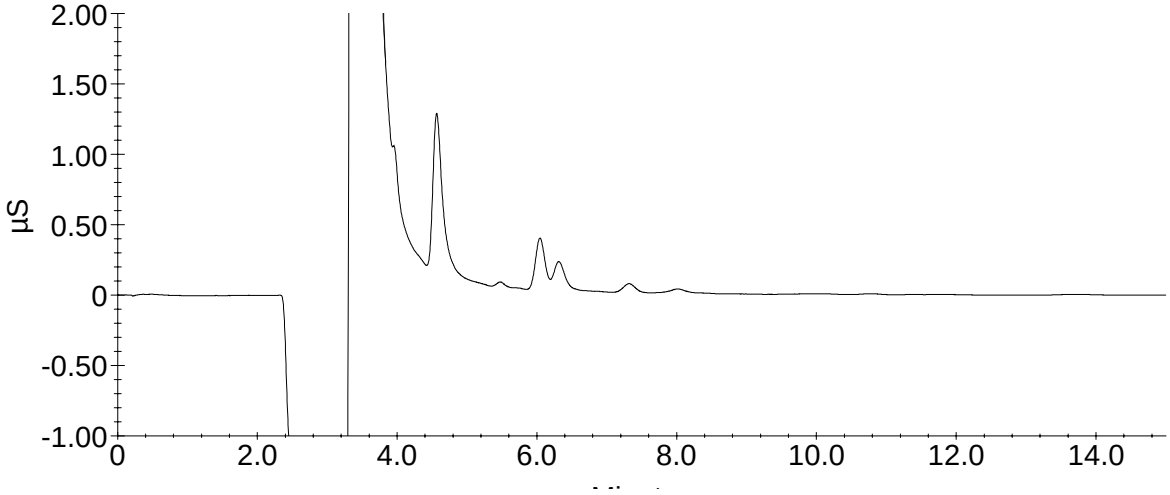
Sample Name : 1200875405|437404|1|1|MB
Data File Name : C:\PEAKNET\DATA\050628_027.DXD
Date Time Updated : 6/28/2005 17:05:03

Method : ...\050610.met	Inject# : 27	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 16:49:59	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.65	0.00	386573	72518



Sample Analysis Report

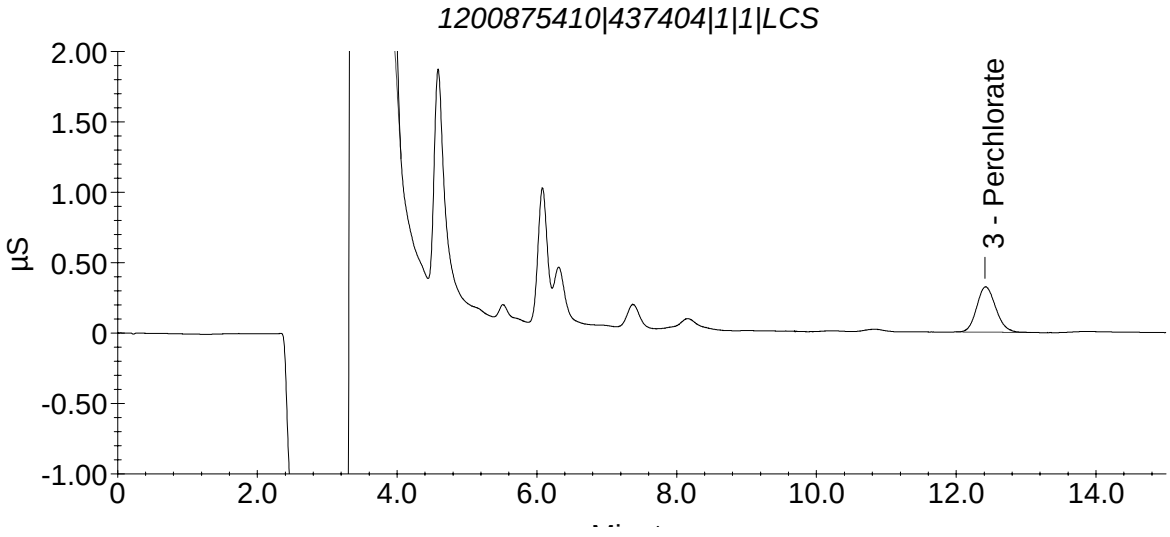
Sample Name : 1200875410|437404|1|1|LCS
Data File Name : C:\PEAKNET\DATA\050628_028.DXD
Date Time Updated : 6/28/2005 17:20:12

Method : ...\050610.met	Inject# : 28	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 17:05:08	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.68	0.00	2721085	543295
3	Perchlorate	12.41	49.09	61052	3216



Sample Analysis Report

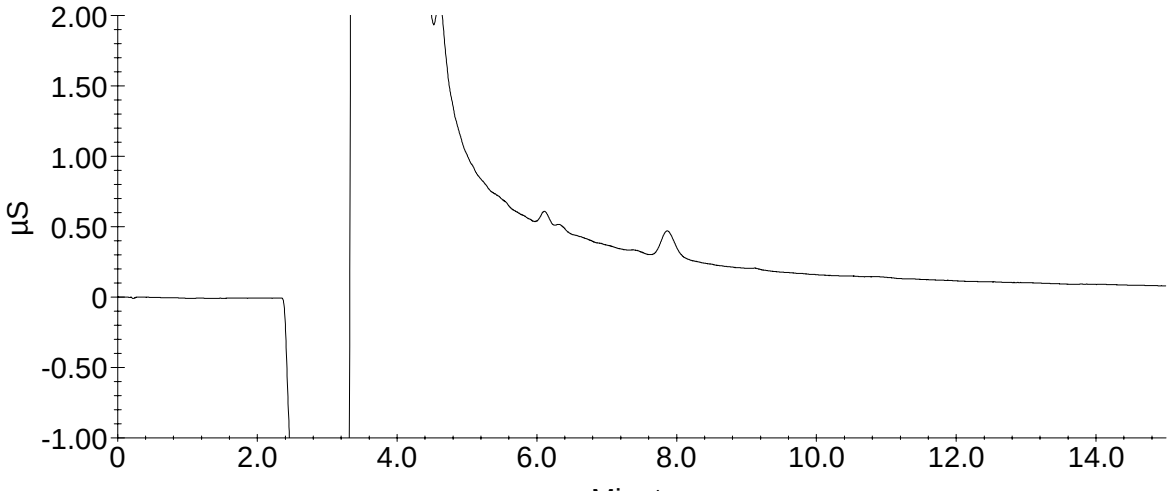
Sample Name : 139349001|437404|1|1|
Data File Name : C:\PEAKNET\DATA\050628_029.DXD
Date Time Updated : 6/28/2005 17:35:21

Method : ...\050610.met	Inject# : 29	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 17:20:16	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.80	0.00	128417471	15546481



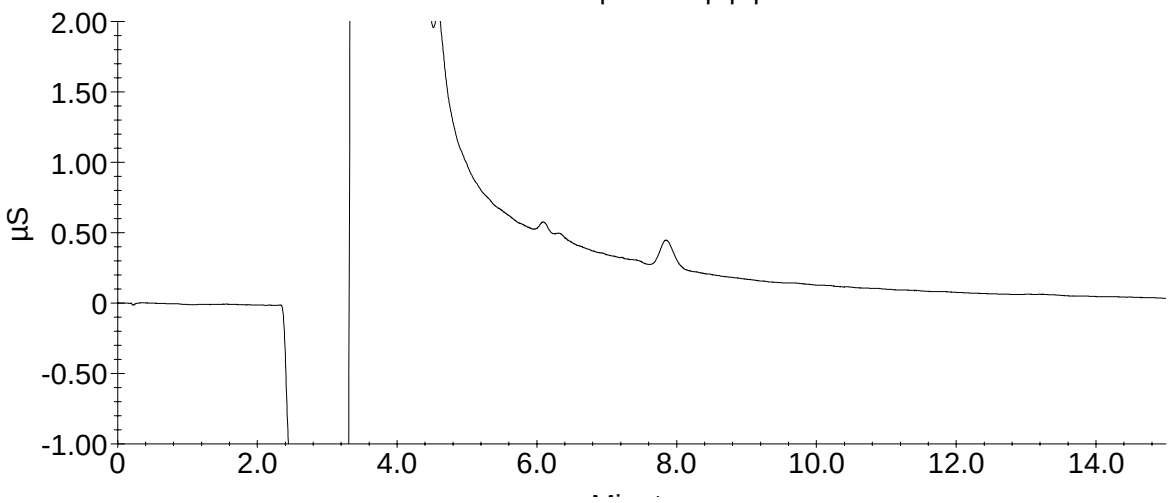
Sample Analysis Report

Sample Name : 1200875406|437404|1|1|DUP
Data File Name : C:\PEAKNET\DATA\050628_030.DXD
Date Time Updated : 6/28/2005 17:50:29

Method : ...\050610.met	Inject# : 30	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 17:35:25	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
Peak Information : All Components					
2	Solvent peak Perchlorate	3.80	0.00	128589939	16164949



Sample Analysis Report

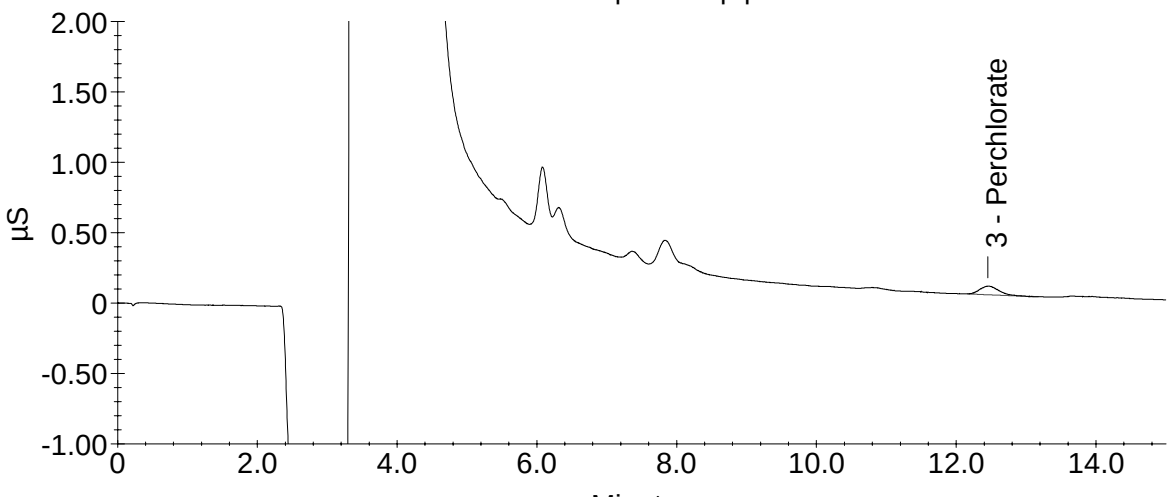
Sample Name : 1200875408|437404|1|1PS
Data File Name : C:\PEAKNET\DATA\050628_031.DXD
Date Time Updated : 6/28/2005 18:05:38

Method : ...\050610.met	Inject# : 31	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 17:50:33	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.79	0.00	127502512	15796551
3	Perchlorate	12.45	9.65	11572	608



Sample Analysis Report

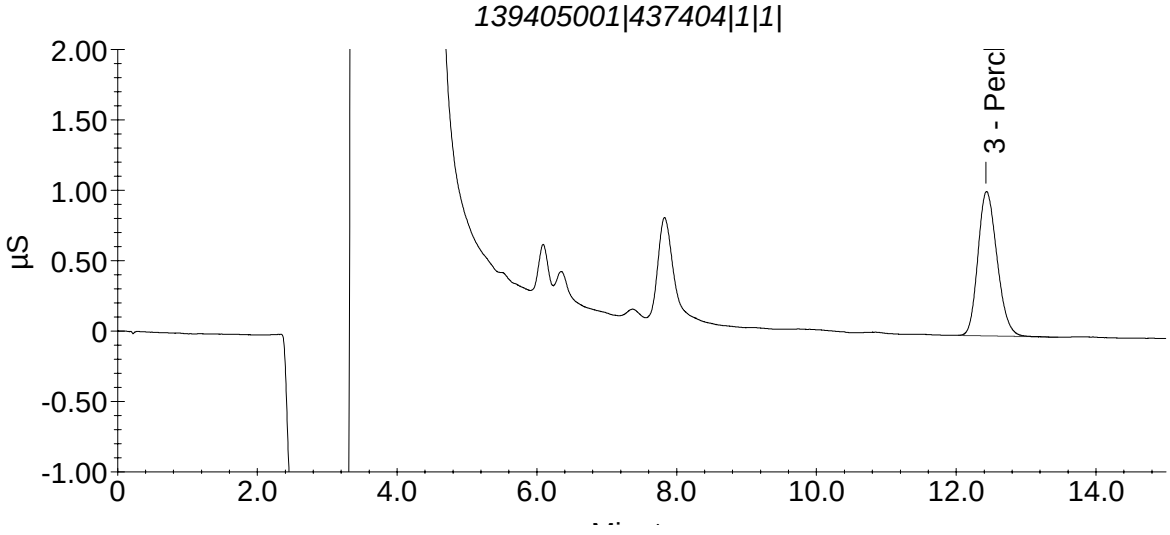
Sample Name : 139405001|437404|1|1|
Data File Name : C:\PEAKNET\DATA\050628_033.DXD
Date Time Updated : 6/28/2005 18:35:55

Method : ...\050610.met	Inject# : 33	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 18:20:50	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.80	0.00	29749345	5742296
3	Perchlorate	12.43	156.06	195243	10240



Sample Analysis Report

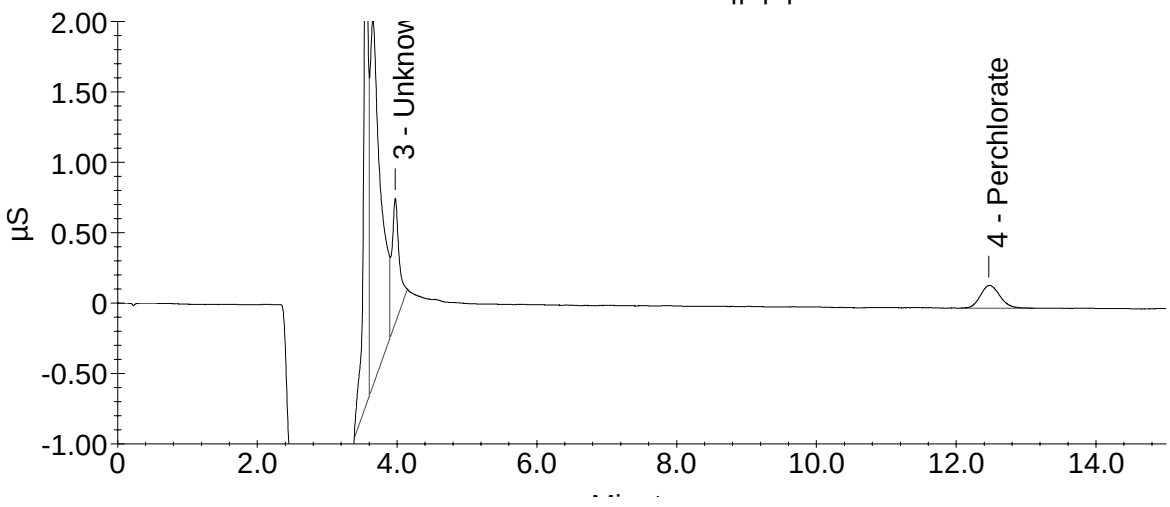
Sample Name : WPC050610-03CVL||1|1|
Data File Name : C:\PEAKNET\DATA\050628_034.DXD
Date Time Updated : 6/28/2005 18:51:04

Method : ...\050610.met	Inject# : 34	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 18:36:00	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	256700	26061
4	Perchlorate	12.47	25.30	31212	1607



Sample Analysis Report

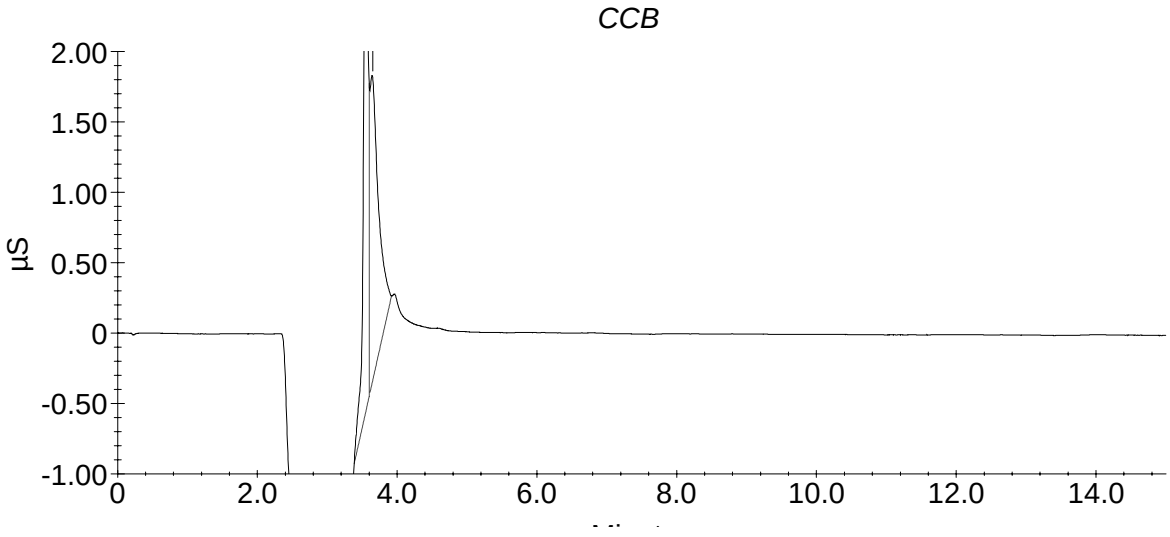
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050628_035.DXD
Date Time Updated : 6/28/2005 19:06:13

Method : ...\050610.met	Inject# : 35	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 18:51:09	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.65	0.00	178886	21331



Sample Analysis Report

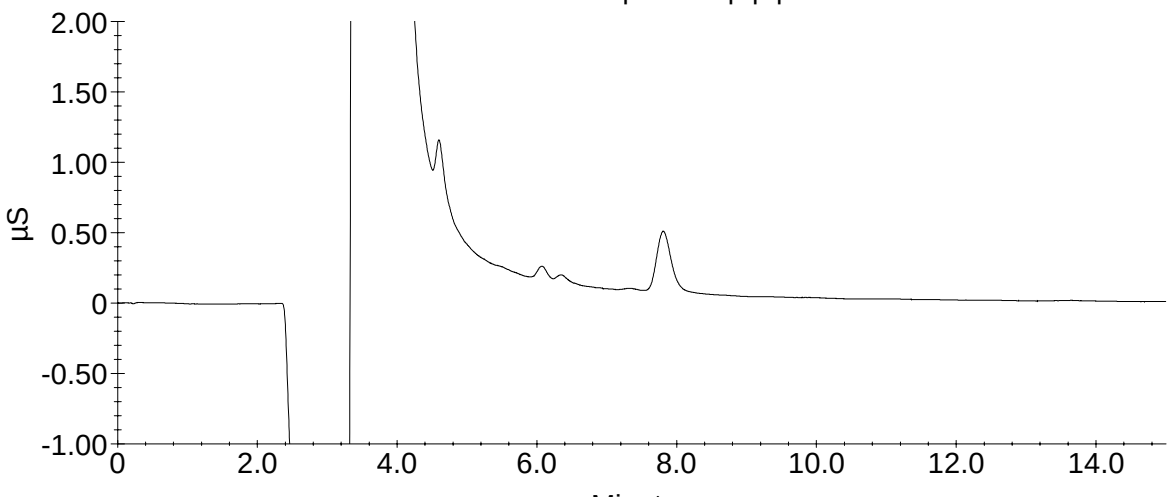
Sample Name : 139406001|437404|1|1|
Data File Name : C:\PEAKNET\DATA\050628_036.DXD
Date Time Updated : 6/28/2005 19:21:21

Method : ...\050610.met	Inject# : 36	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 19:06:17	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.73	0.00	19426770	4287029



Sample Analysis Report

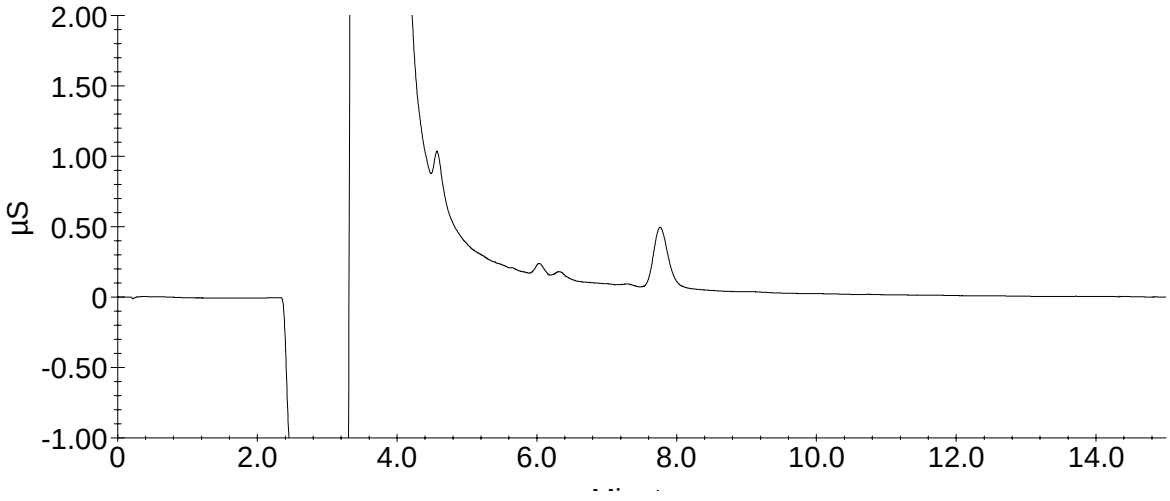
Sample Name : 1200875407|437404|1|1|DUP
Data File Name : C:\PEAKNET\DATA\050628_037.DXD
Date Time Updated : 6/28/2005 19:36:30

Method : ...\050610.met	Inject# : 37	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 19:21:26	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.71	0.00	19620923	4236094



Sample Analysis Report

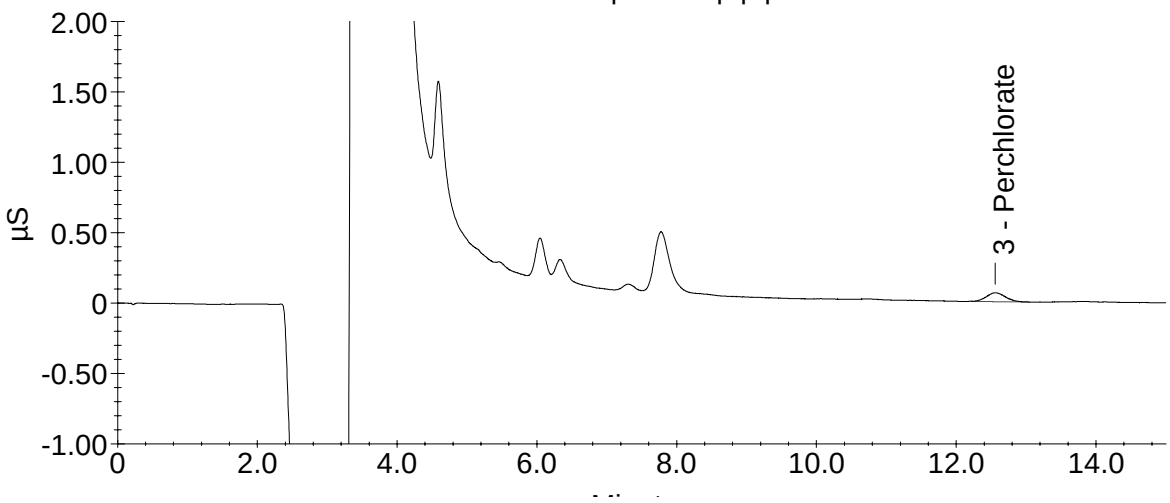
Sample Name : 1200875409|437404|1|1|PS
Data File Name : C:\PEAKNET\DATA\050628_038.DXD
Date Time Updated : 6/28/2005 19:51:39

Method : ...\050610.met	Inject# : 38	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 19:36:35	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.71	0.00	19665031	4055035
3	Perchlorate	12.56	9.93	11928	632



Sample Analysis Report

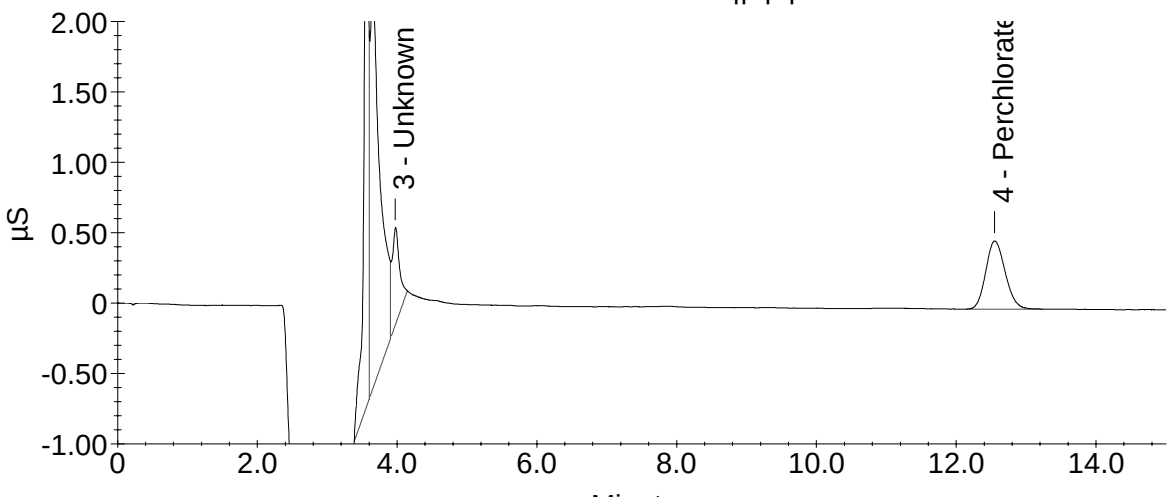
Sample Name : WPC050610-03CVH||1|1|
Data File Name : C:\PEAKNET\DATA\050628_040.DXD
Date Time Updated : 6/28/2005 20:21:56

Method : ...\050610.met	Inject# : 40	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 20:06:52	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	274019	28310
4	Perchlorate	12.55	74.97	93521	4838



Sample Analysis Report

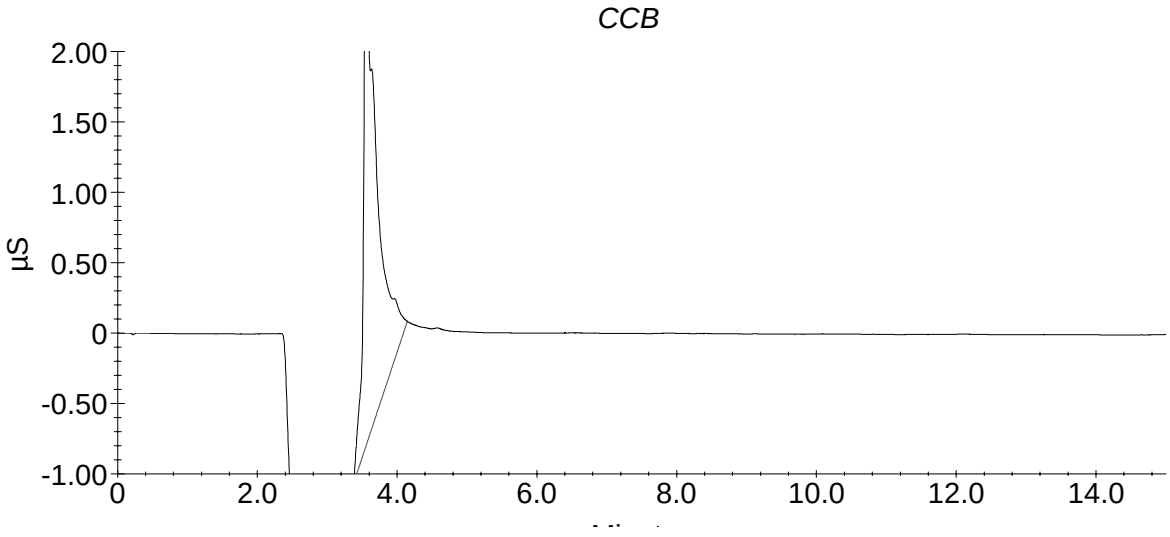
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050628_041.DXD
Date Time Updated : 6/28/2005 20:37:05

Method : ...\050610.met	Inject# : 41	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/28/2005 20:22:01	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.55	0.00	512141	41824



Sample Analysis Report

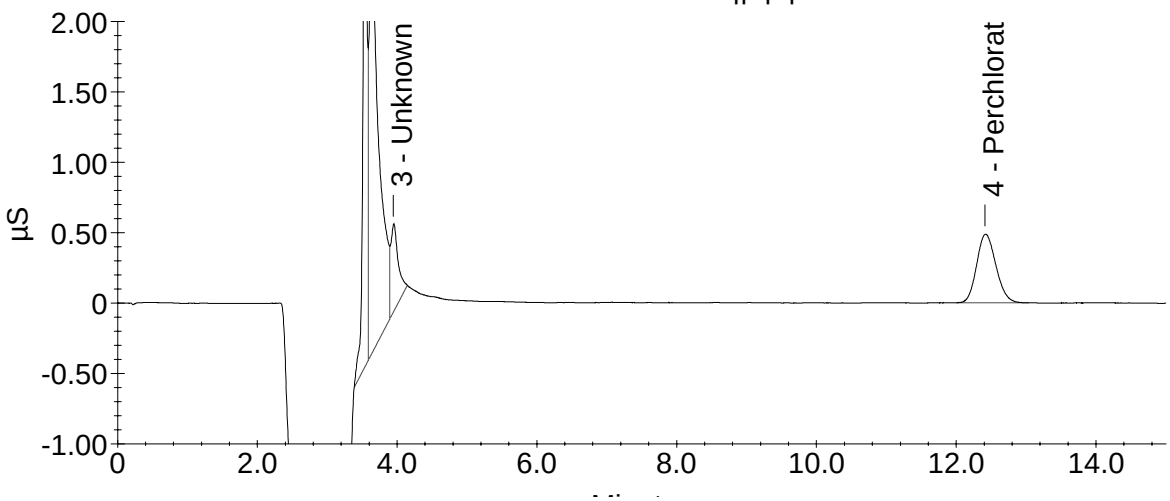
Sample Name : WPC050610-03CVH||1|1|
Data File Name : C:\PEAKNET\DATA\050628_070.DXD
Date Time Updated : 6/29/2005 10:25:22

Method : ...\050610.met	Inject# : 70	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/29/2005 10:10:18	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.64	0.00	269948	28313
4	Perchlorate	12.41	74.84	93350	4868



Sample Analysis Report

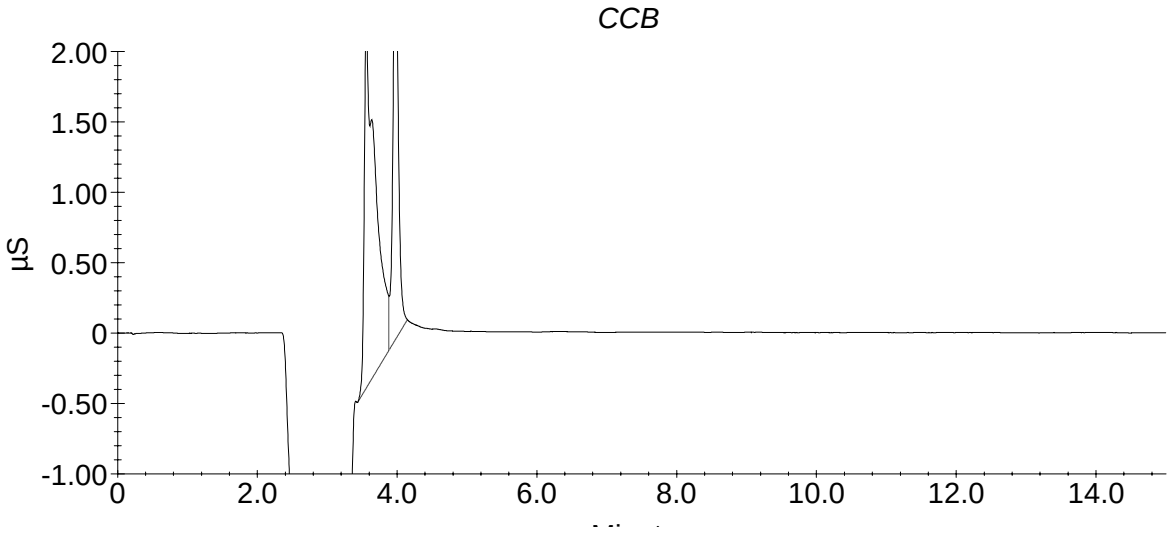
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050628_071.DXD
Date Time Updated : 6/29/2005 10:40:32

Method : ...\050610.met	Inject# : 71	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/29/2005 10:25:27	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.56	0.00	289604	26598



Sample Analysis Report

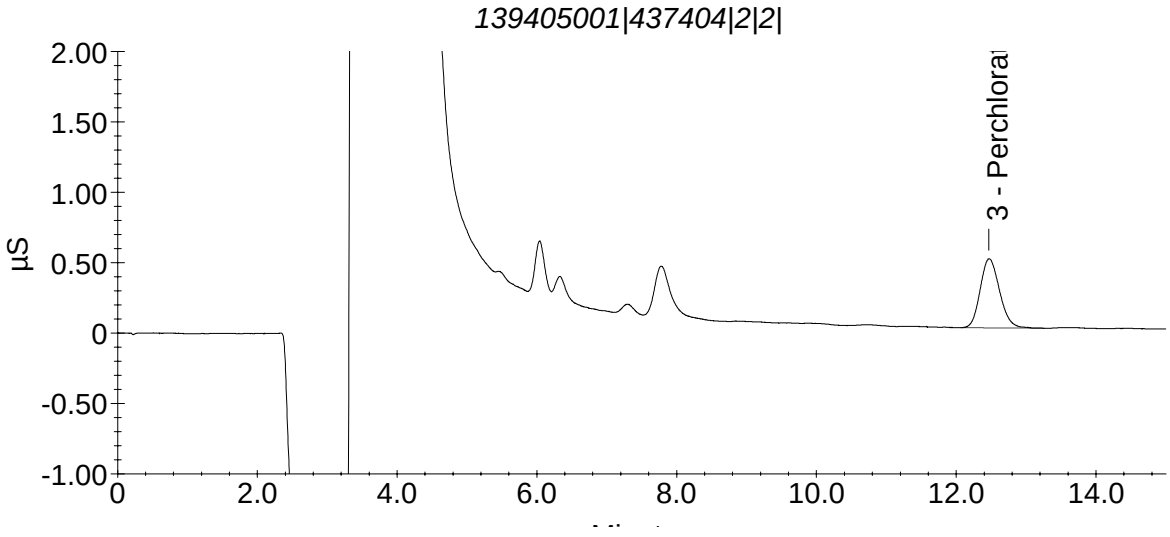
Sample Name : 139405001|437404|2|2|
Data File Name : C:\PEAKNET\DATA\050628_072.DXD
Date Time Updated : 6/29/2005 10:55:41

Method : ...\050610.met	Inject# : 72	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/29/2005 10:40:36	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.81	0.00	48514573	9897758
3	Perchlorate	12.47	75.65	94375	4910



Sample Analysis Report

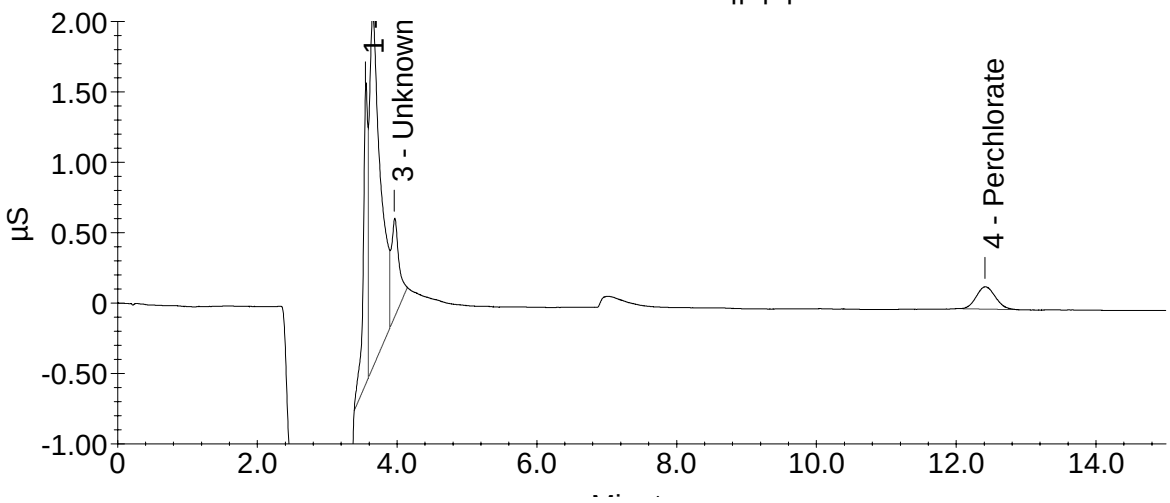
Sample Name : WPC050610-03CVL||1|1|
Data File Name : C:\PEAKNET\DATA\050628_074.DXD
Date Time Updated : 6/29/2005 11:25:59

Method : ...\050610.met	Inject# : 74	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/29/2005 11:10:54	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	261643	25107
4	Perchlorate	12.41	24.44	30133	1588



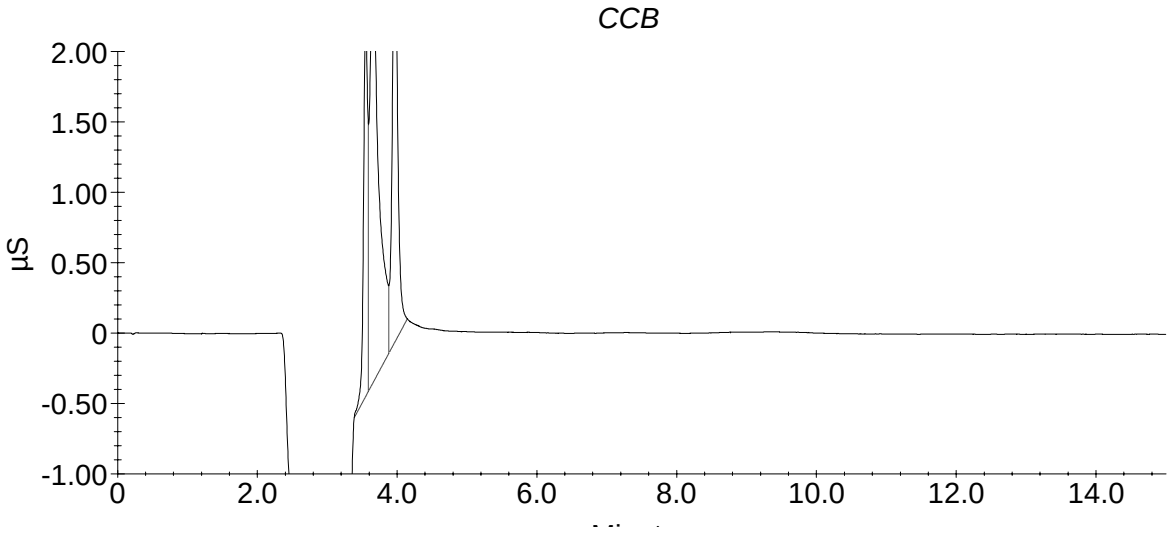
Sample Analysis Report

Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050628_075.DXD
Date Time Updated : 6/29/2005 11:41:08

Method : ...\050610.met	Inject# : 75	System Name : DX-500
Analyst : MAR1	Detector : CD20	Calibration Type : EXTERNAL
Date : 6/29/2005 11:26:04	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
Peak Information : All Components					
2	Solvent peak Perchlorate	3.65	0.00	264621	31109



Solids, Total Dissolved

Batch: 437838.0
Analyst: JLD1

TDS/TS/VS LogBook

Date/Time: 29-JUN-05 13:17

Procedure Code BALDSEP_LF

Procedure Description EPA 160.1 Solids, Dissolved

Lab Sop GL-GC-E-001

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200876471	WTD050609-01	300	96.333

Sample Type	Sample Id	Rpd(%)
DUP	1200876469	1.5649452269171
DUP	1200876470	.91603053435115
DUP	1200876713	1.1428571428571

Sample Id	Sample Type	Original Hsn	Instrument	Crucible ID	Aliquot (L)	Crucible Wt(g)	Final Wt Event 1	Final Wt Event 2	Final Wt Event 3	Final Wt Event 4	Result	Units
1200876468	MB		BAL216	BLK	0.1	50.6113	50.6112	50.6111			-2	mg/L
1200876471	LCS		BAL216	Y1	0.1	60.464	60.4931	60.4929			289	mg/L
139405001	SAMPLE		BAL216	K9	0.1	49.4581	49.4908	49.4903			322	mg/L
1200876469	DUP	139405001	BAL216	4E	0.1	53.9863	54.0185	54.018			317	mg/L
139405002	SAMPLE		BAL216	T5	0.1	55.8483	55.8817	55.8812			329	mg/L
1200876470	DUP	139405002	BAL216	BK	0.1	57.2552	57.2882	57.2878			326	mg/L
139406001	SAMPLE		BAL216	BK1	0.1	57.2778	57.2934	57.293			152	mg/L
139409001	SAMPLE		BAL216	Z3	0.1	52.8577	52.8669	52.8664			87	mg/L
1200876713	DUP	139409001	BAL216	T6	0.1	55.6993	55.7084	55.7081			88	mg/L
139524001	SAMPLE		BAL216	JT	0.1	53.4656	53.476	53.476			104	mg/L
139524002	SAMPLE		BAL216	J9	0.1	49.9055	49.9175	49.9172			117	mg/L
139545001	SAMPLE		BAL216	C2	0.1	49.2429	49.2588	49.2586			157	mg/L
139551001	SAMPLE		BAL216	Y2	0.1	53.7893	53.8042	53.8038			145	mg/L
139551002	SAMPLE		BAL216	FO	0.1	55.2544	55.2699	55.2695			151	mg/L

Comments: **All Weights are in Grams**

A) Result = (Final - Crucible)/Aliquot * 1000

B) Prep Factor = 0.5 / Aliquot

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS

Solids, Total Suspended

TSS/VSS LogBook

Batch: 437449.0
Analyst: JLD1
Date/Time: 28-JUN-2005 12:11
Procedure Code TSS160.2LF
Procedure Description EPA 160.2 Total Suspended Solids
Lab Sop GL-GC-E-012

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200875540	WTS050628	500	97.6

Sample Type	Sample Id	Rpd(%)
DUP	1200875541	0
DUP	1200875542	.84388185654008
DUP	1200875863	9.7560975609756

Sample Id	Sample Type	Original Hsn	Instrument	Filter ID	Aliquot (L)	Initial Filter Wt Event 1	Initial Filter Wt Event 2	Final Filter Wt Event 1	Final Filter Wt Event 2	Final Filter Wt Event 3	Final Filter Wt Event 4	Result (mg/L)
1200875539	MB		BAL216	26	0.5	0.1061	0.1065	0.106	0.106			-1
1200875540	LCS		BAL216	27	0.1	0.1054	0.1056	0.1544	0.1544			488
139402002	SAMPLE		BAL216	28	0.35	0.1057	0.1059	0.1062	0.1062			0.85714
1200875541	DUP	139402002	BAL216	29	0.35	0.1055	0.1053	0.1056	0.1056			0.85714
139405002	SAMPLE		BAL216	30	0.45	0.1061	0.1065	0.1142	0.1143			17.33333
1200875863	DUP	139405002	BAL216	31	0.45	0.106	0.1062	0.1148	0.1148			19.11111
139406005	SAMPLE		BAL216	32	0.5	0.1054	0.1054	0.1054	0.1055			0.2
139409005	SAMPLE		BAL216	33	0.2	0.105	0.1051	0.1168	0.1169			59
1200875542	DUP	139409005	BAL216	34	0.2	0.1045	0.1049	0.1168	0.1168			59.5

Comments: **A) TSS** Result = (Final Filter Wt - Initial Filter Wt) * 1000 / Aliquot
B) VSS Result = (Initial Filter Wt - Final Filter Wt) * 1000 / Aliquot

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS
All Weights are in Grams

Specific Conductivity

Analytical Logbook

Conductivity and Salinity

Batch ID: 439386.0
Analyst: James Robinson
Method: EPA 120.1 (gk) SW846 9050A (jj)
Lab SOP: GL-GC-E-009 REV# 6
Instrument: Orion 160 Conductivity Meter

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO040709-06	25	mL
LCS	1200879897	Conductivity LCS	WCO040709-06	150	mL

Sample ID	Run Date	Dilution	Temperature (C)	Conductivity Result (umhos/cm)
1200879897 LCS	05-JUL-2005 21:43:14	1	24.6	1446
139405001 (jj)	05-JUL-2005 21:45:02	1	12.5	269
1200879888 DUP (139405001)	05-JUL-2005 21:48:24	1	13.5	278
139405002 (jj)	05-JUL-2005 21:49:18	1	13.1	278
1200879889 DUP (139405002)	05-JUL-2005 21:50:14	1	13.5	280
CCV	05-JUL-2005 21:50:28	1	24.6	1446
139406001 (gk)	05-JUL-2005 21:51:31	1	13	133.2
1200879890 DUP (139406001)	05-JUL-2005 21:51:39	1	13.7	137.3
139409001 (gk)	05-JUL-2005 21:52:33	1	14.4	109.7
1200879891 DUP (139409001)	05-JUL-2005 21:54:03	1	16	110.3
139524001 (gk)	05-JUL-2005 21:54:50	1	15.8	137.7
CCV	05-JUL-2005 21:55:45	1	24.6	1446
1200879892 DUP (139524001)	05-JUL-2005 21:56:22	1	16.5	139.9
139524002 (gk)	05-JUL-2005 21:57:24	1	16.2	157.3
139545001 (gk)	05-JUL-2005 21:58:29	1	16	110.4
1200879893 DUP (139545001)	05-JUL-2005 21:59:25	1	17.1	112.3
139551001 (jj)	05-JUL-2005 22:00:19	1	16.7	121
CCV	05-JUL-2005 22:00:44	1	24.6	1446
1200879894 DUP (139551001)	05-JUL-2005 22:01:22	1	17.6	120.7
139551002 (jj)	05-JUL-2005 22:02:22	1	18.6	123.3
1200879895 DUP (139551002)	05-JUL-2005 22:02:33	1	19.1	124.3
139713001 (gk)	05-JUL-2005 22:03:25	1	23	580
1200879896 DUP (139713001)	05-JUL-2005 22:04:06	1	23.1	578
CCV	05-JUL-2005 22:04:45	1	24.6	1446

Calibration Information:

Run Date: 05-JUL-05 21:15
Instrument: CON160
Analyst: JAR2

Standard	Observed	Theoretical		%Recovery
WCO050705-05	15.09	14.5	umhos/cm	104.07
WCO050705-03	1435	1413	umhos/cm	101.56
WCO050705-04	1932	1900	umhos/cm	101.68
WCO050705-08	25000	24800	umhos/cm	100.81
WCO050705-01	255	250	umhos/cm	102

Comments:

Analytical Logbook

Batch ID: **439386.0**
Analyst: **James Robinson**
Method: **EPA 120.1 (gk) SW846 9050A (jj)**
Lab SOP: **GL-GC-E-009 REV# 6**
Instrument: **Orion 160 Conductivity Meter**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO040709-06	25	mL
LCS	1200879897	Conductivity LCS	WCO040709-06	150	mL

Sample ID	Run Date		Dilution		Temperature (C)	Conductivity Result (umhos/cm)
WCO050705-02	754	750	umhos/cm	100.53		

Total Kjeldahl Nitrogen

Prep LogBook

Analyst: GXA2 Verified by:_____

Batch: 437634

Lab SOP: GL-GC-E-071 REV# 5

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200876013	UTR040728-01.1	.2	mL
MS	1200876015	UTR040728-01.1	.2	mL
MS	1200876021	UTR040728-01.1	.2	mL
MS	1200876022	UTR040728-01.1	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200876012		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
LCS	1200876013		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
SAMPLE	139374003		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	WATER
SAMPLE	139405002		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
DUP	1200876014	139405002	EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
MS	1200876015	139405002	EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
SAMPLE	139406001		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
DUP	1200876019	139406001	EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
MS	1200876021	139406001	EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	GROUND WATER
SAMPLE	139409001		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	SURFACE WATER
DUP	1200876020	139409001	EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	SURFACE WATER
MS	1200876022	139409001	EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	SURFACE WATER
SAMPLE	139470001		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470002		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470003		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470004		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470005		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470006		EPA 351.2 Prep	29-JUN-2005 19:07	20 mL	20 mL	1	WASTE WATER

Reagent/Solvent Lot ID	Amount	Description
310709-C	5 mL	TKN/PO4 Digestion Solution

Comments

This is runlog Lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	6/30/2005 9:56:25	OM_6-30-2005_09-55-39
3.0 ppm Std.		1	jxm	6/30/2005 9:57:14	OM_6-30-2005_09-55-39
1.0 ppm Std.		1	jxm	6/30/2005 9:58:03	OM_6-30-2005_09-55-39
0.5 ppm Std		1	jxm	6/30/2005 9:58:53	OM_6-30-2005_09-55-39
0.1 ppm Std		1	jxm	6/30/2005 9:59:44	OM_6-30-2005_09-55-39
ICAL-00		1	jxm	6/30/2005 10:00:37	OM_6-30-2005_09-55-39
ICV		1	jxm	6/30/2005 10:02:33	OM_6-30-2005_09-55-39
ICB		1	jxm	6/30/2005 10:04:29	OM_6-30-2005_09-55-39
1200876012	437638	1	jxm	6/30/2005 10:06:24	OM_6-30-2005_09-55-39
1200876013	437638	1	jxm	6/30/2005 10:07:16	OM_6-30-2005_09-55-39
139374003	437638	1	jxm	6/30/2005 10:08:07	OM_6-30-2005_09-55-39
139405002	437638	1	jxm	6/30/2005 10:08:57	OM_6-30-2005_09-55-39
1200876014	437638	1	jxm	6/30/2005 10:09:48	OM_6-30-2005_09-55-39
1200876015	437638	1	jxm	6/30/2005 10:10:38	OM_6-30-2005_09-55-39
139406001	437638	1	jxm	6/30/2005 10:11:27	OM_6-30-2005_09-55-39
1200876019	437638	1	jxm	6/30/2005 10:12:17	OM_6-30-2005_09-55-39
1200876021	437638	1	jxm	6/30/2005 10:13:06	OM_6-30-2005_09-55-39
139409001	437638	1	jxm	6/30/2005 10:13:55	OM_6-30-2005_09-55-39
CCV		1	jxm	6/30/2005 10:14:44	OM_6-30-2005_09-55-39
CCB		1	jxm	6/30/2005 10:16:40	OM_6-30-2005_09-55-39
1200876020	437638	1	jxm	6/30/2005 10:18:34	OM_6-30-2005_09-55-39
1200876022	437638	1	jxm	6/30/2005 10:19:22	OM_6-30-2005_09-55-39
139470001	437638	1	jxm	6/30/2005 10:20:10	OM_6-30-2005_09-55-39
139470002	437638	1	jxm	6/30/2005 10:20:58	OM_6-30-2005_09-55-39
139470003	437638	1	jxm	6/30/2005 10:21:46	OM_6-30-2005_09-55-39
139470004	437638	1	jxm	6/30/2005 10:22:35	OM_6-30-2005_09-55-39
139470005	437638	1	jxm	6/30/2005 10:23:27	OM_6-30-2005_09-55-39
139470006	437638	1	jxm	6/30/2005 10:24:18	OM_6-30-2005_09-55-39
CCV		1	jxm	6/30/2005 10:25:09	OM_6-30-2005_09-55-39
CCB		1	jxm	6/30/2005 10:27:05	OM_6-30-2005_09-55-39

Author: jxm Date : 6/30/2005

Original Run Filename: OM_6-30-2005_09-55-39.OMN created 6/30/2005 09:55:39
Original Run Author's Signature: [jxm]
Current Run Filename: OM_6-30-2005_09-55-39.OMN last modified 6/30/2005 10:28:15
Current Run Author's Signature: [jxm]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Channel 1 TKN Area (Vs)	Detection Time	ADF	MDF	Description
WTR050630-01	1	S9	5.000	8.319	6/30/2005@09:56:25			5.0 ppm Std.
WTR050630-02	1	S10	3.000	4.787	6/30/2005@09:57:14			3.0 ppm Std.
WTR050630-04	1	S11	1.000	1.677	6/30/2005@09:58:03			1.0 ppm Std.
WTR050630-05	1	S12	0.500	0.847	6/30/2005@09:58:53			0.5 ppm Std
WTR050630-06	1	S13	0.100	0.172	6/30/2005@09:59:44			0.1 ppm Std
WTR050630-10 0.0 ppm	1	S15	0.000	0.002	6/30/2005@10:00:37			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99970 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR050630-08 ICV	1	S16	0.909	1.496	6/30/2005@10:02:33			ICV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.909 < 1.104					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.909 > 0.895					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S15	-0.005	-0.011	6/30/2005@10:04:29			ICB/CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.005 < 0.050					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.005 > -0.050					
		Message	ICB Passed					
		Action	Continue					
1200876012|437638|MB	1	1	-0.090	-0.152	6/30/2005@10:06:24			
1200876013||LCS	1	2	1.032	1.699	6/30/2005@10:07:16			
139374003	1	3	0.050	0.079	6/30/2005@10:08:07			
139405002	1	4	0.050	0.078	6/30/2005@10:08:57			
1200876014||DUP	1	5	-0.065	-0.111	6/30/2005@10:09:48			
1200876015||MS	1	6	1.071	1.762	6/30/2005@10:10:38			
139406001	1	7	-0.176	-0.295	6/30/2005@10:11:27			
1200876019||DUP	1	8	-0.220	-0.366	6/30/2005@10:12:17			
1200876021||MS	1	9	1.089	1.791	6/30/2005@10:13:06			
139409001	1	10	-0.065	-0.111	6/30/2005@10:13:55			
WTR050630-04 CCV	1	S11	1.058	1.741	6/30/2005@10:14:44			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.058 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.058 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.004	-0.010	6/30/2005@10:16:40			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.004 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

		Result:	-0.004 > -0.050					
		Message	CCB Passed					
		Action	Continue					
1200876020||DUP	1	11	0.007	0.008	6/30/2005@10:18:34			
1200876022||MS	1	12	1.209	1.990	6/30/2005@10:19:22			
139470001	1	13	0.156	0.254	6/30/2005@10:20:10			
139470002	1	14	-0.103	-0.173	6/30/2005@10:20:58			
139470003	1	15	0.002	-7.361e-5	6/30/2005@10:21:46			
139470004	1	16	-0.074	-0.125	6/30/2005@10:22:35			
139470005	1	17	0.378	0.619	6/30/2005@10:23:27			
139470006	1	18	0.927	1.525	6/30/2005@10:24:18			
WTR050630-04 CCV	1	S11	1.075	1.768	6/30/2005@10:25:09			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.075 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.075 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.012	-0.023	6/30/2005@10:27:05			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.012 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.012 > -0.050					
		Message	CCB Passed					
		Action	Continue					

Channel 1 (TKN) : Current View

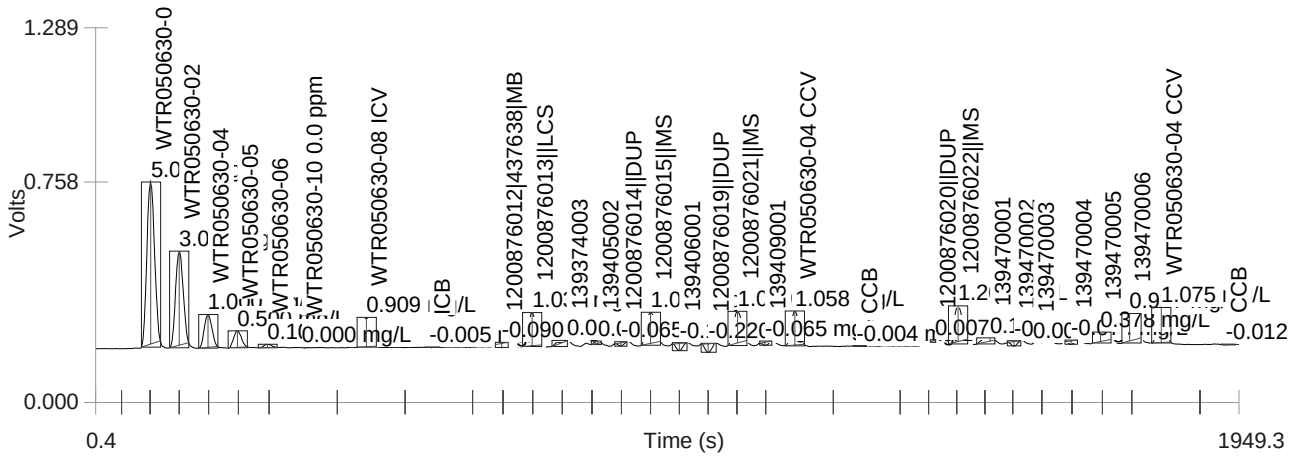
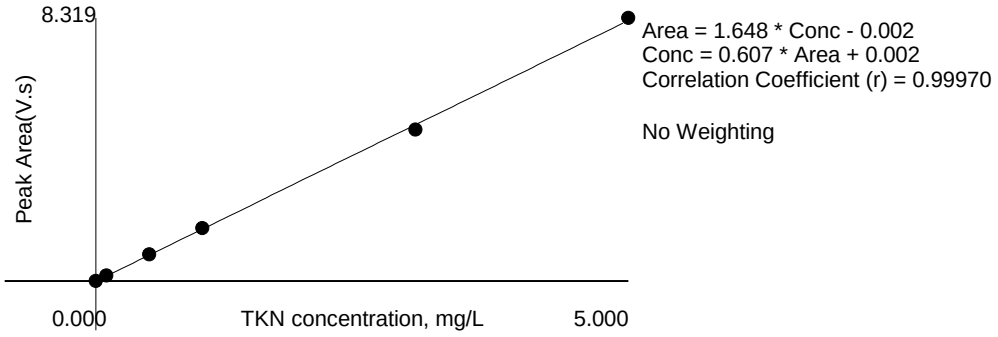


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	8.319	0.558	-1.0	6/30/2005	09:57:33
2	3.000	1	4.787	0.324	3.1	6/30/2005	09:58:22
3	1.000	1	1.677	0.112	-1.9	6/30/2005	09:59:11
4	0.500	1	0.847	0.057	-3.1	6/30/2005	10:00:01
5	0.100	1	0.172	0.012	-5.6	6/30/2005	10:00:53
6	0.000	1	0.002	3.532e-4		6/30/2005	10:01:45

Author: jxm Date : 6/30/2005

Figure 1: TKN



Total Phosphorus

Prep LogBook

Analyst: GXA2 Verified by:_____

Batch: 437641

Lab SOP: GL-GC-E-071 REV# 5

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200876032	UTR040728-01.1	.2	mL
MS	1200876034	UTR040728-01.1	.2	mL
MS	1200876037	UTR040728-01.1	.2	mL
MS	1200876038	UTR040728-01.1	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200876031		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
LCS	1200876032		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
SAMPLE	139374003		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WATER
SAMPLE	139405001		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
DUP	1200876033	139405001	EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
MS	1200876034	139405001	EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
SAMPLE	139405002		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
DUP	1200876035	139405002	EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
MS	1200876037	139405002	EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
SAMPLE	139406001		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	GROUND WATER
SAMPLE	139409001		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	SURFACE WATER
DUP	1200876036	139409001	EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	SURFACE WATER
MS	1200876038	139409001	EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	SURFACE WATER
SAMPLE	139442001		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470001		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470002		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470003		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470004		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470005		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WASTE WATER
SAMPLE	139470006		EPA 365.4 Prep	29-JUN-2005 19:05	20 mL	20 mL	1	WASTE WATER

Reagent/Solvent Lot ID	Amount	Description
310709-C	5 mL	TKN/PO4 Digestion Solution

Comments

This is runlog Lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	6/30/2005 11:06:50	OM_6-30-2005_11-06-08
3.0 ppm Std.		1	jxm	6/30/2005 11:07:38	OM_6-30-2005_11-06-08
1.0 ppm Std.		1	jxm	6/30/2005 11:08:27	OM_6-30-2005_11-06-08
0.5 ppm Std		1	jxm	6/30/2005 11:09:16	OM_6-30-2005_11-06-08
0.1 ppm Std		1	jxm	6/30/2005 11:10:07	OM_6-30-2005_11-06-08
0.05 ppm Std		1	jxm	6/30/2005 11:10:58	OM_6-30-2005_11-06-08
ICAL-00		1	jxm	6/30/2005 11:11:50	OM_6-30-2005_11-06-08
ICV		1	jxm	6/30/2005 11:13:55	OM_6-30-2005_11-06-08
ICB		1	jxm	6/30/2005 11:16:00	OM_6-30-2005_11-06-08
1200876031	437643	1	jxm	6/30/2005 11:18:03	OM_6-30-2005_11-06-08
1200876032	437643	1	jxm	6/30/2005 11:18:55	OM_6-30-2005_11-06-08
139374003	437643	1	jxm	6/30/2005 11:19:45	OM_6-30-2005_11-06-08
139405001	437643	1	jxm	6/30/2005 11:20:36	OM_6-30-2005_11-06-08
1200876033	437643	1	jxm	6/30/2005 11:21:27	OM_6-30-2005_11-06-08
1200876034	437643	1	jxm	6/30/2005 11:22:17	OM_6-30-2005_11-06-08
139406001	437643	1	jxm	6/30/2005 11:25:33	OM_6-30-2005_11-06-08
CCV		1	jxm	6/30/2005 11:26:22	OM_6-30-2005_11-06-08
CCB		1	jxm	6/30/2005 11:28:26	OM_6-30-2005_11-06-08
139409001	437643	1	jxm	6/30/2005 11:30:29	OM_6-30-2005_11-06-08
1200876036	437643	1	jxm	6/30/2005 11:31:18	OM_6-30-2005_11-06-08
1200876038	437643	1	jxm	6/30/2005 11:32:05	OM_6-30-2005_11-06-08
139442001	437643	1	jxm	6/30/2005 11:32:53	OM_6-30-2005_11-06-08
139470001	437643	1	jxm	6/30/2005 11:33:41	OM_6-30-2005_11-06-08
139470002	437643	1	jxm	6/30/2005 11:34:31	OM_6-30-2005_11-06-08
139470003	437643	1	jxm	6/30/2005 11:35:22	OM_6-30-2005_11-06-08
139470004	437643	1	jxm	6/30/2005 11:36:14	OM_6-30-2005_11-06-08
139470005	437643	1	jxm	6/30/2005 11:37:05	OM_6-30-2005_11-06-08
139470006	437643	1	jxm	6/30/2005 11:37:55	OM_6-30-2005_11-06-08
CCV		1	jxm	6/30/2005 11:38:45	OM_6-30-2005_11-06-08
CCB		1	jxm	6/30/2005 11:40:51	OM_6-30-2005_11-06-08
139405002	437643	1	jxm	6/30/2005 11:42:54	OM_6-30-2005_11-06-08
1200876035	437643	1	jxm	6/30/2005 11:43:43	OM_6-30-2005_11-06-08
1200876037	437643	1	jxm	6/30/2005 11:44:33	OM_6-30-2005_11-06-08
CCV		1	jxm	6/30/2005 11:45:22	OM_6-30-2005_11-06-08
CCB		1	jxm	6/30/2005 11:47:27	OM_6-30-2005_11-06-08

Author: jxm Date : 6/30/2005

Original Run Filename: OM_6-30-2005_11-06-08.OMN created 6/30/2005 11:06:08
Original Run Author's Signature: [jxm]
Current Run Filename: OM_6-30-2005_11-06-08.OMN last modified 6/30/2005 11:48:48
Current Run Author's Signature: [jxm]
Description: Total Phosphorus EPA Method 365.4 GEL SOP:GL-GC-E-103 Rev 0
Detection wavelength: 880 nM

Sample	Rep.	Cup No.	Channel 1 TLPOS Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR050630-01	1	S1	5.000	24.138	6/30/2005@11:06:50			5.0 ppm Std.
WTR050630-02	1	S2	3.000	14.269	6/30/2005@11:07:38			3.0 ppm Std.
WTR050630-04	1	S3	1.000	4.698	6/30/2005@11:08:27			1.0 ppm Std.
WTR050630-05	1	S4	0.500	2.394	6/30/2005@11:09:16			0.5 ppm Std
WTR050630-06	1	S5	0.100	0.504	6/30/2005@11:10:07			0.1 ppm Std
WTR050630-07	1	S6	0.050	0.273	6/30/2005@11:10:58			0.05 ppm Std
WTR050630-10 0.0	1	S7	0.000	0.050	6/30/2005@11:11:50			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99995 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR050630-08 ICV	1	S8	1.006	4.826	6/30/2005@11:13:55			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.006 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.006 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S7	0.018	0.075	6/30/2005@11:16:00			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.018 < 0.050					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.018 > -0.050					
Message			ICB Passed					
Action			Continue					
1200876031|437643|MB	1	1	0.035	0.158	6/30/2005@11:18:03			
1200876032||LCS	1	2	0.964	4.626	6/30/2005@11:18:55			
139374003	1	3	0.052	0.237	6/30/2005@11:19:45			
139405001	1	4	0.075	0.349	6/30/2005@11:20:36			
1200876033||DUP	1	5	0.096	0.452	6/30/2005@11:21:27			
1200876034||MS	1	6	1.022	4.904	6/30/2005@11:22:17			
139405002	1	7	0.162	0.766	6/30/2005@11:23:06			
1200876035||DUP	1	8	0.107	0.503	6/30/2005@11:23:55			
1200876037||MS	1	9	0.712	3.414	6/30/2005@11:24:44			
139406001	1	10	0.088	0.410	6/30/2005@11:25:33			
WTR050630-04 CCV	1	S3	0.999	4.795	6/30/2005@11:26:22			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.999 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.999 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	0.018	0.075	6/30/2005@11:28:26			CCB
Known Conc:			0.000					

DQM Test: > + Concentration Limit								
		Result:	0.018 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.018 > -0.050					
		Message	CCB Passed					
		Action	Continue					
139409001	1	11	0.264	1.260	6/30/2005@11:30:29			
1200876036||DUP	1	12	0.281	1.340	6/30/2005@11:31:18			
1200876038||MS	1	13	1.210	5.805	6/30/2005@11:32:05			
139442001	1	14	0.203	0.964	6/30/2005@11:32:53			
139470001	1	15	0.211	1.002	6/30/2005@11:33:41			
139470002	1	16	0.190	0.902	6/30/2005@11:34:31			
139470003	1	17	0.209	0.995	6/30/2005@11:35:22			
139470004	1	18	0.176	0.834	6/30/2005@11:36:14			
139470005	1	19	0.187	0.890	6/30/2005@11:37:05			
139470006	1	20	0.217	1.030	6/30/2005@11:37:55			
WTR050630-04 CCV	1	S3	0.994	4.769	6/30/2005@11:38:45			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.994 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.994 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.018	0.077	6/30/2005@11:40:51			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.018 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.018 > -0.050					
		Message	CCB Passed					
		Action	Continue					
139405002	1	7	0.166	0.786	6/30/2005@11:42:54			
1200876035||DUP	1	8	0.104	0.490	6/30/2005@11:43:43			
1200876037||MS	1	9	1.050	5.039	6/30/2005@11:44:33			
WTR050630-04 CCV	1	S3	0.997	4.781	6/30/2005@11:45:22			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.997 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.997 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.018	0.076	6/30/2005@11:47:27			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.018 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.018 > -0.050					
		Message	CCB Passed					
		Action	Continue					

Author: jxm Date : 6/30/2005

Channel 1 (TLPOS) : Current View

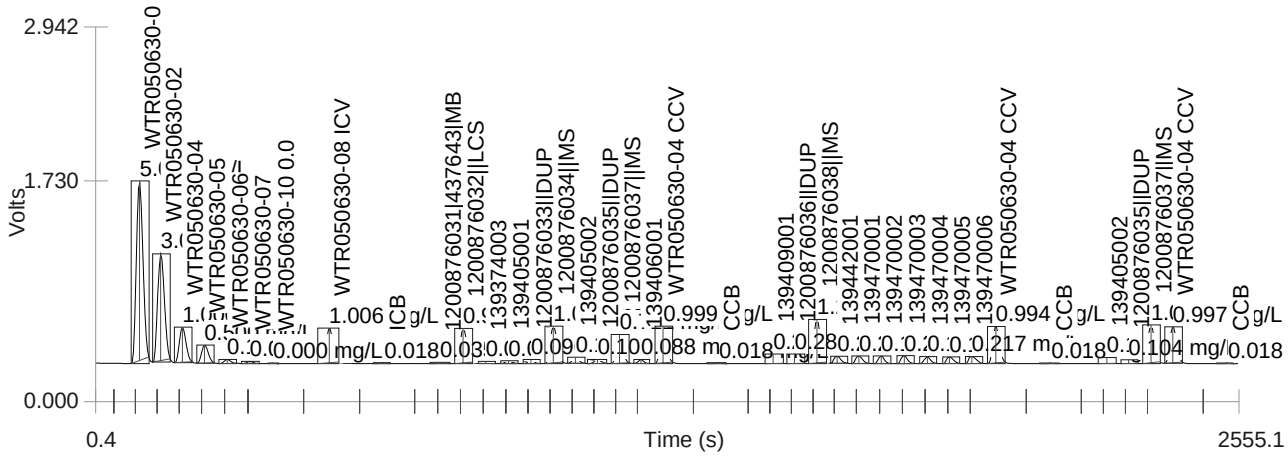
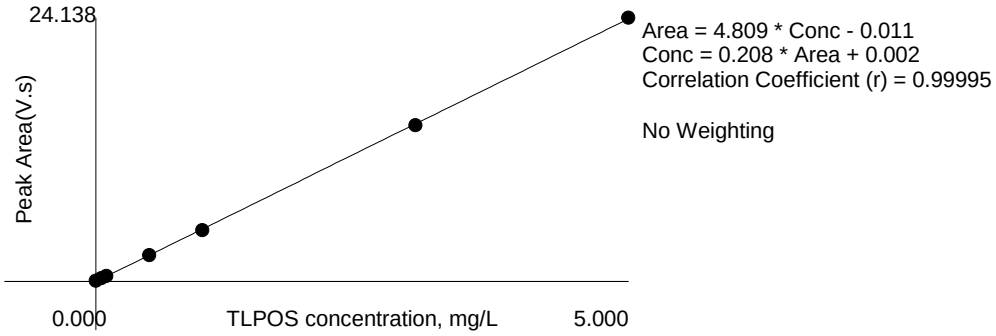


Table 1: TLPOS

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	24.138	1.409	-0.4	6/30/2005	11:08:11
2	3.000	1	14.269	0.840	1.0	6/30/2005	11:08:58
3	1.000	1	4.698	0.276	2.1	6/30/2005	11:09:47
4	0.500	1	2.394	0.141	-0.0	6/30/2005	11:10:36
5	0.100	1	0.504	0.031	-7.2	6/30/2005	11:11:27
6	0.050	1	0.273	0.018	-19.1	6/30/2005	11:12:18
7	0.000	1	0.050	0.006		6/30/2005	11:13:10

Figure 1: TLPOS



This is runlog Lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	6/30/2005 13:43:59	OM_6-30-2005_13-42-32
3.0 ppm Std.		1	jxm	6/30/2005 13:44:47	OM_6-30-2005_13-42-32
1.0 ppm Std.		1	jxm	6/30/2005 13:45:35	OM_6-30-2005_13-42-32
0.5 ppm Std		1	jxm	6/30/2005 13:46:25	OM_6-30-2005_13-42-32
0.1 ppm Std		1	jxm	6/30/2005 13:47:16	OM_6-30-2005_13-42-32
0.05 ppm Std		1	jxm	6/30/2005 13:48:07	OM_6-30-2005_13-42-32
ICAL-00		1	jxm	6/30/2005 13:48:59	OM_6-30-2005_13-42-32
ICV		1	jxm	6/30/2005 13:51:04	OM_6-30-2005_13-42-32
ICB		1	jxm	6/30/2005 13:53:09	OM_6-30-2005_13-42-32
139405002	437643	1	jxm	6/30/2005 13:55:12	OM_6-30-2005_13-42-32
1200876035	437643	1	jxm	6/30/2005 13:56:02	OM_6-30-2005_13-42-32
1200876037	437643	1	jxm	6/30/2005 13:56:51	OM_6-30-2005_13-42-32
CCV		1	jxm	6/30/2005 13:57:40	OM_6-30-2005_13-42-32
CCB		1	jxm	6/30/2005 13:59:45	OM_6-30-2005_13-42-32

Original Run Filename: OM_6-30-2005_13-42-32.OMN created 6/30/2005 13:42:32
Original Run Author's Signature: [jxm]
Current Run Filename: OM_6-30-2005_13-42-32.OMN last modified 6/30/2005 14:01:06
Current Run Author's Signature: [jxm]
Description: Total Phosphorus EPA Method 365.4 GEL SOP:GL-GC-E-103 Rev 0
Detection wavelength: 880 nM

Sample	Rep.	Cup No.	Channel 1 TLPOS Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR050630-01	1	S1	5.000	23.914	6/30/2005@13:43:59			5.0 ppm Std.
WTR050630-02	1	S2	3.000	14.290	6/30/2005@13:44:47			3.0 ppm Std.
WTR050630-04	1	S3	1.000	4.677	6/30/2005@13:45:35			1.0 ppm Std.
WTR050630-05	1	S4	0.500	2.401	6/30/2005@13:46:25			0.5 ppm Std
WTR050630-06	1	S5	0.100	0.508	6/30/2005@13:47:16			0.1 ppm Std
WTR050630-07	1	S6	0.050	0.265	6/30/2005@13:48:07			0.05 ppm Std
WTR050630-10 0.0	1	S7	0.000	0.064	6/30/2005@13:48:59			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99998 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR050630-08 ICV	1	S8	0.975	4.664	6/30/2005@13:51:04			ICV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.975 < 1.104					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.975 > 0.895					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S7	0.011	0.061	6/30/2005@13:53:09			ICB/CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.011 < 0.050					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.011 > -0.050					
		Message	ICB Passed					
		Action	Continue					
139405002|437643|	1	7	0.136	0.658	6/30/2005@13:55:12			
1200876035||DUP	1	8	0.132	0.640	6/30/2005@13:56:02			
1200876037||MS	1	9	1.091	5.216	6/30/2005@13:56:51			
WTR050630-04 CCV	1	S3	0.994	4.753	6/30/2005@13:57:40			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.994 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.994 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.012	0.064	6/30/2005@13:59:45			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.012 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.012 > -0.050					
		Message	CCB Passed					

Author: jxm Date : 6/30/2005

Action	Continue					

Channel 1 (TLPOS) : Current View

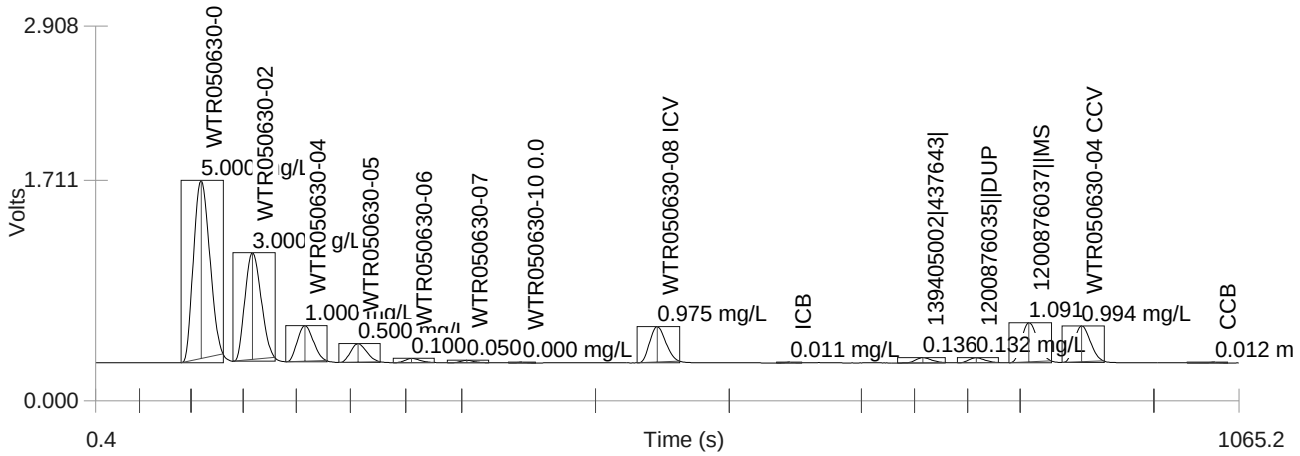
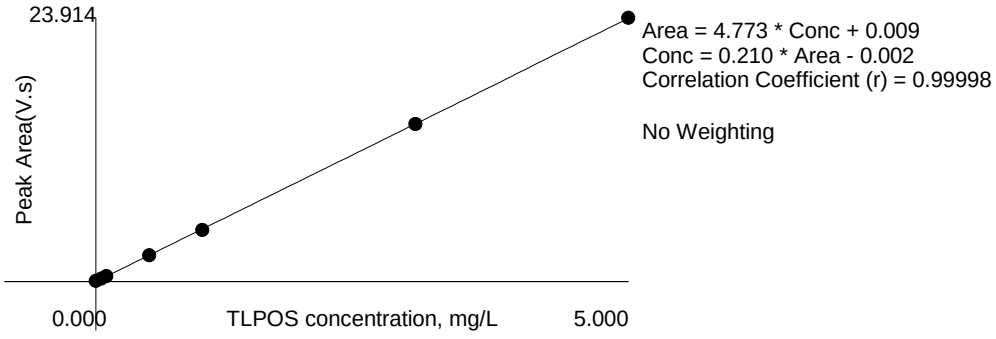


Table 1: TLPOS

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	23.914	1.382	-0.2	6/30/2005	13:45:19
2	3.000	1	14.290	0.827	0.3	6/30/2005	13:46:07
3	1.000	1	4.677	0.276	2.2	6/30/2005	13:46:56
4	0.500	1	2.401	0.143	-0.2	6/30/2005	13:47:45
5	0.100	1	0.508	0.033	-4.4	6/30/2005	13:48:36
6	0.050	1	0.265	0.018	-7.2	6/30/2005	13:49:27
7	0.000	1	0.064	0.007		6/30/2005	13:50:19

Figure 1: TLPOS



pH

pH / Corrosivity LogBook

Analyst: JAR2
Batch: 437861
Lab SOP: GL-GC-E-008 REV# 9
Description: pH

Type	Sample Id	Serial Number	Description
CCV	240	UPH297361-01	PH 7 BUFFER FOR PH
LCS	1200876545	UPH305149-02	LCS BUFFER SOLUTION

Type	Sample id	Parent Sample Id	Matrix	Method	Run Date	Run Time	Parmname	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
LCS	1200876545		Ground Water		28-JUN-05	17:22	pH	7.04	23.6'C	7	100.571	
LCS	1200876545		Ground Water		28-JUN-05	17:22	pH 2	7.04	23.6'C	7	100.571	
SAMPLE	139405001		Ground Water	EPA 150.1	28-JUN-05	17:24	pH	6.93	19.9'C			
SAMPLE	139405001		Ground Water	EPA 150.1	28-JUN-05	17:24	pH 2	6.93	19.9'C			
DUP	1200876541	139405001	Ground Water	EPA 150.1	28-JUN-05	17:26	pH	6.94	20.0'C			.144
DUP	1200876541	139405001	Ground Water	EPA 150.1	28-JUN-05	17:26	pH 2	6.94	20.0'C			.144
SAMPLE	139405002		Ground Water	EPA 150.1	28-JUN-05	17:30	pH	6.97	22.2'C			
SAMPLE	139405002		Ground Water	EPA 150.1	28-JUN-05	17:30	pH 2	6.97	22.2'C			
DUP	1200876542	139405002	Ground Water	EPA 150.1	28-JUN-05	17:32	pH	6.98	22.2'C			.143
DUP	1200876542	139405002	Ground Water	EPA 150.1	28-JUN-05	17:32	pH 2	6.98	22.2'C			.143
CCV					28-JUN-05	17:33	pH	7.04	23.6'C			
CCV					28-JUN-05	17:33	pH 2	7.04	23.6'C			
SAMPLE	139406001		Ground Water	EPA 150.1	28-JUN-05	17:34	pH	8.01	20.2'C			
SAMPLE	139406001		Ground Water	EPA 150.1	28-JUN-05	17:34	pH 2	8.01	20.2'C			
DUP	1200876543	139406001	Ground Water	EPA 150.1	28-JUN-05	17:35	pH	8.02	20.3'C			.125
DUP	1200876543	139406001	Ground Water	EPA 150.1	28-JUN-05	17:35	pH 2	8.02	20.3'C			.125
SAMPLE	139409001		Surface Water	EPA 150.1	28-JUN-05	17:37	pH	7.69	21.1'C			
SAMPLE	139409001		Surface Water	EPA 150.1	28-JUN-05	17:37	pH 2	7.69	21.1'C			
DUP	1200876544	139409001	Surface Water	EPA 150.1	28-JUN-05	17:38	pH	7.7	21.3'C			.13
DUP	1200876544	139409001	Surface Water	EPA 150.1	28-JUN-05	17:38	pH 2	7.7	21.3'C			.13
SAMPLE	139524001		Surface Water	EPA 150.1	28-JUN-05	17:39	pH	7.9	21.7'C			
SAMPLE	139524001		Surface Water	EPA 150.1	28-JUN-05	17:39	pH 2	7.9	21.7'C			
CCV					28-JUN-05	17:41	pH	7.04	23.6'C			
CCV					28-JUN-05	17:41	pH 2	7.04	23.6'C			
DUP	1200876663	139524001	Surface Water	EPA 150.1	28-JUN-05	17:42	pH	7.89	21.7'C			.127
DUP	1200876663	139524001	Surface Water	EPA 150.1	28-JUN-05	17:42	pH 2	7.89	21.7'C			.127
SAMPLE	139524002		Surface Water	EPA 150.1	28-JUN-05	17:43	pH	7.82	21.6'C			
SAMPLE	139524002		Surface Water	EPA 150.1	28-JUN-05	17:43	pH 2	7.82	21.6'C			
CCV					28-JUN-05	17:44	pH	7.04	23.6'C			
CCV					28-JUN-05	17:44	pH 2	7.04	23.6'C			

pH / Corrosivity LogBook

Type	Sample id	Parent Sample Id	Matrix	Method	Run Date	Run Time	Parmname	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)

Calibration Information:

Run Date: 28-JUN-05 15:18
Instrument: PHX060
Analyst: JAR2

Comments:

	Standard	Observed	Theoretical		C	%Recovery
15:05	UPH305147-01	3.99	4	SU	23.2	99.75
15:05	UPH297361-01	7.05	7	SU	23.2	100.71
15:05	UPH050217-02	10.01	10	SU	23.2	100.1
15:05	310030	2.04	2	SU	23.2	102
15:05	050420-A	12	12	SU	23.2	100
15:05	UPH305149-02	7.03	7	SU	23.2	100.43

Miscellaneous

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
29-JUN-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
IC	EPA 300.0	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
437414	See Below		

Potentially affected work order(s)(SDG): 139349,139405,139406

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. Failed Recovery for LCS/MS/PS: QC 1200875452PS	1.The spike recovery of 113% for Sulfate was outside of the required acceptance limits due to matrix interference. The recoveries for this PS at a 2x dilution are 102%, 105%, 106%, 103%, 102% and 106 % for Fluoride, Chloride, Orthophosphate, Nitrite, Nitrate, and Bromide respectively.
QC 1200875456PS	The spike recoveries of 116% and 120% for Sulfate and Chloride respectively were outside of the required acceptance limits due to matrix interference. The recoveries for the 1x PS are107 and 101% respectively for Bromide and Fluoride. These confirm matrix interference for Sulfate on the neat run. The recoveries for the 2x run are 104%, 106% and 110% for Fluoride, Bromide, and Sulfate respectively. These recoveries confirm matrix interference for the 2x Chloride run.

Originator's Name:

Mary Sherwood 29-JUN-05

Data Validator/Group Leader:

Julia Hamilton 03-JUL-05

Quality Review:

Director:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
30-JUN-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 351.2	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
437638	See Below		

Potentially affected work order(s)(SDG): 139374,139405,139406,139409,139470

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for LCS/MS/PS: QC 1200876022MS	1. Sample spike recovery failed due to matrix interference. The sample and sample dup had double peaks which is a sign of matrix interference.

Originator's Name:

James Maestas 30-JUN-05

Data Validator/Group Leader:

Julia Hamilton 30-JUN-05

Quality Review:

Nancy Mattern 01-JUL-05

Director:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (ESHL)
Work Order 139405

Method/Analysis Information

Product:	**Alphaspec Am241 Liquid**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Analytical Batch Number:	437633

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200876016	Method Blank (MB)
1200876017	139349008(GU05060PCCR01) Sample Duplicate (DUP)
1200876018	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139349008 (GU05060PCCR01).
The QC sample is from ESHL work order 139349.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package. Aliquots for samples 1200876016 (MB) and 1200876018 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Liquid**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Analytical Batch Number:	437640

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200876023	Method Blank (MB)
1200876024	139349008(GU05060PCCR01) Sample Duplicate (DUP)
1200876025	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139349008 (GU05060PCCR01).

The QC sample is from ESHL work order 139349.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package.
Aliquots for samples 1200876023 (MB) and 1200876025 (LCS) were changed to 1.0 per client request.
Pu-238 blank activity is greater than the DLC, but less than the MDA.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec U, Liquid**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Analytical Batch Number:	437642

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200876028	Method Blank (MB)
1200876029	139349008(GU05060PCCR01) Sample Duplicate (DUP)
1200876030	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139349008 (GU05060PCCR01).
The QC sample is from ESHL work order 139349.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package.
Aliquots for samples 1200876028 (MB) and 1200876030 (LCS) were changed to 1.0 per client request.
U-235 and U-238 blank activity is greater than the DLC but less than the MDA.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gammaspec, Gamma, Liquid (Standard List)**
Analytical Method:	EPA 901.1
Analytical Batch Number:	437153

Sample ID	Client ID

139405001	GF05050GMC401
139405002	GU05050GMC401
1200874843	Method Blank (MB)
1200874844	139349001(GF05060PCCR01) Sample Duplicate (DUP)
1200874845	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed as follows: December 2004, January 2005, and March 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139349001 (GF05060PCCR01).
The QC sample is from ESHL work order 139349.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
The result for Np-237 was greater than the decision level but less than the minimum detectable concentration in the method blank, 1200874843 (MB).

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to no valid peak.	Potassium-40	1200874843

Method/Analysis Information

Product: **GFPC, Gross A/B, liquid**
Analytical Method: EPA 900.0
Analytical Batch Number: 441414

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200885000	Method Blank (MB)
1200885001	139349008(GU05060PCCR01) Sample Duplicate (DUP)
1200885002	139349008(GU05060PCCR01) Matrix Spike (MS)
1200885003	139349008(GU05060PCCR01) Matrix Spike Duplicate (MSD)
1200885004	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-001 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on July 19, 2004.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139349008 (GU05060PCCR01).
The QC sample is from ESHL work order 139349.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples were reprepped due to a field blank being used as a qc.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Gross Alpha/Beta Preparation Information
High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating, especially to a dull red heat. For this sample set, the prepared planchet was counted for beta activity before being flamed. After flaming, the planchet was counted for alpha activity. This sequence causes the alpha count run data to record over the beta count run data in AlphaLims, therefore only the alpha count data will appear on the instrument runlog.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200885000 (MB) and 1200885004 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Sr90, liquid**
Analytical Method:	EPA 905.0 Modified
Analytical Batch Number:	439112

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200879245	Method Blank (MB)
1200879246	139349008(GU05060PCCR01) Sample Duplicate (DUP)
1200879247	139349008(GU05060PCCR01) Matrix Spike (MS)
1200879248	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on November 2, 2004.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139349008 (GU05060PCCR01).
The QC sample is from ESHL work order 139349.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200879248 (LCS) was recounted due to low/high recovery.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200879245 (MB) and 1200879248 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**TC99**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	437627

Sample ID	Client ID
139405002	GU05050GMC401
1200875998	Method Blank (MB)
1200875999	139405002(GU05050GMC401) Sample Duplicate (DUP)
1200876000	139405002(GU05050GMC401) Matrix Spike (MS)
1200876001	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed on June 20, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139405002 (GU05050GMC401).
The QC sample is from ESHL work order 139405.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200875998 (MB) and 1200876001 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Liquid**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	437248

Sample ID	Client ID
139405002	GU05050GMC401
1200875113	Method Blank (MB)
1200875114	139349008(GU05060PCCR01) Sample Duplicate (DUP)
1200875115	139349008(GU05060PCCR01) Matrix Spike (MS)
1200875116	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on July 5, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 139349008 (GU05060PCCR01).
The QC sample is from ESHL work order 139349.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 139405002 (GU05050GMC401) was recounted to verify activity.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Lucas Cell, Ra226, liquid**
Analytical Method:	EPA 903.1 Modified
Analytical Batch Number:	437415

Sample ID	Client ID
139405001	GF05050GMC401
139405002	GU05050GMC401
1200875441	Method Blank (MB)
1200875442	138851001(GF05050GMC601) Sample Duplicate (DUP)
1200875443	138851001(GF05050GMC601) Matrix Spike (MS)
1200875444	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-008 REV# 8.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed as follows: Detector 1 was calibrated on December 9, 2004. Detector 2 was calibrated on May 9, 2005. Detector 3 was calibrated on October 26, 2004. Detector 4 was calibrated on September 23, 2004. Detector 5 was calibrated on November 8, 2004. Detector 6 was calibrated on November 22, 2004.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 138851001 (GF05050GMC601).
The QC sample is from ESHL work order 138851.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

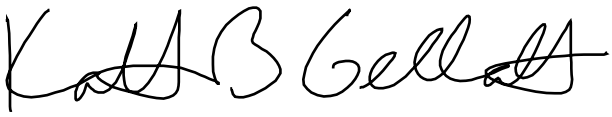
NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200875441 (MB) and 1200875444 (LCS) were changed to 1.0 per client request.
The blank result is greater than the decision level, but less than the MDC.

Qualifier information
Manual qualifiers were not required.

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

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: 

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 139405 GEL Work Order: 139405

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 14, 2005

Client Sample ID:	GF05050GMC401	Project:	ESHL00701
Sample ID:	139405001	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	23−JUN−05		
Receive Date:	25−JUN−05		
Collector:	Client		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.000599	0.038	+/−0.00602	0.050	pCi/L		BJB1	07/02/05	2123	437633	1
Alphaspec Pu, Liquid												
Plutonium−238		0.00762	0.030	+/−0.00468	0.050	pCi/L		BJB1	07/04/05	1502	437640	2
Plutonium−239/240		4.540E−10	0.031	+/−0.00467	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.115	0.073	+/−0.0187	0.100	pCi/L		BJB1	07/01/05	2310	437642	3
Uranium−235/236		0.0359	0.044	+/−0.00996	0.100	pCi/L						
Uranium−238		0.0453	0.051	+/−0.0111	0.100	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid (Standard List)												
Cesium−137		−0.213	2.01	+/−0.573	5.00	pCi/L		AKB	07/13/05	2014	437153	4
Cobalt−60		−0.305	1.87	+/−0.543	5.00	pCi/L						
Gross Gamma		47.1	150	+/−31.2		pCi/L						
Neptunium−237		3.16	18.2	+/−5.25		pCi/L						
Potassium−40		9.77	20.6	+/−13.1	100	pCi/L						
Sodium−22		−0.0847	2.18	+/−0.624	5.00	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha		−0.136	2.05	+/−0.448	3.00	pCi/L		SXE1	07/13/05	1509	441414	5
Beta		1.01	1.19	+/−0.347	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		−0.0138	0.131	+/−0.0379	0.500	pCi/L		EXW1	07/10/05	1537	439112	7
Rad Radium−226												
Lucas Cell, Ra226, liquid												
Radium−226		0.415	0.447	+/−0.166	1.00	pCi/L		AB1	07/01/05	1425	437415	8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	GXA2	06/29/05	1905	437641
SW846 3005A	ICP−MS 3005 PREP	FGA	07/06/05	1100	437236
SW846 3005A	ICP−TRACE SW846 3005A	MXW1	06/28/05	0800	437220
SW846 7470A Pre	EPA 7470A Mercury Prep Liquid	ETL	06/29/05	1130	437372

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 14, 2005

Client Sample ID: GF05050GMC401
Sample ID: 139405001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M
SW846 8321A Mc	SW846 8321A Perchlorate Extraction in Liquid			LOF	07/01/05	2002	438024				
SW846 9010B Pre	SW846 9010B Prep			GXA2	06/27/05	2313	437474				

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified
8	EPA 903.1 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	91	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	91	(15%−125%)
Uranium−232	Alphaspec U, Liquid	73	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	72	(25%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 14, 2005

Client Sample ID: GF05050GMC401
Sample ID: 139405001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M

h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 14, 2005

Client Sample ID: GU05050GMC401
Sample ID: 139405002
Matrix: Ground Water
Collect Date: 23−JUN−05
Receive Date: 25−JUN−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.00742	0.032	+/−0.00558	0.050	pCi/L		BJB1	07/02/05	2123	437633	1
Alphaspec Pu, Liquid												
Plutonium−238		0.00718	0.037	+/−0.00536	0.050	pCi/L		BJB1	07/04/05	1502	437640	2
Plutonium−239/240		0.00478	0.038	+/−0.00339	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.0957	0.069	+/−0.0174	0.100	pCi/L		BJB1	07/01/05	2310	437642	3
Uranium−235/236		0.0183	0.042	+/−0.00972	0.100	pCi/L						
Uranium−238		0.041	0.049	+/−0.0126	0.100	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid (Standard List)												
Cesium−137		0.438	1.82	+/−0.507	5.00	pCi/L		AKB	07/13/05	2014	437153	4
Cobalt−60		1.22	2.25	+/−0.593	5.00	pCi/L						
Gross Gamma		57.9	168	+/−59.8		pCi/L						
Neptunium−237		1.22	15.3	+/−4.53		pCi/L						
Potassium−40		3.48	20.0	+/−12.4	100	pCi/L						
Sodium−22		−0.396	1.77	+/−0.518	5.00	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha		−0.431	2.06	+/−0.451	3.00	pCi/L		SXE1	07/13/05	1509	441414	5
Beta		2.03	1.04	+/−0.345	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		−0.0171	0.118	+/−0.0339	0.500	pCi/L		EXW1	07/10/05	1537	439112	7
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		12900	345	+/−402	200	pCi/L		LAG1	07/13/05	1835	437248	8
TC99												
Technetium−99		3.42	3.94	+/−1.21	5.00	pCi/L		EGD1	07/05/05	1303	437627	9
Rad Radium−226												
Lucas Cell, Ra226, liquid												
Radium−226		3.28	0.694	+/−0.418	1.00	pCi/L		AB1	07/01/05	1425	437415	10

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 14, 2005

Client Sample ID: GU05050GMC401
Sample ID: 139405002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M
EPA 160.2	EPA 160.2 Total Suspended Solids			JLD1	06/28/05	1211	437449				
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa			JXM	06/30/05	1008	437638				
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep			GXA2	06/29/05	1907	437634				
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe			GXA2	06/29/05	1905	437641				
SW846 3005A	ICP−MS 3005 PREP			FGA	07/06/05	1100	437236				
SW846 3005A	ICP−TRACE SW846 3005A			MXW1	06/28/05	0800	437220				
SW846 3510C	3510C−8270C BNA Appendix 9 Prep Fed			RXM1	06/28/05	0900	437182				
SW846 7470A Pre	EPA 7470A Mercury Prep Liquid			ETL	06/29/05	1130	437372				
SW846 8260B	VOA Library Search						437252				
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL			PAM	07/07/05	1353	439994				
SW846 8270C	BNA Library Search						437748				

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified
8	EPA 906.0 Modified
9	DOE EML HASL−300, Tc−02−RC Modified
10	EPA 903.1 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	91	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	71	(15%−125%)
Uranium−232	Alphaspec U, Liquid	73	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	71	(25%−125%)
Carrier/Tracer Recovery	TC99	104	(15%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: July 14, 2005

Client Sample ID: GU05050GMC401
Sample ID: 139405002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M

< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

QUALITY CONTROL DATA

QC Summary

Report Date: July 14, 2005

Client : **Los Alamos National Labs**
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico
Contact: **Billy Turney**

Workorder: **139405**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 437633										
QC1200876017 139349008 DUP										
Americium-241	U	0.00572	U	0.000925	pCi/L	0.166		(0% - 100%)	BJB1	07/02/05 21:23
	TPU:	+/-0.0115		+/-0.00298						
	Yield:	68.4		88.9						
QC1200876018 LCS										
Americium-241	2.73			2.76	pCi/L		101	(75%-125%)		07/04/05 15:02
	TPU:			+/-0.140						
	Yield:			95.9						
QC1200876016 MB										
Americium-241			U	-0.0053	pCi/L					07/02/05 21:23
	TPU:			+/-0.00216						
	Yield:			85.9						
Batch 437640										
QC1200876024 139349008 DUP										
Plutonium-238	U	0.00254	U	-0.00268	pCi/L	0.172		(0% - 100%)	BJB1	07/04/05 15:02
	TPU:	+/-0.00914		+/-0.006						
	Yield:	82.5		59.7						
Plutonium-239/240	U	0.0127	U	0.00268	pCi/L	0.320		(0% - 100%)		
	TPU:	+/-0.00762		+/-0.00805						
	Yield:	82.5		59.7						
QC1200876025 LCS										
Plutonium-238			U	0.0204	pCi/L			(75%-125%)		
	TPU:			+/-0.00724						
	Yield:			72.9						
Plutonium-239/240	2.39			2.52	pCi/L		105	(75%-125%)		
	TPU:			+/-0.110						
	Yield:			72.9						
QC1200876023 MB										
Plutonium-238			U	0.00301	pCi/L					07/04/05 15:02
	TPU:			+/-0.00214						
	Yield:			85.9						
Plutonium-239/240			U	0.00151	pCi/L					
	TPU:			+/-0.00261						
	Yield:			85.9						

QC Summary

Workorder: 139405

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 437642										
QC1200876029 139349008 DUP										
Uranium-234		0.533		0.539	pCi/L	0.034		(0% - 20%)	BJB1	07/01/05 23:10
	TPU:	+/-0.0446		+/-0.0436						
	Yield:	67.1		61.7						
Uranium-235/236	U	0.0409		0.0499	pCi/L	0.174		(0% - 100%)		
	TPU:	+/-0.0132		+/-0.0127						
	Yield:	67.1		61.7						
Uranium-238		0.334		0.332	pCi/L	0.015		(0% - 100%)		
	TPU:	+/-0.0337		+/-0.0328						
	Yield:	67.1		61.7						
QC1200876030 LCS										
Uranium-234				2.51	pCi/L			(75%-125%)		07/01/05 23:10
	TPU:			+/-0.113						
	Yield:			90.7						
Uranium-235/236				0.190	pCi/L			(75%-125%)		
	TPU:			+/-0.0194						
	Yield:			90.7						
Uranium-238	2.43			2.73	pCi/L		112	(75%-125%)		
	TPU:			+/-0.121						
	Yield:			90.7						
QC1200876028 MB										
Uranium-234			U	0.0082	pCi/L					07/01/05 23:10
	TPU:			+/-0.00636						
	Yield:			82.7						
Uranium-235/236			U	0.00823	pCi/L					
	TPU:			+/-0.00436						
	Yield:			82.7						
Uranium-238			U	0.0082	pCi/L					
	TPU:			+/-0.00493						
	Yield:			82.7						
Rad Gamma Spec										
Batch 437153										
QC1200874844 139349001 DUP										
Cesium-137	U	-0.002	U	-0.191	pCi/L	0.0682		(0% - 100%)	AKB	07/14/05 07:32
	TPU:	+/-0.519		+/-0.863						
Cobalt-60	U	0.169	U	-1.29	pCi/L	0.535		(0% - 100%)		
	TPU:	+/-0.478		+/-0.882						

QC Summary

Workorder: **139405**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 437153										
Gross Gamma		U	U	83.4	pCi/L	0.166		(0% - 100%)		
		TPU: +/-53.4		+/-60.2						
Neptunium-237		U	U	-8.01	pCi/L	0.450		(0% - 100%)		
		TPU: +/-3.82		+/-3.99						
Potassium-40		U	U	10.8	pCi/L	0.00945		(0% - 100%)		
		TPU: +/-13.4		+/-9.86						
Sodium-22		U	U	-0.685	pCi/L	0.202		(0% - 100%)		
		TPU: +/-0.480		+/-1.10						
QC1200874845 LCS										
Americium-241	1220			1240	pCi/L		102	(75%-125%)		07/13/05 17:46
		TPU:		+/-56.8						
Cesium-137	472			478	pCi/L		101	(75%-125%)		
		TPU:		+/-24.9						
Cobalt-60	731			717	pCi/L		98	(75%-125%)		
		TPU:		+/-33.4						
Gross Gamma	6370			5860	pCi/L		92			
		TPU:		+/-983						
Neptunium-237			U	-11.5	pCi/L					
		TPU:		+/-44.5						
Potassium-40			U	53.8	pCi/L					
		TPU:		+/-58.2						
Sodium-22			U	3.83	pCi/L					
		TPU:		+/-5.49						
QC1200874843 MB										
Cesium-137			U	0.501	pCi/L					07/13/05 20:15
		TPU:		+/-0.522						
Cobalt-60			U	-0.538	pCi/L					
		TPU:		+/-0.525						
Gross Gamma			U	67.0	pCi/L					
		TPU:		+/-72.5						
Neptunium-237			U	9.51	pCi/L					
		TPU:		+/-4.37						
Potassium-40			UI	30.0	pCi/L					
		TPU:		+/-6.32						
Sodium-22			U	-0.639	pCi/L					

QC Summary

Workorder: **139405**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 437153										
	TPU:			+/-0.593						
Rad Gas Flow										
Batch 439112										
QC1200879246 139349008 DUP										
Strontium-90	U	0.154	U	0.0689	pCi/L	0.423		(0% - 100%)	SXW1	07/11/05 00:03
	TPU:	+/-0.0489		+/-0.0516						
	Yield:	56.1		62.8						
QC1200879248 LCS										
Strontium-90	17.9			15.6	pCi/L		87	(75%-125%)		07/13/05 17:19
	TPU:			+/-0.473						
	Yield:			70.7						
QC1200879245 MB										
Strontium-90			U	-0.038	pCi/L					07/10/05 23:59
	TPU:			+/-0.0327						
	Yield:			58.3						
QC1200879247 139349008 MS										
Strontium-90	44.8 U	0.154		41.4	pCi/L		92	(75%-125%)		07/09/05 18:35
	TPU:	+/-0.0489		+/-1.46						
	Yield:	56.1		67.3						
Batch 441414										
QC1200885001 139349008 DUP										
Alpha		2.26		3.00	pCi/L	0.296		(0% - 100%)	SXE1	07/14/05 12:00
	TPU:	+/-0.627		+/-0.620						
Beta		3.92		5.18	pCi/L	0.697		(0% - 100%)		
	TPU:	+/-0.424		+/-0.481						
QC1200885004 LCS										
Alpha	10.8			10.8	pCi/L		100	(75%-125%)		07/13/05 16:12
	TPU:			+/-0.823						
Beta	35.8			35.0	pCi/L		98	(75%-125%)		
	TPU:			+/-0.804						
QC1200885000 MB										
Alpha			U	-0.0638	pCi/L					07/14/05 12:00
	TPU:			+/-0.0342						
Beta			U	0.0376	pCi/L					
	TPU:			+/-0.0509						
QC1200885002 139349008 MS										
Alpha	71.9	2.26		71.3	pCi/L		96	(75%-125%)		07/13/05 16:12
				+/-5.59						

QC Summary

Workorder: **139405**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 441414										
		TPU: +/-0.627								
Beta	239	3.92		266	pCi/L		110	(75%-125%)		
		TPU: +/-0.424		+/-6.04						
QC1200885003 139349008 MSD										
Alpha	71.9	2.26		75.9	pCi/L	0.190	102	(0%-20%)		07/13/05 16:12
		TPU: +/-0.627		+/-6.61						
Beta	239	3.92		263	pCi/L	0.163	108	(0%-20%)		
		TPU: +/-0.424		+/-5.60						
Rad Liquid Scintillation										
Batch 437248										
QC1200875114 139349008 DUP										
Tritium	U	0.00	U	-35.5	pCi/L	0.160		(0% - 100%)	LAG1	07/12/05 17:09
		TPU: +/-54.1		+/-57.0						
QC1200875116 LCS										
Tritium	3070			3390	pCi/L		110	(75%-125%)		07/12/05 21:11
		TPU:		+/-115						
QC1200875113 MB										
Tritium			U	67.1	pCi/L					07/12/05 15:08
		TPU:		+/-56.5						
QC1200875115 139349008 MS										
Tritium	3070 U	0.00		3030	pCi/L		99	(75%-125%)		07/12/05 19:10
		TPU: +/-54.1		+/-111						
Batch 437627										
QC1200875999 139405002 DUP										
Technetium-99	U	3.42	U	3.21	pCi/L	0.0418		(0% - 100%)	EGD1	07/05/05 14:38
		TPU: +/-1.21		+/-1.21						
		Yield: 104		104						
QC1200876001 LCS										
Technetium-99	118			109	pCi/L		92	(75%-125%)		07/05/05 16:10
		TPU:		+/-1.86						
		Yield:		95.1						
QC1200875998 MB										
Technetium-99			U	0.263	pCi/L					07/05/05 13:51
		TPU:		+/-0.483						
		Yield:		99.3						
QC1200876000 139405002 MS										
Technetium-99	296 U	3.42		269	pCi/L		90	(75%-125%)		07/05/05 15:25
		TPU: +/-1.21		+/-4.54						

QC Summary

Workorder: **139405**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Liquid Scintillation										
Batch 437627										
	Yield:	104		105						
Rad Ra-226										
Batch 437415										
QC1200875442 138851001 DUP										
Radium-226		3.04		2.09	pCi/L	0.689		(0% - 100%)	AB1	07/01/05 14:25
	TPU:	+/-0.374		+/-0.314						
QC1200875444 LCS										
Radium-226	12.1			12.0	pCi/L		100	(75%-125%)		07/01/05 15:00
	TPU:			+/-0.608						
QC1200875441 MB										
Radium-226			U	0.270	pCi/L					07/01/05 14:25
	TPU:			+/-0.0999						
QC1200875443 138851001 MS										
Radium-226	24.1	3.04		22.6	pCi/L		81	(75%-125%)		
	TPU:	+/-0.374		+/-1.13						

Notes:
The Qualifiers in this report are defined as follows:

- ** Indicates the analyte is a surrogate compound.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- P The response between the confirmation and the primary columns is >40% Different.
- R Sample results are rejected.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
- h Sample preparation or preservation holding time exceeded.

QC Summary

Workorder: **139405**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 3

Batch# 437633 Product: AM Date: 7/8/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/2000

Primary Review Performed By: 7/8/05

Secondary Review Performed By: 7/6/05

7/8 – 7/13

ESHL

Am/Cm Que Sheet

28-JUN-05

Batch #: 437633 **Analyst:** BJB1 **Minimum DueDate:** 08-JUL-05 **Comments:**

Tracer(s): Am243/Cm244 **Tracer Code:** 445-962-BB **Expiration Date:** 9/10/05 **Vol:** 0.1ml

LCS Isotope(s): ~~Am241~~/Cm244 **LCS Code(s):** 0533-E / NA **Expiration Date:** 9/10/05 / NA **Vol(s):** 0.1ml / NA

Spike Isotope(s): Am241/Cm244 **Spike Code(s):** NA / NA **Expiration Date:** NA / NA **Vol(s):** NA / NA

Prep Date: 6/28/05 **Initials:** BJB **Pipet ID:** 4497313 **Balance ID:** 360402L6 **Witness:** SCP 6/28/05

Sample I	Client Description	Type	Hazard Code	Min	Matrix	Client	Collection Date	Label #	Aliquot (g/ml/ f)	Am/Cm D	Ash Weight (g)
139136001	GF05060GSCP01	SAMPLE		.05 pCi/L	GROUND WATESHL001		21-JUN-05	1	0.800	74	
139136002	GF05060GSMH01	SAMPLE		.05 pCi/L	GROUND WATESHL001		20-JUN-05	2	0.800	75	
139136003	GF05060GSMH90	SAMPLE		.05 pCi/L	GROUND WATESHL001		20-JUN-05	3	0.800	76	
139136004	GF05060GSLK01	SAMPLE		.05 pCi/L	GROUND WATESHL001		20-JUN-05	4	0.800	77	
139136017	GU05060GSCP01	SAMPLE		.05 pCi/L	GROUND WATESHL001		21-JUN-05	5	0.800	78	
139136018	GU05060GSMH01	SAMPLE		.05 pCi/L	GROUND WATESHL001		20-JUN-05	6	0.800	79	
139136019	GU05060GSMH90	SAMPLE		.05 pCi/L	GROUND WATESHL001		20-JUN-05	7	0.800	81	
139136020	GU05060GSLK01	SAMPLE		.05 pCi/L	GROUND WATESHL001		20-JUN-05	8	0.800	82	
139349001	GF05060PCCR01	SAMPLE		.05 pCi/L	SURFACE WATESHL001		23-JUN-05	9	0.800	83	
139349008	GU05060PCCR01	SAMPLE		.05 pCi/L	SURFACE WATESHL001		23-JUN-05	10	0.800	84	
139349009	GU05060PCCR01-FB	SAMPLE		.05 pCi/L	SURFACE WATESHL001		23-JUN-05	11	0.800	85	
139405001	GF05050GMC401	SAMPLE		.05 pCi/L	GROUND WATESHL001		23-JUN-05	12	0.800	86	
139405002	GU05050GMC401	SAMPLE		.05 pCi/L	GROUND WATESHL001		23-JUN-05	13	0.800	87	
139406001	GF0506G32R101	SAMPLE		.05 pCi/L	GROUND WATESHL001		22-JUN-05	14	0.800	88	
139406005	GU0506G32R101	SAMPLE		.05 pCi/L	GROUND WATESHL001		22-JUN-05	15	0.800	103	
139409001	GF05060PEGR01	SAMPLE		.05 pCi/L	SURFACE WATESHL001		24-JUN-05	16	0.800	104	
139409005	GU05060PEGR01	SAMPLE		.05 pCi/L	SURFACE WATESHL001		24-JUN-05	17	0.800	105	
1200876016	MB for batch 437633	MB		.05 pCi/L	SURFACE WATQC ACCOUNT		6/28/05	18	0.800	106	
1200876017	GU05060PCCR01(139349008DUP)	DUP		.05 pCi/L	SURFACE WATQC ACCOUNT		23-JUN-05	19	0.800	109	
1200876018	LCS for batch 437633	LCS		.05 pCi/L	SURFACE WATQC ACCOUNT		6/28/05	20	0.800	111	

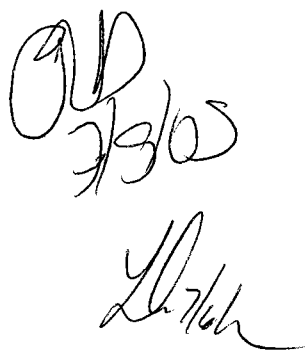
BJB 6/28/05

Solid Sample Dissolution by: **LEACH or DIGESTION** (Circle One) BJB 6/28/05

Data Reviewed By: 7/3/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200876017	DUP	Americium-241	0.800 L	0.000925	0.00298	0.030	-.006625	pCi/L	NO
1200876018	LCS	Americium-241	1.00 L	2.76	0.140	0.022	-.0053	pCi/L	NO
1200876016	MB	Americium-241	1.00 L	-0.0053	0.00216	0.024	-.0053	pCi/L	NO
139136001	GF05060GSCP01	Americium-241	0.800 L	-0.0261	0.00894	0.038	-.006625	pCi/L	NO
139136002	GF05060GSMH01	Americium-241	0.800 L	0.00531	0.0114	0.031	-.006625	pCi/L	NO
139136003	GF05060GSMH90	Americium-241	0.800 L	-0.00208	0.0118	0.036	-.006625	pCi/L	NO
139136004	GF05060GSLK01	Americium-241	0.800 L	-0.00235	0.00473	0.034	-.006625	pCi/L	NO
139136017	GU05060GSCP01	Americium-241	0.800 L	-0.00156	0.00689	0.040	-.006625	pCi/L	NO
139136018	GU05060GSMH01	Americium-241	0.800 L	-0.00454	0.0102	0.033	-.006625	pCi/L	NO
139136019	GU05060GSMH90	Americium-241	0.800 L	-0.00415	0.0127	0.039	-.006625	pCi/L	NO
139136020	GU05060GSLK01	Americium-241	0.800 L	-0.00966	0.0145	0.048	-.006625	pCi/L	NO
139349001	GF05060PCCR01	Americium-241	0.800 L	0.00641	0.00946	0.034	-.006625	pCi/L	NO
139349008	GU05060PCCR01	Americium-241	0.800 L	0.00572	0.0115	0.049	-.006625	pCi/L	NO
139349009	GU05060PCCR01 -FB	Americium-241	0.800 L	-0.00481	0.00492	0.029	-.006625	pCi/L	NO
139405001	GF05050GMC401	Americium-241	0.800 L	0.000599	0.00602	0.038	-.006625	pCi/L	NO
139405002	GU05050GMC401	Americium-241	0.800 L	0.00742	0.00558	0.032	-.006625	pCi/L	NO
139406001	GF0506G32R101	Americium-241	0.800 L	-0.00886	0.00636	0.035	-.006625	pCi/L	NO
139406005	GU0506G32R101	Americium-241	0.800 L	-0.00293	0.00469	0.029	-.006625	pCi/L	NO
139409001	GF05060PEGR01	Americium-241	0.800 L	-0.000602	0.00262	0.032	-.006625	pCi/L	NO
139409005	GU05060PEGR01	Americium-241	0.800 L	-0.00875	0.00368	0.034	-.006625	pCi/L	NO



Calculation of MDA using a Blank Population. **Sg** **Updated:** 7/29/2004

Batch: 437633 **Am-241** 2.81724

sample	isotope	eff (dec)	yield (dec)	volume (Liter)	abundance (dec)	count time (min)	**MDA (pCi/Liter)**
139136001	Am-241	0.269522	0.86029	0.8	0.9994	1000	**0.038**
139136002	Am-241	0.330261	0.85774	0.8	0.9994	1000	**0.031**
139136003	Am-241	0.312148	0.79341	0.8	0.9994	1000	**0.036**
139136004	Am-241	0.32526	0.81045	0.8	0.9994	1000	**0.034**
139136017	Am-241	0.348292	0.63835	0.8	0.9994	1000	**0.040**
139136018	Am-241	0.346894	0.77838	0.8	0.9994	1000	**0.033**
139136019	Am-241	0.283704	0.80258	0.8	0.9994	1000	**0.039**
139136020	Am-241	0.290389	0.63837	0.8	0.9994	1000	**0.048**
139349001	Am-241	0.311587	0.83262	0.8	0.9994	1000	**0.034**
139349008	Am-241	0.266815	0.68415	0.8	0.9994	1000	**0.049**
139349009	Am-241	0.348845	0.89064	0.8	0.9994	1000	**0.029**
139405001	Am-241	0.257713	0.9078	0.8	0.9994	1000	**0.038**
139405002	Am-241	0.309092	0.90877	0.8	0.9994	1000	**0.032**
139406001	Am-241	0.269392	0.93427	0.8	0.9994	1000	**0.035**
139406005	Am-241	0.34562	0.88128	0.8	0.9994	1000	**0.029**
139409001	Am-241	0.336675	0.83343	0.8	0.9994	1000	**0.032**
139409005	Am-241	0.327627	0.81051	0.8	0.9994	1000	**0.034**
1200876016	Am-241	0.34401	0.85898	1	0.9994	1000	**0.024**
1200876017	Am-241	0.335793	0.88887	0.8	0.9994	1000	**0.030**
1200870628	Am-241	0.343919	0.95886	1	0.9994	1000	**0.022**

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437633
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S0139349008_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :29953
AVERAGE %EFFICIENCY :26.6815
% YIELD : 68.415

COUNT DATE: 2-JUL-2005 21:23:32
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B084.CNF;519
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407460
MSD PCI/L : 3.407460
LCS PCI/L : 3.407460
TRACER DPM : 6.7255
EFF FILE : W084.CNF;174
CAL DATE: 1-JUL-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

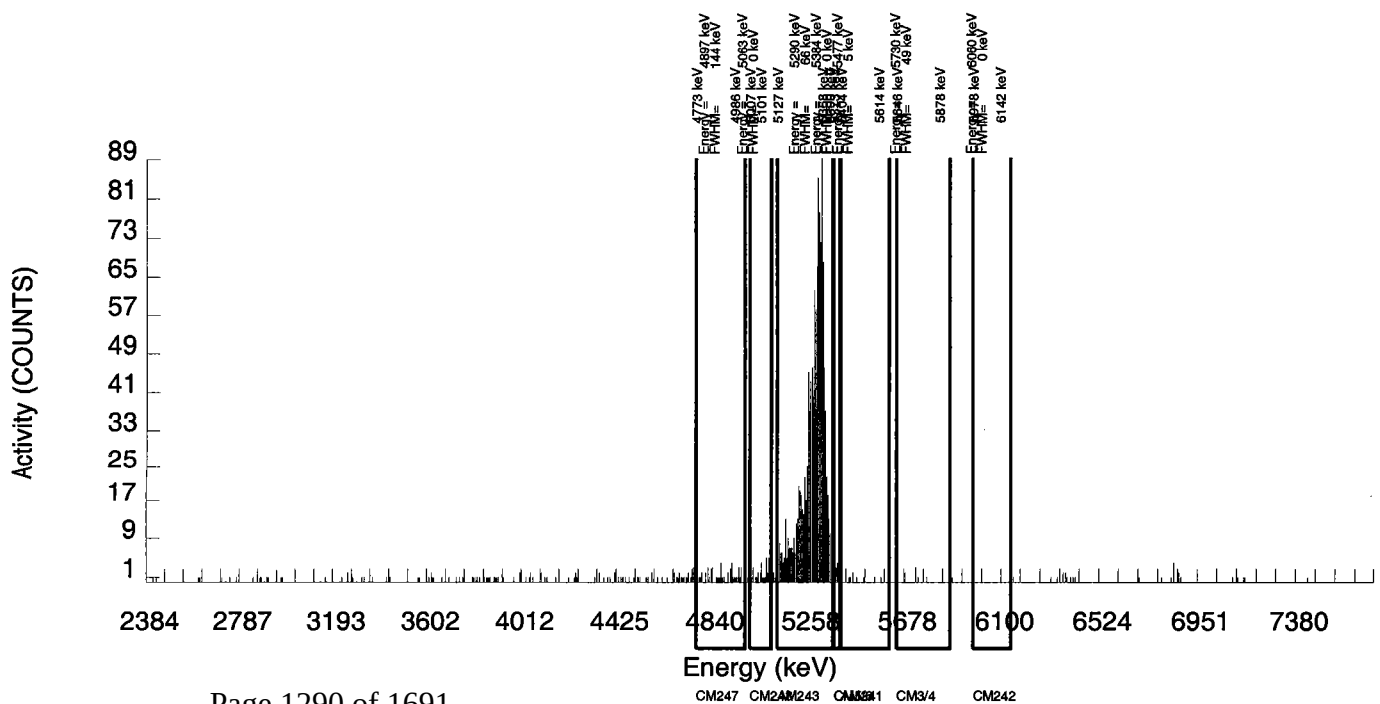
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-2.000	9.000	100.0000	-6.18E-03	1.24E-02	2.16E-02	5.14E-02	1.24E-02
CM-5/6	5386.000	26.000	0.000	86.09000	9.32E-02	1.88E-02	0.00E+00	9.71E-03	1.83E-02
AM-241	5479.150	1.853	6.000	99.94000	5.72E-03	1.15E-02	1.76E-02	4.35E-02	1.15E-02
CM-242	6102.000	-1.000	1.000	100.0000	-3.22E-03	3.23E-03	7.50E-03	2.37E-02	3.22E-03
AM243	5270.000	1225.000	3.000	99.78000	3.79E+00	2.17E-01	1.25E-02	3.33E-02	1.08E-01
CM-247	4946.000	41.000	2.000	79.30000	1.59E-01	2.73E-02	1.28E-02	3.61E-02	2.61E-02
CM-248	5078.600	36.000	1.000	91.00000	1.22E-01	2.18E-02	7.89E-03	2.49E-02	2.09E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437633
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S0139405001_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :29278
AVERAGE %EFFICIENCY :25.7713
% YIELD : 90.780

COUNT DATE: 2-JUL-2005 21:23:32
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B086.CNF;519
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407460
MSD PCI/L : 3.407460
LCS PCI/L : 3.407460
TRACER DPM : 6.7255
EFF FILE : W086.CNF;154
CAL DATE: 1-JUL-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

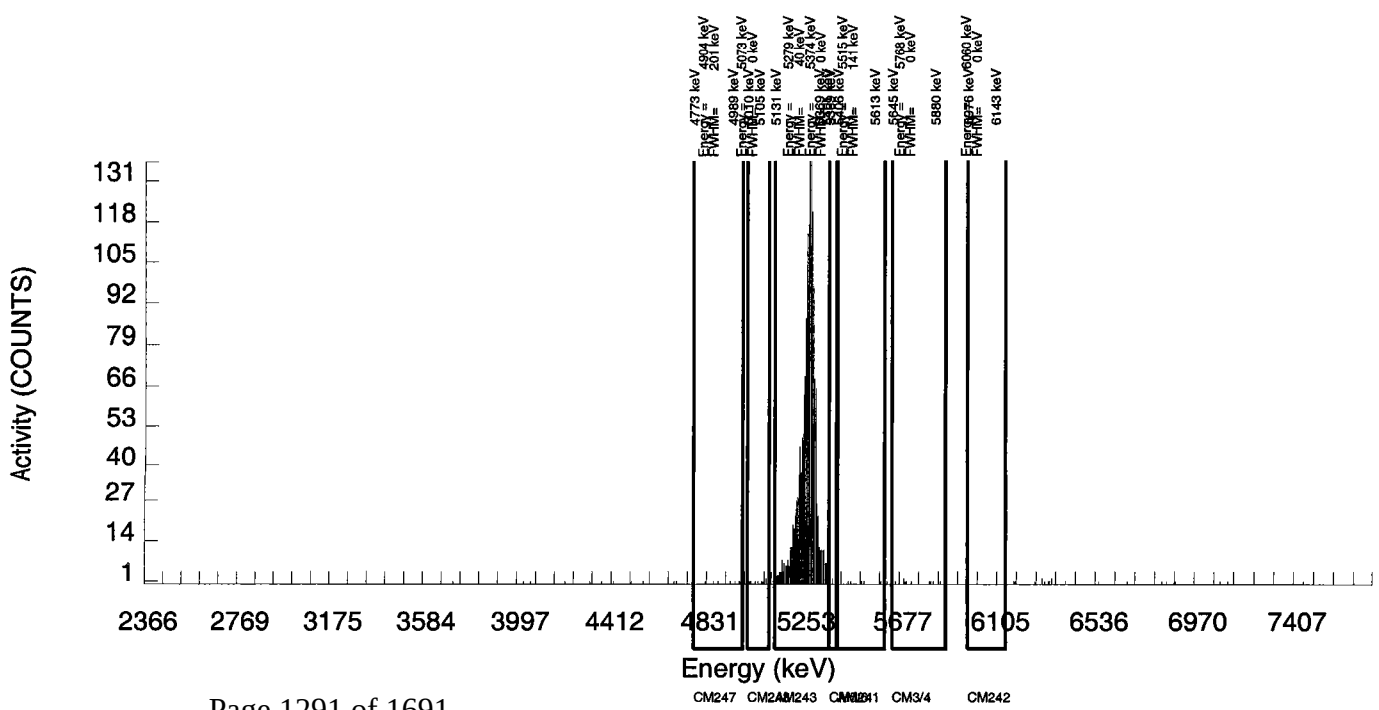
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	5.000	8.000	100.0000	1.20E-02	1.11E-02	1.59E-02	3.82E-02	1.10E-02
CM-5/6	5386.000	16.000	1.000	86.09000	4.47E-02	1.21E-02	6.50E-03	2.06E-02	1.19E-02
AM-241	5479.150	0.249	3.000	99.94000	5.99E-04	6.02E-03	9.70E-03	2.59E-02	6.02E-03
CM-242	6102.000	-1.000	1.000	100.0000	-2.51E-03	2.52E-03	5.85E-03	1.85E-02	2.51E-03
AM243	5270.000	1570.000	3.000	99.78000	3.79E+00	2.05E-01	9.72E-03	2.60E-02	9.58E-02
CM-247	4946.000	7.000	1.000	79.30000	2.12E-02	9.16E-03	7.06E-03	2.23E-02	9.10E-03
CM-248	5078.600	13.000	0.000	91.00000	3.44E-02	9.68E-03	0.00E+00	7.17E-03	9.54E-03

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437633
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S0139405002_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :34430
AVERAGE %EFFICIENCY :30.9092
% YIELD : 90.877

COUNT DATE: 2-JUL-2005 21:23:32
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B087.CNF;524
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407460
MSD PCI/L : 3.407460
LCS PCI/L : 3.407460
TRACER DPM : 6.7255
EFF FILE : W087.CNF;153
CAL DATE: 1-JUL-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

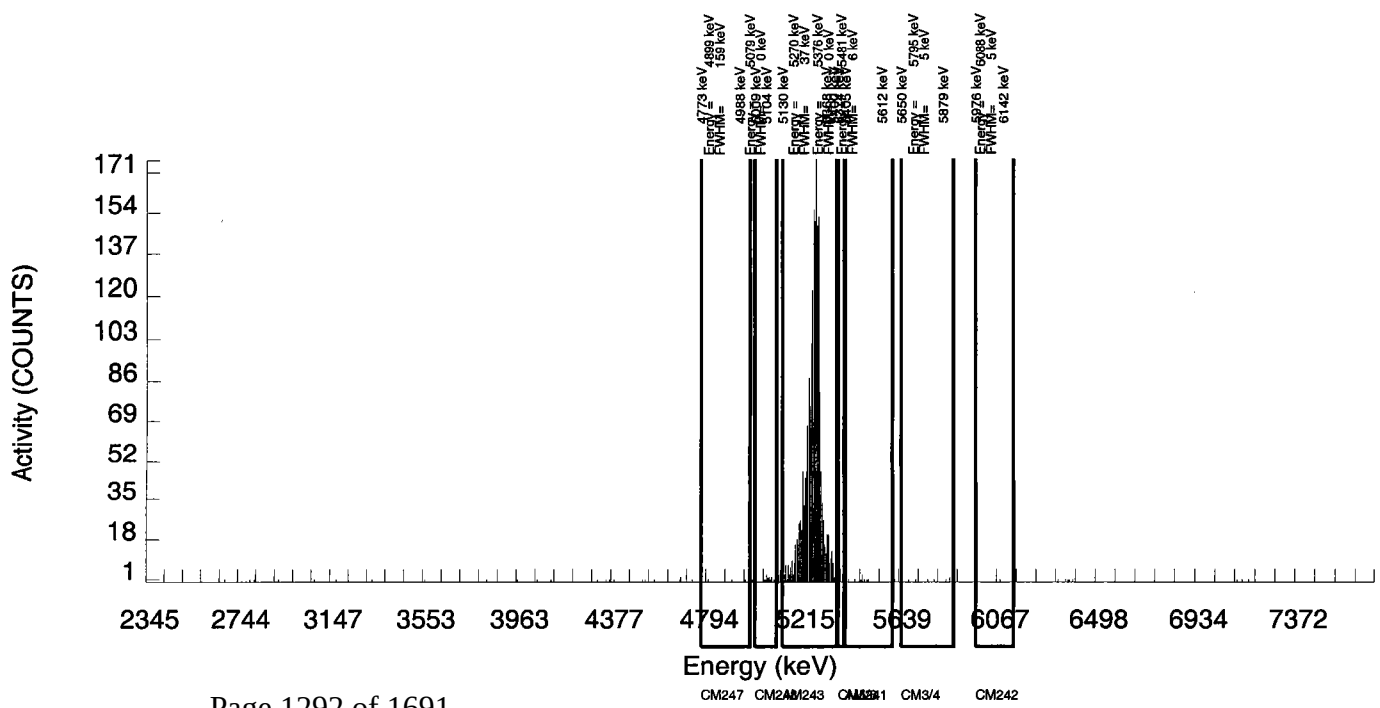
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	4.000	3.000	100.0000	8.03E-03	6.36E-03	8.09E-03	2.16E-02	6.35E-03
CM-5/6	5386.000	2.000	0.000	86.09000	4.66E-03	3.30E-03	0.00E+00	6.31E-03	3.29E-03
AM-241	5479.150	3.697	2.000	99.94000	7.42E-03	5.58E-03	6.60E-03	1.86E-02	5.56E-03
CM-242	6102.000	0.000	1.000	100.0000	0.00E+00	2.96E-03	4.87E-03	1.54E-02	2.96E-03
AM243	5270.000	1885.000	2.000	99.78000	3.79E+00	1.97E-01	6.61E-03	1.87E-02	8.73E-02
CM-247	4946.000	1.000	2.000	79.30000	2.53E-03	5.65E-03	8.32E-03	2.35E-02	5.65E-03
CM-248	5078.600	15.000	0.000	91.00000	3.30E-02	8.67E-03	0.00E+00	5.97E-03	8.53E-03

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437633
SAMPLE DATE : 28-JUN-2005 00:00:00

SAMPLE ID : S1200876016_AM
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :45382
AVERAGE %EFFICIENCY :34.4010
% YIELD : 85.898

COUNT DATE: 2-JUL-2005 21:23:41
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B106.CNF;170
BKG DATE: 26-JUN-2005

MS PCI/L : 2.725905
MSD PCI/L : 2.725905
LCS PCI/L : 2.725905
TRACER DPM : 6.7255
EFF FILE : W106.CNF;46
CAL DATE: 1-JUL-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

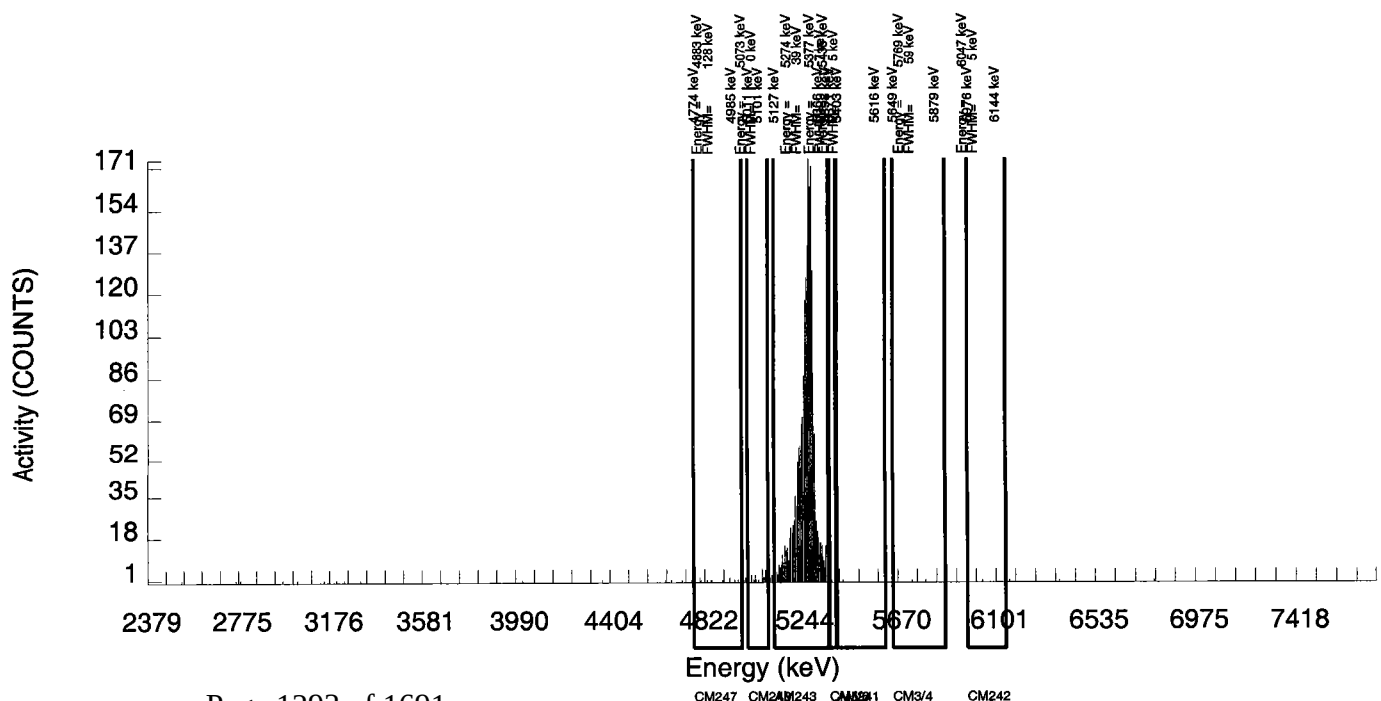
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	1.000	1.000	100.0000	1.53E-03	2.64E-03	3.55E-03	1.12E-02	2.64E-03
CM-5/6	5386.000	11.000	0.000	86.09000	1.95E-02	5.94E-03	0.00E+00	4.80E-03	5.87E-03
AM-241	5479.150	-3.475	1.000	99.94000	-5.30E-03	2.16E-03	3.55E-03	1.12E-02	2.16E-03
CM-242	6102.000	0.000	1.000	100.0000	9.29E-11	2.20E-03	3.63E-03	1.15E-02	2.20E-03
AM243	5270.000	1983.000	1.000	99.78000	3.03E+00	1.56E-01	3.55E-03	1.12E-02	6.81E-02
CM-247	4946.000	10.000	2.000	79.30000	1.92E-02	7.25E-03	6.32E-03	1.79E-02	7.19E-03
CM-248	5078.600	20.000	1.000	91.00000	3.35E-02	8.01E-03	3.90E-03	1.23E-02	7.86E-03

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 7/5/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437633
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S1200876017_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :31693
AVERAGE %EFFICIENCY :33.5793
% YIELD : 88.887

COUNT DATE: 2-JUL-2005 21:23:44
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B109.CNF;170
BKG DATE: 26-JUN-2005

MS PCI/L : 3.407460
MSD PCI/L : 3.407460
LCS PCI/L : 3.407460
TRACER DPM : 6.7255
EFF FILE : W109.CNF;46
CAL DATE: 1-JUL-2005

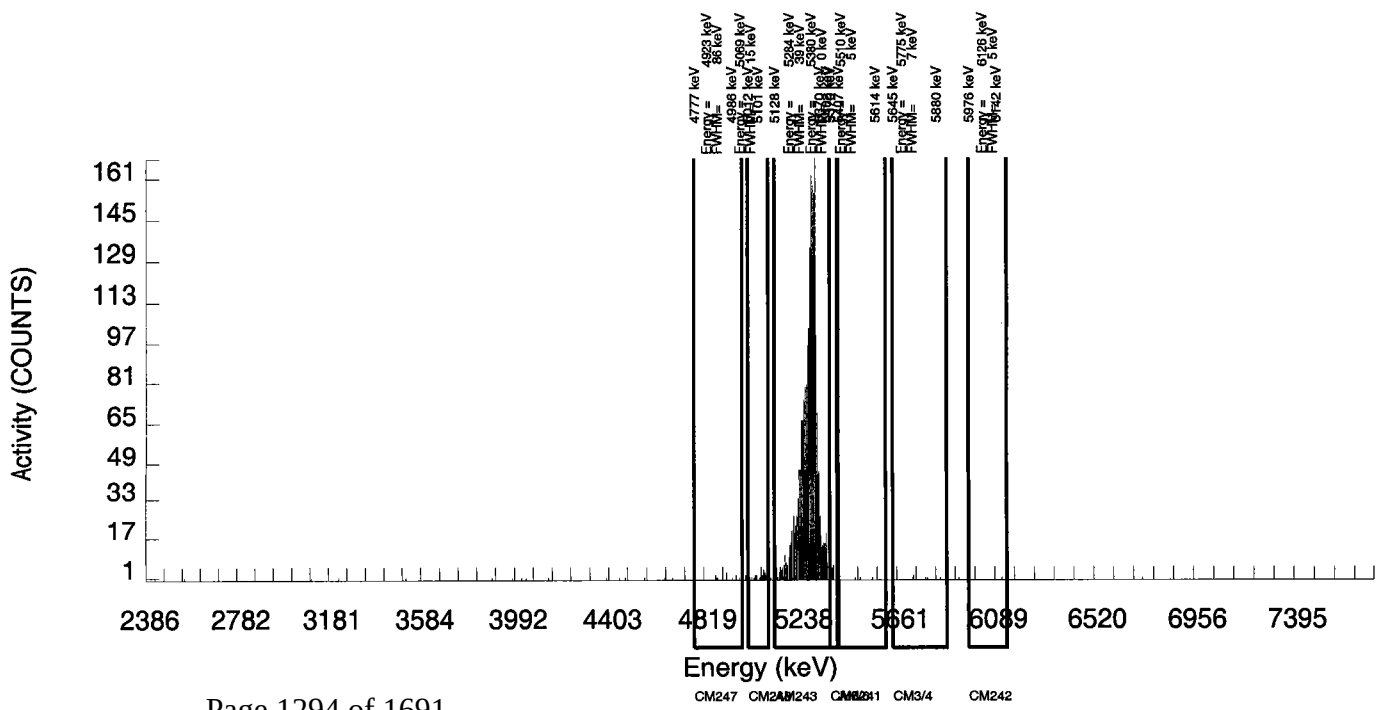
MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	4.000	3.000	100.0000	7.55E-03	5.98E-03	7.61E-03	2.03E-02	5.97E-03
CM-5/6	5386.000	36.000	0.000	86.09000	7.89E-02	1.36E-02	0.00E+00	5.94E-03	1.31E-02
AM-241	5479.150	0.490	1.000	99.94000	9.25E-04	2.98E-03	4.39E-03	1.39E-02	2.98E-03
CM-242	6102.000	0.000	1.000	100.0000	0.00E+00	2.79E-03	4.58E-03	1.45E-02	2.79E-03
AM243	5270.000	2003.000	3.000	99.78000	3.79E+00	1.94E-01	7.62E-03	2.04E-02	8.47E-02
CM-247	4946.000	9.000	2.000	79.30000	2.14E-02	8.63E-03	7.83E-03	2.21E-02	8.58E-03
CM-248	5078.600	20.000	1.000	91.00000	4.15E-02	9.91E-03	4.82E-03	1.53E-02	9.72E-03

REVIEWED BY: NOTE: Corrections made to AM-241 DATE : 7/5/05

RER= 0.166



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437633	SAMPLE ID : S1200876018_AM
SAMPLE DATE : 28-JUN-2005 00:00:00	SAMPLE QTY: 1.000 L
DETECTOR NUMBER :30448	COUNT DATE: 4-JUL-2005 15:02:40
AVERAGE %EFFICIENCY :34.3919	ELAPSED LIVE TIME(SEC): 59999.99
% YIELD : 95.886	ANALYST :BJB1

MS : 0533-E	MS PCI/L : 2.725905	MS ISOTOPE : AM-241
MSD : 0533-E	MSD PCI/L : 2.725905	MSD ISOTOPE: AM-241
LCS : 0533-E	LCS PCI/L : 2.725905	LCS ISOTOPE: AM-241
TRACER : 445-96-2-BB	TRACER DPM : 6.7255	TRACER ISOTOPE: AM243
BKG FILE: B111.CNF;172	EFF FILE : W111.CNF;49	LIB FILE : ENV_ALPHA_AM.N
BKG DATE: 3-JUL-2005	CAL DATE: 1-JUL-2005	

NUCLIDE ACTIVITY SUMMARY

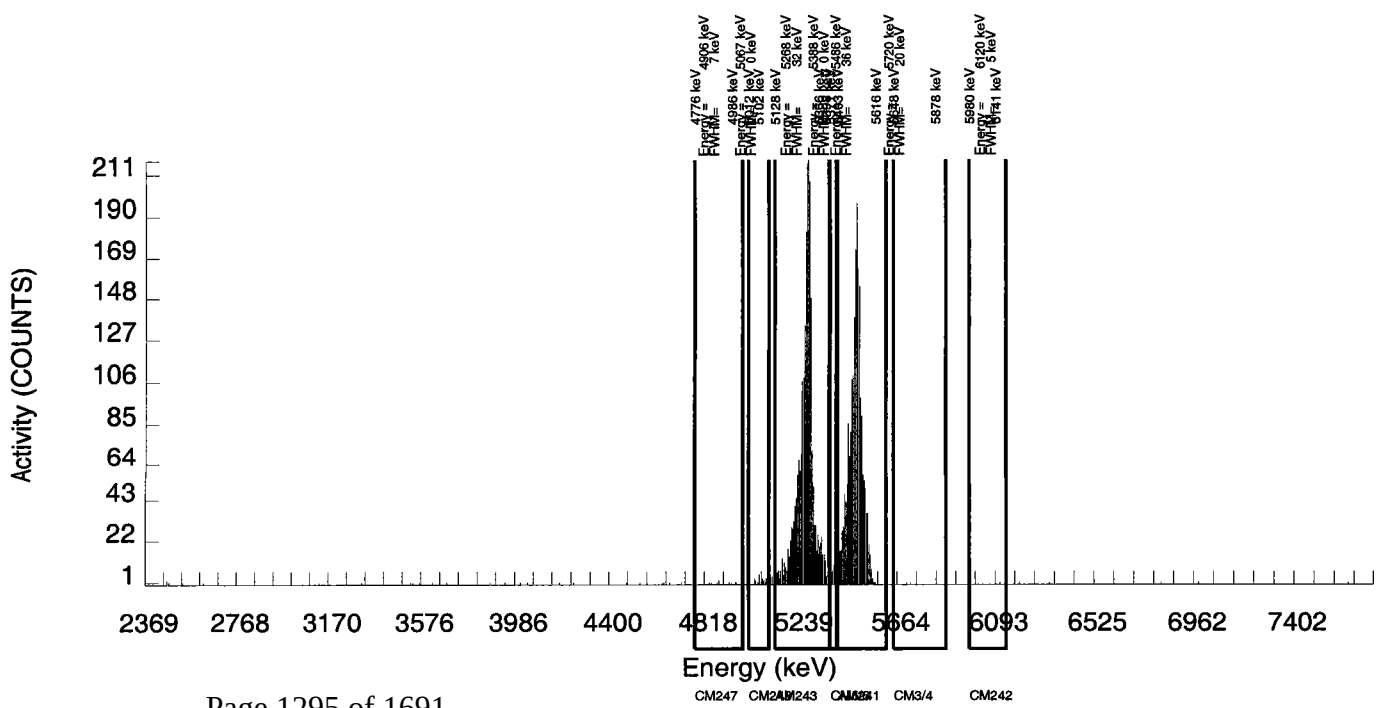
NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	1.000	1.000	100.0000	1.37E-03	2.37E-03	3.18E-03	1.01E-02	2.37E-03
CM-5/6	5386.000	47.000	0.000	86.09000	7.46E-02	1.14E-02	0.00E+00	4.30E-03	1.09E-02
AM-241	5479.150	2017.122	3.000	99.94000	2.76E+00	1.40E-01	5.51E-03	1.47E-02	6.15E-02
CM-242	6102.000	-1.000	2.000	100.0000	-1.41E-03	2.44E-03	4.63E-03	1.31E-02	2.44E-03
AM243	5270.000	2213.000	2.000	99.78000	3.03E+00	1.52E-01	4.50E-03	1.27E-02	6.45E-02
CM-247	4946.000	7.000	2.000	79.30000	1.21E-02	5.74E-03	5.67E-03	1.60E-02	5.71E-03
CM-248	5078.600	28.000	1.000	91.00000	4.20E-02	8.44E-03	3.49E-03	1.10E-02	8.22E-03

REVIEWED BY: NOTE: Corrections made to AM-241 DATE :

7/8/05

7/6/05

LCS = 2.76 / 2.73 = 101%



Radiochemistry Batch Checklist, Rev 3

Batch# 4137640 Product: Pu Date: 7/5/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.		✓	NCR 217205
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .		✓	NCR 217205
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	✓		NCR 217205

General Engineering Laboratories

10/31/2000

Primary Review Performed By: [signature] 7/5/05

Secondary Review Performed By: [signature] 7/11/05

ESH L 7/8 - 7/15

Plutonium Que Sheet

29-JUN-05

Batch #: 437640 **Analyst:** BJB1 **Minimum DueDate:** 08-JUL-05

Tracer Isotope(s): ~~Pu-242~~/Pu-236 **Tracer Code:** 0799-A **Expiration Date:** 6/19/06 **Vol:** 0.1ml

LCS Isotope(s): Pu-239/Pu-238 **LCS Code:** 0338-N **Expiration Date:** 4/26/06 **Vol:** 0.1ml

Spike Isotope(s): Pu-239/Pu-238 **Spike Code:** NA **Expiration Date:** NA **Vol:** NA

Prep Date: 6/20/05 **Initials:** BJB **Pipet ID:** 4497313 **Balance ID:** 36040216 **Witness:** JCP 6/28/05

Sample ID	Client	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label #	Aliquot (g (f) f)	Pu Det #	Ash Weight (g)
139136001	GF05060GSCP01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	21-JUN-05	1	0.800	94	
139136002	GF05060GSMH01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	20-JUN-05	2	0.800	111	
139136003	GF05060GSMH90	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	20-JUN-05	3	0.800	59	
139136004	GF05060GSLK01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	20-JUN-05	4	0.800	82	
139136017	GU05060GSCP01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	21-JUN-05	5	0.800	83	
139136018	GU05060GSMH01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	20-JUN-05	6	0.800	84	
139136019	GU05060GSMH90	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	20-JUN-05	7	0.800	85	
139136020	GU05060GSLK01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	20-JUN-05	8	0.800	86	
139349001	GF05060PCCR01	SAMPLE		.05 pCi/L	SURFACE WAT	ESHL001	23-JUN-05	9	0.800	87	
139349008	GU05060PCCR01	SAMPLE		.05 pCi/L	SURFACE WAT	ESHL001	23-JUN-05	10	0.800	88	
139349009	GU05060PCCR01-FB	SAMPLE		.05 pCi/L	SURFACE WAT	ESHL001	23-JUN-05	11	0.800	89	
139405001	GF05050GMC401	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	23-JUN-05	12	0.800	90	
139405002	GU05050GMC401	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	23-JUN-05	13	0.800	92	
139406001	GF0506G32R101	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	22-JUN-05	14	0.800	94	
139406005	GU0506G32R101	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	22-JUN-05	15	0.800	96	
139409001	GF05060PEGR01	SAMPLE		.05 pCi/L	SURFACE WAT	ESHL001	24-JUN-05	16	0.800	97	
* 139409005	GU05060PEGR01	SAMPLE		.05 pCi/L	SURFACE WAT	ESHL001	24-JUN-05	17	0.800	99	
1200876023	MB for batch 437640	MB		.05 pCi/L	SURFACE WAT	QC ACCOUNT	6/28/05	18	1.0 ~~0.800~~	100	
1200876024	GU05060PCCR01(139349008DUP)	DUP		.05 pCi/L	SURFACE WAT	QC ACCOUNT	23-JUN-05	19	0.800	101	
1200876025	LCS for batch 437640	LCS		.05 pCi/L	SURFACE WAT	QC ACCOUNT	6/28/05	20	~~0.800~~ 1.0	102	

BJB 6/29/05

* Sample removed from batch 6/28/05

Solid Sample Dissolution by: ~~LEACH~~ or DIGESTION (Circle One) BJB 6/29/05

Data Reviewed By: 7/11/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200876024	DUP	Plutonium-238	0.800 L	-0.00268	0.006	0.042	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00268	0.00805	0.043	.0018875	pCi/L	YES
1200876025	LCS	Plutonium-238	1.00 L	0.0204	0.00724	0.026	.00301	pCi/L	NO
		Plutonium-239/240	1.00 L	2.52	0.110	0.027	.00151	pCi/L	NO
1200876023	MB	Plutonium-238	1.00 L	0.00301	0.00214	0.023	.00301	pCi/L	YES
		Plutonium-239/240	1.00 L	0.00151	0.00261	0.024	.00151	pCi/L	YES
139136001	GF05060GSCP01	Plutonium-238	0.800 L	-0.0082	0.00459	0.032	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0123	0.00505	0.033	.0018875	pCi/L	NO
139136002	GF05060GSMH01	Plutonium-238	0.800 L	0.00	0.00461	0.029	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00	0.00266	0.030	.0018875	pCi/L	YES
139136003	GF05060GSMH90	Plutonium-238	0.800 L	-0.00901	0.0186	0.035	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.0113	0.0117	0.036	.0018875	pCi/L	YES
139136004	GF05060GSLK01	Plutonium-238	0.800 L	0.00734	0.0107	0.038	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00979	0.00848	0.039	.0018875	pCi/L	NO
139136017	GU05060GSCP01	Plutonium-238	0.800 L	0.00	0.00824	0.032	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00	0.00412	0.033	.0018875	pCi/L	YES
139136018	GU05060GSMH01	Plutonium-238	0.800 L	0.00223	0.00803	0.035	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0156	0.00591	0.036	.0018875	pCi/L	NO
139136019	GU05060GSMH90	Plutonium-238	0.800 L	-0.00523	0.00302	0.027	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00	0.00427	0.028	.0018875	pCi/L	YES
139136020	GU05060GSLK01	Plutonium-238	0.800 L	0.0068	0.006	0.035	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00906	0.00454	0.036	.0018875	pCi/L	YES
139349001	GF05060PCCR01	Plutonium-238	0.800 L	0.00	0.004	0.031	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.004	0.004	0.032	.0018875	pCi/L	YES
139349008	GU05060PCCR01	Plutonium-238	0.800 L	0.00254	0.00914	0.039	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0127	0.00762	0.041	.0018875	pCi/L	NO
139349009	GU05060PCCR01 -FB	Plutonium-238	0.800 L	0.00257	0.00257	0.040	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00514	0.00515	0.041	.0018875	pCi/L	YES
139405001	GF05050GMC401	Plutonium-238	0.800 L	0.00762	0.00468	0.030	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	4.540E-10	0.00467	0.031	.0018875	pCi/L	YES
139405002	GU05050GMC401	Plutonium-238	0.800 L	0.00718	0.00536	0.037	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00478	0.00339	0.038	.0018875	pCi/L	YES
139406001	GF0506G32R101	Plutonium-238	0.800 L	0.00276	0.00478	0.043	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00552	0.00552	0.044	.0018875	pCi/L	YES
139406005	GU0506G32R101	Plutonium-238	0.800 L	-0.00389	0.0129	0.060	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0194	0.0117	0.062	.0018875	pCi/L	NO
139409001	GF05060PEGR01	Plutonium-238	0.800 L	0.00194	0.00512	0.030	.0037625	pCi/L	YES
		Plutonium-239/240	0.800 L	-4.620E-10	0.00387	0.031	.0018875	pCi/L	YES

7/11/05

7/11/05

Calculation of MDA using a Blank Population.

Batch: 437640

	Sq	
Pu-239	2.864	
Pu-238	2.755	

Updated:

sample	isotope	eff (dec)	yield (dec)	volume (Liter)	abundance (dec)	count time (min)	MDA (pCi/Liter)
139136001	Pu-239	0.313176	0.87794	0.8	0.999	1000	**0.033**
	Pu-238	0.313176	0.87794	0.8	0.999	1000	**0.032**
139136002	Pu-239	0.343919	0.87043	0.8	0.999	1000	**0.030**
	Pu-238	0.343919	0.87043	0.8	0.999	1000	**0.029**
139136003	Pu-239	0.291881	0.85714	0.8	0.999	1000	**0.036**
	Pu-238	0.291881	0.85714	0.8	0.999	1000	**0.035**
139136004	Pu-239	0.290389	0.79315	0.8	0.999	1000	**0.039**
	Pu-238	0.290389	0.79315	0.8	0.999	1000	**0.038**
139136017	Pu-239	0.311587	0.87858	0.8	0.999	1000	**0.033**
	Pu-238	0.311587	0.87858	0.8	0.999	1000	**0.032**
139136018	Pu-239	0.266815	0.94932	0.8	0.999	1000	**0.036**
	Pu-238	0.266815	0.94932	0.8	0.999	1000	**0.035**
139136019	Pu-239	0.348845	0.92708	0.8	0.999	1000	**0.028**
	Pu-238	0.348845	0.92708	0.8	0.999	1000	**0.027**
139136020	Pu-239	0.257713	0.96567	0.8	0.999	1000	**0.036**
	Pu-238	0.257713	0.96567	0.8	0.999	1000	**0.035**
139349001	Pu-239	0.309092	0.9116	0.8	0.999	1000	**0.032**
	Pu-238	0.309092	0.9116	0.8	0.999	1000	**0.031**
139349008	Pu-239	0.269392	0.82521	0.8	0.999	1000	**0.041**
	Pu-238	0.269392	0.82521	0.8	0.999	1000	**0.039**
139349009	Pu-239	0.295213	0.7429	0.8	0.999	1000	**0.041**
	Pu-238	0.295213	0.7429	0.8	0.999	1000	**0.040**
139405001	Pu-239	0.325388	0.90897	0.8	0.999	1000	**0.031**
	Pu-238	0.325388	0.90897	0.8	0.999	1000	**0.030**
139405002	Pu-239	0.332395	0.70875	0.8	0.999	1000	**0.038**
	Pu-238	0.332395	0.70875	0.8	0.999	1000	**0.037**
139406001	Pu-239	0.313176	0.65253	0.8	0.999	1000	**0.044**
	Pu-238	0.313176	0.65253	0.8	0.999	1000	**0.043**

2/7/12 02/11/12

139406005	Pu-239	0.328215	0.44146	0.8	0.999	1000	**0.062**
	Pu-238	0.328215	0.44146	0.8	0.999	1000	**0.060**
139409001	Pu-239	0.345961	0.84143	0.8	0.999	1000	**0.031**
	Pu-238	0.345961	0.84143	0.8	0.999	1000	**0.030**
1200876023	Pu-239	0.348568	0.85882	1	0.999	1000	**0.024**
	Pu-238	0.348568	0.85882	1	0.999	1000	**0.023**
1200876024	Pu-239	0.351812	0.59686	0.8	0.999	1000	**0.043**
	Pu-238	0.351812	0.59686	0.8	0.999	1000	**0.042**
1200876025	Pu-239	0.364596	0.72853	1	0.999	1000	**0.027**
	Pu-238	0.364596	0.72853	1	0.999	1000	**0.026**

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437640
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S0139349008_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :30434
AVERAGE %EFFICIENCY :26.9392
% YIELD : 82.521

COUNT DATE: 4-JUL-2005 15:02:30
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0799-A
BKG FILE: B088.CNF;515
BKG DATE: 3-JUL-2005

MS PCI/L : 2.987608
MSD PCI/L : 2.987608
LCS PCI/L : 2.987608
TRACER DPM : 8.3579
EFF FILE : W088.CNF;151
CAL DATE: 1-JUL-2005

MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

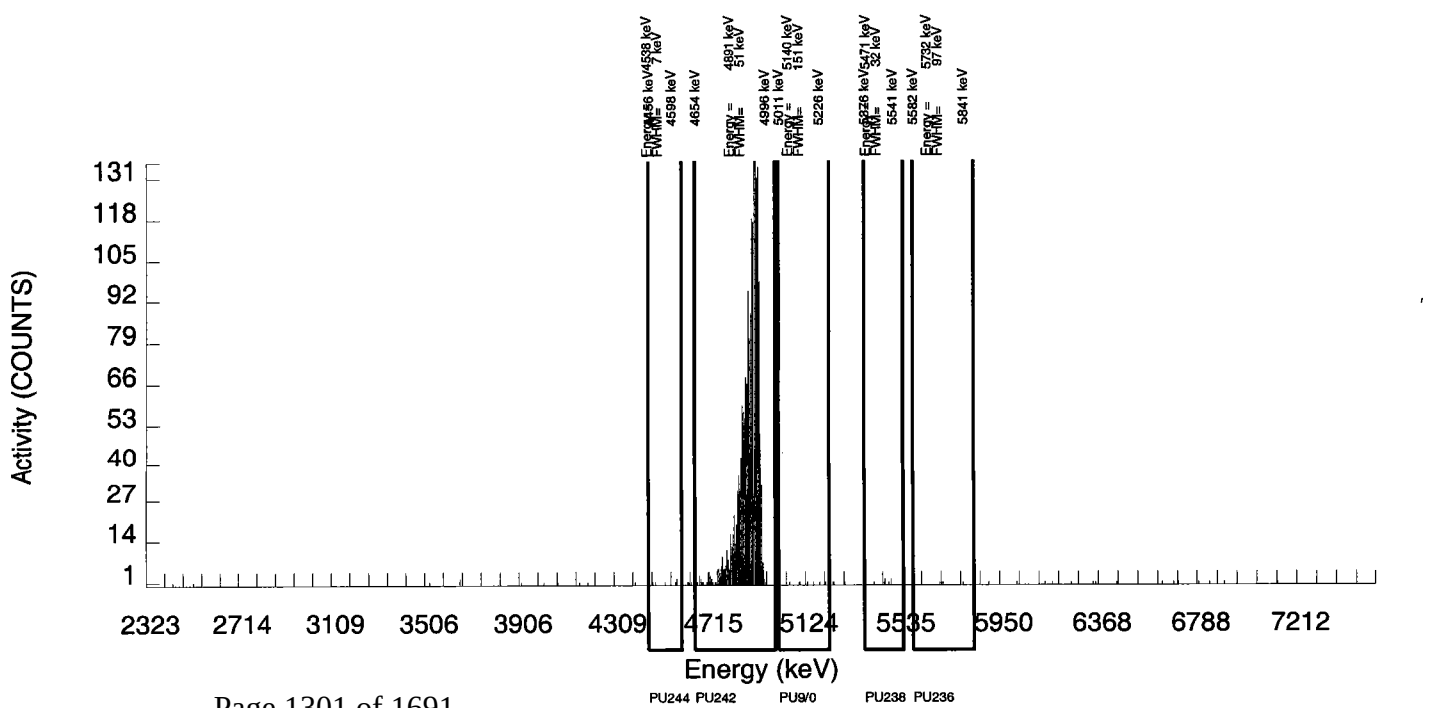
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	5.000	2.000	99.90000	1.27E-02	7.62E-03	8.34E-03	2.35E-02	7.61E-03
PU-236	5749.000	-3.000	7.000	100.0000	-7.66E-03	8.47E-03	1.57E-02	3.83E-02	8.47E-03
PU-238	5499.000	1.000	6.000	99.90000	2.54E-03	9.14E-03	1.45E-02	3.58E-02	9.14E-03
PU242	4890.000	1858.000	1.000	100.0000	4.71E+00	2.04E-01	5.89E-03	1.86E-02	1.09E-01
PU-244	4589.000	8.000	0.000	99.90000	2.03E-02	7.21E-03	0.00E+00	6.87E-03	7.17E-03

REVIEWED BY:

DATE :

7/11/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437640
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S0139405001_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :38159
AVERAGE %EFFICIENCY :32.5388
% YIELD : 90.897

COUNT DATE: 4-JUL-2005 15:02:32
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0799-A
BKG FILE: B090.CNF;216
BKG DATE: 3-JUL-2005

MS PCI/L : 2.987608
MSD PCI/L : 2.987608
LCS PCI/L : 2.987608
TRACER DPM : 8.3579
EFF FILE : W090.CNF;70
CAL DATE: 1-JUL-2005

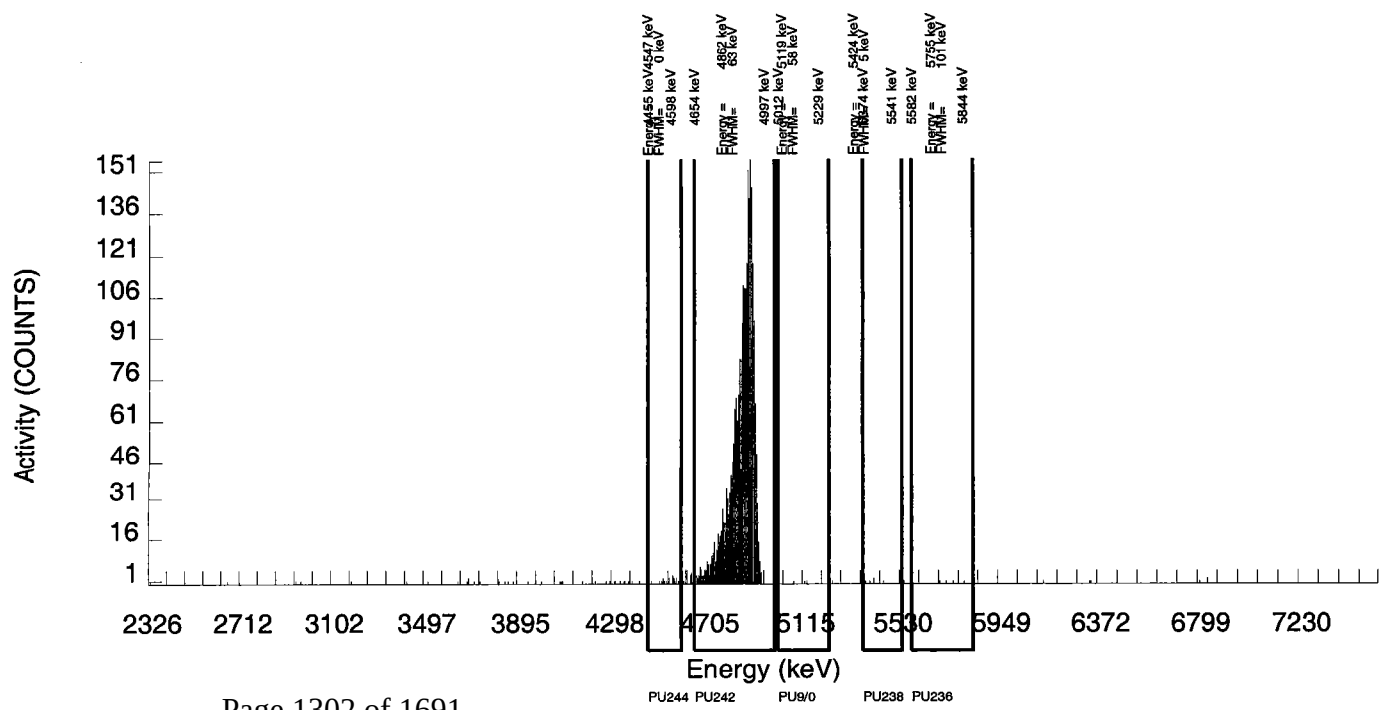
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	0.000	3.000	99.90000	4.54E-10	4.67E-03	7.68E-03	2.05E-02	4.67E-03
PU-236	5749.000	0.000	4.000	100.0000	4.58E-10	5.43E-03	8.93E-03	2.30E-02	5.43E-03
PU-238	5499.000	4.000	1.000	99.90000	7.62E-03	4.68E-03	4.43E-03	1.40E-02	4.67E-03
PU242	4890.000	2472.000	7.000	100.0000	4.71E+00	2.39E-01	1.17E-02	2.86E-02	9.49E-02
PU-244	4589.000	22.000	0.000	99.90000	4.19E-02	9.15E-03	0.00E+00	5.16E-03	8.94E-03

REVIEWED BY:

DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437640
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S0139405002_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33204
AVERAGE %EFFICIENCY :33.2395
% YIELD : 70.875

COUNT DATE: 4-JUL-2005 15:02:32
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0799-A
BKG FILE: B092.CNF;211
BKG DATE: 3-JUL-2005

MS PCI/L : 2.987608
MSD PCI/L : 2.987608
LCS PCI/L : 2.987608
TRACER DPM : 8.3579
EFF FILE : W092.CNF;67
CAL DATE: 1-JUL-2005

MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

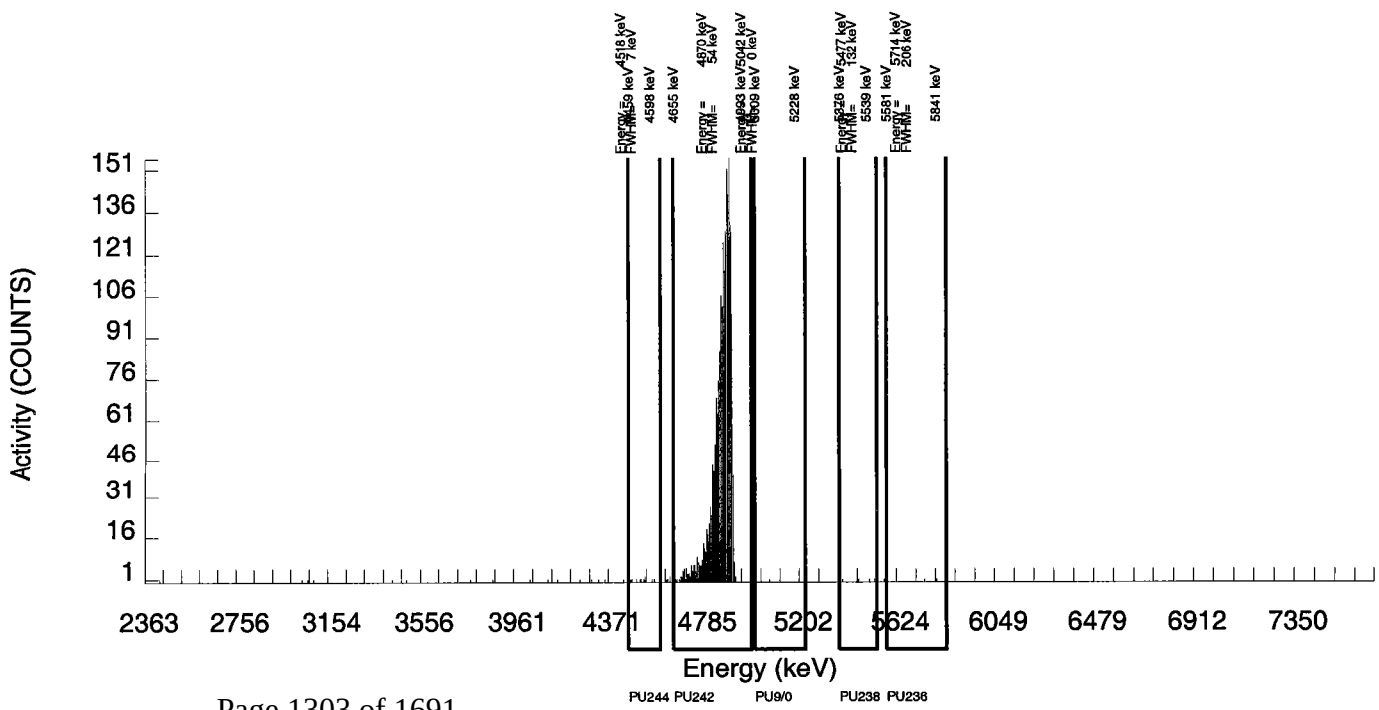
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	2.000	0.000	99.90000	4.78E-03	3.39E-03	0.00E+00	6.48E-03	3.38E-03
PU-236	5749.000	1.000	2.000	100.0000	2.41E-03	5.39E-03	7.93E-03	2.24E-02	5.39E-03
PU-238	5499.000	3.000	1.000	99.90000	7.18E-03	5.36E-03	5.57E-03	1.76E-02	5.35E-03
PU242	4890.000	1969.000	2.000	100.0000	4.71E+00	2.48E-01	7.86E-03	2.22E-02	1.06E-01
PU-244	4589.000	11.000	0.000	99.90000	2.63E-02	8.03E-03	0.00E+00	6.48E-03	7.93E-03

REVIEWED BY:

DATE : 7/11/05

7/11/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437640
SAMPLE DATE : 28-JUN-2005 00:00:00

SAMPLE ID : S1200876023_PU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :42468
AVERAGE %EFFICIENCY :34.8568
% YIELD : 85.882

COUNT DATE: 4-JUL-2005 15:02:35
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0799-A
BKG FILE: B100.CNF;170
BKG DATE: 3-JUL-2005

MS PCI/L : 2.390082
MSD PCI/L : 2.390082
LCS PCI/L : 2.390082
TRACER DPM : 8.3579
EFF FILE : W100.CNF;54
CAL DATE: 1-JUL-2005

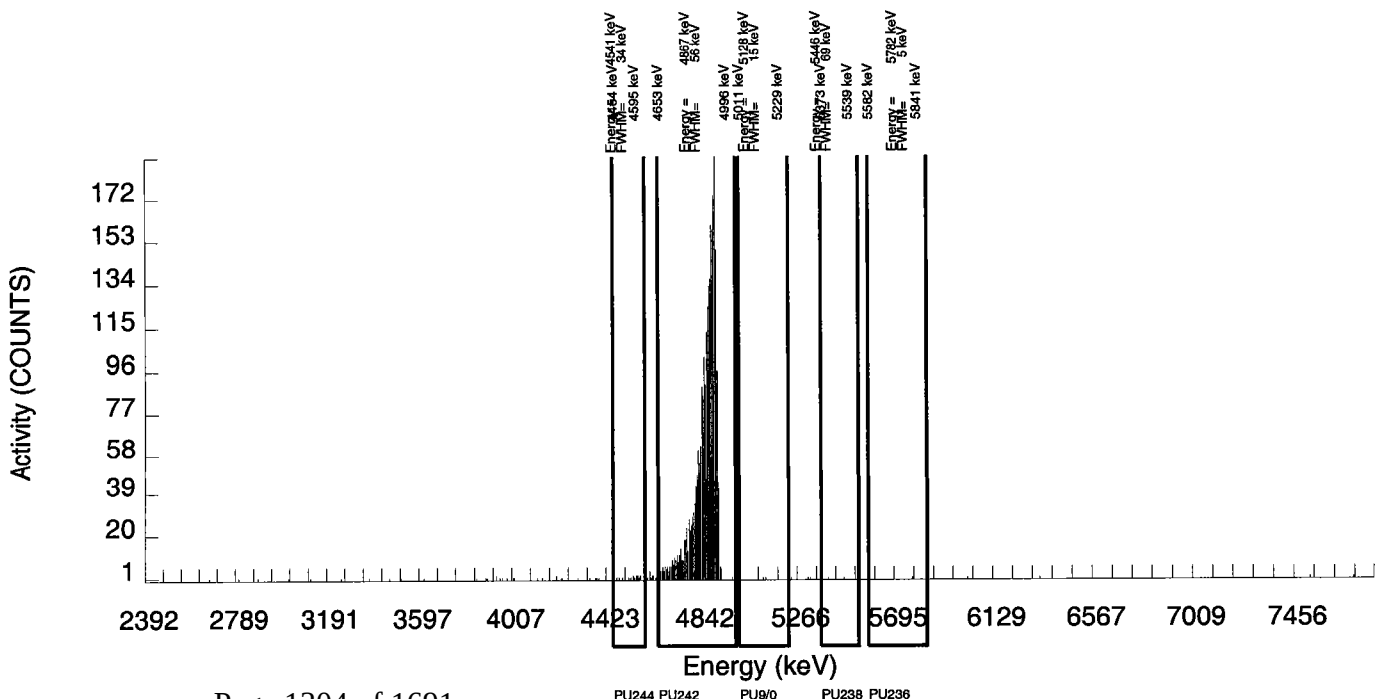
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	1.000	1.000	99.90000	1.51E-03	2.61E-03	3.50E-03	1.11E-02	2.61E-03
PU-236	5749.000	0.000	1.000	100.0000	-1.80E-10	2.14E-03	3.52E-03	1.11E-02	2.14E-03
PU-238	5499.000	2.000	0.000	99.90000	3.01E-03	2.14E-03	0.00E+00	4.08E-03	2.13E-03
PU242	4890.000	2502.000	3.000	100.0000	3.76E+00	1.91E-01	6.06E-03	1.62E-02	7.54E-02
PU-244	4589.000	18.000	0.000	99.90000	2.71E-02	6.51E-03	0.00E+00	4.08E-03	6.39E-03

REVIEWED BY: DATE :

7/11/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437640
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S1200876024_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :31696
AVERAGE %EFFICIENCY :35.1812
% YIELD : 59.686

COUNT DATE: 4-JUL-2005 15:02:38
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0799-A
BKG FILE: B101.CNF;172
BKG DATE: 3-JUL-2005

MS PCI/L : 2.987608
MSD PCI/L : 2.987608
LCS PCI/L : 2.987608
TRACER DPM : 8.3579
EFF FILE : W101.CNF;50
CAL DATE: 1-JUL-2005

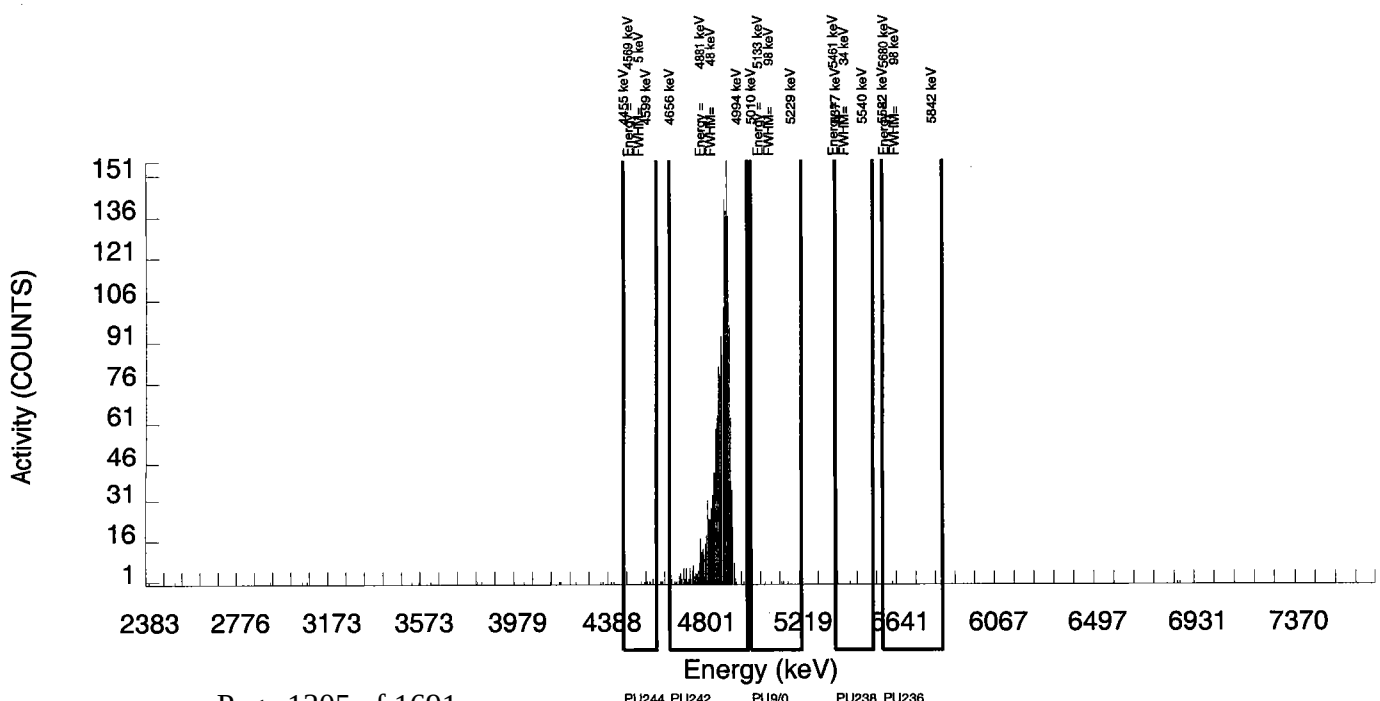
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	1.000	4.000	99.90000	2.68E-03	8.05E-03	1.25E-02	3.22E-02	8.05E-03
PU-236	5749.000	-1.000	3.000	100.0000	-2.70E-03	6.04E-03	1.09E-02	2.91E-02	6.04E-03
PU-238	5499.000	-1.000 ✓	3.000	99.90000	-2.68E-03	6.00E-03	1.08E-02	2.89E-02	6.00E-03
PU242	4890.000	1755.000	0.000	100.0000	4.71E+00	2.06E-01	0.00E+00	7.27E-03	1.12E-01
PU-244	4589.000	5.000	2.000	99.90000	1.34E-02	8.07E-03	8.83E-03	2.49E-02	8.05E-03

REVIEWED BY: DATE :

Pu% : 0.320
Pu238 : 0.172



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437640
SAMPLE DATE : 28-JUN-2005 00:00:00

SAMPLE ID : S1200876025_PU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :30438
AVERAGE %EFFICIENCY :36.4596
% YIELD : 72.853

COUNT DATE: 4-JUL-2005 15:02:38
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0338-N
MSD : 0338-N
LCS : 0338-N
TRACER : 0799-A
BKG FILE: B102.CNF;172
BKG DATE: 3-JUL-2005

MS PCI/L : 2.390082
MSD PCI/L : 2.390082
LCS PCI/L : 2.390082
TRACER DPM : 8.3579
EFF FILE : W102.CNF;48
CAL DATE: 1-JUL-2005

MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

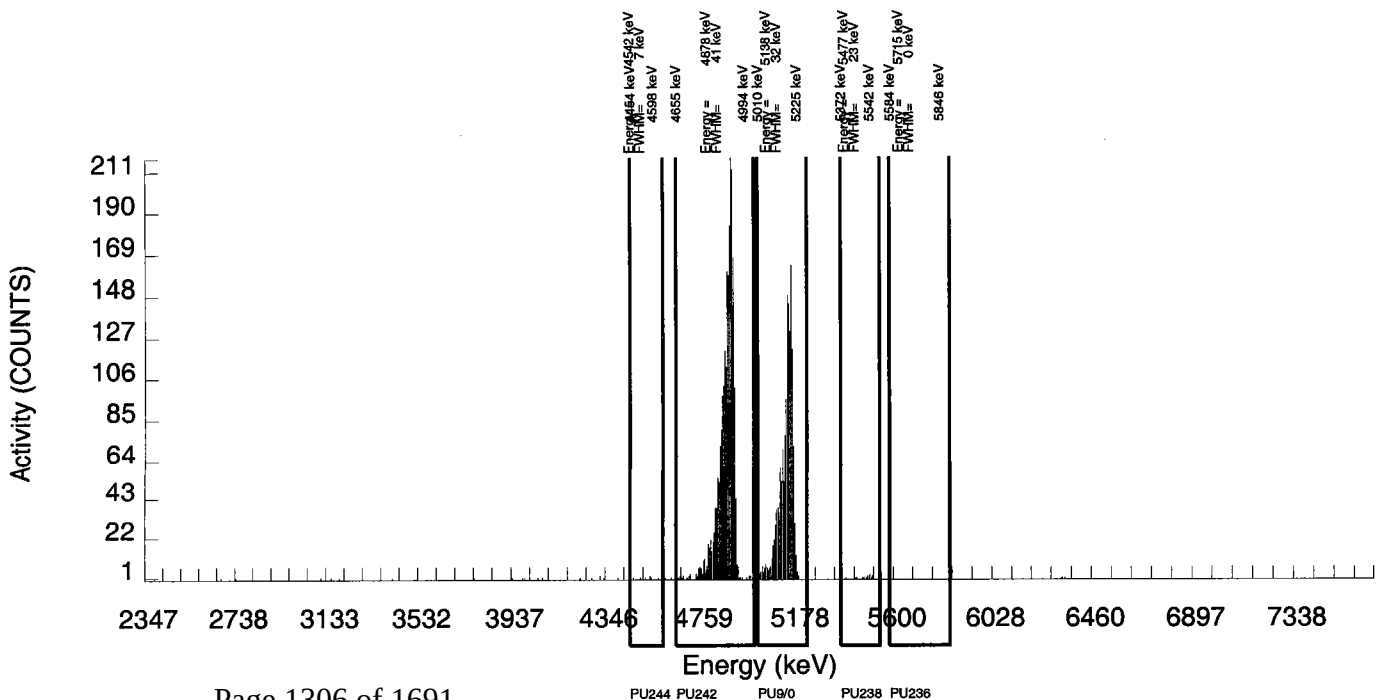
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	1484.000	3.000	99.90000	2.52E+00	1.10E-01	6.84E-03	1.83E-02	6.55E-02
PU-236	5749.000	-5.000	5.000	100.0000	-8.52E-03	3.82E-03	8.86E-03	2.23E-02	3.81E-03
PU-238	5499.000	12.000	3.000	99.90000	2.04E-02	7.24E-03	6.84E-03	1.83E-02	7.20E-03
PU242	4890.000	2220.000	1.000	100.0000	3.76E+00	1.54E-01	3.95E-03	1.25E-02	7.99E-02
PU-244	4589.000	7.000	1.000	99.90000	1.19E-02	5.11E-03	3.95E-03	1.25E-02	5.09E-03

REVIEWED BY: DATE :

7/11/05

LCS: $\frac{2.52}{2.39} = 105\%$



Radiochemistry Batch Checklist, Rev 3

Batch# 437642 Product: U Date: 7/5/06

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/2000

Primary Review Performed By: 7/5/06

Secondary Review Performed By: 7/6/05

ESHL 7/7/06

Uranium Que Sheet

27-JUN-05

Batch #: 437642 Analyst: BJB1 Minimum DueDate: 08-JUL-05

Tracer Isotope: U-232/U-236 Tracer Code: 0688-E Expiration Date: 5/4/06 Vol: 0.1ml

LCS Isotope: U-238 LCS Code: 0389-B Expiration Date: 7/27/05 Vol: 0.1ml

Spike Isotope: U-238 Spike Code: NA Expiration Date: NA Vol: NA

Prep Date: 6/28/05 Initials: BJB Pipet ID: # 4497313 BJB 6/28/05 Balance ID: 3604/0216 Witness: BJB 6/28/05

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label #	Aliquot (g / ml / f)	U Det #	Ash Weight (g)
139136001	GF05060GSCP01	SAMPLE		.1 pCi/L	GROUND WATIESHL001		21-JUN-05	1	0.800	14	
139136002	GF05060GSMH01	SAMPLE		.1 pCi/L	GROUND WATIESHL001		20-JUN-05	2	0.800	16	
139136003	GF05060GSMH90	SAMPLE		.1 pCi/L	GROUND WATIESHL001		20-JUN-05	3	0.800	17	
139136004	GF05060GSLK01	SAMPLE		.1 pCi/L	GROUND WATIESHL001		20-JUN-05	4	0.800	18	
139136017	GU05060GSCP01	SAMPLE		.1 pCi/L	GROUND WATIESHL001		21-JUN-05	5	0.800	20	
139136018	GU05060GSMH01	SAMPLE		.1 pCi/L	GROUND WATIESHL001		20-JUN-05	6	0.800	23	
139136019	GU05060GSMH90	SAMPLE		.1 pCi/L	GROUND WATIESHL001		20-JUN-05	7	0.800	24	
139136020	GU05060GSLK01	SAMPLE		.1 pCi/L	GROUND WATIESHL001		20-JUN-05	8	0.800	39	
139349001	GF05060PCCR01	SAMPLE		.1 pCi/L	SURFACE WATESHL001		23-JUN-05	9	0.800	42	
139349008	GU05060PCCR01	SAMPLE		.1 pCi/L	SURFACE WATESHL001		23-JUN-05	10	0.800	43	
139349009	GU05060PCCR01-FB	SAMPLE		.1 pCi/L	SURFACE WATESHL001		23-JUN-05	11	0.800	44	
139405001	GF05050GMC401	SAMPLE		.1 pCi/L	GROUND WATIESHL001		23-JUN-05	12	0.800	45	
139405002	GU05050GMC401	SAMPLE		.1 pCi/L	GROUND WATIESHL001		23-JUN-05	13	0.800	46	
139406001	GF0506G32R101	SAMPLE		.1 pCi/L	GROUND WATIESHL001		22-JUN-05	14	0.800	47	
139406005	GU0506G32R101	SAMPLE		.1 pCi/L	GROUND WATIESHL001		22-JUN-05	15	0.800	48	
139409001	GF05060PEGR01	SAMPLE		.1 pCi/L	SURFACE WATESHL001		24-JUN-05	16	0.800	65	
139409005	GU05060PEGR01	SAMPLE		.1 pCi/L	SURFACE WATESHL001		24-JUN-05	17	0.800	68	
1200876028	MB for batch 437642	MB		.1 pCi/L	SURFACE WATQC ACCOUNT			18	1.0	69	
1200876029	GU05060PCCR01(139349008DUP)	DUP		.1 pCi/L	SURFACE WATQC ACCOUNT		23-JUN-05	19	0.800	10	
1200876030	LCS for batch 437642	LCS		.1 pCi/L	SURFACE WATQC ACCOUNT			20	1.0	83	

7/6/05

Solid Sample Dissolution by: LEACH or DIGESTION (BJB 6/28/05)

Circle One

Data Reviewed By: 7/6/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200876029	DUP	Uranium-233/234	0.800 L	0.539	0.0436	0.080	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0499	0.0127	0.049	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.332	0.0328	0.056	.01025	pCi/L	NO
1200876030	LCS	Uranium-233/234	1.00 L	2.51	0.113	0.048	.0082	pCi/L	NO
		Uranium-235/236	1.00 L	0.190	0.0194	0.029	.00823	pCi/L	NO
		Uranium-238	1.00 L	2.73	0.121	0.034	.0082	pCi/L	NO
1200876028	MB	Uranium-233/234	1.00 L	0.0082	0.00636	0.050	.0082	pCi/L	YES
		Uranium-235/236	1.00 L	0.00823	0.00436	0.031	.00823	pCi/L	YES
		Uranium-238	1.00 L	0.0082	0.00493	0.035	.0082	pCi/L	YES
139136001	GF05060GSCP01	Uranium-233/234	0.800 L	0.050	0.013	0.073	.01025	pCi/L	YES
		Uranium-235/236	0.800 L	0.0215	0.0099	0.044	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.00952	0.00754	0.051	.01025	pCi/L	YES
139136002	GF05060GSMH01	Uranium-233/234	0.800 L	0.0446	0.0133	0.076	.01025	pCi/L	YES
		Uranium-235/236	0.800 L	0.00249	0.00556	0.046	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.0124	0.00895	0.053	.01025	pCi/L	YES
139136003	GF05060GSMH90	Uranium-233/234	0.800 L	0.0311	0.0105	0.073	.01025	pCi/L	YES
		Uranium-235/236	0.800 L	0.012	0.00637	0.044	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.0263	0.00993	0.052	.01025	pCi/L	YES
139136004	GF05060GSLK01	Uranium-233/234	0.800 L	0.0557	0.0165	0.085	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	-6.660E-10	0.00559	0.052	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.0502	0.0121	0.060	.01025	pCi/L	YES
139136017	GU05060GSCP01	Uranium-233/234	0.800 L	0.0395	0.011	0.080	.01025	pCi/L	YES
		Uranium-235/236	0.800 L	0.00528	0.00374	0.049	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.0237	0.00957	0.057	.01025	pCi/L	YES
139136018	GU05060GSMH01	Uranium-233/234	0.800 L	0.0775	0.0174	0.087	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0144	0.0126	0.053	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.0201	0.0132	0.062	.01025	pCi/L	YES
139136019	GU05060GSMH90	Uranium-233/234	0.800 L	0.0602	0.0149	0.076	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0126	0.00909	0.047	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.0201	0.0107	0.054	.01025	pCi/L	YES
139136020	GU05060GSLK01	Uranium-233/234	0.800 L	0.191	0.0224	0.069	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0411	0.0103	0.042	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.109	0.0166	0.049	.01025	pCi/L	NO
139349001	GF05060PCCR01	Uranium-233/234	0.800 L	0.508	0.0431	0.082	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0458	0.016	0.050	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.293	0.0309	0.058	.01025	pCi/L	NO
139349008	GU05060PCCR01	Uranium-233/234	0.800 L	0.533	0.0446	0.083	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0409	0.0132	0.051	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.334	0.0337	0.059	.01025	pCi/L	NO
139349009	GU05060PCCR01-FB	Uranium-233/234	0.800 L	0.526	0.0415	0.074	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0146	0.00911	0.045	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.366	0.0334	0.052	.01025	pCi/L	NO

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
139405001	GF05050GMC401	Uranium-233/234	0.800 L	0.115	0.0187	0.073	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0359	0.00996	0.044	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.0453	0.0111	0.051	.01025	pCi/L	YES
139405002	GU05050GMC401	Uranium-233/234	0.800 L	0.0957	0.0174	0.069	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0183	0.00972	0.042	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.041	0.0126	0.049	.01025	pCi/L	YES
139406001	GF0506G32R101	Uranium-233/234	0.800 L	0.582	0.0468	0.085	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0612	0.0133	0.052	.0102875	pCi/L	NO
		Uranium-238	0.800 L	0.269	0.0297	0.060	.01025	pCi/L	NO
139406005	GU0506G32R101	Uranium-233/234	0.800 L	0.530	0.0388	0.063	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0458	0.0112	0.039	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.260	0.0252	0.045	.01025	pCi/L	NO
139409001	GF05060PEGR01	Uranium-233/234	0.800 L	0.271	0.0317	0.091	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0358	0.012	0.055	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.173	0.0245	0.064	.01025	pCi/L	NO
139409005	GU05060PEGR01	Uranium-233/234	0.800 L	0.388	0.0386	0.089	.01025	pCi/L	NO
		Uranium-235/236	0.800 L	0.0498	0.0122	0.054	.0102875	pCi/L	YES
		Uranium-238	0.800 L	0.266	0.0302	0.063	.01025	pCi/L	NO

Calculation of MDA using a Blank Population.

Batch: 437642

Sg	
U-234	5.97252
U-235	3.41012
U-238	4.05878

Updated:

sample	isotope	eff (dec)	yield (dec)	volume (gram)	abundance (dec)	count time (min)	MDA (pCi/Liter)
139136001	U-234	0.317793	0.74447	0.8	1	1000	**0.073**
	U-235	0.317793	0.74447	0.8	0.997	1000	**0.044**
	U-238	0.317793	0.74447	0.8	1	1000	**0.051**
139136002	U-234	0.333499	0.68134	0.8	1	1000	**0.076**
	U-235	0.333499	0.68134	0.8	0.997	1000	**0.046**
	U-238	0.333499	0.68134	0.8	1	1000	**0.053**
139136003	U-234	0.295994	0.7962	0.8	1	1000	**0.073**
	U-235	0.295994	0.7962	0.8	0.997	1000	**0.044**
	U-238	0.295994	0.7962	0.8	1	1000	**0.052**
139136004	U-234	0.286458	0.70545	0.8	1	1000	**0.085**
	U-235	0.286458	0.70545	0.8	0.997	1000	**0.052**
	U-238	0.286458	0.70545	0.8	1	1000	**0.060**
139136017	U-234	0.331807	0.64444	0.8	1	1000	**0.080**
	U-235	0.331807	0.64444	0.8	0.997	1000	**0.049**
	U-238	0.331807	0.64444	0.8	1	1000	**0.057**
139136018	U-234	0.278695	0.70403	0.8	1	1000	**0.087**
	U-235	0.278695	0.70403	0.8	0.997	1000	**0.053**
	U-238	0.278695	0.70403	0.8	1	1000	**0.062**
139136019	U-234	0.288092	0.77917	0.8	1	1000	**0.076**
	U-235	0.288092	0.77917	0.8	0.997	1000	**0.047**
	U-238	0.288092	0.77917	0.8	1	1000	**0.054**
139136020	U-234	0.356321	0.69437	0.8	1	1000	**0.069**
	U-235	0.356321	0.69437	0.8	0.997	1000	**0.042**
	U-238	0.356321	0.69437	0.8	1	1000	**0.049**
139349001	U-234	0.342278	0.61239	0.8	1	1000	**0.082**
	U-235	0.342278	0.61239	0.8	0.997	1000	**0.050**
	U-238	0.342278	0.61239	0.8	1	1000	**0.058**
139349008	U-234	0.309002	0.67061	0.8	1	1000	**0.083**
	U-235	0.309002	0.67061	0.8	0.997	1000	**0.051**
	U-238	0.309002	0.67061	0.8	1	1000	**0.059**

139349009	U-234	0.333444	0.69687	0.8	1	1000	**0.074**
	U-235	0.333444	0.69687	0.8	0.997	1000	**0.045**
	U-238	0.333444	0.69687	0.8	1	1000	**0.052**
139405001	U-234	0.322718	0.7314	0.8	1	1000	**0.073**
	U-235	0.322718	0.7314	0.8	0.997	1000	**0.044**
	U-238	0.322718	0.7314	0.8	1	1000	**0.051**
139405002	U-234	0.337092	0.73343	0.8	1	1000	**0.069**
	U-235	0.337092	0.73343	0.8	0.997	1000	**0.042**
	U-238	0.337092	0.73343	0.8	1	1000	**0.049**
139406001	U-234	0.302948	0.67008	0.8	1	1000	**0.085**
	U-235	0.302948	0.67008	0.8	0.997	1000	**0.052**
	U-238	0.302948	0.67008	0.8	1	1000	**0.060**
139406005	U-234	0.343095	0.79014	0.8	1	1000	**0.063**
	U-235	0.343095	0.79014	0.8	0.997	1000	**0.039**
	U-238	0.343095	0.79014	0.8	1	1000	**0.045**
139409001	U-234	0.280179	0.67475	0.8	1	1000	**0.091**
	U-235	0.280179	0.67475	0.8	0.997	1000	**0.055**
	U-238	0.280179	0.67475	0.8	1	1000	**0.064**
139409005	U-234	0.296462	0.65069	0.8	1	1000	**0.089**
	U-235	0.296462	0.65069	0.8	0.997	1000	**0.054**
	U-238	0.296462	0.65069	0.8	1	1000	**0.063**
1200876028	U-234	0.332159	0.82666	1	1	1000	**0.050**
	U-235	0.332159	0.82666	1	0.997	1000	**0.031**
	U-238	0.332159	0.82666	1	1	1000	**0.035**
1200876029	U-234	0.348684	0.61693	0.8	1	1000	**0.080**
	U-235	0.348684	0.61693	0.8	0.997	1000	**0.049**
	U-238	0.348684	0.61693	0.8	1	1000	**0.056**
1200876030	U-234	0.31587	0.90657	1	1	1000	**0.048**
	U-235	0.31587	0.90657	1	0.997	1000	**0.029**
	U-238	0.31587	0.90657	1	1	1000	**0.034**

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437642 SAMPLE DATE : 23-JUN-2005 00:00:00	SAMPLE ID : S0139349008_UU SAMPLE QTY: 0.800 L
DETECTOR NUMBER :42470 AVERAGE %EFFICIENCY :30.9002 % YIELD : 67.061	COUNT DATE: 1-JUL-2005 23:10:25 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :BJB1

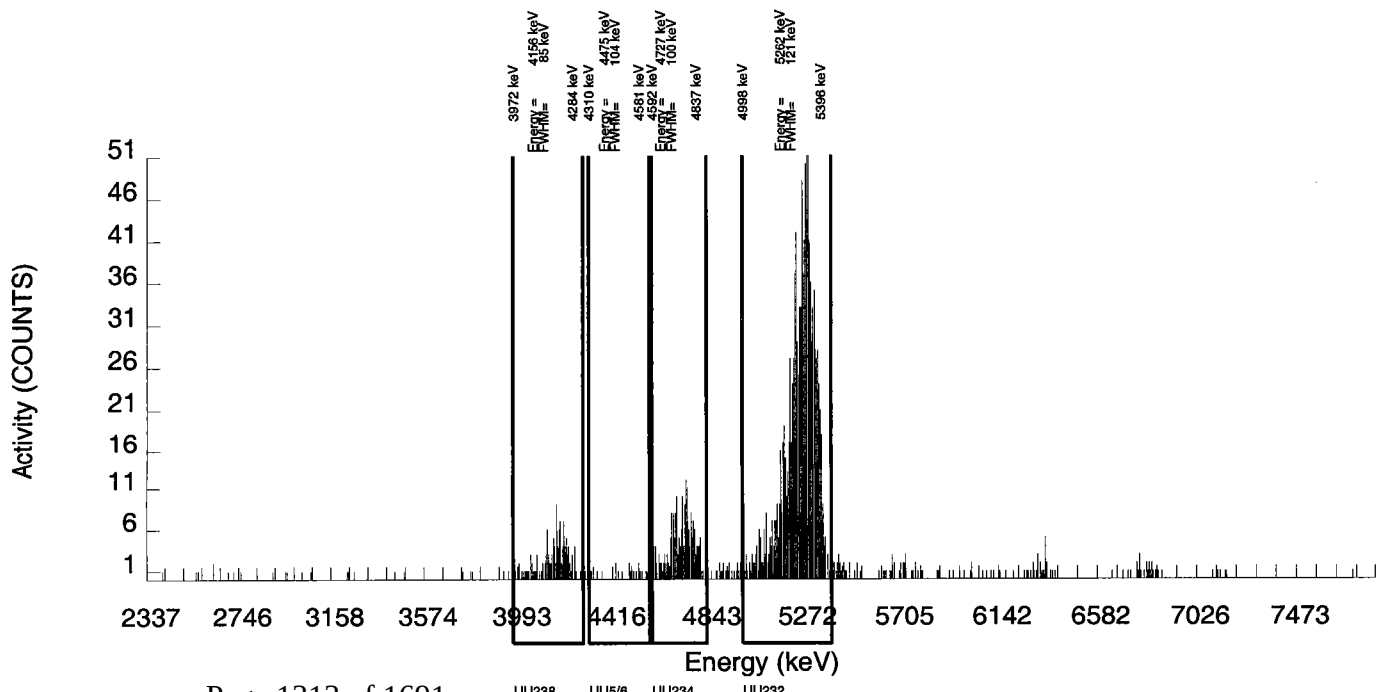
MS : 0389-G MSD : 0389-G LCS : 0389-G TRACER : 0688-E BKG FILE: B043.CNF;594 BKG DATE: 26-JUN-2005	MS PCI/L : 3.039161 MSD PCI/L : 3.039161 LCS PCI/L : 3.039161 TRACER DPM : 5.4496 EFF FILE : W043.CNF;150 CAL DATE: 2-JUN-2005	MS ISOTOPE : U-238 MSD ISOTOPE: U-238 LCS ISOTOPE: U-238 TRACER ISOTOPE: U232 LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	196.000	5.000	100.0000	5.33E-01	4.46E-02	1.41E-02	3.56E-02	3.90E-02
U232	5302.100	1129.000	19.000	100.0000	3.07E+00	1.56E-01	2.76E-02	6.25E-02	9.28E-02
U-235	4391.000	15.000	4.000	99.70000	4.09E-02	1.32E-02	1.27E-02	3.27E-02	1.31E-02
U-238	4184.730	123.000	3.000	100.0000	3.34E-01	3.37E-02	1.09E-02	2.92E-02	3.09E-02

REVIEWED BY: DATE :

7/6/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437642
SAMPLE DATE : 23-JUN-2005 00:00:00

SAMPLE ID : S0139405001_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :34430
AVERAGE %EFFICIENCY :32.2718
% YIELD : 73.140

COUNT DATE: 1-JUL-2005 23:10:25
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0389-G
MSD : 0389-G
LCS : 0389-G
TRACER : 0688-E
BKG FILE: B045.CNF;593
BKG DATE: 26-JUN-2005

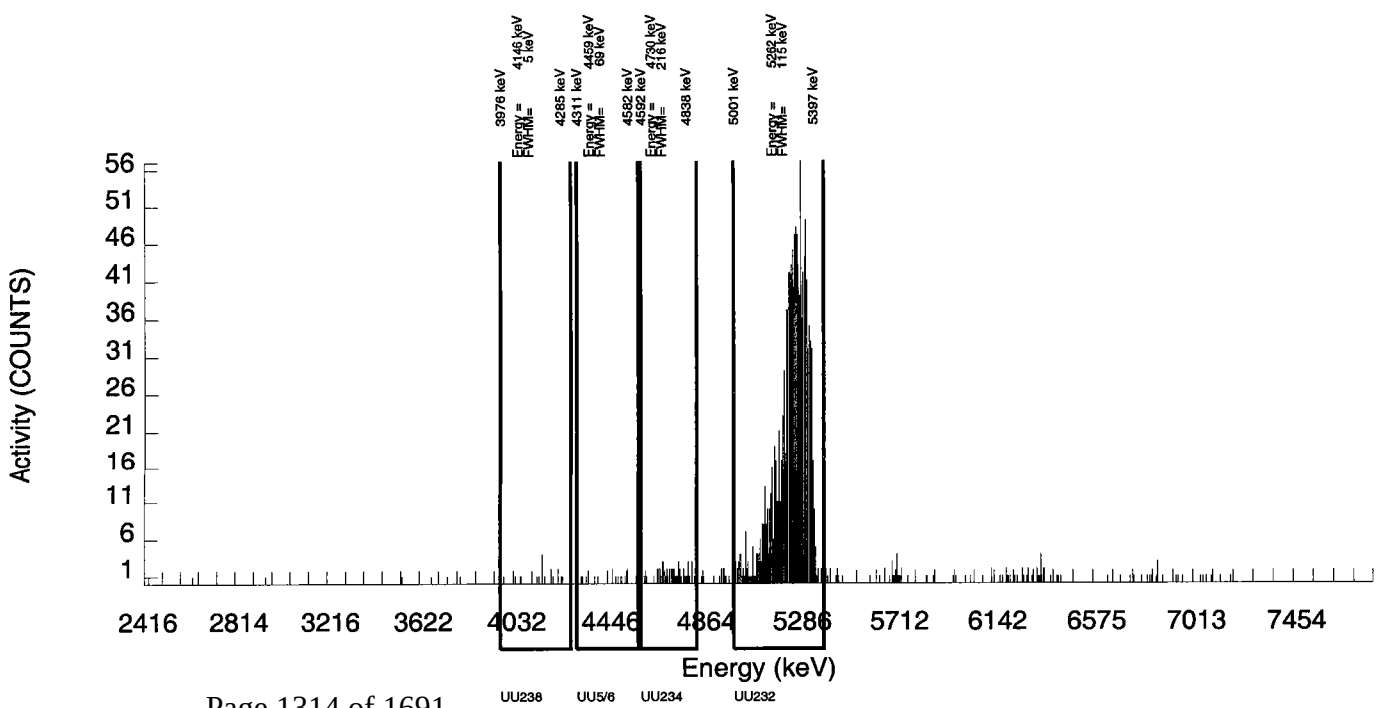
MS PCI/L : 3.039161
MSD PCI/L : 3.039161
LCS PCI/L : 3.039161
TRACER DPM : 5.4496
EFF FILE : W045.CNF;160
CAL DATE: 2-JUN-2005

MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	48.000	5.000	100.0000	1.15E-01	1.87E-02	1.24E-02	3.13E-02	1.82E-02
U232	5302.100	1286.000	3.000	100.0000	3.07E+00	1.47E-01	9.61E-03	2.57E-02	8.58E-02
U-235	4391.000	15.000	1.000	99.70000	3.59E-02	9.96E-03	5.57E-03	1.76E-02	9.87E-03
U-238	4184.730	19.000	1.000	100.0000	4.53E-02	1.11E-02	5.55E-03	1.76E-02	1.09E-02

REVIEWED BY: DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

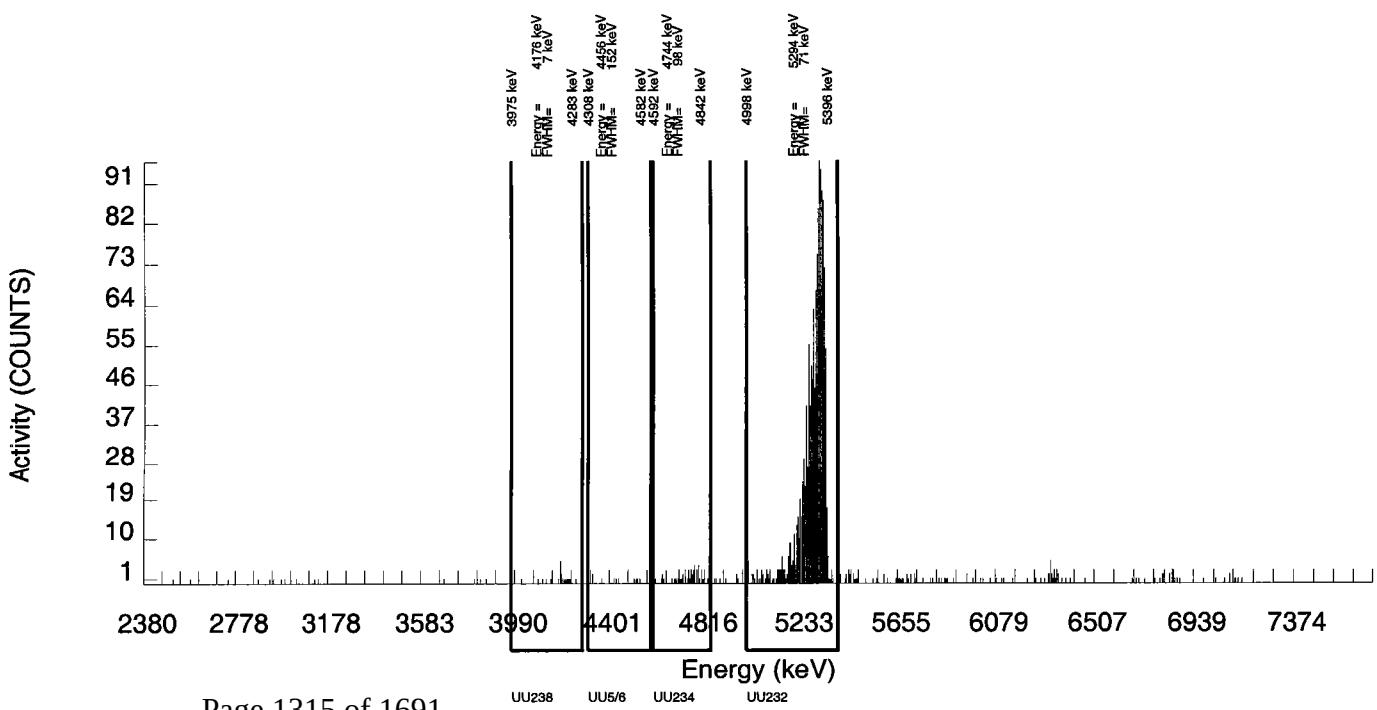
BATCH NUMBER: 437642 SAMPLE DATE : 23-JUN-2005 00:00:00	SAMPLE ID : S0139405002_UU SAMPLE QTY: 0.800 L
DETECTOR NUMBER :42471 AVERAGE %EFFICIENCY :33.7092 % YIELD : 73.343	COUNT DATE: 1-JUL-2005 23:10:25 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :BJB1

MS : 0389-G MSD : 0389-G LCS : 0389-G TRACER : 0688-E BKG FILE: B046.CNF;606 BKG DATE: 26-JUN-2005	MS PCI/L : 3.039161 MSD PCI/L : 3.039161 LCS PCI/L : 3.039161 TRACER DPM : 5.4496 EFF FILE : W046.CNF;161 CAL DATE: 2-JUN-2005	MS ISOTOPE : U-238 MSD ISOTOPE: U-238 LCS ISOTOPE: U-238 TRACER ISOTOPE: U232 LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	42.000	7.000	100.0000	9.57E-02	1.74E-02	1.40E-02	3.42E-02	1.70E-02
U232	5302.100	1347.000	23.000	100.0000	3.07E+00	1.46E-01	2.54E-02	5.70E-02	8.50E-02
U-235	4391.000	8.000	5.000	99.70000	1.83E-02	9.72E-03	1.19E-02	2.99E-02	9.69E-03
U-238	4184.730	18.000	6.000	100.0000	4.10E-02	1.26E-02	1.30E-02	3.21E-02	1.25E-02

REVIEWED BY: DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

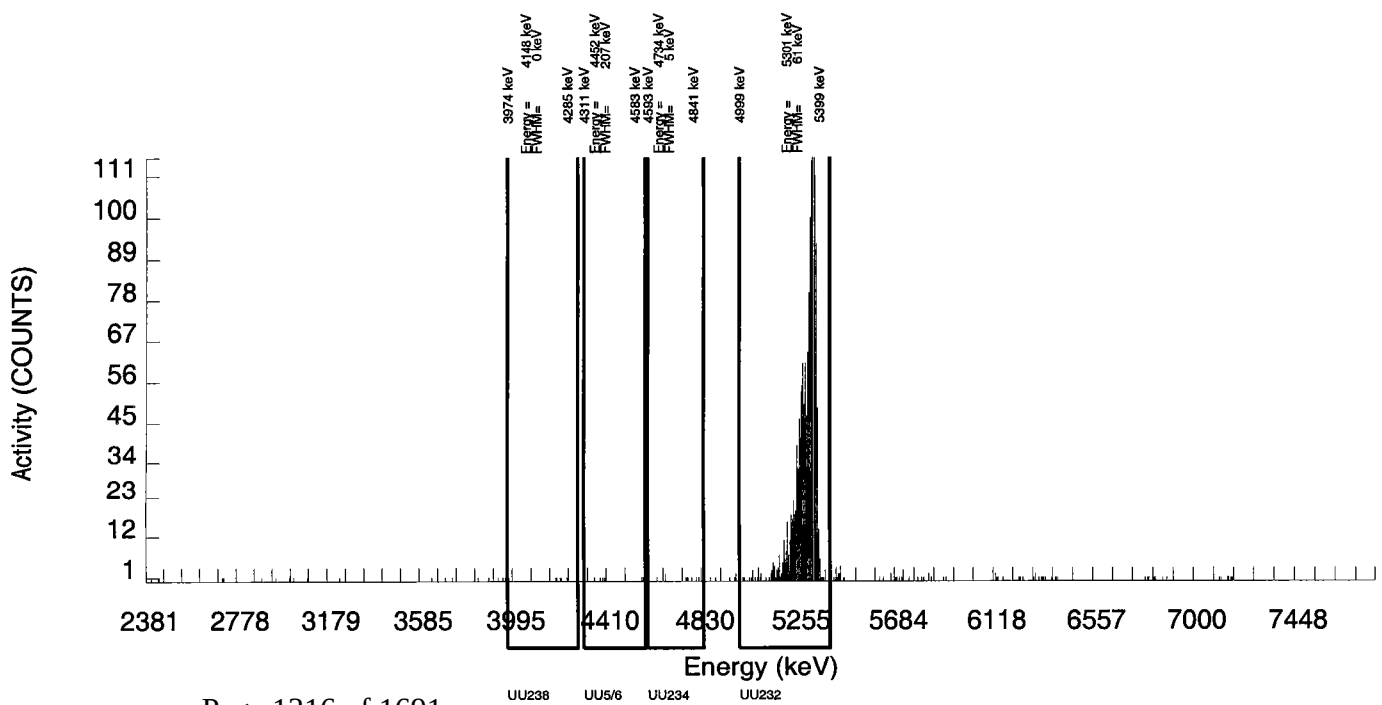
BATCH NUMBER: 437642 SAMPLE DATE : 28-JUN-2005 00:00:00	SAMPLE ID : S1200876028_UU SAMPLE QTY: 1.000 L
DETECTOR NUMBER :39172 AVERAGE %EFFICIENCY :33.2159 % YIELD : 82.666	COUNT DATE: 1-JUL-2005 23:10:39 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :BJB1

MS : 0389-G MSD : 0389-G LCS : 0389-G TRACER : 0688-E BKG FILE: B069.CNF;594 BKG DATE: 26-JUN-2005	MS PCI/L : 2.431329 MSD PCI/L : 2.431329 LCS PCI/L : 2.431329 TRACER DPM : 5.4489 EFF FILE : W069.CNF;150 CAL DATE: 1-JUL-2005	MS ISOTOPE : U-238 MSD ISOTOPE: U-238 LCS ISOTOPE: U-238 TRACER ISOTOPE: U232 LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	5.000	5.000	100.0000	8.20E-03	6.36E-03	8.53E-03	2.15E-02	6.35E-03
U232	5302.100	1496.000	11.000	100.0000	2.45E+00	1.12E-01	1.27E-02	2.97E-02	6.39E-02
U-235	4391.000	5.000	1.000	99.70000	8.23E-03	4.36E-03	3.83E-03	1.21E-02	4.35E-03
U-238	4184.730	5.000	2.000	100.0000	8.20E-03	4.93E-03	5.40E-03	1.52E-02	4.92E-03

REVIEWED BY: DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437642 SAMPLE DATE : 23-JUN-2005 00:00:00	SAMPLE ID : S1200876029_UU SAMPLE QTY: 0.800 L
DETECTOR NUMBER :33207 AVERAGE %EFFICIENCY :34.8684 % YIELD : 61.693	COUNT DATE: 1-JUL-2005 23:10:39 ELAPSED LIVE TIME(SEC): 59999.99 ANALYST :BJB1

MS : 0389-G MSD : 0389-G LCS : 0389-G TRACER : 0688-E BKG FILE: B070.CNF;599 BKG DATE: 26-JUN-2005	MS PCI/L : 3.039161 MSD PCI/L : 3.039161 LCS PCI/L : 3.039161 TRACER DPM : 5.4496 EFF FILE : W070.CNF;148 CAL DATE: 1-JUL-2005	MS ISOTOPE : U-238 MSD ISOTOPE: U-238 LCS ISOTOPE: U-238 TRACER ISOTOPE: U232 LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	206.000	2.000	100.0000	5.39E-01	4.36E-02	8.61E-03	2.43E-02	3.79E-02
U232	5302.100	1172.000	8.000	100.0000	3.07E+00	1.52E-01	1.72E-02	4.15E-02	9.02E-02
U-235	4391.000	19.000	2.000	99.70000	4.99E-02	1.27E-02	8.64E-03	2.44E-02	1.26E-02
U-238	4184.730	127.000	2.000	100.0000	3.32E-01	3.28E-02	8.61E-03	2.43E-02	3.00E-02

REVIEWED BY: DATE :

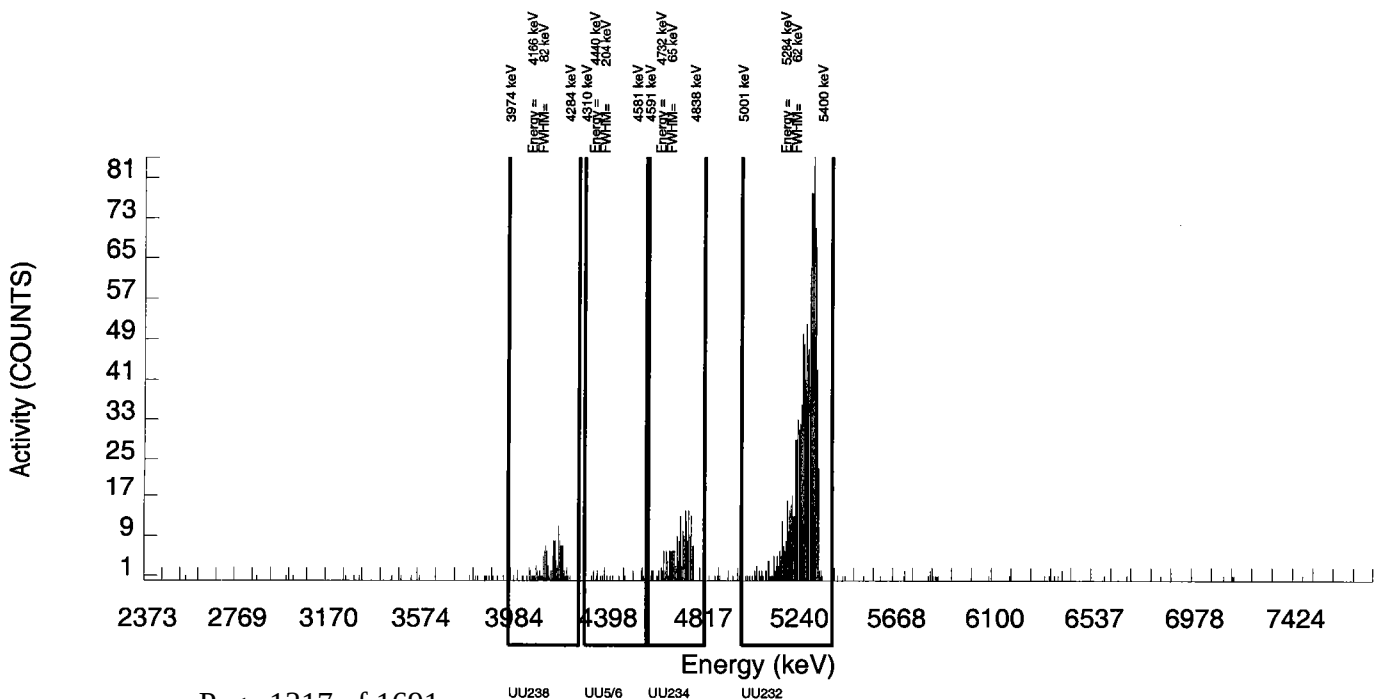
7/6/05

U3/4 : 0.034

U235 : 0.174

U4-U238 : 0.015

7/15/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 437642
SAMPLE DATE : 28-JUN-2005 00:00:00

SAMPLE ID : S1200876030_UU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :34436
AVERAGE %EFFICIENCY :31.1587
% YIELD : 90.657

COUNT DATE: 1-JUL-2005 23:10:43
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-G
MSD : 0389-G
LCS : 0389-G
TRACER : 0688-E
BKG FILE: B083.CNF;517
BKG DATE: 26-JUN-2005

MS PCI/L : 2.431329
MSD PCI/L : 2.431329
LCS PCI/L : 2.431329
TRACER DPM : 5.4489
EFF FILE : W083.CNF;169
CAL DATE: 1-JUL-2005

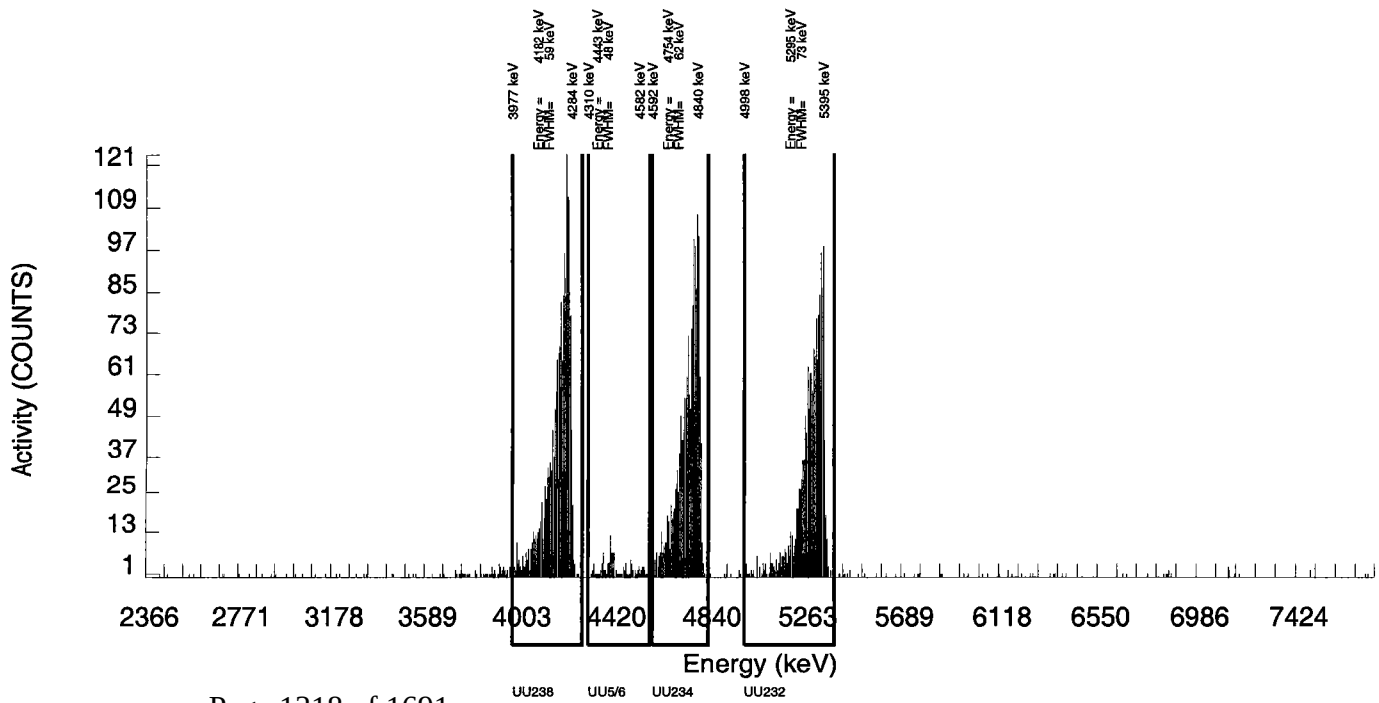
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	1576.000	2.000	100.0000	2.51E+00	1.13E-01	5.25E-03	1.48E-02	6.34E-02
U232	5302.100	1539.000	5.000	100.0000	2.45E+00	1.11E-01	8.30E-03	2.09E-02	6.28E-02
U-235	4391.000	119.000	4.000	99.70000	1.90E-01	1.94E-02	7.44E-03	1.92E-02	1.80E-02
U-238	4184.730	1709.000	0.000	100.0000	2.73E+00	1.21E-01	0.00E+00	4.32E-03	6.59E-02

REVIEWED BY: QD 7/6/05 DATE :

LCS: $\frac{2.73}{2.43} = 112\%$



Radiochemistry Batch Checklist, Rev 3

Batch# 437153 Product: YL/ESHL Date: 14JUL05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			N/A
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .			N/A
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			N/A

General Engineering Laboratories

10/31/2000

Primary Review Performed By: Michael Pinkston 7/14/05

Secondary Review Performed By: Patricia Nichols 7/14/05

Gamma Spec Que Sheet

07/12/2005

Batch #:437153 **Analyst: AKB** **Minimum DueDate: 07/08/2005**

Gamma Spike Isotope: Mixed Gamma **Spike Code:** N/A **Expiration Date:** N/A **Vol:** N/A **Nominal Concentration:** N/A

Gamma LCS Isotope: Mixed Gamma **LCS Code:** 0761-A **Expiration Date:** 4/27/06 **Vol:** 1.0mL **Nominal Concentration:** Am=1220, Cs=471.7, Co=730.6 Eu=1.Y= 6367

Initials: KB **Prep Date:** 7/12/05 **Witness:** N/A

Sample ID	Client Description	Type	Hazard Code	RDL	Client	Matrix	Collect Date	Aliquot (1 g / F)	Detector	Sealing Date/Time (if Applicable)
139349001	GF05060PCCR01	SAMPLE		10 pCi/L	ESHL001	SURFACE WATER	23-JUN-05 08:55:00	2.0	12	
139349008	GU05060PCCR01	SAMPLE		10 pCi/L	ESHL001	SURFACE WATER	23-JUN-05 08:55:00	2.0	7	
139349009	GU05060PCCR01-FB	SAMPLE		10 pCi/L	ESHL001	SURFACE WATER	23-JUN-05 08:55:00	2.0	1	
139405001	GF05050GMC401	SAMPLE		5 pCi/L	ESHL001	GROUND WATER	23-JUN-05 08:50:00	2.0	2	
139405002	GU05050GMC401	SAMPLE		5 pCi/L	ESHL001	GROUND WATER	23-JUN-05 08:50:00	2.0	3	
1200874843	MB for batch 437153	MB		5 pCi/L	QC ACCOUNT	GROUND WATER	7/12/05	2.0	4	
1200874844	GF05060PCCR01(139349001DUP)	DUP		10 pCi/L	QC ACCOUNT	SURFACE WATER	23-JUN-05 08:55:00	2.0	17	
1200874845	LCS for batch 437153	LCS		5 pCi/L	QC ACCOUNT	GROUND WATER	7/12/05	2.0	17	

MKH 7/14/05

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General Engineering Laboratories, Radiochemistry Division

Data Reviewed By: Michael Hunter 7/14/05

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertainty	Units	MDA	RDL	
437153	139349001	SAMPLE	13-JUL-05	Cadmium-115	1147	921.8	pCi/L	0	N	
				Cerium-143	52410	32280	pCi/L	0	N	
				Iodine-133	7.566E+06	7.292E+06	pCi/L	0	N	
				Krypton-85 LA	1691	154	pCi/L	557.6	N	
				Lanthanum-140	4689	2782	pCi/L	0	N	
				Molybdenum-99 HE	456.9	116.4	pCi/L	289.3	N	
				Sodium-24	2.275E+09	4.227E+09	pCi/L	0	N	
				Technetium-99m	1.497E+25	0	pCi/L	0	N	
				Thulium-171 HE	2118	1008	pCi/L	1949	N	
437153	139349008	SAMPLE	13-JUL-05	Annihilation Rad.	16.55	1.001	pCi/L	3.635	N	
				Iodine-135	2.223E+22	0	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99 HE	346.9	172.6	pCi/L	294.7	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Sodium-24	2.361E+09	4.957E+09	pCi/L	0	N	
				Technetium-99m	1.149E+25	0	pCi/L	0	N	
				Thulium-171 HE	3405	1021	pCi/L	2095	N	
437153	139349009	SAMPLE	13-JUL-05	Annihilation Rad.	13.37	0.9061	pCi/L	3.335	N	
				Cerium-143	61990	37160	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-135	5.224E+22	0	pCi/L	0	N	
				Molybdenum-99 HE	515	162.1	pCi/L	307.8	N	
				Potassium-40 NVP	26.82	15.59	pCi/L	17.21	10.0	U
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Radium-224 HE	40.2	23.58	pCi/L	34.27	N	
				Sodium-24	1.570E+09	4.794E+09	pCi/L	0	N	
				Technetium-99m	1.939E+25	0	pCi/L	0	N	
437153	139405001	SAMPLE	13-JUL-05	Annihilation Rad.	16.55	1.084	pCi/L	3.78	N	
				Cadmium-115	288.2	1045	pCi/L	0	N	
				Cerium-143	78890	42080	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99 HE	521.2	125.4	pCi/L	389.7	N	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Promethium-149	20010	9981	pCi/L	0	N	
				Technetium-99m	1.981E+25	0	pCi/L	0	N	
437153	139405002	SAMPLE	13-JUL-05	Annihilation Rad.	14.89	0.9161	pCi/L	3.329	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertainty	Units	MDA	RDL
437153	139405002	SAMPLE	13-JUL-05	Lanthanum-140	32.38	3398	pCi/L	0	N
				Molybdenum-99 NVP LA	659.3	138.2	pCi/L	304.4	N
				Promethium-149	2637	8659	pCi/L	0	N
				Technetium-99m	2.508E+25	0	pCi/L	0	N
				Thorium-234 HE	195.7	71.89	pCi/L	111.5	N
				Uranium-238 HE	195.7	71.89	pCi/L	89.8	N
437153	1200874843	MB	13-JUL-05	Iodine-132	3.536E+05	1.065E+06	pCi/L	0	N
				Krypton-85 LA	831.6	123.5	pCi/L	480.7	N
				Manganese-56	1.879E+05	2.525E+05	pCi/L	0	N
				Potassium-40 NVP	30.03	6.322	pCi/L	26.16	10.0 N.1
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Protactinium-234m HE	272	165.9	pCi/L	222.3	N
437153	1200874844	DUP	14-JUL-05	Annihilation Rad.	14.23	1.275	pCi/L	4.945	N
				Bismuth-210 HE NVP	144.2	18.28	pCi/L	64.58	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Lead-210 NVP	144.2	18.28	pCi/L	64.58	N
				Promethium-149	23830	14280	pCi/L	0	N
				Radium-224 HE	47.37	25.08	pCi/L	44.29	N
				Sodium-24	1.265E+10	1.260E+10	pCi/L	0	N
				Technetium-99m	3.701E+25	0	pCi/L	0	N
				Thorium-234 NVP	259.9	28.37	pCi/L	72.38	N
				Uranium-238 NVP	259.9	28.37	pCi/L	72.38	N
437153	1200874845	LCS	13-JUL-05	Americium-241	1241	56.83	pCi/L	50.11	N
				Barium-137m	452.1	23.51	pCi/L	23.13	N
				Cadmium-109	14230	571	pCi/L	402.6	N
				Cerium-139	327.1	15.18	pCi/L	15.68	N
				Cesium-137	477.9	24.88	pCi/L	24.45	10.0
				Cobalt-57	312.2	15.29	pCi/L	14.48	N
				Cobalt-60	717.4	33.42	pCi/L	24.76	10.0
				Gross Gamma	5863	983	pCi/L	3197	120
				Mercury-203	300.1	16.36	pCi/L	17.76	N
				Promethium-147	6.653E+08	3.256E+07	pCi/L	4.813E+07	N
				Tin-113	492.5	26.39	pCi/L	23.55	N
				Tin-126	1454	58.34	pCi/L	46.75	N
				Yttrium-88	872.7	40.09	pCi/L	11.57	N

Result Greater Than DL

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertainty	Units	DL	RDL
437153	139349009	SAMPLE	13-JUL-05	Lead-210	146.5	132.9	pCi/L	140.7	N
				Lead-211	33.46	18.18	pCi/L	26.03	N
				Molybdenum-99	515	162.1	pCi/L	150.1	N
				Potassium-40	26.82	15.59	pCi/L	7.823	10.0
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Radium-224	40.2	23.58	pCi/L	16.59	N
				Sodium-24	1.570E+09	4.794E+09	pCi/L	0	N
				Technetium-99m	1.939E+25	0	pCi/L	0	N
437153	139405001	SAMPLE	13-JUL-05	Annihilation Rad.	16.55	1.084	pCi/L	1.852	N
				Cadmium-115	288.2	1045	pCi/L	0	N
				Cerium-143	78890	42080	pCi/L	0	N
				Cerium-144	12.4	6.573	pCi/L	7.87	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	521.2	125.4	pCi/L	190.6	N
				Potassium-40	9.765	13.05	pCi/L	9.416	100
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Promethium-149	20010	9981	pCi/L	0	N
				Technetium-99m	1.981E+25	0	pCi/L	0	N
				Tellurium-125m	453.1	241.2	pCi/L	411.8	N
				Thulium-171	2297	1287	pCi/L	1348	N
				Tin-115	122.5	58.41	pCi/L	104.2	N
437153	139405002	SAMPLE	13-JUL-05	Annihilation Rad.	14.89	0.9161	pCi/L	1.632	N
				Bismuth-210	264.7	95.62	pCi/L	152.1	N
				Cobalt-60	1.221	0.5934	pCi/L	1.055	5.00
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Lanthanum-140	32.38	3398	pCi/L	0	N
				Lead-210	264.7	95.62	pCi/L	152.1	N
				Molybdenum-99	659.3	138.2	pCi/L	148.6	N
				Promethium-149	2637	8659	pCi/L	0	N
				Technetium-99m	2.508E+25	0	pCi/L	0	N
				Thorium-234	195.7	71.89	pCi/L	54.65	N
				Thulium-171	2041	655.1	pCi/L	1027	N
				Uranium-238	195.7	71.89	pCi/L	43.82	N
437153	1200874843	MB	13-JUL-05	Iodine-132	3.536E+05	1.065E+06	pCi/L	0	N
				Krypton-85	831.6	123.5	pCi/L	232	N
				Lead-211	25.1	20.23	pCi/L	23.04	N
				Manganese-56	1.879E+05	2.525E+05	pCi/L	0	N

MGH 7/14/05

Result Greater Than DL

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	DL	RDL
437153	1200874843	MB	13-JUL-05	Neptunium-237	9.507	4.366	pCi/L	6.197	10.0
				Potassium-40	30.03	6.322	pCi/L	12.3	10.0 > MDA
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Protactinium-234m	272	165.9	pCi/L	103.9	N
				Technetium-99m	265.9	124.6	pCi/L	216.6	N
				Thorium-234	47.56	58.77	pCi/L	44.43	N
				Thulium-171	1016	584.9	pCi/L	953.2	N
				Uranium-238	47.56	58.77	pCi/L	44.43	N
437153	1200874844	DUP	14-JUL-05	Americium-241	2.499	1.639	pCi/L	2.435	Y
				Annihilation Rad.	14.23	1.275	pCi/L	2.401	N
				Bismuth-210	144.2	18.28	pCi/L	31.47	N
				Bismuth-211	15.42	4.804	pCi/L	8.616	N
				Bismuth-212	14.47	7.539	pCi/L	13.53	N
				Iodine-131	12.49	4.573	pCi/L	8.132	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Lead-210	144.2	18.28	pCi/L	31.47	N
				Molybdenum-99	379.1	141.8	pCi/L	194.2	N
				Promethium-149	23830	14280	pCi/L	0	N
				Radium-224	47.37	25.08	pCi/L	21.12	N
				Sodium-24	1.265E+10	1.260E+10	pCi/L	0	N
				Technetium-99m	3.701E+25	0	pCi/L	0	N
				Tellurium-125m	370.2	216.7	pCi/L	357.1	N
				Thorium-234	259.9	28.37	pCi/L	35.45	N
				Thulium-171	622.1	462	pCi/L	562	N
				Uranium-235	10.16	8.061	pCi/L	8.653	N
				Uranium-238	259.9	28.37	pCi/L	35.45	N
437153	1200874845	LCS	13-JUL-05	Actinium-227	169.9	105.2	pCi/L	117.1	N
				Americium-241	1241	56.83	pCi/L	24.53	Y
				Annihilation Rad.	16.71	5.623	pCi/L	9.85	N
				Barium-137m	452.1	23.51	pCi/L	10.9	N
				Cadmium-109	14230	571	pCi/L	196.7	N
				Cerium-139	327.1	15.18	pCi/L	7.581	N
				Cesium-137	477.9	24.88	pCi/L	11.53	10.0
				Cobalt-57	312.2	15.29	pCi/L	7.027	N
				Cobalt-60	717.4	33.42	pCi/L	11.29	10.0
				Gross Gamma	5863	983	pCi/L	1563	120
				Mercury-203	300.1	16.36	pCi/L	8.5	N

MAH 7/14/05

GEL QUALS

Batch ID: 437153

Report run on: July 14, 2005 2:53 PM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
139349009-1 13-JUL-2005 20:13	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		26.82			
1200874843-1 MB 13-JUL-2005 20:15	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		30.03			

Failed RDL Report

Batch Id	Samp Id	Sample Type	Run Date	Parmname	Result	MDA	RDL
437153	139349001	SAMPLE	13-JUL-05	Gross Gamma	45.75	167.2	120
				Neptunium-237	-0.981	12.78	10.0
				Potassium-40	11.26	18.08	10.0
437153	139349008	SAMPLE	13-JUL-05	Gross Gamma	46.17	154.7	120
				Neptunium-237	4.414	13.23	10.0
				Potassium-40	7.19	20.96	10.0
437153	139349009	SAMPLE	13-JUL-05	Gross Gamma	85.74	234.5	120
				Neptunium-237	-2.815	13.62	10.0
437153	139405001	SAMPLE	13-JUL-05				
437153	139405002	SAMPLE	13-JUL-05				
437153	1200874843	MB	13-JUL-05	Gross Gamma	67.03	230	120
				Neptunium-237	9.507	12.79	10.0
437153	1200874844	DUP	14-JUL-05	Gross Gamma	83.41	313.7	120
				Neptunium-237	-8.005	12.33	10.0
				Potassium-40	10.82	38.41	10.0
437153	1200874845	LCS	13-JUL-05	Neptunium-237	-11.46	133.8	10.0
				Potassium-40	53.79	228.1	10.0
				Sodium-22	3.826	20.64	10.0

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 437153	SAMPLE ID	: G139349001
ANALYST	: AKB	DETECTOR	: GAMMA12
SAMPLE DATE	: 23-JUN-2005 08:55:00.00	COUNT TIME	: 0 12:00:00.00
ANALYSIS DATE	: 13-JUL-2005 18:54:12.72	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 4.575E+01
GROSS GAMMA ERROR (pCi/LITER)	: 5.338E+01
GROSS GAMMA MDA (pCi/LITER)	: 1.672E+02
GROSS GAMMA DLC (pCi/LITER)	: 8.165E+01

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 437153	SAMPLE ID	: G139405001
ANALYST	: AKB	DETECTOR	: GAMMA2
SAMPLE DATE	: 23-JUN-2005 08:50:00.00	COUNT TIME	: 0 12:00:00.00
ANALYSIS DATE	: 13-JUL-2005 20:14:02.13	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 4.706E+01
GROSS GAMMA ERROR (pCi/LITER)	: 3.118E+01
GROSS GAMMA MDA (pCi/LITER)	: 1.503E+02
GROSS GAMMA DLC (pCi/LITER)	: 7.342E+01

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 437153	SAMPLE ID	: G139405002
ANALYST	: AKB	DETECTOR	: GAMMA3
SAMPLE DATE	: 23-JUN-2005 08:50:00.00	COUNT TIME	: 0 12:00:00.00
ANALYSIS DATE	: 13-JUL-2005 20:14:30.87	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 5.794E+01
GROSS GAMMA ERROR (pCi/LITER)	: 5.978E+01
GROSS GAMMA MDA (pCi/LITER)	: 1.683E+02
GROSS GAMMA DLC (pCi/LITER)	: 8.221E+01

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 437153	SAMPLE ID	: G1200874843
ANALYST	: AKB	DETECTOR	: GAMMA4
SAMPLE DATE	: 12-JUL-2005 00:00:00.00	COUNT TIME	: 0 12:00:00.00
ANALYSIS DATE	: 13-JUL-2005 20:15:02.78	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 6.703E+01
GROSS GAMMA ERROR (pCi/LITER)	: 7.253E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.300E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.115E+02

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 437153	SAMPLE ID	: G1200874844
ANALYST	: AKB	DETECTOR	: GAMMA17
SAMPLE DATE	: 23-JUN-2005 08:55:00.00	COUNT TIME	: 0 06:30:38.91
ANALYSIS DATE	: 14-JUL-2005 07:32:19.60	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 8.341E+01
GROSS GAMMA ERROR (pCi/LITER)	: 6.022E+01
GROSS GAMMA MDA (pCi/LITER)	: 3.137E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.518E+02

General Engineering Labs, LLC

2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 437153	SAMPLE ID	: G1200874845
ANALYST	: AKB	DETECTOR	: GAMMA17
SAMPLE DATE	: 12-JUL-2005 00:00:00.00	COUNT TIME	: 0 01:00:00.00
ANALYSIS DATE	: 13-JUL-2005 17:46:34.20	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 5.863E+03
GROSS GAMMA ERROR (pCi/LITER)	: 9.830E+02
GROSS GAMMA MDA (pCi/LITER)	: 3.197E+03
GROSS GAMMA DLC (pCi/LITER)	: 1.563E+03

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:32:36.80

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139349001.CNF;1
Sample date : 23-JUN-2005 08:55:00 Acquisition date : 13-JUL-2005 18:54:12
Sample ID : G139349001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA12 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.52 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 100017444
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.87*	10	618	0.60	92.91	89	8	2.42E-04	497.0	
2	4	63.31*	27	712	1.31	125.81	122	15	6.35E-04	231.7	5.46E-01
3	4	66.26*	135	905	1.71	131.72	122	15	3.12E-03	47.4	
4	0	113.51	116	648	2.02	226.29	223	8	2.68E-03	39.2	
5	0	139.78	183	642	1.10	278.87	275	8	4.23E-03	25.1	
6	0	185.95*	158	958	1.31	371.27	364	15	3.65E-03	49.9	
7	0	198.52	290	596	1.49	396.41	392	10	6.72E-03	16.8	
8	0	206.25	102	480	2.41	411.90	408	8	2.37E-03	38.4	
9	0	238.86*	48	704	1.19	477.16	472	12	1.10E-03	135.6	
10	0	338.55	88	379	2.34	676.66	672	11	2.03E-03	44.1	
11	0	399.92	31	165	0.78	799.46	797	7	7.17E-04	71.7	
12	0	403.24	48	223	1.55	806.10	803	10	1.10E-03	60.1	
13	0	501.50	51	239	0.90	1002.73	998	12	1.19E-03	61.8	
14	0	511.47*	4	340	2.89	1022.69	1014	19	1.00E-04	*****	
15	0	558.98*	50	196	1.48	1117.75	1113	11	1.16E-03	69.8	
16	0	584.21*	17	181	1.44	1168.22	1162	13	3.88E-04	226.1	
17	0	596.85	104	131	1.91	1193.52	1190	9	2.40E-03	22.1	
18	0	913.32*	3	123	2.54	1826.65	1818	19	7.48E-05	960.8	
19	0	1034.76	18	42	1.39	2069.59	2066	8	4.07E-04	68.2	
20	0	1108.83	24	48	1.49	2217.74	2213	10	5.62E-04	56.9	
21	0	1121.85*	24	106	0.77	2243.78	2237	17	5.61E-04	126.7	
22	0	1128.87	17	29	0.67	2257.83	2255	6	3.95E-04	56.0	
23	0	1175.96	21	44	0.82	2352.01	2349	12	4.89E-04	65.4	
24	0	1204.04	26	79	4.45	2408.18	2402	15	5.93E-04	78.1	
25	0	1239.60	20	45	1.40	2479.29	2474	10	4.60E-04	67.0	
26	0	1254.75	22	53	0.93	2509.60	2506	11	5.13E-04	69.0	
27	0	1280.62	29	39	3.51	2561.34	2554	13	6.78E-04	47.6	
28	0	1374.21	14	32	0.92	2748.52	2747	7	3.16E-04	73.7	
29	0	1379.11	41	37	3.88	2758.31	2753	11	9.43E-04	33.3	
30	0	1462.33*	23	66	2.79	2924.74	2916	20	5.36E-04	119.0	
31	0	1563.87	17	48	0.58	3127.79	3121	16	3.86E-04	96.0	
32	0	1685.25	16	6	0.98	3370.51	3368	6	3.67E-04	37.6	
33	0	1729.89	30	26	5.14	3459.77	3453	13	6.94E-04	39.5	
34	0	1775.83	10	12	1.06	3551.62	3547	7	2.25E-04	67.9	
35	0	1799.18	34	25	1.58	3598.29	3589	17	7.81E-04	38.4	
36	0	1875.23	7	12	0.73	3750.35	3746	7	1.70E-04	86.6	
37	0	1965.03	14	40	5.68	3929.87	3922	17	3.12E-04	113.2	
38	0	1983.43	8	8	1.45	3966.66	3965	6	1.87E-04	64.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 14-JUL-2005 11:32:41

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139349001.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 23-JUN-2005 08:55:00 Acquisition date : 13-JUL-2005 18:54:12
Sample ID : G139349001 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.52 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Iden	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	1.126E+01	2.681E+01	1.808E+01	1.117E+00	0.623
Y-91	+	557.57	*	1.667E+00	2.330E+00	1.907E+00	1.229E-01	0.874
	+	1204.90		4.897E+02	7.656E+02	7.964E+02	4.797E+01	0.615
MO-99	+	140.51	*	4.569E+02	2.328E+02	2.893E+02	2.340E+01	1.579
		181.06		1.278E+03	2.583E+03	3.848E+03	6.691E+02	0.332
		739.58		1.472E+02	1.325E+03	2.264E+03	3.276E+02	0.065
TL-208		75.00		2.981E+01	3.696E+01	6.351E+01	7.449E+00	0.469
		277.35		5.808E+00	1.209E+01	2.138E+01	2.347E+00	0.272
	+	510.84		4.747E-01	1.611E+01	6.738E+00	7.017E-01	0.070
	+	583.14	*	5.184E-01	2.344E+00	1.910E+00	1.402E-01	0.271
		763.30		6.109E+00	5.658E+01	9.676E+01	1.283E+01	0.063
		860.37		3.414E+00	7.186E+00	1.325E+01	1.154E+00	0.258
		1093.90		-2.434E+02	2.799E+02	4.527E+02	1.027E+02	-0.538
BI-210	+	46.50	*	2.941E+01	2.924E+02	2.986E+02	2.281E+01	0.098
PB-210	+	46.50	*	2.941E+01	2.924E+02	2.986E+02	2.281E+01	0.098
TH-228		84.40		9.033E+01	8.554E+01	1.468E+02	1.933E+01	0.615
NP-	+	238.60	*	1.551E+00	4.209E+00	3.137E+00	2.500E-01	0.494
		300.10		-6.306E-01	2.358E+01	4.101E+01	2.420E+01	-0.015
U-238	+	63.29	*	2.019E+01	9.364E+01	8.293E+01	1.423E+01	0.243
CM-247		278.00		1.916E+01	2.394E+01	4.275E+01	2.791E+00	0.448
		287.40		-1.301E+01	3.858E+01	6.645E+01	4.316E+00	-0.196
	+	402.60	*	1.300E+00	1.564E+00	1.717E+00	9.768E-02	0.757
ANH-511	+	511.00	*	1.005E-01	3.409E+00	1.426E+00	8.909E-02	0.070

---- Non-Identified Nuclides ----

Nuclide	Iden	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	7.133E+00	1.042E+01	1.852E+01	1.297E+00	0.385
NA-22		1274.53	*	-4.857E-02	9.607E-01	1.485E+00	8.785E-02	-0.033
AL-26	+	511.00		6.139E-02	2.084E+00	8.716E-01	5.445E-02	0.070
LI-		1808.65	*	1.429E-01	1.012E+00	1.880E+00	1.040E-01	0.076
SC-46		889.25	*	-3.630E-02	1.042E+00	1.861E+00	1.526E-01	-0.020
NA-	+	1120.51		1.219E+00	3.092E+00	2.320E+00	1.535E-01	0.526

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
V-48		944.10		6.958E+00	2.876E+01	5.219E+01	4.178E+00	0.133
		983.50	*	2.894E-01	2.316E+00	4.159E+00	3.226E-01	0.070
		1312.09		-5.417E-01	2.701E+00	4.675E+00	2.721E-01	-0.116
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-1.738E+01	1.369E+01	2.253E+01	1.562E+00	-0.772
MN-54		834.83	*	-4.380E-01	9.548E-01	1.558E+00	1.228E-01	-0.281
CO-56		846.75	*	-4.072E-01	1.130E+00	1.969E+00	1.565E-01	-0.207
		1037.82		1.364E+00	9.234E+00	1.451E+01	1.145E+00	0.094
	+	1238.25		1.636E+00	2.194E+00	3.254E+00	2.059E-01	0.503
CO-57		122.06	*	5.157E-01	9.453E-01	1.597E+00	1.486E-01	0.323
		136.47		2.209E+00	8.409E+00	1.258E+01	1.125E+00	0.176
CO-58		810.78	*	9.850E-01	1.109E+00	2.001E+00	1.552E-01	0.492
FE-59		192.35		-2.934E-01	3.508E+01	5.752E+01	7.006E+00	-0.005
		1099.25	*	3.033E-02	2.630E+00	4.644E+00	3.570E-01	0.007
		1291.60		-1.908E+00	3.211E+00	5.371E+00	4.015E-01	-0.355
CO-60		1173.24		-4.489E-01	1.114E+00	1.630E+00	9.884E-02	-0.275
		1332.50	*	1.691E-01	9.552E-01	1.726E+00	9.959E-02	0.098
ZN-65		1115.55	*	1.490E+00	2.165E+00	4.014E+00	2.680E-01	0.371
SE-75	+	66.05		3.623E+02	3.454E+02	3.058E+02	2.803E+01	1.185
		96.73		-4.685E+01	2.944E+01	4.585E+01	6.284E+00	-1.022
		121.11		-2.646E+00	5.214E+00	8.533E+00	9.993E-01	-0.310
		136.00		-4.779E-01	1.440E+00	2.363E+00	1.973E-01	-0.202
	+	198.60		2.901E+02	9.985E+01	1.023E+02	7.913E+00	2.835
		264.65	*	2.803E-01	1.362E+00	2.402E+00	1.589E-01	0.117
		279.53		2.310E+00	3.611E+00	6.420E+00	4.459E-01	0.360
		303.91		-1.261E+01	6.736E+01	1.164E+02	1.156E+01	-0.108
	+	400.65		6.026E+00	8.661E+00	1.228E+01	1.108E+00	0.491
KR-85		513.99	*	1.691E+03	3.081E+02	5.576E+02	3.491E+01	3.033
SR-85		513.99	*	9.187E+00	1.674E+00	3.029E+00	1.897E-01	3.033
Y-88		898.02		6.636E-01	1.071E+00	1.995E+00	1.655E-01	0.333
		1836.01	*	-2.135E-01	1.197E+00	2.151E+00	1.183E-01	-0.099
NB-94		702.63	*	-2.122E-01	9.845E-01	1.645E+00	1.162E-01	-0.129
		871.10		-6.678E-02	9.229E-01	1.639E+00	1.327E-01	-0.041
NB-95		765.79	*	-1.780E-01	1.397E+00	2.347E+00	1.751E-01	-0.076
NB-95M		235.69	*	-4.733E+01	1.970E+02	2.815E+02	3.086E+01	-0.168
ZR-95		724.18		-3.175E-02	2.624E+00	4.451E+00	3.595E-01	-0.007
		756.74	*	-6.015E-01	2.136E+00	3.547E+00	2.980E-01	-0.170
RU-103		497.08	*	-5.200E-01	1.600E+00	2.350E+00	3.014E-01	-0.221
		610.33		5.823E+01	2.820E+01	4.995E+01	7.869E+00	1.166
RH-106	+	511.85		5.070E-01	1.721E+01	7.207E+00	4.505E-01	0.070
		621.84	*	-1.164E+00	9.347E+00	1.583E+01	1.057E+00	-0.074
		1050.47		-1.960E+01	5.698E+01	9.866E+01	7.156E+00	-0.199
RU-106		622.20	*	-2.200E+00	9.440E+00	1.587E+01	1.935E+00	-0.139
AG-108M		433.93	*	3.750E-01	9.867E-01	1.733E+00	1.102E-01	0.216
		614.37		-1.504E+00	1.235E+00	1.949E+00	1.381E-01	-0.772
KI		722.95		1.950E-01	1.102E+00	1.895E+00	1.439E-01	0.103
CD-109		88.03	*	-4.610E+01	2.682E+01	4.230E+01	3.821E+00	-1.090
AG-110M		657.75	*	-1.908E-01	9.283E-01	1.565E+00	1.114E-01	-0.122
		677.61		-5.654E+00	8.995E+00	1.466E+01	1.056E+00	-0.386

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		706.67		-1.501E+00	6.591E+00	1.098E+01	8.099E-01	-0.137
		763.93		-9.909E-01	4.388E+00	7.322E+00	5.658E-01	-0.135
		884.67		1.184E+00	1.347E+00	2.531E+00	2.142E-01	0.468
		937.48		-1.633E-01	2.521E+00	4.509E+00	3.777E-01	-0.036
		1384.27		6.807E-01	4.717E+00	8.402E+00	5.175E-01	0.081
SN-113		391.69	*	1.187E-01	1.397E+00	2.427E+00	1.462E-01	0.049
SN-115		484.47		4.598E+02	5.964E+02	1.064E+03	6.516E+01	0.432
		933.00	*	-2.787E+01	8.259E+01	1.446E+02	1.167E+01	-0.193
		1290.58		-7.736E+01	2.293E+02	3.938E+02	2.312E+01	-0.196
SN-117M		156.02		1.011E+01	1.043E+02	1.728E+02	1.219E+01	0.058
		158.56	*	9.169E-02	2.576E+00	4.256E+00	2.937E-01	0.022
TE-123M		159.00	*	-2.816E-01	1.048E+00	1.714E+00	1.190E-01	-0.164
SB-124		602.73		5.650E-02	1.190E+00	2.033E+00	1.345E-01	0.028
		645.85		-4.686E+00	1.431E+01	2.395E+01	1.773E+00	-0.196
		713.78		-1.318E+01	5.059E+01	8.430E+01	9.292E+00	-0.156
		722.79		2.810E+00	1.040E+01	1.798E+01	1.333E+00	0.156
		1368.16		1.077E+01	4.774E+01	8.668E+01	1.029E+01	0.124
		1690.98	*	1.752E+00	2.464E+00	4.709E+00	2.922E-01	0.372
SB-125		176.33		5.923E+00	1.181E+01	1.971E+01	1.793E+00	0.301
		427.89	*	-8.482E-01	2.757E+00	4.690E+00	2.850E-01	-0.181
		463.38		1.258E+00	8.130E+00	1.410E+01	9.804E-01	0.089
		600.56		3.361E+00	5.896E+00	9.182E+00	6.810E-01	0.366
		606.64		-3.278E+01	2.103E+01	3.247E+01	2.446E+00	-1.010
		635.90		-2.465E-01	7.942E+00	1.352E+01	1.027E+00	-0.018
TE-125M		109.28	*	-3.966E+00	3.438E+02	5.746E+02	6.046E+01	-0.007
I-126		388.63		-2.630E+00	8.479E+00	1.446E+01	8.188E-01	-0.182
		666.33	*	3.008E-01	6.999E+00	1.193E+01	8.151E-01	0.025
		753.82		1.650E+01	5.685E+01	9.807E+01	7.241E+00	0.168
SB-126		666.33		1.273E-01	2.961E+00	5.046E+00	3.449E-01	0.025
		695.00		4.993E+00	3.155E+00	5.797E+00	4.067E-01	0.861
		697.00		-3.193E+00	1.118E+01	1.858E+01	1.306E+00	-0.172
		720.50	*	2.727E+00	5.256E+00	9.247E+00	6.635E-01	0.295
SN-126	+	64.28		7.993E+00	3.706E+01	3.126E+01	4.455E+00	0.256
		86.94		-1.061E+01	1.176E+01	1.782E+01	7.381E+00	-0.595
		87.57	*	-3.092E+00	2.630E+00	4.246E+00	3.815E-01	-0.728
SB-127		252.40		2.080E+02	3.936E+02	6.823E+02	2.878E+02	0.305
		411.60		-1.246E+02	9.839E+02	1.689E+03	2.665E+02	-0.074
		444.90		-1.381E+02	8.107E+02	1.385E+03	1.757E+02	-0.100
		473.00		-1.049E+02	1.382E+02	2.274E+02	2.975E+01	-0.461
		543.30		7.009E+02	1.330E+03	2.340E+03	3.460E+02	0.300
		603.50		1.732E+02	9.000E+02	1.549E+03	2.014E+02	0.112
		685.70	*	2.292E+01	9.843E+01	1.705E+02	2.066E+01	0.134
		698.50		-4.895E+02	1.200E+03	1.976E+03	3.238E+02	-0.248
		783.70		1.111E+02	2.692E+02	4.676E+02	6.278E+01	0.238
I-131		284.30		3.777E+01	7.646E+01	1.355E+02	9.690E+00	0.279
		364.48	*	-2.603E-01	6.075E+00	1.049E+01	6.989E-01	-0.025
		636.97		1.538E+01	7.224E+01	1.248E+02	9.223E+00	0.123
TE-132		228.16	*	-1.911E+01	7.740E+01	1.249E+02	1.986E+01	-0.153
BA-133		79.62		-1.432E+01	4.337E+01	7.233E+01	1.085E+01	-0.198

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		81.00		-2.068E+00	3.260E+00	5.367E+00	8.440E-01	-0.385
		276.40		6.316E+00	1.171E+01	2.073E+01	2.759E+00	0.305
		302.85		-1.105E+00	4.460E+00	7.688E+00	9.211E-01	-0.144
		356.02	*	-1.812E+00	1.407E+00	2.281E+00	2.663E-01	-0.794
		383.85		-9.970E-01	9.340E+00	1.608E+01	1.742E+00	-0.062
CS-134		563.23		-9.395E+00	1.193E+01	1.671E+01	1.099E+00	-0.562
		569.32		8.378E+00	6.199E+00	1.125E+01	7.478E-01	0.744
		604.70		-7.554E-01	9.858E-01	1.603E+00	1.066E-01	-0.471
		795.84	*	-8.879E-02	1.045E+00	1.764E+00	1.358E-01	-0.050
		801.93		5.675E-01	1.115E+01	1.892E+01	1.463E+00	0.030
		1365.15		-3.554E+00	3.226E+01	5.663E+01	3.603E+00	-0.063
CS-135		268.24	*	-2.502E+00	4.709E+00	8.067E+00	6.652E-01	-0.310
CS-136	+	66.88		7.791E+01	7.480E+01	6.399E+01	9.376E+00	1.217
		86.36		-2.807E+00	4.547E+01	7.635E+01	9.938E+00	-0.037
		153.25		1.358E+01	2.990E+01	5.011E+01	4.215E+00	0.271
		163.92		1.962E+01	5.128E+01	8.546E+01	6.748E+00	0.230
		176.60		9.286E+00	1.735E+01	2.900E+01	2.070E+00	0.320
		273.65		-9.465E-01	1.863E+01	3.243E+01	2.361E+00	-0.029
	+	340.55		9.510E+00	8.418E+00	8.751E+00	5.705E-01	1.087
		818.51		-1.751E-01	2.615E+00	4.419E+00	3.445E-01	-0.040
		1048.07	*	7.898E-02	3.496E+00	6.235E+00	4.807E-01	0.013
		1235.36		-1.461E+01	1.931E+01	2.674E+01	2.700E+00	-0.546
BA-137M		661.65	*	-6.670E-03	9.821E-01	1.673E+00	1.138E-01	-0.004
CS-137		661.66	*	-2.002E-03	1.039E+00	1.770E+00	1.208E-01	-0.001
CE-139		165.85	*	6.599E-01	1.061E+00	1.783E+00	1.152E-01	0.370
BA-140		162.67		2.076E+01	3.632E+01	6.087E+01	4.440E+00	0.341
		304.87		1.045E+01	5.389E+01	9.431E+01	2.587E+01	0.111
		423.73		-1.215E+00	7.875E+01	1.358E+02	4.315E+01	-0.009
		537.31	*	-1.186E+00	1.033E+01	1.758E+01	5.737E+00	-0.067
CE-141		145.44	*	2.972E-01	2.516E+00	4.176E+00	3.285E-01	0.071
CE-144		133.51	*	-9.876E-01	7.360E+00	1.216E+01	1.882E+00	-0.081
PM-144		476.78		-8.002E-02	2.083E+00	3.574E+00	2.569E-01	-0.022
		618.01		4.710E-01	9.314E-01	1.636E+00	1.141E-01	0.288
		696.49	*	-1.849E-01	1.070E+00	1.791E+00	1.259E-01	-0.103
PM-146		453.88	*	3.841E-01	1.316E+00	2.300E+00	2.010E-01	0.167
		633.25		-8.624E-02	3.967E+01	6.771E+01	2.504E+01	-0.001
		735.93		-2.453E+00	4.139E+00	6.638E+00	1.874E+00	-0.370
		747.24		-1.186E+00	2.602E+00	4.265E+00	5.670E-01	-0.278
ND-147		91.11		-8.640E+00	1.527E+01	2.515E+01	2.409E+00	-0.344
		531.02	*	8.932E-01	2.342E+01	4.028E+01	5.542E+00	0.022
PM-147		121.30	*	-1.358E+05	1.937E+06	3.219E+06	2.980E+05	-0.042
EU-152		121.78		1.298E+00	2.690E+00	4.538E+00	4.767E-01	0.286
		344.31	*	1.228E-01	3.103E+00	5.387E+00	3.682E-01	0.023
		963.37		3.678E+00	6.419E+00	1.189E+01	9.381E-01	0.309
GD-153		69.67		5.280E+01	6.346E+01	9.920E+01	7.305E+00	0.532
		83.37		2.726E+02	4.941E+02	8.437E+02	7.224E+01	0.323
		97.43	*	-1.979E+00	2.870E+00	4.704E+00	4.109E-01	-0.421
		103.18		1.638E+00	3.822E+00	6.476E+00	5.655E-01	0.253
EU-154		123.07		6.676E-01	1.911E+00	3.210E+00	3.794E-01	0.208

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		247.93		5.438E+00	1.234E+01	2.043E+01	2.051E+00	0.266
		591.76		1.923E+00	1.771E+01	3.049E+01	3.126E+00	0.063
		723.30		5.318E-01	4.685E+00	8.014E+00	6.620E-01	0.066
		756.86		-7.032E+00	2.186E+01	3.619E+01	4.028E+00	-0.194
		873.20		-1.247E+00	8.150E+00	1.439E+01	1.711E+00	-0.087
		996.30		1.384E+00	9.356E+00	1.681E+01	2.912E+00	0.082
		1004.76		-3.125E+00	5.600E+00	9.526E+00	1.039E+00	-0.328
		1274.51	*	-1.300E-01	2.676E+00	4.137E+00	3.892E-01	-0.031
EU-155		86.54		-5.073E-01	3.130E+00	5.239E+00	4.696E-01	-0.097
		105.31	*	2.674E+00	3.783E+00	6.456E+00	5.720E-01	0.414
TB-160		86.79		-8.398E+00	8.953E+00	1.459E+01	1.299E+00	-0.575
		298.57		-2.271E+00	3.609E+00	6.133E+00	3.954E-01	-0.370
		879.36	*	-4.182E+00	3.960E+00	6.538E+00	5.323E-01	-0.640
		962.29		1.803E+00	1.247E+01	2.247E+01	1.774E+00	0.080
		966.15		-1.669E+00	4.904E+00	8.510E+00	6.698E-01	-0.196
	+	1177.93		7.881E+00	1.032E+01	1.377E+01	8.344E-01	0.572
TM-171		51.87		-2.409E+02	4.943E+02	8.317E+02	5.591E+01	-0.290
		59.40		-6.610E+01	1.083E+03	1.839E+03	1.134E+02	-0.036
	+	66.72	*	2.118E+03	2.016E+03	1.949E+03	1.384E+02	1.087
HF-181		56.28		-2.810E+01	4.480E+01	7.486E+01	4.784E+00	-0.375
		57.53		-1.216E+01	2.360E+01	3.956E+01	2.490E+00	-0.308
	+	65.20		7.298E+01	6.944E+01	6.396E+01	4.443E+00	1.141
		133.02		-4.649E-01	2.560E+00	4.225E+00	3.586E-01	-0.110
		136.25		4.304E+00	2.246E+01	3.350E+01	2.771E+00	0.128
		345.85		-1.446E+00	6.597E+00	1.134E+01	6.937E-01	-0.128
		482.03	*	4.607E-03	1.471E+00	2.526E+00	1.544E-01	0.002
TA-182	+	67.75		8.783E+00	8.358E+00	6.876E+00	4.947E-01	1.277
		100.10		3.716E+00	6.510E+00	1.108E+01	9.665E-01	0.335
		222.10		-2.386E+00	1.219E+01	1.976E+01	1.299E+00	-0.121
	+	1121.28		3.327E+00	8.435E+00	6.027E+00	3.983E-01	0.552
		1189.05		3.284E+00	6.488E+00	1.204E+01	7.278E-01	0.273
		1221.42	*	-6.357E+00	4.381E+00	6.739E+00	4.043E-01	-0.943
		1230.97		3.624E+00	1.067E+01	1.929E+01	1.154E+00	0.188
IR-192		295.96		7.520E-01	3.375E+00	5.918E+00	3.872E-01	0.127
		308.46		-7.027E-01	3.193E+00	5.511E+00	3.557E-01	-0.128
		316.51	*	1.460E+00	1.177E+00	2.132E+00	1.358E-01	0.685
		468.07		-2.579E-01	2.142E+00	3.661E+00	2.526E-01	-0.070
		604.41		-8.613E+00	1.414E+01	2.318E+01	2.733E+00	-0.372
		612.46		-3.409E+01	2.415E+01	3.760E+01	3.099E+00	-0.907
HG-203		70.83		-1.016E+01	3.851E+01	6.464E+01	8.341E+00	-0.157
		72.87		-2.654E+01	2.223E+01	3.585E+01	4.510E+00	-0.740
		82.60		-1.491E-02	3.984E+01	6.709E+01	9.165E+00	0.000
		279.20	*	4.028E-01	1.429E+00	2.513E+00	1.720E-01	0.160
BI-207		569.67		1.192E+00	9.697E-01	1.750E+00	1.136E-01	0.681
		897.83		3.010E+02	6.100E+02	1.125E+03	9.283E+01	0.267
		1063.62	*	-4.367E-01	1.318E+00	2.279E+00	1.628E-01	-0.192
		1442.20		2.648E+02	6.788E+02	1.246E+03	7.253E+01	0.213
		1770.23		-2.664E+01	1.982E+01	2.971E+01	1.663E+00	-0.897
BI-211		351.07	*	8.125E+00	6.641E+00	1.198E+01	7.996E-01	0.678

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PB-211	+	404.84	*	3.254E+01	4.406E+01	4.800E+01	2.992E+01	0.678
		427.08		-9.483E+00	6.121E+01	1.045E+02	6.458E+01	-0.091
		831.96		9.535E+00	3.138E+01	5.353E+01	3.349E+01	0.178
BI-212		727.18	*	6.919E+00	8.019E+00	1.433E+01	1.266E+00	0.483
PB-212		74.80		8.647E+00	1.188E+01	2.038E+01	2.481E+00	0.424
		87.30		-1.484E+01	1.254E+01	2.010E+01	2.698E+00	-0.738
	+	115.19		2.251E+02	1.775E+02	2.257E+02	2.033E+01	0.997
	+	238.63	*	1.551E+00	4.209E+00	3.813E+00	3.039E-01	0.407
		300.09		-6.308E-01	2.358E+01	4.101E+01	3.571E+00	-0.015
BI-214		609.31	*	5.380E+00	2.278E+00	4.222E+00	3.556E-01	1.274
		768.36		3.514E+00	1.884E+01	3.230E+01	3.086E+00	0.109
		934.06		-3.433E+01	2.566E+01	4.063E+01	4.140E+00	-0.845
	+	1120.29		6.806E+00	1.726E+01	1.295E+01	1.212E+00	0.526
	+	1238.11		1.538E+01	2.065E+01	3.206E+01	2.652E+00	0.480
	+	1377.67		4.932E+01	3.311E+01	4.549E+01	3.904E+00	1.084
PB-214		74.81		1.467E+01	2.003E+01	3.440E+01	3.700E+00	0.427
		77.11		4.307E+00	1.123E+01	1.912E+01	2.111E+00	0.225
		87.30		-2.638E+01	2.224E+01	3.572E+01	4.329E+00	-0.738
		241.98		1.164E+01	1.240E+01	1.873E+01	1.619E+00	0.622
		295.21		2.558E-01	4.249E+00	7.408E+00	6.660E-01	0.035
		351.92	*	3.737E+00	2.296E+00	4.178E+00	3.539E-01	0.894
RN-219		271.23		7.501E+00	7.397E+00	1.330E+01	1.151E+00	0.564
	+	401.81	*	1.452E+01	1.756E+01	2.208E+01	2.993E+00	0.658
RA-223		122.32		3.216E+01	6.451E+01	1.088E+02	1.073E+01	0.295
		144.24		3.383E+01	2.428E+01	4.153E+01	3.691E+00	0.815
		154.21		-2.914E-01	1.363E+01	2.250E+01	1.840E+00	-0.013
		269.46		2.905E-02	5.620E+00	9.818E+00	6.663E-01	0.003
		323.87	*	1.190E+00	2.107E+01	3.666E+01	6.121E+00	0.032
	+	338.28		5.689E+01	5.059E+01	4.793E+01	5.151E+00	1.187
		445.03		1.530E+01	6.936E+01	1.208E+02	1.249E+01	0.127
RA-224		240.98	*	3.584E+01	2.514E+01	3.865E+01	2.547E+00	0.927
RA-226		295.21		2.558E-01	4.249E+00	7.408E+00	6.660E-01	0.035
		351.92		3.737E+00	2.286E+00	4.178E+00	2.545E-01	0.894
		609.31	*	5.380E+00	2.278E+00	4.222E+00	3.556E-01	1.274
AC-227		79.80		-1.687E+01	5.564E+01	9.278E+01	2.007E+01	-0.182
		236.00		4.125E-01	8.167E+00	1.185E+01	1.304E+00	0.035
		256.20	*	5.851E-01	1.291E+01	2.258E+01	3.266E+00	0.026
		286.10		-1.320E+01	4.940E+01	8.525E+01	1.027E+01	-0.155
		299.80		6.255E+00	4.330E+01	7.577E+01	1.270E+01	0.083
		304.40		3.394E+00	5.955E+01	1.039E+02	1.843E+01	0.033
		329.70		2.604E+01	2.939E+01	5.229E+01	6.702E+00	0.498
		334.20		-5.296E+01	7.944E+01	1.160E+02	2.176E+01	-0.457
TH-227		79.80		-1.659E+01	5.471E+01	9.122E+01	1.973E+01	-0.182
		94.00		3.635E+02	1.096E+02	1.402E+02	3.063E+01	2.593
		236.00		4.060E-01	8.039E+00	1.167E+01	1.118E+00	0.035
		256.20	*	5.757E-01	1.271E+01	2.222E+01	3.817E+00	0.026
		286.10		-1.299E+01	5.032E+01	8.393E+01	8.411E+01	-0.155
		299.80		6.142E+00	4.251E+01	7.440E+01	1.229E+01	0.083
		304.40		3.338E+00	5.857E+01	1.021E+02	1.789E+01	0.033

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		329.70		2.564E+01	2.893E+01	5.148E+01	6.529E+00	0.498
		334.20		-5.195E+01	7.789E+01	1.138E+02	2.101E+01	-0.457
AC-228		209.25		1.042E+01	2.136E+01	3.026E+01	1.936E+01	0.344
	+	338.32		1.372E+01	1.334E+01	1.156E+01	4.718E+00	1.187
		463.01		-4.492E+00	1.912E+01	3.247E+01	7.634E+00	-0.138
		794.95		5.446E+00	1.921E+01	3.329E+01	7.671E+00	0.164
		911.21	*	2.513E+00	4.110E+00	6.694E+00	7.306E-01	0.375
		964.77		1.772E+01	1.875E+01	3.462E+01	8.442E+00	0.512
		969.11		-2.505E+00	6.038E+00	1.037E+01	2.391E+00	-0.242
RA-228		209.25		1.042E+01	2.136E+01	3.026E+01	1.936E+01	0.344
	+	338.32		1.372E+01	1.334E+01	1.156E+01	4.718E+00	1.187
		463.01		-4.492E+00	1.912E+01	3.247E+01	7.634E+00	-0.138
		794.95		5.446E+00	1.921E+01	3.329E+01	7.671E+00	0.164
		911.21	*	2.513E+00	4.110E+00	6.694E+00	7.306E-01	0.375
		964.77		1.772E+01	1.875E+01	3.462E+01	8.442E+00	0.512
		969.11		-2.505E+00	6.038E+00	1.037E+01	2.391E+00	-0.242
TH-229		85.43		3.596E-01	6.013E+00	1.013E+01	8.880E-01	0.035
		88.47		-7.577E-01	3.502E+00	5.847E+00	5.268E-01	-0.130
		100.00		3.130E-01	6.641E+00	1.114E+01	9.715E-01	0.028
		193.63	*	1.758E+01	1.724E+01	2.922E+01	1.905E+00	0.602
		210.97		1.405E+00	2.437E+01	3.996E+01	2.620E+00	0.035
TH-230		295.21		2.558E-01	4.249E+00	7.407E+00	6.659E-01	0.035
		351.92		3.737E+00	2.286E+00	4.178E+00	2.545E-01	0.894
		609.31	*	5.380E+00	2.278E+00	4.222E+00	3.556E-01	1.274
PA-231		283.67	*	-8.180E+00	4.911E+01	8.509E+01	1.199E+01	-0.096
		301.29		1.855E+00	1.709E+01	2.987E+01	3.231E+00	0.062
		330.00		4.625E+01	6.525E+01	1.133E+02	3.558E+01	0.408
TH-231		84.21		1.704E+01	1.604E+01	2.730E+01	4.875E+00	0.624
		236.00		4.117E-01	8.153E+00	1.183E+01	1.302E+00	0.035
		256.20		5.840E-01	1.289E+01	2.254E+01	3.260E+00	0.026
		269.46	*	2.905E-02	5.620E+00	9.818E+00	7.756E-01	0.003
		271.23		7.501E+00	7.406E+00	1.330E+01	1.329E+00	0.564
		283.67		-8.179E+00	4.911E+01	8.509E+01	1.199E+01	-0.096
		301.29		1.855E+00	1.709E+01	2.987E+01	2.654E+00	0.062
		329.85		1.621E+01	2.007E+01	3.563E+01	4.918E+00	0.455
		351.07		8.125E+00	6.641E+00	1.198E+01	7.996E-01	0.678
	+	401.81		1.452E+01	1.752E+01	1.915E+01	2.076E+00	0.758
TH-232	+	238.59	*	1.520E+00	4.123E+00	3.734E+00	2.976E-01	0.407
		911.20		2.462E+00	4.080E+00	6.641E+00	7.248E-01	0.371
		964.40		2.455E+01	1.882E+01	3.475E+01	8.474E+00	0.707
		969.11		-2.488E+00	5.996E+00	1.030E+01	2.375E+00	-0.242
PA-233		75.28		7.524E+01	9.859E+01	1.688E+02	2.519E+01	0.446
		86.59		-9.635E+00	5.075E+01	8.478E+01	2.281E+01	-0.114
		300.12		-3.192E-01	1.193E+01	2.076E+01	2.849E+00	-0.015
		311.98	*	-4.288E-01	2.026E+00	3.496E+00	2.343E-01	-0.123
	+	340.50		3.451E+01	3.149E+01	3.176E+01	7.324E+00	1.087
	+	398.62		4.799E+01	6.995E+01	1.109E+02	2.863E+01	0.433
		415.76		6.158E+00	4.904E+01	8.523E+01	1.754E+01	0.072
PA-234	+	63.00		2.354E+01	1.091E+02	9.592E+01	1.393E+01	0.245

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		94.67		-2.606E+01	7.659E+00	1.051E+01	1.315E+00	-2.480
		98.44		1.384E+00	3.339E+00	5.515E+00	3.078E+00	0.251
		99.70		2.039E+00	1.722E+01	2.896E+01	2.525E+00	0.070
		111.00		4.857E+00	7.103E+00	1.086E+01	1.333E+00	0.447
		131.20		1.762E+00	3.714E+00	6.253E+00	5.384E-01	0.282
		152.70		2.588E+00	1.089E+01	1.815E+01	2.975E+00	0.143
	+	186.00		9.819E+01	1.025E+02	6.417E+01	1.970E+01	1.530
		226.40		2.829E+00	1.379E+01	2.267E+01	2.713E+00	0.125
		227.20		6.923E+00	1.474E+01	2.446E+01	1.610E+00	0.283
		248.90		-7.814E+00	2.716E+01	4.697E+01	1.053E+01	-0.166
		293.70		1.467E+01	2.033E+01	3.602E+01	5.884E+00	0.407
		369.80		-2.337E+01	2.738E+01	4.492E+01	9.365E+00	-0.520
		568.70		4.762E+01	3.110E+01	5.692E+01	3.693E+00	0.837
		569.50		1.057E+01	8.602E+00	1.553E+01	1.008E+00	0.681
		574.00		-4.083E+01	4.731E+01	7.674E+01	4.995E+00	-0.532
		699.00		-1.837E+01	2.152E+01	3.404E+01	6.271E+00	-0.539
		706.10		-1.271E+01	3.283E+01	5.335E+01	2.365E+01	-0.238
		733.00		-2.328E+00	1.020E+01	1.703E+01	3.697E+00	-0.137
		742.81		1.105E+01	3.982E+01	6.756E+01	4.531E+01	0.164
		796.30		-1.667E+01	2.377E+01	3.743E+01	1.002E+01	-0.445
		805.80		1.190E+01	2.839E+01	4.904E+01	1.491E+01	0.243
		819.60		-6.128E+00	3.362E+01	5.608E+01	2.123E+01	-0.109
		826.30		-2.676E-01	2.335E+01	3.944E+01	1.759E+01	-0.007
		831.60		6.221E+00	1.615E+01	2.803E+01	8.305E+00	0.222
		876.40		-1.150E-01	2.221E+01	3.964E+01	4.073E+01	-0.003
		880.51		-6.405E+00	7.682E+00	1.291E+01	1.052E+00	-0.496
		883.24		8.447E+00	9.574E+00	1.470E+01	9.874E+00	0.575
		899.00		9.945E+00	2.149E+01	3.886E+01	1.696E+01	0.256
		925.00		1.344E+01	3.193E+01	5.834E+01	4.733E+00	0.230
		926.50		1.056E+00	4.608E+00	8.329E+00	2.091E+00	0.127
		946.00	*	5.378E+00	7.553E+00	1.404E+01	2.596E+00	0.383
		949.00		8.192E-01	1.072E+01	1.929E+01	1.539E+00	0.042
		980.50		-5.635E+00	1.819E+01	3.171E+01	2.466E+00	-0.178
		1394.10		-1.786E+01	3.295E+01	5.153E+01	3.338E+01	-0.347
PA-234M		766.40		-1.294E+02	4.545E+02	7.363E+02	5.637E+02	-0.176
		1001.03	*	3.801E+01	1.197E+02	2.166E+02	1.973E+01	0.175
TH-234	+	63.29	*	2.019E+01	9.364E+01	9.751E+01	1.674E+01	0.207
		92.38		1.466E+02	3.388E+01	4.014E+01	7.300E+00	3.653
	+	112.81		5.531E+02	4.449E+02	5.563E+02	1.011E+02	0.994
U-234	+	67.67		8.792E+02	8.424E+02	6.922E+02	9.246E+01	1.270
		241.98		1.166E+01	1.241E+01	1.875E+01	1.622E+00	0.622
		295.21	*	2.558E-01	4.249E+00	7.407E+00	6.659E-01	0.035
		351.92		3.737E+00	2.296E+00	4.178E+00	3.539E-01	0.894
U-235		89.95		-2.247E+02	8.094E+01	5.972E+01	1.848E+01	-3.762
		93.35		1.813E+02	5.659E+01	4.774E+01	1.341E+01	3.797
		105.00		3.382E+00	3.783E+01	6.344E+01	1.896E+01	0.053
		143.76	*	1.017E+01	7.668E+00	1.286E+01	2.201E+00	0.791
		163.33		3.597E+00	1.696E+01	2.812E+01	5.134E+00	0.128
	+	185.71		3.637E+00	3.635E+00	2.375E+00	1.544E-01	1.532

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	205.31		2.684E+01	2.110E+01	2.701E+01	4.669E+00	0.994
NP-237		86.48	*	-9.810E-01	7.631E+00	1.278E+01	2.871E+00	-0.077
		95.87		-2.021E+02	6.280E+01	5.454E+01	1.346E+01	-3.706
NP-239		99.55		1.247E+00	5.632E+00	9.496E+00	8.282E-01	0.131
		117.00	*	1.121E+01	7.583E+00	1.186E+01	1.077E+00	0.945
		209.75		9.371E-01	2.791E+01	4.065E+01	2.665E+00	0.023
		228.18		-1.932E+00	7.861E+00	1.270E+01	8.358E-01	-0.152
		277.60		3.411E+00	5.738E+00	1.019E+01	6.653E-01	0.335
		334.31		-2.778E+01	4.368E+01	6.438E+01	4.002E+00	-0.431
AM-241		59.54	*	-3.273E-01	6.243E+00	1.060E+01	7.429E-01	-0.031
AM-242		99.55		2.911E+01	1.314E+02	2.216E+02	1.933E+01	0.131
		103.70	*	-4.650E+00	7.897E+01	1.319E+02	1.153E+01	-0.035
CF-249		252.85		2.522E+01	2.892E+01	5.184E+01	3.412E+00	0.486
		333.44		-5.380E+00	5.030E+00	8.338E+00	5.189E-01	-0.645
		387.95	*	3.501E-01	1.216E+00	2.131E+00	1.208E-01	0.164
CF-251		176.00	*	3.145E+00	4.559E+00	7.652E+00	4.957E-01	0.411
		227.00		6.501E+00	1.311E+01	2.177E+01	1.433E+00	0.299
		285.00		1.413E+01	5.563E+01	9.785E+01	6.366E+00	0.144

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139349001       *
* Acquisition date : 13-JUL-2005 18:54:12 Detector SN#    : 100017444      *
* Detector ID      : GAMMA12              Sensitivity     : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 12:00:03.52     Half life ratio :  8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 23-JUN-2005 08:55:00 Nuclide Library :                 *
* Sample ID        : G139349001           Analyst initials: AKB             *
* Batch Number     : 437153               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
* Standard Weight  :   0.00000                                              *
* CALIB. DATE/TIME : 29-DEC-2004 13:03:05 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	1.126E+01	2.681E+01	1.808E+01	0.000E+00
Y-91	1.667E+00	2.330E+00	1.907E+00	0.000E+00
MO-99	4.569E+02	2.328E+02	2.893E+02	0.000E+00
TL-208	5.184E-01	2.344E+00	1.910E+00	0.000E+00
BI-210	2.941E+01	2.924E+02	2.986E+02	0.000E+00
PB-210	2.941E+01	2.924E+02	2.986E+02	0.000E+00
TH-228	1.551E+00	4.209E+00	3.137E+00	0.000E+00
U-238	2.019E+01	9.364E+01	8.293E+01	0.000E+00
CM-247	1.300E+00	1.564E+00	1.717E+00	0.000E+00
ANH-511	1.005E-01	3.409E+00	1.426E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)

BE-7	7.133E+00	1.042E+01	1.852E+01	0.000E+00	NOT IDENT.
NA-22	-4.857E-02	9.607E-01	1.485E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	8.454E+09	0.000E+00	0.000E+00	SHORT HLIF
AL-26	1.429E-01	1.012E+00	1.880E+00	0.000E+00	FAIL ABUN
SC-46	-3.630E-02	1.042E+00	1.861E+00	0.000E+00	FAIL ABUN
V-48	2.894E-01	2.316E+00	4.159E+00	0.000E+00	NOT IDENT.
CR-51	-1.738E+01	1.369E+01	2.253E+01	0.000E+00	NOT IDENT.
MN-54	-4.380E-01	9.548E-01	1.558E+00	0.000E+00	NOT IDENT.
CO-56	-4.072E-01	1.130E+00	1.969E+00	0.000E+00	FAIL ABUN
MN-56	0.000E+00	2.773E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	5.157E-01	9.453E-01	1.597E+00	0.000E+00	NOT IDENT.
CO-58	9.850E-01	1.109E+00	2.001E+00	0.000E+00	NOT IDENT.
FE-59	3.033E-02	2.630E+00	4.644E+00	0.000E+00	NOT IDENT.
CO-60	1.691E-01	9.552E-01	1.726E+00	0.000E+00	NOT IDENT.
ZN-65	1.490E+00	2.165E+00	4.014E+00	0.000E+00	NOT IDENT.
SE-75	2.803E-01	1.362E+00	2.402E+00	0.000E+00	FAIL ABUN
KR-85	0.000E+00	3.081E+02	5.576E+02	0.000E+00	NOT IDENT.
SR-85	0.000E+00	1.674E+00	3.029E+00	0.000E+00	NOT IDENT.
Y-88	-2.135E-01	1.197E+00	2.151E+00	0.000E+00	NOT IDENT.
NB-94	-2.122E-01	9.845E-01	1.645E+00	0.000E+00	NOT IDENT.
NB-95	-1.780E-01	1.397E+00	2.347E+00	0.000E+00	NOT IDENT.
NB-95M	-4.733E+01	1.970E+02	2.815E+02	0.000E+00	NOT IDENT.
ZR-95	-6.015E-01	2.136E+00	3.547E+00	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	9.513E+24	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-5.200E-01	1.600E+00	2.350E+00	0.000E+00	NOT IDENT.
RH-106	-1.164E+00	9.347E+00	1.583E+01	0.000E+00	FAIL ABUN
RU-106	-2.200E+00	9.440E+00	1.587E+01	0.000E+00	NOT IDENT.
AG-108M	3.750E-01	9.867E-01	1.733E+00	0.000E+00	NOT IDENT.
CD-109	-4.610E+01	2.682E+01	4.230E+01	0.000E+00	NOT IDENT.
AG-110M	-1.908E-01	9.283E-01	1.565E+00	0.000E+00	NOT IDENT.
SN-113	1.187E-01	1.397E+00	2.427E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	1.844E+03	0.000E+00	0.000E+00	SHORT HLIF
SN-115	-2.787E+01	8.259E+01	1.446E+02	0.000E+00	NOT IDENT.
SN-117M	9.169E-02	2.576E+00	4.256E+00	0.000E+00	NOT IDENT.
TE-123M	-2.816E-01	1.048E+00	1.714E+00	0.000E+00	NOT IDENT.
SB-124	1.752E+00	2.464E+00	4.709E+00	0.000E+00	NOT IDENT.
SB-125	-8.482E-01	2.757E+00	4.690E+00	0.000E+00	NOT IDENT.
TE-125M	-3.966E+00	3.438E+02	5.746E+02	0.000E+00	NOT IDENT.
I-126	3.008E-01	6.999E+00	1.193E+01	0.000E+00	NOT IDENT.
SB-126	2.727E+00	5.256E+00	9.247E+00	0.000E+00	NOT IDENT.
SN-126	-3.092E+00	2.630E+00	4.246E+00	0.000E+00	FAIL ABUN
SB-127	2.292E+01	9.843E+01	1.705E+02	0.000E+00	NOT IDENT.
I-131	-2.603E-01	6.075E+00	1.049E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	4.660E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.911E+01	7.740E+01	1.249E+02	0.000E+00	NOT IDENT.
BA-133	-1.812E+00	1.407E+00	2.281E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	1.458E+07	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-8.879E-02	1.045E+00	1.764E+00	0.000E+00	NOT IDENT.
CS-135	-2.502E+00	4.709E+00	8.067E+00	0.000E+00	NOT IDENT.
I-135	0.000E+00	1.447E+23	0.000E+00	0.000E+00	SHORT HLIF
CS-136	7.898E-02	3.496E+00	6.235E+00	0.000E+00	FAIL ABUN
BA-137M	-6.670E-03	9.821E-01	1.673E+00	0.000E+00	NOT IDENT.
CS-137	-2.002E-03	1.039E+00	1.770E+00	0.000E+00	NOT IDENT.
CE-139	6.599E-01	1.061E+00	1.783E+00	0.000E+00	NOT IDENT.
BA-140	-1.186E+00	1.033E+01	1.758E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	5.564E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-141	2.972E-01	2.516E+00	4.176E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	6.456E+04	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-9.876E-01	7.360E+00	1.216E+01	0.000E+00	NOT IDENT.
PM-144	-1.849E-01	1.070E+00	1.791E+00	0.000E+00	NOT IDENT.

PR-144	0.000E+00	5.789E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	3.841E-01	1.316E+00	2.300E+00	0.000E+00	NOT IDENT.
ND-147	8.932E-01	2.342E+01	4.028E+01	0.000E+00	NOT IDENT.
PM-147	-1.358E+05	1.937E+06	3.219E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	1.631E+04	0.000E+00	0.000E+00	SHORT HLIF
EU-152	1.228E-01	3.103E+00	5.387E+00	0.000E+00	NOT IDENT.
GD-153	-1.979E+00	2.870E+00	4.704E+00	0.000E+00	NOT IDENT.
EU-154	-1.300E-01	2.676E+00	4.137E+00	0.000E+00	NOT IDENT.
EU-155	2.674E+00	3.783E+00	6.456E+00	0.000E+00	NOT IDENT.
TB-160	-4.182E+00	3.960E+00	6.538E+00	0.000E+00	FAIL ABUN
TM-171	0.000E+00	2.016E+03	1.949E+03	0.000E+00	FAIL ABUN
HF-181	4.607E-03	1.471E+00	2.526E+00	0.000E+00	FAIL ABUN
TA-182	-6.357E+00	4.381E+00	6.739E+00	0.000E+00	FAIL ABUN
IR-192	1.460E+00	1.177E+00	2.132E+00	0.000E+00	NOT IDENT.
HG-203	4.028E-01	1.429E+00	2.513E+00	0.000E+00	NOT IDENT.
BI-207	-4.367E-01	1.318E+00	2.279E+00	0.000E+00	NOT IDENT.
BI-211	8.125E+00	6.641E+00	1.198E+01	0.000E+00	NOT IDENT.
PB-211	3.254E+01	4.406E+01	4.800E+01	0.000E+00	FAIL ABUN
BI-212	6.919E+00	8.019E+00	1.433E+01	0.000E+00	NOT IDENT.
PB-212	1.551E+00	4.209E+00	3.813E+00	0.000E+00	FAIL ABUN
BI-214	0.000E+00	2.278E+00	4.222E+00	0.000E+00	FAIL ABUN
PB-214	3.737E+00	2.296E+00	4.178E+00	0.000E+00	NOT IDENT.
RN-219	1.452E+01	1.756E+01	2.208E+01	0.000E+00	FAIL ABUN
RA-223	1.190E+00	2.107E+01	3.666E+01	0.000E+00	FAIL ABUN
RA-224	3.584E+01	2.514E+01	3.865E+01	0.000E+00	NOT IDENT.
RA-226	0.000E+00	2.278E+00	4.222E+00	0.000E+00	NOT IDENT.
AC-227	5.851E-01	1.291E+01	2.258E+01	0.000E+00	NOT IDENT.
TH-227	5.757E-01	1.271E+01	2.222E+01	0.000E+00	NOT IDENT.
AC-228	2.513E+00	4.110E+00	6.694E+00	0.000E+00	FAIL ABUN
RA-228	2.513E+00	4.110E+00	6.694E+00	0.000E+00	FAIL ABUN
TH-229	1.758E+01	1.724E+01	2.922E+01	0.000E+00	NOT IDENT.
TH-230	0.000E+00	2.278E+00	4.222E+00	0.000E+00	NOT IDENT.
PA-231	-8.180E+00	4.911E+01	8.509E+01	0.000E+00	NOT IDENT.
TH-231	2.905E-02	5.620E+00	9.818E+00	0.000E+00	FAIL ABUN
TH-232	1.520E+00	4.123E+00	3.734E+00	0.000E+00	FAIL ABUN
PA-233	-4.288E-01	2.026E+00	3.496E+00	0.000E+00	FAIL ABUN
PA-234	5.378E+00	7.553E+00	1.404E+01	0.000E+00	FAIL ABUN
PA-234M	3.801E+01	1.197E+02	2.166E+02	0.000E+00	NOT IDENT.
TH-234	2.019E+01	9.364E+01	9.751E+01	0.000E+00	FAIL ABUN
U-234	2.558E-01	4.249E+00	7.407E+00	0.000E+00	FAIL ABUN
U-235	1.017E+01	7.668E+00	1.286E+01	0.000E+00	FAIL ABUN
NP-237	-9.810E-01	7.631E+00	1.278E+01	0.000E+00	NOT IDENT.
NP-239	1.121E+01	7.583E+00	1.186E+01	0.000E+00	NOT IDENT.
AM-241	-3.273E-01	6.243E+00	1.060E+01	0.000E+00	NOT IDENT.
AM-242	-4.650E+00	7.897E+01	1.319E+02	0.000E+00	NOT IDENT.
CF-249	3.501E-01	1.216E+00	2.131E+00	0.000E+00	NOT IDENT.
CF-251	3.145E+00	4.559E+00	7.652E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:32:33.46

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139349001.CNF;1
Sample date : 23-JUN-2005 08:55:00 Acquisition date : 13-JUL-2005 18:54:12
Sample ID : G139349001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA12 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:03.52 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 100017444
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.87	61	618	0.60	92.91	89	8	1.41E-03	72.0	
2	4	63.31	254	712	1.31	125.81	122	15	5.88E-03	19.4	5.46E-01
3	4	66.26	198	905	1.71	131.72	122	15	4.59E-03	29.4	
4	0	92.78	640	985	1.34	184.79	182	10	1.48E-02	10.0	
5	0	113.51	116	648	2.02	226.29	223	8	2.68E-03	39.2	
6	0	139.78	183	642	1.10	278.87	275	8	4.23E-03	25.1	
7	0	185.95	562	958	1.31	371.27	364	15	1.30E-02	12.7	
8	0	198.52	290	596	1.49	396.41	392	10	6.72E-03	16.8	
9	0	206.25	102	480	2.41	411.90	408	8	2.37E-03	38.4	
10	0	238.86	202	704	1.19	477.16	472	12	4.69E-03	27.1	
11	0	338.55	88	379	2.34	676.66	672	11	2.03E-03	44.1	
12	0	352.40	43	240	1.21	704.38	702	7	9.90E-04	62.1	
13	0	399.92	31	165	0.78	799.46	797	7	7.17E-04	71.7	
14	0	403.24	48	223	1.55	806.10	803	10	1.10E-03	60.1	
15	0	501.50	51	239	0.90	1002.73	998	12	1.19E-03	61.8	
16	0	511.47	914	340	2.89	1022.69	1014	19	2.11E-02	5.9	
17	0	558.98	87	196	1.48	1117.75	1113	11	2.00E-03	33.1	
18	0	584.21	128	181	1.44	1168.22	1162	13	2.95E-03	23.7	
19	0	596.85	104	131	1.91	1193.52	1190	9	2.40E-03	22.1	
20	0	609.85	87	176	1.22	1219.52	1215	10	2.01E-03	30.6	
21	0	913.32	72	123	2.54	1826.65	1818	19	1.67E-03	38.7	
22	0	1034.76	18	42	1.39	2069.59	2066	8	4.07E-04	68.2	
23	0	1108.83	24	48	1.49	2217.74	2213	10	5.62E-04	56.9	
24	0	1121.85	51	106	0.77	2243.78	2237	17	1.19E-03	48.1	
25	0	1128.87	17	29	0.67	2257.83	2255	6	3.95E-04	56.0	
26	0	1175.96	21	44	0.82	2352.01	2349	12	4.89E-04	65.4	
27	0	1204.04	26	79	4.45	2408.18	2402	15	5.93E-04	78.1	
28	0	1239.60	20	45	1.40	2479.29	2474	10	4.60E-04	67.0	
29	0	1254.75	22	53	0.93	2509.60	2506	11	5.13E-04	69.0	
30	0	1280.62	29	39	3.51	2561.34	2554	13	6.78E-04	47.6	
31	0	1374.21	14	32	0.92	2748.52	2747	7	3.16E-04	73.7	
32	0	1379.11	41	37	3.88	2758.31	2753	11	9.43E-04	33.3	
33	0	1462.33	124	66	2.79	2924.74	2916	20	2.87E-03	18.3	
34	0	1563.87	17	48	0.58	3127.79	3121	16	3.86E-04	96.0	
35	0	1685.25	16	6	0.98	3370.51	3368	6	3.67E-04	37.6	
36	0	1729.89	30	26	5.14	3459.77	3453	13	6.94E-04	39.5	
37	0	1765.88	61	36	2.06	3531.71	3526	15	1.42E-03	24.3	
38	0	1775.83	10	12	1.06	3551.62	3547	7	2.25E-04	67.9	

Sample ID : G139349001 Acquisition date : 13-JUL-2005 18:54:12

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1799.18	34	25	1.58	3598.29	3589	17	7.81E-04	38.4	
40	0	1875.23	7	12	0.73	3750.35	3746	7	1.70E-04	86.6	
41	0	1965.03	14	40	5.68	3929.87	3922	17	3.12E-04	113.2	
42	0	1983.43	8	8	1.45	3966.66	3965	6	1.87E-04	64.5	

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:32:39.09

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**********************************************************************
*                          GENERAL ENG. LABS, LLC.                   *
*                              2040 Savage Road                      *
*                            Charleston, SC 29414                    *
**********************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139349001.CNF;1
Sample date       : 23-JUN-2005 08:55:00 Acquisition date : 13-JUL-2005 18:54:12
Sample ID         : G139349001           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA12              Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00         Elapsed real time: 0 12:00:03.52  0.0%
Energy tolerance  : 2.00000 KEV          Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 437153               Detector SN#     : 100017444
Matrix Spike DPM  :                      LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	23	10.67*	6.034E-01	1.126E+01	1.126E+01	238.12
Y-91	557.57	50	95.08*	1.267E+00	1.305E+00	1.667E+00	139.82
	1204.90	26	0.30	6.967E-01	3.834E+02	4.897E+02	156.34
MO-99	140.51	183	82.70*	2.761E+00	2.504E+00	4.569E+02	50.95
E	181.06	------	6.20	2.543E+00	------ Line Not Found		------
	739.58	------	12.80	1.030E+00	------ Line Not Found		------
TL-208	75.00	------	3.43	1.749E+00	------ Line Not Found		------
	277.35	------	6.80	2.005E+00	------ Line Not Found		------
	510.84	4	21.60	1.348E+00	4.651E-01	4.747E-01	3393.86
	583.14	17	84.20*	1.228E+00	5.078E-01	5.184E-01	452.18
	763.30	------	1.64	1.005E+00	------ Line Not Found		------
	860.37	------	12.46	9.143E-01	------ Line Not Found		------
	1093.90	------	0.37	7.523E-01	------ Line Not Found		------
BI-210	46.50	10	4.05*	2.750E-01	2.936E+01	2.941E+01	994.00
PB-210	46.50	10	4.05*	2.750E-01	2.936E+01	2.941E+01	994.00
TH-228	84.40	------	1.21	2.147E+00	------ Line Not Found		------
	238.60	48	44.60*	2.194E+00	1.520E+00	1.551E+00	271.34
	300.10	------	3.41	1.909E+00	------ Line Not Found		------
U-238	63.29	27	3.80*	1.118E+00	2.019E+01	2.019E+01	463.76
CM-247	278.00	------	3.40	2.002E+00	------ Line Not Found		------
	287.40	------	2.00	1.962E+00	------ Line Not Found		------
M	402.60	48	72.60*	1.580E+00	1.300E+00	1.300E+00	120.33
ANH-511	511.00	4	100.00*	1.348E+00	1.005E-01	1.005E-01	3393.85

Flag: "*" = Keyline

Sample ID : G139349001 Acquisition date : 13-JUL-2005 18:54:12

Total number of lines in spectrum 38
Number of unidentified lines 17
Number of lines tentatively identified by NID 21 55.26%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.126E+01	1.126E+01	2.681E+01	238.12	
Y-91	58.51D	1.28	1.305E+00	1.667E+00	2.330E+00	139.82	
MO-99	66.02H	182.	2.504E+00	4.569E+02	2.328E+02	50.95	
TL-208	1.91Y	1.02	5.078E-01	5.184E-01	23.44E-01	452.18	
BI-210	22.26Y	1.00	2.936E+01	2.941E+01	29.24E+01	994.00	
PB-210	22.26Y	1.00	2.936E+01	2.941E+01	29.24E+01	994.00	
TH-228	1.91Y	1.02	1.520E+00	1.551E+00	4.209E+00	271.34	
U-238	4.47E+09Y	1.00	2.019E+01	2.019E+01	9.364E+01	463.76	
CM-247	1.56E+07Y	1.00	1.300E+00	1.300E+00	1.564E+00	120.33	
ANH-511	1.00E+09Y	1.00	1.005E-01	1.005E-01	34.09E-01	3393.85	
			---------	---------			
	Total Activity :		9.741E+01	5.523E+02			
	Grand Total Activity :		9.741E+01	5.523E+02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	66.26	135	905	1.71	131.72	122	15	3.12E-03	94.9	1.29E+00	T
0	113.51	116	648	2.02	226.29	223	8	2.68E-03	78.3	2.73E+00	T
0	185.95	158	958	1.31	371.27	364	15	3.65E-03	99.7	2.51E+00	T
0	198.52	290	596	1.49	396.41	392	10	6.72E-03	33.5	2.43E+00	T
0	206.25	102	480	2.41	411.90	408	8	2.37E-03	76.7	2.38E+00	T
0	338.55	88	379	2.34	676.66	672	11	2.03E-03	88.3	1.77E+00	T
0	399.92	31	165	0.78	799.46	797	7	7.17E-04	****	1.59E+00	T
0	501.50	51	239	0.90	1002.73	998	12	1.19E-03	****	1.37E+00	
0	596.85	104	131	1.91	1193.52	1190	9	2.40E-03	44.3	1.21E+00	
0	913.32	3	123	2.54	1826.65	1818	19	7.48E-05	****	8.71E-01	
0	1034.76	18	42	1.39	2069.59	2066	8	4.07E-04	****	7.87E-01	
0	1108.83	24	48	1.49	2217.74	2213	10	5.62E-04	****	7.44E-01	
0	1121.85	24	106	0.77	2243.78	2237	17	5.61E-04	****	7.37E-01	T
0	1128.87	17	29	0.67	2257.83	2255	6	3.95E-04	****	7.33E-01	
0	1175.96	21	44	0.82	2352.01	2349	12	4.89E-04	****	7.10E-01	T
0	1239.60	20	45	1.40	2479.29	2474	10	4.60E-04	****	6.81E-01	T
0	1254.75	22	53	0.93	2509.60	2506	11	5.13E-04	****	6.75E-01	
0	1280.62	29	39	3.51	2561.34	2554	13	6.78E-04	95.2	6.64E-01	
0	1374.21	14	32	0.92	2748.52	2747	7	3.16E-04	****	6.30E-01	
0	1379.11	41	37	3.88	2758.31	2753	11	9.43E-04	66.6	6.29E-01	T
0	1563.87	17	48	0.58	3127.79	3121	16	3.86E-04	****	5.78E-01	
0	1685.25	16	6	0.98	3370.51	3368	6	3.67E-04	75.1	5.54E-01	
0	1729.89	30	26	5.14	3459.77	3453	13	6.94E-04	79.0	5.47E-01	
0	1775.83	10	12	1.06	3551.62	3547	7	2.25E-04	****	5.41E-01	
0	1799.18	34	25	1.58	3598.29	3589	17	7.81E-04	76.7	5.38E-01	
0	1875.23	7	12	0.73	3750.35	3746	7	1.70E-04	****	5.30E-01	
0	1965.03	14	40	5.68	3929.87	3922	17	3.12E-04	****	5.23E-01	
0	1983.43	8	8	1.45	3966.66	3965	6	1.87E-04	****	5.22E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:32:47.80

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139349001.CNF;1		
Acquisition date	: 13-JUL-2005 18:54:12	Detector SN#	: 100017444
Detector ID	: GAMMA12	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 12:00:00.00	Abundance limit	: 75.00000
Elapsed real time	: 0 12:00:03.52	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 23-JUN-2005 08:55:00	Nuclide Library	: EPI
Sample ID	: G139349001	Analyst initials	: AKB
Batch Number	: 437153	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 29-DEC-2004 13:03:05.6	MS Isotope	:
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	1.126E+01	2.681E+01	1.808E+01	1.117E+00	0.623
Y-91	1.667E+00	2.330E+00	1.907E+00	1.229E-01	0.874
MO-99	4.569E+02	2.328E+02	2.893E+02	2.340E+01	1.579
TL-208	5.184E-01	2.344E+00	1.910E+00	1.402E-01	0.271
BI-210	2.941E+01	2.924E+02	2.986E+02	2.281E+01	0.098
PB-210	2.941E+01	2.924E+02	2.986E+02	2.281E+01	0.098
TH-228	1.551E+00	4.209E+00	3.137E+00	2.500E-01	0.494
U-238	2.019E+01	9.364E+01	8.293E+01	1.423E+01	0.243
CM-247	1.300E+00	1.564E+00	1.717E+00	9.768E-02	0.757
ANH-511	1.005E-01	3.409E+00	1.426E+00	8.909E-02	0.070

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	7.133E+00		1.042E+01	1.852E+01	1.297E+00	0.385
NA-22	-4.857E-02		9.607E-01	1.485E+00	8.785E-02	-0.033

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	1.429E-01		1.012E+00	1.880E+00	1.040E-01	0.076
SC-46	-3.630E-02		1.042E+00	1.861E+00	1.526E-01	-0.020
V-48	2.894E-01		2.316E+00	4.159E+00	3.226E-01	0.070
CR-51	-1.738E+01		1.369E+01	2.253E+01	1.562E+00	-0.772
MN-54	-4.380E-01		9.548E-01	1.558E+00	1.228E-01	-0.281
CO-56	-4.072E-01		1.130E+00	1.969E+00	1.565E-01	-0.207
CO-57	5.157E-01		9.453E-01	1.597E+00	1.486E-01	0.323
CO-58	9.850E-01		1.109E+00	2.001E+00	1.552E-01	0.492
FE-59	3.033E-02		2.630E+00	4.644E+00	3.570E-01	0.007
CO-60	1.691E-01		9.552E-01	1.726E+00	9.959E-02	0.098
ZN-65	1.490E+00		2.165E+00	4.014E+00	2.680E-01	0.371
SE-75	2.803E-01		1.362E+00	2.402E+00	1.589E-01	0.117
KR-85	1.691E+03		3.081E+02	5.576E+02	3.491E+01	3.033
SR-85	9.187E+00		1.674E+00	3.029E+00	1.897E-01	3.033
Y-88	-2.135E-01		1.197E+00	2.151E+00	1.183E-01	-0.099
NB-94	-2.122E-01		9.845E-01	1.645E+00	1.162E-01	-0.129
NB-95	-1.780E-01		1.397E+00	2.347E+00	1.751E-01	-0.076
NB-95M	-4.733E+01		1.970E+02	2.815E+02	3.086E+01	-0.168
ZR-95	-6.015E-01		2.136E+00	3.547E+00	2.980E-01	-0.170
RU-103	-5.200E-01		1.600E+00	2.350E+00	3.014E-01	-0.221
RH-106	-1.164E+00		9.347E+00	1.583E+01	1.057E+00	-0.074
RU-106	-2.200E+00		9.440E+00	1.587E+01	1.935E+00	-0.139
AG-108M	3.750E-01		9.867E-01	1.733E+00	1.102E-01	0.216
CD-109	-4.610E+01		2.682E+01	4.230E+01	3.821E+00	-1.090
AG-110M	-1.908E-01		9.283E-01	1.565E+00	1.114E-01	-0.122
SN-113	1.187E-01		1.397E+00	2.427E+00	1.462E-01	0.049
SN-115	-2.787E+01		8.259E+01	1.446E+02	1.167E+01	-0.193
SN-117M	9.169E-02		2.576E+00	4.256E+00	2.937E-01	0.022
TE-123M	-2.816E-01		1.048E+00	1.714E+00	1.190E-01	-0.164
SB-124	1.752E+00		2.464E+00	4.709E+00	2.922E-01	0.372
SB-125	-8.482E-01		2.757E+00	4.690E+00	2.850E-01	-0.181
TE-125M	-3.966E+00		3.438E+02	5.746E+02	6.046E+01	-0.007
I-126	3.008E-01		6.999E+00	1.193E+01	8.151E-01	0.025
SB-126	2.727E+00		5.256E+00	9.247E+00	6.635E-01	0.295
SN-126	-3.092E+00		2.630E+00	4.246E+00	3.815E-01	-0.728
SB-127	2.292E+01		9.843E+01	1.705E+02	2.066E+01	0.134
I-131	-2.603E-01		6.075E+00	1.049E+01	6.989E-01	-0.025
TE-132	-1.911E+01		7.740E+01	1.249E+02	1.986E+01	-0.153
BA-133	-1.812E+00		1.407E+00	2.281E+00	2.663E-01	-0.794
CS-134	-8.879E-02		1.045E+00	1.764E+00	1.358E-01	-0.050
CS-135	-2.502E+00		4.709E+00	8.067E+00	6.652E-01	-0.310
CS-136	7.898E-02		3.496E+00	6.235E+00	4.807E-01	0.013
BA-137M	-6.670E-03		9.821E-01	1.673E+00	1.138E-01	-0.004
CS-137	-2.002E-03		1.039E+00	1.770E+00	1.208E-01	-0.001
CE-139	6.599E-01		1.061E+00	1.783E+00	1.152E-01	0.370
BA-140	-1.186E+00		1.033E+01	1.758E+01	5.737E+00	-0.067
CE-141	2.972E-01		2.516E+00	4.176E+00	3.285E-01	0.071
CE-144	-9.876E-01		7.360E+00	1.216E+01	1.882E+00	-0.081

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-144	-1.849E-01		1.070E+00	1.791E+00	1.259E-01	-0.103
PM-146	3.841E-01		1.316E+00	2.300E+00	2.010E-01	0.167
ND-147	8.932E-01		2.342E+01	4.028E+01	5.542E+00	0.022
PM-147	-1.358E+05		1.937E+06	3.219E+06	2.980E+05	-0.042
EU-152	1.228E-01		3.103E+00	5.387E+00	3.682E-01	0.023
GD-153	-1.979E+00		2.870E+00	4.704E+00	4.109E-01	-0.421
EU-154	-1.300E-01		2.676E+00	4.137E+00	3.892E-01	-0.031
EU-155	2.674E+00		3.783E+00	6.456E+00	5.720E-01	0.414
TB-160	-4.182E+00		3.960E+00	6.538E+00	5.323E-01	-0.640
TM-171	2.118E+03	+	2.016E+03	1.949E+03	1.384E+02	1.087
HF-181	4.607E-03		1.471E+00	2.526E+00	1.544E-01	0.002
TA-182	-6.357E+00		4.381E+00	6.739E+00	4.043E-01	-0.943
IR-192	1.460E+00		1.177E+00	2.132E+00	1.358E-01	0.685
HG-203	4.028E-01		1.429E+00	2.513E+00	1.720E-01	0.160
BI-207	-4.367E-01		1.318E+00	2.279E+00	1.628E-01	-0.192
BI-211	8.125E+00		6.641E+00	1.198E+01	7.996E-01	0.678
PB-211	3.254E+01	+	4.406E+01	4.800E+01	2.992E+01	0.678
BI-212	6.919E+00		8.019E+00	1.433E+01	1.266E+00	0.483
PB-212	1.551E+00	+	4.209E+00	3.813E+00	3.039E-01	0.407
BI-214	5.380E+00		2.278E+00	4.222E+00	3.556E-01	1.274
PB-214	3.737E+00		2.296E+00	4.178E+00	3.539E-01	0.894
RN-219	1.452E+01	+	1.756E+01	2.208E+01	2.993E+00	0.658
RA-223	1.190E+00		2.107E+01	3.666E+01	6.121E+00	0.032
RA-224	3.584E+01		2.514E+01	3.865E+01	2.547E+00	0.927
RA-226	5.380E+00		2.278E+00	4.222E+00	3.556E-01	1.274
AC-227	5.851E-01		1.291E+01	2.258E+01	3.266E+00	0.026
TH-227	5.757E-01		1.271E+01	2.222E+01	3.817E+00	0.026
AC-228	2.513E+00		4.110E+00	6.694E+00	7.306E-01	0.375
RA-228	2.513E+00		4.110E+00	6.694E+00	7.306E-01	0.375
TH-229	1.758E+01		1.724E+01	2.922E+01	1.905E+00	0.602
TH-230	5.380E+00		2.278E+00	4.222E+00	3.556E-01	1.274
PA-231	-8.180E+00		4.911E+01	8.509E+01	1.199E+01	-0.096
TH-231	2.905E-02		5.620E+00	9.818E+00	7.756E-01	0.003
TH-232	1.520E+00	+	4.123E+00	3.734E+00	2.976E-01	0.407
PA-233	-4.288E-01		2.026E+00	3.496E+00	2.343E-01	-0.123
PA-234	5.378E+00		7.553E+00	1.404E+01	2.596E+00	0.383
PA-234M	3.801E+01		1.197E+02	2.166E+02	1.973E+01	0.175
TH-234	2.019E+01	+	9.364E+01	9.751E+01	1.674E+01	0.207
U-234	2.558E-01		4.249E+00	7.407E+00	6.659E-01	0.035
U-235	1.017E+01		7.668E+00	1.286E+01	2.201E+00	0.791
NP-237	-9.810E-01		7.631E+00	1.278E+01	2.871E+00	-0.077
NP-239	1.121E+01		7.583E+00	1.186E+01	1.077E+00	0.945
AM-241	-3.273E-01		6.243E+00	1.060E+01	7.429E-01	-0.031
AM-242	-4.650E+00		7.897E+01	1.319E+02	1.153E+01	-0.035
CF-249	3.501E-01		1.216E+00	2.131E+00	1.208E-01	0.164
CF-251	3.145E+00		4.559E+00	7.652E+00	4.957E-01	0.411

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:40:17.15

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405001.CNF;1
Sample date : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:02
Sample ID : G139405001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA2 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:02.51 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 7933154
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	1	63.48*	29	537	1.44	126.71	123	14	6.79E-04	189.9	1.40E+00
2	1	66.48*	101	672	1.58	132.71	123	14	2.33E-03	55.7	
3	0	92.82*	97	852	1.58	185.34	180	11	2.24E-03	92.6	
4	0	132.09	89	639	1.91	263.84	261	9	2.05E-03	52.5	
5	0	140.15	162	478	2.30	279.96	277	7	3.74E-03	23.8	
6	0	162.56	92	469	1.70	324.75	322	8	2.12E-03	42.1	
7	0	185.68*	52	616	1.74	370.97	366	11	1.20E-03	119.1	
8	0	198.22*	97	530	1.81	396.02	392	9	2.26E-03	56.1	
9	0	204.68	51	685	2.05	408.93	404	12	1.18E-03	103.5	
10	0	335.06	38	283	3.59	669.55	667	10	8.91E-04	82.8	
11	0	360.45	29	109	1.13	720.31	718	5	6.72E-04	56.9	
12	0	475.21	43	105	1.47	949.72	946	8	1.00E-03	43.8	
13	0	499.59	43	158	2.50	998.46	993	11	9.84E-04	59.5	
14	0	595.60	93	157	1.72	1190.41	1186	11	2.16E-03	27.8	
15	0	724.14	20	31	1.24	1447.41	1445	5	4.62E-04	48.0	
16	0	766.49	64	77	3.35	1532.08	1526	13	1.49E-03	30.9	
17	0	841.39	46	99	6.57	1681.83	1675	16	1.07E-03	50.3	
18	0	1019.08	52	94	8.85	2037.15	2024	25	1.21E-03	53.2	
19	0	1047.89	25	34	3.35	2094.76	2091	9	5.70E-04	47.2	
20	0	1138.96	34	34	3.01	2276.88	2272	13	7.91E-04	40.9	
21	0	1245.55	13	23	1.51	2490.04	2488	7	2.98E-04	67.7	
22	1	1435.48	33	39	2.37	2869.91	2859	28	7.63E-04	41.9	2.36E+00
23	1	1441.31	24	23	2.37	2881.57	2859	28	5.51E-04	48.7	
24	0	1460.38*	15	38	1.75	2919.71	2913	15	3.53E-04	133.7	
25	0	1573.07	14	27	0.97	3145.11	3140	12	3.33E-04	76.7	
26	0	1601.84	17	21	0.55	3202.65	3196	12	3.96E-04	58.8	
27	0	1685.50	24	14	5.25	3370.01	3363	14	5.62E-04	38.4	
28	0	1699.16	15	42	7.21	3397.34	3387	19	3.54E-04	105.5	
29	0	1778.70	21	18	1.16	3556.45	3551	12	4.83E-04	46.3	
30	0	1967.29	24	18	5.85	3933.74	3927	17	5.64E-04	43.9	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 14-JUL-2005 11:40:20

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405001.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:02
Sample ID : G139405001 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : gamma2 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:02.51 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	9.765E+00	2.611E+01	2.056E+01	1.238E+00	0.475
NB-95	+	765.79	*	3.859E+00	2.398E+00	2.743E+00	1.996E-01	1.407
MO-99	+	140.51	*	5.212E+02	2.508E+02	3.897E+02	2.731E+01	1.337
		181.06		-7.766E+02	3.289E+03	4.844E+03	8.554E+02	-0.160
		739.58		2.261E+02	1.384E+03	2.485E+03	3.604E+02	0.091
CE-144	+	133.51	*	1.240E+01	1.315E+01	1.611E+01	2.365E+00	0.770
TH-234	+	63.29	*	3.198E+01	1.216E+02	1.332E+02	2.704E+01	0.240
	+	92.38		3.106E+01	5.778E+01	3.807E+01	7.129E+00	0.816
		112.81		8.465E+01	4.298E+02	7.383E+02	1.295E+02	0.115
U-235		89.95		-7.819E+00	5.357E+01	8.054E+01	2.528E+01	-0.097
	+	93.35		3.734E+01	6.993E+01	4.475E+01	1.270E+01	0.834
		105.00		-4.463E+01	5.179E+01	8.369E+01	2.488E+01	-0.533
		143.76	*	7.105E+00	1.067E+01	1.628E+01	2.724E+00	0.437
	+	163.33		2.902E+01	2.504E+01	3.450E+01	6.364E+00	0.841
	+	185.71		1.506E+00	3.589E+00	3.060E+00	2.204E-01	0.492
	+	205.31		1.674E+01	3.477E+01	3.351E+01	5.891E+00	0.499
U-238	+	63.29	*	3.198E+01	1.216E+02	1.332E+02	2.704E+01	0.240

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	9.371E+00	1.305E+01	2.035E+01	1.639E+00	0.460
NA-22		1274.53	*	-8.468E-02	1.247E+00	2.180E+00	1.340E-01	-0.039
AL-26		511.00		1.011E+01	1.325E+00	2.310E+00	1.703E-01	4.378
		1808.65	*	-5.150E-01	1.176E+00	2.060E+00	1.172E-01	-0.250
SC-46		889.25	*	6.920E-01	1.244E+00	2.293E+00	1.529E-01	0.302
		1120.51		1.217E+00	1.543E+00	2.862E+00	2.015E-01	0.425
V-48		944.10		-3.790E+01	3.739E+01	6.034E+01	4.060E+00	-0.628
		983.50	*	1.031E+00	2.757E+00	5.007E+00	3.414E-01	0.206
		1312.09		-2.698E+00	2.966E+00	4.709E+00	2.697E-01	-0.573
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-7.134E-01	1.642E+01	2.762E+01	2.184E+00	-0.026
MN-54		834.83	*	4.843E-01	1.209E+00	2.181E+00	1.522E-01	0.222

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CO-56		846.75	*	1.012E+00	1.443E+00	2.375E+00	1.642E-01	0.426
		1037.82		2.157E+00	9.340E+00	1.685E+01	1.262E+00	0.128
		1238.25		1.613E+00	2.515E+00	4.605E+00	3.144E-01	0.350
CO-57		122.06	*	1.327E+00	1.223E+00	2.144E+00	1.496E-01	0.619
		136.47		-1.448E+01	1.177E+01	1.673E+01	1.289E+00	-0.865
CO-58		810.78	*	-4.127E-01	1.306E+00	2.253E+00	1.604E-01	-0.183
FE-59		192.35		1.506E+01	4.299E+01	7.359E+01	9.254E+00	0.205
		1099.25	*	-2.556E+00	3.035E+00	4.926E+00	3.872E-01	-0.519
		1291.60		1.361E+00	3.790E+00	6.924E+00	5.222E-01	0.197
CO-60		1173.24		5.246E-02	1.236E+00	2.180E+00	1.545E-01	0.024
		1332.50	*	-3.052E-01	1.087E+00	1.871E+00	1.028E-01	-0.163
ZN-65		1115.55	*	-1.633E+00	2.517E+00	4.165E+00	2.934E-01	-0.392
SE-75	+	66.05		3.931E+02	4.411E+02	4.557E+02	6.126E+01	0.862
		96.73		1.800E+01	4.104E+01	6.302E+01	8.823E+00	0.286
		121.11		2.747E+00	6.713E+00	1.158E+01	1.163E+00	0.237
		136.00		-1.498E+00	2.162E+00	3.150E+00	2.194E-01	-0.476
	+	198.60		1.222E+02	1.376E+02	1.292E+02	1.079E+01	0.946
		264.65	*	1.166E+00	1.824E+00	3.152E+00	2.363E-01	0.370
		279.53		3.531E+00	4.411E+00	7.658E+00	5.991E-01	0.461
		303.91		-2.731E+01	8.099E+01	1.346E+02	1.427E+01	-0.203
		400.65		-1.767E+00	9.095E+00	1.516E+01	1.499E+00	-0.117
KR-85		513.99	*	-2.154E+03	4.460E+02	5.449E+02	4.020E+01	-3.954
SR-85		513.99	*	-1.171E+01	2.424E+00	2.962E+00	2.185E-01	-3.954
Y-88		898.02		6.543E-01	1.415E+00	2.569E+00	1.712E-01	0.255
		1836.01	*	-5.933E-01	1.340E+00	2.346E+00	1.332E-01	-0.253
Y-91		557.57	*	1.239E+00	1.303E+00	2.421E+00	1.806E-01	0.512
		1204.90		2.196E+02	5.545E+02	1.003E+03	6.833E+01	0.219
NB-94		702.63	*	-4.638E-01	1.114E+00	1.909E+00	1.422E-01	-0.243
		871.10		-6.986E-02	1.199E+00	2.095E+00	1.420E-01	-0.033
NB-95M		235.69	*	-5.140E+02	2.440E+02	3.705E+02	4.254E+01	-1.387
ZR-95	+	724.18		2.165E+00	2.086E+00	4.774E+00	3.941E-01	0.454
		756.74	*	-2.356E-01	2.282E+00	4.009E+00	3.335E-01	-0.059
RU-103		497.08	*	-7.278E-01	1.948E+00	2.752E+00	3.692E-01	-0.264
		610.33		1.657E+01	2.919E+01	5.259E+01	8.490E+00	0.315
RH-106		511.85		6.905E+01	1.052E+01	1.862E+01	1.373E+00	3.708
		621.84	*	3.863E+00	1.062E+01	1.917E+01	1.442E+00	0.202
		1050.47		3.276E+01	7.801E+01	1.253E+02	8.700E+00	0.262
RU-106		622.20	*	-6.940E-01	1.061E+01	1.869E+01	2.370E+00	-0.037
AG-108M		433.93	*	-4.450E-01	1.209E+00	1.988E+00	1.496E-01	-0.224
		614.37		-8.603E-01	1.371E+00	2.329E+00	1.841E-01	-0.369
	+	722.95		9.213E-01	8.874E-01	2.456E+00	1.914E-01	0.375
CD-109		88.03	*	-6.094E+00	3.560E+01	6.086E+01	6.561E+00	-0.100
AG-110M		657.75	*	1.818E-01	1.144E+00	2.041E+00	1.594E-01	0.089
		677.61		2.497E+00	1.009E+01	1.811E+01	1.407E+00	0.138
		706.67		6.887E+00	7.347E+00	1.355E+01	1.045E+00	0.508
		763.93		2.421E+00	5.674E+00	9.066E+00	6.861E-01	0.267
		884.67		-1.116E+00	1.570E+00	2.614E+00	1.842E-01	-0.427
		937.48		-6.158E-01	3.615E+00	6.273E+00	4.459E-01	-0.098
		1384.27		-2.454E+00	5.397E+00	9.036E+00	5.366E-01	-0.272

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
SN-113		391.69	*	-3.674E-01	1.734E+00	2.882E+00	2.089E-01	-0.127
SN-115		484.47		1.122E+02	6.854E+02	1.164E+03	8.490E+01	0.096
		933.00	*	1.225E+02	1.168E+02	2.214E+02	1.484E+01	0.554
		1290.58		6.816E+01	2.764E+02	4.997E+02	2.980E+01	0.136
SN-117M		156.02		9.122E+01	1.354E+02	2.341E+02	1.643E+01	0.390
		158.56	*	1.551E+00	3.350E+00	5.757E+00	4.058E-01	0.269
TE-123M		159.00	*	-3.404E-02	1.339E+00	2.273E+00	1.618E-01	-0.015
SB-124		602.73		1.455E-01	1.445E+00	2.556E+00	1.920E-01	0.057
		645.85		3.608E+00	1.745E+01	3.125E+01	2.534E+00	0.115
		713.78		-2.957E+01	5.653E+01	9.622E+01	1.079E+01	-0.307
	+	722.79		8.646E+00	8.327E+00	2.304E+01	1.756E+00	0.375
		1368.16		-7.613E+00	6.397E+01	1.110E+02	1.305E+01	-0.069
		1690.98	*	-4.694E-01	5.221E+00	5.080E+00	3.173E-01	-0.092
SB-125		176.33		1.558E+01	1.455E+01	2.532E+01	2.431E+00	0.615
		427.89	*	-7.474E-01	3.499E+00	5.805E+00	4.233E-01	-0.129
		463.38		-3.492E+00	9.892E+00	1.625E+01	1.304E+00	-0.215
		600.56		-6.074E-01	7.620E+00	1.159E+01	9.537E-01	-0.052
		606.64		-7.311E+00	2.243E+01	3.877E+01	3.228E+00	-0.189
		635.90		-6.452E-01	8.682E+00	1.531E+01	1.273E+00	-0.042
TE-125M		109.28	*	4.531E+02	4.824E+02	8.417E+02	8.158E+01	0.538
I-126		388.63		-5.560E+00	1.097E+01	1.794E+01	1.247E+00	-0.310
		666.33	*	-3.537E+00	7.325E+00	1.256E+01	9.433E-01	-0.282
		753.82		4.364E+01	5.838E+01	1.087E+02	7.952E+00	0.401
SB-126		666.33		-1.497E+00	3.100E+00	5.316E+00	3.992E-01	-0.282
		695.00		3.995E+00	3.487E+00	6.529E+00	4.873E-01	0.612
		697.00		5.271E+00	1.229E+01	2.214E+01	1.652E+00	0.238
		720.50	*	3.991E+00	6.640E+00	1.082E+01	8.013E-01	0.369
SN-126	+	64.28		1.266E+01	4.814E+01	4.713E+01	8.329E+00	0.269
		86.94		6.548E-01	1.475E+01	2.537E+01	1.062E+01	0.026
		87.57	*	-1.695E+00	3.582E+00	6.070E+00	6.535E-01	-0.279
SB-127		252.40		5.764E+02	5.438E+02	8.562E+02	3.624E+02	0.673
		411.60		-3.232E+02	1.209E+03	2.001E+03	3.262E+02	-0.162
		444.90		-3.102E+02	1.005E+03	1.657E+03	2.208E+02	-0.187
		473.00		6.531E+01	1.907E+02	2.865E+02	3.924E+01	0.228
		543.30		-7.048E-01	1.495E+03	2.652E+03	4.054E+02	0.000
		603.50		4.234E+02	1.108E+03	1.983E+03	2.677E+02	0.213
		685.70	*	-2.624E+01	1.099E+02	1.918E+02	2.387E+01	-0.137
		698.50		-4.452E+02	1.378E+03	2.374E+03	3.938E+02	-0.188
		783.70		6.262E+00	2.887E+02	5.116E+02	6.777E+01	0.012
I-131		284.30		-1.765E+01	9.437E+01	1.580E+02	1.267E+01	-0.112
		364.48	*	-2.786E-01	7.361E+00	1.235E+01	9.575E-01	-0.023
		636.97		-5.420E+01	7.862E+01	1.330E+02	1.080E+01	-0.407
TE-132		228.16	*	1.364E+01	8.942E+01	1.520E+02	2.471E+01	0.090
BA-133		79.62		-5.715E+01	5.856E+01	9.690E+01	1.600E+01	-0.590
		81.00		-1.560E+00	4.322E+00	7.357E+00	1.258E+00	-0.212
		276.40		-8.717E+00	1.457E+01	2.391E+01	3.296E+00	-0.365
		302.85		-3.289E+00	5.388E+00	8.820E+00	1.106E+00	-0.373
		356.02	*	-9.150E-01	1.691E+00	2.764E+00	3.405E-01	-0.331
		383.85		-4.770E-01	1.207E+01	2.021E+01	2.334E+00	-0.024

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CS-134		563.23		-6.642E+00	1.139E+01	1.949E+01	1.475E+00	-0.341
		569.32		2.019E+00	6.420E+00	1.156E+01	8.804E-01	0.175
		604.70		-1.051E+00	1.172E+00	1.959E+00	1.477E-01	-0.536
		795.84	*	5.039E-01	1.352E+00	2.435E+00	1.758E-01	0.207
		801.93		8.342E+00	1.305E+01	2.391E+01	1.720E+00	0.349
		1365.15		2.188E+01	4.115E+01	7.631E+01	4.682E+00	0.287
CS-135		268.24	*	-1.286E+00	6.010E+00	1.006E+01	9.028E-01	-0.128
CS-136	+	66.88		8.475E+01	9.560E+01	1.006E+02	1.760E+01	0.843
		86.36		1.732E+01	6.259E+01	1.083E+02	1.555E+01	0.160
		153.25		-3.842E+01	3.858E+01	6.350E+01	5.219E+00	-0.605
	+	163.92		8.813E+01	7.465E+01	1.081E+02	9.029E+00	0.815
		176.60		1.912E+01	2.162E+01	3.754E+01	2.916E+00	0.509
		273.65		-3.392E+00	2.312E+01	3.877E+01	3.144E+00	-0.087
		340.55		4.068E-01	7.225E+00	1.066E+01	8.084E-01	0.038
		818.51		-6.633E-01	3.169E+00	5.511E+00	3.899E-01	-0.120
	+	1048.07	*	4.789E+00	4.532E+00	7.880E+00	5.831E-01	0.608
		1235.36		8.959E+00	2.095E+01	3.778E+01	3.942E+00	0.237
BA-137M		661.65	*	-2.023E-01	1.084E+00	1.897E+00	1.426E-01	-0.107
CS-137		661.66	*	-2.130E-01	1.146E+00	2.006E+00	1.511E-01	-0.106
CE-139		165.85	*	7.241E-01	1.467E+00	2.235E+00	1.597E-01	0.324
BA-140	+	162.67		6.258E+01	5.298E+01	7.504E+01	5.780E+00	0.834
		304.87		8.440E+00	6.470E+01	1.097E+02	3.037E+01	0.077
		423.73		1.509E+01	9.727E+01	1.644E+02	5.267E+01	0.092
		537.31	*	6.947E-01	1.250E+01	2.101E+01	6.903E+00	0.033
CE-141		145.44	*	1.810E+00	3.128E+00	5.404E+00	3.849E-01	0.335
PM-144	+	476.78		2.967E+00	2.610E+00	3.836E+00	3.151E-01	0.774
		618.01		4.145E-01	1.121E+00	2.016E+00	1.572E-01	0.206
		696.49	*	8.815E-01	1.163E+00	2.133E+00	1.593E-01	0.413
PM-146		453.88	*	4.679E-01	1.623E+00	2.766E+00	2.659E-01	0.169
		633.25		1.322E+01	4.484E+01	8.037E+01	2.985E+01	0.165
		735.93		-2.729E+00	4.586E+00	7.666E+00	2.166E+00	-0.356
		747.24		2.061E-01	2.575E+00	4.609E+00	6.124E-01	0.045
ND-147	+	91.11		2.220E+01	4.116E+01	2.812E+01	3.021E+00	0.790
		531.02	*	3.376E-01	2.810E+01	4.717E+01	6.741E+00	0.007
PM-147		121.30	*	1.186E+06	2.523E+06	4.360E+06	3.056E+05	0.272
EU-152		121.78		2.265E+00	3.529E+00	6.120E+00	5.231E-01	0.370
		344.31	*	-2.126E+00	3.795E+00	6.213E+00	4.887E-01	-0.342
		963.37		1.312E+00	8.982E+00	1.586E+01	1.074E+00	0.083
GD-153		69.67		-4.340E+01	9.434E+01	1.410E+02	1.617E+01	-0.308
		83.37		3.011E+02	6.641E+02	1.155E+03	1.235E+02	0.261
		97.43	*	-1.101E+00	3.810E+00	6.484E+00	5.898E-01	-0.170
		103.18		1.478E+00	4.950E+00	8.556E+00	7.186E-01	0.173
EU-154		123.07		9.562E-01	2.485E+00	4.283E+00	4.351E-01	0.223
		247.93		6.684E+00	1.446E+01	2.484E+01	2.634E+00	0.269
		591.76		2.030E+01	2.369E+01	3.885E+01	4.223E+00	0.523
	+	723.30		3.855E+00	3.715E+00	9.607E+00	8.110E-01	0.401
		756.86		3.523E+00	2.293E+01	4.107E+01	4.545E+00	0.086
		873.20		-7.620E+00	1.017E+01	1.685E+01	1.857E+00	-0.452
		996.30		2.033E+00	1.099E+01	1.966E+01	3.338E+00	0.103

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1004.76		4.755E+00	6.934E+00	1.275E+01	1.326E+00	0.373
		1274.51	*	-2.220E-01	3.476E+00	6.077E+00	5.806E-01	-0.037
EU-155		86.54		1.348E+00	4.308E+00	7.460E+00	8.063E-01	0.181
		105.31	*	-5.264E+00	5.143E+00	8.535E+00	7.078E-01	-0.617
TB-160		86.79		1.329E+00	1.209E+01	2.084E+01	2.239E+00	0.064
		298.57		1.352E+00	4.509E+00	7.685E+00	5.711E-01	0.176
		879.36	*	2.431E+00	4.709E+00	8.611E+00	5.794E-01	0.282
		962.29		1.508E+01	1.656E+01	3.087E+01	2.091E+00	0.488
		966.15		-5.821E+00	6.568E+00	1.072E+01	7.268E-01	-0.543
		1177.93		1.012E+00	9.786E+00	1.744E+01	1.229E+00	0.058
TM-171		51.87		-2.993E+02	9.120E+02	1.380E+03	2.059E+02	-0.217
		59.40		-2.553E+03	1.996E+03	2.853E+03	4.010E+02	-0.895
	+	66.72	*	2.297E+03	2.575E+03	2.755E+03	3.293E+02	0.834
HF-181		56.28		-1.185E+01	7.933E+01	1.208E+02	1.757E+01	-0.098
		57.53		1.007E+01	4.127E+01	6.376E+01	9.151E+00	0.158
	+	65.20		7.922E+01	8.878E+01	9.593E+01	1.177E+01	0.826
	+	133.02		4.285E+00	4.508E+00	5.566E+00	3.836E-01	0.770
		136.25		-3.953E+01	3.150E+01	4.476E+01	3.084E+00	-0.883
		345.85		1.677E+00	8.020E+00	1.363E+01	9.888E-01	0.123
		482.03	*	-5.985E-03	1.589E+00	2.673E+00	1.948E-01	-0.002
TA-182	+	67.75		9.528E+00	1.068E+01	1.020E+01	1.200E+00	0.934
		100.10		-4.471E+00	8.647E+00	1.461E+01	1.278E+00	-0.306
		222.10		-1.063E+01	1.406E+01	2.312E+01	1.699E+00	-0.460
		1121.28		3.869E+00	4.166E+00	7.813E+00	5.501E-01	0.495
		1189.05		-1.670E+00	7.768E+00	1.345E+01	9.351E-01	-0.124
		1221.42	*	-1.247E+00	4.553E+00	7.847E+00	5.226E-01	-0.159
		1230.97		-2.286E+00	1.217E+01	2.100E+01	1.380E+00	-0.109
IR-192		295.96		1.251E+00	4.343E+00	7.388E+00	5.547E-01	0.169
		308.46		-1.161E+00	4.012E+00	6.675E+00	4.981E-01	-0.174
		316.51	*	8.280E-01	1.451E+00	2.501E+00	1.853E-01	0.331
		468.07		-1.364E+00	2.475E+00	4.016E+00	3.201E-01	-0.340
		604.41		-1.110E+01	1.655E+01	2.799E+01	3.446E+00	-0.397
		612.46		2.333E+00	2.496E+01	4.416E+01	3.955E+00	0.053
HG-203		70.83		-2.760E+01	5.937E+01	9.352E+01	1.445E+01	-0.295
		72.87		-1.942E+01	3.090E+01	5.218E+01	7.795E+00	-0.372
		82.60		8.018E+00	5.304E+01	9.164E+01	1.387E+01	0.087
		279.20	*	1.227E+00	1.722E+00	2.982E+00	2.306E-01	0.412
BI-207		569.67		5.146E-02	9.970E-01	1.771E+00	1.324E-01	0.029
		897.83		3.636E+02	7.864E+02	1.428E+03	9.438E+01	0.255
		1063.62	*	2.843E-01	1.490E+00	2.677E+00	1.865E-01	0.106
	+	1442.20		1.096E+03	1.068E+03	1.343E+03	7.575E+01	0.816
		1770.23		-1.018E+01	1.765E+01	3.039E+01	1.737E+00	-0.335
TL-208		75.00		6.547E+01	5.095E+01	8.935E+01	1.251E+01	0.733
		277.35		-2.555E+00	1.511E+01	2.530E+01	2.922E+00	-0.101
		510.84		7.888E+01	1.221E+01	1.792E+01	1.993E+00	4.402
		583.14	*	1.909E+00	1.307E+00	2.456E+00	2.014E-01	0.778
		763.30		1.907E+01	7.132E+01	1.127E+02	1.484E+01	0.169
		860.37		-2.464E+00	8.638E+00	1.493E+01	1.139E+00	-0.165
		1093.90		3.236E+01	3.336E+02	5.910E+02	1.343E+02	0.055

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BI-210		46.50	*	4.039E+01	3.585E+02	5.542E+02	6.849E+01	0.073
PB-210		46.50	*	4.039E+01	3.585E+02	5.542E+02	6.849E+01	0.073
BI-211		351.07	*	3.044E+00	7.817E+00	1.337E+01	1.035E+00	0.228
PB-211		404.84	*	-1.015E+01	3.308E+01	5.373E+01	3.356E+01	-0.189
		427.08		-4.272E+01	8.299E+01	1.281E+02	7.937E+01	-0.333
		831.96		-1.216E+01	3.866E+01	6.528E+01	4.077E+01	-0.186
BI-212		727.18	*	-3.716E+00	9.677E+00	1.431E+01	1.284E+00	-0.260
PB-212		74.80		2.169E+01	1.648E+01	2.888E+01	4.155E+00	0.751
		87.30		-4.939E+00	1.678E+01	2.858E+01	4.198E+00	-0.173
		115.19		-2.647E+01	1.707E+02	2.907E+02	2.147E+01	-0.091
		238.63	*	4.937E+00	2.532E+00	4.464E+00	3.863E-01	1.106
		300.09		-1.219E-01	2.928E+01	4.936E+01	4.671E+00	-0.002
BI-214		609.31	*	5.530E-01	2.440E+00	4.340E+00	3.962E-01	0.127
	+	768.36		5.073E+01	3.167E+01	3.585E+01	3.367E+00	1.415
		934.06		4.956E+01	3.494E+01	6.755E+01	6.183E+00	0.734
		1120.29		5.909E+00	8.728E+00	1.603E+01	1.549E+00	0.369
		1238.11		1.118E+01	2.402E+01	4.334E+01	3.754E+00	0.258
		1377.67		1.201E+01	3.187E+01	5.785E+01	4.872E+00	0.208
PB-214		74.81		3.656E+01	2.773E+01	4.872E+01	6.438E+00	0.750
		77.11		2.723E+00	1.501E+01	2.599E+01	3.438E+00	0.105
		87.30		-8.778E+00	2.982E+01	5.080E+01	6.860E+00	-0.173
		241.98		-2.390E+01	1.435E+01	2.252E+01	2.092E+00	-1.061
		295.21		1.559E+00	5.354E+00	9.112E+00	8.852E-01	0.171
		351.92	*	2.604E+00	2.720E+00	4.751E+00	4.434E-01	0.548
RN-219		271.23		1.590E+00	9.134E+00	1.552E+01	1.453E+00	0.102
		401.81	*	-1.052E+00	1.418E+01	2.380E+01	3.366E+00	-0.044
RA-223		122.32		8.784E+01	8.364E+01	1.463E+02	1.131E+01	0.600
		144.24		-6.454E+00	3.126E+01	5.286E+01	4.312E+00	-0.122
		154.21		-1.040E+01	1.759E+01	2.937E+01	2.360E+00	-0.354
		269.46		-1.121E+00	7.200E+00	1.208E+01	9.248E-01	-0.093
		323.87	*	-7.445E+00	2.530E+01	4.201E+01	7.195E+00	-0.177
		338.28		-7.541E+00	4.467E+01	6.491E+01	7.416E+00	-0.116
		445.03		-2.947E+01	8.585E+01	1.412E+02	1.566E+01	-0.209
RA-224		240.98	*	2.010E+00	2.716E+01	4.591E+01	3.401E+00	0.044
RA-226		295.21		1.559E+00	5.354E+00	9.112E+00	8.852E-01	0.171
		351.92		2.604E+00	2.715E+00	4.751E+00	3.442E-01	0.548
U		609.31	*	5.530E-01	2.440E+00	4.340E+00	3.962E-01	0.127
AC-227		79.80		-7.071E+01	7.603E+01	1.247E+02	2.830E+01	-0.567
		236.00		-1.013E+01	9.575E+00	1.546E+01	1.779E+00	-0.656
		256.20	*	-2.150E+01	1.630E+01	2.560E+01	3.808E+00	-0.840
		286.10		5.547E+01	5.921E+01	1.033E+02	1.299E+01	0.537
		299.80		2.804E+01	5.380E+01	9.234E+01	1.585E+01	0.304
		304.40		-9.754E+00	7.154E+01	1.199E+02	2.175E+01	-0.081
		329.70		8.944E+00	3.459E+01	5.887E+01	7.876E+00	0.152
	+	334.20		7.482E+01	1.247E+02	1.495E+02	2.864E+01	0.500
TH-227		79.80		-6.952E+01	7.475E+01	1.226E+02	2.783E+01	-0.567
	+	94.00		1.200E+02	2.238E+02	1.426E+02	3.164E+01	0.842
		236.00		-9.975E+00	9.409E+00	1.522E+01	1.545E+00	-0.656
		256.20	*	-2.116E+01	1.616E+01	2.519E+01	4.415E+00	-0.840

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		286.10		5.461E+01	7.968E+01	1.017E+02	1.020E+02	0.537
		299.80		2.753E+01	5.282E+01	9.067E+01	1.535E+01	0.304
		304.40		-9.592E+00	7.035E+01	1.180E+02	2.112E+01	-0.081
		329.70		8.804E+00	3.405E+01	5.795E+01	7.679E+00	0.152
	+	334.20		7.339E+01	1.222E+02	1.467E+02	2.767E+01	0.500
AC-228		209.25		1.006E+01	2.629E+01	3.853E+01	2.468E+01	0.261
		338.32		-1.943E+00	1.080E+01	1.564E+01	6.411E+00	-0.124
		463.01		-9.609E+00	2.334E+01	3.803E+01	9.071E+00	-0.253
		794.95		2.363E+01	2.420E+01	4.436E+01	1.015E+01	0.533
		911.21	*	3.087E+00	4.279E+00	7.881E+00	7.733E-01	0.392
		964.77		-3.920E+01	2.723E+01	3.959E+01	9.523E+00	-0.990
		969.11		7.094E+00	7.645E+00	1.398E+01	3.177E+00	0.507
RA-228		209.25		1.006E+01	2.629E+01	3.853E+01	2.468E+01	0.261
		338.32		-1.943E+00	1.080E+01	1.564E+01	6.411E+00	-0.124
		463.01		-9.609E+00	2.334E+01	3.803E+01	9.071E+00	-0.253
		794.95		2.363E+01	2.420E+01	4.436E+01	1.015E+01	0.533
		911.21	*	3.087E+00	4.279E+00	7.881E+00	7.733E-01	0.392
		964.77		-3.920E+01	2.723E+01	3.959E+01	9.523E+00	-0.990
		969.11		7.094E+00	7.645E+00	1.398E+01	3.177E+00	0.507
TH-228		84.40		-8.521E+00	1.148E+02	1.970E+02	2.874E+01	-0.043
		238.60	*	4.925E+00	2.532E+00	4.462E+00	3.862E-01	1.104
		300.10		-3.302E-01	2.928E+01	4.933E+01	2.916E+01	-0.007
TH-229		85.43		5.866E+00	8.157E+00	1.424E+01	1.526E+00	0.412
		88.47		1.900E+00	5.327E+00	8.166E+00	8.722E-01	0.233
		100.00		-3.819E+00	8.665E+00	1.468E+01	1.286E+00	-0.260
		193.63	*	-1.400E+01	2.197E+01	3.642E+01	2.635E+00	-0.384
		210.97		4.782E+00	2.980E+01	5.071E+01	3.705E+00	0.094
TH-230		295.21		1.559E+00	5.354E+00	9.112E+00	8.852E-01	0.171
		351.92		2.603E+00	2.715E+00	4.751E+00	3.442E-01	0.548
		609.31	*	5.530E-01	2.440E+00	4.340E+00	3.962E-01	0.127
PA-231		283.67	*	-3.563E+01	6.006E+01	9.849E+01	1.433E+01	-0.362
		301.29		-1.685E+01	2.114E+01	3.428E+01	3.920E+00	-0.492
		330.00		2.092E+01	7.662E+01	1.300E+02	4.114E+01	0.161
TH-231		84.21		5.830E-01	2.120E+01	3.650E+01	6.912E+00	0.016
		236.00		-1.012E+01	9.558E+00	1.543E+01	1.776E+00	-0.656
		256.20		-2.146E+01	1.627E+01	2.555E+01	3.801E+00	-0.840
		269.46	*	-1.121E+00	7.200E+00	1.208E+01	1.046E+00	-0.093
		271.23		1.590E+00	9.134E+00	1.552E+01	1.646E+00	0.102
		283.67		-3.563E+01	6.006E+01	9.849E+01	1.433E+01	-0.362
		301.29		-1.685E+01	2.112E+01	3.428E+01	3.301E+00	-0.492
		329.85		6.922E+00	2.379E+01	4.053E+01	5.806E+00	0.171
		351.07		3.044E+00	7.817E+00	1.337E+01	1.035E+00	0.228
		401.81		-1.052E+00	1.418E+01	2.380E+01	2.753E+00	-0.044
TH-232		238.59	*	4.820E+00	2.480E+00	4.371E+00	3.783E-01	1.103
		911.20		3.076E+00	4.251E+00	7.830E+00	7.683E-01	0.393
		964.40		-2.254E+01	2.579E+01	4.121E+01	9.911E+00	-0.547
		969.11		7.046E+00	7.593E+00	1.389E+01	3.156E+00	0.507
PA-233		75.28		1.343E+02	1.355E+02	2.363E+02	3.956E+01	0.569
		86.59		1.628E+01	7.007E+01	1.209E+02	3.334E+01	0.135

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		300.12		-3.779E-01	1.481E+01	2.494E+01	3.545E+00	-0.015
		311.98	*	-1.705E+00	2.592E+00	4.236E+00	3.255E-01	-0.402
		340.50		1.472E+00	2.614E+01	3.855E+01	9.014E+00	0.038
		398.62		5.941E+00	7.365E+01	1.246E+02	3.257E+01	0.048
		415.76		2.267E+01	6.164E+01	1.052E+02	2.206E+01	0.215
PA-234	+	63.00		3.728E+01	1.418E+02	1.477E+02	2.687E+01	0.252
	+	94.67		1.070E+01	1.986E+01	1.226E+01	1.599E+00	0.873
		98.44		-1.779E+00	4.400E+00	7.272E+00	4.061E+00	-0.245
		99.70		-1.155E+01	2.241E+01	3.787E+01	3.332E+00	-0.305
		111.00		-2.187E+00	8.993E+00	1.527E+01	1.747E+00	-0.143
	+	131.20		6.242E+00	6.567E+00	8.177E+00	5.639E-01	0.763
		152.70		-1.189E+01	1.417E+01	2.330E+01	3.793E+00	-0.510
	+	186.00		4.067E+01	9.766E+01	8.080E+01	2.493E+01	0.503
		226.40		6.268E+00	1.585E+01	2.716E+01	3.373E+00	0.231
		227.20		7.897E+00	1.700E+01	2.923E+01	2.153E+00	0.270
		248.90		-1.335E+01	3.422E+01	5.676E+01	1.287E+01	-0.235
		293.70		2.293E+01	2.553E+01	4.403E+01	7.372E+00	0.521
		369.80		-2.139E+00	3.183E+01	5.342E+01	1.134E+01	-0.040
		568.70		3.171E+01	3.195E+01	5.957E+01	4.455E+00	0.532
		569.50		9.428E-01	8.876E+00	1.581E+01	1.182E+00	0.060
		574.00		-3.268E+01	5.012E+01	8.530E+01	6.385E+00	-0.383
		699.00		-6.106E+00	2.356E+01	4.077E+01	7.576E+00	-0.150
		706.10		2.336E+00	3.661E+01	6.445E+01	2.860E+01	0.036
		733.00		1.028E+01	1.111E+01	2.056E+01	4.471E+00	0.500
		742.81		1.505E+01	4.122E+01	7.283E+01	4.885E+01	0.207
		796.30		4.941E+00	2.952E+01	5.238E+01	1.394E+01	0.094
		805.80		-1.612E+01	3.195E+01	5.369E+01	1.625E+01	-0.300
		819.60		-1.606E+01	3.870E+01	6.549E+01	2.469E+01	-0.245
		826.30		-4.778E+00	2.531E+01	4.397E+01	1.955E+01	-0.109
		831.60		-8.803E+00	1.993E+01	3.371E+01	9.916E+00	-0.261
		876.40		-8.225E+00	2.891E+01	4.760E+01	4.887E+01	-0.173
		880.51		9.437E-01	8.690E+00	1.548E+01	1.041E+00	0.061
		883.24		-2.741E+00	8.891E+00	1.501E+01	1.005E+01	-0.183
		899.00		4.057E+00	2.853E+01	5.046E+01	2.188E+01	0.080
		925.00		2.233E+01	3.702E+01	6.821E+01	4.557E+00	0.327
		926.50		3.609E+00	5.370E+00	9.858E+00	2.433E+00	0.366
		946.00	*	-3.386E+00	9.502E+00	1.623E+01	2.917E+00	-0.209
		949.00		4.924E+00	1.443E+01	2.599E+01	1.752E+00	0.189
		980.50		-2.103E+01	2.241E+01	3.628E+01	2.471E+00	-0.580
		1394.10		-4.555E+01	5.224E+01	6.719E+01	4.351E+01	-0.678
PA-234M	+	766.40		1.217E+03	1.197E+03	8.569E+02	6.559E+02	1.421
		1001.03	*	-1.133E+02	1.494E+02	2.458E+02	2.081E+01	-0.461
U-234	+	67.67		9.534E+02	1.074E+03	1.024E+03	1.669E+02	0.931
		241.98		-2.393E+01	1.437E+01	2.255E+01	2.096E+00	-1.061
		295.21	*	1.559E+00	5.354E+00	9.112E+00	8.852E-01	0.171
		351.92		2.603E+00	2.720E+00	4.751E+00	4.434E-01	0.548
NP-237		86.48	*	3.156E+00	1.051E+01	1.816E+01	4.224E+00	0.174
		95.87		3.612E+01	4.972E+01	7.602E+01	1.892E+01	0.475
NP-239		99.55		-4.106E+00	7.319E+00	1.235E+01	1.089E+00	-0.332

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		117.00	*	-4.890E+00	9.006E+00	1.516E+01	1.101E+00	-0.323
		209.75		1.879E+01	3.405E+01	5.181E+01	3.783E+00	0.363
		228.18		1.324E+00	8.971E+00	1.525E+01	1.124E+00	0.087
		277.60		1.304E+00	7.039E+00	1.195E+01	8.910E-01	0.109
	+	334.31		4.137E+01	6.853E+01	8.270E+01	6.049E+00	0.500
AM-241		59.54	*	-1.386E+01	1.150E+01	1.650E+01	2.381E+00	-0.840
AM-242		99.55		-9.582E+01	1.708E+02	2.882E+02	2.541E+01	-0.332
		103.70	*	-6.129E+00	1.028E+02	1.760E+02	1.469E+01	-0.035
CM-247		278.00		1.159E+01	2.891E+01	4.951E+01	3.690E+00	0.234
		287.40		1.117E+01	4.632E+01	7.905E+01	5.887E+00	0.141
		402.60	*	-1.362E-01	1.273E+00	2.133E+00	1.488E-01	-0.064
CF-249		252.85		7.198E+01	3.580E+01	6.420E+01	4.772E+00	1.121
	+	333.44		5.445E+00	9.021E+00	1.026E+01	7.510E-01	0.531
		387.95	*	-3.513E-02	1.595E+00	2.673E+00	1.859E-01	-0.013
CF-251		176.00	*	5.632E+00	5.555E+00	9.678E+00	6.936E-01	0.582
		227.00		8.114E+00	1.515E+01	2.609E+01	1.922E+00	0.311
		285.00		3.479E+01	6.675E+01	1.151E+02	8.577E+00	0.302
ANH-511		511.00	*	1.655E+01	2.168E+00	3.780E+01	2.786E-01	4.378

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405001       *
* Acquisition date : 13-JUL-2005 20:14:02 Detector SN#     : 7933154        *
* Detector ID       : GAMMA2              Sensitivity      : 3.000          *
* Geometry          : 2L_MB               Energy tolerance: 2.000          *
* Elapsed live time:    0 12:00:00.00     Abundance limit  : 75.000         *
* Elapsed real time:    0 12:00:02.51     Half life ratio  :  8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 23-JUN-2005 08:50:00 Nuclide Library :                *
* Sample ID         : G139405001           Analyst initials: AKB            *
* Batch Number      : 437153               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
* Standard Weight   :   0.00000                                             *
* CALIB. DATE/TIME : 13-JAN-2005 15:26:31 MS Isotope       :                *
* MSD DPM           :    0.000           MSD Isotope      :                *
* LCS DPM           :    0.000           LCS Isotope      :                *
* LCSD DPM          :    0.000           LCSD Isotope     :                *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	9.765E+00	2.611E+01	2.056E+01	0.000E+00
NB-95	3.859E+00	2.398E+00	2.743E+00	0.000E+00
MO-99	5.212E+02	2.508E+02	3.897E+02	0.000E+00
CE-144	1.240E+01	1.315E+01	1.611E+01	0.000E+00
U-234	3.198E+01	1.216E+02	1.332E+02	0.000E+00
U-235	7.105E+00	1.067E+01	1.628E+01	0.000E+00
U-238	3.198E+01	1.216E+02	1.332E+02	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Act error) Ided	MDA (pCi/LITER)		
BE-7	9.371E+00	1.305E+01	2.035E+01	0.000E+00	NOT IDENT.
NA-22	-8.468E-02	1.247E+00	2.180E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	1.157E+10	0.000E+00	0.000E+00	SHORT HLIF

AL-26	-5.150E-01	1.176E+00	2.060E+00	0.000E+00	NOT IDENT.
SC-46	6.920E-01	1.244E+00	2.293E+00	0.000E+00	NOT IDENT.
V-48	1.031E+00	2.757E+00	5.007E+00	0.000E+00	NOT IDENT.
CR-51	-7.134E-01	1.642E+01	2.762E+01	0.000E+00	NOT IDENT.
MN-54	4.843E-01	1.209E+00	2.181E+00	0.000E+00	NOT IDENT.
CO-56	1.012E+00	1.443E+00	2.375E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	1.427E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	1.327E+00	1.223E+00	2.144E+00	0.000E+00	NOT IDENT.
CO-58	-4.127E-01	1.306E+00	2.253E+00	0.000E+00	NOT IDENT.
FE-59	-2.556E+00	3.035E+00	4.926E+00	0.000E+00	NOT IDENT.
CO-60	-3.052E-01	1.087E+00	1.871E+00	0.000E+00	NOT IDENT.
ZN-65	-1.633E+00	2.517E+00	4.165E+00	0.000E+00	NOT IDENT.
SE-75	1.166E+00	1.824E+00	3.152E+00	0.000E+00	FAIL ABUN
KR-85	-2.154E+03	4.460E+02	5.449E+02	0.000E+00	NOT IDENT.
SR-85	-1.171E+01	2.424E+00	2.962E+00	0.000E+00	NOT IDENT.
Y-88	-5.933E-01	1.340E+00	2.346E+00	0.000E+00	NOT IDENT.
Y-91	1.239E+00	1.303E+00	2.421E+00	0.000E+00	NOT IDENT.
NB-94	-4.638E-01	1.114E+00	1.909E+00	0.000E+00	NOT IDENT.
NB-95M	-5.140E+02	2.440E+02	3.705E+02	0.000E+00	NOT IDENT.
ZR-95	-2.356E-01	2.282E+00	4.009E+00	0.000E+00	FAIL ABUN
TC-99M	0.000E+00	1.216E+25	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-7.278E-01	1.948E+00	2.752E+00	0.000E+00	NOT IDENT.
RH-106	3.863E+00	1.062E+01	1.917E+01	0.000E+00	NOT IDENT.
RU-106	-6.940E-01	1.061E+01	1.869E+01	0.000E+00	NOT IDENT.
AG-108M	-4.450E-01	1.209E+00	1.988E+00	0.000E+00	FAIL ABUN
CD-109	-6.094E+00	3.560E+01	6.086E+01	0.000E+00	NOT IDENT.
AG-110M	1.818E-01	1.144E+00	2.041E+00	0.000E+00	NOT IDENT.
SN-113	-3.674E-01	1.734E+00	2.882E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	2.090E+03	0.000E+00	0.000E+00	SHORT HLIF
SN-115	1.225E+02	1.168E+02	2.214E+02	0.000E+00	NOT IDENT.
SN-117M	1.551E+00	3.350E+00	5.757E+00	0.000E+00	NOT IDENT.
TE-123M	-3.404E-02	1.339E+00	2.273E+00	0.000E+00	NOT IDENT.
SB-124	-4.694E-01	5.221E+00	5.080E+00	0.000E+00	FAIL ABUN
SB-125	-7.474E-01	3.499E+00	5.805E+00	0.000E+00	NOT IDENT.
TE-125M	4.531E+02	4.824E+02	8.417E+02	0.000E+00	NOT IDENT.
I-126	-3.537E+00	7.325E+00	1.256E+01	0.000E+00	NOT IDENT.
SB-126	3.991E+00	6.640E+00	1.082E+01	0.000E+00	NOT IDENT.
SN-126	-1.695E+00	3.582E+00	6.070E+00	0.000E+00	FAIL ABUN
SB-127	-2.624E+01	1.099E+02	1.918E+02	0.000E+00	NOT IDENT.
I-131	-2.786E-01	7.361E+00	1.235E+01	0.000E+00	NOT IDENT.
TE-132	0.000E+00	7.207E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.364E+01	8.942E+01	1.520E+02	0.000E+00	NOT IDENT.
BA-133	-9.150E-01	1.691E+00	2.764E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	1.798E+07	0.000E+00	0.000E+00	SHORT HLIF
CS-134	5.039E-01	1.352E+00	2.435E+00	0.000E+00	NOT IDENT.
CS-135	-1.286E+00	6.010E+00	1.006E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	1.988E+23	0.000E+00	0.000E+00	SHORT HLIF
CS-136	4.789E+00	4.532E+00	7.880E+00	0.000E+00	FAIL ABUN
BA-137M	-2.023E-01	1.084E+00	1.897E+00	0.000E+00	NOT IDENT.
CS-137	-2.130E-01	1.146E+00	2.006E+00	0.000E+00	NOT IDENT.
CE-139	7.241E-01	1.467E+00	2.235E+00	0.000E+00	NOT IDENT.
BA-140	6.947E-01	1.250E+01	2.101E+01	0.000E+00	FAIL ABUN
LA-140	0.000E+00	7.660E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-141	1.810E+00	3.128E+00	5.404E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	8.416E+04	0.000E+00	0.000E+00	SHORT HLIF
PM-144	8.815E-01	1.163E+00	2.133E+00	0.000E+00	FAIL ABUN
PR-144	0.000E+00	1.320E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	4.679E-01	1.623E+00	2.766E+00	0.000E+00	NOT IDENT.
ND-147	3.376E-01	2.810E+01	4.717E+01	0.000E+00	FAIL ABUN
PM-147	1.186E+06	2.523E+06	4.360E+06	0.000E+00	NOT IDENT.

PM-149	0.000E+00	1.996E+04	0.000E+00	0.000E+00	SHORT HLIF
EU-152	-2.126E+00	3.795E+00	6.213E+00	0.000E+00	NOT IDENT.
GD-153	-1.101E+00	3.810E+00	6.484E+00	0.000E+00	NOT IDENT.
EU-154	-2.220E-01	3.476E+00	6.077E+00	0.000E+00	FAIL ABUN
EU-155	-5.264E+00	5.143E+00	8.535E+00	0.000E+00	NOT IDENT.
TB-160	2.431E+00	4.709E+00	8.611E+00	0.000E+00	NOT IDENT.
TM-171	2.297E+03	2.575E+03	2.755E+03	0.000E+00	FAIL ABUN
HF-181	-5.985E-03	1.589E+00	2.673E+00	0.000E+00	FAIL ABUN
TA-182	-1.247E+00	4.553E+00	7.847E+00	0.000E+00	FAIL ABUN
IR-192	8.280E-01	1.451E+00	2.501E+00	0.000E+00	NOT IDENT.
HG-203	1.227E+00	1.722E+00	2.982E+00	0.000E+00	NOT IDENT.
BI-207	2.843E-01	1.490E+00	2.677E+00	0.000E+00	FAIL ABUN
TL-208	1.909E+00	1.307E+00	2.456E+00	0.000E+00	NOT IDENT.
BI-210	4.039E+01	3.585E+02	5.542E+02	0.000E+00	NOT IDENT.
PB-210	4.039E+01	3.585E+02	5.542E+02	0.000E+00	NOT IDENT.
TI-211	3.044E+00	7.817E+00	1.337E+01	0.000E+00	NOT IDENT.
PB-211	-1.015E+01	3.308E+01	5.373E+01	0.000E+00	NOT IDENT.
BI-212	-3.716E+00	9.677E+00	1.431E+01	0.000E+00	NOT IDENT.
PB-212	0.000E+00	2.532E+00	4.464E+00	0.000E+00	NOT IDENT.
BI-214	5.530E-01	2.440E+00	4.340E+00	0.000E+00	FAIL ABUN
PB-214	2.604E+00	2.720E+00	4.751E+00	0.000E+00	NOT IDENT.
RN-219	-1.052E+00	1.418E+01	2.380E+01	0.000E+00	NOT IDENT.
RA-223	-7.445E+00	2.530E+01	4.201E+01	0.000E+00	NOT IDENT.
RA-224	2.010E+00	2.716E+01	4.591E+01	0.000E+00	NOT IDENT.
RA-226	5.530E-01	2.440E+00	4.340E+00	0.000E+00	NOT IDENT.
AC-227	-2.150E+01	1.630E+01	2.560E+01	0.000E+00	FAIL ABUN
TH-227	-2.116E+01	1.616E+01	2.519E+01	0.000E+00	FAIL ABUN
AC-228	3.087E+00	4.279E+00	7.881E+00	0.000E+00	NOT IDENT.
RA-228	3.087E+00	4.279E+00	7.881E+00	0.000E+00	NOT IDENT.
TH-228	0.000E+00	2.532E+00	4.462E+00	0.000E+00	NOT IDENT.
TH-229	-1.400E+01	2.197E+01	3.642E+01	0.000E+00	NOT IDENT.
TH-230	5.530E-01	2.440E+00	4.340E+00	0.000E+00	NOT IDENT.
PA-231	-3.563E+01	6.006E+01	9.849E+01	0.000E+00	NOT IDENT.
TH-231	-1.121E+00	7.200E+00	1.208E+01	0.000E+00	NOT IDENT.
TH-232	0.000E+00	2.480E+00	4.371E+00	0.000E+00	NOT IDENT.
PA-233	-1.705E+00	2.592E+00	4.236E+00	0.000E+00	NOT IDENT.
PA-234	-3.386E+00	9.502E+00	1.623E+01	0.000E+00	FAIL ABUN
PA-234M	-1.133E+02	1.494E+02	2.458E+02	0.000E+00	FAIL ABUN
U-234	1.559E+00	5.354E+00	9.112E+00	0.000E+00	FAIL ABUN
NP-237	3.156E+00	1.051E+01	1.816E+01	0.000E+00	NOT IDENT.
NP-239	-4.890E+00	9.006E+00	1.516E+01	0.000E+00	FAIL ABUN
AM-241	-1.386E+01	1.150E+01	1.650E+01	0.000E+00	NOT IDENT.
AM-242	-6.129E+00	1.028E+02	1.760E+02	0.000E+00	NOT IDENT.
CM-247	-1.362E-01	1.273E+00	2.133E+00	0.000E+00	NOT IDENT.
CF-249	-3.513E-02	1.595E+00	2.673E+00	0.000E+00	FAIL ABUN
CF-251	5.632E+00	5.555E+00	9.678E+00	0.000E+00	NOT IDENT.
ANH-511	0.000E+00	2.168E+00	3.780E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:40:14.50

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405001.CNF;1
Sample date : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:02
Sample ID : G139405001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA2 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:02.51 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 7933154
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	1	63.48	164	537	1.44	126.71	123	14	3.79E-03	24.5	1.40E+00
2	1	66.48	137	672	1.58	132.71	123	14	3.17E-03	35.5	
3	0	92.82	471	852	1.58	185.34	180	11	1.09E-02	12.9	
4	0	132.09	89	639	1.91	263.84	261	9	2.05E-03	52.5	
5	0	140.15	162	478	2.30	279.96	277	7	3.74E-03	23.8	
6	0	143.45	92	483	1.10	286.54	284	7	2.14E-03	40.8	
7	0	162.56	92	469	1.70	324.75	322	8	2.12E-03	42.1	
8	0	185.68	328	616	1.74	370.97	366	11	7.59E-03	15.7	
9	0	198.22	162	530	1.81	396.02	392	9	3.75E-03	26.8	
10	0	204.68	51	685	2.05	408.93	404	12	1.18E-03	103.5	
11	0	238.51	114	351	1.11	476.55	474	7	2.63E-03	28.9	
12	0	335.06	38	283	3.59	669.55	667	10	8.91E-04	82.8	
13	0	360.45	29	109	1.13	720.31	718	5	6.72E-04	56.9	
14	0	475.21	43	105	1.47	949.72	946	8	1.00E-03	43.8	
15	0	499.59	43	158	2.50	998.46	993	11	9.84E-04	59.5	
16	0	510.71	675	328	2.39	1020.70	1011	22	1.56E-02	7.8	
17	0	570.70	5	99	0.63	1140.62	1136	8	1.04E-04	386.6	
18	0	582.76	66	144	1.25	1164.74	1159	12	1.53E-03	38.4	
19	0	595.60	93	157	1.72	1190.41	1186	11	2.16E-03	27.8	
20	0	724.14	20	31	1.24	1447.41	1445	5	4.62E-04	48.0	
21	0	766.49	64	77	3.35	1532.08	1526	13	1.49E-03	30.9	
22	0	804.10	17	70	1.24	1607.28	1602	9	4.02E-04	90.9	
23	0	841.39	46	99	6.57	1681.83	1675	16	1.07E-03	50.3	
24	0	968.87	25	89	2.03	1936.74	1933	13	5.80E-04	79.8	
25	0	1019.08	52	94	8.85	2037.15	2024	25	1.21E-03	53.2	
26	0	1047.89	25	34	3.35	2094.76	2091	9	5.70E-04	47.2	
27	0	1138.96	34	34	3.01	2276.88	2272	13	7.91E-04	40.9	
28	0	1245.55	13	23	1.51	2490.04	2488	7	2.98E-04	67.7	
29	0	1271.23	5	21	0.57	2541.41	2538	7	1.10E-04	166.1	
30	1	1435.48	33	39	2.37	2869.91	2859	28	7.63E-04	41.9	2.36E+00
31	1	1441.31	24	23	2.37	2881.57	2859	28	5.51E-04	48.7	
32	0	1460.38	73	38	1.75	2919.71	2913	15	1.69E-03	21.7	
33	0	1573.07	14	27	0.97	3145.11	3140	12	3.33E-04	76.7	
34	0	1601.84	17	21	0.55	3202.65	3196	12	3.96E-04	58.8	
35	0	1685.50	24	14	5.25	3370.01	3363	14	5.62E-04	38.4	
36	0	1699.16	15	42	7.21	3397.34	3387	19	3.54E-04	105.5	
37	0	1764.68	35	14	3.33	3528.40	3523	11	8.20E-04	26.3	
38	0	1778.70	21	18	1.16	3556.45	3551	12	4.83E-04	46.3	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1967.29	24	18	5.85	3933.74	3927	17	5.64E-04	43.9	

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:40:19.17

****
*
GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414
*
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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405001.CNF;1
Sample date : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:02
Sample ID : G139405001 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA2 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:02.51 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 7933154
Matrix Spike DPM : LCS DPM :

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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	15	10.67*	4.581E-01	9.765E+00	9.765E+00	267.39
NB-95	765.79	64	99.81*	7.876E-01	2.561E+00	3.859E+00	62.14
MO-99	140.51	162	82.70*	2.172E+00	2.814E+00	5.212E+02	48.13
	181.06	------	6.20	2.023E+00	------ Line Not Found		------
	739.58	------	12.80	8.111E-01	------ Line Not Found		------
CE-144	133.51	89	10.80*	2.176E+00	1.179E+01	1.240E+01	106.00
TH-234	63.29	29	3.80*	7.551E-01	3.198E+01	3.198E+01	380.35
	92.38	97	5.41	1.804E+00	3.106E+01	3.106E+01	186.05
	112.81	------	0.24	2.102E+00	------ Line Not Found		------
U-235	89.95	------	2.70	1.735E+00	------ Line Not Found		------
	93.35	97	4.50	1.804E+00	3.734E+01	3.734E+01	187.28
	105.00	------	2.10	2.020E+00	------ Line Not Found		------
	143.76	------	10.50*	2.165E+00	------ Line Not Found		------
	163.33	92	4.70	2.106E+00	2.902E+01	2.902E+01	86.29
	185.71	52	54.00	2.001E+00	1.506E+00	1.506E+00	238.25
	205.31	51	5.00	1.910E+00	1.674E+01	1.674E+01	207.77
U-238	63.29	29	3.80*	7.551E-01	3.198E+01	3.198E+01	380.35

Flag: "*" = Keyline

Sample ID : G139405001 Acquisition date : 13-JUL-2005 20:14:02

Total number of lines in spectrum	30	
Number of unidentified lines	14	
Number of lines tentatively identified by NID	16	53.33%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	9.765E+00	9.765E+00	26.11E+00	267.39	
NB-95	35.06D	1.51	2.561E+00	3.859E+00	2.398E+00	62.14	
MO-99	66.02H	185.	2.814E+00	5.212E+02	2.508E+02	48.13	
CE-144	284.30D	1.05	1.179E+01	1.240E+01	1.315E+01	106.00	
TH-234	4.47E+09Y	1.00	3.198E+01	3.198E+01	12.16E+01	380.35	
U-235	7.04E+08Y	1.00	1.506E+00	1.506E+00	3.589E+00	238.25	K
U-238	4.47E+09Y	1.00	3.198E+01	3.198E+01	12.16E+01	380.35	
			---------	---------			
	Total Activity :		9.240E+01	6.127E+02			
	Grand Total Activity :		9.240E+01	6.127E+02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G139405001
Acquisition date : 13-JUL-2005 20:14:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
1	66.48	101	672	1.58	132.71	123	14	2.33E-03	****	8.87E-01	T
0	198.22	97	530	1.81	396.02	392	9	2.26E-03	****	1.94E+00	T
0	335.06	38	283	3.59	669.55	667	10	8.91E-04	****	1.43E+00	T
0	360.45	29	109	1.13	720.31	718	5	6.72E-04	****	1.36E+00	
0	475.21	43	105	1.47	949.72	946	8	1.00E-03	87.6	1.13E+00	T
0	499.59	43	158	2.50	998.46	993	11	9.84E-04	****	1.09E+00	
0	595.60	93	157	1.72	1190.41	1186	11	2.16E-03	55.7	9.61E-01	
0	724.14	20	31	1.24	1447.41	1445	5	4.62E-04	96.0	8.25E-01	T
0	841.39	46	99	6.57	1681.83	1675	16	1.07E-03	****	7.28E-01	
0	1019.08	52	94	8.85	2037.15	2024	25	1.21E-03	****	6.17E-01	
0	1047.89	25	34	3.35	2094.76	2091	9	5.70E-04	94.3	6.02E-01	T
0	1138.96	34	34	3.01	2276.88	2272	13	7.91E-04	81.7	5.60E-01	
0	1245.55	13	23	1.51	2490.04	2488	7	2.98E-04	****	5.19E-01	
1	1435.48	33	39	2.37	2869.91	2859	28	7.63E-04	83.8	4.64E-01	
1	1441.31	24	23	2.37	2881.57	2859	28	5.51E-04	97.3	4.62E-01	T
0	1573.07	14	27	0.97	3145.11	3140	12	3.33E-04	****	4.36E-01	
0	1601.84	17	21	0.55	3202.65	3196	12	3.96E-04	****	4.31E-01	
0	1685.50	24	14	5.25	3370.01	3363	14	5.62E-04	76.9	4.18E-01	
0	1699.16	15	42	7.21	3397.34	3387	19	3.54E-04	****	4.17E-01	
0	1778.70	21	18	1.16	3556.45	3551	12	4.83E-04	92.5	4.08E-01	
0	1967.29	24	18	5.85	3933.74	3927	17	5.64E-04	87.8	3.95E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:40:27.25

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405001.CNF;1
Acquisition date : 13-JUL-2005 20:14:02 Detector SN# : 7933154
Detector ID : GAMMA2 Sensitivity : 3.00000
Geometry : 2L_MB Energy tolerance: 2.00000
Elapsed live time: 0 12:00:00.00 Abundance limit : 75.00000
Elapsed real time: 0 12:00:02.51 Half life ratio : 8.00000

SAMPLE DATA

Sample date : 23-JUN-2005 08:50:00 Nuclide Library : EPI
Sample ID : G139405001 Analyst initials: AKB
Batch Number : 437153 Sample Quantity : 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME : 13-JAN-2005 15:26:31.3 MS Isotope :
MSD DPM : MSD Isotope :
LCS DPM : LCS Isotope :

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	9.765E+00	2.611E+01	2.056E+01	1.238E+00	0.475
NB-95	3.859E+00	2.398E+00	2.743E+00	1.996E-01	1.407
MO-99	5.212E+02	2.508E+02	3.897E+02	2.731E+01	1.337
CE-144	1.240E+01	1.315E+01	1.611E+01	2.365E+00	0.770
TH-234	3.198E+01	1.216E+02	1.332E+02	2.704E+01	0.240
U-235	7.105E+00	1.067E+01	1.628E+01	2.724E+00	0.437
U-238	3.198E+01	1.216E+02	1.332E+02	2.704E+01	0.240

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	9.371E+00		1.305E+01	2.035E+01	1.639E+00	0.460
NA-22	-8.468E-02		1.247E+00	2.180E+00	1.340E-01	-0.039
AL-26	-5.150E-01		1.176E+00	2.060E+00	1.172E-01	-0.250
SC-46	6.920E-01		1.244E+00	2.293E+00	1.529E-01	0.302
V-48	1.031E+00		2.757E+00	5.007E+00	3.414E-01	0.206

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CR-51	-7.134E-01		1.642E+01	2.762E+01	2.184E+00	-0.026
MN-54	4.843E-01		1.209E+00	2.181E+00	1.522E-01	0.222
CO-56	1.012E+00		1.443E+00	2.375E+00	1.642E-01	0.426
CO-57	1.327E+00		1.223E+00	2.144E+00	1.496E-01	0.619
CO-58	-4.127E-01		1.306E+00	2.253E+00	1.604E-01	-0.183
FE-59	-2.556E+00		3.035E+00	4.926E+00	3.872E-01	-0.519
CO-60	-3.052E-01		1.087E+00	1.871E+00	1.028E-01	-0.163
ZN-65	-1.633E+00		2.517E+00	4.165E+00	2.934E-01	-0.392
SE-75	1.166E+00		1.824E+00	3.152E+00	2.363E-01	0.370
KR-85	-2.154E+03		4.460E+02	5.449E+02	4.020E+01	-3.954
SR-85	-1.171E+01		2.424E+00	2.962E+00	2.185E-01	-3.954
Y-88	-5.933E-01		1.340E+00	2.346E+00	1.332E-01	-0.253
Y-91	1.239E+00		1.303E+00	2.421E+00	1.806E-01	0.512
NB-94	-4.638E-01		1.114E+00	1.909E+00	1.422E-01	-0.243
NB-95M	-5.140E+02		2.440E+02	3.705E+02	4.254E+01	-1.387
ZR-95	-2.356E-01		2.282E+00	4.009E+00	3.335E-01	-0.059
RU-103	-7.278E-01		1.948E+00	2.752E+00	3.692E-01	-0.264
RH-106	3.863E+00		1.062E+01	1.917E+01	1.442E+00	0.202
RU-106	-6.940E-01		1.061E+01	1.869E+01	2.370E+00	-0.037
AG-108M	-4.450E-01		1.209E+00	1.988E+00	1.496E-01	-0.224
CD-109	-6.094E+00		3.560E+01	6.086E+01	6.561E+00	-0.100
AG-110M	1.818E-01		1.144E+00	2.041E+00	1.594E-01	0.089
SN-113	-3.674E-01		1.734E+00	2.882E+00	2.089E-01	-0.127
SN-115	1.225E+02		1.168E+02	2.214E+02	1.484E+01	0.554
SN-117M	1.551E+00		3.350E+00	5.757E+00	4.058E-01	0.269
TE-123M	-3.404E-02		1.339E+00	2.273E+00	1.618E-01	-0.015
SB-124	-4.694E-01		5.221E+00	5.080E+00	3.173E-01	-0.092
SB-125	-7.474E-01		3.499E+00	5.805E+00	4.233E-01	-0.129
TE-125M	4.531E+02		4.824E+02	8.417E+02	8.158E+01	0.538
I-126	-3.537E+00		7.325E+00	1.256E+01	9.433E-01	-0.282
SB-126	3.991E+00		6.640E+00	1.082E+01	8.013E-01	0.369
SN-126	-1.695E+00		3.582E+00	6.070E+00	6.535E-01	-0.279
SB-127	-2.624E+01		1.099E+02	1.918E+02	2.387E+01	-0.137
I-131	-2.786E-01		7.361E+00	1.235E+01	9.575E-01	-0.023
TE-132	1.364E+01		8.942E+01	1.520E+02	2.471E+01	0.090
BA-133	-9.150E-01		1.691E+00	2.764E+00	3.405E-01	-0.331
CS-134	5.039E-01		1.352E+00	2.435E+00	1.758E-01	0.207
CS-135	-1.286E+00		6.010E+00	1.006E+01	9.028E-01	-0.128
CS-136	4.789E+00	+	4.532E+00	7.880E+00	5.831E-01	0.608
BA-137M	-2.023E-01		1.084E+00	1.897E+00	1.426E-01	-0.107
CS-137	-2.130E-01		1.146E+00	2.006E+00	1.511E-01	-0.106
CE-139	7.241E-01		1.467E+00	2.235E+00	1.597E-01	0.324
BA-140	6.947E-01		1.250E+01	2.101E+01	6.903E+00	0.033
CE-141	1.810E+00		3.128E+00	5.404E+00	3.849E-01	0.335
PM-144	8.815E-01		1.163E+00	2.133E+00	1.593E-01	0.413
PM-146	4.679E-01		1.623E+00	2.766E+00	2.659E-01	0.169
ND-147	3.376E-01		2.810E+01	4.717E+01	6.741E+00	0.007
PM-147	1.186E+06		2.523E+06	4.360E+06	3.056E+05	0.272

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
EU-152	-2.126E+00		3.795E+00	6.213E+00	4.887E-01	-0.342
GD-153	-1.101E+00		3.810E+00	6.484E+00	5.898E-01	-0.170
EU-154	-2.220E-01		3.476E+00	6.077E+00	5.806E-01	-0.037
EU-155	-5.264E+00		5.143E+00	8.535E+00	7.078E-01	-0.617
TB-160	2.431E+00		4.709E+00	8.611E+00	5.794E-01	0.282
TM-171	2.297E+03	+	2.575E+03	2.755E+03	3.293E+02	0.834
HF-181	-5.985E-03		1.589E+00	2.673E+00	1.948E-01	-0.002
TA-182	-1.247E+00		4.553E+00	7.847E+00	5.226E-01	-0.159
IR-192	8.280E-01		1.451E+00	2.501E+00	1.853E-01	0.331
TL-203	1.227E+00		1.722E+00	2.982E+00	2.306E-01	0.412
BI-207	2.843E-01		1.490E+00	2.677E+00	1.865E-01	0.106
TL-208	1.909E+00		1.307E+00	2.456E+00	2.014E-01	0.778
BI-210	4.039E+01		3.585E+02	5.542E+02	6.849E+01	0.073
PB-210	4.039E+01		3.585E+02	5.542E+02	6.849E+01	0.073
BI-211	3.044E+00		7.817E+00	1.337E+01	1.035E+00	0.228
PB-211	-1.015E+01		3.308E+01	5.373E+01	3.356E+01	-0.189
BI-212	-3.716E+00		9.677E+00	1.431E+01	1.284E+00	-0.260
PB-212	4.937E+00		2.532E+00	4.464E+00	3.863E-01	1.106
BI-214	5.530E-01		2.440E+00	4.340E+00	3.962E-01	0.127
PB-214	2.604E+00		2.720E+00	4.751E+00	4.434E-01	0.548
RN-219	-1.052E+00		1.418E+01	2.380E+01	3.366E+00	-0.044
RA-223	-7.445E+00		2.530E+01	4.201E+01	7.195E+00	-0.177
RA-224	2.010E+00		2.716E+01	4.591E+01	3.401E+00	0.044
RA-226	5.530E-01		2.440E+00	4.340E+00	3.962E-01	0.127
AC-227	-2.150E+01		1.630E+01	2.560E+01	3.808E+00	-0.840
TH-227	-2.116E+01		1.616E+01	2.519E+01	4.415E+00	-0.840
AC-228	3.087E+00		4.279E+00	7.881E+00	7.733E-01	0.392
RA-228	3.087E+00		4.279E+00	7.881E+00	7.733E-01	0.392
TH-228	4.925E+00		2.532E+00	4.462E+00	3.862E-01	1.104
TH-229	-1.400E+01		2.197E+01	3.642E+01	2.635E+00	-0.384
TH-230	5.530E-01		2.440E+00	4.340E+00	3.962E-01	0.127
PA-231	-3.563E+01		6.006E+01	9.849E+01	1.433E+01	-0.362
TH-231	-1.121E+00		7.200E+00	1.208E+01	1.046E+00	-0.093
TH-232	4.820E+00		2.480E+00	4.371E+00	3.783E-01	1.103
PA-233	-1.705E+00		2.592E+00	4.236E+00	3.255E-01	-0.402
PA-234	-3.386E+00		9.502E+00	1.623E+01	2.917E+00	-0.209
PA-234M	-1.133E+02		1.494E+02	2.458E+02	2.081E+01	-0.461
U-234	1.559E+00		5.354E+00	9.112E+00	8.852E-01	0.171
NP-237	3.156E+00		1.051E+01	1.816E+01	4.224E+00	0.174
NP-239	-4.890E+00		9.006E+00	1.516E+01	1.101E+00	-0.323
AM-241	-1.386E+01		1.150E+01	1.650E+01	2.381E+00	-0.840
AM-242	-6.129E+00		1.028E+02	1.760E+02	1.469E+01	-0.035
CM-247	-1.362E-01		1.273E+00	2.133E+00	1.488E-01	-0.064
CF-249	-3.513E-02		1.595E+00	2.673E+00	1.859E-01	-0.013
CF-251	5.632E+00		5.555E+00	9.678E+00	6.936E-01	0.582
UNH-511	1.655E+01		2.168E+00	3.780E+00	2.786E-01	4.378

VAX/VMS Nuclide Identification Report Generated

```
*********************************************************************
*                        Environmental Physics, Inc.                *
*                             2040 Savage Road                      *
*                           Charleston, SC 29414                    *
*********************************************************************
*                                                                   *
*                            DETECTOR DATA                          *
*                                                                   *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G139405001    *
* Acquisition date : 13-JUL-2005 20:14:02 Detector SN#     : 7933154 *
* Detector ID      : GAMMA2               Sensitivity      : 3.000   *
* Geometry         : 2L_MB                Energy tolerance: 2.000   *
* Elapsed live time:    0 12:00:00.00     Abundance limit  : 75.000  *
* Elapsed real time:    0 12:00:02.51     Half life ratio  : 8.000   *
*********************************************************************
*                                                                   *
*                            SAMPLE DATA                            *
*                                                                   *
* Sample date      : 23-JUN-2005 08:50:00 Nuclide Library :          *
* Sample ID        : G139405001           Analyst initials: AKB      *
* Batch Number     : 437153               Sample Quantity : 2.0000E+00 LITER *
* Recovery         :    1.00000           Carrier Weight :    0.00000 *
*********************************************************************
*                                                                   *
*                              QC DATA                              *
*                                                                   *
* CALIB. DATE/TIME : 13-JAN-2005 15:26:31 MS Isotope      :         *
* MSD DPM          :    0.000             MSD Isotope     :         *
* LCS DPM          :    0.000             LCS Isotope     :         *
* LCSD DPM         :    0.000             LCSD Isotope    :         *
*********************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	9.765E+00	2.611E+01	9.416E+00	1.305E+01
NB-95	3.859E+00	2.398E+00	1.291E+00	1.199E+00
MO-99	5.212E+02	2.508E+02	1.906E+02	1.254E+02
CE-144	1.240E+01	1.315E+01	7.870E+00	6.573E+00
TH-234	3.198E+01	1.216E+02	6.515E+01	6.082E+01
U-235	7.105E+00	1.067E+01	7.957E+00	5.335E+00
U-238	3.198E+01	1.216E+02	6.515E+01	6.082E+01

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	9.371E+00	1.305E+01	9.710E+00	6.526E+00	NOT IDENT.
NA-22	-8.468E-02	1.247E+00	1.006E+00	6.237E-01	NOT IDENT.
NA-24	-3.374E+09	1.157E+10	0.000E+00	5.783E+09	SHORT HLIF

AL-26	-5.150E-01	1.176E+00	9.255E-01	5.878E-01 NOT IDENT.
SC-46	6.920E-01	1.244E+00	1.075E+00	6.219E-01 NOT IDENT.
V-48	1.031E+00	2.757E+00	2.341E+00	1.379E+00 NOT IDENT.
CR-51	-7.134E-01	1.642E+01	1.333E+01	8.209E+00 NOT IDENT.
MN-54	4.843E-01	1.209E+00	1.031E+00	6.046E-01 NOT IDENT.
CO-56	1.012E+00	1.443E+00	1.118E+00	7.216E-01 NOT IDENT.
MN-56	1.000E+41	1.427E+41	0.000E+00	0.000E+00 SHORT HLIF
CO-57	1.327E+00	1.223E+00	1.048E+00	6.117E-01 NOT IDENT.
CO-58	-4.127E-01	1.306E+00	1.058E+00	6.531E-01 NOT IDENT.
FE-59	-2.556E+00	3.035E+00	2.285E+00	1.518E+00 NOT IDENT.
CO-60	-3.052E-01	1.087E+00	8.491E-01	5.434E-01 NOT IDENT.
ZN-65	-1.633E+00	2.517E+00	1.928E+00	1.259E+00 NOT IDENT.
SE-75	1.166E+00	1.824E+00	1.529E+00	9.121E-01 FAIL ABUN
KR-85	-2.154E+03	4.460E+02	2.634E+02	2.230E+02 NOT IDENT.
SR-85	-1.171E+01	2.424E+00	1.432E+00	1.212E+00 NOT IDENT.
Y-88	-5.933E-01	1.340E+00	1.053E+00	6.701E-01 NOT IDENT.
Y-91	1.239E+00	1.303E+00	1.155E+00	6.517E-01 NOT IDENT.
NB-94	-4.638E-01	1.114E+00	9.051E-01	5.568E-01 NOT IDENT.
NB-95M	-5.140E+02	2.440E+02	1.802E+02	1.220E+02 NOT IDENT.
ZR-95	-2.356E-01	2.282E+00	1.885E+00	1.141E+00 FAIL ABUN
TC-99M	1.981E+25	1.216E+25	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-7.278E-01	1.948E+00	1.314E+00	9.739E-01 NOT IDENT.
RH-106	3.863E+00	1.062E+01	9.106E+00	5.309E+00 NOT IDENT.
RU-106	-6.940E-01	1.061E+01	8.868E+00	5.305E+00 NOT IDENT.
AG-108M	-4.450E-01	1.209E+00	9.514E-01	6.043E-01 FAIL ABUN
CD-109	-6.094E+00	3.560E+01	2.976E+01	1.780E+01 NOT IDENT.
AG-110M	1.818E-01	1.144E+00	9.678E-01	5.721E-01 NOT IDENT.
SN-113	-3.674E-01	1.734E+00	1.385E+00	8.669E-01 NOT IDENT.
CD-115	2.882E+02	2.090E+03	0.000E+00	1.045E+03 SHORT HLIF
SN-115	1.225E+02	1.168E+02	1.042E+02	5.841E+01 NOT IDENT.
SN-117M	1.551E+00	3.350E+00	2.814E+00	1.675E+00 NOT IDENT.
TE-123M	-3.404E-02	1.339E+00	1.110E+00	6.696E-01 NOT IDENT.
SB-124	-4.694E-01	5.221E+00	2.278E+00	2.611E+00 FAIL ABUN
SB-125	-7.474E-01	3.499E+00	2.784E+00	1.750E+00 NOT IDENT.
TE-125M	4.531E+02	4.824E+02	4.118E+02	2.412E+02 NOT IDENT.
I-126	-3.537E+00	7.325E+00	5.921E+00	3.662E+00 NOT IDENT.
SB-126	3.991E+00	6.640E+00	5.108E+00	3.320E+00 NOT IDENT.
SN-126	-1.695E+00	3.582E+00	2.968E+00	1.791E+00 FAIL ABUN
SB-127	-2.624E+01	1.099E+02	9.023E+01	5.494E+01 NOT IDENT.
I-131	-2.786E-01	7.361E+00	5.950E+00	3.680E+00 NOT IDENT.
I-132	-1.000E+41	7.207E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	1.364E+01	8.942E+01	7.387E+01	4.471E+01 NOT IDENT.
BA-133	-9.150E-01	1.691E+00	1.331E+00	8.453E-01 NOT IDENT.
I-133	-7.032E+06	1.798E+07	0.000E+00	8.991E+06 SHORT HLIF
CS-134	5.039E-01	1.352E+00	1.152E+00	6.762E-01 NOT IDENT.
CS-135	-1.286E+00	6.010E+00	4.872E+00	3.005E+00 NOT IDENT.
I-135	-1.450E+23	1.988E+23	0.000E+00	0.000E+00 SHORT HLIF
CS-136	4.789E+00	4.532E+00	3.679E+00	2.266E+00 FAIL ABUN
BA-137M	-2.023E-01	1.084E+00	8.960E-01	5.420E-01 NOT IDENT.
CS-137	-2.130E-01	1.146E+00	9.472E-01	5.730E-01 NOT IDENT.
CE-139	7.241E-01	1.467E+00	1.090E+00	7.334E-01 NOT IDENT.
BA-140	6.947E-01	1.250E+01	1.001E+01	6.250E+00 FAIL ABUN
LA-140	-6.169E+02	7.660E+03	0.000E+00	3.830E+03 SHORT HLIF
CE-141	1.810E+00	3.128E+00	2.640E+00	1.564E+00 NOT IDENT.
CE-143	7.889E+04	8.416E+04	0.000E+00	4.208E+04 SHORT HLIF
PM-144	8.815E-01	1.163E+00	1.015E+00	5.816E-01 FAIL ABUN
PR-144	1.000E+41	1.320E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	4.679E-01	1.623E+00	1.325E+00	8.117E-01 NOT IDENT.
ND-147	3.376E-01	2.810E+01	2.246E+01	1.405E+01 FAIL ABUN
PM-147	1.186E+06	2.523E+06	2.132E+06	1.261E+06 NOT IDENT.

PM-149	2.001E+04	1.996E+04	0.000E+00	9.981E+03	SHORT HLIF
EU-152	-2.126E+00	3.795E+00	2.994E+00	1.897E+00	NOT IDENT.
GD-153	-1.101E+00	3.810E+00	3.168E+00	1.905E+00	NOT IDENT.
EU-154	-2.220E-01	3.476E+00	2.805E+00	1.738E+00	FAIL ABUN
EU-155	-5.264E+00	5.143E+00	4.168E+00	2.572E+00	NOT IDENT.
TB-160	2.431E+00	4.709E+00	4.049E+00	2.355E+00	NOT IDENT.
TM-171	2.297E+03	2.575E+03	1.348E+03	1.287E+03	FAIL ABUN
HF-181	-5.985E-03	1.589E+00	1.273E+00	7.944E-01	FAIL ABUN
TA-182	-1.247E+00	4.553E+00	3.589E+00	2.277E+00	FAIL ABUN
IR-192	8.280E-01	1.451E+00	1.209E+00	7.256E-01	NOT IDENT.
HG-203	1.227E+00	1.722E+00	1.445E+00	8.608E-01	NOT IDENT.
BI-207	2.843E-01	1.490E+00	1.244E+00	7.452E-01	FAIL ABUN
TL-208	1.909E+00	1.307E+00	1.176E+00	6.534E-01	NOT IDENT.
BI-210	4.039E+01	3.585E+02	2.700E+02	1.792E+02	NOT IDENT.
PB-210	4.039E+01	3.585E+02	2.700E+02	1.792E+02	NOT IDENT.
BI-211	3.044E+00	7.817E+00	6.451E+00	3.909E+00	NOT IDENT.
PB-211	-1.015E+01	3.308E+01	2.572E+01	1.654E+01	NOT IDENT.
BI-212	-3.716E+00	9.677E+00	6.715E+00	4.838E+00	NOT IDENT.
PB-212	4.937E+00	2.532E+00	2.178E+00	1.266E+00	NOT IDENT.
BI-214	5.530E-01	2.440E+00	2.074E+00	1.220E+00	FAIL ABUN
PB-214	2.604E+00	2.720E+00	2.294E+00	1.360E+00	NOT IDENT.
RN-219	-1.052E+00	1.418E+01	1.139E+01	7.089E+00	NOT IDENT.
RA-223	-7.445E+00	2.530E+01	2.027E+01	1.265E+01	NOT IDENT.
RA-224	2.010E+00	2.716E+01	2.234E+01	1.358E+01	NOT IDENT.
RA-226	5.530E-01	2.440E+00	2.074E+00	1.220E+00	NOT IDENT.
AC-227	-2.150E+01	1.630E+01	1.240E+01	8.149E+00	FAIL ABUN
TH-227	-2.116E+01	1.616E+01	1.220E+01	8.078E+00	FAIL ABUN
AC-228	3.087E+00	4.279E+00	3.716E+00	2.140E+00	NOT IDENT.
RA-228	3.087E+00	4.279E+00	3.716E+00	2.140E+00	NOT IDENT.
TH-228	4.925E+00	2.532E+00	2.177E+00	1.266E+00	NOT IDENT.
TH-229	-1.400E+01	2.197E+01	1.775E+01	1.098E+01	NOT IDENT.
TH-230	5.530E-01	2.440E+00	2.074E+00	1.220E+00	NOT IDENT.
PA-231	-3.563E+01	6.006E+01	4.760E+01	3.003E+01	NOT IDENT.
TH-231	-1.121E+00	7.200E+00	5.851E+00	3.600E+00	NOT IDENT.
TH-232	4.820E+00	2.480E+00	2.133E+00	1.240E+00	NOT IDENT.
PA-233	-1.705E+00	2.592E+00	2.046E+00	1.296E+00	NOT IDENT.
PA-234	-3.386E+00	9.502E+00	7.583E+00	4.751E+00	FAIL ABUN
PA-234M	-1.133E+02	1.494E+02	1.150E+02	7.470E+01	FAIL ABUN
U-234	1.559E+00	5.354E+00	4.416E+00	2.677E+00	FAIL ABUN
NP-237	3.156E+00	1.051E+01	8.879E+00	5.254E+00	NOT IDENT.
NP-239	-4.890E+00	9.006E+00	7.403E+00	4.503E+00	FAIL ABUN
AM-241	-1.386E+01	1.150E+01	8.054E+00	5.749E+00	NOT IDENT.
AM-242	-6.129E+00	1.028E+02	8.596E+01	5.142E+01	NOT IDENT.
CM-247	-1.362E-01	1.273E+00	1.021E+00	6.366E-01	NOT IDENT.
CF-249	-3.513E-02	1.595E+00	1.288E+00	7.977E-01	FAIL ABUN
CF-251	5.632E+00	5.555E+00	4.725E+00	2.778E+00	NOT IDENT.
ANH-511	1.655E+01	2.168E+00	1.852E+00	1.084E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:41:46.25

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405002.CNF;1
Sample date : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:30
Sample ID : G139405002 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:04.15 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.13	141	929	1.25	107.11	102	12	3.25E-03	44.1	
2	0	64.66*	255	1282	3.81	130.13	123	15	5.90E-03	35.7	
3	0	140.02	243	711	1.59	280.62	277	9	5.63E-03	20.7	7.28E-01
4	0	143.88*	9	670	1.86	288.34	285	8	2.07E-04	699.7	
5	0	175.96	107	534	2.50	352.39	349	8	2.48E-03	38.6	
6	0	185.92*	8	771	1.19	372.29	367	11	1.96E-04	905.7	
7	0	198.17	222	711	1.21	396.76	391	11	5.14E-03	24.2	
8	0	295.65*	46	392	2.71	591.44	586	11	1.06E-03	105.8	
9	0	338.61*	29	249	1.99	677.24	673	9	6.64E-04	135.1	
10	0	352.04*	21	500	1.83	704.07	696	17	4.92E-04	305.0	
11	0	368.18	66	236	2.34	736.30	733	9	1.52E-03	43.8	
12	0	450.15	22	124	1.35	900.01	896	7	5.08E-04	86.9	
13	0	596.82	97	229	2.07	1192.97	1186	15	2.25E-03	35.5	
14	1	863.66	52	25	2.12	1726.00	1724	10	1.20E-03	16.9	4.28E+01
15	1	866.16	61	31	2.12	1731.00	1724	10	1.40E-03	14.5	
16	0	868.66	20	42	0.83	1735.99	1733	6	4.53E-04	57.2	
17	0	878.56	11	37	1.21	1755.77	1752	6	2.65E-04	89.3	
18	0	910.80*	36	93	1.88	1820.18	1813	16	8.24E-04	80.4	
19	0	927.66	26	50	0.57	1853.86	1850	10	5.97E-04	56.7	
20	0	969.10	78	72	3.44	1936.65	1929	14	1.82E-03	25.7	
21	0	1078.81	14	45	1.46	2155.83	2154	9	3.34E-04	86.2	
22	0	1281.24	14	37	1.61	2560.28	2554	10	3.14E-04	88.7	
23	0	1345.22	12	17	1.16	2688.11	2686	7	2.82E-04	61.8	
24	0	1383.79	15	15	0.52	2765.18	2762	6	3.53E-04	47.5	
25	0	1461.58*	7	58	2.98	2920.62	2911	18	1.57E-04	357.0	
26	0	1515.27	15	19	0.79	3027.91	3023	8	3.47E-04	57.3	
27	0	1520.43	14	15	0.67	3038.23	3036	6	3.17E-04	53.6	
28	0	1663.83	19	34	1.01	3324.79	3316	15	4.50E-04	69.0	
29	0	1707.64	15	6	1.08	3412.33	3410	6	3.47E-04	36.5	
30	0	1765.88	42	61	1.38	3528.72	3520	22	9.63E-04	50.2	
31	0	1810.64	19	55	5.88	3618.18	3608	22	4.40E-04	102.1	
32	0	1848.27	43	53	9.82	3693.38	3678	27	1.01E-03	49.4	
33	0	1933.07	39	19	5.43	3862.87	3853	20	9.00E-04	32.3	
34	0	1940.99	13	22	0.68	3878.69	3872	11	3.01E-04	75.2	
35	0	1962.33	10	14	0.76	3921.35	3917	7	2.25E-04	74.0	
36	0	1971.38	10	11	1.33	3939.44	3936	7	2.43E-04	59.9	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 14-JUL-2005 11:41:50

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405002.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:30
Sample ID : G139405002 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:04.15 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	3.483E+00	2.487E+01	1.995E+01	1.195E+00	0.175
MO-99	+	140.51	*	6.593E+02	2.765E+02	3.044E+02	1.886E+01	2.166
TH-		181.06		3.254E+02	2.547E+03	4.153E+03	7.161E+02	0.078
PA-		739.58		-3.799E+02	1.386E+03	2.356E+03	3.328E+02	-0.161
CE-141	+	145.44	*	3.489E-01	4.883E+00	4.457E+00	2.799E-01	0.078
BI-211	+	351.07	*	3.065E+00	1.870E+01	1.124E+01	7.816E-01	0.273
U-234		67.67		6.930E+02	5.151E+02	8.127E+02	1.088E+02	0.853
		241.98		-3.921E+01	1.237E+01	1.838E+01	1.551E+00	-2.134
	+	295.21	*	3.950E+00	8.364E+00	7.492E+00	6.713E-01	0.527
	+	351.92		1.066E+00	6.504E+00	3.916E+00	3.405E-01	0.272
U-235		89.95		-3.034E+02	1.043E+02	6.763E+01	2.065E+01	-4.486
		93.35		2.096E+02	6.426E+01	5.415E+01	1.494E+01	3.871
		105.00		-2.420E+01	4.297E+01	6.956E+01	2.039E+01	-0.348
	+	143.76	*	1.034E+00	1.447E+01	1.299E+01	2.130E+00	0.080
		163.33		9.771E+00	1.829E+01	3.022E+01	5.461E+00	0.323
	+	185.71		2.026E-01	3.671E+00	2.557E+00	1.562E-01	0.079
		205.31		5.416E+00	1.686E+01	2.944E+01	5.049E+00	0.184
U-238	+	63.29	*	1.957E+02	1.438E+02	8.980E+01	1.565E+01	2.180

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	5.911E+00	1.130E+01	1.941E+01	1.413E+00	0.305
NA-22		1274.53	*	-3.964E-01	1.035E+00	1.773E+00	1.028E-01	-0.224
AL-26		511.00		9.102E+00	1.120E+00	2.034E+00	1.306E-01	4.474
	+	1808.65	*	1.187E+00	2.424E+00	2.197E+00	1.244E-01	0.540
SC-46		889.25	*	-1.490E-01	1.197E+00	2.036E+00	1.512E-01	-0.073
		1120.51		9.945E-01	1.311E+00	2.443E+00	1.599E-01	0.407
V-48		944.10		1.661E+00	3.481E+01	5.957E+01	4.378E+00	0.028
		983.50	*	6.411E-02	2.619E+00	4.673E+00	3.372E-01	0.014
		1312.09		-1.230E+00	2.819E+00	4.778E+00	2.673E-01	-0.257
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	8.129E+00	1.432E+01	2.493E+01	1.752E+00	0.326

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MN-54		834.83	*	-5.061E-02	1.154E+00	1.971E+00	1.403E-01	-0.026
CO-56		846.75	*	-9.228E-01	1.381E+00	2.256E+00	1.621E-01	-0.409
		1037.82		-6.729E+00	9.073E+00	1.526E+01	1.152E+00	-0.441
		1238.25		1.359E+00	2.008E+00	3.726E+00	2.349E-01	0.365
CO-57		122.06	*	1.031E+00	1.047E+00	1.782E+00	1.122E-01	0.579
		136.47		-1.443E+00	9.295E+00	1.356E+01	9.495E-01	-0.106
CO-58		810.78	*	2.998E-01	1.231E+00	2.156E+00	1.511E-01	0.139
FE-59		192.35		-1.574E+01	3.524E+01	6.048E+01	7.244E+00	-0.260
		1099.25	*	8.486E-01	2.693E+00	4.877E+00	3.683E-01	0.174
		1291.60		-3.087E-01	3.390E+00	5.950E+00	4.370E-01	-0.052
CO-60		1173.24		-8.170E-02	1.085E+00	1.911E+00	1.185E-01	-0.043
		1332.50	*	1.221E+00	1.187E+00	2.249E+00	1.234E-01	0.543
ZN-65		1115.55	*	-1.556E-01	2.433E+00	4.276E+00	2.817E-01	-0.036
SE-75	+	66.05		8.221E+02	5.918E+02	3.338E+02	3.125E+01	2.463
		96.73		-7.144E+01	3.441E+01	5.218E+01	6.580E+00	-1.369
		121.11		7.726E-01	5.814E+00	9.674E+00	9.236E-01	0.080
		136.00		-1.260E+00	1.619E+00	2.601E+00	1.609E-01	-0.484
	+	198.60		2.296E+02	1.123E+02	1.120E+02	8.304E+00	2.050
		264.65	*	3.079E-01	1.604E+00	2.769E+00	1.780E-01	0.111
		279.53		1.696E+00	3.708E+00	6.453E+00	4.408E-01	0.263
		303.91		-1.955E+01	7.291E+01	1.231E+02	1.223E+01	-0.159
		400.65		3.945E+00	8.423E+00	1.452E+01	1.365E+00	0.272
KR-85		513.99	*	-1.400E+02	3.360E+02	5.741E+02	3.686E+01	-0.244
SR-85		513.99	*	-7.612E-01	1.827E+00	3.121E+00	2.004E-01	-0.244
Y-88		898.02		9.733E-01	1.323E+00	2.373E+00	1.785E-01	0.410
		1836.01	*	-2.903E-01	1.328E+00	2.341E+00	1.325E-01	-0.124
Y-91		557.57	*	1.455E-01	1.161E+00	2.053E+00	1.311E-01	0.071
		1204.90		5.957E+01	4.826E+02	8.597E+02	5.230E+01	0.069
NB-94		702.63	*	-9.496E-01	1.109E+00	1.820E+00	1.155E-01	-0.522
		871.10		5.542E-01	1.243E+00	1.914E+00	1.402E-01	0.290
NB-95		765.79	*	-8.478E-01	1.489E+00	2.474E+00	1.664E-01	-0.343
NB-95M		235.69	*	-5.284E+02	2.029E+02	3.078E+02	3.325E+01	-1.717
ZR-95		724.18		-3.142E+00	2.934E+00	4.722E+00	3.513E-01	-0.665
		756.74	*	8.628E-01	2.236E+00	3.955E+00	3.071E-01	0.218
RU-103		497.08	*	2.875E-01	1.546E+00	2.599E+00	3.363E-01	0.111
		610.33		3.959E+01	2.916E+01	5.241E+01	8.177E+00	0.755
RH-106		511.85		7.544E+01	9.238E+00	1.678E+01	1.078E+00	4.495
		621.84	*	-8.377E-01	9.992E+00	1.734E+01	1.082E+00	-0.048
		1050.47		3.044E+01	6.106E+01	1.127E+02	7.810E+00	0.270
RU-106		622.20	*	-2.883E+00	9.880E+00	1.695E+01	2.027E+00	-0.170
AG-108M		433.93	*	-1.177E-01	1.077E+00	1.798E+00	1.223E-01	-0.065
		614.37		-2.156E+00	1.225E+00	1.916E+00	1.288E-01	-1.125
		722.95		-2.785E-01	1.232E+00	2.100E+00	1.452E-01	-0.133
CD-109		88.03	*	-8.055E+00	3.029E+01	5.055E+01	3.816E+00	-0.159
AG-110M		657.75	*	-9.601E-01	1.002E+00	1.641E+00	1.062E-01	-0.585
		677.61		-4.240E+00	9.221E+00	1.558E+01	1.017E+00	-0.272
		706.67		3.874E+00	6.983E+00	1.238E+01	8.280E-01	0.313
		763.93		-4.428E+00	4.588E+00	7.396E+00	5.193E-01	-0.599
		884.67		6.625E-01	1.482E+00	2.625E+00	2.026E-01	0.252

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		937.48		-1.354E+00	3.351E+00	5.546E+00	4.288E-01	-0.244
	+	1384.27		3.503E+00	3.332E+00	7.711E+00	4.565E-01	0.454
SN-113		391.69	*	-3.861E-01	1.418E+00	2.366E+00	1.560E-01	-0.163
SN-115		484.47		5.995E+02	6.562E+02	1.146E+03	7.353E+01	0.523
		933.00	*	1.019E+01	1.217E+02	1.814E+02	1.339E+01	0.056
		1290.58		9.882E+00	2.503E+02	4.440E+02	2.532E+01	0.022
SN-117M		156.02		-1.564E+01	1.106E+02	1.804E+02	1.091E+01	-0.087
		158.56	*	-4.352E-01	2.786E+00	4.534E+00	2.745E-01	-0.096
TE-123M		159.00	*	-4.725E-01	1.138E+00	1.835E+00	1.125E-01	-0.257
SB-124		602.73		-1.746E-01	1.551E+00	2.323E+00	1.464E-01	-0.075
		645.85		-5.930E+00	1.582E+01	2.698E+01	1.852E+00	-0.220
		713.78		-4.644E+01	5.479E+01	8.953E+01	9.465E+00	-0.519
		722.79		-2.267E+00	1.158E+01	1.978E+01	1.328E+00	-0.115
		1368.16		-2.875E+01	6.028E+01	1.012E+02	1.188E+01	-0.284
		1690.98	*	1.474E+00	3.078E+00	5.779E+00	3.586E-01	0.255
SB-125	+	176.33		2.000E+01	1.554E+01	2.105E+01	1.857E+00	0.950
		427.89	*	1.491E+00	2.966E+00	5.114E+00	3.353E-01	0.292
		463.38		-9.630E-01	8.840E+00	1.471E+01	1.071E+00	-0.065
		600.56		2.642E+00	6.743E+00	1.046E+01	7.477E-01	0.253
		606.64		-7.996E+00	2.273E+01	3.873E+01	2.803E+00	-0.206
		635.90		-1.027E+00	8.694E+00	1.503E+01	1.072E+00	-0.068
TE-125M		109.28	*	9.343E+01	4.047E+02	6.786E+02	5.841E+01	0.138
I-126		388.63		1.305E+00	8.640E+00	1.472E+01	9.190E-01	0.089
		666.33	*	-7.196E-02	6.826E+00	1.189E+01	7.284E-01	-0.006
		753.82		-3.103E+01	6.028E+01	1.006E+02	6.692E+00	-0.308
SB-126		666.33		-3.045E-02	2.889E+00	5.031E+00	3.082E-01	-0.006
		695.00		-1.811E+00	3.274E+00	5.482E+00	3.454E-01	-0.330
		697.00		2.287E+00	1.151E+01	2.010E+01	1.269E+00	0.114
		720.50	*	4.666E+00	5.951E+00	1.075E+01	6.936E-01	0.434
SN-126	+	64.28		7.748E+01	5.642E+01	3.395E+01	4.923E+00	2.282
		86.94		-5.890E+00	1.308E+01	2.135E+01	8.783E+00	-0.276
		87.57	*	-1.775E+00	3.065E+00	5.067E+00	3.815E-01	-0.350
SB-127		252.40		8.523E+01	4.035E+02	6.968E+02	2.937E+02	0.122
		411.60		1.006E+03	1.030E+03	1.800E+03	2.882E+02	0.559
		444.90		2.537E+01	8.519E+02	1.433E+03	1.851E+02	0.018
		473.00		-3.775E+01	1.538E+02	2.535E+02	3.361E+01	-0.149
		543.30		-1.070E+03	1.384E+03	2.318E+03	3.435E+02	-0.461
		603.50		3.024E+02	1.038E+03	1.827E+03	2.349E+02	0.166
		685.70	*	5.605E+00	1.059E+02	1.850E+02	2.173E+01	0.030
		698.50		1.441E+03	1.312E+03	2.365E+03	3.809E+02	0.609
		783.70		1.725E+02	2.848E+02	5.087E+02	6.635E+01	0.339
I-131		284.30		2.525E+01	7.865E+01	1.364E+02	9.632E+00	0.185
		364.48	*	-4.828E+00	7.040E+00	9.970E+00	7.001E-01	-0.484
		636.97		-2.505E+01	7.821E+01	1.337E+02	9.236E+00	-0.187
TE-132		228.16	*	6.104E+01	7.523E+01	1.323E+02	2.088E+01	0.461
BA-133		79.62		-2.739E+01	4.721E+01	7.823E+01	1.134E+01	-0.350
		81.00		-2.198E+00	3.572E+00	5.903E+00	8.970E-01	-0.372
		276.40		3.078E-01	1.177E+01	2.021E+01	2.677E+00	0.015
		302.85		-9.470E-01	4.798E+00	8.124E+00	9.733E-01	-0.117

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		356.02	*	6.849E-01	1.590E+00	2.423E+00	2.872E-01	0.283
		383.85		5.713E-01	9.909E+00	1.679E+01	1.868E+00	0.034
CS-134		563.23		-3.367E+00	1.093E+01	1.885E+01	1.223E+00	-0.179
		569.32		4.185E+00	6.222E+00	1.123E+01	7.329E-01	0.373
		604.70		9.693E-02	1.135E+00	1.977E+00	1.250E-01	0.049
		795.84	*	6.990E-01	1.182E+00	2.117E+00	1.473E-01	0.330
		801.93		1.303E+01	1.209E+01	2.215E+01	1.549E+00	0.588
		1365.15		3.805E+01	3.949E+01	7.455E+01	4.564E+00	0.510
CS-135		268.24	*	-6.047E-01	5.333E+00	9.108E+00	7.383E-01	-0.066
CS-136		66.88		6.782E+01	4.857E+01	7.631E+01	1.124E+01	0.889
		86.36		3.465E+01	5.352E+01	9.140E+01	1.108E+01	0.379
		153.25		-1.858E+01	3.296E+01	5.298E+01	3.937E+00	-0.351
		163.92		2.323E+01	5.483E+01	9.067E+01	6.778E+00	0.256
	+	176.60		2.984E+01	2.313E+01	3.144E+01	2.133E+00	0.949
		273.65		-1.533E+01	1.920E+01	3.193E+01	2.282E+00	-0.480
	+	340.55		3.204E+00	8.661E+00	8.029E+00	5.413E-01	0.399
		818.51		-4.474E-01	2.870E+00	4.899E+00	3.451E-01	-0.091
		1048.07	*	-2.369E+00	3.942E+00	6.701E+00	4.957E-01	-0.354
		1235.36		1.572E+00	1.740E+01	3.087E+01	3.113E+00	0.051
BA-137M		661.65	*	4.176E-01	9.599E-01	1.722E+00	1.050E-01	0.242
CS-137		661.66	*	4.384E-01	1.015E+00	1.820E+00	1.114E-01	0.241
CE-139		165.85	*	-3.315E-01	1.156E+00	1.868E+00	1.135E-01	-0.177
BA-140		162.67		1.674E+01	3.973E+01	6.566E+01	4.439E+00	0.255
		304.87		-4.228E+00	5.794E+01	9.855E+01	2.703E+01	-0.043
		423.73		-1.386E+01	8.283E+01	1.380E+02	4.400E+01	-0.100
		537.31	*	-8.614E-01	1.058E+01	1.853E+01	6.046E+00	-0.046
CE-144		133.51	*	4.347E+00	8.217E+00	1.373E+01	1.969E+00	0.317
PM-144		476.78		1.322E+00	2.221E+00	3.829E+00	2.857E-01	0.345
		618.01		-1.597E-01	9.831E-01	1.700E+00	1.119E-01	-0.094
		696.49	*	-1.243E-01	1.093E+00	1.877E+00	1.186E-01	-0.066
PM-146		453.88	*	-3.127E-01	1.397E+00	2.314E+00	2.088E-01	-0.135
		633.25		3.385E+01	4.525E+01	7.891E+01	2.911E+01	0.429
		735.93		1.456E-01	4.390E+00	7.620E+00	2.137E+00	0.019
		747.24		1.046E-01	2.754E+00	4.772E+00	6.158E-01	0.022
ND-147		91.11		3.032E+00	1.671E+01	2.807E+01	2.276E+00	0.108
		531.02	*	-3.387E+00	2.372E+01	4.147E+01	5.721E+00	-0.082
PM-147		121.30	*	5.555E+05	2.193E+06	3.661E+06	2.301E+05	0.152
EU-152		121.78		1.741E+00	3.018E+00	5.082E+00	4.059E-01	0.343
		344.31	*	-5.948E-01	3.070E+00	5.174E+00	3.657E-01	-0.115
		963.37		1.036E+01	8.557E+00	1.413E+01	1.029E+00	0.733
GD-153		69.67		7.789E+00	7.027E+01	1.077E+02	7.750E+00	0.072
		83.37		-6.734E+00	5.571E+02	9.394E+02	6.916E+01	-0.007
		97.43	*	-1.783E+00	3.254E+00	5.360E+00	3.677E-01	-0.333
		103.18		9.510E-01	4.266E+00	7.178E+00	4.743E-01	0.132
EU-154		123.07		4.674E-01	2.131E+00	3.551E+00	3.444E-01	0.132
		247.93		6.730E-01	1.183E+01	2.044E+01	2.018E+00	0.033
		591.76		-6.556E+00	2.085E+01	3.093E+01	3.122E+00	-0.212
		723.30		-3.204E+00	5.234E+00	8.701E+00	6.647E-01	-0.368
		756.86		1.209E+01	2.265E+01	4.042E+01	4.308E+00	0.299

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		873.20		-3.118E+00	9.299E+00	1.554E+01	1.768E+00	-0.201
		996.30		-3.663E+00	1.068E+01	1.853E+01	3.171E+00	-0.198
		1004.76		-2.158E+00	6.462E+00	1.120E+01	1.186E+00	-0.193
		1274.51	*	-1.121E+00	2.884E+00	4.933E+00	4.603E-01	-0.227
EU-155		86.54		4.338E-01	3.715E+00	6.271E+00	4.756E-01	0.069
		105.31	*	-2.590E+00	4.327E+00	7.090E+00	4.733E-01	-0.365
TB-160		86.79		4.270E-01	1.039E+01	1.749E+01	1.311E+00	0.024
		298.57		7.763E-01	4.333E+00	6.558E+00	4.213E-01	0.118
	+	879.36	*	1.801E+00	3.219E+00	7.473E+00	5.507E-01	0.241
		962.29		1.607E+01	1.670E+01	2.699E+01	1.968E+00	0.596
		966.15		-3.173E-01	6.968E+00	1.013E+01	7.375E-01	-0.031
		1177.93		-2.668E+00	9.179E+00	1.588E+01	9.821E-01	-0.168
TM-171	+	51.87		1.061E+03	9.390E+02	8.236E+02	6.494E+01	1.288
		59.40		2.239E+02	1.151E+03	1.984E+03	1.509E+02	0.113
		66.72	*	2.041E+03	1.310E+03	2.099E+03	1.524E+02	0.972
F-181		56.28		-1.263E+01	5.265E+01	8.039E+01	6.233E+00	-0.157
		57.53		-1.291E+01	2.817E+01	4.257E+01	3.275E+00	-0.303
	+	65.20		1.657E+02	1.189E+02	6.973E+01	5.097E+00	2.376
		133.02		1.141E+00	2.847E+00	4.753E+00	2.913E-01	0.240
		136.25		-1.528E+01	2.267E+01	3.656E+01	2.230E+00	-0.418
		345.85		-7.337E-01	7.721E+00	1.143E+01	7.300E-01	-0.064
		482.03	*	-3.708E-03	1.572E+00	2.623E+00	1.682E-01	-0.001
TA-182		67.75		6.657E+00	5.065E+00	8.074E+00	5.841E-01	0.824
		100.10		1.372E+00	7.486E+00	1.259E+01	8.475E-01	0.109
		222.10		-4.531E+00	1.145E+01	1.958E+01	1.222E+00	-0.231
		1121.28		3.182E+00	3.506E+00	6.612E+00	4.325E-01	0.481
		1189.05		-3.598E+00	7.435E+00	1.265E+01	7.773E-01	-0.284
		1221.42	*	4.503E+00	4.711E+00	8.901E+00	5.356E-01	0.506
		1230.97		2.716E+00	1.105E+01	1.987E+01	1.188E+00	0.137
IR-192	+	295.96		3.173E+00	6.716E+00	6.061E+00	3.943E-01	0.523
		308.46		1.595E+00	3.391E+00	5.890E+00	3.821E-01	0.271
		316.51	*	-2.586E-01	1.191E+00	2.013E+00	1.299E-01	-0.128
		468.07		1.533E+00	2.382E+00	4.102E+00	2.959E-01	0.374
		604.41		9.611E-01	1.607E+01	2.795E+01	3.245E+00	0.034
		612.46		9.213E-01	2.312E+01	4.027E+01	3.198E+00	0.023
HG-203		70.83		-1.196E+00	4.189E+01	7.121E+01	9.075E+00	-0.017
		72.87		-1.856E+01	2.434E+01	4.023E+01	4.952E+00	-0.461
		82.60		-2.089E+01	4.438E+01	7.377E+01	9.573E+00	-0.283
		279.20	*	7.548E-01	1.459E+00	2.545E+00	1.712E-01	0.297
BI-207		569.67		5.869E-01	9.673E-01	1.740E+00	1.108E-01	0.337
		897.83		5.313E+02	7.347E+02	1.317E+03	9.839E+01	0.403
		1063.62	*	3.873E-01	1.350E+00	2.458E+00	1.687E-01	0.158
		1442.20		2.304E+02	7.839E+02	1.411E+03	7.910E+01	0.163
		1770.23		1.391E+01	1.855E+01	3.181E+01	1.807E+00	0.437
TL-208		75.00		2.626E+01	4.103E+01	7.059E+01	7.988E+00	0.372
		277.35		1.912E+00	1.230E+01	2.120E+01	2.311E+00	0.090
		510.84		6.945E+01	1.037E+01	1.565E+01	1.647E+00	4.437
		583.14	*	1.682E+00	1.280E+00	2.347E+00	1.681E-01	0.717
		763.30		-6.627E+01	5.935E+01	9.367E+01	1.205E+01	-0.708

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		860.37		-3.957E-01	9.666E+00	1.427E+01	1.143E+00	-0.028
		1093.90		7.941E+01	2.909E+02	5.264E+02	1.192E+02	0.151
BI-210		46.50	*	2.647E+02	1.912E+02	3.118E+02	2.555E+01	0.849
PB-210		46.50	*	2.647E+02	1.912E+02	3.118E+02	2.555E+01	0.849
PB-211		404.84	*	-4.170E+00	2.886E+01	4.815E+01	3.004E+01	-0.087
		427.08		1.953E+00	6.628E+01	1.116E+02	6.906E+01	0.017
		831.96		-3.106E+01	4.259E+01	6.147E+01	3.840E+01	-0.505
BI-212		727.18	*	2.651E+00	8.499E+00	1.498E+01	1.236E+00	0.177
PB-212		74.80		9.919E+00	1.323E+01	2.280E+01	2.687E+00	0.435
		87.30		-7.100E+00	1.454E+01	2.408E+01	3.012E+00	-0.295
		115.19		7.053E+01	1.481E+02	2.494E+02	1.580E+01	0.283
		238.63	*	7.564E+00	2.210E+00	4.014E+00	3.104E-01	1.884
		300.09		2.082E+00	2.897E+01	4.359E+01	3.792E+00	0.048
BI-214		609.31	*	2.986E+00	2.390E+00	4.351E+00	3.543E-01	0.686
		768.36		1.568E+01	2.021E+01	3.642E+01	3.274E+00	0.431
		934.06		1.971E+01	3.166E+01	5.672E+01	5.478E+00	0.347
		1120.29		6.385E+00	7.392E+00	1.384E+01	1.288E+00	0.461
		1238.11		1.209E+01	1.882E+01	3.483E+01	2.875E+00	0.347
		1377.67		1.741E+01	2.938E+01	5.383E+01	4.527E+00	0.323
PB-214		74.81		1.684E+01	2.230E+01	3.848E+01	3.969E+00	0.438
		77.11		1.570E+00	1.244E+01	2.113E+01	2.216E+00	0.074
		87.30		-1.262E+01	2.583E+01	4.279E+01	4.749E+00	-0.295
		241.98		-3.916E+01	1.236E+01	1.836E+01	1.548E+00	-2.134
	+	295.21		3.950E+00	8.364E+00	7.893E+00	7.073E-01	0.500
	+	351.92	*	1.066E+00	6.504E+00	4.506E+00	3.918E-01	0.237
RN-219		271.23		1.678E+00	7.753E+00	1.340E+01	1.144E+00	0.125
		401.81	*	3.154E+00	1.302E+01	2.222E+01	3.068E+00	0.142
RA-223		122.32		8.149E+01	7.173E+01	1.225E+02	8.719E+00	0.665
	+	144.24		3.350E+00	4.688E+01	4.076E+01	3.034E+00	0.082
		154.21		-1.453E+00	1.454E+01	2.375E+01	1.715E+00	-0.061
		269.46		1.639E+00	6.202E+00	1.073E+01	7.107E-01	0.153
		323.87	*	-1.301E+01	2.221E+01	3.671E+01	6.147E+00	-0.354
	+	338.28		1.911E+01	5.168E+01	5.481E+01	5.961E+00	0.349
		445.03		2.255E-01	7.277E+01	1.222E+02	1.296E+01	0.002
RA-224		240.98	*	-5.877E+00	2.341E+01	3.994E+01	2.519E+00	-0.147
RA-226	+	295.21		3.950E+00	8.364E+00	7.492E+00	6.713E-01	0.527
	+	351.92		1.066E+00	6.504E+00	3.916E+00	2.507E-01	0.272
		609.31	*	2.986E+00	2.390E+00	4.351E+00	3.543E-01	0.686
AC-227		79.80		-3.984E+01	6.101E+01	1.002E+02	2.133E+01	-0.397
		236.00		-2.458E+01	8.554E+00	1.273E+01	1.378E+00	-1.931
		256.20	*	-8.387E+00	1.347E+01	2.258E+01	3.243E+00	-0.371
		286.10		2.175E+01	5.114E+01	8.889E+01	1.066E+01	0.245
		299.80		6.554E+00	5.362E+01	8.088E+01	1.355E+01	0.081
		304.40		8.256E+00	6.352E+01	1.089E+02	1.933E+01	0.076
		329.70		-2.190E+00	3.017E+01	5.113E+01	6.595E+00	-0.043
		334.20		-1.851E+01	7.613E+01	1.279E+02	2.408E+01	-0.145
TH-227		79.80		-3.917E+01	5.999E+01	9.855E+01	2.097E+01	-0.397
		94.00		4.018E+02	1.222E+02	1.611E+02	3.417E+01	2.494
		236.00		-2.419E+01	8.317E+00	1.253E+01	1.175E+00	-1.931

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		256.20	*	-8.253E+00	1.328E+01	2.222E+01	3.799E+00	-0.371
		286.10		2.141E+01	5.466E+01	8.751E+01	8.769E+01	0.245
		299.80		6.435E+00	5.265E+01	7.942E+01	1.312E+01	0.081
		304.40		8.119E+00	6.246E+01	1.071E+02	1.876E+01	0.076
		329.70		-2.155E+00	2.970E+01	5.034E+01	6.425E+00	-0.043
		334.20		-1.816E+01	7.466E+01	1.255E+02	2.325E+01	-0.145
AC-228		209.25		2.014E-01	1.944E+01	3.368E+01	2.153E+01	0.006
	+	338.32		4.608E+00	1.259E+01	1.321E+01	5.398E+00	0.349
		463.01		-2.092E+00	2.046E+01	3.405E+01	8.040E+00	-0.061
		794.95		1.613E+01	2.228E+01	3.966E+01	9.045E+00	0.407
	+	911.21	*	4.904E+00	7.901E+00	8.006E+00	8.300E-01	0.613
		964.77		8.913E-01	2.593E+01	3.807E+01	9.213E+00	0.023
	+	969.11		1.894E+01	1.066E+01	1.311E+01	3.000E+00	1.444
RA-228		209.25		2.014E-01	1.944E+01	3.368E+01	2.153E+01	0.006
	+	338.32		4.608E+00	1.259E+01	1.321E+01	5.398E+00	0.349
		463.01		-2.092E+00	2.046E+01	3.405E+01	8.040E+00	-0.061
		794.95		1.613E+01	2.228E+01	3.966E+01	9.045E+00	0.407
	+	911.21	*	4.904E+00	7.901E+00	8.006E+00	8.300E-01	0.613
		964.77		8.913E-01	2.593E+01	3.807E+01	9.213E+00	0.023
	+	969.11		1.894E+01	1.066E+01	1.311E+01	3.000E+00	1.444
TH-228		84.40		6.029E+01	9.754E+01	1.667E+02	2.062E+01	0.362
		238.60	*	7.568E+00	2.210E+00	4.014E+00	3.104E-01	1.885
		300.10		2.031E+00	2.899E+01	4.359E+01	2.572E+01	0.047
TH-229		85.43		6.066E+00	6.959E+00	1.197E+01	8.904E-01	0.507
		88.47		-1.814E+00	4.119E+00	6.835E+00	5.132E-01	-0.265
		100.00		1.490E+00	7.520E+00	1.266E+01	8.522E-01	0.118
		193.63	*	1.024E+01	1.931E+01	3.033E+01	1.861E+00	0.337
		210.97		9.317E+00	2.568E+01	4.492E+01	2.784E+00	0.207
TH-230	+	295.21		3.950E+00	8.364E+00	7.492E+00	6.713E-01	0.527
	+	351.92		1.066E+00	6.504E+00	3.916E+00	2.507E-01	0.272
		609.31	*	2.986E+00	2.390E+00	4.351E+00	3.543E-01	0.686
PA-231		283.67	*	-7.480E+00	5.125E+01	8.728E+01	1.226E+01	-0.086
		301.29		1.434E+00	1.861E+01	3.185E+01	3.444E+00	0.045
		330.00		-2.323E+01	6.685E+01	1.113E+02	3.500E+01	-0.209
TH-231		84.21		8.198E+00	1.815E+01	3.088E+01	5.338E+00	0.265
		236.00		-2.453E+01	8.538E+00	1.270E+01	1.376E+00	-1.931
		256.20		-8.372E+00	1.345E+01	2.254E+01	3.238E+00	-0.371
		269.46	*	1.639E+00	6.202E+00	1.073E+01	8.326E-01	0.153
		271.23		1.678E+00	7.753E+00	1.340E+01	1.325E+00	0.125
		283.67		-7.480E+00	5.125E+01	8.728E+01	1.226E+01	-0.086
		301.29		1.434E+00	1.861E+01	3.185E+01	2.829E+00	0.045
		329.85		-6.097E+00	2.082E+01	3.494E+01	4.850E+00	-0.174
	+	351.07		3.065E+00	1.870E+01	1.124E+01	7.816E-01	0.273
		401.81		3.154E+00	1.302E+01	2.222E+01	2.478E+00	0.142
TH-232		238.59	*	7.415E+00	2.165E+00	3.932E+00	3.040E-01	1.885
	+	911.20		4.870E+00	7.847E+00	6.343E+00	6.577E-01	0.768
		964.40		2.281E+01	2.457E+01	3.867E+01	9.358E+00	0.590
	+	969.11		1.881E+01	1.059E+01	8.628E+00	1.973E+00	2.180
PA-233		75.28		6.509E+01	1.086E+02	1.865E+02	2.720E+01	0.349

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		86.59		6.111E+00	6.021E+01	1.016E+02	2.689E+01	0.060
		300.12		9.769E-01	1.466E+01	2.205E+01	3.026E+00	0.044
		311.98	*	-8.756E-01	2.050E+00	3.439E+00	2.322E-01	-0.255
	+	340.50		1.159E+01	3.144E+01	2.904E+01	6.717E+00	0.399
		398.62		4.122E+01	6.802E+01	1.166E+02	3.028E+01	0.353
		415.76		-3.344E+01	5.328E+01	8.612E+01	1.786E+01	-0.388
PA-234	+	63.00		2.282E+02	1.663E+02	1.061E+02	1.577E+01	2.150
		94.67		-1.609E+01	7.878E+00	1.215E+01	1.379E+00	-1.324
		98.44		3.410E+00	4.157E+00	6.363E+00	3.534E+00	0.536
		99.70		1.364E+01	1.934E+01	3.300E+01	2.227E+00	0.413
		111.00		-2.309E+00	7.643E+00	1.260E+01	1.338E+00	-0.183
		131.20		6.270E-01	4.208E+00	6.975E+00	4.288E-01	0.090
		152.70		-6.085E+00	1.222E+01	1.965E+01	3.124E+00	-0.310
	+	186.00		5.472E+00	9.913E+01	6.909E+01	2.115E+01	0.079
		226.40		-1.943E+00	1.325E+01	2.281E+01	2.691E+00	-0.085
		227.20		8.236E+00	1.417E+01	2.493E+01	1.560E+00	0.330
		248.90		-6.794E+00	2.774E+01	4.736E+01	1.058E+01	-0.143
	+	293.70		1.896E+01	4.023E+01	3.625E+01	5.915E+00	0.523
	+	369.80		4.218E+01	3.796E+01	4.880E+01	1.024E+01	0.864
		568.70		1.862E+01	3.174E+01	5.703E+01	3.633E+00	0.326
		569.50		5.206E+00	8.581E+00	1.544E+01	9.832E-01	0.337
		574.00		-1.545E+01	4.583E+01	7.879E+01	5.012E+00	-0.196
		699.00		2.760E+01	2.290E+01	4.115E+01	7.473E+00	0.671
		706.10		2.549E+01	3.656E+01	6.218E+01	2.749E+01	0.410
		733.00		3.424E-02	1.117E+01	1.932E+01	4.149E+00	0.002
		742.81		-1.581E+01	4.217E+01	6.886E+01	4.613E+01	-0.230
		796.30		6.054E+00	2.583E+01	4.511E+01	1.198E+01	0.134
		805.80		2.004E+01	3.138E+01	5.511E+01	1.665E+01	0.364
		819.60		-3.900E+01	3.976E+01	5.882E+01	2.218E+01	-0.663
		826.30		1.952E+01	2.719E+01	4.637E+01	2.062E+01	0.421
		831.60		-6.695E+00	1.947E+01	3.245E+01	9.553E+00	-0.206
		876.40		-1.696E+01	3.513E+01	4.250E+01	4.365E+01	-0.399
	+	880.51		3.438E+00	6.144E+00	1.332E+01	9.827E-01	0.258
		883.24		6.328E+00	9.531E+00	1.541E+01	1.034E+01	0.411
		899.00		6.142E+00	2.646E+01	4.566E+01	1.986E+01	0.135
		925.00		-1.549E+01	4.086E+01	5.772E+01	4.274E+00	-0.268
	+	926.50		4.907E+00	5.693E+00	8.905E+00	2.216E+00	0.551
		946.00	*	2.801E-01	9.171E+00	1.567E+01	2.854E+00	0.018
		949.00		1.938E+00	1.317E+01	2.273E+01	1.667E+00	0.085
		980.50		4.393E+00	2.035E+01	3.688E+01	2.665E+00	0.119
		1394.10		1.294E+01	3.711E+01	6.560E+01	4.248E+01	0.197
PA-234M		766.40		-9.748E+01	4.764E+02	8.017E+02	6.132E+02	-0.122
		1001.03	*	1.168E+02	1.360E+02	2.529E+02	2.202E+01	0.462
TH-234	+	63.29	*	1.957E+02	1.438E+02	1.115E+02	1.943E+01	1.756
		92.38		1.684E+02	3.783E+01	4.573E+01	7.975E+00	3.684
		112.81		1.352E+02	3.759E+02	6.302E+02	1.076E+02	0.215
NP-237		86.48	*	1.222E+00	9.055E+00	1.528E+01	3.355E+00	0.080
		95.87		-3.143E+02	8.822E+01	6.169E+01	1.487E+01	-5.094
NP-239		99.55		5.069E+00	6.342E+00	1.085E+01	7.326E-01	0.467

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		117.00	*	-5.757E+00	7.789E+00	1.263E+01	7.979E-01	-0.456
		209.75		6.709E-01	2.622E+01	4.545E+01	2.815E+00	0.015
		228.18		6.115E+00	7.497E+00	1.327E+01	8.312E-01	0.461
		277.60		-8.327E-01	5.863E+00	9.997E+00	6.397E-01	-0.083
		334.31		1.303E+01	4.669E+01	7.075E+01	4.534E+00	0.184
AM-241		59.54	*	-2.778E-01	7.465E+00	1.146E+01	9.514E-01	-0.024
AM-242		99.55		1.183E+02	1.480E+02	2.532E+02	1.710E+01	0.467
		103.70	*	8.543E+00	8.778E+01	1.472E+02	9.697E+00	0.058
CM-247		278.00		1.019E+01	2.433E+01	4.231E+01	2.708E+00	0.241
		287.40		-2.767E+01	4.035E+01	6.723E+01	4.312E+00	-0.412
		402.60	*	-5.994E-01	1.166E+00	1.917E+00	1.201E-01	-0.313
CF-249		252.85		5.921E+00	2.971E+01	5.148E+01	3.265E+00	0.115
		333.44		-1.690E+00	5.471E+00	9.179E+00	5.884E-01	-0.184
		387.95	*	-1.392E-03	1.265E+00	2.138E+00	1.336E-01	-0.001
CF-251	+	176.00	*	7.675E+00	5.945E+00	8.129E+00	4.948E-01	0.944
		227.00		7.406E+00	1.259E+01	2.216E+01	1.387E+00	0.334
		285.00		2.413E+01	5.738E+01	9.984E+01	6.401E+00	0.242
ANH-511		511.00	*	1.489E+01	1.832E+00	3.329E+00	2.137E-01	4.474

VAX/VMS Nuclide Identification Report Generated

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*********************************************************************
*                          General Eng. Labs, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
*                                                                   *
*                            DETECTOR DATA                          *
*                                                                   *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405002 *
* Acquisition date : 13-JUL-2005 20:14:30 Detector SN#    : 12922955 *
* Detector ID       : GAMMA3              Sensitivity     : 3.000    *
* Geometry          : 2L_MB               Energy tolerance: 2.000    *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000   *
* Elapsed real time:    0 12:00:04.15     Half life ratio :  8.000   *
*********************************************************************
*                                                                   *
*                            SAMPLE DATA                            *
*                                                                   *
* Sample date       : 23-JUN-2005 08:50:00 Nuclide Library :        *
* Sample ID         : G139405002           Analyst initials: AKB    *
* Batch Number      : 437153               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000 *
*********************************************************************
*                                                                   *
*                              QC DATA                              *
* Standard Weight   :   0.00000                                     *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :         *
* MSD DPM           :    0.000           MSD Isotope     :         *
* LCS DPM           :    0.000           LCS Isotope     :         *
* LCSD DPM          :    0.000           LCSD Isotope    :         *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	3.483E+00	2.487E+01	1.995E+01	0.000E+00
MO-99	6.593E+02	2.765E+02	3.044E+02	0.000E+00
CE-141	2.805E-01	5.038E+00	4.457E+00	0.000E+00
BI-211	3.065E+00	1.870E+01	1.124E+01	0.000E+00
U-234	3.950E+00	8.364E+00	7.492E+00	0.000E+00
U-235	1.034E+00	1.447E+01	1.424E+01	0.000E+00
U-238	1.957E+02	1.438E+02	8.980E+01	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Act error) Ided	MDA (pCi/LITER	)	
BE-7	5.911E+00	1.130E+01	1.941E+01	0.000E+00	NOT IDENT.
NA-22	-3.964E-01	1.035E+00	1.773E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	1.082E+10	0.000E+00	0.000E+00	SHORT HLIF

AL-26	1.187E+00	2.424E+00	2.197E+00	0.000E+00 FAIL ABUN
SC-46	-1.490E-01	1.197E+00	2.036E+00	0.000E+00 NOT IDENT.
V-48	6.411E-02	2.619E+00	4.673E+00	0.000E+00 NOT IDENT.
CR-51	8.129E+00	1.432E+01	2.493E+01	0.000E+00 NOT IDENT.
MN-54	-5.061E-02	1.154E+00	1.971E+00	0.000E+00 NOT IDENT.
CO-56	-9.228E-01	1.381E+00	2.256E+00	0.000E+00 NOT IDENT.
MN-56	0.000E+00	1.496E+41	0.000E+00	0.000E+00 SHORT HLIF
CO-57	1.031E+00	1.047E+00	1.782E+00	0.000E+00 NOT IDENT.
CO-58	2.998E-01	1.231E+00	2.156E+00	0.000E+00 NOT IDENT.
FE-59	8.486E-01	2.693E+00	4.877E+00	0.000E+00 NOT IDENT.
CO-60	1.221E+00	1.187E+00	2.249E+00	0.000E+00 NOT IDENT.
ZN-65	-1.556E-01	2.433E+00	4.276E+00	0.000E+00 NOT IDENT.
SE-75	3.079E-01	1.604E+00	2.769E+00	0.000E+00 FAIL ABUN
KR-85	-1.400E+02	3.360E+02	5.741E+02	0.000E+00 NOT IDENT.
SR-85	-7.612E-01	1.827E+00	3.121E+00	0.000E+00 NOT IDENT.
Y-88	-2.903E-01	1.328E+00	2.341E+00	0.000E+00 NOT IDENT.
Y-91	1.455E-01	1.161E+00	2.053E+00	0.000E+00 NOT IDENT.
NB-94	-9.496E-01	1.109E+00	1.820E+00	0.000E+00 NOT IDENT.
NB-95	-8.478E-01	1.489E+00	2.474E+00	0.000E+00 NOT IDENT.
NB-95M	-5.284E+02	2.029E+02	3.078E+02	0.000E+00 NOT IDENT.
ZR-95	8.628E-01	2.236E+00	3.955E+00	0.000E+00 NOT IDENT.
TC-99M	0.000E+00	1.420E+25	0.000E+00	0.000E+00 SHORT HLIF
RU-103	2.875E-01	1.546E+00	2.599E+00	0.000E+00 NOT IDENT.
RH-106	-8.377E-01	9.992E+00	1.734E+01	0.000E+00 NOT IDENT.
RU-106	-2.883E+00	9.880E+00	1.695E+01	0.000E+00 NOT IDENT.
AG-108M	-1.177E-01	1.077E+00	1.798E+00	0.000E+00 NOT IDENT.
CD-109	-8.055E+00	3.029E+01	5.055E+01	0.000E+00 NOT IDENT.
AG-110M	-9.601E-01	1.002E+00	1.641E+00	0.000E+00 FAIL ABUN
SN-113	-3.861E-01	1.418E+00	2.366E+00	0.000E+00 NOT IDENT.
CD-115	0.000E+00	1.815E+03	0.000E+00	0.000E+00 SHORT HLIF
SN-115	1.019E+01	1.217E+02	1.814E+02	0.000E+00 NOT IDENT.
SN-117M	-4.352E-01	2.786E+00	4.534E+00	0.000E+00 NOT IDENT.
TE-123M	-4.725E-01	1.138E+00	1.835E+00	0.000E+00 NOT IDENT.
SB-124	1.474E+00	3.078E+00	5.779E+00	0.000E+00 NOT IDENT.
SB-125	1.491E+00	2.966E+00	5.114E+00	0.000E+00 FAIL ABUN
TE-125M	9.343E+01	4.047E+02	6.786E+02	0.000E+00 NOT IDENT.
I-126	-7.196E-02	6.826E+00	1.189E+01	0.000E+00 NOT IDENT.
SB-126	4.666E+00	5.951E+00	1.075E+01	0.000E+00 NOT IDENT.
SN-126	-1.775E+00	3.065E+00	5.067E+00	0.000E+00 FAIL ABUN
SB-127	5.605E+00	1.059E+02	1.850E+02	0.000E+00 NOT IDENT.
I-131	-4.828E+00	7.040E+00	9.970E+00	0.000E+00 NOT IDENT.
I-132	0.000E+00	3.986E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	6.104E+01	7.523E+01	1.323E+02	0.000E+00 NOT IDENT.
BA-133	6.849E-01	1.590E+00	2.423E+00	0.000E+00 NOT IDENT.
I-133	0.000E+00	1.560E+07	0.000E+00	0.000E+00 SHORT HLIF
CS-134	6.990E-01	1.182E+00	2.117E+00	0.000E+00 NOT IDENT.
CS-135	-6.047E-01	5.333E+00	9.108E+00	0.000E+00 NOT IDENT.
I-135	0.000E+00	1.646E+23	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-2.369E+00	3.942E+00	6.701E+00	0.000E+00 FAIL ABUN
BA-137M	4.176E-01	9.599E-01	1.722E+00	0.000E+00 NOT IDENT.
CS-137	4.384E-01	1.015E+00	1.820E+00	0.000E+00 NOT IDENT.
CE-139	-3.315E-01	1.156E+00	1.868E+00	0.000E+00 NOT IDENT.
BA-140	-8.614E-01	1.058E+01	1.853E+01	0.000E+00 NOT IDENT.
LA-140	0.000E+00	6.796E+03	0.000E+00	0.000E+00 SHORT HLIF
CE-143	0.000E+00	7.965E+04	0.000E+00	0.000E+00 SHORT HLIF
CE-144	4.347E+00	8.217E+00	1.373E+01	0.000E+00 NOT IDENT.
PM-144	-1.243E-01	1.093E+00	1.877E+00	0.000E+00 NOT IDENT.
PR-144	0.000E+00	8.793E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	-3.127E-01	1.397E+00	2.314E+00	0.000E+00 NOT IDENT.
ND-147	-3.387E+00	2.372E+01	4.147E+01	0.000E+00 NOT IDENT.

PM-147	5.555E+05	2.193E+06	3.661E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	1.732E+04	0.000E+00	0.000E+00	SHORT HLIF
EU-152	-5.948E-01	3.070E+00	5.174E+00	0.000E+00	NOT IDENT.
GD-153	-1.783E+00	3.254E+00	5.360E+00	0.000E+00	NOT IDENT.
EU-154	-1.121E+00	2.884E+00	4.933E+00	0.000E+00	NOT IDENT.
EU-155	-2.590E+00	4.327E+00	7.090E+00	0.000E+00	NOT IDENT.
TB-160	1.801E+00	3.219E+00	7.473E+00	0.000E+00	FAIL ABUN
TM-171	2.041E+03	1.310E+03	2.099E+03	0.000E+00	FAIL ABUN
HF-181	-3.708E-03	1.572E+00	2.623E+00	0.000E+00	FAIL ABUN
TA-182	4.503E+00	4.711E+00	8.901E+00	0.000E+00	NOT IDENT.
IR-192	-2.586E-01	1.191E+00	2.013E+00	0.000E+00	FAIL ABUN
HG-203	7.548E-01	1.459E+00	2.545E+00	0.000E+00	NOT IDENT.
BI-207	3.873E-01	1.350E+00	2.458E+00	0.000E+00	NOT IDENT.
TL-208	1.682E+00	1.280E+00	2.347E+00	0.000E+00	NOT IDENT.
BI-210	2.647E+02	1.912E+02	3.118E+02	0.000E+00	NOT IDENT.
PB-210	2.647E+02	1.912E+02	3.118E+02	0.000E+00	NOT IDENT.
PB-211	-4.170E+00	2.886E+01	4.815E+01	0.000E+00	NOT IDENT.
BI-212	2.651E+00	8.499E+00	1.498E+01	0.000E+00	NOT IDENT.
PB-212	0.000E+00	2.210E+00	4.014E+00	0.000E+00	NOT IDENT.
BI-214	2.986E+00	2.390E+00	4.351E+00	0.000E+00	NOT IDENT.
PB-214	1.066E+00	6.504E+00	4.506E+00	0.000E+00	FAIL ABUN
RN-219	3.154E+00	1.302E+01	2.222E+01	0.000E+00	NOT IDENT.
A-223	-1.301E+01	2.221E+01	3.671E+01	0.000E+00	FAIL ABUN
A-224	-5.877E+00	2.341E+01	3.994E+01	0.000E+00	NOT IDENT.
RA-226	2.986E+00	2.390E+00	4.351E+00	0.000E+00	FAIL ABUN
AC-227	-8.387E+00	1.347E+01	2.258E+01	0.000E+00	NOT IDENT.
TH-227	-8.253E+00	1.328E+01	2.222E+01	0.000E+00	NOT IDENT.
AC-228	4.904E+00	7.901E+00	8.006E+00	0.000E+00	FAIL ABUN
RA-228	4.904E+00	7.901E+00	8.006E+00	0.000E+00	FAIL ABUN
TH-228	0.000E+00	2.210E+00	4.014E+00	0.000E+00	NOT IDENT.
TH-229	1.024E+01	1.931E+01	3.033E+01	0.000E+00	NOT IDENT.
TH-230	2.986E+00	2.390E+00	4.351E+00	0.000E+00	FAIL ABUN
PA-231	-7.480E+00	5.125E+01	8.728E+01	0.000E+00	NOT IDENT.
TH-231	1.639E+00	6.202E+00	1.073E+01	0.000E+00	FAIL ABUN
TH-232	0.000E+00	2.165E+00	3.932E+00	0.000E+00	FAIL ABUN
PA-233	-8.756E-01	2.050E+00	3.439E+00	0.000E+00	FAIL ABUN
PA-234	2.801E-01	9.171E+00	1.567E+01	0.000E+00	FAIL ABUN
PA-234M	1.168E+02	1.360E+02	2.529E+02	0.000E+00	NOT IDENT.
U-234	0.000E+00	1.438E+02	1.115E+02	0.000E+00	FAIL ABUN
P-237	1.222E+00	9.055E+00	1.528E+01	0.000E+00	NOT IDENT.
-239	-5.757E+00	7.789E+00	1.263E+01	0.000E+00	NOT IDENT.
-241	-2.778E-01	7.465E+00	1.146E+01	0.000E+00	NOT IDENT.
AM-242	8.543E+00	8.778E+01	1.472E+02	0.000E+00	NOT IDENT.
CM-247	-5.994E-01	1.166E+00	1.917E+00	0.000E+00	NOT IDENT.
F-249	-1.392E-03	1.265E+00	2.138E+00	0.000E+00	NOT IDENT.
F-251	7.675E+00	5.945E+00	8.129E+00	0.000E+00	FAIL ABUN
ANH-511	0.000E+00	1.832E+00	3.329E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:41:43.50

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405002.CNF;1
Sample date : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:30
Sample ID : G139405002 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA3 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:00:04.15 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 12922955
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.70	101	589	2.42	94.27	90	8	2.34E-03	42.8	
2	0	53.13	141	929	1.25	107.11	102	12	3.25E-03	44.1	
3	0	64.66	503	1282	3.81	130.13	123	15	1.16E-02	16.2	
4	3	92.81	703	581	1.30	186.35	183	12	1.63E-02	6.5	7.28E-01
5	3	94.89	86	678	1.31	190.49	183	12	2.00E-03	58.5	
6	0	140.02	243	711	1.59	280.62	277	9	5.63E-03	20.7	
7	0	143.88	111	670	1.86	288.34	285	8	2.57E-03	41.5	
8	0	175.96	107	534	2.50	352.39	349	8	2.48E-03	38.6	
9	0	185.92	461	771	1.19	372.29	367	11	1.07E-02	12.5	
10	0	198.17	222	711	1.21	396.76	391	11	5.14E-03	24.2	
11	0	238.89	213	565	1.27	478.07	474	10	4.93E-03	22.0	
12	0	295.65	94	392	2.71	591.44	586	11	2.19E-03	41.8	
13	0	338.61	70	249	1.99	677.24	673	9	1.62E-03	42.7	
14	0	352.04	130	500	1.83	704.07	696	17	3.02E-03	40.3	
15	0	368.18	66	236	2.34	736.30	733	9	1.52E-03	43.8	
16	0	450.15	22	124	1.35	900.01	896	7	5.08E-04	86.9	
17	0	511.67	729	357	2.97	1022.90	1015	20	1.69E-02	7.5	
18	0	583.17	67	168	2.12	1165.70	1162	10	1.56E-03	37.8	
19	0	596.82	97	229	2.07	1192.97	1186	15	2.25E-03	35.5	
20	0	605.95	43	80	1.85	1211.21	1209	6	9.87E-04	36.7	
21	0	609.69	80	136	2.66	1218.68	1214	9	1.85E-03	28.6	
22	1	863.66	52	25	2.12	1726.00	1724	10	1.20E-03	16.9	4.28E+01
23	1	866.16	61	31	2.12	1731.00	1724	10	1.40E-03	14.5	
24	0	868.66	20	42	0.83	1735.99	1733	6	4.53E-04	57.2	
25	0	878.56	11	37	1.21	1755.77	1752	6	2.65E-04	89.3	
26	0	910.80	84	93	1.88	1820.18	1813	16	1.95E-03	27.7	
27	0	927.66	26	50	0.57	1853.86	1850	10	5.97E-04	56.7	
28	0	969.10	78	72	3.44	1936.65	1929	14	1.82E-03	25.7	
29	0	1001.61	21	92	1.39	2001.60	1995	11	4.85E-04	91.7	
30	0	1078.81	14	45	1.46	2155.83	2154	9	3.34E-04	86.2	
31	0	1281.24	14	37	1.61	2560.28	2554	10	3.14E-04	88.7	
32	0	1345.22	12	17	1.16	2688.11	2686	7	2.82E-04	61.8	
33	0	1383.79	15	15	0.52	2765.18	2762	6	3.53E-04	47.5	
34	0	1461.58	68	58	2.98	2920.62	2911	18	1.57E-03	29.2	
35	0	1515.27	15	19	0.79	3027.91	3023	8	3.47E-04	57.3	
36	0	1520.43	14	15	0.67	3038.23	3036	6	3.17E-04	53.6	
37	0	1663.83	19	34	1.01	3324.79	3316	15	4.50E-04	69.0	
38	0	1707.64	15	6	1.08	3412.33	3410	6	3.47E-04	36.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1765.88	42	61	1.38	3528.72	3520	22	9.63E-04	50.2	
40	0	1810.64	19	55	5.88	3618.18	3608	22	4.40E-04	102.1	
41	0	1848.27	43	53	9.82	3693.38	3678	27	1.01E-03	49.4	
42	0	1933.07	39	19	5.43	3862.87	3853	20	9.00E-04	32.3	
43	0	1940.99	13	22	0.68	3878.69	3872	11	3.01E-04	75.2	
44	0	1962.33	10	14	0.76	3921.35	3917	7	2.25E-04	74.0	
45	0	1971.38	10	11	1.33	3939.44	3936	7	2.43E-04	59.9	

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:41:48.34

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**********************************************************************
*                          GENERAL ENG. LABS, LLC.                   *
*                              2040 Savage Road                      *
*                            Charleston, SC 29414                    *
**********************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405002.CNF;1
Sample date       : 23-JUN-2005 08:50:00 Acquisition date : 13-JUL-2005 20:14:30
Sample ID         : G139405002           Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA3               Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00         Elapsed real time: 0 12:00:04.15  0.0%
Energy tolerance  : 2.00000 KEV          Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 437153               Detector SN#     : 12922955
Matrix Spike DPM :                       LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	7	10.67*	5.724E-01	3.483E+00	3.483E+00	713.97
MO-99	140.51	243	82.70*	2.585E+00	3.559E+00	6.593E+02	41.93
	181.06	------	6.20	2.443E+00	------ Line Not Found		------
	739.58	------	12.80	9.745E-01	------ Line Not Found		------
CE-141	145.44	9	48.40*	2.581E+00	2.243E-01	3.489E-01	1399.45
BI-211	351.07	21	12.94*	1.676E+00	3.065E+00	3.065E+00	610.04
U-234	67.67	------	0.37	1.218E+00	------ Line Not Found		------
	241.98	------	7.49	2.124E+00	------ Line Not Found		------
	295.21	46	19.20*	1.880E+00	3.950E+00	3.950E+00	211.77
	351.92	21	37.20	1.676E+00	1.066E+00	1.066E+00	610.06
U-235	89.95	------	2.70	2.072E+00	------ Line Not Found		------
	93.35	------	4.50	2.160E+00	------ Line Not Found		------
	105.00	------	2.10	2.386E+00	------ Line Not Found		------
	143.76	9	10.50*	2.581E+00	1.034E+00	1.034E+00	1399.53
	163.33	------	4.70	2.525E+00	------ Line Not Found		------
	185.71	8	54.00	2.419E+00	2.026E-01	2.026E-01	1811.50
	205.31	------	5.00	2.316E+00	------ Line Not Found		------
U-238	63.29	255	3.80*	1.072E+00	1.957E+02	1.957E+02	73.46

Flag: "*" = Keyline

Sample ID : G139405002 Acquisition date : 13-JUL-2005 20:14:30

Total number of lines in spectrum 36
Number of unidentified lines 16
Number of lines tentatively identified by NID 20 55.56%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	3.483E+00	3.483E+00	24.87E+00	713.97	
MO-99	66.02H	185.	3.559E+00	6.593E+02	2.765E+02	41.93	
CE-141	32.50D	1.56	2.243E-01	3.489E-01	48.83E-01	1399.45	
BI-211	7.04E+08Y	1.00	3.065E+00	3.065E+00	18.70E+00	610.04	
U-234	2.45E+05Y	1.00	3.950E+00	3.950E+00	8.364E+00	211.77	
U-235	7.04E+08Y	1.00	1.034E+00	1.034E+00	14.47E+00	1399.53	
U-238	4.47E+09Y	1.00	1.957E+02	1.957E+02	1.438E+02	73.46	
			---	---			
	Total Activity :		2.111E+02	8.670E+02			
	Grand Total Activity :		2.111E+02	8.670E+02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.13	141	929	1.25	107.11	102	12	3.25E-03	88.2	5.23E-01	T
0	175.96	107	534	2.50	352.39	349	8	2.48E-03	77.2	2.47E+00	T
0	198.17	222	711	1.21	396.76	391	11	5.14E-03	48.3	2.35E+00	T
0	338.61	29	249	1.99	677.24	673	9	6.64E-04	****	1.72E+00	T
0	368.18	66	236	2.34	736.30	733	9	1.52E-03	87.5	1.63E+00	T
0	450.15	22	124	1.35	900.01	896	7	5.08E-04	****	1.41E+00	
0	596.82	97	229	2.07	1192.97	1186	15	2.25E-03	70.9	1.15E+00	
1	863.66	52	25	2.12	1726.00	1724	10	1.20E-03	33.8	8.62E-01	
1	866.16	61	31	2.12	1731.00	1724	10	1.40E-03	29.1	8.60E-01	
0	868.66	20	42	0.83	1735.99	1733	6	4.53E-04	****	8.58E-01	T
0	878.56	11	37	1.21	1755.77	1752	6	2.65E-04	****	8.50E-01	T
0	910.80	36	93	1.88	1820.18	1813	16	8.24E-04	****	8.26E-01	T
0	927.66	26	50	0.57	1853.86	1850	10	5.97E-04	****	8.14E-01	T
0	969.10	78	72	3.44	1936.65	1929	14	1.82E-03	51.5	7.86E-01	T
0	1078.81	14	45	1.46	2155.83	2154	9	3.34E-04	****	7.21E-01	
0	1281.24	14	37	1.61	2560.28	2554	10	3.14E-04	****	6.30E-01	
0	1345.22	12	17	1.16	2688.11	2686	7	2.82E-04	****	6.08E-01	
0	1383.79	15	15	0.52	2765.18	2762	6	3.53E-04	94.9	5.95E-01	T
0	1515.27	15	19	0.79	3027.91	3023	8	3.47E-04	****	5.58E-01	
0	1520.43	14	15	0.67	3038.23	3036	6	3.17E-04	****	5.57E-01	
0	1663.83	19	34	1.01	3324.79	3316	15	4.50E-04	****	5.26E-01	
0	1707.64	15	6	1.08	3412.33	3410	6	3.47E-04	73.0	5.18E-01	T
0	1765.88	42	61	1.38	3528.72	3520	22	9.63E-04	****	5.09E-01	
0	1810.64	19	55	5.88	3618.18	3608	22	4.40E-04	****	5.02E-01	T
0	1848.27	43	53	9.82	3693.38	3678	27	1.01E-03	98.7	4.97E-01	
0	1933.07	39	19	5.43	3862.87	3853	20	9.00E-04	64.7	4.87E-01	
0	1940.99	13	22	0.68	3878.69	3872	11	3.01E-04	****	4.86E-01	
0	1962.33	10	14	0.76	3921.35	3917	7	2.25E-04	****	4.84E-01	
0	1971.38	10	11	1.33	3939.44	3936	7	2.43E-04	****	4.83E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:41:56.82

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G139405002.CNF;1		
Acquisition date	: 13-JUL-2005 20:14:30	Detector SN#	: 12922955
Detector ID	: GAMMA3	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 12:00:00.00	Abundance limit	: 75.00000
Elapsed real time	: 0 12:00:04.15	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 23-JUN-2005 08:50:00	Nuclide Library	: EPI
Sample ID	: G139405002	Analyst initials	: AKB
Batch Number	: 437153	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 24-MAR-2005 14:55:19.2	MS Isotope	:
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	3.483E+00	2.487E+01	1.995E+01	1.195E+00	0.175
MO-99	6.593E+02	2.765E+02	3.044E+02	1.886E+01	2.166
CE-141	2.805E-01	5.038E+00	4.457E+00	2.799E-01	0.063
PI-211	3.065E+00	1.870E+01	1.124E+01	7.816E-01	0.273
U-234	3.950E+00	8.364E+00	7.492E+00	6.713E-01	0.527
U-235	1.034E+00	1.447E+01	1.424E+01	2.336E+00	0.073
U-238	1.957E+02	1.438E+02	8.980E+01	1.565E+01	2.180

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	5.911E+00		1.130E+01	1.941E+01	1.413E+00	0.305
NA-22	-3.964E-01		1.035E+00	1.773E+00	1.028E-01	-0.224
AL-26	1.187E+00	+	2.424E+00	2.197E+00	1.244E-01	0.540
SC-46	-1.490E-01		1.197E+00	2.036E+00	1.512E-01	-0.073
V-48	6.411E-02		2.619E+00	4.673E+00	3.372E-01	0.014

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CR-51	8.129E+00		1.432E+01	2.493E+01	1.752E+00	0.326
MN-54	-5.061E-02		1.154E+00	1.971E+00	1.403E-01	-0.026
CO-56	-9.228E-01		1.381E+00	2.256E+00	1.621E-01	-0.409
CO-57	1.031E+00		1.047E+00	1.782E+00	1.122E-01	0.579
CO-58	2.998E-01		1.231E+00	2.156E+00	1.511E-01	0.139
FE-59	8.486E-01		2.693E+00	4.877E+00	3.683E-01	0.174
CO-60	1.221E+00		1.187E+00	2.249E+00	1.234E-01	0.543
ZN-65	-1.556E-01		2.433E+00	4.276E+00	2.817E-01	-0.036
SE-75	3.079E-01		1.604E+00	2.769E+00	1.780E-01	0.111
KR-85	-1.400E+02		3.360E+02	5.741E+02	3.686E+01	-0.244
SR-85	-7.612E-01		1.827E+00	3.121E+00	2.004E-01	-0.244
SR-88	-2.903E-01		1.328E+00	2.341E+00	1.325E-01	-0.124
Y-91	1.455E-01		1.161E+00	2.053E+00	1.311E-01	0.071
NB-94	-9.496E-01		1.109E+00	1.820E+00	1.155E-01	-0.522
NB-95	-8.478E-01		1.489E+00	2.474E+00	1.664E-01	-0.343
NB-95M	-5.284E+02		2.029E+02	3.078E+02	3.325E+01	-1.717
ZR-95	8.628E-01		2.236E+00	3.955E+00	3.071E-01	0.218
RU-103	2.875E-01		1.546E+00	2.599E+00	3.363E-01	0.111
RH-106	-8.377E-01		9.992E+00	1.734E+01	1.082E+00	-0.048
RU-106	-2.883E+00		9.880E+00	1.695E+01	2.027E+00	-0.170
AG-108M	-1.177E-01		1.077E+00	1.798E+00	1.223E-01	-0.065
CD-109	-8.055E+00		3.029E+01	5.055E+01	3.816E+00	-0.159
AG-110M	-9.601E-01		1.002E+00	1.641E+00	1.062E-01	-0.585
SN-113	-3.861E-01		1.418E+00	2.366E+00	1.560E-01	-0.163
SN-115	1.019E+01		1.217E+02	1.814E+02	1.339E+01	0.056
SN-117M	-4.352E-01		2.786E+00	4.534E+00	2.745E-01	-0.096
TE-123M	-4.725E-01		1.138E+00	1.835E+00	1.125E-01	-0.257
SB-124	1.474E+00		3.078E+00	5.779E+00	3.586E-01	0.255
SB-125	1.491E+00		2.966E+00	5.114E+00	3.353E-01	0.292
TE-125M	9.343E+01		4.047E+02	6.786E+02	5.841E+01	0.138
I-126	-7.196E-02		6.826E+00	1.189E+01	7.284E-01	-0.006
SB-126	4.666E+00		5.951E+00	1.075E+01	6.936E-01	0.434
SN-126	-1.775E+00		3.065E+00	5.067E+00	3.815E-01	-0.350
SB-127	5.605E+00		1.059E+02	1.850E+02	2.173E+01	0.030
I-131	-4.828E+00		7.040E+00	9.970E+00	7.001E-01	-0.484
TE-132	6.104E+01		7.523E+01	1.323E+02	2.088E+01	0.461
BA-133	6.849E-01		1.590E+00	2.423E+00	2.872E-01	0.283
CS-134	6.990E-01		1.182E+00	2.117E+00	1.473E-01	0.330
CS-135	-6.047E-01		5.333E+00	9.108E+00	7.383E-01	-0.066
CS-136	-2.369E+00		3.942E+00	6.701E+00	4.957E-01	-0.354
BA-137M	4.176E-01		9.599E-01	1.722E+00	1.050E-01	0.242
CS-137	4.384E-01		1.015E+00	1.820E+00	1.114E-01	0.241
CE-139	-3.315E-01		1.156E+00	1.868E+00	1.135E-01	-0.177
BA-140	-8.614E-01		1.058E+01	1.853E+01	6.046E+00	-0.046
CE-144	4.347E+00		8.217E+00	1.373E+01	1.969E+00	0.317
PM-144	-1.243E-01		1.093E+00	1.877E+00	1.186E-01	-0.066
PM-146	-3.127E-01		1.397E+00	2.314E+00	2.088E-01	-0.135
ND-147	-3.387E+00		2.372E+01	4.147E+01	5.721E+00	-0.082

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-147	5.555E+05		2.193E+06	3.661E+06	2.301E+05	0.152
EU-152	-5.948E-01		3.070E+00	5.174E+00	3.657E-01	-0.115
GD-153	-1.783E+00		3.254E+00	5.360E+00	3.677E-01	-0.333
EU-154	-1.121E+00		2.884E+00	4.933E+00	4.603E-01	-0.227
EU-155	-2.590E+00		4.327E+00	7.090E+00	4.733E-01	-0.365
TB-160	1.801E+00	+	3.219E+00	7.473E+00	5.507E-01	0.241
TM-171	2.041E+03		1.310E+03	2.099E+03	1.524E+02	0.972
HF-181	-3.708E-03		1.572E+00	2.623E+00	1.682E-01	-0.001
TA-182	4.503E+00		4.711E+00	8.901E+00	5.356E-01	0.506
IR-192	-2.586E-01		1.191E+00	2.013E+00	1.299E-01	-0.128
HG-203	7.548E-01		1.459E+00	2.545E+00	1.712E-01	0.297
BI-207	3.873E-01		1.350E+00	2.458E+00	1.687E-01	0.158
TL-208	1.682E+00		1.280E+00	2.347E+00	1.681E-01	0.717
BI-210	2.647E+02		1.912E+02	3.118E+02	2.555E+01	0.849
PB-210	2.647E+02		1.912E+02	3.118E+02	2.555E+01	0.849
PB-211	-4.170E+00		2.886E+01	4.815E+01	3.004E+01	-0.087
BI-212	2.651E+00		8.499E+00	1.498E+01	1.236E+00	0.177
PB-212	7.564E+00		2.210E+00	4.014E+00	3.104E-01	1.884
BI-214	2.986E+00		2.390E+00	4.351E+00	3.543E-01	0.686
PB-214	1.066E+00	+	6.504E+00	4.506E+00	3.918E-01	0.237
RN-219	3.154E+00		1.302E+01	2.222E+01	3.068E+00	0.142
RA-223	-1.301E+01		2.221E+01	3.671E+01	6.147E+00	-0.354
RA-224	-5.877E+00		2.341E+01	3.994E+01	2.519E+00	-0.147
RA-226	2.986E+00		2.390E+00	4.351E+00	3.543E-01	0.686
AC-227	-8.387E+00		1.347E+01	2.258E+01	3.243E+00	-0.371
TH-227	-8.253E+00		1.328E+01	2.222E+01	3.799E+00	-0.371
AC-228	4.904E+00	+	7.901E+00	8.006E+00	8.300E-01	0.613
RA-228	4.904E+00	+	7.901E+00	8.006E+00	8.300E-01	0.613
TH-228	7.568E+00		2.210E+00	4.014E+00	3.104E-01	1.885
TH-229	1.024E+01		1.931E+01	3.033E+01	1.861E+00	0.337
TH-230	2.986E+00		2.390E+00	4.351E+00	3.543E-01	0.686
PA-231	-7.480E+00		5.125E+01	8.728E+01	1.226E+01	-0.086
TH-231	1.639E+00		6.202E+00	1.073E+01	8.326E-01	0.153
TH-232	7.415E+00		2.165E+00	3.932E+00	3.040E-01	1.885
PA-233	-8.756E-01		2.050E+00	3.439E+00	2.322E-01	-0.255
PA-234	2.801E-01		9.171E+00	1.567E+01	2.854E+00	0.018
PA-234M	1.168E+02		1.360E+02	2.529E+02	2.202E+01	0.462
TH-234	1.957E+02	+	1.438E+02	1.115E+02	1.943E+01	1.756
NP-237	1.222E+00		9.055E+00	1.528E+01	3.355E+00	0.080
NP-239	-5.757E+00		7.789E+00	1.263E+01	7.979E-01	-0.456
AM-241	-2.778E-01		7.465E+00	1.146E+01	9.514E-01	-0.024
AM-242	8.543E+00		8.778E+01	1.472E+02	9.697E+00	0.058
CM-247	-5.994E-01		1.166E+00	1.917E+00	1.201E-01	-0.313
CF-249	-1.392E-03		1.265E+00	2.138E+00	1.336E-01	-0.001
CF-251	7.675E+00	+	5.945E+00	8.129E+00	4.948E-01	0.944
ANH-511	1.489E+01		1.832E+00	3.329E+00	2.137E-01	4.474

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G139405002            *
* Acquisition date : 13-JUL-2005 20:14:30 Detector SN#     : 12922955      *
* Detector ID      : GAMMA3               Sensitivity      : 3.000         *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 12:00:00.00     Abundance limit  : 75.000         *
* Elapsed real time:    0 12:00:04.15     Half life ratio  : 8.000          *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 23-JUN-2005 08:50:00 Nuclide Library :                 *
* Sample ID        : G139405002           Analyst initials: AKB             *
* Batch Number     : 437153               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope       :                *
* MSD DPM          :    0.000             MSD Isotope      :                *
* LCS DPM          :    0.000             LCS Isotope      :                *
* LCSD DPM         :    0.000             LCSD Isotope     :                *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	3.483E+00	2.487E+01	9.289E+00	1.243E+01
MO-99	6.593E+02	2.765E+02	1.486E+02	1.382E+02
CE-141	2.805E-01	5.038E+00	2.177E+00	2.519E+00
PB-211	3.065E+00	1.870E+01	5.426E+00	9.349E+00
U-234	3.950E+00	8.364E+00	3.631E+00	4.182E+00
U-235	1.034E+00	1.447E+01	6.969E+00	7.234E+00
U-238	1.957E+02	1.438E+02	4.382E+01	7.189E+01

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	5.911E+00	1.130E+01	9.318E+00	5.652E+00	NOT IDENT.
NA-22	-3.964E-01	1.035E+00	8.190E-01	5.177E-01	NOT IDENT.
NA-24	-5.986E+09	1.082E+10	0.000E+00	5.410E+09	SHORT HLIF

AL-26	1.187E+00	2.424E+00	1.015E+00	1.212E+00 FAIL ABUN
SC-46	-1.490E-01	1.197E+00	9.588E-01	5.984E-01 NOT IDENT.
V-48	6.411E-02	2.619E+00	2.203E+00	1.310E+00 NOT IDENT.
CR-51	8.129E+00	1.432E+01	1.207E+01	7.162E+00 NOT IDENT.
MN-54	-5.061E-02	1.154E+00	9.357E-01	5.770E-01 NOT IDENT.
CO-56	-9.228E-01	1.381E+00	1.070E+00	6.904E-01 NOT IDENT.
MN-56	-1.000E+41	1.496E+41	0.000E+00	0.000E+00 SHORT HLIF
CO-57	1.031E+00	1.047E+00	8.710E-01	5.233E-01 NOT IDENT.
CO-58	2.998E-01	1.231E+00	1.021E+00	6.156E-01 NOT IDENT.
FE-59	8.486E-01	2.693E+00	2.294E+00	1.346E+00 NOT IDENT.
CO-60	1.221E+00	1.187E+00	1.055E+00	5.934E-01 NOT IDENT.
ZN-65	-1.556E-01	2.433E+00	2.013E+00	1.216E+00 NOT IDENT.
SE-75	3.079E-01	1.604E+00	1.345E+00	8.018E-01 FAIL ABUN
KR-85	-1.400E+02	3.360E+02	2.796E+02	1.680E+02 NOT IDENT.
SR-85	-7.612E-01	1.827E+00	1.520E+00	9.134E-01 NOT IDENT.
Y-88	-2.903E-01	1.328E+00	1.073E+00	6.639E-01 NOT IDENT.
Y-91	1.455E-01	1.161E+00	9.799E-01	5.804E-01 NOT IDENT.
NB-94	-9.496E-01	1.109E+00	8.689E-01	5.547E-01 NOT IDENT.
NB-95	-8.478E-01	1.489E+00	1.170E+00	7.446E-01 NOT IDENT.
NB-95M	-5.284E+02	2.029E+02	1.498E+02	1.015E+02 NOT IDENT.
ZR-95	8.628E-01	2.236E+00	1.878E+00	1.118E+00 NOT IDENT.
MO-99M	2.508E+25	1.420E+25	0.000E+00	0.000E+00 SHORT HLIF
RU-103	2.875E-01	1.546E+00	1.248E+00	7.732E-01 NOT IDENT.
RH-106	-8.377E-01	9.992E+00	8.271E+00	4.996E+00 NOT IDENT.
RU-106	-2.883E+00	9.880E+00	8.074E+00	4.940E+00 NOT IDENT.
AG-108M	-1.177E-01	1.077E+00	8.639E-01	5.384E-01 NOT IDENT.
CD-109	-8.055E+00	3.029E+01	2.472E+01	1.515E+01 NOT IDENT.
AG-110M	-9.601E-01	1.002E+00	7.762E-01	5.012E-01 FAIL ABUN
SN-113	-3.861E-01	1.418E+00	1.136E+00	7.092E-01 NOT IDENT.
CD-115	-7.785E+02	1.815E+03	0.000E+00	9.077E+02 SHORT HLIF
SN-115	1.019E+01	1.217E+02	8.533E+01	6.084E+01 NOT IDENT.
SN-117M	-4.352E-01	2.786E+00	2.213E+00	1.393E+00 NOT IDENT.
TE-123M	-4.725E-01	1.138E+00	8.958E-01	5.691E-01 NOT IDENT.
SB-124	1.474E+00	3.078E+00	2.680E+00	1.539E+00 NOT IDENT.
SB-125	1.491E+00	2.966E+00	2.458E+00	1.483E+00 FAIL ABUN
TE-125M	9.343E+01	4.047E+02	3.316E+02	2.024E+02 NOT IDENT.
I-126	-7.196E-02	6.826E+00	5.645E+00	3.413E+00 NOT IDENT.
SB-126	4.666E+00	5.951E+00	5.124E+00	2.975E+00 NOT IDENT.
SN-126	-1.775E+00	3.065E+00	2.478E+00	1.533E+00 FAIL ABUN
SB-127	5.605E+00	1.059E+02	8.776E+01	5.295E+01 NOT IDENT.
I-131	-4.828E+00	7.040E+00	4.798E+00	3.520E+00 NOT IDENT.
I-132	1.000E+41	3.986E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	6.104E+01	7.523E+01	6.438E+01	3.762E+01 NOT IDENT.
BA-133	6.849E-01	1.590E+00	1.170E+00	7.951E-01 NOT IDENT.
I-133	-1.599E+07	1.560E+07	0.000E+00	7.802E+06 SHORT HLIF
CS-134	6.990E-01	1.182E+00	1.004E+00	5.911E-01 NOT IDENT.
CS-135	-6.047E-01	5.333E+00	4.424E+00	2.666E+00 NOT IDENT.
I-135	-1.086E+22	1.646E+23	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-2.369E+00	3.942E+00	3.138E+00	1.971E+00 FAIL ABUN
BA-137M	4.176E-01	9.599E-01	8.172E-01	4.800E-01 NOT IDENT.
CS-137	4.384E-01	1.015E+00	8.635E-01	5.073E-01 NOT IDENT.
CE-139	-3.315E-01	1.156E+00	9.111E-01	5.778E-01 NOT IDENT.
BA-140	-8.614E-01	1.058E+01	8.849E+00	5.289E+00 NOT IDENT.
LA-140	3.238E+01	6.796E+03	0.000E+00	3.398E+03 SHORT HLIF
CE-143	-4.040E+04	7.965E+04	0.000E+00	3.983E+04 SHORT HLIF
CE-144	4.347E+00	8.217E+00	6.711E+00	4.109E+00 NOT IDENT.
PM-144	-1.243E-01	1.093E+00	8.955E-01	5.465E-01 NOT IDENT.
PR-144	-1.000E+41	8.793E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	-3.127E-01	1.397E+00	1.109E+00	6.985E-01 NOT IDENT.
ND-147	-3.387E+00	2.372E+01	1.979E+01	1.186E+01 NOT IDENT.

M-147	5.555E+05	2.193E+06	1.789E+06	1.096E+06	NOT IDENT.
M-149	2.637E+03	1.732E+04	0.000E+00	8.659E+03	SHORT HLIF
EU-152	-5.948E-01	3.070E+00	2.494E+00	1.535E+00	NOT IDENT.
GD-153	-1.783E+00	3.254E+00	2.618E+00	1.627E+00	NOT IDENT.
EU-154	-1.121E+00	2.884E+00	2.278E+00	1.442E+00	NOT IDENT.
EU-155	-2.590E+00	4.327E+00	3.461E+00	2.163E+00	NOT IDENT.
TB-160	1.801E+00	3.219E+00	3.525E+00	1.609E+00	FAIL ABUN
TM-171	2.041E+03	1.310E+03	1.027E+03	6.551E+02	FAIL ABUN
HF-181	-3.708E-03	1.572E+00	1.259E+00	7.859E-01	FAIL ABUN
TA-182	4.503E+00	4.711E+00	4.182E+00	2.356E+00	NOT IDENT.
IR-192	-2.586E-01	1.191E+00	9.725E-01	5.954E-01	FAIL ABUN
HG-203	7.548E-01	1.459E+00	1.235E+00	7.296E-01	NOT IDENT.
BI-207	3.873E-01	1.350E+00	1.152E+00	6.749E-01	NOT IDENT.
TL-208	1.682E+00	1.280E+00	1.130E+00	6.401E-01	NOT IDENT.
BI-210	2.647E+02	1.912E+02	1.521E+02	9.562E+01	NOT IDENT.
PB-210	2.647E+02	1.912E+02	1.521E+02	9.562E+01	NOT IDENT.
PB-211	-4.170E+00	2.886E+01	2.313E+01	1.443E+01	NOT IDENT.
BI-212	2.651E+00	8.499E+00	7.124E+00	4.249E+00	NOT IDENT.
PB-212	7.564E+00	2.210E+00	1.963E+00	1.105E+00	NOT IDENT.
BI-214	2.986E+00	2.390E+00	2.096E+00	1.195E+00	NOT IDENT.
PB-214	1.066E+00	6.504E+00	2.186E+00	3.252E+00	FAIL ABUN
RN-219	3.154E+00	1.302E+01	1.069E+01	6.510E+00	NOT IDENT.
RA-223	-1.301E+01	2.221E+01	1.775E+01	1.110E+01	FAIL ABUN
RA-224	-5.877E+00	2.341E+01	1.947E+01	1.170E+01	NOT IDENT.
RA-226	2.986E+00	2.390E+00	2.096E+00	1.195E+00	FAIL ABUN
AC-227	-8.387E+00	1.347E+01	1.096E+01	6.737E+00	NOT IDENT.
TH-227	-8.253E+00	1.328E+01	1.079E+01	6.640E+00	NOT IDENT.
AC-228	4.904E+00	7.901E+00	3.818E+00	3.950E+00	FAIL ABUN
RA-228	4.904E+00	7.901E+00	3.818E+00	3.950E+00	FAIL ABUN
TH-228	7.568E+00	2.210E+00	1.963E+00	1.105E+00	NOT IDENT.
TH-229	1.024E+01	1.931E+01	1.479E+01	9.657E+00	NOT IDENT.
TH-230	2.986E+00	2.390E+00	2.096E+00	1.195E+00	FAIL ABUN
PA-231	-7.480E+00	5.125E+01	4.229E+01	2.562E+01	NOT IDENT.
TH-231	1.639E+00	6.202E+00	5.212E+00	3.101E+00	FAIL ABUN
TH-232	7.415E+00	2.165E+00	1.923E+00	1.083E+00	FAIL ABUN
PA-233	-8.756E-01	2.050E+00	1.660E+00	1.025E+00	FAIL ABUN
PA-234	2.801E-01	9.171E+00	7.399E+00	4.585E+00	FAIL ABUN
PA-234M	1.168E+02	1.360E+02	1.200E+02	6.798E+01	NOT IDENT.
TH-234	1.957E+02	1.438E+02	5.465E+01	7.189E+01	FAIL ABUN
NP-237	1.222E+00	9.055E+00	7.476E+00	4.528E+00	NOT IDENT.
NP-239	-5.757E+00	7.789E+00	6.169E+00	3.894E+00	NOT IDENT.
AM-241	-2.778E-01	7.465E+00	5.589E+00	3.733E+00	NOT IDENT.
AM-242	8.543E+00	8.778E+01	7.185E+01	4.389E+01	NOT IDENT.
CM-247	-5.994E-01	1.166E+00	9.207E-01	5.832E-01	NOT IDENT.
CF-249	-1.392E-03	1.265E+00	1.029E+00	6.324E-01	NOT IDENT.
CF-251	7.675E+00	5.945E+00	3.970E+00	2.972E+00	FAIL ABUN
ANH-511	1.489E+01	1.832E+00	1.632E+00	9.161E-01	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:42:45.27

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874843.CNF;1
Sample date : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 20:15:02
Sample ID : G1200874843 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA4 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:01:28.33 0.2%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 9912854
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	47.27*	18	425	2.08	95.50	91	8	4.13E-04	272.1	
2	0	63.19*	41	444	1.09	127.38	124	8	9.45E-04	123.2	
3	0	84.59	61	299	1.00	170.26	168	5	1.41E-03	44.5	
4	0	92.80*	33	469	1.20	186.71	184	8	7.66E-04	189.4	
5	0	135.18	36	495	1.21	271.62	269	8	8.44E-04	106.8	
6	0	143.66*	17	422	0.97	288.61	286	7	3.94E-04	282.1	
7	0	159.47	16	426	1.28	320.27	317	7	3.71E-04	215.3	
8	0	185.64*	19	707	1.15	372.71	366	13	4.36E-04	382.0	
9	0	238.70*	102	532	1.42	479.01	473	12	2.36E-03	58.1	
10	0	257.66	29	264	1.26	517.01	515	7	6.80E-04	93.1	
11	0	320.32	33	188	1.27	642.55	640	7	7.75E-04	70.0	
12	0	328.12	14	255	0.79	658.17	657	8	3.33E-04	193.4	
13	0	337.85	50	257	1.76	677.67	673	9	1.15E-03	59.7	
14	0	352.26*	4	197	0.76	706.55	703	9	8.72E-05	*****	
15	0	391.46	36	139	1.83	785.08	782	7	8.35E-04	56.8	
16	0	404.47	32	154	1.38	811.14	808	9	7.31E-04	74.3	
17	0	418.08	15	100	1.20	838.42	837	6	3.56E-04	105.5	
18	0	446.17	47	142	1.25	894.71	890	10	1.08E-03	50.0	
19	0	462.81	35	80	1.16	928.05	925	6	8.12E-04	43.6	
20	0	510.94*	102	326	2.59	1024.47	1015	22	2.36E-03	70.2	
21	4	566.74	41	74	1.58	1136.28	1133	20	9.56E-04	41.1	1.19E+00
22	4	569.64	55	136	2.26	1142.09	1133	20	1.28E-03	49.2	
23	0	583.80*	20	147	1.20	1170.48	1165	12	4.63E-04	189.5	
24	0	588.47	22	50	1.38	1179.83	1176	6	5.04E-04	56.8	
25	2	689.14	29	74	1.98	1381.55	1374	41	6.71E-04	69.4	3.55E+00
26	2	701.34	32	88	1.64	1406.00	1374	41	7.38E-04	55.6	
27	2	704.33	30	56	1.64	1412.00	1374	41	7.00E-04	38.4	
28	0	712.76	94	196	8.88	1428.89	1419	23	2.16E-03	40.2	
29	0	802.25	48	89	2.07	1608.22	1604	12	1.12E-03	41.3	
30	0	860.72	41	49	1.52	1725.38	1722	9	9.58E-04	34.3	
31	0	865.16	18	47	0.99	1734.28	1731	8	4.25E-04	68.3	
32	0	870.45	24	44	0.76	1744.88	1741	8	5.64E-04	51.9	
33	0	873.64	12	32	1.32	1751.27	1748	6	2.84E-04	77.9	
34	0	927.19	25	61	0.55	1858.59	1854	11	5.79E-04	63.5	
35	0	968.77	10	61	1.50	1941.92	1939	9	2.20E-04	151.4	
36	0	985.68	21	77	0.91	1975.80	1970	15	4.82E-04	95.2	
37	0	1002.52	51	131	5.31	2009.55	2002	23	1.17E-03	60.7	
38	0	1033.36	37	30	3.85	2071.36	2066	12	8.49E-04	34.2	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1141.62	18	30	0.66	2288.32	2284	9	4.14E-04	61.0	
40	0	1277.34	9	23	1.03	2560.31	2559	8	2.03E-04	99.3	
41	0	1290.15	62	132	22.25	2585.99	2566	48	1.43E-03	68.2	
42	0	1323.83	21	46	1.96	2653.50	2648	14	4.90E-04	71.1	
43	0	1443.83	15	17	1.43	2894.01	2891	6	3.46E-04	51.4	
44	0	1539.62	7	21	4.29	3086.02	3084	10	1.53E-04	138.7	
45	3	1548.30	35	17	2.83	3103.41	3093	54	8.13E-04	32.0	1.51E+00
46	3	1563.75	26	17	2.84	3134.38	3093	54	6.12E-04	43.5	
47	1	1577.50	19	26	2.36	3161.94	3151	24	4.29E-04	66.4	2.88E+00
48	1	1582.30	19	22	2.36	3171.57	3151	24	4.33E-04	41.4	
49	0	1592.26	18	48	0.68	3191.54	3187	17	4.16E-04	90.6	
50	0	1616.52	5	15	1.36	3240.15	3236	6	1.22E-04	124.2	
51	0	1630.05	20	5	0.59	3267.28	3264	9	4.51E-04	30.0	
52	0	1660.54	10	6	1.26	3328.41	3326	6	2.29E-04	50.6	
53	0	1708.05*	7	6	0.96	3423.63	3421	7	1.57E-04	107.0	
54	0	1718.29	18	19	1.15	3444.16	3437	13	4.14E-04	56.0	
55	0	1764.34	36	30	1.03	3536.47	3530	15	8.33E-04	37.1	
56	0	1793.65	12	4	1.71	3595.23	3593	6	2.76E-04	40.1	
57	0	1831.24	20	16	3.94	3670.57	3664	13	4.57E-04	47.7	
58	0	1857.09	9	6	1.30	3722.40	3720	7	2.18E-04	52.3	
59	0	1871.11	5	9	1.22	3750.50	3747	6	1.16E-04	104.9	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 14-JUL-2005 11:42:49

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874843.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 20:15:02
Sample ID : G1200874843 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:01:28.33 0.2%
Peak Width (FWHM): 2.50 Confidence level : 2.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CR-51	+	320.08	*	7.145E+00	1.002E+01	1.544E+01	1.171E+00	0.463
NB-94	+	702.63	*	1.082E+00	1.205E+00	1.560E+00	1.060E-01	0.693
	+	871.10		9.834E-01	1.025E+00	1.635E+00	1.552E-01	0.601
SN-113	+	391.69	*	1.271E+00	1.447E+00	2.146E+00	1.563E-01	0.592
SN-117M		156.02		-7.291E+00	3.704E+01	6.355E+01	4.117E+00	-0.115
	+	158.56	*	2.890E-01	1.245E+00	1.521E+00	9.818E-02	0.190
TE-123M	+	159.00	*	2.701E-01	1.163E+00	1.490E+00	9.715E-02	0.181
CE-141	+	145.44	*	5.062E-01	2.856E+00	2.664E+00	1.815E-01	0.190
CE-144	+	133.51	*	4.659E+00	9.972E+00	1.122E+01	1.644E+00	0.415
TL-208		75.00		3.585E+01	4.021E+01	6.698E+01	8.335E+00	0.535
		277.35		1.051E+01	1.195E+01	2.080E+01	2.335E+00	0.505
	+	510.84		1.272E+01	1.791E+01	6.768E+00	7.325E-01	1.880
	+	583.14	*	7.033E-01	2.666E+00	1.908E+00	1.420E-01	0.369
		763.30		1.226E+00	5.659E+01	9.794E+01	1.314E+01	0.013
	+	860.37		1.330E+01	9.220E+00	1.224E+01	1.211E+00	1.087
		1093.90		-1.490E+02	2.622E+02	4.441E+02	1.033E+02	-0.336
BI-210	+	46.50	*	9.713E+01	5.287E+02	4.864E+02	5.354E+01	0.200
PB-210	+	46.50	*	9.713E+01	5.287E+02	4.864E+02	5.354E+01	0.200
BI-211	+	351.07	*	6.147E-01	1.432E+01	1.053E+01	7.963E-01	0.058
TH-228	+	84.40		9.921E+01	8.933E+01	1.382E+02	1.809E+01	0.718
	+	238.60	*	3.838E+00	4.473E+00	2.973E+00	2.415E-01	1.291
		300.10		1.444E+00	2.499E+01	4.189E+01	2.474E+01	0.034
PA-234M		766.40		2.645E+02	5.251E+02	8.640E+02	6.617E+02	0.306
	+	1001.03	*	2.720E+02	3.317E+02	2.223E+02	2.358E+01	1.224
TH-234	+	63.29	*	4.756E+01	1.175E+02	9.194E+01	1.750E+01	0.517
	+	92.38		1.043E+01	3.955E+01	2.710E+01	4.834E+00	0.385
		112.81		4.202E+01	3.091E+02	5.441E+02	9.461E+01	0.077
U-235		89.95		-8.923E+00	3.558E+01	5.613E+01	1.728E+01	-0.159
	+	93.35		1.254E+01	4.762E+01	3.247E+01	9.039E+00	0.386
		105.00		-5.207E+00	3.418E+01	5.987E+01	1.766E+01	-0.087
	+	143.76	*	2.232E+00	1.260E+01	1.178E+01	1.959E+00	0.189
		163.33		1.277E+01	1.595E+01	2.792E+01	5.077E+00	0.458
	+	185.71		5.146E-01	3.932E+00	2.380E+00	1.540E-01	0.216
		205.31		-1.051E+00	1.590E+01	2.699E+01	4.670E+00	-0.039

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NP-237	+	86.48	*	9.507E+00	8.732E+00	1.279E+01	2.857E+00	0.743
		95.87		-1.526E+01	3.440E+01	5.343E+01	1.302E+01	-0.286
U-238	+	63.29	*	4.756E+01	1.175E+02	9.194E+01	1.750E+01	0.517
CM-247		278.00		-1.106E+00	2.395E+01	4.016E+01	2.789E+00	-0.028
		287.40		-8.923E+00	4.093E+01	6.796E+01	4.738E+00	-0.131
	+	402.60	*	1.003E+00	1.492E+00	1.987E+00	1.386E-01	0.504
ANH-511	+	511.00	*	2.743E+00	3.853E+00	1.459E+00	1.008E-01	1.880

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-2.836E+00	8.400E+00	1.452E+01	1.129E+00	-0.195
NA-22		1274.53	*	-6.389E-01	1.185E+00	1.689E+00	1.158E-01	-0.378
NA-24		1368.55	*	4.651E-01	1.026E+01	1.847E+01	1.177E+00	0.025
AL-26	+	511.00		1.676E+00	2.355E+00	8.918E-01	6.160E-02	1.880
		1808.65	*	-4.094E-02	1.051E+00	1.936E+00	1.138E-01	-0.021
K-40		1460.81	*	3.003E+01	1.264E+01	2.616E+01	1.729E+00	1.148
SC-46		889.25	*	-2.616E-01	1.041E+00	1.742E+00	1.709E-01	-0.150
		1120.51		7.636E-01	1.115E+00	2.097E+00	1.747E-01	0.364
V-48		944.10		-2.947E+00	1.281E+01	2.281E+01	2.221E+00	-0.129
		983.50	*	1.910E-01	1.262E+00	2.011E+00	1.909E-01	0.095
		1312.09		-6.200E-01	1.278E+00	2.165E+00	1.398E-01	-0.286
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
MN-54		834.83	*	5.370E-01	9.891E-01	1.770E+00	1.570E-01	0.303
CO-56		846.75	*	3.847E-01	1.032E+00	1.819E+00	1.650E-01	0.212
		1037.82		1.707E+00	8.043E+00	1.295E+01	1.234E+00	0.132
		1238.25		3.615E-01	1.610E+00	2.938E+00	2.202E-01	0.123
CO-57		122.06	*	-3.869E-02	8.015E-01	1.400E+00	1.003E-01	-0.028
	+	136.47		4.807E+00	1.027E+01	1.173E+01	8.898E-01	0.410
CO-58		810.78	*	-9.556E-01	1.041E+00	1.651E+00	1.402E-01	-0.579
FE-59		192.35		-3.104E+01	2.520E+01	4.055E+01	4.937E+00	-0.765
		1099.25	*	-5.422E-02	1.843E+00	3.304E+00	3.057E-01	-0.016
	+	1291.60		8.319E+00	1.136E+01	4.522E+00	3.673E-01	1.840
CO-60		1173.24		1.100E-01	1.079E+00	1.945E+00	1.508E-01	0.057
		1332.50	*	-5.377E-01	1.050E+00	1.775E+00	1.106E-01	-0.303
ZN-65		1115.55	*	8.603E-01	2.236E+00	4.104E+00	3.445E-01	0.210
SE-75		66.05		6.031E+01	2.106E+02	3.195E+02	3.704E+01	0.189
		96.73		-1.905E+01	2.390E+01	4.087E+01	5.353E+00	-0.466
		121.11		-3.207E+00	4.107E+00	6.967E+00	7.063E-01	-0.460
	+	136.00		8.560E-01	1.829E+00	2.060E+00	1.410E-01	0.416
		198.60		1.103E+02	5.702E+01	1.025E+02	7.938E+00	1.075
		264.65	*	-3.941E-01	1.372E+00	2.281E+00	1.584E-01	-0.173
		279.53		-1.478E+00	3.271E+00	5.376E+00	3.949E-01	-0.275
		303.91		8.910E+00	6.592E+01	1.108E+02	1.144E+01	0.080
		400.65		-5.767E-01	7.372E+00	1.214E+01	1.201E+00	-0.048
KR-85		513.99	*	8.316E+02	2.469E+02	4.807E+02	3.317E+01	1.730
SR-85		513.99	*	3.717E+00	1.104E+00	2.148E+00	1.482E-01	1.730
Y-88		898.02		3.380E-01	1.078E+00	1.895E+00	1.896E-01	0.178

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1836.01	*	1.035E-01	1.160E+00	1.892E+00	1.103E-01	0.055
Y-91		557.57	*	9.646E-01	8.883E-01	1.658E+00	1.122E-01	0.582
		1204.90		3.528E+02	3.829E+02	7.327E+02	5.489E+01	0.482
NB-95		765.79	*	7.591E-01	1.028E+00	1.861E+00	1.442E-01	0.408
NB-95M		235.69	*	1.887E+00	5.034E+00	7.791E+00	6.484E-01	0.242
ZR-95		724.18		-6.106E-01	2.302E+00	3.894E+00	3.115E-01	-0.157
		756.74	*	4.194E-01	1.553E+00	2.761E+00	2.370E-01	0.152
MO-99		140.51	*	1.594E+00	1.493E+00	2.672E+00	1.816E-01	0.596
		181.06		2.437E+00	2.277E+01	3.516E+01	6.107E+00	0.069
		739.58		2.549E+00	1.236E+01	2.167E+01	3.142E+00	0.118
TC-99M		140.51	*	2.659E+02	2.492E+02	4.457E+02	3.427E+01	0.596
RU-103		497.08	*	-4.330E-01	9.983E-01	1.710E+00	2.258E-01	-0.253
		610.33		3.791E+01	2.066E+01	3.753E+01	5.895E+00	1.010
RH-106	+	511.85		1.337E+01	1.878E+01	7.121E+00	4.917E-01	1.877
		621.84	*	4.601E+00	9.942E+00	1.770E+01	1.144E+00	0.260
		1050.47		-3.539E+01	5.728E+01	9.757E+01	8.771E+00	-0.363
RU-106		622.20	*	4.146E+00	9.926E+00	1.762E+01	2.128E+00	0.235
AG-108M		433.93	*	4.874E-01	9.893E-01	1.794E+00	1.329E-01	0.272
		614.37		1.384E-01	1.148E+00	2.010E+00	1.396E-01	0.069
		722.95		-3.480E-02	1.151E+00	1.986E+00	1.490E-01	-0.018
CD-109		88.03	*	4.012E-01	2.642E+01	4.234E+01	3.622E+00	0.009
AG-110M		657.75	*	4.455E-02	9.473E-01	1.653E+00	1.089E-01	0.027
		677.61		-5.677E+00	8.420E+00	1.389E+01	9.390E-01	-0.409
		706.67		-5.036E-01	9.042E+00	9.748E+00	6.971E-01	-0.052
		763.93		-9.714E-01	4.349E+00	7.369E+00	5.888E-01	-0.132
		884.67		-9.534E-02	1.440E+00	2.447E+00	2.441E-01	-0.039
		937.48		-4.106E-01	2.627E+00	4.712E+00	4.735E-01	-0.087
		1384.27		1.879E+00	3.938E+00	7.481E+00	4.932E-01	0.251
CD-115		231.44		4.291E+00	1.933E+02	3.279E+02	2.208E+01	0.013
		260.90		1.983E+01	8.101E+01	1.238E+02	8.516E+00	0.160
		492.35		-1.998E+01	1.809E+01	2.971E+01	2.063E+00	-0.673
		527.90	*	1.082E+00	5.370E+00	9.557E+00	6.560E-01	0.113
SN-115		484.47		-3.101E+01	4.390E+02	7.707E+02	5.363E+01	-0.040
		933.00	*	-1.085E+01	7.311E+01	1.238E+02	1.213E+01	-0.088
	+	1290.58		6.071E+02	8.288E+02	3.297E+02	2.204E+01	1.841
SB-124		602.73		-2.595E-01	1.045E+00	1.786E+00	1.173E-01	-0.145
		645.85		-1.799E+00	1.261E+01	2.171E+01	1.522E+00	-0.083
	+	713.78		1.382E+02	1.121E+02	7.110E+01	7.757E+00	1.943
		722.79		5.579E-01	8.781E+00	1.524E+01	1.115E+00	0.037
		1368.16		6.869E-01	4.213E+01	7.554E+01	9.141E+00	0.009
		1690.98	*	2.036E+00	2.105E+00	4.314E+00	2.834E-01	0.472
SB-125		176.33		3.909E+00	1.065E+01	1.852E+01	1.677E+00	0.211
		427.89	*	-3.381E-01	2.702E+00	4.758E+00	3.424E-01	-0.071
	+	463.38		8.543E+00	7.486E+00	1.393E+01	1.087E+00	0.613
		600.56		3.047E-01	5.640E+00	9.805E+00	7.247E-01	0.031
		606.64		-3.310E+01	2.191E+01	3.445E+01	2.571E+00	-0.961
		635.90		-2.873E+00	7.781E+00	1.320E+01	9.632E-01	-0.218
TE-125M		109.28	*	1.799E+01	2.679E+02	4.716E+02	4.335E+01	0.038
I-126		388.63		-9.971E-01	3.524E+00	5.066E+00	3.529E-01	-0.197

Sample ID : G1200874843 Acquisition date : 13-JUL-2005 20:15:02

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		666.33	*	-1.644E+00	2.541E+00	4.207E+00	2.642E-01	-0.391
		753.82		1.087E+01	1.872E+01	3.401E+01	2.572E+00	0.320
SB-126		666.33		-6.665E-01	1.030E+00	1.706E+00	1.071E-01	-0.391
		695.00		1.498E+00	1.116E+00	2.083E+00	1.392E-01	0.720
		697.00		4.305E+00	3.780E+00	6.993E+00	4.695E-01	0.616
		720.50	*	-2.323E-01	2.155E+00	3.231E+00	2.281E-01	-0.072
SN-126	+	64.28		1.883E+01	4.649E+01	3.722E+01	6.048E+00	0.506
		86.94		1.659E+00	1.227E+01	1.818E+01	7.516E+00	0.091
		87.57	*	1.853E+00	2.665E+00	4.398E+00	3.759E-01	0.421
SB-127		252.40		-2.590E+00	1.360E+01	2.270E+01	9.334E+00	-0.114
		411.60		-2.589E+01	3.414E+01	5.796E+01	7.611E+00	-0.447
	+	444.90		3.976E+01	3.989E+01	4.252E+01	3.858E+00	0.935
		473.00		2.454E+00	5.018E+00	9.045E+00	8.606E-01	0.271
		543.30		-1.556E+00	4.436E+01	7.788E+01	8.947E+00	-0.020
		603.50		-3.331E+00	3.410E+01	5.879E+01	5.122E+00	-0.057
		685.70	*	-2.356E+00	4.033E+00	5.756E+00	4.025E-01	-0.409
		698.50		4.505E+01	4.211E+01	7.711E+01	1.011E+01	0.584
		783.70		-8.028E+00	9.139E+00	1.457E+01	1.421E+00	-0.551
I-131		284.30		4.580E+00	1.614E+01	2.745E+01	2.045E+00	0.167
		364.48	*	-3.336E-01	1.258E+00	2.056E+00	1.547E-01	-0.162
		636.97		-6.448E+00	1.431E+01	2.415E+01	1.677E+00	-0.267
TE-132		228.16	*	5.527E-01	1.374E+00	2.366E+00	3.125E-01	0.234
BA-133		79.62		-2.614E+01	4.664E+01	7.292E+01	1.110E+01	-0.358
		81.00		2.042E+00	3.364E+00	5.540E+00	8.784E-01	0.369
		276.40		1.021E+01	1.172E+01	2.036E+01	2.750E+00	0.502
		302.85		7.191E-01	4.821E+00	8.113E+00	9.982E-01	0.089
		356.02	*	-1.209E-01	1.540E+00	2.264E+00	2.767E-01	-0.053
		383.85		1.245E+01	9.618E+00	1.694E+01	1.956E+00	0.735
I-133		529.87	*	3.894E+00	5.183E+00	9.480E+00	6.733E-01	0.411
	+	875.33		5.889E+01	9.196E+01	2.123E+02	2.229E+01	0.277
		1298.22		-6.454E+01	2.352E+02	4.093E+02	3.289E+01	-0.158
CS-134		563.23		9.787E+00	1.060E+01	1.774E+01	1.215E+00	0.552
	+	569.32		1.042E+01	1.028E+01	9.830E+00	6.753E-01	1.060
		604.70		5.149E-02	1.032E+00	1.793E+00	1.181E-01	0.029
		795.84	*	6.745E-01	1.103E+00	1.991E+00	1.648E-01	0.339
	+	801.93		2.089E+01	1.737E+01	1.886E+01	1.579E+00	1.108
		1365.15		1.153E+01	3.338E+01	6.202E+01	4.207E+00	0.186
CS-135		268.24	*	-1.799E+00	5.181E+00	8.576E+00	7.314E-01	-0.210
I-135		288.45		1.965E+03	4.794E+03	8.192E+03	8.646E+02	0.240
	+	417.63		1.876E+03	3.963E+03	7.173E+03	7.091E+02	0.262
		546.56		5.204E+02	2.068E+03	3.691E+03	3.582E+02	0.141
		836.80		-3.760E+02	2.882E+03	4.879E+03	5.637E+02	-0.077
		1038.76		4.065E+02	2.212E+03	4.055E+03	4.843E+02	0.100
		1124.00		-7.100E+03	5.696E+03	8.994E+03	9.675E+02	-0.789
		1131.51		-6.271E+02	8.010E+02	1.330E+03	1.460E+02	-0.471
		1260.41	*	1.785E+02	6.461E+02	1.190E+03	9.147E+01	0.150
		1457.56		7.360E+01	2.658E+03	4.689E+03	4.461E+02	0.016
		1678.03		-2.501E+02	1.678E+03	2.975E+03	3.131E+02	-0.084
	+	1706.46		2.068E+03	4.434E+03	7.699E+03	8.320E+02	0.269

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1791.20		-8.287E+02	3.156E+03	4.788E+03	4.271E+02	-0.173
CS-136		66.88		1.399E+01	1.643E+01	2.746E+01	4.432E+00	0.510
	+	86.36		2.123E+01	1.911E+01	2.943E+01	3.764E+00	0.722
		153.25		7.182E-01	1.032E+01	1.790E+01	1.395E+00	0.040
		163.92		1.735E+01	1.807E+01	3.204E+01	2.478E+00	0.541
		176.60		4.540E-01	6.035E+00	1.039E+01	7.347E-01	0.044
		273.65		-8.448E+00	7.392E+00	1.173E+01	8.930E-01	-0.720
		340.55		1.210E-01	2.250E+00	3.340E+00	2.450E-01	0.036
		818.51		-1.767E-01	1.054E+00	1.791E+00	1.540E-01	-0.099
		1048.07	*	-6.850E-01	1.374E+00	2.367E+00	2.214E-01	-0.289
		1235.36		5.239E+00	6.222E+00	1.187E+01	1.290E+00	0.441
BA-137M		661.65	*	4.748E-01	9.882E-01	1.774E+00	1.102E-01	0.268
CS-137		661.66	*	5.011E-01	1.045E+00	1.875E+00	1.170E-01	0.267
CE-139		165.85	*	-4.159E-01	9.331E-01	1.580E+00	1.010E-01	-0.263
BA-140		162.67		2.958E+00	1.253E+01	2.174E+01	1.538E+00	0.136
		304.87		1.417E+01	2.089E+01	3.548E+01	9.783E+00	0.399
		423.73		5.649E+00	2.782E+01	4.973E+01	1.592E+01	0.114
		537.31	*	5.298E-01	3.869E+00	6.827E+00	2.234E+00	0.078
LA-140	+	328.76		3.365E+00	1.301E+01	1.732E+01	1.321E+00	0.194
		432.49		3.140E+01	6.471E+01	1.173E+02	8.806E+00	0.268
		487.02		4.068E-02	4.365E+00	7.690E+00	5.848E-01	0.005
		751.64		-2.079E+01	4.813E+01	8.043E+01	6.892E+00	-0.258
		815.77		3.152E+00	9.653E+00	1.704E+01	1.628E+00	0.185
		867.85		-4.707E+00	6.588E+01	6.947E+01	6.845E+00	-0.068
		919.55		-3.517E+01	7.877E+01	1.294E+02	1.511E+01	-0.272
		925.19		5.416E+00	3.701E+01	5.636E+01	5.814E+00	0.096
		1596.21	*	1.438E+00	3.085E+00	5.095E+00	3.166E-01	0.282
CE-143		231.55		3.508E+01	1.114E+02	1.905E+02	5.862E+01	0.184
		293.27	*	2.022E-02	5.681E+00	9.521E+00	1.935E+00	0.002
	+	350.62		6.707E+00	1.563E+02	1.083E+02	3.277E+01	0.062
		490.37		-5.961E+01	1.170E+02	1.976E+02	6.091E+01	-0.302
		664.57		-1.191E+01	4.914E+01	8.373E+01	2.631E+01	-0.142
		721.93		2.850E+01	5.315E+01	9.435E+01	2.677E+01	0.302
PM-144		476.78		-6.362E-01	2.062E+00	3.568E+00	2.834E-01	-0.178
		618.01		-5.464E-01	1.001E+00	1.678E+00	1.140E-01	-0.326
		696.49	*	1.214E+00	9.903E-01	1.839E+00	1.233E-01	0.660
PM-146		453.88	*	2.556E-02	1.230E+00	2.182E+00	2.065E-01	0.012
		633.25		-5.278E-02	4.027E+01	7.011E+01	2.589E+01	-0.001
		735.93		-2.307E+00	4.082E+00	6.670E+00	1.883E+00	-0.346
		747.24		3.014E-01	2.447E+00	4.284E+00	5.722E-01	0.070
ND-147	+	91.11		2.300E+00	8.714E+00	6.012E+00	5.382E-01	0.383
		531.02	*	-5.108E+00	7.672E+00	1.286E+01	1.802E+00	-0.397
PM-147		121.30	*	-1.234E+06	1.697E+06	2.890E+06	2.066E+05	-0.427
PM-149		285.95	*	-5.694E+00	5.101E+01	8.513E+01	1.248E+01	-0.067
EU-152		121.78		-1.099E+00	2.427E+00	4.175E+00	3.627E-01	-0.263
		344.31	*	3.009E-01	3.336E+00	5.565E+00	4.262E-01	0.054
		963.37		4.082E+00	6.777E+00	1.276E+01	1.228E+00	0.320
GD-153		69.67		3.631E+01	6.272E+01	1.042E+02	9.788E+00	0.348
	+	83.37		5.478E+02	4.903E+02	7.859E+02	6.712E+01	0.697

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		97.43	*	1.015E+00	2.571E+00	4.597E+00	3.542E-01	0.221
		103.18		1.937E-01	3.316E+00	5.860E+00	4.350E-01	0.033
EU-154		123.07		1.164E+00	1.707E+00	3.047E+00	3.130E-01	0.382
		247.93		-7.893E+00	1.214E+01	1.988E+01	2.026E+00	-0.397
		591.76		-4.267E+00	1.723E+01	2.966E+01	3.049E+00	-0.144
		723.30		-1.874E+00	4.923E+00	8.261E+00	6.757E-01	-0.227
		756.86		4.640E+00	1.935E+01	3.432E+01	3.868E+00	0.135
	+	873.20		4.318E+00	6.751E+00	1.426E+01	1.839E+00	0.303
		996.30		8.622E+00	1.051E+01	1.793E+01	3.256E+00	0.481
		1004.76		2.014E+00	5.736E+00	1.057E+01	1.289E+00	0.190
		1274.51	*	-1.803E+00	3.334E+00	4.748E+00	4.760E-01	-0.380
EU-155	+	86.54		3.880E+00	3.473E+00	5.216E+00	4.499E-01	0.744
		105.31	*	1.439E-02	3.483E+00	6.139E+00	4.586E-01	0.002
TB-160		86.79		4.762E-01	8.363E+00	1.236E+01	1.056E+00	0.039
		298.57		-3.341E+00	3.204E+00	5.077E+00	3.554E-01	-0.658
		879.36	*	4.518E+00	3.448E+00	6.522E+00	6.284E-01	0.693
		962.29		1.011E+00	1.122E+01	2.037E+01	1.961E+00	0.050
		966.15		-2.068E+00	4.769E+00	7.119E+00	6.839E-01	-0.290
		1177.93		-1.924E+00	7.185E+00	1.257E+01	9.700E-01	-0.153
TM-171		51.87		-6.378E+02	6.880E+02	1.074E+03	1.394E+02	-0.594
		59.40		-1.048E+03	1.241E+03	1.938E+03	2.299E+02	-0.541
		66.72	*	1.016E+03	1.170E+03	1.967E+03	1.941E+02	0.517
HF-181		56.28		7.473E+00	4.203E+01	6.956E+01	8.644E+00	0.107
		57.53		1.771E+01	2.118E+01	3.598E+01	4.389E+00	0.492
		65.20		-5.977E+00	3.642E+01	5.400E+01	5.492E+00	-0.111
		133.02		-2.661E-01	1.858E+00	2.891E+00	1.977E-01	-0.092
	+	136.25		9.963E+00	2.128E+01	2.397E+01	1.622E+00	0.416
		345.85		4.329E+00	5.273E+00	9.106E+00	6.408E-01	0.475
		482.03	*	-7.030E-01	1.039E+00	1.760E+00	1.225E-01	-0.399
TA-182		67.75		-2.209E+00	4.319E+00	6.840E+00	6.622E-01	-0.323
		100.10		-1.832E-01	5.575E+00	9.824E+00	7.424E-01	-0.019
		222.10		5.129E+00	1.058E+01	1.829E+01	1.222E+00	0.281
		1121.28		2.145E+00	3.146E+00	5.920E+00	4.928E-01	0.362
		1189.05		-1.129E+00	6.424E+00	1.133E+01	8.636E-01	-0.100
		1221.42	*	4.225E+00	4.423E+00	8.430E+00	6.194E-01	0.501
		1230.97		-3.038E+00	9.599E+00	1.663E+01	1.207E+00	-0.183
IR-192		295.96		3.007E+00	3.067E+00	5.339E+00	3.775E-01	0.563
		308.46		-9.633E-01	2.800E+00	4.603E+00	3.255E-01	-0.209
		316.51	*	1.190E-01	1.030E+00	1.730E+00	1.220E-01	0.069
		468.07		2.779E-01	1.776E+00	3.156E+00	2.440E-01	0.088
		604.41		1.500E+00	1.255E+01	2.188E+01	2.572E+00	0.069
		612.46		-3.608E+01	2.089E+01	3.219E+01	2.618E+00	-1.121
HG-203		70.83		-1.294E+01	3.377E+01	5.368E+01	7.520E+00	-0.241
		72.87		-1.199E+01	1.923E+01	3.011E+01	4.056E+00	-0.398
	+	82.60		3.481E+01	3.138E+01	5.293E+01	7.251E+00	0.658
		279.20	*	-6.324E-02	1.080E+00	1.810E+00	1.312E-01	-0.035
BI-207	+	569.67		1.642E+00	1.621E+00	1.550E+00	1.041E-01	1.059
		897.83		3.131E+02	6.677E+02	1.190E+03	1.186E+02	0.263
		1063.62	*	8.196E-02	1.287E+00	2.334E+00	2.072E-01	0.035

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	1442.20		6.235E+02	6.425E+02	1.284E+03	8.058E+01	0.486
		1770.23		-3.828E+00	1.808E+01	2.783E+01	1.658E+00	-0.138
PB-211	+	404.84	*	2.510E+01	4.047E+01	4.821E+01	3.011E+01	0.521
		427.08		1.104E+00	6.036E+01	1.071E+02	6.636E+01	0.010
		831.96		-4.002E+01	4.275E+01	5.368E+01	3.365E+01	-0.746
BI-212		727.18	*	4.358E+00	8.325E+00	1.486E+01	1.304E+00	0.293
PB-212		74.80		2.148E+00	1.331E+01	2.160E+01	2.783E+00	0.099
		87.30		5.146E+00	1.252E+01	2.040E+01	2.684E+00	0.252
		115.19		2.980E+01	1.201E+02	2.121E+02	1.520E+01	0.140
	+	238.63	*	3.838E+00	4.473E+00	4.011E+00	3.258E-01	0.957
		300.09		1.456E+00	2.498E+01	4.189E+01	3.826E+00	0.035
BI-214		609.31	*	3.142E+00	2.341E+00	4.296E+00	3.582E-01	0.731
		768.36		1.098E+01	1.969E+01	3.518E+01	3.449E+00	0.312
		934.06		-1.932E+00	2.729E+01	4.935E+01	5.728E+00	-0.039
		1120.29		4.771E+00	7.244E+00	1.359E+01	1.447E+00	0.351
		1238.11		5.288E+00	1.796E+01	3.295E+01	3.030E+00	0.160
		1377.67		-4.796E+00	2.289E+01	4.028E+01	3.585E+00	-0.119
PB-214		74.81		3.775E+00	2.287E+01	3.714E+01	4.291E+00	0.102
		77.11		7.573E+00	1.228E+01	2.026E+01	2.347E+00	0.374
		87.30		9.315E+00	2.266E+01	3.694E+01	4.365E+00	0.252
		241.98		-4.905E-01	1.223E+01	1.842E+01	1.621E+00	-0.027
		295.21		7.530E+00	4.494E+00	7.987E+00	7.491E-01	0.943
	+	351.92	*	2.138E-01	4.982E+00	4.305E+00	3.956E-01	0.050
RN-219		271.23		7.802E+00	7.783E+00	1.361E+01	1.216E+00	0.573
		401.81	*	-1.908E+00	1.337E+01	2.079E+01	2.941E+00	-0.092
RA-223		122.32		-5.419E+00	5.788E+01	1.009E+02	7.966E+00	-0.054
	+	144.24		7.232E+00	4.080E+01	3.843E+01	3.041E+00	0.188
		154.21		5.593E+00	1.254E+01	2.202E+01	1.674E+00	0.254
		269.46		-2.978E+00	6.106E+00	1.004E+01	7.162E-01	-0.297
		323.87	*	-1.424E+01	2.468E+01	3.501E+01	5.948E+00	-0.407
	+	338.28		3.755E+01	4.503E+01	5.397E+01	6.079E+00	0.696
	+	445.03		9.733E+01	9.784E+01	1.041E+02	1.144E+01	0.935
RA-224		240.98	*	1.652E+01	2.325E+01	3.640E+01	2.470E+00	0.454
RA-226		295.21		7.530E+00	4.494E+00	7.987E+00	7.491E-01	0.943
	+	351.92		2.138E-01	4.982E+00	3.880E+00	2.739E-01	0.055
		609.31	*	3.142E+00	2.341E+00	4.296E+00	3.582E-01	0.731
AC-227		79.80		-3.287E+01	6.032E+01	9.404E+01	2.048E+01	-0.350
		236.00		2.461E+00	7.511E+00	1.158E+01	1.287E+00	0.212
	+	256.20	*	8.273E+00	1.546E+01	2.158E+01	3.150E+00	0.383
		286.10		9.409E+00	5.134E+01	8.691E+01	1.069E+01	0.108
		299.80		-7.246E+00	4.725E+01	7.841E+01	1.332E+01	-0.092
		304.40		4.382E+01	6.262E+01	1.075E+02	1.931E+01	0.408
	+	329.70		1.016E+01	3.932E+01	5.221E+01	6.902E+00	0.195
		334.20		-4.579E+01	8.621E+01	1.223E+02	2.330E+01	-0.374
TH-227		79.80		-3.238E+01	5.941E+01	9.261E+01	2.017E+01	-0.350
	+	94.00		4.031E+01	1.529E+02	1.295E+02	2.786E+01	0.311
		236.00		2.427E+00	7.404E+00	1.142E+01	1.108E+00	0.212
	+	256.20	*	8.153E+00	1.525E+01	2.127E+01	3.678E+00	0.383
		286.10		9.278E+00	5.146E+01	8.570E+01	8.591E+01	0.108

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		299.80		-7.127E+00	4.647E+01	7.712E+01	1.292E+01	-0.092
		304.40		4.316E+01	6.167E+01	1.059E+02	1.878E+01	0.408
	+	329.70		1.002E+01	3.877E+01	5.148E+01	6.738E+00	0.195
		334.20		-4.499E+01	8.468E+01	1.202E+02	2.255E+01	-0.374
AC-228		209.25		1.196E+01	1.910E+01	3.057E+01	1.956E+01	0.391
	+	338.32		8.998E+00	1.136E+01	1.294E+01	5.298E+00	0.696
	+	463.01		2.008E+01	1.817E+01	3.222E+01	7.660E+00	0.623
		794.95		-1.064E+00	2.004E+01	3.445E+01	8.006E+00	-0.031
		911.21	*	4.081E+00	4.357E+00	7.821E+00	9.588E-01	0.522
		964.77		-4.521E+00	1.897E+01	3.353E+01	8.382E+00	-0.135
	+	969.11		2.535E+00	7.699E+00	1.194E+01	2.830E+00	0.212
RA-228		209.25		1.196E+01	1.910E+01	3.057E+01	1.956E+01	0.391
	+	338.32		8.998E+00	1.136E+01	1.294E+01	5.298E+00	0.696
	+	463.01		2.008E+01	1.817E+01	3.222E+01	7.660E+00	0.623
		794.95		-1.064E+00	2.004E+01	3.445E+01	8.006E+00	-0.031
		911.21	*	4.081E+00	4.357E+00	7.821E+00	9.588E-01	0.522
		964.77		-4.521E+00	1.897E+01	3.353E+01	8.382E+00	-0.135
	+	969.11		2.535E+00	7.699E+00	1.194E+01	2.830E+00	0.212
TH-229	+	85.43		7.260E+00	6.498E+00	9.836E+00	8.394E-01	0.738
		88.47		-9.937E-01	3.634E+00	5.746E+00	4.885E-01	-0.173
		100.00		-2.220E-02	6.272E+00	1.106E+01	8.367E-01	-0.002
		193.63	*	9.471E+00	1.603E+01	2.801E+01	1.825E+00	0.338
		210.97		-3.285E+00	2.360E+01	3.996E+01	2.644E+00	-0.082
TH-230		295.21		7.530E+00	4.494E+00	7.987E+00	7.491E-01	0.943
	+	351.92		2.138E-01	4.982E+00	3.880E+00	2.739E-01	0.055
		609.31	*	3.142E+00	2.341E+00	4.296E+00	3.582E-01	0.731
PA-231		283.67	*	3.938E+01	5.092E+01	8.803E+01	1.260E+01	0.447
		301.29		1.258E+01	1.856E+01	3.191E+01	3.564E+00	0.394
	+	330.00		2.235E+01	8.673E+01	1.176E+02	3.713E+01	0.190
TH-231	+	84.21		1.872E+01	1.701E+01	2.618E+01	4.662E+00	0.715
		236.00		2.461E+00	7.510E+00	1.158E+01	1.287E+00	0.212
	+	256.20		8.271E+00	1.546E+01	2.130E+01	3.109E+00	0.388
		269.46	*	-2.978E+00	6.107E+00	1.004E+01	8.232E-01	-0.297
		271.23		7.802E+00	7.792E+00	1.361E+01	1.393E+00	0.573
		283.67		3.938E+01	5.092E+01	8.803E+01	1.260E+01	0.447
		301.29		1.258E+01	1.854E+01	3.191E+01	2.971E+00	0.394
	+	329.85		6.986E+00	2.703E+01	3.674E+01	5.210E+00	0.190
	+	351.07		6.147E-01	1.432E+01	1.053E+01	7.963E-01	0.058
		401.81		-1.908E+00	1.336E+01	2.079E+01	2.405E+00	-0.092
TH-232	+	238.59	*	3.830E+00	4.463E+00	4.002E+00	3.251E-01	0.957
		911.20		4.078E+00	4.354E+00	7.815E+00	9.581E-01	0.522
		964.40		-3.261E+00	1.904E+01	3.386E+01	8.465E+00	-0.096
	+	969.11		2.534E+00	7.693E+00	1.125E+01	2.668E+00	0.225
PA-233		75.28		2.642E+01	1.092E+02	1.779E+02	2.752E+01	0.148
		86.59		-2.654E+00	5.768E+01	8.478E+01	2.272E+01	-0.031
		300.12		7.330E-01	1.288E+01	2.160E+01	3.023E+00	0.034
		311.98	*	-1.243E+00	2.206E+00	3.578E+00	2.620E-01	-0.347
		340.50		1.259E+00	2.173E+01	3.225E+01	7.517E+00	0.039
		398.62		7.368E+01	6.676E+01	1.132E+02	2.961E+01	0.651

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		415.76		-7.782E+00	5.313E+01	8.249E+01	1.728E+01	-0.094
PA-234	+	63.00		5.544E+01	1.369E+02	1.091E+02	1.828E+01	0.508
	+	94.67		3.595E+00	1.362E+01	8.953E+00	1.066E+00	0.401
		98.44		2.045E+00	3.320E+00	5.624E+00	3.129E+00	0.364
		99.70		8.173E+00	1.624E+01	2.910E+01	2.205E+00	0.281
		111.00		1.863E+00	6.352E+00	1.124E+01	1.251E+00	0.166
		131.20		-9.516E-01	3.325E+00	5.737E+00	3.947E-01	-0.166
		152.70		-1.591E+00	1.022E+01	1.759E+01	2.829E+00	-0.090
	+	186.00		1.389E+01	1.062E+02	6.430E+01	1.974E+01	0.216
		226.40		-1.072E+01	1.301E+01	2.121E+01	2.554E+00	-0.505
		227.20		-4.991E+00	1.384E+01	2.312E+01	1.552E+00	-0.216
		248.90		5.819E+00	2.781E+01	4.739E+01	1.066E+01	0.123
		293.70		1.389E+01	2.144E+01	3.673E+01	6.078E+00	0.378
		369.80		1.711E+00	2.898E+01	4.816E+01	1.021E+01	0.036
	+	568.70		5.348E+01	5.278E+01	5.041E+01	3.389E+00	1.061
	+	569.50		1.458E+01	1.440E+01	1.377E+01	9.250E-01	1.059
		574.00		-3.198E+01	4.979E+01	7.202E+01	4.826E+00	-0.444
		699.00		2.334E+01	2.116E+01	3.840E+01	7.031E+00	0.608
	+	706.10		3.212E+01	2.846E+01	5.110E+01	2.263E+01	0.629
		733.00		1.505E+00	1.020E+01	1.787E+01	3.877E+00	0.084
		742.81		3.078E+01	4.443E+01	7.176E+01	4.813E+01	0.429
		796.30		1.565E+01	2.420E+01	4.324E+01	1.164E+01	0.362
		805.80		1.190E+01	3.364E+01	5.206E+01	1.592E+01	0.229
		819.60		3.709E+00	3.415E+01	5.941E+01	2.259E+01	0.062
		826.30		-1.431E+00	2.288E+01	3.920E+01	1.755E+01	-0.036
		831.60		-2.249E+01	1.912E+01	2.749E+01	8.219E+00	-0.818
		876.40		-2.076E+01	3.540E+01	3.838E+01	3.949E+01	-0.541
		880.51		7.799E+00	7.966E+00	1.472E+01	1.422E+00	0.530
		883.24		-6.264E+00	9.664E+00	1.396E+01	9.402E+00	-0.449
		899.00		-2.026E+01	2.618E+01	3.906E+01	1.719E+01	-0.519
		925.00		-5.416E-01	3.638E+01	5.433E+01	5.346E+00	-0.010
	+	926.50		5.269E+00	6.830E+00	8.107E+00	2.085E+00	0.650
		946.00	*	-4.248E+00	7.446E+00	1.280E+01	2.470E+00	-0.332
		949.00		-2.835E+00	1.125E+01	1.998E+01	1.940E+00	-0.142
		980.50		8.756E+00	2.059E+01	3.418E+01	3.252E+00	0.256
		1394.10		-1.350E+01	3.484E+01	5.762E+01	3.735E+01	-0.234
U-234		67.67		-2.512E+02	4.862E+02	7.685E+02	1.142E+02	-0.327
		241.98		-4.911E-01	1.225E+01	1.844E+01	1.624E+00	-0.027
		295.21	*	7.530E+00	4.494E+00	7.987E+00	7.491E-01	0.943
	+	351.92		2.138E-01	4.982E+00	3.880E+00	3.565E-01	0.055
NP-239		99.55		3.348E+00	5.337E+00	9.599E+00	7.281E-01	0.349
		117.00	*	1.997E+00	6.346E+00	1.123E+01	8.038E-01	0.178
		209.75		1.642E+01	2.358E+01	4.120E+01	2.723E+00	0.399
		228.18		2.883E+00	7.249E+00	1.249E+01	8.391E-01	0.231
		277.60		2.435E+00	5.753E+00	9.852E+00	6.839E-01	0.247
		334.31		-2.802E+01	4.744E+01	6.732E+01	4.739E+00	-0.416
AM-241		59.54	*	-2.745E+00	7.022E+00	1.128E+01	1.387E+00	-0.243
AM-242		99.55		7.812E+01	1.245E+02	2.240E+02	1.699E+01	0.349
		103.70	*	-2.114E+01	7.285E+01	1.271E+02	9.410E+00	-0.166

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CF-249		252.85		-9.223E+00	2.881E+01	4.796E+01	3.282E+00	-0.192
		333.44		1.036E+00	5.477E+00	9.209E+00	6.483E-01	0.112
		387.95	*	-9.843E-01	1.430E+00	1.982E+00	1.381E-01	-0.497
CF-251		176.00	*	2.870E+00	4.124E+00	7.254E+00	4.660E-01	0.396
		227.00		-5.779E+00	1.224E+01	2.035E+01	1.366E+00	-0.284
		285.00		-2.134E+01	5.916E+01	9.755E+01	6.795E+00	-0.219

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874843      *
* Acquisition date : 13-JUL-2005 20:15:02 Detector SN#    : 9912854        *
* Detector ID       : GAMMA4              Sensitivity     : 3.000          *
* Geometry          : 2L_MB               Energy tolerance: 2.000          *
* Elapsed live time:    0 12:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 12:01:28.33     Half life ratio :  8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 12-JUL-2005 00:00:00 Nuclide Library :                *
* Sample ID         : G1200874843          Analyst initials: AKB            *
* Batch Number      : 437153               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* Standard Weight   :   0.00000                                             *
* CALIB. DATE/TIME : 14-JAN-2005 13:51:59 MS Isotope      :                 *
* MSD DPM           :    0.000            MSD Isotope     :                 *
* LCS DPM           :    0.000            LCS Isotope     :                 *
* LCSD DPM          :    0.000            LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
CR-51	7.145E+00	1.002E+01	1.544E+01	0.000E+00
NB-94	1.082E+00	1.205E+00	1.560E+00	0.000E+00
SN-113	1.271E+00	1.447E+00	2.146E+00	0.000E+00
SN-117M	2.890E-01	1.245E+00	1.521E+00	0.000E+00
TE-123M	2.701E-01	1.163E+00	1.490E+00	0.000E+00
CE-141	4.436E-01	2.725E+00	2.664E+00	0.000E+00
CE-144	4.659E+00	9.972E+00	1.122E+01	0.000E+00
TL-208	7.033E-01	2.666E+00	1.908E+00	0.000E+00
BI-210	9.713E+01	5.287E+02	4.864E+02	0.000E+00
PB-210	9.713E+01	5.287E+02	4.864E+02	0.000E+00
BI-211	6.147E-01	1.432E+01	1.053E+01	0.000E+00
TH-228	3.838E+00	4.473E+00	2.973E+00	0.000E+00
PA-234M	2.720E+02	3.317E+02	2.223E+02	0.000E+00
TH-234	4.756E+01	1.175E+02	9.194E+01	0.000E+00
U-235	2.232E+00	1.260E+01	1.225E+01	0.000E+00
NP-237	9.507E+00	8.732E+00	1.279E+01	0.000E+00
U-238	4.756E+01	1.175E+02	9.194E+01	0.000E+00

CM-247	1.003E+00	1.492E+00	1.987E+00	0.000E+00
ANH-511	2.743E+00	3.853E+00	1.459E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Act error) Ided	MDA (pCi/LITER	)	
BE-7	-2.836E+00	8.400E+00	1.452E+01	0.000E+00	NOT IDENT.
NA-22	-6.389E-01	1.185E+00	1.689E+00	0.000E+00	NOT IDENT.
NA-24	4.651E-01	1.026E+01	1.847E+01	0.000E+00	NOT IDENT.
CL-26	-4.094E-02	1.051E+00	1.936E+00	0.000E+00	FAIL ABUN
K-40	0.000E+00	1.264E+01	2.616E+01	0.000E+00	NOT IDENT.
SC-46	-2.616E-01	1.041E+00	1.742E+00	0.000E+00	NOT IDENT.
V-48	1.910E-01	1.262E+00	2.011E+00	0.000E+00	NOT IDENT.
MN-54	5.370E-01	9.891E-01	1.770E+00	0.000E+00	NOT IDENT.
CO-56	3.847E-01	1.032E+00	1.819E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	5.050E+05	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-3.869E-02	8.015E-01	1.400E+00	0.000E+00	FAIL ABUN
CO-58	-9.556E-01	1.041E+00	1.651E+00	0.000E+00	NOT IDENT.
FE-59	-5.422E-02	1.843E+00	3.304E+00	0.000E+00	FAIL ABUN
CO-60	-5.377E-01	1.050E+00	1.775E+00	0.000E+00	NOT IDENT.
ZN-65	8.603E-01	2.236E+00	4.104E+00	0.000E+00	NOT IDENT.
SE-75	-3.941E-01	1.372E+00	2.281E+00	0.000E+00	FAIL ABUN
KR-85	0.000E+00	2.469E+02	4.807E+02	0.000E+00	NOT IDENT.
SR-85	0.000E+00	1.104E+00	2.148E+00	0.000E+00	NOT IDENT.
Y-88	1.035E-01	1.160E+00	1.892E+00	0.000E+00	NOT IDENT.
W-91	9.646E-01	8.883E-01	1.658E+00	0.000E+00	NOT IDENT.
NB-95	7.591E-01	1.028E+00	1.861E+00	0.000E+00	NOT IDENT.
NB-95M	1.887E+00	5.034E+00	7.791E+00	0.000E+00	NOT IDENT.
ZR-95	4.194E-01	1.553E+00	2.761E+00	0.000E+00	NOT IDENT.
MO-99	1.594E+00	1.493E+00	2.672E+00	0.000E+00	NOT IDENT.
TC-99M	2.659E+02	2.492E+02	4.457E+02	0.000E+00	NOT IDENT.
RU-103	-4.330E-01	9.983E-01	1.710E+00	0.000E+00	NOT IDENT.
RH-106	4.601E+00	9.942E+00	1.770E+01	0.000E+00	FAIL ABUN
RU-106	4.146E+00	9.926E+00	1.762E+01	0.000E+00	NOT IDENT.
AG-108M	4.874E-01	9.893E-01	1.794E+00	0.000E+00	NOT IDENT.
CD-109	4.012E-01	2.642E+01	4.234E+01	0.000E+00	NOT IDENT.
AG-110M	4.455E-02	9.473E-01	1.653E+00	0.000E+00	NOT IDENT.
CD-115	1.082E+00	5.370E+00	9.557E+00	0.000E+00	NOT IDENT.
SN-115	-1.085E+01	7.311E+01	1.238E+02	0.000E+00	FAIL ABUN
SB-124	2.036E+00	2.105E+00	4.314E+00	0.000E+00	FAIL ABUN
SB-125	-3.381E-01	2.702E+00	4.758E+00	0.000E+00	FAIL ABUN
TE-125M	1.799E+01	2.679E+02	4.716E+02	0.000E+00	NOT IDENT.
I-126	-1.644E+00	2.541E+00	4.207E+00	0.000E+00	NOT IDENT.
SB-126	-2.323E-01	2.155E+00	3.231E+00	0.000E+00	NOT IDENT.
SN-126	1.853E+00	2.665E+00	4.398E+00	0.000E+00	FAIL ABUN
SB-127	-2.356E+00	4.033E+00	5.756E+00	0.000E+00	FAIL ABUN
I-131	-3.336E-01	1.258E+00	2.056E+00	0.000E+00	NOT IDENT.
I-132	0.000E+00	2.129E+06	0.000E+00	0.000E+00	SHORT HLIF
TE-132	5.527E-01	1.374E+00	2.366E+00	0.000E+00	NOT IDENT.
BA-133	-1.209E-01	1.540E+00	2.264E+00	0.000E+00	NOT IDENT.
I-133	3.894E+00	5.183E+00	9.480E+00	0.000E+00	FAIL ABUN
CS-134	6.745E-01	1.103E+00	1.991E+00	0.000E+00	FAIL ABUN
CS-135	-1.799E+00	5.181E+00	8.576E+00	0.000E+00	NOT IDENT.
I-135	1.785E+02	6.461E+02	1.190E+03	0.000E+00	FAIL ABUN
CS-136	-6.850E-01	1.374E+00	2.367E+00	0.000E+00	FAIL ABUN
BA-137M	4.748E-01	9.882E-01	1.774E+00	0.000E+00	NOT IDENT.
CS-137	5.011E-01	1.045E+00	1.875E+00	0.000E+00	NOT IDENT.

CE-139	-4.159E-01	9.331E-01	1.580E+00	0.000E+00	NOT IDENT.
BA-140	5.298E-01	3.869E+00	6.827E+00	0.000E+00	NOT IDENT.
LA-140	1.438E+00	3.085E+00	5.095E+00	0.000E+00	FAIL ABUN
CE-143	2.022E-02	5.681E+00	9.521E+00	0.000E+00	FAIL ABUN
PM-144	1.214E+00	9.903E-01	1.839E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	8.161E+40	0.000E+00	0.000E+00	SHORT HLIF
PM-146	2.556E-02	1.230E+00	2.182E+00	0.000E+00	NOT IDENT.
ND-147	-5.108E+00	7.672E+00	1.286E+01	0.000E+00	FAIL ABUN
PM-147	-1.234E+06	1.697E+06	2.890E+06	0.000E+00	NOT IDENT.
PM-149	-5.694E+00	5.101E+01	8.513E+01	0.000E+00	NOT IDENT.
EU-152	3.009E-01	3.336E+00	5.565E+00	0.000E+00	NOT IDENT.
GD-153	1.015E+00	2.571E+00	4.597E+00	0.000E+00	FAIL ABUN
EU-154	-1.803E+00	3.334E+00	4.748E+00	0.000E+00	FAIL ABUN
EU-155	1.439E-02	3.483E+00	6.139E+00	0.000E+00	FAIL ABUN
TB-160	4.518E+00	3.448E+00	6.522E+00	0.000E+00	NOT IDENT.
TM-171	1.016E+03	1.170E+03	1.967E+03	0.000E+00	NOT IDENT.
HF-181	-7.030E-01	1.039E+00	1.760E+00	0.000E+00	FAIL ABUN
TA-182	4.225E+00	4.423E+00	8.430E+00	0.000E+00	NOT IDENT.
IR-192	1.190E-01	1.030E+00	1.730E+00	0.000E+00	NOT IDENT.
HG-203	-6.324E-02	1.080E+00	1.810E+00	0.000E+00	FAIL ABUN
BI-207	8.196E-02	1.287E+00	2.334E+00	0.000E+00	FAIL ABUN
PB-211	2.510E+01	4.047E+01	4.821E+01	0.000E+00	FAIL ABUN
BI-212	4.358E+00	8.325E+00	1.486E+01	0.000E+00	NOT IDENT.
PB-212	3.838E+00	4.473E+00	4.011E+00	0.000E+00	FAIL ABUN
PB-214	3.142E+00	2.341E+00	4.296E+00	0.000E+00	NOT IDENT.
BI-214	2.138E-01	4.982E+00	4.305E+00	0.000E+00	FAIL ABUN
RN-219	-1.908E+00	1.337E+01	2.079E+01	0.000E+00	NOT IDENT.
RA-223	-1.424E+01	2.468E+01	3.501E+01	0.000E+00	FAIL ABUN
RA-224	1.652E+01	2.325E+01	3.640E+01	0.000E+00	NOT IDENT.
RA-226	3.142E+00	2.341E+00	4.296E+00	0.000E+00	FAIL ABUN
AC-227	8.273E+00	1.546E+01	2.158E+01	0.000E+00	FAIL ABUN
TH-227	8.153E+00	1.525E+01	2.127E+01	0.000E+00	FAIL ABUN
AC-228	4.081E+00	4.357E+00	7.821E+00	0.000E+00	FAIL ABUN
RA-228	4.081E+00	4.357E+00	7.821E+00	0.000E+00	FAIL ABUN
TH-229	9.471E+00	1.603E+01	2.801E+01	0.000E+00	FAIL ABUN
TH-230	3.142E+00	2.341E+00	4.296E+00	0.000E+00	FAIL ABUN
PA-231	3.938E+01	5.092E+01	8.803E+01	0.000E+00	FAIL ABUN
TH-231	-2.978E+00	6.107E+00	1.004E+01	0.000E+00	FAIL ABUN
TH-232	3.830E+00	4.463E+00	4.002E+00	0.000E+00	FAIL ABUN
PA-233	-1.243E+00	2.206E+00	3.578E+00	0.000E+00	NOT IDENT.
PA-234	-4.248E+00	7.446E+00	1.280E+01	0.000E+00	FAIL ABUN
U-234	7.530E+00	4.494E+00	7.987E+00	0.000E+00	FAIL ABUN
NP-239	1.997E+00	6.346E+00	1.123E+01	0.000E+00	NOT IDENT.
AM-241	-2.745E+00	7.022E+00	1.128E+01	0.000E+00	NOT IDENT.
AM-242	-2.114E+01	7.285E+01	1.271E+02	0.000E+00	NOT IDENT.
CF-249	-9.843E-01	1.430E+00	1.982E+00	0.000E+00	NOT IDENT.
CF-251	2.870E+00	4.124E+00	7.254E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:42:42.63

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874843.CNF;1
Sample date : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 20:15:02
Sample ID : G1200874843 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA4 Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00 Elapsed real time: 0 12:01:28.33 0.2%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 9912854
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	47.27	105	425	2.08	95.50	91	8	2.43E-03	35.5	
2	0	63.19	138	444	1.09	127.38	124	8	3.20E-03	27.6	
3	0	84.59	61	299	1.00	170.26	168	5	1.41E-03	44.5	
4	0	92.80	426	469	1.20	186.71	184	8	9.86E-03	10.0	
5	0	135.18	36	495	1.21	271.62	269	8	8.44E-04	106.8	
6	0	143.66	52	422	0.97	288.61	286	7	1.21E-03	66.6	
7	0	159.47	16	426	1.28	320.27	317	7	3.71E-04	215.3	
8	0	185.64	359	707	1.15	372.71	366	13	8.31E-03	16.2	
9	0	205.22	41	294	1.14	411.95	410	6	9.49E-04	67.9	
10	0	238.70	238	532	1.42	479.01	473	12	5.50E-03	20.5	
11	0	257.66	29	264	1.26	517.01	515	7	6.80E-04	93.1	
12	0	294.96	67	336	0.94	591.74	587	10	1.54E-03	53.0	
13	0	320.32	33	188	1.27	642.55	640	7	7.75E-04	70.0	
14	0	328.12	14	255	0.79	658.17	657	8	3.33E-04	193.4	
15	0	337.85	50	257	1.76	677.67	673	9	1.15E-03	59.7	
16	0	352.26	107	197	0.76	706.55	703	9	2.47E-03	25.7	
17	0	391.46	36	139	1.83	785.08	782	7	8.35E-04	56.8	
18	0	404.47	32	154	1.38	811.14	808	9	7.31E-04	74.3	
19	0	418.08	15	100	1.20	838.42	837	6	3.56E-04	105.5	
20	0	446.17	47	142	1.25	894.71	890	10	1.08E-03	50.0	
21	0	462.81	35	80	1.16	928.05	925	6	8.12E-04	43.6	
22	0	510.94	897	326	2.59	1024.47	1015	22	2.08E-02	6.1	
23	4	566.74	41	74	1.58	1136.28	1133	20	9.56E-04	41.1	1.19E+00
24	4	569.64	55	136	2.26	1142.09	1133	20	1.28E-03	49.2	
25	0	583.80	94	147	1.20	1170.48	1165	12	2.18E-03	28.3	
26	0	588.47	22	50	1.38	1179.83	1176	6	5.04E-04	56.8	
27	0	609.29	81	90	1.32	1221.54	1218	7	1.88E-03	22.3	
28	2	689.14	29	74	1.98	1381.55	1374	41	6.71E-04	69.4	3.55E+00
29	2	701.34	32	88	1.64	1406.00	1374	41	7.38E-04	55.6	
30	2	704.33	30	56	1.64	1412.00	1374	41	7.00E-04	38.4	
31	0	712.76	94	196	8.88	1428.89	1419	23	2.16E-03	40.2	
32	0	802.25	48	89	2.07	1608.22	1604	12	1.12E-03	41.3	
33	0	860.72	41	49	1.52	1725.38	1722	9	9.58E-04	34.3	
34	0	865.16	18	47	0.99	1734.28	1731	8	4.25E-04	68.3	
35	0	870.45	24	44	0.76	1744.88	1741	8	5.64E-04	51.9	
36	0	873.64	12	32	1.32	1751.27	1748	6	2.84E-04	77.9	
37	0	911.26	53	98	4.84	1826.66	1818	14	1.23E-03	42.0	
38	0	927.19	25	61	0.55	1858.59	1854	11	5.79E-04	63.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	968.77	10	61	1.50	1941.92	1939	9	2.20E-04	151.4	
40	0	985.68	21	77	0.91	1975.80	1970	15	4.82E-04	95.2	
41	0	1002.52	51	131	5.31	2009.55	2002	23	1.17E-03	60.7	
42	0	1033.36	37	30	3.85	2071.36	2066	12	8.49E-04	34.2	
43	0	1141.62	18	30	0.66	2288.32	2284	9	4.14E-04	61.0	
44	0	1277.34	9	23	1.03	2560.31	2559	8	2.03E-04	99.3	
45	0	1290.15	62	132	22.25	2585.99	2566	48	1.43E-03	68.2	
46	0	1323.83	21	46	1.96	2653.50	2648	14	4.90E-04	71.1	
47	0	1443.83	15	17	1.43	2894.01	2891	6	3.46E-04	51.4	
48	0	1460.63	50	51	1.11	2927.70	2923	16	1.16E-03	35.2	
49	0	1539.62	7	21	4.29	3086.02	3084	10	1.53E-04	138.7	
50	3	1548.30	35	17	2.83	3103.41	3093	54	8.13E-04	32.0	1.51E+00
51	3	1563.75	26	17	2.84	3134.38	3093	54	6.12E-04	43.5	
52	1	1577.50	19	26	2.36	3161.94	3151	24	4.29E-04	66.4	2.88E+00
53	1	1582.30	19	22	2.36	3171.57	3151	24	4.33E-04	41.4	
54	0	1592.26	18	48	0.68	3191.54	3187	17	4.16E-04	90.6	
55	0	1616.52	5	15	1.36	3240.15	3236	6	1.22E-04	124.2	
56	0	1630.05	20	5	0.59	3267.28	3264	9	4.51E-04	30.0	
57	0	1660.54	10	6	1.26	3328.41	3326	6	2.29E-04	50.6	
58	0	1708.05	14	6	0.96	3423.63	3421	7	3.24E-04	40.6	
59	0	1718.29	18	19	1.15	3444.16	3437	13	4.14E-04	56.0	
60	0	1764.34	36	30	1.03	3536.47	3530	15	8.33E-04	37.1	
61	0	1793.65	12	4	1.71	3595.23	3593	6	2.76E-04	40.1	
62	0	1831.24	20	16	3.94	3670.57	3664	13	4.57E-04	47.7	
63	0	1857.09	9	6	1.30	3722.40	3720	7	2.18E-04	52.3	
64	0	1871.11	5	9	1.22	3750.50	3747	6	1.16E-04	104.9	

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:42:47.53

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**********************************************************************
*                          GENERAL ENG. LABS, LLC.                   *
*                              2040 Savage Road                      *
*                            Charleston, SC 29414                    *
**********************************************************************
Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874843.CNF;1
Sample date       : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 20:15:02
Sample ID         : G1200874843          Sample quantity  : 2.00000E+00 LITER
Detector name     : GAMMA4               Detector geometry: 2L_MB
Elapsed live time: 0 12:00:00.00         Elapsed real time: 0 12:01:28.33  0.2%
Energy tolerance  : 2.00000 KEV          Analyst Initials : AKB
Abundance limit   : 75.00000             Sensitivity      : 3.00000
Batch ID          : 437153               Detector SN#     : 9912854
Matrix Spike DPM :                       LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
CR-51	320.08	33	9.83*	1.571E+00	6.780E+00	7.145E+00	140.17
B-94	702.63	32	100.00*	9.227E-01	1.082E+00	1.082E+00	111.39
	871.10	24	100.00	7.751E-01	9.834E-01	9.834E-01	104.25
SN-113	391.69	36	64.90*	1.386E+00	1.255E+00	1.271E+00	113.87
SN-117M	156.02	------	2.11	2.244E+00	------ Line Not Found		------
	158.56	16	86.40*	2.232E+00	2.598E-01	2.890E-01	430.63
TE-123M	159.00	16	84.10*	2.232E+00	2.669E-01	2.701E-01	430.63
CE-141	145.44	17	48.40*	2.274E+00	4.841E-01	5.062E-01	564.19
CE-144	133.51	36	10.80*	2.278E+00	4.636E+00	4.659E+00	214.03
TL-208	75.00	------	3.43	1.228E+00	------ Line Not Found		------
	277.35	------	6.80	1.714E+00	------ Line Not Found		------
	510.84	102	21.60	1.162E+00	1.270E+01	1.272E+01	140.74
	583.14	20	84.20*	1.058E+00	7.018E-01	7.033E-01	379.10
	763.30	------	1.64	8.631E-01	------ Line Not Found		------
	860.37	41	12.46	7.824E-01	1.327E+01	1.330E+01	69.32
	1093.90	------	0.37	6.383E-01	------ Line Not Found		------
BI-210	46.50	18	4.05*	1.420E-01	9.711E+01	9.713E+01	544.36
PB-210	46.50	18	4.05*	1.420E-01	9.711E+01	9.713E+01	544.36
PB-211	351.07	4	12.94*	1.481E+00	6.147E-01	6.147E-01	2329.73
TH-228	84.40	61	1.21	1.591E+00	9.900E+01	9.921E+01	90.05
	238.60	102	44.60*	1.869E+00	3.830E+00	3.838E+00	116.53
	300.10	------	3.41	1.635E+00	------ Line Not Found		------
PA-234M	766.40	------	0.21	8.603E-01	------ Line Not Found		------
	1001.03	51	0.85*	6.877E-01	2.720E+02	2.720E+02	121.94
TH-234	63.29	41	3.80*	7.063E-01	4.756E+01	4.756E+01	247.10
	92.38	33	5.41	1.834E+00	1.043E+01	1.043E+01	379.12
	112.81	------	0.24	2.176E+00	------ Line Not Found		------
U-235	89.95	------	2.70	1.757E+00	------ Line Not Found		------
	93.35	33	4.50	1.834E+00	1.254E+01	1.254E+01	379.73
	105.00	------	2.10	2.079E+00	------ Line Not Found		------
	143.76	17	10.50*	2.274E+00	2.232E+00	2.232E+00	564.39
	163.33	------	4.70	2.218E+00	------ Line Not Found		------

Sample ID : G1200874843 Acquisition date : 13-JUL-2005 20:15:02

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
	185.71	19	54.00	2.119E+00	5.146E-01	5.146E-01	764.06
	205.31	------	5.00	2.024E+00	------ Line Not Found		------
NP-237	86.48	61	12.60*	1.591E+00	9.507E+00	9.507E+00	91.85
	95.87	------	2.60	1.908E+00	------ Line Not Found		------
U-238	63.29	41	3.80*	7.063E-01	4.756E+01	4.756E+01	247.10
CM-247	278.00	------	3.40	1.712E+00	------ Line Not Found		------
	287.40	------	2.00	1.678E+00	------ Line Not Found		------
	402.60	32	72.60*	1.357E+00	1.003E+00	1.003E+00	148.80
ANH-511	511.00	102	100.00*	1.162E+00	2.743E+00	2.743E+00	140.50

Flag: "*" = Keyline

Sample ID : G1200874843 Acquisition date : 13-JUL-2005 20:15:02

Total number of lines in spectrum 59
Number of unidentified lines 24
Number of lines tentatively identified by NID 35 59.32%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CR-51	27.70D	1.05	6.780E+00	7.145E+00	10.02E+00	140.17	
NB-94	20300.00Y	1.00	1.082E+00	1.082E+00	1.205E+00	111.39	
SN-113	115.10D	1.01	1.255E+00	1.271E+00	1.447E+00	113.87	
SN-117M	13.60D	1.11	2.598E-01	2.890E-01	12.45E-01	430.63	
TE-123M	119.70D	1.01	2.669E-01	2.701E-01	11.63E-01	430.63	
CE-141	32.50D	1.05	4.841E-01	5.062E-01	28.56E-01	564.19	
CE-144	284.30D	1.01	4.636E+00	4.659E+00	9.972E+00	214.03	
TL-208	1.91Y	1.00	7.018E-01	7.033E-01	26.66E-01	379.10	
BI-210	22.26Y	1.00	9.711E+01	9.713E+01	52.87E+01	544.36	
PB-210	22.26Y	1.00	9.711E+01	9.713E+01	52.87E+01	544.36	
BI-211	7.04E+08Y	1.00	6.147E-01	6.147E-01	143.2E-01	2329.73	
TH-228	1.91Y	1.00	3.830E+00	3.838E+00	4.473E+00	116.53	
PA-234M	4.47E+09Y	1.00	2.720E+02	2.720E+02	3.317E+02	121.94	
TH-234	4.47E+09Y	1.00	4.756E+01	4.756E+01	11.75E+01	247.10	
U-235	7.04E+08Y	1.00	2.232E+00	2.232E+00	12.60E+00	564.39	
NP-237	2.14E+06Y	1.00	9.507E+00	9.507E+00	8.732E+00	91.85	
U-238	4.47E+09Y	1.00	4.756E+01	4.756E+01	11.75E+01	247.10	
CM-247	1.56E+07Y	1.00	1.003E+00	1.003E+00	1.492E+00	148.80	
ANH-511	1.00E+09Y	1.00	2.743E+00	2.743E+00	3.853E+00	140.50	
			---------	---------			
	Total Activity :		5.968E+02	5.973E+02			

Grand Total Activity : 5.968E+02 5.973E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1200874843
Acquisition date : 13-JUL-2005 20:15:02

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	257.66	29	264	1.26	517.01	515	7	6.80E-04	****	1.79E+00	T
0	328.12	14	255	0.79	658.17	657	8	3.33E-04	****	1.55E+00	T
0	337.85	50	257	1.76	677.67	673	9	1.15E-03	****	1.52E+00	T
0	418.08	15	100	1.20	838.42	837	6	3.56E-04	****	1.33E+00	T
0	446.17	47	142	1.25	894.71	890	10	1.08E-03	99.9	1.27E+00	T
0	462.81	35	80	1.16	928.05	925	6	8.12E-04	87.3	1.24E+00	T
4	566.74	41	74	1.58	1136.28	1133	20	9.56E-04	82.2	1.08E+00	
4	569.64	55	136	2.26	1142.09	1133	20	1.28E-03	98.5	1.08E+00	T
0	588.47	22	50	1.38	1179.83	1176	6	5.04E-04	****	1.05E+00	
2	689.14	29	74	1.98	1381.55	1374	41	6.71E-04	****	9.35E-01	
0	712.76	94	196	8.88	1428.89	1419	23	2.16E-03	80.4	9.11E-01	T
0	802.25	48	89	2.07	1608.22	1604	12	1.12E-03	82.7	8.29E-01	T
0	865.16	18	47	0.99	1734.28	1731	8	4.25E-04	****	7.79E-01	
0	873.64	12	32	1.32	1751.27	1748	6	2.84E-04	****	7.73E-01	T
0	927.19	25	61	0.55	1858.59	1854	11	5.79E-04	****	7.35E-01	T
0	968.77	10	61	1.50	1941.92	1939	9	2.20E-04	****	7.08E-01	T
0	985.68	21	77	0.91	1975.80	1970	15	4.82E-04	****	6.98E-01	
0	1033.36	37	30	3.85	2071.36	2066	12	8.49E-04	68.3	6.70E-01	
0	1141.62	18	30	0.66	2288.32	2284	9	4.14E-04	****	6.16E-01	
0	1277.34	9	23	1.03	2560.31	2559	8	2.03E-04	****	5.61E-01	
0	1290.15	62	132	22.25	2585.99	2566	48	1.43E-03	****	5.56E-01	T
0	1323.83	21	46	1.96	2653.50	2648	14	4.90E-04	****	5.45E-01	
0	1443.83	15	17	1.43	2894.01	2891	6	3.46E-04	****	5.10E-01	T
0	1539.62	7	21	4.29	3086.02	3084	10	1.53E-04	****	4.87E-01	
3	1548.30	35	17	2.83	3103.41	3093	54	8.13E-04	64.0	4.86E-01	
3	1563.75	26	17	2.84	3134.38	3093	54	6.12E-04	87.0	4.83E-01	
1	1577.50	19	26	2.36	3161.94	3151	24	4.29E-04	****	4.80E-01	
1	1582.30	19	22	2.36	3171.57	3151	24	4.33E-04	82.8	4.79E-01	
0	1592.26	18	48	0.68	3191.54	3187	17	4.16E-04	****	4.77E-01	
0	1616.52	5	15	1.36	3240.15	3236	6	1.22E-04	****	4.73E-01	
0	1630.05	20	5	0.59	3267.28	3264	9	4.51E-04	59.9	4.70E-01	
0	1660.54	10	6	1.26	3328.41	3326	6	2.29E-04	****	4.65E-01	
0	1708.05	7	6	0.96	3423.63	3421	7	1.57E-04	****	4.58E-01	T
0	1718.29	18	19	1.15	3444.16	3437	13	4.14E-04	****	4.57E-01	
0	1764.34	36	30	1.03	3536.47	3530	15	8.33E-04	74.2	4.51E-01	
0	1793.65	12	4	1.71	3595.23	3593	6	2.76E-04	80.1	4.48E-01	
0	1831.24	20	16	3.94	3670.57	3664	13	4.57E-04	95.4	4.44E-01	
0	1857.09	9	6	1.30	3722.40	3720	7	2.18E-04	****	4.42E-01	
0	1871.11	5	9	1.22	3750.50	3747	6	1.16E-04	****	4.40E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:42:56.33

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874843.CNF;1
Acquisition date : 13-JUL-2005 20:15:02 Detector SN# : 9912854
Detector ID : GAMMA4 Sensitivity : 3.00000
Geometry : 2L_MB Energy tolerance: 2.00000
Elapsed live time: 0 12:00:00.00 Abundance limit : 75.00000
Elapsed real time: 0 12:01:28.33 Half life ratio : 8.00000

SAMPLE DATA

Sample date : 12-JUL-2005 00:00:00 Nuclide Library : EPI
Sample ID : G1200874843 Analyst initials: AKB
Batch Number : 437153 Sample Quantity : 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME : 14-JAN-2005 13:51:59.6 MS Isotope :
MSD DPM : MSD Isotope :
LCS DPM : LCS Isotope :

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CR-51	7.145E+00	1.002E+01	1.544E+01	1.171E+00	0.463
NB-94	1.082E+00	1.205E+00	1.560E+00	1.060E-01	0.693
SN-113	1.271E+00	1.447E+00	2.146E+00	1.563E-01	0.592
SN-117M	2.890E-01	1.245E+00	1.521E+00	9.818E-02	0.190
TE-123M	2.701E-01	1.163E+00	1.490E+00	9.715E-02	0.181
CE-141	4.436E-01	2.725E+00	2.664E+00	1.815E-01	0.166
CE-144	4.659E+00	9.972E+00	1.122E+01	1.644E+00	0.415
TL-208	7.033E-01	2.666E+00	1.908E+00	1.420E-01	0.369
BI-210	9.713E+01	5.287E+02	4.864E+02	5.354E+01	0.200
PB-210	9.713E+01	5.287E+02	4.864E+02	5.354E+01	0.200
BI-211	6.147E-01	1.432E+01	1.053E+01	7.963E-01	0.058
TH-228	3.838E+00	4.473E+00	2.973E+00	2.415E-01	1.291
PA-234M	2.720E+02	3.317E+02	2.223E+02	2.358E+01	1.224
TH-234	4.756E+01	1.175E+02	9.194E+01	1.750E+01	0.517
U-235	2.232E+00	1.260E+01	1.225E+01	2.035E+00	0.182
NP-237	9.507E+00	8.732E+00	1.279E+01	2.857E+00	0.743
U-238	4.756E+01	1.175E+02	9.194E+01	1.750E+01	0.517
CM-247	1.003E+00	1.492E+00	1.987E+00	1.386E-01	0.504

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
ANH-511	2.743E+00	3.853E+00	1.459E+00	1.008E-01	1.880

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-2.836E+00		8.400E+00	1.452E+01	1.129E+00	-0.195
NA-22	-6.389E-01		1.185E+00	1.689E+00	1.158E-01	-0.378
NA-24	4.651E-01		1.026E+01	1.847E+01	1.177E+00	0.025
AL-26	-4.094E-02		1.051E+00	1.936E+00	1.138E-01	-0.021
K-40	3.003E+01		1.264E+01	2.616E+01	1.729E+00	1.148
SC-46	-2.616E-01		1.041E+00	1.742E+00	1.709E-01	-0.150
V-48	1.910E-01		1.262E+00	2.011E+00	1.909E-01	0.095
MN-54	5.370E-01		9.891E-01	1.770E+00	1.570E-01	0.303
CO-56	3.847E-01		1.032E+00	1.819E+00	1.650E-01	0.212
CO-57	-3.869E-02		8.015E-01	1.400E+00	1.003E-01	-0.028
CO-58	-9.556E-01		1.041E+00	1.651E+00	1.402E-01	-0.579
FE-59	-5.422E-02		1.843E+00	3.304E+00	3.057E-01	-0.016
CO-60	-5.377E-01		1.050E+00	1.775E+00	1.106E-01	-0.303
ZN-65	8.603E-01		2.236E+00	4.104E+00	3.445E-01	0.210
SE-75	-3.941E-01		1.372E+00	2.281E+00	1.584E-01	-0.173
KR-85	8.316E+02		2.469E+02	4.807E+02	3.317E+01	1.730
SR-85	3.717E+00		1.104E+00	2.148E+00	1.482E-01	1.730
Y-88	1.035E-01		1.160E+00	1.892E+00	1.103E-01	0.055
Y-91	9.646E-01		8.883E-01	1.658E+00	1.122E-01	0.582
NB-95	7.591E-01		1.028E+00	1.861E+00	1.442E-01	0.408
NB-95M	1.887E+00		5.034E+00	7.791E+00	6.484E-01	0.242
ZR-95	4.194E-01		1.553E+00	2.761E+00	2.370E-01	0.152
MO-99	1.594E+00		1.493E+00	2.672E+00	1.816E-01	0.596
TC-99M	2.659E+02		2.492E+02	4.457E+02	3.427E+01	0.596
RU-103	-4.330E-01		9.983E-01	1.710E+00	2.258E-01	-0.253
RH-106	4.601E+00		9.942E+00	1.770E+01	1.144E+00	0.260
RU-106	4.146E+00		9.926E+00	1.762E+01	2.128E+00	0.235
AG-108M	4.874E-01		9.893E-01	1.794E+00	1.329E-01	0.272
CD-109	4.012E-01		2.642E+01	4.234E+01	3.622E+00	0.009
AG-110M	4.455E-02		9.473E-01	1.653E+00	1.089E-01	0.027
CD-115	1.082E+00		5.370E+00	9.557E+00	6.560E-01	0.113
SN-115	-1.085E+01		7.311E+01	1.238E+02	1.213E+01	-0.088
SB-124	2.036E+00		2.105E+00	4.314E+00	2.834E-01	0.472
SB-125	-3.381E-01		2.702E+00	4.758E+00	3.424E-01	-0.071
TE-125M	1.799E+01		2.679E+02	4.716E+02	4.335E+01	0.038
I-126	-1.644E+00		2.541E+00	4.207E+00	2.642E-01	-0.391
SB-126	-2.323E-01		2.155E+00	3.231E+00	2.281E-01	-0.072
I-126	1.853E+00		2.665E+00	4.398E+00	3.759E-01	0.421
SB-127	-2.356E+00		4.033E+00	5.756E+00	4.025E-01	-0.409
I-131	-3.336E-01		1.258E+00	2.056E+00	1.547E-01	-0.162
TE-132	5.527E-01		1.374E+00	2.366E+00	3.125E-01	0.234
BA-133	-1.209E-01		1.540E+00	2.264E+00	2.767E-01	-0.053

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
I-133	3.894E+00		5.183E+00	9.480E+00	6.733E-01	0.411
CS-134	6.745E-01		1.103E+00	1.991E+00	1.648E-01	0.339
CS-135	-1.799E+00		5.181E+00	8.576E+00	7.314E-01	-0.210
I-135	1.785E+02		6.461E+02	1.190E+03	9.147E+01	0.150
CS-136	-6.850E-01		1.374E+00	2.367E+00	2.214E-01	-0.289
BA-137M	4.748E-01		9.882E-01	1.774E+00	1.102E-01	0.268
CS-137	5.011E-01		1.045E+00	1.875E+00	1.170E-01	0.267
CE-139	-4.159E-01		9.331E-01	1.580E+00	1.010E-01	-0.263
BA-140	5.298E-01		3.869E+00	6.827E+00	2.234E+00	0.078
LA-140	1.438E+00		3.085E+00	5.095E+00	3.166E-01	0.282
CE-143	2.022E-02		5.681E+00	9.521E+00	1.935E+00	0.002
PM-144	1.214E+00		9.903E-01	1.839E+00	1.233E-01	0.660
PM-146	2.556E-02		1.230E+00	2.182E+00	2.065E-01	0.012
ND-147	-5.108E+00		7.672E+00	1.286E+01	1.802E+00	-0.397
PM-147	-1.234E+06		1.697E+06	2.890E+06	2.066E+05	-0.427
PM-149	-5.694E+00		5.101E+01	8.513E+01	1.248E+01	-0.067
EU-152	3.009E-01		3.336E+00	5.565E+00	4.262E-01	0.054
GD-153	1.015E+00		2.571E+00	4.597E+00	3.542E-01	0.221
EU-154	-1.803E+00		3.334E+00	4.748E+00	4.760E-01	-0.380
EU-155	1.439E-02		3.483E+00	6.139E+00	4.586E-01	0.002
TB-160	4.518E+00		3.448E+00	6.522E+00	6.284E-01	0.693
YB-171	1.016E+03		1.170E+03	1.967E+03	1.941E+02	0.517
HF-181	-7.030E-01		1.039E+00	1.760E+00	1.225E-01	-0.399
TA-182	4.225E+00		4.423E+00	8.430E+00	6.194E-01	0.501
IR-192	1.190E-01		1.030E+00	1.730E+00	1.220E-01	0.069
HG-203	-6.324E-02		1.080E+00	1.810E+00	1.312E-01	-0.035
BI-207	8.196E-02		1.287E+00	2.334E+00	2.072E-01	0.035
PB-211	2.510E+01	+	4.047E+01	4.821E+01	3.011E+01	0.521
BI-212	4.358E+00		8.325E+00	1.486E+01	1.304E+00	0.293
PB-212	3.838E+00	+	4.473E+00	4.011E+00	3.258E-01	0.957
BI-214	3.142E+00		2.341E+00	4.296E+00	3.582E-01	0.731
PB-214	2.138E-01	+	4.982E+00	4.305E+00	3.956E-01	0.050
RN-219	-1.908E+00		1.337E+01	2.079E+01	2.941E+00	-0.092
RA-223	-1.424E+01		2.468E+01	3.501E+01	5.948E+00	-0.407
RA-224	1.652E+01		2.325E+01	3.640E+01	2.470E+00	0.454
RA-226	3.142E+00		2.341E+00	4.296E+00	3.582E-01	0.731
AC-227	8.273E+00	+	1.546E+01	2.158E+01	3.150E+00	0.383
TH-227	8.153E+00	+	1.525E+01	2.127E+01	3.678E+00	0.383
RA-228	4.081E+00		4.357E+00	7.821E+00	9.588E-01	0.522
AC-228	4.081E+00		4.357E+00	7.821E+00	9.588E-01	0.522
TH-229	9.471E+00		1.603E+01	2.801E+01	1.825E+00	0.338
TH-230	3.142E+00		2.341E+00	4.296E+00	3.582E-01	0.731
PA-231	3.938E+01		5.092E+01	8.803E+01	1.260E+01	0.447
TH-231	-2.978E+00		6.107E+00	1.004E+01	8.232E-01	-0.297
TH-232	3.830E+00	+	4.463E+00	4.002E+00	3.251E-01	0.957
PA-233	-1.243E+00		2.206E+00	3.578E+00	2.620E-01	-0.347
PA-234	-4.248E+00		7.446E+00	1.280E+01	2.470E+00	-0.332
U-234	7.530E+00		4.494E+00	7.987E+00	7.491E-01	0.943

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NP-239	1.997E+00		6.346E+00	1.123E+01	8.038E-01	0.178
AM-241	-2.745E+00		7.022E+00	1.128E+01	1.387E+00	-0.243
AM-242	-2.114E+01		7.285E+01	1.271E+02	9.410E+00	-0.166
CF-249	-9.843E-01		1.430E+00	1.982E+00	1.381E-01	-0.497
CF-251	2.870E+00		4.124E+00	7.254E+00	4.660E-01	0.396

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                             DETECTOR DATA                                 *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200874843           *
* Acquisition date : 13-JUL-2005 20:15:02 Detector SN#     : 9912854        *
* Detector ID      : GAMMA4               Sensitivity      : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 12:00:00.00     Abundance limit  : 75.000         *
* Elapsed real time:    0 12:01:28.33     Half life ratio  : 8.000          *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 12-JUL-2005 00:00:00 Nuclide Library :                 *
* Sample ID        : G1200874843          Analyst initials: AKB             *
* Batch Number     : 437153               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 14-JAN-2005 13:51:59 MS Isotope       :                *
* MSD DPM          :    0.000             MSD Isotope      :                *
* LCS DPM          :    0.000             LCS Isotope      :                *
* LCSD DPM         :    0.000             LCSD Isotope     :                *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
CR-51	7.145E+00	1.002E+01	7.433E+00	5.008E+00
NB-94	1.082E+00	1.205E+00	7.343E-01	6.024E-01
SN-113	1.271E+00	1.447E+00	1.026E+00	7.235E-01
SN-117M	2.890E-01	1.245E+00	7.367E-01	6.223E-01
TE-123M	2.701E-01	1.163E+00	7.227E-01	5.817E-01
CE-141	4.436E-01	2.725E+00	1.293E+00	1.363E+00
CE-144	4.659E+00	9.972E+00	5.440E+00	4.986E+00
TL-208	7.033E-01	2.666E+00	9.068E-01	1.333E+00
BI-210	9.713E+01	5.287E+02	2.350E+02	2.644E+02
PB-210	9.713E+01	5.287E+02	2.350E+02	2.644E+02
BI-211	6.147E-01	1.432E+01	5.046E+00	7.161E+00
TH-228	3.838E+00	4.473E+00	1.436E+00	2.236E+00
PA-234M	2.720E+02	3.317E+02	1.039E+02	1.659E+02
TH-234	4.756E+01	1.175E+02	4.443E+01	5.877E+01
U-235	2.232E+00	1.260E+01	5.949E+00	6.298E+00
NP-237	9.507E+00	8.732E+00	6.197E+00	4.366E+00
U-238	4.756E+01	1.175E+02	4.443E+01	5.877E+01

CM-247	1.003E+00	1.492E+00	9.513E-01	7.459E-01
ANH-511	2.743E+00	3.853E+00	6.935E-01	1.927E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU
BE-7	-2.836E+00	8.400E+00	6.919E+00	4.200E+00 NOT IDENT.
NA-22	-6.389E-01	1.185E+00	7.694E-01	5.925E-01 NOT IDENT.
NA-24	4.651E-01	1.026E+01	8.440E+00	5.132E+00 NOT IDENT.
AL-26	-4.094E-02	1.051E+00	8.734E-01	5.254E-01 FAIL ABUN
K-40	3.003E+01	1.264E+01	1.230E+01	6.322E+00 NOT IDENT.
SC-46	-2.616E-01	1.041E+00	8.147E-01	5.203E-01 NOT IDENT.
V-48	1.910E-01	1.262E+00	9.397E-01	6.308E-01 NOT IDENT.
MN-54	5.370E-01	9.891E-01	8.322E-01	4.946E-01 NOT IDENT.
CO-56	3.847E-01	1.032E+00	8.555E-01	5.159E-01 NOT IDENT.
MN-56	1.879E+05	5.050E+05	0.000E+00	2.525E+05 SHORT HLIF
CO-57	-3.869E-02	8.015E-01	6.783E-01	4.008E-01 FAIL ABUN
CO-58	-9.556E-01	1.041E+00	7.728E-01	5.204E-01 NOT IDENT.
FE-59	-5.422E-02	1.843E+00	1.531E+00	9.214E-01 FAIL ABUN
CO-60	-5.377E-01	1.050E+00	8.095E-01	5.248E-01 NOT IDENT.
ZN-65	8.603E-01	2.236E+00	1.919E+00	1.118E+00 NOT IDENT.
SE-75	-3.941E-01	1.372E+00	1.101E+00	6.862E-01 FAIL ABUN
KR-85	8.316E+02	2.469E+02	2.320E+02	1.235E+02 NOT IDENT.
SR-85	3.717E+00	1.104E+00	1.037E+00	5.518E-01 NOT IDENT.
Y-88	1.035E-01	1.160E+00	8.489E-01	5.802E-01 NOT IDENT.
Y-91	9.646E-01	8.883E-01	7.878E-01	4.442E-01 NOT IDENT.
NB-95	7.591E-01	1.028E+00	8.794E-01	5.141E-01 NOT IDENT.
NB-95M	1.887E+00	5.034E+00	3.763E+00	2.517E+00 NOT IDENT.
ZR-95	4.194E-01	1.553E+00	1.291E+00	7.765E-01 NOT IDENT.
MO-99	1.594E+00	1.493E+00	1.299E+00	7.463E-01 NOT IDENT.
TC-99M	2.659E+02	2.492E+02	2.166E+02	1.246E+02 NOT IDENT.
RU-103	-4.330E-01	9.983E-01	8.137E-01	4.992E-01 NOT IDENT.
RH-106	4.601E+00	9.942E+00	8.428E+00	4.971E+00 FAIL ABUN
RU-106	4.146E+00	9.926E+00	8.385E+00	4.963E+00 NOT IDENT.
AG-108M	4.874E-01	9.893E-01	8.573E-01	4.946E-01 NOT IDENT.
CD-109	4.012E-01	2.642E+01	2.052E+01	1.321E+01 NOT IDENT.
AG-110M	4.455E-02	9.473E-01	7.801E-01	4.736E-01 NOT IDENT.
CD-115	1.082E+00	5.370E+00	4.536E+00	2.685E+00 NOT IDENT.
SN-115	-1.085E+01	7.311E+01	5.745E+01	3.656E+01 FAIL ABUN
SB-124	2.036E+00	2.105E+00	1.966E+00	1.053E+00 FAIL ABUN
SB-125	-3.381E-01	2.702E+00	2.270E+00	1.351E+00 FAIL ABUN
TE-125M	1.799E+01	2.679E+02	2.288E+02	1.340E+02 NOT IDENT.
I-126	-1.644E+00	2.541E+00	1.982E+00	1.270E+00 NOT IDENT.
SB-126	-2.323E-01	2.155E+00	1.518E+00	1.077E+00 NOT IDENT.
SN-126	1.853E+00	2.665E+00	2.132E+00	1.333E+00 FAIL ABUN
SB-127	-2.356E+00	4.033E+00	2.695E+00	2.016E+00 FAIL ABUN
I-131	-3.336E-01	1.258E+00	9.856E-01	6.292E-01 NOT IDENT.
TE-132	3.536E+05	2.129E+06	0.000E+00	1.065E+06 SHORT HLIF
I-132	5.527E-01	1.374E+00	1.145E+00	6.870E-01 NOT IDENT.
BA-133	-1.209E-01	1.540E+00	1.084E+00	7.701E-01 NOT IDENT.
I-133	3.894E+00	5.183E+00	4.513E+00	2.592E+00 FAIL ABUN
CS-134	6.745E-01	1.103E+00	9.364E-01	5.516E-01 FAIL ABUN
CS-135	-1.799E+00	5.181E+00	4.139E+00	2.591E+00 NOT IDENT.
I-135	1.785E+02	6.461E+02	5.478E+02	3.231E+02 FAIL ABUN
CS-136	-6.850E-01	1.374E+00	1.095E+00	6.868E-01 FAIL ABUN
BA-137M	4.748E-01	9.882E-01	8.386E-01	4.941E-01 NOT IDENT.
CS-137	5.011E-01	1.045E+00	8.864E-01	5.223E-01 NOT IDENT.

CE-139	-4.159E-01	9.331E-01	7.662E-01	4.666E-01 NOT IDENT.
BA-140	5.298E-01	3.869E+00	3.246E+00	1.934E+00 NOT IDENT.
LA-140	1.438E+00	3.085E+00	2.328E+00	1.543E+00 FAIL ABUN
CE-143	2.022E-02	5.681E+00	4.588E+00	2.841E+00 FAIL ABUN
PM-144	1.214E+00	9.903E-01	8.739E-01	4.952E-01 NOT IDENT.
PR-144	1.000E+41	8.161E+40	0.000E+00	0.000E+00 SHORT HLIF
PM-146	2.556E-02	1.230E+00	1.038E+00	6.151E-01 NOT IDENT.
ND-147	-5.108E+00	7.672E+00	6.109E+00	3.836E+00 FAIL ABUN
PM-147	-1.234E+06	1.697E+06	1.398E+06	8.484E+05 NOT IDENT.
PM-149	-5.694E+00	5.101E+01	4.103E+01	2.550E+01 NOT IDENT.
EU-152	3.009E-01	3.336E+00	2.678E+00	1.668E+00 NOT IDENT.
GD-153	1.015E+00	2.571E+00	2.230E+00	1.285E+00 FAIL ABUN
EU-154	-1.803E+00	3.334E+00	2.162E+00	1.667E+00 FAIL ABUN
EU-155	1.439E-02	3.483E+00	2.973E+00	1.742E+00 FAIL ABUN
TB-160	4.518E+00	3.448E+00	3.065E+00	1.724E+00 NOT IDENT.
TM-171	1.016E+03	1.170E+03	9.532E+02	5.849E+02 NOT IDENT.
HF-181	-7.030E-01	1.039E+00	8.368E-01	5.197E-01 FAIL ABUN
TA-182	4.225E+00	4.423E+00	3.945E+00	2.212E+00 NOT IDENT.
IR-192	1.190E-01	1.030E+00	8.328E-01	5.152E-01 NOT IDENT.
HG-203	-6.324E-02	1.080E+00	8.726E-01	5.401E-01 FAIL ABUN
BI-207	8.196E-02	1.287E+00	1.081E+00	6.434E-01 FAIL ABUN
PB-211	2.510E+01	4.047E+01	2.304E+01	2.023E+01 FAIL ABUN
BI-212	4.358E+00	8.325E+00	7.031E+00	4.162E+00 NOT IDENT.
PB-212	3.838E+00	4.473E+00	1.956E+00	2.236E+00 FAIL ABUN
BI-214	3.142E+00	2.341E+00	2.060E+00	1.170E+00 NOT IDENT.
PB-214	2.138E-01	4.982E+00	2.077E+00	2.491E+00 FAIL ABUN
RN-219	-1.908E+00	1.337E+01	9.925E+00	6.683E+00 NOT IDENT.
RA-223	-1.424E+01	2.468E+01	1.682E+01	1.234E+01 FAIL ABUN
RA-224	1.652E+01	2.325E+01	1.763E+01	1.163E+01 NOT IDENT.
RA-226	3.142E+00	2.341E+00	2.060E+00	1.170E+00 FAIL ABUN
AC-227	8.273E+00	1.546E+01	1.042E+01	7.729E+00 FAIL ABUN
TH-227	8.153E+00	1.525E+01	1.027E+01	7.627E+00 FAIL ABUN
AC-228	4.081E+00	4.357E+00	3.707E+00	2.179E+00 FAIL ABUN
RA-228	4.081E+00	4.357E+00	3.707E+00	2.179E+00 FAIL ABUN
TH-229	9.471E+00	1.603E+01	1.357E+01	8.014E+00 FAIL ABUN
TH-230	3.142E+00	2.341E+00	2.060E+00	1.170E+00 FAIL ABUN
PA-231	3.938E+01	5.092E+01	4.248E+01	2.546E+01 FAIL ABUN
TH-231	-2.978E+00	6.107E+00	4.843E+00	3.054E+00 FAIL ABUN
TH-232	3.830E+00	4.463E+00	1.951E+00	2.232E+00 FAIL ABUN
PA-233	-1.243E+00	2.206E+00	1.721E+00	1.103E+00 NOT IDENT.
PA-234	-4.248E+00	7.446E+00	5.915E+00	3.723E+00 FAIL ABUN
U-234	7.530E+00	4.494E+00	3.862E+00	2.247E+00 FAIL ABUN
NP-239	1.997E+00	6.346E+00	5.448E+00	3.173E+00 NOT IDENT.
AM-241	-2.745E+00	7.022E+00	5.427E+00	3.511E+00 NOT IDENT.
AM-242	-2.114E+01	7.285E+01	6.156E+01	3.643E+01 NOT IDENT.
BK-249	-9.843E-01	1.430E+00	9.455E-01	7.148E-01 NOT IDENT.
CF-251	2.870E+00	4.124E+00	3.518E+00	2.062E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 14:03:39.43

****

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

****

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874844.CNF;1
Sample date : 23-JUN-2005 08:55:00 Acquisition date : 14-JUL-2005 07:32:19
Sample ID : G1200874844 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 06:30:38.91 Elapsed real time: 0 06:30:40.72 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

****

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
* 1	0	51.12	54	329	1.62	89.68	87	6	2.32E-03	54.3	
2	0	60.55	41	299	1.28	108.63	107	5	1.76E-03	65.5	
3	0	67.15*	46	323	0.82	121.91	120	5	1.95E-03	74.2	
4	0	99.36	74	378	0.75	186.66	183	8	3.16E-03	47.2	
5	0	140.41	70	243	0.96	269.21	267	6	2.99E-03	37.3	
6	0	143.97*	48	327	0.70	276.36	273	8	2.04E-03	78.9	
7	0	154.45	58	344	0.79	297.44	293	9	2.48E-03	59.0	
8	0	163.97*	23	298	0.80	316.58	313	8	9.86E-04	154.8	
9	0	198.91	77	233	0.93	386.83	383	8	3.28E-03	36.2	
10	5	239.17*	54	159	1.19	467.79	464	18	2.29E-03	56.0	2.53E+00
11	5	241.93	62	238	1.75	473.34	464	18	2.64E-03	52.9	
12	0	278.31	43	167	1.88	546.48	544	8	1.84E-03	53.8	
13	0	286.02	30	113	1.08	561.98	560	6	1.28E-03	59.5	
14	0	295.77*	6	145	1.33	581.61	579	7	2.71E-04	392.8	
15	0	375.68	62	213	4.81	742.30	736	16	2.65E-03	54.0	
16	0	413.25*	14	123	2.38	817.85	814	10	5.82E-04	174.7	
17	0	583.70*	19	69	1.78	1160.62	1157	9	7.90E-04	111.0	
18	0	596.23	60	61	1.92	1185.81	1182	8	2.57E-03	26.0	
19	0	702.65	13	89	5.08	1399.85	1398	13	5.41E-04	155.1	
20	0	749.27	24	81	4.35	1493.60	1487	12	1.02E-03	78.0	
21	0	911.33*	19	76	0.94	1819.57	1812	16	7.94E-04	130.6	
22	0	952.02	17	41	1.21	1901.41	1897	8	7.06E-04	73.0	
23	0	982.54	36	42	4.46	1962.79	1956	13	1.55E-03	40.3	
24	1	1001.63*	6	49	1.79	2001.19	1996	17	2.42E-04	287.3	1.16E+00
25	1	1005.58	20	23	1.80	2009.15	1996	17	8.49E-04	45.0	
26	0	1038.66	14	46	0.50	2075.68	2071	9	6.10E-04	90.2	
27	0	1097.67	28	57	2.82	2194.39	2189	14	1.21E-03	59.2	
28	0	1125.11	35	36	5.29	2249.59	2244	14	1.50E-03	39.7	
29	0	1250.09	28	22	2.57	2501.00	2496	11	1.19E-03	37.5	
30	0	1255.14	25	22	3.39	2511.16	2506	11	1.07E-03	41.5	
31	0	1378.12	14	20	0.62	2758.58	2755	9	6.04E-04	63.1	
32	0	1414.36	18	32	5.06	2831.49	2826	14	7.74E-04	69.7	
33	0	1469.99	24	14	5.28	2943.41	2936	15	1.01E-03	40.9	
34	0	1516.95	17	14	4.10	3037.88	3033	12	7.05E-04	52.8	
35	0	1624.54	11	8	2.72	3254.36	3252	8	4.69E-04	53.8	
36	0	1692.18	6	9	3.17	3390.47	3385	10	2.45E-04	110.3	
37	0	1701.24	5	11	1.31	3408.71	3401	12	2.00E-04	153.8	
38	0	1758.57	9	1	1.45	3524.06	3521	7	3.67E-04	42.0	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1764.70	31	5	2.09	3536.39	3533	9	1.31E-03	22.1	
40	0	1800.84	8	14	3.80	3609.12	3602	12	3.51E-04	99.5	
41	4	1818.74	23	9	2.93	3645.13	3630	27	9.61E-04	36.7	1.28E+00
42	0	1835.24	29	20	6.60	3678.34	3669	26	1.22E-03	46.3	
43	0	1933.89	8	2	1.77	3876.86	3874	6	3.24E-04	50.1	
44	0	1939.12	16	3	4.35	3887.37	3880	14	6.76E-04	35.3	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 14-JUL-2005 14:03:43

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874844.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 23-JUN-2005 08:55:00 Acquisition date : 14-JUL-2005 07:32:19
Sample ID : G1200874844 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 06:30:38.91 Elapsed real time: 0 06:30:40.72 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MO-99	+	140.51	*	3.791E+02	2.836E+02	4.029E+02	2.649E+01	0.941
		181.06		3.163E+02	2.993E+03	5.356E+03	9.190E+02	0.059
		739.58		-1.428E+03	2.575E+03	4.408E+03	6.131E+02	-0.324
CE-139	+	165.85	*	7.549E-01	2.338E+00	2.192E+00	1.258E-01	0.344
CE-141	+	145.44	*	3.454E+00	5.458E+00	4.992E+00	3.265E-01	0.692
TM-171	+	51.87		1.626E+02	1.767E+02	2.408E+02	1.440E+01	0.675
	+	59.40		4.301E+02	5.639E+02	8.324E+02	5.055E+01	0.517
	+	66.72	*	6.221E+02	9.239E+02	1.160E+03	7.088E+01	0.536
HG-203		70.83		-5.046E+00	2.861E+01	4.752E+01	5.798E+00	-0.106
		72.87		9.880E-01	1.746E+01	2.924E+01	3.441E+00	0.034
		82.60		-1.434E+01	3.776E+01	6.166E+01	7.707E+00	-0.233
	+	279.20	*	2.499E+00	2.694E+00	3.340E+00	2.270E-01	0.748
RA-224	+	240.98	*	4.737E+01	5.017E+01	4.429E+01	2.777E+00	1.070
TH-228		84.40		1.676E+02	8.435E+01	1.480E+02	1.756E+01	1.132
	+	238.60	*	3.618E+00	4.059E+00	4.129E+00	3.179E-01	0.876
		300.10		-2.802E+00	3.263E+01	5.662E+01	3.341E+01	-0.049
TH-232	+	238.59	*	3.543E+00	3.975E+00	4.043E+00	3.113E-01	0.876
	+	911.20		6.094E+00	1.593E+01	1.173E+01	1.070E+00	0.520
		964.40		3.531E+01	4.084E+01	7.564E+01	1.800E+01	0.467
		969.11		-1.141E+00	1.093E+01	1.926E+01	4.325E+00	-0.059
PA-234M		766.40		4.528E+02	8.887E+02	1.530E+03	1.169E+03	0.296
	+	1001.03	*	6.604E+01	3.795E+02	4.234E+02	3.290E+01	0.156
AM-241	+	59.54	*	2.499E+00	3.278E+00	5.033E+00	3.490E-01	0.497

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-3.047E+00	1.716E+01	2.893E+01	2.206E+00	-0.105
NA-22		1274.53	*	-6.847E-01	2.192E+00	3.700E+00	2.241E-01	-0.185
AL-26		511.00		8.699E+00	1.558E+00	3.023E+00	2.054E-01	2.878
		1808.65	*	-6.716E-03	2.062E+00	3.348E+00	1.991E-01	-0.002
K-40		1460.81	*	1.082E+01	1.972E+01	3.841E+01	2.358E+00	0.282
SC-46		889.25	*	1.760E+00	2.166E+00	4.127E+00	2.295E-01	0.427

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1120.51		1.403E+00	2.490E+00	4.203E+00	2.716E-01	0.334
V-48		944.10		4.529E+01	5.699E+01	1.092E+02	6.251E+00	0.415
	+	983.50	*	8.785E+00	7.105E+00	8.355E+00	4.927E-01	1.052
		1312.09		2.797E+00	5.366E+00	9.978E+00	5.761E-01	0.280
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	1.233E+01	2.107E+01	3.768E+01	2.711E+00	0.327
MN-54		834.83	*	-3.550E-01	1.801E+00	3.169E+00	1.844E-01	-0.112
CO-56		846.75	*	-3.118E-01	1.992E+00	3.525E+00	2.033E-01	-0.088
	+	1037.82		1.244E+01	2.246E+01	2.942E+01	1.989E+00	0.423
		1238.25		4.405E-01	3.497E+00	6.273E+00	4.154E-01	0.070
CO-57		122.06	*	8.693E-02	1.150E+00	1.891E+00	1.317E-01	0.046
		136.47		3.407E+00	9.483E+00	1.574E+01	1.167E+00	0.216
CO-58		810.78	*	-2.378E+00	2.177E+00	3.513E+00	2.086E-01	-0.677
FE-59		192.35		2.201E-02	4.058E+01	7.221E+01	8.578E+00	0.000
	+	1099.25	*	7.389E+00	8.761E+00	1.020E+01	7.442E-01	0.724
		1291.60		-5.640E-02	5.964E+00	1.057E+01	7.950E-01	-0.005
CO-60		1173.24		1.199E+00	1.970E+00	3.712E+00	2.474E-01	0.323
		1332.50	*	-1.287E+00	1.764E+00	3.018E+00	1.696E-01	-0.426
ZN-65		1115.55	*	-1.038E+00	4.102E+00	7.052E+00	4.553E-01	-0.147
SE-75	+	66.05		1.066E+02	1.585E+02	2.834E+02	2.402E+01	0.376
		96.73		3.141E+01	3.369E+01	5.374E+01	6.708E+00	0.585
		121.11		-5.947E-01	6.335E+00	1.032E+01	1.031E+00	-0.058
		136.00		3.822E-01	1.785E+00	2.942E+00	1.959E-01	0.130
	+	198.60		1.568E+02	1.140E+02	1.292E+02	9.398E+00	1.213
		264.65	*	-6.591E-01	1.866E+00	3.215E+00	2.077E-01	-0.205
	+	279.53		6.329E+00	6.823E+00	8.510E+00	5.871E-01	0.744
		303.91		-5.977E+01	9.333E+01	1.563E+02	1.567E+01	-0.382
		400.65		3.192E-01	1.181E+01	2.045E+01	1.973E+00	0.016
KR-85		513.99	*	-1.879E+03	5.524E+02	7.193E+02	4.885E+01	-2.613
SR-85		513.99	*	-1.026E+01	3.014E+00	3.925E+00	2.666E-01	-2.613
Y-88		898.02		5.978E-01	2.110E+00	3.876E+00	2.163E-01	0.154
	+	1836.01	*	5.130E+00	4.762E+00	3.840E+00	2.288E-01	1.336
Y-91		557.57	*	-2.585E-01	1.939E+00	3.258E+00	2.185E-01	-0.079
		1204.90		5.569E+02	8.505E+02	1.608E+03	1.043E+02	0.346
NB-94	+	702.63	*	9.145E-01	2.837E+00	2.653E+00	1.631E-01	0.345
		871.10		-7.965E-01	1.773E+00	3.037E+00	1.717E-01	-0.262
NB-95		765.79	*	-6.317E-01	2.637E+00	4.632E+00	2.801E-01	-0.136
NB-95M		235.69	*	3.769E+00	2.452E+02	3.897E+02	4.232E+01	0.010
ZR-95		724.18		-4.376E+00	4.776E+00	7.935E+00	5.660E-01	-0.552
		756.74	*	-2.249E+00	3.946E+00	6.740E+00	4.887E-01	-0.334
RU-103		497.08	*	-1.955E+00	2.490E+00	3.956E+00	5.197E-01	-0.494
		610.33		5.512E+01	4.458E+01	8.460E+01	1.328E+01	0.652
RH-106		511.85		6.494E+01	1.294E+01	2.486E+01	1.689E+00	2.612
		621.84	*	-4.692E+00	1.561E+01	2.767E+01	1.779E+00	-0.170
		1050.47		-4.281E+01	1.117E+02	1.903E+02	1.177E+01	-0.225
RU-106		622.20	*	1.665E+00	1.557E+01	2.846E+01	3.432E+00	0.059
AG-108M		433.93	*	5.378E-01	1.573E+00	2.770E+00	1.984E-01	0.194
		614.37		-4.617E-01	1.798E+00	3.199E+00	2.213E-01	-0.144
		722.95		-2.152E+00	2.052E+00	3.368E+00	2.220E-01	-0.639

Sample ID : G1200874844 Acquisition date : 14-JUL-2005 07:32:19

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CD-109		88.03	*	1.738E+01	2.517E+01	4.310E+01	2.858E+00	0.403
AG-110M		657.75	*	4.183E-01	1.750E+00	3.215E+00	2.105E-01	0.130
		677.61		1.547E-01	1.556E+01	2.811E+01	1.827E+00	0.006
		706.67		-3.993E+00	1.222E+01	1.867E+01	1.208E+00	-0.214
		763.93		-1.181E+01	8.588E+00	1.358E+01	8.677E-01	-0.869
		884.67		2.096E+00	2.711E+00	5.133E+00	3.082E-01	0.408
		937.48		2.110E+00	5.520E+00	1.020E+01	6.280E-01	0.207
		1384.27		2.694E+00	7.914E+00	1.538E+01	9.310E-01	0.175
SN-113		391.69	*	-1.598E+00	2.201E+00	3.601E+00	2.496E-01	-0.444
SN-115		484.47		-6.496E+01	9.429E+02	1.607E+03	1.093E+02	-0.040
		933.00	*	-3.195E+01	1.737E+02	3.057E+02	1.734E+01	-0.104
		1290.58		-9.900E-01	4.353E+02	7.726E+02	4.582E+01	-0.001
SN-117M	+	156.02		1.850E+02	2.186E+02	2.209E+02	1.332E+01	0.837
		158.56	*	-1.706E+00	3.372E+00	5.291E+00	3.151E-01	-0.322
TE-123M		159.00	*	-6.620E-01	1.340E+00	2.103E+00	1.266E-01	-0.315
SB-124		602.73		1.508E-01	2.108E+00	3.573E+00	2.335E-01	0.042
		645.85		2.586E+00	2.699E+01	4.913E+01	3.426E+00	0.053
		713.78		-2.970E+01	8.820E+01	1.544E+02	1.606E+01	-0.192
		722.79		-1.890E+01	1.944E+01	3.215E+01	2.052E+00	-0.588
		1368.16		3.026E+01	9.242E+01	1.791E+02	2.115E+01	0.169
	+	1690.98	*	2.197E+00	4.850E+00	7.995E+00	5.132E-01	0.275
SB-125		176.33		3.524E+00	1.393E+01	2.506E+01	2.164E+00	0.141
		427.89	*	-2.117E+00	4.284E+00	7.099E+00	4.917E-01	-0.298
		463.38		-1.136E+01	1.205E+01	1.901E+01	1.449E+00	-0.597
		600.56		-2.203E+00	9.175E+00	1.515E+01	1.115E+00	-0.145
		606.64		-3.789E+01	3.428E+01	5.708E+01	4.244E+00	-0.664
		635.90		4.291E+00	1.414E+01	2.605E+01	1.892E+00	0.165
TE-125M		109.28	*	3.702E+02	4.334E+02	7.392E+02	6.553E+01	0.501
I-126		388.63		1.156E+01	1.257E+01	2.306E+01	1.521E+00	0.501
		666.33	*	1.373E+00	1.172E+01	2.138E+01	1.318E+00	0.064
		753.82		2.719E+01	1.066E+02	1.944E+02	1.180E+01	0.140
SB-126		666.33		5.814E-01	4.962E+00	9.054E+00	5.581E-01	0.064
		695.00		-5.018E+00	5.464E+00	9.119E+00	5.612E-01	-0.550
		697.00		-4.379E+00	1.930E+01	3.404E+01	2.095E+00	-0.129
		720.50	*	3.967E+00	1.028E+01	1.895E+01	1.161E+00	0.209
SN-126		64.28		1.140E+02	2.156E+01	2.966E+01	4.123E+00	3.844
		86.94		-1.302E+01	1.218E+01	1.717E+01	7.038E+00	-0.758
		87.57	*	-1.220E+00	2.566E+00	4.165E+00	2.755E-01	-0.293
SB-127		252.40		2.477E+02	5.587E+02	9.867E+02	4.162E+02	0.251
	+	411.60		7.967E+02	2.787E+03	2.803E+03	4.556E+02	0.284
		444.90		1.828E+02	1.458E+03	2.516E+03	3.330E+02	0.073
		473.00		1.189E+02	2.304E+02	4.102E+02	5.568E+01	0.290
		543.30		-2.629E+03	2.596E+03	3.973E+03	5.988E+02	-0.662
		603.50		-1.608E+02	1.713E+03	2.861E+03	3.748E+02	-0.056
		685.70	*	-1.366E+02	2.064E+02	3.517E+02	4.163E+01	-0.388
		698.50		3.354E+03	2.255E+03	4.352E+03	7.026E+02	0.771
		783.70		1.908E+02	5.034E+02	9.312E+02	1.188E+02	0.205
I-131	+	284.30		1.016E+02	1.211E+02	1.988E+02	1.420E+01	0.511
		364.48	*	1.249E+01	9.145E+00	1.709E+01	1.246E+00	0.731

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		636.97		-6.325E+01	1.355E+02	2.363E+02	1.664E+01	-0.268
TE-132		228.16	*	1.327E+01	9.915E+01	1.762E+02	2.791E+01	0.075
BA-133		79.62		-2.409E+01	4.008E+01	6.473E+01	9.108E+00	-0.372
		81.00		1.044E+00	2.945E+00	4.973E+00	7.356E-01	0.210
	+	276.40		2.054E+01	2.226E+01	2.813E+01	3.734E+00	0.730
		302.85		1.607E-01	6.187E+00	1.081E+01	1.304E+00	0.015
		356.02	*	-2.500E-02	2.004E+00	3.468E+00	4.162E-01	-0.007
		383.85		9.657E+00	1.393E+01	2.512E+01	2.844E+00	0.384
CS-134		563.23		-4.610E+00	1.778E+01	2.950E+01	2.005E+00	-0.156
		569.32		1.886E+00	1.012E+01	1.740E+01	1.187E+00	0.108
		604.70		-1.546E-01	1.605E+00	2.884E+00	1.889E-01	-0.054
		795.84	*	-7.122E-02	2.091E+00	3.730E+00	2.249E-01	-0.019
		801.93		-6.980E+00	1.988E+01	3.455E+01	2.076E+00	-0.202
		1365.15		3.289E+00	6.360E+01	1.192E+02	7.443E+00	0.028
CS-135		268.24	*	-7.980E-01	6.245E+00	1.090E+01	8.870E-01	-0.073
CS-136	+	66.88		2.337E+01	3.484E+01	4.357E+01	6.184E+00	0.536
		86.36		-1.765E+01	4.625E+01	7.540E+01	8.734E+00	-0.234
	+	153.25		5.424E+01	6.413E+01	6.054E+01	4.529E+00	0.896
	+	163.92		3.591E+01	1.112E+02	1.098E+02	7.972E+00	0.327
		176.60		-2.541E+00	2.087E+01	3.698E+01	2.419E+00	-0.069
		273.65		1.238E+01	2.721E+01	4.859E+01	3.498E+00	0.255
		340.55		-2.907E+00	7.482E+00	1.266E+01	8.816E-01	-0.230
		818.51		-3.056E+00	5.050E+00	8.561E+00	5.053E-01	-0.357
		1048.07	*	-8.726E-01	6.900E+00	1.212E+01	8.100E-01	-0.072
		1235.36		8.622E-01	3.198E+01	5.638E+01	5.803E+00	0.015
BA-137M		661.65	*	-1.920E-01	1.632E+00	2.933E+00	1.808E-01	-0.065
CS-137		661.66	*	-1.906E-01	1.727E+00	3.104E+00	1.921E-01	-0.061
BA-140	+	162.67		2.551E+01	7.902E+01	7.915E+01	5.187E+00	0.322
		304.87		-1.534E+01	7.500E+01	1.292E+02	3.548E+01	-0.119
		423.73		5.921E+01	1.223E+02	2.156E+02	6.890E+01	0.275
		537.31	*	2.126E+00	1.922E+01	3.283E+01	1.074E+01	0.065
CE-144		133.51	*	-1.130E-01	9.222E+00	1.502E+01	2.189E+00	-0.008
PM-144		476.78		-1.780E+00	3.408E+00	5.583E+00	4.353E-01	-0.319
		618.01		1.002E+00	1.582E+00	2.989E+00	2.023E-01	0.335
		696.49	*	-2.505E-01	1.782E+00	3.165E+00	1.950E-01	-0.079
PM-146		453.88	*	-4.189E-01	2.241E+00	3.779E+00	3.515E-01	-0.111
		633.25		4.886E+01	7.344E+01	1.347E+02	4.971E+01	0.363
		735.93		4.565E+00	7.152E+00	1.339E+01	3.742E+00	0.341
		747.24		-4.192E-01	5.086E+00	7.988E+00	1.010E+00	-0.052
ND-147		91.11		-1.263E+02	2.035E+01	2.156E+01	1.625E+00	-5.859
		531.02	*	-1.058E+01	4.165E+01	6.932E+01	9.681E+00	-0.153
PM-147		121.30	*	-3.228E+05	2.374E+06	3.860E+06	2.680E+05	-0.084
EU-152		121.78		-3.159E-02	3.293E+00	5.389E+00	4.591E-01	-0.006
		344.31	*	3.213E+00	4.335E+00	7.866E+00	5.735E-01	0.408
		963.37		1.444E+01	1.414E+01	2.708E+01	1.573E+00	0.533
GD-153		69.67		1.404E+01	4.138E+01	7.031E+01	4.323E+00	0.200
		83.37		-2.320E+02	4.857E+02	7.896E+02	5.114E+01	-0.294
	+	97.43	*	5.114E+00	4.843E+00	5.371E+00	3.579E-01	0.952
		103.18		2.362E-01	4.452E+00	7.361E+00	4.938E-01	0.032

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
EU-154		123.07		1.358E+00	2.222E+00	3.753E+00	3.806E-01	0.362
		247.93		3.550E+00	1.472E+01	2.630E+01	2.593E+00	0.135
		591.76		2.535E+01	3.311E+01	5.921E+01	6.074E+00	0.428
		723.30		-1.019E+01	8.557E+00	1.384E+01	1.017E+00	-0.736
		756.86		-2.534E+01	4.014E+01	6.812E+01	7.009E+00	-0.372
		873.20		-7.635E-01	1.466E+01	2.616E+01	2.712E+00	-0.029
		996.30		-3.580E+00	1.764E+01	3.076E+01	5.117E+00	-0.116
	+	1004.76		1.102E+01	9.972E+00	1.799E+01	1.772E+00	0.613
		1274.51	*	-1.989E+00	6.098E+00	1.027E+01	9.754E-01	-0.194
EU-155		86.54		-3.347E+00	3.208E+00	5.059E+00	3.387E-01	-0.661
		105.31	*	1.227E+00	4.579E+00	7.638E+00	5.243E-01	0.161
TB-160		86.79		-9.980E+00	9.014E+00	1.416E+01	9.332E-01	-0.705
		298.57		-2.953E+00	5.478E+00	8.200E+00	5.370E-01	-0.360
		879.36	*	4.479E+00	7.684E+00	1.440E+01	8.083E-01	0.311
		962.29		1.247E+01	2.779E+01	5.093E+01	2.956E+00	0.245
		966.15		8.752E-02	1.068E+01	1.882E+01	1.096E+00	0.005
		1177.93		-3.876E-01	1.540E+01	2.733E+01	1.814E+00	-0.014
HF-181		56.28		-5.073E+00	1.750E+01	2.921E+01	1.758E+00	-0.174
		57.53		-5.395E+00	9.929E+00	1.637E+01	9.884E-01	-0.330
	+	65.20		2.157E+01	3.203E+01	6.089E+01	3.710E+00	0.354
		133.02		-1.162E-01	3.193E+00	5.197E+00	3.462E-01	-0.022
		136.25		7.830E+00	2.552E+01	4.226E+01	2.779E+00	0.185
		345.85		-1.207E+00	9.431E+00	1.624E+01	1.078E+00	-0.074
		482.03	*	-4.160E-01	2.297E+00	3.872E+00	2.633E-01	-0.107
TA-182	+	67.75		2.585E+00	3.839E+00	4.679E+00	2.864E-01	0.552
	+	100.10		1.214E+01	1.149E+01	1.127E+01	7.532E-01	1.077
		222.10		-4.236E+00	1.428E+01	2.488E+01	1.530E+00	-0.170
		1121.28		5.535E+00	6.808E+00	1.186E+01	7.667E-01	0.467
		1189.05		1.286E+01	1.432E+01	2.752E+01	1.810E+00	0.467
		1221.42	*	4.057E+00	7.872E+00	1.481E+01	9.459E-01	0.274
		1230.97		1.145E+01	1.893E+01	3.585E+01	2.269E+00	0.319
IR-192	+	295.96		9.134E-01	7.175E+00	7.920E+00	5.244E-01	0.115
		308.46		2.732E+00	4.361E+00	7.901E+00	5.244E-01	0.346
		316.51	*	-8.178E-02	1.669E+00	2.897E+00	1.919E-01	-0.028
		468.07		1.948E+00	3.391E+00	6.051E+00	4.575E-01	0.322
		604.41		-1.653E+00	2.285E+01	4.113E+01	4.828E+00	-0.040
		612.46		-5.737E+01	3.690E+01	5.883E+01	4.770E+00	-0.975
BI-207		569.67		-5.665E-02	1.602E+00	2.699E+00	1.800E-01	-0.021
		897.83		3.144E+02	1.193E+03	2.183E+03	1.204E+02	0.144
		1063.62	*	-7.661E-01	2.603E+00	4.465E+00	2.784E-01	-0.172
		1442.20		-4.581E+01	1.142E+03	2.144E+03	1.235E+02	-0.021
		1770.23		-8.693E+00	2.734E+01	4.862E+01	2.892E+00	-0.179
TL-208		75.00		-1.053E+00	3.095E+01	5.153E+01	5.539E+00	-0.020
	+	277.35		2.120E+01	2.293E+01	2.877E+01	3.147E+00	0.737
		510.84		5.488E+01	1.296E+01	2.307E+01	2.481E+00	2.378
	+	583.14	*	1.371E+00	3.046E+00	3.321E+00	2.460E-01	0.413
		763.30		-9.318E+01	1.085E+02	1.797E+02	2.251E+01	-0.519
		860.37		-5.904E+00	1.439E+01	2.475E+01	1.640E+00	-0.239
		1093.90		-2.714E+02	6.372E+02	9.168E+02	2.066E+02	-0.296

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BI-210		46.50	*	1.442E+02	3.655E+01	6.458E+01	4.650E+00	2.233
PB-210		46.50	*	1.442E+02	3.655E+01	6.458E+01	4.650E+00	2.233
BI-211		351.07	*	1.542E+01	9.608E+00	1.804E+01	1.299E+00	0.855
PB-211		404.84	*	-1.222E+00	4.370E+01	7.511E+01	4.688E+01	-0.016
		427.08		-5.386E+01	1.008E+02	1.567E+02	9.703E+01	-0.344
		831.96		-8.635E+00	5.731E+01	1.010E+02	6.300E+01	-0.085
BI-212		727.18	*	1.447E+01	1.508E+01	2.879E+01	2.290E+00	0.503
PB-212		74.80		-9.744E-01	9.949E+00	1.652E+01	1.857E+00	-0.059
		87.30		-1.415E+01	1.251E+01	1.948E+01	2.335E+00	-0.727
		115.19		-3.712E+01	1.615E+02	2.619E+02	1.794E+01	-0.142
	+	238.63	*	3.618E+00	4.059E+00	5.240E+00	4.034E-01	0.690
		300.09		-2.844E+00	3.258E+01	5.661E+01	4.978E+00	-0.050
BI-214		609.31	*	6.485E+00	3.722E+00	7.302E+00	6.070E-01	0.888
		768.36		3.071E+01	3.460E+01	6.595E+01	5.590E+00	0.466
		934.06		-3.180E+00	5.450E+01	9.684E+01	8.163E+00	-0.033
		1120.29		8.822E+00	1.397E+01	2.374E+01	2.197E+00	0.372
		1238.11		1.786E-01	3.337E+01	5.893E+01	5.009E+00	0.003
	+	1377.67		4.379E+01	5.535E+01	9.161E+01	7.790E+00	0.478
PB-214		74.81		-1.631E+00	1.679E+01	2.788E+01	2.701E+00	-0.058
		77.11		6.037E+00	9.887E+00	1.684E+01	1.665E+00	0.358
		87.30		-2.515E+01	2.217E+01	3.461E+01	3.635E+00	-0.727
	+	241.98		2.443E+01	2.591E+01	2.292E+01	1.928E+00	1.066
	+	295.21		1.133E+00	8.903E+00	1.012E+01	9.150E-01	0.112
		351.92	*	4.542E+00	3.445E+00	6.353E+00	5.649E-01	0.715
RN-219		271.23		2.755E-01	1.051E+01	1.840E+01	1.578E+00	0.015
		401.81	*	9.796E+00	1.870E+01	3.338E+01	4.666E+00	0.293
RA-223		122.32		2.210E+00	7.822E+01	1.282E+02	9.897E+00	0.017
	+	144.24		3.291E+01	5.202E+01	4.733E+01	3.639E+00	0.695
	+	154.21		2.389E+01	2.825E+01	2.768E+01	2.006E+00	0.863
		269.46		-3.219E+00	7.871E+00	1.348E+01	8.986E-01	-0.239
		323.87	*	-2.229E+01	3.070E+01	5.061E+01	8.512E+00	-0.441
		338.28		-1.308E+01	4.497E+01	7.648E+01	8.423E+00	-0.171
		445.03		-1.812E+01	1.178E+02	1.993E+02	2.160E+01	-0.091
RA-226	+	295.21		1.133E+00	8.903E+00	1.012E+01	9.150E-01	0.112
		351.92		4.542E+00	3.435E+00	6.353E+00	4.235E-01	0.715
		609.31	*	6.485E+00	3.722E+00	7.302E+00	6.070E-01	0.888
AC-227		79.80		-2.195E+01	5.141E+01	8.364E+01	1.756E+01	-0.262
		236.00		1.860E+00	9.190E+00	1.482E+01	1.601E+00	0.126
		256.20	*	1.698E+00	1.642E+01	2.901E+01	4.168E+00	0.059
	+	286.10		6.343E+01	7.584E+01	1.163E+02	1.400E+01	0.546
		299.80		-7.480E+00	6.004E+01	1.041E+02	1.748E+01	-0.072
		304.40		-3.140E+01	8.075E+01	1.374E+02	2.446E+01	-0.229
		329.70		-2.542E+01	4.183E+01	6.971E+01	9.064E+00	-0.365
		334.20		-1.751E+01	1.071E+02	1.838E+02	3.474E+01	-0.095
TH-227		79.80		-2.158E+01	5.055E+01	8.223E+01	1.726E+01	-0.262
		94.00		6.423E+02	1.702E+02	1.982E+02	4.177E+01	3.241
		236.00		1.831E+00	9.045E+00	1.458E+01	1.363E+00	0.126
		256.20	*	1.671E+00	1.615E+01	2.855E+01	4.882E+00	0.059
	+	286.10		6.245E+01	9.713E+01	1.145E+02	1.147E+02	0.546

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		299.80		-7.345E+00	5.895E+01	1.022E+02	1.693E+01	-0.072
		304.40		-3.088E+01	7.941E+01	1.351E+02	2.374E+01	-0.229
		329.70		-2.503E+01	4.118E+01	6.862E+01	8.831E+00	-0.365
		334.20		-1.718E+01	1.051E+02	1.803E+02	3.356E+01	-0.095
AC-228		209.25		8.773E+00	2.281E+01	3.988E+01	2.549E+01	0.220
		338.32		-3.371E+00	1.091E+01	1.840E+01	7.524E+00	-0.183
		463.01		-2.097E+01	2.870E+01	4.561E+01	1.082E+01	-0.460
		794.95		1.216E+01	3.812E+01	6.981E+01	1.574E+01	0.174
	+	911.21	*	6.137E+00	1.604E+01	1.418E+01	1.294E+00	0.433
		964.77		2.587E+01	4.121E+01	7.557E+01	1.799E+01	0.342
		969.11		-1.149E+00	1.100E+01	1.939E+01	4.355E+00	-0.059
RA-228		209.25		8.773E+00	2.281E+01	3.988E+01	2.549E+01	0.220
		338.32		-3.371E+00	1.091E+01	1.840E+01	7.524E+00	-0.183
		463.01		-2.097E+01	2.870E+01	4.561E+01	1.082E+01	-0.460
		794.95		1.216E+01	3.812E+01	6.981E+01	1.574E+01	0.174
	+	911.21	*	6.137E+00	1.604E+01	1.418E+01	1.294E+00	0.433
		964.77		2.587E+01	4.121E+01	7.557E+01	1.799E+01	0.342
		969.11		-1.149E+00	1.100E+01	1.939E+01	4.355E+00	-0.059
TH-229		85.43		8.617E-01	6.167E+00	1.029E+01	6.730E-01	0.084
		88.47		7.274E-01	3.475E+00	5.823E+00	3.862E-01	0.125
	+	100.00		1.215E+01	1.151E+01	1.128E+01	7.538E-01	1.077
		193.63	*	1.129E+01	2.021E+01	3.681E+01	2.188E+00	0.307
		210.97		-3.289E+00	3.048E+01	5.363E+01	3.256E+00	-0.061
TH-230	+	295.21		1.133E+00	8.903E+00	1.012E+01	9.150E-01	0.112
		351.92		4.542E+00	3.435E+00	6.353E+00	4.235E-01	0.715
		609.31	*	6.484E+00	3.722E+00	7.302E+00	6.070E-01	0.888
PA-231		283.67	*	1.807E+01	7.575E+01	1.208E+02	1.702E+01	0.150
		301.29		2.069E+01	2.366E+01	4.320E+01	4.705E+00	0.479
		330.00		-5.935E+01	9.333E+01	1.525E+02	4.799E+01	-0.389
TH-231		84.21		1.899E+01	1.597E+01	2.729E+01	4.618E+00	0.696
		236.00		1.857E+00	9.173E+00	1.479E+01	1.598E+00	0.126
		256.20		1.695E+00	1.638E+01	2.896E+01	4.161E+00	0.059
		269.46	*	-3.219E+00	7.872E+00	1.348E+01	1.051E+00	-0.239
		271.23		2.755E-01	1.051E+01	1.840E+01	1.826E+00	0.015
		283.67		1.807E+01	7.575E+01	1.208E+02	1.702E+01	0.150
		301.29		2.069E+01	2.363E+01	4.320E+01	3.878E+00	0.479
		329.85		-1.800E+01	2.871E+01	4.774E+01	6.673E+00	-0.377
		351.07		1.542E+01	9.608E+00	1.804E+01	1.299E+00	0.855
		401.81		9.796E+00	1.868E+01	3.338E+01	3.793E+00	0.293
PA-233		75.28		1.773E+00	8.268E+01	1.379E+02	1.953E+01	0.013
		86.59		-5.503E+01	5.385E+01	8.194E+01	2.150E+01	-0.672
		300.12		-1.376E+00	1.649E+01	2.866E+01	3.949E+00	-0.048
		311.98	*	-1.669E+00	2.720E+00	4.564E+00	3.152E-01	-0.366
		340.50		-9.125E+00	2.672E+01	4.520E+01	1.048E+01	-0.202
		398.62		-5.902E+01	9.433E+01	1.534E+02	3.996E+01	-0.385
		415.76		3.758E+01	8.468E+01	1.353E+02	2.822E+01	0.278
PA-234		63.00		2.068E+02	5.061E+01	7.622E+01	1.086E+01	2.713
		94.67		-4.216E+01	1.036E+01	1.281E+01	1.425E+00	-3.290
	+	98.44		5.932E+00	6.500E+00	6.370E+00	3.537E+00	0.931

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	99.70		3.139E+01	2.973E+01	2.913E+01	1.946E+00	1.078
		111.00		-3.526E-01	7.990E+00	1.310E+01	1.423E+00	-0.027
		131.20		-1.823E+00	4.722E+00	7.540E+00	5.060E-01	-0.242
	+	152.70		1.961E+01	2.334E+01	2.368E+01	3.773E+00	0.828
		186.00		3.562E+02	1.255E+02	1.291E+02	3.945E+01	2.760
		226.40		-3.018E+00	1.674E+01	2.927E+01	3.441E+00	-0.103
		227.20		2.986E+00	1.790E+01	3.183E+01	1.968E+00	0.094
		248.90		1.608E+01	3.485E+01	6.264E+01	1.399E+01	0.257
		293.70		-1.870E+01	3.149E+01	4.677E+01	7.652E+00	-0.400
		369.80		1.333E+01	4.049E+01	7.133E+01	1.503E+01	0.187
		568.70		4.337E+00	5.173E+01	8.809E+01	5.879E+00	0.049
		569.50		2.170E+00	1.400E+01	2.399E+01	1.600E+00	0.090
		574.00		-3.443E+01	8.258E+01	1.344E+02	8.945E+00	-0.256
		699.00		5.108E+01	3.688E+01	7.050E+01	1.276E+01	0.724
		706.10		-6.937E+01	6.845E+01	8.480E+01	3.746E+01	-0.818
		733.00		-7.785E+00	1.868E+01	3.234E+01	6.904E+00	-0.241
		742.81		1.107E+01	6.812E+01	1.234E+02	8.264E+01	0.090
		796.30		-4.510E+00	4.502E+01	7.984E+01	2.102E+01	-0.056
		805.80		2.822E+01	4.986E+01	9.245E+01	2.774E+01	0.305
		819.60		-3.925E+01	6.191E+01	1.015E+02	3.808E+01	-0.387
		826.30		4.740E+01	4.622E+01	8.093E+01	3.584E+01	0.586
		831.60		-4.706E+00	2.896E+01	5.125E+01	1.494E+01	-0.092
		876.40		5.063E+00	4.422E+01	7.912E+01	8.118E+01	0.064
		880.51		-8.952E+00	1.512E+01	2.547E+01	1.428E+00	-0.351
		883.24		5.730E+00	1.572E+01	2.804E+01	1.876E+01	0.204
		899.00		5.696E+00	4.085E+01	7.396E+01	3.196E+01	0.077
		925.00		-1.693E+01	5.820E+01	1.010E+02	5.696E+00	-0.168
		926.50		3.643E+00	8.391E+00	1.559E+01	3.809E+00	0.234
		946.00	*	-1.295E+01	1.612E+01	2.613E+01	4.605E+00	-0.496
		949.00		-8.710E+00	2.762E+01	4.113E+01	2.363E+00	-0.212
		980.50		-1.065E+01	4.572E+01	6.866E+01	4.040E+00	-0.155
		1394.10		2.000E+01	6.219E+01	1.175E+02	7.610E+01	0.170
TH-234		63.29	*	2.599E+02	5.674E+01	7.238E+01	1.225E+01	3.591
		92.38		1.688E+02	3.849E+01	4.947E+01	8.522E+00	3.411
		112.81		4.226E+00	3.874E+02	6.367E+02	1.098E+02	0.007
U-234	+	67.67		2.581E+02	3.844E+02	5.042E+02	6.462E+01	0.512
	+	241.98		2.447E+01	2.594E+01	2.485E+01	2.092E+00	0.984
	+	295.21	*	1.133E+00	8.903E+00	1.073E+01	9.706E-01	0.106
		351.92		4.542E+00	3.445E+00	6.353E+00	5.649E-01	0.715
U-235		89.95		1.122E+01	3.544E+01	5.932E+01	1.801E+01	0.189
		93.35		3.329E+02	9.695E+01	6.711E+01	1.844E+01	4.961
		105.00		2.132E+01	4.485E+01	7.485E+01	2.197E+01	0.285
	+	143.76	*	1.016E+01	1.612E+01	1.787E+01	2.952E+00	0.568
	+	163.33		1.161E+01	3.600E+01	3.759E+01	6.762E+00	0.309
		185.71		1.269E+01	2.406E+00	4.722E+00	2.779E-01	2.687
		205.31		1.663E+01	2.022E+01	3.671E+01	6.276E+00	0.453
NP-237		86.48	*	-8.005E+00	7.981E+00	1.233E+01	2.670E+00	-0.649
		95.87		-2.511E+02	7.716E+01	6.255E+01	1.502E+01	-4.014
U-238		63.29	*	2.599E+02	5.674E+01	7.238E+01	1.225E+01	3.591

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NP-239	+	99.55		1.025E+01	9.707E+00	1.045E+01	6.982E-01	0.980
		117.00	*	1.781E+00	8.395E+00	1.391E+01	9.568E-01	0.128
		209.75		1.478E+01	2.959E+01	5.362E+01	3.250E+00	0.276
		228.18		1.182E+00	9.223E+00	1.638E+01	1.014E+00	0.072
	+	277.60		1.001E+01	1.079E+01	1.286E+01	8.315E-01	0.779
		334.31		-8.867E+00	5.929E+01	1.018E+02	6.751E+00	-0.087
AM-242	+	99.55		2.392E+02	2.265E+02	2.440E+02	1.630E+01	0.980
		103.70	*	4.599E+01	9.085E+01	1.535E+02	1.030E+01	0.300
CM-247	+	278.00		4.152E+01	4.475E+01	5.421E+01	3.507E+00	0.766
	+	287.40		4.996E+01	5.952E+01	1.000E+02	6.508E+00	0.500
		402.60	*	-4.221E-01	1.718E+00	2.911E+00	1.930E-01	-0.145
CF-249		252.85		2.829E+01	3.822E+01	6.959E+01	4.413E+00	0.407
		333.44		-1.843E+00	7.742E+00	1.323E+01	8.770E-01	-0.139
		387.95	*	3.799E-01	1.838E+00	3.220E+00	2.124E-01	0.118
CF-251		176.00	*	4.293E+00	5.338E+00	9.813E+00	5.703E-01	0.438
		227.00		-4.314E-01	1.572E+01	2.772E+01	1.714E+00	-0.016
	+	285.00		7.137E+01	8.503E+01	1.431E+02	9.299E+00	0.499
ANH-511		511.00	*	1.423E+01	2.549E+00	4.945E+00	3.360E-01	2.878

VAX/VMS Nuclide Identification Report Generated

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*********************************************************************
*                          General Eng. Labs, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
*                                                                   *
*                             DETECTOR DATA                         *
*                                                                   *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874844  *
* Acquisition date : 14-JUL-2005 07:32:19 Detector SN#    : 30-TN10348  *
* Detector ID       : GAMMA17             Sensitivity     : 3.000       *
* Geometry          : 2L_MB               Energy tolerance: 2.000       *
* Elapsed live time:    0 06:30:38.91     Abundance limit : 75.000      *
* Elapsed real time:    0 06:30:40.72     Half life ratio :  8.000      *
*********************************************************************
*                                                                   *
*                              SAMPLE DATA                          *
*                                                                   *
* Sample date       : 23-JUN-2005 08:55:00 Nuclide Library :          *
* Sample ID         : G1200874844          Analyst initials: AKB      *
* Batch Number      : 437153               Sample Quantity : 2.0000E+00 LITER  *
* Recovery          :    1.00000           Carrier Weight :    0.00000  *
*********************************************************************
*                                                                   *
*                                QC DATA                            *
* Standard Weight   :   0.00000                                     *
* CALIB. DATE/TIME :  1-DEC-2004 11:39:23 MS Isotope      :         *
* MSD DPM           :    0.000            MSD Isotope     :         *
* LCS DPM           :    0.000            LCS Isotope     :         *
* LCSD DPM          :    0.000            LCSD Isotope    :         *
*********************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
MO-99	3.791E+02	2.836E+02	4.029E+02	0.000E+00
CE-139	7.549E-01	2.338E+00	2.192E+00	0.000E+00
CE-141	3.454E+00	5.458E+00	4.992E+00	0.000E+00
TM-171	6.221E+02	9.239E+02	1.160E+03	0.000E+00
HG-203	2.499E+00	2.694E+00	3.340E+00	0.000E+00
RA-224	4.737E+01	5.017E+01	4.429E+01	0.000E+00
TH-228	3.618E+00	4.059E+00	4.129E+00	0.000E+00
TH-232	3.543E+00	3.975E+00	4.043E+00	0.000E+00
PA-234M	6.604E+01	3.795E+02	4.234E+02	0.000E+00
AM-241	2.499E+00	3.278E+00	5.033E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)

BE-7	-3.047E+00	1.716E+01	2.893E+01	0.000E+00	NOT IDENT.
NA-22	-6.847E-01	2.192E+00	3.700E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	2.520E+10	0.000E+00	0.000E+00	SHORT HLIF
AL-26	-6.716E-03	2.062E+00	3.348E+00	0.000E+00	NOT IDENT.
K-40	1.082E+01	1.972E+01	3.841E+01	0.000E+00	NOT IDENT.
SC-46	1.760E+00	2.166E+00	4.127E+00	0.000E+00	NOT IDENT.
V-48	0.000E+00	7.105E+00	8.355E+00	0.000E+00	FAIL ABUN
CR-51	1.233E+01	2.107E+01	3.768E+01	0.000E+00	NOT IDENT.
MN-54	-3.550E-01	1.801E+00	3.169E+00	0.000E+00	NOT IDENT.
CO-56	-3.118E-01	1.992E+00	3.525E+00	0.000E+00	FAIL ABUN
MN-56	0.000E+00	6.407E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	8.693E-02	1.150E+00	1.891E+00	0.000E+00	NOT IDENT.
CO-58	-2.378E+00	2.177E+00	3.513E+00	0.000E+00	NOT IDENT.
FE-59	7.389E+00	8.761E+00	1.020E+01	0.000E+00	FAIL ABUN
CO-60	-1.287E+00	1.764E+00	3.018E+00	0.000E+00	NOT IDENT.
ZN-65	-1.038E+00	4.102E+00	7.052E+00	0.000E+00	NOT IDENT.
SE-75	-6.591E-01	1.866E+00	3.215E+00	0.000E+00	FAIL ABUN
KR-85	-1.879E+03	5.524E+02	7.193E+02	0.000E+00	NOT IDENT.
SR-85	-1.026E+01	3.014E+00	3.925E+00	0.000E+00	NOT IDENT.
Y-88	0.000E+00	4.762E+00	3.840E+00	0.000E+00	FAIL ABUN
Y-91	-2.585E-01	1.939E+00	3.258E+00	0.000E+00	NOT IDENT.
NB-94	9.145E-01	2.837E+00	2.653E+00	0.000E+00	FAIL ABUN
NB-95	-6.317E-01	2.637E+00	4.632E+00	0.000E+00	NOT IDENT.
NB-95M	3.769E+00	2.452E+02	3.897E+02	0.000E+00	NOT IDENT.
ZR-95	-2.249E+00	3.946E+00	6.740E+00	0.000E+00	NOT IDENT.
TC-99M	0.000E+00	3.119E+25	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.955E+00	2.490E+00	3.956E+00	0.000E+00	NOT IDENT.
RH-106	-4.692E+00	1.561E+01	2.767E+01	0.000E+00	NOT IDENT.
RU-106	1.665E+00	1.557E+01	2.846E+01	0.000E+00	NOT IDENT.
AG-108M	5.378E-01	1.573E+00	2.770E+00	0.000E+00	NOT IDENT.
CD-109	1.738E+01	2.517E+01	4.310E+01	0.000E+00	NOT IDENT.
AG-110M	4.183E-01	1.750E+00	3.215E+00	0.000E+00	NOT IDENT.
SN-113	-1.598E+00	2.201E+00	3.601E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	3.432E+03	0.000E+00	0.000E+00	SHORT HLIF
SN-115	-3.195E+01	1.737E+02	3.057E+02	0.000E+00	NOT IDENT.
SN-117M	-1.706E+00	3.372E+00	5.291E+00	0.000E+00	FAIL ABUN
TE-123M	-6.620E-01	1.340E+00	2.103E+00	0.000E+00	NOT IDENT.
SB-124	2.197E+00	4.850E+00	7.995E+00	0.000E+00	FAIL ABUN
SB-125	-2.117E+00	4.284E+00	7.099E+00	0.000E+00	NOT IDENT.
TE-125M	3.702E+02	4.334E+02	7.392E+02	0.000E+00	NOT IDENT.
I-126	1.373E+00	1.172E+01	2.138E+01	0.000E+00	NOT IDENT.
SB-126	3.967E+00	1.028E+01	1.895E+01	0.000E+00	NOT IDENT.
SN-126	-1.220E+00	2.566E+00	4.165E+00	0.000E+00	NOT IDENT.
SB-127	-1.366E+02	2.064E+02	3.517E+02	0.000E+00	FAIL ABUN
I-131	1.249E+01	9.145E+00	1.709E+01	0.000E+00	FAIL ABUN
I-132	0.000E+00	4.320E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.327E+01	9.915E+01	1.762E+02	0.000E+00	NOT IDENT.
BA-133	-2.500E-02	2.004E+00	3.468E+00	0.000E+00	FAIL ABUN
I-133	0.000E+00	3.452E+07	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-7.122E-02	2.091E+00	3.730E+00	0.000E+00	NOT IDENT.
CS-135	-7.980E-01	6.245E+00	1.090E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	7.282E+23	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-8.726E-01	6.900E+00	1.212E+01	0.000E+00	FAIL ABUN
BA-137M	-1.920E-01	1.632E+00	2.933E+00	0.000E+00	NOT IDENT.
CS-137	-1.906E-01	1.727E+00	3.104E+00	0.000E+00	NOT IDENT.
BA-140	2.126E+00	1.922E+01	3.283E+01	0.000E+00	FAIL ABUN
LA-140	0.000E+00	1.123E+04	0.000E+00	0.000E+00	SHORT HLIF
CE-143	0.000E+00	1.243E+05	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-1.130E-01	9.222E+00	1.502E+01	0.000E+00	NOT IDENT.
PM-144	-2.505E-01	1.782E+00	3.165E+00	0.000E+00	NOT IDENT.

PR-144	0.000E+00	7.112E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-4.189E-01	2.241E+00	3.779E+00	0.000E+00	NOT IDENT.
ND-147	-1.058E+01	4.165E+01	6.932E+01	0.000E+00	NOT IDENT.
PM-147	-3.228E+05	2.374E+06	3.860E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	2.856E+04	0.000E+00	0.000E+00	SHORT HLIF
EU-152	3.213E+00	4.335E+00	7.866E+00	0.000E+00	NOT IDENT.
GD-153	5.114E+00	4.843E+00	5.371E+00	0.000E+00	FAIL ABUN
EU-154	-1.989E+00	6.098E+00	1.027E+01	0.000E+00	FAIL ABUN
EU-155	1.227E+00	4.579E+00	7.638E+00	0.000E+00	NOT IDENT.
TB-160	4.479E+00	7.684E+00	1.440E+01	0.000E+00	NOT IDENT.
HF-181	-4.160E-01	2.297E+00	3.872E+00	0.000E+00	FAIL ABUN
TA-182	4.057E+00	7.872E+00	1.481E+01	0.000E+00	FAIL ABUN
IR-192	-8.178E-02	1.669E+00	2.897E+00	0.000E+00	FAIL ABUN
BI-207	-7.661E-01	2.603E+00	4.465E+00	0.000E+00	NOT IDENT.
TL-208	1.371E+00	3.046E+00	3.321E+00	0.000E+00	FAIL ABUN
BI-210	0.000E+00	3.655E+01	6.458E+01	0.000E+00	NOT IDENT.
PB-210	0.000E+00	3.655E+01	6.458E+01	0.000E+00	NOT IDENT.
BI-211	1.542E+01	9.608E+00	1.804E+01	0.000E+00	NOT IDENT.
PB-211	-1.222E+00	4.370E+01	7.511E+01	0.000E+00	NOT IDENT.
BI-212	1.447E+01	1.508E+01	2.879E+01	0.000E+00	NOT IDENT.
PB-212	3.618E+00	4.059E+00	5.240E+00	0.000E+00	FAIL ABUN
BI-214	6.485E+00	3.722E+00	7.302E+00	0.000E+00	FAIL ABUN
PB-214	4.542E+00	3.445E+00	6.353E+00	0.000E+00	FAIL ABUN
RN-219	9.796E+00	1.870E+01	3.338E+01	0.000E+00	NOT IDENT.
RA-223	-2.229E+01	3.070E+01	5.061E+01	0.000E+00	FAIL ABUN
RA-226	6.485E+00	3.722E+00	7.302E+00	0.000E+00	FAIL ABUN
AC-227	1.698E+00	1.642E+01	2.901E+01	0.000E+00	FAIL ABUN
TH-227	1.671E+00	1.615E+01	2.855E+01	0.000E+00	FAIL ABUN
AC-228	6.137E+00	1.604E+01	1.418E+01	0.000E+00	FAIL ABUN
RA-228	6.137E+00	1.604E+01	1.418E+01	0.000E+00	FAIL ABUN
TH-229	1.129E+01	2.021E+01	3.681E+01	0.000E+00	FAIL ABUN
TH-230	6.484E+00	3.722E+00	7.302E+00	0.000E+00	FAIL ABUN
PA-231	1.807E+01	7.575E+01	1.208E+02	0.000E+00	NOT IDENT.
TH-231	-3.219E+00	7.872E+00	1.348E+01	0.000E+00	NOT IDENT.
PA-233	-1.669E+00	2.720E+00	4.564E+00	0.000E+00	NOT IDENT.
PA-234	-1.295E+01	1.612E+01	2.613E+01	0.000E+00	FAIL ABUN
TH-234	0.000E+00	5.674E+01	7.238E+01	0.000E+00	NOT IDENT.
U-234	1.133E+00	8.903E+00	1.073E+01	0.000E+00	FAIL ABUN
U-235	1.016E+01	1.612E+01	1.787E+01	0.000E+00	FAIL ABUN
NP-237	-8.005E+00	7.981E+00	1.233E+01	0.000E+00	NOT IDENT.
U-238	0.000E+00	5.674E+01	7.238E+01	0.000E+00	NOT IDENT.
NP-239	1.781E+00	8.395E+00	1.391E+01	0.000E+00	FAIL ABUN
AM-242	4.599E+01	9.085E+01	1.535E+02	0.000E+00	FAIL ABUN
CM-247	-4.221E-01	1.718E+00	2.911E+00	0.000E+00	FAIL ABUN
CF-249	3.799E-01	1.838E+00	3.220E+00	0.000E+00	NOT IDENT.
CF-251	4.293E+00	5.338E+00	9.813E+00	0.000E+00	FAIL ABUN
ANH-511	0.000E+00	2.549E+00	4.945E+00	0.000E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 14:03:36.11

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874844.CNF;1
Sample date : 23-JUN-2005 08:55:00 Acquisition date : 14-JUL-2005 07:32:19
Sample ID : G1200874844 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 06:30:38.91 Elapsed real time: 0 06:30:40.72 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	47.14	266	354	0.78	81.69	80	6	1.13E-02	12.7	
2	0	51.12	54	329	1.62	89.68	87	6	2.32E-03	54.3	
3	0	60.55	41	299	1.28	108.63	107	5	1.76E-03	65.5	
4	0	63.87	520	395	0.99	115.31	113	6	2.22E-02	7.4	
5	0	67.15	87	323	0.82	121.91	120	5	3.70E-03	33.2	
6	0	85.12	43	341	1.12	158.04	156	6	1.84E-03	70.2	
7	0	93.27	680	546	1.04	174.43	170	9	2.90E-02	7.3	
8	0	99.36	74	378	0.75	186.66	183	8	3.16E-03	47.2	
9	0	112.47	8	670	4.20	213.03	204	13	3.31E-04	689.2	
10	0	140.41	70	243	0.96	269.21	267	6	2.99E-03	37.3	
11	0	143.97	120	327	0.70	276.36	273	8	5.11E-03	27.7	
12	0	154.45	58	344	0.79	297.44	293	9	2.48E-03	59.0	
13	0	163.97	62	298	0.80	316.58	313	8	2.63E-03	50.3	
14	0	186.27	296	362	1.02	361.42	355	11	1.26E-02	13.8	
15	0	198.91	77	233	0.93	386.83	383	8	3.28E-03	36.2	
16	5	239.17	155	159	1.19	467.79	464	18	6.63E-03	15.4	2.53E+00
17	5	241.93	62	238	1.75	473.34	464	18	2.64E-03	52.9	
18	0	278.31	43	167	1.88	546.48	544	8	1.84E-03	53.8	
19	0	286.02	30	113	1.08	561.98	560	6	1.28E-03	59.5	
20	0	295.77	30	145	1.33	581.61	579	7	1.30E-03	67.8	
21	0	352.37	31	170	0.67	695.42	692	9	1.33E-03	78.1	
22	0	375.68	62	213	4.81	742.30	736	16	2.65E-03	54.0	
23	0	413.25	30	123	2.38	817.85	814	10	1.29E-03	71.0	
24	0	511.66	314	197	2.33	1015.74	1008	15	1.34E-02	11.4	
25	0	583.70	36	69	1.78	1160.62	1157	9	1.55E-03	44.0	
26	0	596.23	60	61	1.92	1185.81	1182	8	2.57E-03	26.0	
27	0	608.96	69	140	3.09	1211.42	1204	16	2.96E-03	40.0	
28	0	702.65	13	89	5.08	1399.85	1398	13	5.41E-04	155.1	
29	0	749.27	24	81	4.35	1493.60	1487	12	1.02E-03	78.0	
30	0	911.33	48	76	0.94	1819.57	1812	16	2.04E-03	43.3	
31	0	952.02	17	41	1.21	1901.41	1897	8	7.06E-04	73.0	
32	0	982.54	36	42	4.46	1962.79	1956	13	1.55E-03	40.3	
33	1	1001.63	30	49	1.79	2001.19	1996	17	1.26E-03	48.3	1.16E+00
34	1	1005.58	20	23	1.80	2009.15	1996	17	8.49E-04	45.0	
35	0	1038.66	14	46	0.50	2075.68	2071	9	6.10E-04	90.2	
36	0	1097.67	28	57	2.82	2194.39	2189	14	1.21E-03	59.2	
37	0	1125.11	35	36	5.29	2249.59	2244	14	1.50E-03	39.7	
38	0	1250.09	28	22	2.57	2501.00	2496	11	1.19E-03	37.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1255.14	25	22	3.39	2511.16	2506	11	1.07E-03	41.5	
40	0	1378.12	14	20	0.62	2758.58	2755	9	6.04E-04	63.1	
41	0	1414.36	18	32	5.06	2831.49	2826	14	7.74E-04	69.7	
42	0	1469.99	24	14	5.28	2943.41	2936	15	1.01E-03	40.9	
43	0	1516.95	17	14	4.10	3037.88	3033	12	7.05E-04	52.8	
44	0	1624.54	11	8	2.72	3254.36	3252	8	4.69E-04	53.8	
45	0	1692.18	6	9	3.17	3390.47	3385	10	2.45E-04	110.3	
46	0	1701.24	5	11	1.31	3408.71	3401	12	2.00E-04	153.8	
47	0	1758.57	9	1	1.45	3524.06	3521	7	3.67E-04	42.0	
48	0	1764.70	31	5	2.09	3536.39	3533	9	1.31E-03	22.1	
49	0	1800.84	8	14	3.80	3609.12	3602	12	3.51E-04	99.5	
50	4	1818.74	23	9	2.93	3645.13	3630	27	9.61E-04	36.7	1.28E+00
51	4	1823.25	9	3	1.63	3654.22	3630	27	3.90E-04	43.1	
52	0	1835.24	29	20	6.60	3678.34	3669	26	1.22E-03	46.3	
53	0	1933.89	8	2	1.77	3876.86	3874	6	3.24E-04	50.1	
54	0	1939.12	16	3	4.35	3887.37	3880	14	6.76E-04	35.3	

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 14:03:41.97

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

****

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874844.CNF;1
Sample date : 23-JUN-2005 08:55:00 Acquisition date : 14-JUL-2005 07:32:19
Sample ID : G1200874844 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 06:30:38.91 Elapsed real time: 0 06:30:40.72 0.0%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
MO-99	140.51	70	82.70*	2.607E+00	1.872E+00	3.791E+02	74.81
	181.06	------	6.20	2.323E+00	------ Line Not Found		------
	739.58	------	12.80	7.640E-01	------ Line Not Found		------
CE-139	165.85	23	80.35*	2.442E+00	6.789E-01	7.549E-01	309.68
CE-141	145.44	48	48.40*	2.582E+00	2.203E+00	3.454E+00	158.02
TM-171	51.87	54	0.81	2.435E+00	1.592E+02	1.626E+02	108.67
	59.40	41	0.21	2.644E+00	4.212E+02	4.301E+02	131.12
	66.72	46	0.16*	2.737E+00	6.092E+02	6.221E+02	148.53
HG-203	70.83	------	4.75	2.774E+00	------ Line Not Found		------
	72.87	------	8.00	2.790E+00	------ Line Not Found		------
	82.60	------	3.55	2.837E+00	------ Line Not Found		------
	279.20	43	77.30*	1.761E+00	1.826E+00	2.499E+00	107.80
TH-228	84.40	------	1.21	2.841E+00	------ Line Not Found		------
	238.60	54	44.60*	1.961E+00	3.543E+00	3.618E+00	112.20
	300.10	------	3.41	1.663E+00	------ Line Not Found		------
TH-232	238.59	54	44.60*	1.961E+00	3.543E+00	3.543E+00	112.20
	911.20	19	27.70	6.355E-01	6.094E+00	6.094E+00	261.35
	964.40	------	5.20	6.053E-01	------ Line Not Found		------
	969.11	------	16.60	6.028E-01	------ Line Not Found		------
PA-234M	766.40	------	0.21	7.401E-01	------ Line Not Found		------
	1001.03	6	0.85*	5.861E-01	6.604E+01	6.604E+01	574.72
AM-241	59.54	41	35.90*	2.644E+00	2.499E+00	2.499E+00	131.16

Nuclide Type: NATURAL

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
RA-224	240.98	62	3.95*	1.946E+00	4.639E+01	4.737E+01	105.90

Flag: "*" = Keyline

Sample ID : G1200874844 Acquisition date : 14-JUL-2005 07:32:19

Total number of lines in spectrum	44	
Number of unidentified lines	17	
Number of lines tentatively identified by NID	27	61.36%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
MO-99	66.02H	203.	1.872E+00	3.791E+02	2.836E+02	74.81	
CE-139	137.66D	1.11	6.789E-01	7.549E-01	23.38E-01	309.68	
CE-141	32.50D	1.57	2.203E+00	3.454E+00	5.458E+00	158.02	
TM-171	1.92Y	1.02	6.092E+02	6.221E+02	9.239E+02	148.53	
HG-203	46.61D	1.37	1.826E+00	2.499E+00	2.694E+00	107.80	
TH-228	1.91Y	1.02	3.543E+00	3.618E+00	4.059E+00	112.20	
TH-232	1.41E+10Y	1.00	3.543E+00	3.543E+00	3.975E+00	112.20	
PA-234M	4.47E+09Y	1.00	6.604E+01	6.604E+01	37.95E+01	574.72	
AM-241	432.20Y	1.00	2.499E+00	2.499E+00	3.278E+00	131.16	
			---------	---------			
	Total Activity :		6.914E+02	1.084E+03			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RA-224	1.91Y	1.02	4.639E+01	4.737E+01	5.017E+01	105.90	
			---------	---------			
	Total Activity :		4.639E+01	4.737E+01			

Grand Total Activity : 7.378E+02 1.131E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	99.36	74	378	0.75	186.66	183	8	3.16E-03	94.5	2.83E+00	T
0	154.45	58	344	0.79	297.44	293	9	2.48E-03	****	2.51E+00	T
0	198.91	77	233	0.93	386.83	383	8	3.28E-03	72.3	2.20E+00	T
0	286.02	30	113	1.08	561.98	560	6	1.28E-03	****	1.73E+00	T
0	295.77	6	145	1.33	581.61	579	7	2.71E-04	****	1.68E+00	T
0	375.68	62	213	4.81	742.30	736	16	2.65E-03	****	1.39E+00	
0	413.25	14	123	2.38	817.85	814	10	5.82E-04	****	1.28E+00	T
0	583.70	19	69	1.78	1160.62	1157	9	7.90E-04	****	9.45E-01	T
0	596.23	60	61	1.92	1185.81	1182	8	2.57E-03	52.0	9.27E-01	
0	702.65	13	89	5.08	1399.85	1398	13	5.41E-04	****	8.00E-01	T
0	749.27	24	81	4.35	1493.60	1487	12	1.02E-03	****	7.55E-01	
0	952.02	17	41	1.21	1901.41	1897	8	7.06E-04	****	6.12E-01	
0	982.54	36	42	4.46	1962.79	1956	13	1.55E-03	80.7	5.96E-01	T
1	1005.58	20	23	1.80	2009.15	1996	17	8.49E-04	89.9	5.84E-01	T
0	1038.66	14	46	0.50	2075.68	2071	9	6.10E-04	****	5.68E-01	T
0	1097.67	28	57	2.82	2194.39	2189	14	1.21E-03	****	5.43E-01	T
0	1125.11	35	36	5.29	2249.59	2244	14	1.50E-03	79.3	5.32E-01	T
0	1250.09	28	22	2.57	2501.00	2496	11	1.19E-03	75.1	4.89E-01	
0	1255.14	25	22	3.39	2511.16	2506	11	1.07E-03	82.9	4.87E-01	
0	1378.12	14	20	0.62	2758.58	2755	9	6.04E-04	****	4.53E-01	T
0	1414.36	18	32	5.06	2831.49	2826	14	7.74E-04	****	4.44E-01	
0	1469.99	24	14	5.28	2943.41	2936	15	1.01E-03	81.7	4.32E-01	
0	1516.95	17	14	4.10	3037.88	3033	12	7.05E-04	****	4.22E-01	
0	1624.54	11	8	2.72	3254.36	3252	8	4.69E-04	****	4.02E-01	
0	1692.18	6	9	3.17	3390.47	3385	10	2.45E-04	****	3.91E-01	T
0	1701.24	5	11	1.31	3408.71	3401	12	2.00E-04	****	3.90E-01	
0	1758.57	9	1	1.45	3524.06	3521	7	3.67E-04	84.1	3.82E-01	
0	1764.70	31	5	2.09	3536.39	3533	9	1.31E-03	44.3	3.81E-01	
0	1800.84	8	14	3.80	3609.12	3602	12	3.51E-04	****	3.76E-01	
4	1818.74	23	9	2.93	3645.13	3630	27	9.61E-04	73.5	3.73E-01	
0	1835.24	29	20	6.60	3678.34	3669	26	1.22E-03	92.6	3.71E-01	T
0	1933.89	8	2	1.77	3876.86	3874	6	3.24E-04	****	3.59E-01	
0	1939.12	16	3	4.35	3887.37	3880	14	6.76E-04	70.6	3.59E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 14:03:50.20

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874844.CNF;1		
Acquisition date	: 14-JUL-2005 07:32:19	Detector SN#	: 30-TN10348
Detector ID	: GAMMA17	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 06:30:38.91	Abundance limit	: 75.00000
Elapsed real time	: 0 06:30:40.72	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 23-JUN-2005 08:55:00	Nuclide Library	: EPI
Sample ID	: G1200874844	Analyst initials	: AKB
Batch Number	: 437153	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 1-DEC-2004 11:39:23.06	MS Isotope	:
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MO-99	3.791E+02	2.836E+02	4.029E+02	2.649E+01	0.941
CE-139	7.549E-01	2.338E+00	2.192E+00	1.258E-01	0.344
CE-141	3.454E+00	5.458E+00	4.992E+00	3.265E-01	0.692
TM-171	6.221E+02	9.239E+02	1.160E+03	7.088E+01	0.536
HG-203	2.499E+00	2.694E+00	3.340E+00	2.270E-01	0.748
RA-224	4.737E+01	5.017E+01	4.429E+01	2.777E+00	1.070
TH-228	3.618E+00	4.059E+00	4.129E+00	3.179E-01	0.876
TH-232	3.543E+00	3.975E+00	4.043E+00	3.113E-01	0.876
PA-234M	6.604E+01	3.795E+02	4.234E+02	3.290E+01	0.156
AM-241	2.499E+00	3.278E+00	5.033E+00	3.490E-01	0.497

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-3.047E+00		1.716E+01	2.893E+01	2.206E+00	-0.105
NA-22	-6.847E-01		2.192E+00	3.700E+00	2.241E-01	-0.185

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	-6.716E-03		2.062E+00	3.348E+00	1.991E-01	-0.002
K-40	1.082E+01		1.972E+01	3.841E+01	2.358E+00	0.282
SC-46	1.760E+00		2.166E+00	4.127E+00	2.295E-01	0.427
V-48	8.785E+00	+	7.105E+00	8.355E+00	4.927E-01	1.052
CR-51	1.233E+01		2.107E+01	3.768E+01	2.711E+00	0.327
MN-54	-3.550E-01		1.801E+00	3.169E+00	1.844E-01	-0.112
CO-56	-3.118E-01		1.992E+00	3.525E+00	2.033E-01	-0.088
CO-57	8.693E-02		1.150E+00	1.891E+00	1.317E-01	0.046
CO-58	-2.378E+00		2.177E+00	3.513E+00	2.086E-01	-0.677
FE-59	7.389E+00	+	8.761E+00	1.020E+01	7.442E-01	0.724
CO-60	-1.287E+00		1.764E+00	3.018E+00	1.696E-01	-0.426
ZN-65	-1.038E+00		4.102E+00	7.052E+00	4.553E-01	-0.147
SE-75	-6.591E-01		1.866E+00	3.215E+00	2.077E-01	-0.205
KR-85	-1.879E+03		5.524E+02	7.193E+02	4.885E+01	-2.613
SR-85	-1.026E+01		3.014E+00	3.925E+00	2.666E-01	-2.613
Y-88	5.130E+00	+	4.762E+00	3.840E+00	2.288E-01	1.336
Y-91	-2.585E-01		1.939E+00	3.258E+00	2.185E-01	-0.079
NB-94	9.145E-01	+	2.837E+00	2.653E+00	1.631E-01	0.345
NB-95	-6.317E-01		2.637E+00	4.632E+00	2.801E-01	-0.136
NB-95M	3.769E+00		2.452E+02	3.897E+02	4.232E+01	0.010
ZR-95	-2.249E+00		3.946E+00	6.740E+00	4.887E-01	-0.334
RU-103	-1.955E+00		2.490E+00	3.956E+00	5.197E-01	-0.494
RH-106	-4.692E+00		1.561E+01	2.767E+01	1.779E+00	-0.170
RU-106	1.665E+00		1.557E+01	2.846E+01	3.432E+00	0.059
AG-108M	5.378E-01		1.573E+00	2.770E+00	1.984E-01	0.194
CD-109	1.738E+01		2.517E+01	4.310E+01	2.858E+00	0.403
AG-110M	4.183E-01		1.750E+00	3.215E+00	2.105E-01	0.130
SN-113	-1.598E+00		2.201E+00	3.601E+00	2.496E-01	-0.444
SN-115	-3.195E+01		1.737E+02	3.057E+02	1.734E+01	-0.104
SN-117M	-1.706E+00		3.372E+00	5.291E+00	3.151E-01	-0.322
TE-123M	-6.620E-01		1.340E+00	2.103E+00	1.266E-01	-0.315
SB-124	2.197E+00	+	4.850E+00	7.995E+00	5.132E-01	0.275
SB-125	-2.117E+00		4.284E+00	7.099E+00	4.917E-01	-0.298
TE-125M	3.702E+02		4.334E+02	7.392E+02	6.553E+01	0.501
I-126	1.373E+00		1.172E+01	2.138E+01	1.318E+00	0.064
SB-126	3.967E+00		1.028E+01	1.895E+01	1.161E+00	0.209
SN-126	-1.220E+00		2.566E+00	4.165E+00	2.755E-01	-0.293
SB-127	-1.366E+02		2.064E+02	3.517E+02	4.163E+01	-0.388
I-131	1.249E+01		9.145E+00	1.709E+01	1.246E+00	0.731
TE-132	1.327E+01		9.915E+01	1.762E+02	2.791E+01	0.075
BA-133	-2.500E-02		2.004E+00	3.468E+00	4.162E-01	-0.007
CS-134	-7.122E-02		2.091E+00	3.730E+00	2.249E-01	-0.019
CS-135	-7.980E-01		6.245E+00	1.090E+01	8.870E-01	-0.073
CS-136	-8.726E-01		6.900E+00	1.212E+01	8.100E-01	-0.072
BA-137M	-1.920E-01		1.632E+00	2.933E+00	1.808E-01	-0.065
CS-137	-1.906E-01		1.727E+00	3.104E+00	1.921E-01	-0.061
BA-140	2.126E+00		1.922E+01	3.283E+01	1.074E+01	0.065
CE-144	-1.130E-01		9.222E+00	1.502E+01	2.189E+00	-0.008

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-144	-2.505E-01		1.782E+00	3.165E+00	1.950E-01	-0.079
PM-146	-4.189E-01		2.241E+00	3.779E+00	3.515E-01	-0.111
ND-147	-1.058E+01		4.165E+01	6.932E+01	9.681E+00	-0.153
PM-147	-3.228E+05		2.374E+06	3.860E+06	2.680E+05	-0.084
EU-152	3.213E+00		4.335E+00	7.866E+00	5.735E-01	0.408
GD-153	5.114E+00	+	4.843E+00	5.371E+00	3.579E-01	0.952
EU-154	-1.989E+00		6.098E+00	1.027E+01	9.754E-01	-0.194
EU-155	1.227E+00		4.579E+00	7.638E+00	5.243E-01	0.161
TB-160	4.479E+00		7.684E+00	1.440E+01	8.083E-01	0.311
HF-181	-4.160E-01		2.297E+00	3.872E+00	2.633E-01	-0.107
TA-182	4.057E+00		7.872E+00	1.481E+01	9.459E-01	0.274
IR-192	-8.178E-02		1.669E+00	2.897E+00	1.919E-01	-0.028
BI-207	-7.661E-01		2.603E+00	4.465E+00	2.784E-01	-0.172
TL-208	1.371E+00	+	3.046E+00	3.321E+00	2.460E-01	0.413
BI-210	1.442E+02		3.655E+01	6.458E+01	4.650E+00	2.233
PB-210	1.442E+02		3.655E+01	6.458E+01	4.650E+00	2.233
BI-211	1.542E+01		9.608E+00	1.804E+01	1.299E+00	0.855
PB-211	-1.222E+00		4.370E+01	7.511E+01	4.688E+01	-0.016
BI-212	1.447E+01		1.508E+01	2.879E+01	2.290E+00	0.503
PB-212	3.618E+00	+	4.059E+00	5.240E+00	4.034E-01	0.690
BI-214	6.485E+00		3.722E+00	7.302E+00	6.070E-01	0.888
PB-214	4.542E+00		3.445E+00	6.353E+00	5.649E-01	0.715
RN-219	9.796E+00		1.870E+01	3.338E+01	4.666E+00	0.293
RA-223	-2.229E+01		3.070E+01	5.061E+01	8.512E+00	-0.441
RA-226	6.485E+00		3.722E+00	7.302E+00	6.070E-01	0.888
AC-227	1.698E+00		1.642E+01	2.901E+01	4.168E+00	0.059
TH-227	1.671E+00		1.615E+01	2.855E+01	4.882E+00	0.059
AC-228	6.137E+00	+	1.604E+01	1.418E+01	1.294E+00	0.433
RA-228	6.137E+00	+	1.604E+01	1.418E+01	1.294E+00	0.433
TH-229	1.129E+01		2.021E+01	3.681E+01	2.188E+00	0.307
TH-230	6.484E+00		3.722E+00	7.302E+00	6.070E-01	0.888
PA-231	1.807E+01		7.575E+01	1.208E+02	1.702E+01	0.150
TH-231	-3.219E+00		7.872E+00	1.348E+01	1.051E+00	-0.239
PA-233	-1.669E+00		2.720E+00	4.564E+00	3.152E-01	-0.366
PA-234	-1.295E+01		1.612E+01	2.613E+01	4.605E+00	-0.496
TH-234	2.599E+02		5.674E+01	7.238E+01	1.225E+01	3.591
U-234	1.133E+00	+	8.903E+00	1.073E+01	9.706E-01	0.106
U-235	1.016E+01	+	1.612E+01	1.787E+01	2.952E+00	0.568
NP-237	-8.005E+00		7.981E+00	1.233E+01	2.670E+00	-0.649
U-238	2.599E+02		5.674E+01	7.238E+01	1.225E+01	3.591
NP-239	1.781E+00		8.395E+00	1.391E+01	9.568E-01	0.128
AM-242	4.599E+01		9.085E+01	1.535E+02	1.030E+01	0.300
CM-247	-4.221E-01		1.718E+00	2.911E+00	1.930E-01	-0.145
CF-249	3.799E-01		1.838E+00	3.220E+00	2.124E-01	0.118
CF-251	4.293E+00		5.338E+00	9.813E+00	5.703E-01	0.438
ANH-511	1.423E+01		2.549E+00	4.945E+00	3.360E-01	2.878

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200874844           *
* Acquisition date : 14-JUL-2005 07:32:19 Detector SN#     : 30-TN10348    *
* Detector ID      : GAMMA17              Sensitivity      : 3.000         *
* Geometry         : 2L_MB                Energy tolerance: 2.000         *
* Elapsed live time:    0 06:30:38.91     Abundance limit  : 75.000        *
* Elapsed real time:    0 06:30:40.72     Half life ratio  : 8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date      : 23-JUN-2005 08:55:00 Nuclide Library :                 *
* Sample ID        : G1200874844          Analyst initials: AKB             *
* Batch Number     : 437153               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME :  1-DEC-2004 11:39:23 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
MO-99	3.791E+02	2.836E+02	1.942E+02	1.418E+02
CE-139	7.549E-01	2.338E+00	1.052E+00	1.169E+00
CE-141	3.454E+00	5.458E+00	2.399E+00	2.729E+00
TM-171	6.221E+02	9.239E+02	5.620E+02	4.620E+02
HG-203	2.499E+00	2.694E+00	1.592E+00	1.347E+00
RA-224	4.737E+01	5.017E+01	2.112E+01	2.508E+01
TH-228	3.618E+00	4.059E+00	1.975E+00	2.030E+00
TH-232	3.543E+00	3.975E+00	1.934E+00	1.987E+00
PA-234M	6.604E+01	3.795E+02	1.960E+02	1.898E+02
AM-241	2.499E+00	3.278E+00	2.435E+00	1.639E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU

BE-7	-3.047E+00	1.716E+01	1.360E+01	8.578E+00	NOT IDENT.
NA-22	-6.847E-01	2.192E+00	1.686E+00	1.096E+00	NOT IDENT.
NA-24	1.265E+10	2.520E+10	0.000E+00	1.260E+10	SHORT HLIF
AL-26	-6.716E-03	2.062E+00	1.466E+00	1.031E+00	NOT IDENT.
K-40	1.082E+01	1.972E+01	1.753E+01	9.859E+00	NOT IDENT.
SC-46	1.760E+00	2.166E+00	1.921E+00	1.083E+00	NOT IDENT.
V-48	8.785E+00	7.105E+00	3.852E+00	3.553E+00	FAIL ABUN
CR-51	1.233E+01	2.107E+01	1.800E+01	1.054E+01	NOT IDENT.
MN-54	-3.550E-01	1.801E+00	1.466E+00	9.006E-01	NOT IDENT.
CO-56	-3.118E-01	1.992E+00	1.625E+00	9.961E-01	FAIL ABUN
MN-56	-1.000E+41	6.407E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	8.693E-02	1.150E+00	9.104E-01	5.751E-01	NOT IDENT.
CO-58	-2.378E+00	2.177E+00	1.620E+00	1.088E+00	NOT IDENT.
FE-59	7.389E+00	8.761E+00	4.748E+00	4.380E+00	FAIL ABUN
CO-60	-1.287E+00	1.764E+00	1.341E+00	8.820E-01	NOT IDENT.
ZN-65	-1.038E+00	4.102E+00	3.223E+00	2.051E+00	NOT IDENT.
SE-75	-6.591E-01	1.866E+00	1.528E+00	9.328E-01	FAIL ABUN
KR-85	-1.879E+03	5.524E+02	3.428E+02	2.762E+02	NOT IDENT.
SR-85	-1.026E+01	3.014E+00	1.870E+00	1.507E+00	NOT IDENT.
Y-88	5.130E+00	4.762E+00	1.678E+00	2.381E+00	FAIL ABUN
Y-91	-2.585E-01	1.939E+00	1.523E+00	9.695E-01	NOT IDENT.
NB-94	9.145E-01	2.837E+00	1.230E+00	1.419E+00	FAIL ABUN
NB-95	-6.317E-01	2.637E+00	2.157E+00	1.319E+00	NOT IDENT.
NB-95M	3.769E+00	2.452E+02	1.859E+02	1.226E+02	NOT IDENT.
ZR-95	-2.249E+00	3.946E+00	3.135E+00	1.973E+00	NOT IDENT.
TC-99M	3.701E+25	3.119E+25	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.955E+00	2.490E+00	1.863E+00	1.245E+00	NOT IDENT.
RH-106	-4.692E+00	1.561E+01	1.292E+01	7.803E+00	NOT IDENT.
RU-106	1.665E+00	1.557E+01	1.331E+01	7.786E+00	NOT IDENT.
AG-108M	5.378E-01	1.573E+00	1.308E+00	7.865E-01	NOT IDENT.
CD-109	1.738E+01	2.517E+01	2.081E+01	1.258E+01	NOT IDENT.
AG-110M	4.183E-01	1.750E+00	1.505E+00	8.751E-01	NOT IDENT.
SN-113	-1.598E+00	2.201E+00	1.699E+00	1.101E+00	NOT IDENT.
CD-115	-9.642E+01	3.432E+03	0.000E+00	1.716E+03	SHORT HLIF
SN-115	-3.195E+01	1.737E+02	1.399E+02	8.685E+01	NOT IDENT.
SN-117M	-1.706E+00	3.372E+00	2.540E+00	1.686E+00	FAIL ABUN
TE-123M	-6.620E-01	1.340E+00	1.010E+00	6.700E-01	NOT IDENT.
SB-124	2.197E+00	4.850E+00	3.481E+00	2.425E+00	FAIL ABUN
SB-125	-2.117E+00	4.284E+00	3.334E+00	2.142E+00	NOT IDENT.
TE-125M	3.702E+02	4.334E+02	3.571E+02	2.167E+02	NOT IDENT.
I-126	1.373E+00	1.172E+01	9.978E+00	5.858E+00	NOT IDENT.
SB-126	3.967E+00	1.028E+01	8.879E+00	5.138E+00	NOT IDENT.
SN-126	-1.220E+00	2.566E+00	2.009E+00	1.283E+00	NOT IDENT.
SB-127	-1.366E+02	2.064E+02	1.641E+02	1.032E+02	FAIL ABUN
I-131	1.249E+01	9.145E+00	8.132E+00	4.573E+00	FAIL ABUN
I-132	1.000E+41	4.320E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	1.327E+01	9.915E+01	8.425E+01	4.958E+01	NOT IDENT.
BA-133	-2.500E-02	2.004E+00	1.645E+00	1.002E+00	FAIL ABUN
I-133	-1.055E+07	3.452E+07	0.000E+00	1.726E+07	SHORT HLIF
CS-134	-7.122E-02	2.091E+00	1.735E+00	1.045E+00	NOT IDENT.
CS-135	-7.980E-01	6.245E+00	5.182E+00	3.122E+00	NOT IDENT.
I-135	-2.713E+22	7.282E+23	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-8.726E-01	6.900E+00	5.535E+00	3.450E+00	FAIL ABUN
BA-137M	-1.920E-01	1.632E+00	1.364E+00	8.161E-01	NOT IDENT.
CS-137	-1.906E-01	1.727E+00	1.444E+00	8.633E-01	NOT IDENT.
BA-140	2.126E+00	1.922E+01	1.546E+01	9.611E+00	FAIL ABUN
LA-140	-4.421E+03	1.123E+04	0.000E+00	5.615E+03	SHORT HLIF
CE-143	-5.370E+04	1.243E+05	0.000E+00	6.217E+04	SHORT HLIF
CE-144	-1.130E-01	9.222E+00	7.229E+00	4.611E+00	NOT IDENT.
PM-144	-2.505E-01	1.782E+00	1.482E+00	8.908E-01	NOT IDENT.

PR-144	-1.000E+41	7.112E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-4.189E-01	2.241E+00	1.784E+00	1.120E+00	NOT IDENT.
ND-147	-1.058E+01	4.165E+01	3.249E+01	2.083E+01	NOT IDENT.
PM-147	-3.228E+05	2.374E+06	1.859E+06	1.187E+06	NOT IDENT.
PM-149	2.383E+04	2.856E+04	0.000E+00	1.428E+04	SHORT HLIF
EU-152	3.213E+00	4.335E+00	3.737E+00	2.167E+00	NOT IDENT.
GD-153	5.114E+00	4.843E+00	2.593E+00	2.421E+00	FAIL ABUN
EU-154	-1.989E+00	6.098E+00	4.680E+00	3.049E+00	FAIL ABUN
EU-155	1.227E+00	4.579E+00	3.686E+00	2.290E+00	NOT IDENT.
TB-160	4.479E+00	7.684E+00	6.693E+00	3.842E+00	NOT IDENT.
HF-181	-4.160E-01	2.297E+00	1.818E+00	1.148E+00	FAIL ABUN
TA-182	4.057E+00	7.872E+00	6.750E+00	3.936E+00	FAIL ABUN
IR-192	-8.178E-02	1.669E+00	1.377E+00	8.346E-01	FAIL ABUN
BI-207	-7.661E-01	2.603E+00	2.046E+00	1.301E+00	NOT IDENT.
TL-208	1.371E+00	3.046E+00	1.561E+00	1.523E+00	FAIL ABUN
BI-210	1.442E+02	3.655E+01	3.147E+01	1.828E+01	NOT IDENT.
PB-210	1.442E+02	3.655E+01	3.147E+01	1.828E+01	NOT IDENT.
BI-211	1.542E+01	9.608E+00	8.616E+00	4.804E+00	NOT IDENT.
PB-211	-1.222E+00	4.370E+01	3.551E+01	2.185E+01	NOT IDENT.
BI-212	1.447E+01	1.508E+01	1.353E+01	7.539E+00	NOT IDENT.
PB-212	3.618E+00	4.059E+00	2.530E+00	2.030E+00	FAIL ABUN
BI-214	6.485E+00	3.722E+00	3.468E+00	1.861E+00	FAIL ABUN
PB-214	4.542E+00	3.445E+00	3.035E+00	1.723E+00	FAIL ABUN
RN-219	9.796E+00	1.870E+01	1.578E+01	9.350E+00	NOT IDENT.
RA-223	-2.229E+01	3.070E+01	2.403E+01	1.535E+01	FAIL ABUN
RA-226	6.485E+00	3.722E+00	3.468E+00	1.861E+00	FAIL ABUN
AC-227	1.698E+00	1.642E+01	1.384E+01	8.208E+00	FAIL ABUN
TH-227	1.671E+00	1.615E+01	1.362E+01	8.076E+00	FAIL ABUN
AC-228	6.137E+00	1.604E+01	6.649E+00	8.020E+00	FAIL ABUN
RA-228	6.137E+00	1.604E+01	6.649E+00	8.020E+00	FAIL ABUN
TH-229	1.129E+01	2.021E+01	1.765E+01	1.010E+01	FAIL ABUN
TH-230	6.484E+00	3.722E+00	3.468E+00	1.861E+00	FAIL ABUN
PA-231	1.807E+01	7.575E+01	5.763E+01	3.788E+01	NOT IDENT.
TH-231	-3.219E+00	7.872E+00	6.425E+00	3.936E+00	NOT IDENT.
PA-233	-1.669E+00	2.720E+00	2.158E+00	1.360E+00	NOT IDENT.
PA-234	-1.295E+01	1.612E+01	1.201E+01	8.060E+00	FAIL ABUN
TH-234	2.599E+02	5.674E+01	3.545E+01	2.837E+01	NOT IDENT.
U-234	1.133E+00	8.903E+00	5.127E+00	4.451E+00	FAIL ABUN
U-235	1.016E+01	1.612E+01	8.653E+00	8.061E+00	FAIL ABUN
NP-237	-8.005E+00	7.981E+00	5.949E+00	3.991E+00	NOT IDENT.
U-238	2.599E+02	5.674E+01	3.545E+01	2.837E+01	NOT IDENT.
NP-239	1.781E+00	8.395E+00	6.705E+00	4.197E+00	FAIL ABUN
AM-242	4.599E+01	9.085E+01	7.402E+01	4.542E+01	FAIL ABUN
CM-247	-4.221E-01	1.718E+00	1.374E+00	8.591E-01	FAIL ABUN
CF-249	3.799E-01	1.838E+00	1.523E+00	9.190E-01	NOT IDENT.
CF-251	4.293E+00	5.338E+00	4.722E+00	2.669E+00	FAIL ABUN
ANH-511	1.423E+01	2.549E+00	2.401E+00	1.275E+00	NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:43:56.25

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874845.CNF;1
Sample date : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 17:46:34
Sample ID : G1200874845 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:02.01 0.1%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	38.47	273	774	0.77	64.24	60	9	7.58E-02	19.3	
2	0	60.19	3131	1592	0.73	107.91	103	10	8.70E-01	3.0	
3	0	73.93*	93	1103	0.61	135.54	132	7	2.59E-02	60.4	
4	0	88.72	4076	1220	0.91	165.28	161	10	1.13E+00	2.3	
5	0	122.72	1927	717	0.90	233.64	228	10	5.35E-01	3.5	
6	0	137.24	229	543	0.73	262.84	259	8	6.37E-02	18.8	
7	0	166.52	1682	588	0.96	321.70	317	10	4.67E-01	3.6	
8	0	186.44*	47	319	1.14	361.77	358	8	1.31E-02	69.2	
9	0	227.78*	43	253	1.34	444.89	442	7	1.21E-02	62.9	
10	0	255.92	53	305	1.40	501.47	498	9	1.46E-02	61.5	
11	0	279.84	1056	259	1.08	549.57	545	11	2.93E-01	4.3	
12	0	290.11	19	180	0.91	570.23	568	7	5.16E-03	121.8	
13	0	301.37	52	183	1.97	592.86	588	9	1.44E-02	49.3	
14	0	304.79	32	116	1.30	599.73	597	6	8.97E-03	55.5	
15	0	327.30	30	126	1.29	645.00	642	7	8.25E-03	65.0	
16	0	392.28	1128	248	1.16	775.67	770	12	3.13E-01	4.1	
17	0	410.45*	34	80	0.88	812.21	810	6	9.35E-03	45.8	
18	0	413.55*	23	97	0.95	818.44	816	7	6.36E-03	74.7	
19	0	596.39	26	62	0.99	1186.14	1183	7	7.09E-03	55.2	
20	0	610.55*	11	67	0.98	1214.62	1212	7	2.98E-03	138.6	
21	0	662.21	914	128	1.28	1318.52	1313	13	2.54E-01	4.2	
22	0	711.49	29	42	1.84	1417.62	1415	6	7.92E-03	40.5	
23	0	731.16	44	110	0.74	1457.19	1451	13	1.22E-02	51.4	
24	0	745.63	36	49	1.58	1486.28	1482	8	9.89E-03	38.6	
25	0	814.65	21	107	1.65	1625.11	1617	11	5.81E-03	98.3	
26	0	855.30	38	51	1.44	1706.87	1703	10	1.05E-02	38.6	
27	3	898.42	1439	50	1.58	1793.59	1784	29	4.00E-01	2.8	3.08E+00
28	3	906.72	38	32	2.10	1810.29	1784	29	1.05E-02	23.6	
29	1	986.28	30	31	1.78	1970.33	1967	17	8.20E-03	34.4	4.15E+00
30	1	990.76	24	37	1.79	1979.33	1967	17	6.57E-03	50.8	
31	0	1000.63*	5	45	0.91	1999.19	1997	8	1.48E-03	224.6	
32	0	1006.45	22	52	0.65	2010.90	2006	10	6.03E-03	66.0	
33	0	1054.54	16	28	1.38	2107.62	2105	6	4.56E-03	56.0	
34	0	1076.65	16	32	1.50	2152.10	2150	7	4.31E-03	65.2	
35	0	1106.19	27	62	3.33	2211.53	2206	13	7.49E-03	63.1	
36	0	1115.74	14	51	0.91	2230.74	2229	9	3.77E-03	97.9	
37	0	1145.18	14	17	1.03	2289.97	2288	6	3.80E-03	54.6	
38	0	1148.44	26	15	1.96	2296.53	2293	8	7.12E-03	33.3	

RECOVERY

Am-241 → $\frac{1241}{1220}$ = 102% Cs-137 → $\frac{477.9}{471.7}$ = 101% Co-60 → $\frac{717.4}{730.6}$ = 98% Gross γ = $\frac{5863}{6367}$ = 92%

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1152.54	6	22	0.51	2304.77	2303	6	1.63E-03	134.2	
40	0	1163.20	13	38	2.94	2326.20	2323	10	3.65E-03	91.6	
41	0	1173.46	985	60	1.67	2346.84	2338	15	2.74E-01	3.5	
42	0	1197.71	11	20	1.30	2395.64	2393	8	3.06E-03	76.6	
43	0	1286.92	23	19	4.85	2575.10	2570	12	6.31E-03	45.1	
44	0	1292.05	13	19	1.33	2585.43	2583	8	3.59E-03	63.9	
45	0	1303.22	18	42	7.83	2607.89	2601	21	5.00E-03	93.0	
46	0	1324.84	12	36	0.93	2651.39	2650	7	3.22E-03	90.2	
47	0	1332.75*	888	36	1.78	2667.31	2660	17	2.47E-01	3.7	
48	0	1573.78	13	33	1.41	3152.24	3146	12	3.67E-03	91.1	
49	0	1603.64	22	26	1.47	3212.32	3208	10	6.06E-03	49.5	
50	0	1750.50	5	24	4.84	3507.82	3506	24	1.30E-03	280.5	
51	0	1764.94	5	3	0.69	3536.87	3535	4	1.44E-03	63.9	
52	0	1836.19	848	5	2.00	3680.25	3671	20	2.35E-01	3.5	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 14-JUL-2005 11:44:00

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874845.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : AKB
Sample date : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 17:46:34
Sample ID : G1200874845 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:02.01 0.1%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CO-57	+	122.06	*	3.122E+02	3.059E+01	1.448E+01	1.009E+00	21.557
	+	136.47		3.142E+02	1.207E+02	1.221E+02	9.056E+00	2.573
CO-60	+	1173.24		7.206E+02	6.981E+01	2.405E+01	1.603E+00	29.959
	+	1332.50	*	7.174E+02	6.684E+01	2.476E+01	1.391E+00	28.981
ZN-65	+	1115.55	*	1.882E+01	3.689E+01	5.280E+01	3.409E+00	0.357
SR-88	+	898.02		9.091E+02	7.178E+01	2.544E+01	1.419E+00	35.739
	+	1836.01	*	8.727E+02	8.017E+01	1.157E+01	6.895E-01	75.427
CD-109	+	88.03	*	1.423E+04	1.142E+03	4.026E+02	2.670E+01	35.340
SN-113	+	391.69	*	4.925E+02	5.277E+01	2.355E+01	1.633E+00	20.911
SN-126		64.28		2.178E+01	1.008E+02	1.686E+02	2.344E+01	0.129
	+	86.94		6.043E+03	2.492E+03	1.909E+02	7.825E+01	31.649
	+	87.57	*	1.454E+03	1.167E+02	4.675E+01	3.093E+00	31.090
TE-132	+	228.16	*	1.327E+01	1.678E+01	2.212E+01	2.862E+00	0.600
BA-137M	+	661.65	*	4.521E+02	4.701E+01	2.313E+01	1.426E+00	19.542
CS-137	+	661.66	*	4.779E+02	4.976E+01	2.445E+01	1.513E+00	19.542
CE-139	+	165.85	*	3.271E+02	3.036E+01	1.568E+01	9.001E-01	20.861
PM-147	+	121.30	*	6.653E+08	6.512E+07	3.198E+07	2.220E+06	20.804
HG-203		70.83		3.825E+01	2.292E+02	3.802E+02	4.639E+01	0.101
	+	72.87		1.607E+02	1.950E+02	2.284E+02	2.688E+01	0.704
		82.60		-7.847E+01	2.881E+02	4.693E+02	5.866E+01	-0.167
	+	279.20	*	3.001E+02	3.273E+01	1.776E+01	1.207E+00	16.898
PA-234M		766.40		2.209E+03	6.146E+03	1.080E+04	8.253E+03	0.205
	+	1001.03	*	4.039E+02	1.815E+03	2.835E+03	2.203E+02	0.142
AM-241	+	59.54	*	1.241E+03	1.137E+02	5.011E+01	3.475E+00	24.767

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-2.309E+01	9.595E+01	1.604E+02	1.223E+01	-0.144
NA-22		1274.53	*	3.826E+00	1.099E+01	2.064E+01	1.250E+00	0.185
NA-24		1368.55	*	2.043E+01	8.651E+01	1.654E+02	9.532E+00	0.124
AL-26		511.00		1.021E+01	6.873E+00	1.262E+01	8.573E-01	0.810
		1808.65	*	1.016E+00	7.803E+00	1.596E+01	9.494E-01	0.064

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40		1460.81	*	5.379E+01	1.165E+02	2.281E+02	1.400E+01	0.236
SC-46		889.25	*	2.834E+00	1.298E+01	2.341E+01	1.302E+00	0.121
		1120.51		9.420E+00	1.729E+01	2.818E+01	1.821E+00	0.334
V-48		944.10		-4.329E+01	2.004E+02	3.459E+02	1.980E+01	-0.125
		983.50	*	-1.787E+00	1.653E+01	2.519E+01	1.486E+00	-0.071
		1312.09		-1.263E+00	1.665E+01	2.521E+01	1.455E+00	-0.050
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-1.196E+01	8.079E+01	1.392E+02	1.001E+01	-0.086
MN-54		834.83	*	8.798E+00	1.318E+01	2.448E+01	1.424E+00	0.359
CO-56		846.75	*	-9.451E-01	1.275E+01	2.251E+01	1.298E+00	-0.042
		1037.82		2.588E+01	1.063E+02	1.899E+02	1.284E+01	0.136
		1238.25		-3.665E+00	1.944E+01	3.354E+01	2.221E+00	-0.109
CO-58		810.78	*	-1.500E+00	1.493E+01	2.304E+01	1.369E+00	-0.065
FE-59		192.35		8.204E+01	2.294E+02	4.109E+02	4.881E+01	0.200
		1099.25	*	1.104E+01	2.679E+01	4.858E+01	3.544E+00	0.227
	+	1291.60		2.421E+01	3.099E+01	3.112E+01	2.340E+00	0.778
SE-75		66.05		-1.933E+02	9.856E+02	1.627E+03	1.379E+02	-0.119
		96.73		-9.374E+00	2.296E+02	3.761E+02	4.694E+01	-0.025
	+	121.11		1.608E+03	1.952E+02	7.724E+01	7.716E+00	20.815
	+	136.00		5.589E+01	2.139E+01	2.193E+01	1.461E+00	2.549
		198.60		2.098E+02	5.029E+02	9.011E+02	6.554E+01	0.233
		264.65	*	1.301E+00	1.267E+01	2.225E+01	1.437E+00	0.058
	+	279.53		9.059E+02	9.937E+01	5.119E+01	3.532E+00	17.697
	+	303.91		5.642E+02	6.291E+02	8.978E+02	9.000E+01	0.628
		400.65		-4.044E+01	7.383E+01	1.222E+02	1.179E+01	-0.331
KR-85		513.99	*	-3.922E+02	2.494E+03	4.164E+03	2.828E+02	-0.094
SR-85		513.99	*	-1.747E+00	1.111E+01	1.855E+01	1.260E+00	-0.094
Y-91		557.57	*	7.036E+00	1.173E+01	2.062E+01	1.383E+00	0.341
		1204.90		1.496E+03	4.375E+03	8.022E+03	5.204E+02	0.187
NB-94		702.63	*	-5.746E-01	1.175E+01	2.094E+01	1.287E+00	-0.027
		871.10		1.445E+00	1.408E+01	2.500E+01	1.413E+00	0.058
NB-95		765.79	*	1.278E+00	1.281E+01	2.297E+01	1.388E+00	0.056
NB-95M		235.69	*	-3.194E+00	4.475E+01	7.801E+01	6.160E+00	-0.041
ZR-95		724.18		-5.457E+00	2.654E+01	4.680E+01	3.339E+00	-0.117
		756.74	*	-4.462E+00	2.147E+01	3.777E+01	2.739E+00	-0.118
MO-99		140.51	*	7.456E+00	1.496E+01	2.463E+01	1.619E+00	0.303
		181.06		-1.186E+01	1.719E+02	3.037E+02	5.211E+01	-0.039
		739.58		-2.655E+01	1.357E+02	2.395E+02	3.331E+01	-0.111
TC-99M		140.51	*	5.819E+02	1.168E+03	1.922E+03	1.393E+02	0.303
RU-103		497.08	*	-2.867E+00	1.159E+01	1.930E+01	2.535E+00	-0.149
	+	610.33		8.163E+01	2.266E+02	3.642E+02	5.716E+01	0.224
RH-106		511.85		9.347E+01	5.494E+01	1.019E+02	6.923E+00	0.917
		621.84	*	-2.311E+01	1.069E+02	1.900E+02	1.222E+01	-0.122
		1050.47		-3.014E+01	8.848E+02	1.540E+03	9.522E+01	-0.020
RU-106		622.20	*	-1.213E+00	1.076E+02	1.938E+02	2.338E+01	-0.006
AG-108M		433.93	*	-7.628E-01	1.136E+01	1.933E+01	1.385E+00	-0.039
		614.37		-2.502E+00	1.298E+01	2.310E+01	1.598E+00	-0.108
		722.95		-9.592E+00	1.433E+01	2.434E+01	1.604E+00	-0.394
AG-110M		657.75	*	8.766E+00	1.346E+01	2.259E+01	1.479E+00	0.388

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		677.61		1.258E+01	1.208E+02	2.164E+02	1.406E+01	0.058
		706.67		9.750E+00	7.189E+01	1.296E+02	8.388E+00	0.075
		763.93		-3.736E+00	5.408E+01	9.597E+01	6.131E+00	-0.039
		884.67		2.930E+00	1.848E+01	3.307E+01	1.986E+00	0.089
		937.48		-7.684E+00	4.182E+01	7.244E+01	4.459E+00	-0.106
		1384.27		-2.972E-01	4.899E+01	9.160E+01	5.544E+00	-0.003
CD-115		231.44		8.536E+02	1.690E+03	3.023E+03	1.878E+02	0.282
		260.90		-4.692E+02	6.067E+02	1.019E+03	6.506E+01	-0.461
		492.35		2.555E+01	1.883E+02	3.243E+02	2.206E+01	0.079
		527.90	*	2.471E+01	5.527E+01	9.744E+01	6.600E+00	0.254
SN-115		484.47		1.710E+03	5.404E+03	9.363E+03	6.368E+02	0.183
		933.00	*	2.783E+02	1.111E+03	1.990E+03	1.129E+02	0.140
	+	1290.58		1.766E+03	2.260E+03	2.270E+03	1.346E+02	0.778
SN-117M		156.02		1.889E+01	4.101E+02	6.598E+02	3.978E+01	0.029
		158.56	*	-6.700E+00	1.041E+01	1.619E+01	9.643E-01	-0.414
TE-123M		159.00	*	-3.419E+00	9.775E+00	1.542E+01	9.278E-01	-0.222
SB-124		602.73		-7.495E+00	1.228E+01	1.956E+01	1.278E+00	-0.383
		645.85		2.563E+01	1.610E+02	2.915E+02	2.032E+01	0.088
		713.78		2.928E+02	5.456E+02	9.073E+02	9.441E+01	0.323
		722.79		-6.951E+01	1.083E+02	1.844E+02	1.177E+01	-0.377
		1368.16		1.812E+02	4.931E+02	9.564E+02	1.129E+02	0.189
		1690.98	*	6.838E+00	2.209E+01	4.385E+01	2.815E+00	0.156
SB-125		176.33		7.740E+00	9.754E+01	1.736E+02	1.500E+01	0.045
		427.89	*	2.355E+01	2.864E+01	5.197E+01	3.600E+00	0.453
		463.38		2.201E+01	9.157E+01	1.587E+02	1.210E+01	0.139
		600.56		5.626E+01	6.094E+01	1.098E+02	8.081E+00	0.512
		606.64		-1.865E+01	2.172E+02	3.888E+02	2.890E+01	-0.048
		635.90		2.728E+01	9.994E+01	1.824E+02	1.325E+01	0.150
TE-125M		109.28	*	-2.237E+03	2.817E+03	4.441E+03	3.919E+02	-0.504
I-126		388.63		-1.157E+01	3.706E+01	5.537E+01	3.652E+00	-0.209
		666.33	*	2.163E+01	3.530E+01	5.892E+01	3.632E+00	0.367
		753.82		-1.898E+01	2.528E+02	4.491E+02	2.725E+01	-0.042
SB-126		666.33		8.764E+00	1.430E+01	2.387E+01	1.472E+00	0.367
		695.00		1.677E+00	1.346E+01	2.422E+01	1.490E+00	0.069
		697.00		-3.120E+01	4.499E+01	7.648E+01	4.705E+00	-0.408
		720.50	*	1.918E+01	2.392E+01	4.510E+01	2.764E+00	0.425
SB-127		252.40		-2.028E+01	1.246E+02	2.157E+02	8.849E+01	-0.094
	+	411.60		3.927E+02	3.634E+02	5.320E+02	6.892E+01	0.738
		444.90		3.541E+01	2.914E+02	5.030E+02	4.464E+01	0.070
		473.00		2.764E+00	5.497E+01	9.369E+01	8.779E+00	0.030
		543.30		2.095E+02	5.361E+02	9.334E+02	1.067E+02	0.224
		603.50		-1.926E+02	3.723E+02	5.976E+02	5.182E+01	-0.322
		685.70	*	2.040E+01	4.762E+01	8.717E+01	5.758E+00	0.234
		698.50		1.460E+02	4.600E+02	8.419E+02	1.079E+02	0.173
		783.70		1.028E+02	1.121E+02	2.129E+02	1.732E+01	0.483
I-131		284.30		-2.676E+01	1.413E+02	2.442E+02	1.713E+01	-0.110
		364.48	*	-2.967E+00	1.167E+01	1.983E+01	1.422E+00	-0.150
		636.97		-1.944E+02	1.819E+02	3.025E+02	2.090E+01	-0.643
BA-133		79.62		3.708E+00	3.740E+02	6.162E+02	8.671E+01	0.006

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		81.00		-7.052E+00	2.921E+01	4.770E+01	7.055E+00	-0.148
		276.40		-5.202E+01	1.204E+02	1.825E+02	2.423E+01	-0.285
	+	302.85		6.579E+01	6.537E+01	6.572E+01	7.923E+00	1.001
		356.02	*	1.403E+00	1.350E+01	2.348E+01	2.819E+00	0.060
		383.85		1.322E+01	9.745E+01	1.692E+02	1.915E+01	0.078
I-133		529.87	*	2.234E+01	4.510E+01	7.961E+01	5.546E+00	0.281
		875.33		-3.945E+02	1.227E+03	2.113E+03	1.491E+02	-0.187
		1298.22		-9.010E+02	2.610E+03	3.763E+03	2.785E+02	-0.239
CS-134		563.23		-8.176E+01	1.237E+02	1.974E+02	1.342E+01	-0.414
		569.32		1.862E+00	7.308E+01	1.230E+02	8.393E+00	0.015
		604.70		-1.190E+00	1.085E+01	1.943E+01	1.273E+00	-0.061
		795.84	*	-1.659E+00	1.358E+01	2.402E+01	1.449E+00	-0.069
		801.93		-3.184E+01	1.346E+02	2.357E+02	1.416E+01	-0.135
		1365.15		-1.663E+02	3.943E+02	7.007E+02	4.377E+01	-0.237
CS-135		268.24	*	1.084E+01	4.690E+01	8.282E+01	6.741E+00	0.131
I-135	+	288.45		1.112E+04	2.712E+04	3.574E+04	3.654E+03	0.311
		417.63		1.455E+02	2.137E+04	3.663E+04	3.532E+03	0.004
		546.56		-1.236E+04	1.217E+04	1.878E+04	1.808E+03	-0.658
		836.80		-7.775E+03	1.666E+04	2.841E+04	2.655E+03	-0.274
		1038.76		6.624E+03	1.605E+04	2.899E+04	2.857E+03	0.228
		1124.00		-3.440E+04	3.419E+04	5.347E+04	5.022E+03	-0.643
		1131.51		8.670E+02	5.652E+03	9.998E+03	9.729E+02	0.087
		1260.41	*	2.492E+03	3.088E+03	6.169E+03	4.243E+02	0.404
		1457.56		-1.218E+03	1.181E+04	2.179E+04	1.995E+03	-0.056
		1678.03		-6.837E+03	1.100E+04	1.864E+04	1.936E+03	-0.367
		1706.46		9.036E+03	2.376E+04	4.695E+04	5.024E+03	0.192
		1791.20		-2.178E+03	1.067E+04	1.974E+04	1.758E+03	-0.110
CS-136		66.88		-1.123E-01	8.884E+01	1.473E+02	2.090E+01	-0.001
		86.36		-1.576E+01	1.952E+02	2.942E+02	3.405E+01	-0.054
		153.25		4.174E+01	1.121E+02	1.834E+02	1.369E+01	0.228
		163.92		6.654E+01	1.944E+02	3.159E+02	2.287E+01	0.211
		176.60		5.250E+00	5.374E+01	9.577E+01	6.247E+00	0.055
		273.65		2.791E+00	6.553E+01	1.146E+02	8.228E+00	0.024
		340.55		-2.606E+00	1.864E+01	3.195E+01	2.220E+00	-0.082
		818.51		-1.262E+01	1.423E+01	2.347E+01	1.380E+00	-0.538
		1048.07	*	1.476E+00	2.048E+01	3.605E+01	2.402E+00	0.041
		1235.36		6.143E+01	7.453E+01	1.425E+02	1.464E+01	0.431
BA-140		162.67		-1.299E+02	1.356E+02	2.071E+02	1.357E+01	-0.627
	+	304.87		1.802E+02	2.062E+02	3.100E+02	8.514E+01	0.581
		423.73		5.465E+01	3.011E+02	5.219E+02	1.668E+02	0.105
		537.31	*	-2.462E+01	4.696E+01	7.498E+01	2.452E+01	-0.328
LA-140	+	328.76		7.253E+01	9.451E+01	1.380E+02	9.991E+00	0.526
		432.49		3.518E+02	6.143E+02	1.094E+03	7.937E+01	0.322
		487.02		-5.395E+00	4.631E+01	7.792E+01	5.817E+00	-0.069
		751.64		1.302E+02	5.508E+02	1.001E+03	7.333E+01	0.130
	+	815.77		9.879E+01	1.943E+02	1.716E+02	1.247E+01	0.576
		867.85		1.589E+02	4.813E+02	8.739E+02	5.543E+01	0.182
		919.55		-6.140E+02	9.587E+02	1.599E+03	1.343E+02	-0.384
		925.19		4.566E+02	4.057E+02	7.749E+02	4.987E+01	0.589

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1596.21	*	-4.835E+01	3.312E+01	4.990E+01	2.941E+00	-0.969
CE-141		145.44	*	8.336E+00	1.623E+01	2.677E+01	1.751E+00	0.311
CE-143		231.55		4.327E+02	9.336E+02	1.652E+03	5.063E+02	0.262
		293.27	*	-7.360E+00	4.970E+01	7.669E+01	1.546E+01	-0.096
		350.62		-3.323E+02	5.975E+02	9.830E+02	2.966E+02	-0.338
		490.37		-6.623E+02	1.161E+03	1.861E+03	5.728E+02	-0.356
		664.57		2.589E+03	1.113E+03	1.459E+03	4.582E+02	1.774
		721.93		1.447E+02	5.530E+02	1.005E+03	2.829E+02	0.144
CE-144		133.51	*	2.599E+01	7.100E+01	1.165E+02	1.698E+01	0.223
PM-144		476.78		1.190E+01	2.303E+01	4.058E+01	3.162E+00	0.293
		618.01		4.737E+00	1.100E+01	2.033E+01	1.375E+00	0.233
		696.49	*	-1.554E+01	1.227E+01	1.991E+01	1.225E+00	-0.781
PM-146		453.88	*	1.200E+01	1.438E+01	2.594E+01	2.413E+00	0.463
		633.25		1.554E+02	5.158E+02	9.378E+02	3.462E+02	0.166
		735.93		1.491E+01	5.677E+01	9.204E+01	2.572E+01	0.162
	+	747.24		4.882E+01	3.822E+01	5.727E+01	7.238E+00	0.853
ND-147		91.11		-2.762E+01	3.619E+01	5.293E+01	3.988E+00	-0.522
		531.02	*	-1.407E+01	8.395E+01	1.405E+02	1.962E+01	-0.100
PM-149		285.95	*	1.741E+02	4.054E+02	7.231E+02	1.045E+02	0.241
EU-152	+	121.78		9.361E+02	1.026E+02	4.339E+01	3.697E+00	21.575
		344.31	*	-7.808E+00	2.958E+01	5.041E+01	3.676E+00	-0.155
		963.37		8.535E+01	1.091E+02	2.011E+02	1.168E+01	0.424
GD-153		69.67		-1.339E+02	4.165E+02	6.825E+02	4.197E+01	-0.196
		83.37		7.353E+02	4.623E+03	7.621E+03	4.937E+02	0.096
		97.43	*	3.565E+00	2.459E+01	4.057E+01	2.703E+00	0.088
		103.18		1.096E+01	3.601E+01	5.953E+01	3.994E+00	0.184
EU-154	+	123.07		6.565E+02	8.058E+01	2.925E+01	2.966E+00	22.445
		247.93		-2.227E+01	1.121E+02	1.943E+02	1.917E+01	-0.115
		591.76		-2.572E+01	2.310E+02	3.847E+02	3.946E+01	-0.067
		723.30		-3.338E+01	6.029E+01	1.033E+02	7.592E+00	-0.323
		756.86		-7.239E+01	2.697E+02	4.719E+02	4.856E+01	-0.153
		873.20		5.153E+01	1.199E+02	2.180E+02	2.260E+01	0.236
		996.30		8.780E+01	1.279E+02	2.383E+02	3.964E+01	0.368
	+	1004.76		7.808E+01	1.033E+02	1.362E+02	1.342E+01	0.573
		1274.51	*	1.050E+01	3.088E+01	5.794E+01	5.502E+00	0.181
EU-155		86.54		-5.603E+00	3.628E+01	5.453E+01	3.651E+00	-0.103
		105.31	*	6.343E+00	3.844E+01	6.316E+01	4.336E+00	0.100
TB-160	+	86.79		4.113E+03	3.301E+02	1.299E+02	8.561E+00	31.653
		298.57		-7.486E+00	3.060E+01	4.692E+01	3.072E+00	-0.160
		879.36	*	3.459E+01	4.696E+01	8.776E+01	4.925E+00	0.394
		962.29		1.589E+02	1.778E+02	3.300E+02	1.916E+01	0.481
		966.15		-7.047E+00	6.265E+01	1.088E+02	6.332E+00	-0.065
		1177.93		-1.431E+01	9.384E+01	1.422E+02	9.439E+00	-0.101
TM-171		51.87		3.652E+02	1.529E+03	2.571E+03	1.538E+02	0.142
	+	59.40		2.096E+05	1.787E+04	8.468E+03	5.142E+02	24.748
		66.72	*	-4.045E+02	6.409E+03	1.061E+04	6.482E+02	-0.038
HF-181		56.28		2.307E+01	1.404E+02	2.349E+02	1.414E+01	0.098
		57.53		1.574E+01	8.776E+01	1.359E+02	8.202E+00	0.116
		65.20		-1.421E+02	1.619E+02	2.616E+02	1.594E+01	-0.543

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		133.02		-1.386E+00	1.895E+01	3.058E+01	2.037E+00	-0.045
	+	136.25		6.483E+02	2.480E+02	2.546E+02	1.674E+01	2.546
		345.85		-2.812E+01	4.787E+01	7.980E+01	5.297E+00	-0.352
		482.03	*	-4.581E+00	1.242E+01	2.054E+01	1.397E+00	-0.223
TA-182		67.75		6.184E+00	2.476E+01	4.129E+01	2.528E+00	0.150
		100.10		-6.031E+01	5.688E+01	8.918E+01	5.959E+00	-0.676
		222.10		5.535E+01	9.887E+01	1.776E+02	1.092E+01	0.312
		1121.28		2.209E+01	4.342E+01	7.923E+01	5.123E+00	0.279
		1189.05		3.408E+00	7.580E+01	1.352E+02	8.892E+00	0.025
		1221.42	*	-1.003E+01	4.543E+01	7.838E+01	5.007E+00	-0.128
		1230.97		-8.354E+01	1.138E+02	1.824E+02	1.154E+01	-0.458
ER-192		295.96		1.721E+00	2.556E+01	4.475E+01	2.963E+00	0.038
		308.46		2.348E+00	2.558E+01	4.475E+01	2.970E+00	0.052
		316.51	*	1.254E+00	9.385E+00	1.643E+01	1.088E+00	0.076
		468.07		4.243E+00	2.081E+01	3.588E+01	2.713E+00	0.118
		604.41		-8.432E+00	1.315E+02	2.361E+02	2.771E+01	-0.036
	+	612.46		8.437E+01	2.340E+02	3.752E+02	3.041E+01	0.225
BI-207		569.67		4.028E+00	1.125E+01	1.943E+01	1.296E+00	0.207
	+	897.83		5.711E+05	4.483E+04	1.598E+04	8.809E+02	35.747
		1063.62	*	-1.062E+01	2.046E+01	3.406E+01	2.124E+00	-0.312
		1442.20		-3.087E+03	8.251E+03	1.470E+04	8.471E+02	-0.210
		1770.23		2.826E+01	1.350E+02	2.711E+02	1.612E+01	0.104
TL-208	+	75.00		3.658E+02	4.434E+02	4.482E+02	4.818E+01	0.816
		277.35		2.351E+01	1.227E+02	1.945E+02	2.128E+01	0.121
		510.84		5.482E+01	5.341E+01	9.520E+01	1.024E+01	0.576
		583.14	*	5.029E+00	1.241E+01	2.161E+01	1.601E+00	0.233
		763.30		-2.512E+02	7.438E+02	1.291E+03	1.618E+02	-0.195
		860.37		9.279E+01	1.033E+02	1.955E+02	1.296E+01	0.475
		1093.90		1.109E+03	4.112E+03	7.333E+03	1.653E+03	0.151
BI-210		46.50	*	1.976E+02	2.637E+02	4.540E+02	3.268E+01	0.435
PB-210		46.50	*	1.976E+02	2.637E+02	4.540E+02	3.268E+01	0.435
BI-211		351.07	*	-1.647E+01	6.351E+01	1.080E+02	7.775E+00	-0.153
PB-211		404.84	*	7.083E+01	2.904E+02	5.023E+02	3.136E+02	0.141
		427.08		2.717E+02	6.985E+02	1.194E+03	7.388E+02	0.228
		831.96		1.007E+02	4.584E+02	8.173E+02	5.095E+02	0.123
BI-212		727.18	*	-1.260E+01	1.137E+02	1.770E+02	1.408E+01	-0.071
PB-212	+	74.80		1.173E+02	1.422E+02	1.447E+02	1.627E+01	0.810
	+	87.30		6.735E+03	8.636E+02	2.172E+02	2.603E+01	31.009
		115.19		-2.685E+02	1.364E+03	2.200E+03	1.507E+02	-0.122
		238.63	*	4.159E+00	1.822E+01	3.212E+01	2.473E+00	0.129
	+	300.09		3.439E+02	3.405E+02	3.653E+02	3.213E+01	0.941
BI-214	+	609.31	*	9.572E+00	2.654E+01	4.448E+01	3.698E+00	0.215
		768.36		1.828E+01	2.529E+02	4.516E+02	3.828E+01	0.040
		934.06		-2.218E+02	4.523E+02	7.627E+02	6.429E+01	-0.291
		1120.29		8.191E+01	1.093E+02	1.829E+02	1.692E+01	0.448
		1238.11		-2.188E+01	2.145E+02	3.744E+02	3.182E+01	-0.058
		1377.67		-1.731E+02	2.824E+02	4.891E+02	4.159E+01	-0.354
B-214	+	74.81		2.017E+02	2.443E+02	2.489E+02	2.412E+01	0.810
		77.11		-5.136E+01	9.145E+01	1.481E+02	1.464E+01	-0.347

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	87.30		1.220E+04	1.396E+03	3.933E+02	4.130E+01	31.009
		241.98		5.765E+01	1.015E+02	1.819E+02	1.531E+01	0.317
		295.21		1.591E+01	3.900E+01	6.940E+01	6.276E+00	0.229
		351.92	*	1.577E+01	2.189E+01	3.936E+01	3.500E+00	0.401
RN-219		271.23		-3.887E+00	6.976E+01	1.215E+02	1.042E+01	-0.032
		401.81	*	2.022E+00	1.308E+02	2.251E+02	3.147E+01	0.009
RA-223	+	122.32		2.233E+04	2.311E+03	1.037E+03	8.002E+01	21.541
		144.24		5.327E+01	2.345E+02	3.821E+02	2.938E+01	0.139
		154.21		5.344E+01	1.381E+02	2.259E+02	1.637E+01	0.237
		269.46		-3.080E+01	5.517E+01	9.355E+01	6.237E+00	-0.329
		323.87	*	-3.865E+01	1.916E+02	3.290E+02	5.533E+01	-0.117
		338.28		1.419E+02	3.047E+02	5.395E+02	5.942E+01	0.263
		445.03		1.588E+02	7.581E+02	1.316E+03	1.426E+02	0.121
RA-224		240.98	*	6.022E+01	1.983E+02	3.512E+02	2.203E+01	0.171
RA-226		295.21		1.591E+01	3.900E+01	6.940E+01	6.276E+00	0.229
		351.92		1.577E+01	2.187E+01	3.936E+01	2.624E+00	0.401
	+	609.31	*	9.572E+00	2.654E+01	4.448E+01	3.698E+00	0.215
AC-227		79.80		-3.642E+01	4.838E+02	7.949E+02	1.669E+02	-0.046
		236.00		1.888E+01	7.008E+01	1.238E+02	1.338E+01	0.152
	+	256.20	*	1.699E+02	2.105E+02	2.429E+02	3.490E+01	0.700
		286.10		2.304E+02	4.608E+02	8.247E+02	9.934E+01	0.279
	+	299.80		6.469E+02	6.472E+02	7.292E+02	1.225E+02	0.887
	+	304.40		5.544E+02	6.235E+02	1.011E+03	1.798E+02	0.549
		329.70		-1.082E+01	3.096E+02	4.791E+02	6.229E+01	-0.023
		334.20		9.702E+01	7.041E+02	1.229E+03	2.323E+02	0.079
TH-227		79.80		-3.587E+01	4.765E+02	7.829E+02	1.643E+02	-0.046
		94.00		5.731E+02	5.909E+02	9.821E+02	2.070E+02	0.584
		236.00		1.862E+01	6.908E+01	1.221E+02	1.141E+01	0.152
	+	256.20	*	1.675E+02	2.080E+02	2.394E+02	4.094E+01	0.700
		286.10		2.272E+02	5.075E+02	8.133E+02	8.150E+02	0.279
	+	299.80		6.362E+02	6.363E+02	7.172E+02	1.188E+02	0.887
	+	304.40		5.461E+02	6.140E+02	9.954E+02	1.749E+02	0.549
		329.70		-1.067E+01	3.053E+02	4.724E+02	6.079E+01	-0.023
		334.20		9.532E+01	6.918E+02	1.208E+03	2.247E+02	0.079
AC-228		209.25		-4.028E+01	1.684E+02	2.900E+02	1.854E+02	-0.139
		338.32		3.418E+01	7.425E+01	1.293E+02	5.288E+01	0.264
		463.01		-1.519E+01	2.217E+02	3.755E+02	8.907E+01	-0.040
		794.95		3.493E+01	2.459E+02	4.451E+02	1.003E+02	0.078
		911.21	*	-3.098E+00	5.278E+01	9.228E+01	8.418E+00	-0.034
		964.77		-4.947E+01	3.049E+02	5.252E+02	1.250E+02	-0.094
		969.11		-4.300E+01	8.921E+01	1.493E+02	3.353E+01	-0.288
RA-228		209.25		-4.028E+01	1.684E+02	2.900E+02	1.854E+02	-0.139
		338.32		3.418E+01	7.425E+01	1.293E+02	5.288E+01	0.264
		463.01		-1.519E+01	2.217E+02	3.755E+02	8.907E+01	-0.040
		794.95		3.493E+01	2.459E+02	4.451E+02	1.003E+02	0.078
		911.21	*	-3.098E+00	5.278E+01	9.228E+01	8.418E+00	-0.034
		964.77		-4.947E+01	3.049E+02	5.252E+02	1.250E+02	-0.094
		969.11		-4.300E+01	8.921E+01	1.493E+02	3.353E+01	-0.288
TH-228		84.40		5.107E+02	8.446E+02	1.405E+03	1.667E+02	0.364

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		238.60	*	3.977E+00	1.821E+01	3.209E+01	2.471E+00	0.124
	+	300.10		3.439E+02	3.953E+02	3.653E+02	2.156E+02	0.941
TH-229		85.43		1.177E+01	6.820E+01	1.037E+02	6.785E+00	0.113
	+	88.47		1.985E+03	1.593E+02	5.618E+01	3.726E+00	35.326
		100.00		-6.805E+01	6.397E+01	1.003E+02	6.701E+00	-0.679
		193.63	*	-4.082E+01	1.489E+02	2.604E+02	1.548E+01	-0.157
		210.97		-9.387E+01	2.238E+02	3.869E+02	2.349E+01	-0.243
TH-230		295.21		1.591E+01	3.900E+01	6.940E+01	6.276E+00	0.229
		351.92		1.577E+01	2.187E+01	3.936E+01	2.624E+00	0.401
	+	609.31	*	9.572E+00	2.654E+01	4.448E+01	3.698E+00	0.215
PA-231		283.67	*	-4.980E+01	5.041E+02	7.839E+02	1.104E+02	-0.064
	+	301.29		2.545E+02	2.525E+02	2.790E+02	3.039E+01	0.912
		330.00		5.518E+01	6.863E+02	1.070E+03	3.369E+02	0.052
TH-231		84.21		3.665E+01	1.604E+02	2.645E+02	4.476E+01	0.139
		236.00		1.888E+01	7.006E+01	1.238E+02	1.338E+01	0.152
	+	256.20		1.699E+02	2.104E+02	2.202E+02	3.164E+01	0.772
		269.46	*	-3.080E+01	5.518E+01	9.355E+01	7.294E+00	-0.329
		271.23		-3.887E+00	6.976E+01	1.215E+02	1.205E+01	-0.032
		283.67		-4.980E+01	5.041E+02	7.839E+02	1.104E+02	-0.064
	+	301.29		2.545E+02	2.520E+02	2.790E+02	2.504E+01	0.912
		329.85		4.900E+00	2.136E+02	3.319E+02	4.639E+01	0.015
		351.07		-1.647E+01	6.351E+01	1.080E+02	7.775E+00	-0.153
		401.81		2.022E+00	1.308E+02	2.251E+02	2.558E+01	0.009
TH-232		238.59	*	3.909E+00	1.818E+01	3.203E+01	2.465E+00	0.122
		911.20		-2.710E+00	5.278E+01	9.233E+01	8.422E+00	-0.029
		964.40		3.409E+01	3.053E+02	5.369E+02	1.278E+02	0.063
		969.11		-4.297E+01	8.916E+01	1.492E+02	3.351E+01	-0.288
PA-233	+	75.28		9.941E+02	1.208E+03	1.218E+03	1.724E+02	0.816
		86.59		-1.042E+02	5.932E+02	8.899E+02	2.335E+02	-0.117
	+	300.12		1.774E+02	1.766E+02	1.884E+02	2.596E+01	0.941
		311.98	*	-9.623E+00	1.951E+01	3.294E+01	2.275E+00	-0.292
		340.50		-2.281E+01	1.833E+02	3.144E+02	7.291E+01	-0.073
		398.62		-3.464E+02	6.806E+02	1.120E+03	2.918E+02	-0.309
		415.76		-1.815E+02	5.979E+02	8.886E+02	1.853E+02	-0.204
PA-234		63.00		2.710E+02	3.144E+02	4.958E+02	7.064E+01	0.546
		94.67		-4.506E+01	5.247E+01	8.301E+01	9.233E+00	-0.543
		98.44		-4.834E+00	3.036E+01	4.930E+01	2.737E+01	-0.098
		99.70		-1.302E+02	1.642E+02	2.606E+02	1.741E+01	-0.499
		111.00		-4.145E-01	6.753E+01	1.100E+02	1.195E+01	-0.004
		131.20		-1.726E+01	3.578E+01	5.673E+01	3.807E+00	-0.304
		152.70		-5.233E+01	1.145E+02	1.798E+02	2.865E+01	-0.291
	+	186.00		3.859E+02	5.470E+02	5.959E+02	1.822E+02	0.648
	+	226.40		1.341E+02	1.694E+02	2.102E+02	2.471E+01	0.638
	+	227.20		1.437E+02	1.809E+02	2.359E+02	1.459E+01	0.609
		248.90		2.703E+02	2.692E+02	4.812E+02	1.075E+02	0.562
		293.70		9.335E+00	1.914E+02	3.341E+02	5.465E+01	0.028
		369.80		1.650E+02	2.856E+02	5.053E+02	1.065E+02	0.327
		568.70		1.602E+01	3.664E+02	6.186E+02	4.128E+01	0.026
		569.50		3.054E+01	1.001E+02	1.723E+02	1.149E+01	0.177

---- Non-Identified Nuclides ----

Nuclide	Line Ided		Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
			574.00		3.003E+01	5.313E+02	8.997E+02	5.987E+01	0.033
			699.00		5.790E+01	2.431E+02	4.424E+02	8.006E+01	0.131
			706.10		-5.611E+00	3.743E+02	6.677E+02	2.950E+02	-0.008
		+	733.00		2.434E+02	2.557E+02	2.255E+02	4.814E+01	1.079
			742.81		1.530E+02	5.525E+02	8.806E+02	5.895E+02	0.174
			796.30		-8.183E+01	2.913E+02	5.077E+02	1.337E+02	-0.161
			805.80		-6.049E+01	3.620E+02	6.351E+02	1.905E+02	-0.095
			819.60		-3.917E+02	4.948E+02	7.840E+02	2.940E+02	-0.500
			826.30		-1.420E+02	3.177E+02	5.329E+02	2.360E+02	-0.267
			831.60		-7.010E+00	2.362E+02	4.173E+02	1.217E+02	-0.017
			876.40		-2.167E+02	3.993E+02	5.554E+02	5.698E+02	-0.390
			880.51		2.937E+01	1.134E+02	2.038E+02	1.143E+01	0.144
			883.24		-4.264E+01	1.182E+02	1.964E+02	1.314E+02	-0.217
		+	899.00		1.999E+04	8.708E+03	5.598E+02	2.419E+02	35.699
			925.00		5.435E+02	4.644E+02	8.895E+02	5.014E+01	0.611
			926.50		-4.363E+01	7.271E+01	1.203E+02	2.937E+01	-0.363
			946.00	*	5.618E+01	1.155E+02	2.107E+02	3.713E+01	0.267
			949.00		1.431E+00	1.706E+02	3.005E+02	1.726E+01	0.005
			980.50		8.700E+01	2.824E+02	5.090E+02	2.996E+01	0.171
			1394.10		-4.533E+01	3.514E+02	6.503E+02	4.212E+02	-0.070
TH-234			63.29	*	2.452E+02	2.710E+02	4.261E+02	7.210E+01	0.575
			92.38		1.167E+02	1.628E+02	2.524E+02	4.348E+01	0.463
			112.81		-1.039E+03	3.446E+03	5.535E+03	9.541E+02	-0.188
U-234			67.67		5.074E+02	2.774E+03	4.618E+03	5.918E+02	0.110
			241.98		5.773E+01	1.017E+02	1.822E+02	1.534E+01	0.317
			295.21	*	1.591E+01	3.900E+01	6.940E+01	6.276E+00	0.229
			351.92		1.577E+01	2.189E+01	3.936E+01	3.500E+00	0.401
U-235		+	89.95		1.992E+04	6.115E+03	4.753E+02	1.443E+02	41.914
			93.35		2.503E+02	1.938E+02	3.115E+02	8.560E+01	0.803
			105.00		1.038E+02	3.804E+02	6.256E+02	1.836E+02	0.166
			143.76	*	3.264E+01	7.332E+01	1.203E+02	1.986E+01	0.271
			163.33		-5.631E+01	1.738E+02	2.736E+02	4.922E+01	-0.206
		+	185.71		1.429E+01	1.980E+01	2.205E+01	1.298E+00	0.648
			205.31		-1.028E+02	1.477E+02	2.510E+02	4.291E+01	-0.410
NP-237			86.48	*	-1.146E+01	8.900E+01	1.338E+02	2.899E+01	-0.086
			95.87		-1.175E+02	3.075E+02	4.952E+02	1.189E+02	-0.237
U-238			63.29	*	2.452E+02	2.710E+02	4.261E+02	7.210E+01	0.575
NP-239			99.55		-8.104E+00	5.241E+01	8.539E+01	5.703E+00	-0.095
			117.00	*	-8.179E+00	7.228E+01	1.170E+02	8.043E+00	-0.070
			209.75		-1.955E+02	2.267E+02	3.842E+02	2.329E+01	-0.509
		+	228.18		7.521E+01	9.468E+01	1.253E+02	7.758E+00	0.600
			277.60		7.452E+01	6.242E+01	1.046E+02	6.762E+00	0.713
			334.31		3.779E+01	3.890E+02	6.777E+02	4.492E+01	0.056
AM-242			99.55		-1.891E+02	1.223E+03	1.992E+03	1.331E+02	-0.095
			103.70	*	-4.990E+02	8.179E+02	1.305E+03	8.761E+01	-0.382
CM-247		+	278.00		6.646E+03	7.117E+02	3.687E+02	2.385E+01	18.026
			287.40		-1.975E+01	4.174E+02	6.503E+02	4.232E+01	-0.030
			402.60	*	8.840E+00	1.148E+01	2.074E+01	1.376E+00	0.426
CF-249			252.85		2.322E+02	2.980E+02	4.912E+02	3.115E+01	0.473

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		333.44		-1.208E+01	5.193E+01	8.870E+01	5.879E+00	-0.136
		387.95	*	-1.092E+01	1.487E+01	2.136E+01	1.409E+00	-0.511
CF-251		176.00	*	1.128E+01	3.794E+01	6.810E+01	3.958E+00	0.166
	+	227.00		1.277E+02	1.608E+02	2.095E+02	1.295E+01	0.610
		285.00		-7.457E+00	5.263E+02	9.177E+02	5.964E+01	-0.008
ANH-511		511.00	*	1.671E+01	1.125E+01	2.064E+01	1.403E+00	0.810

VAX/VMS Nuclide Identification Report Generated

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*****************************************************************************
*                          General Eng. Labs, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874845      *
* Acquisition date : 13-JUL-2005 17:46:34 Detector SN#    : 30-TN10348      *
* Detector ID       : GAMMA17             Sensitivity     : 3.000           *
* Geometry          : 2L_MB               Energy tolerance: 2.000           *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000          *
* Elapsed real time:    0 01:00:02.01     Half life ratio :  8.000          *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 12-JUL-2005 00:00:00 Nuclide Library :                *
* Sample ID         : G1200874845          Analyst initials: AKB            *
* Batch Number      : 437153               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
* Standard Weight   :   0.00000                                             *
* CALIB. DATE/TIME :  1-DEC-2004 11:39:23 MS Isotope      :                 *
* MSD DPM           :    0.000            MSD Isotope     :                 *
* LCS DPM           :    0.000            LCS Isotope     :                 *
* LCSD DPM          :    0.000            LCSD Isotope    :                 *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
CO-57	3.122E+02	3.059E+01	1.448E+01	0.000E+00
CO-60	7.174E+02	6.684E+01	2.476E+01	0.000E+00
ZN-65	1.882E+01	3.689E+01	5.280E+01	0.000E+00
Y-88	8.727E+02	8.017E+01	1.157E+01	0.000E+00
CD-109	1.423E+04	1.142E+03	4.026E+02	0.000E+00
SN-113	4.925E+02	5.277E+01	2.355E+01	0.000E+00
SN-126	1.454E+03	1.167E+02	4.675E+01	0.000E+00
TE-132	1.327E+01	1.678E+01	2.212E+01	0.000E+00
BA-137M	4.521E+02	4.701E+01	2.313E+01	0.000E+00
CS-137	4.779E+02	4.976E+01	2.445E+01	0.000E+00
CE-139	3.271E+02	3.036E+01	1.568E+01	0.000E+00
HG-203	3.001E+02	3.273E+01	1.776E+01	0.000E+00
PA-234M	4.039E+02	1.815E+03	2.835E+03	0.000E+00
AM-241	1.241E+03	1.137E+02	5.011E+01	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Act error) Ided	MDA (pCi/LITER	)	
BE-7	-2.309E+01	9.595E+01	1.604E+02	0.000E+00	NOT IDENT.
NA-22	3.826E+00	1.099E+01	2.064E+01	0.000E+00	NOT IDENT.
NA-24	2.043E+01	8.651E+01	1.654E+02	0.000E+00	NOT IDENT.
AL-26	1.016E+00	7.803E+00	1.596E+01	0.000E+00	NOT IDENT.
K-40	5.379E+01	1.165E+02	2.281E+02	0.000E+00	NOT IDENT.
SC-46	2.834E+00	1.298E+01	2.341E+01	0.000E+00	NOT IDENT.
V-48	-1.787E+00	1.653E+01	2.519E+01	0.000E+00	NOT IDENT.
CR-51	-1.196E+01	8.079E+01	1.392E+02	0.000E+00	NOT IDENT.
MN-54	8.798E+00	1.318E+01	2.448E+01	0.000E+00	NOT IDENT.
CO-56	-9.451E-01	1.275E+01	2.251E+01	0.000E+00	NOT IDENT.
MN-56	0.000E+00	1.091E+06	0.000E+00	0.000E+00	SHORT HLIF
CO-58	-1.500E+00	1.493E+01	2.304E+01	0.000E+00	NOT IDENT.
FE-59	1.104E+01	2.679E+01	4.858E+01	0.000E+00	FAIL ABUN
SE-75	1.301E+00	1.267E+01	2.225E+01	0.000E+00	FAIL ABUN
KR-85	-3.922E+02	2.494E+03	4.164E+03	0.000E+00	NOT IDENT.
SR-85	-1.747E+00	1.111E+01	1.855E+01	0.000E+00	NOT IDENT.
Y-91	7.036E+00	1.173E+01	2.062E+01	0.000E+00	NOT IDENT.
NB-94	-5.746E-01	1.175E+01	2.094E+01	0.000E+00	NOT IDENT.
NB-95	1.278E+00	1.281E+01	2.297E+01	0.000E+00	NOT IDENT.
NB-95M	-3.194E+00	4.475E+01	7.801E+01	0.000E+00	NOT IDENT.
ZR-95	-4.462E+00	2.147E+01	3.777E+01	0.000E+00	NOT IDENT.
MO-99	7.456E+00	1.496E+01	2.463E+01	0.000E+00	NOT IDENT.
TC-99M	5.819E+02	1.168E+03	1.922E+03	0.000E+00	NOT IDENT.
RU-103	-2.867E+00	1.159E+01	1.930E+01	0.000E+00	FAIL ABUN
RH-106	-2.311E+01	1.069E+02	1.900E+02	0.000E+00	NOT IDENT.
RU-106	-1.213E+00	1.076E+02	1.938E+02	0.000E+00	NOT IDENT.
AG-108M	-7.628E-01	1.136E+01	1.933E+01	0.000E+00	NOT IDENT.
AG-110M	8.766E+00	1.346E+01	2.259E+01	0.000E+00	NOT IDENT.
CD-115	2.471E+01	5.527E+01	9.744E+01	0.000E+00	NOT IDENT.
SN-115	2.783E+02	1.111E+03	1.990E+03	0.000E+00	FAIL ABUN
SN-117M	-6.700E+00	1.041E+01	1.619E+01	0.000E+00	NOT IDENT.
TE-123M	-3.419E+00	9.775E+00	1.542E+01	0.000E+00	NOT IDENT.
SB-124	6.838E+00	2.209E+01	4.385E+01	0.000E+00	NOT IDENT.
SB-125	2.355E+01	2.864E+01	5.197E+01	0.000E+00	NOT IDENT.
TE-125M	-2.237E+03	2.817E+03	4.441E+03	0.000E+00	NOT IDENT.
SN-126	2.163E+01	3.530E+01	5.892E+01	0.000E+00	NOT IDENT.
SB-126	1.918E+01	2.392E+01	4.510E+01	0.000E+00	NOT IDENT.
SB-127	2.040E+01	4.762E+01	8.717E+01	0.000E+00	FAIL ABUN
I-131	-2.967E+00	1.167E+01	1.983E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	4.184E+06	0.000E+00	0.000E+00	SHORT HLIF
BA-133	1.403E+00	1.350E+01	2.348E+01	0.000E+00	FAIL ABUN
I-133	2.234E+01	4.510E+01	7.961E+01	0.000E+00	NOT IDENT.
CS-134	-1.659E+00	1.358E+01	2.402E+01	0.000E+00	NOT IDENT.
CS-135	1.084E+01	4.690E+01	8.282E+01	0.000E+00	NOT IDENT.
I-135	2.492E+03	3.088E+03	6.169E+03	0.000E+00	FAIL ABUN
CS-136	1.476E+00	2.048E+01	3.605E+01	0.000E+00	NOT IDENT.
BA-140	-2.462E+01	4.696E+01	7.498E+01	0.000E+00	FAIL ABUN
LA-140	-4.835E+01	3.312E+01	4.990E+01	0.000E+00	FAIL ABUN
CE-141	8.336E+00	1.623E+01	2.677E+01	0.000E+00	NOT IDENT.
CE-143	-7.360E+00	4.970E+01	7.669E+01	0.000E+00	NOT IDENT.
CE-144	2.599E+01	7.100E+01	1.165E+02	0.000E+00	NOT IDENT.
PM-144	-1.554E+01	1.227E+01	1.991E+01	0.000E+00	NOT IDENT.
PR-144	0.000E+00	7.895E+40	0.000E+00	0.000E+00	SHORT HLIF
PM-146	1.200E+01	1.438E+01	2.594E+01	0.000E+00	FAIL ABUN
ND-147	-1.407E+01	8.395E+01	1.405E+02	0.000E+00	NOT IDENT.
PM-147	0.000E+00	6.512E+07	4.813E+07	0.000E+00	FAIL ABUN

PM-149	1.741E+02	4.054E+02	7.231E+02	0.000E+00 NOT IDENT.
EU-152	-7.808E+00	2.958E+01	5.041E+01	0.000E+00 FAIL ABUN
GD-153	3.565E+00	2.459E+01	4.057E+01	0.000E+00 NOT IDENT.
EU-154	1.050E+01	3.088E+01	5.794E+01	0.000E+00 FAIL ABUN
EU-155	6.343E+00	3.844E+01	6.316E+01	0.000E+00 NOT IDENT.
TB-160	3.459E+01	4.696E+01	8.776E+01	0.000E+00 FAIL ABUN
TM-171	-4.045E+02	6.409E+03	1.061E+04	0.000E+00 FAIL ABUN
HF-181	-4.581E+00	1.242E+01	2.054E+01	0.000E+00 FAIL ABUN
TA-182	-1.003E+01	4.543E+01	7.838E+01	0.000E+00 NOT IDENT.
IR-192	1.254E+00	9.385E+00	1.643E+01	0.000E+00 FAIL ABUN
BI-207	-1.062E+01	2.046E+01	3.406E+01	0.000E+00 FAIL ABUN
TL-208	5.029E+00	1.241E+01	2.161E+01	0.000E+00 FAIL ABUN
BI-210	1.976E+02	2.637E+02	4.540E+02	0.000E+00 NOT IDENT.
PB-210	1.976E+02	2.637E+02	4.540E+02	0.000E+00 NOT IDENT.
BI-211	-1.647E+01	6.351E+01	1.080E+02	0.000E+00 NOT IDENT.
[illegible]B-211	7.083E+01	2.904E+02	5.023E+02	0.000E+00 NOT IDENT.
[illegible]I-212	-1.260E+01	1.137E+02	1.770E+02	0.000E+00 NOT IDENT.
PB-212	4.159E+00	1.822E+01	3.212E+01	0.000E+00 FAIL ABUN
BI-214	9.572E+00	2.654E+01	4.448E+01	0.000E+00 FAIL ABUN
PB-214	1.577E+01	2.189E+01	3.936E+01	0.000E+00 FAIL ABUN
RN-219	2.022E+00	1.308E+02	2.251E+02	0.000E+00 NOT IDENT.
RA-223	-3.865E+01	1.916E+02	3.290E+02	0.000E+00 FAIL ABUN
RA-224	6.022E+01	1.983E+02	3.512E+02	0.000E+00 NOT IDENT.
RA-226	9.572E+00	2.654E+01	4.448E+01	0.000E+00 FAIL ABUN
AC-227	1.699E+02	2.105E+02	2.429E+02	0.000E+00 FAIL ABUN
TH-227	1.675E+02	2.080E+02	2.394E+02	0.000E+00 FAIL ABUN
AC-228	-3.098E+00	5.278E+01	9.228E+01	0.000E+00 NOT IDENT.
RA-228	-3.098E+00	5.278E+01	9.228E+01	0.000E+00 NOT IDENT.
TH-228	3.977E+00	1.821E+01	3.209E+01	0.000E+00 FAIL ABUN
TH-229	-4.082E+01	1.489E+02	2.604E+02	0.000E+00 FAIL ABUN
TH-230	9.572E+00	2.654E+01	4.448E+01	0.000E+00 FAIL ABUN
PA-231	-4.980E+01	5.041E+02	7.839E+02	0.000E+00 FAIL ABUN
TH-231	-3.080E+01	5.518E+01	9.355E+01	0.000E+00 FAIL ABUN
[illegible]-232	3.909E+00	1.818E+01	3.203E+01	0.000E+00 NOT IDENT.
[illegible]A-233	-9.623E+00	1.951E+01	3.294E+01	0.000E+00 FAIL ABUN
PA-234	5.618E+01	1.155E+02	2.107E+02	0.000E+00 FAIL ABUN
TH-234	2.452E+02	2.710E+02	4.261E+02	0.000E+00 NOT IDENT.
U-234	1.591E+01	3.900E+01	6.940E+01	0.000E+00 NOT IDENT.
U-235	3.264E+01	7.332E+01	1.203E+02	0.000E+00 FAIL ABUN
NP-237	-1.146E+01	8.900E+01	1.338E+02	0.000E+00 NOT IDENT.
U-238	2.452E+02	2.710E+02	4.261E+02	0.000E+00 NOT IDENT.
NP-239	-8.179E+00	7.228E+01	1.170E+02	0.000E+00 FAIL ABUN
AM-242	-4.990E+02	8.179E+02	1.305E+03	0.000E+00 NOT IDENT.
CM-247	8.840E+00	1.148E+01	2.074E+01	0.000E+00 FAIL ABUN
CF-249	-1.092E+01	1.487E+01	2.136E+01	0.000E+00 NOT IDENT.
CF-251	1.128E+01	3.794E+01	6.810E+01	0.000E+00 FAIL ABUN
ANH-511	1.671E+01	1.125E+01	2.064E+01	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:43:52.73

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GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

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Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874845.CNF;1
Sample date : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 17:46:34
Sample ID : G1200874845 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:02.01 0.1%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	38.47	273	774	0.77	64.24	60	9	7.58E-02	19.3	
2	0	60.19	3131	1592	0.73	107.91	103	10	8.70E-01	3.0	
3	0	73.93	104	1103	0.61	135.54	132	7	2.88E-02	54.3	
4	0	88.72	4076	1220	0.91	165.28	161	10	1.13E+00	2.3	
5	0	93.38	87	634	1.18	174.64	172	7	2.40E-02	49.4	
6	0	122.72	1927	717	0.90	233.64	228	10	5.35E-01	3.5	
7	0	137.24	229	543	0.73	262.84	259	8	6.37E-02	18.8	
8	0	166.52	1682	588	0.96	321.70	317	10	4.67E-01	3.6	
9	0	186.44	94	319	1.14	361.77	358	8	2.61E-02	34.4	
10	0	227.78	46	253	1.34	444.89	442	7	1.26E-02	59.9	
11	0	255.92	53	305	1.40	501.47	498	9	1.46E-02	61.5	
12	0	279.84	1056	259	1.08	549.57	545	11	2.93E-01	4.3	
13	0	290.11	19	180	0.91	570.23	568	7	5.16E-03	121.8	
14	0	301.37	52	183	1.97	592.86	588	9	1.44E-02	49.3	
15	0	304.79	32	116	1.30	599.73	597	6	8.97E-03	55.5	
16	0	327.30	30	126	1.29	645.00	642	7	8.25E-03	65.0	
17	0	392.28	1128	248	1.16	775.67	770	12	3.13E-01	4.1	
18	0	410.45	36	80	0.88	812.21	810	6	1.01E-02	42.4	
19	0	413.55	25	97	0.95	818.44	816	7	7.07E-03	67.0	
20	0	596.39	26	62	0.99	1186.14	1183	7	7.09E-03	55.2	
21	0	610.55	23	67	0.98	1214.62	1212	7	6.43E-03	63.0	
22	0	662.21	914	128	1.28	1318.52	1313	13	2.54E-01	4.2	
23	0	711.49	29	42	1.84	1417.62	1415	6	7.92E-03	40.5	
24	0	731.16	44	110	0.74	1457.19	1451	13	1.22E-02	51.4	
25	0	745.63	36	49	1.58	1486.28	1482	8	9.89E-03	38.6	
26	0	814.65	21	107	1.65	1625.11	1617	11	5.81E-03	98.3	
27	0	855.30	38	51	1.44	1706.87	1703	10	1.05E-02	38.6	
28	3	898.42	1439	50	1.58	1793.59	1784	29	4.00E-01	2.8	3.08E+00
29	3	906.72	38	32	2.10	1810.29	1784	29	1.05E-02	23.6	
30	1	986.28	30	31	1.78	1970.33	1967	17	8.20E-03	34.4	4.15E+00
31	1	990.76	24	37	1.79	1979.33	1967	17	6.57E-03	50.8	
32	0	1000.63	9	45	0.91	1999.19	1997	8	2.50E-03	132.4	
33	0	1006.45	22	52	0.65	2010.90	2006	10	6.03E-03	66.0	
34	0	1054.54	16	28	1.38	2107.62	2105	6	4.56E-03	56.0	
35	0	1076.65	16	32	1.50	2152.10	2150	7	4.31E-03	65.2	
36	0	1106.19	27	62	3.33	2211.53	2206	13	7.49E-03	63.1	
37	0	1115.74	14	51	0.91	2230.74	2229	9	3.77E-03	97.9	
38	0	1145.18	14	17	1.03	2289.97	2288	6	3.80E-03	54.6	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1148.44	26	15	1.96	2296.53	2293	8	7.12E-03	33.3	
40	0	1152.54	6	22	0.51	2304.77	2303	6	1.63E-03	134.2	
41	0	1163.20	13	38	2.94	2326.20	2323	10	3.65E-03	91.6	
42	0	1173.46	985	60	1.67	2346.84	2338	15	2.74E-01	3.5	
43	0	1197.71	11	20	1.30	2395.64	2393	8	3.06E-03	76.6	
44	0	1286.92	23	19	4.85	2575.10	2570	12	6.31E-03	45.1	
45	0	1292.05	13	19	1.33	2585.43	2583	8	3.59E-03	63.9	
46	0	1303.22	18	42	7.83	2607.89	2601	21	5.00E-03	93.0	
47	0	1324.84	12	36	0.93	2651.39	2650	7	3.22E-03	90.2	
48	0	1332.75	889	36	1.78	2667.31	2660	17	2.47E-01	3.7	
49	0	1573.78	13	33	1.41	3152.24	3146	12	3.67E-03	91.1	
50	0	1603.64	22	26	1.47	3212.32	3208	10	6.06E-03	49.5	
51	0	1750.50	5	24	4.84	3507.82	3506	24	1.30E-03	280.5	
52	0	1764.94	5	3	0.69	3536.87	3535	4	1.44E-03	63.9	
53	0	1836.19	848	5	2.00	3680.25	3671	20	2.35E-01	3.5	

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:43:58.65

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874845.CNF;1
Sample date : 12-JUL-2005 00:00:00 Acquisition date : 13-JUL-2005 17:46:34
Sample ID : G1200874845 Sample quantity : 2.00000E+00 LITER
Detector name : GAMMA17 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:02.01 0.1%
Energy tolerance : 2.00000 KEV Analyst Initials : AKB
Abundance limit : 75.00000 Sensitivity : 3.00000
Batch ID : 437153 Detector SN# : 30-TN10348
Matrix Spike DPM : LCS DPM :

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
CO-57	122.06	1927	85.51*	2.721E+00	3.108E+02	3.122E+02	9.80
	136.47	229	10.47	2.628E+00	3.128E+02	3.142E+02	38.41
CO-60	1173.24	985	99.90	5.140E-01	7.201E+02	7.206E+02	9.69
	1332.50	888	99.98*	4.649E-01	7.170E+02	7.174E+02	9.32
ZN-65	1115.55	14	50.75*	5.355E-01	1.873E+01	1.882E+01	195.96
Y-88	898.02	1439	93.40	6.435E-01	8.987E+02	9.091E+02	7.90
	1836.01	848	99.38*	3.711E-01	8.628E+02	8.727E+02	9.19
CD-109	88.03	4076	3.79*	2.845E+00	1.419E+04	1.423E+04	8.03
SN-113	391.69	1128	64.90*	1.339E+00	4.873E+02	4.925E+02	10.72
SN-126	64.28	------	9.60	2.701E+00	------ Line Not Found		------
	86.94	4076	8.90	2.845E+00	6.043E+03	6.043E+03	41.24
	87.57	4076	37.00*	2.845E+00	1.454E+03	1.454E+03	8.03
TE-132	228.16	43	88.20*	2.026E+00	9.125E+00	1.327E+01	126.39
BA-137M	661.65	914	89.98*	8.435E-01	4.520E+02	4.521E+02	10.40
CS-137	661.66	914	85.12*	8.435E-01	4.778E+02	4.779E+02	10.41
CE-139	165.85	1682	80.35*	2.424E+00	3.242E+02	3.271E+02	9.28
PM-147	121.30	1927	0.00*	2.721E+00	6.644E+08	6.653E+08	9.79
HG-203	70.83	------	4.75	2.774E+00	------ Line Not Found		------
	72.87	93	8.00	2.798E+00	1.566E+02	1.607E+02	121.31
	82.60	------	3.55	2.837E+00	------ Line Not Found		------
	279.20	1056	77.30*	1.754E+00	2.923E+02	3.001E+02	10.91
PA-234M	766.40	------	0.21	7.401E-01	------ Line Not Found		------
	1001.03	5	0.85*	5.866E-01	4.039E+02	4.039E+02	449.27
AM-241	59.54	3131	35.90*	2.638E+00	1.241E+03	1.241E+03	9.16

Flag: "*" = Keyline

Sample ID : G1200874845 Acquisition date : 13-JUL-2005 17:46:34

Total number of lines in spectrum 52
Number of unidentified lines 23
Number of lines tentatively identified by NID 29 55.77%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CO-57	270.90D	1.00	3.108E+02	3.122E+02	0.306E+02	9.80	
CO-60	5.27Y	1.00	7.170E+02	7.174E+02	0.668E+02	9.32	
ZN-65	244.40D	1.01	1.873E+01	1.882E+01	3.689E+01	195.96	
Y-88	106.60D	1.01	8.628E+02	8.727E+02	0.802E+02	9.19	
CD-109	464.00D	1.00	1.419E+04	1.423E+04	0.114E+04	8.03	
SN-113	115.10D	1.01	4.873E+02	4.925E+02	0.528E+02	10.72	
SN-126	1.00E+05Y	1.00	1.454E+03	1.454E+03	0.117E+03	8.03	
TE-132	78.20H	1.45	9.125E+00	1.327E+01	1.678E+01	126.39	
BA-137M	30.17Y	1.00	4.520E+02	4.521E+02	0.470E+02	10.40	
CS-137	30.17Y	1.00	4.778E+02	4.779E+02	0.498E+02	10.41	
CE-139	137.66D	1.01	3.242E+02	3.271E+02	0.304E+02	9.28	
PM-147	2.62Y	1.00	6.644E+08	6.653E+08	0.651E+08	9.79	
HG-203	46.61D	1.03	2.923E+02	3.001E+02	0.327E+02	10.91	
PA-234M	4.47E+09Y	1.00	4.039E+02	4.039E+02	18.15E+02	449.27	
AM-241	432.20Y	1.00	1.241E+03	1.241E+03	0.114E+03	9.16	
			---	---			
	Total Activity :		6.645E+08	6.653E+08			
	Grand Total Activity :		6.645E+08	6.653E+08			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	38.47	273	774	0.77	64.24	60	9	7.58E-02	38.6	1.96E+00	
0	186.44	47	319	1.14	361.77	358	8	1.31E-02	****	2.29E+00	T
0	255.92	53	305	1.40	501.47	498	9	1.46E-02	****	1.87E+00	T
0	290.11	19	180	0.91	570.23	568	7	5.16E-03	****	1.71E+00	T
0	301.37	52	183	1.97	592.86	588	9	1.44E-02	98.6	1.66E+00	T
0	304.79	32	116	1.30	599.73	597	6	8.97E-03	****	1.64E+00	T
0	327.30	30	126	1.29	645.00	642	7	8.25E-03	****	1.55E+00	T
0	410.45	34	80	0.88	812.21	810	6	9.35E-03	91.6	1.29E+00	T
0	413.55	23	97	0.95	818.44	816	7	6.36E-03	****	1.28E+00	
0	596.39	26	62	0.99	1186.14	1183	7	7.09E-03	****	9.27E-01	
0	610.55	11	67	0.98	1214.62	1212	7	2.98E-03	****	9.07E-01	T
0	711.49	29	42	1.84	1417.62	1415	6	7.92E-03	80.9	7.91E-01	
0	731.16	44	110	0.74	1457.19	1451	13	1.22E-02	****	7.72E-01	T
0	745.63	36	49	1.58	1486.28	1482	8	9.89E-03	77.3	7.58E-01	T
0	814.65	21	107	1.65	1625.11	1617	11	5.81E-03	****	7.01E-01	T
0	855.30	38	51	1.44	1706.87	1703	10	1.05E-02	77.2	6.72E-01	
3	906.72	38	32	2.10	1810.29	1784	29	1.05E-02	47.3	6.38E-01	
1	986.28	30	31	1.78	1970.33	1967	17	8.20E-03	68.8	5.94E-01	
1	990.76	24	37	1.79	1979.33	1967	17	6.57E-03	****	5.92E-01	
0	1006.45	22	52	0.65	2010.90	2006	10	6.03E-03	****	5.84E-01	T
0	1054.54	16	28	1.38	2107.62	2105	6	4.56E-03	****	5.61E-01	
0	1076.65	16	32	1.50	2152.10	2150	7	4.31E-03	****	5.52E-01	
0	1106.19	27	62	3.33	2211.53	2206	13	7.49E-03	****	5.39E-01	
0	1145.18	14	17	1.03	2289.97	2288	6	3.80E-03	****	5.24E-01	
0	1148.44	26	15	1.96	2296.53	2293	8	7.12E-03	66.7	5.23E-01	
0	1152.54	6	22	0.51	2304.77	2303	6	1.63E-03	****	5.21E-01	
0	1163.20	13	38	2.94	2326.20	2323	10	3.65E-03	****	5.18E-01	
0	1197.71	11	20	1.30	2395.64	2393	8	3.06E-03	****	5.06E-01	
0	1286.92	23	19	4.85	2575.10	2570	12	6.31E-03	90.2	4.78E-01	
0	1292.05	13	19	1.33	2585.43	2583	8	3.59E-03	****	4.76E-01	T
0	1303.22	18	42	7.83	2607.89	2601	21	5.00E-03	****	4.73E-01	
0	1324.84	12	36	0.93	2651.39	2650	7	3.22E-03	****	4.67E-01	
0	1573.78	13	33	1.41	3152.24	3146	12	3.67E-03	****	4.11E-01	
0	1603.64	22	26	1.47	3212.32	3208	10	6.06E-03	99.1	4.06E-01	
0	1750.50	5	24	4.84	3507.82	3506	24	1.30E-03	****	3.83E-01	
0	1764.94	5	3	0.69	3536.87	3535	4	1.44E-03	****	3.81E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 14-JUL-2005 11:44:10.40

GENERAL ENG. LABS, LLC.
2040 Savage Road
Charleston, SC 29414

DETECTOR DATA

Configuration	: DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200874845.CNF;1		
Acquisition date	: 13-JUL-2005 17:46:34	Detector SN#	: 30-TN10348
Detector ID	: GAMMA17	Sensitivity	: 3.00000
Geometry	: 2L_MB	Energy tolerance	: 2.00000
Elapsed live time	: 0 01:00:00.00	Abundance limit	: 75.00000
Elapsed real time	: 0 01:00:02.01	Half life ratio	: 8.00000

SAMPLE DATA

Sample date	: 12-JUL-2005 00:00:00	Nuclide Library	: EPI
Sample ID	: G1200874845	Analyst initials	: AKB
Batch Number	: 437153	Sample Quantity	: 2.00000E+00 LITER

QC DATA

CALIB. DATE/TIME	: 1-DEC-2004 11:39:23.06	MS Isotope	:
MSD DPM	:	MSD Isotope	:
LCS DPM	:	LCS Isotope	:

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CO-57	3.122E+02	3.059E+01	1.448E+01	1.009E+00	21.557
CO-60	7.174E+02	6.684E+01	2.476E+01	1.391E+00	28.981
ZN-65	1.882E+01	3.689E+01	5.280E+01	3.409E+00	0.357
Y-88	8.727E+02	8.017E+01	1.157E+01	6.895E-01	75.427
CD-109	1.423E+04	1.142E+03	4.026E+02	2.670E+01	35.340
SN-113	4.925E+02	5.277E+01	2.355E+01	1.633E+00	20.911
SN-126	1.454E+03	1.167E+02	4.675E+01	3.093E+00	31.090
TE-132	1.327E+01	1.678E+01	2.212E+01	2.862E+00	0.600
BA-137M	4.521E+02	4.701E+01	2.313E+01	1.426E+00	19.542
CS-137	4.779E+02	4.976E+01	2.445E+01	1.513E+00	19.542
CE-139	3.271E+02	3.036E+01	1.568E+01	9.001E-01	20.861
HG-203	3.001E+02	3.273E+01	1.776E+01	1.207E+00	16.898
PA-234M	4.039E+02	1.815E+03	2.835E+03	2.203E+02	0.142
AM-241	1.241E+03	1.137E+02	5.011E+01	3.475E+00	24.767

---- Non-Identified Nuclides ----

Key-Line Activity	K.L.	Act error	MDA	MDA error	Act/MDA

Nuclide	(pCi/LITER) Ided		(pCi/LITER)		
BE-7	-2.309E+01	9.595E+01	1.604E+02	1.223E+01	-0.144

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	3.826E+00		1.099E+01	2.064E+01	1.250E+00	0.185
NA-24	2.043E+01		8.651E+01	1.654E+02	9.532E+00	0.124
AL-26	1.016E+00		7.803E+00	1.596E+01	9.494E-01	0.064
K-40	5.379E+01		1.165E+02	2.281E+02	1.400E+01	0.236
SC-46	2.834E+00		1.298E+01	2.341E+01	1.302E+00	0.121
V-48	-1.787E+00		1.653E+01	2.519E+01	1.486E+00	-0.071
CR-51	-1.196E+01		8.079E+01	1.392E+02	1.001E+01	-0.086
MN-54	8.798E+00		1.318E+01	2.448E+01	1.424E+00	0.359
CO-56	-9.451E-01		1.275E+01	2.251E+01	1.298E+00	-0.042
CO-58	-1.500E+00		1.493E+01	2.304E+01	1.369E+00	-0.065
FE-59	1.104E+01		2.679E+01	4.858E+01	3.544E+00	0.227
SE-75	1.301E+00		1.267E+01	2.225E+01	1.437E+00	0.058
KR-85	-3.922E+02		2.494E+03	4.164E+03	2.828E+02	-0.094
SR-85	-1.747E+00		1.111E+01	1.855E+01	1.260E+00	-0.094
Y-91	7.036E+00		1.173E+01	2.062E+01	1.383E+00	0.341
NB-94	-5.746E-01		1.175E+01	2.094E+01	1.287E+00	-0.027
NB-95	1.278E+00		1.281E+01	2.297E+01	1.388E+00	0.056
NB-95M	-3.194E+00		4.475E+01	7.801E+01	6.160E+00	-0.041
ZR-95	-4.462E+00		2.147E+01	3.777E+01	2.739E+00	-0.118
MO-99	7.456E+00		1.496E+01	2.463E+01	1.619E+00	0.303
TC-99M	5.819E+02		1.168E+03	1.922E+03	1.393E+02	0.303
RU-103	-2.867E+00		1.159E+01	1.930E+01	2.535E+00	-0.149
RH-106	-2.311E+01		1.069E+02	1.900E+02	1.222E+01	-0.122
RU-106	-1.213E+00		1.076E+02	1.938E+02	2.338E+01	-0.006
AG-108M	-7.628E-01		1.136E+01	1.933E+01	1.385E+00	-0.039
AG-110M	8.766E+00		1.346E+01	2.259E+01	1.479E+00	0.388
CD-115	2.471E+01		5.527E+01	9.744E+01	6.600E+00	0.254
SN-115	2.783E+02		1.111E+03	1.990E+03	1.129E+02	0.140
SN-117M	-6.700E+00		1.041E+01	1.619E+01	9.643E-01	-0.414
TE-123M	-3.419E+00		9.775E+00	1.542E+01	9.278E-01	-0.222
SB-124	6.838E+00		2.209E+01	4.385E+01	2.815E+00	0.156
SB-125	2.355E+01		2.864E+01	5.197E+01	3.600E+00	0.453
TE-125M	-2.237E+03		2.817E+03	4.441E+03	3.919E+02	-0.504
I-126	2.163E+01		3.530E+01	5.892E+01	3.632E+00	0.367
SB-126	1.918E+01		2.392E+01	4.510E+01	2.764E+00	0.425
SB-127	2.040E+01		4.762E+01	8.717E+01	5.758E+00	0.234
I-131	-2.967E+00		1.167E+01	1.983E+01	1.422E+00	-0.150
BA-133	1.403E+00		1.350E+01	2.348E+01	2.819E+00	0.060
I-133	2.234E+01		4.510E+01	7.961E+01	5.546E+00	0.281
CS-134	-1.659E+00		1.358E+01	2.402E+01	1.449E+00	-0.069
CS-135	1.084E+01		4.690E+01	8.282E+01	6.741E+00	0.131
I-135	2.492E+03		3.088E+03	6.169E+03	4.243E+02	0.404
CS-136	1.476E+00		2.048E+01	3.605E+01	2.402E+00	0.041
BA-140	-2.462E+01		4.696E+01	7.498E+01	2.452E+01	-0.328
LA-140	-4.835E+01		3.312E+01	4.990E+01	2.941E+00	-0.969
CE-141	8.336E+00		1.623E+01	2.677E+01	1.751E+00	0.311
CE-143	-7.360E+00		4.970E+01	7.669E+01	1.546E+01	-0.096
CE-144	2.599E+01		7.100E+01	1.165E+02	1.698E+01	0.223

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-144	-1.554E+01		1.227E+01	1.991E+01	1.225E+00	-0.781
PM-146	1.200E+01		1.438E+01	2.594E+01	2.413E+00	0.463
ND-147	-1.407E+01		8.395E+01	1.405E+02	1.962E+01	-0.100
PM-147	6.653E+08		6.512E+07	4.813E+07	3.341E+06	13.822
PM-149	1.741E+02		4.054E+02	7.231E+02	1.045E+02	0.241
EU-152	-7.808E+00		2.958E+01	5.041E+01	3.676E+00	-0.155
GD-153	3.565E+00		2.459E+01	4.057E+01	2.703E+00	0.088
EU-154	1.050E+01		3.088E+01	5.794E+01	5.502E+00	0.181
EU-155	6.343E+00		3.844E+01	6.316E+01	4.336E+00	0.100
TB-160	3.459E+01		4.696E+01	8.776E+01	4.925E+00	0.394
TM-171	-4.045E+02		6.409E+03	1.061E+04	6.482E+02	-0.038
TA-181	-4.581E+00		1.242E+01	2.054E+01	1.397E+00	-0.223
TA-182	-1.003E+01		4.543E+01	7.838E+01	5.007E+00	-0.128
IR-192	1.254E+00		9.385E+00	1.643E+01	1.088E+00	0.076
BI-207	-1.062E+01		2.046E+01	3.406E+01	2.124E+00	-0.312
TL-208	5.029E+00		1.241E+01	2.161E+01	1.601E+00	0.233
BI-210	1.976E+02		2.637E+02	4.540E+02	3.268E+01	0.435
PB-210	1.976E+02		2.637E+02	4.540E+02	3.268E+01	0.435
BI-211	-1.647E+01		6.351E+01	1.080E+02	7.775E+00	-0.153
PB-211	7.083E+01		2.904E+02	5.023E+02	3.136E+02	0.141
BI-212	-1.260E+01		1.137E+02	1.770E+02	1.408E+01	-0.071
PB-212	4.159E+00		1.822E+01	3.212E+01	2.473E+00	0.129
BI-214	9.572E+00	+	2.654E+01	4.448E+01	3.698E+00	0.215
PB-214	1.577E+01		2.189E+01	3.936E+01	3.500E+00	0.401
RN-219	2.022E+00		1.308E+02	2.251E+02	3.147E+01	0.009
RA-223	-3.865E+01		1.916E+02	3.290E+02	5.533E+01	-0.117
RA-224	6.022E+01		1.983E+02	3.512E+02	2.203E+01	0.171
RA-226	9.572E+00	+	2.654E+01	4.448E+01	3.698E+00	0.215
AC-227	1.699E+02	+	2.105E+02	2.429E+02	3.490E+01	0.700
TH-227	1.675E+02	+	2.080E+02	2.394E+02	4.094E+01	0.700
AC-228	-3.098E+00		5.278E+01	9.228E+01	8.418E+00	-0.034
RA-228	-3.098E+00		5.278E+01	9.228E+01	8.418E+00	-0.034
TH-228	3.977E+00		1.821E+01	3.209E+01	2.471E+00	0.124
TH-229	-4.082E+01		1.489E+02	2.604E+02	1.548E+01	-0.157
TH-230	9.572E+00	+	2.654E+01	4.448E+01	3.698E+00	0.215
PA-231	-4.980E+01		5.041E+02	7.839E+02	1.104E+02	-0.064
TH-231	-3.080E+01		5.518E+01	9.355E+01	7.294E+00	-0.329
TH-232	3.909E+00		1.818E+01	3.203E+01	2.465E+00	0.122
PA-233	-9.623E+00		1.951E+01	3.294E+01	2.275E+00	-0.292
PA-234	5.618E+01		1.155E+02	2.107E+02	3.713E+01	0.267
TH-234	2.452E+02		2.710E+02	4.261E+02	7.210E+01	0.575
U-234	1.591E+01		3.900E+01	6.940E+01	6.276E+00	0.229
U-235	3.264E+01		7.332E+01	1.203E+02	1.986E+01	0.271
NP-237	-1.146E+01		8.900E+01	1.338E+02	2.899E+01	-0.086
U-238	2.452E+02		2.710E+02	4.261E+02	7.210E+01	0.575
NP-239	-8.179E+00		7.228E+01	1.170E+02	8.043E+00	-0.070
AM-242	-4.990E+02		8.179E+02	1.305E+03	8.761E+01	-0.382
CM-247	8.840E+00		1.148E+01	2.074E+01	1.376E+00	0.426

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CF-249	-1.092E+01		1.487E+01	2.136E+01	1.409E+00	-0.511
CF-251	1.128E+01		3.794E+01	6.810E+01	3.958E+00	0.166
ANH-511	1.671E+01		1.125E+01	2.064E+01	1.403E+00	0.810

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                              DETECTOR DATA                                *
*                                                                           *
* Configuration     : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200874845          *
* Acquisition date  : 13-JUL-2005 17:46:34 Detector SN#     : 30-TN10348    *
* Detector ID       : GAMMA17              Sensitivity      : 3.000         *
* Geometry          : 2L_MB                Energy tolerance: 2.000         *
* Elapsed live time:    0 01:00:00.00      Abundance limit  : 75.000        *
* Elapsed real time:    0 01:00:02.01      Half life ratio  : 8.000         *
*****************************************************************************
*                                                                           *
*                              SAMPLE DATA                                  *
*                                                                           *
* Sample date       : 12-JUL-2005 00:00:00 Nuclide Library  :               *
* Sample ID         : G1200874845          Analyst initials: AKB            *
* Batch Number      : 437153               Sample Quantity : 2.0000E+00 LITER *
* Recovery          :    1.00000           Carrier Weight  :    0.00000     *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME  :  1-DEC-2004 11:39:23 MS Isotope      :               *
* MSD DPM           :    0.000             MSD Isotope     :               *
* LCS DPM           :    0.000             LCS Isotope     :               *
* LCSD DPM          :    0.000             LCSD Isotope    :               *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
CO-57	3.122E+02	3.059E+01	7.027E+00	1.529E+01
CO-60	7.174E+02	6.684E+01	1.129E+01	3.342E+01
ZN-65	1.882E+01	3.689E+01	2.454E+01	1.844E+01
Y-88	8.727E+02	8.017E+01	4.393E+00	4.009E+01
CD-109	1.423E+04	1.142E+03	1.967E+02	5.710E+02
SN-113	4.925E+02	5.277E+01	1.119E+01	2.639E+01
SN-126	1.454E+03	1.167E+02	2.291E+01	5.834E+01
TE-132	1.327E+01	1.678E+01	1.065E+01	8.388E+00
BA-137M	4.521E+02	4.701E+01	1.090E+01	2.351E+01
CS-137	4.779E+02	4.976E+01	1.153E+01	2.488E+01
CE-139	3.271E+02	3.036E+01	7.581E+00	1.518E+01
HG-203	3.001E+02	3.273E+01	8.500E+00	1.636E+01
PA-234M	4.039E+02	1.815E+03	1.316E+03	9.073E+02
AM-241	1.241E+03	1.137E+02	2.453E+01	5.683E+01

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-2.309E+01	9.595E+01	7.580E+01	4.797E+01	NOT IDENT.
NA-22	3.826E+00	1.099E+01	9.268E+00	5.494E+00	NOT IDENT.
NA-24	2.043E+01	8.651E+01	7.487E+01	4.325E+01	NOT IDENT.
AL-26	1.016E+00	7.803E+00	6.624E+00	3.901E+00	NOT IDENT.
K-40	5.379E+01	1.165E+02	1.031E+02	5.824E+01	NOT IDENT.
SC-46	2.834E+00	1.298E+01	1.092E+01	6.489E+00	NOT IDENT.
V-48	-1.787E+00	1.653E+01	1.168E+01	8.263E+00	NOT IDENT.
CR-51	-1.196E+01	8.079E+01	6.621E+01	4.040E+01	NOT IDENT.
MN-54	8.798E+00	1.318E+01	1.150E+01	6.590E+00	NOT IDENT.
CO-56	-9.451E-01	1.275E+01	1.050E+01	6.377E+00	NOT IDENT.
MN-56	-7.988E+04	1.091E+06	0.000E+00	5.456E+05	SHORT HLIF
CO-58	-1.500E+00	1.493E+01	1.079E+01	7.464E+00	NOT IDENT.
FE-59	1.104E+01	2.679E+01	2.260E+01	1.340E+01	FAIL ABUN
SE-75	1.301E+00	1.267E+01	1.066E+01	6.337E+00	FAIL ABUN
KR-85	-3.922E+02	2.494E+03	1.973E+03	1.247E+03	NOT IDENT.
SR-85	-1.747E+00	1.111E+01	8.785E+00	5.553E+00	NOT IDENT.
Y-91	7.036E+00	1.173E+01	9.759E+00	5.867E+00	NOT IDENT.
NB-94	-5.746E-01	1.175E+01	9.838E+00	5.874E+00	NOT IDENT.
NB-95	1.278E+00	1.281E+01	1.078E+01	6.405E+00	NOT IDENT.
NB-95M	-3.194E+00	4.475E+01	3.758E+01	2.237E+01	NOT IDENT.
ZR-95	-4.462E+00	2.147E+01	1.764E+01	1.074E+01	NOT IDENT.
MO-99	7.456E+00	1.496E+01	1.195E+01	7.482E+00	NOT IDENT.
TC-99M	5.819E+02	1.168E+03	9.328E+02	5.840E+02	NOT IDENT.
RU-103	-2.867E+00	1.159E+01	9.115E+00	5.794E+00	FAIL ABUN
RH-106	-2.311E+01	1.069E+02	8.923E+01	5.346E+01	NOT IDENT.
RU-106	-1.213E+00	1.076E+02	9.114E+01	5.379E+01	NOT IDENT.
AG-108M	-7.628E-01	1.136E+01	9.163E+00	5.681E+00	NOT IDENT.
AG-110M	8.766E+00	1.346E+01	1.066E+01	6.732E+00	NOT IDENT.
CD-115	2.471E+01	5.527E+01	4.582E+01	2.764E+01	NOT IDENT.
SN-115	2.783E+02	1.111E+03	9.325E+02	5.555E+02	FAIL ABUN
SN-117M	-6.700E+00	1.041E+01	7.841E+00	5.207E+00	NOT IDENT.
TE-123M	-3.419E+00	9.775E+00	7.466E+00	4.888E+00	NOT IDENT.
SB-124	6.838E+00	2.209E+01	1.923E+01	1.104E+01	NOT IDENT.
SB-125	2.355E+01	2.864E+01	2.460E+01	1.432E+01	NOT IDENT.
TE-125M	-2.237E+03	2.817E+03	2.156E+03	1.408E+03	NOT IDENT.
I-126	2.163E+01	3.530E+01	2.782E+01	1.765E+01	NOT IDENT.
SB-126	1.918E+01	2.392E+01	2.123E+01	1.196E+01	NOT IDENT.
I-127	2.040E+01	4.762E+01	4.122E+01	2.381E+01	FAIL ABUN
I-131	-2.967E+00	1.167E+01	9.410E+00	5.836E+00	NOT IDENT.
I-132	-2.373E+06	4.184E+06	0.000E+00	2.092E+06	SHORT HLIF
BA-133	1.403E+00	1.350E+01	1.116E+01	6.751E+00	FAIL ABUN
I-133	2.234E+01	4.510E+01	3.749E+01	2.255E+01	NOT IDENT.
CS-134	-1.659E+00	1.358E+01	1.118E+01	6.788E+00	NOT IDENT.
CS-135	1.084E+01	4.690E+01	3.968E+01	2.345E+01	NOT IDENT.
I-135	2.492E+03	3.088E+03	2.778E+03	1.544E+03	FAIL ABUN
CS-136	1.476E+00	2.048E+01	1.679E+01	1.024E+01	NOT IDENT.
BA-140	-2.462E+01	4.696E+01	3.531E+01	2.348E+01	FAIL ABUN
LA-140	-4.835E+01	3.312E+01	2.225E+01	1.656E+01	FAIL ABUN
CE-141	8.336E+00	1.623E+01	1.297E+01	8.116E+00	NOT IDENT.
CE-143	-7.360E+00	4.970E+01	3.663E+01	2.485E+01	NOT IDENT.
CE-144	2.599E+01	7.100E+01	5.652E+01	3.550E+01	NOT IDENT.
PM-144	-1.554E+01	1.227E+01	9.324E+00	6.134E+00	NOT IDENT.
PR-144	-1.000E+41	7.895E+40	0.000E+00	0.000E+00	SHORT HLIF
PM-146	1.200E+01	1.438E+01	1.229E+01	7.189E+00	FAIL ABUN
ND-147	-1.407E+01	8.395E+01	6.605E+01	4.198E+01	NOT IDENT.
PM-147	6.653E+08	6.512E+07	2.361E+07	3.256E+07	FAIL ABUN

M-149	1.741E+02	4.054E+02	3.452E+02	2.027E+02 NOT IDENT.
EU-152	-7.808E+00	2.958E+01	2.393E+01	1.479E+01 FAIL ABUN
GD-153	3.565E+00	2.459E+01	1.972E+01	1.229E+01 NOT IDENT.
EU-154	1.050E+01	3.088E+01	2.601E+01	1.544E+01 FAIL ABUN
EU-155	6.343E+00	3.844E+01	3.072E+01	1.922E+01 NOT IDENT.
TB-160	3.459E+01	4.696E+01	4.113E+01	2.348E+01 FAIL ABUN
TM-171	-4.045E+02	6.409E+03	5.190E+03	3.204E+03 FAIL ABUN
HF-181	-4.581E+00	1.242E+01	9.710E+00	6.210E+00 FAIL ABUN
TA-182	-1.003E+01	4.543E+01	3.540E+01	2.271E+01 NOT IDENT.
IR-192	1.254E+00	9.385E+00	7.830E+00	4.693E+00 FAIL ABUN
BI-207	-1.062E+01	2.046E+01	1.582E+01	1.023E+01 FAIL ABUN
TL-208	5.029E+00	1.241E+01	1.017E+01	6.203E+00 FAIL ABUN
BI-210	1.976E+02	2.637E+02	2.216E+02	1.319E+02 NOT IDENT.
PB-210	1.976E+02	2.637E+02	2.216E+02	1.319E+02 NOT IDENT.
BI-211	-1.647E+01	6.351E+01	5.136E+01	3.176E+01 NOT IDENT.
PB-211	7.083E+01	2.904E+02	2.378E+02	1.452E+02 NOT IDENT.
BI-212	-1.260E+01	1.137E+02	8.300E+01	5.687E+01 NOT IDENT.
B-212	4.159E+00	1.822E+01	1.549E+01	9.112E+00 FAIL ABUN
I-214	9.572E+00	2.654E+01	2.104E+01	1.327E+01 FAIL ABUN
PB-214	1.577E+01	2.189E+01	1.876E+01	1.095E+01 FAIL ABUN
RN-219	2.022E+00	1.308E+02	1.067E+02	6.539E+01 NOT IDENT.
RA-223	-3.865E+01	1.916E+02	1.562E+02	9.579E+01 FAIL ABUN
RA-224	6.022E+01	1.983E+02	1.691E+02	9.916E+01 NOT IDENT.
RA-226	9.572E+00	2.654E+01	2.104E+01	1.327E+01 FAIL ABUN
AC-227	1.699E+02	2.105E+02	1.171E+02	1.052E+02 FAIL ABUN
TH-227	1.675E+02	2.080E+02	1.155E+02	1.040E+02 FAIL ABUN
AC-228	-3.098E+00	5.278E+01	4.328E+01	2.639E+01 NOT IDENT.
RA-228	-3.098E+00	5.278E+01	4.328E+01	2.639E+01 NOT IDENT.
TH-228	3.977E+00	1.821E+01	1.547E+01	9.106E+00 FAIL ABUN
TH-229	-4.082E+01	1.489E+02	1.253E+02	7.446E+01 FAIL ABUN
TH-230	9.572E+00	2.654E+01	2.104E+01	1.327E+01 FAIL ABUN
PA-231	-4.980E+01	5.041E+02	3.739E+02	2.520E+02 FAIL ABUN
TH-231	-3.080E+01	5.518E+01	4.473E+01	2.759E+01 FAIL ABUN
TH-232	3.909E+00	1.818E+01	1.544E+01	9.089E+00 NOT IDENT.
PA-233	-9.623E+00	1.951E+01	1.566E+01	9.753E+00 FAIL ABUN
A-234	5.618E+01	1.155E+02	9.850E+01	5.773E+01 FAIL ABUN
I-234	2.452E+02	2.710E+02	2.082E+02	1.355E+02 NOT IDENT.
U-234	1.591E+01	3.900E+01	3.315E+01	1.950E+01 NOT IDENT.
U-235	3.264E+01	7.332E+01	5.829E+01	3.666E+01 FAIL ABUN
NP-237	-1.146E+01	8.900E+01	6.554E+01	4.450E+01 NOT IDENT.
U-238	2.452E+02	2.710E+02	2.082E+02	1.355E+02 NOT IDENT.
NP-239	-8.179E+00	7.228E+01	5.685E+01	3.614E+01 FAIL ABUN
AM-242	-4.990E+02	8.179E+02	6.349E+02	4.089E+02 NOT IDENT.
CM-247	8.840E+00	1.148E+01	9.843E+00	5.742E+00 FAIL ABUN
CF-249	-1.092E+01	1.487E+01	1.012E+01	7.437E+00 NOT IDENT.
CF-251	1.128E+01	3.794E+01	3.285E+01	1.897E+01 FAIL ABUN
ANH-511	1.671E+01	1.125E+01	9.850E+00	5.623E+00 NOT IDENT.

Radiochemistry Batch Checklist, Rev 3

Batch# 439112 Product: Sr-90 Date: 7/13/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg	NA		
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	NA		
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	NA		

General Engineering Laboratories

10/31/2000

Primary Review Performed By: J PARKER 7/13/05

Secondary Review Performed By: [illegible] 7/14/05

7/8 - 7/13

ESHL

210

Strontium 90 Que Sheet

07/01/05

Batch #: 439112 **Analyst:** EXW1 **Minimum DueDate:** 07/08/2005 **Comments**

Sr-90 Spike Code: 0133-N **Expiration Date:** 5/25/06 **Vol:** 0.1 **Sr Sep. Date/time:** 7/6/05 9:35

Sr-90 LCS Code: 0133-N **Expiration Date:** 5/25/06 **Vol:** 0.1

Sr Carrier Code: 005753 **Exp Date:** 11/13/06 **Vol:** 0.5 **Sdt Wt:** 8.91

Prep Date: 7/5/05 **Initials:** MEW **Pipet ID:** 44970603 **Balance #:** 512048603 **Analytical Scale #:** 3811004-7 **Witness:** 7/5/05

Sample ID	Client Description	Type	RDL	Collection Date	Matrix	Client	Rad	Bkr#	Aliquot (mL) or (g)	Det # 1 & 2	Initial Sr wt (g)	Final Sr wt (g)	Net Sr wt (mg)
139349001	GF05060PCCR01	SAMPLE	.4 pCi/L	JUN-23-05 08:55 AM	SURFACE WATE	ESHL001		1	800	1B	0.0871	0.0932	6.1
139349008	GU05060PCCR01	SAMPLE	.4 pCi/L	JUN-23-05 08:55 AM	SURFACE WATE	ESHL001		2	800	1C	0.0862	0.0912	5.0
139349009	GU05060PCCR01-FB	SAMPLE	.4 pCi/L	JUN-23-05 08:55 AM	SURFACE WATE	ESHL001		3	800	2A	0.0862	0.0921	5.9
139405001	GF05050GMC401	SAMPLE	.5 pCi/L	JUN-23-05 08:50 AM	GROUND WATE	ESHL001		4	800	2B	0.0844	0.0908	6.4
139405002	GU05050GMC401	SAMPLE	.5 pCi/L	JUN-23-05 08:50 AM	GROUND WATE	ESHL001		5	800	2C	0.0859	0.0917	6.3
139406001	GF0506G32R101	SAMPLE	.4 pCi/L	JUN-22-05 01:10 PM	GROUND WATE	ESHL001		6	800	2D	0.0847	0.0903	5.6
139406005	GU0506G32R101	SAMPLE	.4 pCi/L	JUN-22-05 01:10 PM	GROUND WATE	ESHL001		7	800	3A	0.0846	0.0904	5.8
139409001	GF05060PEGR01	SAMPLE	.4 pCi/L	JUN-24-05 09:00 AM	SURFACE WATE	ESHL001		8	800	3B	0.0854	0.0909	5.5
139409005	GU05060PEGR01	SAMPLE	.4 pCi/L	JUN-24-05 09:00 AM	SURFACE WATE	ESHL001		9	800	3C	0.0837	0.0895	5.8
139524001	GF05060PUOR01	SAMPLE	.4 pCi/L	JUN-27-05 10:05 AM	SURFACE WATE	ESHL001		10	800	3D 3A	0.0836	0.0919	8.3
139524002	GF05060PCGR01	SAMPLE	.4 pCi/L	JUN-24-05 09:15 AM	SURFACE WATE	ESHL001		11	800	4A	0.0840	0.0895	5.5
139524009	GU05060PUOR01	SAMPLE	.4 pCi/L	JUN-27-05 10:05 AM	SURFACE WATE	ESHL001		12	800	4B	0.0848	0.0905	5.7
139524010	GU05060PCGR01	SAMPLE	.4 pCi/L	JUN-24-05 09:15 AM	SURFACE WATE	ESHL001		13	800	4C	0.0844	0.0893	4.9
139713001	GF05060PBJZ01	SAMPLE	.4 pCi/L	JUN-28-05 10:45 AM	SURFACE WATE	ESHL001		14	800	4D	0.0858	0.0919	6.1
139713005	GU05060PBJZ01	SAMPLE	.4 pCi/L	JUN-28-05 10:45 AM	SURFACE WATE	ESHL001		15	800	1B	0.0842	0.0895	5.3
1200879245	MB for batch 439112	MB	.4 pCi/L		SURFACE WATE	QC ACCOUNT		16	800 1000	1C	0.0864	0.0916	5.2
1200879246	GU05060PCCR01(139349008DUP)	DUP	.4 pCi/L	JUN-23-05 08:55 AM	SURFACE WATE	QC ACCOUNT		17	800	2A	0.0844	0.0900	5.6
1200879247	GU05060PCCR01(139349008MS)	MS	.4 pCi/L	JUN-23-05 08:55 AM	SURFACE WATE	QC ACCOUNT		18	400	3A	0.0847	0.0907	6.0
1200879248	LCS for batch 439112	LCS	.4 pCi/L		SURFACE WATE	QC ACCOUNT		19	800 1000	3C 1B	0.0842	0.0905	6.3

dG 7/14/05

wt ✓

Instruments used: LB4110 S/N 8219, PIC S/N 10751-4

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One)

Data Reviewed By: PARKER 7/13/05

NO 7/14/05

General Engineering Laboratories, Radiochemistry Division

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200879246	DUP	Strontium-90	0.800 L	0.0689	0.0516	0.202	-.0475	pCi/L	NO
1200879248	LCS	Strontium-90	1.00 L	15.6	0.473	0.301	-.038	pCi/L	NO
1200879245	MB	Strontium-90	1.00 L	-0.038	0.0327	0.116	-.038	pCi/L	NO
1200879247	MS	Strontium-90	0.400 L	41.4	1.46	1.04	-.095	pCi/L	NO
139349001	GF05060PCCR01	Strontium-90	0.800 L	0.0198	0.0413	0.140	-.0475	pCi/L	NO
139349008	GU05060PCCR01	Strontium-90	0.800 L	0.154	0.0489	0.154	-.0475	pCi/L	NO
139349009	GU05060PCCR01 -FB	Strontium-90	0.800 L	0.0934	0.0383	0.123	-.0475	pCi/L	NO
139405001	GF05050GMC401	Strontium-90	0.800 L	-0.0138	0.0379	0.131	-.0475	pCi/L	NO
139405002	GU05050GMC401	Strontium-90	0.800 L	-0.0171	0.0339	0.118	-.0475	pCi/L	NO
139406001	GF0506G32R101	Strontium-90	0.800 L	-0.00569	0.0406	0.140	-.0475	pCi/L	NO
139406005	GU0506G32R101	Strontium-90	0.800 L	0.000776	0.0431	0.148	-.0475	pCi/L	NO
139409001	GF05060PEGR01	Strontium-90	0.800 L	0.0948	0.0488	0.159	-.0475	pCi/L	NO
139409005	GU05060PEGR01	Strontium-90	0.800 L	-0.00665	0.0441	0.152	-.0475	pCi/L	NO
139524001	GF05060PUOR01	Strontium-90	0.800 L	0.0379	0.0625	0.290	-.0475	pCi/L	NO
139524002	GF05060PCGR01	Strontium-90	0.800 L	-0.0182	0.0478	0.165	-.0475	pCi/L	NO
139524009	GU05060PUOR01	Strontium-90	0.800 L	0.003	0.0453	0.155	-.0475	pCi/L	NO
139524010	GU05060PCGR01	Strontium-90	0.800 L	-0.0867	0.048	0.172	-.0475	pCi/L	NO
139713001	GF05060PBJZ01	Strontium-90	0.800 L	-0.0063	0.0514	0.175	-.0475	pCi/L	NO
139713005	GU05060PBJZ01	Strontium-90	0.800 L	-0.0395	0.0449	0.157	-.0475	pCi/L	NO

7/14/15

Strontium-90 Water

Filename : SR90.XLS
File type : Excel
Version # : 1

Batch : 439112
Analyst : EXW1
Prep Date : 7/5/2005
Sr-90 Abundance : 1

Calibration Date : 11/2/2004
Calibration Due Date : 11/2/2005

Spike S/N : 0133-N
Spike Exp Date : 5/25/2006
Spike Activity (dpm/ml): 397.66
Spike Volume Added: 0.1

LCS S/N : 0133-N
LCS Exp Date : 5/25/2006
LCS Activity (dpm/ml): 397.66
LCS Volume Added: 0.1

Carrier S/N : 1005753
Carrier Exp Date : 11/13/2006
Carrier Volume Added: 0.5
Carrier Weight (mg/ml): 17.83
Carrier Weight StDev.: 0.07

Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1 ml Stdev : +/-	0.005480	ml
Procedure Code :	GFC90SRL	
Parmname :	Strontium-90	
Required MDC:	0.4	pCi/L
Halflife of Sr-90 :	28.6	years
Halflife of Y-90 :	64.1	hours
Batch counted on :	PIC	
BKG Count time :	1000	min

Sample Characteristics				**Carrier Calculations**				
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Carrier Weight (Standard)	Net Weight (Sample)	Net Weight StDev.	Carrier Aliquot (mL)	Carrier Aliquot StDev.
139349001	0.800	2.0861E-05	6/23/2005 8:55	17.83	6.10	0.033548	0.5	0.002564
139349008	0.800	2.0861E-05	6/23/2005 8:55	17.83	5.00	0.028820	0.5	0.002564
139349009	0.800	2.0861E-05	6/23/2005 8:55	17.83	5.90	0.032688	0.5	0.002564
139405001	0.800	2.0861E-05	6/23/2005 8:50	17.83	6.40	0.034837	0.5	0.002564
139405002	0.800	2.0861E-05	6/23/2005 8:50	17.83	6.30	0.034407	0.5	0.002564
139406001	0.800	2.0861E-05	6/22/2005 13:10	17.83	5.60	0.031399	0.5	0.002564
139406005	0.800	2.0861E-05	6/22/2005 13:10	17.83	5.80	0.032258	0.5	0.002564
139409001	0.800	2.0861E-05	6/24/2005 9:00	17.83	5.00	0.028820	0.5	0.002564
139409005	0.800	2.0861E-05	6/24/2005 9:00	17.83	5.80	0.032258	0.5	0.002564
139524001	0.800	2.0861E-05	6/27/2005 10:05	17.83	8.30	0.043003	0.5	0.002564
139524002	0.800	2.0861E-05	6/24/2005 9:15	17.83	5.50	0.030969	0.5	0.002564
139524009	0.800	2.0861E-05	6/27/2005 10:05	17.83	5.70	0.031829	0.5	0.002564
139524010	0.800	2.0861E-05	6/24/2005 9:15	17.83	4.90	0.028390	0.5	0.002564
139713001	0.800	2.0861E-05	6/28/2005 10:45	17.83	6.10	0.033548	0.5	0.002564
139713005	0.800	2.0861E-05	6/28/2005 10:45	17.83	5.30	0.030109	0.5	0.002564
1200879245	1.000	2.0399E-05	7/5/2005 0:00	17.83	5.20	0.029680	0.5	0.002564
1200879246	0.800	2.0861E-05	6/23/2005 8:55	17.83	5.60	0.031399	0.5	0.002564
1200879247	0.400	1.9669E-05	6/23/2005 8:55	17.83	6.00	0.033118	0.5	0.002564
1200879248	1.000	2.0399E-05	7/5/2005 0:00	17.83	6.30	0.034407	0.5	0.002564

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Count Raw Data

Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Gross Beta CPM	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency Sr-90	Detector Efficiency Y-90	Detector Efficiency Error	Alpha X-Talk	Count Start Date/Time	Strontium Separation Date/Time	Yttrium Ingrowth	Sr-90 Decay	Sample Recovery %	Sample Recovery Error %
1B	500	23	204	0.403	0.384	500	0.4127	0.5561	0.00409	0.10673	7/10/2005 15:35	7/6/2005 9:35	0.683	0.999	68.42%	1.01%
1C	500	54	230	0.453	0.328	500	0.4301	0.5605	0.00344	0.06880	7/10/2005 15:36	7/6/2005 9:35	0.683	0.999	56.09%	1.04%
2A	500	11	189	0.377	0.288	500	0.4240	0.5685	0.00349	0.04431	7/10/2005 15:37	7/6/2005 9:35	0.683	0.999	66.18%	1.02%
2B	500	30	193	0.378	0.392	500	0.4281	0.5645	0.00383	0.13907	7/10/2005 15:37	7/6/2005 9:35	0.683	0.999	71.79%	1.00%
2C	500	17	141	0.279	0.296	500	0.4144	0.5631	0.00575	0.09051	7/10/2005 15:37	7/6/2005 9:35	0.683	0.999	70.67%	1.01%
2D	500	41	170	0.337	0.342	500	0.4236	0.5719	0.00479	0.03853	7/10/2005 15:38	7/6/2005 9:35	0.683	0.999	62.82%	1.02%
3A	500	40	189	0.375	0.374	500	0.4011	0.5517	0.00943	0.04130	7/10/2005 15:38	7/6/2005 9:35	0.683	0.999	65.06%	1.02%
3B	500	50	208	0.411	0.336	500	0.4143	0.5589	0.00655	0.04932	7/10/2005 15:38	7/6/2005 9:35	0.683	0.999	56.09%	1.04%
3C	500	25	201	0.400	0.406	500	0.4099	0.5553	0.00535	0.04117	7/10/2005 15:38	7/6/2005 9:35	0.683	0.999	65.06%	1.02%
3A	60	8	26	0.428	0.374	500	0.3954	0.5517	0.00943	0.04133	7/13/2005 11:39	7/6/2005 9:35	0.842	0.999	93.10%	0.98%
4A	500	17	216	0.430	0.446	500	0.4212	0.5540	0.00744	0.05787	7/10/2005 15:39	7/6/2005 9:35	0.683	0.999	61.69%	1.03%
4B	500	20	220	0.437	0.434	500	0.4256	0.5653	0.00196	0.08097	7/10/2005 15:39	7/6/2005 9:35	0.683	0.999	63.94%	1.02%
4C	500	34	164	0.325	0.394	500	0.4241	0.5648	0.00426	0.03681	7/10/2005 15:39	7/6/2005 9:35	0.683	0.999	54.96%	1.04%
4D	500	48	315	0.626	0.632	500	0.4185	0.5650	0.00816	0.04325	7/10/2005 15:39	7/6/2005 9:35	0.683	0.999	68.42%	1.01%
1B	500	27	178	0.350	0.384	500	0.4144	0.5561	0.00409	0.10670	7/10/2005 23:59	7/6/2005 9:35	0.710	0.999	59.45%	1.03%
1C	500	49	147	0.287	0.328	500	0.4295	0.5605	0.00344	0.06881	7/10/2005 23:59	7/6/2005 9:35	0.710	1.000	58.33%	1.03%
2A	210	5	74	0.351	0.288	500	0.4248	0.5685	0.00349	0.04430	7/11/2005 0:03	7/6/2005 9:35	0.703	0.999	62.82%	1.02%
3A	60	65	1102	18.322	0.451	1000	0.4006	0.5517	0.00943	0.04130	7/9/2005 18:35	7/6/2005 9:35	0.586	0.999	67.30%	1.01%
1B	60	7	1324	22.054	0.384	500	0.4123	0.5561	0.00409	0.10673	7/13/2005 17:19	7/6/2005 9:35	0.851	0.999	70.67%	1.01%

DB 7/14/05

Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.0949	0.0670	0.1397	**0.0198**	2.0783	0.0191	0.0397	0.0413	0.0413		SAMPLE				
0.1044	0.0737	0.1541	**0.1540**	0.3174	0.1246	0.0395	0.0489	0.0489		SAMPLE				
0.0829	0.0586	0.1228	**0.0934**	0.4098	0.0890	0.0365	0.0382	0.0383		SAMPLE				
0.0890	0.0629	0.1310	**-0.0138**	2.7352	-0.0143	0.0392	0.0379	0.0379		SAMPLE				
0.0800	0.0565	0.1184	**-0.0171**	1.9856	-0.0171	0.0339	0.0339	0.0339		SAMPLE				
0.0950	0.0671	0.1401	**-0.0057**	7.1414	-0.0052	0.0368	0.0406	0.0406		SAMPLE				
0.1004	0.0709	0.1478	**0.0008**	55.5788	0.0007	0.0387	0.0431	0.0431		SAMPLE				
0.1078	0.0761	0.1591	**0.0948**	0.5151	0.0751	0.0387	0.0488	0.0488		SAMPLE				
0.1031	0.0728	0.1515	**-0.0067**	6.6268	-0.0061	0.0401	0.0441	0.0441		SAMPLE				
0.1832	0.1293	0.2904	**0.0379**	1.6492	0.0538	0.0888	0.0625	0.0625		SAMPLE				
0.1125	0.0794	0.1650	**-0.0182**	2.6214	-0.0160	0.0419	0.0478	0.0478		SAMPLE				
0.1054	0.0744	0.1547	**0.0030**	15.1136	0.0028	0.0417	0.0453	0.0453		SAMPLE				
0.1171	0.0827	0.1722	**-0.0867**	0.5539	-0.0685	0.0379	0.0480	0.0480		SAMPLE				
0.1199	0.0847	0.1749	**-0.0063**	8.1528	-0.0062	0.0502	0.0514	0.0514		SAMPLE				
0.1069	0.0755	0.1573	**-0.0395**	1.1351	-0.0338	0.0383	0.0449	0.0449		SAMPLE				
0.0788	0.0556	0.1163	**-0.0380**	0.8610	-0.0407	0.0351	0.0327	0.0327		MB				
0.1328	0.0938	0.2016	**0.0689**	0.7490	0.0633	0.0474	0.0516	0.0516	139349008	DUP	0.0%	0.4233		
0.6612	0.4668	1.0379	**41.3585**	0.0339	17.8709	0.5530	1.2798	1.4552	139349008	MS			44.82	91.9%
0.1898	0.1340	0.3005	**15.6049**	0.0300	21.6702	0.6069	0.4370	0.4731		LCS			17.91	87.1%

JEG 7/14/05

SampleID	Instr	Time	Alpha	Beta	Count Start Time	Count End Time
139349001	1B	500	23	204	7/10/2005 15:35	7/10/2005 23:55
139349008	1C	500	54	230	7/10/2005 15:36	7/10/2005 23:56
139349009	2A	500	11	189	7/10/2005 15:37	7/10/2005 23:57
139405001	2B	500	30	193	7/10/2005 15:37	7/10/2005 23:57
139405002	2C	500	17	141	7/10/2005 15:37	7/10/2005 23:57
139406001	2D	500	41	170	7/10/2005 15:38	7/10/2005 23:58
139406005	3A	500	40	189	7/10/2005 15:38	7/10/2005 23:58
139409001	3B	500	50	208	7/10/2005 15:38	7/10/2005 23:58
139409005	3C	500	25	201	7/10/2005 15:38	7/10/2005 23:58
139524001	3A	60	8	26	7/13/2005 11:39	7/13/2005 12:39
139524002	4A	500	17	216	7/10/2005 15:39	7/10/2005 23:59
139524009	4B	500	20	220	7/10/2005 15:39	7/10/2005 23:59
139524010	4C	500	34	164	7/10/2005 15:39	7/10/2005 23:59
139713001	4D	500	48	315	7/10/2005 15:39	7/10/2005 23:59
139713005	1B	500	27	178	7/10/2005 23:59	7/11/2005 8:19
1200879245	1C	500	49	147	7/10/2005 23:59	7/11/2005 8:19
1200879246	2A	210	5	74	7/11/2005 0:03	7/11/2005 3:33
1200879247	3A	60	65	1102	7/9/2005 18:35	7/9/2005 19:35
1200879248	1B	60	7	1324	7/13/2005 17:19	7/13/2005 18:19

7/14/05

7/14/05

Radiochemistry Batch Checklist, Rev 3

Batch# 441414 Product: GAB Date: 7/14/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg	✓		
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	NA		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	NA		
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	NA		

General Engineering Laboratories

10/31/2000

Primary Review Performed By: [signature] 7/14/05

Secondary Review Performed By: [signature] 7/14/05

7/8-7/15

ESH

210

Gross Alpha Beta Que Sheet

07/13/2005 13:31:54

Batch #:441414 **Analyst:SXE1** **Minimum DueDate: 07/08/2005**

Alpha Spike Isotope: Th-230	Spike Code: 0159-O	Vol: 0.1	Balance #: 51204863	10% HNO3: 315074.1	
Beta Spike Isotope: Sr-90	Spike Code: 0133-N	Vol: 0.1	Pipet #: 2766953	Conc HNO3: 318447.10	
Alpha LCS Isotope: Th-230	LCS Code: 0159-O	Vol: 0.1	Prep Date: 7/12/05	Analytical Scale #: C31514	Conc HCl: NA
Beta LCS Isotope: Sr-90	LCS Code: 0133-N	Vol: 0.1	Initials: SSE 7/12/05	Witness: [illegible] 7/12/05 (recopied)	Conc HF: NA
					Conc Boric: NA

Sample ID	Client Description	Type	Hazard Code	RDL Alpha/Beta	Client	Matrix	Bkr#	Aliquot (mL or g)	Carrier or Det#	Initial Wt (g)	Final Wt (g)	Net Wt (mg)
139349001	GF05060PCCR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	1	150	3D	7.4938	7.5122	18.4
139349008	GU05060PCCR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	2	150	4A	7.4243	7.4533	29.0
139349009	GU05060PCCR01-FB	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	3	150	4B	7.4140	7.4450	31.0
139405001	GF05050GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	4	150	4C	7.3783	7.4083	30.0
139405002	GU05050GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	5	150	4D	7.4559	7.4882	32.3
139406001	GF0506G32R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	6	150	4A	7.3661	7.3844	18.3
139406005	GU0506G32R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	7	150	4B	7.3980	7.4171	19.1
139409001	GF05060PEGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	8	150	4C	7.3714	7.3813	9.9
139409005	GU05060PEGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	9	150	4D	7.3692	7.3893	20.1
139524001	GF05060PUOR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	10	150	3C	7.3615	7.3741	12.6
139524002	GF05060PCGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	11	150	3D	7.5230	7.5366	13.6
139524009	GU05060PUOR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	12	150	1C	7.3798	7.4224	42.6
139524010	GU05060PCGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	13	150	1D	7.4245	7.4432	18.7
139713001	GF05060PBJZ01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	14	150	2A	7.4963	7.5569	60.6
139713005	GU05060PBJZ01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	15	150	2B	7.3271	7.3889	61.8
1200885000	MB for batch 441414	MB		UCF pCi/L to pCi/L	QC ACCOUNT	SURFACE WATE	16	1000	2C	7.4156	7.4155	0
1200885001	GU05060PCCR01(139349008DUP)	DUP		3 pCi/L	QC ACCOUNT	SURFACE WATE	17	150	2D	7.4426	7.4719	29.3
1200885002	GU05060PCCR01(139349008MS)	MS		3 pCi/L	QC ACCOUNT	SURFACE WATE	18	150	1C	7.3695	7.4030	33.5
1200885003	GU05060PCCR01(139349008MSD)	MSD		3 pCi/L	QC ACCOUNT	SURFACE WATE	19	150	2A	7.3421	7.3740	31.9
1200885004	LCS for batch 441414	LCS		UCF pCi/L to pCi/L	QC ACCOUNT	SURFACE WATE	20	1000	2C	7.3980	7.3982	0.2

Wt ✓

Have the planchets been flamed? (Yes) / No

Instrument Used: (Circle One) LB4100 S/N: 8219 (PIC S/N:10751-4)

Data Reviewed By: JParker 7/14/05

NO 7/14/05

Gross Alpha Beta Que Sheet

07/12/2005 17:42:13

Batch #:441414 **Analyst:SXE1** **Minimum DueDate: 07/08/2005**

Alpha Spike Isotope: Th-230 Spike Code: 0159-0 Vol: 0.1 Balance #: 512048163
Beta Spike Isotope: Sr-90 Spike Code: 0133-N Vol: 0.1 Pipet #: 2766953
Alpha LCS Isotope: Th-230 LCS Code: 0159-0 Vol: 0.1 Prep Date: 7/12/05
Beta LCS Isotope: Sr-90 LCS Code: 0133-N Vol: 0.1 Initials: SSE

Analytical Scale # C31514
Witness: CTH 7/12/05 Accepted

10% HNO3: 315074.1
Conc HNO3: 318447.10
Conc HCl: N/A
Conc HF: N/A
Conc Boric: N/A

Sample ID	Client Description	Type	Hazard Code	RDL Alpha/Beta	Client	Matrix	Bkr#	Aliquot (mL) or g)	Carrier or Det#	Initial Wt (g)	Final Wt (g)	Net Wt (mg)
139349001	GF05060PCCR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	1	150	1A	7.4938	7.5370	43.2
139349008	GU05060PCCR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	2	150	1B	7.4243	7.4751	50.8
139349009	GU05060PCCR01-FB	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	3	150	2A	7.4140	7.4796	65.6
139405001	GF05050GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	4	150	2B	7.3783	7.4470	68.7
139405002	GU05050GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	5	150	2C	7.4559	7.5267	70.8
139406001	GF0506G32R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	6	150	3B	7.3661	7.4140	47.9
139406005	GU0506G32R101	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	7	150	3C	7.3980	7.4446	46.6
139409001	GF05060PEGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	8	150	3D	7.3714	7.4011	29.7
139409005	GU05060PEGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	9	150	4B	7.3692	7.4146	45.4
139524001	GF05060PUOR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	10	150	4C	7.3615	7.3975	36.0
139524002	GF05060PCGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	11	150	4D	7.5230	7.5615	38.5
139524009	GU05060PUOR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	12	150	1C	7.3798	7.4581	78.3
139524010	GU05060PCGR01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	13	150	1D	7.4245	7.4682	43.7
139713001	GF05060PBJZ01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	14	150	3A	7.4963	7.5866	90.3
139713005	GU05060PBJZ01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	15	150	3B	7.3271	7.4195	92.4
1200885000	MB for batch 441414	MB		UCF pCi/L to pCi/L	QC ACCOUNT	SURFACE WATE	16	1000	3C	7.4156	7.4165	0.9
1200885001	GU05060PCCR01(139349008DUP)	DUP		3 pCi/L	QC ACCOUNT	SURFACE WATE	17	150	3D	7.4476	7.5062	63.6
1200885002	GU05060PCCR01(139349008MS)	MS		3 pCi/L	QC ACCOUNT	SURFACE WATE	18	150	4D	7.3695	7.4346	65.1
1200885003	GU05060PCCR01(139349008MSD)	MSD		3 pCi/L	QC ACCOUNT	SURFACE WATE	19	150	1C	7.3421	7.4088	66.7
1200885004	LCS for batch 441414	LCS		UCF pCi/L to pCi/L	QC ACCOUNT	SURFACE WATE	20	1000	1D	7.3980	7.3989	0.9

Wtc

Have the planchets been flamed? Yes / (No)

Instrument Used: (Circle One) LB4100 S/N: 8219 PIC S/N:10751-4

Data Reviewed By: [signature] 7/13/05

7107 1/14/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200885001	DUP	ALPHA	0.150 L	3.00	0.620	1.31	-.42533333	pCi/L	NO
		BETA	0.150 L	5.18	0.481	1.28	.250666667	pCi/L	NO
1200885004	LCS	ALPHA	1.00 L	10.8	0.823	0.388	-.0638	pCi/L	NO
		BETA	1.00 L	35.0	0.804	0.444	.0376	pCi/L	NO
1200885000	MB	ALPHA	1.00 L	-0.0638	0.0342	0.186	-.0638	pCi/L	NO
		BETA	1.00 L	0.0376	0.0509	0.189	.0376	pCi/L	YES
1200885002	MS	ALPHA	0.150 L	71.3	5.59	4.24	-.42533333	pCi/L	NO
		BETA	0.150 L	266	6.04	3.64	.250666667	pCi/L	NO
1200885003	MSD	ALPHA	0.150 L	75.9	6.61	2.71	-.42533333	pCi/L	NO
		BETA	0.150 L	263	5.60	2.67	.250666667	pCi/L	NO
139349001	GF05060PCCR01	ALPHA	0.150 L	0.661	0.437	1.60	-.42533333	pCi/L	NO
		BETA	0.150 L	1.53	0.363	1.20	.250666667	pCi/L	NO
139349008	GU05060PCCR01	ALPHA	0.150 L	2.26	0.627	1.81	-.42533333	pCi/L	NO
		BETA	0.150 L	3.92	0.424	1.16	.250666667	pCi/L	NO
139349009	GU05060PCCR01 -FB	ALPHA	0.150 L	3.91	0.721	1.72	-.42533333	pCi/L	NO
		BETA	0.150 L	4.15	0.402	1.02	.250666667	pCi/L	NO
139405001	GF05050GMC401	ALPHA	0.150 L	-0.136	0.448	2.05	-.42533333	pCi/L	NO
		BETA	0.150 L	1.01	0.347	1.19	.250666667	pCi/L	YES
139405002	GU05050GMC401	ALPHA	0.150 L	-0.431	0.451	2.06	-.42533333	pCi/L	NO
		BETA	0.150 L	2.03	0.345	1.04	.250666667	pCi/L	NO
139406001	GF0506G32R101	ALPHA	0.150 L	0.0177	0.353	1.53	-.42533333	pCi/L	NO
		BETA	0.150 L	1.67	0.352	1.12	.250666667	pCi/L	NO
139406005	GU0506G32R101	ALPHA	0.150 L	0.658	0.386	1.43	-.42533333	pCi/L	NO
		BETA	0.150 L	2.17	0.396	1.25	.250666667	pCi/L	NO
139409001	GF05060PEGR01	ALPHA	0.150 L	0.111	0.385	1.62	-.42533333	pCi/L	NO
		BETA	0.150 L	2.88	0.425	1.29	.250666667	pCi/L	NO
139409005	GU05060PEGR01	ALPHA	0.150 L	0.685	0.488	1.73	-.42533333	pCi/L	NO
		BETA	0.150 L	3.10	0.429	1.28	.250666667	pCi/L	NO
139524001	GF05060PUOR01	ALPHA	0.150 L	0.744	0.388	1.32	-.42533333	pCi/L	NO
		BETA	0.150 L	1.34	0.363	1.22	.250666667	pCi/L	NO
139524002	GF05060PCGR01	ALPHA	0.150 L	0.736	0.399	1.41	-.42533333	pCi/L	NO
		BETA	0.150 L	1.45	0.437	1.50	.250666667	pCi/L	NO
139524009	GU05060PUOR01	ALPHA	0.150 L	5.35	0.882	2.24	-.42533333	pCi/L	NO
		BETA	0.150 L	6.72	0.478	1.08	.250666667	pCi/L	NO
139524010	GU05060PCGR01	ALPHA	0.150 L	1.64	0.390	0.821	-.42533333	pCi/L	NO
		BETA	0.150 L	2.18	0.386	1.21	.250666667	pCi/L	NO
139713001	GF05060PBJZ01	ALPHA	0.150 L	3.93	0.763	1.58	-.42533333	pCi/L	NO
		BETA	0.150 L	7.60	0.531	1.22	.250666667	pCi/L	NO
139713005	GU05060PBJZ01	ALPHA	0.150 L	4.36	0.830	2.16	-.42533333	pCi/L	NO
		BETA	0.150 L	5.12	0.449	1.12	.250666667	pCi/L	NO

SBP 7/14/05 7/14/05

Gross Alpha Water

Filename : ALPHA.XLS
File type : Excel
Version # : 1

Batch : 441414
Analyst : SXE1
Prep Date : 7/12/2005

Calibration Date : 7/19/2004
Calibration Due Date : 7/19/2005

Spike S/N : 0159-O
Spike Exp Date : 6/23/2006
Spike Activity (dpm/ml): 239.45
Spike Volume Added: 0.1

LCS S/N : 0159-O
LCS Exp Date : 6/23/2006
LCS Activity (dpm/ml): 239.45
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : GFCGANBL
Parmname : Alpha
Required MDC: 3 pCi/L
Batch counted on : PIC
BKG Count time : 500 min

Sample Characteristics | **Count Raw Data**

Sample ID	Sample Aliquot L	Sample Residue Wt. (mg)	Sample Aliquot StDev.	Sample Date/Time	Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency	Detector Efficiency Error	Beta X-Talk	Count Start Date/Time
139349001	0.150	18.4	1.4035E-05	6/23/2005 8:55	3D	180	20	163	0.060	500	0.1872	0.03657	0.01096	7/13/2005 15:09
139349008	0.150	29.0	1.4035E-05	6/23/2005 8:55	4A	180	42	223	0.078	500	0.1859	0.04683	0.01223	7/13/2005 15:09
139349009	0.150	31.0	1.4035E-05	6/23/2005 8:55	4B	180	51	180	0.058	500	0.1722	0.01889	0.00100	7/13/2005 15:09
139405001	0.150	30.0	1.4035E-05	6/23/2005 8:50	4C	180	17	113	0.096	500	0.1795	0.04190	0.01044	7/13/2005 15:09
139405002	0.150	32.3	1.4035E-05	6/23/2005 8:50	4D	180	19	142	0.110	500	0.1893	0.06392	0.02882	7/13/2005 15:09
139406001	0.150	18.3	1.4035E-05	6/22/2005 13:10	4A	210	18	112	0.078	500	0.2019	0.04683	0.01223	7/14/2005 8:55
139406005	0.150	19.1	1.4035E-05	6/22/2005 13:10	4B	210	21	101	0.058	500	0.1896	0.01889	0.00100	7/14/2005 8:55
139409001	0.150	9.9	1.4035E-05	6/24/2005 9:00	4C	210	23	117	0.096	500	0.2086	0.04190	0.01044	7/14/2005 8:55
139409005	0.150	20.1	1.4035E-05	6/24/2005 9:00	4D	210	39	208	0.110	500	0.2067	0.06392	0.02882	7/14/2005 8:56
139524001	0.150	12.6	1.4035E-05	6/27/2005 10:05	3C	210	26	172	0.060	500	0.2082	0.05526	0.01496	7/14/2005 9:55
139524002	0.150	13.6	1.4035E-05	6/24/2005 9:15	3D	210	24	126	0.060	500	0.1945	0.03657	0.01096	7/14/2005 9:55
139524009	0.150	42.6	1.4035E-05	6/27/2005 10:05	1C	210	92	275	0.126	500	0.1704	0.04146	0.00637	7/14/2005 12:00
139524010	0.150	18.7	1.4035E-05	6/24/2005 9:15	1D	210	28	140	0.018	500	0.2047	0.05139	0.00526	7/14/2005 12:00
139713001	0.150	60.6	1.4035E-05	6/28/2005 10:45	2A	210	54	290	0.042	500	0.1493	0.05327	0.01423	7/14/2005 12:00
139713005	0.150	61.8	1.4035E-05	6/28/2005 10:45	2B	210	61	238	0.080	500	0.1443	0.03211	0.00103	7/14/2005 12:00
1200885000	1.000	0.0	2.0399E-05	7/12/2005 0:00	2C	210	8	50	0.070	500	0.2373	0.04912	0.00708	7/14/2005 12:00
1200885001	0.150	29.3	1.4035E-05	6/23/2005 8:55	2D	210	53	185	0.048	500	0.1908	0.07830	0.01545	7/14/2005 12:00
1200885002	0.150	33.5	1.4035E-05	6/23/2005 8:55	1C	60	284	2547	0.126	500	0.1828	0.04146	0.00637	7/13/2005 16:12
1200885003	0.150	31.9	1.4035E-05	6/23/2005 8:55	2A	60	319	2416	0.042	500	0.1860	0.05327	0.01423	7/13/2005 16:12
1200885004	1.000	0.2	2.0399E-05	7/12/2005 0:00	2C	60	363	2412	0.070	500	0.2369	0.04912	0.00708	7/13/2005 16:12

JED 7/14/05

MD 7/14/05

Alpha Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.9652	0.6814	1.6040	**0.6607**	0.5325	0.0511	0.0272	0.4356	0.4366		SAMPLE				
1.1078	0.7821	1.8070	**2.2640**	0.2498	0.1553	0.0381	0.6155	0.6266		SAMPLE				
1.0317	0.7284	1.7190	**3.9129**	0.1834	0.2253	0.0411	0.7171	0.7209		SAMPLE				
1.2731	0.8988	2.0492	**-0.1356**	17.2100	-0.0016	0.0268	0.4479	0.4479		SAMPLE				
1.2925	0.9125	2.0635	**-0.4313**	6.3898	-0.0044	0.0284	0.4506	0.4506		SAMPLE				
0.9448	0.6670	1.5257	**0.0177**	3.0793	0.0077	0.0238	0.3534	0.3534		SAMPLE				
0.8673	0.6123	1.4288	**0.6576**	0.5797	0.0420	0.0243	0.3854	0.3856		SAMPLE				
1.0143	0.7161	1.6177	**0.1110**	1.9756	0.0135	0.0267	0.3846	0.3846		SAMPLE				
1.0955	0.7734	1.7340	**0.6852**	0.4435	0.0757	0.0332	0.4827	0.4878		SAMPLE				
0.8034	0.5672	1.3202	**0.7436**	0.4211	0.0638	0.0266	0.3842	0.3876		SAMPLE				
0.8598	0.6070	1.4130	**0.7364**	0.4762	0.0543	0.0258	0.3978	0.3990		SAMPLE				
1.4222	1.0041	2.2352	**5.3524**	0.1604	0.3121	0.0484	0.8520	0.8820		SAMPLE				
0.4476	0.3160	0.8212	**1.6409**	0.2304	0.1153	0.0259	0.3801	0.3899		SAMPLE				
0.9375	0.6619	1.5830	**3.9329**	0.1764	0.2151	0.0362	0.7277	0.7634		SAMPLE				
1.3385	0.9450	2.1582	**4.3561**	0.1894	0.2105	0.0393	0.8176	0.8296		SAMPLE				
0.1142	0.0806	0.1857	**-0.0638**	0.5641	-0.0319	0.0179	0.0340	0.0342		MB				
0.7839	0.5534	1.3096	**3.0018**	0.1929	0.2044	0.0360	0.5669	0.6203	139349008	DUP	28.0%	0.2958		
2.4807	1.7514	4.2437	**71.2522**	0.0738	4.6073	0.2813	4.6216	5.5863	139349008	MS			71.91	95.9%
1.4072	0.9935	2.7149	**75.8886**	0.0776	5.2747	0.2978	4.8070	6.6090	139349008	MSD	6.3%	0.1901	71.91	102.4%
0.2140	0.1511	0.3880	**10.8302**	0.0724	5.9800	0.3178	0.6042	0.8229		LCS			10.79	100.4%

JKT 7/14/05

SampleID	Instr	Time	Alpha	Beta	Count Start Time	Count End Time
139349001	3D	180	20	163	7/13/2005 15:09	7/13/2005 18:09
139349008	4A	180	42	223	7/13/2005 15:09	7/13/2005 18:09
139349009	4B	180	51	180	7/13/2005 15:09	7/13/2005 18:09
139405001	4C	180	17	113	7/13/2005 15:09	7/13/2005 18:09
139405002	4D	180	19	142	7/13/2005 15:09	7/13/2005 18:09
139406001	4A	210	18	112	7/14/2005 8:55	7/14/2005 12:25
139406005	4B	210	21	101	7/14/2005 8:55	7/14/2005 12:25
139409001	4C	210	23	117	7/14/2005 8:55	7/14/2005 12:25
139409005	4D	210	39	208	7/14/2005 8:56	7/14/2005 12:26
139524001	3C	210	26	172	7/14/2005 9:55	7/14/2005 13:25
139524002	3D	210	24	126	7/14/2005 9:55	7/14/2005 13:25
139524009	1C	210	92	275	7/14/2005 12:00	7/14/2005 15:30
139524010	1D	210	28	140	7/14/2005 12:00	7/14/2005 15:30
139713001	2A	210	54	290	7/14/2005 12:00	7/14/2005 15:30
139713005	2B	210	61	238	7/14/2005 12:00	7/14/2005 15:30
1200885000	2C	210	8	50	7/14/2005 12:00	7/14/2005 15:30
1200885001	2D	210	53	185	7/14/2005 12:00	7/14/2005 15:30
1200885002	1C	60	284	2547	7/13/2005 16:12	7/13/2005 17:12
1200885003	2A	60	319	2416	7/13/2005 16:12	7/13/2005 17:12
1200885004	2C	60	363	2412	7/13/2005 16:12	7/13/2005 17:12

ND 1/14/05

JFP 7/14/05

Gross Beta Water

Filename : BETA.XLS
File type : Excel
Version # : 1

Batch : 441414
Analyst : SXE1
Prep Date : 7/12/2005

Calibration Date : 7/19/2004
Calibration Due Date : 7/19/2005

Spike S/N : 0133-N
Spike Exp Date : 5/25/2006
Spike Activity (dpm/ml): 397.47
Spike Volume Added: 0.1

LCS S/N : 0133-N
LCS Exp Date : 5/25/2006
LCS Activity (dpm/ml): 397.47
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : GFCGANBL
Parmname : Beta
Required MDC: 3 pCi/L
Batch counted on : PIC
BKG Count time : 500 min

Sample Characteristics | **Count Raw Data**

Sample ID	Sample Aliquot L	Sample Residue Wt. (mg)	Sample Aliquot StDev.	Sample Date/Time	Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency	Detector Efficiency Error	Alpha X-Talk	Count Start Date/Time
139349001	0.150	43.2	1.4035E-05	6/23/2005 8:55	1A	320	32	206	0.412	500	0.4408	0.00600	0.07784	7/12/2005 21:52
139349008	0.150	50.8	1.4035E-05	6/23/2005 8:55	1B	320	50	311	0.384	500	0.4375	0.00409	0.10798	7/12/2005 21:52
139349009	0.150	65.6	1.4035E-05	6/23/2005 8:55	2A	320	71	288	0.288	500	0.4352	0.00349	0.04754	7/12/2005 21:52
139405001	0.150	68.7	1.4035E-05	6/23/2005 8:50	2B	320	27	176	0.392	500	0.4324	0.00383	0.14636	7/12/2005 21:52
139405002	0.150	70.8	1.4035E-05	6/23/2005 8:50	2C	320	22	190	0.296	500	0.4314	0.00575	0.09393	7/12/2005 21:52
139406001	0.150	47.9	1.4035E-05	6/22/2005 13:10	3B	320	47	186	0.336	500	0.4263	0.00655	0.05078	7/12/2005 21:52
139406005	0.150	46.6	1.4035E-05	6/22/2005 13:10	3C	320	29	228	0.406	500	0.4181	0.00535	0.04456	7/12/2005 21:52
139409001	0.150	29.7	1.4035E-05	6/24/2005 9:00	3D	320	30	265	0.426	500	0.4143	0.00464	0.04560	7/12/2005 21:52
139409005	0.150	45.4	1.4035E-05	6/24/2005 9:00	4B	320	53	283	0.434	500	0.4216	0.00196	0.08796	7/12/2005 21:52
139524001	0.150	36.0	1.4035E-05	6/27/2005 10:05	4C	320	38	188	0.394	500	0.4239	0.00426	0.03958	7/12/2005 21:52
139524002	0.150	38.5	1.4035E-05	6/24/2005 9:15	4D	320	55	271	0.632	500	0.4302	0.00816	0.04426	7/12/2005 21:52
139524009	0.150	78.3	1.4035E-05	6/27/2005 10:05	1C	320	112	426	0.328	500	0.4368	0.00344	0.07232	7/12/2005 22:03
139524010	0.150	43.7	1.4035E-05	6/24/2005 9:15	1D	320	27	238	0.418	500	0.4380	0.00511	0.09714	7/12/2005 22:03
139713001	0.150	90.3	1.4035E-05	6/28/2005 10:45	3A	320	91	458	0.374	500	0.4129	0.00943	0.04256	7/13/2005 6:12
139713005	0.150	92.4	1.4035E-05	6/28/2005 10:45	3B	320	75	344	0.336	500	0.4261	0.00655	0.05230	7/13/2005 6:12
1200885000	1.000	0.9	2.0399E-05	7/12/2005 0:00	3C	320	24	142	0.406	500	0.4151	0.00535	0.04076	7/13/2005 6:13
1200885001	0.150	63.6	1.4035E-05	6/23/2005 8:55	3D	320	76	371	0.426	500	0.4185	0.00464	0.04872	7/13/2005 6:13
1200885002	0.150	65.1	1.4035E-05	6/23/2005 8:55	4D	60	247	2341	0.632	500	0.4308	0.00816	0.04508	7/12/2005 20:46
1200885003	0.150	66.7	1.4035E-05	6/23/2005 8:55	1C	60	208	2330	0.328	500	0.4376	0.00344	0.07176	7/12/2005 20:58
1200885004	1.000	0.9	2.0399E-05	7/12/2005 0:00	1D	60	305	2101	0.418	500	0.4394	0.00511	0.09342	7/12/2005 20:58

7/13/05

WO 7/14/05

Beta Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.8055	0.5687	1.1951	**1.5259**	0.2299	0.2318	0.0533	0.3628	0.3629		SAMPLE				
0.7835	0.5531	1.1643	**3.9192**	0.1050	0.5879	0.0617	0.4234	0.4237		SAMPLE				
0.6821	0.4816	1.0215	**4.1500**	0.0952	0.6120	0.0582	0.4016	0.4019		SAMPLE				
0.8009	0.5655	1.1896	**1.0115**	0.3167	0.1580	0.0500	0.3474	0.3474		SAMPLE				
0.6975	0.4925	1.0438	**2.0275**	0.1663	0.2978	0.0495	0.3443	0.3445		SAMPLE				
0.7521	0.5310	1.1215	**1.6749**	0.2035	0.2453	0.0499	0.3514	0.3515		SAMPLE				
0.8431	0.5952	1.2512	**2.1726**	0.1799	0.3065	0.0551	0.3959	0.3961		SAMPLE				
0.8715	0.6153	1.2918	**2.8838**	0.1459	0.4021	0.0587	0.4251	0.4253		SAMPLE				
0.8643	0.6102	1.2807	**3.1041**	0.1338	0.4504	0.0603	0.4292	0.4293		SAMPLE				
0.8191	0.5783	1.2165	**1.3375**	0.2648	0.1935	0.0512	0.3629	0.3629		SAMPLE				
1.0223	0.7217	1.5025	**1.4469**	0.2911	0.2149	0.0625	0.4365	0.4367		SAMPLE				
0.7253	0.5121	1.0823	**6.7236**	0.0693	1.0033	0.0694	0.4771	0.4777		SAMPLE				
0.8165	0.5765	1.2109	**2.1772**	0.1726	0.3258	0.0562	0.3854	0.3856		SAMPLE				
0.8194	0.5785	1.2185	**7.6020**	0.0690	1.0573	0.0723	0.5256	0.5305		SAMPLE				
0.7525	0.5313	1.1222	**5.1221**	0.0862	0.7390	0.0635	0.4475	0.4488		SAMPLE				
0.1274	0.0899	0.1890	**0.0376**	1.2421	0.0378	0.0469	0.0509	0.0509		MB				
0.8627	0.6091	1.2789	**5.1797**	0.0913	0.7334	0.0669	0.4800	0.4807	139349008	DUP	27.7%	0.6969		
2.3576	1.6645	3.6434	**266.2965**	0.0226	38.3847	0.8072	5.6271	6.0357	139349008	MS			238.72	109.9%
1.6717	1.1803	2.6700	**262.5076**	0.0212	38.5053	0.8049	5.5231	5.5975	139349008	MSD	1.4%	0.1628	238.72	108.3%
0.2819	0.1991	0.4443	**34.9816**	0.0227	34.5987	0.7645	0.7837	0.8044		LCS			35.81	97.7%

JKS
7/13/05

SampleID	Instr	Time	Alpha	Beta	Count Start Time	Count End Time
139349001	1A	320	32	206	7/12/2005 21:52	7/13/2005 3:12
139349008	1B	320	50	311	7/12/2005 21:52	7/13/2005 3:12
139349009	2A	320	71	288	7/12/2005 21:52	7/13/2005 3:12
139405001	2B	320	27	176	7/12/2005 21:52	7/13/2005 3:12
139405002	2C	320	22	190	7/12/2005 21:52	7/13/2005 3:12
139406001	3B	320	47	186	7/12/2005 21:52	7/13/2005 3:12
139406005	3C	320	29	228	7/12/2005 21:52	7/13/2005 3:12
139409001	3D	320	30	265	7/12/2005 21:52	7/13/2005 3:12
139409005	4B	320	53	283	7/12/2005 21:52	7/13/2005 3:12
139524001	4C	320	38	188	7/12/2005 21:52	7/13/2005 3:12
139524002	4D	320	55	271	7/12/2005 21:52	7/13/2005 3:12
139524009	1C	320	112	426	7/12/2005 22:03	7/13/2005 3:23
139524010	1D	320	27	238	7/12/2005 22:03	7/13/2005 3:23
139713001	3A	320	91	458	7/13/2005 6:12	7/13/2005 11:32
139713005	3B	320	75	344	7/13/2005 6:12	7/13/2005 11:32
1200885000	3C	320	24	142	7/13/2005 6:13	7/13/2005 11:33
1200885001	3D	320	76	371	7/13/2005 6:13	7/13/2005 11:33
1200885002	4D	60	247	2341	7/12/2005 20:46	7/12/2005 21:46
1200885003	1C	60	208	2330	7/12/2005 20:58	7/12/2005 21:58
1200885004	1D	60	305	2101	7/12/2005 20:58	7/12/2005 21:58

NO 7/14/05

JFD
7/13/05

Radiochemistry Batch Checklist for LSC, Rev 3

Batch# 437248 Product: H-3 Date: 7.14.05

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* RDL, error is 100% or less of sample activity. If greater 10* RDL, error is 20% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	N/A		
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	N/A		
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	N/A		

General Engineering Laboratories
10/31/2000

Primary Review Performed By: Wendy Ricks 7.14.05

Secondary Review Performed By: KD 7/14/05

ESHL

7.8.05 / 7.15.05

Tritium Que Sheet

08-JUL-05

Batch #: 437248 **Analyst:** LAG1 **Minimum DueDate:** 08-JUL-05

Spike Isotope: Hydrogen-3 **Spike Code:** 01344 **Expiration Date:** 7120105 **Vol:** 0.1

LCS Isotope: Hydrogen-3 **LCS Code:** 01344 **Expiration Date:** 7120105 **Vol:** 0.1

Prep Date: 71805 **Initials:** LAG **Pipet ID:** 1429305 **Witness:** JCS 7/8/05

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date		Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Dist Vol (mL)
139136017	GU05060GSCP01	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	21-JUN-05	1	10	46-2	302		50		13
139136018	GU05060GSMH01	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	20-JUN-05	2	10	46-3	49		50		13
139136019	GU05060GSMH90	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	20-JUN-05	3	10	46-4	52		50		13
139136020	GU05060GSLK01	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	20-JUN-05	4	10	46-5	54		50		13
139193017	GU05060GSTS01	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	21-JUN-05	5	10	46-6	318		50		13
139193018	GU05060GSLB01	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	22-JUN-05	6	10	46-7	305		50		13
139193019	GU05060GS1801	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	22-JUN-05	7	10	46-8	306		50		13
139193020	GU0506G12R301	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	20-JUN-05	8	10	46-9	308		50		13
139349008	GU05060PCCR01	SAMPLE		.25 pCi/mL	SURFACE WATE	ESHL001	23-JUN-05	9	10	46-10	311		50		13
139349009	GU05060PCCR01-FB	SAMPLE		.25 pCi/mL	SURFACE WATE	ESHL001	23-JUN-05	10	10	46-11	319		50		13
139405002	GU05050GMC401	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	23-JUN-05	11	10	58-2	324		50		13
139406005	GU0506G32R101	SAMPLE		.2 pCi/mL	GROUND WATE	ESHL001	22-JUN-05	12	10	48-1	328		50		13
139409005	GU05060PEGR01	SAMPLE		.25 pCi/mL	SURFACE WATE	ESHL001	24-JUN-05	13	10	48-2	337		50		13
1200875113	MB for batch 437248	MB		.2 pCi/mL	SURFACE WAT	QC ACCOUNT		14	10	48-3	539		50		13
1200875114	GU05060PCCR01(139349008DUP)	DUP		.25 pCi/mL	SURFACE WAT	QC ACCOUNT	23-JUN-05	15	10	48-4	540		50		13
1200875115	GU05060PCCR01(139349008MS)	MS		.25 pCi/mL	SURFACE WAT	QC ACCOUNT	23-JUN-05	16	10	48-5	342		50		13
1200875116	LCS for batch 437248	LCS		.2 pCi/mL	SURFACE WAT	QC ACCOUNT		17	10	48-6	343		50		13

LAG 71805

LAG 71805

Comments: _____

Instrument Used (circle as appropriate): *LS6000 (Red) 7065185, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4040127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299*

Bkg prepared with dead water? Yes/No

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly via*

Data Reviewed By: _____ 7.14.05

mo 7/14/05

General Engineering Laboratories, Radiochemistry Division

Tritium Water

Filename : H3DST.XLS
File type : Excel
Version # : 1

Batch : 437248
Analyst : LAG1
Prep Date : 7/8/2005
H-3 Abundance : 1
Calibration Date : 7/5/2005
Calibration Due Date : 7/5/2006
Geometry: 13 mls Ultima Gold LLT,10 mls Sample

Spike S/N : 0134-H
Spike Exp Date : 7/20/2005
Spike Activity (dpm/ml): 3405.24
Spike Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1.0 ml Stdev : +/- 0.005480 ml
Pipet, 5.0 ml Stdev : +/- 0.025729 ml

LCS S/N : 0134-H
LCS Exp Date : 7/20/2005
LCS Activity (dpm/ml): 3405.24
LCS Volume Added: 0.1

Procedure Code : LSCDSH3L
Parmname : Tritium
Required MDC: 200 pCi/L
Halflife of Tritium : 12.28 years
Batch counted on : LSCYELLOW
Detector Effiency Error : 0.00792
BKG Count time : 120 min

Sample Characteristics | **Count raw Data**

Sample ID	Total Sample Volume (L)	Sample Aliquot L	Sample Aliquot StDev.	Distilled Sample Counted L	Sample Counted StDev.	Sample Date/Time	Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time
139136017	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/21/2005 8:00	46-2	120	697.9	1.8	0.1387	0.00792	1.60	120	7/11/2005 6:44
139136018	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/20/2005 10:15	46-3	120	689.38	1.9	0.1310	0.00792	1.60	120	7/11/2005 8:45
139136019	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/20/2005 10:15	46-4	120	697.55	1.8	0.1383	0.00792	1.60	120	7/11/2005 10:46
139136020	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/20/2005 10:45	46-5	120	693.63	1.7	0.1348	0.00792	1.60	120	7/11/2005 12:47
139193017	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/21/2005 11:55	46-6	120	697.84	1.7	0.1386	0.00792	1.60	120	7/11/2005 14:48
139193018	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/22/2005 9:25	46-7	120	695.03	1.7	0.1361	0.00792	1.60	120	7/11/2005 16:49
139193019	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/22/2005 10:00	46-8	120	687.96	1.9	0.1297	0.00792	1.60	120	7/11/2005 18:50
139193020	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/20/2005 11:33	46-9	120	698.89	1.6	0.1395	0.00792	1.60	120	7/11/2005 20:51
139349008	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/23/2005 8:55	46-10	120	695.33	1.6	0.1363	0.00792	1.60	120	7/11/2005 22:52
139349009	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/23/2005 8:55	46-11	120	709.98	1.6	0.1496	0.00792	1.60	120	7/12/2005 0:53
139405002	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/23/2005 8:50	58-2	30	697.78	40.7	0.1385	0.00792	1.30	30	7/13/2005 18:35
139406005	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/22/2005 13:10	48-1	120	694.62	1.6	0.1357	0.00792	1.60	120	7/12/2005 11:06
139409005	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/24/2005 9:00	48-2	120	690.97	1.9	0.1324	0.00792	1.60	120	7/12/2005 13:07
1200875113	0.050	0.050	7.8337E-06	0.010	2.5729E-05	7/8/2005 0:00	48-3	120	693.16	1.8	0.1344	0.00792	1.60	120	7/12/2005 15:08
1200875114	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/23/2005 8:55	48-4	120	685.46	1.5	0.1274	0.00792	1.60	120	7/12/2005 17:09
1200875115	0.050	0.050	7.8337E-06	0.010	2.5729E-05	6/23/2005 8:55	48-5	120	691.21	10.5	0.1326	0.00792	1.60	120	7/12/2005 19:10
1200875116	0.050	0.050	7.8337E-06	0.010	2.5729E-05	7/8/2005 0:00	48-6	120	694.74	11.8	0.1358	0.00792	1.60	120	7/12/2005 21:11

7.14.05
7/14/05

Sample Decay	Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.997	123.9957	87.5420	182.4329	**65.1773**	0.8417	0.2000	0.1683	54.8549	54.8578		SAMPLE				
0.997	131.2959	92.6961	193.1736	**103.5219**	0.5693	0.3000	0.1708	58.9324	58.9393		SAMPLE				
0.997	124.2999	87.7568	182.8804	**65.3372**	0.8417	0.2000	0.1683	54.9894	54.9924		SAMPLE				
0.997	127.5662	90.0628	187.6861	**33.5270**	1.6583	0.1000	0.1658	55.5983	55.5991		SAMPLE				
0.997	124.0476	87.5786	182.5092	**32.6023**	1.6583	0.1000	0.1658	54.0648	54.0655		SAMPLE				
0.997	126.3464	89.2016	185.8914	**33.2065**	1.6583	0.1000	0.1658	55.0667	55.0674		SAMPLE				
0.997	132.5580	93.5871	195.0304	**104.5170**	0.5693	0.3000	0.1708	59.4989	59.5059		SAMPLE				
0.997	123.2280	87.0000	181.3033	**0.0000**	#DIV/0!	0.0000	0.1633	52.8875	52.8875		SAMPLE				
0.997	126.0811	89.0144	185.5011	**0.0000**	#DIV/0!	0.0000	0.1633	54.1121	54.1121		SAMPLE				
0.997	114.9201	81.1346	169.0800	**0.0000**	#DIV/0!	0.0000	0.1633	49.3219	49.3219		SAMPLE				
0.997	223.7263	157.9527	345.3255	**12850.8311**	0.0313	39.4000	1.1832	385.9215	401.8517		SAMPLE				
0.997	126.7030	89.4534	186.4161	**0.0000**	#DIV/0!	0.0000	0.1633	54.3790	54.3790		SAMPLE				
0.997	129.8197	91.6538	191.0016	**102.3579**	0.5693	0.3000	0.1708	58.2698	58.2766		SAMPLE				
0.999	127.6439	90.1177	187.8004	**67.0949**	0.8417	0.2000	0.1683	56.4688	56.4718		MB				
0.997	134.8951	95.2371	198.4690	**-35.4532**	1.6073	-0.1000	0.1607	56.9831	56.9840	139349008	DUP	0.0%	0.1596		
0.997	129.6330	91.5220	190.7270	**3032.2525**	0.0367	8.9000	0.3175	108.1876	111.3699	139349008	MS			3074.73	98.6%
0.999	126.3081	89.1746	185.8351	**3386.0335**	0.0339	10.2000	0.3342	110.9310	114.7908		LCS			3067.78	110.4%

WW 7.14.05

PROTOCOL	: 12 Tritium Tri-safe
DATE	: 2005/07/11
TIME	: 04:42
ID	: P12AS086

Wallac 1414 WinSpectral v1.40 S/N 4140127

Counting mode	: CPM
Isotope(s)	: H3
H3 =	5- 350,12.43 y
Protocol name	: Tritium Tri-safe
Counting time	: 7200
Repeats	: 1
Cycles	: 1
Replicates	: 1
2 sigma %	: 0.80
Minimum cpm	: 0.00 Checking time: 10
Advanced modes	: Chemilum
Output to Display	:
POS,FNCT1,RACK,RACKPOS,CTIME,SQPE,DATE,TIME,CPMw1,CPM,SQPI,CPM1,RPT,RPL	
Additions to Display	: Listing,Spectrum
Spectrum	: Beta
Window 1	: 15- 131 /Beta
Window 2	: 1-1024 /Beta
Window 3	: 1-1024 /Beta
Window 4	: 1-1024 /Beta
Window 5	: 1-1024 /Beta
Window 6	: 1-1024 /Beta
FNCT1 = CtTime	: ctime/60
FNCT2 = FNCT2	:
FNCT3 = FNCT3	:
FNCT4 = FNCT4	:

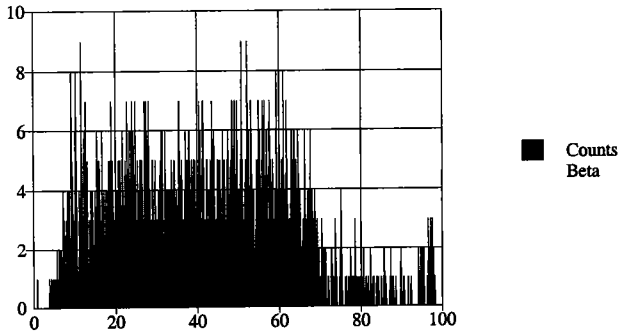
Total count rate:

H3 138.7 CPM

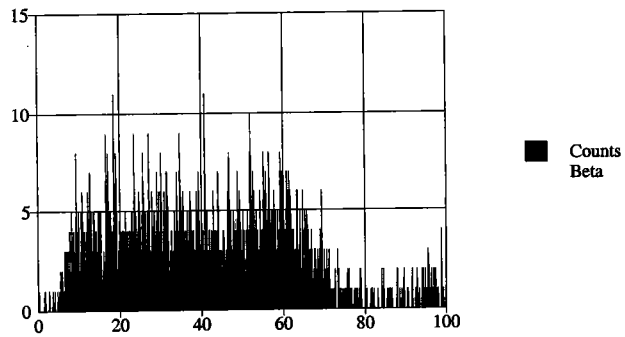
7,14,05

NO 7/14/05

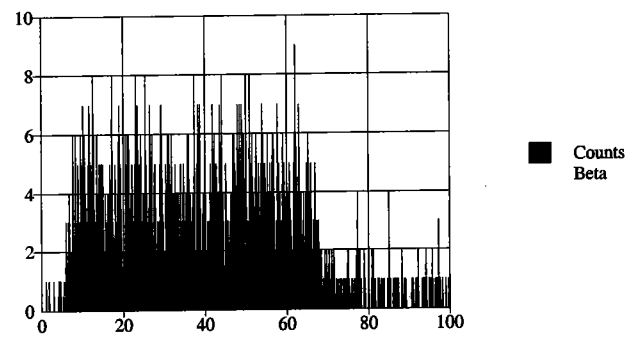
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACK	RACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	1	120.00	698.66	1.60	7/11/2005	4:43 AM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	2	120.00	697.90	1.80	7/11/2005	6:44 AM



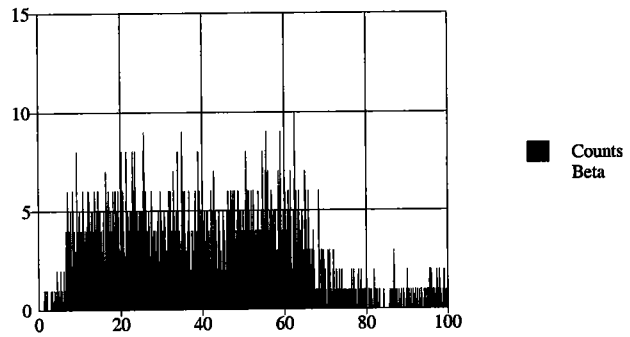
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	3	120.00	689.38	1.90	7/11/2005	8:45 AM



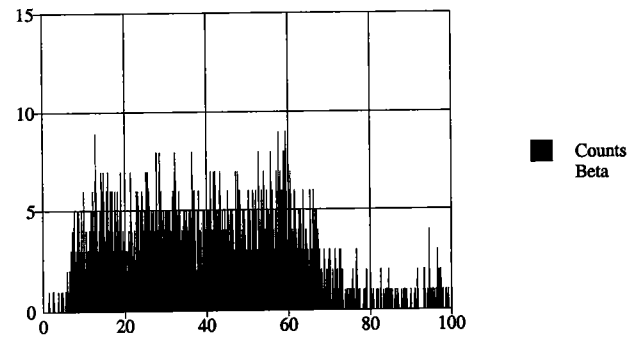
7/14/05

7/14/05

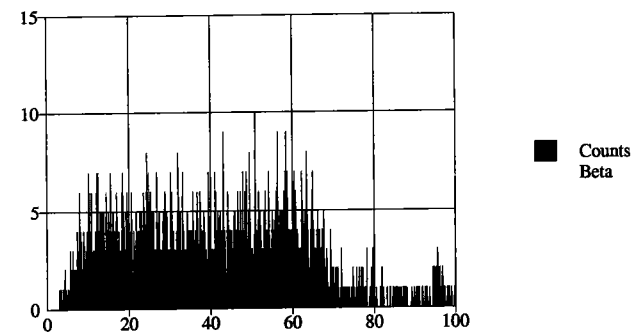
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACKRACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46 4	120.00	697.55	1.80	7/11/2005	10:46 AM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46 5	120.00	693.63	1.70	7/11/2005	12:47 PM

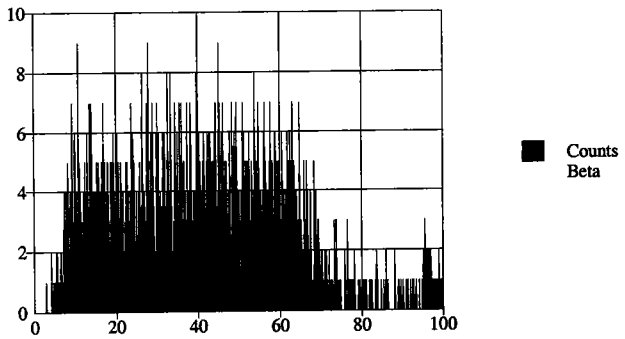


Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46 6	120.00	697.84	1.70	7/11/2005	2:48 PM

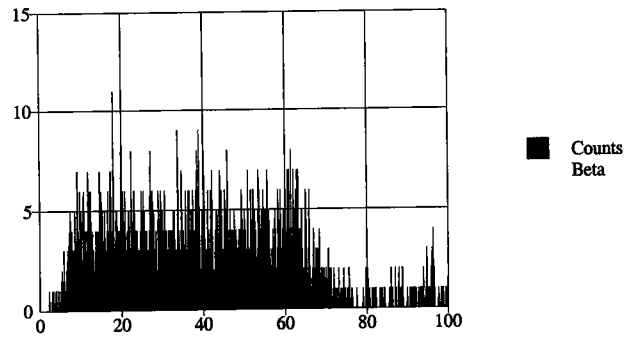


7/14/05
7/14/05

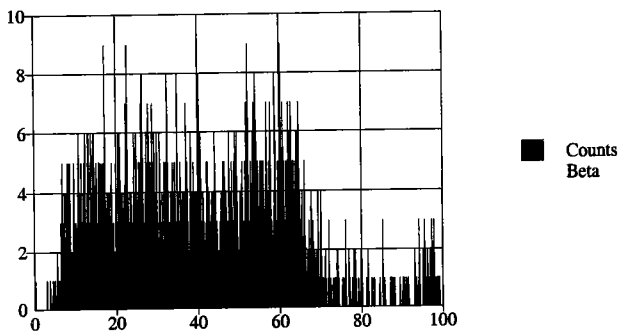
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACK	RACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	7	120.00	695.03	1.70	7/11/2005	4:49 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	8	120.00	687.96	1.90	7/11/2005	6:50 PM



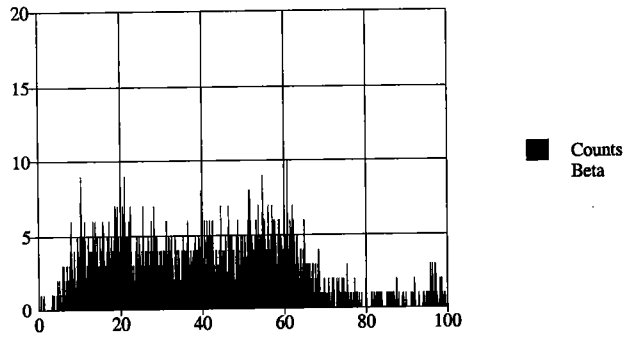
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	9	120.00	698.89	1.60	7/11/2005	8:51 PM



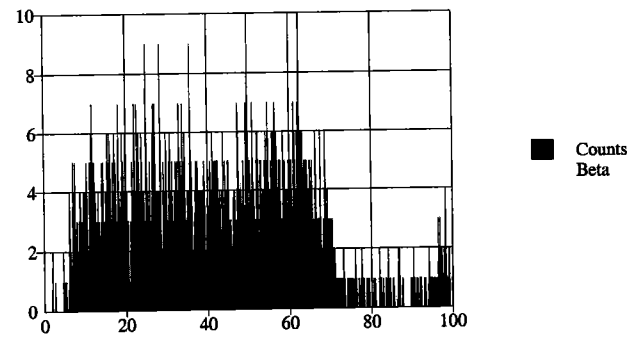
RO 7/14/05

WW 7/14.05

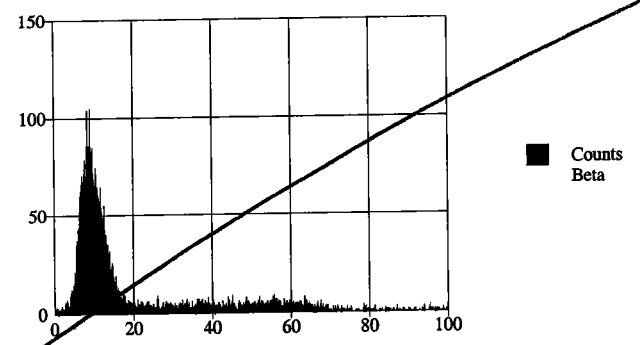
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACK	RACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	10	120.00	695.33	1.60	7/11/2005	10:52 PM



Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	11	120.00	709.98	1.60	7/12/2005	0:53 AM



Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
46	12	120.00	697.08	41.30	7/12/2005	2:54 AM



7,14,05

7/14/05

7,14,05

PROTOCOL : 12 Tritium Tri-safe
DATE : 2005/07/12
TIME : 11:06
ID : P12AS087

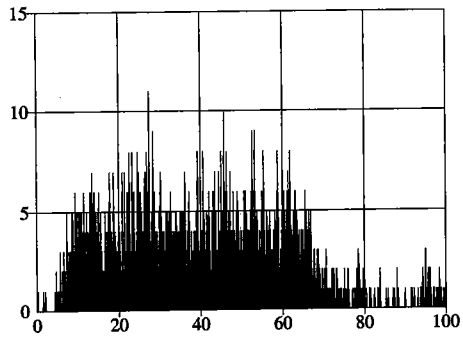
Wallac 1414 WinSpectral v1.40 S/N 4140127
Counting mode : CPM
Isotope(s) : H3
H3 = 5- 350,12.43 y
Protocol name : Tritium Tri-safe
Counting time : 7200
Repeats : 1
Cycles : 1
Replicates : 1
2 sigma % : 0.80
Minimum cpm : 0.00 Checking time: 10
Advanced modes : Chemilum
Output to Display :
POS,FNCT1,RACK,RACKPOS,CTIME,SQPE,DATE,TIME,CPMw1,CPM,SQPI,CPM1,RPT,RPL
Additions to Display : Listing,Spectrum
Spectrum : Beta
Window 1 : 15- 131 /Beta
Window 2 : 1-1024 /Beta
Window 3 : 1-1024 /Beta
Window 4 : 1-1024 /Beta
Window 5 : 1-1024 /Beta
Window 6 : 1-1024 /Beta
FNCT1 = CtTime : ctime/60
FNCT2 = FNCT2 :
FNCT3 = FNCT3 :
FNCT4 = FNCT4 :

Total count rate:
H3 67.6 CPM

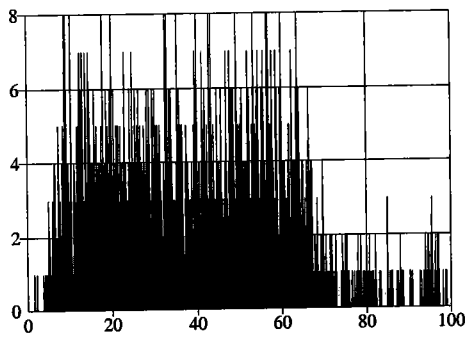
7/14/05

7.14.05

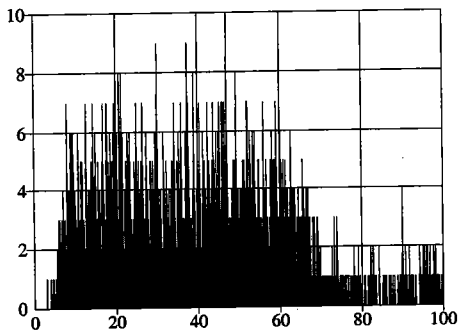
Rack_Position RACKRACKPOS	Count_time(min) FNCT1	Quench_Number SQPE	Tritium_cpm CPMW1	Run_Date DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
48 1	120.00	694.62	1.60	7/12/2005	11:06 AM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
48 2	120.00	690.97	1.90	7/12/2005	1:07 PM



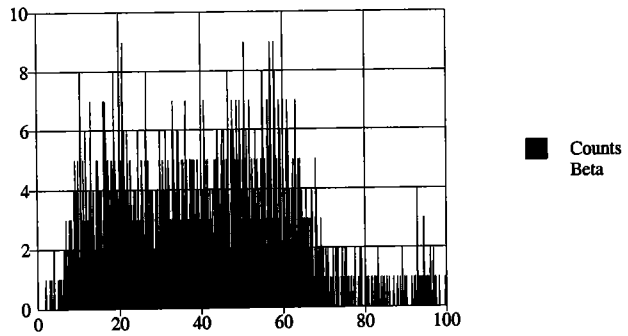
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
48 3	120.00	693.16	1.80	7/12/2005	3:08 PM



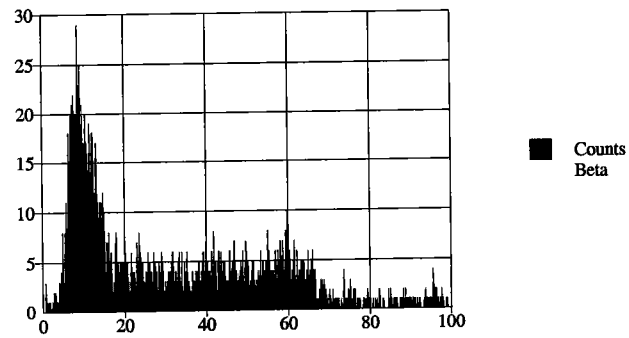
no 7/14/05

MM 7/14/05

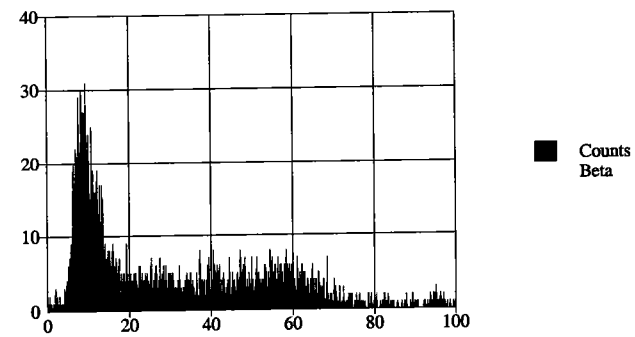
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACKRACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
48 4	120.00	685.46	1.50	7/12/2005	5:09 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
48 5	120.00	691.21	10.50	7/12/2005	7:10 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
48 6	120.00	694.74	11.80	7/12/2005	9:11 PM



WP 1/14/05

WM 7.14.05

PROTOCOL : 10 Tritium Tri-safe
DATE : 2005/07/13
TIME : 18:03
ID : P10AS114

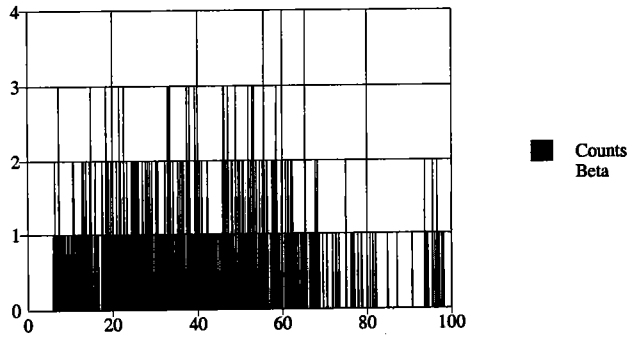
Wallac 1414 WinSpectral v1.40 S/N 4140127
Counting mode : CPM
Isotope(s) : H3
H3 = 5- 350,12.43 y
Protocol name : Tritium Tri-safe
Counting time : 1800
Repeats : 1
Cycles : 1
Replicates : 1
2 sigma % : 0.80
Minimum cpm : 0.00 Checking time: 10
Advanced modes : Chemilum
Output to Display :
POS,FNCT1,RACK,RACKPOS,CTIME,SQPE,DATE,TIME,CPMw1,CPM,SQPI,CPM1,RPT,RPL
Additions to Display : Listing,Spectrum
Spectrum : Beta
Window 1 : 15- 131 /Beta
Window 2 : 1-1024 /Beta
Window 3 : 1-1024 /Beta
Window 4 : 1-1024 /Beta
Window 5 : 1-1024 /Beta
Window 6 : 1-1024 /Beta
FNCT1 = CtTime : ctime/60
FNCT2 = FNCT2 :
FNCT3 = FNCT3 :
FNCT4 = FNCT4 :

Total count rate:
H3 61.3 CPM

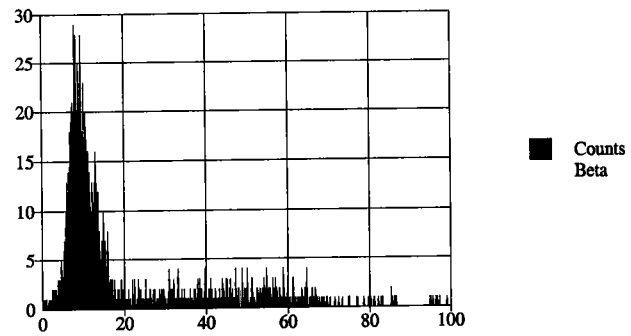
7/14/05

7.14.05

Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACK	RACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
58	1	30.00	697.90	1.30	7/13/2005	6:04 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
58	2	30.00	697.78	40.70	7/13/2005	6:35 PM



Radiochemistry Batch Checklist for LSC, Rev 3

Batch# 4371607 Product: Tc-99 Date: 7/6/05

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* RDL, error is 100% or less of sample activity. If greater 10* RDL, error is 20% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .	✓		
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125%.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories
10/31/00

Primary Review Performed By: Melanie Laycock 7/6/05

Secondary Review Performed By: KO 7/8/05

7/9-7/16
ESH&L

Tc-99 Que Sheet

06/27/2005

Batch #: 437627 **Analyst:** ~~BXD1~~ ESD1 ESD 6/30/05 **Minimum DueDate:** 07/09/2005 **Comments**

Spike Isotope: Technetium-99 **Spike Code:** 0718-B **Expiration Date:** 2/4/06 **Vol:** 0.1 ul

LCS Isotope: Technetium-99 **LCS Code:** 0718-B **Expiration Date:** 2/4/06 **Vol:** 0.1 ul

Tracer Isotope: Technetium-99m **Tracer Code:** TC06431A **Reference Date:** 6/30/05 **Expiration Date:** 7/1/05 **Vol:** 1.0 ul

Prep Date: 7/1/05 **Initials:** ESD **Pipet ID:** 1429303 **Balance ID:** 51204863 **Witness:** ABI 7/1/05

Sample I	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label	Sample Mass (g/mL)	LSC Rack #
139405002	GU05050GMC401	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	23-JUN-05 08:50 AM	1	400	38-3
1200875998	MB for batch 437627	MB		5 pCi/L	GROUND WATER	QC ACCOUNT		2	1000	38-4
1200875999	GU05050GMC401(139405002DUP	DUP		5 pCi/L	GROUND WATER	QC ACCOUNT	23-JUN-05 08:50 AM	3	400	38-5
1200876000	GU05050GMC401(139405002MS)	MS		5 pCi/L	GROUND WATER	QC ACCOUNT	23-JUN-05 08:50 AM	4	400	38-6
1200876001	LCS for batch 437627	LCS		5 pCi/L	GROUND WATER	QC ACCOUNT		5	1000	38-7

Comments:

Data Reviewed By: MAT 7/6/05

Instrument Used: LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Green) 7067404 Wallac (Yellow) 4040127, Wallac (Pink) 2200082, LS6000 (Brown) 7060655, LS6500 (Gold) 7070506, Wallac (White) 4140299

MAT 7/8/05

General Engineering Laboratories, Radiochemistry Division

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200875999	DUP	Technetium-99	0.400 L	3.21	1.21	3.92	.6575	pCi/L	YES
1200876001	LCS	Technetium-99	1.00 L	109	1.86	1.68	.263	pCi/L	NO
1200875998	MB	Technetium-99	1.00 L	0.263	0.483	1.61	.263	pCi/L	YES
1200876000	MS	Technetium-99	0.400 L	269	4.54	4.00	.6575	pCi/L	NO
139405002	GU05050GMC401	Technetium-99	0.400 L	3.42	1.21	3.94	.6575	pCi/L	NO

E437627

Tc-99 Water

Filename : TC99.XLS
File type : Excel
Version # : 1

Batch : 437627
Analyst : EGD1
Prep Date : 07/01/05
Tc-99 Abundance : 1
Calibration Date : 06/20/05
Calibration Due Date : 06/20/06
Geometry:
5ml DI/10ml ultima gold

Spike S/N :	0718-B
Spike Exp Date :	02/04/06
Spike Activity (dpm/ml):	2624.66
Spike Volume Added:	0.1
LCS S/N :	0718-B
LCS Exp Date :	02/04/06
LCS Activity (dpm/ml):	2624.66
LCS Volume Added:	0.1
Tracer S/N :	TC0643A
Tracer Exp Date :	07/01/05
Tracer Volume Added:	1.0

Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1 ml Stdev : +/-	0.005480	ml
Procedure Code :	LSC99TCL	
Parmname :	Technetium-99	
Required MDC:	5	pCi/L
Halflife of Tc-99 :	213000	years
Batch counted on :	LSCBLUE	
Detector Effiency Error :	0.00792	
BKG Count time :	45	min

Sample Characteristics				**Tracer Calculations**					
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Tracer Concentration (Tc-99 Ref.)	Tracer Ref. Count Uncertainty	Tracer Concentration (Tc-99 Samp.)	Tracer Samp. Count Uncertainty	Tracer Aliquot (mL)	Tracer Aliquot StDev.
139405002	0.400	1.9669E-05	06/23/05 8:50	108980	0.84%	113576	0.82%	1.0	0.005480
1200875998	1.000	2.0399E-05	07/01/05 0:00	108980	0.84%	108179	0.84%	1.0	0.005480
1200875999	0.400	1.9669E-05	06/23/05 8:50	108980	0.84%	113533	0.82%	1.0	0.005480
1200876000	0.400	1.9669E-05	06/23/05 8:50	108980	0.84%	114099	0.82%	1.0	0.005480
1200876001	1.000	2.0399E-05	07/01/05 0:00	108980	0.84%	103641	0.86%	1.0	0.005480

MAN 6/6/05
KO 7/8/05

Count raw Data

Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time	Sample Decay	Sample Recovery %	Sample Recovery Error %
38-3	45	159.7	22.22	0.8570	0.00792	19.51	45	07/05/05 13:03	1.000	104.22%	0.97%
38-4	45	128.2	20.02	0.8806	0.00792	19.51	45	07/05/05 13:51	1.000	99.27%	0.98%
38-5	45	156.2	22.07	0.8610	0.00792	19.51	45	07/05/05 14:38	1.000	104.18%	0.97%
38-6	42.55	153.4	235.28	0.8639	0.00792	19.51	45	07/05/05 15:25	1.000	104.70%	0.97%
38-7	44.9	126.9	222.76	0.8809	0.00792	19.51	45	07/05/05 16:10	1.000	95.10%	0.98%

7/16/05

Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	**1 SIGMA** Counting Uncertainty	**1 SIGMA** Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
2.7356	1.9313	3.9385	**3.4168**	0.3556	2.7100	0.9630	1.2141	1.2149		SAMPLE				
1.1181	0.7894	1.6098	**0.2628**	1.8378	0.5100	0.9373	0.4830	0.4830		MB				
2.7241	1.9232	3.9219	**3.2142**	0.3757	2.5600	0.9612	1.2069	1.2075	139405002	DUP	0.0%	0.0418		
2.7780	1.9613	4.0018	**268.6453**	0.0169	215.7700	2.4419	3.0403	4.5378	139405002	MS			295.57	89.7%
1.1679	0.8246	1.6816	**109.2883**	0.0170	203.2500	2.3227	1.2489	1.8595		LCS			118.23	92.4%

MA 7/16/05

1480, RiaCalc WIZ, program 3.6, serial #4800440

ASSAY 1-Jul-05 15:11:11

Protocol	id	12	TC99_REC
Time	limit	300	
Count	limit	10000	
Isotope	Tc-99m		
Protocol	date	15-Jun-04	6:53:27
Run	id.	84	

POS	RACK	BATCH	TIME	COUNTS	CPM	ERROR	% RECOVERY
1	36	1	8	14346	108979.6	0.84	
2	36	2	8	14934	113576.1	0.82	104.22
3	36	3	8	14224	108179	0.84	99.27
4	36	4	8	14909	113533.2	0.82	104.18
5	36	5	8	14973	114098.7	0.82	104.70
6	89	6	8	13603	103640.8	0.86	95.10

END OF ASSAY

7/1/05

7/6/05

7/7/05

ID: TC-99 5 JUL 2005 12:15

USER: 7 COMMENT:BLUE

PRESET TIME :	45.00						
DATA CALC :	CPM	H# :YES	SAMPLE REPEATS:	1	PRINTER	:EDIT
COUNT BLANK :	NO	IC# : NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AQC : NO	CYCLE REPEATS :	1	DISK	:EDIT
SCINTILLATOR:	LIQUID	LUMEX:YES	LOW SAMPLE REJ:	0	RWM LIST	: OFF
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:			none	

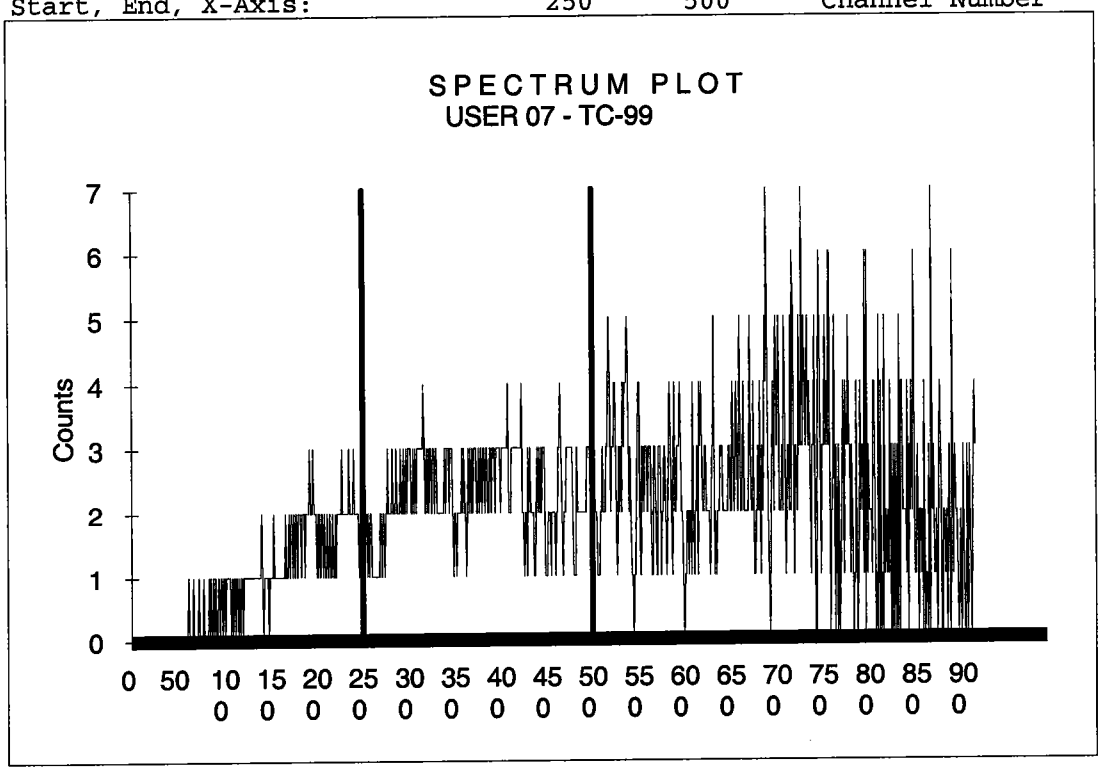
CHAN: 250.0 - 625.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

ALPHA-BETA DISCRIMINATION: NO

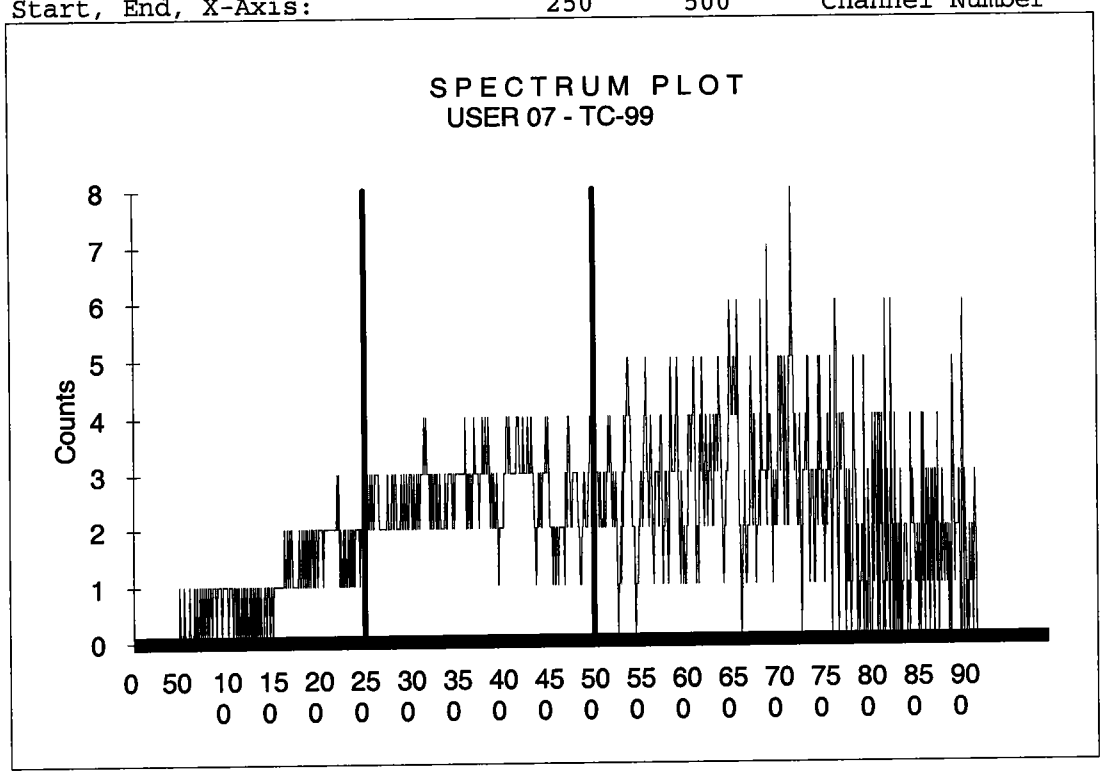
SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	LUMEX %	ELAPSED TIME
1	38-1	45.00	128.0	19.51	6.75	39.44	4.78	1.27	46.62
MISSING SAMPLE									
3	38-3	45.00	159.7	22.22	6.32	42.20	4.61	1.06	93.87
4	38-4	45.00	128.2	20.02	6.66	41.42	4.67	1.33	141.12
5	38-5	45.00	156.2	22.07	6.35	42.22	4.61	1.07	188.35
6	38-6	42.55	153.4	235.28	2.00	275.84	1.85	0.20	233.08
7	38-7	44.90	126.9	222.76	2.00	259.02	1.86	0.28	280.27

MA 7/6/05
no 7/7/05

Instrument Type:	LS 6000			
Data Capture Date:	5 Jul 2005 13:01:43			
User Filename:	A:\USER07\S0770508.BSF			
File Info:	A:\USER07\U0770524.BSF			
USER#:	07			
User ID:	TC-99			
User Comments:	BLUE			
Scintillator:	LIQUID			
Sample, Rack-Pos, Time:	1	38-1	45	
H#, Total Counts:	128.0		0	
Start, End, X-Axis:	250	500	Channel Number	

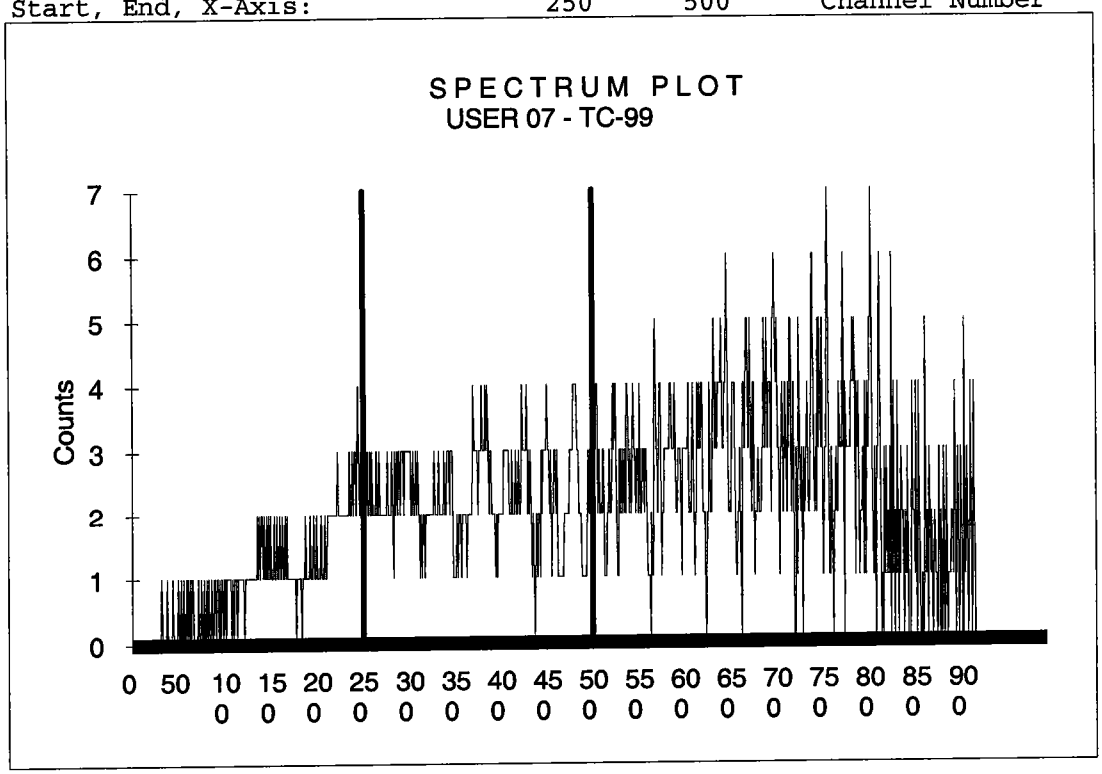


Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 13:48:58		
User Filename:	A:\USER07\S0770509.BSF		
File Info:	A:\USER07\U0770524.BSF		
USER#:	07		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	3	38-3	45
H#, Total Counts:	159.7		0
Start, End, X-Axis:	250	500	Channel Number



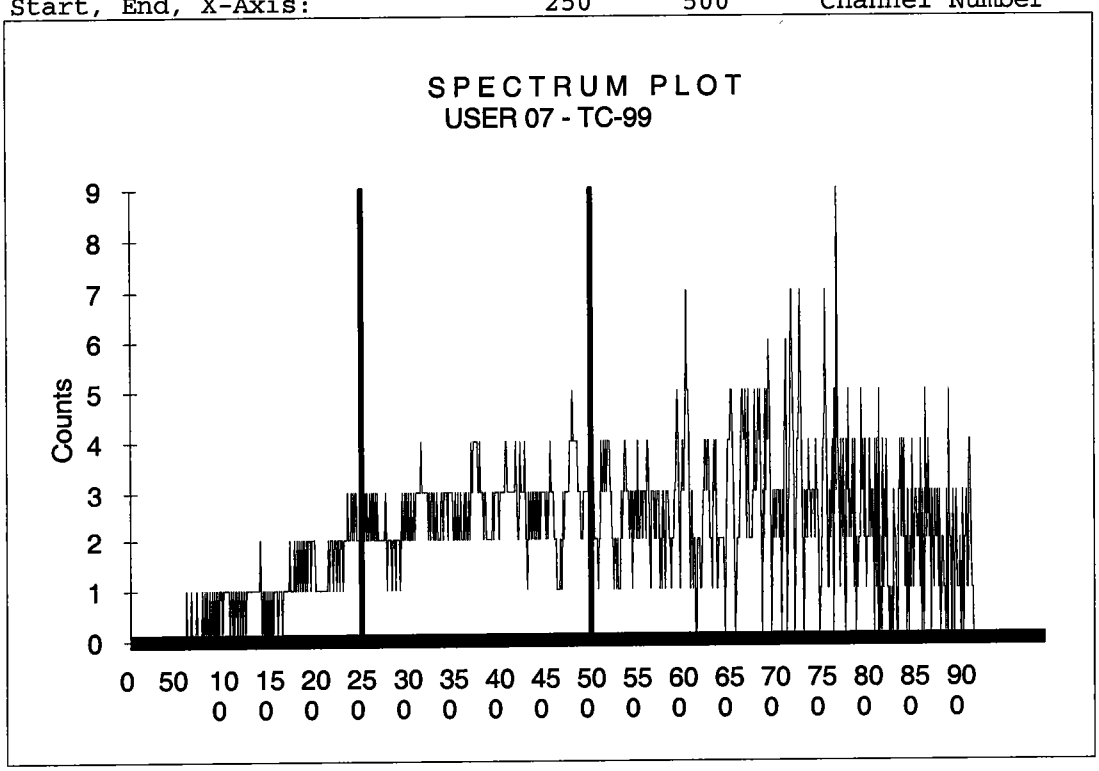
MA 7/6/05
KO 7/7/05

Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 14:36:14		
User Filename:	A:\USER07\S0770510.BSF		
File Info:	A:\USER07\U0770524.BSF		
USER#:	07		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	4	38-4	45
H#, Total Counts:	128.2		0
Start, End, X-Axis:	250	500	Channel Number



MA 7/7/05
JMO 7/7/05

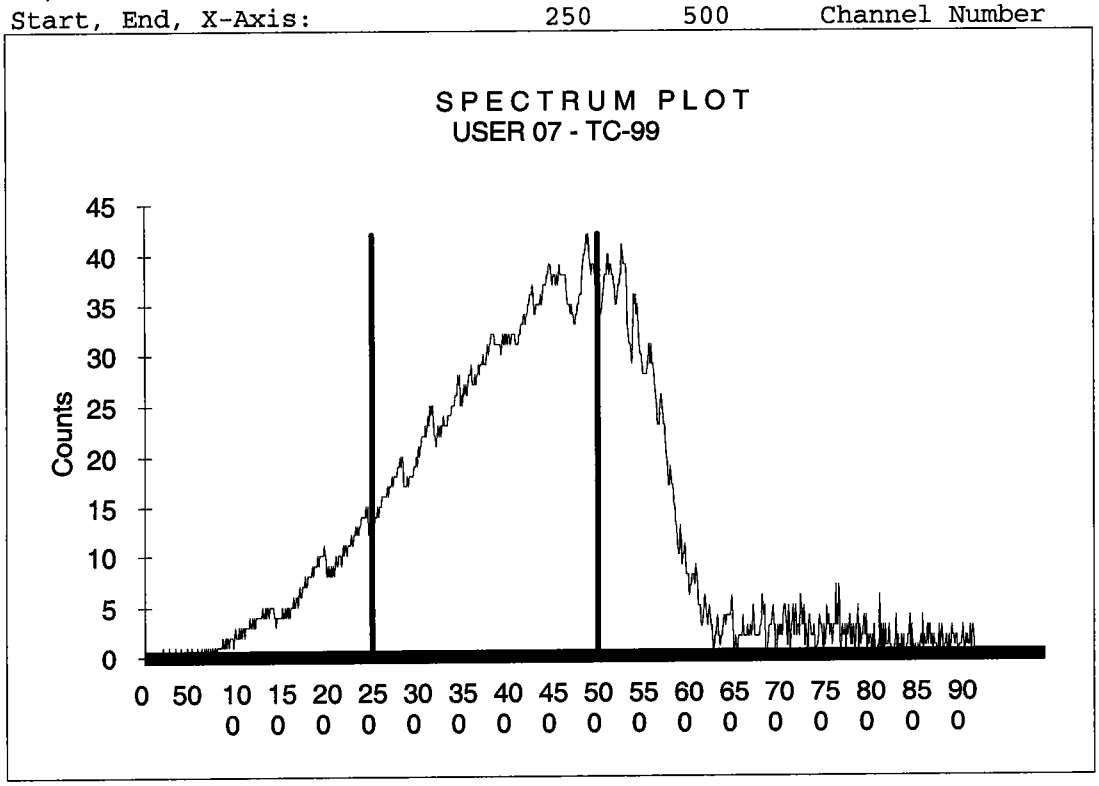
Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 15:23:27		
User Filename:	A:\USER07\S0770511.BSF		
File Info:	A:\USER07\U0770524.BSF		
USER#:	07		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	5	38-5	45
H#, Total Counts:	156.2		0
Start, End, X-Axis:	250	500	Channel Number



7/6/05

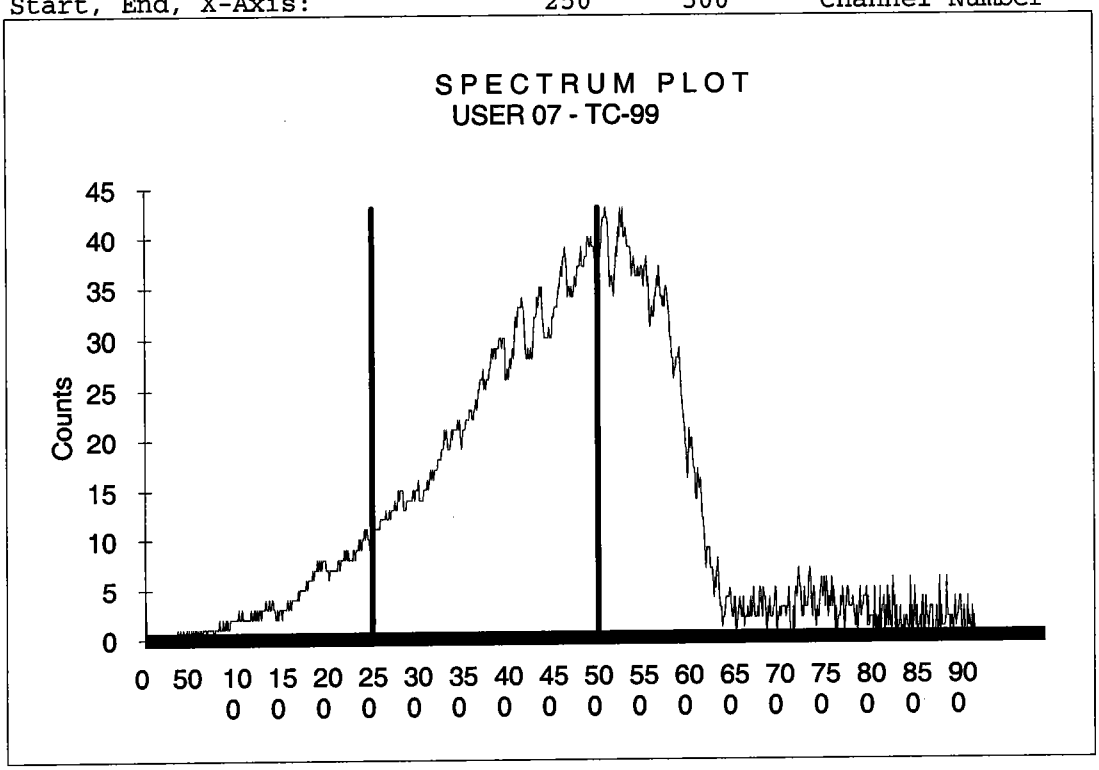
7/7/05

Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 16:08:11		
User Filename:	A:\USER07\S0770512.BSF		
File Info:	A:\USER07\U0770524.BSF		
USER#:	07		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	6	38-6	42.55
H#, Total Counts:	153.4		0
Start, End, X-Axis:	250	500	Channel Number



MFM 7/6/05
QAO 7/7/05

Instrument Type:	LS 6000		
Data Capture Date:	5 Jul 2005 16:55:22		
User Filename:	A:\USER07\S0770513.BSF		
File Info:	A:\USER07\U0770524.BSF		
USER#:	07		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	7	38-7	44.9
H#, Total Counts:	126.9		0
Start, End, X-Axis:	250	500	Channel Number



MA 7/6/05
TW 7/7/05

Radiochemistry Batch Checklist, Rev 3

Batch# 437415 Product: Ra-226 Date: 7/6/15

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg			NA
If activity less 10* RDL, error is 150% or less of sample activity. If greater 10* RDL, error is 40% or less. If below the RDL, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* RDL, then rpd is 100% or less. If greater 5*, then rpd 20% or less. If below the RDL, the rpd is 0%.	✓		
Tracer yield is 15-125% . WSRC is 25-125%. Carrier yield is 25-125% .			NA
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	✓		NA
Method Spike and LCS are within 75-125%.	✓ 7/6/15		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓ ✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

10/31/00

Primary Review Performed By: [signature] 7/6/15

Secondary Review Performed By: [signature] 7/7/15

7/4 7/16
ESH/C

Radium-226 Que Sheet

06/27/2005 *General Engineering Laboratories, Radiochemistry Division*

Batch #: 437415 **Analyst:AB1** **Minimum DueDate:** 07/04/2005

Spike Isotope: Radium-226 **Spike Code:** 0321-H **Expiration Date:** 5/20/06 **Vol:** 0.1 **Nom Conc:** 24.15

LCS Isotope: Radium-226 **LCS Code:** 0321-H **Expiration Date:** 5/20/06 **Vol:** 0.1 **Nom Conc:** 12.07

Sample Count Time: 30 (Min)

Prep Date: 6/28/05 **Pipet ID:** 1429303 **Initials:** JMB **Witness:** BXD 6/28/05 **Bkg Count Time:** 30 (Min)

	Sample I	Client Description	Type	Hazard Code	Matrix	Min CRDL	Client	Vol (mL)	End Init Degas Date/Tin	End LN De-em Date/Time	Start Count Date/Time	Cell #	Det #	Bkg cpm	Total Counts
1	138436003	GF05050GMC501	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	206	2	8	11
2	138436004	GU05050GMC501	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	306	3	8	14
3	138851001	GF05050GMC601	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	406	4	3	76
4	138851002	GF05050GMC690	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	506	5	8	27
5	138851003	GU05050GMC601	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 950	7/1/05 1335	606	6	5	22
6	138851004	GU05050GMC690	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 1025	7/1/05 1425	107	1	6	13
7	139405001	GF05050GMC401	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 1025	7/1/05 1425	207	2	3	13
8	139405002	GU05050GMC401	SAMPLE		GROUND WAT	1 pCi/L	ESHL001	500	6/28/05 740	7/1/05 1025	7/1/05 1425	307	3	4	93
9	1200875441	MB for batch 437415	MB		GROUND WAT	1 pCi/L	QC ACCOUNT	1000	6/28/05 740	7/1/05 1025	7/1/05 1425	407	4	5	18
10	1200875442	GF05050GMC601(138851001DUDUP			GROUND WAT	1 pCi/L	QC ACCOUNT	500	6/28/05 740	7/1/05 1025	7/1/05 1425	507	5	4	57
11	1200875443	GF05050GMC601(138851001MSMS			GROUND WAT	1 pCi/L	QC ACCOUNT	500	6/28/05 740	7/1/05 1025	7/1/05 1425	607	6	6	572
12	1200875444	LCS for batch 437415	LCS		GROUND WAT	1 pCi/L	QC ACCOUNT	1000	6/28/05 740	7/1/05 1100	7/1/05 1500	112	1	6	523

✓ nonstorm

Comments:

Data Reviewed By: MA 7/1/05 MP 7/1/05

Instrument ID's:
LUCAS1:90988, LUCAS2:136917, LUCAS3:90989, LUCAS4:102753, LUC5:132286, LUC6:170055

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200875442	DUP	Radium-226	0.500 L	2.09	0.314	0.474	.54	pCi/L	YES
1200875444	LCS	Radium-226	1.00 L	12.0	0.608	0.328	.27	pCi/L	NO
1200875441	MB	Radium-226	1.00 L	0.270	0.0999	0.273	.27	pCi/L	YES
1200875443	MS	Radium-226	0.500 L	22.6	1.13	0.562	.54	pCi/L	NO
138436003	GF05050GMC501	Radium-226	0.500 L	0.115	0.167	0.607	.54	pCi/L	YES
138436004	GU05050GMC501	Radium-226	0.500 L	0.241	0.188	0.638	.54	pCi/L	YES
138851001	GF05050GMC601	Radium-226	0.500 L	3.04	0.374	0.448	.54	pCi/L	NO
138851002	GF05050GMC690	Radium-226	0.500 L	0.782	0.245	0.653	.54	pCi/L	YES
138851003	GU05050GMC601	Radium-226	0.500 L	0.739	0.227	0.570	.54	pCi/L	YES
138851004	GU05050GMC690	Radium-226	0.500 L	0.302	0.188	0.609	.54	pCi/L	YES
139405001	GF05050GMC401	Radium-226	0.500 L	0.415	0.166	0.447	.54	pCi/L	YES
139405002	GU05050GMC401	Radium-226	0.500 L	3.28	0.418	0.694	.54	pCi/L	NO

MA 7/6/05
MO 7/7/05

Radium-226 Water

Filename : RA226.XLS
File type : Excel
Version # : 1

Batch : 437415
Analyst : AB1
Prep Date : 06/28/05
Ra-226 Abundance : 1

Calibration Date : 09/23/04
Calibration Due Date : 09/23/05

Spike S/N : 0321-H
Spike Exp Date : 05/20/06
Spike Activity (dpm/ml): 268.01
Spike Volume Added: 0.1

LCS S/N : 0321-H
LCS Exp Date : 05/20/06
LCS Activity (dpm/ml): 268.01
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : LUC26RAL
Parmname : Radium-226
Required MDC: 1 pCi/L
Halflife of Ra-226 : 1600 years
Halflife of Rn-222: 3.823 days
Batch counted on : LUCAS CELL DETECTOR
BKG Count time : 30 min

Sample Characteristics				Count Raw Data							
								Weekly Background			
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Cell Number	Counting Time	Gross Counts	Gross CPM	Counts	CPM	Count Time	Detector Efficiency
138436003	0.500	2.0256E-05	06/09/05 8:00	206	30	11	0.367	8	0.267	30	1.8800
138436004	0.500	2.0256E-05	06/09/05 8:00	306	30	14	0.467	8	0.267	30	1.7890
138851001	0.500	2.0256E-05	06/15/05 9:07	406	30	76	2.533	3	0.100	30	1.7270
138851002	0.500	2.0256E-05	06/15/05 9:07	506	30	27	0.900	8	0.267	30	1.7460
138851003	0.500	2.0256E-05	06/15/05 9:07	606	30	22	0.733	5	0.167	30	1.6540
138851004	0.500	2.0256E-05	06/15/05 9:07	107	30	13	0.433	6	0.200	30	1.6590
139405001	0.500	2.0256E-05	06/23/05 8:50	207	30	13	0.433	3	0.100	30	1.7250
139405002	0.500	2.0256E-05	06/23/05 8:50	307	30	83	2.767	8	0.267	30	1.6380
1200875441	1.000	2.0399E-05	06/28/05 0:00	407	30	18	0.600	5	0.167	30	1.7210
1200875442	0.500	2.0256E-05	06/15/05 9:07	507	30	57	1.900	4	0.133	30	1.8150
1200875443	0.500	2.0256E-05	06/15/05 9:07	607	30	572	19.067	6	0.200	30	1.7970
1200875444	1.000	2.0399E-05	06/28/05 0:00	112	30	523	17.433	6	0.200	30	1.5310

mo 7/6/05

mo 7/7/05

Detector Efficiency Error	De-Gas Date/Time	Rn-222 Ingrow Start Date/Time	Count Start Date/Time	Rn-222 Corrections De-Gas to Ingrowth	Ingrowth to Count	During Count	Ra-226 Decay
0.02691	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.00980	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.01759	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.02843	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.02655	06/28/05 7:40	07/01/05 9:50	07/01/05 13:35	0.429	0.972	1.002	1.000
0.02415	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02691	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.00980	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.01759	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02843	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02655	06/28/05 7:40	07/01/05 10:25	07/01/05 14:25	0.431	0.970	1.002	1.000
0.02415	06/28/05 7:40	07/01/05 11:00	07/01/05 15:00	0.434	0.970	1.002	1.000

MA716/05

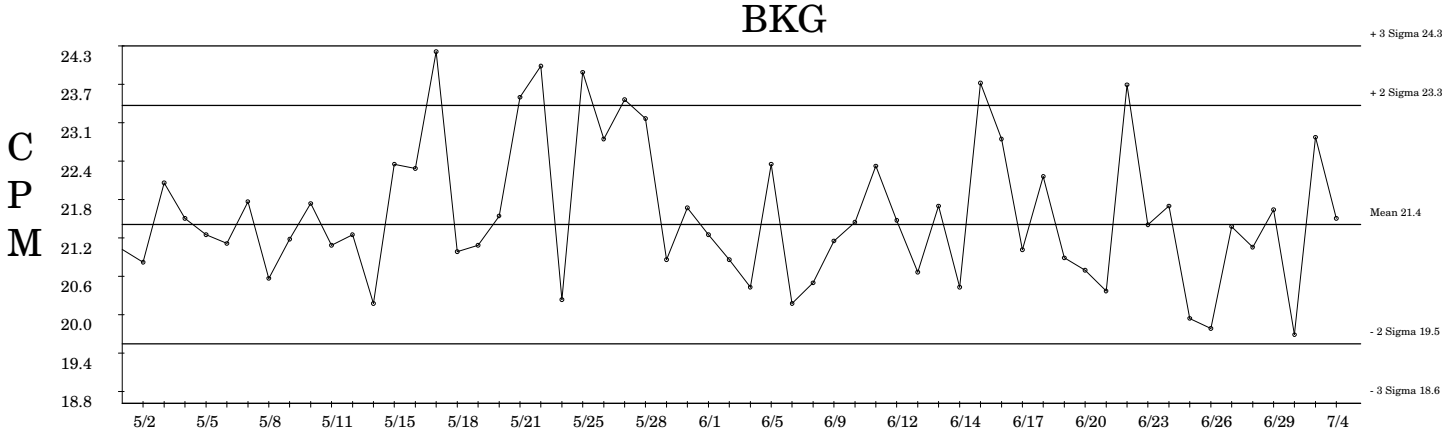
Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	**1 SIGMA** Counting Uncertainty	**1 SIGMA** Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.3564	0.2516	0.6067	**0.1147**	1.4532	0.1000	0.1453	0.1667	0.1667		SAMPLE				
0.3745	0.2644	0.6375	**0.2411**	0.7818	0.2000	0.1563	0.1885	0.1885		SAMPLE				
0.2376	0.1677	0.4481	**3.0385**	0.1230	2.4333	0.2963	0.3700	0.3738		SAMPLE				
0.3837	0.2709	0.6532	**0.7822**	0.3127	0.6333	0.1972	0.2436	0.2446		SAMPLE				
0.3202	0.2261	0.5698	**0.7388**	0.3068	0.5667	0.1732	0.2258	0.2267		SAMPLE				
0.3483	0.2459	0.6087	**0.3021**	0.6232	0.2333	0.1453	0.1881	0.1883		SAMPLE				
0.2369	0.1672	0.4468	**0.4151**	0.4009	0.3333	0.1333	0.1660	0.1664		SAMPLE				
0.4074	0.2876	0.6935	**3.2784**	0.1276	2.5000	0.3180	0.4170	0.4182		SAMPLE				
0.1533	0.1082	0.2727	**0.2704**	0.3693	0.4333	0.1599	0.0998	0.0999		MB				
0.2600	0.1835	0.4738	**2.0908**	0.1501	1.7667	0.2603	0.3081	0.3138	138851001	DUP	37.0%	0.6891		
0.3216	0.2271	0.5619	**22.5518**	0.0501	18.8667	0.8014	0.9579	1.1296	138851001	MS			24.15	80.8%
0.1876	0.1325	0.3279	**12.0194**	0.0506	17.2333	0.7667	0.5347	0.6084		LCS			12.07	99.6%

MA716105

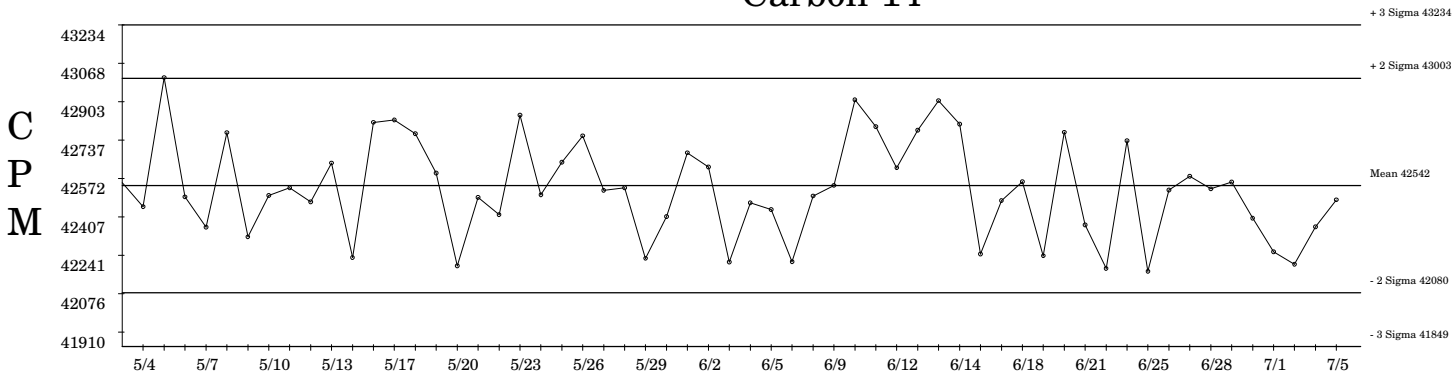
BACKGROUND AND EFFICIENCY DATA

LSCBLUE 07/05/2005
BKG



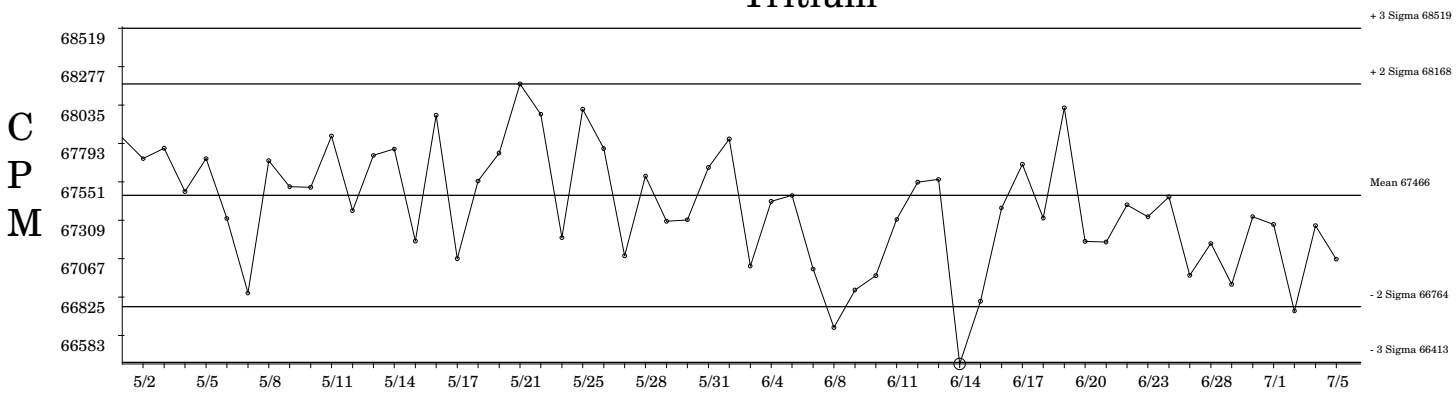
DATE

Carbon-14



DATE

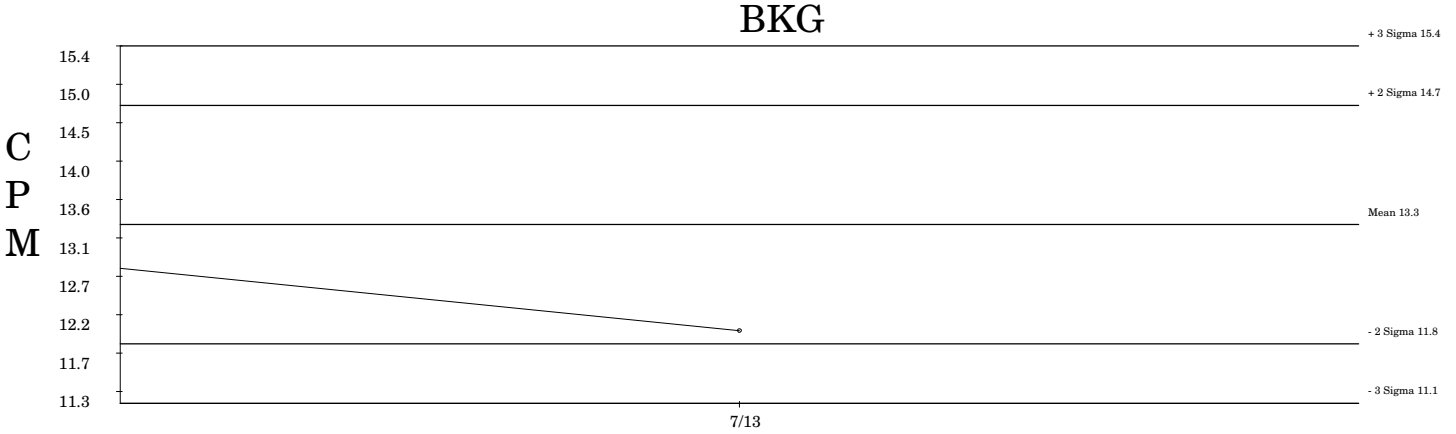
Tritium



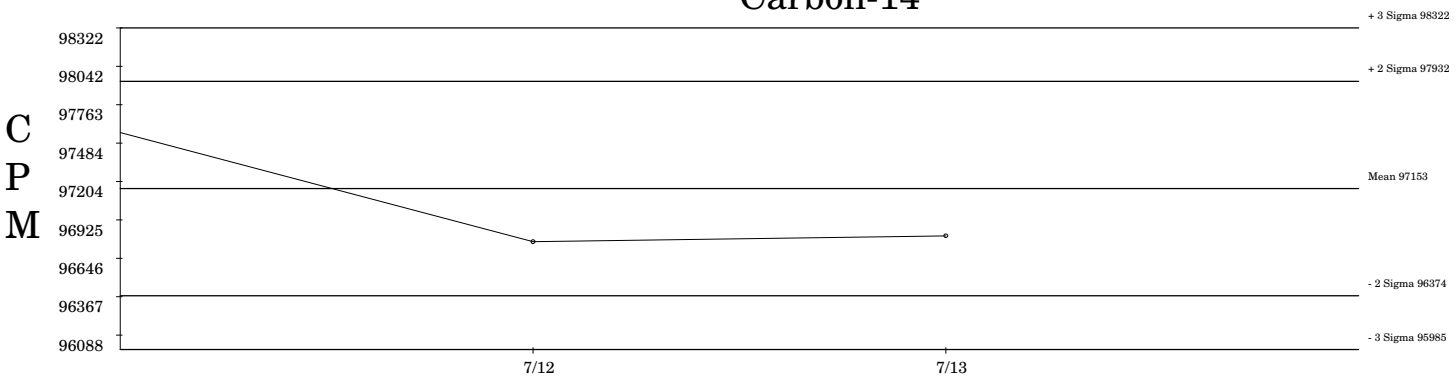
DATE

○ Denotes Outlier

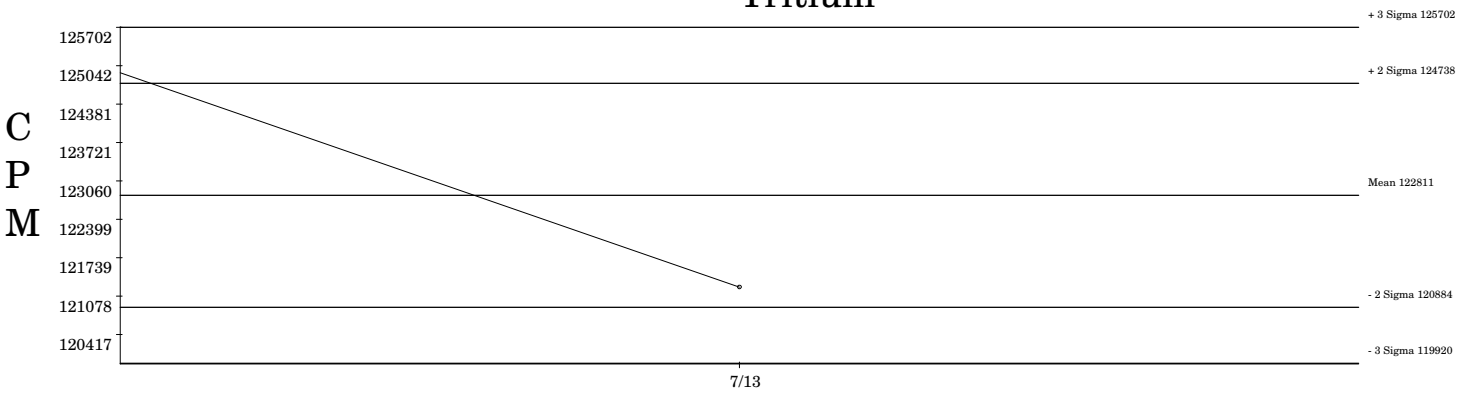
LSCYELLOW 07/13/2005
BKG



Carbon-14

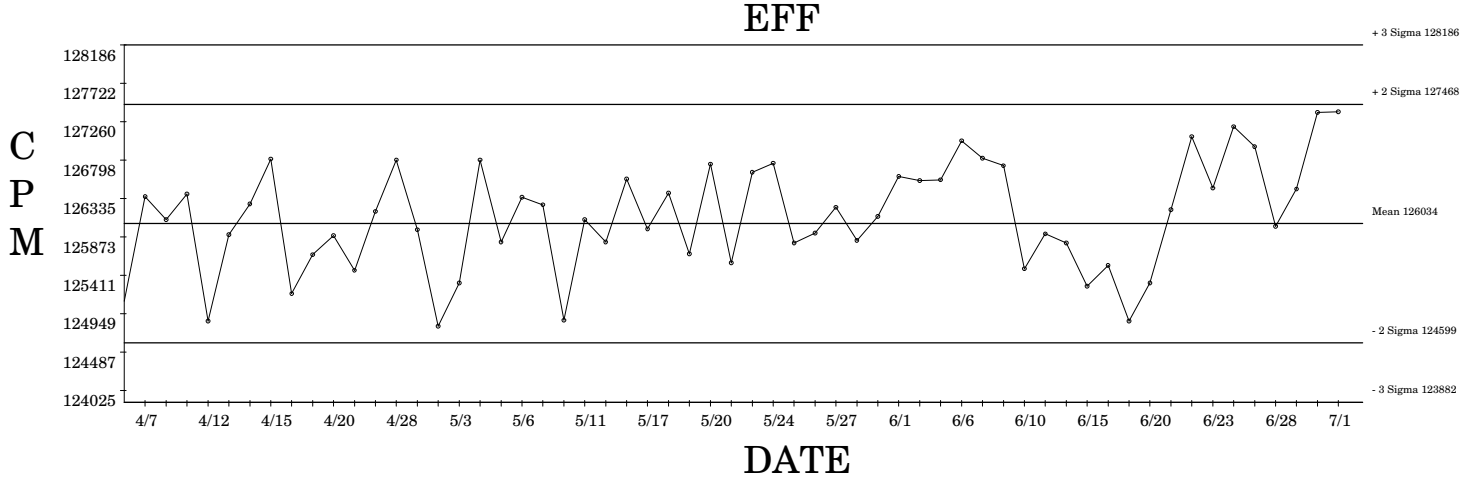


Tritium



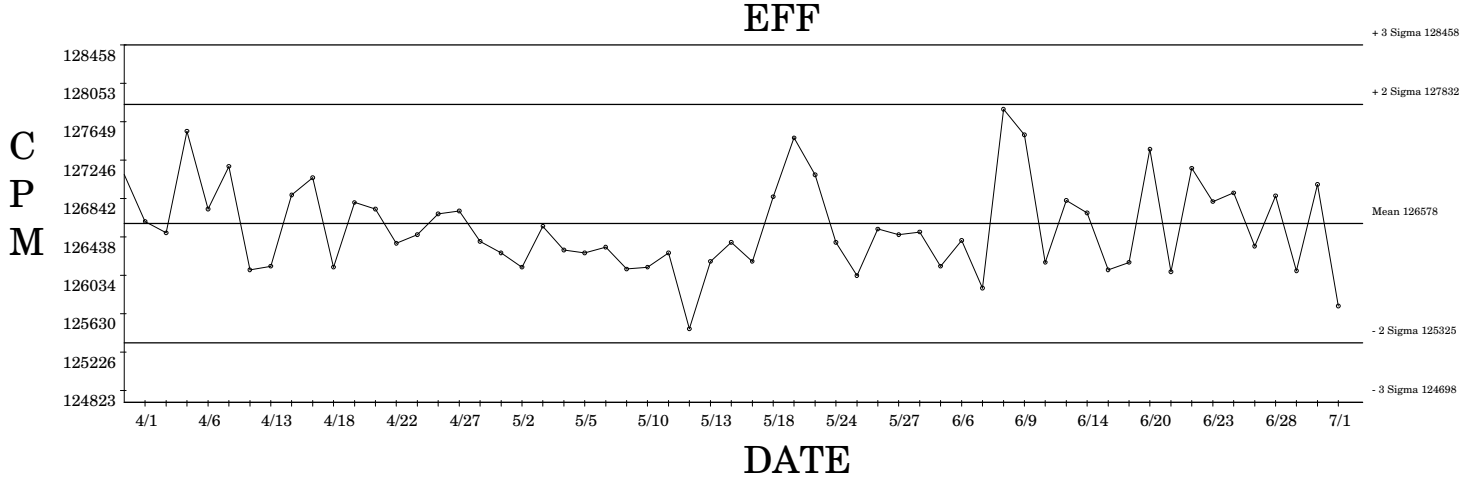
○ Denotes Outlier

LUCAS1 07/01/2005
EFF



○ Denotes Outlier

LUCAS2 07/01/2005
EFF



○ Denotes Outlier

LUCAS3 07/01/2005
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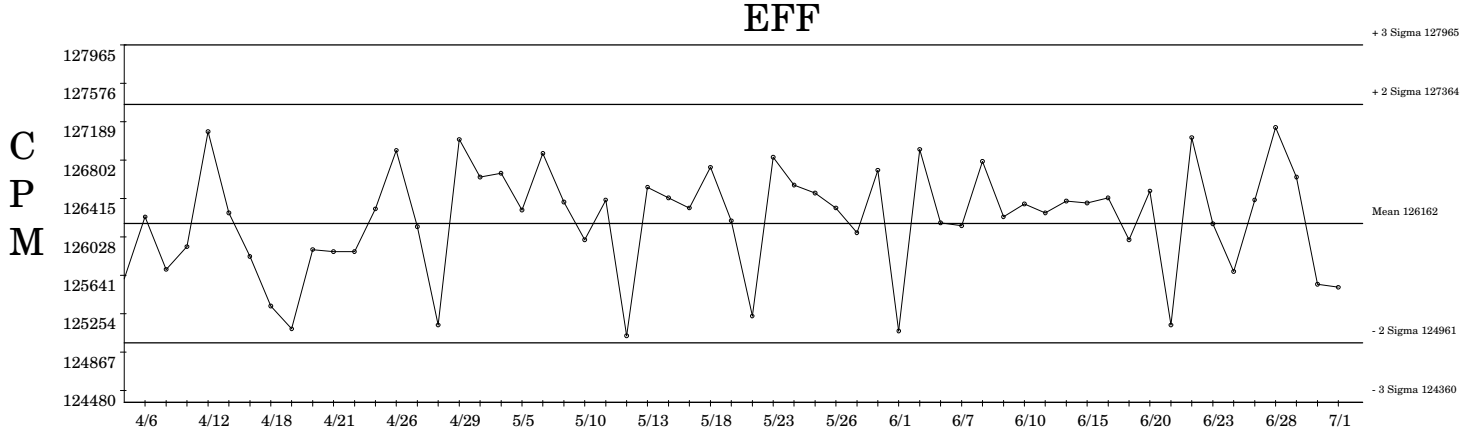

○ Denotes Outlier

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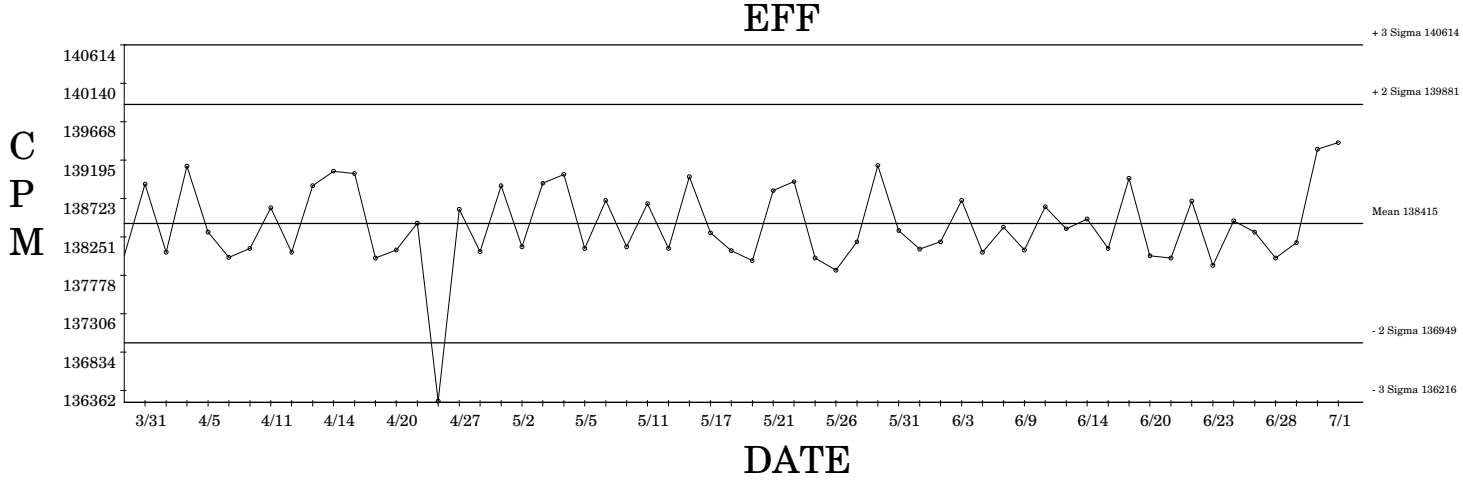
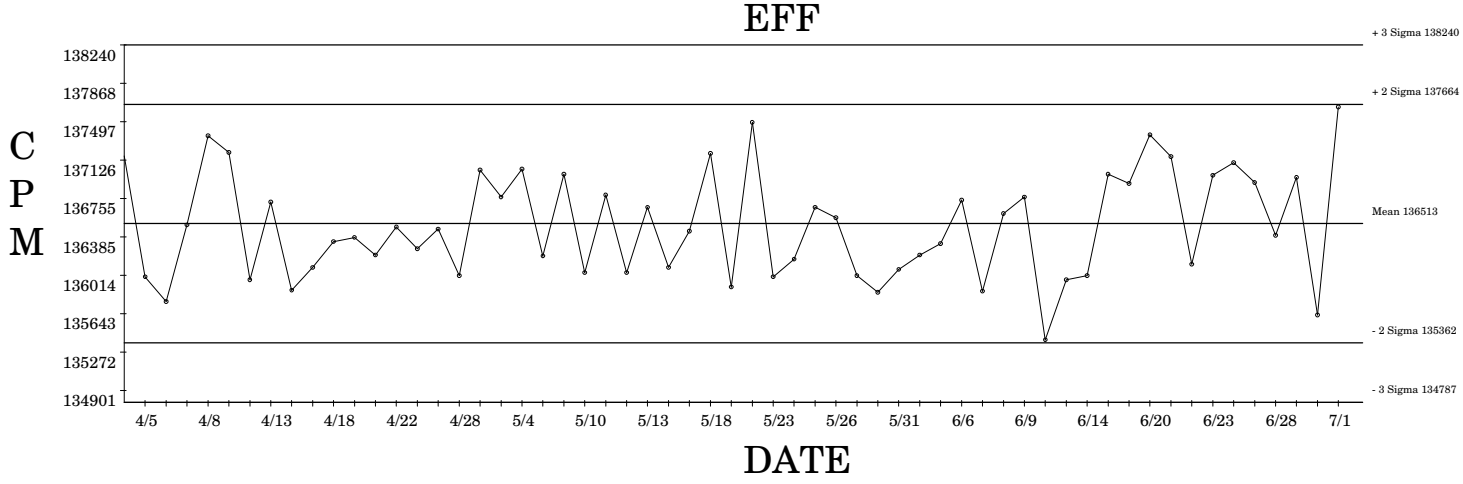


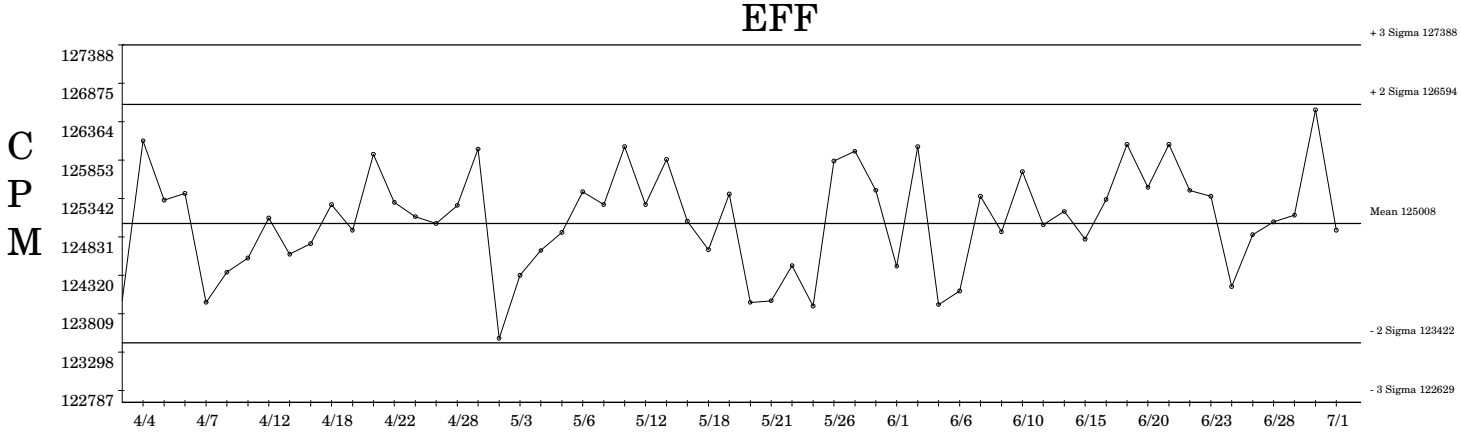
○ Denotes Outlier

LUCAS5 07/01/2005
EFF



○ Denotes Outlier

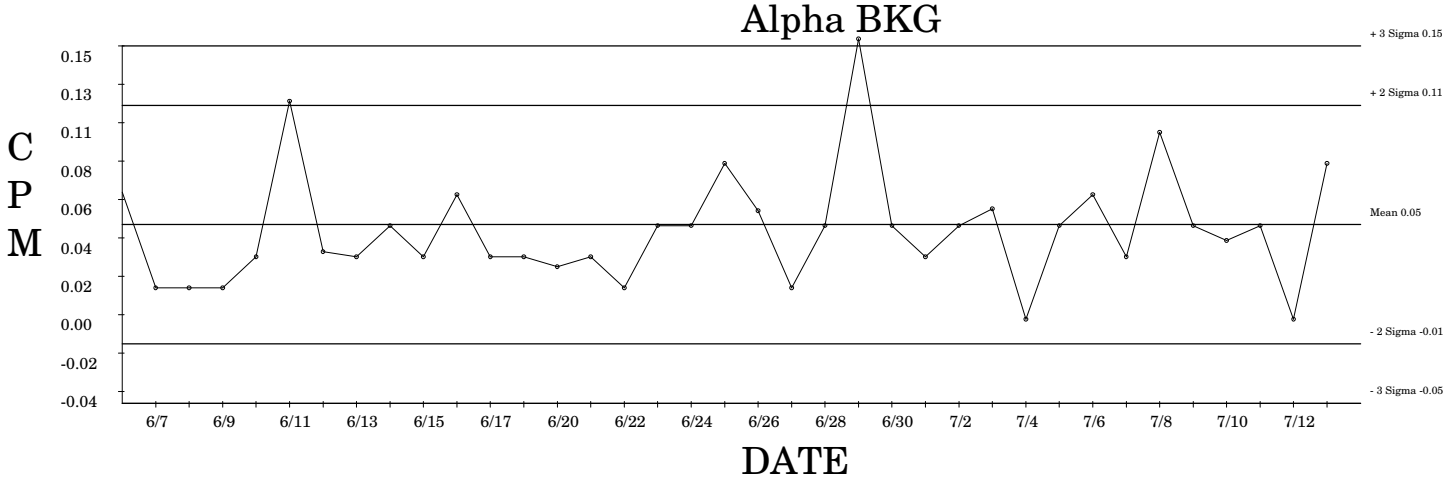
LUCAS6 07/01/2005
EFF



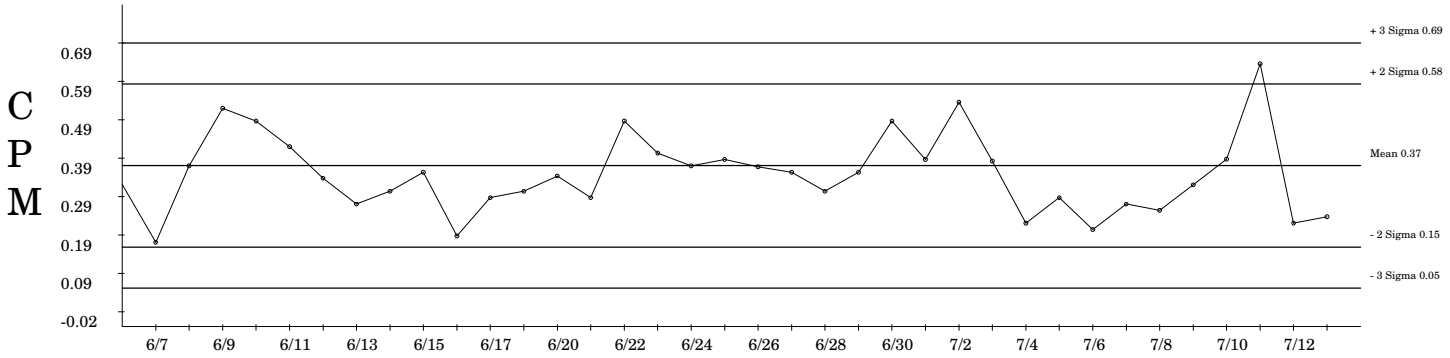
○ Denotes Outlier

PIC1B 07/13/2005

Alpha BKG



Beta BKG



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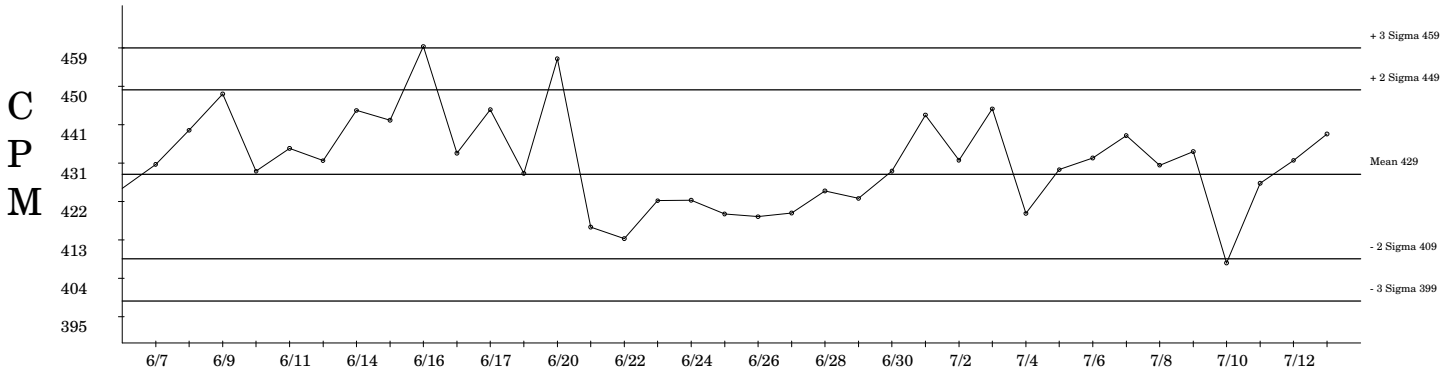

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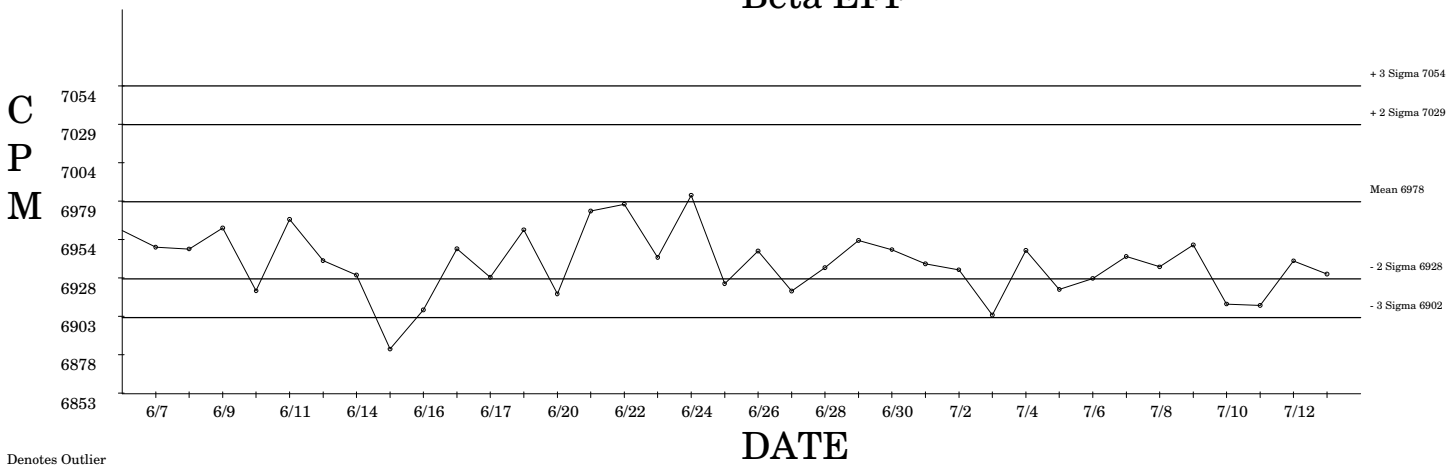
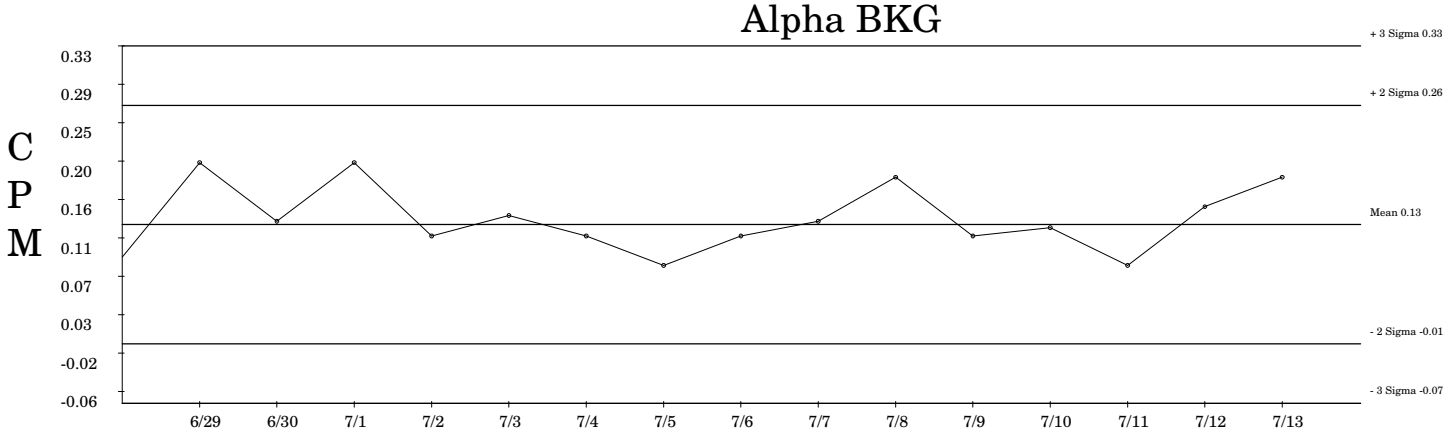


○ Denotes Outlier

PIC1C 07/13/2005

Alpha BKG



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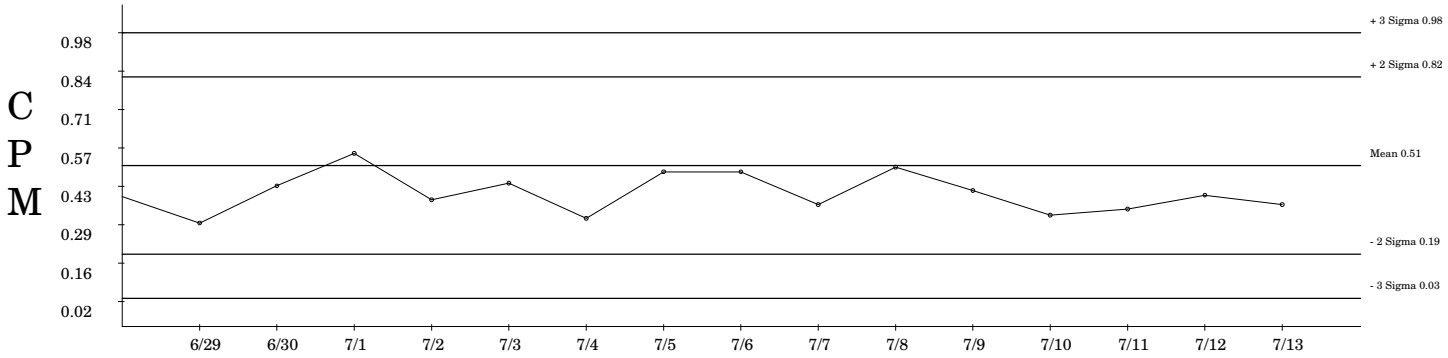

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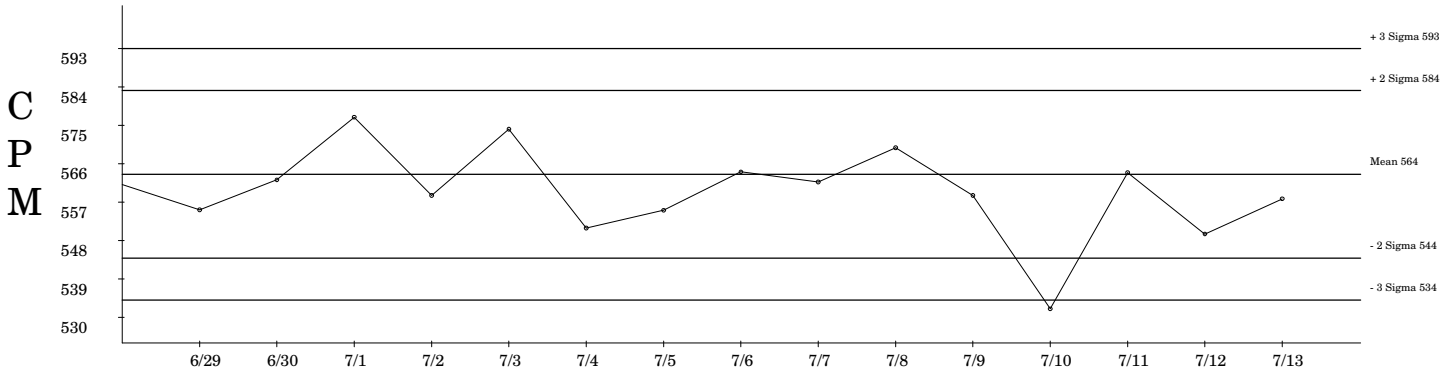

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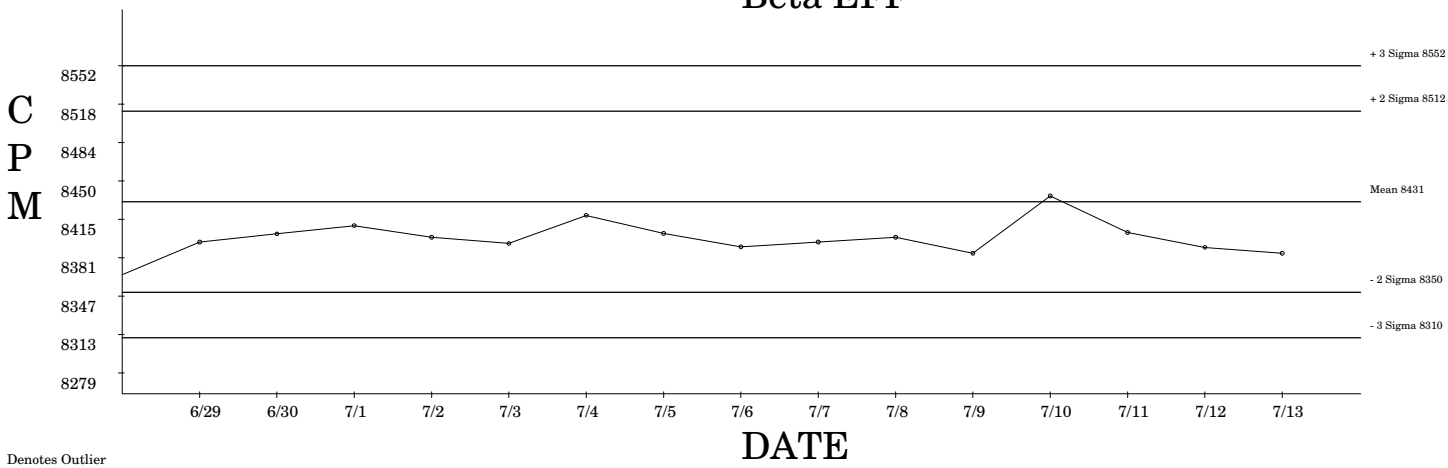
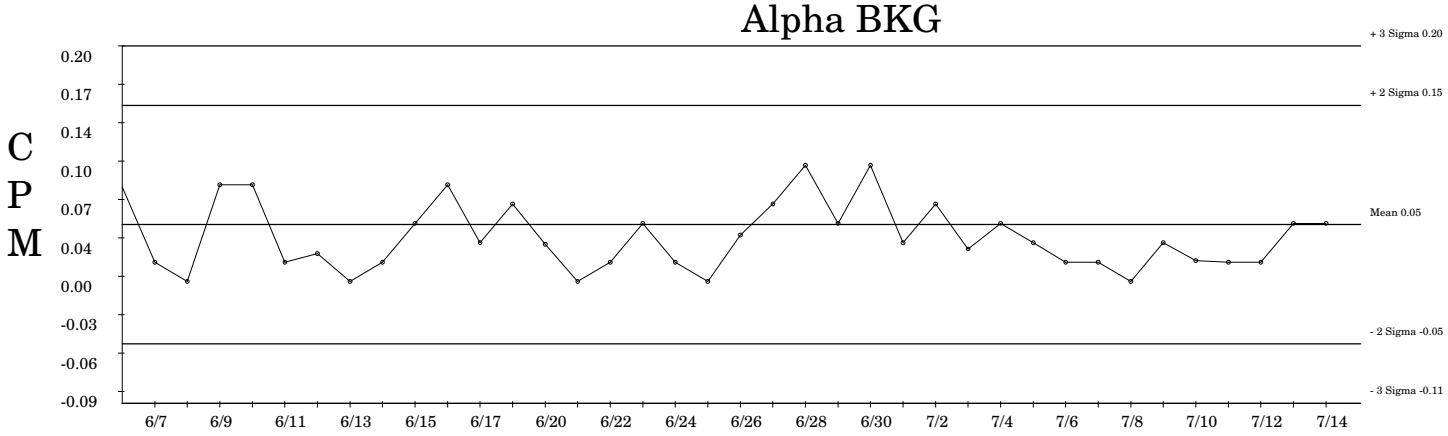


○ Denotes Outlier

PIC1D 07/14/2005

Alpha BKG



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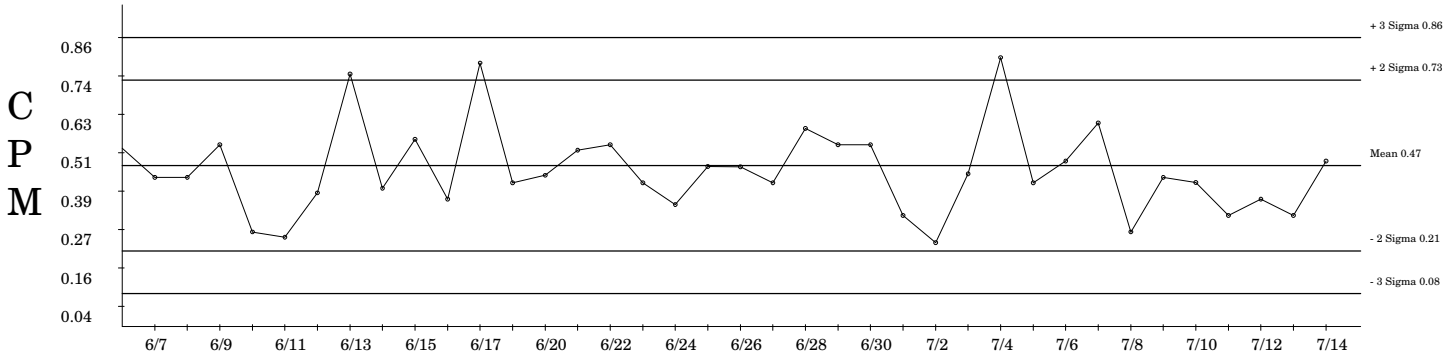

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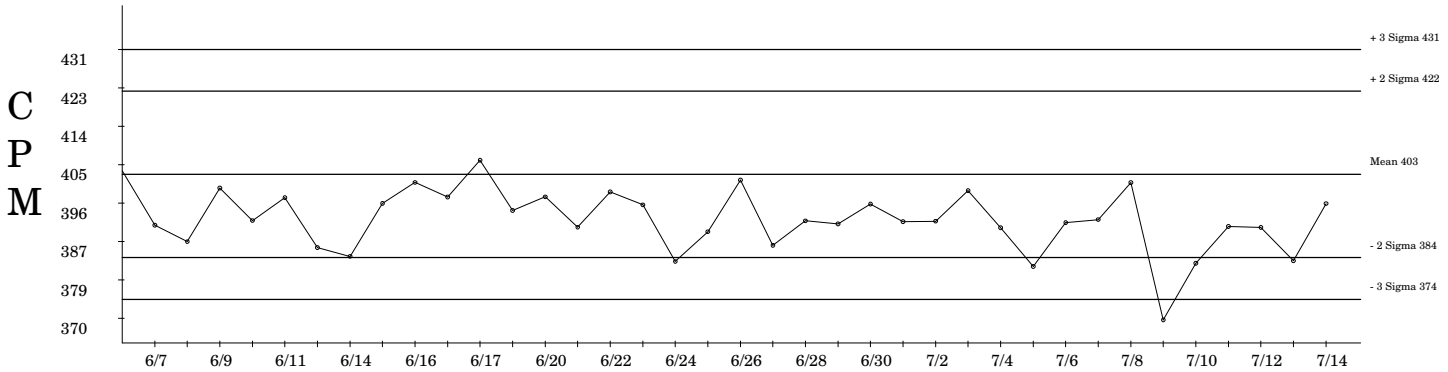

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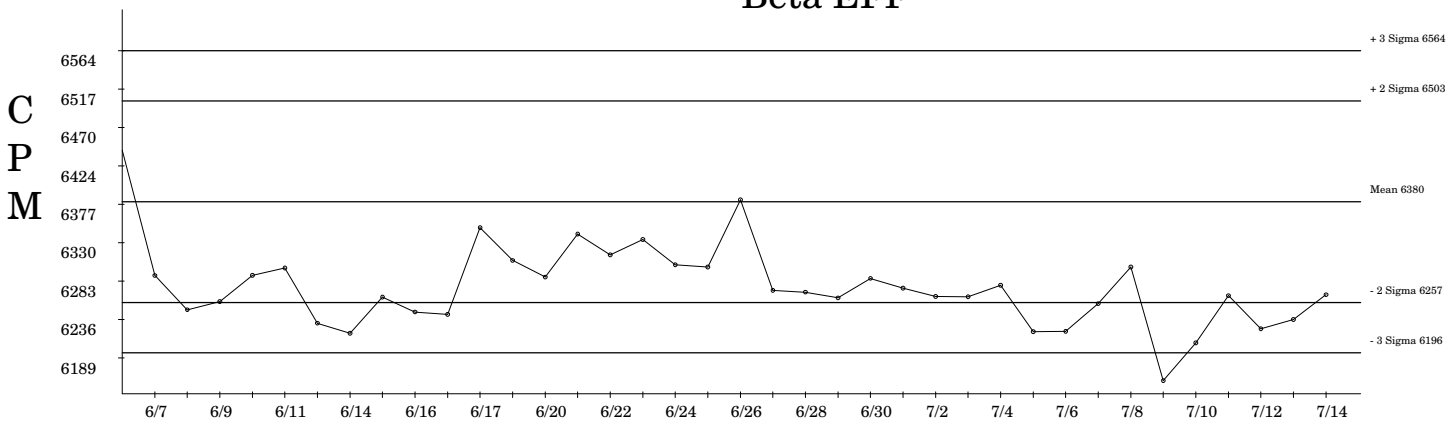
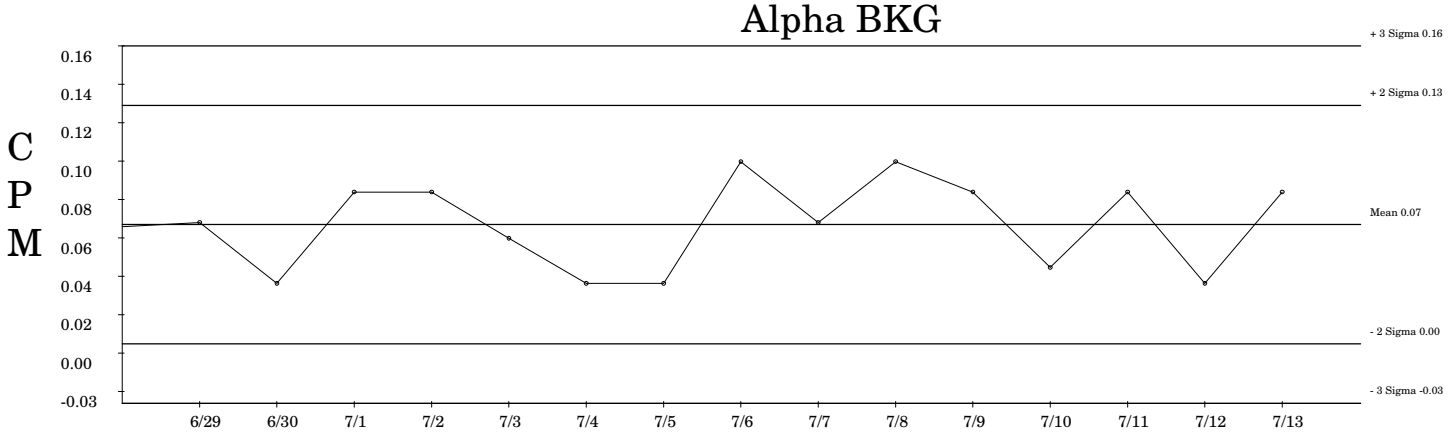


○ Denotes Outlier

PIC2A 07/13/2005

Alpha BKG



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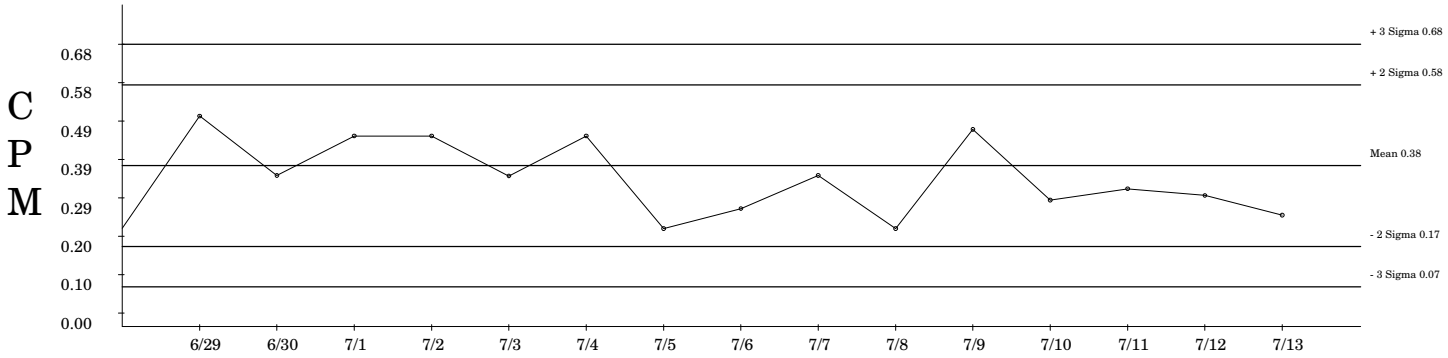

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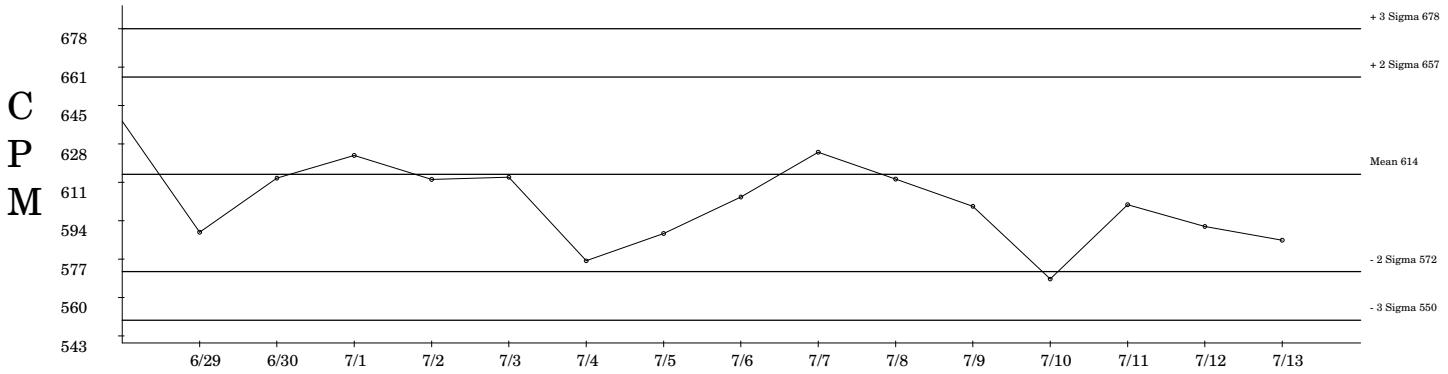

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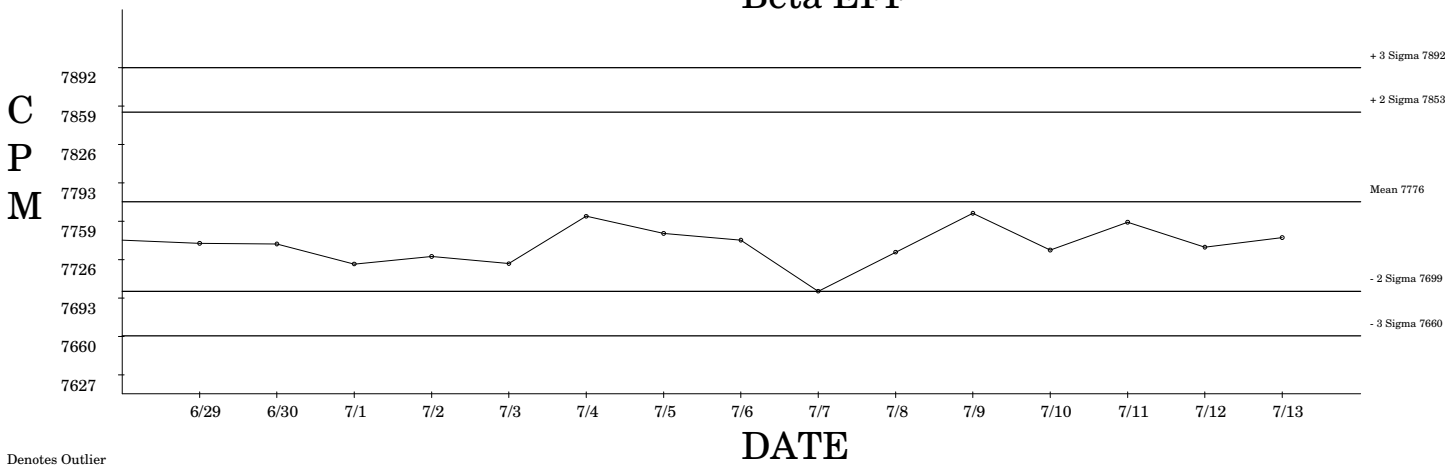
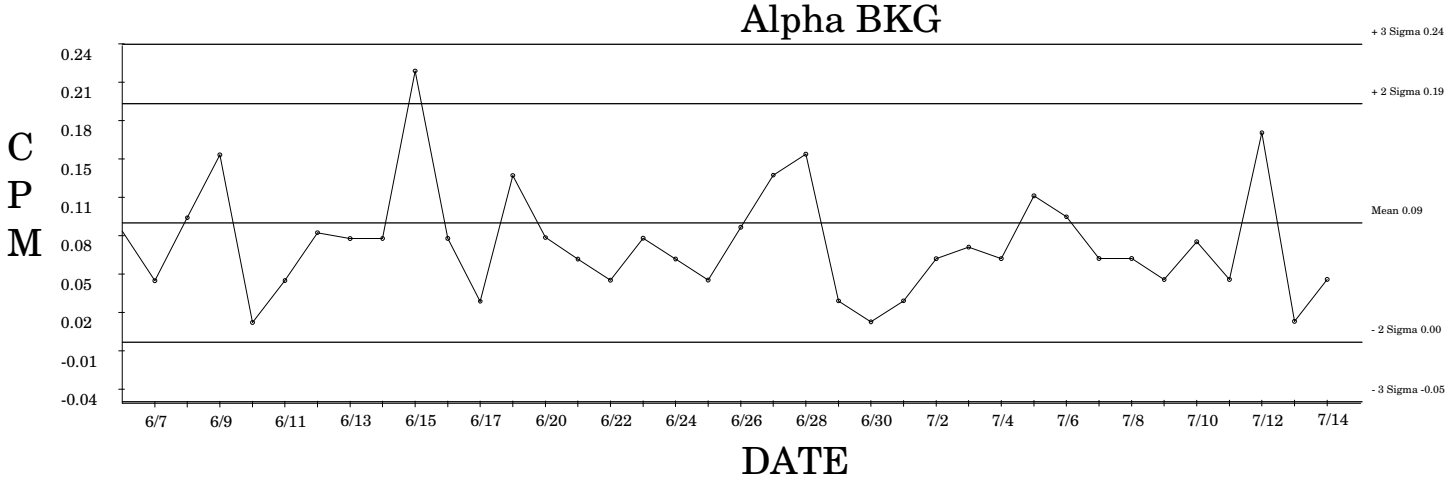


○ Denotes Outlier

PIC2B 07/14/2005

Alpha BKG



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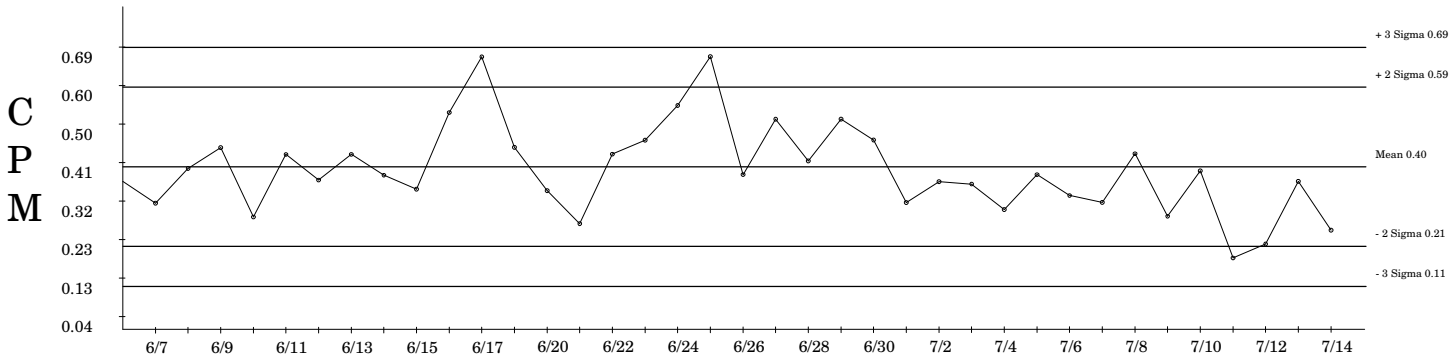

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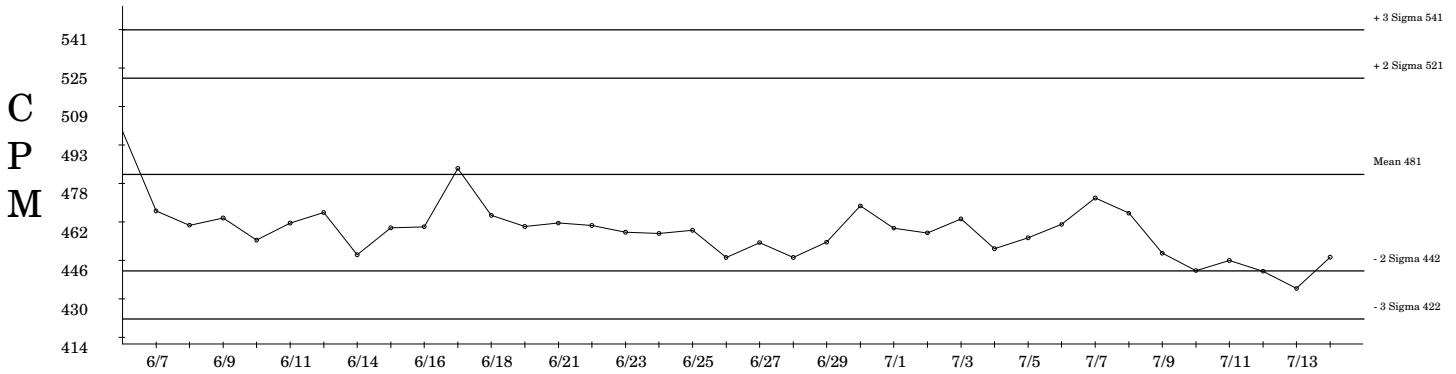

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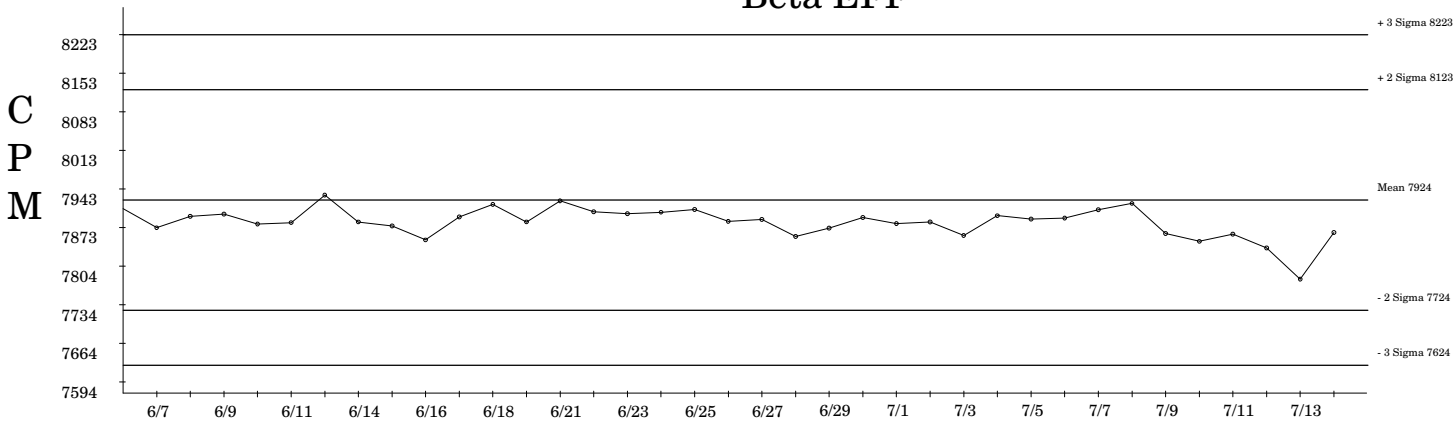
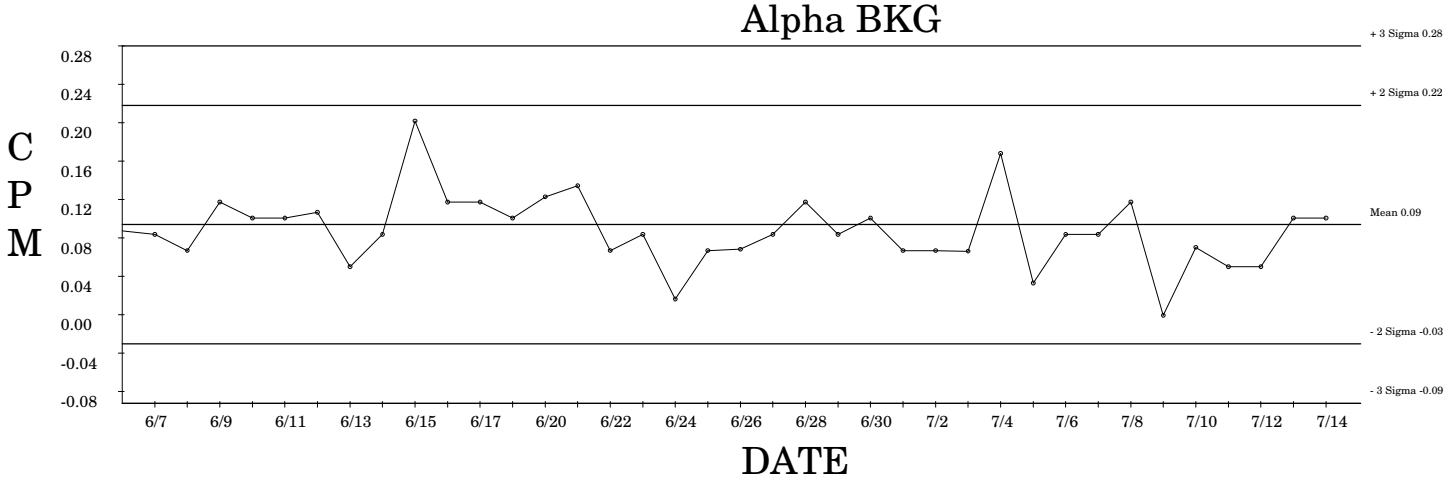


○ Denotes Outlier

PIC2C 07/14/2005

Alpha BKG



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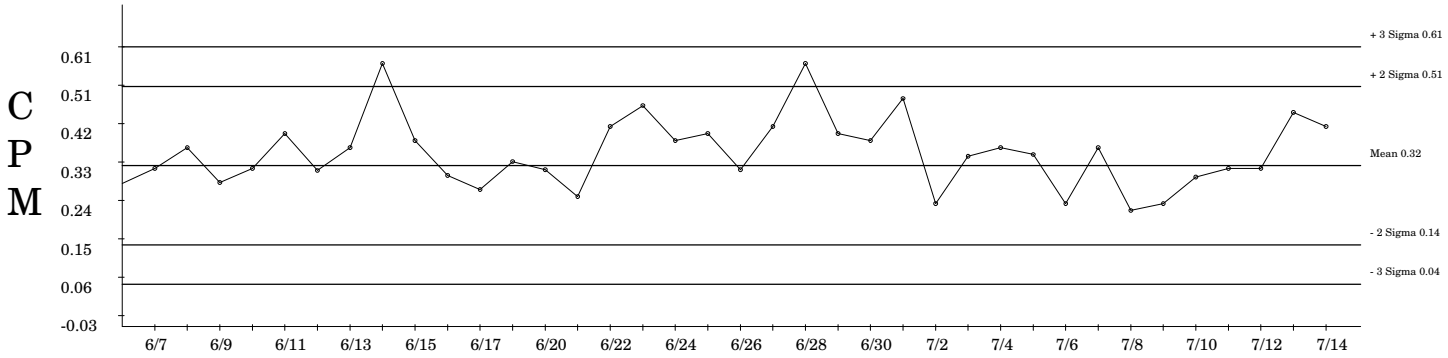

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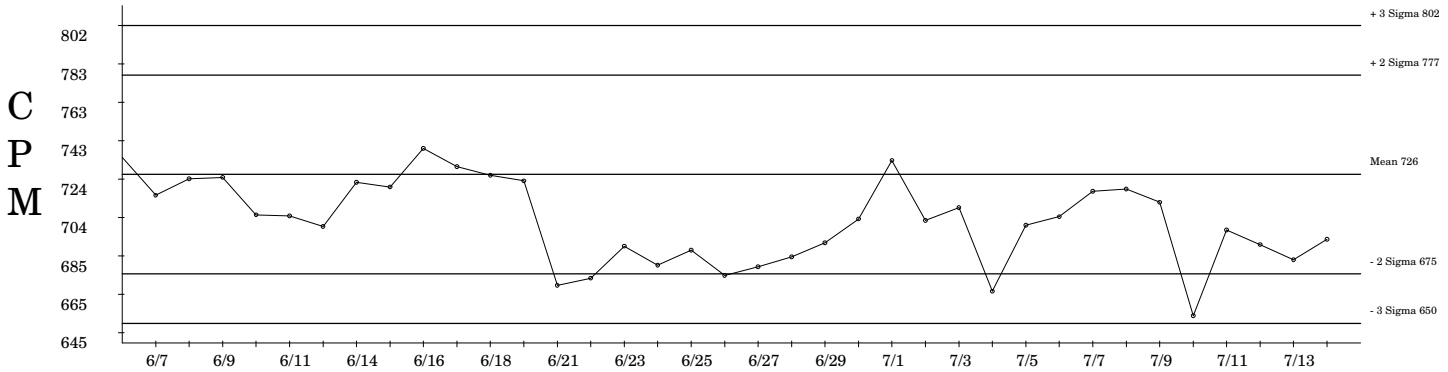

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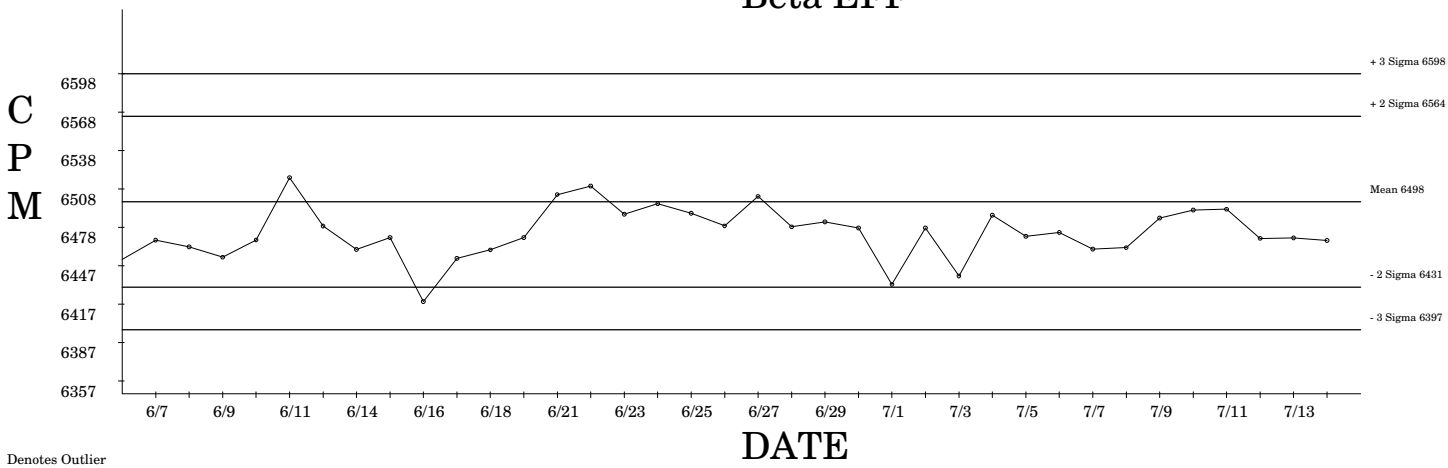

○ Denotes Outlier

PIC2D 07/14/2005

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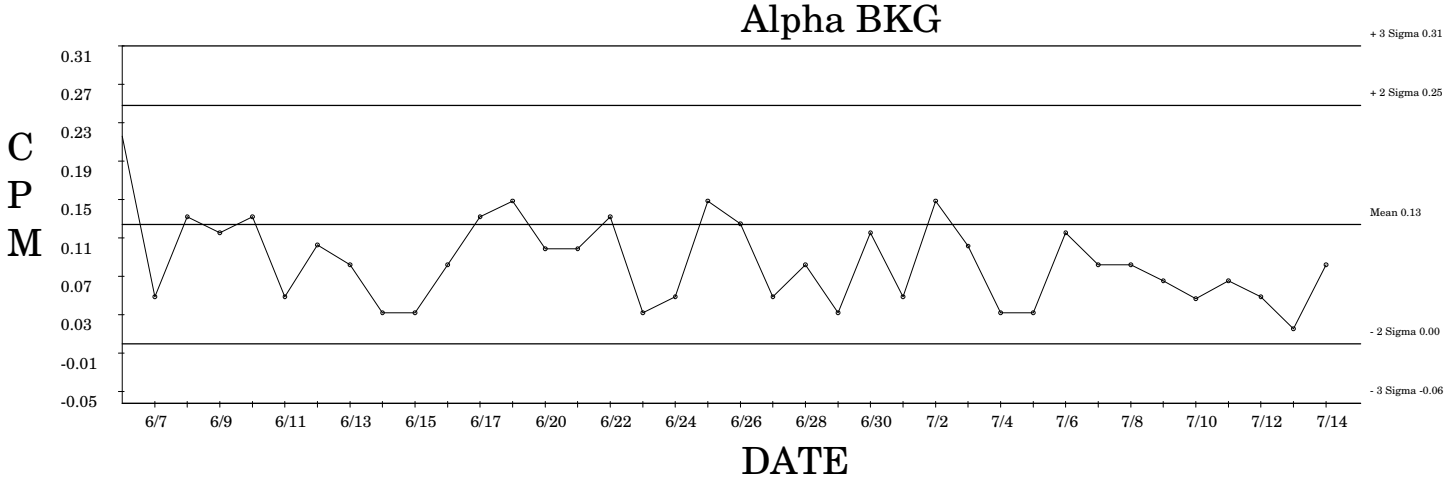

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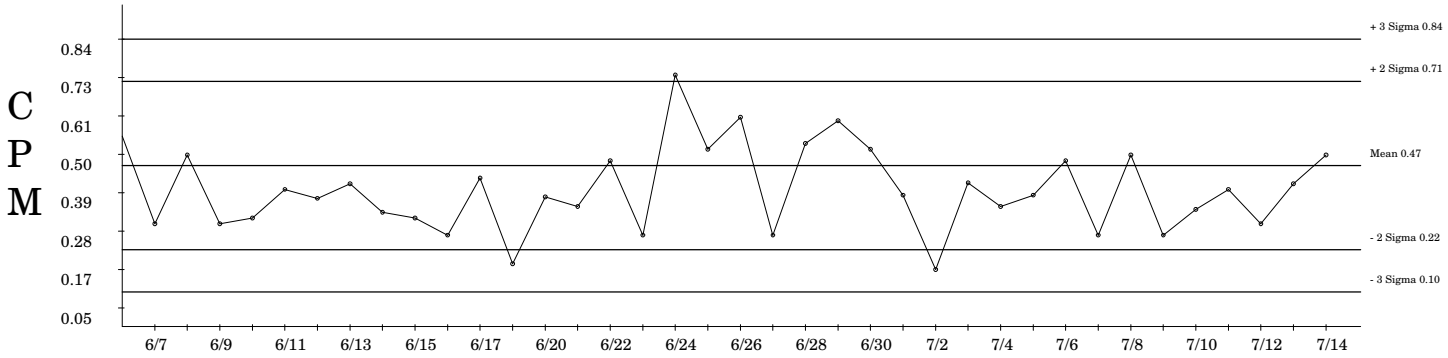

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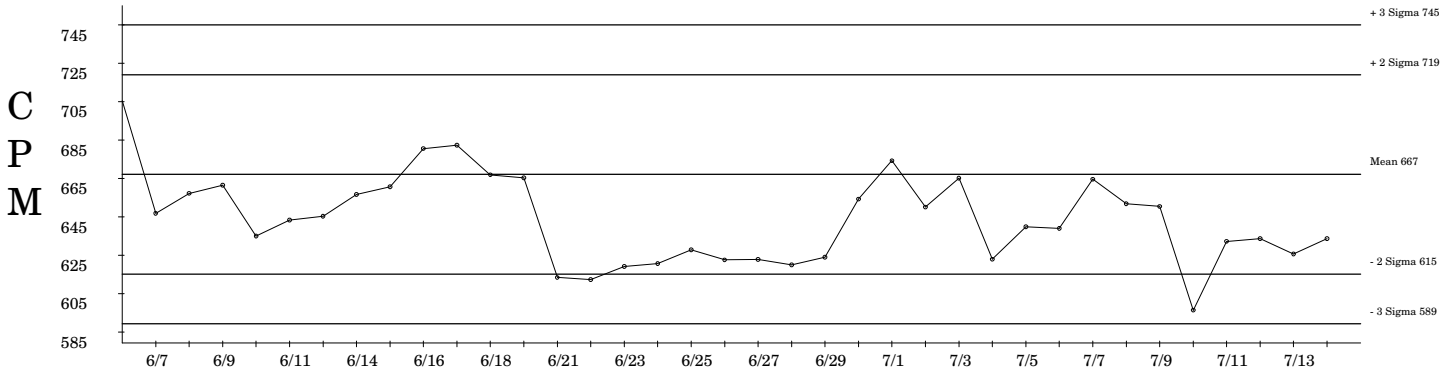

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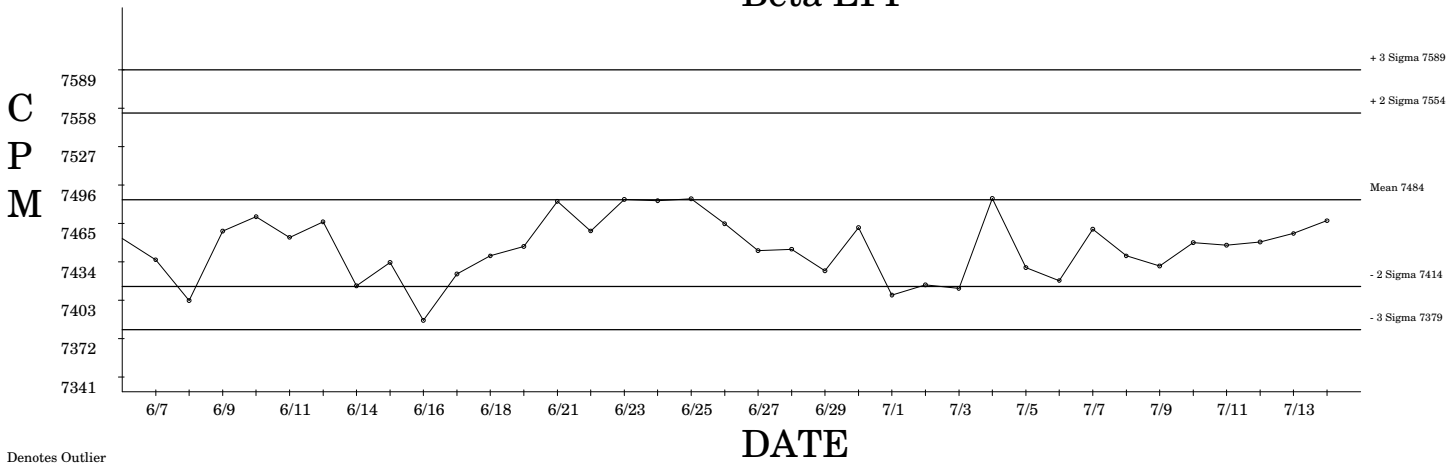
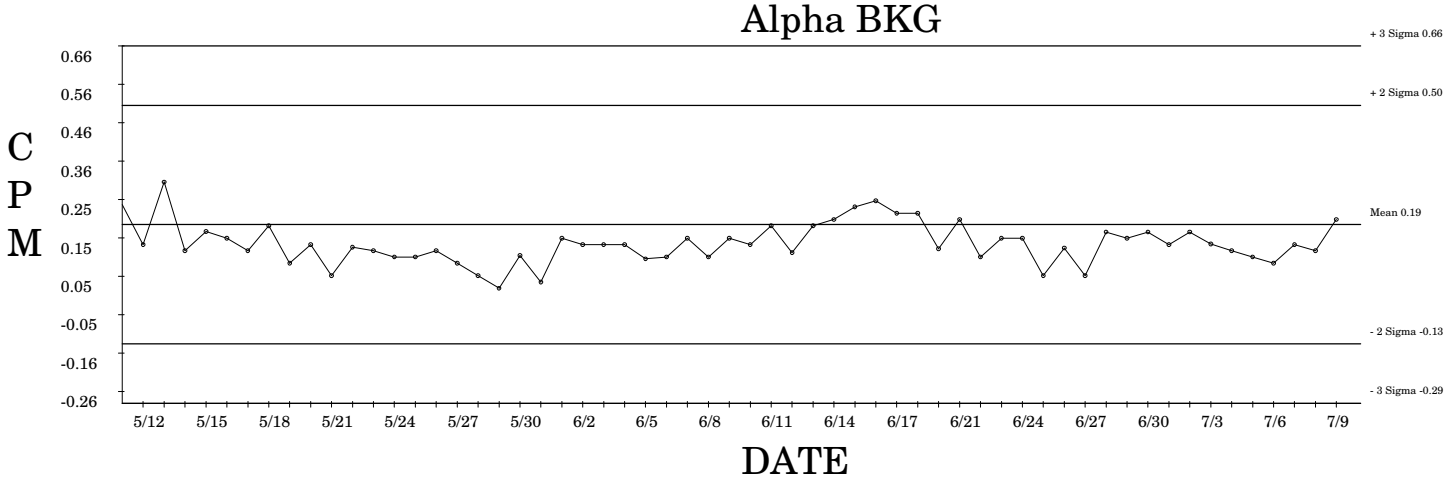


○ Denotes Outlier

PIC3A 07/09/2005

Alpha BKG



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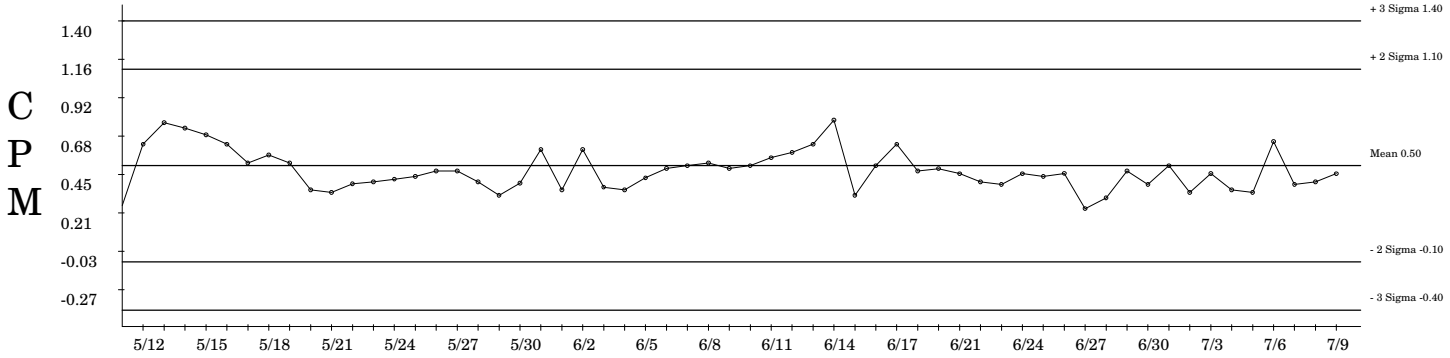

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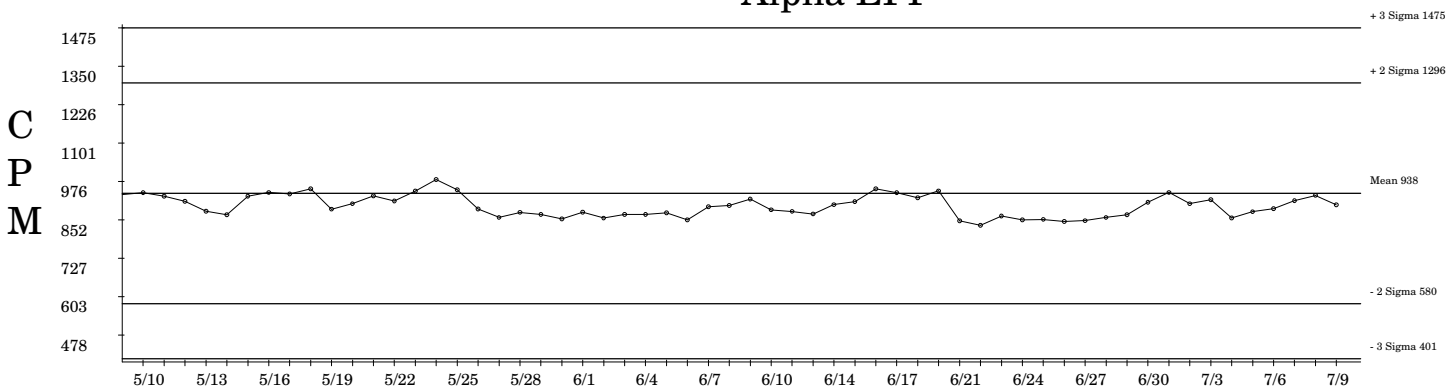

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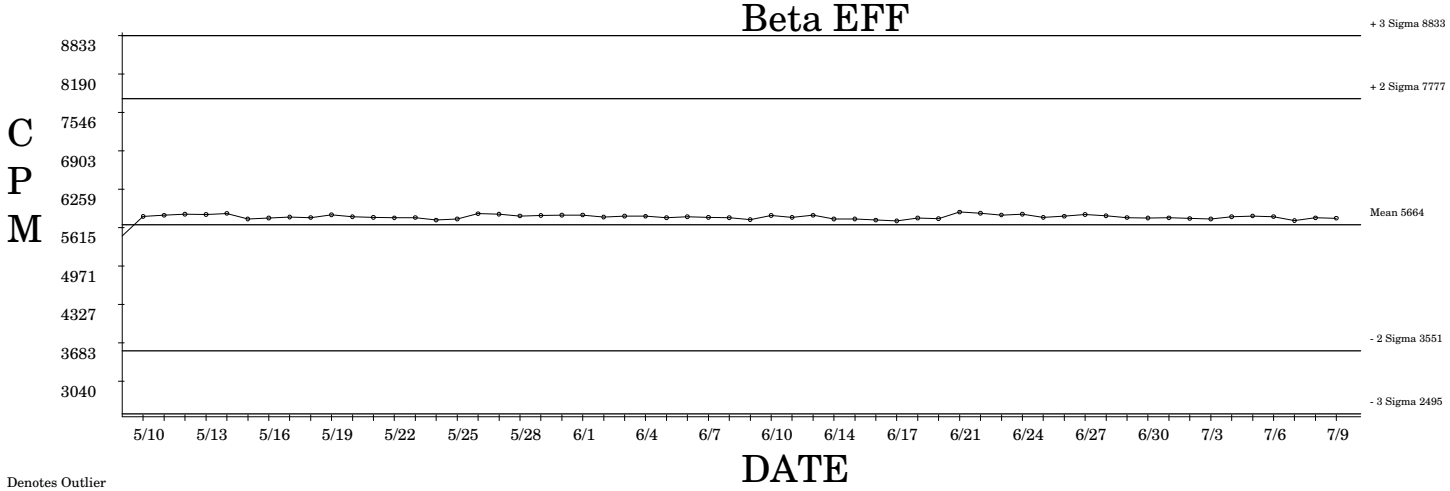

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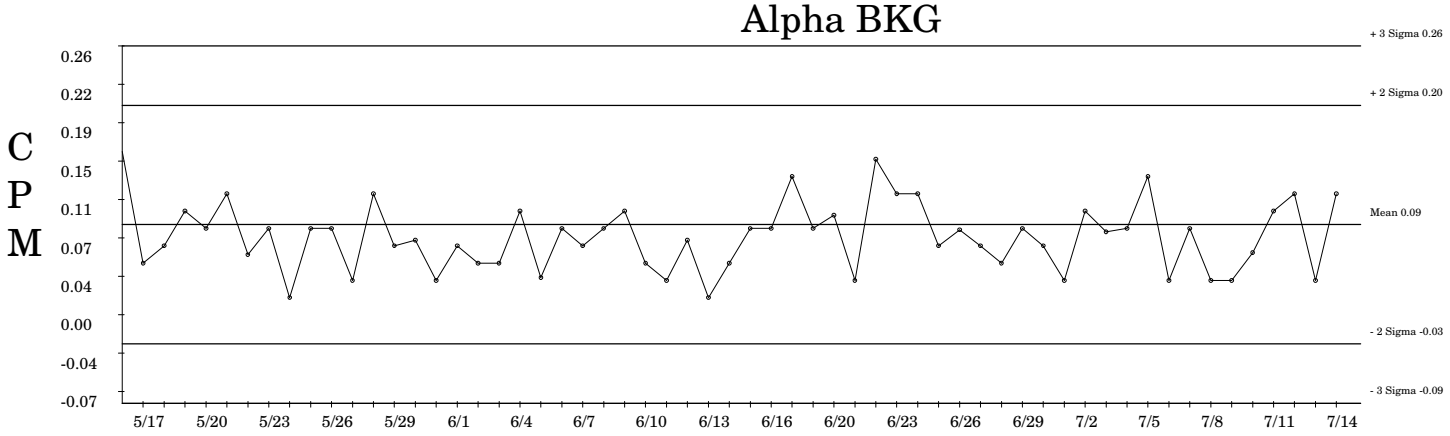
PIC3C 07/14/2005

Alpha BKG



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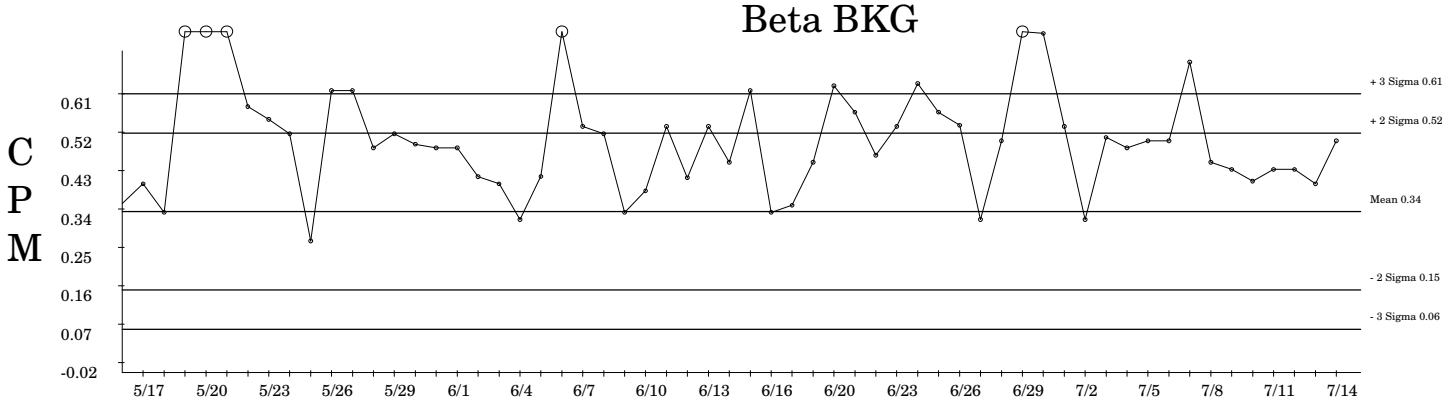

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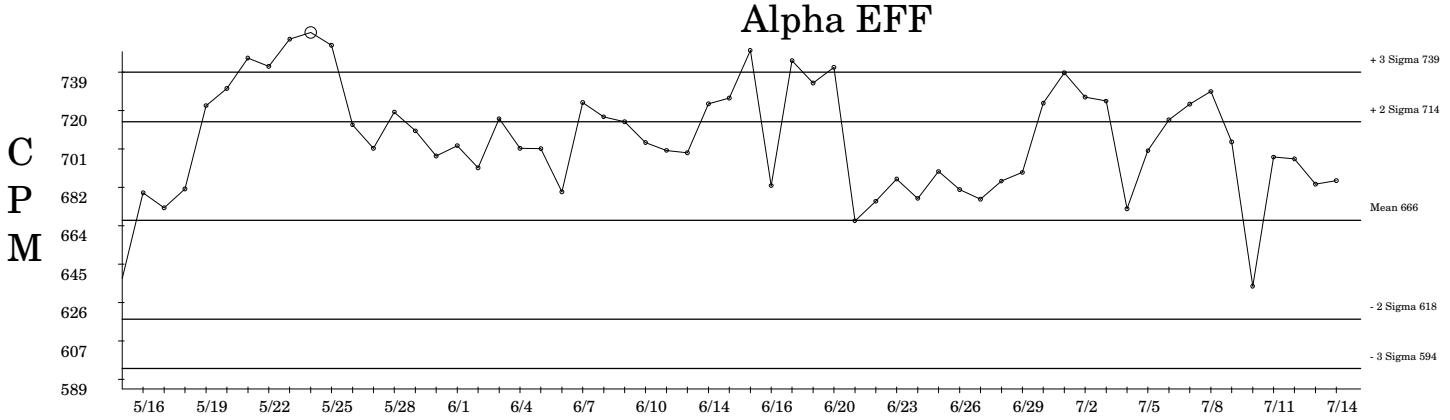

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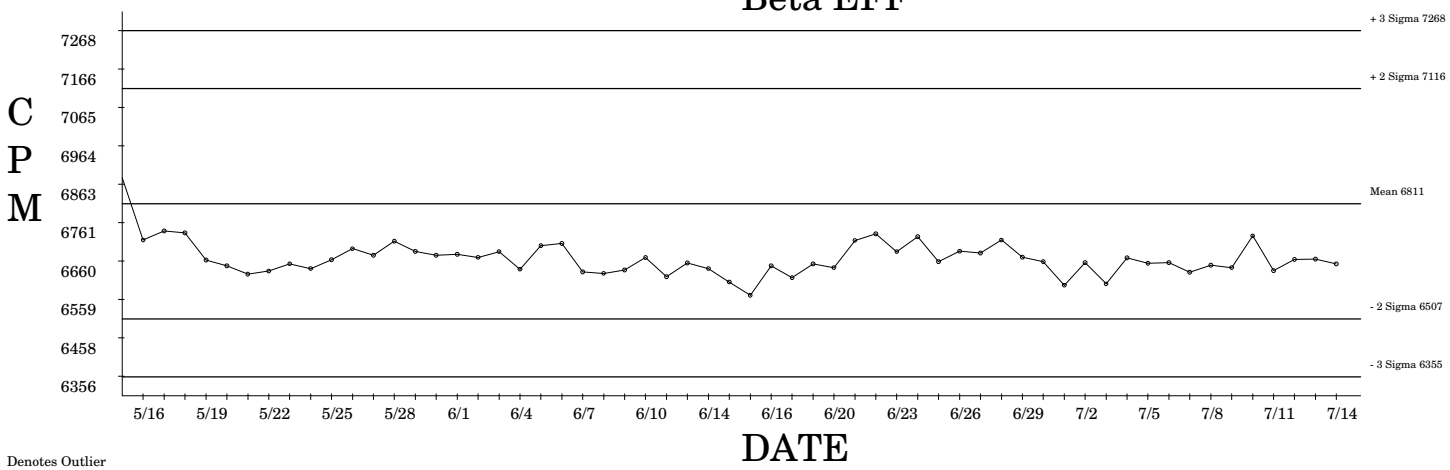
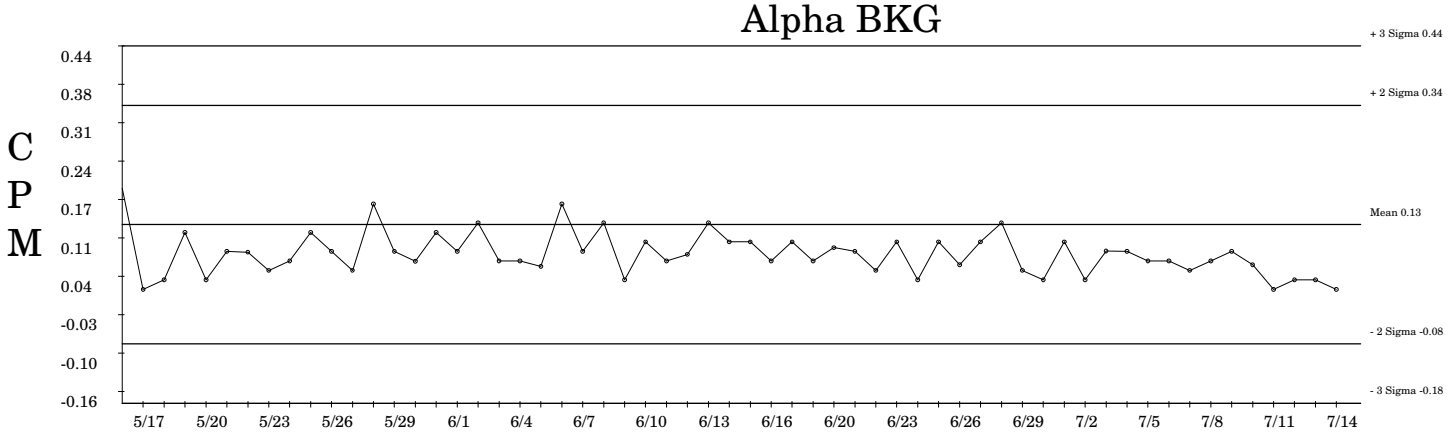


○ Denotes Outlier

PIC3D 07/14/2005

Alpha BKG



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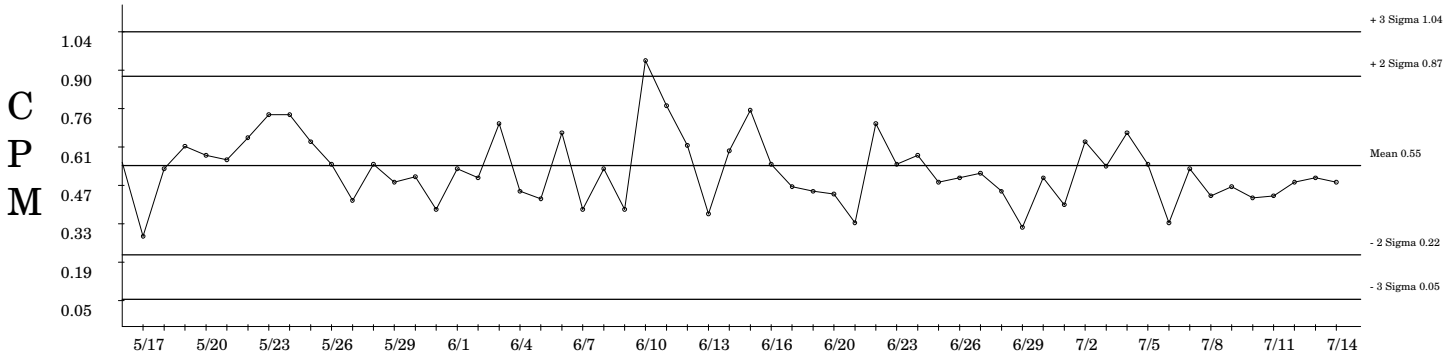

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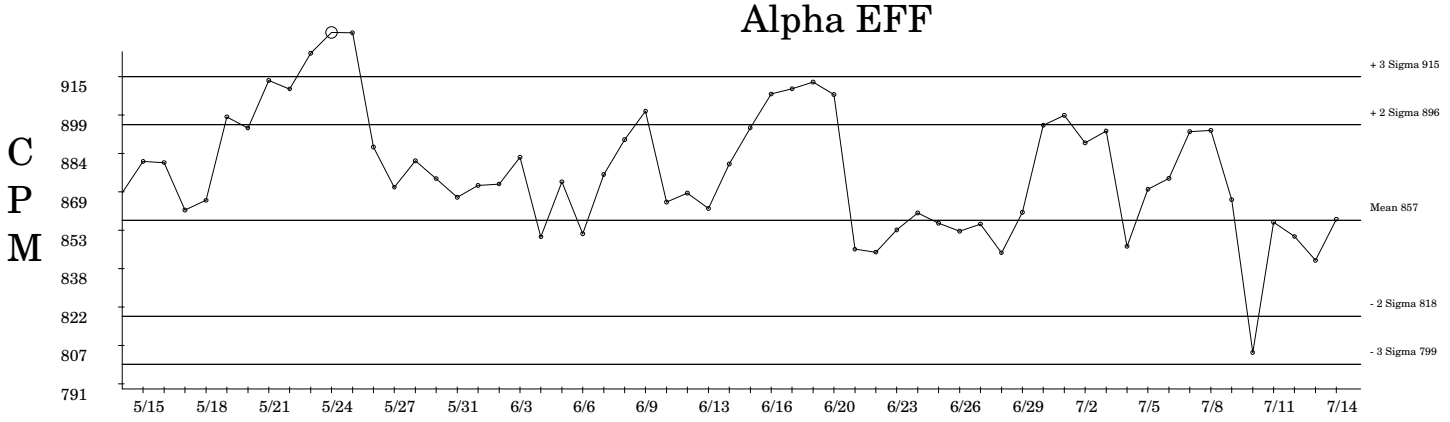

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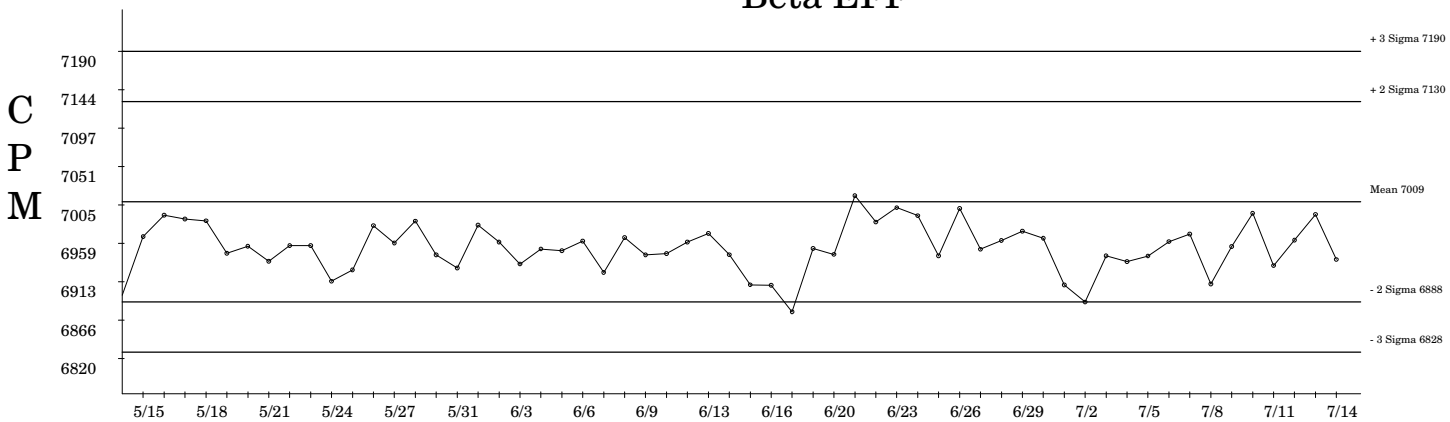
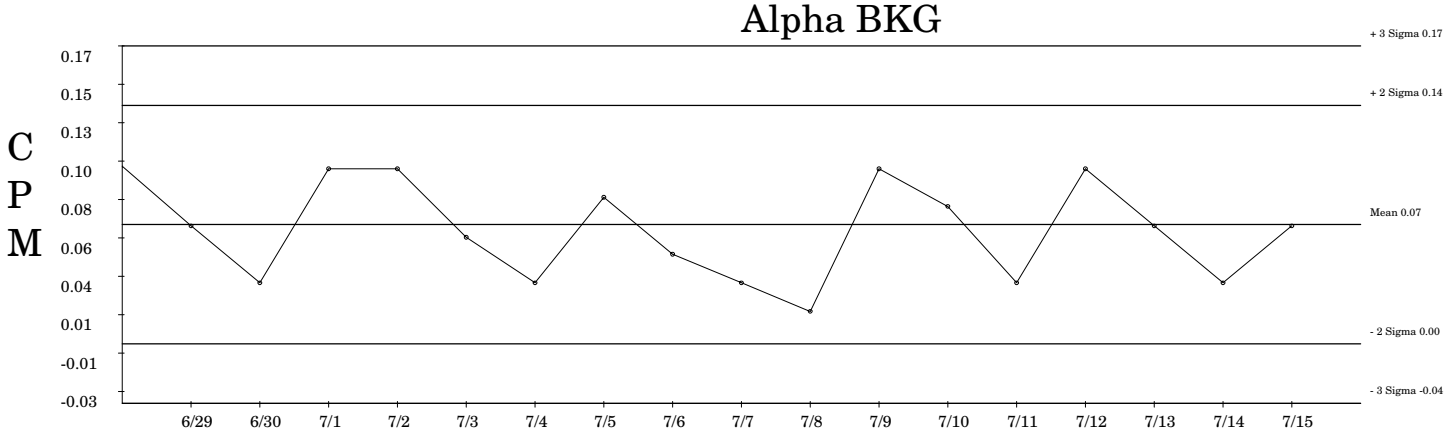


○ Denotes Outlier

PIC4A 07/15/2005

Alpha BKG



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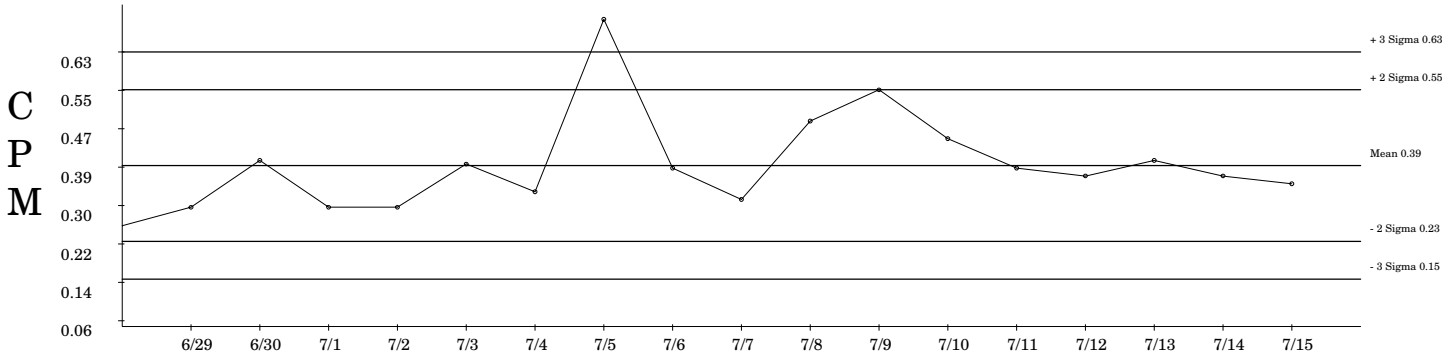

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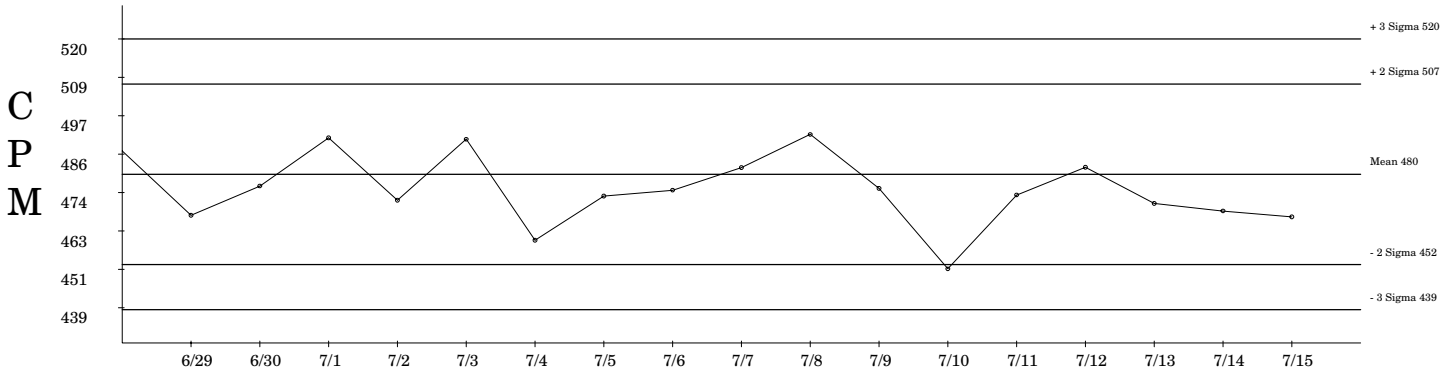

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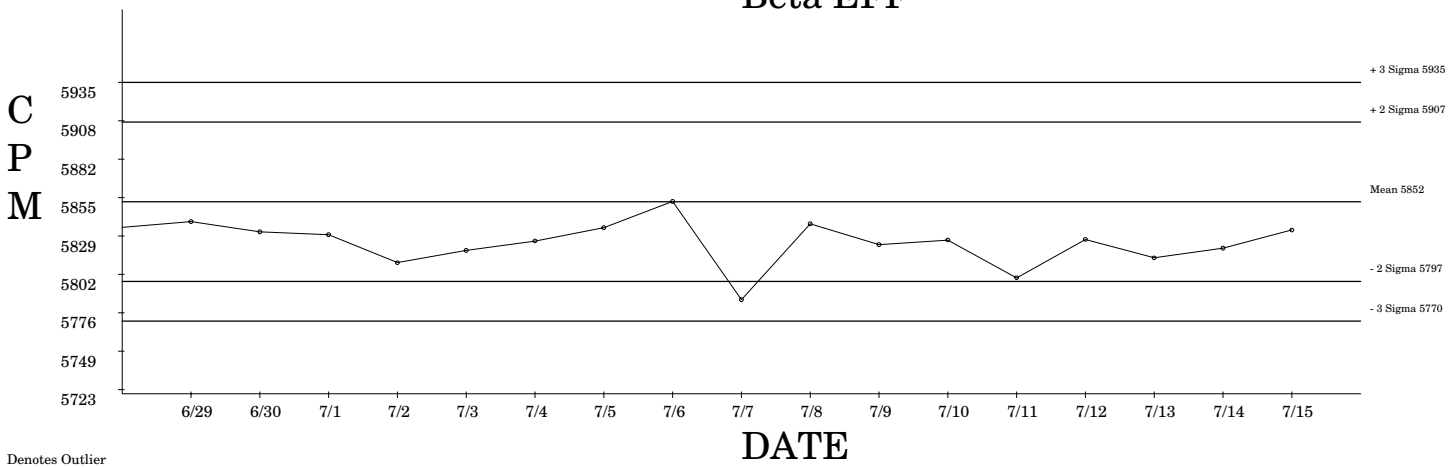
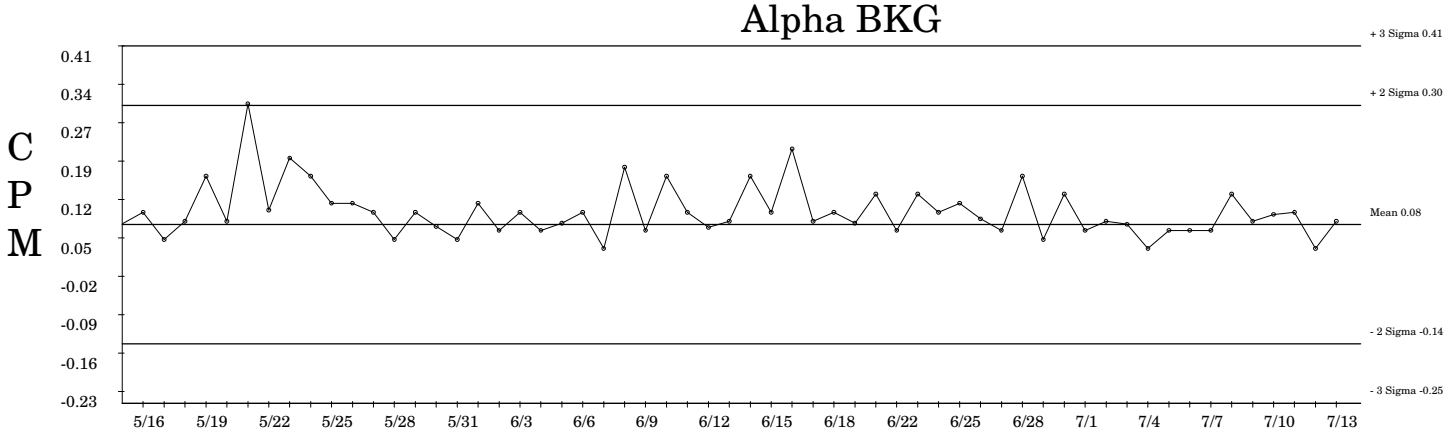


○ Denotes Outlier

PIC4C 07/13/2005

Alpha BKG



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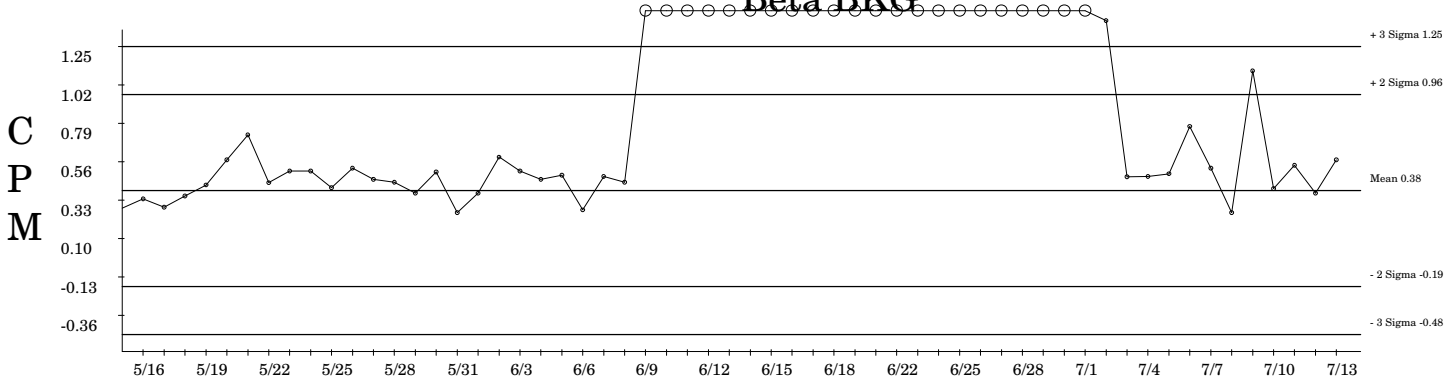

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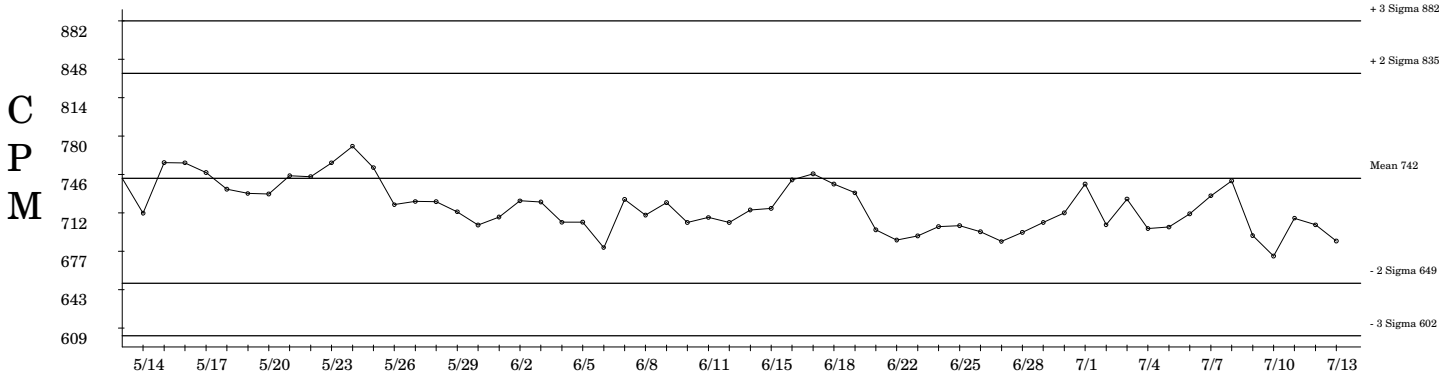

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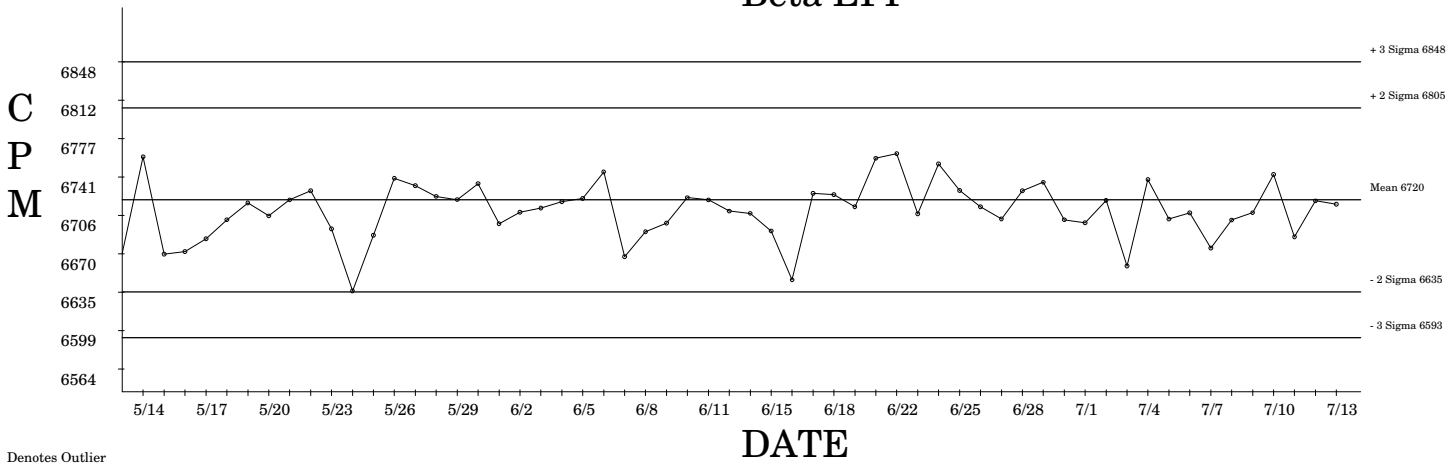

○ Denotes Outlier

PIC4D 07/13/2005

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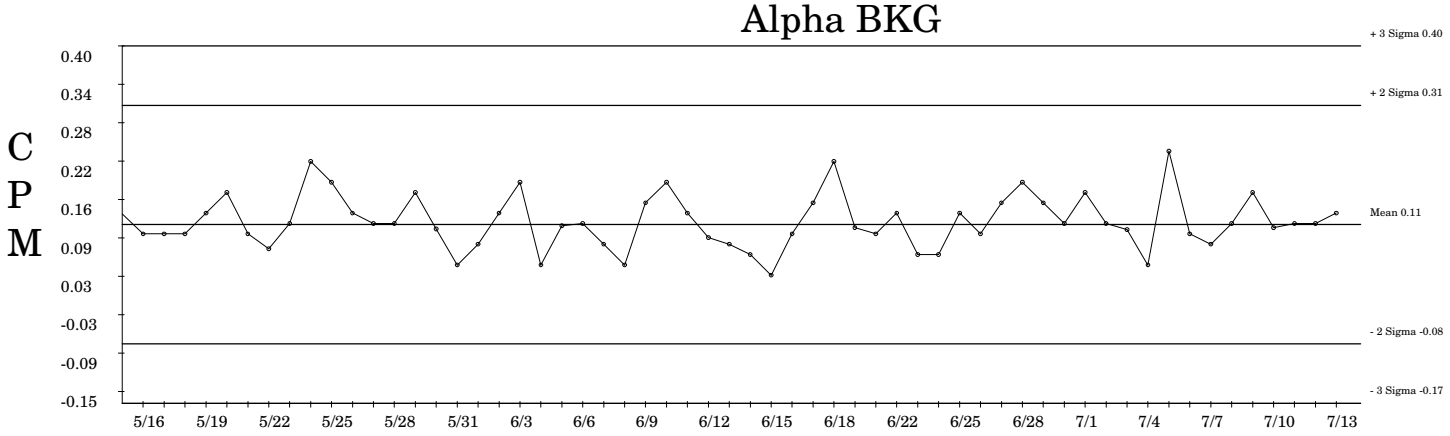

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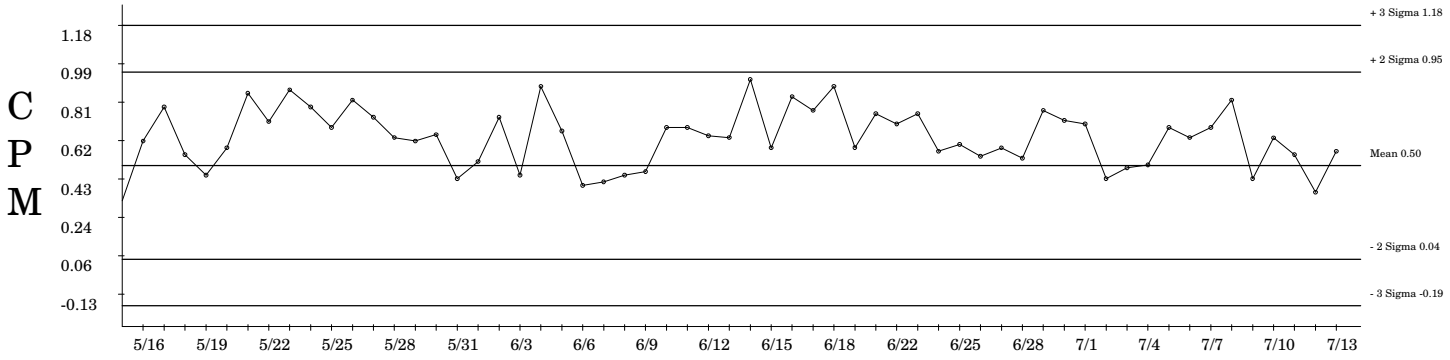
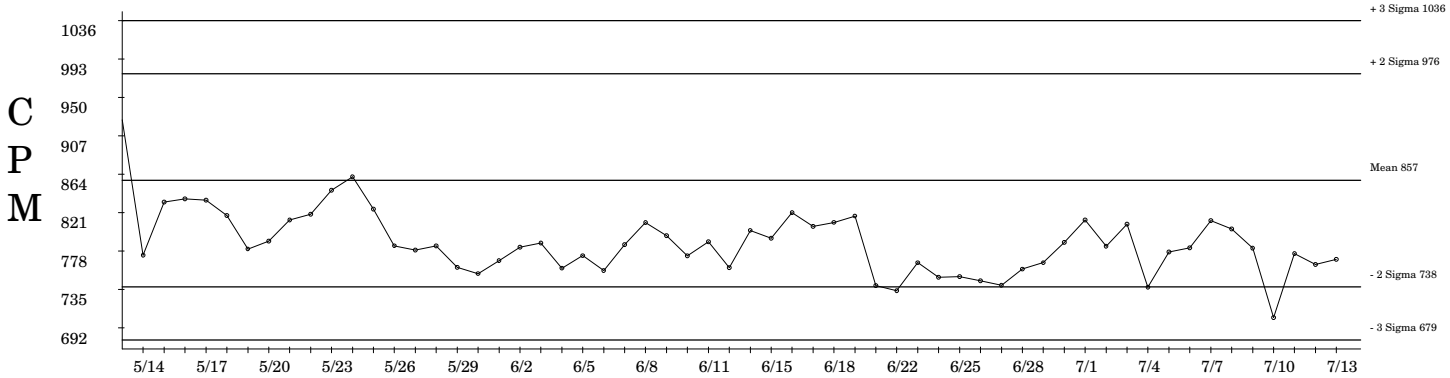
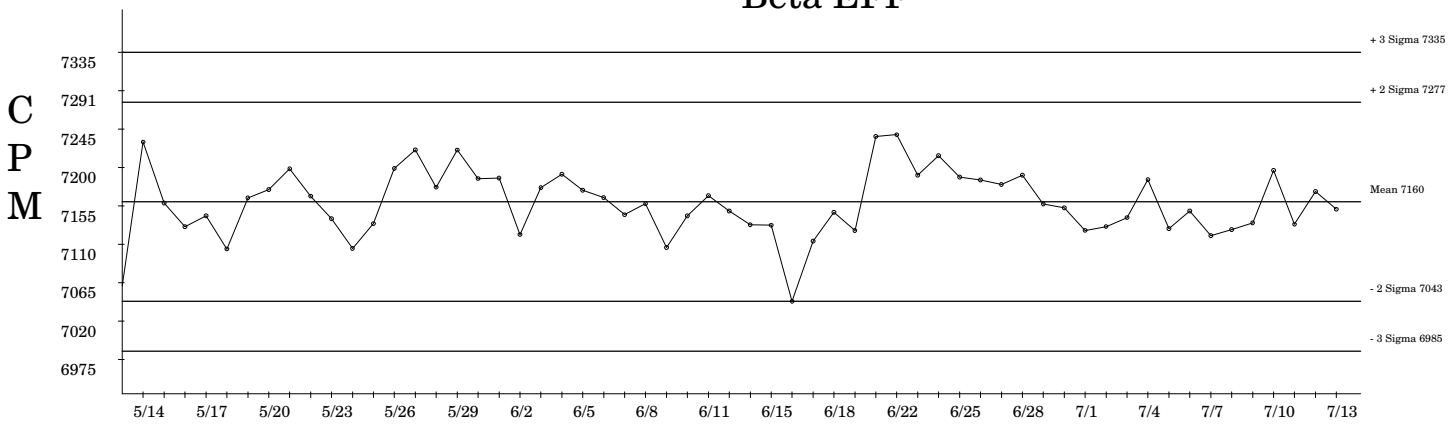


Alpha EFF

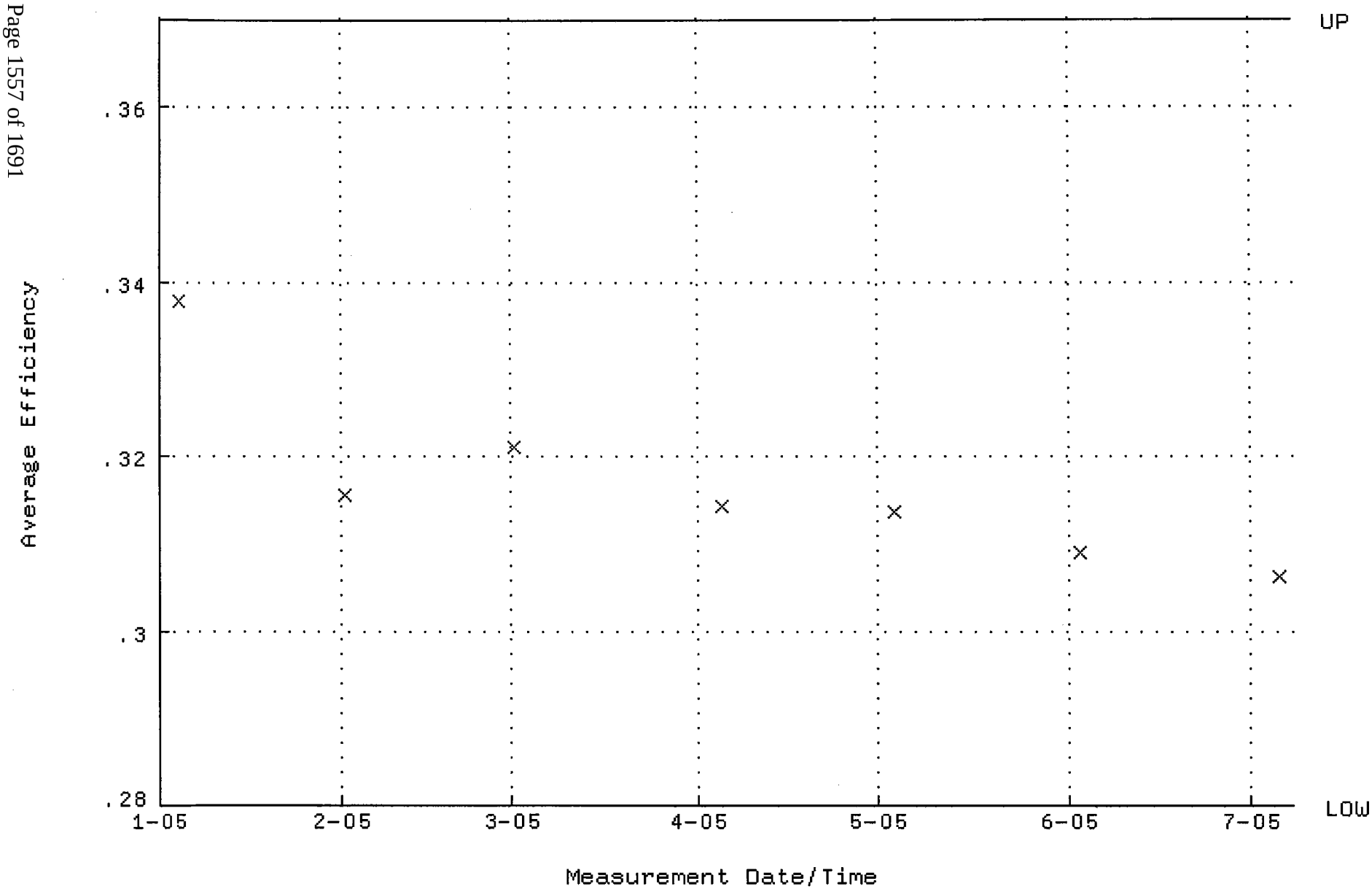


Beta EFF

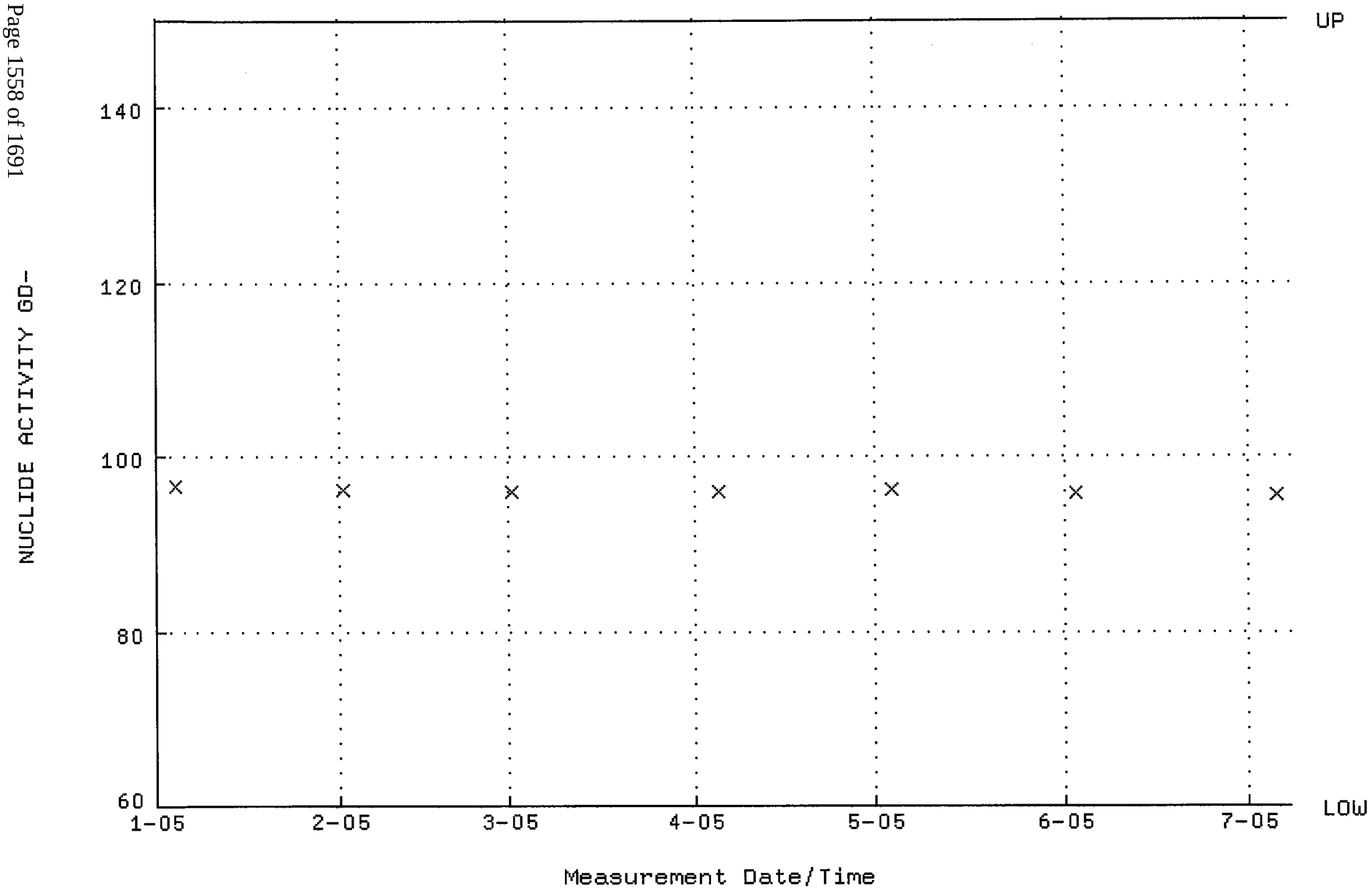


○ Denotes Outlier

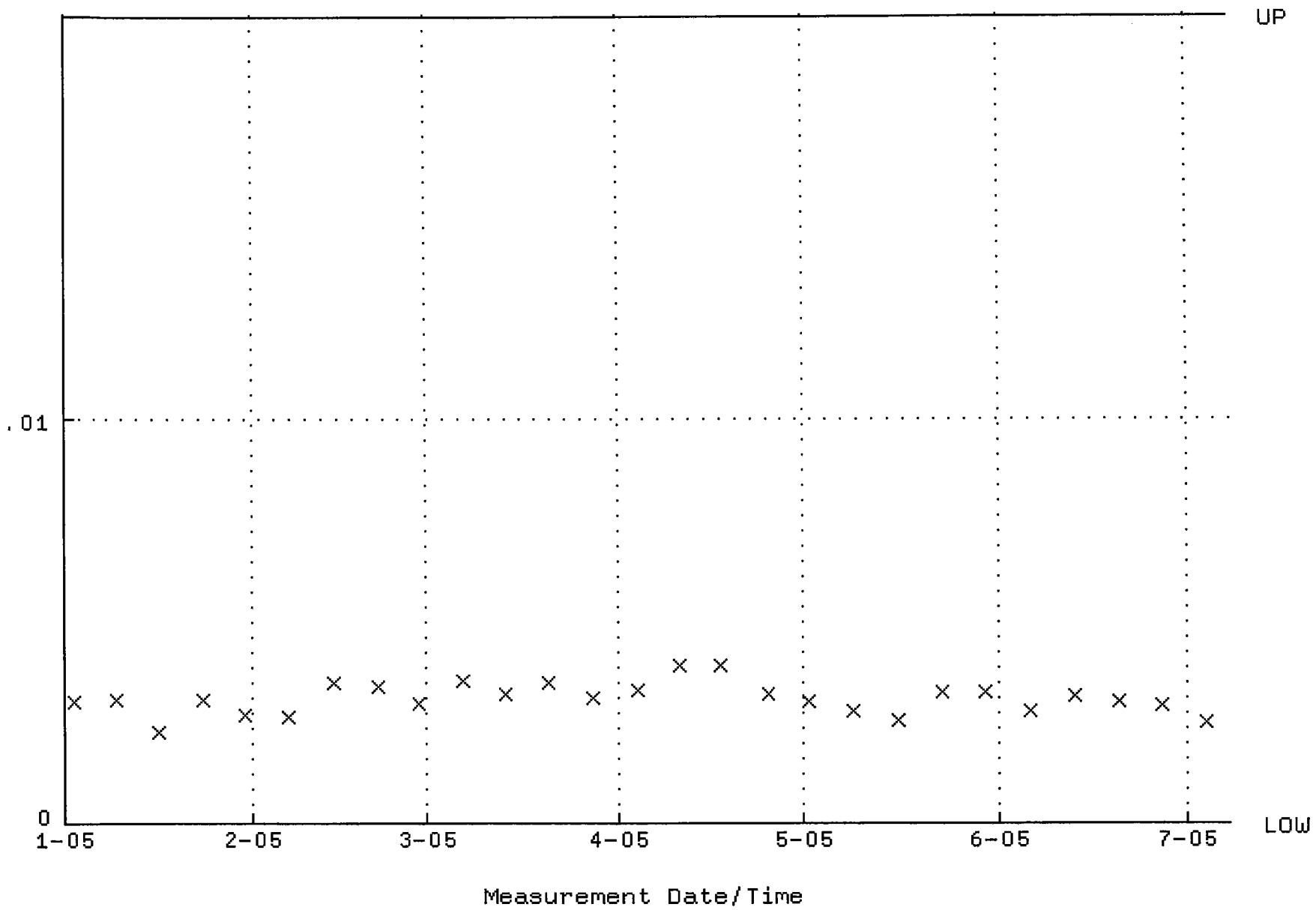
QA filename : DKA100:[ENV_ALPHA.QA.W]W043.QAF;102
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 07:29:20 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



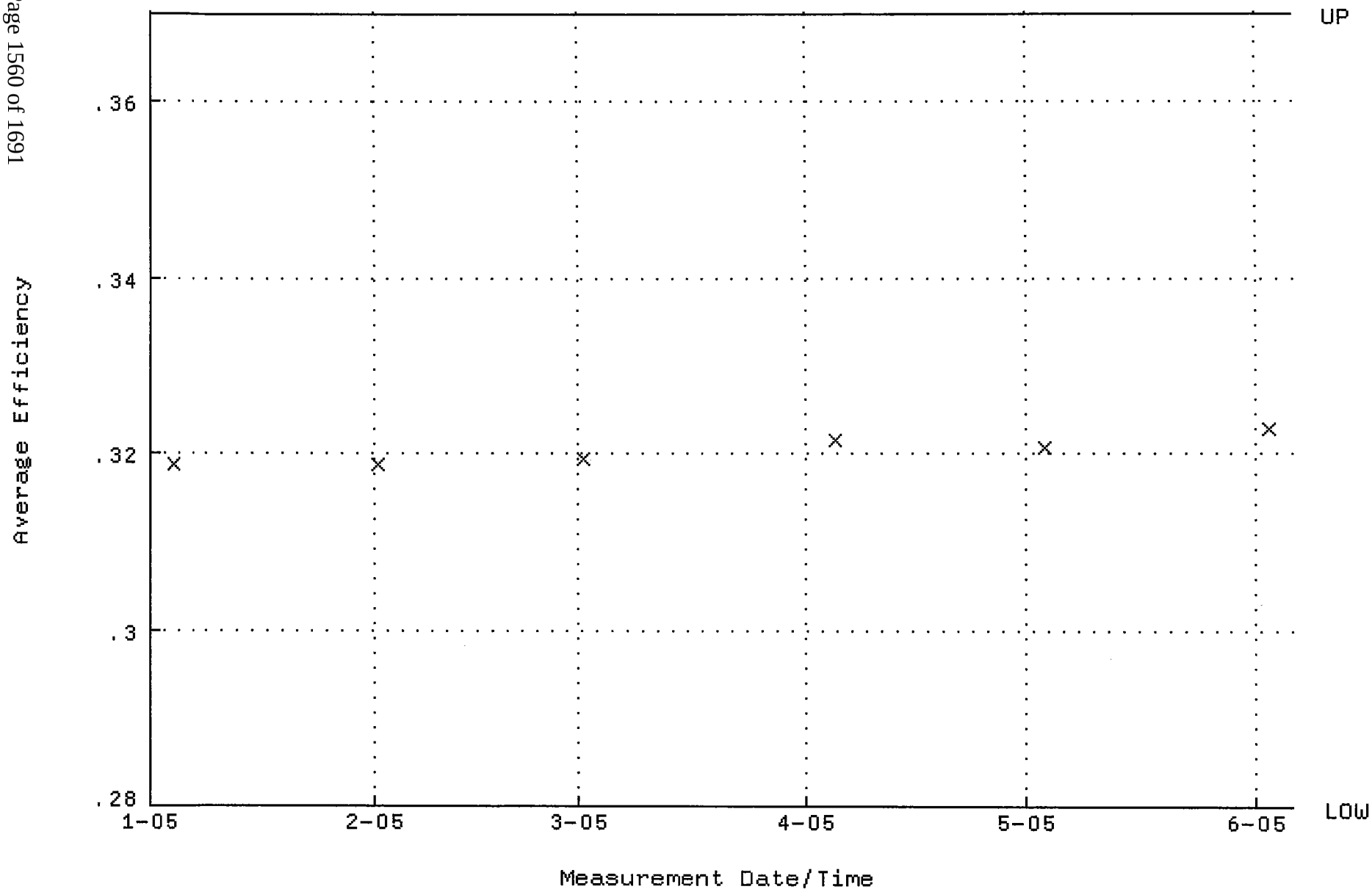
QA filename : DKA100:[ENV_ALPHA.QA.W]W043.QAF;102
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 07:29:20 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



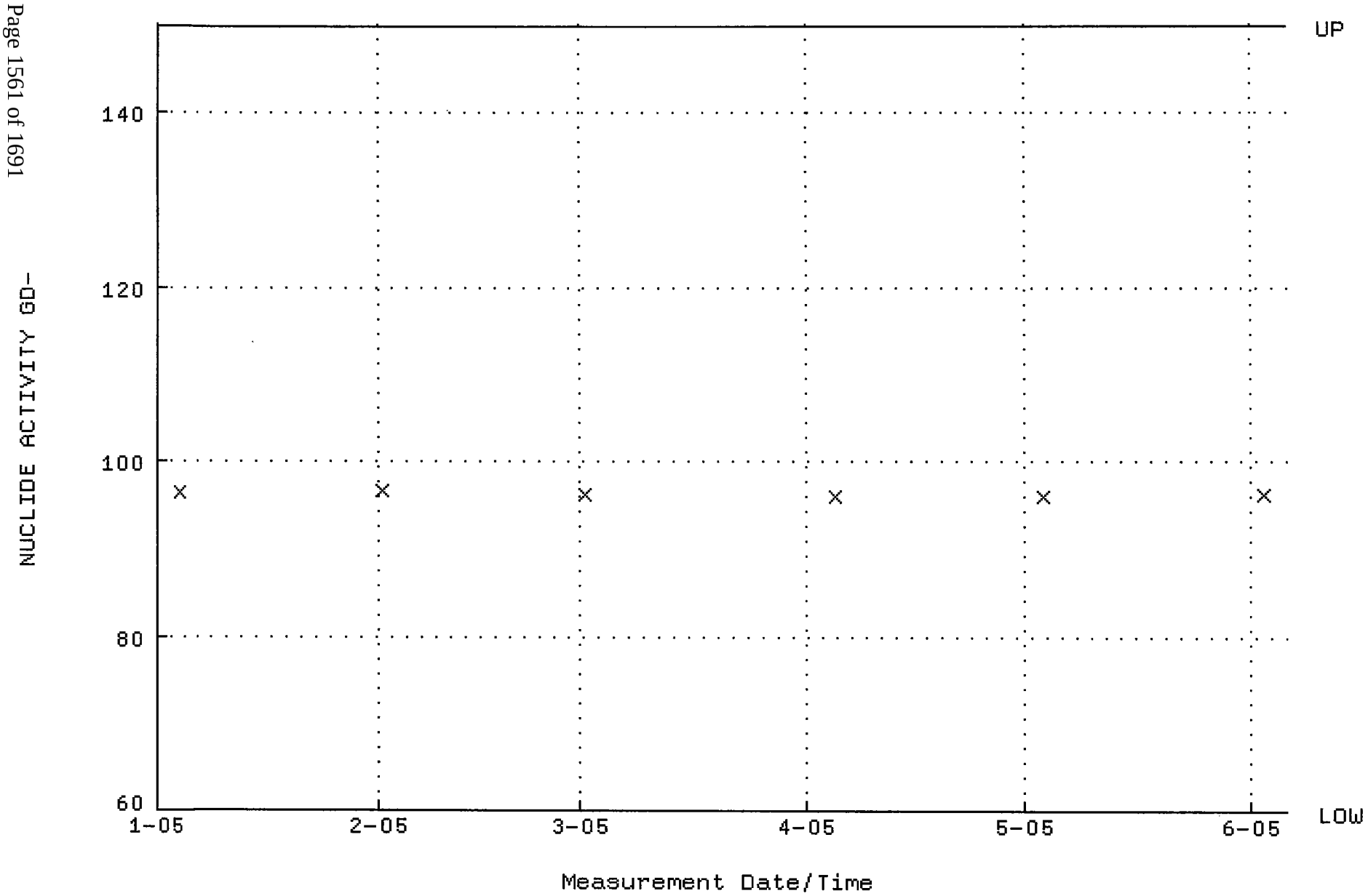
QA filename : DKA100:[ENV_ALPHA.QA.B]B043.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:04 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



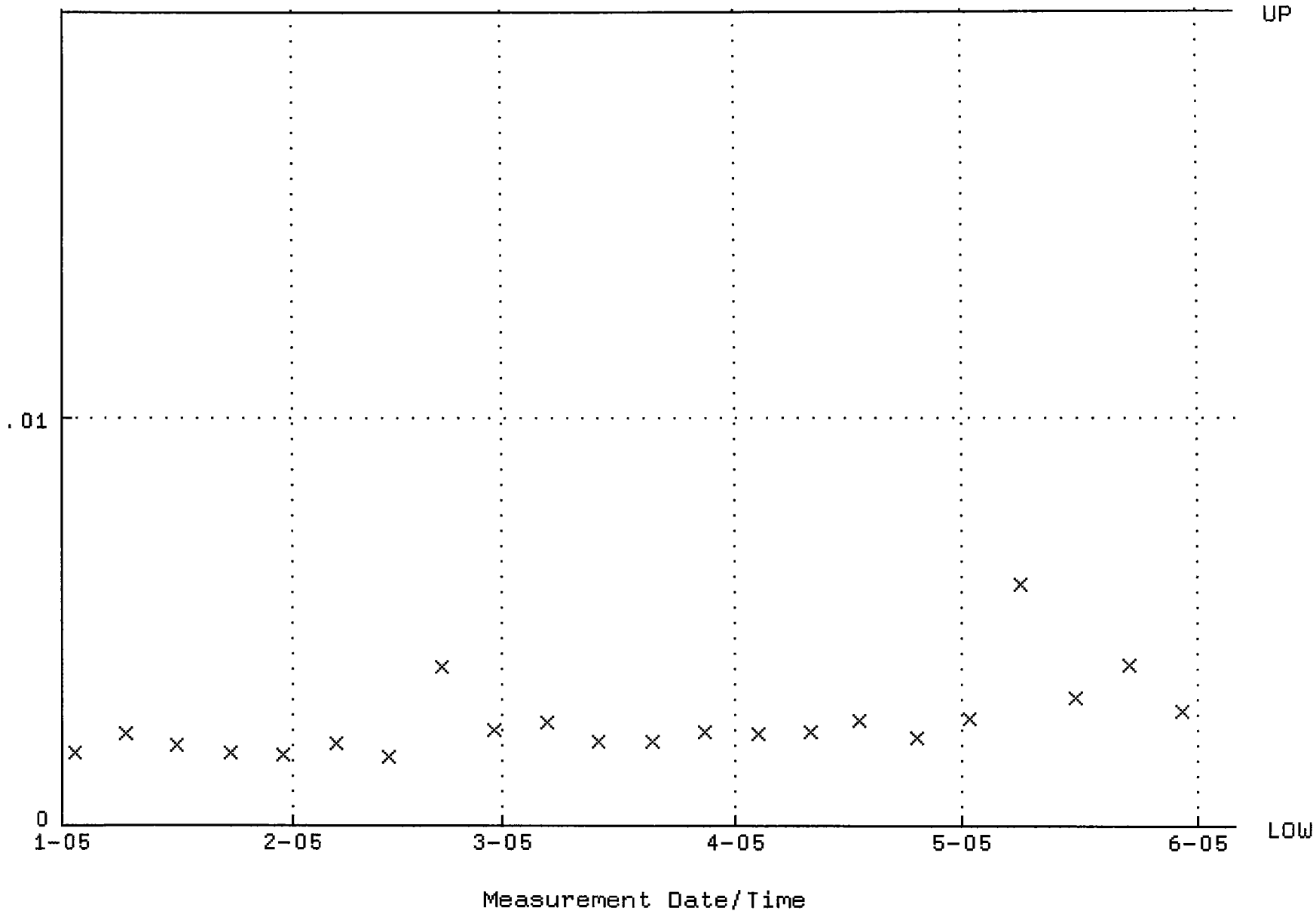
QA filename : DKA100:[ENV_ALPHA.QA.W]W045.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 07:29:20 through 5-JUN-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



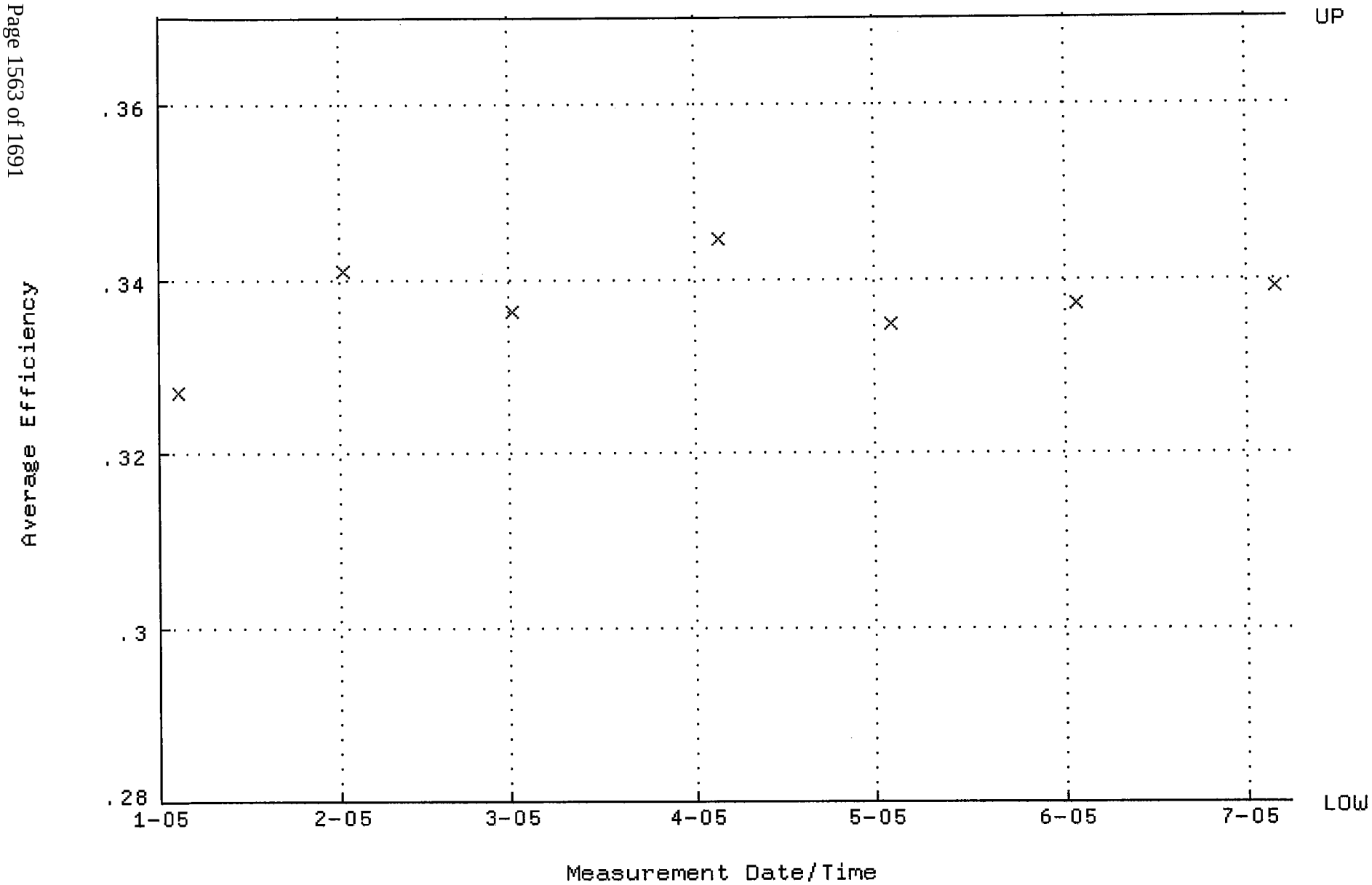
QA filename : DKA100:[ENV_ALPHA.QA.W]W045.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 07:29:20 through 5-JUN-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



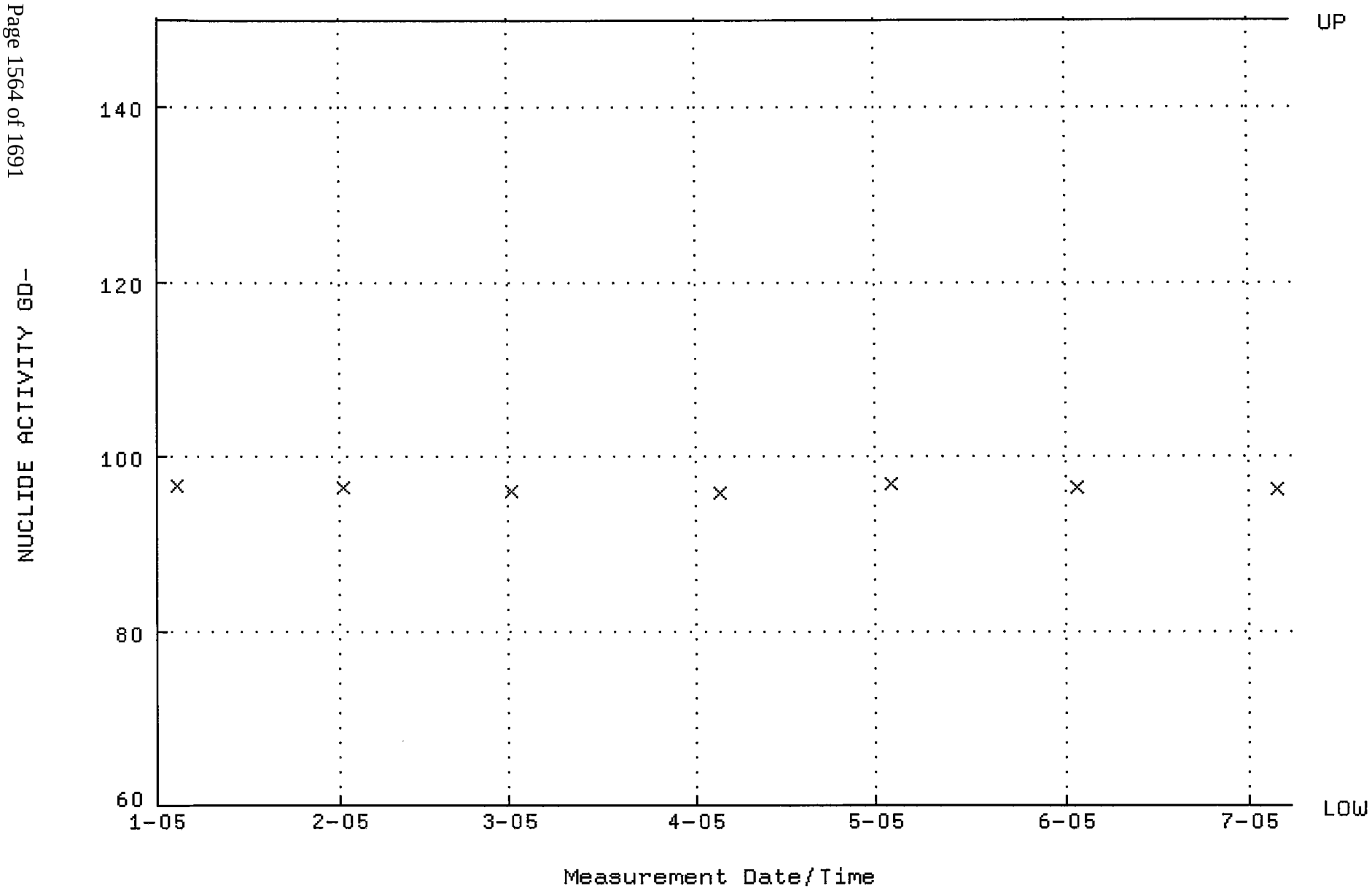
QA filename : DKA100:[ENV_ALPHA.QA.B]B045.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:04 through 5-JUN-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



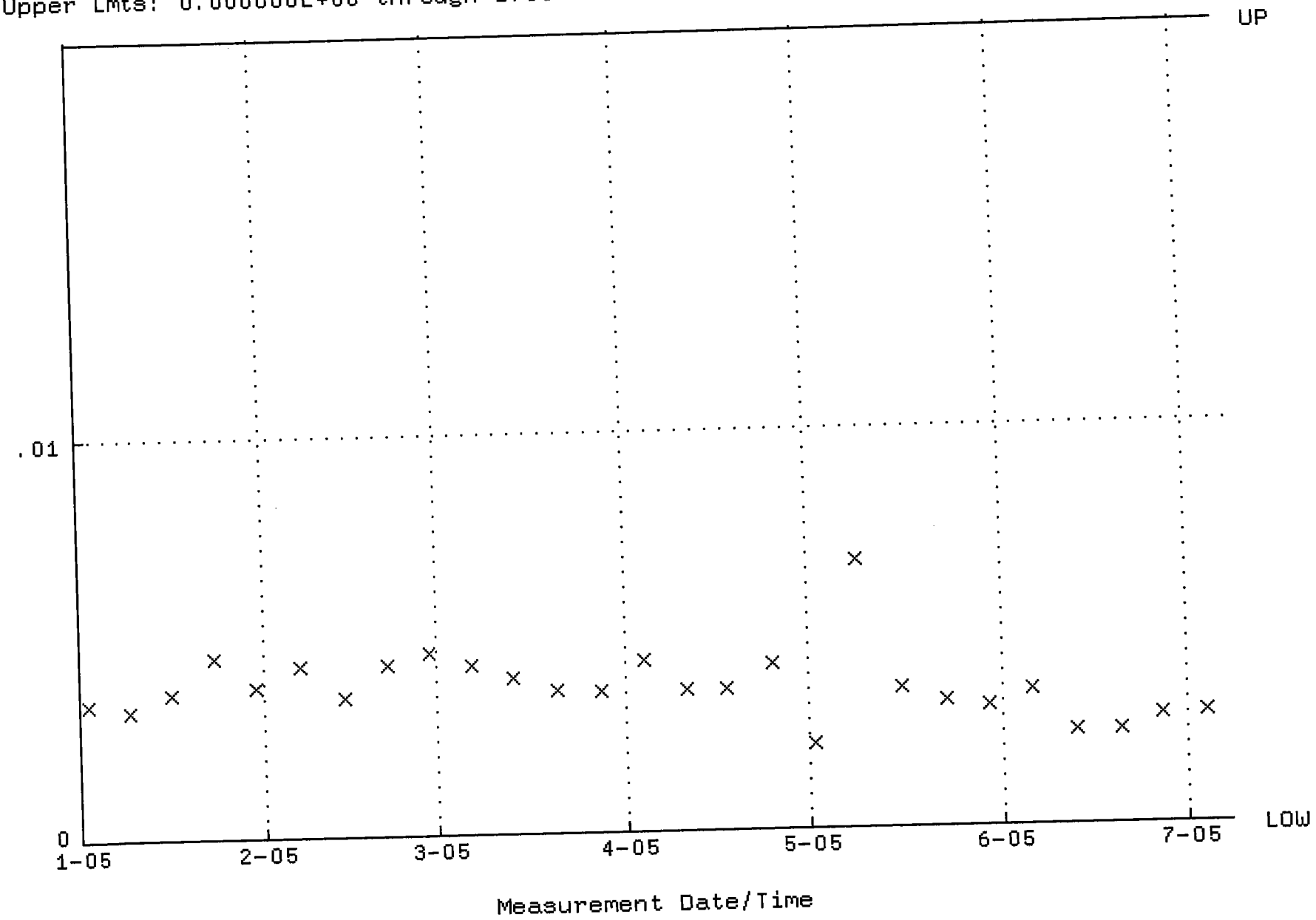
QA filename : DKA100:[ENV_ALPHA.QA.W]W046.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 07:29:20 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



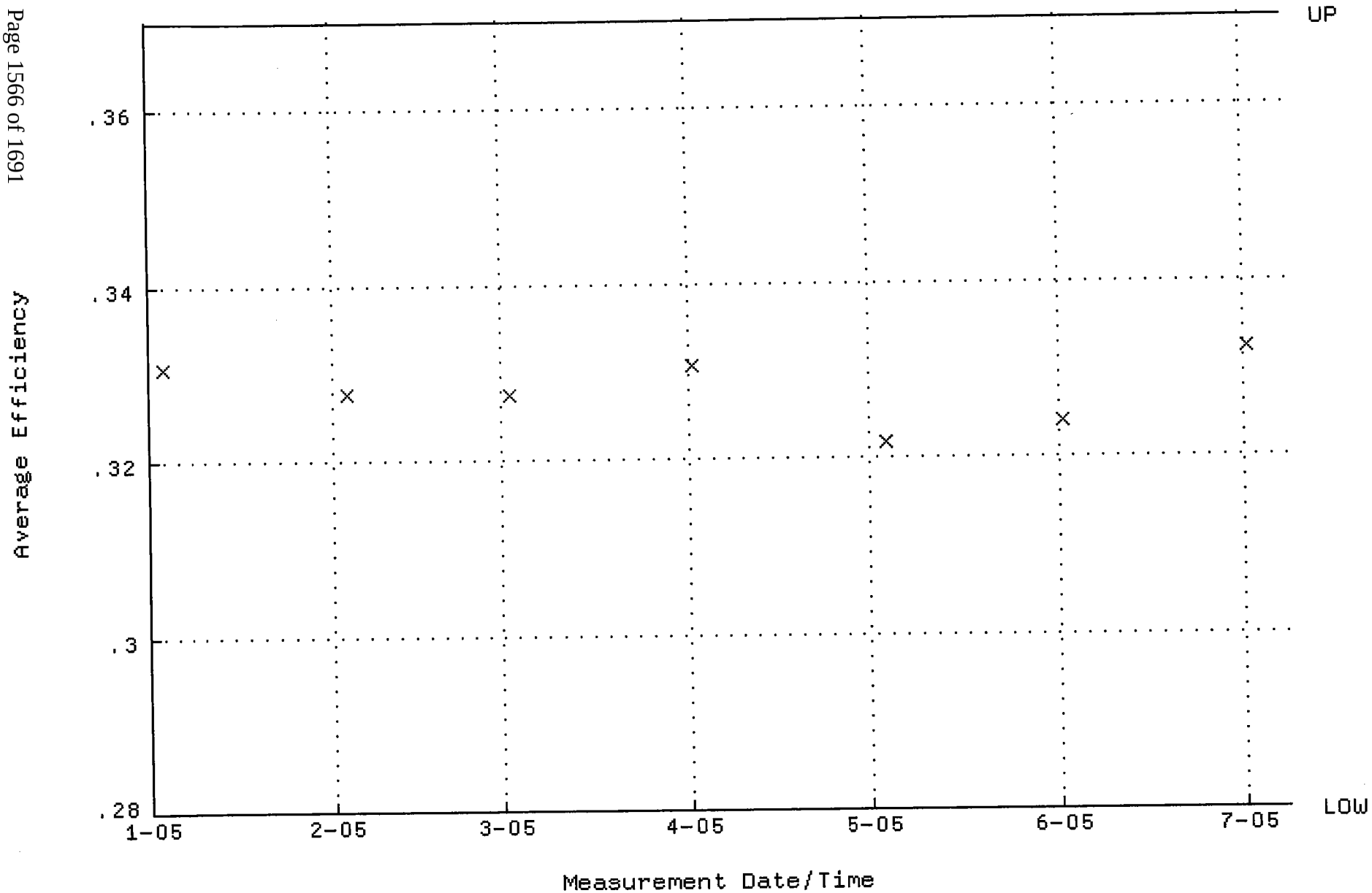
QA filename : DKA100:[ENV_ALPHA.QA.W]W046.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 07:29:20 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



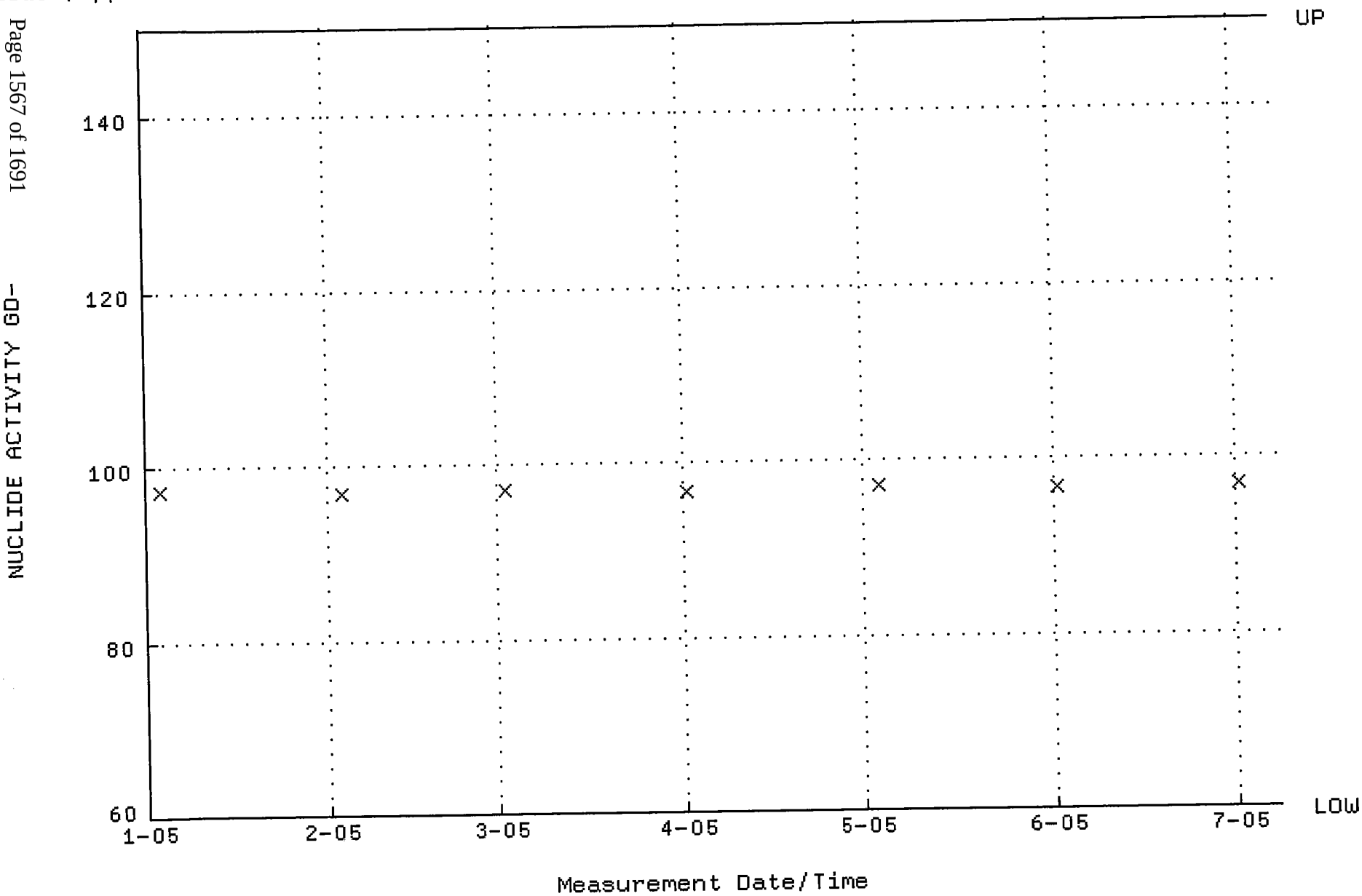
QA filename : DKA100:[ENV_ALPHA.QA.B]B046.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:04 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



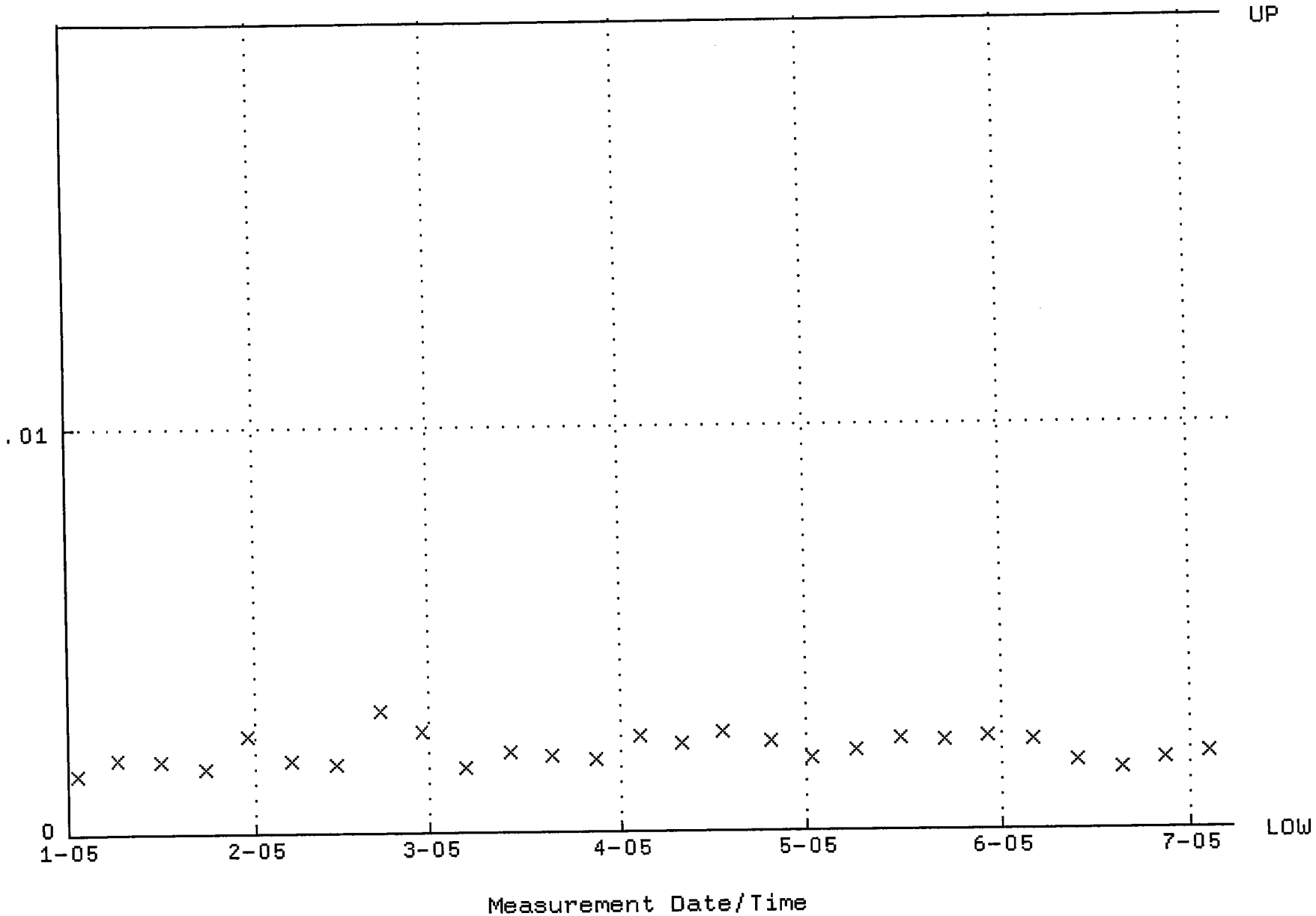
QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:21 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



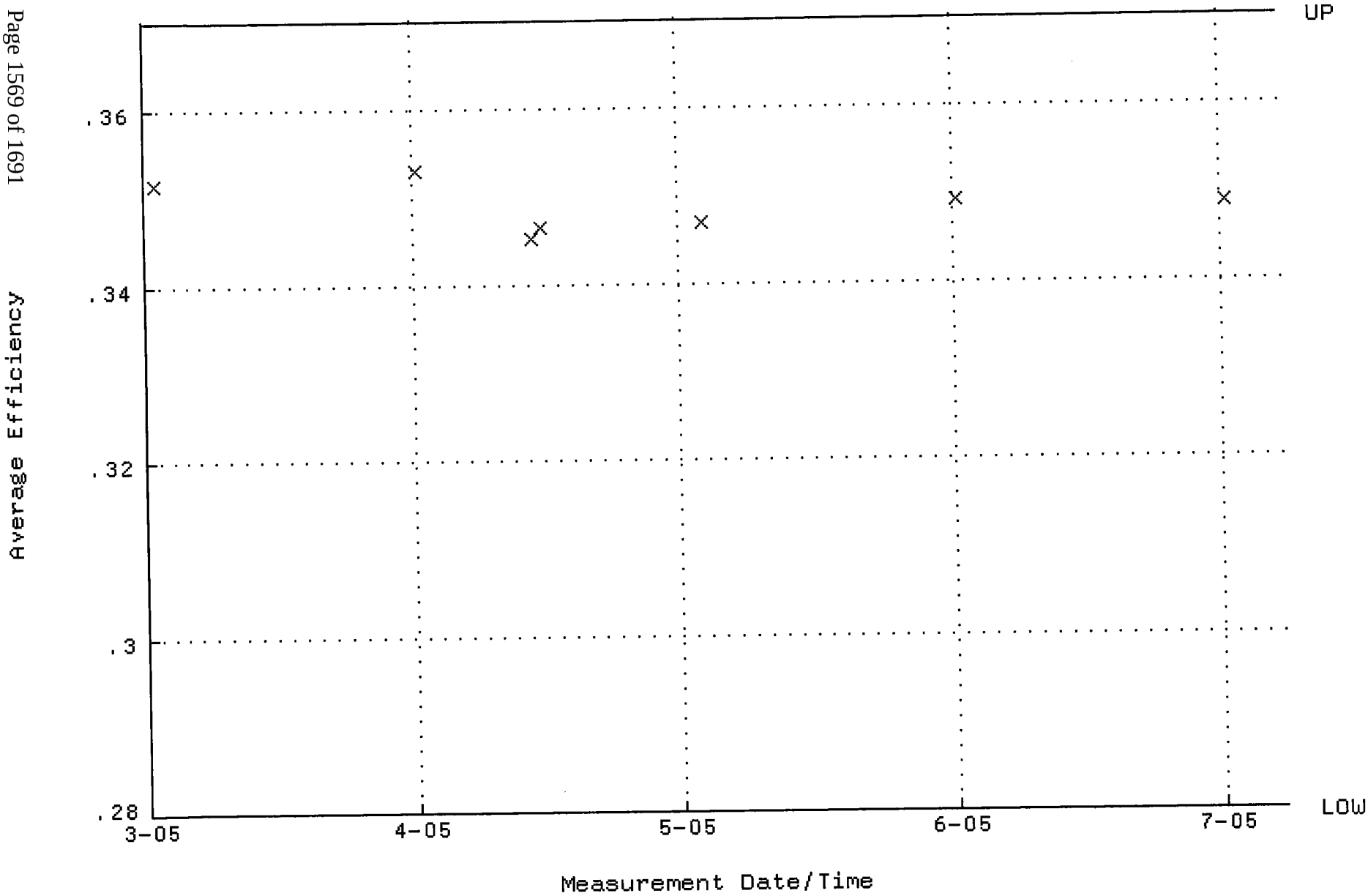
QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:21 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



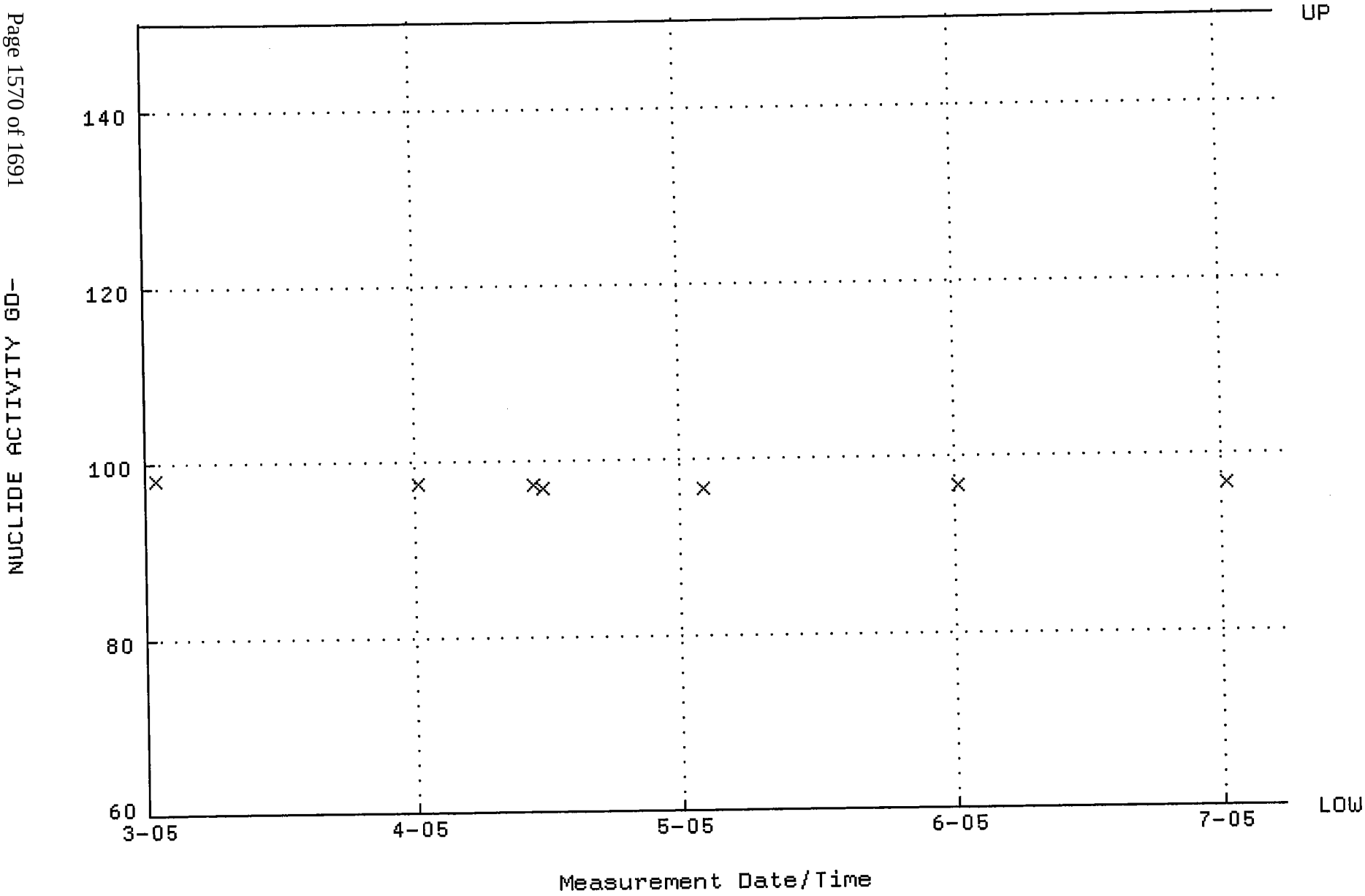
QA filename : DKA100:[ENV_ALPHA.QA.B]B069.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:07 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



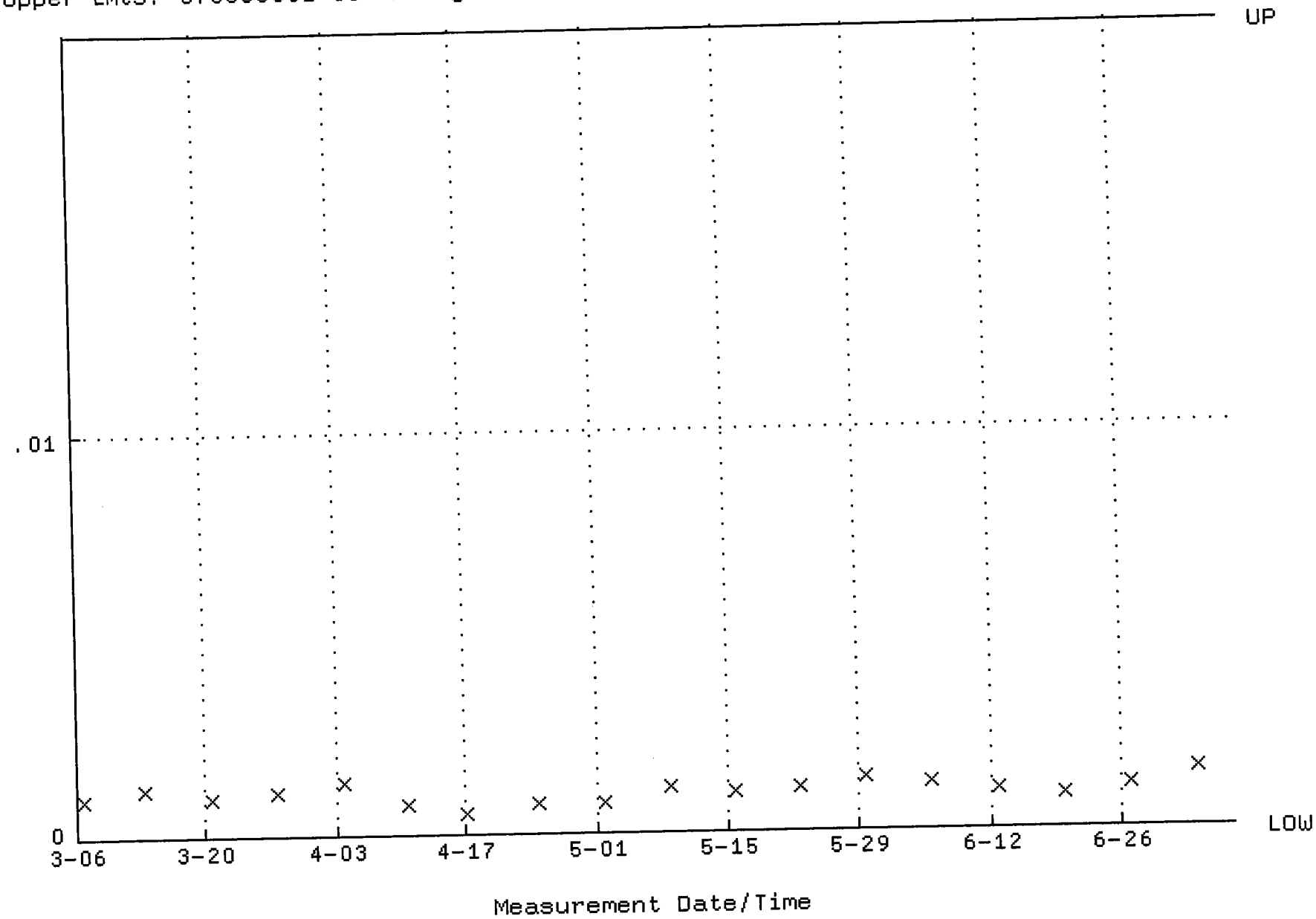
QA filename : DKA100:[ENV_ALPHA.QA.W]W070.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 2-MAR-2005 08:07:45 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



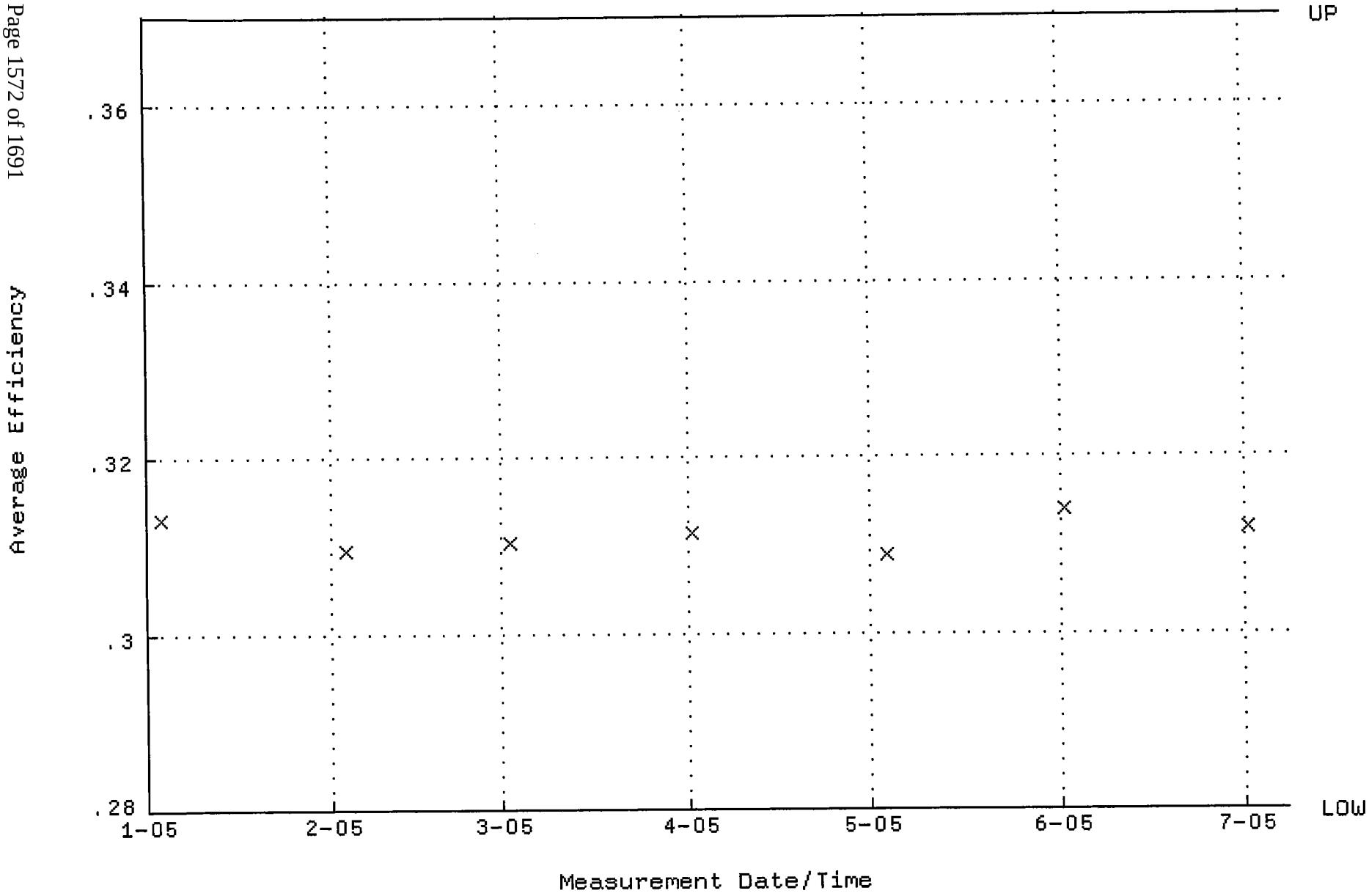
QA filename : DKA100:[ENV_ALPHA.QA.W]W070.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 2-MAR-2005 08:07:45 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



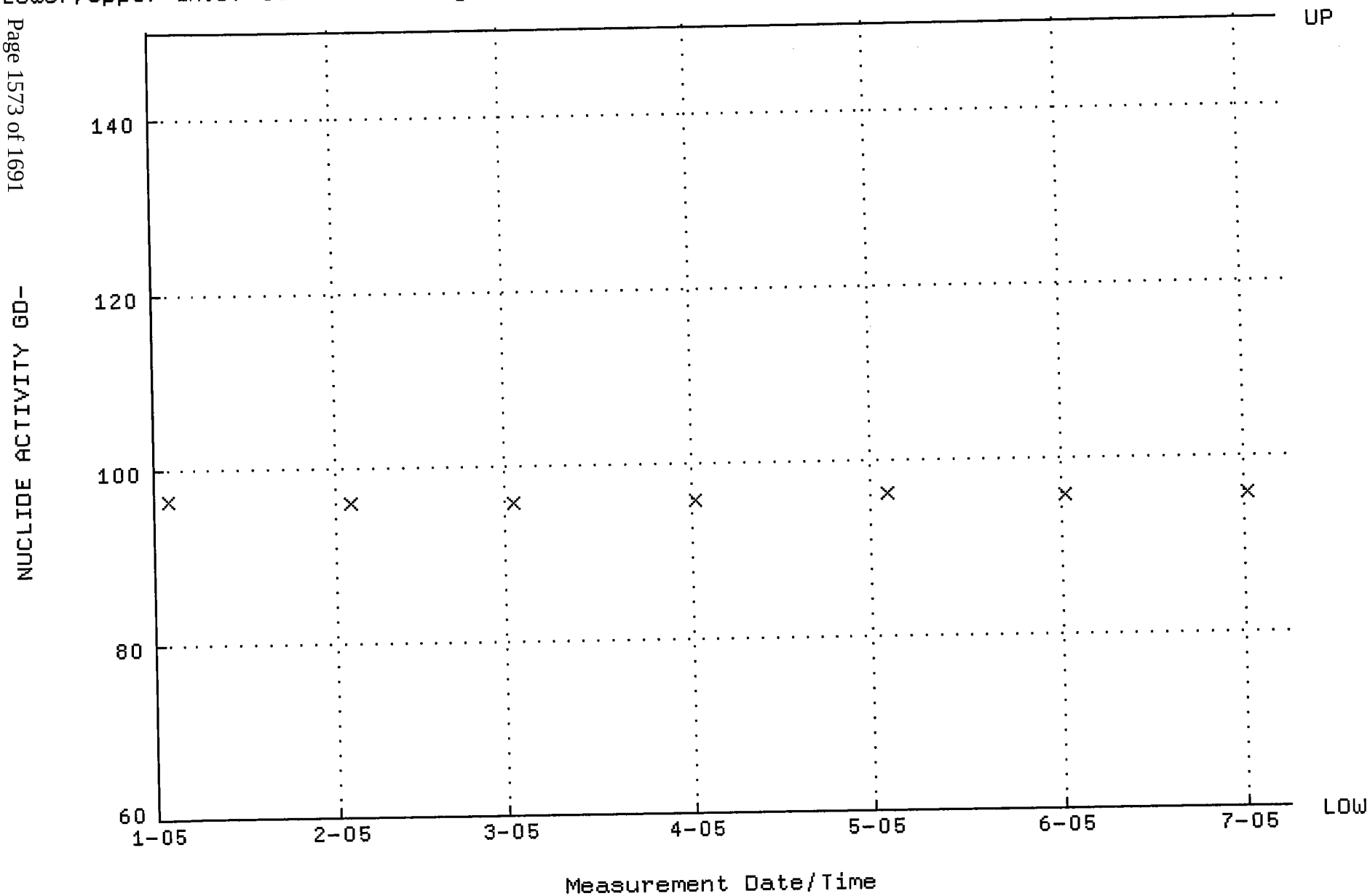
QA filename : DKA100:[ENV_ALPHA.QA.B]B070.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 6-MAR-2005 18:32:42 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



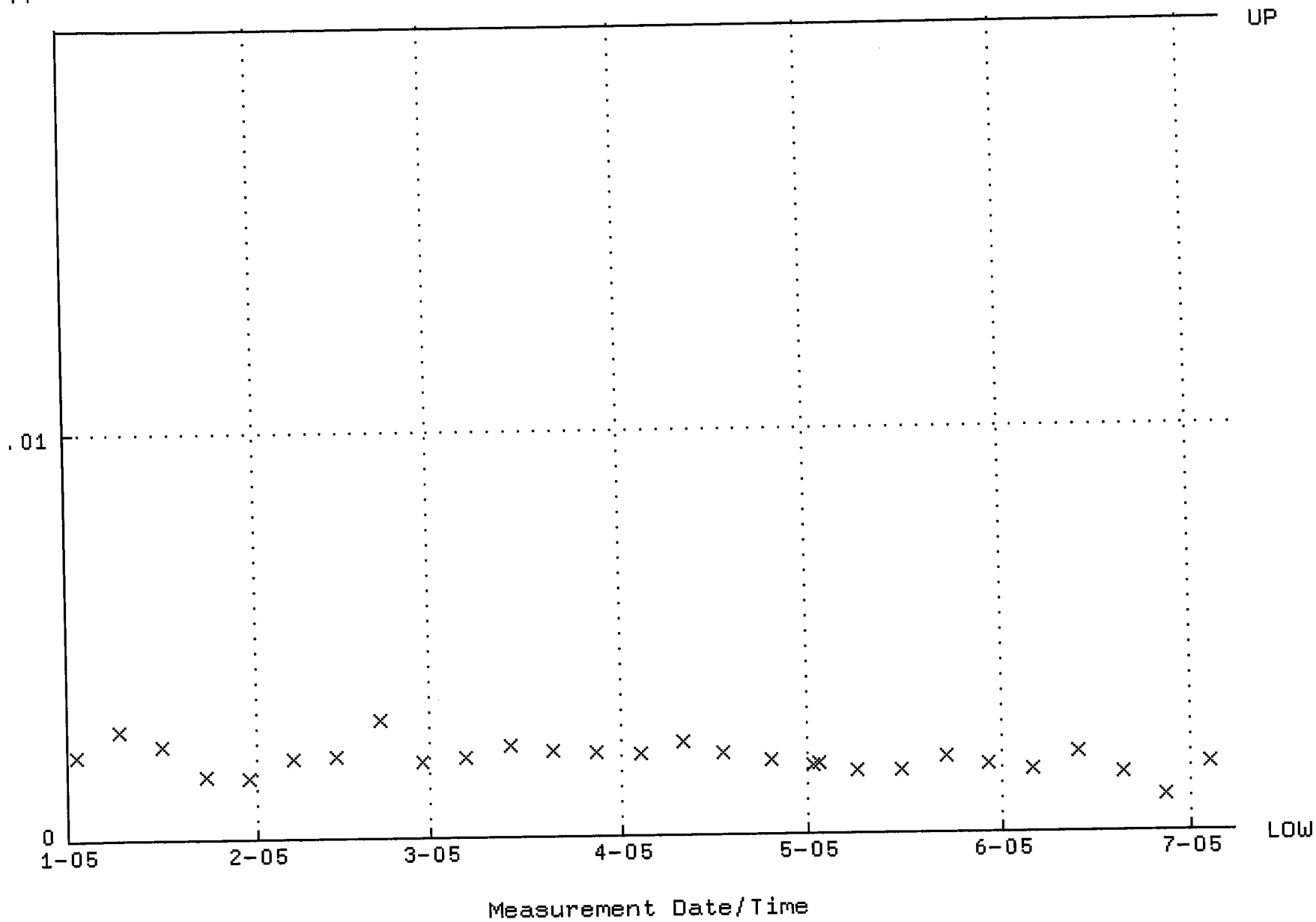
QA filename : DKA100:[ENV_ALPHA.QA.W]W083.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



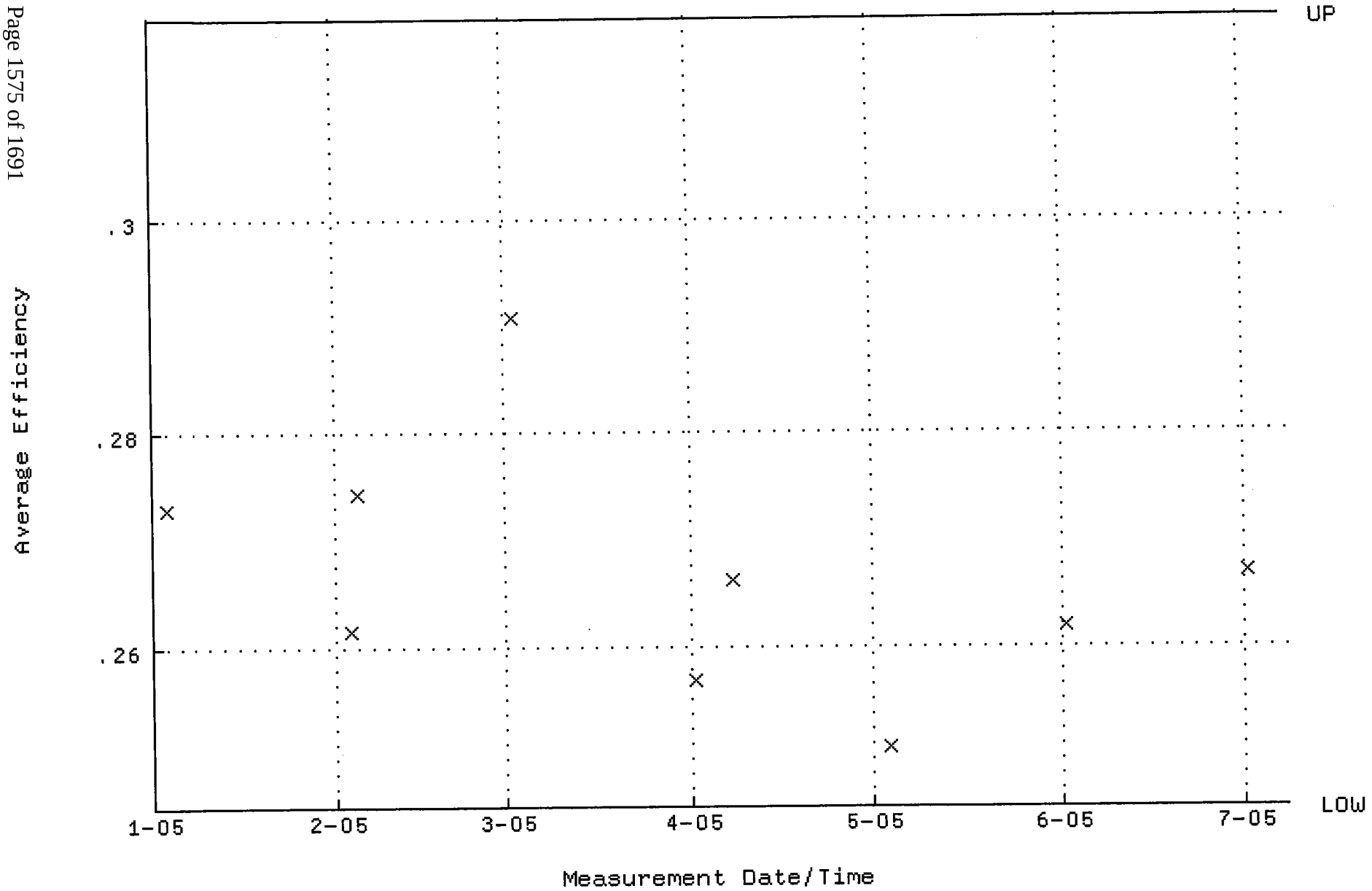
QA filename : DKA100:[ENV_ALPHA.QA.W]W083.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



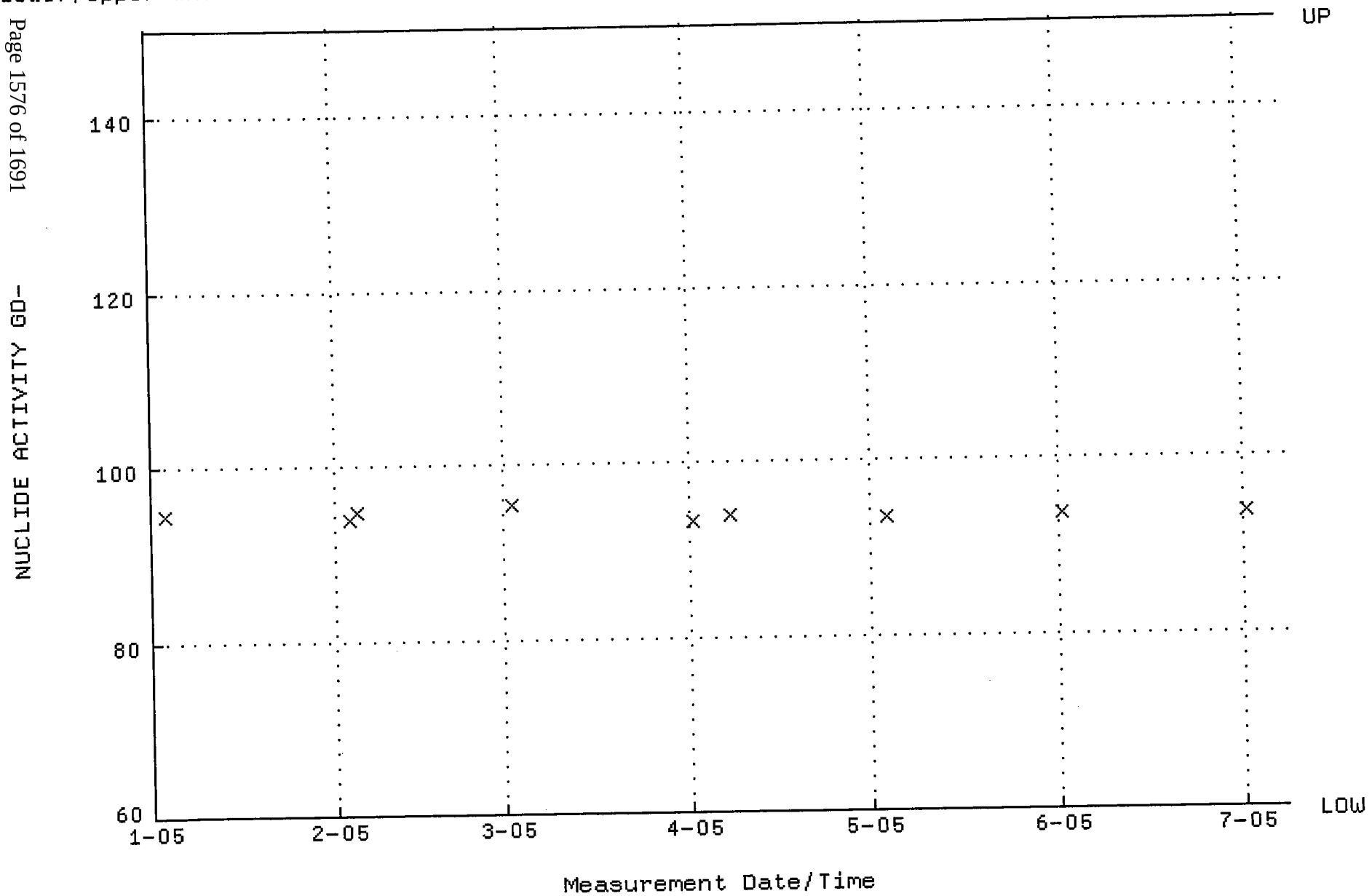
QA filename : DKA100:[ENV_ALPHA.QA.B]B083.QAF;3
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



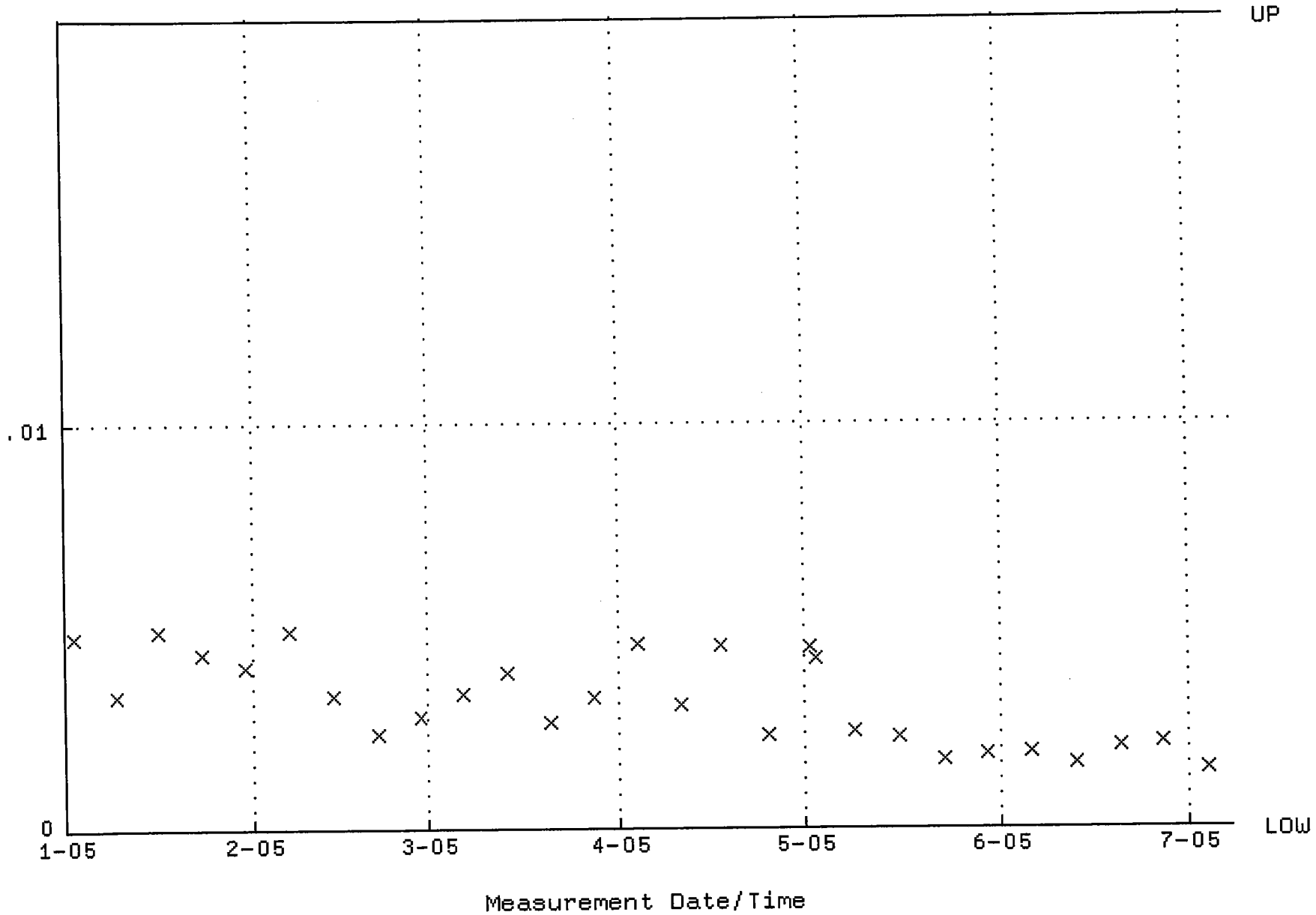
QA filename : DKA100:[ENV_ALPHA.QA.W]W084.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.245030 through 0.318770



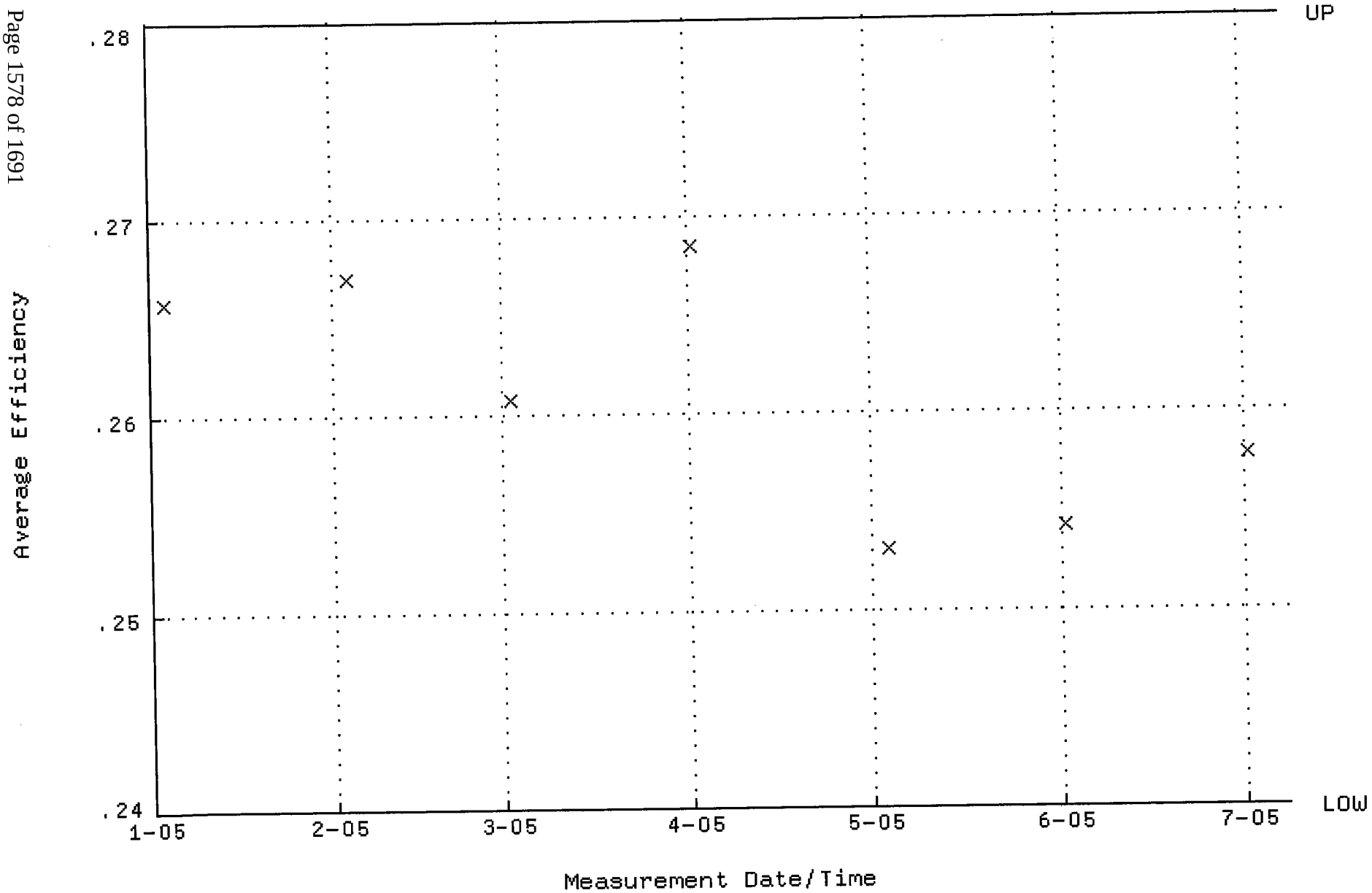
QA filename : DKA100:[ENV_ALPHA.QA.W]W084.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



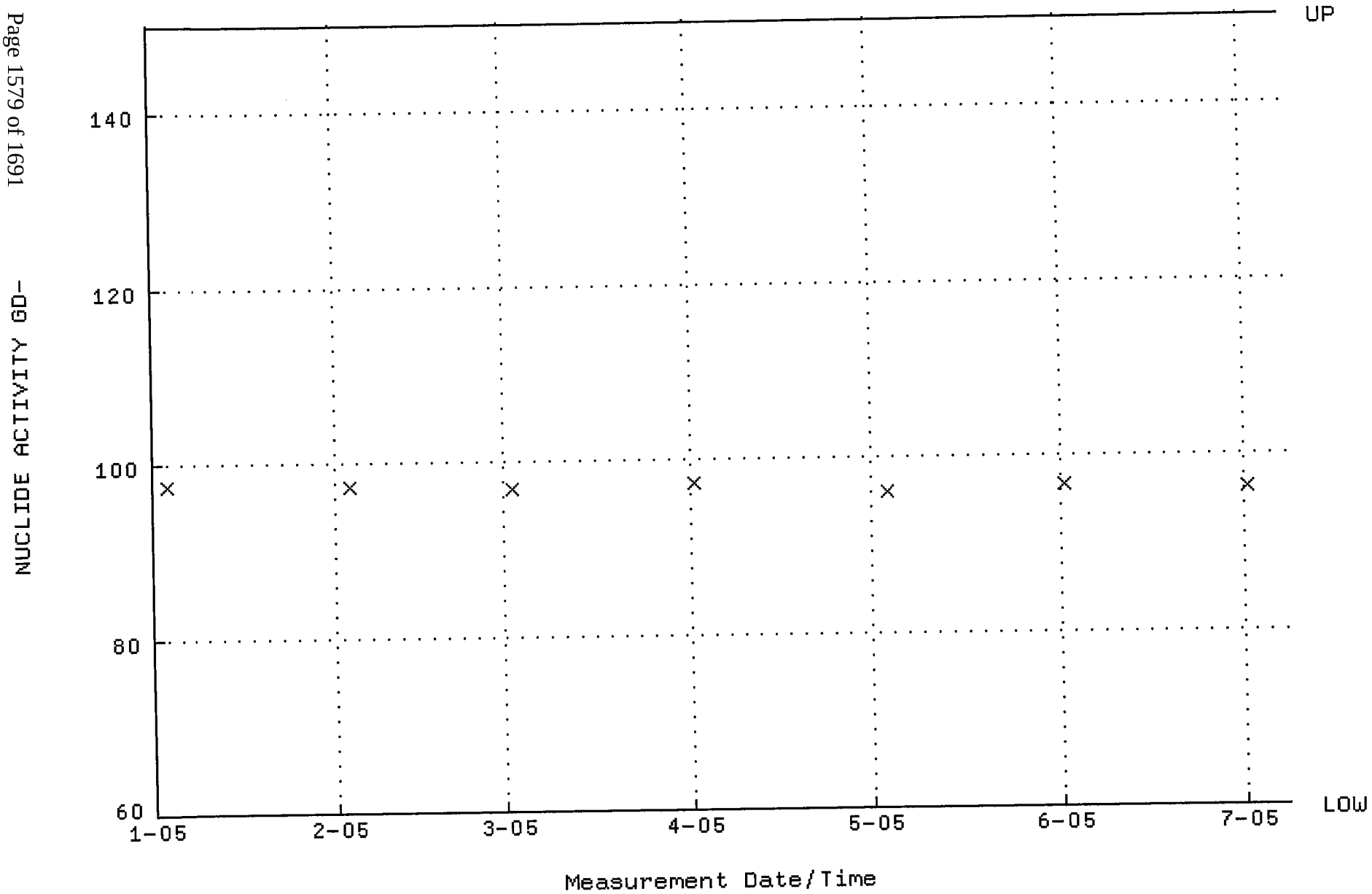
QA filename : DKA100:[ENV_ALPHA.QA.B]B084.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



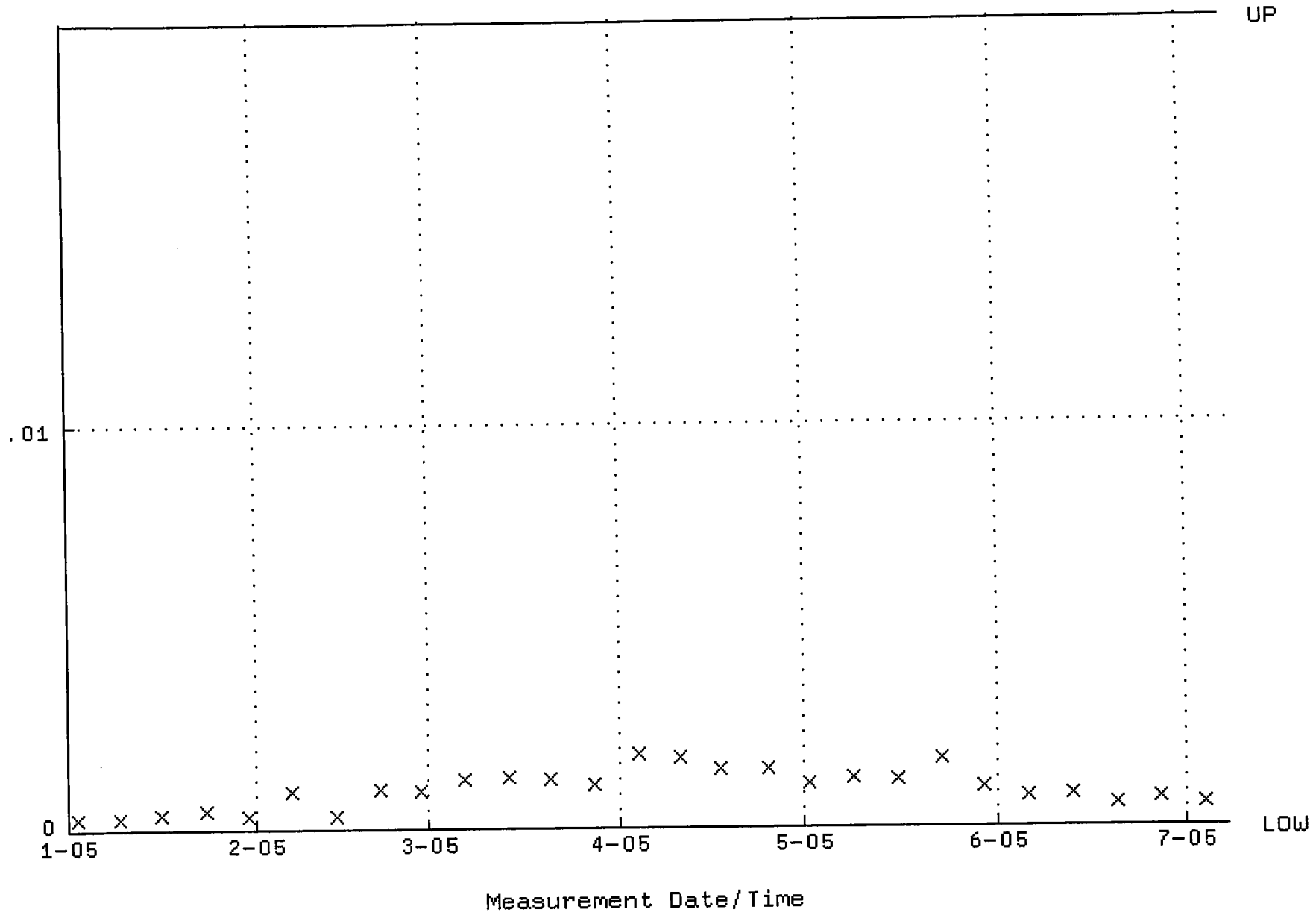
QA filename : DKA100:[ENV_ALPHA.QA.W]W086.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.240000 through 0.280000



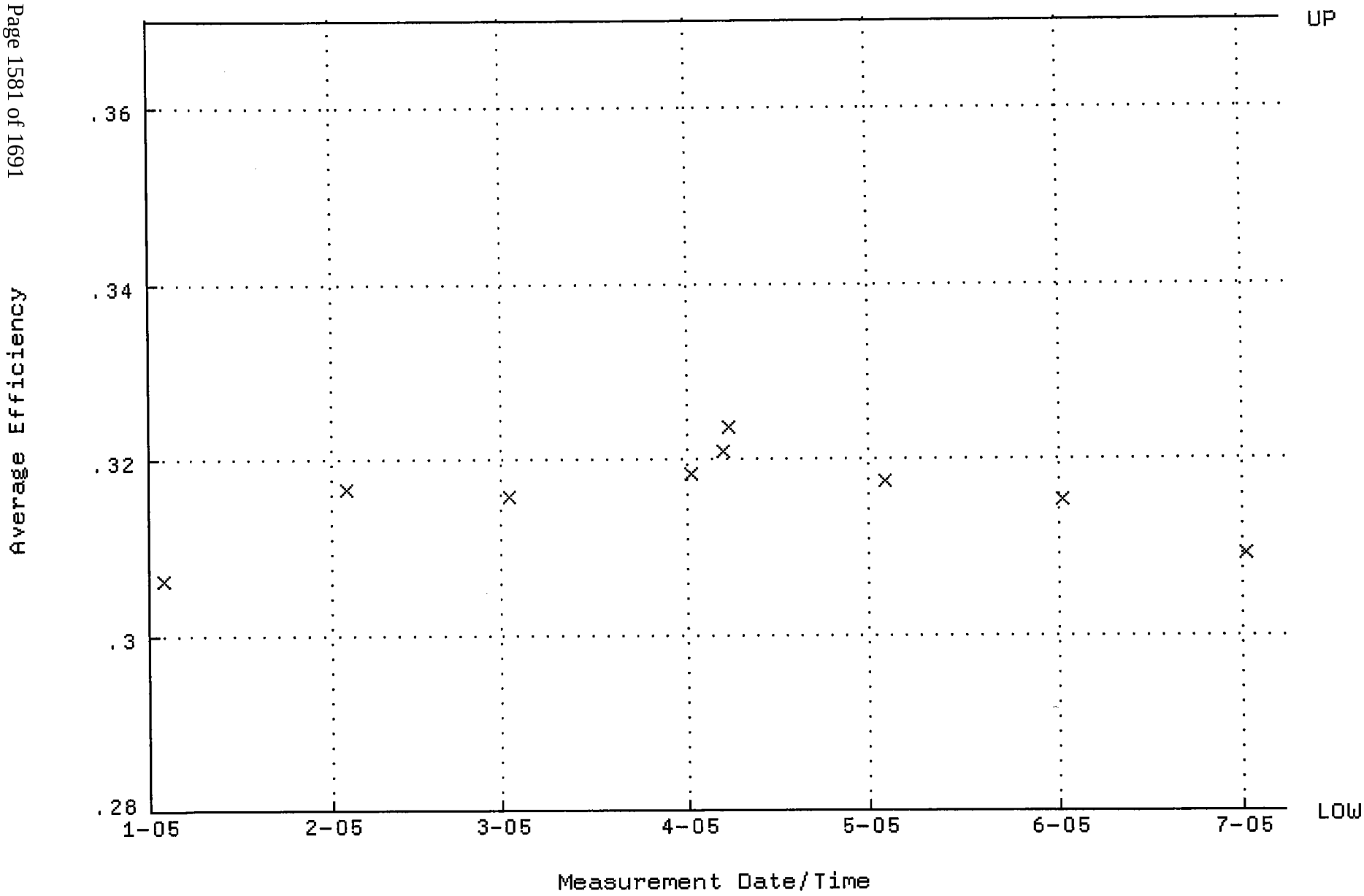
QA filename : DKA100:[ENV_ALPHA.QA.W]W086.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



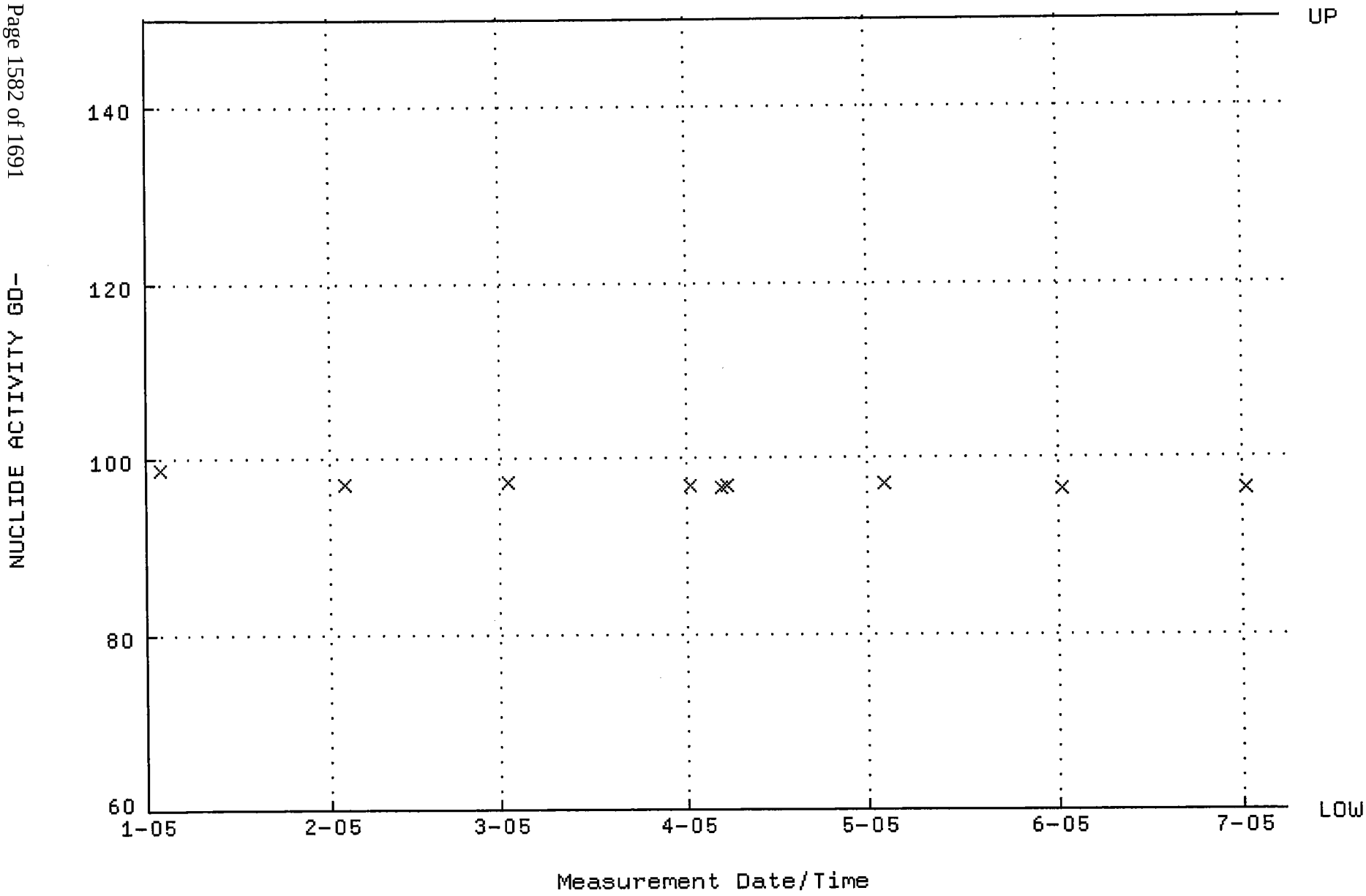
QA filename : DKA100:[ENV_ALPHA.QA.B]B086.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



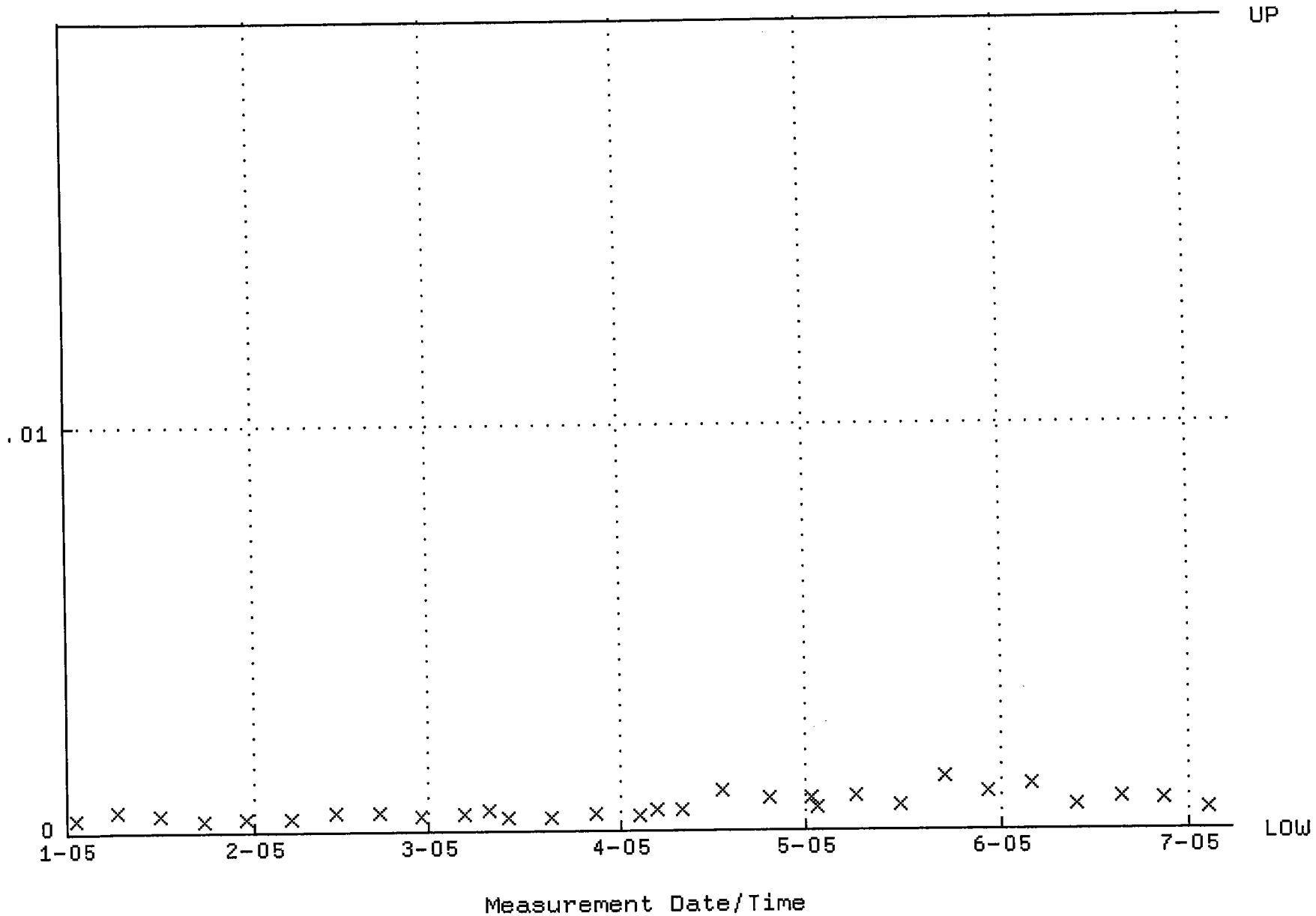
QA filename : DKA100:[ENV_ALPHA.QA.W]W087.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



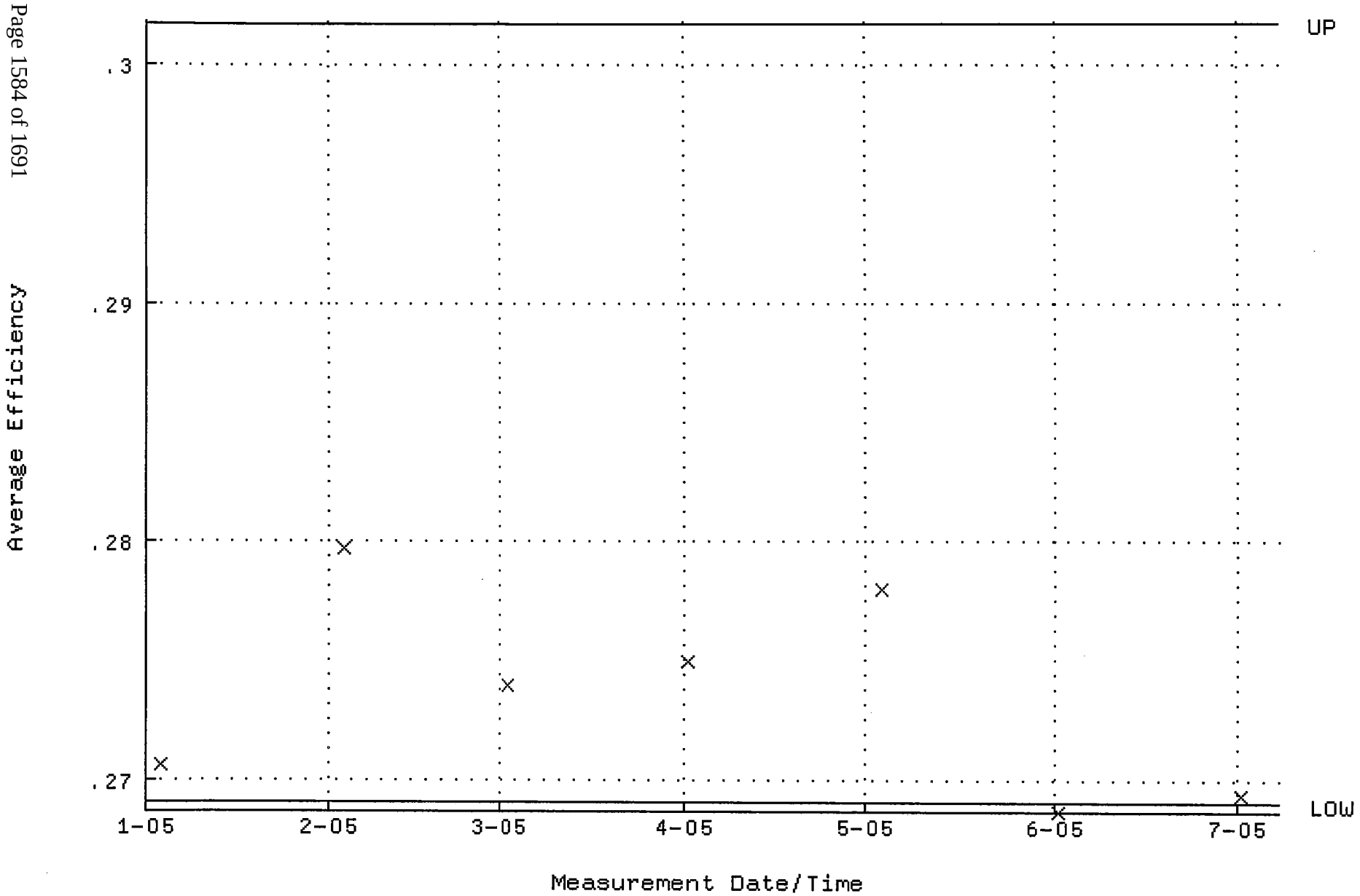
QA filename : DKA100:[ENV_ALPHA.QA.W]W087.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



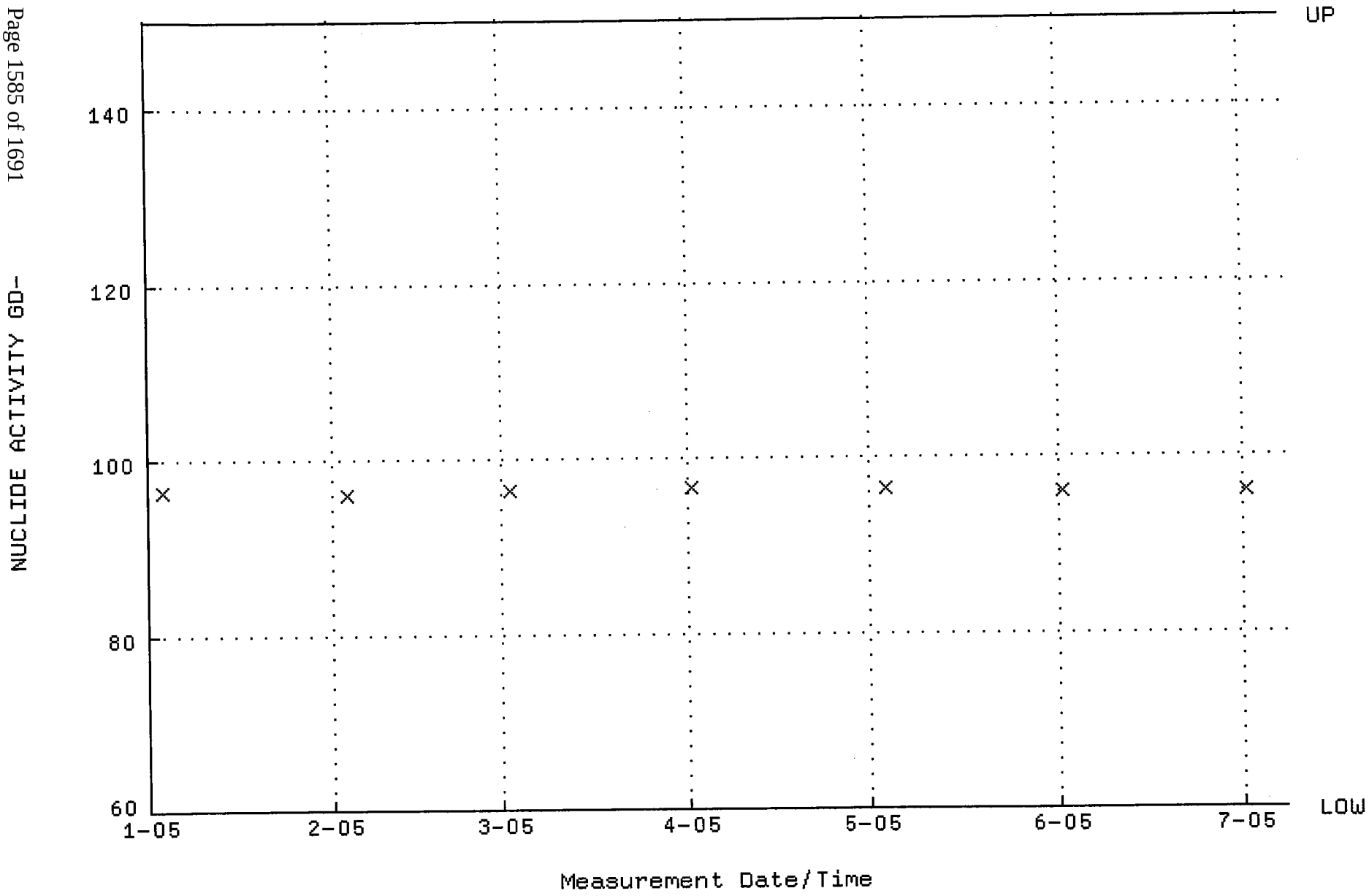
QA filename : DKA100:[ENV_ALPHA.QA.B]B087.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



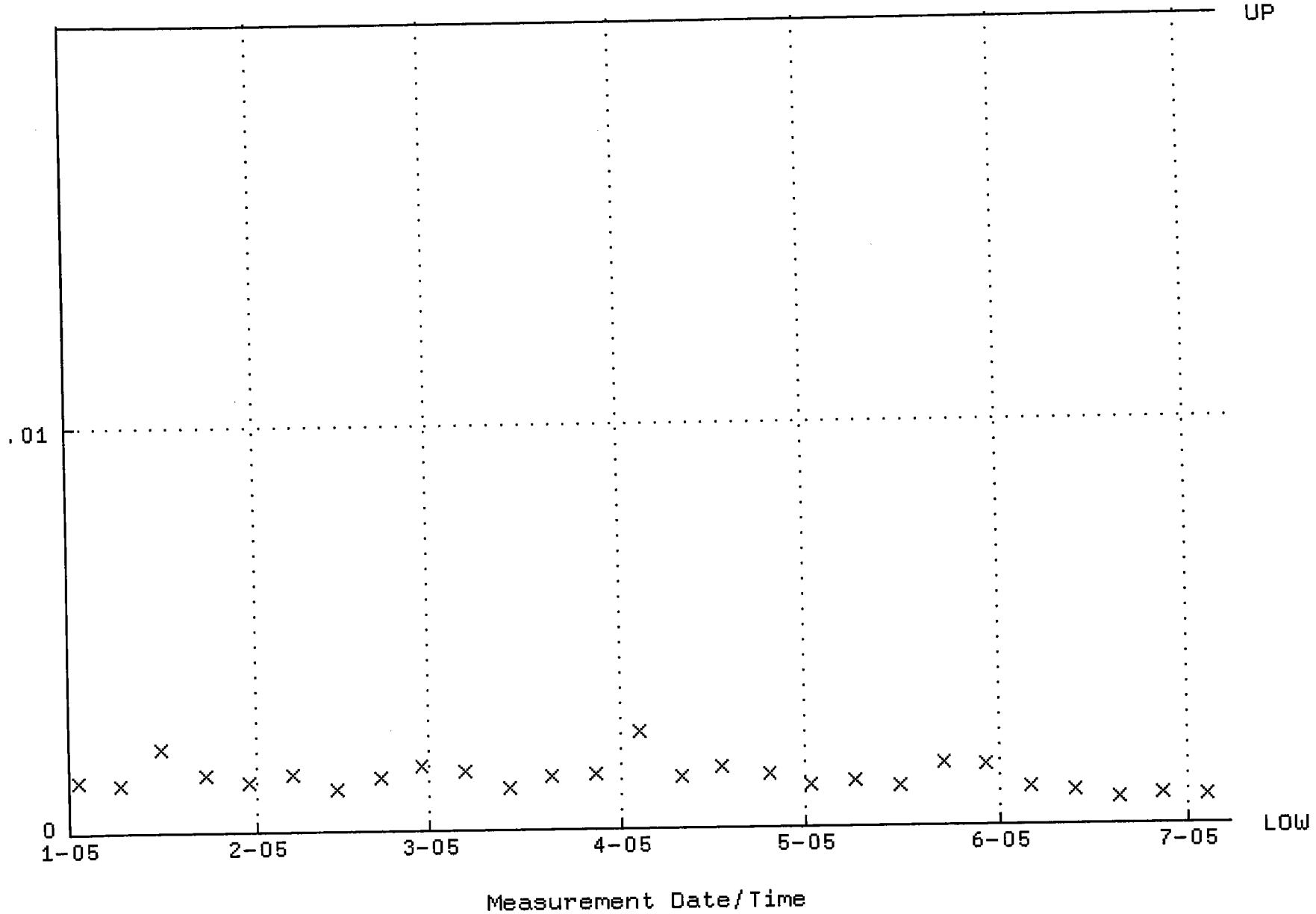
QA filename : DKA100:[ENV_ALPHA.QA.W]W088.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.269100 through 0.301700



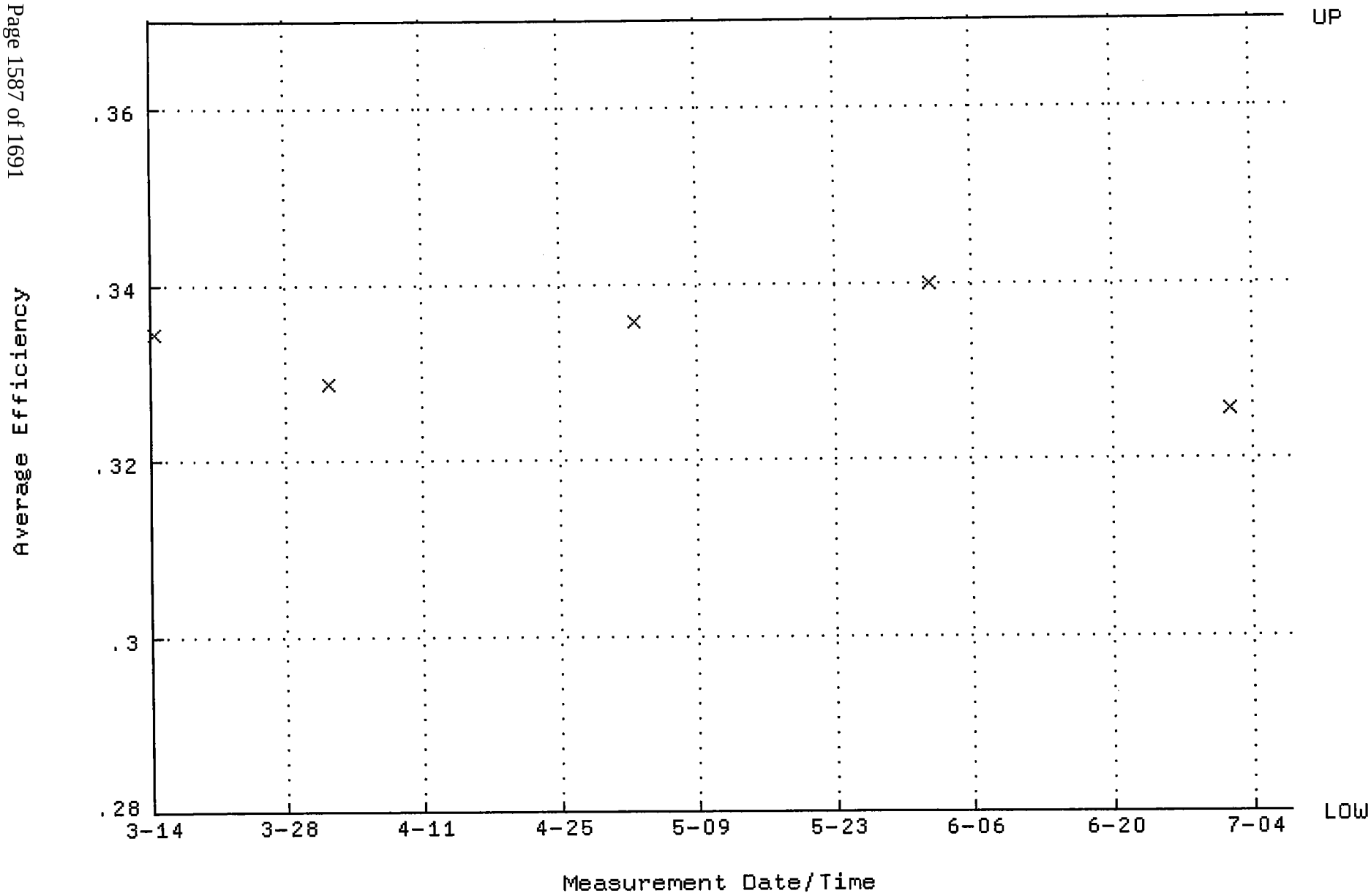
QA filename : DKA100:[ENV_ALPHA.QA.W]W088.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-JAN-2005 11:31:24 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



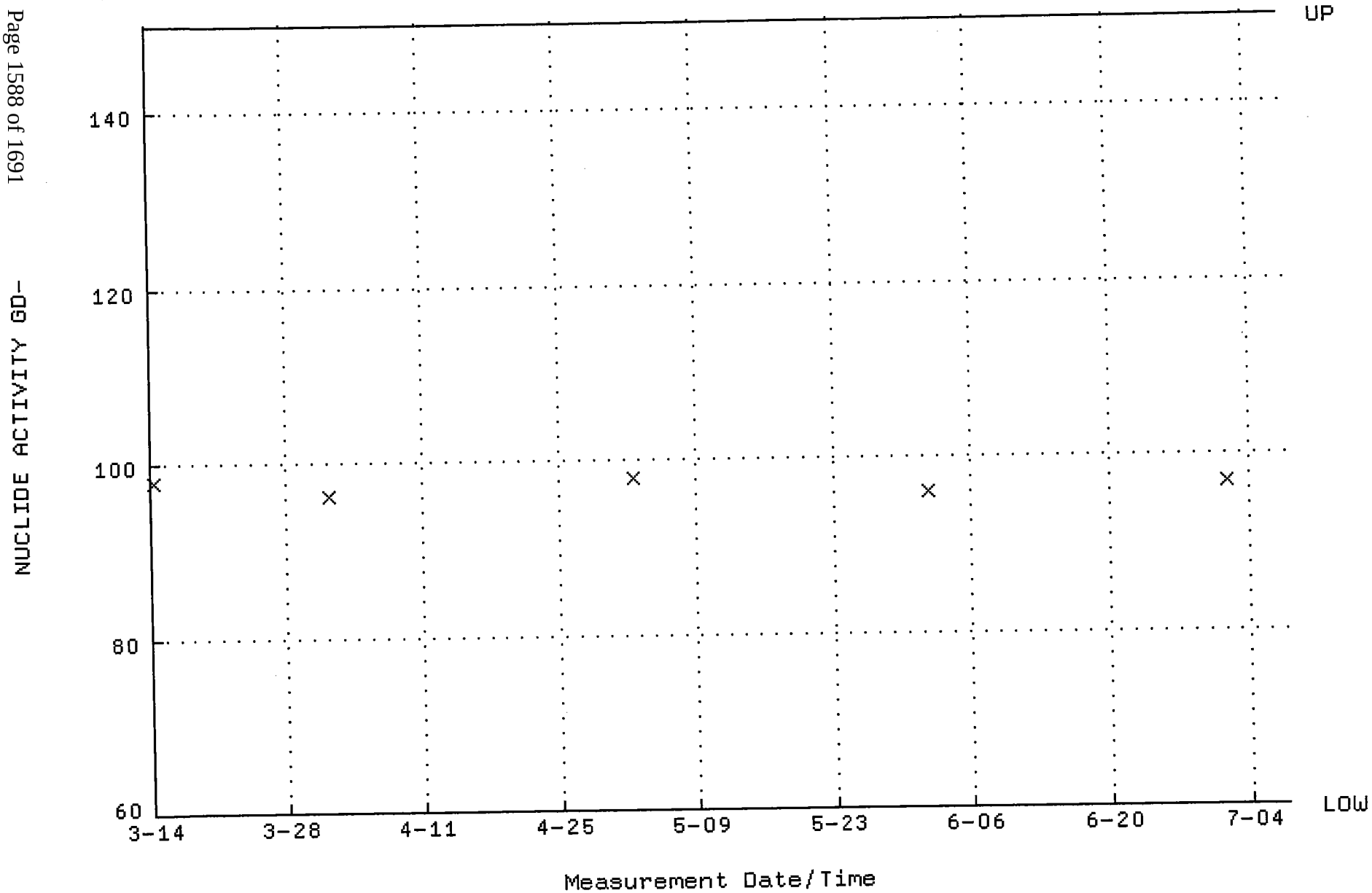
QA filename : DKA100:[ENV_ALPHA.QA.B]B088.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:09 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



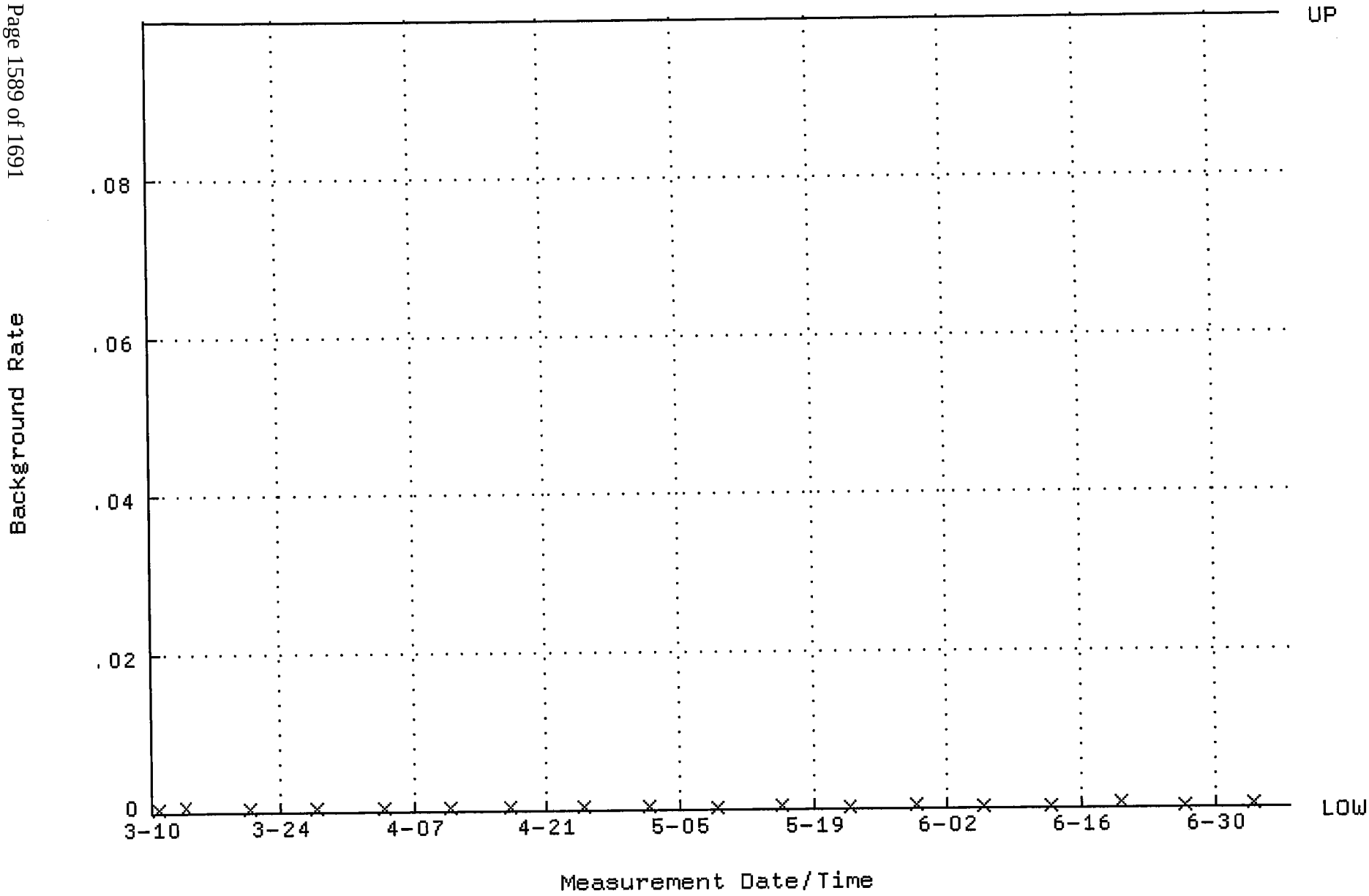
QA filename : DKA100:[ENV_ALPHA.QA.W]W090.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 14-MAR-2005 11:23:27 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



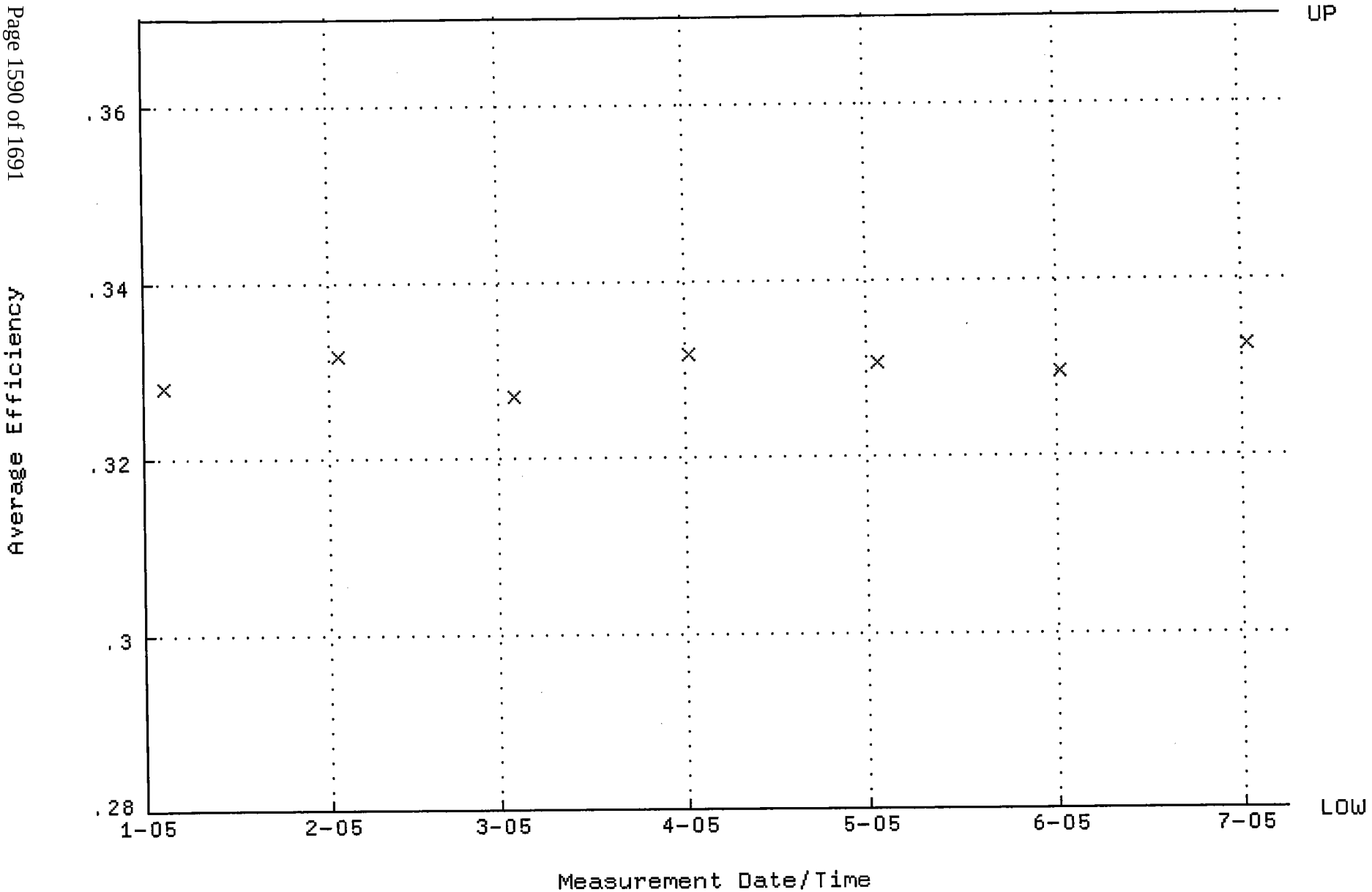
QA filename : DKA100:[ENV_ALPHA.QA.W]W090.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 14-MAR-2005 11:23:27 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



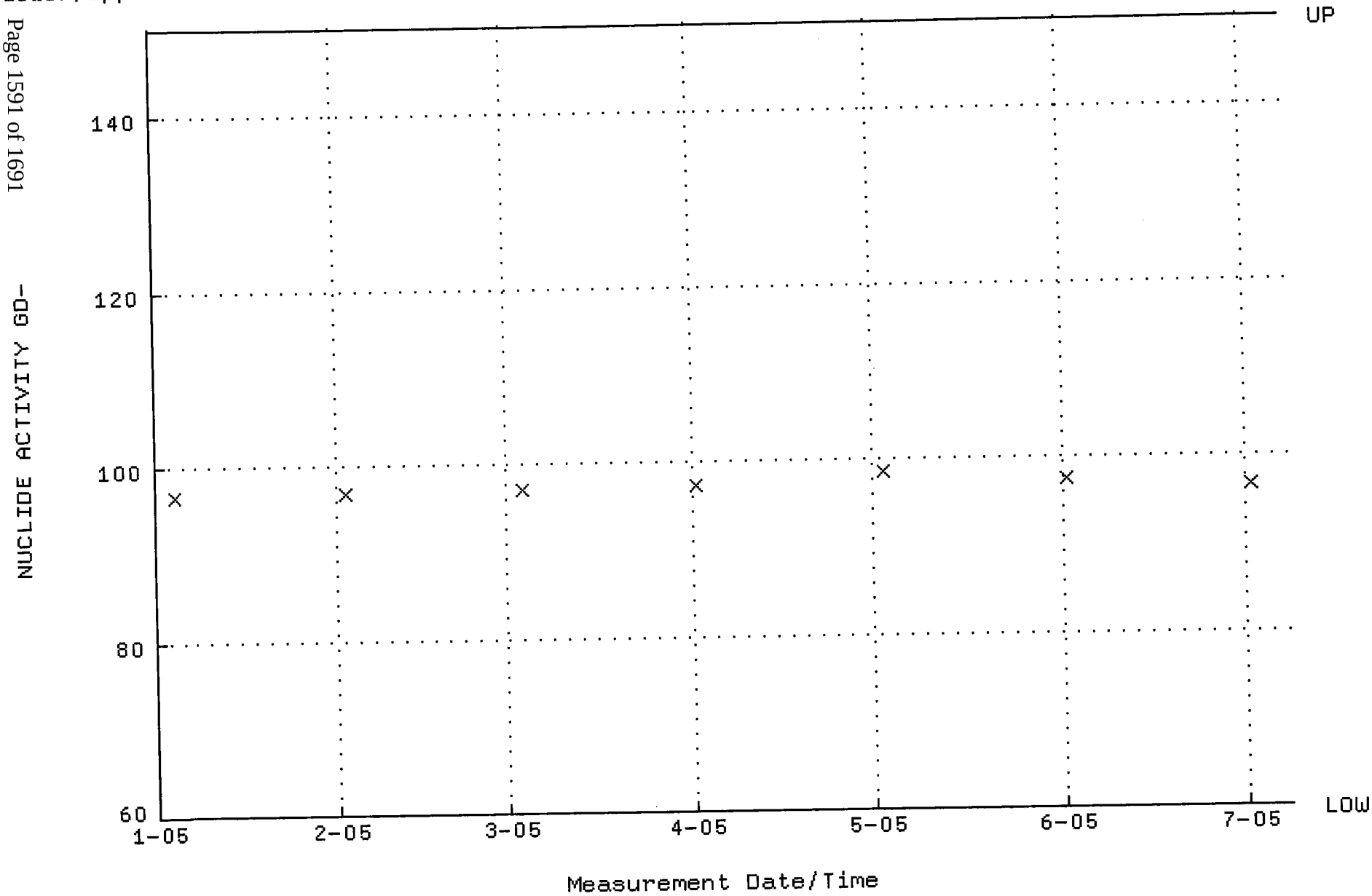
QA filename : DKA100:[ENV_ALPHA.QA.B]B090.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 10-MAR-2005 18:07:47 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



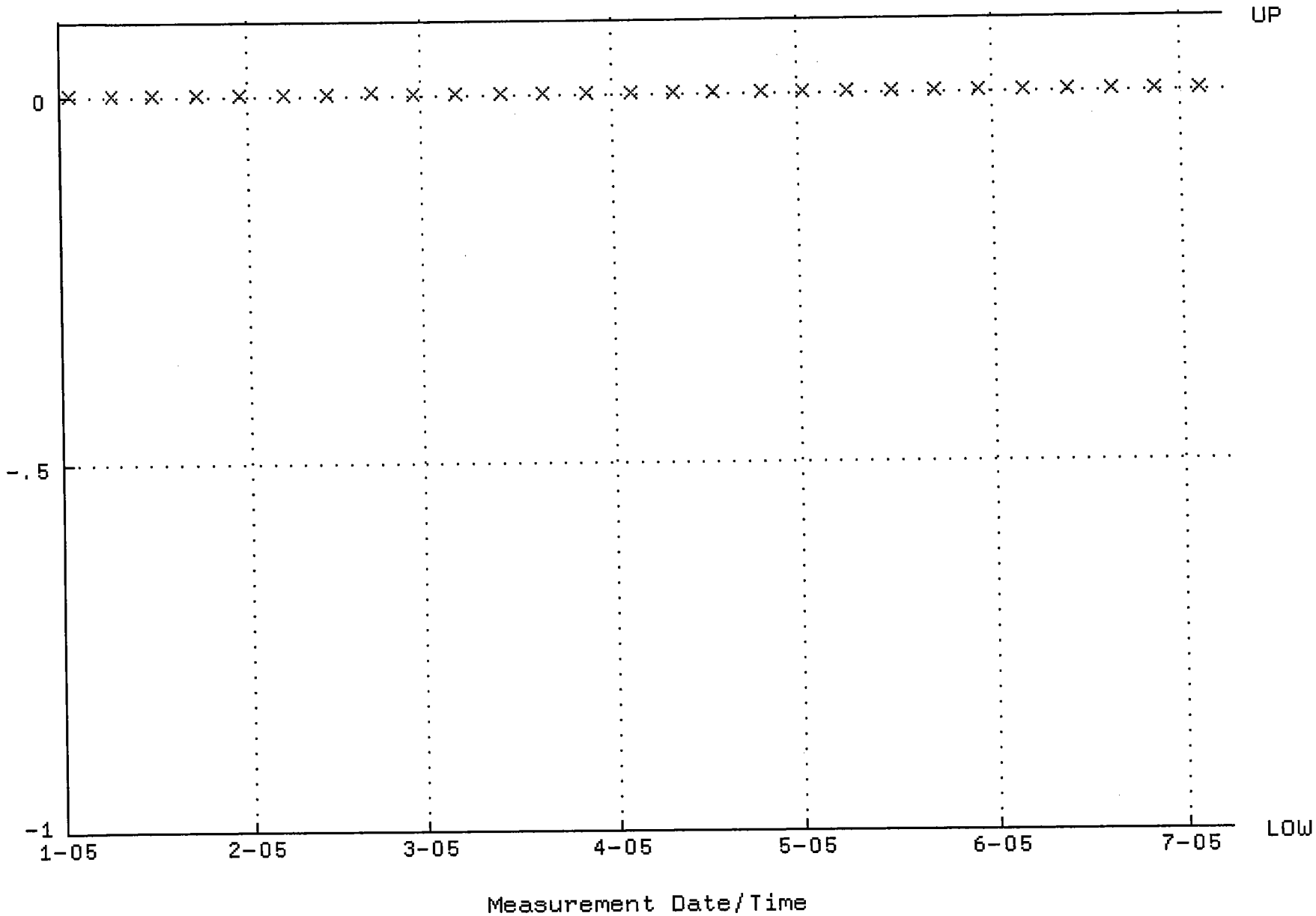
QA filename : DKA100:[ENV_ALPHA.QA.W]W092.QAF;1
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 07:29:29 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



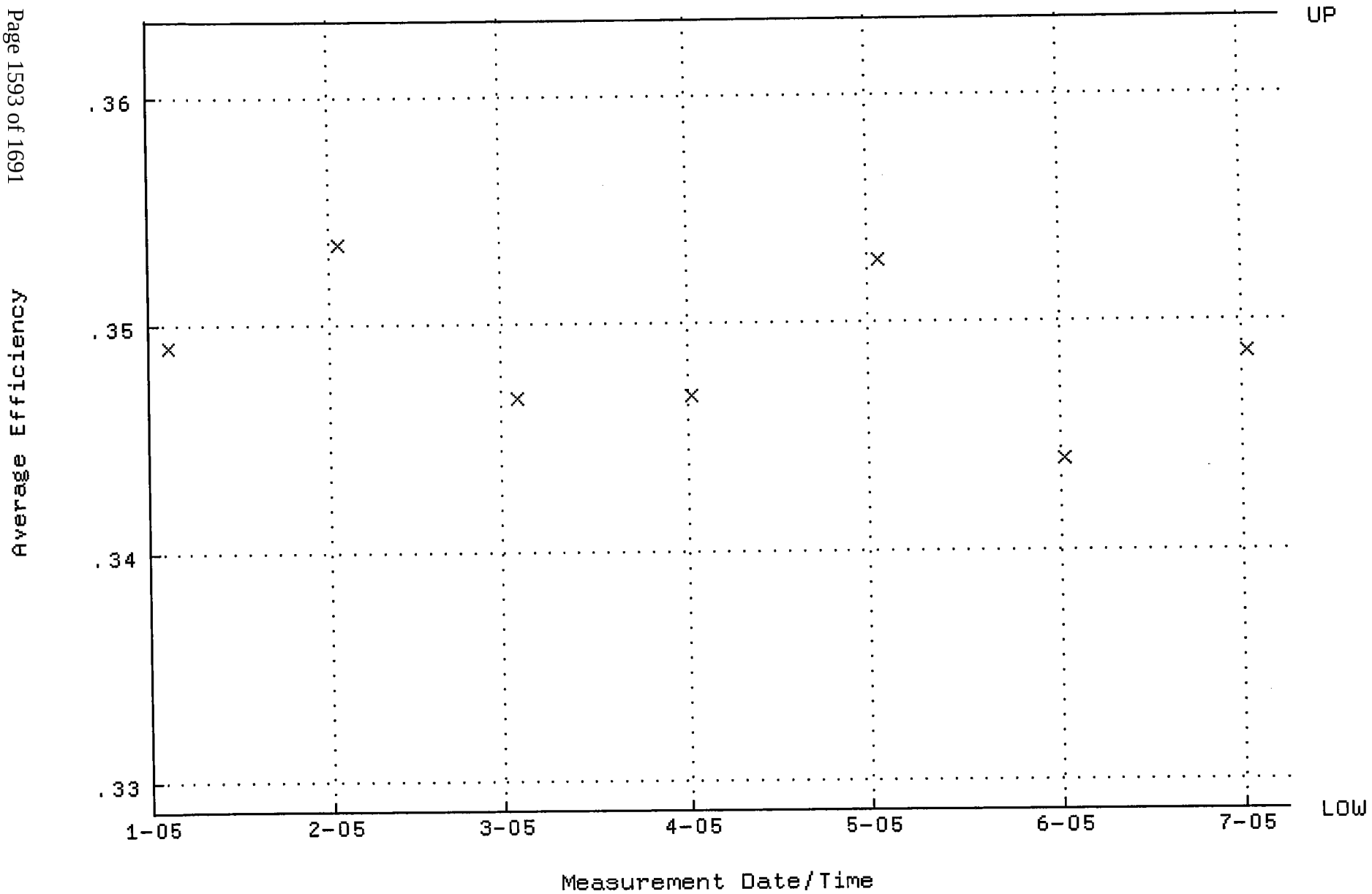
QA filename : DKA100:[ENV_ALPHA.QA.W]W092.QAF;1
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 07:29:29 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



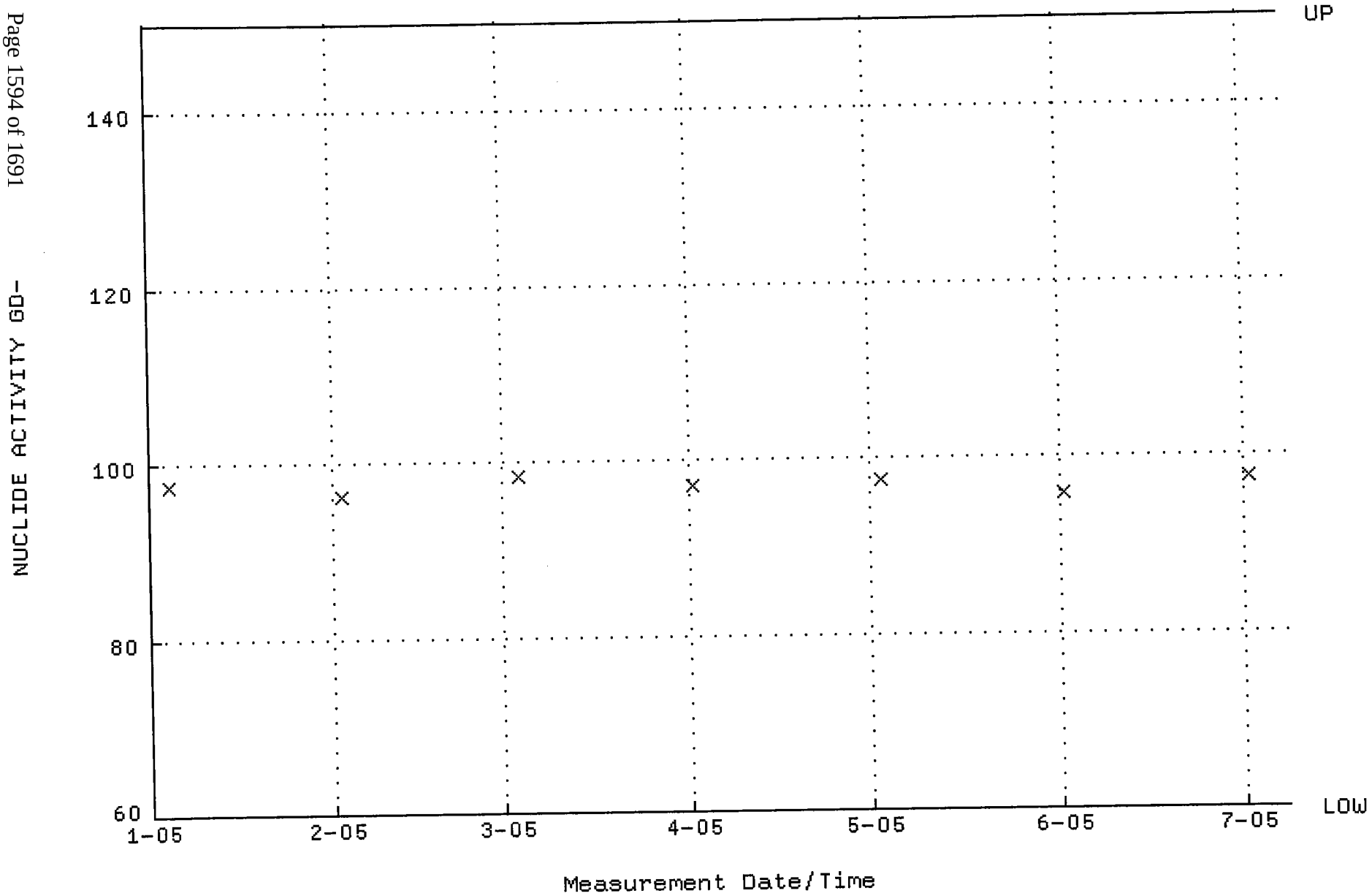
QA filename : DKA100:[ENV_ALPHA.QA.B]B092.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:10 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: -1.00000 through 0.100000



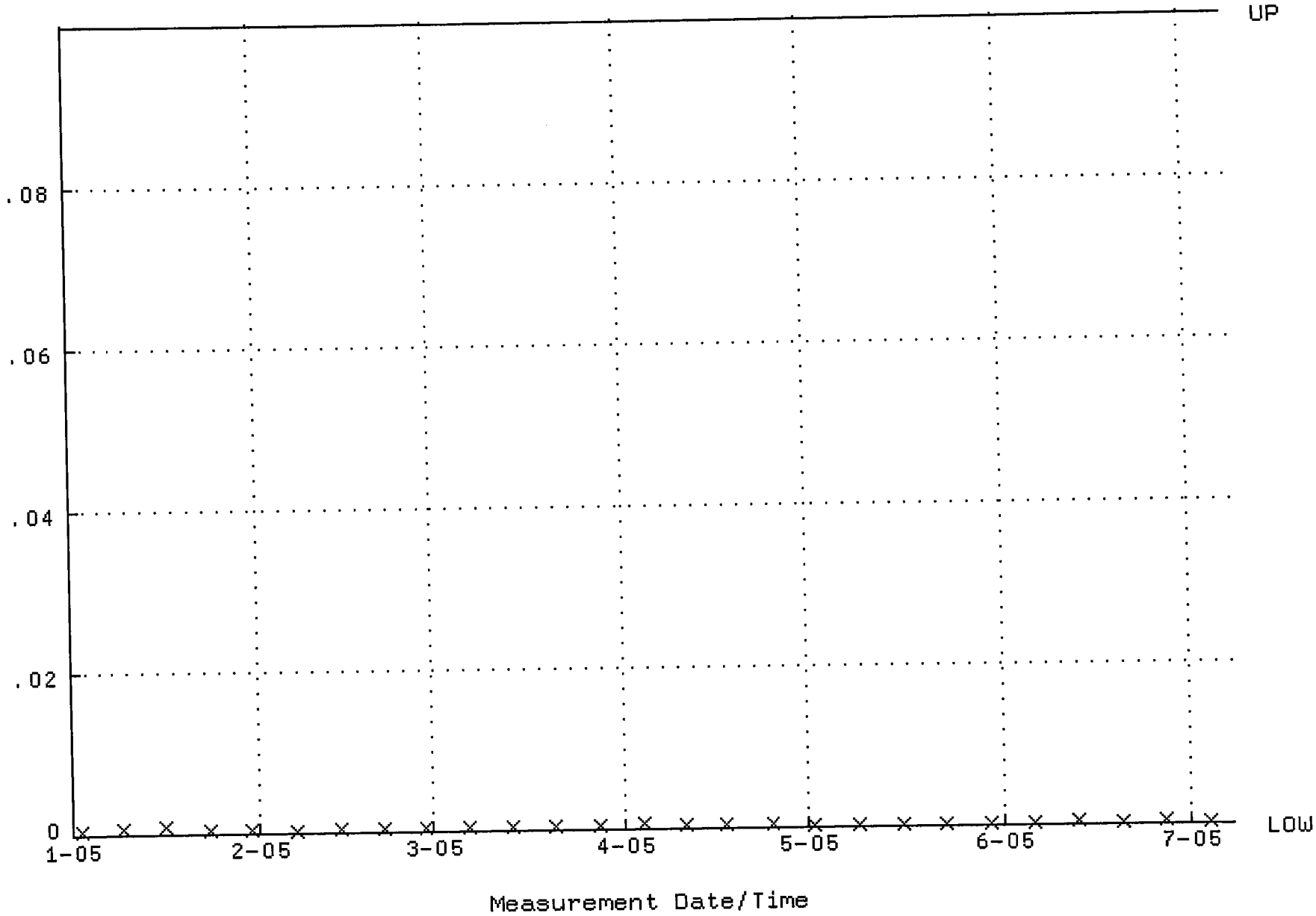
QA filename : DKA100:[ENV_ALPHA.QA.W]W100.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-JAN-2005 07:29:31 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.328700 through 0.363300



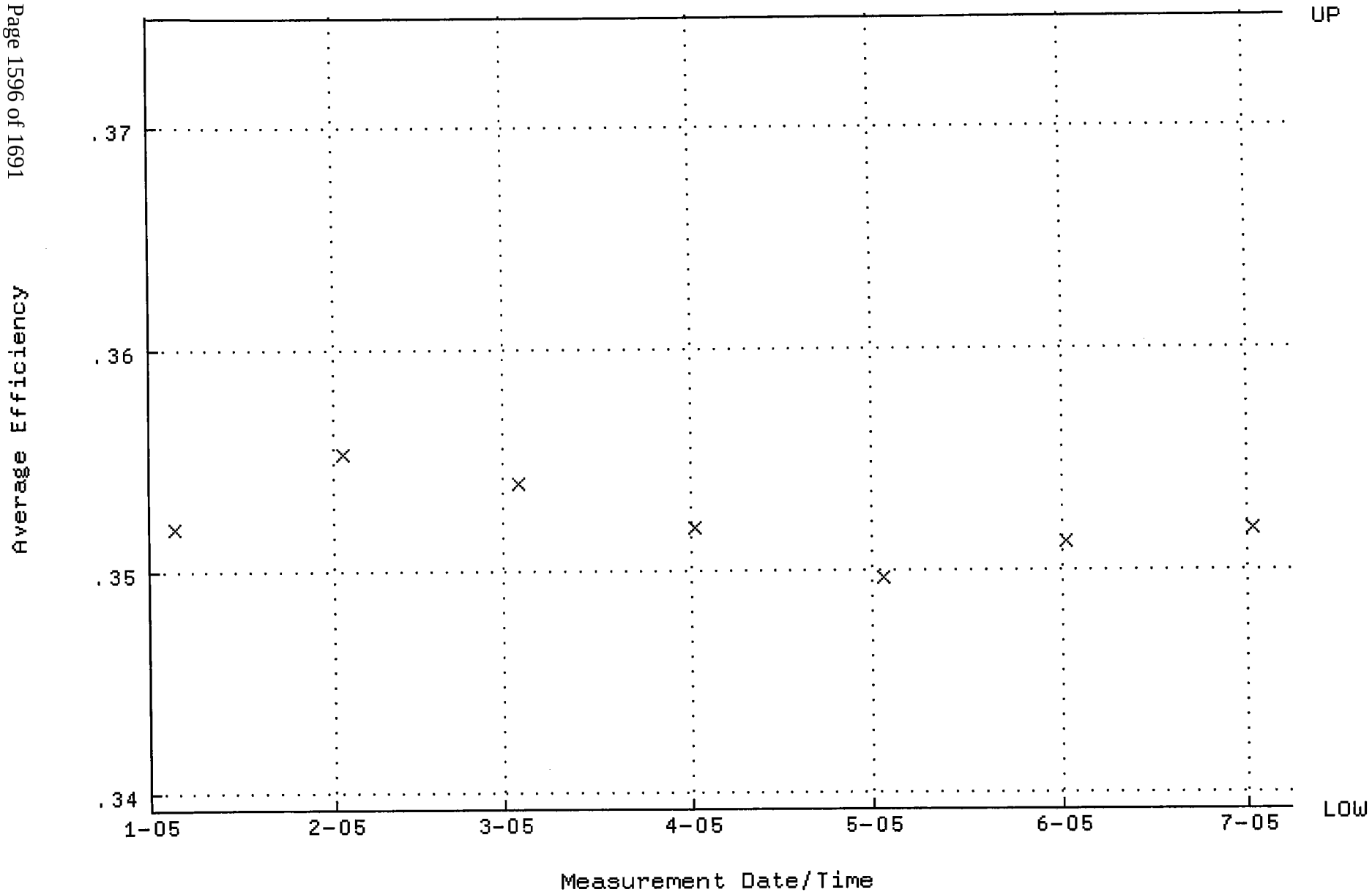
QA filename : DKA100:[ENV_ALPHA.QA.W]W100.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-JAN-2005 07:29:31 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



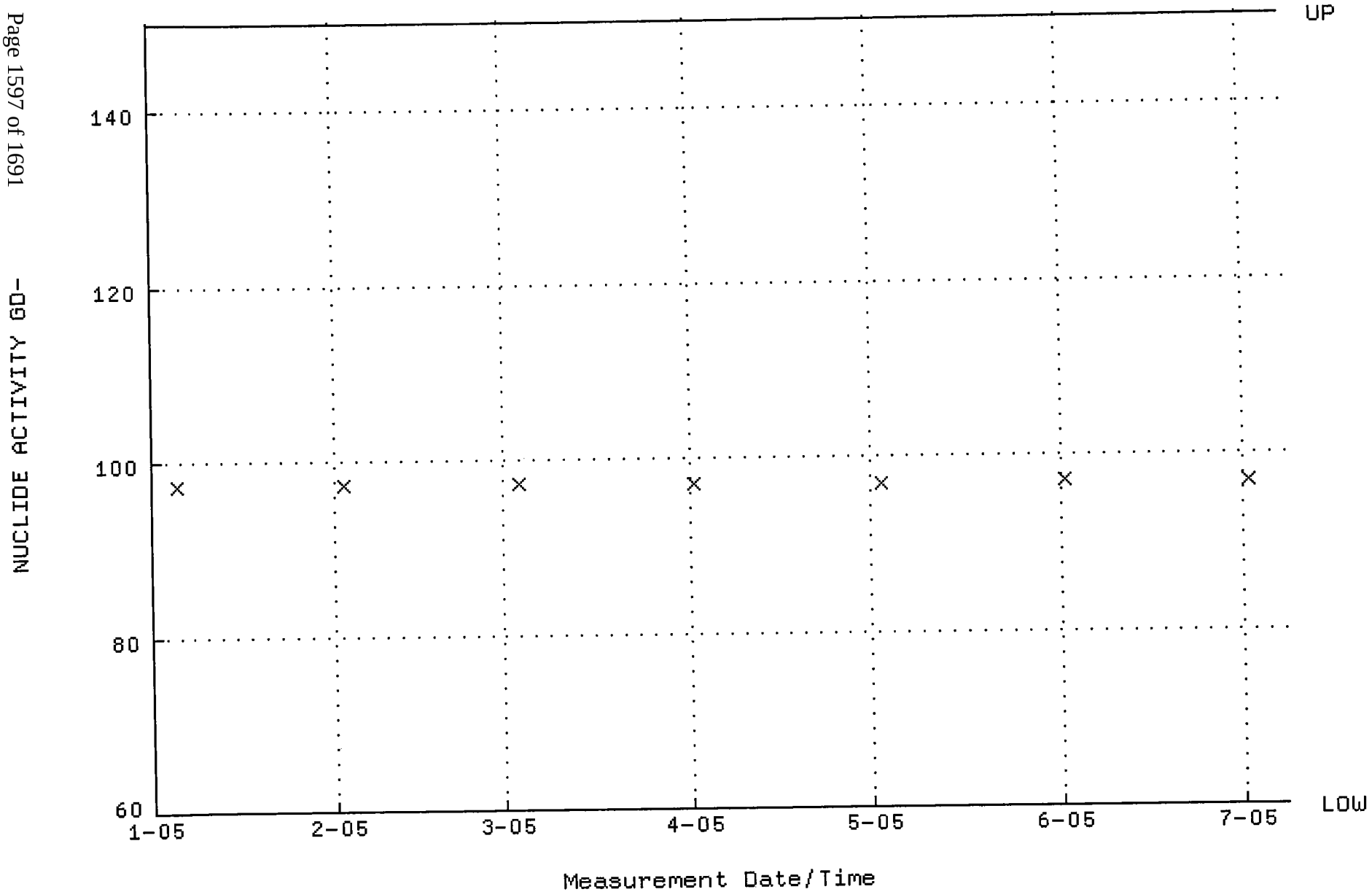
QA filename : DKA100:[ENV_ALPHA.QA.B]B100.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:11 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



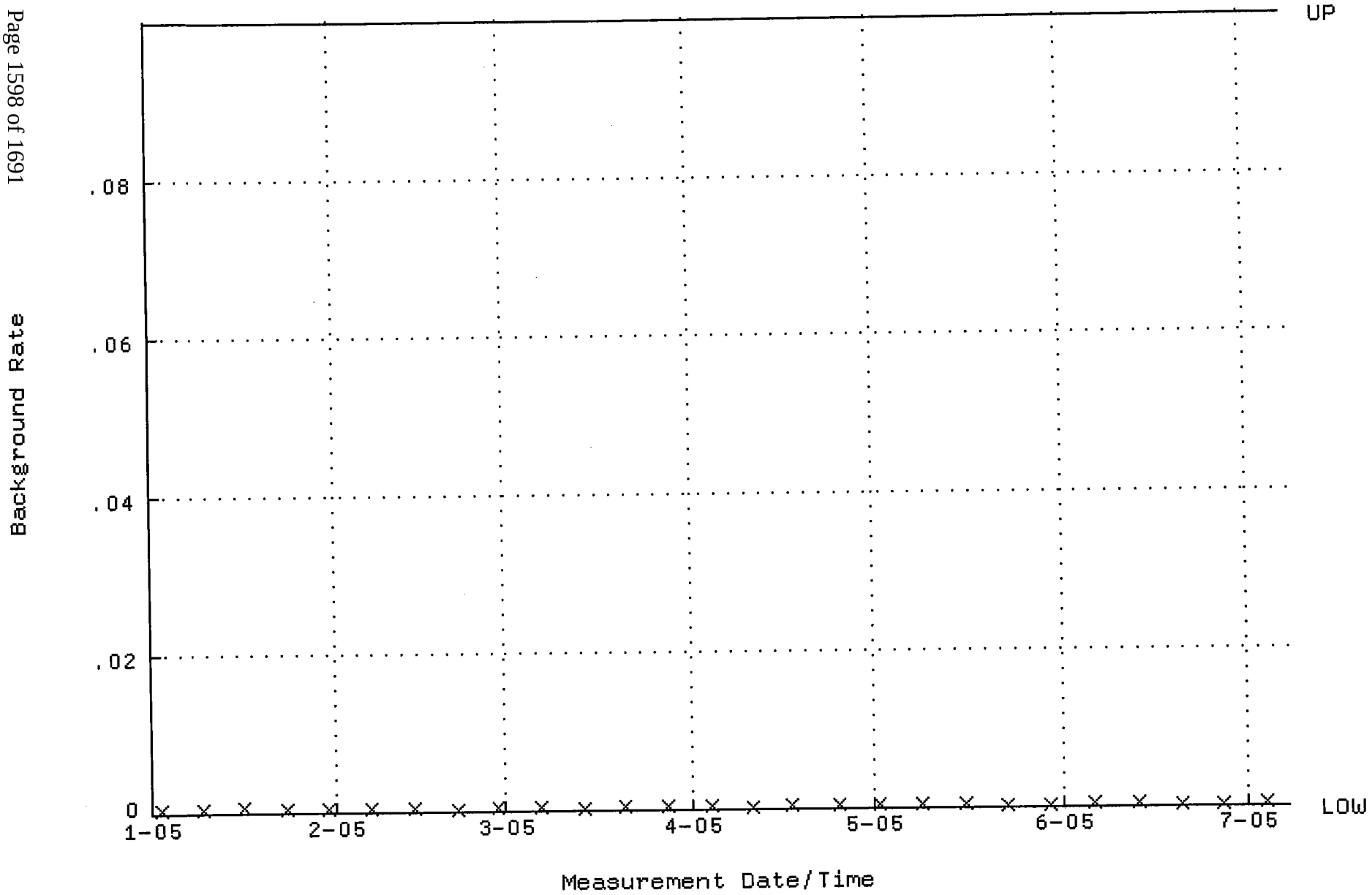
QA filename : DKA100:[ENV_ALPHA.QA.W]W101.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.339200 through 0.375000



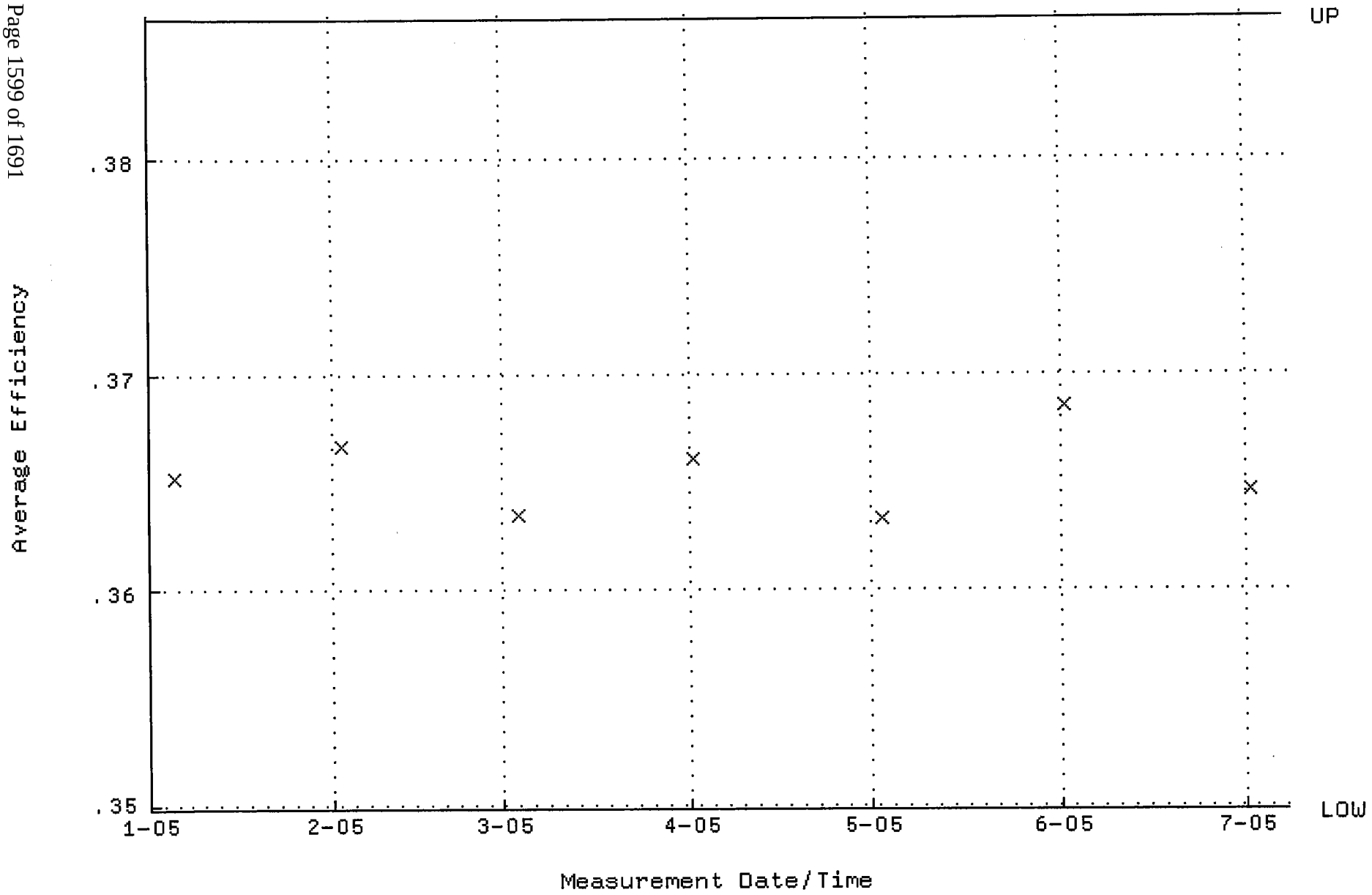
QA filename : DKA100:[ENV_ALPHA.QA.W]W101.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



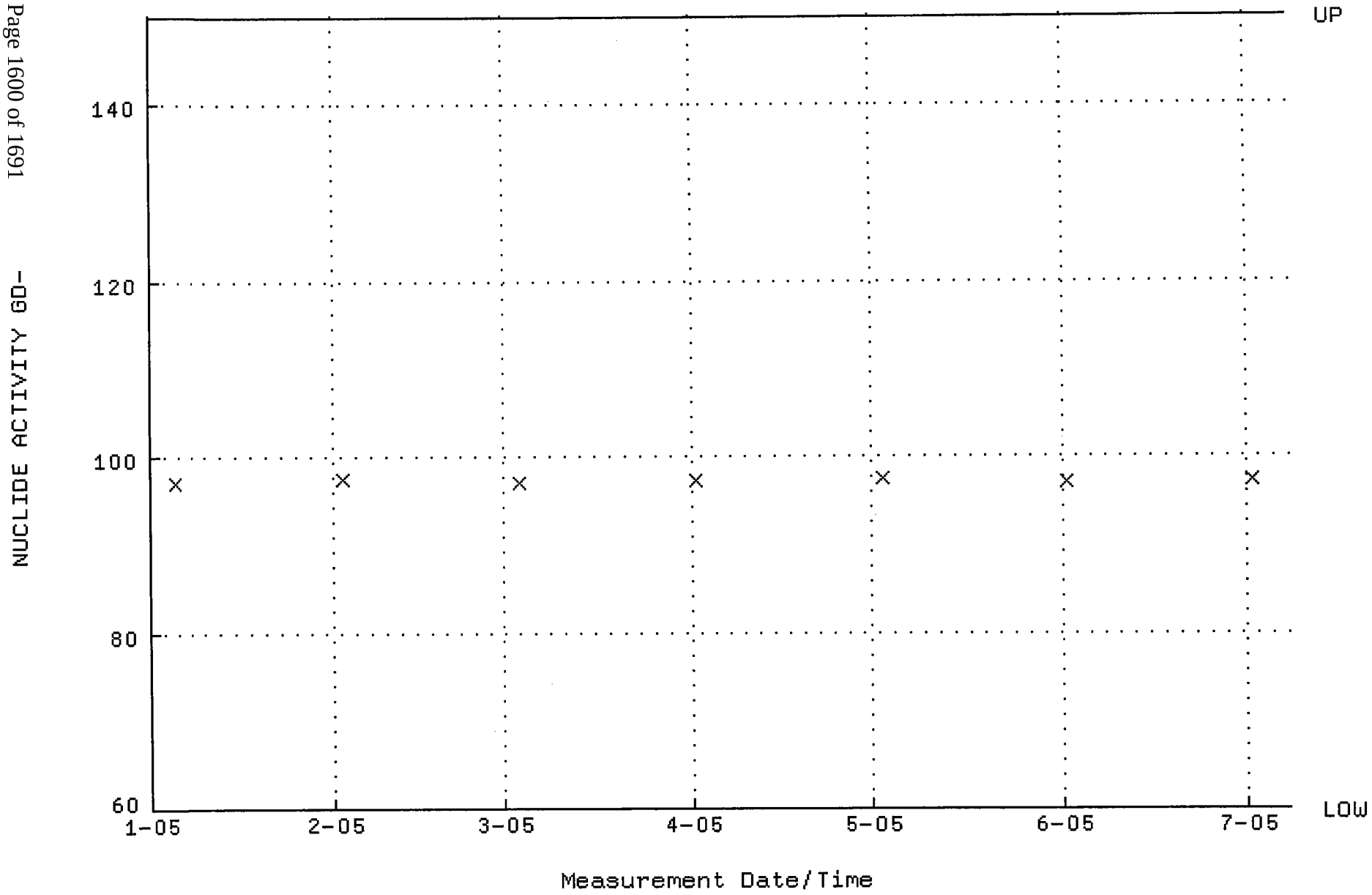
QA filename : DKA100:[ENV_ALPHA.QA.B]B101.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:12 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



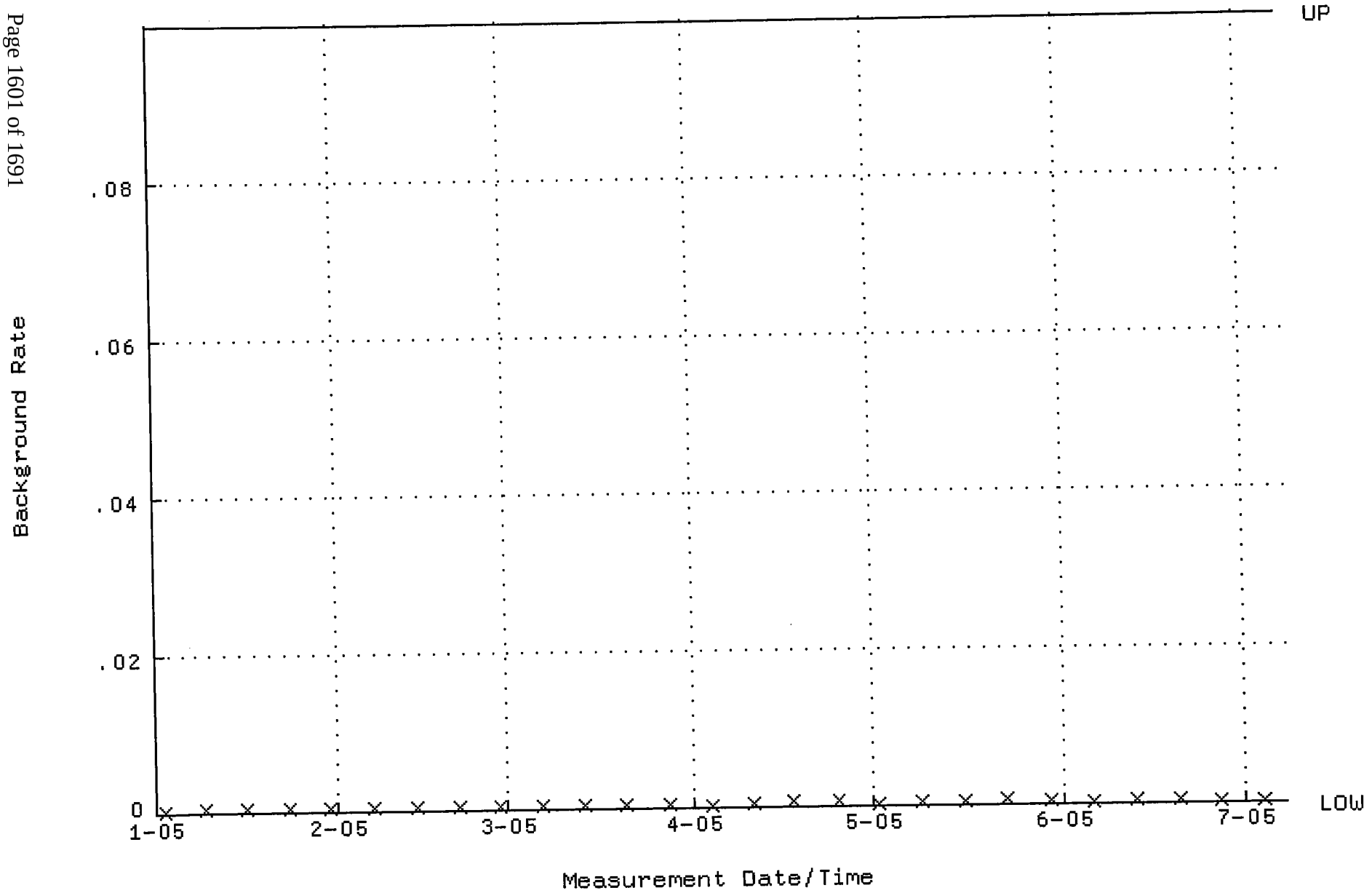
QA filename : DKA100:[ENV_ALPHA.QA.W]W102.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.349800 through 0.386600



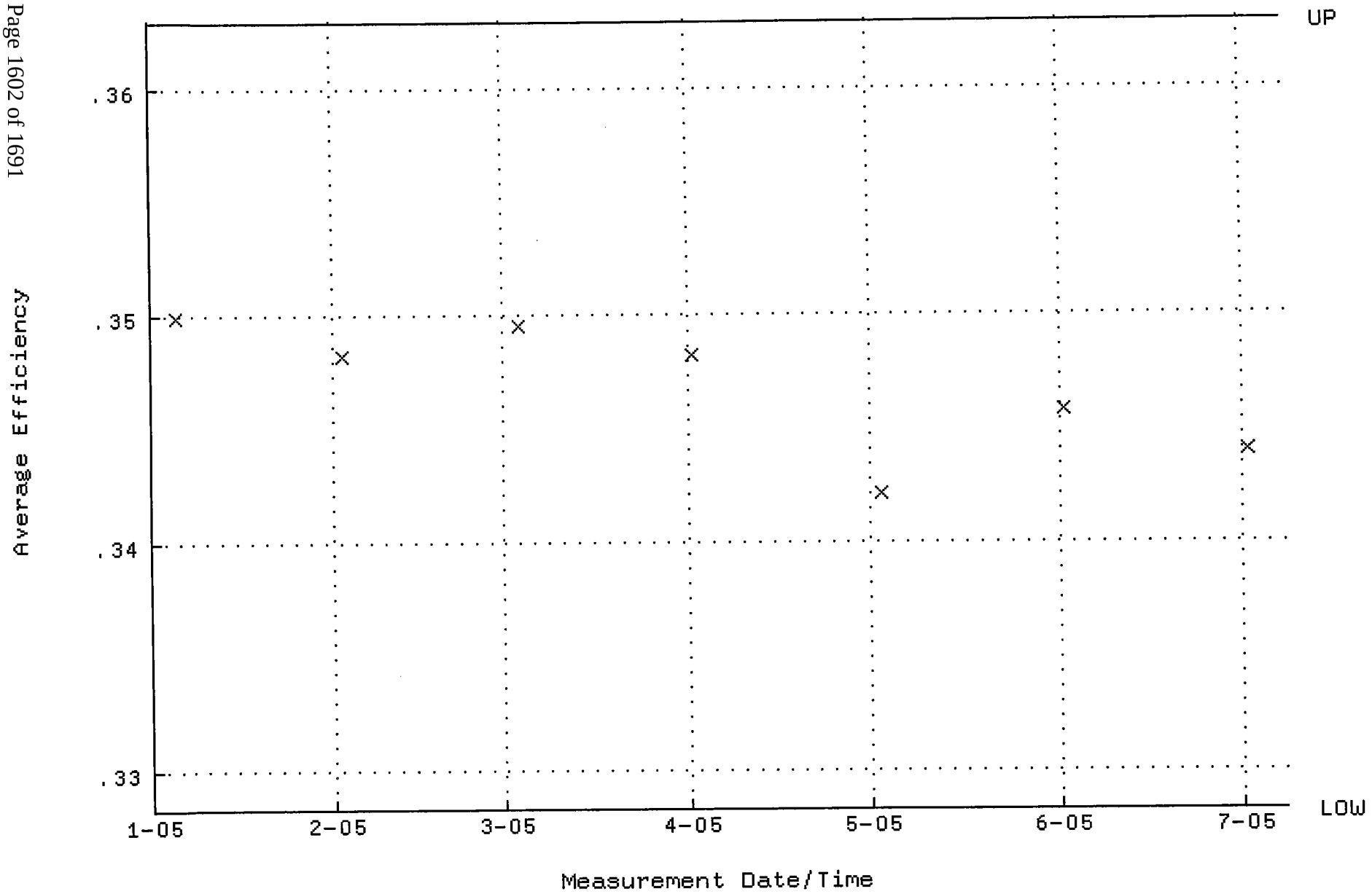
QA filename : DKA100:[ENV_ALPHA.QA.W]W102.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



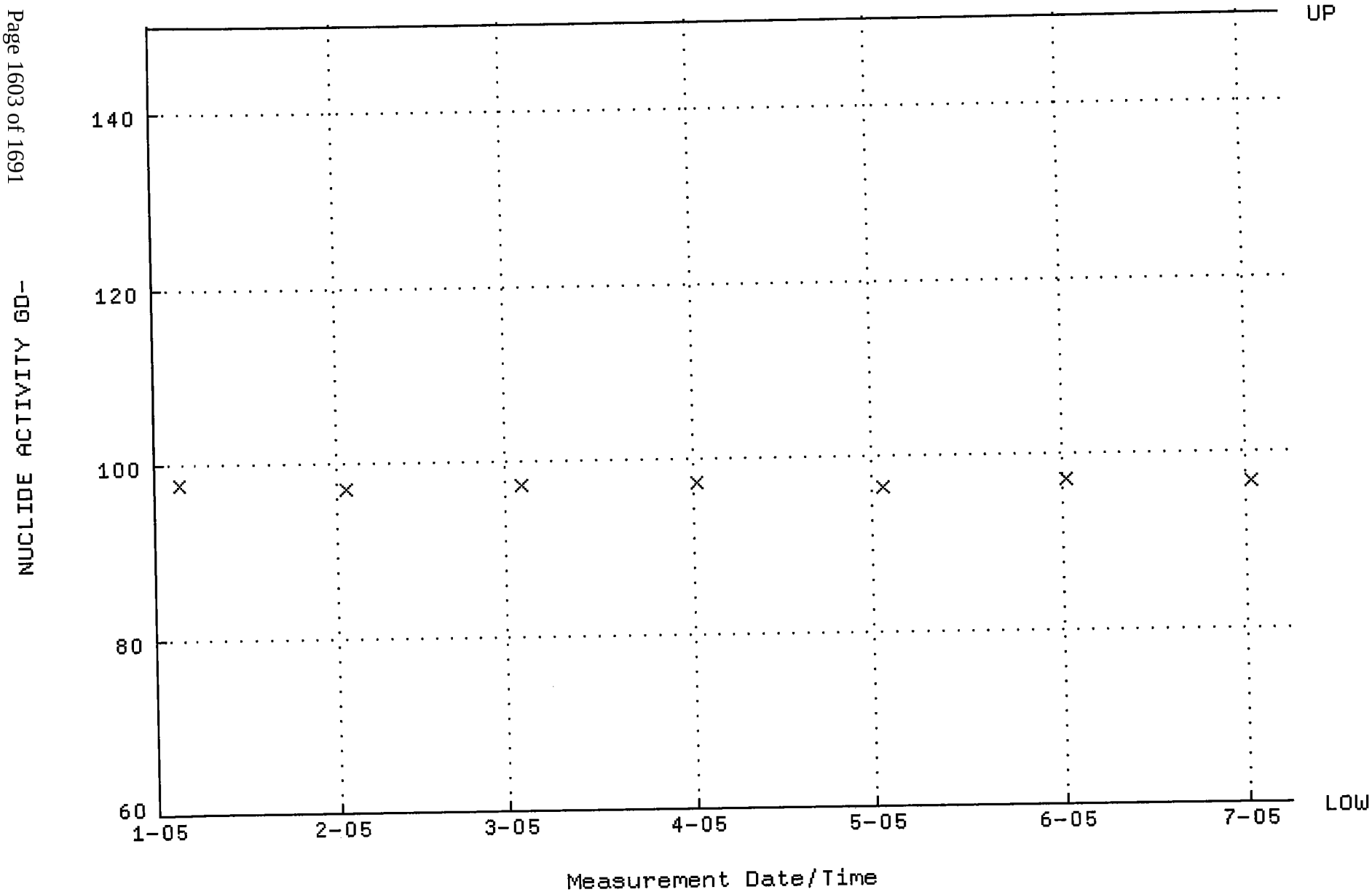
QA filename : DKA100:[ENV_ALPHA.QA.B]B102.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:12 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



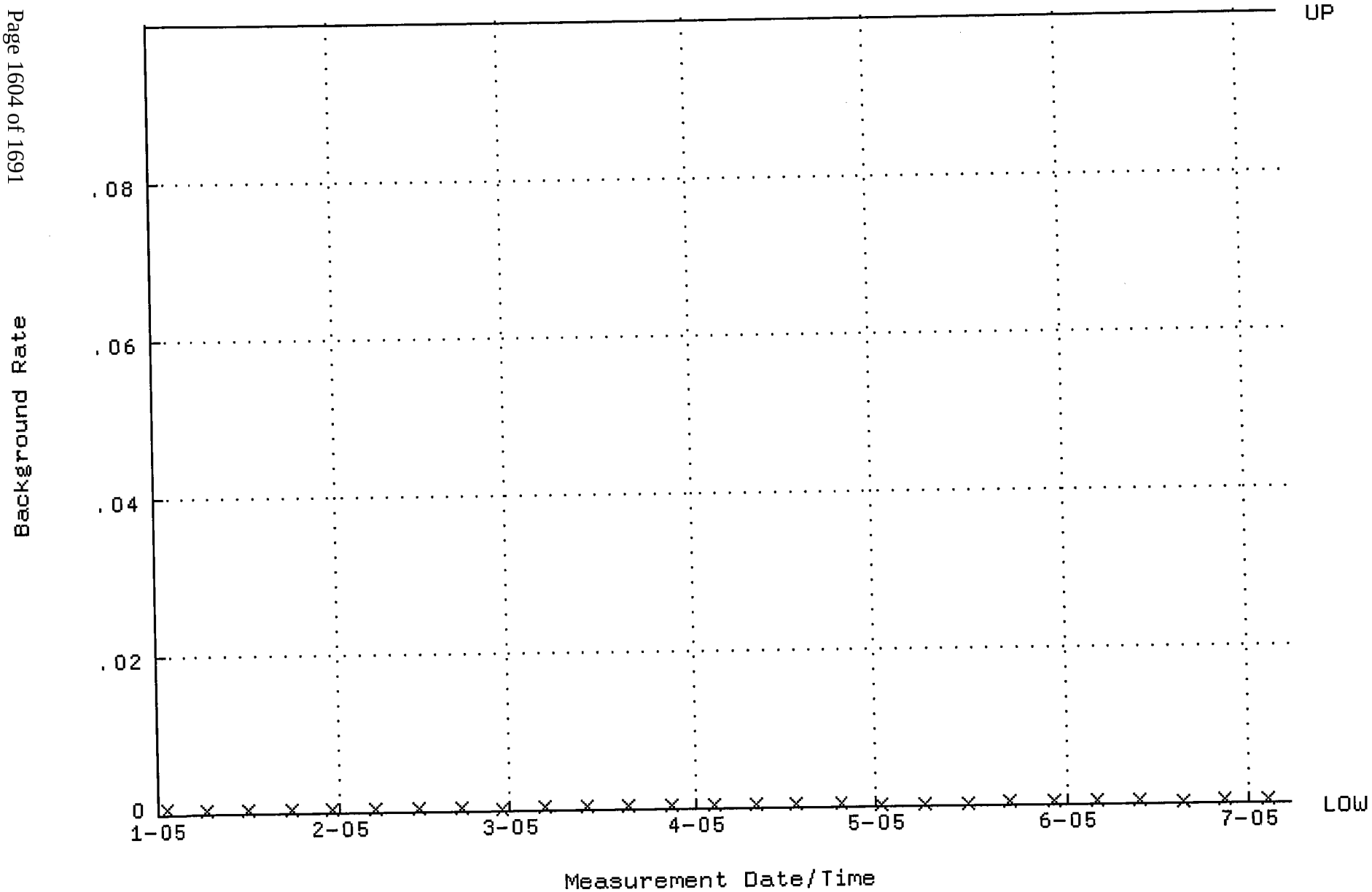
QA filename : DKA100:[ENV_ALPHA.QA.W]W106.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.328300 through 0.362900



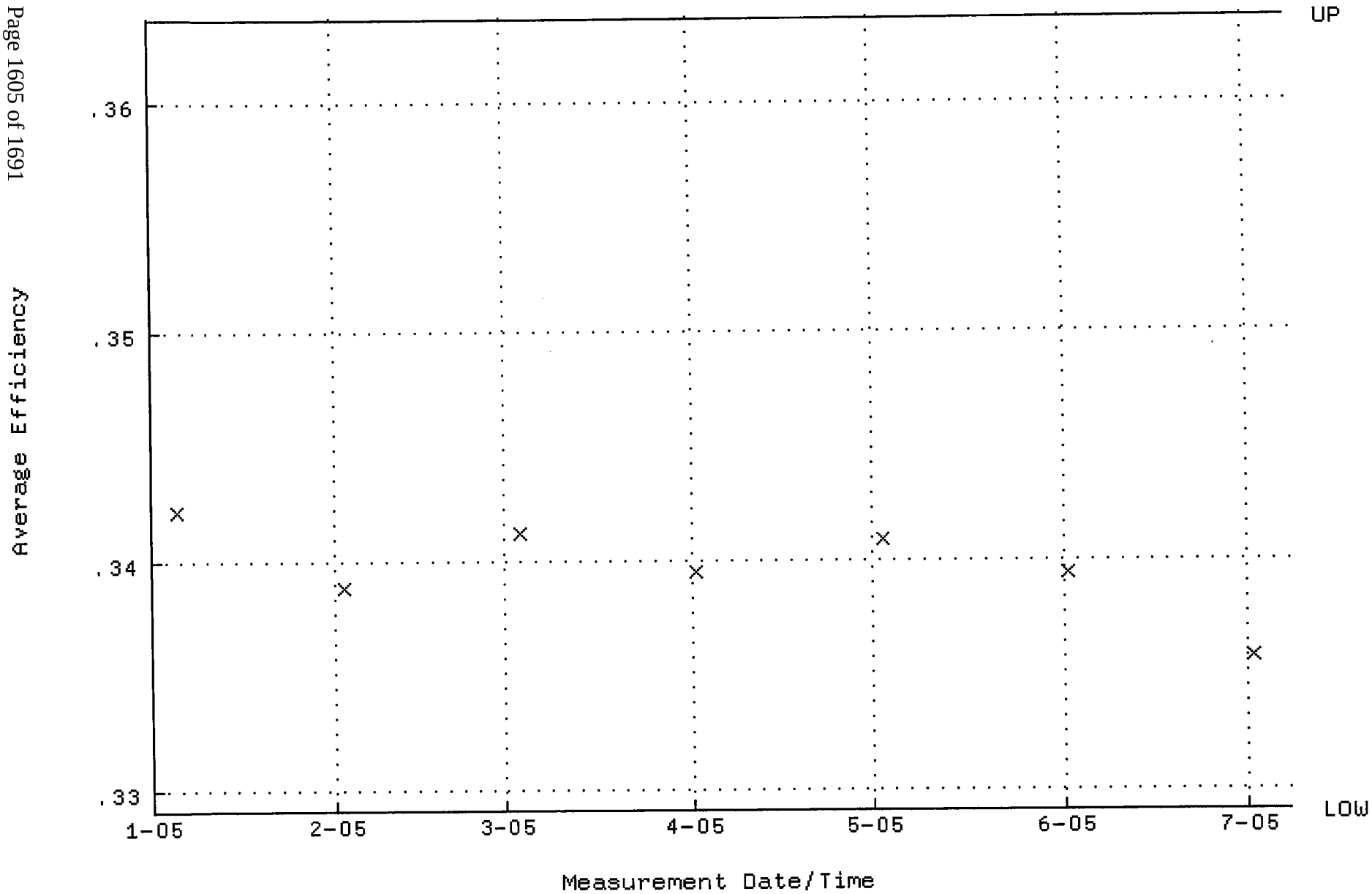
QA filename : DKA100:[ENV_ALPHA.QA.W]W106.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:33 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



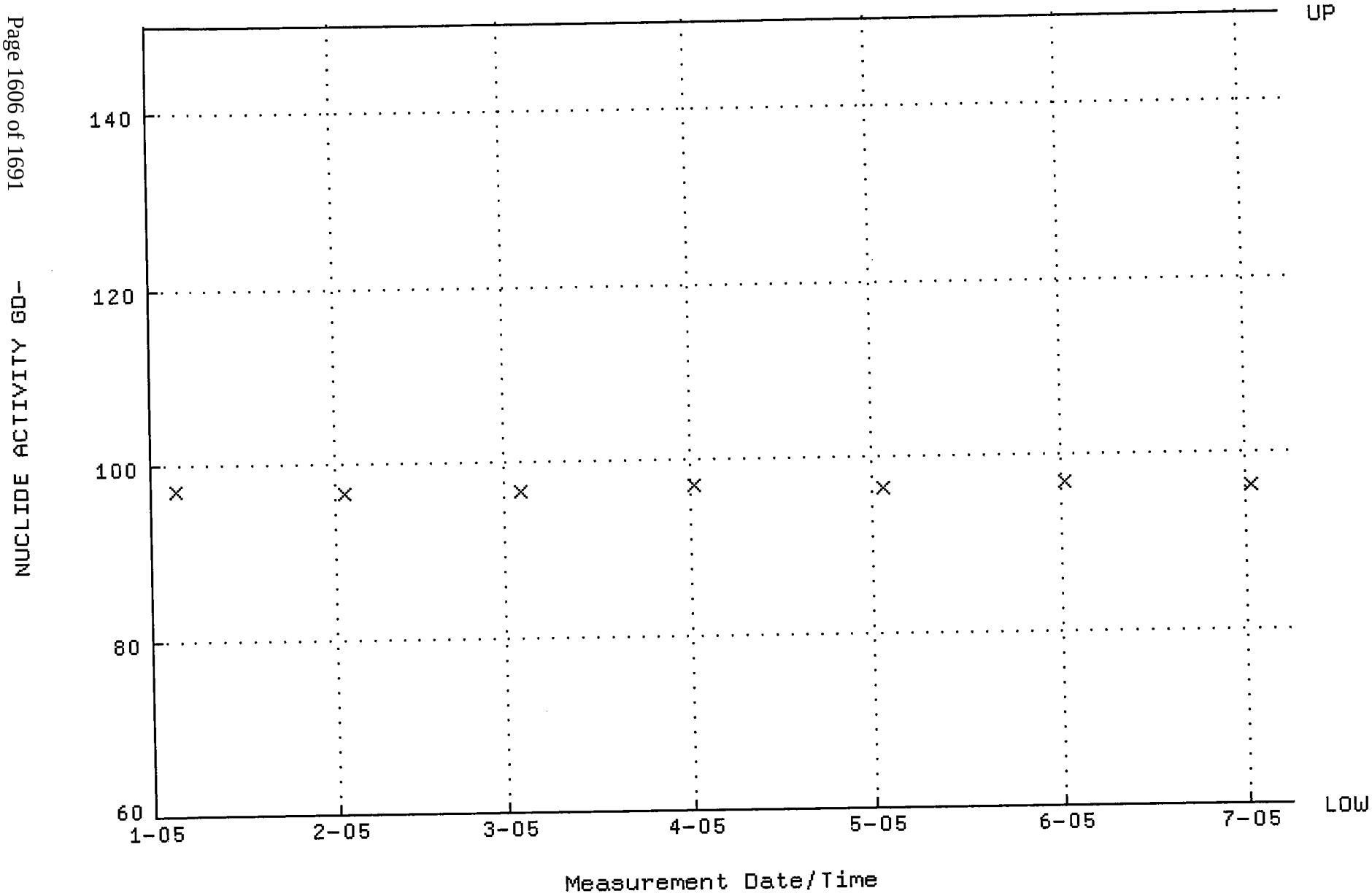
QA filename : DKA100:[ENV_ALPHA.QA.B]B106.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:12 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



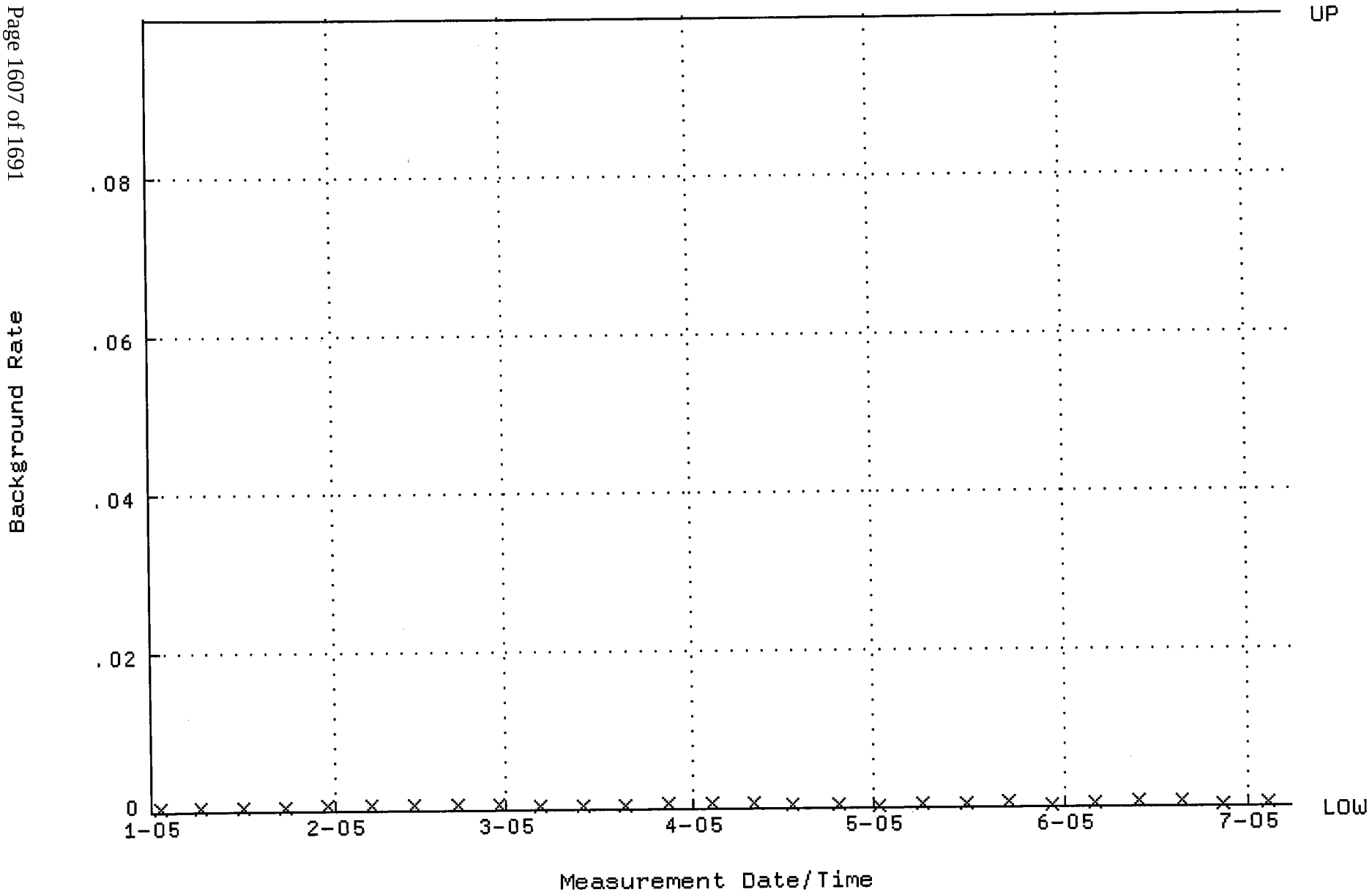
QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:34 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.329100 through 0.363700



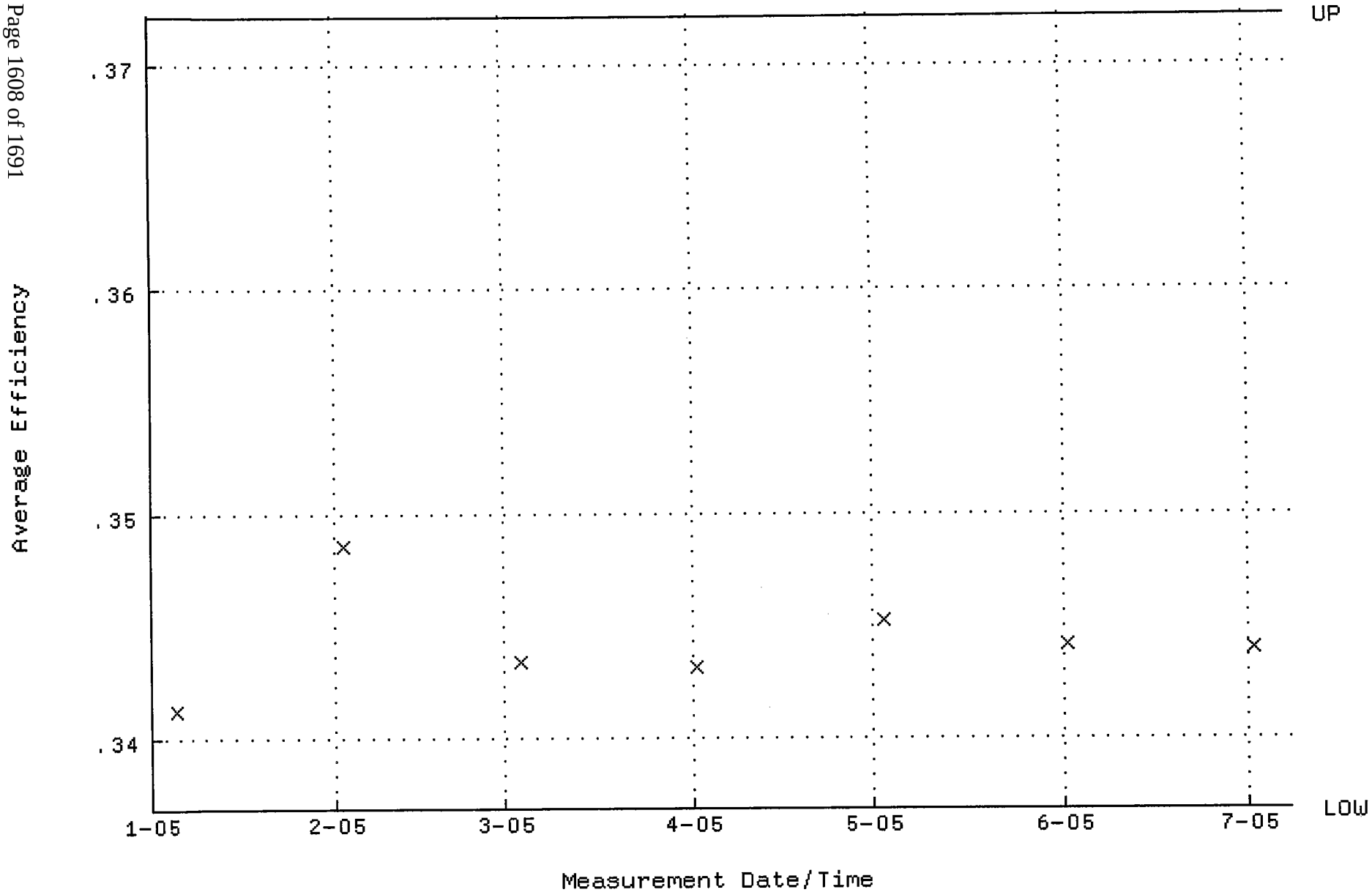
QA filename : DKA100:[ENV_ALPHA.QA.W]W109.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:34 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



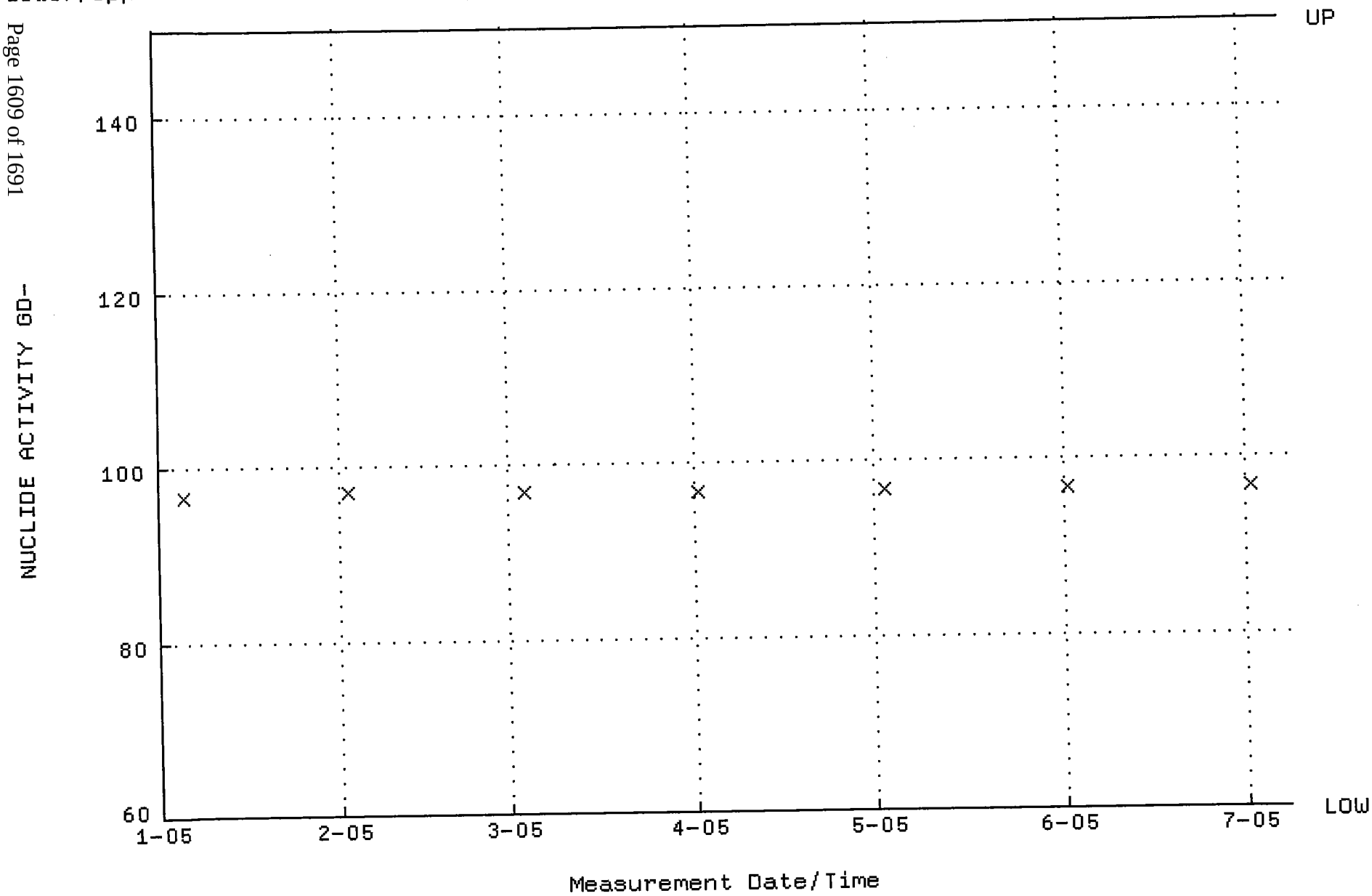
QA filename : DKA100:[ENV_ALPHA.QA.B]B109.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:13 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



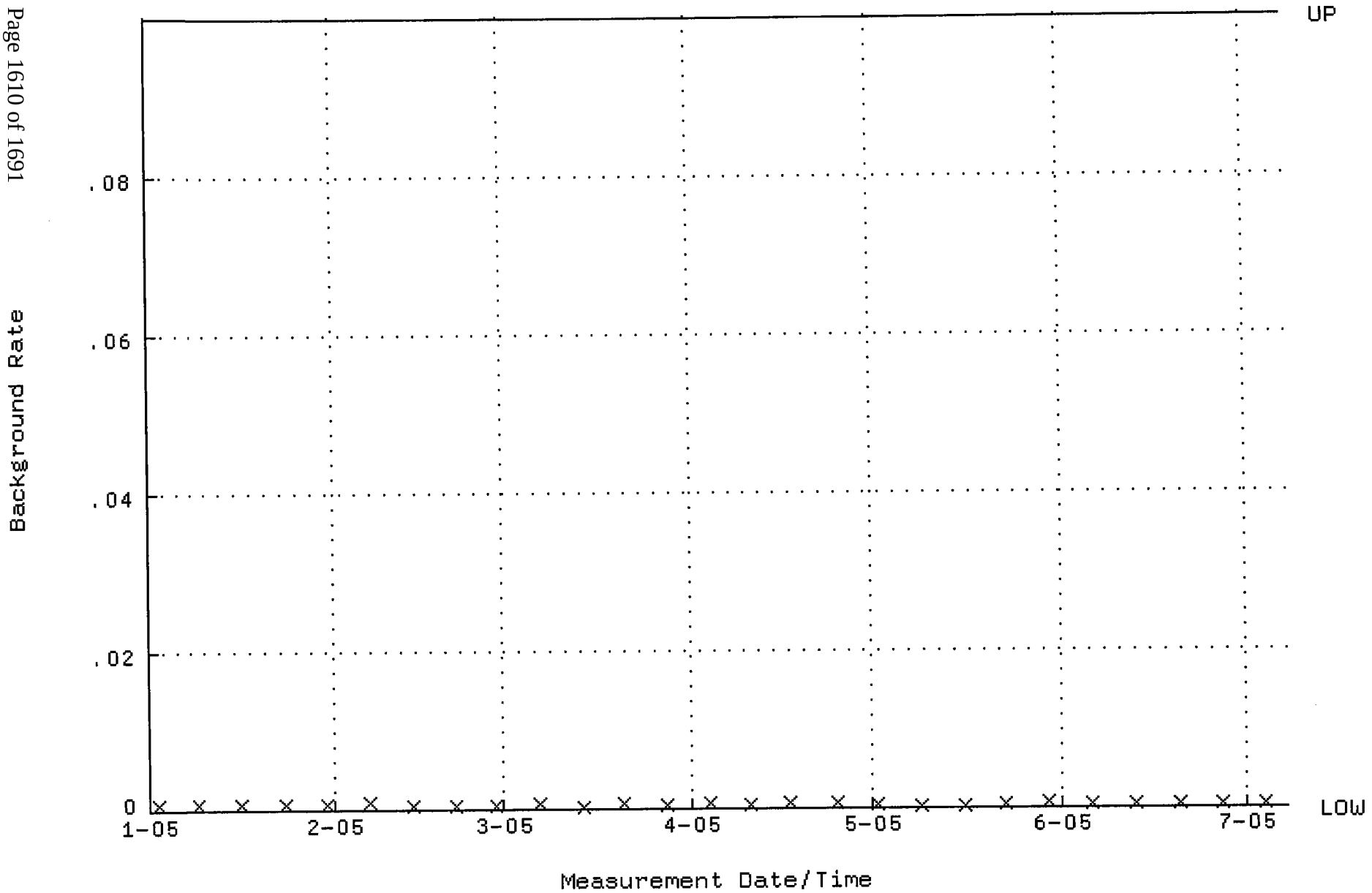
QA filename : DKA100:[ENV_ALPHA.QA.W]W111.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-JAN-2005 07:49:34 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.336800 through 0.372200



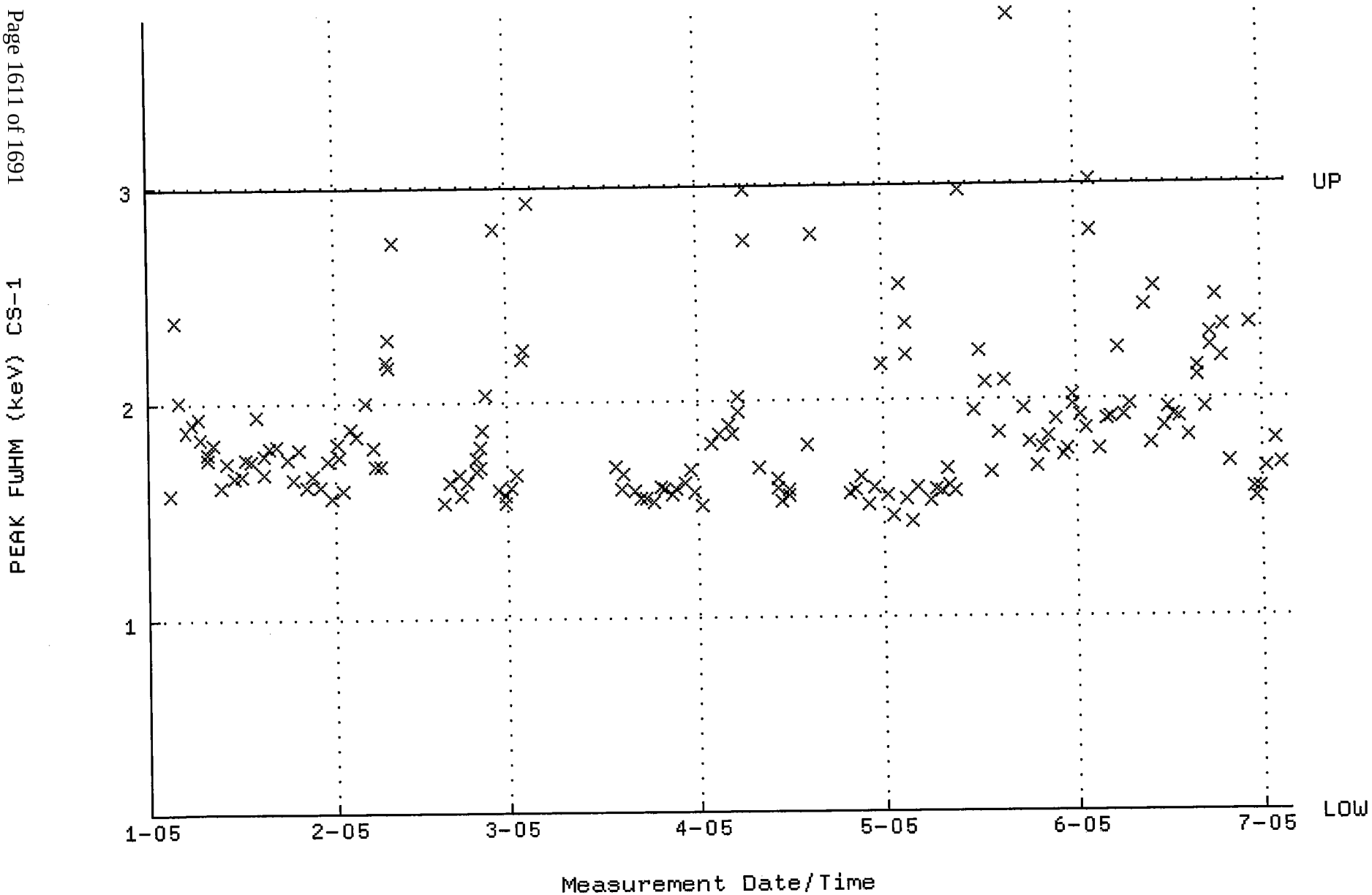
QA filename : DKA100:[ENV_ALPHA.QA.W]W111.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-JAN-2005 07:49:34 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



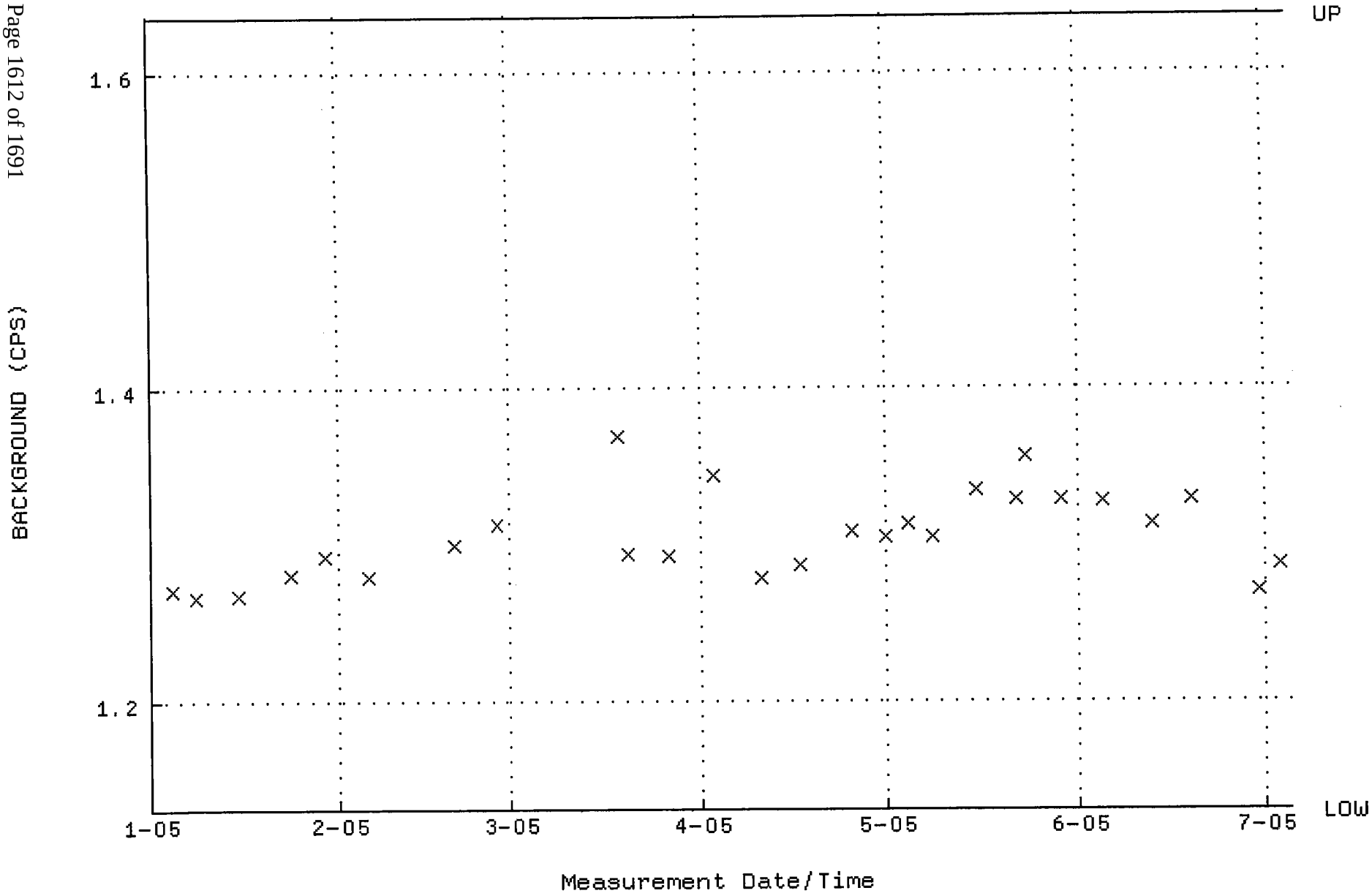
QA filename : DKA100:[ENV_ALPHA.QA.B]B111.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 2-JAN-2005 16:37:13 through 7-JUL-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



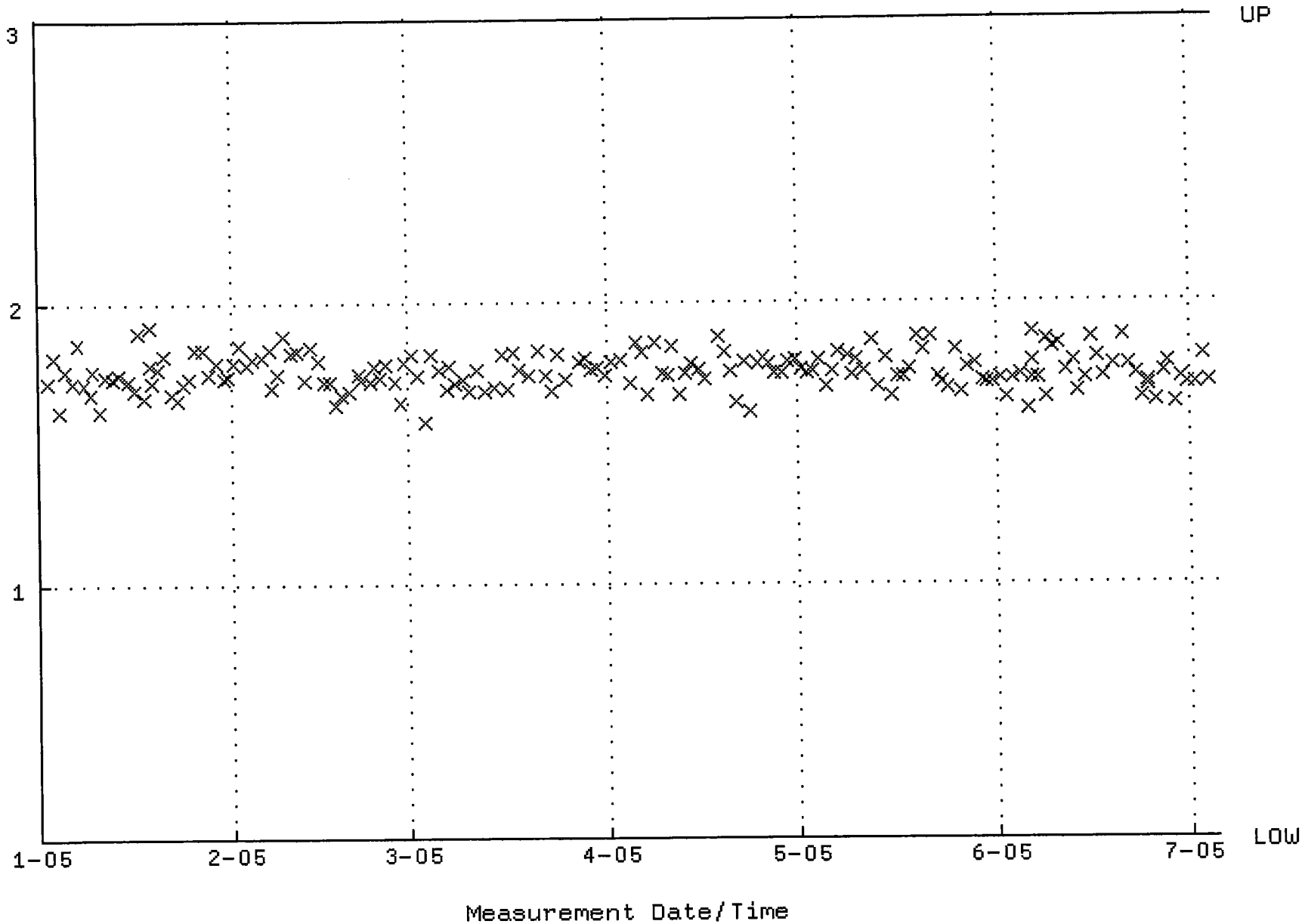
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA2.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 4-JAN-2005 16:42:06 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



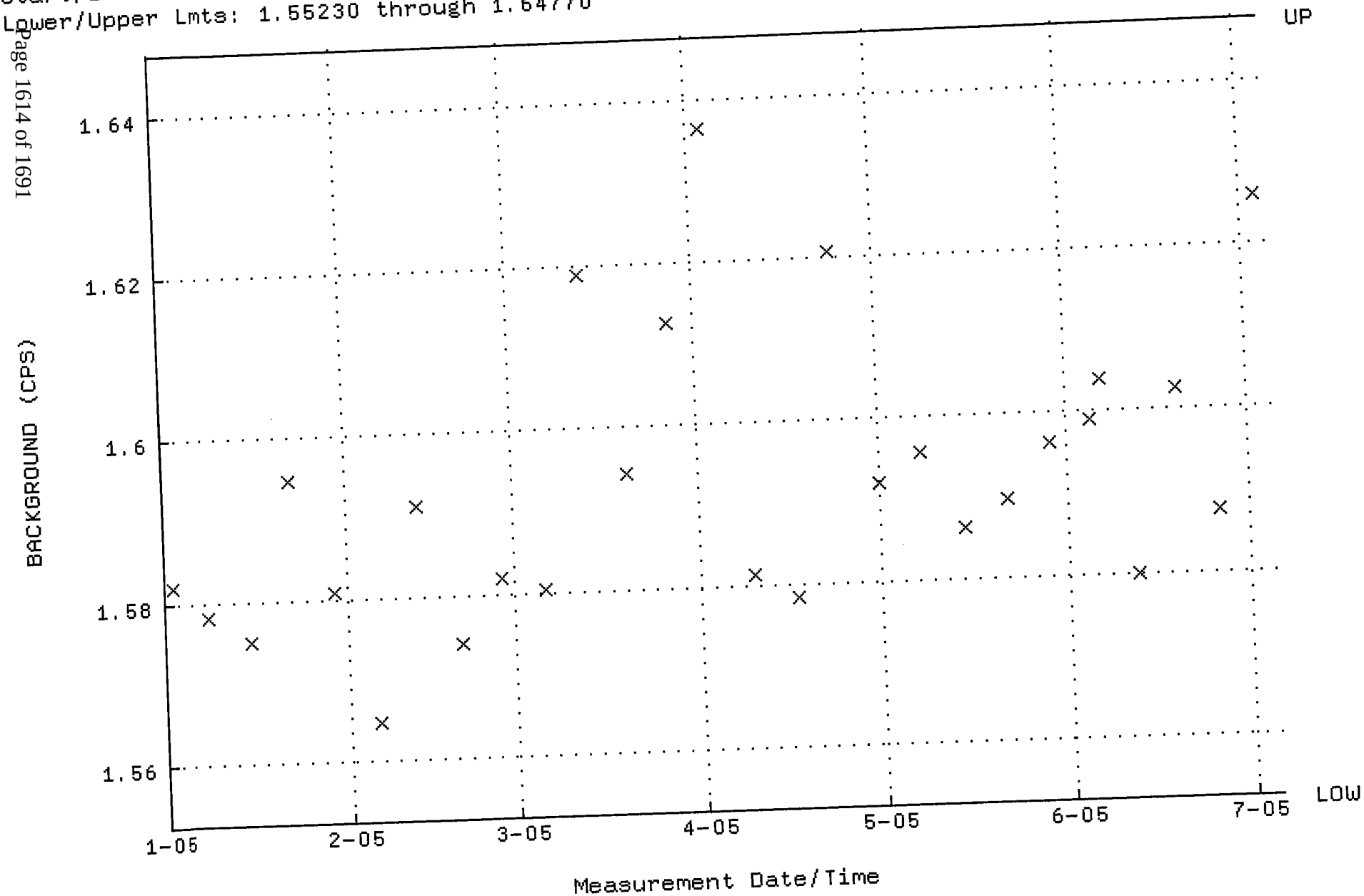
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA2.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 4-JAN-2005 16:55:03 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.13100 through 1.63600



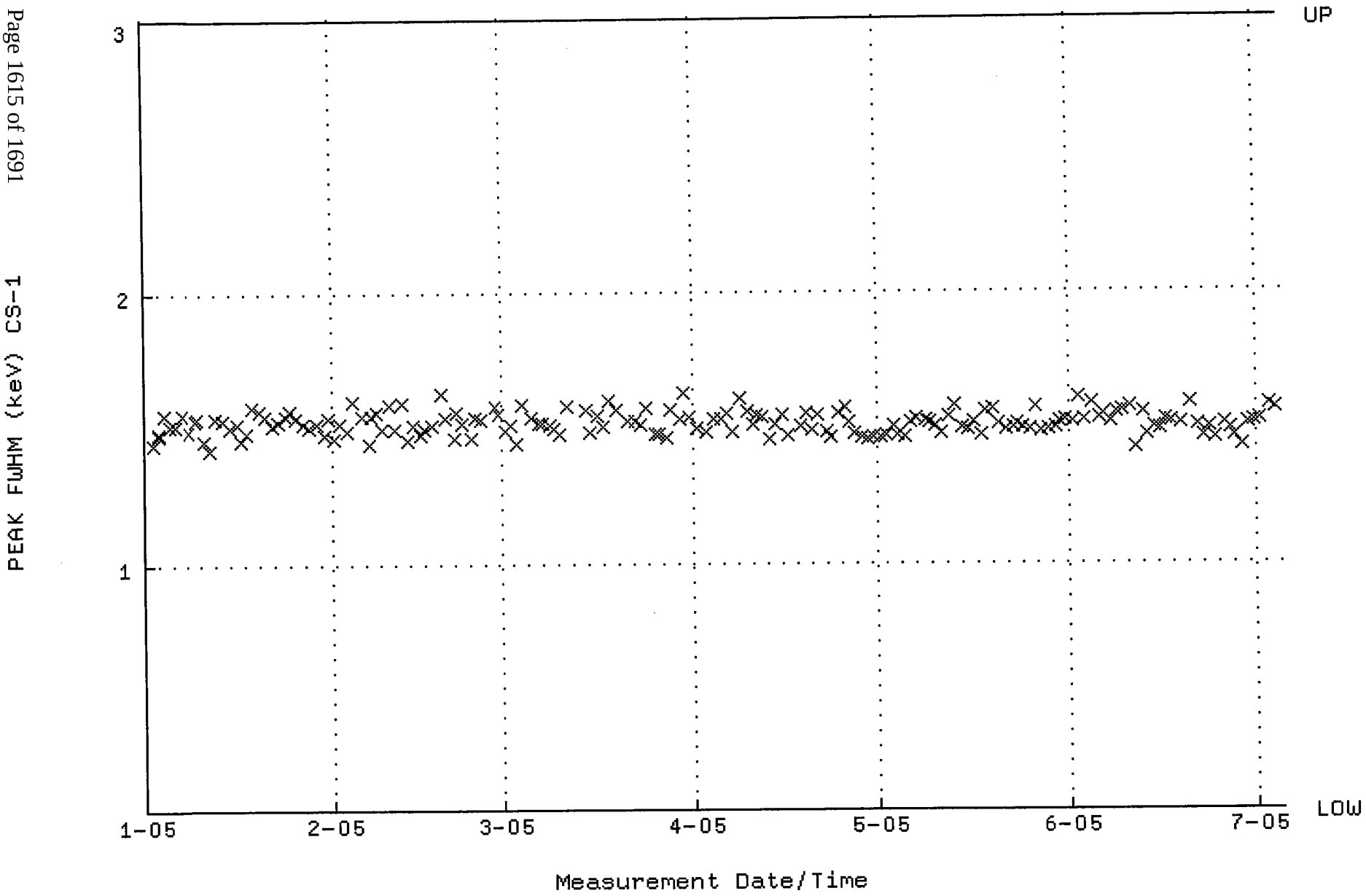
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA3.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 14:41:41 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



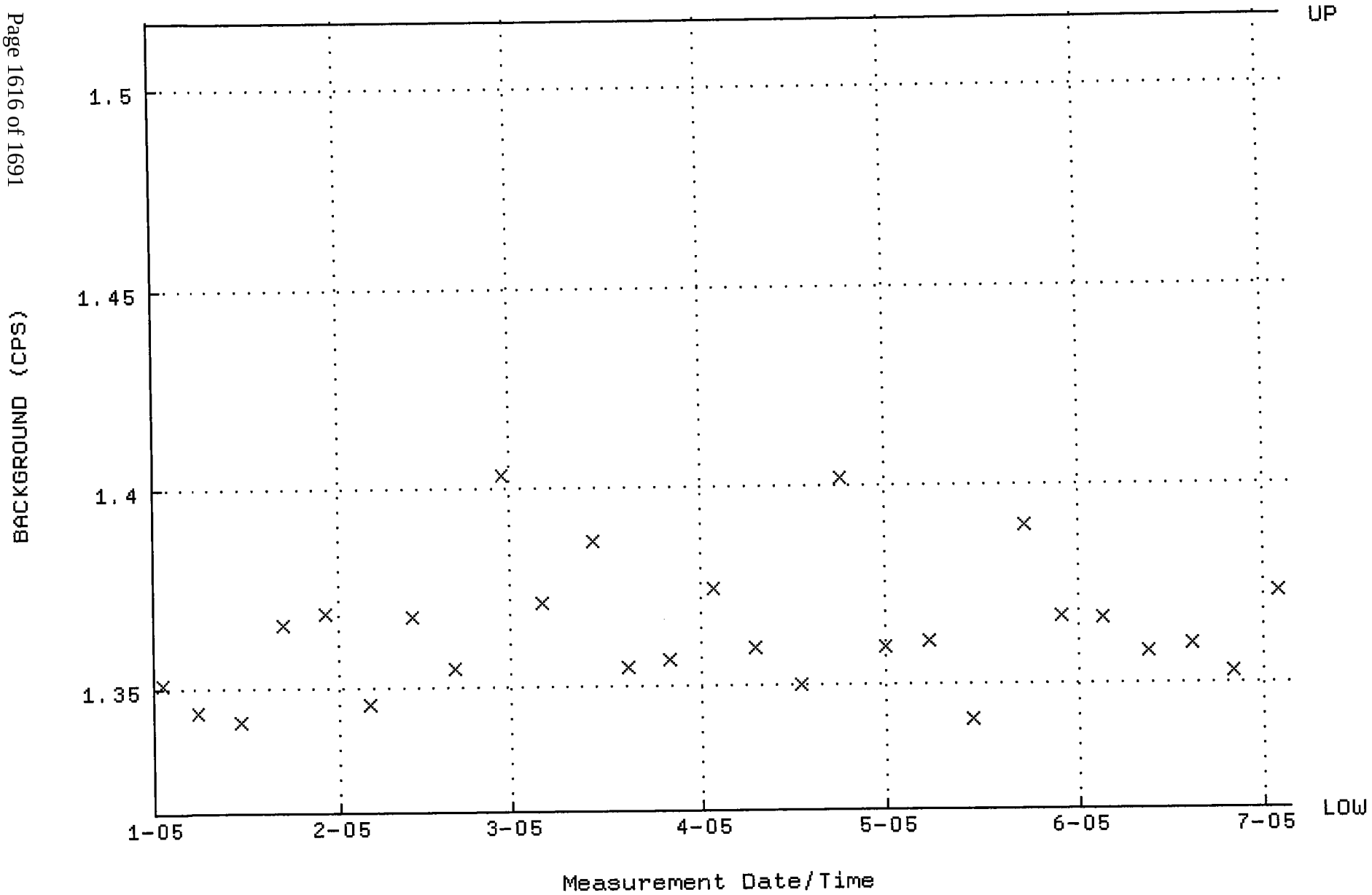
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA3.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:07:37 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.55230 through 1.64770



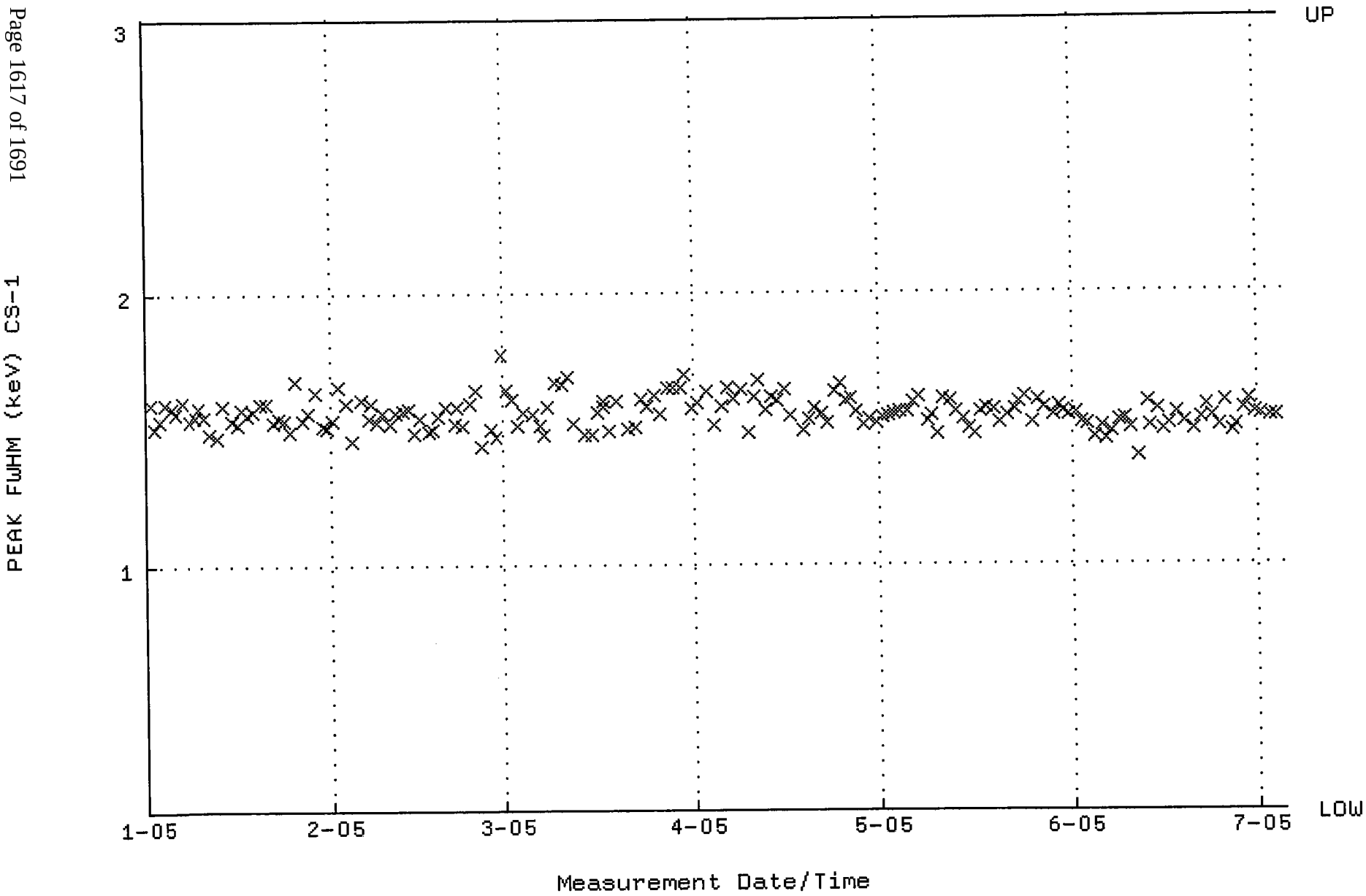
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA4.QAF;7
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 13:58:37 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



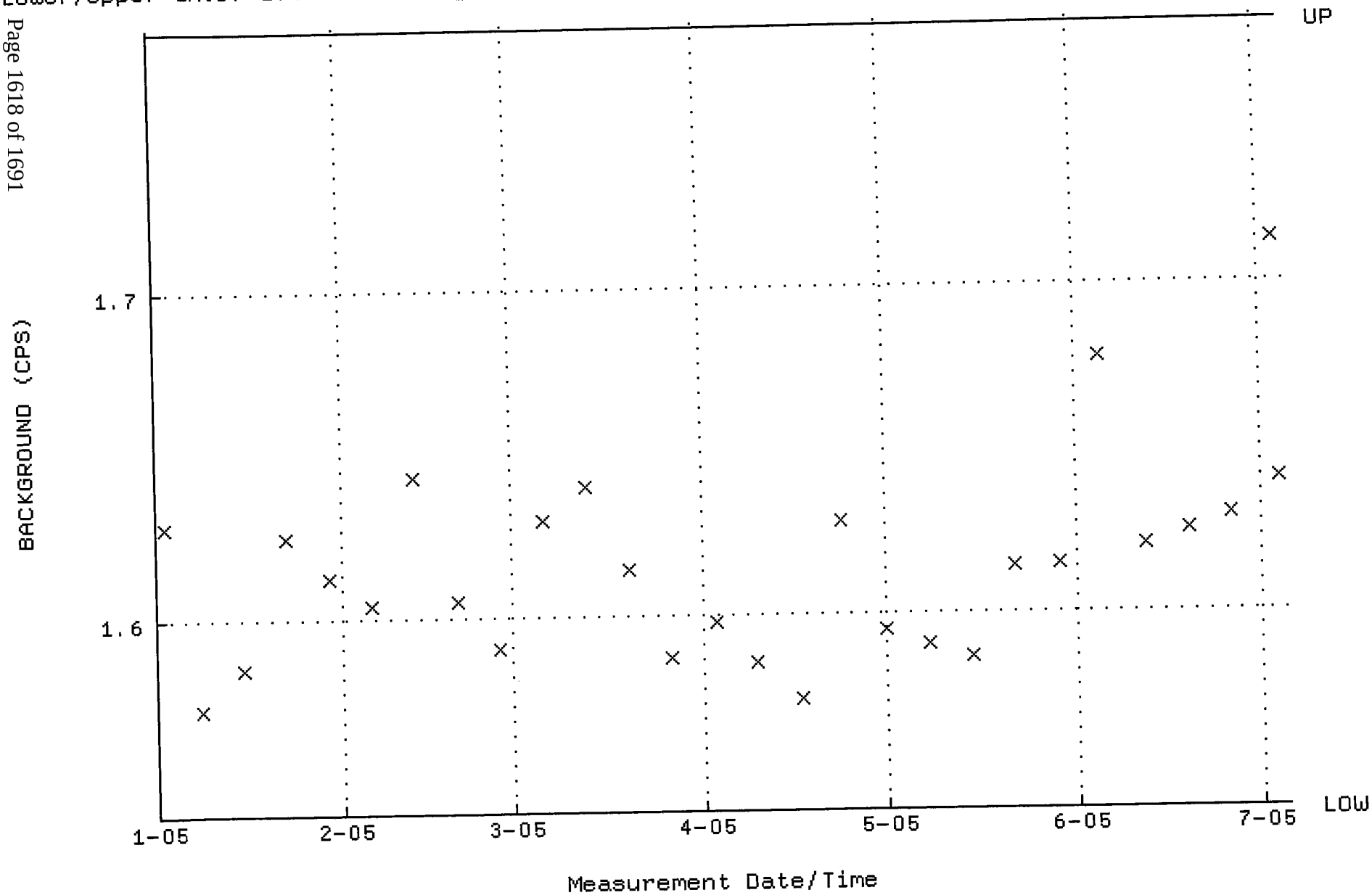
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA4.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:08:02 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.31900 through 1.51700



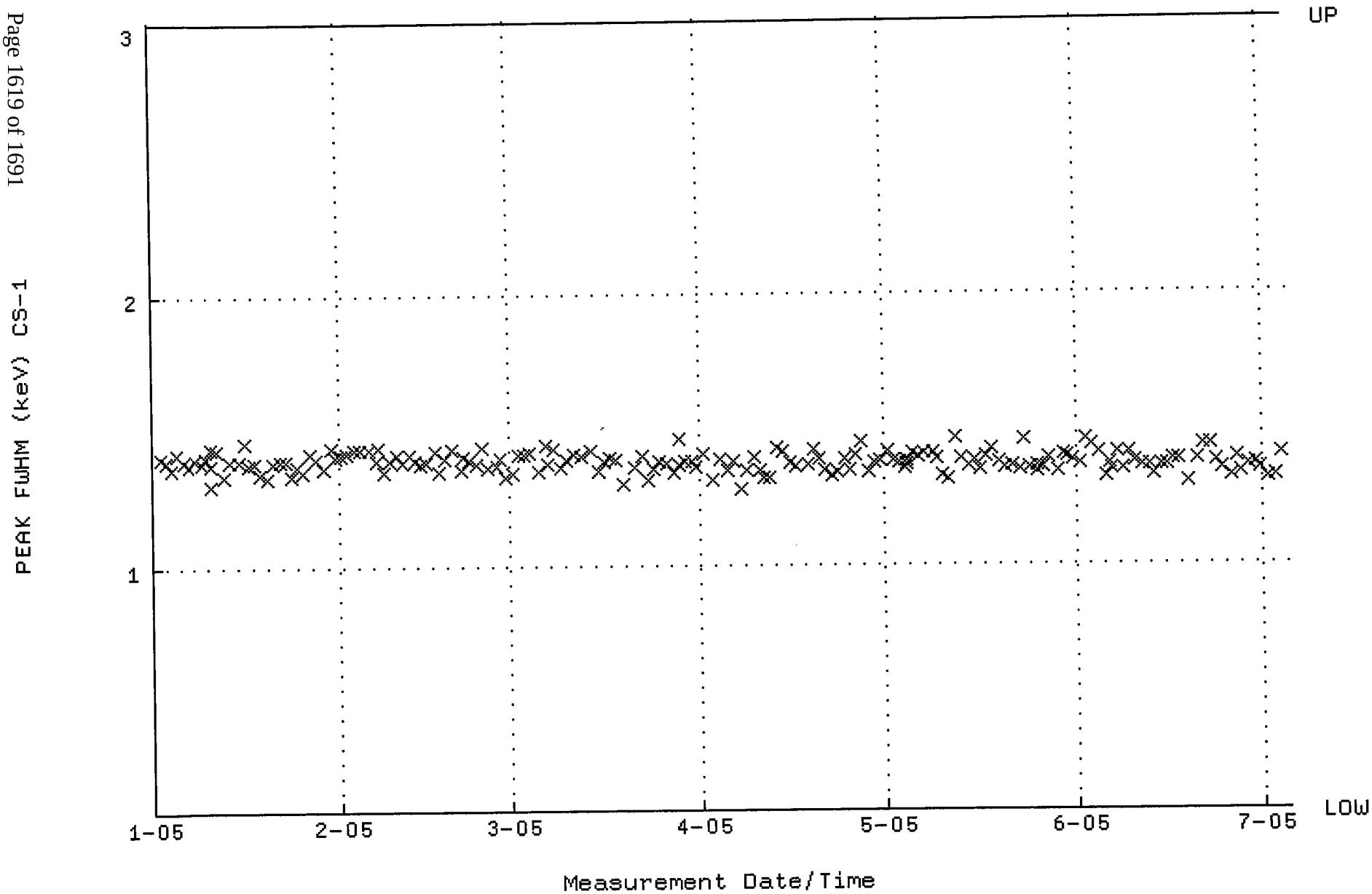
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA12.QAF;5
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 1-JAN-2005 21:26:44 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



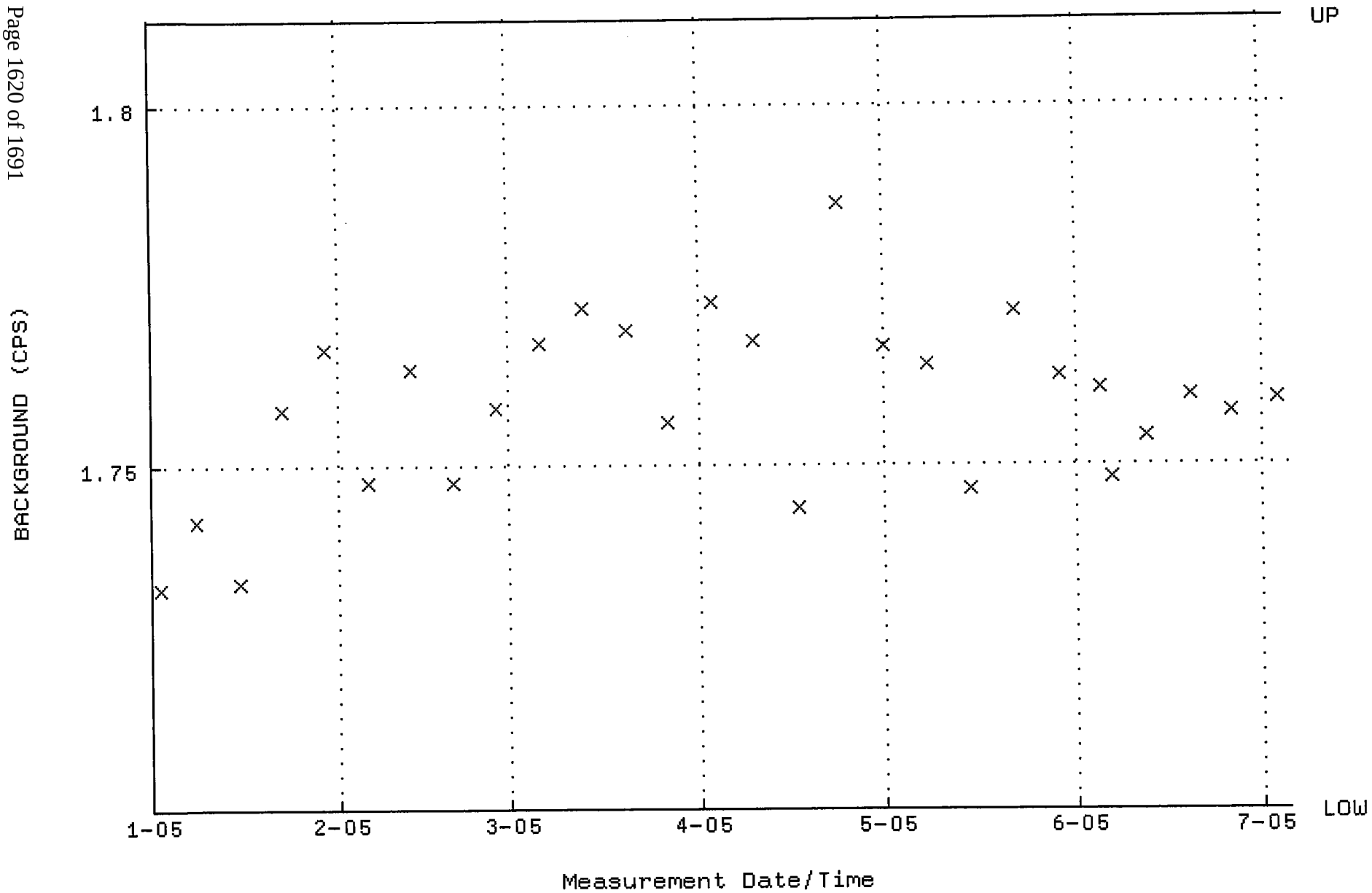
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA12.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:09:20 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.54000 through 1.78000



QA filename : DKA100:[ENV_ALPHA]QC_GAMMA17.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-JAN-2005 14:42:01 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA17.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-JAN-2005 15:14:47 through 4-JUL-2005 12:00:00
Lower/Upper Lmts: 1.70200 through 1.81200



STANDARDS DATA

0321

National Institute of Standards & Technology

Certificate

Standard Reference Material 4967
Radioactivity Standard

Radionuclide	Radium-226 [1]*
Source identification	SRM 4967
Source description	Liquid in a 5-mL, flame-sealed NIST borosilicate-glass ampoule [2]
Solution composition	Approximately 1.4 mol•L^{-1} HCl[3] containing 1.74 mg $BaCl_2$ per gram of solution[4] and Ra^{+2} [5]
Solution density	1.019 ± 0.001 g•mL^{-1} at 22 °C [6]
Solution mass	5.1167 ± 0.0027 g [7]
Radium-226 activity concentration	2729 Bq•g^{-1} [8]
Reference time	1200 EST 9 September 1991
Overall uncertainty	1.18 percent [9]
Half life	1600 ± 7 years [10]
Calibration method	NIST pressurized "4π"γ ionization chamber "A" calibrated with the national radium standards[11]; and confirmatory measurements [12]

This standard reference material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, Dale D. Hoppes, Group Leader.

Gaithersburg, MD
January 1992

William P. Reed, Chief
Standard Reference Materials Program

*Notes on back

RC-S-027-150

NOTES

(1) This standard was prepared by gravimetric dilutions of the "1947 series" of ^{226}Ra standards which were recalibrated at NIST (NBS) in 1967. The "age" of the radium, with accompanying in-growth of ^{210}Pb, is at least 44.3 years.

(2) Approximately five milliliters of solution. Ampoule specifications:

body diameter	16.5 ± 0.5 mm
wall thickness	0.60 ± 0.04 mm
barium content	less than 2.5 percent
lead oxide content	less than 0.02 percent
other heavy elements	trace quantities

(3) Corresponding to a 14.9% (by weight) solution of NIST, high-purity, vacuum-distilled hydrochloric acid (nominal 10 $mol \cdot L^{-1}$) in doubly-distilled water.

(4) The $BaCl_2$ reagent used to prepare the carrier solution was measured in a NaI(Tl) well counter and found to contain ≤ 0.01 Bq ^{226}Ra per gram of $BaCl_2$.

(5) The atom ratio of barium carrier to radium in the solution is approximately 2.5×10^4.

(6) The uncertainty in the density is three times the standard deviation of the mean for three independent gravimetric determinations. Confirmatory measurements based on the total master solution mass and individually dispensed masses in known volumes were in agreement.

(7) Mean mass of the dispensed solution in the ampoule. The uncertainty is three times the standard deviation of 19 individually weighed masses of solution from which the mean mass was calculated.

(8) Corresponding to 7.461×10^{-8} g ^{226}Ra per gram of solution assuming a conversion factor of 36.576 $kBq \cdot \mu g^{-1}$.

(9) The overall uncertainty, 1.18 percent, was formed by taking three times the quadratic combination of the standard deviation of the mean, or approximations thereof, for the following component uncertainties:

a) four ion chamber "A" measurements on samples of 2 dilutions	0.051 percent
b) twenty-two comparative ion chamber "A" measurements on 8 "1947(1967 recalibrated) series" of ^{226}Ra standards	0.040 percent
c) ion chamber calibration for the "1947(1967 recalibrated) series" [with respect to the "radiation balance" primary measurements on the "1957 series" and national radium standards (see note 11)]	0.34 percent
d) gravimetric dilution factor	0.1 percent
e) half-life correction	0.0046 percent
f) ^{226}Ra mass to activity conversion	0.16 percent

(10) NCRP Report No. 58, 2nd ed., Appendix A3 (Feb. 1985).

(11) For further details on NIST (NBS) radium series calibrations see W.B. Mann, et al., J. Res. NBS 62, 21-26 (1959). The 1967 recalibration of the "1947 series" and "1957 series" intercomparisons were made with chamber "A".

(12) For confirmation, this ^{226}Ra standard series was also directly compared against preparations of the "1947" (1967 recalibration)", "1978", and "1984" ^{226}Ra series by ^{222}Rn analyses with the NIST pulse-ionization-chamber Primary Radon Measurement System [R. Collé, et al., J. Res. NIST 95 155-165 (1990); J.M.R. Hutchinson, et al., Appl. Rad. Isot. 43, 175-189 (1992)], by liquid scintillation counting, and by NaI(Tl) well-crystal and Ge γ-spectrometry.

For further information please contact R. Collé, (301) 975-5527.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0321
Prepared By:	Angela Albee
Carrier Conc:	1 M HCL
Reference Date:	09/09/1991
Ampoule Mass (g):	5.1167 g
Uncertainty:	+/- 1.18 %
LogBook No:	RC S 027 150

A Solution Material Info	
Isotope:	Radium-226
Prepared By:	Angela Albee
Prep Date:	02/20/2002
Verification Date:	05/20/2005
Expiration Date:	05/20/2006
Primary Code:	0321-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8303 g
Density(g/mL):	1.0099

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.8303 g) * (2729 bq/g) * (60 dpm/bq) / (100 mL) = 7909.1332 dpm/mL
(4.8303 g) * (2729 bq/g) * (60 dpm/bq) / (1.0099 g/mL) / (100 mL) = 7831.6081 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/20/2002	Angela Albee	3.1119	100	0321-B	243.712 dpm/mL	02/20/2002	02/20/2003
02/20/2002	Angela Albee	15.194	100	0321-C	1189.9345 dpm/mL	02/20/2002	02/20/2003
02/04/2003	Angela Albee	3.1704	100	0321-D	248.293 dpm/mL	02/04/2003	02/04/2004
06/10/2003	Angela Albee	1.5178	100	0321-E	118.868 dpm/mL	06/10/2003	06/10/2004
12/30/2003	Amanda Fehr	3.3464	100	0321-F	262.1 dpm/mL	01/12/2004	01/12/2005
09/13/2004	Amanda Fehr	3.6239	100	0321-G	283.81 dpm/mL	09/13/2004	09/13/2005
05/18/2005	Amanda Fehr	3.4427	100	0321-H	269.6188 dpm/mL	05/20/2005	05/20/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Ra-226 Standard 0321-H

A. Fehr
5/20/2005

Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
0321-H N1	1170.1000	34.2000	1135.9000	4.20643586	1.0000	270.0385881
0321-H N2	1137.8000	34.2000	1103.6000	4.20643586	1.0000	262.3598783
0321-H N3	1149.6000	34.2000	1115.4000	4.20643586	1.0000	265.1651036
					Average =	265.8545233

Mean Value (Counting) =	265.8545233	**99.1905663**	**Pass**
Stdev =	3.885501322	0.01461514	**Rule 3 (Pass/Fail)**

Certificate Value =	268.0
Lower Limit =	258.0835207
Upper Limit =	273.625526
Rule 1 Pass/Fail	**Pass**
Two sigma =	7.771002644
10 % of Mean =	26.58545233
Rule 2 (Pass/Fail)	**Pass**

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for Ra-226 source 0321-H by transferring portions of the standard into tared glass liquid scintillation vials. One mL of DI Water and 10 mL Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Green using source standard verification. The Ra-226 efficiency calibration which was used for verification calculations was performed on 5/20/05 using source 0299-A (Ra-226). Calibration data is recorded in this logbook under Ra-226 (0299-A). Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 5/20/05
Angela A. Johnson 5/24/05

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

0718

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

69416-278

Tc-99 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 25430.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ISOTOPE:	Tc-99
ACTIVITY (dps):	3.660 E4
HALF-LIFE:	2.111 E5 years
CALIBRATION DATE:	October 28, 2004 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	2.2%

Impurities: γ-impurities <0.1%

5.00994 grams 0.3M NH_4OH with 225 µg/g $TcO_4(-I)$.

P O NUMBER 3248RD, Item 2

PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 10-28-2004

RECEIVED 11/1/04

RC-S-039-002

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0718
Prepared By:	Amanda Fehr
Carrier Conc:	DI Water
Reference Date:	10/28/2004
Ampoule Mass (g):	5.00994 g
Uncertainty:	+/- 2.2 %
LogBook No:	RC-S-039-002

A Solution Material Info	
Isotope:	Technetium-99
Prepared By:	Amanda Fehr
Prep Date:	12/21/2004
Verification Date:	02/04/2005
Expiration Date:	02/04/2006
Primary Code:	0718-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.7462 g
Density(g/mL):	0.9976

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.7462 g) * (36600 dps) * (60 dpm/dps) / (5.00994 g * 100 mL) = 20803.9521 dpm/mL
(4.7462 g) * (36600 dps) * (60 dpm/dps) / (0.9976 g/mL)/ (5.00994 g * 100 mL) = 20853.8621 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/31/2005	Amanda Fehr	62.93	500	0718-B	2624.67 dpm/mL	02/04/2005	02/04/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Tc-99 Standard 0718-B

Analyst: A. Fehr Date: 2/04/05	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
	0718-B N1	1263.7000	26.1000	1237.6000	0.95172709	0.5000	2600.745551
	0718-B N2	1291.2000	26.1000	1265.1000	0.95172709	0.5000	2658.535227
	0718-B N3	1244.2000	26.1000	1218.1000	0.95172709	0.5000	2559.767418
						Average =	2606.349399
Mean Value (Counting) =	2606.349399		**99.3019846**	**% of known**			
Stdev =	49.62179332		0.01903881				
Certificate Value =	2624.7						
Lower Limit =	2507.105812						
Upper Limit =	2705.592985						
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**				
Two sigma =	99.24358664						
10 % of Mean =	260.6349399						
Rule 2 (Pass/Fail)	**Pass**						

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

The analyst prepared three standard verification sources for Tc-99 source 0718-B by transferring portions of the standard into tared glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 14 for Tc-99 source standard verification. The Tc-99 efficiency calibration which was used for verification calculations was performed on 2/4/05 using source 0247-A
(Tc-99). Calibration data is recorded in this logbook under Tc-99 0247-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 2/7/05
2/10/05

Tracer Log

Source Code	Tc0043
Activity	1.0004 uCi
Supplier	Lowcountry Diagnostics
Solvent/Carrier	Sodium Pertechnetate
Reference Date	6/30/05

Isotope	Tc99M
Prep Date	6/30/05
Primary Code	Tc0043A
Prepared By	ESD
Expiration Date	~~6/1~~ 7/1/05 ESD 6/30/05

Mass of Parent (g) .3618 Dilution (ml) 100

Show calculation converting parent activity:

$$\frac{1.0004\ \text{mCi}}{5\ \text{mL}} \left| \frac{\text{mL}}{\text{g}} \right| \frac{.3618\ \text{g}}{100\ \text{mL}} \left| \frac{1000\ \mu\text{Ci}}{1\ \text{mCi}} \right| = .7239\ \frac{\mu\text{Ci}}{\text{mL}}$$

Reviewed By: BXF Date: 6-30-05

LOW COUNTRY DIAGNOSTICS
44-A FOLLY ROAD BLVD. CHARLESTON, SC 29407
8435561113

CAUTION
RADIOACTIVE MATERIAL

Patient: Per Phys Order
c/o
GENERAL ENGINEERING LAB
CHARLESTON, SC 29414

Rx#:**326683**
Thursday
Use as directed by
Dr.: COLEMAN
Lic# 362
Run:1 Box:1

Procedure **CALIBRATION SOURCE**
Pharmaceutical: **TC99M NA TCO4-**

1.0004 mCi @ 17:00 30-Jun-2005
0.07 ml 14.1 mCi/ml

Mo-99 < 0.15 uCi/mCi at 14 hours post calibration time
PRODUCT OF FISSION MO-99

1 LOT: 6-06/30/05
Exp:07/01/05 @06:00

Page: RC-S-038-

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

0159

Radionuclide	Th-230	Customer:	GENERAL ENGINEERING LABS
Half Life:	(7.54 ± 0.03) x 10^4 years	P.O.No.:	2507 RD
Catalog No.:	7230	Reference Date:	1 Sep 99 12:00 PST.
Source No.:	678-28-1	Contained Radioactivity:	Th-230: 9.740 μCi (360.4 kBq)

Description of Solution

a. Mass of solution: 4.89252 grams in 5 mL flame sealed ampoule
b. Chemical form: Thorium nitrate in 0.1M nitric acid
c. Carrier content: 10 μg Th/mL of solution
d. Density: 1.0016 gram/ml @ 20°C.

Radioimpurities

Am-241: See Technical Data Sheet

Radioactive Daughters

Ra-226: See Technical Data Sheet

Radionuclide Concentration

Th-230: 1.991 μCi/gram of solution (73.67 kBq/gram of solution)

Method of Calibration

Weighed aliquots of the solution were assayed using a liquid scintillation counter.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration:	±2.0%
b. Random uncertainty in assay:	±0.8%
c. Random uncertainty in weighing(s):	±0.0%
d. Total uncertainty at the 99% confidence level:	±2.2%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay(and later NIST certification) of Standard Reference Materials. (As in NRC Regulatory Guide 4.15)

2. Nuclear data were taken from Table of Radioactive Isotopes (1986), edited by Virginia Shirley.

Daniel James Van Dalsem
QUALITY CONTROL

26-Aug-99
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 N. KEYSTONE STREET
BURBANK, CALIFORNIA 91504
818·843·7000 FAX 818·843·6168

RCS-024-102

0159

Th-230 TECHNICAL DATA

The Th-230 used to prepare your order was taken from Isotope Products Laboratories Lot #6481 and had the following composition as of December 15, 1994.

NUCLIDE	ATOM%	ACTIVITY%
Th-229	<0.001	$<1.23 \times 10^{-2}$
Th-230	83.71	99.79
Th-232	16.29	1.08×10^{-4}
Ra-226 (daughter Th-230)	----	0.15
Am-241	----	0.05

Isotopic composition provided by Oak Ridge National Laboratory.

No other alpha emitting nuclides were detected.

If you have any questions, please contact Technical Service.

ISOTOPE PRODUCTS LABORATORIES
18000 Keystone Street
Burbank, California
91504
818-843-7000
FAX 818-843-6163

RC-S-024-102A

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0159
Prepared By:	Joe Davis
Carrier Conc:	0.1M HNO3
Reference Date:	09/01/1999
Ampoule Mass (g):	4.89252 g
Uncertainty:	+/- 2.2 %
LogBook No:	RC S 023 102

A Solution Material Info	
Isotope:	Thorium-230
Prepared By:	Joe Davis
Prep Date:	09/21/1999
Verification Date:	06/19/2004
Expiration Date:	06/19/2005
Primary Code:	0159-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.7484 g
Density(g/mL):	0.9992

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.7484 g) * (1.991 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 209880.2297 dpm/mL
(4.7484 g) * (1.991 uCi/g) * (2220000 dpm/uCi) / (0.9992 g/mL) / (100 mL) = 210051.8397 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/29/2001	Angela Albee	.0992	100	0159-H	208.37 dpm/mL	01/29/2001	01/29/2002
02/28/2001	Angela Albee	1.0451	1000	0159-I-102	219.525 dpm/mL	03/06/2002	03/06/2003
02/28/2001	Angela Albee	1.0451	1000	0159-I-202	219.525 dpm/mL	03/12/2002	03/12/2003
09/21/1999	Joe Davis	.1172	100	0159-B	246.18 dpm/mL	09/21/1999	09/21/2000
09/23/1999	Joe Davis	.1016	100	0159-C	213.41 dpm/mL	09/23/1999	09/23/2000
01/10/2000	Joe Davis	.1008	100	0159-D	211.56 dpm/mL	01/10/2000	01/10/2001
02/16/2000	Richard Kinney	.2422	500	0159-E	101.75 dpm/mL	02/16/2000	02/16/2001
03/20/2000	Joe Davis	.0998	100	0159-F	209.63 dpm/mL	03/20/2000	03/20/2001
07/28/2000	Robert Timm	1.0046	1000	0159-G	211.02 dpm/mL	07/28/2000	07/28/2001
05/10/2001	Angela Albee	.0987	1000	0159-J	210.1569 dpm/mL	05/10/2001	05/10/2002
08/31/2001	Lonnie Morris	.0416	100	0159-K	87.31 dpm/mL	09/23/2002	09/23/2003
06/07/2002	Angela Albee	1.0002	1000	0159-L	207.278 dpm/mL	06/07/2002	06/07/2003
01/16/2003	Angela Albee	4.5144	1000	0159-M	947.483 dpm/mL	01/16/2003	01/16/2004
02/27/2003	Angela Albee	1.1079	1000	0159-N	232.526 dpm/mL	02/27/2004	02/27/2005
06/23/2004	Amanda Fehr	1.14	1000	0159-O	239.459 dpm/mL	07/03/2005	07/03/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Th-230 Standard 0159-O

A. Fehr
7/3/2005

Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Amt Used (mL)	Source DPM/mL
0159-N N1	258.0000	23.3000	234.7000	0.9696	1.0000	242.0585809
0159-N N2	259.3000	23.3000	236.0000	0.9696	1.0000	243.3993399
0159-N N3	255.4000	23.3000	232.1000	0.9696	1.0000	239.3770627

Mean Value (Counting) =	241.6116612	dpm/mL	**100.903182**	**% of known**
Stdev =	2.048043318	dpm/mL	0.00847659	
Certificate Value =	239.449	dpm/mL		
Lower Limit =	237.5155745	dpm/mL		
Upper Limit =	245.7077478	dpm/mL		
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**	
Two sigma =	4.096086636			
10 % of Mean =	24.16116612			
Rule 2 (Pass/Fail)	**Pass**			

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

The analyst prepared three standard verification sources for Th-230 source 0159-O by transferring 1.0 mL portions of the standard to glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 26 for alpha source standard verification. The alpha efficiency calibration which was used for verification calculations was performed using NIST source 0556-A (Th-230). Calibration data is recorded in this logbook under Th-230 0556-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 7/13/05

Angela A. Johnson 7/15/05

0133

Certificate of calibration of absolutely standardised radioactive solution

P 3574

UKAS ACCREDITED CALIBRATION LABORATORY No. 0146

Measurement

Reference time for solution number **S6/7/19**: **1200 GMT on 1 April 1996**

Radioactive concentration of strontium-90:	477.1	kilobecquerels per gram of solution
which is equivalent to:	12.89	microcuries per gram of solution
Mass of solution:	5.0669	grams
Total activity of strontium-90:	2.417	megabecquerels
which is equivalent to:	65.3	microcuries

Method of measurement used (see page 3 of the certificate): K

Calibration dates: 25 March 1996 to 27 March 1996

The calibration date is provided for added information only, and must not be confused with the reference date on pages 1 and 2 of the certificate. It is the reference date that must be used in all calculations relating to the values of activity.

Accuracy

Expanded uncertainty in the radioactive concentration quoted above: ± 0.80 %

Combined Type A uncertainty : ± 0.05 %

Combined Type B uncertainty : ± 0.40 %

Radionuclidic purity

The estimated activities of any radioactive impurities found by high-resolution gamma ray spectrometry, or in any other examination of the solution, are listed below expressed as percentages of the activity of the principal radionuclide at the reference time.

Other radionuclides 0.0005(3) %

Chemical composition

0.1 M HCl containing 100 micrograms of strontium and 100 micrograms of yttrium per ml.

Physical data

Recommended half life: 29.12 ± 0.24 years (1 year = 365.25 days)

Strontium-90: 100% beta particle emission.
Yttrium-90: 100% beta particle emission. Half life 64.1 ± 0.1 hours.

The activity of the yttrium-90 is equal to the activity of the strontium-90.

Remarks

This product meets the quality assurance requirements for achieving traceability to NIST as defined in ANSI N42.22-1995.

Tests made over a period of 2 years on standardised solutions of strontium-90 stored in glass ampoules have shown that loss of strontium-90 from solution is negligible other than by radioactive decay.

21-5-073-000

Nycomed Amersham plc
Amersham Laboratories

Certificate of calibration of absolutely standardised radioactive solution

P 35374

NAMAS
CALIBRATION
No. 0146

ISSUED BY:	Nycomed Amersham plc Radiation & Radioactivity Calibration Laboratory Amersham Laboratories White Lion Road Amersham Buckinghamshire HP7 9LL	ISSUED FOR:	AEA Technology plc Isotrak Amersham Laboratories White Lion Road Amersham Buckinghamshire HP7 9LL

Description Principal radionuclide: Strontium-90

Product code: SIZ64
Solution number: S6/7/19

Measurement Reference time: 1200 GMT on 1 April 1996

Nuclear data Nuclear data quoted on this certificate are taken from the Joint European File, Version 2.2.

Expression of uncertainties The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k = 2.00$, which for a *t*-distribution with $\nu_{eff} = \infty$ effective degrees of freedom corresponds to a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Unless indicated, all other uncertainties are expressed at the confidence level associated with one standard uncertainty.

The format used for the uncertainties in the values of radionuclidic purity is illustrated by the following examples;

6.5(21)	=	6.5 ± 2.1
6.54(21)	=	6.54 ± 0.21
6.543(21)	=	6.543 ± 0.021

Approved Signatory W. F. Case

Date of issue 11 May 1999

LC-S-073-060A

Nycomed

Certificate of calibration of absolutely standardised radioactive solution P 35474

UKAS ACCREDITED CALIBRATION LABORATORY No. 0146

Methods of measurement The measurement techniques listed below are currently in use at Nycomed Amersham for the absolute standardisation of radioactive solutions. The methods used for this standardisation are indicated on page 2 of the certificate.

Using a gas flow proportional counter

A	4 pi beta counting
B	4 pi alpha counting
C	4 pi internal conversion electron counting
D	4 pi coincidence counting
E	4 pi anticoincidence counting
F	4 pi coincidence and anticoincidence counting

Using a liquid scintillation counter

G	4 pi coincidence counting
H	4 pi anticoincidence counting
J	4 pi coincidence and anticoincidence counting
K	4 pi efficiency tracing

SI unit of radioactivity The S.I. unit of radioactivity is the becquerel

1 becquerel (Bq) = 1 nuclear transformation per second, therefore

1 curie (Ci) = 3.7×10^{10} becquerels exactly

Useful conversion factors are:

1 microcurie (μCi)	=	3.7×10^{4} Bq	=	37 kilobecquerels (kBq)
1 millicurie (mCi)	=	3.7×10^{7} Bq	=	37 megabecquerels (MBq)
1 kilobecquerel (kBq)	=	27.027 nanocuries (nCi)		
1 megabecquerel (MBq)	=	27.027 microcuries (μCi)		

RC-5-023-060B

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0133
Prepared By:	Joe Davis
Carrier Conc:	0.1 M HCL
Reference Date:	04/01/1996
Ampoule Mass (g):	5.0669 g
Uncertainty:	+/- .8 %
LogBook No:	RC S 023 060

A Solution Material Info	
Isotope:	Strontium-90
Prepared By:	Joe Davis
Prep Date:	09/25/1999
Verification Date:	05/26/2004
Expiration Date:	05/26/2005
Primary Code:	0133-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8374 g
Density(g/mL):	1.0041

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.8374 g) * (12.89 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 1384260.7092 dpm/mL
(4.8374 g) * (12.89 uCi/g) * (2220000 dpm/uCi) / (1.0041 g/mL) / (100 mL) = 1378622.1492 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
09/06/2000	Joe Davis	.0899	1000	0133-F	124.445 dpm/mL	09/06/2000	09/06/2001
12/05/1999	Joe Davis	.9937	100	0133-C	13699.37 dpm/mL	12/05/1999	12/05/2000
12/05/1999	Joe Davis	.0995	100	0133-B	1371.73 dpm/mL	12/05/1999	12/05/2000
02/16/2000	Richard Kinney	.0349	500	0133-D	96.23 dpm/mL	02/16/2000	02/16/2001
03/09/2000	Richard Kinney	.0282	250	0133-E	155.51 dpm/mL	03/09/2000	03/09/2001
10/13/2000	Robert Timm	.3194	1000	0133-G-104	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	1.0865	100	0133-H	14978.73 dpm/mL	10/09/2002	10/09/2003
10/13/2000	Robert Timm	.3194	1000	0133-G-204	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	.3194	1000	0133-G-304	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	.3194	1000	0133-G-404	440.332 dpm/mL	10/09/2001	10/09/2002
05/10/2001	Angela Albee	1.0005	1000	0133-I	1379.311 dpm/mL	05/11/2001	05/11/2002
05/06/2002	Angela Albee	.3738	1000	0133-J	515.329 dpm/mL	05/09/2002	05/09/2003
06/07/2002	Angela Albee	.1816	1000	0133-K	250.358 dpm/mL	06/07/2002	06/07/2003
01/16/2003	Angela Albee	.2964	1000	0133-L	408.624 dpm/mL	01/16/2003	01/16/2004
04/18/2003	Lonnie Morris	.3247	1000	0133-M	447.6386 dpm/mL	04/16/2004	04/16/2005
10/31/2002	Angela Albee	10.11	1000	0133-G		10/31/2002	10/31/2003
05/25/2004	Amanda Fehr	.361	1000	0133-N	497.6826 dpm/mL	05/25/2005	05/25/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Sr-90 Standard 0133-N

A. Fehr	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Vol. Used (mL)	Source DPM/mL
5/24/2005	0133-N N1	847.5000	30.2000	817.3000	1.99637882	1.0000	409.3912406
	0133-N N2	844.0000	30.2000	813.8000	1.99637882	1.0000	407.6380664
	0133-N N3	846.7000	30.2000	816.5000	1.99637882	1.0000	408.9905151
						Average =	408.673274

Mean Value (Counting) =	408.673274	dpm/mL	**100.350716**	**Pass**
Stdev =	0.918632917	dpm/mL	0.00224784	**Rule 3 (Pass/Fail)**
Certificate Value =	407.245	dpm/mL		
Lower Limit =	406.8360082	dpm/mL		
Upper Limit =	410.5105399	dpm/mL		
Rule 1 Pass/Fail	**Pass**			
Two sigma =	1.837265833			
10 % of Mean =	40.8673274			
Rule 2 (Pass/Fail)	**Pass**			

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for Sr-90 source 0133-N by transferring 1.0 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 17 for Sr-90 source standard verification. The Sr-90 efficiency calibration which was used for verification calculations was performed on 5/24/05 using source
0717-A (Sr-90). Calibration data is recorded in this logbook under Sr-90 0418. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 5/24/05
Heather Acree 6/15/05

STANDARDIZATION OF STRONTIUM CARRIER

DATE: 5/23/2005 EXP. DATE: 11/13/2006

LOT NUMBER 1005753

STRONTIUM PRECIPITATES

	1	2	3	4	
Weight of carrier added	1.0324	1.0327	1.0291	1.0318	**Must weigh carrier added**
Aliquot (1.00 mL)					
Crucible + ppt.	17.2738	20.0436	18.1282	17.3798	
Crucible	17.2559	20.0258	18.1105	17.3619	
Wt. of ppt., g	0.0179	0.0178	0.0177	0.0179	
mg Sr/mL	17.90	17.80	17.70	17.90	
mg Sr/g	17.34	17.24	17.20	17.35	

Average	**Std. Dev.**	
17.83	± 0.10	0.00537126
17.28	± 0.07	0.00428424
mg Sr/ 0.5 mL		**8.91**
mg Sr/g		17.28

0.5% of Mean Value = 0.089125 Pass

A satisfactory standardization is obtained when results give a standard deviation of less than 0.5% of the mean value.

Amersham International plc
Amersham Laboratories

0134

NAMAS
CALIBRATION
No. 0146

Certificate of calibration of standardized tritium labeled water

Description

Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY·64

Chemical form: water Batch: 111

Measurement

Reference time: 1200 GMT on 1 March 1996

Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water

which is equivalent to: 13.19 microcuries per gram of water

or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement
This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy

The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than ±2.5%

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99·7% confidence level, and the estimated systematic uncertainties.

Purity

No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data

Half-life of tritium: 12·43 ± 0·11 years

Maximum beta energy of tritium: 18·6 keV

Remarks:

The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = $3{\cdot}7 \times 10^{10}$ becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = $3{\cdot}7 \times 10^4$ Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27·027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved signatory

RC-5-024-061

W.F. Case

Amersham
The Health Science Group

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Albee
Carrier Conc:	DI WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Albee
Prep Date:	02/21/2001
Verification Date:	07/20/2004
Expiration Date:	07/20/2005
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (100 mL) = 985535.5200 dpm/mL
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (1.0004 g/mL) / (100 mL) = 985180.3116 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/21/2001	Angela Albee	.5368	100	0134-B	5288.42 dpm/mL	02/21/2001	02/21/2002
05/10/2001	Angela Albee	5.2817	1000	0134-C-103	5203.4505 dpm/mL	05/08/2003	05/08/2004
05/10/2001	Angela Albee	5.2817	1000	0134-C-203	5203.4505 dpm/mL	05/10/2002	05/10/2003
05/10/2001	Angela Albee	5.2817	1000	0134-C-303	5203.4505 dpm/mL	05/10/2002	05/10/2003
03/11/2002	Angela Albee	1.6362	250	0134-D	6447.84 dpm/mL	03/12/2002	03/12/2003
01/16/2003	Angela Albee	6.4157	100	0134-E	63206.501 dpm/mL	01/16/2003	01/16/2004
01/16/2003	Angela Albee	3.2108	250	0134-F	12652.925 dpm/mL	01/16/2003	01/16/2004
07/28/2003	Angela Albee	2.91	500	0134-G	5733.749 dpm/mL	08/01/2003	08/01/2004
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/20/2004	07/20/2005

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

ANALYTICS

0781

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 - U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

70361-278

5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solution sources. The Am-241 was calibrated by 4 pi alpha liquid scintillation counting. All other radionuclides were calibrated using a germanium gamma spectrometer system. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Analytics maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Rev. 1, February, 1979.

Calibration date: April 1, 2005 12:00 EST

ISOTOPE	GAMMA-RAY ENERGY	HALF-LIFE		GAMMA-RAYS PER SECOND	TOTAL UNCERTAINTY %
Am-241	59.5	432	y	3372	4.5
Cd-109	88	462.6	d	4698	3.3
Co-57	122	271.79	d	2450	3.0
Ce-139	166	137.6	d	3496	2.8
Hg-203	279	46.61	d	7565	2.7
Sn-113	392	115.1	d	4711	2.6
Cs-137	662	30.07	y	3109	3.0
Y-88	898	106.6	d	12320	2.6
Co-60	1173	5.2714	y	5769	2.7
Co-60	1332	5.2714	y	5830	2.6
Y-88	1836	106.6	d	12860	2.6

5.32720 grams 4M HCl solution.
P O NUMBER 2704RD, Item 1

SOURCE PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 04-11-2005

This standard will expire one year after the calibration date.

U.S. DEPARTMENT OF COMMERCE
National Institute of Standards & Technology
Gaithersburg, MD 20899

Certificate of Participation

Analytics, Incorporated
Atlanta, Georgia

is a participant for the period January 1, 2005, through December 31, 2005, in a radioactivity measurements assurance program conducted by the National Institute of Standards and Technology, in cooperation with the Nuclear Energy Institute. Continued participation is evidenced by dated Reports of Traceability issued for particular radionuclides, which indicate the deviation of the participant's reported value from that measured by the National Institute of Standards and Technology. The significance of these Reports is addressed below.*

For the Director,

Michael P. Unterweger, Acting Leader
Radioactivity Group
Physics Laboratory

*As guidance for the proper use of Reports of Traceability, it should be emphasized that the National Institute of Standards and Technology is concerned only with fostering good measurements capability and consistency with the national measurements system. The assurance of the proper application of that capability to the ultimate consumer products is the responsibility of each manufacturer of these products and of the Federal regulatory agencies.

A continuing traceability program in radioactivity demonstrates, to the degree established by the periodic assays of calibrated radioactivity samples, a continuing competence to maintain the methods and standards necessary for accurate measurement. Such a program cannot, however, endorse each and every measurement nor the final product, any more than a spot check can vouch for every unchecked item. Care should be taken, therefore, not to imply such endorsement. The proper use of this Report is governed by section 200.114 of Title 15 of the Code of Federal Regulations. These regulations may be met if Reports are quoted only in their entirety. Excerpts out of context may be misleading.

RC-S-039-065b

ANALYTICS

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ANALYSIS OF UNCERTAINTY FOR MIXED GAMMA STANDARDS

BATCH 120

CALIBRATION DATE: April 1, 2005 12:00 EST

Isotope	Energy (keV)	Calibration Method[1]	Statistics[2]	Calibration[2]	Peak Fitting[2]	Geometry[2]	Impurities[2]	Weighing[2]	Combined Standard Uncertainty[2]	Relative Expanded Uncertinty[2] (k=2)
Cd-109	88	HPGe	0.16	1.1	0.88	0.8	0	0.2	1.64	3.3
Co-57	122	HPGe	0.23	1.1	0.71	0.7	0	0.2	1.52	3.0
Ce-139	166	HPGe	0.17	1.0	0.58	0.7	0	0.2	1.38	2.8
Hg-203	279	HPGe	0.11	1.1	0.34	0.7	0	0.2	1.37	2.7
Sn-113	392	HPGe	0.21	1.0	0.35	0.7	0	0.2	1.30	2.6
Cs-137	662	HPGe	0.36	1.1	0.60	0.7	0	0.2	1.49	3.0
Y-88	898	HPGe	0.19	1.0	0.33	0.7	0	0.2	1.29	2.6
Co-60	1173	HPGe	0.31	.97	0.45	0.7	0	0.2	1.33	2.7
Co-60	1332	HPGe	0.33	.93	0.48	0.7	0	0.2	1.32	2.6
Y-88	1836	HPGe	0.24	1.0	0.35	0.7	0	0.2	1.31	2.6

Optional Additional Isotopes

Pb-210	46.5	4π LS	0.33	1.1	0	0.9	0.30	0.2	1.50	3.0
Am-241	59.5	4π LS	0.33	1.1	0	0.9	0.30	0.2	1.50	3.0
Sr-85	514	IC	0.30	1.1	0	0.7	0.17	0.2	1.36	2.7
Cs-134	605	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Cs-134	796	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Mn-54	835	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Zn-65	1116	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7

[1]Calibration Methods:

4π LS (4 pi Liquid Scintillation Counting)
HPGe (High Purity Germanium Gamma Ray Spectrometer)
IC (Gamma Ray Ionization Chamber)

[2]As Percent (%)from counting data

No interfering gamma emitting impurities were detected during calibration. Depending on the resolution and energy dispersion (keV/channel) of the measuring system, the following spectral conflicts may occur: (1) between the 88 keV gamma-ray and the X-rays emitted in the decay of Hg-203, (2) between the 1333 keV gamma-ray and the 1325 keV single escape peak from the 1836 keV gamma-ray.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0781
Prepared By:	Amanda Fehr
Carrier Conc:	4M HCL
Reference Date:	04/01/2005
Ampoule Mass (g):	5.3272 g
Uncertainty:	+/- 3 %
LogBook No:	RC-S-039-065

A Solution Material Info	
Isotope:	Mixed Gamma
Prepared By:	Amanda Fehr
Prep Date:	04/26/2005
Verification Date:	04/27/2005
Expiration Date:	04/27/2006
Primary Code:	0781-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.1233 g
Density(g/mL):	5.4962

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dpm)) * (conversion dpm to dpm) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dpm)) * (conversion dpm to dpm) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.1233 g) * (219149.436 dpm) * (1 dpm/dpm) / (5.3272 g * 100 mL) = 2107.6143 dpm/mL
(5.1233 g) * (219149.436 dpm) * (1 dpm/dpm) / (5.4962 g/mL)/ (5.3272 g * 100 mL) = 383.4709 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Mixed Gamma Standard 0781-A (AM-241 & Cs-137)

A. Fehr
4/29/2005

Am-241	Isotope	Result		Cs-137	Isotope	Result	
	Mixed Gamma N1	9796			Mixed Gamma N1	3753	
	Mixed Gamma N2	9930			Mixed Gamma N2	4015	
	Mixed Gamma N3	10290			Mixed Gamma N3	3878	
Mean Value (Counting) =	10005.33	**102.47**	**Pass**		3882.00	**102.39**	**Pass**
Stdev =	255.471		**Rule 3 (Pass/Fail)**		131.046		**Rule 3 (Pass/I**
Certificate Value =	9764.6				3791.3		
Lower Limit =	9494.391719				3619.908413		
Upper Limit =	10516.27495				4144.091587		
Rule 1 (Pass/Fail)	**Pass**				**Pass**		
Two sigma =	510.9416144				262.091587		
10 % of Mean =	1000.53333333				388.20000000		
Rule 2 (Pass/Fail)	**Pass**				**Pass**		

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

Amanda L. Fehr 4/29/05

Angela A. Johnson 5/6/05

Verification for Mixed Gamma Standard 0781-A (Co-60)

A. Fehr 4/29/2005	**Isotope**	**Result** **pCi/L**	
	Mixed Gamma N1	6132	
	Mixed Gamma N2	6073	
	Mixed Gamma N3	6240	
Mean Value (Counting) =	6148.33	pCi/L	**102.365 Pass**
Stdev =	84.690	pCi/L	**Rule 3 (Pass/Fail)**
Certificate Value =	6006.3	pCi/L	
Lower Limit =	5978.954074	pCi/L	
Upper Limit =	6317.712592	pCi/L	
Rule 1 Pass/Fail	**Pass**		
Two sigma =	169.3792589		
10 % of Mean =	614.8333333		
Rule 2 (Pass/Fail)	**Pass**		

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

Amanda L. Fehr 4/29/05

Angela A. Johnson 5/6/05

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution:	5.3739 g (in a 5 ml Flame Sealed Ampoule)	
b. Chemical form:	Am(NO3)3 in 2N HNO3	
c. Carrier content:	None added	
d. Density:	1.0651	g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under:	228, 278	keV.
Branching ratio(s) used:	0.108, 0.1420	gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration:	±3.0%
b. Random uncertainty in assay:	±0.4%
c. Random uncertainty in weighing(s):	±0.0%
d. Total uncertainty at the 99% confidence level:	±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Kuen
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ **1. STANDARD WIPE TEST**

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **2. SOAK TEST**

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **3. SOAK TEST -- BERYLLIUM WINDOW**

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **4. GAS SOURCE TEST (Radioactive Gas)**

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ **5. OTHER LEAK TEST**

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **6. LEAK TEST NOT APPLICABLE**

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Genie Bost
Prep Date:	01/05/1994
Verification Date:	04/15/2003
Expiration Date:	04/15/2004
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996
07/20/1995	Theresa Parrotte	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
09/11/1995	Theresa Parrotte	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Parrotte	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996

11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/28/2000	Angela Albee	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
04/13/2001	Angela Albee	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
08/23/2001	Angela Albee	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Albee	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Albee	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Albee	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/17/2004	03/17/2005
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Tim Chandler	.011	1000	445-96-2-Z	22.7877 dpm/mL	05/03/2004	05/03/2005
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2004	09/10/2005

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0533

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65338-278

Am-241 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Am-241
ACTIVITY (dps):	3.920 E4
HALF-LIFE:	4.322 E2 years
CALIBRATION DATE:	January 15, 2003 12:00 EST
TOTAL UNCERTAINTY*:	3.2%
SYSTEMATIC:	2.2%
RANDOM:	1.0%

*99% confidence level.

5.10649 grams 1M HCl solution.

Impurities: γ-impurities <0.1%
α-impurities <0.1%

P O NUMBER 3213 RD, Item 1

SOURCE PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: UM Mc 1-16-03

RC-S-035-048a

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0533
Prepared By:	Angela Albee
Carrier Conc:	1 M HCL
Reference Date:	01/15/2003
Ampoule Mass (g):	5.10649 g
Uncertainty:	+/- 3.2 %
LogBook No:	RC S 035 048

A Solution Material Info	
Isotope:	Americium-241
Prepared By:	Angela Albee
Prep Date:	02/05/2003
Verification Date:	05/08/2003
Expiration Date:	05/08/2004
Primary Code:	0533-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8225 g
Density(g/mL):	1.0139

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.8225 g) * (39200 dps) * (60 dpm/dps) / (5.10649 g * 100 mL) = 22211.9695 dpm/mL
(4.8225 g) * (39200 dps) * (60 dpm/dps) / (1.0139 g/mL)/ (5.10649 g * 100 mL) = 21907.2185 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/20/2003	Angela Albee	1.0151	100	0533-B	222.38 dpm/mL	03/01/2004	03/01/2005
02/20/2003	Angela Albee	.6819	250	0533-C	59.754 dpm/mL	02/20/2004	02/20/2005
05/07/2003	Tim Chandler	.1245	100	0533-D	27.2745 dpm/mL	05/03/2004	05/03/2005
09/10/2004	Amanda Fehr	.6933	250	0533-E	60.753 dpm/mL	09/10/2004	09/10/2005

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0338

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

60513-278

Pu-239 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 24148.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Pu-239
ACTIVITY (dps):	3.674 E4
HALF-LIFE:	24131 years
CALIBRATION DATE:	October 30, 2000 12:00 EST
TOTAL UNCERTAINTY*:	5.0%

*99% confidence level.

5.45541 grams 3M HNO_3 solution.

Impurities detected (activity in dps/vial on Oct. 30, 2000):

Am-241 297.28
Pu-240 1208.8
Pu-241 2010.7
Pu-242 0.17

See reverse side for additional information.

P O NUMBER 2528RD, Item 1

PREPARED BY: M. Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 11/13/00

RC-S-028-167

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0338
Prepared By:	Penet Melton
Carrier Conc:	3 M HNO3
Reference Date:	10/30/2000
Ampoule Mass (g):	5.45541 g
Uncertainty:	+/- 5 %
LogBook No:	RC S 028 167

A Solution Material Info	
Isotope:	Plutonium-239
Prepared By:	Penet Melton
Prep Date:	12/01/2000
Verification Date:	03/16/2005
Expiration Date:	03/16/2006
Primary Code:	0338-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.1674 g
Density(g/mL):	1.0120

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.1674 g) * (36740 dps) * (59.9 dpm/dps) / (5.45541 g * 100 mL) = 20845.4205 dpm/mL
(5.1674 g) * (36740 dps) * (59.9 dpm/dps) / (1.0120 g/mL)/ (5.45541 g * 100 mL) = 20598.2002 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/15/2000	Angela Albee	.1183	100	0338-B	24.4083 dpm/mL	12/15/2000	12/15/2001
12/15/2000	Angela Albee	1.0107	100	0338-C	208.5336 dpm/mL	12/15/2000	12/15/2001
01/29/2001	Tim Chandler	10.0017	100	0338-D	2063.61 dpm/mL	12/15/2000	12/15/2001
10/29/2001	Tim Chandler	.3032	250	0338-E	25.0232 dpm/mL	10/16/2003	10/16/2004
12/04/2001	Tim Chandler	10.0308	100	0338-F	2069.614 dpm/mL	10/25/2002	10/25/2003
01/13/2003	Tim Chandler	3	1000	0338-F-1	6.209 dpm/mL	01/13/2003	01/13/2004
10/16/2002	Tim Chandler	.02908	100	0338-G	5.9628 dpm/ml	10/16/2002	10/16/2003
10/16/2002	Tim Chandler	.0478	100	0338-H	9.8624 dpm/mL	10/16/2002	10/16/2003
12/30/2002	Tim Chandler	10.0252	100	0338-I	2068.458 dpm/mL	10/24/2003	10/24/2004
12/31/2002	Tim Chandler	.162	500	0338-J	6.685 dpm/mL	12/31/2002	12/31/2003
08/12/2003	Amanda Fehr	.2282	100	0338-K	47.084 dpm/mL	08/12/2003	08/12/2004
12/09/2003	Amanda Fehr	.2409	100	0338-L	50.2764 dpm/mL	12/09/2003	12/09/2004
03/18/2004	Tim Chandler	10.0192	500	0338-M	413.4441 dpm/ml	03/18/2004	03/18/2005
04/26/2004	Amanda Fehr	.643	250	0338-N	53.067 dpm/mL	04/26/2005	04/26/2006
05/26/2004	Brenda Burke	.355	250	0338-O	29.298 dpm/mL	05/26/2004	05/26/2005
12/20/2004	Brenda Burke	.01957	100	0338-P	4.0371 dpm/mL	12/20/2004	12/20/2005
03/16/2005	Brenda Burke	10.0395	100	0338-Q	2071.4087 dpm/mL	03/16/2005	03/16/2006

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Verification for Plutonium-239 Standard *0338-N*

Analyst: A.Fehr	**Isotope**	**Value**	**Uncertainty**
Date: 4/27/05	0338-L #1	2.390	0.2920
	0338-L #2	2.520	0.3040
	0338-L #3	2.640	0.3140

Mean Value (Counting) =	2.517	1.052955	**Pass**
Stdev =	0.125033329		**Rule 3 (Pass/Fail)**

Target =	2.39
Lower Limit =	2.266600009
Upper Limit =	2.766733324
Rule 1 Pass/Fail	**Pass**
Two sigma =	0.250066658
10 % of Mean =	0.251666667
Rule 2 (Pass/Fail)	**Pass**

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three Pu-239 standard verification sources for standard ***0338-N*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Pu-242*** standard ***0756-A*** and was diluted in a disposable centrifuge tube with 4 mL of 2 M HCl, and 6 mL of DI water, 50 micrograms of Nd carrier and 4 drops of hydrazine dihydrachloride were added to the centrifuge tube and waited 10 minutes. Two mL of 48% HF was added to precipitate Nd(and ***Plutonium***) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for ***Pu-239*** were calculated by comparison to ***Pu-242*** certified values.

Amanda L. Fehr 4/27/05

Angela A. Johnson
5/6/05

0799

National Institute of Standards & Technology
Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

RECEIVED 6/16/05 AP

*Notes and references are on pages 5 to 7.

RC-5-039-083

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 to 7.

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994** [b]*
Massic activity of the solution [c]	**26.31 Bq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72%** [d] [e]
Solution density	**(1.105 ± 0.002) g·mL^{-1} at 20 °C** [f]

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) Bq·g^{-1} [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three 4πα liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	$^{239}Pu + ^{240}Pu$ <0.000 001 [u]	$^{239}Pu + ^{240}Pu$ 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	$^{238}Pu + ^{241}Am$ <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 s−1•g−1 for energies less than 3.1 MeV,
0.03 s−1•g−1 for energies between 3.1 and 4.4 MeV, and
0.003 s−1•g−1 for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5 × 10-5 s−1•g−1 for energies between 19 and 39 keV,
7 × 10-5 s−1•g−1 for energies between 49 and 92 keV,
2 × 10-5 s−1•g−1 for energies between 106 and 507 keV,
1 × 10-5 s−1•g−1 for energies between 515 and 1456 keV, and
5 × 10-6 s−1•g−1 for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i = 100\%$. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}·{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0799
Prepared By:	Angela Albee
Carrier Conc:	3.2M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.5 g
Uncertainty:	+/- .72 %
LogBook No:	RC S 039 083

A Solution Material Info	
Isotope:	Plutonium-242
Prepared By:	Angela Albee
Prep Date:	06/19/2005
Verification Date:	06/19/2005
Expiration Date:	06/19/2006
Primary Code:	0799-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.2946 g
Density(g/mL):	1.0178

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.2946 g) * (26.31 bq/g) * (60 dpm/bq) / (100 mL) = 83.5806 dpm/mL
(5.2946 g) * (26.31 bq/g) * (60 dpm/bq) / (1.0178 g/mL) / (100 mL) = 82.1213 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

ANALYTICS

0688

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 • U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

68509-278

U-232 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 23236.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	U-232
ACTIVITY (dps):	3.779 E3
CALIBRATION DATE:	June 18, 2004 12:00 EST
HALF-LIFE:	68.9 years
RELATIVE EXPANDED UNCERTAINTY (k=2):	3.3%

Impurities: Am-241 <0.15%
U-233 <0.3%

RECEIVED
Tin Laboratory

5.20343 grams 1M HNO_3 solution.

P O NUMBER 3243 RD, Item 1

SOURCE PREPARED BY: M. Dimitrova
M. Dimitrova, Radiochemist

Q A APPROVED: 6/23/04

RC-S-037-081

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0688
Prepared By:	Amanda Fehr
Carrier Conc:	1M HNO3
Reference Date:	06/18/2004
Ampoule Mass (g):	5.20343 g
Uncertainty:	+/- 3.3 %
LogBook No:	RC-S-037-087

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Amanda Fehr
Prep Date:	06/25/2004
Verification Date:	06/25/2004
Expiration Date:	06/25/2005
Primary Code:	0688-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.9894 g
Density(g/mL):	1.0276

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.9894 g) * (3779 dps) * (59.9 dpm/dps) / (5.20343 g * 100 mL) = 2170.5126 dpm/mL
(4.9894 g) * (3779 dps) * (59.9 dpm/dps) / (1.0276 g/mL)/ (5.20343 g * 100 mL) = 2112.2178 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
06/18/2004	Brenda Burke	2.203	250	0688-B	18.6439 g/mL	06/28/2005	06/28/2006
07/06/2004	Tim Chandler	2.2243	250	0688-C	18.8242 dpm/mL	07/14/2004	07/14/2005
07/06/2004	Amanda Fehr	26.03	1000	0688-D	55.0728 dpm/mL	07/06/2004	07/06/2005
04/19/2005	Amanda Fehr	26.01	1000	0688-E	55.0305 dpm/mL	05/04/2005	05/04/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Uranium-232 Standard *0688-E*

Analyst: A.Fehr	**Isotope**	**Value**		**Uncertainty**	
Date: 5/4/05	0688-D N1	2.57	pCi/L	0.364	pCi/L
	0688-D N2	2.40	pCi/L	0.355	pCi/L
	0688-D N3	2.44	pCi/L	0.300	pCi/L
Mean Value (Counting) =	2.470	pCi/L		**1.0046795**	**% of known**
Stdev =	0.088881944	pCi/L			
Target =	2.46	pCi/L			
Lower Limit =	2.292236112	pCi/L			
Upper Limit =	2.647763888	pCi/L			
Rule 1 Pass/Fail	**Pass**	**Pass**		**Pass**	
Two sigma =	0.177763888				
10 % of Mean =	0.247				
Rule 2 (Pass/Fail)	**Pass**				

The analyst prepared three standard verification sources for standard **0688-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **0389-G** and 50 micrograms of Nd carrier in a disposable centrifuge tube. Each standard was diluted to 4 mL with 2 M HCl, and 2 mL of DI water. One mL of TiCl3 was added. Two mL of 48% HF was added to precipitate Nd(and **Uranium**) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for **U-232** were calculated by comparison to **U-238** certified values.

Reference SOP RAD M-001

Amanda L. Fehr 5/4/05

Angela L. Johnson 5/6/05

0389

National Institute of Standards & Technology

Certificate

Standard Reference Material 4321C
Natural Uranium Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive natural uranium nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains uranium-238, uranium-235, and uranium-234 with a total activity of approximately 2600 Bq. Uranium decays by alpha-particle emission. The progeny of uranium-238, uranium-235, and uranium-234 have a total activity of approximately 2600 Bq and decay by alpha- and beta-particle emission. None of the alpha or beta particles escape from the SRM ampoule. During the decay process X-rays and gamma rays with energies from 11 keV to 2.0 MeV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains nitric acid (HNO_3) with a concentration of 1 mole per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least August 2007.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, J.M.R. Hutchinson, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by N.M. Trahey.

Gaithersburg, Maryland 20899
November 1997

Thomas E. Gills, Chief
Standard Reference Materials Program

*Notes and references are on pages 5 and 6.

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Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 and

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PROPERTIES OF SRM 4321C
(Certified values are shown in bold type)

Source identification number	NIST SRM 4321C		
Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution density	**(1.053 ± 0.001) g·mL^{-1} at 21.4 °C** [b]*		
Solution mass	**(5.258 ± 0.002) g** [b]		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O HNO_3 $UO_2(NO_3)_2$	53 1.0 0.09	0.91 0.06 0.03
Radiological Properties:			
Radionuclide	**Natural Uranium (Mixture of U-238, U-235, and U-234)**		
Reference time	**1200 EST, 1 August 1997**		
Massic activity of the solution [c]	**U-238: 242.0 Bq·g^{-1}** **U-235: 11.14 Bq·g^{-1}** **U-234: 233.1 Bq·g^{-1}**		
Relative expanded uncertainty (k=2)	**U-238: 0.60%** [d] [e] **U-235: 0.62%** [d] [e] **U-234: 0.98%** [d] [e]		
Mass fraction of uranium	**(0.01960 ± 0.00010) g·g^{-1}** [b]		
Photon-emitting impurities	None detected [f]		
Half lives used	Uranium-238: (4.468 ± 0.003) × 10^9 a [g] Uranium-235: (7.038 ± 0.005) × 10^8 a [g] Uranium-234: (2.455 ± 0.006) × 10^5 a [g]		
Measuring instruments	Mass spectrometer, silicon surface-barrier detector, and 4π(α+ß) liquid-scintillation counting systems.		

*Notes and references are on pages 5 and 6.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [h]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [i]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [j]
Isotopic uranium atom fraction in SRM 960	Standard deviation of the mean for repeated mass-spectrometric measurements (A)	U-238: 0.001 U-235: 0.07 U-234: 0.31	1.0 1.0 1.0	0.001 0.07 0.31
Half life	Standard uncertainty of the half life (A)	U-238: 0.07 U-235: 0.07 U-234: 0.25	1.0 1.0 1.0	0.07 0.07 0.25
Uranium mass fraction in SRM 960	Certificate value (B)	0.003	1.0	0.003
Quantitative dissolution	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Photon-emitting impurities	Limit of detection (B) [k]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)			U-238: U-235: U-234:	0.30 0.31 0.49
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)			U-238: U-235: U-234:	0.60 0.62 0.98

*Notes and references are on pages 5 and

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NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The stated uncertainty is two times the standard uncertainty.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process.

The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y.

The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty.

The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each standard uncertainty component, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic count rate is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] Estimated limits of detection for photon-emitting impurities are:
1.4 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 8 and 59 keV,
1.1 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 67 and 88 keV,
0.5 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 102 and 197 keV,
0.3 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 205 and 762 keV,
0.2 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 770 and 996 keV, and
0.1 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 1006 and 1900 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of uranium-238, uranium-235, uranium-234, or their progeny.

[g] The stated uncertainty is the standard uncertainty. See reference [5].

[h] Relative standard uncertainty of the input quantity x_i.

[i] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[j] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[k] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i = 100\%$. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of U-238)}•{(Bq of impurity)/(Bq of U-238)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, U.S.A. 1-212-642-4900.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993. Available from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, U.S.A. 1-212-642-4900. (Listed under ISO miscellaneous publications as "ISO Guide to the Expression 1993".)

[3] B. N. Taylor and C. E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), August 1997.

RC-S-03

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0389
Prepared By:	Angela Albee
Carrier Conc:	0.5 M HNO3
Reference Date:	08/01/1997
Ampoule Mass (g):	5 g
Uncertainty:	+/- .6 %
LogBook No:	RC S 034 051

A Solution Material Info	
Isotope:	Uranium-238
Prepared By:	Angela Albee
Prep Date:	07/31/2001
Verification Date:	07/27/2004
Expiration Date:	07/27/2005
Primary Code:	0389-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.6846 g
Density(g/mL):	1.0142

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.6846 g) * (242 bq/g) * (60 dpm/bq) / (100 mL) = 680.2039 dpm/mL
(4.6846 g) * (242 bq/g) * (60 dpm/bq) / (1.0142 g/mL) / (100 mL) = 670.6699 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/31/2001	Lonnie Morris	20.2428	250	0389-B	54.305 dpm/mL	07/01/2002	07/01/2003
10/31/2002	Lonnie Morris	8.2354	100	0389-C	55.232 dpm/mL	10/31/2002	10/31/2003
02/12/2003	Angela Albee	20.2039	250	0389-D	54.201 dpm/mL	02/02/2004	02/02/2005
01/13/2004	Amanda Fehr	8.2215	100	0389-E	55.14 dpm/mL	01/13/2004	01/13/2005
06/17/2004	Brenda Burke	8.505	250	0389-F	22.8162 dpm/mL	07/22/2004	07/22/2005
07/22/2004	Amanda Fehr	20.12	250	0389-G	53.9755 dpm/mL	07/27/2004	07/27/2005

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Uranium-238 Standard *0389-G*

Analyst: A. Fehr	Isotope	Value		Uncertainty	
Date: 7/29/04	0389-G N1	2.48	pCi/L	0.355	pCi/L
	0389-G N2	2.41	pCi/L	0.258	pCi/L
	0389-G N3	2.55	pCi/L	0.398	pCi/L
Mean Value (Counting) =	2.480	pCi/S		**1.0200183**	**% of known**
Stdev =	0.07	pCi/S			
Target =	2.43	pCi/L			
Lower Limit =	2.34	pCi/L			
Upper Limit =	2.62	pCi/L			
Rule 1 Pass/Fail	**Pass**	**Pass**		**Pass**	
Two sigma =	0.14				
10 % of Mean =	0.248				
Rule 2 (Pass/Fail)	**Pass**				

The analyst prepared three standard verification sources for standard **0389-G** using 0.2 mL for each source. Each standard was combined with 0.2 mL of **U-232** standard **0688-D** and was diluted to 10 mL with 1M HCL. 50 micrograms of neodymium carrier, and 1 mL of Titanium Chloride were added. Two mL of 48% HF was then added to precipitate neodymium (and **uranium**) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for **U-238** were calculated by comparison to **U-232** certified values.

Reference SOP RAD M-001

Amanda L. Fehr 7/29/04

8/9/04

RUNLOGS

Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
139136001	SAMPLE	BJB1	1074		02-JUL-2005 21:23	437633		
139136002	SAMPLE	BJB1	1075		02-JUL-2005 21:23	437633		
139136003	SAMPLE	BJB1	1076		02-JUL-2005 21:23	437633		
139136004	SAMPLE	BJB1	1077		02-JUL-2005 21:23	437633		
139136017	SAMPLE	BJB1	1078		02-JUL-2005 21:23	437633		
139136018	SAMPLE	BJB1	1079		02-JUL-2005 21:23	437633		
139136019	SAMPLE	BJB1	1081		02-JUL-2005 21:23	437633		
139136020	SAMPLE	BJB1	1082		02-JUL-2005 21:23	437633		
139349001	SAMPLE	BJB1	1083		02-JUL-2005 21:23	437633		
139349008	SAMPLE	BJB1	1084		02-JUL-2005 21:23	437633		
139349009	SAMPLE	BJB1	1085		02-JUL-2005 21:23	437633		
139405001	SAMPLE	BJB1	1086		02-JUL-2005 21:23	437633		
139405002	SAMPLE	BJB1	1087		02-JUL-2005 21:23	437633		
139406001	SAMPLE	BJB1	1088		02-JUL-2005 21:23	437633		
139406005	SAMPLE	BJB1	1103		02-JUL-2005 21:23	437633		
139409001	SAMPLE	BJB1	1104		02-JUL-2005 21:23	437633		
139409005	SAMPLE	BJB1	1105		02-JUL-2005 21:23	437633		
1200876016	MB	BJB1	1106		02-JUL-2005 21:23	437633		
1200876017	DUP	BJB1	1109		02-JUL-2005 21:23	437633		
1200876018	LCS	BJB1	1111		04-JUL-2005 15:02	437633		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
139136003	SAMPLE	BJB1	1059		02-JUL-2005 21:23	437640		
139136001	SAMPLE	BJB1	1094		02-JUL-2005 21:23	437640		
139136002	SAMPLE	BJB1	1111		02-JUL-2005 21:23	437640		
139136004	SAMPLE	BJB1	1082		04-JUL-2005 15:02	437640		
139136017	SAMPLE	BJB1	1083		04-JUL-2005 15:02	437640		
139136018	SAMPLE	BJB1	1084		04-JUL-2005 15:02	437640		
139136019	SAMPLE	BJB1	1085		04-JUL-2005 15:02	437640		
139136020	SAMPLE	BJB1	1086		04-JUL-2005 15:02	437640		
139349001	SAMPLE	BJB1	1087		04-JUL-2005 15:02	437640		
139349008	SAMPLE	BJB1	1088		04-JUL-2005 15:02	437640		
139349009	SAMPLE	BJB1	1089		04-JUL-2005 15:02	437640		
139405001	SAMPLE	BJB1	1090		04-JUL-2005 15:02	437640		
139405002	SAMPLE	BJB1	1092		04-JUL-2005 15:02	437640		
139406001	SAMPLE	BJB1	1094		04-JUL-2005 15:02	437640		
139406005	SAMPLE	BJB1	1096		04-JUL-2005 15:02	437640		
139409001	SAMPLE	BJB1	1097		04-JUL-2005 15:02	437640		
139409005	SAMPLE	BJB1	1099		04-JUL-2005 15:02	437640		
1200876023	MB	BJB1	1100		04-JUL-2005 15:02	437640		
1200876024	DUP	BJB1	1101		04-JUL-2005 15:02	437640		
1200876025	LCS	BJB1	1102		04-JUL-2005 15:02	437640		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
139136001	SAMPLE	BJB1	1014		01-JUL-2005 22:01	437642		
139136002	SAMPLE	BJB1	1016		01-JUL-2005 22:01	437642		
139136003	SAMPLE	BJB1	1017		01-JUL-2005 22:01	437642		
139136004	SAMPLE	BJB1	1018		01-JUL-2005 22:01	437642		
139136017	SAMPLE	BJB1	1020		01-JUL-2005 22:01	437642		
139136018	SAMPLE	BJB1	1023		01-JUL-2005 22:01	437642		
139136019	SAMPLE	BJB1	1024		01-JUL-2005 22:01	437642		
139136020	SAMPLE	BJB1	1039		01-JUL-2005 23:10	437642		
139349001	SAMPLE	BJB1	1042		01-JUL-2005 23:10	437642		
139349008	SAMPLE	BJB1	1043		01-JUL-2005 23:10	437642		
139349009	SAMPLE	BJB1	1044		01-JUL-2005 23:10	437642		
139405001	SAMPLE	BJB1	1045		01-JUL-2005 23:10	437642		
139405002	SAMPLE	BJB1	1046		01-JUL-2005 23:10	437642		
139406001	SAMPLE	BJB1	1047		01-JUL-2005 23:10	437642		
139406005	SAMPLE	BJB1	1048		01-JUL-2005 23:10	437642		
139409001	SAMPLE	BJB1	1065		01-JUL-2005 23:10	437642		
139409005	SAMPLE	BJB1	1068		01-JUL-2005 23:10	437642		
1200876028	MB	BJB1	1069		01-JUL-2005 23:10	437642		
1200876029	DUP	BJB1	1070		01-JUL-2005 23:10	437642		
1200876030	LCS	BJB1	1083		01-JUL-2005 23:10	437642		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
1200874845	LCS	AKB	GAMMA17		13-JUL-2005 17:46	437153	2L_MB	06-DEC-2004
139349001	SAMPLE	AKB	GAMMA12		13-JUL-2005 18:54	437153	2L_MB	03-JAN-2005
139349008	SAMPLE	AKB	GAMMA7		13-JUL-2005 18:59	437153	2L_MB	03-JAN-2005
139349009	SAMPLE	AKB	GAMMA1		13-JUL-2005 20:13	437153	2L_MB	18-JAN-2005
139405001	SAMPLE	AKB	GAMMA2		13-JUL-2005 20:14	437153	2L_MB	18-JAN-2005
139405002	SAMPLE	AKB	GAMMA3		13-JUL-2005 20:14	437153	2L_MB	24-MAR-2005
1200874843	MB	AKB	GAMMA4		13-JUL-2005 20:15	437153	2L_MB	18-JAN-2005
1200874844	DUP	AKB	GAMMA17		14-JUL-2005 07:32	437153	2L_MB	06-DEC-2004

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
1200879247	MS	EXW1	PIC3A		09-JUL-2005 18:35	439112	Tuffryn Filter	02-NOV-2004
139349001	SAMPLE	EXW1	PIC1B		10-JUL-2005 15:35	439112	Tuffryn Filter	02-NOV-2004
139349008	SAMPLE	EXW1	PIC1C		10-JUL-2005 15:36	439112	Tuffryn Filter	02-NOV-2004
139349009	SAMPLE	EXW1	PIC2A		10-JUL-2005 15:37	439112	Tuffryn Filter	02-NOV-2004
139405001	SAMPLE	EXW1	PIC2B		10-JUL-2005 15:37	439112	Tuffryn Filter	02-NOV-2004
139405002	SAMPLE	EXW1	PIC2C		10-JUL-2005 15:37	439112	Tuffryn Filter	02-NOV-2004
139406001	SAMPLE	EXW1	PIC2D		10-JUL-2005 15:38	439112	Tuffryn Filter	02-NOV-2004
139406005	SAMPLE	EXW1	PIC3A		10-JUL-2005 15:38	439112	Tuffryn Filter	02-NOV-2004
139409001	SAMPLE	EXW1	PIC3B		10-JUL-2005 15:38	439112	Tuffryn Filter	02-NOV-2004
139409005	SAMPLE	EXW1	PIC3C		10-JUL-2005 15:38	439112	Tuffryn Filter	02-NOV-2004
139524002	SAMPLE	EXW1	PIC4A		10-JUL-2005 15:39	439112	Tuffryn Filter	02-NOV-2004
139524009	SAMPLE	EXW1	PIC4B		10-JUL-2005 15:39	439112	Tuffryn Filter	02-NOV-2004
139524010	SAMPLE	EXW1	PIC4C		10-JUL-2005 15:39	439112	Tuffryn Filter	02-NOV-2004
139713001	SAMPLE	EXW1	PIC4D		10-JUL-2005 15:39	439112	Tuffryn Filter	02-NOV-2004
139713005	SAMPLE	EXW1	PIC1B		10-JUL-2005 23:59	439112	Tuffryn Filter	02-NOV-2004
1200879245	MB	EXW1	PIC1C		10-JUL-2005 23:59	439112	Tuffryn Filter	02-NOV-2004
1200879246	DUP	EXW1	PIC2A		11-JUL-2005 00:03	439112	Tuffryn Filter	02-NOV-2004
139524001	SAMPLE	EXW1	PIC3A		13-JUL-2005 11:39	439112	Tuffryn Filter	02-NOV-2004
1200879248	LCS	EXW1	PIC1B		13-JUL-2005 17:19	439112	Tuffryn Filter	02-NOV-2004

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
139349001	SAMPLE	SXE1	PIC3D		13-JUL-2005 15:09	441414	2 inch Planchett	19-JUL-2004
139349008	SAMPLE	SXE1	PIC4A		13-JUL-2005 15:09	441414	2 inch Planchett	19-JUL-2004
139349009	SAMPLE	SXE1	PIC4B		13-JUL-2005 15:09	441414	2 inch Planchett	19-JUL-2004
139405001	SAMPLE	SXE1	PIC4C		13-JUL-2005 15:09	441414	2 inch Planchett	19-JUL-2004
139405002	SAMPLE	SXE1	PIC4D		13-JUL-2005 15:09	441414	2 inch Planchett	19-JUL-2004
1200885002	MS	SXE1	PIC1C		13-JUL-2005 16:12	441414	2 inch Planchett	19-JUL-2004
1200885003	MSD	SXE1	PIC2A		13-JUL-2005 16:12	441414	2 inch Planchett	19-JUL-2004
1200885004	LCS	SXE1	PIC2C		13-JUL-2005 16:12	441414	2 inch Planchett	19-JUL-2004
139406001	SAMPLE	SXE1	PIC4A		14-JUL-2005 08:55	441414	2 inch Planchett	19-JUL-2004
139406005	SAMPLE	SXE1	PIC4B		14-JUL-2005 08:55	441414	2 inch Planchett	19-JUL-2004
139409001	SAMPLE	SXE1	PIC4C		14-JUL-2005 08:55	441414	2 inch Planchett	19-JUL-2004
139409005	SAMPLE	SXE1	PIC4D		14-JUL-2005 08:56	441414	2 inch Planchett	19-JUL-2004
139524001	SAMPLE	SXE1	PIC3C		14-JUL-2005 09:55	441414	2 inch Planchett	19-JUL-2004
139524002	SAMPLE	SXE1	PIC3D		14-JUL-2005 09:55	441414	2 inch Planchett	19-JUL-2004
139524009	SAMPLE	SXE1	PIC1C		14-JUL-2005 12:00	441414	2 inch Planchett	19-JUL-2004
139524010	SAMPLE	SXE1	PIC1D		14-JUL-2005 12:00	441414	2 inch Planchett	19-JUL-2004
139713001	SAMPLE	SXE1	PIC2A		14-JUL-2005 12:00	441414	2 inch Planchett	19-JUL-2004
139713005	SAMPLE	SXE1	PIC2B		14-JUL-2005 12:00	441414	2 inch Planchett	19-JUL-2004
1200885000	MB	SXE1	PIC2C		14-JUL-2005 12:00	441414	2 inch Planchett	19-JUL-2004
1200885001	DUP	SXE1	PIC2D		14-JUL-2005 12:00	441414	2 inch Planchett	19-JUL-2004

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
139136017	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 06:44	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139136018	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 08:45	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139136019	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 10:46	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139136020	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 12:47	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139193017	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 14:48	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139193018	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 16:49	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139193019	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 18:50	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139193020	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 20:51	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139349008	SAMPLE	LAG1	LSCYELLOW		11-JUL-2005 22:52	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139349009	SAMPLE	LAG1	LSCYELLOW		12-JUL-2005 00:53	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139406005	SAMPLE	LAG1	LSCYELLOW		12-JUL-2005 11:06	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139409005	SAMPLE	LAG1	LSCYELLOW		12-JUL-2005 13:07	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1200875113	MB	LAG1	LSCYELLOW		12-JUL-2005 15:08	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1200875114	DUP	LAG1	LSCYELLOW		12-JUL-2005 17:09	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1200875115	MS	LAG1	LSCYELLOW		12-JUL-2005 19:10	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1200875116	LCS	LAG1	LSCYELLOW		12-JUL-2005 21:11	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
139405002	SAMPLE	LAG1	LSCYELLOW		13-JUL-2005 18:35	437248	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
139405002	SAMPLE	EGD1	LSCBLUE		05-JUL-2005 13:03	437627	5ml DI/10ml ultima gold	20-JUN-2005
1200875998	MB	EGD1	LSCBLUE		05-JUL-2005 13:51	437627	5ml DI/10ml ultima gold	20-JUN-2005
1200875999	DUP	EGD1	LSCBLUE		05-JUL-2005 14:38	437627	5ml DI/10ml ultima gold	20-JUN-2005
1200876000	MS	EGD1	LSCBLUE		05-JUL-2005 15:25	437627	5ml DI/10ml ultima gold	20-JUN-2005
1200876001	LCS	EGD1	LSCBLUE		05-JUL-2005 16:10	437627	5ml DI/10ml ultima gold	20-JUN-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Geometry	Cal Date
138436003	SAMPLE	AB1	LUCAS2		01-JUL-2005 13:35	437415	Lucas Cell	09-MAY-2005
138436004	SAMPLE	AB1	LUCAS3		01-JUL-2005 13:35	437415	Lucas Cell	26-OCT-2004
138851001	SAMPLE	AB1	LUCAS4		01-JUL-2005 13:35	437415	Lucas Cell	23-SEP-2004
138851002	SAMPLE	AB1	LUCAS5		01-JUL-2005 13:35	437415	Lucas Cell	08-NOV-2004
138851003	SAMPLE	AB1	LUCAS6		01-JUL-2005 13:35	437415	Lucas Cell	22-NOV-2004
138851004	SAMPLE	AB1	LUCAS1		01-JUL-2005 14:25	437415	Lucas Cell	09-DEC-2004
139405001	SAMPLE	AB1	LUCAS2		01-JUL-2005 14:25	437415	Lucas Cell	09-MAY-2005
139405002	SAMPLE	AB1	LUCAS3		01-JUL-2005 14:25	437415	Lucas Cell	26-OCT-2004
1200875441	MB	AB1	LUCAS4		01-JUL-2005 14:25	437415	Lucas Cell	23-SEP-2004
1200875442	DUP	AB1	LUCAS5		01-JUL-2005 14:25	437415	Lucas Cell	08-NOV-2004
1200875443	MS	AB1	LUCAS6		01-JUL-2005 14:25	437415	Lucas Cell	22-NOV-2004
1200875444	LCS	AB1	LUCAS1		01-JUL-2005 15:00	437415	Lucas Cell	09-DEC-2004

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AQA Nonconformance Report

NCR No. 9-20-05 MLH

Pg 1 of 1

SECTION 1

Document Title: LANL ESH 143122 VOC GEL	Project or Program: Data Validation
Originator/Date: Marcia Hilchey 9/20/05	Contract No.: 67191001-03-A5

DESCRIPTION OF NONCONFORMANCE

Requirement: Sample GU05050GMC401 result for chloromethane should be qualified J,V9,V14b,VWQ5.

Condition Found: Sample GU05050GMC401 result for chloromethane was not qualified.

Assigned to: Marcia Hilchey Response Due 9/20/05

SECTION 2

DISPOSITION: Accept-As-Is_____ Reject_____ Administrative Action__X____

Justification: validation oversight

Instructions: (Identify what Administrative Actions and/or Corrective Actions will occur.)

Issue revised report.

Responsible Employee___Dave Schwent_____ Corrective Action Due Date 9/20/05_____

SECTION 3

VERIFICATION AND CLOSURE: Disposition Completed As Directed ____X___ Other (Specify)_____

Originator or QA Coordinator (Signature/Date) Ms. Marcia Hilchey 9/20/05

Analytical Quality Associates, Inc.
616 Maxine NE
Albuquerque, NM 87123
Phone: 505-299-5201
Fax: 505-299-6744
Email: minteer@aol.com

Memorandum - Revised

Date: 09/20/05

To: William Turney

From: David Schwent/Marcia Hilchey

Subject: GC/MS Organic Data Review and Validation – WQH ESH
COC: WG-02537-GE, WG-02542-GE, and WG-02562-GE
SDG: 143122
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

Sample GU05060G1MB01	Results for all target analytes except chloromethane and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision information. The result for chloromethane should be **qualified J, V9** due to analysis beyond 2X the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information.
Sample GU05050GMC601	Results for all target analytes except 2-butanone; 4-methyl-2-pentanone; toluene; 1,4-dioxane; and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision information. Results for 2-butanone; 4-methyl-2-pentanone; toluene; and 1,4-dioxane should be **qualified J, V9** due to analysis beyond 2X the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information.
Sample GU05050GMC690	Results for all target analytes except acetone; carbon disulfide; 2-butanone; 4-methyl-2-pentanone; toluene; 1,4-dioxane; and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision. Results for carbon disulfide; 2-butanone; 4-methyl-2-pentanone; toluene; and 1,4-dioxane; should be **qualified J, V9** due to analysis beyond 2X

	the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for acetone should be **qualified J, V9** due to analysis beyond 2X the holding time; **J+, VWQ9** due to calibration problems, **J,V14b** due to lack of applicable MS analysis; and **J**, **VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information.
Sample GU05050GMC401	Results for all target analytes except chloromethane; carbon disulfide; 1,4-dioxane; and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision. Results for carbon disulfide and 1,4-dioxane; should be **qualified J, V9** due to analysis beyond 2X the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information. The result for chloromethane should be **qualified J, V9** due to analysis beyond 2X the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information.

Summary/General Comments

All samples were prepared and analyzed with approved procedures using method EPA8260B (VOCs). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times, except for the following. The samples were re-logged for analysis to confirm the presence of target analyte 1,4-dioxane as per client request (see e-mail, dated 08-15-05). The samples were analyzed beyond 2X the method specified holding time. All associated sample detects should be **qualified J** and non-detects (NDs) should be **qualified R** (unusable).

Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration QC acceptance criteria were met, except the following. The continuing calibration verification (CCV) percent difference (%D) of acetone was >20% with positive

bias. The associated result of Sample GU05050GMC690 was a detect and should be **qualified J+**; all other associated sample results were NDs and should not be qualified. The CCV %D of dichlorodifluoromethane was >40% but <60% with negative bias. All associated sample results were NDs and should be **qualified UJ**. The CCV %D of 2,2-dichloropropane was >20% but <40% with negative bias. However, all associated sample results were NDs and should not be qualified.

Blanks

No target analytes were detected in the blanks.

Surrogates

All surrogate QC acceptance criteria were met.

Internal Standards

All internal standard QC acceptance criteria were met.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

No MS/MSD analyses were performed. As a result, no applicable MS analysis or measure of laboratory precision exist for the field sample data. All associated sample detects should be **qualified J** and sample NDs should be **qualified UJ** due to lack of applicable MS analysis and lack of precision information.

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

All LCS QC acceptance criteria were met, except the following. The LCS percent recovery (%R) for acetone was > QC acceptance criteria. However, this was the only LCS %R outside acceptance criteria and, based on professional judgment, no sample data should be qualified as a result. No LCSD analysis was performed.

Detection Limits/Dilutions

Detection limits were not reported in the data package. No samples required dilution.

Tentatively Identified Compounds (TICs)

No TICs were identified in the samples.

Other QC

No other specific issues which affect data quality were identified.

Analytical Quality Associates, Inc.
616 Maxine NE
Albuquerque, NM 87123
Phone: 505-299-5201
Fax: 505-299-6744
Email: minteer@aol.com

Memorandum

Date: 09/13/05

To: William Turney

From: David Schwent

Subject: GC/MS Organic Data Review and Validation – WQH ESH
COC: WG-02537-GE, WG-02542-GE, and WG-02562-GE
SDG: 143122
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

Sample GU05060G1MB01	Results for all target analytes except chloromethane and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision information. The result for chloromethane should be **qualified J, V9** due to analysis beyond 2X the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information.
Sample GU05050GMC601	Results for all target analytes except 2-butanone; 4-methyl-2-pentanone; toluene; 1,4-dioxane; and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision information. Results for 2-butanone; 4-methyl-2-pentanone; toluene; and 1,4-dioxane should be **qualified J, V9** due to analysis beyond 2X the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information.
Sample GU05050GMC690	Results for all target analytes except acetone; carbon disulfide; 2-butanone; 4-methyl-2-pentanone; toluene; 1,4-dioxane; and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision. Results for carbon disulfide; 2-butanone; 4-methyl-2-pentanone; toluene; and 1,4-dioxane; should be **qualified J, V9** due to analysis beyond 2X

	the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for acetone should be **qualified J, V9** due to analysis beyond 2X the holding time; **J+, VWQ9** due to calibration problems, **J,V14b** due to lack of applicable MS analysis; and **J**, **VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information.
Sample GU05050GMC401	Results for all target analytes <u>except</u> chloromethane; carbon disulfide; 1,4-dioxane; and dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time**; UJ, V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5**, due to lack of precision. Results for carbon disulfide and 1,4-dioxane; should be **qualified J, V9** due to analysis beyond 2X the holding time: **J, V14b** due to lack of applicable MS analysis; and **J, VWQ5** due to lack of precision information. The result for dichlorodifluoromethane should be **qualified R, V9** due to analysis beyond 2X the holding time; **UJ**, **VWQ9** due to calibration problems; **UJ**, **V14b** due to lack of applicable MS analysis**;** and **UJ, VWQ5** due to lack of precision information.

<u>Summary/General Comments</u>

All samples were prepared and analyzed with approved procedures using method EPA8260B (VOCs). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

<u>Sample Shipping/Receiving</u>

All COC, analysis request, and sample receipt documentation was complete and correct.

<u>Holding Times and Preservation</u>

All samples were properly preserved and analyzed within the prescribed holding times, except for the following. The samples were re-logged for analysis to confirm the presence of target analyte 1,4-dioxane as per client request (see e-mail, dated 08-15-05). The samples were analyzed beyond 2X the method specified holding time. All associated sample detects should be **qualified J** and non-detects (NDs) should be **qualified R** (unusable).

<u>Instrument Tune</u>

All instrument tune requirements were met.

<u>Calibration</u>

All initial and continuing calibration QC acceptance criteria were met, except the following. The continuing calibration verification (CCV) percent difference (%D) of acetone was >20% with positive bias. The associated result of Sample GU05050GMC690 was a detect and should be **qualified J+**; all other associated sample results were NDs and should not be qualified. The CCV %D of dichlorodifluoromethane was >40% but <60% with negative bias. All associated sample results were

NDs and should be **qualified UJ**. The CCV %D of 2,2-dichloropropane was >20% but <40% with negative bias. However, all associated sample results were NDs and should not be qualified.

Blanks

No target analytes were detected in the blanks.

Surrogates

All surrogate QC acceptance criteria were met.

Internal Standards

All internal standard QC acceptance criteria were met.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

No MS/MSD analyses were performed. As a result, no applicable MS analysis or measure of laboratory precision exist for the field sample data. All associated sample detects should be **qualified J** and sample NDs should be **qualified UJ** due to lack of applicable MS analysis and lack of precision information.

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

All LCS QC acceptance criteria were met, except the following. The LCS percent recovery (%R) for acetone was > QC acceptance criteria. However, this was the only LCS %R outside acceptance criteria and, based on professional judgment, no sample data should be qualified as a result. No LCSD analysis was performed.

Detection Limits/Dilutions

Detection limits were not reported in the data package. No samples required dilution.

Tentatively Identified Compounds (TICs)

No TICs were identified in the samples.

Other QC

No other specific issues which affect data quality were identified.

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GENERAL NARRATIVE

CASE NARRATIVE
for
Los Alamos National Laboratory
ESH-18
SDG 143122
Chain of Custody WG-02537-GE, WG-02542-GE and WG-02562-GE

August 19, 2005

Laboratory Identification:

General Engineering Laboratories, LLC

Mailing Address:

P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:

2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:

(843) 556-8171

Summary:

Sample receipt

The samples for Los Alamos National Laboratory for ESH-18 arrived at General Engineering Laboratories, LLC, (GEL) Charleston, South Carolina on June 10, 19 and 25, 2005 for environmental analyses. All sample containers arrived without any visible signs of tampering. The sample containers were delivered with chain of custody documentation and signatures. The sample containers were received at 3-6/20-25°C temperature. The samples were relogged for 1,4-Dioxane analysis per the client's request.

The laboratory received the following samples:

Laboratory Identification	Sample Description
143122001	GU05060G1MB01
143122002	GU05050GMC601
143122003	GU05050GMC690
143122004	GU05050GMC401

Internal Chain of Custody:

Custody was maintained for the samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Review Qualifier Flag Sheet, and GC/MS Volatile Analysis.

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

Valerie S. Davis

Project Manager

CHAIN OF CUSTODY

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Relq # 143122

134057

Matrix: Ground Water Coc Id: WG-02537-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/23/05 @ 8:50	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Tumey Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:tumey@lanl.gov

Analysis Request

Sample Id: **GF05050GMC401** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
GW: CN	250 ml poly	1	NAOH and <4C				
GW: Rad ~~w/MS~~	1.0 gal poly	~~4~~ 2	HN03				
GenInorg II Order WG	1.0 L poly	1	<4C				
P+N	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
Total Containers:	~~10~~ 5						

Sample Id: **GU05050GMC401** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW, SW, RO: H-3 w/ MS	1.0 L amber glass	1	Not Preserved				
GW, SW, RO: SSC	500 ml poly	1	<4C				
GW: Rad w/MS	1.0 gal poly	~~4~~ 2	HN03				
GW: SVOA w/MS+TICs	1.0 L amber glass	~~3~~ 1	<4C				
GenInorg II Order WG	1.0 L poly	1	<4C				
TC99	1.0 L poly	1	HCL				
TKN+TOC	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
WG VOA w/MS+TICs	40 ml amber glass	~~6~~ 3	HCl and <4C				
Total Containers:	~~20~~ 12						

Sample Id: **GU05050GMC401-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW: VOA FTB	40 ml amber glass	1	HCl and <4C				
Total Containers:	1						

Grand Total: ~~31~~ 23

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02537-GE PO #: Program: ER-R Cost Code: E200 Collection Date/Time: 6/23/05 @ 9:50	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Turney Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:turney@lanl.gov

Analysis Request

Technique:

Comments:

Chain of Custody

Sampling Team: Max Mars, Jim Jordan, Alex Nova, Ed Pullian

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
Max Mars (sampler)	6/24/05	8:05		6/24/05	8:05	
				6-25-05	0915	

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Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02542-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/15/05 @ 9:07	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178
WQH Contact: William Tumey Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545	Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:tumey@lanl.gov	

13385 17

Analysis Request

Sample Id: **GU05050GMC601** **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
WG VOA w/MS+TICs	40 ml amber glass	6	HCl and <4C				
Total Containers:	20						

Sample Id: **GU05050GMC601-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW: VOA FTB	40 ml amber glass	1	HCl and <4C				
Total Containers:	1						

Sample Id: **GU05050GMC690** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW, SW, RO: H-3 w/ MS	1.0 L amber glass	1	Not Preserved				
GW, SW, RO: SSC	500 ml poly	1	<4C				
GW: Rad w/MS	1.0 gal poly	4	HN03				
GW: SVOA w/MS+TICs	1.0 L amber glass	3	<4C				
GenInorg II Order WG	1.0 L poly	1	<4C				
TC99	1.0 L poly	1	HCL				
TKN+TOC	1.0 L glass	1	H2SO4 and <4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
WG VOA w/MS+TICs	40 ml amber glass	6	HCl and <4C				
Total Containers:	20						

Grand Total: 61

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02542-GE PO #: Program: ER-R Cost Code: E200 Collection Date/ Time: 6/15/05 @ 9:07	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Tumey Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:tumey@lanl.gov

Analysis Request

Technique:

Comments:

Chain of Custody

Sampling Team: Max Moon, Melissa Sandoval, Jim Jordan Mike Trujillo

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
(sampler)	6/15/05	12:30				
				6/15/05	12:30	
				6-19-05	9:15	

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Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water
Coc Id: WG-02562-GE
PO #:
Program: Wtr Sup
Cost Code: 4239
Collection Date/ Time: 6/8/05 13:55

Ship To:
General Engineering Laboratories, Inc.,
Charleston, SC

2040 Savage Rd.

Charleston, SC 29407

Contact:
Valerie Davis

Phone:
(843) 556-8171

Fax:
(843) 766-1178

WQH Contact:

William Tumey
Los Alamos National Laboratory
MS K497 DDP 59011701U
Los Alamos, NM 87545

Phone: 1-505-665-8572
Fax: 1-505-665-9344
e-mail:tumey@lanl.gov

1383697

Analysis Request

Sample Id: **GU05060G1MB01** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
GW, SW, RO: H-3 ~~w/MS~~	1.0 L amber glass 250 ml	1	Not Preserved				
GW, SW, RO: SSC	500 ml poly	1	<4C				
GW, SW: Gen Inorg III	250 ml poly	1	H2SO4 and <4C				
GW: CN	250 ml poly	1	NAOH and <4C				
GW: Gen Inorg II	1.0 L poly	1	<4C				
GW: PCB ~~w/MS~~	1.0 L amber glass	2	<4C				
GW: Rad ~~w/MS~~	1.0 gal poly	1	HN03				
GW: SVOA ~~w/MS~~+TICs	1.0 L amber glass	2	<4C				
NMED HE ~~w/MS~~	1.0 L amber glass	2	<4C				
Pesticides ~~w/MS~~	1.0 L amber glass	2	<4C				
WG Hg	250 ml amber glass	1	HN03				
WG Metals, Gen	1.0 L poly	1	HN03				
WG VOA ~~w/MS~~+TICs	40 ml amber glass	6	HCl and <4C			MAY Contain Air Bubbles well pumping Lots of air	
Total Containers:	30						

Sample Id: **GU05060G1MB01-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
GW: VOA FTB	40 ml amber glass	1	HCl and <4C				
Total Containers:	1						

Grand Total: 31 17

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
RRES-WQH

Matrix: Ground Water Coc Id: WG-02562-GE PO #: Program: Wtr Sup Cost Code: 4239 Collection Date/ Time: 6-6-05 18:55	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: William Turney Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-665-8572 Fax: 1-505-665-9344 e-mail:turney@lanl.gov

Analysis Request

Technique:

Comments:

Chain of Custody

Sampling Team: B. Reed, Conrad Montoya, Amy Dixon

Relinquished By: (sampler)	Date	Time	Received By	Date	Time	Reason for Transfer
Conrad Montoya	6.8.05	16:30		6/8/05	1630	
				6.10.05	935	

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COOLER RECEIPT CHECKLIST

SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: Los Alamos	SDG/ARCOC/Work Order: 138851
Date Received: 6.17.05	PM(A) Review (ensure non-conforming items are resolved prior to signing): Valerie Jaramillo
Received By: CM	

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓	✓ 23°C	✓ RSO 6/17/05	Circle Coolant # ice bags (blue ice) dry ice (none) other(describe) 2.0 23.0
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	✓			Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?	✓			Sample ID's and containers affected:
7	Samples received within holding time?	✓			Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?			✓	Sample ID's affected: no date + time on sample
10	Number of containers received match number indicated on COC?			✓	Sample ID's affected: Did not Receieve 4 liter Amber 50615, 4 liter cubes 50616
11	COC form is properly signed in relinquished/received sections?	✓			
12	Air Bill ,Tracking #'s, & Additional Comments	6954 7789			6864 - 23.0, 6853 - 23.0, 6842 - 2.0, 6831 - 2.0 / 6875 - 2.0

Radiological Information	Non-RAD	RAD	RADII	RSO RAD Receipt #
What is the radiological classification of the samples?	✓			Comments:
Radioactivity Screening Results (maximum observed CPM)	50 cpm			*If > x2 area background is observed on a non-radioactive sample, contact the RSO to investigate.

PM (or PMA) review of Receiving Rad classification: VSO Initials 6/17/05 Date:

SAMPLE RECEIPT & REVIEW FORM

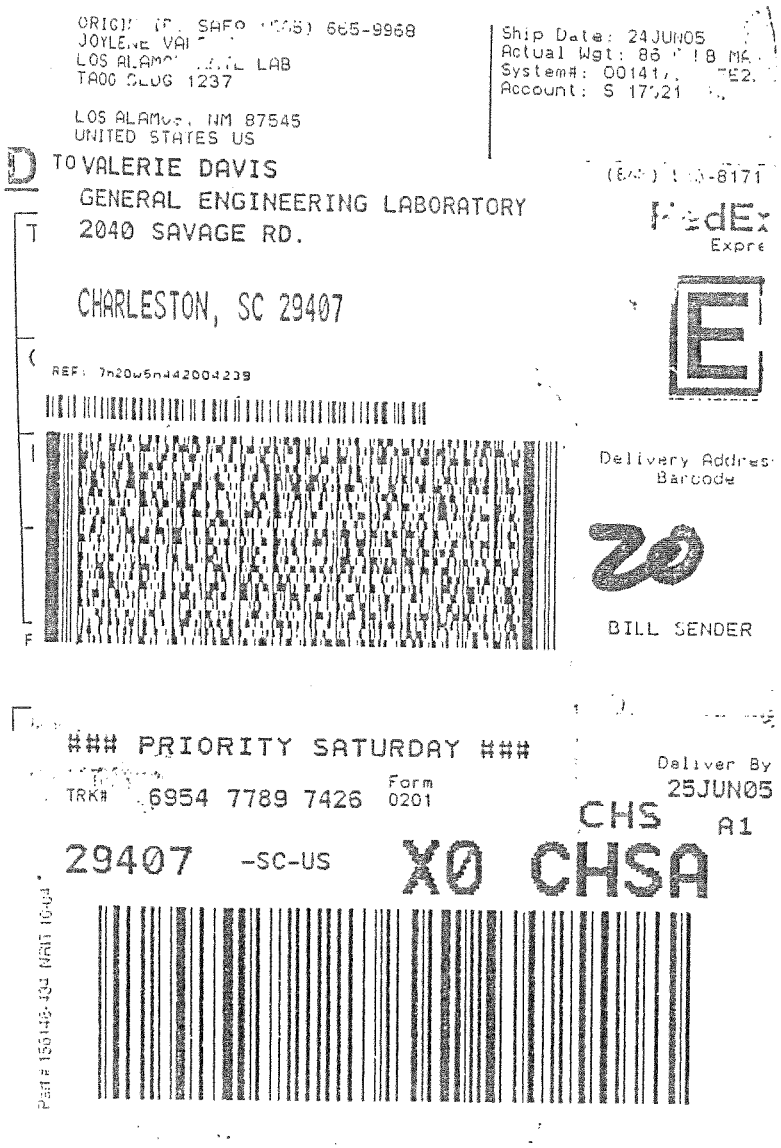
PM use only

Client: LANL / ESH-18	SDG/ARCOC/Work Order: WG-025370-GE
Date Received: 6-25-05	PM(A) Review (ensure non-conforming items are resolved prior to signing): Valin Dain
Received By: MK	

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓			Circle Temp device serial # ice bags blue ice dry ice none other(describe) 3°C 4°C 19°C 20°C
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?			✓	Circle Applicable: seals broken damaged container leaking container other (describe) 2 SAMPLES ARRIVED WITH LIDS OFF GF32R101-1 GAL RAD GW32R101-1 GAL RAD
5	Samples requiring chemical preservation at proper pH?			✓	Sample ID's, containers affected and observed pH: GW32R101 - 1 GAL RAD PH=6
6	VOA vials free of headspace (defined as < 6mm bubble)?	✓			Sample ID's and containers affected:
7	Samples received within holding time?	✓			Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?			✓	Sample ID's affected: NO DATE OR TIME ON SAMPLES
10	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
11	COC form is properly signed in relinquished/received sections?	✓			
12	Air Bill ,Tracking #'s, & Additional Comments				Fed Ex #'s 6954 7789 7448-3°C 7437-3°C 7460-4°C 7404-4°C 7426-2°C 7459-19°C ↑ NO ICE

Radiological Information	Non-RAD	RAD	RAD!	RSO RAD Receipt #
What is the radiological classification of the samples?	✓			Comments:
Radioactivity Screening Results (maximum observed CPM)	0 cpm			*If >x2 area background is observed on a non-radioactive sample, contact the RSO to investigate.

PM (or PMA) review of Receiving Rad classification: VSO Initials 6/27/05 Date



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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 24JUN05
Actual Wgt: 86.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

REF: 7h20w5n442004239

FedEx Express

Delivery Address Barcode

20

BILL SENDER

PRIORITY SATURDAY

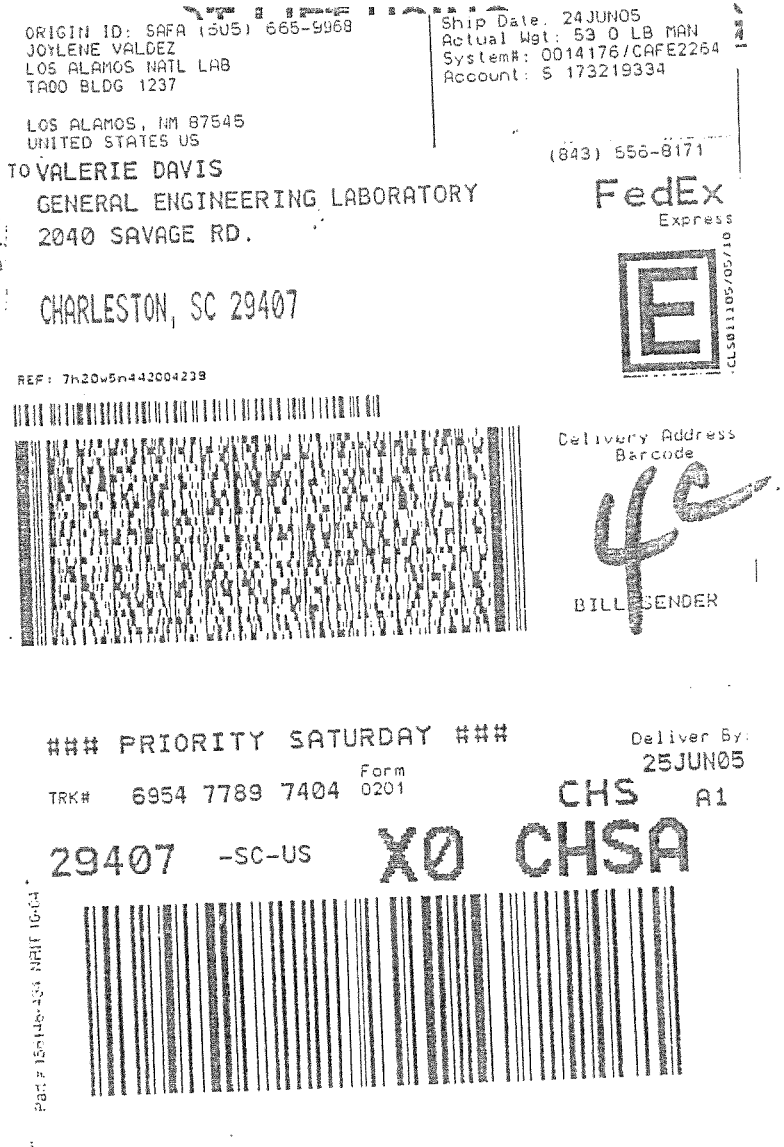
TRK# 6954 7789 7426 Form 0201

Deliver By 25JUN05

CHS A1

29407 -SC-US XO CHSA

Part # 150146-434 NAIT 10-04



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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 24JUN05
Actual Wgt: 53.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

REF: 7h20w5n442004239

FedEx Express

CLS011105/05/10

Delivery Address Barcode

4c

BILL SENDER

PRIORITY SATURDAY

TRK# 6954 7789 7404 Form 0201

Deliver By 25JUN05

CHS A1

29407 -SC-US XO CHSA

Part # 150146-434 NAIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES/US

Ship Date: 24JUN05
Actual Wgt: 50.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

FedEx Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

3e

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7448

Form 0201

CHS A1

29407 -SC-US

X0 CHSA

Part # 156145-434 NAIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

FedEx Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

3e

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7437

Form 0201

CHS A1

29407 -SC-US

X0 CHSA

Part # 156145-434 NAIT 10-04

...NATL LAB
TA00 BLDG 1237

LOS ALAMOS, NM 87545
UNITED STATES US

System#: ...
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx
Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7460

Form 0201

CHS A1

29407 -SC-US

X0 CHSA

Part # 150148-434 NAIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date 24JUN05
Actual Wgt: 84.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx
Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY SATURDAY

Deliver By:
25JUN05

TRK# 6954 7789 7459

Form 0201

CHS A1

29407 -SC-US

X0 CHSA

Part # 150148-434 NAIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 43.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS (843) 556-8171
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

REF: 7h20w5n442004238

FedEx Express

CLS0111105/05/10

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

FRI
Deliver By:
17JUN05

TRK# 6954 7789 6875 Form 0201

CHS A1

29407 -SC-US XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 52.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS (843) 556-8171
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

REF: 7h20w5n442004239

FedEx Express

CLS0111105/05/10

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

FRI
Deliver By:
17JUN05

TRK# 6954 7789 6842 Form 0201

CHS A1

29407 -SC-US XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 50.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

FedEx
Express

CLS011105/05/10

REF: 2a20a6a442004239

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

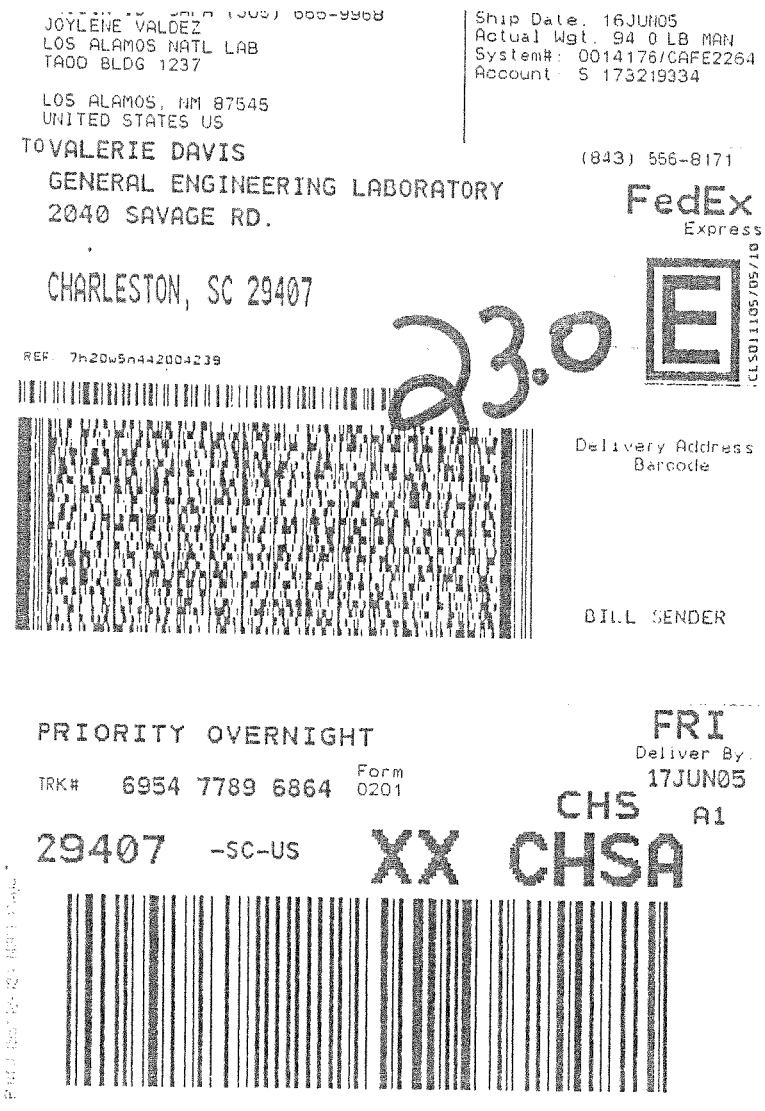
FRI
Deliver By
17JUN05

TRK# 6954 7789 6831 Form 0201

CHS A1

29407 -SC-US

XX CHSA



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 94.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx Express

CLS011105/05/10

23.0

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

FRI
Deliver By:
17JUN05

TRK# 6954 7789 6864

Form 0201

CHS A1

29407 -SC-US

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 16JUN05
Actual Wgt: 95.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx Express

CLS011105/05/10

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

23.0

PRIORITY OVERNIGHT

FRI
Deliver By:
17JUN05

TRK# 6954 7789 6853

Form 0201

CHS A1

29407 -SC-US

XX CHSA

SAMPLE RECEIPT & REVIEW FORM

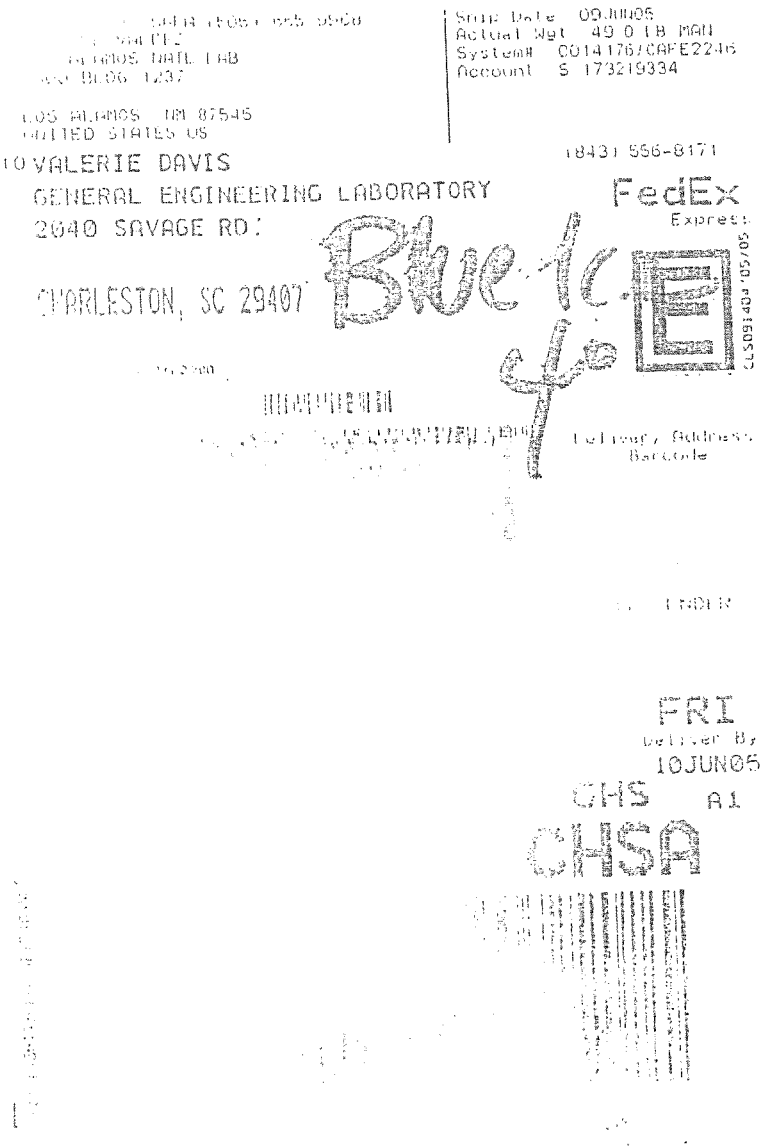
PM use only

Client: Los Alamos	**SDG/ARCOC/Work Order:** 138369
Date Received: 6-10-05	**PM(A) Review (ensure non-conforming items are resolved prior to signing):**
Received By: CD	

	Sample Receipt Criteria	Conforming	NA	Non-Conforming	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓		✓ VSO 6/13/05	Circle Coolant # ice bags (blue ice) dry ice (none) other(describe)
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?			✓	Circle Applicable: seals broken damaged container leaking container other (describe) Broken 1 liter amber 2mBOL NMED HE
5	Samples requiring chemical preservation at proper pH?	✓			Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?			✓	Sample ID's and containers affected: Air bubble 1mBOL (on Both)
7	Samples received within holding time?	✓			Id's and tests affected:
8	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
9	Date & time on COC match date & time on bottles?			✓	Sample ID's affected: no date + time on samples
10	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
11	COC form is properly signed in relinquished/received sections?	✓			
12	Air Bill ,Tracking #'s, & Additional Comments	6954 7989			6257 -4.0 6360 -13.0 6268 -4.0 6382 -6.0 / 6327 -6.0 6280 -20.0 6279 -25.0 6305 -6.0

Radiological Information	Non-RAD	RAD	RADII	RSO RAD Receipt #
What is the radiological classification of the samples?	✓			Comments:
Radioactivity Screening Results (maximum observed CPM)	300 CPM			*If > x2 area background is observed on a non-radioactive sample, contact the RSO to investigate.

PM (or PMA) review of Receiving Rad classification: VSO Initials 6/13/05 Date:



Ship Date 09JUN05
Actual Wgt 49.0 LB MAN
System# 0014176/CAFE2246
Account S 173219334

LOS ALAMOS NM 87545
UNITED STATES US

10 VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx Express

Blue ice & Broken

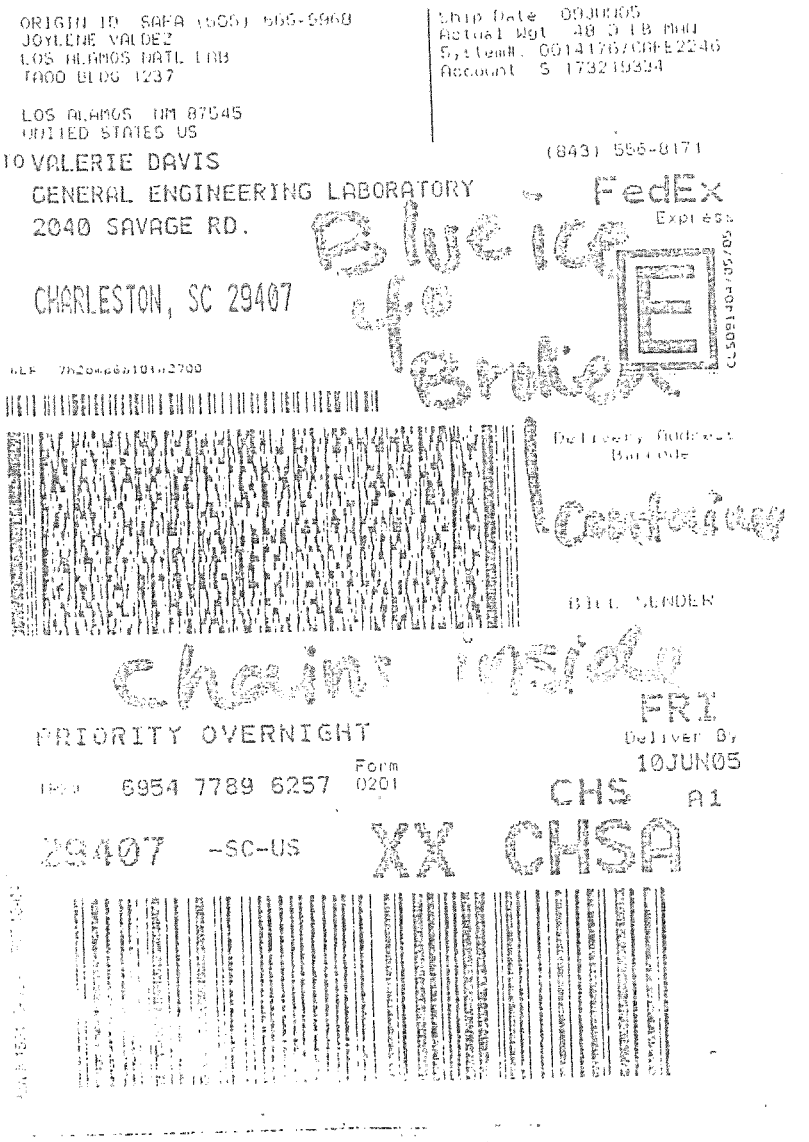
Delivery Address Barcode

BILL SENDER

FRI
Deliver By
10JUN05

CHS A1

CHSA



ORIGIN ID SAFA (505) 665-5960
JOYLENE VALDEZ
LOS ALAMOS NATL LNB
TA00 BLDG 1237

Ship Date 09JUN05
Actual Wgt 49.0 LB MAN
System# 0014176/CAFE2246
Account S 173219334

LOS ALAMOS NM 87545
UNITED STATES US

10 VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx Express

Blue ice & Broken

Delivery Address Barcode

Cassettes

BILL SENDER

chain inside

FRI
Deliver By
10JUN05

PRIORITY OVERNIGHT

Form 0201

6954 7789 6257

CHS A1

29407 -SC-US

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 09JUN05
Actual Wgt: 87.0 LB MAN
System#: 0014176/CAFE2246
Account: S 173219334

TO VALERIE DAVIS (843) 556-8171
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

REF: 7n2ampba10tn2700

FedEx Express

CLS091404/05/05

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

TRK# 6954 7789 6279 Form 0201

29407 -SC-US

FRI
Deliver By
10JUN05

CHS
A1

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 09JUN05
Actual Wgt: 87.0 LB MAN
System#: 0014176/CAFE2246
Account: S 173219334

TO VALERIE DAVIS (843) 556-8171
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

REF: 7n2ampba10tn2700

FedEx Express

CLS091404/05/05

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

TRK# 6954 7789 6280 Form 0201

FRI
Deliver By
10JUN05

CHS
A1

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

Ship Date: 09JUN05
Actual Wgt: 55.0 LB MAN
System#: 0014176/CAFE2246
Account: S 173219334

Chains inside

(843) 556-8171

FedEx
Express

Blue ice

E

(LSD)404/05/05

Delivery Address Barcode

6°

BILL SENDER

OVERNIGHT

Form 0201

FRI
Deliver By:
10JUN05

CHS A1

XX CHSA

Part # 150140-434 NRIT 10-04

23

LOS ALAMOS NATL LAB
TA00 BLDG 1237

LOS ALAMOS, NM 87545
UNITED STATES US

Account: S 173219...

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

Blue ice 6°

FedEx
Express

E

(LSD)404/05/05

REF. 7h2omp6a101u2700

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

Form 0201

TRK# 6954 7789 6305

FRI
Deliver By:
10JUN05

CHS A1

29407 -SC-US

XX CHSA

Part # 150140-434 NRIT 10-04

VALERIE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237

LOS ALAMOS, NM 87545
UNITED STATES US

Actual Wgt: 46.0 LB-MAN
System#: 0014176/CAFE2246
Account: S 173219334

(843) 556-8171

TRIE DAVIS
[illegible] ENGINEERING LABORATORY
[illegible]D.

FedEx Express

Blue Ice
6°

CLS051404/05/05

[illegible] Delivery Address Barcode

6954 7789 6382

LOS ALAMOS NATL LAB
TA00 BLDG 1237

LOS ALAMOS, NM 87545
UNITED STATES US

System#: 0014176/CAFE2246
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

13.0 E

FedEx Express

CLS051404/05/05

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

FRI
Deliver By:
10JUN05

Form 0201

6954 7789 6360

CHS A1

29407 -SC-US

XX CHSA

Part # 150148-43: MAIT 10-04

24

Part # 150148-43: MAIT 10-04

DATA REVIEW QUALIFIER FLAG DEFINITION SHEET

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR ORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
A	The TIC is suspected aldol-condensation product.	COA, Form 1, and EDD
B	Analyte was detected in the associated method blank as well as in the sample.	COA, Form 1, and EDD
C	Pesticide analyte has been confirmed by GC/MS.	COA, Form 1, and EDD
D	Analyte(s) quantified in an analysis performed at a secondary dilution factor.	COA, Form 1, and EDD
E	Identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.	COA, Form 1, and EDD
J	This flag indicates an estimated value concerning either, (1) estimating a concentration for tentatively identified compounds (TICs), or (2) analyte detected at a level less than the RDL or PQL and greater than or equal to the MDL.	COA, Form 1, and EDD
N	Presumptive evidence based upon a mass spectral library search to make a tentative identification of the analyte.	COA, Form 1, and EDD
NJ	Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard.	COA, Form 1, and EDD
P	- Pesticide/PCB target analyte that is greater than 25% difference for the detected concentrations between the two GC columns. - HPLC target analyte that is greater than 40% difference for the detected concentrations between detectors or columns.	Form 1 and EDD
U	Compound analyzed for but not detected (sample quantitation limit has been adjusted to reflect dilutions and percent moisture).	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	COA, Form 1, and EDD
**	Laboratory Control Sample recovery outside of acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR INORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
E	The qualifier that is used when the percent difference between the parent sample and its serial dilution's concentration exceeds 10%. The sample's concentration must be greater than 50 times the IDL/MDL for ICP or 100 times the absolute value of the preparation blank's concentration for ICP-MS. However, if analyzing ILMO 4.0 (ICP-MS), the parent sample's concentration must be 20 times the CRDL before the "E" flag is applied.	Form 1 and EDD
*	The qualifier that is used to indicate the duplicate sample analysis for an analyte is out of control.	Form 1 and EDD
J	The qualifier is used to indicate that the reported result fell above the IDL/MDL but below the CRDL.	Form 1 and EDD
N	This qualifier is used to indicate that the matrix or pre-digested spike sample recovery for an analyte is not within the specified control limit.	Form 1 and EDD
U	Analyte analyzed for but not detected above the PQL/CRDL.	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	Form 1 and EDD
**	Laboratory Control Sample (LCS) recovery for an analyte is outside of specified acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.
Any recoveries falling outside the acceptance range will be flagged with a **.
All flags do not apply to QC Summary and Certificate of Analysis packages.

GC/MS VOLATILE ANALYSIS

GC/MS Volatile Organics
Los Alamos National Laboratory (ESHL)
SDG 143122

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometer
Analytical Method:	SW846 8260B DOE-AL
Prep Method:	SW846 5030B
Analytical Batch Number:	452857

Sample Analysis

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

Sample ID	Client ID
143122001	GU05060G1MB01
143122002	GU05050GMC601
143122003	GU05050GMC690
143122004	GU05050GMC401
1200912214	Method Blank (MB)
1200912215	Laboratory Control Sample (LCS)
1200912216	Laboratory Control Sample (LCS)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 9.

Calibration Information

Due to the limited capacity of software all of the current initial calibration files are not displayed here. If necessary, a calibration history will be inserted in the package prior to the appropriate Form 6.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

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

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits, except Acetone. The failure is less than 5% of the requested analyte list. This satisfies the client criteria. See NCR 235388.

QC Sample Designation
Spike analyses were not performed for this SDG. The samples in this SDG were re-logged out of holding time in order to confirm the presence of 1,4-Dioxane in the initial analyses.

Internal Standard (ISTD) Acceptance
The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

Holding Time Specifications
Samples 143122001 (GU05060G1MB01), 143122002 (GU05050GMC601), 143122003 (GU05050GMC690) and 143122004 (GU05050GMC401) were re-logged out of holding in order to confirm the presence of 1,4-Dioxane in the initial analyses.

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG except for dilutions and/or confirmations.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign

and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 235388 was generated for this SDG.

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

TIC Comment
Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments
All samples in this SDG, except 143122004 (GU05050GMC401) were analyzed from unopened vials. Both vials for sample 143122004 (GU05050GMC401) had been previously opened.

System Configuration

The Volatile-GC/MS analysis was performed on a VOA Mass Spec.

Instrument ID	System Configuration	Column ID	Column Description	P & T Trap
VOA7.I	HP5890/HP5972	J&W2	DB-624, 75m x 0.53mm, 3.0um	Trap 10

Certification Statement

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

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Erin Lambert Date: 8/22/05

Roadmap for ESHL 143122 VOA

This roadmap was analyzed by Patricia Steele on 08-22-2005, 13:42.
This roadmap was reviewed by Erin Haubert on 08-22-2005, 14:13.
This roadmap was packaged by LySandra Gathers on 08-22-2005, 14:58.
This roadmap was validated by Erin Haubert on 08-22-2005, 15:33.
This roadmap was validated by Erin Haubert on 08-22-2005, 15:35.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA7.i/081505.b/7x108.d	143122001	GU05060G1MB01	15-AUG-2005	13:54	143122.sub	1	
☐	N	/chem/VOA7.i/081505.b/7x109.d	143122002	GU05050GMC601	15-AUG-2005	14:21	143122.sub	1	
☐	N	/chem/VOA7.i/081505.b/7x110.d	143122003	GU05050GMC690	15-AUG-2005	14:49	143122.sub	1	
☐	N	/chem/VOA7.i/081505.b/7x111.d	143122004	GU05050GMC401	15-AUG-2005	15:16	143122.sub	1	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA7.i/081505.b/7x103LANL122.d	1200912215	VBLK01LCS	lcs	15-AUG-2005	10:22	143122.sub	1	
☐	N	/chem/VOA7.i/081505.b/7x104LANL122.d	1200912216	VBLK01SLCS	lcs	15-AUG-2005	10:50	143122.sub	1	
☐	N	/chem/VOA7.i/081505.b/7x107LANL122.d	1200912214	VBLK01	mb	15-AUG-2005	13:26	143122.sub	1	

SAMPLE DATA SUMMARY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	3.4	
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	4.2	J
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	23.4	J

1E

EPA SAMPLE NO.

GU05050GMC401

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	3.3	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.8	
108-88-3	Toluene	1.8	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	21.6	J

1E

EPA SAMPLE NO.

GU05050GMC601

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	11.6	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	4.2	J
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	4.6	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	7.7	
108-88-3	Toluene	1.3	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	24.6	J

1E

EPA SAMPLE NO.

GU05050GMC690

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05060G1MB01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.5	
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05060G1MB01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05060G1MB01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05060G1MB01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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QUALITY CONTROL SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

	EPA SAMPLE NO.	SMC1 (DBF)#	SMC2 (TOL)#	SMC3 (BFB)#	OTHER	TOT OUT
01	VBLK01LCS	102	104	91		0
02	VBLK01SLCS	104	106	119		0
03	VBLK01	106	104	104		0
04	GU05060G1MB01	104	105	106		0
05	GU05050GMC601	99	103	104		0
06	GU05050GMC690	104	103	101		0
07	GU05050GMC401	102	103	102		0
08						
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	QC LIMITS
SMC1 (DBF) = Dibromofluoromethane	(85-120)
SMC2 (TOL) = Toluene-d8	(79-122)
SMC3 (BFB) = Bromofluorobenzene	(75-119)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	26.6	53	50-142
Chloromethane	50.0	0.0	41.8	84	52-134
Vinyl chloride	50.0	0.0	47.0	94	60-128
Bromomethane	50.0	0.0	46.2	92	60-120
Chloroethane	50.0	0.0	48.7	97	68-129
Trichlorofluoromethane	50.0	0.0	52.1	104	66-136
1,1-Dichloroethylene	50.0	0.0	55.8	112	71-125
Acetone	250	0.0	363	145*	62-134
Iodomethane	250	0.0	254	102	77-134
Carbon disulfide	250	0.0	243	97	74-142
Acetonitrile	1250	0.0	1290	103	58-136
Methylene chloride	50.0	0.0	48.9	98	71-120
trans-1,2-Dichloroethyl	50.0	0.0	50.9	102	77-128
1,1-Dichloroethane	50.0	0.0	54.5	109	72-120
Vinyl acetate	250	0.0	222	89	66-142
2-Butanone	250	0.0	272	109	62-138
cis-1,2-Dichloroethylen	50.0	0.0	53.6	107	79-120
2,2-Dichloropropane	50.0	0.0	55.1	110	78-135
Bromochloromethane	50.0	0.0	50.4	101	78-124
Chloroform	50.0	0.0	52.2	104	80-121
1,1,1-Trichloroethane	50.0	0.0	52.9	106	71-123
1,1-Dichloropropene	50.0	0.0	54.2	108	78-123
Carbon tetrachloride	50.0	0.0	51.0	102	77-132
1,2-Dichloroethane	50.0	0.0	51.4	103	76-128
Benzene	50.0	0.0	49.3	99	69-120
Trichloroethylene	50.0	0.0	48.5	97	78-118
1,2-Dichloropropane	50.0	0.0	52.7	105	73-119
Dibromomethane	50.0	0.0	46.6	93	82-123

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	49.9	100	87-134
cis-1,3-Dichloropropyle	50.0	0.0	48.5	97	79-125
4-Methyl-2-pentanone	250	0.0	259	104	64-135
Toluene	50.0	0.0	47.7	95	75-120
trans-1,3-Dichloropropy	50.0	0.0	49.3	99	73-126
1,1,2-Trichloroethane	50.0	0.0	46.2	92	78-120
1,3-Dichloropropane	50.0	0.0	53.2	106	78-115
2-Hexanone	250	0.0	284	114	66-141
Tetrachloroethylene	50.0	0.0	54.4	109	69-124
Dibromochloromethane	50.0	0.0	46.7	93	78-133
1,2-Dibromoethane	50.0	0.0	45.4	91	80-120
Chlorobenzene	50.0	0.0	46.8	94	80-118
1,1,1,2-Tetrachloroetha	50.0	0.0	49.1	98	82-122
Ethylbenzene	50.0	0.0	51.4	103	79-120
o-Xylene	50.0	0.0	52.8	106	80-119
m,p-Xylenes	100	0.0	104	104	78-116
Xylenes (total)	150	0.0	157	105	80-117
Styrene	50.0	0.0	56.4	113	78-117
Bromoform	50.0	0.0	43.7	87	74-136
Isopropylbenzene	50.0	0.0	44.4	89	75-120
1,1,2,2-Tetrachloroetha	50.0	0.0	44.9	90	72-129
1,2,3-Trichloropropane	50.0	0.0	44.1	88	72-127
Bromobenzene	50.0	0.0	48.8	98	79-118
n-Propylbenzene	50.0	0.0	49.4	99	74-122
2-Chlorotoluene	50.0	0.0	51.5	103	76-118
1,3,5-Trimethylbenzene	50.0	0.0	49.9	100	73-117
1,2,4-Trimethylbenzene	50.0	0.0	53.4	107	75-117
4-Chlorotoluene	50.0	0.0	49.7	99	76-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
tert-Butylbenzene	50.0	0.0	49.6	99	72-121
sec-Butylbenzene	50.0	0.0	50.6	101	72-124
4-Isopropyltoluene	50.0	0.0	45.0	90	75-124
1,3-Dichlorobenzene	50.0	0.0	52.2	104	75-118
1,4-Dichlorobenzene	50.0	0.0	49.5	99	75-120
n-Butylbenzene	50.0	0.0	56.9	114	71-130
1,2-Dichlorobenzene	50.0	0.0	47.4	95	78-116
1,2-Dibromo-3-chloropro	50.0	0.0	42.0	84	63-139
1,2,4-Trichlorobenzene	50.0	0.0	47.6	95	71-135
Hexachlorobutadiene	50.0	0.0	42.4	85	65-128
Naphthalene	50.0	0.0	42.5	85	63-138
1,2,3-Trichlorobenzene	50.0	0.0	42.6	85	70-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 68 outside limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC	#	QC. LIMITS REC.
Acrolein	250	0.0	288	115		56-148
Isobutyl alcohol	2500	0.0	2270	91		57-137
Allyl chloride	250	0.0	213	85		65-126
Acrylonitrile	250	0.0	204	82		57-126
2-Chloro-1,3-butadiene	50.0	0.0	36.8	74		50-148
Methacrylonitrile	250	0.0	215	86		64-118
Propionitrile	250	0.0	176	70		58-129
Methyl methacrylate	250	0.0	215	86		68-122
Ethyl methacrylate	250	0.0	205	82		68-120
1,4-Dioxane	2500	0.0	2070	83		60-131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Lab File ID: 7X107LANL122 Lab Sample ID: 1200912214

Date Analyzed: 08/15/05 Time Analyzed: 1326

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA7

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK01LCS	1200912215	7X103LANL122	1022
02	VBLK01SLCS	1200912216	7X104LANL122	1050
03	GU05060G1MB01	143122001	7X108	1354
04	GU05050GMC601	143122002	7X109	1421
05	GU05050GMC690	143122003	7X110	1449
06	GU05050GMC401	143122004	7X111	1516
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Lab File ID: 7W501 BFB Injection Date: 08/12/05

Instrument ID: VOA7 BFB Injection Time: 1449

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.8
75	30.0 - 60.0% of mass 95	47.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.3 (0.3)1
174	50.0 - 100.0% of mass 95	84.8
175	5.0 - 9.0% of mass 174	6.1 (7.2)1
176	95.0 - 101.0% of mass 174	82.1 (96.8)1
177	5.0 - 9.0% of mass 176	4.7 (5.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD001	W7VM050812-01	7W504	08/12/05	1609
02	VSTD002	W7VM050812-02	7W505	08/12/05	1636
03	VSTD005	W7VM050812-03	7W506	08/12/05	1702
04	VSTD010	W7VM050812-04	7W507	08/12/05	1729
05	VSTD020	W7VM050812-05	7W508	08/12/05	1756
06	VSTD050	W7VM050812-06	7W509	08/12/05	1823
07	VSTD100	W7VM050812-07	7W510	08/12/05	1850
08	VSTD005S	UVM050727-02A	7W512	08/12/05	1944
09	VSTD010S	UVM050727-03A	7W513	08/12/05	2011
10	VSTD025S	UVM050727-04A	7W514	08/12/05	2038
11	VSTD050S	UVM050727-05A	7W515	08/12/05	2103
12	VSTD100S	UVM050727-06A	7W516	08/12/05	2130
13	VSTD250S	UVM050727-07A	7W517	08/12/05	2157
14	VSTD500S	UVM050727-08A	7W518	08/12/05	2224
15	VSTD050ICV	UVM050804-01A	7W520	08/12/05	2318
16	VSTD250ICV	UVM050803-01B	7W521	08/12/05	2346
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Lab File ID: 7X101 BFB Injection Date: 08/15/05

Instrument ID: VOA7 BFB Injection Time: 0927

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	51.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 100.0% of mass 95	83.4
175	5.0 - 9.0% of mass 174	5.4 (6.5)1
176	95.0 - 101.0% of mass 174	79.7 (95.5)1
177	5.0 - 9.0% of mass 176	4.8 (6.1)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	W7V050815-02	7X103	08/15/05	1022
02	VBLK01LCS	1200912215	7X103LANL122	08/15/05	1022
03	VSTD250S	UVM050803-01B	7X104	08/15/05	1050
04	VBLK01SLCS	1200912216	7X104LANL122	08/15/05	1050
05	VBLK01	1200912214	7X107LANL122	08/15/05	1326
06	GU05060G1MB01	143122001	7X108	08/15/05	1354
07	GU05050GMC601	143122002	7X109	08/15/05	1421
08	GU05050GMC690	143122003	7X110	08/15/05	1449
09	GU05050GMC401	143122004	7X111	08/15/05	1516
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8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Lab File ID (Standard): 7X103 Date Analyzed: 08/15/05

Instrument ID: VOA7 Time Analyzed: 1022

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1835095	10.16	1251140	13.11	666221	15.44
	UPPER LIMIT	3670190	10.66	2502280	13.61	1332442	15.94
	LOWER LIMIT	917548	9.66	625570	12.61	333110	14.94
	EPA SAMPLE NO.						
01	VBLK01LCS	1835095	10.16	1251140	13.11	666221	15.44
02	VBLK01SLCS	1929240	10.16	1237576	13.11	554892	15.44
03	VBLK01	1630289	10.16	1075709	13.11	456371	15.44
04	GU05060G1MB01	1669212	10.16	1100953	13.11	458304	15.44
05	GU05050GMC601	1949446	10.16	1282425	13.11	524692	15.44
06	GU05050GMC690	1731655	10.16	1186621	13.11	489117	15.44
07	GU05050GMC401	1748195	10.16	1138353	13.11	485502	15.44
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	3.4	
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	4.2	J
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	23.4	J

1E

EPA SAMPLE NO.

GU05050GMC401

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X111

Level: (low/med) LOW Date Received: 06/25/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x111.d
Lab Smp Id: 143122004 Client Smp ID: GU05050GMC401
Inj Date : 15-AUG-2005 15:16
Operator : PS Inst ID: VOA7.i
Smp Info : |143122004|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 139405002 (opened)
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.164	10.164	(1.000)	1748195	50.0000	
* 61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1138353	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	15.442	15.437	(1.000)	485502	50.0000	
$ 35 Dibromofluoromethane	113	9.443	9.448	(0.929)	446344	50.9472	50.9
$ 47 Toluene-d8	98	11.713	11.713	(0.893)	1553548	51.3515	51.4
$ 71 Bromofluorobenzene	95	14.224	14.224	(0.921)	447486	50.9221	50.9
4 Chloromethane	50	5.292	5.308	(0.521)	57708	3.39489	3.4
14 Carbon disulfide	76	7.520	7.541	(0.740)	2477	4.17598	4.2(aQ)
97 1,4-Dioxane	88	10.880	10.864	(1.070)	2616	23.3940	23.4(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

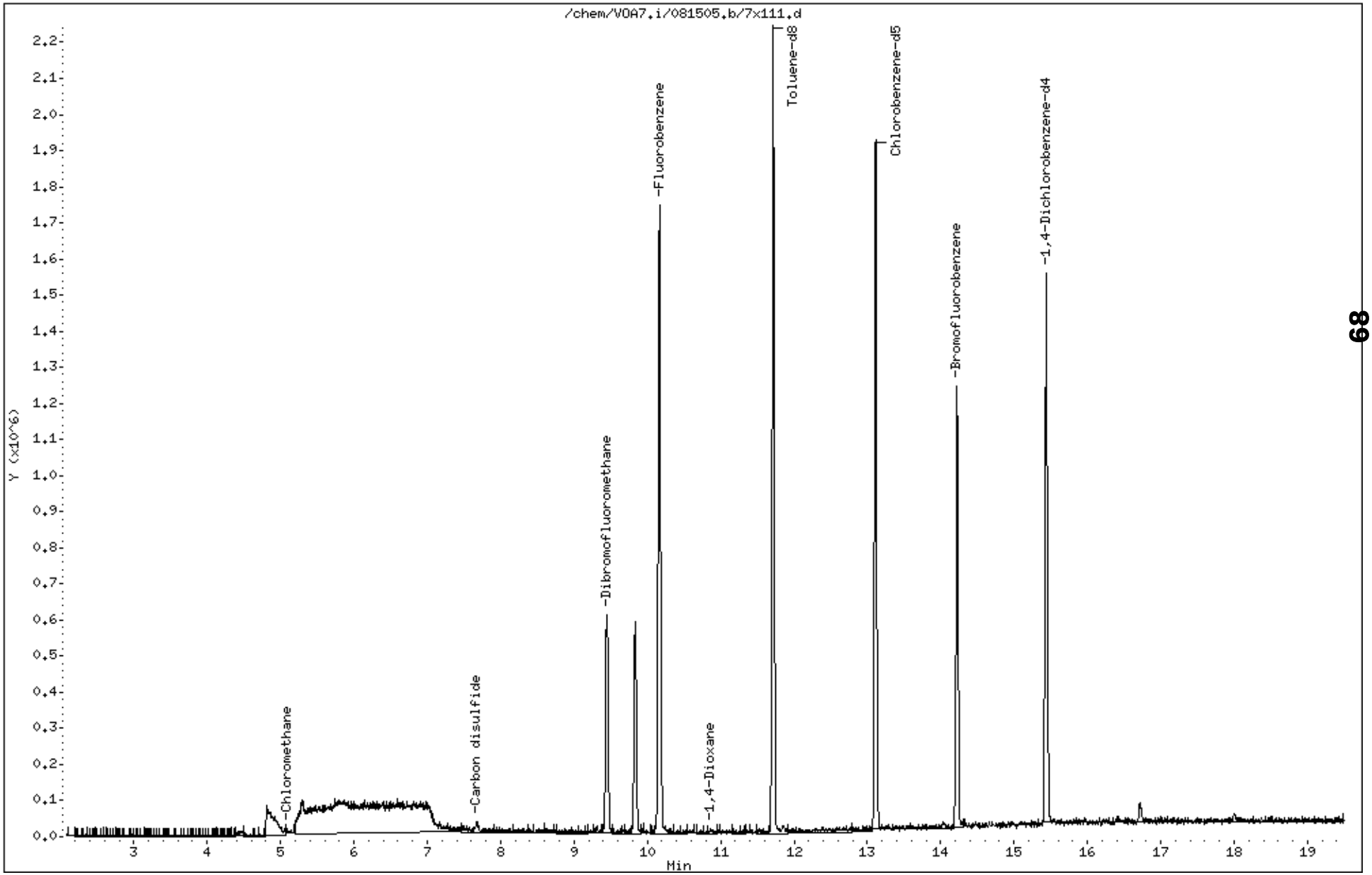
General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x111.d
Lab Smp Id: 143122004 Client Smp ID: GU05050GMC401
Inj Date : 15-AUG-2005 15:16
Operator : PS Inst ID: VOA7.i
Smp Info : |143122004|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 139405002 (opened)
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/081505.b/7x111.d
Date : 15-AUG-2005 15:16
Client ID: GU05050GMC401
Instrument: VOA7.i
Sample Info: |143122004|452857|1|VOAF|1||
Purge Volume: 5.0
Operator: PS
Column phase: DB-624
Column diameter: 0.25



Data File: /chem/VOA7.i/081505.b/7x111.d

Date : 15-AUG-2005 15:16

Client ID: GU05050GMC401

Instrument: VOA7.i

Sample Info: |143122004|452857|1|VOAF|1||

Purge Volume: 5.0

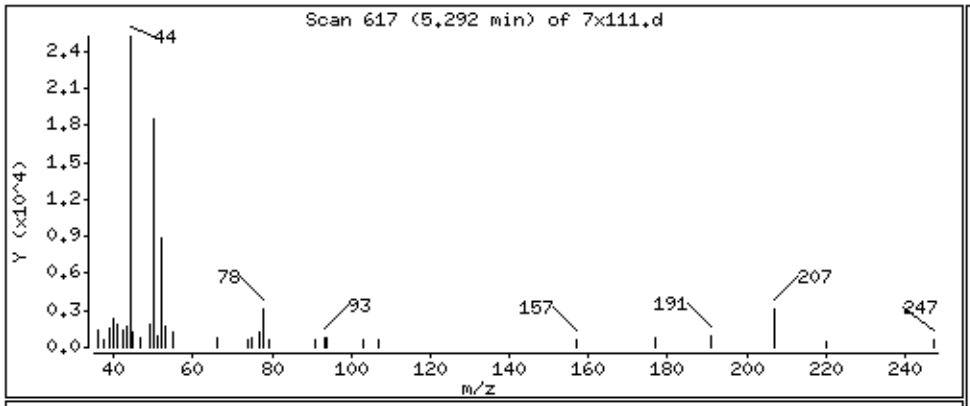
Operator: PS

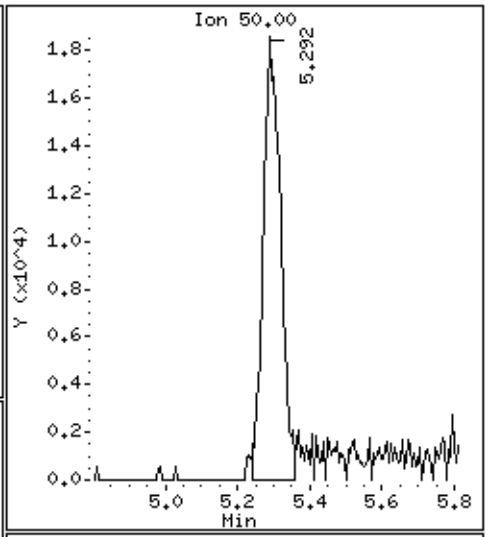
Column phase: DB-624

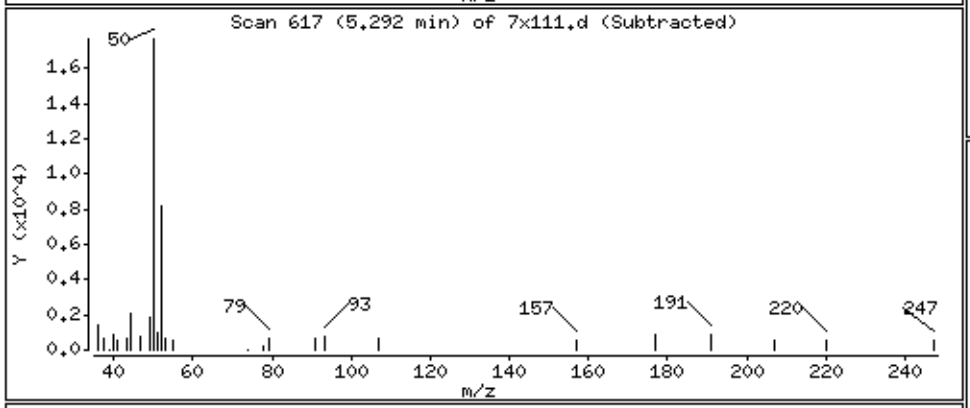
Column diameter: 0.25

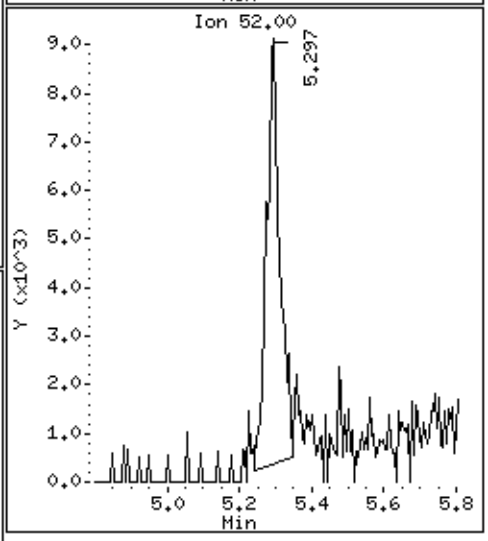
4 Chloromethane

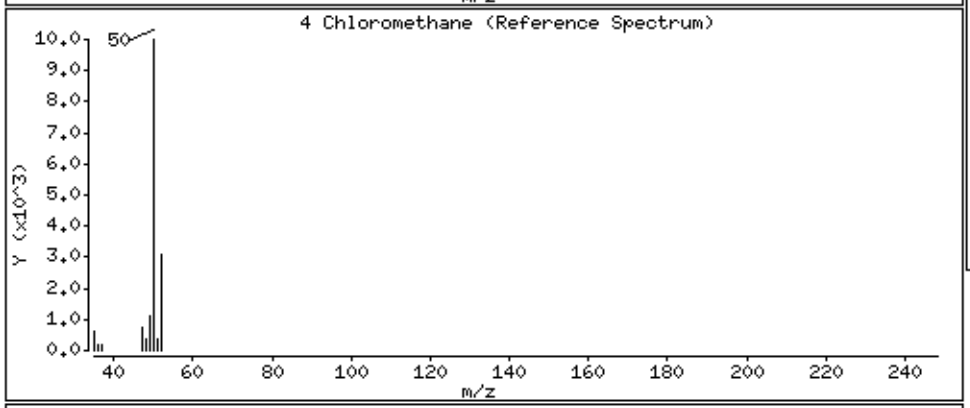
Concentration: 3.4 ug/l

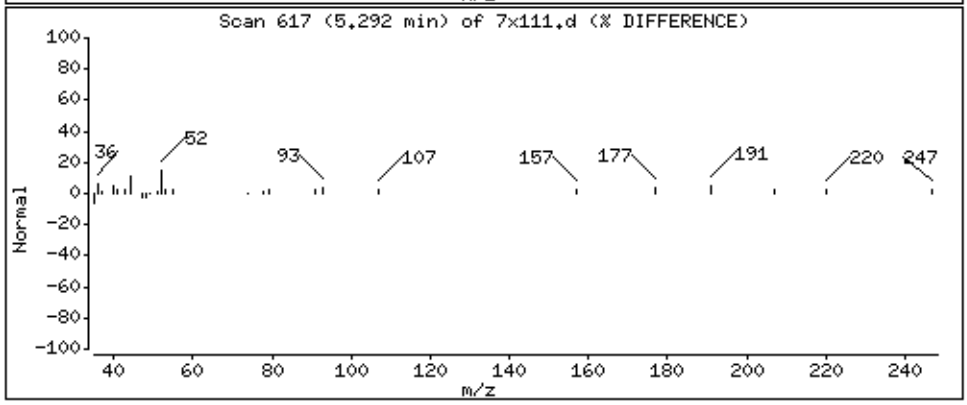












Data File: /chem/VOA7.i/081505.b/7x111.d

Date : 15-AUG-2005 15:16

Client ID: GU05050GMC401

Instrument: VOA7.i

Sample Info: |143122004|452857|1|VOAF|1||

Purge Volume: 5.0

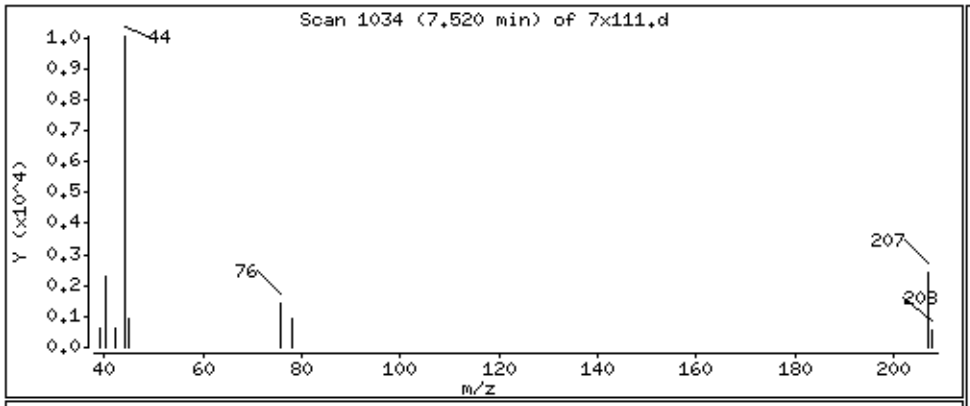
Operator: PS

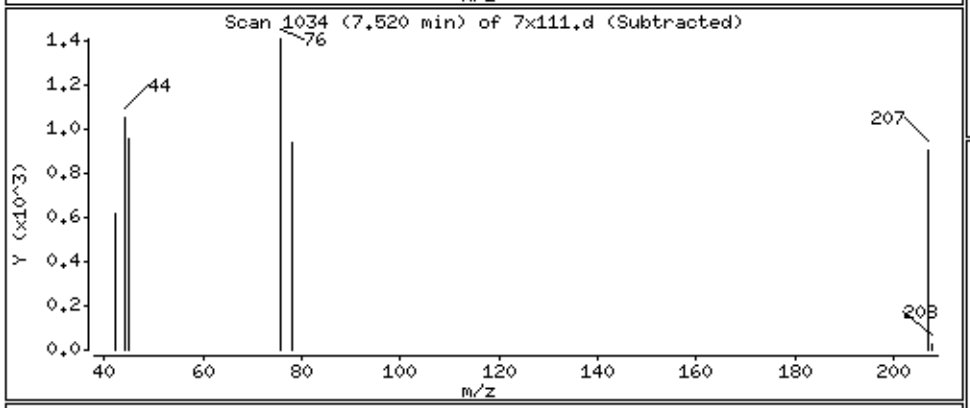
Column phase: DB-624

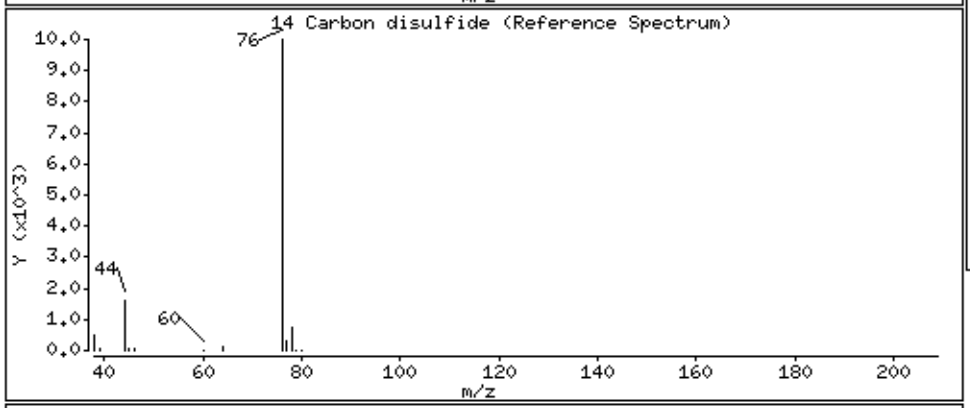
Column diameter: 0.25

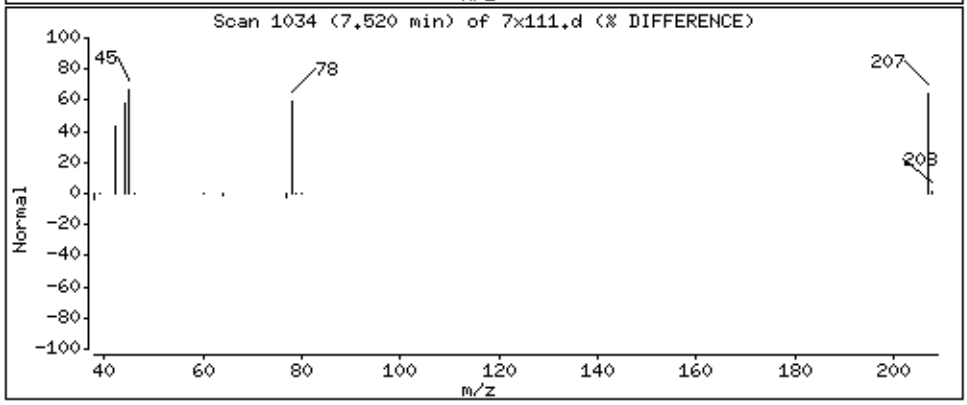
14 Carbon disulfide

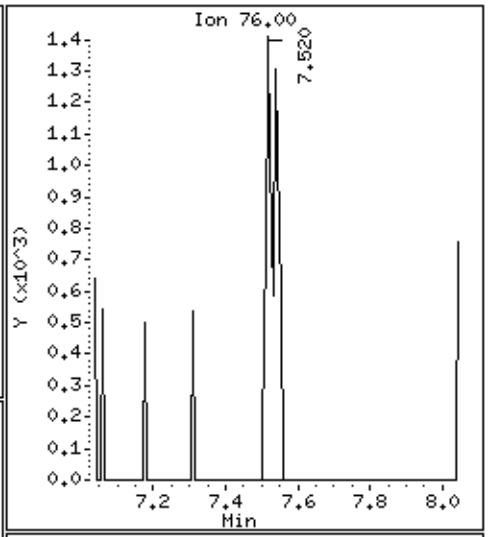
Concentration: 4.2 ug/l

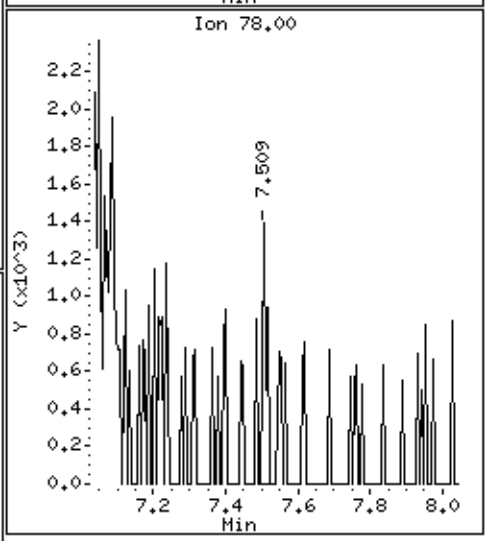












Data File: /chem/VOA7.i/081505.b/7x111.d

Date : 15-AUG-2005 15:16

Client ID: GU05050GMC401

Instrument: VOA7.i

Sample Info: |143122004|452857|1|VOAF|1||

Purge Volume: 5.0

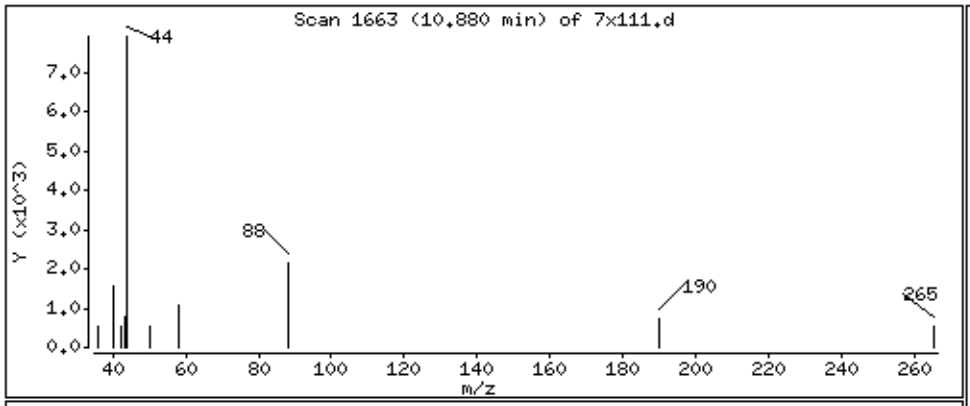
Operator: PS

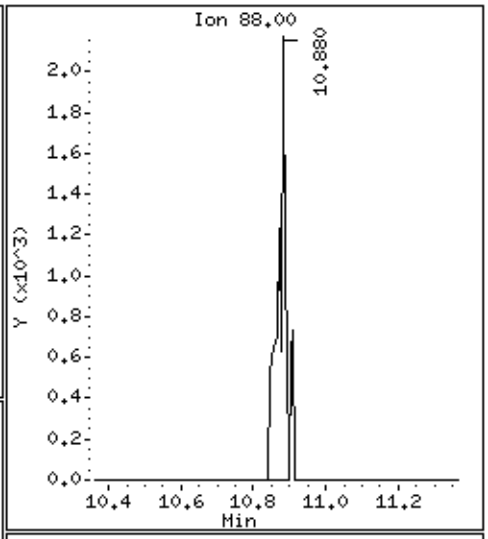
Column phase: DB-624

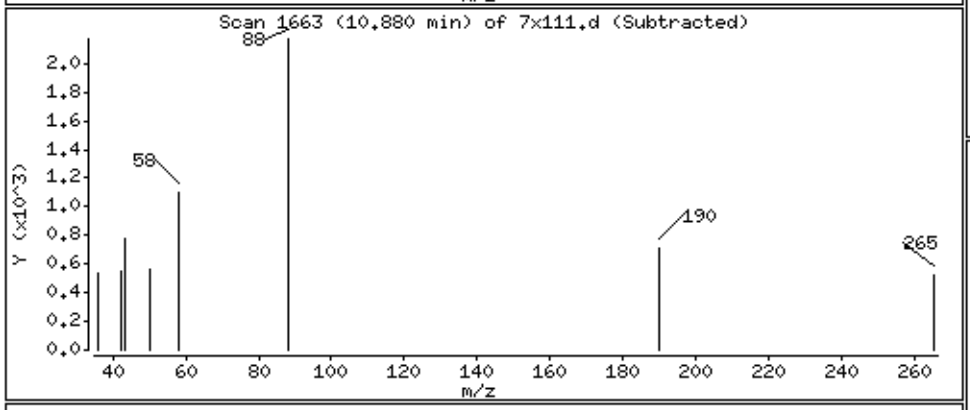
Column diameter: 0.25

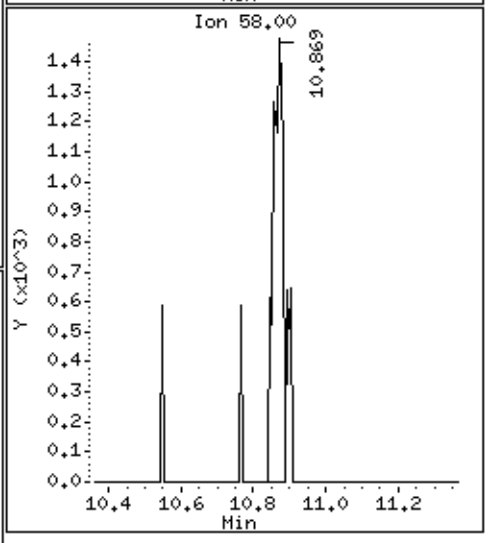
97 1,4-Dioxane

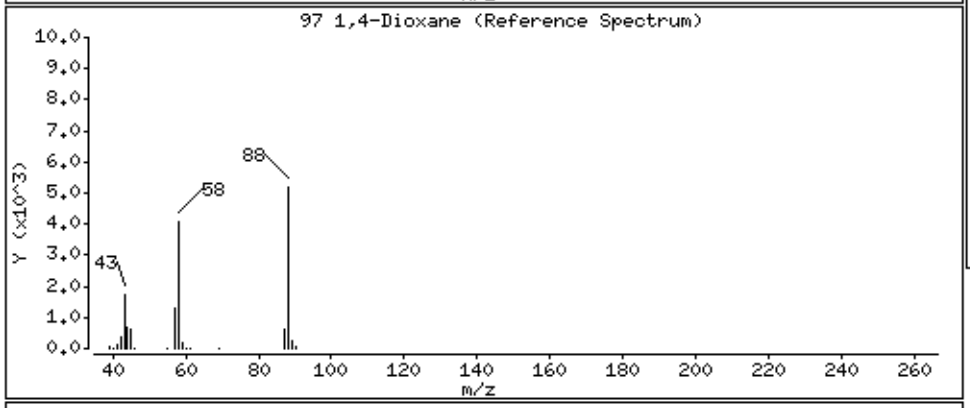
Concentration: 23.4 ug/l

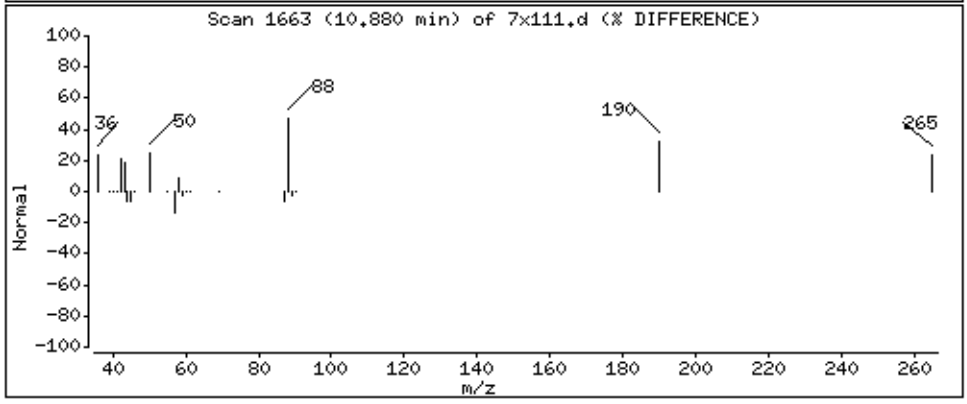












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	3.3	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.8	
108-88-3	Toluene	1.8	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC601

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	21.6	J

1E

EPA SAMPLE NO.

GU05050GMC601

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X109

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x109.d
Lab Smp Id: 143122002 Client Smp ID: GU05050GMC601
Inj Date : 15-AUG-2005 14:21
Operator : PS Inst ID: VOA7.i
Smp Info : |143122002|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 138851003
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.164	10.164	(1.000)	1949446	50.0000	
* 61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1282425	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	524692	50.0000	
$ 35 Dibromofluoromethane	113	9.448	9.448	(0.930)	485270	49.6722	49.7
$ 47 Toluene-d8	98	11.713	11.713	(0.893)	1759107	51.6138	51.6
$ 71 Bromofluorobenzene	95	14.224	14.224	(0.921)	491817	51.7866	51.8
30 2-Butanone	43	8.951	8.946	(0.881)	16536	3.30009	3.3(a)
97 1,4-Dioxane	88	10.880	10.864	(1.070)	2693	21.5964	21.6(a)
49 4-Methyl-2-pentanone	58	11.510	11.505	(0.878)	20507	5.75268	5.8(Q)
50 Toluene	92	11.788	11.783	(0.899)	45943	1.79883	1.8

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

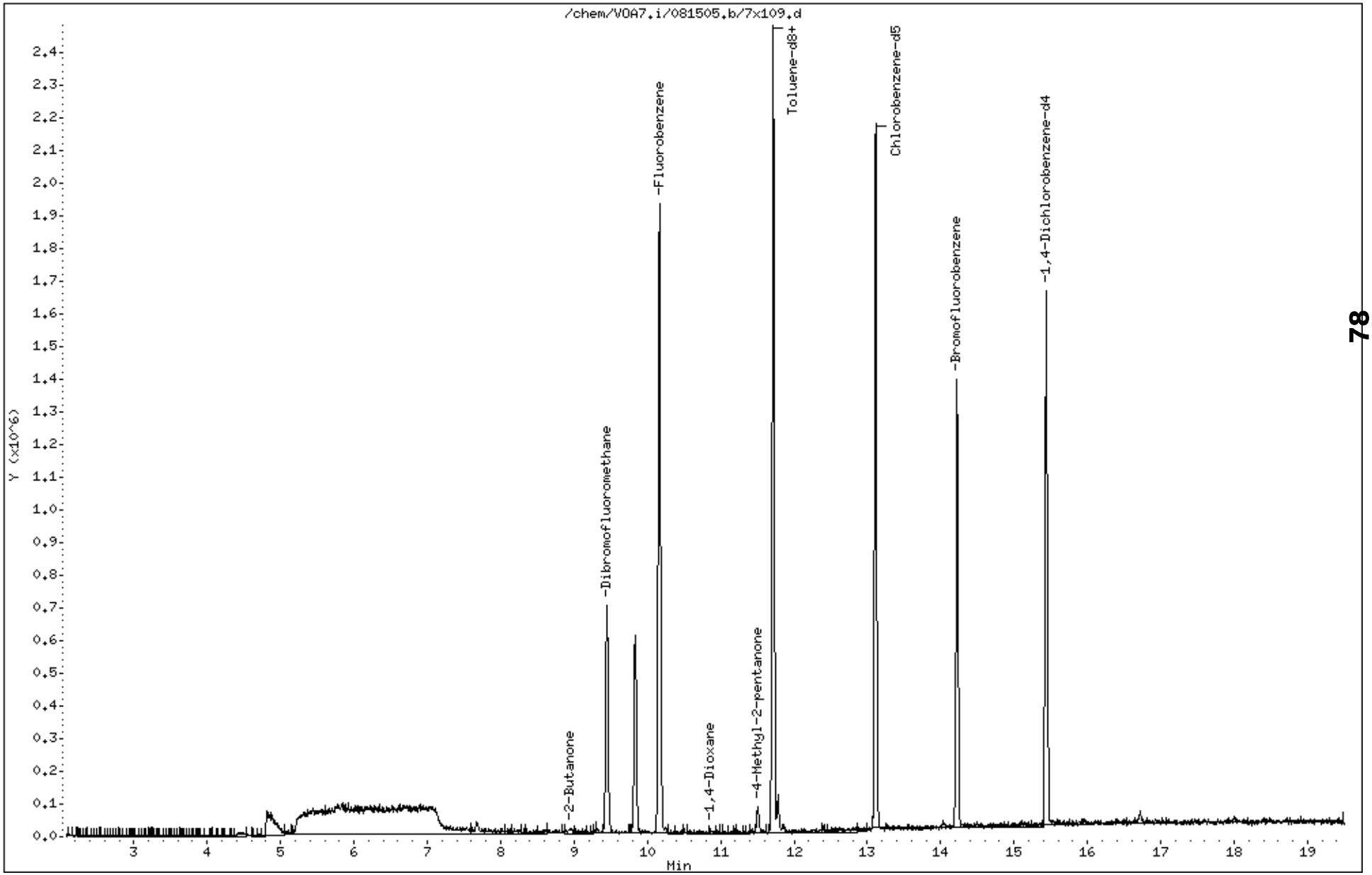
General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x109.d
Lab Smp Id: 143122002 Client Smp ID: GU05050GMC601
Inj Date : 15-AUG-2005 14:21
Operator : PS Inst ID: VOA7.i
Smp Info : |143122002|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 138851003
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/081505.b/7x109.d
Date : 15-AUG-2005 14:21
Client ID: GU05050GMC601
Instrument: VOA7.i
Sample Info: |1431220021452857|1|VOAF|1||
Purge Volume: 5.0
Operator: PS
Column phase: DB-624
Column diameter: 0.25



Data File: /chem/VOA7.i/081505.b/7x109.d

Date : 15-AUG-2005 14:21

Client ID: GU05050GMC601

Instrument: VOA7.i

Sample Info: |1431220021452857|1|VOAF|1||

Purge Volume: 5.0

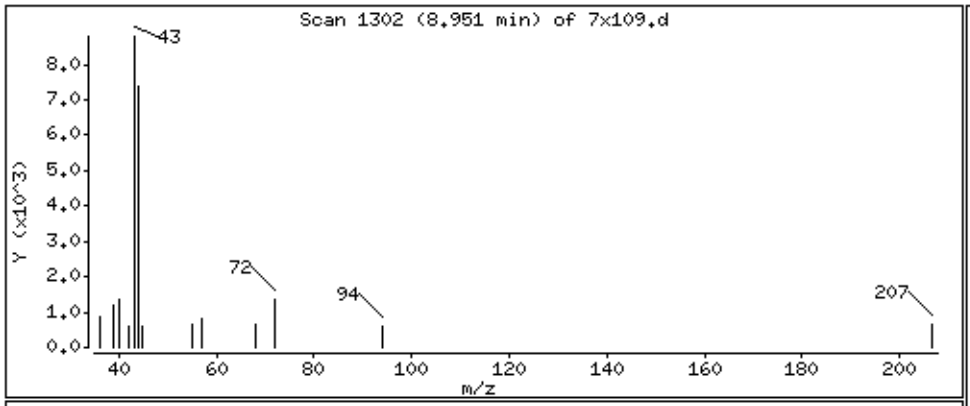
Operator: PS

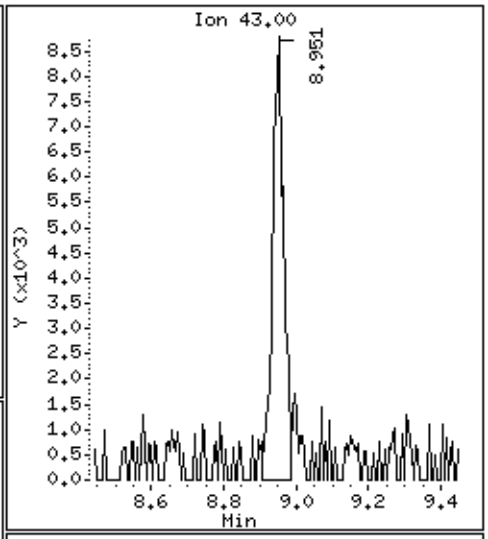
Column phase: DB-624

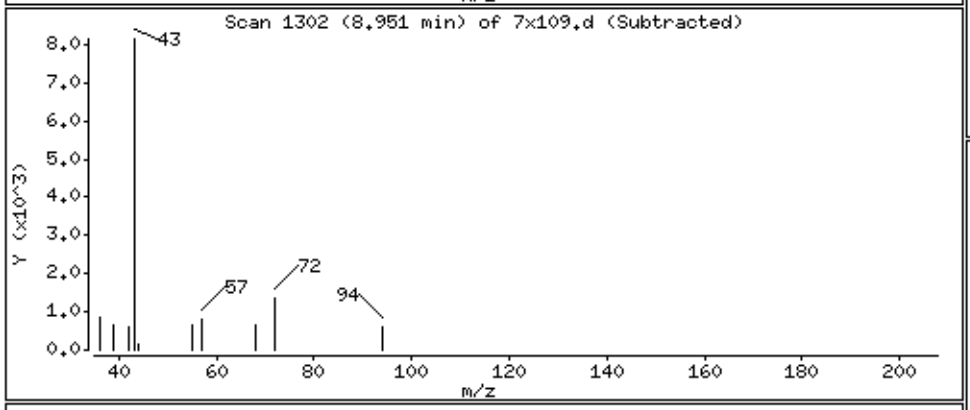
Column diameter: 0.25

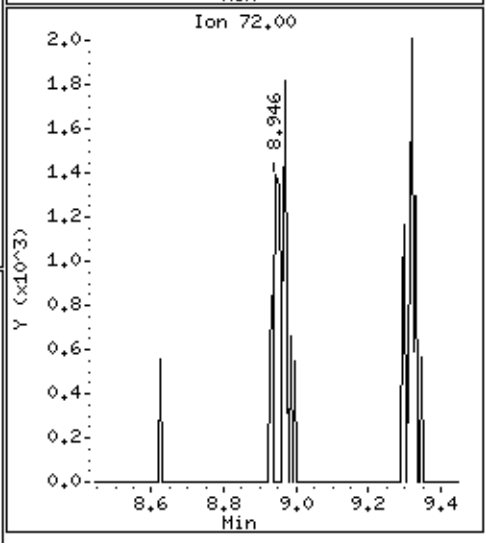
30 2-Butanone

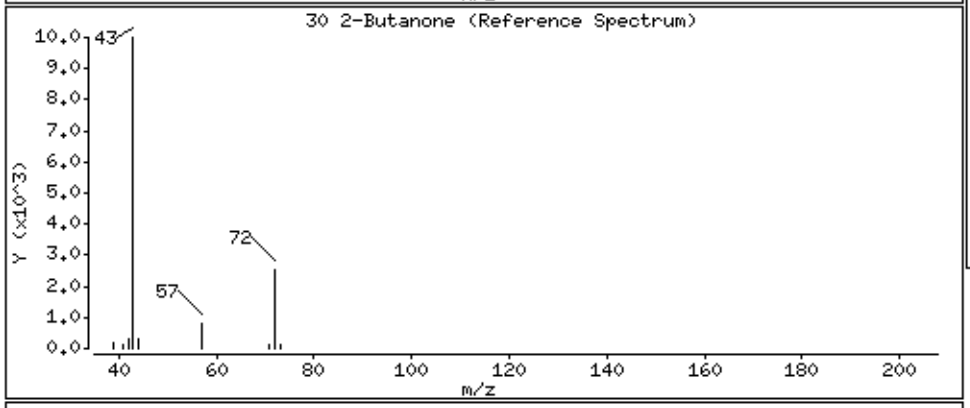
Concentration: 3.3 ug/l

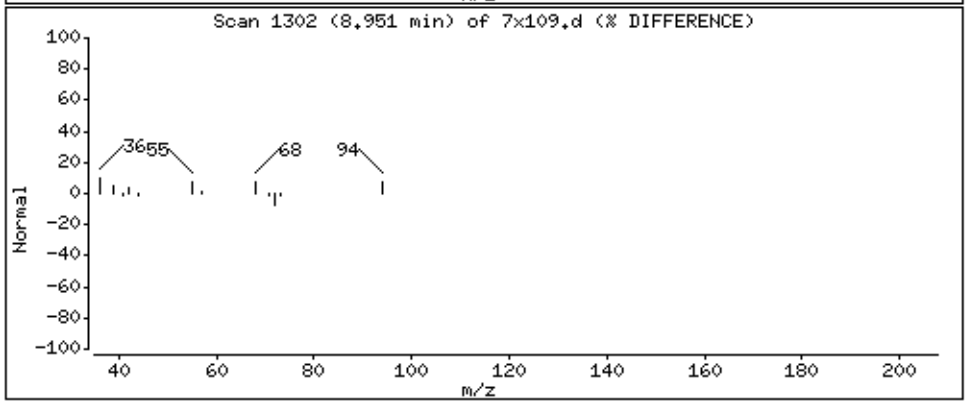












Data File: /chem/VOA7.i/081505.b/7x109.d

Date : 15-AUG-2005 14:21

Client ID: GU05050GMC601

Instrument: VOA7.i

Sample Info: |143122002|452857|1|VOAF|1||

Purge Volume: 5.0

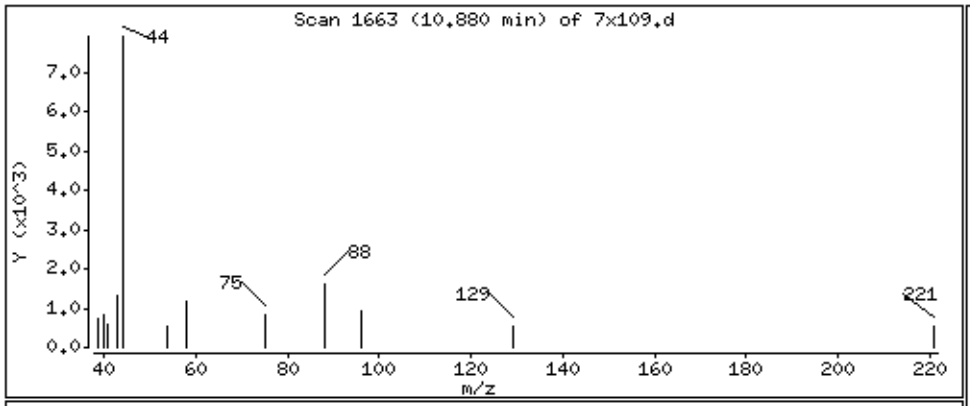
Operator: PS

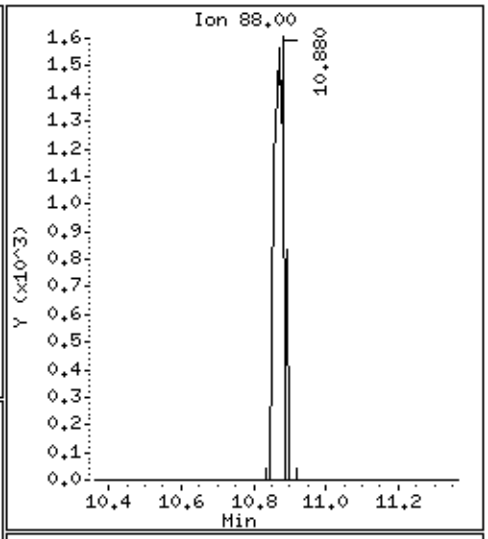
Column phase: DB-624

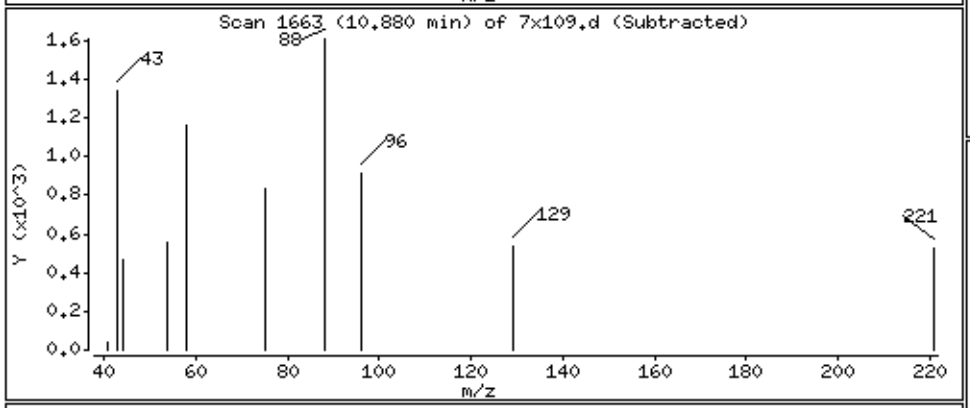
Column diameter: 0.25

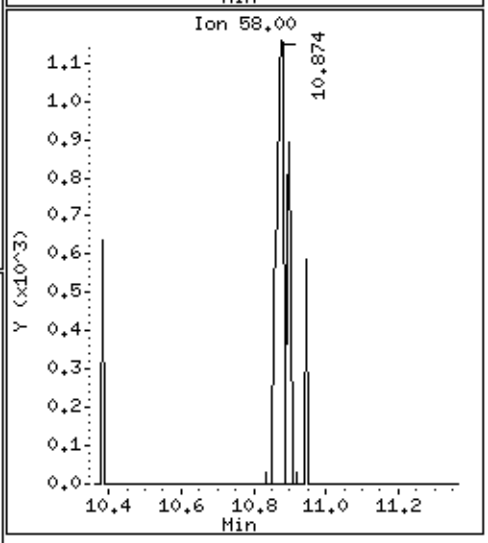
97 1,4-Dioxane

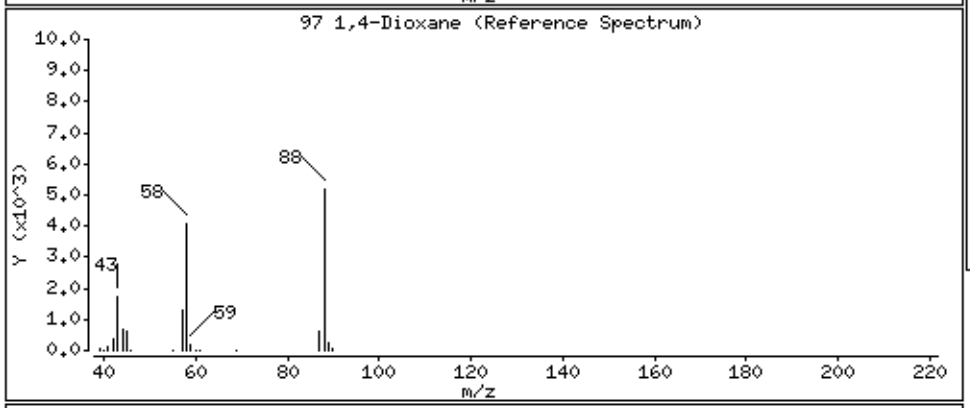
Concentration: 21.6 ug/l

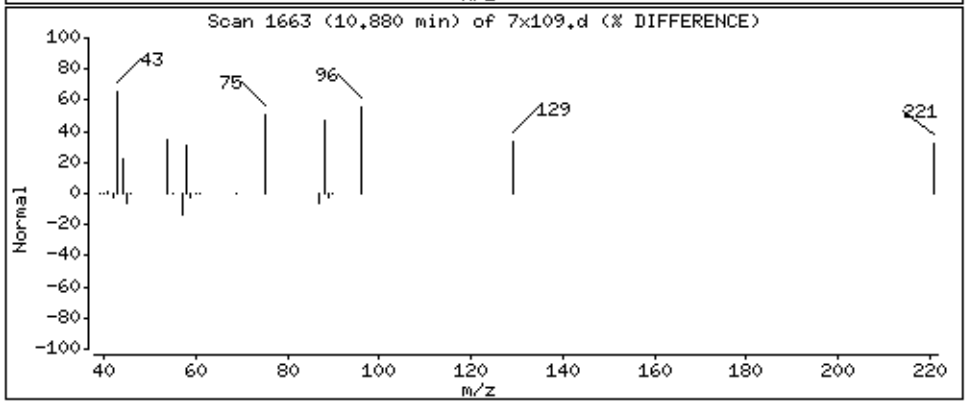












Data File: /chem/VOA7.i/081505.b/7x109.d

Page 4

Date : 15-AUG-2005 14:21

Client ID: GU05050GMC601

Instrument: VOA7.i

Sample Info: |1431220021452857|1|VOAF|1||

Purge Volume: 5.0

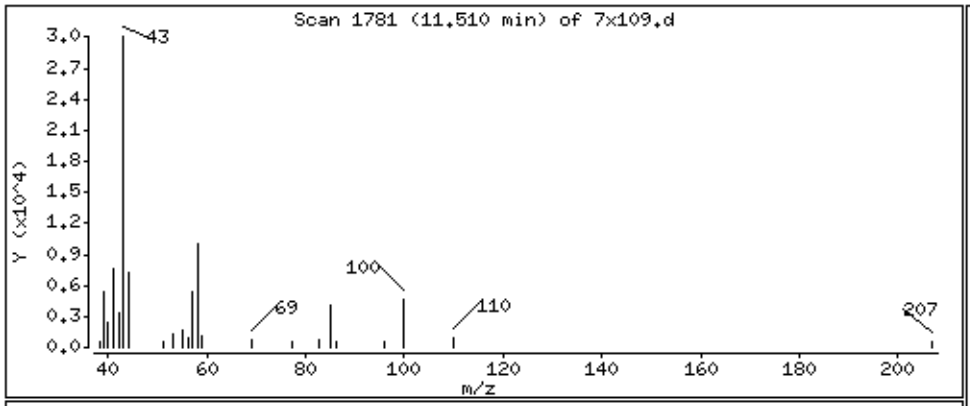
Operator: PS

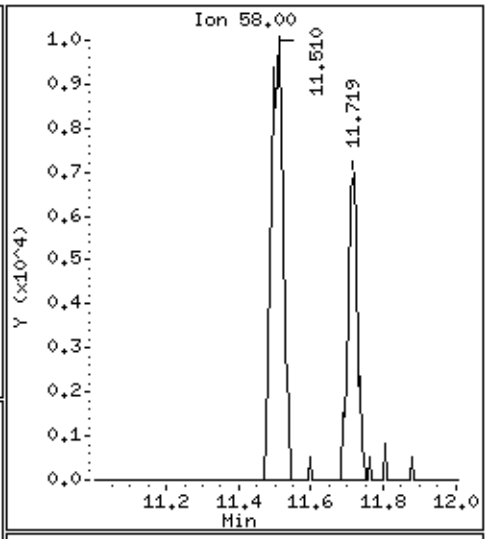
Column phase: DB-624

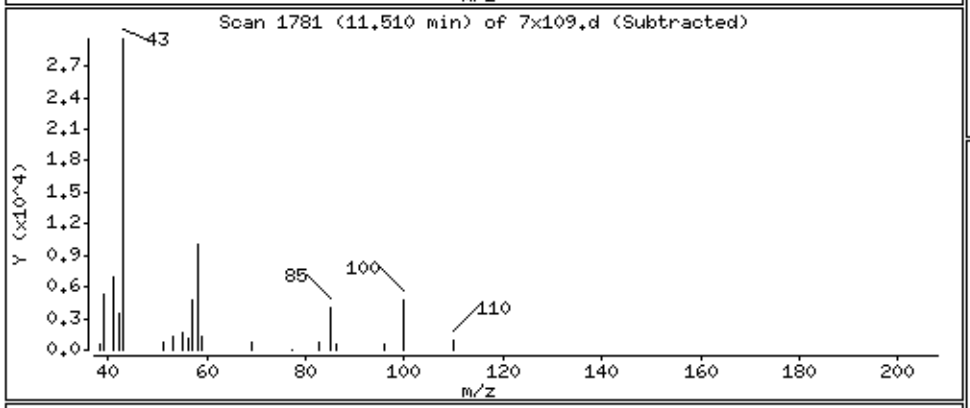
Column diameter: 0.25

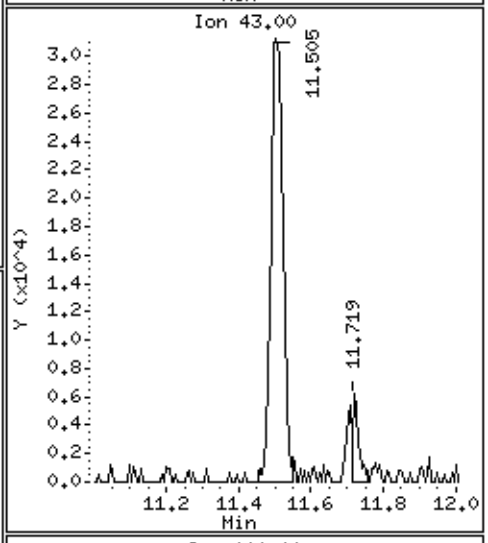
49 4-Methyl-2-pentanone

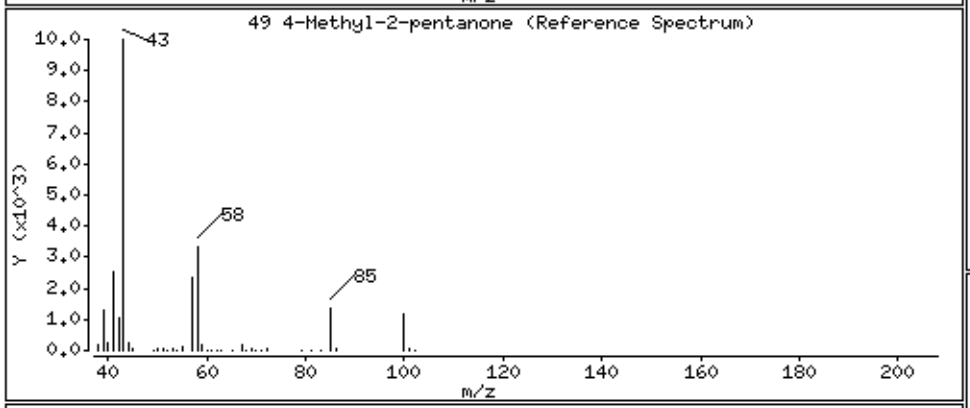
Concentration: 5.8 ug/l

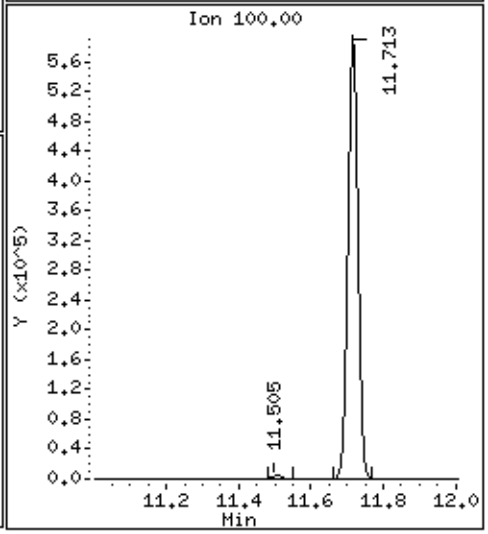


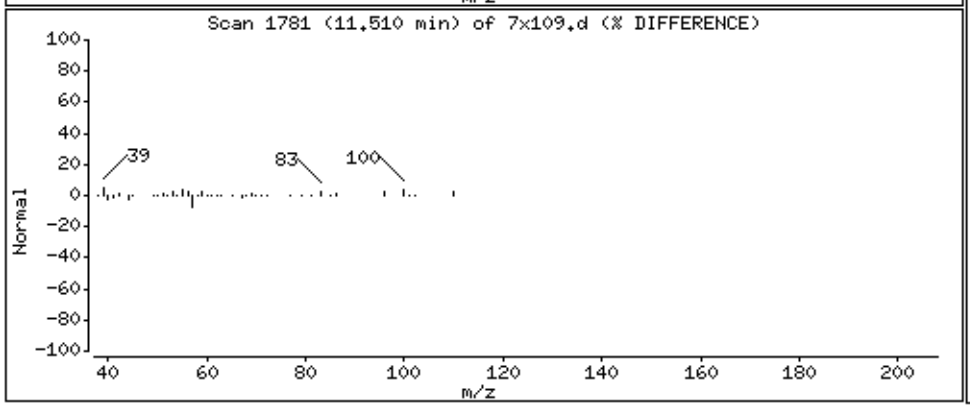












Data File: /chem/VOA7.i/081505.b/7x109.d

Date : 15-AUG-2005 14:21

Client ID: GU05050GMC601

Instrument: VOA7.i

Sample Info: |1431220021452857|1|VOAF|1||

Purge Volume: 5.0

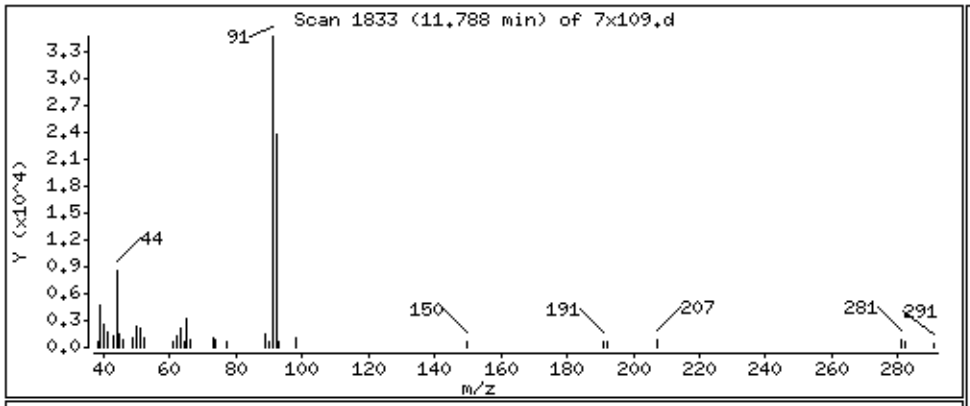
Operator: PS

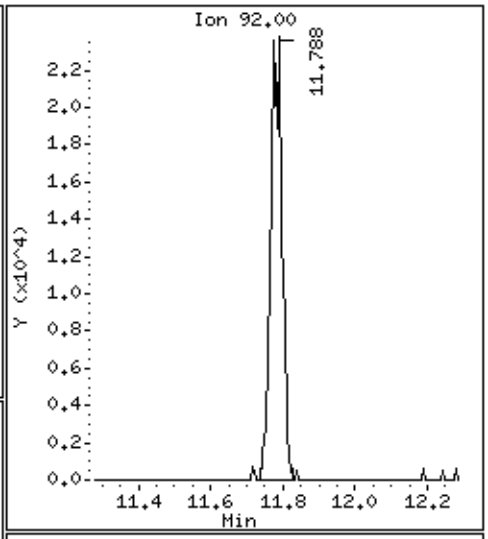
Column phase: DB-624

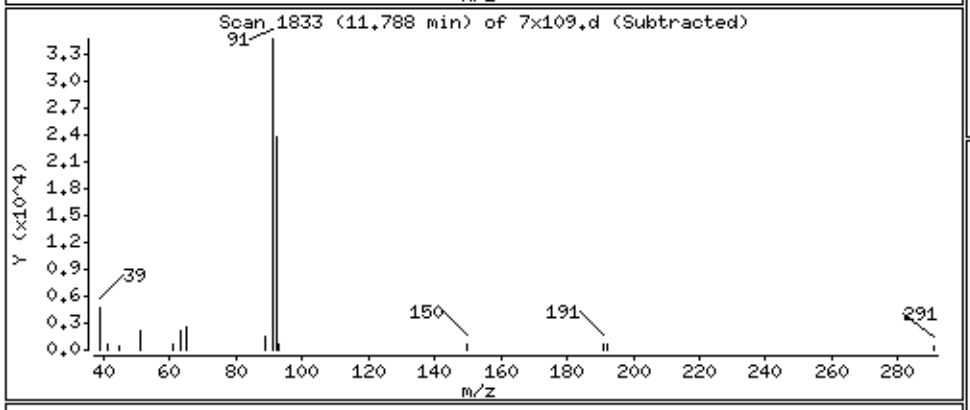
Column diameter: 0.25

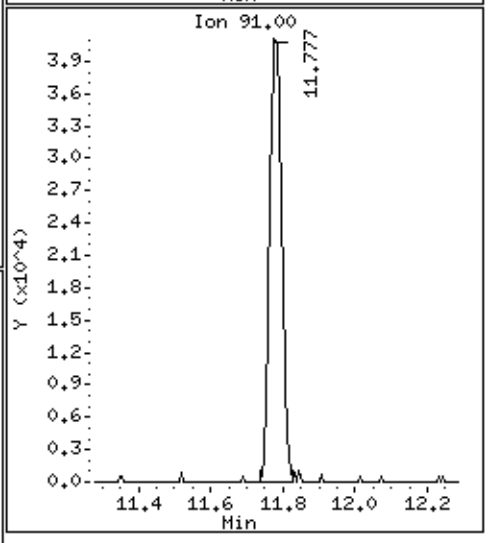
50 Toluene

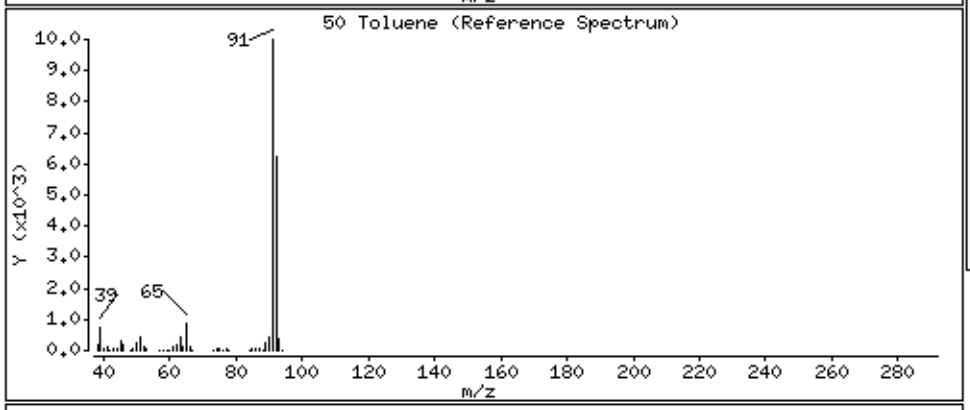
Concentration: 1.8 ug/l

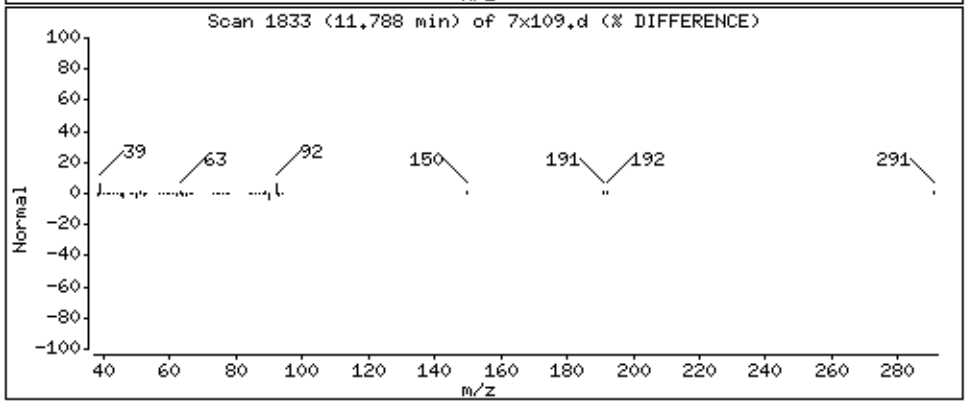












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	11.6	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	4.2	J
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	4.6	J
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	7.7	
108-88-3	Toluene	1.3	
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05050GMC690

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	24.6	J

1E

EPA SAMPLE NO.

GU05050GMC690

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X110

Level: (low/med) LOW Date Received: 06/17/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x110.d
Lab Smp Id: 143122003 Client Smp ID: GU05050GMC690
Inj Date : 15-AUG-2005 14:49
Operator : JEB Inst ID: VOA7.i
Smp Info : |143122003|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 138851004
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.164	10.164	(1.000)	1731655	50.0000	
* 61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1186621	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	15.442	15.437	(1.000)	489117	50.0000	
$ 35 Dibromofluoromethane	113	9.448	9.448	(0.930)	449557	51.8041	51.8
$ 47 Toluene-d8	98	11.713	11.713	(0.893)	1628738	51.6470	51.6
$ 71 Bromofluorobenzene	95	14.224	14.224	(0.921)	448328	50.6409	50.6
10 Acetone	43	7.178	7.172	(0.706)	36536	11.5799	11.6
14 Carbon disulfide	76	7.530	7.541	(0.741)	2604	4.18019	4.2(aQ)
30 2-Butanone	43	8.941	8.946	(0.880)	20685	4.64730	4.6(a)
97 1,4-Dioxane	88	10.880	10.864	(1.070)	2722	24.5744	24.6(aQ)
49 4-Methyl-2-pentanone	58	11.510	11.505	(0.878)	25499	7.73056	7.7(Q)
50 Toluene	92	11.783	11.783	(0.899)	31632	1.33850	1.3

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

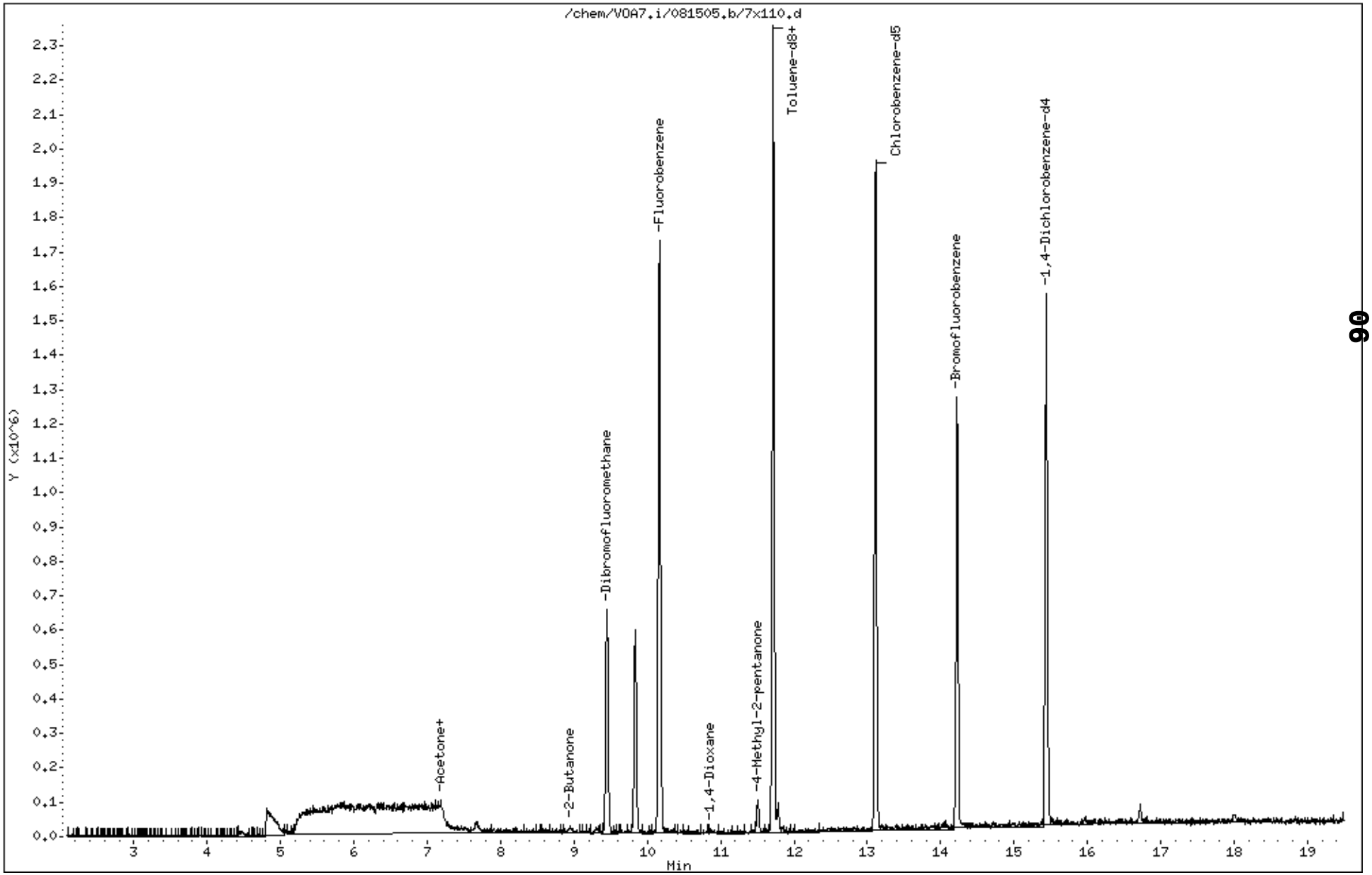
General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x110.d
Lab Smp Id: 143122003 Client Smp ID: GU05050GMC690
Inj Date : 15-AUG-2005 14:49
Operator : JEB Inst ID: VOA7.i
Smp Info : |143122003|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 138851004
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/081505.b/7x110.d
Date : 15-AUG-2005 14:49
Client ID: GU05050GMC690
Instrument: VOA7.i
Sample Info: |143122003|452857|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



Data File: /chem/VOA7.i/081505.b/7x110.d

Date : 15-AUG-2005 14:49

Client ID: GU05050GMC690

Instrument: VOA7.i

Sample Info: |1431220031452857|1|VOAF|1||

Purge Volume: 5.0

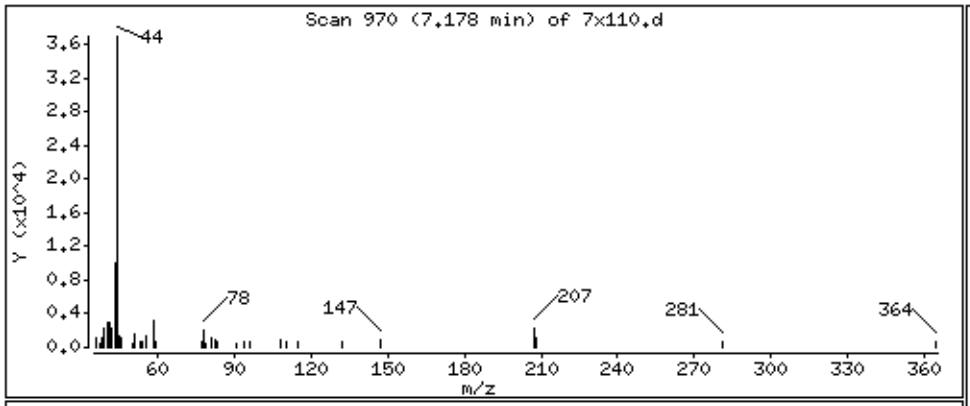
Operator: JEB

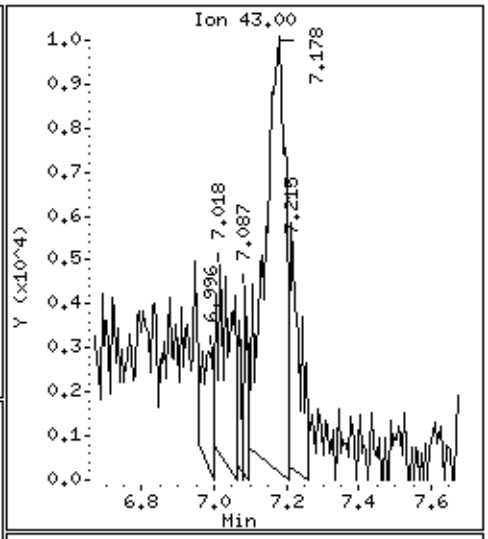
Column phase: DB-624

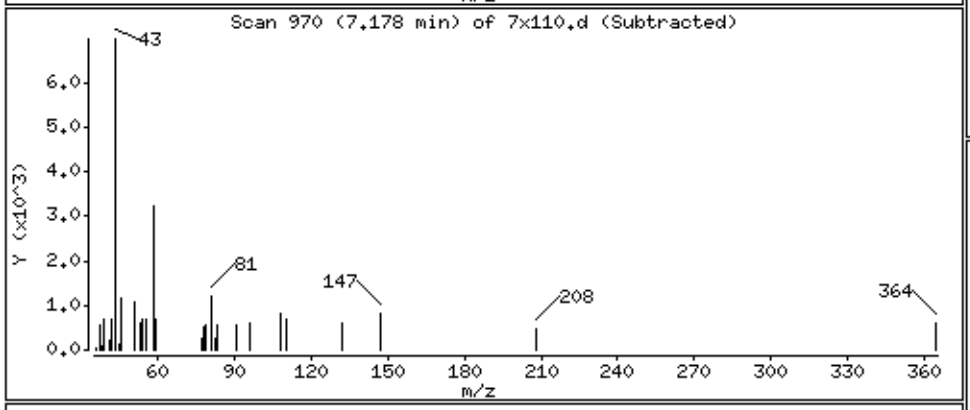
Column diameter: 0.25

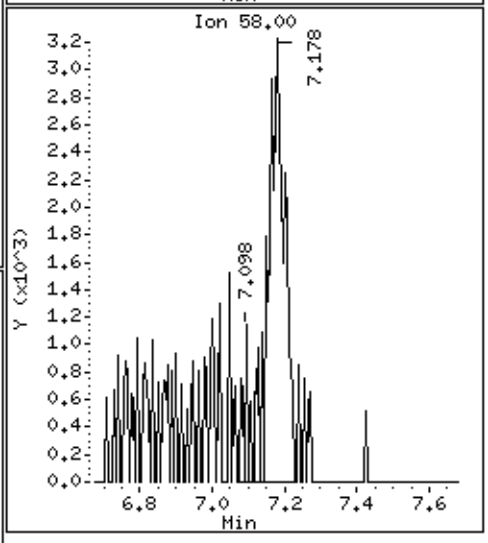
10 Acetone

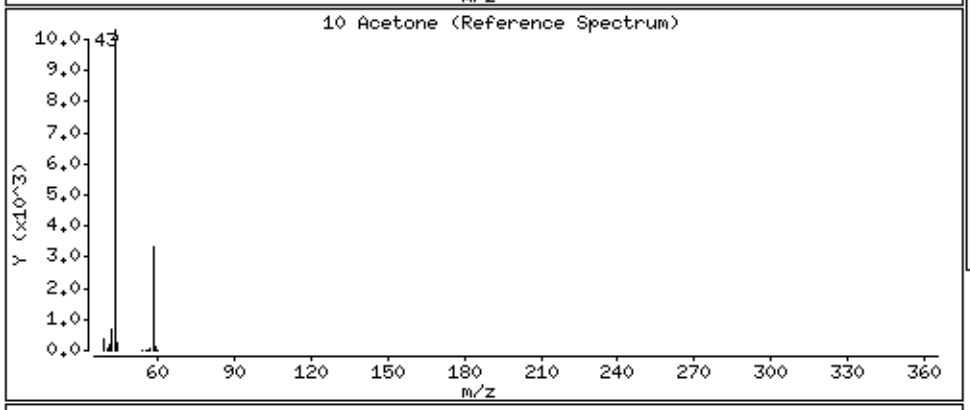
Concentration: 11.6 ug/l

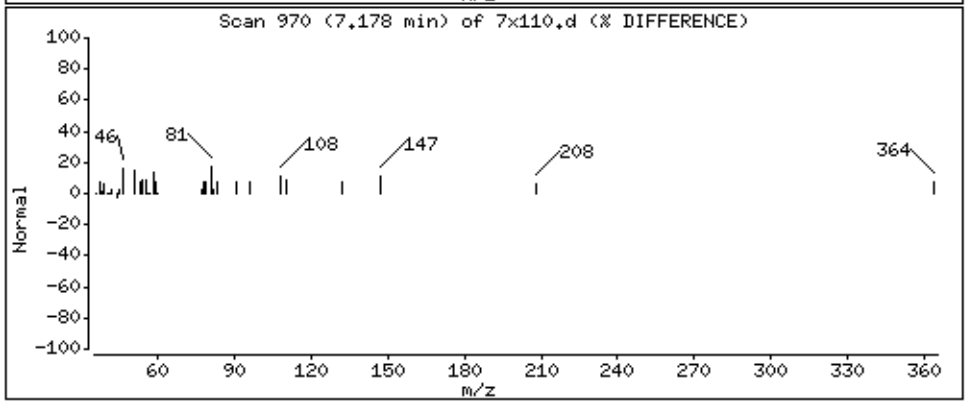












Data File: /chem/VOA7.i/081505.b/7x110.d

Date : 15-AUG-2005 14:49

Client ID: GU05050GMC690

Instrument: VOA7.i

Sample Info: |1431220031452857|1|VOAF|1||

Purge Volume: 5.0

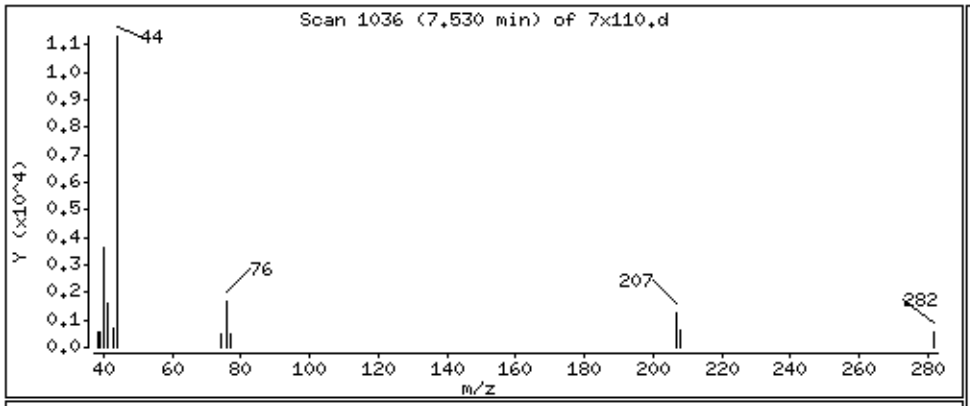
Operator: JEB

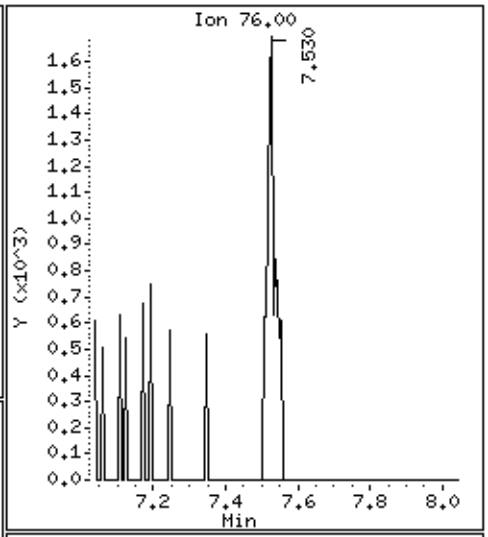
Column phase: DB-624

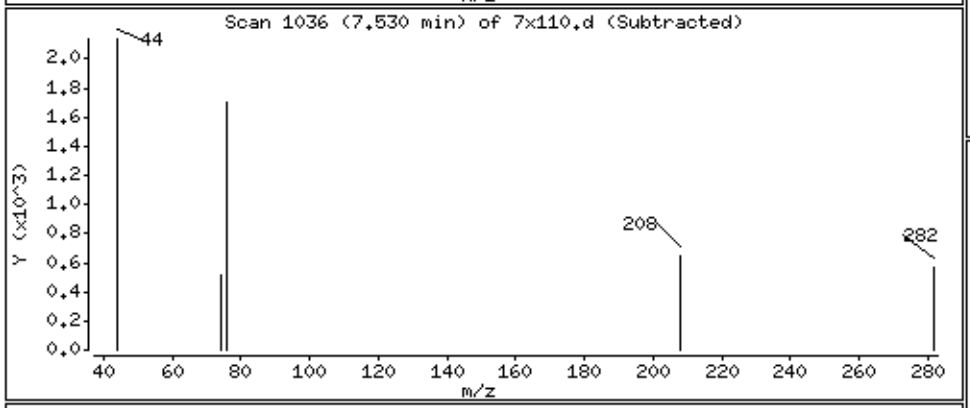
Column diameter: 0.25

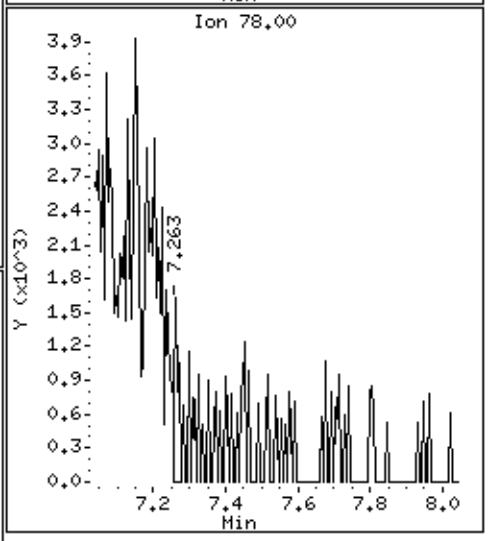
14 Carbon disulfide

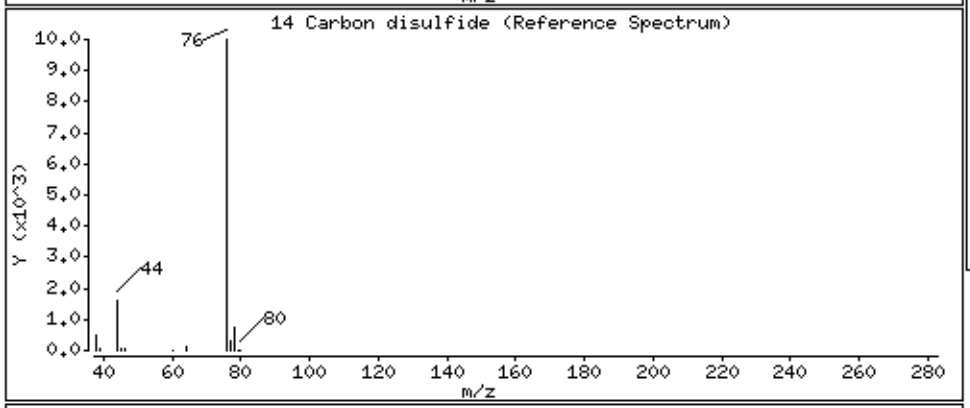
Concentration: 4.2 ug/l

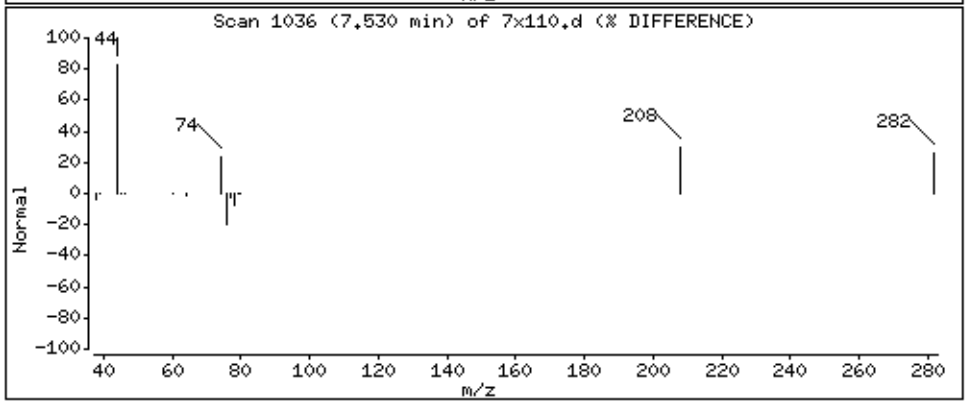












Data File: /chem/VOA7.i/081505.b/7x110.d

Date : 15-AUG-2005 14:49

Client ID: GU05050GMC690

Instrument: VOA7.i

Sample Info: |1431220031452857|1|VOAF|1||

Purge Volume: 5.0

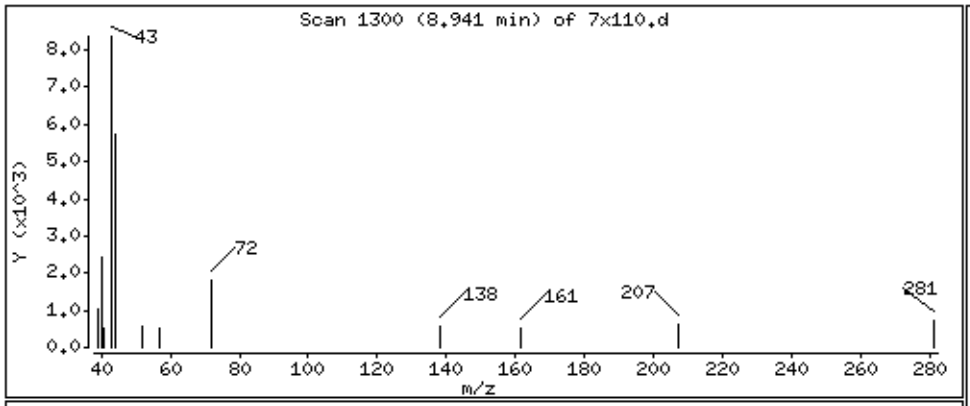
Operator: JEB

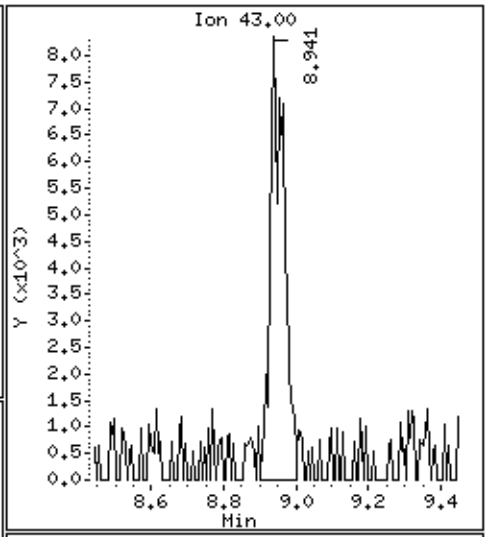
Column phase: DB-624

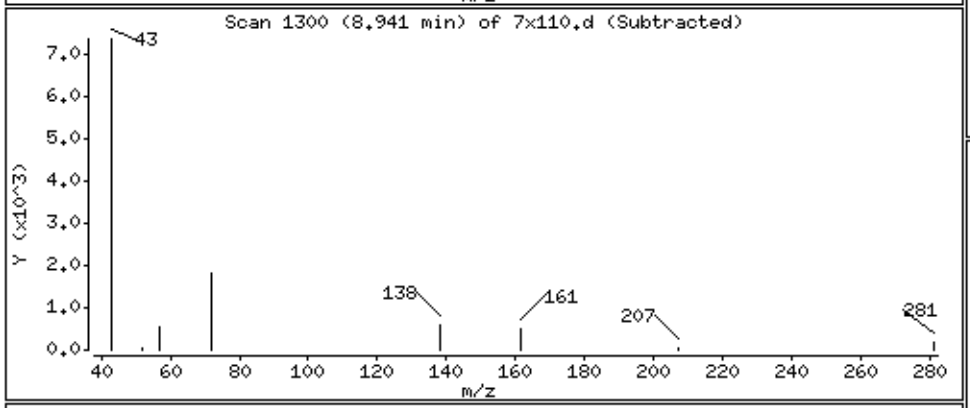
Column diameter: 0.25

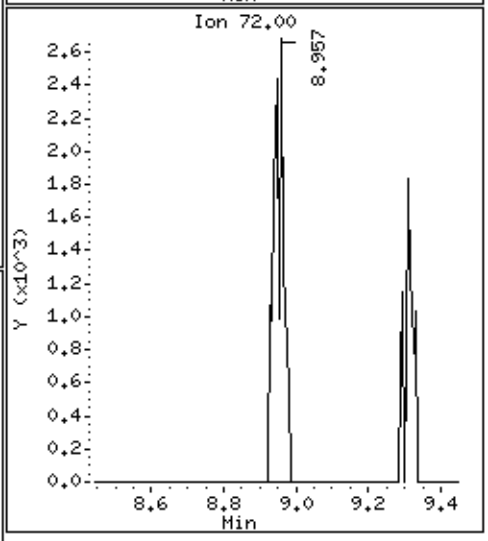
30 2-Butanone

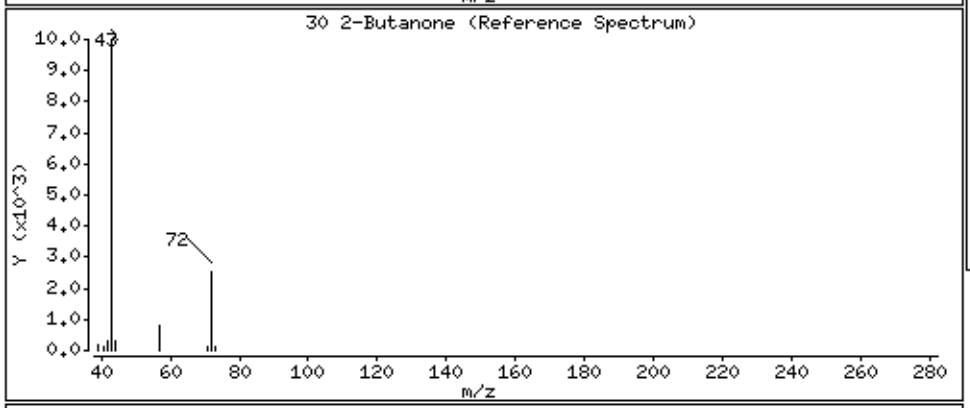
Concentration: 4.6 ug/l

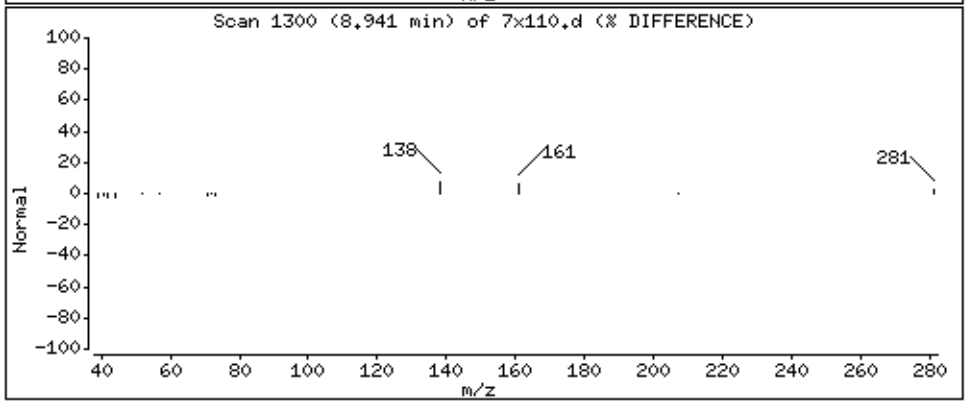












Data File: /chem/VOA7.i/081505.b/7x110.d

Date : 15-AUG-2005 14:49

Client ID: GU05050GMC690

Instrument: VOA7.i

Sample Info: |143122003|452857|1|VOAF|1||

Purge Volume: 5.0

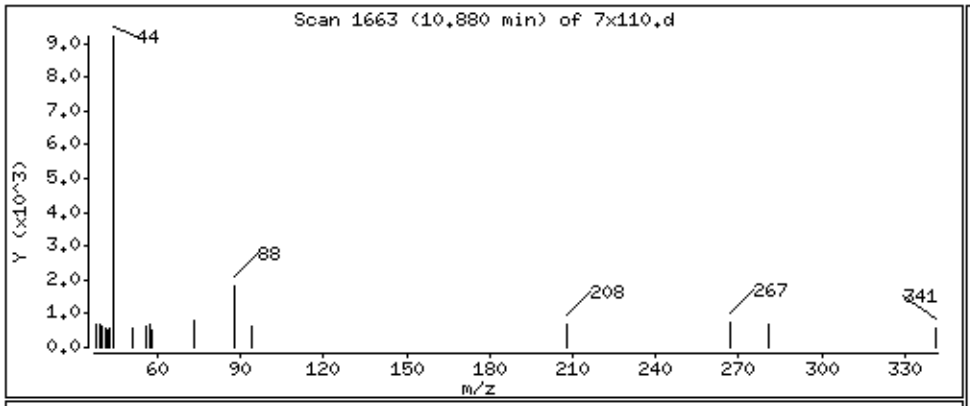
Operator: JEB

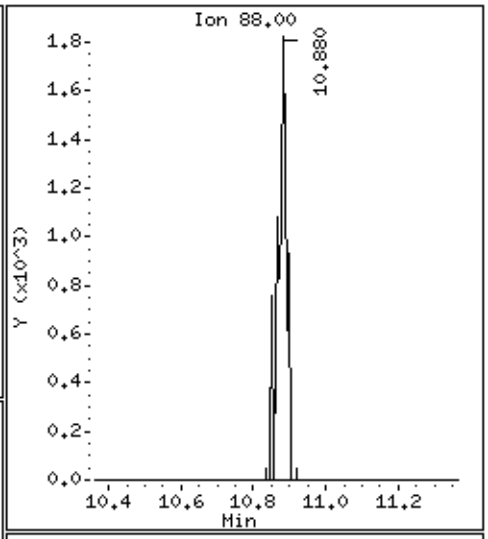
Column phase: DB-624

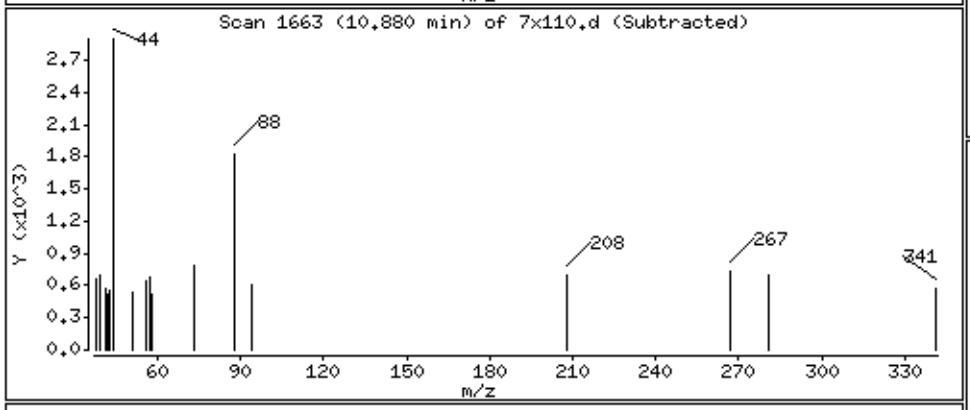
Column diameter: 0.25

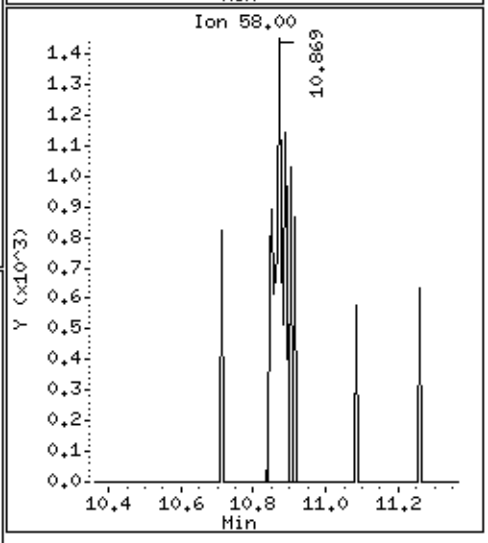
97 1,4-Dioxane

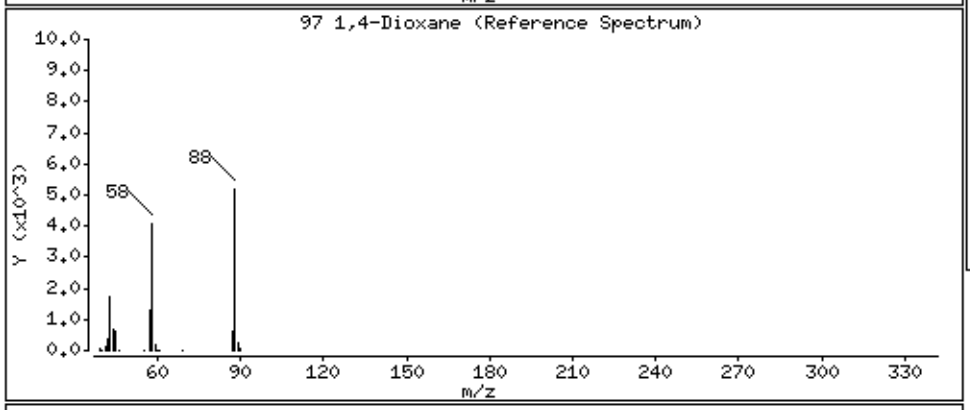
Concentration: 24.6 ug/l

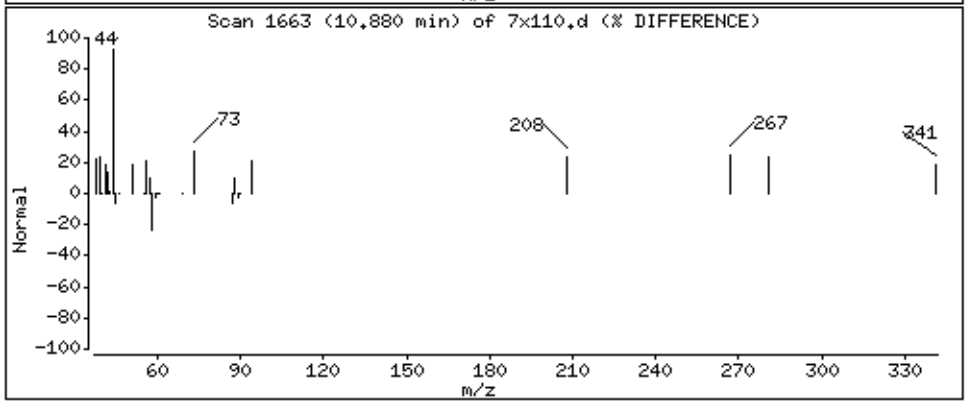












Data File: /chem/VOA7.i/081505.b/7x110.d

Date : 15-AUG-2005 14:49

Client ID: GU05050GMC690

Instrument: VOA7.i

Sample Info: |1431220031452857|1|VOAF|1||

Purge Volume: 5.0

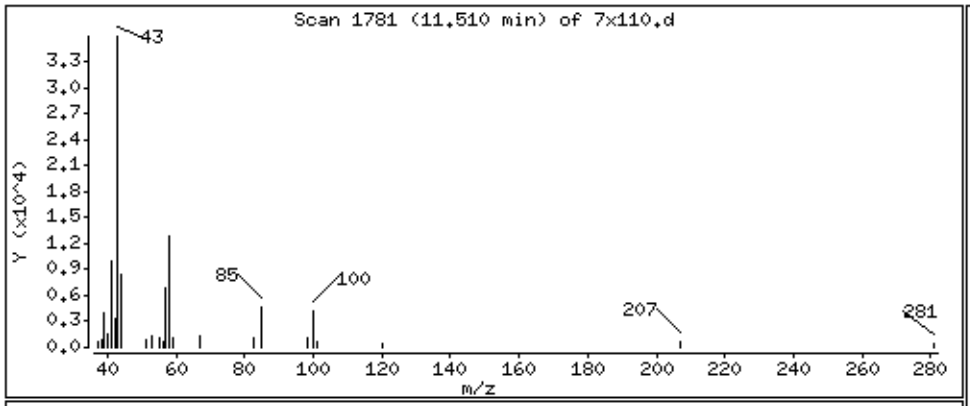
Operator: JEB

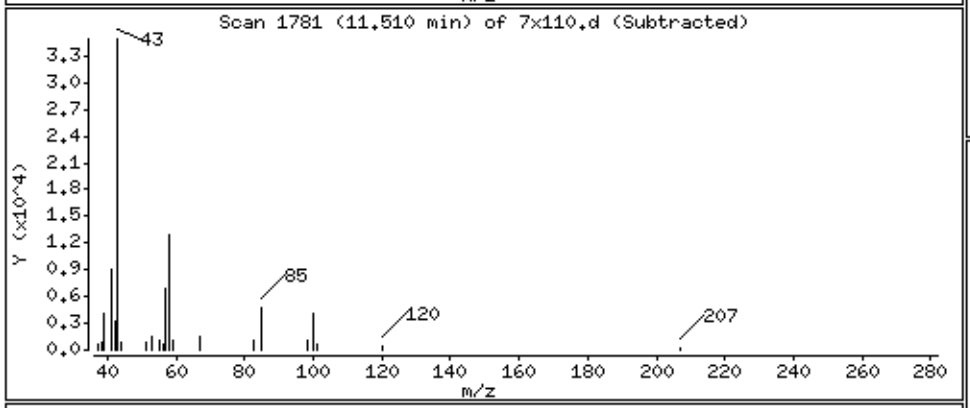
Column phase: DB-624

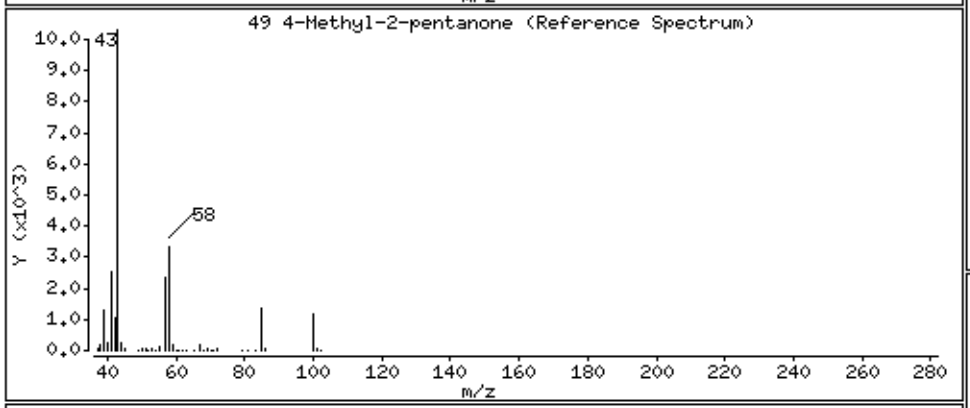
Column diameter: 0.25

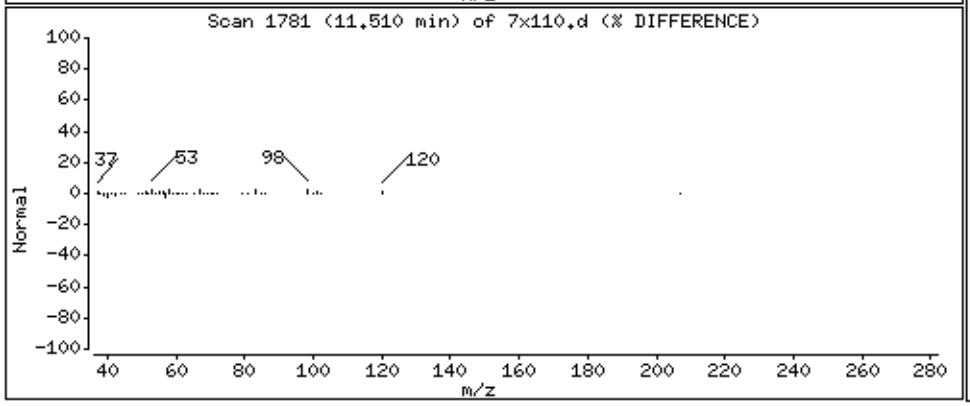
49 4-Methyl-2-pentanone

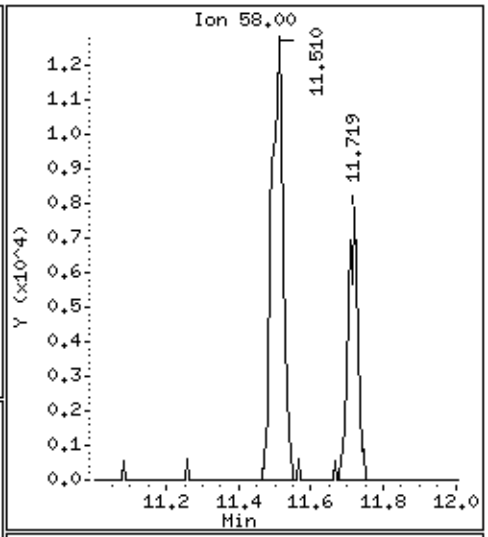
Concentration: 7.7 ug/l

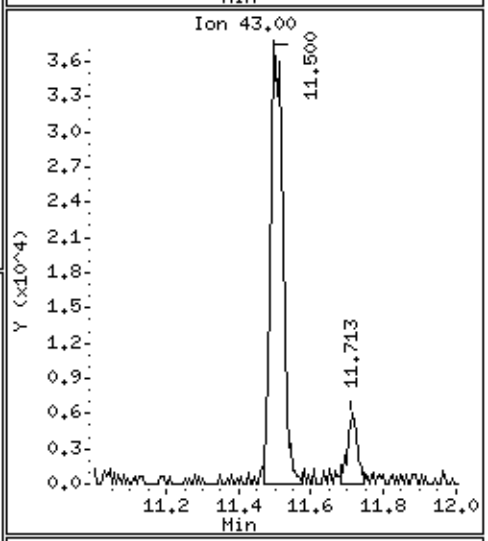


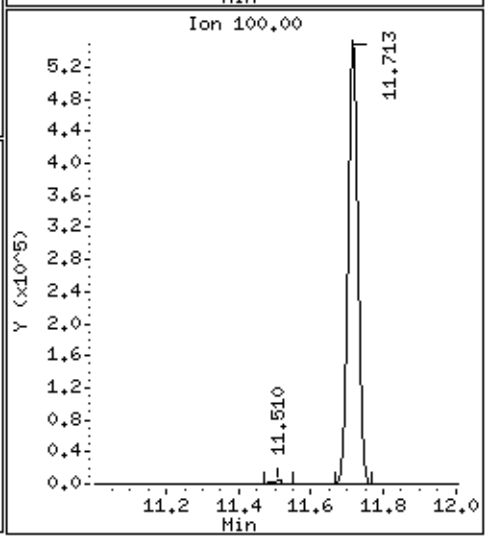












Data File: /chem/VOA7.i/081505.b/7x110.d

Date : 15-AUG-2005 14:49

Client ID: GU05050GMC690

Instrument: VOA7.i

Sample Info: |143122003|452857|1|VOAF|1||

Purge Volume: 5.0

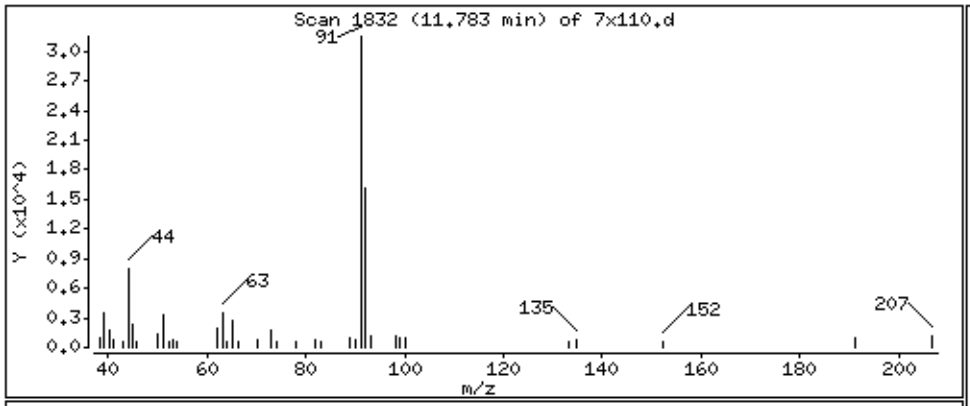
Operator: JEB

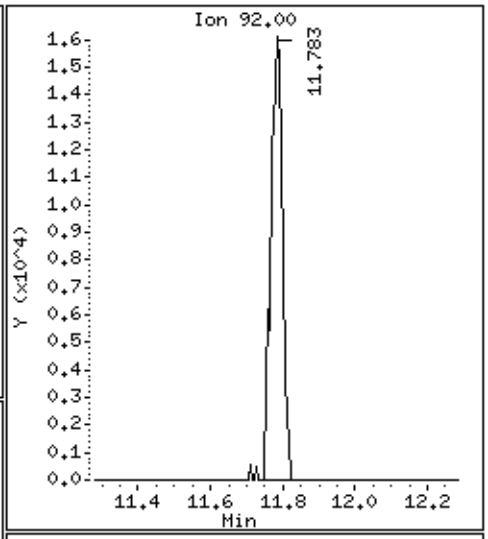
Column phase: DB-624

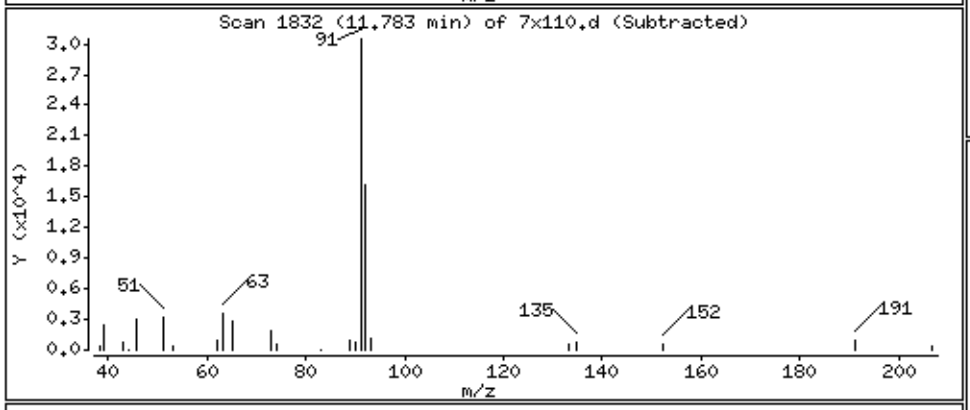
Column diameter: 0.25

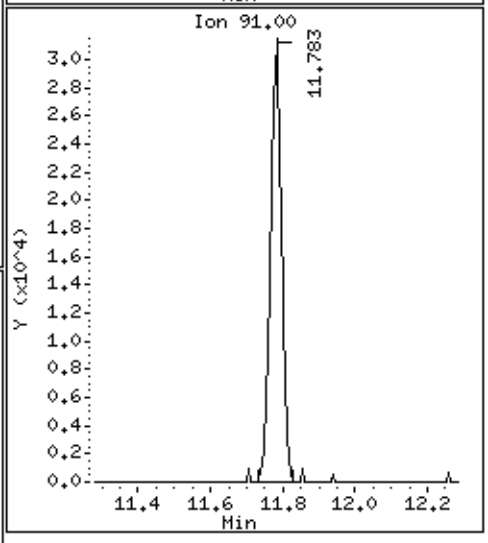
50 Toluene

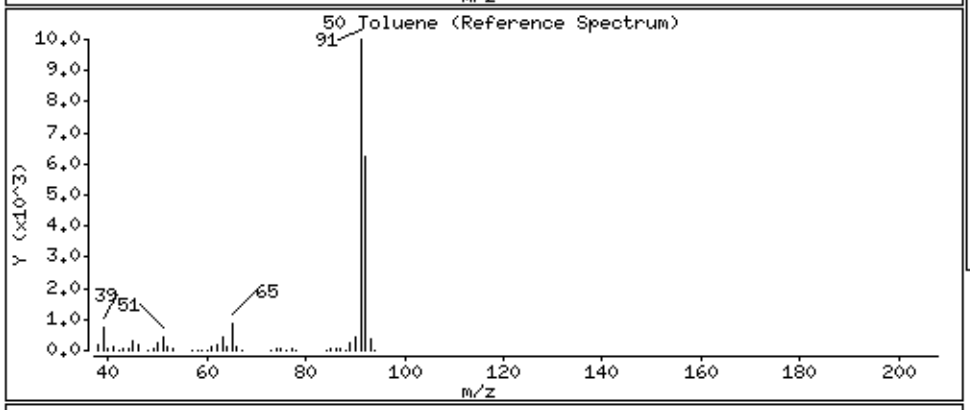
Concentration: 1.3 ug/l

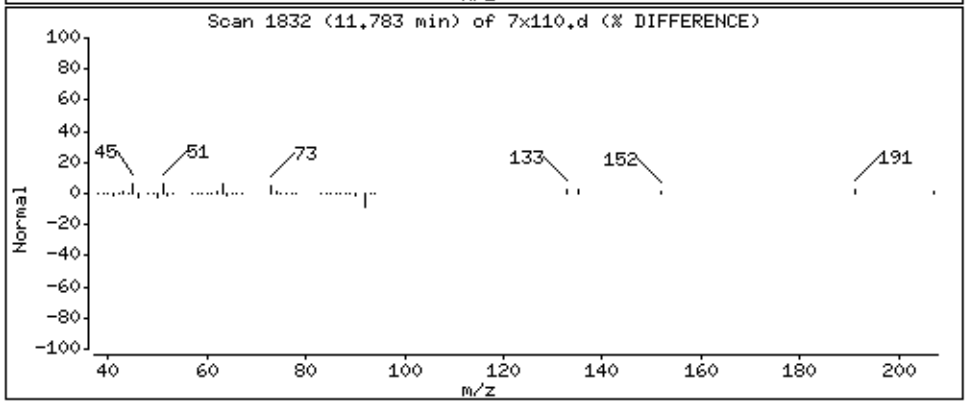












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05060G1MB01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.5	
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05060G1MB01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05060G1MB01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05060G1MB01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 143122001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X108

Level: (low/med) LOW Date Received: 06/10/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x108.d
Lab Smp Id: 143122001 Client Smp ID: GU05060G1MB01
Inj Date : 15-AUG-2005 13:54
Operator : JEB Inst ID: VOA7.i
Smp Info : |143122001|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 138369001
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.164	10.164	(1.000)	1669212	50.0000	
* 61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1100953	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	458304	50.0000	
$ 35 Dibromofluoromethane	113	9.448	9.448	(0.930)	436747	52.2107	52.2
$ 47 Toluene-d8	98	11.713	11.713	(0.893)	1535684	52.4854	52.5
$ 71 Bromofluorobenzene	95	14.224	14.224	(0.921)	439986	53.0400	53.0
4 Chloromethane	50	5.292	5.308	(0.521)	24949	1.53717	1.5

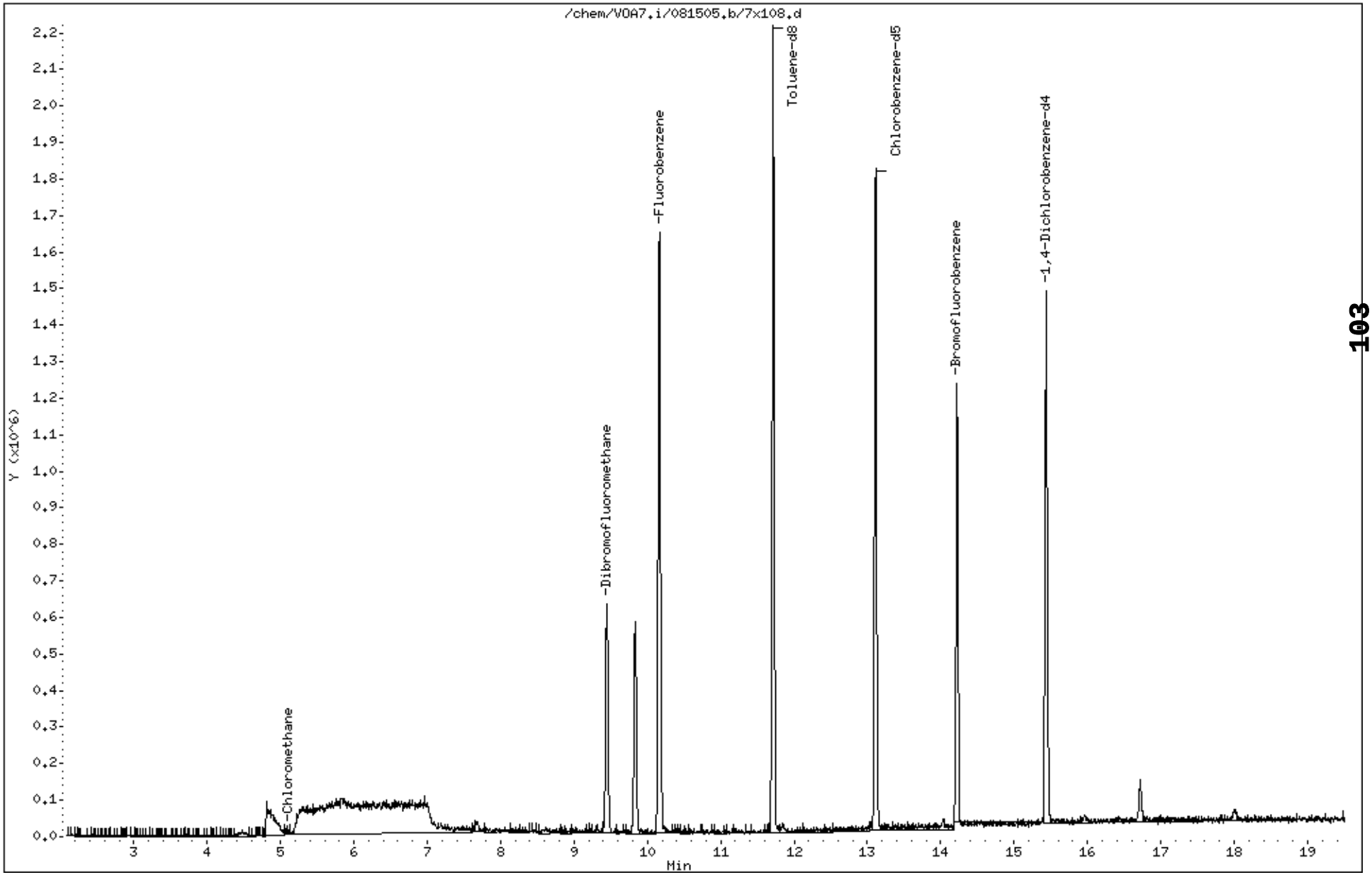
General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x108.d
Lab Smp Id: 143122001 Client Smp ID: GU05060G1MB01
Inj Date : 15-AUG-2005 13:54
Operator : JEB Inst ID: VOA7.i
Smp Info : |143122001|452857|1|VOAF|1||
Misc Info : ESHL 5.0ML PH2 RELOG OF 138369001
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/081505.b/7x108.d
Date : 15-AUG-2005 13:54
Client ID: GU05060G1MB01
Instrument: VOA7.i
Sample Info: |143122001|452857|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



Data File: /chem/VOA7.i/081505.b/7x108.d

Date : 15-AUG-2005 13:54

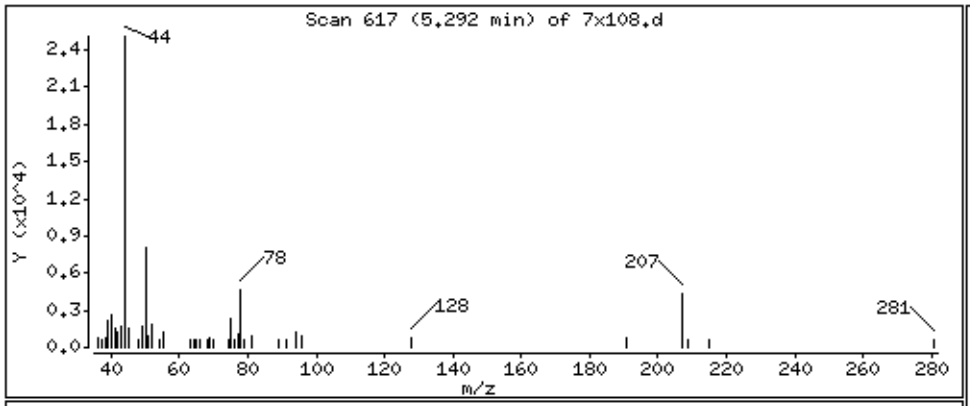
Client ID: GU05060G1MB01 Instrument: VOA7.i

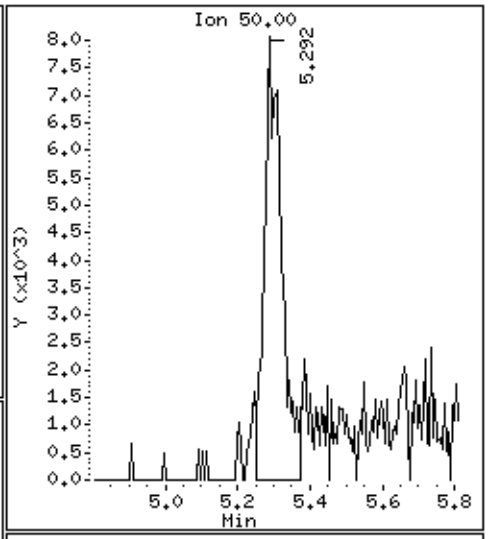
Sample Info: |143122001|452857|1|VOAF|1||

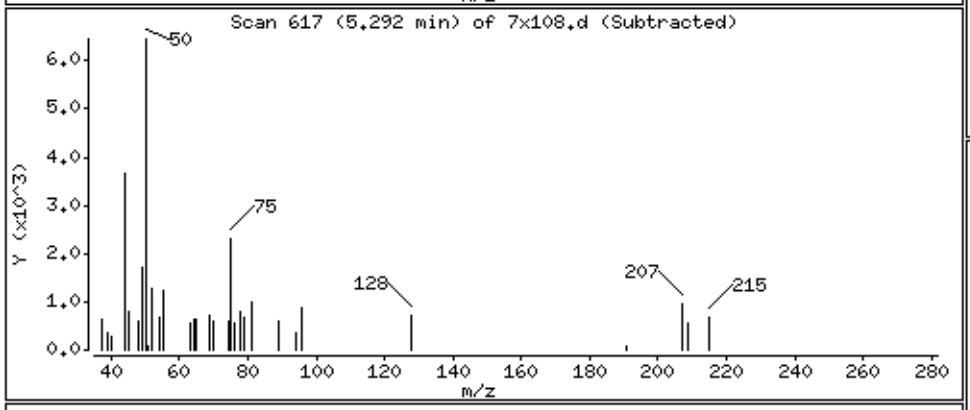
Purge Volume: 5.0 Operator: JEB

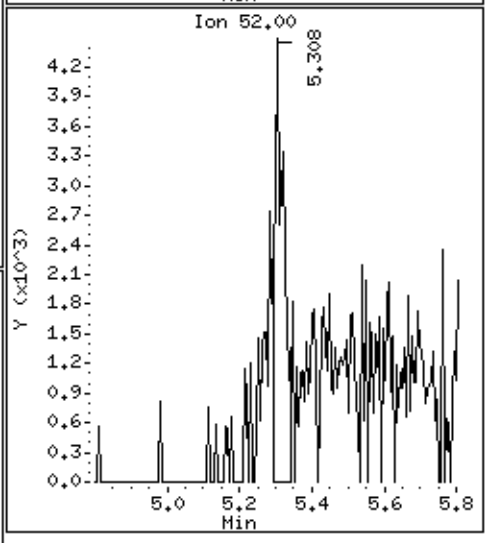
Column phase: DB-624 Column diameter: 0.25

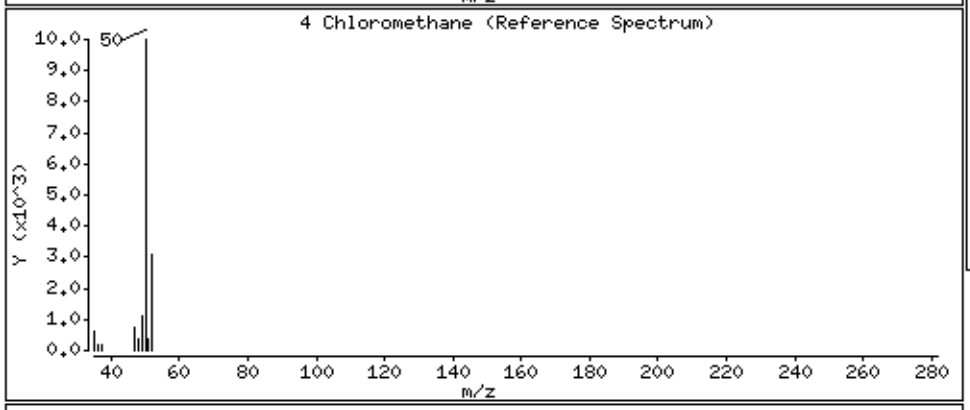
4 Chloromethane Concentration: 1.5 ug/l

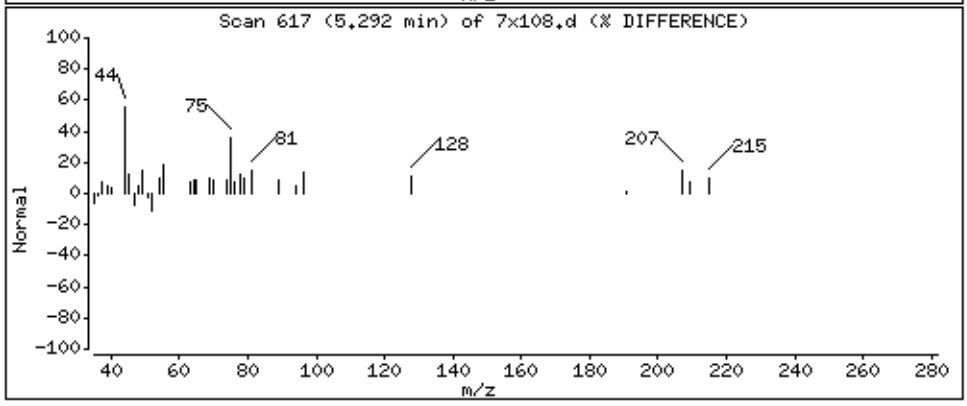












STANDARDS DATA

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
Dibromofluoromethane (surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropane		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis
!: Indicates calibration verification concentration level used for regular level analysis

Report Date: 13-Aug-2005 12:37

Calibration History

Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Start Cal Date: 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
12-AUG-2005 19:44	ICALsubS	/chem/VOA7.i/081205.b/7w512.d
12-AUG-2005 16:09	CALsubL+	/chem/VOA7.i/081205.b/7w504.d
Cal Level: 2 , Cal Amount: 2.00000		
12-AUG-2005 20:11	ICALsubS	/chem/VOA7.i/081205.b/7w513.d
12-AUG-2005 16:36	CALsubL+	/chem/VOA7.i/081205.b/7w505.d
Cal Level: 3 , Cal Amount: 5.00000		
12-AUG-2005 20:38	ICALsubS	/chem/VOA7.i/081205.b/7w514.d
12-AUG-2005 17:02	CALsubL+	/chem/VOA7.i/081205.b/7w506.d
Cal Level: 4 , Cal Amount: 10.00000		
12-AUG-2005 21:03	ICALsubS	/chem/VOA7.i/081205.b/7w515.d
12-AUG-2005 17:29	CALsubL+	/chem/VOA7.i/081205.b/7w507.d
Cal Level: 5 , Cal Amount: 20.00000		
12-AUG-2005 21:30	ICALsubS	/chem/VOA7.i/081205.b/7w516.d
12-AUG-2005 17:56	CALsubL+	/chem/VOA7.i/081205.b/7w508.d
Cal Level: 6 , Cal Amount: 50.00000		
12-AUG-2005 21:57	ICALsubS	/chem/VOA7.i/081205.b/7w517.d
12-AUG-2005 18:23	CALsubL+	/chem/VOA7.i/081205.b/7w509.d
Cal Level: 7 , Cal Amount: 100.00000		
12-AUG-2005 22:24	ICALsubS	/chem/VOA7.i/081205.b/7w518.d
12-AUG-2005 18:50	CALsubL+	/chem/VOA7.i/081205.b/7w510.d
Cal Level: 8 , Cal Amount: 0.50000		
10-AUG-2005 13:49	ICALsubS	/chem/VOA7.i/081005.b/7w303.d
10-AUG-2005 13:22	CALsubL+	/chem/VOA7.i/081005.b/7w302.d

Continuing Calibration

Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
12-AUG-2005 23:46	CALsubS+SS	/chem/VOA7.i/081205.b/7w521.d
Ccal Level: 6 , Ccal Amount: 50.0		
12-AUG-2005 23:18	CALsubL+	/chem/VOA7.i/081205.b/7w520.d
Ccal Level: 6 , Ccal Amount: 50.0		
12-AUG-2005 21:57	ICALsubS	/chem/VOA7.i/081205.b/7w517.d
Ccal Level: 6 , Ccal Amount: 50.0		
12-AUG-2005 18:23	CALsubL+	/chem/VOA7.i/081205.b/7w509.d

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Calibration File Names:
Level 1: /chem/VOA7.i/081205.b/7w512.d
Level 2: /chem/VOA7.i/081205.b/7w513.d
Level 3: /chem/VOA7.i/081205.b/7w514.d
Level 4: /chem/VOA7.i/081205.b/7w515.d
Level 5: /chem/VOA7.i/081205.b/7w516.d
Level 6: /chem/VOA7.i/081205.b/7w517.d
Level 7: /chem/VOA7.i/081205.b/7w518.d
Level 8: /chem/VOA7.i/081005.b/7w303.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	0.5000 Level 8										
M 1 Xylenes (total)	0.55782	0.58364	0.61069	0.52440	0.63368	0.71409						
	0.78441	+++++					AVRG		0.62982		14.46670	
M 136 1,3-Dichloropropylene	0.37624	0.36771	0.37862	0.33635	0.35460	0.38222						
	0.42418	+++++					AVRG		0.37428		7.27240	<-
M 2 1,2-Dichloroethylene (total)	0.27081	0.26900	0.27955	0.23320	0.26053	0.27576						
	0.30073	+++++					AVRG		0.26994		7.58343	
3 Dichlorodifluoromethane	0.30103	0.39460	0.36318	0.37873	0.36464	0.38656						
	0.38937	+++++					AVRG		0.36830		8.68703	
4 Chloromethane	0.58651	0.53201	0.46757	0.44208	0.43437	0.47340						
	0.46727	+++++					AVRG		0.48617		11.15996	

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
5 Vinyl chloride	0.44797	0.47672	0.43495	0.45141	0.43224	0.44891					
	0.46752	+++++					AVRG		0.45139		3.56831
6 Bromomethane	0.38243	0.35786	0.28697	0.27556	0.28998	0.29170					
	0.29538	+++++					AVRG		0.31141		13.23196
7 Chloroethane	0.26179	0.27246	0.26435	0.23830	0.23908	0.26042					
	0.25685	+++++					AVRG		0.25618		5.02367
8 Trichlorofluoromethane	0.49934	0.54651	0.52996	0.53550	0.52522	0.54271					
	0.54790	+++++					AVRG		0.53245		3.16649
134 Ethyl Ether	0.26405	0.28962	0.20680	0.19158	0.23602	0.26112					
	0.26467	+++++					AVRG		0.24484		14.33765
9 Acrolein	0.07486	0.06030	0.06349	0.05089	0.04905	0.06515					
	0.06815	+++++					AVRG		0.06170		14.92817
12 Trichlorotrifluoroethane	0.17855	0.16311	0.14305	0.13718	0.13475	0.15847					
	0.14592	+++++					AVRG		0.15157		10.44209
10 Acetone	0.10832	0.10252	0.09194	0.08279	0.07752	0.07886					
	0.09576	+++++					AVRG		0.09110		13.08577
11 1,1-Dichloroethylene	0.41011	0.39480	0.38737	0.33772	0.36935	0.37939					
	0.47373	+++++					AVRG		0.39321		10.71220

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
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Quant Method : ISTD
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Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
13 Iodomethane	0.40030	0.39711	0.43151	0.37072	0.41020	0.43340					
	0.48365	+++++					AVRG		0.41813		8.60992
15 Acetonitrile	0.04213	0.04068	0.04013	0.03642	0.03741	0.03657					
	0.04018	+++++					AVRG		0.03907		5.75796
128 Methyl acetate	0.18113	0.20299	0.19703	0.18862	0.18820	0.19719					
	0.21432	+++++					AVRG		0.19564		5.60933
14 Carbon disulfide	403442	451583	1654889	2097120	4495773	12230023					
	26392896	+++++					LINR	0.08215	1.03116		0.99728
16 Allyl chloride	60003	89487	180751	462240	889444	2206380					
	3827993	+++++					LINR	0.02806	0.19649		0.99570
17 Methylene chloride	+++++	54632	98904	154303	300246	729853					
	1505084	+++++					LINR	-0.01906	0.29062		0.99918
18 Acrylonitrile	31962	40705	106122	280604	570897	1420014					
	2400350	+++++					LINR	0.04502	0.12436		0.99396
20 tert-Butyl methyl ether	0.66207	0.72029	0.71220	0.67668	0.67823	0.72576					
	0.79438	+++++					AVRG		0.70995		6.27198
21 trans-1,2-Dichloroethylene	0.25003	0.27253	0.28040	0.23157	0.25077	0.26683					
	0.29091	+++++					AVRG		0.26329		7.74042

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
23 Vinyl acetate	0.45396	0.47103	0.48262	0.47952	0.49584	0.57885					
	0.61044	+++++					AVRG		0.51032		11.69369
22 1,1-Dichloroethane	0.50836	0.49593	0.51866	0.43157	0.47309	0.48885					
	0.51830	+++++					AVRG		0.49068		6.27745
24 2-Chloro-1,3-butadiene	25130	28293	73998	213361	411249	987402					
	+++++	+++++					LINR	0.02584	0.48386		0.99477
26 Ethyl acetate	75260	105140	276876	702785	1400441	3756177					
	6454275	+++++					LINR	0.09490	0.33463		0.99415
30 2-Butanone	0.13690	0.14016	0.12576	0.11988	0.11837	0.12290					
	0.13566	+++++					AVRG		0.12852		6.91245
31 cis-1,2-Dichloroethylene	0.29160	0.26548	0.27870	0.23482	0.27030	0.28469					
	0.31055	+++++					AVRG		0.27659		8.55083
28 Propionitrile	9499	16193	43579	113327	230957	594831					
	+++++	+++++					LINR	0.18299	0.05871		0.99151
25 2,2-Dichloropropane	0.40119	0.42272	0.42614	0.33686	0.38040	0.39961					
	0.42887	+++++					AVRG		0.39940		8.17903
27 Methacrylonitrile	35278	64028	172409	415714	855605	2302260					
	4271592	+++++					LINR	0.16643	0.21928		0.99712

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
29 Bromochloromethane	0.12039	0.11630	0.13751	0.11981	0.12543	0.13194					
	0.13805	+++++					AVRG		0.12706		6.95966
32 Chloroform	0.47352	0.44178	0.50009	0.43120	0.45471	0.47386					
	0.49992	+++++					AVRG		0.46787		5.74240
72 Tetrahydrofuran	46722	55259	115523	255465	497963	1191890					
	2214333	+++++					LINR	-0.09645	0.37664		0.99933
36 1,1,1-Trichloroethane	0.38571	0.39194	0.42075	0.33428	0.38811	0.39989					
	0.42881	+++++					AVRG		0.39278		7.79568
19 Isobutyl alcohol	0.01328	0.01069	0.01173	0.01206	0.01280	0.01375					
	0.01553	+++++					AVRG		0.01283		12.21076
34 1,1-Dichloropropene	0.31087	0.32590	0.34586	0.28648	0.32010	0.34765					
	0.38440	+++++					AVRG		0.33161		9.43952
129 Cyclohexane	0.49067	0.45042	0.43636	0.34570	0.40637	0.44395					
	0.50461	+++++					AVRG		0.43973		12.07016
33 Carbon tetrachloride	0.29551	0.39430	0.38894	0.30477	0.34786	0.36001					
	0.38707	+++++					AVRG		0.35407		11.44762
37 1,2-Dichloroethane	0.34130	0.37015	0.39464	0.33860	0.33943	0.36228					
	0.38855	+++++					AVRG		0.36214		6.49792

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
38 Benzene	1.23015	1.16301	1.12369	0.95777	1.05544	1.11793						
	1.20425	+++++					AVRG		1.12175		8.26399	
131 n-Butyl alcohol	0.00690	0.00833	0.00774	0.00793	0.00807	0.00906						
	0.01079	+++++					AVRG		0.00840		14.69689	<-
39 Trichloroethylene	0.26890	0.26387	0.26070	0.22394	0.24131	0.25879						
	0.27833	+++++					AVRG		0.25655		7.11419	
42 Methyl methacrylate	29823	58655	167784	470232	976386	2181800						
	4827163	+++++					LINR	0.24540	0.24276		0.99613	
41 1,2-Dichloropropane	0.28482	0.28104	0.26780	0.25253	0.26070	0.28259						
	0.29881	+++++					AVRG		0.27547		5.77310	
130 Methylcyclohexane	0.42256	0.41219	0.47076	0.36976	0.44612	0.49397						
	0.55799	+++++					AVRG		0.45333		13.53334	
97 1,4-Dioxane	0.00338	0.00251	0.00293	0.00313	0.00318	0.00327						
	0.00400	+++++					AVRG		0.00320		14.18212	
43 Dibromomethane	0.15394	0.16347	0.16749	0.14994	0.15229	0.15868						
	0.16683	+++++					AVRG		0.15895		4.49387	
45 Bromodichloromethane	0.32668	0.35116	0.35270	0.30790	0.34084	0.34712						
	0.37209	+++++					AVRG		0.34264		5.98848	

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
48 2-Nitropropane	0.10183	0.07981	0.08412	0.09984	0.07126	0.09634					
	0.10988	+++++					AVRG		0.09187		14.98698
44 2-Chloroethylvinyl ether	26124	58234	157313	318818	684045	2050961					
	4459822	+++++					LINR	0.21739	0.17668		0.99748
46 cis-1,3-Dichloropropylene	0.41272	0.38542	0.40263	0.34175	0.37520	0.40317					
	0.43986	+++++					AVRG		0.39439		7.86093
49 4-Methyl-2-pentanone	0.10739	0.13036	0.13493	0.13543	0.14611	0.15171					
	0.16697	+++++					AVRG		0.13899		13.45201
50 Toluene	1.14419	0.98485	0.96963	0.80817	0.95523	1.00829					
	1.10015	+++++					AVRG		0.99579		10.90249
51 Ethyl methacrylate	49901	95155	268693	571156	1285566	3912236					
	8850373	+++++					LINR	0.30141	0.70880		0.99442
53 trans-1,3-Dichloropropylene	0.52820	0.53910	0.54029	0.50412	0.51864	0.53576					
	0.60318	+++++					AVRG		0.53847		5.81213
54 1,1,2-Trichloroethane	0.30746	0.29106	0.28146	0.25309	0.26383	0.26313					
	0.27815	+++++					AVRG		0.27688		6.73102
55 2-Hexanone	0.19538	0.23633	0.24099	0.22979	0.24668	0.26550					
	0.29568	+++++					AVRG		0.24433		12.69532

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
52 1,3-Dichloropropane	0.53022	0.52759	0.56793	0.53014	0.54572	0.57839					
	0.61328	+++++					AVRG		0.55618		5.76597
56 Tetrachloroethylene	0.27650	0.31054	0.32112	0.25062	0.31465	0.32199					
	0.35390	+++++					AVRG		0.30705		10.96639
57 Dibromochloromethane	0.27474	0.31584	0.34401	0.29987	0.32937	0.34014					
	0.36832	+++++					AVRG		0.32461		9.51672
59 1,2-Dibromoethane	0.27564	0.28915	0.30049	0.27266	0.29241	0.29640					
	0.32037	+++++					AVRG		0.29245		5.48765
62 Chlorobenzene	1.11836	1.01150	0.99057	0.86869	0.97900	1.01838					
	1.11165	+++++					AVRG		1.01402		8.38161
58 Ethylbenzene	1.50001	1.68289	1.63830	1.36526	1.66739	1.83738					
	2.03952	+++++					AVRG		1.67582		13.05681
60 1,1,1,2-Tetrachloroethane	0.38204	0.36454	0.34452	0.30621	0.34440	0.38016					
	0.40564	+++++					AVRG		0.36107		9.02011
63 m,p-Xylenes	0.55811	0.60045	0.63399	0.52379	0.64367	0.71765					
	0.79443	+++++					AVRG		0.63887		14.52882
64 o-Xylene	0.55724	0.55003	0.56410	0.52563	0.61368	0.70696					
	0.76439	+++++					AVRG		0.61172		14.74827

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
65 Styrene	0.81895	0.86958	0.93241	0.81500	0.99063	1.18221					
	+++++	+++++					AVRG		0.93480		14.85097
66 Bromoform	0.49413	0.39449	0.41710	0.40972	0.41827	0.41988					
	0.46718	+++++					AVRG		0.43154		8.22415
67 Isopropylbenzene	2.94357	2.91267	2.85306	2.36609	2.94098	3.12517					
	3.49685	+++++					AVRG		2.94834		11.43156
68 cis-1,4-Dichloro-2-butene	0.32539	0.29493	0.30906	0.29982	0.32779	0.36004					
	0.41647	+++++					AVRG		0.33336		12.78926
70 Cyclohexanone	12049	23300	60060	137258	217693	706741					
	1656213	+++++					LINR	1.43592	0.02636		0.99082
73 1,1,2,2-Tetrachloroethane	0.81833	0.89898	0.81593	0.79074	0.77951	0.74750					
	0.78223	+++++					AVRG		0.80475		5.96074
69 trans-1,4-Dichloro-2-butene	0.29177	0.27610	0.27775	0.28484	0.31640	0.34200					
	0.39960	+++++					AVRG		0.31264		14.42302
74 1,2,3-Trichloropropane	0.20284	0.24974	0.26224	0.21222	0.22796	0.21927					
	0.22790	+++++					AVRG		0.22888		9.09132
75 Bromobenzene	0.84275	0.83195	0.80680	0.69027	0.82624	0.85187					
	0.90421	+++++					AVRG		0.82201		7.97473

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	0.5000 Level 8									
76 n-Propylbenzene	3.81837	3.75268	3.67442	2.94416	3.79930	3.95263					
	4.44922	+++++					AVRG		3.77011		11.80926
78 1,3,5-Trimethylbenzene	2.66631	2.41497	2.40823	2.09493	2.59746	2.79491					
	3.15991	+++++					AVRG		2.59096		13.00691
77 2-Chlorotoluene	2.65561	2.58598	2.63625	2.18390	2.63289	2.66722					
	2.94695	+++++					AVRG		2.61554		8.57798
80 4-Chlorotoluene	2.27148	2.41816	2.15769	1.81681	2.11711	2.25495					
	2.49679	+++++					AVRG		2.21900		10.02260
81 tert-Butylbenzene	2.68629	2.27653	2.38926	2.02702	2.60580	2.73330					
	3.02444	+++++					AVRG		2.53466		13.01411
79 1,2,4-Trimethylbenzene	2.44624	2.52261	2.49722	2.10661	2.65561	2.86290					
	3.10351	+++++					AVRG		2.59924		12.26059
82 Pentachloroethane	0.49441	0.42482	0.48399	0.49857	0.50386	0.53867					
	0.63252	+++++					AVRG		0.51098		12.42099
83 sec-Butylbenzene	3.52825	3.33365	3.44123	2.81148	3.46661	3.76489					
	4.25748	+++++					AVRG		3.51480		12.45313
84 4-Isopropyltoluene	37262	76647	205129	314531	807561	2621352					
	5981227	+++++					LINR	0.04853	3.24046		0.99547

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
85 1,3-Dichlorobenzene	1.53769	1.51593	1.51596	1.26799	1.42808	1.50225					
	1.66038	+++++					AVRG		1.48975		8.03268
87 1,4-Dichlorobenzene	1.67374	1.62526	1.57117	1.39513	1.51390	1.56795					
	1.64238	+++++					AVRG		1.56993		5.97458
88 Benzyl chloride	95531	177842	465554	896237	1894774	5748187					
	12548849	+++++					LINR	0.25340	2.15292		0.99510
89 n-Butylbenzene	2.54939	2.39648	2.50603	1.95219	2.42058	2.68885					
	2.95747	+++++					AVRG		2.49586		12.28864
90 1,2-Dichlorobenzene	1.42925	1.46932	1.46060	1.23031	1.36127	1.42331					
	1.55594	+++++					AVRG		1.41857		7.17022
91 bis(2-Chloroisopropyl)ether	0.46726	0.38349	0.41109	0.39646	0.42637	0.48783					
	0.56884	+++++					AVRG		0.44876		14.44230
92 1,2-Dibromo-3-chloropropane	0.15224	0.16849	0.18130	0.15476	0.16352	0.15689					
	0.17284	+++++					AVRG		0.16429		6.43873
93 1,2,4-Trichlorobenzene	1.01993	1.00445	0.95245	0.81591	0.77034	0.88082					
	0.90140	+++++					AVRG		0.90647		10.27031
94 Hexachlorobutadiene	0.76375	0.70199	0.66950	0.55421	0.59791	0.63530					
	0.65184	+++++					AVRG		0.65350		10.46213

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Compound	1 Level 1 100 Level 7	2 Level 2 0.5000 Level 8	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
95 Naphthalene	1.92254	2.55857	2.44561	2.23236	2.03513	2.46093						
	2.57186	+++++					AVRG		2.31814		11.17673	
96 1,2,3-Trichlorobenzene	1.05244	1.02693	1.01935	0.85167	0.79604	0.92602						
	0.93054	+++++					AVRG		0.94328		10.17116	
$ 135 1,2-Dichloroethane-d4	0.31053	0.31254	0.32480	0.28536	0.29626	0.30517						
	0.31390	+++++					AVRG		0.30694		4.19447	<-
$ 35 Dibromofluoromethane	+++++	+++++	0.27311	0.23084	0.23959	0.24869						
	0.26062	+++++					AVRG		0.25057		6.68544	
$ 47 Toluene-d8	+++++	+++++	1.37458	1.10425	1.31112	1.37448						
	1.47965	+++++					AVRG		1.32881		10.48656	
$ 71 Bromofluorobenzene	+++++	+++++	1.02551	0.78731	0.89666	0.85767						
	0.95789	+++++					AVRG		0.90501		10.10907	

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 26-AUG-2004 22:19
End Cal Date : 12-AUG-2005 22:24
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Cal Date : 13-Aug-2005 15:33 tcl

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w504.d
Lab Smp Id: W7VM050812-01 Client Smp ID: VSTD001
Inj Date : 12-AUG-2005 16:09
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7VM050812-01|ICAL|1|VOAF|1||
Misc Info : VSTD001 5uL+5uL UVM050616-02B+UVM050810-02A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 19:44 Cal File: 7w512.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				56116	3.00000	2.6(a)
M 2 1,2-Dichloroethylene (total)	96				28235	2.00000	2.0
M 136 1,3-Dichloropropylene	100				39227	2.00000	2.0
3 Dichlorodifluoromethane	85	4.998	4.982	(0.492)	15693	1.00000	0.82(a)
4 Chloromethane	50	5.297	5.308	(0.521)	30575	1.00000	1.2
5 Vinyl chloride	62	5.527	5.532	(0.544)	23353	1.00000	0.99(a)
6 Bromomethane	94	6.050	6.061	(0.595)	19936	1.00000	1.2
7 Chloroethane	64	6.168	6.189	(0.607)	13647	1.00000	1.0
8 Trichlorofluoromethane	101	6.563	6.558	(0.646)	26031	1.00000	0.94(a)
134 Ethyl Ether	59	6.820	6.814	(0.671)	13765	1.00000	1.1(Q)
10 Acetone	43	7.183	7.172	(0.707)	28234	5.00000	5.9
15 Acetonitrile	41	7.498	7.498	(0.738)	54904	25.0000	27.0
11 1,1-Dichloroethylene	61	7.183	7.178	(0.707)	21379	1.00000	1.0
128 Methyl acetate	43	7.504	7.498	(0.738)	47211	5.00000	4.6(a)
13 Iodomethane	142	7.413	7.413	(0.729)	104340	5.00000	4.8(a)
14 Carbon disulfide	76	7.546	7.546	(0.742)	403442	5.00000	11.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 tert-Butyl methyl ether	73	7.936	7.926	(0.781)	34514	1.00000	0.93(a)
	21 trans-1,2-Dichloroethylene	96	7.974	7.974	(0.784)	13034	1.00000	0.95(a)
	23 Vinyl acetate	43	8.353	8.353	(0.822)	118326	5.00000	4.4(a)
	22 1,1-Dichloroethane	63	8.412	8.417	(0.828)	26501	1.00000	1.0
	30 2-Butanone	43	8.951	8.946	(0.881)	35683	5.00000	5.3
	31 cis-1,2-Dichloroethylene	96	8.999	8.999	(0.885)	15201	1.00000	1.0
	25 2,2-Dichloropropane	77	9.021	9.021	(0.888)	20914	1.00000	1.0
	32 Chloroform	83	9.272	9.277	(0.912)	24685	1.00000	1.0
	29 Bromochloromethane	128	9.261	9.261	(0.911)	6276	1.00000	0.95(a)
$	135 1,2-Dichloroethane-d4	65	9.838	9.838	(0.968)	16188	1.00000	1.0
$	35 Dibromofluoromethane	113	9.443	9.448	(0.929)	13633	1.00000	1.0
	36 1,1,1-Trichloroethane	97	9.555	9.544	(0.940)	20107	1.00000	0.98(a)
	129 Cyclohexane	56	9.630	9.630	(0.947)	25579	1.00000	1.1
	34 1,1-Dichloropropene	75	9.678	9.689	(0.952)	16206	1.00000	0.94(a)
	131 n-Butyl alcohol	56	10.233	10.234	(1.007)	35995	100.000	82.2(Q)
	33 Carbon tetrachloride	117	9.726	9.726	(0.957)	15405	1.00000	0.83(a)
	37 1,2-Dichloroethane	62	9.913	9.913	(0.975)	17792	1.00000	0.94(a)
	38 Benzene	78	9.929	9.929	(0.977)	64128	1.00000	1.1
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	2606516	50.0000	
	39 Trichloroethylene	95	10.527	10.538	(1.036)	14018	1.00000	1.0(Q)
	41 1,2-Dichloropropane	63	10.778	10.778	(1.060)	14848	1.00000	1.0
	130 Methylcyclohexane	83	10.768	10.768	(1.059)	22028	1.00000	0.93(a)
	45 Bromodichloromethane	83	11.008	11.008	(1.083)	17030	1.00000	0.95(a)
	43 Dibromomethane	93	10.912	10.917	(1.074)	8025	1.00000	0.97(a)
	44 2-Chloroethylvinyl ether	63	11.200	11.195	(1.102)	26124	5.00000	13.7
	49 4-Methyl-2-pentanone	58	11.510	11.505	(0.878)	18006	5.00000	3.9(a)
	46 cis-1,3-Dichloropropylene	75	11.419	11.425	(1.124)	21515	1.00000	1.0
$	47 Toluene-d8	98	11.719	11.713	(0.894)	57990	1.00000	1.3
	50 Toluene	92	11.783	11.783	(0.899)	38368	1.00000	1.1
	53 trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	17712	1.00000	0.98(a)
	54 1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	10310	1.00000	1.1
	55 2-Hexanone	43	12.285	12.280	(0.937)	32758	5.00000	4.0(a)
	52 1,3-Dichloropropane	76	12.306	12.306	(0.938)	17780	1.00000	0.95(a)
	56 Tetrachloroethylene	164	12.317	12.322	(0.939)	9272	1.00000	0.90(a)
	57 Dibromochloromethane	129	12.552	12.552	(0.957)	9213	1.00000	0.85(a)
	59 1,2-Dibromoethane	107	12.723	12.712	(0.970)	9243	1.00000	0.94(a)
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1676651	50.0000	
	62 Chlorobenzene	112	13.140	13.140	(1.002)	37502	1.00000	1.1(Q)
	60 1,1,1,2-Tetrachloroethane	131	13.198	13.188	(1.007)	12811	1.00000	1.0
	58 Ethylbenzene	91	13.193	13.188	(1.006)	50300	1.00000	2.7
	63 m,p-Xylenes	106	13.284	13.284	(1.013)	37430	2.00000	1.7(a)
	64 o-Xylene	106	13.690	13.690	(1.044)	18686	1.00000	0.91(a)
	65 Styrene	104	13.695	13.695	(1.044)	27462	1.00000	0.88(a)
	66 Bromoform	173	13.952	13.957	(0.903)	7569	1.00000	1.1(Q)
	67 Isopropylbenzene	105	14.021	14.021	(0.908)	45089	1.00000	1.00
	73 1,1,2,2-Tetrachloroethane	83	14.304	14.299	(0.926)	12535	1.00000	1.0
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	29614	1.00000	2.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	14.390	14.390	(0.932)	3107	1.00000	0.99(aQ)
75	Bromobenzene	156	14.438	14.433	(0.935)	12909	1.00000	1.0
76	n-Propylbenzene	91	14.427	14.427	(0.934)	58489	1.00000	1.0
77	2-Chlorotoluene	91	14.587	14.582	(0.945)	40678	1.00000	1.0
78	1,3,5-Trimethylbenzene	105	14.566	14.566	(0.943)	40842	1.00000	1.0
80	4-Chlorotoluene	91	14.689	14.684	(0.951)	34794	1.00000	1.0
81	tert-Butylbenzene	119	14.945	14.945	(0.968)	41148	1.00000	1.0
79	1,2,4-Trimethylbenzene	105	14.988	14.983	(0.971)	37471	1.00000	0.94(a)
83	sec-Butylbenzene	105	15.175	15.170	(0.983)	54045	1.00000	1.0
84	4-Isopropyltoluene	119	15.282	15.287	(0.990)	37262	1.00000	3.2
85	1,3-Dichlorobenzene	146	15.383	15.378	(0.996)	23554	1.00000	1.0
* 86	1,4-Dichlorobenzene-d4	152	15.442	15.437	(1.000)	765889	50.0000	
87	1,4-Dichlorobenzene	146	15.469	15.464	(1.002)	25638	1.00000	1.1
89	n-Butylbenzene	91	15.747	15.747	(1.020)	39051	1.00000	1.0
90	1,2-Dichlorobenzene	146	15.923	15.918	(1.031)	21893	1.00000	1.0
92	1,2-Dibromo-3-chloropropane	157	16.874	16.863	(1.093)	2332	1.00000	1.6
93	1,2,4-Trichlorobenzene	180	18.044	18.033	(1.168)	15623	1.00000	1.1
94	Hexachlorobutadiene	225	18.204	18.209	(1.179)	11699	1.00000	1.2
95	Naphthalene	128	18.498	18.498	(1.198)	29449	1.00000	0.83(a)
96	1,2,3-Trichlorobenzene	180	18.893	18.899	(1.223)	16121	1.00000	1.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA7.i/081205.b/7w504.d

Date : 12-AUG-2005 16:09

Client ID: VSTD001

Sample Info: |W7VM050812-01|ICAL|1|VOAF|1||

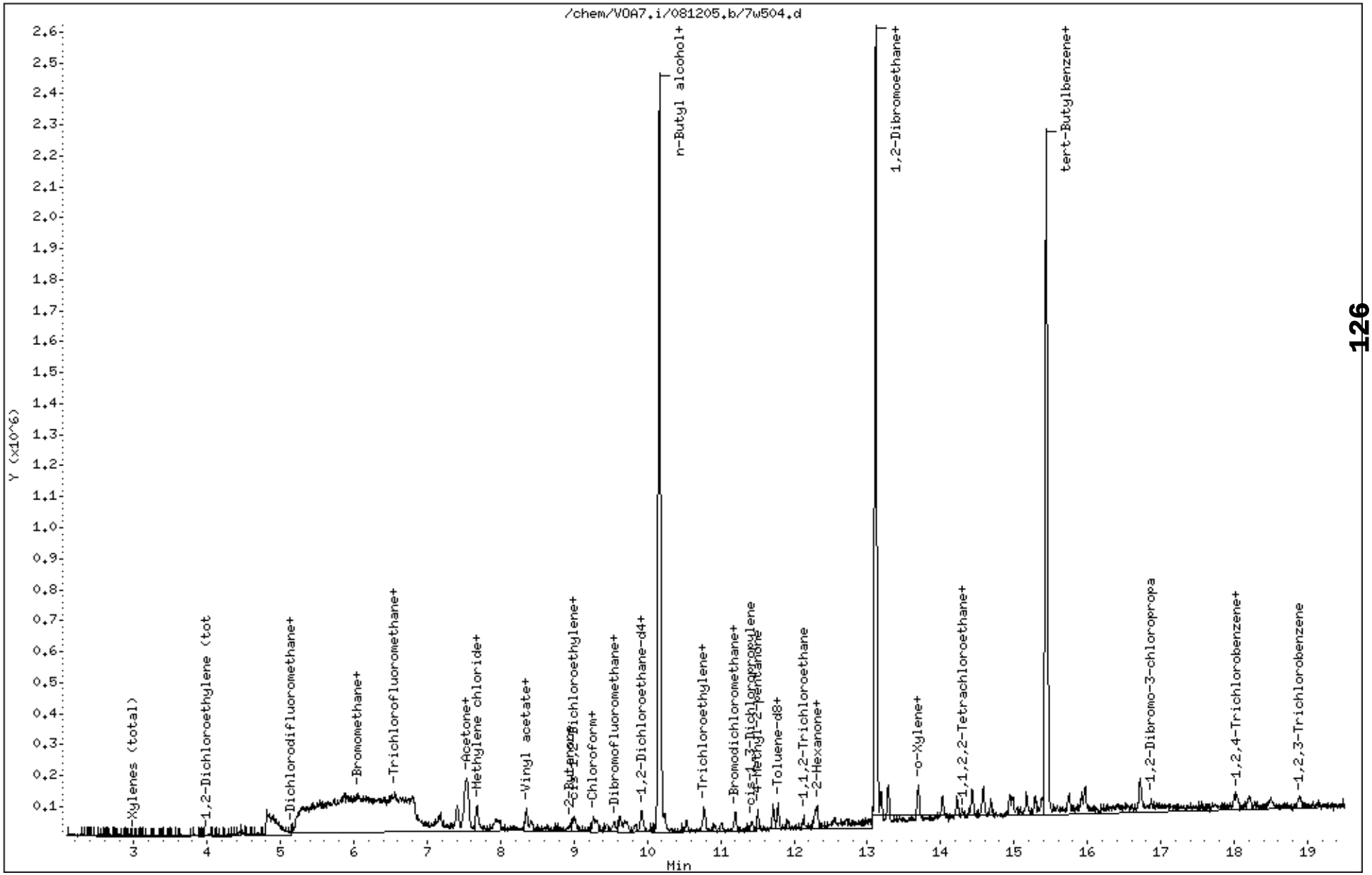
Purge Volume: 5.0

Column phase: DB-624

Instrument: VOA7.i

Operator: JEB

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w505.d
Lab Smp Id: W7VM050812-02 Client Smp ID: VSTD002
Inj Date : 12-AUG-2005 16:36
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7VM050812-02|ICAL|1|VOAF|1||
Misc Info : VSTD002 5uL+5uL UVM050616-03B+UVM050810-03A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 20:11 Cal File: 7w513.d
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				115664	6.00000	5.6
M 2 1,2-Dichloroethylene (total)	96				54739	4.00000	4.0
M 136 1,3-Dichloropropylene	100				74826	4.00000	4.0
3 Dichlorodifluoromethane	85	4.987	4.982	(0.491)	40148	2.00000	2.1
4 Chloromethane	50	5.292	5.308	(0.521)	54129	2.00000	2.2
5 Vinyl chloride	62	5.527	5.532	(0.544)	48504	2.00000	2.1
6 Bromomethane	94	6.051	6.061	(0.595)	36410	2.00000	2.3
7 Chloroethane	64	6.179	6.189	(0.608)	27721	2.00000	2.1
8 Trichlorofluoromethane	101	6.558	6.558	(0.645)	55605	2.00000	2.0
134 Ethyl Ether	59	6.814	6.814	(0.670)	29467	2.00000	2.4
10 Acetone	43	7.172	7.172	(0.706)	52156	10.0000	11.2
15 Acetonitrile	41	7.498	7.498	(0.738)	103464	50.0000	52.0
11 1,1-Dichloroethylene	61	7.178	7.178	(0.706)	40169	2.00000	2.0
128 Methyl acetate	43	7.498	7.498	(0.738)	103267	10.0000	10.4
13 Iodomethane	142	7.407	7.413	(0.729)	202018	10.0000	9.5
17 Methylene chloride	84	7.685	7.685	(0.756)	54632	2.00000	2.7(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	14 Carbon disulfide	76	7.546	7.546	(0.742)	451583	10.0000	12.7
	20 tert-Butyl methyl ether	73	7.931	7.926	(0.780)	73286	2.00000	2.0
	21 trans-1,2-Dichloroethylene	96	7.968	7.974	(0.784)	27728	2.00000	2.1
	23 Vinyl acetate	43	8.353	8.353	(0.822)	239622	10.0000	9.2
	22 1,1-Dichloroethane	63	8.412	8.417	(0.828)	50458	2.00000	2.0
	30 2-Butanone	43	8.957	8.946	(0.881)	71301	10.0000	10.9
	31 cis-1,2-Dichloroethylene	96	8.994	8.999	(0.885)	27011	2.00000	1.9
	25 2,2-Dichloropropane	77	9.026	9.021	(0.888)	43010	2.00000	2.1
	32 Chloroform	83	9.277	9.277	(0.913)	44949	2.00000	1.9
	29 Bromochloromethane	128	9.267	9.261	(0.912)	11833	2.00000	1.8(Q)
$	135 1,2-Dichloroethane-d4	65	9.833	9.838	(0.967)	31799	2.00000	2.0
$	35 Dibromofluoromethane	113	9.454	9.448	(0.930)	27426	2.00000	2.2
	36 1,1,1-Trichloroethane	97	9.539	9.544	(0.938)	39878	2.00000	2.0
	129 Cyclohexane	56	9.635	9.630	(0.948)	45828	2.00000	2.0
	34 1,1-Dichloropropene	75	9.689	9.689	(0.953)	33159	2.00000	2.0
	131 n-Butyl alcohol	56	10.234	10.234	(1.007)	84771	200.000	198
	33 Carbon tetrachloride	117	9.721	9.726	(0.956)	40118	2.00000	2.2
	37 1,2-Dichloroethane	62	9.913	9.913	(0.975)	37661	2.00000	2.0
	38 Benzene	78	9.929	9.929	(0.977)	118330	2.00000	2.1
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	2543618	50.0000	
	39 Trichloroethylene	95	10.533	10.538	(1.036)	26847	2.00000	2.0
	41 1,2-Dichloropropane	63	10.784	10.778	(1.061)	28594	2.00000	2.0
	130 Methylcyclohexane	83	10.762	10.768	(1.059)	41938	2.00000	1.8
	45 Bromodichloromethane	83	11.008	11.008	(1.083)	35729	2.00000	2.0
	43 Dibromomethane	93	10.912	10.917	(1.074)	16632	2.00000	2.0
	44 2-Chloroethylvinyl ether	63	11.190	11.195	(1.101)	58234	10.0000	17.3
	49 4-Methyl-2-pentanone	58	11.510	11.505	(0.878)	43056	10.0000	9.4
	46 cis-1,3-Dichloropropylene	75	11.419	11.425	(1.123)	39214	2.00000	2.0
$	47 Toluene-d8	98	11.713	11.713	(0.893)	97341	2.00000	2.2
	50 Toluene	92	11.783	11.783	(0.899)	65058	2.00000	2.0
	53 trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	35612	2.00000	2.0
	54 1,1,2-Trichloroethane	83	12.125	12.130	(0.925)	19227	2.00000	2.1
	55 2-Hexanone	43	12.285	12.280	(0.937)	78059	10.0000	9.7
	52 1,3-Dichloropropane	76	12.312	12.306	(0.939)	34852	2.00000	1.9
	56 Tetrachloroethylene	164	12.317	12.322	(0.939)	20514	2.00000	2.0
	57 Dibromochloromethane	129	12.552	12.552	(0.957)	20864	2.00000	1.9
	59 1,2-Dibromoethane	107	12.712	12.712	(0.969)	19101	2.00000	2.0
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1651462	50.0000	
	62 Chlorobenzene	112	13.145	13.140	(1.002)	66818	2.00000	2.0(Q)
	60 1,1,1,2-Tetrachloroethane	131	13.182	13.188	(1.005)	24081	2.00000	2.0(Q)
	58 Ethylbenzene	91	13.182	13.188	(1.005)	111169	2.00000	3.6
	63 m,p-Xylenes	106	13.284	13.284	(1.013)	79330	4.00000	3.8
	64 o-Xylene	106	13.695	13.690	(1.044)	36334	2.00000	1.8
	65 Styrene	104	13.690	13.695	(1.044)	57443	2.00000	1.9
	66 Bromoform	173	13.957	13.957	(0.904)	12376	2.00000	1.8
	67 Isopropylbenzene	105	14.021	14.021	(0.908)	91377	2.00000	2.0
	73 1,1,2,2-Tetrachloroethane	83	14.294	14.299	(0.926)	28203	2.00000	2.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	41295	2.00000	2.9
	74 1,2,3-Trichloropropane	110	14.384	14.390	(0.932)	7835	2.00000	2.3
	75 Bromobenzene	156	14.438	14.433	(0.935)	26100	2.00000	2.0
	76 n-Propylbenzene	91	14.427	14.427	(0.935)	117730	2.00000	2.0
	77 2-Chlorotoluene	91	14.587	14.582	(0.945)	81128	2.00000	2.0
	78 1,3,5-Trimethylbenzene	105	14.571	14.566	(0.944)	75763	2.00000	1.9
	80 4-Chlorotoluene	91	14.684	14.684	(0.951)	75863	2.00000	2.2
	81 tert-Butylbenzene	119	14.945	14.945	(0.968)	71420	2.00000	1.8
	79 1,2,4-Trimethylbenzene	105	14.983	14.983	(0.971)	79140	2.00000	1.9
	83 sec-Butylbenzene	105	15.170	15.170	(0.983)	104584	2.00000	1.9
	84 4-Isopropyltoluene	119	15.287	15.287	(0.990)	76647	2.00000	3.9
	85 1,3-Dichlorobenzene	146	15.378	15.378	(0.996)	47558	2.00000	2.0
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	784306	50.0000	
	87 1,4-Dichlorobenzene	146	15.464	15.464	(1.002)	50988	2.00000	2.1
	89 n-Butylbenzene	91	15.752	15.747	(1.020)	75183	2.00000	1.9
	90 1,2-Dichlorobenzene	146	15.918	15.918	(1.031)	46096	2.00000	2.1
	92 1,2-Dibromo-3-chloropropane	157	16.853	16.863	(1.092)	5286	2.00000	2.7
	93 1,2,4-Trichlorobenzene	180	18.039	18.033	(1.169)	31512	2.00000	2.2
	94 Hexachlorobutadiene	225	18.220	18.209	(1.180)	22023	2.00000	2.1
	95 Naphthalene	128	18.493	18.498	(1.198)	80268	2.00000	2.2
	96 1,2,3-Trichlorobenzene	180	18.888	18.899	(1.224)	32217	2.00000	2.2

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA7.i/081205.b/7w505.d

Date : 12-AUG-2005 16:36

Client ID: VSTD002

Instrument: VOA7.i

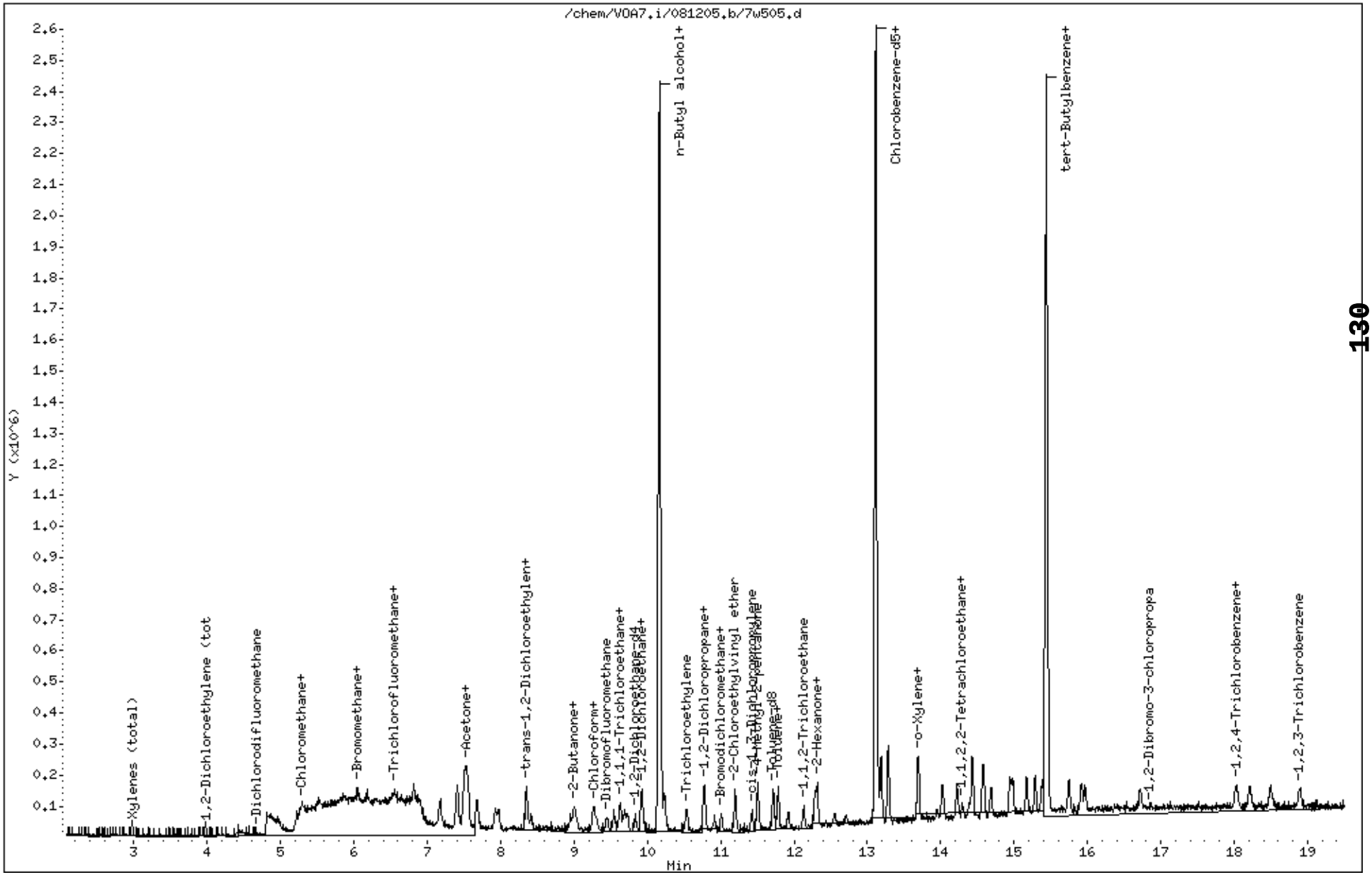
Sample Info: |W7VM050812-02|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w506.d
Lab Smp Id: W7VM050812-03 Client Smp ID: VSTD005
Inj Date : 12-AUG-2005 17:02
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7VM050812-03|ICAL|1|VOAF|1||
Misc Info : VSTD005 5uL+5uL UVM050616-04B+UVM050810-04A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 20:38 Cal File: 7w514.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				300192	15.0000	14.5
M 2 1,2-Dichloroethylene (total)	96				139577	10.0000	10.4
M 136 1,3-Dichloropropylene	100				189045	10.0000	10.1
3 Dichlorodifluoromethane	85	4.982	4.982	(0.490)	90668	5.00000	4.9
4 Chloromethane	50	5.303	5.308	(0.522)	116727	5.00000	4.8
5 Vinyl chloride	62	5.522	5.532	(0.543)	108584	5.00000	4.8
6 Bromomethane	94	6.050	6.061	(0.595)	71641	5.00000	4.6
7 Chloroethane	64	6.184	6.189	(0.608)	65995	5.00000	5.2
8 Trichlorofluoromethane	101	6.553	6.558	(0.645)	132303	5.00000	5.0
134 Ethyl Ether	59	6.814	6.814	(0.670)	51628	5.00000	4.2
10 Acetone	43	7.178	7.172	(0.706)	114757	25.0000	25.2
15 Acetonitrile	41	7.504	7.498	(0.738)	250487	125.000	128
11 1,1-Dichloroethylene	61	7.172	7.178	(0.706)	96705	5.00000	4.9
128 Methyl acetate	43	7.504	7.498	(0.738)	245936	25.0000	25.2
13 Iodomethane	142	7.407	7.413	(0.729)	538628	25.0000	25.8
17 Methylene chloride	84	7.680	7.685	(0.756)	98904	5.00000	5.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	14 Carbon disulfide	76	7.541	7.546	(0.742)	1654889	25.0000	36.2
	20 tert-Butyl methyl ether	73	7.931	7.926	(0.780)	177800	5.00000	5.0
	21 trans-1,2-Dichloroethylene	96	7.974	7.974	(0.784)	70001	5.00000	5.3
	23 Vinyl acetate	43	8.358	8.353	(0.822)	602425	25.0000	23.6
	22 1,1-Dichloroethane	63	8.422	8.417	(0.829)	129482	5.00000	5.3
	30 2-Butanone	43	8.951	8.946	(0.881)	156984	25.0000	24.5
	31 cis-1,2-Dichloroethylene	96	8.994	8.999	(0.885)	69576	5.00000	5.0
	25 2,2-Dichloropropane	77	9.021	9.021	(0.888)	106385	5.00000	5.3
	32 Chloroform	83	9.277	9.277	(0.913)	124846	5.00000	5.3
	29 Bromochloromethane	128	9.256	9.261	(0.911)	34329	5.00000	5.4
$	135 1,2-Dichloroethane-d4	65	9.838	9.838	(0.968)	81086	5.00000	5.3
$	35 Dibromofluoromethane	113	9.448	9.448	(0.930)	68181	5.00000	5.4
	36 1,1,1-Trichloroethane	97	9.550	9.544	(0.940)	105038	5.00000	5.4
	129 Cyclohexane	56	9.630	9.630	(0.947)	108936	5.00000	5.0
	34 1,1-Dichloropropene	75	9.683	9.689	(0.953)	86344	5.00000	5.2
	131 n-Butyl alcohol	56	10.239	10.234	(1.007)	193225	500.000	460
	33 Carbon tetrachloride	117	9.726	9.726	(0.957)	97097	5.00000	5.5
	37 1,2-Dichloroethane	62	9.913	9.913	(0.975)	98522	5.00000	5.4
	38 Benzene	78	9.929	9.929	(0.977)	280526	5.00000	5.0
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	2496475	50.0000	
	39 Trichloroethylene	95	10.533	10.538	(1.036)	65082	5.00000	5.1
	41 1,2-Dichloropropane	63	10.784	10.778	(1.061)	66855	5.00000	4.9
	130 Methylcyclohexane	83	10.773	10.768	(1.060)	117523	5.00000	5.2
	45 Bromodichloromethane	83	11.008	11.008	(1.083)	88051	5.00000	5.1
	43 Dibromomethane	93	10.917	10.917	(1.074)	41813	5.00000	5.3
	44 2-Chloroethylvinyl ether	63	11.200	11.195	(1.102)	157313	25.0000	28.7
	49 4-Methyl-2-pentanone	58	11.505	11.505	(0.877)	110545	25.0000	24.3
	46 cis-1,3-Dichloropropylene	75	11.430	11.425	(1.125)	100516	5.00000	5.1
$	47 Toluene-d8	98	11.713	11.713	(0.893)	225229	5.00000	5.2
	50 Toluene	92	11.783	11.783	(0.899)	158878	5.00000	4.9
	53 trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	88529	5.00000	5.0
	54 1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	46118	5.00000	5.1
	55 2-Hexanone	43	12.285	12.280	(0.937)	197433	25.0000	24.6
	52 1,3-Dichloropropane	76	12.301	12.306	(0.938)	93058	5.00000	5.1
	56 Tetrachloroethylene	164	12.317	12.322	(0.939)	52617	5.00000	5.2
	57 Dibromochloromethane	129	12.557	12.552	(0.958)	56367	5.00000	5.3
	59 1,2-Dibromoethane	107	12.712	12.712	(0.969)	49237	5.00000	5.1
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1638535	50.0000	
	62 Chlorobenzene	112	13.140	13.140	(1.002)	162309	5.00000	4.9
	60 1,1,1,2-Tetrachloroethane	131	13.188	13.188	(1.006)	56451	5.00000	4.8
	58 Ethylbenzene	91	13.188	13.188	(1.006)	268441	5.00000	6.0
	63 m,p-Xylenes	106	13.284	13.284	(1.013)	207762	10.0000	9.9
	64 o-Xylene	106	13.690	13.690	(1.044)	92430	5.00000	4.6
	65 Styrene	104	13.695	13.695	(1.044)	152778	5.00000	5.0
	66 Bromoform	173	13.957	13.957	(0.904)	33777	5.00000	4.8
	67 Isopropylbenzene	105	14.026	14.021	(0.909)	231042	5.00000	4.8
	73 1,1,2,2-Tetrachloroethane	83	14.294	14.299	(0.926)	66074	5.00000	5.1

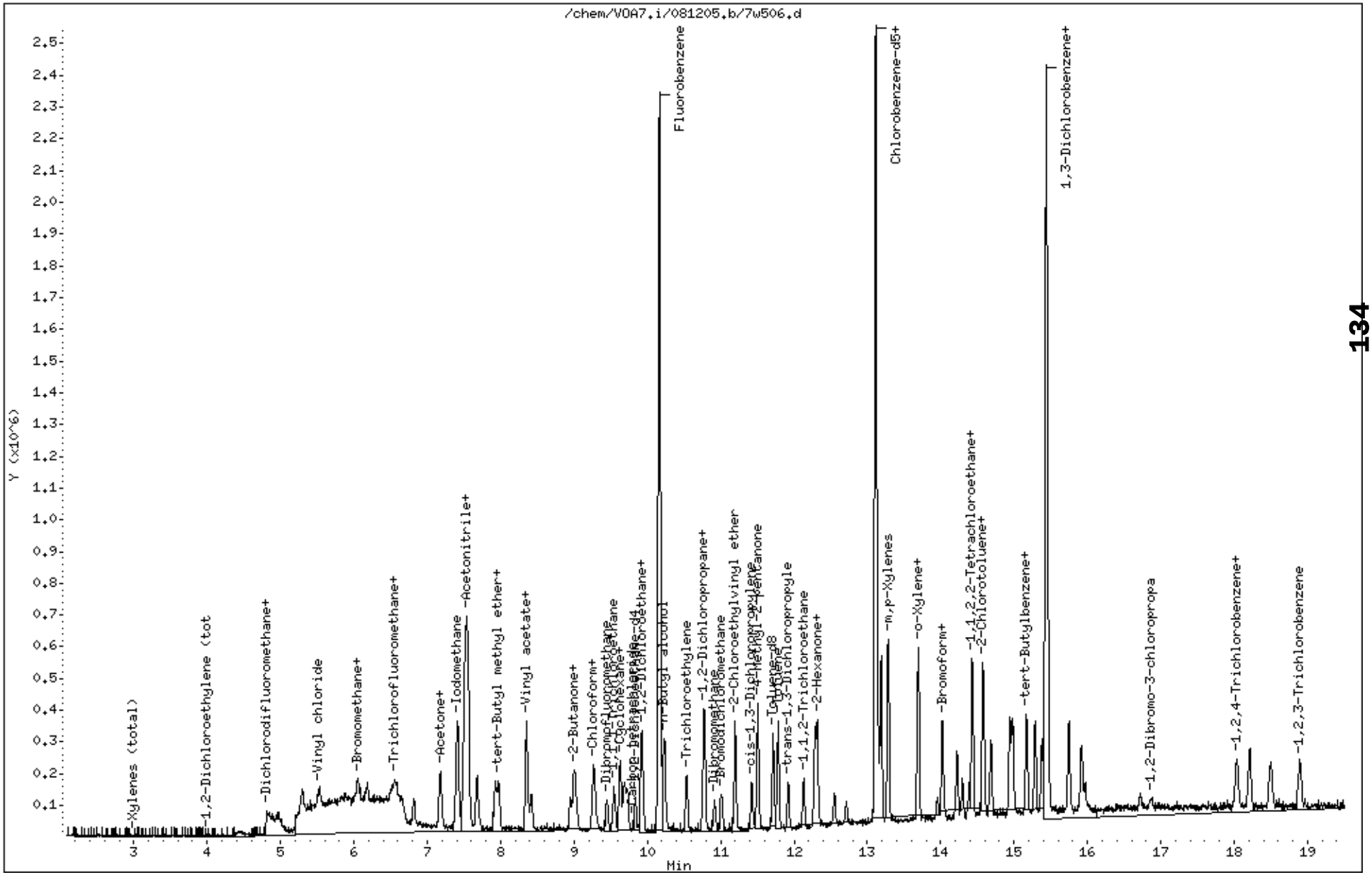
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	83046	5.00000	5.7
	74 1,2,3-Trichloropropane	110	14.395	14.390	(0.932)	21236	5.00000	5.9(Q)
	75 Bromobenzene	156	14.443	14.433	(0.936)	65335	5.00000	4.9
	76 n-Propylbenzene	91	14.427	14.427	(0.935)	297556	5.00000	4.9
	77 2-Chlorotoluene	91	14.587	14.582	(0.945)	213484	5.00000	5.0
	78 1,3,5-Trimethylbenzene	105	14.571	14.566	(0.944)	195019	5.00000	4.6
	80 4-Chlorotoluene	91	14.684	14.684	(0.951)	174730	5.00000	4.9
	81 tert-Butylbenzene	119	14.945	14.945	(0.968)	193483	5.00000	4.7
	79 1,2,4-Trimethylbenzene	105	14.983	14.983	(0.971)	202226	5.00000	4.8
	83 sec-Butylbenzene	105	15.175	15.170	(0.983)	278672	5.00000	4.9
	84 4-Isopropyltoluene	119	15.287	15.287	(0.990)	205129	5.00000	6.3
	85 1,3-Dichlorobenzene	146	15.383	15.378	(0.997)	122763	5.00000	5.1
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	809803	50.0000	
	87 1,4-Dichlorobenzene	146	15.469	15.464	(1.002)	127234	5.00000	5.0
	89 n-Butylbenzene	91	15.741	15.747	(1.020)	202939	5.00000	5.0
	90 1,2-Dichlorobenzene	146	15.918	15.918	(1.031)	118280	5.00000	5.1
	92 1,2-Dibromo-3-chloropropane	157	16.863	16.863	(1.092)	14682	5.00000	6.0
	93 1,2,4-Trichlorobenzene	180	18.033	18.033	(1.168)	77130	5.00000	5.2
	94 Hexachlorobutadiene	225	18.215	18.209	(1.180)	54216	5.00000	5.1
	95 Naphthalene	128	18.498	18.498	(1.198)	198046	5.00000	5.3
	96 1,2,3-Trichlorobenzene	180	18.893	18.899	(1.224)	82547	5.00000	5.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA7.i/081205.b/7w506.d
Date : 12-AUG-2005 17:02
Client ID: VSTD005
Sample Info: |W7VM050812-03|ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: JEB
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w507.d
Lab Smp Id: W7VM050812-04 Client Smp ID: VSTD010
Inj Date : 12-AUG-2005 17:29
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7VM050812-04|ICAL|1|VOAF|1||
Misc Info : VSTD010 5uL+5uL UVM050616-05B+UVM050810-05A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 21:03 Cal File: 7w515.d
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				513440	30.0000	25.0
M 2 1,2-Dichloroethylene (total)	96				231867	20.0000	17.3
M 136 1,3-Dichloropropylene	100				334429	20.0000	18.0
3 Dichlorodifluoromethane	85	4.987	4.982	(0.491)	188285	10.0000	10.3
4 Chloromethane	50	5.292	5.308	(0.521)	219781	10.0000	9.1
5 Vinyl chloride	62	5.522	5.532	(0.543)	224418	10.0000	10.0
6 Bromomethane	94	6.056	6.061	(0.596)	136997	10.0000	8.8
7 Chloroethane	64	6.179	6.189	(0.608)	118470	10.0000	9.3
8 Trichlorofluoromethane	101	6.553	6.558	(0.645)	266224	10.0000	10.0
134 Ethyl Ether	59	6.814	6.814	(0.670)	95242	10.0000	7.8
10 Acetone	43	7.172	7.172	(0.706)	205790	50.0000	45.4
15 Acetonitrile	41	7.498	7.498	(0.738)	452611	250.000	233
11 1,1-Dichloroethylene	61	7.178	7.178	(0.706)	167897	10.0000	8.6
128 Methyl acetate	43	7.504	7.498	(0.738)	468874	50.0000	48.2
13 Iodomethane	142	7.407	7.413	(0.729)	921507	50.0000	44.3
17 Methylene chloride	84	7.685	7.685	(0.756)	154303	10.0000	9.7

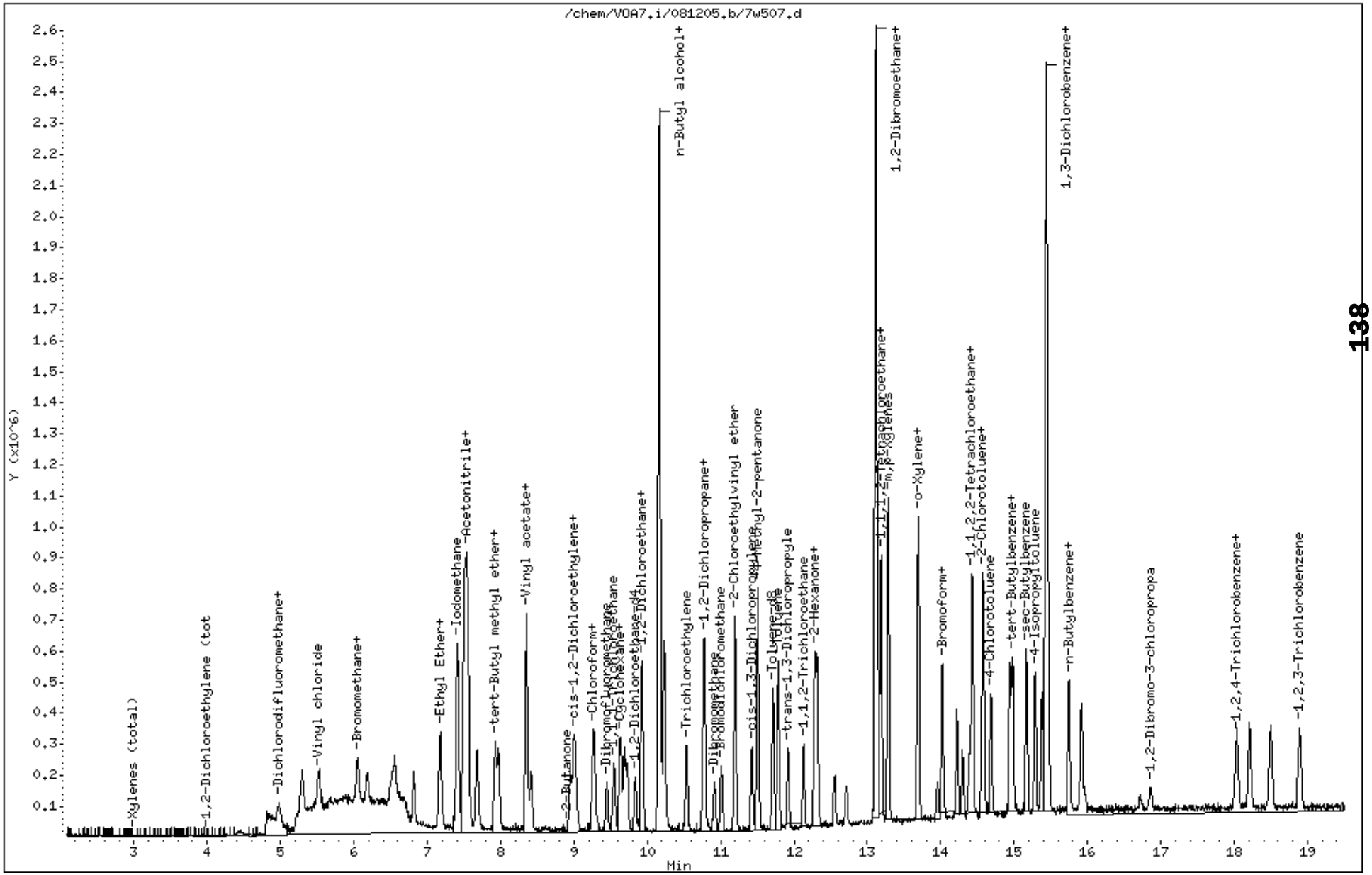
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
14	Carbon disulfide	76	7.541	7.546	(0.742)	2097120	50.0000	45.0
20	tert-Butyl methyl ether	73	7.931	7.926	(0.780)	336412	10.0000	9.5
21	trans-1,2-Dichloroethylene	96	7.979	7.974	(0.785)	115127	10.0000	8.8
23	Vinyl acetate	43	8.353	8.353	(0.822)	1191977	50.0000	47.0
22	1,1-Dichloroethane	63	8.417	8.417	(0.828)	214555	10.0000	8.8
30	2-Butanone	43	8.946	8.946	(0.880)	297999	50.0000	46.6
31	cis-1,2-Dichloroethylene	96	8.999	8.999	(0.885)	116740	10.0000	8.5
25	2,2-Dichloropropane	77	9.021	9.021	(0.888)	167472	10.0000	8.4
32	Chloroform	83	9.277	9.277	(0.913)	214372	10.0000	9.2
29	Bromochloromethane	128	9.261	9.261	(0.911)	59563	10.0000	9.4
$ 135	1,2-Dichloroethane-d4	65	9.838	9.838	(0.968)	141866	10.0000	9.3
$ 35	Dibromofluoromethane	113	9.443	9.448	(0.929)	114761	10.0000	9.2
36	1,1,1-Trichloroethane	97	9.539	9.544	(0.938)	166186	10.0000	8.5
129	Cyclohexane	56	9.630	9.630	(0.947)	171865	10.0000	7.9
34	1,1-Dichloropropene	75	9.689	9.689	(0.953)	142422	10.0000	8.6
131	n-Butyl alcohol	56	10.234	10.234	(1.007)	394263	1000.00	944
33	Carbon tetrachloride	117	9.721	9.726	(0.956)	151517	10.0000	8.6
37	1,2-Dichloroethane	62	9.913	9.913	(0.975)	168335	10.0000	9.4
38	Benzene	78	9.929	9.929	(0.977)	476157	10.0000	8.5
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2485748	50.0000	
39	Trichloroethylene	95	10.533	10.538	(1.036)	111331	10.0000	8.7
41	1,2-Dichloropropane	63	10.784	10.778	(1.061)	125544	10.0000	9.2
130	Methylcyclohexane	83	10.768	10.768	(1.059)	183827	10.0000	8.2
45	Bromodichloromethane	83	11.008	11.008	(1.083)	153071	10.0000	9.0
43	Dibromomethane	93	10.923	10.917	(1.075)	74542	10.0000	9.4
44	2-Chloroethylvinyl ether	63	11.195	11.195	(1.101)	318818	50.0000	47.2
49	4-Methyl-2-pentanone	58	11.505	11.505	(0.877)	221002	50.0000	48.7
46	cis-1,3-Dichloropropylene	75	11.430	11.425	(1.125)	169903	10.0000	8.7
$ 47	Toluene-d8	98	11.713	11.713	(0.893)	360390	10.0000	8.3
50	Toluene	92	11.783	11.783	(0.899)	263759	10.0000	8.1
53	trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	164526	10.0000	9.4
54	1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	82599	10.0000	9.1
55	2-Hexanone	43	12.280	12.280	(0.936)	374974	50.0000	47.0
52	1,3-Dichloropropane	76	12.306	12.306	(0.938)	173018	10.0000	9.5
56	Tetrachloroethylene	164	12.322	12.322	(0.940)	81795	10.0000	8.2
57	Dibromochloromethane	129	12.557	12.552	(0.958)	97866	10.0000	9.2
59	1,2-Dibromoethane	107	12.712	12.712	(0.969)	88986	10.0000	9.3
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1631828	50.0000	
62	Chlorobenzene	112	13.140	13.140	(1.002)	283511	10.0000	8.6
60	1,1,1,2-Tetrachloroethane	131	13.188	13.188	(1.006)	99936	10.0000	8.5
58	Ethylbenzene	91	13.182	13.188	(1.005)	445573	10.0000	8.7
63	m,p-Xylenes	106	13.284	13.284	(1.013)	341894	20.0000	16.4
64	o-Xylene	106	13.695	13.690	(1.044)	171546	10.0000	8.6
65	Styrene	104	13.695	13.695	(1.044)	265987	10.0000	8.7
66	Bromoform	173	13.952	13.957	(0.903)	66044	10.0000	9.5
67	Isopropylbenzene	105	14.021	14.021	(0.908)	381396	10.0000	8.0
73	1,1,2,2-Tetrachloroethane	83	14.299	14.299	(0.926)	127462	10.0000	9.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	126909	10.0000	8.7
	74 1,2,3-Trichloropropane	110	14.384	14.390	(0.932)	34208	10.0000	9.4(Q)
	75 Bromobenzene	156	14.438	14.433	(0.935)	111266	10.0000	8.4
	76 n-Propylbenzene	91	14.427	14.427	(0.934)	474577	10.0000	7.8
	77 2-Chlorotoluene	91	14.582	14.582	(0.944)	352029	10.0000	8.3
	78 1,3,5-Trimethylbenzene	105	14.566	14.566	(0.943)	337687	10.0000	8.1
	80 4-Chlorotoluene	91	14.689	14.684	(0.951)	292857	10.0000	8.2
	81 tert-Butylbenzene	119	14.940	14.945	(0.967)	326741	10.0000	8.0
	79 1,2,4-Trimethylbenzene	105	14.983	14.983	(0.970)	339571	10.0000	8.1
	83 sec-Butylbenzene	105	15.170	15.170	(0.982)	453191	10.0000	8.0
	84 4-Isopropyltoluene	119	15.282	15.287	(0.990)	314531	10.0000	8.4
	85 1,3-Dichlorobenzene	146	15.383	15.378	(0.996)	204391	10.0000	8.5
*	86 1,4-Dichlorobenzene-d4	152	15.442	15.437	(1.000)	805964	50.0000	
	87 1,4-Dichlorobenzene	146	15.464	15.464	(1.001)	224885	10.0000	8.9
	89 n-Butylbenzene	91	15.741	15.747	(1.019)	314679	10.0000	7.8
	90 1,2-Dichlorobenzene	146	15.923	15.918	(1.031)	198317	10.0000	8.7
	92 1,2-Dibromo-3-chloropropane	157	16.869	16.863	(1.092)	24947	10.0000	9.8
	93 1,2,4-Trichlorobenzene	180	18.044	18.033	(1.168)	131519	10.0000	9.0
	94 Hexachlorobutadiene	225	18.209	18.209	(1.179)	89334	10.0000	8.5
	95 Naphthalene	128	18.498	18.498	(1.198)	359840	10.0000	9.6
	96 1,2,3-Trichlorobenzene	180	18.893	18.899	(1.223)	137283	10.0000	9.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA7.i/081205.b/7w507.d
Date : 12-AUG-2005 17:29
Client ID: VSTD010
Instrument: VOA7.i
Sample Info: |W7VM050812-04|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w508.d
Lab Smp Id: W7VM050812-05 Client Smp ID: VSTD020
Inj Date : 12-AUG-2005 17:56
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7VM050812-05|ICAL|1|VOAF|1||
Misc Info : VSTD020 5uL+5uL UVM050616-06B+UVM050810-06A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 21:30 Cal File: 7w516.d
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1229368	60.0000	60.4
M 2 1,2-Dichloroethylene (total)	96				523242	40.0000	38.6
M 136 1,3-Dichloropropylene	100				712171	40.0000	38.3
3 Dichlorodifluoromethane	85	4.992	4.982	(0.491)	366167	20.0000	19.8
4 Chloromethane	50	5.302	5.308	(0.522)	436185	20.0000	17.9
5 Vinyl chloride	62	5.527	5.532	(0.544)	434049	20.0000	19.2
6 Bromomethane	94	6.056	6.061	(0.596)	291195	20.0000	18.6
7 Chloroethane	64	6.184	6.189	(0.608)	240077	20.0000	18.7
8 Trichlorofluoromethane	101	6.558	6.558	(0.645)	527416	20.0000	19.7
134 Ethyl Ether	59	6.820	6.814	(0.671)	237009	20.0000	19.3
10 Acetone	43	7.177	7.172	(0.706)	389224	100.000	85.1
15 Acetonitrile	41	7.498	7.498	(0.738)	939182	500.000	479
11 1,1-Dichloroethylene	61	7.177	7.178	(0.706)	370889	20.0000	18.8
128 Methyl acetate	43	7.498	7.498	(0.738)	944906	100.000	96.2
13 Iodomethane	142	7.407	7.413	(0.729)	2059543	100.000	98.1
17 Methylene chloride	84	7.685	7.685	(0.756)	300246	20.0000	19.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
14	Carbon disulfide	76	7.546	7.546	(0.742)	4495773	100.000	90.9
20	tert-Butyl methyl ether	73	7.925	7.926	(0.780)	681063	20.0000	19.1
21	trans-1,2-Dichloroethylene	96	7.979	7.974	(0.785)	251814	20.0000	19.0
23	Vinyl acetate	43	8.353	8.353	(0.822)	2489533	100.000	97.2
22	1,1-Dichloroethane	63	8.417	8.417	(0.828)	475063	20.0000	19.3
30	2-Butanone	43	8.951	8.946	(0.881)	594298	100.000	92.1
31	cis-1,2-Dichloroethylene	96	8.994	8.999	(0.885)	271428	20.0000	19.5
25	2,2-Dichloropropane	77	9.021	9.021	(0.888)	381987	20.0000	19.0
32	Chloroform	83	9.277	9.277	(0.913)	456613	20.0000	19.4
29	Bromochloromethane	128	9.261	9.261	(0.911)	125954	20.0000	19.7
$ 135	1,2-Dichloroethane-d4	65	9.833	9.838	(0.967)	297501	20.0000	19.3
$ 35	Dibromofluoromethane	113	9.448	9.448	(0.930)	240593	20.0000	19.1
36	1,1,1-Trichloroethane	97	9.544	9.544	(0.939)	389734	20.0000	19.8
129	Cyclohexane	56	9.630	9.630	(0.947)	408070	20.0000	18.5
34	1,1-Dichloropropene	75	9.688	9.689	(0.953)	321437	20.0000	19.3
131	n-Butyl alcohol	56	10.228	10.234	(1.006)	809979	2000.00	1920
33	Carbon tetrachloride	117	9.731	9.726	(0.957)	349308	20.0000	19.6
37	1,2-Dichloroethane	62	9.918	9.913	(0.976)	340849	20.0000	18.7
38	Benzene	78	9.929	9.929	(0.977)	1059853	20.0000	18.8
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2510442	50.0000	
39	Trichloroethylene	95	10.538	10.538	(1.037)	242316	20.0000	18.8
41	1,2-Dichloropropane	63	10.778	10.778	(1.060)	261791	20.0000	18.9
130	Methylcyclohexane	83	10.767	10.768	(1.059)	447982	20.0000	19.7
45	Bromodichloromethane	83	11.008	11.008	(1.083)	342260	20.0000	19.9
43	Dibromomethane	93	10.917	10.917	(1.074)	152929	20.0000	19.2
44	2-Chloroethylvinyl ether	63	11.195	11.195	(1.101)	684045	100.000	88.0
49	4-Methyl-2-pentanone	58	11.505	11.505	(0.877)	472433	100.000	105
46	cis-1,3-Dichloropropylene	75	11.425	11.425	(1.124)	376771	20.0000	19.0
$ 47	Toluene-d8	98	11.718	11.713	(0.894)	847883	20.0000	19.7
50	Toluene	92	11.782	11.783	(0.899)	617733	20.0000	19.2
53	trans-1,3-Dichloropropylene	75	11.921	11.922	(0.909)	335400	20.0000	19.3
54	1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	170616	20.0000	19.0
55	2-Hexanone	43	12.279	12.280	(0.936)	797620	100.000	101
52	1,3-Dichloropropane	76	12.306	12.306	(0.938)	352908	20.0000	19.6
56	Tetrachloroethylene	164	12.322	12.322	(0.940)	203479	20.0000	20.5
57	Dibromochloromethane	129	12.552	12.552	(0.957)	212999	20.0000	20.3
59	1,2-Dibromoethane	107	12.712	12.712	(0.969)	189100	20.0000	20.0
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1616714	50.0000	
62	Chlorobenzene	112	13.139	13.140	(1.002)	633103	20.0000	19.3
60	1,1,1,2-Tetrachloroethane	131	13.193	13.188	(1.006)	222720	20.0000	19.1
58	Ethylbenzene	91	13.187	13.188	(1.006)	1078277	20.0000	18.3
63	m,p-Xylenes	106	13.284	13.284	(1.013)	832510	40.0000	40.3
64	o-Xylene	106	13.690	13.690	(1.044)	396858	20.0000	20.1
65	Styrene	104	13.695	13.695	(1.044)	640629	20.0000	21.2
66	Bromoform	173	13.957	13.957	(0.904)	133839	20.0000	19.4
67	Isopropylbenzene	105	14.021	14.021	(0.908)	941072	20.0000	20.0
73	1,1,2,2-Tetrachloroethane	83	14.299	14.299	(0.926)	249433	20.0000	19.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	286918	20.0000	19.8
	74 1,2,3-Trichloropropane	110	14.389	14.390	(0.932)	72943	20.0000	20.2(Q)
	75 Bromobenzene	156	14.438	14.433	(0.935)	264386	20.0000	20.1
	76 n-Propylbenzene	91	14.427	14.427	(0.935)	1215722	20.0000	20.2
	77 2-Chlorotoluene	91	14.587	14.582	(0.945)	842489	20.0000	20.1
	78 1,3,5-Trimethylbenzene	105	14.571	14.566	(0.944)	831151	20.0000	20.0
	80 4-Chlorotoluene	91	14.683	14.684	(0.951)	677445	20.0000	19.1
	81 tert-Butylbenzene	119	14.945	14.945	(0.968)	833818	20.0000	20.6
	79 1,2,4-Trimethylbenzene	105	14.982	14.983	(0.971)	849757	20.0000	20.4
	83 sec-Butylbenzene	105	15.169	15.170	(0.983)	1109268	20.0000	19.7
	84 4-Isopropyltoluene	119	15.287	15.287	(0.990)	807561	20.0000	18.0
	85 1,3-Dichlorobenzene	146	15.378	15.378	(0.996)	456965	20.0000	19.2
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	799965	50.0000	
	87 1,4-Dichlorobenzene	146	15.463	15.464	(1.002)	484427	20.0000	19.3
	89 n-Butylbenzene	91	15.746	15.747	(1.020)	774552	20.0000	19.4
	90 1,2-Dichlorobenzene	146	15.917	15.918	(1.031)	435586	20.0000	19.2
	92 1,2-Dibromo-3-chloropropane	157	16.863	16.863	(1.092)	52325	20.0000	19.8
	93 1,2,4-Trichlorobenzene	180	18.038	18.033	(1.169)	246499	20.0000	17.0
	94 Hexachlorobutadiene	225	18.215	18.209	(1.180)	191322	20.0000	18.3
	95 Naphthalene	128	18.498	18.498	(1.198)	651213	20.0000	17.6
	96 1,2,3-Trichlorobenzene	180	18.888	18.899	(1.224)	254722	20.0000	16.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA7.i/081205.b/7w508.d

Date : 12-AUG-2005 17:56

Client ID: VSTD020

Instrument: VOA7.i

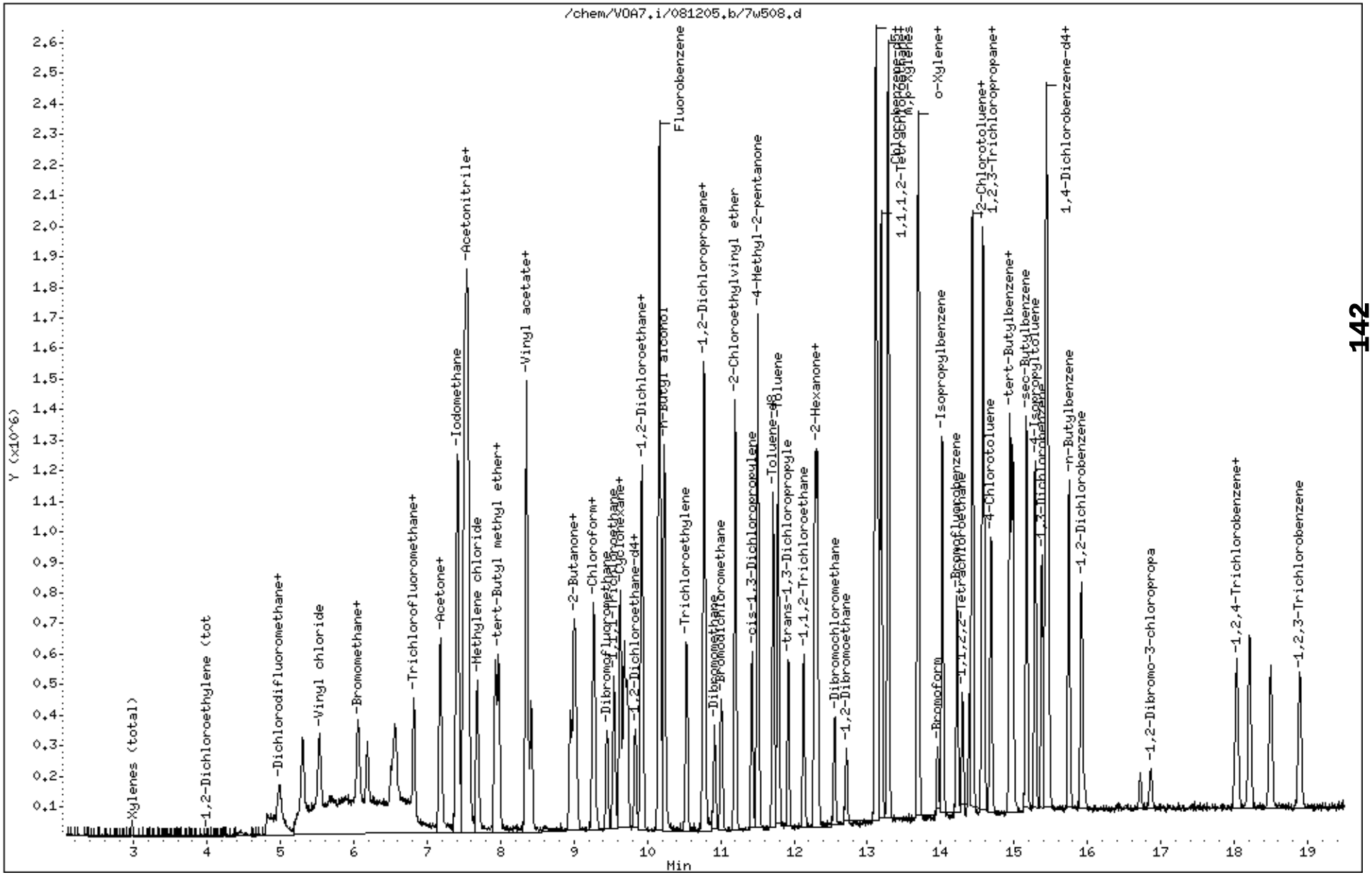
Sample Info: |W7VM050812-05|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w509.d
Lab Smp Id: W7VM050812-06 Client Smp ID: VSTD050
Inj Date : 12-AUG-2005 18:23
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7VM050812-06|ICAL|1|VOAF|1||
Misc Info : VSTD050 5uL+5uL UVM050616-07B+UVM050810-07A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 21:57 Cal File: 7w517.d
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

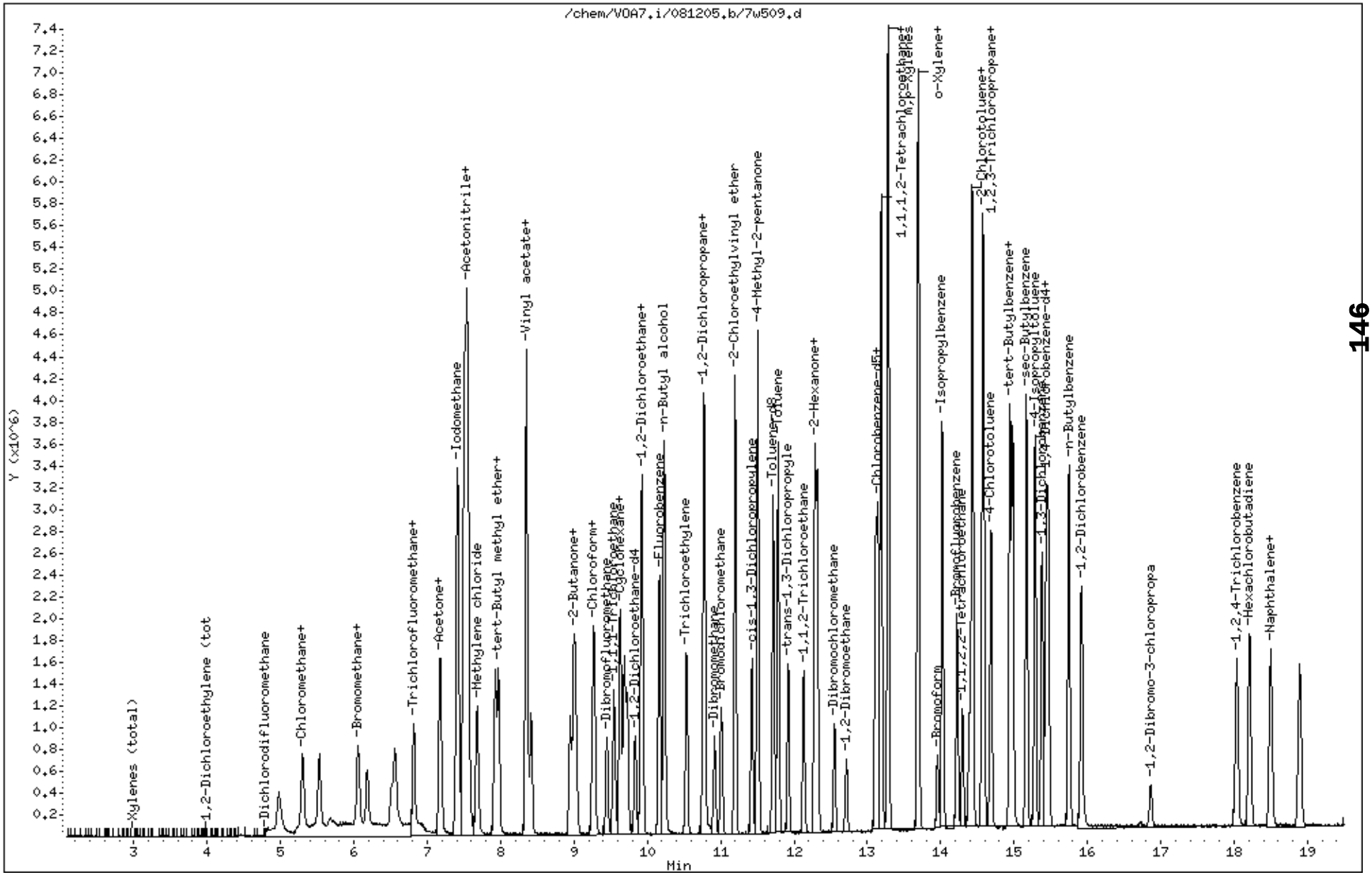
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				3696783	150.000	170
M 2 1,2-Dichloroethylene (total)	96				1411374	100.000	102
M 136 1,3-Dichloropropylene	100				1956249	100.000	101
3 Dichlorodifluoromethane	85	4.977	4.982	(0.490)	989232	50.0000	52.5
4 Chloromethane	50	5.297	5.308	(0.521)	1211450	50.0000	48.7
5 Vinyl chloride	62	5.532	5.532	(0.544)	1148773	50.0000	49.7
6 Bromomethane	94	6.061	6.061	(0.596)	746465	50.0000	46.8
7 Chloroethane	64	6.179	6.189	(0.608)	666411	50.0000	50.8
8 Trichlorofluoromethane	101	6.563	6.558	(0.646)	1388820	50.0000	51.0
134 Ethyl Ether	59	6.814	6.814	(0.670)	668214	50.0000	53.3
10 Acetone	43	7.172	7.172	(0.706)	1009047	250.000	216
15 Acetonitrile	41	7.498	7.498	(0.738)	2339281	1250.00	1170
11 1,1-Dichloroethylene	61	7.178	7.178	(0.706)	970879	50.0000	48.2
128 Methyl acetate	43	7.498	7.498	(0.738)	2523094	250.000	252
13 Iodomethane	142	7.413	7.413	(0.729)	5545399	250.000	259
17 Methylene chloride	84	7.680	7.685	(0.756)	729853	50.0000	48.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	14 Carbon disulfide	76	7.541	7.546	(0.742)	12230023	250.000	236
	20 tert-Butyl methyl ether	73	7.926	7.926	(0.780)	1857234	50.0000	51.1
	21 trans-1,2-Dichloroethylene	96	7.974	7.974	(0.784)	682835	50.0000	50.7
	23 Vinyl acetate	43	8.353	8.353	(0.822)	7406543	250.000	284
	22 1,1-Dichloroethane	63	8.417	8.417	(0.828)	1250977	50.0000	49.8
	30 2-Butanone	43	8.951	8.946	(0.881)	1572480	250.000	239
	31 cis-1,2-Dichloroethylene	96	8.994	8.999	(0.885)	728539	50.0000	51.5
	25 2,2-Dichloropropane	77	9.021	9.021	(0.888)	1022609	50.0000	50.0
	32 Chloroform	83	9.277	9.277	(0.913)	1212620	50.0000	50.6
	29 Bromochloromethane	128	9.261	9.261	(0.911)	337641	50.0000	51.9
$	135 1,2-Dichloroethane-d4	65	9.833	9.838	(0.967)	780946	50.0000	49.7
$	35 Dibromofluoromethane	113	9.448	9.448	(0.930)	636401	50.0000	49.6
	36 1,1,1-Trichloroethane	97	9.544	9.544	(0.939)	1023331	50.0000	50.9
	129 Cyclohexane	56	9.630	9.630	(0.947)	1136072	50.0000	50.5
	34 1,1-Dichloropropene	75	9.688	9.689	(0.953)	889649	50.0000	52.4
	131 n-Butyl alcohol	56	10.233	10.234	(1.007)	2319662	5000.00	5390
	33 Carbon tetrachloride	117	9.726	9.726	(0.957)	921278	50.0000	50.8
	37 1,2-Dichloroethane	62	9.913	9.913	(0.975)	927086	50.0000	50.0
	38 Benzene	78	9.929	9.929	(0.977)	2860830	50.0000	49.8
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	2559034	50.0000	
	39 Trichloroethylene	95	10.533	10.538	(1.036)	662243	50.0000	50.4
	41 1,2-Dichloropropane	63	10.784	10.778	(1.061)	723170	50.0000	51.3
	130 Methylcyclohexane	83	10.768	10.768	(1.059)	1264089	50.0000	54.5
	45 Bromodichloromethane	83	11.008	11.008	(1.083)	888288	50.0000	50.6
	43 Dibromomethane	93	10.917	10.917	(1.074)	406080	50.0000	49.9
	44 2-Chloroethylvinyl ether	63	11.195	11.195	(1.101)	2050961	250.000	238
	49 4-Methyl-2-pentanone	58	11.505	11.505	(0.877)	1308964	250.000	273
	46 cis-1,3-Dichloropropylene	75	11.425	11.425	(1.124)	1031723	50.0000	51.1
$	47 Toluene-d8	98	11.713	11.713	(0.893)	2371859	50.0000	51.7
	50 Toluene	92	11.783	11.783	(0.899)	1739947	50.0000	50.6
	53 trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	924526	50.0000	49.7
	54 1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	454073	50.0000	47.5
	55 2-Hexanone	43	12.285	12.280	(0.937)	2290771	250.000	272
	52 1,3-Dichloropropane	76	12.306	12.306	(0.938)	998102	50.0000	52.0
	56 Tetrachloroethylene	164	12.322	12.322	(0.940)	555634	50.0000	52.4
	57 Dibromochloromethane	129	12.552	12.552	(0.957)	586959	50.0000	52.4
	59 1,2-Dibromoethane	107	12.712	12.712	(0.969)	511474	50.0000	50.7
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1725645	50.0000	
	62 Chlorobenzene	112	13.140	13.140	(1.002)	1757362	50.0000	50.2
	60 1,1,1,2-Tetrachloroethane	131	13.188	13.188	(1.006)	656021	50.0000	52.6
	58 Ethylbenzene	91	13.188	13.188	(1.006)	3170663	50.0000	46.9
	63 m,p-Xylenes	106	13.284	13.284	(1.013)	2476828	100.000	112
	64 o-Xylene	106	13.690	13.690	(1.044)	1219955	50.0000	57.8
	65 Styrene	104	13.695	13.695	(1.044)	2040082	50.0000	63.2
	66 Bromoform	173	13.957	13.957	(0.904)	389091	50.0000	48.6
	67 Isopropylbenzene	105	14.021	14.021	(0.908)	2896031	50.0000	53.0
	73 1,1,2,2-Tetrachloroethane	83	14.299	14.299	(0.926)	692697	50.0000	46.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	794783	50.0000	47.4
	74 1,2,3-Trichloropropane	110	14.390	14.390	(0.932)	203197	50.0000	48.5
	75 Bromobenzene	156	14.432	14.433	(0.935)	789410	50.0000	51.8
	76 n-Propylbenzene	91	14.427	14.427	(0.935)	3662816	50.0000	52.4
	77 2-Chlorotoluene	91	14.582	14.582	(0.945)	2471659	50.0000	51.0
	78 1,3,5-Trimethylbenzene	105	14.571	14.566	(0.944)	2589982	50.0000	53.9
	80 4-Chlorotoluene	91	14.683	14.684	(0.951)	2089615	50.0000	50.8
	81 tert-Butylbenzene	119	14.945	14.945	(0.968)	2532891	50.0000	53.9
	79 1,2,4-Trimethylbenzene	105	14.983	14.983	(0.971)	2652990	50.0000	55.1
	83 sec-Butylbenzene	105	15.170	15.170	(0.983)	3488845	50.0000	53.6
	84 4-Isopropyltoluene	119	15.287	15.287	(0.990)	2621352	50.0000	46.1
	85 1,3-Dichlorobenzene	146	15.383	15.378	(0.997)	1392103	50.0000	50.4
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	926679	50.0000	
	87 1,4-Dichlorobenzene	146	15.469	15.464	(1.002)	1452982	50.0000	49.9
	89 n-Butylbenzene	91	15.747	15.747	(1.020)	2491702	50.0000	53.9
	90 1,2-Dichlorobenzene	146	15.923	15.918	(1.031)	1318948	50.0000	50.2
	92 1,2-Dibromo-3-chloropropane	157	16.863	16.863	(1.092)	145385	50.0000	46.5
	93 1,2,4-Trichlorobenzene	180	18.033	18.033	(1.168)	816236	50.0000	48.6
	94 Hexachlorobutadiene	225	18.215	18.209	(1.180)	588720	50.0000	48.6
	95 Naphthalene	128	18.498	18.498	(1.198)	2280490	50.0000	53.1
	96 1,2,3-Trichlorobenzene	180	18.893	18.899	(1.224)	858121	50.0000	49.1

Data File: /chem/VOA7.i/081205.b/7w509.d
Date : 12-AUG-2005 18:23
Client ID: VSTD050
Sample Info: |W7VM050812-06|ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: JEB
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w510.d
Lab Smp Id: W7VM050812-07 Client Smp ID: VSTD100
Inj Date : 12-AUG-2005 18:50
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7VM050812-07|ICAL|1|VOAF|1||
Misc Info : VSTD100 5uL+5uL UVM050616-08B+UVM050810-08A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 10 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				8101681	300.000	374
M 2 1,2-Dichloroethylene (total)	96				3057414	200.000	223
M 136 1,3-Dichloropropylene	100				4312545	200.000	224
3 Dichlorodifluoromethane	85	4.982	4.982	(0.490)	1979299	100.000	106(A)
4 Chloromethane	50	5.308	5.308	(0.522)	2375294	100.000	96.1
5 Vinyl chloride	62	5.532	5.532	(0.544)	2376574	100.000	104(A)
6 Bromomethane	94	6.061	6.061	(0.596)	1501515	100.000	94.8
7 Chloroethane	64	6.189	6.189	(0.609)	1305651	100.000	100(A)
8 Trichlorofluoromethane	101	6.558	6.558	(0.645)	2785177	100.000	103(A)
134 Ethyl Ether	59	6.814	6.814	(0.670)	1345399	100.000	108(A)
10 Acetone	43	7.172	7.172	(0.706)	2433867	500.000	526(A)
15 Acetonitrile	41	7.498	7.498	(0.738)	5106536	2500.00	2570(A)
11 1,1-Dichloroethylene	61	7.178	7.178	(0.706)	2408143	100.000	120(A)
128 Methyl acetate	43	7.498	7.498	(0.738)	5447325	500.000	548(A)
13 Iodomethane	142	7.413	7.413	(0.729)	12292933	500.000	578(A)
17 Methylene chloride	84	7.685	7.685	(0.756)	1505084	100.000	101(A)

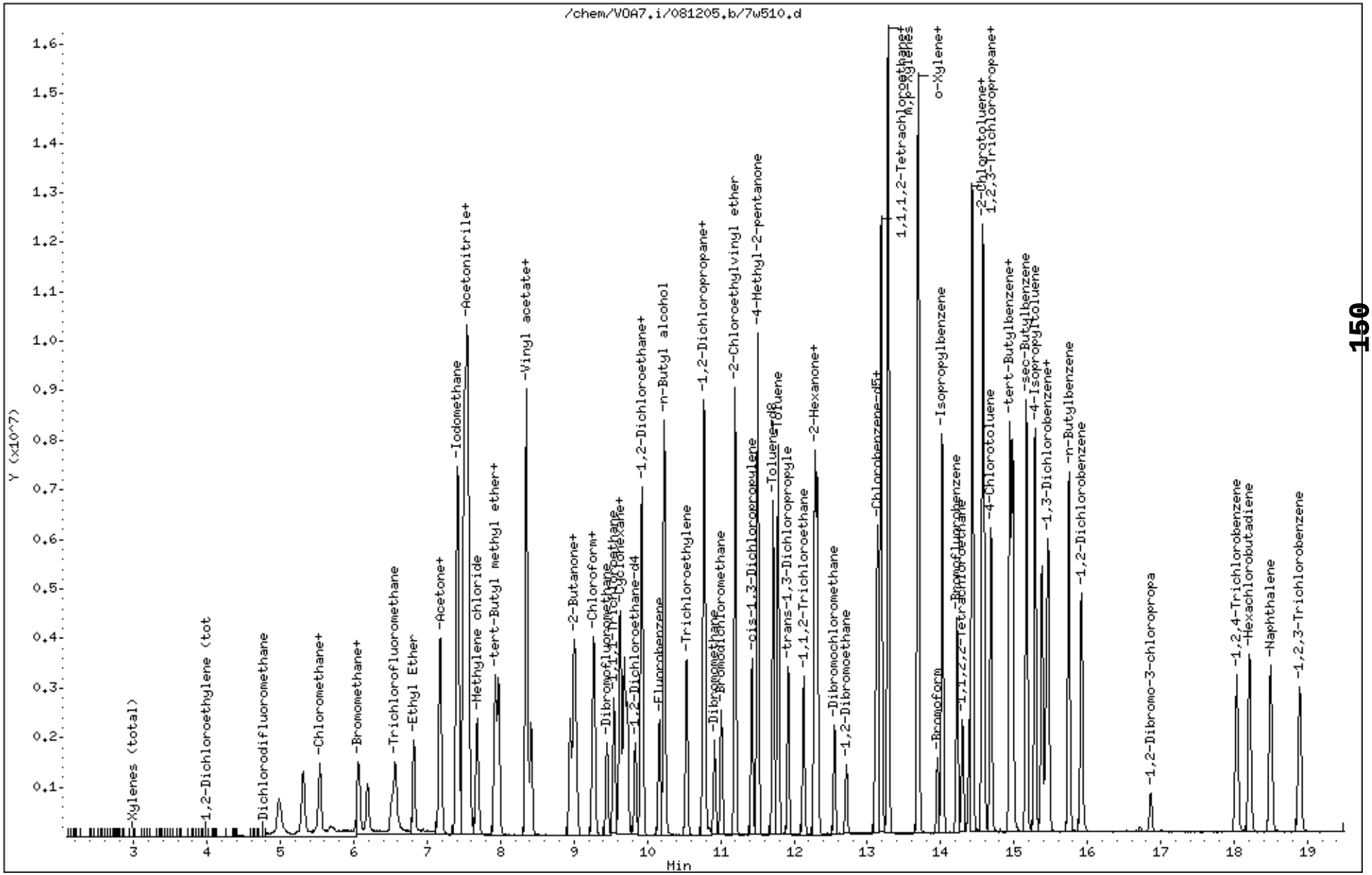
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	14 Carbon disulfide	76	7.546	7.546	(0.742)	26392896	500.000	508(A)
	20 tert-Butyl methyl ether	73	7.926	7.926	(0.780)	4038146	100.000	112(A)
	21 trans-1,2-Dichloroethylene	96	7.974	7.974	(0.784)	1478798	100.000	110(A)
	23 Vinyl acetate	43	8.353	8.353	(0.822)	15515515	500.000	598(A)
	22 1,1-Dichloroethane	63	8.417	8.417	(0.828)	2634705	100.000	106(A)
	30 2-Butanone	43	8.946	8.946	(0.880)	3448023	500.000	528(A)
	31 cis-1,2-Dichloroethylene	96	8.999	8.999	(0.885)	1578616	100.000	112(A)
	25 2,2-Dichloropropane	77	9.021	9.021	(0.888)	2180121	100.000	107(A)
	32 Chloroform	83	9.277	9.277	(0.913)	2541253	100.000	107(A)
	29 Bromochloromethane	128	9.261	9.261	(0.911)	701740	100.000	109(A)
$	135 1,2-Dichloroethane-d4	65	9.838	9.838	(0.968)	1595645	100.000	102(A)
$	35 Dibromofluoromethane	113	9.448	9.448	(0.930)	1324843	100.000	104
	36 1,1,1-Trichloroethane	97	9.544	9.544	(0.939)	2179780	100.000	109(A)
	129 Cyclohexane	56	9.630	9.630	(0.947)	2565109	100.000	115(A)
	34 1,1-Dichloropropene	75	9.689	9.689	(0.953)	1954038	100.000	116(A)
	131 n-Butyl alcohol	56	10.234	10.234	(1.007)	5483986	10000.0	12800(A)
	33 Carbon tetrachloride	117	9.726	9.726	(0.957)	1967644	100.000	109(A)
	37 1,2-Dichloroethane	62	9.913	9.913	(0.975)	1975136	100.000	107(A)
	38 Benzene	78	9.929	9.929	(0.977)	6121638	100.000	107(A)
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	2541684	50.0000	
	39 Trichloroethylene	95	10.538	10.538	(1.037)	1414872	100.000	108(A)
	41 1,2-Dichloropropane	63	10.778	10.778	(1.060)	1518977	100.000	108(A)
	130 Methylcyclohexane	83	10.768	10.768	(1.059)	2836457	100.000	123(A)
	45 Bromodichloromethane	83	11.008	11.008	(1.083)	1891466	100.000	108(A)
	43 Dibromomethane	93	10.917	10.917	(1.074)	848074	100.000	105(A)
	44 2-Chloroethylvinyl ether	63	11.195	11.195	(1.101)	4459822	500.000	507(A)
	49 4-Methyl-2-pentanone	58	11.505	11.505	(0.877)	2874195	500.000	601(A)
	46 cis-1,3-Dichloropropylene	75	11.425	11.425	(1.124)	2235946	100.000	112(A)
$	47 Toluene-d8	98	11.713	11.713	(0.893)	5094082	100.000	111
	50 Toluene	92	11.783	11.783	(0.899)	3787575	100.000	110(A)
	53 trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	2076599	100.000	112(A)
	54 1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	957590	100.000	100(A)
	55 2-Hexanone	43	12.280	12.280	(0.936)	5089749	500.000	605(A)
	52 1,3-Dichloropropane	76	12.306	12.306	(0.938)	2111381	100.000	110(A)
	56 Tetrachloroethylene	164	12.322	12.322	(0.940)	1218390	100.000	115(A)
	57 Dibromochloromethane	129	12.552	12.552	(0.957)	1268027	100.000	113(A)
	59 1,2-Dibromoethane	107	12.712	12.712	(0.969)	1102978	100.000	110(A)
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1721386	50.0000	
	62 Chlorobenzene	112	13.140	13.140	(1.002)	3827166	100.000	110(A)
	60 1,1,1,2-Tetrachloroethane	131	13.188	13.188	(1.006)	1396540	100.000	112(A)
	58 Ethylbenzene	91	13.188	13.188	(1.006)	7021597	100.000	102(A)
	63 m,p-Xylenes	106	13.284	13.284	(1.013)	5470061	200.000	249(A)
	64 o-Xylene	106	13.690	13.690	(1.044)	2631620	100.000	125(A)
	65 Styrene	104	13.695	13.695	(1.044)	4527554	100.000	141(A)
	66 Bromoform	173	13.957	13.957	(0.904)	865760	100.000	108(A)
	67 Isopropylbenzene	105	14.021	14.021	(0.908)	6480263	100.000	119(A)
	73 1,1,2,2-Tetrachloroethane	83	14.299	14.299	(0.926)	1449598	100.000	97.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	1775133	100.000	106
	74 1,2,3-Trichloropropane	110	14.390	14.390	(0.932)	422341	100.000	101(A)
	75 Bromobenzene	156	14.433	14.433	(0.935)	1675662	100.000	110(A)
	76 n-Propylbenzene	91	14.427	14.427	(0.935)	8245156	100.000	118(A)
	77 2-Chlorotoluene	91	14.582	14.582	(0.945)	5461203	100.000	113(A)
	78 1,3,5-Trimethylbenzene	105	14.566	14.566	(0.944)	5855845	100.000	122(A)
	80 4-Chlorotoluene	91	14.684	14.684	(0.951)	4626977	100.000	112(A)
	81 tert-Butylbenzene	119	14.945	14.945	(0.968)	5604798	100.000	119(A)
	79 1,2,4-Trimethylbenzene	105	14.983	14.983	(0.971)	5751335	100.000	119(A)
	83 sec-Butylbenzene	105	15.170	15.170	(0.983)	7889831	100.000	121(A)
	84 4-Isopropyltoluene	119	15.287	15.287	(0.990)	5981227	100.000	102(A)
	85 1,3-Dichlorobenzene	146	15.378	15.378	(0.996)	3076964	100.000	111(A)
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	926585	50.0000	
	87 1,4-Dichlorobenzene	146	15.464	15.464	(1.002)	3043617	100.000	105(A)
	89 n-Butylbenzene	91	15.747	15.747	(1.020)	5480687	100.000	118(A)
	90 1,2-Dichlorobenzene	146	15.918	15.918	(1.031)	2883419	100.000	110(A)
	92 1,2-Dibromo-3-chloropropane	157	16.863	16.863	(1.092)	320293	100.000	102(A)
	93 1,2,4-Trichlorobenzene	180	18.033	18.033	(1.168)	1670450	100.000	99.4
	94 Hexachlorobutadiene	225	18.209	18.209	(1.180)	1207971	100.000	99.7
	95 Naphthalene	128	18.498	18.498	(1.198)	4766103	100.000	111(A)
	96 1,2,3-Trichlorobenzene	180	18.899	18.899	(1.224)	1724457	100.000	98.6

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA7.i/081205.b/7w510.d
Date : 12-AUG-2005 18:50
Client ID: VSTD100
Instrument: VOA7.i
Sample Info: |W7VM050812-07|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w512.d
Lab Smp Id: UVM050727-02A Client Smp ID: VSTD005S
Inj Date : 12-AUG-2005 19:44
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050727-02A|ICAL|1|VOAF|1||
Misc Info : VSTD005S 5uL UVM050727-02A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 19:44 Cal File: 7w512.d
Als bottle: 12 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.023	7.018	(0.691)	16324	5.00000	6.1(a)
12	Trichlorotrifluoroethane	85	7.130	7.130	(0.701)	38932	5.00000	5.9
16	Allyl chloride	76	7.546	7.546	(0.742)	60003	5.00000	8.4
18	Acrylonitrile	53	7.920	7.915	(0.779)	31962	5.00000	8.1(a)
24	2-Chloro-1,3-butadiene	53	8.508	8.503	(0.837)	25130	1.00000	2.5
28	Propionitrile	54	9.026	9.037	(0.888)	9499	5.00000	12.9
26	Ethyl acetate	43	8.930	8.935	(0.879)	75260	5.00000	9.9
27	Methacrylonitrile	41	9.192	9.192	(0.904)	35278	5.00000	12.0
19	Isobutyl alcohol	41	9.576	9.571	(0.942)	28953	50.0000	51.7
72	Tetrahydrofuran	42	9.309	9.309	(0.603)	46722	5.00000	4.9(a)
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2180472	50.0000	
42	Methyl methacrylate	69	10.725	10.720	(1.055)	29823	5.00000	15.1
97	1,4-Dioxane	88	10.864	10.864	(1.069)	7371	50.0000	52.8
48	2-Nitropropane	43	11.211	11.206	(1.103)	22203	5.00000	16.2(Q)
51	Ethyl methacrylate	69	11.900	11.900	(0.908)	49901	5.00000	17.6
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1382354	50.0000	

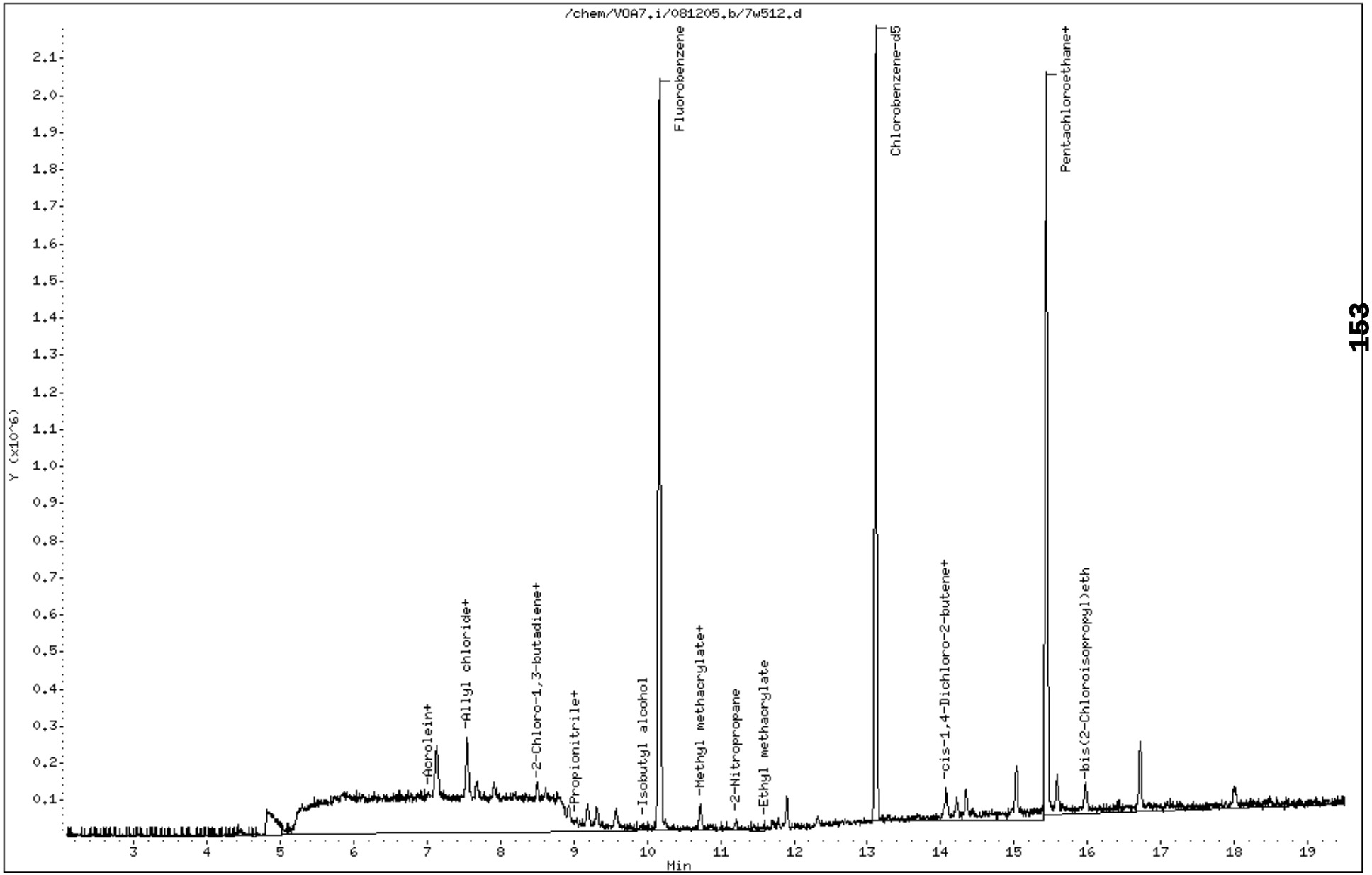
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
70	Cyclohexanone	55	14.203	14.203	(1.083)	12049	25.0000	88.3
68	cis-1,4-Dichloro-2-butene	53	14.075	14.075	(0.912)	20830	5.00000	4.9(a)
69	trans-1,4-Dichloro-2-butene	53	14.336	14.342	(0.929)	18678	5.00000	4.7(a)
82	Pentachloroethane	167	15.036	15.031	(0.974)	31650	5.00000	4.8(a)
* 86	1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	640151	50.0000	
88	Benzyl chloride	91	15.581	15.587	(1.009)	95531	5.00000	16.1
91	bis(2-Chloroisopropyl)ether	45	15.987	15.987	(1.036)	29912	5.00000	5.2

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA7.i/081205.b/7w512.d
Date : 12-AUG-2005 19:44
Client ID: VSTD005S
Sample Info: |UVM050727-02A|ICAL|1|VOAF|1||
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA7.i
Operator: JEB
Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w513.d
Lab Smp Id: UVM050727-03A Client Smp ID: VSTD010S
Inj Date : 12-AUG-2005 20:11
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050727-03A|ICAL|1|VOAF|1||
Misc Info : VSTD010S 5uL UVM050727-03A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 20:11 Cal File: 7w513.d
Als bottle: 13 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.023	7.018	(0.691)	27975	10.0000	9.8(aQ)
12	Trichlorotrifluoroethane	85	7.124	7.130	(0.701)	75669	10.0000	10.8
16	Allyl chloride	76	7.546	7.546	(0.742)	89487	10.0000	11.2(Q)
18	Acrylonitrile	53	7.915	7.915	(0.779)	40705	10.0000	9.3(a)
24	2-Chloro-1,3-butadiene	53	8.502	8.503	(0.837)	28293	2.00000	2.6
28	Propionitrile	54	9.031	9.037	(0.889)	16193	10.0000	15.1
26	Ethyl acetate	43	8.935	8.935	(0.879)	105140	10.0000	11.5
27	Methacrylonitrile	41	9.191	9.192	(0.904)	64028	10.0000	14.6
19	Isobutyl alcohol	41	9.571	9.571	(0.942)	49576	100.000	83.3
72	Tetrahydrofuran	42	9.309	9.309	(0.603)	55259	10.0000	5.8
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2319611	50.0000	
42	Methyl methacrylate	69	10.719	10.720	(1.055)	58655	10.0000	17.5
97	1,4-Dioxane	88	10.880	10.864	(1.070)	11644	100.000	78.5
48	2-Nitropropane	43	11.216	11.206	(1.104)	37025	10.0000	18.8
51	Ethyl methacrylate	69	11.900	11.900	(0.908)	95155	10.0000	19.6
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1468051	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	70 Cyclohexanone	55	14.203	14.203	(1.083)	23300	50.0000	102
	68 cis-1,4-Dichloro-2-butene	53	14.074	14.075	(0.912)	40744	10.0000	8.8
	69 trans-1,4-Dichloro-2-butene	53	14.347	14.342	(0.929)	38143	10.0000	8.8
	82 Pentachloroethane	167	15.025	15.031	(0.973)	58688	10.0000	8.3
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	690738	50.0000	
	88 Benzyl chloride	91	15.591	15.587	(1.010)	177842	10.0000	18.6
	91 bis(2-Chloroisopropyl)ether	45	15.981	15.987	(1.035)	52978	10.0000	8.5

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA7.i/081205.b/7w513.d

Page 1

Date : 12-AUG-2005 20:11

Client ID: VSTD010S

Instrument: VOA7.i

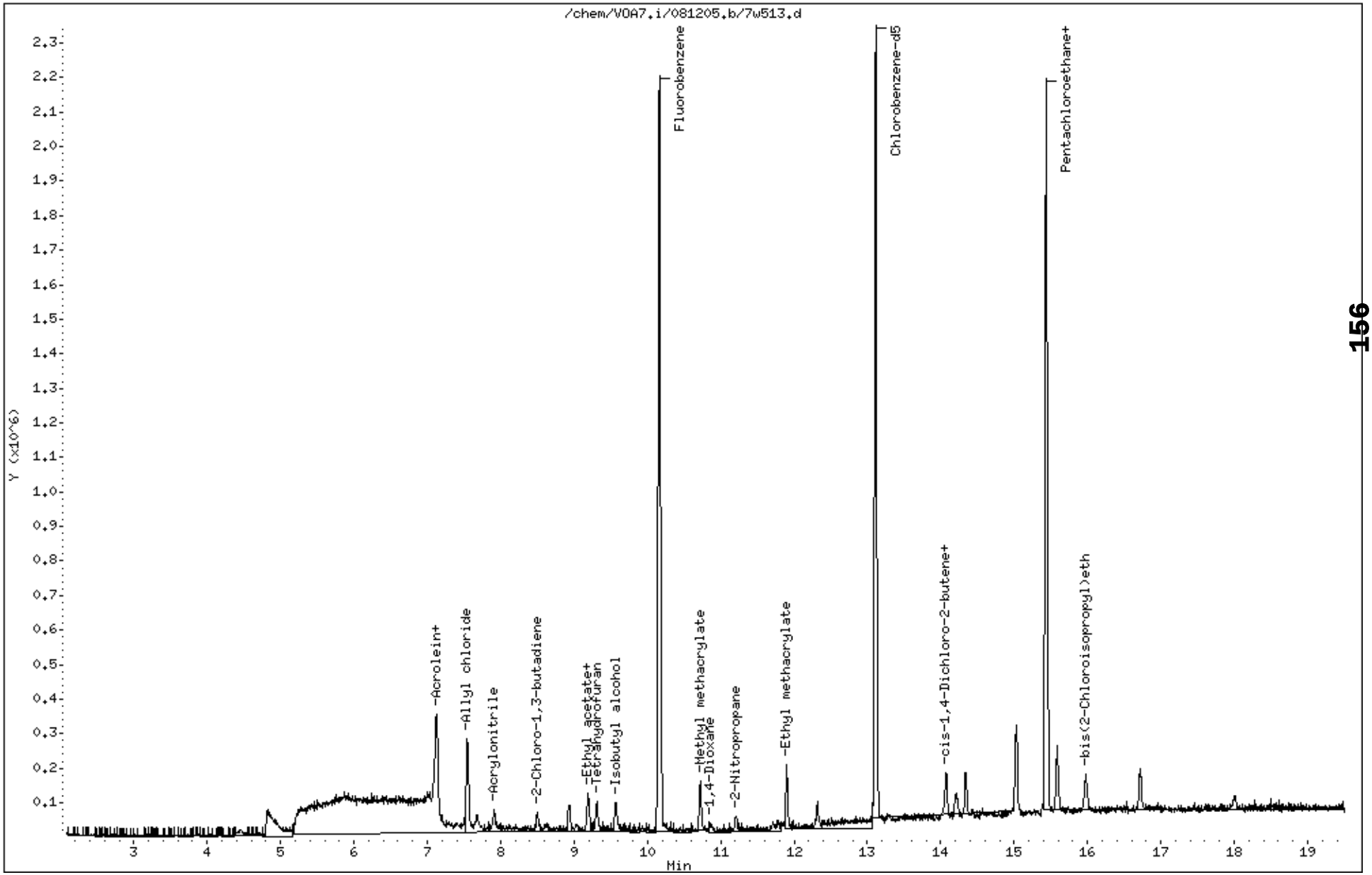
Sample Info: |UVM050727-03A|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



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General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w514.d
Lab Smp Id: UVM050727-04A Client Smp ID: VSTD025S
Inj Date : 12-AUG-2005 20:38
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050727-04A|ICAL|1|VOAF|1||
Misc Info : VSTD025S 5uL UVM050727-04A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 20:38 Cal File: 7w514.d
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.017	7.018	(0.690)	68035	25.0000	25.7
12	Trichlorotrifluoroethane	85	7.135	7.130	(0.702)	153285	25.0000	23.6
16	Allyl chloride	76	7.552	7.546	(0.743)	180751	25.0000	22.9
18	Acrylonitrile	53	7.915	7.915	(0.779)	106122	25.0000	22.2
24	2-Chloro-1,3-butadiene	53	8.503	8.503	(0.837)	73998	5.00000	4.9
28	Propionitrile	54	9.037	9.037	(0.889)	43579	25.0000	26.5
26	Ethyl acetate	43	8.935	8.935	(0.879)	276876	25.0000	24.0
27	Methacrylonitrile	41	9.192	9.192	(0.904)	172409	25.0000	26.7
19	Isobutyl alcohol	41	9.571	9.571	(0.942)	125725	250.000	228
72	Tetrahydrofuran	42	9.315	9.309	(0.603)	115523	25.0000	19.8
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2143149	50.0000	
42	Methyl methacrylate	69	10.720	10.720	(1.055)	167784	25.0000	28.4
97	1,4-Dioxane	88	10.869	10.864	(1.069)	31349	250.000	229
48	2-Nitropropane	43	11.211	11.206	(1.103)	90137	25.0000	30.7
51	Ethyl methacrylate	69	11.900	11.900	(0.908)	268693	25.0000	28.9
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1371795	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	14.208	14.203	(1.084)	60060	125.000	155
68	cis-1,4-Dichloro-2-butene	53	14.075	14.075	(0.912)	96225	25.0000	23.2
69	trans-1,4-Dichloro-2-butene	53	14.342	14.342	(0.929)	86476	25.0000	22.2
82	Pentachloroethane	167	15.031	15.031	(0.974)	150689	25.0000	23.7
* 86	1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	622691	50.0000	
88	Benzyl chloride	91	15.586	15.587	(1.010)	465554	25.0000	30.0
91	bis(2-Chloroisopropyl)ether	45	15.987	15.987	(1.036)	127991	25.0000	22.9

Data File: /chem/VOA7.i/081205.b/7w514.d

Date : 12-AUG-2005 20:38

Client ID: VSTD025S

Instrument: VOA7.i

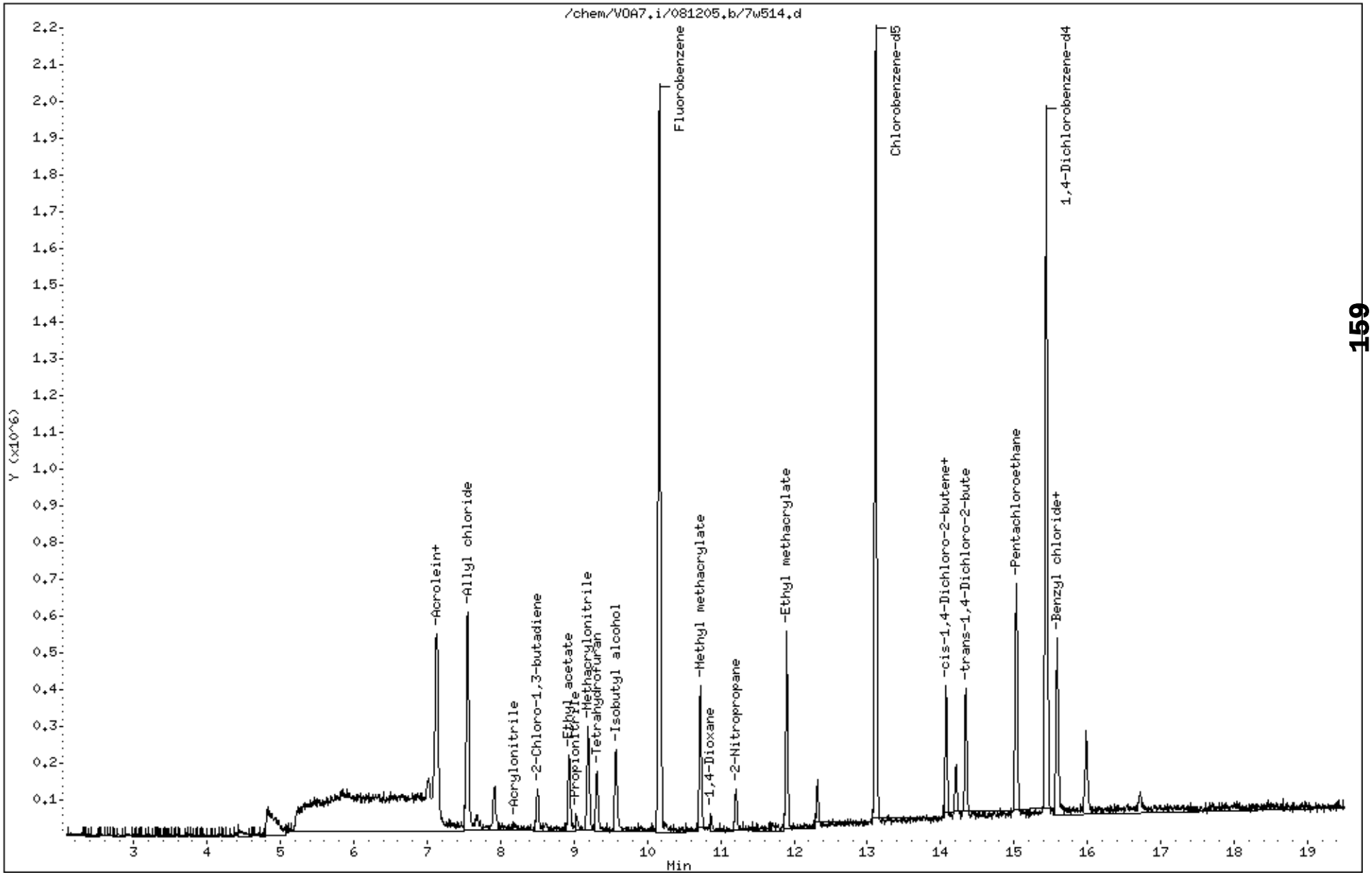
Sample Info: |UVM050727-04A|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w515.d
Lab Smp Id: UVM050727-05A Client Smp ID: VSTD050S
Inj Date : 12-AUG-2005 21:03
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050727-05A|ICAL|1|VOAF|1||
Misc Info : VSTD050S 5uL UVM050727-05A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 21:03 Cal File: 7w515.d
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.017	7.018	(0.690)	133167	50.0000	41.2
12	Trichlorotrifluoroethane	85	7.130	7.130	(0.701)	358959	50.0000	45.2
16	Allyl chloride	76	7.546	7.546	(0.742)	462240	50.0000	46.4
18	Acrylonitrile	53	7.915	7.915	(0.779)	280604	50.0000	45.4
24	2-Chloro-1,3-butadiene	53	8.503	8.503	(0.837)	213361	10.0000	9.7
28	Propionitrile	54	9.037	9.037	(0.889)	113327	50.0000	46.0
26	Ethyl acetate	43	8.930	8.935	(0.879)	702785	50.0000	44.9
27	Methacrylonitrile	41	9.192	9.192	(0.904)	415714	50.0000	44.5
19	Isobutyl alcohol	41	9.571	9.571	(0.942)	315470	500.000	470
72	Tetrahydrofuran	42	9.309	9.309	(0.603)	255465	50.0000	52.5
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2616780	50.0000	
42	Methyl methacrylate	69	10.720	10.720	(1.055)	470232	50.0000	49.3
97	1,4-Dioxane	88	10.869	10.864	(1.069)	81836	500.000	489
48	2-Nitropropane	43	11.206	11.206	(1.102)	261270	50.0000	56.9
51	Ethyl methacrylate	69	11.906	11.900	(0.908)	571156	50.0000	47.5
* 61	Chlorobenzene-d5	117	13.118	13.113	(1.000)	1242175	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	14.208	14.203	(1.083)	137258	250.000	281
68	cis-1,4-Dichloro-2-butene	53	14.074	14.075	(0.912)	177428	50.0000	45.0
69	trans-1,4-Dichloro-2-butene	53	14.347	14.342	(0.929)	168563	50.0000	45.6
82	Pentachloroethane	167	15.031	15.031	(0.974)	295049	50.0000	48.8
* 86	1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	591791	50.0000	
88	Benzyl chloride	91	15.592	15.587	(1.010)	896237	50.0000	47.8
91	bis(2-Chloroisopropyl)ether	45	15.982	15.987	(1.035)	234620	50.0000	44.2

Data File: /chem/VOA7.i/081205.b/7w515.d

Page 1

Date : 12-AUG-2005 21:03

Client ID: VSTD050S

Instrument: VOA7.i

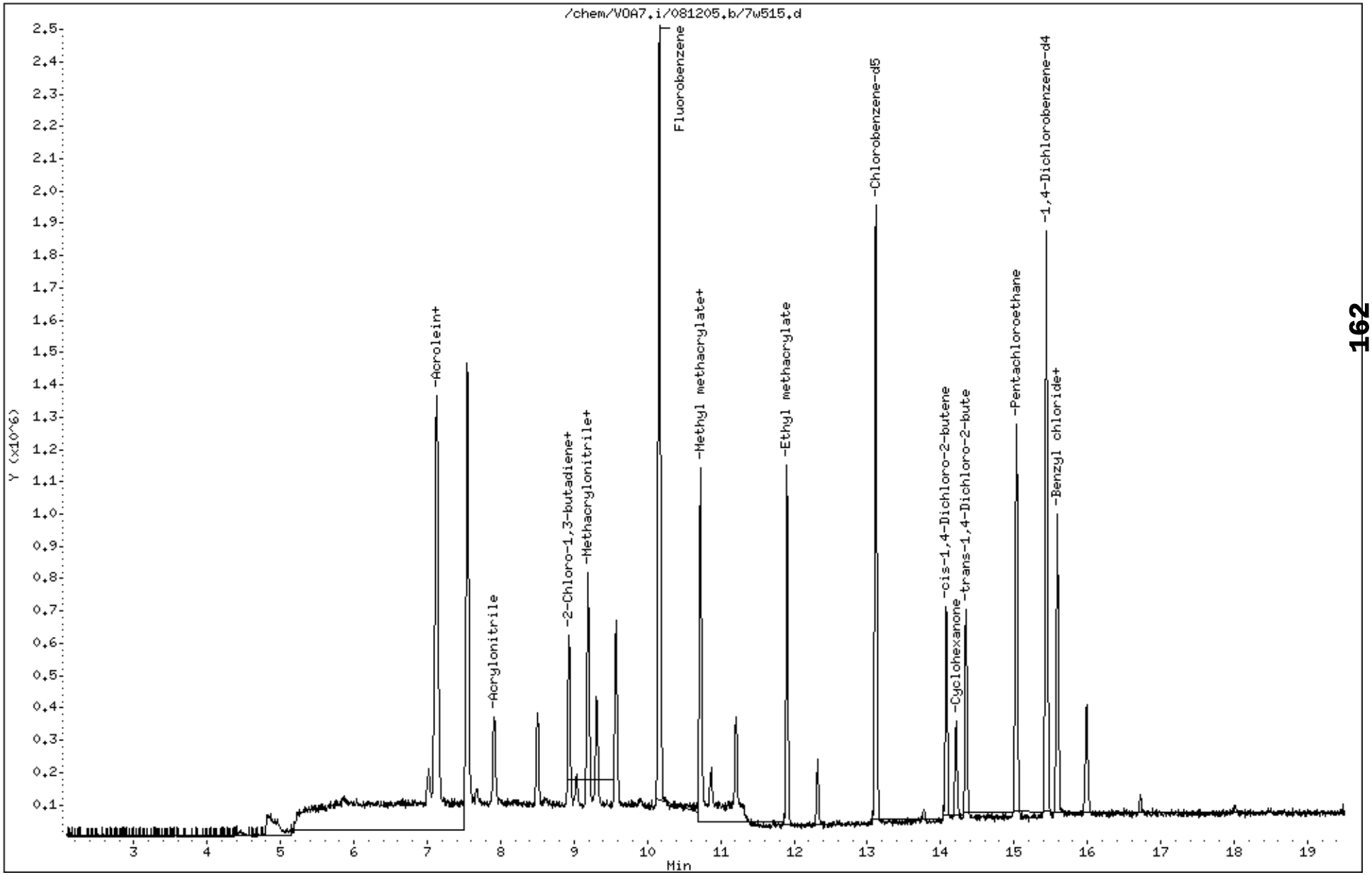
Sample Info: |UVM050727-05A|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w516.d
Lab Smp Id: UVM050727-06A Client Smp ID: VSTD100S
Inj Date : 12-AUG-2005 21:30
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050727-06A|ICAL|1|VOAF|1||
Misc Info : VSTD100S 5uL UVM050727-06A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 21:30 Cal File: 7w516.d
Als bottle: 16 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.017	7.018	(0.690)	255888	100.000	79.5
12	Trichlorotrifluoroethane	85	7.130	7.130	(0.701)	703064	100.000	88.9
16	Allyl chloride	76	7.546	7.546	(0.742)	889444	100.000	88.2
18	Acrylonitrile	53	7.915	7.915	(0.779)	570897	100.000	90.2
24	2-Chloro-1,3-butadiene	53	8.497	8.503	(0.836)	411249	20.0000	17.6
28	Propionitrile	54	9.037	9.037	(0.889)	230957	100.000	84.6
26	Ethyl acetate	43	8.935	8.935	(0.879)	1400441	100.000	85.0
27	Methacrylonitrile	41	9.192	9.192	(0.904)	855605	100.000	83.1
19	Isobutyl alcohol	41	9.576	9.571	(0.942)	667682	1000.00	997
72	Tetrahydrofuran	42	9.309	9.309	(0.603)	497963	100.000	109
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2608690	50.0000	
42	Methyl methacrylate	69	10.725	10.720	(1.055)	976386	100.000	89.4
97	1,4-Dioxane	88	10.864	10.864	(1.069)	165787	1000.00	994
48	2-Nitropropane	43	11.211	11.206	(1.103)	371781	100.000	76.3
51	Ethyl methacrylate	69	11.906	11.900	(0.908)	1285566	100.000	88.4
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1236159	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	14.213	14.203	(1.084)	217693	500.000	406
68	cis-1,4-Dichloro-2-butene	53	14.074	14.075	(0.912)	381140	100.000	98.3
69	trans-1,4-Dichloro-2-butene	53	14.342	14.342	(0.929)	367895	100.000	101
82	Pentachloroethane	167	15.036	15.031	(0.974)	585862	100.000	98.6
* 86	1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	581374	50.0000	
88	Benzyl chloride	91	15.592	15.587	(1.010)	1894774	100.000	88.4
91	bis(2-Chloroisopropyl)ether	45	15.987	15.987	(1.036)	495764	100.000	95.0

Data File: /chem/VOA7.i/081205.b/7w516.d

Date : 12-AUG-2005 21:30

Client ID: VSTD100S

Instrument: VOA7.i

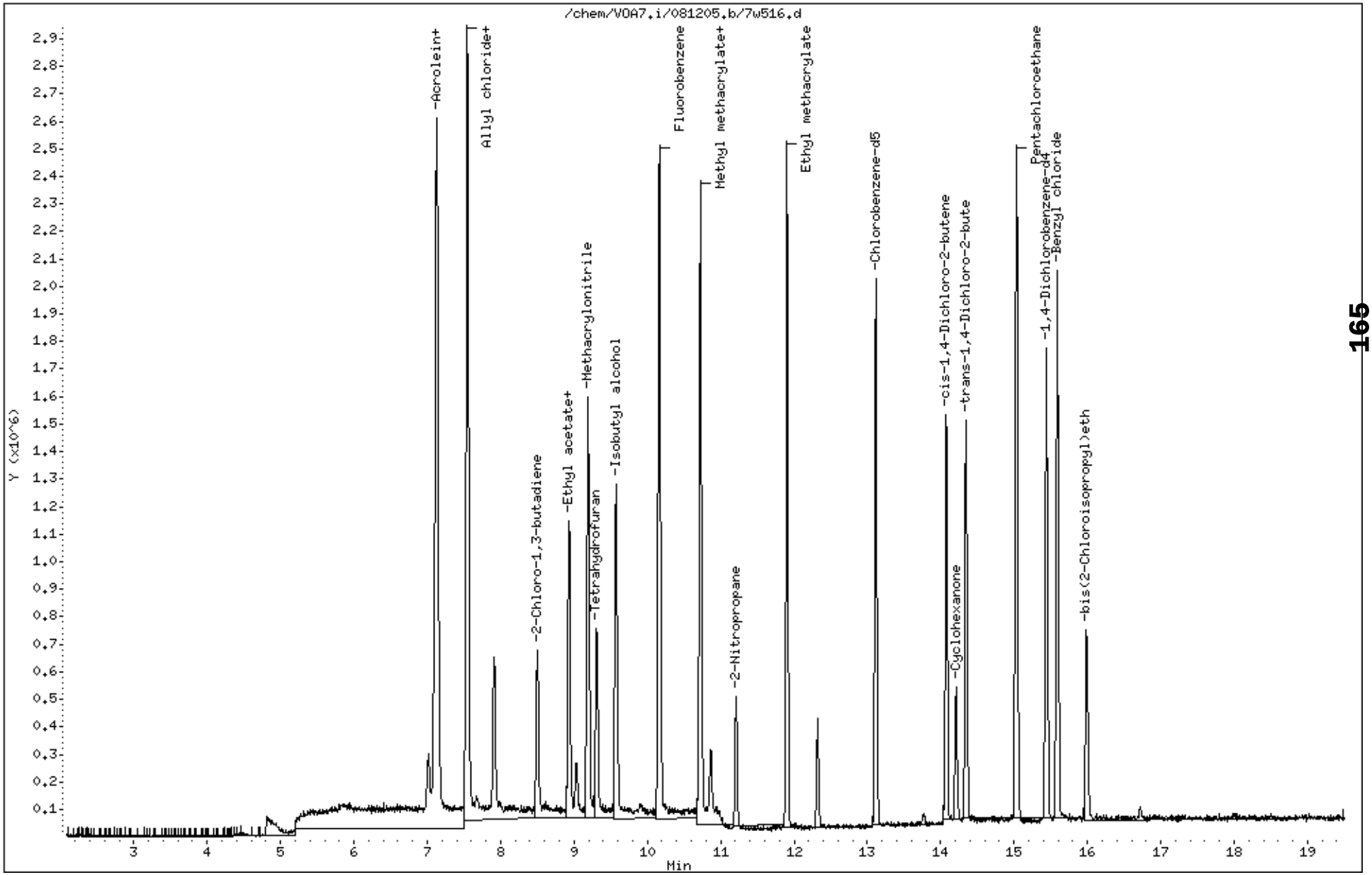
Sample Info: |UVM050727-06A|ICAL|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w517.d
Lab Smp Id: UVM050727-07A Client Smp ID: VSTD250S
Inj Date : 12-AUG-2005 21:57
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050727-07A|ICAL|1|VOAF|1||
Misc Info : VSTD250S 5uL UVM050727-07A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 21:57 Cal File: 7w517.d
Als bottle: 17 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

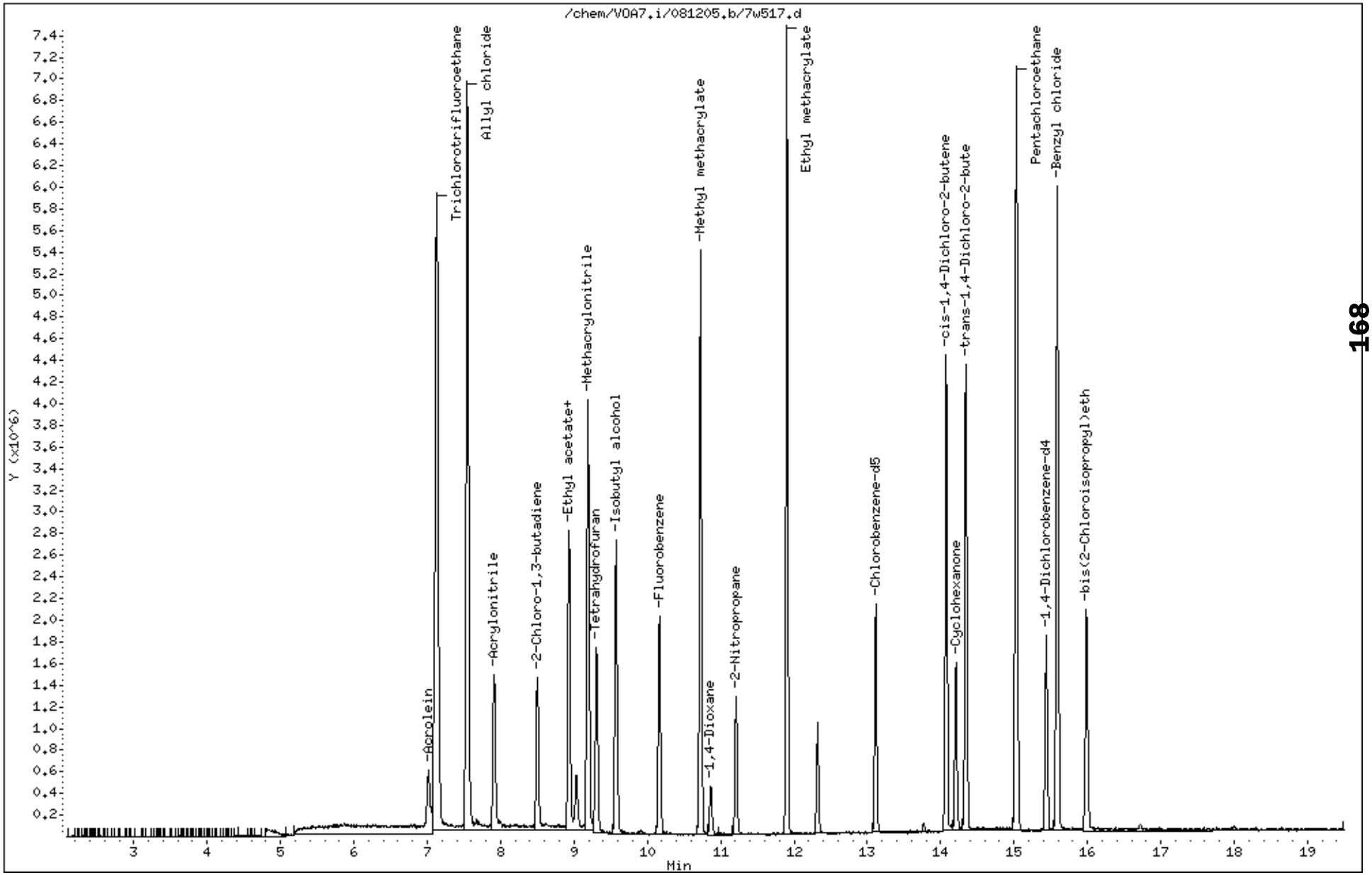
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.023	7.018	(0.691)	671284	250.000	264
12	Trichlorotrifluoroethane	85	7.130	7.130	(0.701)	1632843	250.000	261
16	Allyl chloride	76	7.546	7.546	(0.742)	2206380	250.000	274
18	Acrylonitrile	53	7.915	7.915	(0.779)	1420014	250.000	279
24	2-Chloro-1,3-butadiene	53	8.497	8.503	(0.836)	987402	50.0000	50.8
28	Propionitrile	54	9.031	9.037	(0.889)	594831	250.000	255
26	Ethyl acetate	43	8.930	8.935	(0.879)	3756177	250.000	277
27	Methacrylonitrile	41	9.192	9.192	(0.904)	2302260	250.000	263
19	Isobutyl alcohol	41	9.576	9.571	(0.942)	1416350	2500.00	2680
72	Tetrahydrofuran	42	9.309	9.309	(0.603)	1191890	250.000	250
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	2060802	50.0000	
42	Methyl methacrylate	69	10.725	10.720	(1.055)	2181800	250.000	230
97	1,4-Dioxane	88	10.864	10.864	(1.069)	336632	2500.00	2550
48	2-Nitropropane	43	11.211	11.206	(1.103)	992660	250.000	230
51	Ethyl methacrylate	69	11.900	11.900	(0.908)	3912236	250.000	226
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1307263	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	14.208	14.203	(1.084)	706741	1250.00	1100
68	cis-1,4-Dichloro-2-butene	53	14.074	14.075	(0.911)	1116800	250.000	270
69	trans-1,4-Dichloro-2-butene	53	14.342	14.342	(0.929)	1060852	250.000	273
82	Pentachloroethane	167	15.031	15.031	(0.973)	1670897	250.000	264
* 86	1,4-Dichlorobenzene-d4	152	15.442	15.437	(1.000)	620384	50.0000	
88	Benzyl chloride	91	15.586	15.587	(1.009)	5748187	250.000	228
91	bis(2-Chloroisopropyl)ether	45	15.987	15.987	(1.035)	1513217	250.000	272

Data File: /chem/VOA7.i/081205.b/7w517.d
Date : 12-AUG-2005 21:57
Client ID: VSTD250S
Instrument: VOA7.i
Sample Info: |UVM050727-07A||CAL|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w518.d
Lab Smp Id: UVM050727-08A Client Smp ID: VSTD500S
Inj Date : 12-AUG-2005 22:24
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050727-08A|ICAL|1|VOAF|1||
Misc Info : VSTD500S 5uL UVM050727-08A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 18 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

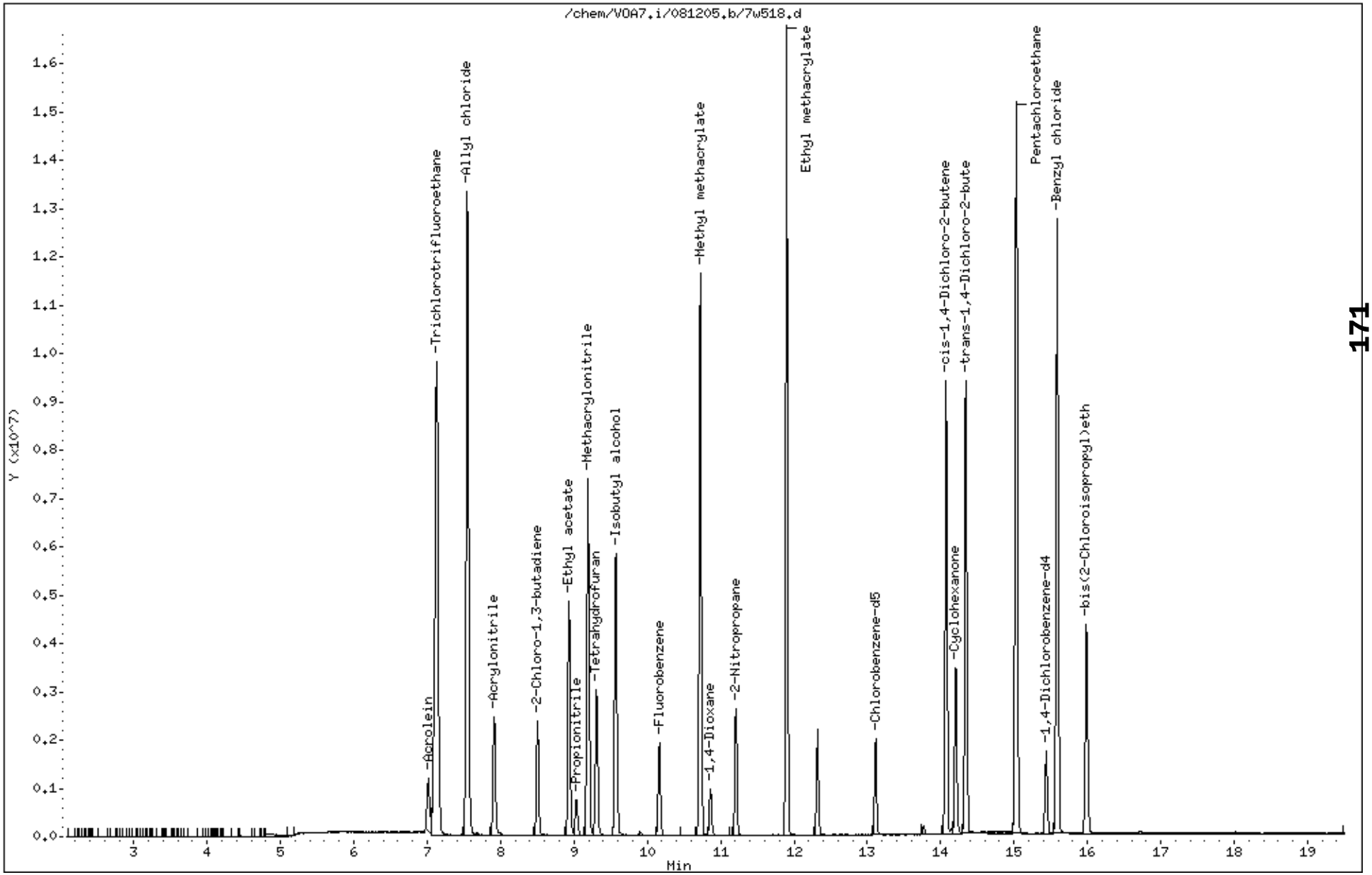
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.017	7.018	(0.690)	1361157	500.000	552(A)
12	Trichlorotrifluoroethane	85	7.124	7.130	(0.701)	2914304	500.000	481
16	Allyl chloride	76	7.546	7.546	(0.742)	3827993	500.000	489
18	Acrylonitrile	53	7.915	7.915	(0.779)	2400350	500.000	485
24	2-Chloro-1,3-butadiene	53	8.503	8.503	(0.837)	1581672	100.000	83.1
28	Propionitrile	54	9.031	9.037	(0.889)	924595	500.000	403
26	Ethyl acetate	43	8.930	8.935	(0.879)	6454275	500.000	488
27	Methacrylonitrile	41	9.192	9.192	(0.904)	4271592	500.000	496
19	Isobutyl alcohol	41	9.571	9.571	(0.942)	3101740	5000.00	6050(A)
72	Tetrahydrofuran	42	9.309	9.309	(0.603)	2214333	500.000	498
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	1997210	50.0000	
42	Methyl methacrylate	69	10.720	10.720	(1.055)	4827163	500.000	510(A)
97	1,4-Dioxane	88	10.859	10.864	(1.068)	798887	5000.00	6250(A)
48	2-Nitropropane	43	11.211	11.206	(1.103)	2194468	500.000	511(A)
51	Ethyl methacrylate	69	11.900	11.900	(0.908)	8850373	500.000	512(A)
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1257032	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
70	Cyclohexanone	55	14.208	14.203	(1.084)	1656213	2500.00	2570
68	cis-1,4-Dichloro-2-butene	53	14.069	14.075	(0.911)	2435038	500.000	625(A)
69	trans-1,4-Dichloro-2-butene	53	14.342	14.342	(0.929)	2336424	500.000	639(A)
82	Pentachloroethane	167	15.031	15.031	(0.973)	3698249	500.000	619(A)
* 86	1,4-Dichlorobenzene-d4	152	15.442	15.437	(1.000)	584684	50.0000	
88	Benzyl chloride	91	15.586	15.587	(1.009)	12548849	500.000	511(A)
91	bis(2-Chloroisopropyl)ether	45	15.987	15.987	(1.035)	3325890	500.000	634(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA7.i/081205.b/7w518.d
Date : 12-AUG-2005 22:24
Client ID: VSTD500S
Instrument: VOA7.i
Sample Info: |UVM050727-08A|ICAL|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 12-AUG-2005 23:18
Lab File ID: 7w520.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: UVM050804-01A Quant Type: ISTD
Method: /chem/VOA7.i/081205.b/VOA7-8260B-081205.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M	1 Xylenes (total)	0.62982	0.59770	0.59770	0.050	-5.10303	40.00000	Averaged	
M	2 1,2-Dichloroethylene (total	0.26994	0.28730	0.28730	0.050	6.41707	40.00000	Averaged	
	3 Dichlorodifluoromethane	0.36830	0.19710	0.19710	0.050	-46.24077	40.00000	Averaged	<-
	4 Chloromethane	0.48617	0.36050	0.36050	0.100	-24.82332	40.00000	Averaged	spcc
	5 Vinyl chloride	0.45139	0.34770	0.34770	0.050	-22.96053	20.00000	Averaged	<-ccc
	6 Bromomethane	0.31141	0.24320	0.24320	0.050	-21.91370	40.00000	Averaged	
	7 Chloroethane	0.25618	0.22100	0.22100	0.050	-13.72163	40.00000	Averaged	
	8 Trichlorofluoromethane	0.53245	0.48060	0.48060	0.050	-9.63772	40.00000	Averaged	
	134 Ethyl Ether	0.24484	0.20510	0.20510	0.010	-16.24207	40.00000	Averaged	
	10 Acetone	0.09110	0.10100	0.10100	0.050	12.45714	40.00000	Averaged	
	15 Acetonitrile	0.03907	0.04495	0.04495	0.010	15.03694	40.00000	Averaged	
	11 1,1-Dichloroethylene	0.39321	0.42960	0.42960	0.050	9.25279	20.00000	Averaged	ccc
	128 Methyl acetate	0.19564	0.25650	0.25650	0.010	31.09081	40.00000	Averaged	
	13 Iodomethane	0.41813	0.46150	0.46150	0.050	10.37439	40.00000	Averaged	
	17 Methylene chloride	54.80309	50.00000	0.32410	0.050	9.60617	40.00000	Linear	
	14 Carbon disulfide	261	250	1.05900	0.050	4.30260	40.00000	Linear	
	20 tert-Butyl methyl ether	0.70995	0.85520	0.85520	0.050	20.45433	40.00000	Averaged	
	21 trans-1,2-Dichloroethylene	0.26329	0.30430	0.30430	0.050	15.58533	40.00000	Averaged	
	23 Vinyl acetate	0.51032	0.62300	0.62300	0.010	22.07284	40.00000	Averaged	
	22 1,1-Dichloroethane	0.49068	0.53880	0.53880	0.100	9.80657	40.00000	Averaged	spcc
	30 2-Butanone	0.12852	0.13440	0.13440	0.030	4.60444	40.00000	Averaged	
	31 cis-1,2-Dichloroethylene	0.27659	0.27020	0.27020	0.050	-2.31026	40.00000	Averaged	
	25 2,2-Dichloropropane	0.39940	0.37520	0.37520	0.050	-6.06747	40.00000	Averaged	
	32 Chloroform	0.46787	0.43120	0.43120	0.010	-7.84188	20.00000	Averaged	ccc
	29 Bromochloromethane	0.12706	0.12060	0.12060	0.010	-5.11318	40.00000	Averaged	
$	35 Dibromofluoromethane	0.25057	0.25403	0.25403	0.010	1.37890	40.00000	Averaged	
	36 1,1,1-Trichloroethane	0.39278	0.36320	0.36320	0.010	-7.54305	40.00000	Averaged	
	129 Cyclohexane	0.43973	0.33330	0.33330	0.010	-24.19434	40.00000	Averaged	
	34 1,1-Dichloropropene	0.33161	0.28780	0.28780	0.010	-13.20501	40.00000	Averaged	
	131 n-Butyl alcohol	0.00840	0.00487	0.00487	0.008	-42.03475	40.00000	Averaged	<-
	33 Carbon tetrachloride	0.35407	0.32580	0.32580	0.010	-7.99443	40.00000	Averaged	
	37 1,2-Dichloroethane	0.36214	0.34670	0.34670	0.010	-4.26388	40.00000	Averaged	
	38 Benzene	1.12175	1.02600	1.02600	0.010	-8.57260	40.00000	Averaged	
	39 Trichloroethylene	0.25655	0.22680	0.22680	0.010	-11.59851	40.00000	Averaged	
	41 1,2-Dichloropropane	0.27547	0.25370	0.25370	0.010	-7.91621	20.00000	Averaged	ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 12-AUG-2005 23:18
Lab File ID: 7w520.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: UVM050804-01A Quant Type: ISTD
Method: /chem/VOA7.i/081205.b/VOA7-8260B-081205.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.45333	0.36040	0.36040	0.010	-20.49188	40.00000	Averaged
45 Bromodichloromethane	0.34264	0.32710	0.32710	0.010	-4.53144	40.00000	Averaged
43 Dibromomethane	0.15895	0.14650	0.14650	0.010	-7.84958	40.00000	Averaged
44 2-Chloroethylvinyl ether	217	250	0.14570	0.010	-13.16308	40.00000	Linear
49 4-Methyl-2-pentanone	0.13899	0.15010	0.15010	0.010	7.99187	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.39439	0.31880	0.31880	0.010	-19.17626	40.00000	Averaged
$ 47 Toluene-d8	1.32881	1.35430	1.35430	0.010	1.91821	40.00000	Averaged
50 Toluene	0.99579	0.87420	0.87420	0.010	-12.20725	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.53847	0.42570	0.42570	0.010	-20.94959	40.00000	Averaged
54 1,1,2-Trichloroethane	0.27688	0.23800	0.23800	0.010	-14.03924	40.00000	Averaged
55 2-Hexanone	0.24433	0.27430	0.27430	0.010	12.26669	40.00000	Averaged
52 1,3-Dichloropropane	0.55618	0.51920	0.51920	0.010	-6.64797	40.00000	Averaged
56 Tetrachloroethylene	0.30705	0.27560	0.27560	0.010	-10.25439	40.00000	Averaged
57 Dibromochloromethane	0.32461	0.30690	0.30690	0.010	-5.45381	40.00000	Averaged
59 1,2-Dibromoethane	0.29245	0.25790	0.25790	0.010	-11.79658	40.00000	Averaged
62 Chlorobenzene	1.01402	0.86050	0.86050	0.300	-15.14370	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.36107	0.32530	0.32530	0.010	-9.91503	40.00000	Averaged
58 Ethylbenzene	40.02232	50.00000	1.55600	0.010	-19.95536	20.00000	Linear ccc
63 m,p-Xylenes	0.63887	0.60350	0.60350	0.010	-5.53439	40.00000	Averaged
64 o-Xylene	0.61172	0.58600	0.58600	0.010	-4.20198	40.00000	Averaged
65 Styrene	0.93480	0.96700	0.96700	0.010	3.44303	40.00000	Averaged
66 Bromoform	0.43154	0.38250	0.38250	0.100	-11.36866	40.00000	Averaged spcc
67 Isopropylbenzene	2.94834	2.43300	2.43300	0.010	-17.48390	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.80475	0.74550	0.74550	0.300	-7.36365	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	0.90501	0.84124	0.84124	0.010	-7.04591	40.00000	Averaged
74 1,2,3-Trichloropropane	45.17941	50.00000	0.20440	0.010	-9.64117	40.00000	Linear
75 Bromobenzene	0.82201	0.74120	0.74120	0.010	-9.83101	40.00000	Averaged
76 n-Propylbenzene	3.77011	3.43400	3.43400	0.010	-8.91246	40.00000	Averaged
77 2-Chlorotoluene	2.61554	2.40400	2.40400	0.010	-8.09862	40.00000	Averaged
78 1,3,5-Trimethylbenzene	2.59096	2.30600	2.30600	0.010	-10.98582	40.00000	Averaged
80 4-Chlorotoluene	2.21900	1.96800	1.96800	0.010	-11.31065	40.00000	Averaged
81 tert-Butylbenzene	2.53466	2.28900	2.28900	0.010	-9.69302	40.00000	Averaged
79 1,2,4-Trimethylbenzene	2.59924	2.44200	2.44200	0.010	-6.06635	40.00000	Averaged
83 sec-Butylbenzene	3.51480	3.19900	3.19900	0.010	-8.97629	40.00000	Averaged
84 4-Isopropyltoluene	39.88846	50.00000	2.42800	0.010	-20.22309	40.00000	Linear

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 12-AUG-2005 23:18
Lab File ID: 7w520.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: UVM050804-01A Quant Type: ISTD
Method: /chem/VOA7.i/081205.b/VOA7-8260B-081205.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.48975	1.38000	1.38000	0.010	-7.36962	40.00000	Averaged
87 1,4-Dichlorobenzene	1.56993	1.37400	1.37400	0.010	-12.47657	40.00000	Averaged
89 n-Butylbenzene	2.49586	2.35200	2.35200	0.010	-6.47165	40.00000	Averaged
90 1,2-Dichlorobenzene	1.41857	1.27400	1.27400	0.010	-10.20660	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	47.99732	50.00000	0.16190	0.010	-4.00535	40.00000	Linear
93 1,2,4-Trichlorobenzene	0.90647	0.77270	0.77270	0.010	-14.76143	40.00000	Averaged
94 Hexachlorobutadiene	0.65350	0.54330	0.54330	0.010	-16.85812	40.00000	Averaged
95 Naphthalene	2.31814	2.10000	2.10000	0.010	-9.41816	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.94328	0.79016	0.79016	0.010	-16.23259	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 12.11295
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w520.d
Lab Smp Id: UVM050804-01A Client Smp ID: VSTD050ICV
Inj Date : 12-AUG-2005 23:18
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050804-01A|ICV|1|VOAF|1||
Misc Info : GEL N/A N/A VSTD050 UVM050804-01A
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

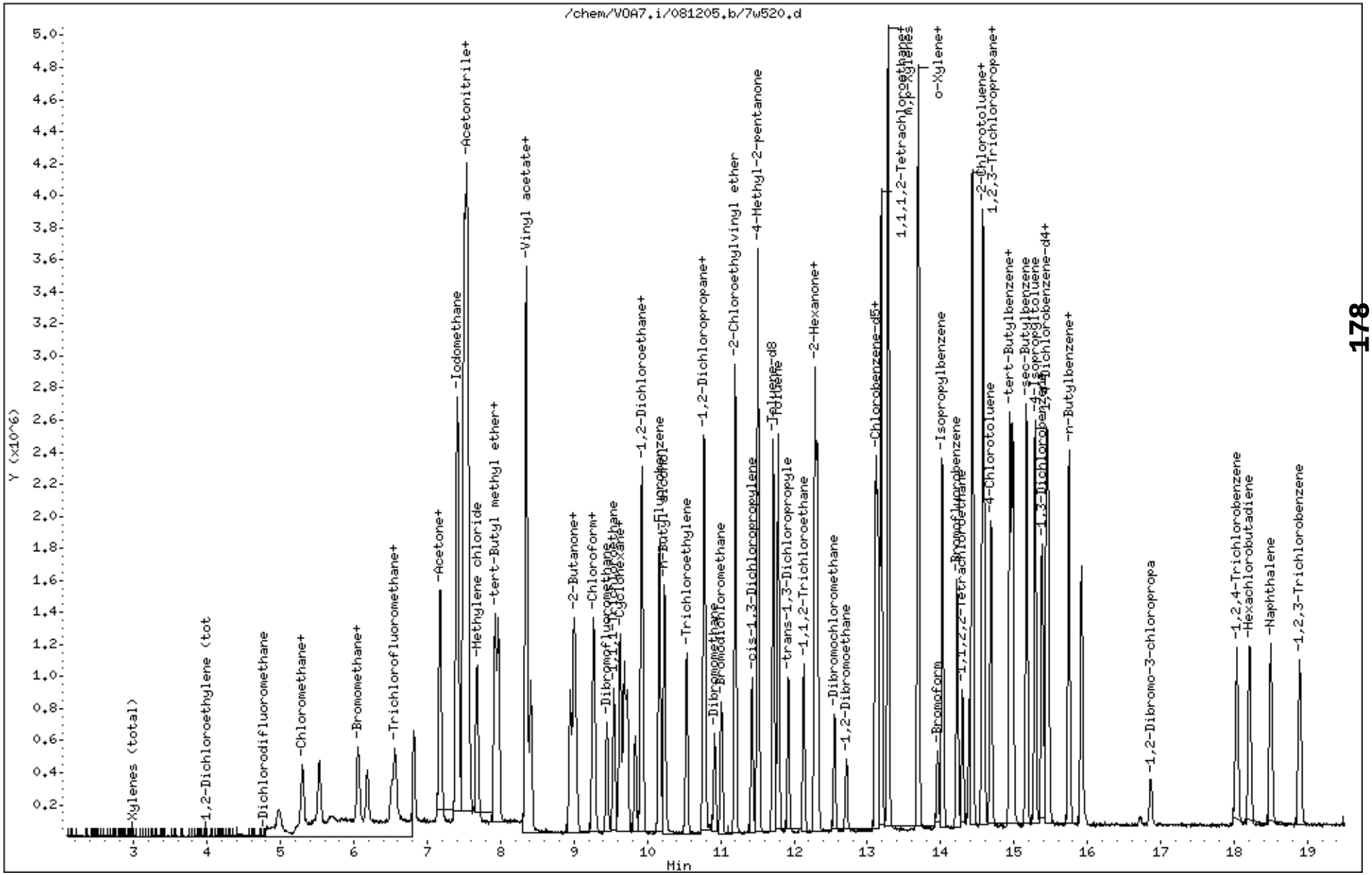
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1	Xylenes (total)	106				2429704	150.000	142
M 2	1,2-Dichloroethylene (total)	96				1093879	100.000	107
3	Dichlorodifluoromethane	85	4.982	4.982	(0.490)	375249	50.0000	26.9
4	Chloromethane	50	5.297	5.308	(0.521)	686399	50.0000	37.6
5	Vinyl chloride	62	5.527	5.532	(0.544)	662102	50.0000	38.5
6	Bromomethane	94	6.056	6.061	(0.596)	462987	50.0000	39.0
7	Chloroethane	64	6.184	6.189	(0.608)	420824	50.0000	43.1
8	Trichlorofluoromethane	101	6.558	6.558	(0.645)	915005	50.0000	45.2
134	Ethyl Ether	59	6.814	6.814	(0.670)	390447	50.0000	41.9
10	Acetone	43	7.172	7.172	(0.706)	961888	250.000	281
15	Acetonitrile	41	7.498	7.498	(0.738)	2139530	1250.00	1440
11	1,1-Dichloroethylene	61	7.178	7.178	(0.706)	817930	50.0000	54.6
128	Methyl acetate	43	7.498	7.498	(0.738)	2441513	250.000	328
13	Iodomethane	142	7.413	7.413	(0.729)	4393457	250.000	276
17	Methylene chloride	84	7.685	7.685	(0.756)	617023	50.0000	54.8
14	Carbon disulfide	76	7.541	7.546	(0.742)	10077582	250.000	261

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 tert-Butyl methyl ether	73	7.925	7.926	(0.780)	1628200	50.0000	60.2
	21 trans-1,2-Dichloroethylene	96	7.974	7.974	(0.784)	579426	50.0000	57.8
	23 Vinyl acetate	43	8.347	8.353	(0.821)	5930552	250.000	305
	22 1,1-Dichloroethane	63	8.406	8.417	(0.827)	1025855	50.0000	54.9
	30 2-Butanone	43	8.946	8.946	(0.880)	1279804	250.000	262
	31 cis-1,2-Dichloroethylene	96	8.994	8.999	(0.885)	514452	50.0000	48.8
	25 2,2-Dichloropropane	77	9.026	9.021	(0.888)	714305	50.0000	47.0
	32 Chloroform	83	9.277	9.277	(0.913)	820953	50.0000	46.1
	29 Bromochloromethane	128	9.261	9.261	(0.911)	229550	50.0000	47.4
$	35 Dibromofluoromethane	113	9.448	9.448	(0.930)	483656	50.0000	50.7
	36 1,1,1-Trichloroethane	97	9.544	9.544	(0.939)	691436	50.0000	46.2
	129 Cyclohexane	56	9.630	9.630	(0.947)	634664	50.0000	37.9
	34 1,1-Dichloropropene	75	9.683	9.689	(0.953)	548002	50.0000	43.4
	131 n-Butyl alcohol	56	10.233	10.234	(1.007)	927938	5000.00	2900
	33 Carbon tetrachloride	117	9.720	9.726	(0.956)	620237	50.0000	46.0
	37 1,2-Dichloroethane	62	9.913	9.913	(0.975)	660097	50.0000	47.9
	38 Benzene	78	9.929	9.929	(0.977)	1952686	50.0000	45.7
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	1903971	50.0000	
	39 Trichloroethylene	95	10.532	10.538	(1.036)	431804	50.0000	44.2
	41 1,2-Dichloropropane	63	10.784	10.778	(1.061)	482969	50.0000	46.0
	130 Methylcyclohexane	83	10.773	10.768	(1.060)	686262	50.0000	39.8
	45 Bromodichloromethane	83	11.013	11.008	(1.084)	622816	50.0000	47.7
	43 Dibromomethane	93	10.917	10.917	(1.074)	278879	50.0000	46.1
	44 2-Chloroethylvinyl ether	63	11.200	11.195	(1.102)	1387475	250.000	217
	49 4-Methyl-2-pentanone	58	11.510	11.505	(0.878)	1016939	250.000	270
	46 cis-1,3-Dichloropropylene	75	11.430	11.425	(1.125)	606914	50.0000	40.4
$	47 Toluene-d8	98	11.713	11.713	(0.893)	1835185	50.0000	51.0
	50 Toluene	92	11.783	11.783	(0.899)	1184648	50.0000	43.9
	53 trans-1,3-Dichloropropylene	75	11.927	11.922	(0.910)	576804	50.0000	39.5
	54 1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	322521	50.0000	43.0
	55 2-Hexanone	43	12.285	12.280	(0.937)	1858398	250.000	281
	52 1,3-Dichloropropane	76	12.306	12.306	(0.938)	703566	50.0000	46.7
	56 Tetrachloroethylene	164	12.322	12.322	(0.940)	373406	50.0000	44.9
	57 Dibromochloromethane	129	12.552	12.552	(0.957)	415884	50.0000	47.3
	59 1,2-Dibromoethane	107	12.717	12.712	(0.970)	349539	50.0000	44.1
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1355076	50.0000	
	62 Chlorobenzene	112	13.145	13.140	(1.002)	1165991	50.0000	42.4
	60 1,1,1,2-Tetrachloroethane	131	13.188	13.188	(1.006)	440770	50.0000	45.0
	58 Ethylbenzene	91	13.188	13.188	(1.006)	2107989	50.0000	40.0
	63 m,p-Xylenes	106	13.284	13.284	(1.013)	1635611	100.000	94.5
	64 o-Xylene	106	13.690	13.690	(1.044)	794092	50.0000	47.9
	65 Styrene	104	13.695	13.695	(1.044)	1310335	50.0000	51.7
	66 Bromoform	173	13.957	13.957	(0.904)	273713	50.0000	44.3
	67 Isopropylbenzene	105	14.021	14.021	(0.908)	1741032	50.0000	41.2
	73 1,1,2,2-Tetrachloroethane	83	14.299	14.299	(0.926)	533495	50.0000	46.3
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	602020	50.0000	46.5
	74 1,2,3-Trichloropropane	110	14.390	14.390	(0.932)	146241	50.0000	45.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	14.432	14.433	(0.935)	530427	50.0000	45.1
76	n-Propylbenzene	91	14.427	14.427	(0.935)	2457555	50.0000	45.5
77	2-Chlorotoluene	91	14.582	14.582	(0.945)	1720180	50.0000	46.0
78	1,3,5-Trimethylbenzene	105	14.571	14.566	(0.944)	1650478	50.0000	44.5
80	4-Chlorotoluene	91	14.683	14.684	(0.951)	1408375	50.0000	44.3
81	tert-Butylbenzene	119	14.945	14.945	(0.968)	1638067	50.0000	45.2
79	1,2,4-Trimethylbenzene	105	14.983	14.983	(0.971)	1747264	50.0000	47.0
83	sec-Butylbenzene	105	15.170	15.170	(0.983)	2289525	50.0000	45.5
84	4-Isopropyltoluene	119	15.287	15.287	(0.990)	1737471	50.0000	39.9
85	1,3-Dichlorobenzene	146	15.378	15.378	(0.996)	987547	50.0000	46.3
* 86	1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	715632	50.0000	
87	1,4-Dichlorobenzene	146	15.463	15.464	(1.002)	983322	50.0000	43.8
89	n-Butylbenzene	91	15.746	15.747	(1.020)	1682978	50.0000	46.8
90	1,2-Dichlorobenzene	146	15.917	15.918	(1.031)	911561	50.0000	44.9
92	1,2-Dibromo-3-chloropropane	157	16.863	16.863	(1.092)	115860	50.0000	48.0
93	1,2,4-Trichlorobenzene	180	18.038	18.033	(1.169)	552944	50.0000	42.6
94	Hexachlorobutadiene	225	18.215	18.209	(1.180)	388825	50.0000	41.6
95	Naphthalene	128	18.498	18.498	(1.198)	1502696	50.0000	45.3
96	1,2,3-Trichlorobenzene	180	18.893	18.899	(1.224)	565467	50.0000	41.9

Data File: /chem/VOA7.i/081205.b/7w520.d
Date : 12-AUG-2005 23:18
Client ID: VSTD050ICV
Instrument: VOA7.i
Sample Info: |UVM050804-01A|ICV|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 12-AUG-2005 23:46
Lab File ID: 7w521.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: UVM050803-01B Quant Type: ISTD
Method: /chem/VOA7.i/081205.b/VOA7-8260B-081205.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
	9 Acrolein	0.06170	0.05844	0.05844	0.001	-5.28791	40.00000	Averaged
	12 Trichlorotrifluoroethane	0.15157	0.12390	0.12390	0.050	-18.22755	40.00000	Averaged
	16 Allyl chloride	211	250	0.16440	0.010	-15.79152	40.00000	Linear
	18 Acrylonitrile	216	250	0.10640	0.010	-13.50292	40.00000	Linear
	24 2-Chloro-1,3-butadiene	36.49965	50.00000	0.34070	0.010	-27.00069	40.00000	Linear
	28 Propionitrile	185	250	0.04133	0.010	-25.93360	40.00000	Linear
	26 Ethyl acetate	215	250	0.28080	0.010	-14.18011	40.00000	Linear
	27 Methacrylonitrile	215	250	0.18160	0.010	-13.85585	40.00000	Linear
	19 Isobutyl alcohol	0.01283	0.01308	0.01308	0.005	1.90446	40.00000	Averaged
	72 Tetrahydrofuran	208	250	0.32020	0.010	-16.91042	40.00000	Linear
	42 Methyl methacrylate	223	250	0.20430	0.010	-10.95263	40.00000	Linear
	51 Ethyl methacrylate	204	250	0.53560	0.010	-18.40964	40.00000	Linear
	97 1,4-Dioxane	0.00320	0.00319	0.00319	0.002	-0.21285	40.00000	Averaged
	48 2-Nitropropane	217	250	0.09032	0.010	-13.32215	40.00000	Linear
	70 Cyclohexanone	1069	1250	0.02103	0.010	-14.47712	40.00000	Linear
	68 cis-1,4-Dichloro-2-butene	0.33336	0.35720	0.35720	0.010	7.13977	40.00000	Averaged
	69 trans-1,4-Dichloro-2-butene	0.31264	0.34170	0.34170	0.010	9.30214	40.00000	Averaged
	82 Pentachloroethane	0.51098	0.50390	0.50390	0.010	-1.38042	40.00000	Averaged
	88 Benzyl chloride	217	250	1.75900	0.010	-13.24719	40.00000	Linear
	91 bis(2-Chloroisopropyl)ether	0.44876	0.42330	0.42330	0.010	-5.66549	40.00000	Averaged
$	35 Dibromofluoromethane	0.25057	0.25880	0.25880	0.010	3.29158	40.00000	Averaged
$	47 Toluene-d8	1.32881	1.35200	1.35200	0.010	1.71122	40.00000	Averaged
$	71 Bromofluorobenzene	0.90501	1.14800	1.14800	0.010	26.89071	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 12.11295
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081205.b/7w521.d
Lab Smp Id: UVM050803-01B Client Smp ID: VSTD250ICV
Inj Date : 12-AUG-2005 23:46
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050803-01B|ICVSHORT|1|VOAF|1||
Misc Info : GEL N/A N/A VSTD250S UVM050803-01B
Comment :
Method : /chem/VOA7.i/081205.b/VOA7-8260B-081205.m
Meth Date : 13-Aug-2005 15:33 tcl Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 21 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

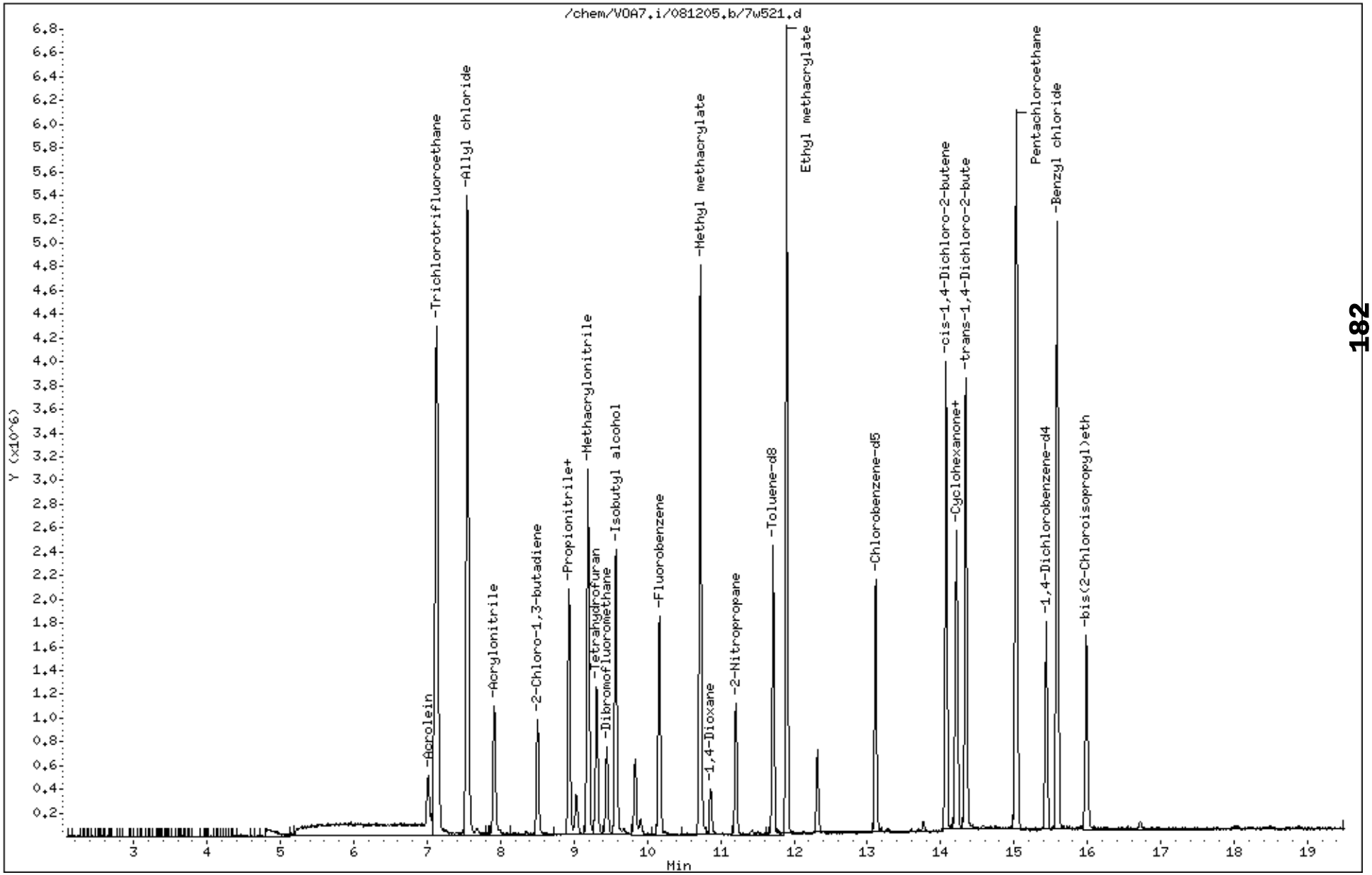
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	9 Acrolein	56	7.018	7.018	(0.690)	571458	250.000	237
	12 Trichlorotrifluoroethane	85	7.130	7.130	(0.701)	1212087	250.000	204
	16 Allyl chloride	76	7.546	7.546	(0.742)	1607260	250.000	210
	18 Acrylonitrile	53	7.915	7.915	(0.779)	1040944	250.000	216
	24 2-Chloro-1,3-butadiene	53	8.503	8.503	(0.837)	666374	50.0000	36.5
	28 Propionitrile	54	9.037	9.037	(0.889)	404198	250.000	185
	26 Ethyl acetate	43	8.935	8.935	(0.879)	2746272	250.000	214
	27 Methacrylonitrile	41	9.192	9.192	(0.904)	1775888	250.000	215
	19 Isobutyl alcohol	41	9.571	9.571	(0.942)	1278794	2500.00	2550
	72 Tetrahydrofuran	42	9.309	9.309	(0.603)	906706	250.000	208
	42 Methyl methacrylate	69	10.720	10.720	(1.055)	1997475	250.000	223
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	1955836	50.0000	
	51 Ethyl methacrylate	69	11.900	11.900	(0.908)	3465002	250.000	204
	97 1,4-Dioxane	88	10.864	10.864	(1.069)	312098	2500.00	2490
	48 2-Nitropropane	43	11.206	11.206	(1.102)	883263	250.000	217
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1293917	50.0000	

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	70 Cyclohexanone	55	14.203	14.203	(1.083)	680354	1250.00	1070
	68 cis-1,4-Dichloro-2-butene	53	14.075	14.075	(0.911)	1011311	250.000	268
	69 trans-1,4-Dichloro-2-butene	53	14.342	14.342	(0.929)	967598	250.000	273
	82 Pentachloroethane	167	15.031	15.031	(0.973)	1426887	250.000	246
*	86 1,4-Dichlorobenzene-d4	152	15.442	15.437	(1.000)	566310	50.0000	
	88 Benzyl chloride	91	15.587	15.587	(1.009)	4979592	250.000	217
	91 bis(2-Chloroisopropyl)ether	45	15.987	15.987	(1.035)	1198705	250.000	236
$	35 Dibromofluoromethane	113	9.448	9.448	(0.930)	506205	50.0000	51.6
$	47 Toluene-d8	98	11.713	11.713	(0.893)	1748798	50.0000	50.8
$	71 Bromofluorobenzene	95	14.219	14.224	(0.921)	650334	50.0000	63.4

Data File: /chem/VOA7.i/081205.b/7w521.d
Date : 12-AUG-2005 23:46
Client ID: VSTD250ICV
Instrument: VOA7.i
Sample Info: |UVM050803-01B|ICVSHORT|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 15-AUG-2005 10:22
Lab File ID: 7x103.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: W7V050815-02 Quant Type: ISTD
Method: /chem/VOA7.i/081505.b/VOA7-8260B-081205.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.62982	0.65770	0.65770	0.050	4.42649	40.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.26994	0.28238	0.28238	0.050	4.60997	40.00000	Averaged	
M 136 1,3-Dichloropropylene	0.37428	0.37221	0.37221	0.010	-0.55097	40.00000	Averaged	
3 Dichlorodifluoromethane	0.36830	0.19632	0.19632	0.050	-46.69570	40.00000	Averaged	<-
4 Chloromethane	0.48617	0.40682	0.40682	0.100	-16.32104	40.00000	Averaged	spcc
5 Vinyl chloride	0.45139	0.42461	0.42461	0.050	-5.93253	20.00000	Averaged	ccc
6 Bromomethane	0.31141	0.28745	0.28745	0.050	-7.69290	40.00000	Averaged	
7 Chloroethane	0.25618	0.24940	0.24940	0.050	-2.64643	40.00000	Averaged	
8 Trichlorofluoromethane	0.53245	0.55533	0.55533	0.050	4.29625	40.00000	Averaged	
134 Ethyl Ether	0.24484	0.26694	0.26694	0.010	9.02932	40.00000	Averaged	
10 Acetone	0.09110	0.13227	0.13227	0.050	45.18694	40.00000	Averaged	<-
15 Acetonitrile	0.03907	0.04041	0.04041	0.010	3.42603	40.00000	Averaged	
11 1,1-Dichloroethylene	0.39321	0.43893	0.43893	0.050	11.62859	20.00000	Averaged	ccc
128 Methyl acetate	0.19564	0.24337	0.24337	0.010	24.39748	40.00000	Averaged	
13 Iodomethane	0.41813	0.42575	0.42575	0.050	1.82312	40.00000	Averaged	
17 Methylene chloride	48.87539	50.00000	0.28962	0.050	-2.24923	40.00000	Linear	
14 Carbon disulfide	243	250	0.98688	0.050	-2.65083	40.00000	Linear	
20 tert-Butyl methyl ether	0.70995	0.64423	0.64423	0.050	-9.25662	40.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.26329	0.26819	0.26819	0.050	1.86243	40.00000	Averaged	
23 Vinyl acetate	0.51032	0.45410	0.45410	0.010	-11.01677	40.00000	Averaged	
22 1,1-Dichloroethane	0.49068	0.53520	0.53520	0.100	9.07253	40.00000	Averaged	spcc
30 2-Butanone	0.12852	0.13991	0.13991	0.030	8.86745	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.27659	0.29657	0.29657	0.050	7.22540	40.00000	Averaged	
25 2,2-Dichloropropane	0.39940	0.44052	0.44052	0.050	10.29670	40.00000	Averaged	
32 Chloroform	0.46787	0.48807	0.48807	0.010	4.31795	20.00000	Averaged	ccc
29 Bromochloromethane	0.12706	0.12801	0.12801	0.010	0.74961	40.00000	Averaged	
$ 135 1,2-Dichloroethane-d4	0.30694	0.26255	0.26255	0.010	-14.46181	40.00000	Averaged	
$ 35 Dibromofluoromethane	0.25057	0.25474	0.25474	0.010	1.66372	40.00000	Averaged	
36 1,1,1-Trichloroethane	0.39278	0.41529	0.41529	0.010	5.73024	40.00000	Averaged	
129 Cyclohexane	0.43973	0.43508	0.43508	0.010	-1.05745	40.00000	Averaged	
34 1,1-Dichloropropene	0.33161	0.35956	0.35956	0.010	8.42986	40.00000	Averaged	
131 n-Butyl alcohol	0.00840	0.00403	0.00403	0.008	-52.08131	40.00000	Averaged	<-
33 Carbon tetrachloride	0.35407	0.36117	0.36117	0.010	2.00546	40.00000	Averaged	
37 1,2-Dichloroethane	0.36214	0.37203	0.37203	0.010	2.73255	40.00000	Averaged	
38 Benzene	1.12175	1.10575	1.10575	0.010	-1.42587	40.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 15-AUG-2005 10:22
Lab File ID: 7x103.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: W7V050815-02 Quant Type: ISTD
Method: /chem/VOA7.i/081505.b/VOA7-8260B-081205.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	39 Trichloroethylene	0.25655	0.24896	0.24896	0.010	-2.95903	40.00000	Averaged	
	41 1,2-Dichloropropane	0.27547	0.29058	0.29058	0.010	5.48443	20.00000	Averaged	ccc
	130 Methylcyclohexane	0.45333	0.45480	0.45480	0.010	0.32269	40.00000	Averaged	
	45 Bromodichloromethane	0.34264	0.34225	0.34225	0.010	-0.11368	40.00000	Averaged	
	43 Dibromomethane	0.15895	0.14814	0.14814	0.010	-6.79958	40.00000	Averaged	
	44 2-Chloroethylvinyl ether	175	250	0.11605	0.010	-29.96979	40.00000	Linear	
	49 4-Methyl-2-pentanone	0.13899	0.14400	0.14400	0.010	3.61037	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.39439	0.38268	0.38268	0.010	-2.97094	40.00000	Averaged	
$	47 Toluene-d8	1.32881	1.38975	1.38975	0.010	4.58544	40.00000	Averaged	
	50 Toluene	0.99579	0.94920	0.94920	0.010	-4.67810	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.53847	0.53060	0.53060	0.010	-1.46174	40.00000	Averaged	
	54 1,1,2-Trichloroethane	0.27688	0.25577	0.25577	0.010	-7.62346	40.00000	Averaged	
	55 2-Hexanone	0.24433	0.27730	0.27730	0.010	13.49125	40.00000	Averaged	
	52 1,3-Dichloropropane	0.55618	0.59191	0.59191	0.010	6.42409	40.00000	Averaged	
	56 Tetrachloroethylene	0.30705	0.33428	0.33428	0.010	8.86946	40.00000	Averaged	
	57 Dibromochloromethane	0.32461	0.30305	0.30305	0.010	-6.64194	40.00000	Averaged	
	59 1,2-Dibromoethane	0.29245	0.26538	0.26538	0.010	-9.25600	40.00000	Averaged	
	62 Chlorobenzene	1.01402	0.94874	0.94874	0.300	-6.43818	40.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.36107	0.35460	0.35460	0.010	-1.79171	40.00000	Averaged	
	58 Ethylbenzene	1.67582	1.72363	1.72363	0.010	2.85297	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.63887	0.66328	0.66328	0.010	3.82028	40.00000	Averaged	
	64 o-Xylene	0.61172	0.64654	0.64654	0.010	5.69271	40.00000	Averaged	
	65 Styrene	0.93480	1.05404	1.05404	0.010	12.75637	40.00000	Averaged	
	66 Bromoform	0.43154	0.37749	0.37749	0.100	-12.52467	40.00000	Averaged	spcc
	67 Isopropylbenzene	2.94834	2.61609	2.61609	0.010	-11.26908	40.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.80475	0.72273	0.72273	0.300	-10.19134	40.00000	Averaged	spcc
$	71 Bromofluorobenzene	0.90501	0.82551	0.82551	0.010	-8.78368	40.00000	Averaged	
	74 1,2,3-Trichloropropane	0.22888	0.20186	0.20186	0.010	-11.80594	40.00000	Averaged	
	75 Bromobenzene	0.82201	0.80161	0.80161	0.010	-2.48170	40.00000	Averaged	
	76 n-Propylbenzene	3.77011	3.72370	3.72370	0.010	-1.23099	40.00000	Averaged	
	77 2-Chlorotoluene	2.61554	2.69304	2.69304	0.010	2.96301	40.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.59096	2.58688	2.58688	0.010	-0.15735	40.00000	Averaged	
	80 4-Chlorotoluene	2.21900	2.20491	2.20491	0.010	-0.63474	40.00000	Averaged	
	81 tert-Butylbenzene	2.53466	2.51363	2.51363	0.010	-0.82962	40.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.59924	2.77450	2.77450	0.010	6.74260	40.00000	Averaged	
	83 sec-Butylbenzene	3.51480	3.56052	3.56052	0.010	1.30074	40.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 15-AUG-2005 10:22
Lab File ID: 7x103.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: W7V050815-02 Quant Type: ISTD
Method: /chem/VOA7.i/081505.b/VOA7-8260B-081205.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	45.05501	50.00000	2.76272	0.010	-9.88999	40.00000	Linear
85 1,3-Dichlorobenzene	1.48975	1.55501	1.55501	0.010	4.38002	40.00000	Averaged
87 1,4-Dichlorobenzene	1.56993	1.55501	1.55501	0.010	-0.95088	40.00000	Averaged
89 n-Butylbenzene	2.49586	2.84164	2.84164	0.010	13.85445	40.00000	Averaged
90 1,2-Dichlorobenzene	1.41857	1.34612	1.34612	0.010	-5.10719	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.16429	0.13802	0.13802	0.010	-15.98940	40.00000	Averaged
93 1,2,4-Trichlorobenzene	0.90647	0.86335	0.86335	0.010	-4.75718	40.00000	Averaged
94 Hexachlorobutadiene	0.65350	0.55414	0.55414	0.010	-15.20387	40.00000	Averaged
95 Naphthalene	2.31814	1.97250	1.97250	0.010	-14.91009	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.94328	0.80316	0.80316	0.010	-14.85454	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.21290
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x103.d
Lab Smp Id: W7V050815-02 Client Smp ID: VSTD050
Inj Date : 15-AUG-2005 10:22
Operator : JEB Inst ID: VOA7.i
Smp Info : |W7V050815-02|ICV|1|VOAF|1||
Misc Info : GEL N/A LCS/ICV UVM050708-01D+IVM050808-01
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2468617	150.000	157
M 2 1,2-Dichloroethylene (total)	96				1036404	100.000	104
M 136 1,3-Dichloropropylene	100				1366097	100.000	97.8
3 Dichlorodifluoromethane	85	4.977	4.977	(0.490)	360268	50.0000	26.6
4 Chloromethane	50	5.308	5.308	(0.522)	746561	50.0000	41.8
5 Vinyl chloride	62	5.532	5.532	(0.544)	779201	50.0000	47.0
6 Bromomethane	94	6.061	6.061	(0.596)	527506	50.0000	46.2
7 Chloroethane	64	6.184	6.184	(0.608)	457667	50.0000	48.7
8 Trichlorofluoromethane	101	6.558	6.558	(0.645)	1019076	50.0000	52.1
134 Ethyl Ether	59	6.814	6.814	(0.670)	489867	50.0000	54.5
10 Acetone	43	7.172	7.172	(0.706)	1213612	250.000	363
15 Acetonitrile	41	7.498	7.498	(0.738)	1853998	1250.00	1290
11 1,1-Dichloroethylene	61	7.167	7.167	(0.705)	805485	50.0000	55.8
128 Methyl acetate	43	7.498	7.498	(0.738)	2233041	250.000	311
13 Iodomethane	142	7.413	7.413	(0.729)	3906453	250.000	254
17 Methylene chloride	84	7.680	7.680	(0.756)	531477	50.0000	48.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	14 Carbon disulfide	76	7.541	7.541	(0.742)	9055135	250.000	243
	20 tert-Butyl methyl ether	73	7.931	7.931	(0.780)	1182221	50.0000	45.4
	21 trans-1,2-Dichloroethylene	96	7.974	7.974	(0.784)	492162	50.0000	50.9
	23 Vinyl acetate	43	8.353	8.353	(0.822)	4166606	250.000	222
	22 1,1-Dichloroethane	63	8.417	8.417	(0.828)	982135	50.0000	54.5
	30 2-Butanone	43	8.946	8.946	(0.880)	1283777	250.000	272
	31 cis-1,2-Dichloroethylene	96	8.999	8.999	(0.885)	544242	50.0000	53.6
	25 2,2-Dichloropropane	77	9.021	9.021	(0.888)	808404	50.0000	55.1
	32 Chloroform	83	9.277	9.277	(0.913)	895658	50.0000	52.2
	29 Bromochloromethane	128	9.261	9.261	(0.911)	234917	50.0000	50.4
$	135 1,2-Dichloroethane-d4	65	9.833	9.833	(0.967)	481801	50.0000	42.8
$	35 Dibromofluoromethane	113	9.448	9.448	(0.930)	467470	50.0000	50.8
	36 1,1,1-Trichloroethane	97	9.544	9.544	(0.939)	762097	50.0000	52.9
	129 Cyclohexane	56	9.630	9.630	(0.947)	798406	50.0000	49.5
	34 1,1-Dichloropropene	75	9.689	9.689	(0.953)	659834	50.0000	54.2
	131 n-Butyl alcohol	56	10.233	10.233	(1.007)	738980	5000.00	2400
	33 Carbon tetrachloride	117	9.726	9.726	(0.957)	662774	50.0000	51.0
	37 1,2-Dichloroethane	62	9.913	9.913	(0.975)	682714	50.0000	51.4
	38 Benzene	78	9.929	9.929	(0.977)	2029165	50.0000	49.3
*	40 Fluorobenzene	96	10.164	10.164	(1.000)	1835095	50.0000	
	39 Trichloroethylene	95	10.538	10.538	(1.037)	456858	50.0000	48.5
	41 1,2-Dichloropropane	63	10.784	10.784	(1.061)	533240	50.0000	52.7
	130 Methylcyclohexane	83	10.768	10.768	(1.059)	834596	50.0000	50.2
	45 Bromodichloromethane	83	11.008	11.008	(1.083)	628064	50.0000	49.9
	43 Dibromomethane	93	10.917	10.917	(1.074)	271854	50.0000	46.6
	44 2-Chloroethylvinyl ether	63	11.200	11.200	(1.102)	1064819	250.000	175
	49 4-Methyl-2-pentanone	58	11.505	11.505	(0.877)	900843	250.000	259
	46 cis-1,3-Dichloropropylene	75	11.425	11.425	(1.124)	702245	50.0000	48.5
$	47 Toluene-d8	98	11.713	11.713	(0.893)	1738767	50.0000	52.3
	50 Toluene	92	11.783	11.783	(0.899)	1187587	50.0000	47.7
	53 trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	663852	50.0000	49.3
	54 1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	320009	50.0000	46.2
	55 2-Hexanone	43	12.280	12.280	(0.936)	1734693	250.000	284
	52 1,3-Dichloropropane	76	12.306	12.306	(0.938)	740565	50.0000	53.2
	56 Tetrachloroethylene	164	12.322	12.322	(0.940)	418231	50.0000	54.4
	57 Dibromochloromethane	129	12.552	12.552	(0.957)	379160	50.0000	46.7
	59 1,2-Dibromoethane	107	12.712	12.712	(0.969)	332025	50.0000	45.4
*	61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1251140	50.0000	
	62 Chlorobenzene	112	13.140	13.140	(1.002)	1187003	50.0000	46.8
	60 1,1,1,2-Tetrachloroethane	131	13.188	13.188	(1.006)	443660	50.0000	49.1
	58 Ethylbenzene	91	13.188	13.188	(1.006)	2156504	50.0000	51.4
	63 m,p-Xylenes	106	13.284	13.284	(1.013)	1659704	100.000	104
	64 o-Xylene	106	13.690	13.690	(1.044)	808913	50.0000	52.8
	65 Styrene	104	13.695	13.695	(1.044)	1318756	50.0000	56.4
	66 Bromoform	173	13.957	13.957	(0.904)	251491	50.0000	43.7
	67 Isopropylbenzene	105	14.021	14.021	(0.908)	1742895	50.0000	44.4
	73 1,1,2,2-Tetrachloroethane	83	14.299	14.299	(0.926)	481499	50.0000	44.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	549975	50.0000	45.6
	74 1,2,3-Trichloropropane	110	14.390	14.390	(0.932)	134483	50.0000	44.1
	75 Bromobenzene	156	14.432	14.432	(0.935)	534051	50.0000	48.8
	76 n-Propylbenzene	91	14.427	14.427	(0.935)	2480808	50.0000	49.4
	77 2-Chlorotoluene	91	14.582	14.582	(0.945)	1794161	50.0000	51.5
	78 1,3,5-Trimethylbenzene	105	14.571	14.571	(0.944)	1723435	50.0000	49.9
	80 4-Chlorotoluene	91	14.684	14.684	(0.951)	1468959	50.0000	49.7
	81 tert-Butylbenzene	119	14.945	14.945	(0.968)	1674636	50.0000	49.6
	79 1,2,4-Trimethylbenzene	105	14.983	14.983	(0.971)	1848431	50.0000	53.4
	83 sec-Butylbenzene	105	15.170	15.170	(0.983)	2372092	50.0000	50.6
	84 4-Isopropyltoluene	119	15.287	15.287	(0.990)	1840583	50.0000	45.0
	85 1,3-Dichlorobenzene	146	15.469	15.469	(1.002)	1035977	50.0000	52.2
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	666221	50.0000	
	87 1,4-Dichlorobenzene	146	15.469	15.469	(1.002)	1035977	50.0000	49.5
	89 n-Butylbenzene	91	15.747	15.747	(1.020)	1893162	50.0000	56.9
	90 1,2-Dichlorobenzene	146	15.918	15.918	(1.031)	896815	50.0000	47.4
	92 1,2-Dibromo-3-chloropropane	157	16.863	16.863	(1.092)	91954	50.0000	42.0
	93 1,2,4-Trichlorobenzene	180	18.033	18.033	(1.168)	575182	50.0000	47.6
	94 Hexachlorobutadiene	225	18.209	18.209	(1.180)	369181	50.0000	42.4
	95 Naphthalene	128	18.498	18.498	(1.198)	1314124	50.0000	42.5
	96 1,2,3-Trichlorobenzene	180	18.888	18.888	(1.224)	535084	50.0000	42.6

Data File: /chem/VOA7.i/081505.b/7x103.d

Date : 15-AUG-2005 10:22

Client ID: VSTD050

Instrument: VOA7.i

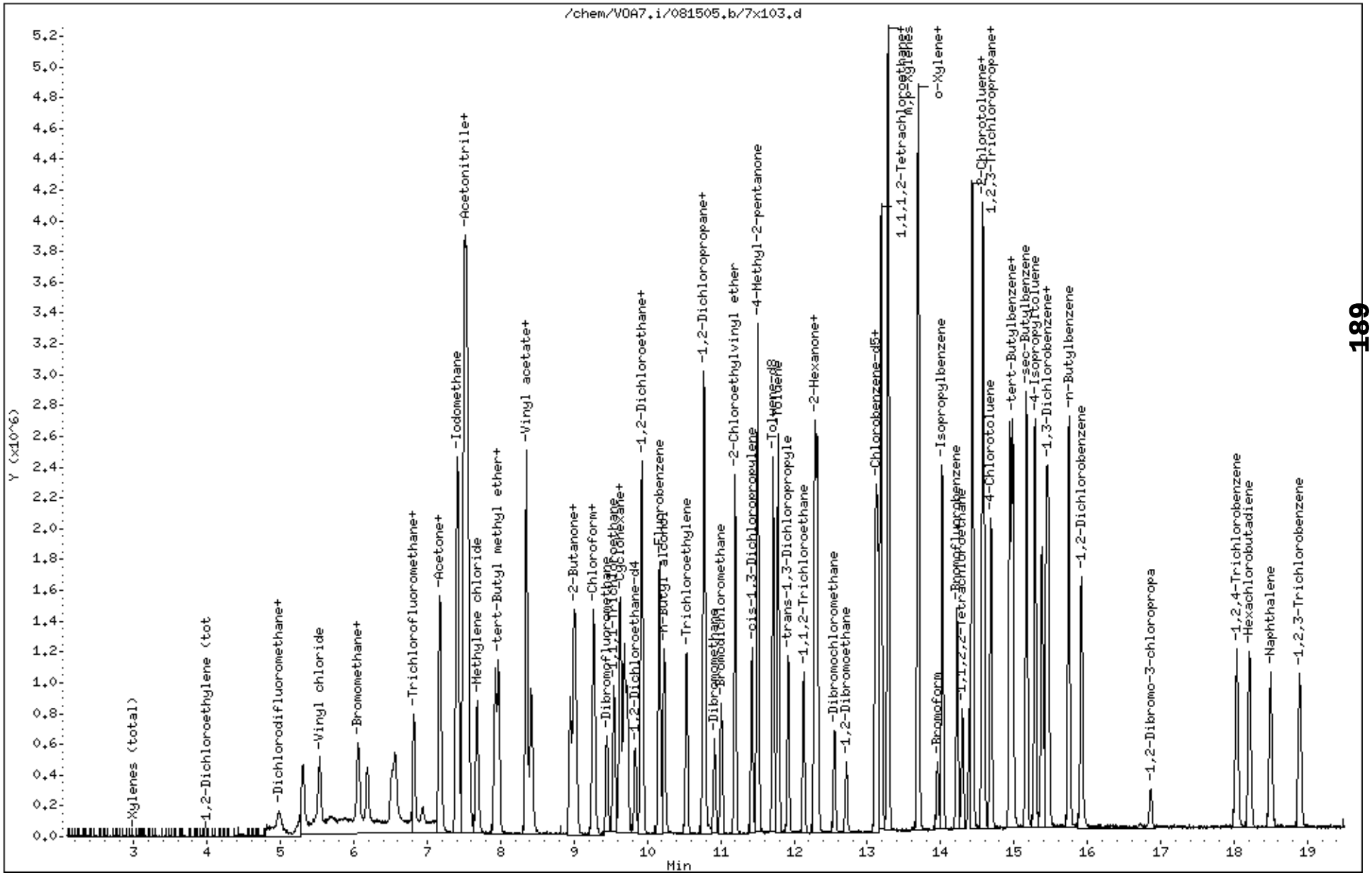
Sample Info: |W7V050815-02|ICV|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA7.i Injection Date: 15-AUG-2005 10:50
Lab File ID: 7x104.d Init. Cal. Date(s): 26-AUG-2004 12-AUG-2005
Analysis Type: WATER Init. Cal. Times: 22:19 22:24
Lab Sample ID: UVM050803-01B Quant Type: ISTD
Method: /chem/VOA7.i/081505.b/VOA7-8260B-081205.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
9 Acrolein	0.06170	0.07107	0.07107	0.001	15.19489	40.00000	Averaged
12 Trichlorotrifluoroethane	0.15157	0.12321	0.12321	0.050	-18.71050	40.00000	Averaged
16 Allyl chloride	213	250	0.16608	0.010	-14.91600	40.00000	Linear
18 Acrylonitrile	205	250	0.10064	0.010	-18.17453	40.00000	Linear
24 2-Chloro-1,3-butadiene	36.80188	50.00000	0.34364	0.010	-26.39625	40.00000	Linear
28 Propionitrile	176	250	0.03908	0.010	-29.77452	40.00000	Linear
26 Ethyl acetate	205	250	0.26778	0.010	-18.07814	40.00000	Linear
27 Methacrylonitrile	215	250	0.18107	0.010	-14.09545	40.00000	Linear
19 Isobutyl alcohol	0.01283	0.01166	0.01166	0.005	-9.13288	40.00000	Averaged
72 Tetrahydrofuran	203	250	0.31254	0.010	-18.94709	40.00000	Linear
42 Methyl methacrylate	215	250	0.19679	0.010	-14.02865	40.00000	Linear
51 Ethyl methacrylate	205	250	0.53949	0.010	-17.85908	40.00000	Linear
97 1,4-Dioxane	0.00320	0.00264	0.00264	0.002	-17.34546	40.00000	Averaged
48 2-Nitropropane	199	250	0.08258	0.010	-20.34977	40.00000	Linear
70 Cyclohexanone	1052	1250	0.02066	0.010	-15.87345	40.00000	Linear
68 cis-1,4-Dichloro-2-butene	0.33336	0.35361	0.35361	0.010	6.07601	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.31264	0.34087	0.34087	0.010	9.02912	40.00000	Averaged
82 Pentachloroethane	0.51098	0.52904	0.52904	0.010	3.53461	40.00000	Averaged
88 Benzyl chloride	259	250	2.11810	0.010	3.45056	40.00000	Linear
91 bis(2-Chloroisopropyl)ether	0.44876	0.39786	0.39786	0.010	-11.34238	40.00000	Averaged
$ 35 Dibromofluoromethane	0.25057	0.26153	0.26153	0.010	4.37466	40.00000	Averaged
$ 47 Toluene-d8	1.32881	1.40800	1.40800	0.010	5.95929	40.00000	Averaged
$ 71 Bromofluorobenzene	0.90501	1.07571	1.07571	0.010	18.86153	40.00000	Averaged
$ 135 1,2-Dichloroethane-d4	0.30694	0.27264	0.27264	0.010	-11.17235	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.33417
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x104.d
Lab Smp Id: UVM050803-01B Client Smp ID: VSTD250S
Inj Date : 15-AUG-2005 10:50
Operator : JEB Inst ID: VOA7.i
Smp Info : |UVM050803-01B|SHORT|1|VOAF|1||
Misc Info : GEL N/A SHORT
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 11:18 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

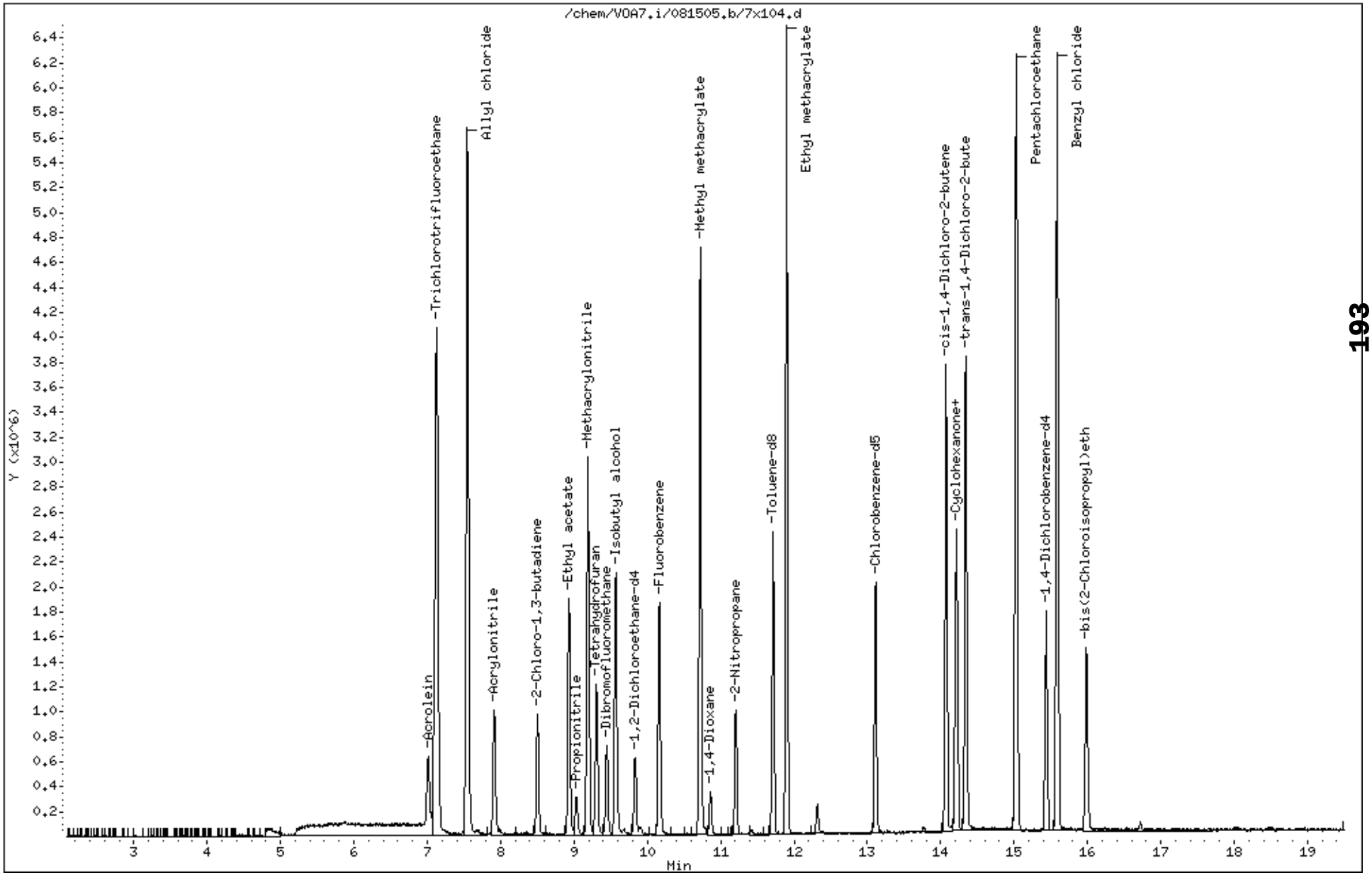
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.018	7.018	(0.690)	685593	250.000	288
12	Trichlorotrifluoroethane	85	7.130	7.130	(0.701)	1188544	250.000	203
16	Allyl chloride	76	7.546	7.546	(0.742)	1601999	250.000	213
18	Acrylonitrile	53	7.910	7.910	(0.778)	970750	250.000	204
24	2-Chloro-1,3-butadiene	53	8.503	8.503	(0.837)	662955	50.0000	36.8
28	Propionitrile	54	9.037	9.037	(0.889)	376951	250.000	176
26	Ethyl acetate	43	8.930	8.930	(0.879)	2583103	250.000	205
27	Methacrylonitrile	41	9.192	9.192	(0.904)	1746671	250.000	215
19	Isobutyl alcohol	41	9.571	9.571	(0.942)	1124781	2500.00	2270
72	Tetrahydrofuran	42	9.309	9.309	(0.603)	867143	250.000	203
42	Methyl methacrylate	69	10.720	10.720	(1.055)	1898281	250.000	215
* 40	Fluorobenzene	96	10.164	10.164	(1.000)	1929240	50.0000	
51	Ethyl methacrylate	69	11.900	11.900	(0.908)	3338273	250.000	205
97	1,4-Dioxane	88	10.859	10.859	(1.068)	254998	2500.00	2070
48	2-Nitropropane	43	11.206	11.206	(1.102)	796618	250.000	199
* 61	Chlorobenzene-d5	117	13.113	13.113	(1.000)	1237576	50.0000	

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	70 Cyclohexanone	55	14.208	14.208	(1.084)	639340	1250.00	1050
	68 cis-1,4-Dichloro-2-butene	53	14.069	14.069	(0.911)	981082	250.000	265
	69 trans-1,4-Dichloro-2-butene	53	14.342	14.342	(0.929)	945721	250.000	272
	82 Pentachloroethane	167	15.031	15.031	(0.974)	1467798	250.000	259
*	86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	554892	50.0000	
	88 Benzyl chloride	91	15.587	15.587	(1.010)	5876586	250.000	259
	91 bis(2-Chloroisopropyl)ether	45	15.987	15.987	(1.036)	1103854	250.000	222
$	35 Dibromofluoromethane	113	9.448	9.448	(0.930)	504557	50.0000	52.2
$	47 Toluene-d8	98	11.713	11.713	(0.893)	1742509	50.0000	53.0
$	71 Bromofluorobenzene	95	14.224	14.224	(0.921)	596900	50.0000	59.4
$	135 1,2-Dichloroethane-d4	65	9.838	9.833	(0.968)	525997	50.0000	44.4

Data File: /chem/VOA7.i/081505.b/7x104.d
Date : 15-AUG-2005 10:50
Client ID: VSTD250S
Instrument: VOA7.i
Sample Info: |UVM050803-01B|SHORT|1|VOAF|1||
Purge Volume: 5.0
Operator: JEB
Column phase: DB-624
Column diameter: 0.25



QUALITY CONTROL DATA

Data File: /chem/VOA7.i/081205.b/7w501.d

Date : 12-AUG-2005 14:49

Client ID: BFB01

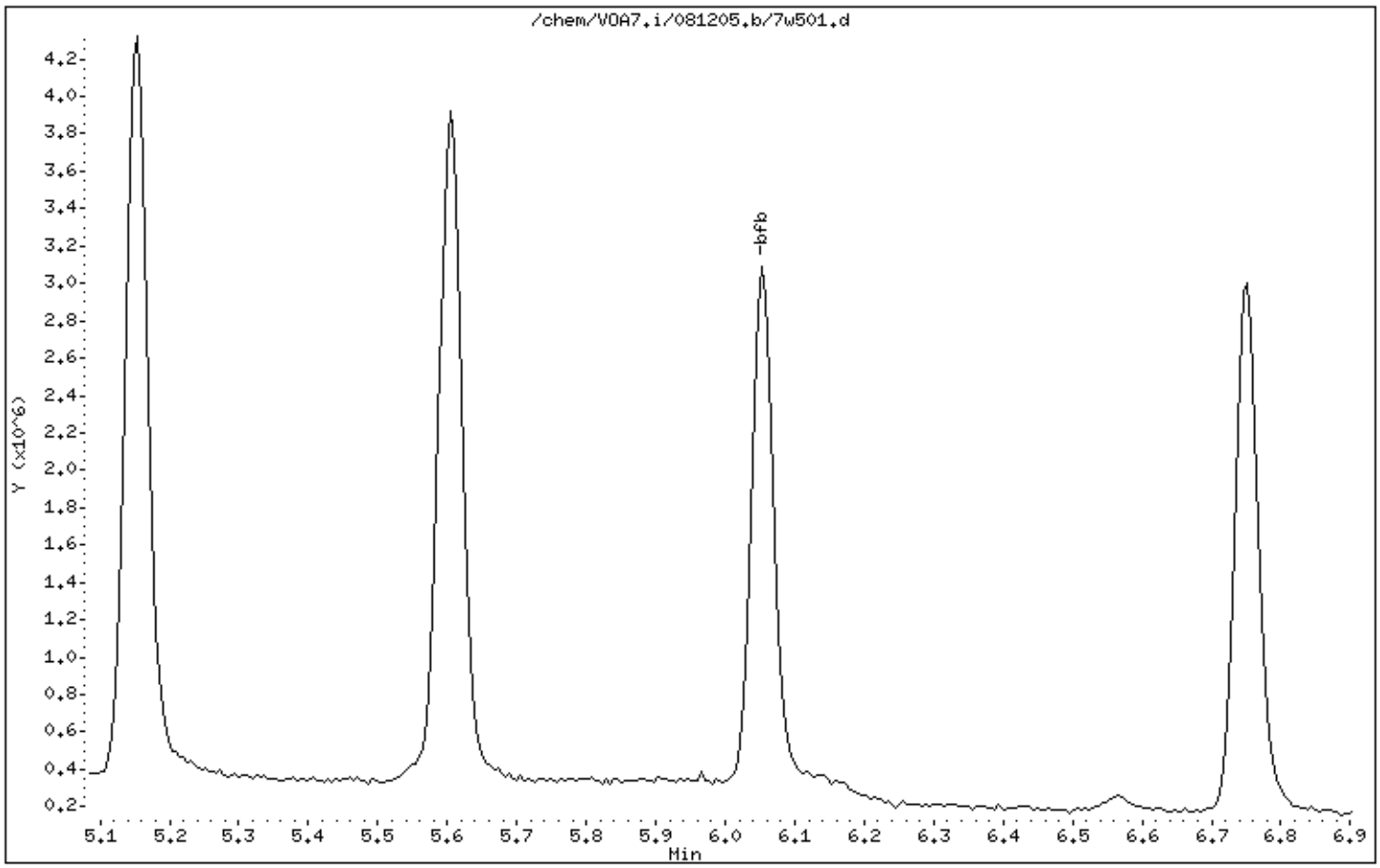
Instrument: VOA7.i

Sample Info: |UVM050622-02|BFB|1|VOAF|1||

Operator: CDS1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA7.i/081205.b/7w501.d

Date : 12-AUG-2005 14:49

Client ID: BFB01

Instrument: VOA7.i

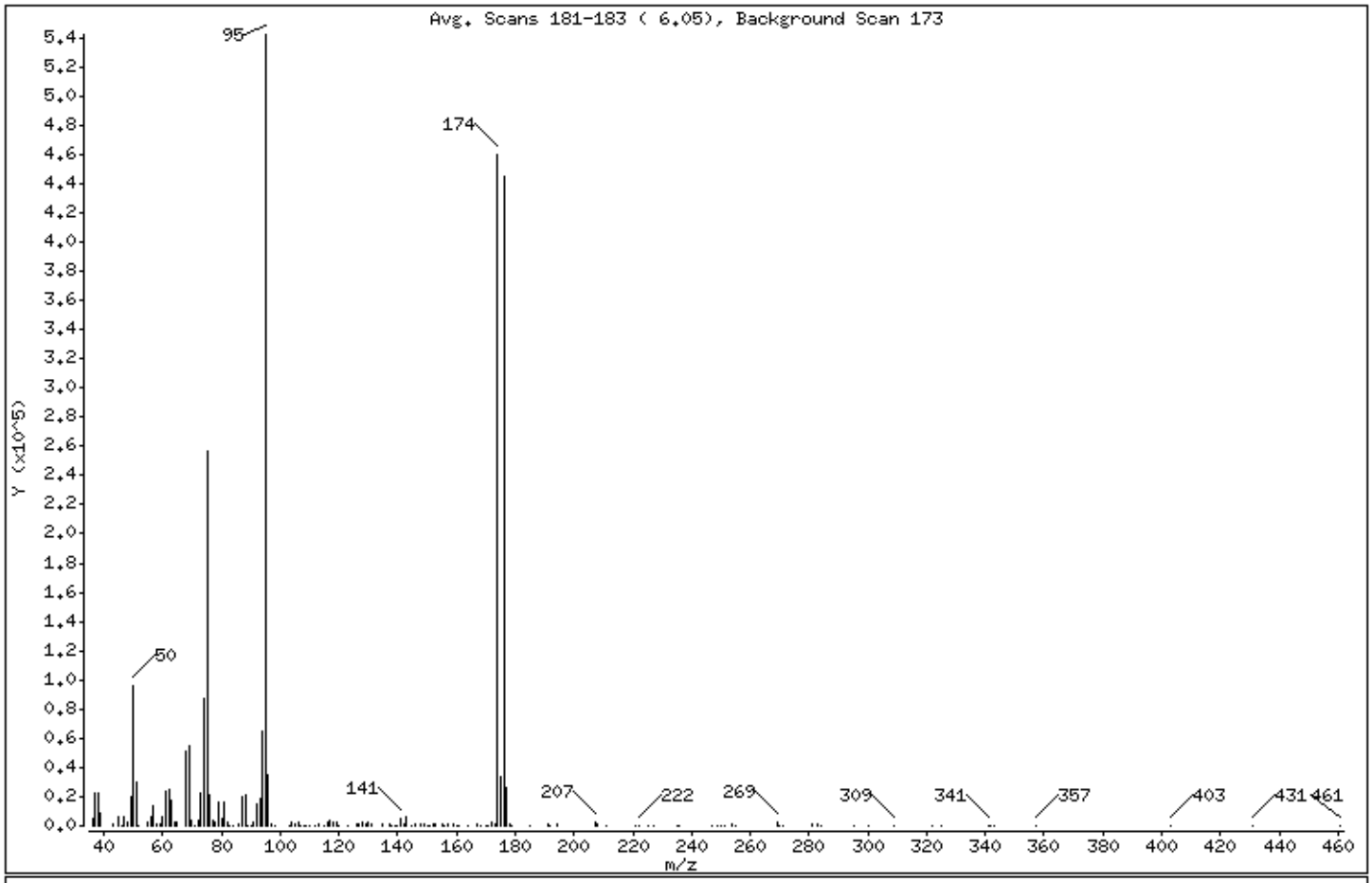
Sample Info: |UVM050622-02|BFB|1|VOAF|1||

Operator: CDS1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.80
75	30.00 - 60.00% of mass 95	47.44
96	5.00 - 9.00% of mass 95	6.51
173	Less than 2.00% of mass 174	0.25 (0.30)
174	50.00 - 100.00% of mass 95	84.84
175	5.00 - 9.00% of mass 174	6.13 (7.22)
176	95.00 - 101.00% of mass 174	82.11 (96.78)
177	5.00 - 9.00% of mass 176	4.71 (5.74)

Date : 12-AUG-2005 14:49

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |UVM050622-02|BFB|1|VOAF|1||

Operator: CDS1

Column phase: db624 Column diameter: 0.25

Data File: 7w501.d
Spectrum: Avg. Scans 181-183 (6.05), Background Scan 173
Location of Maximum: 95.00
Number of points: 149

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4755	82.00	2728	131.00	1513	192.00	438
37.00	22400	83.00	560	135.00	833	194.00	1124
38.00	22280	84.00	560	137.00	724	207.00	2808
39.00	9149	86.00	948	138.00	241	208.00	1680
43.00	966	87.00	20240	139.00	562	211.00	192
45.00	6730	88.00	21032	140.00	524	221.00	18
46.00	329	89.00	521	141.00	4636	222.00	498
47.00	6088	90.00	512	142.00	632	225.00	243
48.00	2632	91.00	2889	143.00	6006	227.00	176
49.00	20488	92.00	15561	145.00	445	235.00	193
50.00	96456	93.00	18896	146.00	1084	236.00	189
51.00	29352	94.00	65080	148.00	1495	247.00	199
52.00	248	95.00	541952	149.00	939	249.00	499
55.00	2174	96.00	35296	150.00	277	250.00	436
56.00	6009	97.00	710	151.00	170	251.00	603
57.00	13887	98.00	238	152.00	771	254.00	720
58.00	848	103.00	62	153.00	724	255.00	177
59.00	654	104.00	2274	155.00	1779	269.00	2131
60.00	5709	105.00	762	156.00	510	270.00	49
61.00	23664	106.00	2274	157.00	1253	271.00	441
62.00	24512	107.00	355	159.00	1107	281.00	935
63.00	17176	108.00	326	160.00	263	283.00	921
64.00	2196	109.00	512	161.00	543	284.00	290
65.00	2572	110.00	428	164.00	269	295.00	198
68.00	51688	112.00	425	167.00	794	300.00	210
69.00	55288	113.00	656	168.00	215	309.00	310
70.00	4180	115.00	213	170.00	221	322.00	253
71.00	523	116.00	2596	171.00	208	325.00	282
72.00	3940	117.00	3482	172.00	3093	341.00	515
73.00	22896	118.00	2606	173.00	1373	342.00	197
74.00	87160	119.00	2485	174.00	459776	343.00	415
75.00	257088	120.00	334	175.00	33216	357.00	186
76.00	21208	123.00	207	176.00	444992	403.00	211
77.00	3299	126.00	1143	177.00	25544	431.00	184
78.00	2135	127.00	670	178.00	1449	461.00	183

Date : 12-AUG-2005 14:49

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |UVM050622-02|BFB|1|VOAF|1||

Operator: CDS1

Column phase: db624 Column diameter: 0.25

Data File: 7w501.d
Spectrum: Avg. Scans 181-183 (6.05), Background Scan 173
Location of Maximum: 95.00
Number of points: 149

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	15637	128.00	1915	179.00	331		
80.00	4966	129.00	1005	185.00	203		
81.00	15880	130.00	2863	191.00	798		

Data File: /chem/VOA7.i/081505.b/7x101.d

Date : 15-AUG-2005 09:27

Client ID: BFB01

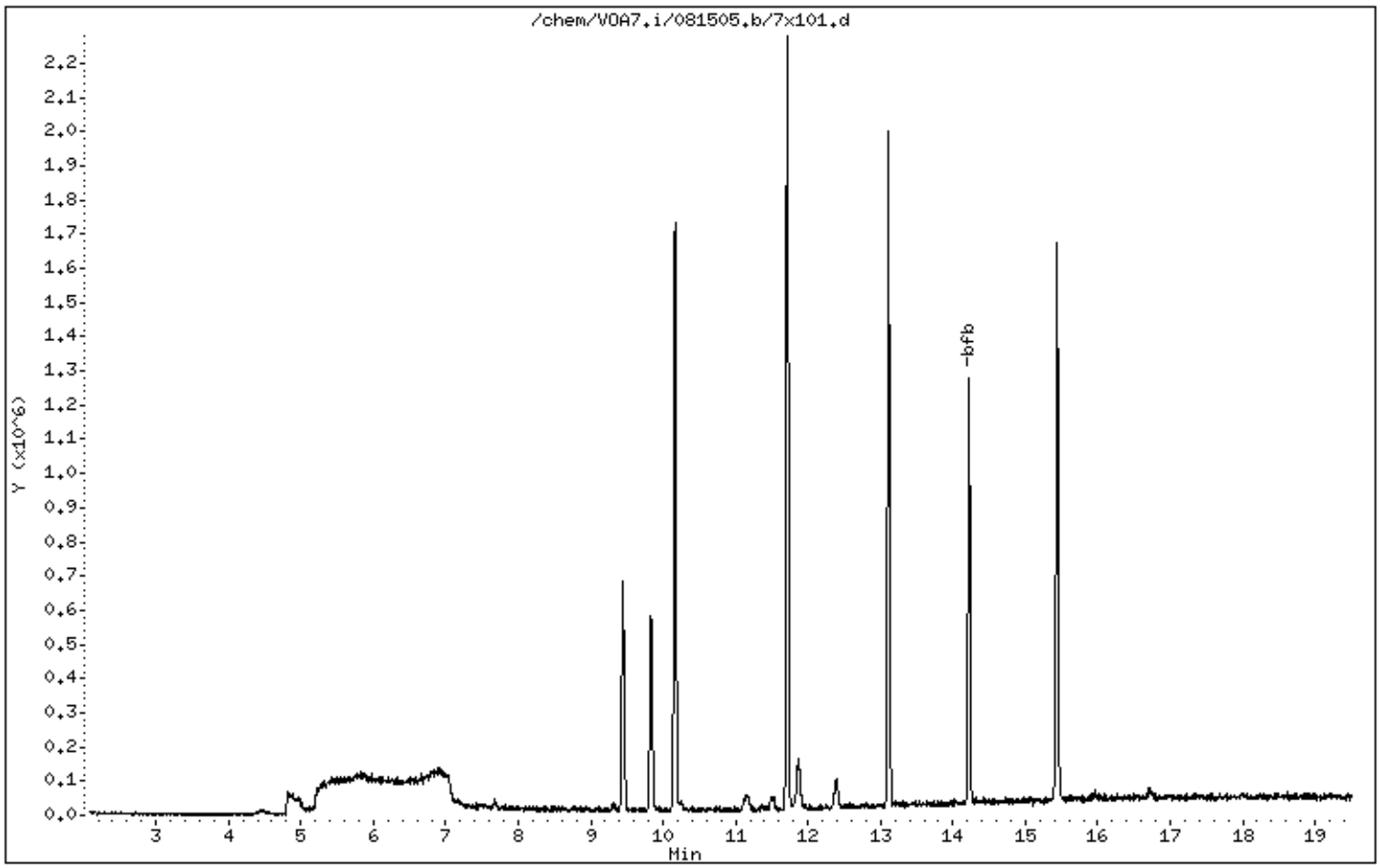
Instrument: VOA7.i

Sample Info: IUVM0500622-02|BFB|VOAF|1||

Operator: JEB

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA7.i/081505.b/7x101.d

Date : 15-AUG-2005 09:27

Client ID: BFB01

Instrument: VOA7.i

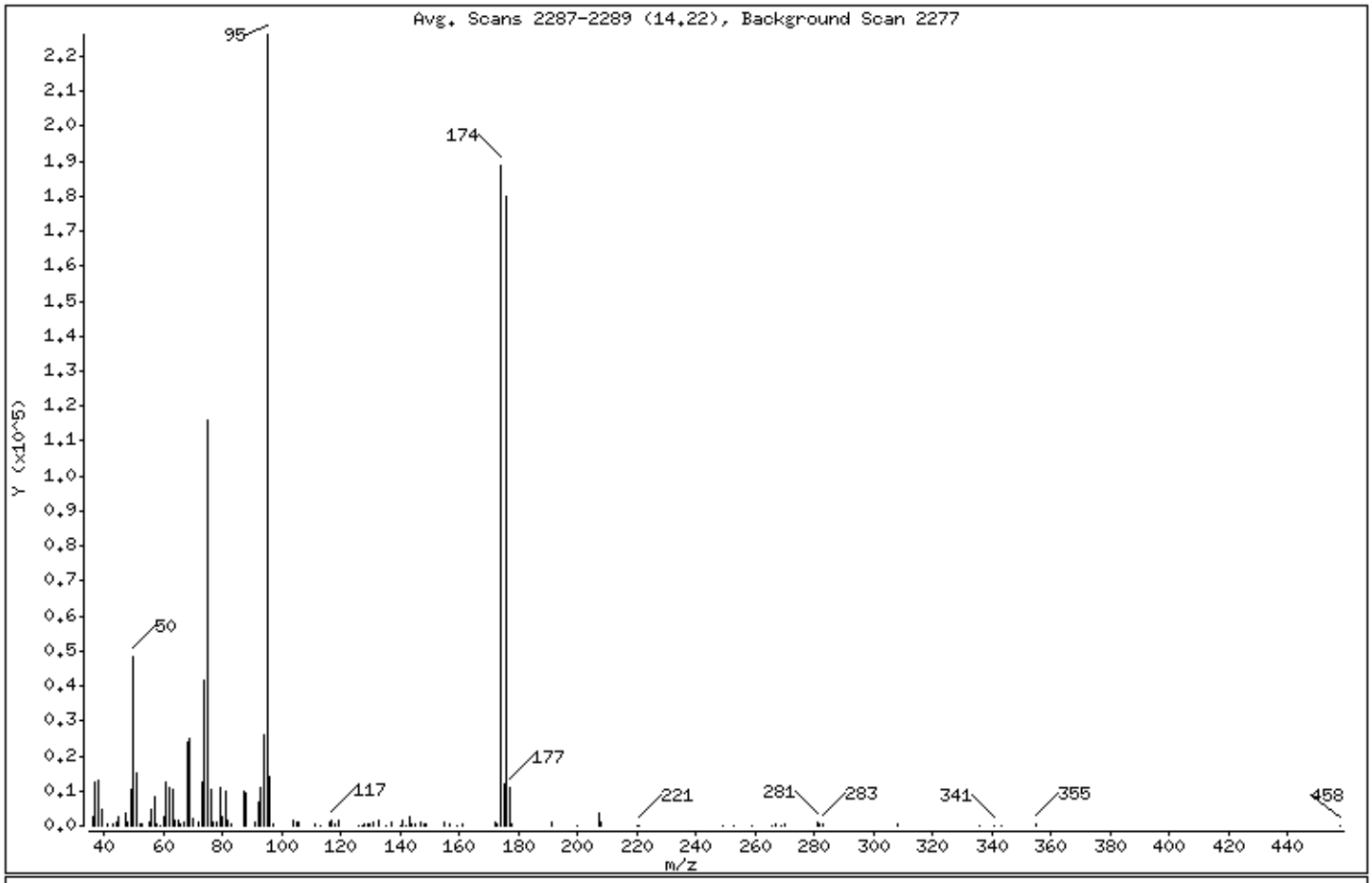
Sample Info: |UVM0500622-02|BFB|VOAF|1||

Operator: JEB

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.29
75	30.00 - 60.00% of mass 95	51.26
96	5.00 - 9.00% of mass 95	6.26
173	Less than 2.00% of mass 174	0.19 (0.22)
174	50.00 - 100.00% of mass 95	83.44
175	5.00 - 9.00% of mass 174	5.38 (6.45)
176	95.00 - 101.00% of mass 174	79.65 (95.46)
177	5.00 - 9.00% of mass 176	4.83 (6.07)

Date : 15-AUG-2005 09:27

Client ID: BFB01 Instrument: VOA7.i

Sample Info: |UVM0500622-02|BFB|VOAF|1||

Operator: JEB

Column phase: db624 Column diameter: 0.25

Data File: 7x101.d
Spectrum: Avg. Scans 2287-2289 (14.22), Background Scan 2277
Location of Maximum: 95.00
Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2588	69.00	24888	117.00	1788	176.00	180160
37.00	12242	70.00	2217	118.00	362	177.00	10937
38.00	12898	72.00	1120	119.00	1373	178.00	563
39.00	4705	73.00	12443	126.00	172	191.00	1165
41.00	410	74.00	41664	127.00	172	200.00	196
43.00	507	75.00	115976	128.00	281	207.00	3643
44.00	960	76.00	10310	129.00	423	208.00	1091
45.00	2833	77.00	934	130.00	640	220.00	167
47.00	3557	78.00	1127	131.00	832	221.00	187
48.00	1086	79.00	10825	133.00	1417	249.00	208
49.00	10391	80.00	2409	135.00	121	253.00	210
50.00	48152	81.00	9866	137.00	834	259.00	232
51.00	15136	82.00	1560	140.00	188	266.00	168
52.00	627	83.00	274	141.00	1560	267.00	262
53.00	396	87.00	9745	142.00	198	269.00	224
55.00	851	88.00	9121	143.00	2526	270.00	386
56.00	4460	91.00	1228	144.00	290	281.00	1229
57.00	8538	92.00	6806	145.00	493	282.00	387
58.00	392	93.00	11004	147.00	1259	283.00	357
59.00	239	94.00	26056	148.00	405	308.00	280
60.00	2675	95.00	226240	149.00	469	336.00	171
61.00	12340	96.00	14158	155.00	803	341.00	191
62.00	11119	97.00	466	157.00	527	343.00	172
63.00	10504	104.00	1501	159.00	192	355.00	339
64.00	1666	105.00	951	161.00	407	458.00	212
65.00	1809	106.00	1080	172.00	1228		
66.00	348	111.00	400	173.00	422		
67.00	1240	113.00	187	174.00	188736		
68.00	24128	116.00	907	175.00	12179		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912214

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X107LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
75-71-8	Dichlorodifluoromethane		1.0	U
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-69-4	Trichlorofluoromethane		1.0	U
107-02-8	Acrolein		5.0	U
75-35-4	1,1-Dichloroethylene		1.0	U
67-64-1	Acetone		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		5.0	U
75-05-8	Acetonitrile		25.0	U
78-83-1	Isobutyl alcohol		50.0	U
107-05-1	Allyl chloride		5.0	U
75-09-2	Methylene chloride		5.0	U
107-13-1	Acrylonitrile		5.0	U
156-60-5	trans-1,2-Dichloroethylene		1.0	U
75-34-3	1,1-Dichloroethane		1.0	U
108-05-4	Vinyl acetate		5.0	U
126-99-8	2-Chloro-1,3-butadiene		1.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethylene		1.0	U
594-20-7	2,2-Dichloropropane		1.0	U
126-98-7	Methacrylonitrile		5.0	U
107-12-0	Propionitrile		5.0	U
74-97-5	Bromochloromethane		1.0	U
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
563-58-6	1,1-Dichloropropene		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		1.0	U
79-01-6	Trichloroethylene		1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912214

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X107LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
1330-20-7	Xylenes (total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912214

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X107LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

VBLK01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912214

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X107LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x107LANL122.d
Lab Smp Id: 1200912214 Client Smp ID: VBLK01
Inj Date : 15-AUG-2005 13:26
Operator : JEB Inst ID: VOA7.i
Smp Info : |1200912214|452857|1|VOAF|1||
Misc Info : GEL N/A BLANK
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.164	10.164	(1.000)	1630289	50.0000	
* 61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1075709	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	456371	50.0000	
$ 35 Dibromofluoromethane	113	9.443	9.448	(0.929)	434914	53.2328	53.2
$ 47 Toluene-d8	98	11.713	11.713	(0.893)	1492114	52.1931	52.2
$ 71 Bromofluorobenzene	95	14.219	14.224	(0.921)	431369	52.2214	52.2

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x107LANL122.d
Lab Smp Id: 1200912214 Client Smp ID: VBLK01
Inj Date : 15-AUG-2005 13:26
Operator : JEB Inst ID: VOA7.i
Smp Info : |1200912214|452857|1|VOAF|1||
Misc Info : GEL N/A BLANK
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50
Processing Host: kilroy

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA7.i/081505.b/7x107LANL122.d

Page 1

Date : 15-AUG-2005 13:26

Client ID: VBLK01

Instrument: VOA7.i

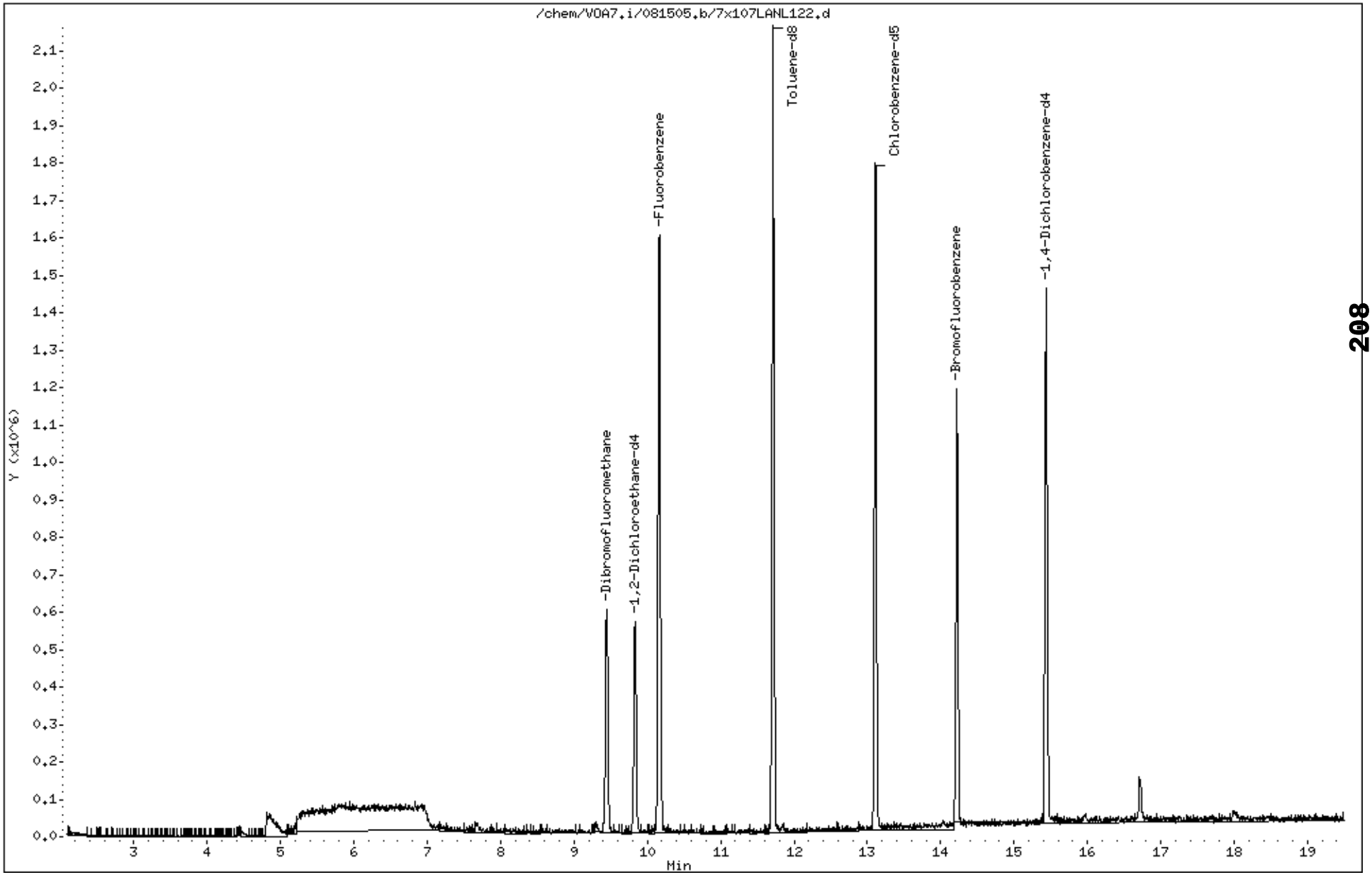
Sample Info: |1200912214|45285|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912215

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X103LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	26.6	
74-87-3	Chloromethane	41.8	
75-01-4	Vinyl chloride	47.0	
74-83-9	Bromomethane	46.2	
75-00-3	Chloroethane	48.7	
75-69-4	Trichlorofluoromethane	52.1	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	55.8	
67-64-1	Acetone	363	E
74-88-4	Iodomethane	254	
75-15-0	Carbon disulfide	243	
75-05-8	Acetonitrile	1290	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	48.9	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	50.9	
75-34-3	1,1-Dichloroethane	54.5	
108-05-4	Vinyl acetate	222	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	272	
156-59-2	cis-1,2-Dichloroethylene	53.6	
594-20-7	2,2-Dichloropropane	55.1	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	50.4	
67-66-3	Chloroform	52.2	
71-55-6	1,1,1-Trichloroethane	52.9	
563-58-6	1,1-Dichloropropene	54.2	
56-23-5	Carbon tetrachloride	51.0	
107-06-2	1,2-Dichloroethane	51.4	
71-43-2	Benzene	49.3	
79-01-6	Trichloroethylene	48.5	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912215

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X103LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
78-87-5	1,2-Dichloropropane	52.7	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	46.6	
75-27-4	Bromodichloromethane	49.9	
10061-01-5	cis-1,3-Dichloropropylene	48.5	
108-10-1	4-Methyl-2-pentanone	259	
108-88-3	Toluene	47.7	
10061-02-6	trans-1,3-Dichloropropylene	49.3	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	46.2	
142-28-9	1,3-Dichloropropane	53.2	
591-78-6	2-Hexanone	284	
127-18-4	Tetrachloroethylene	54.4	
124-48-1	Dibromochloromethane	46.7	
106-93-4	1,2-Dibromoethane	45.4	
108-90-7	Chlorobenzene	46.8	
630-20-6	1,1,1,2-Tetrachloroethane	49.1	
100-41-4	Ethylbenzene	51.4	
95-47-6	o-Xylene	52.8	
----------	m,p-Xylenes	104	
1330-20-7	Xylenes (total)	157	
100-42-5	Styrene	56.4	E
75-25-2	Bromoform	43.7	
98-82-8	Isopropylbenzene	44.4	
79-34-5	1,1,2,2-Tetrachloroethane	44.9	
96-18-4	1,2,3-Trichloropropane	44.1	
108-86-1	Bromobenzene	48.8	
103-65-1	n-Propylbenzene	49.4	
95-49-8	2-Chlorotoluene	51.5	
108-67-8	1,3,5-Trimethylbenzene	49.9	
95-63-6	1,2,4-Trimethylbenzene	53.4	
106-43-4	4-Chlorotoluene	49.7	
98-06-6	tert-Butylbenzene	49.6	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912215

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X103LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	50.6	
99-87-6	4-Isopropyltoluene	45.0	
541-73-1	1,3-Dichlorobenzene	52.2	
106-46-7	1,4-Dichlorobenzene	49.5	
104-51-8	n-Butylbenzene	56.9	
95-50-1	1,2-Dichlorobenzene	47.4	
96-12-8	1,2-Dibromo-3-chloropropane	42.0	
120-82-1	1,2,4-Trichlorobenzene	47.6	
87-68-3	Hexachlorobutadiene	42.4	
91-20-3	Naphthalene	42.5	
87-61-6	1,2,3-Trichlorobenzene	42.6	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x103LANL122.d
Lab Smp Id: 1200912215 Client Smp ID: VBLK01LCS
Inj Date : 15-AUG-2005 10:22
Operator : JEB Inst ID: VOA7.i
Smp Info : |1200912215|452857|1|VOAF|1||
Misc Info : GEL N/A LCS/ICV UVM050708-01D+IVM050808-01
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.164	10.164	(1.000)	1835095	50.0000	
* 61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1251140	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	666221	50.0000	
$ 35 Dibromofluoromethane	113	9.448	9.448	(0.930)	467470	50.8319	50.8
$ 47 Toluene-d8	98	11.713	11.713	(0.893)	1738767	52.2927	52.3
$ 71 Bromofluorobenzene	95	14.224	14.224	(0.921)	549975	45.6082	45.6
3 Dichlorodifluoromethane	85	4.977	4.977	(0.490)	360268	26.6522	26.6
4 Chloromethane	50	5.308	5.308	(0.522)	746561	41.8395	41.8
5 Vinyl chloride	62	5.532	5.532	(0.544)	779201	47.0337	47.0
6 Bromomethane	94	6.061	6.061	(0.596)	527506	46.1536	46.2
7 Chloroethane	64	6.184	6.184	(0.608)	457667	48.6768	48.7
8 Trichlorofluoromethane	101	6.558	6.558	(0.645)	1019076	52.1481	52.1
11 1,1-Dichloroethylene	61	7.167	7.167	(0.705)	805485	55.8143	55.8
10 Acetone	43	7.172	7.172	(0.706)	1213612	362.967	363(AR)
14 Carbon disulfide	76	7.541	7.541	(0.742)	9055135	243.373	243

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17	Methylene chloride	84	7.680	7.680	(0.756)	531477	48.8754	48.9
21	trans-1,2-Dichloroethylene	96	7.974	7.974	(0.784)	492162	50.9312	50.9
22	1,1-Dichloroethane	63	8.417	8.417	(0.828)	982135	54.5363	54.5
31	cis-1,2-Dichloroethylene	96	8.999	8.999	(0.885)	544242	53.6127	53.6
32	Chloroform	83	9.277	9.277	(0.913)	895658	52.1590	52.2
37	1,2-Dichloroethane	62	9.913	9.913	(0.975)	682714	51.3663	51.4
30	2-Butanone	43	8.946	8.946	(0.880)	1283777	272.169	272
36	1,1,1-Trichloroethane	97	9.544	9.544	(0.939)	762097	52.8651	52.9
87	1,4-Dichlorobenzene	146	15.469	15.469	(1.002)	1035977	49.5246	49.5
93	1,2,4-Trichlorobenzene	180	18.033	18.033	(1.168)	575182	47.6214	47.6
85	1,3-Dichlorobenzene	146	15.469	15.469	(1.002)	1035977	52.1900	52.2
90	1,2-Dichlorobenzene	146	15.918	15.918	(1.031)	896815	47.4464	47.4
95	Naphthalene	128	18.498	18.498	(1.198)	1314124	42.5450	42.5
94	Hexachlorobutadiene	225	18.209	18.209	(1.180)	369181	42.3981	42.4
33	Carbon tetrachloride	117	9.726	9.726	(0.957)	662774	51.0027	51.0
38	Benzene	78	9.929	9.929	(0.977)	2029165	49.2871	49.3
39	Trichloroethylene	95	10.538	10.538	(1.037)	456858	48.5205	48.5
41	1,2-Dichloropropane	63	10.784	10.784	(1.061)	533240	52.7422	52.7
45	Bromodichloromethane	83	11.008	11.008	(1.083)	628064	49.9432	49.9
46	cis-1,3-Dichloropropylene	75	11.425	11.425	(1.124)	702245	48.5145	48.5
53	trans-1,3-Dichloropropylene	75	11.922	11.922	(0.909)	663852	49.2691	49.3
54	1,1,2-Trichloroethane	83	12.130	12.130	(0.925)	320009	46.1883	46.2
57	Dibromochloromethane	129	12.552	12.552	(0.957)	379160	46.6790	46.7
49	4-Methyl-2-pentanone	58	11.505	11.505	(0.877)	900843	259.026	259
50	Toluene	92	11.783	11.783	(0.899)	1187587	47.6610	47.7
56	Tetrachloroethylene	164	12.322	12.322	(0.940)	418231	54.4347	54.4
55	2-Hexanone	43	12.280	12.280	(0.936)	1734693	283.728	284
59	1,2-Dibromoethane	107	12.712	12.712	(0.969)	332025	45.3720	45.4
62	Chlorobenzene	112	13.140	13.140	(1.002)	1187003	46.7809	46.8
58	Ethylbenzene	91	13.188	13.188	(1.006)	2156504	51.4265	51.4
63	m,p-Xylenes	106	13.284	13.284	(1.013)	1659704	103.820	104
65	Styrene	104	13.695	13.695	(1.044)	1318756	56.3782	56.4(A)
64	o-Xylene	106	13.690	13.690	(1.044)	808913	52.8464	52.8
67	Isopropylbenzene	105	14.021	14.021	(0.908)	1742895	44.3655	44.4
66	Bromoform	173	13.957	13.957	(0.904)	251491	43.7377	43.7
73	1,1,2,2-Tetrachloroethane	83	14.299	14.299	(0.926)	481499	44.9043	44.9
92	1,2-Dibromo-3-chloropropane	157	16.863	16.863	(1.092)	91954	42.0053	42.0
M 1	Xylenes (total)	106				2468617	156.667	157
60	1,1,1,2-Tetrachloroethane	131	13.188	13.188	(1.006)	443660	49.1041	49.1
34	1,1-Dichloropropene	75	9.689	9.689	(0.953)	659834	54.2149	54.2
52	1,3-Dichloropropane	76	12.306	12.306	(0.938)	740565	53.2120	53.2
80	4-Chlorotoluene	91	14.684	14.684	(0.951)	1468959	49.6826	49.7
15	Acetonitrile	41	7.498	7.498	(0.738)	1853998	1292.83	1290
13	Iodomethane	142	7.413	7.413	(0.729)	3906453	254.558	254
43	Dibromomethane	93	10.917	10.917	(1.074)	271854	46.6002	46.6
29	Bromochloromethane	128	9.261	9.261	(0.911)	234917	50.3748	50.4
75	Bromobenzene	156	14.432	14.432	(0.935)	534051	48.7592	48.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81 tert-Butylbenzene	119	14.945	14.945	(0.968)	1674636	49.5852	49.6
83 sec-Butylbenzene	105	15.170	15.170	(0.983)	2372092	50.6504	50.6
76 n-Propylbenzene	91	14.427	14.427	(0.935)	2480808	49.3845	49.4
89 n-Butylbenzene	91	15.747	15.747	(1.020)	1893162	56.9272	56.9
23 Vinyl acetate	43	8.353	8.353	(0.822)	4166606	222.458	222
84 4-Isopropyltoluene	119	15.287	15.287	(0.990)	1840583	45.0550	45.0
77 2-Chlorotoluene	91	14.582	14.582	(0.945)	1794161	51.4815	51.5
25 2,2-Dichloropropane	77	9.021	9.021	(0.888)	808404	55.1483	55.1
78 1,3,5-Trimethylbenzene	105	14.571	14.571	(0.944)	1723435	49.9213	49.9
96 1,2,3-Trichlorobenzene	180	18.888	18.888	(1.224)	535084	42.5727	42.6
79 1,2,4-Trimethylbenzene	105	14.983	14.983	(0.971)	1848431	53.3713	53.4
74 1,2,3-Trichloropropane	110	14.390	14.390	(0.932)	134483	44.0970	44.1

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA7.i/081505.b/7x103LANL122.d

Page 1

Date : 15-AUG-2005 10:22

Client ID: VBLK01LCS

Instrument: VOA7.i

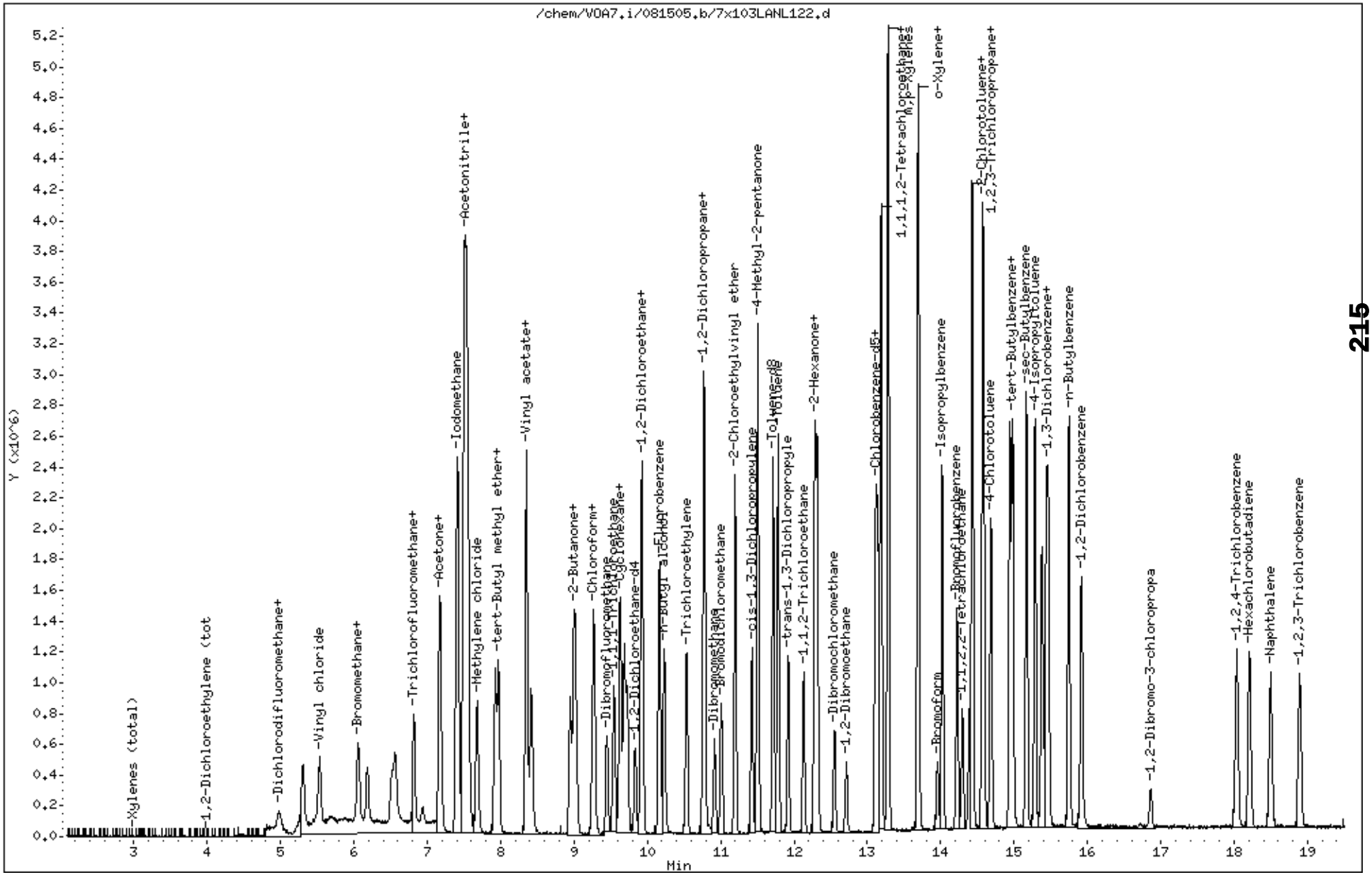
Sample Info: |1200912215|452857|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



215

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912216

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X104LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	288	
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	2270	
107-05-1	Allyl chloride	213	
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	204	
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	36.8	
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	215	
107-12-0	Propionitrile	176	
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethylene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912216

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X104LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
78-87-5	1,2-Dichloropropane		1.0	U
80-62-6	Methyl methacrylate		215	
74-95-3	Dibromomethane		1.0	U
75-27-4	Bromodichloromethane		1.0	U
10061-01-5	cis-1,3-Dichloropropylene		1.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		1.0	U
10061-02-6	trans-1,3-Dichloropropylene		1.0	U
97-63-2	Ethyl methacrylate		205	
79-00-5	1,1,2-Trichloroethane		1.0	U
142-28-9	1,3-Dichloropropane		1.0	U
591-78-6	2-Hexanone		5.0	U
127-18-4	Tetrachloroethylene		1.0	U
124-48-1	Dibromochloromethane		1.0	U
106-93-4	1,2-Dibromoethane		1.0	U
108-90-7	Chlorobenzene		1.0	U
630-20-6	1,1,1,2-Tetrachloroethane		1.0	U
100-41-4	Ethylbenzene		1.0	U
95-47-6	o-Xylene		1.0	U
----------	m,p-Xylenes		2.0	U
1330-20-7	Xylenes (total)		1.0	U
100-42-5	Styrene		1.0	U
75-25-2	Bromoform		1.0	U
98-82-8	Isopropylbenzene		1.0	U
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U
96-18-4	1,2,3-Trichloropropane		1.0	U
108-86-1	Bromobenzene		1.0	U
103-65-1	n-Propylbenzene		1.0	U
95-49-8	2-Chlorotoluene		1.0	U
108-67-8	1,3,5-Trimethylbenzene		1.0	U
95-63-6	1,2,4-Trimethylbenzene		1.0	U
106-43-4	4-Chlorotoluene		1.0	U
98-06-6	tert-Butylbenzene		1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 143122

Matrix: (soil/water) WATER Lab Sample ID: 1200912216

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 7X104LANL122

Level: (low/med) LOW Date Received: 08/15/05

% Moisture: not dec. _____ Date Analyzed: 08/15/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	2070	

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA7.i/081505.b/7x104LANL122.d
Lab Smp Id: 1200912216 Client Smp ID: VBLK01SLCS
Inj Date : 15-AUG-2005 10:50
Operator : JEB Inst ID: VOA7.i
Smp Info : |1200912216|452857|1|VOAF|1||
Misc Info : GEL N/A SHORT
Comment :
Method : /chem/VOA7.i/081505.b/VOA7-8260B-081205.m
Meth Date : 15-Aug-2005 16:28 yip00818 Quant Type: ISTD
Cal Date : 12-AUG-2005 22:24 Cal File: 7w518.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 143122.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.164	10.164	(1.000)	1929240	50.0000	
* 61 Chlorobenzene-d5	117	13.113	13.113	(1.000)	1237576	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	15.437	15.437	(1.000)	554892	50.0000	
$ 35 Dibromofluoromethane	113	9.448	9.448	(0.930)	504557	52.1873	52.2
$ 47 Toluene-d8	98	11.713	11.713	(0.893)	1742509	52.9796	53.0
$ 71 Bromofluorobenzene	95	14.224	14.224	(0.921)	596900	59.4307	59.4
97 1,4-Dioxane	88	10.859	10.864	(1.068)	254998	2066.36	2070
42 Methyl methacrylate	69	10.720	10.720	(1.055)	1898281	214.928	215
51 Ethyl methacrylate	69	11.900	11.900	(0.908)	3338273	205.352	205
24 2-Chloro-1,3-butadiene	53	8.503	8.503	(0.837)	662955	36.8019	36.8
27 Methacrylonitrile	41	9.192	9.192	(0.904)	1746671	214.761	215
19 Isobutyl alcohol	41	9.571	9.571	(0.942)	1124781	2271.68	2270
16 Allyl chloride	76	7.546	7.546	(0.742)	1601999	212.710	213
18 Acrylonitrile	53	7.910	7.915	(0.778)	970750	204.564	204
9 Acrolein	56	7.018	7.017	(0.690)	685593	287.987	288

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
28 Propionitrile	54	9.037	9.031	(0.889)	376951	175.563	176

Data File: /chem/VOA7.i/081505.b/7x104LANL122.d

Page 1

Date : 15-AUG-2005 10:50

Client ID: VBLK01SLCS

Instrument: VOA7.i

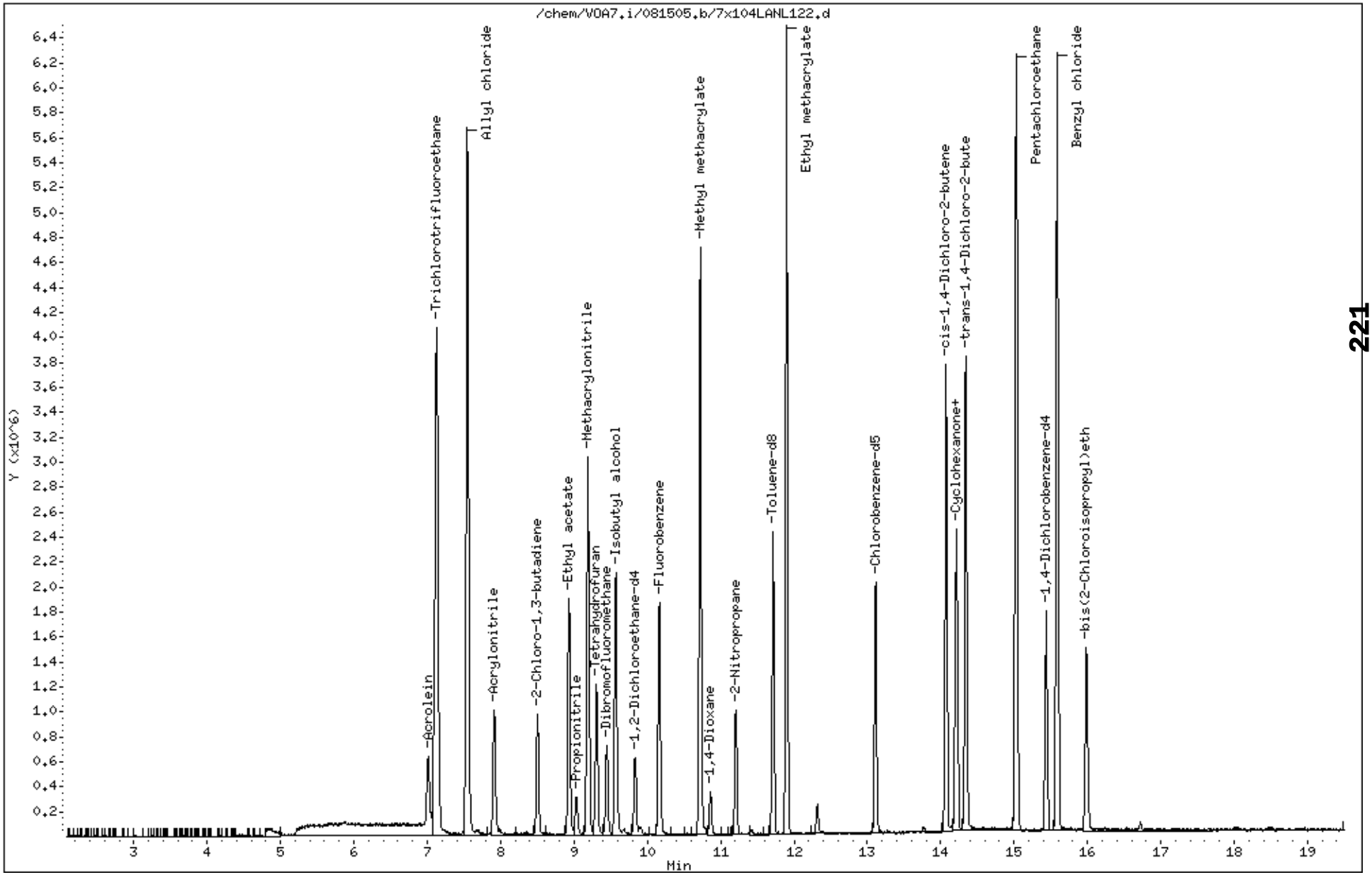
Sample Info: |1200912216|45285|1|VOAF|1||

Purge Volume: 5.0

Operator: JEB

Column phase: DB-624

Column diameter: 0.25



MISCELLANEOUS DATA

General Engineering Laboratories
Form GEL–NCR
Rev. 06/05

NCR Report No.: 235388
Revision No.: 1

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
22–AUG–05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B DOE–AL	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
452857	See Below		

Potentially affected work order(s)(SDG): 143122

Application Issues:

Container scanning event for custody missed

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Container scanning event for custody missed: 143122 001,002,003,004 2. The LCS recoveries were within the acceptance limits, except Acetone.	1. The samples in this SDG were re–logs. The analyst maintained custody of the samples during analysis. 2. The failures were less than 5% of the requested analyte list. This satisfies the client criteria.

Originator's Name:
Erin Haubert 22–AUG–05

Data Validator/Group Leader:
Erin Haubert 22–AUG–05

Quality Review:

Director:

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 08/12/2005 Method 8260 Operator: PS

REVIEWED BY: [illegible]
DATE: 8/15/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1906

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/12/2005

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 081205v7

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	N/A				
IS	UVM050730-01	1	1	1	
SS	UVM050719-02	1		1	
LCS/MS				5	
BFB	UVM050622-02				1
SHORT	UVM050803-01B		5		
DHEC				5	

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
08/12/2005	14:49	7W501.D	UVM050622-02		BFB		1	N/A	99	w	TLW	O	
08/12/2005	15:16	7W502.D	BLANK	GEL	BLANK	N/A	1	N/A	1	w	TLW	X	BLANK
08/12/2005	15:42	7W503.D	UVM050616-01B	VSTD001	ICAL	5uL	1	N/A	3	w	TLW	X	UVM050616-01B
08/12/2005	16:09	7W504.D	W7VM050812-01	VSTD001	ICAL	5uL+5uL	1	N/A	4	w	TLW	O	UVM050616-02B+UVM050810-02A
08/12/2005	16:36	7W505.D	W7VM050812-02	VSTD002	ICAL	5uL+5uL	1	N/A	5	w	TLW	O	UVM050616-03B+UVM050810-03A
08/12/2005	17:02	7W506.D	W7VM050812-03	VSTD005	ICAL	5uL+5uL	1	N/A	6	w	TLW	O	UVM050616-04B+UVM050810-04A
08/12/2005	17:29	7W507.D	W7VM050812-04	VSTD010	ICAL	5uL+5uL	1	N/A	7	w	TLW	O	UVM050616-05B+UVM050810-05A
08/12/2005	17:56	7W508.D	W7VM050812-05	VSTD020	ICAL	5uL+5uL	1	N/A	8	w	TLW	O	UVM050616-06B+UVM050810-06A
08/12/2005	18:23	7W509.D	W7VM050812-06	VSTD050	ICAL	5uL+5uL	1	N/A	9	w	TLW	O	UVM050616-07B+UVM050810-07A
08/12/2005	18:50	7W510.D	W7VM050812-07	VSTD100	ICAL	5uL+5uL	1	N/A	10	w	TLW	O	UVM050616-08B+UVM050810-08A
08/12/2005	19:17	7W511.D	BLANK	GEL	BLANK	N/A	1	N/A	11	w	TLW	X	BLANK
08/12/2005	19:44	7W512.D	UVM050727-02A	VSTD005S	ICAL	5uL	1	N/A	12	w	TLW	O	UVM050727-02A
08/12/2005	20:11	7W513.D	UVM050727-03A	VSTD010S	ICAL	5uL	1	N/A	13	w	TLW	O	UVM050727-03A
08/12/2005	20:38	7W514.D	UVM050727-04A	VSTD025S	ICAL	5uL	1	N/A	14	w	TLW	O	UVM050727-04A
08/12/2005	21:03	7W515.D	UVM050727-05A	VSTD050S	ICAL	5uL	1	N/A	15	w	TLW	O	UVM050727-05A
08/12/2005	21:30	7W516.D	UVM050727-06A	VSTD100S	ICAL	5uL	1	N/A	16	w	TLW	O	UVM050727-06A
08/12/2005	21:57	7W517.D	UVM050727-07A	VSTD250S	ICAL	5uL	1	N/A	17	w	TLW	O	UVM050727-07A
08/12/2005	22:24	7W518.D	UVM050727-08A	VSTD500S	ICAL	5uL	1	N/A	18	w	TLW	O	UVM050727-08A
08/12/2005	22:51	7W519.D	BLANK	GEL	BLANK	N/A	1	N/A	19	w	TLW	X	BLANK
08/12/2005	23:18	7W520.D	UVM050804-01A	GEL	ICV	N/A	1	N/A	20	w	TLW	X	VSTD050 UVM050804-01A
08/12/2005	23:46	7W521.D	UVM050803-01B		ICVSHORT		1	N/A	21	w	TLW	O	
08/13/2005	0:13	7W522.D	BLANK	GEL	BLANK	N/A	1	N/A	22	w	TLW	X	BLANK
08/13/2005	0:41	7W523.D	BLANK	GEL	BLANK	N/A	1	N/A	23	w	TLW	X	BLANK
08/13/2005	1:08	7W524.D	BLANK	GEL	BLANK	N/A	1	N/A	24	w	TLW	X	BLANK
08/13/2005	1:35	7W525.D	W7VM050812-08	GEL	MDL	0.05uL	1	N/A	25	w	TLW	X	MDL VERIFICATION 0.05
08/13/2005	2:02	7W526.D	W7VM050812-09	GEL	MDL	0.1uL	1	N/A	26	w	TLW	X	MDL VERIFICATION 0.1
08/13/2005	2:30	7W527.D	W7VM050812-10	GEL	MDL	0.2uL	1	N/A	27	w	TLW	X	MDL VERIFICATION 0.2
08/13/2005	2:57	7W528.D	W7VM050812-11	GEL	MDL	0.25uL	1	N/A	28	w	TLW	X	MDL VERIFICATION 0.25
08/13/2005	3:24	7W529.D	W7VM050812-12	GEL	MDL	0.50uL	1	N/A	29	w	TLW	X	MDL VERIFICATION 0.50

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 08/13/2005 Method 8260 Operator: PS

REVIEWED BY: EW
DATE: 8/15/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1906

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/12/2005

(See pg. 1 for ICAL Std. Sci. Ids)

Sequence Number: 081305V7

Daily Standard	Solution ID#	Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7V050813-01				
IS	UVM050730-01	1	1	1	
SS	UVM050719-02	1		1	
LCS/MS	UVM050804-01A			5	
BFB	UVM050622-02				1
SHORT	UVM050803-01B		5		
DHEC	UVM050801-01B			5	

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
08/13/2005	11:38	7W601.D	UVM050622-02	GEL	BFB	5.0ML	1	N/A	1	w	PS	O	
08/13/2005	12:08	7W602.D	W7V050813-01	GEL	CCV	5.0ML	1	N/A	2	w	PS	O	UVM051810-07A+UVM050616-07B
08/13/2005	12:36	7W603.D	W7V050813-02	GEL	ICV	5.0ML	1	N/A	3	w	PS	O	UVM050708-01D+IVM050808
08/13/2005	13:03	7W604.D	UVM050804-01A	GEL	LCS	5.0ML	1	N/A	4	w	PS	X	O2SI
08/13/2005	13:31	7W605.D	UVM050803-01B	GEL	SHORT	5.0ML	1	N/A	5	w	PS	O	
08/13/2005	13:58	7W606.D	UVM050801-01B	GEL	DHEC	5.0ML	1	N/A	6	w	PS	O	
08/13/2005	14:26	7W607.D	BLANK	GEL	BLANK	5.0ML	1	N/A	7	w	PS	X	
08/13/2005	14:53	7W608.D	BLANK	GEL	BLANK	5.0ML	1	N/A	8	w	PS	O	
08/13/2005	15:20	7W609.D	BLANK	GEL	BLANK	5.0ML	1	N/A	9	w	PS	X	
08/13/2005	15:48	7W610.D	MDLV 0.25	GEL	LONG	5.0ML	1	N/A	10	w	PS	O	UVM050616-01B+UVM050810-01A
08/13/2005	16:15	7W611.D	MDLV 0.3	GEL	LONG	5.0ML	1	N/A	11	w	PS	O	UVM050616-01B+UVM050810-01A
08/13/2005	16:43	7W612.D	MDLV 0.5	GEL	LONG	5.0ML	1	N/A	12	w	PS	O	UVM050616-01B+UVM050810-01A
08/13/2005	17:10	7W613.D	MDLV 0.75	GEL	LONG	5.0ML	1	N/A	13	w	PS	O	UVM050616-01B+UVM050810-01A
08/13/2005	17:37	7W614.D	MDLV 1.0	GEL	SHORT	5.0ML	1	N/A	14	w	PS	O	UVM0508
08/13/2005	18:05	7W615.D	MDLV 2.5	GEL	SHORT	5.0ML	1	N/A	15	w	PS	O	
08/13/2005	18:32	7W616.D	MDLV 3.0	GEL	SHORT	5.0ML	1	N/A	16	w	PS	O	

General Engineering Laboratories, LLC
Revision: 2/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA7

Date: 08/15/2005 Method _____ Operator: JEB

REVIEWED BY: RS
DATE: 8/22/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1906

YS 8/19/05

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/12/2005

(See pg. 1 for ICAL Std. Sci. Ids)

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7V050815-01				
IS	UVM050730-01	1	1	1	
SS	UVM050719-02	1		1	
LCS/MS	W7V050815-02			5	
BFB	UVM050622-02				1
SHORT	UVM050803-01B		5		
DHEC	UVM050801-01B			5	

Purge Amount

5 Water Purge Vol:
_____ Soil Purge Wt.
_____ Mid level ext. MeOH Vol:
_____ ul
_____ Methanol Lot #
x Heated Purge

Sequence Number: 081505V7

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
08/15/2005	9:27	7X101.D	UVM050622-02	[redacted]	BFB	N/A	1	N/A	1	W	JEB	O	
08/15/2005	9:55	7X102.D	W7V050815-01		CCV	N/A	1	N/A	2	W	JEB	X	
08/15/2005	10:22	7X103.D	W7V050815-02		ICV	N/A	1	N/A	3	W	JEB	O	UVM050708-
08/15/2005	10:50	7X104.D	UVM050803-01B		SHORT	N/A	1	N/A	4	W	JEB	O	
08/15/2005	11:17	7X105.D	UVM050801-01B		DHEC	N/A	1	N/A	5	W	JEB	O	
08/15/2005	11:44	7X106.D	BLANK		BLANK	N/A	1	N/A	6	W	JEB	X	
08/15/2005	13:26	7X107.D	BLANK		BLANK	N/A	1	N/A	7	W	JEB	O	
08/15/2005	13:54	7X108.D	143122001	ESHL	452857	5.0ML	1	PH2	9	w	JEB	O	RELOG OF 138369001
08/15/2005	14:21	7X109.D	143122002	ESHL	452857	5.0ML	1	PH2	10	w	JEB	O	RELOG OF 138851003
08/15/2005	14:49	7X110.D	143122003	ESHL	452857	5.0ML	1	PH2	11	w	JEB	O	RELOG OF 138851004
08/15/2005	15:16	7X111.D	143122004	ESHL	452857	5.0ML	1	PH2	12	w	JEB	O	RELOG OF 139405002
08/15/2005	15:44	7X112.D	138369001	[redacted]	452857	5.0ML	1	PH2	13	w	JEB	O	opened vial (original)
08/15/2005	16:11	7X113.D	142843001		452949	5.0ML	1	PH2	14	w	JEB	O	
08/15/2005	16:38	7X114.D	142843002		452949	5.0ML	1	PH2	15	w	JEB	O	
08/15/2005	17:06	7X115.D	142912003		452949	5.0ML	1	PH2	16	w	JEB	O	
08/15/2005	17:33	7X116.D	142917002		452949	5.0ML	1	PH2	17	w	JEB	O	
08/15/2005	18:00	7X117.D	142228001		452949	5.0ML	1	PH2	18	w	JEB	O	
08/15/2005	18:28	7X118.D	142228002		452949	5.0ML	1	PH2	19	w	JEB	O	
08/15/2005	18:55	7X119.D	142228003		452949	5.0ML	1	PH2	20	w	JEB	O	
08/15/2005	19:23	7X120.D	142772002		452949	5.0ML	1	PH2	21	w	JEB	O	
08/15/2005	19:50	7X121.D	142793002		452949	5.0ML	1	PH2	22	w	JEB	O	
08/15/2005	20:17	7X122.D	142795001		452949	5.0ML	1	PH2	23	w	JEB	O	
08/15/2005	20:45	7X123.D	142863001		452949	5.0ML	1	PH2	24	w	JEB	O	
08/15/2005	21:12	7X124.D	1200912376		452949	5.0ML	1	PH2	25	w	JEB	X	142863001MS
08/15/2005	21:39	7X125.D	1200912377		452949	5.0ML	1	PH2	26	w	JEB	X	142863001MSD
08/15/2005	22:06	7X126.D	BLANK	BLANK	452949	5.0ML	1	PH2	27	w	JEB	X	
08/15/2005	22:34	7X127.D	142861001		452949	5.0ML	1	PH2	28	w	JEB	X	
08/15/2005	23:01	7X128.D	142861002		452949	5.0ML	1	PH2	29	w	JEB	X	

General Engineering Laboratories, LLC
Revisior 22/04

ORGANIC RUN LOG - IN STRUMENT ID#VOA7

Date: 08/15/2005 Method _____ Operator: JEB

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1906

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/12/2005

(See pg. 1 for ICAL Std. Sci. Ids)

Sequence Number: 081505V7

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W7V050815-01				
IS	UVM050730-01	1	1	1	
SS	UVM050719-02	1		1	
LCS/MS	W7V050815-02			5	
BFB	UVM050622-02				1
SHORT	UVM050803-01B		5		
DHEC	UVM050801-01B			5	

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
08/15/2005	23:29	7X129.D	142861003	[redacted]	452949	5.0ML	1	PH2	30	w	JEB	X	
08/15/2005	23:56	7X130.D	142912001	[redacted]	452949	0.5ML	10	PH7	31	w	JEB	X	10X
08/16/2005	0:24	7X131.D	142912002	[redacted]	452949	0.25ML	20	PH7	32	w	JEB	X	20X
08/16/2005	0:51	7X132.D	BLANK	BLANK	452949	5.0ML	1		33	w	JEB	X	
08/16/2005	1:18	7X133.D	BLANK	BLANK	452949	5.0ML	1		34	w	JEB	X	
08/16/2005	1:46	7X134.D	BLANK	BLANK	452949	5.0ML	1		35	w	JEB	X	
08/16/2005	2:13	7X135.D	BLANK	BLANK	452949	5.0ML	1		36	w	JEB	X	
08/16/2005	2:41	7X136.D	BLANK	BLANK	452949	5.0ML	1		37	w	JEB	X	

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AQA Nonconformance Report

NCR No. 12-22-05EH

Pg 1 of 1

SECTION 1

Document Title: DV report: LANL WQH 145579 VOCs GEL	Project or Program: Data Validation
Originator / Date: Eyda Hergenreder 12/22/05	Contract No.: 67191001-03-A5

DESCRIPTION OF NONCONFORMANCE

Requirement: Methylene chloride and 1,4-dioxane should be rejected due to initial calibration problem..

Condition Found: Initial calibration intercept for methylene chloride was > 3X MDL and the RF for 1,4-dioxane was <0.01.

Assigned to: Eyda Hergenreder Response Due 12/22/05

DISPOSITION: Accept-As-Is_____ Reject_____ Administrative Action__X__

Justification:

Validation error caught during peer review of data.

Instructions: (Identify what Administrative Actions and/or Corrective Actions will occur.)
Revise and re-issue DV report.

Responsible Employee__Eyda Hergenreder_____ Corrective Action Due Date_12/22/05_

SECTION 3

VERIFICATION AND CLOSURE: Disposition Completed As Directed ___X____ Other (Specify)_____

Originator or QA Coordinator (Signature/Date)____ Eyda Hergenreder Eyda Hergenreder 12/22/05

AQA Nonconformance Report

NCR No. 12-22-05EH

Pg 1 of 1

SECTION 1

Document Title: DV report: LANL WQH 145579 SVOCs GEL	Project or Program: Data Validation
Originator / Date: Eyda Hergenreder 12/22/05	Contract No.: 67191001-03-A5

DESCRIPTION OF NONCONFORMANCE

Requirement: Dinoseb and Naphthalene should be rejected due to initial calibration problem.

Condition Found: Initial calibration intercept for dinoseb and naphthalene were > 3X MDL with a negative bias.

Assigned to: Eyda Hergenreder Response Due 12/22/05

DISPOSITION: Accept-As-Is_____ Reject_____ Administrative Action__X__

Justification:
Validation error caught during peer review of data.

Instructions: (Identify what Administrative Actions and/or Corrective Actions will occur.)
Revise and re-issue DV report.

Responsible Employee__Eyda Hergenreder_____ Corrective Action Due Date_12/22/05_

SECTION 3

VERIFICATION AND CLOSURE: Disposition Completed As Directed ___X____ Other (Specify)_____

Originator or QA Coordinator (Signature/Date)____ Eyda Hergenreder Eyda Hergenreder 12/22/05

Analytical Quality Associates, Inc.
616 Maxine NE
Albuquerque, NM 87123
Phone: 505-299-5201
Fax: 505-299-6744
Email: minteer@aol.com

Memorandum - Revised

Date: 12/22/05

To: William Turney

From: Eyda Hergenreder

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WG-03367-GE; WG-03371-GE; WG-03407-GE; WG-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

All Samples	The result for methylene chloride should be **qualified R, VWQ5,** due to calibration problems. The result for isobutyl alcohol should be **qualified UJ, V7b,** due to calibration problems. The results for acrolein, trichlorotrifluoroethane, isobutyl alcohol, allyl chloride, acrylonitrile, 2-chloro-1,3-butadiene, methacrylonitrile, propionitrile, methyl methacrylate and ethyl methacrylate should be **qualified UJ, V14b,** due to lack of matrix specific accuracy and precision data.
Sample GU05090GMC401	The result for 1,4-dioxane should be **qualified J,V7b ,** due to calibration problems, **qualified J, V14b,** due to lack of matrix specific accuracy and precision data.
Samples GU05090G3TM01 GU05090GMC401-FTB GU05090G57M01 GU05090G57M01-FTB GU05090G7CM01 GU05090G7CM01-FTB	The result for 1,4-dioxane should be **qualified R, V7b,** due to calibration problems, **qualified UJ, V14b,** due to lack of matrix specific accuracy and precision data.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using EPA 8260B VOCs. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

All COC, analysis request and sample receipt documentation were complete and correct.

Holding Times and Preservation

The samples were properly preserved and analyzed within the prescribed holding time.

Instrument Tune

All instrument tune requirement were met.

Calibration

All initial and continuing calibration criteria were met with the following exception. The initial calibration intercept for methylene chloride was negative with an absolute value greater than three times the MDL. Methylene chloride was not detected in any of the samples, and data should be **qualified R**. The initial calibration response factor for isobutyl alcohol was <0.05 but ≥0.01. Isobutyl alcohol was not detected in any of the samples, and data should be **qualified UJ**. The initial calibration response factor for 1,4-dioxane was <0.01. 1,4-Dioxane was detected in sample GU05090GMC401, and data should be **qualified J**. 1,4-Dioxane was not detected in any of the other samples in this SDG, and data should be **qualified R**.

The continuing calibration verification percent differences associated with the samples were >20% for acrolein; acrylonitrile; propionitrile and isobutyl alcohol. All other calibration criteria were met and all sample results for these compounds were non-detect, therefore, sample data should not be qualified.

The continuing calibration verification percent difference associated with the QC samples was >20% for acrolein. All other calibration criteria were met; therefore, no data should be qualified.

The continuing calibration verification percent differences associated with the QC samples were >20% but ≤40% with a negative bias for methylene chloride and benzene. All other calibration criteria were met; therefore, sample data should not be qualified.

Blanks

No target compounds were detected in the method blank. The toluene result for sample GU05090G7CM01-FTB was >MDL but ≤PQL; however all other associated field sample results were non-detect; therefore no data should be qualified.

Surrogates

All surrogate acceptance criteria were met.

Internal Standards (ISs)

All internal standard criteria were met.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

All MS/MSD acceptance criteria were met. Acrolein, trichlorotrifluoroethane, isobutyl alcohol, allyl chloride, acrylonitrile, 2-chloro-1,3-butadiene, methacrylonitrile, propionitrile, methyl methacrylate, ethyl methacrylate and 1,4-dioxane were not included in the MS or MSD analyses, resulting in no matrix specific accuracy or precision data for these samples in this SDG. 1,4-Dioxane was detected in sample GU05090GMC401 and should be **qualified J**. 1,4-Dioxane was not detected in any of the other samples

in this SDG, and data should be **qualified UJ**. None of the other compounds listed were detected in the samples, and data should be **qualified UJ**.

Laboratory Control Sample

All LCS acceptance criteria were met.

Detection Limits/Dilutions

All detection limits were properly reported. The samples were not diluted.

Tentatively Identified Compounds

TICs were requested and reported, but not assessed for validation.

Other QC

No other specific issues that affect data quality were identified.

Reviewed by: Maryann Jordan Level: II Date: 12/14/05

Analytical Quality Associates, Inc.
616 Maxine NE
Albuquerque, NM 87123
Phone: 505-299-5201
Fax: 505-299-6744
Email: minteer@aol.com

Memorandum - Revised

Date: 12/22/05

To: William Turney

From: Eyda Hergenreder

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WT-03367-GE; WT-03371-GE; WT-03407-GE; WT-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: SVOCs

Data Qualifiers (see following sections for detailed explanations)

All Samples	The results for dinoseb and naphthalene should be **qualified R, SWQ5,** due to calibration problems, and **qualified UJ, SWQ5,** due to lack of matrix specific accuracy and precision data. The results for N-nitrosodiethylamine, N-nitrosopyrrolidine, N-nitrosodi-n-butylamine, 1,2,4,5-tetrachlorobenzene, pentachlorobenzene and 2,3,4,6-tetrachlorophenol should be **qualified UJ, SWQ5,** due to lack of matrix specific accuracy data and lack of precision data The results for all other target compounds should be **qualified UJ, SWQ5** due to the lack of matrix specific precision data.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using EPA 8270C SVOCs. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

All COC, analysis request and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were properly preserved and analyzed within the prescribed holding time.

Instrument Tune

All instrument tune requirement were met.

Calibration

All initial and continuing calibration criteria were met with the following exception. The initial calibration intercepts for indeno(1,2,3-cd)pyrene; dibenzo(ah)anthracene and benzo(ghi)perylene were >3X the MDL with a positive bias. The associated sample results were non-detect; therefore no data should be qualified. The initial calibration intercept for dinoseb and naphthalene were negative with an absolute value >3X the MDL. Dinoseb and naphthalene were not detected in the samples, and data should be **qualified R**.

The continuing calibration verification %D for benzidine and 3,3'-dichlorobenzidine were >20% with a positive bias. All sample results were non-detect; therefore no data should be qualified**.**

Blanks

No target compounds were detected in the method blank.

Surrogates

All surrogate acceptance criteria were met.

Internal Standards (ISs)

All internal standard criteria were met.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS analysis was completed on a sample from this SDG; however a MSD was not analyzed. All sample results were non-detect; therefore all compounds should be **qualified UJ** due to the lack of matrix specific precision data. N-Nitrosodiethylamine, N-nitrosopyrrolidine, N-nitrosodi-n-butylamine, 1,2,4,5-tetrachlorobenzene, pentachlorobenzene, 2,3,4,6-tetrachlorophenol and dinoseb were not included in the MS. These compounds were not detected in the samples, and data should be **qualified UJ** due to lack of matrix specific accuracy data.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met with the following exception. The LCS recovery for 2,6-dinitrotoluene was <laboratory acceptance limit but ≥10%. However based on the number of compounds in the LCS, 5 outliers are allowed; therefore no sample should be qualified.

Detection Limits/Dilutions

All detection limits were properly reported. The samples were not diluted.

Tentatively Identified Compounds

TICs were requested and reported, but not assessed for validation.

Other QC

No other specific issues that affect data quality were identified.

Reviewed by: Maryann Jordan Level: II Date: 12/14/05

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Memorandum

Date: 11/02/05

To: William Turney

From: Eyda Hergenreder

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WG-03367-GE; WG-03371-GE; WG-03407-GE; WG-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

No data qualifiers should be applied to the EPA 8260B samples in this data package.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using EPA 8260B VOCs. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

All COC, analysis request and sample receipt documentation were complete and correct.

Holding Times and Preservation

The samples were properly preserved and analyzed within the prescribed holding time.

Instrument Tune

All instrument tune requirement were met.

Calibration

All initial and continuing calibration criteria were met with the following exception. The continuing calibration verification percent difference associated with the samples were >20% for acrolein; acrylonitrile; propionitrile. All other calibration criteria were met and all sample results for these compounds were non-detect, therefore sample data should not be qualified.

The continuing calibration verification percent difference associated with the QC samples was >20% for acrolein. All other calibration criteria were met; therefore no data should be qualified.

The continuing calibration verification percent difference were >20% but ≤40% with a negative bias, for isobutyl alcohol associated with the samples and methylene chloride and benzene associated with the QC samples. All other calibration criteria were met; therefore sample data should not be qualified.

Blanks

No target compounds were detected in the method blank. The toluene result for sample GU05090G7CM01-FTB was >MDL but ≤PQL; however all other associated field sample results were non-detect; therefore no data should be qualified.

Surrogates

All surrogate acceptance criteria were met.

Internal Standards (ISs)

All internal standard criteria were met.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

All MS/MSD acceptance criteria were met.

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

All LCS/LCSD acceptance criteria were met.

Detection Limits/Dilutions

All detection limits were properly reported. The samples were not diluted.

Tentatively Identified Compounds

TICs were requested and reported, but not assessed for validation.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 11/02/05

To: William Turney

From: Eyda Hergenreder

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WT-03367-GE; WT-03371-GE; WT-03407-GE; WT-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: SVOCs

Data Qualifiers (see following sections for detailed explanations)

All Samples	The results for all compounds should be **qualified UJ, SWQ5** due to the lack of matrix-specific accuracy and precision data.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using EPA 8270C SVOCs. Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

All COC, analysis request and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were properly preserved and analyzed within the prescribed holding time.

Instrument Tune

All instrument tune requirement were met.

Calibration

All initial and continuing calibration criteria were met with the following exception. The initial calibration intercept for indeno(1,2,3-cd)pyrene; dibenzo(ah)anthracene and benzo(ghi)perylene were >3X the MDL with a positive bias. The associated sample results were non-detect; therefore no data should be qualified.

The continuous calibration verification %D for benzidine and 3,3'-dichlorobenzidine were >20% with a positive bias. All sample results were non-detect; therefore no data should be qualified**.**

Blanks

No target compounds were detected in the method blank.

Surrogates

All surrogate acceptance criteria were met.

Internal Standards (ISs)

All internal standard criteria were met.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS analysis was completed on a sample from this SDG; however a MSD was not analyzed. All sample results were non-detect; therefore all compounds should be **qualified UJ** due to the lack of a matrix-specific accuracy and precision data.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met with the following exception. The LCS recovery for 2,6-dinitrotoluene was <laboratory acceptance limit but ≥10%. However based on the number of compounds in the LCS, 5 outliers are allowed; therefore no sample should be qualified.

Detection Limits/Dilutions

All detection limits were properly reported. The sample was not diluted.

Tentatively Identified Compounds

TICs were requested and reported, but not assessed for validation.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 11/04/05

To: William Turney

From: Eyda Hergenreder

Subject: Radiochemical Data Review and Validation – LANL WQH
COC: WG-03367-GE; WG-03371-GE; WG-03407-GE; WG-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: RAD

Data Qualifiers (see following sections for detailed explanations)

Sample GF05090G3TM01	The results for alpha spectrometry analytes Pu-238, Pu-239/240, U-235/236; gross alpha; Sr-90 and gamma spectroscopy analytes Cs-137, Co-60, Np-237, K-40, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values. The result for alpha spectrometry analyte Am-241 should be **qualified J, RWQ2** due to reported value <3X the MDC.
Sample GF05090GMC401	The results for alpha spectrometry analytes Am-241, Pu-238, Pu-239/240, U-235/236, U-238; gross alpha; Sr-90 and gamma spectroscopy analytes Cs-137, Co-60, Np-237, K-40, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values. The results for alpha spectrometry analyte U-234 and gross beta should be **qualified J, RWQ2** due to reported value <3X the MDC.
Sample GF05090G57M01	The results for alpha spectrometry analyte U-235/236; gross alpha; Sr-90 and gamma spectroscopy analytes Cs-137, Co-60, Np-237, K-40, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values. The results for alpha spectrometry analytes Pu-238 and Pu-239/240 should be **qualified J, RWQ2** due to reported values <3X the MDC.
Sample GF05090G7CM01	The results for alpha spectrometry analytes Pu-238, Pu-239/240, U-235/236; gross alpha and gamma spectroscopy analytes Cs-137, Co-60, Np-237, K-40, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values. The results for alpha spectrometry analyte Am-241 and Sr-90 should be **qualified J, RWQ2** due to reported values <3X the MDC.

Sample GU05090G3TM01	The results for alpha spectrometry analytes Pu-238, Pu-239/240, U-235/236; gross alpha; Sr-90 and gamma spectroscopy analytes Cs-137, Co-60, Np-237, K-40, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values.
Sample GU05090GMC401	The results for alpha spectrometry analytes Am-241, Pu-238, Pu-239/240, U-235/236 and U-238; gross alpha; gross beta; Sr-90 and gamma spectroscopy analytes Cs-137, Co-60, Np-237, K-40, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values. The results for alpha spectrometry analyte U-234 and TC-99 should be **qualified J, RWQ2** due to reported values <3X the MDC.
Sample GU05090G57M01	The results for alpha spectrometry analyte U-235/236; gross alpha; Sr-90 and gamma spectroscopy analytes Co-60, Np-237, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values. The results for gross spectroscopy analytes Cs-137 and K-40 should be **qualified R, RWQ7** due to data rejected by the laboratory.
Sample GU05090G7CM01	The results for alpha spectrometry analytes Pu-238, Pu-239/240, U-235/236; gross alpha and gamma spectroscopy analytes Cs-137, Co-60, Np-237, Na-22 and gross gamma should be **qualified BD, R5** due to low reported values. The results for alpha spectrometry analyte Am-241; Sr-90 and gross spectroscopy analyte K-40 should be **qualified J, RWQ2** due to reported values <3X the MDC.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using methods DOE EML HASL300 (Iso-Am, -Pu, -U); EPA 901.1 (Gamma Spec); EPA 905.0 (Sr-90); DOE EML HASL300 (TC99); EPA 906.0 (Tritium) and EPA 900.0 (gross alpha/beta). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP), Rev. 4.

Sample Shipping/Receiving

The COC, analysis request and sample receipt documentations were complete and correct.

Holding Times and Preservation

The samples were properly preserved and analyzed within the required holding times.

Quantification

All sample results which were < the associated 2-sigma uncertainty and/or < the associated MDC should be **qualified BD**. All sample results which were ≥MDC but <3X the MDC should be **qualified J**. All samples results which were rejected by the laboratory should be **qualified R.**

Calibration

The case narratives stated that the instruments used were properly calibrated.

Blanks

No target analytes were detected in the method blanks at concentrations > the MDC and 2-sigma uncertainty.

Tracer/Carrier Recovery

All tracer/carrier recoveries were within acceptance limits.

Matrix Spike (MS)

The MS analyses met all QC acceptance criteria.

The MS analysis for Sr-90 and tritium were performed on samples of similar matrix from other LANL SDG. No data should be qualified as a result.

Laboratory Replicate

The laboratory replicate analyses met all QC acceptance criteria.

The replicate analyses for alpha spectrometry analytes gamma spectroscopy; tritium and Sr-90 were performed on samples of similar matrix from other LANL SDG. No data should be qualified as a result.

Laboratory Control Sample (LCS)

All LCS analyses met the QC acceptance criteria.

Detection Limits/Dilutions

All detection limits were properly reported. The samples were not diluted.

Other QC

The laboratory rejected the data for gamma spectroscopy analytes Cs-137 and K-40 for sample GU05090G57M01 due to no valid peak.

The following MDC were > than the reporting limit (RL):

GF05090G3TM01: gamma spectrometry analytes Np-237, K-40, gross gamma.

GF05090GMC401: gamma spectrometry analytes Np-237, K-40, gross gamma.

GF05090G57M01: gamma spectrometry analytes Np-237, K-40, gross gamma.

GF05090G7CM01: gamma spectrometry analytes Np-237, K-40; gross gamma.

GU05090G3TM01: gamma spectrometry analytes Np-237, K-40, gross gamma; gross beta and tritium

GU05090GMC401: gamma spectrometry analytes Np-237, K-40, gross gamma; gross beta and tritium

GU05090G57M01: gamma spectrometry analytes Np-237, K-40, gross gamma

GU05090G7CM01: gamma spectrometry analytes Np-237, K-40, gross gamma

For gross alpha/gross beta analysis, the sample planchets were counted for beta activity before being flamed. After flaming, the planchets were counted for alpha activity. No data should be qualified as a result.

No other specific issues that affect data quality were identified.

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Memorandum

Date: 11/03/05

To: William Turney

From: Eyda Hergenreder

Subject: Inorganic Data Review and Validation – LANL WQH
COC: WG-03367-GE; WG-03371-GE; WG-03407-GE; WG-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: Metals

Data Qualifiers (see following sections for detailed explanations)

Sample GF05090G7CM01	The result for Zn should be **qualified 12.6U, I4a** due to a blank contamination.
Sample GU05090G3TM01	The result for Zn should be **qualified 12.6U, I4a** due to a blank contamination.
Sample GU05090G7CM01	The result for Zn should be **qualified 12.6U, I4a** due to a blank contamination.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using methods EPA 6010B (ICPAES); EPA 6020 (ICPMS); EPA 245.1/245.2 (CVAA) and SM2340B (Hardness by calculation). Data were reported for all required analytes.

See the attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

The COC, analysis request and sample receipt documentations were complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times.

ICP-MS Instrument Tune

All ICPMS tune requirements were met.

Calibration

All initial and continuing calibration met QC acceptance criteria with the following exception. The initial calibration y-intercept for silica was negative with an absolute value >3X the MDL. All sample results were >3X the absolute value of the intercept; therefore no data should be qualified.

Reporting Limit Verification

All CRI and CRA standard recoveries met the QC acceptance criteria with the following exception. The CRA for Hg was >130%. All sample results were non-detect; therefore no data should be qualified.

Blanks

In one or more of the blanks SiO_2; Ca and Zn were detected at >MDL but ≤PQL. All associated sample results for Ca and SiO_2 were >5X the blank reading; therefore no data should be qualified. The Zn results for samples GF05090G7CM01; GU05090G3TM01 and GU05090G7CM01 were <5X the blank reading; therefore data for these sample should be **qualified 12.6U.** The Zn results on all other associated sample were > 5X the blank reading; therefore no other data should be qualified.

In one or more of the blanks Na was detected at a negative reading with absolute value >MDL but ≤PQL. All Na results were >5X the MDL; therefore no data should be qualified.

ICP-MS Internal Standards

All ICPMS internal standard recoveries were within acceptance limits.

Matrix Spike (MS)

The MS analysis met all QC acceptance criteria with the following exception. The SiO_2 MS recovery for samples GU05090GMC401 and GU05090G57M01 were <75 but >30%. Since the spike recoveries for samples GU05090G3TM01 and GU05090G7CM01 were acceptable and the sample results were >4X the spike added, no data should be qualified as a result.

The Na MS recovery for sample GU05090G3TM01 was <30% and the recovery for sample GU05090G7CM01 was >125%. Since the spike recoveries for samples GU05090GMC401 and GU05090G57M01 were acceptable and the sample results were >4X the spike added, no data should be qualified as a result.

Laboratory Replicate

All replicate analysis met all QC acceptance criteria with the following exception. The RPD for U on samples GU05090G3TM01 and GU05090G7CM01 were > 20%. Since the RPD for samples GU05090GMC401 and GU05090G57M01 were acceptable, no data should be qualified as a result.

Laboratory Control Sample (LCS)

The LCS analysis met all QC acceptance criteria.

Detection Limits/Dilutions

All detection limits were properly reported.

ICP Interference check sample (ICS A and AB) Analyses

The results of the ICS-A and ICS-AB analyses were not applicable because the concentrations of Al, Ca, Fe, and Mg in the samples were < those in the ICS solutions. No sample data should be qualified as a result.

ICP and ICPMS Serial Dilution

All serial dilution results met QC acceptance criteria.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 11/03/05

To: William Turney

From: Eyda Hergenreder

Subject: Inorganic Data Review and Validation – LANL WQH
COC: WG-03367-GE; WG-03371-GE; WG-03407-E; WG-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: General Chemistry

Data Qualifiers (see following sections for detailed explanations)

All Samples	The results for pH should be **qualified J, I9** due to the analysis completed beyond the holding time.
Sample GU05090G3TM01	The result for TKN should be **qualified 0.43U, I4a** due to a blank contamination.
Sample GU05090GMC401	The result for total organic carbon should be **qualified 2.99U, 14a** due to a blank contamination.
	The result for TKN should be **qualified 0.43U, I4a** due to a blank contamination.
Sample GU05090G57M01	The result for TKN should be **qualified 0.43U, I4a** due to a blank contamination.
Sample GU05090G7CM01	The result for TKN should be **qualified 0.43U, I4a** due to a blank contamination.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using methods EPA 9020 (Total Organic Carbon); EPA 120.1 (Conductivity); EPA 150.1 (pH); EPA 335.3 (Total Cyanide); EPA 300.0 (Bromide, Fluoride, Sulfate and Chloride); EPA 314.0 (Perchlorate); EPA 351.2 (TKN); EPA 353.1 (Nitrate/Nitrite as nitrogen); EPA 365.4 (Total phosphorus); EPA 160.1 (TDS); EPA 160.2 (TSS) and EPA 310.1(Alkalinity). Data were reported for all required analytes.

See the attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

The COC, analysis request and sample receipt documentations were complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times with the following exception. All samples were received beyond the holding time for pH. Samples GF05090G3TM01; GF05090GMC401; GF05090G57M01; GU05090G3TM01; GU05090GMC401; GU05090G57M01 were analyzed beyond 2X the holding time. Samples GF05090G7CM01 and GU05090G7CM01 were analyzed within 2X the holding time. All samples should be **qualified J.**

Calibration

All initial and continuing calibration QC acceptance criteria were met with the following exception. The initial calibration y-intercept for nitrate/nitrite as nitrogen and total organic carbon were negative with absolute values >3X the MDL. All sample results for nitrate/nitrite as nitrogen and total organic carbon were >3X the absolute value of the intercept; therefore no other sample data should be qualified.

The initial calibration y-intercept for sulfate was >3X the MDL. All associated sulfate results were >3X the absolute value of the intercept; therefore no data should be qualified.

Blanks

All blank results met the QC acceptance criteria with the following exception. In one or more blanks, total dissolved solids; nitrate/nitrite as nitrogen and TKN were negative concentration with absolute values >MDL but ≤PQL. All sample results for total dissolved solids; TKN and nitrate/nitrite as nitrogen were >5X the MDL; therefore no data should be qualified.

In one or more blanks, total organic carbon; TKN and total phosphorus were detected at >MDL but ≤PQL. All sample results for TKN were <5X the blank reading; therefore data for the samples should be **qualified 0.43U.** The total organic carbon result for sample GU05090GMC401 was <5X the blank reading; therefore data for this sample should be **qualified 2.99U**. All other total organic carbon results were >5X the blank reading; therefore no other data should be qualified. All sample results for total phosphorus results were >5X the blank result; therefore no data should be qualified.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met.

Matrix Spike (MS)

All MS acceptance criteria were met.

The matrix spike analysis for perchlorate was performed on a sample of similar matrix from another LANL SDG. No data should be qualified as a result.

Laboratory Replicate

All replicate relative percent differences were within acceptance limits.

The laboratory replicate analysis for perchlorate was performed on a sample with similar matrix from another LANL SDG. No data should be qualified as a result.

Detection Limits/Dilutions

All detection limits were properly reported. The following samples were analyzed at a dilution due to elevated concentration.
GF05090G3TM01: 5X for chloride; 10X for nitrate/nitrite as nitrogen
GF05090GMC401: 2X for chloride; 10X for nitrate/nitrite as nitrogen and 5X for perchlorate
GF05090G57M01: 2X for chloride; 10X for nitrate/nitrite as nitrogen
GF05090G7CM01: 5X for chloride; 10X for nitrate/nitrite as nitrogen
GU05090G3TM01: 5X for chloride
GU05090GMC401: 2X for chloride
GU05090G57M01: 5X for chloride
GU05090G7CM01: 5X for chloride

Other QC

No specific issues that affect data quality were identified.

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Memorandum

Date: 11/03/05

To: William Turney

From: Eyda Hergenreder

Subject: LC/MS/MS Organic Data Review and Validation – LANL WQH
COC: WG-03367-GE; WG-03371-GE; WG-03407-GE; WG-03418-GE
SDG: 145579
Laboratory: GEL
Analysis: Perchlorate

Data Qualifiers (see following sections for detailed explanations)

No data qualifiers should be applied to the EPA 8321A perchlorate samples in this data package.

Summary/General Comments

The samples were prepared and analyzed using a modified EPA Method 8321A procedure (perchlorate).

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

The data validation was performed according to DOE NNSA Service Center Model Data Validation Procedure (MDVP) Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation were complete and correct.

Holding Times and Preservation

The samples were properly preserved and analyzed within the holding time.

Calibration

All initial and continuing calibration criteria were met.

Reporting Limit Standard (CRI)

All CRI acceptance criteria were met. It should be noted that the CRI spiked concentration was at the MDL, not 2 times the MDL as stated in the MDVP. No sample data should be qualified as a result.

Blanks

No target analyte was detected in the blanks.

Internal Standard

Internal standard retention time acceptance criteria were met for perchlorate-O(18). The recovery of perchlorate-O(18) met matrix spike recovery acceptance criteria.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS recovery was > the laboratory acceptance limit; however the MSD recovery and the MS/MSD RPD were acceptable; therefore no data should be qualified.

It should be noted that the MS/MSD were performed on a sample of similar matrix from another LANL SDG. No data should be qualified as a result.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met.

Detection Limits/Dilutions

All detection limits were properly reported. The samples were analyzed at the following dilutions due to elevated concentration:
GF05090G3TM01: 100X
GF05090GMC401: 250X
GF05090G57M01: 100X
GF05090G7CM01: 100X

Perchlorate Chlorine Ratios

The perchlorate chlorine ratio acceptance criteria were met.

Interference Check Standard (ICS)

The ICS recovery met QC acceptance criteria.

Other QC

No other specific issues that affect data quality were identified.

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GENERAL NARRATIVE

CASE NARRATIVE
for
Los Alamos National Laboratory
ESH-18
SDG 145579
Chain of Custody WG-03367-GE, WG-03371-GE, WG-03407-GE, and WG-03418-GE

October 12, 2005

Laboratory Identification:

General Engineering Laboratories, LLC

Mailing Address:

P.O. Box 30712
Charleston, South Carolina 29417

Express Mail Delivery and Shipping Address:

2040 Savage Road
Charleston, South Carolina 29407

Telephone Number:

(843) 556-8171

Summary:

Sample receipt

The samples for Los Alamos National Laboratory for ESH-18 arrived at General Engineering Laboratories, LLC, (GEL) Charleston, South Carolina on September 15, 2005 for environmental analyses. All sample containers arrived without any visible signs of tampering. The sample containers were delivered with chain of custody documentation and signatures. The sample containers were received at 2/21/22°C temperature.

The laboratory received the following samples:

Laboratory Identification	Sample Description
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401

145579007	GU05090G57M01
145579008	GU05090G7CM01
145579009	GU05090GMC401-FTB
145579010	GU05090G57M01-FTB
145579011	GU05090G7CM01-FTB

Internal Chain of Custody:

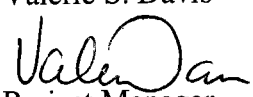
Custody was maintained for the samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Review Qualifier Flag Sheet, Volatile Analysis, Semivolatile Analysis, Perchlorates by LC-MS/MS Analysis, Metals Analysis, General Chemistry Analysis, and Radiochemistry Analysis.

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

Valerie S. Davis



Project Manager

CHAIN OF CUSTODY

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03367-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 9/13/05 / 1500	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178
WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Sampler Initials: JLJ	Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Date: 9-13-05	

145579

Analysis Request

Sample Id: **GF05090G3TM01** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: CN(T)	250 ml poly	1	NaOH			pH >12	
WG, WP: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
WG, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WP: Hg	250 ml amber glass	1	HN03			pH <2	
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03			pH <2	
WG, WP: P+N	1.0 L glass	1	H2SO4 and <4C			pH <2	
WG, WP: RAD ~~w/MS~~	1.0 gal poly	~~2~~ 1	HN03			pH <2	
Total Containers:	~~9~~ 8						

Sample Id: **GF05090G3TM90** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: CN(T)	250 ml poly	1	NaOH				
WG, WP: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
WG, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WP: Hg	250 ml amber glass	1	HN03				
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WP: P+N	1.0 L glass	1	H2SO4 and <4C				
WG, WP: RAD w/MS	1.0 gal poly	~~2~~ 1	HN03				
Total Containers:	~~9~~ 8						

Not collected

Sample Id: **GU05090G3TM01** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: 8260B VOA ~~w/MS~~+TICs (+1)	40 ml amber glass 3	~~2~~ 1	HCl and <4C				
WG, WP: 8270C SVOA ~~w/MS~~+TICs (1)	1.0 L amber glass	~~2~~ 1	<4C				
WG, WP: GEN INORG	1.0 L poly	1	<4C				

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03367-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 9/13/05 1500	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: DLJ Date: 9-13-05

Analysis Request

Sample Id: **GU05090G3TM01** **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: H-3	250 ml amber glass	1	Not Preserved				
WG, WP: Hg	250 ml amber glass	1	HN03			pH<2	
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03			pH<2	
WG, WP: RAD ~~w/MS~~	1.0 gal poly	~~2~~ 1	HN03			pH<2	
WG, WP: SSC	500 ml poly	1	<4C				
WG, WP: TC99	1.0 L poly	1	HCL			pH<2	
WG, WP: TKN+TOC	1.0 L glass	1	H2SO4			pH<2	
Total Containers:	~~16~~ 14						

Sample Id: **GU05090G3TM01-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: 8260B VOA FTB	40 ml amber glass	1	HCl and <4C			Not Collected	
Total Containers:	1						

Sample Id: **GU05090G3TM90** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: 8260B VOA w/MS+TICs	40 ml amber glass	2	HCl and <4C				
WG, WP: 8270C SVOA w/MS+TICs	1.0 L amber glass	3	<4C				
WG, WP: GEN INORG	1.0 L poly	1	<4C			Not Collected	
WG, WP: H-3	250 ml amber glass	1	Not Preserved				
WG, WP: Hg	250 ml amber glass	1	HN03				
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WP: RAD ~~w/MS~~	1.0 gal poly	~~2~~ 1	HN03				
WG, WP: SSC	~~500 ml poly~~	1	<4C				
WG, WP: TC99	1.0 L poly	1	HCL				
WG, WP: TKN+TOC	1.0 L glass	1	H2SO4				
Total Containers:							

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03367-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time:	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178
WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Sampler Initials: _____	Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Date: _____	

Analysis Request

Sample Id: **GU05090G3TM90** 16	**UF**	

Grand Total: **51**

7

Technique: Bladder pump

Comments:
One Trip Blank used for two wells : Coc ID; WG-03367 & WG-03407

Chain of Custody

Sampling Team: J. Smith, M. Mace, R. Velasquez

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
(sampler)	9-13-05	1645		9-13-05	1645	
				9-15-05	9:00	

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03371-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 09-13-05 07:30	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: A.M. Date: 09-13-05

Analysis Request

Sample Id: **GF05090GMC401** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: CN(T)	250 ml poly	1	NaOH				
WG, WP: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
WG, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WP: Hg	250 ml amber glass	1	HN03				
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WP: P+N	1.0 L glass	1	H2SO4 and <4C				
WG, WP: RAD w/MS JLS	1.0 gal poly	2 ~~3~~	HN03				

Total Containers: 9-12-05 ~~8~~ JLS 9-12-05

Sample Id: **GF05090GMC490** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: CN(T)	250 ml poly	1	NaOH				
WG, WP: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
WG, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WP: Hg	250 ml amber glass	1	HN03				
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WP: P+N	1.0 L glass	1	H2SO4 and <4C				
WG, WP: RAD w/MS	1.0 gal poly	3	HN03				

JLS 9-12-05

Total Containers: ~~9~~ 10 JLS 9-12-05

Sample Id: **GU05090GMC401** Field Prep: **UF**

Order Suite Desc	Container Desc JLS	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: 8260B VOA w/MS+TICs	40 ml amber glass ~~9-12-05~~	~~3~~ 2	HCl and <4C				
WG, WP: 8270C SVOA w/MS+TICs	1.0 L amber glass JLS 9-12-05	1	<4C				
WG, WP: GEN INORG	1.0 L poly	1	<4C				

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03371-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 09-13-05 07:30	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178
WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545	Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov	
Sampler Initials: B.M	Date: 09-13-05	

Analysis Request

Sample Id: **GU05090GMC401** **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: H-3	250 ml amber glass	1	Not Preserved				
WG, WP: Hg	250 ml amber glass	1	HN03				
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WP: RAD w/MS	1.0 gal poly	~~2~~ 1	HN03				
WG, WP: SSC	500 ml poly	1	<4C				
WG, WP: TC99	1.0 L poly	1	HCL				
WG, WP: TKN+TOC	1.0 L glass	1	H2SO4				
Total Containers:	~~16~~ 12						

9-12-05 JRJ

Sample Id: **GU05090GMC401-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: 8260B VOA FTB	40 ml amber glass	1	HCl and <4C				
Total Containers:	1						

Sample Id: **GU05090GMC490** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WP: 8260B VOA w/MS+TICs	40 ml amber glass	3	HCl and <4C				
WG, WP: 8270C SVOA w/MS+TICs	1.0 L amber glass	3	<4C				
WG, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WP: H-3	250 ml amber glass	1	Not Preserved				
WG, WP: Hg	250 ml amber glass	1	HN03				
WG, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WP: RAD w/MS	1.0 gal poly	3	HN03				
WG, WP: SSC	500 ml poly	1	<4C				
WG, WP: TC99	1.0 L poly	1	HCL				
WG, WP: TKN+TOC	1.0 L glass	1	H2SO4				
Total Containers:							

JRJ 9-12-05

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03371-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 09-13-05 07:30	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: A.M Date: 09-13-05

Analysis Request

Sample Id: **GU05090GMC490** **UF**

16 O JLT 9-12-05 A.M.

Grand Total: ~~51~~ 21

10

Technique: BAILER

Comments:

Chain of Custody

Sampling Team: A.MORA, E PULLMAN, R.CZOP.

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
(sampler)						
A.MORA	09-13-05	14:40		9/13/05	14:40	
				9/15/05	9:00	

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03407-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 9/13/01 C 12:55	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407 Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: DJ Date: 9-13-05

Analysis Request

Sample Id: **GF05090G57M01** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: CN(T)	250 ml poly	1	NaOH			PH 7 12	
WG, WM, WP: ClO4 314 & LCMSMS	1.0 L poly ✓	1	Not Preserved				
WG, WM, WP: GEN INORG	1.0 L poly ✓	1	<4C				
WG, WM, WP: Hg	250 ml amber glass ✓	1	HN03			PH < 2	
WG, WM, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly ✓	1	HN03			PH < 2	
WG, WM, WP: P+N	1.0 L glass 2	1	H2SO4 and <4C			PH < 2	
WG, WM, WP: RAD w/MS	1.0 gal poly ✓	2 3	HN03				
Total Containers:	8						

Sample Id: **GF05090G57M90** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: CN(T)	250 ml poly	1	NaOH			not collected	
WG, WM, WP: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
WG, WM, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WM, WP: Hg	250 ml amber glass	1	HN03				
WG, WM, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WM, WP: P+N	1.0 L glass	1	H2SO4 and <4C				
WG, WM, WP: RAD w/MS	1.0 gal poly	3	HN03				
Total Containers:	9						

Sample Id: **GU05090G57M01** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: 8260B VOA w/MS+TICs	40 ml amber glass	3	HCl and <4C				
WG, WM, WP: 8270C SVOA w/MS+TICs	1.0 L amber glass	1	<4C				
WG, WM, WP: GEN INORG	1.0 L poly	1	<4C				

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03407-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 9/13/01 @ 12:35	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178
WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov		
Sampler Initials: JZJ Date: 9-13-05		

Analysis Request

Sample Id: **GU05090G57M01** **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: H-3	250 ml amber glass	1	Not Preserved				
WG, WM, WP: Hg	250 ml amber glass	1	HN03			pH < 2	
WG, WM, WP: ~~METAL+B+Sn+Sr+U+SiO2~~	500 ml poly	1	HN03			pH < 2	
WG, WM, WP: RAD ~~w/MS~~	1.0 gal poly	2	HN03			pH < 2	
WG, WM, WP: SSC	500 ml poly	1	<4C				
WG, WM, WP: TC99	1.0 L poly	1	HCL			pH < 2	
WG, WM, WP: TKN+TOC	1.0 L glass	1	H2SO4			pH < 2	
Total Containers:	6						

Sample Id: **GU05090G57M01-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: 8260B VOA ~~FTB~~	40 ml amber glass	1	HCl and <4C				
Total Containers:	1						

Sample Id: **GU05090G57M90** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: 8260B VOA ~~w/MS+TICs~~	40 ml amber glass	3	HCl and <4C			not collected	
WG, WM, WP: 8270C SVOA ~~w/MS+TICs~~	1.0 L amber glass	3	<4C				
WG, WM, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WM, WP: H-3	250 ml amber glass	1	Not Preserved				
WG, WM, WP: Hg	250 ml amber glass	1	HN03				
WG, WM, WP: ~~METAL+B+Sn+Sr+U+SiO2~~	500 ml poly	1	HN03				
WG, WM, WP: RAD w/MS	1.0 gal poly	3	HN03				
WG, WM, WP: SSC	500 ml poly	1	<4C				
WG, WM, WP: TC99	1.0 L poly	1	HCL				
WG, WM, WP: TKN+TOC	1.0 L glass	1	H2SO4				

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03407-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 9/13/05@ 12:55	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: JLJ Date: 9-13-05

Analysis Request

Sample Id: **GU05090G57M90** **UF**
Total Containers: 16

Grand Total: 51

13

Technique: Bladder Pump

Comments:
One Trip Blank used for two wells COC IDs WG-03407-~~EE~~ JLJ 9-13-05 9-13-05
WG-05367-~~EE~~ JLJ

Chain of Custody

Sampling Team: Max Maes, Jim Jordan, Ric Velasquez

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
(sampler)	9-13-05	1645		9-13-05	1645	
				9.15.05	9:00	

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03418-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 9/14/05 @ 9:32	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: _____ Date: _____

Analysis Request

Sample Id: **GF05090G7CM01** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: CN(T)	250 ml poly	1	NaOH				
WG, WM, WP: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
WG, WM, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WM, WP: Hg	250 ml amber glass	1	HN03				
WG, WM, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WM, WP: P+N	1.0 L glass	1	H2SO4 and <4C				
WG, WM, WP: RAD w/MS	1.0 gal poly	3	HN03				
Total Containers:	9						

Sample Id: **GF05090G7CM90** Field Prep: **F**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: CN(T)	250 ml poly	1	NaOH			not collected	
WG, WM, WP: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved				
WG, WM, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WM, WP: Hg	250 ml amber glass	1	HN03				
WG, WM, WP: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03				
WG, WM, WP: P+N	1.0 L glass	1	H2SO4 and <4C				
WG, WM, WP: RAD w/MS	1.0 gal poly	3	HN03				
Total Containers:	9						

Sample Id: **GU05090G7CM01** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: 8260B VOA w/MS+TICs	40 ml amber glass ✓	2 ✓	HCl and <4C				
WG, WM, WP: 8270C SVOA w/MS+TICs	1.0 L amber glass ✓	1	<4C				
WG, WM, WP: GEN INORG	1.0 L poly ✓	1	<4C				

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03418-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/ Time: 9/14/05 9:32	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: _____ Date: _____

Analysis Request

Sample Id: **GU05090G7CM01** **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: H-3	250 ml amber glass ✓	1	Not Preserved				
WG, WM, WP: Hg	250 ml amber glass ✓	1	HN03				
WG, WM, WP:	500 ml poly ✓	1	HN03				
METAL+B+Sn+Sr+U+SiO2							
WG, WM, WP: RAD ~~w/MS~~	1.0 gal poly ✓	2 3	HN03				
WG, WM, WP: SSC	500 ml poly ✓	1	<4C				
WG, WM, WP: TC99	1.0 L poly ✓	1	HCL				
WG, WM, WP: TKN+TOC	1.0 L glass ✓	1	H2SO4				
Total Containers:	~~16~~ 8						

Sample Id: **GU05090G7CM01-FTB** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: 8260B VOA	40 ml amber glass	1	HCl and <4C				
FTB							
Total Containers:	1						

Sample Id: **GU05090G7CM90** Field Prep: **UF**

Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	Barcode	WQH Comment	Analytical Lab Comments
WG, WM, WP: 8260B VOA	40 ml amber glass	3	HCl and <4C			Not Collected	
w/MS+TICs							
WG, WM, WP: 8270C SVOA	1.0 L amber glass	3	<4C				
w/MS+TICs							
WG, WM, WP: GEN INORG	1.0 L poly	1	<4C				
WG, WM, WP: H-3	250 ml amber glass	1	Not Preserved				
WG, WM, WP: Hg	250 ml amber glass	1	HN03				
WG, WM, WP:	500 ml poly	1	HN03				
METAL+B+Sn+Sr+U+SiO2							
WG, WM, WP: RAD w/MS	1.0 gal poly	3	HN03				
WG, WM, WP: SSC	500 ml poly	1	<4C				
WG, WM, WP: TC99	1.0 L poly	1	HCL				
WG, WM, WP: TKN+TOC	1.0 L glass	1	H2SO4				

15

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03418-GE PO #: Program: Stwd Mon Cost Code: MRAA 0110 DRJ0 Collection Date/Time: 9/14/05 @ 9:32	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: _____ Date: _____

Analysis Request

Sample Id: **GU05090G7CM90** **UF**
Total Containers: 16

Grand Total: **51**

16

Technique:

Comments:

Chain of Custody

Sampling Team: Max Mars, Ricic Velasquez, Alex Mora

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
Max Mars (sampler)	9/14/05	10:55		9/14/05	10:55	Picked up for Submittal
	9/14/05	11:20		9/14/05	11:20	
				9/15/05	9:00	Max Mars

COOLER RECEIPT CHECKLIST

SAMPLE RECEIPT & REVIEW FORM

PM use only

Client: LOS ALAMOS	**SDG/ARCOC/Work Order:** 145579
Date Received: 9/15/05	**PM(A) Review (ensure non-conforming items are resolved prior to signing):** Valen Jain
Received By:	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓			Circle Coolant # ice bags (blue ice) dry ice (none) other describe) SEE Below
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	✓			Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?	✓			Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)			✓	
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?			✓	Sample ID's and containers affected: ~~did not Receive 1 Liter glass GW05090659001 HASO4~~ ~~See Sheet~~
10	Date & time on COC match date & time on bottles?			✓	Sample ID's affected: no date + time on samples
11	Number of containers received match number indicated on COC?			✓	Sample ID's affected: ~~Receive 1 Liter glass HASO4 GF05090659001~~ ~~See Sheet~~
12	COC form is properly signed in relinquished/received sections?	✓			
14	Air Bill ,Tracking #'s, & Additional Comments	6954 7790 5758 - 2.0° 6954 7790 5710 - 2.0° 6954 7790 5748 - 22.0° 6954 7790 5760 - 21.0°			6954 7790 5781 - 21°

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	
A	Radiological Classification?	✓			RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation. Maximum Counts Observed*: 30 CPM
B	PCB Regulated?	✓			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: VSD Initials 10/13/05 Date:

DO NOT LIFT USING THIS TAG

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 14SEP05
Actual Wgt: 67.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

2.0

FedEx
Express

REF: 7h2oer8a0d--

Delivery Address Bar Code

BILL SCR

THU
Deliver By
15SEP05

PRIORITY OVERNIGHT

TRK# 6954 7790 5829

Form 0201

CHS A1

XX CHSA

29407 -SC-US

ORIGIN ID SAFA (505) 665-99c
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237
LOS ALAMOS, NM 87545
UNITED STATES US
Ship Date: 14SEP05
Actual Wgt: 38.0 LB MAN
System# 0014176/CAFE2264
Account: S 173219334
(843) 556-8171
J VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.
CHARLESTON, SC 29407
2.0
FedEx
Express
Delivery Address Barcode
BILL SENDER
PRIORITY OVERNIGHT
TRK# 6954 7790 5830
Form 0201
THU
Deliver By
15SEP05
CHS A1
29407 -SC-US
XX CHSA

Ship Date: 14SEP05
Actual Wgt: 60.0 LB MAN
System# 0014176/CAFE2264
Account: S 173219334
(843) 556-8171
CHARLESTON, SC 29407
2.0
FedEx
Express
Delivery Address Barcode
BILL SENDER
PRIORITY OVERNIGHT
TRK# 6954 7790 5818
Form 0201
THU
Deliver By
15SEP05
CHS A1
29407 -SC-US
XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 14SEP05
Actual Wgt. 9 0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

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Express

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

TRK# 6954 7790 5862

Form 0201

THU
Deliver By
15SEP05

CHS A1

29407 -SC-US

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 14SEP05
Actual Wgt: 55.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

(843) 556-8171

FedEx
Express

REF: 7h20w5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

TRK# 6954 7790 5873

Form 0201

THU
Deliver By
15SEP05

CHS A1

29407 -SC-US

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date 14SEP05
Actual Wgt 46.0 LB MAN
System# 0014176/CAFE2264
Account S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

2.0

FedEx Express

REF 7h2ow5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

THU
Deliver By
15SEP05

TRK# 6954 7790 5759

Form 0201

CHS A1

29407 -SC-US

XX CHSA

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date 14SEP05
Actual Wgt 51.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

2.0

FedEx Express

REF 7h2ow5n442004239

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

THU
Deliver By
15SEP05

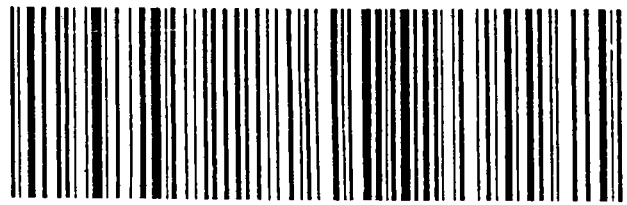
TRK# 6954 7790 5770

Form 0201

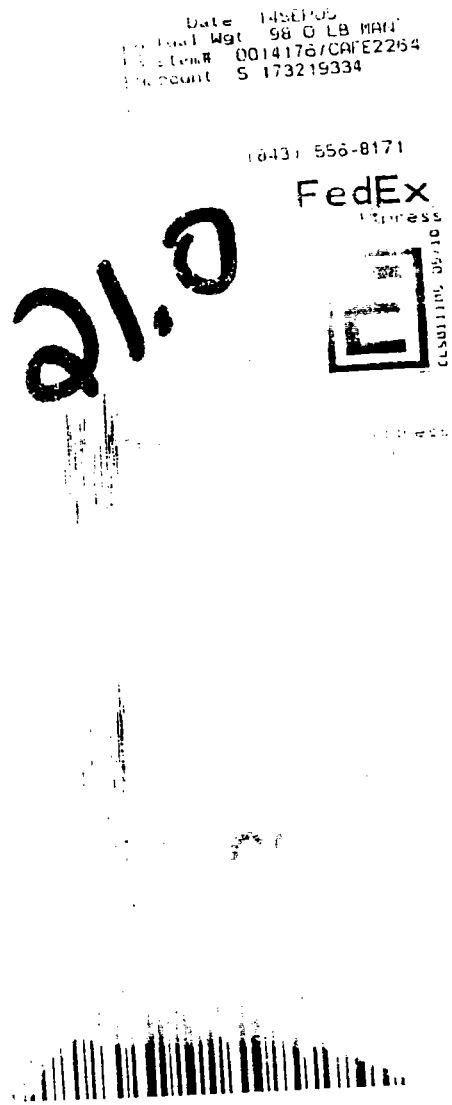
CHS A1

29407 -SC-US

XX CHSA



ORIGIN ID SAFA (505) 665-9968
DYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237
LOS ALAMOS, NM 87545
UNITED STATES US
Ship Date 14SEP05
Actual Wgt 101.0 LB MAN
System# 0014176/CAFE2264
Account S 173219334
(843) 556-8171
TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.
CHARLESTON, SC 29407
22.0
FedEx
Express
Delivery Address Barcode
BILL SENDER
THU
Deliver By
15SEP05
OVERNIGHT
6954 7790 5748
Form 0201
CHS A1
407 -SC-US
XX CHSA


Date 14SEP05
Actual Wgt 98.0 LB MAN
System# 0014176/CAFE2264
Account S 173219334
(843) 556-8171
FedEx
Express
21.0

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 14SEP05
Actual Wgt: 35.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

21.0

FedEx Express

CLS011105/05/10

REF: 7h2ow5n442004239

Delivery Address Barcode

BILL SENDER

THU
Deli
15

PRIORITY OVERNIGHT

TRK# 6954 7790 5781

Form 0201

CHS

XX CHSA

29407 -SC-US

FedEx

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 14SEP05
Actual Wgt: 58.0 LB MAN
System#: 0014176/CAFE2264
Account: S 173219334

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LABORATORY
2040 SAVAGE RD.

CHARLESTON, SC 29407

FedEx Express

CLS011105/05/10

REF: 7h2ow5n442004239

Delivery Address Barcode

BILL SENDER

4.0

THU
Deliver By
15SEP05

PRIORITY OVERNIGHT

TRK# 6954 7790 5807

Form 0201

CHS A1

XX CHSA

29407 -SC-US

DATA REVIEW QUALIFIER FLAG DEFINITION SHEET

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR ORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
A	The TIC is suspected aldol-condensation product.	COA, Form 1, and EDD
B	Analyte was detected in the associated method blank as well as in the sample.	COA, Form 1, and EDD
C	Pesticide analyte has been confirmed by GC/MS.	COA, Form 1, and EDD
D	Analyte(s) quantified in an analysis performed at a secondary dilution factor.	COA, Form 1, and EDD
E	Identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.	COA, Form 1, and EDD
J	This flag indicates an estimated value concerning either, (1) estimating a concentration for tentatively identified compounds (TICs), or (2) analyte detected at a level less than the RDL or PQL and greater than or equal to the MDL.	COA, Form 1, and EDD
N	Presumptive evidence based upon a mass spectral library search to make a tentative identification of the analyte.	COA, Form 1, and EDD
NJ	Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard.	COA, Form 1, and EDD
P	- Pesticide/PCB target analyte that is greater than 25% difference for the detected concentrations between the two GC columns. - HPLC target analyte that is greater than 40% difference for the detected concentrations between detectors or columns.	Form 1 and EDD
U	Compound analyzed for but not detected (sample quantitation limit has been adjusted to reflect dilutions and percent moisture).	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	COA, Form 1, and EDD
**	Laboratory Control Sample recovery outside of acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR INORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
E	The qualifier that is used when the percent difference between the parent sample and its serial dilution's concentration exceeds 10%. The sample's concentration must be greater than 50 times the IDL/MDL for ICP or 100 times the absolute value of the preparation blank's concentration for ICP-MS. However, if analyzing ILMO 4.0 (ICP-MS), the parent sample's concentration must be 20 times the CRDL before the "E" flag is applied.	Form 1 and EDD
*	The qualifier that is used to indicate the duplicate sample analysis for an analyte is out of control.	Form 1 and EDD
J	The qualifier is used to indicate that the reported result fell above the IDL/MDL but below the CRDL.	Form 1 and EDD
N	This qualifier is used to indicate that the matrix or pre-digested spike sample recovery for an analyte is not within the specified control limit.	Form 1 and EDD
U	Analyte analyzed for but not detected above the PQL/CRDL.	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	Form 1 and EDD
**	Laboratory Control Sample (LCS) recovery for an analyte is outside of specified acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.
Any recoveries falling outside the acceptance range will be flagged with a **.
All flags do not apply to QC Summary and Certificate of Analysis packages.

GC/MS VOLATILE ANALYSIS

GC/MS Volatile Organics
Los Alamos National Laboratory (ESHL)
SDG 145579

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometer
Analytical Method:	SW846 8260B DOE-AL
Prep Method:	SW846 5030B
Analytical Batch Number:	465842

Sample Analysis

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

Sample ID	Client ID
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
145579009	GU05090GMC401-FTB
145579010	GU05090G57M01-FTB
145579011	GU05090G7CM01-FTB
1200943515	Method Blank (MB)
1200943518	Laboratory Control Sample (LCS)
1200943519	Laboratory Control Sample (LCS)
1200945696	Method Blank (MB)
1200945697	Laboratory Control Sample (LCS)
1200945698	Laboratory Control Sample (LCS)
1200945702	145579006(GU05090GMC401) Matrix Spike (MS)
1200945703	145579006(GU05090GMC401) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 9.

Calibration Information
Due to the limited capacity of software all of the current initial calibration files are not displayed here. If necessary, a calibration history will be inserted in the package prior to the appropriate Form 6.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

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

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 145579006 (GU05090GMC401) was designated for spike analysis in this SDG.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

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

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG except for dilutions and/or confirmations.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
A nonconformance report was not required for this SDG.

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

TIC Comment
The tentatively identified compounds included some silanols. These compounds were due to column or septum bleed and were not native to the affected samples.

Additional Comments
Additional comments were not required for this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on a HP Mass Spectrometer.

Instrument ID	System Configuration	Column ID	Column Description	P & T Trap
VOA2.I	HP6890/HP5973	J&W1	DB-624, 60m x 0.25mm, 1.4um	Trap 10

Certification Statement

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

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ Date: 10/13/05

Roadmap for ESHL 145579 VOA

This roadmap was analyzed by Crystal Stacey on 09-27-2005, 13:45.
This roadmap was packaged by LySandra Gathers on 10-04-2005, 13:25.
This roadmap was reviewed by Gwen Hallquist on 10-13-2005, 13:36.
This roadmap was validated by Gwen Hallquist on 10-13-2005, 13:53.
This roadmap was validated by Gwen Hallquist on 10-13-2005, 13:55.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA2.i/092605v2.b/2d115.d	145579005	GU05090G3TM01	26-SEP-2005	12:33	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d116.d	145579006	GU05090GMC401	26-SEP-2005	12:59	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d118.d	145579007	GU05090G57M01	26-SEP-2005	13:51	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d119.d	145579008	GU05090G7CM01	26-SEP-2005	14:17	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d120.d	145579009	GU05090GMC401-FTB	26-SEP-2005	14:43	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d121.d	145579010	GU05090G57M01-FTB	26-SEP-2005	15:09	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d122.d	145579011	GU05090G7CM01-FTB	26-SEP-2005	15:35	145579.sub	1	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA2.i/092605v2.b/2d103L2.d	1200943518	VBLK01LCS	lcs	26-SEP-2005	06:58	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d104SL2.d	1200943519	VBLK01SLCS	lcs	26-SEP-2005	07:36	145579.sub	1	
☐	N	/chem/VOA2.i/092605v2.b/2d106B2.d	1200943515	VBLK01	mb	26-SEP-2005	08:29	145579.sub	1	
☐	N	/chem/VOA2.i/092705v2.b/2d203L2.d	1200945697	VBLK02LCS	lcs	27-SEP-2005	07:03	145579.sub	1	
☐	N	/chem/VOA2.i/092705v2.b/2d204SL2.d	1200945698	VBLK02SLCS	lcs	27-SEP-2005	07:39	145579.sub	1	
☐	N	/chem/VOA2.i/092705v2.b/2d208B2.d	1200945696	VBLK02	mb	27-SEP-2005	09:24	145579.sub	1	
☐	N	/chem/VOA2.i/092705v2.b/2d214.d	1200945702	GU05090GMC401MS	ms	27-SEP-2005	12:00	145579.sub	1	
☐	N	/chem/VOA2.i/092705v2.b/2d215.d	1200945703	GU05090GMC401MSD	msd	27-SEP-2005	12:26	145579.sub	1	

SAMPLE DATA SUMMARY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	2.9	J
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

FORM I VOA OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G3TM01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G57M01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
57M01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
57M01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
57M01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G
57M01-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

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EPA SAMPLE NO.

GU05090G7CM01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
7CM01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
75-71-8	Dichlorodifluoromethane		1.0	U
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-69-4	Trichlorofluoromethane		1.0	U
107-02-8	Acrolein		5.0	U
75-35-4	1,1-Dichloroethylene		1.0	U
67-64-1	Acetone		5.0	U
76-13-1	Trichlorotrifluoroethane		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		5.0	U
75-05-8	Acetonitrile		25.0	U
78-83-1	Isobutyl alcohol		50.0	U
107-05-1	Allyl chloride		5.0	U
75-09-2	Methylene chloride		5.0	U
107-13-1	Acrylonitrile		5.0	U
156-60-5	trans-1,2-Dichloroethylene		1.0	U
75-34-3	1,1-Dichloroethane		1.0	U
108-05-4	Vinyl acetate		5.0	U
126-99-8	2-Chloro-1,3-butadiene		1.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethylene		1.0	U
594-20-7	2,2-Dichloropropane		1.0	U
126-98-7	Methacrylonitrile		5.0	U
107-12-0	Propionitrile		5.0	U
74-97-5	Bromochloromethane		1.0	U
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
563-58-6	1,1-Dichloropropene		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
7CM01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.44	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
7CM01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G
7CM01-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	3.5	J
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.8	

1E

EPA SAMPLE NO.

GU05090GMC401

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G
MC401-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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QUALITY CONTROL SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

	EPA SAMPLE NO.	SMC1 (DBF)#	SMC2 (TOL)#	SMC3 (BFB)#	OTHER	TOT OUT
01	VBLK01LCS	113	108	107		0
02	VBLK01SLCS	112	106	106		0
03	VBLK01	113	108	106		0
04	GU05090G3TM01	114	107	106		0
05	GU05090GMC401	113	109	108		0
06	GU05090G57M01	117	110	109		0
07	GU05090G7CM01	113	108	107		0
08	GU05090GMC401-FTB	115	109	106		0
09	GU05090G57M01-FTB	114	109	108		0
10	GU05090G7CM01-FTB	114	109	108		0
11	VBLK02LCS	116	110	112		0
12	VBLK02SLCS	112	109	107		0
13	VBLK02	112	109	107		0
14	GU05090GMC401MS	116	108	109		0
15	GU05090GMC401MSD	115	107	108		0
16						
17						
18						
19						
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22						
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	QC LIMITS
SMC1 (DBF) = Dibromofluoromethane	(85-120)
SMC2 (TOL) = Toluene-d8	(79-122)
SMC3 (BFB) = Bromofluorobenzene	(75-119)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	59.2	118	50-142
Chloromethane	50.0	0.0	49.6	99	52-134
Vinyl chloride	50.0	0.0	53.8	108	60-128
Bromomethane	50.0	0.0	51.6	103	60-120
Chloroethane	50.0	0.0	49.9	100	68-129
Trichlorofluoromethane	50.0	0.0	54.2	108	66-136
1,1-Dichloroethylene	50.0	0.0	49.6	99	71-125
Acetone	250	0.0	228	91	62-134
Iodomethane	250	0.0	226	90	77-134
Carbon disulfide	250	0.0	278	111	74-142
Acetonitrile	1250	0.0	1180	94	58-136
Methylene chloride	50.0	0.0	42.4	85	71-120
trans-1,2-Dichloroethyl	50.0	0.0	47.2	94	77-128
1,1-Dichloroethane	50.0	0.0	46.7	93	72-120
Vinyl acetate	250	0.0	238	95	66-142
2-Butanone	250	0.0	237	95	62-138
cis-1,2-Dichloroethylen	50.0	0.0	46.2	92	79-120
2,2-Dichloropropane	50.0	0.0	48.3	97	78-135
Bromochloromethane	50.0	0.0	46.8	94	78-124
Chloroform	50.0	0.0	46.4	93	80-121
1,1,1-Trichloroethane	50.0	0.0	48.3	97	71-123
1,1-Dichloropropene	50.0	0.0	47.1	94	78-123
Carbon tetrachloride	50.0	0.0	49.7	99	77-132
1,2-Dichloroethane	50.0	0.0	45.5	91	76-128
Benzene	50.0	0.0	43.7	87	69-120
Trichloroethylene	50.0	0.0	46.4	93	78-118
1,2-Dichloropropane	50.0	0.0	45.8	92	73-119
Dibromomethane	50.0	0.0	46.6	93	82-123

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	48.9	98	87-134
cis-1,3-Dichloropropyle	50.0	0.0	48.6	97	79-125
4-Methyl-2-pentanone	250	0.0	239	96	64-135
Toluene	50.0	0.0	43.1	86	75-120
trans-1,3-Dichloropropy	50.0	0.0	48.0	96	73-126
1,1,2-Trichloroethane	50.0	0.0	46.2	92	78-120
1,3-Dichloropropane	50.0	0.0	43.9	88	78-115
2-Hexanone	250	0.0	240	96	66-141
Tetrachloroethylene	50.0	0.0	43.6	87	69-124
Dibromochloromethane	50.0	0.0	49.5	99	78-133
1,2-Dibromoethane	50.0	0.0	47.6	95	80-120
Chlorobenzene	50.0	0.0	45.1	90	80-118
1,1,1,2-Tetrachloroetha	50.0	0.0	47.4	95	82-122
Ethylbenzene	50.0	0.0	44.2	88	79-120
o-Xylene	50.0	0.0	44.6	89	80-119
m,p-Xylenes	100	0.0	86.7	87	78-116
Styrene	50.0	0.0	47.2	94	78-117
Bromoform	50.0	0.0	56.9	114	74-136
Isopropylbenzene	50.0	0.0	45.6	91	75-120
1,1,2,2-Tetrachloroetha	50.0	0.0	49.5	99	72-129
1,2,3-Trichloropropane	50.0	0.0	49.7	99	72-127
Bromobenzene	50.0	0.0	45.2	90	79-118
n-Propylbenzene	50.0	0.0	44.5	89	74-122
2-Chlorotoluene	50.0	0.0	43.6	87	76-118
1,3,5-Trimethylbenzene	50.0	0.0	44.6	89	73-117
1,2,4-Trimethylbenzene	50.0	0.0	45.4	91	75-117
4-Chlorotoluene	50.0	0.0	44.8	90	76-118
tert-Butylbenzene	50.0	0.0	44.9	90	72-121

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50.0	0.0	45.5	91	72-124
4-Isopropyltoluene	50.0	0.0	45.5	91	75-124
1,3-Dichlorobenzene	50.0	0.0	44.7	89	75-118
1,4-Dichlorobenzene	50.0	0.0	44.7	89	75-120
n-Butylbenzene	50.0	0.0	46.7	93	71-130
1,2-Dichlorobenzene	50.0	0.0	45.0	90	78-116
1,2-Dibromo-3-chloropro	50.0	0.0	54.6	109	63-139
1,2,4-Trichlorobenzene	50.0	0.0	47.6	95	71-135
Hexachlorobutadiene	50.0	0.0	47.6	95	65-128
Naphthalene	50.0	0.0	48.6	97	63-138
1,2,3-Trichlorobenzene	50.0	0.0	47.7	95	70-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 67 outside limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK01

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Acrolein	250	0.0	347	139	56-148
Trichlorotrifluoroethan	250	0.0	275	110	66-131
Isobutyl alcohol	2500	0.0	3040	122	57-137
Allyl chloride	250	0.0	256	102	65-126
Acrylonitrile	250	0.0	305	122	57-126
2-Chloro-1,3-butadiene	50.0	0.0	57.7	115	50-148
Methacrylonitrile	250	0.0	285	114	64-118
Propionitrile	250	0.0	316	126	58-129
Methyl methacrylate	250	0.0	288	115	68-122
Ethyl methacrylate	250	0.0	253	101	68-120
1,4-Dioxane	2500	0.0	2940	118	60-131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 11 outside limits

COMMENTS: _____
_____

FORM III VOA-1 OLM03.0

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	42.6	85	50-142
Chloromethane	50.0	0.0	42.4	85	52-134
Vinyl chloride	50.0	0.0	45.9	92	60-128
Bromomethane	50.0	0.0	45.0	90	60-120
Chloroethane	50.0	0.0	46.1	92	68-129
Trichlorofluoromethane	50.0	0.0	47.4	95	66-136
1,1-Dichloroethylene	50.0	0.0	45.1	90	71-125
Acetone	250	0.0	206	82	62-134
Iodomethane	250	0.0	203	81	77-134
Carbon disulfide	250	0.0	240	96	74-142
Acetonitrile	1250	0.0	1070	86	58-136
Methylene chloride	50.0	0.0	36.8	74	71-120
trans-1,2-Dichloroethyl	50.0	0.0	43.2	86	77-128
1,1-Dichloroethane	50.0	0.0	42.8	86	72-120
Vinyl acetate	250	0.0	217	87	66-142
2-Butanone	250	0.0	214	86	62-138
cis-1,2-Dichloroethylen	50.0	0.0	43.1	86	79-120
2,2-Dichloropropane	50.0	0.0	44.0	88	78-135
Bromochloromethane	50.0	0.0	42.8	86	78-124
Chloroform	50.0	0.0	42.2	84	80-121
1,1,1-Trichloroethane	50.0	0.0	43.6	87	71-123
1,1-Dichloropropene	50.0	0.0	43.0	86	78-123
Carbon tetrachloride	50.0	0.0	45.0	90	77-132
1,2-Dichloroethane	50.0	0.0	42.6	85	76-128
Benzene	50.0	0.0	39.4	79	69-120
Trichloroethylene	50.0	0.0	42.0	84	78-118
1,2-Dichloropropane	50.0	0.0	42.7	85	73-119
Dibromomethane	50.0	0.0	42.6	85	82-123

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	44.8	90	87-134
cis-1,3-Dichloropropyle	50.0	0.0	44.3	89	79-125
4-Methyl-2-pentanone	250	0.0	216	86	64-135
Toluene	50.0	0.0	40.3	81	75-120
trans-1,3-Dichloropropy	50.0	0.0	44.4	89	73-126
1,1,2-Trichloroethane	50.0	0.0	42.0	84	78-120
1,3-Dichloropropane	50.0	0.0	40.8	82	78-115
2-Hexanone	250	0.0	219	88	66-141
Tetrachloroethylene	50.0	0.0	40.6	81	69-124
Dibromochloromethane	50.0	0.0	45.5	91	78-133
1,2-Dibromoethane	50.0	0.0	42.6	85	80-120
Chlorobenzene	50.0	0.0	41.9	84	80-118
1,1,1,2-Tetrachloroetha	50.0	0.0	43.9	88	82-122
Ethylbenzene	50.0	0.0	41.1	82	79-120
o-Xylene	50.0	0.0	40.6	81	80-119
m,p-Xylenes	100	0.0	80.4	80	78-116
Styrene	50.0	0.0	43.6	87	78-117
Bromoform	50.0	0.0	51.6	103	74-136
Isopropylbenzene	50.0	0.0	42.8	86	75-120
1,1,2,2-Tetrachloroetha	50.0	0.0	45.3	91	72-129
1,2,3-Trichloropropane	50.0	0.0	45.3	91	72-127
Bromobenzene	50.0	0.0	42.2	84	79-118
n-Propylbenzene	50.0	0.0	42.3	85	74-122
2-Chlorotoluene	50.0	0.0	41.5	83	76-118
1,3,5-Trimethylbenzene	50.0	0.0	42.8	86	73-117
1,2,4-Trimethylbenzene	50.0	0.0	42.6	85	75-117
4-Chlorotoluene	50.0	0.0	42.5	85	76-118
tert-Butylbenzene	50.0	0.0	42.4	85	72-121

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50.0	0.0	42.4	85	72-124
4-Isopropyltoluene	50.0	0.0	43.1	86	75-124
1,3-Dichlorobenzene	50.0	0.0	41.3	83	75-118
1,4-Dichlorobenzene	50.0	0.0	41.3	83	75-120
n-Butylbenzene	50.0	0.0	43.8	88	71-130
1,2-Dichlorobenzene	50.0	0.0	42.3	85	78-116
1,2-Dibromo-3-chloropro	50.0	0.0	49.2	98	63-139
1,2,4-Trichlorobenzene	50.0	0.0	43.9	88	71-135
Hexachlorobutadiene	50.0	0.0	44.7	89	65-128
Naphthalene	50.0	0.0	43.5	87	63-138
1,2,3-Trichlorobenzene	50.0	0.0	43.4	87	70-137

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 67 outside limits

COMMENTS: _____

3A
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: VBLK02

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	LCS CONCENTRATION (ug/l)	LCS % REC #	QC. LIMITS REC.
Acrolein	250	0.0	316	126	56-148
Trichlorotrifluoroethan	250	0.0	268	107	66-131
Isobutyl alcohol	2500	0.0	2820	113	57-137
Allyl chloride	250	0.0	246	98	65-126
Acrylonitrile	250	0.0	286	114	57-126
2-Chloro-1,3-butadiene	50.0	0.0	56.6	113	50-148
Methacrylonitrile	250	0.0	269	108	64-118
Propionitrile	250	0.0	294	118	58-129
Methyl methacrylate	250	0.0	267	107	68-122
Ethyl methacrylate	250	0.0	248	99	68-120
1,4-Dioxane	2500	0.0	2820	113	60-131

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 11 outside limits

COMMENTS: _____
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FORM III VOA-1 OLM03.0

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090GMC40

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50.0	0.0	59.0	118	47-138
Chloromethane	50.0	0.0	49.8	100	43-140
Vinyl chloride	50.0	0.0	53.3	107	53-119
Bromomethane	50.0	0.0	53.5	107	57-120
Chloroethane	50.0	0.0	52.1	104	63-122
Trichlorofluoromethane	50.0	0.0	52.8	106	57-127
1,1-Dichloroethylene	50.0	0.0	49.2	98	60-122
Acetone	250	3.5	205	81	56-128
Iodomethane	250	0.0	226	90	72-126
Carbon disulfide	250	0.0	265	106	66-136
Acetonitrile	1250	0.0	1100	88	58-128
Methylene chloride	50.0	0.0	44.4	89	69-120
trans-1,2-Dichloroethyl	50.0	0.0	47.8	96	72-120
1,1-Dichloroethane	50.0	0.0	47.8	96	67-120
Vinyl acetate	250	0.0	238	95	55-133
2-Butanone	250	0.0	219	88	62-126
cis-1,2-Dichloroethylen	50.0	0.0	48.1	96	75-116
2,2-Dichloropropane	50.0	0.0	46.8	94	62-126
Bromochloromethane	50.0	0.0	49.2	98	79-122
Chloroform	50.0	0.0	47.8	96	73-121
1,1,1-Trichloroethane	50.0	0.0	48.0	96	61-122
1,1-Dichloropropene	50.0	0.0	46.3	93	67-116
Carbon tetrachloride	50.0	0.0	48.7	97	66-131
1,2-Dichloroethane	50.0	0.0	49.2	98	71-127
Benzene	50.0	0.0	44.1	88	64-120
Trichloroethylene	50.0	0.0	46.0	92	71-120
1,2-Dichloropropane	50.0	0.0	48.2	96	70-130
Dibromomethane	50.0	0.0	49.0	98	78-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090GMC40

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
Bromodichloromethane	50.0	0.0	51.4	103	85-133
cis-1,3-Dichloropropyle	50.0	0.0	51.3	103	72-120
4-Methyl-2-pentanone	250	0.0	221	88	62-133
Toluene	50.0	0.0	43.0	86	68-120
trans-1,3-Dichloropropy	50.0	0.0	49.9	100	67-121
1,1,2-Trichloroethane	50.0	0.0	47.5	95	74-120
1,3-Dichloropropane	50.0	0.0	45.9	92	74-117
2-Hexanone	250	0.0	221	88	58-140
Tetrachloroethylene	50.0	0.0	42.5	85	60-120
Dibromochloromethane	50.0	0.0	52.0	104	77-133
1,2-Dibromoethane	50.0	0.0	48.2	96	74-121
Chlorobenzene	50.0	0.0	45.4	91	72-116
1,1,1,2-Tetrachloroetha	50.0	0.0	49.1	98	72-127
Ethylbenzene	50.0	0.0	43.3	87	70-120
o-Xylene	50.0	0.0	43.5	87	72-117
m,p-Xylenes	100	0.0	84.8	85	69-120
Styrene	50.0	0.0	47.2	94	68-116
Bromoform	50.0	0.0	55.8	112	70-134
Isopropylbenzene	50.0	0.0	43.8	88	64-120
1,1,2,2-Tetrachloroetha	50.0	0.0	47.7	95	63-130
1,2,3-Trichloropropane	50.0	0.0	46.5	93	66-126
Bromobenzene	50.0	0.0	45.3	91	74-115
n-Propylbenzene	50.0	0.0	42.2	84	64-116
2-Chlorotoluene	50.0	0.0	43.0	86	67-115
1,3,5-Trimethylbenzene	50.0	0.0	44.0	88	66-120
1,2,4-Trimethylbenzene	50.0	0.0	44.6	89	65-120
4-Chlorotoluene	50.0	0.0	44.1	88	66-120
tert-Butylbenzene	50.0	0.0	44.1	88	65-116

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090GMC40

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50.0	0.0	43.9	88	64-118
4-Isopropyltoluene	50.0	0.0	44.1	88	65-118
1,3-Dichlorobenzene	50.0	0.0	44.0	88	66-115
1,4-Dichlorobenzene	50.0	0.0	43.8	88	67-116
n-Butylbenzene	50.0	0.0	44.4	89	60-121
1,2-Dichlorobenzene	50.0	0.0	46.3	93	72-115
1,2-Dibromo-3-chloropro	50.0	0.0	51.5	103	55-138
1,2,4-Trichlorobenzene	50.0	0.0	47.0	94	60-130
Hexachlorobutadiene	50.0	0.0	46.0	92	57-119
Naphthalene	50.0	0.0	47.6	95	62-132
1,2,3-Trichlorobenzene	50.0	0.0	47.7	95	66-129

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090GMC40

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0	55.4	111	6	30	47-138
Chloromethane	50.0	47.1	94	6	30	43-140
Vinyl chloride	50.0	50.4	101	6	30	53-119
Bromomethane	50.0	50.1	100	7	30	57-120
Chloroethane	50.0	49.6	99	5	30	63-122
Trichlorofluoromethane	50.0	49.3	99	7	30	57-127
1,1-Dichloroethylene	50.0	46.5	93	5	30	60-122
Acetone	250	194	76	6	30	56-128
Iodomethane	250	214	86	4	30	72-126
Carbon disulfide	250	248	99	7	30	66-136
Acetonitrile	1250	1050	84	5	30	58-128
Methylene chloride	50.0	39.9	80	11	30	69-120
trans-1,2-Dichloroethyl	50.0	44.5	89	8	30	72-120
1,1-Dichloroethane	50.0	44.7	89	8	30	67-120
Vinyl acetate	250	223	89	6	30	55-133
2-Butanone	250	204	82	7	30	62-126
cis-1,2-Dichloroethylen	50.0	44.7	89	8	30	75-116
2,2-Dichloropropane	50.0	43.2	86	9	30	62-126
Bromochloromethane	50.0	46.3	93	5	30	79-122
Chloroform	50.0	44.1	88	9	30	73-121
1,1,1-Trichloroethane	50.0	44.9	90	6	30	61-122
1,1-Dichloropropene	50.0	43.3	87	7	30	67-116
Carbon tetrachloride	50.0	45.4	91	6	30	66-131
1,2-Dichloroethane	50.0	46.6	93	5	30	71-127
Benzene	50.0	41.3	83	6	30	64-120
Trichloroethylene	50.0	42.4	85	8	30	71-120
1,2-Dichloropropane	50.0	45.2	90	6	30	70-130
Dibromomethane	50.0	45.2	90	8	30	78-124

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

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3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090GMC40

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Bromodichloromethane	50.0	48.3	97	6	30	85-133
cis-1,3-Dichloropropyle	50.0	47.3	95	8	30	72-120
4-Methyl-2-pentanone	250	207	83	6	30	62-133
Toluene	50.0	40.9	82	5	30	68-120
trans-1,3-Dichloropropy	50.0	47.0	94	6	30	67-121
1,1,2-Trichloroethane	50.0	44.5	89	6	30	74-120
1,3-Dichloropropane	50.0	43.8	88	4	30	74-117
2-Hexanone	250	212	85	3	30	58-140
Tetrachloroethylene	50.0	40.9	82	4	30	60-120
Dibromochloromethane	50.0	49.2	98	6	30	77-133
1,2-Dibromoethane	50.0	46.2	92	4	30	74-121
Chlorobenzene	50.0	42.6	85	7	30	72-116
1,1,1,2-Tetrachloroetha	50.0	45.7	91	7	30	72-127
Ethylbenzene	50.0	40.8	82	6	30	70-120
o-Xylene	50.0	41.5	83	5	30	72-117
m,p-Xylenes	100	80.2	80	6	30	69-120
Styrene	50.0	44.7	89	5	30	68-116
Bromoform	50.0	51.3	103	8	30	70-134
Isopropylbenzene	50.0	41.2	82	7	30	64-120
1,1,2,2-Tetrachloroetha	50.0	45.0	90	5	30	63-130
1,2,3-Trichloropropane	50.0	44.2	88	6	30	66-126
Bromobenzene	50.0	42.9	86	6	30	74-115
n-Propylbenzene	50.0	40.1	80	5	30	64-116
2-Chlorotoluene	50.0	40.6	81	6	30	67-115
1,3,5-Trimethylbenzene	50.0	41.2	82	7	30	66-120
1,2,4-Trimethylbenzene	50.0	41.8	84	6	30	65-120
4-Chlorotoluene	50.0	41.4	83	6	30	66-120
tert-Butylbenzene	50.0	42.0	84	5	30	65-116

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090GMC40

COMPOUND	SPIKE ADDED (ug/l)	MSD CONCENTRATION (ug/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
sec-Butylbenzene	50.0	40.8	82	7	30	64-118
4-Isopropyltoluene	50.0	41.6	83	6	30	65-118
1,3-Dichlorobenzene	50.0	41.0	82	7	30	66-115
1,4-Dichlorobenzene	50.0	41.2	82	7	30	67-116
n-Butylbenzene	50.0	41.4	83	7	30	60-121
1,2-Dichlorobenzene	50.0	42.8	86	8	30	72-115
1,2-Dibromo-3-chloropro	50.0	48.6	97	6	30	55-138
1,2,4-Trichlorobenzene	50.0	43.2	86	9	30	60-130
Hexachlorobutadiene	50.0	43.7	87	6	30	57-119
Naphthalene	50.0	44.4	89	6	30	62-132
1,2,3-Trichlorobenzene	50.0	44.8	90	5	30	66-129

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 67 outside limits
Spike Recovery: 0 out of 134 outside limits

COMMENTS: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: 2D106B2 Lab Sample ID: 1200943515

Date Analyzed: 09/26/05 Time Analyzed: 0829

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK01LCS	1200943518	2D103L2	0658
02	VBLK01SLCS	1200943519	2D104SL2	0736
03	GU05090G3TM01	145579005	2D115	1233
04	GU05090GMC401	145579006	2D116	1259
05	GU05090G57M01	145579007	2D118	1351
06	GU05090G7CM01	145579008	2D119	1417
07	GU05090GMC401-FTB	145579009	2D120	1443
08	GU05090G57M01-FTB	145579010	2D121	1509
09	GU05090G7CM01-FTB	145579011	2D122	1535
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4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: 2D208B2 Lab Sample ID: 1200945696

Date Analyzed: 09/27/05 Time Analyzed: 0924

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK02LCS	1200945697	2D203L2	0703
02	VBLK02SLCS	1200945698	2D204SL2	0739
03	GU05090GMC401MS	1200945702	2D214	1200
04	GU05090GMC401MSD	1200945703	2D215	1226
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: 2C308 BFB Injection Date: 09/21/05

Instrument ID: VOA2 BFB Injection Time: 1107

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.1
75	30.0 - 60.0% of mass 95	48.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 100.0% of mass 95	76.6
175	5.0 - 9.0% of mass 174	5.5 (7.1)1
176	95.0 - 101.0% of mass 174	73.7 (96.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD001	W2V050921-01	2C310	09/21/05	1147
02	VSTD002	W2V050921-02	2C311	09/21/05	1213
03	VSTD005	W2V050921-03	2C312	09/21/05	1239
04	VSTD010	W2V050921-04	2C313	09/21/05	1305
05	VSTD020	W2V050921-05	2C314	09/21/05	1331
06	VSTD100	W2V050921-07	2C316	09/21/05	1423
07	VSTD0005	W2V050921-08	2C318	09/21/05	1516
08	SECOND_SOURCE_ICV	W2V050920-09	2C320	09/21/05	1608
09	VSTD005S	VSTD005S	2C323	09/21/05	1726
10	VSTD010S	VSTD010S	2C324	09/21/05	1752
11	VSTD025S	VSTD025S	2C325	09/21/05	1818
12	VSTD050S	VSTD050S	2C326	09/21/05	1844
13	VSTD100S	VSTD100S	2C327	09/21/05	1910
14	VSTD500S	VSTD500S	2C329	09/21/05	2002
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: 2D101 BFB Injection Date: 09/26/05

Instrument ID: VOA2 BFB Injection Time: 0618

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.4
75	30.0 - 60.0% of mass 95	46.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	76.2
175	5.0 - 9.0% of mass 174	5.4 (7.0)1
176	95.0 - 101.0% of mass 174	74.0 (97.1)1
177	5.0 - 9.0% of mass 176	4.8 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	UVM050920-01A	2D103	09/26/05	0658
02	VBLK01LCS	1200943518	2D103L2	09/26/05	0658
03	VSTD250S	UVM050829-10A	2D104	09/26/05	0736
04	VBLK01SLCS	1200943519	2D104SL2	09/26/05	0736
05	VBLK01	1200943515	2D106B2	09/26/05	0829
06	GU05090G3TM01	145579005	2D115	09/26/05	1233
07	GU05090GMC401	145579006	2D116	09/26/05	1259
08	GU05090G57M01	145579007	2D118	09/26/05	1351
09	GU05090G7CM01	145579008	2D119	09/26/05	1417
10	GU05090GMC401-FTB	145579009	2D120	09/26/05	1443
11	GU05090G57M01-FTB	145579010	2D121	09/26/05	1509
12	GU05090G7CM01-FTB	145579011	2D122	09/26/05	1535
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: 2D201 BFB Injection Date: 09/27/05

Instrument ID: VOA2 BFB Injection Time: 0623

GC Column: DB624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	28.7
75	30.0 - 60.0% of mass 95	49.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.3 (0.5)1
174	50.0 - 100.0% of mass 95	74.8
175	5.0 - 9.0% of mass 174	5.3 (7.1)1
176	95.0 - 101.0% of mass 174	71.3 (95.2)1
177	5.0 - 9.0% of mass 176	4.8 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	UVM050920-01A	2D203	09/27/05	0703
02	VBLK02LCS	1200945697	2D203L2	09/27/05	0703
03	VSTD250S	UVM050829-10A	2D204	09/27/05	0739
04	VBLK02SLCS	1200945698	2D204SL2	09/27/05	0739
05	VBLK02	1200945696	2D208B2	09/27/05	0924
06	GU05090GMC401MS	1200945702	2D214	09/27/05	1200
07	GU05090GMC401MSD	1200945703	2D215	09/27/05	1226
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID (Standard): 2D103 Date Analyzed: 09/26/05

Instrument ID: VOA2 Time Analyzed: 0658

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1790524	10.69	1238911	14.00	604269	16.48
	UPPER LIMIT	3581048	11.19	2477822	14.50	1208538	16.98
	LOWER LIMIT	895262	10.19	619456	13.50	302134	15.98
	EPA SAMPLE NO.						
01	VBLK01LCS	1790524	10.69	1238911	14.00	604269	16.48
02	VBLK01SLCS	1719002	10.69	1199606	13.99	576691	16.48
03	VBLK01	1723574	10.69	1161831	14.00	569051	16.48
04	GU05090G3TM01	1976101	10.69	1337886	14.00	652087	16.48
05	GU05090GMC401	1971690	10.69	1324181	14.00	634243	16.48
06	GU05090G57M01	1982844	10.69	1321084	14.00	645649	16.48
07	GU05090G7CM01	1992578	10.69	1343052	14.00	646043	16.48
08	GU05090GMC401-FTB	1947407	10.69	1322426	14.00	649807	16.48
09	GU05090G57M01-FTB	1951444	10.69	1328136	14.00	639901	16.48
10	GU05090G7CM01-FTB	1952665	10.69	1313702	14.00	631518	16.48
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID (Standard): 2D203 Date Analyzed: 09/27/05

Instrument ID: VOA2 Time Analyzed: 0703

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1759109	10.69	1209665	14.00	582116	16.48
	UPPER LIMIT	3518218	11.19	2419330	14.50	1164232	16.98
	LOWER LIMIT	879554	10.19	604832	13.50	291058	15.98
	EPA SAMPLE NO.						
01	VBLK02LCS	1759109	10.69	1209665	14.00	582116	16.48
02	VBLK02SLCS	1669383	10.69	1141233	14.00	553717	16.48
03	VBLK02	1640701	10.69	1093505	14.00	535666	16.48
04	GU05090GMC401MS	1855705	10.69	1313145	14.00	646380	16.48
05	GU05090GMC401MSD	1867036	10.69	1310351	14.00	645555	16.48
06							
07							
08							
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10							
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18							
19							
20							
21							
22							

IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	2.9	J
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G3TM01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D115

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d115.d
Lab Smp Id: 145579005 Client Smp ID: GU05090G3TM01
Inj Date : 26-SEP-2005 12:33
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579005|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.692	(1.000)	1976101	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.995	(1.000)	1337886	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.479	16.477	(1.000)	652087	50.0000	
$ 35 Dibromofluoromethane	113	9.908	9.907	(0.927)	517868	57.0485	57.0
$ 47 Toluene-d8	98	12.409	12.408	(0.887)	1785988	53.6982	53.7
$ 71 Bromofluorobenzene	95	15.225	15.224	(0.924)	694849	53.0499	53.0
10 Acetone	43	7.311	7.298	(0.684)	13637	2.93298	2.9(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

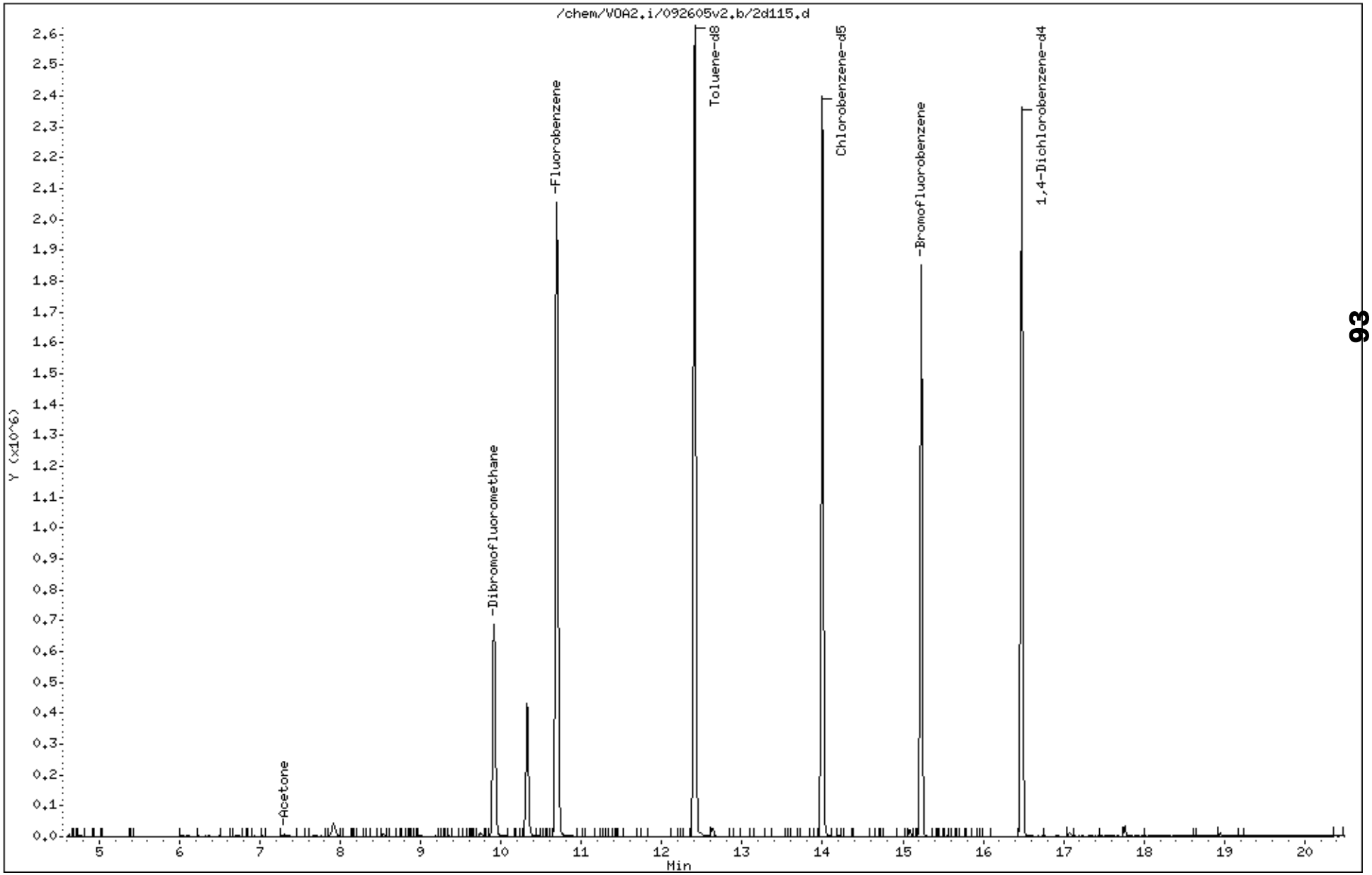
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d115.d
Lab Smp Id: 145579005 Client Smp ID: GU05090G3TM01
Inj Date : 26-SEP-2005 12:33
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579005|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d115.d
Date : 26-SEP-2005 12:33
Client ID: GU05090G3TM01
Sample Info: |145579005|465842|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



Data File: /chem/VOA2.i/092605v2.b/2d115.d

Date : 26-SEP-2005 12:33

Client ID: GU05090G3TM01

Instrument: VOA2.i

Sample Info: |145579005|465842|1|VOAF|1|

Purge Volume: 5.0

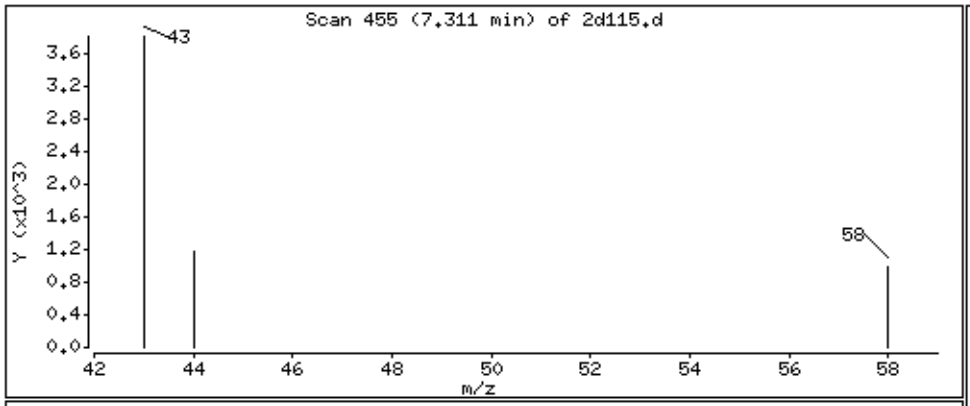
Operator: CDS1

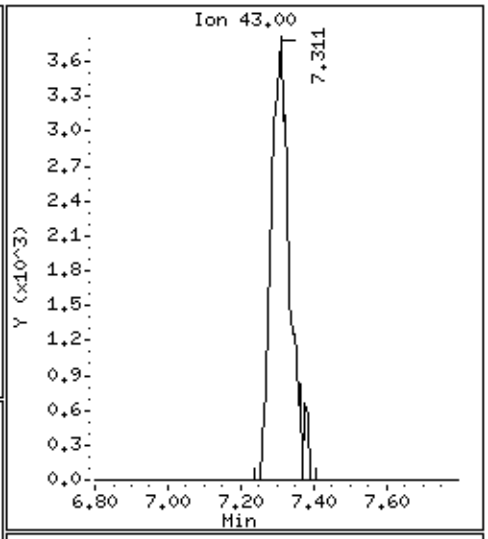
Column phase: DB-624

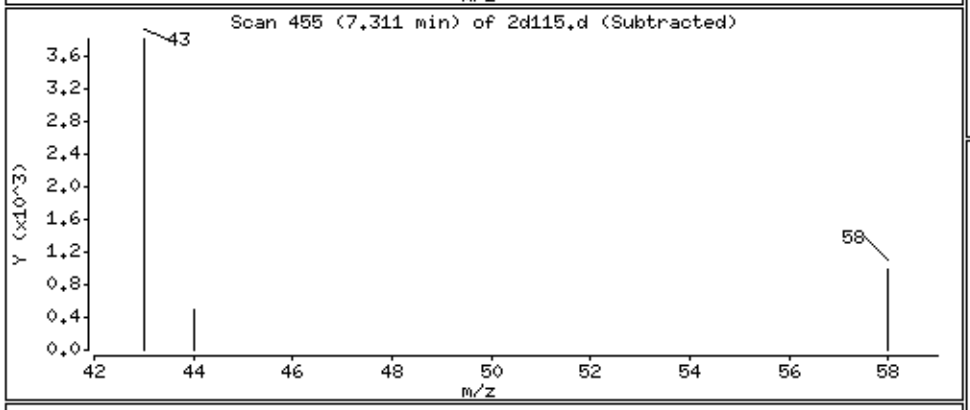
Column diameter: 0.25

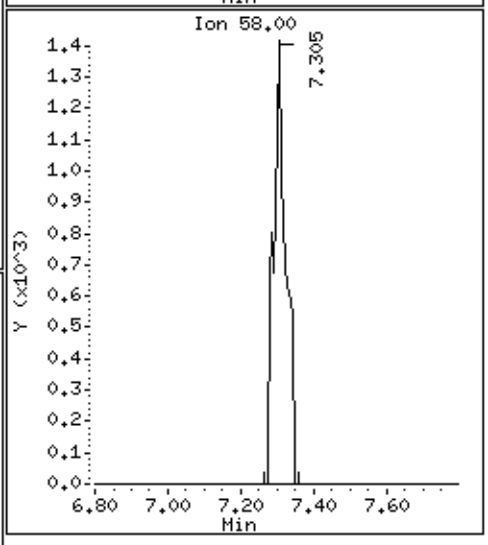
10 Acetone

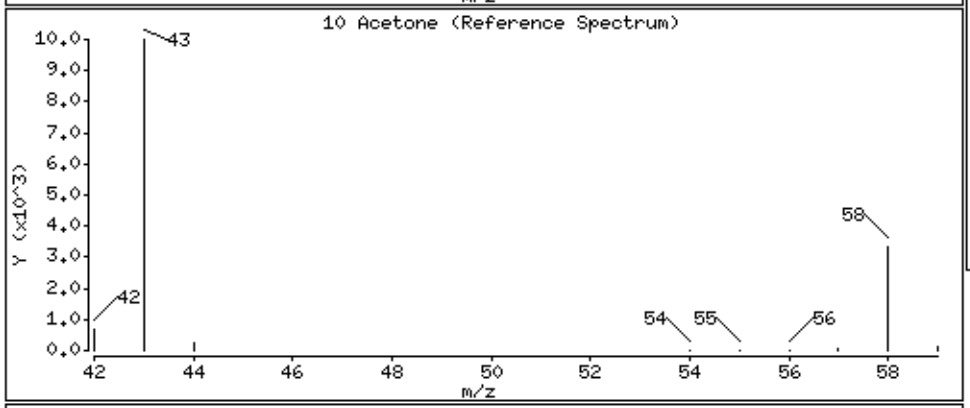
Concentration: 2.9 ug/l

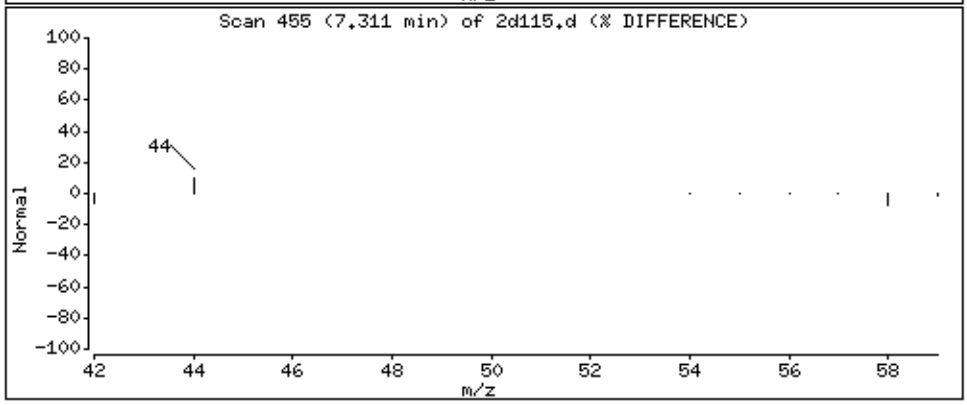












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G57M01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D118

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d118.d
Lab Smp Id: 145579007 Client Smp ID: GU05090G57M01
Inj Date : 26-SEP-2005 13:51
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579007|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.692	(1.000)	1982844	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.995	(1.000)	1321084	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.477	(1.000)	645649	50.0000	
$ 35 Dibromofluoromethane	113	9.914	9.907	(0.927)	532845	58.4988	58.5
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1807609	55.0395	55.0
$ 71 Bromofluorobenzene	95	15.225	15.224	(0.924)	706668	54.4902	54.5

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d118.d
Lab Smp Id: 145579007 Client Smp ID: GU05090G57M01
Inj Date : 26-SEP-2005 13:51
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579007|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d118.d

Page 1

Date : 26-SEP-2005 13:51

Client ID: GU05090G57M01

Instrument: VOA2.i

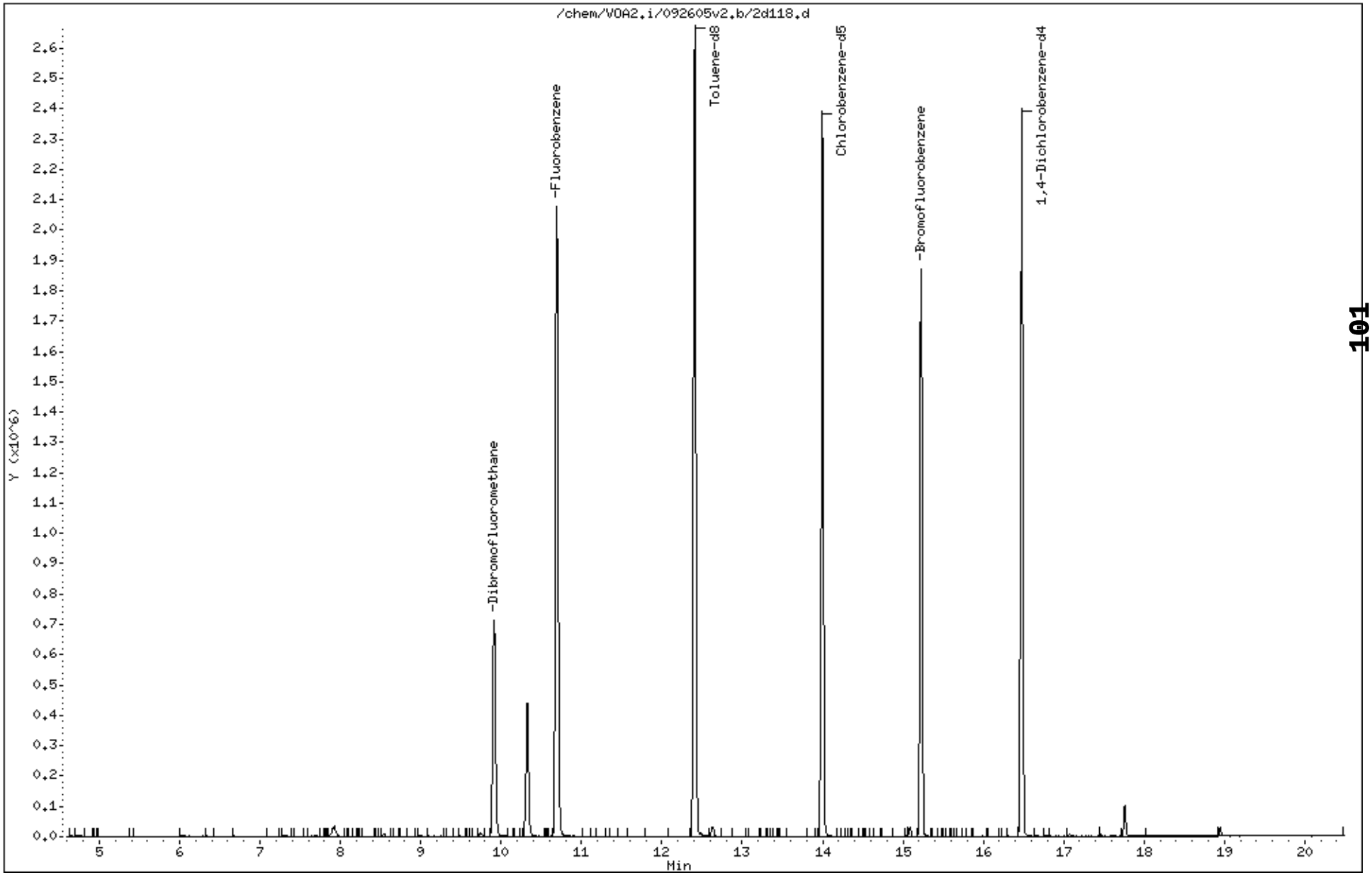
Sample Info: |145579007|465842|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
57M01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
57M01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
57M01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G
57M01-FTB

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D121

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d121.d
Lab Smp Id: 145579010 Client Smp ID: GU05090G57M01-FTB
Inj Date : 26-SEP-2005 15:09
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579010|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1951444	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.995	(1.000)	1328136	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.477	(1.000)	639901	50.0000	
$ 35 Dibromofluoromethane	113	9.914	9.907	(0.927)	511036	57.0072	57.0
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1796957	54.4246	54.4
$ 71 Bromofluorobenzene	95	15.225	15.224	(0.924)	697445	54.2621	54.3

General Engineering Laboratories, LLC

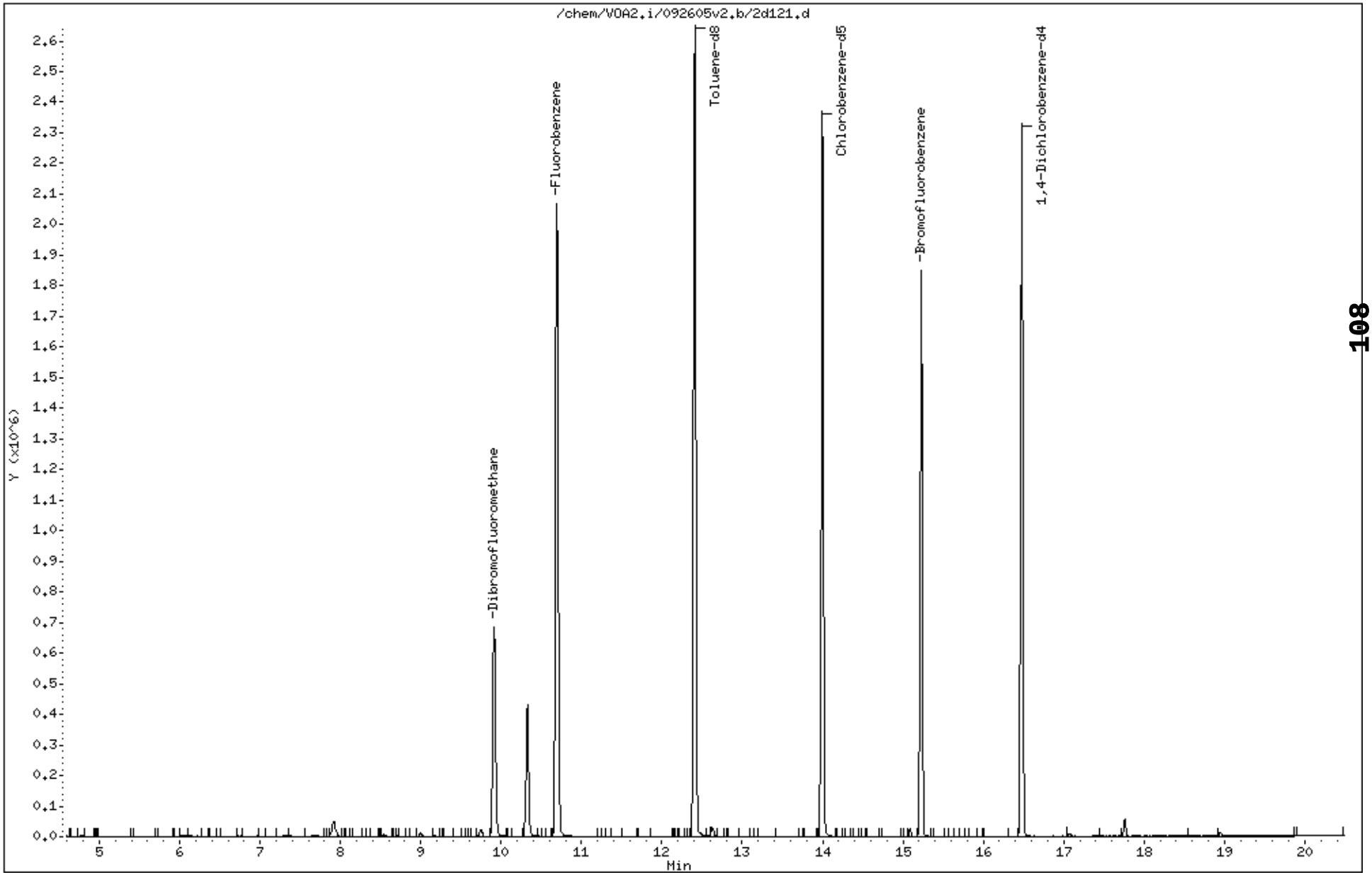
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d121.d
Lab Smp Id: 145579010 Client Smp ID: GU05090G57M01-FTB
Inj Date : 26-SEP-2005 15:09
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579010|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d121.d
Date : 26-SEP-2005 15:09
Client ID: GU05090G57M01-FTB
Sample Info: |145579010|465842|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

EPA SAMPLE NO.

GU05090G7CM01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D119

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
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10.					
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30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d119.d
Lab Smp Id: 145579008 Client Smp ID: GU05090G7CM01
Inj Date : 26-SEP-2005 14:17
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579008|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1992578	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1343052	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	646043	50.0000	
$ 35 Dibromofluoromethane	113	9.913	9.907	(0.927)	518364	56.6310	56.6
$ 47 Toluene-d8	98	12.407	12.408	(0.887)	1801422	53.9539	54.0
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	696052	53.6389	53.6

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d119.d
Lab Smp Id: 145579008 Client Smp ID: GU05090G7CM01
Inj Date : 26-SEP-2005 14:17
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579008|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d119.d

Page 1

Date : 26-SEP-2005 14:17

Client ID: GU05090G7CM01

Instrument: VOA2.i

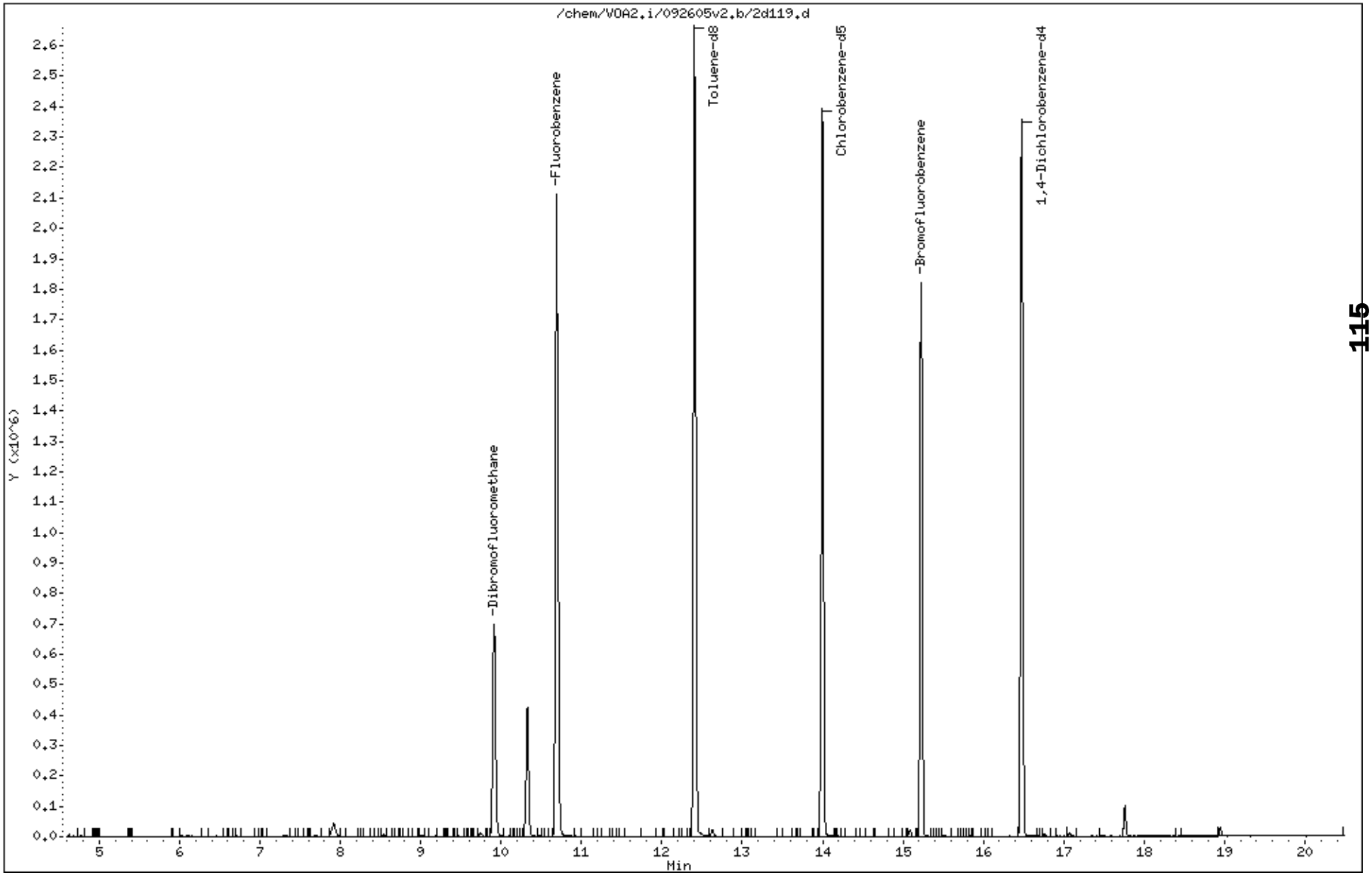
Sample Info: |145579008|465842|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
7CM01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
75-71-8	Dichlorodifluoromethane		1.0	U
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-69-4	Trichlorofluoromethane		1.0	U
107-02-8	Acrolein		5.0	U
75-35-4	1,1-Dichloroethylene		1.0	U
67-64-1	Acetone		5.0	U
76-13-1	Trichlorotrifluoroethane		5.0	U
74-88-4	Iodomethane		5.0	U
75-15-0	Carbon disulfide		5.0	U
75-05-8	Acetonitrile		25.0	U
78-83-1	Isobutyl alcohol		50.0	U
107-05-1	Allyl chloride		5.0	U
75-09-2	Methylene chloride		5.0	U
107-13-1	Acrylonitrile		5.0	U
156-60-5	trans-1,2-Dichloroethylene		1.0	U
75-34-3	1,1-Dichloroethane		1.0	U
108-05-4	Vinyl acetate		5.0	U
126-99-8	2-Chloro-1,3-butadiene		1.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethylene		1.0	U
594-20-7	2,2-Dichloropropane		1.0	U
126-98-7	Methacrylonitrile		5.0	U
107-12-0	Propionitrile		5.0	U
74-97-5	Bromochloromethane		1.0	U
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
563-58-6	1,1-Dichloropropene		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
7CM01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.44	J
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
7CM01-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
GU05090G
7CM01-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D122

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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27.					
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29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d122.d
Lab Smp Id: 145579011 Client Smp ID: GU05090G7CM01-FTB
Inj Date : 26-SEP-2005 15:35
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579011|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.692	(1.000)	1952665	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.995	(1.000)	1313702	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.477	(1.000)	631518	50.0000	
$ 35 Dibromofluoromethane	113	9.914	9.907	(0.927)	510785	56.9436	56.9
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1779568	54.4902	54.5
$ 71 Bromofluorobenzene	95	15.225	15.224	(0.924)	688167	54.2510	54.2
50 Toluene	92	12.487	12.481	(0.892)	10456	0.44336	0.44(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

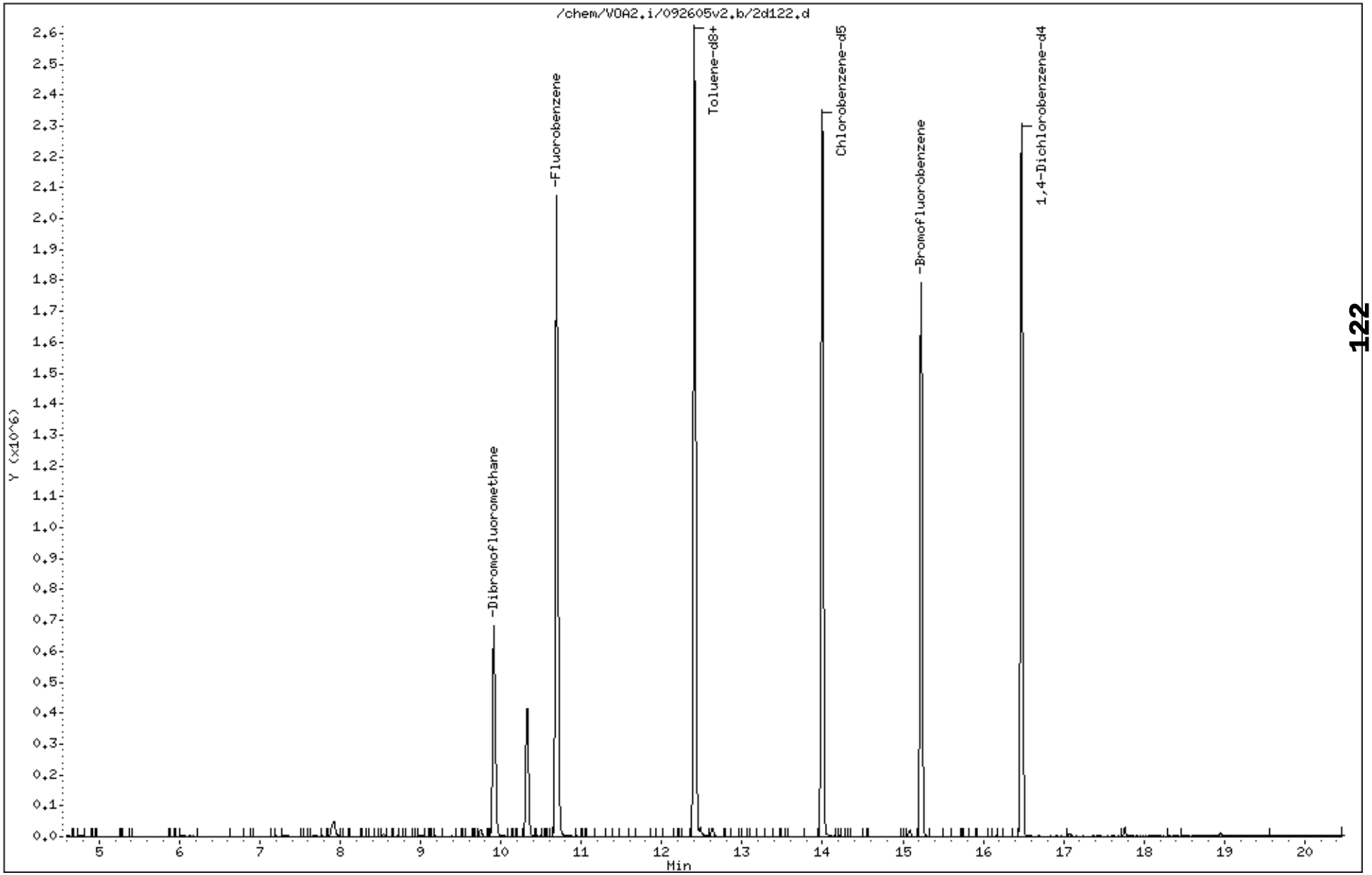
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d122.d
Lab Smp Id: 145579011 Client Smp ID: GU05090G7CM01-FTB
Inj Date : 26-SEP-2005 15:35
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579011|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d122.d
Date : 26-SEP-2005 15:35
Client ID: GU05090G7CM01-FTB
Sample Info: |145579011|465842|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



122

Data File: /chem/VOA2.i/092605v2.b/2d122.d

Date : 26-SEP-2005 15:35

Client ID: GU05090G7CM01-FTB

Instrument: VOA2.i

Sample Info: |145579011|465842|1|VOAF|1|

Purge Volume: 5.0

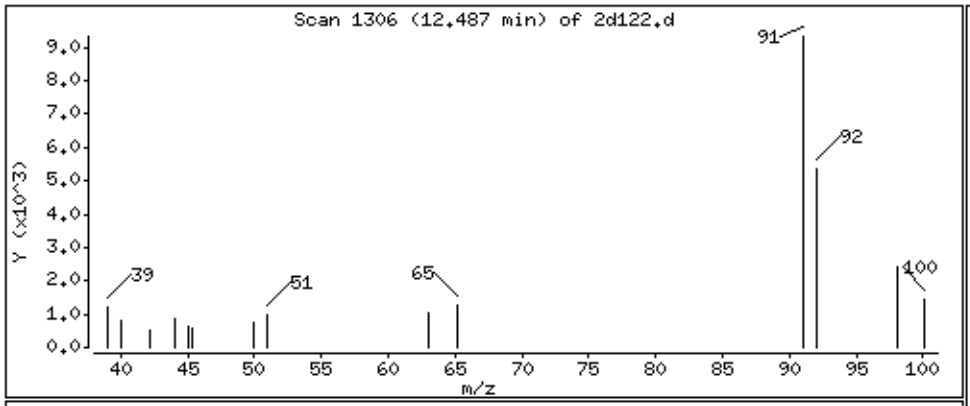
Operator: CDS1

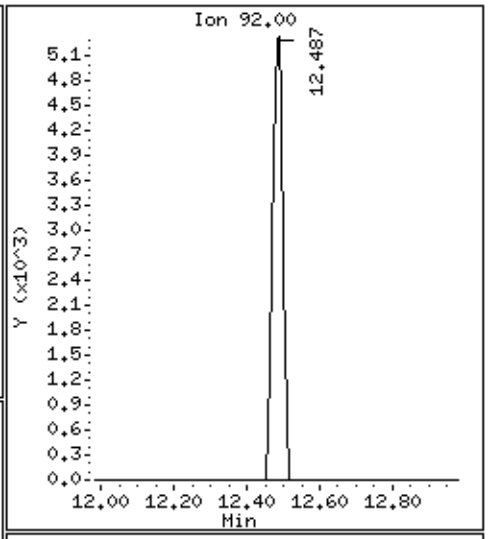
Column phase: DB-624

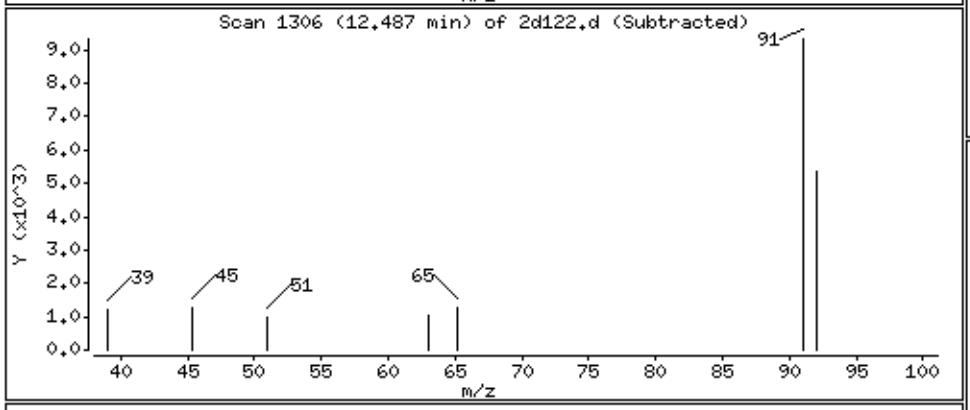
Column diameter: 0.25

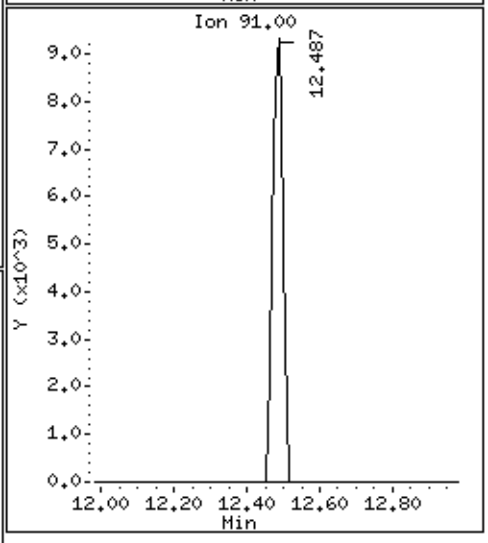
50 Toluene

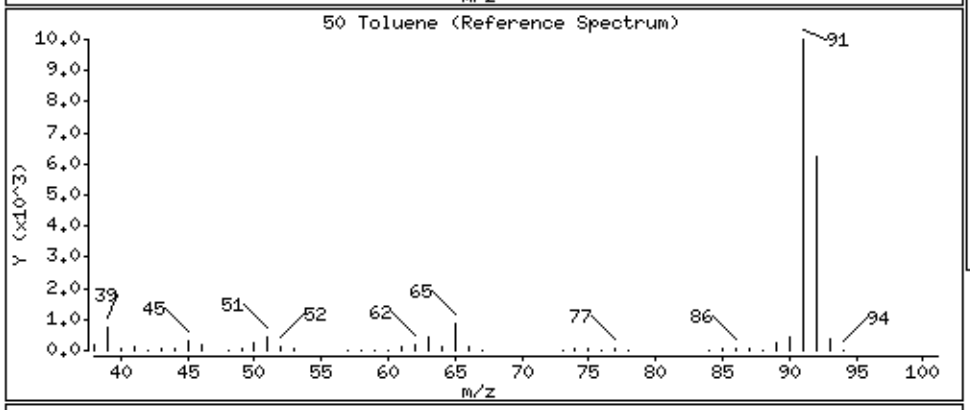
Concentration: 0.44 ug/l

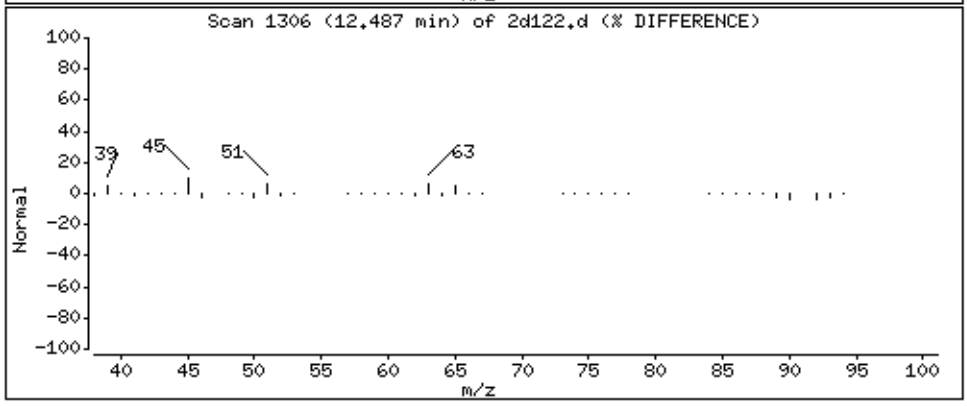












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	3.5	J
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.8	

1E

EPA SAMPLE NO.

GU05090GMC401

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D116

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d116.d
Lab Smp Id: 145579006 Client Smp ID: GU05090GMC401
Inj Date : 26-SEP-2005 12:59
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579006|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.692	(1.000)	1971690	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.995	(1.000)	1324181	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.477	(1.000)	634243	50.0000	
$ 35 Dibromofluoromethane	113	9.914	9.907	(0.927)	511989	56.5271	56.5
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1789495	54.3605	54.4
$ 71 Bromofluorobenzene	95	15.225	15.224	(0.924)	688294	54.0279	54.0
10 Acetone	43	7.304	7.298	(0.683)	16124	3.47563	3.5(a)
97 1,4-Dioxane	88	11.435	11.440	(1.069)	4669	50.7991	50.8

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d116.d
Lab Smp Id: 145579006 Client Smp ID: GU05090GMC401
Inj Date : 26-SEP-2005 12:59
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579006|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d116.d

Page 1

Date : 26-SEP-2005 12:59

Client ID: GU05090GMC401

Instrument: VOA2.i

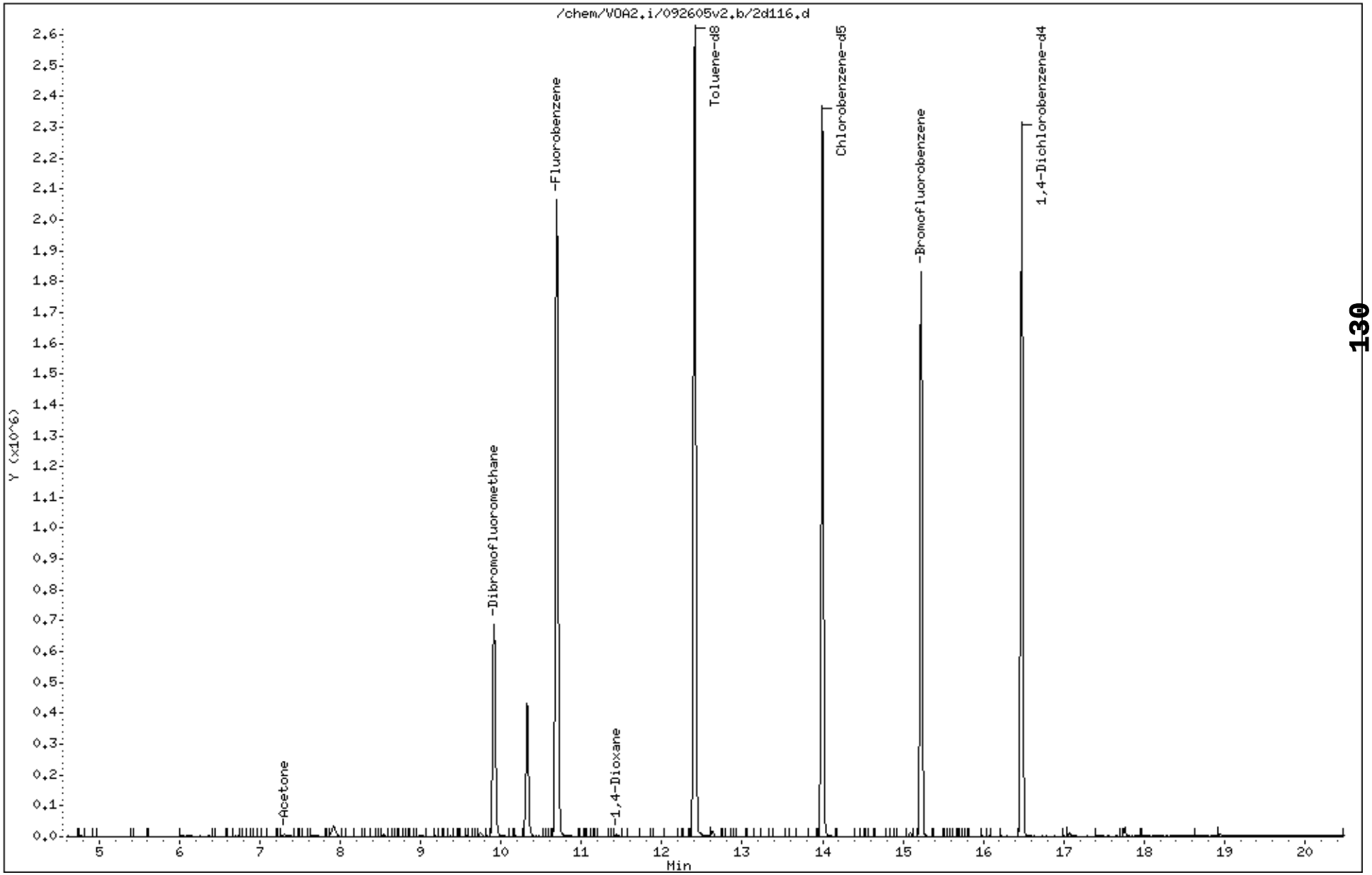
Sample Info: |145579006|465842|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA2.i/092605v2.b/2d116.d

Date : 26-SEP-2005 12:59

Client ID: GU05090GMC401

Instrument: VOA2.i

Sample Info: |145579006|465842|1|VOAF|1|

Purge Volume: 5.0

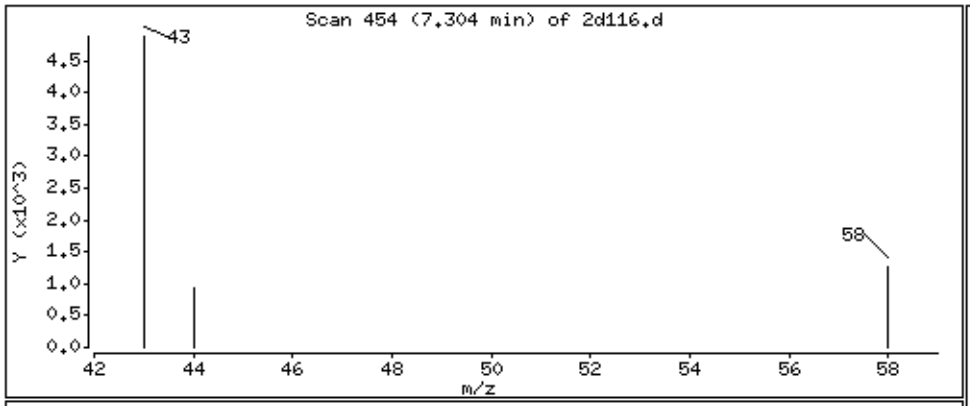
Operator: CDS1

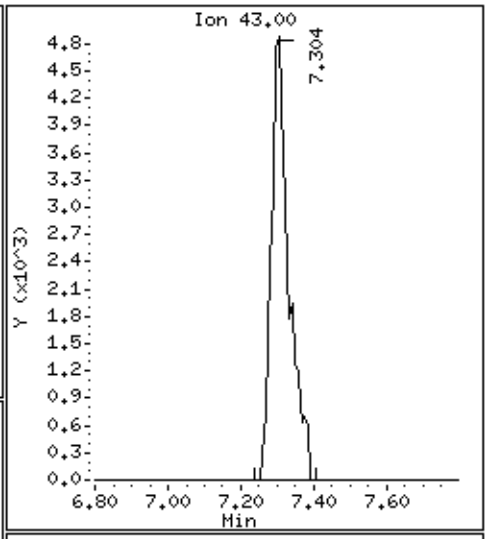
Column phase: DB-624

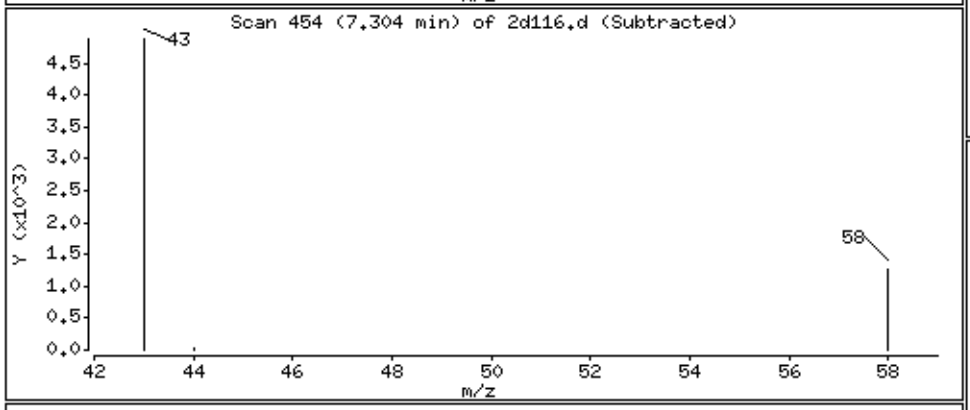
Column diameter: 0.25

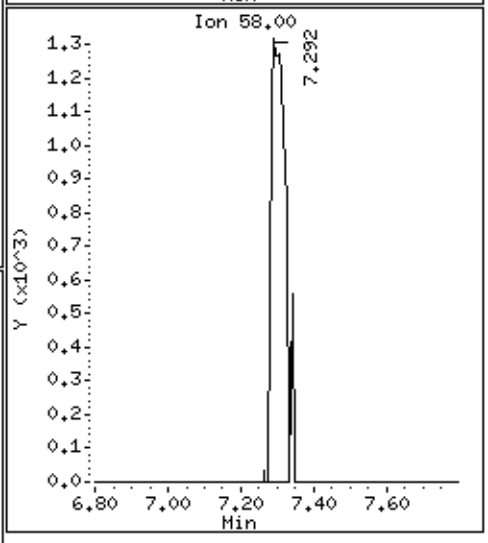
10 Acetone

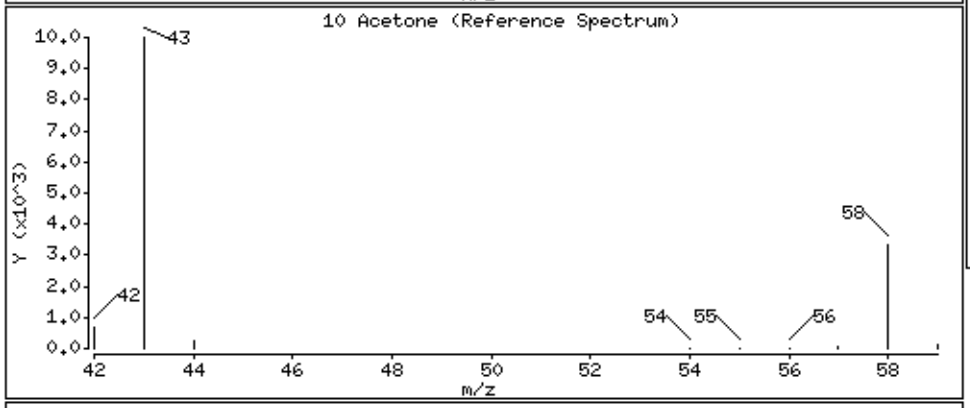
Concentration: 3.5 ug/l

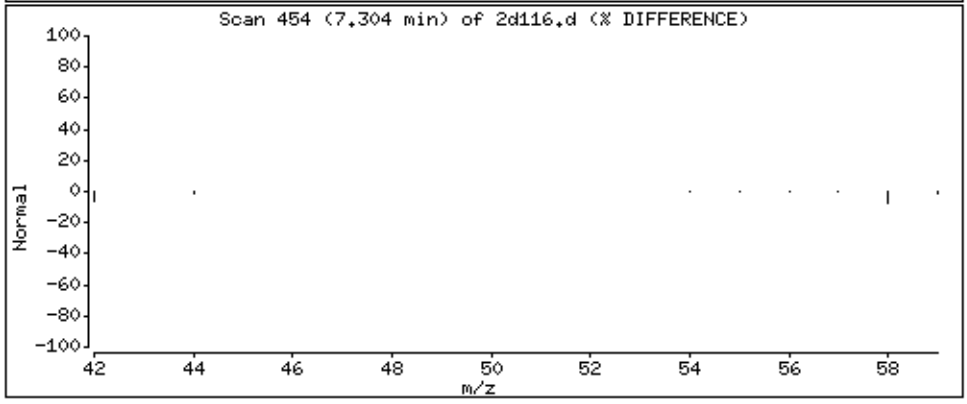












Data File: /chem/VOA2.i/092605v2.b/2d116.d

Date : 26-SEP-2005 12:59

Client ID: GU05090GMC401

Instrument: VOA2.i

Sample Info: |145579006|465842|1|VOAF|1|

Purge Volume: 5.0

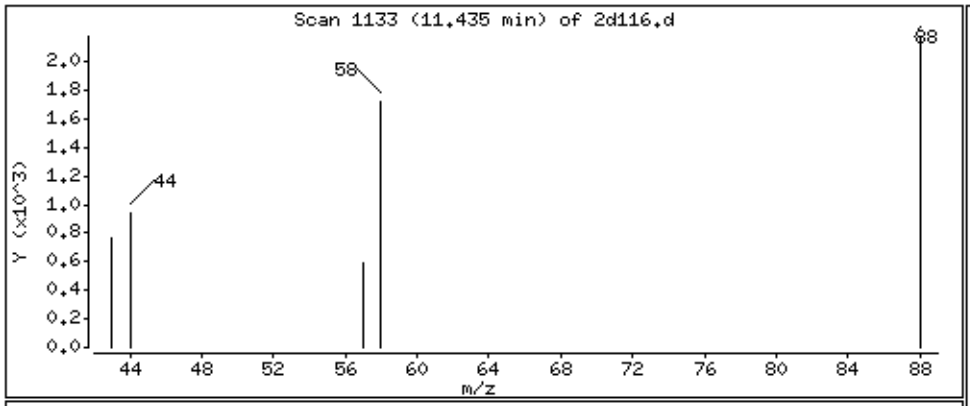
Operator: CDS1

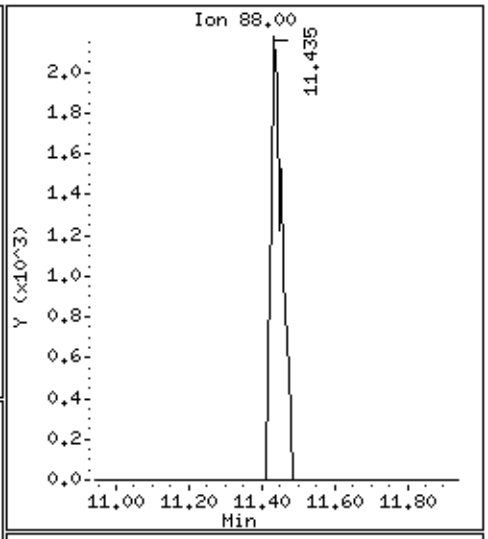
Column phase: DB-624

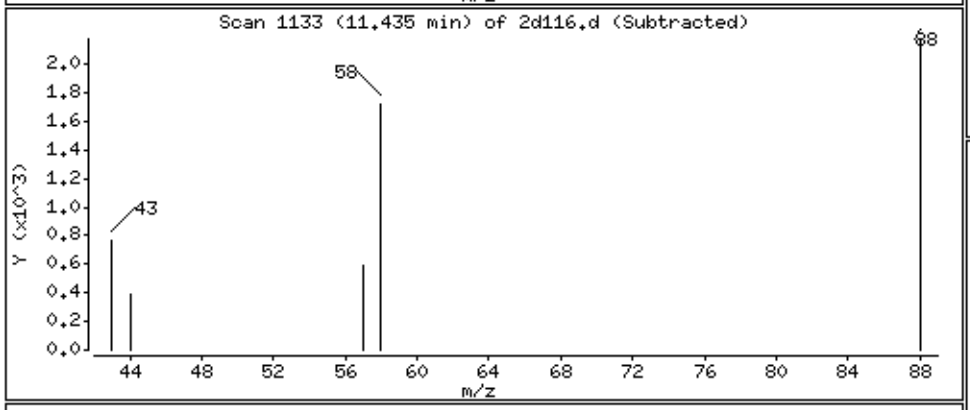
Column diameter: 0.25

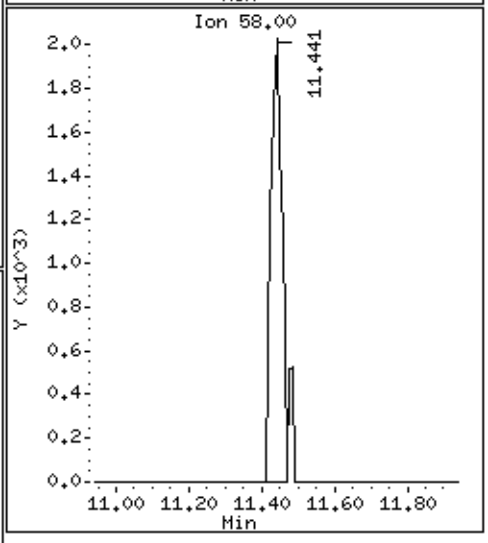
97 1,4-Dioxane

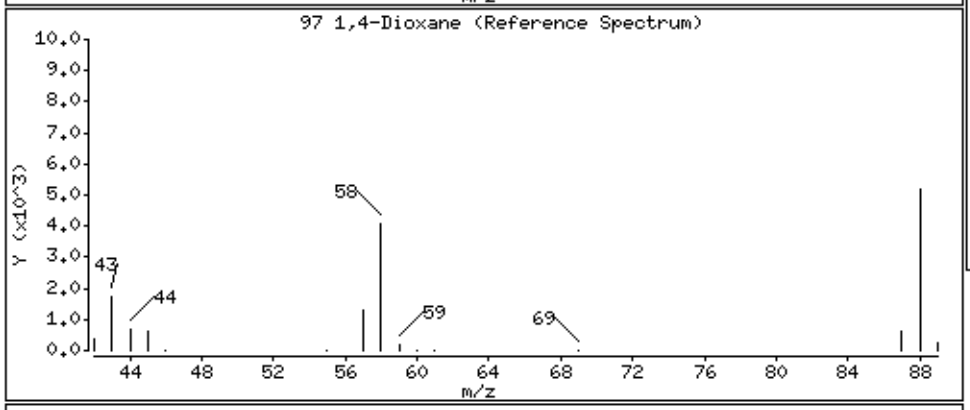
Concentration: 50.8 ug/l

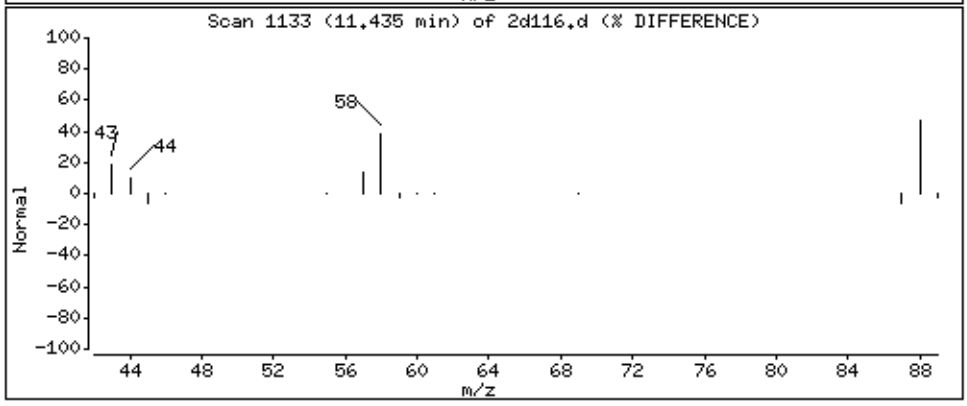












1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401-FTB

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	50.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
GU05090G
MC401-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 145579009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D120

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d120.d
Lab Smp Id: 145579009 Client Smp ID: GU05090GMC401-FTB
Inj Date : 26-SEP-2005 14:43
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579009|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1947407	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1322426	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	649807	50.0000	
$ 35 Dibromofluoromethane	113	9.907	9.907	(0.927)	515132	57.5833	57.6
$ 47 Toluene-d8	98	12.407	12.408	(0.887)	1790142	54.4523	54.4
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	690835	52.9285	52.9

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d120.d
Lab Smp Id: 145579009 Client Smp ID: GU05090GMC401-FTB
Inj Date : 26-SEP-2005 14:43
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |145579009|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d120.d

Page 1

Date : 26-SEP-2005 14:43

Client ID: GU05090GMC401-FTB

Instrument: VOA2.i

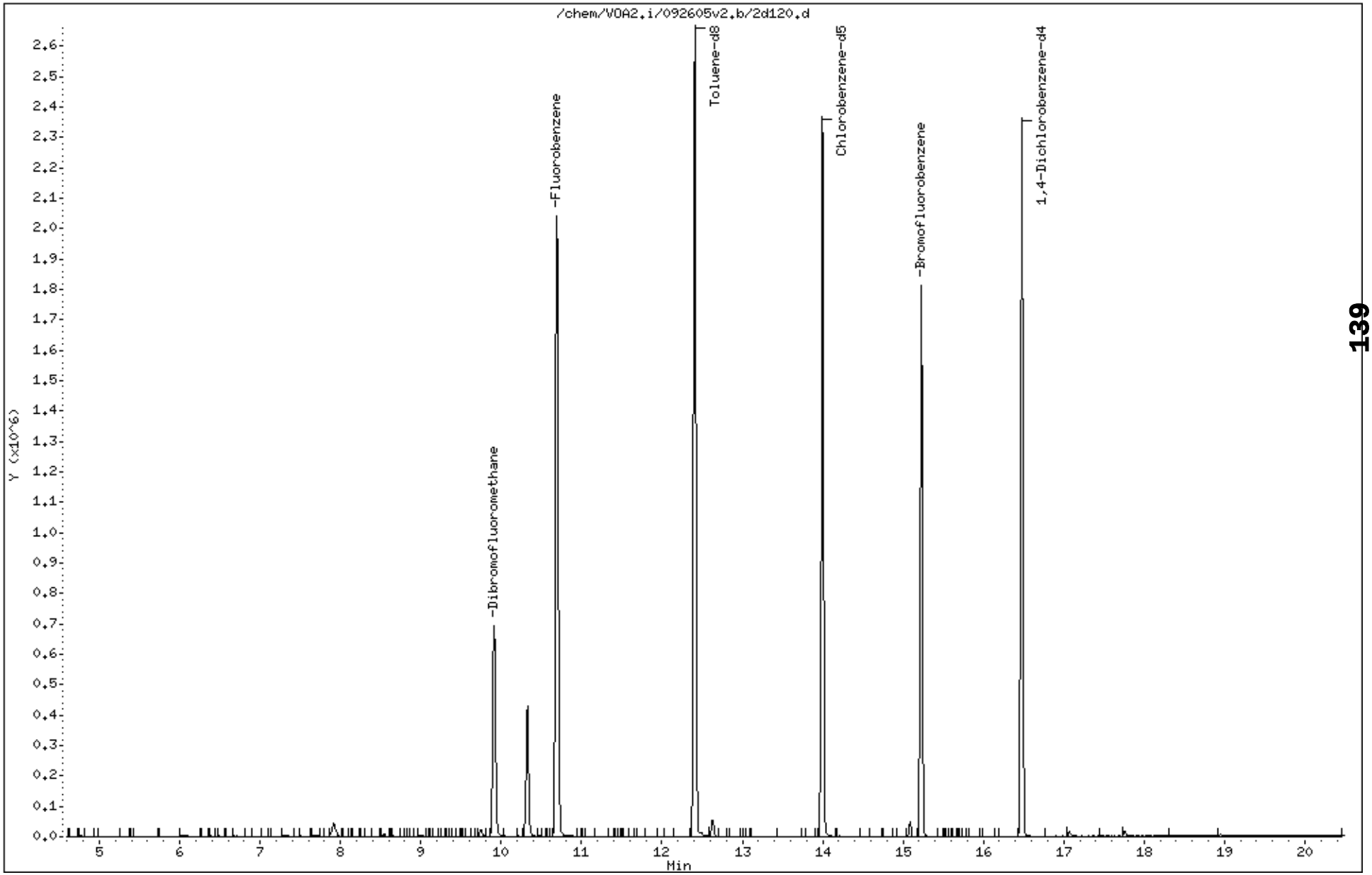
Sample Info: |145579009|465842|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



STANDARDS DATA

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
Dibromofluoromethane (surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropane		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis
!: Indicates calibration verification concentration level used for regular level analysis

Report Date: 22-Sep-2005 11:06

Calibration History

Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Start Cal Date: 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
21-SEP-2005 17:26	ICALsubS	/chem/VOA2.i/092105v2.b/2c323.d
21-SEP-2005 11:47	CALsubL+	/chem/VOA2.i/092105v2.b/2c310.d
Cal Level: 2 , Cal Amount: 2.00000		
21-SEP-2005 17:52	ICALsubS	/chem/VOA2.i/092105v2.b/2c324.d
21-SEP-2005 12:13	CALsubL+	/chem/VOA2.i/092105v2.b/2c311.d
Cal Level: 3 , Cal Amount: 5.00000		
21-SEP-2005 18:18	ICALsubS	/chem/VOA2.i/092105v2.b/2c325.d
21-SEP-2005 12:39	CALsubL+	/chem/VOA2.i/092105v2.b/2c312.d
Cal Level: 4 , Cal Amount: 10.00000		
21-SEP-2005 18:44	ICALsubS	/chem/VOA2.i/092105v2.b/2c326.d
21-SEP-2005 13:05	CALsubL+	/chem/VOA2.i/092105v2.b/2c313.d
Cal Level: 5 , Cal Amount: 20.00000		
21-SEP-2005 19:10	ICALsubS	/chem/VOA2.i/092105v2.b/2c327.d
21-SEP-2005 13:31	CALsubL+	/chem/VOA2.i/092105v2.b/2c314.d
Cal Level: 7 , Cal Amount: 100.00000		
21-SEP-2005 20:02	ICALsubS	/chem/VOA2.i/092105v2.b/2c329.d
21-SEP-2005 14:23	CALsubL+	/chem/VOA2.i/092105v2.b/2c316.d
Cal Level: 8 , Cal Amount: 200.00000		
21-SEP-2005 15:16	BENZENE+	/chem/VOA2.i/092105v2.b/2c318.d

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Calibration File Names:
Level 1: /chem/VOA2.i/092105v2.b/2c323.d
Level 2: /chem/VOA2.i/092105v2.b/2c324.d
Level 3: /chem/VOA2.i/092105v2.b/2c325.d
Level 4: /chem/VOA2.i/092105v2.b/2c326.d
Level 5: /chem/VOA2.i/092105v2.b/2c327.d
Level 7: /chem/VOA2.i/092105v2.b/2c329.d
Level 8: /chem/VOA2.i/092105v2.b/2c318.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 8										
M 1 Xylenes (total)	0.64369	0.61514	0.63774	0.61449	0.59858	0.50322					
	+++++						AVRG		0.60214		8.50447
M 2 1,2-Dichloroethylene (total)	0.45725	0.44848	0.46289	0.45767	0.46108	0.44451					
	+++++						AVRG		0.45531		1.59399
M 135 1,3-Dichloropropylene	0.31892	0.31611	0.33436	0.33391	0.34146	0.33346					
	+++++						AVRG		0.32970		3.01069
3 Dichlorodifluoromethane	0.20966	0.25717	0.29692	0.23519	0.27132	0.23761					
	+++++						AVRG		0.25131		12.19614
4 Chloromethane	0.39513	0.44992	0.45560	0.40422	0.42283	0.38940					
	+++++						AVRG		0.41952		6.71917
5 Vinyl chloride	0.18052	0.25142	0.26108	0.24387	0.25469	0.23670					
	+++++						AVRG		0.23805		12.36360

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
6 Bromomethane	0.14983	0.20342	0.21314	0.20322	0.21014	0.19540	+++++	AVRG		0.19586		11.93651
7 Chloroethane	0.17057	0.22637	0.21908	0.21910	0.22406	0.21554	+++++	AVRG		0.21245		9.82894
8 Trichlorofluoromethane	0.29725	0.36263	0.37268	0.38312	0.38260	0.36754	+++++	AVRG		0.36097		8.93601
134 Ethyl Ether	0.27895	0.28683	0.28896	0.30072	0.29530	0.29672	+++++	AVRG		0.29125		2.71335
9 Acrolein	0.05461	0.05650	0.05481	0.06493	0.06617	0.06836	+++++	AVRG		0.06090		10.27290
12 Trichlorotrifluoroethane	0.09399	0.09442	0.08747	0.10007	0.09529	0.08890	+++++	AVRG		0.09336		4.90442
10 Acetone	0.13994	0.12758	0.11799	0.11098	0.10185	0.10752	+++++	AVRG		0.11764		11.97668
11 1,1-Dichloroethylene	0.40338	0.39306	0.40196	0.40129	0.40420	0.40116	+++++	AVRG		0.40084		0.99641
13 Iodomethane	0.38556	0.38390	0.38834	0.38371	0.37898	0.33745	+++++	AVRG		0.37632		5.12568

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
15 Acetonitrile	0.05770	0.05683	0.05491	0.05278	0.04851	0.04808	+++++	AVRG		0.05314		7.74491
128 Methyl acetate	0.33567	0.32988	0.31409	0.30677	0.29150	0.27262	+++++	AVRG		0.30842		7.68025
14 Carbon disulfide	0.68580	0.68244	0.68899	0.67008	0.64672	0.54415	+++++	AVRG		0.65303		8.50338
16 Allyl chloride	0.15342	0.13935	0.12491	0.13365	0.13555	0.11730	+++++	AVRG		0.13403		9.25760
17 Methylene chloride	+++++	77243	118516	159492	244003	841883	+++++	LINR	-0.18922	0.20119		0.99952
18 Acrylonitrile	0.12160	0.11714	0.11920	0.13044	0.12893	0.12421	+++++	AVRG		0.12359		4.29324
20 tert-Butyl methyl ether	0.72939	0.70610	0.71332	0.69218	0.69321	0.67162	+++++	AVRG		0.70097		2.84257
21 trans-1,2-Dichloroethylene	0.43554	0.41055	0.42462	0.42065	0.42624	0.41470	+++++	AVRG		0.42205		2.10393
23 Vinyl acetate	0.74106	0.79551	0.80309	0.83495	0.76620	0.61853	+++++	AVRG		0.75989		10.04731

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
22 1,1-Dichloroethane	0.52932	0.49743	0.50743	0.49865	0.50100	0.43859	+++++	AVRG		0.49540		6.10194
24 2-Chloro-1,3-butadiene	0.46775	0.47454	0.45838	0.51656	0.52303	0.51677	+++++	AVRG		0.49284		5.87970
26 Ethyl acetate	0.37089	0.35638	0.35297	0.37576	0.37490	0.32667	+++++	AVRG		0.35959		5.21996
30 2-Butanone	0.19923	0.19634	0.18712	0.18703	0.17144	0.17611	+++++	AVRG		0.18621		5.85111
31 cis-1,2-Dichloroethylene	0.47896	0.48641	0.50116	0.49470	0.49592	0.47432	+++++	AVRG		0.48858		2.14679
28 Propionitrile	0.04164	0.04404	0.04566	0.04729	0.04780	0.04653	+++++	AVRG		0.04549		5.07008
25 2,2-Dichloropropane	0.34507	0.32880	0.33712	0.34315	0.33715	0.32587	+++++	AVRG		0.33619		2.26561
27 Methacrylonitrile	0.22006	0.22521	0.22012	0.23661	0.23198	0.20930	+++++	AVRG		0.22388		4.33408
29 Bromochloromethane	0.11084	0.10679	0.10890	0.11376	0.11045	0.10690	+++++	AVRG		0.10961		2.42176

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
32 Chloroform	0.39525	0.41081	0.40221	0.39732	0.39164	0.37340	+++++	AVRG		0.39511		3.17160
72 Tetrahydrofuran	45268	69954	133723	258436	501179	2095571	+++++	LINR	-0.18225	0.32739		0.99919
36 1,1,1-Trichloroethane	0.31835	0.32746	0.33623	0.33840	0.33726	0.32901	+++++	AVRG		0.33112		2.32998
19 Isobutyl alcohol	0.01275	0.01282	0.01638	0.01482	0.01482	0.01310	+++++	AVRG		0.01412		10.35064
34 1,1-Dichloropropene	0.31791	0.30786	0.30954	0.31585	0.31133	0.29079	+++++	AVRG		0.30888		3.12220
129 Cyclohexane	0.59659	0.60710	0.59337	0.60856	0.59932	0.58039	+++++	AVRG		0.59756		1.72046
33 Carbon tetrachloride	0.26502	0.26449	0.28161	0.28298	0.28653	0.28162	+++++	AVRG		0.27704		3.49653
37 1,2-Dichloroethane	0.37781	0.38289	0.37160	0.37031	0.36793	0.35901	+++++	AVRG		0.37159		2.21790
38 Benzene	1.12747	1.06064	1.04907	1.02032	0.98833	0.87312	+++++	AVRG		1.01982		8.39221

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	200 Level 8										
131 n-Butyl alcohol	0.00927	0.01006	0.01039	0.01063	0.01012	0.01027					
	0.01122						AVRG		0.01028		5.75989
39 Trichloroethylene	0.24740	0.24397	0.24125	0.23812	0.23836	0.22411					
	+++++						AVRG		0.23887		3.36557
42 Methyl methacrylate	0.14656	0.14725	0.16015	0.16230	0.16317	0.13705					
	+++++						AVRG		0.15275		6.98801
41 1,2-Dichloropropane	0.28129	0.28955	0.28764	0.28196	0.28169	0.26200					
	+++++						AVRG		0.28069		3.48782
130 Methylcyclohexane	0.45418	0.44663	0.44317	0.43758	0.42406	0.38289					
	+++++						AVRG		0.43142		5.98585
97 1,4-Dioxane	0.00207	0.00212	0.00253	0.00245	0.00245	0.00237					
	+++++						AVRG		0.00233		8.26900
43 Dibromomethane	0.14920	0.13878	0.14503	0.14261	0.13993	0.13788					
	+++++						AVRG		0.14224		3.02597
45 Bromodichloromethane	0.27904	0.28532	0.30206	0.30635	0.31087	0.30515					
	+++++						AVRG		0.29813		4.30311
48 2-Nitropropane	0.07651	0.08177	0.09373	0.09889	0.10459	0.10713					
	+++++						AVRG		0.09377		13.17937

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
44 2-Chloroethylvinyl ether	0.12463	0.13977	0.14046	0.15025	0.13981	0.12861	+++++	AVRG		0.13726		6.72644
46 cis-1,3-Dichloropropylene	0.34153	0.32710	0.35464	0.35699	0.36441	0.34956	+++++	AVRG		0.34904		3.77673
49 4-Methyl-2-pentanone	0.17910	0.18007	0.18587	0.18457	0.17230	0.16431	+++++	AVRG		0.17770		4.57168
50 Toluene	0.98191	0.90882	0.93464	0.90420	0.88766	0.76836	+++++	AVRG		0.89760		7.94854
51 Ethyl methacrylate	0.38778	0.41341	0.46064	0.44397	0.43881	0.33693	+++++	AVRG		0.41359		10.98270
53 trans-1,3-Dichloropropylene	0.44214	0.44588	0.46807	0.45977	0.47369	0.45511	+++++	AVRG		0.45744		2.68783
54 1,1,2-Trichloroethane	0.25181	0.24682	0.26610	0.24009	0.24872	0.22816	+++++	AVRG		0.24695		5.10238
55 2-Hexanone	0.38704	0.39593	0.40669	0.40203	0.37652	0.34760	+++++	AVRG		0.38597		5.61553
52 1,3-Dichloropropane	0.52001	0.50604	0.52091	0.49682	0.49356	0.43010	+++++	AVRG		0.49457		6.78801

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
56 Tetrachloroethylene	0.28352	0.27243	0.28554	0.27549	0.27145	0.23662	+++++	AVRG		0.27084		6.54716
57 Dibromochloromethane	0.29830	0.27563	0.30379	0.31313	0.32346	0.32092	+++++	AVRG		0.30587		5.78449
59 1,2-Dibromoethane	0.27751	0.29433	0.29605	0.29019	0.28822	0.27769	+++++	AVRG		0.28733		2.79885
62 Chlorobenzene	0.94150	0.91433	0.91370	0.90297	0.89625	0.80917	+++++	AVRG		0.89632		5.06559
58 Ethylbenzene	1.74208	1.64029	1.66931	1.65210	1.60626	1.32571	+++++	AVRG		1.60596		8.99709
60 1,1,1,2-Tetrachloroethane	0.29317	0.29430	0.31681	0.31532	0.32171	0.29016	+++++	AVRG		0.30524		4.63243
63 m,p-Xylenes	0.64395	0.62169	0.64952	0.61976	0.59885	0.50120	+++++	AVRG		0.60583		8.98130
64 o-Xylene	0.64316	0.60203	0.61416	0.60397	0.59805	0.50726	+++++	AVRG		0.59477		7.71339
65 Styrene	0.90619	0.89386	0.95072	0.96228	0.96745	0.81692	+++++	AVRG		0.91623		6.25020

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
66 Bromoform	0.33030	0.34061	0.37133	0.39812	0.41753	0.45559	+++++	AVRG		0.38558		12.36261
67 Isopropylbenzene	3.11392	2.94511	2.99063	2.91272	2.94885	2.55352	+++++	AVRG		2.91079		6.48034
68 cis-1,4-Dichloro-2-butene	0.33838	0.33419	0.39155	0.36653	0.38351	0.35232	+++++	AVRG		0.36108		6.52595
70 Cyclohexanone	0.02257	0.02410	0.03113	0.02762	0.02779	0.02585	+++++	AVRG		0.02651		11.44623
73 1,1,2,2-Tetrachloroethane	0.80547	0.77094	0.79734	0.76832	0.76029	0.75105	+++++	AVRG		0.77557		2.75151
69 trans-1,4-Dichloro-2-butene	0.32533	0.32787	0.38580	0.35752	0.36965	0.33703	+++++	AVRG		0.35053		6.97611
74 1,2,3-Trichloropropane	0.20044	0.22041	0.20650	0.20507	0.19896	0.19795	+++++	AVRG		0.20489		4.06334
75 Bromobenzene	0.80338	0.78934	0.79908	0.76372	0.77902	0.67868	+++++	AVRG		0.76887		6.04071
76 n-Propylbenzene	4.13051	3.89993	4.03203	3.93530	3.88148	3.13618	+++++	AVRG		3.83590		9.26054

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
78 1,3,5-Trimethylbenzene	2.70677	2.53993	2.58488	2.55632	2.54280	2.09893	+++++	AVRG		2.50494		8.32185
77 2-Chlorotoluene	2.84042	2.69304	2.66181	2.56739	2.55503	2.08408	+++++	AVRG		2.56696		10.05334
80 4-Chlorotoluene	2.63929	2.42433	2.47337	2.35490	2.36297	2.06464	+++++	AVRG		2.38658		7.90639
81 tert-Butylbenzene	2.73556	2.48687	2.58174	2.50888	2.54027	2.23370	+++++	AVRG		2.51450		6.50319
79 1,2,4-Trimethylbenzene	2.78602	2.61596	2.73682	2.59040	2.63089	2.24550	+++++	AVRG		2.60093		7.30082
82 Pentachloroethane	0.39275	0.39181	0.44965	0.42264	0.41907	0.34058	+++++	AVRG		0.40275		9.25475
83 sec-Butylbenzene	3.76275	3.50227	3.64413	3.51696	3.52732	2.95063	+++++	AVRG		3.48401		8.02777
84 4-Isopropyltoluene	2.94436	2.76030	2.77903	2.74297	2.77034	2.41857	+++++	AVRG		2.73593		6.28515
85 1,3-Dichlorobenzene	1.70466	1.55662	1.57775	1.52552	1.51038	1.32337	+++++	AVRG		1.53305		8.07041

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	200 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
87 1,4-Dichlorobenzene	1.70079	1.56184	1.51869	1.47139	1.46531	1.31729	+++++	AVRG		1.50589		8.38328
88 Benzyl chloride	1.16830	1.24524	1.54091	1.42120	1.41211	1.03115	+++++	AVRG		1.30315		14.47317
89 n-Butylbenzene	2.92579	2.80475	2.76892	2.75222	2.78589	2.41362	+++++	AVRG		2.74187		6.28129
90 1,2-Dichlorobenzene	1.55181	1.46542	1.44776	1.40133	1.40889	1.27434	+++++	AVRG		1.42493		6.41286
91 bis(2-Chloroisopropyl)ether	0.58259	0.57934	0.71129	0.65117	0.64804	0.58220	+++++	AVRG		0.62577		8.56777
92 1,2-Dibromo-3-chloropropane	0.13388	0.13880	0.13725	0.14506	0.14162	0.16377	+++++	AVRG		0.14340		7.44754
93 1,2,4-Trichlorobenzene	1.04716	0.99447	0.97122	0.95282	0.96065	0.89687	+++++	AVRG		0.97053		5.10677
94 Hexachlorobutadiene	0.49777	0.51150	0.51743	0.51567	0.52778	0.49761	+++++	AVRG		0.51129		2.31247
95 Naphthalene	2.53381	2.30549	2.34004	2.29337	2.24147	2.17151	+++++	AVRG		2.31428		5.29407

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	100 Level 7	Curve	b	Coefficients m1	m2	%RSD or R^2
	200 Level 8										
96 1,2,3-Trichlorobenzene	0.96706	0.93232	0.90913	0.91304	0.90644	0.86205					
	+++++						AVRG		0.91501		3.76234
$ 35 Dibromofluoromethane	+++++	0.23571	0.23131	0.22973	0.22707	0.22462					
	+++++						AVRG		0.22969		1.84049
$ 47 Toluene-d8	+++++	1.35651	1.27979	1.27152	1.24713	1.06002					
	+++++						AVRG		1.24300		8.86315
$ 71 Bromofluorobenzene	+++++	1.06137	1.04048	1.00054	1.00111	0.91807					
	+++++						AVRG		1.00432		5.45973

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2005 11:47
End Cal Date : 21-SEP-2005 20:02
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Cal Date : 22-Sep-2005 11:06 cry00643

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c310.d
Lab Smp Id: W2V050921-01 Client Smp ID: VSTD001
Inj Date : 21-SEP-2005 11:47
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050921-01|ICAL|1|VOAF|1|
Misc Info : VSTD001 5uL -- UVM050901-01+UVM050818-04E
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 11:05 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 17:26 Cal File: 2c323.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				53044	3.00000	3.2
M 2 1,2-Dichloroethylene (total)	96				37482	2.00000	2.0
M 135 1,3-Dichloropropylene	75				26143	2.00000	1.9(a)
3 Dichlorodifluoromethane	85	4.918	4.918	(0.460)	8593	1.00000	0.83(a)
4 Chloromethane	50	5.269	5.269	(0.493)	16195	1.00000	0.94(a)
5 Vinyl chloride	62	5.497	5.497	(0.514)	7399	1.00000	0.76(a)
6 Bromomethane	94	6.081	6.081	(0.569)	6141	1.00000	0.76(aQ)
7 Chloroethane	64	6.209	6.209	(0.581)	6991	1.00000	0.80(a)
8 Trichlorofluoromethane	101	6.635	6.635	(0.620)	12183	1.00000	0.82(aQ)
134 Ethyl Ether	59	6.915	6.915	(0.647)	11433	1.00000	0.96(Q)
10 Acetone	43	7.304	7.304	(0.683)	28679	5.00000	5.9
15 Acetonitrile	41	7.669	7.669	(0.717)	59121	25.0000	27.1(Q)
11 1,1-Dichloroethylene	61	7.353	7.353	(0.688)	16533	1.00000	1.0(Q)
128 Methyl acetate	43	7.699	7.699	(0.720)	68789	5.00000	5.4
13 Iodomethane	142	7.596	7.596	(0.710)	79014	5.00000	5.1(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	14 Carbon disulfide	76	7.766	7.766	(0.726)	140543	5.00000	5.2
	20 tert-Butyl methyl ether	73	8.204	8.204	(0.767)	29895	1.00000	1.0
	21 trans-1,2-Dichloroethylene	61	8.253	8.253	(0.772)	17851	1.00000	1.0(Q)
	23 Vinyl acetate	43	8.691	8.691	(0.813)	151866	5.00000	4.9(a)
	22 1,1-Dichloroethane	63	8.752	8.752	(0.818)	21695	1.00000	1.1
	30 2-Butanone	43	9.342	9.342	(0.874)	40828	5.00000	5.3
	31 cis-1,2-Dichloroethylene	61	9.403	9.403	(0.879)	19631	1.00000	0.98(aQ)
	25 2,2-Dichloropropane	77	9.439	9.439	(0.883)	14143	1.00000	1.0
	32 Chloroform	83	9.725	9.725	(0.910)	16200	1.00000	1.0(Q)
	29 Bromochloromethane	128	9.695	9.695	(0.907)	4543	1.00000	1.0(Q)
$	35 Dibromofluoromethane	113	9.908	9.908	(0.927)	9047	1.00000	0.96(Q)
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	13048	1.00000	0.96(aQ)
	129 Cyclohexane	56	10.115	10.115	(0.946)	24452	1.00000	1.00(Q)
	34 1,1-Dichloropropene	75	10.182	10.182	(0.952)	13030	1.00000	1.0(Q)
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	37998	100.000	90.2(Q)
	33 Carbon tetrachloride	117	10.218	10.218	(0.956)	10862	1.00000	0.96(aQ)
	37 1,2-Dichloroethane	62	10.413	10.413	(0.974)	15485	1.00000	1.0
	38 Benzene	78	10.431	10.431	(0.976)	46211	1.00000	1.1
*	40 Fluorobenzene	96	10.693	10.693	(1.000)	2049315	50.0000	
	39 Trichloroethylene	95	11.094	11.094	(1.038)	10140	1.00000	1.0(Q)
	41 1,2-Dichloropropane	63	11.356	11.356	(1.062)	11529	1.00000	1.0(Q)
	130 Methylcyclohexane	83	11.356	11.356	(1.062)	18615	1.00000	1.0(Q)
	45 Bromodichloromethane	83	11.617	11.617	(1.086)	11437	1.00000	0.94(aQ)
	43 Dibromomethane	93	11.502	11.502	(1.076)	6115	1.00000	1.0(Q)
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	25540	5.00000	4.5(aQ)
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	24598	5.00000	5.0(Q)
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	13998	1.00000	0.98(aQ)
$	47 Toluene-d8	98	12.408	12.408	(0.887)	37366	1.00000	1.1
	50 Toluene	92	12.487	12.487	(0.892)	26972	1.00000	1.1(Q)
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	12145	1.00000	0.97(aQ)
	54 1,1,2-Trichloroethane	83	12.870	12.870	(0.920)	6917	1.00000	1.0(Q)
	55 2-Hexanone	43	13.053	13.053	(0.933)	53158	5.00000	5.0(Q)
	52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	14284	1.00000	1.0(Q)
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	7788	1.00000	1.0(Q)
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	8194	1.00000	0.98(aQ)
	59 1,2-Dibromoethane	107	13.527	13.527	(0.967)	7623	1.00000	0.96(aQ)
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1373446	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	25862	1.00000	1.0(Q)
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	8053	1.00000	0.96(aQ)
	58 Ethylbenzene	91	14.093	14.093	(1.007)	47853	1.00000	1.1(Q)
	63 m,p-Xylenes	106	14.209	14.209	(1.015)	35377	2.00000	2.1(Q)
	64 o-Xylene	106	14.653	14.653	(1.047)	17667	1.00000	1.1(Q)
	65 Styrene	104	14.659	14.659	(1.047)	24892	1.00000	0.99(aQ)
	66 Bromoform	173	14.927	14.927	(0.906)	4268	1.00000	0.86(aQ)
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	40237	1.00000	1.1
	73 1,1,2,2-Tetrachloroethane	83	15.298	15.298	(0.928)	10408	1.00000	1.0(Q)
$	71 Bromofluorobenzene	95	15.225	15.225	(0.924)	16641	1.00000	1.3(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	2590	1.00000	0.98(aQ)
75	Bromobenzene	156	15.444	15.444	(0.937)	10381	1.00000	1.0(Q)
76	n-Propylbenzene	91	15.456	15.456	(0.938)	53373	1.00000	1.1
77	2-Chlorotoluene	91	15.614	15.614	(0.948)	36703	1.00000	1.1
78	1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	34976	1.00000	1.1(Q)
80	4-Chlorotoluene	91	15.717	15.717	(0.954)	34104	1.00000	1.1
81	tert-Butylbenzene	119	15.991	15.991	(0.970)	35348	1.00000	1.1(Q)
79	1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	36000	1.00000	1.1(Q)
83	sec-Butylbenzene	105	16.222	16.222	(0.984)	48621	1.00000	1.1
84	4-Isopropyltoluene	119	16.344	16.344	(0.992)	38046	1.00000	1.1
85	1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	22027	1.00000	1.1(Q)
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	646083	50.0000	(Q)
87	1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	21977	1.00000	1.1(Q)
89	n-Butylbenzene	91	16.806	16.806	(1.020)	37806	1.00000	1.1(Q)
90	1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	20052	1.00000	1.1(Q)
92	1,2-Dibromo-3-chloropropane	75	17.853	17.853	(1.083)	1730	1.00000	0.93(aQ)
93	1,2,4-Trichlorobenzene	180	18.936	18.936	(1.149)	13531	1.00000	1.1
94	Hexachlorobutadiene	225	19.118	19.118	(1.160)	6432	1.00000	0.97(aQ)
95	Naphthalene	128	19.337	19.337	(1.174)	32741	1.00000	1.1
96	1,2,3-Trichlorobenzene	180	19.690	19.690	(1.195)	12496	1.00000	1.0(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092105v2.b/2c310.d

Date : 21-SEP-2005 11:47

Client ID: VSTD001

Instrument: VOA2.i

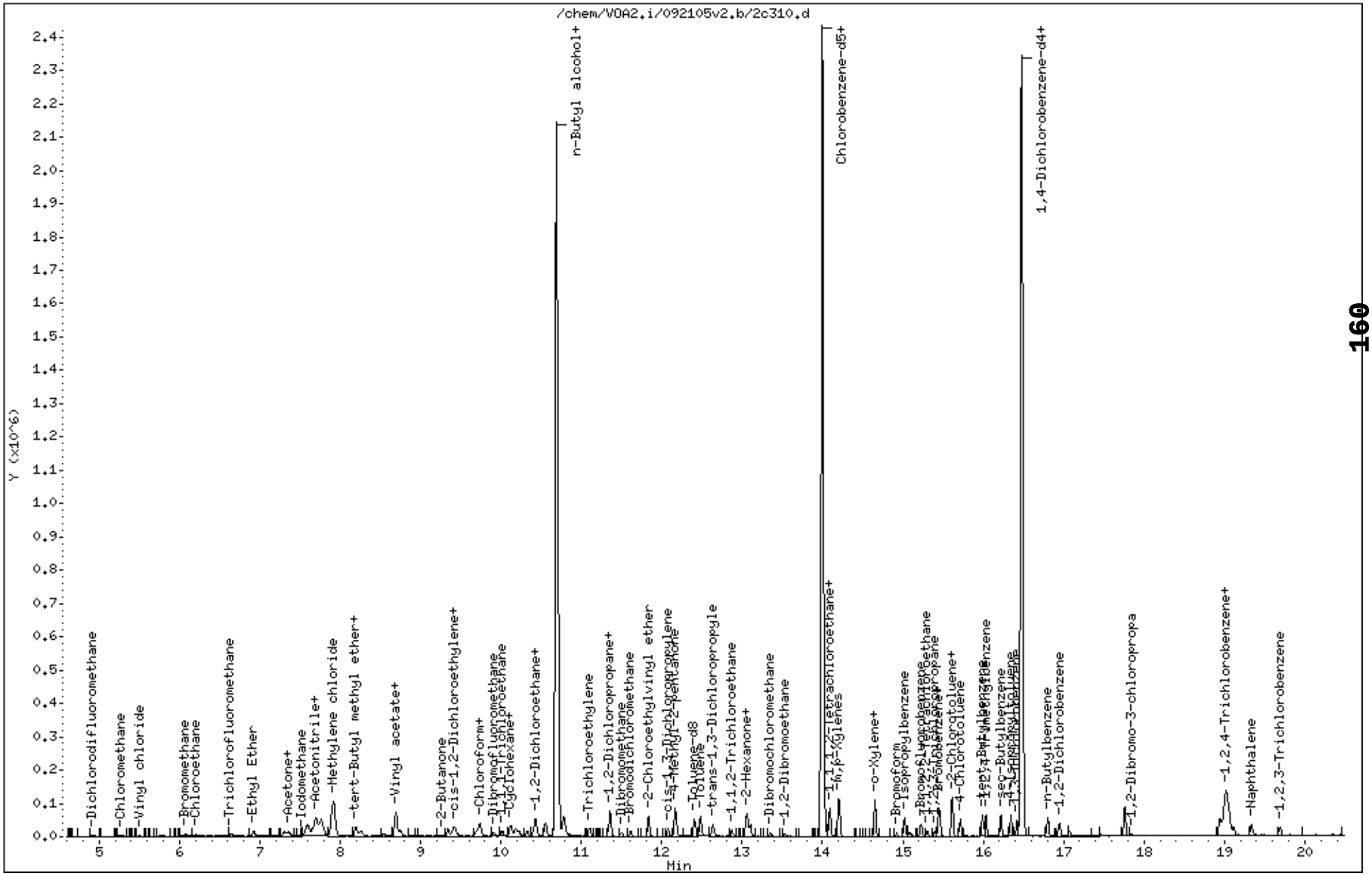
Sample Info: |W2V050921-01|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c311.d
Lab Smp Id: W2V050921-02 Client Smp ID: VSTD002
Inj Date : 21-SEP-2005 12:13
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050921-02|ICAL|1|VOAF|1|
Misc Info : VSTD002 5uL - UVM050901-01+UVM050818-05E
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 11:05 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 17:52 Cal File: 2c324.d
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				97063	6.00000	6.1
M 2 1,2-Dichloroethylene (total)	96				68941	4.00000	3.9
M 135 1,3-Dichloropropylene	75				48593	4.00000	3.8
3 Dichlorodifluoromethane	85	4.928	4.928	(0.461)	19766	2.00000	2.0
4 Chloromethane	50	5.261	5.261	(0.492)	34581	2.00000	2.1
5 Vinyl chloride	62	5.513	5.513	(0.516)	19324	2.00000	2.1
6 Bromomethane	94	6.075	6.075	(0.568)	15635	2.00000	2.1(Q)
7 Chloroethane	64	6.208	6.208	(0.581)	17399	2.00000	2.1
8 Trichlorofluoromethane	101	6.646	6.646	(0.622)	27872	2.00000	2.0(Q)
134 Ethyl Ether	59	6.914	6.914	(0.647)	22046	2.00000	2.0(Q)
10 Acetone	43	7.310	7.310	(0.684)	49031	10.0000	10.8
15 Acetonitrile	41	7.668	7.668	(0.717)	109202	50.0000	53.5(Q)

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	11 1,1-Dichloroethylene	61	7.358	7.358	(0.688)	30211	2.00000	2.0(Q)
	128 Methyl acetate	43	7.693	7.693	(0.719)	126773	10.0000	10.7
	13 Iodomethane	142	7.608	7.608	(0.712)	147532	10.0000	10.2(Q)
	14 Carbon disulfide	76	7.760	7.760	(0.726)	262262	10.0000	10.4
	20 tert-Butyl methyl ether	73	8.198	8.198	(0.767)	54271	2.00000	2.0(Q)
	21 trans-1,2-Dichloroethylene	61	8.265	8.265	(0.773)	31555	2.00000	1.9(Q)
	23 Vinyl acetate	43	8.691	8.691	(0.813)	305717	10.0000	10.5
	22 1,1-Dichloroethane	63	8.745	8.745	(0.818)	38233	2.00000	2.0
	30 2-Butanone	43	9.341	9.341	(0.874)	75455	10.0000	10.5
	31 cis-1,2-Dichloroethylene	61	9.408	9.408	(0.880)	37386	2.00000	2.0(Q)
	25 2,2-Dichloropropane	77	9.439	9.439	(0.883)	25272	2.00000	2.0
	32 Chloroform	83	9.725	9.725	(0.910)	31575	2.00000	2.1(Q)
	29 Bromochloromethane	128	9.694	9.694	(0.907)	8208	2.00000	1.9(Q)
$	35 Dibromofluoromethane	113	9.913	9.913	(0.927)	18117	2.00000	2.0(Q)
	36 1,1,1-Trichloroethane	97	10.023	10.023	(0.937)	25169	2.00000	2.0(Q)
	129 Cyclohexane	56	10.120	10.120	(0.946)	46662	2.00000	2.0(Q)
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	23662	2.00000	2.0(Q)
	131 n-Butyl alcohol	56	10.777	10.777	(1.008)	77312	200.000	196(Q)
	33 Carbon tetrachloride	117	10.224	10.224	(0.956)	20329	2.00000	1.9(Q)
	37 1,2-Dichloroethane	62	10.406	10.406	(0.973)	29429	2.00000	2.1
	38 Benzene	78	10.430	10.430	(0.976)	81521	2.00000	2.1
*	40 Fluorobenzene	96	10.692	10.692	(1.000)	1921513	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	18752	2.00000	2.0(Q)
	41 1,2-Dichloropropane	63	11.355	11.355	(1.062)	22255	2.00000	2.1(Q)
	130 Methylcyclohexane	83	11.361	11.361	(1.063)	34328	2.00000	2.1(Q)
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	21930	2.00000	1.9(Q)
	43 Dibromomethane	93	11.495	11.495	(1.075)	10667	2.00000	2.0(Q)
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	53715	10.0000	10.2
	49 4-Methyl-2-pentanone	58	12.170	12.170	(0.870)	47355	10.0000	10.1(Q)
	46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	25141	2.00000	1.9(Q)
$	47 Toluene-d8	98	12.408	12.408	(0.887)	71348	2.00000	2.2
	50 Toluene	92	12.487	12.487	(0.892)	47801	2.00000	2.0(Q)
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	23452	2.00000	1.9(Q)
	54 1,1,2-Trichloroethane	83	12.870	12.870	(0.920)	12982	2.00000	2.0(Q)
	55 2-Hexanone	43	13.052	13.052	(0.933)	104124	10.0000	10.2(Q)
	52 1,3-Dichloropropane	76	13.077	13.077	(0.934)	26616	2.00000	2.0(Q)
	56 Tetrachloroethylene	164	13.113	13.113	(0.937)	14329	2.00000	2.0(Q)
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	14497	2.00000	1.8(Q)
	59 1,2-Dibromoethane	107	13.533	13.533	(0.967)	15481	2.00000	2.0(Q)
*	61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1314919	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	48091	2.00000	2.0(Q)
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	15479	2.00000	1.9(Q)
	58 Ethylbenzene	91	14.093	14.093	(1.007)	86274	2.00000	2.0(Q)
	63 m,p-Xylenes	106	14.202	14.202	(1.015)	65398	4.00000	4.1(Q)
	64 o-Xylene	106	14.658	14.658	(1.047)	31665	2.00000	2.0(Q)
	65 Styrene	104	14.658	14.658	(1.047)	47014	2.00000	2.0(Q)
	66 Bromoform	173	14.926	14.926	(0.906)	8736	2.00000	1.8(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
67	Isopropylbenzene	105	15.023	15.023	(0.912)	75536	2.00000	2.0
73	1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	19773	2.00000	2.0(Q)
$ 71	Bromofluorobenzene	95	15.230	15.230	(0.924)	27222	2.00000	2.1(Q)
74	1,2,3-Trichloropropane	110	15.394	15.394	(0.934)	5653	2.00000	2.2(Q)
75	Bromobenzene	156	15.449	15.449	(0.938)	20245	2.00000	2.0(Q)
76	n-Propylbenzene	91	15.455	15.455	(0.938)	100025	2.00000	2.0
77	2-Chlorotoluene	91	15.614	15.614	(0.948)	69071	2.00000	2.1
78	1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	65144	2.00000	2.0(Q)
80	4-Chlorotoluene	91	15.717	15.717	(0.954)	62179	2.00000	2.0(Q)
81	tert-Butylbenzene	119	15.991	15.991	(0.970)	63783	2.00000	2.0(Q)
79	1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	67094	2.00000	2.0(Q)
83	sec-Butylbenzene	105	16.222	16.222	(0.984)	89826	2.00000	2.0
84	4-Isopropyltoluene	119	16.344	16.344	(0.992)	70796	2.00000	2.0
85	1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	39924	2.00000	2.0(Q)
* 86	1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	641198	50.0000	(Q)
87	1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	40058	2.00000	2.1(Q)
89	n-Butylbenzene	91	16.800	16.800	(1.020)	71936	2.00000	2.0(Q)
90	1,2-Dichlorobenzene	146	16.952	16.952	(1.029)	37585	2.00000	2.0(Q)
92	1,2-Dibromo-3-chloropropane	75	17.840	17.840	(1.083)	3560	2.00000	1.9(Q)
93	1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	25506	2.00000	2.0
94	Hexachlorobutadiene	225	19.118	19.118	(1.160)	13119	2.00000	2.0(Q)
95	Naphthalene	128	19.337	19.337	(1.174)	59131	2.00000	2.0
96	1,2,3-Trichlorobenzene	180	19.695	19.695	(1.195)	23912	2.00000	2.0(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092105v2.b/2c311.d

Date : 21-SEP-2005 12:13

Client ID: VSTD002

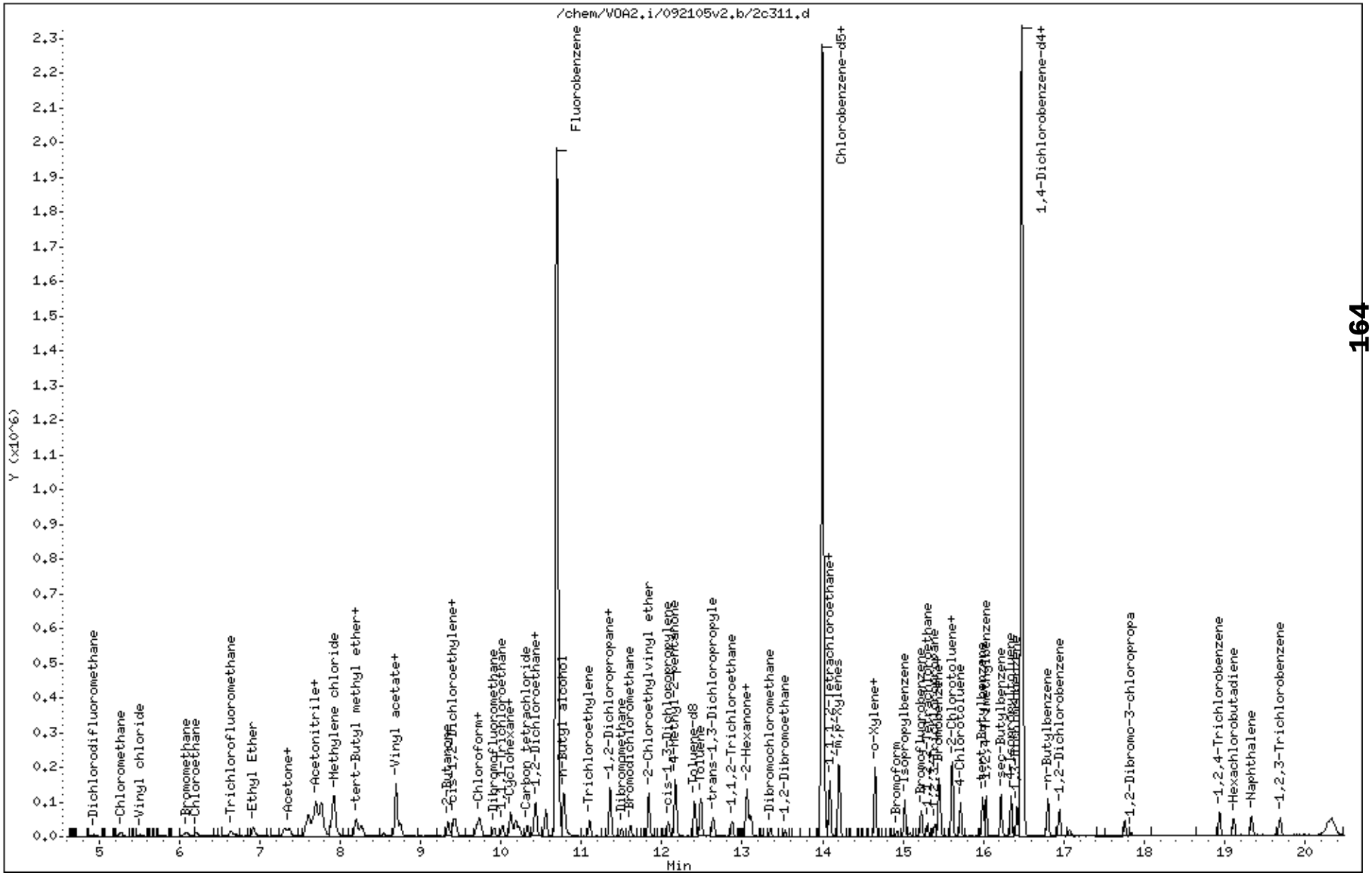
Sample Info: IW2V050921-02IICALI1IVOAFI1I

Column phase: DB-624

Instrument: VOA2.i

Operator: CDS1

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c312.d
Lab Smp Id: W2V050921-03 Client Smp ID: VSTD005
Inj Date : 21-SEP-2005 12:39
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050921-03|ICAL|1|VOAF|1|
Misc Info : VSTD005 5uL - UVM050901-01+UVM050818-06E
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 11:05 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 18:18 Cal File: 2c325.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				255694	15.0000	15.9
M 2 1,2-Dichloroethylene (total)	96				184385	10.0000	10.2
M 135 1,3-Dichloropropylene	75				133188	10.0000	10.1
3 Dichlorodifluoromethane	85	4.921	4.921	(0.460)	59136	5.00000	5.9
4 Chloromethane	50	5.272	5.272	(0.493)	90740	5.00000	5.4
5 Vinyl chloride	62	5.506	5.506	(0.515)	51999	5.00000	5.5
6 Bromomethane	94	6.087	6.087	(0.569)	42450	5.00000	5.4(Q)
7 Chloroethane	64	6.221	6.221	(0.582)	43634	5.00000	5.2
8 Trichlorofluoromethane	101	6.647	6.647	(0.622)	74226	5.00000	5.2(Q)
134 Ethyl Ether	59	6.920	6.920	(0.647)	57552	5.00000	5.0(Q)
10 Acetone	43	7.297	7.297	(0.682)	117501	25.0000	25.1
15 Acetonitrile	41	7.669	7.669	(0.717)	273402	125.000	129(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	11 1,1-Dichloroethylene	61	7.364	7.364	(0.689)	80058	5.00000	5.0(Q)
	128 Methyl acetate	43	7.699	7.699	(0.720)	312781	25.0000	25.4
	13 Iodomethane	142	7.608	7.608	(0.712)	386729	25.0000	25.8(Q)
	17 Methylene chloride	84	7.918	7.918	(0.741)	118516	5.00000	5.3(Q)
	14 Carbon disulfide	76	7.766	7.766	(0.726)	686119	25.0000	26.4
	20 tert-Butyl methyl ether	73	8.198	8.198	(0.767)	142071	5.00000	5.1
	21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	84571	5.00000	5.0(Q)
	23 Vinyl acetate	43	8.691	8.691	(0.813)	799748	25.0000	26.4
	22 1,1-Dichloroethane	63	8.751	8.751	(0.818)	101064	5.00000	5.1(Q)
	30 2-Butanone	43	9.342	9.342	(0.874)	186343	25.0000	25.1
	31 cis-1,2-Dichloroethylene	61	9.408	9.408	(0.880)	99814	5.00000	5.1(Q)
	25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	67143	5.00000	5.0
	32 Chloroform	83	9.725	9.725	(0.910)	80108	5.00000	5.1(Q)
	29 Bromochloromethane	128	9.694	9.694	(0.907)	21690	5.00000	5.0(Q)
$	35 Dibromofluoromethane	113	9.913	9.913	(0.927)	46069	5.00000	5.0(Q)
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	66966	5.00000	5.1(Q)
	129 Cyclohexane	56	10.120	10.120	(0.947)	118181	5.00000	5.0(Q)
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	61651	5.00000	5.0(Q)
	131 n-Butyl alcohol	56	10.777	10.777	(1.008)	206857	500.000	505(Q)
	33 Carbon tetrachloride	117	10.224	10.224	(0.956)	56087	5.00000	5.1(Q)
	37 1,2-Dichloroethane	62	10.406	10.406	(0.973)	74010	5.00000	5.0(Q)
	38 Benzene	78	10.430	10.430	(0.976)	208940	5.00000	5.1
*	40 Fluorobenzene	96	10.692	10.692	(1.000)	1991678	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	48049	5.00000	5.0(Q)
	41 1,2-Dichloropropane	63	11.355	11.355	(1.062)	57288	5.00000	5.1(Q)
	130 Methylcyclohexane	83	11.361	11.361	(1.063)	88265	5.00000	5.1(Q)
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	60161	5.00000	5.1(Q)
	43 Dibromomethane	93	11.495	11.495	(1.075)	28886	5.00000	5.1(Q)
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	139874	25.0000	25.6
	49 4-Methyl-2-pentanone	58	12.170	12.170	(0.870)	124206	25.0000	26.1(Q)
	46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	70632	5.00000	5.1(Q)
$	47 Toluene-d8	98	12.408	12.408	(0.887)	171040	5.00000	5.1
	50 Toluene	92	12.487	12.487	(0.892)	124911	5.00000	5.2(Q)
	53 trans-1,3-Dichloropropylene	75	12.639	12.639	(0.903)	62556	5.00000	5.1(Q)
	54 1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	35564	5.00000	5.4(Q)
	55 2-Hexanone	43	13.052	13.052	(0.933)	271761	25.0000	26.3(Q)
	52 1,3-Dichloropropane	76	13.077	13.077	(0.934)	69618	5.00000	5.3(Q)
	56 Tetrachloroethylene	164	13.101	13.101	(0.936)	38162	5.00000	5.3(Q)
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	40601	5.00000	5.0(Q)
	59 1,2-Dibromoethane	107	13.527	13.527	(0.967)	39566	5.00000	5.2(Q)
*	61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1336466	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	122113	5.00000	5.1(Q)
	60 1,1,1,2-Tetrachloroethane	131	14.081	14.081	(1.006)	42340	5.00000	5.2(Q)
	58 Ethylbenzene	91	14.093	14.093	(1.007)	223097	5.00000	5.2(Q)
	63 m,p-Xylenes	106	14.202	14.202	(1.015)	173613	10.0000	10.7(Q)
	64 o-Xylene	106	14.652	14.652	(1.047)	82081	5.00000	5.2(Q)
	65 Styrene	104	14.658	14.658	(1.047)	127060	5.00000	5.2(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	66 Bromoform	173	14.926	14.926	(0.906)	24222	5.00000	4.8(Q)
	67 Isopropylbenzene	105	15.023	15.023	(0.912)	195080	5.00000	5.1
	73 1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	52011	5.00000	5.1(Q)
$	71 Bromofluorobenzene	95	15.224	15.224	(0.924)	67871	5.00000	5.2(Q)
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	13470	5.00000	5.0(Q)
	75 Bromobenzene	156	15.443	15.443	(0.937)	52124	5.00000	5.2(Q)
	76 n-Propylbenzene	91	15.455	15.455	(0.938)	263011	5.00000	5.2
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	173631	5.00000	5.2
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	168613	5.00000	5.2(Q)
	80 4-Chlorotoluene	91	15.717	15.717	(0.954)	161339	5.00000	5.2(Q)
	81 tert-Butylbenzene	119	15.991	15.991	(0.970)	168408	5.00000	5.1(Q)
	79 1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	178524	5.00000	5.3(Q)
	83 sec-Butylbenzene	105	16.222	16.222	(0.984)	237708	5.00000	5.2
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	181277	5.00000	5.1
	85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	102917	5.00000	5.1(Q)
*	86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	652304	50.0000	(Q)
	87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	99065	5.00000	5.0(Q)
	89 n-Butylbenzene	91	16.800	16.800	(1.020)	180618	5.00000	5.0(Q)
	90 1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	94438	5.00000	5.1(Q)
	92 1,2-Dibromo-3-chloropropane	75	17.840	17.840	(1.083)	8953	5.00000	4.8(Q)
	93 1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	63353	5.00000	5.0
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	33752	5.00000	5.0(Q)
	95 Naphthalene	128	19.337	19.337	(1.174)	152642	5.00000	5.0
	96 1,2,3-Trichlorobenzene	180	19.689	19.689	(1.195)	59303	5.00000	5.0(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092105v2.b/2c312.d

Date : 21-SEP-2005 12:39

Client ID: VSTD005

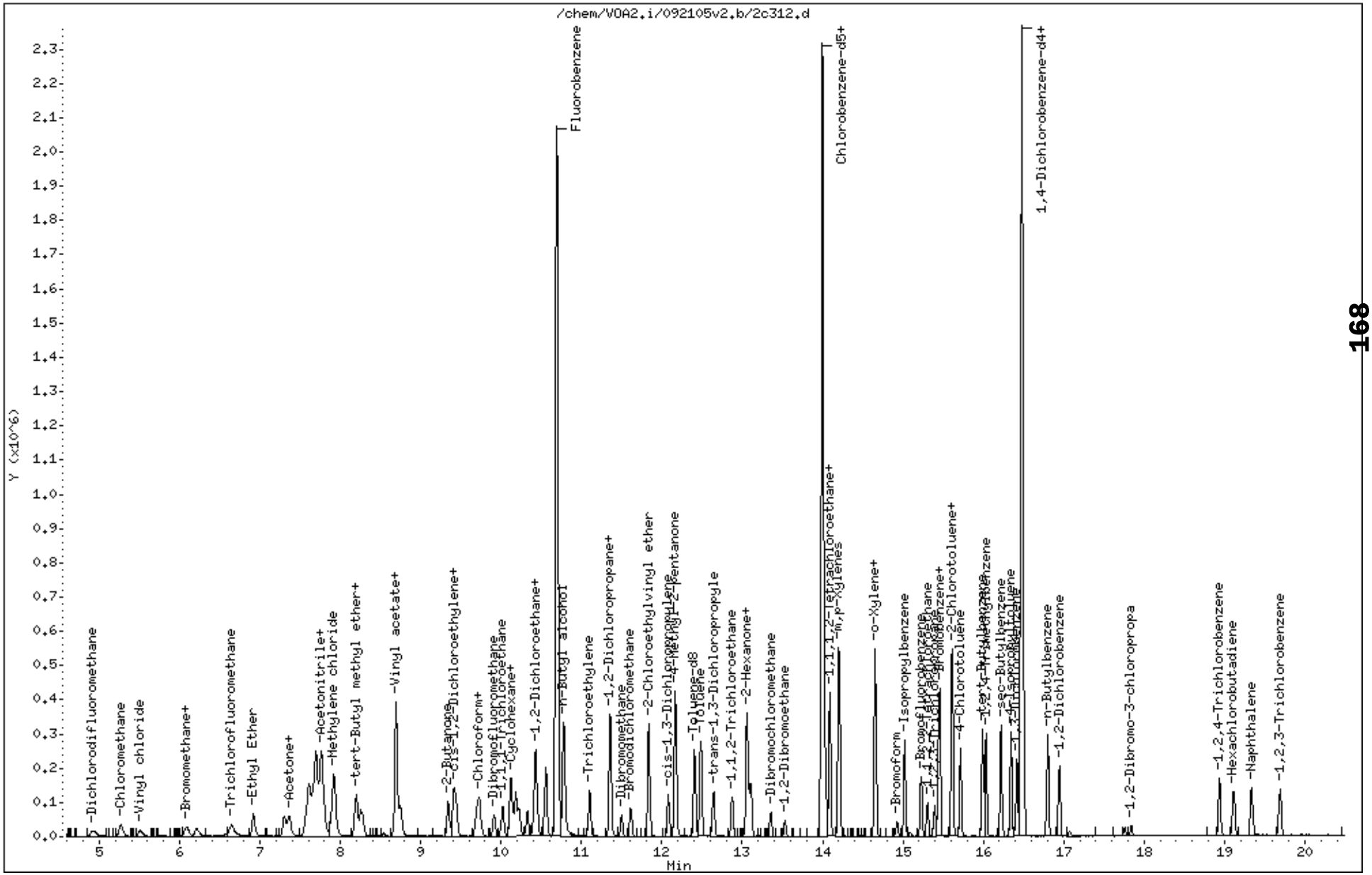
Instrument: VOA2.i

Sample Info: |W2V050921-03|ICAL|1|VOAF|1|

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c313.d
Lab Smp Id: W2V050921-04 Client Smp ID: VSTD010
Inj Date : 21-SEP-2005 13:05
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050921-04|ICAL|1|VOAF|1|
Misc Info : VSTD010 5uL - UVM050901-01+UVM050818-07E
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 11:05 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 18:44 Cal File: 2c326.d
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				491434	30.0000	30.6
M 2 1,2-Dichloroethylene (total)	96				360938	20.0000	20.1
M 135 1,3-Dichloropropylene	75				263331	20.0000	20.2
3 Dichlorodifluoromethane	85	4.927	4.927	(0.461)	92738	10.0000	9.4(Q)
4 Chloromethane	50	5.272	5.272	(0.493)	159390	10.0000	9.6
5 Vinyl chloride	62	5.512	5.512	(0.516)	96162	10.0000	10.2
6 Bromomethane	94	6.093	6.093	(0.570)	80134	10.0000	10.4(Q)
7 Chloroethane	64	6.215	6.215	(0.581)	86394	10.0000	10.3
8 Trichlorofluoromethane	101	6.641	6.641	(0.621)	151072	10.0000	10.6(Q)
134 Ethyl Ether	59	6.915	6.915	(0.647)	118581	10.0000	10.3(Q)
10 Acetone	43	7.298	7.298	(0.683)	218798	50.0000	47.2
15 Acetonitrile	41	7.669	7.669	(0.717)	520313	250.000	248(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	11 1,1-Dichloroethylene	61	7.365	7.365	(0.689)	158237	10.0000	10.0(Q)
	128 Methyl acetate	43	7.699	7.699	(0.720)	604830	50.0000	49.7
	13 Iodomethane	142	7.608	7.608	(0.712)	756524	50.0000	51.0(Q)
	17 Methylene chloride	84	7.918	7.918	(0.741)	159492	10.0000	10.6(Q)
	14 Carbon disulfide	76	7.760	7.760	(0.726)	1321117	50.0000	51.3
	20 tert-Butyl methyl ether	73	8.198	8.198	(0.767)	272941	10.0000	9.9
	21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	165870	10.0000	10(Q)
	23 Vinyl acetate	43	8.691	8.691	(0.813)	1646173	50.0000	54.9
	22 1,1-Dichloroethane	63	8.746	8.746	(0.818)	196628	10.0000	10.1(Q)
	30 2-Butanone	43	9.342	9.342	(0.874)	368756	50.0000	50.2
	31 cis-1,2-Dichloroethylene	61	9.409	9.409	(0.880)	195068	10.0000	10.1(Q)
	25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	135311	10.0000	10.2
	32 Chloroform	83	9.725	9.725	(0.910)	156671	10.0000	10.0(Q)
	29 Bromochloromethane	128	9.695	9.695	(0.907)	44858	10.0000	10.4(Q)
$	35 Dibromofluoromethane	113	9.914	9.914	(0.927)	90585	10.0000	10.0(Q)
	36 1,1,1-Trichloroethane	97	10.023	10.023	(0.937)	133436	10.0000	10.2(Q)
	129 Cyclohexane	56	10.121	10.121	(0.947)	239965	10.0000	10.2(Q)
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	124545	10.0000	10.2(Q)
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	419137	1000.00	1030(Q)
	33 Carbon tetrachloride	117	10.224	10.224	(0.956)	111583	10.0000	10.2(Q)
	37 1,2-Dichloroethane	62	10.413	10.413	(0.974)	146020	10.0000	10(Q)
	38 Benzene	78	10.431	10.431	(0.976)	402331	10.0000	10.0
*	40 Fluorobenzene	96	10.692	10.692	(1.000)	1971590	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	93896	10.0000	10(Q)
	41 1,2-Dichloropropane	63	11.349	11.349	(1.061)	111180	10.0000	10.0(Q)
	130 Methylcyclohexane	83	11.362	11.362	(1.063)	172547	10.0000	10.1(Q)
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	120798	10.0000	10.3(Q)
	43 Dibromomethane	93	11.495	11.495	(1.075)	56232	10.0000	10.0(Q)
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	296236	50.0000	54.7(Q)
	49 4-Methyl-2-pentanone	58	12.165	12.165	(0.869)	246019	50.0000	51.9(Q)
	46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	140766	10.0000	10.2(Q)
$	47 Toluene-d8	98	12.408	12.408	(0.887)	338961	10.0000	10.2
	50 Toluene	92	12.481	12.481	(0.892)	241041	10.0000	10.1(Q)
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	122565	10.0000	10.0(Q)
	54 1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	64003	10.0000	9.7(Q)
	55 2-Hexanone	43	13.053	13.053	(0.933)	535867	50.0000	52.1(Q)
	52 1,3-Dichloropropane	76	13.077	13.077	(0.934)	132442	10.0000	10.0(Q)
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	73440	10.0000	10.2(Q)
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	83474	10.0000	10.2(Q)
	59 1,2-Dibromoethane	107	13.533	13.533	(0.967)	77359	10.0000	10.1(Q)
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1332897	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	240712	10.0000	10.1(Q)
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	84059	10.0000	10.3(Q)
	58 Ethylbenzene	91	14.093	14.093	(1.007)	440415	10.0000	10.3(Q)
	63 m,p-Xylenes	106	14.203	14.203	(1.015)	330429	20.0000	20.4(Q)
	64 o-Xylene	106	14.653	14.653	(1.047)	161005	10.0000	10.2(Q)
	65 Styrene	104	14.653	14.653	(1.047)	256523	10.0000	10.5(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	66 Bromoform	173	14.927	14.927	(0.906)	52746	10.0000	10.3(Q)
	67 Isopropylbenzene	105	15.024	15.024	(0.912)	385898	10.0000	10.0
	73 1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	101792	10.0000	9.9(Q)
$	71 Bromofluorobenzene	95	15.225	15.225	(0.924)	132559	10.0000	10(Q)
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	27169	10.0000	10.0(Q)
	75 Bromobenzene	156	15.444	15.444	(0.937)	101183	10.0000	9.9(Q)
	76 n-Propylbenzene	91	15.456	15.456	(0.938)	521376	10.0000	10.2
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	340146	10.0000	10.0
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	338679	10.0000	10.2(Q)
	80 4-Chlorotoluene	91	15.717	15.717	(0.954)	311993	10.0000	9.9(Q)
	81 tert-Butylbenzene	119	15.991	15.991	(0.970)	332394	10.0000	10(Q)
	79 1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	343194	10.0000	10(Q)
	83 sec-Butylbenzene	105	16.222	16.222	(0.984)	465952	10.0000	10.1
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	363408	10.0000	10.0
	85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	202112	10.0000	10(Q)
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	662435	50.0000	(Q)
	87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	194940	10.0000	9.8(Q)
	89 n-Butylbenzene	91	16.800	16.800	(1.020)	364634	10.0000	10.0(Q)
	90 1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	185658	10.0000	9.8(Q)
	92 1,2-Dibromo-3-chloropropane	75	17.841	17.841	(1.083)	19219	10.0000	10.1(Q)
	93 1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	126236	10.0000	9.8
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	68320	10.0000	10.1(Q)
	95 Naphthalene	128	19.337	19.337	(1.174)	303842	10.0000	9.9
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	120966	10.0000	10(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092105v2.b/2c313.d

Date : 21-SEP-2005 13:05

Client ID: VSTD010

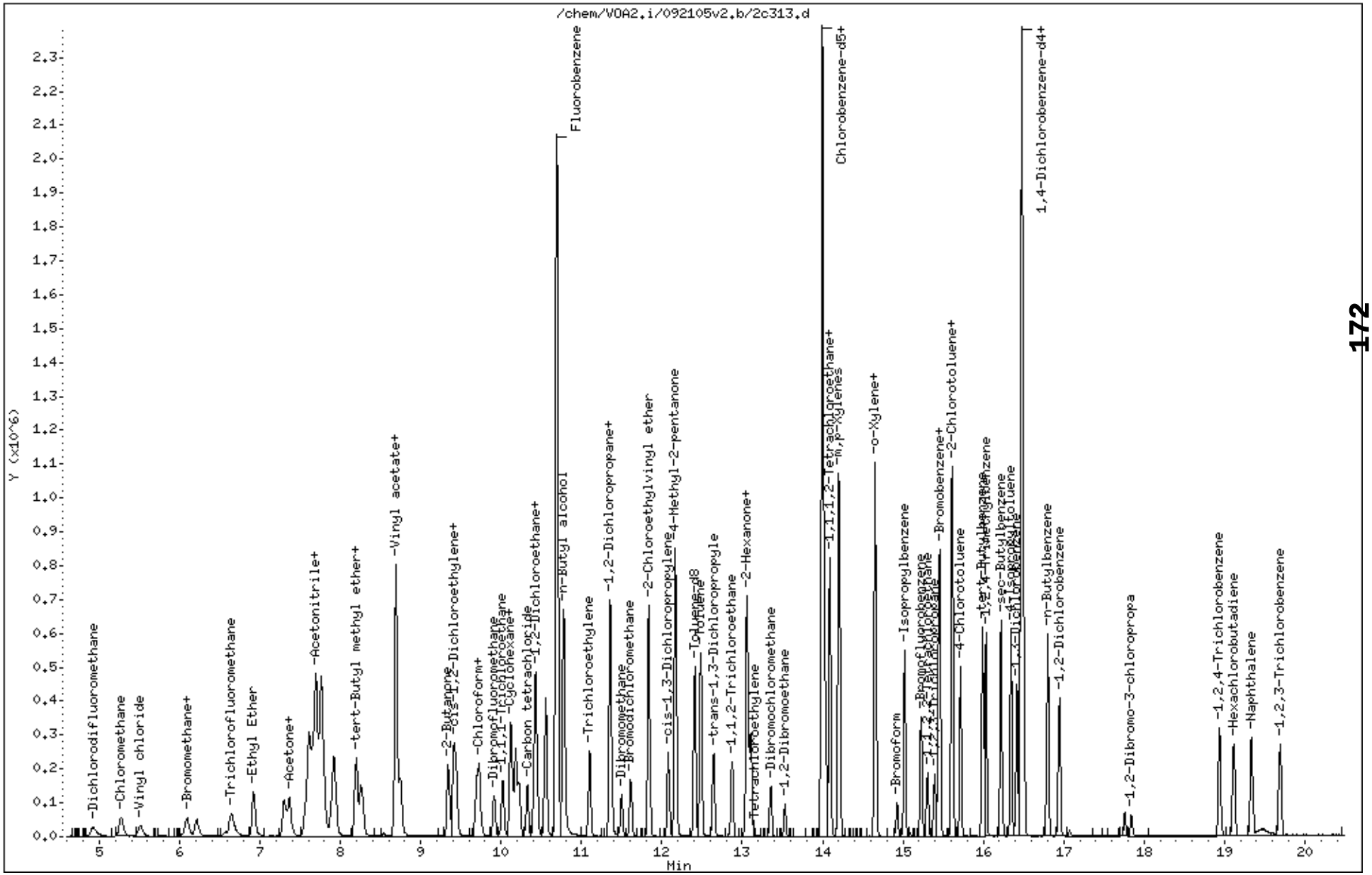
Instrument: VOA2.i

Sample Info: |W2V050921-04|ICAL|1|VOAF|1|

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c314.d
Lab Smp Id: W2V050921-05 Client Smp ID: VSTD020
Inj Date : 21-SEP-2005 13:31
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050921-05|ICAL|1|VOAF|1|
Misc Info : VSTD020 5uL - UVM050901-01+UVM050818-08E
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 11:05 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				970063	60.0000	59.6
M 2 1,2-Dichloroethylene (total)	96				740851	40.0000	40.5
M 135 1,3-Dichloropropylene	75				548653	40.0000	41.4
3 Dichlorodifluoromethane	85	4.922	4.922	(0.460)	217971	20.0000	21.6(Q)
4 Chloromethane	50	5.278	5.278	(0.494)	339697	20.0000	20.2
5 Vinyl chloride	62	5.512	5.512	(0.516)	204615	20.0000	21.4
6 Bromomethane	94	6.093	6.093	(0.570)	168827	20.0000	21.4(Q)
7 Chloroethane	64	6.215	6.215	(0.581)	180006	20.0000	21.1(Q)
8 Trichlorofluoromethane	101	6.647	6.647	(0.622)	307374	20.0000	21.2(Q)
134 Ethyl Ether	59	6.921	6.921	(0.647)	237241	20.0000	20.3(Q)
10 Acetone	43	7.298	7.298	(0.683)	409139	100.000	86.6
15 Acetonitrile	41	7.663	7.663	(0.717)	974372	500.000	456(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	11 1,1-Dichloroethylene	61	7.365	7.365	(0.689)	324726	20.0000	20.2(Q)
	128 Methyl acetate	43	7.699	7.699	(0.720)	1170930	100.000	94.5
	13 Iodomethane	142	7.620	7.620	(0.713)	1522348	100.000	101(Q)
	17 Methylene chloride	84	7.931	7.931	(0.742)	244003	20.0000	20.7(Q)
	14 Carbon disulfide	76	7.766	7.766	(0.726)	2597827	100.000	99.0
	20 tert-Butyl methyl ether	73	8.198	8.198	(0.767)	556919	20.0000	19.8(Q)
	21 trans-1,2-Dichloroethylene	61	8.265	8.265	(0.773)	342434	20.0000	20.2(Q)
	23 Vinyl acetate	43	8.691	8.691	(0.813)	3077759	100.000	101
	22 1,1-Dichloroethane	63	8.746	8.746	(0.818)	402496	20.0000	20.2
	30 2-Butanone	43	9.342	9.342	(0.874)	688683	100.000	92.1
	31 cis-1,2-Dichloroethylene	61	9.409	9.409	(0.880)	398417	20.0000	20.3(Q)
	25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	270866	20.0000	20.0
	32 Chloroform	83	9.725	9.725	(0.910)	314635	20.0000	19.8(Q)
	29 Bromochloromethane	128	9.695	9.695	(0.907)	88738	20.0000	20.2(Q)
$	35 Dibromofluoromethane	113	9.914	9.914	(0.927)	182423	20.0000	19.8(Q)
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	270948	20.0000	20.4(Q)
	129 Cyclohexane	56	10.121	10.121	(0.947)	481490	20.0000	20.0(Q)
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	250117	20.0000	20.2(Q)
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	812900	2000.00	1970(Q)
	33 Carbon tetrachloride	117	10.224	10.224	(0.956)	230195	20.0000	20.7(Q)
	37 1,2-Dichloroethane	62	10.413	10.413	(0.974)	295588	20.0000	19.8(Q)
	38 Benzene	78	10.431	10.431	(0.976)	794008	20.0000	19.4
*	40 Fluorobenzene	96	10.693	10.693	(1.000)	2008468	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	191495	20.0000	20.0(Q)
	41 1,2-Dichloropropane	63	11.350	11.350	(1.061)	226309	20.0000	20.1(Q)
	130 Methylcyclohexane	83	11.362	11.362	(1.063)	340681	20.0000	19.6(Q)
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	249749	20.0000	20.8(Q)
	43 Dibromomethane	93	11.496	11.496	(1.075)	112421	20.0000	19.7(Q)
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	561613	100.000	102(Q)
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	465380	100.000	97.0(Q)
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	292764	20.0000	20.9(Q)
$	47 Toluene-d8	98	12.408	12.408	(0.887)	673697	20.0000	20.1
	50 Toluene	92	12.481	12.481	(0.892)	479511	20.0000	19.8(Q)
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	255889	20.0000	20.7(Q)
	54 1,1,2-Trichloroethane	83	12.870	12.870	(0.920)	134357	20.0000	20.1(Q)
	55 2-Hexanone	43	13.053	13.053	(0.933)	1016967	100.000	97.6(Q)
	52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	266621	20.0000	20.0(Q)
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	146638	20.0000	20.0(Q)
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	174735	20.0000	21.2(Q)
	59 1,2-Dibromoethane	107	13.533	13.533	(0.967)	155697	20.0000	20.1(Q)
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1350495	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	484154	20.0000	20.0(Q)
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	173788	20.0000	21.1(Q)
	58 Ethylbenzene	91	14.093	14.093	(1.007)	867701	20.0000	20.0(Q)
	63 m,p-Xylenes	106	14.203	14.203	(1.015)	646995	40.0000	39.5(Q)
	64 o-Xylene	106	14.653	14.653	(1.047)	323068	20.0000	20.1(Q)
	65 Styrene	104	14.653	14.653	(1.047)	522615	20.0000	21.1(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
66	Bromoform	173	14.927	14.927	(0.906)	109816	20.0000	21.6(Q)
67	Isopropylbenzene	105	15.018	15.018	(0.911)	775595	20.0000	20.3
73	1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	199968	20.0000	19.6(Q)
$ 71	Bromofluorobenzene	95	15.225	15.225	(0.924)	263309	20.0000	19.9(Q)
74	1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	52331	20.0000	19.4(Q)
75	Bromobenzene	156	15.444	15.444	(0.937)	204894	20.0000	20.3(Q)
76	n-Propylbenzene	91	15.456	15.456	(0.938)	1020894	20.0000	20.2
77	2-Chlorotoluene	91	15.614	15.614	(0.948)	672016	20.0000	19.9
78	1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	668797	20.0000	20.3(Q)
80	4-Chlorotoluene	91	15.717	15.717	(0.954)	621500	20.0000	19.8(Q)
81	tert-Butylbenzene	119	15.991	15.991	(0.970)	668132	20.0000	20.2(Q)
79	1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	691967	20.0000	20.2(Q)
83	sec-Butylbenzene	105	16.222	16.222	(0.984)	927742	20.0000	20.2
84	4-Isopropyltoluene	119	16.344	16.344	(0.992)	728644	20.0000	20.2
85	1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	397256	20.0000	19.7(Q)
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	657541	50.0000	(Q)
87	1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	385401	20.0000	19.5(Q)
89	n-Butylbenzene	91	16.800	16.800	(1.020)	732736	20.0000	20.3(Q)
90	1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	370561	20.0000	19.8(Q)
92	1,2-Dibromo-3-chloropropane	75	17.841	17.841	(1.083)	37248	20.0000	19.8(Q)
93	1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	252666	20.0000	19.8
94	Hexachlorobutadiene	225	19.118	19.118	(1.160)	138816	20.0000	20.6(Q)
95	Naphthalene	128	19.337	19.337	(1.174)	589544	20.0000	19.4
96	1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	238409	20.0000	19.8(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092105v2.b/2c314.d

Date : 21-SEP-2005 13:31

Client ID: VSTD020

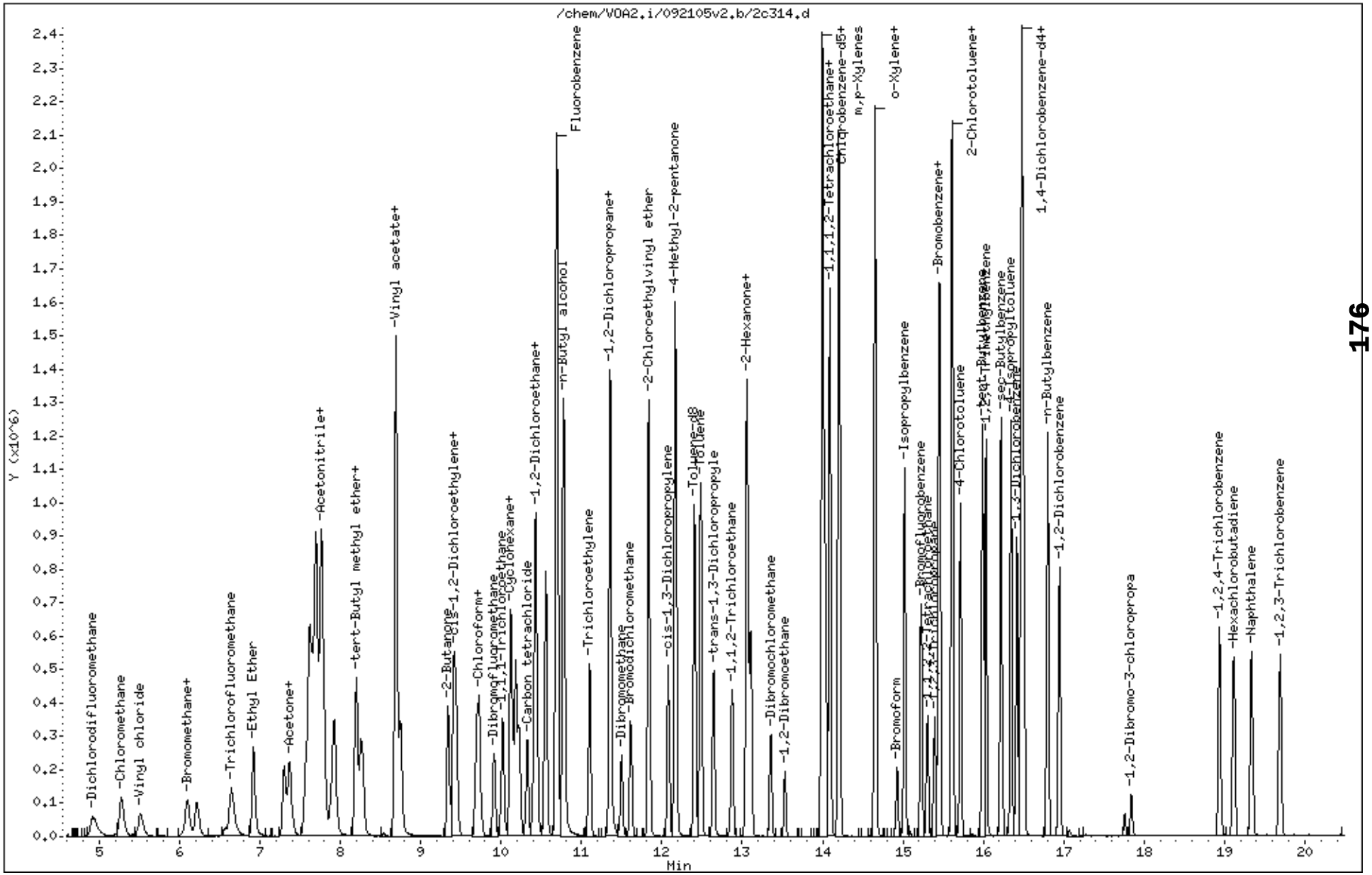
Sample Info: IW2V050921-05IICALI1IVOAFI1I

Instrument: VOA2.i

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c316.d
Lab Smp Id: W2V050921-07 Client Smp ID: VSTD100
Inj Date : 21-SEP-2005 14:23
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050921-07|ICAL|1|VOAF|1|
Misc Info : VSTD100 5uL - UVM050901-01+UVM050818-10E
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:11 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 20:02 Cal File: 2c329.d
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				4032738	300.000	251
M 2 1,2-Dichloroethylene (total)	96				3405683	200.000	195
M 135 1,3-Dichloropropylene	75				2554830	200.000	202(A)
3 Dichlorodifluoromethane	85	4.924	4.924	(0.460)	910253	100.000	94.5
4 Chloromethane	50	5.293	5.293	(0.495)	1491720	100.000	92.8
5 Vinyl chloride	62	5.515	5.515	(0.516)	906758	100.000	99.4
6 Bromomethane	94	6.106	6.106	(0.571)	748528	100.000	99.8
7 Chloroethane	64	6.234	6.234	(0.583)	825680	100.000	101(A)
8 Trichlorofluoromethane	101	6.641	6.641	(0.621)	1407990	100.000	102(A)
134 Ethyl Ether	59	6.921	6.921	(0.647)	1136698	100.000	102(A)
10 Acetone	43	7.298	7.298	(0.683)	2059380	500.000	457
15 Acetonitrile	41	7.663	7.663	(0.717)	4604611	2500.00	2260

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	11 1,1-Dichloroethylene	61	7.371	7.371	(0.689)	1536762	100.000	100(A)
	128 Methyl acetate	43	7.694	7.694	(0.720)	5221878	500.000	442
	13 Iodomethane	142	7.621	7.621	(0.713)	6463498	500.000	448
	17 Methylene chloride	84	7.931	7.931	(0.742)	841883	100.000	99.8
	14 Carbon disulfide	76	7.761	7.761	(0.726)	10422696	500.000	417
	20 tert-Butyl methyl ether	73	8.193	8.193	(0.766)	2572879	100.000	95.8
	21 trans-1,2-Dichloroethylene	61	8.260	8.260	(0.772)	1588657	100.000	98.2
	23 Vinyl acetate	43	8.691	8.691	(0.813)	11847459	500.000	407
	22 1,1-Dichloroethane	63	8.752	8.752	(0.818)	1680164	100.000	88.5
	30 2-Butanone	43	9.336	9.336	(0.873)	3373326	500.000	473
	31 cis-1,2-Dichloroethylene	61	9.409	9.409	(0.880)	1817026	100.000	97.1
	25 2,2-Dichloropropane	77	9.440	9.440	(0.883)	1248361	100.000	96.9
	32 Chloroform	83	9.726	9.726	(0.910)	1430441	100.000	94.5
	29 Bromochloromethane	128	9.695	9.695	(0.907)	409532	100.000	97.5
$	35 Dibromofluoromethane	113	9.914	9.914	(0.927)	860479	100.000	97.8
	36 1,1,1-Trichloroethane	97	10.018	10.018	(0.937)	1260386	100.000	99.4
	129 Cyclohexane	56	10.121	10.121	(0.947)	2223364	100.000	97.1
	34 1,1-Dichloropropene	75	10.182	10.182	(0.952)	1113952	100.000	94.1
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	3933942	10000.0	9990
	33 Carbon tetrachloride	117	10.225	10.225	(0.956)	1078829	100.000	102(A)
	37 1,2-Dichloroethane	62	10.407	10.407	(0.973)	1375313	100.000	96.6
	38 Benzene	78	10.431	10.431	(0.976)	3344768	100.000	85.6
*	40 Fluorobenzene	96	10.693	10.693	(1.000)	1915418	50.0000	
	39 Trichloroethylene	95	11.101	11.101	(1.038)	858528	100.000	93.8
	41 1,2-Dichloropropane	63	11.350	11.350	(1.061)	1003663	100.000	93.3
	130 Methylcyclohexane	83	11.362	11.362	(1.063)	1466794	100.000	88.8
	45 Bromodichloromethane	83	11.612	11.612	(1.086)	1168994	100.000	102(A)
	43 Dibromomethane	93	11.496	11.496	(1.075)	528184	100.000	96.9
	44 2-Chloroethylvinyl ether	63	11.837	11.837	(1.107)	2463505	500.000	468
	49 4-Methyl-2-pentanone	58	12.171	12.171	(0.870)	2194613	500.000	462
	46 cis-1,3-Dichloropropylene	75	12.080	12.080	(1.130)	1339120	100.000	100(A)
$	47 Toluene-d8	98	12.408	12.408	(0.887)	2831615	100.000	85.3
	50 Toluene	92	12.481	12.481	(0.892)	2052498	100.000	85.6
	53 trans-1,3-Dichloropropylene	75	12.646	12.646	(0.904)	1215710	100.000	99.5
	54 1,1,2-Trichloroethane	83	12.877	12.877	(0.920)	609475	100.000	92.4
	55 2-Hexanone	43	13.053	13.053	(0.933)	4642727	500.000	450
	52 1,3-Dichloropropane	76	13.072	13.072	(0.934)	1148905	100.000	87.0
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	632089	100.000	87.4
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	857275	100.000	105(A)
	59 1,2-Dibromoethane	107	13.534	13.534	(0.967)	741783	100.000	96.6
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1335636	50.0000	
	62 Chlorobenzene	112	14.033	14.033	(1.003)	2161507	100.000	90.3
	60 1,1,1,2-Tetrachloroethane	131	14.088	14.088	(1.007)	775094	100.000	95.0
	58 Ethylbenzene	91	14.094	14.094	(1.007)	3541342	100.000	82.5
	63 m,p-Xylenes	106	14.209	14.209	(1.015)	2677700	200.000	165
	64 o-Xylene	106	14.653	14.653	(1.047)	1355038	100.000	85.3
	65 Styrene	104	14.659	14.659	(1.047)	2182212	100.000	89.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
66	Bromoform	173	14.927	14.927	(0.906)	596285	100.000	118(A)
67	Isopropylbenzene	105	15.018	15.018	(0.911)	3342067	100.000	87.7
73	1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	982977	100.000	96.8
$ 71	Bromofluorobenzene	95	15.225	15.225	(0.924)	1201573	100.000	91.4
74	1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	259074	100.000	96.6
75	Bromobenzene	156	15.444	15.444	(0.937)	888263	100.000	88.3
76	n-Propylbenzene	91	15.456	15.456	(0.938)	4104652	100.000	81.8
77	2-Chlorotoluene	91	15.614	15.614	(0.948)	2727660	100.000	81.2
78	1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	2747087	100.000	83.8
80	4-Chlorotoluene	91	15.718	15.718	(0.954)	2702217	100.000	86.5
81	tert-Butylbenzene	119	15.992	15.992	(0.970)	2923477	100.000	88.8
79	1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	2938924	100.000	86.3
83	sec-Butylbenzene	105	16.223	16.223	(0.984)	3861798	100.000	84.7
84	4-Isopropyltoluene	119	16.344	16.344	(0.992)	3165435	100.000	88.4
85	1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	1732037	100.000	86.3
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	654403	50.0000	
87	1,4-Dichlorobenzene	146	16.509	16.509	(1.002)	1724079	100.000	87.5
89	n-Butylbenzene	91	16.801	16.801	(1.020)	3158955	100.000	88.0
90	1,2-Dichlorobenzene	146	16.947	16.947	(1.028)	1667870	100.000	89.4
92	1,2-Dibromo-3-chloropropane	75	17.841	17.841	(1.083)	214340	100.000	114(A)
93	1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	1173828	100.000	92.4
94	Hexachlorobutadiene	225	19.119	19.119	(1.160)	651274	100.000	97.3
95	Naphthalene	128	19.338	19.338	(1.174)	2842083	100.000	93.8
96	1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	1128251	100.000	94.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA2.i/092105v2.b/2c316.d

Date : 21-SEP-2005 14:23

Client ID: VSTD100

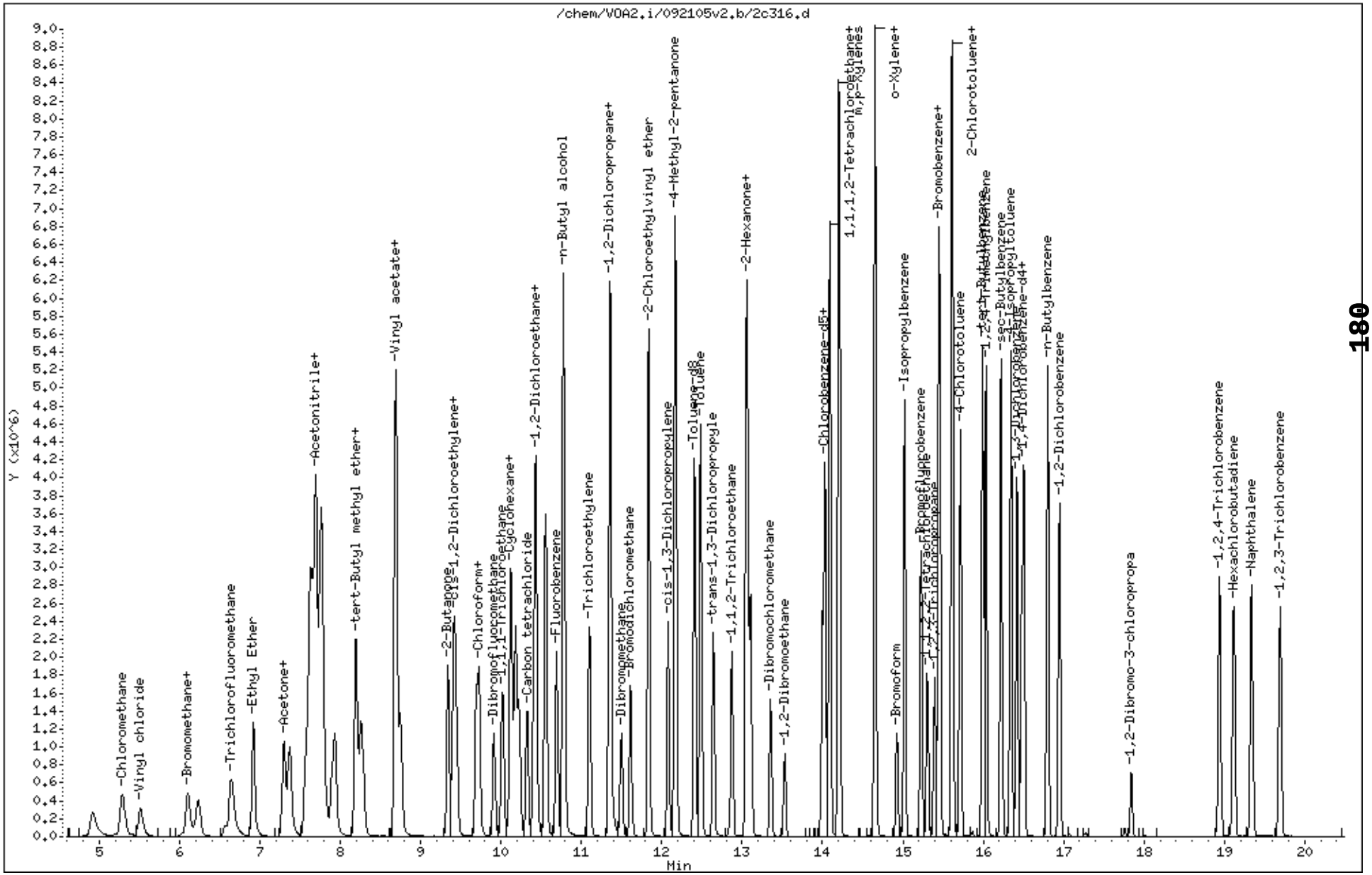
Instrument: VOA2.i

Sample Info: IW2V050921-07IICALI1IVOAFI1I

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c318.d
Lab Smp Id: W2V050921-08 Client Smp ID: VSTD0005
Inj Date : 21-SEP-2005 15:16
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050921-08|ICAL|1|VOAF|1|
Misc Info : VSTD0005 5uL - UVM050616-01C+UVM050818-03E
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:14 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 15:16 Cal File: 2c318.d
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BENZENE+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
38 Benzene	78	10.437	10.437	(0.976)	26169	0.50000	0.64(a)
131 n-Butyl alcohol	56	10.784	10.784	(1.009)	22646	50.0000	54.6(Q)
* 40 Fluorobenzene	96	10.693	10.693	(1.000)	2019073	50.0000	

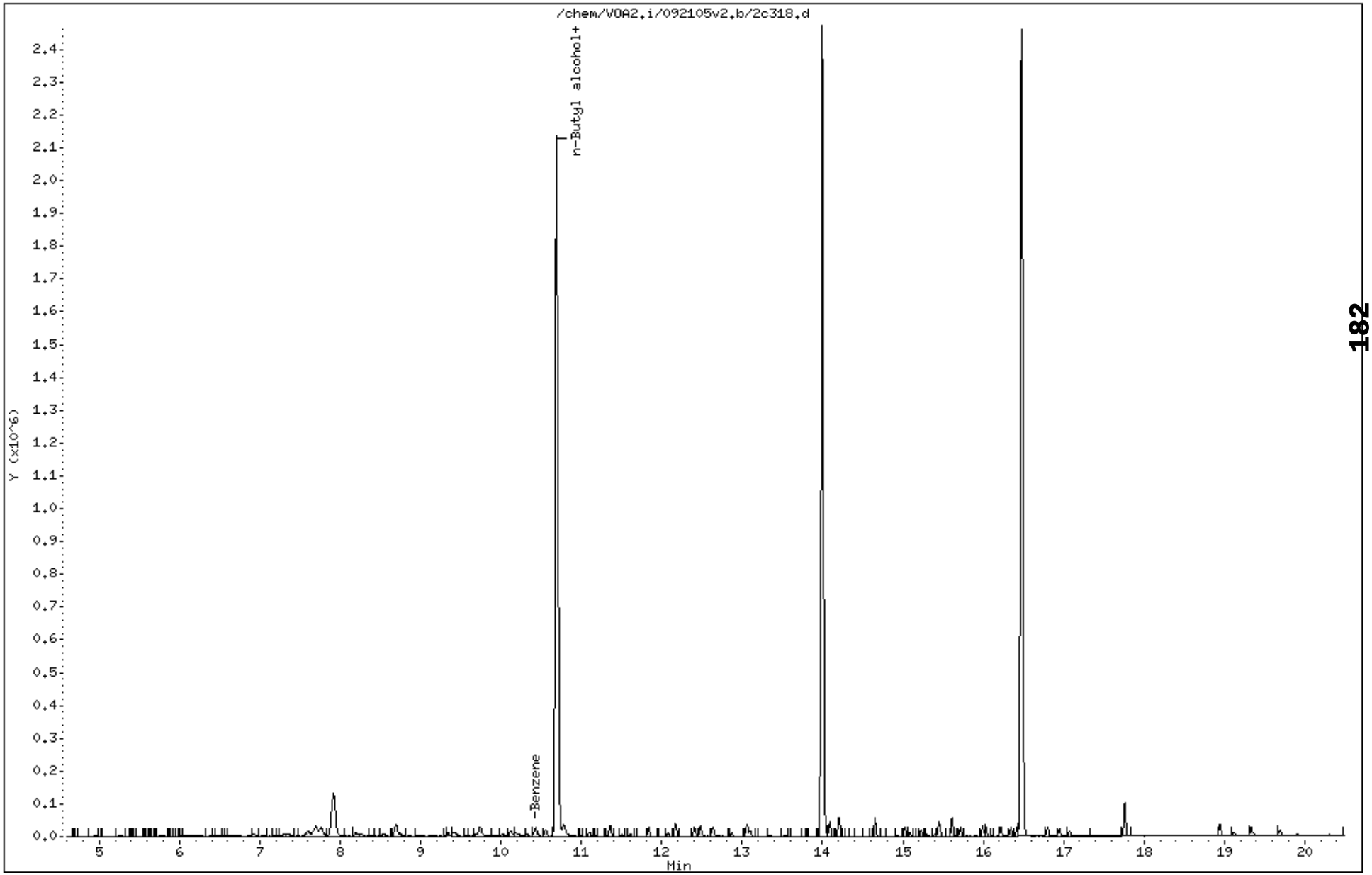
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092105v2.b/2c318.d
Date : 21-SEP-2005 15:16
Client ID: VSTD0005
Sample Info: |W2V050921-08|ICAL|1|VOAF|1|

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25

Column phase: DB-624



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General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c323.d
Lab Smp Id: VSTD005S Client Smp ID: VSTD005S
Inj Date : 21-SEP-2005 17:26
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |VSTD005S|ICAL|1|VOAF|1|
Misc Info : VSTD005S 5ul - UVM050829-01
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:10 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 17:26 Cal File: 2c323.d
Als bottle: 15 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.122	7.122	(0.666)	10898	5.00000	4.5(a)
12	Trichlorotrifluoroethane	85	7.323	7.317	(0.685)	18757	5.00000	5.0
16	Allyl chloride	76	7.761	7.761	(0.726)	30617	5.00000	5.7(Q)
18	Acrylonitrile	53	8.156	8.150	(0.763)	24266	5.00000	4.9(a)
24	2-Chloro-1,3-butadiene	53	8.856	8.862	(0.828)	18669	1.00000	0.95(a)
28	Propionitrile	54	9.422	9.415	(0.881)	8310	5.00000	4.6(a)
26	Ethyl acetate	43	9.355	9.348	(0.875)	74014	5.00000	5.2
27	Methacrylonitrile	41	9.610	9.604	(0.899)	43916	5.00000	4.9(a)
19	Isobutyl alcohol	41	10.060	10.054	(0.941)	25449	50.0000	45.2(a)
* 40	Fluorobenzene	96	10.693	10.693	(1.000)	1995598	50.0000	
42	Methyl methacrylate	69	11.320	11.313	(1.059)	29247	5.00000	4.8(a)
97	1,4-Dioxane	88	11.441	11.441	(1.070)	4122	50.0000	44.3(a)
48	2-Nitropropane	43	11.819	11.812	(1.105)	15269	5.00000	4.1(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	51 Ethyl methacrylate	69	12.640	12.640	(0.903)	51856	5.00000	4.7(a)
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1337260	50.0000	
	70 Cyclohexanone	55	15.183	15.182	(1.085)	15091	25.0000	21.3
	68 cis-1,4-Dichloro-2-butene	53	15.061	15.061	(0.914)	22222	5.00000	4.7(a)
	69 trans-1,4-Dichloro-2-butene	53	15.353	15.353	(0.932)	21365	5.00000	4.6(a)
	82 Pentachloroethane	167	16.071	16.071	(0.975)	25793	5.00000	4.9(a)
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	656726	50.0000	
	88 Benzyl chloride	91	16.624	16.624	(1.009)	76725	5.00000	4.5(a)
	91 bis(2-Chloroisopropyl)ether	45	17.026	17.026	(1.033)	38260	5.00000	4.6(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092105v2.b/2c323.d

Date : 21-SEP-2005 17:26

Client ID: VSTD005S

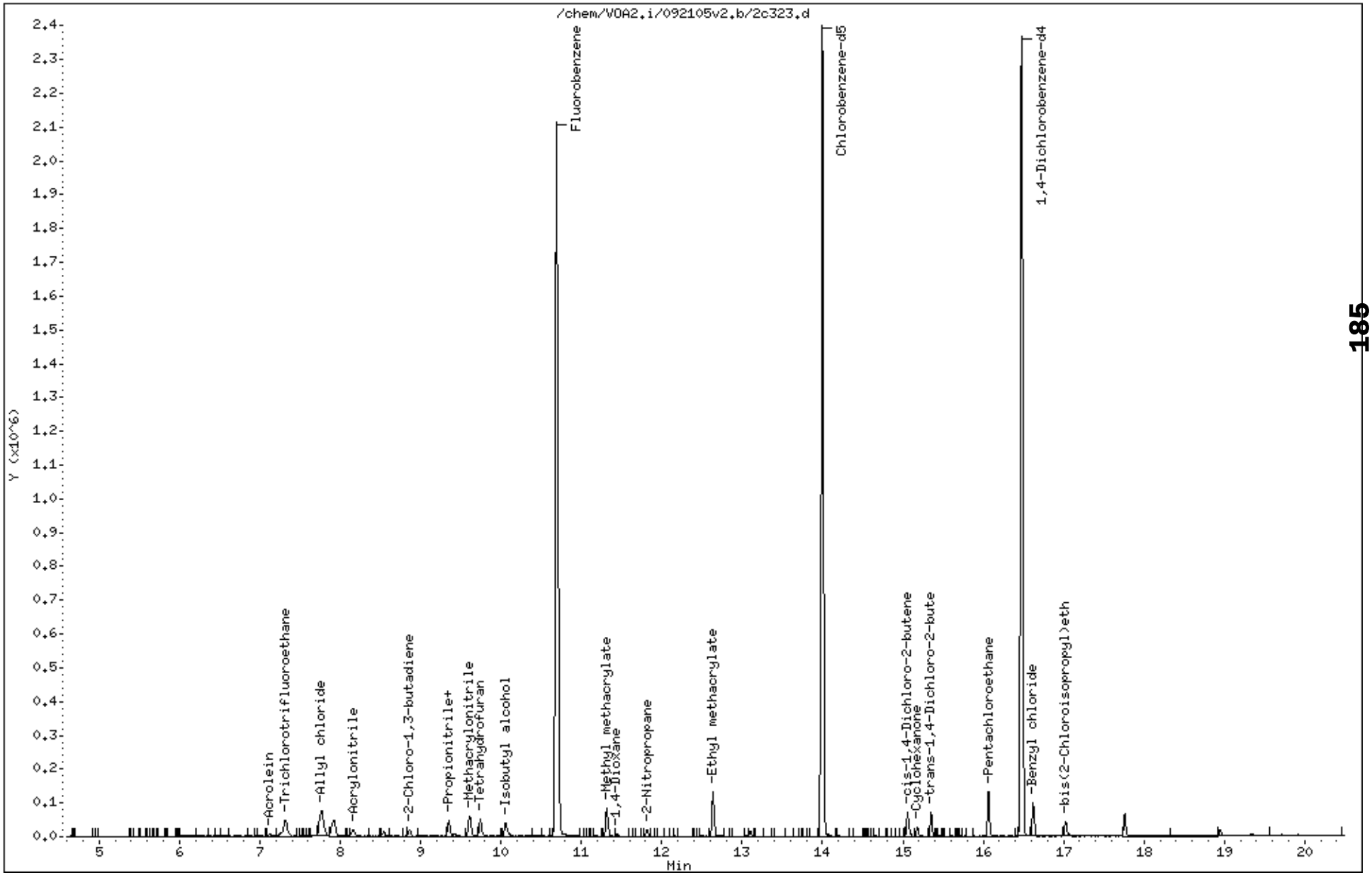
Sample Info: |VSTD005S|ICAL|1|VOAF|1|

Column phase: DB-624

Instrument: VOA2.i

Operator: CDS1

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c324.d
Lab Smp Id: VSTD010S Client Smp ID: VSTD010S
Inj Date : 21-SEP-2005 17:52
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |VSTD010S|ICAL|1|VOAF|1|
Misc Info : VSTD010S 5ul - UVM050829-02
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:10 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 17:52 Cal File: 2c324.d
Als bottle: 16 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.127	7.122	(0.667)	23517	10.0000	9.3(a)
12	Trichlorotrifluoroethane	85	7.328	7.317	(0.685)	39302	10.0000	10.1
16	Allyl chloride	76	7.766	7.761	(0.726)	58001	10.0000	10.4
18	Acrylonitrile	53	8.155	8.150	(0.763)	48757	10.0000	9.5(a)
24	2-Chloro-1,3-butadiene	53	8.861	8.862	(0.829)	39503	2.00000	1.9
28	Propionitrile	54	9.427	9.415	(0.882)	18332	10.0000	9.7
26	Ethyl acetate	43	9.354	9.348	(0.875)	148335	10.0000	9.9
27	Methacrylonitrile	41	9.609	9.604	(0.899)	93740	10.0000	10.0
19	Isobutyl alcohol	41	10.060	10.054	(0.941)	53359	100.000	90.8
72	Tetrahydrofuran	42	9.749	9.744	(0.592)	69954	10.0000	6.2
* 40	Fluorobenzene	96	10.692	10.693	(1.000)	2081134	50.0000	
42	Methyl methacrylate	69	11.319	11.313	(1.059)	61290	10.0000	9.6
97	1,4-Dioxane	88	11.447	11.441	(1.071)	8823	100.000	90.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	48 2-Nitropropane	43	11.818	11.812	(1.105)	34035	10.0000	8.7
	51 Ethyl methacrylate	69	12.639	12.640	(0.903)	115972	10.0000	10
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1402628	50.0000	
	70 Cyclohexanone	55	15.182	15.182	(1.085)	33797	50.0000	45.4
	68 cis-1,4-Dichloro-2-butene	53	15.060	15.061	(0.914)	46668	10.0000	9.2
	69 trans-1,4-Dichloro-2-butene	53	15.352	15.353	(0.932)	45785	10.0000	9.4
	82 Pentachloroethane	167	16.064	16.071	(0.975)	54714	10.0000	9.7
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	698229	50.0000	
	88 Benzyl chloride	91	16.624	16.624	(1.009)	173892	10.0000	9.6
	91 bis(2-Chloroisopropyl)ether	45	17.025	17.026	(1.033)	80903	10.0000	9.2

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/VOA2.i/092105v2.b/2c324.d

Date : 21-SEP-2005 17:52

Client ID: VSTD010S

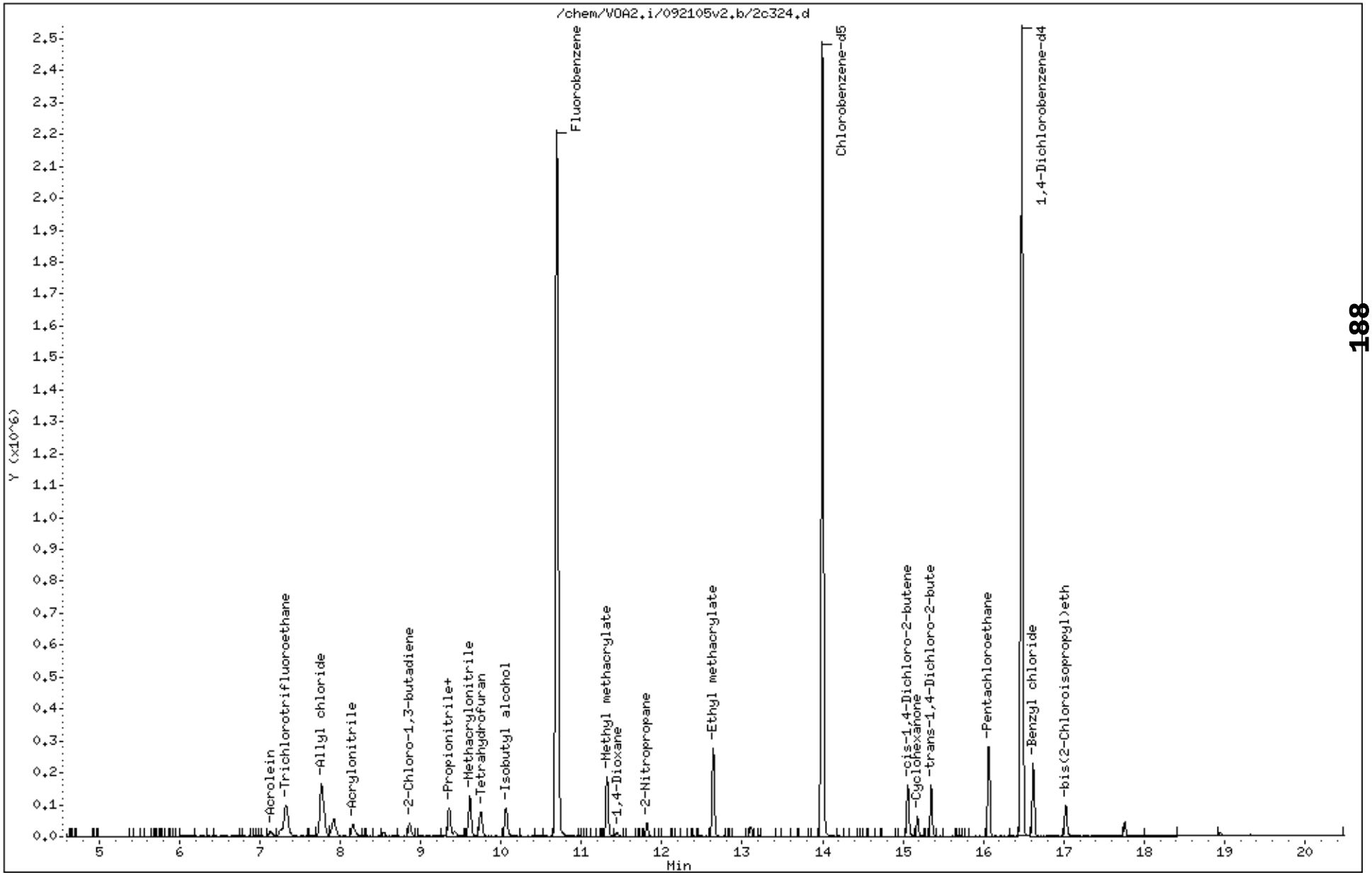
Sample Info: |VSTD010S|ICAL|1|VOAF|1|

Column phase: DB-624

Instrument: VOA2.i

Operator: CDS1

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c325.d
Lab Smp Id: VSTD025S Client Smp ID: VSTD025S
Inj Date : 21-SEP-2005 18:18
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |VSTD025S|ICAL|1|VOAF|1|
Misc Info : VSTD025S 5ul - UVM05082-03
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:10 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 18:18 Cal File: 2c325.d
Als bottle: 17 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

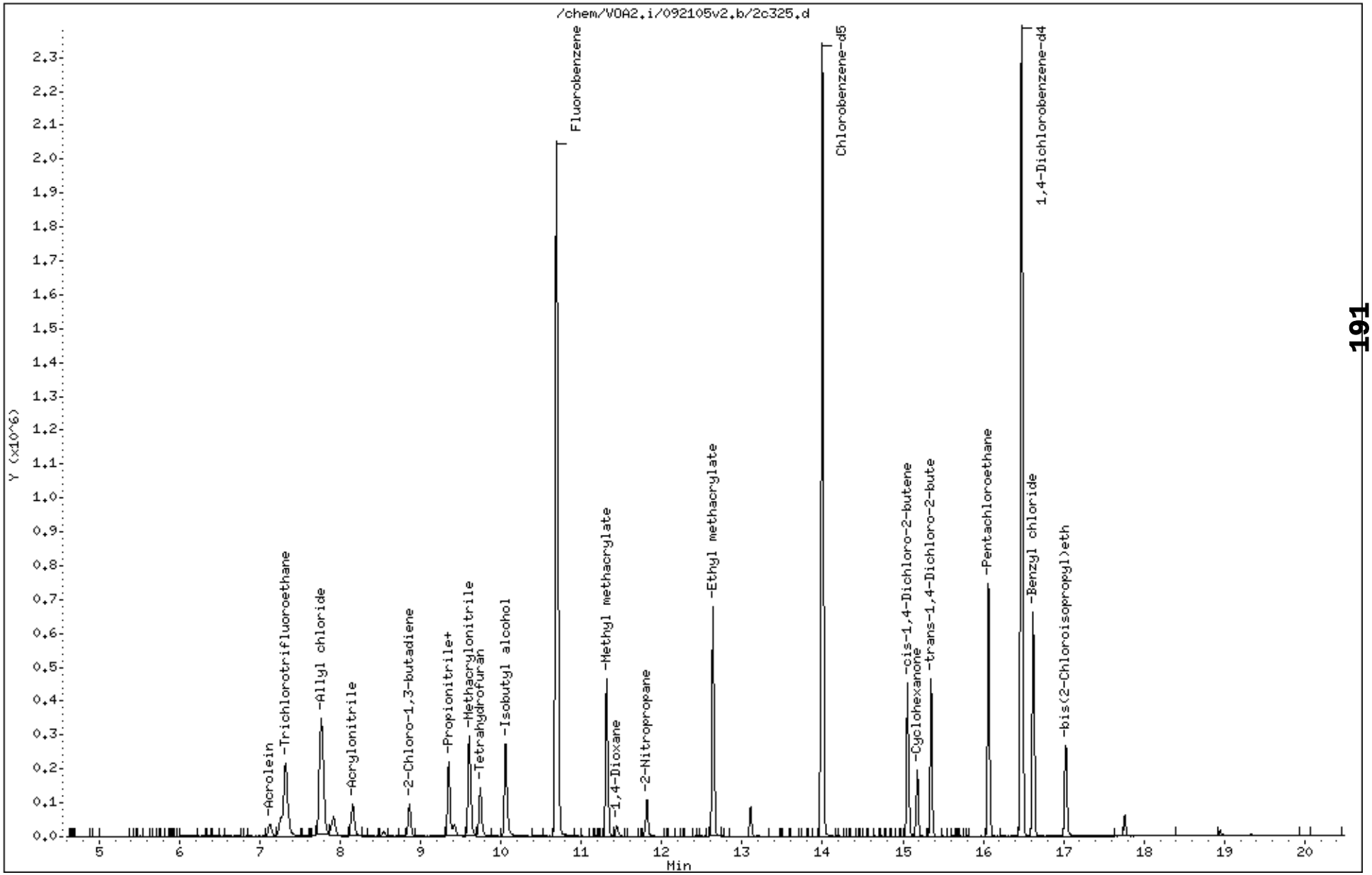
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.122	7.122	(0.666)	53951	25.0000	22.5
12	Trichlorotrifluoroethane	85	7.317	7.317	(0.684)	86106	25.0000	23.4
16	Allyl chloride	76	7.761	7.761	(0.726)	122958	25.0000	23.3
18	Acrylonitrile	53	8.150	8.150	(0.762)	117337	25.0000	24.1
24	2-Chloro-1,3-butadiene	53	8.856	8.862	(0.828)	90244	5.00000	4.6
28	Propionitrile	54	9.415	9.415	(0.881)	44950	25.0000	25.1
26	Ethyl acetate	43	9.348	9.348	(0.874)	347458	25.0000	24.5
27	Methacrylonitrile	41	9.604	9.604	(0.898)	216680	25.0000	24.6
19	Isobutyl alcohol	41	10.060	10.054	(0.941)	161221	250.000	290
72	Tetrahydrofuran	42	9.744	9.744	(0.591)	133723	25.0000	21.9
* 40	Fluorobenzene	96	10.693	10.693	(1.000)	1968757	50.0000	
42	Methyl methacrylate	69	11.313	11.313	(1.058)	157647	25.0000	26.2
97	1,4-Dioxane	88	11.435	11.441	(1.069)	24943	250.000	272

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
48	2-Nitropropane	43	11.818	11.812	(1.105)	92263	25.0000	25.0
51	Ethyl methacrylate	69	12.640	12.640	(0.903)	303862	25.0000	27.8
* 61	Chlorobenzene-d5	117	13.996	13.996	(1.000)	1319307	50.0000	
70	Cyclohexanone	55	15.182	15.182	(1.085)	102688	125.000	147
68	cis-1,4-Dichloro-2-butene	53	15.061	15.061	(0.914)	129019	25.0000	27.1
69	trans-1,4-Dichloro-2-butene	53	15.353	15.353	(0.932)	127126	25.0000	27.5
82	Pentachloroethane	167	16.065	16.071	(0.975)	148165	25.0000	27.9
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	659019	50.0000	
88	Benzyl chloride	91	16.624	16.624	(1.009)	507744	25.0000	29.6
91	bis(2-Chloroisopropyl)ether	45	17.026	17.026	(1.033)	234376	25.0000	28.4

Data File: /chem/VOA2.i/092105v2.b/2c325.d
Date : 21-SEP-2005 18:18
Client ID: VSTD025S
Sample Info: |VSTD025S|ICAL|1|VOAF|1|

Instrument: VOA2.i
Operator: CDS1
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c326.d
Lab Smp Id: VSTD050S Client Smp ID: VSTD050S
Inj Date : 21-SEP-2005 18:44
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |VSTD050S|ICAL|1|VOAF|1|
Misc Info : VSTD050S 5ul - UVM050829-04
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:10 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 18:44 Cal File: 2c326.d
Als bottle: 18 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

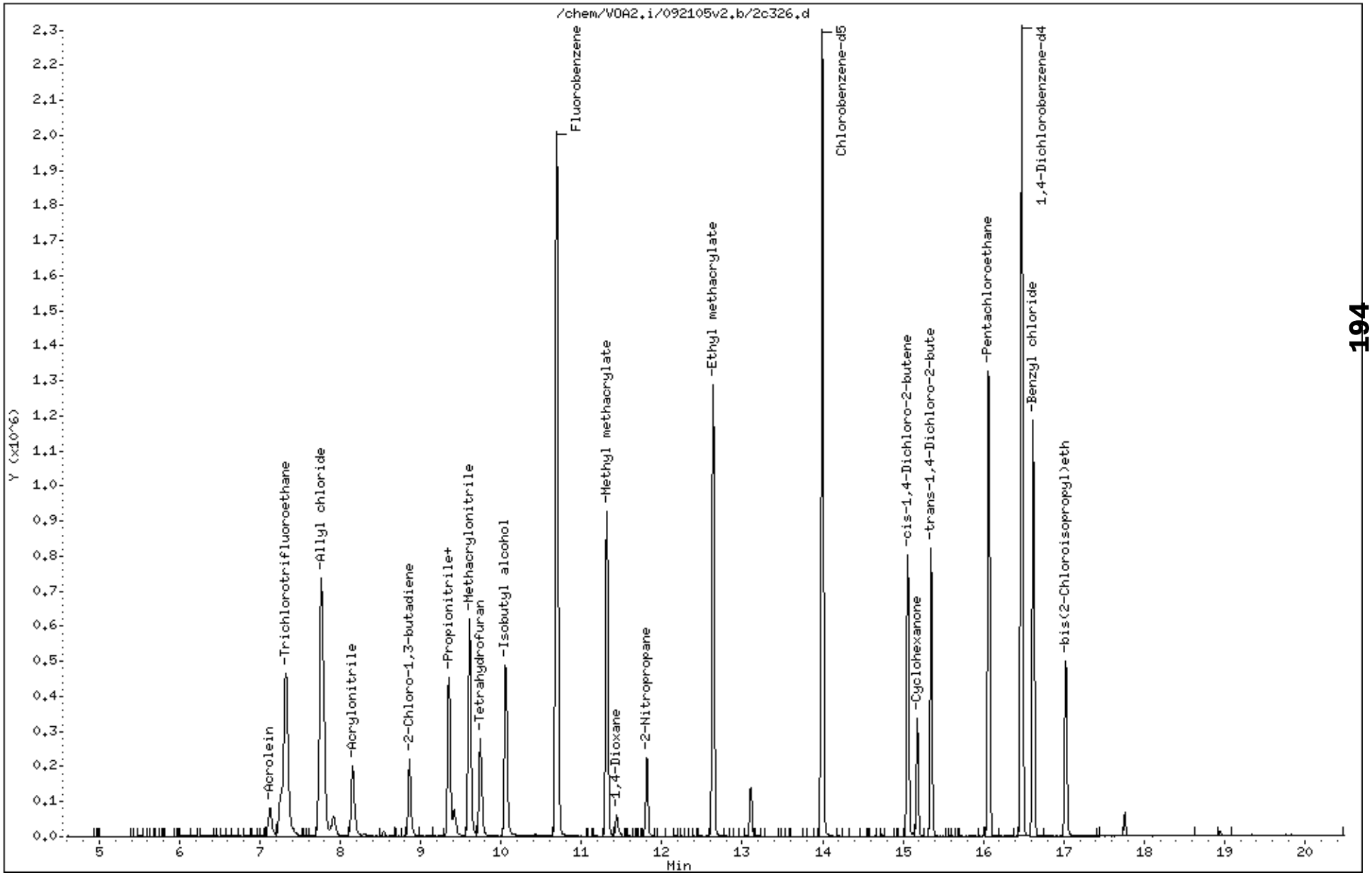
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.122	7.122	(0.666)	124131	50.0000	53.3
12	Trichlorotrifluoroethane	85	7.316	7.317	(0.684)	191314	50.0000	53.6
16	Allyl chloride	76	7.760	7.761	(0.726)	255508	50.0000	49.8
18	Acrylonitrile	53	8.156	8.150	(0.763)	249377	50.0000	52.8
24	2-Chloro-1,3-butadiene	53	8.861	8.862	(0.829)	197510	10.0000	10.5
28	Propionitrile	54	9.421	9.415	(0.881)	90415	50.0000	52.0
26	Ethyl acetate	43	9.348	9.348	(0.874)	718368	50.0000	52.2
27	Methacrylonitrile	41	9.604	9.604	(0.898)	452343	50.0000	52.8
19	Isobutyl alcohol	41	10.054	10.054	(0.940)	283371	500.000	525
72	Tetrahydrofuran	42	9.743	9.744	(0.591)	258436	50.0000	53.0
* 40	Fluorobenzene	96	10.693	10.693	(1.000)	1911771	50.0000	
42	Methyl methacrylate	69	11.313	11.313	(1.058)	310286	50.0000	53.1
97	1,4-Dioxane	88	11.441	11.441	(1.070)	46859	500.000	526

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
48	2-Nitropropane	43	11.818	11.812	(1.105)	189046	50.0000	52.7
51	Ethyl methacrylate	69	12.639	12.640	(0.903)	573911	50.0000	53.7
* 61	Chlorobenzene-d5	117	13.996	13.996	(1.000)	1292669	50.0000	
70	Cyclohexanone	55	15.176	15.182	(1.084)	178546	250.000	260
68	cis-1,4-Dichloro-2-butene	53	15.060	15.061	(0.914)	233073	50.0000	50.8
69	trans-1,4-Dichloro-2-butene	53	15.352	15.353	(0.932)	227346	50.0000	51.0
82	Pentachloroethane	167	16.070	16.071	(0.975)	268756	50.0000	52.5
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	635895	50.0000	
88	Benzyl chloride	91	16.624	16.624	(1.009)	903733	50.0000	54.5
91	bis(2-Chloroisopropyl)ether	45	17.025	17.026	(1.033)	414078	50.0000	52.0

Data File: /chem/VOA2.i/092105v2.b/2c326.d
Date : 21-SEP-2005 18:44
Client ID: VSTD050S
Sample Info: |VSTD050S|ICAL|1|VOAF|1|

Instrument: VOA2.i
Operator: CDS1
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c327.d
Lab Smp Id: VSTD100S Client Smp ID: VSTD100S
Inj Date : 21-SEP-2005 19:10
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |VSTD100S|ICAL|1|VOAF|1|
Misc Info : VSTD100S 5ul - UVM050829-05
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:10 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 19 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.122	7.122	(0.666)	257102	100.000	109
12	Trichlorotrifluoroethane	85	7.317	7.317	(0.684)	370264	100.000	102
16	Allyl chloride	76	7.761	7.761	(0.726)	526727	100.000	101
18	Acrylonitrile	53	8.150	8.150	(0.762)	501007	100.000	104
24	2-Chloro-1,3-butadiene	53	8.862	8.862	(0.829)	406469	20.0000	21.2
28	Propionitrile	54	9.415	9.415	(0.881)	185744	100.000	105
26	Ethyl acetate	43	9.348	9.348	(0.874)	1456775	100.000	104
27	Methacrylonitrile	41	9.604	9.604	(0.898)	901399	100.000	104
19	Isobutyl alcohol	41	10.054	10.054	(0.940)	575720	1000.00	1050
72	Tetrahydrofuran	42	9.744	9.744	(0.591)	501179	100.000	110
* 40	Fluorobenzene	96	10.693	10.693	(1.000)	1942870	50.0000	
42	Methyl methacrylate	69	11.313	11.313	(1.058)	634040	100.000	107
97	1,4-Dioxane	88	11.441	11.441	(1.070)	95151	1000.00	1050

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
48	2-Nitropropane	43	11.812	11.812	(1.105)	406420	100.000	112
51	Ethyl methacrylate	69	12.640	12.640	(0.903)	1160043	100.000	106
* 61	Chlorobenzene-d5	117	13.996	13.996	(1.000)	1321819	50.0000	
70	Cyclohexanone	55	15.182	15.182	(1.085)	367316	500.000	524
68	cis-1,4-Dichloro-2-butene	53	15.061	15.061	(0.914)	493473	100.000	106
69	trans-1,4-Dichloro-2-butene	53	15.353	15.353	(0.932)	475641	100.000	105
82	Pentachloroethane	167	16.071	16.071	(0.975)	539241	100.000	104
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	643371	50.0000	
88	Benzyl chloride	91	16.624	16.624	(1.009)	1817026	100.000	108
91	bis(2-Chloroisopropyl)ether	45	17.026	17.026	(1.033)	833860	100.000	104

Data File: /chem/VOA2.i/092105v2.b/2c327.d

Date : 21-SEP-2005 19:10

Client ID: VSTD100S

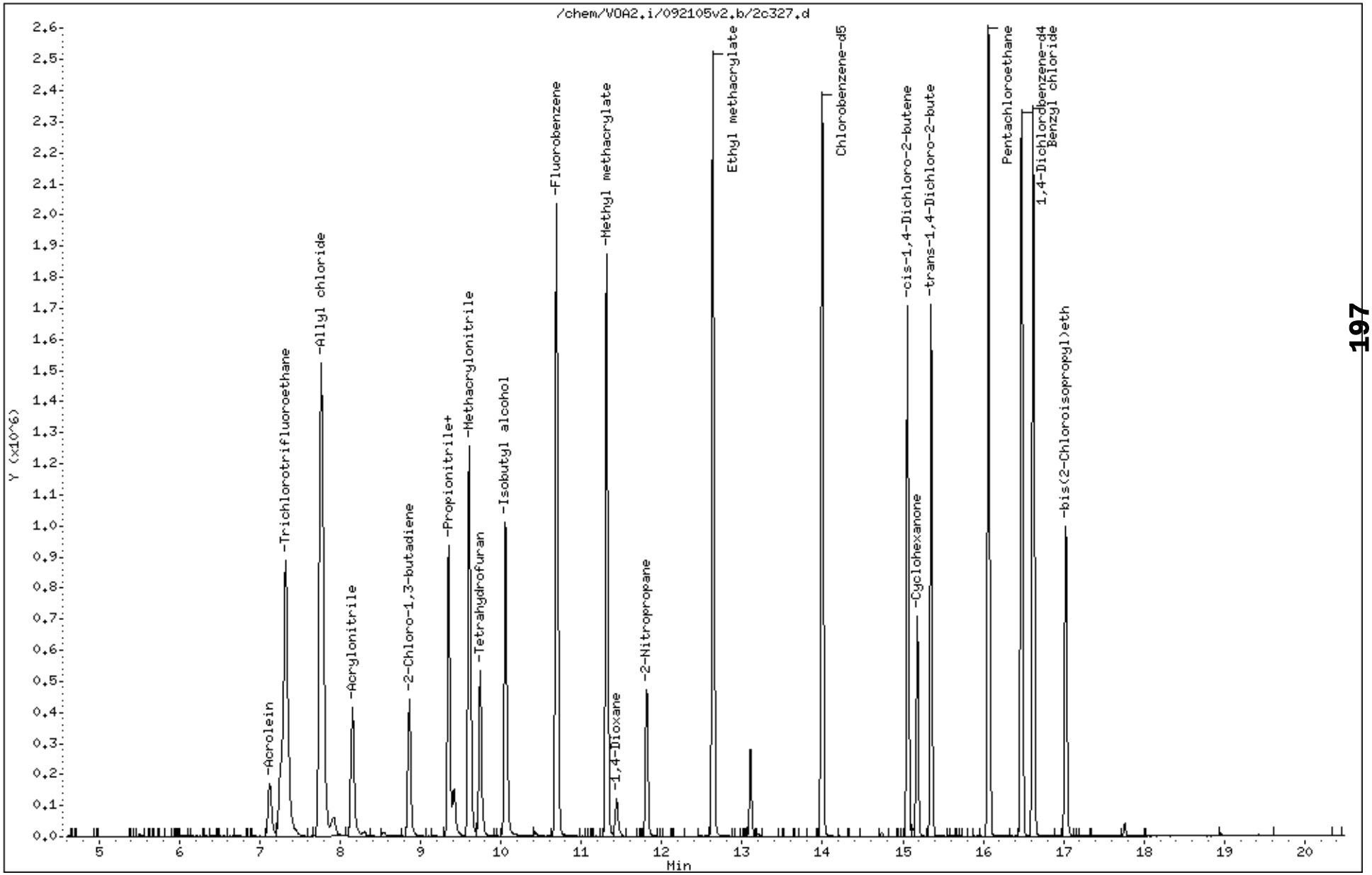
Sample Info: |VSTD100S|ICAL|1|VOAF|1|

Column phase: DB-624

Instrument: VOA2.i

Operator: CDS1

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c329.d
Lab Smp Id: VSTD500S Client Smp ID: VSTD500S
Inj Date : 21-SEP-2005 20:02
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |VSTD500S|ICAL|1|VOAF|1|
Misc Info : VSTD500S 5ul - UVM050829-07
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 12:10 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 20:02 Cal File: 2c329.d
Als bottle: 21 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.122	7.122	(0.666)	1251967	500.000	561(A)
12	Trichlorotrifluoroethane	85	7.323	7.323	(0.685)	1628175	500.000	476
16	Allyl chloride	76	7.767	7.767	(0.726)	2148302	500.000	438(H)
18	Acrylonitrile	53	8.150	8.150	(0.762)	2274861	500.000	502(A)
24	2-Chloro-1,3-butadiene	53	8.862	8.862	(0.829)	1892837	100.000	105(A)
28	Propionitrile	54	9.416	9.416	(0.881)	852081	500.000	511(A)
26	Ethyl acetate	43	9.349	9.349	(0.874)	5982570	500.000	454
27	Methacrylonitrile	41	9.604	9.604	(0.898)	3833065	500.000	467
19	Isobutyl alcohol	41	10.054	10.054	(0.940)	2399555	5000.00	4640
72	Tetrahydrofuran	42	9.744	9.744	(0.591)	2095571	500.000	498
* 40	Fluorobenzene	96	10.693	10.693	(1.000)	1831405	50.0000	
42	Methyl methacrylate	69	11.314	11.314	(1.058)	2509940	500.000	449
97	1,4-Dioxane	88	11.435	11.435	(1.069)	433242	5000.00	5070(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	48 2-Nitropropane	43	11.812	11.812	(1.105)	1962033	500.000	571(A)
	51 Ethyl methacrylate	69	12.640	12.640	(0.903)	4275466	500.000	407
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1268965	50.0000	
	70 Cyclohexanone	55	15.177	15.177	(1.084)	1640377	2500.00	2440
	68 cis-1,4-Dichloro-2-butene	53	15.061	15.061	(0.914)	2224848	500.000	488
	69 trans-1,4-Dichloro-2-butene	53	15.353	15.353	(0.932)	2128255	500.000	481
	82 Pentachloroethane	167	16.071	16.071	(0.975)	2150708	500.000	423
*	86 1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	631479	50.0000	
	88 Benzyl chloride	91	16.625	16.625	(1.009)	6511476	500.000	396
	91 bis(2-Chloroisopropyl)ether	45	17.026	17.026	(1.033)	3676492	500.000	465

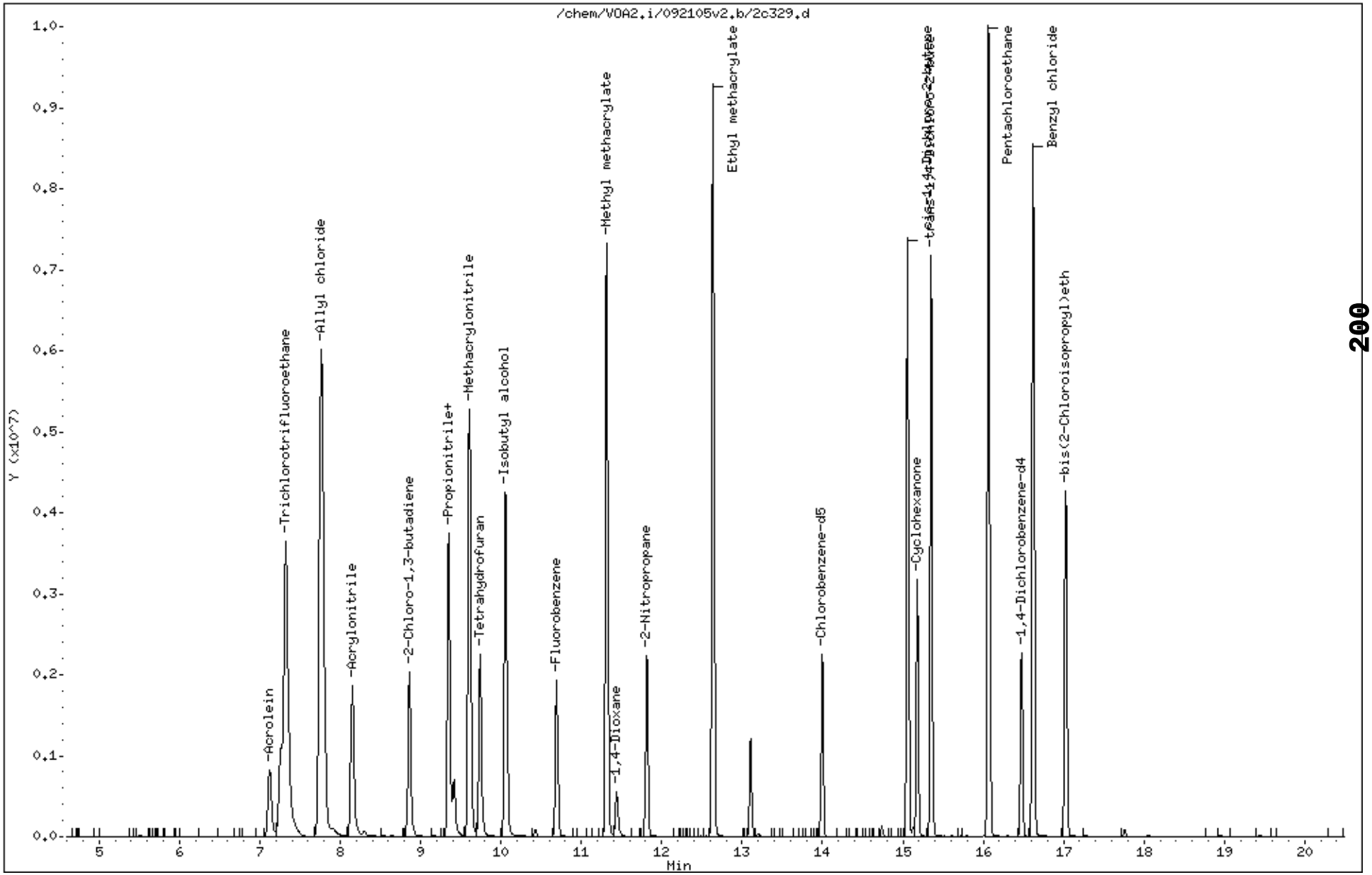
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Data File: /chem/VOA2.i/092105v2.b/2c329.d
Date : 21-SEP-2005 20:02
Client ID: VSTD500S
Sample Info: |VSTD500S|ICAL|1|VOAF|1|

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25

Column phase: DB-624



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 21-SEP-2005 16:08
Lab File ID: 2c320.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: SOIL Init. Cal. Times: 11:47 20:02
Lab Sample ID: W2V050920-09 Quant Type: ISTD
Method: /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.60214	0.52610	0.52610	0.050	-12.62827	40.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.45531	0.43749	0.43749	0.050	-3.91445	40.00000	Averaged
M 135 1,3-Dichloropropylene	0.32970	0.38052	0.38052	0.050	15.41303	40.00000	Averaged
3 Dichlorodifluoromethane	0.25131	0.22653	0.22653	0.050	-9.86040	40.00000	Averaged
4 Chloromethane	0.41952	0.39930	0.39930	0.100	-4.81951	40.00000	Averaged spcc
5 Vinyl chloride	0.23805	0.23827	0.23827	0.050	0.09250	20.00000	Averaged ccc
6 Bromomethane	0.19586	0.18604	0.18604	0.050	-5.01152	40.00000	Averaged
7 Chloroethane	0.21245	0.20165	0.20165	0.050	-5.08230	40.00000	Averaged
8 Trichlorofluoromethane	0.36097	0.32816	0.32816	0.050	-9.09031	40.00000	Averaged
134 Ethyl Ether	0.29125	0.28455	0.28455	0.001	-2.30118	40.00000	Averaged
10 Acetone	0.11764	0.14831	0.14831	0.050	26.06417	40.00000	Averaged
15 Acetonitrile	0.05314	0.05407	0.05407	0.010	1.75767	40.00000	Averaged
11 1,1-Dichloroethylene	0.40084	0.41652	0.41652	0.050	3.91087	20.00000	Averaged ccc
128 Methyl acetate	0.30842	0.29673	0.29673	0.010	-3.79163	40.00000	Averaged
13 Iodomethane	0.37632	0.35840	0.35840	0.050	-4.76404	40.00000	Averaged
17 Methylene chloride	51.21627	50.00000	0.24416	0.050	2.43254	40.00000	Linear
14 Carbon disulfide	0.65303	0.65179	0.65179	0.050	-0.19024	40.00000	Averaged
20 tert-Butyl methyl ether	0.70097	0.70057	0.70057	0.050	-0.05668	40.00000	Averaged
21 trans-1,2-Dichloroethylene	0.42205	0.40597	0.40597	0.050	-3.81040	40.00000	Averaged
23 Vinyl acetate	0.75989	0.71924	0.71924	0.010	-5.34907	40.00000	Averaged
22 1,1-Dichloroethane	0.49540	0.48135	0.48135	0.100	-2.83777	40.00000	Averaged spcc
30 2-Butanone	0.18621	0.21285	0.21285	0.030	14.30377	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.48858	0.46901	0.46901	0.050	-4.00433	40.00000	Averaged
25 2,2-Dichloropropane	0.33619	0.32287	0.32287	0.050	-3.96473	40.00000	Averaged
32 Chloroform	0.39511	0.40231	0.40231	0.010	1.82220	20.00000	Averaged ccc
29 Bromochloromethane	0.10961	0.11305	0.11305	0.010	3.13539	40.00000	Averaged
$ 35 Dibromofluoromethane	0.22969	0.20474	0.20474	0.010	-10.86278	40.00000	Averaged
36 1,1,1-Trichloroethane	0.33112	0.32149	0.32149	0.010	-2.90764	40.00000	Averaged
129 Cyclohexane	0.59756	0.54957	0.54957	0.010	-8.03010	40.00000	Averaged
34 1,1-Dichloropropene	0.30888	0.29472	0.29472	0.010	-4.58249	40.00000	Averaged
131 n-Butyl alcohol	0.01028	0.01215	0.01215	0.001	18.23328	40.00000	Averaged
33 Carbon tetrachloride	0.27704	0.28434	0.28434	0.010	2.63649	40.00000	Averaged
37 1,2-Dichloroethane	0.37159	0.38294	0.38294	0.010	3.05546	40.00000	Averaged
38 Benzene	1.01982	0.87902	0.87902	0.010	-13.80683	40.00000	Averaged
39 Trichloroethylene	0.23887	0.22421	0.22421	0.010	-6.13697	40.00000	Averaged
41 1,2-Dichloropropane	0.28069	0.28247	0.28247	0.010	0.63478	20.00000	Averaged ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 21-SEP-2005 16:08
Lab File ID: 2c320.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: SOIL Init. Cal. Times: 11:47 20:02
Lab Sample ID: W2V050920-09 Quant Type: ISTD
Method: /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m

	COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
	130 Methylcyclohexane	0.43142	0.37714	0.37714	0.010	-12.58014	40.00000	Averaged	
	45 Bromodichloromethane	0.29813	0.31760	0.31760	0.010	6.52878	40.00000	Averaged	
	43 Dibromomethane	0.14224	0.14638	0.14638	0.010	2.91177	40.00000	Averaged	
	44 2-Chloroethylvinyl ether	0.13726	0.12521	0.12521	0.010	-8.77340	40.00000	Averaged	
	49 4-Methyl-2-pentanone	0.17770	0.19483	0.19483	0.010	9.63780	40.00000	Averaged	
	46 cis-1,3-Dichloropropylene	0.34904	0.40024	0.40024	0.010	14.66829	40.00000	Averaged	
$	47 Toluene-d8	1.24300	1.04921	1.04921	0.010	-15.59008	40.00000	Averaged	
	50 Toluene	0.89760	0.78124	0.78124	0.010	-12.96332	20.00000	Averaged	ccc
	53 trans-1,3-Dichloropropylene	0.45744	0.52986	0.52986	0.010	15.83132	40.00000	Averaged	
	54 1,1,2-Trichloroethane	0.24695	0.25509	0.25509	0.010	3.29478	40.00000	Averaged	
	55 2-Hexanone	0.38597	0.43053	0.43053	0.010	11.54471	40.00000	Averaged	
	52 1,3-Dichloropropane	0.49457	0.49625	0.49625	0.010	0.33864	40.00000	Averaged	
	56 Tetrachloroethylene	0.27084	0.24237	0.24237	0.010	-10.51186	40.00000	Averaged	
	57 Dibromochloromethane	0.30587	0.33593	0.33593	0.010	9.82522	40.00000	Averaged	
	59 1,2-Dibromoethane	0.28733	0.30561	0.30561	0.010	6.35966	40.00000	Averaged	
	62 Chlorobenzene	0.89632	0.84197	0.84197	0.300	-6.06333	40.00000	Averaged	spcc
	60 1,1,1,2-Tetrachloroethane	0.30524	0.31065	0.31065	0.010	1.76986	40.00000	Averaged	
	58 Ethylbenzene	1.60596	1.36571	1.36571	0.010	-14.96001	20.00000	Averaged	ccc
	63 m,p-Xylenes	0.60583	0.52341	0.52341	0.010	-13.60378	40.00000	Averaged	
	64 o-Xylene	0.59477	0.53148	0.53148	0.010	-10.64100	40.00000	Averaged	
	65 Styrene	0.91623	0.89287	0.89287	0.010	-2.55002	40.00000	Averaged	
	66 Bromoform	0.38558	0.47937	0.47937	0.100	24.32531	40.00000	Averaged	spcc
	67 Isopropylbenzene	2.91079	2.47157	2.47157	0.010	-15.08961	40.00000	Averaged	
	73 1,1,2,2-Tetrachloroethane	0.77557	0.81800	0.81800	0.300	5.47176	40.00000	Averaged	spcc
$	71 Bromofluorobenzene	1.00432	0.87546	0.87546	0.010	-12.83010	40.00000	Averaged	
	74 1,2,3-Trichloropropane	0.20489	0.23069	0.23069	0.010	12.59480	40.00000	Averaged	
	75 Bromobenzene	0.76887	0.73607	0.73607	0.010	-4.26546	40.00000	Averaged	
	76 n-Propylbenzene	3.83590	3.15130	3.15130	0.010	-17.84740	40.00000	Averaged	
	77 2-Chlorotoluene	2.56696	2.24697	2.24697	0.010	-12.46578	40.00000	Averaged	
	78 1,3,5-Trimethylbenzene	2.50494	2.22655	2.22655	0.010	-11.11350	40.00000	Averaged	
	80 4-Chlorotoluene	2.38658	2.14956	2.14956	0.010	-9.93139	40.00000	Averaged	
	81 tert-Butylbenzene	2.51450	2.27525	2.27525	0.010	-9.51505	40.00000	Averaged	
	79 1,2,4-Trimethylbenzene	2.60093	2.40085	2.40085	0.010	-7.69278	40.00000	Averaged	
	83 sec-Butylbenzene	3.48401	3.05164	3.05164	0.010	-12.41002	40.00000	Averaged	
	84 4-Isopropyltoluene	2.73593	2.47270	2.47270	0.010	-9.62097	40.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 21-SEP-2005 16:08
Lab File ID: 2c320.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: SOIL Init. Cal. Times: 11:47 20:02
Lab Sample ID: W2V050920-09 Quant Type: ISTD
Method: /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.53305	1.39267	1.39267	0.010	-9.15685	40.00000	Averaged
87 1,4-Dichlorobenzene	1.50589	1.38233	1.38233	0.010	-8.20498	40.00000	Averaged
89 n-Butylbenzene	2.74187	2.46262	2.46262	0.010	-10.18462	40.00000	Averaged
90 1,2-Dichlorobenzene	1.42493	1.34577	1.34577	0.010	-5.55513	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.14340	0.17661	0.17661	0.010	23.15919	40.00000	Averaged
93 1,2,4-Trichlorobenzene	0.97053	0.95141	0.95141	0.010	-1.96982	40.00000	Averaged
94 Hexachlorobutadiene	0.51129	0.48609	0.48609	0.010	-4.93044	40.00000	Averaged
95 Naphthalene	2.31428	2.43803	2.43803	0.010	5.34713	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.91501	0.91144	0.91144	0.010	-0.38948	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.07894
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092105v2.b/2c320.d
Lab Smp Id: W2V050920-09 Client Smp ID: SECOND_SOURCE_ICV
Inj Date : 21-SEP-2005 16:08
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |W2V050920-09|ICV|1|VOAF|1|
Misc Info : VBLK01LCS 5ML - UVM050916-01E/IVM050915-01
Comment :
Method : /chem/VOA2.i/092105v2.b/VOA2-8260B-092105.m
Meth Date : 22-Sep-2005 11:09 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (100/(100-M))*(Vt/Ws)*(Uf) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
M	0.00000	% moisture
Vt	5.00000	Purge Volume (ml)
Ws	5.00000	weight of sample (g)
Uf	1.00000	Unit correction factor
Va	100.00000	Soil Aliquot Volume (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
M 1 Xylenes (total)	106				2085385	150.000	131
M 2 1,2-Dichloroethylene (total)	96				1697780	100.000	96.1
M 135 1,3-Dichloropropylene	75				1476696	100.000	115
3 Dichlorodifluoromethane	85	4.916	4.916	(0.460)	439547	50.0000	45.1
4 Chloromethane	50	5.291	5.291	(0.495)	774780	50.0000	47.6
5 Vinyl chloride	62	5.513	5.513	(0.516)	462324	50.0000	50.0
6 Bromomethane	94	6.099	6.099	(0.570)	360990	50.0000	47.5
7 Chloroethane	64	6.227	6.227	(0.582)	391283	50.0000	47.4
8 Trichlorofluoromethane	101	6.641	6.641	(0.621)	636742	50.0000	45.4
134 Ethyl Ether	59	6.921	6.921	(0.647)	552122	50.0000	48.8
10 Acetone	43	7.298	7.298	(0.683)	1438848	250.000	315
15 Acetonitrile	41	7.663	7.663	(0.717)	2622849	1250.00	1270
11 1,1-Dichloroethylene	61	7.371	7.371	(0.689)	808195	50.0000	52.0

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	128 Methyl acetate	43	7.699	7.699	(0.720)	2878790	250.000	240
	13 Iodomethane	142	7.620	7.620	(0.713)	3477086	250.000	238
	17 Methylene chloride	84	7.931	7.931	(0.742)	473752	50.0000	51.2
	14 Carbon disulfide	76	7.766	7.766	(0.726)	6323500	250.000	250
	20 tert-Butyl methyl ether	73	8.198	8.198	(0.767)	1359368	50.0000	50.0
	21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	787724	50.0000	48.1
	23 Vinyl acetate	43	8.691	8.691	(0.813)	6977943	250.000	237
	22 1,1-Dichloroethane	63	8.752	8.752	(0.818)	933986	50.0000	48.6
	30 2-Butanone	43	9.336	9.336	(0.873)	2065029	250.000	286
	31 cis-1,2-Dichloroethylene	61	9.409	9.409	(0.880)	910056	50.0000	48.0
	25 2,2-Dichloropropane	77	9.439	9.439	(0.883)	626475	50.0000	48.0
	32 Chloroform	83	9.725	9.725	(0.910)	780618	50.0000	50.9
	29 Bromochloromethane	128	9.695	9.695	(0.907)	219350	50.0000	51.6
$	35 Dibromofluoromethane	113	9.914	9.914	(0.927)	397262	50.0000	44.6
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	623807	50.0000	48.5
	129 Cyclohexane	56	10.121	10.121	(0.947)	1066366	50.0000	46.0
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	571872	50.0000	47.7
	131 n-Butyl alcohol	56	10.778	10.778	(1.008)	2358019	5000.00	5910
	33 Carbon tetrachloride	117	10.224	10.224	(0.956)	551730	50.0000	51.3
	37 1,2-Dichloroethane	62	10.407	10.407	(0.973)	743050	50.0000	51.5
	38 Benzene	78	10.431	10.431	(0.976)	1705612	50.0000	43.1
*	40 Fluorobenzene	96	10.692	10.692	(1.000)	1940361	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	435048	50.0000	46.9
	41 1,2-Dichloropropane	63	11.356	11.356	(1.062)	548091	50.0000	50.3
	130 Methylcyclohexane	83	11.362	11.362	(1.063)	731796	50.0000	43.7
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	616254	50.0000	53.3
	43 Dibromomethane	93	11.495	11.495	(1.075)	284030	50.0000	51.4
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	1214802	250.000	228
	49 4-Methyl-2-pentanone	58	12.165	12.165	(0.869)	1287127	250.000	274
	46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	776601	50.0000	57.3
$	47 Toluene-d8	98	12.408	12.408	(0.887)	1386299	50.0000	42.2
	50 Toluene	92	12.487	12.487	(0.892)	1032233	50.0000	43.5
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	700095	50.0000	57.9
	54 1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	337041	50.0000	51.6
	55 2-Hexanone	43	13.053	13.053	(0.933)	2844232	250.000	279
	52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	655680	50.0000	50.2
	56 Tetrachloroethylene	164	13.108	13.108	(0.937)	320242	50.0000	44.7
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	443851	50.0000	54.9
	59 1,2-Dibromoethane	107	13.527	13.527	(0.967)	403791	50.0000	53.2
*	61 Chlorobenzene-d5	117	13.996	13.996	(1.000)	1321277	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	1112480	50.0000	47.0
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	410450	50.0000	50.9
	58 Ethylbenzene	91	14.093	14.093	(1.007)	1804477	50.0000	42.5
	63 m,p-Xylenes	106	14.203	14.203	(1.015)	1383147	100.000	86.4
	64 o-Xylene	106	14.653	14.653	(1.047)	702238	50.0000	44.7
	65 Styrene	104	14.653	14.653	(1.047)	1179729	50.0000	48.7
	66 Bromoform	173	14.927	14.927	(0.906)	311422	50.0000	62.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
67	Isopropylbenzene	105	15.018	15.018	(0.911)	1605635	50.0000	42.4
73	1,1,2,2-Tetrachloroethane	83	15.304	15.304	(0.929)	531411	50.0000	52.7
$ 71	Bromofluorobenzene	95	15.225	15.225	(0.924)	568737	50.0000	43.6
74	1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	149868	50.0000	56.3
75	Bromobenzene	156	15.444	15.444	(0.937)	478185	50.0000	47.9
76	n-Propylbenzene	91	15.456	15.456	(0.938)	2047217	50.0000	41.1
77	2-Chlorotoluene	91	15.614	15.614	(0.948)	1459730	50.0000	43.8
78	1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1446464	50.0000	44.4
80	4-Chlorotoluene	91	15.717	15.717	(0.954)	1396448	50.0000	45.0
81	tert-Butylbenzene	119	15.991	15.991	(0.970)	1478098	50.0000	45.2
79	1,2,4-Trimethylbenzene	105	16.034	16.034	(0.973)	1559694	50.0000	46.2
83	sec-Butylbenzene	105	16.222	16.222	(0.984)	1982479	50.0000	43.8
84	4-Isopropyltoluene	119	16.344	16.344	(0.992)	1606375	50.0000	45.2
85	1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	904739	50.0000	45.4
* 86	1,4-Dichlorobenzene-d4	152	16.478	16.478	(1.000)	649643	50.0000	
87	1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	898020	50.0000	45.9
89	n-Butylbenzene	91	16.800	16.800	(1.020)	1599822	50.0000	44.9
90	1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	874270	50.0000	47.2
92	1,2-Dibromo-3-chloropropane	75	17.847	17.847	(1.083)	114732	50.0000	61.6
93	1,2,4-Trichlorobenzene	180	18.942	18.942	(1.150)	618078	50.0000	49.0
94	Hexachlorobutadiene	225	19.118	19.118	(1.160)	315782	50.0000	47.5
95	Naphthalene	128	19.337	19.337	(1.174)	1583849	50.0000	52.7
96	1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	592112	50.0000	49.8

Data File: /chem/VOA2.i/092105v2.b/2c320.d

Date : 21-SEP-2005 16:08

Client ID: SECOND_SOURCE_ICV

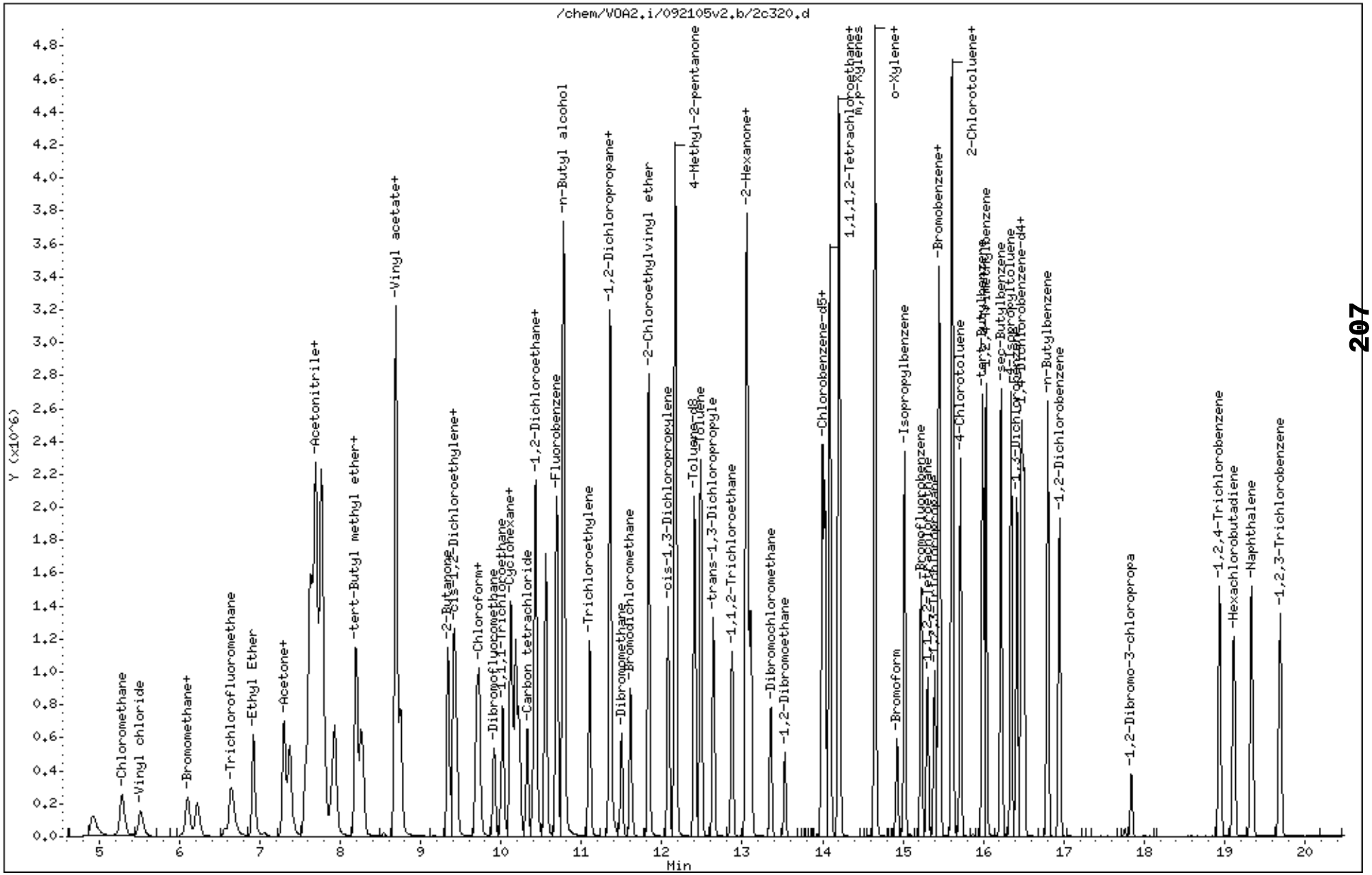
Sample Info: |W2V050920-09|ICV|1|VOAF|1|

Column phase: DB-624

Instrument: VOA2.i

Operator: CDS1

Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 26-SEP-2005 06:58
Lab File ID: 2d103.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050920-01A Quant Type: ISTD
Method: /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.60214	0.52725	0.52725	0.050	-12.43721	40.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.45531	0.42520	0.42520	0.050	-6.61315	40.00000	Averaged	
M 135 1,3-Dichloropropylene	0.32970	0.32144	0.32144	0.050	-2.50621	40.00000	Averaged	
3 Dichlorodifluoromethane	0.25131	0.29743	0.29743	0.050	18.35331	40.00000	Averaged	
4 Chloromethane	0.41952	0.41613	0.41613	0.100	-0.80788	40.00000	Averaged	spcc
5 Vinyl chloride	0.23805	0.25597	0.25597	0.050	7.52729	20.00000	Averaged	ccc
6 Bromomethane	0.19586	0.20236	0.20236	0.050	3.31868	40.00000	Averaged	
7 Chloroethane	0.21245	0.21194	0.21194	0.050	-0.23916	40.00000	Averaged	
8 Trichlorofluoromethane	0.36097	0.39113	0.39113	0.050	8.35463	40.00000	Averaged	
134 Ethyl Ether	0.29125	0.25684	0.25684	0.001	-11.81273	40.00000	Averaged	
10 Acetone	0.11764	0.10719	0.10719	0.050	-8.88997	40.00000	Averaged	
15 Acetonitrile	0.05314	0.05022	0.05022	0.010	-5.48051	40.00000	Averaged	
11 1,1-Dichloroethylene	0.40084	0.39781	0.39781	0.050	-0.75674	20.00000	Averaged	ccc
128 Methyl acetate	0.30842	0.27322	0.27322	0.010	-11.41494	40.00000	Averaged	
13 Iodomethane	0.37632	0.33948	0.33948	0.050	-9.78975	40.00000	Averaged	
17 Methylene chloride	42.38852	50.00000	0.20864	0.050	-15.22295	40.00000	Linear	
14 Carbon disulfide	0.65303	0.72724	0.72724	0.050	11.36441	40.00000	Averaged	
20 tert-Butyl methyl ether	0.70097	0.65248	0.65248	0.050	-6.91840	40.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.42205	0.39852	0.39852	0.050	-5.57527	40.00000	Averaged	
23 Vinyl acetate	0.75989	0.72340	0.72340	0.010	-4.80164	40.00000	Averaged	
22 1,1-Dichloroethane	0.49540	0.46249	0.46249	0.100	-6.64489	40.00000	Averaged	spcc
30 2-Butanone	0.18621	0.17661	0.17661	0.030	-5.15834	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.48858	0.45189	0.45189	0.050	-7.50971	40.00000	Averaged	
25 2,2-Dichloropropane	0.33619	0.32468	0.32468	0.050	-3.42365	40.00000	Averaged	
32 Chloroform	0.39511	0.36633	0.36633	0.010	-7.28318	20.00000	Averaged	ccc
29 Bromochloromethane	0.10961	0.10264	0.10264	0.010	-6.35800	40.00000	Averaged	
$ 35 Dibromofluoromethane	0.22969	0.25965	0.25965	0.010	13.04454	40.00000	Averaged	
36 1,1,1-Trichloroethane	0.33112	0.31971	0.31971	0.010	-3.44652	40.00000	Averaged	
129 Cyclohexane	0.59756	0.54844	0.54844	0.010	-8.21974	40.00000	Averaged	
34 1,1-Dichloropropene	0.30888	0.29113	0.29113	0.010	-5.74645	40.00000	Averaged	
131 n-Butyl alcohol	0.01028	0.00558	0.00558	0.001	-45.71690	40.00000	Averaged	<-
33 Carbon tetrachloride	0.27704	0.27548	0.27548	0.010	-0.56255	40.00000	Averaged	
37 1,2-Dichloroethane	0.37159	0.33801	0.33801	0.010	-9.03769	40.00000	Averaged	
38 Benzene	1.01982	0.89093	0.89093	0.010	-12.63891	40.00000	Averaged	
39 Trichloroethylene	0.23887	0.22164	0.22164	0.010	-7.21203	40.00000	Averaged	
41 1,2-Dichloropropane	0.28069	0.25715	0.25715	0.010	-8.38688	20.00000	Averaged	ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 26-SEP-2005 06:58
Lab File ID: 2d103.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050920-01A Quant Type: ISTD
Method: /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.43142	0.39668	0.39668	0.010	-8.05214	40.00000	Averaged
45 Bromodichloromethane	0.29813	0.29177	0.29177	0.010	-2.13417	40.00000	Averaged
43 Dibromomethane	0.14224	0.13247	0.13247	0.010	-6.86590	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.13726	0.11627	0.11627	0.010	-15.29289	40.00000	Averaged
49 4-Methyl-2-pentanone	0.17770	0.16962	0.16962	0.010	-4.54827	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.34904	0.33926	0.33926	0.010	-2.80130	40.00000	Averaged
$ 47 Toluene-d8	1.24300	1.33865	1.33865	0.010	7.69567	40.00000	Averaged
50 Toluene	0.89760	0.77413	0.77413	0.010	-13.75497	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.45744	0.43881	0.43881	0.010	-4.07429	40.00000	Averaged
54 1,1,2-Trichloroethane	0.24695	0.22826	0.22826	0.010	-7.56956	40.00000	Averaged
55 2-Hexanone	0.38597	0.37063	0.37063	0.010	-3.97351	40.00000	Averaged
52 1,3-Dichloropropane	0.49457	0.43458	0.43458	0.010	-12.13046	40.00000	Averaged
56 Tetrachloroethylene	0.27084	0.23627	0.23627	0.010	-12.76597	40.00000	Averaged
57 Dibromochloromethane	0.30587	0.30304	0.30304	0.010	-0.92770	40.00000	Averaged
59 1,2-Dibromoethane	0.28733	0.27335	0.27335	0.010	-4.86776	40.00000	Averaged
62 Chlorobenzene	0.89632	0.80902	0.80902	0.300	-9.73937	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.30524	0.28914	0.28914	0.010	-5.27493	40.00000	Averaged
58 Ethylbenzene	1.60596	1.42090	1.42090	0.010	-11.52327	20.00000	Averaged ccc
63 m,p-Xylenes	0.60583	0.52552	0.52552	0.010	-13.25545	40.00000	Averaged
64 o-Xylene	0.59477	0.53072	0.53072	0.010	-10.77030	40.00000	Averaged
65 Styrene	0.91623	0.86490	0.86490	0.010	-5.60252	40.00000	Averaged
66 Bromoform	0.38558	0.43916	0.43916	0.100	13.89678	40.00000	Averaged spcc
67 Isopropylbenzene	2.91079	2.65648	2.65648	0.010	-8.73685	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.77557	0.76823	0.76823	0.300	-0.94577	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	1.00432	1.07112	1.07112	0.010	6.65180	40.00000	Averaged
74 1,2,3-Trichloropropane	0.20489	0.20381	0.20381	0.010	-0.52522	40.00000	Averaged
75 Bromobenzene	0.76887	0.69431	0.69431	0.010	-9.69663	40.00000	Averaged
76 n-Propylbenzene	3.83590	3.41706	3.41706	0.010	-10.91908	40.00000	Averaged
77 2-Chlorotoluene	2.56696	2.23645	2.23645	0.010	-12.87567	40.00000	Averaged
78 1,3,5-Trimethylbenzene	2.50494	2.23539	2.23539	0.010	-10.76061	40.00000	Averaged
80 4-Chlorotoluene	2.38658	2.13913	2.13913	0.010	-10.36857	40.00000	Averaged
81 tert-Butylbenzene	2.51450	2.25944	2.25944	0.010	-10.14364	40.00000	Averaged
79 1,2,4-Trimethylbenzene	2.60093	2.36204	2.36204	0.010	-9.18470	40.00000	Averaged
83 sec-Butylbenzene	3.48401	3.17355	3.17355	0.010	-8.91090	40.00000	Averaged
84 4-Isopropyltoluene	2.73593	2.49114	2.49114	0.010	-8.94705	40.00000	Averaged

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 26-SEP-2005 06:58
Lab File ID: 2d103.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050920-01A Quant Type: ISTD
Method: /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.53305	1.37117	1.37117	0.010	-10.55940	40.00000	Averaged
87 1,4-Dichlorobenzene	1.50589	1.34539	1.34539	0.010	-10.65786	40.00000	Averaged
89 n-Butylbenzene	2.74187	2.56270	2.56270	0.010	-6.53433	40.00000	Averaged
90 1,2-Dichlorobenzene	1.42493	1.28306	1.28306	0.010	-9.95621	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.14340	0.15657	0.15657	0.010	9.18865	40.00000	Averaged
93 1,2,4-Trichlorobenzene	0.97053	0.92489	0.92489	0.010	-4.70225	40.00000	Averaged
94 Hexachlorobutadiene	0.51129	0.48669	0.48669	0.010	-4.81209	40.00000	Averaged
95 Naphthalene	2.31428	2.25087	2.25087	0.010	-2.74011	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.91501	0.87314	0.87314	0.010	-4.57537	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.15606
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d103.d
Lab Smp Id: UVM050920-01A Client Smp ID: VSTD050
Inj Date : 26-SEP-2005 06:58
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050920-01A|LCSD|1|VOAF|1|
Misc Info : VBLK01LCS VSTD050
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:40 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

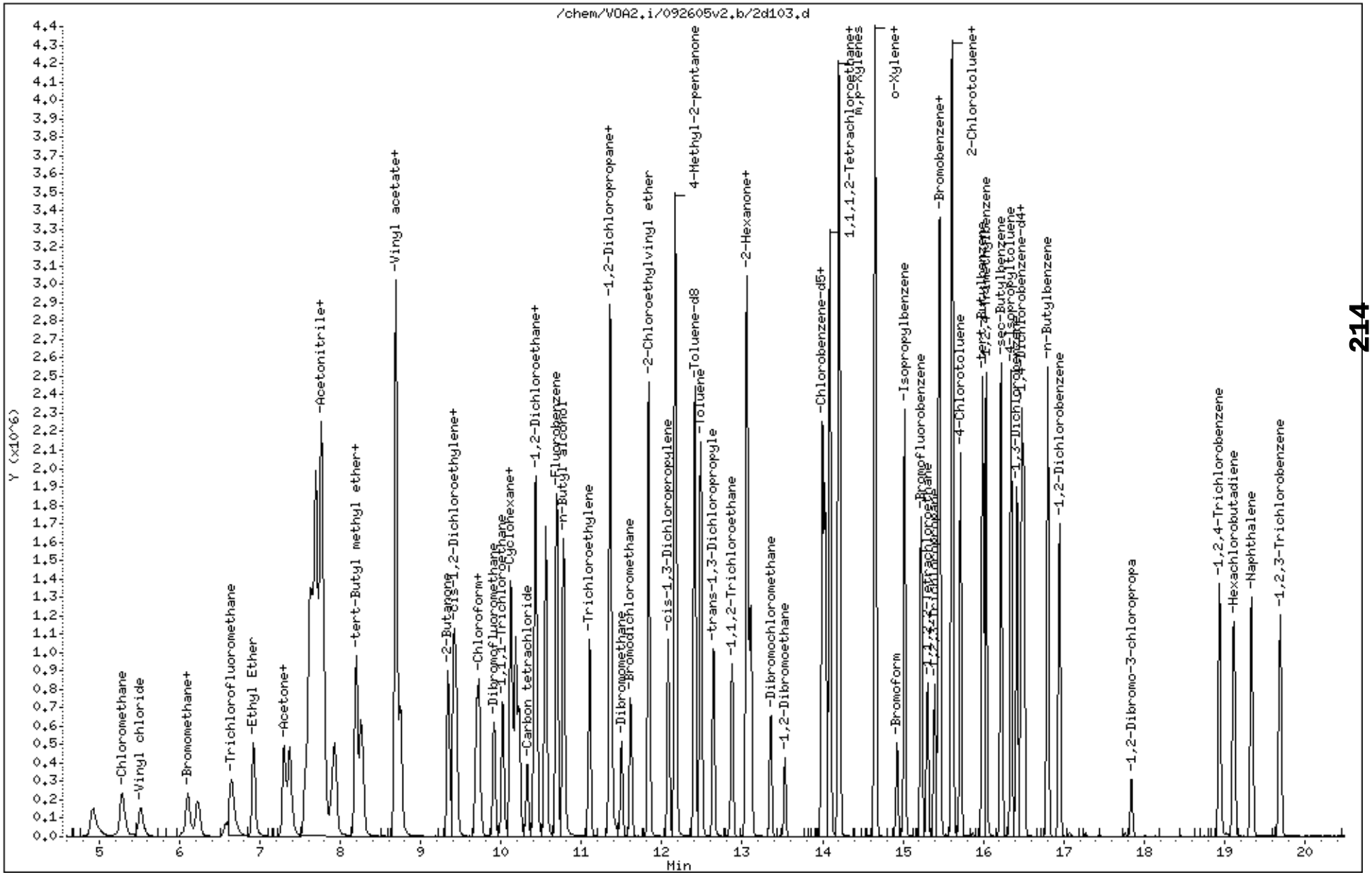
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1959662	150.000	131
M 2 1,2-Dichloroethylene (total)	96				1522673	100.000	93.4
M 135 1,3-Dichloropropylene	75				1151094	100.000	97.5
3 Dichlorodifluoromethane	85	4.921	4.921	(0.460)	532559	50.0000	59.2
4 Chloromethane	50	5.284	5.284	(0.494)	745084	50.0000	49.6
5 Vinyl chloride	62	5.512	5.512	(0.515)	458312	50.0000	53.8
6 Bromomethane	94	6.099	6.099	(0.570)	362327	50.0000	51.6
7 Chloroethane	64	6.227	6.227	(0.582)	379491	50.0000	49.9
8 Trichlorofluoromethane	101	6.647	6.647	(0.622)	700323	50.0000	54.2
134 Ethyl Ether	59	6.920	6.920	(0.647)	459885	50.0000	44.1
10 Acetone	43	7.298	7.298	(0.682)	959593	250.000	228
15 Acetonitrile	41	7.663	7.663	(0.717)	2248149	1250.00	1180
11 1,1-Dichloroethylene	61	7.371	7.371	(0.689)	712285	50.0000	49.6
128 Methyl acetate	43	7.693	7.693	(0.719)	2445993	250.000	221
13 Iodomethane	142	7.620	7.620	(0.713)	3039261	250.000	226

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	17 Methylene chloride	84	7.924	7.924	(0.741)	373566	50.0000	42.4
	14 Carbon disulfide	76	7.760	7.760	(0.726)	6510713	250.000	278
	20 tert-Butyl methyl ether	73	8.198	8.198	(0.767)	1168274	50.0000	46.5
	21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	713558	50.0000	47.2
	23 Vinyl acetate	43	8.691	8.691	(0.813)	6476339	250.000	238
	22 1,1-Dichloroethane	63	8.751	8.751	(0.818)	828092	50.0000	46.7
	30 2-Butanone	43	9.342	9.342	(0.874)	1581111	250.000	237
	31 cis-1,2-Dichloroethylene	61	9.408	9.408	(0.880)	809115	50.0000	46.2
	25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	581355	50.0000	48.3
	32 Chloroform	83	9.725	9.725	(0.910)	655922	50.0000	46.4
	29 Bromochloromethane	128	9.694	9.694	(0.907)	183780	50.0000	46.8
$	35 Dibromofluoromethane	113	9.907	9.907	(0.927)	464906	50.0000	56.5
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	572441	50.0000	48.3
	129 Cyclohexane	56	10.120	10.120	(0.946)	981991	50.0000	45.9
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	521274	50.0000	47.1
	131 n-Butyl alcohol	56	10.777	10.777	(1.008)	999010	5000.00	2710
	33 Carbon tetrachloride	117	10.224	10.224	(0.956)	493256	50.0000	49.7
	37 1,2-Dichloroethane	62	10.406	10.406	(0.973)	605210	50.0000	45.5
	38 Benzene	78	10.431	10.431	(0.976)	1595229	50.0000	43.7
*	40 Fluorobenzene	96	10.692	10.692	(1.000)	1790524	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	396855	50.0000	46.4
	41 1,2-Dichloropropane	63	11.349	11.349	(1.061)	460426	50.0000	45.8
	130 Methylcyclohexane	83	11.361	11.361	(1.063)	710263	50.0000	46.0
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	522422	50.0000	48.9
	43 Dibromomethane	93	11.495	11.495	(1.075)	237195	50.0000	46.6
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	1040882	250.000	212
	49 4-Methyl-2-pentanone	58	12.170	12.170	(0.870)	1050730	250.000	239
	46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	607453	50.0000	48.6
$	47 Toluene-d8	98	12.408	12.408	(0.887)	1658471	50.0000	53.8
	50 Toluene	92	12.481	12.481	(0.892)	959082	50.0000	43.1
	53 trans-1,3-Dichloropropylene	75	12.639	12.639	(0.903)	543641	50.0000	48.0
	54 1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	282791	50.0000	46.2
	55 2-Hexanone	43	13.052	13.052	(0.933)	2295902	250.000	240
	52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	538404	50.0000	43.9
	56 Tetrachloroethylene	164	13.107	13.107	(0.937)	292715	50.0000	43.6
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	375434	50.0000	49.5
	59 1,2-Dibromoethane	107	13.533	13.533	(0.967)	338652	50.0000	47.6
*	61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1238911	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	1002309	50.0000	45.1
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	358222	50.0000	47.4
	58 Ethylbenzene	91	14.093	14.093	(1.007)	1760368	50.0000	44.2
	63 m,p-Xylenes	106	14.202	14.202	(1.015)	1302153	100.000	86.7
	64 o-Xylene	106	14.652	14.652	(1.047)	657509	50.0000	44.6
	65 Styrene	104	14.659	14.659	(1.047)	1071537	50.0000	47.2
	66 Bromoform	173	14.926	14.926	(0.906)	265373	50.0000	56.9
	67 Isopropylbenzene	105	15.017	15.017	(0.911)	1605229	50.0000	45.6
	73 1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	464219	50.0000	49.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.224	15.224	(0.924)	647245	50.0000	53.3
	74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	123157	50.0000	49.7
	75 Bromobenzene	156	15.443	15.443	(0.937)	419553	50.0000	45.2
	76 n-Propylbenzene	91	15.455	15.455	(0.938)	2064823	50.0000	44.5
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1351418	50.0000	43.6
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1350778	50.0000	44.6
	80 4-Chlorotoluene	91	15.717	15.717	(0.954)	1292609	50.0000	44.8
	81 tert-Butylbenzene	119	15.991	15.991	(0.970)	1365310	50.0000	44.9
	79 1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	1427310	50.0000	45.4
	83 sec-Butylbenzene	105	16.222	16.222	(0.984)	1917680	50.0000	45.5
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	1505320	50.0000	45.5
	85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	828555	50.0000	44.7
*	86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	604269	50.0000	
	87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	812978	50.0000	44.7
	89 n-Butylbenzene	91	16.800	16.800	(1.020)	1548562	50.0000	46.7
	90 1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	775312	50.0000	45.0
	92 1,2-Dibromo-3-chloropropane	75	17.840	17.840	(1.083)	94613	50.0000	54.6
	93 1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	558884	50.0000	47.6
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	294092	50.0000	47.6
	95 Naphthalene	128	19.337	19.337	(1.174)	1360130	50.0000	48.6
	96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	527612	50.0000	47.7

Data File: /chem/VOA2.i/092605v2.b/2d103.d
Date : 26-SEP-2005 06:58
Client ID: VSTD050
Sample Info: IUVM050920-01A|LCSD|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 26-SEP-2005 07:36
Lab File ID: 2d104.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050829-10A Quant Type: ISTD
Method: /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
9 Acrolein	0.06090	0.08454	0.08454	0.001	38.82637	40.00000	Averaged
12 Trichlorotrifluoroethane	0.09336	0.10270	0.10270	0.050	10.00379	40.00000	Averaged
16 Allyl chloride	0.13403	0.13729	0.13729	0.010	2.42954	40.00000	Averaged
18 Acrylonitrile	0.12359	0.15081	0.15081	0.010	22.03009	40.00000	Averaged
24 2-Chloro-1,3-butadiene	0.49284	0.56883	0.56883	0.010	15.41919	40.00000	Averaged
28 Propionitrile	0.04549	0.05749	0.05749	0.010	26.35978	40.00000	Averaged
26 Ethyl acetate	0.35959	0.41034	0.41034	0.010	14.11232	40.00000	Averaged
27 Methacrylonitrile	0.22388	0.25529	0.25529	0.010	14.02948	40.00000	Averaged
19 Isobutyl alcohol	0.01412	0.01716	0.01716	0.005	21.54580	40.00000	Averaged
72 Tetrahydrofuran	308	250	0.41524	0.010	23.18796	40.00000	Linear
42 Methyl methacrylate	0.15275	0.17627	0.17627	0.010	15.39907	40.00000	Averaged
51 Ethyl methacrylate	0.41359	0.41917	0.41917	0.010	1.35044	40.00000	Averaged
97 1,4-Dioxane	0.00233	0.00274	0.00274	0.001	17.49473	40.00000	Averaged
48 2-Nitropropane	0.09377	0.12267	0.12267	0.010	30.81764	40.00000	Averaged
70 Cyclohexanone	0.02651	0.03709	0.03709	0.010	39.90084	40.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.36108	0.42814	0.42814	0.010	18.57319	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.35053	0.40155	0.40155	0.010	14.55458	40.00000	Averaged
82 Pentachloroethane	0.40275	0.41041	0.41041	0.010	1.90266	40.00000	Averaged
88 Benzyl chloride	1.30315	1.48296	1.48296	0.010	13.79845	40.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.62577	0.68509	0.68509	0.010	9.47845	40.00000	Averaged
$ 35 Dibromofluoromethane	0.22969	0.25627	0.25627	0.010	11.57215	40.00000	Averaged
$ 47 Toluene-d8	1.24300	1.32474	1.32474	0.010	6.57615	40.00000	Averaged
$ 71 Bromofluorobenzene	1.00432	1.06247	1.06247	0.010	5.79082	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 16.31102
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d104.d
Lab Smp Id: UVM050829-10A Client Smp ID: VSTD250S
Inj Date : 26-SEP-2005 07:36
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050829-10A|SHORT|1|VOAF|1|
Misc Info : VBLK01SLCS VSTD250S
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

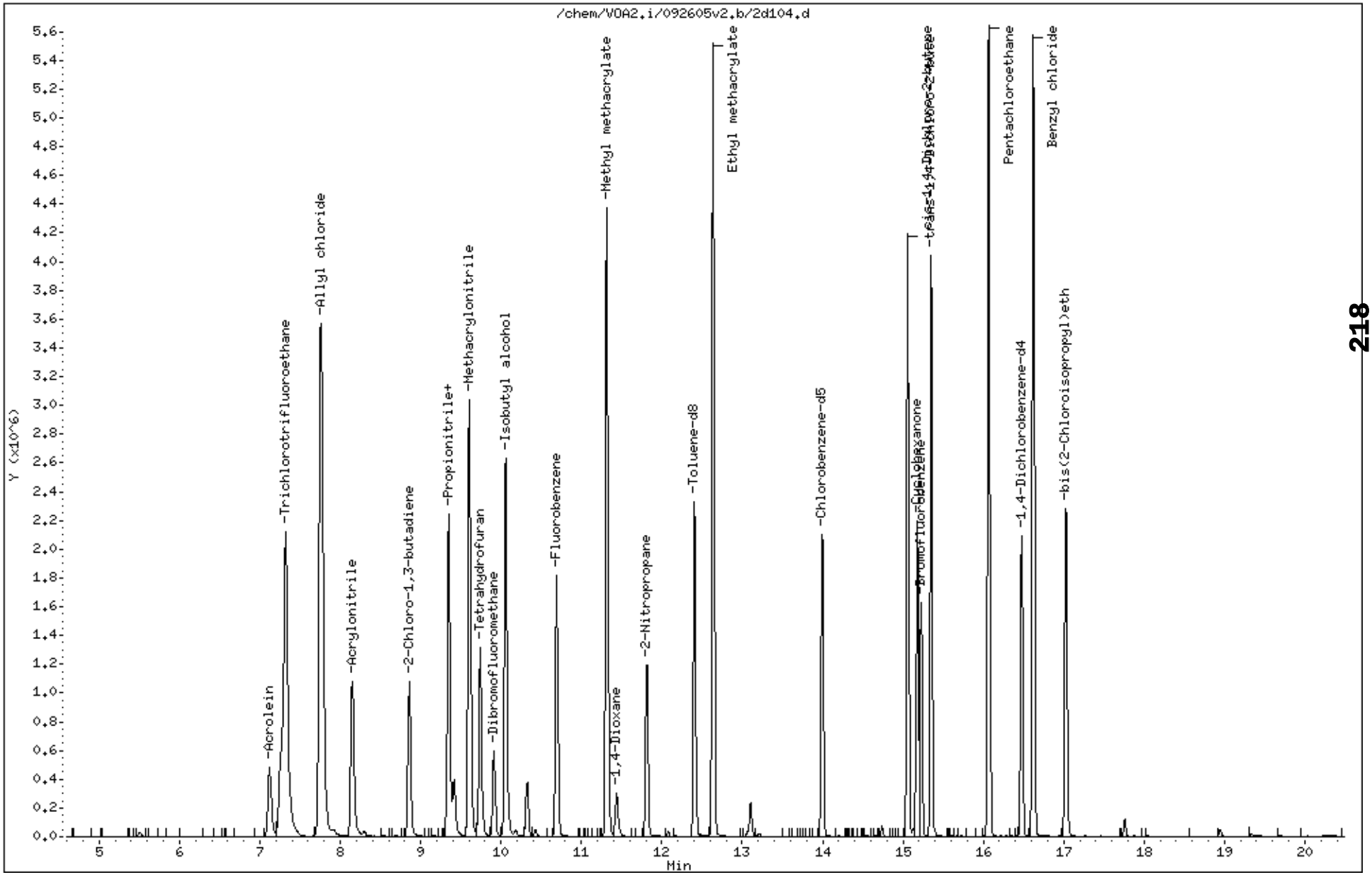
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.120	7.120	(0.666)	726616	250.000	347
12	Trichlorotrifluoroethane	85	7.321	7.321	(0.685)	882690	250.000	275
16	Allyl chloride	76	7.759	7.759	(0.726)	1179990	250.000	256
18	Acrylonitrile	53	8.149	8.149	(0.762)	1296254	250.000	305
24	2-Chloro-1,3-butadiene	53	8.860	8.860	(0.829)	977821	50.0000	57.7
28	Propionitrile	54	9.420	9.420	(0.881)	494104	250.000	316
26	Ethyl acetate	43	9.347	9.347	(0.874)	3526891	250.000	285
27	Methacrylonitrile	41	9.609	9.609	(0.899)	2194211	250.000	285
19	Isobutyl alcohol	41	10.059	10.059	(0.941)	1474596	2500.00	3040
72	Tetrahydrofuran	42	9.742	9.742	(0.591)	1197313	250.000	308
42	Methyl methacrylate	69	11.312	11.312	(1.058)	1515030	250.000	288
* 40	Fluorobenzene	96	10.691	10.691	(1.000)	1719002	50.0000	
51	Ethyl methacrylate	69	12.638	12.638	(0.903)	2514217	250.000	253
97	1,4-Dioxane	88	11.440	11.440	(1.070)	235377	2500.00	2940
48	2-Nitropropane	43	11.811	11.811	(1.105)	1054333	250.000	327

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1199606	50.0000	
	70 Cyclohexanone	55	15.181	15.181	(1.085)	1112310	1250.00	1750
	68 cis-1,4-Dichloro-2-butene	53	15.059	15.059	(0.914)	1234528	250.000	296
	69 trans-1,4-Dichloro-2-butene	53	15.351	15.351	(0.932)	1157852	250.000	286
	82 Pentachloroethane	167	16.069	16.069	(0.975)	1183412	250.000	255
*	86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	576691	50.0000	
	88 Benzyl chloride	91	16.623	16.623	(1.009)	4276061	250.000	284
	91 bis(2-Chloroisopropyl)ether	45	17.024	17.024	(1.033)	1975415	250.000	274
$	35 Dibromofluoromethane	113	9.913	9.913	(0.927)	440522	50.0000	55.8
$	47 Toluene-d8	98	12.407	12.407	(0.887)	1589162	50.0000	53.3
$	71 Bromofluorobenzene	95	15.224	15.224	(0.924)	612719	50.0000	52.9

Data File: /chem/VOA2.i/092605v2.b/2d104.d
Date : 26-SEP-2005 07:36
Client ID: VSTD250S
Instrument: VOA2.i
Sample Info: |UVM050829-10A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Operator: CDS1
Column phase: DB-624
Column diameter: 0.25



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 27-SEP-2005 07:03
Lab File ID: 2d203.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050920-01A Quant Type: ISTD
Method: /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.60214	0.48601	0.48601	0.050	-19.28634	40.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.45531	0.39293	0.39293	0.050	-13.70080	40.00000	Averaged
M 135 1,3-Dichloropropylene	0.32970	0.29431	0.29431	0.050	-10.73427	40.00000	Averaged
3 Dichlorodifluoromethane	0.25131	0.21402	0.21402	0.050	-14.83876	40.00000	Averaged
4 Chloromethane	0.41952	0.35620	0.35620	0.100	-15.09233	40.00000	Averaged|spcc
5 Vinyl chloride	0.23805	0.21854	0.21854	0.050	-8.19565	20.00000	Averaged|ccc
6 Bromomethane	0.19586	0.17644	0.17644	0.050	-9.91446	40.00000	Averaged
7 Chloroethane	0.21245	0.19596	0.19596	0.050	-7.76144	40.00000	Averaged
8 Trichlorofluoromethane	0.36097	0.34233	0.34233	0.050	-5.16454	40.00000	Averaged
134 Ethyl Ether	0.29125	0.23544	0.23544	0.001	-19.16204	40.00000	Averaged
10 Acetone	0.11764	0.09686	0.09686	0.050	-17.67104	40.00000	Averaged
15 Acetonitrile	0.05314	0.04557	0.04557	0.010	-14.24431	40.00000	Averaged
11 1,1-Dichloroethylene	0.40084	0.36172	0.36172	0.050	-9.75911	20.00000	Averaged|ccc
128 Methyl acetate	0.30842	0.25223	0.25223	0.010	-18.22057	40.00000	Averaged
13 Iodomethane	0.37632	0.30510	0.30510	0.050	-18.92509	40.00000	Averaged
17 Methylene chloride	36.83237	50.00000	0.18628	0.050	-26.33527	40.00000	Linear
14 Carbon disulfide	0.65303	0.62844	0.62844	0.050	-3.76559	40.00000	Averaged
20 tert-Butyl methyl ether	0.70097	0.57968	0.57968	0.050	-17.30311	40.00000	Averaged
21 trans-1,2-Dichloroethylene	0.42205	0.36428	0.36428	0.050	-13.68883	40.00000	Averaged
23 Vinyl acetate	0.75989	0.65844	0.65844	0.010	-13.34988	40.00000	Averaged
22 1,1-Dichloroethane	0.49540	0.42397	0.42397	0.100	-14.41910	40.00000	Averaged|spcc
30 2-Butanone	0.18621	0.15980	0.15980	0.030	-14.18289	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.48858	0.42159	0.42159	0.050	-13.71114	40.00000	Averaged
25 2,2-Dichloropropane	0.33619	0.29587	0.29587	0.050	-11.99379	40.00000	Averaged
32 Chloroform	0.39511	0.33321	0.33321	0.010	-15.66575	20.00000	Averaged|ccc
29 Bromochloromethane	0.10961	0.09382	0.09382	0.010	-14.40642	40.00000	Averaged
$ 35 Dibromofluoromethane	0.22969	0.26568	0.26568	0.010	15.67169	40.00000	Averaged
36 1,1,1-Trichloroethane	0.33112	0.28854	0.28854	0.010	-12.85871	40.00000	Averaged
129 Cyclohexane	0.59756	0.50849	0.50849	0.010	-14.90573	40.00000	Averaged
34 1,1-Dichloropropene	0.30888	0.26550	0.26550	0.010	-14.04480	40.00000	Averaged
131 n-Butyl alcohol	0.01028	0.00996	0.00996	0.001	-3.08142	40.00000	Averaged
33 Carbon tetrachloride	0.27704	0.24950	0.24950	0.010	-9.94233	40.00000	Averaged
37 1,2-Dichloroethane	0.37159	0.31703	0.31703	0.010	-14.68345	40.00000	Averaged
38 Benzene	1.01982	0.80478	0.80478	0.010	-21.08663	40.00000	Averaged
39 Trichloroethylene	0.23887	0.20056	0.20056	0.010	-16.03959	40.00000	Averaged
41 1,2-Dichloropropane	0.28069	0.23950	0.23950	0.010	-14.67432	20.00000	Averaged|ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 27-SEP-2005 07:03
Lab File ID: 2d203.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050920-01A Quant Type: ISTD
Method: /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.43142	0.36144	0.36144	0.010	-16.22140	40.00000	Averaged
45 Bromodichloromethane	0.29813	0.26687	0.26687	0.010	-10.48752	40.00000	Averaged
43 Dibromomethane	0.14224	0.12125	0.12125	0.010	-14.75693	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.13726	0.11173	0.11173	0.010	-18.59459	40.00000	Averaged
49 4-Methyl-2-pentanone	0.17770	0.15393	0.15393	0.010	-13.37710	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.34904	0.30954	0.30954	0.010	-11.31637	40.00000	Averaged
$ 47 Toluene-d8	1.24300	1.37428	1.37428	0.010	10.56166	40.00000	Averaged
50 Toluene	0.89760	0.72378	0.72378	0.010	-19.36513	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.45744	0.40585	0.40585	0.010	-11.27868	40.00000	Averaged
54 1,1,2-Trichloroethane	0.24695	0.20766	0.20766	0.010	-15.90839	40.00000	Averaged
55 2-Hexanone	0.38597	0.33803	0.33803	0.010	-12.42154	40.00000	Averaged
52 1,3-Dichloropropane	0.49457	0.40376	0.40376	0.010	-18.36085	40.00000	Averaged
56 Tetrachloroethylene	0.27084	0.21974	0.21974	0.010	-18.86984	40.00000	Averaged
57 Dibromochloromethane	0.30587	0.27815	0.27815	0.010	-9.06313	40.00000	Averaged
59 1,2-Dibromoethane	0.28733	0.24511	0.24511	0.010	-14.69399	40.00000	Averaged
62 Chlorobenzene	0.89632	0.75086	0.75086	0.300	-16.22833	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.30524	0.26823	0.26823	0.010	-12.12563	40.00000	Averaged
58 Ethylbenzene	1.60596	1.32065	1.32065	0.010	-17.76536	20.00000	Averaged ccc
63 m,p-Xylenes	0.60583	0.48738	0.48738	0.010	-19.55109	40.00000	Averaged
64 o-Xylene	0.59477	0.48327	0.48327	0.010	-18.74702	40.00000	Averaged
65 Styrene	0.91623	0.79925	0.79925	0.010	-12.76803	40.00000	Averaged
66 Bromoform	0.38558	0.39775	0.39775	0.100	3.15678	40.00000	Averaged spcc
67 Isopropylbenzene	2.91079	2.49243	2.49243	0.010	-14.37294	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.77557	0.70275	0.70275	0.300	-9.38937	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	1.00432	1.12051	1.12051	0.010	11.56938	40.00000	Averaged
74 1,2,3-Trichloropropane	0.20489	0.18560	0.18560	0.010	-9.41271	40.00000	Averaged
75 Bromobenzene	0.76887	0.64822	0.64822	0.010	-15.69139	40.00000	Averaged
76 n-Propylbenzene	3.83590	3.24480	3.24480	0.010	-15.40970	40.00000	Averaged
77 2-Chlorotoluene	2.56696	2.12859	2.12859	0.010	-17.07738	40.00000	Averaged
78 1,3,5-Trimethylbenzene	2.50494	2.14579	2.14579	0.010	-14.33766	40.00000	Averaged
80 4-Chlorotoluene	2.38658	2.02783	2.02783	0.010	-15.03196	40.00000	Averaged
81 tert-Butylbenzene	2.51450	2.13095	2.13095	0.010	-15.25349	40.00000	Averaged
79 1,2,4-Trimethylbenzene	2.60093	2.21772	2.21772	0.010	-14.73359	40.00000	Averaged
83 sec-Butylbenzene	3.48401	2.95602	2.95602	0.010	-15.15479	40.00000	Averaged
84 4-Isopropyltoluene	2.73593	2.35701	2.35701	0.010	-13.84975	40.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 27-SEP-2005 07:03
Lab File ID: 2d203.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050920-01A Quant Type: ISTD
Method: /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.53305	1.26736	1.26736	0.010	-17.33088	40.00000	Averaged
87 1,4-Dichlorobenzene	1.50589	1.24362	1.24362	0.010	-17.41630	40.00000	Averaged
89 n-Butylbenzene	2.74187	2.40129	2.40129	0.010	-12.42114	40.00000	Averaged
90 1,2-Dichlorobenzene	1.42493	1.20659	1.20659	0.010	-15.32257	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.14340	0.14124	0.14124	0.010	-1.50615	40.00000	Averaged
93 1,2,4-Trichlorobenzene	0.97053	0.85146	0.85146	0.010	-12.26841	40.00000	Averaged
94 Hexachlorobutadiene	0.51129	0.45670	0.45670	0.010	-10.67749	40.00000	Averaged
95 Naphthalene	2.31428	2.01301	2.01301	0.010	-13.01805	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.91501	0.79477	0.79477	0.010	-13.14013	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 13.85607
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d203.d
Lab Smp Id: UVM050920-01A Client Smp ID: VSTD050
Inj Date : 27-SEP-2005 07:03
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050920-01A|LCSD|1|VOAF|1|
Misc Info : VBLK01LCS VSTD050
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

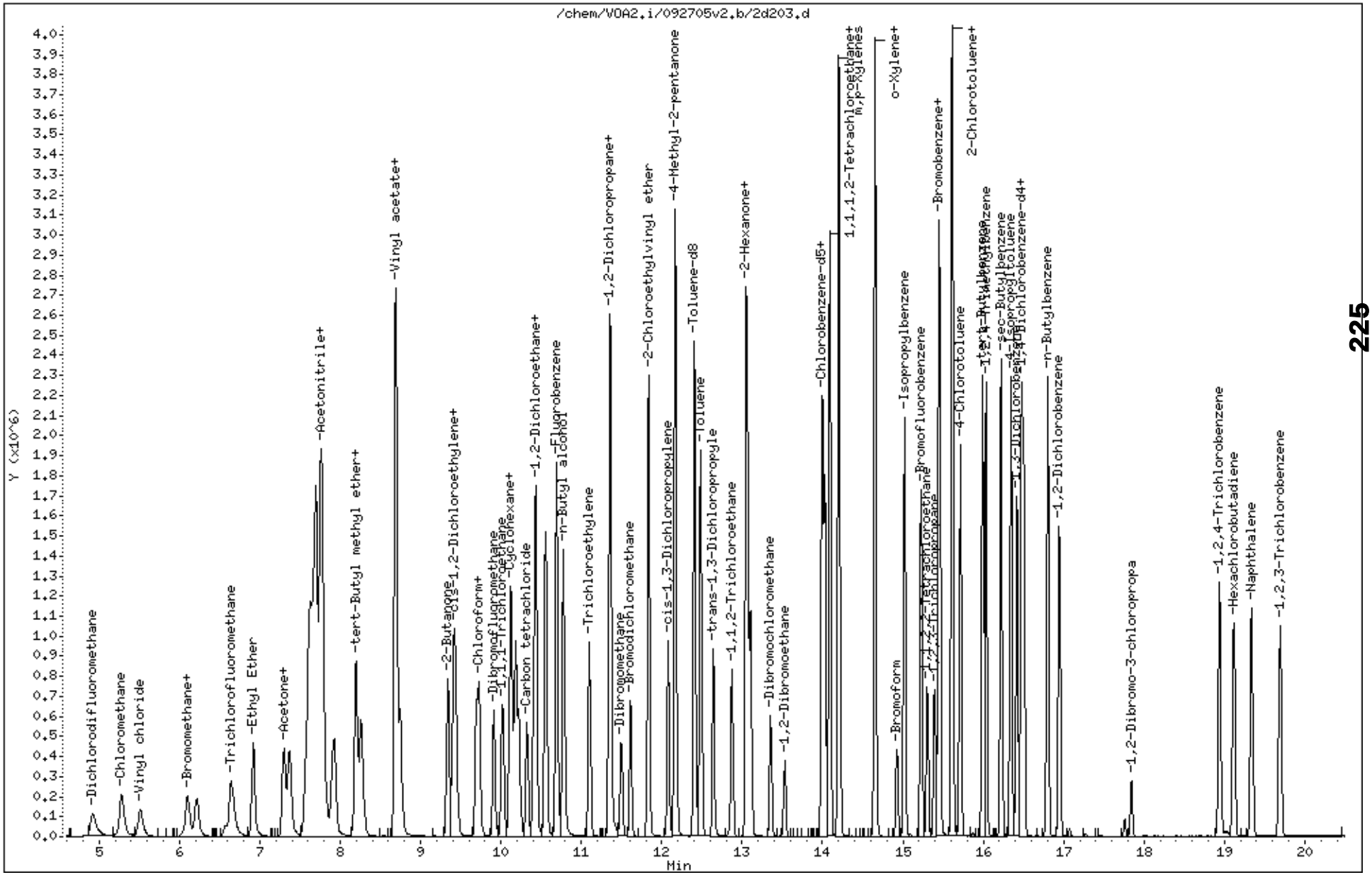
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1763736	150.000	121
M 2 1,2-Dichloroethylene (total)	96				1382421	100.000	86.3
M 135 1,3-Dichloropropylene	75				1035455	100.000	89.3
3 Dichlorodifluoromethane	85	4.924	4.924	(0.461)	376480	50.0000	42.6
4 Chloromethane	50	5.281	5.281	(0.494)	626596	50.0000	42.4
5 Vinyl chloride	62	5.509	5.509	(0.515)	384431	50.0000	45.9
6 Bromomethane	94	6.099	6.099	(0.570)	310377	50.0000	45.0
7 Chloroethane	64	6.215	6.215	(0.581)	344720	50.0000	46.1
8 Trichlorofluoromethane	101	6.640	6.640	(0.621)	602191	50.0000	47.4
134 Ethyl Ether	59	6.920	6.920	(0.647)	414163	50.0000	40.4
10 Acetone	43	7.297	7.297	(0.682)	851895	250.000	206
15 Acetonitrile	41	7.656	7.656	(0.716)	2003915	1250.00	1070
11 1,1-Dichloroethylene	61	7.370	7.370	(0.689)	636310	50.0000	45.1
128 Methyl acetate	43	7.693	7.693	(0.719)	2218459	250.000	204
13 Iodomethane	142	7.620	7.620	(0.713)	2683559	250.000	203

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
	17 Methylene chloride	84	7.924	7.924	(0.741)	327683	50.0000	36.8
	14 Carbon disulfide	76	7.766	7.766	(0.726)	5527454	250.000	240
	20 tert-Butyl methyl ether	73	8.198	8.198	(0.767)	1019724	50.0000	41.3
	21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	640801	50.0000	43.2
	23 Vinyl acetate	43	8.691	8.691	(0.813)	5791378	250.000	217
	22 1,1-Dichloroethane	63	8.751	8.751	(0.818)	745813	50.0000	42.8
	30 2-Butanone	43	9.341	9.341	(0.874)	1405561	250.000	214
	31 cis-1,2-Dichloroethylene	61	9.408	9.408	(0.880)	741620	50.0000	43.1
	25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	520471	50.0000	44.0
	32 Chloroform	83	9.725	9.725	(0.910)	586152	50.0000	42.2
	29 Bromochloromethane	128	9.694	9.694	(0.907)	165037	50.0000	42.8
$	35 Dibromofluoromethane	113	9.913	9.913	(0.927)	467364	50.0000	57.8
	36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	507574	50.0000	43.6
	129 Cyclohexane	56	10.120	10.120	(0.946)	894481	50.0000	42.5
	34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	467039	50.0000	43.0
	131 n-Butyl alcohol	56	10.777	10.777	(1.008)	876183	2500.00	2420
	33 Carbon tetrachloride	117	10.224	10.224	(0.956)	438890	50.0000	45.0
	37 1,2-Dichloroethane	62	10.406	10.406	(0.973)	557687	50.0000	42.6
	38 Benzene	78	10.436	10.436	(0.976)	1415690	50.0000	39.4
*	40 Fluorobenzene	96	10.692	10.692	(1.000)	1759109	50.0000	
	39 Trichloroethylene	95	11.100	11.100	(1.038)	352799	50.0000	42.0
	41 1,2-Dichloropropane	63	11.355	11.355	(1.062)	421303	50.0000	42.7
	130 Methylcyclohexane	83	11.361	11.361	(1.063)	635804	50.0000	41.9
	45 Bromodichloromethane	83	11.611	11.611	(1.086)	469447	50.0000	44.8
	43 Dibromomethane	93	11.495	11.495	(1.075)	213289	50.0000	42.6
	44 2-Chloroethylvinyl ether	63	11.836	11.836	(1.107)	982760	250.000	204
	49 4-Methyl-2-pentanone	58	12.170	12.170	(0.870)	931033	250.000	216
	46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	544513	50.0000	44.3
$	47 Toluene-d8	98	12.408	12.408	(0.887)	1662414	50.0000	55.3
	50 Toluene	92	12.487	12.487	(0.892)	875527	50.0000	40.3
	53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	490942	50.0000	44.4
	54 1,1,2-Trichloroethane	83	12.870	12.870	(0.920)	251205	50.0000	42.0
	55 2-Hexanone	43	13.052	13.052	(0.933)	2044488	250.000	219
	52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	488420	50.0000	40.8
	56 Tetrachloroethylene	164	13.107	13.107	(0.937)	265807	50.0000	40.6
	57 Dibromochloromethane	129	13.357	13.357	(0.954)	336470	50.0000	45.5
	59 1,2-Dibromoethane	107	13.533	13.533	(0.967)	296504	50.0000	42.6
*	61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1209665	50.0000	
	62 Chlorobenzene	112	14.032	14.032	(1.003)	908292	50.0000	41.9
	60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	324470	50.0000	43.9
	58 Ethylbenzene	91	14.093	14.093	(1.007)	1597549	50.0000	41.1
	63 m,p-Xylenes	106	14.202	14.202	(1.015)	1179139	100.000	80.4
	64 o-Xylene	106	14.652	14.652	(1.047)	584597	50.0000	40.6
	65 Styrene	104	14.658	14.658	(1.047)	966824	50.0000	43.6
	66 Bromoform	173	14.926	14.926	(0.906)	231538	50.0000	51.6
	67 Isopropylbenzene	105	15.023	15.023	(0.912)	1450881	50.0000	42.8
	73 1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	409080	50.0000	45.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$	71 Bromofluorobenzene	95	15.224	15.224	(0.924)	652266	50.0000	55.8
	74 1,2,3-Trichloropropane	110	15.394	15.394	(0.934)	108042	50.0000	45.3
	75 Bromobenzene	156	15.443	15.443	(0.937)	377341	50.0000	42.2
	76 n-Propylbenzene	91	15.455	15.455	(0.938)	1888852	50.0000	42.3
	77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1239089	50.0000	41.5
	78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1249098	50.0000	42.8
	80 4-Chlorotoluene	91	15.717	15.717	(0.954)	1180434	50.0000	42.5
	81 tert-Butylbenzene	119	15.991	15.991	(0.970)	1240462	50.0000	42.4
	79 1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	1290971	50.0000	42.6
	83 sec-Butylbenzene	105	16.222	16.222	(0.984)	1720744	50.0000	42.4
	84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	1372052	50.0000	43.1
	85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	737750	50.0000	41.3
*	86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	582116	50.0000	
	87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	723929	50.0000	41.3
	89 n-Butylbenzene	91	16.800	16.800	(1.020)	1397832	50.0000	43.8
	90 1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	702376	50.0000	42.3
	92 1,2-Dibromo-3-chloropropane	75	17.846	17.846	(1.083)	82217	50.0000	49.2
	93 1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	495649	50.0000	43.9
	94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	265853	50.0000	44.7
	95 Naphthalene	128	19.337	19.337	(1.174)	1171804	50.0000	43.5
	96 1,2,3-Trichlorobenzene	180	19.695	19.695	(1.195)	462650	50.0000	43.4

Data File: /chem/VOA2.i/092705v2.b/2d203.d
Date : 27-SEP-2005 07:03
Client ID: VSTD050
Sample Info: IUVM050920-01A|LCSD|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA2.i Injection Date: 27-SEP-2005 07:39
Lab File ID: 2d204.d Init. Cal. Date(s): 21-SEP-2005 21-SEP-2005
Analysis Type: WATER Init. Cal. Times: 11:47 20:02
Lab Sample ID: UVM050829-10A Quant Type: ISTD
Method: /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
9 Acrolein	0.06090	0.07689	0.07689	0.001	26.26876	40.00000	Averaged
12 Trichlorotrifluoroethane	0.09336	0.09992	0.09992	0.050	7.02747	40.00000	Averaged
16 Allyl chloride	0.13403	0.13205	0.13205	0.010	-1.47737	40.00000	Averaged
18 Acrylonitrile	0.12359	0.14115	0.14115	0.010	14.21212	40.00000	Averaged
24 2-Chloro-1,3-butadiene	0.49284	0.55773	0.55773	0.010	13.16607	40.00000	Averaged
28 Propionitrile	0.04549	0.05346	0.05346	0.010	17.50649	40.00000	Averaged
26 Ethyl acetate	0.35959	0.38456	0.38456	0.010	6.94167	40.00000	Averaged
27 Methacrylonitrile	0.22388	0.24133	0.24133	0.010	7.79623	40.00000	Averaged
19 Isobutyl alcohol	0.01412	0.01594	0.01594	0.005	12.93655	40.00000	Averaged
72 Tetrahydrofuran	291	250	0.39278	0.010	16.32755	40.00000	Linear
42 Methyl methacrylate	0.15275	0.16299	0.16299	0.010	6.70561	40.00000	Averaged
51 Ethyl methacrylate	0.41359	0.40979	0.40979	0.010	-0.91934	40.00000	Averaged
97 1,4-Dioxane	0.00233	0.00263	0.00263	0.001	12.67799	40.00000	Averaged
48 2-Nitropropane	0.09377	0.11628	0.11628	0.010	24.00211	40.00000	Averaged
70 Cyclohexanone	0.02651	0.03578	0.03578	0.010	34.96989	40.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.36108	0.40461	0.40461	0.010	12.05714	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.35053	0.38263	0.38263	0.010	9.15765	40.00000	Averaged
82 Pentachloroethane	0.40275	0.40494	0.40494	0.010	0.54302	40.00000	Averaged
88 Benzyl chloride	1.30315	1.42590	1.42590	0.010	9.41985	40.00000	Averaged
91 bis(2-Chloroisopropyl)ether	0.62577	0.63998	0.63998	0.010	2.27026	40.00000	Averaged
$ 35 Dibromofluoromethane	0.22969	0.25652	0.25652	0.010	11.68160	40.00000	Averaged
$ 47 Toluene-d8	1.24300	1.35449	1.35449	0.010	8.97013	40.00000	Averaged
$ 71 Bromofluorobenzene	1.00432	1.07706	1.07706	0.010	7.24275	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 11.49033
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d204.d
Lab Smp Id: UVM050829-10A Client Smp ID: VSTD250S
Inj Date : 27-SEP-2005 07:39
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |UVM050829-10A|SHORT|1|VOAF|1|
Misc Info : VBLK01SLCS VSTD250S
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	7.121	7.121	(0.666)	641813	250.000	316
12	Trichlorotrifluoroethane	85	7.316	7.316	(0.684)	834018	250.000	268
16	Allyl chloride	76	7.760	7.760	(0.726)	1102221	250.000	246
18	Acrylonitrile	53	8.149	8.149	(0.762)	1178189	250.000	286
24	2-Chloro-1,3-butadiene	53	8.861	8.861	(0.829)	931059	50.0000	56.6
28	Propionitrile	54	9.415	9.415	(0.880)	446222	250.000	294
26	Ethyl acetate	43	9.348	9.348	(0.874)	3209860	250.000	267
27	Methacrylonitrile	41	9.603	9.603	(0.898)	2014394	250.000	269
19	Isobutyl alcohol	41	10.059	10.059	(0.941)	1330599	2500.00	2820
72	Tetrahydrofuran	42	9.743	9.743	(0.591)	1087432	250.000	291
42	Methyl methacrylate	69	11.313	11.313	(1.058)	1360460	250.000	267
* 40	Fluorobenzene	96	10.692	10.692	(1.000)	1669383	50.0000	
51	Ethyl methacrylate	69	12.639	12.639	(0.903)	2338308	250.000	248
97	1,4-Dioxane	88	11.440	11.440	(1.070)	219212	2500.00	2820
48	2-Nitropropane	43	11.811	11.811	(1.105)	970555	250.000	310

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
*	61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1141233	50.0000	
	70 Cyclohexanone	55	15.182	15.182	(1.085)	1020888	1250.00	1690
	68 cis-1,4-Dichloro-2-butene	53	15.060	15.060	(0.914)	1120208	250.000	280
	69 trans-1,4-Dichloro-2-butene	53	15.352	15.352	(0.932)	1059350	250.000	273
	82 Pentachloroethane	167	16.070	16.070	(0.975)	1121107	250.000	251
*	86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	553717	50.0000	
	88 Benzyl chloride	91	16.624	16.624	(1.009)	3947738	250.000	274
	91 bis(2-Chloroisopropyl)ether	45	17.025	17.025	(1.033)	1771837	250.000	256
$	35 Dibromofluoromethane	113	9.907	9.907	(0.927)	428226	50.0000	55.8
$	47 Toluene-d8	98	12.408	12.408	(0.887)	1545793	50.0000	54.5
$	71 Bromofluorobenzene	95	15.230	15.230	(0.924)	596384	50.0000	53.6

Data File: /chem/VOA2.i/092705v2.b/2d204.d

Date : 27-SEP-2005 07:39

Client ID: VSTD250S

Instrument: VOA2.i

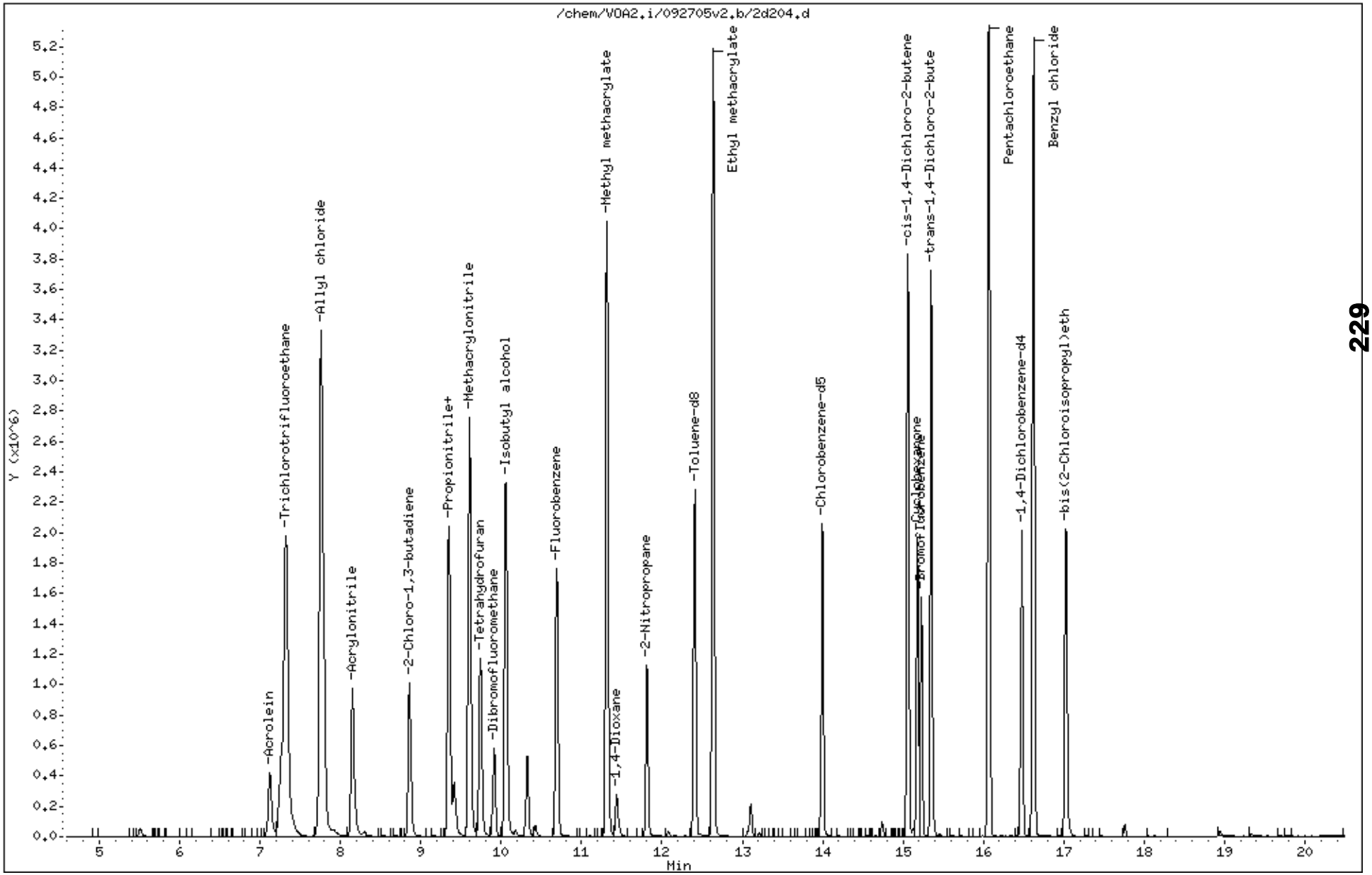
Sample Info: |UVM050829-10A|SHORT|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



QUALITY CONTROL DATA

Data File: /chem/VOA2.i/092105v2.b/2c308.d

Date : 21-SEP-2005 11:07

Client ID: BFB01

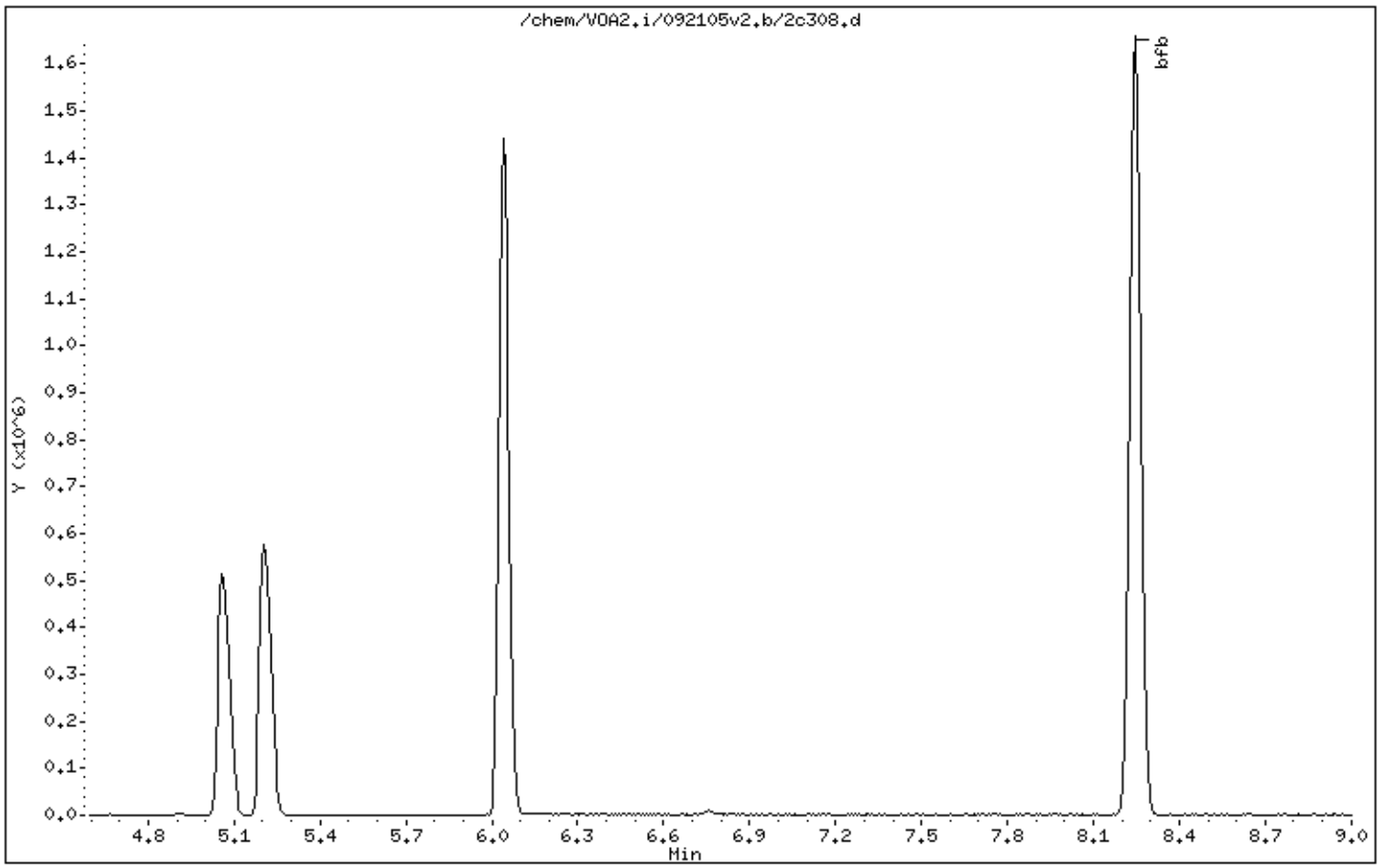
Instrument: VOA2.i

Sample Info: |UVM050816-02|BFB2|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA2.i/092105v2.b/2c308.d

Date : 21-SEP-2005 11:07

Client ID: BFB01

Instrument: VOA2.i

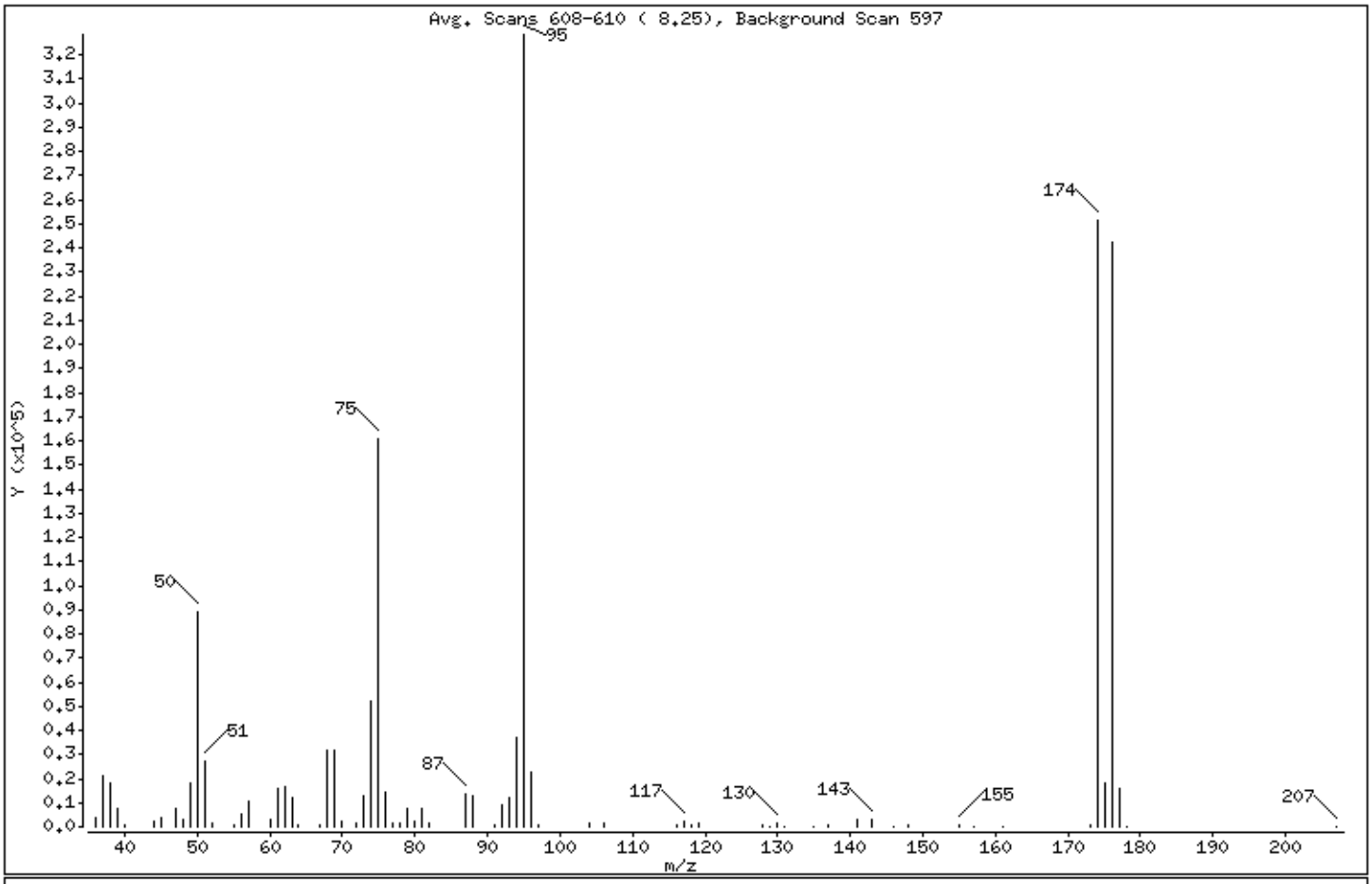
Sample Info: |UVM050816-02|BFB2|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.10
75	30.00 - 60.00% of mass 95	48.90
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.19 (0.24)
174	50.00 - 100.00% of mass 95	76.59
175	5.00 - 9.00% of mass 174	5.46 (7.12)
176	95.00 - 101.00% of mass 174	73.75 (96.28)
177	5.00 - 9.00% of mass 176	4.94 (6.70)

Data File: /chem/VOA2.i/092105v2.b/2c308.d

Date : 21-SEP-2005 11:07

Client ID: BFB01 Instrument: VOA2.i

Sample Info: |UVM050816-02|BFB2|1|VOAF|1|

Operator: CDS1

Column phase: db624 Column diameter: 0.25

Data File: 2c308.d
Spectrum: Avg. Scans 608-610 (8.25), Background Scan 597
Location of Maximum: 95.00
Number of points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3584	62.00	16688	87.00	13401	131.00	175
37.00	20760	63.00	12231	88.00	12505	135.00	188
38.00	17920	64.00	1063	91.00	964	137.00	422
39.00	7216	67.00	693	92.00	8838	141.00	3028
40.00	718	68.00	31728	93.00	12395	143.00	3296
44.00	2400	69.00	31632	94.00	36672	146.00	179
45.00	3806	70.00	2424	95.00	328384	148.00	814
47.00	7503	72.00	1621	96.00	22400	155.00	855
48.00	2737	73.00	13115	97.00	396	157.00	196
49.00	18016	74.00	52256	104.00	1295	161.00	182
50.00	89000	75.00	160576	106.00	1163	173.00	608
51.00	27096	76.00	14094	116.00	1119	174.00	251520
52.00	1231	77.00	1796	117.00	1952	175.00	17920
55.00	1035	78.00	1241	118.00	1126	176.00	242176
56.00	5247	79.00	7505	119.00	1549	177.00	16217
57.00	10667	80.00	2284	128.00	1028	178.00	200
60.00	3177	81.00	7498	129.00	195	207.00	198
61.00	16199	82.00	1536	130.00	1149		

Data File: /chem/VOA2.i/092605v2.b/2d101.d

Date : 26-SEP-2005 06:18

Client ID: BFB01

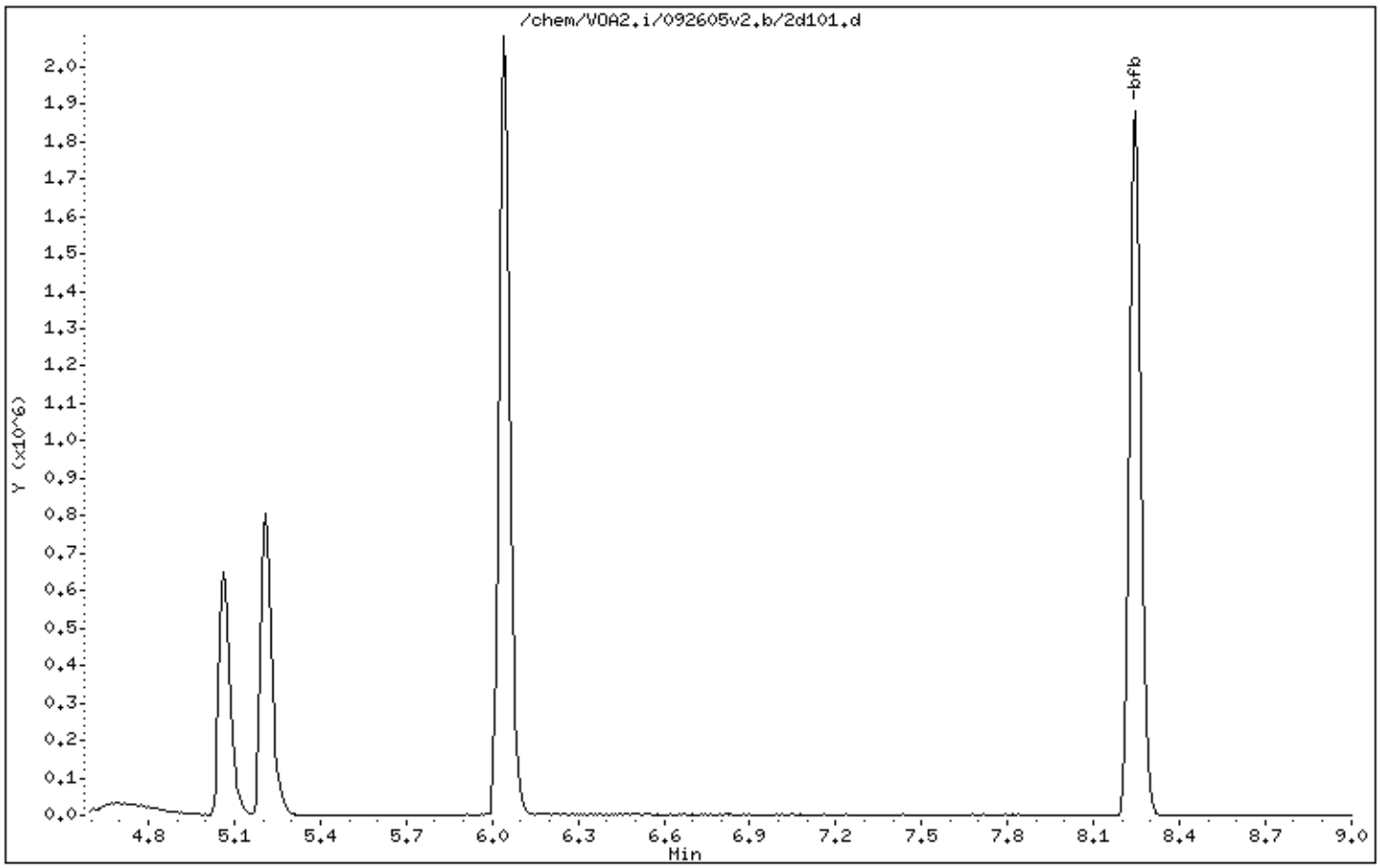
Instrument: VOA2.i

Sample Info: |UVM050816-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA2.i/092605v2.b/2d101.d

Date : 26-SEP-2005 06:18

Client ID: BFB01

Instrument: VOA2.i

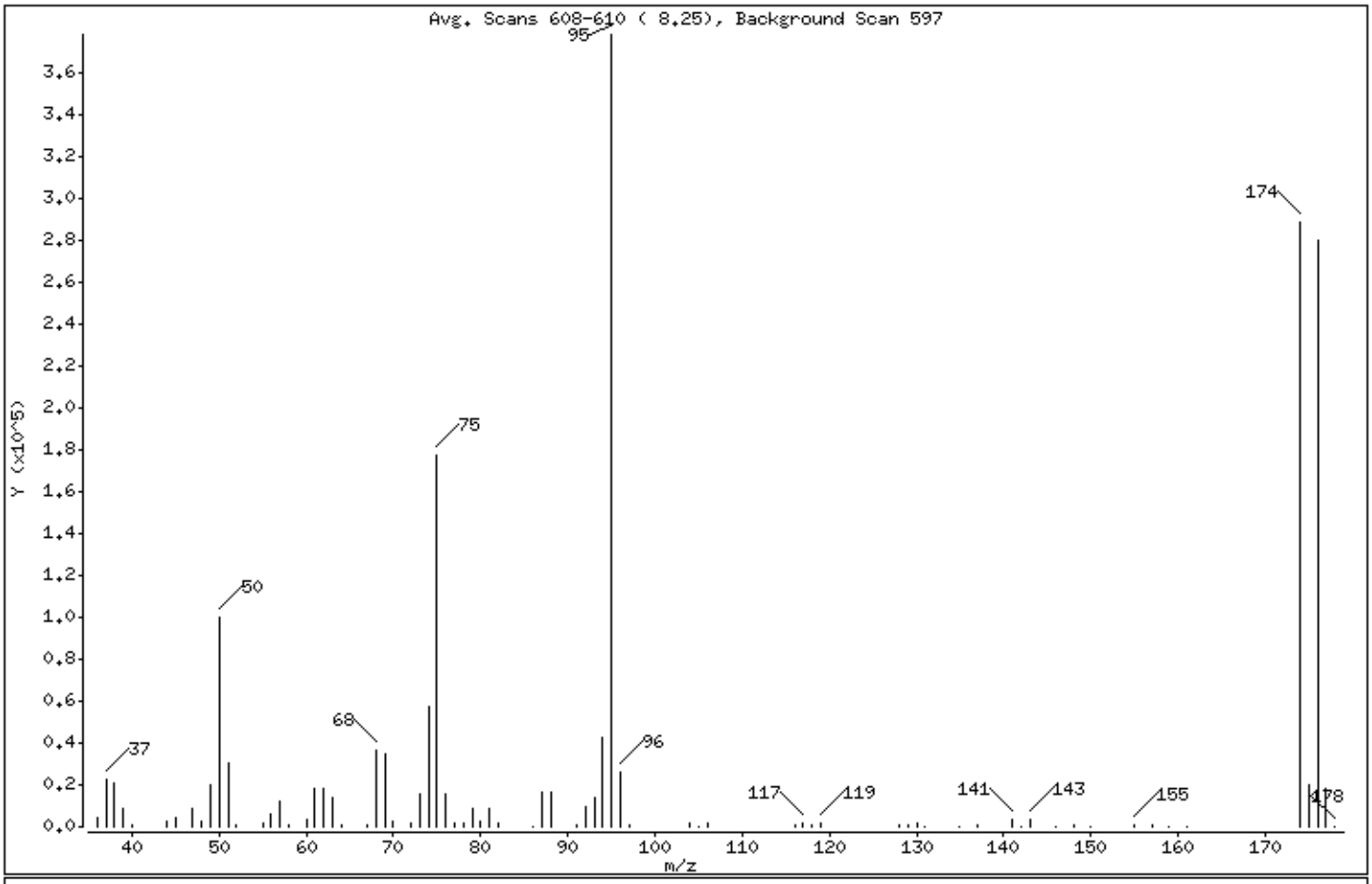
Sample Info: |UVM050816-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	26.41
75	30.00 - 60.00% of mass 95	46.91
96	5.00 - 9.00% of mass 95	6.96
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	76.22
175	5.00 - 9.00% of mass 174	5.35 (7.02)
176	95.00 - 101.00% of mass 174	74.02 (97.11)
177	5.00 - 9.00% of mass 176	4.81 (6.49)

Date : 26-SEP-2005 06:18

Client ID: BFB01 Instrument: VOA2.i

Sample Info: |UVM050816-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624 Column diameter: 0.25

Data File: 2d101.d
Spectrum: Avg. Scans 608-610 (8.25), Background Scan 597
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4091	62.00	18120	87.00	16298	131.00	374
37.00	22472	63.00	13580	88.00	16220	135.00	215
38.00	20864	64.00	1274	91.00	1025	137.00	623
39.00	8510	67.00	834	92.00	9758	141.00	3127
40.00	699	68.00	36056	93.00	13681	142.00	190
44.00	2524	69.00	34768	94.00	42616	143.00	3576
45.00	4137	70.00	2755	95.00	377920	146.00	365
47.00	8357	72.00	1877	96.00	26288	148.00	809
48.00	2944	73.00	15368	97.00	811	150.00	352
49.00	19792	74.00	57032	104.00	1336	155.00	898
50.00	99808	75.00	177280	105.00	387	157.00	702
51.00	30208	76.00	15347	106.00	1502	159.00	198
52.00	1287	77.00	1860	116.00	1062	161.00	198
55.00	1328	78.00	1604	117.00	2159	174.00	288064
56.00	6339	79.00	8295	118.00	1178	175.00	20224
57.00	11735	80.00	2686	119.00	1600	176.00	279744
58.00	448	81.00	8336	128.00	1187	177.00	18168
60.00	3417	82.00	1870	129.00	547	178.00	410
61.00	18360	86.00	180	130.00	1421		

Data File: /chem/VOA2.i/092705v2.b/2d201.d

Date : 27-SEP-2005 06:23

Client ID: BFB01

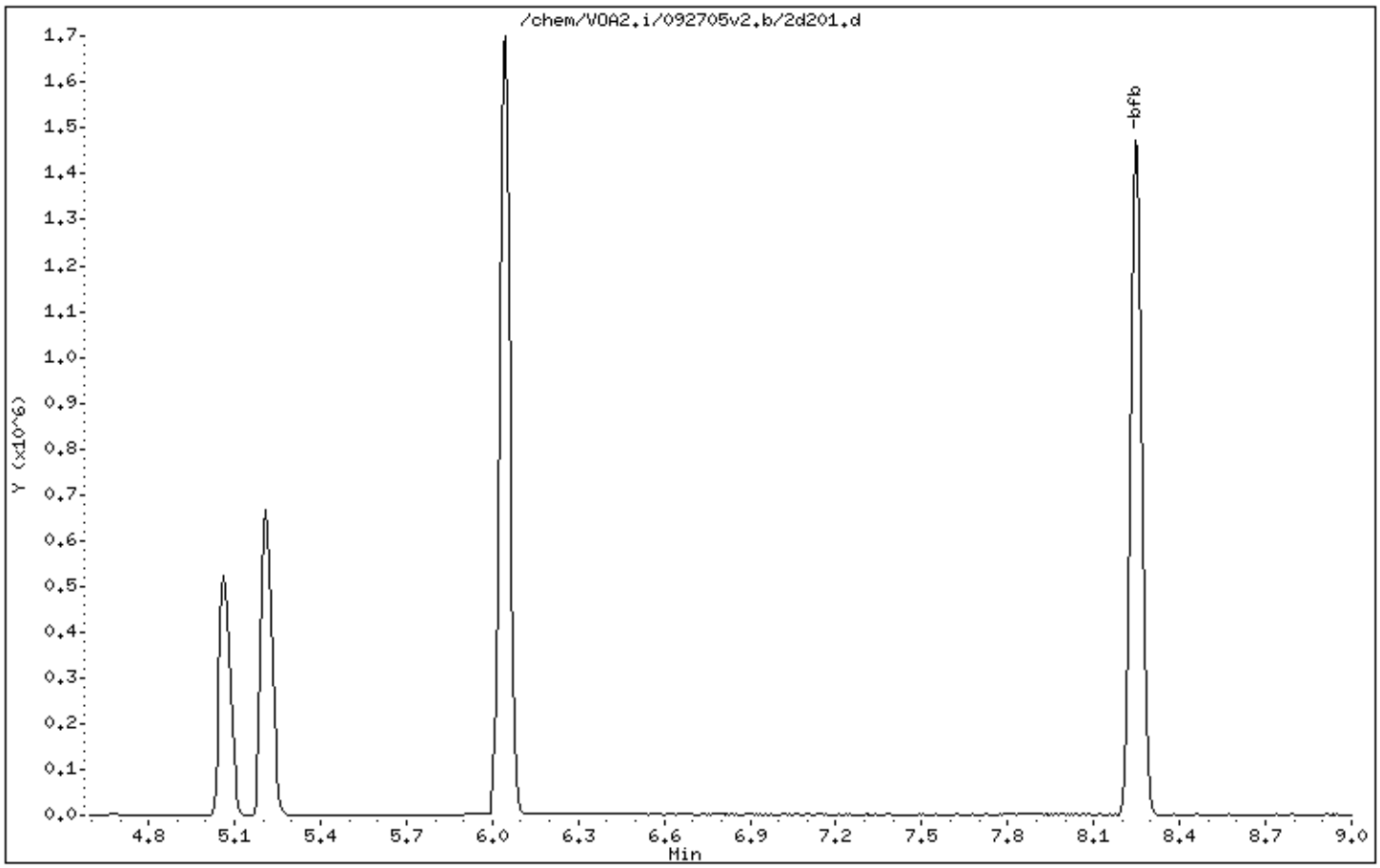
Instrument: VOA2.i

Sample Info: |UVM050816-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25



Data File: /chem/VOA2.i/092705v2.b/2d201.d

Date : 27-SEP-2005 06:23

Client ID: BFB01

Instrument: VOA2.i

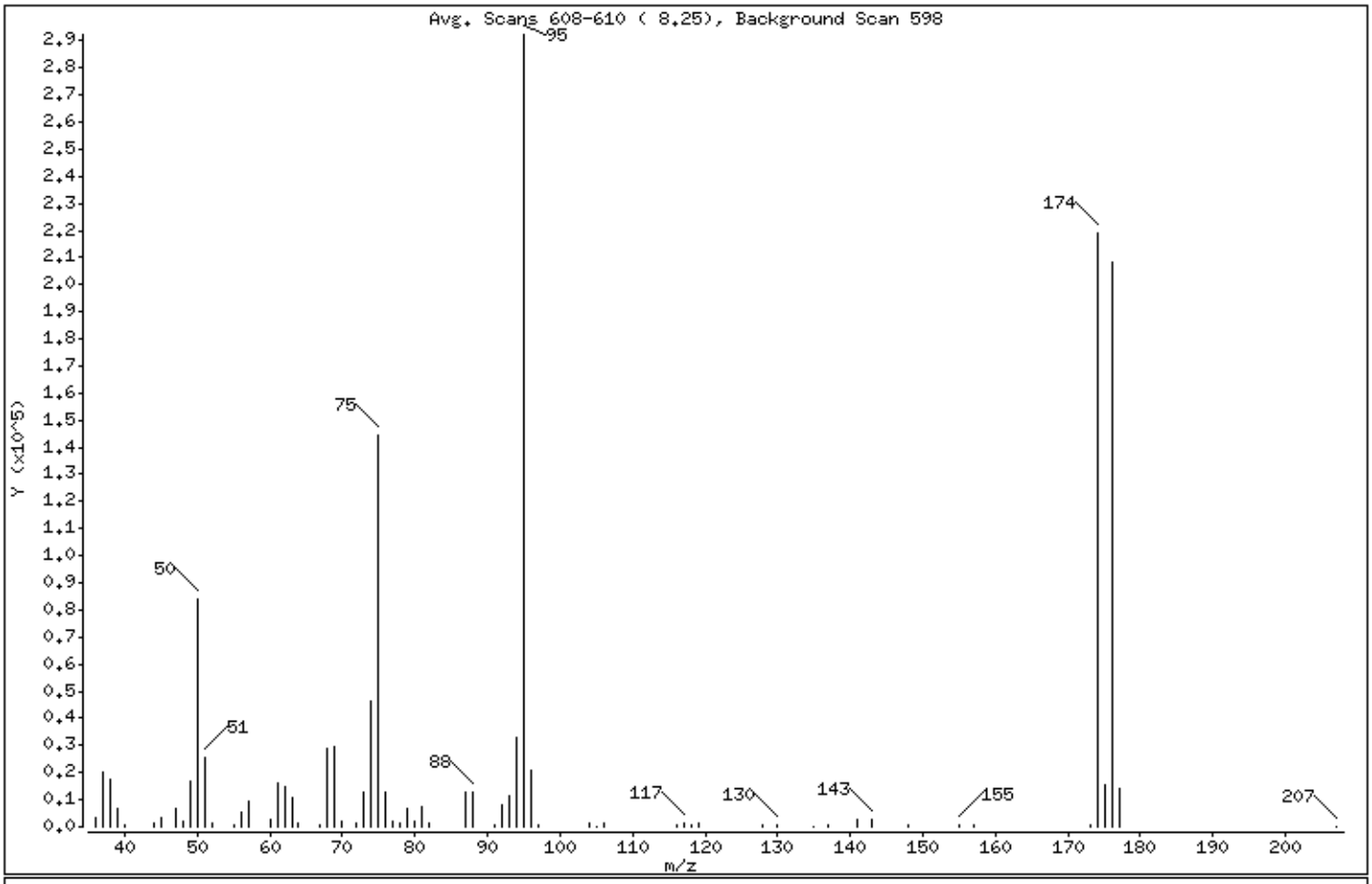
Sample Info: |UVM050816-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	28.75
75	30.00 - 60.00% of mass 95	49.45
96	5.00 - 9.00% of mass 95	7.09
173	Less than 2.00% of mass 174	0.34 (0.45)
174	50.00 - 100.00% of mass 95	74.84
175	5.00 - 9.00% of mass 174	5.33 (7.12)
176	95.00 - 101.00% of mass 174	71.27 (95.23)
177	5.00 - 9.00% of mass 176	4.76 (6.68)

Date : 27-SEP-2005 06:23

Client ID: BFB01 Instrument: VOA2.i

Sample Info: |UVM050816-02|BFB|1|VOAF|1|

Operator: CDS1

Column phase: db624 Column diameter: 0.25

Data File: 2d201.d
Spectrum: Avg. Scans 608-610 (8.25), Background Scan 598
Location of Maximum: 95.00
Number of points: 67

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3679	61.00	16051	81.00	7607	119.00	1217
37.00	19840	62.00	14997	82.00	1546	128.00	744
38.00	17504	63.00	10716	87.00	12436	130.00	911
39.00	6848	64.00	1023	88.00	12483	135.00	208
40.00	601	67.00	440	91.00	913	137.00	353
44.00	1675	68.00	28968	92.00	7905	141.00	2830
45.00	3606	69.00	29464	93.00	11192	143.00	2855
47.00	6774	70.00	1995	94.00	32952	148.00	770
48.00	2350	72.00	1446	95.00	292224	155.00	687
49.00	17064	73.00	12430	96.00	20712	157.00	410
50.00	84000	74.00	46552	97.00	414	173.00	986
51.00	25224	75.00	144512	104.00	1164	174.00	218688
52.00	1122	76.00	12463	105.00	170	175.00	15562
55.00	921	77.00	1708	106.00	1084	176.00	208256
56.00	5706	78.00	1095	116.00	834	177.00	13903
57.00	9470	79.00	6860	117.00	1442	207.00	94
60.00	2855	80.00	2092	118.00	830		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943515

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D106B2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943515

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D106B2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943515

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D106B2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
135-98-8	sec-Butylbenzene		1.0	U
99-87-6	4-Isopropyltoluene		1.0	U
541-73-1	1,3-Dichlorobenzene		1.0	U
106-46-7	1,4-Dichlorobenzene		1.0	U
104-51-8	n-Butylbenzene		1.0	U
95-50-1	1,2-Dichlorobenzene		1.0	U
96-12-8	1,2-Dibromo-3-chloropropane		1.0	U
120-82-1	1,2,4-Trichlorobenzene		1.0	U
87-68-3	Hexachlorobutadiene		1.0	U
91-20-3	Naphthalene		1.0	U
87-61-6	1,2,3-Trichlorobenzene		1.0	U
123-91-1	1,4-Dioxane		50.0	U

1E

EPA SAMPLE NO.

VBLK01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943515

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D106B2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d106B2.d
Lab Smp Id: 1200943515 Client Smp ID: VBLK01
Inj Date : 26-SEP-2005 08:29
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200943515|465842|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1723574	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1161831	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	569051	50.0000	
$ 35 Dibromofluoromethane	113	9.913	9.907	(0.927)	445991	56.3288	56.3
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1555499	53.8552	53.8
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	606274	53.0417	53.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d106B2.d
Lab Smp Id: 1200943515 Client Smp ID: VBLK01
Inj Date : 26-SEP-2005 08:29
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200943515|465842|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092605v2.b/2d106B2.d

Page 1

Date : 26-SEP-2005 08:29

Client ID: VBLK01

Instrument: VOA2.i

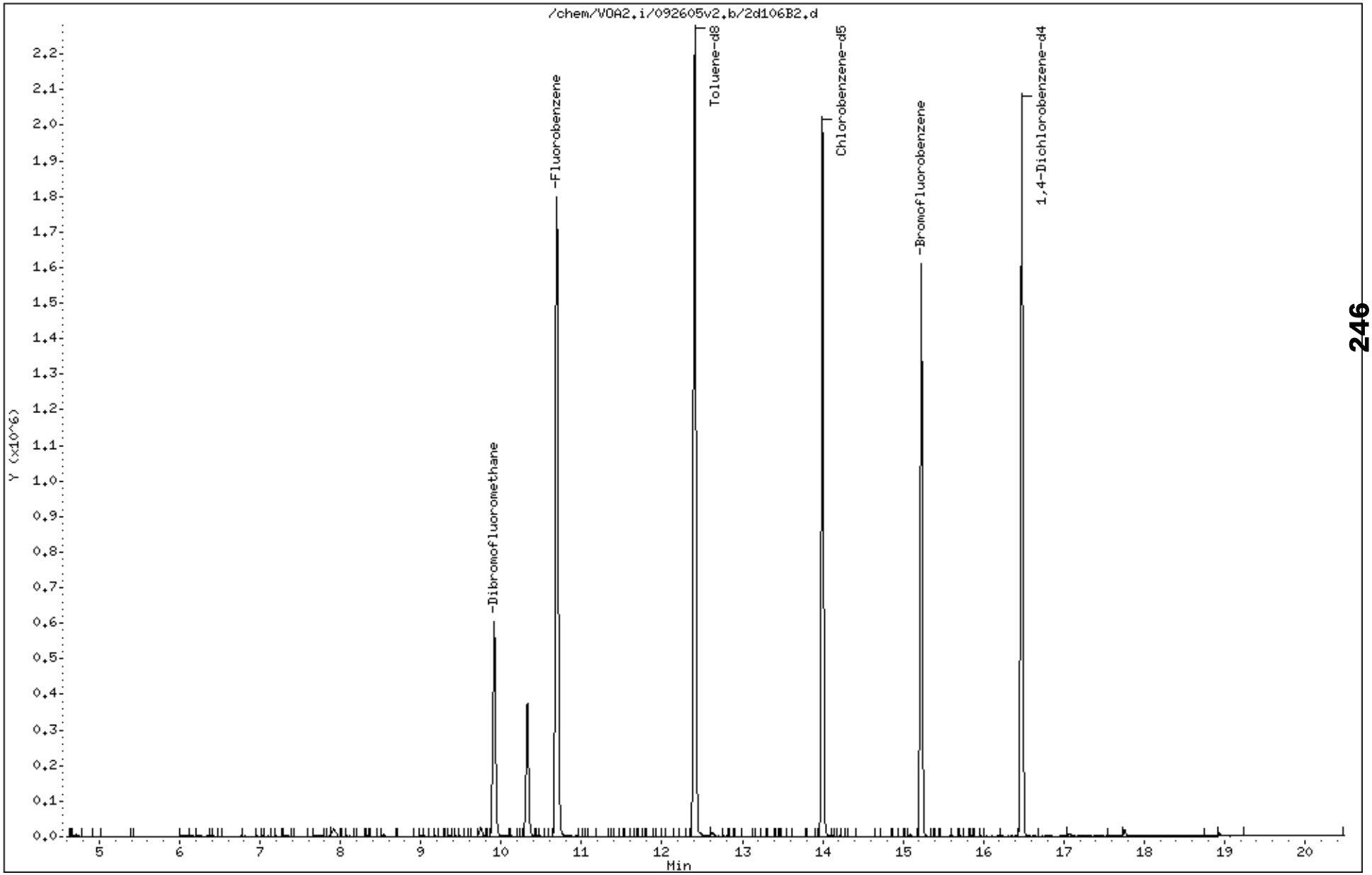
Sample Info: |1200943515|465842|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945696

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D208B2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945696

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D208B2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945696

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D208B2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
135-98-8	sec-Butylbenzene		1.0	U
99-87-6	4-Isopropyltoluene		1.0	U
541-73-1	1,3-Dichlorobenzene		1.0	U
106-46-7	1,4-Dichlorobenzene		1.0	U
104-51-8	n-Butylbenzene		1.0	U
95-50-1	1,2-Dichlorobenzene		1.0	U
96-12-8	1,2-Dibromo-3-chloropropane		1.0	U
120-82-1	1,2,4-Trichlorobenzene		1.0	U
87-68-3	Hexachlorobutadiene		1.0	U
91-20-3	Naphthalene		1.0	U
87-61-6	1,2,3-Trichlorobenzene		1.0	U
123-91-1	1,4-Dioxane		50.0	U

1E

EPA SAMPLE NO.

VBLK02

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945696

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D208B2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d208B2.d
Lab Smp Id: 1200945696 Client Smp ID: VBLK02
Inj Date : 27-SEP-2005 09:24
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200945696|465842|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1640701	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1093505	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	535666	50.0000	
$ 35 Dibromofluoromethane	113	9.907	9.913	(0.927)	423629	56.2071	56.2
$ 47 Toluene-d8	98	12.407	12.408	(0.887)	1488259	54.7467	54.7
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	573807	53.3300	53.3

General Engineering Laboratories, LLC

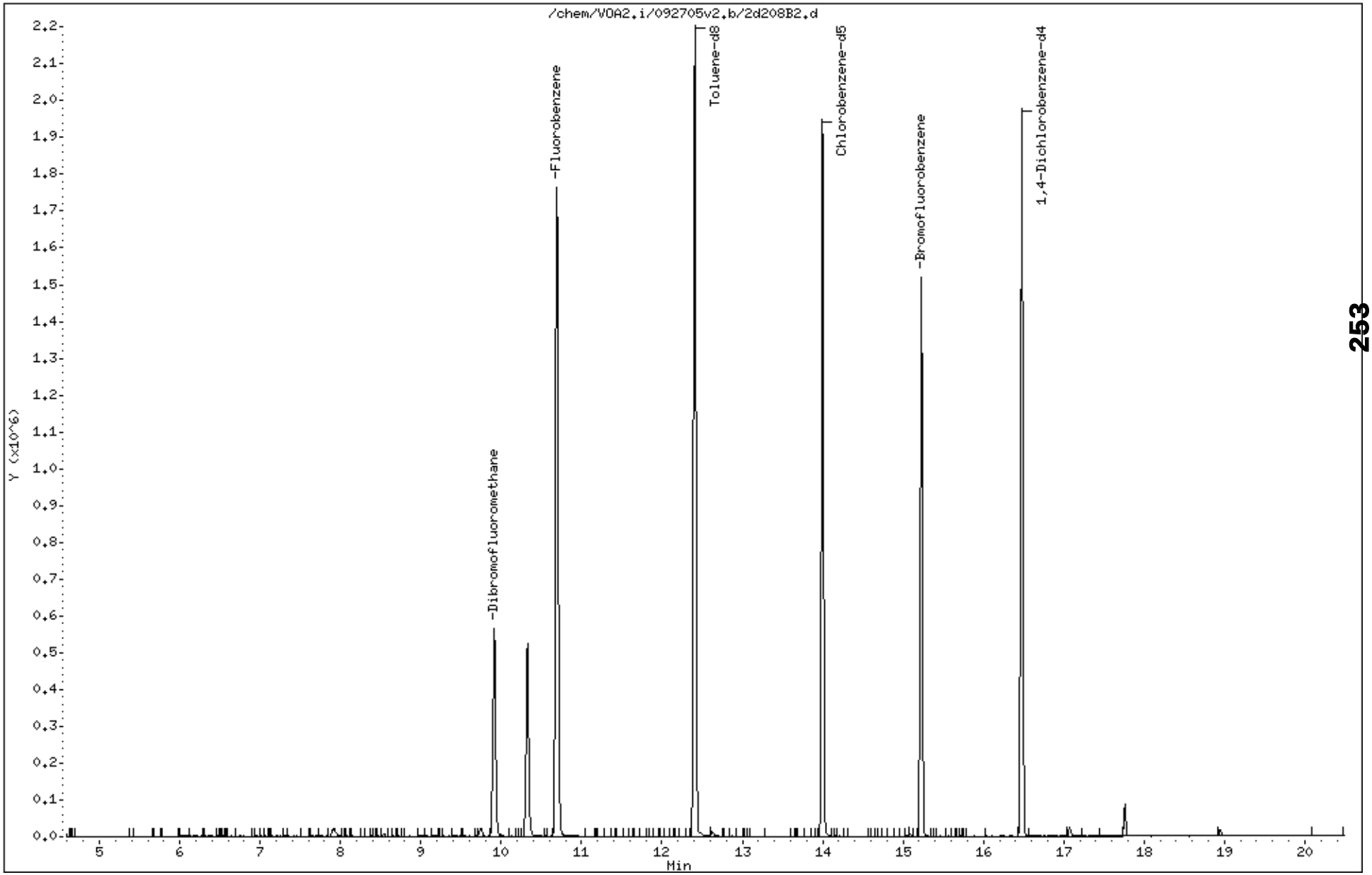
VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d208B2.d
Lab Smp Id: 1200945696 Client Smp ID: VBLK02
Inj Date : 27-SEP-2005 09:24
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200945696|465842|1|VOAF|1|
Misc Info : VBLK01
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: /chem/VOA2.i/092705v2.b/2d208B2.d
Date : 27-SEP-2005 09:24
Client ID: VBLK02
Sample Info: |1200945696|465842|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943518

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D103L2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	59.2	
74-87-3	Chloromethane	49.6	
75-01-4	Vinyl chloride	53.8	
74-83-9	Bromomethane	51.6	
75-00-3	Chloroethane	49.9	
75-69-4	Trichlorofluoromethane	54.2	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	49.6	
67-64-1	Acetone	228	
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	226	
75-15-0	Carbon disulfide	278	
75-05-8	Acetonitrile	1180	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	42.4	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	47.2	
75-34-3	1,1-Dichloroethane	46.7	
108-05-4	Vinyl acetate	238	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	237	
156-59-2	cis-1,2-Dichloroethylene	46.2	
594-20-7	2,2-Dichloropropane	48.3	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	46.8	
67-66-3	Chloroform	46.4	
71-55-6	1,1,1-Trichloroethane	48.3	
563-58-6	1,1-Dichloropropene	47.1	
56-23-5	Carbon tetrachloride	49.7	
107-06-2	1,2-Dichloroethane	45.5	
71-43-2	Benzene	43.7	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943518

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D103L2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	46.4	
78-87-5	1,2-Dichloropropane	45.8	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	46.6	
75-27-4	Bromodichloromethane	48.9	
10061-01-5	cis-1,3-Dichloropropylene	48.6	
108-10-1	4-Methyl-2-pentanone	239	
108-88-3	Toluene	43.1	
10061-02-6	trans-1,3-Dichloropropylene	48.0	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	46.2	
142-28-9	1,3-Dichloropropane	43.9	
591-78-6	2-Hexanone	240	
127-18-4	Tetrachloroethylene	43.6	
124-48-1	Dibromochloromethane	49.5	
106-93-4	1,2-Dibromoethane	47.6	
108-90-7	Chlorobenzene	45.1	
630-20-6	1,1,1,2-Tetrachloroethane	47.4	
100-41-4	Ethylbenzene	44.2	
95-47-6	o-Xylene	44.6	
----------	m,p-Xylenes	86.7	
100-42-5	Styrene	47.2	
75-25-2	Bromoform	56.9	
98-82-8	Isopropylbenzene	45.6	
79-34-5	1,1,2,2-Tetrachloroethane	49.5	
96-18-4	1,2,3-Trichloropropane	49.7	
108-86-1	Bromobenzene	45.2	
103-65-1	n-Propylbenzene	44.5	
95-49-8	2-Chlorotoluene	43.6	
108-67-8	1,3,5-Trimethylbenzene	44.6	
95-63-6	1,2,4-Trimethylbenzene	45.4	
106-43-4	4-Chlorotoluene	44.8	
98-06-6	tert-Butylbenzene	44.9	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943518

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D103L2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	45.5	
99-87-6	4-Isopropyltoluene	45.5	
541-73-1	1,3-Dichlorobenzene	44.7	
106-46-7	1,4-Dichlorobenzene	44.7	
104-51-8	n-Butylbenzene	46.7	
95-50-1	1,2-Dichlorobenzene	45.0	
96-12-8	1,2-Dibromo-3-chloropropane	54.6	
120-82-1	1,2,4-Trichlorobenzene	47.6	
87-68-3	Hexachlorobutadiene	47.6	
91-20-3	Naphthalene	48.6	
87-61-6	1,2,3-Trichlorobenzene	47.7	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d103L2.d
Lab Smp Id: 1200943518 Client Smp ID: VBLK01LCS
Inj Date : 26-SEP-2005 06:58
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200943518|465842|1|VOAF|1|
Misc Info : VBLK01LCS VSTD050
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

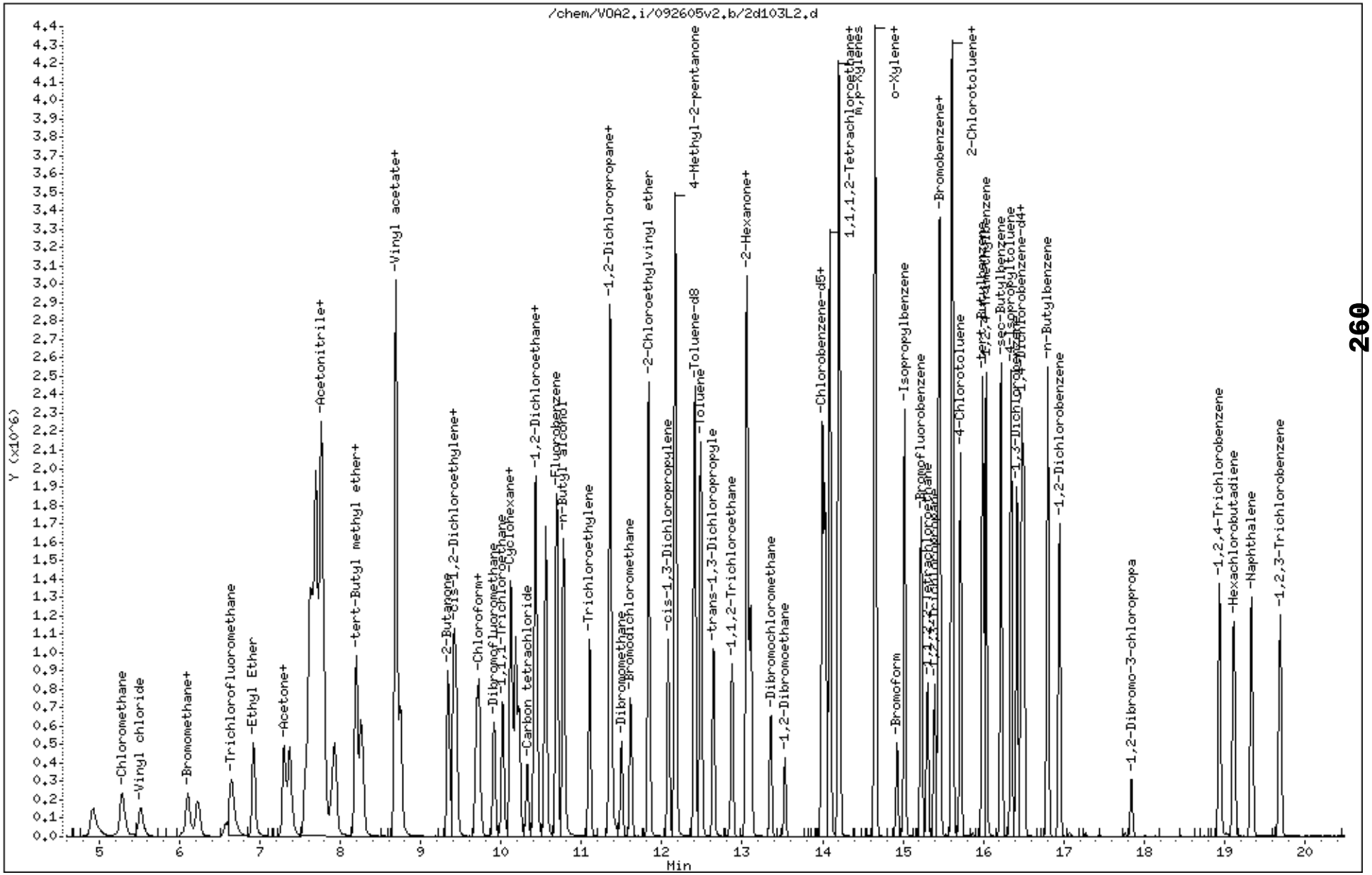
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1790524	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1238911	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	604269	50.0000	
$ 35 Dibromofluoromethane	113	9.907	9.907	(0.927)	464906	56.5223	56.5
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1658471	53.8478	53.8
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	647245	53.3259	53.3
3 Dichlorodifluoromethane	85	4.921	4.921	(0.460)	532559	59.1767	59.2
4 Chloromethane	50	5.284	5.284	(0.494)	745084	49.5961	49.6
5 Vinyl chloride	62	5.512	5.512	(0.515)	458312	53.7636	53.8
6 Bromomethane	94	6.099	6.099	(0.570)	362327	51.6593	51.6
7 Chloroethane	64	6.227	6.227	(0.582)	379491	49.8804	49.9
8 Trichlorofluoromethane	101	6.647	6.647	(0.622)	700323	54.1773	54.2
11 1,1-Dichloroethylene	61	7.371	7.371	(0.689)	712285	49.6216	49.6
10 Acetone	43	7.298	7.298	(0.682)	959593	227.775	228
14 Carbon disulfide	76	7.760	7.760	(0.726)	6510713	278.411	278

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17 Methylene chloride	84	7.924	7.924	(0.741)	373566	42.3885	42.4
21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	713558	47.2124	47.2
22 1,1-Dichloroethane	63	8.751	8.751	(0.818)	828092	46.6776	46.7
31 cis-1,2-Dichloroethylene	61	9.408	9.408	(0.880)	809115	46.2451	46.2
32 Chloroform	83	9.725	9.725	(0.910)	655922	46.3584	46.4
37 1,2-Dichloroethane	62	10.406	10.406	(0.973)	605210	45.4812	45.5
30 2-Butanone	43	9.342	9.342	(0.874)	1581111	237.104	237
36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	572441	48.2767	48.3
87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	812978	44.6711	44.7
93 1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	558884	47.6489	47.6
85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	828555	44.7203	44.7
90 1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	775312	45.0219	45.0
95 Naphthalene	128	19.337	19.337	(1.174)	1360130	48.6299	48.6
94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	294092	47.5940	47.6
33 Carbon tetrachloride	117	10.224	10.224	(0.956)	493256	49.7187	49.7
38 Benzene	78	10.431	10.431	(0.976)	1595229	43.6805	43.7
39 Trichloroethylene	95	11.100	11.100	(1.038)	396855	46.3940	46.4
41 1,2-Dichloropropane	63	11.349	11.349	(1.061)	460426	45.8066	45.8
45 Bromodichloromethane	83	11.611	11.611	(1.086)	522422	48.9329	48.9
46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	607453	48.5994	48.6
53 trans-1,3-Dichloropropylene	75	12.639	12.639	(0.903)	543641	47.9629	48.0
54 1,1,2-Trichloroethane	83	12.876	12.876	(0.920)	282791	46.2152	46.2
57 Dibromochloromethane	129	13.357	13.357	(0.954)	375434	49.5361	49.5
49 4-Methyl-2-pentanone	58	12.170	12.170	(0.870)	1050730	238.629	239
50 Toluene	92	12.481	12.481	(0.892)	959082	43.1225	43.1
56 Tetrachloroethylene	164	13.107	13.107	(0.937)	292715	43.6170	43.6
55 2-Hexanone	43	13.052	13.052	(0.933)	2295902	240.066	240
59 1,2-Dibromoethane	107	13.533	13.533	(0.967)	338652	47.5661	47.6
62 Chlorobenzene	112	14.032	14.032	(1.003)	1002309	45.1303	45.1
58 Ethylbenzene	91	14.093	14.093	(1.007)	1760368	44.2384	44.2
63 m,p-Xylenes	106	14.202	14.202	(1.015)	1302153	86.7445	86.7
65 Styrene	104	14.659	14.659	(1.047)	1071537	47.1987	47.2
64 o-Xylene	106	14.652	14.652	(1.047)	657509	44.6149	44.6
67 Isopropylbenzene	105	15.017	15.017	(0.911)	1605229	45.6316	45.6
66 Bromoform	173	14.926	14.926	(0.906)	265373	56.9484	56.9
73 1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	464219	49.5271	49.5
92 1,2-Dibromo-3-chloropropane	75	17.840	17.840	(1.083)	94613	54.5943	54.6
60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	358222	47.3625	47.4
34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	521274	47.1268	47.1
52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	538404	43.9348	43.9
80 4-Chlorotoluene	91	15.717	15.717	(0.954)	1292609	44.8157	44.8
15 Acetonitrile	41	7.663	7.663	(0.717)	2248149	1181.49	1180
13 Iodomethane	142	7.620	7.620	(0.713)	3039261	225.526	226
43 Dibromomethane	93	11.495	11.495	(1.075)	237195	46.5671	46.6
29 Bromochloromethane	128	9.694	9.694	(0.907)	183780	46.8210	46.8
75 Bromobenzene	156	15.443	15.443	(0.937)	419553	45.1517	45.2
81 tert-Butylbenzene	119	15.991	15.991	(0.970)	1365310	44.9282	44.9

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
83 sec-Butylbenzene	105	16.222	16.222	(0.984)	1917680	45.5446	45.5
76 n-Propylbenzene	91	15.455	15.455	(0.938)	2064823	44.5405	44.5
89 n-Butylbenzene	91	16.800	16.800	(1.020)	1548562	46.7328	46.7
23 Vinyl acetate	43	8.691	8.691	(0.813)	6476339	237.996	238
84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	1505320	45.5265	45.5
77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1351418	43.5622	43.6
25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	581355	48.2882	48.3
78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1350778	44.6197	44.6
96 1,2,3-Trichlorobenzene	180	19.696	19.696	(1.195)	527612	47.7123	47.7
79 1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	1427310	45.4076	45.4
74 1,2,3-Trichloropropane	110	15.395	15.395	(0.934)	123157	49.7374	49.7

Data File: /chem/VOA2.i/092605v2.b/2d103L2.d
Date : 26-SEP-2005 06:58
Client ID: VBLK01LCS
Instrument: VOA2.i
Sample Info: |1200943518|465842|1|VOAF|1|
Purge Volume: 5.0
Operator: CDS1
Column phase: DB-624
Column diameter: 0.25



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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943519

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D104SL2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	347	
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	275	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	3040	
107-05-1	Allyl chloride	256	
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	305	
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	57.7	
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	285	
107-12-0	Propionitrile	316	
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943519

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D104SL2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	288	
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	253	
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200943519

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D104SL2

Level: (low/med) LOW Date Received: 09/26/05

% Moisture: not dec. _____ Date Analyzed: 09/26/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	2940	

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092605v2.b/2d104SL2.d
Lab Smp Id: 1200943519 Client Smp ID: VBLK01SLCS
Inj Date : 26-SEP-2005 07:36
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200943519|465842|1|VOAF|1|
Misc Info : VBLK01SLCS VSTD250S
Comment :
Method : /chem/VOA2.i/092605v2.b/VOA2-8260B-092105.m
Meth Date : 26-Sep-2005 14:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.691	10.692	(1.000)	1719002	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1199606	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	576691	50.0000	
$ 35 Dibromofluoromethane	113	9.913	9.907	(0.927)	440522	55.7861	55.8
$ 47 Toluene-d8	98	12.407	12.408	(0.887)	1589162	53.2881	53.3
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	612719	52.8954	52.9
12 Trichlorotrifluoroethane	85	7.321	7.321	(0.685)	882690	275.009	275
97 1,4-Dioxane	88	11.440	11.440	(1.070)	235377	2937.37	2940
42 Methyl methacrylate	69	11.312	11.312	(1.058)	1515030	288.498	288
51 Ethyl methacrylate	69	12.638	12.638	(0.903)	2514217	253.376	253
24 2-Chloro-1,3-butadiene	53	8.860	8.860	(0.829)	977821	57.7096	57.7
27 Methacrylonitrile	41	9.609	9.609	(0.899)	2194211	285.074	285
19 Isobutyl alcohol	41	10.059	10.059	(0.941)	1474596	3038.65	3040
16 Allyl chloride	76	7.759	7.759	(0.726)	1179990	256.074	256
18 Acrylonitrile	53	8.149	8.149	(0.762)	1296254	305.075	305

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
9 Acrolein	56	7.120	7.120	(0.666)	726616	347.066	347
28 Propionitrile	54	9.420	9.420	(0.881)	494104	315.899	316

Data File: /chem/VOA2.i/092605v2.b/2d104SL2.d

Page 1

Date : 26-SEP-2005 07:36

Client ID: VBLK01SLCS

Instrument: VOA2.i

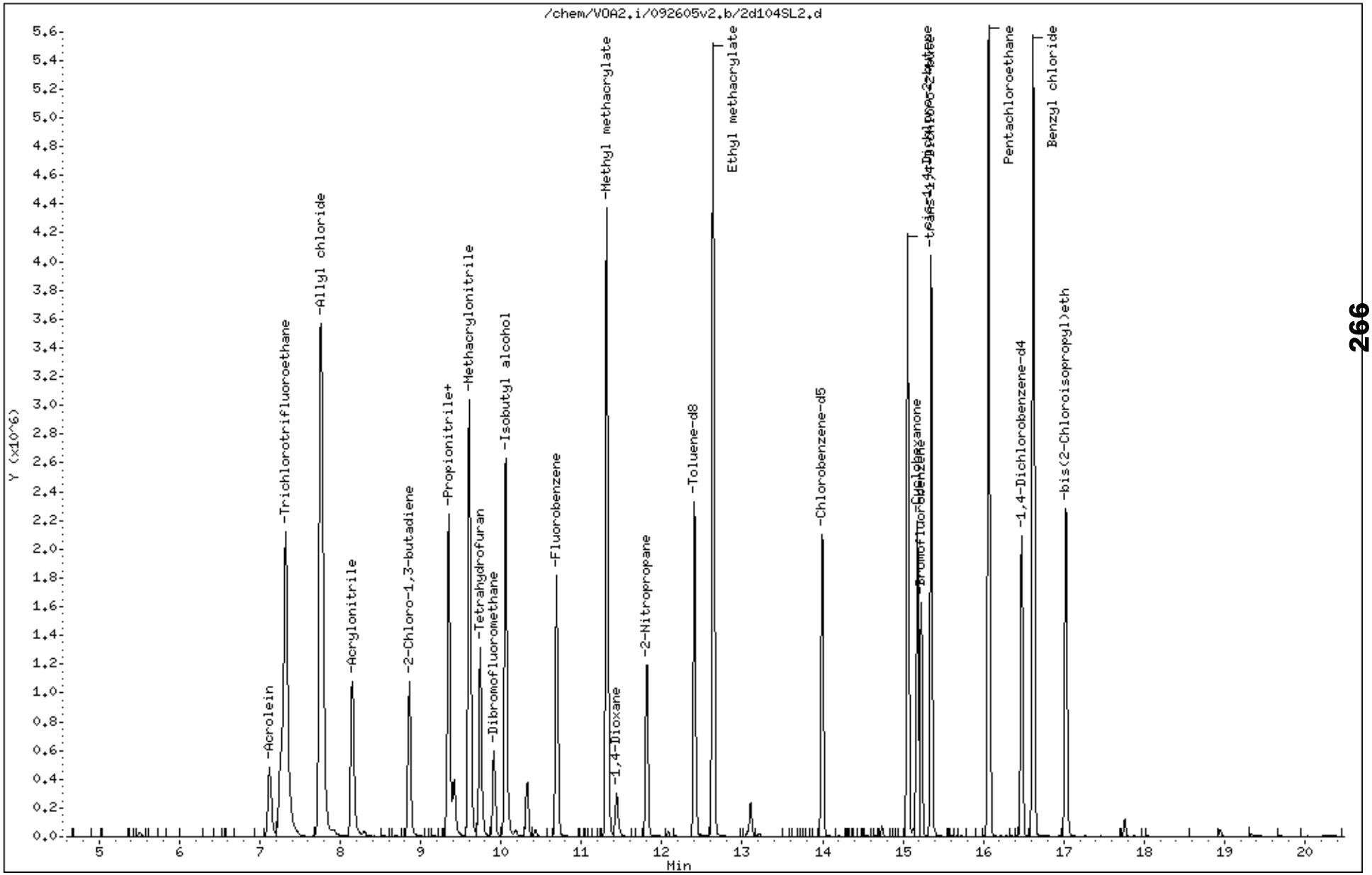
Sample Info: |120094351914658421|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945698

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D204SL2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
107-02-8	Acrolein	316	
75-35-4	1,1-Dichloroethylene	1.0	U
67-64-1	Acetone	5.0	U
76-13-1	Trichlorotrifluoroethane	268	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-05-8	Acetonitrile	25.0	U
78-83-1	Isobutyl alcohol	2820	
107-05-1	Allyl chloride	246	
75-09-2	Methylene chloride	5.0	U
107-13-1	Acrylonitrile	286	
156-60-5	trans-1,2-Dichloroethylene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	5.0	U
126-99-8	2-Chloro-1,3-butadiene	56.6	
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethylene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
126-98-7	Methacrylonitrile	269	
107-12-0	Propionitrile	294	
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945698

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D204SL2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
80-62-6	Methyl methacrylate	267	
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropylene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropylene	1.0	U
97-63-2	Ethyl methacrylate	248	
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
591-78-6	2-Hexanone	5.0	U
127-18-4	Tetrachloroethylene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
95-47-6	o-Xylene	1.0	U
----------	m,p-Xylenes	2.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
108-86-1	Bromobenzene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02SLCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945698

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D204SL2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
91-20-3	Naphthalene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
123-91-1	1,4-Dioxane	2820	

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d204SL2.d
Lab Smp Id: 1200945698 Client Smp ID: VBLK02SLCS
Inj Date : 27-SEP-2005 07:39
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200945698|465842|1|VOAF|1|
Misc Info : VBLK01SLCS VSTD250S
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:38 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

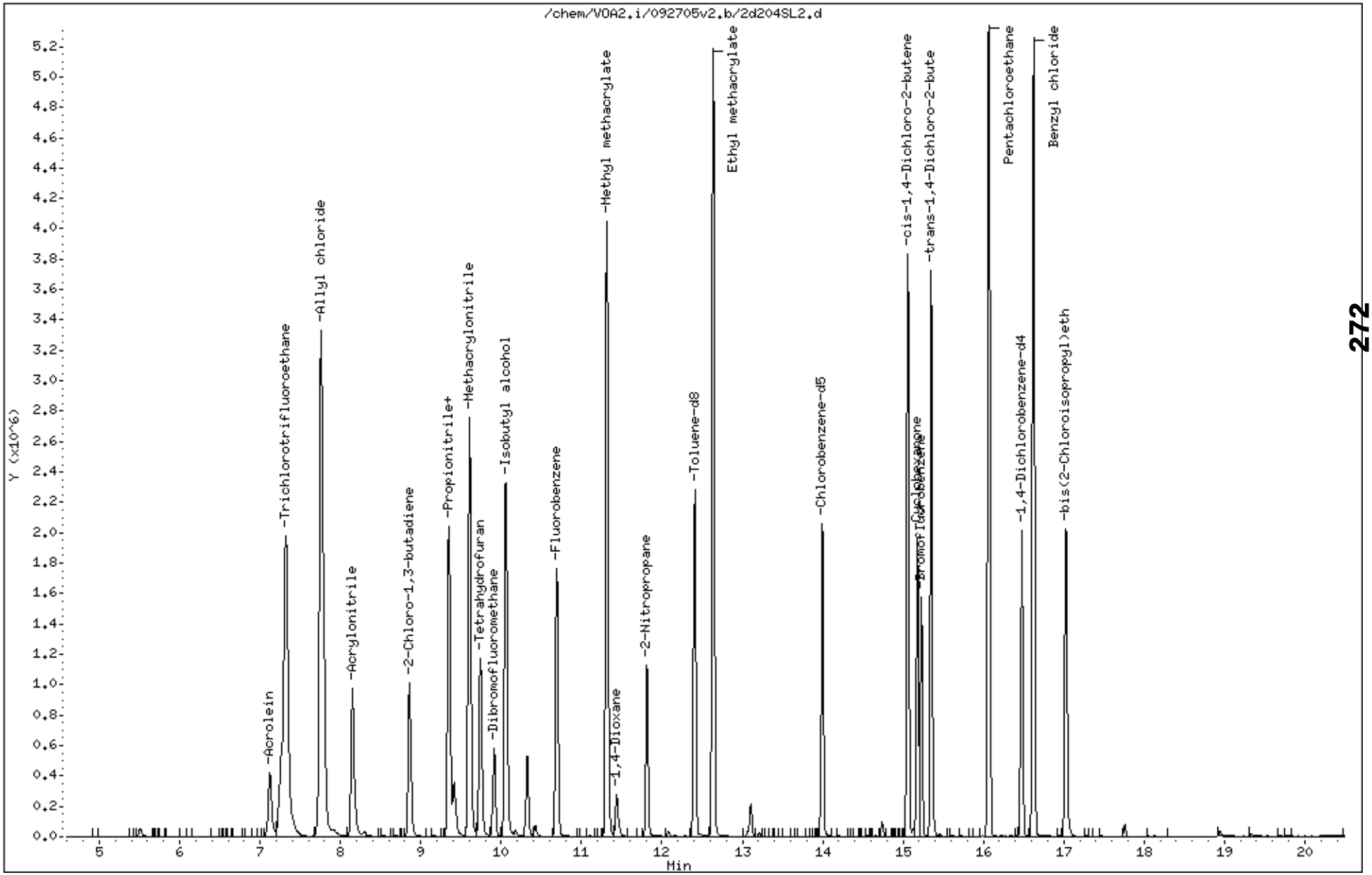
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1669383	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1141233	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	553717	50.0000	
$ 35 Dibromofluoromethane	113	9.907	9.913	(0.927)	428226	55.8408	55.8
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1545793	54.4851	54.5
$ 71 Bromofluorobenzene	95	15.230	15.224	(0.924)	596384	53.6214	53.6
12 Trichlorotrifluoroethane	85	7.316	7.316	(0.684)	834018	267.569	268
97 1,4-Dioxane	88	11.440	11.440	(1.070)	219212	2816.95	2820
42 Methyl methacrylate	69	11.313	11.313	(1.058)	1360460	266.764	267
51 Ethyl methacrylate	69	12.639	12.639	(0.903)	2338308	247.702	248
24 2-Chloro-1,3-butadiene	53	8.861	8.861	(0.829)	931059	56.5830	56.6
27 Methacrylonitrile	41	9.603	9.603	(0.898)	2014394	269.491	269
19 Isobutyl alcohol	41	10.059	10.059	(0.941)	1330599	2823.41	2820
16 Allyl chloride	76	7.760	7.760	(0.726)	1102221	246.307	246
18 Acrylonitrile	53	8.149	8.149	(0.762)	1178189	285.530	286

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
9 Acrolein	56	7.121	7.121	(0.666)	641813	315.672	316
28 Propionitrile	54	9.415	9.415	(0.880)	446222	293.766	294

Data File: /chem/VOA2.i/092705v2.b/2d204SL2.d
Date : 27-SEP-2005 07:39
Client ID: VBLK02SLCS
Instrument: VOA2.i
Sample Info: |1200945698|465842|1|VOAF|1|
Purge Volume: 5.0
Operator: CDS1
Column phase: DB-624
Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945697

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D203L2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	42.6	
74-87-3	Chloromethane	42.4	
75-01-4	Vinyl chloride	45.9	
74-83-9	Bromomethane	45.0	
75-00-3	Chloroethane	46.1	
75-69-4	Trichlorofluoromethane	47.4	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	45.1	
67-64-1	Acetone	206	
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	203	
75-15-0	Carbon disulfide	240	
75-05-8	Acetonitrile	1070	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	36.8	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	43.2	
75-34-3	1,1-Dichloroethane	42.8	
108-05-4	Vinyl acetate	217	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	214	
156-59-2	cis-1,2-Dichloroethylene	43.1	
594-20-7	2,2-Dichloropropane	44.0	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	42.8	
67-66-3	Chloroform	42.2	
71-55-6	1,1,1-Trichloroethane	43.6	
563-58-6	1,1-Dichloropropene	43.0	
56-23-5	Carbon tetrachloride	45.0	
107-06-2	1,2-Dichloroethane	42.6	
71-43-2	Benzene	39.4	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945697

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D203L2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	42.0	
78-87-5	1,2-Dichloropropane	42.7	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	42.6	
75-27-4	Bromodichloromethane	44.8	
10061-01-5	cis-1,3-Dichloropropylene	44.3	
108-10-1	4-Methyl-2-pentanone	216	
108-88-3	Toluene	40.3	
10061-02-6	trans-1,3-Dichloropropylene	44.4	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	42.0	
142-28-9	1,3-Dichloropropane	40.8	
591-78-6	2-Hexanone	219	
127-18-4	Tetrachloroethylene	40.6	
124-48-1	Dibromochloromethane	45.5	
106-93-4	1,2-Dibromoethane	42.6	
108-90-7	Chlorobenzene	41.9	
630-20-6	1,1,1,2-Tetrachloroethane	43.9	
100-41-4	Ethylbenzene	41.1	
95-47-6	o-Xylene	40.6	
----------	m,p-Xylenes	80.4	
100-42-5	Styrene	43.6	
75-25-2	Bromoform	51.6	
98-82-8	Isopropylbenzene	42.8	
79-34-5	1,1,2,2-Tetrachloroethane	45.3	
96-18-4	1,2,3-Trichloropropane	45.3	
108-86-1	Bromobenzene	42.2	
103-65-1	n-Propylbenzene	42.3	
95-49-8	2-Chlorotoluene	41.5	
108-67-8	1,3,5-Trimethylbenzene	42.8	
95-63-6	1,2,4-Trimethylbenzene	42.6	
106-43-4	4-Chlorotoluene	42.5	
98-06-6	tert-Butylbenzene	42.4	

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945697

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D203L2

Level: (low/med) LOW Date Received: 09/27/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	42.4	
99-87-6	4-Isopropyltoluene	43.1	
541-73-1	1,3-Dichlorobenzene	41.3	
106-46-7	1,4-Dichlorobenzene	41.3	
104-51-8	n-Butylbenzene	43.8	
95-50-1	1,2-Dichlorobenzene	42.3	
96-12-8	1,2-Dibromo-3-chloropropane	49.2	
120-82-1	1,2,4-Trichlorobenzene	43.9	
87-68-3	Hexachlorobutadiene	44.7	
91-20-3	Naphthalene	43.5	
87-61-6	1,2,3-Trichlorobenzene	43.4	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d203L2.d
Lab Smp Id: 1200945697 Client Smp ID: VBLK02LCS
Inj Date : 27-SEP-2005 07:03
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200945697|465842|1|VOAF|1|
Misc Info : VBLK01LCS VSTD050
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:39 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1759109	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1209665	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	582116	50.0000	
$ 35 Dibromofluoromethane	113	9.913	9.913	(0.927)	467364	57.8358	57.8
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1662414	55.2808	55.3
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	652266	55.7847	55.8
3 Dichlorodifluoromethane	85	4.924	4.924	(0.461)	376480	42.5806	42.6
4 Chloromethane	50	5.281	5.281	(0.494)	626596	42.4538	42.4
5 Vinyl chloride	62	5.509	5.509	(0.515)	384431	45.9022	45.9
6 Bromomethane	94	6.099	6.099	(0.570)	310377	45.0428	45.0
7 Chloroethane	64	6.215	6.215	(0.581)	344720	46.1193	46.1
8 Trichlorofluoromethane	101	6.640	6.640	(0.621)	602191	47.4177	47.4
11 1,1-Dichloroethylene	61	7.370	7.370	(0.689)	636310	45.1204	45.1
10 Acetone	43	7.297	7.297	(0.682)	851895	205.822	206
14 Carbon disulfide	76	7.766	7.766	(0.726)	5527454	240.586	240

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17	Methylene chloride	84	7.924	7.924	(0.741)	327683	36.8324	36.8
21	trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	640801	43.1556	43.2
22	1,1-Dichloroethane	63	8.751	8.751	(0.818)	745813	42.7905	42.8
31	cis-1,2-Dichloroethylene	61	9.408	9.408	(0.880)	741620	43.1444	43.1
32	Chloroform	83	9.725	9.725	(0.910)	586152	42.1671	42.2
37	1,2-Dichloroethane	62	10.406	10.406	(0.973)	557687	42.6583	42.6
30	2-Butanone	43	9.341	9.341	(0.874)	1405561	214.543	214
36	1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	507574	43.5706	43.6
87	1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	723929	41.2918	41.3
93	1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	495649	43.8658	43.9
85	1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	737750	41.3346	41.3
90	1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	702376	42.3387	42.3
95	Naphthalene	128	19.337	19.337	(1.174)	1171804	43.4910	43.5
94	Hexachlorobutadiene	225	19.118	19.118	(1.160)	265853	44.6613	44.7
33	Carbon tetrachloride	117	10.224	10.224	(0.956)	438890	45.0288	45.0
38	Benzene	78	10.436	10.436	(0.976)	1415690	39.4567	39.4
39	Trichloroethylene	95	11.100	11.100	(1.038)	352799	41.9802	42.0
41	1,2-Dichloropropane	63	11.355	11.355	(1.062)	421303	42.6628	42.7
45	Bromodichloromethane	83	11.611	11.611	(1.086)	469447	44.7562	44.8
46	cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	544513	44.3418	44.3
53	trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	490942	44.3607	44.4
54	1,1,2-Trichloroethane	83	12.870	12.870	(0.920)	251205	42.0458	42.0
57	Dibromochloromethane	129	13.357	13.357	(0.954)	336470	45.4684	45.5
49	4-Methyl-2-pentanone	58	12.170	12.170	(0.870)	931033	216.557	216
50	Toluene	92	12.487	12.487	(0.892)	875527	40.3174	40.3
56	Tetrachloroethylene	164	13.107	13.107	(0.937)	265807	40.5651	40.6
55	2-Hexanone	43	13.052	13.052	(0.933)	2044488	218.946	219
59	1,2-Dibromoethane	107	13.533	13.533	(0.967)	296504	42.6530	42.6
62	Chlorobenzene	112	14.032	14.032	(1.003)	908292	41.8858	41.9
58	Ethylbenzene	91	14.093	14.093	(1.007)	1597549	41.1173	41.1
63	m,p-Xylenes	106	14.202	14.202	(1.015)	1179139	80.4489	80.4
65	Styrene	104	14.658	14.658	(1.047)	966824	43.6160	43.6
64	o-Xylene	106	14.652	14.652	(1.047)	584597	40.6265	40.6
67	Isopropylbenzene	105	15.023	15.023	(0.912)	1450881	42.8135	42.8
66	Bromoform	173	14.926	14.926	(0.906)	231538	51.5784	51.6
73	1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	409080	45.3053	45.3
92	1,2-Dibromo-3-chloropropane	75	17.846	17.846	(1.083)	82217	49.2469	49.2
60	1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	324470	43.9372	43.9
34	1,1-Dichloropropene	75	10.181	10.181	(0.952)	467039	42.9776	43.0
52	1,3-Dichloropropane	76	13.071	13.071	(0.934)	488420	40.8196	40.8
80	4-Chlorotoluene	91	15.717	15.717	(0.954)	1180434	42.4840	42.5
15	Acetonitrile	41	7.656	7.656	(0.716)	2003915	1071.95	1070
13	Iodomethane	142	7.620	7.620	(0.713)	2683559	202.687	203
43	Dibromomethane	93	11.495	11.495	(1.075)	213289	42.6215	42.6
29	Bromochloromethane	128	9.694	9.694	(0.907)	165037	42.7968	42.8
75	Bromobenzene	156	15.443	15.443	(0.937)	377341	42.1543	42.2
81	tert-Butylbenzene	119	15.991	15.991	(0.970)	1240462	42.3733	42.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	16.222	16.222	(0.984)	1720744	42.4226	42.4
76 n-Propylbenzene	91	15.455	15.455	(0.938)	1888852	42.2952	42.3
89 n-Butylbenzene	91	16.800	16.800	(1.020)	1397832	43.7894	43.8
23 Vinyl acetate	43	8.691	8.691	(0.813)	5791378	216.625	217
84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	1372052	43.0751	43.1
77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1239089	41.4613	41.5
25 2,2-Dichloropropane	77	9.433	9.433	(0.882)	520471	44.0031	44.0
78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1249098	42.8312	42.8
96 1,2,3-Trichlorobenzene	180	19.695	19.695	(1.195)	462650	43.4299	43.4
79 1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	1290971	42.6332	42.6
74 1,2,3-Trichloropropane	110	15.394	15.394	(0.934)	108042	45.2936	45.3

Data File: /chem/VOA2.i/092705v2.b/2d203L2.d

Date : 27-SEP-2005 07:03

Client ID: VBLK02LCS

Instrument: VOA2.i

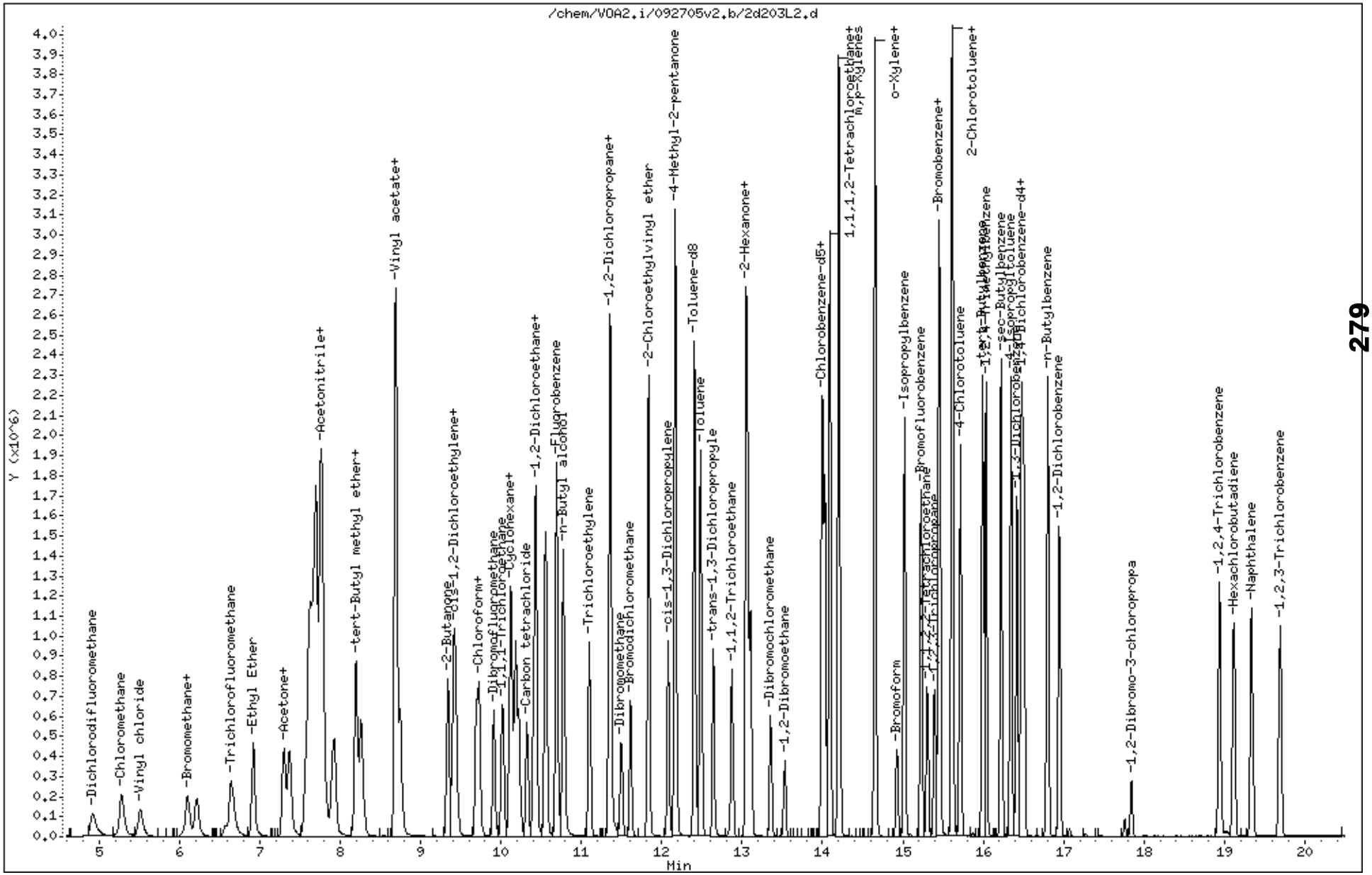
Sample Info: |1200945697|465842|1|VOAF|1|

Purge Volume: 5.0

Operator: CDS1

Column phase: DB-624

Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945702

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D214

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	59.0	
74-87-3	Chloromethane	49.8	
75-01-4	Vinyl chloride	53.3	
74-83-9	Bromomethane	53.5	
75-00-3	Chloroethane	52.1	
75-69-4	Trichlorofluoromethane	52.8	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	49.2	
67-64-1	Acetone	205	
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	226	
75-15-0	Carbon disulfide	265	
75-05-8	Acetonitrile	1100	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	44.4	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	47.8	
75-34-3	1,1-Dichloroethane	47.8	
108-05-4	Vinyl acetate	238	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	219	
156-59-2	cis-1,2-Dichloroethylene	48.1	
594-20-7	2,2-Dichloropropane	46.8	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	49.2	
67-66-3	Chloroform	47.8	
71-55-6	1,1,1-Trichloroethane	48.0	
563-58-6	1,1-Dichloropropene	46.3	
56-23-5	Carbon tetrachloride	48.7	
107-06-2	1,2-Dichloroethane	49.2	
71-43-2	Benzene	44.1	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945702

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D214

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	46.0	
78-87-5	1,2-Dichloropropane	48.2	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	49.0	
75-27-4	Bromodichloromethane	51.4	
10061-01-5	cis-1,3-Dichloropropylene	51.3	
108-10-1	4-Methyl-2-pentanone	221	
108-88-3	Toluene	43.0	
10061-02-6	trans-1,3-Dichloropropylene	49.9	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	47.5	
142-28-9	1,3-Dichloropropane	45.9	
591-78-6	2-Hexanone	221	
127-18-4	Tetrachloroethylene	42.5	
124-48-1	Dibromochloromethane	52.0	
106-93-4	1,2-Dibromoethane	48.2	
108-90-7	Chlorobenzene	45.4	
630-20-6	1,1,1,2-Tetrachloroethane	49.1	
100-41-4	Ethylbenzene	43.3	
95-47-6	o-Xylene	43.5	
----------	m,p-Xylenes	84.8	
100-42-5	Styrene	47.2	
75-25-2	Bromoform	55.8	
98-82-8	Isopropylbenzene	43.8	
79-34-5	1,1,2,2-Tetrachloroethane	47.7	
96-18-4	1,2,3-Trichloropropane	46.5	
108-86-1	Bromobenzene	45.3	
103-65-1	n-Propylbenzene	42.2	
95-49-8	2-Chlorotoluene	43.0	
108-67-8	1,3,5-Trimethylbenzene	44.0	
95-63-6	1,2,4-Trimethylbenzene	44.6	
106-43-4	4-Chlorotoluene	44.1	
98-06-6	tert-Butylbenzene	44.1	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945702

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D214

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	43.9	
99-87-6	4-Isopropyltoluene	44.1	
541-73-1	1,3-Dichlorobenzene	44.0	
106-46-7	1,4-Dichlorobenzene	43.8	
104-51-8	n-Butylbenzene	44.4	
95-50-1	1,2-Dichlorobenzene	46.3	
96-12-8	1,2-Dibromo-3-chloropropane	51.5	
120-82-1	1,2,4-Trichlorobenzene	47.0	
87-68-3	Hexachlorobutadiene	46.0	
91-20-3	Naphthalene	47.6	
87-61-6	1,2,3-Trichlorobenzene	47.7	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d214.d
Lab Smp Id: 1200945702 Client Smp ID: GU05090GMC401MS
Inj Date : 27-SEP-2005 12:00
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200945702|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MS 145579006
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:38 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.692	10.692	(1.000)	1855705	50.0000	
* 61 Chlorobenzene-d5	117	13.995	13.995	(1.000)	1313145	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.477	16.477	(1.000)	646380	50.0000	
$ 35 Dibromofluoromethane	113	9.913	9.913	(0.927)	493378	57.8769	57.9
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1756755	53.8145	53.8
$ 71 Bromofluorobenzene	95	15.224	15.224	(0.924)	707425	54.4869	54.5
3 Dichlorodifluoromethane	85	4.929	4.924	(0.461)	549969	58.9647	59.0
4 Chloromethane	50	5.291	5.281	(0.495)	776143	49.8488	49.8
5 Vinyl chloride	62	5.514	5.509	(0.516)	470876	53.2973	53.3
6 Bromomethane	94	6.105	6.099	(0.571)	388788	53.4850	53.5
7 Chloroethane	64	6.233	6.215	(0.583)	410684	52.0844	52.1
8 Trichlorofluoromethane	101	6.640	6.640	(0.621)	708018	52.8487	52.8
11 1,1-Dichloroethylene	61	7.370	7.370	(0.689)	732028	49.2058	49.2
10 Acetone	43	7.297	7.297	(0.682)	893840	204.715	205
14 Carbon disulfide	76	7.766	7.766	(0.726)	6419307	264.861	265

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17 Methylene chloride	84	7.936	7.924	(0.742)	402019	44.3778	44.4
21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	747959	47.7502	47.8
22 1,1-Dichloroethane	63	8.751	8.751	(0.818)	879962	47.8591	47.8
31 cis-1,2-Dichloroethylene	61	9.408	9.408	(0.880)	871949	48.0860	48.1
32 Chloroform	83	9.731	9.725	(0.910)	700772	47.7886	47.8
37 1,2-Dichloroethane	62	10.406	10.406	(0.973)	679326	49.2578	49.2
30 2-Butanone	43	9.341	9.341	(0.874)	1511739	218.738	219
36 1,1,1-Trichloroethane	97	10.017	10.017	(0.937)	589833	47.9963	48.0
87 1,4-Dichlorobenzene	146	16.508	16.508	(1.002)	853814	43.8584	43.8
93 1,2,4-Trichlorobenzene	180	18.941	18.941	(1.150)	589889	47.0158	47.0
85 1,3-Dichlorobenzene	146	16.416	16.417	(0.996)	872789	44.0388	44.0
90 1,2-Dichlorobenzene	146	16.946	16.946	(1.028)	852957	46.3038	46.3
95 Naphthalene	128	19.337	19.337	(1.174)	1422654	47.5516	47.6
94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	304261	46.0317	46.0
33 Carbon tetrachloride	117	10.224	10.224	(0.956)	501238	48.7487	48.7
38 Benzene	78	10.430	10.436	(0.976)	1669191	44.1004	44.1
39 Trichloroethylene	95	11.100	11.100	(1.038)	407417	45.9558	46.0
41 1,2-Dichloropropane	63	11.355	11.355	(1.062)	501851	48.1741	48.2
45 Bromodichloromethane	83	11.611	11.611	(1.086)	568235	51.3545	51.4
46 cis-1,3-Dichloropropylene	75	12.079	12.079	(1.130)	664175	51.2710	51.3
53 trans-1,3-Dichloropropylene	75	12.645	12.645	(0.904)	599029	49.8618	49.9
54 1,1,2-Trichloroethane	83	12.876	12.870	(0.920)	308257	47.5291	47.5
57 Dibromochloromethane	129	13.357	13.357	(0.954)	417864	52.0177	52.0
49 4-Methyl-2-pentanone	58	12.170	12.170	(0.870)	1030819	220.873	221
50 Toluene	92	12.487	12.487	(0.892)	1012764	42.9620	43.0
56 Tetrachloroethylene	164	13.107	13.107	(0.937)	302592	42.5398	42.5
55 2-Hexanone	43	13.052	13.052	(0.933)	2237139	220.698	221
59 1,2-Dibromoethane	107	13.527	13.533	(0.967)	363547	48.1761	48.2
62 Chlorobenzene	112	14.032	14.032	(1.003)	1068284	45.3817	45.4
58 Ethylbenzene	91	14.093	14.093	(1.007)	1826673	43.3096	43.3
63 m,p-Xylenes	106	14.202	14.202	(1.015)	1348795	84.7722	84.8
65 Styrene	104	14.652	14.658	(1.047)	1136287	47.2214	47.2
64 o-Xylene	106	14.652	14.652	(1.047)	679726	43.5150	43.5
67 Isopropylbenzene	105	15.023	15.023	(0.912)	1648007	43.7955	43.8
66 Bromoform	173	14.926	14.926	(0.906)	278236	55.8188	55.8
73 1,1,2,2-Tetrachloroethane	83	15.303	15.303	(0.929)	478578	47.7326	47.7
92 1,2-Dibromo-3-chloropropane	75	17.840	17.846	(1.083)	95543	51.5392	51.5
60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	393355	49.0676	49.1
34 1,1-Dichloropropene	75	10.181	10.181	(0.952)	530407	46.2681	46.3
52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	596635	45.9342	45.9
80 4-Chlorotoluene	91	15.717	15.717	(0.954)	1360654	44.1015	44.1
15 Acetonitrile	41	7.662	7.656	(0.717)	2176996	1103.91	1100
13 Iodomethane	142	7.620	7.620	(0.713)	3159145	226.188	226
43 Dibromomethane	93	11.495	11.495	(1.075)	258953	49.0530	49.0
29 Bromochloromethane	128	9.694	9.694	(0.907)	200156	49.2019	49.2
75 Bromobenzene	156	15.443	15.443	(0.937)	449929	45.2661	45.3
81 tert-Butylbenzene	119	15.991	15.991	(0.970)	1434037	44.1154	44.1

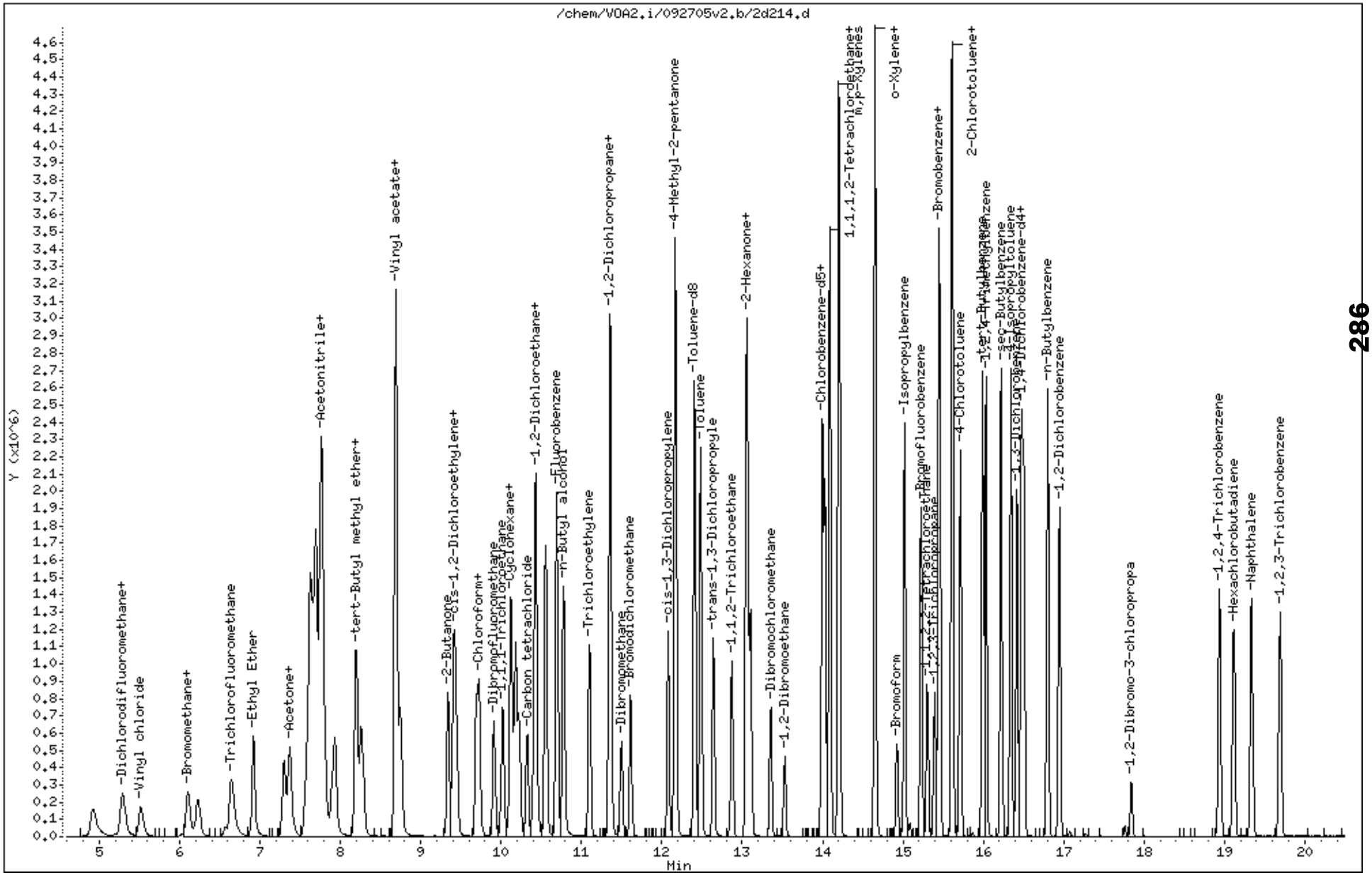
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	16.222	16.222	(0.984)	1976198	43.8766	43.9
76 n-Propylbenzene	91	15.455	15.455	(0.938)	2091639	42.1795	42.2
89 n-Butylbenzene	91	16.800	16.800	(1.020)	1575624	44.4517	44.4
23 Vinyl acetate	43	8.691	8.691	(0.813)	6705014	237.745	238
84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	1561517	44.1494	44.1
77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1426042	42.9729	43.0
25 2,2-Dichloropropane	77	9.439	9.433	(0.883)	584652	46.8563	46.8
78 1,3,5-Trimethylbenzene	105	15.614	15.614	(0.948)	1426744	44.0586	44.0
96 1,2,3-Trichlorobenzene	180	19.695	19.695	(1.195)	564810	47.7486	47.7
79 1,2,4-Trimethylbenzene	105	16.033	16.033	(0.973)	1501258	44.6487	44.6
74 1,2,3-Trichloropropane	110	15.394	15.394	(0.934)	123184	46.5072	46.5(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092705v2.b/2d214.d
Date : 27-SEP-2005 12:00
Client ID: GU05090GMC401MS
Sample Info: |120094570214658421|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401MSD

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945703

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D215

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	55.4	
74-87-3	Chloromethane	47.1	
75-01-4	Vinyl chloride	50.4	
74-83-9	Bromomethane	50.1	
75-00-3	Chloroethane	49.6	
75-69-4	Trichlorofluoromethane	49.3	
107-02-8	Acrolein	5.0	U
75-35-4	1,1-Dichloroethylene	46.5	
67-64-1	Acetone	194	
76-13-1	Trichlorotrifluoroethane	5.0	U
74-88-4	Iodomethane	214	
75-15-0	Carbon disulfide	248	
75-05-8	Acetonitrile	1050	
78-83-1	Isobutyl alcohol	50.0	U
107-05-1	Allyl chloride	5.0	U
75-09-2	Methylene chloride	39.9	
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethylene	44.5	
75-34-3	1,1-Dichloroethane	44.7	
108-05-4	Vinyl acetate	223	
126-99-8	2-Chloro-1,3-butadiene	1.0	U
78-93-3	2-Butanone	204	
156-59-2	cis-1,2-Dichloroethylene	44.7	
594-20-7	2,2-Dichloropropane	43.2	
126-98-7	Methacrylonitrile	5.0	U
107-12-0	Propionitrile	5.0	U
74-97-5	Bromochloromethane	46.3	
67-66-3	Chloroform	44.1	
71-55-6	1,1,1-Trichloroethane	44.9	
563-58-6	1,1-Dichloropropene	43.3	
56-23-5	Carbon tetrachloride	45.4	
107-06-2	1,2-Dichloroethane	46.6	
71-43-2	Benzene	41.3	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401MSD

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945703

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D215

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethylene	42.4	
78-87-5	1,2-Dichloropropane	45.2	
80-62-6	Methyl methacrylate	5.0	U
74-95-3	Dibromomethane	45.2	
75-27-4	Bromodichloromethane	48.3	
10061-01-5	cis-1,3-Dichloropropylene	47.3	
108-10-1	4-Methyl-2-pentanone	207	
108-88-3	Toluene	40.9	
10061-02-6	trans-1,3-Dichloropropylene	47.0	
97-63-2	Ethyl methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	44.5	
142-28-9	1,3-Dichloropropane	43.8	
591-78-6	2-Hexanone	212	
127-18-4	Tetrachloroethylene	40.9	
124-48-1	Dibromochloromethane	49.2	
106-93-4	1,2-Dibromoethane	46.2	
108-90-7	Chlorobenzene	42.6	
630-20-6	1,1,1,2-Tetrachloroethane	45.7	
100-41-4	Ethylbenzene	40.8	
95-47-6	o-Xylene	41.5	
----------	m,p-Xylenes	80.2	
100-42-5	Styrene	44.7	
75-25-2	Bromoform	51.3	
98-82-8	Isopropylbenzene	41.2	
79-34-5	1,1,2,2-Tetrachloroethane	45.0	
96-18-4	1,2,3-Trichloropropane	44.2	
108-86-1	Bromobenzene	42.9	
103-65-1	n-Propylbenzene	40.1	
95-49-8	2-Chlorotoluene	40.6	
108-67-8	1,3,5-Trimethylbenzene	41.2	
95-63-6	1,2,4-Trimethylbenzene	41.8	
106-43-4	4-Chlorotoluene	41.4	
98-06-6	tert-Butylbenzene	42.0	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G
MC401MSD

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) WATER Lab Sample ID: 1200945703

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2D215

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: not dec. _____ Date Analyzed: 09/27/05

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
135-98-8	sec-Butylbenzene	40.8	
99-87-6	4-Isopropyltoluene	41.6	
541-73-1	1,3-Dichlorobenzene	41.0	
106-46-7	1,4-Dichlorobenzene	41.2	
104-51-8	n-Butylbenzene	41.4	
95-50-1	1,2-Dichlorobenzene	42.8	
96-12-8	1,2-Dibromo-3-chloropropane	48.6	
120-82-1	1,2,4-Trichlorobenzene	43.2	
87-68-3	Hexachlorobutadiene	43.7	
91-20-3	Naphthalene	44.4	
87-61-6	1,2,3-Trichlorobenzene	44.8	
123-91-1	1,4-Dioxane	50.0	U

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA2.i/092705v2.b/2d215.d
Lab Smp Id: 1200945703 Client Smp ID: GU05090GMC401MSD
Inj Date : 27-SEP-2005 12:26
Operator : CDS1 Inst ID: VOA2.i
Smp Info : |1200945703|465842|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MSD 145579006
Comment :
Method : /chem/VOA2.i/092705v2.b/VOA2-8260B-092105.m
Meth Date : 27-Sep-2005 13:38 cry00643 Quant Type: ISTD
Cal Date : 21-SEP-2005 19:10 Cal File: 2c327.d
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	10.693	10.692	(1.000)	1867036	50.0000	
* 61 Chlorobenzene-d5	117	13.996	13.995	(1.000)	1310351	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	16.478	16.477	(1.000)	645555	50.0000	
$ 35 Dibromofluoromethane	113	9.914	9.913	(0.927)	491701	57.3301	57.3
$ 47 Toluene-d8	98	12.408	12.408	(0.887)	1746239	53.6064	53.6
$ 71 Bromofluorobenzene	95	15.225	15.224	(0.924)	699529	53.9476	53.9
3 Dichlorodifluoromethane	85	4.922	4.924	(0.460)	519835	55.3957	55.4
4 Chloromethane	50	5.291	5.281	(0.495)	738334	47.1327	47.1
5 Vinyl chloride	62	5.519	5.509	(0.516)	447561	50.3509	50.4
6 Bromomethane	94	6.106	6.099	(0.571)	366541	50.1185	50.1
7 Chloroethane	64	6.221	6.215	(0.582)	393148	49.5578	49.6
8 Trichlorofluoromethane	101	6.647	6.640	(0.622)	664458	49.2963	49.3
11 1,1-Dichloroethylene	61	7.371	7.370	(0.689)	696366	46.5246	46.5
10 Acetone	43	7.292	7.297	(0.682)	850512	193.610	194
14 Carbon disulfide	76	7.767	7.766	(0.726)	6056360	248.369	248

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
17 Methylene chloride	84	7.925	7.924	(0.741)	371127	39.9391	39.9
21 trans-1,2-Dichloroethylene	61	8.259	8.259	(0.772)	701269	44.4978	44.5
22 1,1-Dichloroethane	63	8.746	8.751	(0.818)	827000	44.7057	44.7
31 cis-1,2-Dichloroethylene	61	9.409	9.408	(0.880)	816279	44.7427	44.7
32 Chloroform	83	9.726	9.725	(0.910)	651292	44.1448	44.1
37 1,2-Dichloroethane	62	10.407	10.406	(0.973)	646261	46.5758	46.6
30 2-Butanone	43	9.336	9.341	(0.873)	1421460	204.427	204
36 1,1,1-Trichloroethane	97	10.018	10.017	(0.937)	555224	44.9058	44.9
87 1,4-Dichlorobenzene	146	16.509	16.508	(1.002)	801347	41.2159	41.2
93 1,2,4-Trichlorobenzene	180	18.942	18.941	(1.150)	541562	43.2191	43.2
85 1,3-Dichlorobenzene	146	16.417	16.417	(0.996)	811750	41.0112	41.0
90 1,2-Dichlorobenzene	146	16.947	16.946	(1.028)	786985	42.7770	42.8
95 Naphthalene	128	19.337	19.337	(1.174)	1326326	44.3885	44.4
94 Hexachlorobutadiene	225	19.118	19.118	(1.160)	288483	43.7004	43.7
33 Carbon tetrachloride	117	10.224	10.224	(0.956)	469969	45.4302	45.4
38 Benzene	78	10.431	10.436	(0.976)	1572916	41.3046	41.3
39 Trichloroethylene	95	11.100	11.100	(1.038)	378491	42.4339	42.4
41 1,2-Dichloropropane	63	11.350	11.355	(1.061)	473421	45.1692	45.2
45 Bromodichloromethane	83	11.611	11.611	(1.086)	537407	48.2737	48.3
46 cis-1,3-Dichloropropylene	75	12.080	12.079	(1.130)	616145	47.2746	47.3
53 trans-1,3-Dichloropropylene	75	12.640	12.645	(0.903)	563069	46.9685	47.0
54 1,1,2-Trichloroethane	83	12.871	12.870	(0.920)	288048	44.5079	44.5
57 Dibromochloromethane	129	13.351	13.357	(0.954)	394487	49.2123	49.2
49 4-Methyl-2-pentanone	58	12.165	12.170	(0.869)	964637	207.133	207
50 Toluene	92	12.481	12.487	(0.892)	962117	40.9005	40.9
56 Tetrachloroethylene	164	13.108	13.107	(0.937)	290075	40.8671	40.9
55 2-Hexanone	43	13.053	13.052	(0.933)	2145814	212.140	212
59 1,2-Dibromoethane	107	13.528	13.533	(0.967)	347561	46.1559	46.2
62 Chlorobenzene	112	14.033	14.032	(1.003)	1001359	42.6294	42.6
58 Ethylbenzene	91	14.094	14.093	(1.007)	1717319	40.8037	40.8
63 m,p-Xylenes	106	14.203	14.202	(1.015)	1273277	80.1965	80.2
65 Styrene	104	14.653	14.658	(1.047)	1074264	44.7390	44.7
64 o-Xylene	106	14.653	14.652	(1.047)	646349	41.4665	41.5
67 Isopropylbenzene	105	15.018	15.023	(0.911)	1546618	41.1537	41.2
66 Bromoform	173	14.927	14.926	(0.906)	255344	51.2917	51.3
73 1,1,2,2-Tetrachloroethane	83	15.304	15.303	(0.929)	450753	45.0149	45.0
92 1,2-Dibromo-3-chloropropane	75	17.841	17.846	(1.083)	90023	48.6236	48.6
60 1,1,1,2-Tetrachloroethane	131	14.087	14.087	(1.007)	365459	45.6850	45.7
34 1,1-Dichloropropene	75	10.182	10.181	(0.952)	499065	43.2699	43.3
52 1,3-Dichloropropane	76	13.071	13.071	(0.934)	567789	43.8066	43.8
80 4-Chlorotoluene	91	15.718	15.717	(0.954)	1275882	41.4067	41.4
15 Acetonitrile	41	7.663	7.656	(0.717)	2075498	1046.06	1050
13 Iodomethane	142	7.621	7.620	(0.713)	3005042	213.848	214
43 Dibromomethane	93	11.496	11.495	(1.075)	240100	45.2057	45.2
29 Bromochloromethane	128	9.689	9.694	(0.906)	189420	46.2803	46.3
75 Bromobenzene	156	15.444	15.443	(0.937)	426122	42.9258	42.9
81 tert-Butylbenzene	119	15.992	15.991	(0.970)	1362473	41.9674	42.0

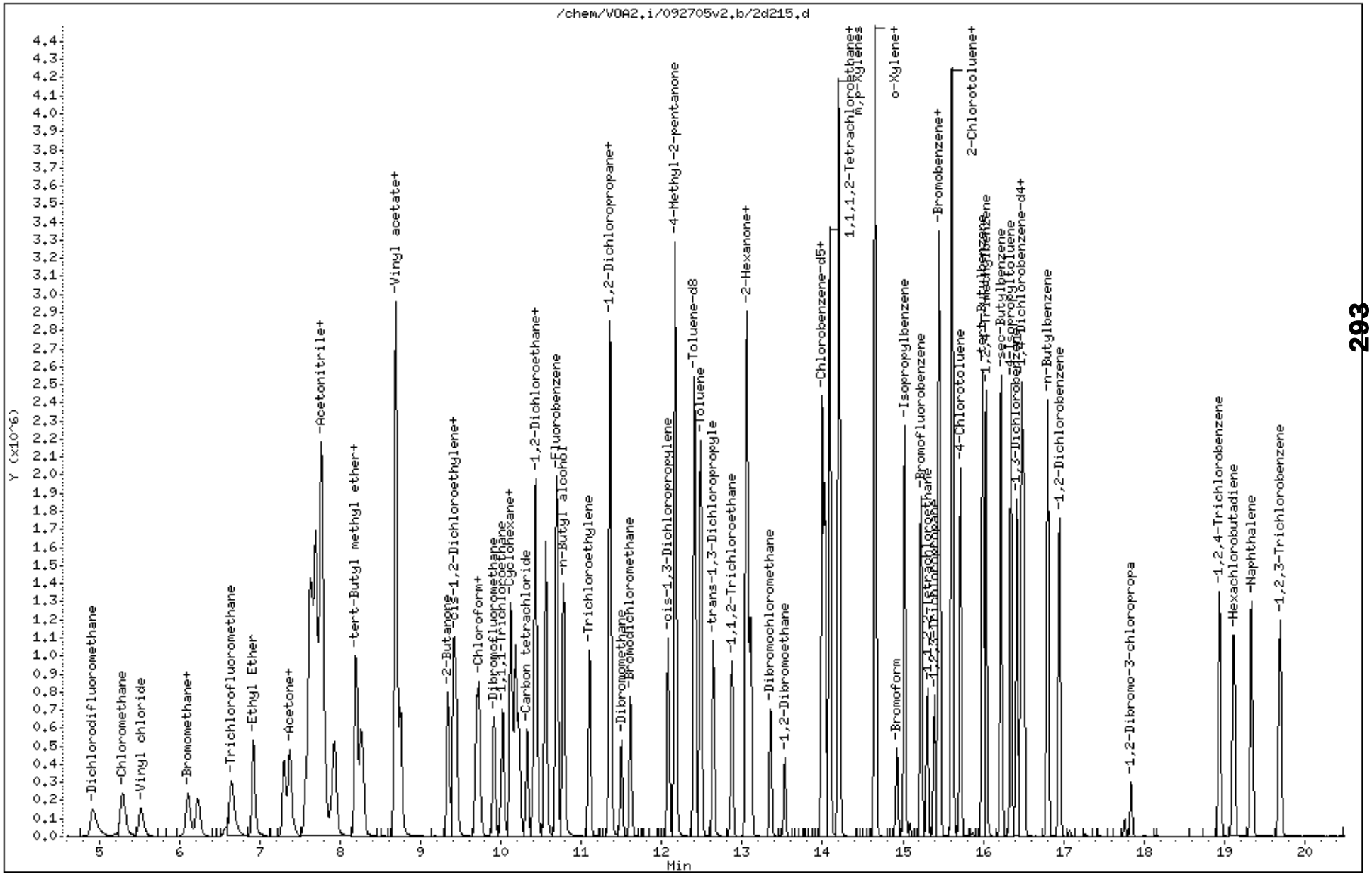
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
83 sec-Butylbenzene	105	16.223	16.222	(0.984)	1835100	40.7960	40.8
76 n-Propylbenzene	91	15.456	15.455	(0.938)	1985574	40.0918	40.1
89 n-Butylbenzene	91	16.801	16.800	(1.020)	1466686	41.4312	41.4
23 Vinyl acetate	43	8.691	8.691	(0.813)	6318052	222.664	223
84 4-Isopropyltoluene	119	16.344	16.344	(0.992)	1468405	41.5698	41.6
77 2-Chlorotoluene	91	15.614	15.614	(0.948)	1344680	40.5729	40.6
25 2,2-Dichloropropane	77	9.434	9.433	(0.882)	541998	43.1742	43.2
78 1,3,5-Trimethylbenzene	105	15.608	15.614	(0.947)	1333475	41.2311	41.2
96 1,2,3-Trichlorobenzene	180	19.696	19.695	(1.195)	529604	44.8295	44.8
79 1,2,4-Trimethylbenzene	105	16.034	16.033	(0.973)	1404520	41.8250	41.8
74 1,2,3-Trichloropropane	110	15.395	15.394	(0.934)	116879	44.1832	44.2(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA2.i/092705v2.b/2d215.d
Date : 27-SEP-2005 12:26
Client ID: GU05090GMC401MSD
Sample Info: |120094570314658421|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA2.i
Operator: CDS1
Column diameter: 0.25



MISCELLANEOUS DATA

INSTRUMENT ID#VOA2

Date: 9/21/05 Method 8260 Operator: CDS

REVIEWED BY: [illegible]
DATE: 9/22/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1624

CALIBRATION & CC INFORMATION:

Initial Calibration Date: _____

(See pg. _____ for ICAL Std. Sci. Ids)

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM050909-01	1	1	1	
SS	UVM050902-01	1	1	1	
LCS/MS					
BFB	UVM050816-02				1
SHORT					
DHEC					

Purge Amount

5 Water Purge Vol:
5 Soil Purge Wt.
_____ Mid level ext. MeOH Vol:
_____ ul
_____ Methanol Lot #
X Heated Purge

Sequence Number: 092105V2

CDS 09/22/05

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(O/X)	Comments
9/21/05	11:07	2C308.D	UVM050816-02	--------	BFB2	--------	1	--------	1	--------	CDS	O	
9/21/05	11:21	2C309.D	W2V050920-01	VSTD001	ICAL	5uL ea	1	--------	1	w/s	CDS	X	UVM050901-02+UVM050818-04E
9/21/05	11:47	2C310.D	W2V050920-01	VSTD001	ICAL	5uL ea	1	--------	2	w/s	CDS	O	UVM050901-02+UVM050818-04E
9/21/05	12:13	2C311.D	W2V050920-02	VSTD002	ICAL	5uL ea	1	--------	3	w/s	CDS	O	UVM050901-03+UVM050818-05E
9/21/05	12:39	2C312.D	W2V050920-03	VSTD005	ICAL	5uL ea	1	--------	4	w/s	CDS	O	UVM050901-04+UVM050818-06E
9/21/05	13:05	2C313.D	W2V050920-04	VSTD010	ICAL	5uL ea	1	--------	5	w/s	CDS	O	UVM050901-05+UVM050818-07E
9/21/05	13:31	2C314.D	W2V050920-05	VSTD020	ICAL	5uL ea	1	--------	6	w/s	CDS	O	UVM050901-06+UVM050818-08E
9/21/05	13:57	2C315.D	W2V050920-06	VSTD050	ICAL	5uL ea	1	--------	7	w/s	CDS	X	UVM050901-07+UVM050818-09E
9/21/05	14:23	2C316.D	W2V050920-07	VSTD100	ICAL	5uL ea	1	--------	8	w/s	CDS	O	UVM050901-08+UVM050818-10E
9/21/05	14:50	2C317.D	12008--------	--------	ICAL	5ML	1	--------	9	w/s	CDS	X	
9/21/05	15:16	2C318.D	W2V050920-08	VSTD0005	ICAL	5uL ea	1	--------	10	w/s	CDS	O	UVM050901-01+UVM050818-03E
9/21/05	15:42	2C319.D	UVM050906-01E	--------	ICV	5ML	1	--------	11	w/s	CDS	X	
9/21/05	16:08	2C320.D	W2V050920-09	--------	ICV	5uL ea	1	--------	12	w/s	CDS	O	UVM050916-01E/IVM050915-01
9/21/05	16:34	2C321.D	12008--------	BLANK	ICAL	5ML	1	--------	13	w/s	CDS	X	
9/21/05	17:00	2C322.D	VSTD005S	VSTD005S	ICAL	5ul	1	--------	14	w/s	CDS	X	UVM050829-01
9/21/05	17:26	2C323.D	VSTD005S	VSTD005S	ICAL	5ul	1	--------	15	w/s	CDS	O	UVM050829-01
9/21/05	17:52	2C324.D	VSTD010S	VSTD010S	ICAL	5ul	1	--------	16	w/s	CDS	O	UVM050829-02
9/21/05	18:18	2C325.D	VSTD025S	VSTD025S	ICAL	5ul	1	--------	17	w/s	CDS	O	UVM050829-03
9/21/05	18:44	2C326.D	VSTD050S	VSTD050S	ICAL	5ul	1	--------	18	w/s	CDS	O	UVM050829-04
9/21/05	19:10	2C327.D	VSTD100S	VSTD100S	ICAL	5ul	1	--------	19	w/s	CDS	O	UVM050829-05
9/21/05	19:36	2C328.D	VSTD250S	VSTD250S	ICAL	5ul	1	--------	20	w/s	CDS	X	UVM050829-06; BAD PURGE
9/21/05	20:02	2C329.D	VSTD500S	VSTD500S	ICAL	5ul	1	--------	21	w/s	CDS	O	UVM050829-07
9/21/05	20:28	2C330.D	12008--------	BLANK	ICAL	5ML	1	--------	22	w/s	CDS	X	
9/21/05	20:54	2C331.D	UVM050829-10A	--------	SHORT	5ML	1	--------	23	w/s	CDS	O	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA2

Date: 9/26/05 Method 8260 Operator: CDS

REVIEWED BY:
DATE: 9/27/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1624

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/21/05

(See pg. 100 for ICAL Std. Sci. Ids)

Daily Standard Volume Added for Purge (ul)

	Solution ID#	Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM050920-01A		5		
IS	UVM050909-01	1	1	1	
SS	UVM050902-01	1	1	1	
LCS/MS	UVM050920-01A			5	
BFB	UVM050816-02				1
SHORT	UVM050829-10A		5		
DHEC					

Purge Amount

5	Water Purge Vol:
5	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
	ul
CN888	Methanol Lot #
X	Heated Purge

Sequence Number: 092605V2

COS 09/27/05

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(O/X)	Comments
9/26/05	6:18	2D101.D	UVM050816-02	--------	BFB	--------	1	--------	1	--------	CDS	O	
9/26/05	6:32	2D102.D	UVM050920-01A	--------	LCS	5ml	1	--------	1	w/s	CDS	X	
9/26/05	6:58	2D103.D	UVM050920-01A	--------	LCSD	5ml	1	--------	2	w/s	CDS	O	passes as CCV/LCS
9/26/05	7:36	2D104.D	UVM050829-10A	--------	SHORT	5ml	1	--------	3	w/s	CDS	O	
9/26/05	8:02	2D105.D	12009-------	--------	-------	5ml	1	--------	4	w/s	CDS	X	clean-up blank
9/26/05	8:29	2D106.D	12009-------	--------	-------	5ml	1	--------	5	w/s	CDS	O	
9/26/05	8:55	2D107.D	146293001	[redacted]	466322	5ML	1	PH2	6	w	CDS	O	REP 10X MEK
9/26/05	9:21	2D108.D	1200944582		466325	100UL	50	--------	7	w	CDS	X	MBLK01; REP carry-over
9/26/05	9:47	2D109.D	146298001		466325	1UL	5000	--------	8	w	CDS	X	5G/5ML REP 50UL
9/26/05	10:13	2D110.D	12009-------	--------	466325	5ml	1	--------	9	w	CDS	X	clean-up blank
9/26/05	10:39	2D111.D	145473001		466135	5.8G	1	--------	10	s	CDS	O	
9/26/05	11:06	2D112.D	145695001		466135	7.1G	1	--------	11	s	CDS	O	
9/26/05	11:32	2D113.D	146298001		466325	50UL	100	--------	12	w	CDS	O	5G/5ML
9/26/05	12:07	2D114.D	145450001		465842	5ML	1	PH2	13	w	CDS	O	
9/26/05	12:33	2D115.D	145579005	ESHL	465842	5ML	1	PH2	14	w	CDS	O	
9/26/05	12:59	2D116.D	145579006	ESHL	465842	5ML	1	PH2	15	w	CDS	O	
9/26/05	13:25	2D117.D	----------	----------	465842		1	--------	16		CDS	X	repurge of 146298001
9/26/05	13:51	2D118.D	145579007	ESHL	465842	5ML	1	PH2	17	w	CDS	O	
9/26/05	14:17	2D119.D	145579008	ESHL	465842	5ML	1	PH2	18	w	CDS	O	
9/26/05	14:43	2D120.D	145579009	ESHL	465842	5ML	1	PH2	18	w	CDS	O	
9/26/05	15:09	2D121.D	145579010	ESHL	465842	5ML	1	PH2	19	w	CDS	O	
9/26/05	15:35	2D122.D	145579011	ESHL	465842	5ML	1	PH2	20	w	CDS	O	
9/26/05	16:01	2D123.D	1200945548	[redacted]	465842	100uL	1	--------	21	w	CDS	O	FBLK01
9/26/05	16:27	2D124.D	145942001		465842	500uL	10	PH7	22	w	CDS	O	
9/26/05	16:53	2D125.D	145942002		465842	500uL	10	PH7	23	w	CDS	O	

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA2

Date: 9/26/05 Method 8260 Operator: CDS

REVIEWED BY: KP
DATE: 9/27/05

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1624

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 9/21/05

(See pg. 100 for ICAL Std. Sci. Ids)

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM050920-01A		5		
IS	UVM050909-01	1	1	1	
SS	UVM050902-01	1	1	1	
LCS/MS	UVM050920-01A			5	
BFB	UVM050816-02				1
SHORT	UVM050829-10A		5		
DHEC					

Purge Amount

5	Water Purge Vol:
5	Soil Purge Wt.
X	Mid level ext. MeOH Vol:
	ul
CN888	Methanol Lot #
X	Heated Purge

Sequence Number: 092605V2

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(O/X)	Comments
9/26/05	17:19	2D126.D	145942003	[redacted]	465842	500uL	10	PH7	24	w	CDS	O	
9/26/05	17:45	2D127.D	1200944579		466325	50UL	100	-------	25	w	CDS	X	5G/5ML MS 146298001;SS HIGH
9/26/05	18:11	2D128.D	1200944580		466325	50UL	100	-------	26	w	CDS	X	5G/5ML MSD 146298001;SS HIGH

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GC/MS SEMIVOLATILE ANALYSIS

Semi-Volatile Case Narrative
Los Alamos National Laboratory (ESHL)
SDG 145579

Method/Analysis Information

Procedure:	**Semivolatile Analysis by Gas Chromatograph/Mass Spectrometer**
Analytical Method:	SW846 8270C
Prep Method:	SW846 3510C
Analytical Batch Number:	463561
Prep Batch Number:	463559

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8270C:

Sample ID	Client ID
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200938050	Method Blank (MB)
1200938051	Laboratory Control Sample (LCS)
1200938052	145579005(GU05090G3TM01) Matrix Spike (MS)

Preparation/Analytical Method Verification

Procedures for preparation, analysis, and reporting of analytical data are documented by General Engineering Laboratories, LLC (GEL) as Standard Operating Procedure (SOP) GL-OA-E-009, Rev. 14.

Calibration Information

Due to software limitations, the files displayed at the beginning of the Form 6 are only the last files uploaded for each individual level. A complete listing of all files used in the current ICAL are shown on the Calibration History that is included with each Level 4 or higher package. The last file by date in each level is the one currently uploaded for that level.

Diphenylamine has now superseded N-Nitroso-diphenylamine as a CCC on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Method 8270 (prior to 8270C) listed N-Nitroso-diphenylamine as a CCC. However, as stated in EPA Method 8270C, Revision 3, December, 1996, Section 1.4.5, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, show that

they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

When calibrations are performed for Appendix IX compounds some of the compounds may not be calibrated exactly according to the criteria in Method 8270C. If the %RSD is greater than 15% or the correlation coefficient is less that 0.99 then the analyte is quantitated using the response factor. If the analyte is detected then the sample is re-analyzed for that analyte on an instrument that is compliant with the criteria in the method.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The laboratory control sample (LCS) recovery for 2,6 Dinitrotoluene (70%) was outside of the established acceptance limits of (72-115%). The failure was less than 5% of the requested spiking compounds. This satisfies the acceptance criteria for this client. All associated data were reported.

QC Sample Designation
Sample 145579005 (GU05090G3TM01) was selected for analysis as the matrix spike.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information:

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

Preparation/Analytical Method Verification
Less than 1000ml of sample was used during the extraction process for samples 145579005 and 1200938052 MS.

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

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for confirmations and/or dilutions.

Miscellaneous Information:

Nonconformance (NCR) Documentation
Nonconformance report (NCR) 256659 was generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Please see the raw data in the Miscellaneous Section.

Additional Comments
Additional comments were not required for this SDG.

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The laboratory utilizes a HP 6890 Series gas chromatograph and a HP 5973 Mass Selective Detector. The configuration is equipped with the electronic pressure control. All MS interfaces are capillary direct.

Chromatographic Columns

Chromatographic separation of semivolatile components is accomplished through analysis on one or more of the following columns (all with dimensions of 30 meters x 0.25 millimeters ID and 0.25 micron film except J&W DB-5MS2 which is 25 meters x 0.20 mm ID and 0.33 micron film):

Column ID	Column Description
J&W	DB-5.625(5% Phenyl)-methylpolysiloxane (identified by a DB-5.625 designation on quantitation reports and reconstructed ion chromatograms)
J&W DB-5MS	Similar to the J&W DB-5.625 with low bleed characteristics (identified by a DB-5MS designation)
Alltech	EC-5 (SE-54) 5% Phenyl, 95% Methylpolysiloxane (identified by a HP-5MS designation)
HP	HP-5MS 5% Phenylmethylsiloxane (identified by a HP-5MS designation)
Phenomenex	ZB-5 5% Phenyl Polysiloxane (identified by a ZB-5 designation)
J&W DB-5MS2	Similar to the J&W DB-5.625 with low bleed characteristics (identified by a DB-5MS2 designation)

Instrument Configuration

The samples reported in this SDG were analyzed on one or more of the following instrument systems. Instrument systems are referenced in the raw data and individual form headers by the Instrument ID designations listed below:

The Semi-Volatiles-GC/MS analysis was performed on a HP Mass Spectrometer.

Instrument ID	System Configuration	Column ID	Column Description
MSD6.I	HP6890/HP5973	DB-5MS	25m x 0.20mm x 0.33 um (5% Phenylmethylpolysiloxane)

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ **Date:** 14 Oct, 2005

Roadmap for ESHL 145579 SVOA

This roadmap was analyzed by Jennifer Dunagan on 10-12-2005, 15:47.
This roadmap was reviewed by Joseph Bearden on 10-13-2005, 14:08.
This roadmap was packaged by Lawanda Miller on 10-13-2005, 15:45.
This roadmap was validated by on 10-14-2005, 10:56.

Sample

exclude	manual	datafile	smpid	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/MSD6.i/s100805.s.b/s6j0821.d	145579005	09-OCT-2005	00:31	145579.sub	GU05090G3TM01	1	
☐	N	/chem/MSD6.i/s100805.s.b/s6j0823.d	145579006	09-OCT-2005	01:14	145579.sub	GU05090GMC401	1	
☐	N	/chem/MSD6.i/s100805.s.b/s6j0824.d	145579007	09-OCT-2005	01:36	145579.sub	GU05090G57M01	1	
☐	N	/chem/MSD6.i/s100805.s.b/s6j0825.d	145579008	09-OCT-2005	01:58	145579.sub	GU05090G7CM01	1	

QC Sample

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	comment
☐	N	/chem/MSD6.i/s100805.s.b/s6j0813-1.d	1200938050	mb	08-OCT-2005	21:35	145579.sub	sblk01	1	
☐	N	/chem/MSD6.i/s100805.s.b/s6j0814-1.d	1200938051	lcs	08-OCT-2005	21:57	145579.sub	SBLK01LCS	1	SPIKES FAIL LESS THAN 5%
☐	N	/chem/MSD6.i/s100805.s.b/s6j0822.d	1200938052	ms	09-OCT-2005	00:53	145579.sub	GU05090G3TM01MS	1	

SAMPLE DATA SUMMARY

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	20.0	U
62-53-3	Aniline	20.0	U
108-95-2	Phenol	20.0	U
111-44-4	bis(2-Chloroethyl) ether	20.0	U
95-57-8	2-Chlorophenol	20.0	U
541-73-1	1,3-Dichlorobenzene	20.0	U
106-46-7	1,4-Dichlorobenzene	20.0	U
100-51-6	Benzyl alcohol	20.0	U
95-50-1	1,2-Dichlorobenzene	20.0	U
108-60-1	bis(2-Chloroisopropyl)ether	20.0	U
95-48-7	o-Cresol	20.0	U
621-64-7	N-Nitrosodipropylamine	20.0	U
65794-96-9	m,p-Cresols	20.0	U
67-72-1	Hexachloroethane	20.0	U
98-95-3	Nitrobenzene	20.0	U
78-59-1	Isophorone	20.0	U
88-75-5	2-Nitrophenol	20.0	U
105-67-9	2,4-Dimethylphenol	20.0	U
111-91-1	bis(2-Chloroethoxy)methane	20.0	U
120-83-2	2,4-Dichlorophenol	20.0	U
65-85-0	Benzoic acid	40.0	U
120-82-1	1,2,4-Trichlorobenzene	20.0	U
91-20-3	Naphthalene	2.0	U
106-47-8	4-Chloroaniline	20.0	U
87-68-3	Hexachlorobutadiene	20.0	U
59-50-7	4-Chloro-3-methylphenol	20.0	U
91-57-6	2-Methylnaphthalene	2.0	U
90-12-0	1-Methylnaphthalene	2.0	U
77-47-4	Hexachlorocyclopentadiene	20.0	U
88-06-2	2,4,6-Trichlorophenol	20.0	U
95-95-4	2,4,5-Trichlorophenol	20.0	U
91-58-7	2-Chloronaphthalene	2.0	U
88-74-4	o-Nitroaniline	20.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	20.0	U
131-11-3	Dimethylphthalate	20.0	U
606-20-2	2,6-Dinitrotoluene	20.0	U
208-96-8	Acenaphthylene	2.0	U
83-32-9	Acenaphthene	2.0	U
51-28-5	2,4-Dinitrophenol	40.0	U
132-64-9	Dibenzofuran	20.0	U
121-14-2	2,4-Dinitrotoluene	20.0	U
84-66-2	Diethylphthalate	20.0	U
100-02-7	4-Nitrophenol	20.0	U
86-73-7	Fluorene	2.0	U
7005-72-3	4-Chlorophenylphenylether	20.0	U
534-52-1	2-Methyl-4,6-dinitrophenol	20.0	U
100-01-6	p-Nitroaniline	20.0	U
122-39-4	Diphenylamine	20.0	U
122-66-7	1,2-Diphenylhydrazine	20.0	U
101-55-3	4-Bromophenylphenylether	20.0	U
118-74-1	Hexachlorobenzene	20.0	U
1912-24-9	Atrazine	20.0	U
87-86-5	Pentachlorophenol	20.0	U
85-01-8	Phenanthrene	2.0	U
120-12-7	Anthracene	2.0	U
84-74-2	Di-n-butylphthalate	20.0	U
206-44-0	Fluoranthene	2.0	U
92-87-5	Benzidine	100	U
129-00-0	Pyrene	2.0	U
85-68-7	Butylbenzylphthalate	20.0	U
56-55-3	Benzo(a)anthracene	2.0	U
91-94-1	3,3'-Dichlorobenzidine	20.0	U
218-01-9	Chrysene	2.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	20.0	U
117-84-0	Di-n-octylphthalate	20.0	U
205-99-2	Benzo(b)fluoranthene	2.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	2.0	U
50-32-8	Benzo(a)pyrene	2.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.0	U
53-70-3	Dibenzo(a,h)anthracene	2.0	U
191-24-2	Benzo(ghi)perylene	2.0	U
55-18-5	N-Nitrosodiethylamine	20.0	U
930-55-2	N-Nitrosopyrrolidine	20.0	U
924-16-3	N-Nitrosodi-n-butylamine	20.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	20.0	U
608-93-5	Pentachlorobenzene	20.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	20.0	U
88-85-7	Dinoseb	20.0	U

1F

EPA SAMPLE NO.

GU05090G3TM01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.33	135	J
2.		UNKNOWN	1.43	13.3	JB
3.	1000154-28-6	CYCLOPENTENE, 1,2,3,4,5-PENT	2.64	26.6	NJ
4.		UNKNOWN	2.79	8.8	JB
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
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19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I SV-TIC OLM03.0

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	10.6	U
62-53-3	Aniline	10.6	U
108-95-2	Phenol	10.6	U
111-44-4	bis(2-Chloroethyl) ether	10.6	U
95-57-8	2-Chlorophenol	10.6	U
541-73-1	1,3-Dichlorobenzene	10.6	U
106-46-7	1,4-Dichlorobenzene	10.6	U
100-51-6	Benzyl alcohol	10.6	U
95-50-1	1,2-Dichlorobenzene	10.6	U
108-60-1	bis(2-Chloroisopropyl)ether	10.6	U
95-48-7	o-Cresol	10.6	U
621-64-7	N-Nitrosodipropylamine	10.6	U
65794-96-9	m,p-Cresols	10.6	U
67-72-1	Hexachloroethane	10.6	U
98-95-3	Nitrobenzene	10.6	U
78-59-1	Isophorone	10.6	U
88-75-5	2-Nitrophenol	10.6	U
105-67-9	2,4-Dimethylphenol	10.6	U
111-91-1	bis(2-Chloroethoxy)methane	10.6	U
120-83-2	2,4-Dichlorophenol	10.6	U
65-85-0	Benzoic acid	21.3	U
120-82-1	1,2,4-Trichlorobenzene	10.6	U
91-20-3	Naphthalene	1.1	U
106-47-8	4-Chloroaniline	10.6	U
87-68-3	Hexachlorobutadiene	10.6	U
59-50-7	4-Chloro-3-methylphenol	10.6	U
91-57-6	2-Methylnaphthalene	1.1	U
90-12-0	1-Methylnaphthalene	1.1	U
77-47-4	Hexachlorocyclopentadiene	10.6	U
88-06-2	2,4,6-Trichlorophenol	10.6	U
95-95-4	2,4,5-Trichlorophenol	10.6	U
91-58-7	2-Chloronaphthalene	1.1	U
88-74-4	o-Nitroaniline	10.6	U

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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
99-09-2	m-Nitroaniline	10.6	U	
131-11-3	Dimethylphthalate	10.6	U	
606-20-2	2,6-Dinitrotoluene	10.6	U	
208-96-8	Acenaphthylene	1.1	U	
83-32-9	Acenaphthene	1.1	U	
51-28-5	2,4-Dinitrophenol	21.3	U	
132-64-9	Dibenzofuran	10.6	U	
121-14-2	2,4-Dinitrotoluene	10.6	U	
84-66-2	Diethylphthalate	10.6	U	
100-02-7	4-Nitrophenol	10.6	U	
86-73-7	Fluorene	1.1	U	
7005-72-3	4-Chlorophenylphenylether	10.6	U	
534-52-1	2-Methyl-4,6-dinitrophenol	10.6	U	
100-01-6	p-Nitroaniline	10.6	U	
122-39-4	Diphenylamine	10.6	U	
122-66-7	1,2-Diphenylhydrazine	10.6	U	
101-55-3	4-Bromophenylphenylether	10.6	U	
118-74-1	Hexachlorobenzene	10.6	U	
1912-24-9	Atrazine	10.6	U	
87-86-5	Pentachlorophenol	10.6	U	
85-01-8	Phenanthrene	1.1	U	
120-12-7	Anthracene	1.1	U	
84-74-2	Di-n-butylphthalate	10.6	U	
206-44-0	Fluoranthene	1.1	U	
92-87-5	Benzidine	53.2	U	
129-00-0	Pyrene	1.1	U	
85-68-7	Butylbenzylphthalate	10.6	U	
56-55-3	Benzo(a)anthracene	1.1	U	
91-94-1	3,3'-Dichlorobenzidine	10.6	U	
218-01-9	Chrysene	1.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10.6	U	
117-84-0	Di-n-octylphthalate	10.6	U	
205-99-2	Benzo(b)fluoranthene	1.1	U	

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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	1.1	U
50-32-8	Benzo(a)pyrene	1.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.1	U
53-70-3	Dibenzo(a,h)anthracene	1.1	U
191-24-2	Benzo(ghi)perylene	1.1	U
55-18-5	N-Nitrosodiethylamine	10.6	U
930-55-2	N-Nitrosopyrrolidine	10.6	U
924-16-3	N-Nitrosodi-n-butylamine	10.6	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10.6	U
608-93-5	Pentachlorobenzene	10.6	U
58-90-2	2,3,4,6-Tetrachlorophenol	10.6	U
88-85-7	Dinoseb	10.6	U

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EPA SAMPLE NO.

GU05090G57M01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.33	79.2	J
2.		UNKNOWN	1.43	5.9	JB
3.	1000154-28-6	CYCLOPENTENE, 1,2,3,4,5-PENT	2.52	4.5	NJ
4.		UNKNOWN	2.64	16.0	J
5.		UNKNOWN	2.79	5.2	JB
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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	10.5	U
62-53-3	Aniline	10.5	U
108-95-2	Phenol	10.5	U
111-44-4	bis(2-Chloroethyl) ether	10.5	U
95-57-8	2-Chlorophenol	10.5	U
541-73-1	1,3-Dichlorobenzene	10.5	U
106-46-7	1,4-Dichlorobenzene	10.5	U
100-51-6	Benzyl alcohol	10.5	U
95-50-1	1,2-Dichlorobenzene	10.5	U
108-60-1	bis(2-Chloroisopropyl)ether	10.5	U
95-48-7	o-Cresol	10.5	U
621-64-7	N-Nitrosodipropylamine	10.5	U
65794-96-9	m,p-Cresols	10.5	U
67-72-1	Hexachloroethane	10.5	U
98-95-3	Nitrobenzene	10.5	U
78-59-1	Isophorone	10.5	U
88-75-5	2-Nitrophenol	10.5	U
105-67-9	2,4-Dimethylphenol	10.5	U
111-91-1	bis(2-Chloroethoxy)methane	10.5	U
120-83-2	2,4-Dichlorophenol	10.5	U
65-85-0	Benzoic acid	21.0	U
120-82-1	1,2,4-Trichlorobenzene	10.5	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.5	U
87-68-3	Hexachlorobutadiene	10.5	U
59-50-7	4-Chloro-3-methylphenol	10.5	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.5	U
88-06-2	2,4,6-Trichlorophenol	10.5	U
95-95-4	2,4,5-Trichlorophenol	10.5	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.5	U

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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	10.5	U
131-11-3	Dimethylphthalate	10.5	U
606-20-2	2,6-Dinitrotoluene	10.5	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	21.0	U
132-64-9	Dibenzofuran	10.5	U
121-14-2	2,4-Dinitrotoluene	10.5	U
84-66-2	Diethylphthalate	10.5	U
100-02-7	4-Nitrophenol	10.5	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.5	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.5	U
100-01-6	p-Nitroaniline	10.5	U
122-39-4	Diphenylamine	10.5	U
122-66-7	1,2-Diphenylhydrazine	10.5	U
101-55-3	4-Bromophenylphenylether	10.5	U
118-74-1	Hexachlorobenzene	10.5	U
1912-24-9	Atrazine	10.5	U
87-86-5	Pentachlorophenol	10.5	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.5	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	52.6	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.5	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.5	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.5	U
117-84-0	Di-n-octylphthalate	10.5	U
205-99-2	Benzo(b)fluoranthene	1.0	U

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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
55-18-5	N-Nitrosodiethylamine	10.5	U
930-55-2	N-Nitrosopyrrolidine	10.5	U
924-16-3	N-Nitrosodi-n-butylamine	10.5	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10.5	U
608-93-5	Pentachlorobenzene	10.5	U
58-90-2	2,3,4,6-Tetrachlorophenol	10.5	U
88-85-7	Dinoseb	10.5	U

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EPA SAMPLE NO.

GU05090G7CM01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.33	52.4	J
2.		UNKNOWN	2.63	15.4	J
3.		UNKNOWN	2.78	6.6	JB
4.		UNKNOWN	2.79	6.4	JB
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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	10.5	U
62-53-3	Aniline	10.5	U
108-95-2	Phenol	10.5	U
111-44-4	bis(2-Chloroethyl) ether	10.5	U
95-57-8	2-Chlorophenol	10.5	U
541-73-1	1,3-Dichlorobenzene	10.5	U
106-46-7	1,4-Dichlorobenzene	10.5	U
100-51-6	Benzyl alcohol	10.5	U
95-50-1	1,2-Dichlorobenzene	10.5	U
108-60-1	bis(2-Chloroisopropyl)ether	10.5	U
95-48-7	o-Cresol	10.5	U
621-64-7	N-Nitrosodipropylamine	10.5	U
65794-96-9	m,p-Cresols	10.5	U
67-72-1	Hexachloroethane	10.5	U
98-95-3	Nitrobenzene	10.5	U
78-59-1	Isophorone	10.5	U
88-75-5	2-Nitrophenol	10.5	U
105-67-9	2,4-Dimethylphenol	10.5	U
111-91-1	bis(2-Chloroethoxy)methane	10.5	U
120-83-2	2,4-Dichlorophenol	10.5	U
65-85-0	Benzoic acid	21.0	U
120-82-1	1,2,4-Trichlorobenzene	10.5	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.5	U
87-68-3	Hexachlorobutadiene	10.5	U
59-50-7	4-Chloro-3-methylphenol	10.5	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.5	U
88-06-2	2,4,6-Trichlorophenol	10.5	U
95-95-4	2,4,5-Trichlorophenol	10.5	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.5	U

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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
99-09-2	m-Nitroaniline	10.5	U	
131-11-3	Dimethylphthalate	10.5	U	
606-20-2	2,6-Dinitrotoluene	10.5	U	
208-96-8	Acenaphthylene	1.0	U	
83-32-9	Acenaphthene	1.0	U	
51-28-5	2,4-Dinitrophenol	21.0	U	
132-64-9	Dibenzofuran	10.5	U	
121-14-2	2,4-Dinitrotoluene	10.5	U	
84-66-2	Diethylphthalate	10.5	U	
100-02-7	4-Nitrophenol	10.5	U	
86-73-7	Fluorene	1.0	U	
7005-72-3	4-Chlorophenylphenylether	10.5	U	
534-52-1	2-Methyl-4,6-dinitrophenol	10.5	U	
100-01-6	p-Nitroaniline	10.5	U	
122-39-4	Diphenylamine	10.5	U	
122-66-7	1,2-Diphenylhydrazine	10.5	U	
101-55-3	4-Bromophenylphenylether	10.5	U	
118-74-1	Hexachlorobenzene	10.5	U	
1912-24-9	Atrazine	10.5	U	
87-86-5	Pentachlorophenol	10.5	U	
85-01-8	Phenanthrene	1.0	U	
120-12-7	Anthracene	1.0	U	
84-74-2	Di-n-butylphthalate	10.5	U	
206-44-0	Fluoranthene	1.0	U	
92-87-5	Benzidine	52.6	U	
129-00-0	Pyrene	1.0	U	
85-68-7	Butylbenzylphthalate	10.5	U	
56-55-3	Benzo(a)anthracene	1.0	U	
91-94-1	3,3'-Dichlorobenzidine	10.5	U	
218-01-9	Chrysene	1.0	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10.5	U	
117-84-0	Di-n-octylphthalate	10.5	U	
205-99-2	Benzo(b)fluoranthene	1.0	U	

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SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
55-18-5	N-Nitrosodiethylamine	10.5	U
930-55-2	N-Nitrosopyrrolidine	10.5	U
924-16-3	N-Nitrosodi-n-butylamine	10.5	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10.5	U
608-93-5	Pentachlorobenzene	10.5	U
58-90-2	2,3,4,6-Tetrachlorophenol	10.5	U
88-85-7	Dinoseb	10.5	U

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EPA SAMPLE NO.

GU05090GMC401

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	1.26	21.2	AJB
2.		UNKNOWN	1.33	63.4	J
3.		UNKNOWN	1.43	4.3	JB
4.	123-91-1	1,4-DIOXANE	1.55	5.6	NJ
5.	1000154-28-6	CYCLOPENTENE, 1,2,3,4,5-PENT	2.64	12.5	NJ
6.					
7.					
8.					
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FORM I SV-TIC OLM03.0

QUALITY CONTROL SUMMARY

2C
GROUND WATER SVOA SURROGATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

	EPA SAMPLE NO.	S1 (2FP)#	S2 (PHL)#	S3 (NBZ)#	S4 (FBP)#	S5 (TBP)#	S6 (TPH)#	TOT OUT
01	SBLK01	40	27	77	68	67	94	0
02	SBLK01LCS	44	29	77	73	80	78	0
03	GU05090G3TM01	53	42	78	66	68	98	0
04	GU05090G3TM01MS	60	47	88	84	92	95	0
05	GU05090GMC401	34	23	70	64	66	97	0
06	GU05090G57M01	27	20	79	70	55	103	0
07	GU05090G7CM01	40	26	77	67	68	92	0
08								
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	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(13- 67)
S2 (PHL) = Phenol-d5	(10- 70)
S3 (NBZ) = Nitrobenzene-d5	(43-100)
S4 (FBP) = 2-Fluorobiphenyl	(36- 97)
S5 (TBP) = 2,4,6-Tribromophenol	(33-111)
S6 (TPH) = p-Terphenyl-d14	(50-126)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090G3TM0

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
N-Methyl-N-nitrosomethy	100	0.0	64.2	64	37- 83
Aniline	100	0.0	72.8	73	48- 92
Phenol	200	0.0	96.6	48	23- 64
bis(2-Chloroethyl) ethe	100	0.0	69.9	70	35- 99
2-Chlorophenol	200	0.0	157	78	46- 93
1,3-Dichlorobenzene	100	0.0	67.5	68	39- 86
1,4-Dichlorobenzene	100	0.0	69.9	70	42- 88
Benzyl alcohol	100	0.0	75.2	75	40-101
1,2-Dichlorobenzene	100	0.0	69.9	70	39- 93
bis(2-Chloroisopropyl)e	100	0.0	67.0	67	53- 96
o-Cresol	200	0.0	139	70	31- 98
N-Nitrosodipropylamine	100	0.0	86.6	87	58- 98
m,p-Cresols	200	0.0	145	72	27- 90
Hexachloroethane	100	0.0	72.8	73	27- 92
Nitrobenzene	100	0.0	82.9	83	47-109
Isophorone	100	0.0	81.8	82	52-100
2-Nitrophenol	200	0.0	163	82	47-107
2,4-Dimethylphenol	200	0.0	167	84	49- 96
bis(2-Chloroethoxy)meth	100	0.0	78.7	79	51- 97
2,4-Dichlorophenol	200	0.0	168	84	48-104
Benzoic acid	200	0.0	99.2	50	20- 86
1,2,4-Trichlorobenzene	100	0.0	73.6	74	36- 96
Naphthalene	100	0.0	80.6	81	43- 92
4-Chloroaniline	100	0.0	73.3	73	41-115
Hexachlorobutadiene	100	0.0	79.1	79	31- 97
4-Chloro-3-methylphenol	200	0.0	184	92	43-116
2-Methylnaphthalene	100	0.0	79.8	80	52- 94
1-Methylnaphthalene	100	0.0	78.2	78	48- 98

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090G3TM0

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Hexachlorocyclopentadie	100	0.0	55.2	55	31- 84
2,4,6-Trichlorophenol	200	0.0	176	88	40-105
2,4,5-Trichlorophenol	200	0.0	176	88	49-102
2-Chloronaphthalene	100	0.0	77.9	78	48- 97
o-Nitroaniline	100	0.0	87.9	88	62-112
m-Nitroaniline	100	0.0	78.0	78	58-111
Dimethylphthalate	100	0.0	82.8	83	69-103
2,6-Dinitrotoluene	100	0.0	80.0	80	66-127
Acenaphthylene	100	0.0	80.7	81	54-100
Acenaphthene	100	0.0	75.0	75	56-109
2,4-Dinitrophenol	200	0.0	160	80	30-133
Dibenzofuran	100	0.0	79.1	79	59- 99
2,4-Dinitrotoluene	100	0.0	83.1	83	53-118
Diethylphthalate	100	0.0	89.0	89	63-111
4-Nitrophenol	200	0.0	114	57	21- 88
Fluorene	100	0.0	84.0	84	27-135
4-Chlorophenylphenyleth	100	0.0	84.8	85	59-100
2-Methyl-4,6-dinitrophe	200	0.0	188	94	45-130
p-Nitroaniline	100	0.0	83.6	84	50-121
Diphenylamine	100	0.0	87.8	88	62-104
1,2-Diphenylhydrazine	100	0.0	92.8	93	63-108
4-Bromophenylphenylethe	100	0.0	85.0	85	59-114
Hexachlorobenzene	100	0.0	87.9	88	61-109
Atrazine	100	0.0	83.5	84	10-150
Pentachlorophenol	200	0.0	200	100	34-117
Phenanthrene	100	0.0	86.2	86	65-105
Anthracene	100	0.0	87.6	88	64-105
Di-n-butylphthalate	100	0.0	95.4	95	61-119

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C

GROUND WATER SVOA MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: GU05090G3TM0

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Fluoranthene	100	0.0	88.8	89	55-115
Benzidine	100	0.0	41.5	42	10- 60
Pyrene	100	0.0	92.8	93	50-130
Butylbenzylphthalate	100	0.0	94.0	94	58-123
Benzo(a)anthracene	100	0.0	86.3	86	68-105
3,3'-Dichlorobenzidine	100	0.0	81.3	81	46-109
Chrysene	100	0.0	84.9	85	61-107
bis(2-Ethylhexyl)phthal	100	0.0	97.9	98	54-131
Di-n-octylphthalate	100	0.0	103	103	46-137
Benzo(b)fluoranthene	100	0.0	87.6	88	47-121
Benzo(k)fluoranthene	100	0.0	90.1	90	63-124
Benzo(a)pyrene	100	0.0	91.9	92	52-114
Indeno(1,2,3-cd)pyrene	100	0.0	91.8	92	43-110
Dibenzo(a,h)anthracene	100	0.0	94.3	94	41-109
Benzo(ghi)perylene	100	0.0	90.4	90	41-126

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 71 outside limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: sblk01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
N-Methyl-N-nitrosomethy	50.0	0.0	20.8	42	26- 69
Aniline	50.0	0.0	33.9	68	39- 92
Phenol	100	0.0	29.3	29	18- 42
bis(2-Chloroethyl) ethe	50.0	0.0	31.1	62	37- 97
2-Chlorophenol	100	0.0	69.8	70	45- 90
1,3-Dichlorobenzene	50.0	0.0	29.7	59	35- 84
1,4-Dichlorobenzene	50.0	0.0	31.5	63	38- 85
Benzyl alcohol	50.0	0.0	34.1	68	38- 87
1,2-Dichlorobenzene	50.0	0.0	30.8	62	36- 88
bis(2-Chloroisopropyl)e	50.0	0.0	31.2	62	40-106
o-Cresol	100	0.0	58.2	58	42- 79
N-Nitrosodipropylamine	50.0	0.0	37.6	75	48-104
m,p-Cresols	100	0.0	58.2	58	34- 75
Hexachloroethane	50.0	0.0	31.4	63	30- 86
Nitrobenzene	50.0	0.0	37.4	75	46-101
Isophorone	50.0	0.0	36.6	73	52- 94
2-Nitrophenol	100	0.0	72.1	72	54- 92
2,4-Dimethylphenol	100	0.0	71.7	72	41- 95
bis(2-Chloroethoxy)meth	50.0	0.0	35.4	71	50- 94
2,4-Dichlorophenol	100	0.0	73.3	73	50- 95
Benzoic acid	100	0.0	20.9	21	10- 37
1,2,4-Trichlorobenzene	50.0	0.0	32.4	65	37- 87
Naphthalene	50.0	0.0	35.4	71	41- 87
4-Chloroaniline	50.0	0.0	36.2	72	44-110
Hexachlorobutadiene	50.0	0.0	34.8	70	26- 91
4-Chloro-3-methylphenol	100	0.0	81.6	82	53-102
2-Methylnaphthalene	50.0	0.0	35.1	70	45- 91
1-Methylnaphthalene	50.0	0.0	34.9	70	45- 92

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: sblk01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Hexachlorocyclopentadie	50.0	0.0	23.5	47	27- 72
2,4,6-Trichlorophenol	100	0.0	77.8	78	44-105
2,4,5-Trichlorophenol	100	0.0	79.1	79	50-102
2-Chloronaphthalene	50.0	0.0	33.3	67	50- 92
o-Nitroaniline	50.0	0.0	40.0	80	55-121
m-Nitroaniline	50.0	0.0	36.1	72	50-118
Dimethylphthalate	50.0	0.0	36.9	74	63-106
2,6-Dinitrotoluene	50.0	0.0	35.1	70*	72-115
Acenaphthylene	50.0	0.0	35.5	71	52- 99
Acenaphthene	50.0	0.0	34.0	68	50-109
2,4-Dinitrophenol	100	0.0	67.2	67	28-126
Dibenzofuran	50.0	0.0	34.8	70	55- 98
2,4-Dinitrotoluene	50.0	0.0	36.0	72	51-116
Diethylphthalate	50.0	0.0	38.9	78	62-109
4-Nitrophenol	100	0.0	34.3	34	13- 53
Fluorene	50.0	0.0	37.2	74	54-108
4-Chlorophenylphenyleth	50.0	0.0	36.2	72	57- 98
2-Methyl-4,6-dinitrophe	100	0.0	76.9	77	48-124
p-Nitroaniline	50.0	0.0	36.0	72	40-127
Diphenylamine	50.0	0.0	38.1	76	57-110
1,2-Diphenylhydrazine	50.0	0.0	40.9	82	65-113
4-Bromophenylphenylethe	50.0	0.0	36.9	74	51-115
Hexachlorobenzene	50.0	0.0	38.6	77	58-108
Atrazine	50.0	0.0	36.0	72	10-150
Pentachlorophenol	100	0.0	81.5	82	41-111
Phenanthrene	50.0	0.0	38.8	78	58-105
Anthracene	50.0	0.0	38.9	78	62-106
Di-n-butylphthalate	50.0	0.0	46.4	93	59-120

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

3C
GROUND WATER SVOA LAB CONTROL SAMPLE

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix Spike - EPA Sample No.: sblk01

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Fluoranthene	50.0	0.0	41.0	82	55-114
Benzidine	50.0	0.0	27.0	54	10- 76
Pyrene	50.0	0.0	36.7	73	56-122
Butylbenzylphthalate	50.0	0.0	40.2	80	55-126
Benzo(a)anthracene	50.0	0.0	37.4	75	61-110
3,3'-Dichlorobenzidine	50.0	0.0	43.6	87	41-121
Chrysene	50.0	0.0	37.8	76	62-106
bis(2-Ethylhexyl)phthal	50.0	0.0	43.9	88	53-130
Di-n-octylphthalate	50.0	0.0	43.6	87	52-133
Benzo(b)fluoranthene	50.0	0.0	35.3	71	59-116
Benzo(k)fluoranthene	50.0	0.0	41.9	84	66-116
Benzo(a)pyrene	50.0	0.0	40.5	81	55-119
Indeno(1,2,3-cd)pyrene	50.0	0.0	45.9	92	45-122
Dibenzo(a,h)anthracene	50.0	0.0	47.6	95	47-120
Benzo(ghi)perylene	50.0	0.0	45.4	91	50-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 71 outside limits

COMMENTS: _____

4B

SVOA METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: S6J0813-1 Lab Sample ID: 1200938050

Instrument ID: MSD6 Date Extracted: 09/16/05

Matrix: (soil/water) GROUND WATER Date Analyzed: 10/08/05

Level:(low/med) LOW Time Analyzed: 2135

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK01LCS	1200938051	S6J0814-1	10/08/05
02	GU05090G3TM01	145579005	S6J0821	10/09/05
03	GU05090G3TM01MS	1200938052	S6J0822	10/09/05
04	GU05090GMC401	145579006	S6J0823	10/09/05
05	GU05090G57M01	145579007	S6J0824	10/09/05
06	GU05090G7CM01	145579008	S6J0825	10/09/05
07				
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5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: S6I2301 DFTPP Injection Date: 09/23/05

Instrument ID: MSD6 DFTPP Injection Time: 1536

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	46.0
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	46.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	27.7
365	Greater than 1.0% of mass 198	4.15
441	Present, but less than mass 443	13.0
442	Greater than 40.0% of mass 198	88.9
443	17.0 - 23.0% of mass 442	17.8 (20.0)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ANBZICAL001	UBN050919.01	S6I2314	09/23/05	2038
02	ANBZICAL010	UBN050919.02	S6I2315	09/23/05	2103
03	ANBZICAL020	UBN050919.03	S6I2316	09/23/05	2127
04	ANBZICAL040	UBN050919.04	S6I2317	09/23/05	2151
05	ANBZICAL050	UBN050919.05	S6I2318	09/23/05	2215
06	ANBZICAL080	UBN050919.06	S6I2319	09/23/05	2241
07	ANBZICAL100	UBN050919.07	S6I2320	09/23/05	2305
08	ANBZICAL120	UBN050919.08	S6I2321	09/23/05	2329
09					
10					
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12					
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18					
19					
20					
21					
22					

5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: S6I2401 DFTPP Injection Date: 09/24/05

Instrument ID: MSD6 DFTPP Injection Time: 1521

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.4
68	Less than 2.0% of mass 69	0.2 (0.4)1
69	Mass 69 relative abundance	41.1
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	40.0 - 60.0% of mass 198	44.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	28.5
365	Greater than 1.0% of mass 198	4.72
441	Present, but less than mass 443	15.3
442	Greater than 40.0% of mass 198	106.8
443	17.0 - 23.0% of mass 442	20.6 (19.3)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNAICAL001	UBN050924-01	S6I2403	09/24/05	1601
02	BNAICAL010	UBN050924-02	S6I2404	09/24/05	1625
03	BNAICAL020	UBN050924.03	S6I2405	09/24/05	1649
04	BNAICAL040	UBN050924-04	S6I2406	09/24/05	1713
05	BNAICAL050	UBN050924-05	S6I2407	09/24/05	1737
06	BNAICAL080	UBN050924-06	S6I2408	09/24/05	1801
07	BNAICAL100	UBN050924-07	S6I2409	09/24/05	1825
08	BNAICAL120	UBN050924-08	S6I2410	09/24/05	1849
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5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: S6I2601 DFTPP Injection Date: 09/26/05

Instrument ID: MSD6 DFTPP Injection Time: 0837

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	51.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	42.4
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	45.3
197	Less than 1.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	29.4
365	Greater than 1.0% of mass 198	4.86
441	Present, but less than mass 443	15.0
442	Greater than 40.0% of mass 198	104.4
443	17.0 - 23.0% of mass 442	20.3 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNA CVS	UBN050924-04	S6I2602-BNAICV	09/26/05	0853
02	168ICAL010	UBN050922-08	S6I2605	09/26/05	1034
03	168ICAL020	UBN050922-09	S6I2606	09/26/05	1058
04	168ICAL040	UBN050922-10	S6I2607	09/26/05	1122
05	168ICAL050	UBN050922-11	S6I2608	09/26/05	1145
06	168ICAL080	UBN050922-12	S6I2609	09/26/05	1209
07	168ICAL100	UBN050922-13	S6I2610	09/26/05	1234
08	168ICAL120	UBN050922-14	S6I2611	09/26/05	1257
09					
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18					
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20					
21					
22					

5B

SVOA ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID: S6J0801 DFTPP Injection Date: 10/08/05

Instrument ID: MSD6 DFTPP Injection Time: 1720

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.6
68	Less than 2.0% of mass 69	0.5 (1.0)1
69	Mass 69 relative abundance	48.4
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	40.0 - 60.0% of mass 198	49.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	29.8
365	Greater than 1.0% of mass 198	6.08
441	Present, but less than mass 443	14.4
442	Greater than 40.0% of mass 198	90.8
443	17.0 - 23.0% of mass 442	18.7 (20.6)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNA CVS	UBN050929-01.2	S6J0802	10/08/05	1735
02	ANBZ CVS	UBN050929-02.3	S6J0803	10/08/05	1757
03	168 CVS	UBN051007-01.2	S6J0805	10/08/05	1841
04	SBLK01	1200938050	S6J0813-1	10/08/05	2135
05	SBLK01LCS	1200938051	S6J0814-1	10/08/05	2157
06	GU05090G3TM01	145579005	S6J0821	10/09/05	0031
07	GU05090G3TM01MS	1200938052	S6J0822	10/09/05	0053
08	GU05090GMC401	145579006	S6J0823	10/09/05	0114
09	GU05090G57M01	145579007	S6J0824	10/09/05	0136
10	GU05090G7CM01	145579008	S6J0825	10/09/05	0158
11					
12					
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14					
15					
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17					
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19					
20					
21					
22					

8B
SVOA INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID (Standard): S6J0802 Date Analyzed: 10/08/05

Instrument ID: MSD6 Time Analyzed: 1735

		IS1(DCB)		IS2(NPT)		IS3(ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	211496	3.16	857210	4.00	501554	5.22
	UPPER LIMIT	422992	3.66	1714420	4.50	1003108	5.72
	LOWER LIMIT	105748	2.66	428605	3.50	250777	4.72
	EPA SAMPLE NO.						
01	SBLK01	209412	3.16	794781	4.00	492463	5.22
02	SBLK01LCS	206335	3.16	847465	4.00	499035	5.22
03	GU05090G3TM01	210240	3.16	789290	4.00	510253	5.22
04	GU05090G3TM01MS	226969	3.16	931680	4.00	532871	5.22
05	GU05090GMC401	234495	3.16	869905	4.00	548391	5.22
06	GU05090G57M01	223409	3.16	847289	4.00	533349	5.22
07	GU05090G7CM01	219153	3.16	822304	4.00	530095	5.22
08							
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21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SVOA INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Lab File ID (Standard): S6J0802 Date Analyzed: 10/08/05

Instrument ID: MSD6 Time Analyzed: 1735

		IS4(PHN)		IS5(CRY)		IS6(PRY)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	783067	6.26	717920	7.81	543631	8.77
	UPPER LIMIT	1566134	6.76	1435840	8.31	1087262	9.27
	LOWER LIMIT	391534	5.76	358960	7.31	271816	8.27
	EPA SAMPLE NO.						
01	SBLK01	758093	6.26	558966	7.80	387370	8.76
02	SBLK01LCS	772142	6.26	719709	7.81	575637	8.77
03	GU05090G3TM01	774527	6.26	539788	7.80	357315	8.76
04	GU05090G3TM01MS	824333	6.26	646969	7.80	438996	8.76
05	GU05090GMC401	838427	6.26	595746	7.80	436639	8.75
06	GU05090G57M01	825166	6.26	575094	7.80	371254	8.76
07	GU05090G7CM01	810768	6.26	579369	7.80	383302	8.76
08							
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21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	20.0	U
62-53-3	Aniline	20.0	U
108-95-2	Phenol	20.0	U
111-44-4	bis(2-Chloroethyl) ether	20.0	U
95-57-8	2-Chlorophenol	20.0	U
541-73-1	1,3-Dichlorobenzene	20.0	U
106-46-7	1,4-Dichlorobenzene	20.0	U
100-51-6	Benzyl alcohol	20.0	U
95-50-1	1,2-Dichlorobenzene	20.0	U
108-60-1	bis(2-Chloroisopropyl)ether	20.0	U
95-48-7	o-Cresol	20.0	U
621-64-7	N-Nitrosodipropylamine	20.0	U
65794-96-9	m,p-Cresols	20.0	U
67-72-1	Hexachloroethane	20.0	U
98-95-3	Nitrobenzene	20.0	U
78-59-1	Isophorone	20.0	U
88-75-5	2-Nitrophenol	20.0	U
105-67-9	2,4-Dimethylphenol	20.0	U
111-91-1	bis(2-Chloroethoxy)methane	20.0	U
120-83-2	2,4-Dichlorophenol	20.0	U
65-85-0	Benzoic acid	40.0	U
120-82-1	1,2,4-Trichlorobenzene	20.0	U
91-20-3	Naphthalene	2.0	U
106-47-8	4-Chloroaniline	20.0	U
87-68-3	Hexachlorobutadiene	20.0	U
59-50-7	4-Chloro-3-methylphenol	20.0	U
91-57-6	2-Methylnaphthalene	2.0	U
90-12-0	1-Methylnaphthalene	2.0	U
77-47-4	Hexachlorocyclopentadiene	20.0	U
88-06-2	2,4,6-Trichlorophenol	20.0	U
95-95-4	2,4,5-Trichlorophenol	20.0	U
91-58-7	2-Chloronaphthalene	2.0	U
88-74-4	o-Nitroaniline	20.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	20.0	U
131-11-3	Dimethylphthalate	20.0	U
606-20-2	2,6-Dinitrotoluene	20.0	U
208-96-8	Acenaphthylene	2.0	U
83-32-9	Acenaphthene	2.0	U
51-28-5	2,4-Dinitrophenol	40.0	U
132-64-9	Dibenzofuran	20.0	U
121-14-2	2,4-Dinitrotoluene	20.0	U
84-66-2	Diethylphthalate	20.0	U
100-02-7	4-Nitrophenol	20.0	U
86-73-7	Fluorene	2.0	U
7005-72-3	4-Chlorophenylphenylether	20.0	U
534-52-1	2-Methyl-4,6-dinitrophenol	20.0	U
100-01-6	p-Nitroaniline	20.0	U
122-39-4	Diphenylamine	20.0	U
122-66-7	1,2-Diphenylhydrazine	20.0	U
101-55-3	4-Bromophenylphenylether	20.0	U
118-74-1	Hexachlorobenzene	20.0	U
1912-24-9	Atrazine	20.0	U
87-86-5	Pentachlorophenol	20.0	U
85-01-8	Phenanthrene	2.0	U
120-12-7	Anthracene	2.0	U
84-74-2	Di-n-butylphthalate	20.0	U
206-44-0	Fluoranthene	2.0	U
92-87-5	Benzidine	100	U
129-00-0	Pyrene	2.0	U
85-68-7	Butylbenzylphthalate	20.0	U
56-55-3	Benzo(a)anthracene	2.0	U
91-94-1	3,3'-Dichlorobenzidine	20.0	U
218-01-9	Chrysene	2.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	20.0	U
117-84-0	Di-n-octylphthalate	20.0	U
205-99-2	Benzo(b)fluoranthene	2.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	2.0	U
50-32-8	Benzo(a)pyrene	2.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.0	U
53-70-3	Dibenzo(a,h)anthracene	2.0	U
191-24-2	Benzo(ghi)perylene	2.0	U
55-18-5	N-Nitrosodiethylamine	20.0	U
930-55-2	N-Nitrosopyrrolidine	20.0	U
924-16-3	N-Nitrosodi-n-butylamine	20.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	20.0	U
608-93-5	Pentachlorobenzene	20.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	20.0	U
88-85-7	Dinoseb	20.0	U

1F

EPA SAMPLE NO.

GU05090G3TM01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579005

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0821

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.33	135	J
2.		UNKNOWN	1.43	13.3	JB
3.	1000154-28-6	CYCLOPENTENE, 1,2,3,4,5-PENT	2.64	26.6	NJ
4.		UNKNOWN	2.79	8.8	JB
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0821.d
Lab Smp Id: 145579005 Client Smp ID: GU05090G3TM01
Inj Date : 09-OCT-2005 00:31
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579005|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 16:49 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	500.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.156	3.156	(1.000)	210240	40.0000	
* 29 Naphthalene-d8	136	3.996	3.996	(1.000)	789290	40.0000	
* 46 Acenaphthene-d10	164	5.218	5.224	(1.000)	510253	40.0000	
* 67 Phenanthrene-d10	188	6.258	6.258	(1.000)	774527	40.0000	
* 91 Chrysene-d12	240	7.797	7.809	(1.000)	539788	40.0000	
* 98 Perylene-d12	264	8.755	8.773	(1.000)	357315	40.0000	
$ 3 2-Fluorophenol	112	2.380	2.380	(0.754)	307032	53.1101	106
$ 5 Phenol-d5	99	2.903	2.909	(0.920)	292813	41.9456	83.9
$ 20 Nitrobenzene-d5	82	3.508	3.514	(0.878)	224791	39.1266	78.2
$ 39 2-Fluorobiphenyl	172	4.736	4.742	(0.908)	474848	33.2366	66.5
$ 60 2,4,6-Tribromophenol	329	5.782	5.782	(1.108)	163697	67.9062	136
$ 81 p-Terphenyl-d14	244	7.210	7.210	(0.925)	573119	48.8090	97.6

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0821.d
Lab Smp Id: 145579005 Client Smp ID: GU05090G3TM01
Inj Date : 09-OCT-2005 00:31
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579005|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 16:49 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	500.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

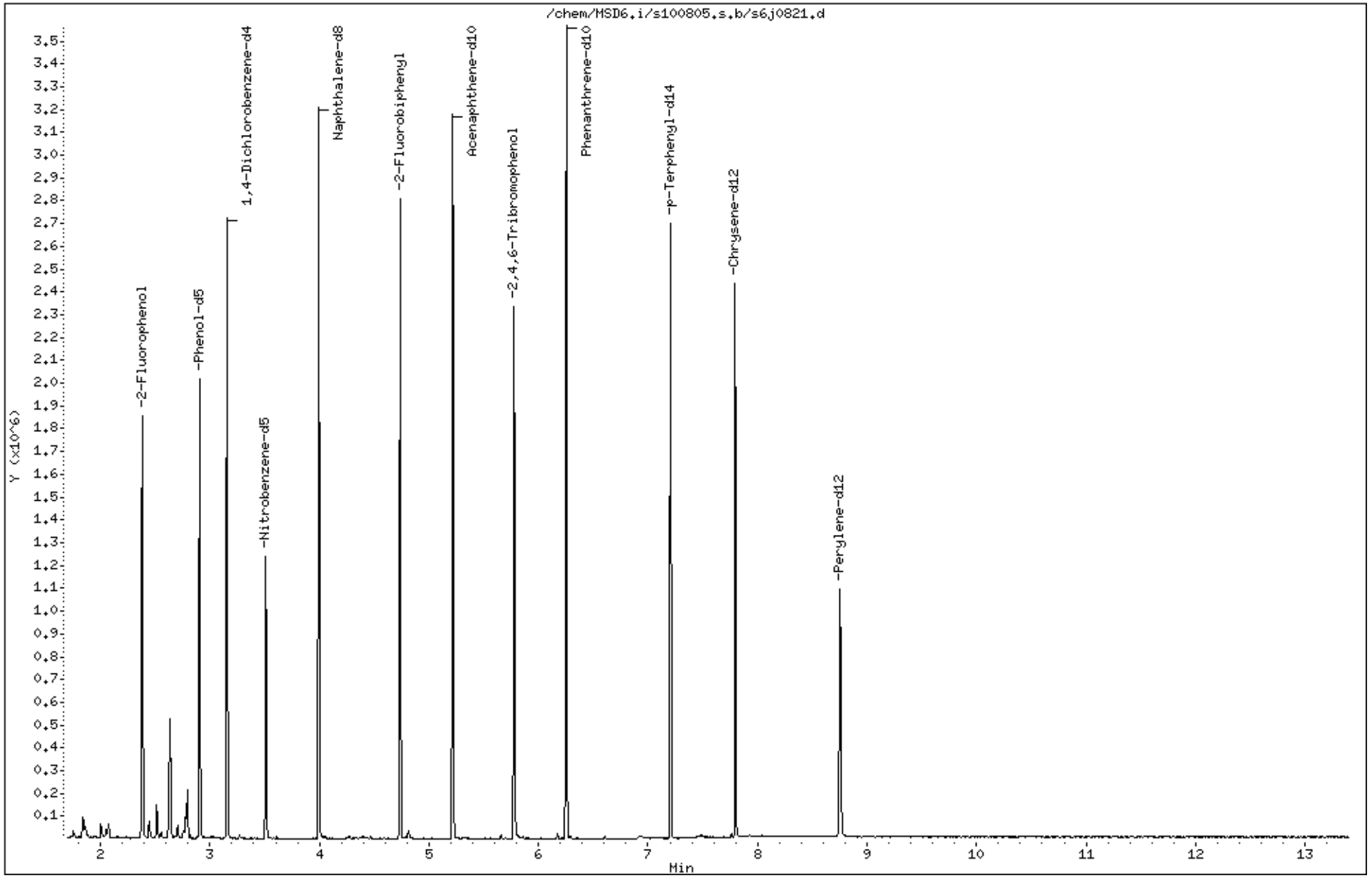
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.156	1582961	40.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.334	2677510	67.6582339	135	0		0	10
Unknown				CAS #:			
1.434	263894	6.66837094	13.3	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Cyclopentene, 1,2,3,4,5-pentamethyl-				CAS #: 1000154-28-6			
2.639	526252	13.2979014	26.6	83	Nist98.l	55801	10
Unknown				CAS #:			
2.791	175084	4.42421959	8.8	0		0	10

Data File: /chem/MSD6.i/s100805.s.b/s6j0821.d
Date : 09-OCT-2005 00:31
Client ID: GU05090G3TM01
Sample Info: |145579005|463561|1|SVMF|1|ESHL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20



Data File: /chem/MSD6.i/s100805.s.b/s6j0821.d

Page 1

Date : 09-OCT-2005 00:31

Client ID: GU05090G3TM01

Instrument: MSD6.i

Sample Info: |145579005|463561|1|SVMF|1|ESHL

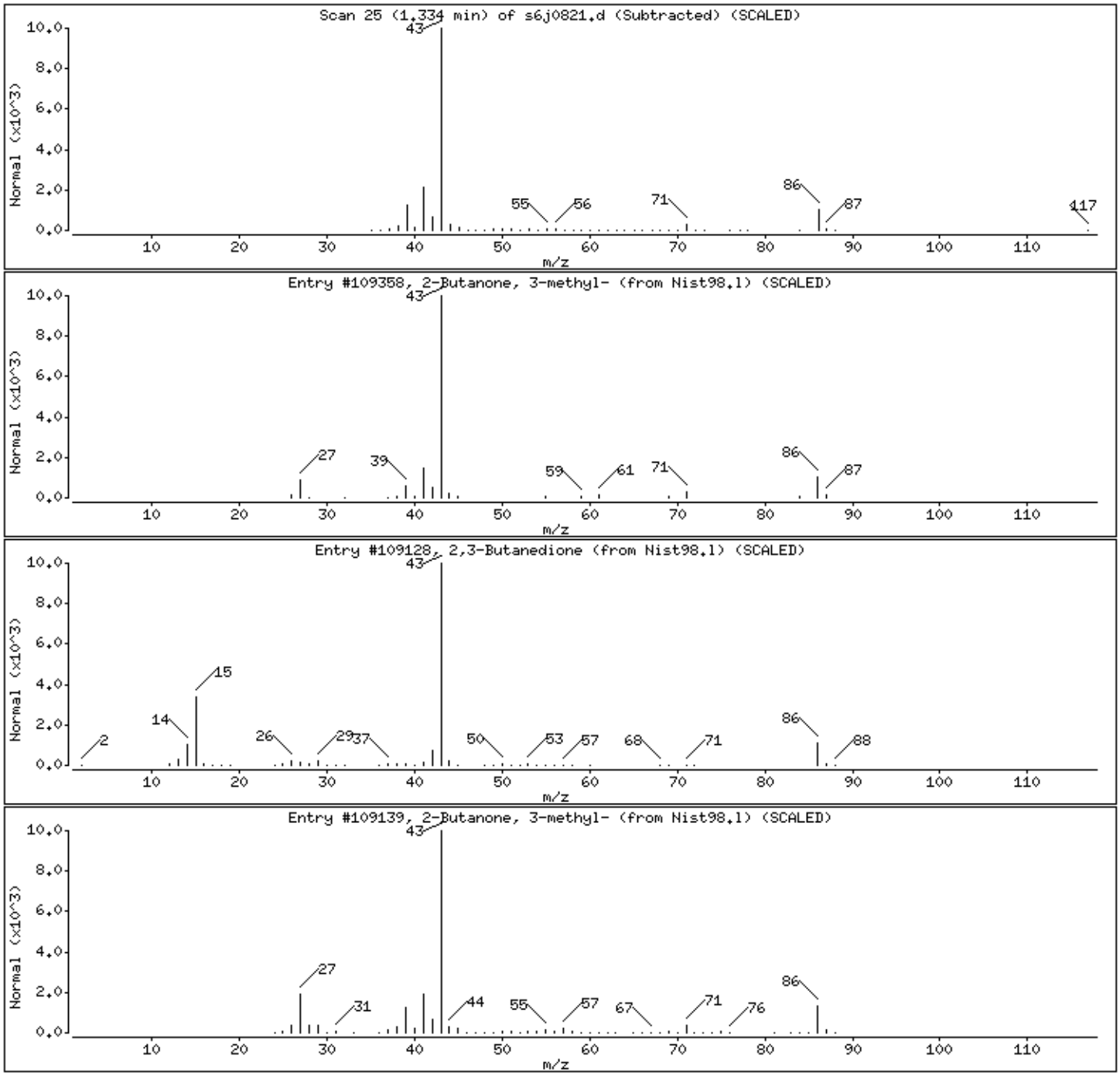
Volume Injected (uL): 0.5

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109358	64	C5H10O	86
2,3-Butanedione	431-03-8	Nist98.l	109128	64	C4H6O2	86
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109139	59	C5H10O	86



Data File: /chem/MSD6.i/s100805.s.b/s6j0821.d

Date : 09-OCT-2005 00:31

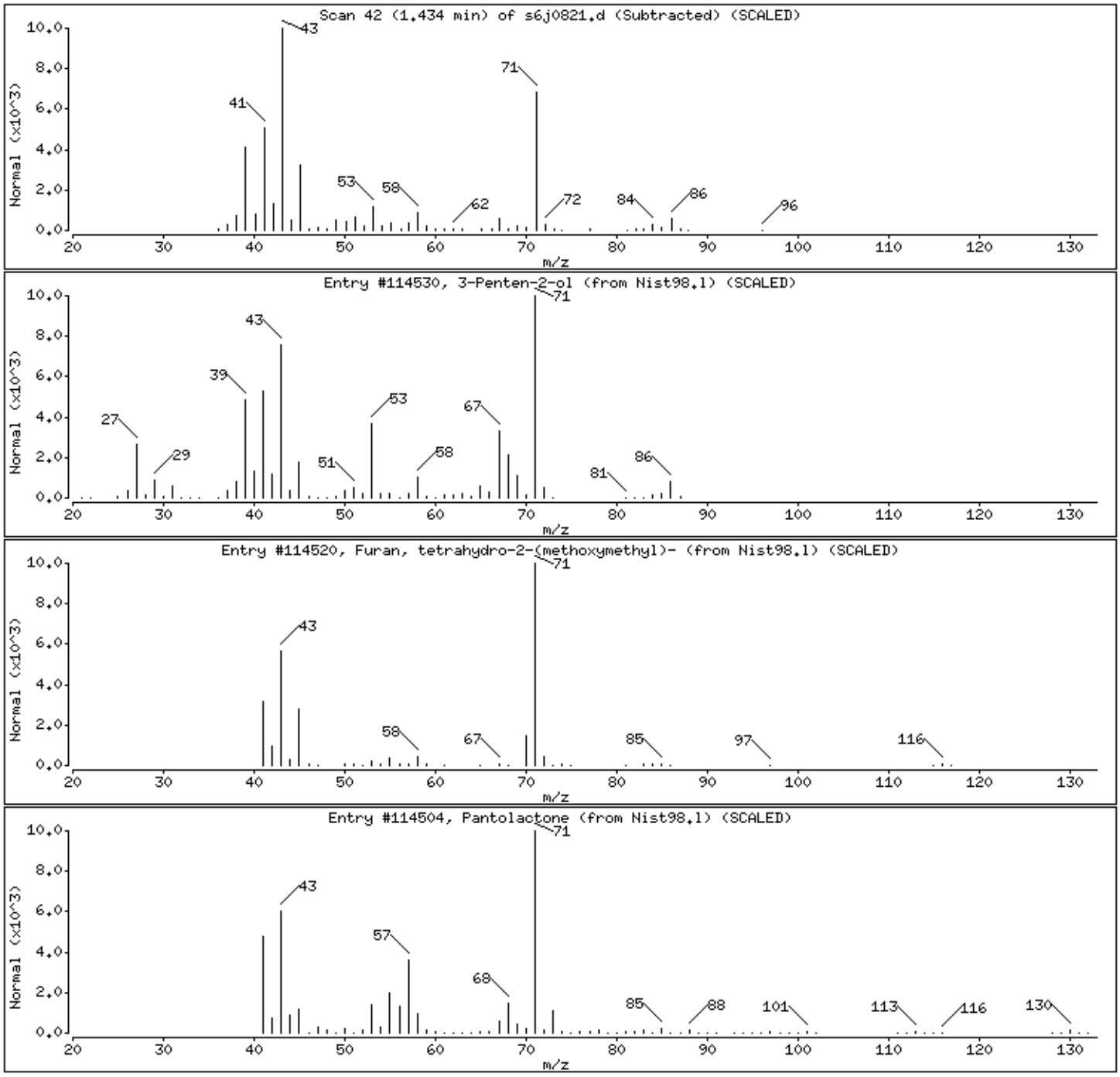
Client ID: GU05090G3TM01 Instrument: MSD6.i

Sample Info: |1455790051463561|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: jld1

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Penten-2-ol	1569-50-2	Nist98.l	114530	58	C5H10O	86
Furan, tetrahydro-2-(methoxymethyl)-	19354-27-9	Nist98.l	114520	50	C6H12O2	116
Pantolactone	599-04-2	Nist98.l	114504	43	C6H10O3	130



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Date : 09-OCT-2005 00:31

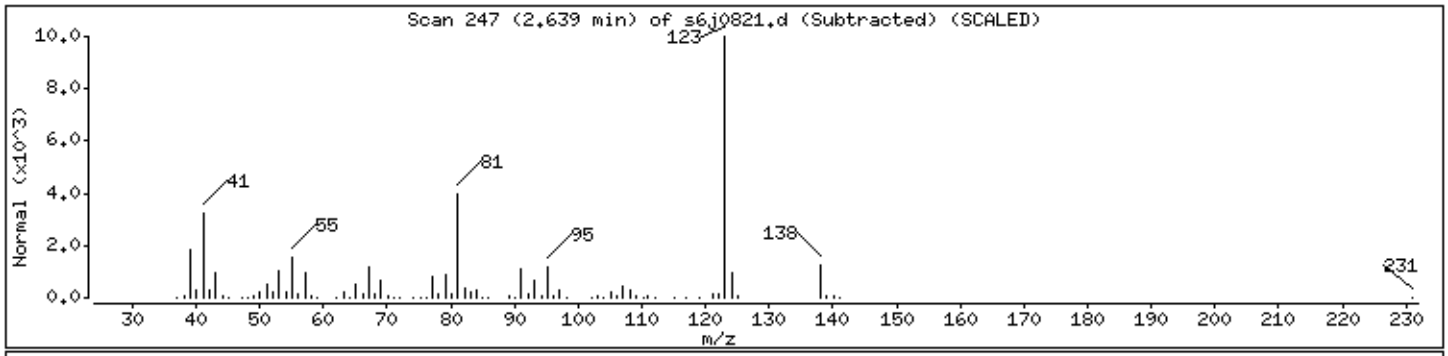
Client ID: GU05090G3TM01 Instrument: MSD6.i

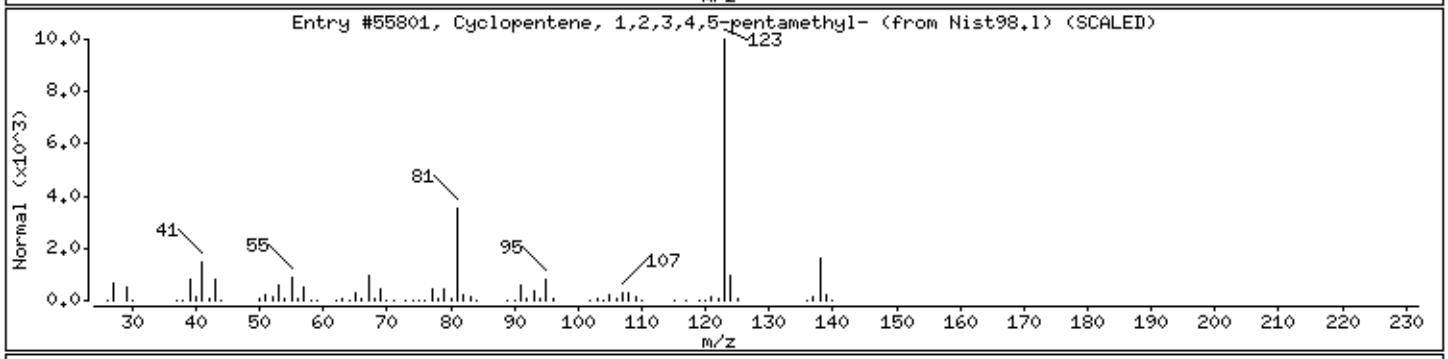
Sample Info: |145579005|463561|1|SVMF|1|ESHL

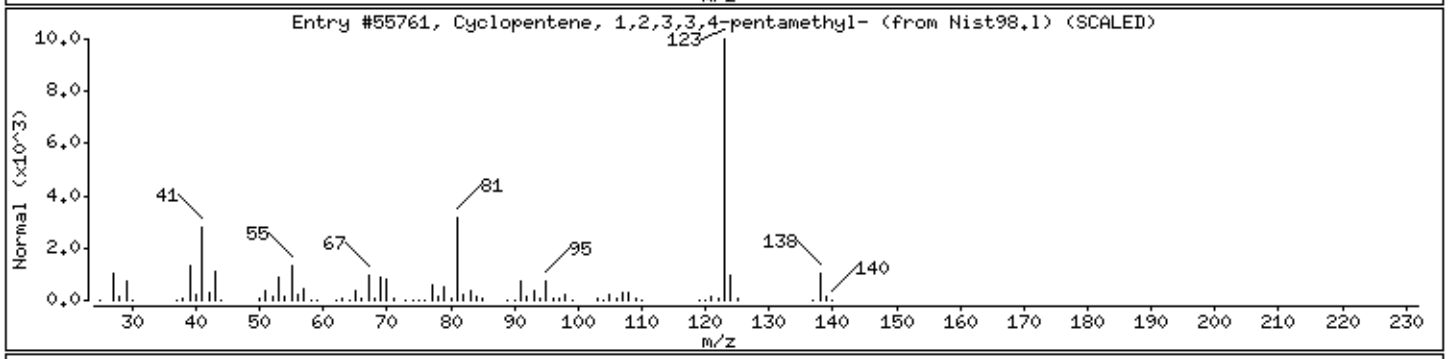
Volume Injected (uL): 0.5 Operator: jld1

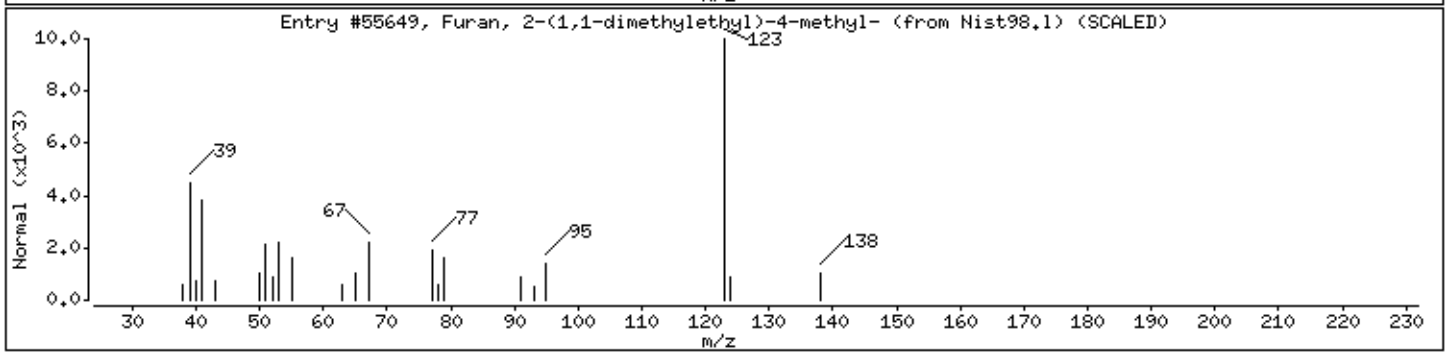
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentene, 1,2,3,4,5-pentamethyl-	1000154-28-6	Nist98.l	55801	83	C10H18	138
Cyclopentene, 1,2,3,3,4-pentamethyl-	1000152-27-1	Nist98.l	55761	81	C10H18	138
Furan, 2-(1,1-dimethylethyl)-4-methyl-	6141-68-0	Nist98.l	55649	80	C9H14O	138









Data File: /chem/MSD6.i/s100805.s.b/s6j0821.d

Date : 09-OCT-2005 00:31

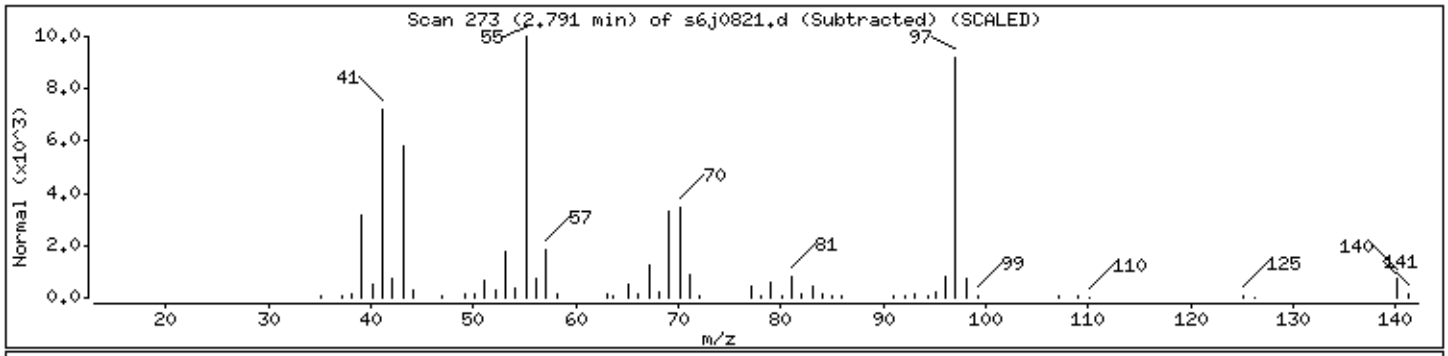
Client ID: GU05090G3TM01 Instrument: MSD6.i

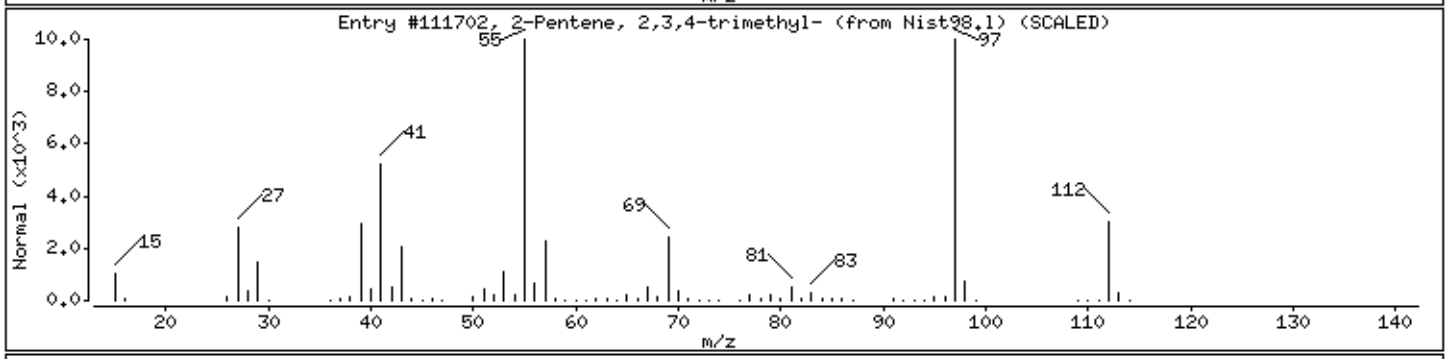
Sample Info: |145579005|463561|1|SVMF|1|ESHL

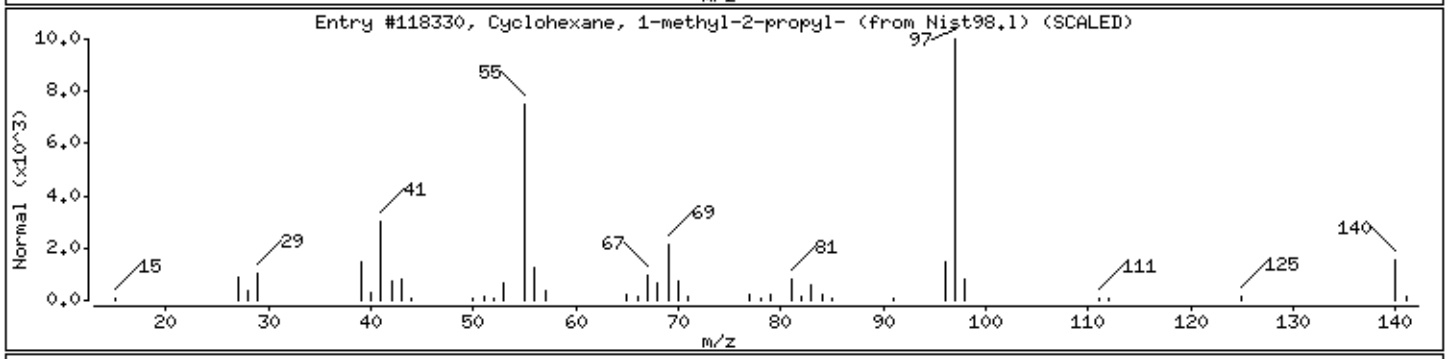
Volume Injected (uL): 0.5 Operator: jld1

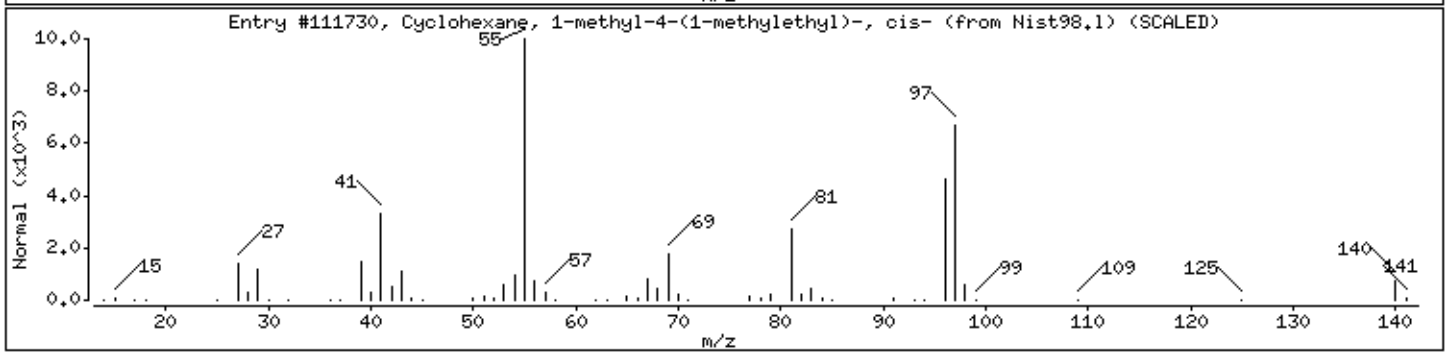
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentene, 2,3,4-trimethyl-	565-77-5	Nist98.l	111702	64	C8H16	112
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	Nist98.l	118330	64	C10H20	140
Cyclohexane, 1-methyl-4-(1-methylethyl)-	6069-98-3	Nist98.l	111730	64	C10H20	140









1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	10.6	U
62-53-3	Aniline	10.6	U
108-95-2	Phenol	10.6	U
111-44-4	bis(2-Chloroethyl) ether	10.6	U
95-57-8	2-Chlorophenol	10.6	U
541-73-1	1,3-Dichlorobenzene	10.6	U
106-46-7	1,4-Dichlorobenzene	10.6	U
100-51-6	Benzyl alcohol	10.6	U
95-50-1	1,2-Dichlorobenzene	10.6	U
108-60-1	bis(2-Chloroisopropyl)ether	10.6	U
95-48-7	o-Cresol	10.6	U
621-64-7	N-Nitrosodipropylamine	10.6	U
65794-96-9	m,p-Cresols	10.6	U
67-72-1	Hexachloroethane	10.6	U
98-95-3	Nitrobenzene	10.6	U
78-59-1	Isophorone	10.6	U
88-75-5	2-Nitrophenol	10.6	U
105-67-9	2,4-Dimethylphenol	10.6	U
111-91-1	bis(2-Chloroethoxy)methane	10.6	U
120-83-2	2,4-Dichlorophenol	10.6	U
65-85-0	Benzoic acid	21.3	U
120-82-1	1,2,4-Trichlorobenzene	10.6	U
91-20-3	Naphthalene	1.1	U
106-47-8	4-Chloroaniline	10.6	U
87-68-3	Hexachlorobutadiene	10.6	U
59-50-7	4-Chloro-3-methylphenol	10.6	U
91-57-6	2-Methylnaphthalene	1.1	U
90-12-0	1-Methylnaphthalene	1.1	U
77-47-4	Hexachlorocyclopentadiene	10.6	U
88-06-2	2,4,6-Trichlorophenol	10.6	U
95-95-4	2,4,5-Trichlorophenol	10.6	U
91-58-7	2-Chloronaphthalene	1.1	U
88-74-4	o-Nitroaniline	10.6	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
99-09-2	m-Nitroaniline	10.6	U	
131-11-3	Dimethylphthalate	10.6	U	
606-20-2	2,6-Dinitrotoluene	10.6	U	
208-96-8	Acenaphthylene	1.1	U	
83-32-9	Acenaphthene	1.1	U	
51-28-5	2,4-Dinitrophenol	21.3	U	
132-64-9	Dibenzofuran	10.6	U	
121-14-2	2,4-Dinitrotoluene	10.6	U	
84-66-2	Diethylphthalate	10.6	U	
100-02-7	4-Nitrophenol	10.6	U	
86-73-7	Fluorene	1.1	U	
7005-72-3	4-Chlorophenylphenylether	10.6	U	
534-52-1	2-Methyl-4,6-dinitrophenol	10.6	U	
100-01-6	p-Nitroaniline	10.6	U	
122-39-4	Diphenylamine	10.6	U	
122-66-7	1,2-Diphenylhydrazine	10.6	U	
101-55-3	4-Bromophenylphenylether	10.6	U	
118-74-1	Hexachlorobenzene	10.6	U	
1912-24-9	Atrazine	10.6	U	
87-86-5	Pentachlorophenol	10.6	U	
85-01-8	Phenanthrene	1.1	U	
120-12-7	Anthracene	1.1	U	
84-74-2	Di-n-butylphthalate	10.6	U	
206-44-0	Fluoranthene	1.1	U	
92-87-5	Benzidine	53.2	U	
129-00-0	Pyrene	1.1	U	
85-68-7	Butylbenzylphthalate	10.6	U	
56-55-3	Benzo(a)anthracene	1.1	U	
91-94-1	3,3'-Dichlorobenzidine	10.6	U	
218-01-9	Chrysene	1.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10.6	U	
117-84-0	Di-n-octylphthalate	10.6	U	
205-99-2	Benzo(b)fluoranthene	1.1	U	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G57M01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	1.1	U
50-32-8	Benzo(a)pyrene	1.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.1	U
53-70-3	Dibenzo(a,h)anthracene	1.1	U
191-24-2	Benzo(ghi)perylene	1.1	U
55-18-5	N-Nitrosodiethylamine	10.6	U
930-55-2	N-Nitrosopyrrolidine	10.6	U
924-16-3	N-Nitrosodi-n-butylamine	10.6	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10.6	U
608-93-5	Pentachlorobenzene	10.6	U
58-90-2	2,3,4,6-Tetrachlorophenol	10.6	U
88-85-7	Dinoseb	10.6	U

1F

EPA SAMPLE NO.

GU05090G57M01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579007

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: S6J0824

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.33	79.2	J
2.		UNKNOWN	1.43	5.9	JB
3.	1000154-28-6	CYCLOPENTENE, 1,2,3,4,5-PENT	2.52	4.5	NJ
4.		UNKNOWN	2.64	16.0	J
5.		UNKNOWN	2.79	5.2	JB
6.					
7.					
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0824.d
Lab Smp Id: 145579007 Client Smp ID: GU05090G57M01
Inj Date : 09-OCT-2005 01:36
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579007|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	940.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.156	3.156	(1.000)	223409	40.0000	
* 29 Naphthalene-d8	136	3.996	3.996	(1.000)	847289	40.0000	
* 46 Acenaphthene-d10	164	5.218	5.224	(1.000)	533349	40.0000	
* 67 Phenanthrene-d10	188	6.258	6.258	(1.000)	825166	40.0000	
* 91 Chrysene-d12	240	7.797	7.809	(1.000)	575094	40.0000	
* 98 Perylene-d12	264	8.755	8.773	(1.000)	371254	40.0000	
$ 3 2-Fluorophenol	112	2.380	2.380	(0.754)	167838	27.3211	29.1
$ 5 Phenol-d5	99	2.903	2.909	(0.920)	151178	20.3798	21.7
$ 20 Nitrobenzene-d5	82	3.508	3.514	(0.878)	243828	39.5350	42.0
$ 39 2-Fluorobiphenyl	172	4.736	4.742	(0.908)	519229	34.7693	37.0
$ 60 2,4,6-Tribromophenol	329	5.776	5.782	(1.107)	139057	55.1868	58.7
$ 81 p-Terphenyl-d14	244	7.210	7.210	(0.925)	647038	51.7213	55.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0824.d
Lab Smp Id: 145579007 Client Smp ID: GU05090G57M01
Inj Date : 09-OCT-2005 01:36
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579007|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	940.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

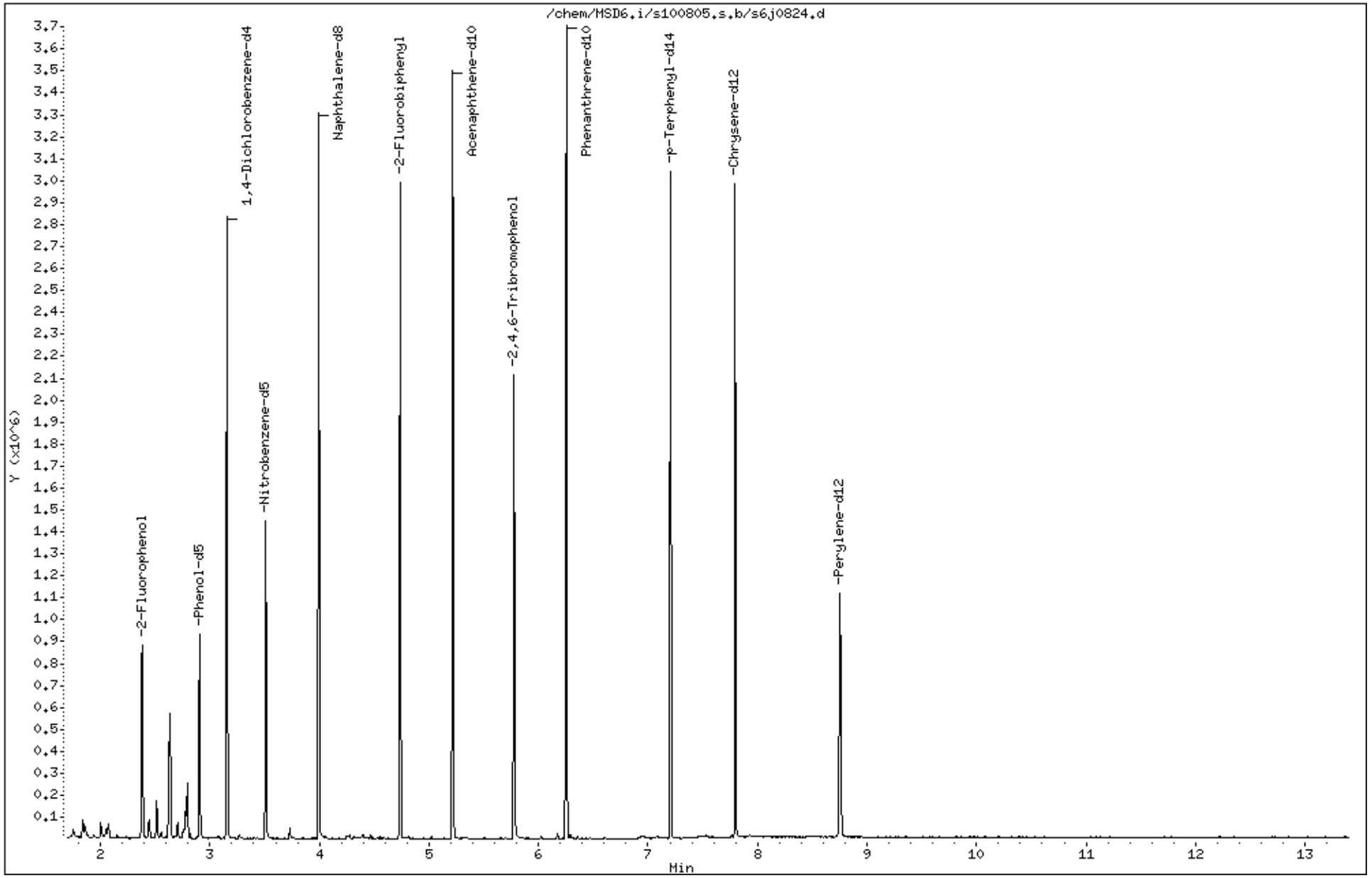
ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.156	1656994	40.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.334	3082991	74.4236953	79.2	0		0	10
Unknown				CAS #:			
1.434	229527	5.54079638	5.9	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
2.515	176825	4.26857640	4.5	90	Nist98.l	55801	10
Cyclopentene, 1,2,3,4,5-pentamethyl-				CAS #: 1000154-28-6			
2.639	621897	15.0126646	16.0	0		0	10
Unknown				CAS #:			
2.791	203017	4.90084675	5.2	0		0	10
Unknown				CAS #:			

Data File: /chem/MSD6.i/s100805.s.b/s6j0824.d
Date : 09-OCT-2005 01:36
Client ID: GU05090G57M01
Sample Info: |145579007|463561|1|SVMF|1|ESHL
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20



Data File: /chem/MSD6.i/s100805.s.b/s6j0824.d

Date : 09-OCT-2005 01:36

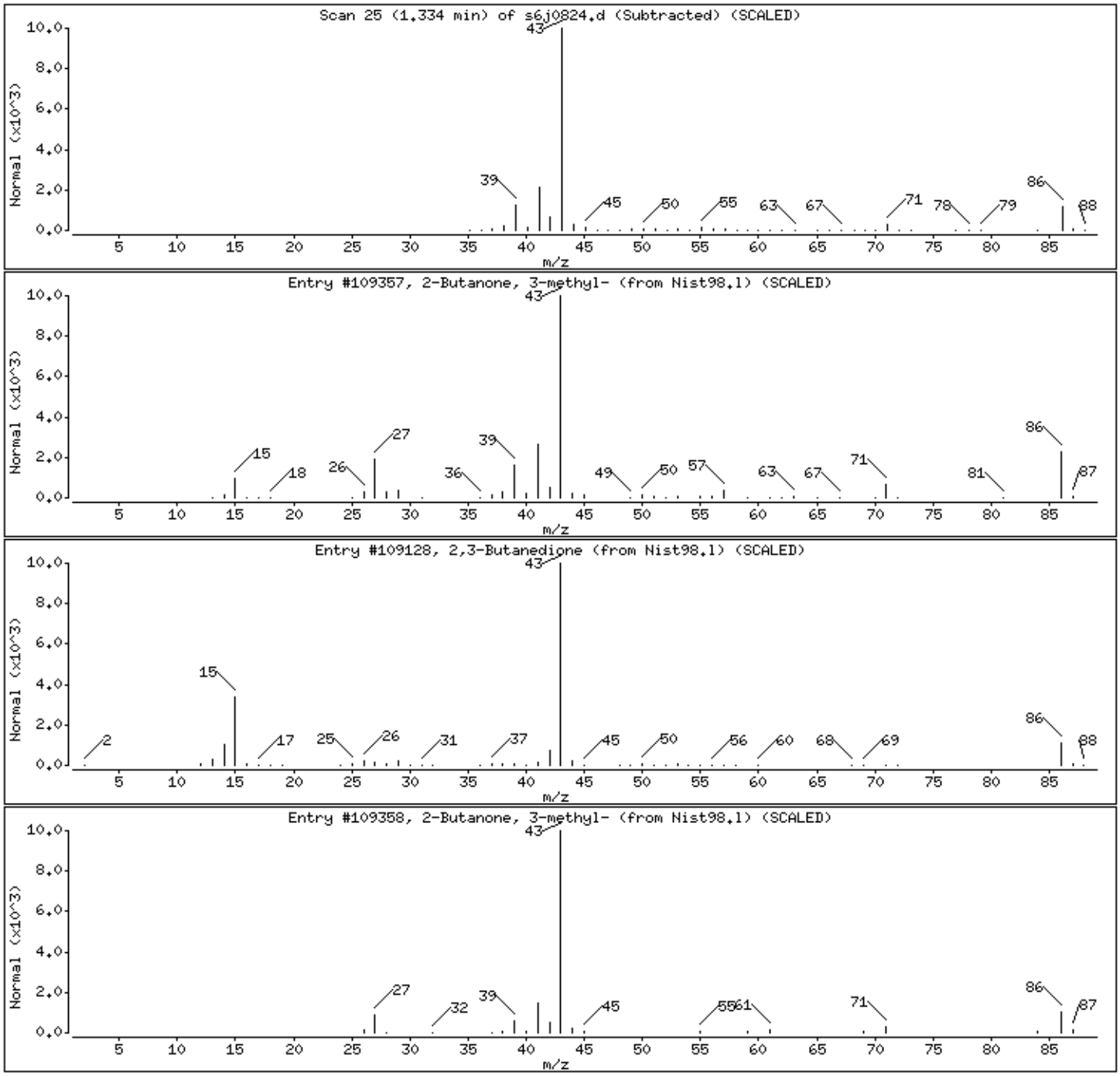
Client ID: GU05090G57M01 Instrument: MSD6.i

Sample Info: |1455790071463561|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: jld1

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109357	64	C5H10O	86
2,3-Butanedione	431-03-8	Nist98.l	109128	64	C4H6O2	86
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109358	64	C5H10O	86



Data File: /chem/MSD6.i/s100805.s.b/s6j0824.d

Date : 09-OCT-2005 01:36

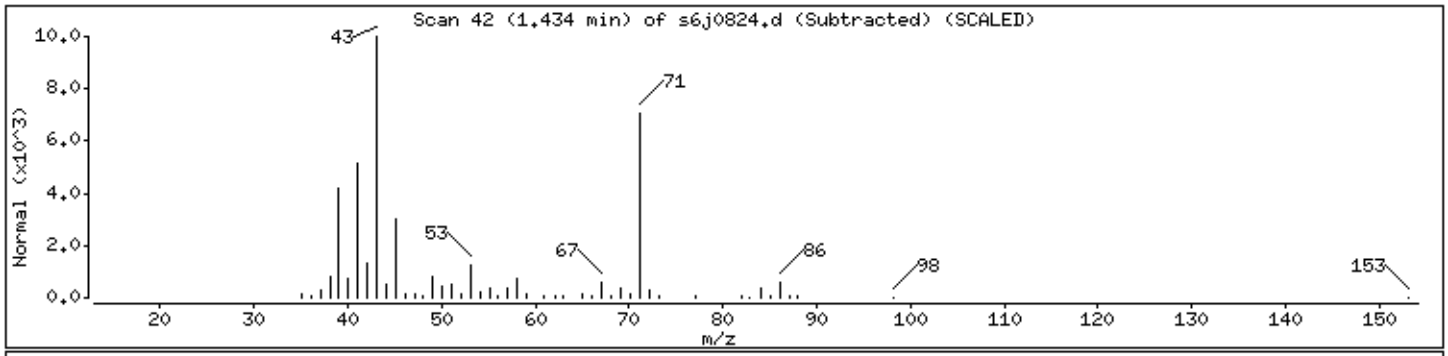
Client ID: GU05090G57M01 Instrument: MSD6.i

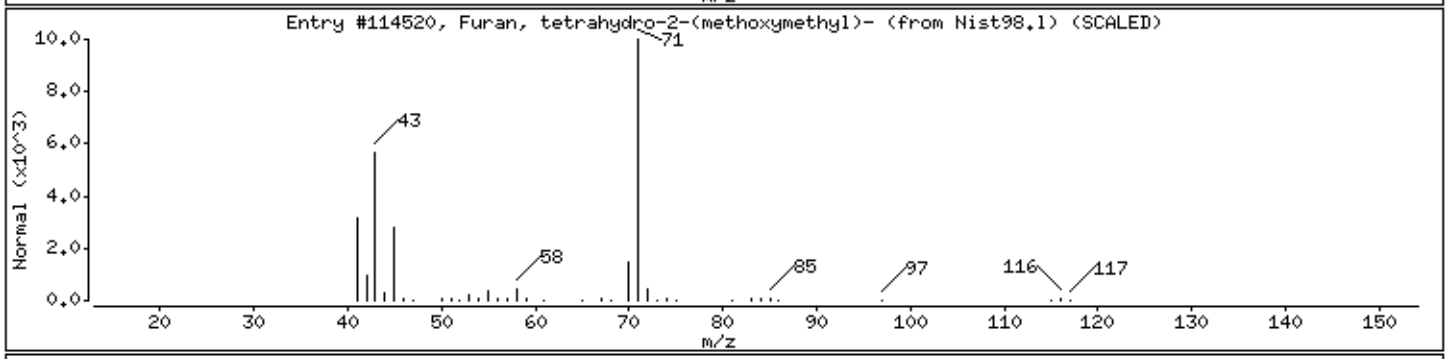
Sample Info: |1455790071463561|1|SVMF|1|ESHL

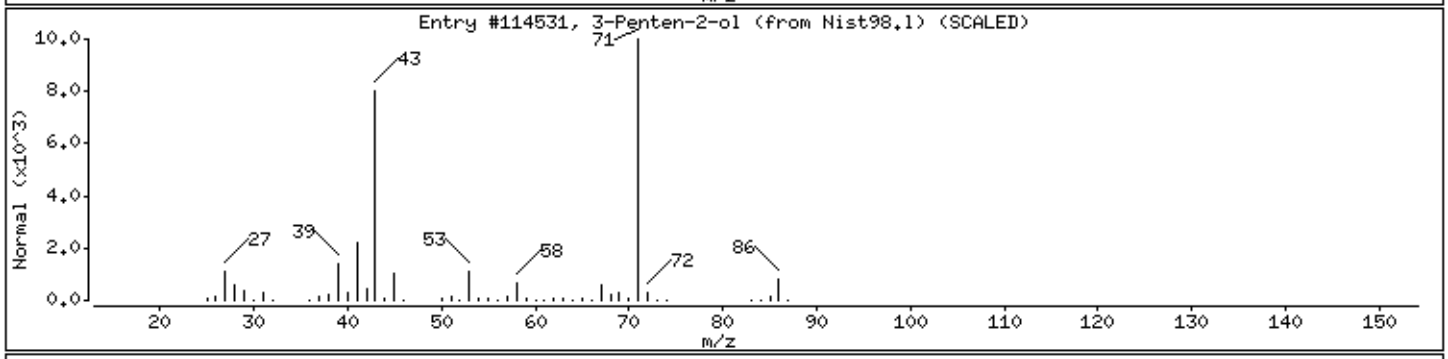
Volume Injected (uL): 0.5 Operator: jld1

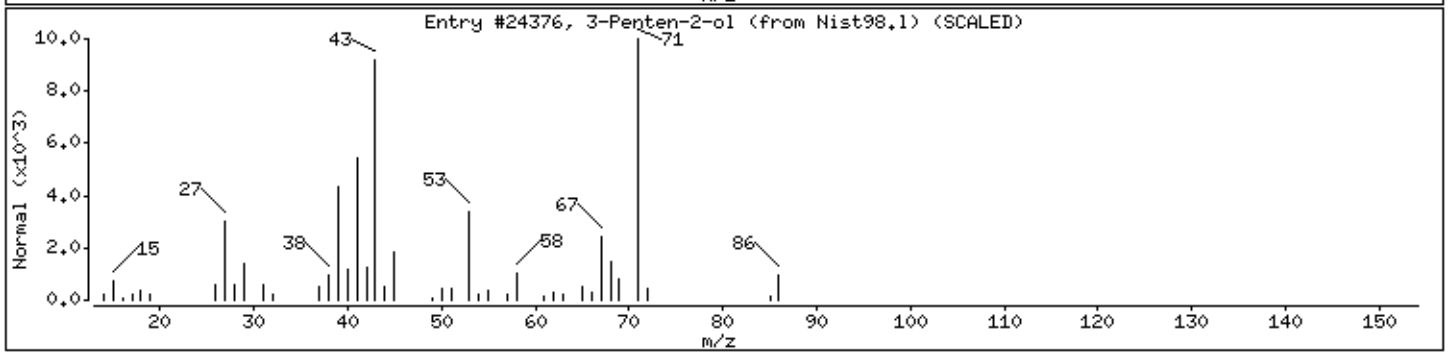
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Furan, tetrahydro-2-(methoxymethyl)-	19354-27-9	Nist98.l	114520	42	C6H12O2	116
3-Penten-2-ol	1569-50-2	Nist98.l	114531	38	C5H10O	86
3-Penten-2-ol	1569-50-2	Nist98.l	24376	35	C5H10O	86









Data File: /chem/MSD6.i/s100805.s.b/s6j0824.d

Date : 09-OCT-2005 01:36

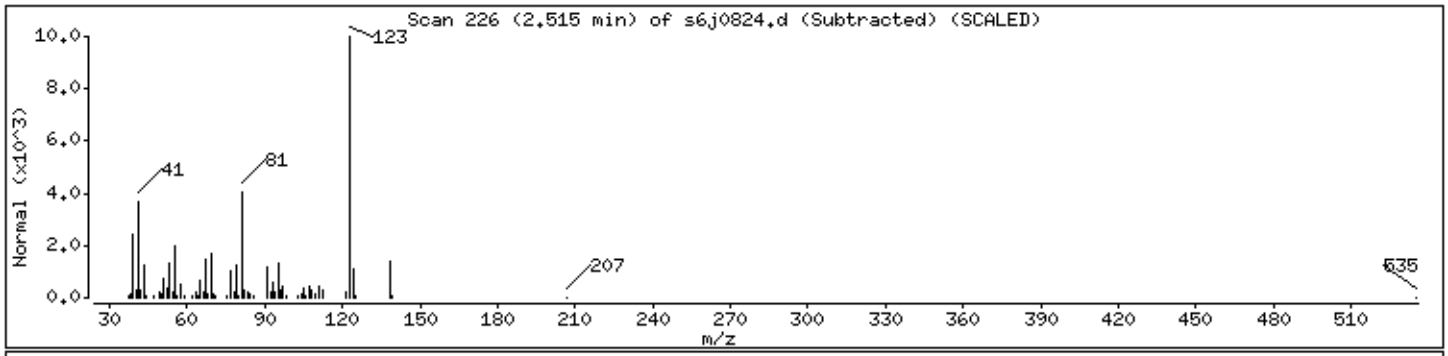
Client ID: GU05090G57M01 Instrument: MSD6.i

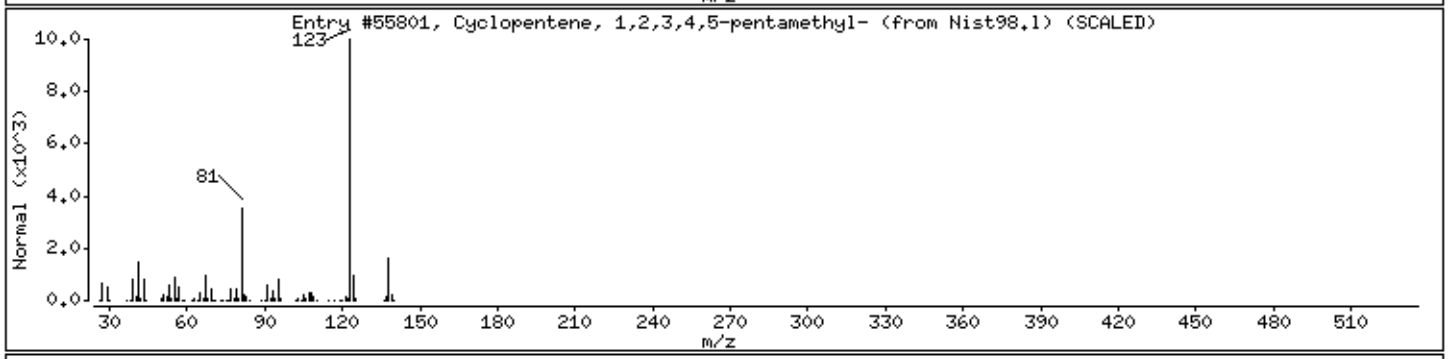
Sample Info: |145579007|463561|1|SVMF|1|ESHL

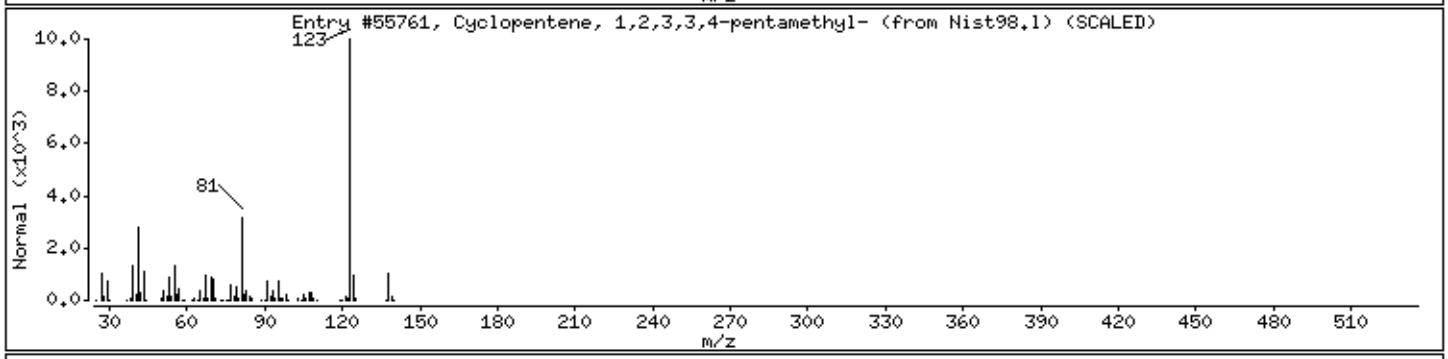
Volume Injected (uL): 0.5 Operator: jld1

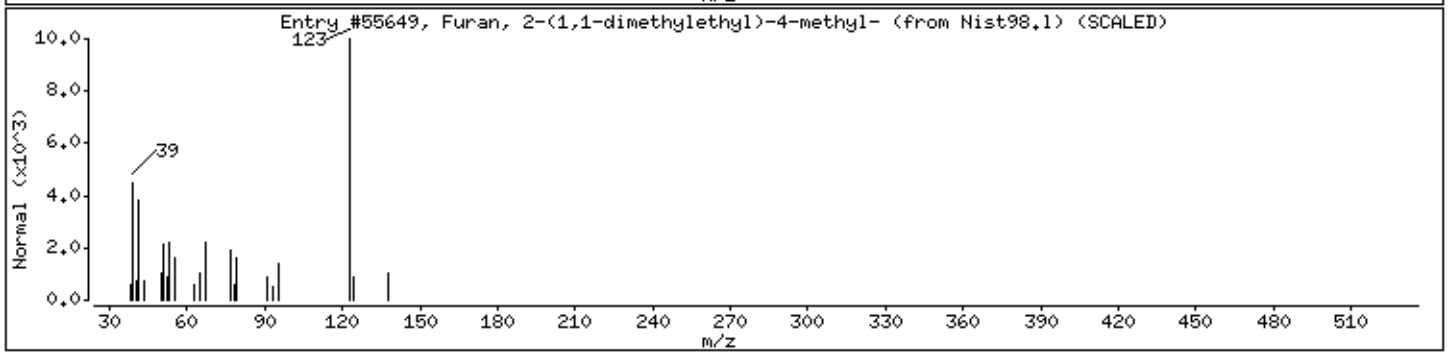
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentene, 1,2,3,4,5-pentamethyl-	1000154-28-6	Nist98.l	55801	90	C10H18	138
Cyclopentene, 1,2,3,3,4-pentamethyl-	1000152-27-1	Nist98.l	55761	83	C10H18	138
Furan, 2-(1,1-dimethylethyl)-4-methyl-	6141-68-0	Nist98.l	55649	81	C9H14O	138









Data File: /chem/MSD6.i/s100805.s.b/s6j0824.d

Date : 09-OCT-2005 01:36

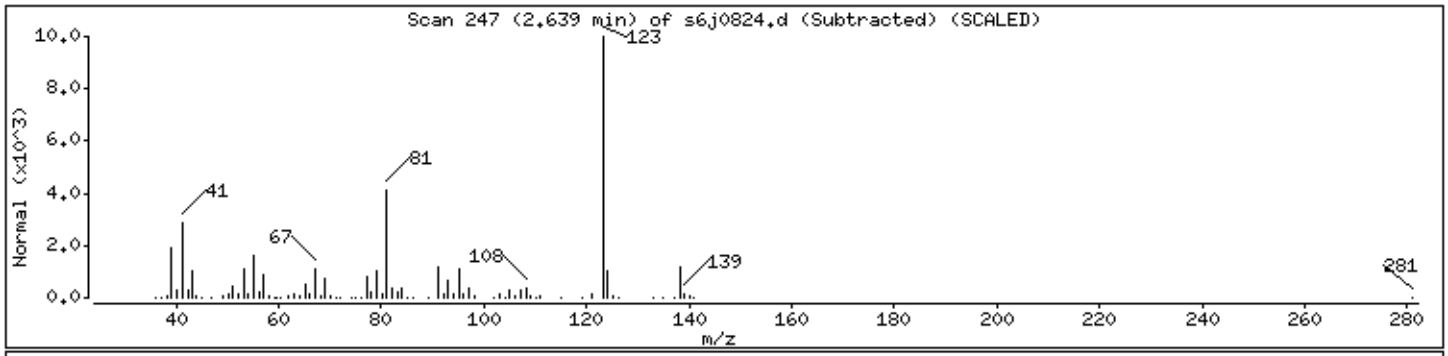
Client ID: GU05090G57M01 Instrument: MSD6.i

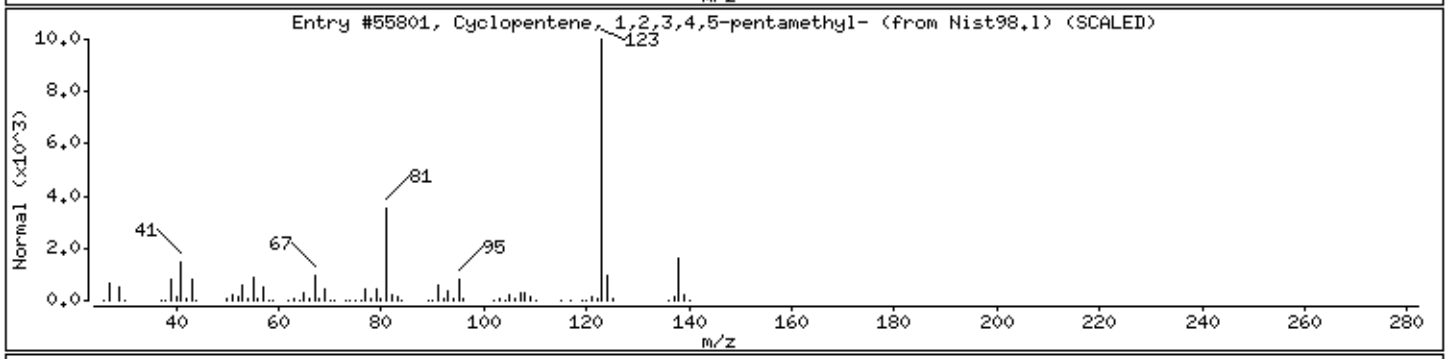
Sample Info: |145579007|463561|1|SVMF|1|ESHL

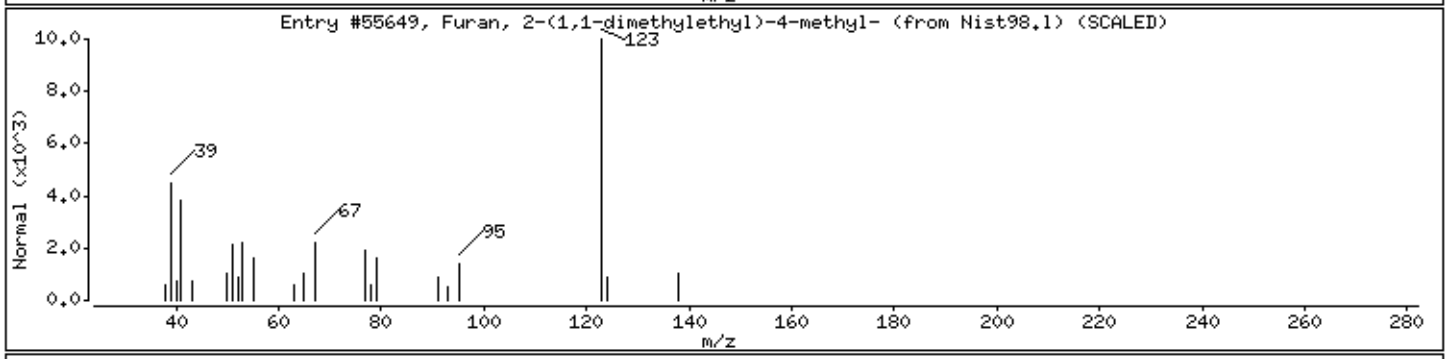
Volume Injected (uL): 0.5 Operator: jld1

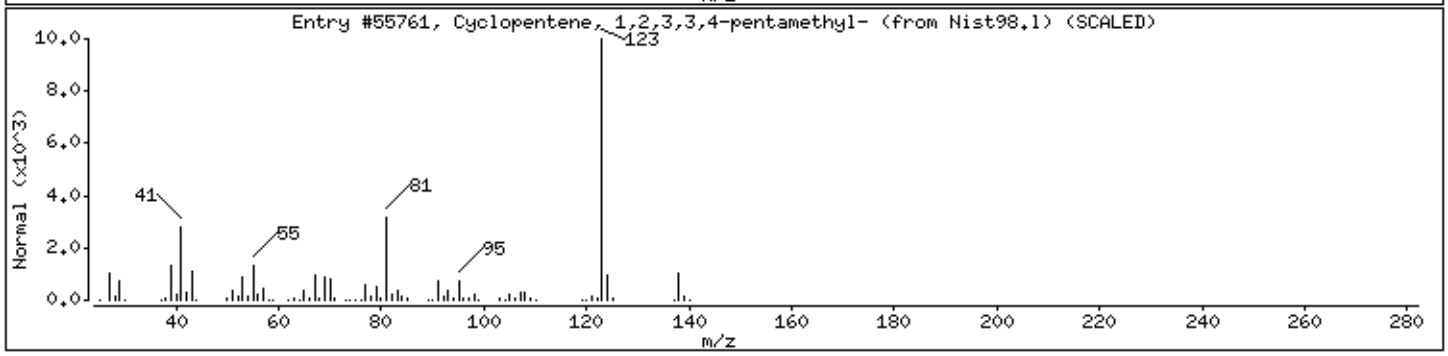
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopentene, 1,2,3,4,5-pentamethyl-	1000154-28-6	Nist98.l	55801	90	C10H18	138
Furan, 2-(1,1-dimethylethyl)-4-methyl-	6141-68-0	Nist98.l	55649	86	C9H14O	138
Cyclopentene, 1,2,3,3,4-pentamethyl-	1000152-27-1	Nist98.l	55761	81	C10H18	138









Data File: /chem/MSD6.i/s100805.s.b/s6j0824.d

Date : 09-OCT-2005 01:36

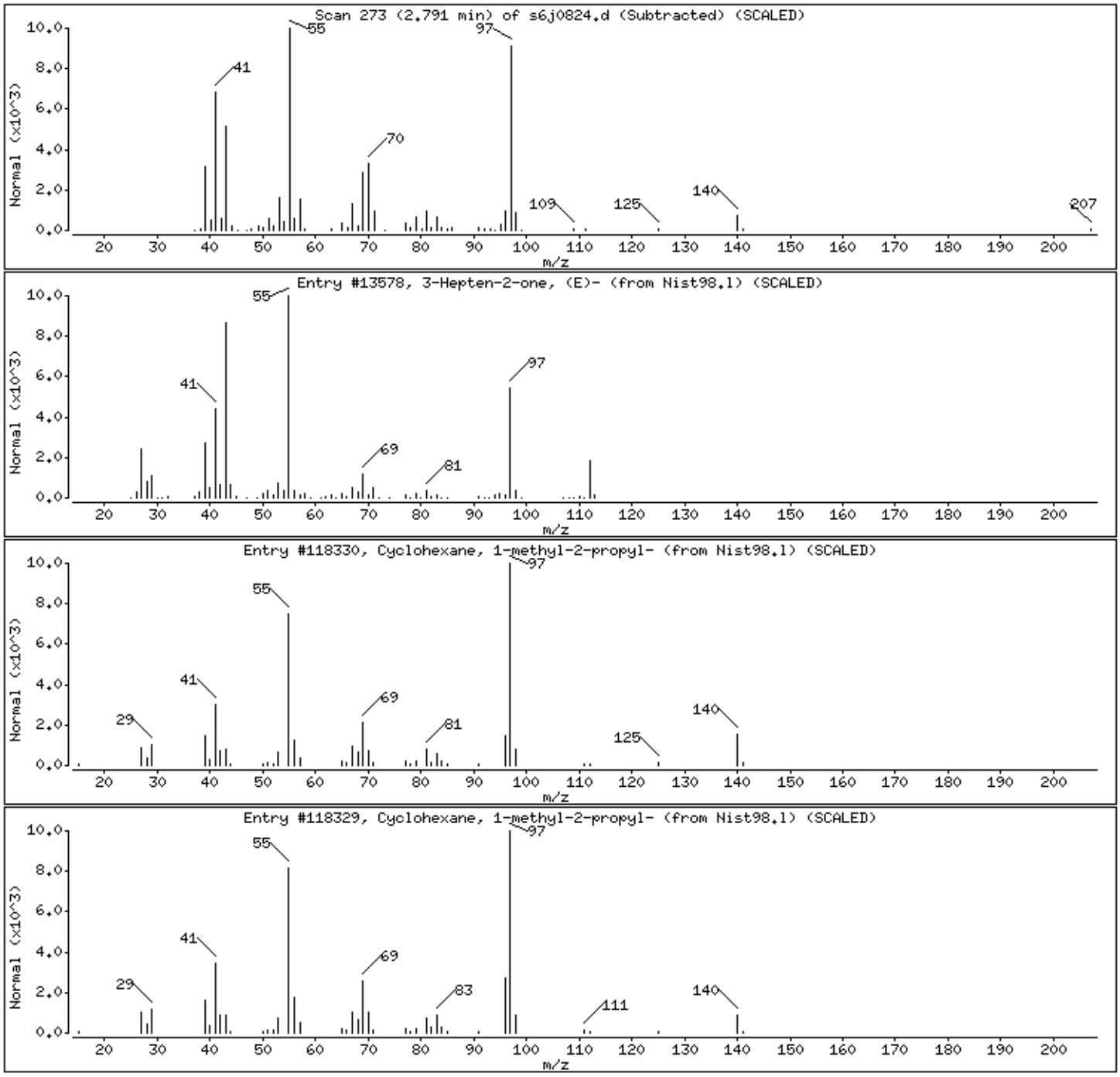
Client ID: GU05090G57M01 Instrument: MSD6.i

Sample Info: |145579007|463561|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: jld1

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Hepten-2-one, (E)-	5609-09-6	Nist98.l	13578	59	C7H12O	112
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	Nist98.l	118330	59	C10H20	140
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	Nist98.l	118329	59	C10H20	140



1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	10.5	U
62-53-3	Aniline	10.5	U
108-95-2	Phenol	10.5	U
111-44-4	bis(2-Chloroethyl) ether	10.5	U
95-57-8	2-Chlorophenol	10.5	U
541-73-1	1,3-Dichlorobenzene	10.5	U
106-46-7	1,4-Dichlorobenzene	10.5	U
100-51-6	Benzyl alcohol	10.5	U
95-50-1	1,2-Dichlorobenzene	10.5	U
108-60-1	bis(2-Chloroisopropyl)ether	10.5	U
95-48-7	o-Cresol	10.5	U
621-64-7	N-Nitrosodipropylamine	10.5	U
65794-96-9	m,p-Cresols	10.5	U
67-72-1	Hexachloroethane	10.5	U
98-95-3	Nitrobenzene	10.5	U
78-59-1	Isophorone	10.5	U
88-75-5	2-Nitrophenol	10.5	U
105-67-9	2,4-Dimethylphenol	10.5	U
111-91-1	bis(2-Chloroethoxy)methane	10.5	U
120-83-2	2,4-Dichlorophenol	10.5	U
65-85-0	Benzoic acid	21.0	U
120-82-1	1,2,4-Trichlorobenzene	10.5	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.5	U
87-68-3	Hexachlorobutadiene	10.5	U
59-50-7	4-Chloro-3-methylphenol	10.5	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.5	U
88-06-2	2,4,6-Trichlorophenol	10.5	U
95-95-4	2,4,5-Trichlorophenol	10.5	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.5	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	10.5	U
131-11-3	Dimethylphthalate	10.5	U
606-20-2	2,6-Dinitrotoluene	10.5	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	21.0	U
132-64-9	Dibenzofuran	10.5	U
121-14-2	2,4-Dinitrotoluene	10.5	U
84-66-2	Diethylphthalate	10.5	U
100-02-7	4-Nitrophenol	10.5	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.5	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.5	U
100-01-6	p-Nitroaniline	10.5	U
122-39-4	Diphenylamine	10.5	U
122-66-7	1,2-Diphenylhydrazine	10.5	U
101-55-3	4-Bromophenylphenylether	10.5	U
118-74-1	Hexachlorobenzene	10.5	U
1912-24-9	Atrazine	10.5	U
87-86-5	Pentachlorophenol	10.5	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.5	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	52.6	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.5	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.5	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.5	U
117-84-0	Di-n-octylphthalate	10.5	U
205-99-2	Benzo(b)fluoranthene	1.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G7CM01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
55-18-5	N-Nitrosodiethylamine	10.5	U
930-55-2	N-Nitrosopyrrolidine	10.5	U
924-16-3	N-Nitrosodi-n-butylamine	10.5	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10.5	U
608-93-5	Pentachlorobenzene	10.5	U
58-90-2	2,3,4,6-Tetrachlorophenol	10.5	U
88-85-7	Dinoseb	10.5	U

1F

EPA SAMPLE NO.

GU05090G7CM01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579008

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0825

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.33	52.4	J
2.		UNKNOWN	2.63	15.4	J
3.		UNKNOWN	2.78	6.6	JB
4.		UNKNOWN	2.79	6.4	JB
5.					
6.					
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0825.d
Lab Smp Id: 145579008 Client Smp ID: GU05090G7CM01
Inj Date : 09-OCT-2005 01:58
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579008|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	950.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.155	3.156	(1.000)	219153	40.0000	
* 29 Naphthalene-d8	136	3.995	3.996	(1.000)	822304	40.0000	
* 46 Acenaphthene-d10	164	5.223	5.224	(1.000)	530095	40.0000	
* 67 Phenanthrene-d10	188	6.257	6.258	(1.000)	810768	40.0000	
* 91 Chrysene-d12	240	7.803	7.809	(1.000)	579369	40.0000	
* 98 Perylene-d12	264	8.760	8.773	(1.000)	383302	40.0000	
$ 3 2-Fluorophenol	112	2.380	2.380	(0.754)	239109	39.6787	41.8
$ 5 Phenol-d5	99	2.903	2.909	(0.920)	192252	26.4201	27.8
$ 20 Nitrobenzene-d5	82	3.508	3.514	(0.878)	231407	38.6611	40.7
$ 39 2-Fluorobiphenyl	172	4.736	4.742	(0.907)	495450	33.3806	35.1
$ 60 2,4,6-Tribromophenol	329	5.782	5.782	(1.107)	170847	68.2194	71.8
$ 81 p-Terphenyl-d14	244	7.209	7.210	(0.924)	582168	46.1925	48.6

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0825.d
Lab Smp Id: 145579008 Client Smp ID: GU05090G7CM01
Inj Date : 09-OCT-2005 01:58
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579008|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	950.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.155	1647307	40.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
1.334	2052304	49.8341504	52.4	0		0	10
Unknown				CAS #:			
2.632	600809	14.5888809	15.4	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.779	259131	6.29223326	6.6	0		0	10
Unknown				CAS #:			
2.791	249138	6.04958563	6.4	0		0	10

Data File: /chem/MSD6.i/s100805.s.b/s6j0825.d

Page 1

Date : 09-OCT-2005 01:58

Client ID: GU05090G7CM01

Instrument: MSD6.i

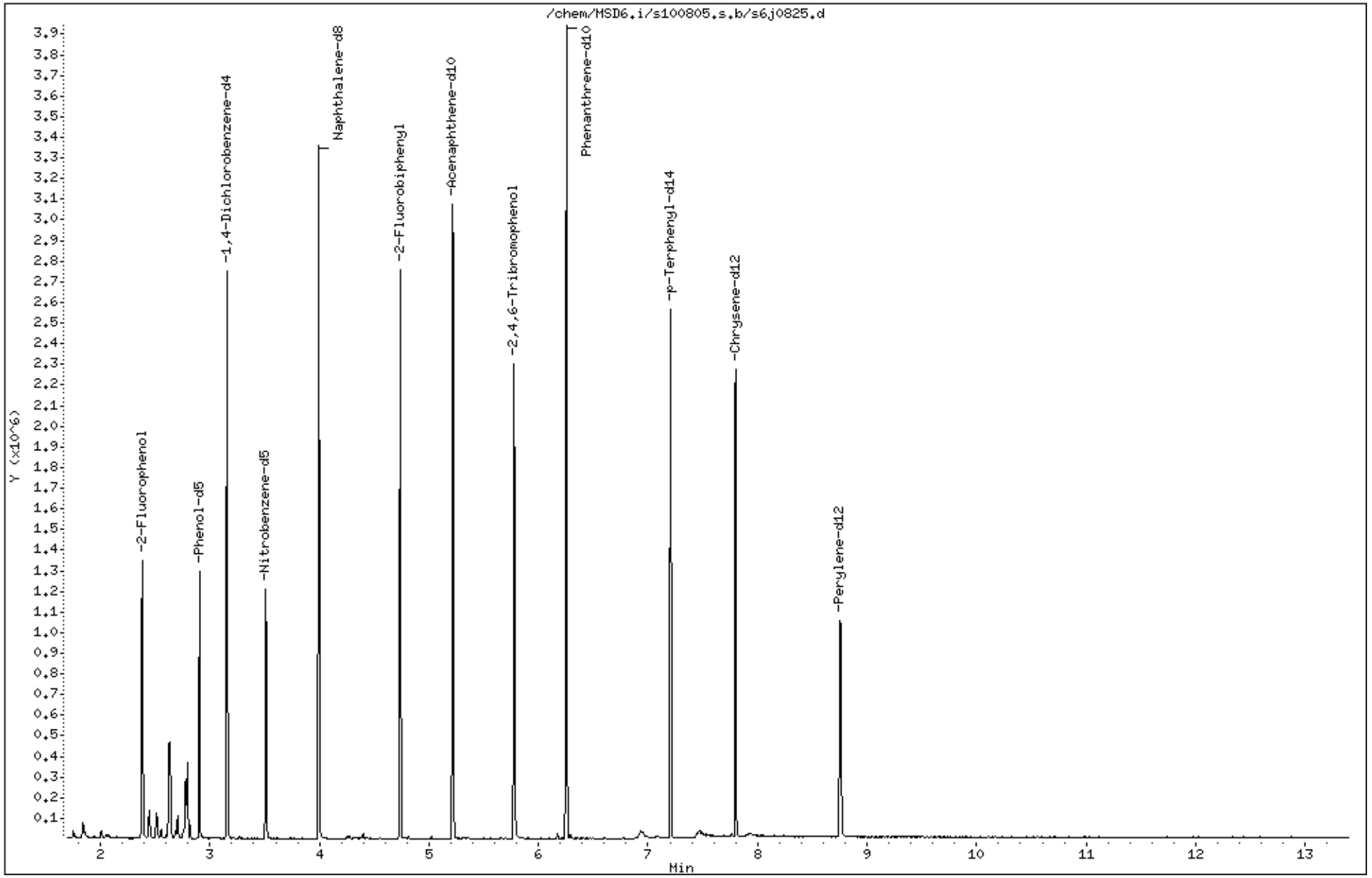
Sample Info: |145579008|463561|1|SVMF|1|ESHL

Volume Injected (uL): 0.5

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s100805.s.b/s6j0825.d

Date : 09-OCT-2005 01:58

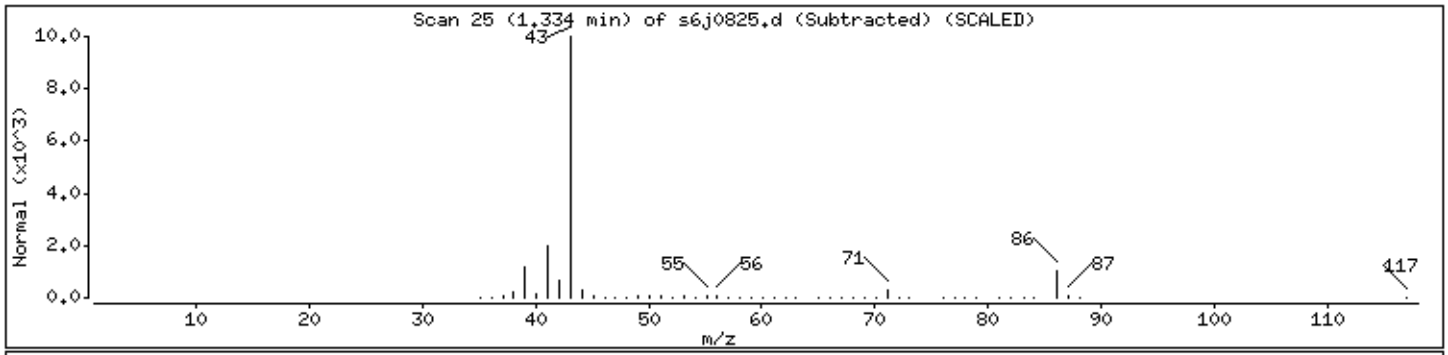
Client ID: GU05090G7CM01 Instrument: MSD6.i

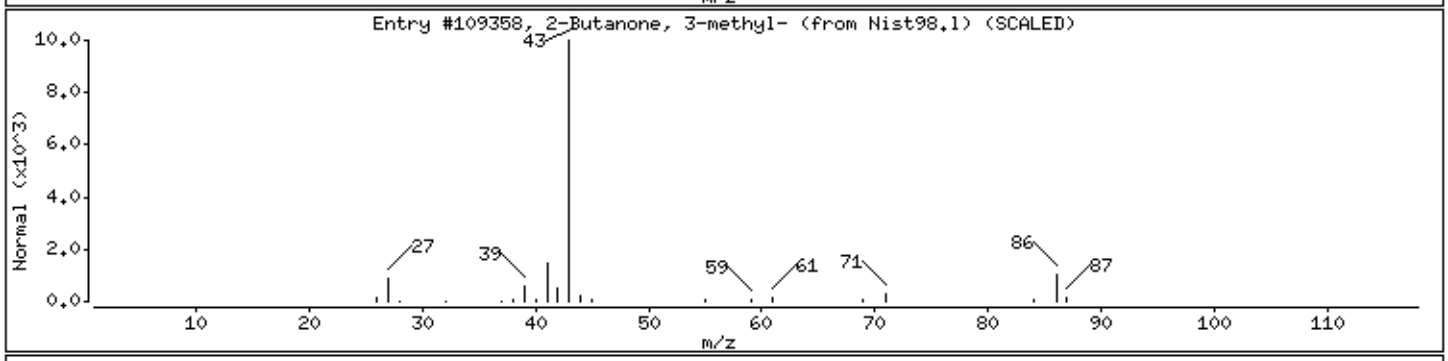
Sample Info: |145579008|463561|1|SVMF|1|ESHL

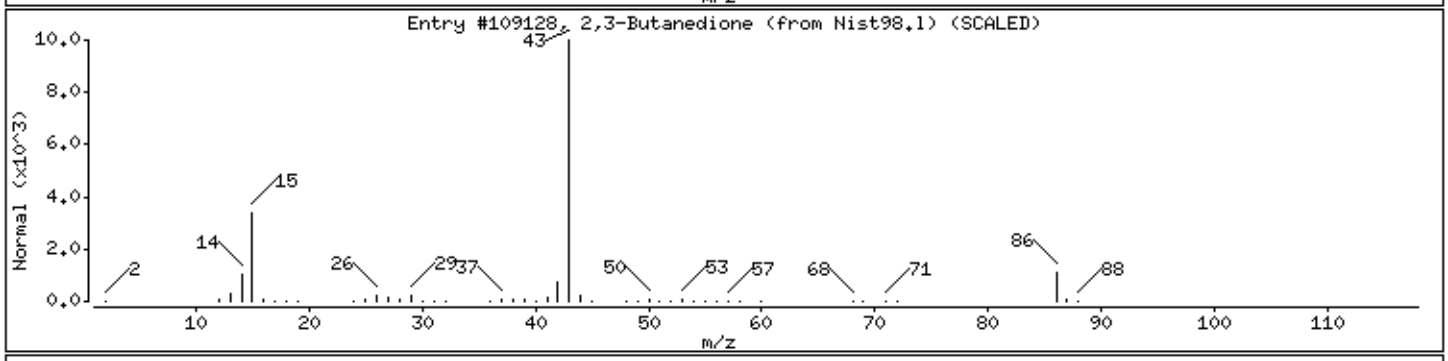
Volume Injected (uL): 0.5 Operator: jld1

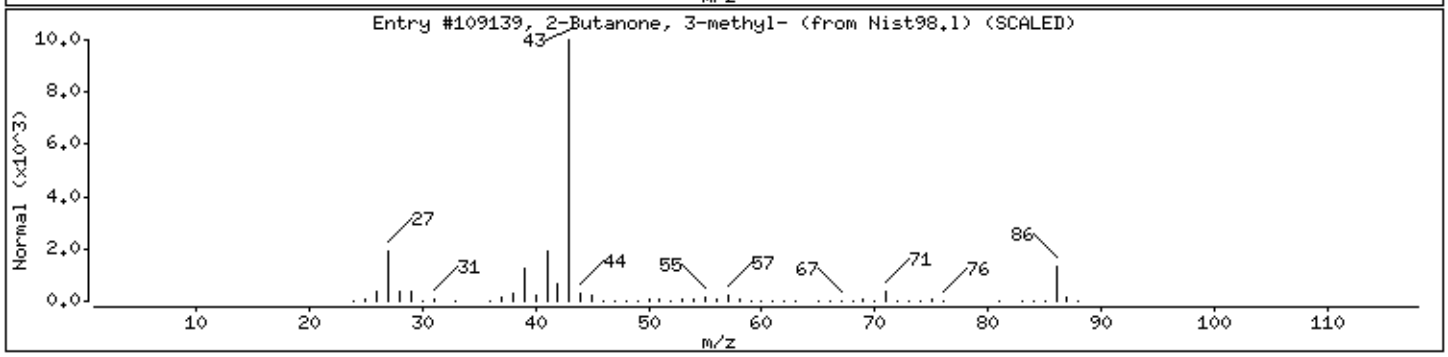
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109358	64	C5H10O	86
2,3-Butanedione	431-03-8	Nist98.l	109128	59	C4H6O2	86
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109139	59	C5H10O	86









Data File: /chem/MSD6.i/s100805.s.b/s6j0825.d

Date : 09-OCT-2005 01:58

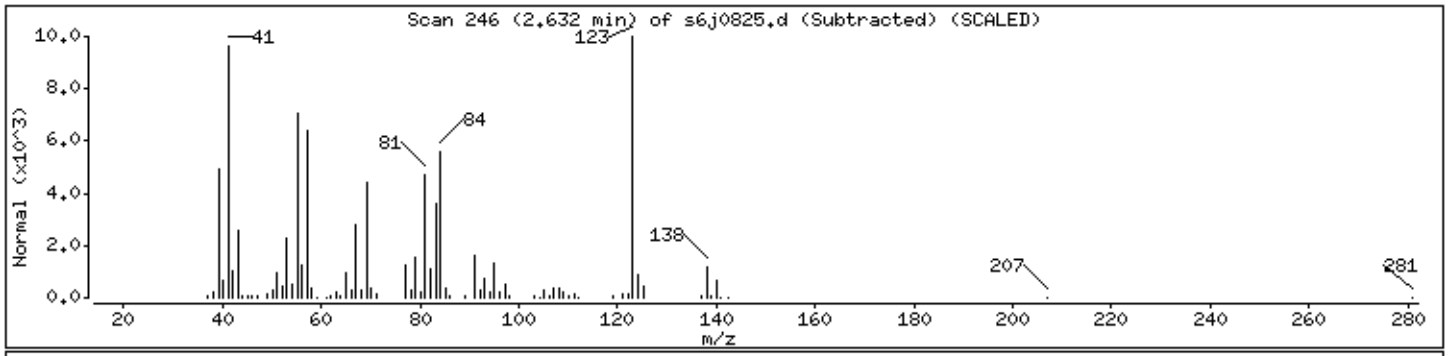
Client ID: GU05090G7CM01 Instrument: MSD6.i

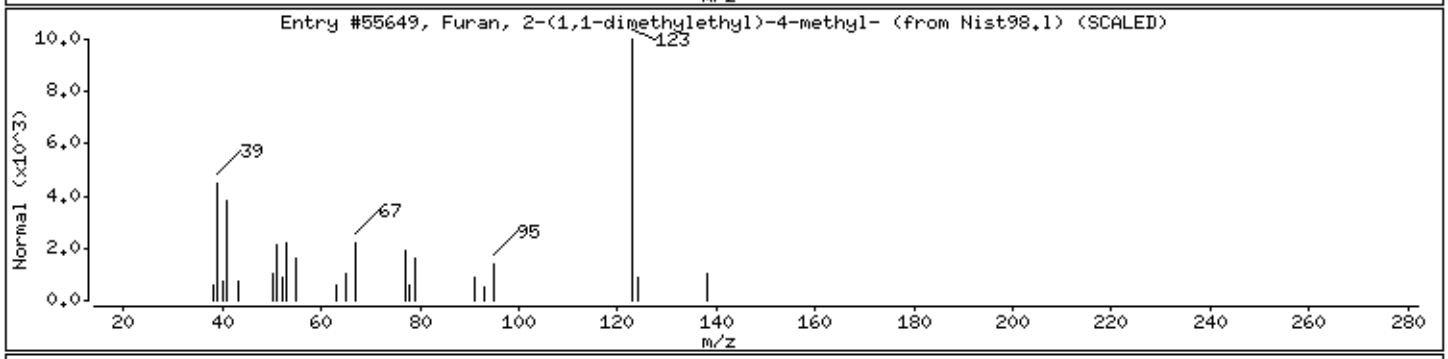
Sample Info: |1455790081463561|1|SVMF|1|ESHL

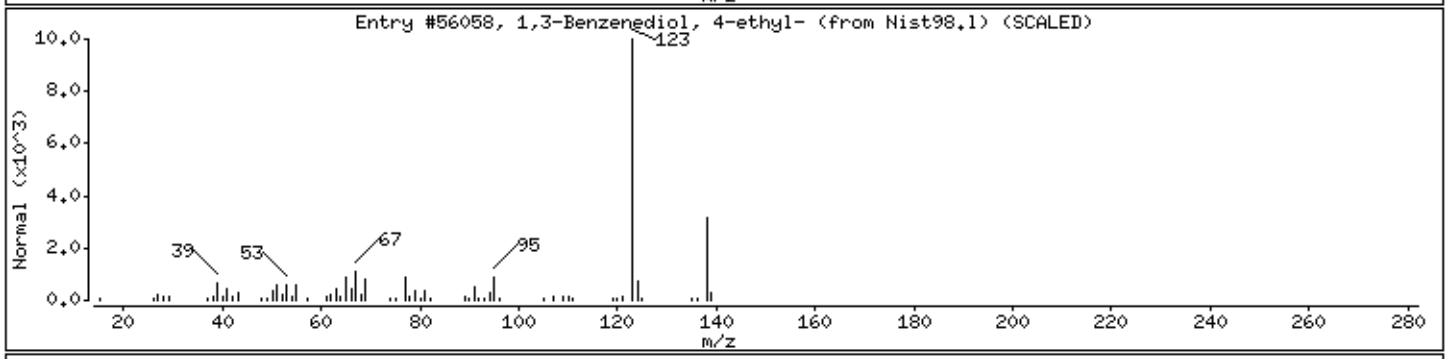
Volume Injected (uL): 0.5 Operator: jld1

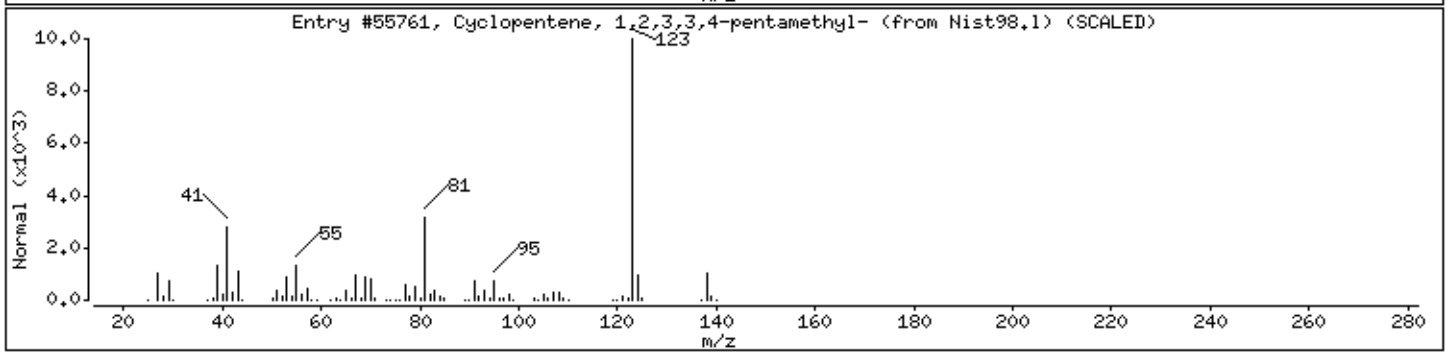
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Furan, 2-(1,1-dimethylethyl)-4-methyl-	6141-68-0	Nist98.l	55649	68	C9H14O	138
1,3-Benzenediol, 4-ethyl-	2896-60-8	Nist98.l	56058	43	C8H10O2	138
Cyclopentene, 1,2,3,3,4-pentamethyl-	1000152-27-1	Nist98.l	55761	41	C10H18	138









Data File: /chem/MSD6.i/s100805.s.b/s6j0825.d

Date : 09-OCT-2005 01:58

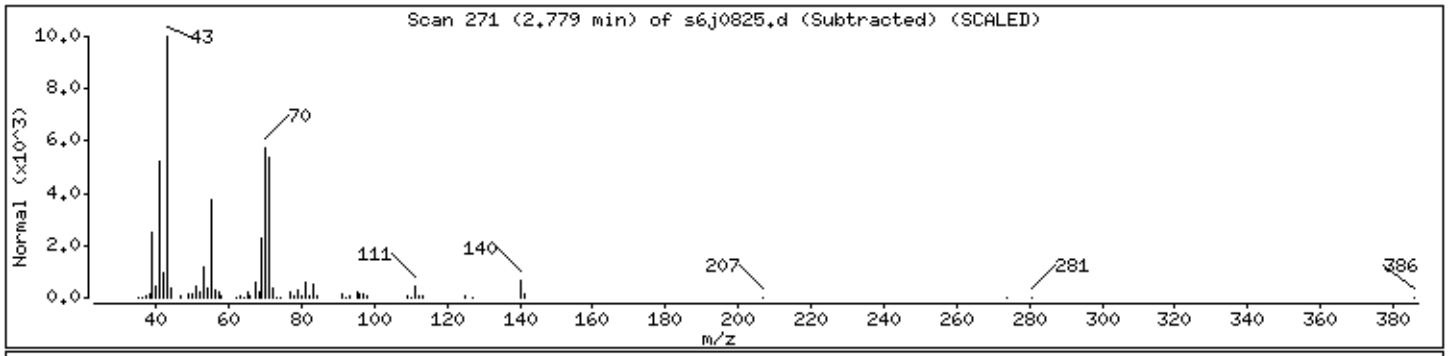
Client ID: GU05090G7CM01 Instrument: MSD6.i

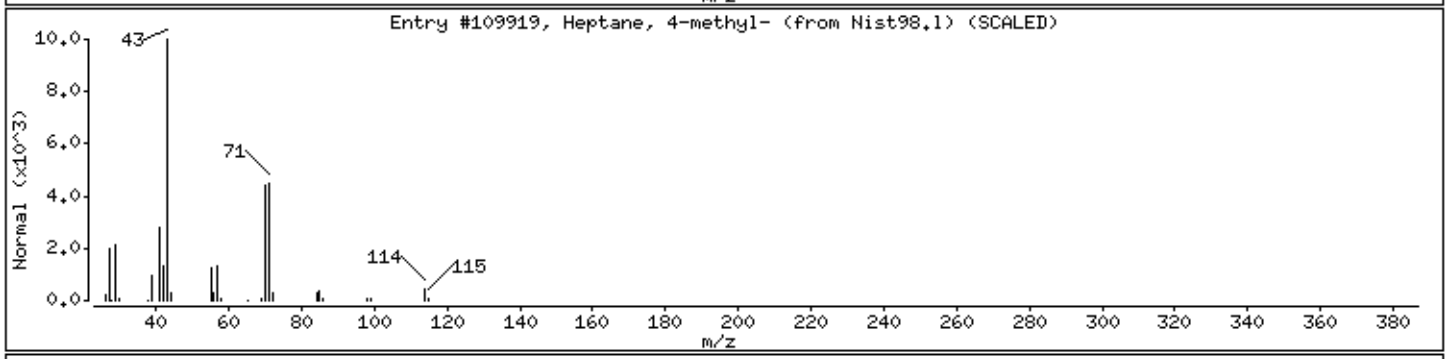
Sample Info: |1455790081463561|1|SVMF|1|ESHL

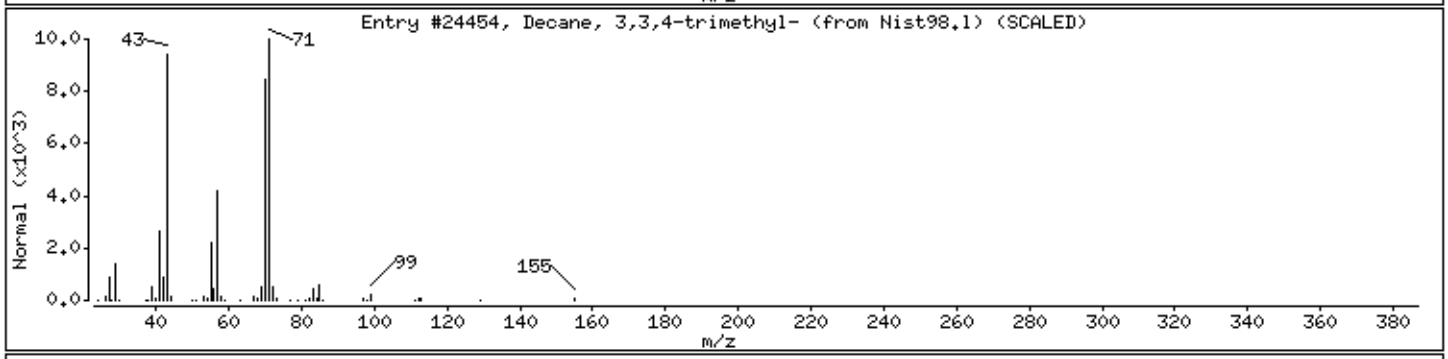
Volume Injected (uL): 0.5 Operator: jld1

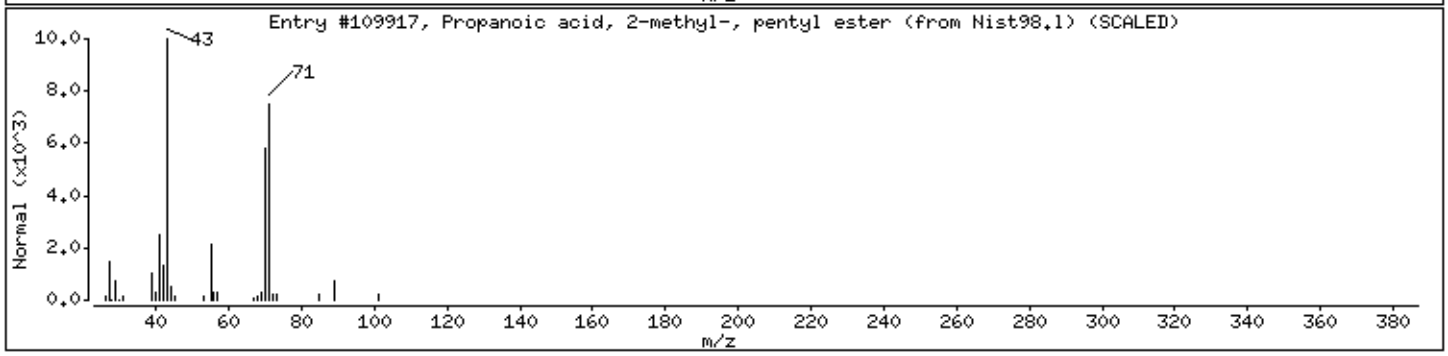
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Heptane, 4-methyl-	589-53-7	Nist98.l	109919	64	C8H18	114
Decane, 3,3,4-trimethyl-	49622-18-6	Nist98.l	24454	64	C13H28	184
Propanoic acid, 2-methyl-, pentyl ester	2445-72-9	Nist98.l	109917	64	C9H18O2	158









Data File: /chem/MSD6.i/s100805.s.b/s6j0825.d

Date : 09-OCT-2005 01:58

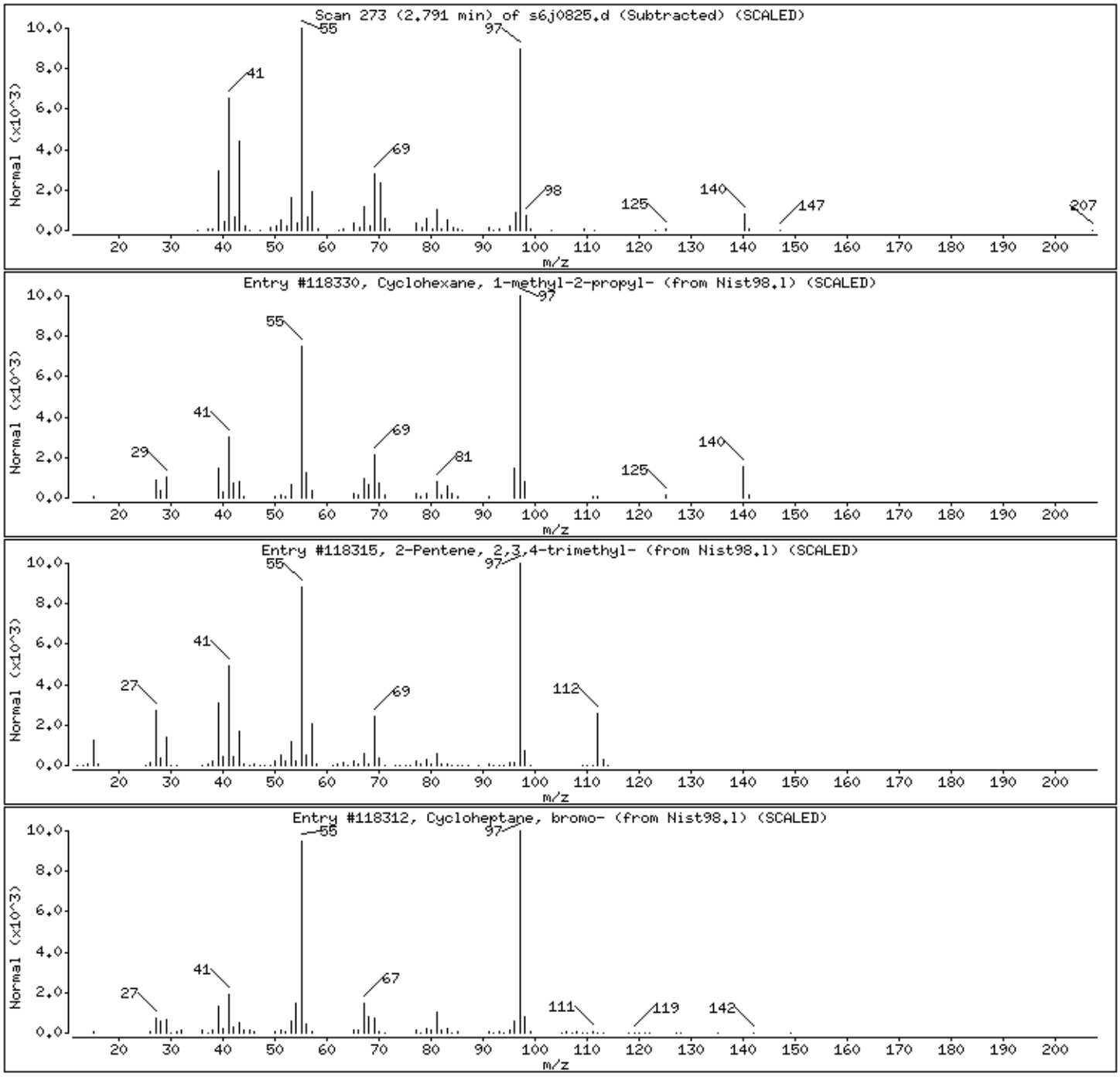
Client ID: GU05090G7CM01 Instrument: MSD6.i

Sample Info: |1455790081463561|1|SVMF|1|ESHL

Volume Injected (uL): 0.5 Operator: jld1

Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	Nist98.l	118330	72	C10H20	140
2-Pentene, 2,3,4-trimethyl-	565-77-5	Nist98.l	118315	64	C8H16	112
Cycloheptane, bromo-	2404-35-5	Nist98.l	118312	64	C7H13Br	176



1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	10.5	U
62-53-3	Aniline	10.5	U
108-95-2	Phenol	10.5	U
111-44-4	bis(2-Chloroethyl) ether	10.5	U
95-57-8	2-Chlorophenol	10.5	U
541-73-1	1,3-Dichlorobenzene	10.5	U
106-46-7	1,4-Dichlorobenzene	10.5	U
100-51-6	Benzyl alcohol	10.5	U
95-50-1	1,2-Dichlorobenzene	10.5	U
108-60-1	bis(2-Chloroisopropyl)ether	10.5	U
95-48-7	o-Cresol	10.5	U
621-64-7	N-Nitrosodipropylamine	10.5	U
65794-96-9	m,p-Cresols	10.5	U
67-72-1	Hexachloroethane	10.5	U
98-95-3	Nitrobenzene	10.5	U
78-59-1	Isophorone	10.5	U
88-75-5	2-Nitrophenol	10.5	U
105-67-9	2,4-Dimethylphenol	10.5	U
111-91-1	bis(2-Chloroethoxy)methane	10.5	U
120-83-2	2,4-Dichlorophenol	10.5	U
65-85-0	Benzoic acid	21.0	U
120-82-1	1,2,4-Trichlorobenzene	10.5	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.5	U
87-68-3	Hexachlorobutadiene	10.5	U
59-50-7	4-Chloro-3-methylphenol	10.5	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.5	U
88-06-2	2,4,6-Trichlorophenol	10.5	U
95-95-4	2,4,5-Trichlorophenol	10.5	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.5	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	10.5	U
131-11-3	Dimethylphthalate	10.5	U
606-20-2	2,6-Dinitrotoluene	10.5	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	21.0	U
132-64-9	Dibenzofuran	10.5	U
121-14-2	2,4-Dinitrotoluene	10.5	U
84-66-2	Diethylphthalate	10.5	U
100-02-7	4-Nitrophenol	10.5	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.5	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.5	U
100-01-6	p-Nitroaniline	10.5	U
122-39-4	Diphenylamine	10.5	U
122-66-7	1,2-Diphenylhydrazine	10.5	U
101-55-3	4-Bromophenylphenylether	10.5	U
118-74-1	Hexachlorobenzene	10.5	U
1912-24-9	Atrazine	10.5	U
87-86-5	Pentachlorophenol	10.5	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.5	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	52.6	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.5	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.5	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.5	U
117-84-0	Di-n-octylphthalate	10.5	U
205-99-2	Benzo(b)fluoranthene	1.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090GMC401

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
55-18-5	N-Nitrosodiethylamine	10.5	U
930-55-2	N-Nitrosopyrrolidine	10.5	U
924-16-3	N-Nitrosodi-n-butylamine	10.5	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10.5	U
608-93-5	Pentachlorobenzene	10.5	U
58-90-2	2,3,4,6-Tetrachlorophenol	10.5	U
88-85-7	Dinoseb	10.5	U

1F

EPA SAMPLE NO.

GU05090GMC401

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 145579006

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: S6J0823

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	1.26	21.2	AJB
2.		UNKNOWN	1.33	63.4	J
3.		UNKNOWN	1.43	4.3	JB
4.	123-91-1	1,4-DIOXANE	1.55	5.6	NJ
5.	1000154-28-6	CYCLOPENTENE, 1,2,3,4,5-PENT	2.64	12.5	NJ
6.					
7.					
8.					
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0823.d
Lab Smp Id: 145579006 Client Smp ID: GU05090GMC401
Inj Date : 09-OCT-2005 01:14
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579006|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	950.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.156	3.156	(1.000)	234495	40.0000	
* 29 Naphthalene-d8	136	3.996	3.996	(1.000)	869905	40.0000	
* 46 Acenaphthene-d10	164	5.218	5.224	(1.000)	548391	40.0000	
* 67 Phenanthrene-d10	188	6.258	6.258	(1.000)	838427	40.0000	
* 91 Chrysene-d12	240	7.797	7.809	(1.000)	595746	40.0000	
* 98 Perylene-d12	264	8.755	8.773	(1.000)	436639	40.0000	
$ 3 2-Fluorophenol	112	2.380	2.380	(0.754)	217298	33.7001	35.5
$ 5 Phenol-d5	99	2.903	2.909	(0.920)	178757	22.9584	24.2
$ 20 Nitrobenzene-d5	82	3.508	3.514	(0.878)	220811	34.8722	36.7
$ 39 2-Fluorobiphenyl	172	4.736	4.742	(0.908)	491771	32.0273	33.7
$ 60 2,4,6-Tribromophenol	329	5.782	5.782	(1.108)	170722	65.8951	69.4
$ 81 p-Terphenyl-d14	244	7.210	7.210	(0.925)	628456	48.4945	51.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0823.d
Lab Smp Id: 145579006 Client Smp ID: GU05090GMC401
Inj Date : 09-OCT-2005 01:14
Operator : jld1 Inst ID: MSD6.i
Smp Info : |145579006|463561|1|SVMF|1|ESHL
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	950.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.156	1742868	40.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
1.258	878396	20.1597745	21.2	0		0	10
Unknown					CAS #:		
1.334	2622374	60.1852285	63.4	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.434	177330	4.06984969	4.3	0		0	10
1,4-Dioxane					CAS #: 123-91-1		
1.546	234046	5.37150894	5.6	91	Nist98.l	210	10
Cyclopentene, 1,2,3,4,5-pentamethyl-					CAS #: 1000154-28-6		
2.639	517924	11.8867047	12.5	90	Nist98.l	55801	10

Data File: /chem/MSD6.i/s100805.s.b/s6j0823.d

Page 1

Date : 09-OCT-2005 01:14

Client ID: GU05090GMC401

Instrument: MSD6.i

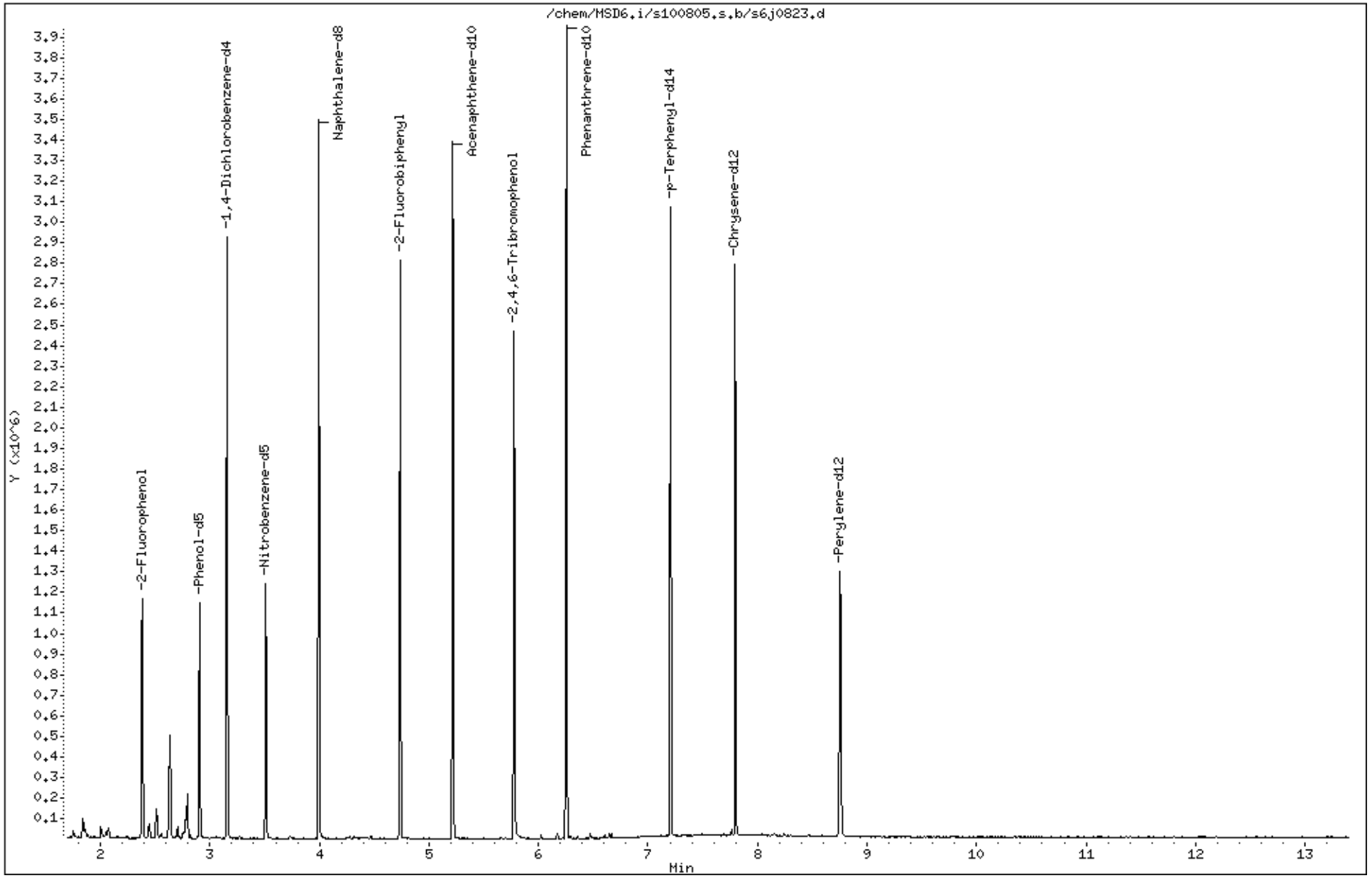
Sample Info: |145579006|463561|1|SVMF|1|ESHL

Volume Injected (uL): 0.5

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s100805.s.b/s6j0823.d

Date : 09-OCT-2005 01:14

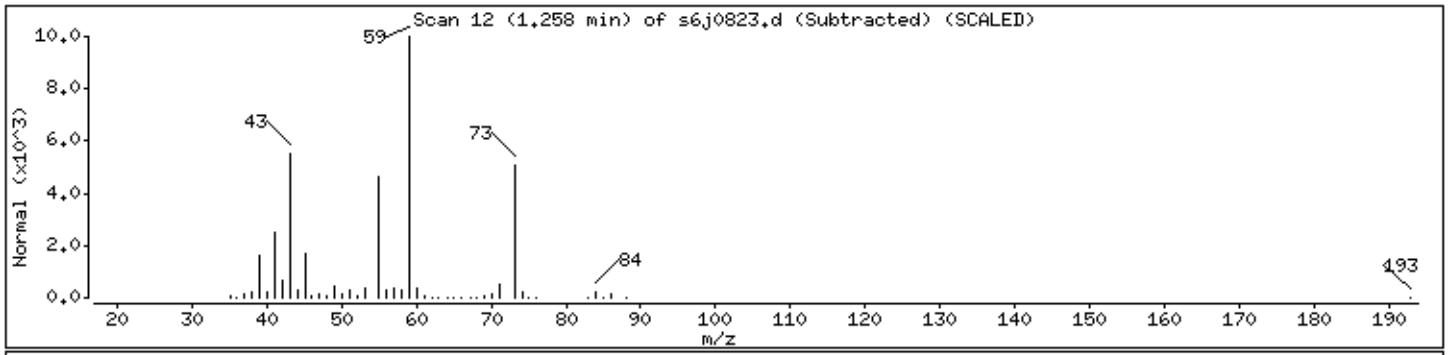
Client ID: GU05090GMC401 Instrument: MSD6.i

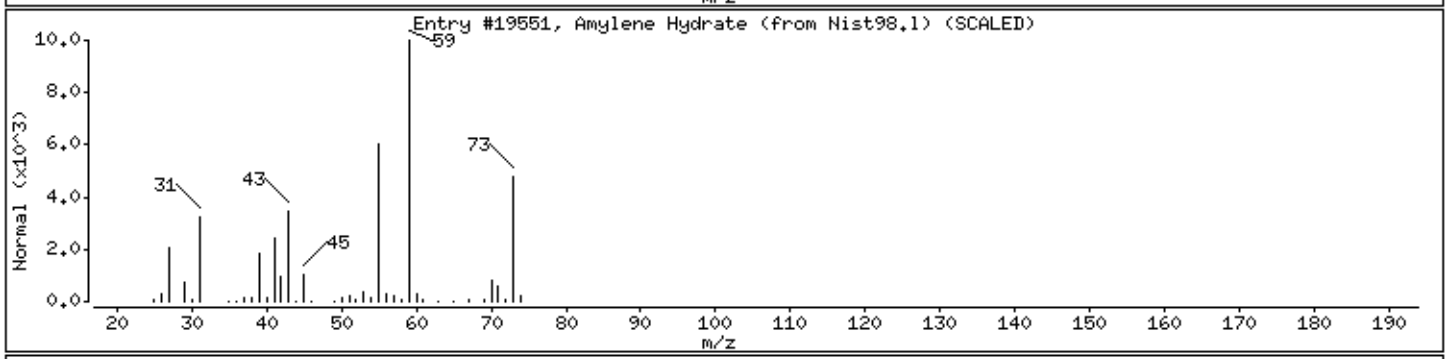
Sample Info: |145579006|463561|1|SVMF|1|ESHL

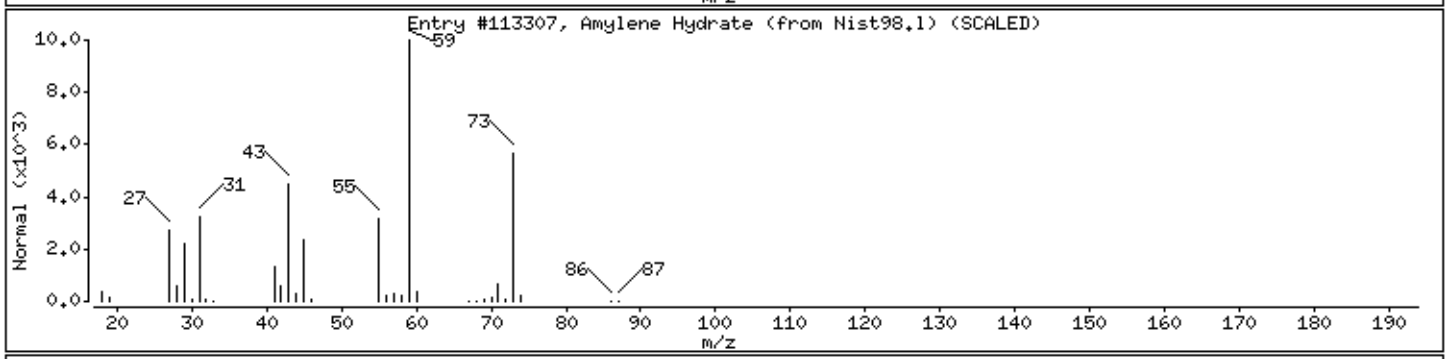
Volume Injected (uL): 0.5 Operator: jld1

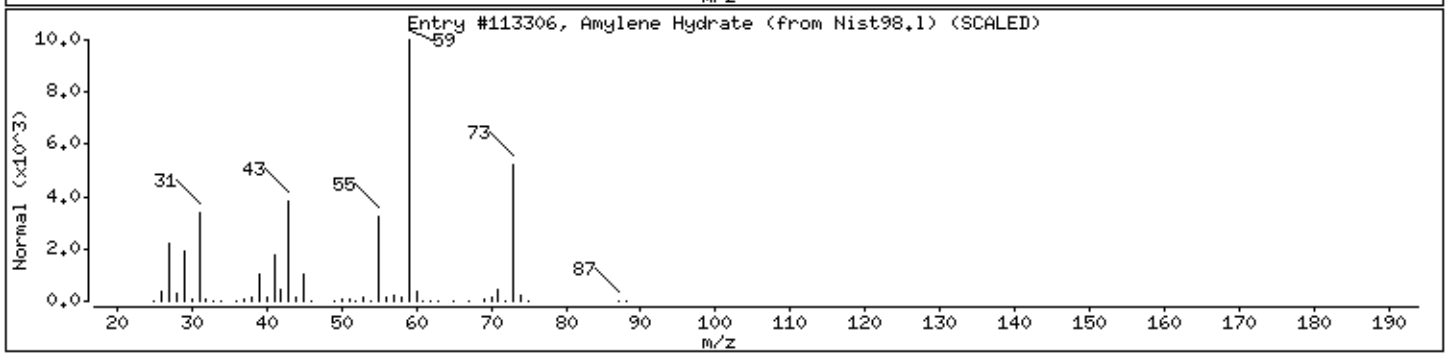
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
Amylene Hydrate	75-85-4	Nist98.l	19551	78	C5H120	88
Amylene Hydrate	75-85-4	Nist98.l	113307	72	C5H120	88
Amylene Hydrate	75-85-4	Nist98.l	113306	72	C5H120	88









Data File: /chem/MSD6.i/s100805.s.b/s6j0823.d

Date : 09-OCT-2005 01:14

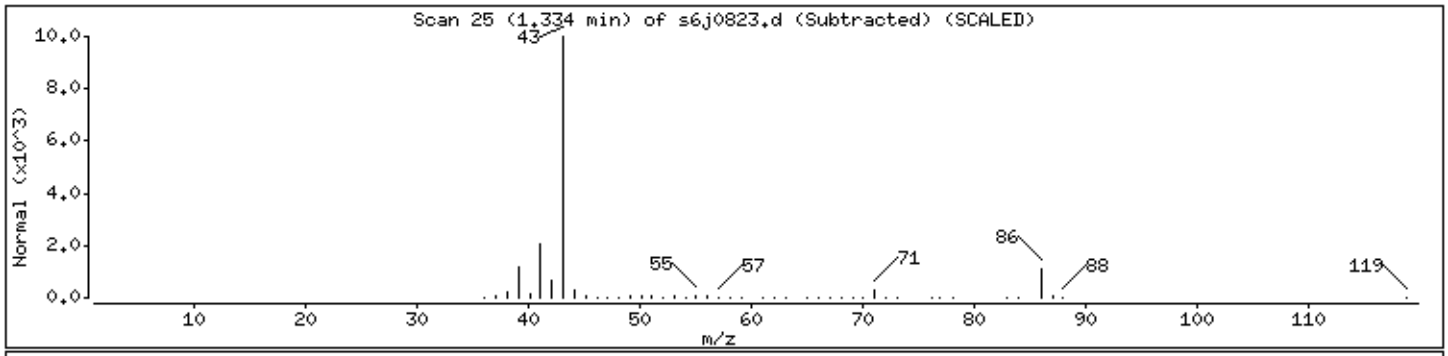
Client ID: GU05090GMC401 Instrument: MSD6.i

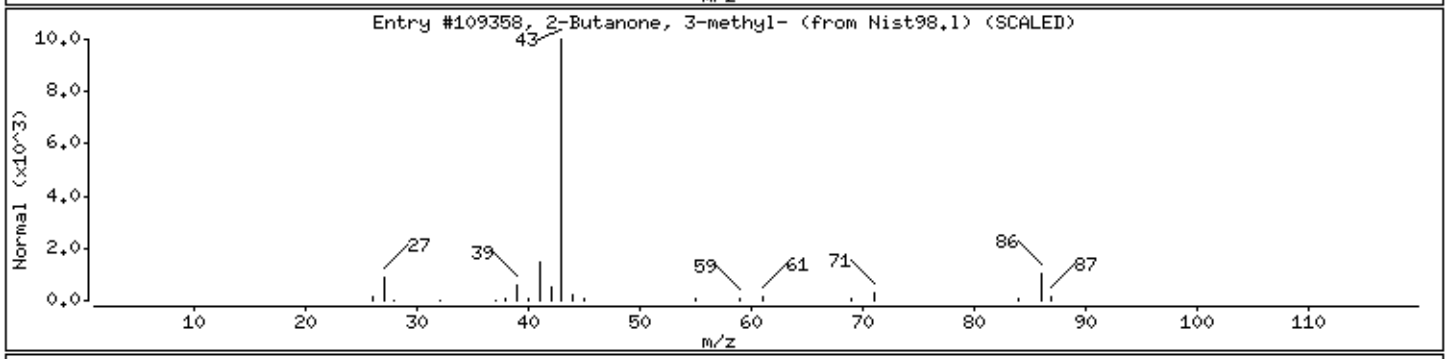
Sample Info: |145579006|463561|1|SVMF|1|ESHL

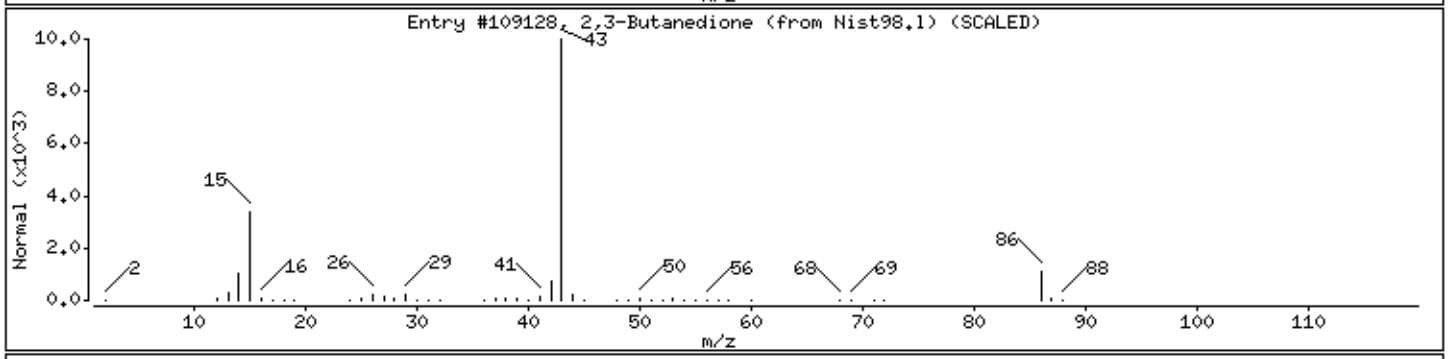
Volume Injected (uL): 0.5 Operator: jld1

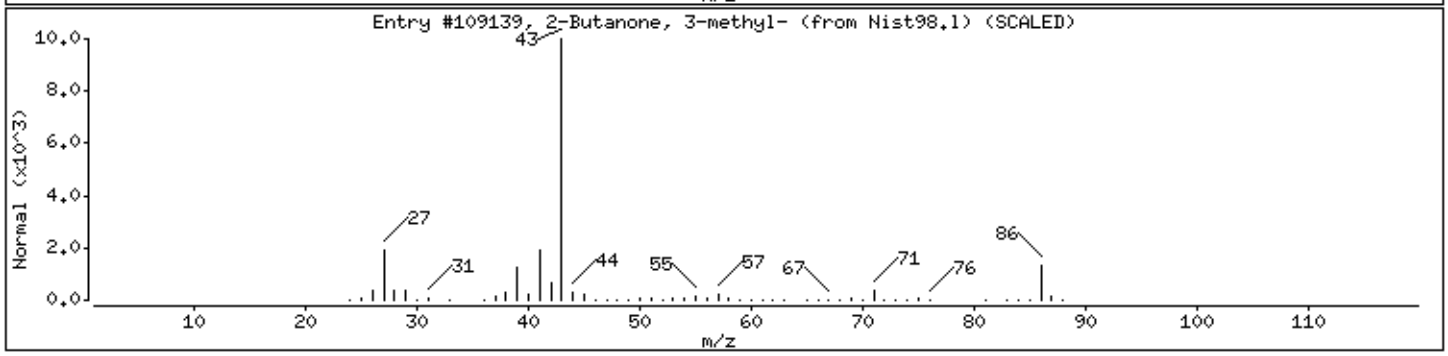
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109358	64	C5H10O	86
2,3-Butanedione	431-03-8	Nist98.l	109128	64	C4H6O2	86
2-Butanone, 3-methyl-	563-80-4	Nist98.l	109139	59	C5H10O	86









Data File: /chem/MSD6.i/s100805.s.b/s6j0823.d

Date : 09-OCT-2005 01:14

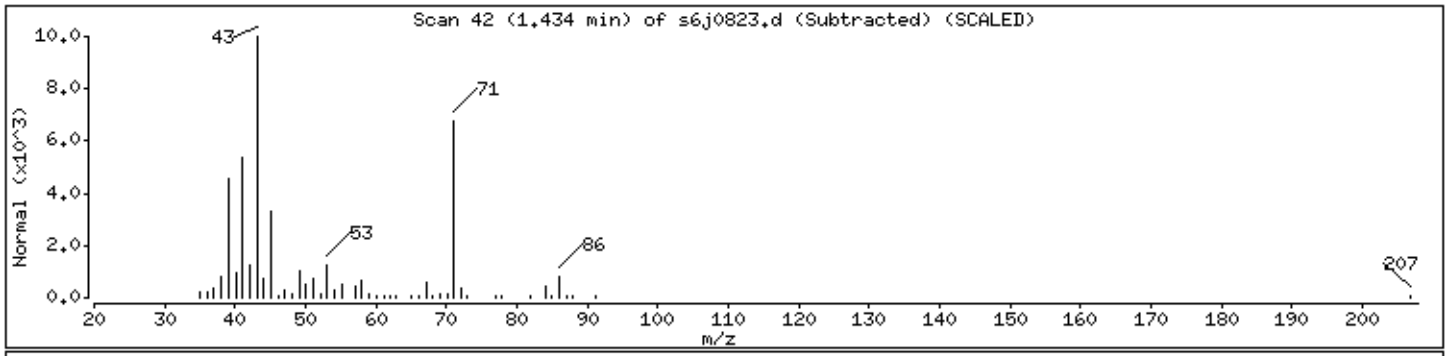
Client ID: GU05090GMC401 Instrument: MSD6.i

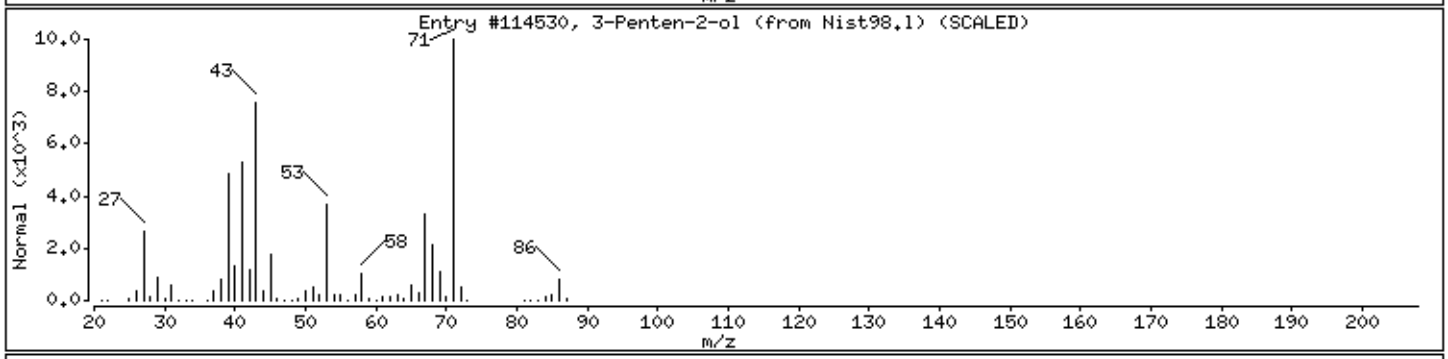
Sample Info: |1455790061463561|1|SVMF|1|ESHL

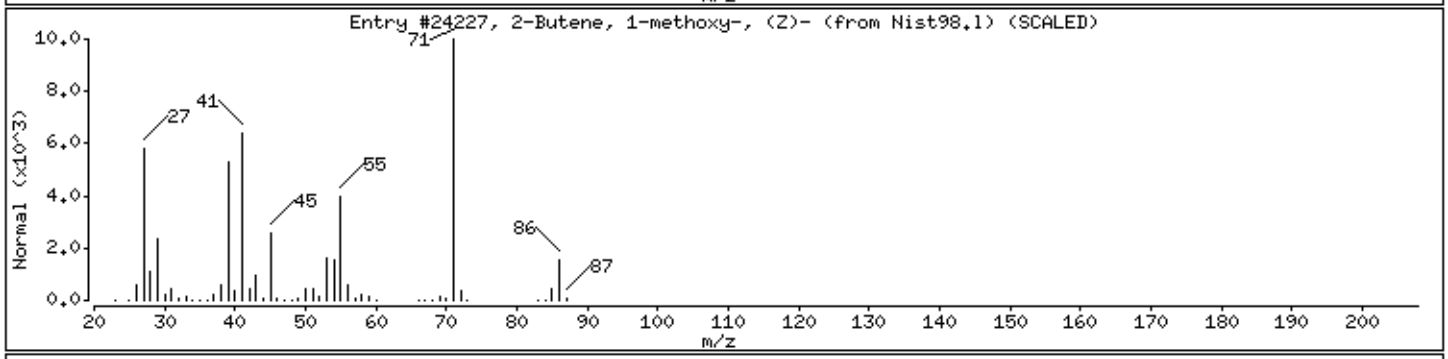
Volume Injected (uL): 0.5 Operator: jld1

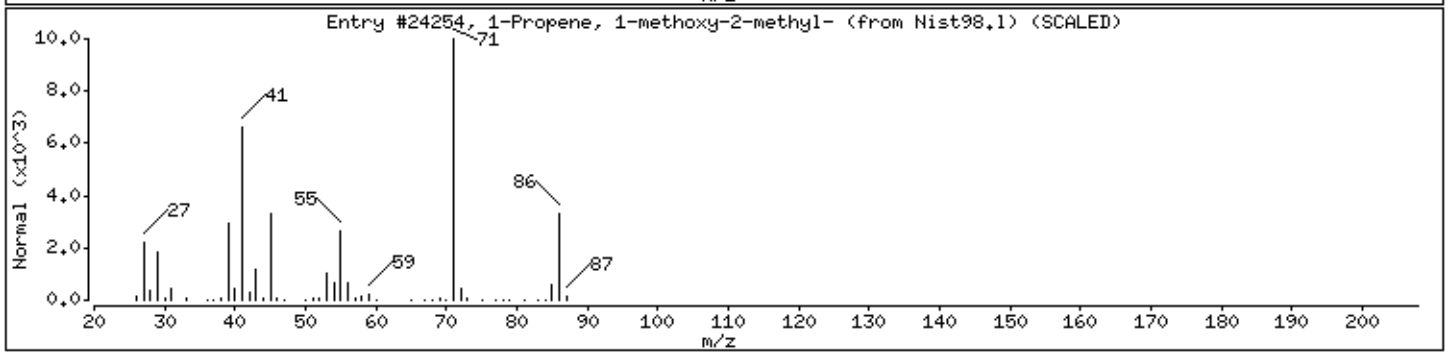
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Penten-2-ol	1569-50-2	Nist98.l	114530	53	C5H10O	86
2-Butene, 1-methoxy-, (Z)-	10034-16-9	Nist98.l	24227	43	C5H10O	86
1-Propene, 1-methoxy-2-methyl-	17574-84-4	Nist98.l	24254	43	C5H10O	86









Data File: /chem/MSD6.i/s100805.s.b/s6j0823.d

Date : 09-OCT-2005 01:14

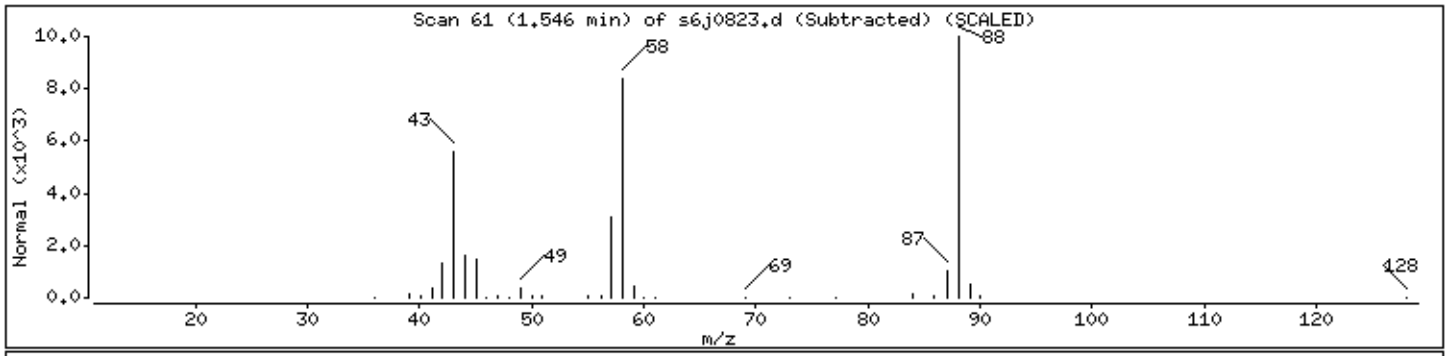
Client ID: GU05090GMC401 Instrument: MSD6.i

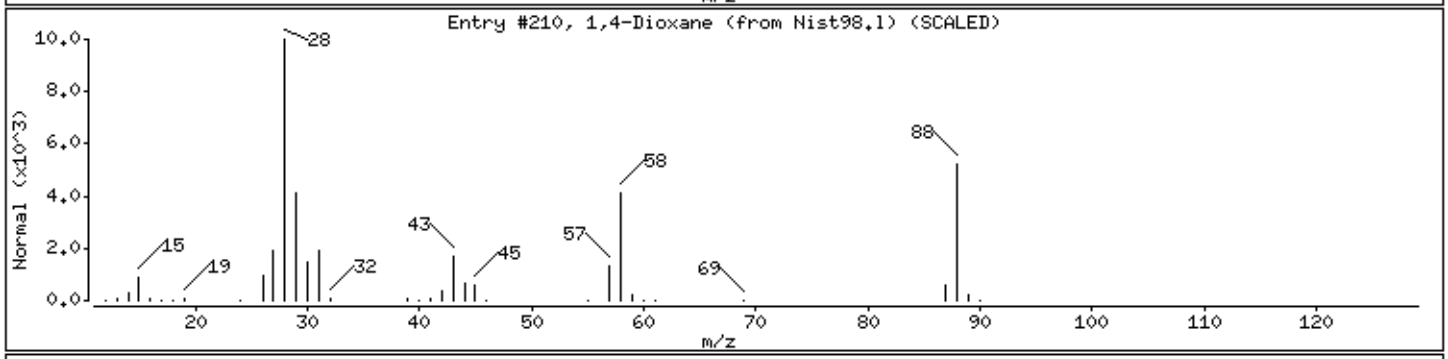
Sample Info: |145579006|463561|1|SVMF|1|ESHL

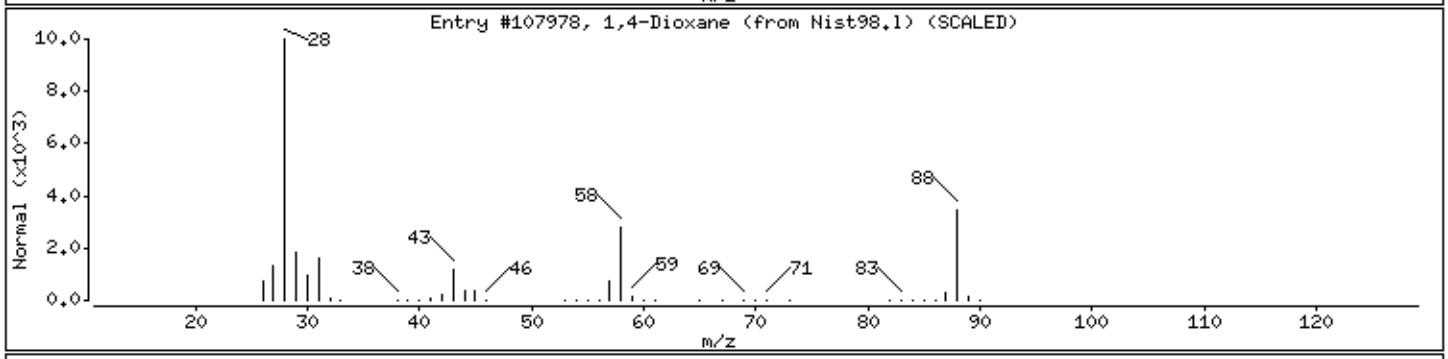
Volume Injected (uL): 0.5 Operator: jld1

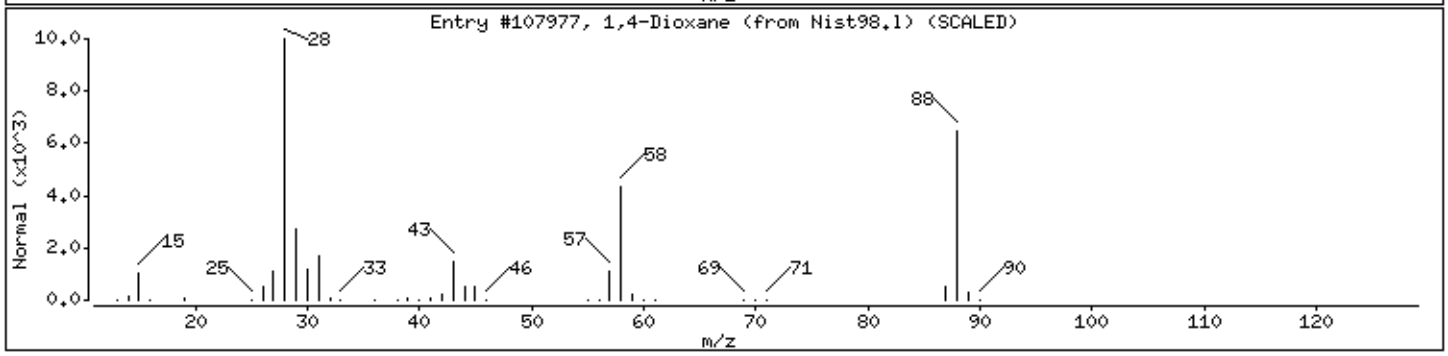
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,4-Dioxane	123-91-1	Nist98.l	210	91	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	107978	90	C4H8O2	88
1,4-Dioxane	123-91-1	Nist98.l	107977	90	C4H8O2	88









Data File: /chem/MSD6.i/s100805.s.b/s6j0823.d

Page 5

Date : 09-OCT-2005 01:14

Client ID: GU05090GMC401

Instrument: MSD6.i

Sample Info: |145579006|463561|1|SVMF|1|ESHL

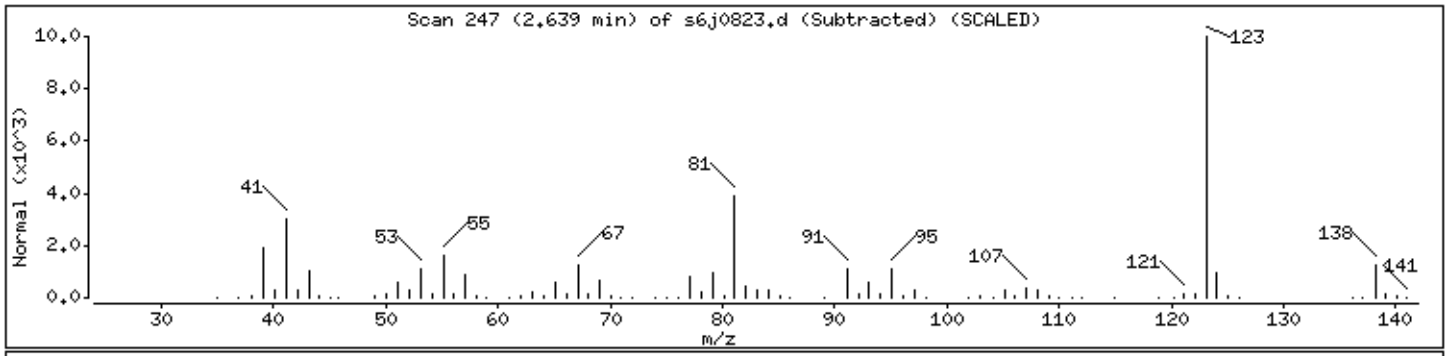
Volume Injected (uL): 0.5

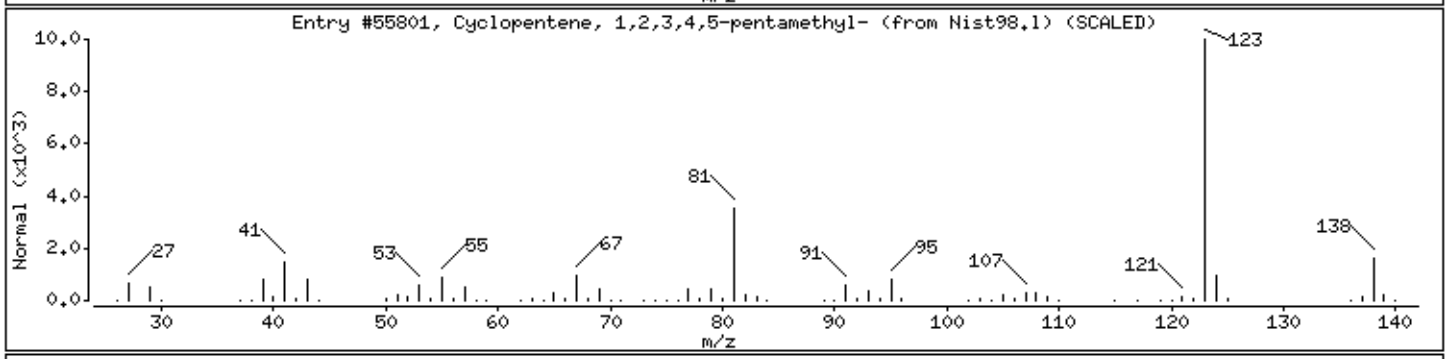
Operator: jld1

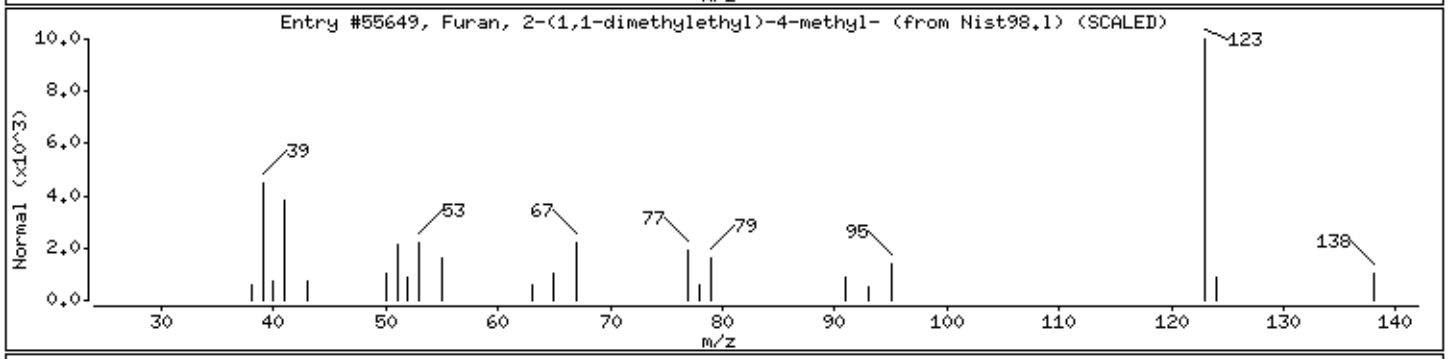
Column phase: J & W DB-5MS

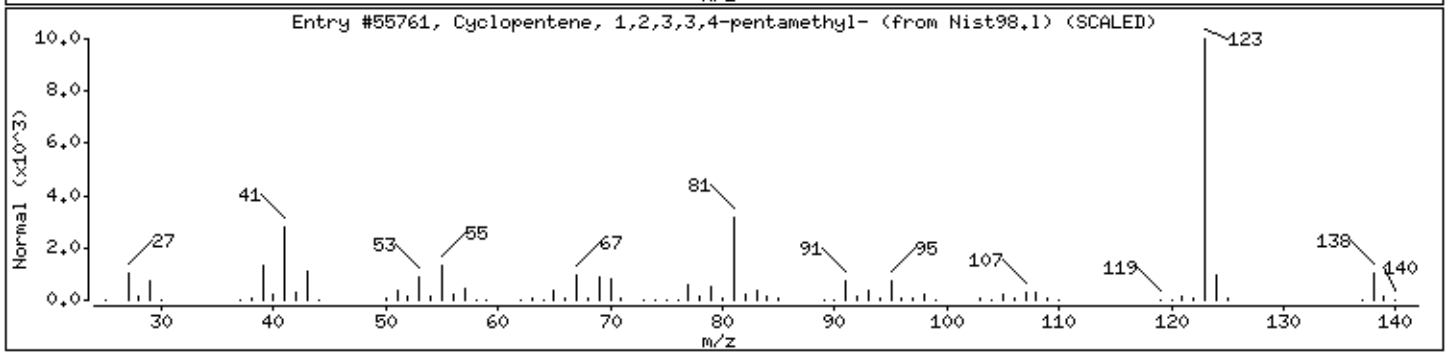
Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentene, 1,2,3,4,5-pentamethyl-	1000154-28-6	Nist98.l	55801	90	C10H18	138
Furan, 2-(1,1-dimethylethyl)-4-methyl-	6141-68-0	Nist98.l	55649	83	C9H14O	138
Cyclopentene, 1,2,3,3,4-pentamethyl-	1000152-27-1	Nist98.l	55761	81	C10H18	138









STANDARDS DATA

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine		10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Benzaldehyde		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
N-Nitrosodipropylamine		10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

Caprolactam		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120
1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate		10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate		10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
Tributylphosphate		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate		10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Benzidine	10	20	50	100	150	200	250	300
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate		10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
3,3'-Dichlorobenzidene	10	20	50	100	150	200	250	300

Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

APPENDIX IX

1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120

Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate (cis and trans)		10	20	40	50	80	100	120

SW846 8270C/EPA 625
Calibration Standard Concentration Levels*

	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Dimethoate		10	20	40	50	80	100	120
4-Aminobiphenyl		10	20	40	50	80	100	120
Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene		10	20	40	50	80	100	120
Isodrin		10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone		10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120
Hexachlorophene		500	1000	1250	2000	2500		
p-Benzoquinone		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120
Methoxychlor		10	20	40	50	80	100	120
2-Ethoxyethanol		50	75	100	125	150	200	250
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
Dibenzo(a,e)pyrene		50	75	100	125	150	200	250
Phthalic anhydride		50	75	100	125	150	200	250
1,4-Dinitrobenzene		50	75	100	125	150	200	250
(2,3-Dibromopropyl)phosphate		50	75	100	125	150	200	250
Methylenebis(2-chloroaniline)		50	75	100	125	150	200	250

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology

(04/04)

Report Date: 10-Oct-2005 08:46

Calibration History

Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Start Cal Date: 23-SEP-2005 20:38
End Cal Date : 26-SEP-2005 22:30

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
24-SEP-2005 16:01	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2403.d
23-SEP-2005 20:38	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2314.d
Cal Level: 2 , Cal Amount: 10.00000		
26-SEP-2005 19:42	ECAREICAL	/chem/MSD6.i/s092605.s.b/s6i2629.d
26-SEP-2005 13:45	AP9MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2613.d
24-SEP-2005 16:25	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2404.d
26-SEP-2005 17:19	HEXMIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2622.d
26-SEP-2005 10:34	168MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2605.d
24-SEP-2005 00:18	167xMIX-O2SI	/chem/MSD6.i/s092305.s.b/s6i2323.d
23-SEP-2005 21:03	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2315.d
Cal Level: 3 , Cal Amount: 20.00000		
26-SEP-2005 20:10	ECAREICAL	/chem/MSD6.i/s092605.s.b/s6i2630.d
26-SEP-2005 14:10	AP9MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2614.d
24-SEP-2005 16:49	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2405.d
26-SEP-2005 17:43	HEXMIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2623.d
26-SEP-2005 10:58	168MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2606.d
23-SEP-2005 21:27	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2316.d
Cal Level: 4 , Cal Amount: 40.00000		
26-SEP-2005 20:38	ECAREICAL	/chem/MSD6.i/s092605.s.b/s6i2631.d
24-SEP-2005 17:13	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2406.d
26-SEP-2005 18:07	HEXMIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2624.d
26-SEP-2005 14:34	AP9MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2615.d
26-SEP-2005 11:22	168MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2607.d
24-SEP-2005 01:06	167xMIX-O2SI	/chem/MSD6.i/s092305.s.b/s6i2325.d
23-SEP-2005 21:51	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2317.d
Cal Level: 5 , Cal Amount: 50.00000		
26-SEP-2005 21:06	ECAREICAL	/chem/MSD6.i/s092605.s.b/s6i2632.d
26-SEP-2005 14:58	AP9MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2616.d
24-SEP-2005 17:37	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2407.d
26-SEP-2005 18:31	HEXMIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2625.d
26-SEP-2005 11:45	168MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2608.d
24-SEP-2005 01:30	167xMIX-O2SI	/chem/MSD6.i/s092305.s.b/s6i2326.d
23-SEP-2005 22:15	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2318.d

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+-------------------+-------------------+-----------------------------------------+
| Cal Level: 6 , Cal Amount: 80.00000                                             |
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26-SEP-2005 21:34	ECAREICAL	/chem/MSD6.i/s092605.s.b/s6i2633.d
26-SEP-2005 15:22	AP9MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2617.d
24-SEP-2005 18:01	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2408.d
26-SEP-2005 18:54	HEXMIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2627.d
26-SEP-2005 12:09	168MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2609.d
24-SEP-2005 01:55	167xMIX-O2SI	/chem/MSD6.i/s092305.s.b/s6i2327.d
23-SEP-2005 22:41	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2319.d

Cal Level: 7 , Cal Amount: 100.00000		
26-SEP-2005 22:02	ECAREICAL	/chem/MSD6.i/s092605.s.b/s6i2634.d
26-SEP-2005 15:47	AP9MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2618.d
24-SEP-2005 18:25	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2409.d
26-SEP-2005 12:34	168MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2610.d
24-SEP-2005 02:19	167xMIX-O2SI	/chem/MSD6.i/s092305.s.b/s6i2328.d
23-SEP-2005 23:05	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2320.d

Cal Level: 8 , Cal Amount: 120.00000		
26-SEP-2005 22:30	ECAREICAL	/chem/MSD6.i/s092605.s.b/s6i2635.d
24-SEP-2005 18:49	BNAICAL-NAB	/chem/MSD6.i/s092405.s.b/s6i2410.d
26-SEP-2005 16:11	AP9MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2619.d
26-SEP-2005 12:57	168MIX-O2SI	/chem/MSD6.i/s092605.s.b/s6i2611.d
24-SEP-2005 02:43	167xMIX-O2SI	/chem/MSD6.i/s092305.s.b/s6i2329.d
23-SEP-2005 23:29	ANIL+BNZ+AT	/chem/MSD6.i/s092305.s.b/s6i2321.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 40.0		
08-OCT-2005 17:57	ANIL+BNZ+AT	/chem/MSD6.i/s100805.s.b/s6j0803.d

Ccal Level: 4 , Ccal Amount: 40.0		
08-OCT-2005 17:35	BNAICAL-NAB	/chem/MSD6.i/s100805.s.b/s6j0802.d

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 23-SEP-2005 20:38
End Cal Date : 26-SEP-2005 22:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Cal Date : 08-Oct-2005 18:45 jen00986

Calibration File Names:
Level 1: /chem/MSD6.i/s092405.s.b/s6i2403.d
Level 2: /chem/MSD6.i/s092605.s.b/s6i2629.d
Level 3: /chem/MSD6.i/s092605.s.b/s6i2630.d
Level 4: /chem/MSD6.i/s092605.s.b/s6i2631.d
Level 5: /chem/MSD6.i/s092605.s.b/s6i2632.d
Level 6: /chem/MSD6.i/s092605.s.b/s6i2633.d
Level 7: /chem/MSD6.i/s092605.s.b/s6i2634.d
Level 8: /chem/MSD6.i/s092605.s.b/s6i2635.d

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
1 N-Methyl-N-nitrosomethylamine	+++++	0.66710	0.68141	0.66478	0.68840	0.69198					
	0.69811	0.66810					AVRG		0.67998		1.97627
2 Pyridine	+++++	1.05808	1.10177	1.14684	1.17059	1.19250					
	1.22354	1.21380					AVRG		1.15816		5.23181
4 Aniline	+++++	1.70599	1.90763	1.73331	1.70247	1.69676					
	1.62077	1.62700					AVRG		1.71342		5.56840
209 Benzaldehyde	+++++	0.97218	1.11678	1.01970	1.01895	1.02794					
	0.99530	0.99326					AVRG		1.02059		4.56793
6 Phenol	+++++	1.42065	1.43670	1.32628	1.37413	1.37923					
	1.34338	1.32737					AVRG		1.37253		3.19075

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Cal Date : 08-Oct-2005 18:45 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
7 bis(2-Chloroethyl) ether	+++++	1.12263	1.09283	1.01028	1.07260	1.07113					
	1.02162	1.00673					AVRG		1.05683		4.23099
8 2-Chlorophenol	+++++	1.21208	1.15830	1.06232	1.13052	1.11148					
	1.05288	1.04145					AVRG		1.10986		5.62830
203 n-Decane	+++++	2.22345	2.19423	1.95825	1.95167	1.81403					
	1.64782	1.52931					AVRG		1.90268		13.66504
9 1,3-Dichlorobenzene	+++++	1.52009	1.51976	1.37011	1.41567	1.40363					
	1.35231	1.28466					AVRG		1.40946		6.13534
11 1,4-Dichlorobenzene	+++++	1.51494	1.50473	1.35047	1.41274	1.38172					
	1.33193	1.29768					AVRG		1.39917		5.99581
12 Benzyl alcohol	+++++	0.62570	0.65849	0.63556	0.67812	0.68032					
	0.68154	0.67089					AVRG		0.66152		3.42721
13 1,2-Dichlorobenzene	+++++	1.42524	1.42315	1.26163	1.34677	1.27347					
	1.23737	1.19794					AVRG		1.30937		6.89744
14 bis(2-Chloroisopropyl)ether	+++++	2.85136	2.81970	2.49723	2.67029	2.50891					
	2.38703	2.27675					AVRG		2.57304		8.39579
15 o-Cresol	+++++	0.98402	0.98866	1.25031	0.97107	0.92919					
	0.90240	0.94513					AVRG		0.99583		11.68955

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
16 Acetophenone	+++++	1.67715	1.67590	1.56023	1.59423	1.59511					
	1.56537	1.54986					AVRG		1.60255		3.32334
17 N-Nitrosodipropylamine	+++++	0.91092	0.92339	0.86820	0.93038	0.91347					
	0.89484	0.89989					AVRG		0.90587		2.28329
18 m,p-Cresols	+++++	1.41931	1.38895	1.25031	1.35467	1.35276					
	1.32357	1.27729					AVRG		1.33812		4.45114
19 Hexachloroethane	+++++	0.55545	0.55968	0.51911	0.55785	0.54775					
	0.53216	0.52040					AVRG		0.54177		3.25402
21 Nitrobenzene	+++++	0.34234	0.34101	0.29735	0.30809	0.29333					
	0.26982	0.25208					AVRG		0.30057		11.19683
22 Isophorone	+++++	0.59112	0.59422	0.53726	0.55075	0.51209					
	0.48410	0.45698					AVRG		0.53236		9.71959
23 2-Nitrophenol	+++++	0.16938	0.16573	0.15284	0.16072	0.14971					
	0.13900	0.13055					AVRG		0.15256		9.26769
24 2,4-Dimethylphenol	+++++	0.29920	0.29143	0.25089	0.25856	0.24063					
	0.21174	0.22673					AVRG		0.25417		12.62935
25 bis(2-Chloroethoxy)methane	+++++	0.34599	0.34252	0.29400	0.31384	0.28454					
	0.27079	0.24917					AVRG		0.30012		12.03435

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
26 2,4-Dichlorophenol	+++++	0.26149	0.26303	0.23899	0.25110	0.23383					
	0.21984	0.20614					AVRG		0.23920		8.87212
27 Benzoic acid	+++++	+++++	23454	83100	133816	255767					
	381643	445529					LINR	0.41105	0.17142		0.99033
28 1,2,4-Trichlorobenzene	+++++	0.32319	0.31219	0.26633	0.27331	0.24833					
	0.23511	+++++					AVRG		0.27641		12.60950
30 Naphthalene	17588	191338	377019	692054	898244	+++++					
	+++++	+++++					LINR	-0.05002	0.71311		0.99126
204 alpha-Terpineol	+++++	0.28661	0.28849	0.25766	0.26739	0.24321					
	0.22665	0.20781					AVRG		0.25398		11.85931
31 4-Chloroaniline	+++++	0.35773	0.40259	0.37618	0.35116	0.35958					
	0.34974	0.35965					AVRG		0.36523		5.08880
189 Caprolactam	+++++	0.09026	0.09204	0.08789	0.09472	0.08671					
	0.08280	0.08029					AVRG		0.08781		5.78026
32 Hexachlorobutadiene	+++++	0.19913	0.19937	0.17067	0.17492	0.15876					
	0.14768	0.13416					AVRG		0.16924		14.55554
33 4-Chloro-3-methylphenol	+++++	0.26293	0.22804	0.23773	0.25508	0.23800					
	0.22484	0.21296					AVRG		0.23708		7.32004

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
34 2-Methylnaphthalene	0.63262	0.63680	0.61555	0.52980	0.54627	0.48002					
	0.44011	+++++					AVRG		0.55445		13.95358
35 1-Methylnaphthalene	0.61916	0.60478	0.57924	0.50243	0.51325	0.46041					
	0.41941	+++++					AVRG		0.52838		14.25943
36 Hexachlorocyclopentadiene	+++++	0.29892	0.31432	0.30792	0.34750	0.35199					
	0.34376	0.32241					AVRG		0.32669		6.44460
208 1,1'Biphenyl	+++++	1.38029	1.40574	1.21330	1.24816	1.20065					
	1.13085	1.06719					AVRG		1.23517		9.97567
205 2,3-Dichloroaniline	+++++	0.53280	0.60829	0.54376	0.53166	0.52915					
	0.50144	0.52377					AVRG		0.53870		6.18218
37 2,4,6-Trichlorophenol	+++++	0.32858	0.34796	0.30736	0.32457	0.31537					
	0.30296	0.29975					AVRG		0.31808		5.34136
38 2,4,5-Trichlorophenol	+++++	0.34417	0.34331	0.34832	0.34053	0.32075					
	0.31614	0.30693					AVRG		0.33145		4.95657
40 2-Chloronaphthalene	1.10280	1.09988	1.08902	0.97565	1.02474	0.97481					
	0.93847	0.89216					AVRG		1.01219		7.88012
42 o-Nitroaniline	+++++	0.26524	0.33234	0.33157	0.29817	0.33905					
	0.32933	0.34441					AVRG		0.32002		8.84501

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	120 Level 8									
41 m-Nitroaniline	+++++	0.21371	0.28217	0.26526	0.23219	0.28617					
	0.27816	0.29501					AVRG		0.26467		11.46430
43 Dimethylphthalate	+++++	1.30735	1.34818	1.21388	1.24468	1.21394					
	1.17413	1.13182					AVRG		1.23343		6.04566
44 2,6-Dinitrotoluene	+++++	0.25496	0.27690	0.26207	0.27220	0.26759					
	0.27254	0.27094					AVRG		0.26817		2.77134
45 Acenaphthylene	1.47094	1.65110	1.69219	1.49069	1.53237	1.46125					
	1.38484	1.27399					AVRG		1.49467		9.02456
47 Acenaphthene	1.06131	1.03967	1.03720	0.93272	0.98062	0.94685					
	0.90840	0.88647					AVRG		0.97415		6.76266
48 2,4-Dinitrophenol	+++++	+++++	20741	54330	79360	126874					
	168311	211108					LINR	0.27875	0.16119		0.99792
49 Dibenzofuran	+++++	1.52605	1.52978	1.35608	1.38283	1.31746					
	1.26337	1.20850					AVRG		1.36915		8.96756
50 2,4-Dinitrotoluene	+++++	0.33287	0.35388	0.34329	0.36414	0.35952					
	0.34536	0.34603					AVRG		0.34930		3.04312
51 Diethylphthalate	+++++	1.33435	1.36645	1.23348	1.27215	1.24012					
	1.19422	1.13892					AVRG		1.25424		6.24924

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
52 4-Nitrophenol	+++++	0.14655	0.16323	0.16085	0.17451	0.17025						
	0.16506	0.15746					AVRG		0.16256		5.58177	
53 Fluorene	1.25941	1.19677	1.23515	1.07347	1.11394	1.04428						
	1.01829	0.97925					AVRG		1.11507		9.37421	
54 4-Chlorophenylphenylether	+++++	0.59449	0.61568	0.54227	0.56557	0.54385						
	0.53262	0.52054					AVRG		0.55929		6.19324	
55 2-Methyl-4,6-dinitrophenol	+++++	0.10547	0.10889	0.11219	0.12987	0.13503						
	0.13555	0.13654					AVRG		0.12336		11.24758	
56 p-Nitroaniline	+++++	0.19920	0.25925	0.24083	0.18654	0.26279						
	0.25624	0.27277					AVRG		0.23966		13.99558	
57 N-Nitroso-diphenylamine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
133 Diphenylamine	+++++	0.66891	0.68867	0.60423	0.62086	0.57468						
	0.57415	0.53395					AVRG		0.60935		9.01954	
58 1,2-Diphenylhydrazine	+++++	0.75670	0.79140	0.70556	0.72795	0.69795						
	0.64636	0.62294					AVRG		0.70698		8.33991	
59 Tributylphosphate	+++++	1.54359	1.57953	1.38512	1.38733	1.30812						
	1.26160	1.21975					AVRG		1.38358		9.84977	

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	100 Level 7	120 Level 8										
61 4-Bromophenylphenylether	+++++	0.23162	0.23316	0.21024	0.21845	0.21645						
	0.21375	0.20616					AVRG		0.21855		4.70433	
62 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
63 Hexachlorobenzene	+++++	0.26832	0.27345	0.24165	0.25491	0.24648						
	0.24317	0.23343					AVRG		0.25163		5.83715	
207 Atrazine	+++++	0.04917	0.06002	0.05756	0.05918	0.05604						
	0.05361	0.05658					AVRG		0.05602		6.57513	
64 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
65 Pentachlorophenol	+++++	0.09553	0.11270	0.11586	0.12405	0.13281						
	0.13258	0.13228					AVRG		0.12083		11.47844	
206 n-Octadecane	+++++	0.63760	0.65312	0.56969	0.58910	0.54132						
	0.51138	0.46919					AVRG		0.56734		11.65113	
66 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
68 Phenanthrene	1.12646	1.06675	1.05305	0.91818	0.90741	0.88593						
	0.81931	0.77469					AVRG		0.94397		13.27002	

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Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
69 Anthracene	1.03504	1.04753	1.04538	0.91567	0.94457	0.86046						
	0.83622	0.78282					AVRG		0.93346		10.99762	
70 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
71 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
72 Di-n-butylphthalate	+++++	1.32551	1.35314	1.17729	1.21030	1.08783						
	0.99584	0.91478					AVRG		1.15210		14.14657	
73 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
74 Heptachlor epoxide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
75 Endrin	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
76 Fluoranthene	1.00987	1.10243	1.08669	0.95545	0.99400	0.89771						
	0.83589	0.80815					AVRG		0.96127		11.28203	
77 Benzidine	0.39282	0.57877	0.63213	0.60607	0.62402	0.54133						
	0.51475	0.56227					AVRG		0.55652		13.92343	

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78 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++						
									AVRG		0.000e+00		0.000e+00	<-
79 Pyrene	1.26114	1.32793	1.30400	1.20386	1.25915	1.10348	1.04240	0.91230						
									AVRG		1.17678		12.31629	
80 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++						
									AVRG		0.000e+00		0.000e+00	<-
82 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++						
									AVRG		0.000e+00		0.000e+00	<-
83 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++						
									AVRG		0.000e+00		0.000e+00	<-
84 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++						
									AVRG		0.000e+00		0.000e+00	<-
85 Butylbenzylphthalate	+++++	0.56840	0.63217	0.59427	0.62346	0.59174	0.58375	0.53560						
									AVRG		0.58991		5.52953	
86 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++						
									AVRG		0.000e+00		0.000e+00	<-
87 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++						
									AVRG		0.000e+00		0.000e+00	<-

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Start Cal Date : 23-SEP-2005 20:38
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Integrator : HP RTE
Method file : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Cal Date : 08-Oct-2005 18:45 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
88 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
89 Benzo(a)anthracene	1.14149	1.11070	1.10354	1.04173	1.06670	0.98896						
	0.97323	0.96036					AVRG		1.04834		6.53972	
90 3,3'-Dichlorobenzidine	0.23873	0.33413	0.34903	0.31753	0.30598	0.31906						
	0.32011	0.32783					AVRG		0.31405		10.51234	
92 Chrysene	1.19681	1.05007	1.04633	0.91795	0.95187	0.92962						
	0.85101	0.77671					AVRG		0.96505		13.54863	
93 bis(2-Ethylhexyl)phthalate	6314	105881	253190	497571	598183	904971						
	1158796	1481182					LINR	-0.02815	0.68633		0.99562	
94 Di-n-octylphthalate	+++++	1.12215	1.30046	1.20666	1.35026	1.33814						
	1.31701	1.09194					AVRG		1.24666		8.53856	
95 Benzo(b)fluoranthene	1.08616	1.28274	1.21088	1.07069	1.21327	1.20683						
	1.09331	1.00681					AVRG		1.14634		8.24507	
96 Benzo(k)fluoranthene	0.97195	1.14020	1.14361	1.10101	1.06743	1.03388						
	1.04693	0.96682					AVRG		1.05898		6.42834	
97 Benzo(a)pyrene	0.56784	0.83180	0.90670	0.85957	0.91371	0.92219						
	0.88823	0.85185					AVRG		0.84274		13.71913	

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	100 Level 7	120 Level 8										
99 Indeno(1,2,3-cd)pyrene	4141	55604	189817	375121	404428	728869						
	984679	1719742					LINR	0.10027	0.83843		0.99584	
100 Dibenzo(a,h)anthracene	3167	44106	152566	302366	328387	599676						
	789897	1380541					LINR	0.09669	0.67510		0.99644	
101 Benzo(ghi)perylene	4175	46057	156454	310177	333180	604769						
	807520	1401377					LINR	0.09287	0.68490		0.99653	
102 1,4-Dioxane	+++++	0.42739	0.42105	0.43839	0.44303	0.46733						
	0.45029	0.44289					AVRG		0.44148		3.42993	<-
103 Methyl methacrylate	+++++	0.28690	0.23753	0.24402	0.23935	0.28301						
	0.25447	0.25180					AVRG		0.25673		7.89054	<-
104 Ethyl methacrylate	+++++	1.15098	1.01815	1.01633	0.99935	1.16501						
	1.04195	1.04038					AVRG		1.06174		6.35673	<-
105 2-Picoline	+++++	1.55338	1.33833	1.37059	1.28923	1.56398						
	1.38118	1.35883					AVRG		1.40793		7.61481	<-
106 N-Nitrosomethylethylamine	+++++	0.60783	0.53872	0.53949	0.53025	0.63897						
	0.57013	0.56661					AVRG		0.57029		7.04605	<-
107 Methyl methanesulfonate	+++++	0.79387	0.66635	0.66847	0.63515	0.77066						
	0.67737	0.67813					AVRG		0.69857		8.49151	<-

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	100 Level 7	120 Level 8										
108 N-Nitrosodiethylamine	+++++	0.61180	0.54470	0.56820	0.51940	0.63478						
	0.58114	0.56714					AVRG		0.57531		6.76255	<-
109 Ethyl Methanesulfonate	+++++	0.95705	0.87737	0.86067	0.85716	0.97997						
	0.89636	0.86084					AVRG		0.89849		5.57874	<-
110 Pentachloroethane	+++++	0.56279	0.49761	0.50436	0.48638	0.56367						
	0.50591	0.49021					AVRG		0.51585		6.41970	<-
111 N-Nitrosopyrrolidine	+++++	0.59516	0.54909	0.55666	0.57100	0.67487						
	0.60026	0.61039					AVRG		0.59392		7.13980	<-
113 N-Nitrosomorpholine	+++++	1.04396	0.93376	0.91649	0.89928	1.03374						
	0.88835	0.87861					AVRG		0.94203		7.28428	<-
114 o-Toluidine	+++++	2.27866	1.99464	1.96177	1.88693	2.20371						
	1.93988	1.89082					AVRG		2.02234		7.69912	<-
115 N-Nitrosopiperidine	+++++	0.13249	0.13490	0.14526	0.15035	0.14956						
	0.14831	0.14704					AVRG		0.14399		5.04067	<-
116 a,a-Dimethylphenethylamine	+++++	0.82259	0.89213	0.96670	0.96060	1.14642						
	1.06267	1.03004					AVRG		0.98302		10.98946	<-
117 Triethylphosphorothioate	+++++	0.15370	+++++	0.14507	+++++	0.15778						
	0.15464	0.15824					AVRG		0.15389		3.44577	<-

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	100 Level 7	120 Level 8										
118 2,6-Dichlorophenol	+++++	0.26427	0.24301	0.24468	0.24070	0.27614						
	0.24884	0.24505					AVRG		0.25181		5.26153	<-
119 Hexachloropropene	+++++	0.20709	0.20802	0.21162	0.21199	0.23880						
	0.21503	0.20746					AVRG		0.21429		5.22304	<-
120 p-Phenylenediamine	+++++	47207	106055	231351	395840	582062						
	772493	956587					LINR	0.16993	0.39352		0.99417	<-
121 N-Nitrosodi-n-butylamine	+++++	0.24478	0.23708	0.23645	0.23041	0.27504						
	0.25481	0.24236					AVRG		0.24585		6.09919	<-
122 Safrole	+++++	0.29616	0.26946	0.26673	0.26585	0.30537						
	0.27314	0.26365					AVRG		0.27719		5.98577	<-
123 1,2,4,5-Tetrachlorobenzene	+++++	0.64267	0.59114	0.54485	0.52586	0.60652						
	0.52764	0.52137					AVRG		0.56572		8.43843	<-
124 Isosafrole	+++++	0.51220	0.47036	0.44904	0.44462	0.52327						
	0.45681	0.45423					AVRG		0.47293		6.72272	<-
125 1,4-Naphthoquinone	+++++	0.35518	0.37307	0.39507	0.38799	0.47161						
	0.41415	0.41584					AVRG		0.40185		9.34324	<-
126 m-Dinitrobenzene	+++++	0.17747	0.18615	0.18361	0.18139	0.22131						
	0.20051	0.20320					AVRG		0.19338		8.09973	<-

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	100 Level 7	120 Level 8										
127 Pentachlorobenzene	+++++	0.57947	0.53197	0.49833	0.47103	0.54526						
	0.49416	0.48375					AVRG		0.51485		7.51504	<-
128 1-Naphthylamine	+++++	1.25947	1.19533	1.08707	1.06215	1.23209						
	1.05642	1.03874					AVRG		1.13304		8.18291	<-
129 2-Naphthylamine	+++++	1.31605	1.23660	1.07165	1.05027	1.17263						
	1.00240	1.02286					AVRG		1.12464		10.59035	<-
130 2,3,4,6-Tetrachlorophenol	+++++	0.19262	0.21128	0.23373	0.24321	0.28522						
	0.25083	0.26141					AVRG		0.23976		12.89929	<-
131 5-Nitro-o-toluidine	+++++	0.33940	0.35673	0.34407	0.34989	0.41900						
	0.36519	0.35724					AVRG		0.36164		7.39192	<-
132 Thionazin	+++++	0.15768	+++++	0.17573	+++++	0.20374						
	0.19536	0.20348					AVRG		0.18720		10.71172	<-
134 Sulfotepp	+++++	0.14741	+++++	0.14879	+++++	0.16494						
	0.16027	0.17209					AVRG		0.15870		6.65697	<-
135 Phorate	+++++	0.41548	+++++	0.42641	+++++	0.47835						
	0.41954	0.43709					AVRG		0.43537		5.82961	<-
136 1,3,5-Trinitrobenzene	+++++	11580	28833	91749	146039	222757						
	333374	437451					LINR	0.29351	0.18715		0.99480	<-

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	100 Level 7	120 Level 8										
137 Phenacetin	+++++	0.35226	0.36025	0.37387	0.37667	0.45819						
	0.40331	0.42624					AVRG		0.39297		9.76009	<-
138 Diallate	+++++	0.25920	+++++	0.27061	+++++	0.31062						
	0.29031	0.29893					AVRG		0.28593		7.30914	<-
139 Dimethoate	+++++	0.19018	+++++	0.23315	+++++	0.27101						
	0.26512	0.27745					AVRG		0.24738		14.64704	<-
140 4-Aminobiphenyl	+++++	0.78135	0.74496	0.72328	0.70426	0.78350						
	0.67783	0.66553					AVRG		0.72582		6.45898	<-
141 Pentachloronitrobenzene	+++++	0.09598	0.09371	0.09744	0.09017	0.10697						
	0.09574	0.09176					AVRG		0.09597		5.70232	<-
142 Pronamide	+++++	0.35122	0.34551	0.34930	0.32294	0.37697						
	0.34166	0.32952					AVRG		0.34530		5.03878	<-
143 Dinoseb	+++++	11403	32662	88337	143720	203581						
	255590	322193					LINR	0.19830	0.15529		0.99327	<-
144 Disulfoton	+++++	0.32039	+++++	0.35230	+++++	0.38742						
	0.35666	0.36406					AVRG		0.35616		6.78230	<-
145 Methyl parathion	+++++	21948	+++++	94977	+++++	285156						
	319663	404545					LINR	0.16757	0.16684		0.99637	<-

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	100 Level 7	120 Level 8										
146 4-Nitroquinoline-1-oxide	+++++	0.02870	0.03631	0.03192	0.03415	0.03248						
	0.02570	0.02410					AVRG		0.03048		14.68311	<-
147 Methapyrilene	+++++	0.70484	0.71530	0.71908	0.67101	0.73676						
	0.60820	0.57318					AVRG		0.67548		9.18877	<-
148 Isodrin	+++++	0.11340	+++++	0.11521	+++++	0.12237						
	0.11441	0.11581					AVRG		0.11624		3.04628	<-
149 Aramite	+++++	0.03983	0.04715	0.04822	0.04978	0.05717						
	0.05113	0.04936					AVRG		0.04895		10.55004	<-
150 Kepone	+++++	15758	+++++	78736	+++++	195377						
	206751	243632					LINR	-0.00477	0.09905		0.99586	<-
151 p-(Dimethylamino)azobenzene	+++++	0.35918	0.33216	0.33557	0.32213	0.42089						
	0.35725	0.35360					AVRG		0.35440		9.17520	<-
152 Chlorobenzilate	+++++	0.31013	+++++	0.33791	+++++	0.38705						
	0.38118	0.37133					AVRG		0.35752		9.12021	<-
153 3,3'-Dimethylbenzidine	+++++	0.55448	0.57930	0.54065	0.53239	0.61382						
	0.53473	0.51969					AVRG		0.55358		5.90466	<-
154 Famphur	+++++	0.38646	+++++	0.40861	+++++	0.46186						
	0.45148	0.44287					AVRG		0.43026		7.34515	<-

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	100 Level 7	120 Level 8										
155 2-Acetylaminofluorene	+++++	39963	115844	247092	379372	482122						
	585141	703689					LINR	0.11539	0.40918		0.99263	<-
157 7,12Dimethylbenz(a)anthracene	+++++	0.57533	0.51750	0.52737	0.51080	0.62850						
	0.57350	0.56566					AVRG		0.55695		7.46356	<-
158 3-Methylcholanthrene	+++++	0.51476	0.52731	0.52336	0.52383	0.60100						
	0.54875	0.53987					AVRG		0.53984		5.41869	<-
166 Maleic anhydride	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
167 a,a,a-Trichlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
26 Phthalic anhydride	+++++	0.32139	0.30348	0.28740	0.28835	0.29652						
	0.28549	0.27894					AVRG		0.29451		4.84047	<-
169 2,3-Dimethylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
170 2,6-Dimethylnapthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
171 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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	100 Level 7	120 Level 8										
172 1-Methyl fluorene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
173 Carbazole	0.81436	0.94537	1.02789	0.89625	0.81190	0.83206						
	0.75643	0.80105					AVRG		0.86066		10.40757	
174 Hexachlorophene	+++++	96618	614946	920568	2097194	2125555						
	+++++	+++++					LINR	10.41008	0.06533		0.99817	<-
175 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
176 Dibenz(a,h)acridine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
177 Dibenz(a,j)acridine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
178 Dibenzo(a,i)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
179 Dibenzo(a,e)pyrene	+++++	0.40155	0.33823	0.30953	0.33471	0.27500						
	0.30478	0.26833					AVRG		0.31888		14.15630	<-
180 7-H-Dibenzo(c,g)carbazole	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

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	100 Level 7	120 Level 8										
181 Dibenzo(a,h)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
182 4,6-Dinitro-2-cyclohexylpheno	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
184 p-Benzoquinone	+++++	0.70237	0.84708	1.00835	1.06664	1.06634						
	1.03889	0.97878					AVRG		0.95835		14.17314	<-
185 (2,3-Dibromopropyl)phosphate	+++++	0.01075	0.01322	0.01000	0.01284	0.01219						
	+++++	+++++					AVRG		0.01180		11.67213	<-
186 2,6-Toluene diisocyanate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
191 Parathion	+++++	14302	+++++	63032	+++++	200602						
	215359	264725					LINR	0.14876	0.11080		0.99695	<-
192 Methoxychlor	+++++	0.55957	+++++	0.60160	+++++	0.68157						
	0.62589	0.65029					AVRG		0.62378		7.45969	<-
193 Hexamethyleneimine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
195 4-Chlorophenyl sulfone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 23-SEP-2005 20:38
End Cal Date : 26-SEP-2005 22:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Cal Date : 08-Oct-2005 18:45 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	120 Level 8										
197 Anthraquinone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
199 2-Aminoanthraquinone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
200 2-Methyl anthracene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
201 N,N-Dimethyl formamide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
202 bis(2-Chloromethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
210 m-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
211 p-Toluidine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
212 Cis Diallate	+++++	0.26027	+++++	0.29202	+++++	0.34303						
	0.32601	0.34991					AVRG		0.31425		11.95638	<-
213 Trans Diallate	+++++	0.30494	+++++	0.31837	+++++	0.36544						
	0.34155	0.35151					AVRG		0.33636		7.30215	<-

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INITIAL CALIBRATION DATA

Start Cal Date : 23-SEP-2005 20:38
End Cal Date : 26-SEP-2005 22:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Cal Date : 08-Oct-2005 18:45 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2	
	100 Level 7	120 Level 8										
214 1,4-Dinitrobenzene	+++++	0.21833	0.20561	0.20155	0.20671	0.20461						
	0.21035	0.20807					AVRG		0.20789		2.57940	<-
215 2-Ethoxyethanol	+++++	0.77803	0.71920	0.74168	0.73675	0.72756						
	0.68820	0.68525					AVRG		0.72524		4.43320	<-
216 Methylenebis(2-chloroaniline)	+++++	0.21171	0.20849	0.18819	0.19265	0.19986						
	0.19672	0.18458					AVRG		0.19746		5.08937	<-
$ 3 2-Fluorophenol	+++++	1.08919	1.12743	1.04559	1.11483	1.11823						
	1.11000	1.09398					AVRG		1.09989		2.49479	
$ 5 Phenol-d5	+++++	1.38750	1.34996	1.26456	1.34964	1.35687						
	1.30899	1.27957					AVRG		1.32815		3.37507	
$ 187 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 188 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++					AVRG		0.000e+00		0.000e+00	<-
$ 20 Nitrobenzene-d5	+++++	0.33251	0.32529	0.28809	0.30171	0.28172						
	0.26264	0.24615					AVRG		0.29116		10.79150	
$ 39 2-Fluorobiphenyl	+++++	1.24596	1.26861	1.09657	1.14513	1.08730						
	1.02824	0.96809					AVRG		1.11998		9.76017	

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INITIAL CALIBRATION DATA

Start Cal Date : 23-SEP-2005 20:38
End Cal Date : 26-SEP-2005 22:30
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Cal Date : 08-Oct-2005 18:45 jen00986

Compound	1 Level 1	10 Level 2	20 Level 3	40 Level 4	50 Level 5	80 Level 6	Curve	Coefficients b	 m1	 m2	%RSD or R^2
	100 Level 7	120 Level 8									
$ 60 2,4,6-Tribromophenol	+++++	0.17632	0.19263	0.18155	0.19610	0.19290					
	0.19159	0.19176					AVRG		0.18898		3.79992
$ 81 p-Terphenyl-d14	+++++	0.97776	0.96314	0.87524	0.90705	0.85219					
	0.80359	0.71191					AVRG		0.87012		10.63781

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

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Data file : /chem/MSD6.i/s092305.s.b/s6i2314.d
Lab Smp Id: UBN050919.01 Client Smp ID: ANBZICAL001
Inj Date : 23-SEP-2005 20:38
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.01|1PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:14 jwf Quant Type: ISTD
Cal Date : 23-SEP-2005 20:38 Cal File: s6i2314.d
Als bottle: 13 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.362	3.362	(1.000)	240579	40.0000	
* 29 Naphthalene-d8	136	4.208	4.208	(1.000)	892856	40.0000	
* 46 Acenaphthene-d10	164	5.442	5.442	(1.000)	524236	40.0000	
* 67 Phenanthrene-d10	188	6.464	6.464	(1.000)	845280	40.0000	
* 91 Chrysene-d12	240	8.015	8.015	(1.000)	725484	40.0000	
* 98 Perylene-d12	264	9.102	9.102	(1.000)	518379	40.0000	
77 Benzidine	184	7.257	7.257	(0.905)	71246	10.0000	7.0
90 3,3'-Dichlorobenzidine	252	7.974	7.974	(0.995)	43298	10.0000	7.6
173 Carbazole	167	6.605	6.605	(1.022)	17209	1.00000	0.95

Data File: /chem/MSD6.i/s092305.s.b/s6i2314.d

Page 1

Date : 23-SEP-2005 20:38

Client ID: ANBZICAL001

Instrument: MSD6.i

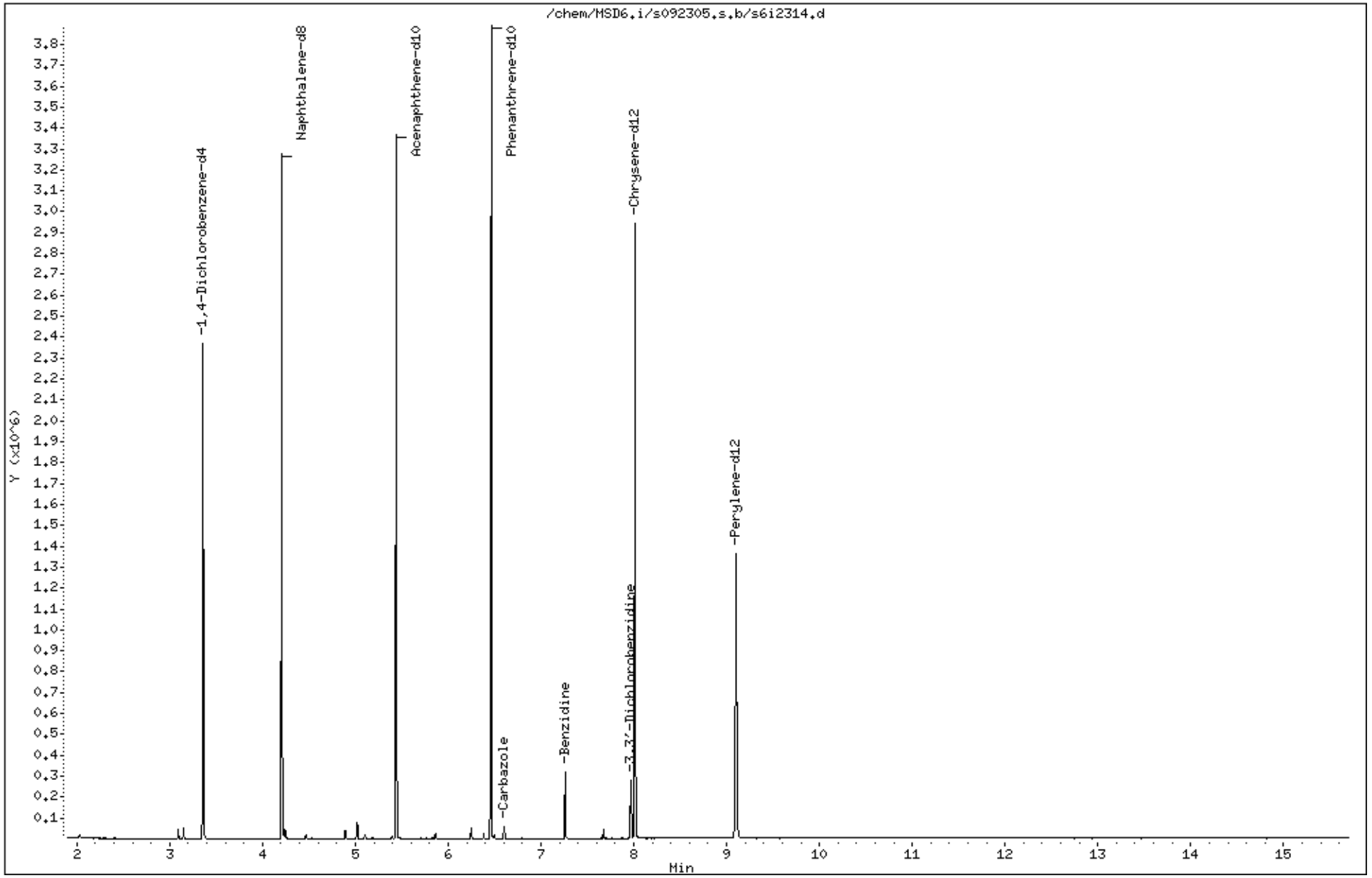
Sample Info: !UBN050919.01!1PPN!1!SVMF!1!ANBZ ICAL

Volume Injected (uL): 0.5

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



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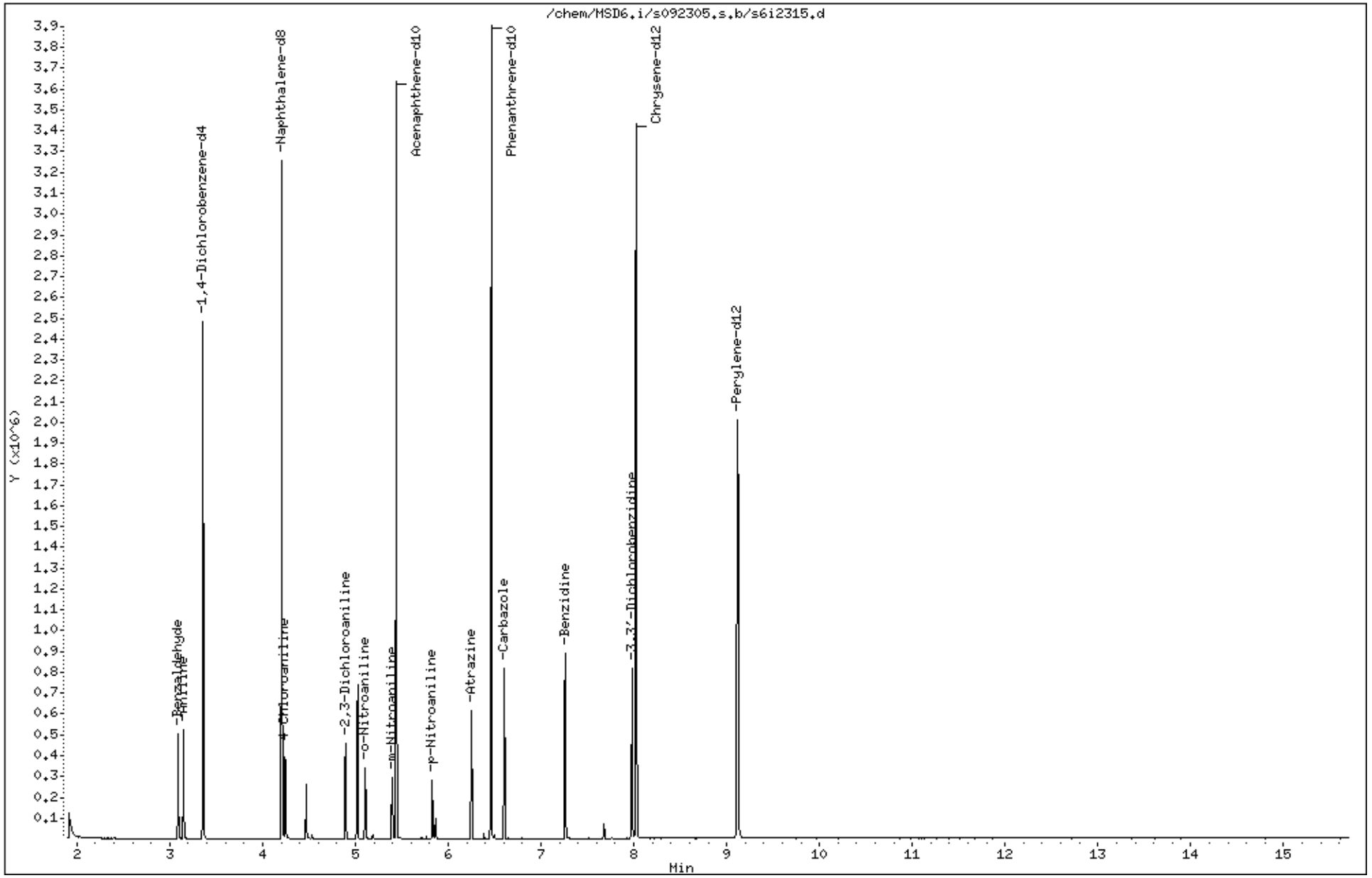
Data file : /chem/MSD6.i/s092305.s.b/s6i2315.d
Lab Smp Id: UBN050919.02 Client Smp ID: ANBZICAL010
Inj Date : 23-SEP-2005 21:03
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.02|10PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:20 jwf Quant Type: ISTD
Cal Date : 24-SEP-2005 10:10 Cal File: s6i2348.d
Als bottle: 14 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.361	3.361	(1.000)	235199	40.0000	
*	29 Naphthalene-d8	136	4.207	4.207	(1.000)	876396	40.0000	
*	46 Acenaphthene-d10	164	5.441	5.441	(1.000)	515731	40.0000	
*	67 Phenanthrene-d10	188	6.463	6.463	(1.000)	829969	40.0000	
*	91 Chrysene-d12	240	8.026	8.026	(1.000)	824598	40.0000	
*	98 Perylene-d12	264	9.119	9.119	(1.000)	781512	40.0000	
	4 Aniline	93	3.150	3.150	(0.937)	100312	10.0000	10
	209 Benzaldehyde	77	3.091	3.091	(0.920)	57164	10.0000	9.5
	31 4-Chloroaniline	127	4.248	4.248	(1.010)	78378	10.0000	9.8
	205 2,3-Dichloroaniline	161	4.895	4.895	(0.900)	68696	10.0000	9.9
	42 o-Nitroaniline	65	5.106	5.106	(0.938)	34198	10.0000	8.3
	41 m-Nitroaniline	138	5.394	5.394	(0.991)	27554	10.0000	8.1
	56 p-Nitroaniline	138	5.829	5.829	(1.071)	25684	10.0000	8.3
	207 Atrazine	173	6.252	6.252	(0.967)	10203	10.0000	8.8
	77 Benzidine	184	7.263	7.263	(0.905)	238626	20.0000	20.8
	90 3,3'-Dichlorobenzidine	252	7.985	7.985	(0.995)	137761	20.0000	21.3
	173 Carbazole	167	6.604	6.604	(1.022)	196156	10.0000	11.0

Data File: /chem/MSD6.i/s092305.s.b/s6i2315.d
Date : 23-SEP-2005 21:03
Client ID: ANBZICAL010
Sample Info: !UBN050919.02!10PPNI1!SVMF!1!ANBZ ICAL

Instrument: MSD6.i
Operator: jld1
Column phase: J & W DB-5MS
Column diameter: 0.20



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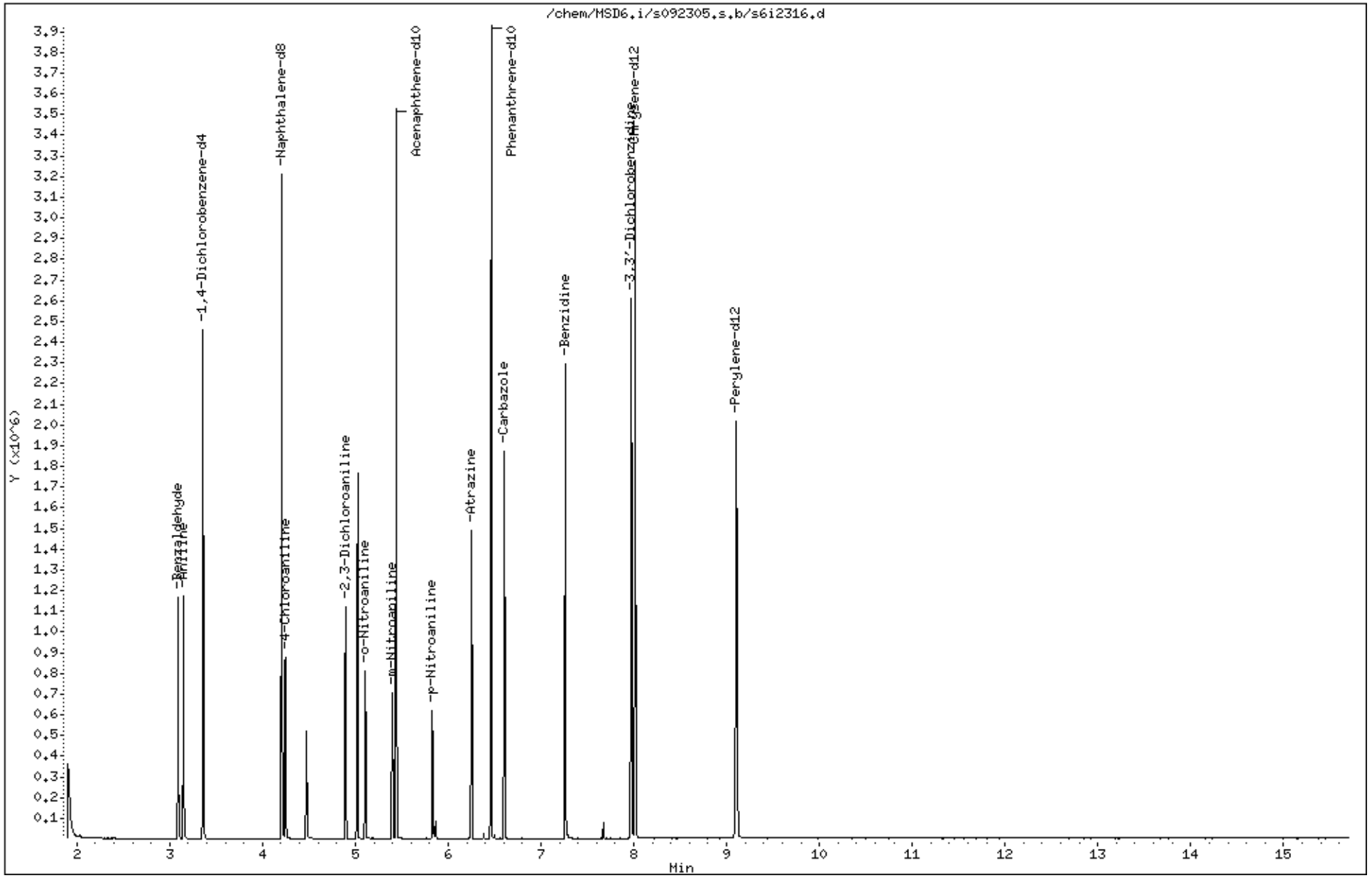
Data file : /chem/MSD6.i/s092305.s.b/s6i2316.d
Lab Smp Id: UBN050919.03 Client Smp ID: ANBZICAL020
Inj Date : 23-SEP-2005 21:27
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.03|20PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:15 jwf Quant Type: ISTD
Cal Date : 24-SEP-2005 10:34 Cal File: s6i2349.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.362	3.362	(1.000)	234966	40.0000	
* 29 Naphthalene-d8	136	4.208	4.208	(1.000)	871039	40.0000	
* 46 Acenaphthene-d10	164	5.442	5.442	(1.000)	512741	40.0000	
* 67 Phenanthrene-d10	188	6.464	6.464	(1.000)	850055	40.0000	
* 91 Chrysene-d12	240	8.015	8.015	(1.000)	826387	40.0000	
* 98 Perylene-d12	264	9.108	9.108	(1.000)	784126	40.0000	
4 Aniline	93	3.150	3.150	(0.937)	224114	20.0000	22.3
209 Benzaldehyde	77	3.091	3.091	(0.920)	131203	20.0000	21.9
31 4-Chloroaniline	127	4.249	4.249	(1.010)	175334	20.0000	22.0
205 2,3-Dichloroaniline	161	4.895	4.895	(0.900)	155947	20.0000	22.6
42 o-Nitroaniline	65	5.107	5.107	(0.938)	85203	20.0000	20.8
41 m-Nitroaniline	138	5.401	5.401	(0.992)	72340	20.0000	21.3
56 p-Nitroaniline	138	5.829	5.829	(1.071)	66464	20.0000	21.6
207 Atrazine	173	6.252	6.252	(0.967)	25511	20.0000	21.4
77 Benzidine	184	7.263	7.263	(0.906)	652976	50.0000	56.8
90 3,3'-Dichlorobenzidine	252	7.974	7.974	(0.995)	360545	50.0000	55.6
173 Carbazole	167	6.605	6.605	(1.022)	436882	20.0000	23.9

Data File: /chem/MSD6.i/s092305.s.b/s6i2316.d
Date : 23-SEP-2005 21:27
Client ID: ANBZICAL020
Sample Info: !UBN050919.03!20PPNI1!SVMF!1!ANBZ ICAL

Instrument: MSD6.i
Operator: jld1
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s092305.s.b/s6i2317.d
Lab Smp Id: UBN050919.04 Client Smp ID: ANBZICAL040
Inj Date : 23-SEP-2005 21:51
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.04|40PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:20 jwf Quant Type: ISTD
Cal Date : 24-SEP-2005 10:58 Cal File: s6i2350.d
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.362	3.362	(1.000)	249532	40.0000	
* 29 Naphthalene-d8	136	4.208	4.208	(1.000)	918503	40.0000	
* 46 Acenaphthene-d10	164	5.442	5.442	(1.000)	545781	40.0000	
* 67 Phenanthrene-d10	188	6.464	6.464	(1.000)	905379	40.0000	
* 91 Chrysene-d12	240	8.015	8.015	(1.000)	798464	40.0000	
* 98 Perylene-d12	264	9.102	9.102	(1.000)	578293	40.0000	
4 Aniline	93	3.150	3.150	(0.937)	432517	40.0000	40.5
209 Benzaldehyde	77	3.092	3.092	(0.920)	254448	40.0000	40.0
31 4-Chloroaniline	127	4.249	4.249	(1.010)	345518	40.0000	41.2
205 2,3-Dichloroaniline	161	4.895	4.895	(0.900)	296772	40.0000	40.4
42 o-Nitroaniline	65	5.113	5.113	(0.940)	180967	40.0000	41.4
41 m-Nitroaniline	138	5.401	5.401	(0.992)	144775	40.0000	40.1
56 p-Nitroaniline	138	5.836	5.836	(1.072)	131439	40.0000	40.2
207 Atrazine	173	6.259	6.259	(0.968)	52117	40.0000	41.1
77 Benzidine	184	7.263	7.263	(0.906)	1209810	100.000	109
90 3,3'-Dichlorobenzidine	252	7.974	7.974	(0.995)	633846	100.000	101
173 Carbazole	167	6.605	6.605	(1.022)	811444	40.0000	41.6

Data File: /chem/MSD6.i/s092305.s.b/s6i2317.d

Page 1

Date : 23-SEP-2005 21:51

Client ID: ANBZICAL040

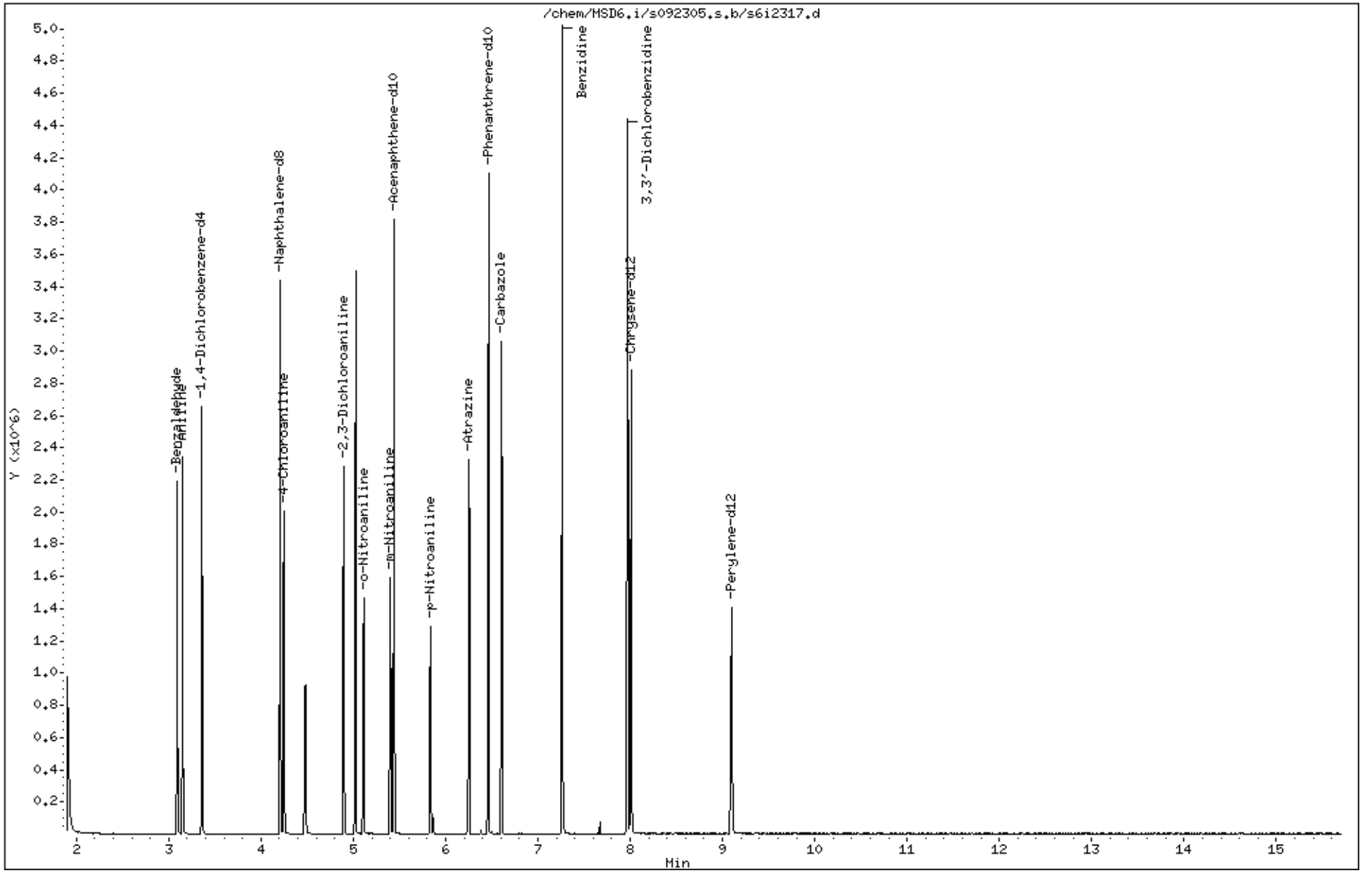
Instrument: MSD6.i

Sample Info: !UBN050919.04!40PPNI1!SVMFI1!ANBZ ICAL

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



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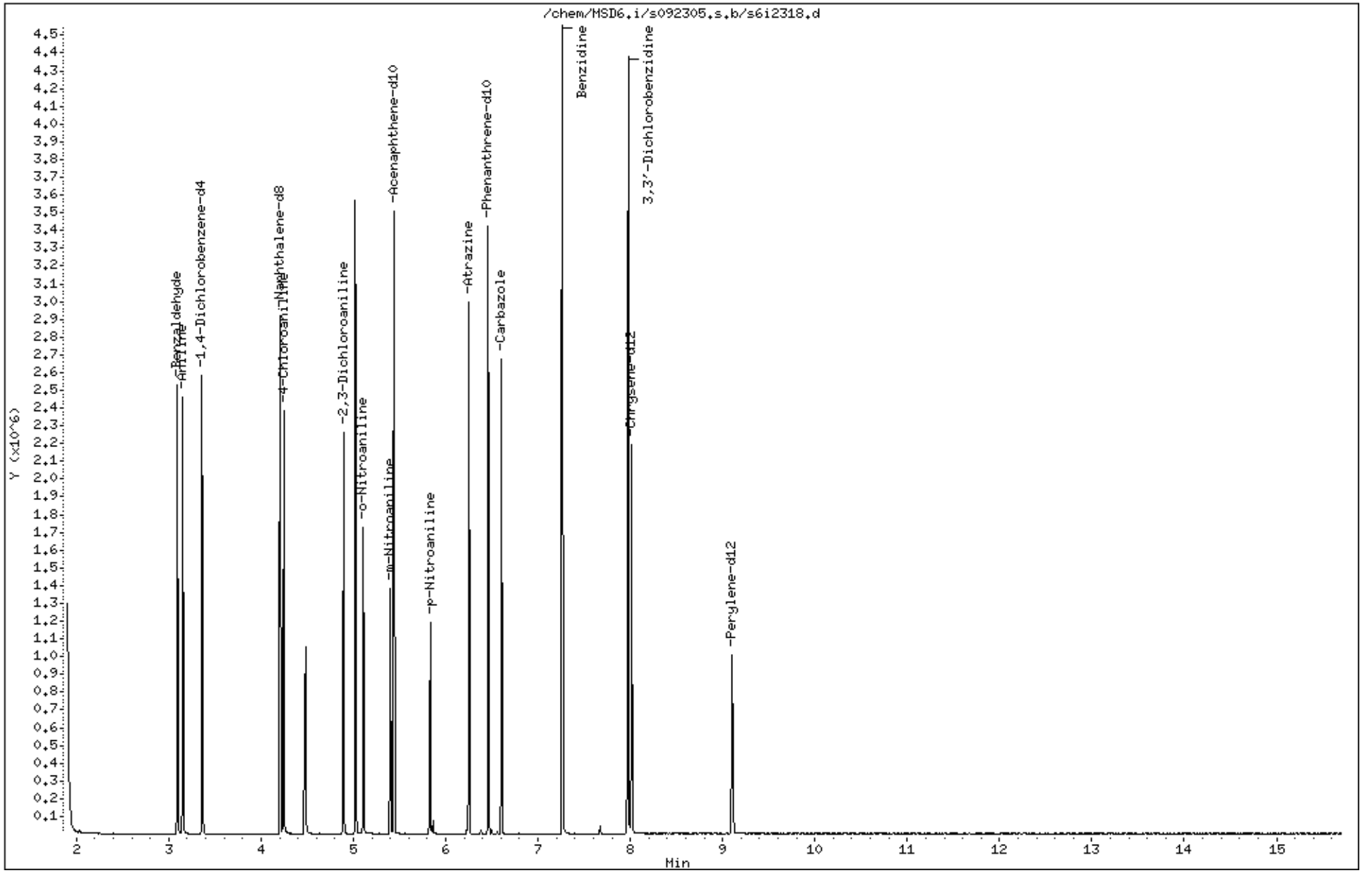
Data file : /chem/MSD6.i/s092305.s.b/s6i2318.d
Lab Smp Id: UBN050919.05 Client Smp ID: ANBZICAL050
Inj Date : 23-SEP-2005 22:15
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.05|50PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:15 jwf Quant Type: ISTD
Cal Date : 24-SEP-2005 11:22 Cal File: s6i2351.d
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.359	3.359	(1.000)	249755	40.0000	
* 29 Naphthalene-d8	136	4.205	4.205	(1.000)	905994	40.0000	
* 46 Acenaphthene-d10	164	5.439	5.439	(1.000)	530937	40.0000	
* 67 Phenanthrene-d10	188	6.461	6.461	(1.000)	780040	40.0000	
* 91 Chrysene-d12	240	8.013	8.013	(1.000)	542821	40.0000	
* 98 Perylene-d12	264	9.105	9.105	(1.000)	385142	40.0000	
4 Aniline	93	3.154	3.154	(0.939)	531502	50.0000	49.7
209 Benzaldehyde	77	3.095	3.095	(0.921)	318110	50.0000	49.9
31 4-Chloroaniline	127	4.246	4.246	(1.010)	397682	50.0000	48.1
205 2,3-Dichloroaniline	161	4.893	4.893	(0.900)	352850	50.0000	49.3
42 o-Nitroaniline	65	5.110	5.110	(0.940)	197889	50.0000	46.6
41 m-Nitroaniline	138	5.404	5.404	(0.994)	154096	50.0000	43.9
56 p-Nitroaniline	138	5.833	5.833	(1.072)	123799	50.0000	38.9
207 Atrazine	173	6.256	6.256	(0.968)	57707	50.0000	52.8
77 Benzidine	184	7.261	7.261	(0.906)	1270248	150.000	168
90 3,3'-Dichlorobenzidine	252	7.977	7.977	(0.996)	622853	150.000	146
173 Carbazole	167	6.608	6.608	(1.023)	791642	50.0000	47.2

Data File: /chem/MSD6.i/s092305.s.b/s6i2318.d
Date : 23-SEP-2005 22:15
Client ID: ANBZICAL050
Sample Info: !UBN050919.05!50PPNI1!SVMFI1!ANBZ ICAL

Instrument: MSD6.i
Operator: jld1
Column phase: J & W DB-5MS
Column diameter: 0.20



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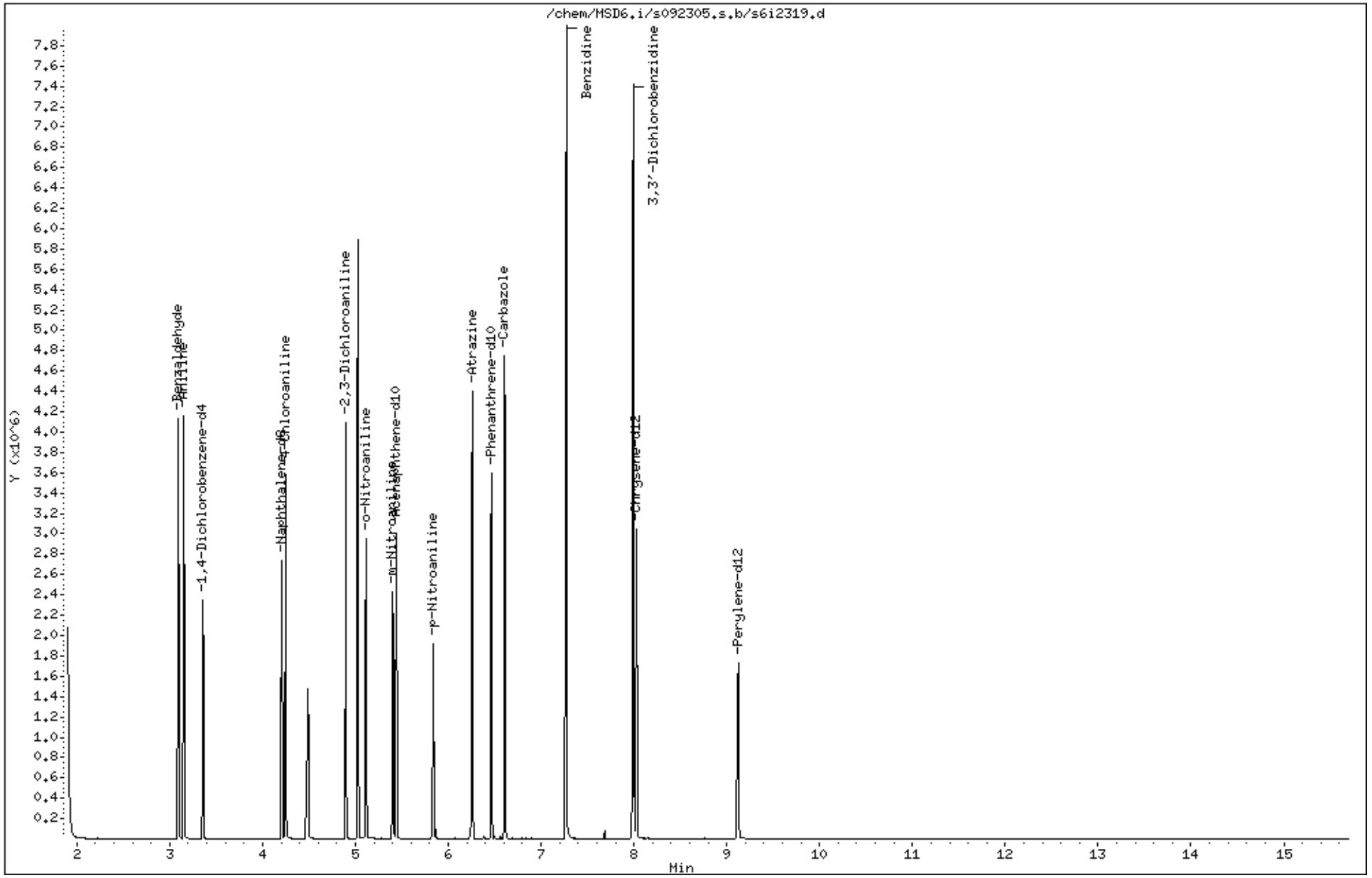
Data file : /chem/MSD6.i/s092305.s.b/s6i2319.d
Lab Smp Id: UBN050919.06 Client Smp ID: ANBZICAL080
Inj Date : 23-SEP-2005 22:41
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.06|80PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:20 jwf Quant Type: ISTD
Cal Date : 24-SEP-2005 11:46 Cal File: s6i2352.d
Als bottle: 18 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.359	3.359 (1.000)	240267	40.0000	
*	29 Naphthalene-d8	136	4.205	4.205 (1.000)	907893	40.0000	
*	46 Acenaphthene-d10	164	5.445	5.445 (1.000)	530746	40.0000	
*	67 Phenanthrene-d10	188	6.467	6.467 (1.000)	887135	40.0000	
*	91 Chrysene-d12	240	8.030	8.030 (1.000)	816082	40.0000	
*	98 Perylene-d12	264	9.123	9.123 (1.000)	683175	40.0000	
	4 Aniline	93	3.153	3.153 (0.939)	815350	80.0000	79.2
	209 Benzaldehyde	77	3.094	3.094 (0.921)	493958	80.0000	80.6
	31 4-Chloroaniline	127	4.252	4.252 (1.011)	652916	80.0000	78.8
	205 2,3-Dichloroaniline	161	4.898	4.898 (0.900)	561687	80.0000	78.6
	42 o-Nitroaniline	65	5.116	5.116 (0.940)	359901	80.0000	84.8
	41 m-Nitroaniline	138	5.409	5.409 (0.994)	303766	80.0000	86.5
	56 p-Nitroaniline	138	5.844	5.844 (1.073)	278954	80.0000	87.7
	207 Atrazine	173	6.261	6.261 (0.968)	99427	80.0000	80.0
	77 Benzidine	184	7.272	7.272 (0.906)	2208862	200.000	194
	90 3,3'-Dichlorobenzidine	252	7.995	7.995 (0.996)	1301890	200.000	203
	173 Carbazole	167	6.608	6.608 (1.022)	1476296	80.0000	77.3

Data File: /chem/MSD6.i/s092305.s.b/s6i2319.d
Date : 23-SEP-2005 22:41
Client ID: ANBZICAL080
Sample Info: !UBN050919.06!80PPNI1!SVMFI1!ANBZ ICAL

Instrument: MSD6.i
Operator: jld1
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s092305.s.b/s6i2320.d
Lab Smp Id: UBN050919.07 Client Smp ID: ANBZICAL100
Inj Date : 23-SEP-2005 23:05
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.07|100PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:16 jwf Quant Type: ISTD
Cal Date : 24-SEP-2005 05:43 Cal File: s6i2337.d
Als bottle: 19 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.359	3.359	(1.000)	246180	40.0000	
* 29 Naphthalene-d8	136	4.205	4.205	(1.000)	920305	40.0000	
* 46 Acenaphthene-d10	164	5.445	5.445	(1.000)	541752	40.0000	
* 67 Phenanthrene-d10	188	6.467	6.467	(1.000)	914252	40.0000	
* 91 Chrysene-d12	240	8.018	8.018	(1.000)	861654	40.0000	
* 98 Perylene-d12	264	9.111	9.111	(1.000)	764439	40.0000	
4 Aniline	93	3.153	3.153	(0.939)	997504	100.000	94.6
209 Benzaldehyde	77	3.094	3.094	(0.921)	612560	100.000	97.5
31 4-Chloroaniline	127	4.252	4.252	(1.011)	804672	100.000	95.8
205 2,3-Dichloroaniline	161	4.898	4.898	(0.900)	679140	100.000	93.1
42 o-Nitroaniline	65	5.116	5.116	(0.940)	446044	100.000	103
41 m-Nitroaniline	138	5.409	5.409	(0.994)	376741	100.000	105
56 p-Nitroaniline	138	5.844	5.844	(1.073)	347048	100.000	107
207 Atrazine	173	6.261	6.261	(0.968)	122532	100.000	95.7
77 Benzidine	184	7.272	7.272	(0.907)	2772108	250.000	231(A)
90 3,3'-Dichlorobenzidine	252	7.983	7.983	(0.996)	1723883	250.000	255
173 Carbazole	167	6.614	6.614	(1.023)	1728919	100.000	87.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD6.i/s092305.s.b/s6i2320.d

Page 1

Date : 23-SEP-2005 23:05

Client ID: ANBZICAL100

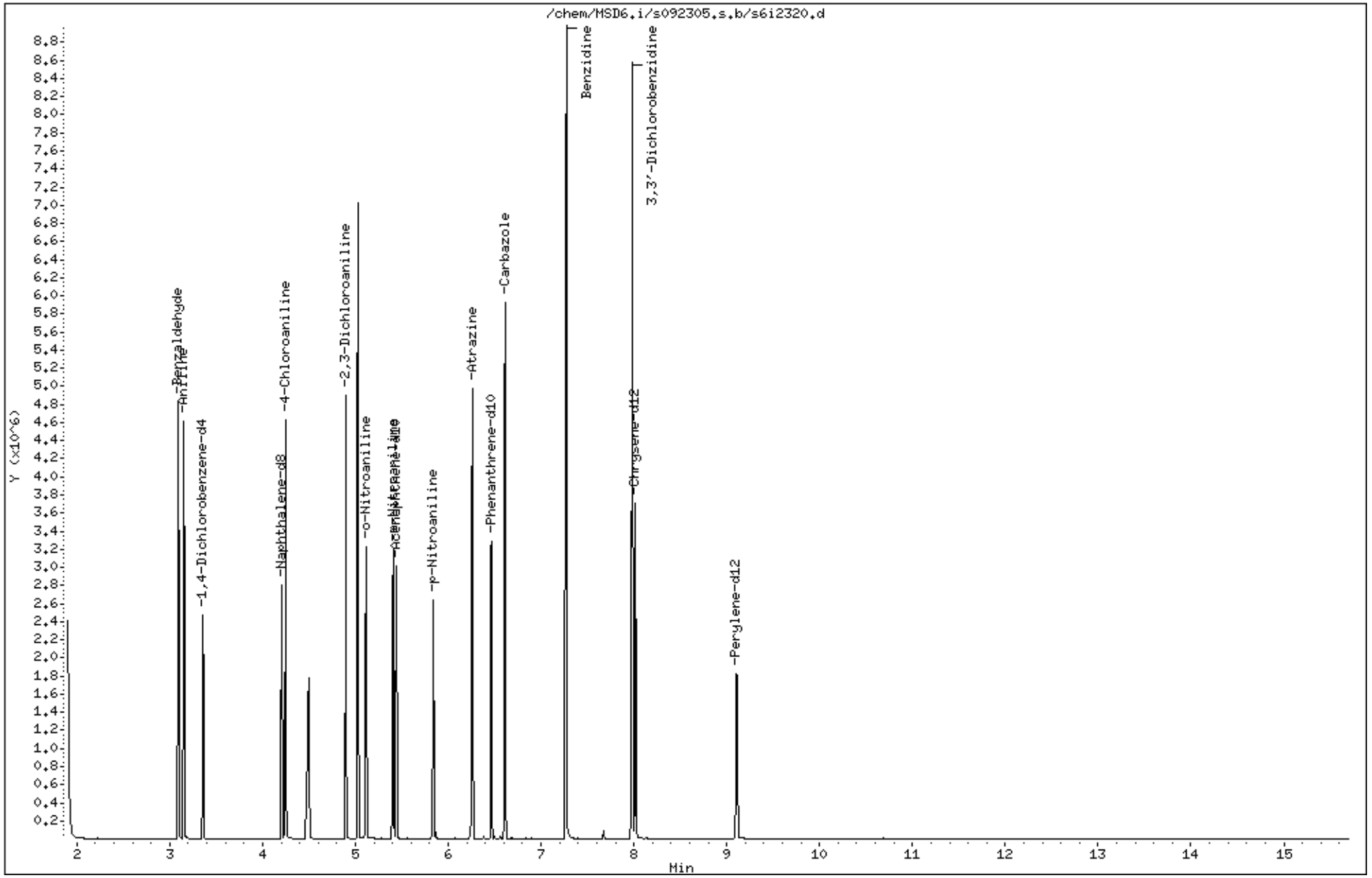
Instrument: MSD6.i

Sample Info: !UBN050919.07!100PPN!1!SVMF!1!ANBZ ICAL

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



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Data file : /chem/MSD6.i/s092305.s.b/s6i2321.d
Lab Smp Id: UBN050919.08 Client Smp ID: ANBZICAL120
Inj Date : 23-SEP-2005 23:29
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050919.08|120PPN|1|SVMF|1|ANBZ ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092305.s.b/MSD6-8270-092305.m
Meth Date : 26-Sep-2005 13:16 jwf Quant Type: ISTD
Cal Date : 24-SEP-2005 09:22 Cal File: s6i2346.d
Als bottle: 20 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

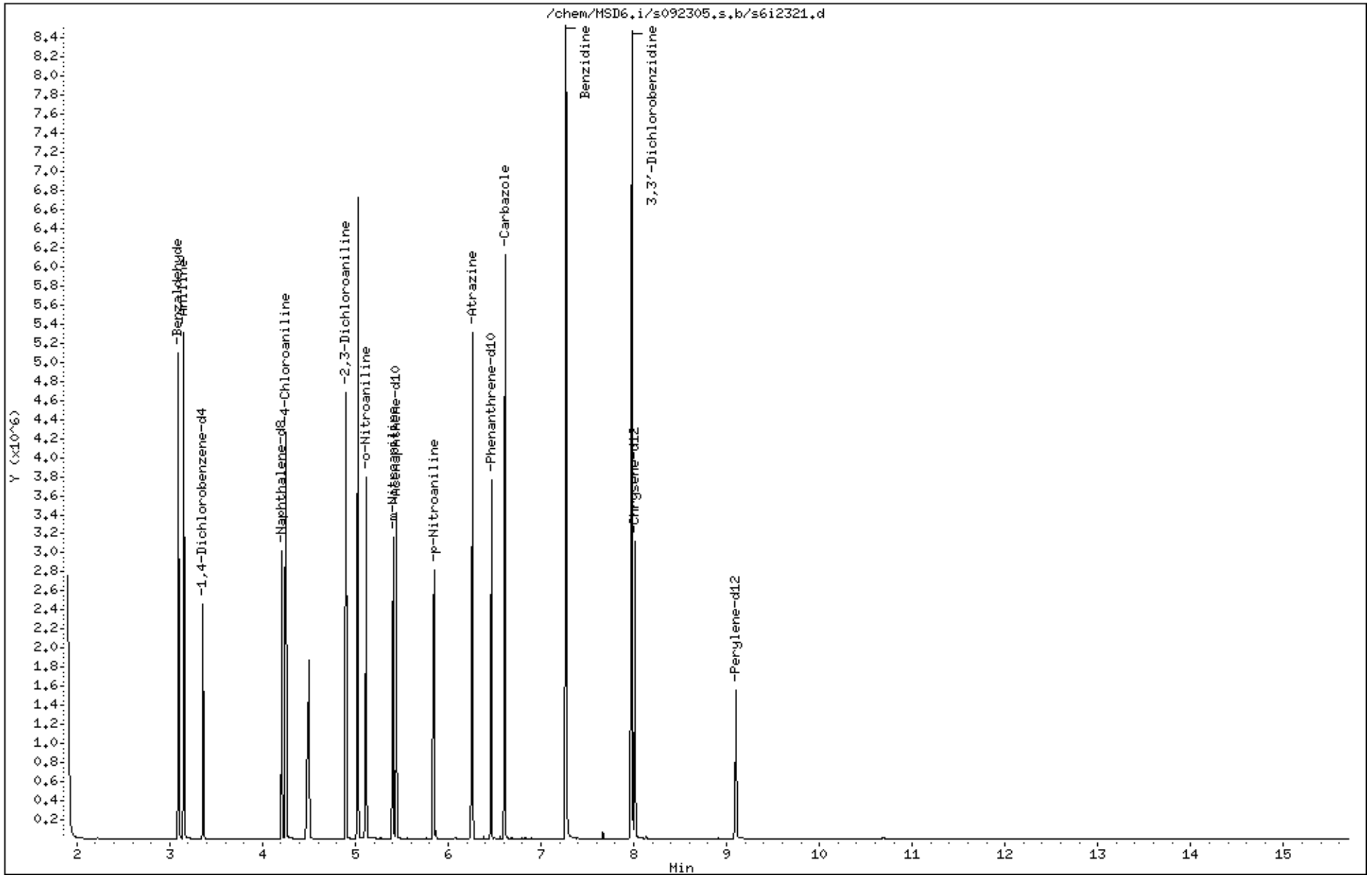
						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.362	3.362	(1.000)	223537	40.0000	
* 29 Naphthalene-d8	136	4.208	4.208	(1.000)	827684	40.0000	
* 46 Acenaphthene-d10	164	5.441	5.441	(1.000)	479725	40.0000	
* 67 Phenanthrene-d10	188	6.464	6.464	(1.000)	806922	40.0000	
* 91 Chrysene-d12	240	8.015	8.015	(1.000)	723911	40.0000	
* 98 Perylene-d12	264	9.102	9.102	(1.000)	578572	40.0000	
4 Aniline	93	3.156	3.156	(0.939)	1091081	120.000	114
209 Benzaldehyde	77	3.097	3.097	(0.921)	666089	120.000	117
31 4-Chloroaniline	127	4.255	4.255	(1.011)	893023	120.000	118
205 2,3-Dichloroaniline	161	4.901	4.901	(0.901)	753802	120.000	117
42 o-Nitroaniline	65	5.118	5.118	(0.941)	495660	120.000	129(A)
41 m-Nitroaniline	138	5.412	5.412	(0.995)	424578	120.000	134(A)
56 p-Nitroaniline	138	5.847	5.847	(1.075)	392566	120.000	136(A)
207 Atrazine	173	6.264	6.264	(0.969)	136978	120.000	121(A)
77 Benzidine	184	7.269	7.269	(0.907)	3052772	300.000	303(A)
90 3,3'-Dichlorobenzidine	252	7.980	7.980	(0.996)	1779894	300.000	313(A)
173 Carbazole	167	6.611	6.611	(1.023)	1939156	120.000	112

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD6.i/s092305.s.b/s6i2321.d
Date : 23-SEP-2005 23:29
Client ID: ANBZICAL120
Sample Info: !UBN050919.08!120PPN!1!SVMF!1!ANBZ ICAL

Instrument: MSD6.i
Operator: jld1
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s092405.s.b/s6i2403.d
Lab Smp Id: UBN050924-01 Client Smp ID: BNAICAL001
Inj Date : 24-SEP-2005 16:01
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924-01|1PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:31 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 16:01 Cal File: s6i2403.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

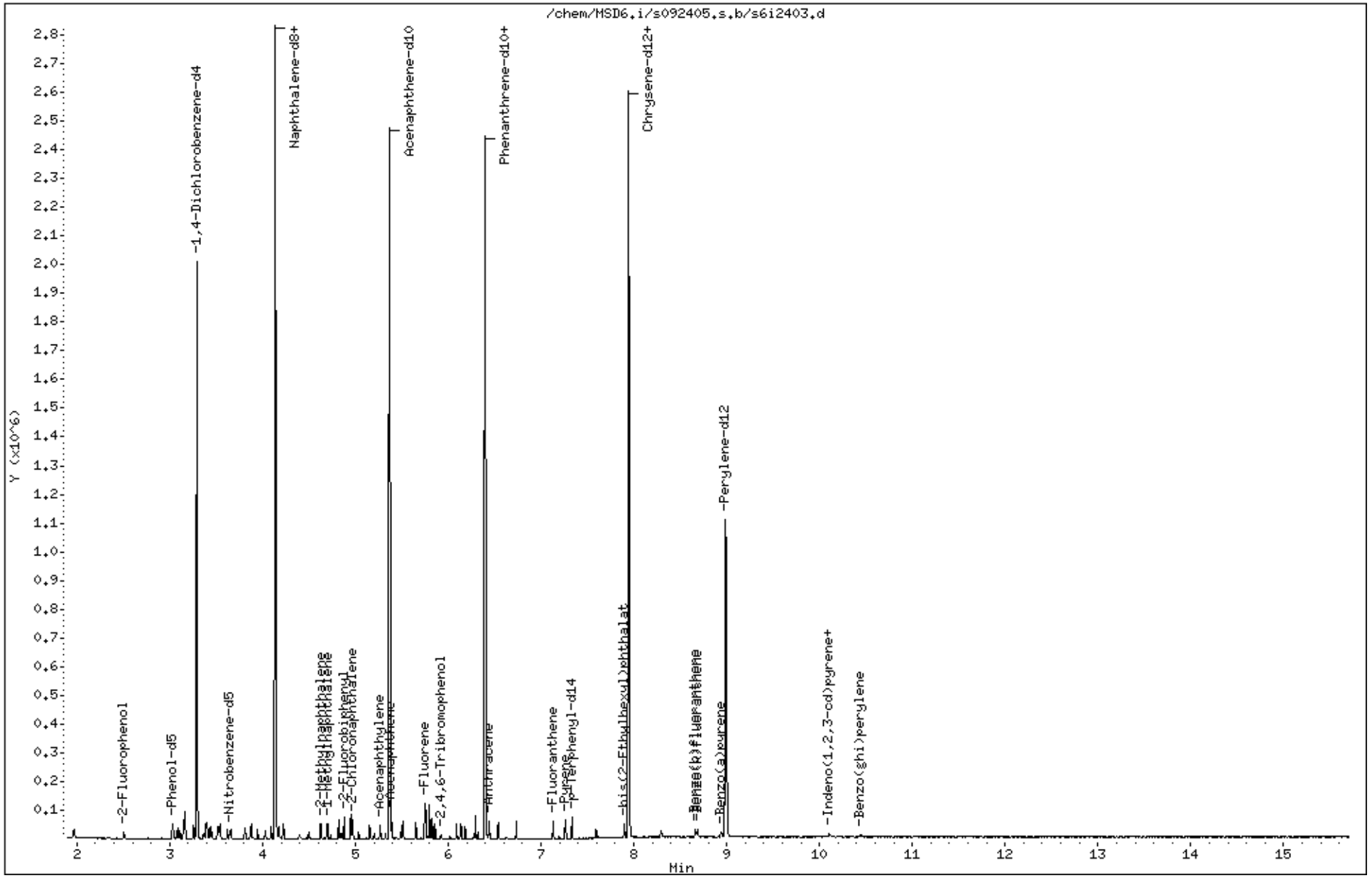
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.291	3.291	(1.000)	194510	40.0000	
* 29 Naphthalene-d8	136	4.137	4.137	(1.000)	734157	40.0000	
* 46 Acenaphthene-d10	164	5.365	5.365	(1.000)	426041	40.0000	
* 67 Phenanthrene-d10	188	6.399	6.399	(1.000)	691336	40.0000	
* 91 Chrysene-d12	240	7.944	7.944	(1.000)	590037	40.0000	
* 98 Perylene-d12	264	8.990	8.990	(1.000)	424137	40.0000	
$ 3 2-Fluorophenol	112	2.509	2.509	(0.763)	5006	1.00000	0.94
$ 5 Phenol-d5	99	3.032	3.032	(0.921)	6140	1.00000	0.95
$ 20 Nitrobenzene-d5	82	3.649	3.649	(0.882)	5856	1.00000	1.1
$ 39 2-Fluorobiphenyl	172	4.877	4.877	(0.909)	13797	1.00000	1.2
$ 60 2,4,6-Tribromophenol	329	5.923	5.923	(1.104)	1262	1.00000	0.63
$ 81 p-Terphenyl-d14	244	7.333	7.333	(0.923)	14248	1.00000	1.1
30 Naphthalene	128	4.149	4.149	(1.003)	17588	1.00000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
34	2-Methylnaphthalene	142	4.630	4.630	(1.119)	11611	1.00000	1.1
35	1-Methylnaphthalene	142	4.701	4.701	(1.136)	11364	1.00000	1.2
40	2-Chloronaphthalene	162	4.971	4.971	(0.927)	11746	1.00000	1.1
45	Acenaphthylene	152	5.265	5.265	(0.981)	15667	1.00000	0.98
47	Acenaphthene	154	5.388	5.388	(1.004)	11304	1.00000	1.1
53	Fluorene	166	5.753	5.753	(1.072)	13414	1.00000	1.1
68	Phenanthrene	178	6.411	6.411	(1.002)	19469	1.00000	1.2(H)
69	Anthracene	178	6.440	6.440	(1.006)	17889	1.00000	1.1
76	Fluoranthene	202	7.133	7.133	(1.115)	17454	1.00000	1.0
79	Pyrene	202	7.263	7.263	(0.914)	18603	1.00000	1.1
89	Benzo(a)anthracene	228	7.938	7.938	(0.999)	16838	1.00000	1.1
92	Chrysene	228	7.962	7.962	(1.002)	17654	1.00000	1.2
93	bis(2-Ethylhexyl)phthalate	149	7.897	7.897	(0.994)	6314	1.00000	
95	Benzo(b)fluoranthene	252	8.667	8.667	(0.964)	11517	1.00000	0.95
96	Benzo(k)fluoranthene	252	8.684	8.684	(0.966)	10306	1.00000	0.92
97	Benzo(a)pyrene	252	8.943	8.943	(0.995)	6021	1.00000	0.67
99	Indeno(1,2,3-cd)pyrene	276	10.100	10.100	(1.124)	4141	1.00000	4.5
100	Dibenzo(a,h)anthracene	278	10.112	10.112	(1.125)	3167	1.00000	4.3(T)
101	Benzo(ghi)perylene	276	10.447	10.447	(1.162)	4175	1.00000	4.3(T)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s092405.s.b/s6i2403.d
Date : 24-SEP-2005 16:01
Client ID: BNAICAL001
Instrument: MSD6.i
Sample Info: |UBN050924-01|1PPNI1|SVMFI1|BNA ICAL
Volume Injected (uL): 0.5
Operator: jld1
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s092405.s.b/s6i2404.d
Lab Smp Id: UBN050924-02 Client Smp ID: BNAICAL010
Inj Date : 24-SEP-2005 16:25
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924-02|10PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:31 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 16:25 Cal File: s6i2404.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.291	3.291	(1.000)	218540	40.0000	
*	29 Naphthalene-d8	136	4.137	4.137	(1.000)	833634	40.0000	
*	46 Acenaphthene-d10	164	5.371	5.371	(1.000)	479818	40.0000	
*	67 Phenanthrene-d10	188	6.399	6.399	(1.000)	775359	40.0000	
*	91 Chrysene-d12	240	7.945	7.945	(1.000)	651344	40.0000	
*	98 Perylene-d12	264	8.990	8.990	(1.000)	428158	40.0000	
$	3 2-Fluorophenol	112	2.504	2.504	(0.761)	59508	10.0000	9.9
$	5 Phenol-d5	99	3.033	3.033	(0.921)	75806	10.0000	10.4
$	20 Nitrobenzene-d5	82	3.650	3.650	(0.882)	69297	10.0000	11.4
$	39 2-Fluorobiphenyl	172	4.878	4.878	(0.908)	149458	10.0000	11.1
$	60 2,4,6-Tribromophenol	329	5.923	5.923	(1.103)	21150	10.0000	9.3
$	81 p-Terphenyl-d14	244	7.334	7.334	(0.923)	159215	10.0000	11.2
	1 N-Methyl-N-nitrosomethylamine	74	1.822	1.822	(0.554)	36447	10.0000	9.8
	2 Pyridine	79	1.858	1.858	(0.564)	57808	10.0000	9.1
	6 Phenol	94	3.039	3.039	(0.923)	77617	10.0000	10.4(Q)
	7 bis(2-Chloroethyl) ether	93	3.109	3.109	(0.945)	61335	10.0000	10.6
	8 2-Chlorophenol	128	3.156	3.156	(0.959)	66222	10.0000	10.9
	203 n-Decane	43	3.162	3.162	(0.961)	121478	10.0000	11.7
	9 1,3-Dichlorobenzene	146	3.256	3.256	(0.989)	83050	10.0000	10.8
	11 1,4-Dichlorobenzene	146	3.303	3.303	(1.004)	82769	10.0000	10.8
	12 Benzyl alcohol	108	3.368	3.368	(1.023)	34185	10.0000	9.4
	13 1,2-Dichlorobenzene	146	3.403	3.403	(1.034)	77868	10.0000	10.9
	14 bis(2-Chloroisopropyl)ether	45	3.450	3.450	(1.048)	155784	10.0000	11.1
	15 o-Cresol	107	3.421	3.421	(1.039)	53762	10.0000	9.9(QH)
	16 Acetophenone	105	3.544	3.544	(1.077)	91631	10.0000	10.5
	17 N-Nitrosodipropylamine	70	3.532	3.532	(1.073)	49768	10.0000	10.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	3.520	3.520	(1.070)	77544	10.0000	10.6
19	Hexachloroethane	117	3.620	3.620	(1.100)	30347	10.0000	10.2
21	Nitrobenzene	77	3.661	3.661	(0.885)	71346	10.0000	11.4
22	Isophorone	82	3.814	3.814	(0.922)	123194	10.0000	11.1
23	2-Nitrophenol	139	3.873	3.873	(0.936)	35300	10.0000	11.1
24	2,4-Dimethylphenol	122	3.879	3.879	(0.938)	62355	10.0000	11.8
25	bis(2-Chloroethoxy)methane	93	3.949	3.949	(0.955)	72107	10.0000	11.5
26	2,4-Dichlorophenol	162	4.032	4.032	(0.974)	54496	10.0000	10.9
28	1,2,4-Trichlorobenzene	180	4.090	4.090	(0.989)	67356	10.0000	11.7
30	Naphthalene	128	4.149	4.149	(1.003)	191338	10.0000	10.9
204	alpha-Terpineol	59	4.143	4.143	(1.001)	59732	10.0000	11.3
189	Caprolactam	113	4.408	4.408	(1.065)	18810	10.0000	10.3
32	Hexachlorobutadiene	225	4.225	4.225	(1.021)	41501	10.0000	11.8
33	4-Chloro-3-methylphenol	107	4.502	4.502	(1.088)	54797	10.0000	11.1
34	2-Methylnaphthalene	142	4.631	4.631	(1.119)	132715	10.0000	11.5
35	1-Methylnaphthalene	142	4.701	4.701	(1.136)	126042	10.0000	11.4
36	Hexachlorocyclopentadiene	237	4.737	4.737	(0.882)	35857	10.0000	9.2
208	1,1'Biphenyl	154	4.954	4.954	(0.922)	165572	10.0000	11.2
37	2,4,6-Trichlorophenol	196	4.819	4.819	(0.897)	39415	10.0000	10.3
38	2,4,5-Trichlorophenol	196	4.848	4.848	(0.903)	41285	10.0000	10.4
40	2-Chloronaphthalene	162	4.972	4.972	(0.926)	131936	10.0000	10.9
43	Dimethylphthalate	163	5.160	5.160	(0.961)	156823	10.0000	10.6
44	2,6-Dinitrotoluene	165	5.207	5.207	(0.969)	30583	10.0000	9.5
45	Acenaphthylene	152	5.265	5.265	(0.980)	198057	10.0000	11.0
47	Acenaphthene	154	5.389	5.389	(1.003)	124713	10.0000	10.7
49	Dibenzofuran	168	5.512	5.512	(1.026)	183057	10.0000	11.1
50	2,4-Dinitrotoluene	165	5.489	5.489	(1.022)	39929	10.0000	9.5
51	Diethylphthalate	149	5.653	5.653	(1.052)	160061	10.0000	10.6
52	4-Nitrophenol	139	5.430	5.430	(1.011)	17579	10.0000	9.0
53	Fluorene	166	5.753	5.753	(1.071)	143558	10.0000	10.7
54	4-Chlorophenylphenylether	204	5.747	5.747	(1.070)	71312	10.0000	10.6
55	2-Methyl-4,6-dinitrophenol	198	5.782	5.782	(0.904)	20444	10.0000	8.5
133	Diphenylamine	169	5.829	5.829	(0.911)	129662	10.0000	11.0
58	1,2-Diphenylhydrazine	77	5.859	5.859	(0.916)	146679	10.0000	10.7
59	Tributylphosphate	99	5.800	5.800	(1.080)	185161	10.0000	11.2
61	4-Bromophenylphenylether	248	6.088	6.088	(0.951)	44897	10.0000	10.6
63	Hexachlorobenzene	284	6.141	6.141	(0.960)	52012	10.0000	10.7
65	Pentachlorophenol	266	6.264	6.264	(0.979)	18517	10.0000	7.9
206	n-Octadecane	57	6.294	6.294	(0.983)	123592	10.0000	11.2
68	Phenanthrene	178	6.411	6.411	(1.002)	206778	10.0000	11.3
69	Anthracene	178	6.446	6.446	(1.007)	203052	10.0000	11.2
72	Di-n-butylphthalate	149	6.734	6.734	(1.052)	256937	10.0000	11.5
76	Fluoranthene	202	7.134	7.134	(1.115)	213694	10.0000	11.5
79	Pyrene	202	7.263	7.263	(0.914)	216235	10.0000	11.3
85	Butylbenzylphthalate	149	7.592	7.592	(0.956)	92556	10.0000	9.6
89	Benzo(a)anthracene	228	7.939	7.939	(0.999)	180862	10.0000	10.6
92	Chrysene	228	7.962	7.962	(1.002)	170989	10.0000	10.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
93	bis(2-Ethylhexyl)phthalate	149	7.898	7.898	(0.994)	105881	10.0000	8.3
94	Di-n-octylphthalate	149	8.297	8.297	(0.923)	120114	10.0000	9.0
95	Benzo(b)fluoranthene	252	8.667	8.667	(0.964)	137304	10.0000	11.2
96	Benzo(k)fluoranthene	252	8.685	8.685	(0.966)	122046	10.0000	10.8
97	Benzo(a)pyrene	252	8.943	8.943	(0.995)	89035	10.0000	9.9
99	Indeno(1,2,3-cd)pyrene	276	10.107	10.107	(1.124)	55604	10.0000	10.2
100	Dibenzo(a,h)anthracene	278	10.113	10.113	(1.125)	44106	10.0000	10(T)
101	Benzo(ghi)perylene	276	10.448	10.448	(1.162)	46057	10.0000	10(T)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s092405.s.b/s6i2404.d

Page 1

Date : 24-SEP-2005 16:25

Client ID: BNAICAL010

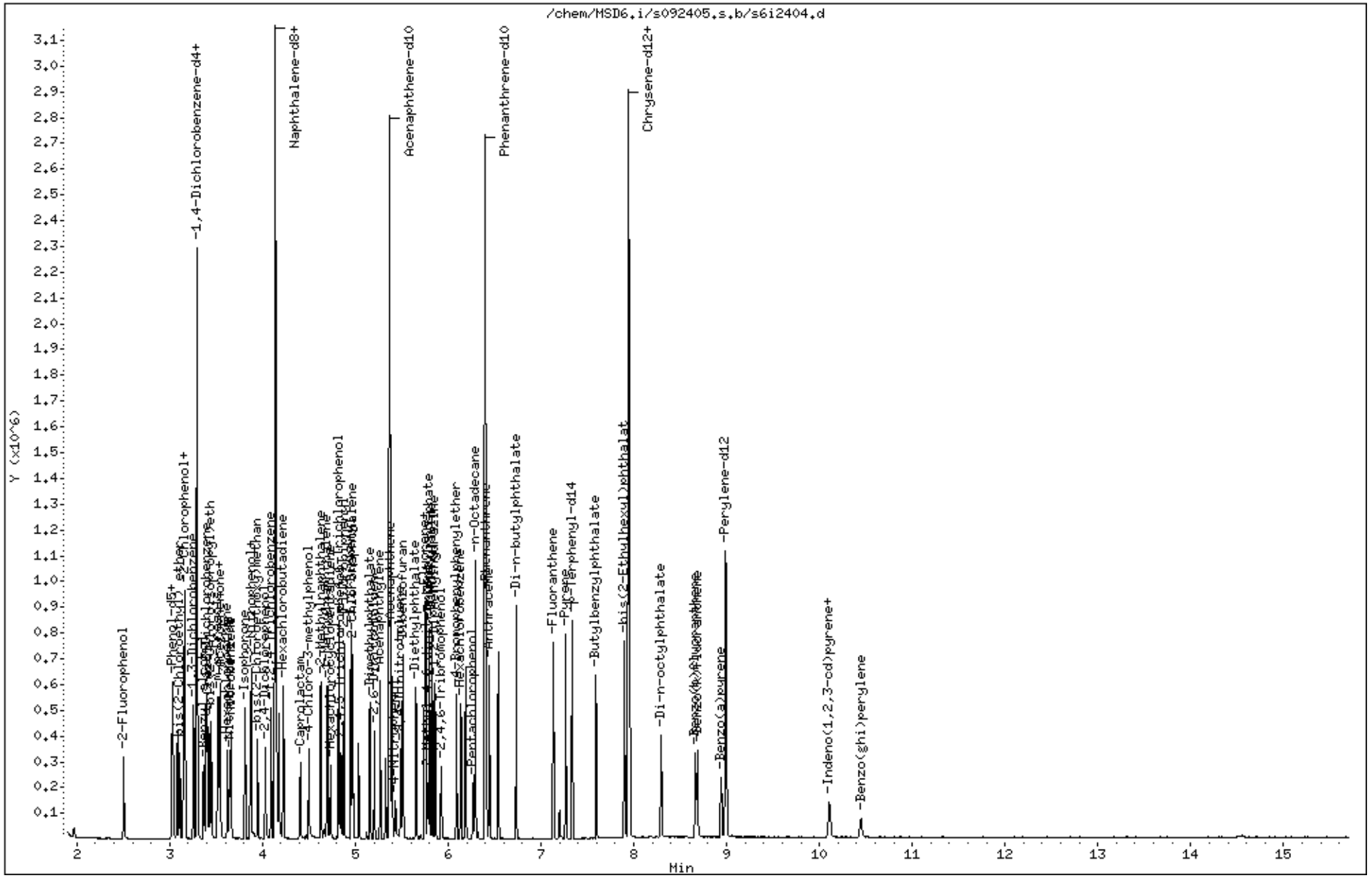
Instrument: MSD6.i

Sample Info: !UBN050924-02!10PPNI1!SVMFI1!BNA ICAL

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



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Data file : /chem/MSD6.i/s092405.s.b/s6i2405.d
Lab Smp Id: UBN050924.03 Client Smp ID: BNAICAL020
Inj Date : 24-SEP-2005 16:49
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924.03|20PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:31 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 16:49 Cal File: s6i2405.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.294	3.294	(1.000)	222164	40.0000	
*	29 Naphthalene-d8	136	4.140	4.140	(1.000)	856657	40.0000	
*	46 Acenaphthene-d10	164	5.368	5.368	(1.000)	467021	40.0000	
*	67 Phenanthrene-d10	188	6.397	6.397	(1.000)	752875	40.0000	
*	91 Chrysene-d12	240	7.948	7.948	(1.000)	650654	40.0000	
*	98 Perylene-d12	264	8.988	8.988	(1.000)	505541	40.0000	
$	3 2-Fluorophenol	112	2.507	2.507	(0.761)	125237	20.0000	20.5
$	5 Phenol-d5	99	3.030	3.030	(0.920)	149956	20.0000	20.3
$	20 Nitrobenzene-d5	82	3.647	3.647	(0.881)	139331	20.0000	22.3
$	39 2-Fluorobiphenyl	172	4.881	4.881	(0.909)	296233	20.0000	22.6
$	60 2,4,6-Tribromophenol	329	5.927	5.927	(1.104)	44980	20.0000	20.4
$	81 p-Terphenyl-d14	244	7.337	7.337	(0.923)	313334	20.0000	22.1
	1 N-Methyl-N-nitrosomethylamine	74	1.820	1.820	(0.552)	75692	20.0000	20.0
	2 Pyridine	79	1.849	1.849	(0.561)	122387	20.0000	19.0
	6 Phenol	94	3.042	3.042	(0.923)	159591	20.0000	20.9(Q)
	7 bis(2-Chloroethyl) ether	93	3.112	3.112	(0.945)	121394	20.0000	20.7
	8 2-Chlorophenol	128	3.159	3.159	(0.959)	128666	20.0000	20.9
	203 n-Decane	43	3.165	3.165	(0.961)	243740	20.0000	23.1
	9 1,3-Dichlorobenzene	146	3.259	3.259	(0.989)	168818	20.0000	21.6
	11 1,4-Dichlorobenzene	146	3.306	3.306	(1.004)	167148	20.0000	21.5
	12 Benzyl alcohol	108	3.365	3.365	(1.021)	73146	20.0000	19.9
	13 1,2-Dichlorobenzene	146	3.400	3.400	(1.032)	158086	20.0000	21.7
	14 bis(2-Chloroisopropyl)ether	45	3.447	3.447	(1.046)	313218	20.0000	21.9
	15 o-Cresol	107	3.424	3.424	(1.039)	109822	20.0000	19.8
	16 Acetophenone	105	3.541	3.541	(1.075)	186162	20.0000	20.9
	17 N-Nitrosodipropylamine	70	3.535	3.535	(1.073)	102572	20.0000	20.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	3.523	3.523	(1.070)	154287	20.0000	20.8
19	Hexachloroethane	117	3.623	3.623	(1.100)	62170	20.0000	20.7
21	Nitrobenzene	77	3.659	3.659	(0.884)	146064	20.0000	22.7
22	Isophorone	82	3.811	3.811	(0.921)	254521	20.0000	22.3
23	2-Nitrophenol	139	3.870	3.870	(0.935)	70989	20.0000	21.7
24	2,4-Dimethylphenol	122	3.882	3.882	(0.938)	124826	20.0000	22.9
25	bis(2-Chloroethoxy)methane	93	3.947	3.947	(0.953)	146711	20.0000	22.8
26	2,4-Dichlorophenol	162	4.035	4.035	(0.974)	112663	20.0000	22.0
27	Benzoic acid	105	3.923	3.923	(0.947)	23454	20.0000	22.8
28	1,2,4-Trichlorobenzene	180	4.093	4.093	(0.989)	133722	20.0000	22.6
30	Naphthalene	128	4.152	4.152	(1.003)	377019	20.0000	22.7
204	alpha-Terpineol	59	4.146	4.146	(1.001)	123569	20.0000	22.7
189	Caprolactam	113	4.417	4.417	(1.067)	39425	20.0000	21.0
32	Hexachlorobutadiene	225	4.229	4.229	(1.021)	85397	20.0000	23.6
33	4-Chloro-3-methylphenol	107	4.499	4.499	(1.087)	97674	20.0000	19.2
34	2-Methylnaphthalene	142	4.628	4.628	(1.118)	263657	20.0000	22.2
35	1-Methylnaphthalene	142	4.699	4.699	(1.135)	248105	20.0000	21.9
36	Hexachlorocyclopentadiene	237	4.734	4.734	(0.882)	73396	20.0000	19.2
208	1,1'Biphenyl	154	4.951	4.951	(0.922)	328256	20.0000	22.8
37	2,4,6-Trichlorophenol	196	4.822	4.822	(0.898)	81252	20.0000	21.9
38	2,4,5-Trichlorophenol	196	4.845	4.845	(0.903)	80167	20.0000	20.7
40	2-Chloronaphthalene	162	4.975	4.975	(0.927)	254297	20.0000	21.5
43	Dimethylphthalate	163	5.157	5.157	(0.961)	314815	20.0000	21.9
44	2,6-Dinitrotoluene	165	5.210	5.210	(0.970)	64659	20.0000	20.6
45	Acenaphthylene	152	5.269	5.269	(0.981)	395144	20.0000	22.6
47	Acenaphthene	154	5.392	5.392	(1.004)	242198	20.0000	21.3
48	2,4-Dinitrophenol	184	5.404	5.404	(1.007)	20741	20.0000	22.2(Q)
49	Dibenzofuran	168	5.515	5.515	(1.027)	357220	20.0000	22.3
50	2,4-Dinitrotoluene	165	5.492	5.492	(1.023)	82634	20.0000	20.3
51	Diethylphthalate	149	5.656	5.656	(1.054)	319081	20.0000	21.8
52	4-Nitrophenol	139	5.433	5.433	(1.012)	38117	20.0000	20.1
53	Fluorene	166	5.756	5.756	(1.072)	288421	20.0000	22.2
54	4-Chlorophenylphenylether	204	5.750	5.750	(1.071)	143767	20.0000	22.0
55	2-Methyl-4,6-dinitrophenol	198	5.786	5.786	(0.904)	40991	20.0000	17.6
133	Diphenylamine	169	5.833	5.833	(0.912)	259240	20.0000	22.6
58	1,2-Diphenylhydrazine	77	5.862	5.862	(0.916)	297913	20.0000	22.4
59	Tributylphosphate	99	5.803	5.803	(1.081)	368837	20.0000	22.8
61	4-Bromophenylphenylether	248	6.091	6.091	(0.952)	87770	20.0000	21.3
63	Hexachlorobenzene	284	6.138	6.138	(0.960)	102937	20.0000	21.7
65	Pentachlorophenol	266	6.267	6.267	(0.980)	42425	20.0000	18.6
206	n-Octadecane	57	6.291	6.291	(0.983)	245859	20.0000	23.0
68	Phenanthrene	178	6.414	6.414	(1.003)	396406	20.0000	22.3
69	Anthracene	178	6.444	6.444	(1.007)	393519	20.0000	22.4
72	Di-n-butylphthalate	149	6.731	6.731	(1.052)	509371	20.0000	23.5
76	Fluoranthene	202	7.131	7.131	(1.115)	409072	20.0000	22.6
79	Pyrene	202	7.266	7.266	(0.914)	424225	20.0000	22.2
85	Butylbenzylphthalate	149	7.595	7.595	(0.956)	205662	20.0000	21.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
89 Benzo(a)anthracene	228	7.936	7.936	(0.999)	359012	20.0000	21.0
92 Chrysene	228	7.959	7.959	(1.001)	340401	20.0000	21.7
93 bis(2-Ethylhexyl)phthalate	149	7.895	7.895	(0.993)	253190	20.0000	21.6
94 Di-n-octylphthalate	149	8.294	8.294	(0.923)	328718	20.0000	20.9
95 Benzo(b)fluoranthene	252	8.665	8.665	(0.964)	306076	20.0000	21.1
96 Benzo(k)fluoranthene	252	8.688	8.688	(0.967)	289071	20.0000	21.6
97 Benzo(a)pyrene	252	8.941	8.941	(0.995)	229188	20.0000	21.5
99 Indeno(1,2,3-cd)pyrene	276	10.104	10.104	(1.124)	189817	20.0000	21.9
100 Dibenzo(a,h)anthracene	278	10.110	10.110	(1.125)	152566	20.0000	21.7(T)
101 Benzo(ghi)perylene	276	10.445	10.445	(1.162)	156454	20.0000	21.8(T)

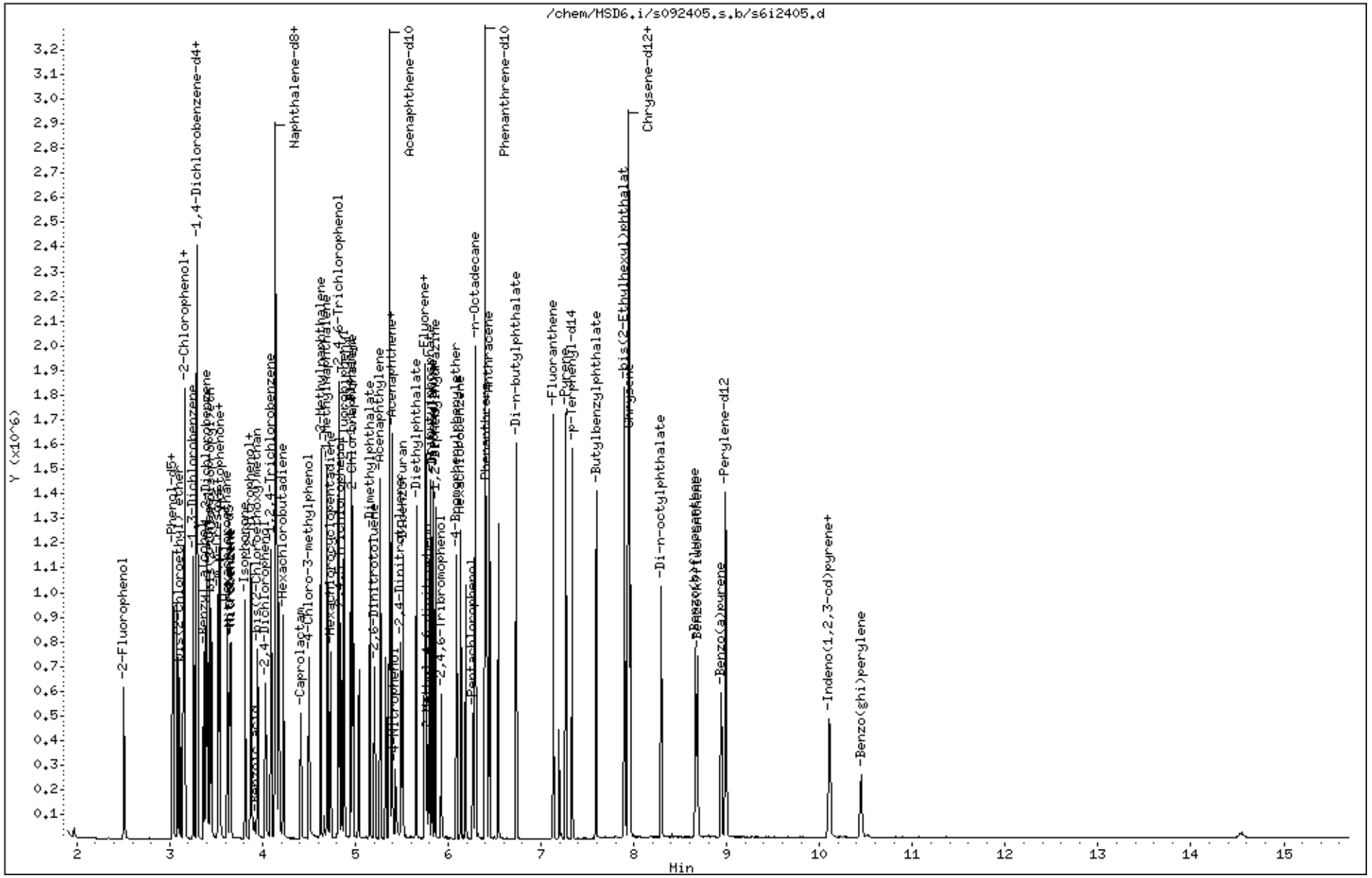
QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s092405.s.b/s6i2405.d
Date : 24-SEP-2005 16:49
Client ID: BNAICAL020
Sample Info: !UBN050924.03!20PPN!1!SVMF!1!BNA ICAL

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



General Engineering Laboratories, LLC

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Data file : /chem/MSD6.i/s092405.s.b/s6i2406.d
Lab Smp Id: UBN050924-04 Client Smp ID: BNAICAL040
Inj Date : 24-SEP-2005 17:13
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924-04|40PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:30 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 17:13 Cal File: s6i2406.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.291	3.291	(1.000)	237625	40.0000	
*	29 Naphthalene-d8	136	4.137	4.137	(1.000)	969762	40.0000	
*	46 Acenaphthene-d10	164	5.371	5.371	(1.000)	521488	40.0000	
*	67 Phenanthrene-d10	188	6.399	6.399	(1.000)	854793	40.0000	
*	91 Chrysene-d12	240	7.944	7.944	(1.000)	708831	40.0000	
*	98 Perylene-d12	264	8.990	8.990	(1.000)	536383	40.0000	
$	3 2-Fluorophenol	112	2.504	2.504	(0.761)	248459	40.0000	38.0
$	5 Phenol-d5	99	3.032	3.032	(0.921)	300490	40.0000	38.1
$	20 Nitrobenzene-d5	82	3.649	3.649	(0.882)	279380	40.0000	39.6
$	39 2-Fluorobiphenyl	172	4.883	4.883	(0.909)	571850	40.0000	39.2
$	60 2,4,6-Tribromophenol	329	5.929	5.929	(1.104)	94675	40.0000	38.4
$	81 p-Terphenyl-d14	244	7.333	7.333	(0.923)	620395	40.0000	40.2
	1 N-Methyl-N-nitrosomethylamine	74	1.822	1.822	(0.554)	157968	40.0000	39.1
	2 Pyridine	79	1.846	1.846	(0.561)	272519	40.0000	39.6
	6 Phenol	94	3.044	3.044	(0.925)	315158	40.0000	38.6
	7 bis(2-Chloroethyl) ether	93	3.115	3.115	(0.946)	240067	40.0000	38.2
	8 2-Chlorophenol	128	3.162	3.162	(0.961)	252433	40.0000	38.3
	203 n-Decane	43	3.168	3.168	(0.962)	465328	40.0000	41.2
	9 1,3-Dichlorobenzene	146	3.262	3.262	(0.991)	325573	40.0000	38.9
	11 1,4-Dichlorobenzene	146	3.303	3.303	(1.004)	320906	40.0000	38.6
	12 Benzyl alcohol	108	3.367	3.367	(1.023)	151025	40.0000	38.4
	13 1,2-Dichlorobenzene	146	3.403	3.403	(1.034)	299794	40.0000	38.5
	14 bis(2-Chloroisopropyl)ether	45	3.450	3.450	(1.048)	593404	40.0000	38.8
	15 o-Cresol	107	3.526	3.526	(1.071)	297105	40.0000	50.2
	16 Acetophenone	105	3.550	3.550	(1.079)	370750	40.0000	38.9
	17 N-Nitrosodipropylamine	70	3.538	3.538	(1.075)	206307	40.0000	38.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
18	m,p-Cresols	107	3.526	3.526	(1.071)	297105	40.0000	37.4
19	Hexachloroethane	117	3.626	3.626	(1.102)	123353	40.0000	38.3
21	Nitrobenzene	77	3.661	3.661	(0.885)	288356	40.0000	39.6
22	Isophorone	82	3.820	3.820	(0.923)	521011	40.0000	40.4
23	2-Nitrophenol	139	3.873	3.873	(0.936)	148223	40.0000	40.1
24	2,4-Dimethylphenol	122	3.884	3.884	(0.939)	243303	40.0000	39.5
25	bis(2-Chloroethoxy)methane	93	3.949	3.949	(0.955)	285107	40.0000	39.2
26	2,4-Dichlorophenol	162	4.037	4.037	(0.976)	231760	40.0000	40.0
27	Benzoic acid	105	3.937	3.937	(0.952)	83100	40.0000	36.4
28	1,2,4-Trichlorobenzene	180	4.096	4.096	(0.990)	258273	40.0000	38.5
30	Naphthalene	128	4.155	4.155	(1.004)	692054	40.0000	38.0
204	alpha-Terpineol	59	4.149	4.149	(1.003)	249866	40.0000	40.6
189	Caprolactam	113	4.431	4.431	(1.071)	85228	40.0000	40.0
32	Hexachlorobutadiene	225	4.225	4.225	(1.021)	165506	40.0000	40.3
33	4-Chloro-3-methylphenol	107	4.507	4.507	(1.089)	230538	40.0000	40.1
34	2-Methylnaphthalene	142	4.631	4.631	(1.119)	513778	40.0000	38.2
35	1-Methylnaphthalene	142	4.701	4.701	(1.136)	487237	40.0000	38.0
36	Hexachlorocyclopentadiene	237	4.736	4.736	(0.882)	160576	40.0000	37.7
208	1,1'Biphenyl	154	4.954	4.954	(0.922)	632719	40.0000	39.3
37	2,4,6-Trichlorophenol	196	4.824	4.824	(0.898)	160284	40.0000	38.6
38	2,4,5-Trichlorophenol	196	4.848	4.848	(0.903)	181643	40.0000	42.0
40	2-Chloronaphthalene	162	4.977	4.977	(0.927)	508790	40.0000	38.6
43	Dimethylphthalate	163	5.159	5.159	(0.961)	633023	40.0000	39.4
44	2,6-Dinitrotoluene	165	5.212	5.212	(0.970)	136667	40.0000	39.1
45	Acenaphthylene	152	5.271	5.271	(0.981)	777376	40.0000	39.9
47	Acenaphthene	154	5.394	5.394	(1.004)	486402	40.0000	38.3
48	2,4-Dinitrophenol	184	5.406	5.406	(1.007)	54330	40.0000	37.0
49	Dibenzofuran	168	5.512	5.512	(1.026)	707180	40.0000	39.6
50	2,4-Dinitrotoluene	165	5.494	5.494	(1.023)	179021	40.0000	39.3
51	Diethylphthalate	149	5.659	5.659	(1.054)	643243	40.0000	39.3
52	4-Nitrophenol	139	5.436	5.436	(1.012)	83883	40.0000	39.6
53	Fluorene	166	5.759	5.759	(1.072)	559801	40.0000	38.5
54	4-Chlorophenylphenylether	204	5.747	5.747	(1.070)	282787	40.0000	38.8
55	2-Methyl-4,6-dinitrophenol	198	5.788	5.788	(0.904)	95897	40.0000	36.4
133	Diphenylamine	169	5.835	5.835	(0.912)	516493	40.0000	39.7
58	1,2-Diphenylhydrazine	77	5.864	5.864	(0.916)	603107	40.0000	39.9
59	Tributylphosphate	99	5.806	5.806	(1.081)	722321	40.0000	40.0
61	4-Bromophenylphenylether	248	6.094	6.094	(0.952)	179710	40.0000	38.5
63	Hexachlorobenzene	284	6.141	6.141	(0.960)	206565	40.0000	38.4
65	Pentachlorophenol	266	6.270	6.270	(0.980)	99038	40.0000	38.4
206	n-Octadecane	57	6.293	6.293	(0.983)	486971	40.0000	40.2
68	Phenanthrene	178	6.417	6.417	(1.003)	784857	40.0000	38.9
69	Anthracene	178	6.446	6.446	(1.007)	782712	40.0000	39.2
72	Di-n-butylphthalate	149	6.734	6.734	(1.052)	1006339	40.0000	40.9
76	Fluoranthene	202	7.134	7.134	(1.115)	816716	40.0000	39.8
79	Pyrene	202	7.269	7.269	(0.915)	853330	40.0000	40.9
85	Butylbenzylphthalate	149	7.592	7.592	(0.956)	421239	40.0000	40.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
89	Benzo(a)anthracene	228	7.938	7.938	(0.999)	738409	40.0000	39.7
92	Chrysene	228	7.962	7.962	(1.002)	650674	40.0000	38.0
93	bis(2-Ethylhexyl)phthalate	149	7.891	7.891	(0.993)	497571	40.0000	39.8
94	Di-n-octylphthalate	149	8.291	8.291	(0.922)	647234	40.0000	38.7
95	Benzo(b)fluoranthene	252	8.661	8.661	(0.963)	574302	40.0000	37.4
96	Benzo(k)fluoranthene	252	8.685	8.685	(0.966)	590561	40.0000	41.6
97	Benzo(a)pyrene	252	8.937	8.937	(0.994)	461059	40.0000	40.8(H)
99	Indeno(1,2,3-cd)pyrene	276	10.107	10.107	(1.124)	375121	40.0000	37.4(H)
100	Dibenzo(a,h)anthracene	278	10.112	10.112	(1.125)	302366	40.0000	37.3(TH)
101	Benzo(ghi)perylene	276	10.447	10.447	(1.162)	310177	40.0000	37.5(TH)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s092405.s.b/s6i2406.d

Date : 24-SEP-2005 17:13

Client ID: BNAICAL040

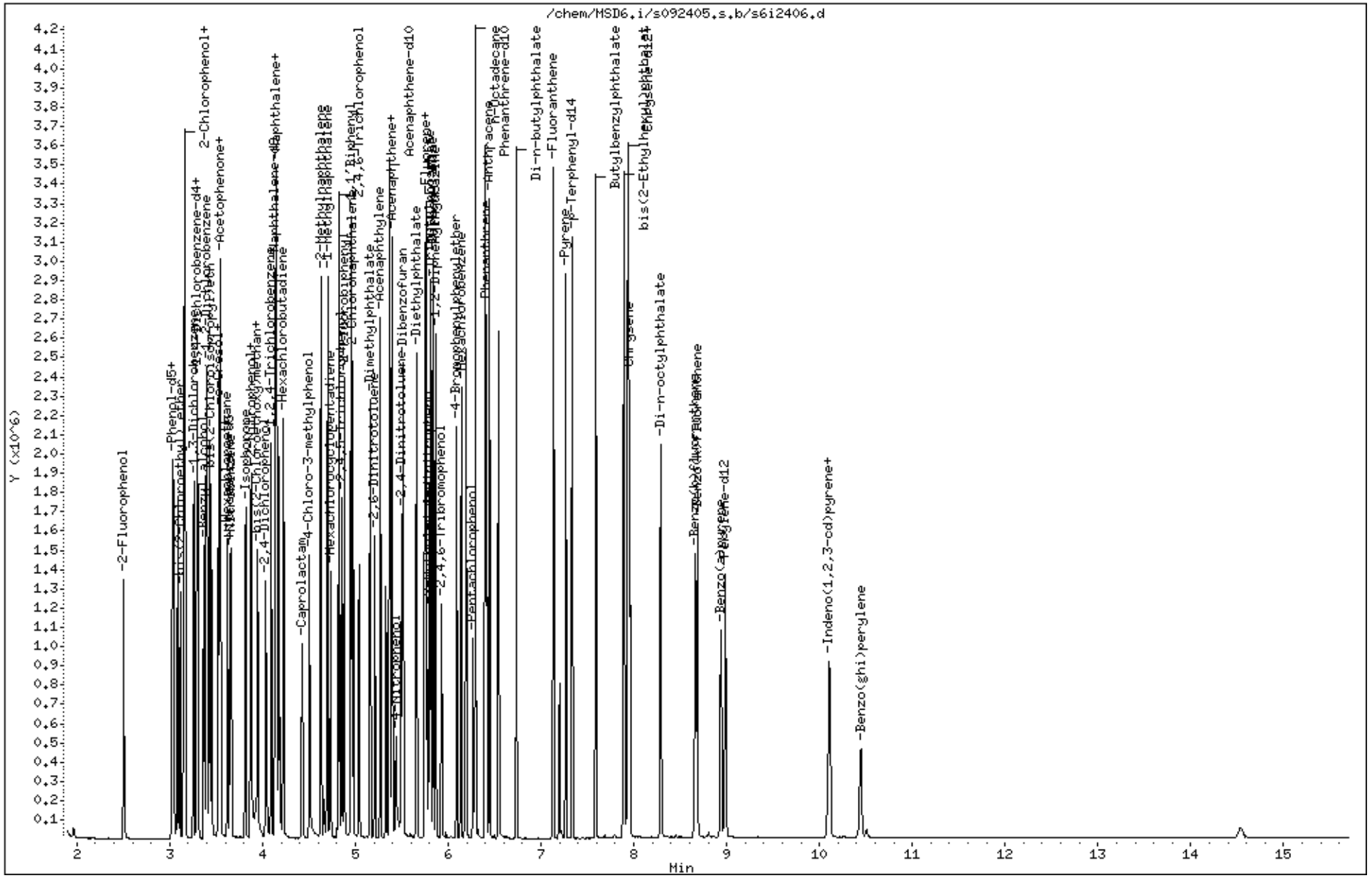
Sample Info: !UBN050924-04!40PPN!1!SVMF!1!BNA ICAL

Column phase: J & W DB-5MS

Instrument: MSD6.i

Operator: jld1

Column diameter: 0.20



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Data file : /chem/MSD6.i/s092405.s.b/s6i2407.d
Lab Smp Id: UBN050924-05 Client Smp ID: BNAICAL050
Inj Date : 24-SEP-2005 17:37
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924-05|50PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:32 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 17:37 Cal File: s6i2407.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.295	3.295	(1.000)	230737	40.0000	
*	29 Naphthalene-d8	136	4.141	4.141	(1.000)	967635	40.0000	
*	46 Acenaphthene-d10	164	5.369	5.369	(1.000)	505989	40.0000	
*	67 Phenanthrene-d10	188	6.397	6.397	(1.000)	836932	40.0000	
*	91 Chrysene-d12	240	7.948	7.948	(1.000)	662794	40.0000	
*	98 Perylene-d12	264	8.994	8.994	(1.000)	459035	40.0000	
$	3 2-Fluorophenol	112	2.507	2.507	(0.761)	321540	50.0000	50.7
$	5 Phenol-d5	99	3.036	3.036	(0.922)	389266	50.0000	50.8
$	20 Nitrobenzene-d5	82	3.653	3.653	(0.882)	364937	50.0000	51.8
$	39 2-Fluorobiphenyl	172	4.881	4.881	(0.909)	724276	50.0000	51.1
$	60 2,4,6-Tribromophenol	329	5.933	5.933	(1.105)	124029	50.0000	51.9
$	81 p-Terphenyl-d14	244	7.337	7.337	(0.923)	751480	50.0000	52.1
	1 N-Methyl-N-nitrosomethylamine	74	1.820	1.820	(0.552)	198548	50.0000	50.6
	2 Pyridine	79	1.843	1.843	(0.560)	337623	50.0000	50.5
	6 Phenol	94	3.042	3.042	(0.923)	396327	50.0000	50.0(Q)
	7 bis(2-Chloroethyl) ether	93	3.113	3.113	(0.945)	309361	50.0000	50.7
	8 2-Chlorophenol	128	3.160	3.160	(0.959)	326065	50.0000	50.9
	203 n-Decane	43	3.165	3.165	(0.961)	562903	50.0000	51.3
	9 1,3-Dichlorobenzene	146	3.259	3.259	(0.989)	408310	50.0000	50.2
	11 1,4-Dichlorobenzene	146	3.306	3.306	(1.004)	407463	50.0000	50.5
	12 Benzyl alcohol	108	3.371	3.371	(1.023)	195585	50.0000	51.2
	13 1,2-Dichlorobenzene	146	3.406	3.406	(1.034)	388436	50.0000	51.4
	14 bis(2-Chloroisopropyl)ether	45	3.453	3.453	(1.048)	770167	50.0000	51.9
	15 o-Cresol	107	3.424	3.424	(1.039)	280076	50.0000	48.8(Q)
	16 Acetophenone	105	3.547	3.547	(1.077)	459810	50.0000	49.7
	17 N-Nitrosodipropylamine	70	3.541	3.541	(1.075)	268340	50.0000	51.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	3.530	3.530	(1.071)	390717	50.0000	50.6
19	Hexachloroethane	117	3.624	3.624	(1.100)	160897	50.0000	51.5
21	Nitrobenzene	77	3.665	3.665	(0.885)	372648	50.0000	51.2
22	Isophorone	82	3.818	3.818	(0.922)	666153	50.0000	51.7
23	2-Nitrophenol	139	3.876	3.876	(0.936)	194400	50.0000	52.7
24	2,4-Dimethylphenol	122	3.882	3.882	(0.938)	312739	50.0000	50.9
25	bis(2-Chloroethoxy)methane	93	3.953	3.953	(0.955)	379609	50.0000	52.3
26	2,4-Dichlorophenol	162	4.035	4.035	(0.974)	303711	50.0000	52.5
27	Benzoic acid	105	3.947	3.947	(0.953)	133816	50.0000	48.7
28	1,2,4-Trichlorobenzene	180	4.094	4.094	(0.989)	330586	50.0000	49.4
30	Naphthalene	128	4.153	4.153	(1.003)	898244	50.0000	50.1
204	alpha-Terpineol	59	4.153	4.153	(1.003)	323425	50.0000	52.6
189	Caprolactam	113	4.440	4.440	(1.072)	114569	50.0000	53.9
32	Hexachlorobutadiene	225	4.229	4.229	(1.021)	211575	50.0000	51.7
33	4-Chloro-3-methylphenol	107	4.505	4.505	(1.088)	308530	50.0000	53.8
34	2-Methylnaphthalene	142	4.628	4.628	(1.118)	660736	50.0000	49.3
35	1-Methylnaphthalene	142	4.699	4.699	(1.135)	620797	50.0000	48.6
36	Hexachlorocyclopentadiene	237	4.734	4.734	(0.882)	219790	50.0000	53.2
208	1,1'Biphenyl	154	4.957	4.957	(0.923)	789441	50.0000	50.5
37	2,4,6-Trichlorophenol	196	4.822	4.822	(0.898)	205284	50.0000	51.0
38	2,4,5-Trichlorophenol	196	4.852	4.852	(0.904)	215382	50.0000	51.4
40	2-Chloronaphthalene	162	4.975	4.975	(0.927)	648137	50.0000	50.6
43	Dimethylphthalate	163	5.163	5.163	(0.962)	787245	50.0000	50.4
44	2,6-Dinitrotoluene	165	5.210	5.210	(0.970)	172165	50.0000	50.8
45	Acenaphthylene	152	5.269	5.269	(0.981)	969206	50.0000	51.3
47	Acenaphthene	154	5.392	5.392	(1.004)	620230	50.0000	50.3
48	2,4-Dinitrophenol	184	5.404	5.404	(1.007)	79360	50.0000	50.1(Q)
49	Dibenzofuran	168	5.516	5.516	(1.027)	874618	50.0000	50.5
50	2,4-Dinitrotoluene	165	5.498	5.498	(1.024)	230312	50.0000	52.1
51	Diethylphthalate	149	5.663	5.663	(1.055)	804619	50.0000	50.7
52	4-Nitrophenol	139	5.439	5.439	(1.013)	110376	50.0000	53.7
53	Fluorene	166	5.762	5.762	(1.073)	704549	50.0000	49.9
54	4-Chlorophenylphenylether	204	5.751	5.751	(1.071)	357718	50.0000	50.6
55	2-Methyl-4,6-dinitrophenol	198	5.792	5.792	(0.905)	135869	50.0000	52.6
133	Diphenylamine	169	5.839	5.839	(0.913)	649521	50.0000	50.9
58	1,2-Diphenylhydrazine	77	5.862	5.862	(0.916)	761556	50.0000	51.5
59	Tributylphosphate	99	5.809	5.809	(1.082)	877470	50.0000	50.1
61	4-Bromophenylphenylether	248	6.091	6.091	(0.952)	228534	50.0000	50.0
63	Hexachlorobenzene	284	6.144	6.144	(0.960)	266678	50.0000	50.6
65	Pentachlorophenol	266	6.268	6.268	(0.980)	129781	50.0000	51.3
206	n-Octadecane	57	6.297	6.297	(0.984)	616295	50.0000	51.9
68	Phenanthrene	178	6.415	6.415	(1.003)	949299	50.0000	48.1
69	Anthracene	178	6.450	6.450	(1.008)	988180	50.0000	50.6
72	Di-n-butylphthalate	149	6.738	6.738	(1.053)	1266171	50.0000	52.5
76	Fluoranthene	202	7.137	7.137	(1.116)	1039888	50.0000	51.7
79	Pyrene	202	7.267	7.267	(0.914)	1043198	50.0000	53.5
85	Butylbenzylphthalate	149	7.596	7.596	(0.956)	516533	50.0000	52.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
89 Benzo(a)anthracene	228	7.942	7.942	(0.999)	883757	50.0000	50.9
92 Chrysene	228	7.966	7.966	(1.002)	788617	50.0000	49.3
93 bis(2-Ethylhexyl)phthalate	149	7.895	7.895	(0.993)	598183	50.0000	51.5
94 Di-n-octylphthalate	149	8.295	8.295	(0.922)	774771	50.0000	54.2
95 Benzo(b)fluoranthene	252	8.671	8.671	(0.964)	696168	50.0000	52.9
96 Benzo(k)fluoranthene	252	8.694	8.694	(0.967)	612482	50.0000	50.4
97 Benzo(a)pyrene	252	8.947	8.947	(0.995)	524283	50.0000	54.2
99 Indeno(1,2,3-cd)pyrene	276	10.110	10.110	(1.124)	404428	50.0000	46.0
100 Dibenzo(a,h)anthracene	278	10.116	10.116	(1.125)	328387	50.0000	46.2(T)
101 Benzo(ghi)perylene	276	10.451	10.451	(1.162)	333180	50.0000	46.1(T)

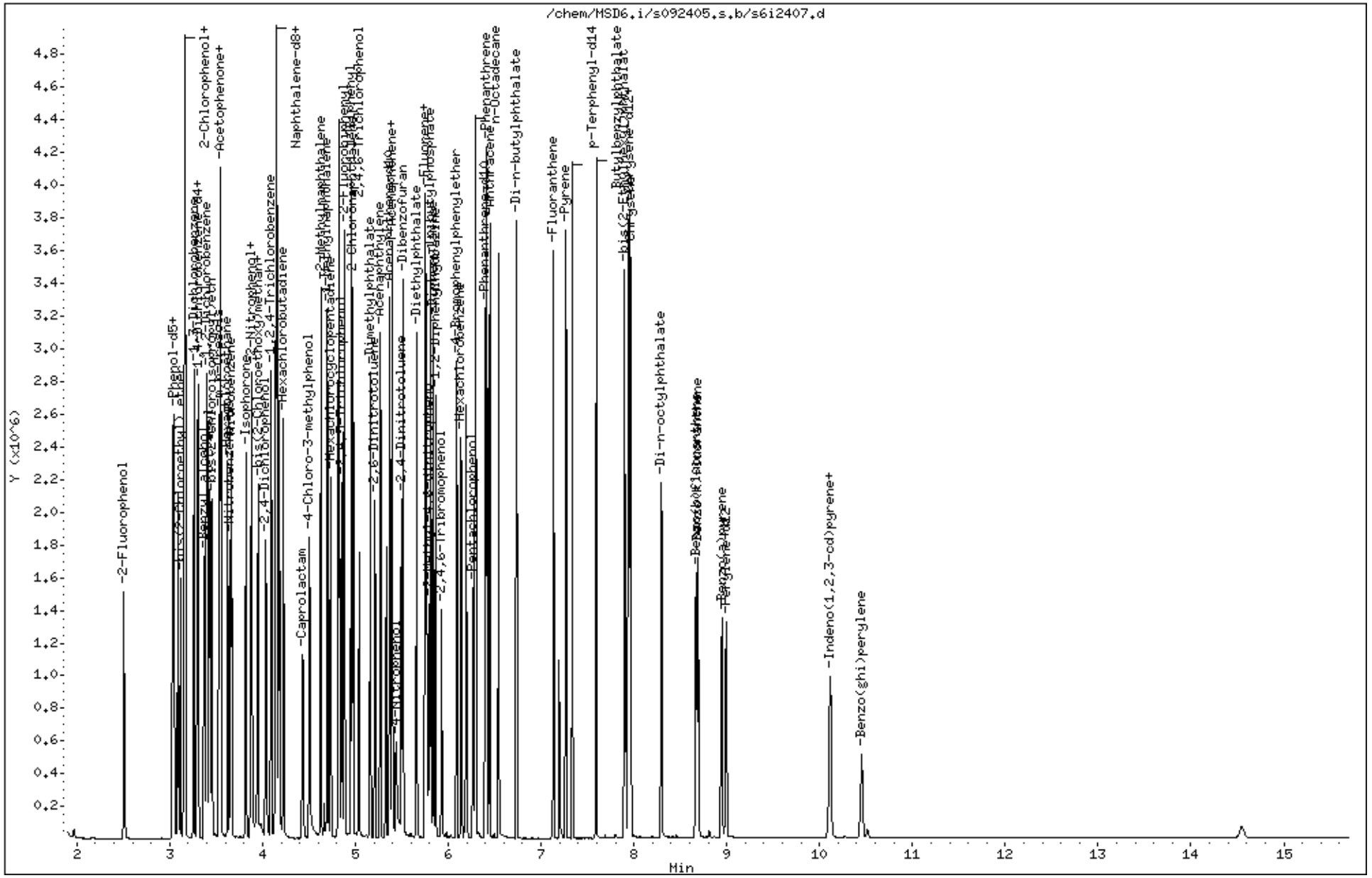
QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s092405.s.b/s6i2407.d
Date : 24-SEP-2005 17:37
Client ID: BNAICAL050
Sample Info: !UBN050924-05!50PPN!1!SVMF!1!BNA ICAL

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



General Engineering Laboratories, LLC

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Data file : /chem/MSD6.i/s092405.s.b/s6i2408.d
Lab Smp Id: UBN050924-06 Client Smp ID: BNAICAL080
Inj Date : 24-SEP-2005 18:01
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924-06|80PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:32 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 18:01 Cal File: s6i2408.d
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.294	3.294 (1.000)	203565	40.0000	
*	29 Naphthalene-d8	136	4.140	4.140 (1.000)	916472	40.0000	
*	46 Acenaphthene-d10	164	5.368	5.368 (1.000)	450241	40.0000	
*	67 Phenanthrene-d10	188	6.402	6.402 (1.000)	746724	40.0000	
*	91 Chrysene-d12	240	7.959	7.959 (1.000)	627291	40.0000	
*	98 Perylene-d12	264	9.005	9.005 (1.000)	468206	40.0000	
$	3 2-Fluorophenol	112	2.507	2.507 (0.761)	455266	80.0000	81.3
$	5 Phenol-d5	99	3.041	3.041 (0.923)	552421	80.0000	81.7
$	20 Nitrobenzene-d5	82	3.653	3.653 (0.882)	516373	80.0000	77.4
$	39 2-Fluorobiphenyl	172	4.886	4.886 (0.910)	979096	80.0000	77.7
$	60 2,4,6-Tribromophenol	329	5.932	5.932 (1.105)	173699	80.0000	81.6
$	81 p-Terphenyl-d14	244	7.342	7.342 (0.922)	1069143	80.0000	78.4
	1 N-Methyl-N-nitrosomethylamine	74	1.819	1.819 (0.552)	281725	80.0000	81.4
	2 Pyridine	79	1.843	1.843 (0.559)	485502	80.0000	82.4
	6 Phenol	94	3.047	3.047 (0.925)	561526	80.0000	80.4
	7 bis(2-Chloroethyl) ether	93	3.118	3.118 (0.946)	436088	80.0000	81.1
	8 2-Chlorophenol	128	3.165	3.165 (0.961)	452515	80.0000	80.1
	203 n-Decane	43	3.165	3.165 (0.961)	738546	80.0000	76.3
	9 1,3-Dichlorobenzene	146	3.259	3.259 (0.989)	571461	80.0000	79.7
	11 1,4-Dichlorobenzene	146	3.306	3.306 (1.004)	562541	80.0000	79.0
	12 Benzyl alcohol	108	3.370	3.370 (1.023)	276978	80.0000	82.3
	13 1,2-Dichlorobenzene	146	3.406	3.406 (1.034)	518468	80.0000	77.8
	14 bis(2-Chloroisopropyl)ether	45	3.453	3.453 (1.048)	1021453	80.0000	78.0
	15 o-Cresol	107	3.429	3.429 (1.041)	378302	80.0000	74.6(H)
	16 Acetophenone	105	3.553	3.553 (1.078)	649417	80.0000	79.6
	17 N-Nitrosodipropylamine	70	3.547	3.547 (1.077)	371901	80.0000	80.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	3.535	3.535	(1.073)	550749	80.0000	80.9
19	Hexachloroethane	117	3.623	3.623	(1.100)	223007	80.0000	80.9
21	Nitrobenzene	77	3.670	3.670	(0.886)	537654	80.0000	78.1
22	Isophorone	82	3.823	3.823	(0.923)	938636	80.0000	77.0
23	2-Nitrophenol	139	3.876	3.876	(0.936)	274412	80.0000	78.5
24	2,4-Dimethylphenol	122	3.888	3.888	(0.939)	441059	80.0000	75.7
25	bis(2-Chloroethoxy)methane	93	3.952	3.952	(0.955)	521542	80.0000	75.8
26	2,4-Dichlorophenol	162	4.040	4.040	(0.976)	428600	80.0000	78.2
27	Benzoic acid	105	3.964	3.964	(0.957)	255767	80.0000	81.6(H)
28	1,2,4-Trichlorobenzene	180	4.099	4.099	(0.990)	455184	80.0000	71.9
30	Naphthalene	128	4.158	4.158	(1.004)	1193203	80.0000	71.0
204	alpha-Terpineol	59	4.152	4.152	(1.003)	445799	80.0000	76.6
189	Caprolactam	113	4.452	4.452	(1.075)	158939	80.0000	79.0
32	Hexachlorobutadiene	225	4.228	4.228	(1.021)	290991	80.0000	75.0
33	4-Chloro-3-methylphenol	107	4.510	4.510	(1.089)	436233	80.0000	80.3
34	2-Methylnaphthalene	142	4.634	4.634	(1.119)	879852	80.0000	69.3
35	1-Methylnaphthalene	142	4.704	4.704	(1.136)	843908	80.0000	69.7
36	Hexachlorocyclopentadiene	237	4.734	4.734	(0.882)	316964	80.0000	86.2
208	1,1'Biphenyl	154	4.957	4.957	(0.923)	1081167	80.0000	77.8
37	2,4,6-Trichlorophenol	196	4.828	4.828	(0.899)	283984	80.0000	79.3
38	2,4,5-Trichlorophenol	196	4.857	4.857	(0.905)	288834	80.0000	77.4
40	2-Chloronaphthalene	162	4.980	4.980	(0.928)	877802	80.0000	77.0
43	Dimethylphthalate	163	5.163	5.163	(0.962)	1093130	80.0000	78.7
44	2,6-Dinitrotoluene	165	5.215	5.215	(0.972)	240961	80.0000	79.8
45	Acenaphthylene	152	5.274	5.274	(0.982)	1315826	80.0000	78.2
47	Acenaphthene	154	5.398	5.398	(1.005)	852618	80.0000	77.8
48	2,4-Dinitrophenol	184	5.409	5.409	(1.008)	126874	80.0000	81.1
49	Dibenzofuran	168	5.515	5.515	(1.027)	1186345	80.0000	77.0
50	2,4-Dinitrotoluene	165	5.503	5.503	(1.025)	323742	80.0000	82.3
51	Diethylphthalate	149	5.662	5.662	(1.055)	1116706	80.0000	79.1
52	4-Nitrophenol	139	5.445	5.445	(1.014)	153307	80.0000	83.8
53	Fluorene	166	5.762	5.762	(1.073)	940356	80.0000	74.9
54	4-Chlorophenylphenylether	204	5.750	5.750	(1.071)	489730	80.0000	77.8
55	2-Methyl-4,6-dinitrophenol	198	5.797	5.797	(0.905)	201660	80.0000	87.6
133	Diphenylamine	169	5.838	5.838	(0.912)	858258	80.0000	75.4
58	1,2-Diphenylhydrazine	77	5.868	5.868	(0.916)	1042349	80.0000	79.0
59	Tributylphosphate	99	5.815	5.815	(1.083)	1177941	80.0000	75.6
61	4-Bromophenylphenylether	248	6.097	6.097	(0.952)	323264	80.0000	79.2
63	Hexachlorobenzene	284	6.144	6.144	(0.960)	368104	80.0000	78.4
65	Pentachlorophenol	266	6.273	6.273	(0.980)	198351	80.0000	87.9
206	n-Octadecane	57	6.296	6.296	(0.983)	808440	80.0000	76.3
68	Phenanthrene	178	6.420	6.420	(1.003)	1323083	80.0000	75.1
69	Anthracene	178	6.449	6.449	(1.007)	1285054	80.0000	73.7
72	Di-n-butylphthalate	149	6.737	6.737	(1.052)	1624615	80.0000	75.5
76	Fluoranthene	202	7.137	7.137	(1.115)	1340678	80.0000	74.7
79	Pyrene	202	7.272	7.272	(0.914)	1384411	80.0000	75.0
85	Butylbenzylphthalate	149	7.601	7.601	(0.955)	742387	80.0000	80.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
89 Benzo(a)anthracene	228	7.947	7.947	(0.999)	1240729	80.0000	75.5
92 Chrysene	228	7.971	7.971	(1.001)	1166290	80.0000	77.1
93 bis(2-Ethylhexyl)phthalate	149	7.906	7.906	(0.993)	904971	80.0000	83.0
94 Di-n-octylphthalate	149	8.306	8.306	(0.922)	1253055	80.0000	85.9
95 Benzo(b)fluoranthene	252	8.682	8.682	(0.964)	1130087	80.0000	84.2
96 Benzo(k)fluoranthene	252	8.705	8.705	(0.967)	968138	80.0000	78.1
97 Benzo(a)pyrene	252	8.958	8.958	(0.995)	863552	80.0000	87.5
99 Indeno(1,2,3-cd)pyrene	276	10.127	10.127	(1.125)	728869	80.0000	78.3
100 Dibenzo(a,h)anthracene	278	10.133	10.133	(1.125)	599676	80.0000	79.8(T)
101 Benzo(ghi)perylene	276	10.474	10.474	(1.163)	604769	80.0000	79.2(T)

QC Flag Legend

T - Target compound detected outside RT window.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s092405.s.b/s6i2408.d
Date : 24-SEP-2005 18:01
Client ID: BNAICAL080
Sample Info: IUBN050924-0618OPPNI1ISWMFI1BNA ICAL
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

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Data file : /chem/MSD6.i/s092405.s.b/s6i2409.d
Lab Smp Id: UBN050924-07 Client Smp ID: BNAICAL100
Inj Date : 24-SEP-2005 18:25
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924-07|100PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:32 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 18:25 Cal File: s6i2409.d
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.295	3.295	(1.000)	215118	40.0000	
*	29 Naphthalene-d8	136	4.141	4.141	(1.000)	1005617	40.0000	
*	46 Acenaphthene-d10	164	5.369	5.369	(1.000)	472774	40.0000	
*	67 Phenanthrene-d10	188	6.403	6.403	(1.000)	786739	40.0000	
*	91 Chrysene-d12	240	7.948	7.948	(1.000)	648903	40.0000	
*	98 Perylene-d12	264	8.994	8.994	(1.000)	494058	40.0000	
$	3 2-Fluorophenol	112	2.508	2.508	(0.761)	596954	100.000	101
$	5 Phenol-d5	99	3.042	3.042	(0.923)	703966	100.000	98.6
$	20 Nitrobenzene-d5	82	3.653	3.653	(0.882)	660288	100.000	90.2
$	39 2-Fluorobiphenyl	172	4.887	4.887	(0.910)	1215316	100.000	91.8
$	60 2,4,6-Tribromophenol	329	5.933	5.933	(1.105)	226444	100.000	101
$	81 p-Terphenyl-d14	244	7.337	7.337	(0.923)	1303634	100.000	92.4
	1 N-Methyl-N-nitrosomethylamine	74	1.820	1.820	(0.552)	375439	100.000	103
	2 Pyridine	79	1.838	1.838	(0.558)	658014	100.000	106
	6 Phenol	94	3.048	3.048	(0.925)	722465	100.000	97.9
	7 bis(2-Chloroethyl) ether	93	3.119	3.119	(0.946)	549423	100.000	96.7
	8 2-Chlorophenol	128	3.166	3.166	(0.961)	566231	100.000	94.9
	203 n-Decane	43	3.166	3.166	(0.961)	886187	100.000	86.6
	9 1,3-Dichlorobenzene	146	3.260	3.260	(0.989)	727263	100.000	95.9
	11 1,4-Dichlorobenzene	146	3.307	3.307	(1.004)	716304	100.000	95.2
	12 Benzyl alcohol	108	3.371	3.371	(1.023)	366530	100.000	103
	13 1,2-Dichlorobenzene	146	3.407	3.407	(1.034)	665449	100.000	94.5
	14 bis(2-Chloroisopropyl)ether	45	3.454	3.454	(1.048)	1283732	100.000	92.8
	15 o-Cresol	107	3.430	3.430	(1.041)	485307	100.000	90.6
	16 Acetophenone	105	3.554	3.554	(1.078)	841847	100.000	97.7
	17 N-Nitrosodipropylamine	70	3.554	3.554	(1.078)	481240	100.000	98.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	3.536	3.536	(1.073)	711811	100.000	98.9
19	Hexachloroethane	117	3.624	3.624	(1.100)	286195	100.000	98.2
21	Nitrobenzene	77	3.671	3.671	(0.886)	678331	100.000	89.8
22	Isophorone	82	3.824	3.824	(0.923)	1217040	100.000	90.9
23	2-Nitrophenol	139	3.877	3.877	(0.936)	349455	100.000	91.1
24	2,4-Dimethylphenol	122	3.888	3.888	(0.939)	532313	100.000	83.3
25	bis(2-Chloroethoxy)methane	93	3.953	3.953	(0.955)	680765	100.000	90.2
26	2,4-Dichlorophenol	162	4.041	4.041	(0.976)	552697	100.000	91.9
27	Benzoic acid	105	3.977	3.977	(0.960)	381643	100.000	105
28	1,2,4-Trichlorobenzene	180	4.100	4.100	(0.990)	591083	100.000	85.0
30	Naphthalene	128	4.159	4.159	(1.004)	1468421	100.000	79.9
204	alpha-Terpineol	59	4.153	4.153	(1.003)	569812	100.000	89.2
189	Caprolactam	113	4.464	4.464	(1.078)	208151	100.000	94.3
32	Hexachlorobutadiene	225	4.229	4.229	(1.021)	371273	100.000	87.2
33	4-Chloro-3-methylphenol	107	4.517	4.517	(1.091)	565264	100.000	94.8
34	2-Methylnaphthalene	142	4.635	4.635	(1.119)	1106455	100.000	79.4
35	1-Methylnaphthalene	142	4.705	4.705	(1.136)	1054425	100.000	79.4
36	Hexachlorocyclopentadiene	237	4.734	4.734	(0.882)	406300	100.000	105
208	1,1'Biphenyl	154	4.964	4.964	(0.924)	1336591	100.000	91.6
37	2,4,6-Trichlorophenol	196	4.829	4.829	(0.899)	358084	100.000	95.2
38	2,4,5-Trichlorophenol	196	4.858	4.858	(0.905)	373662	100.000	95.4
40	2-Chloronaphthalene	162	4.981	4.981	(0.928)	1109212	100.000	92.7
43	Dimethylphthalate	163	5.169	5.169	(0.963)	1387749	100.000	95.2
44	2,6-Dinitrotoluene	165	5.216	5.216	(0.972)	322120	100.000	102
45	Acenaphthylene	152	5.275	5.275	(0.982)	1636794	100.000	92.6
47	Acenaphthene	154	5.398	5.398	(1.005)	1073667	100.000	93.2
48	2,4-Dinitrophenol	184	5.410	5.410	(1.008)	168311	100.000	99.5(Q)
49	Dibenzofuran	168	5.522	5.522	(1.028)	1493226	100.000	92.3
50	2,4-Dinitrotoluene	165	5.504	5.504	(1.025)	408196	100.000	98.9
51	Diethylphthalate	149	5.669	5.669	(1.056)	1411496	100.000	95.2
52	4-Nitrophenol	139	5.445	5.445	(1.014)	195095	100.000	102(Q)
53	Fluorene	166	5.763	5.763	(1.073)	1203558	100.000	91.3
54	4-Chlorophenylphenylether	204	5.751	5.751	(1.071)	629527	100.000	95.2
55	2-Methyl-4,6-dinitrophenol	198	5.798	5.798	(0.905)	266612	100.000	110(A)
133	Diphenylamine	169	5.839	5.839	(0.912)	1129266	100.000	94.2
58	1,2-Diphenylhydrazine	77	5.868	5.868	(0.916)	1271299	100.000	91.4
59	Tributylphosphate	99	5.816	5.816	(1.083)	1491128	100.000	91.2
61	4-Bromophenylphenylether	248	6.098	6.098	(0.952)	420407	100.000	97.8
63	Hexachlorobenzene	284	6.145	6.145	(0.960)	478277	100.000	96.6
65	Pentachlorophenol	266	6.274	6.274	(0.980)	260768	100.000	110
206	n-Octadecane	57	6.297	6.297	(0.983)	1005797	100.000	90.1
68	Phenanthrene	178	6.421	6.421	(1.003)	1611459	100.000	86.8
69	Anthracene	178	6.450	6.450	(1.007)	1644716	100.000	89.6
72	Di-n-butylphthalate	149	6.738	6.738	(1.052)	1958666	100.000	86.4
76	Fluoranthene	202	7.138	7.138	(1.115)	1644061	100.000	87.0
79	Pyrene	202	7.273	7.273	(0.915)	1691040	100.000	88.6
85	Butylbenzylphthalate	149	7.596	7.596	(0.956)	946993	100.000	99.0

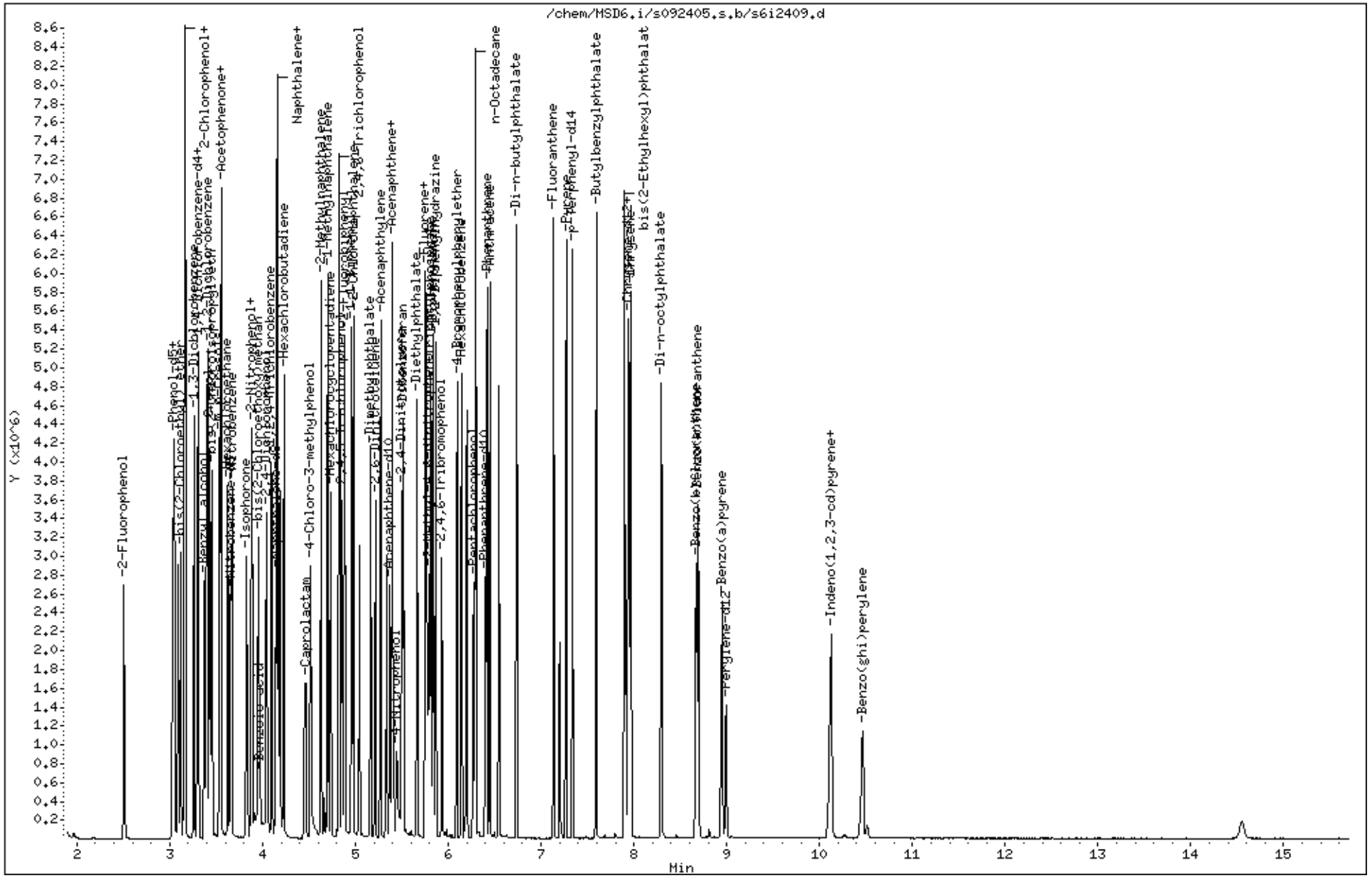
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
89	Benzo(a)anthracene	228	7.943	7.943	(0.999)	1578828	100.000	92.8
92	Chrysene	228	7.966	7.966	(1.002)	1380554	100.000	88.2
93	bis(2-Ethylhexyl)phthalate	149	7.896	7.896	(0.993)	1158796	100.000	103
94	Di-n-octylphthalate	149	8.295	8.295	(0.922)	1626693	100.000	106
95	Benzo(b)fluoranthene	252	8.671	8.671	(0.964)	1350401	100.000	95.4
96	Benzo(k)fluoranthene	252	8.695	8.695	(0.967)	1293105	100.000	98.9
97	Benzo(a)pyrene	252	8.953	8.953	(0.995)	1097099	100.000	105
99	Indeno(1,2,3-cd)pyrene	276	10.116	10.116	(1.125)	984679	100.000	99.1
100	Dibenzo(a,h)anthracene	278	10.128	10.128	(1.126)	789897	100.000	98.6(T)
101	Benzo(ghi)perylene	276	10.463	10.463	(1.163)	807520	100.000	99.2(T)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s092405.s.b/s6i2409.d
Date : 24-SEP-2005 18:25
Client ID: BNAICAL100
Sample Info: !UBN050924-07!100PPN!1!SVMF!1!BNA ICAL

Instrument: MSD6.i
Operator: jld1
Column phase: J & W DB-5MS
Column diameter: 0.20



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Data file : /chem/MSD6.i/s092405.s.b/s6i2410.d
Lab Smp Id: UBN050924-08 Client Smp ID: BNAICAL120
Inj Date : 24-SEP-2005 18:49
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050924-08|120PPN|1|SVMF|1|BNA ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092405.s.b/MSD6-8270-092405.m
Meth Date : 30-Sep-2005 11:33 jen00986 Quant Type: ISTD
Cal Date : 24-SEP-2005 18:49 Cal File: s6i2410.d
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT REL RT	RESPONSE	(ng/ul)	(ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.297	3.297 (1.000)	209767	40.0000	
*	29 Naphthalene-d8	136	4.143	4.143 (1.000)	1049975	40.0000	
*	46 Acenaphthene-d10	164	5.371	5.371 (1.000)	480452	40.0000	
*	67 Phenanthrene-d10	188	6.399	6.399 (1.000)	821571	40.0000	
*	91 Chrysene-d12	240	7.950	7.950 (1.000)	746997	40.0000	
*	98 Perylene-d12	264	8.996	8.996 (1.000)	686074	40.0000	
$	3 2-Fluorophenol	112	2.503	2.503 (0.759)	688444	120.000	119
$	5 Phenol-d5	99	3.044	3.044 (0.923)	805233	120.000	116
$	20 Nitrobenzene-d5	82	3.655	3.655 (0.882)	775359	120.000	101
$	39 2-Fluorobiphenyl	172	4.889	4.889 (0.910)	1395357	120.000	104
$	60 2,4,6-Tribromophenol	329	5.935	5.935 (1.105)	276393	120.000	122(A)
$	81 p-Terphenyl-d14	244	7.339	7.339 (0.923)	1595382	120.000	98.2
	1 N-Methyl-N-nitrosomethylamine	74	1.822	1.822 (0.553)	420437	120.000	118
	2 Pyridine	79	1.839	1.839 (0.558)	763848	120.000	126(A)
	6 Phenol	94	3.050	3.050 (0.925)	835315	120.000	116
	7 bis(2-Chloroethyl) ether	93	3.120	3.120 (0.947)	633535	120.000	114
	8 2-Chlorophenol	128	3.167	3.167 (0.961)	655385	120.000	113
	203 n-Decane	43	3.167	3.167 (0.961)	962394	120.000	96.4
	9 1,3-Dichlorobenzene	146	3.261	3.261 (0.989)	808436	120.000	109
	11 1,4-Dichlorobenzene	146	3.308	3.308 (1.004)	816633	120.000	111
	12 Benzyl alcohol	108	3.379	3.379 (1.025)	422190	120.000	122(A)
	13 1,2-Dichlorobenzene	146	3.408	3.408 (1.034)	753867	120.000	110
	14 bis(2-Chloroisopropyl)ether	45	3.455	3.455 (1.048)	1432763	120.000	106
	15 o-Cresol	107	3.432	3.432 (1.041)	594772	120.000	114
	16 Acetophenone	105	3.555	3.555 (1.078)	975330	120.000	116
	17 N-Nitrosodipropylamine	70	3.555	3.555 (1.078)	566301	120.000	119

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
18 m,p-Cresols	107	3.537	3.537	(1.073)	803802	120.000	114(Q)
19 Hexachloroethane	117	3.626	3.626	(1.100)	327489	120.000	115
21 Nitrobenzene	77	3.673	3.673	(0.887)	794047	120.000	101
22 Isophorone	82	3.825	3.825	(0.923)	1439439	120.000	103
23 2-Nitrophenol	139	3.878	3.878	(0.936)	411227	120.000	103
24 2,4-Dimethylphenol	122	3.890	3.890	(0.939)	714185	120.000	107(A)
25 bis(2-Chloroethoxy)methane	93	3.955	3.955	(0.955)	784865	120.000	99.6
26 2,4-Dichlorophenol	162	4.043	4.043	(0.976)	649335	120.000	103
27 Benzoic acid	105	3.984	3.984	(0.962)	445529	120.000	115(Q)
28 1,2,4-Trichlorobenzene	180	4.096	4.096	(0.989)	671505	120.000	92.5
30 Naphthalene	128	4.160	4.160	(1.004)	1672570	120.000	87.4(A)
204 alpha-Terpineol	59	4.160	4.160	(1.004)	654599	120.000	98.2
189 Caprolactam	113	4.472	4.472	(1.079)	252904	120.000	110
32 Hexachlorobutadiene	225	4.231	4.231	(1.021)	422604	120.000	95.1
33 4-Chloro-3-methylphenol	107	4.519	4.519	(1.091)	670794	120.000	108
34 2-Methylnaphthalene	142	4.636	4.636	(1.119)	1295922	120.000	89.0
35 1-Methylnaphthalene	142	4.707	4.707	(1.136)	1234946	120.000	89.0
36 Hexachlorocyclopentadiene	237	4.736	4.736	(0.882)	464713	120.000	118
208 1,1'Biphenyl	154	4.965	4.965	(0.924)	1538202	120.000	104
37 2,4,6-Trichlorophenol	196	4.830	4.830	(0.899)	432046	120.000	113
38 2,4,5-Trichlorophenol	196	4.859	4.859	(0.905)	442396	120.000	111
40 2-Chloronaphthalene	162	4.983	4.983	(0.928)	1285927	120.000	106
43 Dimethylphthalate	163	5.171	5.171	(0.963)	1631353	120.000	110
44 2,6-Dinitrotoluene	165	5.224	5.224	(0.973)	390527	120.000	121(A)
45 Acenaphthylene	152	5.277	5.277	(0.982)	1836278	120.000	102
47 Acenaphthene	154	5.400	5.400	(1.005)	1277717	120.000	109
48 2,4-Dinitrophenol	184	5.412	5.412	(1.008)	211108	120.000	120(AQ)
49 Dibenzofuran	168	5.523	5.523	(1.028)	1741876	120.000	106
50 2,4-Dinitrotoluene	165	5.506	5.506	(1.025)	498750	120.000	119
51 Diethylphthalate	149	5.670	5.670	(1.056)	1641587	120.000	109
52 4-Nitrophenol	139	5.453	5.453	(1.015)	226960	120.000	116
53 Fluorene	166	5.764	5.764	(1.073)	1411448	120.000	105
54 4-Chlorophenylphenylether	204	5.752	5.752	(1.071)	750283	120.000	112
55 2-Methyl-4,6-dinitrophenol	198	5.805	5.805	(0.907)	336523	120.000	133(A)
133 Diphenylamine	169	5.846	5.846	(0.914)	1316028	120.000	105
58 1,2-Diphenylhydrazine	77	5.870	5.870	(0.917)	1535380	120.000	106
59 Tributylphosphate	99	5.823	5.823	(1.084)	1758089	120.000	106
61 4-Bromophenylphenylether	248	6.099	6.099	(0.953)	508135	120.000	113
63 Hexachlorobenzene	284	6.146	6.146	(0.961)	575339	120.000	111
65 Pentachlorophenol	266	6.275	6.275	(0.981)	326031	120.000	131(A)
206 n-Octadecane	57	6.299	6.299	(0.984)	1156408	120.000	99.2
68 Phenanthrene	178	6.422	6.422	(1.004)	1909390	120.000	98.5
69 Anthracene	178	6.452	6.452	(1.008)	1929427	120.000	101
72 Di-n-butylphthalate	149	6.740	6.740	(1.053)	2254661	120.000	95.3
76 Fluoranthene	202	7.139	7.139	(1.116)	1991847	120.000	101
79 Pyrene	202	7.274	7.274	(0.915)	2044459	120.000	93.0
85 Butylbenzylphthalate	149	7.597	7.597	(0.956)	1200275	120.000	109

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
89	Benzo(a)anthracene	228	7.944	7.944	(0.999)	2152160	120.000	110
92	Chrysene	228	7.968	7.968	(1.002)	1740603	120.000	96.6
93	bis(2-Ethylhexyl)phthalate	149	7.897	7.897	(0.993)	1481182	120.000	114
94	Di-n-octylphthalate	149	8.297	8.297	(0.922)	2247465	120.000	105
95	Benzo(b)fluoranthene	252	8.673	8.673	(0.964)	2072247	120.000	105
96	Benzo(k)fluoranthene	252	8.702	8.702	(0.967)	1989928	120.000	110
97	Benzo(a)pyrene	252	8.955	8.955	(0.995)	1753293	120.000	121(A)
99	Indeno(1,2,3-cd)pyrene	276	10.130	10.130	(1.126)	1719742	120.000	124(A)
100	Dibenzo(a,h)anthracene	278	10.141	10.141	(1.127)	1380541	120.000	123(TA)
101	Benzo(ghi)perylene	276	10.476	10.476	(1.165)	1401377	120.000	123(TA)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s092405.s.b/s6i2410.d

Date : 24-SEP-2005 18:49

Client ID: BNAICAL120

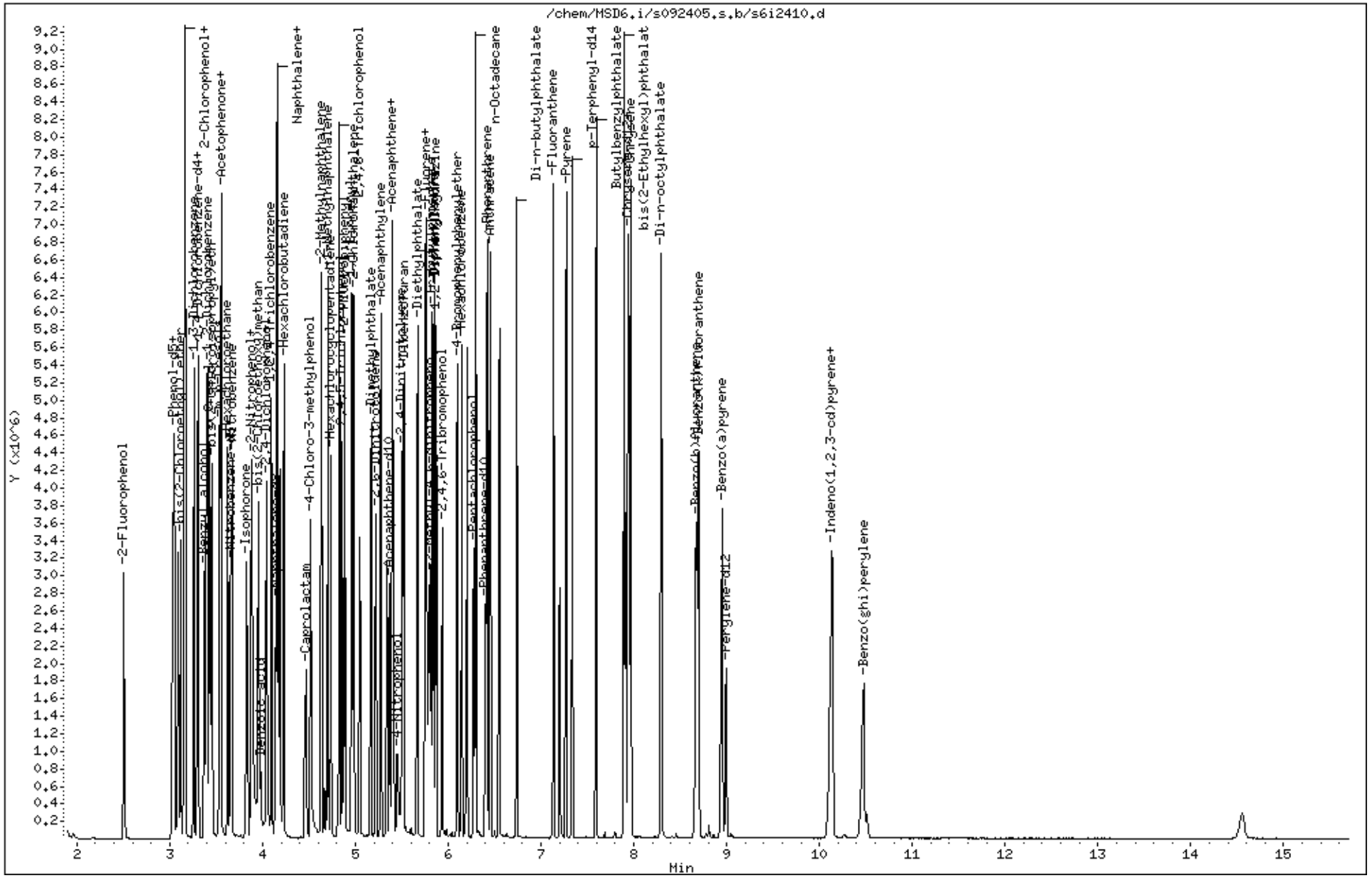
Sample Info: !UBN050924-08!120PPN!1!SVMF!1!BNA ICAL

Column phase: J & W DB-5MS

Instrument: MSD6.i

Operator: jld1

Column diameter: 0.20



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Data file : /chem/MSD6.i/s092605.s.b/s6i2605.d
Lab Smp Id: UBN050922-08 Client Smp ID: 168ICAL010
Inj Date : 26-SEP-2005 10:34
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050922-08|10PPN|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092605.s.b/MSD6-8270-092605.m
Meth Date : 30-Sep-2005 11:43 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 19:42 Cal File: s6i2629.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.293	3.293	(1.000)	200713	40.0000	
* 29 Naphthalene-d8	136	4.139	4.139	(1.000)	745924	40.0000	
* 46 Acenaphthene-d10	164	5.367	5.367	(1.000)	431306	40.0000	
* 67 Phenanthrene-d10	188	6.395	6.395	(1.000)	727024	40.0000	
* 91 Chrysene-d12	240	7.987	7.987	(1.000)	630587	40.0000	
* 98 Perylene-d12	264	9.045	9.045	(1.000)	500773	40.0000	
103 Methyl methacrylate	100	1.659	1.659	(0.504)	14396	10.0000	11.2
104 Ethyl methacrylate	69	2.029	2.029	(0.616)	57754	10.0000	10.8
105 2-Picoline	93	2.217	2.217	(0.673)	77946	10.0000	11.0
106 N-Nitrosomethylethylamine	88	2.264	2.264	(0.688)	30500	10.0000	10.6
107 Methyl methanesulfonate	80	2.423	2.423	(0.736)	39835	10.0000	11.4
108 N-Nitrosodiethylamine	102	2.640	2.640	(0.802)	30699	10.0000	10.6
109 Ethyl Methanesulfonate	79	2.805	2.805	(0.852)	48023	10.0000	10.6
110 Pentachloroethane	167	3.116	3.116	(0.946)	28240	10.0000	10.9
111 N-Nitrosopyrrolidine	100	3.528	3.528	(1.071)	29864	10.0000	10.0(Q)
113 N-Nitrosomorpholine	56	3.551	3.551	(1.079)	52384	10.0000	11.1
114 o-Toluidine	106	3.563	3.563	(1.082)	114339	10.0000	11.3
116 a,a-Dimethylphenethylamine	58	4.009	4.009	(0.969)	153397	10.0000	8.4
118 2,6-Dichlorophenol	162	4.186	4.186	(1.011)	49281	10.0000	10.5
119 Hexachloropropene	213	4.209	4.209	(1.017)	38619	10.0000	9.7
121 N-Nitrosodi-n-butylamine	84	4.397	4.397	(1.062)	45647	10.0000	10
122 Safrole	162	4.920	4.920	(1.189)	55229	10.0000	10.7
123 1,2,4,5-Tetrachlorobenzene	216	4.744	4.744	(0.884)	69297	10.0000	11.4
124 Isosafrole	162	4.920	4.920	(0.917)	55229	10.0000	10.8
125 1,4-Naphthoquinone	158	5.096	5.096	(0.950)	38298	10.0000	8.8
126 m-Dinitrobenzene	168	5.184	5.184	(0.966)	19136	10.0000	9.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127	Pentachlorobenzene	250	5.484	5.484	(1.022)	62482	10.0000	11.2
128	1-Naphthylamine	143	5.566	5.566	(1.037)	135804	10.0000	11.1
129	2-Naphthylamine	143	5.619	5.619	(1.047)	141905	10.0000	11.7
130	2,3,4,6-Tetrachlorophenol	232	5.596	5.596	(1.043)	20770	10.0000	8.0
131	5-Nitro-o-toluidine	152	5.754	5.754	(1.072)	36596	10.0000	9.4
137	Phenacetin	108	6.036	6.036	(0.944)	64025	10.0000	9.0
140	4-Aminobiphenyl	169	6.266	6.266	(0.980)	142015	10.0000	10.8
141	Pentachloronitrobenzene	237	6.277	6.277	(0.982)	17445	10.0000	10.0
142	Pronamide	173	6.289	6.289	(0.983)	63837	10.0000	10.2
143	Dinoseb	211	6.377	6.377	(0.997)	11403	10.0000	12.0
146	4-Nitroquinoline-1-oxide	101	6.882	6.882	(1.076)	5217	10.0000	9.4
147	Methapyrilene	58	6.918	6.918	(1.082)	128108	10.0000	10.4
149	Aramite	185	7.323	7.323	(1.145)	7240	10.0000	8.1(H)
151	p-(Dimethylamino)azobenzene	120	7.429	7.429	(0.930)	56623	10.0000	10.1
153	3,3'-Dimethylbenzidine	212	7.629	7.629	(0.955)	87412	10.0000	10.0
155	2-Acetylaminofluorene	181	7.776	7.776	(0.974)	39963	10.0000	10.8
157	7,12Dimethylbenz(a)anthracene	256	8.698	8.698	(0.962)	72027	10.0000	10.3
158	3-Methylcholanthrene	268	9.297	9.297	(1.028)	64444	10.0000	9.5(Q)

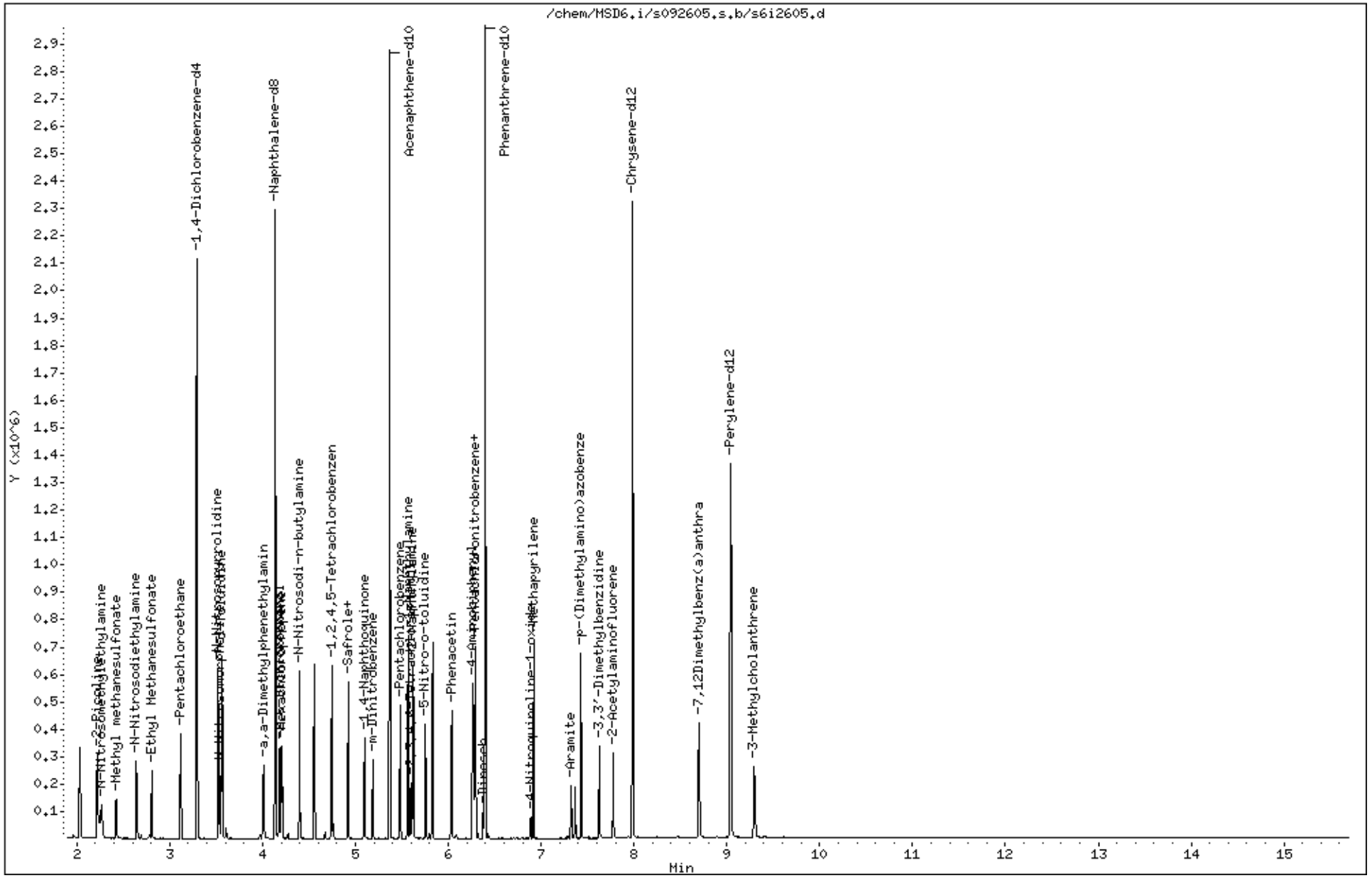
QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s092605.s.b/s6i2605.d
Date : 26-SEP-2005 10:34
Client ID: 168ICAL010
Sample Info: !UBN050922-08!10PPNI1!SVMF!1!168 ICAL

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



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Data file : /chem/MSD6.i/s092605.s.b/s6i2606.d
Lab Smp Id: UBN050922-09 Client Smp ID: 168ICAL020
Inj Date : 26-SEP-2005 10:58
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050922-09|20PPN|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092605.s.b/MSD6-8270-092605.m
Meth Date : 30-Sep-2005 11:43 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 20:10 Cal File: s6i2630.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.289	3.289	(1.000)	210001	40.0000	
* 29 Naphthalene-d8	136	4.135	4.135	(1.000)	748797	40.0000	
* 46 Acenaphthene-d10	164	5.369	5.369	(1.000)	428961	40.0000	
* 67 Phenanthrene-d10	188	6.397	6.397	(1.000)	725885	40.0000	
* 91 Chrysene-d12	240	7.954	7.954	(1.000)	689188	40.0000	
* 98 Perylene-d12	264	9.006	9.006	(1.000)	626257	40.0000	
103 Methyl methacrylate	100	1.655	1.655	(0.503)	24941	20.0000	18.5
104 Ethyl methacrylate	69	2.031	2.031	(0.618)	106906	20.0000	19.2
105 2-Picoline	93	2.213	2.213	(0.673)	140525	20.0000	19.0
106 N-Nitrosomethylethylamine	88	2.266	2.266	(0.689)	56566	20.0000	18.9
107 Methyl methanesulfonate	80	2.419	2.419	(0.736)	69967	20.0000	19.1
108 N-Nitrosodiethylamine	102	2.642	2.642	(0.803)	57194	20.0000	18.9
109 Ethyl Methanesulfonate	79	2.807	2.807	(0.854)	92124	20.0000	19.5
110 Pentachloroethane	167	3.118	3.118	(0.948)	52249	20.0000	19.3
111 N-Nitrosopyrrolidine	100	3.530	3.530	(1.073)	57655	20.0000	18.5(Q)
113 N-Nitrosomorpholine	56	3.553	3.553	(1.080)	98045	20.0000	19.8
114 o-Toluidine	106	3.565	3.565	(1.084)	209438	20.0000	19.7
116 a,a-Dimethylphenethylamine	58	4.017	4.017	(0.972)	334014	20.0000	18.2
118 2,6-Dichlorophenol	162	4.182	4.182	(1.011)	90982	20.0000	19.3
119 Hexachloropropene	213	4.205	4.205	(1.017)	77882	20.0000	19.4
121 N-Nitrosodi-n-butylamine	84	4.399	4.399	(1.064)	88763	20.0000	19.3
122 Safrole	162	4.922	4.922	(1.190)	100884	20.0000	19.4
123 1,2,4,5-Tetrachlorobenzene	216	4.746	4.746	(0.884)	126787	20.0000	20.9
124 Isosafrole	162	4.922	4.922	(0.917)	100884	20.0000	19.9
125 1,4-Naphthoquinone	158	5.092	5.092	(0.949)	80017	20.0000	18.6
126 m-Dinitrobenzene	168	5.186	5.186	(0.966)	39926	20.0000	19.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127 Pentachlorobenzene	250	5.480	5.480	(1.021)	114097	20.0000	20.7
128 1-Naphthylamine	143	5.562	5.562	(1.036)	256376	20.0000	21.1
129 2-Naphthylamine	143	5.621	5.621	(1.047)	265226	20.0000	22.0
130 2,3,4,6-Tetrachlorophenol	232	5.592	5.592	(1.042)	45315	20.0000	17.6
131 5-Nitro-o-toluidine	152	5.756	5.756	(1.072)	76512	20.0000	19.7
137 Phenacetin	108	6.033	6.033	(0.943)	130750	20.0000	18.3
140 4-Aminobiphenyl	169	6.262	6.262	(0.979)	270379	20.0000	20.5
141 Pentachloronitrobenzene	237	6.273	6.273	(0.981)	34010	20.0000	19.5
142 Pronamide	173	6.291	6.291	(0.983)	125400	20.0000	20.0
143 Dinoseb	211	6.373	6.373	(0.996)	32662	20.0000	19.5
146 4-Nitroquinoline-1-oxide	101	6.884	6.884	(1.076)	13180	20.0000	23.8
147 Methapyrilene	58	6.914	6.914	(1.081)	259613	20.0000	21.2
149 Aramite	185	7.313	7.313	(1.143)	17114	20.0000	19.3(H)
151 p-(Dimethylamino)azobenzene	120	7.413	7.413	(0.932)	114459	20.0000	18.7
153 3,3'-Dimethylbenzidine	212	7.607	7.607	(0.956)	199625	20.0000	20.9
155 2-Acetylaminofluorene	181	7.748	7.748	(0.974)	115844	20.0000	21.0
157 7,12Dimethylbenz(a)anthracene	256	8.659	8.659	(0.962)	162045	20.0000	18.6(H)
158 3-Methylcholanthrene	268	9.252	9.252	(1.027)	165116	20.0000	19.5(QH)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s092605.s.b/s6i2606.d

Date : 26-SEP-2005 10:58

Client ID: 168ICAL020

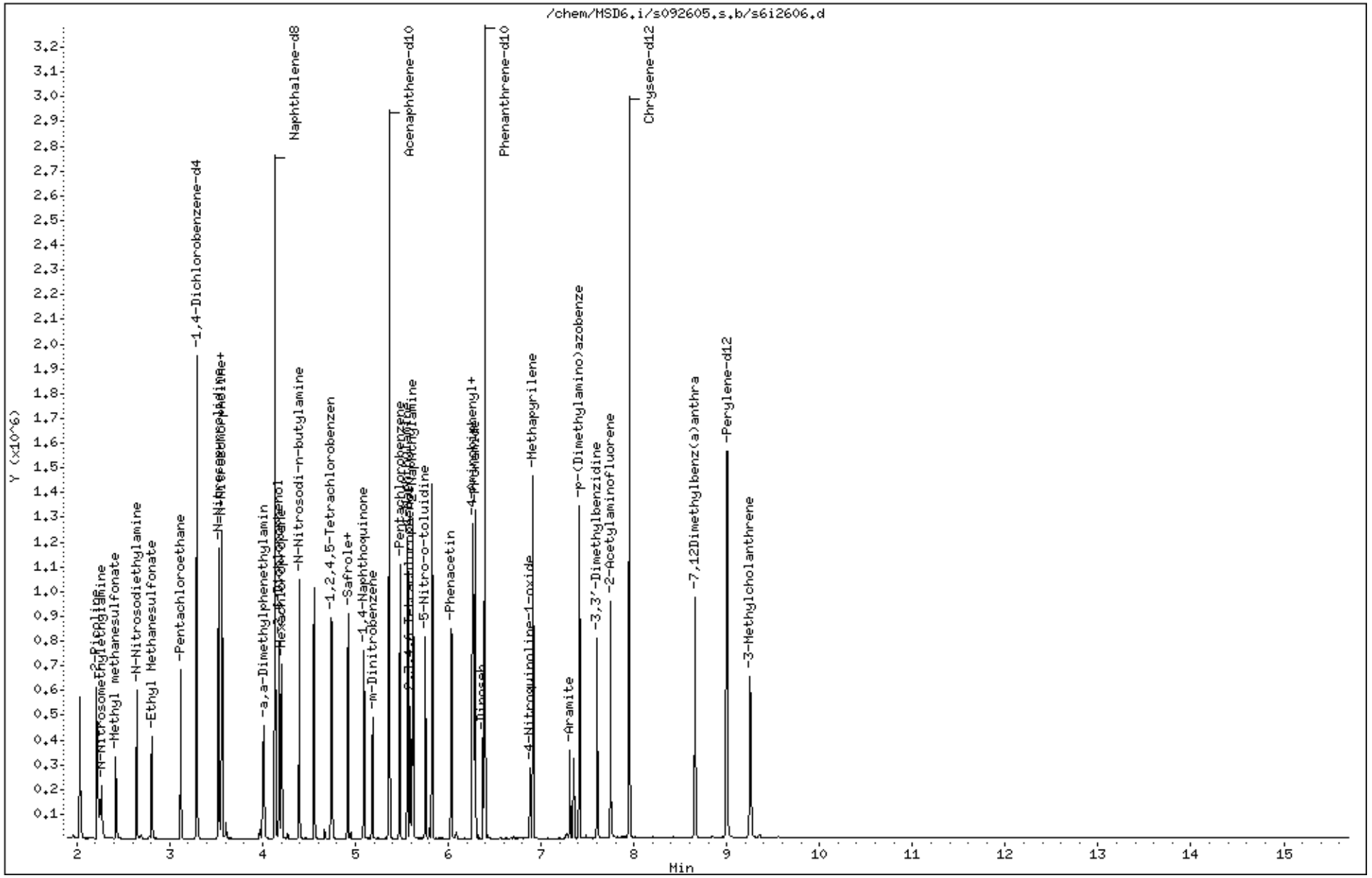
Sample Info: !UBN050922-09!20PPNI1!SVMFI1!168 ICAL

Column phase: J & W DB-5MS

Instrument: MSD6.i

Operator: jld1

Column diameter: 0.20



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Data file : /chem/MSD6.i/s092605.s.b/s6i2607.d
Lab Smp Id: UBN050922-10 Client Smp ID: 168ICAL040
Inj Date : 26-SEP-2005 11:22
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050922-10|40PPN|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092605.s.b/MSD6-8270-092605.m
Meth Date : 30-Sep-2005 11:56 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 20:38 Cal File: s6i2631.d
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.293	3.293	(1.000)	226852	40.0000	
* 29 Naphthalene-d8	136	4.139	4.139	(1.000)	824038	40.0000	
* 46 Acenaphthene-d10	164	5.367	5.367	(1.000)	489491	40.0000	
* 67 Phenanthrene-d10	188	6.395	6.395	(1.000)	797302	40.0000	
* 91 Chrysene-d12	240	7.946	7.946	(1.000)	728552	40.0000	
* 98 Perylene-d12	264	8.992	8.992	(1.000)	607946	40.0000	
103 Methyl methacrylate	100	1.659	1.659	(0.504)	55356	40.0000	38.0
104 Ethyl methacrylate	69	2.029	2.029	(0.616)	230557	40.0000	38.3(H)
105 2-Picoline	93	2.212	2.212	(0.672)	310921	40.0000	38.9
106 N-Nitrosomethylethylamine	88	2.264	2.264	(0.688)	122384	40.0000	37.8(H)
107 Methyl methanesulfonate	80	2.423	2.423	(0.736)	151643	40.0000	38.3(H)
108 N-Nitrosodiethylamine	102	2.646	2.646	(0.804)	128898	40.0000	39.5
109 Ethyl Methanesulfonate	79	2.805	2.805	(0.852)	195245	40.0000	38.3(H)
110 Pentachloroethane	167	3.116	3.116	(0.946)	114415	40.0000	39.1
111 N-Nitrosopyrrolidine	100	3.534	3.534	(1.073)	126279	40.0000	37.5
113 N-Nitrosomorpholine	56	3.557	3.557	(1.080)	207907	40.0000	38.9(H)
114 o-Toluidine	106	3.569	3.569	(1.084)	445031	40.0000	38.8(H)
116 a,a-Dimethylphenethylamine	58	4.015	4.015	(0.970)	796601	40.0000	39.3(H)
118 2,6-Dichlorophenol	162	4.186	4.186	(1.011)	201629	40.0000	38.9(H)
119 Hexachloropropene	213	4.209	4.209	(1.017)	174387	40.0000	39.5(H)
121 N-Nitrosodi-n-butylamine	84	4.397	4.397	(1.062)	194841	40.0000	38.5(H)
122 Safrole	162	4.920	4.920	(1.189)	219799	40.0000	38.5(H)
123 1,2,4,5-Tetrachlorobenzene	216	4.744	4.744	(0.884)	266700	40.0000	38.5(H)
124 Isosafrole	162	4.920	4.920	(0.917)	219799	40.0000	38.0(H)
125 1,4-Naphthoquinone	158	5.096	5.096	(0.950)	193382	40.0000	39.3(H)
126 m-Dinitrobenzene	168	5.185	5.185	(0.966)	89873	40.0000	38.0(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127 Pentachlorobenzene	250	5.484	5.484	(1.022)	243927	40.0000	38.7(H)
128 1-Naphthylamine	143	5.566	5.566	(1.037)	532111	40.0000	38.4(H)
129 2-Naphthylamine	143	5.625	5.625	(1.048)	524565	40.0000	38.1(H)
130 2,3,4,6-Tetrachlorophenol	232	5.596	5.596	(1.043)	114407	40.0000	39.0(H)
131 5-Nitro-o-toluidine	152	5.760	5.760	(1.073)	168417	40.0000	38.0(H)
137 Phenacetin	108	6.042	6.042	(0.945)	298087	40.0000	38.0(H)
140 4-Aminobiphenyl	169	6.266	6.266	(0.980)	576676	40.0000	39.9(H)
141 Pentachloronitrobenzene	237	6.277	6.277	(0.982)	77690	40.0000	40.6
142 Pronamide	173	6.295	6.295	(0.984)	278497	40.0000	40.5(H)
143 Dinoseb	211	6.377	6.377	(0.997)	88337	40.0000	36.5(H)
146 4-Nitroquinoline-1-oxide	101	6.883	6.883	(1.076)	25449	40.0000	41.9(H)
147 Methapyrilene	58	6.912	6.912	(1.081)	573324	40.0000	42.6(H)
149 Aramite	185	7.306	7.306	(1.142)	38447	40.0000	39.4(H)
151 p-(Dimethylamino)azobenzene	120	7.411	7.411	(0.933)	244477	40.0000	37.9
153 3,3'-Dimethylbenzidine	212	7.599	7.599	(0.956)	393895	40.0000	39.1
155 2-Acetylaminofluorene	181	7.740	7.740	(0.974)	247092	40.0000	37.8(H)
157 7,12Dimethylbenz(a)anthracene	256	8.651	8.651	(0.962)	320614	40.0000	37.9(H)
158 3-Methylcholanthrene	268	9.244	9.244	(1.028)	318172	40.0000	38.8(H)

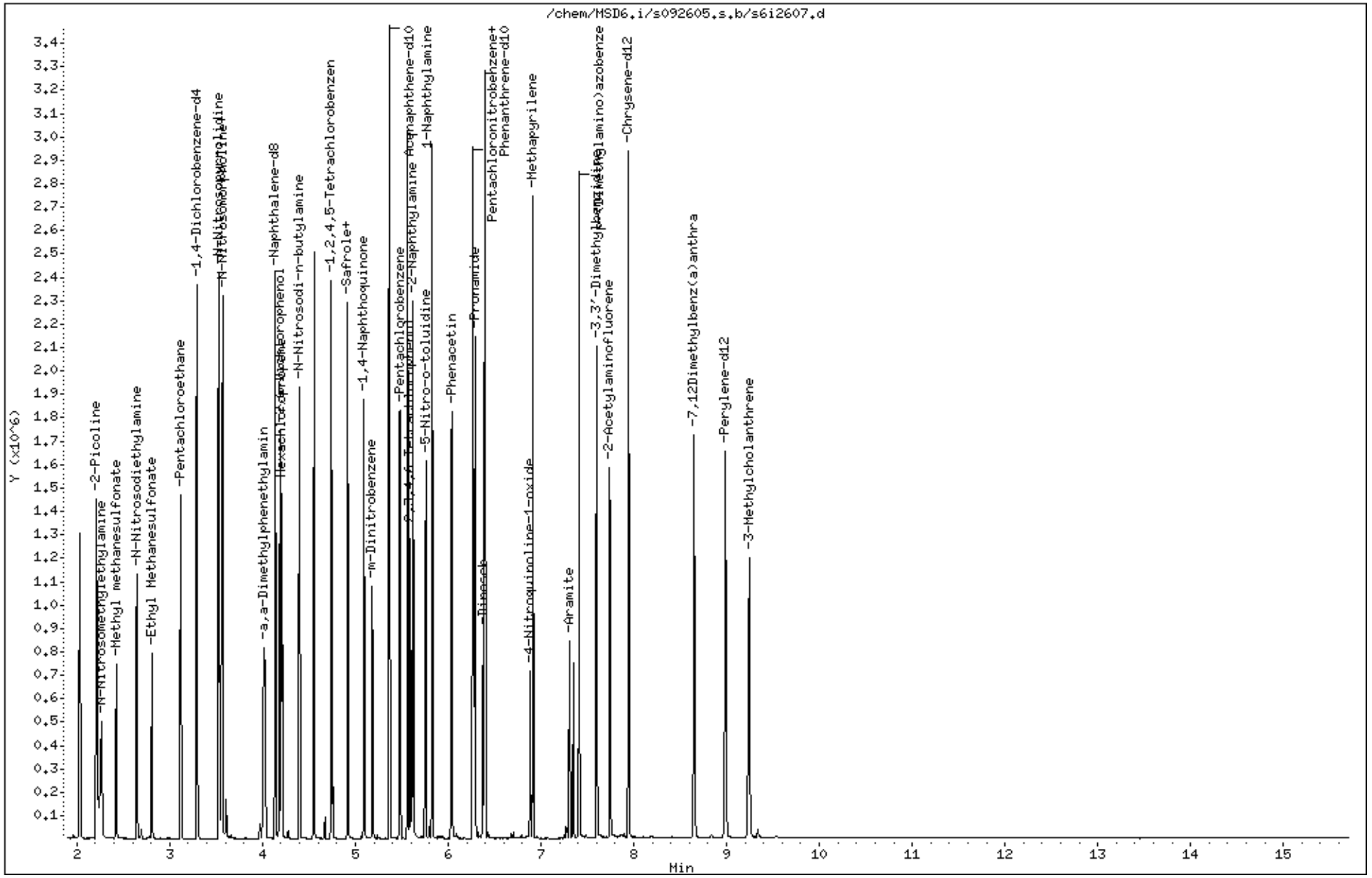
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/MSD6.i/s092605.s.b/s6i2607.d
Date : 26-SEP-2005 11:22
Client ID: 168ICAL040
Sample Info: !UBN050922-10!40PPNI1!SVMF!1!168 ICAL

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s092605.s.b/s6i2608.d
Lab Smp Id: UBN050922-11 Client Smp ID: 168ICAL050
Inj Date : 26-SEP-2005 11:45
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050922-11|50PPN|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092605.s.b/MSD6-8270-092605.m
Meth Date : 30-Sep-2005 11:43 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 21:06 Cal File: s6i2632.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.292	3.292	(1.000)	240106	40.0000	
* 29 Naphthalene-d8	136	4.138	4.138	(1.000)	879353	40.0000	
* 46 Acenaphthene-d10	164	5.366	5.366	(1.000)	525787	40.0000	
* 67 Phenanthrene-d10	188	6.400	6.400	(1.000)	870542	40.0000	
* 91 Chrysene-d12	240	7.945	7.945	(1.000)	866279	40.0000	
* 98 Perylene-d12	264	8.997	8.997	(1.000)	780298	40.0000	
103 Methyl methacrylate	100	1.658	1.658	(0.504)	71837	50.0000	46.6
104 Ethyl methacrylate	69	2.034	2.034	(0.618)	299937	50.0000	47.1
105 2-Picoline	93	2.210	2.210	(0.672)	386939	50.0000	45.8
106 N-Nitrosomethylethylamine	88	2.263	2.263	(0.688)	159146	50.0000	46.5
107 Methyl methanesulfonate	80	2.422	2.422	(0.736)	190630	50.0000	45.5
108 N-Nitrosodiethylamine	102	2.645	2.645	(0.804)	155890	50.0000	45.1
109 Ethyl Methanesulfonate	79	2.810	2.810	(0.854)	257262	50.0000	47.7
110 Pentachloroethane	167	3.121	3.121	(0.948)	145977	50.0000	47.1
111 N-Nitrosopyrrolidine	100	3.538	3.538	(1.075)	171376	50.0000	48.1(Q)
113 N-Nitrosomorpholine	56	3.562	3.562	(1.082)	269904	50.0000	47.7
114 o-Toluidine	106	3.568	3.568	(1.084)	566330	50.0000	46.6
116 a,a-Dimethylphenethylamine	58	4.026	4.026	(0.973)	1055884	50.0000	48.8
118 2,6-Dichlorophenol	162	4.185	4.185	(1.011)	264570	50.0000	47.8
119 Hexachloropropene	213	4.208	4.208	(1.017)	233016	50.0000	49.5
121 N-Nitrosodi-n-butylamine	84	4.402	4.402	(1.064)	253268	50.0000	46.9
122 Safrole	162	4.925	4.925	(1.190)	292217	50.0000	48.0
123 1,2,4,5-Tetrachlorobenzene	216	4.749	4.749	(0.885)	345615	50.0000	46.5
124 Isosafrole	162	4.925	4.925	(0.918)	292217	50.0000	47.0
125 1,4-Naphthoquinone	158	5.095	5.095	(0.950)	255003	50.0000	48.3
126 m-Dinitrobenzene	168	5.189	5.189	(0.967)	119214	50.0000	46.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
127 Pentachlorobenzene	250	5.483	5.483	(1.022)	309574	50.0000	45.7
128 1-Naphthylamine	143	5.571	5.571	(1.038)	698081	50.0000	46.9
129 2-Naphthylamine	143	5.624	5.624	(1.048)	690273	50.0000	46.7
130 2,3,4,6-Tetrachlorophenol	232	5.595	5.595	(1.043)	159845	50.0000	50.7
131 5-Nitro-o-toluidine	152	5.759	5.759	(1.073)	229959	50.0000	48.4
137 Phenacetin	108	6.041	6.041	(0.944)	409882	50.0000	47.9
140 4-Aminobiphenyl	169	6.264	6.264	(0.979)	766356	50.0000	48.5
141 Pentachloronitrobenzene	237	6.276	6.276	(0.981)	98122	50.0000	47.0
142 Pronamide	173	6.294	6.294	(0.983)	351420	50.0000	46.8
143 Dinoseb	211	6.376	6.376	(0.996)	143720	50.0000	50.4
146 4-Nitroquinoline-1-oxide	101	6.887	6.887	(1.076)	37162	50.0000	56.0
147 Methapyrilene	58	6.917	6.917	(1.081)	730179	50.0000	49.7
149 Aramite	185	7.310	7.310	(1.142)	54167	50.0000	50.8
151 p-(Dimethylamino)azobenzene	120	7.416	7.416	(0.933)	348816	50.0000	45.4
153 3,3'-Dimethylbenzidine	212	7.604	7.604	(0.957)	576498	50.0000	48.1
155 2-Acetylaminofluorene	181	7.745	7.745	(0.975)	379372	50.0000	47.4
157 7,12Dimethylbenz(a)anthracene	256	8.656	8.656	(0.962)	498221	50.0000	45.8
158 3-Methylcholanthrene	268	9.255	9.255	(1.029)	510933	50.0000	48.5(Q)

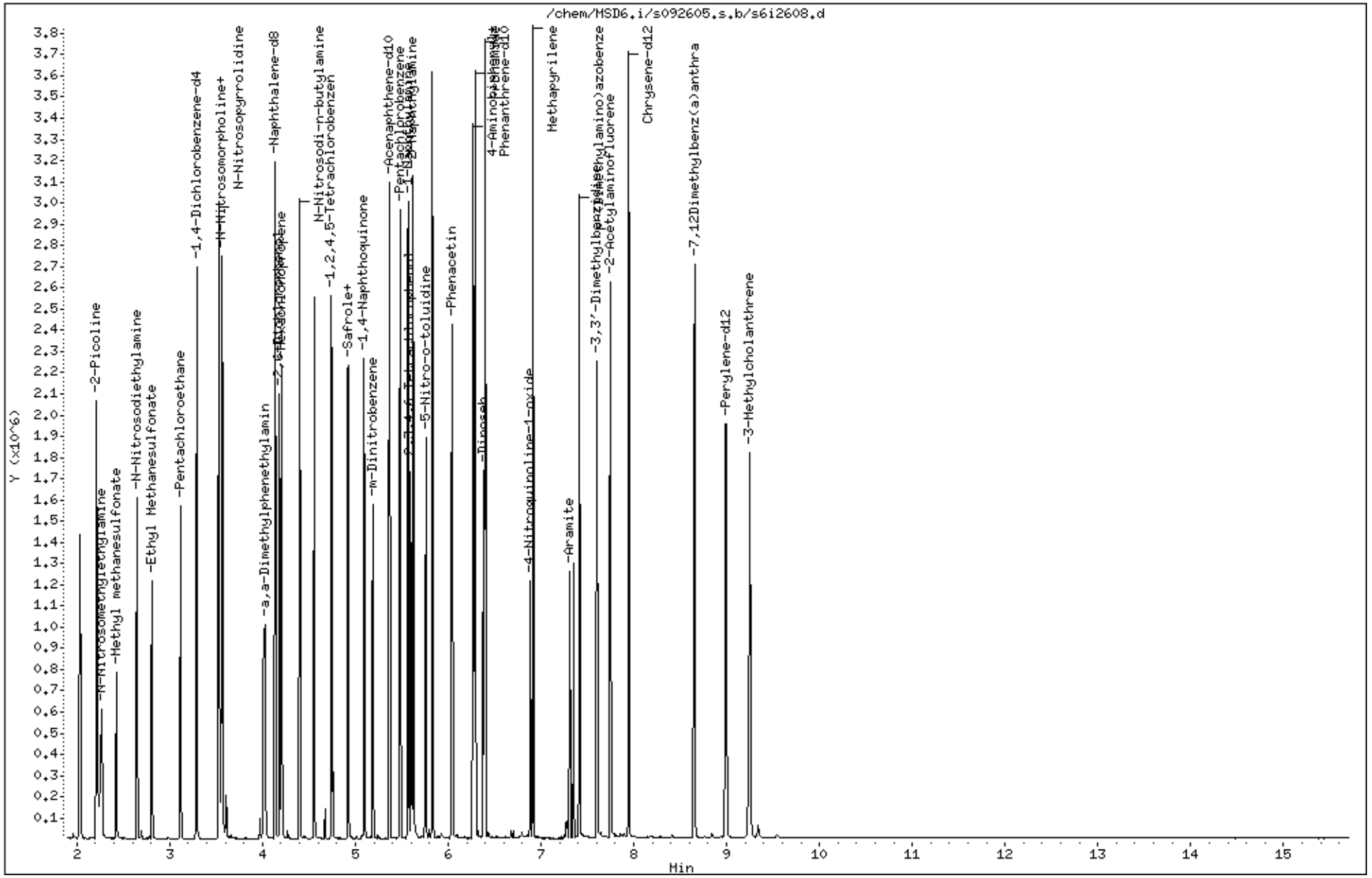
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s092605.s.b/s6i2608.d
Date : 26-SEP-2005 11:45
Client ID: 168ICAL050
Sample Info: !UBN050922-11!50PPN!1!SVMF!1!168 ICAL

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



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Data file : /chem/MSD6.i/s092605.s.b/s6i2609.d
Lab Smp Id: UBN050922-12 Client Smp ID: 168ICAL080
Inj Date : 26-SEP-2005 12:09
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050922-12|80PPN|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092605.s.b/MSD6-8270-092605.m
Meth Date : 30-Sep-2005 11:44 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 21:34 Cal File: s6i2633.d
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.295	3.295	(1.000)	190672	40.0000	
* 29 Naphthalene-d8	136	4.135	4.135	(1.000)	707933	40.0000	
* 46 Acenaphthene-d10	164	5.369	5.369	(1.000)	413139	40.0000	
* 67 Phenanthrene-d10	188	6.397	6.397	(1.000)	673038	40.0000	
* 91 Chrysene-d12	240	7.948	7.948	(1.000)	570446	40.0000	
* 98 Perylene-d12	264	8.994	8.994	(1.000)	414853	40.0000	
103 Methyl methacrylate	100	1.661	1.661	(0.504)	107923	80.0000	88.2
104 Ethyl methacrylate	69	2.032	2.032	(0.617)	444270	80.0000	87.8
105 2-Picoline	93	2.214	2.214	(0.672)	596416	80.0000	88.9
106 N-Nitrosomethylethylamine	88	2.267	2.267	(0.688)	243666	80.0000	89.6
107 Methyl methanesulfonate	80	2.431	2.431	(0.738)	293887	80.0000	88.2
108 N-Nitrosodiethylamine	102	2.648	2.648	(0.804)	242070	80.0000	88.3
109 Ethyl Methanesulfonate	79	2.813	2.813	(0.854)	373705	80.0000	87.2
110 Pentachloroethane	167	3.118	3.118	(0.946)	214951	80.0000	87.4
111 N-Nitrosopyrrolidine	100	3.542	3.542	(1.075)	257357	80.0000	90.9
113 N-Nitrosomorpholine	56	3.565	3.565	(1.082)	394211	80.0000	87.8
114 o-Toluidine	106	3.571	3.571	(1.084)	840370	80.0000	87.2
116 a,a-Dimethylphenethylamine	58	4.023	4.023	(0.973)	1623171	80.0000	93.3
118 2,6-Dichlorophenol	162	4.188	4.188	(1.013)	390971	80.0000	87.7
119 Hexachloropropene	213	4.211	4.211	(1.018)	338112	80.0000	89.2
121 N-Nitrosodi-n-butylamine	84	4.405	4.405	(1.065)	389414	80.0000	89.5
122 Safrole	162	4.922	4.922	(1.190)	432365	80.0000	88.1
123 1,2,4,5-Tetrachlorobenzene	216	4.746	4.746	(0.884)	501157	80.0000	85.8
124 Isosafrole	162	4.922	4.922	(0.917)	432365	80.0000	88.5
125 1,4-Naphthoquinone	158	5.099	5.099	(0.950)	389684	80.0000	93.9
126 m-Dinitrobenzene	168	5.193	5.193	(0.967)	182863	80.0000	91.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127 Pentachlorobenzene	250	5.486	5.486	(1.022)	450535	80.0000	84.7
128 1-Naphthylamine	143	5.569	5.569	(1.037)	1018052	80.0000	87.0
129 2-Naphthylamine	143	5.627	5.627	(1.048)	968916	80.0000	83.4
130 2,3,4,6-Tetrachlorophenol	232	5.598	5.598	(1.043)	235668	80.0000	95.2
131 5-Nitro-o-toluidine	152	5.768	5.768	(1.074)	346209	80.0000	92.7
137 Phenacetin	108	6.050	6.050	(0.946)	616763	80.0000	93.3
140 4-Aminobiphenyl	169	6.268	6.268	(0.980)	1054653	80.0000	86.4
141 Pentachloronitrobenzene	237	6.279	6.279	(0.982)	143987	80.0000	89.2
142 Pronamide	173	6.297	6.297	(0.984)	507431	80.0000	87.3
143 Dinoseb	211	6.379	6.379	(0.997)	203581	80.0000	85.8
146 4-Nitroquinoline-1-oxide	101	6.885	6.885	(1.076)	43723	80.0000	85.2(A)
147 Methapyrilene	58	6.914	6.914	(1.081)	991734	80.0000	87.2
149 Aramite	185	7.314	7.314	(1.143)	76952	80.0000	93.4
151 p-(Dimethylamino)azobenzene	120	7.419	7.419	(0.933)	480194	80.0000	95.0
153 3,3'-Dimethylbenzidine	212	7.607	7.607	(0.957)	700298	80.0000	88.7
155 2-Acetylaminofluorene	181	7.754	7.754	(0.976)	482122	80.0000	87.2
157 7,12Dimethylbenz(a)anthracene	256	8.659	8.659	(0.963)	521470	80.0000	90.3
158 3-Methylcholanthrene	268	9.258	9.258	(1.029)	498654	80.0000	89.1

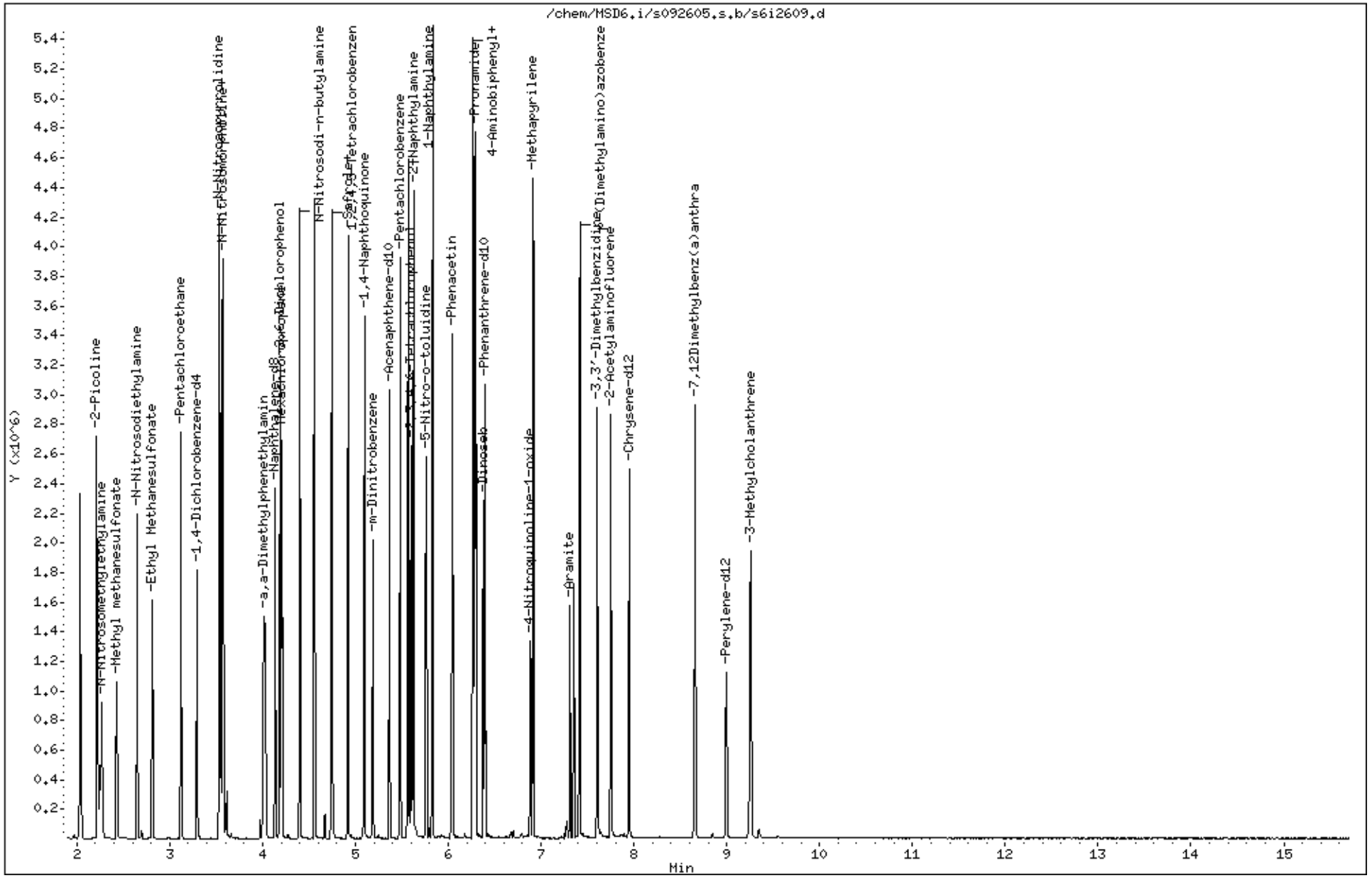
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD6.i/s092605.s.b/s6i2609.d
Date : 26-SEP-2005 12:09
Client ID: 168ICAL080
Sample Info: IUBN050922-12I80PPNI1ISVMFI1I168 ICAL

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



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Data file : /chem/MSD6.i/s092605.s.b/s6i2610.d
Lab Smp Id: UBN050922-13 Client Smp ID: 168ICAL100
Inj Date : 26-SEP-2005 12:34
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050922-13|100PPN|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092605.s.b/MSD6-8270-092605.m
Meth Date : 30-Sep-2005 11:56 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:02 Cal File: s6i2634.d
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.291	3.291	(1.000)	221045	40.0000	
* 29 Naphthalene-d8	136	4.137	4.137	(1.000)	801865	40.0000	
* 46 Acenaphthene-d10	164	5.371	5.371	(1.000)	479460	40.0000	
* 67 Phenanthrene-d10	188	6.399	6.399	(1.000)	749325	40.0000	
* 91 Chrysene-d12	240	7.945	7.945	(1.000)	615704	40.0000	
* 98 Perylene-d12	264	8.991	8.991	(1.000)	452060	40.0000	
103 Methyl methacrylate	100	1.658	1.658	(0.504)	140625	100.000	99.1
104 Ethyl methacrylate	69	2.034	2.034	(0.618)	575797	100.000	98.1
105 2-Picoline	93	2.210	2.210	(0.672)	763255	100.000	98.1
106 N-Nitrosomethylethylamine	88	2.269	2.269	(0.689)	315062	100.000	100
107 Methyl methanesulfonate	80	2.428	2.428	(0.738)	374321	100.000	97.0
108 N-Nitrosodiethylamine	102	2.651	2.651	(0.805)	321145	100.000	101
109 Ethyl Methanesulfonate	79	2.815	2.815	(0.855)	495338	100.000	99.8
110 Pentachloroethane	167	3.121	3.121	(0.948)	279570	100.000	98.1
111 N-Nitrosopyrrolidine	100	3.544	3.544	(1.077)	331710	100.000	101(Q)
113 N-Nitrosomorpholine	56	3.567	3.567	(1.084)	490916	100.000	94.3
114 o-Toluidine	106	3.573	3.573	(1.086)	1072004	100.000	95.9
116 a,a-Dimethylphenethylamine	58	4.020	4.020	(0.972)	2130304	100.000	108
118 2,6-Dichlorophenol	162	4.190	4.190	(1.013)	498849	100.000	98.8
119 Hexachloropropene	213	4.208	4.208	(1.017)	431071	100.000	100
121 N-Nitrosodi-n-butylamine	84	4.408	4.408	(1.065)	510807	100.000	104
122 Safrole	162	4.925	4.925	(1.190)	547553	100.000	98.5
123 1,2,4,5-Tetrachlorobenzene	216	4.748	4.748	(0.884)	632452	100.000	93.3
124 Isosafrole	162	4.925	4.925	(0.917)	547553	100.000	96.6
125 1,4-Naphthoquinone	158	5.101	5.101	(0.950)	496417	100.000	103
126 m-Dinitrobenzene	168	5.195	5.195	(0.967)	240342	100.000	104

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127	Pentachlorobenzene	250	5.489	5.489	(1.022)	592329	100.000	96.0
128	1-Naphthylamine	143	5.571	5.571	(1.037)	1266281	100.000	93.2
129	2-Naphthylamine	143	5.630	5.630	(1.048)	1201530	100.000	89.1
130	2,3,4,6-Tetrachlorophenol	232	5.600	5.600	(1.043)	300656	100.000	105
131	5-Nitro-o-toluidine	152	5.771	5.771	(1.074)	437732	100.000	101
137	Phenacetin	108	6.053	6.053	(0.946)	755517	100.000	103
140	4-Aminobiphenyl	169	6.270	6.270	(0.980)	1269793	100.000	93.4
141	Pentachloronitrobenzene	237	6.282	6.282	(0.982)	179343	100.000	99.8
142	Pronamide	173	6.300	6.300	(0.984)	640032	100.000	98.9
143	Dinoseb	211	6.382	6.382	(0.997)	255590	100.000	95.8
146	4-Nitroquinoline-1-oxide	101	6.887	6.887	(1.076)	48153	100.000	84.3(A)
147	Methapyrilene	58	6.916	6.916	(1.081)	1139343	100.000	90.0
149	Aramite	185	7.310	7.310	(1.142)	95787	100.000	104
151	p-(Dimethylamino)azobenzene	120	7.416	7.416	(0.933)	549902	100.000	101
153	3,3'-Dimethylbenzidine	212	7.604	7.604	(0.957)	823095	100.000	96.6
155	2-Acetylaminofluorene	181	7.751	7.751	(0.976)	585141	100.000	97.5
157	7,12Dimethylbenz(a)anthracene	256	8.656	8.656	(0.963)	648145	100.000	103
158	3-Methylcholanthrene	268	9.255	9.255	(1.029)	620171	100.000	102(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s092605.s.b/s6i2610.d

Page 1

Date : 26-SEP-2005 12:34

Client ID: 168ICAL100

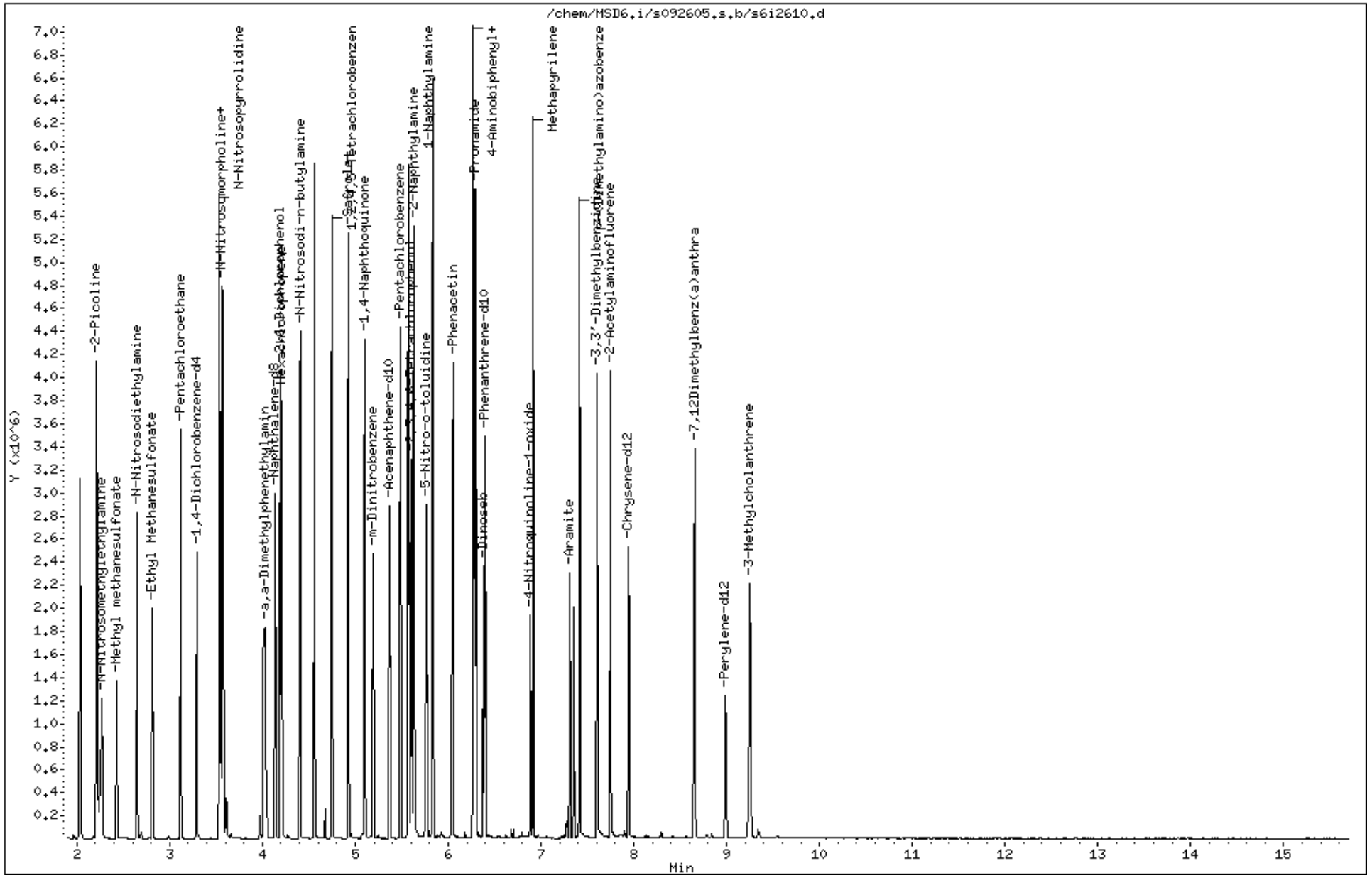
Instrument: MSD6.i

Sample Info: !UBN050922-13!100PPN!1!SVMF!1!168 ICAL

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



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Data file : /chem/MSD6.i/s092605.s.b/s6i2611.d
Lab Smp Id: UBN050922-14 Client Smp ID: 168ICAL120
Inj Date : 26-SEP-2005 12:57
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050922-14|120PPN|1|SVMF|1|168 ICAL
Misc Info : |MSD8270_LF|WBN050916-02
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s092605.s.b/MSD6-8270-092605.m
Meth Date : 30-Sep-2005 11:44 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng/ul)	(ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.291	3.291	(1.000)	219876	40.0000	
* 29 Naphthalene-d8	136	4.137	4.137	(1.000)	809495	40.0000	
* 46 Acenaphthene-d10	164	5.371	5.371	(1.000)	469855	40.0000	
* 67 Phenanthrene-d10	188	6.399	6.399	(1.000)	740980	40.0000	
* 91 Chrysene-d12	240	7.945	7.945	(1.000)	605674	40.0000	
* 98 Perylene-d12	264	8.990	8.990	(1.000)	428173	40.0000	
103 Methyl methacrylate	100	1.658	1.658	(0.504)	166096	120.000	118
104 Ethyl methacrylate	69	2.034	2.034	(0.618)	686263	120.000	118
105 2-Picoline	93	2.210	2.210	(0.672)	896320	120.000	116
106 N-Nitrosomethylethylamine	88	2.269	2.269	(0.689)	373750	120.000	119
107 Methyl methanesulfonate	80	2.433	2.433	(0.739)	447315	120.000	116
108 N-Nitrosodiethylamine	102	2.651	2.651	(0.805)	374100	120.000	118
109 Ethyl Methanesulfonate	79	2.815	2.815	(0.855)	567831	120.000	115
110 Pentachloroethane	167	3.121	3.121	(0.948)	323358	120.000	114
111 N-Nitrosopyrrolidine	100	3.544	3.544	(1.077)	402632	120.000	123(A)
113 N-Nitrosomorpholine	56	3.567	3.567	(1.084)	579553	120.000	112
114 o-Toluidine	106	3.573	3.573	(1.086)	1247237	120.000	112
116 a,a-Dimethylphenethylamine	58	4.026	4.026	(0.973)	2501441	120.000	126(A)
118 2,6-Dichlorophenol	162	4.190	4.190	(1.013)	595096	120.000	117
119 Hexachloropropene	213	4.208	4.208	(1.017)	503805	120.000	116
121 N-Nitrosodi-n-butylamine	84	4.408	4.408	(1.065)	588562	120.000	118
122 Safrole	162	4.925	4.925	(1.190)	640264	120.000	114
123 1,2,4,5-Tetrachlorobenzene	216	4.748	4.748	(0.884)	734907	120.000	110
124 Isosafrole	162	4.925	4.925	(0.917)	640264	120.000	115
125 1,4-Naphthoquinone	158	5.101	5.101	(0.950)	586156	120.000	124(A)
126 m-Dinitrobenzene	168	5.195	5.195	(0.967)	286417	120.000	126(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
127 Pentachlorobenzene	250	5.489	5.489	(1.022)	681873	120.000	113
128 1-Naphthylamine	143	5.577	5.577	(1.038)	1464175	120.000	110
129 2-Naphthylamine	143	5.635	5.635	(1.049)	1441794	120.000	109
130 2,3,4,6-Tetrachlorophenol	232	5.600	5.600	(1.043)	368474	120.000	131(A)
131 5-Nitro-o-toluidine	152	5.771	5.771	(1.074)	503547	120.000	118
137 Phenacetin	108	6.053	6.053	(0.946)	947499	120.000	130(A)
140 4-Aminobiphenyl	169	6.270	6.270	(0.980)	1479427	120.000	110
141 Pentachloronitrobenzene	237	6.282	6.282	(0.982)	203971	120.000	115
142 Pronamide	173	6.299	6.299	(0.984)	732494	120.000	114
143 Dinoseb	211	6.382	6.382	(0.997)	322193	120.000	120
146 4-Nitroquinoline-1-oxide	101	6.887	6.887	(1.076)	53583	120.000	94.9(A)
147 Methapyrilene	58	6.916	6.916	(1.081)	1274154	120.000	102
149 Aramite	185	7.310	7.310	(1.142)	109715	120.000	121(A)
151 p-(Dimethylamino)azobenzene	120	7.416	7.416	(0.933)	642505	120.000	120
153 3,3'-Dimethylbenzidine	212	7.604	7.604	(0.957)	944290	120.000	113
155 2-Acetylaminofluorene	181	7.751	7.751	(0.976)	703689	120.000	118
157 7,12Dimethylbenz(a)anthracene	256	8.655	8.655	(0.963)	726606	120.000	122(A)
158 3-Methylcholanthrene	268	9.255	9.255	(1.029)	693479	120.000	120(A)

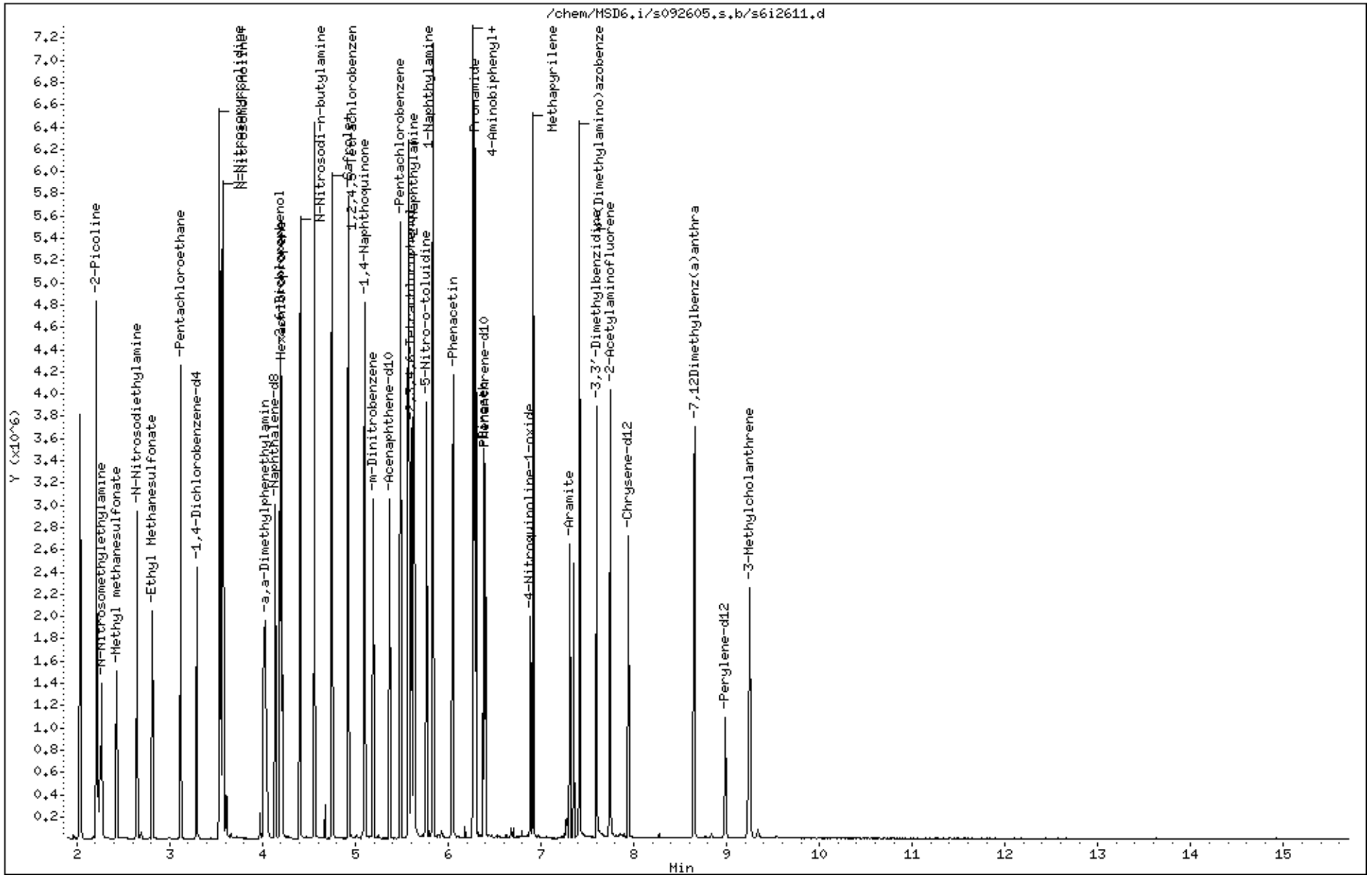
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/MSD6.i/s092605.s.b/s6i2611.d
Date : 26-SEP-2005 12:57
Client ID: 168ICAL120
Sample Info: !UBN050922-14!120PPN!1!SVMF!1!168 ICAL

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-OCT-2005 17:35
Lab File ID: s6j0802.d Init. Cal. Date(s): 23-SEP-2005 26-SEP-2005
Analysis Type: Init. Cal. Times: 20:38 22:30
Lab Sample ID: UBN050929-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 3 2-Fluorophenol	1.09989	1.00825	1.00825	0.000	-8.33201	60.00000	Averaged	
$ 5 Phenol-d5	1.32815	1.24218	1.24218	0.000	-6.47285	60.00000	Averaged	
$ 20 Nitrobenzene-d5	0.29116	0.32052	0.32052	0.000	10.08391	60.00000	Averaged	
$ 39 2-Fluorobiphenyl	1.11998	1.09150	1.09150	0.000	-2.54352	60.00000	Averaged	
$ 60 2,4,6-Tribromophenol	0.18898	0.18982	0.18982	0.000	0.44788	60.00000	Averaged	
$ 81 p-Terphenyl-d14	0.87012	0.84402	0.84402	0.000	-2.99992	60.00000	Averaged	
1 N-Methyl-N-nitrosomethylami	0.67998	0.57525	0.57525	0.000	-15.40212	60.00000	Averaged	
2 Pyridine	1.15816	0.96694	0.96694	0.000	-16.51071	60.00000	Averaged	
6 Phenol	1.37253	1.27143	1.27143	0.001	-7.36596	20.00000	Averaged	ccc
7 bis(2-Chloroethyl) ether	1.05683	0.96944	0.96944	0.000	-8.26904	60.00000	Averaged	
8 2-Chlorophenol	1.10986	1.13229	1.13229	0.000	2.02118	60.00000	Averaged	
203 n-Decane	1.90268	1.89999	1.89999	0.000	-0.14136	60.00000	Averaged	
9 1,3-Dichlorobenzene	1.40946	1.37001	1.37001	0.000	-2.79924	60.00000	Averaged	
11 1,4-Dichlorobenzene	1.39917	1.41561	1.41561	0.001	1.17480	20.00000	Averaged	ccc
12 Benzyl alcohol	0.66152	0.68615	0.68615	0.000	3.72310	60.00000	Averaged	
13 1,2-Dichlorobenzene	1.30937	1.32930	1.32930	0.000	1.52258	60.00000	Averaged	
14 bis(2-Chloroisopropyl)ether	2.57304	2.23329	2.23329	0.000	-13.20433	60.00000	Averaged	
15 o-Cresol	0.99583	0.89870	0.89870	0.000	-9.75349	60.00000	Averaged	
16 Acetophenone	1.60255	1.63665	1.63665	0.000	2.12761	60.00000	Averaged	
17 N-Nitrosodipropylamine	0.90587	0.93361	0.93361	0.050	3.06244	60.00000	Averaged	spcc
18 m,p-Cresols	1.33812	1.31541	1.31541	0.000	-1.69744	60.00000	Averaged	
19 Hexachloroethane	0.54177	0.57267	0.57267	0.000	5.70269	60.00000	Averaged	
21 Nitrobenzene	0.30057	0.32010	0.32010	0.000	6.49536	60.00000	Averaged	
22 Isophorone	0.53236	0.52706	0.52706	0.000	-0.99608	60.00000	Averaged	
23 2-Nitrophenol	0.15256	0.15316	0.15316	0.001	0.38776	20.00000	Averaged	ccc
24 2,4-Dimethylphenol	0.25417	0.25602	0.25602	0.000	0.72925	60.00000	Averaged	
25 bis(2-Chloroethoxy)methane	0.30012	0.29914	0.29914	0.000	-0.32697	60.00000	Averaged	
26 2,4-Dichlorophenol	0.23920	0.24891	0.24891	0.001	4.05877	20.00000	Averaged	ccc
27 Benzoic acid	34.27781	40.00000	0.07644	0.000	-14.30547	60.00000	Linear	
28 1,2,4-Trichlorobenzene	0.27641	0.29102	0.29102	0.000	5.28454	60.00000	Averaged	
30 Naphthalene	43.51262	40.00000	0.81140	0.000	8.78156	60.00000	Linear	
204 alpha-Terpineol	0.25398	0.26636	0.26636	0.000	4.87761	60.00000	Averaged	
189 Caprolactam	0.08781	0.08880	0.08880	0.000	1.12446	60.00000	Averaged	
32 Hexachlorobutadiene	0.16924	0.19742	0.19742	0.001	16.65147	20.00000	Averaged	ccc
33 4-Chloro-3-methylphenol	0.23708	0.25587	0.25587	0.001	7.92603	20.00000	Averaged	ccc
34 2-Methylnaphthalene	0.55445	0.56960	0.56960	0.000	2.73291	60.00000	Averaged	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-OCT-2005 17:35
Lab File ID: s6j0802.d Init. Cal. Date(s): 23-SEP-2005 26-SEP-2005
Analysis Type: Init. Cal. Times: 20:38 22:30
Lab Sample ID: UBN050929-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF40	RRF40	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
35 1-Methylnaphthalene	0.52838	0.52871	0.52871	0.000	0.06186	60.00000	Averaged
36 Hexachlorocyclopentadiene	0.32669	0.27026	0.27026	0.050	-17.27424	60.00000	Averaged spcc
208 1,1'Biphenyl	1.23517	1.24488	1.24488	0.000	0.78665	60.00000	Averaged
37 2,4,6-Trichlorophenol	0.31808	0.34377	0.34377	0.001	8.07819	20.00000	Averaged ccc
38 2,4,5-Trichlorophenol	0.33145	0.35843	0.35843	0.000	8.13939	60.00000	Averaged
40 2-Chloronaphthalene	1.01219	0.95895	0.95895	0.000	-5.26028	60.00000	Averaged
43 Dimethylphthalate	1.23343	1.15046	1.15046	0.000	-6.72684	60.00000	Averaged
44 2,6-Dinitrotoluene	0.26817	0.25305	0.25305	0.000	-5.63969	60.00000	Averaged
45 Acenaphthylene	1.49467	1.45955	1.45955	0.000	-2.34982	60.00000	Averaged
47 Acenaphthene	0.97415	0.95174	0.95174	0.001	-2.30109	20.00000	Averaged ccc
48 2,4-Dinitrophenol	35.09452	40.00000	0.09649	0.050	-12.26370	60.00000	Linear spcc
49 Dibenzofuran	1.36915	1.29542	1.29542	0.000	-5.38500	60.00000	Averaged
50 2,4-Dinitrotoluene	0.34930	0.32628	0.32628	0.000	-6.59026	60.00000	Averaged
51 Diethylphthalate	1.25424	1.23536	1.23536	0.000	-1.50555	60.00000	Averaged
52 4-Nitrophenol	0.16256	0.17308	0.17308	0.050	6.46875	60.00000	Averaged spcc
53 Fluorene	1.11507	1.13726	1.13726	0.000	1.98958	60.00000	Averaged
54 4-Chlorophenylphenylether	0.55929	0.58188	0.58188	0.000	4.03933	60.00000	Averaged
55 2-Methyl-4,6-dinitrophenol	0.12336	0.12063	0.12063	0.000	-2.21159	60.00000	Averaged
133 Diphenylamine	0.60935	0.62986	0.62986	0.001	3.36594	20.00000	Averaged ccc
58 1,2-Diphenylhydrazine	0.70698	0.81523	0.81523	0.000	15.31109	60.00000	Averaged
59 Tributylphosphate	1.38358	1.37780	1.37780	0.000	-0.41759	60.00000	Averaged
61 4-Bromophenylphenylether	0.21855	0.22241	0.22241	0.000	1.76805	60.00000	Averaged
63 Hexachlorobenzene	0.25163	0.26144	0.26144	0.000	3.89801	60.00000	Averaged
65 Pentachlorophenol	0.12083	0.12798	0.12798	0.001	5.91413	20.00000	Averaged ccc
206 n-Octadecane	0.56734	0.53641	0.53641	0.000	-5.45241	60.00000	Averaged
68 Phenanthrene	0.94397	0.97424	0.97424	0.000	3.20667	60.00000	Averaged
69 Anthracene	0.93346	0.97188	0.97188	0.000	4.11598	60.00000	Averaged
72 Di-n-butylphthalate	1.15210	1.26401	1.26401	0.000	9.71422	60.00000	Averaged
76 Fluoranthene	0.96127	1.03316	1.03316	0.001	7.47879	20.00000	Averaged ccc
79 Pyrene	1.17678	1.15009	1.15009	0.000	-2.26786	60.00000	Averaged
85 Butylbenzylphthalate	0.58991	0.56047	0.56047	0.000	-4.99084	60.00000	Averaged
89 Benzo(a)anthracene	1.04834	1.03111	1.03111	0.000	-1.64311	60.00000	Averaged
92 Chrysene	0.96505	0.94295	0.94295	0.000	-2.28926	60.00000	Averaged
93 bis(2-Ethylhexyl)phthalate	42.88229	40.00000	0.75510	0.000	7.20572	60.00000	Linear
94 Di-n-octylphthalate	1.24666	1.31535	1.31535	0.001	5.51013	20.00000	Averaged ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-OCT-2005 17:35
Lab File ID: s6j0802.d Init. Cal. Date(s): 23-SEP-2005 26-SEP-2005
Analysis Type: Init. Cal. Times: 20:38 22:30
Lab Sample ID: UBN050929-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
95 Benzo(b)fluoranthene	1.14634	1.11562	1.11562	0.000	-2.67978	60.00000	Averaged	
96 Benzo(k)fluoranthene	1.05898	1.09903	1.09903	0.000	3.78214	60.00000	Averaged	
97 Benzo(a)pyrene	0.84274	0.91535	0.91535	0.001	8.61643	20.00000	Averaged	ccc
99 Indeno(1,2,3-cd)pyrene	43.77793	40.00000	0.83355	0.000	9.44483	60.00000	Linear	
100 Dibenzo(a,h)anthracene	44.57778	40.00000	0.68708	0.000	11.44445	60.00000	Linear	
101 Benzo(ghi)perylene	42.82963	40.00000	0.66974	0.000	7.07407	60.00000	Linear	

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Data file : /chem/MSD6.i/s100805.s.b/s6j0802.d
Lab Smp Id: UBN050929-01.2 Client Smp ID: BNA CVS
Inj Date : 08-OCT-2005 17:35
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050929-01.2|40PPN|1|SVMF|1|BNA CVS
Misc Info : |MSD8270_LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 11-Oct-2005 15:26 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BNAICAL-NAB.sub
Target Version: 3.50
Processing Host: kilroy

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.156	3.156	(1.000)	211496	40.0000	
*	29 Naphthalene-d8	136	3.996	3.996	(1.000)	857210	40.0000	
*	46 Acenaphthene-d10	164	5.224	5.224	(1.000)	501554	40.0000	
*	67 Phenanthrene-d10	188	6.258	6.258	(1.000)	783067	40.0000	
*	91 Chrysene-d12	240	7.809	7.809	(1.000)	717920	40.0000	
*	98 Perylene-d12	264	8.773	8.773	(1.000)	543631	40.0000	
$	3 2-Fluorophenol	112	2.380	2.380	(0.754)	213241	40.0000	36.7
$	5 Phenol-d5	99	2.909	2.909	(0.922)	262717	40.0000	37.4
$	20 Nitrobenzene-d5	82	3.514	3.514	(0.879)	274752	40.0000	44.0
$	39 2-Fluorobiphenyl	172	4.742	4.742	(0.908)	547445	40.0000	39.0
$	60 2,4,6-Tribromophenol	329	5.782	5.782	(1.107)	95206	40.0000	40.2
$	81 p-Terphenyl-d14	244	7.210	7.210	(0.923)	605940	40.0000	38.8
	1 N-Methyl-N-nitrosomethylamine	74	1.704	1.704	(0.540)	121663	40.0000	33.8
	2 Pyridine	79	1.728	1.728	(0.548)	204504	40.0000	33.4
	6 Phenol	94	2.915	2.915	(0.924)	268903	40.0000	37.0
	7 bis(2-Chloroethyl) ether	93	2.985	2.985	(0.946)	205033	40.0000	36.7
	8 2-Chlorophenol	128	3.026	3.026	(0.959)	239475	40.0000	40.8
	203 n-Decane	43	3.032	3.032	(0.961)	401840	40.0000	39.9
	9 1,3-Dichlorobenzene	146	3.126	3.126	(0.991)	289751	40.0000	38.9
	11 1,4-Dichlorobenzene	146	3.167	3.167	(1.004)	299396	40.0000	40.5
	12 Benzyl alcohol	108	3.238	3.238	(1.026)	145117	40.0000	41.5
	13 1,2-Dichlorobenzene	146	3.267	3.267	(1.035)	281142	40.0000	40.6
	14 bis(2-Chloroisopropyl)ether	45	3.320	3.320	(1.052)	472331	40.0000	34.7
	15 o-Cresol	107	3.297	3.297	(1.045)	190071	40.0000	36.1
	16 Acetophenone	105	3.414	3.414	(1.082)	346144	40.0000	40.8
	17 N-Nitrosodipropylamine	70	3.408	3.408	(1.080)	197455	40.0000	41.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
18	m,p-Cresols	107	3.397	3.397	(1.076)	278204	40.0000	39.3
19	Hexachloroethane	117	3.485	3.485	(1.104)	121117	40.0000	42.3
21	Nitrobenzene	77	3.526	3.526	(0.882)	274390	40.0000	42.6
22	Isophorone	82	3.679	3.679	(0.921)	451797	40.0000	39.6
23	2-Nitrophenol	139	3.737	3.737	(0.935)	131286	40.0000	40.2
24	2,4-Dimethylphenol	122	3.749	3.749	(0.938)	219463	40.0000	40.3
25	bis(2-Chloroethoxy)methane	93	3.820	3.820	(0.956)	256425	40.0000	39.9
26	2,4-Dichlorophenol	162	3.896	3.896	(0.975)	213369	40.0000	41.6
27	Benzoic acid	105	3.808	3.808	(0.953)	65521	40.0000	34.3
28	1,2,4-Trichlorobenzene	180	3.955	3.955	(0.990)	249465	40.0000	42.1
30	Naphthalene	128	4.013	4.013	(1.004)	695542	40.0000	43.5
204	alpha-Terpineol	59	4.008	4.008	(1.003)	228330	40.0000	42.0
189	Caprolactam	113	4.295	4.295	(1.075)	76122	40.0000	40.4
32	Hexachlorobutadiene	225	4.084	4.084	(1.022)	169233	40.0000	46.7
33	4-Chloro-3-methylphenol	107	4.372	4.372	(1.094)	219336	40.0000	43.2
34	2-Methylnaphthalene	142	4.489	4.489	(1.123)	488271	40.0000	41.1
35	1-Methylnaphthalene	142	4.560	4.560	(1.141)	453216	40.0000	40.0
36	Hexachlorocyclopentadiene	237	4.589	4.589	(0.879)	135548	40.0000	33.1
208	1,1'Biphenyl	154	4.812	4.812	(0.921)	624377	40.0000	40.3
37	2,4,6-Trichlorophenol	196	4.683	4.683	(0.897)	172421	40.0000	43.2
38	2,4,5-Trichlorophenol	196	4.707	4.707	(0.901)	179772	40.0000	43.2
40	2-Chloronaphthalene	162	4.830	4.830	(0.925)	480965	40.0000	37.9
43	Dimethylphthalate	163	5.024	5.024	(0.962)	577016	40.0000	37.3
44	2,6-Dinitrotoluene	165	5.071	5.071	(0.971)	126917	40.0000	37.7
45	Acenaphthylene	152	5.124	5.124	(0.981)	732043	40.0000	39.1
47	Acenaphthene	154	5.247	5.247	(1.004)	477348	40.0000	39.1
48	2,4-Dinitrophenol	184	5.265	5.265	(1.008)	48396	40.0000	35.1
49	Dibenzofuran	168	5.365	5.365	(1.027)	649725	40.0000	37.8
50	2,4-Dinitrotoluene	165	5.353	5.353	(1.025)	163646	40.0000	37.4
51	Diethylphthalate	149	5.518	5.518	(1.056)	619599	40.0000	39.4
52	4-Nitrophenol	139	5.300	5.300	(1.015)	86807	40.0000	42.6
53	Fluorene	166	5.612	5.612	(1.074)	570395	40.0000	40.8
54	4-Chlorophenylphenylether	204	5.606	5.606	(1.073)	291845	40.0000	41.6
55	2-Methyl-4,6-dinitrophenol	198	5.647	5.647	(0.902)	94465	40.0000	39.1
133	Diphenylamine	169	5.688	5.688	(0.909)	493223	40.0000	41.3
58	1,2-Diphenylhydrazine	77	5.717	5.717	(0.914)	638378	40.0000	46.1
59	Tributylphosphate	99	5.670	5.670	(1.085)	691041	40.0000	39.8
61	4-Bromophenylphenylether	248	5.952	5.952	(0.951)	174163	40.0000	40.7
63	Hexachlorobenzene	284	5.999	5.999	(0.959)	204725	40.0000	41.6
65	Pentachlorophenol	266	6.129	6.129	(0.979)	100215	40.0000	42.4
206	n-Octadecane	57	6.164	6.164	(0.985)	420044	40.0000	37.8
68	Phenanthrene	178	6.275	6.275	(1.003)	762896	40.0000	41.3
69	Anthracene	178	6.305	6.305	(1.008)	761049	40.0000	41.6
72	Di-n-butylphthalate	149	6.610	6.610	(1.056)	989808	40.0000	43.9
76	Fluoranthene	202	7.004	7.004	(1.119)	809037	40.0000	43.0
79	Pyrene	202	7.133	7.133	(0.913)	825676	40.0000	39.1
85	Butylbenzylphthalate	149	7.468	7.468	(0.956)	402374	40.0000	38.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
89 Benzo(a)anthracene	228	7.803	7.803	(0.999)	740257	40.0000	39.3
92 Chrysene	228	7.827	7.827	(1.002)	676966	40.0000	39.1
93 bis(2-Ethylhexyl)phthalate	149	7.774	7.774	(0.995)	542103	40.0000	42.9
94 Di-n-octylphthalate	149	8.144	8.144	(0.928)	715067	40.0000	42.2
95 Benzo(b)fluoranthene	252	8.473	8.473	(0.966)	606485	40.0000	38.9
96 Benzo(k)fluoranthene	252	8.496	8.496	(0.969)	597466	40.0000	41.5
97 Benzo(a)pyrene	252	8.726	8.726	(0.995)	497613	40.0000	43.4
99 Indeno(1,2,3-cd)pyrene	276	9.783	9.783	(1.115)	453142	40.0000	43.8
100 Dibenzo(a,h)anthracene	278	9.789	9.789	(1.116)	373519	40.0000	44.6(T)
101 Benzo(ghi)perylene	276	10.089	10.089	(1.150)	364094	40.0000	42.8(T)

QC Flag Legend

T - Target compound detected outside RT window.

Data File: /chem/MSD6.i/s100805.s.b/s6j0802.d

Date : 08-OCT-2005 17:35

Client ID: BNA CVS

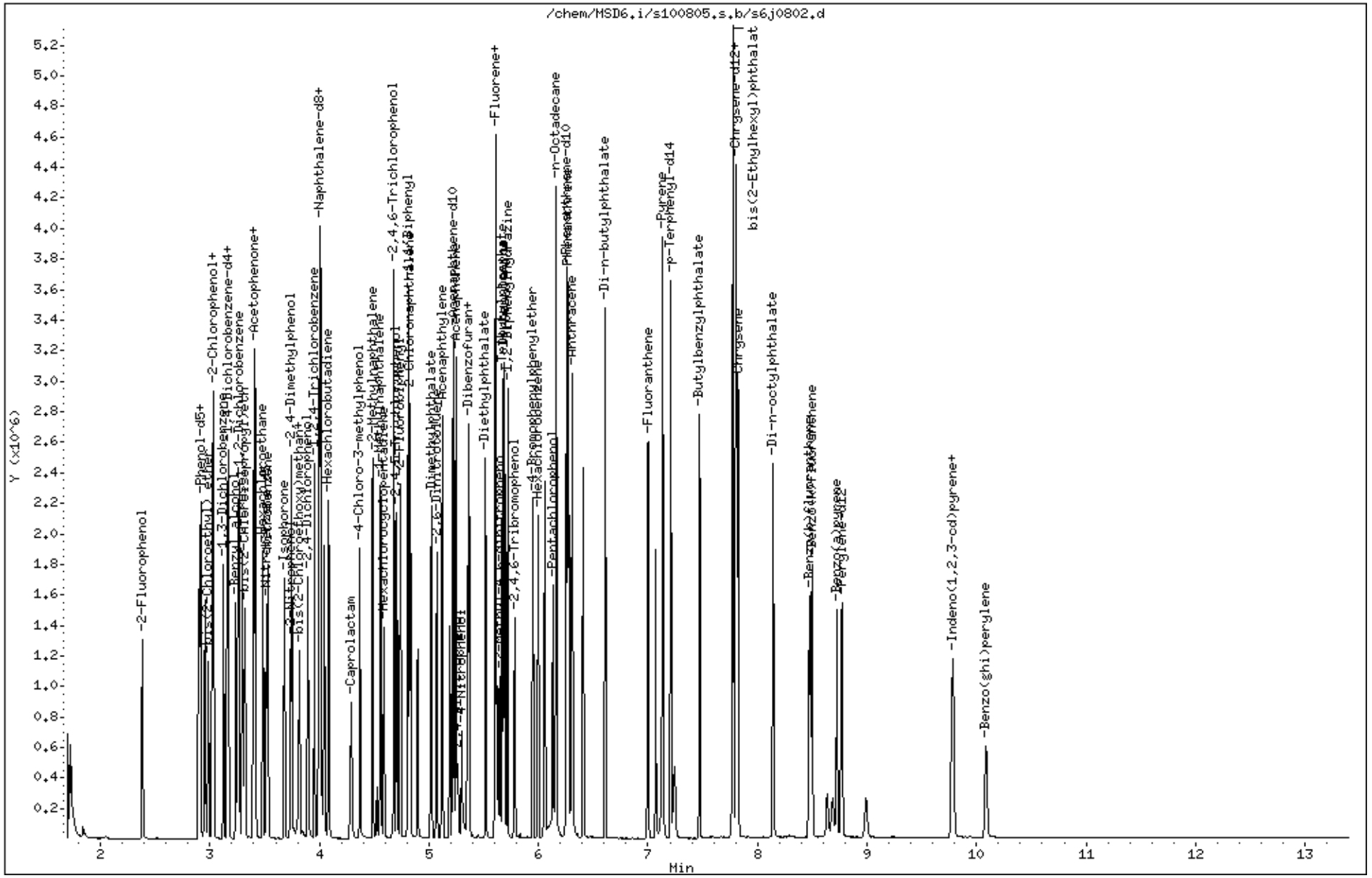
Sample Info: !UBN050929-01,2!40PPN!1!SVMF!1!BNA CVS

Column phase: J & W DB-5MS

Instrument: MSD6.i

Operator: jld1

Column diameter: 0.20



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-OCT-2005 17:57
Lab File ID: s6j0803.d Init. Cal. Date(s): 23-SEP-2005 26-SEP-2005
Analysis Type: Init. Cal. Times: 20:38 22:30
Lab Sample ID: UBN050929-02.3 Quant Type: ISTD
Method: /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 Aniline	1.71342	1.71338	1.71338	0.000	-0.00228	60.00000	Averaged
209 Benzaldehyde	1.02059	1.09690	1.09690	0.000	7.47761	60.00000	Averaged
31 4-Chloroaniline	0.36523	0.37014	0.37014	0.000	1.34344	60.00000	Averaged
205 2,3-Dichloroaniline	0.53870	0.46192	0.46192	0.000	-14.25248	60.00000	Averaged
42 o-Nitroaniline	0.32002	0.33456	0.33456	0.000	4.54345	60.00000	Averaged
41 m-Nitroaniline	0.26467	0.25504	0.25504	0.000	-3.63915	60.00000	Averaged
56 p-Nitroaniline	0.23966	0.23067	0.23067	0.000	-3.75209	60.00000	Averaged
207 Atrazine	0.05602	0.05805	0.05805	0.000	3.60806	60.00000	Averaged
77 Benzidine	0.55652	0.84645	0.84645	0.000	52.09691	60.00000	Averaged
90 3,3'-Dichlorobenzidine	0.31405	0.49894	0.49894	0.000	58.87387	60.00000	Averaged
173 Carbazole	0.86066	0.82007	0.82007	0.000	-4.71696	60.00000	Averaged

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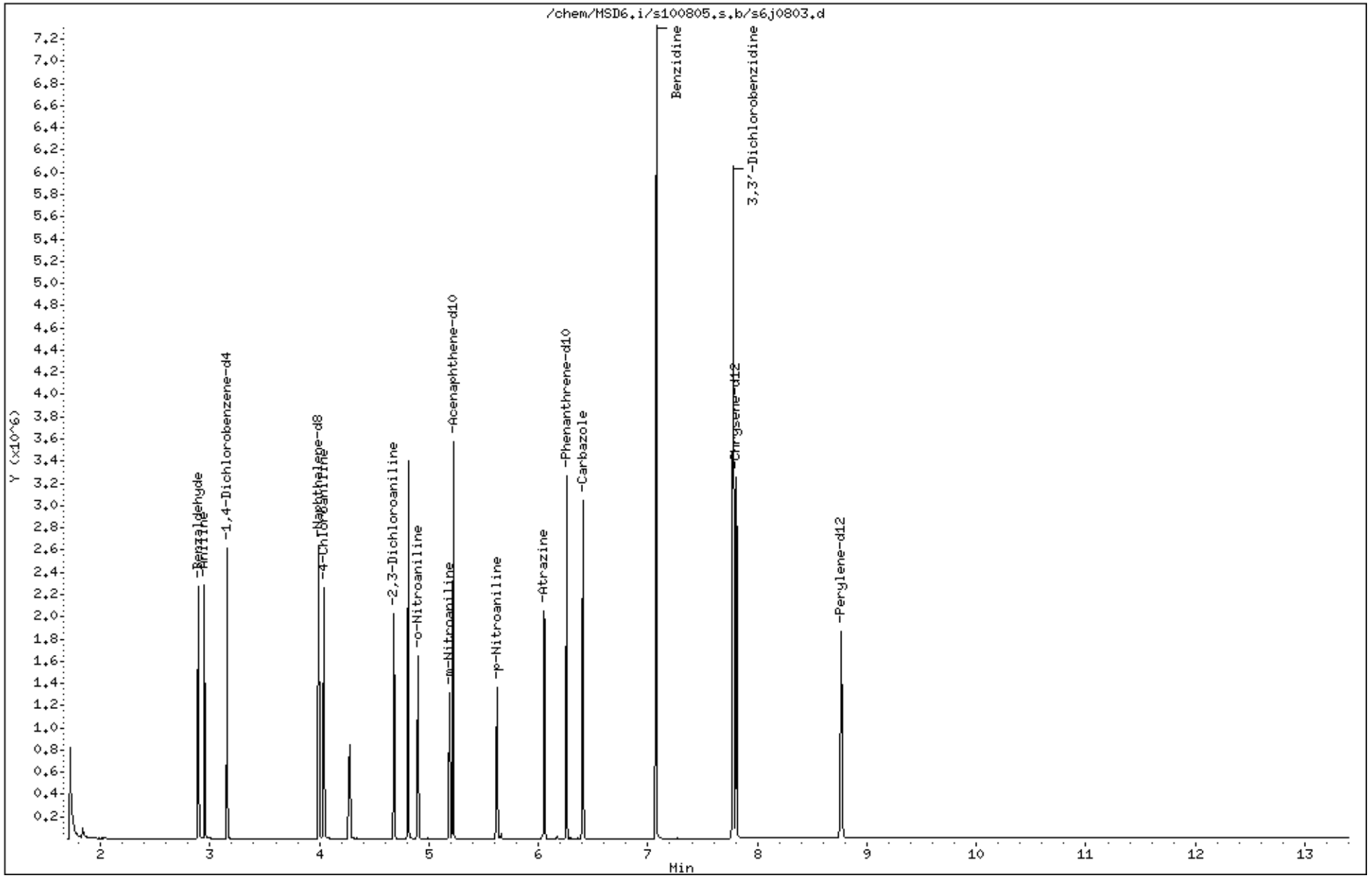
Data file : /chem/MSD6.i/s100805.s.b/s6j0803.d
Lab Smp Id: UBN050929-02.3 Client Smp ID: ANBZ CVS
Inj Date : 08-OCT-2005 17:57
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN050929-02.3|40PPN|1|SVMF|1|ANBZ CVS
Misc Info : |MSD8270_LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 09:27 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ANIL+BNZ+AT.sub
Target Version: 3.50
Processing Host: kilroy

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ul)	ON-COL (ng/ul)
*	10 1,4-Dichlorobenzene-d4	152	3.158	3.158	(1.000)	215690	40.0000	
*	29 Naphthalene-d8	136	3.998	3.998	(1.000)	821358	40.0000	
*	46 Acenaphthene-d10	164	5.220	5.220	(1.000)	513915	40.0000	
*	67 Phenanthrene-d10	188	6.260	6.260	(1.000)	832541	40.0000	
*	91 Chrysene-d12	240	7.805	7.805	(1.000)	773726	40.0000	
*	98 Perylene-d12	264	8.769	8.769	(1.000)	621783	40.0000	
	4 Aniline	93	2.952	2.952	(0.935)	369559	40.0000	40.0
	209 Benzaldehyde	77	2.893	2.893	(0.916)	236591	40.0000	43.0
	31 4-Chloroaniline	127	4.039	4.039	(1.010)	304015	40.0000	40.5
	205 2,3-Dichloroaniline	161	4.679	4.679	(0.896)	237387	40.0000	34.3
	42 o-Nitroaniline	65	4.897	4.897	(0.938)	171934	40.0000	41.8
	41 m-Nitroaniline	138	5.191	5.191	(0.994)	131067	40.0000	38.5
	56 p-Nitroaniline	138	5.619	5.619	(1.077)	118544	40.0000	38.5
	207 Atrazine	173	6.060	6.060	(0.968)	48326	40.0000	41.4
	77 Benzidine	184	7.077	7.077	(0.907)	1637302	100.000	152
	90 3,3'-Dichlorobenzidine	252	7.782	7.782	(0.997)	965113	100.000	159
	173 Carbazole	167	6.407	6.407	(1.023)	682738	40.0000	38.1

Data File: /chem/MSD6.i/s100805.s.b/s6j0803.d
Date : 08-OCT-2005 17:57
Client ID: ANBZ CVS
Sample Info: !UBN050929-02.3!40PPN!1!SVMF!1!ANBZ CVS

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20

Column phase: J & W DB-5MS



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-OCT-2005 18:41
Lab File ID: s6j0805.d Init. Cal. Date(s): 23-SEP-2005 26-SEP-2005
Analysis Type: WATER Init. Cal. Times: 20:38 22:30
Lab Sample ID: UBN051007-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
103 Methyl methacrylate	0.25673	0.22021	0.22021	0.000	-14.22398	60.00000	Averaged
104 Ethyl methacrylate	1.06174	0.93434	0.93434	0.000	-11.99913	60.00000	Averaged
105 2-Picoline	1.40793	1.29681	1.29681	0.000	-7.89230	60.00000	Averaged
106 N-Nitrosomethylethylamine	0.57029	0.47552	0.47552	0.000	-16.61651	60.00000	Averaged
107 Methyl methanesulfonate	0.69857	0.74312	0.74312	0.000	6.37766	60.00000	Averaged
108 N-Nitrosodiethylamine	0.57531	0.54546	0.54546	0.000	-5.18779	60.00000	Averaged
109 Ethyl Methanesulfonate	0.89849	0.85384	0.85384	0.000	-4.96966	60.00000	Averaged
110 Pentachloroethane	0.51585	0.53766	0.53766	0.000	4.22819	60.00000	Averaged
111 N-Nitrosopyrrolidine	0.59392	0.55355	0.55355	0.000	-6.79652	60.00000	Averaged
113 N-Nitrosomorpholine	0.94203	1.01178	1.01178	0.000	7.40467	60.00000	Averaged
114 o-Toluidine	2.02234	1.87859	1.87859	0.000	-7.10824	60.00000	Averaged
116 a,a-Dimethylphenethylamine	0.98302	0.77029	0.77029	0.000	-21.64046	60.00000	Averaged
118 2,6-Dichlorophenol	0.25181	0.25114	0.25114	0.000	-0.26634	60.00000	Averaged
119 Hexachloropropene	0.21429	0.22425	0.22425	0.000	4.64948	60.00000	Averaged
121 N-Nitrosodi-n-butylamine	0.24585	0.24727	0.24727	0.000	0.57763	60.00000	Averaged
122 Safrole	0.27719	0.28820	0.28820	0.000	3.97191	60.00000	Averaged
123 1,2,4,5-Tetrachlorobenzene	0.56572	0.54717	0.54717	0.000	-3.27921	60.00000	Averaged
124 Isosafrole	0.47293	0.45762	0.45762	0.000	-3.23796	60.00000	Averaged
125 1,4-Naphthoquinone	0.40185	0.38367	0.38367	0.000	-4.52210	60.00000	Averaged
126 m-Dinitrobenzene	0.19338	0.18214	0.18214	0.000	-5.80814	60.00000	Averaged
127 Pentachlorobenzene	0.51485	0.50043	0.50043	0.000	-2.80027	60.00000	Averaged
128 1-Naphthylamine	1.13304	1.02666	1.02666	0.000	-9.38892	60.00000	Averaged
129 2-Naphthylamine	1.12464	0.93473	0.93473	0.000	-16.88620	60.00000	Averaged
130 2,3,4,6-Tetrachlorophenol	0.23976	0.25886	0.25886	0.000	7.96993	60.00000	Averaged
131 5-Nitro-o-toluidine	0.36164	0.30426	0.30426	0.000	-15.86649	60.00000	Averaged
137 Phenacetin	0.39297	0.38961	0.38961	0.000	-0.85390	60.00000	Averaged
140 4-Aminobiphenyl	0.72582	0.78127	0.78127	0.000	7.64015	60.00000	Averaged
141 Pentachloronitrobenzene	0.09597	0.12535	0.12535	0.000	30.61589	60.00000	Averaged
142 Pronamide	0.34530	0.37567	0.37567	0.000	8.79571	60.00000	Averaged
143 Dinoseb	39.46441	40.00000	0.12241	0.000	-1.33898	60.00000	Linear
146 4-Nitroquinoline-1-oxide	0.03048	0.03333	0.03333	0.000	9.33517	60.00000	Averaged
147 Methapyrilene	0.67548	0.69041	0.69041	0.000	2.20975	60.00000	Averaged
149 Aramite	0.04895	0.04500	0.04500	0.000	-8.06030	60.00000	Averaged
151 p-(Dimethylamino)azobenzene	0.35440	0.42681	0.42681	0.000	20.43302	60.00000	Averaged
153 3,3'-Dimethylbenzidine	0.55358	0.60029	0.60029	0.000	8.43790	60.00000	Averaged
155 2-Acetylaminofluorene	43.53233	40.00000	0.39810	0.000	8.83081	60.00000	Linear

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSD6.i Injection Date: 08-OCT-2005 18:41
Lab File ID: s6j0805.d Init. Cal. Date(s): 23-SEP-2005 26-SEP-2005
Analysis Type: WATER Init. Cal. Times: 20:38 22:30
Lab Sample ID: UBN051007-01.2 Quant Type: ISTD
Method: /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m

COMPOUND	RRF / AMOUNT	RF40	CCAL RRF40	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
157 7,12Dimethylbenz(a)anthrace	0.55695	0.60292	0.60292	0.000	8.25420	60.00000	Averaged
158 3-Methylcholanthrene	0.53984	0.54202	0.54202	0.000	0.40396	60.00000	Averaged

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General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0805.d
Lab Smp Id: UBN051007-01.2 Client Smp ID: 168 CVS
Inj Date : 08-OCT-2005 18:41
Operator : jld1 Inst ID: MSD6.i
Smp Info : |UBN051007-01.2|40PPN|1|SVMF|1|168 CVS
Misc Info : |MSD8270_LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 10:25 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 168MIX-O2SI.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	AMOUNTS ON-COL (ng/ul)
* 10 1,4-Dichlorobenzene-d4	152	3.156	3.156	(1.000)	198543	40.0000	
* 29 Naphthalene-d8	136	3.996	3.996	(1.000)	744302	40.0000	
* 46 Acenaphthene-d10	164	5.218	5.218	(1.000)	468755	40.0000	
* 67 Phenanthrene-d10	188	6.258	6.258	(1.000)	710479	40.0000	
* 91 Chrysene-d12	240	7.810	7.810	(1.000)	543347	40.0000	
* 98 Perylene-d12	264	8.773	8.773	(1.000)	392767	40.0000	
103 Methyl methacrylate	100	1.546	1.546	(0.490)	43721	40.0000	34.3
104 Ethyl methacrylate	69	1.911	1.911	(0.605)	185506	40.0000	35.2
105 2-Picoline	93	2.087	2.087	(0.661)	257473	40.0000	36.8
106 N-Nitrosomethylethylamine	88	2.146	2.146	(0.680)	94412	40.0000	33.4
107 Methyl methanesulfonate	80	2.304	2.304	(0.730)	147542	40.0000	42.6
108 N-Nitrosodiethylamine	102	2.522	2.522	(0.799)	108298	40.0000	37.9
109 Ethyl Methanesulfonate	79	2.686	2.686	(0.851)	169523	40.0000	38.0

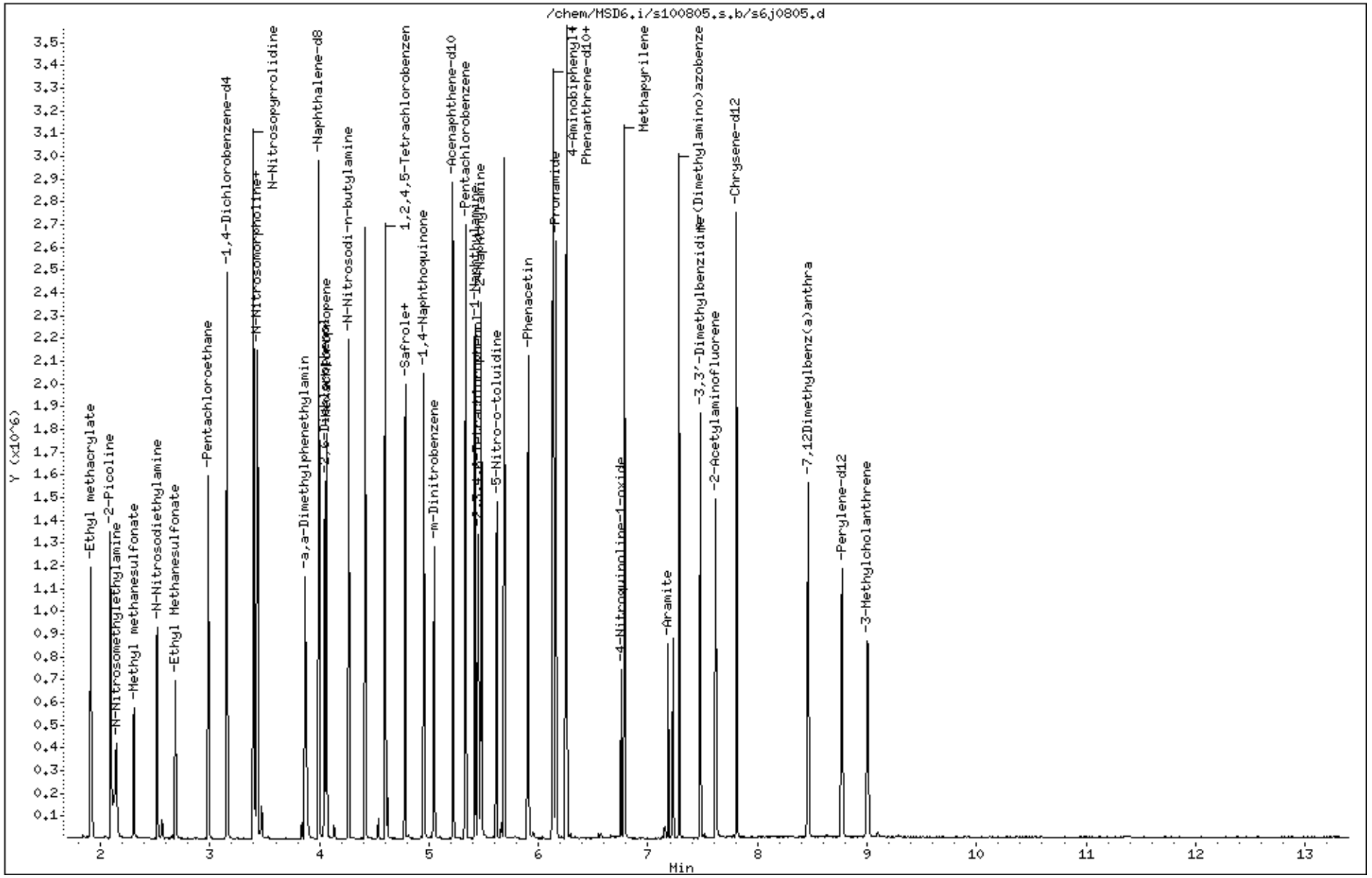
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ul)	ON-COL (ng/ul)
110 Pentachloroethane	167	2.986	2.986	(0.946)	106748	40.0000	41.7
111 N-Nitrosopyrrolidine	100	3.403	3.403	(1.078)	109904	40.0000	37.3(Q)
113 N-Nitrosomorpholine	56	3.426	3.426	(1.086)	200882	40.0000	43.0
114 o-Toluidine	106	3.432	3.432	(1.087)	372981	40.0000	37.2
116 a,a-Dimethylphenethylamine	58	3.873	3.873	(0.969)	573330	40.0000	31.3
118 2,6-Dichlorophenol	162	4.049	4.049	(1.013)	186925	40.0000	39.9
119 Hexachloropropene	213	4.067	4.067	(1.018)	166911	40.0000	41.8
121 N-Nitrosodi-n-butylamine	84	4.267	4.267	(1.068)	184041	40.0000	40.2
122 Safrole	162	4.784	4.784	(1.197)	214511	40.0000	41.6
123 1,2,4,5-Tetrachlorobenzene	216	4.602	4.602	(0.882)	256489	40.0000	38.7
124 Isosafrole	162	4.784	4.784	(0.917)	214511	40.0000	38.7
125 1,4-Naphthoquinone	158	4.954	4.954	(0.949)	179849	40.0000	38.2
126 m-Dinitrobenzene	168	5.048	5.048	(0.967)	85381	40.0000	37.7
127 Pentachlorobenzene	250	5.336	5.336	(1.023)	234581	40.0000	38.9
128 1-Naphthylamine	143	5.424	5.424	(1.039)	481252	40.0000	36.2
129 2-Naphthylamine	143	5.477	5.477	(1.050)	438159	40.0000	33.2
130 2,3,4,6-Tetrachlorophenol	232	5.454	5.454	(1.045)	121344	40.0000	43.2
131 5-Nitro-o-toluidine	152	5.618	5.618	(1.077)	142625	40.0000	33.6
137 Phenacetin	108	5.906	5.906	(0.944)	276812	40.0000	39.6
140 4-Aminobiphenyl	169	6.129	6.129	(0.979)	555076	40.0000	43.0
141 Pentachloronitrobenzene	237	6.135	6.135	(0.980)	89056	40.0000	52.2
142 Pronamide	173	6.159	6.159	(0.984)	266909	40.0000	43.5
143 Dinoseb	211	6.241	6.241	(0.997)	86973	40.0000	39.5
146 4-Nitroquinoline-1-oxide	101	6.752	6.752	(1.079)	23679	40.0000	43.7
147 Methapyrilene	58	6.787	6.787	(1.084)	490520	40.0000	40.9
149 Aramite	185	7.187	7.187	(1.148)	31974	40.0000	36.8
151 p-(Dimethylamino)azobenzene	120	7.287	7.287	(0.933)	231906	40.0000	48.2
153 3,3'-Dimethylbenzidine	212	7.475	7.475	(0.957)	326167	40.0000	43.4
155 2-Acetylaminofluorene	181	7.622	7.622	(0.976)	216307	40.0000	43.5
157 7,12Dimethylbenz(a)anthracene	256	8.462	8.462	(0.964)	236809	40.0000	43.3
158 3-Methylcholanthrene	268	9.008	9.008	(1.027)	212888	40.0000	40.2(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s100805.s.b/s6j0805.d
Date : 08-OCT-2005 18:41
Client ID: 168 CVS
Sample Info: !UBN051007-01,2!40PPN!1!SVMF!1!168 CVS
Volume Injected (uL): 0.5
Column phase: J & W DB-5MS

Instrument: MSD6.i
Operator: jld1
Column diameter: 0.20



QUALITY CONTROL DATA

Data File: /chem/MSD6.i/s092305.s.b/s6i2301.d

Date : 23-SEP-2005 15:36

Client ID: DFTPP

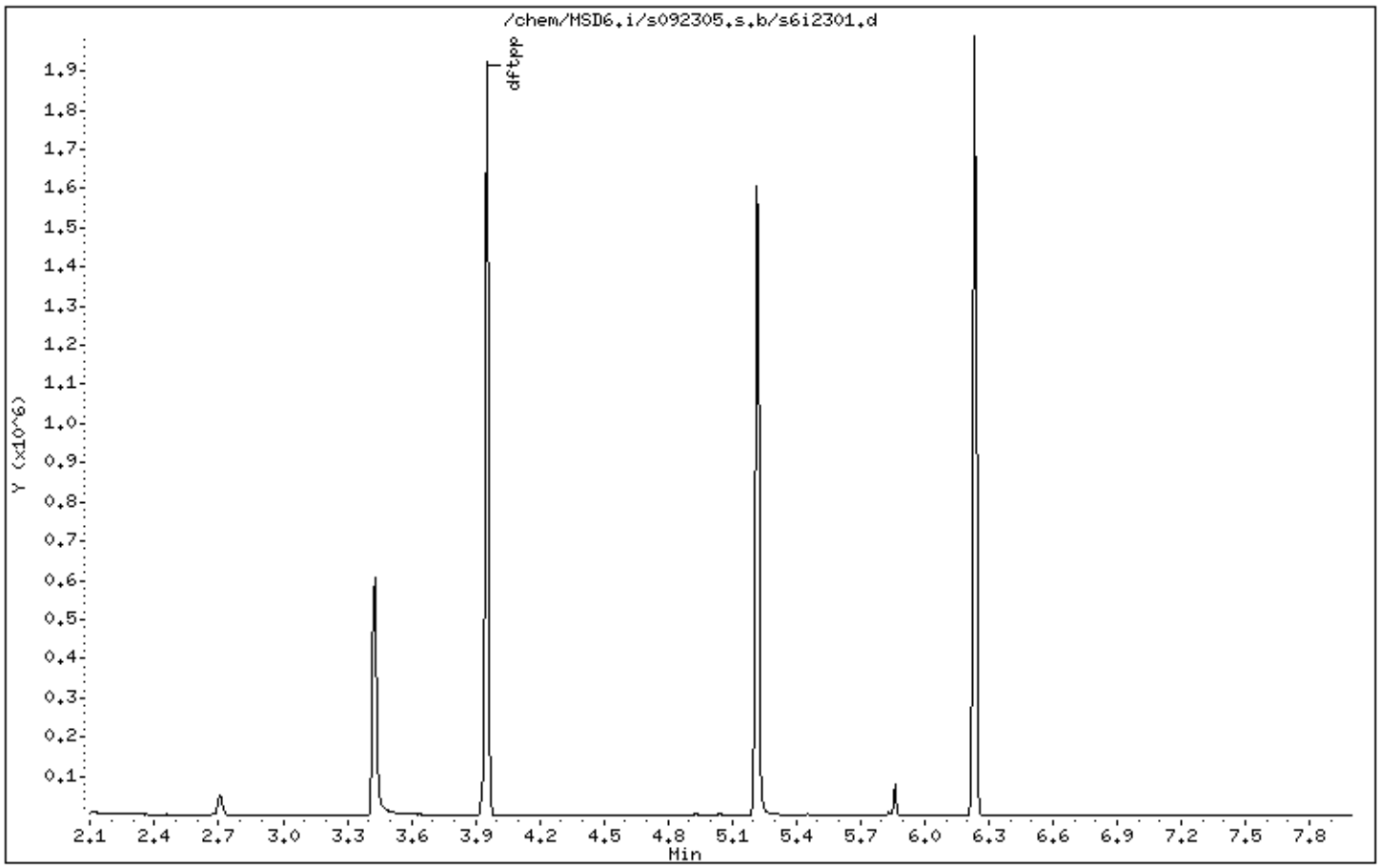
Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s092305.s.b/s6i2301.d

Date : 23-SEP-2005 15:36

Client ID: DFTPP

Instrument: MSD6.i

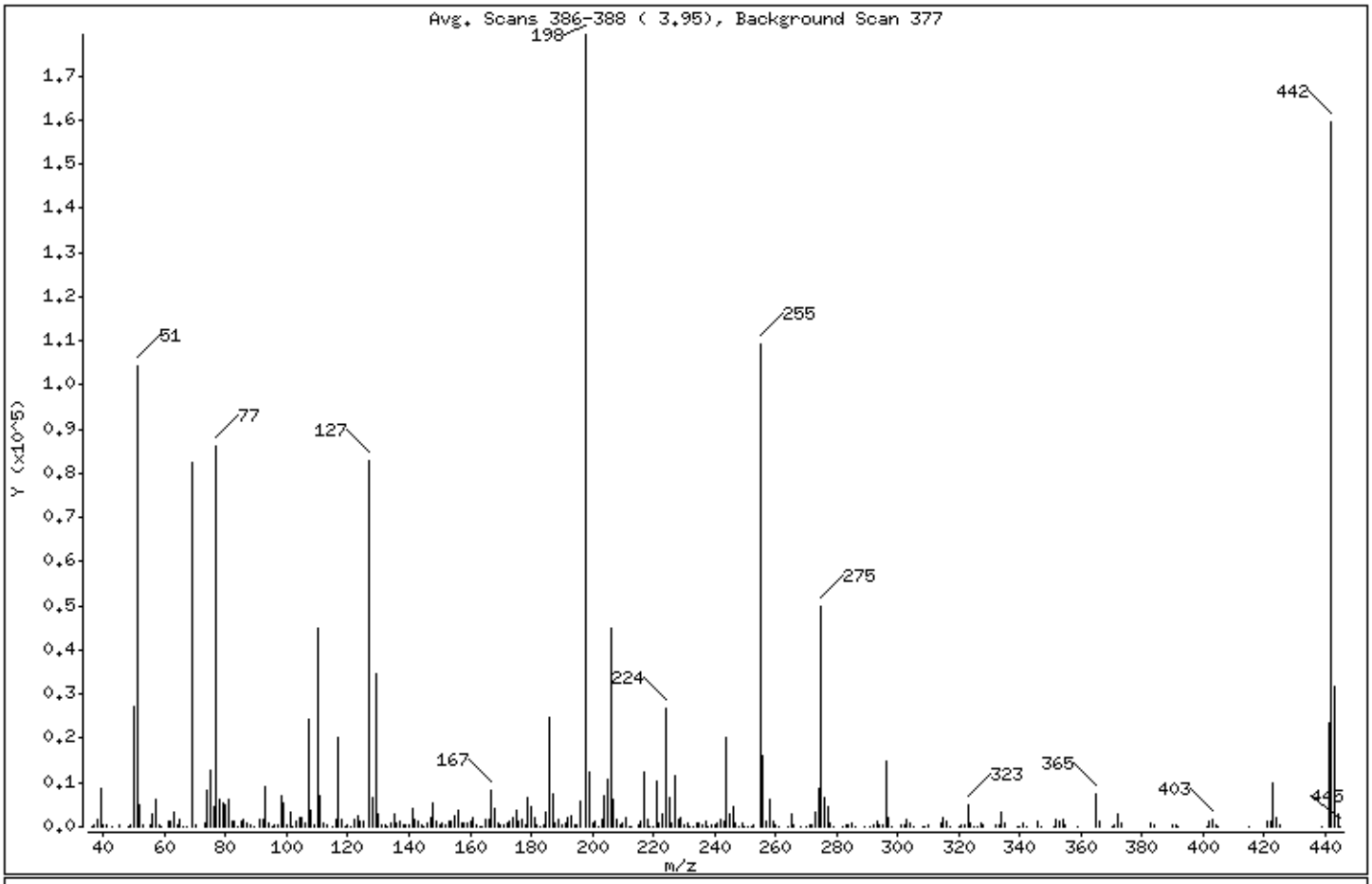
Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	58.06
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	46.05
70	Less than 2.00% of mass 69	0.26 (0.56)
127	40.00 - 60.00% of mass 198	46.18
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.90
275	10.00 - 30.00% of mass 198	27.71
365	Greater than 1.00% of mass 198	4.15
441	Present, but less than mass 443	13.00
442	Greater than 40.00% of mass 198	88.89
443	17.00 - 23.00% of mass 442	17.80 (20.03)

Date : 23-SEP-2005 15:36

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2301.d
Spectrum: Avg. Scans 386-388 (3.95), Background Scan 377
Location of Maximum: 198.00
Number of points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	63	124.00	1234	203.00	1547	291.00	50
37.00	537	125.00	1080	204.00	6976	292.00	284
38.00	1473	127.00	82816	205.00	10791	293.00	1075
39.00	8582	128.00	6585	206.00	45088	294.00	255
40.00	513	129.00	34584	207.00	6099	295.00	399
41.00	261	130.00	2872	208.00	1448	296.00	14673
43.00	111	131.00	618	209.00	600	297.00	2245
45.00	280	132.00	344	210.00	693	298.00	61
48.00	54	133.00	145	211.00	1882	301.00	225
49.00	555	134.00	982	212.00	165	302.00	296
50.00	27312	135.00	2734	213.00	80	303.00	1791
51.00	104112	136.00	1009	215.00	495	304.00	627
52.00	5072	137.00	1323	216.00	1141	305.00	62
53.00	234	138.00	314	217.00	12427	308.00	127
55.00	464	139.00	275	218.00	1733	309.00	80
56.00	2846	140.00	475	219.00	150	310.00	258
57.00	6250	141.00	4268	220.00	85	314.00	720
58.00	292	142.00	1457	221.00	10285	315.00	1894
59.00	124	143.00	1074	222.00	636	316.00	1094
61.00	1144	144.00	324	223.00	2789	317.00	153
62.00	1182	145.00	149	224.00	26864	320.00	58
63.00	3477	146.00	861	225.00	6690	321.00	433
64.00	408	147.00	2175	226.00	650	322.00	311
65.00	1633	148.00	5362	227.00	11606	323.00	5148
66.00	64	149.00	1098	228.00	1720	324.00	899
67.00	59	150.00	377	229.00	2179	325.00	71
69.00	82568	151.00	664	230.00	348	326.00	55
70.00	462	152.00	406	231.00	863	327.00	945
73.00	711	153.00	1247	232.00	61	328.00	543
74.00	8219	154.00	1035	233.00	201	332.00	419
75.00	12734	155.00	2510	234.00	842	333.00	579
76.00	4427	156.00	3658	235.00	927	334.00	3406
77.00	86208	157.00	788	236.00	537	335.00	811
78.00	6007	158.00	880	237.00	1067	339.00	81
79.00	5476	159.00	688	238.00	51	340.00	55

Date : 23-SEP-2005 15:36

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2301.d
Spectrum: Avg. Scans 386-388 (3.95), Background Scan 377
Location of Maximum: 198.00
Number of points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	4848	160.00	1413	239.00	481	341.00	635
81.00	6129	161.00	2223	240.00	486	342.00	144
82.00	1358	162.00	610	241.00	638	346.00	1181
83.00	1351	163.00	62	242.00	1475	347.00	187
84.00	72	164.00	192	243.00	1331	351.00	55
85.00	1210	165.00	1647	244.00	20128	352.00	1595
86.00	1754	166.00	1531	245.00	2927	353.00	1168
87.00	851	167.00	8416	246.00	4580	354.00	1517
88.00	370	168.00	4319	247.00	860	355.00	280
89.00	82	169.00	659	248.00	178	359.00	72
91.00	1491	170.00	279	249.00	741	365.00	7439
92.00	1542	171.00	432	250.00	132	366.00	1171
93.00	9161	172.00	875	251.00	167	370.00	69
94.00	794	173.00	1097	252.00	169	371.00	417
95.00	125	174.00	2109	253.00	529	372.00	2830
96.00	470	175.00	3518	255.00	109136	373.00	648
97.00	258	176.00	1115	256.00	16175	383.00	854
98.00	7141	177.00	1675	257.00	1405	384.00	268
99.00	5468	178.00	564	258.00	6310	390.00	345
100.00	516	179.00	6447	259.00	1256	391.00	354
101.00	3350	180.00	4580	260.00	227	392.00	153
102.00	158	181.00	2159	261.00	180	401.00	134
103.00	1097	182.00	293	264.00	92	402.00	1325
104.00	2145	183.00	58	265.00	2909	403.00	1494
105.00	1996	184.00	610	266.00	443	404.00	500
106.00	683	185.00	3106	268.00	59	405.00	188
107.00	24312	186.00	24800	270.00	145	415.00	53
108.00	3834	187.00	7410	271.00	262	421.00	1336
109.00	223	188.00	688	272.00	336	422.00	1163
110.00	45024	189.00	1741	273.00	3408	423.00	9784
111.00	6823	190.00	284	274.00	8808	424.00	2149
112.00	931	191.00	726	275.00	49680	425.00	362
113.00	218	192.00	2200	276.00	6412	439.00	56
115.00	51	193.00	2646	277.00	4449	441.00	23304
116.00	1612	194.00	479	278.00	730	442.00	159360

Date : 23-SEP-2005 15:36

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2301.d
Spectrum: Avg. Scans 386-388 (3.95), Background Scan 377
Location of Maximum: 198.00
Number of points: 304

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	20168	195.00	284	279.00	78	443.00	31920
118.00	1625	196.00	5867	282.00	126	444.00	2979
119.00	203	198.00	179328	283.00	391	445.00	140
120.00	370	199.00	12382	284.00	423		
121.00	60	200.00	973	285.00	784		
122.00	1523	201.00	1036	286.00	56		
123.00	2605	202.00	106	289.00	121		

Data File: /chem/MSD6.i/s092405.s.b/s6i2401.d

Date : 24-SEP-2005 15:21

Client ID: DFTPP

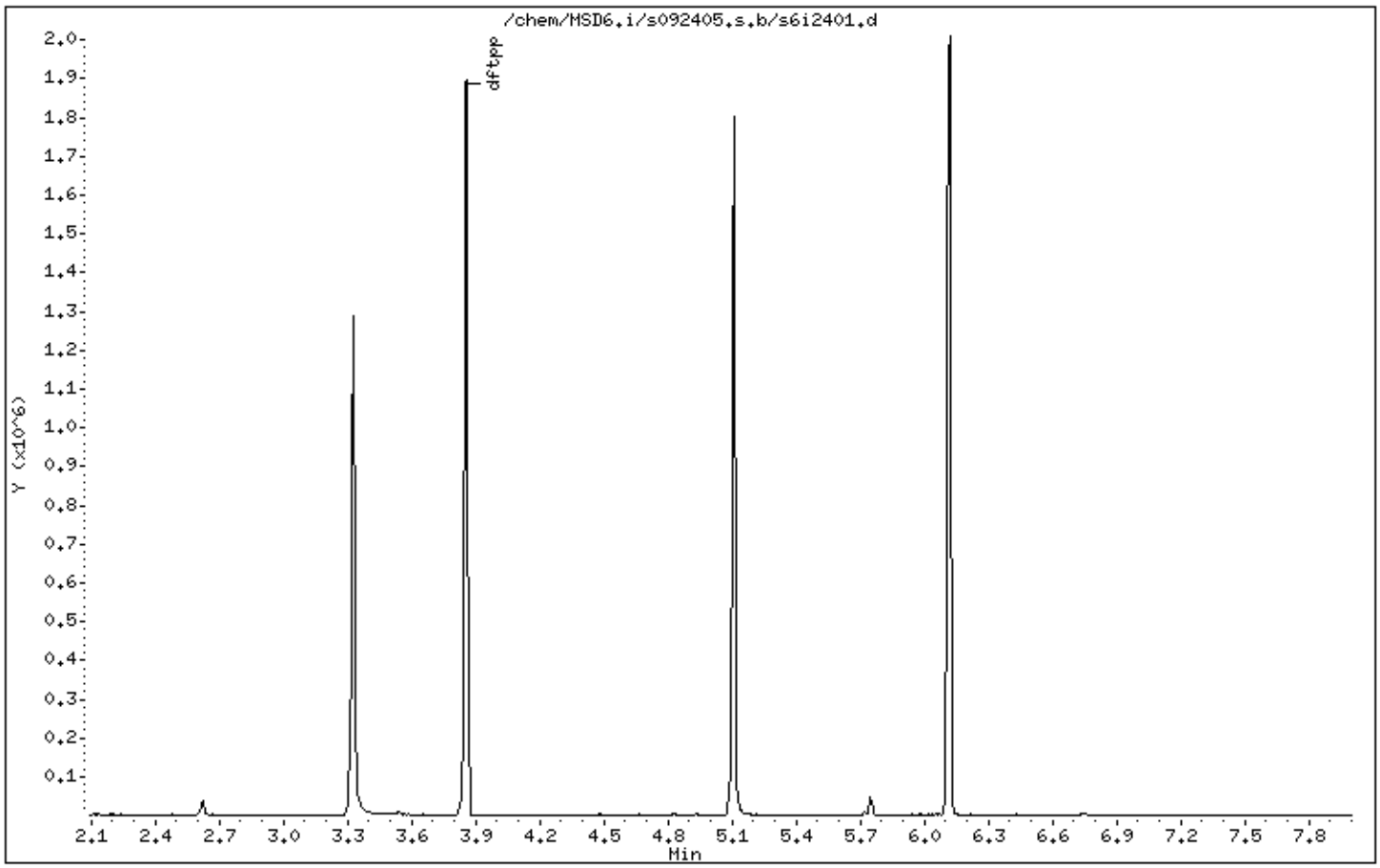
Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s092405.s.b/s6i2401.d

Date : 24-SEP-2005 15:21

Client ID: DFTPP

Instrument: MSD6.i

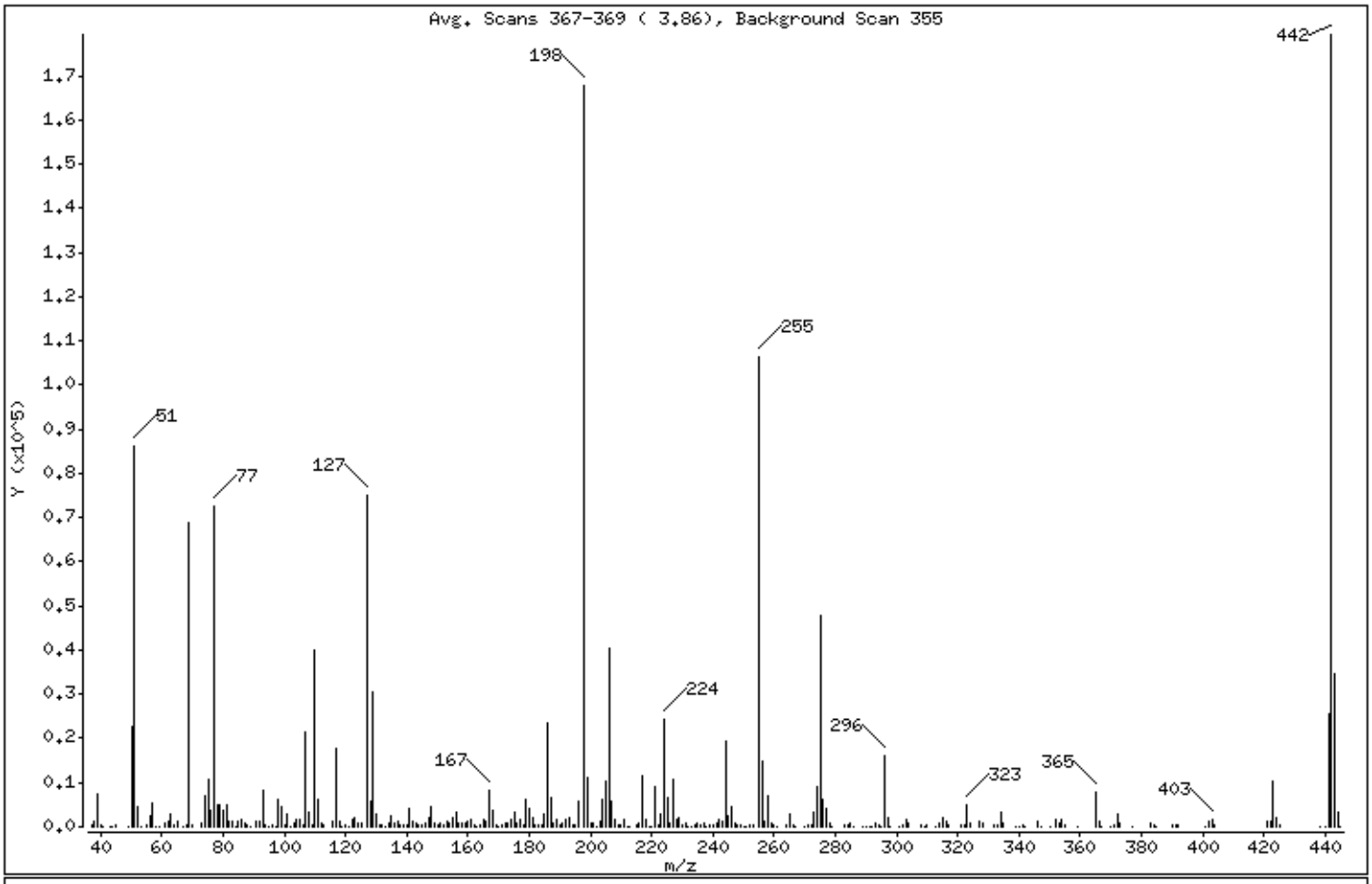
Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	51.37
68	Less than 2.00% of mass 69	0.15 (0.37)
69	Mass 69 relative abundance	41.08
70	Less than 2.00% of mass 69	0.23 (0.57)
127	40.00 - 60.00% of mass 198	44.77
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.56
275	10.00 - 30.00% of mass 198	28.51
365	Greater than 1.00% of mass 198	4.72
441	Present, but less than mass 443	15.30
442	Greater than 40.00% of mass 198	106.76
443	17.00 - 23.00% of mass 442	20.64 (19.33)

Date : 24-SEP-2005 15:21

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2401.d
Spectrum: Avg. Scans 367-369 (3.86), Background Scan 355
Location of Maximum: 442.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	439	125.00	927	203.00	1106	290.00	124
38.00	1267	127.00	75192	204.00	6001	291.00	59
39.00	7537	128.00	5743	205.00	10508	292.00	193
40.00	396	129.00	30336	206.00	40480	293.00	870
41.00	140	130.00	2822	207.00	5769	294.00	309
43.00	58	131.00	553	208.00	1598	295.00	188
44.00	49	132.00	272	209.00	511	296.00	15972
45.00	238	133.00	34	210.00	320	297.00	2252
49.00	178	134.00	765	211.00	1788	298.00	181
50.00	22856	135.00	2543	212.00	185	301.00	186
51.00	86280	136.00	966	213.00	65	302.00	324
52.00	4489	137.00	1291	215.00	530	303.00	1822
53.00	191	138.00	386	216.00	998	304.00	649
55.00	553	139.00	222	217.00	11481	308.00	218
56.00	2284	140.00	237	218.00	1500	309.00	187
57.00	5446	141.00	4063	219.00	126	310.00	230
58.00	167	142.00	1389	220.00	89	313.00	186
59.00	63	143.00	914	221.00	9140	314.00	742
61.00	877	144.00	303	222.00	370	315.00	1873
62.00	1111	145.00	226	223.00	2723	316.00	1122
63.00	2964	146.00	679	224.00	24504	317.00	208
64.00	444	147.00	2136	225.00	6407	321.00	468
65.00	1283	148.00	4467	226.00	718	322.00	262
67.00	82	149.00	889	227.00	10906	323.00	4988
68.00	252	150.00	267	228.00	1817	324.00	958
69.00	69000	151.00	655	229.00	2096	327.00	1093
70.00	393	152.00	373	230.00	314	328.00	642
73.00	768	153.00	1285	231.00	896	332.00	366
74.00	7092	154.00	978	232.00	149	333.00	489
75.00	10522	155.00	2136	233.00	166	334.00	3267
76.00	3711	156.00	3245	234.00	580	335.00	813
77.00	72736	157.00	677	235.00	742	339.00	119
78.00	5086	158.00	748	236.00	546	340.00	75
79.00	5020	159.00	626	237.00	946	341.00	575
80.00	3818	160.00	1145	238.00	109	342.00	156

Date : 24-SEP-2005 15:21

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2401.d
Spectrum: Avg. Scans 367-369 (3.86), Background Scan 355
Location of Maximum: 442.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	5078	161.00	1808	239.00	490	346.00	1140
82.00	1413	162.00	581	240.00	364	347.00	151
83.00	1168	163.00	137	241.00	646	350.00	52
84.00	83	164.00	240	242.00	1476	352.00	1758
85.00	1066	165.00	1655	243.00	1368	353.00	985
86.00	1484	166.00	1169	244.00	19496	354.00	1669
87.00	779	167.00	8256	245.00	2650	355.00	404
88.00	292	168.00	3809	246.00	4396	359.00	72
89.00	139	169.00	576	247.00	903	365.00	7922
91.00	1255	170.00	205	248.00	244	366.00	1077
92.00	1358	171.00	366	249.00	615	367.00	60
93.00	8196	172.00	679	250.00	69	370.00	117
94.00	567	173.00	940	251.00	95	371.00	469
95.00	163	174.00	1475	252.00	221	372.00	2784
96.00	296	175.00	3222	253.00	489	373.00	769
97.00	91	176.00	986	255.00	106368	377.00	67
98.00	6052	177.00	1555	256.00	14998	383.00	802
99.00	4591	178.00	527	257.00	1377	384.00	218
100.00	537	179.00	6334	258.00	6844	385.00	72
101.00	2911	180.00	4224	259.00	874	390.00	437
102.00	139	181.00	1857	260.00	259	391.00	283
103.00	961	182.00	298	261.00	200	392.00	238
104.00	1852	183.00	225	264.00	284	401.00	66
105.00	1594	184.00	604	265.00	2963	402.00	1221
106.00	427	185.00	2814	266.00	259	403.00	1846
107.00	21592	186.00	23376	267.00	51	404.00	583
108.00	3366	187.00	6567	270.00	169	421.00	1309
109.00	520	188.00	675	271.00	268	422.00	1194
110.00	40192	189.00	1687	272.00	314	423.00	10472
111.00	6335	190.00	272	273.00	3385	424.00	2216
112.00	773	191.00	899	274.00	8970	425.00	265
113.00	217	192.00	1778	275.00	47880	438.00	78
116.00	1295	193.00	2267	276.00	6203	440.00	61
117.00	17640	194.00	452	277.00	4302	441.00	25696
118.00	1191	195.00	331	278.00	828	442.00	179328

Date : 24-SEP-2005 15:21

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2401.d
Spectrum: Avg. Scans 367-369 (3.86), Background Scan 355
Location of Maximum: 442.00
Number of points: 301

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	192	196.00	5883	279.00	62	443.00	34672
120.00	267	198.00	167936	283.00	454	444.00	3296
121.00	154	199.00	11025	284.00	342	445.00	206
122.00	1767	200.00	860	285.00	805		
123.00	2087	201.00	806	286.00	115		
124.00	948	202.00	66	289.00	83		

Data File: /chem/MSD6.i/s092605.s.b/s6i2601.d

Page 1

Date : 26-SEP-2005 08:37

Client ID: DFTPP

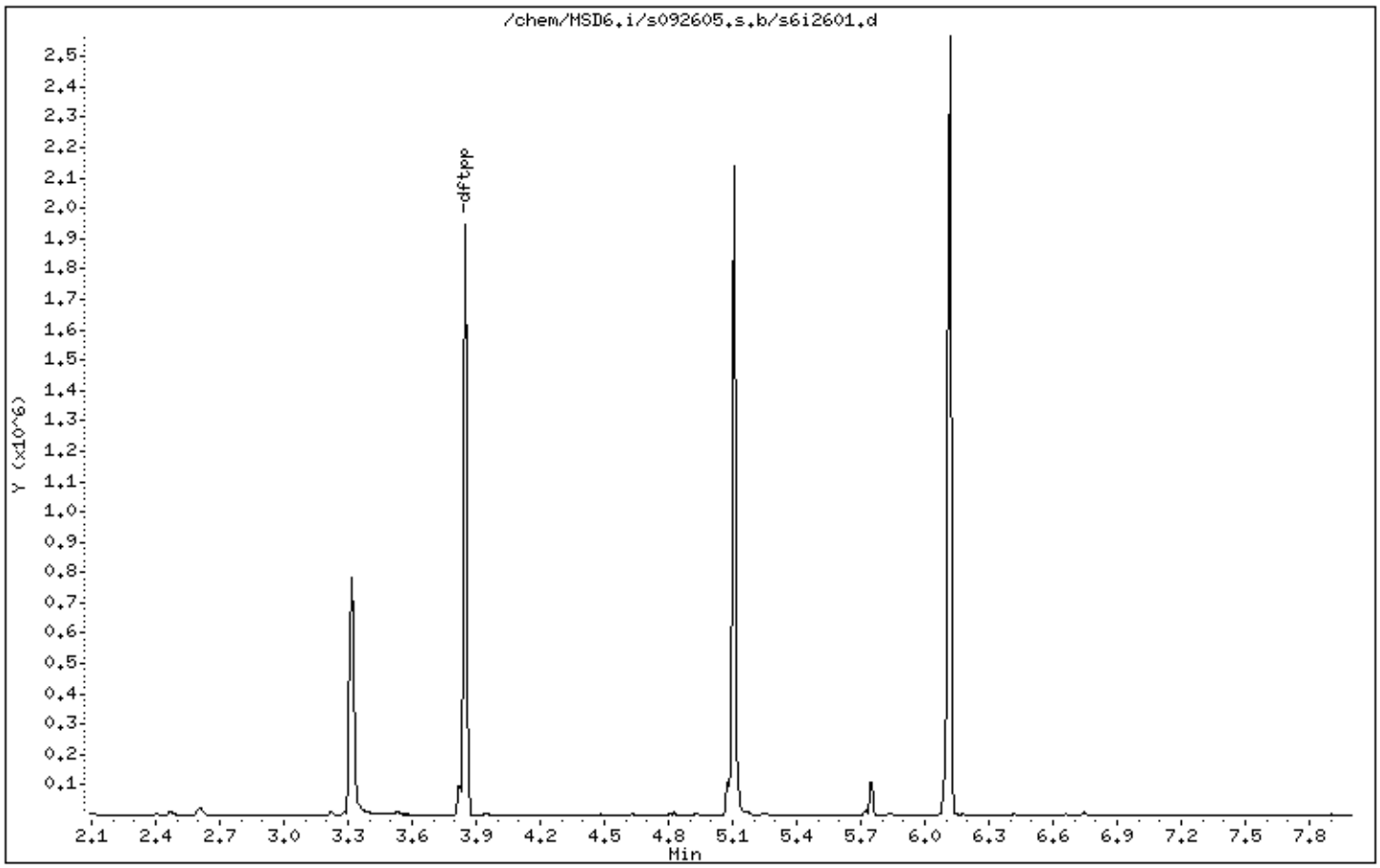
Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s092605.s.b/s6i2601.d

Date : 26-SEP-2005 08:37

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20

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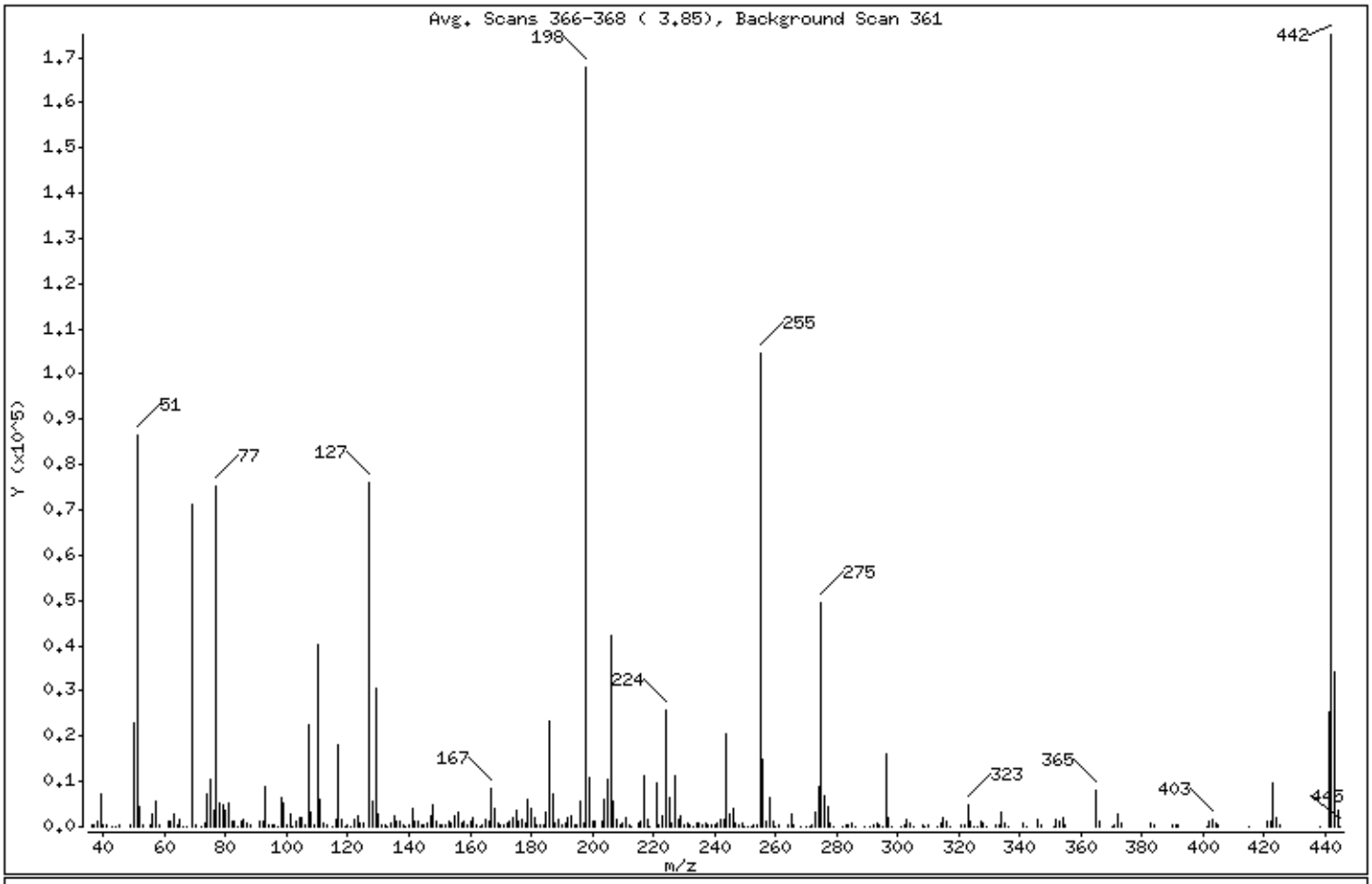


m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	51.46
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	42.39
70	Less than 2.00% of mass 69	0.22 (0.53)
127	40.00 - 60.00% of mass 198	45.29
197	Less than 1.00% of mass 198	0.42
199	5.00 - 9.00% of mass 198	6.43
275	10.00 - 30.00% of mass 198	29.44
365	Greater than 1.00% of mass 198	4.86
441	Present, but less than mass 443	15.00
442	Greater than 40.00% of mass 198	104.38
443	17.00 - 23.00% of mass 442	20.29 (19.44)

Date : 26-SEP-2005 08:37

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2601.d
Spectrum: Avg. Scans 366-368 (3.85), Background Scan 361
Location of Maximum: 442.00
Number of points: 302

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	347	124.00	984	201.00	1150	286.00	81
37.00	408	125.00	938	203.00	1312	289.00	143
38.00	1318	127.00	75968	204.00	6009	291.00	51
39.00	7427	128.00	5819	205.00	10434	292.00	223
40.00	427	129.00	30664	206.00	42344	293.00	1001
41.00	331	130.00	2679	207.00	5647	294.00	285
43.00	73	131.00	553	208.00	1628	295.00	118
44.00	133	132.00	362	209.00	505	296.00	15975
45.00	244	133.00	134	210.00	751	297.00	2120
49.00	423	134.00	935	211.00	1812	298.00	60
50.00	22872	135.00	2518	212.00	224	301.00	109
51.00	86320	136.00	1033	213.00	57	302.00	279
52.00	4312	137.00	1356	215.00	622	303.00	1510
53.00	279	138.00	253	216.00	1111	304.00	616
55.00	594	139.00	140	217.00	11369	305.00	114
56.00	2772	140.00	376	218.00	1590	308.00	227
57.00	5477	141.00	4120	219.00	54	309.00	188
58.00	251	142.00	1325	221.00	9572	310.00	217
61.00	1220	143.00	1145	222.00	349	313.00	52
62.00	1158	144.00	329	223.00	2568	314.00	898
63.00	2864	145.00	221	224.00	25672	315.00	1869
64.00	497	146.00	772	225.00	6474	316.00	1137
65.00	1607	147.00	2368	226.00	878	317.00	146
66.00	165	148.00	4789	227.00	11447	321.00	544
67.00	128	149.00	1081	228.00	1603	322.00	293
69.00	71104	150.00	355	229.00	2321	323.00	4968
70.00	375	151.00	533	230.00	306	324.00	1017
72.00	51	152.00	410	231.00	783	325.00	62
73.00	751	153.00	1306	232.00	205	326.00	64
74.00	7096	154.00	968	233.00	140	327.00	1056
75.00	10536	155.00	2486	234.00	749	328.00	663
76.00	3604	156.00	3055	235.00	859	329.00	53
77.00	75384	157.00	786	236.00	494	332.00	476
78.00	5311	158.00	1023	237.00	955	333.00	521
79.00	4768	159.00	597	238.00	232	334.00	3144

Data File: /chem/MSD6.i/s092605.s.b/s6i2601.d

Date : 26-SEP-2005 08:37

Client ID: DFTPP

Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20

Data File: s6i2601.d
Spectrum: Avg. Scans 366-368 (3.85), Background Scan 361
Location of Maximum: 442.00
Number of points: 302

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	3624	160.00	1316	239.00	472	335.00	890
81.00	5307	161.00	1911	240.00	460	336.00	98
82.00	1209	162.00	598	241.00	719	341.00	610
83.00	1289	163.00	71	242.00	1546	342.00	191
84.00	190	164.00	220	243.00	1475	346.00	1449
85.00	1167	165.00	1724	244.00	20680	347.00	262
86.00	1548	166.00	1253	245.00	2708	351.00	132
87.00	713	167.00	8577	246.00	4184	352.00	1802
88.00	325	168.00	4122	247.00	936	353.00	1181
91.00	1112	169.00	792	248.00	214	354.00	1838
92.00	1194	170.00	349	249.00	912	355.00	332
93.00	9052	171.00	414	250.00	112	365.00	8153
94.00	566	172.00	768	251.00	194	366.00	1238
95.00	202	173.00	1034	252.00	151	370.00	196
96.00	452	174.00	2210	253.00	542	371.00	377
97.00	75	175.00	3710	254.00	211	372.00	2742
98.00	6566	176.00	1059	255.00	104768	373.00	733
99.00	5116	177.00	1569	256.00	14990	383.00	784
100.00	459	178.00	744	257.00	1205	384.00	208
101.00	2915	179.00	5940	258.00	6381	390.00	448
102.00	113	180.00	4015	259.00	1255	391.00	240
103.00	1133	181.00	1903	260.00	68	392.00	234
104.00	1914	182.00	426	261.00	282	401.00	135
105.00	1920	183.00	281	264.00	379	402.00	1022
106.00	271	184.00	520	265.00	2896	403.00	1522
107.00	22440	185.00	3279	266.00	533	404.00	620
108.00	3388	186.00	23224	268.00	132	405.00	210
109.00	372	187.00	7407	270.00	123	415.00	54
110.00	40424	188.00	669	271.00	160	421.00	1310
111.00	6229	189.00	1555	272.00	402	422.00	1392
112.00	755	190.00	333	273.00	3118	423.00	9626
113.00	233	191.00	623	274.00	8764	424.00	2173
115.00	68	192.00	2209	275.00	49384	425.00	270
116.00	1460	193.00	2347	276.00	6698	438.00	50
117.00	18192	194.00	374	277.00	4393	441.00	25168

Date : 26-SEP-2005 08:37

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050830-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6i2601.d
Spectrum: Avg. Scans 366-368 (3.85), Background Scan 361
Location of Maximum: 442.00
Number of points: 302

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	1533	195.00	354	278.00	862	442.00	175040
119.00	190	196.00	5588	279.00	78	443.00	34024
120.00	339	197.00	709	282.00	82	444.00	3487
121.00	54	198.00	167680	283.00	592	445.00	73
122.00	1650	199.00	10790	284.00	386		
123.00	2389	200.00	1054	285.00	662		

Data File: /chem/MSD6.i/s100805.s.b/s6j0801.d

Date : 08-OCT-2005 17:20

Client ID: DFTPP

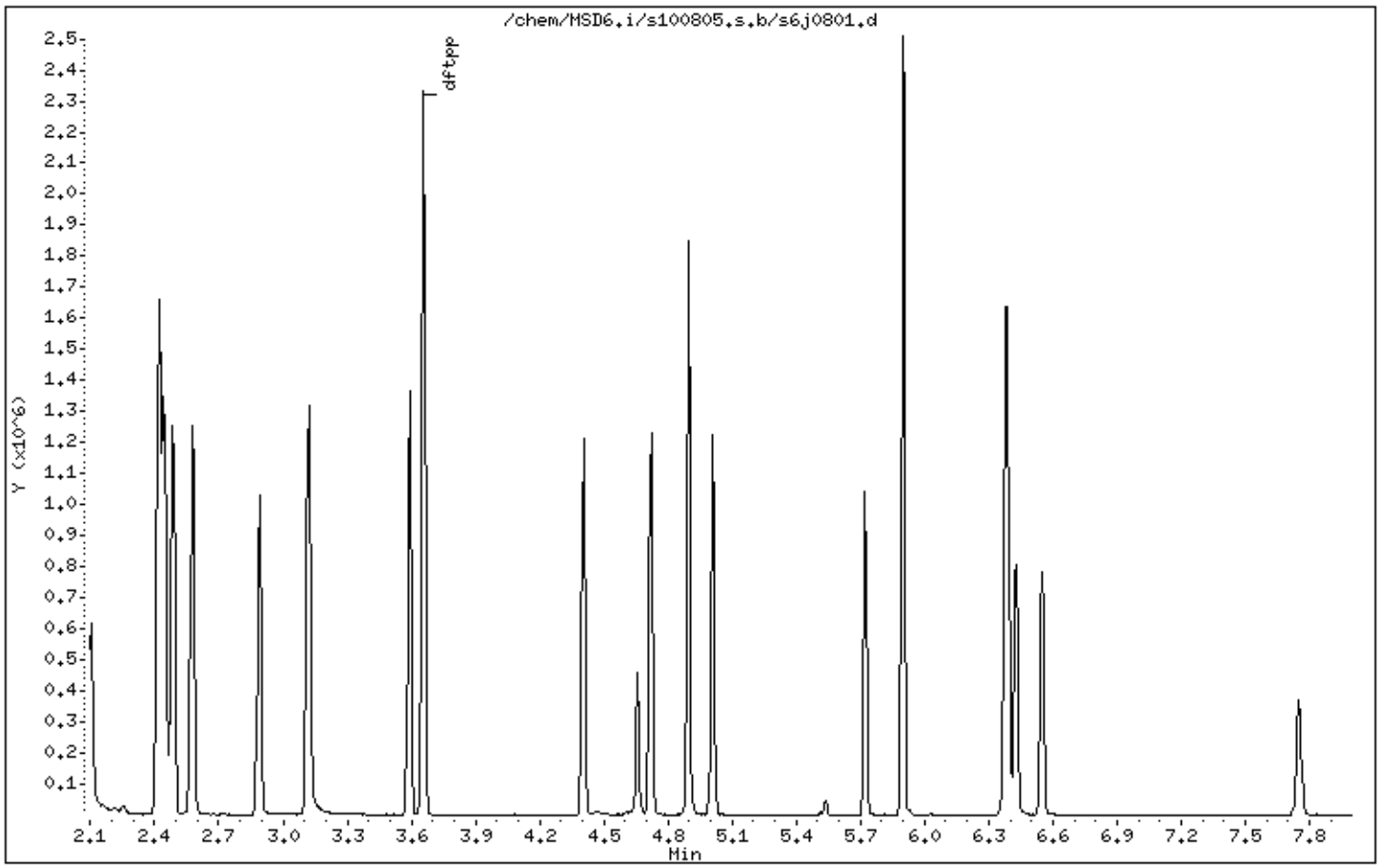
Instrument: MSD6.i

Sample Info: |WBN050916-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s100805.s.b/s6j0801.d

Date : 08-OCT-2005 17:20

Client ID: DFTPP

Instrument: MSD6.i

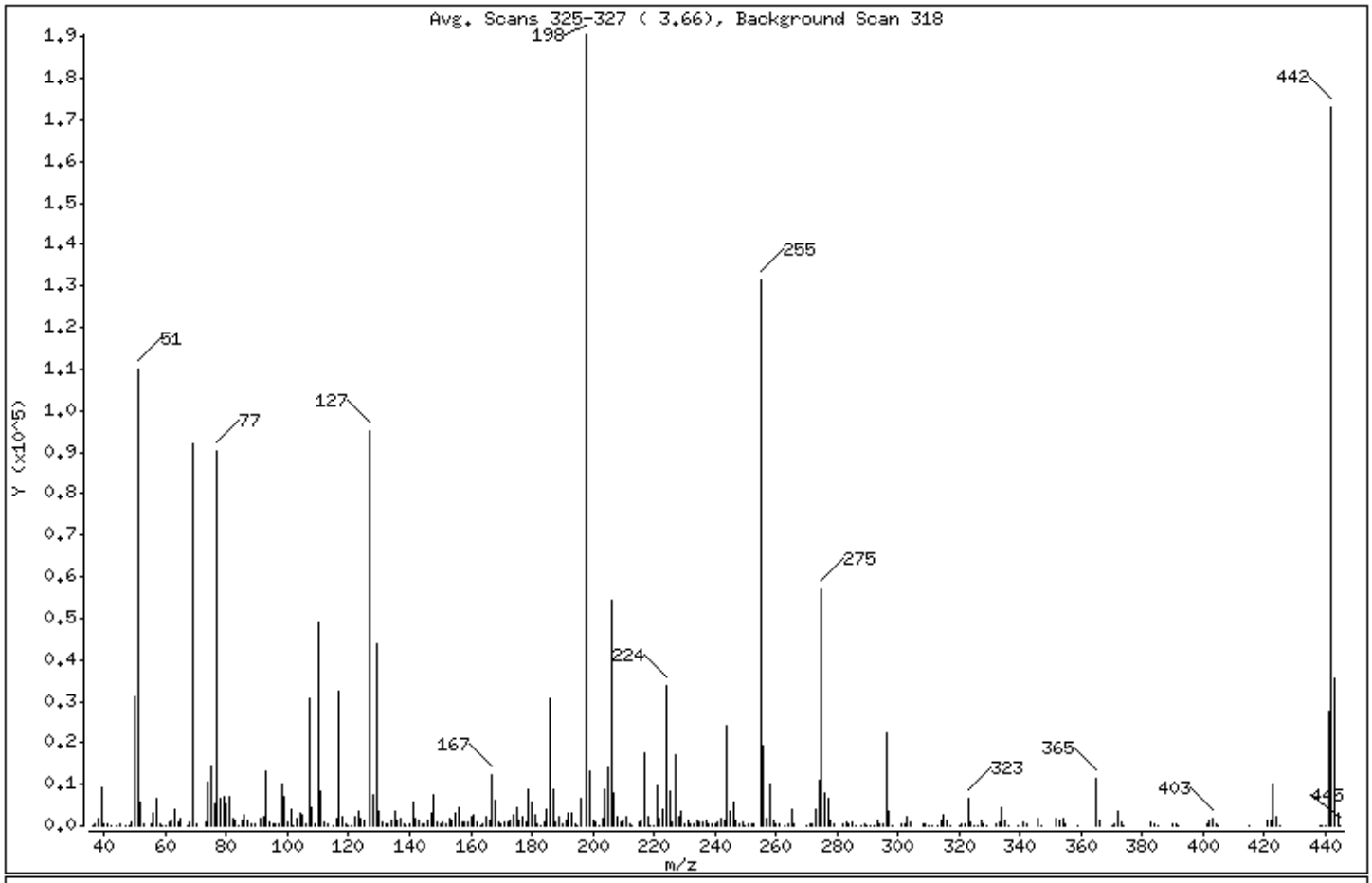
Sample Info: |WBN050916-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS

Column diameter: 0.20

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	57.60
68	Less than 2.00% of mass 69	0.46 (0.95)
69	Mass 69 relative abundance	48.36
70	Less than 2.00% of mass 69	0.28 (0.58)
127	40.00 - 60.00% of mass 198	49.94
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.83
275	10.00 - 30.00% of mass 198	29.82
365	Greater than 1.00% of mass 198	6.08
441	Present, but less than mass 443	14.39
442	Greater than 40.00% of mass 198	90.80
443	17.00 - 23.00% of mass 442	18.67 (20.56)

Date : 08-OCT-2005 17:20

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050916-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6j0801.d
Spectrum: Avg. Scans 325-327 (3.66), Background Scan 318
Location of Maximum: 198.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	64	123.00	3335	204.00	8879	292.00	68
37.00	583	124.00	1578	205.00	14194	293.00	1176
38.00	1579	125.00	1471	206.00	54336	294.00	456
39.00	9076	127.00	95168	207.00	7853	295.00	289
40.00	357	128.00	7487	208.00	2339	296.00	22504
41.00	267	129.00	43616	209.00	880	297.00	3317
42.00	59	130.00	3405	210.00	1367	298.00	217
44.00	134	131.00	820	211.00	2244	301.00	252
45.00	270	132.00	338	212.00	494	302.00	362
47.00	60	133.00	296	213.00	120	303.00	2261
48.00	62	134.00	1152	215.00	701	304.00	669
49.00	1045	135.00	3491	216.00	1526	308.00	411
50.00	30992	136.00	1310	217.00	17424	309.00	231
51.00	109760	137.00	1652	218.00	2181	310.00	199
52.00	5811	138.00	433	219.00	201	311.00	56
53.00	312	139.00	147	220.00	208	313.00	164
55.00	634	140.00	594	221.00	9498	314.00	1105
56.00	3156	141.00	5766	222.00	1870	315.00	2674
57.00	6693	142.00	1742	223.00	3776	316.00	1317
58.00	318	143.00	1403	224.00	33856	317.00	134
59.00	75	144.00	434	225.00	8516	320.00	50
60.00	144	145.00	283	226.00	975	321.00	587
61.00	1079	146.00	1135	227.00	17136	322.00	392
62.00	1377	147.00	2891	228.00	2318	323.00	6360
63.00	4033	148.00	7520	229.00	3389	324.00	1081
64.00	725	149.00	1027	230.00	446	325.00	127
65.00	1768	150.00	555	231.00	1275	326.00	62
67.00	152	151.00	911	232.00	259	327.00	1140
68.00	877	152.00	259	233.00	270	328.00	533
69.00	92160	153.00	1638	234.00	1110	329.00	115
70.00	538	154.00	1442	235.00	1089	332.00	495
73.00	901	155.00	3142	236.00	954	333.00	670
74.00	10576	156.00	4554	237.00	1368	334.00	4308
75.00	14564	157.00	878	238.00	286	335.00	1131
76.00	5267	158.00	968	239.00	627	336.00	158

Date : 08-OCT-2005 17:20

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050916-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6j0801.d
Spectrum: Avg. Scans 325-327 (3.66), Background Scan 318
Location of Maximum: 198.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	90248	159.00	918	240.00	574	339.00	129
78.00	6698	160.00	2020	241.00	782	341.00	770
79.00	7078	161.00	2610	242.00	1958	342.00	230
80.00	5055	162.00	923	243.00	1519	346.00	1764
81.00	7087	163.00	165	244.00	23984	347.00	161
82.00	1676	164.00	300	245.00	3370	352.00	1960
83.00	1297	165.00	2037	246.00	5863	353.00	1298
84.00	204	166.00	1452	247.00	1497	354.00	1894
85.00	1468	167.00	12071	248.00	264	355.00	360
86.00	2658	168.00	6124	249.00	743	359.00	208
87.00	1130	169.00	927	250.00	147	365.00	11582
88.00	523	170.00	440	251.00	235	366.00	1415
89.00	229	171.00	693	252.00	337	370.00	137
91.00	1666	172.00	1069	253.00	650	371.00	539
92.00	1990	173.00	1390	255.00	131456	372.00	3398
93.00	13044	174.00	2782	256.00	19304	373.00	865
94.00	778	175.00	4277	257.00	1703	374.00	77
95.00	266	176.00	1234	258.00	9998	383.00	847
96.00	624	177.00	2303	259.00	1508	384.00	288
97.00	260	178.00	793	260.00	306	385.00	70
98.00	10292	179.00	8641	261.00	253	390.00	461
99.00	7221	180.00	5798	263.00	66	391.00	330
100.00	742	181.00	2528	264.00	317	392.00	216
101.00	3838	182.00	633	265.00	3840	401.00	282
102.00	103	183.00	210	266.00	489	402.00	1333
103.00	1534	184.00	744	270.00	138	403.00	1582
104.00	3024	185.00	3963	271.00	416	404.00	594
105.00	2505	186.00	30640	272.00	632	405.00	133
106.00	547	187.00	8925	273.00	3986	415.00	64
107.00	30640	188.00	950	274.00	11164	421.00	1450
108.00	4506	189.00	2131	275.00	56832	422.00	1294
109.00	342	190.00	417	276.00	7859	423.00	10250
110.00	48920	191.00	1210	277.00	6584	424.00	2400
111.00	8403	192.00	2888	278.00	1290	425.00	210
112.00	915	193.00	3118	279.00	242	438.00	69

Date : 08-OCT-2005 17:20

Client ID: DFTPP Instrument: MSD6.i

Sample Info: |WBN050916-01|50NG|1|SVMF|1|

Operator: JLD

Column phase: J&W DB-5MS Column diameter: 0.20

Data File: s6j0801.d
Spectrum: Avg. Scans 325-327 (3.66), Background Scan 318
Location of Maximum: 198.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	371	194.00	563	282.00	235	439.00	190
115.00	62	195.00	196	283.00	684	440.00	168
116.00	1773	196.00	6354	284.00	553	441.00	27416
117.00	32560	198.00	190528	285.00	1039	442.00	172992
118.00	2334	199.00	13018	286.00	165	443.00	35576
119.00	252	200.00	1225	288.00	73	444.00	3002
120.00	172	201.00	1047	289.00	294	445.00	217
121.00	210	202.00	102	290.00	200		
122.00	2236	203.00	1678	291.00	56		

1B
SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938050

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6J0813-1

Level: (low/med) LOW Date Received: 09/16/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	10.0	U
62-53-3	Aniline	10.0	U
108-95-2	Phenol	10.0	U
111-44-4	bis(2-Chloroethyl) ether	10.0	U
95-57-8	2-Chlorophenol	10.0	U
541-73-1	1,3-Dichlorobenzene	10.0	U
106-46-7	1,4-Dichlorobenzene	10.0	U
100-51-6	Benzyl alcohol	10.0	U
95-50-1	1,2-Dichlorobenzene	10.0	U
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U
95-48-7	o-Cresol	10.0	U
621-64-7	N-Nitrosodipropylamine	10.0	U
65794-96-9	m,p-Cresols	10.0	U
67-72-1	Hexachloroethane	10.0	U
98-95-3	Nitrobenzene	10.0	U
78-59-1	Isophorone	10.0	U
88-75-5	2-Nitrophenol	10.0	U
105-67-9	2,4-Dimethylphenol	10.0	U
111-91-1	bis(2-Chloroethoxy)methane	10.0	U
120-83-2	2,4-Dichlorophenol	10.0	U
65-85-0	Benzoic acid	20.0	U
120-82-1	1,2,4-Trichlorobenzene	10.0	U
91-20-3	Naphthalene	1.0	U
106-47-8	4-Chloroaniline	10.0	U
87-68-3	Hexachlorobutadiene	10.0	U
59-50-7	4-Chloro-3-methylphenol	10.0	U
91-57-6	2-Methylnaphthalene	1.0	U
90-12-0	1-Methylnaphthalene	1.0	U
77-47-4	Hexachlorocyclopentadiene	10.0	U
88-06-2	2,4,6-Trichlorophenol	10.0	U
95-95-4	2,4,5-Trichlorophenol	10.0	U
91-58-7	2-Chloronaphthalene	1.0	U
88-74-4	o-Nitroaniline	10.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938050

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6J0813-1

Level: (low/med) LOW Date Received: 09/16/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	10.0	U
131-11-3	Dimethylphthalate	10.0	U
606-20-2	2,6-Dinitrotoluene	10.0	U
208-96-8	Acenaphthylene	1.0	U
83-32-9	Acenaphthene	1.0	U
51-28-5	2,4-Dinitrophenol	20.0	U
132-64-9	Dibenzofuran	10.0	U
121-14-2	2,4-Dinitrotoluene	10.0	U
84-66-2	Diethylphthalate	10.0	U
100-02-7	4-Nitrophenol	10.0	U
86-73-7	Fluorene	1.0	U
7005-72-3	4-Chlorophenylphenylether	10.0	U
534-52-1	2-Methyl-4,6-dinitrophenol	10.0	U
100-01-6	p-Nitroaniline	10.0	U
122-39-4	Diphenylamine	10.0	U
122-66-7	1,2-Diphenylhydrazine	10.0	U
101-55-3	4-Bromophenylphenylether	10.0	U
118-74-1	Hexachlorobenzene	10.0	U
1912-24-9	Atrazine	10.0	U
87-86-5	Pentachlorophenol	10.0	U
85-01-8	Phenanthrene	1.0	U
120-12-7	Anthracene	1.0	U
84-74-2	Di-n-butylphthalate	10.0	U
206-44-0	Fluoranthene	1.0	U
92-87-5	Benzidine	50.0	U
129-00-0	Pyrene	1.0	U
85-68-7	Butylbenzylphthalate	10.0	U
56-55-3	Benzo(a)anthracene	1.0	U
91-94-1	3,3'-Dichlorobenzidine	10.0	U
218-01-9	Chrysene	1.0	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.0	U
117-84-0	Di-n-octylphthalate	10.0	U
205-99-2	Benzo(b)fluoranthene	1.0	U

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938050

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6J0813-1

Level: (low/med) LOW Date Received: 09/16/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	1.0	U
50-32-8	Benzo(a)pyrene	1.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	U
53-70-3	Dibenzo(a,h)anthracene	1.0	U
191-24-2	Benzo(ghi)perylene	1.0	U
55-18-5	N-Nitrosodiethylamine	10.0	U
930-55-2	N-Nitrosopyrrolidine	10.0	U
924-16-3	N-Nitrosodi-n-butylamine	10.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10.0	U
608-93-5	Pentachlorobenzene	10.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	10.0	U
88-85-7	Dinoseb	10.0	U

1F

EPA SAMPLE NO.

SBLK01

SVOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WATER Lab Sample ID: 1200938050

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6J0813-1

Level: (low/med) LOW Date Received: 09/16/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	1.26	26.4	AJ
2.		UNKNOWN	1.43	5.1	J
3.		UNKNOWN	2.79	4.4	J
4.					
5.					
6.					
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30.					

FORM I SV-TIC OLM03.0

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0813-1.d
Lab Smp Id: 1200938050 Client Smp ID: sblk01
Inj Date : 08-OCT-2005 21:35
Operator : jld1 Inst ID: MSD6.i
Smp Info : |1200938050|463561|1|SVMF|1|MB
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.156	3.156	(1.000)	209412	40.0000	
* 29 Naphthalene-d8	136	3.997	3.996	(1.000)	794781	40.0000	
* 46 Acenaphthene-d10	164	5.219	5.224	(1.000)	492463	40.0000	
* 67 Phenanthrene-d10	188	6.259	6.258	(1.000)	758093	40.0000	
* 91 Chrysene-d12	240	7.804	7.809	(1.000)	558966	40.0000	
* 98 Perylene-d12	264	8.762	8.773	(1.000)	387370	40.0000	
$ 3 2-Fluorophenol	112	2.381	2.380	(0.754)	227843	39.5679	39.6
$ 5 Phenol-d5	99	2.904	2.909	(0.920)	186313	26.7950	26.8
$ 20 Nitrobenzene-d5	82	3.509	3.514	(0.878)	221883	38.3537	38.4
$ 39 2-Fluorobiphenyl	172	4.737	4.742	(0.908)	470120	34.0944	34.1
$ 60 2,4,6-Tribromophenol	329	5.777	5.782	(1.107)	155001	66.6216	66.6
$ 81 p-Terphenyl-d14	244	7.205	7.210	(0.923)	573005	47.1250	47.1

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0813-1.d
Lab Smp Id: 1200938050 Client Smp ID: sblk01
Inj Date : 08-OCT-2005 21:35
Operator : jld1 Inst ID: MSD6.i
Smp Info : |1200938050|463561|1|SVMF|1|MB
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:19 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 10 1,4-Dichlorobenzene-d4	3.156	1559575	40.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Aldol Condensate					CAS #:		
1.259	1028249	26.3725315	26.4	0		0	10
Unknown					CAS #:		
1.435	199699	5.12188425	5.1	0		0	10

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng/ul)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
====	====	==========	==========	====	=======	=========	======
Unknown				CAS #:			
2.792	171498	4.39857968	4.4	0		0	10

Data File: /chem/MSD6.i/s100805.s.b/s6j0813-1.d

Page 1

Date : 08-OCT-2005 21:35

Client ID: sblk01

Instrument: MSD6.i

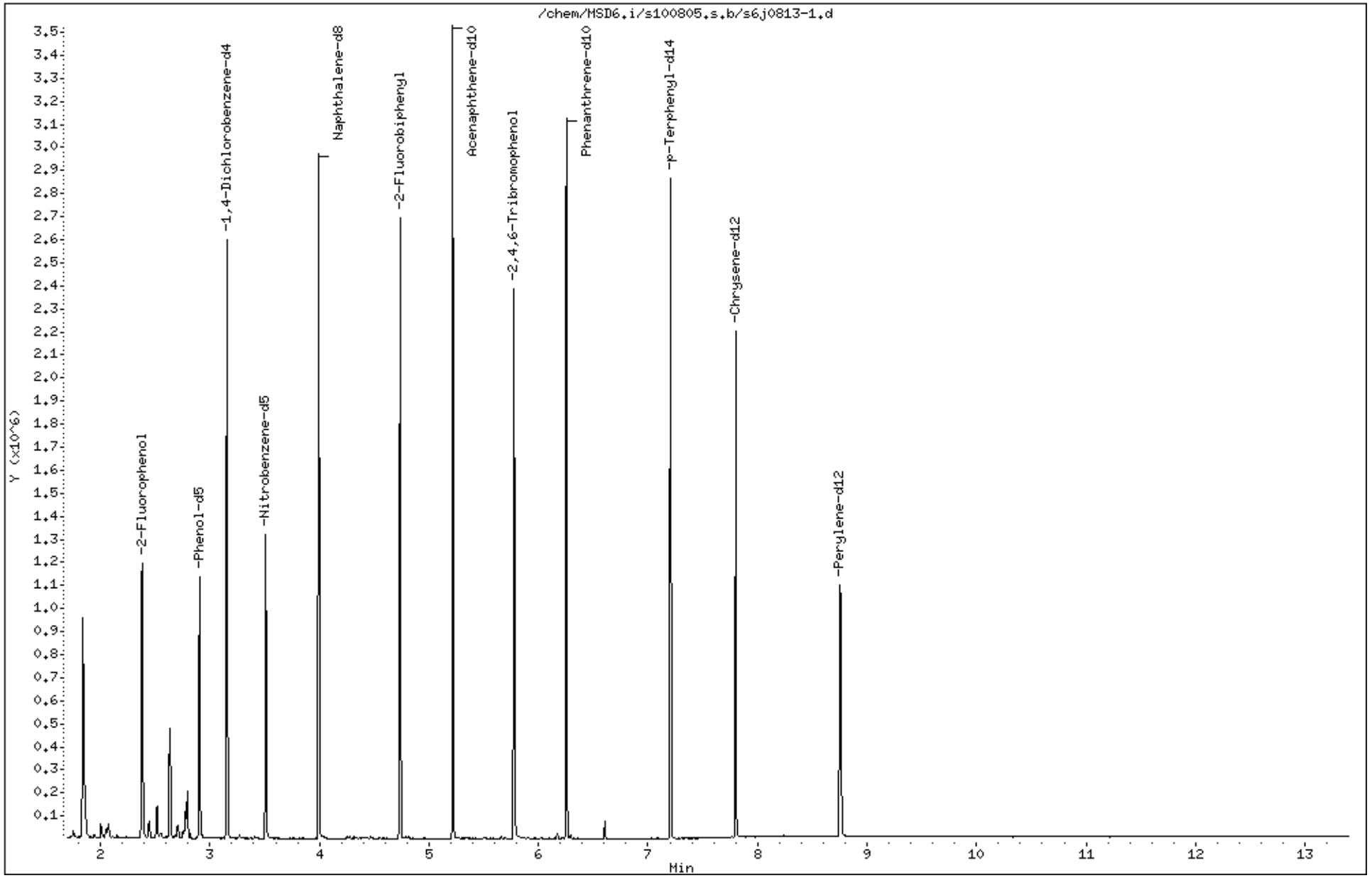
Sample Info: |1200938050|463561|1|SVMF|1|MB

Volume Injected (uL): 0.5

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



Data File: /chem/MSD6.i/s100805.s.b/s6j0813-1.d

Date : 08-OCT-2005 21:35

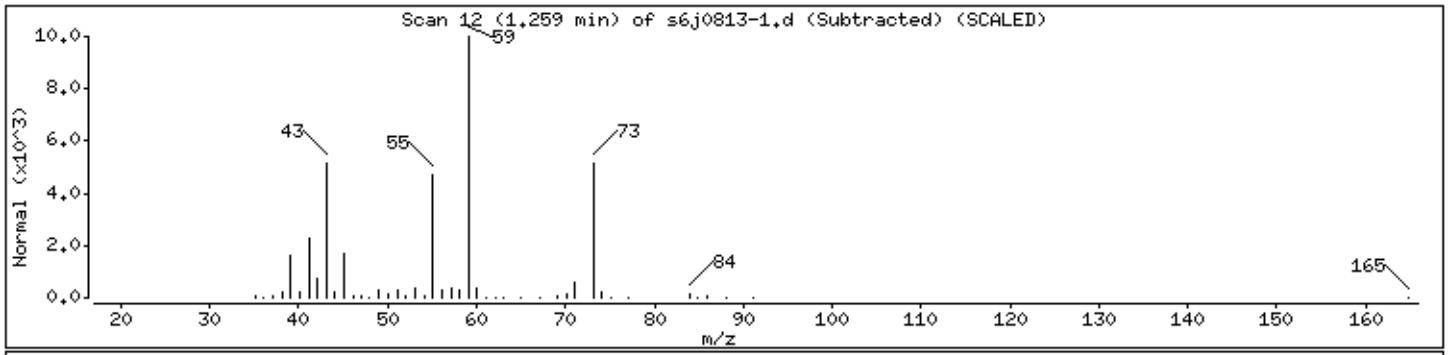
Client ID: sblk01 Instrument: MSD6.i

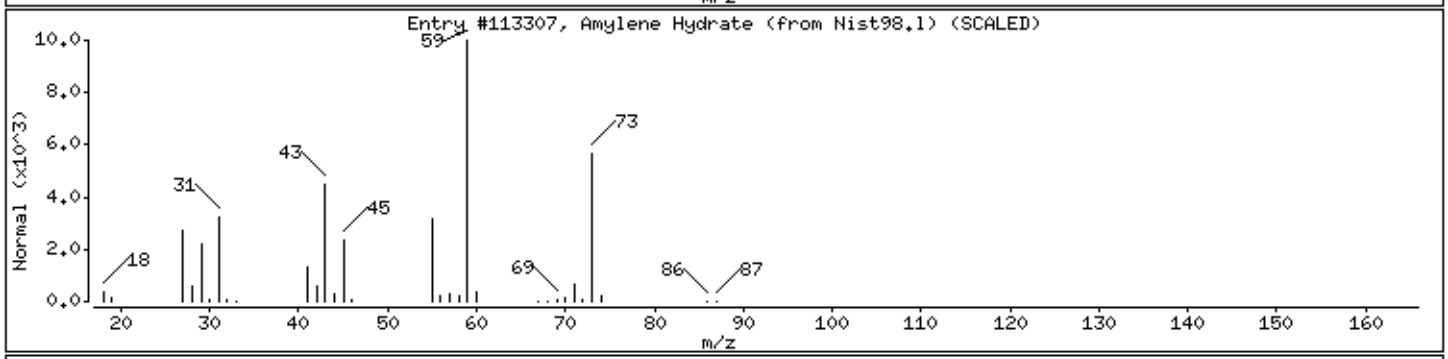
Sample Info: |1200938050|463561|1|SVMF|1|MB

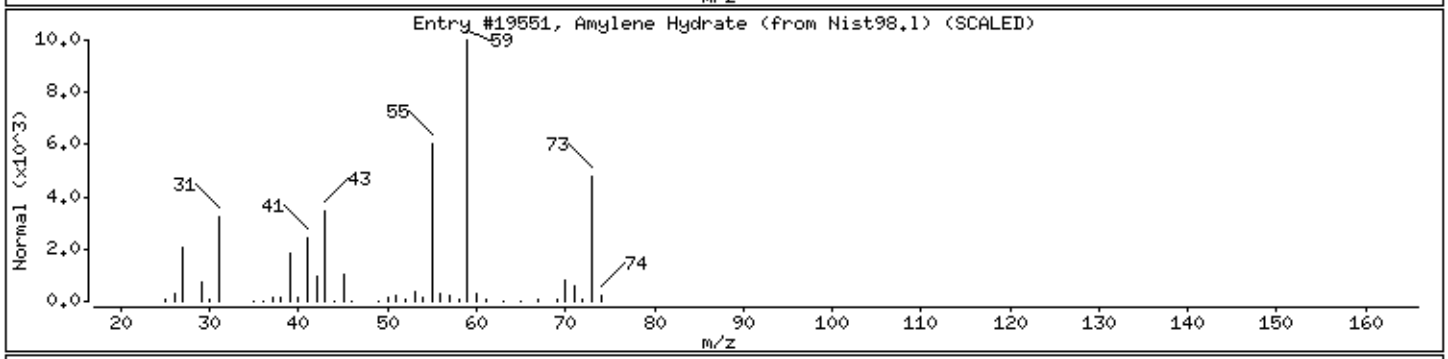
Volume Injected (uL): 0.5 Operator: jld1

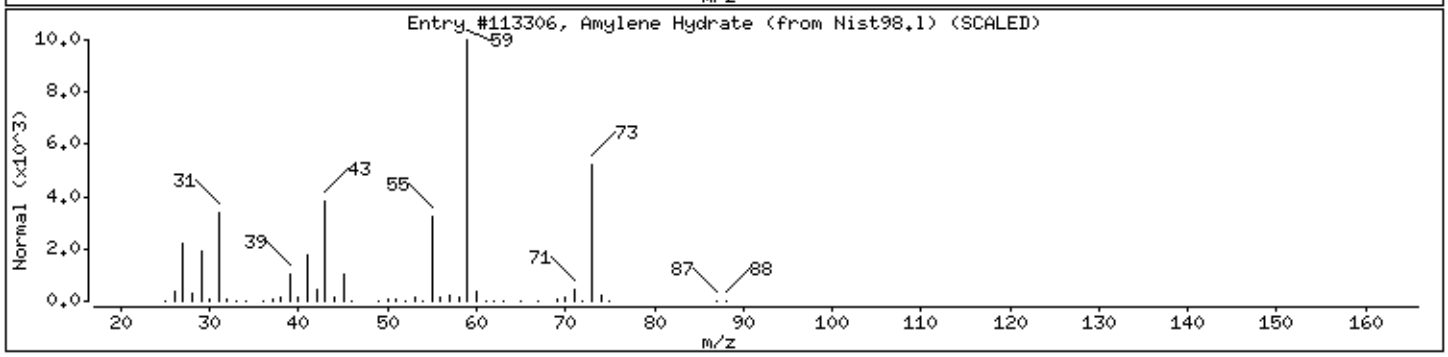
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aldol Condensate						
Amylene Hydrate	75-85-4	Nist98.l	113307	83	C5H120	88
Amylene Hydrate	75-85-4	Nist98.l	19551	78	C5H120	88
Amylene Hydrate	75-85-4	Nist98.l	113306	72	C5H120	88









Data File: /chem/MSD6.i/s100805.s.b/s6j0813-1.d

Date : 08-OCT-2005 21:35

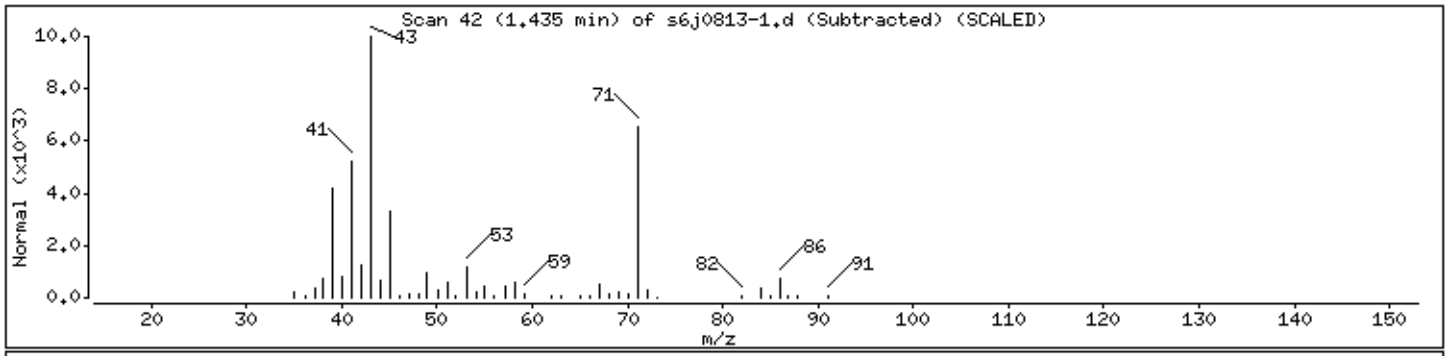
Client ID: sblk01 Instrument: MSD6.i

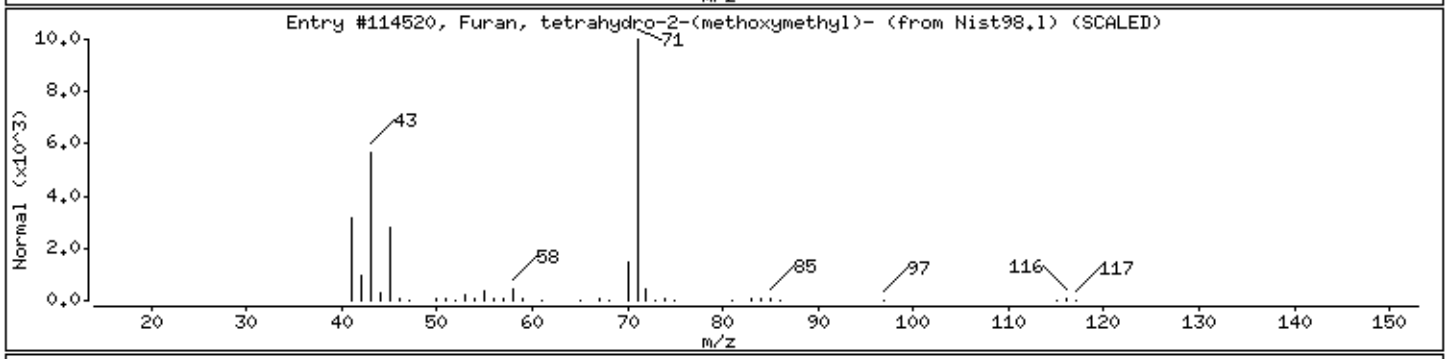
Sample Info: |1200938050|463561|1|SVMF|1|MB

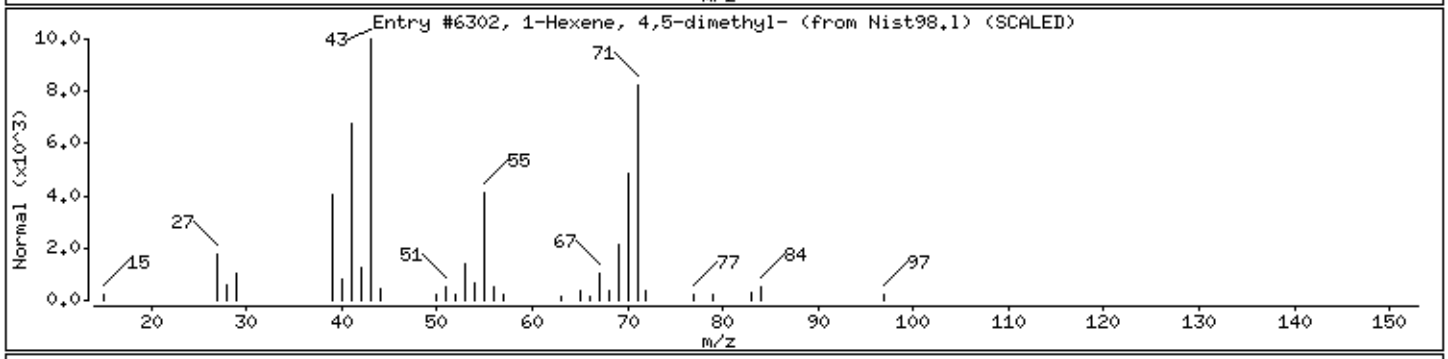
Volume Injected (uL): 0.5 Operator: jld1

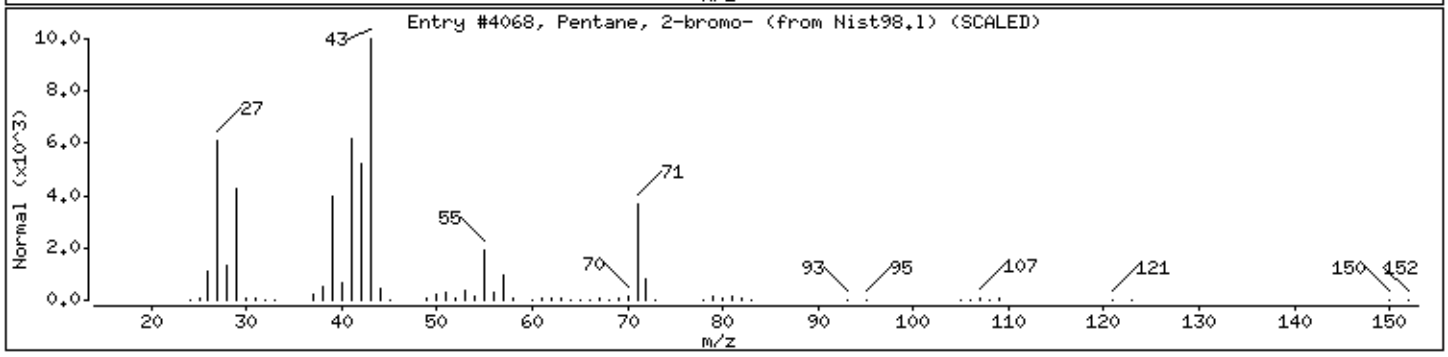
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Furan, tetrahydro-2-(methoxymethyl)-	19354-27-9	Nist98.l	114520	50	C6H12O2	116
1-Hexene, 4,5-dimethyl-	16106-59-5	Nist98.l	6302	36	C8H16	112
Pentane, 2-bromo-	107-81-3	Nist98.l	4068	33	C5H11Br	150









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Date : 08-OCT-2005 21:35

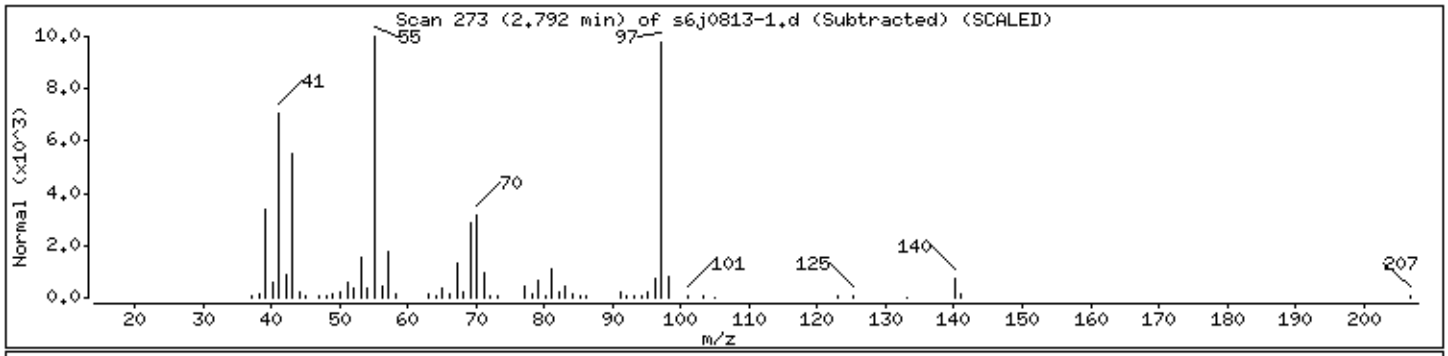
Client ID: sblk01 Instrument: MSD6.i

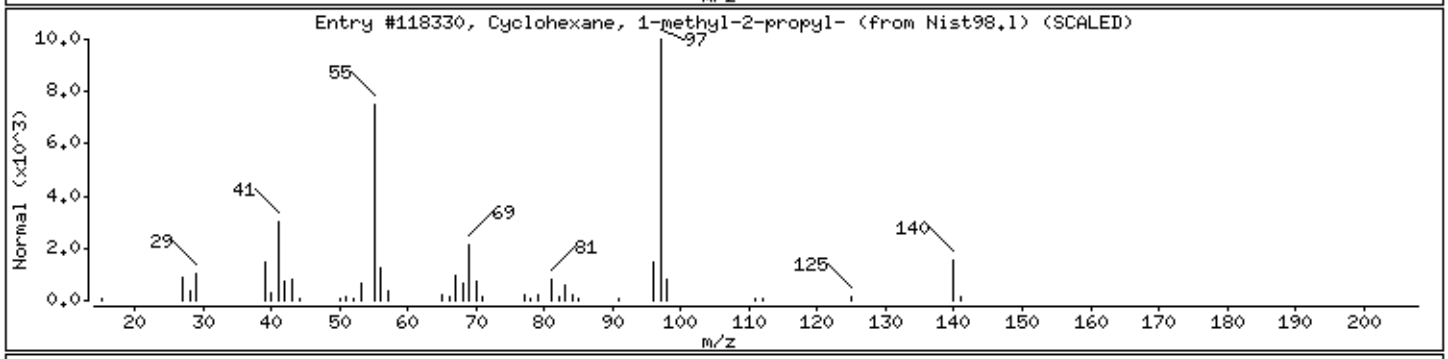
Sample Info: |1200938050|463561|1|SVMF|1|MB

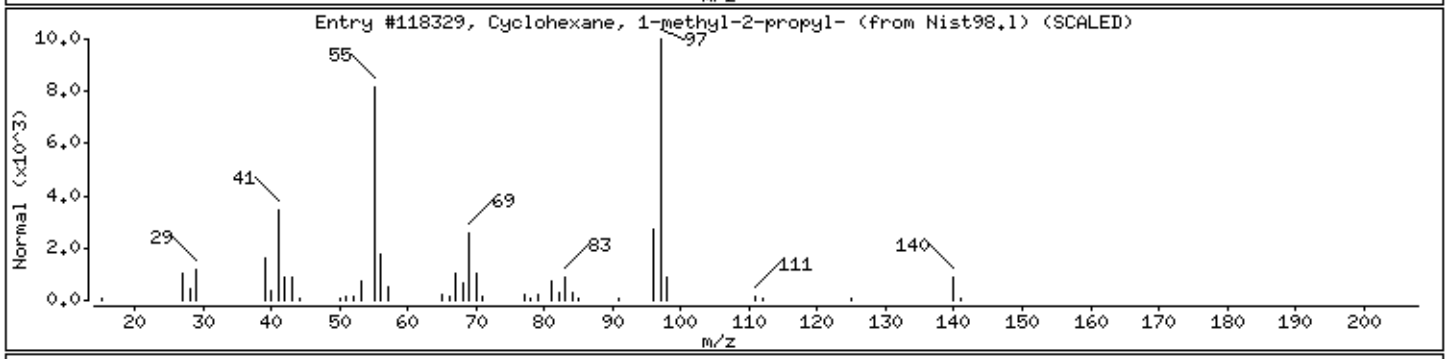
Volume Injected (uL): 0.5 Operator: jld1

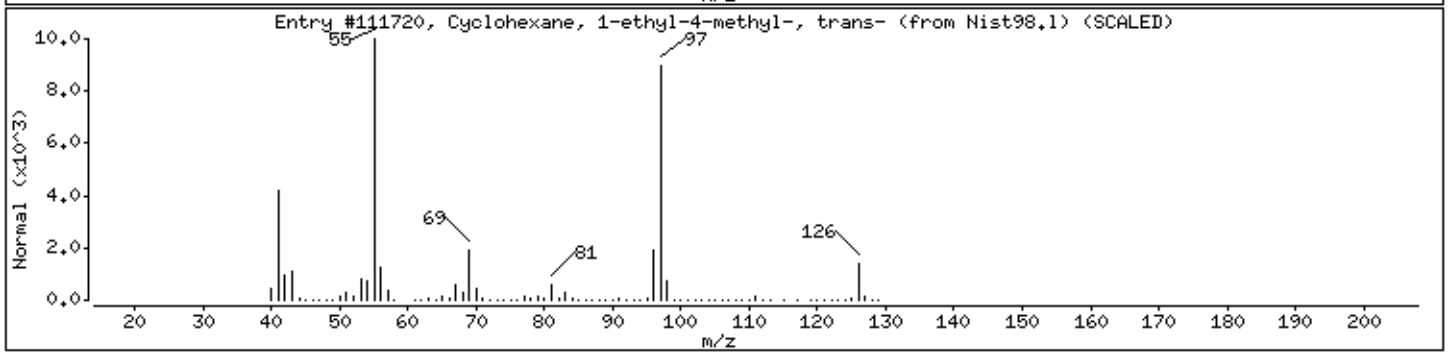
Column phase: J & W DB-5MS Column diameter: 0.20

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	Nist98.l	118330	64	C10H20	140
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	Nist98.l	118329	64	C10H20	140
Cyclohexane, 1-ethyl-4-methyl-, trans-	6236-88-0	Nist98.l	111720	59	C9H18	126









1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938051

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6J0814-1

Level: (low/med) LOW Date Received: 09/16/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	20.8	
62-53-3	Aniline	33.9	
108-95-2	Phenol	29.3	
111-44-4	bis(2-Chloroethyl) ether	31.1	
95-57-8	2-Chlorophenol	69.8	
541-73-1	1,3-Dichlorobenzene	29.7	
106-46-7	1,4-Dichlorobenzene	31.5	
100-51-6	Benzyl alcohol	34.1	
95-50-1	1,2-Dichlorobenzene	30.8	
108-60-1	bis(2-Chloroisopropyl)ether	31.2	
95-48-7	o-Cresol	58.2	
621-64-7	N-Nitrosodipropylamine	37.6	
65794-96-9	m,p-Cresols	58.2	
67-72-1	Hexachloroethane	31.4	
98-95-3	Nitrobenzene	37.4	
78-59-1	Isophorone	36.6	
88-75-5	2-Nitrophenol	72.1	
105-67-9	2,4-Dimethylphenol	71.7	
111-91-1	bis(2-Chloroethoxy)methane	35.4	
120-83-2	2,4-Dichlorophenol	73.3	
65-85-0	Benzoic acid	20.9	
120-82-1	1,2,4-Trichlorobenzene	32.4	
91-20-3	Naphthalene	35.4	
106-47-8	4-Chloroaniline	36.2	
87-68-3	Hexachlorobutadiene	34.8	
59-50-7	4-Chloro-3-methylphenol	81.6	
91-57-6	2-Methylnaphthalene	35.1	
90-12-0	1-Methylnaphthalene	34.9	
77-47-4	Hexachlorocyclopentadiene	23.5	
88-06-2	2,4,6-Trichlorophenol	77.8	
95-95-4	2,4,5-Trichlorophenol	79.1	
91-58-7	2-Chloronaphthalene	33.3	
88-74-4	o-Nitroaniline	40.0	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938051

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6J0814-1

Level: (low/med) LOW Date Received: 09/16/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	36.1	
131-11-3	Dimethylphthalate	36.9	
606-20-2	2,6-Dinitrotoluene	35.1	
208-96-8	Acenaphthylene	35.5	
83-32-9	Acenaphthene	34.0	
51-28-5	2,4-Dinitrophenol	67.2	
132-64-9	Dibenzofuran	34.8	
121-14-2	2,4-Dinitrotoluene	36.0	
84-66-2	Diethylphthalate	38.9	
100-02-7	4-Nitrophenol	34.3	
86-73-7	Fluorene	37.2	
7005-72-3	4-Chlorophenylphenylether	36.2	
534-52-1	2-Methyl-4,6-dinitrophenol	76.9	
100-01-6	p-Nitroaniline	36.0	
122-39-4	Diphenylamine	38.1	
122-66-7	1,2-Diphenylhydrazine	40.9	
101-55-3	4-Bromophenylphenylether	36.9	
118-74-1	Hexachlorobenzene	38.6	
1912-24-9	Atrazine	36.0	
87-86-5	Pentachlorophenol	81.5	
85-01-8	Phenanthrene	38.8	
120-12-7	Anthracene	38.9	
84-74-2	Di-n-butylphthalate	46.4	
206-44-0	Fluoranthene	41.0	
92-87-5	Benzidine	27.0	J
129-00-0	Pyrene	36.7	
85-68-7	Butylbenzylphthalate	40.2	
56-55-3	Benzo(a)anthracene	37.4	
91-94-1	3,3'-Dichlorobenzidine	43.6	
218-01-9	Chrysene	37.8	
117-81-7	bis(2-Ethylhexyl)phthalate	43.9	
117-84-0	Di-n-octylphthalate	43.6	
205-99-2	Benzo(b)fluoranthene	35.3	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01LCS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938051

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6J0814-1

Level: (low/med) LOW Date Received: 09/16/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/08/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	41.9	
50-32-8	Benzo(a)pyrene	40.5	
193-39-5	Indeno(1,2,3-cd)pyrene	45.9	
53-70-3	Dibenzo(a,h)anthracene	47.6	
191-24-2	Benzo(ghi)perylene	45.4	
55-18-5	N-Nitrosodiethylamine	10.0	U
930-55-2	N-Nitrosopyrrolidine	8.6	J
924-16-3	N-Nitrosodi-n-butylamine	2.6	J
95-94-3	1,2,4,5-Tetrachlorobenzene	10.0	U
608-93-5	Pentachlorobenzene	3.3	J
58-90-2	2,3,4,6-Tetrachlorophenol	10.0	U
88-85-7	Dinoseb	8.6	J

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0814-1.d
Lab Smp Id: 1200938051 Client Smp ID: SBLK01LCS
Inj Date : 08-OCT-2005 21:57
Operator : jld1 Inst ID: MSD6.i
Smp Info : |1200938051|463561|1|SVMF|1|LCS
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:47 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	1000.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.156	3.156	(1.000)	206335	40.0000	
* 29 Naphthalene-d8	136	3.996	3.996	(1.000)	847465	40.0000	
* 46 Acenaphthene-d10	164	5.224	5.224	(1.000)	499035	40.0000	
* 67 Phenanthrene-d10	188	6.258	6.258	(1.000)	772142	40.0000	
* 91 Chrysene-d12	240	7.809	7.809	(1.000)	719709	40.0000	
* 98 Perylene-d12	264	8.767	8.773	(1.000)	575637	40.0000	
$ 3 2-Fluorophenol	112	2.380	2.380	(0.754)	247701	43.6580	43.6
$ 5 Phenol-d5	99	2.903	2.909	(0.920)	200671	29.2903	29.3
$ 20 Nitrobenzene-d5	82	3.514	3.514	(0.879)	237815	38.5521	38.6
$ 39 2-Fluorobiphenyl	172	4.736	4.742	(0.907)	506743	36.2664	36.3
$ 60 2,4,6-Tribromophenol	329	5.782	5.782	(1.107)	187758	79.6382	79.6
$ 81 p-Terphenyl-d14	244	7.210	7.210	(0.923)	614491	39.2498	39.2
6 Phenol	94	2.915	2.915	(0.924)	207314	29.2815	29.3

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
8	2-Chlorophenol	128	3.027	3.026	(0.959)	399790	69.8315	69.8
11	1,4-Dichlorobenzene	146	3.168	3.167	(1.004)	227323	31.4963	31.5
17	N-Nitrosodipropylamine	70	3.414	3.408	(1.082)	175558	37.5701	37.6
28	1,2,4-Trichlorobenzene	180	3.955	3.955	(0.990)	190063	32.4547	32.4
33	4-Chloro-3-methylphenol	107	4.366	4.372	(1.093)	410050	81.6354	81.6
47	Acenaphthene	154	5.248	5.247	(1.004)	412945	33.9777	34.0
50	2,4-Dinitrotoluene	165	5.353	5.353	(1.025)	156857	35.9946	36.0
52	4-Nitrophenol	139	5.300	5.300	(1.015)	69539	34.2880	34.3
65	Pentachlorophenol	266	6.129	6.129	(0.979)	190035	81.4735	81.5
79	Pyrene	202	7.134	7.133	(0.913)	777327	36.7122	36.7
4	Aniline	93	2.956	2.952	(0.937)	299346	33.8686	33.9
7	bis(2-Chloroethyl) ether	93	2.980	2.985	(0.944)	169811	31.1492	31.1
9	1,3-Dichlorobenzene	146	3.121	3.126	(0.989)	216138	29.7280	29.7
12	Benzyl alcohol	108	3.238	3.238	(1.026)	116360	34.0997	34.1
13	1,2-Dichlorobenzene	146	3.268	3.267	(1.035)	207862	30.7752	30.8
14	bis(2-Chloroisopropyl)ether	45	3.314	3.320	(1.050)	414545	31.2329	31.2
15	o-Cresol	107	3.297	3.297	(1.045)	299229	58.2515	58.2
18	m,p-Cresols	107	3.397	3.397	(1.076)	402083	58.2514	58.2
19	Hexachloroethane	117	3.485	3.485	(1.104)	87829	31.4274	31.4
21	Nitrobenzene	77	3.526	3.526	(0.882)	238535	37.4576	37.4
22	Isophorone	82	3.685	3.679	(0.922)	413170	36.6322	36.6
23	2-Nitrophenol	139	3.738	3.737	(0.935)	233111	72.1191	72.1
24	2,4-Dimethylphenol	122	3.749	3.749	(0.938)	385946	71.6715	71.7
25	bis(2-Chloroethoxy)methane	93	3.820	3.820	(0.956)	225036	35.3912	35.4
26	2,4-Dichlorophenol	162	3.896	3.896	(0.975)	371538	73.3122	73.3
27	Benzoic acid	105	3.796	3.808	(0.950)	16232	20.9113	20.9
30	Naphthalene	128	4.014	4.013	(1.004)	565744	35.4449	35.4
31	4-Chloroaniline	127	4.043	4.039	(1.012)	280206	36.2117	36.2
32	Hexachlorobutadiene	225	4.084	4.084	(1.022)	124921	34.8390	34.8
34	2-Methylnaphthalene	142	4.484	4.489	(1.122)	412682	35.1309	35.1
35	1-Methylnaphthalene	142	4.554	4.560	(1.140)	390356	34.8698	34.9
36	Hexachlorocyclopentadiene	237	4.589	4.589	(0.879)	95928	23.5364	23.5
37	2,4,6-Trichlorophenol	196	4.683	4.683	(0.897)	308679	77.7860	77.8
38	2,4,5-Trichlorophenol	196	4.707	4.707	(0.901)	326955	79.0672	79.1
40	2-Chloronaphthalene	162	4.830	4.830	(0.925)	420310	33.2840	33.3
42	o-Nitroaniline	65	4.895	4.897	(0.937)	159651	39.9878	40.0
41	m-Nitroaniline	138	5.189	5.191	(0.993)	119133	36.0794	36.1
43	Dimethylphthalate	163	5.024	5.024	(0.962)	567347	36.8692	36.9
44	2,6-Dinitrotoluene	165	5.071	5.071	(0.971)	117487	35.1161	35.1(R)
45	Acenaphthylene	152	5.124	5.124	(0.981)	662330	35.5187	35.5
48	2,4-Dinitrophenol	184	5.265	5.265	(1.008)	112701	67.1918	67.2(Q)
49	Dibenzofuran	168	5.365	5.365	(1.027)	593589	34.7507	34.8
51	Diethylphthalate	149	5.518	5.518	(1.056)	608879	38.9116	38.9
53	Fluorene	166	5.612	5.612	(1.074)	517303	37.1853	37.2
54	4-Chlorophenylphenylether	204	5.606	5.606	(1.073)	252850	36.2372	36.2
55	2-Methyl-4,6-dinitrophenol	198	5.647	5.647	(0.902)	183239	76.9478	76.9
56	p-Nitroaniline	138	5.624	5.619	(1.076)	107795	36.0521	36.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
133	Diphenylamine	169	5.688	5.688	(0.909)	448660	38.1429	38.1
58	1,2-Diphenylhydrazine	77	5.718	5.717	(0.914)	557871	40.8779	40.9
61	4-Bromophenylphenylether	248	5.953	5.952	(0.951)	155516	36.8631	36.9
63	Hexachlorobenzene	284	6.000	5.999	(0.959)	187369	38.5741	38.6
207	Atrazine	173	6.058	6.060	(0.968)	38923	35.9905	36.0
68	Phenanthrene	178	6.276	6.275	(1.003)	707894	38.8483	38.8
69	Anthracene	178	6.305	6.305	(1.008)	700338	38.8664	38.9
72	Di-n-butylphthalate	149	6.611	6.610	(1.056)	1032707	46.4356	46.4
76	Fluoranthene	202	6.998	7.004	(1.118)	761882	41.0586	41.0
77	Benzidine	184	7.069	7.077	(0.905)	270674	27.0314	27.0(a)
85	Butylbenzylphthalate	149	7.468	7.468	(0.956)	426359	40.1689	40.2
89	Benzo(a)anthracene	228	7.797	7.803	(0.998)	704802	37.3653	37.4
90	3,3'-Dichlorobenzidine	252	7.774	7.782	(0.995)	246649	43.6500	43.6
92	Chrysene	228	7.821	7.827	(1.002)	655487	37.7501	37.8
93	bis(2-Ethylhexyl)phthalate	149	7.768	7.774	(0.995)	555992	43.8976	43.9
94	Di-n-octylphthalate	149	8.138	8.144	(0.928)	782788	43.6322	43.6
95	Benzo(b)fluoranthene	252	8.473	8.473	(0.966)	581732	35.2632	35.3
96	Benzo(k)fluoranthene	252	8.491	8.496	(0.968)	638521	41.8987	41.9
97	Benzo(a)pyrene	252	8.720	8.726	(0.995)	491328	40.5127	40.5
99	Indeno(1,2,3-cd)pyrene	276	9.778	9.783	(1.115)	505354	45.8941	45.9
100	Dibenzo(a,h)anthracene	278	9.783	9.789	(1.116)	425297	47.6438	47.6
101	Benzo(ghi)perylene	276	10.089	10.089	(1.151)	411425	45.4569	45.4
111	N-Nitrosopyrrolidine	100	3.027	3.403	(0.959)	26336	8.59627	8.6(aQ)
121	N-Nitrosodi-n-butylamine	84	4.302	4.267	(1.076)	13454	2.58301	2.6(a)
127	Pentachlorobenzene	250	5.782	5.336	(1.107)	21461	3.34116	3.3(a)
143	Dinoseb	211	6.164	6.241	(0.985)	1946	8.58117	8.6(a)
1	N-Methyl-N-nitrosomethylamine	74	1.705	1.704	(0.540)	73044	20.8245	20.8

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: /chem/MSD6.i/s100805.s.b/s6j0814-1.d

Date : 08-OCT-2005 21:57

Client ID: SBLK01LCS

Instrument: MSD6.i

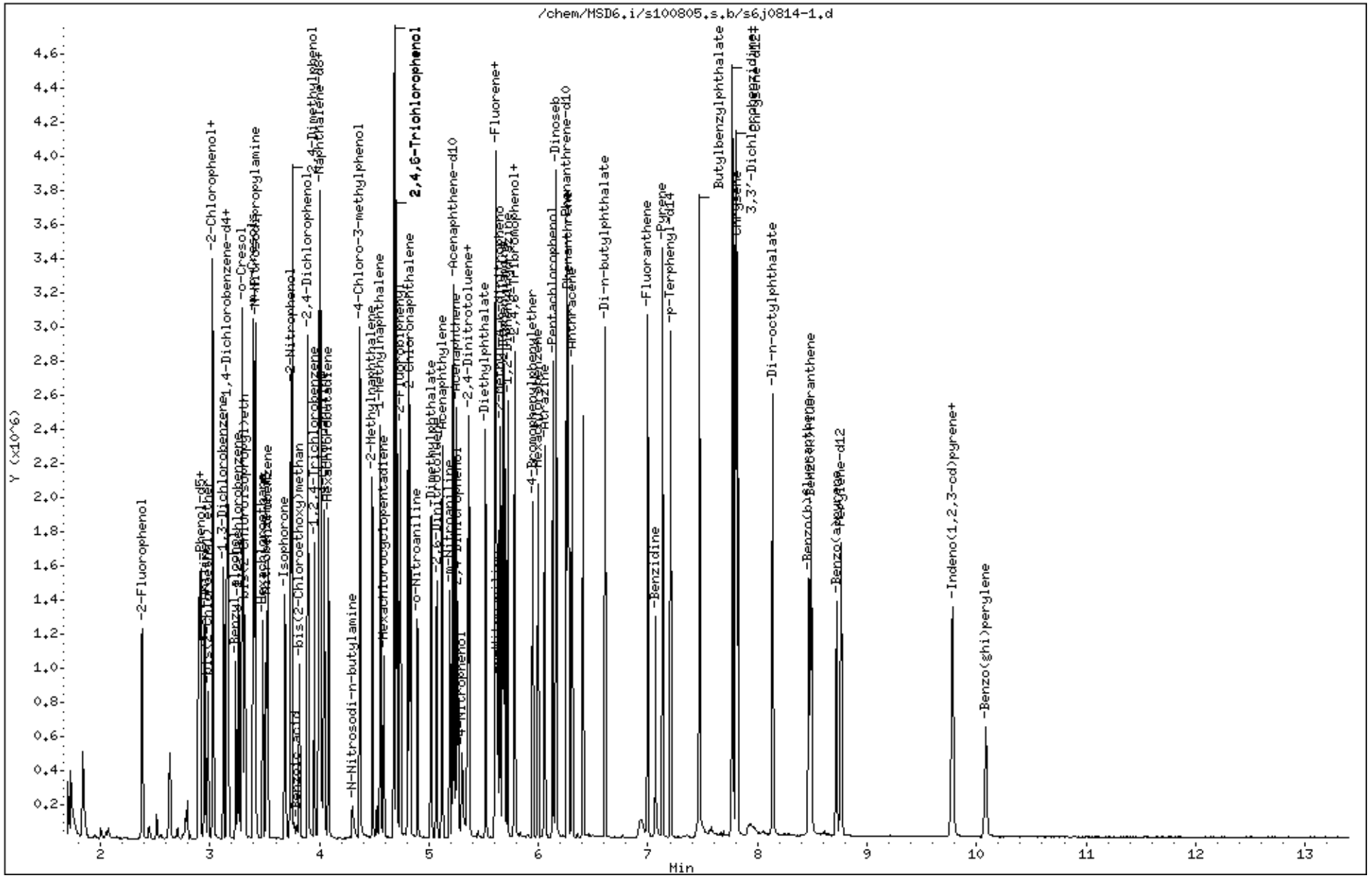
Sample Info: |1200938051|463561|1|SVMF|1|LCS

Volume Injected (uL): 0.5

Operator: jld1

Column phase: J & W DB-5MS

Column diameter: 0.20



1B

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938052

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0822

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Methyl-N-nitrosomethylamin	64.2	
62-53-3	Aniline	72.8	
108-95-2	Phenol	96.6	
111-44-4	bis(2-Chloroethyl) ether	69.9	
95-57-8	2-Chlorophenol	157	
541-73-1	1,3-Dichlorobenzene	67.5	
106-46-7	1,4-Dichlorobenzene	69.9	
100-51-6	Benzyl alcohol	75.2	
95-50-1	1,2-Dichlorobenzene	69.9	
108-60-1	bis(2-Chloroisopropyl)ether	67.0	
95-48-7	o-Cresol	139	
621-64-7	N-Nitrosodipropylamine	86.6	
65794-96-9	m,p-Cresols	145	
67-72-1	Hexachloroethane	72.8	
98-95-3	Nitrobenzene	82.9	
78-59-1	Isophorone	81.8	
88-75-5	2-Nitrophenol	163	
105-67-9	2,4-Dimethylphenol	167	
111-91-1	bis(2-Chloroethoxy)methane	78.7	
120-83-2	2,4-Dichlorophenol	168	
65-85-0	Benzoic acid	99.2	
120-82-1	1,2,4-Trichlorobenzene	73.6	
91-20-3	Naphthalene	80.6	
106-47-8	4-Chloroaniline	73.3	
87-68-3	Hexachlorobutadiene	79.1	
59-50-7	4-Chloro-3-methylphenol	184	
91-57-6	2-Methylnaphthalene	79.8	
90-12-0	1-Methylnaphthalene	78.2	
77-47-4	Hexachlorocyclopentadiene	55.2	
88-06-2	2,4,6-Trichlorophenol	176	
95-95-4	2,4,5-Trichlorophenol	176	
91-58-7	2-Chloronaphthalene	77.9	
88-74-4	o-Nitroaniline	87.9	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938052

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0822

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	m-Nitroaniline	78.0	
131-11-3	Dimethylphthalate	82.8	
606-20-2	2,6-Dinitrotoluene	80.0	
208-96-8	Acenaphthylene	80.7	
83-32-9	Acenaphthene	75.0	
51-28-5	2,4-Dinitrophenol	160	
132-64-9	Dibenzofuran	79.1	
121-14-2	2,4-Dinitrotoluene	83.1	
84-66-2	Diethylphthalate	89.0	
100-02-7	4-Nitrophenol	114	
86-73-7	Fluorene	84.0	
7005-72-3	4-Chlorophenylphenylether	84.8	
534-52-1	2-Methyl-4,6-dinitrophenol	188	
100-01-6	p-Nitroaniline	83.6	
122-39-4	Diphenylamine	87.8	
122-66-7	1,2-Diphenylhydrazine	92.8	
101-55-3	4-Bromophenylphenylether	85.0	
118-74-1	Hexachlorobenzene	87.9	
1912-24-9	Atrazine	83.5	
87-86-5	Pentachlorophenol	200	
85-01-8	Phenanthrene	86.2	
120-12-7	Anthracene	87.6	
84-74-2	Di-n-butylphthalate	95.4	
206-44-0	Fluoranthene	88.8	
92-87-5	Benzidine	41.5	J
129-00-0	Pyrene	92.8	
85-68-7	Butylbenzylphthalate	94.0	
56-55-3	Benzo(a)anthracene	86.3	
91-94-1	3,3'-Dichlorobenzidine	81.3	
218-01-9	Chrysene	84.9	
117-81-7	bis(2-Ethylhexyl)phthalate	97.9	
117-84-0	Di-n-octylphthalate	103	
205-99-2	Benzo(b)fluoranthene	87.6	

1C

SVOA ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GU05090G3TM01MS

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 145579

Matrix: (soil/water) GROUND WAT Lab Sample ID: 1200938052

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: S6J0822

Level: (low/med) LOW Date Received: 09/15/05

% Moisture: _____ decanted: (Y/N)___ Date Extracted:09/16/05

Concentrated Extract Volume: 1.00(mL) Date Analyzed: 10/09/05

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
207-08-9	Benzo(k)fluoranthene	90.1	
50-32-8	Benzo(a)pyrene	91.9	
193-39-5	Indeno(1,2,3-cd)pyrene	91.8	
53-70-3	Dibenzo(a,h)anthracene	94.3	
191-24-2	Benzo(ghi)perylene	90.4	
55-18-5	N-Nitrosodiethylamine	20.0	U
930-55-2	N-Nitrosopyrrolidine	19.6	J
924-16-3	N-Nitrosodi-n-butylamine	9.0	J
95-94-3	1,2,4,5-Tetrachlorobenzene	20.0	U
608-93-5	Pentachlorobenzene	8.2	J
58-90-2	2,3,4,6-Tetrachlorophenol	20.0	U
88-85-7	Dinoseb	17.5	J

General Engineering Laboratories, LLC

General Engineering Laboratories, Inc.

Data file : /chem/MSD6.i/s100805.s.b/s6j0822.d
Lab Smp Id: 1200938052 Client Smp ID: GU05090G3TM01MS
Inj Date : 09-OCT-2005 00:53
Operator : jld1 Inst ID: MSD6.i
Smp Info : |1200938052|463561|1|SVMF|1|MS
Misc Info : |MSD82709LF|WBN051003-01
Comment : Column: J & W DB-5MS:25m x 0.20mm - 0.33um Film
Method : /chem/MSD6.i/s100805.s.b/MSD6-8270-092605.m
Meth Date : 10-Oct-2005 17:47 jen00986 Quant Type: ISTD
Cal Date : 26-SEP-2005 22:30 Cal File: s6i2635.d
Als bottle: 22 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 145579.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * Uf * Vt/(Vo *Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	500.00000	ng unit correction factor
Vt	1.00000	volume of final ext
Vo	500.00000	volume of sample ext
Vi	0.50000	volume injected

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	FINAL (ug/L)
* 10 1,4-Dichlorobenzene-d4	152	3.160	3.156	(1.000)	226969	40.0000	
* 29 Naphthalene-d8	136	4.000	3.996	(1.000)	931680	40.0000	
* 46 Acenaphthene-d10	164	5.222	5.224	(1.000)	532871	40.0000	
* 67 Phenanthrene-d10	188	6.262	6.258	(1.000)	824333	40.0000	
* 91 Chrysene-d12	240	7.801	7.809	(1.000)	646969	40.0000	
* 98 Perylene-d12	264	8.759	8.773	(1.000)	438996	40.0000	
$ 3 2-Fluorophenol	112	2.378	2.380	(0.753)	374218	59.9608	120
$ 5 Phenol-d5	99	2.907	2.909	(0.920)	356910	47.3591	94.7
$ 20 Nitrobenzene-d5	82	3.512	3.514	(0.878)	296565	43.7304	87.5
$ 39 2-Fluorobiphenyl	172	4.740	4.742	(0.908)	625471	41.9211	83.8
$ 60 2,4,6-Tribromophenol	329	5.786	5.782	(1.108)	232701	92.4337	185
$ 81 p-Terphenyl-d14	244	7.208	7.210	(0.924)	666702	47.3726	94.7
6 Phenol	94	2.919	2.915	(0.924)	375992	48.2780	96.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
8	2-Chlorophenol	128	3.025	3.026	(0.957)	494470	78.5174	157
11	1,4-Dichlorobenzene	146	3.171	3.167	(1.004)	277629	34.9693	69.9
17	N-Nitrosodipropylamine	70	3.418	3.408	(1.082)	222618	43.3100	86.6
28	1,2,4-Trichlorobenzene	180	3.953	3.955	(0.988)	237090	36.8255	73.6
33	4-Chloro-3-methylphenol	107	4.370	4.372	(1.093)	508587	92.1005	184
47	Acenaphthene	154	5.245	5.247	(1.004)	486818	37.5126	75.0
50	2,4-Dinitrotoluene	165	5.357	5.353	(1.026)	193348	41.5511	83.1
52	4-Nitrophenol	139	5.304	5.300	(1.016)	123878	57.2028	114
65	Pentachlorophenol	266	6.133	6.129	(0.979)	249717	100.283	200
79	Pyrene	202	7.131	7.133	(0.914)	883657	46.4263	92.8
4	Aniline	93	2.954	2.952	(0.935)	354169	36.4284	72.8
7	bis(2-Chloroethyl) ether	93	2.983	2.985	(0.944)	209669	34.9641	69.9
9	1,3-Dichlorobenzene	146	3.124	3.126	(0.989)	270091	33.7715	67.5
12	Benzyl alcohol	108	3.236	3.238	(1.024)	141201	37.6176	75.2
13	1,2-Dichlorobenzene	146	3.265	3.267	(1.033)	259596	34.9406	69.9
14	bis(2-Chloroisopropyl)ether	45	3.318	3.320	(1.050)	488831	33.4816	67.0
15	o-Cresol	107	3.295	3.297	(1.043)	394002	69.7282	139
18	m,p-Cresols	107	3.401	3.397	(1.076)	551940	72.6924	145
19	Hexachloroethane	117	3.483	3.485	(1.102)	111891	36.3975	72.8
21	Nitrobenzene	77	3.530	3.526	(0.882)	290279	41.4628	82.9
22	Isophorone	82	3.688	3.679	(0.922)	507151	40.9003	81.8
23	2-Nitrophenol	139	3.735	3.737	(0.934)	289262	81.4018	163
24	2,4-Dimethylphenol	122	3.753	3.749	(0.938)	494532	83.5351	167
25	bis(2-Chloroethoxy)methane	93	3.818	3.820	(0.954)	275197	39.3678	78.7
26	2,4-Dichlorophenol	162	3.894	3.896	(0.974)	466905	83.8024	168
27	Benzoic acid	105	3.829	3.808	(0.957)	132378	49.5970	99.2
30	Naphthalene	128	4.012	4.013	(1.003)	702345	40.2843	80.6
31	4-Chloroaniline	127	4.041	4.039	(1.010)	311764	36.6482	73.3
32	Hexachlorobutadiene	225	4.088	4.084	(1.022)	155895	39.5474	79.1
34	2-Methylnaphthalene	142	4.487	4.489	(1.122)	515278	39.8998	79.8
35	1-Methylnaphthalene	142	4.558	4.560	(1.140)	480926	39.0771	78.2
36	Hexachlorocyclopentadiene	237	4.593	4.589	(0.880)	120096	27.5951	55.2
37	2,4,6-Trichlorophenol	196	4.681	4.683	(0.896)	373835	88.2233	176
38	2,4,5-Trichlorophenol	196	4.711	4.707	(0.902)	388175	87.9114	176
40	2-Chloronaphthalene	162	4.834	4.830	(0.926)	525415	38.9652	77.9
42	o-Nitroaniline	65	4.899	4.897	(0.938)	187434	43.9656	87.9
41	m-Nitroaniline	138	5.193	5.191	(0.994)	137549	39.0116	78.0
43	Dimethylphthalate	163	5.022	5.024	(0.962)	680429	41.4102	82.8
44	2,6-Dinitrotoluene	165	5.069	5.071	(0.971)	142949	40.0135	80.0
45	Acenaphthylene	152	5.122	5.124	(0.981)	803334	40.3449	80.7
48	2,4-Dinitrophenol	184	5.269	5.265	(1.009)	147388	79.7865	160(Q)
49	Dibenzofuran	168	5.369	5.365	(1.028)	721526	39.5583	79.1
51	Diethylphthalate	149	5.522	5.518	(1.057)	743992	44.5272	89.0
53	Fluorene	166	5.610	5.612	(1.074)	623731	41.9888	84.0
54	4-Chlorophenylphenylether	204	5.604	5.606	(1.073)	316098	42.4251	84.8
55	2-Methyl-4,6-dinitrophenol	198	5.651	5.647	(0.902)	238867	93.9569	188
56	p-Nitroaniline	138	5.633	5.619	(1.079)	133506	41.8159	83.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ul)	CONCENTRATIONS FINAL (ug/L)
133 Diphenylamine	169	5.692	5.688	(0.909)	551453	43.9136	87.8
58 1,2-Diphenylhydrazine	77	5.721	5.717	(0.914)	675881	46.3895	92.8
61 4-Bromophenylphenylether	248	5.950	5.952	(0.950)	191432	42.5037	85.0
63 Hexachlorobenzene	284	5.997	5.999	(0.958)	227964	43.9601	87.9
207 Atrazine	173	6.062	6.060	(0.968)	48187	41.7355	83.5
68 Phenanthrene	178	6.274	6.275	(1.002)	838874	43.1217	86.2
69 Anthracene	178	6.309	6.305	(1.008)	842706	43.8064	87.6
72 Di-n-butylphthalate	149	6.609	6.610	(1.055)	1132291	47.6899	95.4
76 Fluoranthene	202	7.002	7.004	(1.118)	879256	44.3840	88.8
77 Benzidine	184	7.067	7.077	(0.906)	186900	20.7637	41.5(a)
85 Butylbenzylphthalate	149	7.466	7.468	(0.957)	448725	47.0293	94.0
89 Benzo(a)anthracene	228	7.795	7.803	(0.999)	731550	43.1438	86.3
90 3,3'-Dichlorobenzidine	252	7.772	7.782	(0.996)	206579	40.6691	81.3
92 Chrysene	228	7.819	7.827	(1.002)	662443	42.4401	84.9
93 bis(2-Ethylhexyl)phthalate	149	7.766	7.774	(0.995)	555851	48.9470	97.9
94 Di-n-octylphthalate	149	8.136	8.144	(0.929)	703865	51.4447	103
95 Benzo(b)fluoranthene	252	8.465	8.473	(0.966)	551407	43.8287	87.6
96 Benzo(k)fluoranthene	252	8.489	8.496	(0.969)	523768	45.0663	90.1
97 Benzo(a)pyrene	252	8.718	8.726	(0.995)	425061	45.9577	91.9
99 Indeno(1,2,3-cd)pyrene	276	9.770	9.783	(1.115)	385299	45.8835	91.8
100 Dibenzo(a,h)anthracene	278	9.775	9.789	(1.116)	320748	47.1586	94.3
101 Benzo(ghi)perylene	276	10.075	10.089	(1.150)	311794	45.1948	90.4
111 N-Nitrosopyrrolidine	100	3.025	3.403	(0.957)	33063	9.81090	19.6(aQ)
121 N-Nitrosodi-n-butylamine	84	4.305	4.267	(1.076)	25819	4.50888	9.0(a)
127 Pentachlorobenzene	250	5.786	5.336	(1.108)	28319	4.12890	8.2(a)
143 Dinoseb	211	6.168	6.241	(0.985)	2635	8.75537	17.5(a)
1 N-Methyl-N-nitrosomethylamine	74	1.703	1.704	(0.539)	123805	32.0874	64.2

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/MSD6.i/s100805.s.b/s6j0822.d

Date : 09-OCT-2005 00:53

Client ID: GU05090G3TM01MS

Sample Info: |1200938052|463561|1|SVMF|1|MS

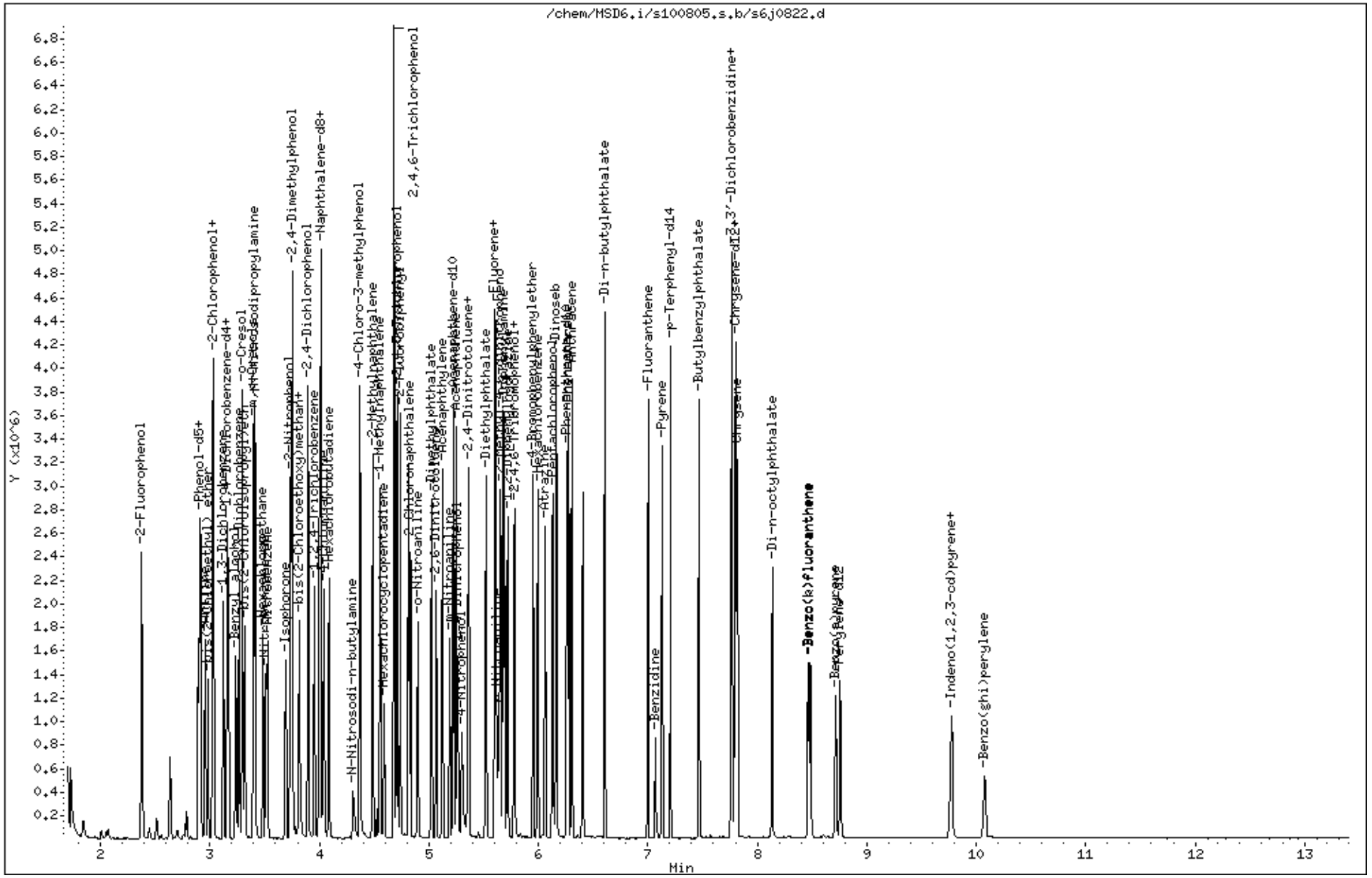
Volume Injected (uL): 0.5

Column phase: J & W DB-5MS

Instrument: MSD6.i

Operator: jld1

Column diameter: 0.20



MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD 6

DATE: 09/23/05 METHOD: 8270,625 OPERATOR: JLD REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 5 on pg. 5
Multiplier Voltage: 1295 Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT REF MAT 36034-A
DFTPP Solution ID: WBN050830-01 Internal Std ID: WBN050916-01
Sequence Number: S092305.S Initial Calibration Date(s): 091605 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6i2301.d	WBN050830-01	JLD	23-SEP-2005 15:36	50NG	s092305.s	1.0	DFTPP	
s6i2302.d	INSTRUMENTBLANK	jld	23-SEP-2005 15:50		s092305.s	1.0		
s6i2303.d	UBN050921-35	jld1	23-SEP-2005 16:14	1PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAILS
s6i2304.d	UBN050921-36	jld1	23-SEP-2005 16:38	10PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAIL
s6i2305.d	UBN050921-37	jld1	23-SEP-2005 17:02	20PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAIL
s6i2306.d	UBN050921-38	jld1	23-SEP-2005 17:25	40PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAIL
s6i2307.d	UBN050921-39	jld1	23-SEP-2005 17:50	50PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAIL
s6i2308.d	UBN050921-40	jld1	23-SEP-2005 18:14	80PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAIL
s6i2309.d	UBN050921-41	jld1	23-SEP-2005 18:37	100PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAIL
s6i2310.d	UBN050921-42	jld1	23-SEP-2005 19:01	120PPN	s092305.s	1.0	BNA ICAL	DUSE; ICAL FAIL
s6i2311.d	INSTRUMENTBLANK	jld	23-SEP-2005 19:26		s092305.s	1.0		
s6i2313.d	INSTRUMENTBLANK	jld	23-SEP-2005 20:14		s092305.s	1.0		
s6i2314.d	UBN050919.01	jld1	23-SEP-2005 20:38	1PPN	s092305.s	1.0	ANBZ ICAL	
s6i2315.d	UBN050919.02	jld1	23-SEP-2005 21:03	10PPN	s092305.s	1.0	ANBZ ICAL	
s6i2316.d	UBN050919.03	jld1	23-SEP-2005 21:27	20PPN	s092305.s	1.0	ANBZ ICAL	
s6i2317.d	UBN050919.04	jld1	23-SEP-2005 21:51	40PPN	s092305.s	1.0	ANBZ ICAL	
s6i2318.d	UBN050919.05	jld1	23-SEP-2005 22:15	50PPN	s092305.s	1.0	ANBZ ICAL	
s6i2319.d	UBN050919.06	jld1	23-SEP-2005 22:41	80PPN	s092305.s	1.0	ANBZ ICAL	
s6i2320.d	UBN050919.07	jld1	23-SEP-2005 23:05	100PPN	s092305.s	1.0	ANBZ ICAL	
s6i2321.d	UBN050919.08	jld1	23-SEP-2005 23:29	120PPN	s092305.s	1.0	ANBZ ICAL	
s6i2322.d	INSTRUMENTBLANK	jld1	23-SEP-2005 23:54		s092305.s	1.0		

s6i2323.d	UBN0509826-01	jld1	24-SEP-2005 00:18	10PPN	s092305.s	1.0	167 ICAL	
s6i2324.d	UBN0509826-02	jld1	24-SEP-2005 00:42	20PPN	s092305.s	1.0	167 ICAL	
s6i2325.d	UBN0509826-03	jld1	24-SEP-2005 01:06	40PPN	s092305.s	1.0	167 ICAL	
s6i2326.d	UBN0509826-04	jld1	24-SEP-2005 01:30	50PPN	s092305.s	1.0	167 ICAL	
s6i2327.d	UBN0509826-05	jld1	24-SEP-2005 01:55	80PPN	s092305.s	1.0	167 ICAL	
s6i2328.d	UBN0509826-06	jld1	24-SEP-2005 02:19	100PPN	s092305.s	1.0	167 ICAL	
s6i2329.d	UBN0509826-07	jld1	24-SEP-2005 02:43	120PPN	s092305.s	1.0	167 ICAL	
s6i2330.d	INSTRUMENTBLANK	jld1	24-SEP-2005 03:07		s092305.s	1.0		
s6i2331.d	WBN050830-01	JLD	24-SEP-2005 03:26	50NG	s092305.s	1.0	DFTPP	TUNE FAILS
s6i2332.d	UBN050922-08	jld1	24-SEP-2005 03:42	10PPN	s092305.s	1.0	168 ICAL	DUSE, TUNE FAILS
s6i2333.d	UBN050922-09	jld1	24-SEP-2005 04:06	20PPN	s092305.s	1.0	168 ICAL	DUSE, TUNE FAILS
s6i2334.d	UBN050922-10	jld1	24-SEP-2005 04:31	40PPN	s092305.s	1.0	168 ICAL	DUSE, TUNE FAILS
s6i2335.d	UBN050922-11	jld1	24-SEP-2005 04:55	50PPN	s092305.s	1.0	168 ICAL	DUSE, TUNE FAILS
s6i2336.d	UBN050922-12	jld1	24-SEP-2005 05:19	80PPN	s092305.s	1.0	168 ICAL	DUSE, TUNE FAILS
s6i2337.d	UBN050922-13	jld1	24-SEP-2005 05:43	100PPN	s092305.s	1.0	168 ICAL	DUSE, TUNE FAILS
s6i2338.d	UBN050922-14	jld1	24-SEP-2005 06:07	120PPN	s092305.s	1.0	168 ICAL	DUSE, TUNE FAILS
s6i2342.d	UBN050825-11	jld1	24-SEP-2005 07:44	40PPN	s092305.s	1.0	AP9 ICAL	DUSE, TUNE FAILS
s6i2346.d	UBN050825-15	jld1	24-SEP-2005 09:22	120PPN	s092305.s	1.0	AP9 ICAL	DUSE, TUNE FAILS
s6i2347.d	INSTRUMENTBLANK	jld	24-SEP-2005 09:46		s092305.s	1.0		

Instrument Batch: /chem/MSD6.i/s092305.s.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6i2348.d	UBN050826-15	jld1	24-SEP-2005 10:10	500PPN	s092305.s	1.0	HEX ICAL	DUSE, TUNE FAILS
s6i2349.d	UBN050826-16	jld1	24-SEP-2005 10:34	1000PPN	s092305.s	1.0	HEX ICAL	DUSE, TUNE FAILS
s6i2350.d	UBN050826-17	jld1	24-SEP-2005 10:58	1250PPN	s092305.s	1.0	HEX ICAL	DUSE, TUNE FAILS
s6i2351.d	UBN050826-18	jld1	24-SEP-2005 11:22	2000PPN	s092305.s	1.0	HEX ICAL	DUSE, TUNE FAILS
s6i2352.d	UBN050826-19	jld1	24-SEP-2005 11:46	2500PPN	s092305.s	1.0	HEX ICAL	DUSE, TUNE FAILS

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD 6

DATE: 09/24/05 METHOD: 8270,625 OPERATOR: JLD REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 5 on pg.5
Multiplier Voltage:1295 Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT REF MAT 36034-A
DFTPP Solution ID: WBN050830-01 Internal Std ID: WBN050919-01
Sequence Number: S092405.S Initial Calibration Date(s): 091605 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6i2401.d	WBN050830-01	JLD	24-SEP-2005 15:21	50NG	s092405.s	1.0	DFTPP	
s6i2403.d	UBN050924-01	jld1	24-SEP-2005 16:01	1PPN	s092405.s	1.0	BNA ICAL	
s6i2404.d	UBN050924-02	jld1	24-SEP-2005 16:25	10PPN	s092405.s	1.0	BNA ICAL	
s6i2405.d	UBN050924.03	jld1	24-SEP-2005 16:49	20PPN	s092405.s	1.0	BNA ICAL	
s6i2406.d	UBN050924-04	jld1	24-SEP-2005 17:13	40PPN	s092405.s	1.0	BNA ICAL	
s6i2407.d	UBN050924-05	jld1	24-SEP-2005 17:37	50PPN	s092405.s	1.0	BNA ICAL	
s6i2408.d	UBN050924-06	jld1	24-SEP-2005 18:01	80PPN	s092405.s	1.0	BNA ICAL	
s6i2409.d	UBN050924-07	jld1	24-SEP-2005 18:25	100PPN	s092405.s	1.0	BNA ICAL	
s6i2410.d	UBN050924-08	jld1	24-SEP-2005 18:49	120PPN	s092405.s	1.0	BNA ICAL	
s6i2412.d	UBN050914-06	jld1	24-SEP-2005 19:36	40PPN	s092405.s	1.0	BNA ICV	DUSE ICV, SEE S6I2602

Instrument Batch: /chem/MSD6.i/s092405.s.b Page: 1

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD 6

DATE: 09/26/05 METHOD: 8270,625 OPERATOR: JLD REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 5 on pg.5
Multiplier Voltage: 1295 Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT REF MAT 36034-a
DFTPP Solution ID: WBN050830-01 Internal Std ID: WBN050916-02
Sequence Number:s092605.s Initial Calibration Date(s):091605 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6i2601.d	WBN050830-01	JLD	26-SEP-2005 08:37	50NG	s092605.s	1.0		
s6i2602-BNAI	UBN050924-04	jld1	26-SEP-2005 08:53	40PPN	s092605.s	1.0	BNA ICV	
s6i2603.d	UBN050924-04	jld1	26-SEP-2005 09:17	40PPN	s092605.s	1.0	BNA CVS	DUSE; NOT NEEDED
s6i2604.d	UBN050914-01	jld1	26-SEP-2005 09:41	40PPN	s092605.s	1.0	ANBZ CVS	DUSE; NOT NEEDED
s6i2605.d	UBN050922-08	jld1	26-SEP-2005 10:34	10PPN	s092605.s	1.0	168 ICAL	
s6i2606.d	UBN050922-09	jld1	26-SEP-2005 10:58	20PPN	s092605.s	1.0	168 ICAL	
s6i2607.d	UBN050922-10	jld1	26-SEP-2005 11:22	40PPN	s092605.s	1.0	168 ICAL	
s6i2608.d	UBN050922-11	jld1	26-SEP-2005 11:45	50PPN	s092605.s	1.0	168 ICAL	
s6i2609.d	UBN050922-12	jld1	26-SEP-2005 12:09	80PPN	s092605.s	1.0	168 ICAL	
s6i2610.d	UBN050922-13	jld1	26-SEP-2005 12:34	100PPN	s092605.s	1.0	168 ICAL	
s6i2611.d	UBN050922-14	jld1	26-SEP-2005 12:57	120PPN	s092605.s	1.0	168 ICAL	
s6i2612.d	INSTRUMENTBLANK	jld1	26-SEP-2005 13:21		s092605.s	1.0		
s6i2613.d	UBN050922-15	jld1	26-SEP-2005 13:45	10PPN	s092605.s	1.0	AP9 ICAL	
s6i2614.d	UBN050922-16	jld1	26-SEP-2005 14:10	20PPN	s092605.s	1.0	AP9 ICAL	
s6i2615.d	UBN050922-17	jld1	26-SEP-2005 14:34	40PPN	s092605.s	1.0	AP9 ICAL	
s6i2616.d	UBN050922-18	jld1	26-SEP-2005 14:58	50PPN	s092605.s	1.0	AP9 ICAL	
s6i2617.d	UBN050922-19	jld1	26-SEP-2005 15:22	80PPN	s092605.s	1.0	AP9 ICAL	
s6i2618.d	UBN050922-20	jld1	26-SEP-2005 15:47	100PPN	s092605.s	1.0	AP9 ICAL	
s6i2619.d	UBN050922-21	jld1	26-SEP-2005 16:11	120PPN	s092605.s	1.0	AP9 ICAL	
s6i2620.d	INSTRUMENTBLANK	JLD	26-SEP-2005 16:45		s092605.s	1.0		
s6i2621.d	WBN050830-01	jld1	26-SEP-2005 17:04	50NG	s092605.s	1.0	DFTPP	

s6i2622.d	UBN050914-11	jld1	26-SEP-2005 17:19	500PPN	s092605.s	1.0	HEX ICAL	
s6i2623.d	UBN050914-12	jld	26-SEP-2005 17:43	1000PPN	s092605.s	1.0	HEX ICAL	
s6i2624.d	UBN050914-13	jld	26-SEP-2005 18:07	1250PPN	s092605.s	1.0	HEX ICAL	
s6i2625.d	UBN050914-14	jld	26-SEP-2005 18:31	2000PPN	s092605.s	1.0	HEX ICAL	
s6i2626.d	WBN050830-01	JLD	26-SEP-2005 16:30	50NG	s092605.s	1.0	DFTPP	DUSE
s6i2627.d	UBN050914-15	jld	26-SEP-2005 18:54	2500PPN	s092605.s	1.0	HEX ICAL	
s6i2628.d	INSTRUMENTBLANK	jld1	26-SEP-2005 19:18		s092605.s	1.0		
s6i2629.d	UBN050922-22	jld1	26-SEP-2005 19:42	50PPN	s092605.s	1.0	CAR ICAL	
s6i2630.d	UBN050922-23	jld1	26-SEP-2005 20:10	75PPN	s092605.s	1.0	CAR ICAL	
s6i2631.d	UBN050922-24	jld1	26-SEP-2005 20:38	100PPN	s092605.s	1.0	CAR ICAL	
s6i2632.d	UBN050922-25	jld1	26-SEP-2005 21:06	125PPN	s092605.s	1.0	CAR ICAL	
s6i2633.d	UBN050922-26	jld1	26-SEP-2005 21:34	150PPN	s092605.s	1.0	CAR ICAL	
s6i2634.d	UBN050922-27	jld1	26-SEP-2005 22:02	200PPN	s092605.s	1.0	CAR ICAL	
s6i2635.d	UBN050922-28	jld1	26-SEP-2005 22:30	250PPN	s092605.s	1.0	CAR ICAL	

GEL ORGANIC RUN LOG INSTRUMENT ID: MSD 6

DATE: 10/08/05 METHOD: 8270,625 OPERATOR: JLD REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 5 on pg. 5
Multiplier Voltage: 1295 Emv Extr. Injection Volume: 0.5, 1.0 ul SOLVENT REF MAT 36034-A
DFTPP Solution ID: WBN050916-01 Internal Std ID: WBN0501007-01
Sequence Number: S100805.S Initial Calibration Date(s):092605 SOP: GL-OA-E-009 Rev. 14

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6j0801.d	WBN050916-01	JLD	08-OCT-2005 17:20	50NG	s100805.s	1.0	DFTPP	
s6j0802-SC.d	UBN050929-01.2	jld1	08-OCT-2005 17:35	40PPN	s100805.s	1.0	BNA CVS	
s6j0802.d	UBN050929-01.2	jld1	08-OCT-2005 17:35	40PPN	s100805.s	1.0	BNA CVS	
s6j0803-SC.d	UBN050929-02.3	jld1	08-OCT-2005 17:57	40PPN	s100805.s	1.0	ANBZ CVS	
s6j0803.d	UBN050929-02.3	jld1	08-OCT-2005 17:57	40PPN	s100805.s	1.0	ANBZ CVS	
s6j0804-SC.d	UBN051007-03.1	jld1	08-OCT-2005 18:19	40PPN	s100805.s	1.0	167 CVS	
s6j0804.d	UBN051007-03.1	jld1	08-OCT-2005 18:19	40PPN	s100805.s	1.0	167 CVS	
s6j0805-SC.d	UBN051007-01.2	jld1	08-OCT-2005 18:41	40PPN	s100805.s	1.0	168 CVS	
s6j0805.d	UBN051007-01.2	jld1	08-OCT-2005 18:41	40PPN	s100805.s	1.0	168 CVS	
s6j0806-SC.d	UBN051007-02.1	jld1	08-OCT-2005 19:03	40PPN	s100805.s	1.0	AP9 CVS	
s6j0806.d	UBN051007-02.1	jld1	08-OCT-2005 19:03	40PPN	s100805.s	1.0	AP9 CVS	
s6j0807-SC.d	UBN051007-04.2	jld1	08-OCT-2005 19:25	40PPN	s100805.s	1.0	HEX CVS	
s6j0807.d	UBN051007-04.2	jld1	08-OCT-2005 19:25	40PPN	s100805.s	1.0	HEX CVS	
s6j0808.d	146402014	jld1	08-OCT-2005 19:47	466736	146402	1.0	MOBA	RR OF S6J0731; USE THIS DATA
s6j0809.d	146402015	jld1	08-OCT-2005 20:09	466736	146402	1.0	MOBA	RR OF S6J0732; USE THIS DATA
s6j0810.d	146402016	jld1	08-OCT-2005 20:30	466736	146402	1.0	MOBA	RR OF S6J0733; USE THIS DATA
s6j0811.d	146402017	jld1	08-OCT-2005 20:52	466736	146402	1.0	MOBA	RR OF S6J0734; USE THIS DATA
s6j0812.d	146402018	jld1	08-OCT-2005 21:14	466736	146402	1.0	MOBA	RR OF S6J0735; USE THIS DATA
s6j0813-1.d	1200938050	jld1	08-OCT-2005 21:35	463561	145579	1.0	MB	
s6j0813.d	1200938050	jld1	08-OCT-2005 21:35	463561	145496	1.0	MB	
s6j0814-1.d	1200938051	jld1	08-OCT-2005 21:57	463561	145579	1.0	LCS	SPIKES FAIL LESS THAN 5%

s6j0814.d	1200938051	jld1	08-OCT-2005 21:57	463561	145496		1.0	LCS	SPIKES FAIL LESS THAN 5%
s6j0815.d	145496003	jld1	08-OCT-2005 22:19	463561	145496		1.0	PNTX	
s6j0816.d	1200938089	jld1	08-OCT-2005 22:41	463561	145496		1.0	MS	
s6j0817.d	1200938104	jld1	08-OCT-2005 23:03	463561	145496		1.0	MSD	
s6j0818.d	145496004	jld1	08-OCT-2005 23:26	463561	145496		1.0	PNTX	
s6j0819.d	145496005	jld1	08-OCT-2005 23:48	463561	145496		1.0	PNTX	
s6j0820.d	145496006	jld1	09-OCT-2005 00:09	463561	145496		1.0	PNTX	
s6j0821.d	145579005	jld1	09-OCT-2005 00:31	463561	145579		1.0	ESHL	
s6j0822.d	1200938052	jld1	09-OCT-2005 00:53	463561	145579		1.0	MS	
s6j0823.d	145579006	jld1	09-OCT-2005 01:14	463561	145579		1.0	ESHL	
s6j0824.d	145579007	jld1	09-OCT-2005 01:36	463561	145579		1.0	ESHL	
s6j0825.d	145579008	jld1	09-OCT-2005 01:58	463561	145579		1.0	ESHL	
s6j0826-1.d	1200952950	jld1	09-OCT-2005 02:19	469882	3941S		1.0	MB	
s6j0826-2.d	1200952950	jld1	09-OCT-2005 02:19	469882	3924S		1.0	MB	
s6j0826-3.d	1200952950	jld1	09-OCT-2005 02:19	469882	3928S		1.0	MB	
s6j0826.d	1200952950	jld1	09-OCT-2005 02:19	469882	3893S		1.0	MB	
s6j0827-1.d	1200952951	jld1	09-OCT-2005 02:41	469882	3941S		1.0	LCS	SPIKES FAIL NO HITS IN SAMPLE; REPORT
s6j0827-2.d	1200952951	jld1	09-OCT-2005 02:41	469882	3924S		1.0	LCS	SPIKES FAIL NO HITS IN SAMPLE; REPORT
s6j0827-3.d	1200952951	jld1	09-OCT-2005 02:41	469882	3928S		1.0	LCS	SPIKES FAIL NO HITS IN SAMPLE; REPORT

Instrument Batch: /chem/MSD6.i/s100805.s.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
s6j0827.d	1200952951	jld1	09-OCT-2005 02:41	469882	3893S	1.0	LCS	SPIKES FAIL; NO HITS IN SAMPLE; REPORT
s6j0828.d	145440001	jld1	09-OCT-2005 03:03	469882	3893S	1.0	LANL	RE OF S4J0423 OUT OF HOLDING; REPORT BOTH SETS OF DATA
s6j0829.d	145914001	jld1	09-OCT-2005 03:24	469882	3941S	1.0	LANL	RE OF S7J0423 OUT OF HOLDING; REPORT BOTH SETS OF DATA
s6j0830.d	145927002	jld1	09-OCT-2005 03:46	469882	3924S	1.0	LANL	RE OF S7J0425 OUT OF HOLDING; REPORT BOTH SETS OF DATA
s6j0831.d	145929001	jld1	09-OCT-2005 04:08	469882	3928S	1.0	LANL	RE OF S7J0426 OUT OF HOLDING; REPORT BOTH SETS OF DATA
s6j0832.d	145929002	jld1	09-OCT-2005 04:29	469882	3928S	1.0	LANL	RE OF S7J0427 OUT OF HOLDING; REPORT BOTH SETS OF DATA

s6j0833.d	1200952954	jld1	09-OCT-2005 04:51	469882	3928S	1.0	MS	SPIKES FAIL; MSD CONFIRMS FAILURES
s6j0834.d	1200952955	jld1	09-OCT-2005 05:13	469882	3928S	1.0	MSD	SPIKES FAIL; MS CONFIRMS FAILURES

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater and Other Aqueous Samples

Batch ID: 463559 **Verified by:** _____

Analyst: Adam Hill

Method: SW846 3510C

Lab SOP: GL−OA−E−013 REV# 14

Instrument: Semi−Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Initial pH	Int Ext pH	Sec Ext pH	Final Volume (mL)	Prepped Factor (mL/mL)
1200938050 MB	16−SEP−2005 13:53:32	1000	7	< 2	> 11	1	0.001
1200938051 LCS	16−SEP−2005 13:53:32	1000	7	< 2	> 11	1	0.001
145496003	16−SEP−2005 13:53:32	1000	7	< 2	> 11	1	0.001
1200938089 MS (145496003)	16−SEP−2005 13:53:32	500	7	< 2	> 11	1	0.002
1200938104 MSD (145496003)	16−SEP−2005 13:53:32	500	7	< 2	> 11	1	0.002
145496004	16−SEP−2005 13:53:32	960	7	< 2	> 11	1	0.00104
145496005	16−SEP−2005 13:53:32	960	7	< 2	> 11	1	0.00104
145496006	16−SEP−2005 13:53:32	960	7	< 2	> 11	1	0.00104
145579005	16−SEP−2005 13:53:32	500	7	< 2	> 11	1	0.002
1200938052 MS (145579005)	16−SEP−2005 13:53:32	500	7	< 2	> 11	1	0.002
145579006	16−SEP−2005 13:53:32	950	7	< 2	> 11	1	0.00105
145579007	16−SEP−2005 13:53:32	940	7	< 2	> 11	1	0.00106
145579008	16−SEP−2005 13:53:32	950	7	< 2	> 11	1	0.00105

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1200938051	BNA LCS for all spikes	UE050912−04	1	mL
MS	1200938052	BNA LCS for all spikes	UE050912−04	1	mL
MS	1200938089	BNA LCS for all spikes	UE050912−04	1	mL
MSD	1200938104	BNA LCS for all spikes	UE050912−04	1	mL
SURR	All	BNA for all SurrogateS	UE050912−01	1	mL
REGNT	All	Methylene Chloride	050906−A	360	mL
SOURC	All	SODIUM SULFATE	243217	30	g

Comments:

Final Solvent: Dichloromethane

Verified By: RPM

All samples were emulsive during base extraction, and sample 145496005 was emulsive during acid and base extractions.

General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 256659
Revision No.: 2

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
11-OCT-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 8270C	Liquid	ESHL, PNTX
Batch ID:	**Sample Numbers:**		
463561	See Below		

Potentially affected work order(s)(SDG): 145496,145579

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS(1200938051) failed spike recovery for 2,6- Dinitrotoluene at 70.20%. The limits are from 72-115%.	1. The failure represented less than 5% of the requested spike analyte list. That satisfied the acceptance criteria for the clietnt and the results were reported.

Originator's Name:
Jennifer Dunagan 11-OCT-05

Data Validator/Group Leader:
Daniel Beacham 14-OCT-05

Quality Review:

Director:

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (ESHL)
SDG 145579

Method/Analysis Information

Procedure:	**Definitive Low Level Analysis Using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) By SW-846 Method 8321 Modified (8321M)**
Analytical Method:	SW846 8321A Modified
Prep Method:	SW846 8321A Modified
Analytical Batch Number:	468258
Prep Batch Number:	468257

Sample Analysis

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
1200949282	Interference Check Sample (ICS)
1200949278	Method Blank (MB)
1200949279	Laboratory Control Sample (LCS)
1200949280	145457001(GF05080G01R01) Matrix Spike (MS)
1200949281	145457001(GF05080G01R01) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 6.

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Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

Low Level Standard (CRI) Requirements
All low level calibration verifications (CRI) bracketing the analyses associated with this batch were within acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 145457001 (GF05080G01R01) from ESHL SDG 145457 was chosen for matrix spike analysis.

Matrix Spike (MS) Recovery Statement
The Matrix Spike (1200949280) failed to meet recovery limits for Perchlorate at 128%. The SPC limit is 75-125%.

Matrix Spike Duplicate (MSD) Recovery Statement
The matrix spike duplicate recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC. During the analysis of perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled perchlorate was added to each sample as a retention time standard/marker. The presence of perchlorate was confirmed by the relative retention time (RRT) of the perchlorate peak and the O(18)standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample

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collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples 145579001 (GF05090G3TM01), 145579002 (GF05090GMC401), 145579003 (GF05090G57M01) and 145579004 (GF05090G7CM01) required additional dilutions to bring the over range concentrations within the calibration range.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
A nonconformance report was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

Method Comments
The sample(s) was/were not originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value. Due to software limitations, all initial calibration blanks must be designated as IPB001 in order for the forms to be correct. The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer. It is fitted with a electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. It is also fitted with a APCI (Atmospheric Pressure chemical Ionization) probe which is operated in the negative ionization mode for explosives analysis. The laboratory utilizes a Agilent 1100 liquid chromatography instrument for secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer. It is fitted with a electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. It is also fitted with a APCI (Atmospheric Pressure chemical Ionization) probe which is operated in the negative ionization mode for explosives analysis.

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Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: _____ **Date:** 10/13/05

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SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090G3TM01

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579001

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	5	20	51.2	ug/L		100	10-OCT-05 16:40	per1010027.wiff
	Perchlorate Isotope Ratio			2.94			100	10-OCT-05 16:40	per1010027.wiff
14797-73-0	Perchlorate-101	5	20	52.1	ug/L		100	10-OCT-05 16:40	per1010027.wiff
	Perchlorate-O(18)			53.7	ug/L		100	10-OCT-05 16:40	per1010027.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090GMC401

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579002

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	12.5	50	159	ug/L		250	10-OCT-05 16:50	per1010028.wiff
	Perchlorate Isotope Ratio			2.93			250	10-OCT-05 16:50	per1010028.wiff
14797-73-0	Perchlorate-101	12.5	50	162	ug/L		250	10-OCT-05 16:50	per1010028.wiff
	Perchlorate-O(18)			140	ug/L		250	10-OCT-05 16:50	per1010028.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090G57M01

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579003

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	5	20	34.9	ug/L		100	10-OCT-05 14:25	per1010013.wiff
	Perchlorate Isotope Ratio			2.94			100	10-OCT-05 14:25	per1010013.wiff
14797-73-0	Perchlorate-101	5	20	35.6	ug/L		100	10-OCT-05 14:25	per1010013.wiff
	Perchlorate-O(18)			53.3	ug/L		100	10-OCT-05 14:25	per1010013.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090G7CM01

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579004

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	5	20	40.9	ug/L		100	10-OCT-05 14:34	per1010014.wiff
	Perchlorate Isotope Ratio			3.03			100	10-OCT-05 14:34	per1010014.wiff
14797-73-0	Perchlorate-101	5	20	40.3	ug/L		100	10-OCT-05 14:34	per1010014.wiff
	Perchlorate-O(18)			58.6	ug/L		100	10-OCT-05 14:34	per1010014.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 145579

Extract Batch Code: 468257

Date Filtered: 08-OCT-05

Matrix: GROUND WATER

Sample ID: 1200949279

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.211	ug/L	106		85 - 115
Perchlorate Isotope Ratio		2.92				-
Perchlorate-101	0.200	.214	ug/L	107		85 - 115
Perchlorate-O(18)		.519	ug/L			-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 145579

Extract Batch Code: 468257

Date Filtered: 08-OCT-05

Matrix: GROUND WATER

Sample ID: 1200949282

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.2	ug/L	100		80 - 120
Perchlorate Isotope Ratio		3.04				
Perchlorate-101	0.200	.195	ug/L	97.5		80 - 120
Perchlorate-O(18)		.501	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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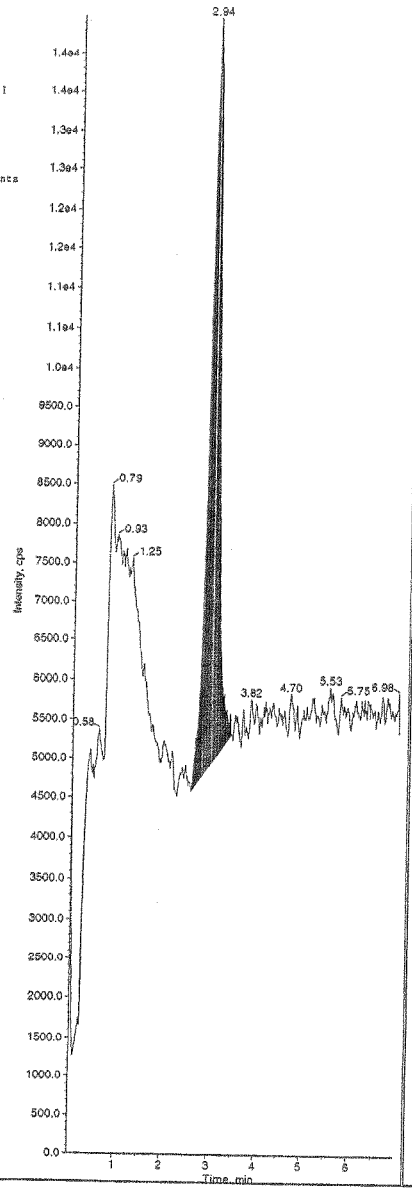
IDQ

MM 10/10/07

573

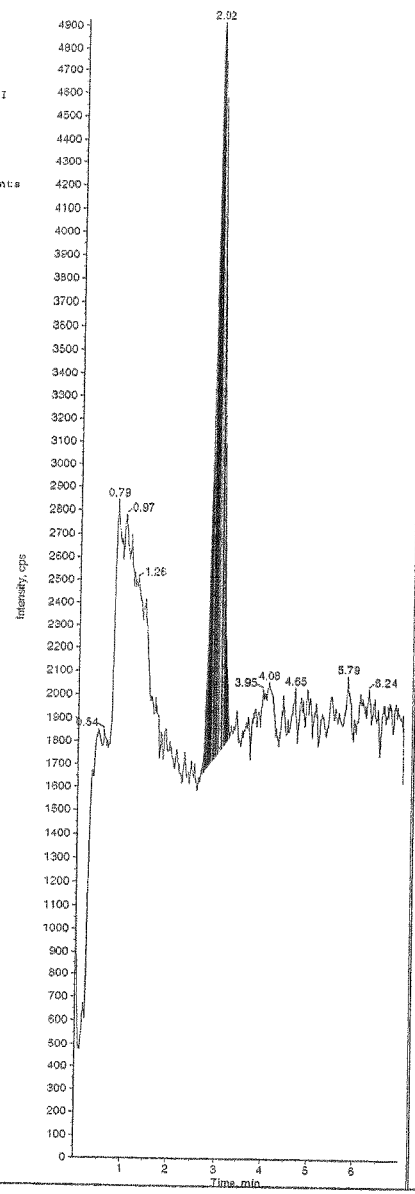
Sample Name: "1200949282" Sample ID: "468258[1]MAP" File: "per10090011.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.200 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:05:21 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	15 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.94 min
Area:	1.53e+005 counts
Height:	9.57e+003 cps
Start Time:	2.56 min
End Time:	3.41 min



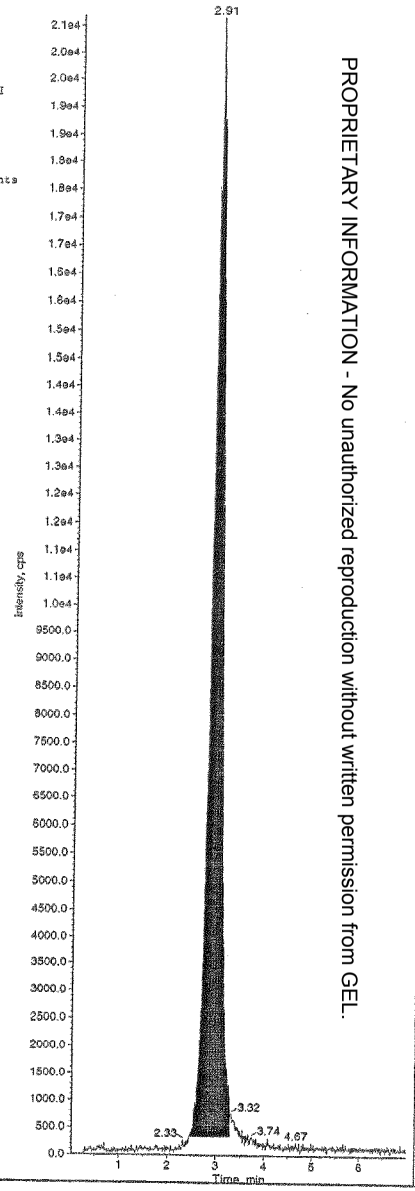
Sample Name: "1200949282" Sample ID: "468258[1]MAP" File: "per10090011.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.195 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:05:21 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	17 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.92 min
Area:	5.04e+004 counts
Height:	3.19e+003 cps
Start Time:	2.54 min
End Time:	3.24 min



Sample Name: "1200949282" Sample ID: "468258[1]MAP" File: "per10090011.wiff"
Peak Name: "Perchlorate-C(13)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.501 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:05:21 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	2
Report Largest Peak:	Yes
Min. Peak Height:	0.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	0 points
RT Window:	900. sec
Expected RT:	3.87 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	2.91 min
Area:	3.22e+005 counts
Height:	2.04e+004 cps
Start Time:	2.46 min
End Time:	3.29 min



dm 10/12/07

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Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 145579

Extract Batch Code: 468257

Date Extracted: 08-OCT-05

GEL MS/PS ID: 1200949280

Client ID: GF05080G01R01

GEL MSD/PSD ID: 1200949281

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.330	ug/L	0.586	128 *	.565	118	3.65	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.09		2.97		0		-
Perchlorate-101	0.200	0.335	ug/L	0.565	115	.567	116	.353	30	75 - 125
Perchlorate-O(18)	0	0.517	ug/L	0.571		.55		3.75		-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	.11	NA	09-OCT-05	per10090001.wiff	IPB001
Perchlorate Isotope Ratio	0.00		NA	09-OCT-05	per10090001.wiff	IPB001
Perchlorate-101	0.00	.1	NA	09-OCT-05	per10090001.wiff	IPB001
Perchlorate	0.00	.01	NA	09-OCT-05	per10090002.wiff	IPB001
Perchlorate Isotope Ratio	0.00		NA	09-OCT-05	per10090002.wiff	IPB001
Perchlorate-101	0.00	.01	NA	09-OCT-05	per10090002.wiff	IPB001
Perchlorate	0.00	.02	NA	10-OCT-05	per1010001.wiff	IPB001
Perchlorate Isotope Ratio	0.00		NA	10-OCT-05	per1010001.wiff	IPB001
Perchlorate-101	0.00	0	NA	10-OCT-05	per1010001.wiff	IPB001
Perchlorate	0.00	.02	NA	10-OCT-05	per1010002.wiff	IPB001
Perchlorate Isotope Ratio	0.00		NA	10-OCT-05	per1010002.wiff	IPB001
Perchlorate-101	0.00	.02	NA	10-OCT-05	per1010002.wiff	IPB001

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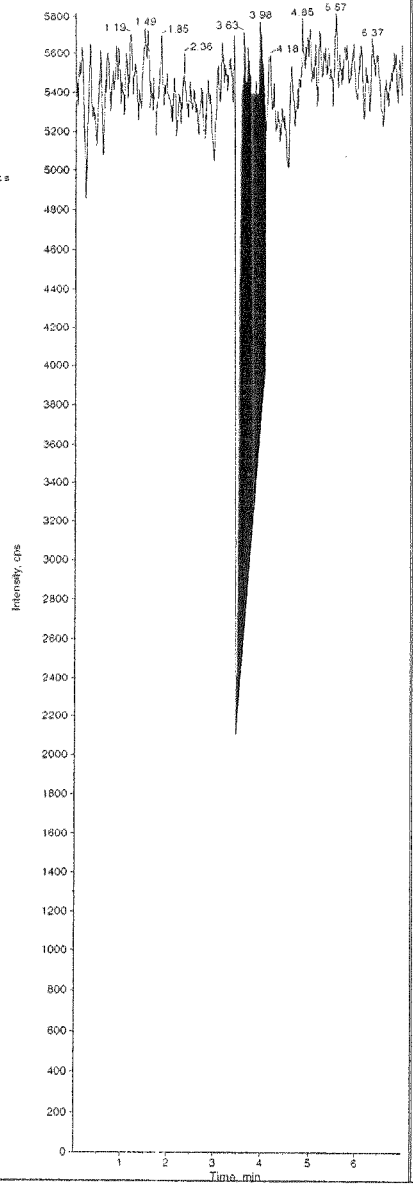
Sample Name: "IPB001" Sample ID: "]IMAP" File: "per10090001.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.105 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:28:16 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 3.98 min
Area: 8.04e+004 counts
Height: 3.15e+003 cps
Start Time: 3.47 min
End Time: 4.09 min

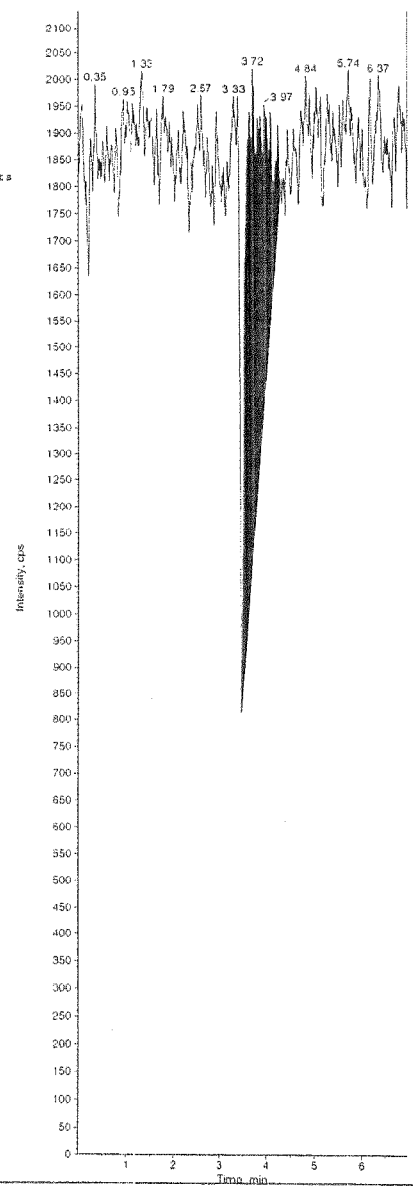


Sample Name: "IPB001" Sample ID: "]IMAP" File: "per10090001.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.103 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:28:16 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.72 min
Area: 2.65e+004 counts
Height: 9.27e+002 cps
Start Time: 3.47 min
End Time: 4.30 min

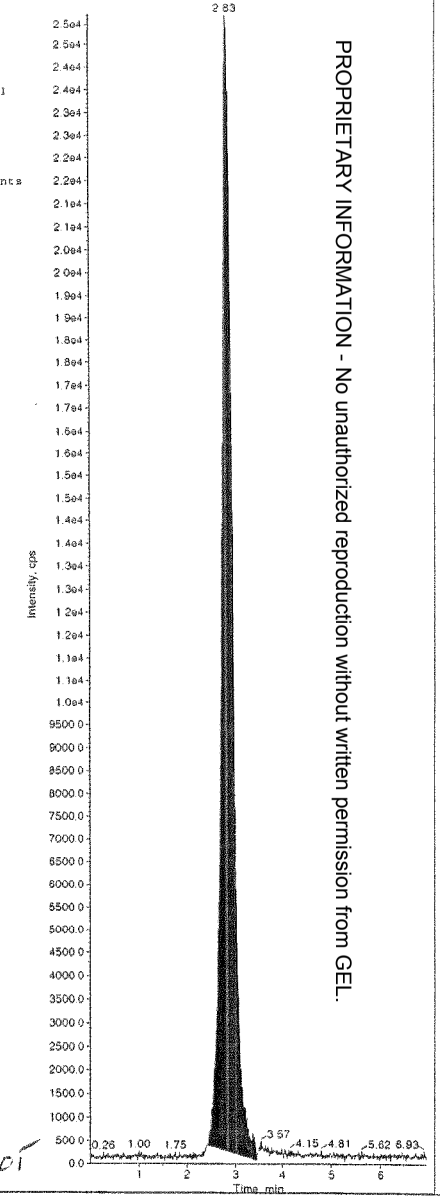


Sample Name: "IPB001" Sample ID: "]IMAP" File: "per10090001.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.633 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:28:16 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 3.87 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.83 min
Area: 4.06e+005 counts
Height: 2.49e+004 cps
Start Time: 2.43 min
End Time: 3.47 min



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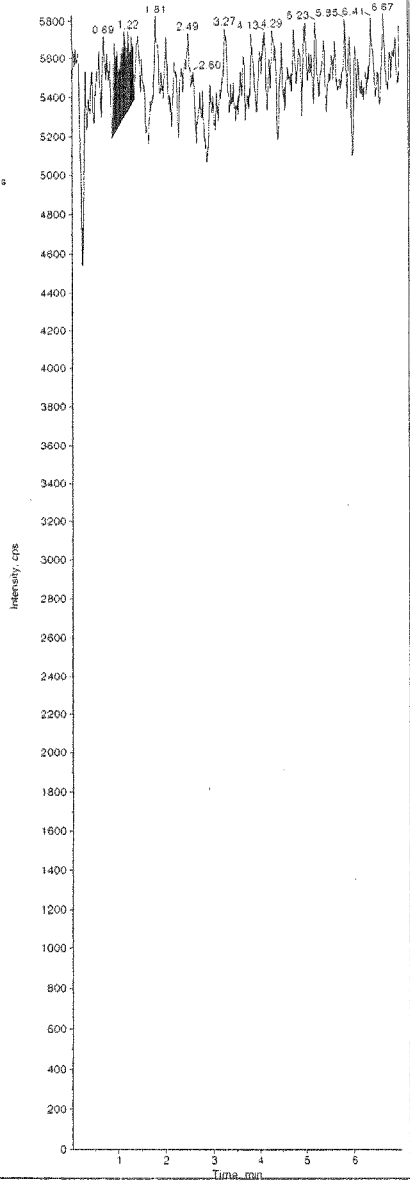
MMM 10/11/05

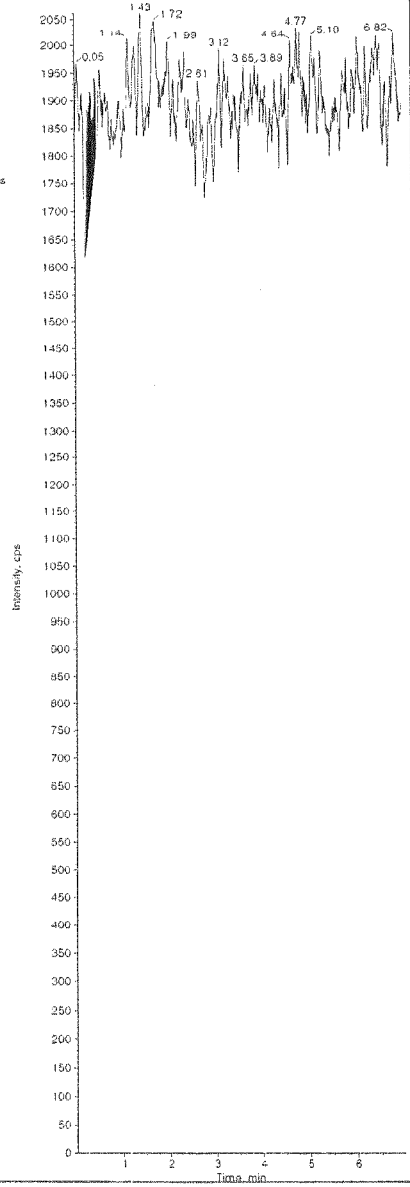
Sample Name: "IPB001" Sample ID: "[1]MAP" File: "por10090002.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.0118 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	11:17:51 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	15 points
RT Window:	900. sec
Expected RT:	5.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	1.22 min
Area:	9.06e+003 counts
Height:	4.66e+002 cps
Start Time:	0.976 min
End Time:	1.56 min



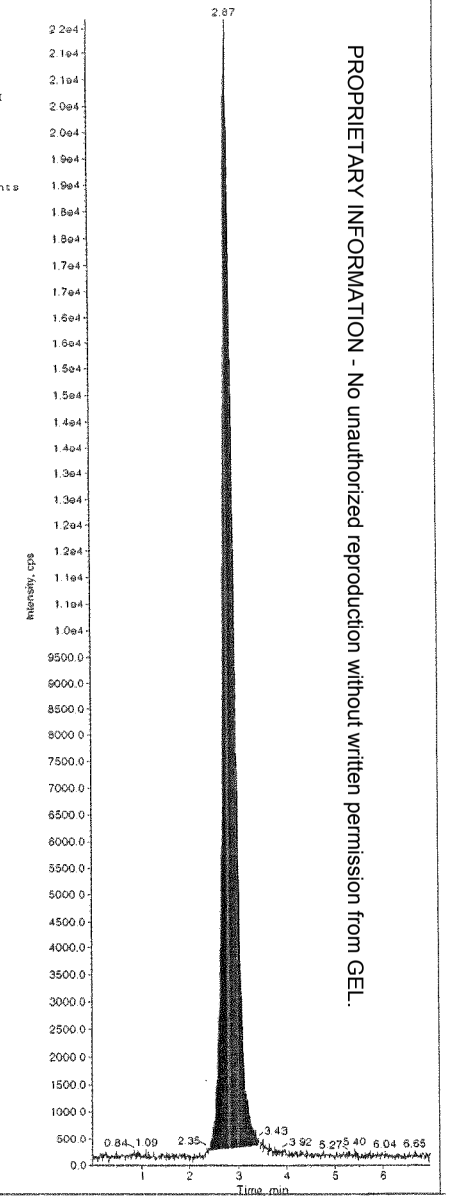
Sample Name: "IPB001" Sample ID: "[1]MAP" File: "por10090002.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00858 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	11:17:51 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	17 points
RT Window:	900. sec
Expected RT:	5.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	0.434 min
Area:	2.22e+003 counts
Height:	2.27e+002 cps
Start Time:	0.209 min
End Time:	0.481 min



Sample Name: "IPB001" Sample ID: "[1]MAP" File: "por10090002.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.530 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	11:17:51 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	2
Report Largest Peak:	Yes
Min. Peak Height:	0.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	0 points
RT Window:	900. sec
Expected RT:	5.87 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.87 min
Area:	5.40e+005 counts
Height:	2.15e+004 cps
Start Time:	2.41 min
End Time:	3.41 min



cthmw 10/11/05

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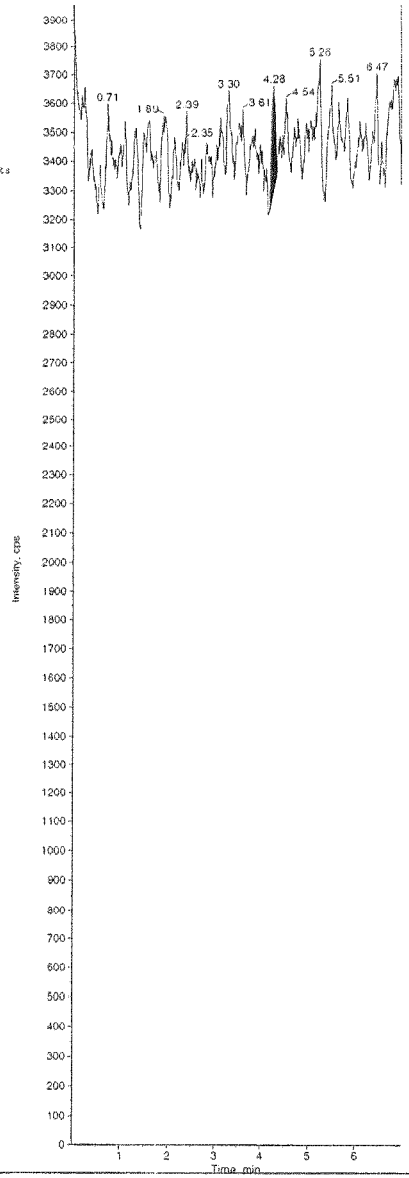
Sample Name: "IPB001" Sample ID: "[1]MAP" File: "per1010001.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0156 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:23:18 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

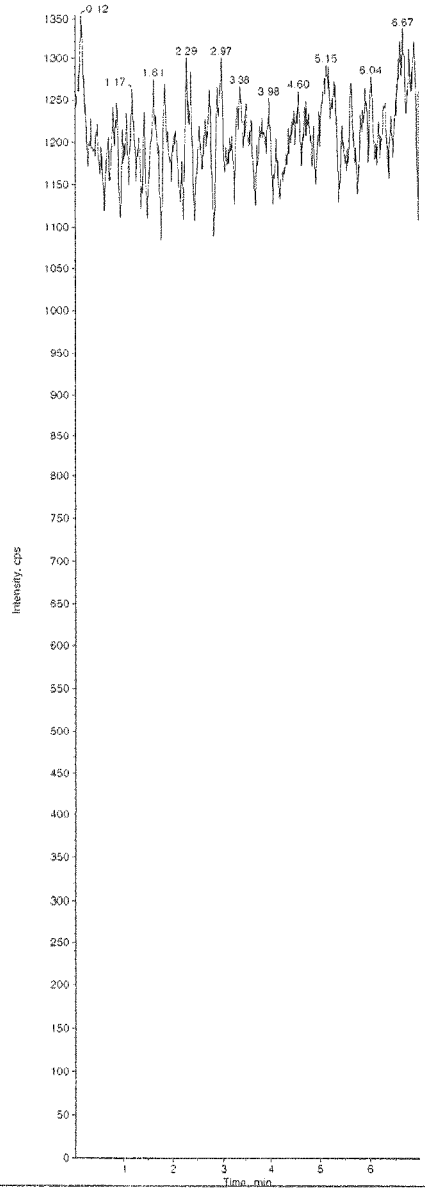
Int. Type: Base To Base
Retention Time: 4.28 min
Area: 2.37e+003 counts
Height: 3.64e+002 cps
Start Time: 4.18 min
End Time: 4.35 min



Sample Name: "IPB001" Sample ID: "[1]MAP" File: "per1010001.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:23:18 PM

Modified: No

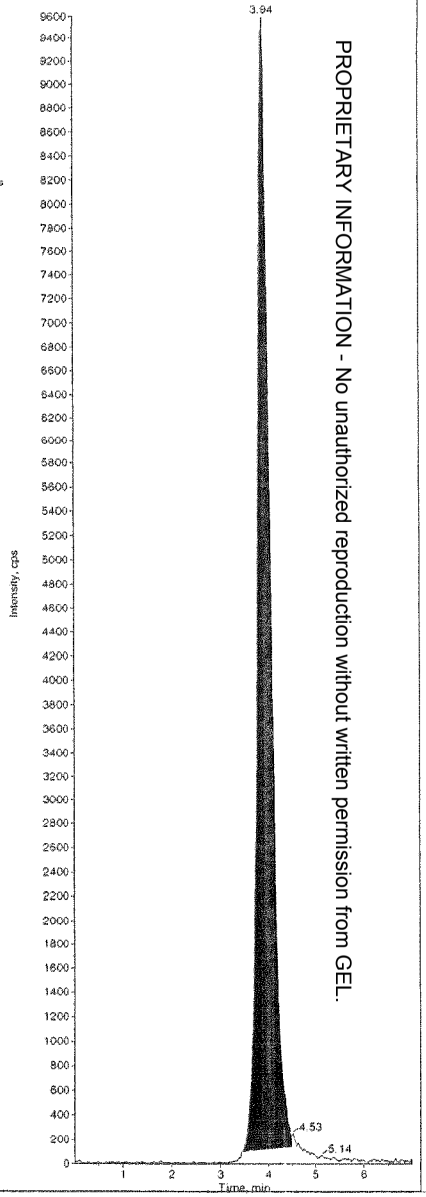


Sample Name: "IPB001" Sample ID: "[1]MAP" File: "per1010001.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.401 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:23:18 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 3.94 min
Area: 1.82e+005 counts
Height: 9.48e+003 cps
Start Time: 3.45 min
End Time: 4.50 min



578

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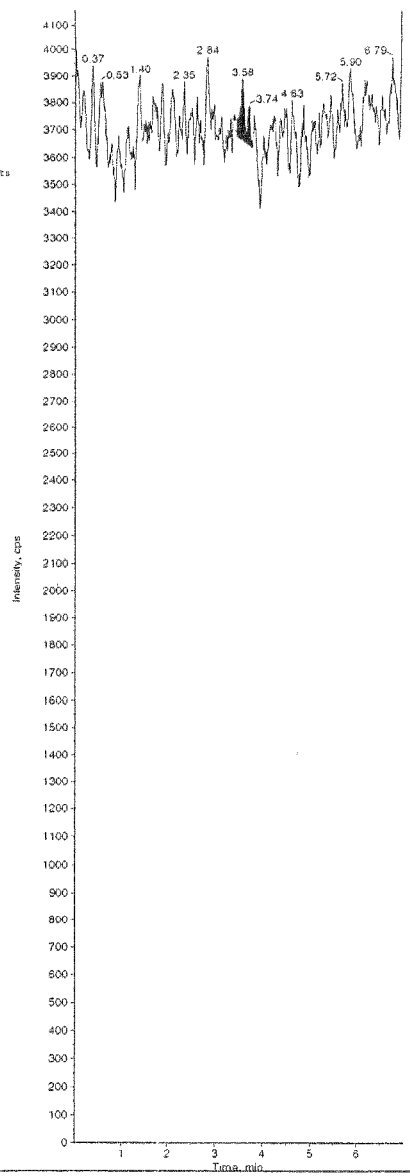
Sample Name "IPB001" Sample ID "[1]MAP" File "perl010002.wiff"
Peak Name "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0151 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:32:51 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 5.58 min
Area: 2.04e+003 counts
Height: 2.29e+002 cps
Start Time: 5.45 min
End Time: 5.77 min

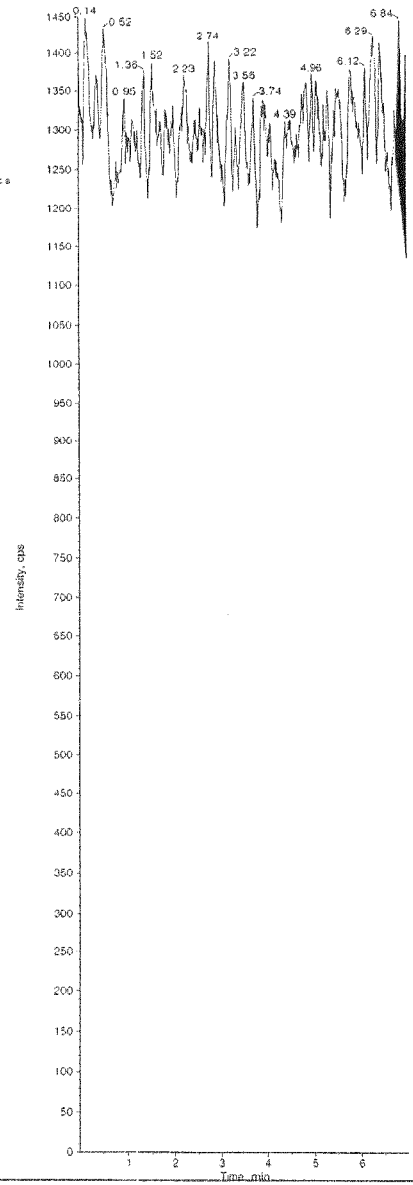


Sample Name "IPB001" Sample ID "[1]MAP" File "perl010002.wiff"
Peak Name "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0247 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:32:51 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 6.84 min
Area: 2.18e+003 counts
Height: 2.56e+002 cps
Start Time: 6.75 min
End Time: 6.99 min

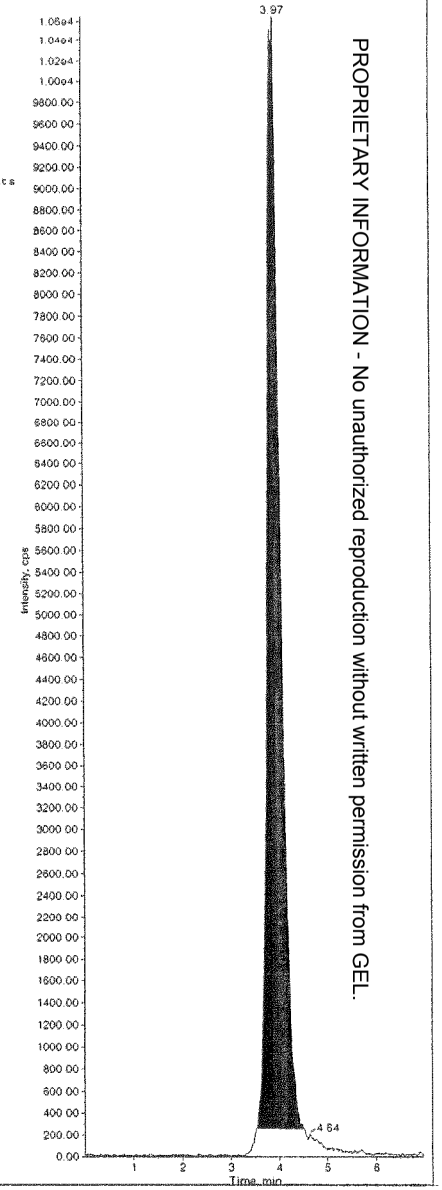


Sample Name "IPB001" Sample ID "[1]MAP" File "perl010002.wiff"
Peak Name "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.439 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:32:51 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.97 min
Area: 1.89e+005 counts
Height: 1.04e+004 cps
Start Time: 3.53 min
End Time: 4.53 min



579

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	09-OCT-05	per10090009.wiff	IPB002
Perchlorate Isotope Ratio	0.00		NA	09-OCT-05	per10090009.wiff	IPB002
Perchlorate-101	0.00	0	NA	09-OCT-05	per10090009.wiff	IPB002
Perchlorate	0.00	0	NA	09-OCT-05	per10090022.wiff	IPB003
Perchlorate Isotope Ratio	0.00		NA	09-OCT-05	per10090022.wiff	IPB003
Perchlorate-101	0.00	.02	NA	09-OCT-05	per10090022.wiff	IPB003
Perchlorate	0.00	.01	NA	10-OCT-05	per1010009.wiff	IPB002
Perchlorate Isotope Ratio	0.00		NA	10-OCT-05	per1010009.wiff	IPB002
Perchlorate-101	0.00	0	NA	10-OCT-05	per1010009.wiff	IPB002
Perchlorate	0.00	.02	NA	10-OCT-05	per1010022.wiff	IPB003
Perchlorate Isotope Ratio	0.00		NA	10-OCT-05	per1010022.wiff	IPB003
Perchlorate-101	0.00	0	NA	10-OCT-05	per1010022.wiff	IPB003
Perchlorate	0.00	.02	NA	10-OCT-05	per1010031.wiff	IPB004

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 145579

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate Isotope Ratio	0.00		NA	10-OCT-05	per1010031.wiff	IPB004
Perchlorate-101	0.00	.02	NA	10-OCT-05	per1010031.wiff	IPB004
Perchlorate	0.00	.01	NA	10-OCT-05	per1010034.wiff	IPB005
Perchlorate Isotope Ratio	0.00		NA	10-OCT-05	per1010034.wiff	IPB005
Perchlorate-101	0.00	0	NA	10-OCT-05	per1010034.wiff	IPB005

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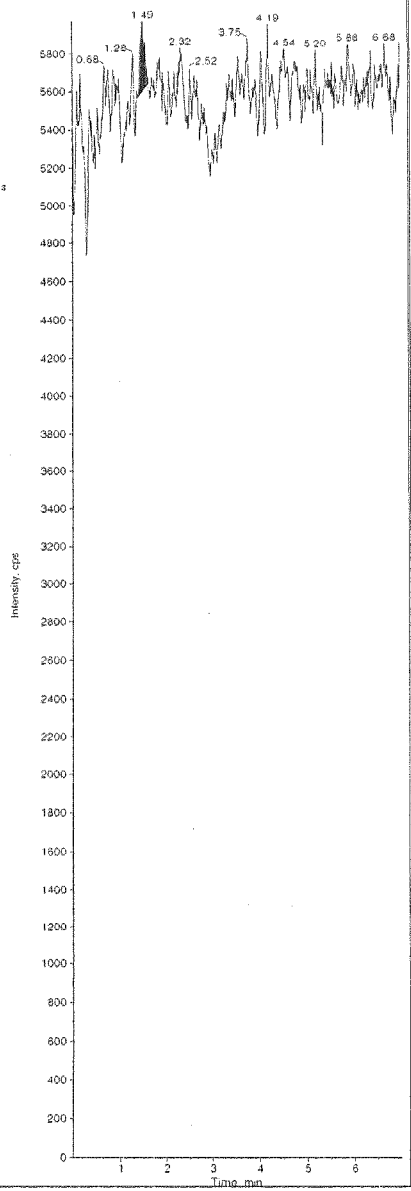
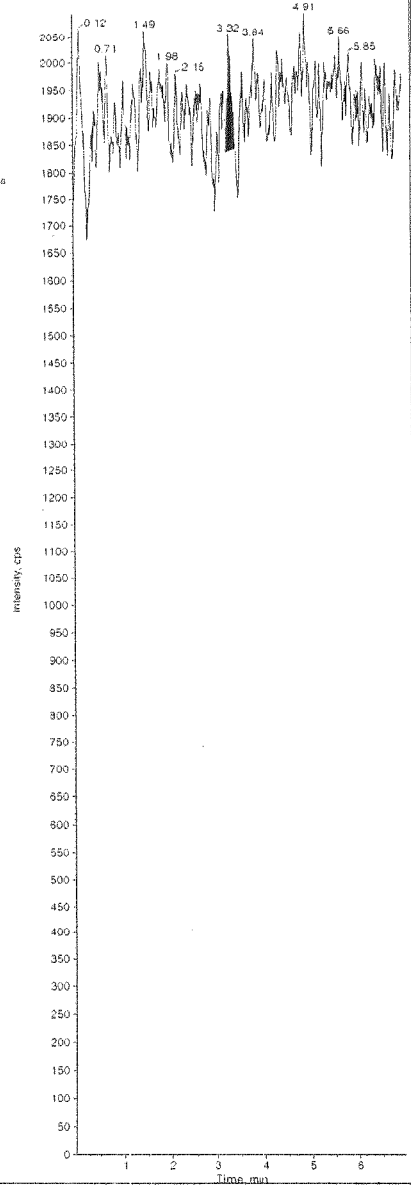
Sample Name: "PB002" Sample ID: "[1]MAP" File: "per10090009.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00977 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	12:45:05 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base, Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	15 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	1.49 min
Area:	2.89e+003 counts
Height:	3.91e+002 cps
Start Time:	1.38 min
End Time:	1.60 min



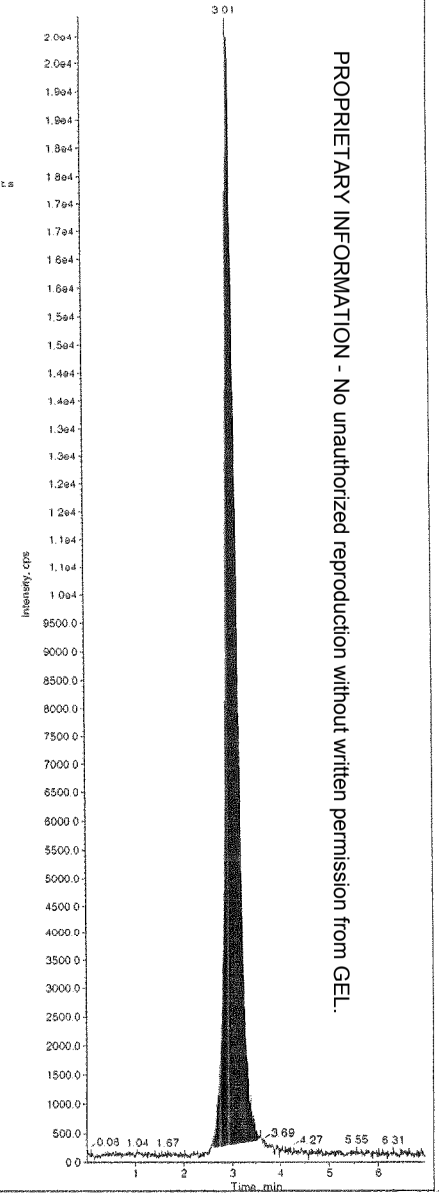
Sample Name: "PB002" Sample ID: "[1]MAP" File: "per10090009.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00425 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	12:45:05 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base, Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	17 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	3.32 min
Area:	1.12e+003 counts
Height:	2.17e+002 cps
Start Time:	3.26 min
End Time:	3.44 min



Sample Name: "PB002" Sample ID: "[1]MAP" File: "per10090009.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.510 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	12:45:05 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base, Sub. Window:	1.00 min
Peak-Split. Factor:	2
Report Largest Peak:	Yes
Min. Peak Height:	0.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	0 points
RT Window:	900. sec
Expected RT:	3.87 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	3.01 min
Area:	3.27e+005 counts
Height:	2.01e+004 cps
Start Time:	2.60 min
End Time:	3.55 min



#mv molules

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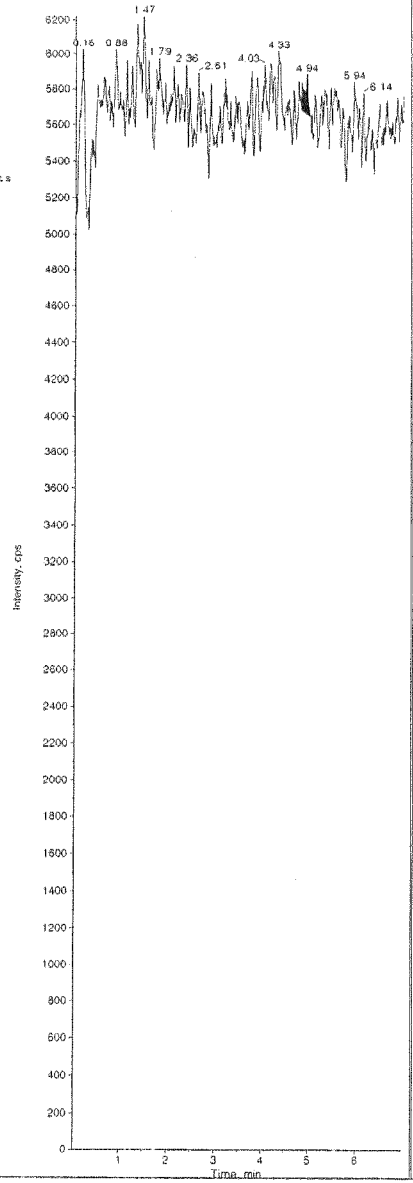
583

Sample Name "IPB003" Sample ID "]]MAP" File "per10090022.wiff"
Peak Name "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment "LCMSPER_B" Annotation ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00182 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 02:50:49 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 5.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.94 min
Area: 1.40e+003 counts
Height: 2.29e+002 cps
Start Time: 4.81 min
End Time: 5.00 min

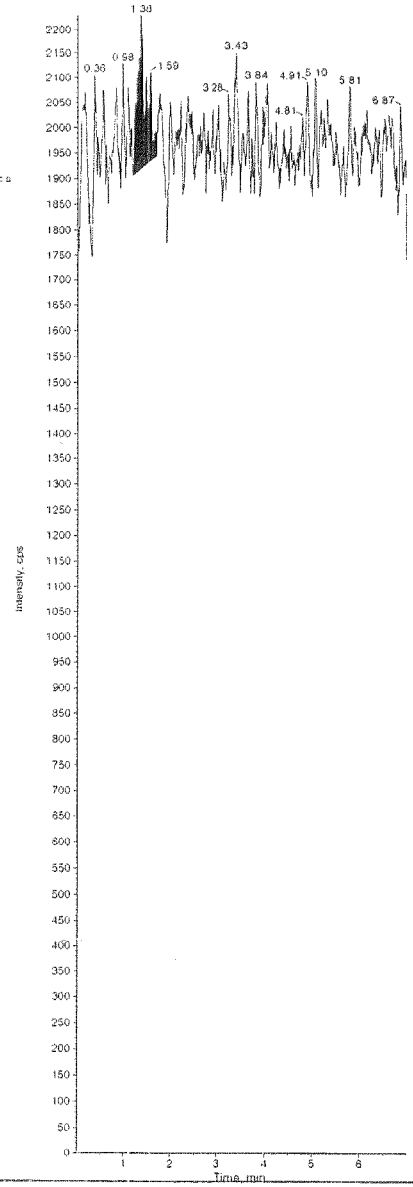


Sample Name "IPB003" Sample ID "]]MAP" File "per10090022.wiff"
Peak Name "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment "LCMSPER_B" Annotation ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0156 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 02:50:49 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 5.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 1.38 min
Area: 4.02e+003 counts
Height: 5.10e+002 cps
Start Time: 1.20 min
End Time: 1.71 min

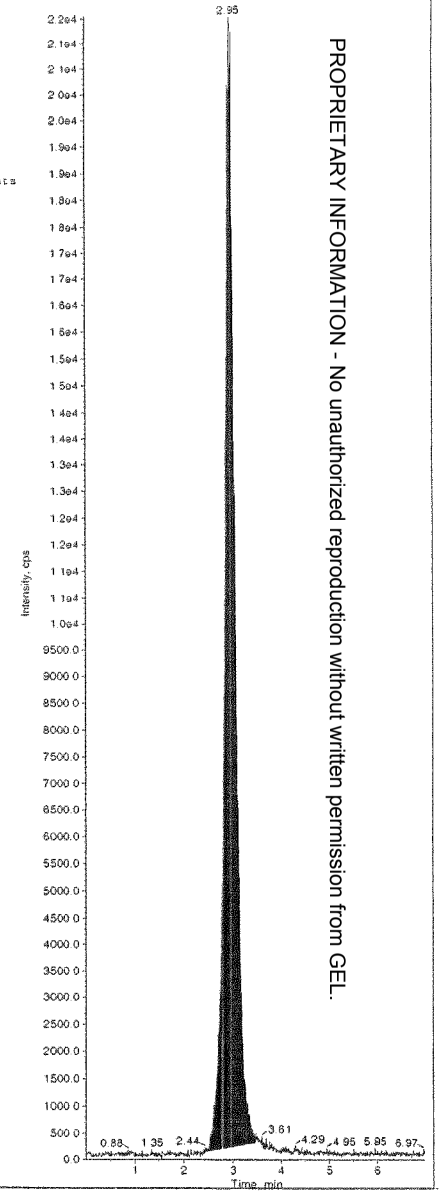


Sample Name "IPB003" Sample ID "]]MAP" File "per10090022.wiff"
Peak Name "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment "LCMSPER_B" Annotation ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.530 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 02:50:49 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 1.87 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.95 min
Area: 1.40e+005 counts
Height: 2.13e+004 cps
Start Time: 2.48 min
End Time: 3.48 min



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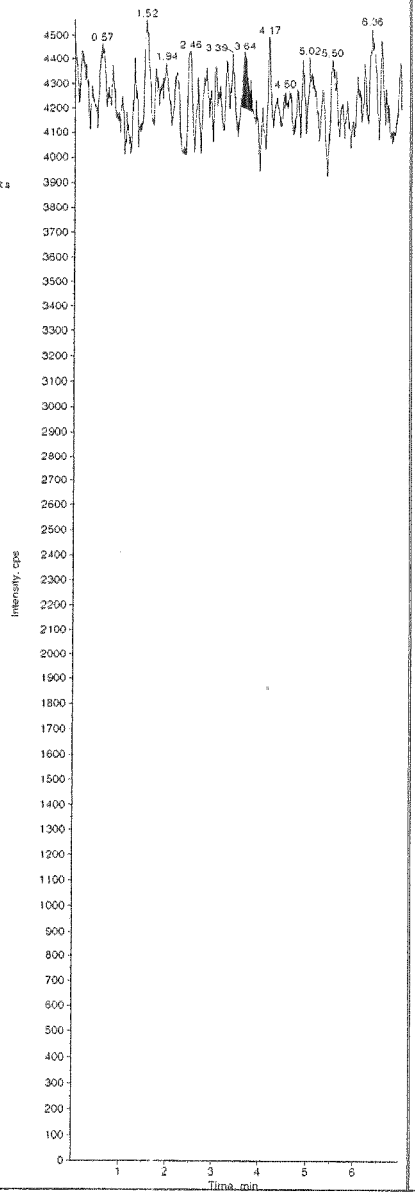
Sample Name: "IPB002" Sample ID: "[1]MAP" File: "per1010009.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0148 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:39:55 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

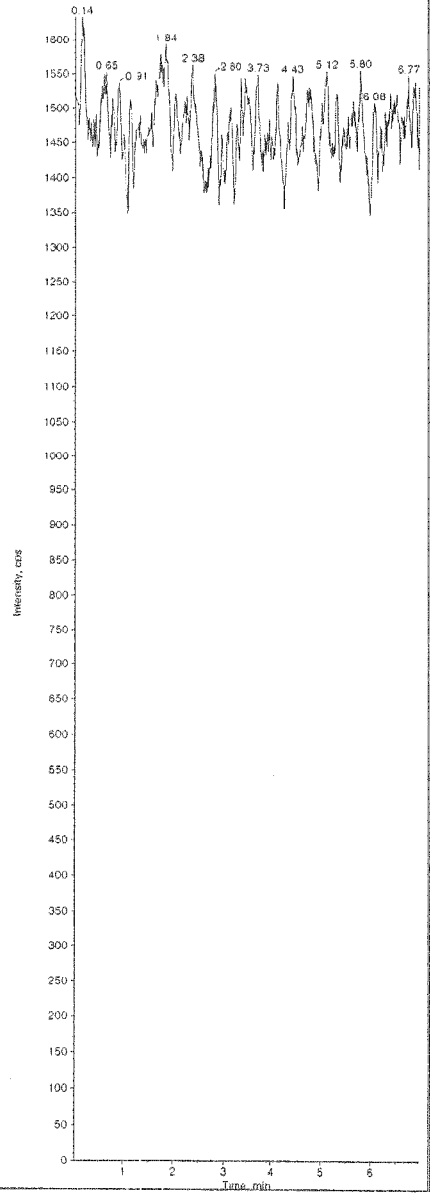
Int. Type: Base To Base
Retention Time: 3.64 min
Area: 1.85e+003 counts
Height: 2.30e+002 cps
Start Time: 3.56 min
End Time: 3.81 min



Sample Name: "IPB002" Sample ID: "[1]MAP" File: "per1010009.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:39:55 PM

Modified: No

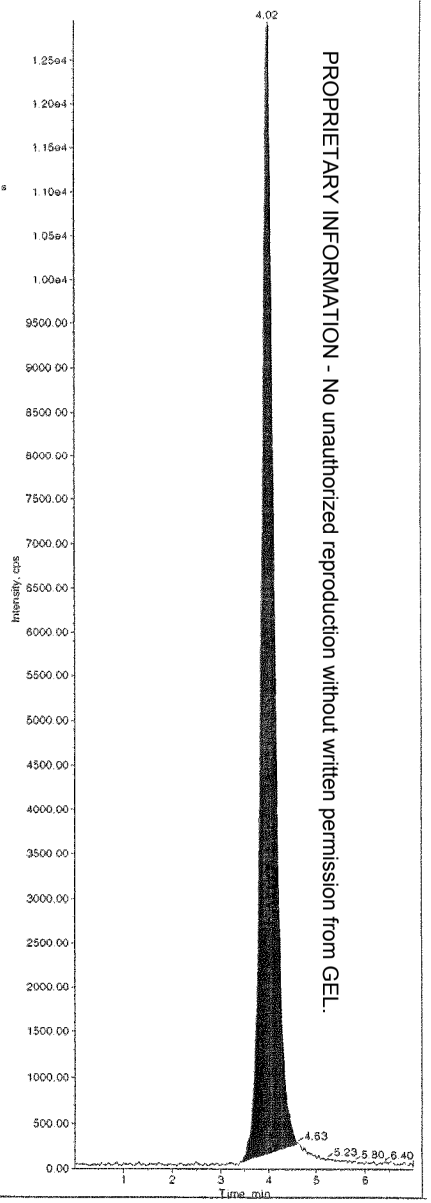


Sample Name: "IPB002" Sample ID: "[1]MAP" File: "per1010009.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.840 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:39:53 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.02 min
Area: 2.45e+005 counts
Height: 1.28e+004 cps
Start Time: 3.45 min
End Time: 4.61 min



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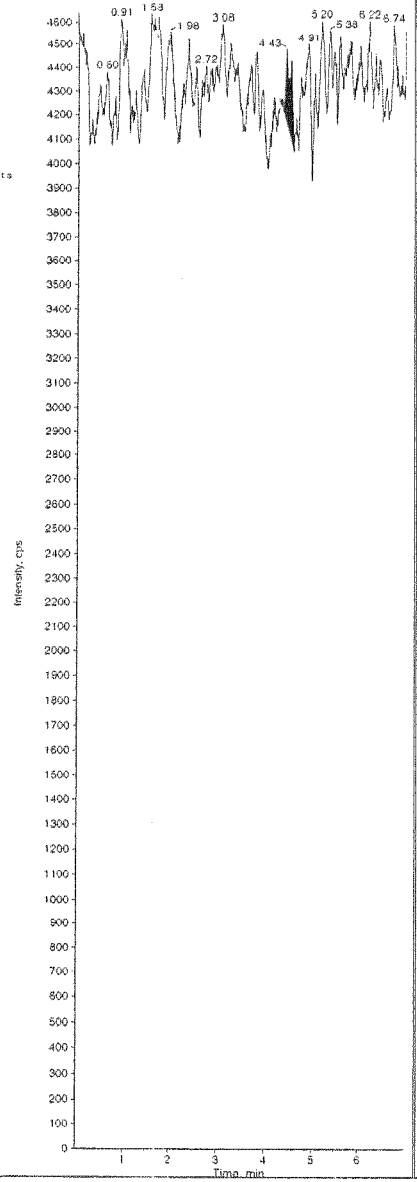
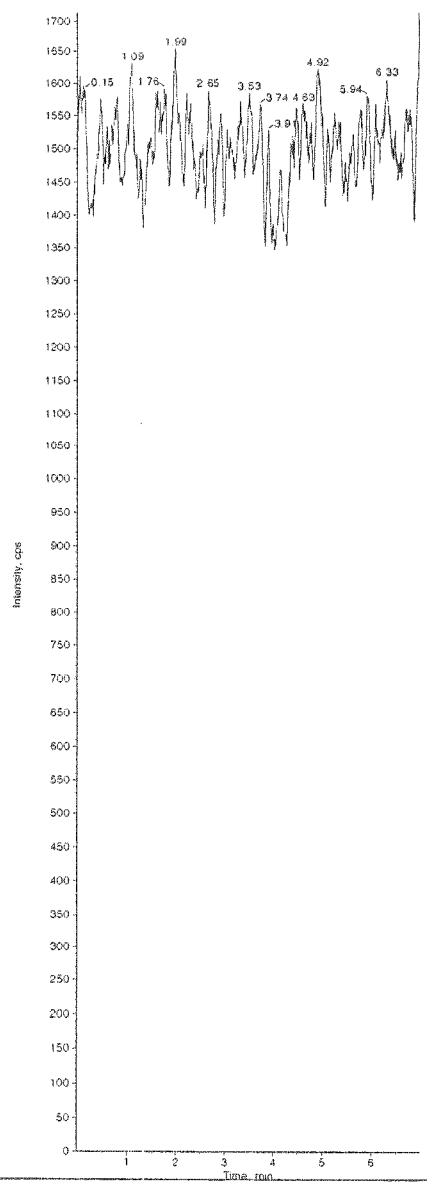
Sample Name: "IPB003" Sample ID: "[1]MAP" File: "per1010022.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.0166	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	03:51:54 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base, Sub. Window:	1.00	min
Peak-Split, Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	23	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	4.43	min
Area:	2.96e+003	counts
Height:	3.44e+002	cps
Start Time:	4.36	min
End Time:	4.60	min



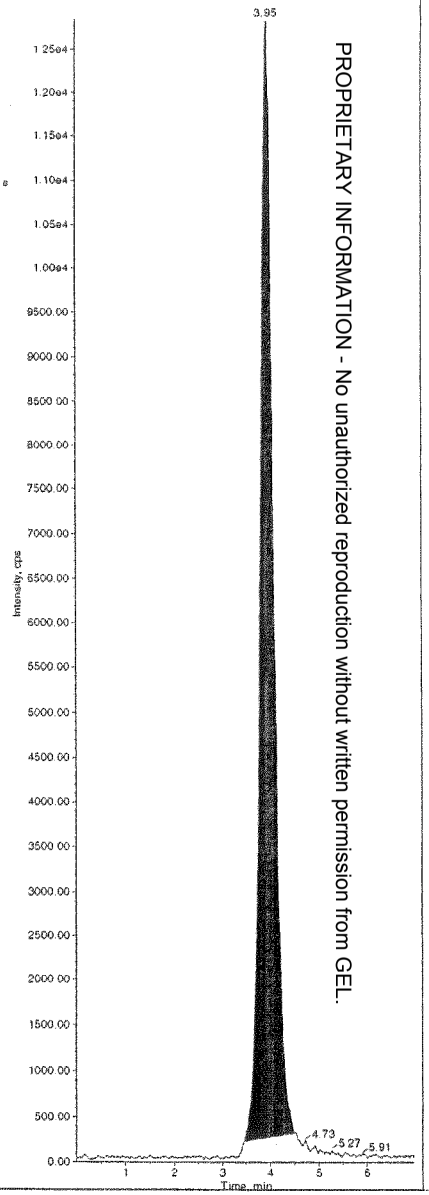
Sample Name: "IPB003" Sample ID: "[1]MAP" File: "per1010022.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	03:51:54 PM	
Modified:	No	



Sample Name: "IPB003" Sample ID: "[1]MAP" File: "per1010022.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.536	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	03:51:54 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base, Sub. Window:	1.00	min
Peak-Split, Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.95	min
Area:	2.43e+005	counts
Height:	1.26e+004	cps
Start Time:	3.46	min
End Time:	4.50	min

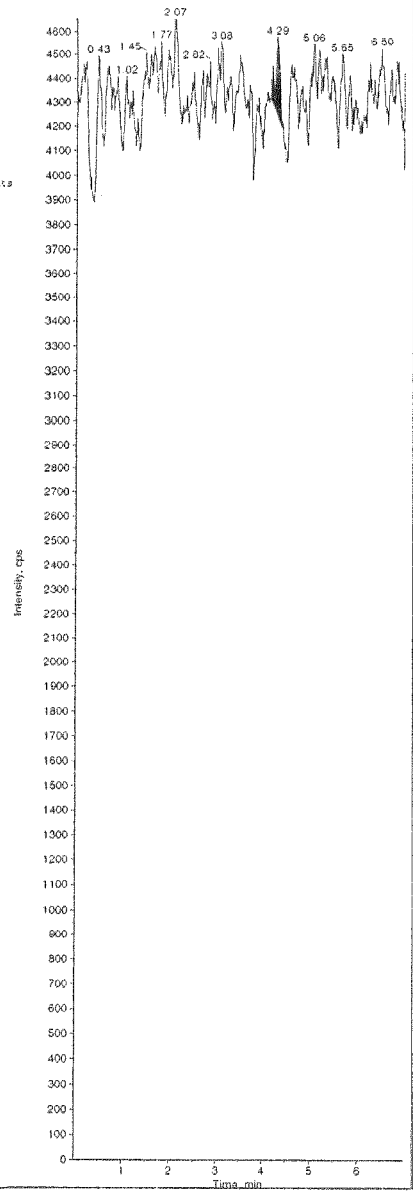


Sample Name "IPB004" Sample ID "[1]MAP" File "per1010031.wiff"
Peak Name "Perchlorate" Mass(es) "99.0/83.0 amu"
Comment "LCMSPER_B" Annotation ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0158 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 05:26:55 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.29 min
Area: 2.46e+003 counts
Height: 3.57e+002 cps
Start Time: 4.15 min
End Time: 4.39 min

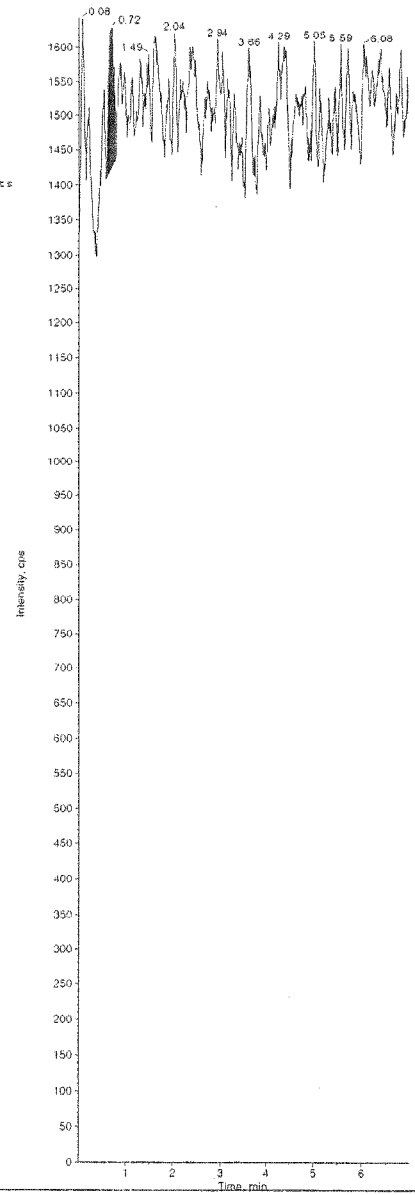


Sample Name "IPB004" Sample ID "[1]MAP" File "per1010031.wiff"
Peak Name "Perchlorate-101" Mass(es) "101.0/85.0 amu"
Comment "LCMSPER_B" Annotation ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0250 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 05:26:55 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 0.721 min
Area: 1.84e+003 counts
Height: 2.07e+002 cps
Start Time: 0.581 min
End Time: 0.822 min

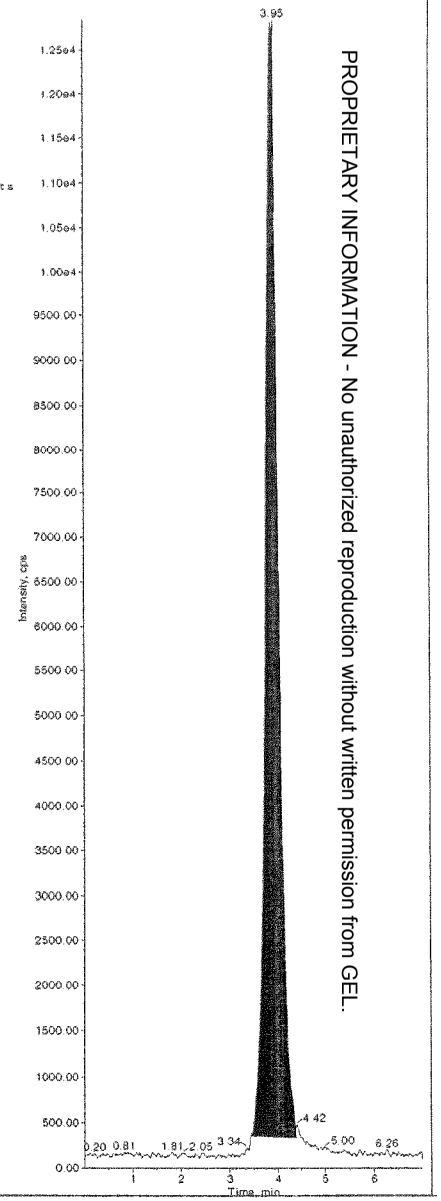


Sample Name "IPB004" Sample ID "[1]MAP" File "per1010031.wiff"
Peak Name "Perchlorate-O(18)" Mass(es) "107.0/89.0 amu"
Comment "LCMSPER_B" Annotation ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.527 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 05:26:55 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 3.95 min
Area: 2.39e+005 counts
Height: 1.25e+004 cps
Start Time: 3.45 min
End Time: 4.39 min



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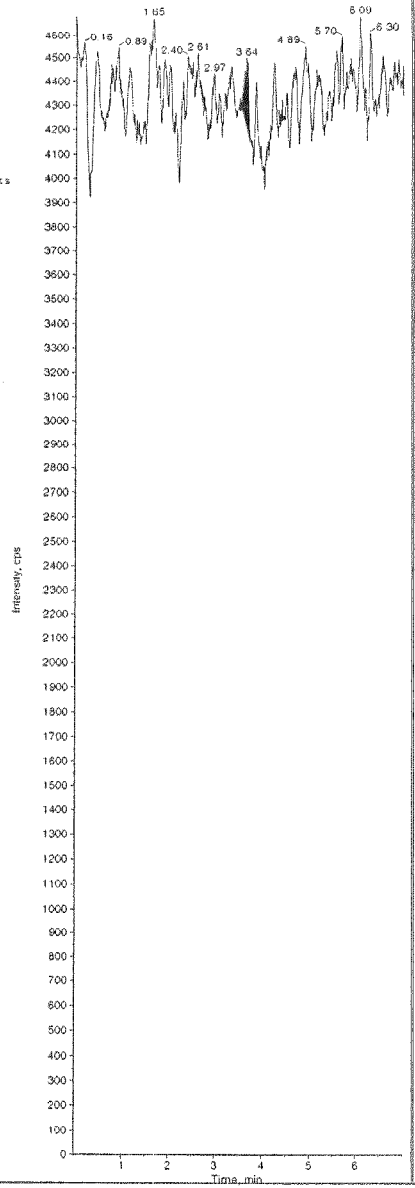
Sample Name: "IPB005" Sample ID: "[1]MAP" File: "per1010034.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0147 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 05:55:49 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQ1
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

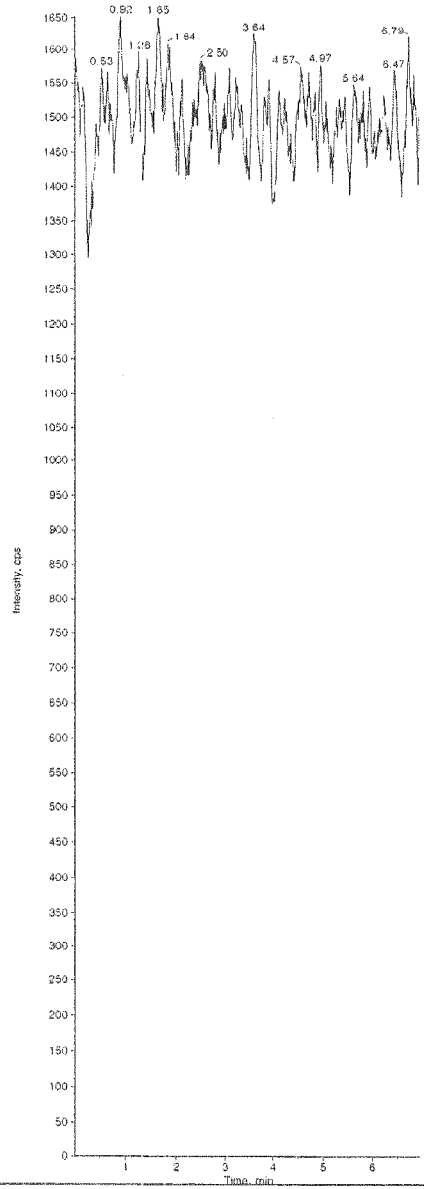
Int. Type: Base To Base
Retention Time: 3.64 min
Area: 1.80e+003 counts
Height: 2.96e+002 cps
Start Time: 3.51 min
End Time: 3.71 min



Sample Name: "IPB005" Sample ID: "[1]MAP" File: "per1010034.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 05:55:49 PM

Modified: No

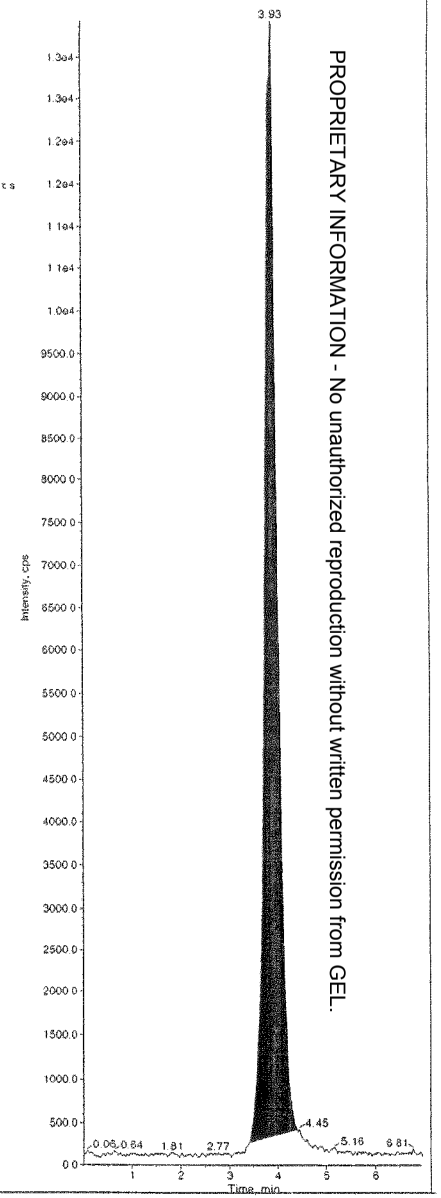


Sample Name: "IPB005" Sample ID: "[1]MAP" File: "per1010034.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.940 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 05:55:49 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQ1
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.93 min
Area: 2.45e+005 counts
Height: 1.31e+004 cps
Start Time: 3.42 min
End Time: 4.41 min



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Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per10090006.wiff**	**09-OCT-05**	**321000**				
Lower Area Limit			**160500**				
Upper Area Limit			**642000**				
1200949282	per10090011.wiff	09-OCT-05 13:05	322000	2.91	2.94	1.01	
1200949278	per10090012.wiff	09-OCT-05 13:14	333000	2.98			
1200949279	per10090013.wiff	09-OCT-05 13:24	333000	2.97	2.99	1.007	

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Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per1010006.wiff**	**10-OCT-05**	**229000**				
Lower Area Limit			**114500**				
Upper Area Limit			**458000**				
145579003	per1010013.wiff	10-OCT-05 14:25	242000	4.06	4.05	.998	
145579004	per1010014.wiff	10-OCT-05 14:34	266000	3.95	4	1.013	
145579001	per1010027.wiff	10-OCT-05 16:40	244000	3.93	3.93	1	
145579002	per1010028.wiff	10-OCT-05 16:50	254000	3.9	3.95	1.013	

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SAMPLE
DATA

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090G3TM01

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579001

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	5	20	51.2	ug/L		100	10-OCT-05 16:40	per1010027.wiff
	Perchlorate Isotope Ratio			2.94			100	10-OCT-05 16:40	per1010027.wiff
14797-73-0	Perchlorate-101	5	20	52.1	ug/L		100	10-OCT-05 16:40	per1010027.wiff
	Perchlorate-O(18)			53.7	ug/L		100	10-OCT-05 16:40	per1010027.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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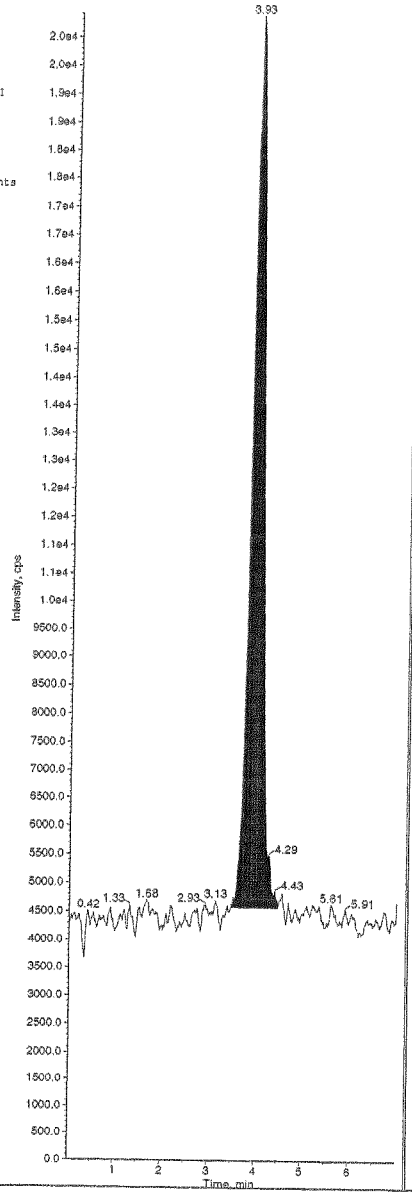
Sample Name: "145579001" Sample ID: "468258[100]MAP" File: "per1010027.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.512 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:40:47 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.93 min
Area: 3.03e+005 counts
Height: 1.58e+004 cps
Start Time: 3.47 min
End Time: 4.50 min

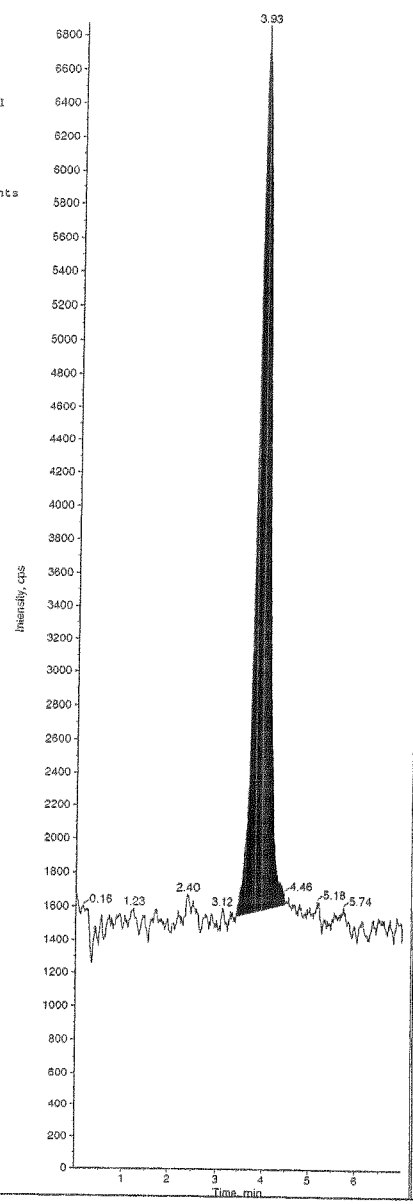


Sample Name: "145579001" Sample ID: "468258[100]MAP" File: "per1010027.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.521 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:40:47 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.93 min
Area: 1.03e+005 counts
Height: 5.28e+003 cps
Start Time: 3.45 min
End Time: 4.49 min

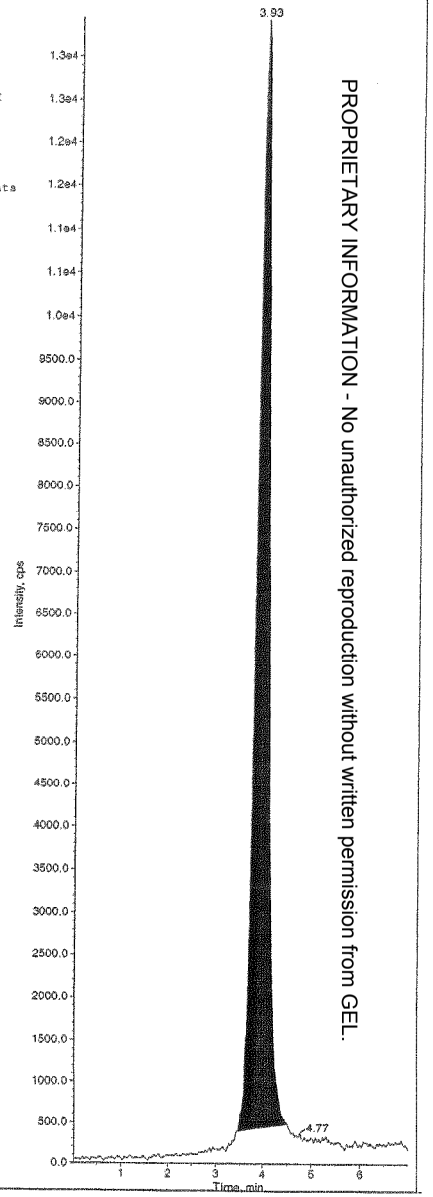


Sample Name: "145579001" Sample ID: "468258[100]MAP" File: "per1010027.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.537 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:40:47 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.93 min
Area: 2.44e+005 counts
Height: 1.30e+004 cps
Start Time: 3.45 min
End Time: 4.49 min



Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090GMC401

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579002

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	12.5	50	159	ug/L		250	10-OCT-05 16:50	per1010028.wiff
	Perchlorate Isotope Ratio			2.93			250	10-OCT-05 16:50	per1010028.wiff
14797-73-0	Perchlorate-101	12.5	50	162	ug/L		250	10-OCT-05 16:50	per1010028.wiff
	Perchlorate-O(18)			140	ug/L		250	10-OCT-05 16:50	per1010028.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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MAP 10/11/05

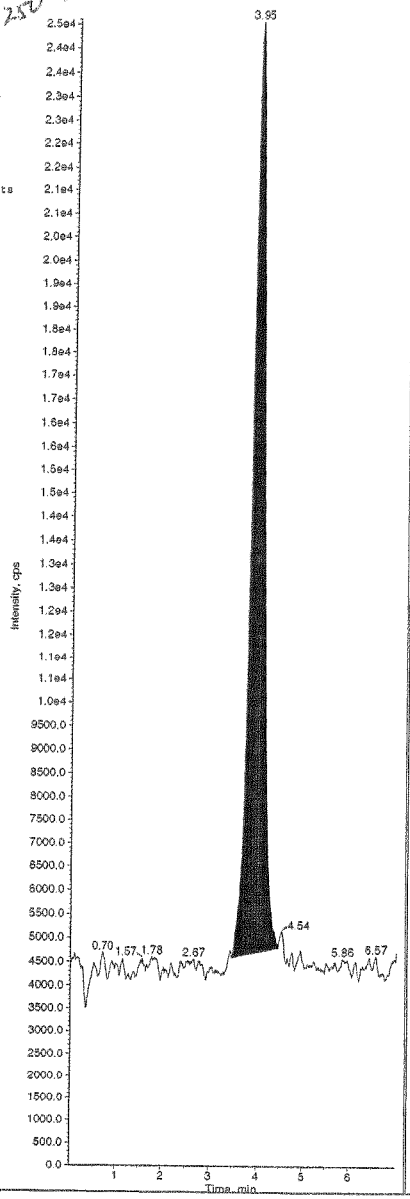
Sample Name: "145579002" Sample ID: "468258|250|MAP" File: "per1010028.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.637 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:50:17 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.95 min
Area: 3.78e+005 counts
Height: 1.99e+004 cps
Start Time: 3.47 min
End Time: 4.46 min

1252 = 159.25



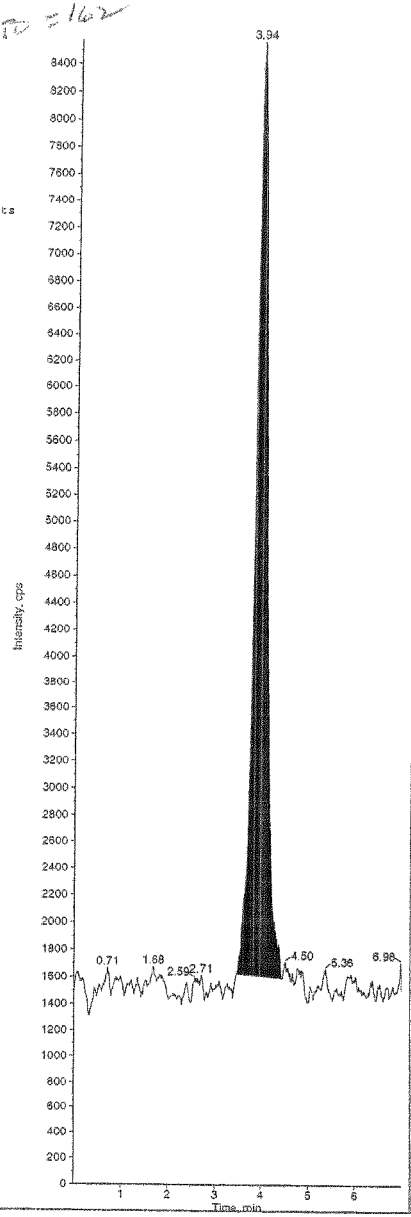
Sample Name: "145579002" Sample ID: "468258|250|MAP" File: "per1010028.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.648 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:50:17 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.94 min
Area: 1.29e+005 counts
Height: 6.97e+003 cps
Start Time: 3.49 min
End Time: 4.45 min

1262 = 162

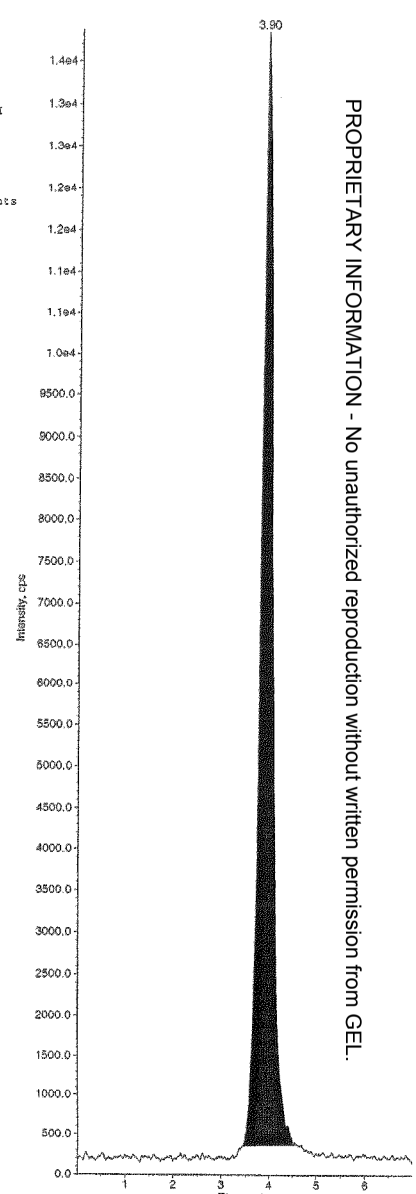


Sample Name: "145579002" Sample ID: "468258|250|MAP" File: "per1010028.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.559 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:50:17 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.90 min
Area: 2.54e+005 counts
Height: 1.35e+004 cps
Start Time: 3.44 min
End Time: 4.52 min



Hmm 10/12/05

594

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090G57M01

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579003

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	5	20	34.9	ug/L		100	10-OCT-05 14:25	per1010013.wiff
	Perchlorate Isotope Ratio			2.94			100	10-OCT-05 14:25	per1010013.wiff
14797-73-0	Perchlorate-101	5	20	35.6	ug/L		100	10-OCT-05 14:25	per1010013.wiff
	Perchlorate-O(18)			53.3	ug/L		100	10-OCT-05 14:25	per1010013.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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MAP 10/11/05

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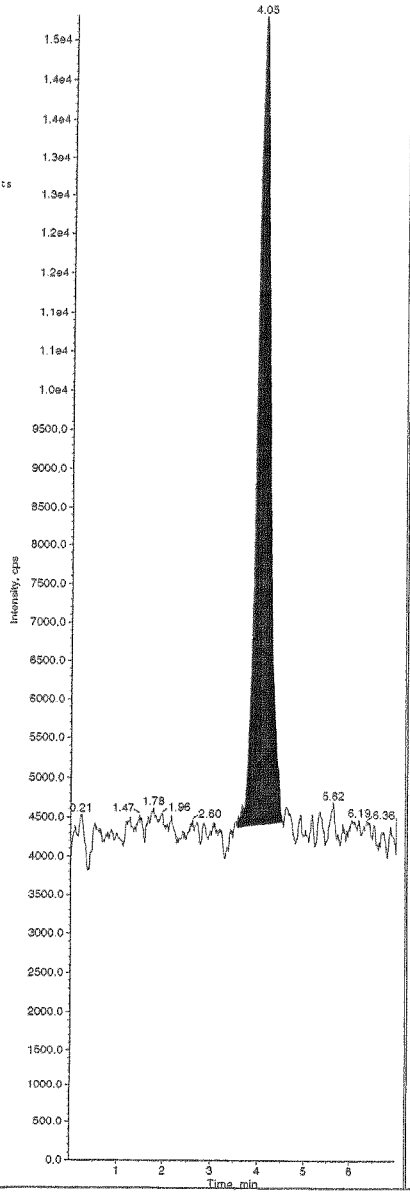
Sample Name: "145579003" Sample ID: "468258|100|MAP" File: "per1010013.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.349 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 02:25:11 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.05 min
Area: 2.04e+005 counts
Height: 1.04e+004 cps
Start Time: 3.54 min
End Time: 4.51 min

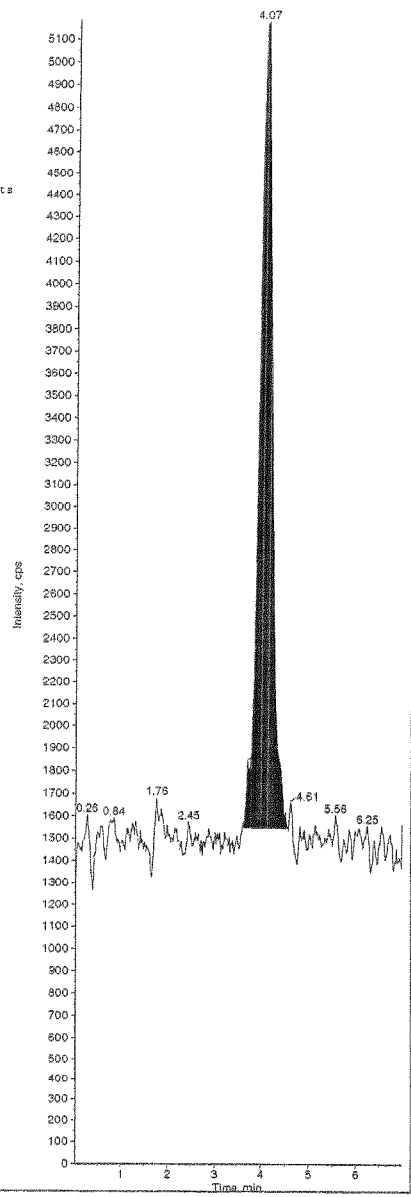


Sample Name: "145579003" Sample ID: "468258|100|MAP" File: "per1010013.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.356 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 02:25:11 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.07 min
Area: 6.94e+004 counts
Height: 3.64e+003 cps
Start Time: 3.64 min
End Time: 4.53 min

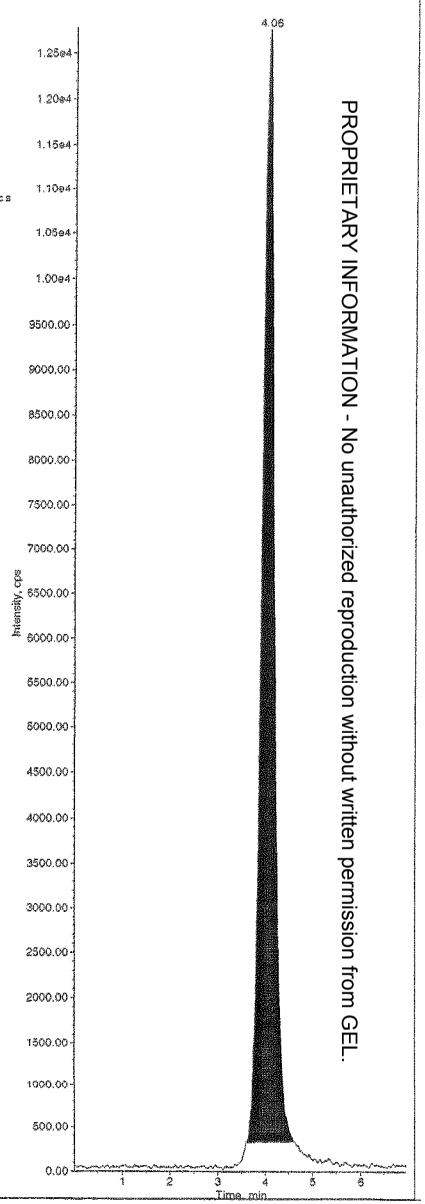


Sample Name: "145579003" Sample ID: "468258|100|MAP" File: "per1010013.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.533 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 02:25:11 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.06 min
Area: 2.42e+005 counts
Height: 1.25e+004 cps
Start Time: 3.60 min
End Time: 4.60 min



Hum 10/11/05

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A Modified

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF05090G7CM01

Date Received: 15-SEP-05

GEL Job No (SDG): 145579

GEL Sample ID: 145579004

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	5	20	40.9	ug/L		100	10-OCT-05 14:34	per1010014.wiff
	Perchlorate Isotope Ratio			3.03			100	10-OCT-05 14:34	per1010014.wiff
14797-73-0	Perchlorate-101	5	20	40.3	ug/L		100	10-OCT-05 14:34	per1010014.wiff
	Perchlorate-O(18)			58.6	ug/L		100	10-OCT-05 14:34	per1010014.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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MAP 10/11/05

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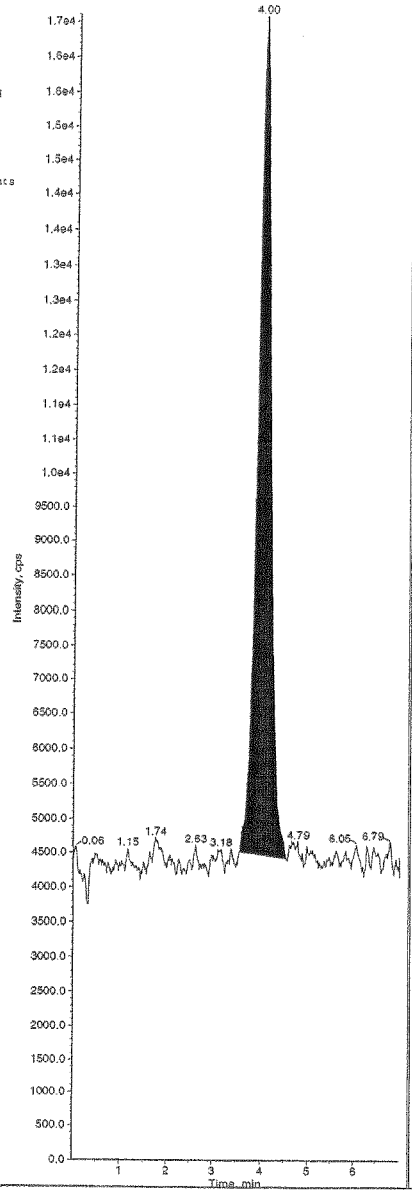
Sample Name: "145579004" Sample ID: "468258|100|MAP" File: "per1010014.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.409 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 02:34:46 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.00 min
Area: 2.40e+005 counts
Height: 1.21e+004 cps
Start Time: 3.56 min
End Time: 4.53 min

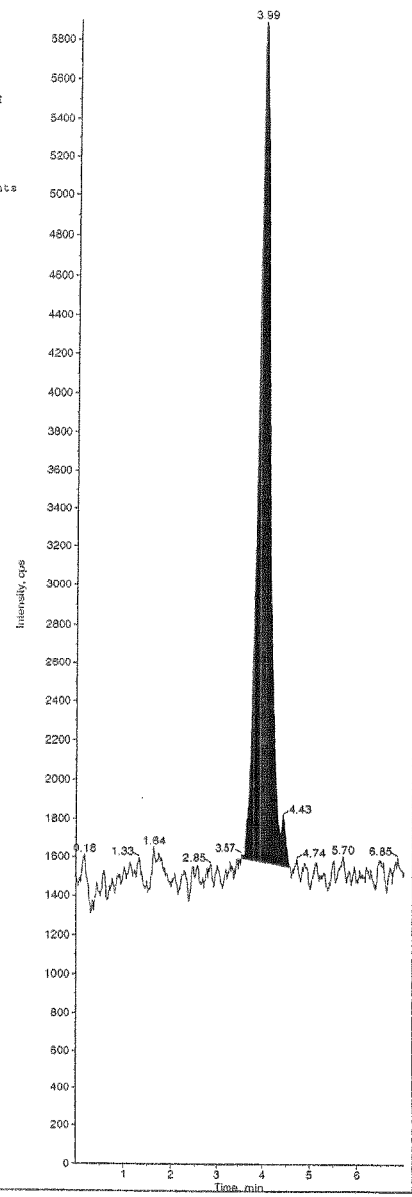


Sample Name: "145579004" Sample ID: "468258|100|MAP" File: "per1010014.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.403 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 02:34:46 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.99 min
Area: 7.91e+004 counts
Height: 4.32e+003 cps
Start Time: 3.58 min
End Time: 4.58 min

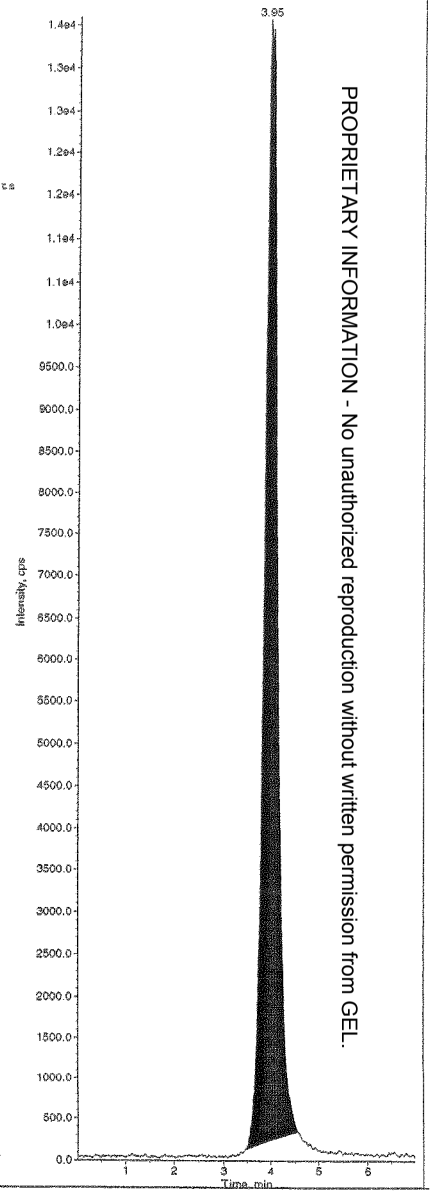


Sample Name: "145579004" Sample ID: "468258|100|MAP" File: "per1010014.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.585 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 02:34:46 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.95 min
Area: 2.65e+005 counts
Height: 1.34e+004 cps
Start Time: 3.49 min
End Time: 4.55 min



dmm 10/11/05

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 09-OCT-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 768600

Response Type: External Standard

Curve Type: RF

600

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 09-OCT-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 258600

Response Type: External Standard

Curve Type: RF

601

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Peak Name: Perchlorate
No Internal Standard
Q1/Q3 Masses: 99.00/83.00 amu

Fit Mean Response Factor Weighting None Iterate No
Factor 7.69e+005
Standard deviation 3.59e+004
%RSD 4.66
Use Area

Peak Name: Perchlorate-101
No Internal Standard
Q1/Q3 Masses: 101.00/85.00 amu

Fit Mean Response Factor Weighting None Iterate No
Factor 2.59e+005
Standard deviation 1.56e+004
%RSD 6.04
Use Area

Peak Name: Perchlorate-O(18)
No Internal Standard
Q1/Q3 Masses: 107.00/89.00 amu

Fit Mean Response Factor Weighting None Iterate No
Factor 6.42e+005
Standard deviation 6.62e+003
%RSD 1.03
Use Area

602

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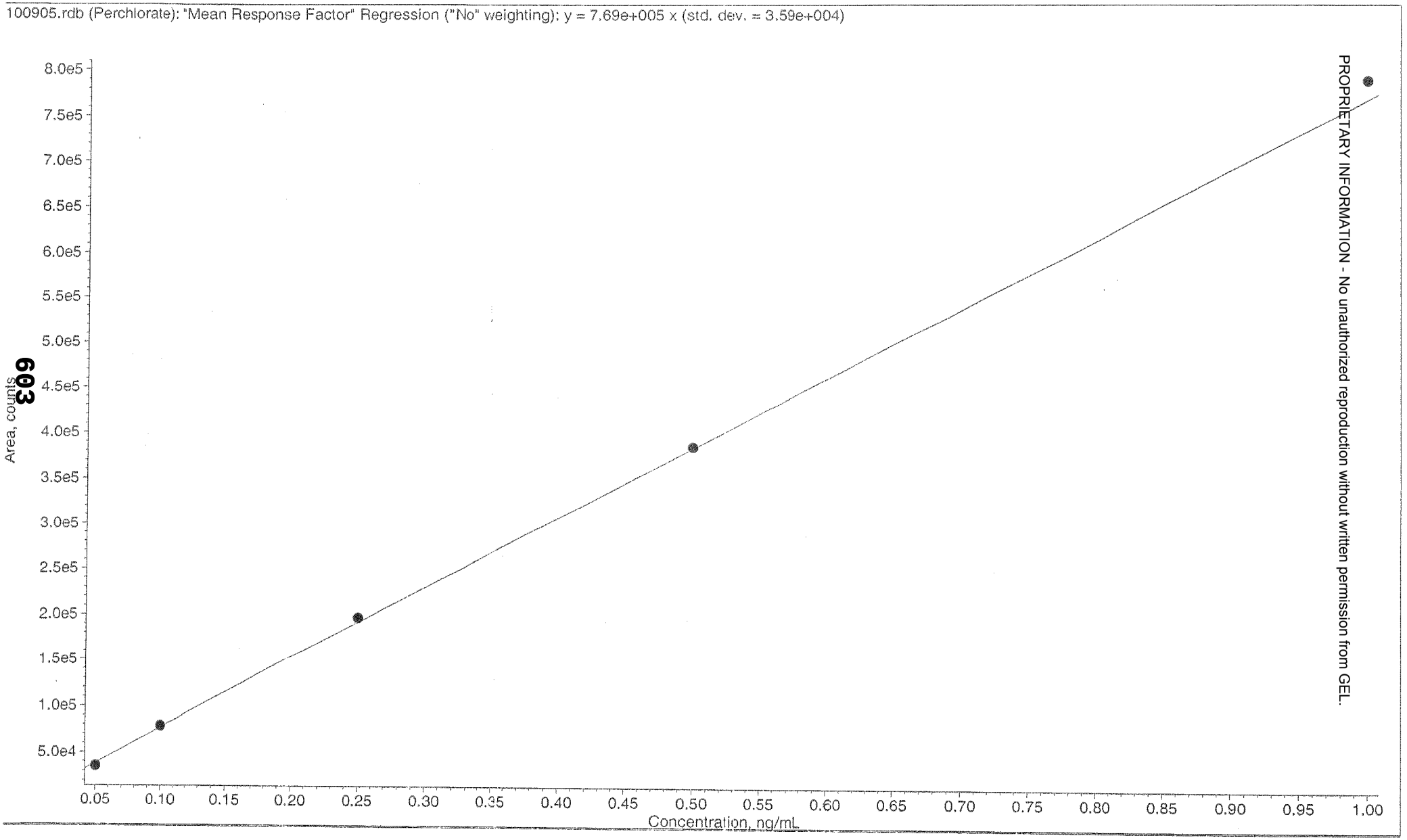
100905.rdb (Perchlorate): "Mean Response Factor" Regression ("No" weighting): y = 7.69e+005 x (std. dev. = 3.59e+004)
Area, counts
8.0e5
7.5e5
7.0e5
6.5e5
6.0e5
5.5e5
5.0e5
4.5e5
4.0e5
3.5e5
3.0e5
2.5e5
2.0e5
1.5e5
1.0e5
5.0e4
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.40
0.45
0.50
0.55
0.60
0.65
0.70
0.75
0.80
0.85
0.90
0.95
1.00
Concentration, ng/mL
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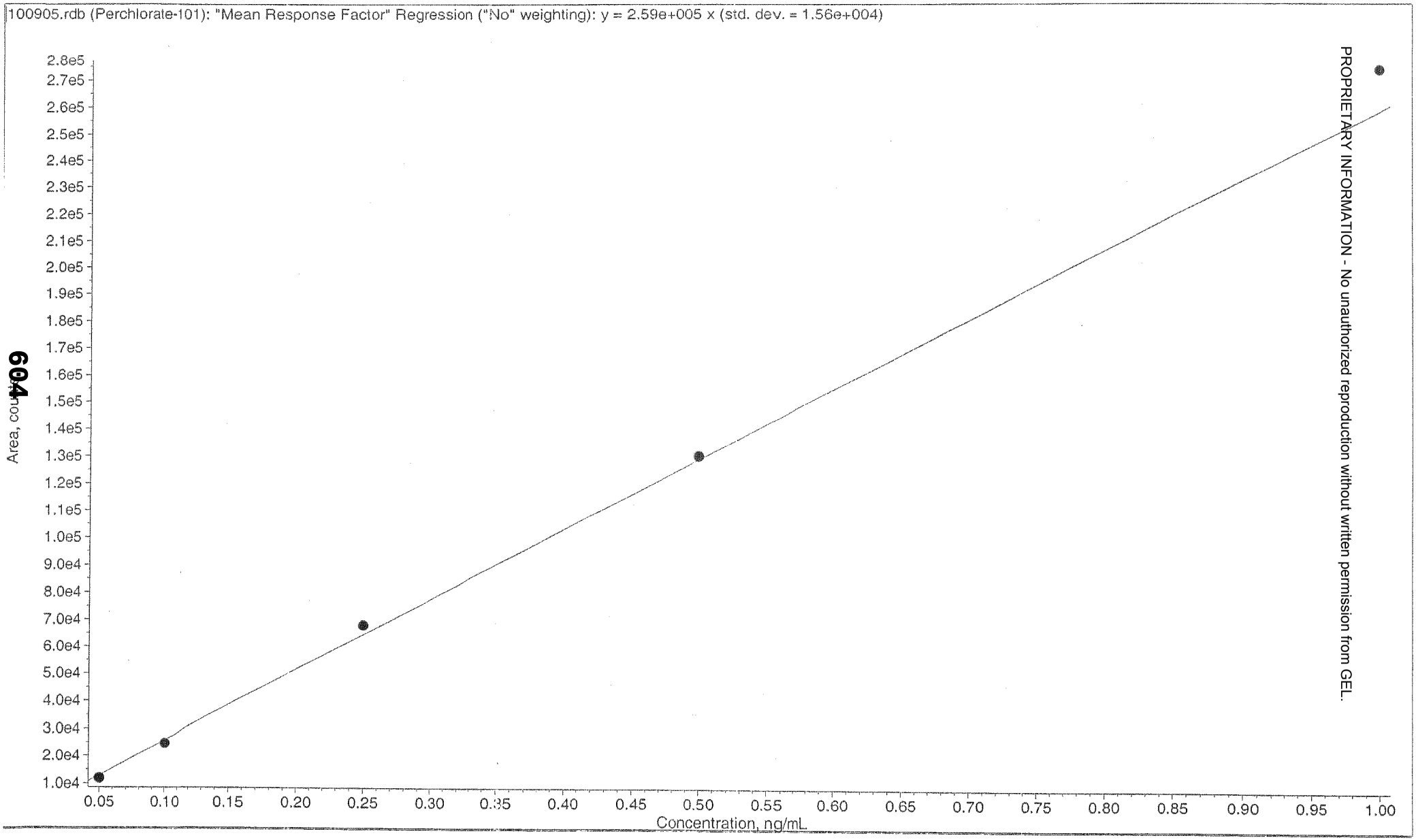

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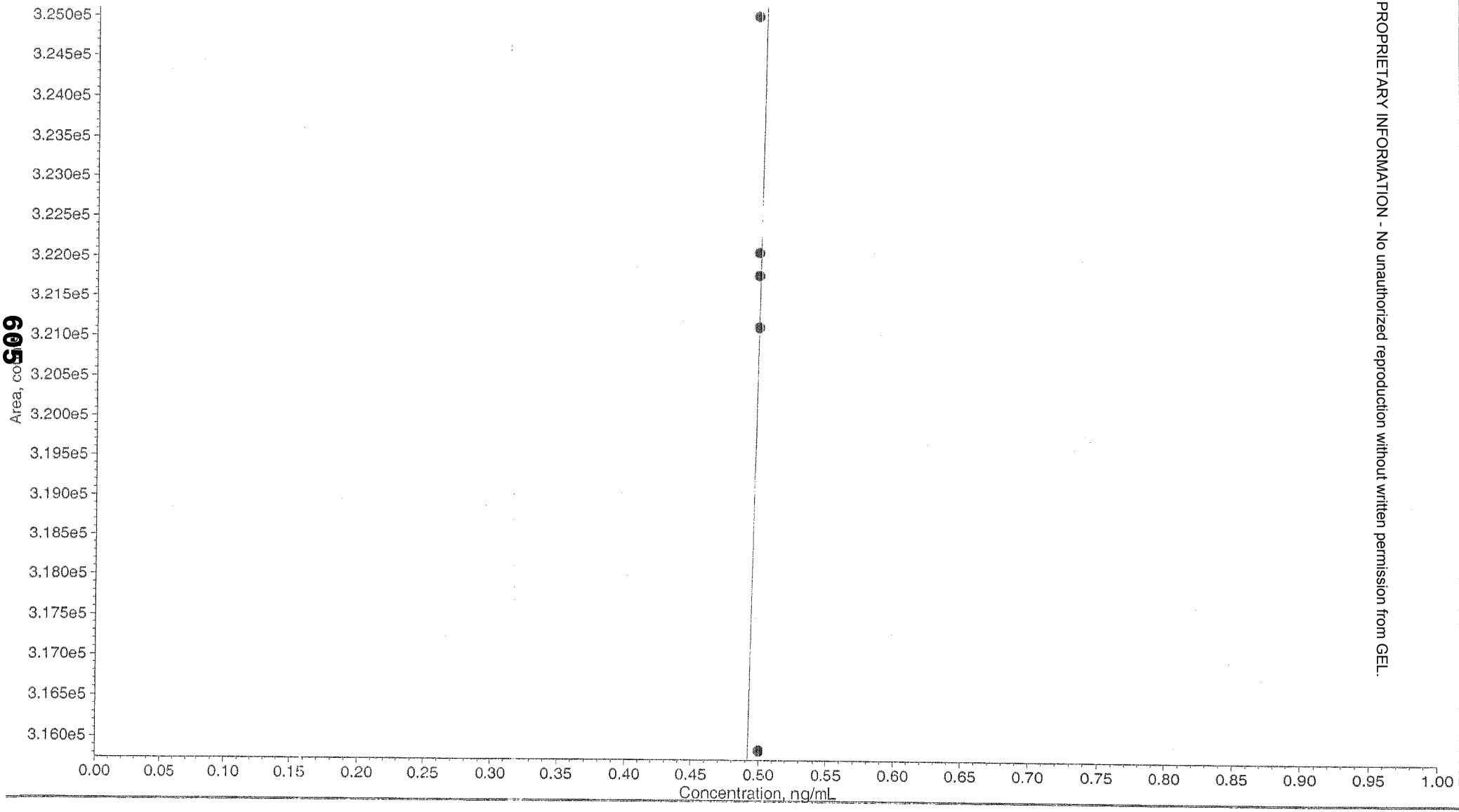
100905.rdb (Perchlorate-O(18)): "Mean Response Factor" Regression ("No" weighting): y = 6.42e+005 x (std. dev. = 6.62e+003)



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AMM 10/10/05

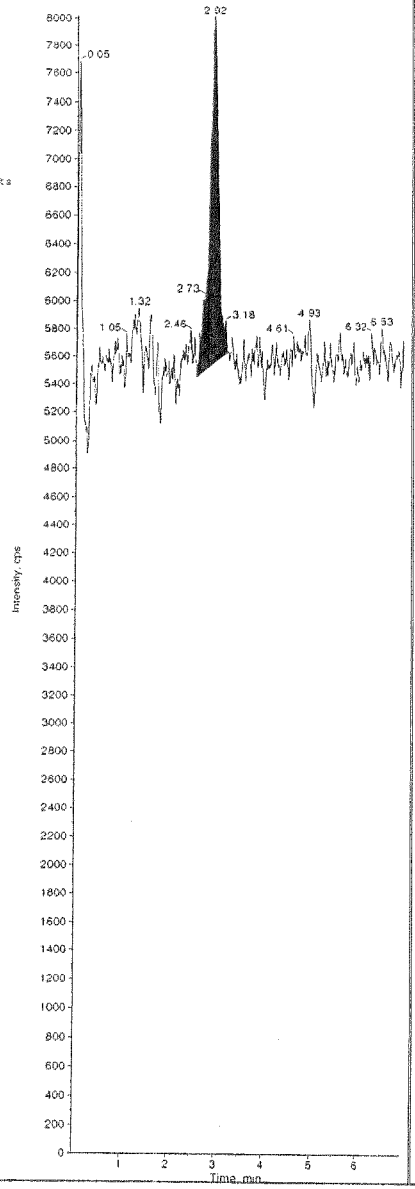
606

Sample Name: "WCL051004-01" Sample ID: "TJMAP" File: "per10090003.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.0500 ng/mL
Calculated Conc: 0.0459 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:47:31 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 1.98 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.92 min
Area: 3.53e+004 counts
Height: 2.47e+003 cps
Start Time: 2.57 min
End Time: 3.22 min

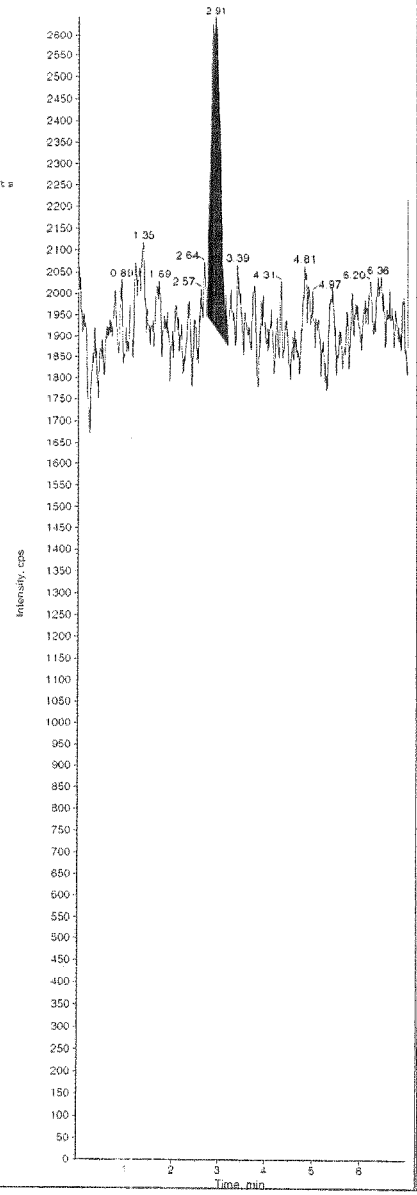


Sample Name: "WCL051004-01" Sample ID: "TJMAP" File: "per10090003.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.0500 ng/mL
Calculated Conc: 0.0462 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:47:31 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 1.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.91 min
Area: 1.18e+004 counts
Height: 7.25e+002 cps
Start Time: 2.69 min
End Time: 3.19 min

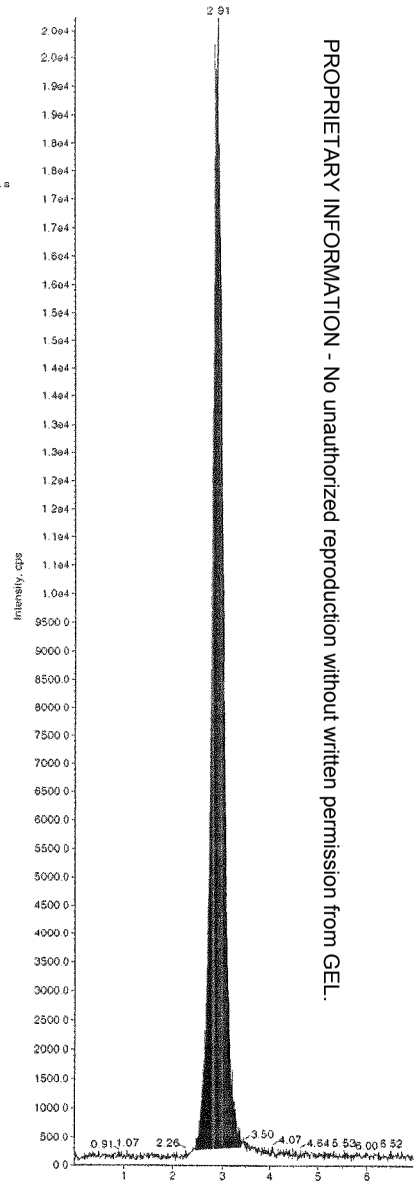


Sample Name: "WCL051004-01" Sample ID: "TJMAP" File: "per10090003.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.501 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:47:31 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 1.87 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.91 min
Area: 5.22e+005 counts
Height: 2.00e+004 cps
Start Time: 2.45 min
End Time: 3.41 min



AMM 10/10/05

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MWT 10/10/06

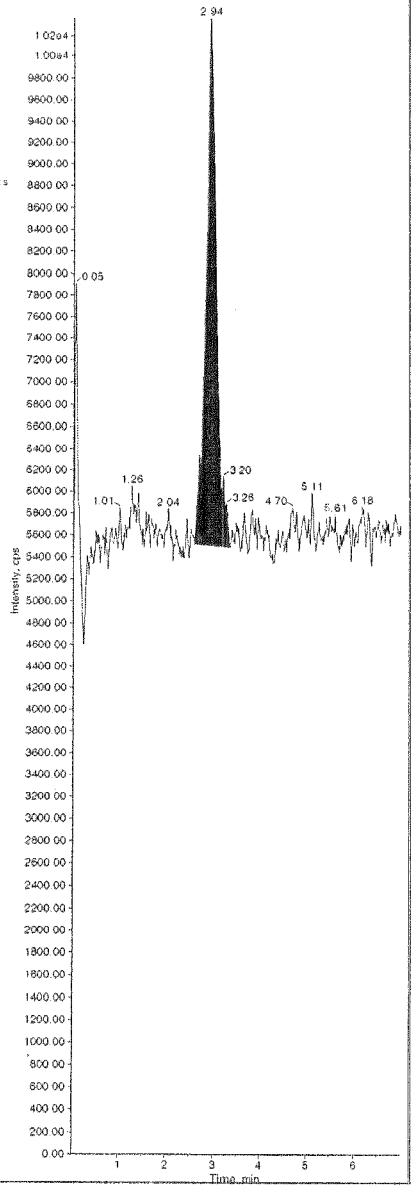
607

Sample Name: "WCL051004-02" Sample ID: "[1]MAP" File: "per10090004.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.100 ng/mL
Calculated Conc: 0.102 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:57:07 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.94 min
Area: 7.86e+004 counts
Height: 4.86e+003 cps
Start Time: 2.58 min
End Time: 3.55 min

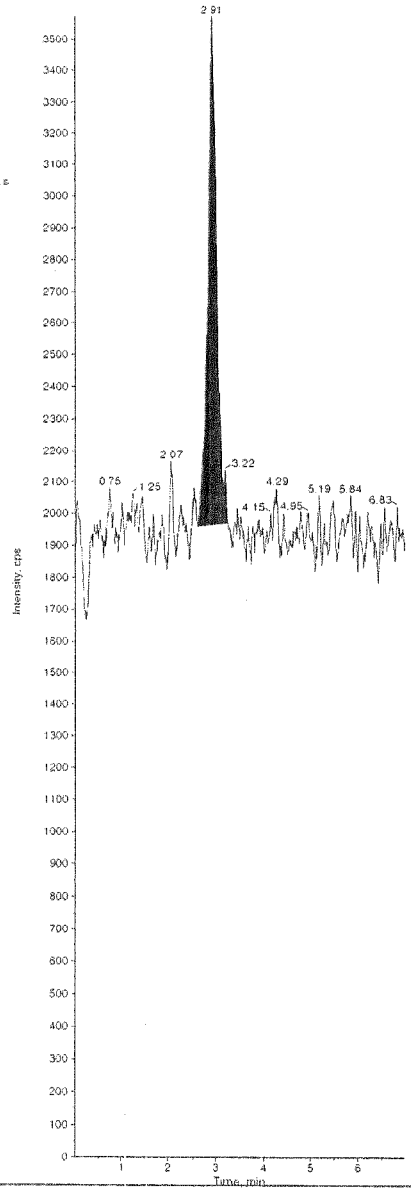


Sample Name: "WCL051004-02" Sample ID: "[1]MAP" File: "per10090004.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.100 ng/mL
Calculated Conc: 0.0954 ng/mL
Acq. Date: 10/06/2005
Acq. Time: 11:57:07 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.91 min
Area: 2.47e+004 counts
Height: 1.61e+003 cps
Start Time: 2.60 min
End Time: 3.26 min

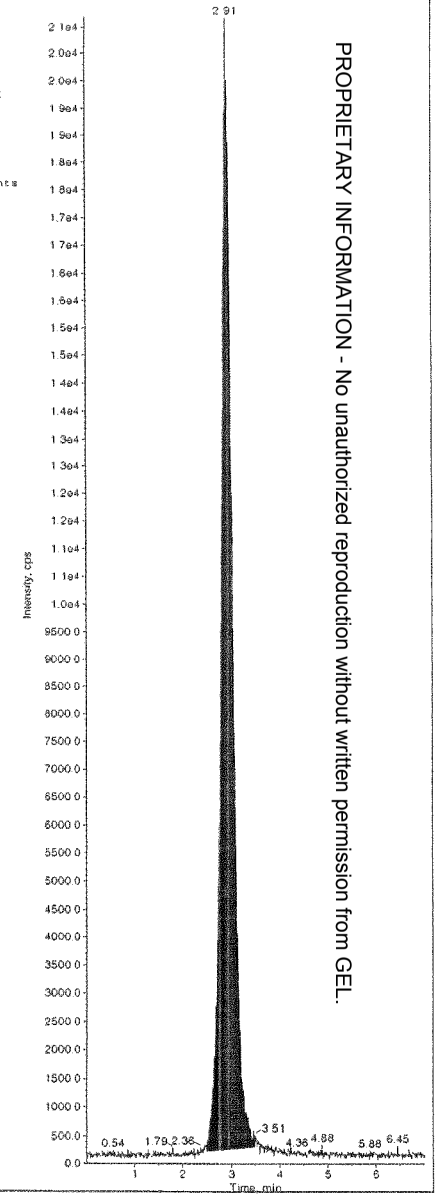


Sample Name: "WCL051004-02" Sample ID: "[1]MAP" File: "per10090004.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.506 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 11:57:07 AM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 3.87 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.91 min
Area: 3.25e+005 counts
Height: 2.04e+004 cps
Start Time: 2.49 min
End Time: 3.50 min



Chris 10/10/06

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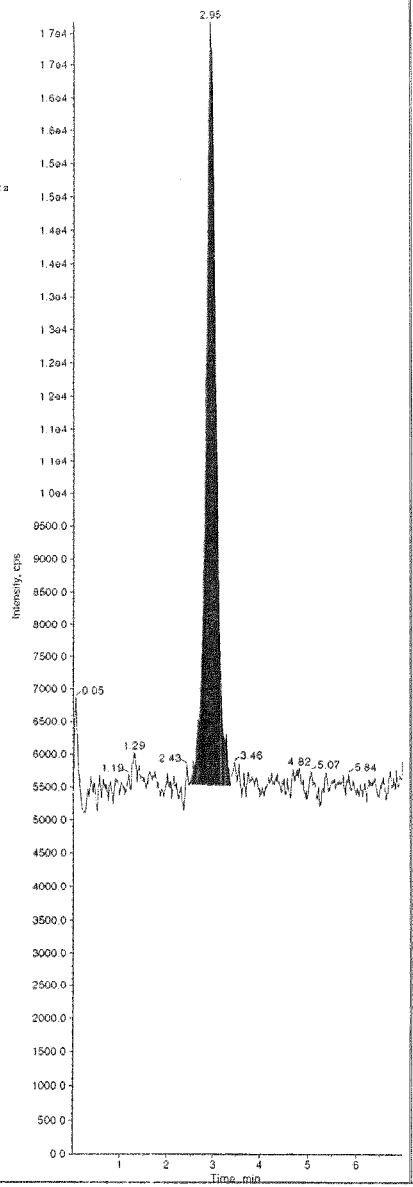
MAP 10/10/05

Sample Name "WCL051004-03" Sample ID "[1]MAP" File: "per10090005.wiff"
Peak Name "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.250 ng/mL
Calculated Conc: 0.257 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 12:06:45 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.95 min
Area: 1.97e+005 counts
Height: 1.17e+004 cps
Start Time: 2.50 min
End Time: 3.38 min

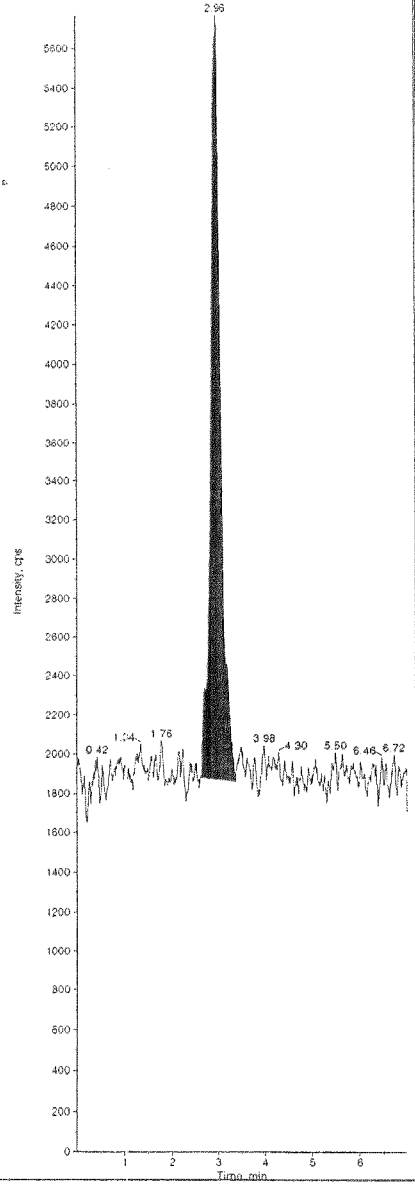


Sample Name "WCL051004-03" Sample ID "[1]MAP" File: "per10090005.wiff"
Peak Name "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.250 ng/mL
Calculated Conc: 0.265 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 12:06:45 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 100.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.96 min
Area: 6.81e+004 counts
Height: 3.91e+003 cps
Start Time: 2.59 min
End Time: 3.17 min

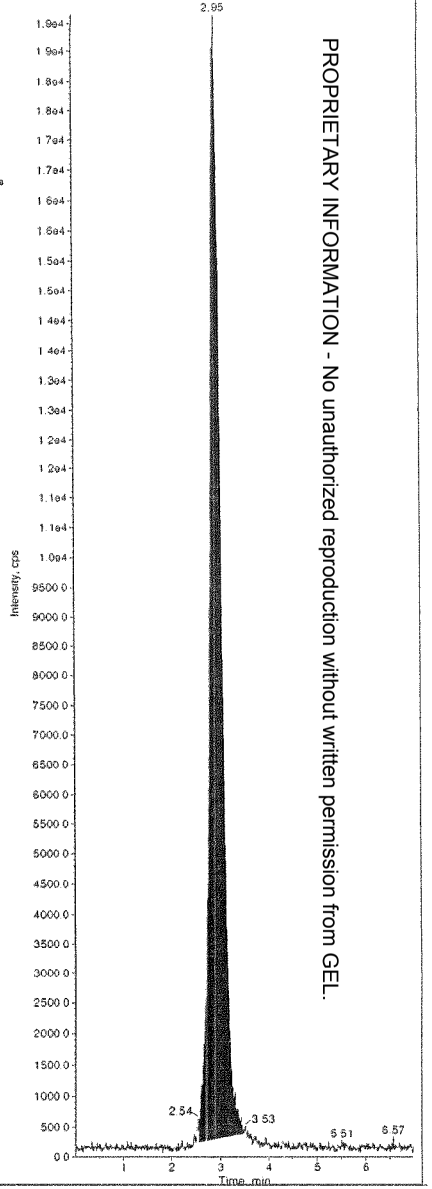


Sample Name "WCL051004-03" Sample ID "[1]MAP" File: "per10090005.wiff"
Peak Name "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.492 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 12:06:45 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 3.87 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 2.95 min
Area: 3.16e+005 counts
Height: 1.88e+004 cps
Start Time: 2.55 min
End Time: 3.50 min



Hmm 10/11/05

809

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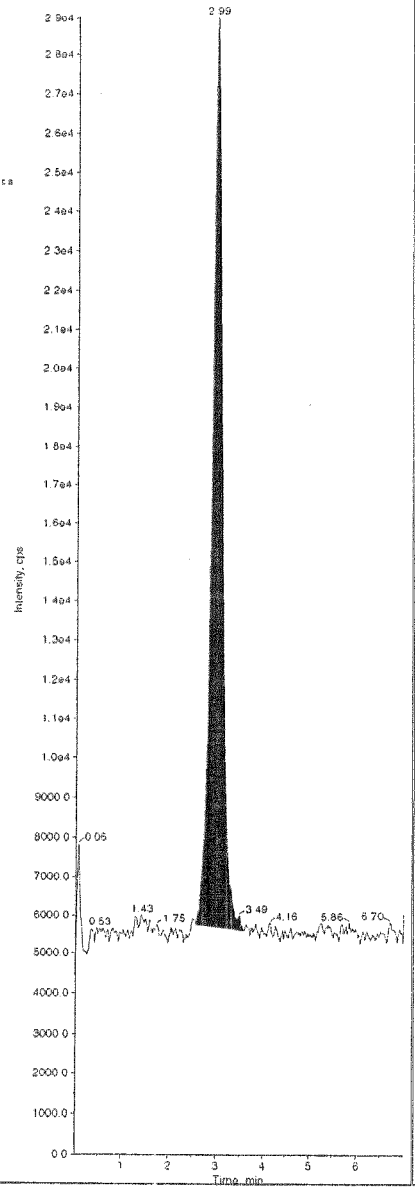
609

Sample Name "WCL051004-04" Sample ID "[1]MAP" File "per10050006.wiff"
Peak Name "Perchlorate" Mass(es) "99.0/83.0 amu"
Comment "LCMSPER_I" Annotation ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.502 ng/mL
Acq. Date: 10/05/2005
Acq. Time: 12:16:14 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.99 min
Area: 1.86e+005 counts
Height: 2.34e+004 cps
Start Time: 2.56 min
End Time: 3.59 min

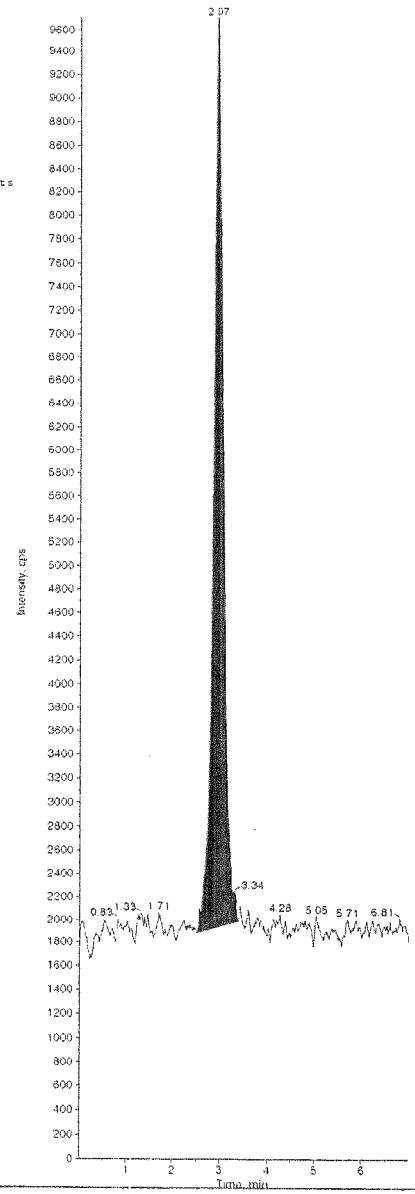


Sample Name "WCL051004-04" Sample ID "[1]MAP" File "per10050006.wiff"
Peak Name "Perchlorate-101" Mass(es) "101.0/85.0 amu"
Comment "LCMSPER_I" Annotation ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.505 ng/mL
Acq. Date: 10/05/2005
Acq. Time: 12:16:14 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.97 min
Area: 1.31e+005 counts
Height: 7.78e+003 cps
Start Time: 2.53 min
End Time: 3.41 min

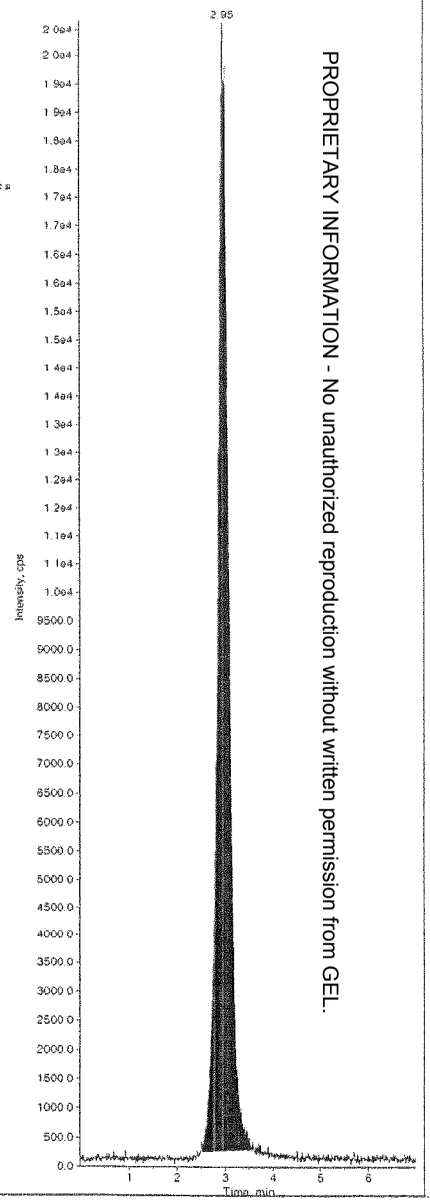


Sample Name "WCL051004-04" Sample ID "[1]MAP" File "per10050006.wiff"
Peak Name "Perchlorate-O(18)" Mass(es) "107.0/89.0 amu"
Comment "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.500 ng/mL
Acq. Date: 10/05/2005
Acq. Time: 12:16:14 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 3.87 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.95 min
Area: 3.21e+005 counts
Height: 1.99e+004 cps
Start Time: 2.52 min
End Time: 3.56 min



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MFP 12/16/05

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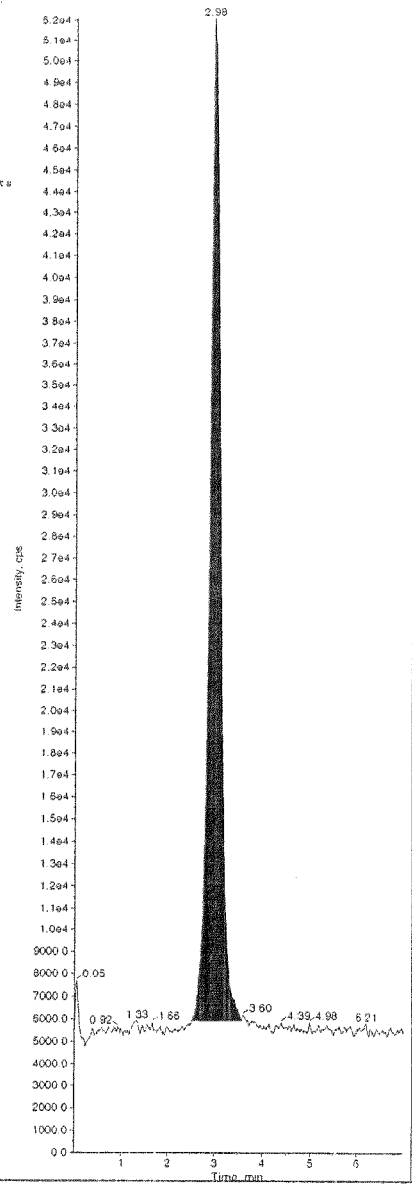
Sample Name: "WCL051004-05" Sample ID: "[1]MAP" File: "per10090007.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 1.00 ng/mL
Calculated Conc: 1.03 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 12:25:51 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.98 min
Area: 7.90e+005 counts
Height: 4.62e+004 cps
Start Time: 2.55 min
End Time: 3.56 min

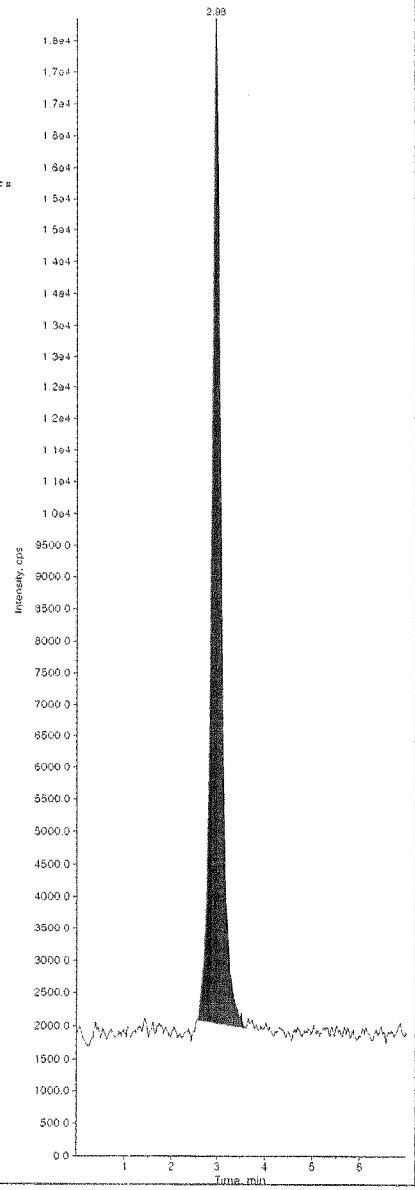


Sample Name: "WCL051004-05" Sample ID: "[1]MAP" File: "per10090007.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 1.00 ng/mL
Calculated Conc: 1.06 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 12:25:51 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.98 min
Area: 2.74e+005 counts
Height: 1.59e+004 cps
Start Time: 2.53 min
End Time: 3.67 min

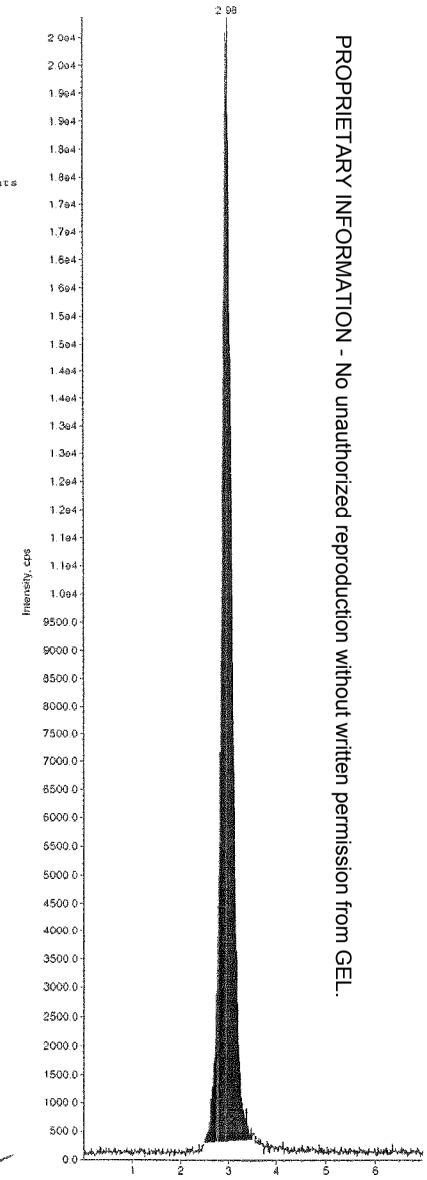


Sample Name: "WCL051004-05" Sample ID: "[1]MAP" File: "per10090007.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.501 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 12:25:51 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 3.87 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.98 min
Area: 3.22e+005 counts
Height: 2.01e+004 cps
Start Time: 2.51 min
End Time: 3.55 min



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12/16/05

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 10-OCT-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination: .9999

Calibration Curve: 605000X + -7090

Response Type: External Standard

Curve Type: Linear Null

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 10-OCT-05

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination: .9998

Calibration Curve: 203000X + -2830

Response Type: External Standard

Curve Type: Linear Null

612

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Peak Name: Perchlorate
No Internal Standard
Q1/Q3 Masses: 99.00/83.00 amu

Fit Linear Weighting None Iterate No
Intercept -7.09e+003
Slope 6.05e+005
Correlation coefficient 0.9999
Use Area

Peak Name: Perchlorate-101
No Internal Standard
Q1/Q3 Masses: 101.00/85.00 amu

Fit Linear Weighting None Iterate No
Intercept -2.83e+003
Slope 2.03e+005
Correlation coefficient 0.9998
Use Area

Peak Name: Perchlorate-O(18)
No Internal Standard
Q1/Q3 Masses: 107.00/89.00 amu

Fit Mean Response Factor Weighting None Iterate No
Factor 4.54e+005
Standard deviation 2.61e+004
%RSD 5.75
Use Area

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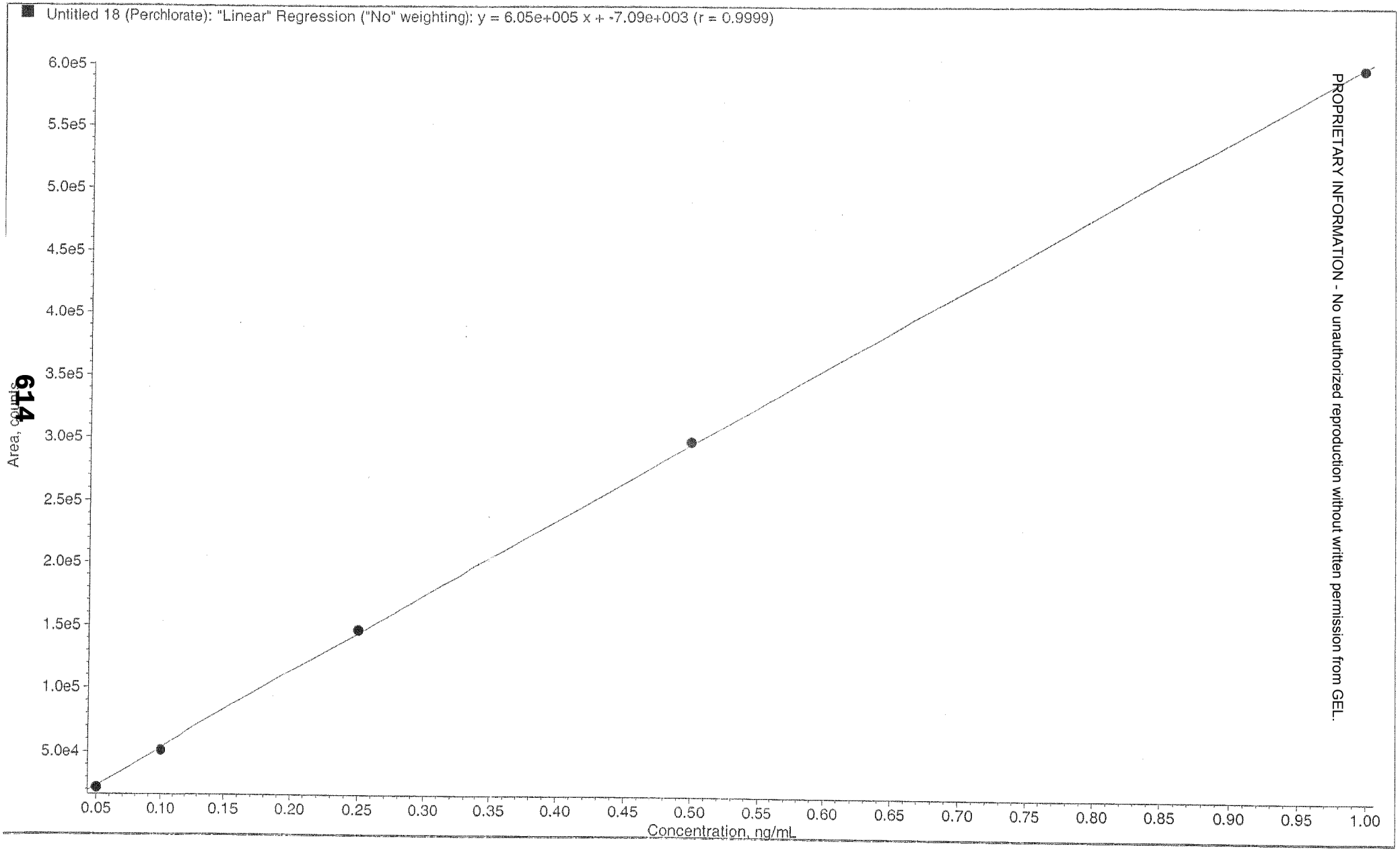

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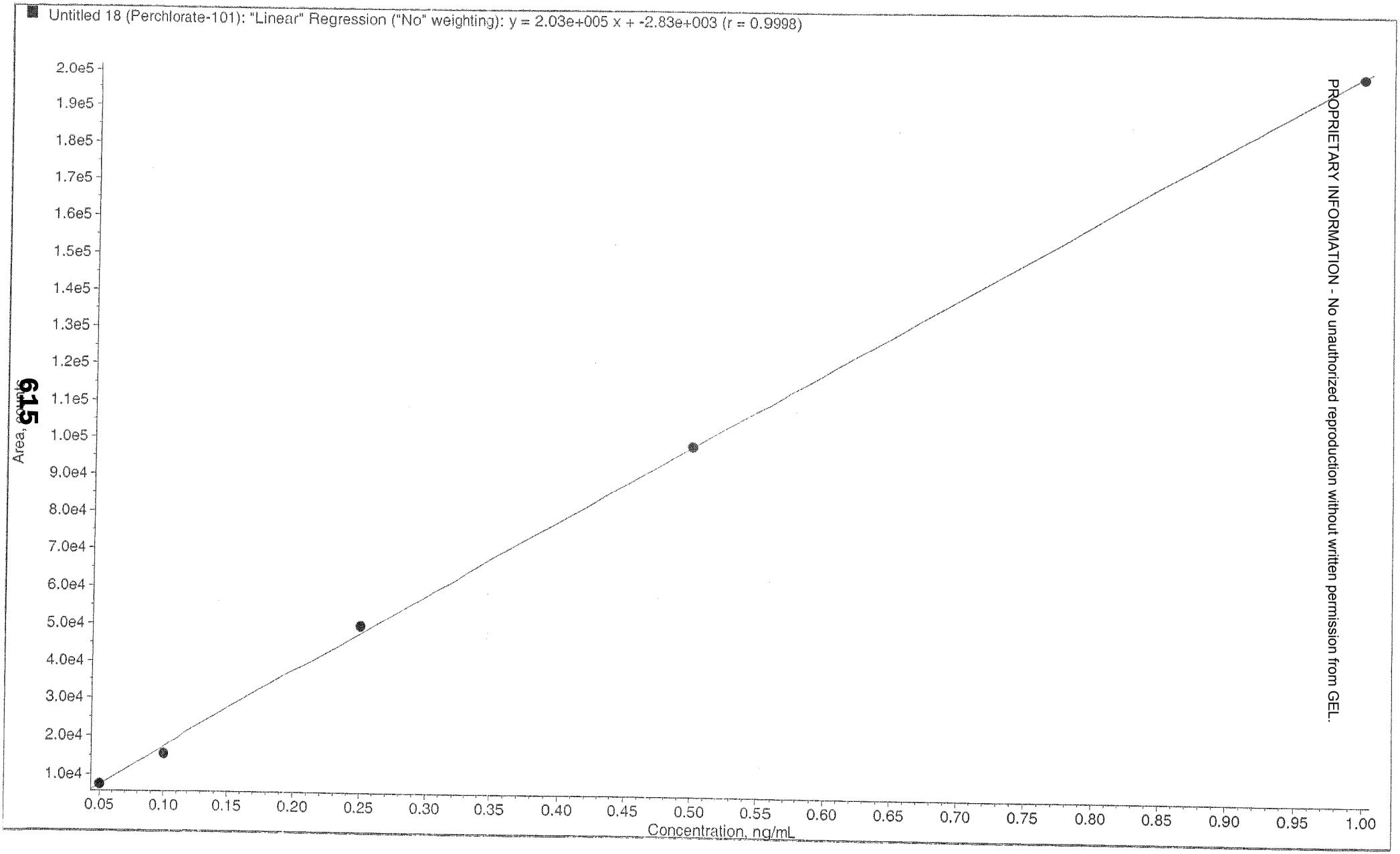

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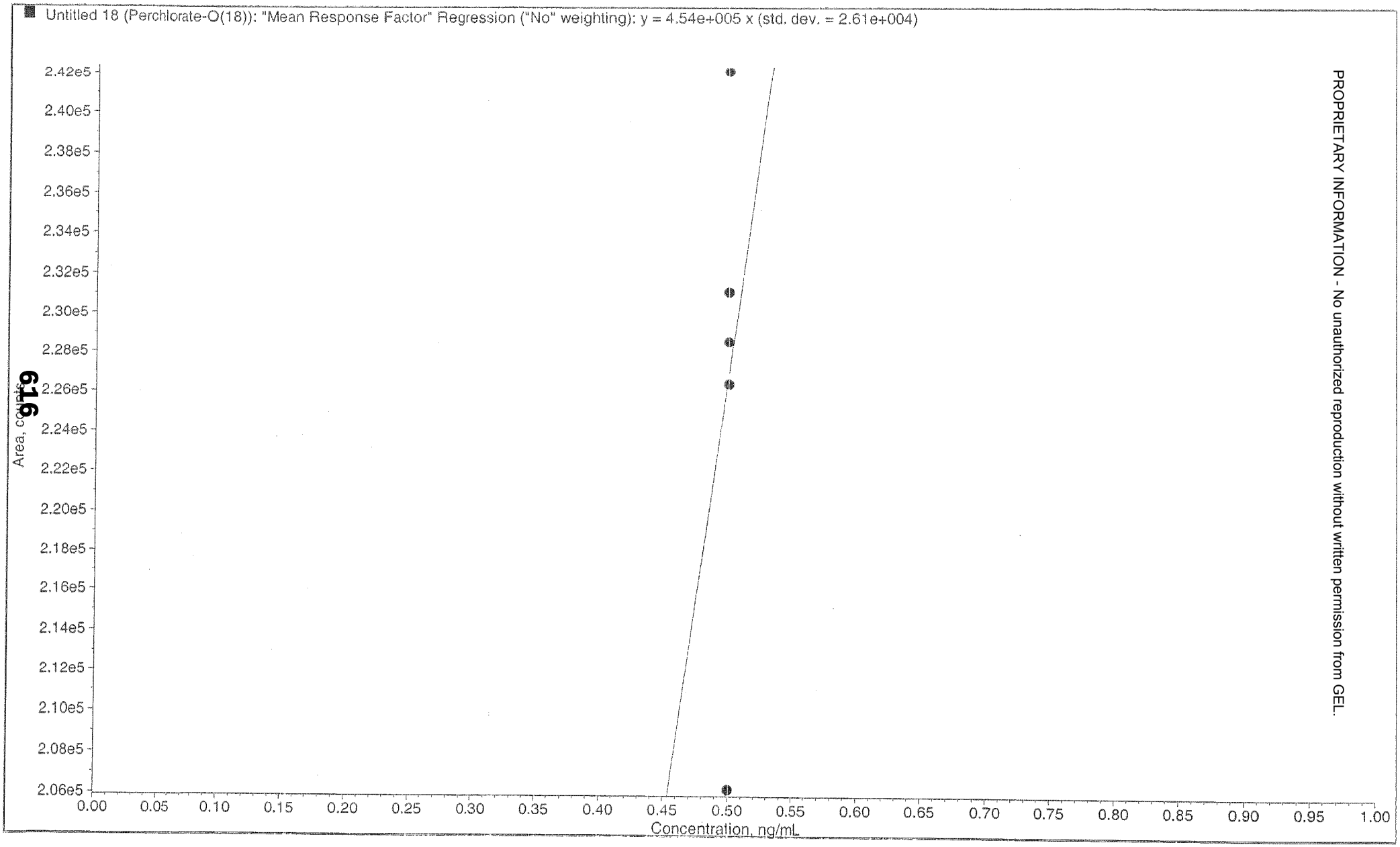

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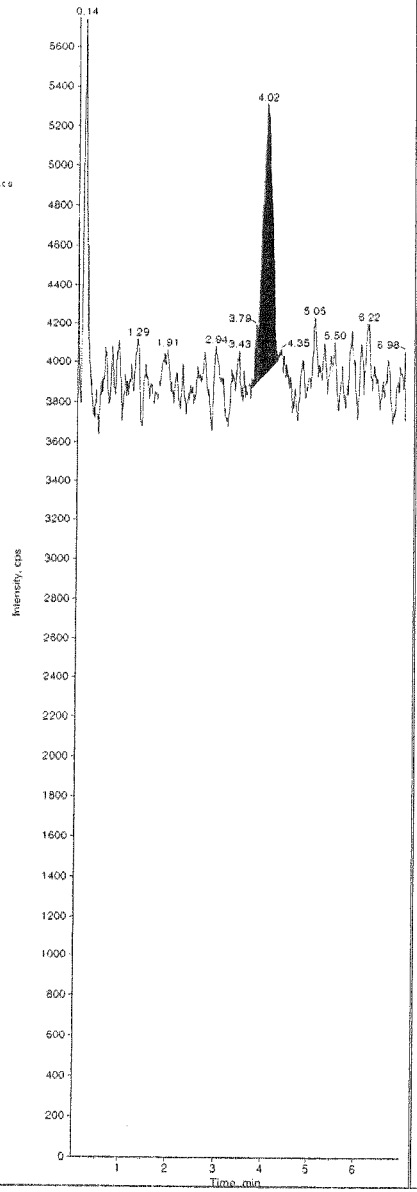
Sample Name "WCL051004-01" Sample ID "[1]MAP" File "per1010003.wiff"
Peak Name "Perchlorate" Mass(es) "99.0/83.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.0500 ng/mL
Calculated Conc: 0.0476 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:42:29 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.02 min
Area: 2.17e+004 counts
Height: 1.37e+003 cps
Start Time: 3.71 min
End Time: 4.26 min

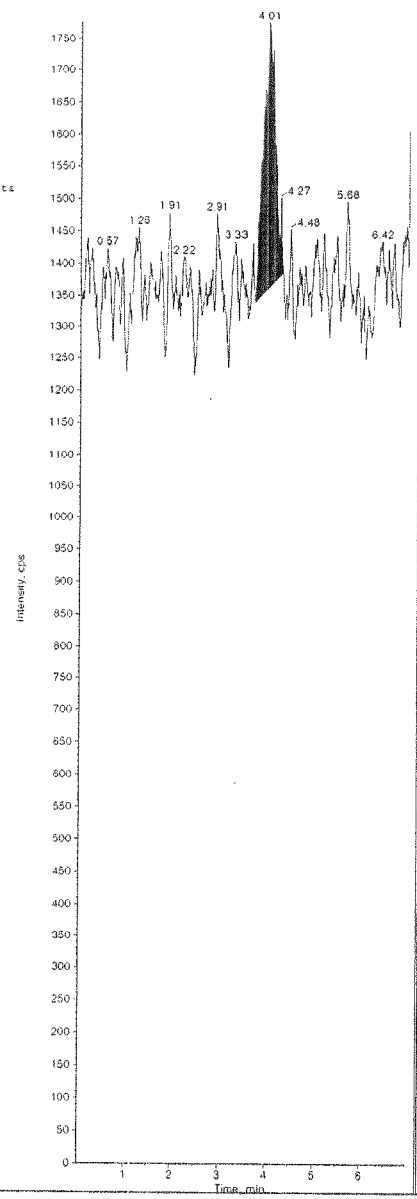


Sample Name "WCL051004-01" Sample ID "[1]MAP" File "per1010003.wiff"
Peak Name "Perchlorate-101" Mass(es) "101.0/85.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.0500 ng/mL
Calculated Conc: 0.0504 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:42:29 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.01 min
Area: 7.41e+003 counts
Height: 4.16e+002 cps
Start Time: 3.73 min
End Time: 4.32 min

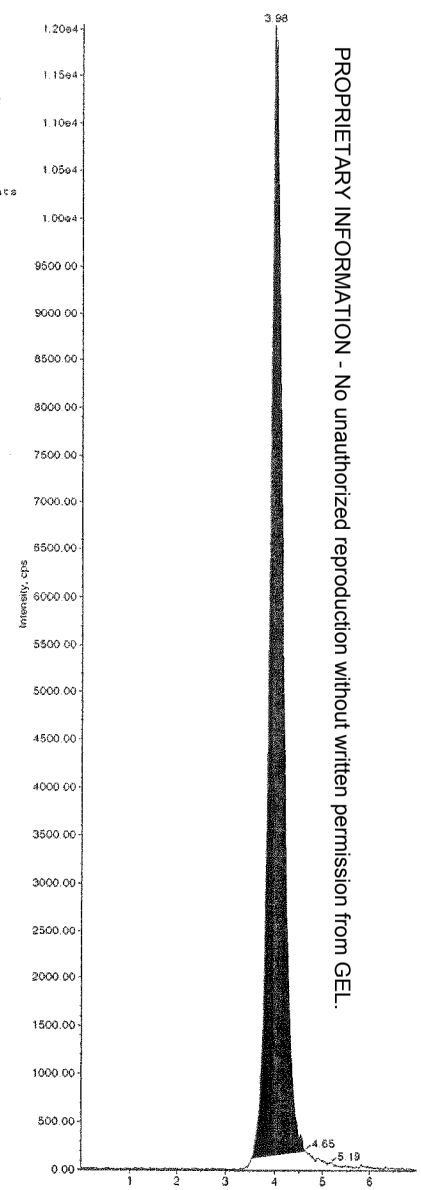


Sample Name "WCL051004-01" Sample ID "[1]MAP" File "per1010003.wiff"
Peak Name "Perchlorate-O(18)" Mass(es) "107.0/89.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.499 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:42:29 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.98 min
Area: 2.26e+005 counts
Height: 1.19e+004 cps
Start Time: 3.55 min
End Time: 4.62 min



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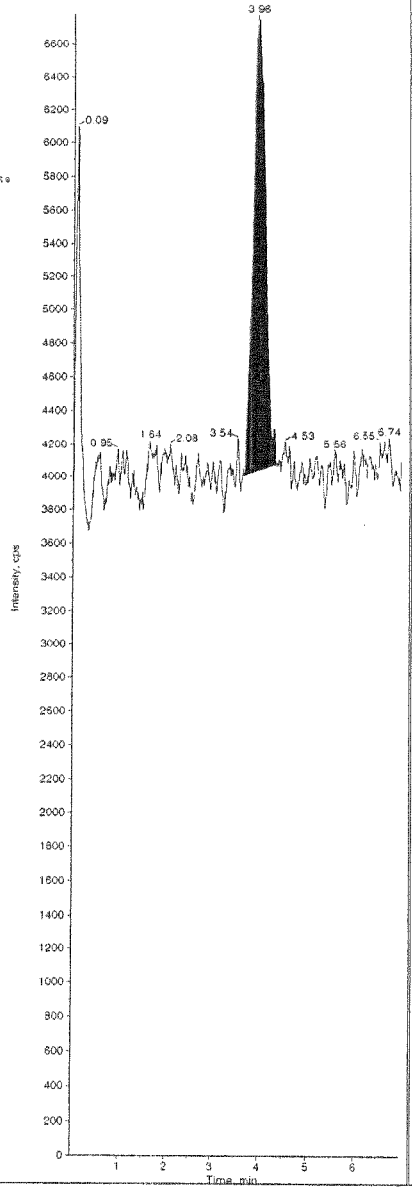
Sample Name: "WCL051004-02" Sample ID: "[1]MAP" File: "per1010004.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.100 ng/mL
Calculated Conc: 0.0963 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:51:59 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.96 min
Area: 5.11e+004 counts
Height: 2.75e+003 cps
Start Time: 3.66 min
End Time: 4.54 min

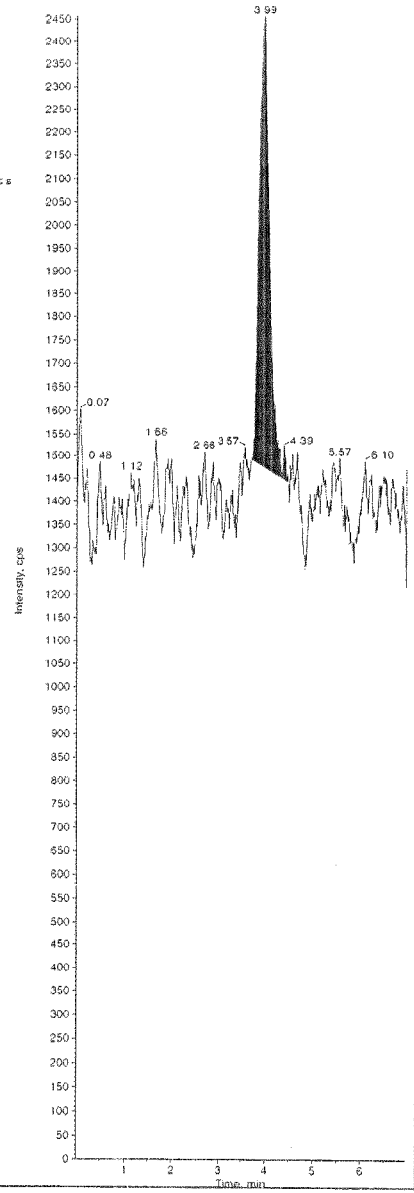


Sample Name: "WCL051004-02" Sample ID: "[1]MAP" File: "per1010004.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.100 ng/mL
Calculated Conc: 0.0907 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:51:59 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.99 min
Area: 1.56e+004 counts
Height: 9.83e+002 cps
Start Time: 3.72 min
End Time: 4.45 min

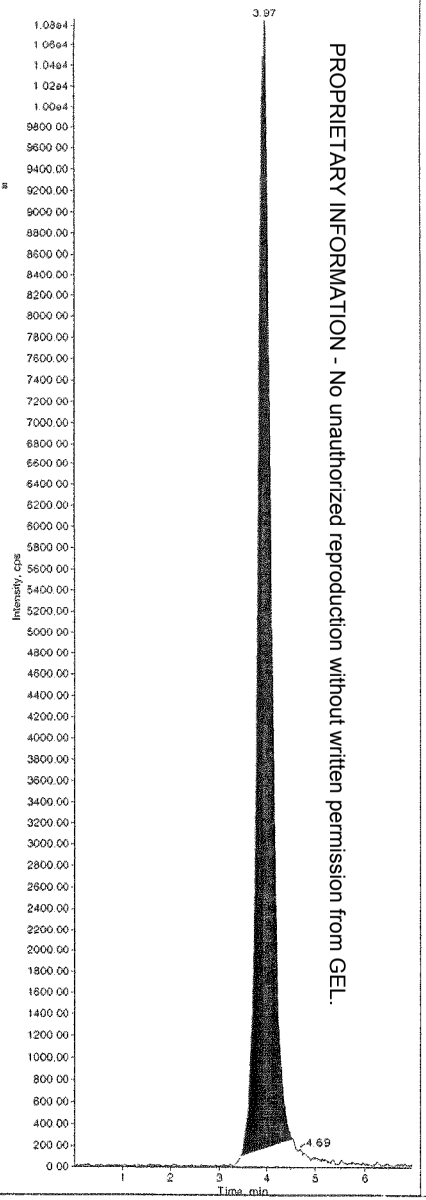


Sample Name: "WCL051004-02" Sample ID: "[1]MAP" File: "per1010004.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.454 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 12:51:59 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.97 min
Area: 2.06e+005 counts
Height: 1.07e+004 cps
Start Time: 3.48 min
End Time: 4.53 min



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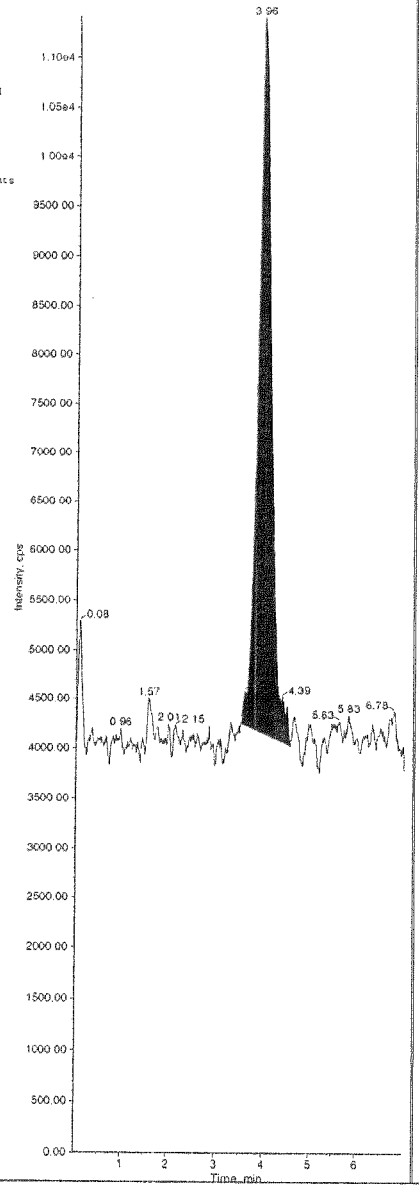
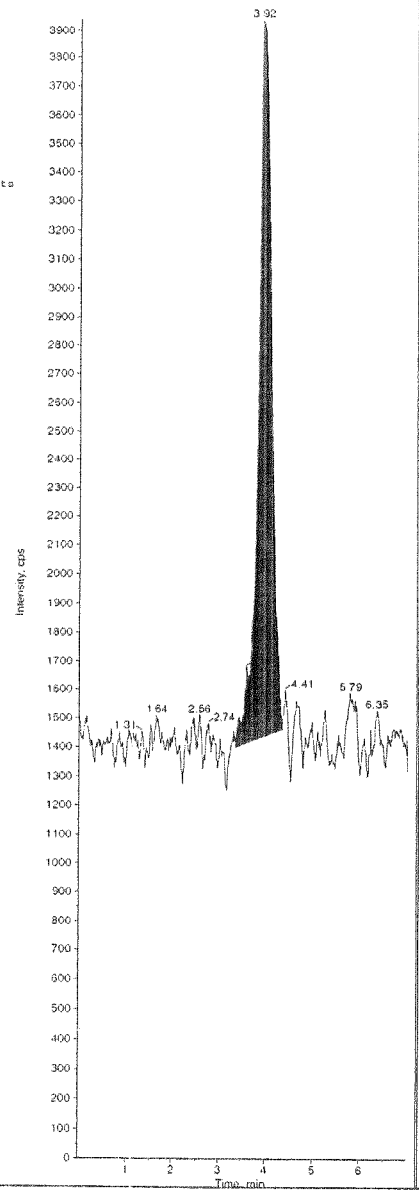
Sample Name: "WCL051004-03" Sample ID: "[1]MAP" File: "per1010005.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	0.250	ng/mL
Calculated Conc:	0.255	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:01:36 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	25	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.96	min
Area:	1.47e+005	counts
Height:	7.23e+003	cps
Start Time:	3.50	min
End Time:	4.56	min



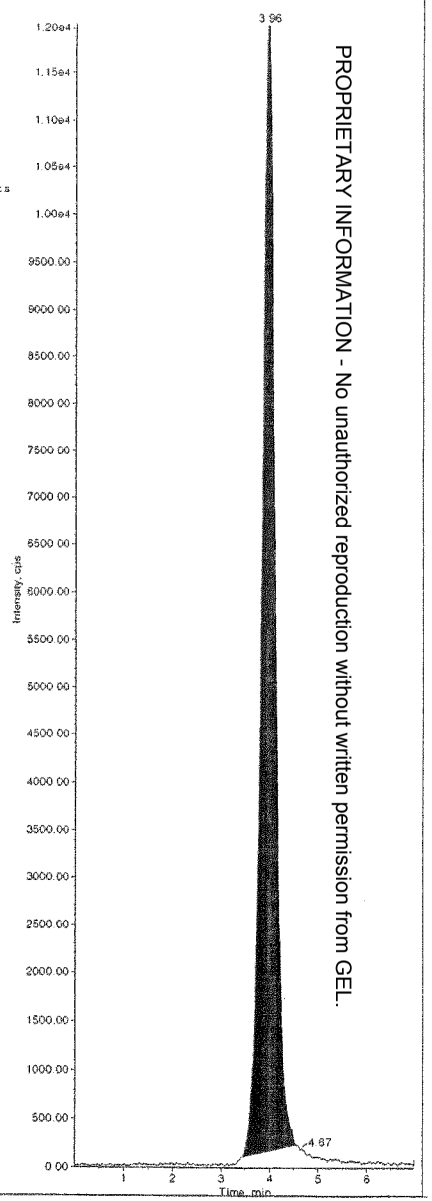
Sample Name: "WCL051004-03" Sample ID: "[1]MAP" File: "per1010005.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	0.250	ng/mL
Calculated Conc:	0.260	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:01:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	25	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.92	min
Area:	5.00e+004	counts
Height:	2.50e+003	cps
Start Time:	3.36	min
End Time:	4.36	min



Sample Name: "WCL051004-03" Sample ID: "[1]MAP" File: "per1010005.wiff"
Peak Name: "Perchlorate-Q(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	0.500	ng/mL
Calculated Conc:	0.509	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:01:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.96	min
Area:	2.31e+005	counts
Height:	1.19e+004	cps
Start Time:	3.45	min
End Time:	4.55	min



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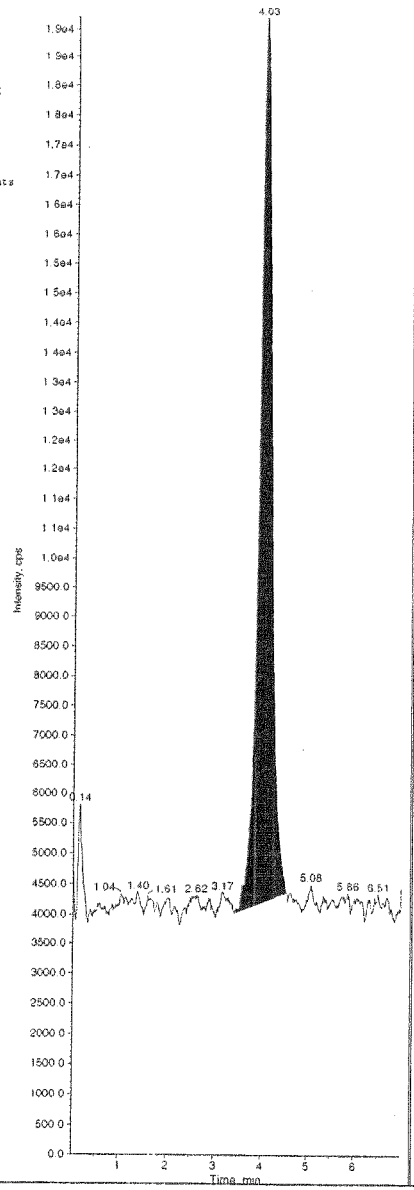
Sample Name: "WCL051004-04" Sample ID: "[1]MAP" File: "per1010005.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.504 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:11:09 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.03 min
Area: 2.98e+005 counts
Height: 1.50e+004 cps
Start Time: 3.49 min
End Time: 4.64 min

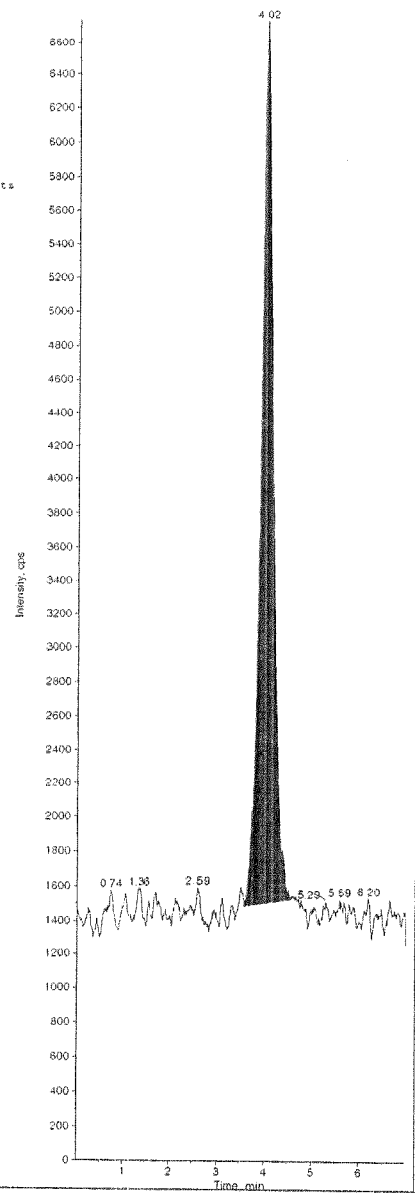


Sample Name: "WCL051004-04" Sample ID: "[1]MAP" File: "per1010006.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.501 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:11:09 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.02 min
Area: 9.89e+004 counts
Height: 5.25e+003 cps
Start Time: 3.57 min
End Time: 4.56 min

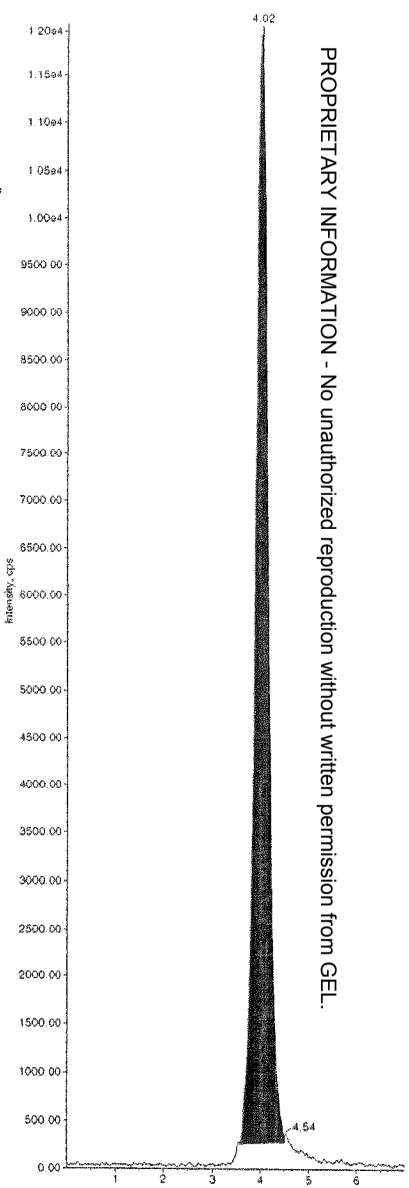


Sample Name: "WCL051004-04" Sample ID: "[1]MAP" File: "per1010008.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.504 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:11:09 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 4.02 min
Area: 2.29e+005 counts
Height: 1.18e+004 cps
Start Time: 3.58 min
End Time: 4.52 min



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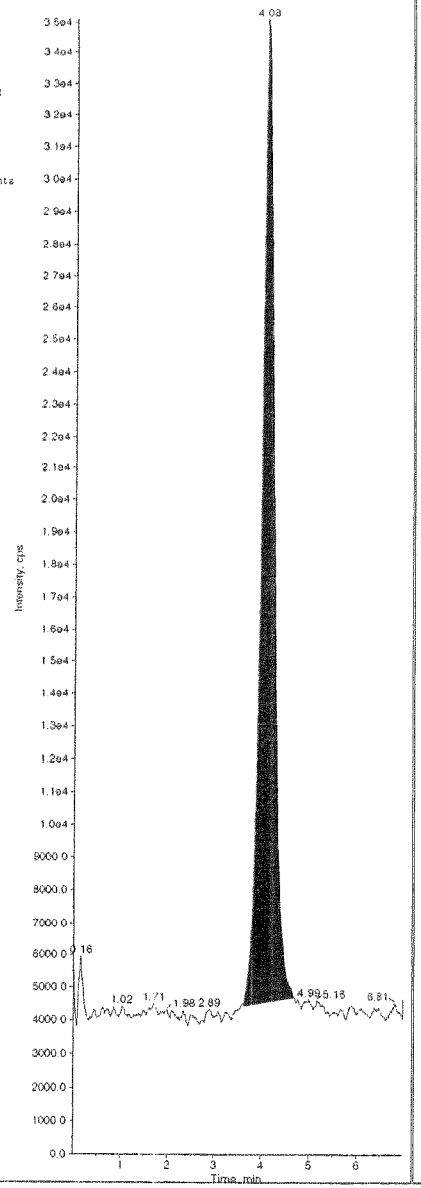
Sample Name "WCL051004-05" Sample ID "[1]MAP" File "per1010007.wiff"
Peak Name "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 1.00 ng/mL
Calculated Conc: 0.997 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:20:45 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.08 min
Area: 5.96e+005 counts
Height: 3.06e+004 cps
Start Time: 3.65 min
End Time: 4.68 min

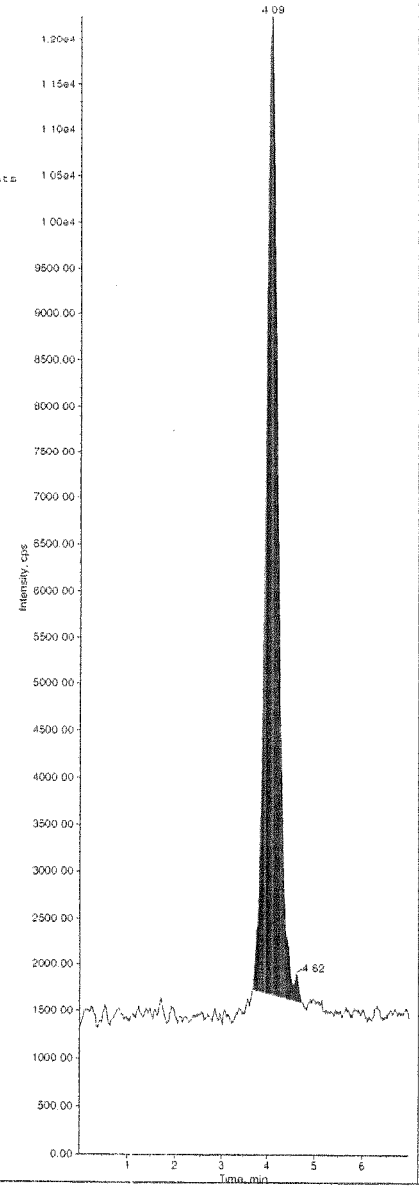


Sample Name "WCL051004-05" Sample ID "[1]MAP" File "per1010007.wiff"
Peak Name "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 1.00 ng/mL
Calculated Conc: 0.998 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:20:45 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 25 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.09 min
Area: 2.00e+006 counts
Height: 1.06e+004 cps
Start Time: 3.69 min
End Time: 4.74 min

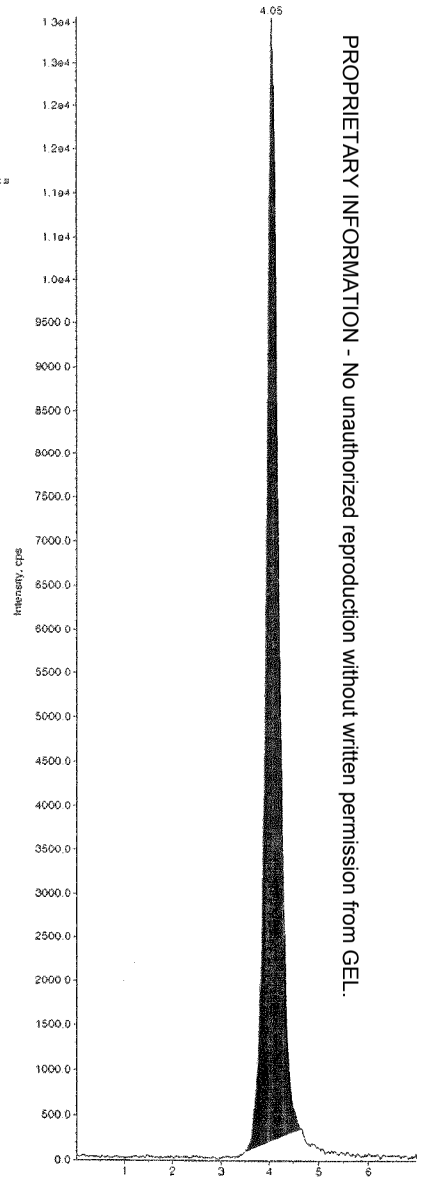


Sample Name "WCL051004-05" Sample ID "[1]MAP" File "per1010007.wiff"
Peak Name "Perchlorate-Q(18)" Mass(es): "107.0/89.0 amu"
Comment "LCMSPER_I" Annotation: ""

Sample Index: 1
Sample Type: Standard
Concentration: 0.500 ng/mL
Calculated Conc: 0.514 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 01:20:45 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 4.05 min
Area: 2.42e+005 counts
Height: 1.28e+004 cps
Start Time: 3.54 min
End Time: 4.64 min



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Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	104	09-OCT-05 12:35	per10090008.wiff
Perchlorate Isotope Ratio		2.99		09-OCT-05 12:35	per10090008.wiff
Perchlorate-101	.5	.52	104	09-OCT-05 12:35	per10090008.wiff
Perchlorate	.5	.51	101	10-OCT-05 13:30	per1010008.wiff
Perchlorate Isotope Ratio		2.95		10-OCT-05 13:30	per1010008.wiff
Perchlorate-101	.5	.51	102	10-OCT-05 13:30	per1010008.wiff

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MMT 10/10/05

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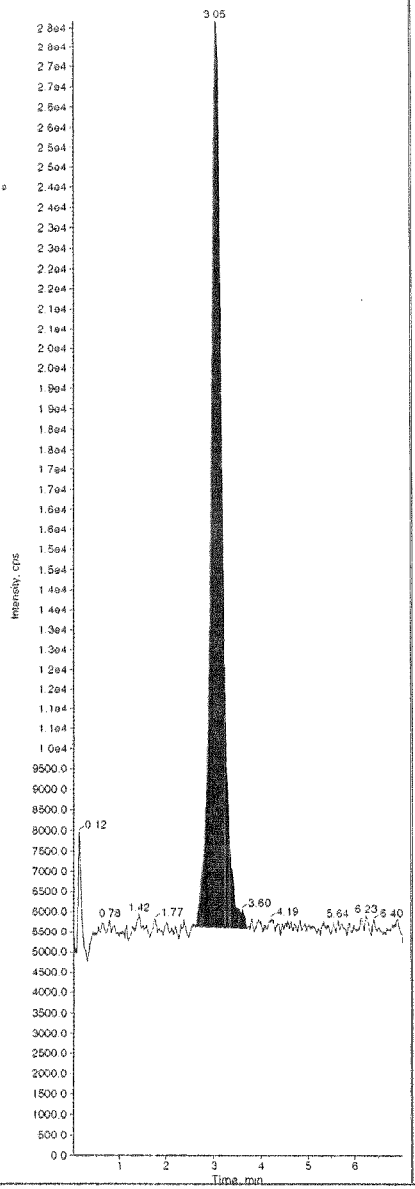
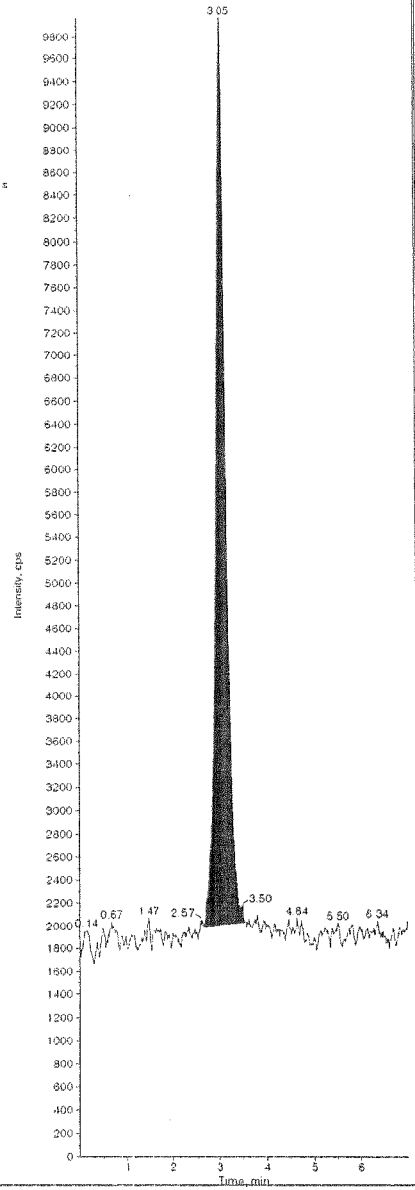
Sample Name: "WCL051004-06ICV" Sample ID: "[1]MAP" File: "por10090008.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.522	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	12:35:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	3.88	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.05	min
Area:	4.01e+005	counts
Height:	2.26e+004	cps
Start Time:	2.63	min
End Time:	3.71	min



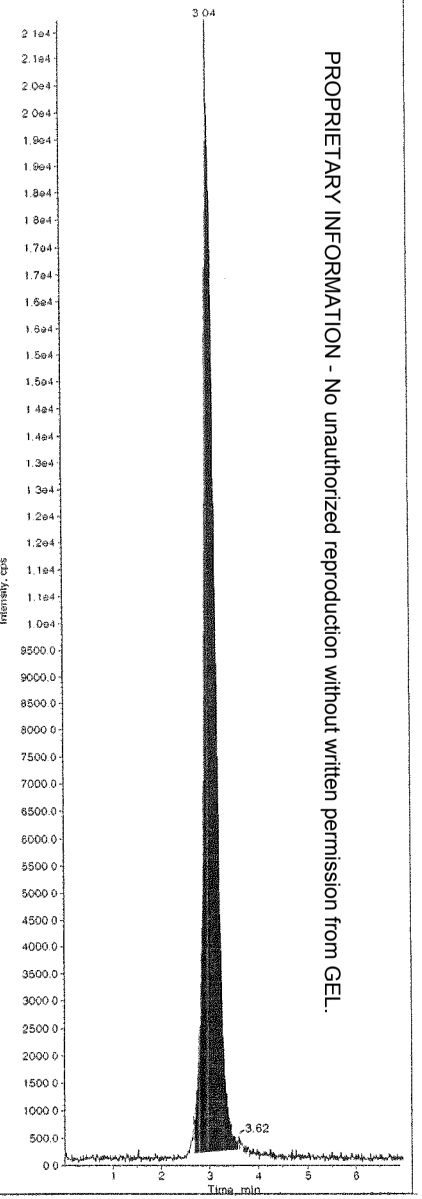
Sample Name: "WCL051004-06ICV" Sample ID: "[1]MAP" File: "por10090008.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.519	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	12:35:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	17	points
RT Window:	900.	sec
Expected RT:	3.88	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.05	min
Area:	1.54e+005	counts
Height:	7.96e+003	cps
Start Time:	2.63	min
End Time:	5.53	min



Sample Name: "WCL051004-06ICV" Sample ID: "[1]MAP" File: "por10090008.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.509	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	12:35:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	0	points
RT Window:	900.	sec
Expected RT:	3.87	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	3.04	min
Area:	3.27e+005	counts
Height:	2.10e+004	cps
Start Time:	2.68	min
End Time:	3.60	min



Hmm 10/11/05

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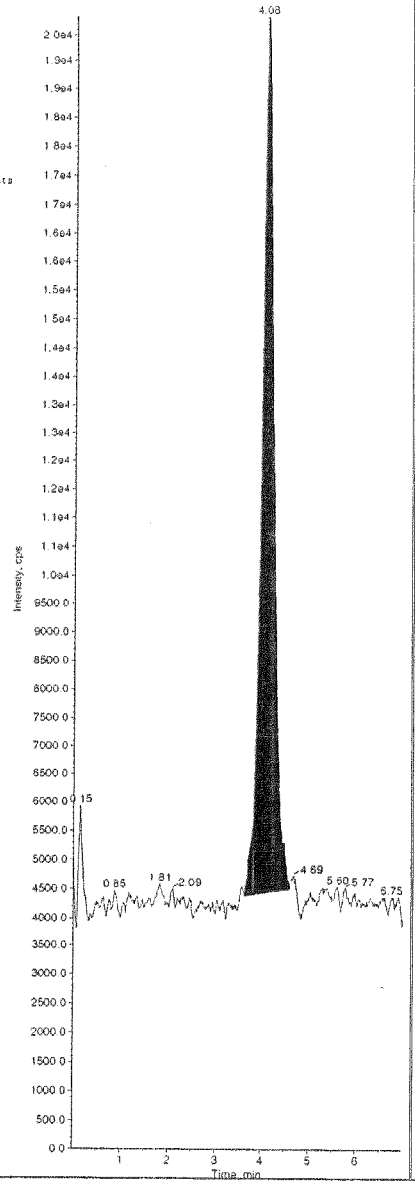
MMT 10/11/05

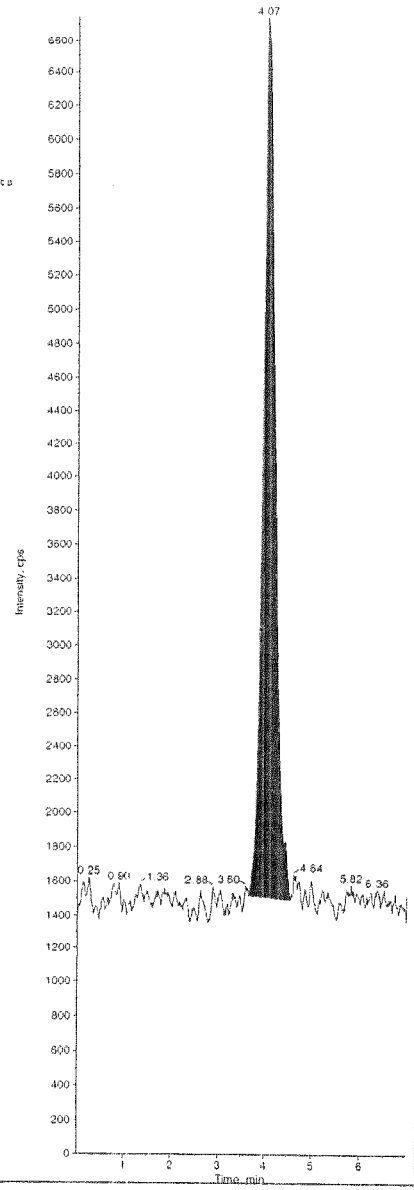
Sample Name: "WCL051004-06ICV" Sample ID: "[1]MAP" File: "per10100#8.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.505	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:10:17 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	21	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	4.08	min
Area:	2.98e+005	counts
Height:	1.84e+004	cps
Start Time:	3.62	min
End Time:	4.61	min



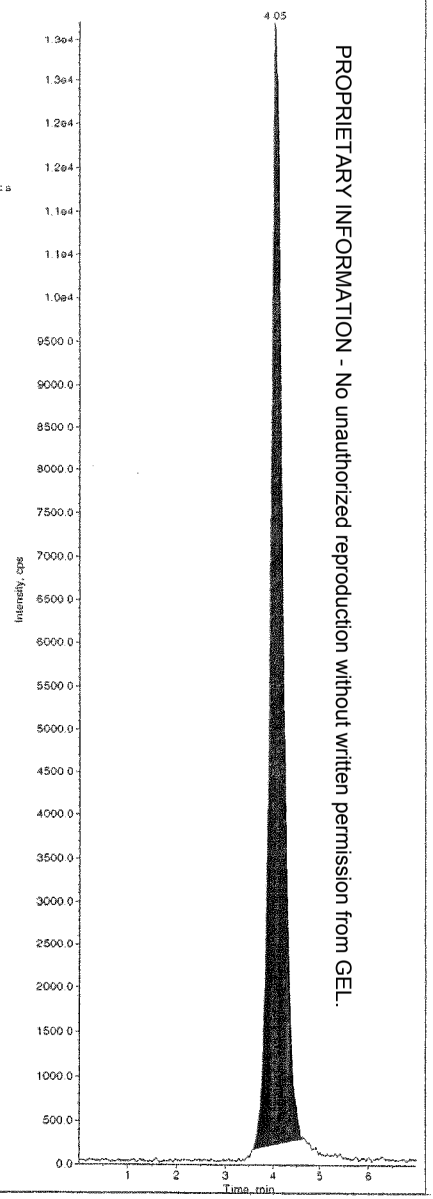
Sample Name: "WCL051004-06ICV" Sample ID: "[1]MAP" File: "per1010008.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.509	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:30:17 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	21	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	4.07	min
Area:	1.01e+005	counts
Height:	5.24e+003	cps
Start Time:	3.67	min
End Time:	4.57	min



Sample Name: "WCL051004-06ICV" Sample ID: "[1]MAP" File: "per1010008.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.548	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:30:17 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	4.05	min
Area:	2.49e+005	counts
Height:	1.30e+004	cps
Start Time:	3.58	min
End Time:	4.65	min



chlorine 10/11/05

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.52	104	09-OCT-05 14:41	per10090021.wiff
Perchlorate Isotope Ratio		2.95		09-OCT-05 14:41	per10090021.wiff
Perchlorate-101	.5	.53	106	09-OCT-05 14:41	per10090021.wiff
Perchlorate	.5	.49	97.8	10-OCT-05 15:42	per1010021.wiff
Perchlorate Isotope Ratio		2.89		10-OCT-05 15:42	per1010021.wiff
Perchlorate-101	.5	.51	101	10-OCT-05 15:42	per1010021.wiff
Perchlorate	.5	.54	108	10-OCT-05 17:46	per1010033.wiff
Perchlorate Isotope Ratio		3.03		10-OCT-05 17:46	per1010033.wiff
Perchlorate-101	.5	.53	106	10-OCT-05 17:46	per1010033.wiff

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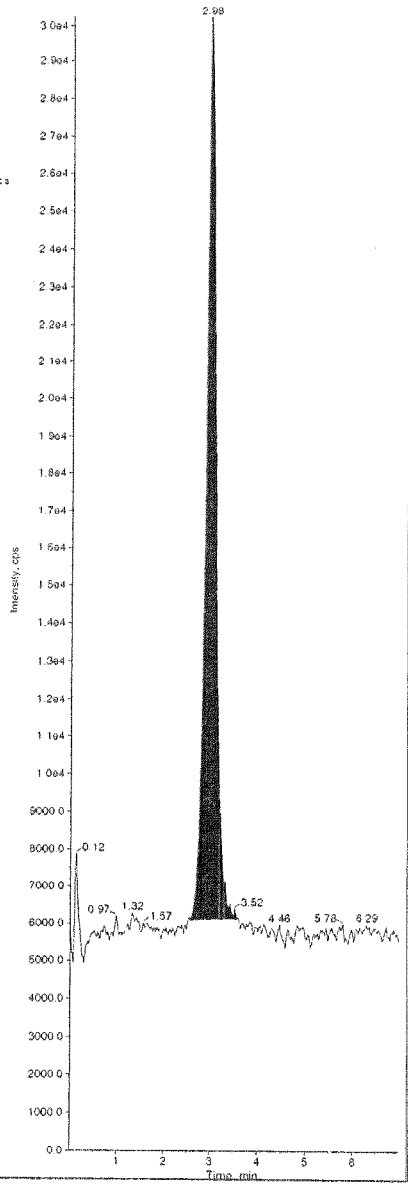
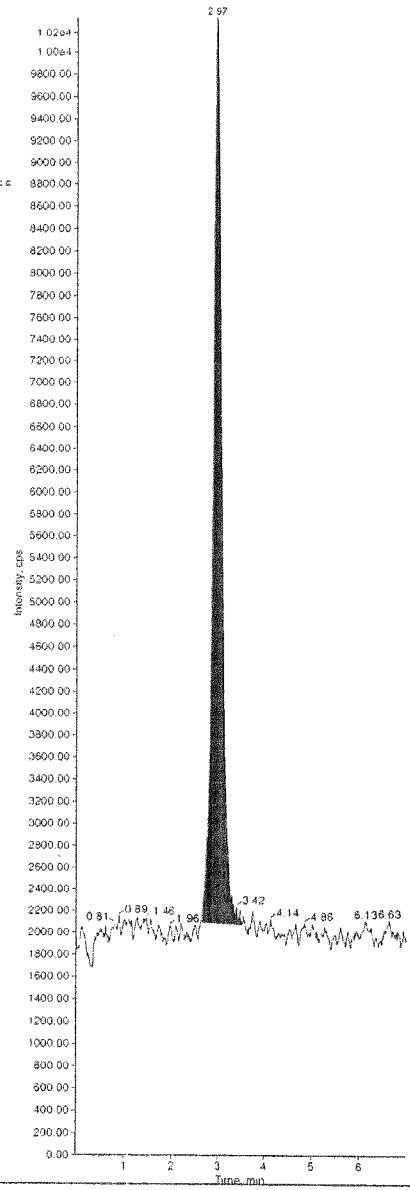
Sample Name: "WCL051004-06CCV" Sample ID: "|1|MAP" File: "per10090021.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.522	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	02:41:18 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	3.88	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	2.98	min
Area:	4.01e+005	counts
Height:	2.41e+004	cps
Start Time:	2.57	min
End Time:	3.57	min



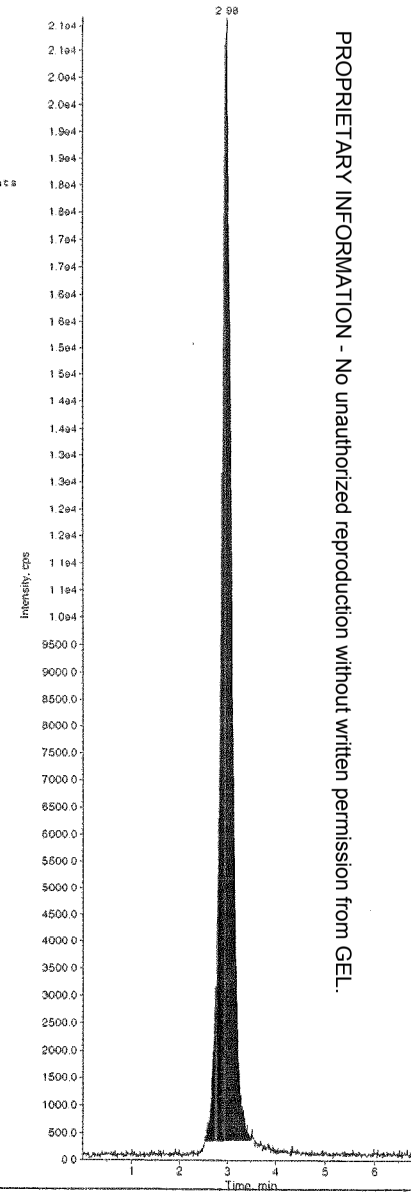
Sample Name: "WCL051004-06CCV" Sample ID: "|1|MAP" File: "per10090021.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.528	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	02:41:18 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	100.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	17	points
RT Window:	900.	sec
Expected RT:	3.88	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	2.97	min
Area:	1.36e+005	counts
Height:	8.25e+003	cps
Start Time:	2.60	min
End Time:	3.53	min



Sample Name: "WCL051004-06CCV" Sample ID: "|1|MAP" File: "per10090021.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.519	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	02:41:18 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	0	points
RT Window:	900.	sec
Expected RT:	3.87	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	2.98	min
Area:	3.33e+005	counts
Height:	2.08e+004	cps
Start Time:	2.55	min
End Time:	3.51	min



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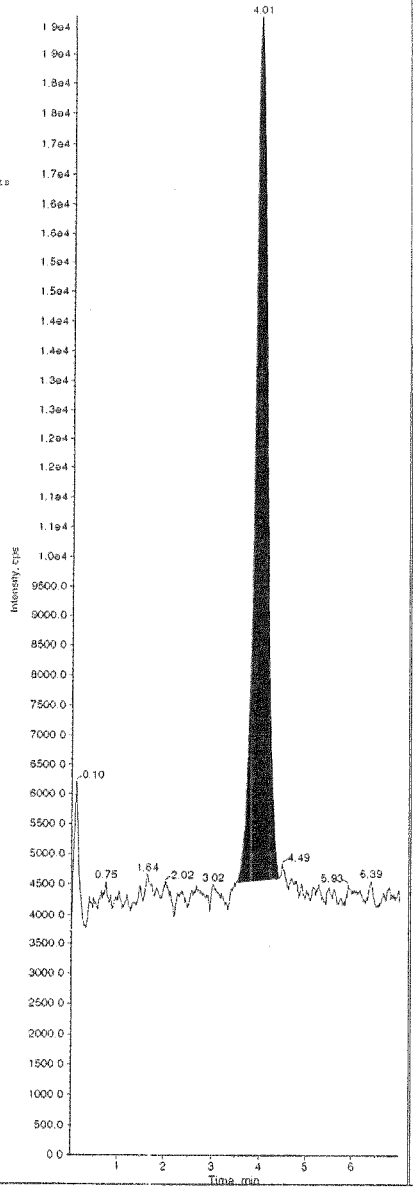
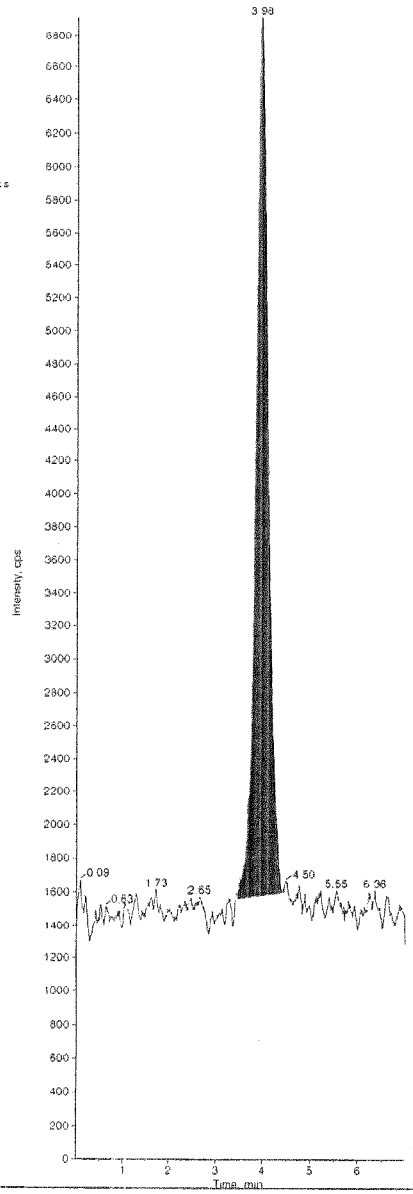
Sample Name: "WCL051004-06CCV" Sample ID: "[1]MAP" File: "per1010021.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.489	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	03:42:15 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	25	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	4.01	min
Area:	2.89e+005	counts
Height:	1.46e+004	cps
Start Time:	3.53	min
End Time:	4.42	min



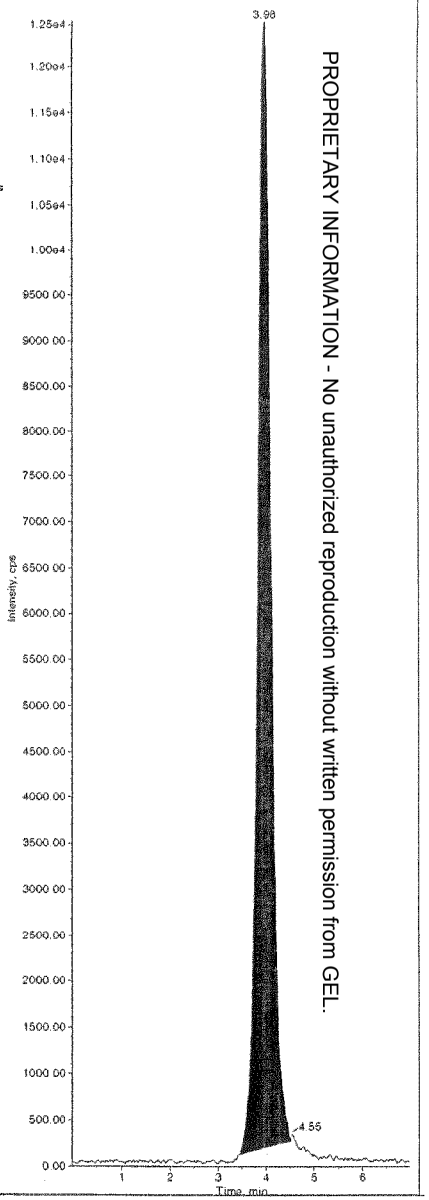
Sample Name: "WCL051004-06CCV" Sample ID: "[1]MAP" File: "per1010021.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.507	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	03:42:15 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	25	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.98	min
Area:	1.00e+005	counts
Height:	5.34e+003	cps
Start Time:	3.50	min
End Time:	4.42	min



Sample Name: "WCL051004-06CCV" Sample ID: "[1]MAP" File: "per1010021.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.546	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	03:42:15 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	3.98	min
Area:	2.48e+005	counts
Height:	1.23e+004	cps
Start Time:	3.45	min
End Time:	4.52	min



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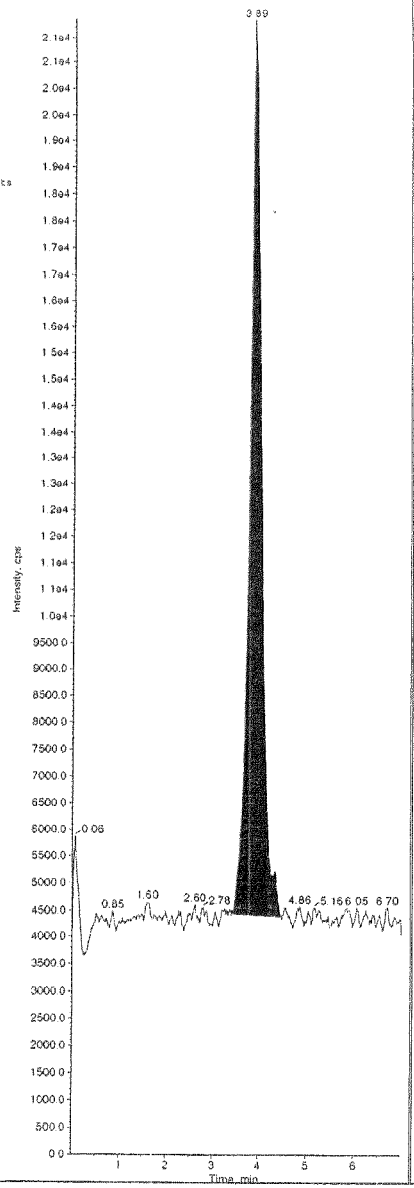
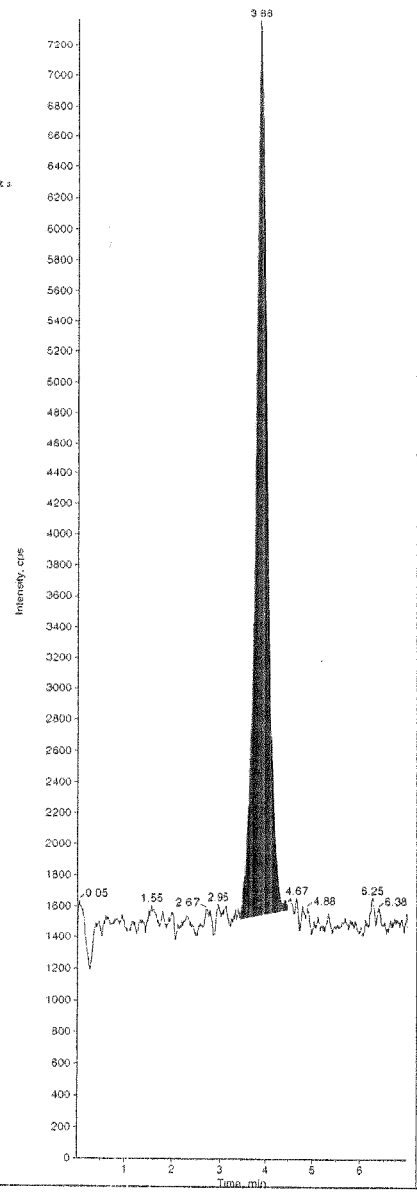
Sample Name: "WCL051004-06CCV" Sample ID: "|1|MAP" File: "per10100033.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	0.500 ng/mL
Calculated Conc:	0.538 ng/mL
Acq. Date:	10/10/2005
Acq. Time:	05:46:08 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base, Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	23 points
RT Window:	900. sec
Expected RT:	4.02 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	3.89 min
Area:	3.18e+005 counts
Height:	1.69e+004 cps
Start Time:	3.43 min
End Time:	4.47 min



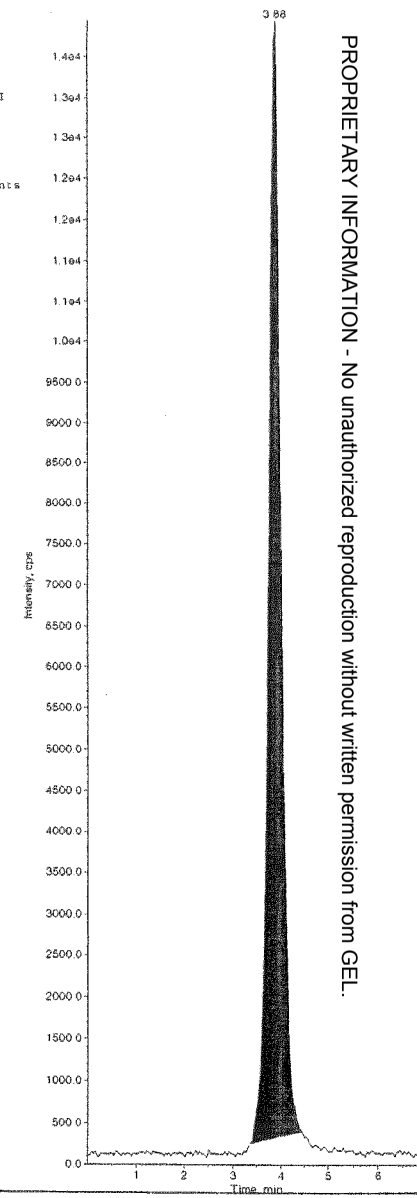
Sample Name: "WCL051004-06CCV" Sample ID: "|1|MAP" File: "per10100033.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	0.500 ng/mL
Calculated Conc:	0.510 ng/mL
Acq. Date:	10/10/2005
Acq. Time:	05:46:08 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base, Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	23 points
RT Window:	900. sec
Expected RT:	4.02 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	3.88 min
Area:	1.05e+005 counts
Height:	5.83e+003 cps
Start Time:	3.43 min
End Time:	4.46 min



Sample Name: "WCL051004-06CCV" Sample ID: "|1|MAP" File: "per10100033.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	0.500 ng/mL
Calculated Conc:	0.560 ng/mL
Acq. Date:	10/10/2005
Acq. Time:	05:46:08 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base, Sub. Window:	1.00 min
Peak-Split. Factor:	2
Report Largest Peak:	Yes
Min. Peak Height:	0.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	15 points
RT Window:	900. sec
Expected RT:	4.02 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	3.88 min
Area:	2.54e+005 counts
Height:	1.56e+004 cps
Start Time:	3.37 min
End Time:	4.44 min



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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	104	09-OCT-05 12:54	per10090010.wiff
Perchlorate Isotope Ratio		3.2		09-OCT-05 12:54	per10090010.wiff
Perchlorate-101	.05	.05	96.6	09-OCT-05 12:54	per10090010.wiff
Perchlorate	.05	.04	88.1	09-OCT-05 15:00	per10090023.wiff
Perchlorate Isotope Ratio		3.43		09-OCT-05 15:00	per10090023.wiff
Perchlorate-101	.05	.04	76.4	09-OCT-05 15:00	per10090023.wiff
Perchlorate	.05	.06	119	10-OCT-05 13:49	per1010010.wiff
Perchlorate Isotope Ratio		3.23		10-OCT-05 13:49	per1010010.wiff
Perchlorate-101	.05	.06	116	10-OCT-05 13:49	per1010010.wiff
Perchlorate	.05	.06	112	10-OCT-05 16:01	per1010023.wiff
Perchlorate Isotope Ratio		3.33		10-OCT-05 16:01	per1010023.wiff

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 145579

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.05	108	10-OCT-05 16:01	per1010023.wiff
Perchlorate	.05	.06	118	10-OCT-05 18:05	per1010035.wiff
Perchlorate Isotope Ratio		2.93		10-OCT-05 18:05	per1010035.wiff
Perchlorate-101	.05	.06	124	10-OCT-05 18:05	per1010035.wiff

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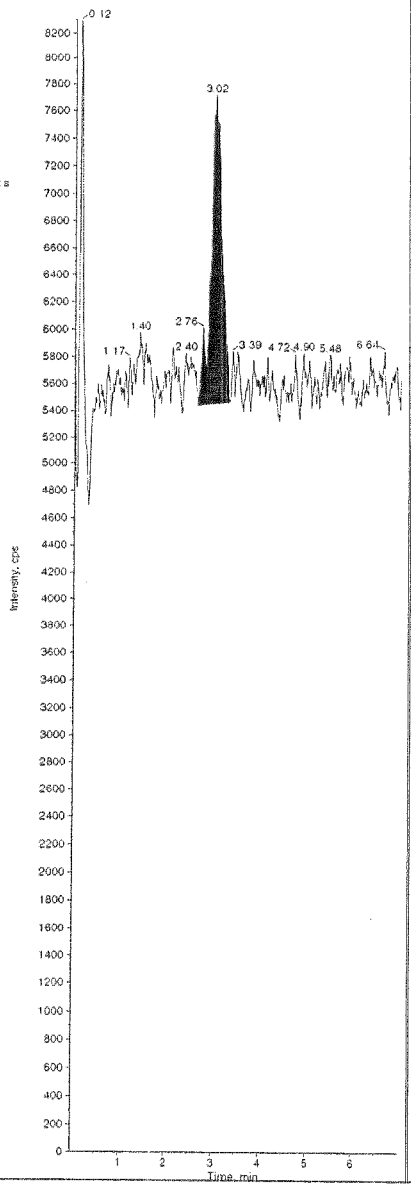
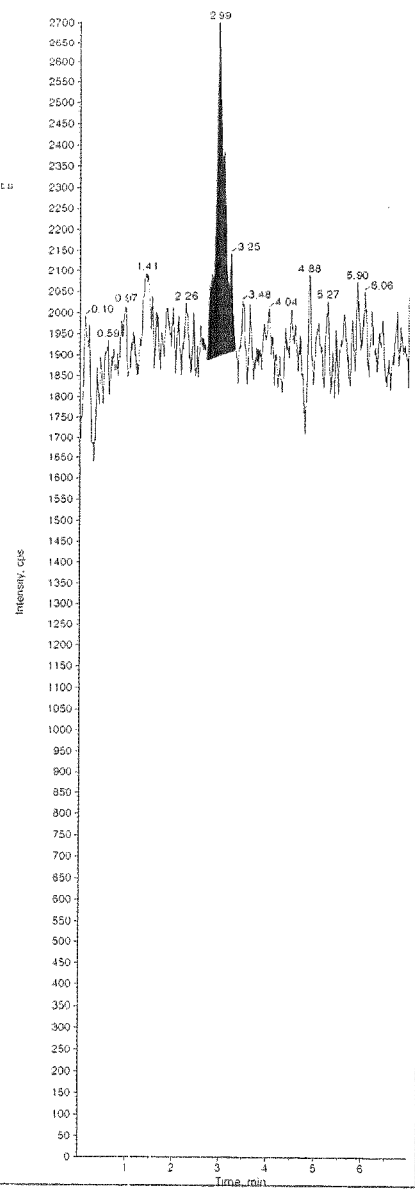
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per10090010.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.0800	ng/mL
Calculated Conc:	0.0520	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	12:54:42 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	3.88	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.02	min
Area:	4.00e+004	counts
Height:	2.27e+003	cps
Start Time:	2.65	min
End Time:	3.32	min



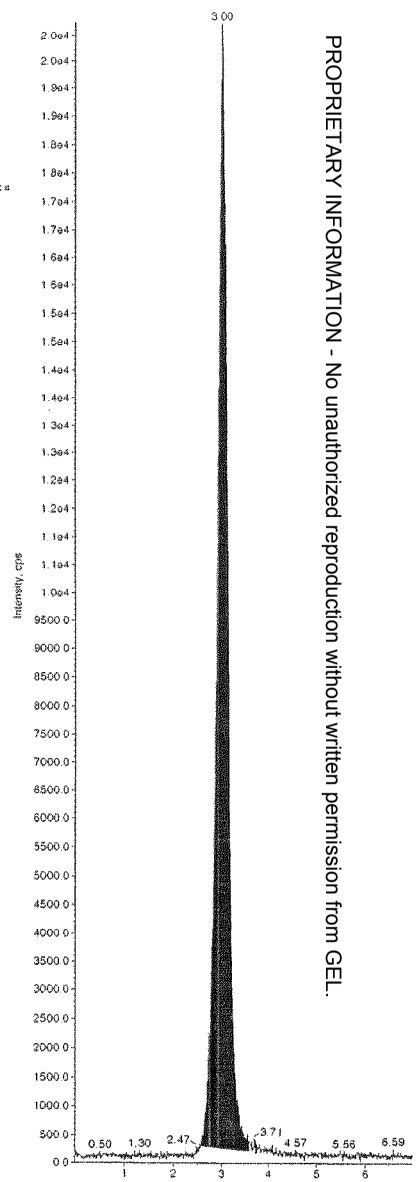
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per10090010.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.0500	ng/mL
Calculated Conc:	0.0483	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	12:54:42 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	17	points
RT Window:	900.	sec
Expected RT:	3.88	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	2.99	min
Area:	1.25e+004	counts
Height:	8.05e+002	cps
Start Time:	2.70	min
End Time:	3.13	min



Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per10090010.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.513	ng/mL
Acq. Date:	10/09/2005	
Acq. Time:	12:54:42 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	0	points
RT Window:	900.	sec
Expected RT:	3.87	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.00	min
Area:	3.50e+005	counts
Height:	2.00e+004	cps
Start Time:	2.58	min
End Time:	3.60	min



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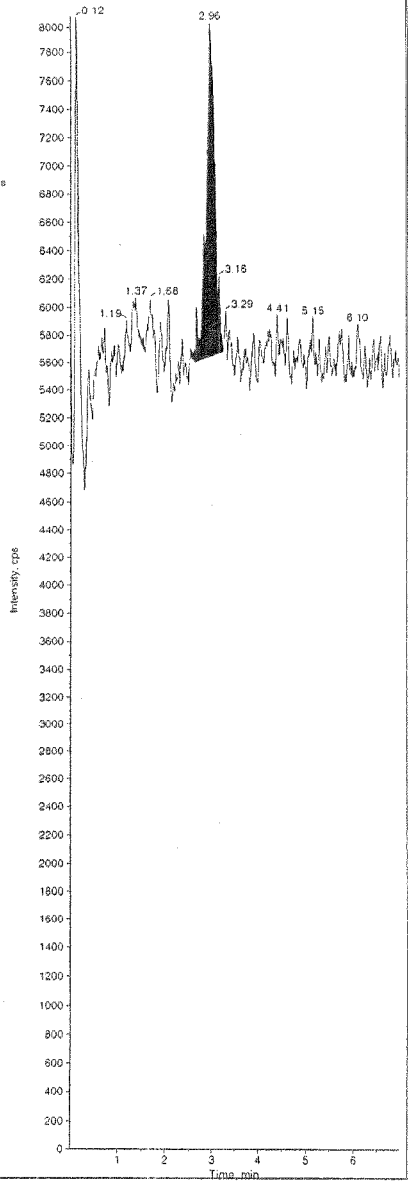
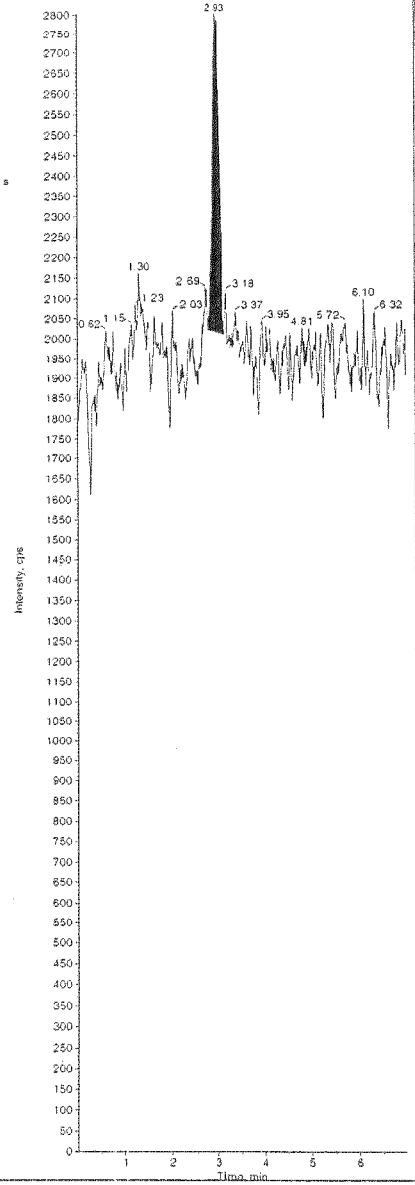
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per10090023.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	0.0500 ng/mL
Calculated Conc:	0.0441 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	05:00:20 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	15 points
RT Window:	900. sec
Expected RT:	5.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.96 min
Area:	3.39e+004 counts
Height:	2.39e+003 cps
Start Time:	2.61 min
End Time:	3.24 min



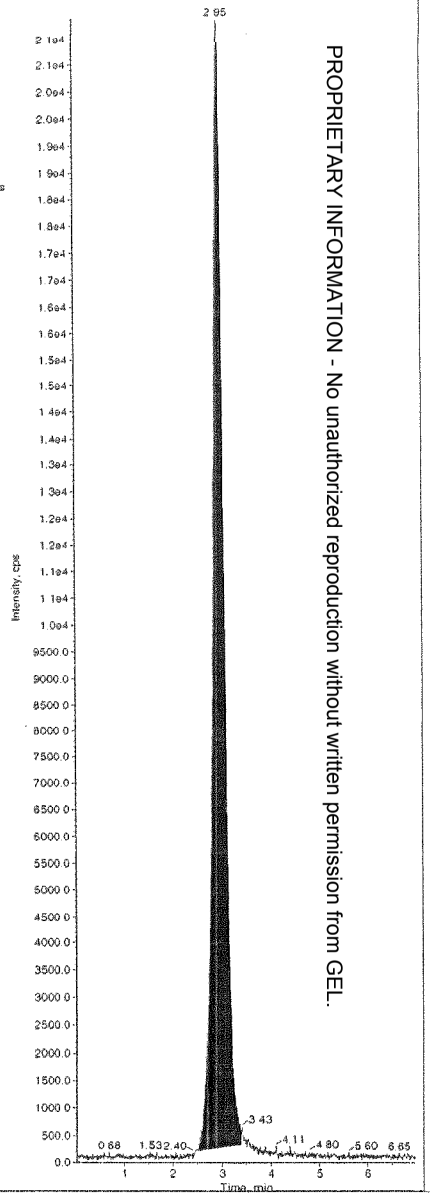
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per10090023.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	0.0500 ng/mL
Calculated Conc:	0.0382 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	05:00:20 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	17 points
RT Window:	900. sec
Expected RT:	5.89 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.93 min
Area:	9.87e+003 counts
Height:	7.85e+002 cps
Start Time:	2.75 min
End Time:	3.15 min



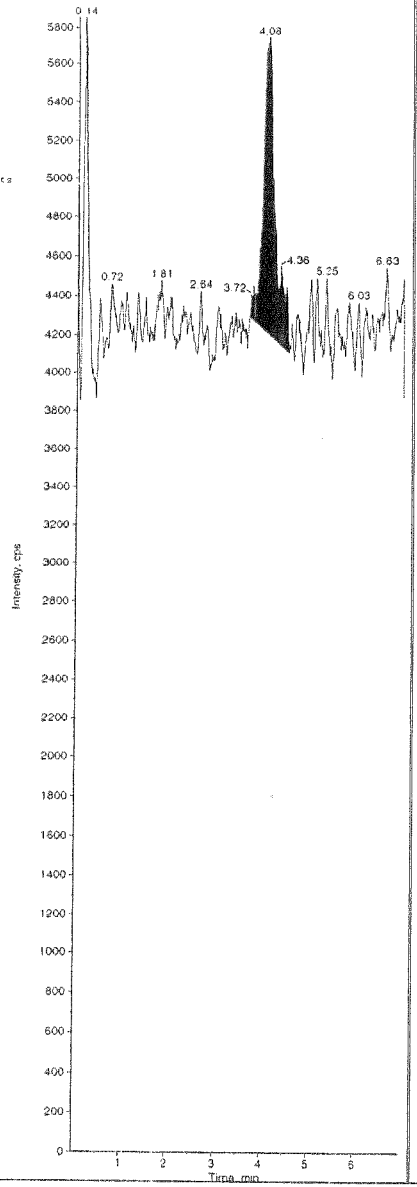
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per10090023.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1
Sample Type:	QC
Concentration:	0.500 ng/mL
Calculated Conc:	0.521 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	05:00:20 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	2
Report Largest Peak:	Yes
Min. Peak Height:	0.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	0 points
RT Window:	900. sec
Expected RT:	5.87 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	2.95 min
Area:	5.55e+005 counts
Height:	2.11e+004 cps
Start Time:	2.51 min
End Time:	3.40 min



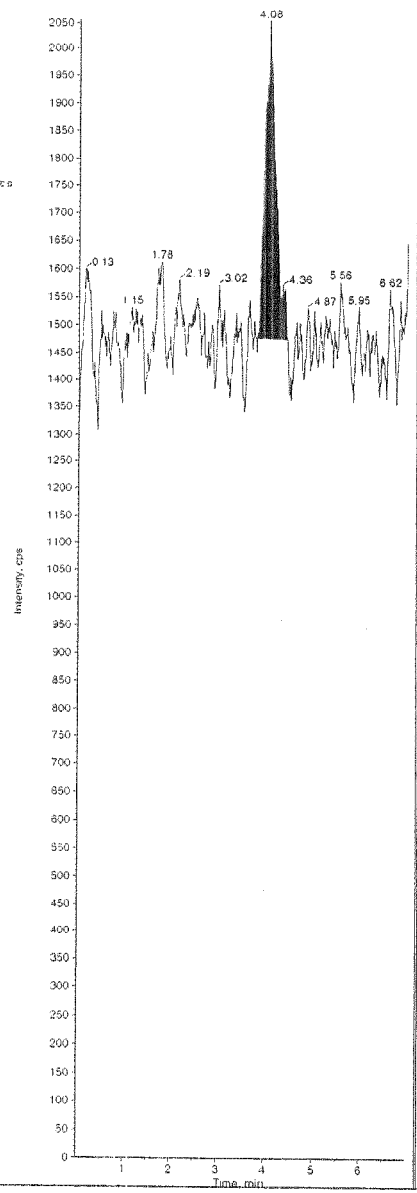
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per1010010.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.0500	ng/mL
Calculated Conc:	0.0597	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:49:30 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	23	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	4.08	min
Area:	2.90e+004	counts
Height:	1.54e+003	cps
Start Time:	3.69	min
End Time:	4.55	min



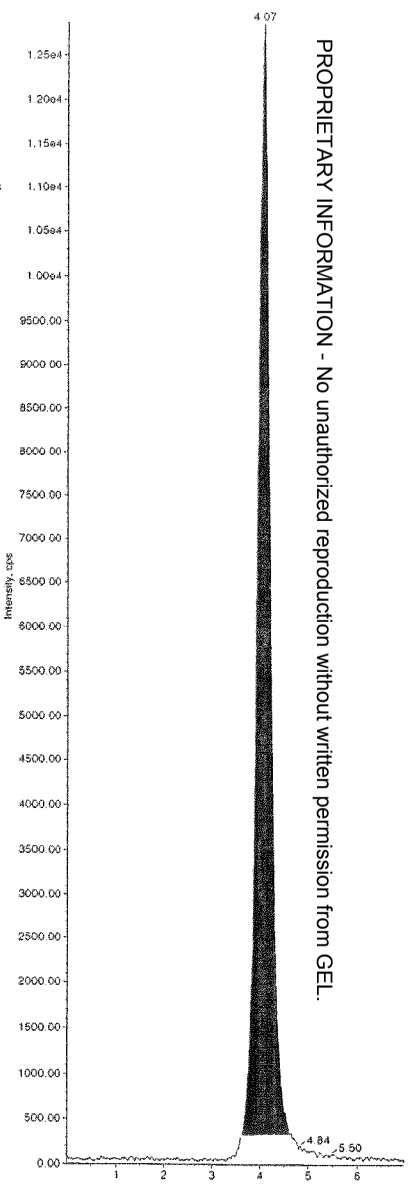
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per1010010.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.0500	ng/mL
Calculated Conc:	0.0582	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:49:30 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	23	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Area:	8.98e+003	counts
Height:	5.79e+002	cps
Start Time:	3.85	min
End Time:	4.45	min



Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per1010010.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.528	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	01:49:30 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	4.07	min
Area:	2.40e+005	counts
Height:	1.26e+004	cps
Start Time:	3.64	min
End Time:	4.63	min



633

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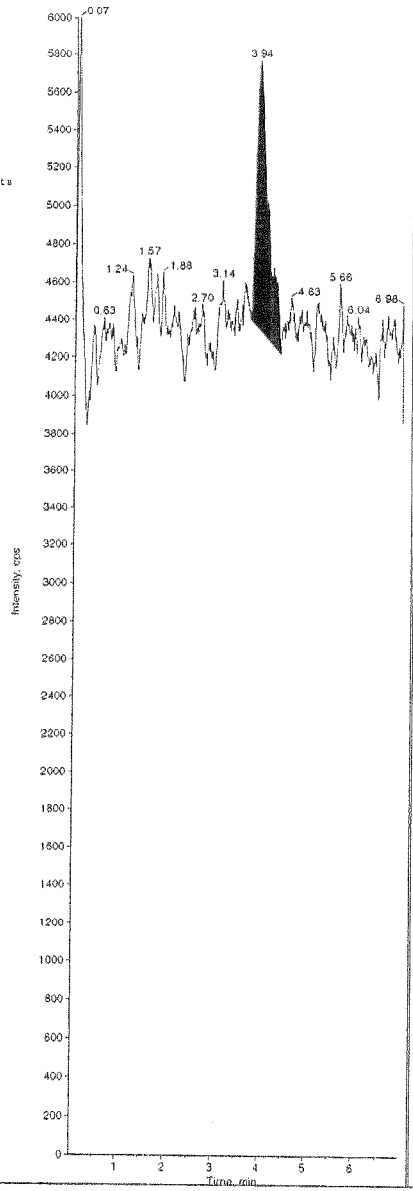
Sample Name "WCL051004-07CRI" Sample ID "[1]MAP" File "per1010023.wiff"
Peak Name "Perchlorate" Mass(es) "99.0/83.0 amu"
Comment "LCMSPER_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 0.0500 ng/mL
Calculated Conc: 0.0562 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:01:34 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.94 min
Area: 2.69e+004 counts
Height: 1.45e+003 cps
Start Time: 3.74 min
End Time: 4.41 min

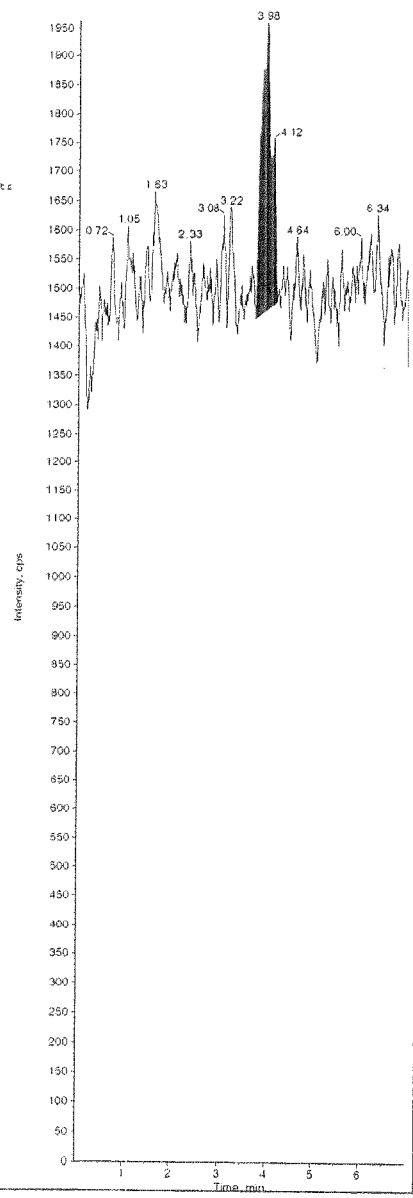


Sample Name "WCL051004-07CRI" Sample ID "[1]MAP" File "per1010023.wiff"
Peak Name "Perchlorate-101" Mass(es) "101.0/85.0 amu"
Comment "LCMSPER_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 0.0500 ng/mL
Calculated Conc: 0.0538 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:01:34 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 23 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.98 min
Area: 9.09e+003 counts
Height: 4.99e+002 cps
Start Time: 3.74 min
End Time: 4.20 min

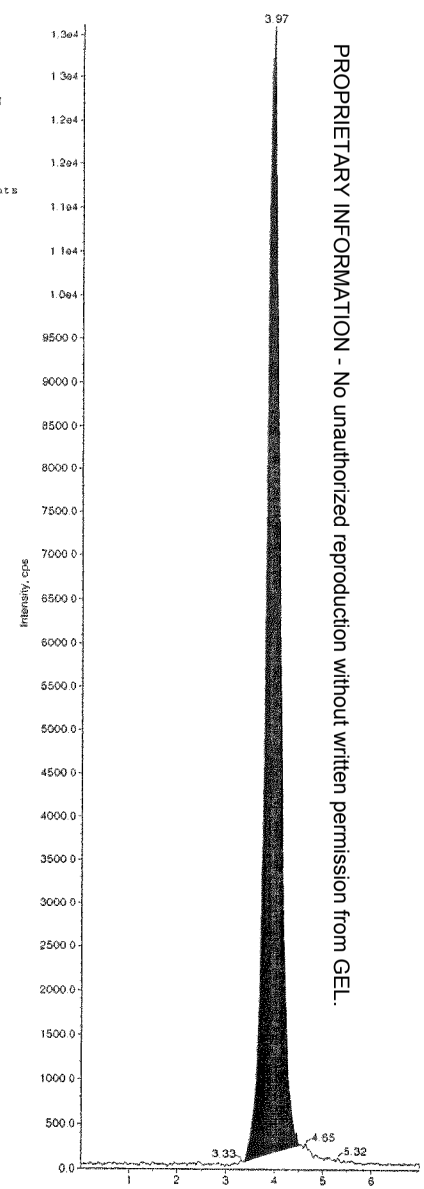


Sample Name "WCL051004-07CRI" Sample ID "[1]MAP" File "per1010023.wiff"
Peak Name "Perchlorate-O(18)" Mass(es) "107.0/89.0 amu"
Comment "LCMSPER_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 0.500 ng/mL
Calculated Conc: 0.554 ng/mL
Acq. Date: 10/10/2005
Acq. Time: 04:01:34 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 4.02 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 3.97 min
Area: 2.51e+005 counts
Height: 1.29e+004 cps
Start Time: 3.58 min
End Time: 4.52 min



634

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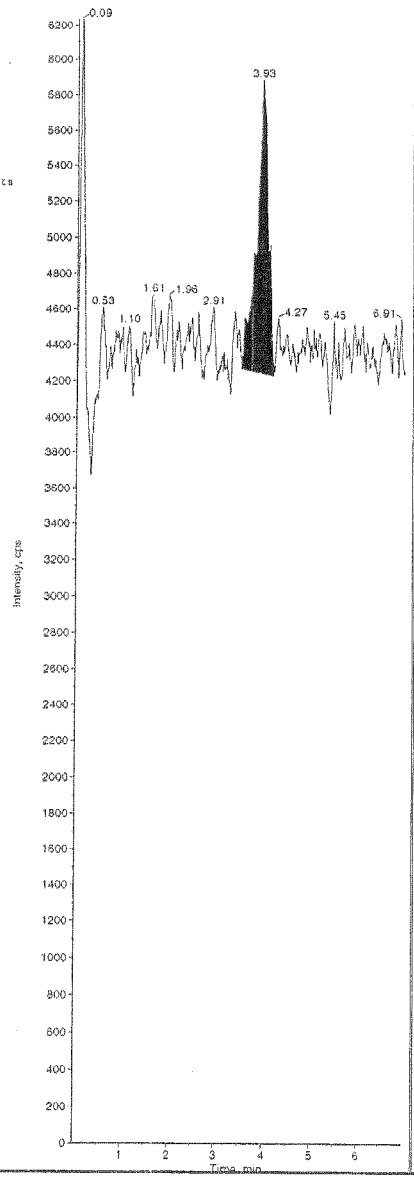
After MMP 10/11/05

635

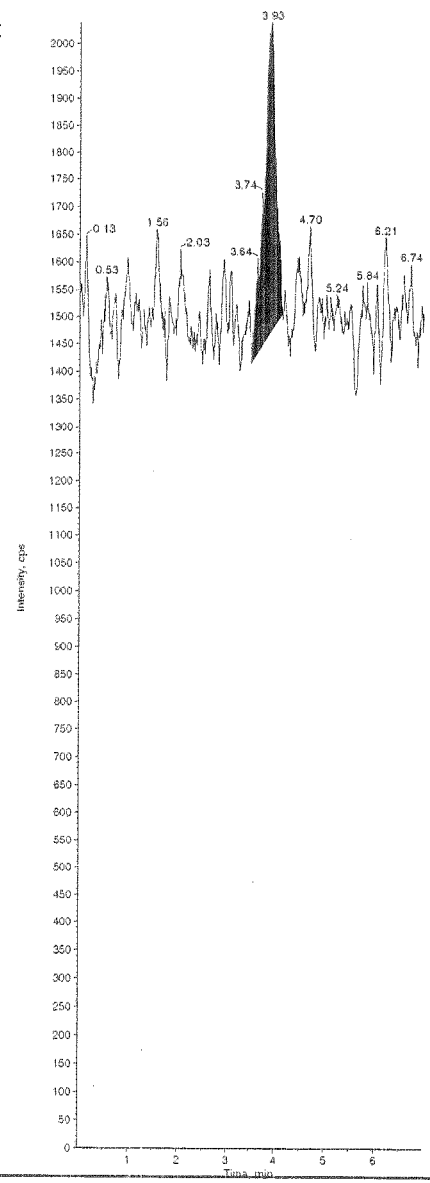
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per1010035.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.0500	ng/mL
Calculated Conc:	0.0591	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	06:05:28 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	5	
Report Largest Peak:	No	
Min. Peak Height:	200.00	cps
Min. Peak Width:	10.00	sec
Smoothing Width:	23	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.93	min
Area:	2.87e+004	counts
Height:	1.65e+003	cps
Start Time:	3.50	min
End Time:	4.18	min



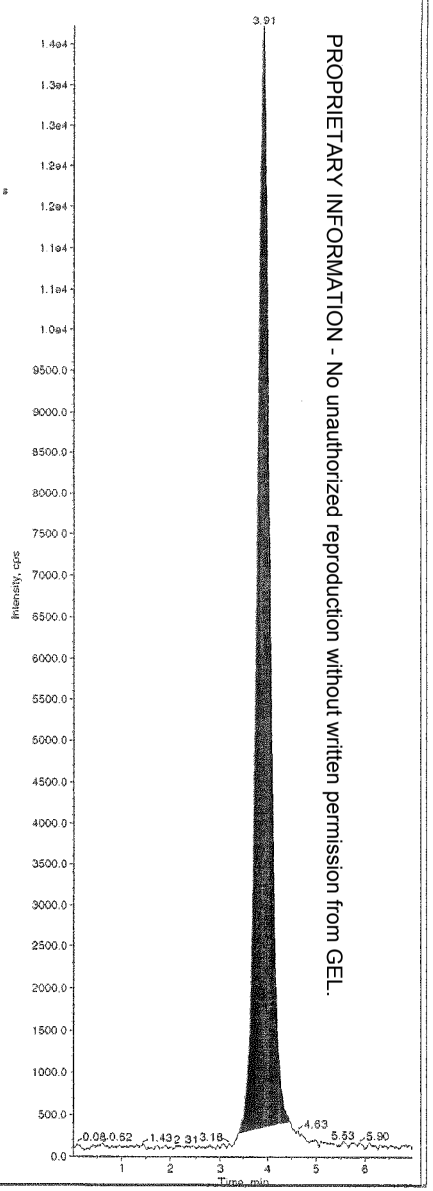
Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per1010035.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.0500	ng/mL
Calculated Conc:	0.0522	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	06:05:28 PM	
Modified:	Yes	
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	3.93	min
Area:	9.80e+003	counts
Height:	5.71e+002	cps
Start Time:	2.53	min
End Time:	4.17	min



Sample Name: "WCL051004-07CRI" Sample ID: "[1]MAP" File: "per1010035.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCMSPER_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	0.500	ng/mL
Calculated Conc:	0.552	ng/mL
Acq. Date:	10/10/2005	
Acq. Time:	06:05:28 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - MQII	
Noise Percentage:	50	
Base. Sub. Window:	1.00	min
Peak-Split. Factor:	2	
Report Largest Peak:	Yes	
Min. Peak Height:	0.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	15	points
RT Window:	900.	sec
Expected RT:	4.02	min
Use Relative RT:	No	
Int. Type:	Base To Base	
Retention Time:	3.91	min
Area:	2.50e+005	counts
Height:	1.34e+004	cps
Start Time:	3.39	min
End Time:	4.45	min



Chromatogram

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QUALITY CONTROL DATA

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 08-OCT-05

GEL Job No (SDG): 145579

GEL Sample ID: 1200949278

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1.00	09-OCT-05 13:14	per10090012.wiff
	Perchlorate Isotope Ratio						1.00	09-OCT-05 13:14	per10090012.wiff
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1.00	09-OCT-05 13:14	per10090012.wiff
	Perchlorate-O(18)			0.518	ug/L		1.00	09-OCT-05 13:14	per10090012.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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MB

MMT 10/10/05

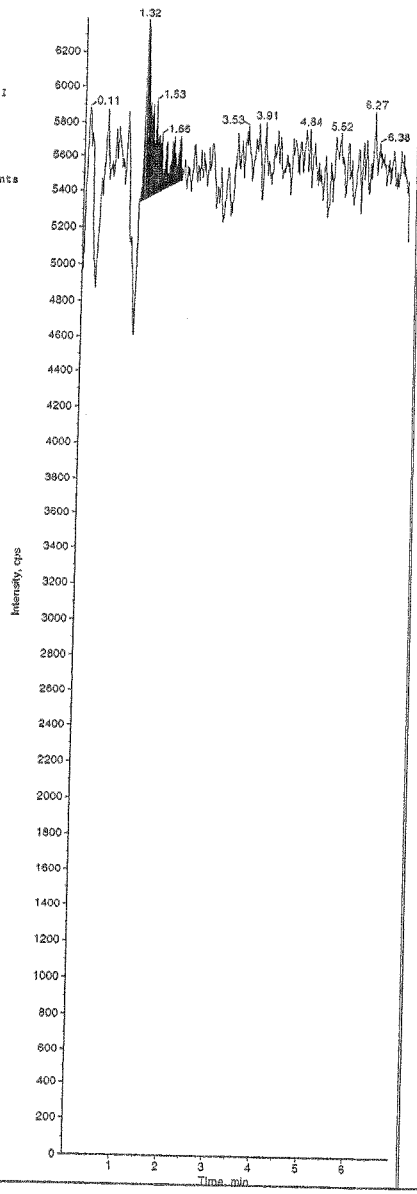
638

Sample Name: "1200949278" Sample ID: "468258[1]MAP" File: "per10090012.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0232 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 01:14:58 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 1.32 min
Area: 1.78e+004 counts
Height: 1.04e+003 cps
Start Time: 1.19 min
End Time: 2.12 min

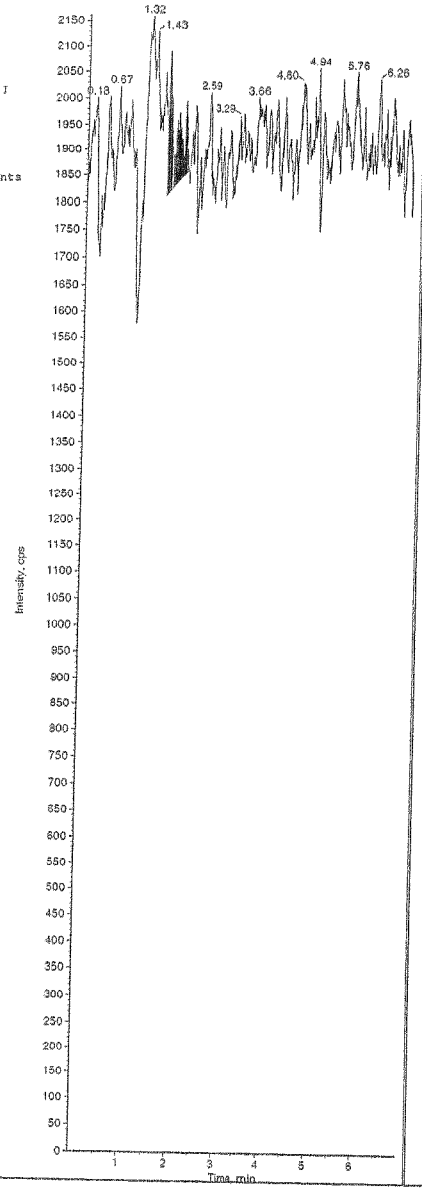


Sample Name: "1200949278" Sample ID: "468258[1]MAP" File: "per10090012.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.0122 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 01:14:58 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 1.71 min
Area: 3.15e+003 counts
Height: 2.73e+002 cps
Start Time: 1.67 min
End Time: 2.12 min

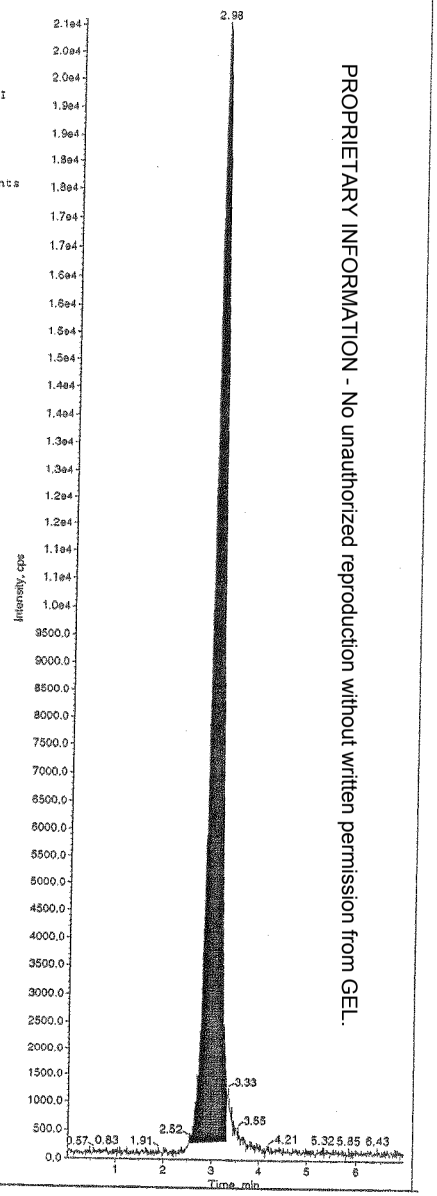


Sample Name: "1200949278" Sample ID: "468258[1]MAP" File: "per10090012.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.518 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 01:14:58 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 3.87 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 2.98 min
Area: 3.33e+005 counts
Height: 2.03e+004 cps
Start Time: 2.53 min
End Time: 3.51 min



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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 8321A

Matrix: GROUND WATER

Extraction Batch ID: 468257

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 08-OCT-05

GEL Job No (SDG): 145579

GEL Sample ID: 1200949279

Date Filtered: 08-OCT-05

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.211	ug/L		1.00	09-OCT-05 13:24	per10090013.wiff
	Perchlorate Isotope Ratio			2.92			1.00	09-OCT-05 13:24	per10090013.wiff
14797-73-0	Perchlorate-101	.05	.2	0.214	ug/L		1.00	09-OCT-05 13:24	per10090013.wiff
	Perchlorate-O(18)			0.519	ug/L		1.00	09-OCT-05 13:24	per10090013.wiff

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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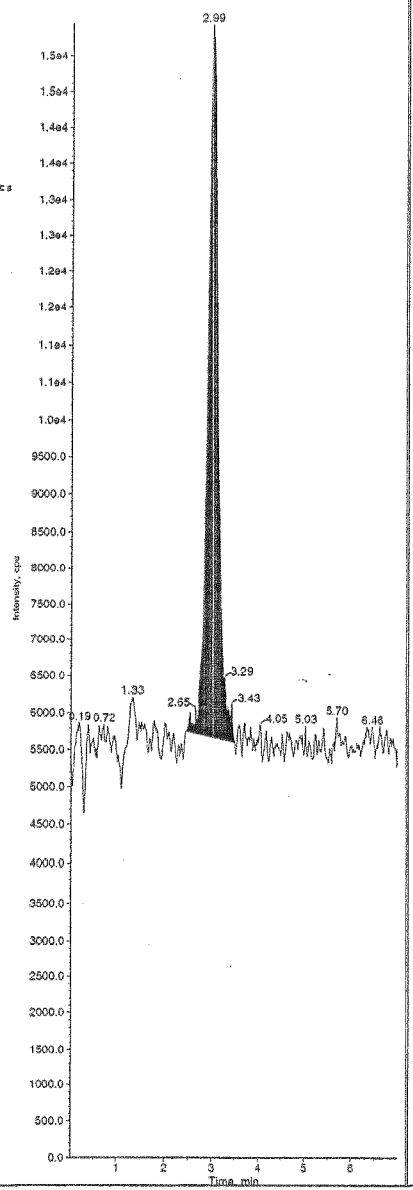
LC8

MAP 10/10/05

640

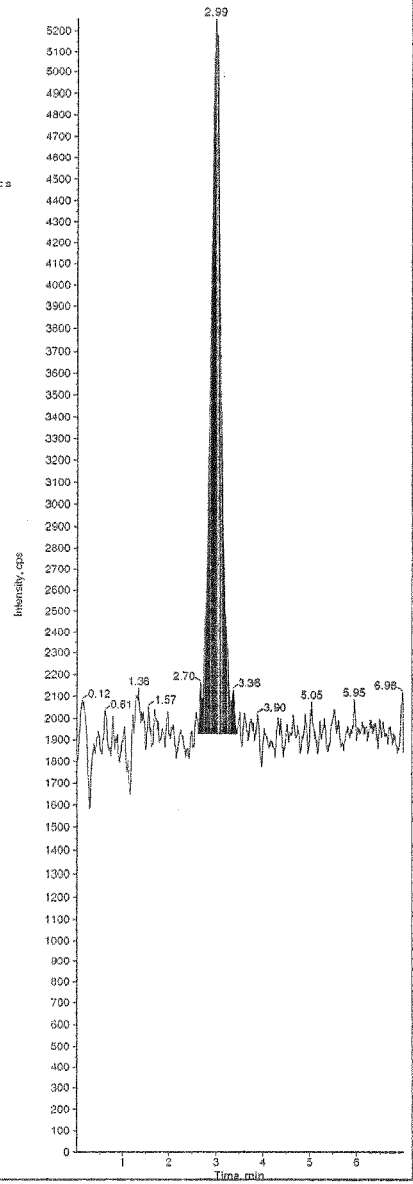
Sample Name: "1200949279" Sample ID: "468258|1|MAP" File: "per10090013.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.211 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:24:33 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	15 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.99 min
Area:	1.62e+005 counts
Height:	9.77e+003 cps
Start Time:	2.48 min
End Time:	3.49 min



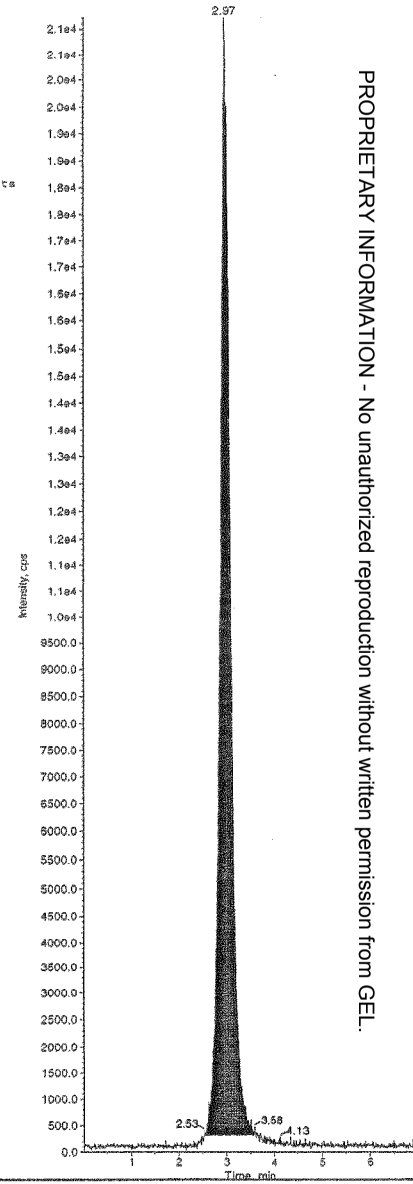
Sample Name: "1200949279" Sample ID: "468258|1|MAP" File: "per10090013.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.214 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:24:33 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	17 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.99 min
Area:	5.54e+004 counts
Height:	3.33e+003 cps
Start Time:	2.64 min
End Time:	3.44 min



Sample Name: "1200949279" Sample ID: "468258|1|MAP" File: "per10090013.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.519 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:24:33 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	2
Report Largest Peak:	Yes
Min. Peak Height:	0.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	0 points
RT Window:	900. sec
Expected RT:	3.87 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.97 min
Area:	3.33e+005 counts
Height:	2.09e+004 cps
Start Time:	2.56 min
End Time:	3.57 min



Anne 10/10/05

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MISCELLANEOUS DATA

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Isotope Ratio Criteria

Average Isotope Ratio
2.93

Standard Deviation
0.19

Sample Between the MDL and RDL (0.050-0.20ug/L)
Control Limits : 2.36-3.50

Sample Above the RDL (0.20ug/L)
Control Limits : 2.55-3.31

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Prep Logbook

Sample Preparation for Perchlorate Analysis using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry

Batch ID: 468257 Verified by: _____
Analyst: Clayton Moser
Method: SW846 8321A Modified

Lab SOP: GL-OA-E-057 REV# 1
Instrument: MicroMass Quatro Micro

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1200949278 MB	08-OCT-2005 08:44:02	10	10	1
1200949279 LCS	08-OCT-2005 08:44:02	10	10	1
145457001	08-OCT-2005 08:44:02	10	10	1
1200949280 MS (145457001)	08-OCT-2005 08:44:02	10	10	1
1200949281 MSD (145457001)	08-OCT-2005 08:44:02	10	10	1
145457002	08-OCT-2005 08:44:02	10	10	1
145457009	08-OCT-2005 08:44:02	10	10	1
145457010	08-OCT-2005 08:44:02	10	10	1
145457012	08-OCT-2005 08:44:02	10	10	1
145579001	08-OCT-2005 08:44:02	10	10	1
145579002	08-OCT-2005 08:44:02	10	10	1
145579003	08-OCT-2005 08:44:02	10	10	1
145579004	08-OCT-2005 08:44:02	10	10	1
145739001	08-OCT-2005 08:44:02	10	10	1
145739002	08-OCT-2005 08:44:02	10	10	1
145739003	08-OCT-2005 08:44:02	10	10	1
145782001	08-OCT-2005 08:44:02	10	10	1
145782002	08-OCT-2005 08:44:02	10	10	1
145892001	08-OCT-2005 08:44:02	10	10	1
145892002	08-OCT-2005 08:44:02	10	10	1
146057001	08-OCT-2005 08:44:02	10	10	1
146057002	08-OCT-2005 08:44:02	10	10	1
146057003	08-OCT-2005 08:44:02	10	10	1
146057004	08-OCT-2005 08:44:02	10	10	1
1200949282 ICS	08-OCT-2005 08:44:02	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1200949282	10 ug/L CCV Second Source	UCL050827-01	.2	mL	
LCS	1200949279	10 ug/L CCV Second Source	UCL050827-01	.2	mL	
MS	1200949280	10 ug/L CCV Second Source	UCL050827-01	.2	mL	
MSD	1200949281	10 ug/L CCV Second Source	UCL050827-01	.2	mL	
RGNT	All	500 ppm carbonate, bicarbonate, chloride, sulfate	323542	10	mL	
RGNT	All	O2SI HPLC Grade Water	346104	10	mL	

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#3

Date: 10/09/05
Extr. Injection Volume: 50uL
Sequence Number: per100905
Initial Calibration Date: 100905

Method: 8321A-Modified
Int. Std.: UCL050705-01
Mobile Phase Lot#: 346104, 347815
Standard-Samp Reagent Lot#: 346104

Reviewed BY: [signature]
Date: 10/11/05
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID: WCL051004-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
per10090001.wiff	IPB001	MAP	10/9/2005 11:28			1		USE	B
per10090002.wiff	IPB001	MAP	10/9/2005 11:37			1		USE	B
per10090003.wiff	WCLICAL-01	MAP	10/9/2005 11:47			1		USE	I
per10090004.wiff	WCLICAL-02	MAP	10/9/2005 11:57			1		USE	I
per10090005.wiff	WCLICAL-03	MAP	10/9/2005 12:06			1		USE	I
per10090006.wiff	WCLICAL-04	MAP	10/9/2005 12:16			1		USE	I
per10090007.wiff	WCLICAL-05	MAP	10/9/2005 12:25			1		USE	I
per10090008.wiff	WCLICV	MAP	10/9/2005 12:35			1		USE	C
per10090009.wiff	IPB002	MAP	10/9/2005 12:45			1		USE	B
per10090010.wiff	WCLCRI	MAP	10/9/2005 12:54			1		USE	C
per10090011.wiff	1200949282	MAP	10/9/2005 13:05	468258	Various	1	ESHL	USE	S
per10090012.wiff	1200949278	MAP	10/9/2005 13:14	468258	Various	1	ESHL	USE	S
per10090013.wiff	1200949279	MAP	10/9/2005 13:24	468258	Various	1	ESHL	USE	S
per10090014.wiff	145457001	MAP	10/9/2005 13:34	468258	145457	1	ESHL	USE	S
per10090015.wiff	1200949280	MAP	10/9/2005 13:43	468258	145457	1	ESHL	USE	S
per10090016.wiff	1200949281	MAP	10/9/2005 13:53	468258	145457	1	ESHL	USE	S
per10090017.wiff	145457002	MAP	10/9/2005 14:02	468258	145457	1	ESHL	USE	S
per10090018.wiff	145457009	MAP	10/9/2005 14:12	468258	145457	1	ESHL	USE	S
per10090019.wiff	145457010	MAP	10/9/2005 14:22	468258	145457	1	ESHL	USE	S
per10090020.wiff	145457012	MAP	10/9/2005 14:31	468258	145457	1	ESHL	USE	S
per10090021.wiff	WCLCCV	MAP	10/9/2005 14:41			1		USE	C
per10090022.wiff	IPB003	MAP	10/9/2005 14:50			1		USE	B
per10090023.wiff	WCLCRI	MAP	10/9/2005 15:00			1		USE	C
per10090024.wiff	145579001	MAP	10/9/2005 15:09	468258	145579	1	ESHL	DUSE	S
per10090025.wiff	145579002	MAP	10/9/2005 15:19	468258	145579	1	ESHL	DUSE	S
per10090026.wiff	145579003	MAP	10/9/2005 15:28	468258	145579	1	ESHL	DUSE	S
per10090027.wiff	145579004	MAP	10/9/2005 15:38	468258	145579	1	ESHL	DUSE	S
per10090028.wiff	145739001	MAP	10/9/2005 15:47	468258	145739	1	ESHL	DUSE	S
per10090029.wiff	145739002	MAP	10/9/2005 15:57	468258	145739	1	ESHL	DUSE	S

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per10090030.wiff	145739003	MAP	10/9/2005 16:07	468258	145739	1	ESHL	DUSE	S
per10090031.wiff	145782001	MAP	10/9/2005 16:16	468258	145782	1	ESHL	DUSE	S
per10090032.wiff	145782002	MAP	10/9/2005 16:26	468258	145782	1	ESHL	DUSE	S
per10090033.wiff	145892001	MAP	10/9/2005 16:36	468258	145892	1	ESHL	DUSE	S
per10090034.wiff	WCLCCV	MAP	10/9/2005 16:45			1		USE	C
per10090035.wiff	IPB004	MAP	10/9/2005 16:55			1		USE	B
per10090036.wiff	WCLCRI	MAP	10/9/2005 17:04			1		USE	C
per10090037.wiff	145892002	MAP	10/9/2005 17:14	468258	145892	1	ESHL	DUSE	S
per10090038.wiff	146057001	MAP	10/9/2005 17:24	468258	146057	1	ESHL	DUSE	S
per10090039.wiff	146057002	MAP	10/9/2005 17:33	468258	146057	1	ESHL	USE	S
per10090040.wiff	146057003	MAP	10/9/2005 17:43	468258	146057	1	ESHL	DUSE	S
per10090041.wiff	146057004	MAP	10/9/2005 17:52	468258	146057	1	ESHL	DUSE	S
per10090042.wiff	1200947390	MAP	10/9/2005 18:02	467444	3874S	1	LANL	USE	S
per10090043.wiff	1200949278	MAP	10/9/2005 18:12	467444	3874S	1	LANL	USE	S
per10090044.wiff	1200949279	MAP	10/9/2005 18:21	467444	3874S	1	LANL	USE	S
per10090045.wiff	145188001	MAP	10/9/2005 18:31	467444	3874S	1	LANL	USE	S
per10090046.wiff	1200947392	MAP	10/9/2005 18:40	467444	3874S	1	LANL	USE	S
per10090047.wiff	WCLCCV	MAP	10/9/2005 18:50			1		USE	C
per10090048.wiff	IPB005	MAP	10/9/2005 19:00			1		USE	B
per10090049.wiff	WCLCRI	MAP	10/9/2005 19:10			1		USE	C
per10090050.wiff	1200947393	MAP	10/9/2005 19:19	467444	3874S	1	LANL	USE	S
per10090051.wiff	145188002	MAP	10/9/2005 19:29	467444	3874S	1	LANL	USE	S
per10090052.wiff	145188003	MAP	10/9/2005 19:38	467444	3874S	1	LANL	USE	S
per10090053.wiff	145188004	MAP	10/9/2005 19:48	467444	3874S	1	LANL	USE	S
per10090054.wiff	145188005	MAP	10/9/2005 19:58	467444	3874S	1	LANL	USE	S
per10090055.wiff	145188006	MAP	10/9/2005 20:07	467444	3874S	1	LANL	USE	S
per10090056.wiff	145188007	MAP	10/9/2005 20:17	467444	3874S	1	LANL	USE	S
per10090057.wiff	145188008	MAP	10/9/2005 20:27	467444	3874S	1	LANL	USE	S
per10090058.wiff	145188009	MAP	10/9/2005 20:36	467444	3874S	1	LANL	USE	S
per10090059.wiff	145188010	MAP	10/9/2005 20:46	467444	3874S	1	LANL	USE	S
per10090060.wiff	WCLCCV	MAP	10/9/2005 20:56			1		USE	C
per10090061.wiff	IPB006	MAP	10/9/2005 21:05			1		USE	B
per10090062.wiff	WCLCRI	MAP	10/9/2005 21:15			1		USE	C
per10090063.wiff	145188011	MAP	10/9/2005 21:25	467444	3874S	1	LANL	USE	S
per10090064.wiff	145188012	MAP	10/9/2005 21:34	467444	3874S	1	LANL	USE	S
per10090065.wiff	145188013	MAP	10/9/2005 21:44	467444	3874S	1	LANL	USE	S
per10090066.wiff	145188014	MAP	10/9/2005 21:53	467444	3874S	1	LANL	USE	S

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per10090067.wiff	145188015	MAP	10/9/2005 22:03	467444	3874S	1	LANL	USE	S	
per10090068.wiff	145188016	MAP	10/9/2005 22:13	467444	3874S	1	LANL	USE	S	
per10090069.wiff	145188017	MAP	10/9/2005 22:22	467444	3874S	1	LANL	USE	S	
per10090070.wiff	145188018	MAP	10/9/2005 22:32	467444	3874S	1	LANL	USE	S	
per10090071.wiff	145188019	MAP	10/9/2005 22:42	467444	3874S	1	LANL	USE	S	
per10090072.wiff	145188020	MAP	10/9/2005 22:51	467444	3874S	1	LANL	USE	S	
per10090073.wiff	WCLCCV	MAP	10/9/2005 23:01			1		USE	C	
per10090074.wiff	IPB007	MAP	10/9/2005 23:11			1		USE	B	
per10090075.wiff	WCLCRI	MAP	10/9/2005 23:20			1		USE	C	
per10090076.wiff	1200932990	MAP	10/9/2005 23:30	461529	Various	1	ESHL	USE	S	
per10090077.wiff	1200932986	MAP	10/9/2005 23:40	461529	Various	1	ESHL	USE	S	
per10090078.wiff	1200932987	MAP	10/9/2005 23:49	461529	Various	1	ESHL	USE	S	
per10090079.wiff	143804001	MAP	10/9/2005 23:59	461529	143804	1	ESHL	USE	S	
per10090080.wiff	1200932988	MAP	10/10/2005 0:08	461529	143804	1	ESHL	USE	S	
per10090081.wiff	1200932989	MAP	10/10/2005 0:18	461529	143804	1	ESHL	USE	S	
per10090082.wiff	144034001	MAP	10/10/2005 0:28	461529	144034	1	ESHL	USE	S	
per10090083.wiff	144067011	MAP	10/10/2005 0:38	461529	144067	1	ESHL	USE	S	
per10090084.wiff	144067012	MAP	10/10/2005 0:47	461529	144067	1	ESHL	USE	S	
per10090085.wiff	144067013	MAP	10/10/2005 0:57	461529	144067	1	ESHL	USE	S	
per10090086.wiff	WCLCCV	MAP	10/10/2005 1:07			1		USE	C	
per10090087.wiff	IPB008	MAP	10/10/2005 1:16			1		USE	B	
per10090088.wiff	WCLCRI	MAP	10/10/2005 1:26			1		USE	C	
per10090089.wiff	144084001	MAP	10/10/2005 1:35	461529	144084	1	ESHL	USE	S	
per10090090.wiff	144117007	MAP	10/10/2005 1:45	461529	144117	25	ESHL	USE	S	
per10090091.wiff	144117008	MAP	10/10/2005 1:54	461529	144117	1	ESHL	USE	S	
per10090092.wiff	144119001	MAP	10/10/2005 2:04	461529	144119	1	ESHL	USE	S	
per10090093.wiff	144119002	MAP	10/10/2005 2:14	461529	144119	1	ESHL	USE	S	
per10090094.wiff	144119003	MAP	10/10/2005 2:23	461529	144119	1	ESHL	USE	S	
per10090095.wiff	144189007	MAP	10/10/2005 2:33	461529	144189	1	ESHL	USE	S	
per10090096.wiff	144189008	MAP	10/10/2005 2:43	461529	144189	1	ESHL	USE	S	
per10090097.wiff	WCLCCV	MAP	10/10/2005 2:52			1		USE	C	
per10090098.wiff	IPB009	MAP	10/10/2005 3:02			1		USE	B	
per10090099.wiff	WCLCRI	MAP	10/10/2005 3:12			1		USE	C	
per10090100.wiff	144191005	MAP	10/10/2005 3:21	461529	144191	1	ESHL	USE	S	
per10090101.wiff	144191006	MAP	10/10/2005 3:31	461529	144191	1	ESHL	USE	S	
per10090102.wiff	144191007	MAP	10/10/2005 3:41	461529	144191	1	ESHL	USE	S	
per10090103.wiff	144191008	MAP	10/10/2005 3:50	461529	144191	1	ESHL	USE	S	

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per10090104.wiff	144344003	MAP	10/10/2005 4:00	461529	144344	1	ESHL	USE	S
per10090105.wiff	144344004	MAP	10/10/2005 4:10	461529	144344	1	ESHL	USE	S
per10090106.wiff	WCLCCV	MAP	10/10/2005 4:19			1		USE	C
per10090107.wiff	IPB010	MAP	10/10/2005 4:29			1		USE	B
per10090108.wiff	WCLCRI	MAP	10/10/2005 4:38			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#3

Date: 10/10/05
Extr. Injection Volume: 20uL
Sequence Number: per101005
Initial Calibration Date: 101005

Method: 8321A-Modified
Int. Std.: UCL050705-01
Mobile Phase Lot#: 346104, 347815
Standard-Samp Reagent Lot#: 346104

Reviewed BY: [signature]
Date: 10/11/05
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID: WCL051004-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
per1010001.wiff	IPB001	MAP	10/10/2005 12:23			1		USE	B
per1010002.wiff	IPB001	MAP	10/10/2005 12:32			1		USE	B
per1010003.wiff	WCLICAL-01	MAP	10/10/2005 12:42			1		USE	I
per1010004.wiff	WCLICAL-02	MAP	10/10/2005 12:51			1		USE	I
per1010005.wiff	WCLICAL-03	MAP	10/10/2005 13:01			1		USE	I
per1010006.wiff	WCLICAL-04	MAP	10/10/2005 13:11			1		USE	I
per1010007.wiff	WCLICAL-05	MAP	10/10/2005 13:20			1		USE	I
per1010008.wiff	WCLICV	MAP	10/10/2005 13:30			1		USE	C
per1010009.wiff	IPB002	MAP	10/10/2005 13:39			1		USE	B
per1010010.wiff	WCLCRI	MAP	10/10/2005 13:49			1		USE	C
per1010011.wiff	145579001	MAP	10/10/2005 14:06	468258	145579	250	ESHL	DUSE	S
per1010012.wiff	145579002	MAP	10/10/2005 14:15	468258	145579	1000	ESHL	DUSE	S
per1010013.wiff	145579003	MAP	10/10/2005 14:25	468258	145579	100	ESHL	USE	S
per1010014.wiff	145579004	MAP	10/10/2005 14:34	468258	145579	100	ESHL	USE	S
per1010015.wiff	145739001	MAP	10/10/2005 14:44	468258	145739	100	ESHL	USE	S
per1010016.wiff	145739002	MAP	10/10/2005 14:53	468258	145739	1	ESHL	USE	S
per1010017.wiff	145782001	MAP	10/10/2005 15:03	468258	145782	50	ESHL	USE	S
per1010018.wiff	145782002	MAP	10/10/2005 15:13	468258	145782	50	ESHL	USE	S
per1010019.wiff	145892001	MAP	10/10/2005 15:22	468258	145892	250	ESHL	DUSE	S
per1010020.wiff	145892002	MAP	10/10/2005 15:32	468258	145892	50	ESHL	USE	S
per1010021.wiff	WCLCCV	MAP	10/10/2005 15:42			1		USE	C
per1010022.wiff	IPB003	MAP	10/10/2005 15:51			1		USE	B
per1010023.wiff	WCLCRI	MAP	10/10/2005 16:01			1		USE	C
per1010024.wiff	146057001	MAP	10/10/2005 16:11	468258	146057	1	ESHL	USE	S
per1010025.wiff	146057003	MAP	10/10/2005 16:20	468258	146057	100	ESHL	USE	S
per1010026.wiff	146057004	MAP	10/10/2005 16:30	468258	146057	100	ESHL	USE	S
per1010027.wiff	145579001	MAP	10/10/2005 16:40	468258	145579	100	ESHL	USE	S
per1010028.wiff	145579002	MAP	10/10/2005 16:50	468258	145579	250	ESHL	USE	S
per1010029.wiff	145892001	MAP	10/10/2005 16:59	468258	145892	50	ESHL	DUSE	S

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per1010030.wiff	145892001	MAP	10/10/2005 17:13	468258	145892	100	ESHL	DUSE	S
per1010031.wiff	IPB004	MAP	10/10/2005 17:26			1		USE	B
per1010032.wiff	145892001	MAP	10/10/2005 17:36	468258	145892	100	ESHL	USE	S
per1010033.wiff	WCLCCV	MAP	10/10/2005 17:46			1		USE	C
per1010034.wiff	IPB005	MAP	10/10/2005 17:55			1		USE	B
per1010035.wiff	WCLCRI	MAP	10/10/2005 18:05			1		USE	C
per1010036.wiff	1200950033	MAP	10/10/2005 18:15	468606	3908S	1	LANL	DUSE	S
per1010037.wiff	1200950029	MAP	10/10/2005 18:24	468606	3908S	1	LANL	DUSE	S
per1010038.wiff	1200950030	MAP	10/10/2005 18:34	468606	3908S	1	LANL	USE	S
per1010039.wiff	145737001	MAP	10/10/2005 18:43	468606	3908S	1	LANL	USE	S
per1010040.wiff	1200950031	MAP	10/10/2005 18:53	468606	3908S	1	LANL	USE	S
per1010041.wiff	1200950032	MAP	10/10/2005 19:02	468606	3908S	1	LANL	USE	S
per1010042.wiff	145737002	MAP	10/10/2005 19:12	468606	3908S	1	LANL	USE	S
per1010043.wiff	145737003	MAP	10/10/2005 19:22	468606	3908S	1	LANL	USE	S
per1010044.wiff	145737004	MAP	10/10/2005 19:31	468606	3908S	1	LANL	USE	S
per1010045.wiff	145737005	MAP	10/10/2005 19:41	468606	3908S	1	LANL	USE	S
per1010046.wiff	WCLCCV	MAP	10/10/2005 19:50			1		USE	C
per1010047.wiff	IPB006	MAP	10/10/2005 20:00			1		USE	B
per1010048.wiff	WCLCRI	MAP	10/10/2005 20:10			1		USE	C
per1010049.wiff	145737006	MAP	10/10/2005 20:19	468606	3908S	1	LANL	USE	S
per1010050.wiff	145737007	MAP	10/10/2005 20:29	468606	3908S	1	LANL	USE	S
per1010051.wiff	145737008	MAP	10/10/2005 20:38	468606	3908S	1	LANL	USE	S
per1010052.wiff	145737009	MAP	10/10/2005 20:48	468606	3908S	1	LANL	USE	S
per1010053.wiff	145737010	MAP	10/10/2005 20:57	468606	3908S	1	LANL	USE	S
per1010054.wiff	145737011	MAP	10/10/2005 21:07	468606	3908S	1	LANL	USE	S
per1010055.wiff	145737012	MAP	10/10/2005 21:17	468606	3908S	1	LANL	USE	S
per1010056.wiff	145737013	MAP	10/10/2005 21:26	468606	3908S	1	LANL	USE	S
per1010057.wiff	145737014	MAP	10/10/2005 21:36	468606	3908S	1	LANL	USE	S
per1010058.wiff	145737015	MAP	10/10/2005 21:45	468606	3908S	1	LANL	USE	S
per1010059.wiff	WCLCCV	MAP	10/10/2005 21:55			1		USE	C
per1010060.wiff	IPB007	MAP	10/10/2005 22:05			1		USE	B
per1010061.wiff	WCLCRI	MAP	10/10/2005 22:14			1		USE	C
per1010062.wiff	145737016	MAP	10/10/2005 22:24	468606	3908S	1	LANL	USE	S
per1010063.wiff	1200935805	MAP	10/10/2005 22:34	462598	Various	1	LANL	USE	S
per1010064.wiff	1200935801	MAP	10/10/2005 22:43	462598	Various	1	LANL	USE	S
per1010065.wiff	1200935802	MAP	10/10/2005 22:53	462598	Various	1	LANL	USE	S
per1010066.wiff	143883001	MAP	10/10/2005 23:03	462598	3763S	1	LANL	USE	S

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per1010067.wiff	143883002	MAP	10/10/2005 23:12	462598	3763S	1	LANL	USE	S
per1010068.wiff	143883003	MAP	10/10/2005 23:22	462598	3763S	1	LANL	USE	S
per1010069.wiff	143883004	MAP	10/10/2005 23:32	462598	3763S	1	LANL	USE	S
per1010070.wiff	143883005	MAP	10/10/2005 23:41	462598	3763S	1	LANL	USE	S
per1010071.wiff	143883006	MAP	10/10/2005 23:51	462598	3763S	1	LANL	USE	S
per1010072.wiff	WCLCCV	MAP	10/11/2005 0:01			1		USE	C
per1010073.wiff	IPB008	MAP	10/11/2005 0:10			1		USE	B
per1010074.wiff	WCLCRI	MAP	10/11/2005 0:20			1		USE	C
per1010075.wiff	143883007	MAP	10/11/2005 0:29	462598	3763S	1	LANL	USE	S
per1010076.wiff	143883008	MAP	10/11/2005 0:39	462598	3763S	1	LANL	USE	S
per1010077.wiff	143883009	MAP	10/11/2005 0:49	462598	3763S	1	LANL	USE	S
per1010078.wiff	143883010	MAP	10/11/2005 0:58	462598	3763S	1	LANL	USE	S
per1010079.wiff	143883011	MAP	10/11/2005 1:08	462598	3763S	1	LANL	USE	S
per1010080.wiff	144681001	MAP	10/11/2005 1:18	462598	3832S	1	LANL	USE	S
per1010081.wiff	144681002	MAP	10/11/2005 1:27	462598	3832S	1	LANL	USE	S
per1010082.wiff	144687001	MAP	10/11/2005 1:37	462598	3826S	1	LANL	USE	S
per1010083.wiff	WCLCCV	MAP	10/11/2005 1:47			1		USE	C
per1010084.wiff	IPB009	MAP	10/11/2005 1:56			1		USE	B
per1010085.wiff	WCLCRI	MAP	10/11/2005 2:06			1		USE	C
per1010086.wiff	144962001	MAP	10/11/2005 2:15	462598	3841S	1	LANL	USE	S
per1010087.wiff	1200935803	MAP	10/11/2005 2:25	462598	3841S	1	LANL	USE	S
per1010088.wiff	1200935804	MAP	10/11/2005 2:35	462598	3841S	1	LANL	USE	S
per1010089.wiff	144962002	MAP	10/11/2005 2:44	462598	3841S	1	LANL	USE	S
per1010090.wiff	WCLCCV	MAP	10/11/2005 2:54			1		USE	C
per1010091.wiff	IPB010	MAP	10/11/2005 3:04			1		USE	B
per1010092.wiff	WCLCRI	MAP	10/11/2005 3:13			1		USE	C

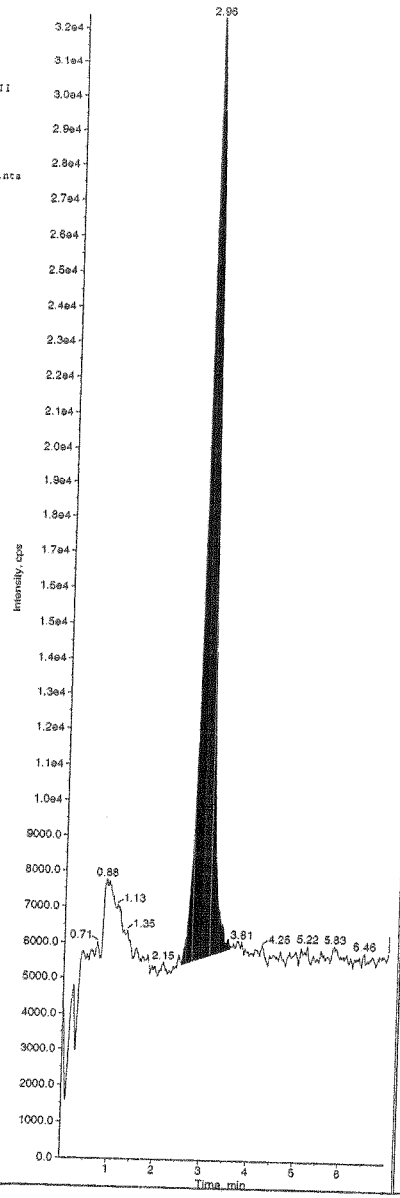
MAT 12/10/05

Sample Name: "1200949280" Sample ID: "488258|1|MAP" File: "per10090015.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.586 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 01:43:42 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 15 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.96 min
Area: 4.51e+005 counts
Height: 2.68e+004 cps
Start Time: 2.53 min
End Time: 3.57 min

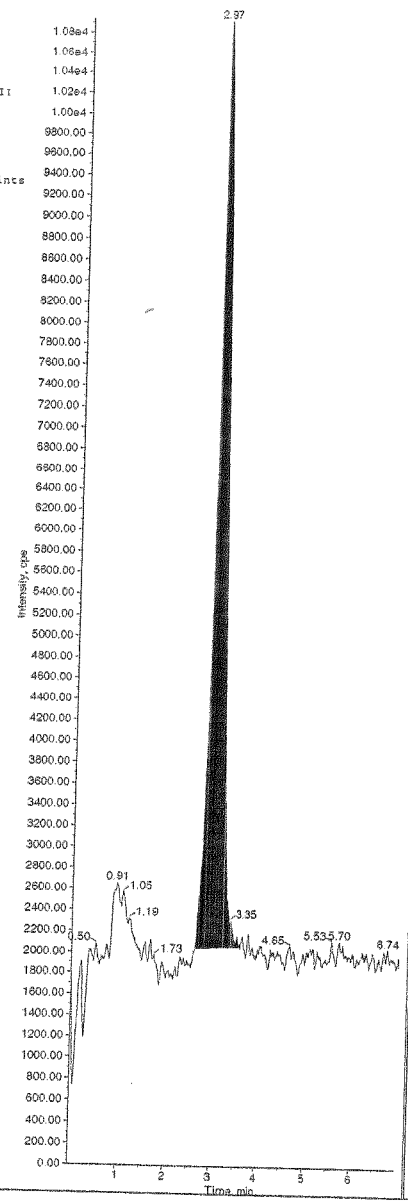


Sample Name: "1200949280" Sample ID: "488258|1|MAP" File: "per10090015.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.565 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 01:43:42 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 5
Report Largest Peak: No
Min. Peak Height: 200.00 cps
Min. Peak Width: 10.00 sec
Smoothing Width: 17 points
RT Window: 900. sec
Expected RT: 3.88 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.97 min
Area: 1.46e+005 counts
Height: 8.88e+003 cps
Start Time: 2.61 min
End Time: 3.56 min

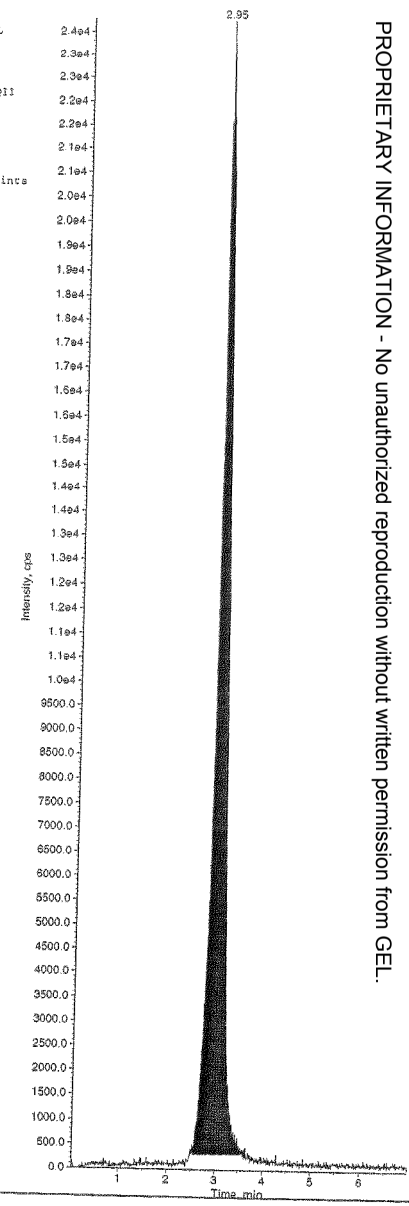


Sample Name: "1200949280" Sample ID: "488258|1|MAP" File: "per10090015.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.571 ng/mL
Acq. Date: 10/09/2005
Acq. Time: 01:43:42 PM

Modified: No
Proc. Algorithm: IntelliQuan - MQII
Noise Percentage: 50
Base. Sub. Window: 1.00 min
Peak-Split. Factor: 2
Report Largest Peak: Yes
Min. Peak Height: 0.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 0 points
RT Window: 900. sec
Expected RT: 3.87 min
Use Relative RT: No

Int. Type: Base To Base
Retention Time: 2.95 min
Area: 3.67e+005 counts
Height: 2.35e+004 cps
Start Time: 2.55 min
End Time: 3.57 min



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651

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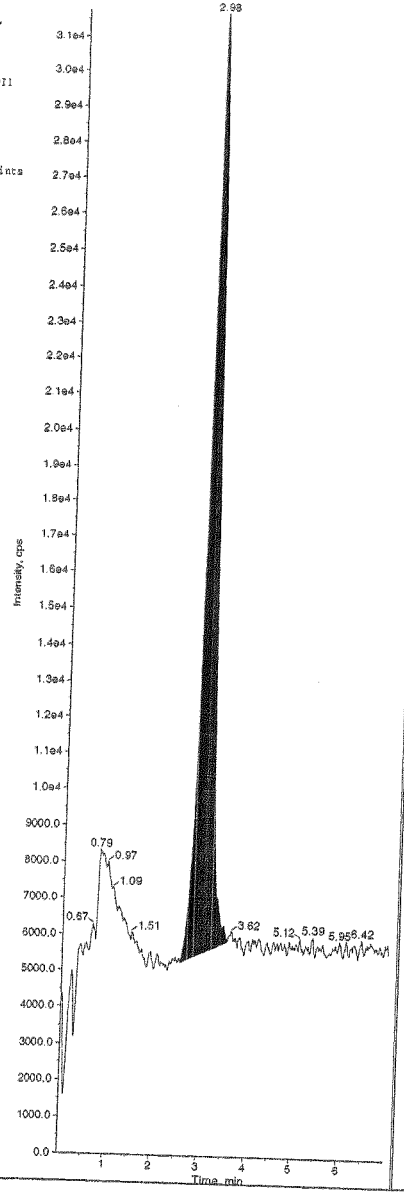
14545700 (MS)

MAP 10/10/05

652

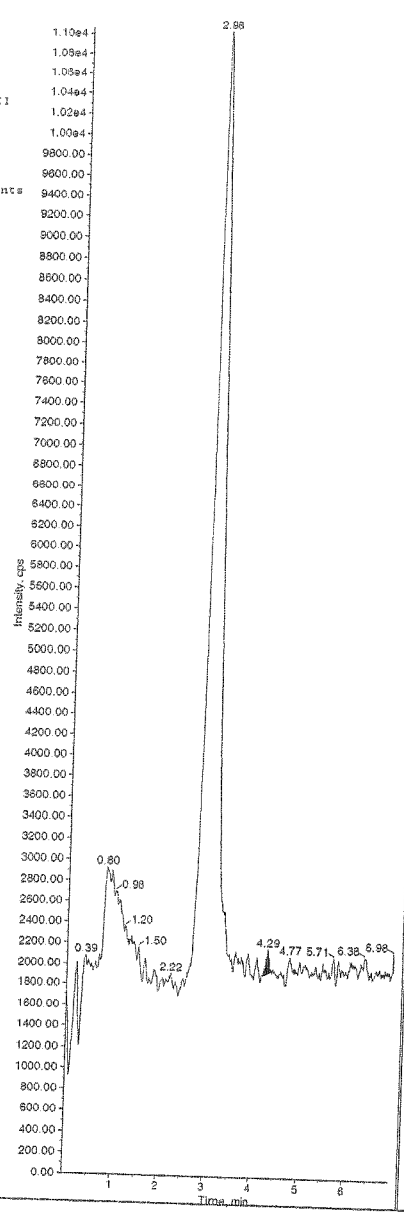
Sample Name: "1200949281" Sample ID: "468258|1|MAP" File: "per10090016.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.565 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:53:13 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	15 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.98 min
Area:	4.34e+005 counts
Height:	2.62e+004 cps
Start Time:	2.54 min
End Time:	3.53 min



Sample Name: "1200949281" Sample ID: "468258|1|MAP" File: "per10090016.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

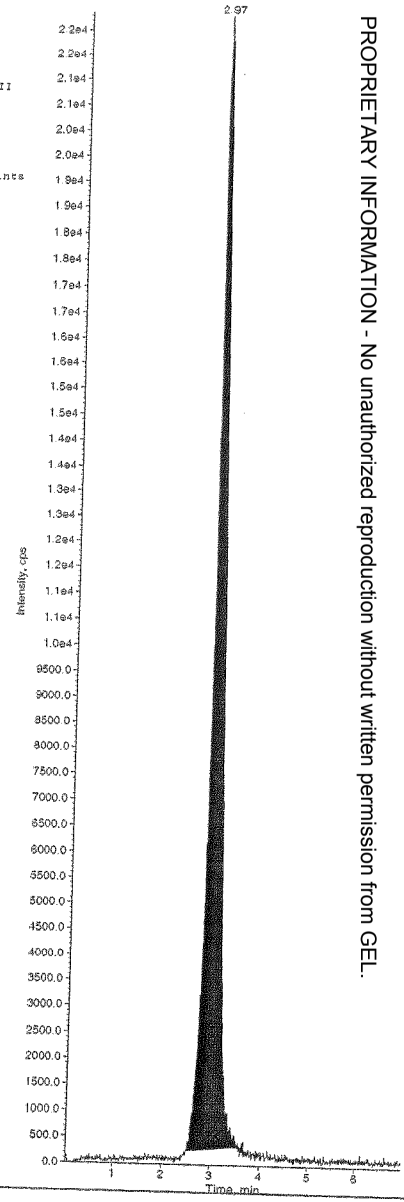
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00440 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:53:13 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	5
Report Largest Peak:	No
Min. Peak Height:	200.00 cps
Min. Peak Width:	10.00 sec
Smoothing Width:	17 points
RT Window:	900. sec
Expected RT:	3.88 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	4.29 min
Area:	1.14e+003 counts
Height:	2.34e+002 cps
Start Time:	4.19 min
End Time:	4.56 min



BEFORE MAP 10/10/05

Sample Name: "1200949281" Sample ID: "468258|1|MAP" File: "per10090016.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.550 ng/mL
Acq. Date:	10/09/2005
Acq. Time:	01:53:13 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - MQII
Noise Percentage:	50
Base. Sub. Window:	1.00 min
Peak-Split. Factor:	2
Report Largest Peak:	Yes
Min. Peak Height:	0.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	0 points
RT Window:	900. sec
Expected RT:	3.87 min
Use Relative RT:	No
Int. Type:	Base To Base
Retention Time:	2.97 min
Area:	3.54e+005 counts
Height:	2.21e+004 cps
Start Time:	2.51 min
End Time:	3.53 min



10/12/05

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14545?-001 ml

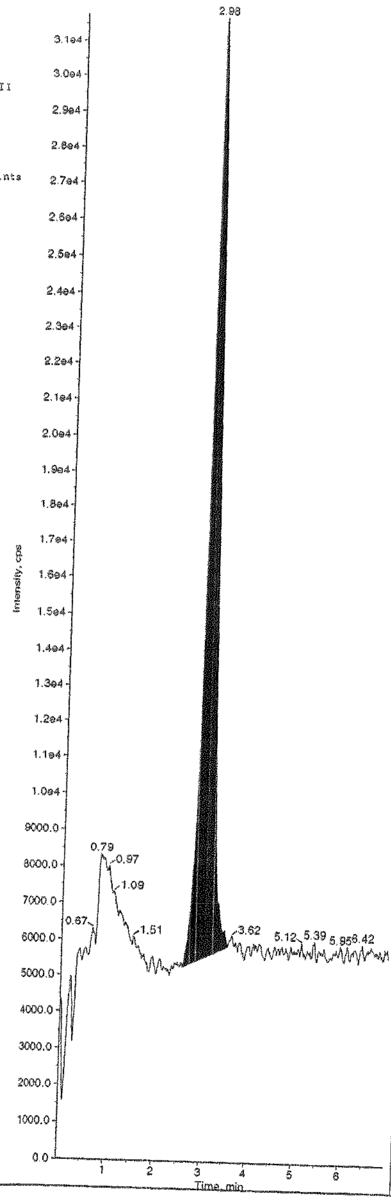
AFTER

Sample Name: "1200949281" Sample ID: "468258|1|MAP" File: "per10090016.wiff"
Peak Name: "Perchlorate" Mass(es): "99.0/83.0 amu"
Comment: "LCP8321_LF" Annotation: ""

```
Sample Index:          1
Sample Type:           Unknown
Concentration:         N/A
Calculated Conc:       0.565    ng/mL
Acq. Date:             10/09/2005
Acq. Time:             01:53:13 PM

Modified:              No
Proc. Algorithm:       IntelliQuan - MQII
Noise Percentage:      50
Base. Sub. Window:     1.00     min
Peak-Split. Factor:    5
Report Largest Peak:   No
Min. Peak Height:      200.00   cps
Min. Peak Width:       10.00    sec
Smoothing Width:       15       points
RT Window:             900.     sec
Expected RT:           3.88     min
Use Relative RT:       No

Int. Type:             Base To Base
Retention Time:        2.98     min
Area:                  4.34e+005  counts
Height:                2.62e+004  cps
Start Time:            2.54     min
End Time:              3.53     min
```

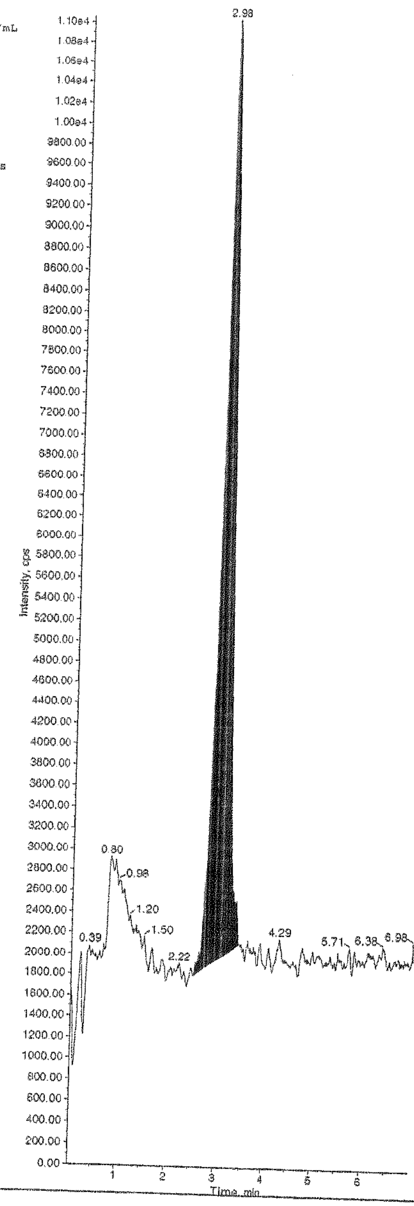


Sample Name: "1200949281" Sample ID: "468258|1|MAP" File: "per10090016.wiff"
Peak Name: "Perchlorate-101" Mass(es): "101.0/85.0 amu"
Comment: "LCP8321_LF" Annotation: ""

```
Sample Index:          1
Sample Type:           Unknown
Concentration:         N/A
Calculated Conc:       0.567    ng/mL
Acq. Date:             10/09/2005
Acq. Time:             01:53:13 PM

Modified:              Yes
RT Window:             900.     sec
Expected RT:           3.88     min
Use Relative RT:       No

Int. Type:             Manual
Retention Time:        2.97     min
Area:                  1.46e+005  counts
Height:                9.09e+003  cps
Start Time:            2.50     min
End Time:              3.40     min
```

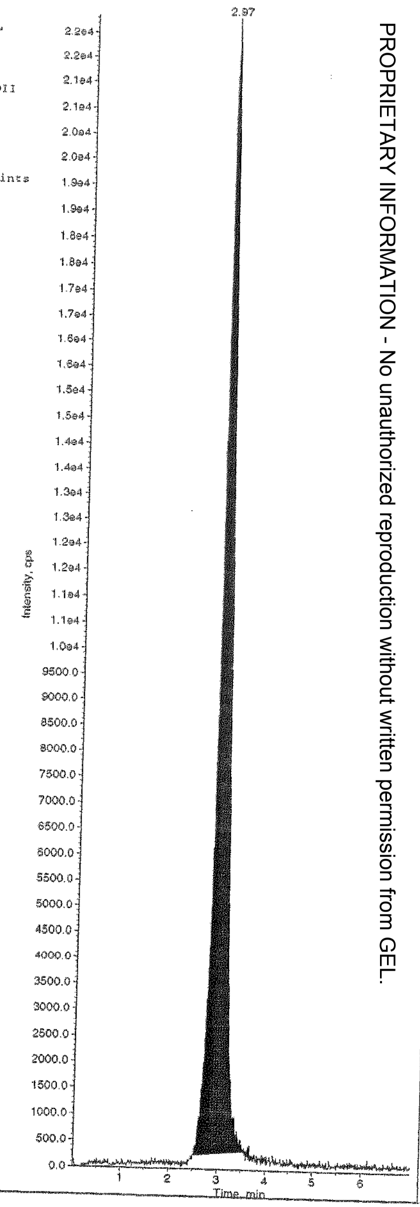


Sample Name: "1200949281" Sample ID: "468258|1|MAP" File: "per10090016.wiff"
Peak Name: "Perchlorate-O(18)" Mass(es): "107.0/89.0 amu"
Comment: "LCP8321_LF" Annotation: ""

```
Sample Index:          1
Sample Type:           Unknown
Concentration:         N/A
Calculated Conc:       0.550    ng/mL
Acq. Date:             10/09/2005
Acq. Time:             01:53:13 PM

Modified:              No
Proc. Algorithm:       IntelliQuan - MQII
Noise Percentage:      50
Base. Sub. Window:     1.00     min
Peak-Split. Factor:    2
Report Largest Peak:   Yes
Min. Peak Height:      0.00     cps
Min. Peak Width:       0.00     sec
Smoothing Width:       0        points
RT Window:             900.     sec
Expected RT:           3.87     min
Use Relative RT:       No

Int. Type:             Base To Base
Retention Time:        2.97     min
Area:                  3.54e+005  counts
Height:                2.21e+004  cps
Start Time:            2.51     min
End Time:              3.53     min
```



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Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (ESHL)
SDG 145579

Method/Analysis Information

Analytical Batch:	463520, 470263, 463364, 463410
Prep Batch:	463519, 463363, 463409
Standard Operating Procedures:	GL-MA-E-010 REV# 16, GL-GC-E-107 REV# 1, GL-MA-E-013 REV# 13, GL-MA-E-014 REV# 10, GL-MA-E-006 REV# 9
Analytical Method:	EPA 245.1/245.2, SM 2340 B, SW846 6010B, SW846 6020
Prep Method:	EPA 245.1/245.2, SW846 3005A

Sample Analysis

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200937536	Method Blank (MB) **ICP**
1200937549	Laboratory Control Sample (LCS)
1200937541	145579005(GU05090G3TM01L) Serial Dilution (SD)
1200937542	145579006(GU05090GMC401L) Serial Dilution (SD)
1200937543	145579007(GU05090G57M01L) Serial Dilution (SD)
1200937544	145579008(GU05090G7CM01L) Serial Dilution (SD)
1200937537	145579005(GU05090G3TM01D) Sample Duplicate (DUP)
1200937538	145579006(GU05090GMC401D) Sample Duplicate (DUP)
1200937539	145579007(GU05090G57M01D) Sample Duplicate (DUP)
1200937540	145579008(GU05090G7CM01D) Sample Duplicate (DUP)

1200937545	145579005(GU05090G3TM01S) Matrix Spike (MS)
1200937546	145579006(GU05090GMC401S) Matrix Spike (MS)
1200937547	145579007(GU05090G57M01S) Matrix Spike (MS)
1200937548	145579008(GU05090G7CM01S) Matrix Spike (MS)
1200937674	Method Blank (MB) **ICP-MS**
1200937687	Laboratory Control Sample (LCS)
1200937679	145579005(GU05090G3TM01L) Serial Dilution (SD)
1200937680	145579006(GU05090GMC401L) Serial Dilution (SD)
1200937681	145579007(GU05090G57M01L) Serial Dilution (SD)
1200937682	145579008(GU05090G7CM01L) Serial Dilution (SD)
1200937675	145579005(GU05090G3TM01D) Sample Duplicate (DUP)
1200937676	145579006(GU05090GMC401D) Sample Duplicate (DUP)
1200937677	145579007(GU05090G57M01D) Sample Duplicate (DUP)
1200937678	145579008(GU05090G7CM01D) Sample Duplicate (DUP)
1200937683	145579005(GU05090G3TM01S) Matrix Spike (MS)
1200937684	145579006(GU05090GMC401S) Matrix Spike (MS)
1200937685	145579007(GU05090G57M01S) Matrix Spike (MS)
1200937686	145579008(GU05090G7CM01S) Matrix Spike (MS)
1200937948	Method Blank (MB) **CVAA**
1200937961	Laboratory Control Sample (LCS)
1200937953	145579005(GU05090G3TM01L) Serial Dilution (SD)
1200937954	145579006(GU05090GMC401L) Serial Dilution (SD)
1200937955	145579007(GU05090G57M01L) Serial Dilution (SD)
1200937956	145579008(GU05090G7CM01L) Serial Dilution (SD)
1200937949	145579005(GU05090G3TM01D) Sample Duplicate (DUP)
1200937950	145579006(GU05090GMC401D) Sample Duplicate (DUP)
1200937951	145579007(GU05090G57M01D) Sample Duplicate (DUP)
1200937952	145579008(GU05090G7CM01D) Sample Duplicate (DUP)
1200937957	145579005(GU05090G3TM01S) Matrix Spike (MS)
1200937958	145579006(GU05090GMC401S) Matrix Spike (MS)
1200937959	145579007(GU05090G57M01S) Matrix Spike (MS)
1200937960	145579008(GU05090G7CM01S) Matrix Spike (MS)

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The ICP analysis was performed on a Thermo Jarrell Ash 61E Trace axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium internal standard. Operating conditions for the Trace ICP are set at a power level of 950 watts. The instrument has a peristaltic pump flow rate of 140 RPM (2.0 mL/min sample uptake rate), argon gas flows of 15 L/min and 0.5 L/min for the torch and auxiliary gases, and a pressure setting of 26 PSI for the nebulizer.

The ICP-MS analysis was performed on a Perkin Elmer Elan 6100E inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, and tantalum were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 3607 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Mercury analysis was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 254 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80mL/min.

The Hardness analysis was performed on a No instrument-calculation method.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits, with the exception of mercury, which yielded a result of 14038% and may indicated a high bias to results near the PQL.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance

criteria.

ICSA/ICSAB statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following samples were selected as the quality control (QC) samples for this SDG: 145579005 (GU05090G3TM01), 145579006 (GU05090GMC401), 145579007 (GU05090G57M01) and 145579008 (GU05090G7CM01) for CVAA, ICP and ICP-MS.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The relative percent difference (RPD) obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases were either the sample or duplicate value is less than 5X the contract required detection limit (RL), a control of RL is used to evaluate the DUP results. All applicable analytes met these requirements, with the exception of uranium, as indicated by the "*" qualifier.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL for CVAA, 50X the IDL for ICP, and 100X the IDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Nonconformance Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. The following NCR was generated for this SDG: NCR ID 253617. A copy is included in the Miscellaneous Data section of this package.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Kristen M. Murray **Date:** 10-12-05

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579001 **CLIENT ID:** GF05090G3TM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1-2
7429-90-5	Aluminum	77.3	ug/L	J		P	68	TRACE2	100305-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7440-38-2	Arsenic	6	ug/L	U		P	6	TRACE2	100305-1
7440-39-3	Barium	150	ug/L			P	1	TRACE2	100305-1
7440-41-7	Beryllium	1.3	ug/L	J		P	1	TRACE2	100305-1
7440-42-8	Boron	83.1	ug/L			P	10	TRACE2	100305-1
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS3	051003-3
7440-70-2	Calcium	20600	ug/L			P	36	TRACE2	100305-1
7440-47-3	Chromium	5.2	ug/L			P	1	TRACE2	100305-1
7440-48-4	Cobalt	1.2	ug/L	J		P	1	TRACE2	100305-1
7440-50-8	Copper	9.8	ug/L	J		P	3	TRACE2	100305-1
7439-89-6	Iron	28.7	ug/L	J		P	18	TRACE2	100305-1
7439-92-1	Lead	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7439-95-4	Magnesium	5190	ug/L			P	85	TRACE2	100305-1
7439-96-5	Manganese	2	ug/L	U		P	2	TRACE2	100305-1
7439-98-7	Molybdenum	69.4	ug/L			P	2	TRACE2	100305-1
7440-02-0	Nickel	3.9	ug/L			MS	0.5	ICPMS3	051003-3
7440-09-7	Potassium	9570	ug/L			P	50	TRACE2	100305-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003-3
7631-86-9	Silica	37.9	mg/L			P	0.032	TRACE2	100305-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003-3
7440-23-5	Sodium	90900	ug/L			P	45	TRACE2	100305-1
7440-24-6	Strontium	136	ug/L			P	1	TRACE2	100305-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003-3
7440-31-5	Tin	4.5	ug/L	J		P	2.5	TRACE2	100305-1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579001 **CLIENT ID:** GF05090G3TM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-61-1	Uranium	1.2	ug/L		*	MS	0.05	ICPMS3	051003-3
7440-62-2	Vanadium	3.1	ug/L	J		P	1	TRACE2	100305-1
7440-66-6	Zinc	34.8	ug/L			P	2	TRACE2	100305-1
	Hardness as CaCO3	72.8	mg/L				0.085	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579002 **CLIENT ID:** GF05090GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1-2
7429-90-5	Aluminum	68	ug/L	U		P	68	TRACE2	100305-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7440-38-2	Arsenic	6	ug/L	U		P	6	TRACE2	100305-1
7440-39-3	Barium	19.4	ug/L			P	1	TRACE2	100305-1
7440-41-7	Beryllium	1	ug/L	U		P	1	TRACE2	100305-1
7440-42-8	Boron	31.7	ug/L	J		P	10	TRACE2	100305-1
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS3	051003-3
7440-70-2	Calcium	36500	ug/L			P	36	TRACE2	100305-1
7440-47-3	Chromium	29.4	ug/L			P	1	TRACE2	100305-1
7440-48-4	Cobalt	1	ug/L	U		P	1	TRACE2	100305-1
7440-50-8	Copper	18.4	ug/L			P	3	TRACE2	100305-1
7439-89-6	Iron	28.5	ug/L	J		P	18	TRACE2	100305-1
7439-92-1	Lead	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7439-95-4	Magnesium	5720	ug/L			P	85	TRACE2	100305-1
7439-96-5	Manganese	7.5	ug/L	J		P	2	TRACE2	100305-1
7439-98-7	Molybdenum	2	ug/L	U		P	2	TRACE2	100305-1
7440-02-0	Nickel	5.1	ug/L			MS	0.5	ICPMS3	051003-3
7440-09-7	Potassium	840	ug/L			P	50	TRACE2	100305-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003-3
7631-86-9	Silica	70.4	mg/L			P	0.032	TRACE2	100305-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003-3
7440-23-5	Sodium	24300	ug/L			P	45	TRACE2	100305-1
7440-24-6	Strontium	177	ug/L			P	1	TRACE2	100305-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003-3
7440-31-5	Tin	2.5	ug/L	U		P	2.5	TRACE2	100305-1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579002 **CLIENT ID:** GF05090GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-61-1	Uranium	0.230	ug/L		*	MS	0.05	ICPMS3	051003-3
7440-62-2	Vanadium	1.5	ug/L	J		P	1	TRACE2	100305-1
7440-66-6	Zinc	52.9	ug/L			P	2	TRACE2	100305-1
	Hardness as CaCO3	115	mg/L				0.085	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579003 **CLIENT ID:** GF05090G57M01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1-2
7429-90-5	Aluminum	2270	ug/L			P	68	TRACE2	100305-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7440-38-2	Arsenic	6	ug/L	U		P	6	TRACE2	100305-1
7440-39-3	Barium	133	ug/L			P	1	TRACE2	100305-1
7440-41-7	Beryllium	1	ug/L	U		P	1	TRACE2	100305-1
7440-42-8	Boron	79.7	ug/L			P	10	TRACE2	100305-1
7440-43-9	Cadmium	0.160	ug/L	J		MS	0.1	ICPMS3	051003-3
7440-70-2	Calcium	15600	ug/L			P	36	TRACE2	100305-1
7440-47-3	Chromium	4	ug/L	J		P	1	TRACE2	100305-1
7440-48-4	Cobalt	1	ug/L	U		P	1	TRACE2	100305-1
7440-50-8	Copper	3	ug/L	U		P	3	TRACE2	100305-1
7439-89-6	Iron	1020	ug/L			P	18	TRACE2	100305-1
7439-92-1	Lead	1.1	ug/L	J		MS	0.5	ICPMS3	051003-3
7439-95-4	Magnesium	4040	ug/L			P	85	TRACE2	100305-1
7439-96-5	Manganese	7.6	ug/L	J		P	2	TRACE2	100305-1
7439-98-7	Molybdenum	98.3	ug/L			P	2	TRACE2	100305-1
7440-02-0	Nickel	4.2	ug/L			MS	0.5	ICPMS3	051003-3
7440-09-7	Potassium	11900	ug/L			P	50	TRACE2	100305-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003-3
7631-86-9	Silica	44.8	mg/L			P	0.032	TRACE2	100305-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003-3
7440-23-5	Sodium	69400	ug/L			P	45	TRACE2	100305-1
7440-24-6	Strontium	103	ug/L			P	1	TRACE2	100305-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003-3
7440-31-5	Tin	2.5	ug/L	U		P	2.5	TRACE2	100305-1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579003 **CLIENT ID:** GF05090G57M01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-61-1	Uranium	1.3	ug/L		*	MS	0.05	ICPMS3	051003-3
7440-62-2	Vanadium	4	ug/L	J		P	1	TRACE2	100305-1
7440-66-6	Zinc	19.6	ug/L			P	2	TRACE2	100305-1
	Hardness as CaCO3	55.7	mg/L				0.085	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579004 **CLIENT ID:** GF05090G7CM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1-2
7429-90-5	Aluminum	161	ug/L	J		P	68	TRACE2	100305-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7440-38-2	Arsenic	6	ug/L	U		P	6	TRACE2	100305-1
7440-39-3	Barium	177	ug/L			P	1	TRACE2	100305-1
7440-41-7	Beryllium	1	ug/L	U		P	1	TRACE2	100305-1
7440-42-8	Boron	77.1	ug/L			P	10	TRACE2	100305-1
7440-43-9	Cadmium	0.20	ug/L	J		MS	0.1	ICPMS3	051003-3
7440-70-2	Calcium	20700	ug/L			P	36	TRACE2	100305-1
7440-47-3	Chromium	1	ug/L	J		P	1	TRACE2	100305-1
7440-48-4	Cobalt	1	ug/L	U		P	1	TRACE2	100305-1
7440-50-8	Copper	3	ug/L	U		P	3	TRACE2	100305-1
7439-89-6	Iron	68.8	ug/L	J		P	18	TRACE2	100305-1
7439-92-1	Lead	0.820	ug/L	J		MS	0.5	ICPMS3	051003-3
7439-95-4	Magnesium	5210	ug/L			P	85	TRACE2	100305-1
7439-96-5	Manganese	2	ug/L	U		P	2	TRACE2	100305-1
7439-98-7	Molybdenum	74.7	ug/L			P	2	TRACE2	100305-1
7440-02-0	Nickel	3.3	ug/L			MS	0.5	ICPMS3	051003-3
7440-09-7	Potassium	15100	ug/L			P	50	TRACE2	100305-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003-3
7631-86-9	Silica	40	mg/L			P	0.032	TRACE2	100305-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003-3
7440-23-5	Sodium	76300	ug/L			P	45	TRACE2	100305-1
7440-24-6	Strontium	139	ug/L			P	1	TRACE2	100305-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003-3
7440-31-5	Tin	2.5	ug/L	U		P	2.5	TRACE2	100305-1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579004 **CLIENT ID:** GF05090G7CM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-61-1	Uranium	28.5	ug/L		*	MS	0.05	ICPMS3	051003-3
7440-62-2	Vanadium	3.3	ug/L	J		P	1	TRACE2	100305-1
7440-66-6	Zinc	6.6	ug/L	J		P	2	TRACE2	100305-1
	Hardness as CaCO3	73.3	mg/L				0.085	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579005 **CLIENT ID:** GU05090G3TM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1-2
7429-90-5	Aluminum	137	ug/L	J		P	68	TRACE2	100305-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7440-38-2	Arsenic	6	ug/L	U		P	6	TRACE2	100305-1
7440-39-3	Barium	148	ug/L			P	1	TRACE2	100305-1
7440-41-7	Beryllium	1	ug/L	U		P	1	TRACE2	100305-1
7440-42-8	Boron	78.5	ug/L			P	10	TRACE2	100305-1
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS3	051003-3
7440-70-2	Calcium	20400	ug/L			P	36	TRACE2	100305-1
7440-47-3	Chromium	1.4	ug/L	J		P	1	TRACE2	100305-1
7440-48-4	Cobalt	1	ug/L	U		P	1	TRACE2	100305-1
7440-50-8	Copper	3	ug/L	U		P	3	TRACE2	100305-1
7439-89-6	Iron	62.5	ug/L	J		P	18	TRACE2	100305-1
7439-92-1	Lead	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7439-95-4	Magnesium	5120	ug/L			P	85	TRACE2	100305-1
7439-96-5	Manganese	2	ug/L	U		P	2	TRACE2	100305-1
7439-98-7	Molybdenum	69.1	ug/L			P	2	TRACE2	100305-1
7440-02-0	Nickel	3.9	ug/L			MS	0.5	ICPMS3	051003-3
7440-09-7	Potassium	9560	ug/L			P	50	TRACE2	100305-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003-3
7631-86-9	Silica	37.8	mg/L			P	0.032	TRACE2	100305-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003-3
7440-23-5	Sodium	89300	ug/L			P	45	TRACE2	100305-1
7440-24-6	Strontium	134	ug/L			P	1	TRACE2	100305-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003-3
7440-31-5	Tin	2.5	ug/L	U		P	2.5	TRACE2	100305-1

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579005 **CLIENT ID:** GU05090G3TM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15–SEP–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440–61–1	Uranium	1.2	ug/L		*	MS	0.05	ICPMS3	051003–3
7440–62–2	Vanadium	1.5	ug/L	J		P	1	TRACE2	100305–1
7440–66–6	Zinc	4.5	ug/L	J		P	2	TRACE2	100305–1
	Hardness as CaCO3	72	mg/L				0.085	CALC001	

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579006 **CLIENT ID:** GU05090GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15–SEP–05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1–2
7429–90–5	Aluminum	413	ug/L			P	68	TRACE2	100305–1
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003–3
7440–38–2	Arsenic	6	ug/L	U		P	6	TRACE2	100305–1
7440–39–3	Barium	20.1	ug/L			P	1	TRACE2	100305–1
7440–41–7	Beryllium	1	ug/L	U		P	1	TRACE2	100305–1
7440–42–8	Boron	27.7	ug/L	J		P	10	TRACE2	100305–1
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS3	051003–3
7440–70–2	Calcium	35600	ug/L			P	36	TRACE2	100305–1
7440–47–3	Chromium	61.3	ug/L			P	1	TRACE2	100305–1
7440–48–4	Cobalt	1	ug/L	U		P	1	TRACE2	100305–1
7440–50–8	Copper	33.3	ug/L			P	3	TRACE2	100305–1
7439–89–6	Iron	507	ug/L			P	18	TRACE2	100305–1
7439–92–1	Lead	0.560	ug/L	J		MS	0.5	ICPMS3	051003–3
7439–95–4	Magnesium	5620	ug/L			P	85	TRACE2	100305–1
7439–96–5	Manganese	9.3	ug/L	J		P	2	TRACE2	100305–1
7439–98–7	Molybdenum	2	ug/L	U		P	2	TRACE2	100305–1
7440–02–0	Nickel	10.1	ug/L			MS	0.5	ICPMS3	051003–3
7440–09–7	Potassium	831	ug/L			P	50	TRACE2	100305–1
7782–49–2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003–3
7631–86–9	Silica	71	mg/L			P	0.032	TRACE2	100305–1
7440–22–4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003–3
7440–23–5	Sodium	22600	ug/L			P	45	TRACE2	100305–1
7440–24–6	Strontium	173	ug/L			P	1	TRACE2	100305–1
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003–3
7440–31–5	Tin	2.5	ug/L	U		P	2.5	TRACE2	100305–1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579006 **CLIENT ID:** GU05090GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-61-1	Uranium	0.120	ug/L	J	*	MS	0.05	ICPMS3	051003-3
7440-62-2	Vanadium	1.3	ug/L	J		P	1	TRACE2	100305-1
7440-66-6	Zinc	23.6	ug/L			P	2	TRACE2	100305-1
	Hardness as CaCO3	112	mg/L				0.085	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579007 **CLIENT ID:** GU05090G57M01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1-2
7429-90-5	Aluminum	3230	ug/L			P	68	TRACE2	100305-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7440-38-2	Arsenic	6	ug/L	U		P	6	TRACE2	100305-1
7440-39-3	Barium	140	ug/L			P	1	TRACE2	100305-1
7440-41-7	Beryllium	1	ug/L	U		P	1	TRACE2	100305-1
7440-42-8	Boron	78.8	ug/L			P	10	TRACE2	100305-1
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS3	051003-3
7440-70-2	Calcium	16300	ug/L			P	36	TRACE2	100305-1
7440-47-3	Chromium	2.9	ug/L	J		P	1	TRACE2	100305-1
7440-48-4	Cobalt	1	ug/L	U		P	1	TRACE2	100305-1
7440-50-8	Copper	3	ug/L	U		P	3	TRACE2	100305-1
7439-89-6	Iron	1460	ug/L			P	18	TRACE2	100305-1
7439-92-1	Lead	1	ug/L	J		MS	0.5	ICPMS3	051003-3
7439-95-4	Magnesium	4290	ug/L			P	85	TRACE2	100305-1
7439-96-5	Manganese	10.5	ug/L			P	2	TRACE2	100305-1
7439-98-7	Molybdenum	93.9	ug/L			P	2	TRACE2	100305-1
7440-02-0	Nickel	4.3	ug/L			MS	0.5	ICPMS3	051003-3
7440-09-7	Potassium	11800	ug/L			P	50	TRACE2	100305-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003-3
7631-86-9	Silica	47.3	mg/L			P	0.032	TRACE2	100305-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003-3
7440-23-5	Sodium	71500	ug/L			P	45	TRACE2	100305-1
7440-24-6	Strontium	107	ug/L			P	1	TRACE2	100305-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003-3
7440-31-5	Tin	2.5	ug/L	U		P	2.5	TRACE2	100305-1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579007 **CLIENT ID:** GU05090G57M01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-61-1	Uranium	0.890	ug/L		*	MS	0.05	ICPMS3	051003-3
7440-62-2	Vanadium	4.2	ug/L	J		P	1	TRACE2	100305-1
7440-66-6	Zinc	12.7	ug/L			P	2	TRACE2	100305-1
	Hardness as CaCO3	58.3	mg/L				0.085	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579008 **CLIENT ID:** GU05090G7CM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	MER536	092105W1-2
7429-90-5	Aluminum	238	ug/L			P	68	TRACE2	100305-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7440-38-2	Arsenic	6	ug/L	U		P	6	TRACE2	100305-1
7440-39-3	Barium	173	ug/L			P	1	TRACE2	100305-1
7440-41-7	Beryllium	1	ug/L	U		P	1	TRACE2	100305-1
7440-42-8	Boron	77	ug/L			P	10	TRACE2	100305-1
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	ICPMS3	051003-3
7440-70-2	Calcium	20300	ug/L			P	36	TRACE2	100305-1
7440-47-3	Chromium	1.3	ug/L	J		P	1	TRACE2	100305-1
7440-48-4	Cobalt	1	ug/L	U		P	1	TRACE2	100305-1
7440-50-8	Copper	3	ug/L	U		P	3	TRACE2	100305-1
7439-89-6	Iron	93.3	ug/L	J		P	18	TRACE2	100305-1
7439-92-1	Lead	0.50	ug/L	U		MS	0.5	ICPMS3	051003-3
7439-95-4	Magnesium	5100	ug/L			P	85	TRACE2	100305-1
7439-96-5	Manganese	2	ug/L	U		P	2	TRACE2	100305-1
7439-98-7	Molybdenum	74.6	ug/L			P	2	TRACE2	100305-1
7440-02-0	Nickel	2.6	ug/L			MS	0.5	ICPMS3	051003-3
7440-09-7	Potassium	14800	ug/L			P	50	TRACE2	100305-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	ICPMS3	051003-3
7631-86-9	Silica	39.5	mg/L			P	0.032	TRACE2	100305-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	ICPMS3	051003-3
7440-23-5	Sodium	74500	ug/L			P	45	TRACE2	100305-1
7440-24-6	Strontium	136	ug/L			P	1	TRACE2	100305-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	ICPMS3	051003-3
7440-31-5	Tin	2.5	ug/L	U		P	2.5	TRACE2	100305-1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 145579 **METHOD TYPE:** EPA

SAMPLE ID: 145579008 **CLIENT ID:** GU05090G7CM01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 15-SEP-05 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	Instrument ID	Analytical Run
7440-61-1	Uranium	0.970	ug/L		*	MS	0.05	ICPMS3	051003-3
7440-62-2	Vanadium	3.1	ug/L	J		P	1	TRACE2	100305-1
7440-66-6	Zinc	4.7	ug/L	J		P	2	TRACE2	100305-1
	Hardness as CaCO3	71.8	mg/L				0.085	CALC001	

Comments:

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.14	ug/L	5	ug/L	102.8	90.0 – 110.0	AV	21-SEP-05 10:56	092105W1-2
	Aluminum	4988.69	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Arsenic	489.37	ug/L	500	ug/L	97.9	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Barium	497.44	ug/L	500	ug/L	99.5	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Beryllium	242.82	ug/L	250	ug/L	97.1	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Boron	494.64	ug/L	500	ug/L	98.9	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Calcium	4927.75	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Chromium	491.28	ug/L	500	ug/L	98.3	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Cobalt	486.22	ug/L	500	ug/L	97.2	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Copper	485.67	ug/L	500	ug/L	97.1	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Iron	4881.35	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Magnesium	4910.36	ug/L	5000	ug/L	98.2	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Manganese	491.25	ug/L	500	ug/L	98.3	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Molybdenum	495.52	ug/L	500	ug/L	99.1	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Potassium	2446.23	ug/L	2500	ug/L	97.9	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Silica	10425.61	ug/L	10700	ug/L	97.4	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Sodium	2451.84	ug/L	2500	ug/L	98.1	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Strontium	492.81	ug/L	500	ug/L	98.6	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Tin	486.19	ug/L	500	ug/L	97.2	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Vanadium	487.11	ug/L	500	ug/L	97.4	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Zinc	485.21	ug/L	500	ug/L	97	90.0 – 110.0	P	03-OCT-05 14:28	100305-1
	Antimony	52.61	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3
	Cadmium	50.85	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3
	Lead	51.71	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3
	Nickel	51.35	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3
	Selenium	52.89	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3
	Silver	52.79	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3
	Thallium	50.83	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3
	Uranium	52.87	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	03-OCT-05 22:32	051003-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Mercury	5.12	ug/L	5	ug/L	102.3	80.0 – 120.0	AV	21-SEP-05 11:02	092105W1-2
	Aluminum	5115.51	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Arsenic	500.79	ug/L	500	ug/L	100.2	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Barium	498.96	ug/L	500	ug/L	99.8	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Beryllium	497.96	ug/L	500	ug/L	99.6	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Boron	500.74	ug/L	500	ug/L	100.2	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Calcium	5087.8	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Chromium	498.07	ug/L	500	ug/L	99.6	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Cobalt	498.92	ug/L	500	ug/L	99.8	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Copper	497.47	ug/L	500	ug/L	99.5	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Iron	5029.94	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Magnesium	5093.61	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Manganese	498.62	ug/L	500	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Molybdenum	504.24	ug/L	500	ug/L	100.9	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Potassium	4990.19	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Silica	5333.56	ug/L	5350	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Sodium	9885.69	ug/L	10000	ug/L	98.9	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Strontium	497.04	ug/L	500	ug/L	99.4	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Tin	495.79	ug/L	500	ug/L	99.2	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Vanadium	498.35	ug/L	500	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Zinc	500.16	ug/L	500	ug/L	100	90.0 – 110.0	P	03-OCT-05 15:06	100305-1
	Antimony	51.95	ug/L	50	ug/L	103.9	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3
	Cadmium	51.14	ug/L	50	ug/L	102.3	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3
	Lead	50.53	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3
	Nickel	50.84	ug/L	50	ug/L	101.7	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3
	Selenium	52.21	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3
	Silver	52.91	ug/L	50	ug/L	105.8	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3
	Thallium	49.38	ug/L	50	ug/L	98.8	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3
	Uranium	50.94	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	03-OCT-05 22:50	051003-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	21-SEP-05 11:26	092105W1-2
	Aluminum	4895.11	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Arsenic	476.24	ug/L	500	ug/L	95.3	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Barium	483.69	ug/L	500	ug/L	96.7	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Beryllium	479.6	ug/L	500	ug/L	95.9	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Boron	482.53	ug/L	500	ug/L	96.5	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Calcium	4921.34	ug/L	5000	ug/L	98.4	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Chromium	480	ug/L	500	ug/L	96	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Cobalt	480.96	ug/L	500	ug/L	96.2	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Copper	479.8	ug/L	500	ug/L	96	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Iron	4858.15	ug/L	5000	ug/L	97.2	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Magnesium	4882.52	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Manganese	482.17	ug/L	500	ug/L	96.4	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Molybdenum	489.73	ug/L	500	ug/L	98	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Potassium	4852.25	ug/L	5000	ug/L	97	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Silica	5131.25	ug/L	5350	ug/L	95.9	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Sodium	9598.54	ug/L	10000	ug/L	96	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Strontium	480.57	ug/L	500	ug/L	96.1	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Tin	482	ug/L	500	ug/L	96.4	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Vanadium	482.67	ug/L	500	ug/L	96.5	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Zinc	484.04	ug/L	500	ug/L	96.8	90.0 – 110.0	P	03-OCT-05 16:00	100305-1
	Antimony	51.52	ug/L	50	ug/L	103	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3
	Cadmium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3
	Lead	52.18	ug/L	50	ug/L	104.4	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3
	Nickel	48.61	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3
	Selenium	52.79	ug/L	50	ug/L	105.6	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3
	Silver	51.86	ug/L	50	ug/L	103.7	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3
	Thallium	50.92	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3
	Uranium	53.18	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	03-OCT-05 23:19	051003-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Mercury	5.11	ug/L	5	ug/L	102.3	80.0 – 120.0	AV	21-SEP-05 11:50	092105W1-2
	Aluminum	5175.64	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Arsenic	506.25	ug/L	500	ug/L	101.3	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Barium	508.5	ug/L	500	ug/L	101.7	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Beryllium	511.46	ug/L	500	ug/L	102.3	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Boron	509.12	ug/L	500	ug/L	101.8	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Calcium	5185.02	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Chromium	508.96	ug/L	500	ug/L	101.8	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Cobalt	514.54	ug/L	500	ug/L	102.9	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Copper	511.93	ug/L	500	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Iron	4946.36	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Magnesium	5109.82	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Manganese	500.47	ug/L	500	ug/L	100.1	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Molybdenum	506.84	ug/L	500	ug/L	101.4	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Potassium	5022.09	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Silica	5451.1	ug/L	5350	ug/L	101.9	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Sodium	10120.28	ug/L	10000	ug/L	101.2	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Strontium	510.62	ug/L	500	ug/L	102.1	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Tin	496.42	ug/L	500	ug/L	99.3	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Vanadium	502.66	ug/L	500	ug/L	100.5	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Zinc	505.24	ug/L	500	ug/L	101.1	90.0 – 110.0	P	03-OCT-05 16:47	100305-1
	Antimony	51.53	ug/L	50	ug/L	103.1	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3
	Cadmium	50.96	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3
	Lead	52.14	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3
	Nickel	47.01	ug/L	50	ug/L	94	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3
	Selenium	53.02	ug/L	50	ug/L	106	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3
	Silver	50.5	ug/L	50	ug/L	101	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3
	Thallium	50.44	ug/L	50	ug/L	100.9	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3
	Uranium	52.71	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	03-OCT-05 23:45	051003-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Mercury	5.09	ug/L	5	ug/L	101.7	80.0 – 120.0	AV	21-SEP-05 12:14	092105W1-2
	Aluminum	5079.79	ug/L	5000	ug/L	101.6	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Arsenic	498.54	ug/L	500	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Barium	498.35	ug/L	500	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Beryllium	505.95	ug/L	500	ug/L	101.2	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Boron	498.56	ug/L	500	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Calcium	5097.16	ug/L	5000	ug/L	101.9	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Chromium	500.92	ug/L	500	ug/L	100.2	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Cobalt	507.74	ug/L	500	ug/L	101.6	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Copper	505.24	ug/L	500	ug/L	101.1	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Iron	4823.06	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Magnesium	5022.17	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Manganese	491.11	ug/L	500	ug/L	98.2	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Molybdenum	494.63	ug/L	500	ug/L	98.9	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Potassium	4937.92	ug/L	5000	ug/L	98.8	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Silica	5379.47	ug/L	5350	ug/L	100.6	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Sodium	10003.95	ug/L	10000	ug/L	100	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Strontium	503.84	ug/L	500	ug/L	100.8	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Tin	487.44	ug/L	500	ug/L	97.5	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Vanadium	492.85	ug/L	500	ug/L	98.6	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Zinc	494.71	ug/L	500	ug/L	98.9	90.0 – 110.0	P	03-OCT-05 17:34	100305-1
	Antimony	51.6	ug/L	50	ug/L	103.2	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3
	Cadmium	50.98	ug/L	50	ug/L	102	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3
	Lead	52.04	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3
	Nickel	46.66	ug/L	50	ug/L	93.3	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3
	Selenium	52.67	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3
	Silver	50.26	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3
	Thallium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3
	Uranium	52.96	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	04-OCT-05 00:25	051003-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Aluminum	5033.78	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Arsenic	501.2	ug/L	500	ug/L	100.2	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Barium	492.38	ug/L	500	ug/L	98.5	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Beryllium	504.22	ug/L	500	ug/L	100.8	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Boron	496.49	ug/L	500	ug/L	99.3	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Calcium	5056.24	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Chromium	498.32	ug/L	500	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Cobalt	506.55	ug/L	500	ug/L	101.3	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Copper	500.47	ug/L	500	ug/L	100.1	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Iron	4746.01	ug/L	5000	ug/L	94.9	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Magnesium	4998.02	ug/L	5000	ug/L	100	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Manganese	485.75	ug/L	500	ug/L	97.2	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Molybdenum	486.93	ug/L	500	ug/L	97.4	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Potassium	4904.5	ug/L	5000	ug/L	98.1	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Silica	5350.25	ug/L	5350	ug/L	100	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Sodium	9952.58	ug/L	10000	ug/L	99.5	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Strontium	499.51	ug/L	500	ug/L	99.9	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Tin	482.9	ug/L	500	ug/L	96.6	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Vanadium	486.34	ug/L	500	ug/L	97.3	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Zinc	490.28	ug/L	500	ug/L	98.1	90.0 – 110.0	P	03-OCT-05 18:39	100305-1
	Antimony	50.58	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
	Cadmium	50.11	ug/L	50	ug/L	100.2	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
	Lead	52.53	ug/L	50	ug/L	105.1	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
	Nickel	46.39	ug/L	50	ug/L	92.8	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
	Selenium	54.22	ug/L	50	ug/L	108.4	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
	Silver	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
	Thallium	50.16	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
	Uranium	52.84	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	04-OCT-05 01:09	051003-3
CCV06										
	Aluminum	5150.14	ug/L	5000	ug/L	103	90.0 – 110.0	P	03-OCT-05 19:44	100305-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	512.14	ug/L	500	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Barium	501.4	ug/L	500	ug/L	100.3	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Beryllium	518.41	ug/L	500	ug/L	103.7	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Boron	505.53	ug/L	500	ug/L	101.1	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Calcium	5176.41	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Chromium	511.66	ug/L	500	ug/L	102.3	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Cobalt	520.79	ug/L	500	ug/L	104.2	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Copper	513.37	ug/L	500	ug/L	102.7	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Iron	4808.27	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Magnesium	5120.14	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Manganese	494.97	ug/L	500	ug/L	99	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Molybdenum	495.5	ug/L	500	ug/L	99.1	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Potassium	4987.01	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Silica	5510.3	ug/L	5350	ug/L	103	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Sodium	10168.22	ug/L	10000	ug/L	101.7	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Strontium	511.8	ug/L	500	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Tin	495.18	ug/L	500	ug/L	99	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Vanadium	495.59	ug/L	500	ug/L	99.1	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Zinc	497.53	ug/L	500	ug/L	99.5	90.0 – 110.0	P	03-OCT-05 19:44	100305-1
	Antimony	51.09	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
	Cadmium	50.69	ug/L	50	ug/L	101.4	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
	Lead	52	ug/L	50	ug/L	104	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
	Nickel	46.06	ug/L	50	ug/L	92.1	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
	Selenium	52.38	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
	Silver	50.82	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
	Thallium	50.51	ug/L	50	ug/L	101	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
	Uranium	52.23	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	04-OCT-05 01:46	051003-3
CCV07										
	Aluminum	5137.18	ug/L	5000	ug/L	102.7	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Arsenic	513.28	ug/L	500	ug/L	102.7	90.0 – 110.0	P	03-OCT-05 20:55	100305-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Barium	499.31	ug/L	500	ug/L	99.9	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Beryllium	521.57	ug/L	500	ug/L	104.3	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Boron	498.07	ug/L	500	ug/L	99.6	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Calcium	5186.26	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Chromium	513.64	ug/L	500	ug/L	102.7	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Cobalt	523.55	ug/L	500	ug/L	104.7	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Copper	511.95	ug/L	500	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Iron	4776.14	ug/L	5000	ug/L	95.5	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Magnesium	5121.23	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Manganese	496.37	ug/L	500	ug/L	99.3	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Molybdenum	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Potassium	4947.73	ug/L	5000	ug/L	99	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Silica	5479.27	ug/L	5350	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Sodium	10126.26	ug/L	10000	ug/L	101.3	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Strontium	512.74	ug/L	500	ug/L	102.6	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Tin	492.41	ug/L	500	ug/L	98.5	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Vanadium	494.59	ug/L	500	ug/L	98.9	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Zinc	494.47	ug/L	500	ug/L	98.9	90.0 – 110.0	P	03-OCT-05 20:55	100305-1
	Antimony	51.38	ug/L	50	ug/L	102.8	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
	Cadmium	51.21	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
	Lead	52.28	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
	Nickel	45.73	ug/L	50	ug/L	91.5	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
	Selenium	53.21	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
	Silver	50.54	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
	Thallium	50.78	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
	Uranium	53.03	ug/L	50	ug/L	106.1	90.0 – 110.0	MS	04-OCT-05 02:08	051003-3
CCV08										
	Aluminum	4972.76	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	03-OCT-05 22:06	100305-1
	Arsenic	490.07	ug/L	500	ug/L	98	90.0 – 110.0	P	03-OCT-05 22:06	100305-1
	Barium	483.1	ug/L	500	ug/L	96.6	90.0 – 110.0	P	03-OCT-05 22:06	100305-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Beryllium	501.7	ug/L	500	ug/L	100.3	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Boron	479.44	ug/L	500	ug/L	95.9	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Calcium	5005	ug/L	5000	ug/L	100.1	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Chromium	494.94	ug/L	500	ug/L	99	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Cobalt	503.66	ug/L	500	ug/L	100.7	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Copper	490.63	ug/L	500	ug/L	98.1	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Iron	4658.22	ug/L	5000	ug/L	93.2	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Magnesium	4957.53	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Manganese	480.78	ug/L	500	ug/L	96.2	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Molybdenum	477.81	ug/L	500	ug/L	95.6	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Potassium	4804.46	ug/L	5000	ug/L	96.1	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Silica	5261.39	ug/L	5350	ug/L	98.3	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Sodium	9815.68	ug/L	10000	ug/L	98.2	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Strontium	494.85	ug/L	500	ug/L	99	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Tin	476.85	ug/L	500	ug/L	95.4	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Vanadium	478.66	ug/L	500	ug/L	95.7	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
	Zinc	477.74	ug/L	500	ug/L	95.6	90.0 – 110.0	P	03–OCT–05 22:06	100305–1
CCV09										
	Aluminum	5205.04	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Arsenic	516.14	ug/L	500	ug/L	103.2	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Barium	508.7	ug/L	500	ug/L	101.7	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Beryllium	527.74	ug/L	500	ug/L	105.6	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Boron	507.55	ug/L	500	ug/L	101.5	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Calcium	5258.36	ug/L	5000	ug/L	105.2	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Chromium	520.88	ug/L	500	ug/L	104.2	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Cobalt	529.34	ug/L	500	ug/L	105.9	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Copper	518.43	ug/L	500	ug/L	103.7	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Iron	4879.57	ug/L	5000	ug/L	97.6	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Magnesium	5218.62	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	03–OCT–05 23:11	100305–1
	Manganese	504.49	ug/L	500	ug/L	100.9	90.0 – 110.0	P	03–OCT–05 23:11	100305–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Molybdenum	499.8	ug/L	500	ug/L	100	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
	Potassium	5121.82	ug/L	5000	ug/L	102.4	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
	Silica	5535.26	ug/L	5350	ug/L	103.5	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
	Sodium	10272.82	ug/L	10000	ug/L	102.7	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
	Strontium	521.06	ug/L	500	ug/L	104.2	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
	Tin	502.69	ug/L	500	ug/L	100.5	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
	Vanadium	503.93	ug/L	500	ug/L	100.8	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
	Zinc	503.36	ug/L	500	ug/L	100.7	90.0 – 110.0	P	03-OCT-05 23:11	100305-1
CCV10										
	Aluminum	5251.97	ug/L	5000	ug/L	105	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Arsenic	522.88	ug/L	500	ug/L	104.6	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Barium	512.88	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Beryllium	533.83	ug/L	500	ug/L	106.8	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Boron	510.07	ug/L	500	ug/L	102	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Calcium	5322.7	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Chromium	526.98	ug/L	500	ug/L	105.4	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Cobalt	534.81	ug/L	500	ug/L	107	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Copper	523.11	ug/L	500	ug/L	104.6	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Iron	4900.09	ug/L	5000	ug/L	98	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Magnesium	5262.9	ug/L	5000	ug/L	105.3	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Manganese	507.78	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Molybdenum	502.41	ug/L	500	ug/L	100.5	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Potassium	5047.55	ug/L	5000	ug/L	101	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Silica	5624.11	ug/L	5350	ug/L	105.1	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Sodium	10323.05	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Strontium	525.34	ug/L	500	ug/L	105.1	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Tin	506.44	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Vanadium	507.78	ug/L	500	ug/L	101.6	90.0 – 110.0	P	04-OCT-05 00:22	100305-1
	Zinc	507.51	ug/L	500	ug/L	101.5	90.0 – 110.0	P	04-OCT-05 00:22	100305-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV11										
	Aluminum	5315.08	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Arsenic	530.7	ug/L	500	ug/L	106.1	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Barium	518.84	ug/L	500	ug/L	103.8	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Beryllium	541.35	ug/L	500	ug/L	108.3	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Boron	518.63	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Calcium	5382.12	ug/L	5000	ug/L	107.6	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Chromium	533.36	ug/L	500	ug/L	106.7	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Cobalt	542.89	ug/L	500	ug/L	108.6	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Copper	529.41	ug/L	500	ug/L	105.9	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Iron	4967.78	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Magnesium	5339.48	ug/L	5000	ug/L	106.8	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Manganese	514.84	ug/L	500	ug/L	103	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Molybdenum	512.04	ug/L	500	ug/L	102.4	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Potassium	5098	ug/L	5000	ug/L	102	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Silica	5683.71	ug/L	5350	ug/L	106.2	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Sodium	10635.03	ug/L	10000	ug/L	106.4	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Strontium	531.26	ug/L	500	ug/L	106.3	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Tin	513.4	ug/L	500	ug/L	102.7	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Vanadium	514.03	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
	Zinc	515.88	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04–OCT–05 01:16	100305–1
CCV12										
	Aluminum	5273.81	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Arsenic	524.81	ug/L	500	ug/L	105	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Barium	513.84	ug/L	500	ug/L	102.8	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Beryllium	533.82	ug/L	500	ug/L	106.8	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Boron	516.85	ug/L	500	ug/L	103.4	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Calcium	5304.33	ug/L	5000	ug/L	106.1	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Chromium	525.65	ug/L	500	ug/L	105.1	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Cobalt	536.35	ug/L	500	ug/L	107.3	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Copper	527.06	ug/L	500	ug/L	105.4	90.0 – 110.0	P	04–OCT–05 02:09	100305–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	4884.42	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Magnesium	5252.63	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Manganese	506.36	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Molybdenum	506.34	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Potassium	5087.28	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Silica	5688.27	ug/L	5350	ug/L	106.3	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Sodium	10882.16	ug/L	10000	ug/L	108.8	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Strontium	524.54	ug/L	500	ug/L	104.9	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Tin	505.03	ug/L	500	ug/L	101	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Vanadium	506.54	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
	Zinc	510.68	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–OCT–05 02:09	100305–1
CCV13										
	Aluminum	5283.26	ug/L	5000	ug/L	105.7	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Arsenic	526.76	ug/L	500	ug/L	105.4	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Barium	515.88	ug/L	500	ug/L	103.2	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Beryllium	535.04	ug/L	500	ug/L	107	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Boron	518.62	ug/L	500	ug/L	103.7	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Calcium	5324.74	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Chromium	527.17	ug/L	500	ug/L	105.4	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Cobalt	536.22	ug/L	500	ug/L	107.2	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Copper	527.3	ug/L	500	ug/L	105.5	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Iron	4944.17	ug/L	5000	ug/L	98.9	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Magnesium	5280.84	ug/L	5000	ug/L	105.6	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Manganese	509.75	ug/L	500	ug/L	102	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Molybdenum	510.71	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Potassium	5082.57	ug/L	5000	ug/L	101.7	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Silica	5699.81	ug/L	5350	ug/L	106.5	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Sodium	10599.01	ug/L	10000	ug/L	106	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Strontium	525.89	ug/L	500	ug/L	105.2	90.0 – 110.0	P	04–OCT–05 03:02	100305–1
	Tin	506.38	ug/L	500	ug/L	101.3	90.0 – 110.0	P	04–OCT–05 03:02	100305–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	509.23	ug/L	500	ug/L	101.9	90.0 – 110.0	P	04-OCT-05 03:02	100305-1
	Zinc	512.92	ug/L	500	ug/L	102.6	90.0 – 110.0	P	04-OCT-05 03:02	100305-1
CCV14										
	Aluminum	5040.83	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Arsenic	500.98	ug/L	500	ug/L	100.2	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Barium	492.47	ug/L	500	ug/L	98.5	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Beryllium	509.03	ug/L	500	ug/L	101.8	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Boron	496.53	ug/L	500	ug/L	99.3	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Calcium	5104.06	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Chromium	501.44	ug/L	500	ug/L	100.3	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Cobalt	510.41	ug/L	500	ug/L	102.1	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Copper	502.8	ug/L	500	ug/L	100.6	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Iron	4770.13	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Magnesium	5048.93	ug/L	5000	ug/L	101	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Manganese	488.61	ug/L	500	ug/L	97.7	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Molybdenum	488.35	ug/L	500	ug/L	97.7	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Potassium	4885.87	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Silica	5392.55	ug/L	5350	ug/L	100.8	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Sodium	9938.27	ug/L	10000	ug/L	99.4	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Strontium	501.86	ug/L	500	ug/L	100.4	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Tin	488.51	ug/L	500	ug/L	97.7	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Vanadium	487.97	ug/L	500	ug/L	97.6	90.0 – 110.0	P	04-OCT-05 04:02	100305-1
	Zinc	491.52	ug/L	500	ug/L	98.3	90.0 – 110.0	P	04-OCT-05 04:02	100305-1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS3,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.2808	ug/L	.2	ug/L	140.38	70.0 – 130.0	AV	21–SEP–05 11:00	092105W1–2
	Lead	2.11	ug/L	2	ug/L	105.35	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
	Nickel	2.09	ug/L	2	ug/L	104.3	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
	Thallium	.858	ug/L	1	ug/L	85.8	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
	Selenium	5.46	ug/L	5	ug/L	109.12	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
	Cadmium	1.01	ug/L	1	ug/L	100.7	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
	Antimony	1.94	ug/L	2	ug/L	97.05	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
	Silver	1.02	ug/L	1	ug/L	102	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
	Uranium	.209	ug/L	.2	ug/L	104.5	70.0 – 130.0	MS	03–OCT–05 22:39	051003–3
PQL01										
	Silica	197.25	ug/L	213	ug/L	92.61	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Aluminum	185.24	ug/L	200	ug/L	92.62	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Iron	97.09	ug/L	100	ug/L	97.09	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Magnesium	285.89	ug/L	300	ug/L	95.3	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Manganese	9.71	ug/L	10	ug/L	97.06	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Potassium	138.55	ug/L	150	ug/L	92.37	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Sodium	169.41	ug/L	150	ug/L	112.94	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Arsenic	13.69	ug/L	15	ug/L	91.29	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Barium	4.73	ug/L	5	ug/L	94.62	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Beryllium	4.5	ug/L	5	ug/L	90.02	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Chromium	4.44	ug/L	5	ug/L	88.79	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Cobalt	4.46	ug/L	5	ug/L	89.22	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Copper	9.31	ug/L	10	ug/L	93.1	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Vanadium	4.61	ug/L	5	ug/L	92.11	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Zinc	9.21	ug/L	10	ug/L	92.1	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Calcium	95.6	ug/L	100	ug/L	95.6	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Boron	47.88	ug/L	50	ug/L	95.76	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Molybdenum	9.02	ug/L	10	ug/L	90.16	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Tin	12.68	ug/L	10	ug/L	126.8	70.0 – 130.0	P	03–OCT–05 14:41	100305–1
	Strontium	4.6	ug/L	5	ug/L	92.03	70.0 – 130.0	P	03–OCT–05 14:41	100305–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
ICB01	Mercury	0.05	+/–.2	U	0.05	0.2	AV	21–SEP–05 10:58	092105W1–2
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 14:35	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 14:35	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 14:35	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 14:35	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 14:35	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 14:35	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 14:35	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 14:35	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 14:35	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 14:35	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 14:35	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 14:35	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 14:35	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 14:35	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 14:35	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	03–OCT–05 14:35	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 14:35	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	03–OCT–05 14:35	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 14:35	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 14:35	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 22:36	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	03–OCT–05 22:36	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 22:36	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 22:36	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	03–OCT–05 22:36	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	03–OCT–05 22:36	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	03–OCT–05 22:36	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	03–OCT–05 22:36	051003–3
CCB01	Mercury	0.05	+/–.2	U	0.05	0.2	AV	21–SEP–05 11:04	092105W1–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 15:12	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 15:12	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 15:12	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 15:12	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 15:12	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 15:12	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 15:12	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 15:12	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 15:12	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 15:12	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 15:12	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 15:12	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 15:12	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 15:12	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 15:12	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	03–OCT–05 15:12	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 15:12	100305–1
	Tin	2.9	+/–10	J	2.5	10.0	P	03–OCT–05 15:12	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 15:12	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 15:12	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 22:54	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	03–OCT–05 22:54	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 22:54	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 22:54	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	03–OCT–05 22:54	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	03–OCT–05 22:54	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	03–OCT–05 22:54	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	03–OCT–05 22:54	051003–3
CCB02									
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	21–SEP–05 11:28	092105W1–2
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 16:05	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 16:05	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:05	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:05	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 16:05	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 16:05	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:05	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:05	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 16:05	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 16:05	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 16:05	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 16:05	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 16:05	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 16:05	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 16:05	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	03–OCT–05 16:05	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:05	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	03–OCT–05 16:05	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:05	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 16:05	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 23:23	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	03–OCT–05 23:23	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 23:23	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 23:23	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	03–OCT–05 23:23	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	03–OCT–05 23:23	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	03–OCT–05 23:23	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	03–OCT–05 23:23	051003–3
CCB03	Mercury	0.05	+/–.2	U	0.05	0.2	AV	21–SEP–05 11:52	092105W1–2
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 16:53	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 16:53	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:53	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:53	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 16:53	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 16:53	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:53	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:53	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 16:53	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 16:53	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 16:53	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 16:53	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 16:53	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 16:53	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 16:53	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	03–OCT–05 16:53	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:53	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	03–OCT–05 16:53	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 16:53	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 16:53	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 23:48	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	03–OCT–05 23:48	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 23:48	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	03–OCT–05 23:48	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	03–OCT–05 23:48	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	03–OCT–05 23:48	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	03–OCT–05 23:48	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	03–OCT–05 23:48	051003–3
CCB04									
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	21–SEP–05 12:16	092105W1–2
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 17:40	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 17:40	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 17:40	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 17:40	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 17:40	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 17:40	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 17:40	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 17:40	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 17:40	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 17:40	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 17:40	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 17:40	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 17:40	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 17:40	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 17:40	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	03–OCT–05 17:40	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 17:40	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	03–OCT–05 17:40	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 17:40	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 17:40	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 00:28	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	04–OCT–05 00:28	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 00:28	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 00:28	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	04–OCT–05 00:28	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	04–OCT–05 00:28	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	04–OCT–05 00:28	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	04–OCT–05 00:28	051003–3
CCB05									
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 18:45	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 18:45	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 18:45	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 18:45	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 18:45	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 18:45	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 18:45	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 18:45	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 18:45	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 18:45	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 18:45	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 18:45	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 18:45	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 18:45	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 18:45	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	03–OCT–05 18:45	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 18:45	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	03–OCT–05 18:45	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 18:45	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 18:45	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 01:13	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	04–OCT–05 01:13	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 01:13	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 01:13	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	04–OCT–05 01:13	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	04–OCT–05 01:13	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	04–OCT–05 01:13	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	04–OCT–05 01:13	051003–3
CCB06									
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 19:50	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 19:50	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 19:50	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 19:50	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 19:50	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 19:50	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 19:50	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 19:50	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 19:50	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 19:50	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 19:50	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 19:50	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 19:50	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 19:50	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 19:50	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	03–OCT–05 19:50	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 19:50	100305–1
	Tin	3.13	+/–10	J	2.5	10.0	P	03–OCT–05 19:50	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 19:50	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 19:50	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 01:49	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	04–OCT–05 01:49	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 01:49	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 01:49	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	04–OCT–05 01:49	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	04–OCT–05 01:49	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	04–OCT–05 01:49	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	04–OCT–05 01:49	051003–3
CCB07									
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 21:01	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 21:01	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 21:01	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 21:01	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 21:01	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 21:01	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 21:01	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 21:01	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 21:01	100305–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 21:01	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 21:01	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 21:01	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 21:01	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 21:01	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 21:01	100305–1
	Sodium	–54.64	+/–150	J	45.0	150	P	03–OCT–05 21:01	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 21:01	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	03–OCT–05 21:01	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 21:01	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 21:01	100305–1
	Antimony	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 02:12	051003–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	04–OCT–05 02:12	051003–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 02:12	051003–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	04–OCT–05 02:12	051003–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	04–OCT–05 02:12	051003–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	04–OCT–05 02:12	051003–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	04–OCT–05 02:12	051003–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	04–OCT–05 02:12	051003–3
CCB08									
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 22:12	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 22:12	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 22:12	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 22:12	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 22:12	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 22:12	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 22:12	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 22:12	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 22:12	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 22:12	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 22:12	100305–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 22:12	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 22:12	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	03–OCT–05 22:12	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 22:12	100305–1
	Sodium	–101.04	+/–150	J	45.0	150	P	03–OCT–05 22:12	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 22:12	100305–1
	Tin	2.79	+/–10	J	2.5	10.0	P	03–OCT–05 22:12	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 22:12	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 22:12	100305–1
CCB09									
	Aluminum	68.0	+/–200	U	68.0	200	P	03–OCT–05 23:17	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	03–OCT–05 23:17	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 23:17	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 23:17	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	03–OCT–05 23:17	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	03–OCT–05 23:17	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 23:17	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 23:17	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	03–OCT–05 23:17	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	03–OCT–05 23:17	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	03–OCT–05 23:17	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 23:17	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 23:17	100305–1
	Potassium	66.7	+/–150	J	50.0	150	P	03–OCT–05 23:17	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	03–OCT–05 23:17	100305–1
	Sodium	–85.46	+/–150	J	45.0	150	P	03–OCT–05 23:17	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 23:17	100305–1
	Tin	2.97	+/–10	J	2.5	10.0	P	03–OCT–05 23:17	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	03–OCT–05 23:17	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	03–OCT–05 23:17	100305–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB10									
	Aluminum	68.0	+/–200	U	68.0	200	P	04–OCT–05 00:28	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	04–OCT–05 00:28	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 00:28	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 00:28	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	04–OCT–05 00:28	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	04–OCT–05 00:28	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 00:28	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 00:28	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	04–OCT–05 00:28	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	04–OCT–05 00:28	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	04–OCT–05 00:28	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 00:28	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 00:28	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	04–OCT–05 00:28	100305–1
	Silica	185.16	+/–213	J	32.0	213	P	04–OCT–05 00:28	100305–1
	Sodium	–102.35	+/–150	J	45.0	150	P	04–OCT–05 00:28	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 00:28	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	04–OCT–05 00:28	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 00:28	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 00:28	100305–1
CCB11									
	Aluminum	68.0	+/–200	U	68.0	200	P	04–OCT–05 01:22	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	04–OCT–05 01:22	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 01:22	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 01:22	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	04–OCT–05 01:22	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	04–OCT–05 01:22	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 01:22	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 01:22	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	04–OCT–05 01:22	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	04–OCT–05 01:22	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Magnesium	85.0	+/–300	U	85.0	300	P	04–OCT–05 01:22	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 01:22	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 01:22	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	04–OCT–05 01:22	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	04–OCT–05 01:22	100305–1
	Sodium	–62.4	+/–150	J	45.0	150	P	04–OCT–05 01:22	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 01:22	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	04–OCT–05 01:22	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 01:22	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 01:22	100305–1
CCB12									
	Aluminum	68.0	+/–200	U	68.0	200	P	04–OCT–05 02:15	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	04–OCT–05 02:15	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 02:15	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 02:15	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	04–OCT–05 02:15	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	04–OCT–05 02:15	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 02:15	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 02:15	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	04–OCT–05 02:15	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	04–OCT–05 02:15	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	04–OCT–05 02:15	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 02:15	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 02:15	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	04–OCT–05 02:15	100305–1
	Silica	32.0	+/–213	U	32.0	213	P	04–OCT–05 02:15	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	04–OCT–05 02:15	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 02:15	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	04–OCT–05 02:15	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 02:15	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 02:15	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB13									
	Aluminum	68.0	+/–200	U	68.0	200	P	04–OCT–05 03:08	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	04–OCT–05 03:08	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 03:08	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 03:08	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	04–OCT–05 03:08	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	04–OCT–05 03:08	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 03:08	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 03:08	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	04–OCT–05 03:08	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	04–OCT–05 03:08	100305–1
	Magnesium	85.0	+/–300	U	85.0	300	P	04–OCT–05 03:08	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 03:08	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 03:08	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	04–OCT–05 03:08	100305–1
	Silica	39.28	+/–213	J	32.0	213	P	04–OCT–05 03:08	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	04–OCT–05 03:08	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 03:08	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	04–OCT–05 03:08	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 03:08	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 03:08	100305–1
CCB14									
	Aluminum	68.0	+/–200	U	68.0	200	P	04–OCT–05 04:08	100305–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	04–OCT–05 04:08	100305–1
	Barium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 04:08	100305–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 04:08	100305–1
	Boron	10.0	+/–50	U	10.0	50.0	P	04–OCT–05 04:08	100305–1
	Calcium	36.0	+/–100	U	36.0	100	P	04–OCT–05 04:08	100305–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 04:08	100305–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 04:08	100305–1
	Copper	3.0	+/–10	U	3.0	10.0	P	04–OCT–05 04:08	100305–1
	Iron	18.0	+/–100	U	18.0	100	P	04–OCT–05 04:08	100305–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Magnesium	85.0	+/–300	U	85.0	300	P	04–OCT–05 04:08	100305–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 04:08	100305–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 04:08	100305–1
	Potassium	50.0	+/–150	U	50.0	150	P	04–OCT–05 04:08	100305–1
	Silica	112.55	+/–213	J	32.0	213	P	04–OCT–05 04:08	100305–1
	Sodium	45.0	+/–150	U	45.0	150	P	04–OCT–05 04:08	100305–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 04:08	100305–1
	Tin	2.5	+/–10	U	2.5	10.0	P	04–OCT–05 04:08	100305–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	04–OCT–05 04:08	100305–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	04–OCT–05 04:08	100305–1

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 145579
Contract: ESHL00701
Matrix: GROUND WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1200937536								
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Arsenic	6	ug/L	+/-15.0	U	P	6	15
	Barium	1	ug/L	+/-5.0	U	P	1	5
	Beryllium	1	ug/L	+/-5.0	U	P	1	5
	Boron	10	ug/L	+/-50.0	U	P	10	50
	Calcium	36.97671	ug/L	+/-100	J	P	36	100
	Chromium	1	ug/L	+/-5.0	U	P	1	5
	Cobalt	1	ug/L	+/-5.0	U	P	1	5
	Copper	3	ug/L	+/-10.0	U	P	3	10
	Iron	18	ug/L	+/-100	U	P	18	100
	Magnesium	85	ug/L	+/-300	U	P	85	300
	Manganese	2	ug/L	+/-10.0	U	P	2	10
	Molybdenum	2	ug/L	+/-10.0	U	P	2	10
	Potassium	50	ug/L	+/-150	U	P	50	150
	Silica	0.032	mg/L	+/-0.213	U	P	0.032	0.213
	Sodium	-72.69078	ug/L	+/-150	J	P	45	150
	Strontium	1	ug/L	+/-5.0	U	P	1	5
	Tin	2.5	ug/L	+/-10.0	U	P	2.5	10
	Vanadium	1	ug/L	+/-5.0	U	P	1	5
	Zinc	2.51659	ug/L	+/-10.0	J	P	2	10
1200937674								
	Antimony	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Cadmium	0.1	ug/L	+/-1.0	U	MS	0.1	1
	Lead	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Nickel	0.5	ug/L	+/-2.0	U	MS	0.5	2
	Selenium	2.5	ug/L	+/-5.0	U	MS	2.5	5
	Silver	0.2	ug/L	+/-1.0	U	MS	0.2	1
	Thallium	0.4	ug/L	+/-1.0	U	MS	0.4	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1200937948								
	Mercury	0.05	ug/L	+/-0.2	U	AV	0.05	0.2

METALS
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Interference Check Sample

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	460317.94	ug/L	500000	ug/L	92.1	80.0 – 120.0	03–OCT–05 14:47	100305–1
	Arsenic	–2.04	ug/L					03–OCT–05 14:47	100305–1
	Barium	1.32	ug/L					03–OCT–05 14:47	100305–1
	Beryllium	0.13	ug/L					03–OCT–05 14:47	100305–1
	Boron	–0.698	ug/L					03–OCT–05 14:47	100305–1
	Calcium	452078.59	ug/L	500000	ug/L	90.4	80.0 – 120.0	03–OCT–05 14:47	100305–1
	Chromium	0.63	ug/L					03–OCT–05 14:47	100305–1
	Cobalt	–0.103	ug/L					03–OCT–05 14:47	100305–1
	Copper	1.44	ug/L					03–OCT–05 14:47	100305–1
	Iron	172963.13	ug/L	200000	ug/L	86.5	80.0 – 120.0	03–OCT–05 14:47	100305–1
	Magnesium	472987.56	ug/L	500000	ug/L	94.6	80.0 – 120.0	03–OCT–05 14:47	100305–1
	Manganese	3.73	ug/L					03–OCT–05 14:47	100305–1
	Molybdenum	0.925	ug/L					03–OCT–05 14:47	100305–1
	Potassium	–2.88	ug/L					03–OCT–05 14:47	100305–1
	Silica	–4.25	ug/L					03–OCT–05 14:47	100305–1
	Sodium	74.06	ug/L					03–OCT–05 14:47	100305–1
	Strontium	6.95	ug/L					03–OCT–05 14:47	100305–1
	Tin	3.12	ug/L					03–OCT–05 14:47	100305–1
	Vanadium	–0.296	ug/L					03–OCT–05 14:47	100305–1
	Zinc	9.16	ug/L					03–OCT–05 14:47	100305–1
ICSAB01									
	Aluminum	470527.84	ug/L	500000	ug/L	94.1	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Arsenic	468.4	ug/L	500	ug/L	93.7	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Barium	491.07	ug/L	500	ug/L	98.2	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Beryllium	231.83	ug/L	250	ug/L	92.7	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Boron	494.58	ug/L	500	ug/L	98.9	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Calcium	458417.59	ug/L	500000	ug/L	91.7	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Chromium	451.03	ug/L	500	ug/L	90.2	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Cobalt	440.79	ug/L	500	ug/L	88.2	80.0 – 120.0	03–OCT–05 14:52	100305–1

METALS
–4–
Interference Check Sample

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Copper	476.29	ug/L	500	ug/L	95.3	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Iron	177967.45	ug/L	200000	ug/L	89	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Magnesium	482464.22	ug/L	500000	ug/L	96.5	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Manganese	463.16	ug/L	500	ug/L	92.6	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Molybdenum	470.87	ug/L	500	ug/L	94.2	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Potassium	5236.71	ug/L	5000	ug/L	105	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Silica	10052.55	ug/L	10700	ug/L	94	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Sodium	4860.98	ug/L	5000	ug/L	97.2	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Strontium	483.43	ug/L	500	ug/L	96.7	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Tin	456.13	ug/L	500	ug/L	91.2	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Vanadium	462.63	ug/L	500	ug/L	92.5	80.0 – 120.0	03–OCT–05 14:52	100305–1
	Zinc	467.41	ug/L	500	ug/L	93.5	80.0 – 120.0	03–OCT–05 14:52	100305–1

METALS
–4–
Interference Check Sample

SDG No: 145579

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.558	ug/L					03–OCT–05 22:43	051003–3
	Cadmium	0.276	ug/L					03–OCT–05 22:43	051003–3
	Lead	0.342	ug/L					03–OCT–05 22:43	051003–3
	Nickel	3.02	ug/L					03–OCT–05 22:43	051003–3
	Selenium	–0.488	ug/L					03–OCT–05 22:43	051003–3
	Silver	0.057	ug/L					03–OCT–05 22:43	051003–3
	Thallium	–0.214	ug/L					03–OCT–05 22:43	051003–3
	Uranium	0.009	ug/L					03–OCT–05 22:43	051003–3
ICSAB01									
	Antimony	21.96	ug/L	20.5	ug/L	107	80.0 – 120.0	03–OCT–05 22:47	051003–3
	Cadmium	19.58	ug/L	20.2	ug/L	96.9	80.0 – 120.0	03–OCT–05 22:47	051003–3
	Lead	19.54	ug/L	20	ug/L	97.7	80.0 – 120.0	03–OCT–05 22:47	051003–3
	Nickel	22.15	ug/L	22.4	ug/L	98.9	80.0 – 120.0	03–OCT–05 22:47	051003–3
	Selenium	18.55	ug/L	20	ug/L	92.7	80.0 – 120.0	03–OCT–05 22:47	051003–3
	Silver	19.75	ug/L	20	ug/L	98.8	80.0 – 120.0	03–OCT–05 22:47	051003–3
	Thallium	18.53	ug/L	20	ug/L	92.7	80.0 – 120.0	03–OCT–05 22:47	051003–3
	Uranium	21.07	ug/L	20	ug/L	105	80.0 – 120.0	03–OCT–05 22:47	051003–3

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G3TM01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579005 **Spike ID:** 1200937545

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5160		137	J	5000	101		P
Arsenic	ug/L	75–125	504		6	U	500	101		P
Barium	ug/L	75–125	641		148		500	98.5		P
Beryllium	ug/L	75–125	506		1	U	500	101		P
Boron	ug/L	75–125	566		78.5		500	97.5		P
Calcium	ug/L		24500		20400		5000	82.1	N/A	P
Chromium	ug/L	75–125	492		1.37	J	500	98.2		P
Cobalt	ug/L	75–125	504		1	U	500	101		P
Copper	ug/L	75–125	506		3	U	500	101		P
Iron	ug/L	75–125	4770		62.5	J	5000	94.2		P
Magnesium	ug/L	75–125	9890		5120		5000	95.4		P
Manganese	ug/L	75–125	489		2	U	500	97.5		P
Molybdenum	ug/L	75–125	546		69.1		500	95.3		P
Potassium	ug/L	75–125	13800		9560		5000	85.4		P
Silica	mg/L	75–125	46.2		37.8		10.7	77.8		P
Sodium	ug/L		90400		89300		5000	22.6	N/A	P
Strontium	ug/L	75–125	624		134		500	98		P
Tin	ug/L	75–125	488		2.5	U	500	97.2		P
Vanadium	ug/L	75–125	485		1.46	J	500	96.7		P
Zinc	ug/L	75–125	495		4.49	J	500	98.1		P

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579006 **Spike ID:** 1200937546

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5680		413		5000	105		P
Arsenic	ug/L	75–125	517		6	U	500	103		P
Barium	ug/L	75–125	535		20.1		500	103		P
Beryllium	ug/L	75–125	523		1	U	500	105		P
Boron	ug/L	75–125	533		27.7	J	500	101		P
Calcium	ug/L		41100		35600		5000	109	N/A	P
Chromium	ug/L	75–125	573		61.3		500	102		P
Cobalt	ug/L	75–125	518		1	U	500	103		P
Copper	ug/L	75–125	550		33.3		500	103		P
Iron	ug/L	75–125	5440		507		5000	98.7		P
Magnesium	ug/L	75–125	10800		5620		5000	104		P
Manganese	ug/L	75–125	513		9.25	J	500	101		P
Molybdenum	ug/L	75–125	496		2	U	500	98.8		P
Potassium	ug/L	75–125	5750		831		5000	98.4		P
Silica	mg/L		78.5		71		10.7	69.7	N/A	P
Sodium	ug/L		28200		22600		5000	113	N/A	P
Strontium	ug/L	75–125	685		173		500	102		P
Tin	ug/L	75–125	498		2.5	U	500	99.6		P
Vanadium	ug/L	75–125	498		1.32	J	500	99.4		P
Zinc	ug/L	75–125	525		23.6		500	100		P

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G57M01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579007 **Spike ID:** 1200937547

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	8460		3230		5000	105		P
Arsenic	ug/L	75-125	515		6	U	500	103		P
Barium	ug/L	75-125	646		140		500	101		P
Beryllium	ug/L	75-125	517		1	U	500	103		P
Boron	ug/L	75-125	582		78.8		500	101		P
Calcium	ug/L	75-125	21000		16300		5000	95.2		P
Chromium	ug/L	75-125	501		2.89	J	500	99.7		P
Cobalt	ug/L	75-125	515		1	U	500	103		P
Copper	ug/L	75-125	515		3	U	500	103		P
Iron	ug/L	75-125	6270		1460		5000	96.2		P
Magnesium	ug/L	75-125	9320		4290		5000	101		P
Manganese	ug/L	75-125	507		10.5		500	99.3		P
Molybdenum	ug/L	75-125	581		93.9		500	97.3		P
Potassium	ug/L	75-125	16400		11800		5000	92.1		P
Silica	mg/L		53.5		47.3		10.7	57.9	N/A	P
Sodium	ug/L		75800		71500		5000	85.7	N/A	P
Strontium	ug/L	75-125	609		107		500	101		P
Tin	ug/L	75-125	493		2.5	U	500	98.2		P
Vanadium	ug/L	75-125	493		4.21	J	500	97.9		P
Zinc	ug/L	75-125	509		12.7		500	99.3		P

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G7CM01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579008 **Spike ID:** 1200937548

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5340		238		5000	102		P
Arsenic	ug/L	75-125	515		6	U	500	103		P
Barium	ug/L	75-125	686		173		500	102		P
Beryllium	ug/L	75-125	513		1	U	500	103		P
Boron	ug/L	75-125	580		77		500	101		P
Calcium	ug/L		25900		20300		5000	112	N/A	P
Chromium	ug/L	75-125	499		1.27	J	500	99.6		P
Cobalt	ug/L	75-125	510		1	U	500	102		P
Copper	ug/L	75-125	516		3	U	500	103		P
Iron	ug/L	75-125	4970		93.3	J	5000	97.5		P
Magnesium	ug/L	75-125	10300		5100		5000	105		P
Manganese	ug/L	75-125	498		2	U	500	99.5		P
Molybdenum	ug/L	75-125	567		74.6		500	98.5		P
Potassium	ug/L	75-125	19800		14800		5000	100		P
Silica	mg/L	75-125	50.5		39.5		10.7	103		P
Sodium	ug/L		81400		74500		5000	138	N/A	P
Strontium	ug/L	75-125	641		136		500	101		P
Tin	ug/L	75-125	497		2.5	U	500	98.9		P
Vanadium	ug/L	75-125	495		3.08	J	500	98.5		P
Zinc	ug/L	75-125	507		4.72	J	500	101		P

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G3TM01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579005 **Spike ID:** 1200937683

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	105		0.5	U	100	105		MS
Cadmium	ug/L	75–125	5.39		0.1	U	5	108		MS
Lead	ug/L	75–125	19.9		0.5	U	20	98.8		MS
Nickel	ug/L	75–125	44.7		3.93		50	81.5		MS
Selenium	ug/L	75–125	11.3		2.5	U	10	102		MS
Silver	ug/L	75–125	46.6		0.2	U	50	93.2		MS
Thallium	ug/L	75–125	45.2		0.4	U	50	90.4		MS
Uranium	ug/L	75–125	54.8		1.23		50	107		MS

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579006 **Spike ID:** 1200937684

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	106		0.5	U	100	106		MS
Cadmium	ug/L	75–125	5.54		0.1	U	5	111		MS
Lead	ug/L	75–125	20.9		0.558	J	20	102		MS
Nickel	ug/L	75–125	53.5		10.1		50	87		MS
Selenium	ug/L	75–125	10.7		2.5	U	10	106		MS
Silver	ug/L	75–125	48.3		0.2	U	50	96.4		MS
Thallium	ug/L	75–125	47.1		0.4	U	50	94.1		MS
Uranium	ug/L	75–125	54.5		0.118	J	50	109		MS

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G57M01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579007 **Spike ID:** 1200937685

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	106		0.5	U	100	106		MS
Cadmium	ug/L	75–125	5.57		0.1	U	5	110		MS
Lead	ug/L	75–125	21.2		1	J	20	101		MS
Nickel	ug/L	75–125	44.9		4.29		50	81.2		MS
Selenium	ug/L	75–125	11.3		2.5	U	10	111		MS
Silver	ug/L	75–125	47.8		0.2	U	50	95.6		MS
Thallium	ug/L	75–125	45.6		0.4	U	50	91.1		MS
Uranium	ug/L	75–125	54.2		0.893		50	107		MS

METALS
-5a-

Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G7CM01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579008 **Spike ID:** 1200937686

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	104		0.5	U	100	104		MS
Cadmium	ug/L	75-125	5.34		0.1	U	5	106		MS
Lead	ug/L	75-125	19.8		0.5	U	20	98.5		MS
Nickel	ug/L	75-125	42.8		2.64		50	80.4		MS
Selenium	ug/L	75-125	10.9		2.5	U	10	95.7		MS
Silver	ug/L	75-125	47.1		0.2	U	50	94.1		MS
Thallium	ug/L	75-125	45.3		0.4	U	50	90.7		MS
Uranium	ug/L	75-125	54.2		0.974		50	106		MS

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G3TM01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579005 **Spike ID:** 1200937957

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.12		0.05	U	2	105		AV

METALS
–5a–

Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090GMC401S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579006 **Spike ID:** 1200937958

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.3		0.05	U	2	115		AV

METALS
-5a-

Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G57M01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579007 **Spike ID:** 1200937959

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.12		0.05	U	2	105		AV

METALS
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Matrix Spike Summary

SDG NO. 145579 **Client ID** GU05090G7CM01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 145579008 **Spike ID:** 1200937960

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.12		0.05	U	2	106		AV

Metals
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Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G3TM01D

Sample ID: 145579005 **Duplicate ID:** 1200937537 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/–200	137	J	139	J	.988		P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/–20%	148		142		4.33		P
Beryllium	ug/L		1	U	1	U			P
Boron	ug/L	+/–50	78.5		74.9		4.65		P
Calcium	ug/L	+/–20%	20400		19500		4.33		P
Chromium	ug/L	+/–5	1.37	J	1.63	J	17.2		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L	+/–100	62.5	J	59.2	J	5.37		P
Magnesium	ug/L	+/–20%	5120		4900		4.33		P
Manganese	ug/L		2	U	2	U			P
Molybdenum	ug/L	+/–20%	69.1		66.1		4.45		P
Potassium	ug/L	+/–20%	9560		9210		3.76		P
Silica	mg/L	+/–20%	37.8		35.6		6.2		P
Sodium	ug/L	+/–20%	89300		84700		5.26		P
Strontium	ug/L	+/–20%	134		128		4.38		P
Tin	ug/L		2.5	U	2.5	U			P
Vanadium	ug/L	+/–5	1.46	J	1.99	J	30.6		P
Zinc	ug/L	+/–10	4.49	J	3.65	J	20.8		P

Metals
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Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090GMC401D

Sample ID: 145579006 **Duplicate ID:** 1200937538 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/-200	413		420		1.77		P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/-5	20.1		20.9		4.16		P
Beryllium	ug/L		1	U	1	U			P
Boron	ug/L	+/-50	27.7	J	28.8	J	3.8		P
Calcium	ug/L	+/-20%	35600		36400		2.08		P
Chromium	ug/L	+/-20%	61.3		62.4		1.77		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L	+/-10	33.3		34.5		3.42		P
Iron	ug/L	+/-20%	507		525		3.33		P
Magnesium	ug/L	+/-20%	5620		5740		2.04		P
Manganese	ug/L	+/-10	9.25	J	9.42	J	1.86		P
Molybdenum	ug/L		2	U	2	U			P
Potassium	ug/L	+/-20%	831		847		1.89		P
Silica	mg/L	+/-20%	71		73.1		2.84		P
Sodium	ug/L	+/-20%	22600		23100		2.03		P
Strontium	ug/L	+/-20%	173		177		2.17		P
Tin	ug/L		2.5	U	2.5	U			P
Vanadium	ug/L	+/-5	1.32	J	1.55	J	15.8		P
Zinc	ug/L	+/-10	23.6		25.1		6.55		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G57M01D

Sample ID: 145579007 **Duplicate ID:** 1200937539 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/–20%	3230		3290		1.61		P
Arsenic	ug/L		6 U		6 U				P
Barium	ug/L	+/–20%	140		143		1.88		P
Beryllium	ug/L		1 U		1 U				P
Boron	ug/L	+/–50	78.8		80.4		2.03		P
Calcium	ug/L	+/–20%	16300		16600		1.8		P
Chromium	ug/L	+/–5	2.89 J		2.96 J		2.34		P
Cobalt	ug/L		1 U		1 U				P
Copper	ug/L		3 U		3 U				P
Iron	ug/L	+/–20%	1460		1490		1.49		P
Magnesium	ug/L	+/–20%	4290		4370		1.82		P
Manganese	ug/L	+/–10	10.5		10.6		.884		P
Molybdenum	ug/L	+/–20%	93.9		95.9		2.07		P
Potassium	ug/L	+/–20%	11800		12200		2.95		P
Silica	mg/L	+/–20%	47.3		47.7		.808		P
Sodium	ug/L	+/–20%	71500		73300		2.5		P
Strontium	ug/L	+/–20%	107		109		1.99		P
Tin	ug/L		2.5 U		2.5 U				P
Vanadium	ug/L	+/–5	4.21 J		4.26 J		1.26		P
Zinc	ug/L	+/–10	12.7		11.8		6.91		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G7CM01D

Sample ID: 145579008 **Duplicate ID:** 1200937540 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/–200	238		215		10.1		P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/–20%	173		177		1.91		P
Beryllium	ug/L		1	U	1	U			P
Boron	ug/L	+/–50	77		77.7		.883		P
Calcium	ug/L	+/–20%	20300		20700		1.75		P
Chromium	ug/L	+/–5	1.27	J	1.26	J	1.04		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L	+/–100	93.3	J	99.5	J	6.4		P
Magnesium	ug/L	+/–20%	5100		5190		1.83		P
Manganese	ug/L		2	U	2	U			P
Molybdenum	ug/L	+/–20%	74.6		75.5		1.2		P
Potassium	ug/L	+/–20%	14800		15000		1.37		P
Silica	mg/L	+/–20%	39.5		39.9		1.12		P
Sodium	ug/L	+/–20%	74500		75500		1.25		P
Strontium	ug/L	+/–20%	136		138		1.62		P
Tin	ug/L		2.5	U	2.5	U			P
Vanadium	ug/L	+/–5	3.08	J	3.03	J	1.75		P
Zinc	ug/L	+/–10	4.72	J	3.53	J	28.7		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G3TM01D

Sample ID: 145579005 **Duplicate ID:** 1200937675 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Cadmium	ug/L		0.1	U	0.1	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Nickel	ug/L	+/-2	3.93		3.87		1.51		MS
Selenium	ug/L		2.5	U	2.5	U			MS
Silver	ug/L		0.2	U	0.2	U			MS
Thallium	ug/L		0.4	U	0.4	U			MS
Uranium	ug/L	+/-20%	1.23		1.79		37.2	*	MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090GMC401D

Sample ID: 145579006 **Duplicate ID:** 1200937676 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Cadmium	ug/L		0.1	U	0.1	U			MS
Lead	ug/L	+/–2	0.558	J	0.594	J	6.25		MS
Nickel	ug/L	+/–20%	10.1		10.3		2.85		MS
Selenium	ug/L		2.5	U	2.5	U			MS
Silver	ug/L		0.2	U	0.2	U			MS
Thallium	ug/L		0.4	U	0.4	U			MS
Uranium	ug/L	+/–.2	0.118	J	0.115	J	2.58		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G57M01D

Sample ID: 145579007 **Duplicate ID:** 1200937677 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Cadmium	ug/L		0.1	U	0.13	J	200		MS
Lead	ug/L	+/–2	1	J	1.14	J	13.3		MS
Nickel	ug/L	+/–2	4.29		4.18		2.74		MS
Selenium	ug/L		2.5	U	2.5	U			MS
Silver	ug/L		0.2	U	0.2	U			MS
Thallium	ug/L		0.4	U	0.4	U			MS
Uranium	ug/L	+/–.2	0.893		0.874		2.15		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G7CM01D

Sample ID: 145579008 **Duplicate ID:** 1200937678 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Cadmium	ug/L		0.1	U	0.1	U			MS
Lead	ug/L		0.5	U	0.5	U			MS
Nickel	ug/L	+/–2	2.64		2.8		5.89		MS
Selenium	ug/L		2.5	U	2.5	U			MS
Silver	ug/L		0.2	U	0.2	U			MS
Thallium	ug/L		0.4	U	0.4	U			MS
Uranium	ug/L	+/–.2	0.974		1.55		45.6	*	MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G3TM01D

Sample ID: 145579005 **Duplicate ID:** 1200937949 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090GMC401D

Sample ID: 145579006 **Duplicate ID:** 1200937950 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G57M01D

Sample ID: 145579007 **Duplicate ID:** 1200937951 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 145579

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GU05090G7CM01D

Sample ID: 145579008 **Duplicate ID:** 1200937952 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

METALS
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Laboratory Control Sample Summary

SDG NO. 145579
Contract: ESHL00701
Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200937549								
	Aluminum	ug/L	5000	5260		105	80–120	P
	Arsenic	ug/L	500	525		105	80–120	P
	Barium	ug/L	500	519		104	80–120	P
	Beryllium	ug/L	500	526		105	80–120	P
	Boron	ug/L	500	511		102	80–120	P
	Calcium	ug/L	5000	5270		105	80–120	P
	Chromium	ug/L	500	517		103	80–120	P
	Cobalt	ug/L	500	527		105	80–120	P
	Copper	ug/L	500	526		105	80–120	P
	Iron	ug/L	5000	4890		97.8	80–120	P
	Magnesium	ug/L	5000	5220		104	80–120	P
	Manganese	ug/L	500	508		102	80–120	P
	Molybdenum	ug/L	500	501		100	80–120	P
	Potassium	ug/L	5000	4930		98.6	80–120	P
	Silica	mg/L	10.7	10.9		102	80–120	P
	Sodium	ug/L	5000	5110		102	80–120	P
	Strontium	ug/L	500	519		104	80–120	P
	Tin	ug/L	500	506		101	80–120	P
	Vanadium	ug/L	500	503		101	80–120	P
	Zinc	ug/L	500	514		103	80–120	P

METALS
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Laboratory Control Sample Summary

SDG NO. 145579
Contract: ESHL00701
Aqueous LCS Source: o2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200937687								
	Antimony	ug/L	50	52		104	80–120	MS
	Cadmium	ug/L	50	48.5		97	80–120	MS
	Lead	ug/L	50	50		100	80–120	MS
	Nickel	ug/L	50	43.3		86.6	80–120	MS
	Selenium	ug/L	50	53.5		107	80–120	MS
	Silver	ug/L	50	47.7		95.5	80–120	MS
	Thallium	ug/L	50	47		93.9	80–120	MS
	Uranium	ug/L	50	51.5		103	80–120	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 145579
Contract: ESHL00701
Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1200937961								
	Mercury	ug/L	2	2.23		111	85–115	AV

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G3TM01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579005 **Serial Dilution ID:** 1200937541

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	137	J	340	U	100			P
Arsenic	6	U	30	U				P
Barium	148		145		2.03		10	P
Beryllium	1	U	5	U				P
Boron	78.5		77.5	J	1.27			P
Calcium	20400		19950		2.21		10	P
Chromium	1.37	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	62.5	J	90	U	100			P
Magnesium	5120		4995		2.44		10	P
Manganese	2	U	10	U				P
Molybdenum	69.1		69		.145			P
Potassium	9560		9350		2.2		10	P
Silica	37800		36650		3.04		10	P
Sodium	89300		81500		8.73		10	P
Strontium	134		130.5		2.61		10	P
Tin	2.5	U	12.5	U				P
Vanadium	1.46	J	5	U	100			P
Zinc	4.49	J	10	U	100			P

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579006 **Serial Dilution ID:** 1200937542

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	413		468.5	J	13.4			P
Arsenic	6	U	30	U				P
Barium	20.1		21	J	4.48			P
Beryllium	1	U	5	U				P
Boron	27.7	J	50	U	100			P
Calcium	35600		35950		.983		10	P
Chromium	61.3		65		6.04		10	P
Cobalt	1	U	5	U				P
Copper	33.3		31.7	J	4.8			P
Iron	507		510		.592			P
Magnesium	5620		5650		.534		10	P
Manganese	9.25	J	10	U	100			P
Molybdenum	2	U	10	U				P
Potassium	831		885		6.5			P
Silica	71000		72000		1.41		10	P
Sodium	22600		21400		5.31		10	P
Strontium	173		175		1.16		10	P
Tin	2.5	U	12.5	U				P
Vanadium	1.32	J	5	U	100			P
Zinc	23.6		23.1	J	2.12			P

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G57M01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579007 **Serial Dilution ID:** 1200937543

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	3230		3270		1.24			P
Arsenic	6	U	30	U				P
Barium	140		141.5		1.07		10	P
Beryllium	1	U	5	U				P
Boron	78.8		78.5	J	.381			P
Calcium	16300		16300		0		10	P
Chromium	2.89	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	1460		1460		0		10	P
Magnesium	4290		4290		0		10	P
Manganese	10.5		10.7	J	1.9			P
Molybdenum	93.9		95		1.17			P
Potassium	11800		12100		2.54		10	P
Silica	47300		47100		.423		10	P
Sodium	71500		68000		4.9		10	P
Strontium	107		108		.935		10	P
Tin	2.5	U	12.5	U				P
Vanadium	4.21	J	6.4	J	52			P
Zinc	12.7		11.6	J	8.66			P

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G7CM01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579008 **Serial Dilution ID:** 1200937544

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	238		340	U	100			P
Arsenic	6	U	30	U				P
Barium	173		174.5		.867		10	P
Beryllium	1	U	5	U				P
Boron	77		73	J	5.19			P
Calcium	20300		20350		.246		10	P
Chromium	1.27	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	93.3	J	94.5	J	1.29			P
Magnesium	5100		5050		.98		10	P
Manganese	2	U	10	U				P
Molybdenum	74.6		74		.804			P
Potassium	14800		15050		1.69		10	P
Silica	39500		39750		.633		10	P
Sodium	74500		70000		6.04		10	P
Strontium	136		136		0		10	P
Tin	2.5	U	12.5	U				P
Vanadium	3.08	J	5	U	100			P
Zinc	4.72	J	10	U	100			P

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G3TM01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579005 **Serial Dilution ID:** 1200937679

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	.5	U	2.5	U				MS
Nickel	3.93		4.205	J	7			MS
Selenium	2.5	U	12.5	U				MS
Silver	.2	U	1	U				MS
Thallium	.4	U	2	U				MS
Uranium	1.23		1.26		2.44			MS

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579006 **Serial Dilution ID:** 1200937680

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	.558	J	2.5	U	100			MS
Nickel	10.1		11.1		9.9			MS
Selenium	2.5	U	12.5	U				MS
Silver	.2	U	1	U				MS
Thallium	.4	U	2	U				MS
Uranium	.118	J	.25	U	100			MS

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G57M01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579007 **Serial Dilution ID:** 1200937681

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	1	J	2.5	U	100			MS
Nickel	4.29		4.25	J	.932			MS
Selenium	2.5	U	12.5	U				MS
Silver	.2	U	1	U				MS
Thallium	.4	U	2	U				MS
Uranium	.893		.92	J	3.02			MS

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G7CM01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579008 **Serial Dilution ID:** 1200937682

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	.5	U	2.5	U				MS
Nickel	2.64		2.87	J	8.71			MS
Selenium	2.5	U	12.5	U				MS
Silver	.2	U	1	U				MS
Thallium	.4	U	2	U				MS
Uranium	.974		1.03		5.75			MS

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G3TM01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579005 **Serial Dilution ID:** 1200937953

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090GMC401L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579006 **Serial Dilution ID:** 1200937954

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G57M01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579007 **Serial Dilution ID:** 1200937955

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
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Serial Dilution Sample Summary

SDG NO. 145579 **Client ID** GU05090G7CM01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 145579008 **Serial Dilution ID:** 1200937956

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 145579 **Method Type:** P

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	463363						
1200937536	MB for batch 463363	MB	GROUND WATER	03–OCT–05	50mL	50mL	
1200937549	LCS for batch 463363	LCS	GROUND WATER	03–OCT–05	50mL	50mL	
1200937545	GU05090G3TM01S	MS	GROUND WATER	03–OCT–05	50mL	50mL	
1200937546	GU05090GMC401S	MS	GROUND WATER	03–OCT–05	50mL	50mL	
1200937547	GU05090G57M01S	MS	GROUND WATER	03–OCT–05	50mL	50mL	
1200937548	GU05090G7CM01S	MS	GROUND WATER	03–OCT–05	50mL	50mL	
1200937537	GU05090G3TM01D	DUP	GROUND WATER	03–OCT–05	50mL	50mL	
1200937538	GU05090GMC401D	DUP	GROUND WATER	03–OCT–05	50mL	50mL	
1200937539	GU05090G57M01D	DUP	GROUND WATER	03–OCT–05	50mL	50mL	
1200937540	GU05090G7CM01D	DUP	GROUND WATER	03–OCT–05	50mL	50mL	
145579001	GF05090G3TM01	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	
145579002	GF05090GMC401	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	
145579003	GF05090G57M01	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	
145579004	GF05090G7CM01	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	
145579005	GU05090G3TM01	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	
145579006	GU05090GMC401	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	
145579007	GU05090G57M01	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	
145579008	GU05090G7CM01	SAMPLE	GROUND WATER	03–OCT–05	50mL	50mL	

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 145579 **Method Type:** MS

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	463409						
1200937674	MB for batch 463409	MB	GROUND WATER	02-OCT-05	50mL	50mL	
1200937687	LCS for batch 463409	LCS	GROUND WATER	02-OCT-05	50mL	50mL	
1200937683	GU05090G3TM01S	MS	GROUND WATER	02-OCT-05	50mL	50mL	
1200937684	GU05090GMC401S	MS	GROUND WATER	02-OCT-05	50mL	50mL	
1200937685	GU05090G57M01S	MS	GROUND WATER	02-OCT-05	50mL	50mL	
1200937686	GU05090G7CM01S	MS	GROUND WATER	02-OCT-05	50mL	50mL	
1200937675	GU05090G3TM01D	DUP	GROUND WATER	02-OCT-05	50mL	50mL	
1200937676	GU05090GMC401D	DUP	GROUND WATER	02-OCT-05	50mL	50mL	
1200937677	GU05090G57M01D	DUP	GROUND WATER	02-OCT-05	50mL	50mL	
1200937678	GU05090G7CM01D	DUP	GROUND WATER	02-OCT-05	50mL	50mL	
145579001	GF05090G3TM01	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	
145579002	GF05090GMC401	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	
145579003	GF05090G57M01	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	
145579004	GF05090G7CM01	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	
145579005	GU05090G3TM01	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	
145579006	GU05090GMC401	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	
145579007	GU05090G57M01	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	
145579008	GU05090G7CM01	SAMPLE	GROUND WATER	02-OCT-05	50mL	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 145579 **Method Type:** AV

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	463519						
1200937948	MB for batch 463519	MB	GROUND WATER	20–SEP–05	20mL	20mL	
1200937961	LCS for batch 463519	LCS	GROUND WATER	20–SEP–05	20mL	20mL	
1200937957	GU05090G3TM01S	MS	GROUND WATER	20–SEP–05	20mL	20mL	
1200937958	GU05090GMC401S	MS	GROUND WATER	20–SEP–05	20mL	20mL	
1200937959	GU05090G57M01S	MS	GROUND WATER	20–SEP–05	20mL	20mL	
1200937960	GU05090G7CM01S	MS	GROUND WATER	20–SEP–05	20mL	20mL	
1200937949	GU05090G3TM01D	DUP	GROUND WATER	20–SEP–05	20mL	20mL	
1200937950	GU05090GMC401D	DUP	GROUND WATER	20–SEP–05	20mL	20mL	
1200937951	GU05090G57M01D	DUP	GROUND WATER	20–SEP–05	20mL	20mL	
1200937952	GU05090G7CM01D	DUP	GROUND WATER	20–SEP–05	20mL	20mL	
145579001	GF05090G3TM01	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	
145579002	GF05090GMC401	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	
145579003	GF05090G57M01	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	
145579004	GF05090G7CM01	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	
145579005	GU05090G3TM01	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	
145579006	GU05090GMC401	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	
145579007	GU05090G57M01	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	
145579008	GU05090G7CM01	SAMPLE	GROUND WATER	20–SEP–05	20mL	20mL	

Metals
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Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: TRACE2
Start Date: 03–OCT–05
End Date: 04–OCT–05
Client Sdg: 145579
Method P
Data File: 100305–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
S0	1	13:57	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
S0.1	1	14:03	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
S0.5	1	14:08	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
SCAL	1	14:14	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
S10	1	14:20	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICV01	1	14:28	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICB01	1	14:35	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
PQL01	1	14:41	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICSA01	1	14:47	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICSAB01	1	14:52	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCV01	1	15:06	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB01	1	15:12	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	15:18																													
ZZZZZZ	1	15:24																													
ZZZZZZ	1	15:30																													
ZZZZZZ	1	15:36																													
ZZZZZZ	1	15:42																													
ZZZZZZ	1	15:48																													
ZZZZZZ	1	15:54																													
CCV02	1	16:00	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB02	1	16:05	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCV03	1	16:47	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB03	1	16:53	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	16:59																													
ZZZZZZ	1	17:05																													
ZZZZZZ	1	17:11																													
ZZZZZZ	1	17:17																													
ZZZZZZ	1	17:23																													
ZZZZZZ	5	17:28																													
CCV04	1	17:34	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB04	1	17:40	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	17:46																													
ZZZZZZ	1	17:52																													
ZZZZZZ	1	17:58																													
ZZZZZZ	1	18:04																													
ZZZZZZ	1	18:10																													
ZZZZZZ	1	18:16																													
ZZZZZZ	1	18:22																													
ZZZZZZ	5	18:28																													
ZZZZZZ	1	18:33																													

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																												
CCV05	1	18:39	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB05	1	18:45	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	18:51																														
ZZZZZZ	1	18:57																														
ZZZZZZ	1	19:03																														
ZZZZZZ	1	19:09																														
ZZZZZZ	1	19:15																														
ZZZZZZ	1	19:21																														
ZZZZZZ	1	19:27																														
ZZZZZZ	5	19:32																														
ZZZZZZ	1	19:38																														
CCV06	1	19:44	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB06	1	19:50	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	19:56																														
ZZZZZZ	1	20:02																														
ZZZZZZ	1	20:08																														
ZZZZZZ	1	20:14																														
ZZZZZZ	1	20:20																														
ZZZZZZ	1	20:26																														
ZZZZZZ	5	20:32																														
ZZZZZZ	1	20:37																														
ZZZZZZ	1	20:43																														
ZZZZZZ	1	20:49																														
CCV07	1	20:55	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB07	1	21:01	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	21:07																														
ZZZZZZ	1	21:13																														
ZZZZZZ	1	21:19																														
ZZZZZZ	1	21:25																														
ZZZZZZ	1	21:31																														
ZZZZZZ	1	21:37																														
ZZZZZZ	1	21:42																														
ZZZZZZ	1	21:48																														
ZZZZZZ	1	21:54																														
ZZZZZZ	1	22:00																														
CCV08	1	22:06	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB08	1	22:12	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	22:18																														
ZZZZZZ	1	22:24																														
ZZZZZZ	1	22:30																														

Metals
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Analysis Run Log

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
ZZZZZZ	1	22:36																														
ZZZZZZ	1	22:42																														
ZZZZZZ	5	22:48																														
ZZZZZZ	1	22:53																														
ZZZZZZ	1	22:59																														
ZZZZZZ	1	23:05																														
CCV09	1	23:11	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB09	1	23:17	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	23:23																														
ZZZZZZ	1	23:29																														
ZZZZZZ	1	23:35																														
ZZZZZZ	1	23:41																														
ZZZZZZ	1	23:47																														
ZZZZZZ	5	23:53																														
ZZZZZZ	1	23:59																														
ZZZZZZ	1	00:04																														
ZZZZZZ	1	00:10																														
ZZZZZZ	1	00:16																														
CCV10	1	00:22	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB10	1	00:28	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	00:34																														
ZZZZZZ	1	00:40																														
ZZZZZZ	1	00:46																														
ZZZZZZ	1	00:52																														
ZZZZZZ	1	00:58																														
ZZZZZZ	1	01:04																														
ZZZZZZ	5	01:10																														
CCV11	1	01:16	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB11	1	01:22	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937536	1	01:27	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937549	1	01:33	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579001	1	01:39	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579002	1	01:45	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579003	1	01:51	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579004	1	01:57	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579005	1	02:03	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCV12	1	02:09	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB12	1	02:15	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937537	1	02:21	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937545	1	02:27	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																														
1200937541	5	02:33	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579006	1	02:39	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937538	1	02:45	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937546	1	02:50	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937542	5	02:56	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCV13	1	03:02	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB13	1	03:08	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579007	1	03:14	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937539	1	03:20	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937547	1	03:26	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937543	5	03:32	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
145579008	1	03:38	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937540	1	03:44	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937548	1	03:50	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1200937544	5	03:56	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCV14	1	04:02	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB14	1	04:08	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X

Metals
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Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 03-OCT-05
End Date: 04-OCT-05
Client Sdg: 145579
Method MS
Data File: 051003-3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
Blank	1	22:21:00		X					X							X					X		X		X			X		X		
Standard 1	1	22:25:00		X					X							X					X		X		X			X		X		
Standard 2	1	22:28:00		X					X							X					X		X		X			X		X		
ICV01	1	22:32:00		X					X							X					X		X		X			X		X		
ICB01	1	22:36:00		X					X							X					X		X		X			X		X		
CRDL01	1	22:39:00		X					X							X					X		X		X			X		X		
ICSA01	1	22:43:00		X					X							X					X		X		X			X		X		
ICSAB01	1	22:47:00		X					X							X					X		X		X			X		X		
CCV01	1	22:50:00		X					X							X					X		X		X			X		X		
CCB01	1	22:54:00		X					X							X					X		X		X			X		X		
ZZZZZZ	1	22:57:00																														
ZZZZZZ	1	23:01:00																														
ZZZZZZ	1	23:05:00																														
ZZZZZZ	1	23:08:00																														
ZZZZZZ	1	23:12:00																														
ZZZZZZ	5	23:16:00																														
CCV02	1	23:19:00		X					X							X					X		X		X			X		X		
CCB02	1	23:23:00		X					X							X					X		X		X			X		X		
ZZZZZZ	1	23:27:00																														
ZZZZZZ	1	23:30:00																														
ZZZZZZ	1	23:34:00																														
ZZZZZZ	1	23:37:00																														
ZZZZZZ	1	23:41:00																														
CCV03	1	23:45:00		X					X							X					X		X		X			X		X		
CCB03	1	23:48:00		X					X							X					X		X		X			X		X		
ZZZZZZ	1	23:52:00																														
ZZZZZZ	1	23:56:00																														
ZZZZZZ	1	23:59:00																														
ZZZZZZ	1	00:03:00																														
ZZZZZZ	1	00:07:00																														
ZZZZZZ	1	00:10:00																														
ZZZZZZ	1	00:14:00																														
ZZZZZZ	5	00:18:00																														
ZZZZZZ	1	00:21:00																														
CCV04	1	00:25:00		X					X							X					X		X		X			X		X		
CCB04	1	00:28:00		X					X							X					X		X		X			X		X		
1200937674	1	00:32:00		X					X							X					X		X		X			X		X		
1200937687	1	00:36:00		X					X							X					X		X		X			X		X		
145579001	1	00:40:00		X					X							X					X		X		X			X		X		
145579002	1	00:43:00		X					X							X					X		X		X			X		X		

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																														
145579003	1	00:47:00		X					X							X					X		X		X			X		X		
145579004	1	00:51:00		X					X							X					X		X		X			X		X		
145579005	1	00:54:00		X					X							X					X		X		X			X		X		
1200937675	1	00:58:00		X					X							X					X		X		X			X		X		
1200937683	1	01:02:00		X					X							X					X		X		X			X		X		
1200937679	5	01:05:00		X					X							X					X		X		X			X		X		
CCV05	1	01:09:00		X					X							X					X		X		X			X		X		
CCB05	1	01:13:00		X					X							X					X		X		X			X		X		
145579006	1	01:16:00		X					X							X					X		X		X			X		X		
1200937676	1	01:20:00		X					X							X					X		X		X			X		X		
1200937684	1	01:24:00		X					X							X					X		X		X			X		X		
1200937680	5	01:27:00		X					X							X					X		X		X			X		X		
145579007	1	01:31:00		X					X							X					X		X		X			X		X		
1200937677	1	01:35:00		X					X							X					X		X		X			X		X		
1200937685	1	01:38:00		X					X							X					X		X		X			X		X		
1200937681	5	01:42:00		X					X							X					X		X		X			X		X		
CCV06	1	01:46:00		X					X							X					X		X		X			X		X		
CCB06	1	01:49:00		X					X							X					X		X		X			X		X		
145579008	1	01:53:00		X					X							X					X		X		X			X		X		
1200937678	1	01:57:00		X					X							X					X		X		X			X		X		
1200937686	1	02:00:00		X					X							X					X		X		X			X		X		
1200937682	5	02:04:00		X					X							X					X		X		X			X		X		
CCV07	1	02:08:00		X					X							X					X		X		X			X		X		
CCB07	1	02:12:00		X					X							X					X		X		X			X		X		

Metals
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Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: MER536
Start Date: 21-SEP-05
End Date: 21-SEP-05
Client Sdg: 145579
Method AV
Data File: 092105W1-2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
SCalib Blank	1	10:44																	X													
S0.2	1	10:46																	X													
S0.5	1	10:48																	X													
S2.0	1	10:50																	X													
S5.0	1	10:52																	X													
S10	1	10:54																	X													
ICV01	1	10:56																	X													
ICB01	1	10:58																	X													
CRDL01	1	11:00																	X													
CCV01	1	11:02																	X													
CCB01	1	11:04																	X													
1200937948	1	11:06																	X													
1200937961	1	11:08																	X													
ZZZZZZ	1	11:10																														
145579001	1	11:12																	X													
145579002	1	11:14																	X													
145579003	1	11:16																	X													
145579004	1	11:18																	X													
145579005	1	11:20																	X													
1200937949	1	11:22																	X													
1200937957	1	11:24																	X													
CCV02	1	11:26																	X													
CCB02	1	11:28																	X													
1200937953	5	11:30																	X													
145579006	1	11:32																	X													
1200937950	1	11:34																	X													
1200937958	1	11:36																	X													
1200937954	5	11:38																	X													
145579007	1	11:40																	X													
1200937951	1	11:42																	X													
1200937959	1	11:44																	X													
1200937955	5	11:46																	X													
145579008	1	11:48																	X													
CCV03	1	11:50																	X													
CCB03	1	11:52																	X													
1200937952	1	11:54																	X													
1200937960	1	11:56																	X													
1200937956	5	11:58																	X													
ZZZZZZ	1	12:00																														
ZZZZZZ	1	12:02																														

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																													
ZZZZZZ	1	12:04																													
ZZZZZZ	1	12:06																													
ZZZZZZ	1	12:08																													
ZZZZZZ	5	12:10																													
ZZZZZZ	1	12:12																													
CCV04	1	12:14																X													
CCB04	1	12:16																X													

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 145579

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Aluminum	308.215	68.0	200
	Antimony	206.838	4.0	10
	Arsenic	193.696	6.0	15
	Barium	493.409	1.0	5
	Beryllium	313.042	1.0	5
	Boron	249.678	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	36.0	100
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.754	3.0	10
	Iron	259.94	18.0	100
	Lead	220.353	2.5	10
	Magnesium	279.078	85.0	300
	Manganese	257.61	2.0	10
	Molybdenum	202.03	2.0	10
	Nickel	231.604	1.0	5
	Potassium	766.491	50.0	150
	Selenium	196.026	6.0	15
	Silica		32.0	213
	Silver	328.068	1.0	5
	Sodium	588.995	45.0	150
	Strontium	421.552	1.0	5

METALS
-10-
Instrument Detection Limits

SDG NO. 145579

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Thallium	190.864	5.0	20
	Tin	283.991	2.5	10
	Uranium	409.019	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.856	2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 145579

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Aluminum		5.0	15
	Antimony		0.5	2
	Arsenic		1.5	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		20.0	100
	Chromium		1.0	3
	Cobalt		0.1	1
	Copper		0.2	1
	Iron		10.0	25
	Lead		0.5	2
	Magnesium		5.0	15
	Manganese		1.0	5
	Molybdenum		0.1	.5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Strontium		2.0	10
	Thallium		0.4	1

METALS
–10–
Instrument Detection Limits

SDG NO. 145579

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Tin		1.0	5
	Uranium		0.05	.2
	Vanadium		2.0	30
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 145579

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY	Mercury		0.05	.2

METALS
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Interelement Correction Factors

Parmname Wavelength

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: TRACE2

GEL Job No: 145579

Effective Dates: 01-AUG-05

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.352	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	-0.00001	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	-0.00040	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 145579
Contract: ESHL00701
Instrument: TRACE2 **Effective Dates:** 01-AUG-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Calcium	Chromium	Cobalt
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00000	0.00000	0.00241	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	-0.00005	0.00013
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00106
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.00051	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	-0.00135
Lead	220.352	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	-0.00065
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	0.00000	0.00000	0.00008	-0.00021
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00001	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	-0.00252
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 145579
Contract: ESHL00701
Instrument: TRACE2 **Effective Dates:** 01-AUG-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Copper	Iron	Lead	Magnesium	Manganese
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00006	0.00000	0.00000	0.00000
Arsenic	189.042	-0.00014	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00002	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	-0.00093
Cobalt	228.616	0.00000	0.00002	0.00000	0.00000	0.00000
Copper	324.753	0.00000	-0.00024	0.00000	0.00000	0.00000
Lead	220.352	0.00000	0.00003	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00002	0.00000	0.00001	0.00000
Nickel	231.604	0.00000	0.00002	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00010	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	-0.00027	0.00000	0.00000	0.00103
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00086	0.00000	0.00000	-0.00057
Vanadium	292.402	0.00000	0.00003	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00005	0.00000	0.00003	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: TRACE2
GEL Job No: 145579
Effective Dates: 01-AUG-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Molybdenum	Nickel	Phosphorous	Potassium	Selenium
Aluminum	308.215	-0.01269	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	-0.00708	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00026	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.753	0.00020	0.00000	0.00000	0.00000	0.00000
Lead	220.352	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.00051	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	-0.00044	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 145579
Contract: ESHL00701
Instrument: TRACE2 **Effective Dates:** 01-AUG-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Silicon	Silver	Sodium	Strontium	Sulfur
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.352	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00011	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: TRACE2
GEL Job No: 145579
Effective Dates: 01–AUG–05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Thallium	Tin	Titanium	Uranium	Vanadium
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.02412
Antimony	206.838	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	–0.00018	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00017
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00121	0.00000
Cobalt	228.616	0.00000	0.00000	0.00181	0.00012	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00089	0.00000
Lead	220.352	0.00000	0.00000	–0.00058	0.00050	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00424	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	0.00000	0.00066	–0.00025	–0.00019
Silver	328.068	0.00000	0.00000	0.00000	0.00025	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	–0.00144	–0.00043	–0.00190
Tin	189.989	0.00000	0.00000	–0.00604	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	–0.00581
Vanadium	292.402	0.00000	0.00000	0.00180	0.00020	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
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Interelement Correction Factors

Lab Code: GEL
GEL Job No: 145579
Contract: ESHL00701
Instrument: TRACE2
Effective Dates: 01-AUG-05
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Zinc
Parmname	Wavelength	
Aluminum	308.215	0.00000
Antimony	206.838	0.00000
Arsenic	189.042	0.00000
Beryllium	313.042	0.00000
Boron	249.678	0.00000
Cadmium	226.502	0.00000
Chromium	267.716	0.00000
Cobalt	228.616	0.00000
Copper	324.753	0.00000
Lead	220.352	0.00000
Magnesium	279.078	0.00000
Manganese	257.61	0.00000
Nickel	231.604	0.00000
Phosphorous	178.287	0.00000
Selenium	196.021	0.00000
Silver	328.068	0.00000
Strontium	421.552	0.00000
Thallium	190.864	0.00000
Tin	189.989	0.00000
Uranium	385.958	0.00000
Vanadium	292.402	0.00000
Zinc	213.858	0.00000

METALS
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Linear Ranges

SDG NO. 145579

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID TRACE2

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		500000	ug/L	01-AUG-05
Antimony		50000	ug/L	01-AUG-05
Arsenic		50000	ug/L	01-AUG-05
Barium		15000	ug/L	01-AUG-05
Beryllium		10000	ug/L	01-AUG-05
Boron		50000	ug/L	01-AUG-05
Cadmium		25000	ug/L	01-AUG-05
Calcium		500000	ug/L	01-AUG-05
Chromium		50000	ug/L	01-AUG-05
Cobalt		50000	ug/L	01-AUG-05
Copper		25000	ug/L	01-AUG-05
Iron		500000	ug/L	01-AUG-05
Lead		50000	ug/L	01-AUG-05
Magnesium		500000	ug/L	01-AUG-05
Manganese		10000	ug/L	01-AUG-05
Molybdenum		50000	ug/L	01-AUG-05
Nickel		50000	ug/L	01-AUG-05
Potassium		50000	ug/L	01-AUG-05
Selenium		50000	ug/L	01-AUG-05
Silica		107000	ug/L	01-AUG-05
Silver		2000	ug/L	01-AUG-05
Sodium		200000	ug/L	01-AUG-05
Strontium		10000	ug/L	01-AUG-05
Thallium		50000	ug/L	01-AUG-05
Tin		50000	ug/L	01-AUG-05
Uranium		50000	ug/L	01-AUG-05
Vanadium		50000	ug/L	01-AUG-05
Zinc		5000	ug/L	01-AUG-05

METALS
-12-
Linear Ranges

SDG NO. 145579

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		100000	ug/L	01-AUG-05
Antimony		10000	ug/L	01-AUG-05
Arsenic		1000	ug/L	01-AUG-05
Barium		10000	ug/L	01-AUG-05
Beryllium		10000	ug/L	01-AUG-05
Boron		2000	ug/L	01-AUG-05
Cadmium		2000	ug/L	01-AUG-05
Calcium		100000	ug/L	01-AUG-05
Chromium		10000	ug/L	01-AUG-05
Cobalt		10000	ug/L	01-AUG-05
Copper		10000	ug/L	01-AUG-05
Iron		200000	ug/L	01-AUG-05
Lead		10000	ug/L	01-AUG-05
Magnesium		100000	ug/L	01-AUG-05
Manganese		10000	ug/L	01-AUG-05
Molybdenum		10000	ug/L	01-AUG-05
Nickel		10000	ug/L	01-AUG-05
Potassium		100000	ug/L	01-AUG-05
Selenium		1000	ug/L	01-AUG-05
Silver		500	ug/L	01-AUG-05
Sodium		100000	ug/L	01-AUG-05
Strontium		10000	ug/L	01-AUG-05
Thallium		10000	ug/L	01-AUG-05
Tin		10000	ug/L	01-AUG-05
Uranium		10000	ug/L	01-AUG-05
Vanadium		10000	ug/L	01-AUG-05
Zinc		10000	ug/L	01-AUG-05

Raw Data

Method: TRACE2 Standard: S0
Run Time: 10/03/05 13:57:05

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Avge	-.0000	.0025	.0001	.0024	.0005	.0004	.0005
SDev	.0002	.0001	.0006	.0004	.0000	.0001	.0000
%RSD	966.6	2.164	933.4	15.51	2.456	12.11	2.735
#1	-.0000	.0025	-.0001	.0028	.0005	.0005	.0005
#2	.0001	.0025	-.0005	.0023	.0005	.0004	.0005
#3	-.0002	.0026	.0007	.0020	.0005	.0004	.0005

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	Fe_	K_7664
Avge	.0003	-.0002	.0004	.0037	-.0001	.0015	.0665
SDev	.0005	.0002	.0003	.0001	.0001	.0005	.0027
%RSD	151.7	83.41	79.88	1.686	88.10	32.08	4.125
#1	.0002	-.0001	.0007	.0036	-.0002	.0020	.0667
#2	-.0001	-.0001	.0001	.0037	-.0002	.0011	.0637
#3	.0009	-.0004	.0004	.0037	.0000	.0014	.0692

Elem	Mg_279	Mn_257	Mo_202	Na_	Na_	Ni_231	Sb_206
Avge	.0002	.0001	-.0001	.0001	-.9698	.0021	-.0003
SDev	.0001	.0001	.0003	.0008	.0058	.0003	.0000
%RSD	79.66	138.0	491.7	824.3	.6024	12.16	3.772
#1	.0003	.0001	-.0003	-.0007	-.9737	.0024	-.0003
#2	.0000	.0000	.0002	-.0000	-.9725	.0020	-.0004
#3	.0002	.0000	-.0001	.0010	-.9631	.0020	-.0003

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Avge	-.0002	-.0009	-.0015	.0157	.0000	.0005	.0032
SDev	.0001	.0001	.0004	.0001	.0001	.0001	.0009
%RSD	82.07	9.332	23.51	.4934	228.9	18.25	27.16
#1	-.0000	-.0008	-.0011	.0157	.0001	.0005	.0041
#2	-.0003	-.0010	-.0018	.0156	.0000	.0004	.0023
#3	-.0002	-.0010	-.0016	.0158	-.0000	.0006	.0032

Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Avge	.0107	.0107	.0019	.0008	-.0004	-.0014	-.0015
SDev	.0002	.0002	.0001	.0054	.0006	.0003	.0009
%RSD	1.452	1.452	7.631	700.7	148.2	19.09	57.24
#1	.0109	.0109	.0020	-.0007	-.0000	-.0015	-.0010
#2	.0106	.0106	.0018	-.0037	-.0001	-.0015	-.0010
#3	.0107	.0107	.0021	.0068	-.0011	-.0011	-.0025

Method: TRACE2 Standard: S0.1
Run Time: 10/03/05 14:03:00

Elem	Ag_328	As_189	B_2496	Ba_493	Be_313	Cd_226	Co_228
Avge	.0733	.0420	.0526	.1315	.3029	.6724	.1460
SDev	.0004	.0004	.0005	.0008	.0019	.0042	.0009
%RSD	.6045	.8515	.9178	.5871	.6326	.6284	.6479
#1	.0728	.0418	.0523	.1312	.3010	.6712	.1456
#2	.0736	.0419	.0532	.1324	.3048	.6770	.1471
#3	.0735	.0424	.0524	.1309	.3028	.6688	.1454

Elem	Cr_267	Cu_324	K_7664	Mn_257	Mo_202	Ni_231	Sb_206
Avge	.1265	.0558	.8475	.1410	.0468	.1497	.0240
SDev	.0005	.0003	.0047	.0007	.0001	.0008	.0009
%RSD	.3714	.5280	.5514	.4983	.2494	.5566	3.973
#1	.1264	.0554	.8442	.1411	.0467	.1488	.0229
#2	.1270	.0559	.8528	.1417	.0467	.1498	.0245
#3	.1261	.0560	.8455	.1403	.0469	.1505	.0246

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Avge	.0679	.3395	.0251	.0183	.0352	.0641	.1117
SDev	.0009	.0027	.0008	.0001	.0003	.0005	.0020
%RSD	1.363	.7963	3.263	.6799	.7002	.7776	1.791
#1	.0668	.3365	.0255	.0182	.0353	.0638	.1135
#2	.0684	.3419	.0242	.0182	.0353	.0646	.1122
#3	.0684	.3400	.0256	.0184	.0349	.0637	.1095

Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Avge	.0773	.0773	.6941	.2310	.0747	.0811	.0494
SDev	.0007	.0007	.0036	.0092	.0008	.0020	.0019
%RSD	.8603	.8603	.5218	3.981	1.039	2.463	3.928
#1	.0766	.0766	.6909	.2240	.0750	.0803	.0508
#2	.0775	.0775	.6980	.2414	.0753	.0834	.0472
#3	.0778	.0778	.6933	.2276	.0738	.0796	.0502

Method: TRACE2 Standard: S0.5
Run Time: 10/03/05 14:08:55

Elem	Ag_328	As_189	B_2496	Ba_493	Be_313	Cd_226	Co_228
Avge	.3703	.2076	.2551	.6519	1.514	3.318	.7300
SDev	.0030	.0016	.0014	.0036	.012	.033	.0039
%RSD	.7998	.7572	.5354	.5496	.7950	.9875	.5322
#1	.3724	.2082	.2567	.6560	1.524	3.346	.7335
#2	.3716	.2088	.2545	.6504	1.517	3.325	.7306
#3	.3669	.2058	.2542	.6494	1.501	3.282	.7258

Elem	Cr_267	Cu_324	Fe_	K_7664	Mn_257	Mo_202	Ni_231
Avge	.6279	.2611	4.645	3.936	.7000	.2341	.7320
SDev	.0050	.0016	.033	.018	.0041	.0012	.0063
%RSD	.7980	.6082	.7055	.4565	.5858	.5133	.8661
#1	.6330	.2625	4.676	3.955	.7047	.2343	.7361
#2	.6278	.2613	4.611	3.933	.6980	.2329	.7351
#3	.6230	.2594	4.648	3.920	.6973	.2353	.7247

Elem	Sb_206	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213
Avge	.1200	.3355	1.714	.1277	.0287	.1746	.3127
SDev	.0002	.0024	.018	.0003	.0002	.0010	.0018
%RSD	.1812	.7235	1.045	.1939	.7987	.5560	.5653
#1	.1202	.3383	1.727	.1278	.0289	.1757	.3148
#2	.1199	.3346	1.721	.1278	.0287	.1740	.3118
#3	.1198	.3337	1.694	.1274	.0284	.1741	.3116

Elem	P_1782	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st
Avge	.5386	.3437	.3437	3.449	1.141	.3752	.3971
SDev	.0097	.0020	.0020	.025	.012	.0019	.0035
%RSD	1.811	.5906	.5890	.7362	1.056	.5131	.8744
#1	.5433	.3450	.3450	3.472	1.153	.3766	.4003
#2	.5452	.3447	.3447	3.452	1.142	.3760	.3976
#3	.5274	.3414	.3414	3.422	1.129	.3730	.3934

Elem	Se2nd
Avge	.2482
SDev	.0034
%RSD	1.385
#1	.2518
#2	.2478
#3	.2450

Method: TRACE2 Standard: SCAL
Run Time: 10/03/05 14:14:50

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Avge	.7343	.5944	.4161	.5117	1.307	3.039	2.128
SDev	.0023	.0030	.0025	.0039	.010	.015	.014
%RSD	.3178	.5109	.6100	.7566	.7566	.4813	.6671
#1	.7359	.5966	.4190	.5152	1.316	3.051	2.139
#2	.7353	.5956	.4154	.5123	1.309	3.043	2.134
#3	.7316	.5909	.4141	.5076	1.296	3.022	2.112

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	Fe_	K_7664
Avge	6.599	1.462	1.259	.5165	.1847	9.333	7.792
SDev	.037	.008	.006	.0023	.0005	.101	.044
%RSD	.5616	.5308	.5098	.4519	.2659	1.078	.5666
#1	6.634	1.467	1.263	.5182	.1848	9.414	7.827
#2	6.603	1.466	1.262	.5174	.1842	9.363	7.806
#3	6.560	1.453	1.252	.5138	.1851	9.220	7.743

Elem	Mg_279	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Sn_189
Avge	.6065	1.407	.4669	19.80	1.462	.2390	.6654
SDev	.0052	.010	.0055	.10	.006	.0022	.0049
%RSD	.8622	.7331	1.185	.5044	.4266	.9051	.7370
#1	.6109	1.415	.4716	19.89	1.468	.2391	.6696
#2	.6079	1.410	.4683	19.81	1.462	.2411	.6666
#3	.6007	1.395	.4608	19.69	1.456	.2367	.6600

Elem	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782	Si_288
Avge	3.408	.2591	.0421	.3511	.6234	1.070	.6743
SDev	.014	.0026	.0001	.0030	.0038	.006	.0024
%RSD	.4158	1.005	.2916	.8455	.6072	.5347	.3568
#1	3.421	.2618	.0422	.3533	.6264	1.074	.6762
#2	3.411	.2591	.0421	.3522	.6246	1.073	.6751
#3	3.393	.2566	.0420	.3477	.6191	1.064	.6716

Elem	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Avge	.6743	6.909	2.273	.7451	.7932	.4939
SDev	.0024	.037	.012	.0081	.0061	.0028
%RSD	.3567	.5289	.5413	1.081	.7636	.5649
#1	.6762	6.936	2.284	.7529	.7999	.4968
#2	.6751	6.923	2.276	.7457	.7881	.4937
#3	.6716	6.867	2.260	.7368	.7915	.4912

Standardization Rpt. 10/03/05 02:25:49 PM page 1

Method: TRACE2 Standard: S10
Run Time: 10/03/05 14:20:45

Elem	Al_308	Ca_317	Fe_	Mg_279	Na_
Avge	2.864	10.14	.3509	2.911	.1301
SDev	.025	.09	.0007	.026	.0013
%RSD	.8767	.8986	.1888	.8970	.9635
#1	2.888	10.23	.3504	2.937	.1304
#2	2.867	10.15	.3517	2.911	.1312
#3	2.838	10.05	.3508	2.885	.1287

Standardization Report 10/03/05 02:25:49 PM page 1

Method: TRACE2 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag_328	328.068	Multiple	Standards	1358.31	.024854	10/03/05 02:14:50
Al_308	308.215	Multiple	Standards	17189.9	-44.4876	10/03/05 02:20:45
As_189	189.042	Multiple	Standards	2398.35	-.159950	10/03/05 02:14:50
B_2496	249.678	Multiple	Standards	1978.65	-4.65064	10/03/05 02:14:50
Ba_493	493.409	Multiple	Standards	765.499	-.395384	10/03/05 02:14:50
Be_313	313.042	Multiple	Standards	330.062	-.133465	10/03/05 02:14:50
Ca_317	317.933	Multiple	Standards	4813.14	-4.15636	10/03/05 02:20:45
Cd_226	226.502	Multiple	Standards	150.399	-.057640	10/03/05 02:14:50
Co_228	228.616	Multiple	Standards	685.266	.142405	10/03/05 02:14:50
Cr_267	267.716	Multiple	Standards	794.990	-.315012	10/03/05 02:14:50
Cu_324	324.753	Multiple	Standards	1933.06	-7.11422	10/03/05 02:14:50
Fe_	271.441	Multiple	Standards	55497.0	6.72920	10/03/05 02:20:45
Fe_	259.940	Multiple	Standards	1074.19	-1.54691	10/03/05 02:14:50
K_7664	766.491	Multiple	Standards	1289.01	-85.8169	10/03/05 02:14:50
Mg_279	279.078	Multiple	Standards	16833.8	-4.18056	10/03/05 02:20:45
Mn_257	257.610	Multiple	Standards	711.585	-.042577	10/03/05 02:14:50
Mo_202	202.030	Multiple	Standards	2137.56	.120701	10/03/05 02:14:50
Na_	330.232	S10	S0	153841.	-15.8839	10/03/05 02:20:45
Na_	588.950	SCAL	S0	481.584	467.020	10/03/05 02:20:45
Ni_231	231.604	Multiple	Standards	682.189	-1.45267	10/03/05 02:14:50
Sb_206	206.838	Multiple	Standards	4128.80	1.41652	10/03/05 02:14:50
Pb_220	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se_196	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sn_189	189.989	Multiple	Standards	1477.94	.250021	10/03/05 02:14:50
Ti_334	334.941	Multiple	Standards	292.872	.279669	10/03/05 02:14:50
Tl_190	190.864	Multiple	Standards	3793.93	5.68060	10/03/05 02:14:50
U_3859	385.958	Multiple	Standards	38112.5	-597.637	10/03/05 02:14:50
V_2924	292.402	Multiple	Standards	2856.82	-.093907	10/03/05 02:14:50
Zn_213	213.858	Multiple	Standards	1594.32	-.856201	10/03/05 02:14:50
P_1782	178.287	Multiple	Standards	4654.45	-14.8898	10/03/05 02:14:50
Si_288	288.158	Multiple	Standards	7517.77	-80.6498	10/03/05 02:14:50
Si02_	288.158	Multiple	Standards	16081.0	-172.516	10/03/05 02:14:50
Sr_421	421.552	Multiple	Standards	144.787	-.281886	10/03/05 02:14:50
Pb1st	220.351	Multiple	Standards	437.811	-.344669	10/03/05 02:14:50
Pb2nd	220.352	Multiple	Standards	1332.35	.553336	10/03/05 02:14:50
Se1st	196.021	Multiple	Standards	1245.03	1.70927	10/03/05 02:14:50
Se2nd	196.022	Multiple	Standards	1991.65	2.96208	10/03/05 02:14:50

Standardization Readback Report 10/03/05 02:25:49 PM page 1

Method: TRACE2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag_328	328.068	S0	.000000	.002872	-.002872
		S0.1	100.000	99.5859	.414146
		S0.5	500.000	502.989	-2.98856
		SCAL	1000.00	997.390	2.60962

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al_308	308.215	S0	.000000	-1.28764	1.28764
		SCAL	10000.0	10172.4	-172.433
		S10	50000.0	49195.9	804.086

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As_189	189.042	S0	.000000	-.005531	.005531
		S0.1	100.000	100.665	-.665352
		S0.5	500.000	497.776	2.22382
		SCAL	1000.00	997.898	2.10229

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B_2496	249.678	S0	.000000	.005551	-.005551
		S0.1	100.000	99.4967	.503281
		S0.5	500.000	500.190	-.189850
		SCAL	1000.00	1007.83	-7.83014

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba_493	493.409	S0	.000000	-.002038	.002038
		S0.1	100.000	100.256	-.256409
		S0.5	500.000	498.652	1.34769
		SCAL	1000.00	1000.13	-.131348

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be_313	313.042	S0	.000000	.001727	-.001727
		S0.1	100.000	99.8344	.165619
		S0.5	500.000	499.681	.318756
		SCAL	1000.00	1002.81	-2.81262

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca_317	317.933	S0	.000000	-1.91504	1.91504
		SCAL	10000.0	10239.4	-239.380
		S10	50000.0	48803.1	1196.90

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd_226	226.502	S0	.000000	-.009331	.009331
		S0.1	100.000	101.066	-1.06555
		S0.5	500.000	498.933	1.06702
		SCAL	1000.00	992.394	7.60620

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration

Co_228	228.616	S0	.000000	-.000571	.000571
		S0.1	100.000	100.216	-.215805
		S0.5	500.000	500.356	-.356049
		SCAL	1000.00	1001.81	-1.81287

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr_267	267.716	S0	.000000	-.001681	.001681
		S0.1	100.000	100.242	-.242264
		S0.5	500.000	498.877	1.12341
		SCAL	1000.00	1000.65	-.649353

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu_324	324.753	S0	.000000	-.005979	.005979
		S0.1	100.000	100.654	-.653824
		S0.5	500.000	497.567	2.43259
		SCAL	1000.00	991.258	8.74182

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe_	271.441	S0	.000000	-1.29194	1.29194
		SCAL	10000.0	10258.4	-258.388
		S10	20000.0	19483.2	516.775

CorCoef: 0.99953

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe_	259.940	S0	.000000	.058495	-.058495
		S0.5	5000.00	4988.30	11.6992
		SCAL	10000.0	10023.4	-23.3975

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
K_7664	766.491	S0	.000000	-.057103	.057103
		S0.1	1000.00	1006.62	-6.61597
		S0.5	5000.00	4987.82	12.1816
		SCAL	10000.0	9958.21	41.7949

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg_279	279.078	S0	.000000	-1.60802	1.60802
		SCAL	10000.0	10205.3	-205.267
		S10	50000.0	48995.3	1004.69

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn_257	257.610	S0	.000000	-.002468	.002468
		S0.1	100.000	100.319	-.319298
		S0.5	500.000	498.057	1.94284
		SCAL	1000.00	1001.17	-1.17218

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo_202	202.030	S0	.000000	-.000744	.000744
		S0.1	100.000	100.069	-.069321
		S0.5	500.000	500.602	-.602264
		SCAL	1000.00	998.102	1.89783

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na_	330.232	S0	.000000	-.000000	.000000
		S10	20000.0	20000.0	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na_	588.950	S0	.000000	.000002	-.000002
		SCAL	10000.0	10000.0	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni_231	231.604	S0	.000000	-.006259	.006259
		S0.1	100.000	100.672	-.672287
		S0.5	500.000	497.876	2.12430
		SCAL	1000.00	995.948	4.05164

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb_206	206.838	S0	.000000	-.008870	.008870
		S0.1	100.000	100.545	-.544540
		S0.5	500.000	496.763	3.23737
		SCAL	1000.00	988.128	11.8725

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb_220	220.353	NONE	.000000	.000000	.000000
		NONE	10.0000	.000000	10.0000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se_196	196.026	NONE	.000000	.000000	.000000
		NONE	10.0000	.000000	10.0000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn_189	189.989	S0	.000000	-.010550	.010550
		S0.1	100.000	100.586	-.586220
		S0.5	500.000	496.162	3.83752
		SCAL	1000.00	983.690	16.3101

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti_334	334.941	S0	.000000	.002246	-.002246
		S0.1	100.000	99.7005	.299477
		S0.5	500.000	502.246	-2.24567
		SCAL	1000.00	998.503	1.49658

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl_190	190.864	S0	.000000	-.012663	.012663
		S0.1	100.000	100.913	-.913025
		S0.5	500.000	490.082	9.91830
		SCAL	1000.00	988.841	11.1592

CorCoef: 0.99998

			Known	Measured	Residual

Element	Wavelength	Standard	Concentration	Concentration	Concentration
U_3859	385.958	S0	.000000	-.000505	.000505
		S0.1	100.000	99.5254	.474564
		S0.5	500.000	494.583	5.41663
		SCAL	1000.00	1007.06	-7.05615

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	S0	.000000	-.001900	.001900
		S0.1	100.000	100.372	-.371864
		S0.5	500.000	498.675	1.32495
		SCAL	1000.00	1002.83	-2.83386

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn_213	213.858	S0	.000000	-.011224	.011224
		S0.1	100.000	101.304	-1.30419
		S0.5	500.000	497.747	2.25281
		SCAL	1000.00	993.033	6.96698

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
P_1782	178.287	S0	.000000	-.044337	.044337
		S0.1	500.000	505.110	-5.11032
		S0.5	2500.00	2492.22	7.78345
		SCAL	5000.00	4966.45	33.5459

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si_288	288.158	S0	.000000	-.004964	.004964
		S0.1	500.000	500.481	-.480774
		S0.5	2500.00	2503.20	-3.20361
		SCAL	5000.00	4988.79	11.2148

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si02_	288.158	S0	.000000	-.010935	.010935
		S0.1	1069.50	1070.56	-1.06226
		S0.5	5347.50	5354.40	-6.89502
		SCAL	10695.0	10670.6	24.4121

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr_421	421.552	S0	.000000	-.001699	.001699
		S0.1	100.000	100.211	-.210526
		S0.5	500.000	499.023	.976837
		SCAL	1000.00	999.988	.011719

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb1st	220.351	S0	.000000	-.006822	.006822
		S0.1	100.000	100.797	-.797462
		S0.5	500.000	499.237	.762512
		SCAL	1000.00	994.887	5.11304

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration

Pb2nd	220.352	S0	.000000	-.002494	.002494
		S0.1	100.000	100.065	-.064682
		S0.5	500.000	500.451	-.451080
		SCAL	1000.00	993.325	6.67548

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1st	196.021	S0	.000000	-.020303	.020303
		S0.1	100.000	102.690	-2.69028
		S0.5	500.000	496.087	3.91306
		SCAL	1000.00	989.228	10.7715

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se2nd	196.022	S0	.000000	-.011274	.011274
		S0.1	100.000	101.353	-1.35292
		S0.5	500.000	497.313	2.68661
		SCAL	1000.00	986.634	13.3657

CorCoef: 0.99999

Method: TRACE2 Sample Name: ICV Operator: HSC
Run Time: 10/03/05 14:28:11
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	248.7	4989.	489.4	494.6	497.4	242.8	4928.
SDev	.3	8.	4.2	.1	1.2	.2	11.
%RSD	.1089	.1674	.8606	.0252	.2488	.1005	.2203
#1	248.6	4987.	492.0	494.7	498.9	243.1	4940.
#2	248.6	4998.	484.5	494.5	496.7	242.7	4923.
#3	249.1	4981.	491.6	494.7	496.7	242.7	4920.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.0	5000.	500.0	500.0	500.0	250.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	481.7	486.2	491.3	485.7	4881.	2446.	4910.
SDev	1.3	1.0	.6	.5	20.	7.	17.
%RSD	.2784	.1999	.1244	.1020	.4135	.2989	.3533
#1	483.2	487.3	492.0	486.2	4904.	2454.	4929.
#2	480.8	486.1	490.8	485.2	4872.	2445.	4906.
#3	480.9	485.3	491.1	485.6	4867.	2440.	4895.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	2500.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	491.3	495.5	2452.	478.7	488.0	484.9	2420.
SDev	1.3	5.4	5.	.9	.8	1.4	8.
%RSD	.2697	1.084	.2203	.1803	.1725	.2877	.3450
#1	492.8	501.7	2458.	477.8	488.7	483.9	2420.
#2	490.5	492.3	2448.	479.5	487.0	486.5	2429.
#3	490.4	492.6	2450.	478.8	488.3	484.3	2412.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	2500.	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	486.2	495.7	500.3	496.1	487.1	485.2	2578.
SDev	3.1	.8	6.5	16.1	1.4	1.9	27.
%RSD	.6333	.1637	1.308	3.245	.2878	.3813	1.040
#1	489.4	494.8	494.0	511.0	488.7	487.3	2549.
#2	486.0	495.7	507.1	498.3	486.6	484.6	2583.
#3	483.2	496.4	499.8	479.0	486.0	483.7	2601.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4874.	10430.	492.8	486.8	483.9	2425.	2418.
SDev	11.	24.	.4	1.0	1.7	6.	13.
%RSD	.2358	.2323	.0884	.2082	.3493	.2646	.5253
#1	4886.	10450.	492.6	485.7	483.1	2417.	2421.
#2	4863.	10400.	492.5	487.7	485.9	2429.	2429.
#3	4873.	10420.	493.3	487.0	482.9	2428.	2404.
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	5000.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: ICB Operator: HSC
Run Time: 10/03/05 14:35:14
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2847	.1859	.6602	1.036	.2596	.0608	1.480
SDev	.2787	1.967	1.706	.557	.0557	.0285	.614
%RSD	97.89	1058.	258.4	53.74	21.46	46.84	41.49
#1	-.1025	.9273	.0100	.9533	.2605	.0786	1.113
#2	-.1461	1.675	-.6247	1.630	.3149	.0760	2.190
#3	-.6055	-2.044	2.595	.5255	.2034	.0280	1.138
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0366	-.1218	.2179	.2977	1.983	.5566	3.405
SDev	.0393	.4191	.2421	.2801	.332	1.110	.755
%RSD	107.4	344.0	111.1	94.06	16.76	199.4	22.16
#1	.0819	.2735	.3926	-.0225	1.854	-.4038	4.260
#2	.0120	-.0777	.3196	.4192	2.361	1.771	3.128
#3	.0158	-.5613	-.0584	.4966	1.736	.3022	2.829
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1243	.1834	5.302	-.8919	-.3520	1.227	2.453
SDev	.0811	.7518	5.159	.4948	.4016	1.479	4.983
%RSD	65.24	409.9	97.29	55.47	114.1	120.5	203.2
#1	.0759	.8838	11.11	-.7706	-.0523	-.4114	7.459
#2	.2180	.2773	3.552	-1.436	-.1954	2.462	2.406
#3	.0791	-.6109	1.247	-.4692	-.8083	1.630	-2.507
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.211	.1733	1.888	3.923	.1561	-.0971	2.109
SDev	.905	.0644	.369	15.02	.4595	.0190	2.174
%RSD	74.71	37.13	19.53	382.9	294.3	19.56	103.1
#1	1.869	.1751	1.526	-6.192	.4514	-.0975	4.497
#2	1.586	.1081	2.263	21.18	.3902	-.0779	1.588
#3	.1792	.2367	1.875	-3.224	-.3733	-.1159	.2429

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.060	10.82	.1610	-.3795	2.029	1.120	3.118
SDev	2.272	4.86	.0160	1.5671	1.576	2.904	6.058
%RSD	44.91	44.91	9.925	413.0	77.67	259.2	194.3
#1	2.732	5.844	.1730	-1.659	.2112	4.311	9.031
#2	7.273	15.56	.1670	1.369	3.009	.4190	3.399
#3	5.174	11.07	.1428	-.8485	2.868	-1.369	-3.075
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: PQL Operator: HSC
Run Time: 10/03/05 14:41:09
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.695	185.2	13.69	47.88	4.731	4.501	95.60
SDev	.448	.6	.22	1.10	.079	.020	.49
%RSD	9.540	.3124	1.632	2.304	1.663	.4446	.5148
#1	4.362	184.9	13.86	47.24	4.694	4.513	95.39
#2	4.519	184.9	13.44	49.15	4.678	4.512	96.16
#3	5.204	185.9	13.78	47.25	4.822	4.478	95.24
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000	200.0	15.00	50.00	5.000	5.000	100.0
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.642	4.461	4.439	9.310	97.09	138.5	285.9
SDev	.069	.182	.337	.527	1.03	2.8	1.0
%RSD	1.483	4.077	7.598	5.661	1.062	2.047	.3428
#1	4.640	4.276	4.435	9.916	98.19	141.0	286.9
#2	4.712	4.639	4.779	8.959	96.16	139.3	284.9
#3	4.574	4.469	4.104	9.054	96.91	135.4	285.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000	5.000	5.000	10.00	100.0	150.0	300.0
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.706	9.016	169.4	4.175	9.632	10.28	17.03
SDev	.126	.468	1.7	.311	1.711	1.44	2.61
%RSD	1.295	5.186	1.023	7.461	17.76	14.04	15.34
#1	9.758	8.776	168.8	4.292	10.30	11.86	14.40
#2	9.562	8.718	171.4	4.410	7.689	9.033	Q19.63
#3	9.797	9.555	168.1	3.822	10.91	9.939	17.06
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00	10.00	150.0	5.000	10.00	10.00	15.00
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	12.68	4.706	20.34	46.99	4.605	9.210	140.2
SDev	1.17	.086	3.57	4.63	.443	.109	1.8
%RSD	9.197	1.834	17.56	9.860	9.622	1.184	1.261
#1	12.08	4.632	16.83	42.42	5.020	9.179	141.8
#2	Q14.02	4.684	20.22	46.87	4.658	9.331	138.3
#3	11.94	4.801	23.96	51.69	4.138	9.120	140.5

Value	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	92.21	197.3	4.602	10.81	10.01	17.27	16.91
SDev	2.82	6.0	.010	1.27	1.91	1.50	3.43
%RSD	3.055	3.055	.2210	11.73	19.09	8.688	20.26
#1	95.42	204.1	4.603	11.15	12.21	16.80	13.20
#2	90.12	192.8	4.591	9.412	8.843	18.95	19.96
#3	91.10	194.9	4.611	11.88	8.969	16.07	17.56
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	100.0		5.000				
Range	30.00		30.00				

Method: TRACE2 Sample Name: ICS-A Operator: HSC
Run Time: 10/03/05 14:47:03
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0871	460300.	-2.039	-.6984	1.319	.1303	452100.
SDev	.4162	582.	.642	.6430	.139	.0005	239.
%RSD	477.8	.1265	31.51	92.07	10.54	.4076	.0528
#1	.3804	459700.	-2.389	-.5508	1.353	.1308	452000.
#2	-.4171	460900.	-2.430	-.1420	1.439	.1302	452400.
#3	-.2247	460400.	-1.297	-1.402	1.167	.1298	451900.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	500000.	.0000	.0000	.0000	.0000	500000.
Range	10.00	100000.	30.00	100.0	10.00	10.00	100000.

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1620	-.1032	.6296	1.443	173000.	-2.879	473000.
SDev	.1794	.2252	.4214	.620	2329.	3.011	1077.
%RSD	110.8	218.2	66.94	42.95	1.347	104.6	.2277
#1	-.0263	-.0541	.1702	2.134	175500.	.0749	471800.
#2	.1812	-.3488	.9984	.9369	172400.	-5.943	473500.
#3	.3310	.0934	.7203	1.257	171000.	-2.769	473700.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	200000.	.0000	500000.
Range	10.00	10.00	10.00	20.00	40000.	300.0	100000.

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.732	.9253	74.06	-1.042	-2.932	-6.814	3.289
SDev	.081	.7522	1.23	.157	2.925	2.083	3.268
%RSD	2.176	81.30	1.655	15.05	99.75	30.56	99.35
#1	3.639	1.782	74.03	-1.206	-5.873	-4.469	6.932
#2	3.787	.6228	72.85	-1.026	-2.900	-7.529	2.320
#3	3.770	.3714	75.30	-.8934	-.0238	-8.446	.6155
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	20.00	20.00	300.0	10.00	20.00	20.00	30.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.121	-1.730	-3.940	-16.66	-.2955	9.158	11.88
SDev	.838	.017	5.511	4.68	.0891	.324	6.77
%RSD	26.86	1.005	139.9	28.10	30.15	3.543	57.01
#1	2.884	-1.720	-9.810	-11.53	-.3429	8.798	6.681
#2	2.427	-1.750	1.123	-17.73	-.3509	9.248	9.419
#3	4.053	-1.719	-3.133	-20.70	-.1928	9.428	19.54

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	20.00	10.00	40.00	100.0	10.00	20.00	300.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.987	-4.250	6.949	218.2	-119.1	.6256	4.619
SDev	1.155	2.470	.035	1.9	2.8	3.792	3.510
%RSD	58.12	58.12	.5009	.8689	2.344	606.2	75.98
#1	-2.588	-5.537	6.976	219.6	-116.4	4.754	8.020
#2	-.6555	-1.402	6.962	216.0	-119.1	-2.703	4.828
#3	-2.716	-5.811	6.910	218.9	-121.9	-.1741	1.010
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	200.0		10.00				

Method: TRACE2 Sample Name: ICS-AB Operator: HSC
Run Time: 10/03/05 14:52:57
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	245.5	470500.	468.4	494.6	491.1	231.8	458400.
SDev	1.5	2831.	2.7	2.4	3.7	.6	2664.
%RSD	.6010	.6016	.5721	.4792	.7499	.2685	.5812
#1	246.7	473400.	465.5	497.2	494.8	232.5	461200.
#2	243.9	470400.	469.1	494.1	490.9	231.7	458200.
#3	246.0	467800.	470.7	492.5	487.5	231.3	455900.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.0	500000.	500.0	500.0	500.0	250.0	500000.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	442.4	440.8	451.0	476.3	178000.	5237.	482500.
SDev	1.3	2.4	2.2	1.8	1312.	32.	2993.
%RSD	.2833	.5547	.4972	.3800	.7371	.6180	.6204
#1	443.8	443.3	453.4	477.9	176500.	5266.	485600.
#2	442.1	440.5	450.6	476.7	178400.	5241.	482300.
#3	441.4	438.5	449.0	474.3	179000.	5202.	479600.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	200000.	5000.	500000.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	463.2	470.9	4861.	429.8	471.7	439.5	2284.
SDev	3.2	5.4	35.	1.0	5.7	4.1	7.
%RSD	.6878	1.142	.7302	.2286	1.204	.9263	.2972
#1	466.5	476.9	4895.	430.9	476.1	443.9	2291.
#2	462.9	469.1	4863.	429.4	473.8	438.9	2285.
#3	460.1	466.6	4824.	429.0	465.3	435.8	2277.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	5000.	500.0	500.0	500.0	2500.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	456.1	468.5	450.0	454.8	462.6	467.4	2363.
SDev	2.1	.7	2.1	12.9	4.1	3.6	17.
%RSD	.4553	.1534	.4606	2.827	.8955	.7674	.7273
#1	458.3	469.1	451.1	449.8	467.3	470.8	2383.
#2	455.9	467.7	447.6	469.4	461.3	467.7	2350.
#3	454.2	468.6	451.2	445.2	459.3	463.7	2356.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4700.	10050.	483.4	674.9	322.0	2302.	2276.
SDev	12.	26.	2.1	5.3	6.0	9.	7.
%RSD	.2569	.2547	.4427	.7906	1.870	.4034	.2996
#1	4711.	10080.	485.8	674.0	328.9	2305.	2284.
#2	4701.	10060.	482.7	680.6	318.2	2308.	2274.
#3	4687.	10030.	481.7	670.0	318.9	2291.	2270.
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	5000.		500.0				
Range	20.00		20.00				

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Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/03/05 15:06:54
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	500.6	5116.	500.8	500.7	499.0	498.0	5088.
SDev	10.0	101.	8.6	6.9	7.4	9.7	89.
%RSD	1.989	1.984	1.715	1.378	1.490	1.954	1.741
#1	510.9	5220.	507.4	507.7	506.7	508.1	5179.
#2	499.8	5110.	503.9	500.5	498.3	497.1	5083.
#3	491.1	5017.	491.1	493.9	491.9	488.7	5002.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	496.5	498.9	498.1	497.5	5030.	4990.	5094.
SDev	10.3	9.7	8.4	10.0	65.	76.	90.
%RSD	2.080	1.950	1.684	2.017	1.284	1.520	1.758
#1	507.4	509.0	506.9	507.9	5097.	5068.	5188.
#2	495.3	498.2	497.0	496.6	5024.	4986.	5083.
#3	486.9	489.6	490.3	487.9	4968.	4917.	5010.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	498.6	504.2	9886.	494.8	496.9	500.0	497.9
SDev	7.6	5.3	170.	9.5	9.0	9.6	10.8
%RSD	1.530	1.060	1.717	1.927	1.813	1.925	2.160
#1	506.5	510.1	10050.	504.6	504.4	509.9	508.8
#2	498.2	503.1	9888.	494.3	499.5	499.6	497.6
#3	491.2	499.6	9715.	485.5	486.9	490.6	487.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	495.8	498.1	496.9	506.4	498.3	500.2	2511.
SDev	7.7	10.4	11.9	18.4	7.0	7.6	53.
%RSD	1.556	2.096	2.394	3.642	1.406	1.514	2.112
#1	504.0	509.1	507.6	525.8	505.9	508.1	2568.
#2	494.6	496.9	499.0	504.4	497.0	499.3	2502.
#3	488.7	488.4	484.1	489.1	492.1	493.1	2463.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2493.	5334.	497.0	498.1	501.0	496.8	498.4
SDev	51.	109.	9.1	10.1	9.5	11.3	10.7
%RSD	2.039	2.036	1.840	2.036	1.900	2.271	2.144
#1	2546.	5445.	506.6	509.4	510.1	509.3	508.5
#2	2490.	5327.	496.1	495.3	501.7	493.7	499.5
#3	2444.	5229.	488.4	489.7	491.1	487.4	487.2
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/03/05 15:12:49
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0068	5.291	.9896	1.174	.2480	.1692	11.39
SDev	.1745	1.816	1.293	.219	.0403	.0800	2.32
%RSD	2550.	34.32	130.6	18.65	16.27	47.27	20.39
#1	.1251	4.321	.0078	1.390	.2025	.1008	10.31
#2	-.1936	7.385	.5068	.9525	.2620	.2572	14.05
#3	.0890	4.165	2.454	1.178	.2794	.1498	9.801
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1977	.1214	.2779	.8101	5.248	1.425	10.53
SDev	.1698	.2633	.3149	.3378	.962	3.988	2.94
%RSD	85.86	216.8	113.3	41.70	18.33	279.8	27.94
#1	.2483	.0955	.4746	.6782	4.631	-2.958	10.62
#2	.3365	-.1279	-.0853	1.194	6.357	4.838	13.43
#3	.0084	.3968	.4444	.5581	4.758	2.396	7.546
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2289	.7659	33.29	-1.018	2.396	-1.056	1.140
SDev	.0368	.5173	8.99	.865	3.187	1.375	.442
%RSD	16.10	67.55	27.00	84.95	133.0	130.2	38.75
#1	.2603	.1713	23.34	-1.081	-.8312	-2.599	.7303
#2	.2379	1.113	40.81	-1.849	2.478	.0407	1.081
#3	.1883	1.013	35.71	-.1232	5.541	-.6094	1.608
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.899	.2060	4.063	-8.082	.4866	.1230	-5.040
SDev	1.599	.1009	6.274	6.271	.0853	.0970	2.557
%RSD	55.15	48.97	154.4	77.59	17.53	78.81	50.73
#1	3.014	.0994	5.407	-14.93	.5850	.0111	-5.967
#2	4.437	.3001	-2.774	-6.707	.4378	.1792	-7.004
#3	1.246	.2185	9.555	-2.613	.4368	.1789	-2.149

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.583	7.665	.2530	-.8708	-1.148	-1.744	2.579
SDev	2.269	4.853	.0717	1.8447	1.141	3.514	1.917
%RSD	63.31	63.32	28.33	211.9	99.35	201.5	74.33
#1	4.755	10.17	.1943	-2.937	-2.430	-3.933	3.059
#2	5.027	10.75	.3329	.6094	-.2432	2.309	.4679
#3	.9683	2.071	.2319	-.2842	-.7718	-3.608	4.212
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/03/05 16:00:02
Comment: IDL STUDY 4TH QTR
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	482.7	4895.	476.2	482.5	483.7	479.6	4921.
SDev	6.0	59.	2.8	5.7	6.0	5.9	59.
%RSD	1.248	1.196	.5984	1.171	1.232	1.221	1.203
#1	479.9	4858.	474.1	480.0	479.3	476.2	4877.
#2	478.6	4865.	475.2	478.6	481.3	476.2	4898.
#3	489.6	4963.	479.5	489.0	490.5	486.4	4989.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	477.6	481.0	480.0	479.8	4858.	4852.	4883.
SDev	5.4	6.2	6.5	5.9	71.	51.	60.
%RSD	1.126	1.284	1.356	1.238	1.464	1.042	1.229
#1	475.6	477.4	475.6	476.4	4788.	4815.	4838.
#2	473.6	477.4	476.9	476.3	4855.	4832.	4859.
#3	483.7	488.1	487.5	486.7	4931.	4910.	4951.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	482.2	489.7	9599.	476.7	481.8	481.2	478.9
SDev	6.4	6.7	108.	5.3	5.6	4.8	2.7
%RSD	1.333	1.376	1.128	1.107	1.156	.9876	.5563
#1	476.8	482.7	9540.	473.6	478.1	478.5	477.3
#2	480.4	490.4	9532.	473.8	479.0	478.5	477.5
#3	489.3	496.1	9723.	482.8	488.2	486.7	482.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	482.0	479.5	480.0	481.3	482.7	484.0	2490.
SDev	8.9	5.7	4.5	9.2	6.3	6.5	12.
%RSD	1.839	1.195	.9416	1.904	1.310	1.346	.4949
#1	477.4	477.9	477.7	473.2	477.4	477.9	2480.
#2	476.4	474.7	477.0	479.5	480.9	483.4	2485.
#3	492.2	485.8	485.2	491.3	489.7	490.9	2504.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2399.	5131.	480.6	481.6	481.0	481.7	477.6
SDev	28.	61.	5.8	5.2	5.2	6.0	1.2
%RSD	1.185	1.185	1.216	1.085	1.076	1.246	.2549
#1	2385.	5101.	477.4	476.2	479.6	476.9	477.5
#2	2380.	5091.	477.0	482.1	476.7	479.7	476.4
#3	2432.	5201.	487.3	486.6	486.7	488.4	478.8
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/03/05 16:05:57
Comment: IDL STUDY 4TH QTR
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1796	-.1732	2.043	-.3102	.2969	.1885	3.470
SDev	.1889	.9507	2.850	.4647	.0695	.0754	.840
%RSD	105.2	548.9	139.5	149.8	23.42	40.00	24.22
#1	-.1047	.7818	3.781	.0365	.2893	.1537	3.057
#2	-.0397	-.1818	3.594	-.8382	.2315	.1368	2.916
#3	-.3945	-1.120	-1.245	-.1290	.3700	.2750	4.437
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2145	.1929	.2756	.7685	1.913	3.681	-.6576
SDev	.0694	.1152	.4685	.1836	1.122	3.335	.5801
%RSD	32.38	59.73	170.0	23.89	58.66	90.59	88.21
#1	.1641	.2431	.4454	.5581	1.258	7.352	-1.294
#2	.2937	.2745	-.2541	.8509	1.273	2.856	-.5196
#3	.1857	.0611	.6355	.8966	3.209	.8365	-.1590
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1793	-.0355	13.31	-.8014	4.783	1.859	1.091
SDev	.0765	.6748	2.75	.2132	2.239	1.206	.257
%RSD	42.66	1902.	20.70	26.60	46.81	64.83	23.58
#1	.1638	-.8094	13.68	-.6610	5.801	3.225	.9215
#2	.1117	.4296	10.38	-.6967	2.216	.9421	.9638
#3	.2623	.2734	15.85	-1.047	6.331	1.411	1.387
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.185	.0891	1.883	-5.022	.3873	.0878	-4.937
SDev	1.180	.1245	2.703	3.383	.2486	.1851	5.631
%RSD	99.64	139.8	143.6	67.38	64.19	210.9	114.1
#1	.0712	-.0318	4.211	-8.913	.5982	-.1240	.1871
#2	2.422	.0821	-1.082	-2.771	.1132	.2190	-10.97
#3	1.061	.2169	2.520	-3.381	.4506	.1683	-4.032

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.595	9.828	.2127	.4646	2.556	-.7492	2.009
SDev	2.572	5.502	.0799	1.503	2.273	3.4718	1.603
%RSD	55.97	55.98	37.58	323.5	88.95	463.4	79.79
#1	4.582	9.802	.1556	-.0815	4.875	-4.710	3.733
#2	7.173	15.34	.1784	2.165	.3317	1.765	.5637
#3	2.029	4.340	.3040	-.6893	2.460	.6976	1.730
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/03/05 16:47:38
Comment: 463350||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	517.6	5176.	506.2	509.1	508.5	511.5	5185.
SDev	3.4	19.	1.3	1.4	.6	2.1	7.
%RSD	.6636	.3670	.2623	.2823	.1230	.4145	.1353
#1	521.1	5198.	507.4	510.8	508.6	513.4	5192.
#2	514.3	5164.	506.5	508.4	507.8	509.2	5178.
#3	517.2	5165.	504.8	508.2	509.1	511.8	5185.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	506.9	514.5	509.0	511.9	4946.	5022.	5110.
SDev	2.9	1.8	1.0	1.9	25.	12.	8.
%RSD	.5787	.3521	.1972	.3805	.5089	.2476	.1610
#1	510.0	516.2	509.6	513.3	4923.	5021.	5118.
#2	504.2	512.6	507.8	509.7	4973.	5010.	5102.
#3	506.5	514.7	509.5	512.8	4944.	5035.	5109.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	500.5	506.8	10120.	507.1	499.9	504.3	502.7
SDev	.5	3.2	43.	2.8	1.9	3.0	3.7
%RSD	.1097	.6302	.4222	.5554	.3806	.5896	.7347
#1	499.9	503.3	10160.	510.3	497.9	503.2	498.6
#2	501.0	509.6	10080.	504.8	501.7	502.1	505.6
#3	500.5	507.6	10120.	506.2	500.0	507.7	504.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	496.4	516.5	510.2	514.0	502.7	505.2	2707.
SDev	.3	3.8	6.3	4.2	.5	1.6	45.
%RSD	.0538	.7304	1.237	.8148	.0974	.3072	1.660
#1	496.4	520.2	505.3	517.1	502.1	503.7	2748.
#2	496.7	512.7	508.0	515.7	502.9	506.8	2659.
#3	496.1	516.5	517.3	509.2	503.0	505.3	2715.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2548.	5451.	510.6	504.9	504.0	504.2	502.0
SDev	15.	31.	2.0	2.7	3.1	1.4	6.2
%RSD	.5768	.5768	.3837	.5373	.6243	.2849	1.242
#1	2558.	5473.	512.4	503.3	503.1	505.8	494.9
#2	2531.	5415.	508.5	503.4	501.4	503.4	506.7
#3	2555.	5466.	511.0	508.0	507.5	503.3	504.4
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/03/05 16:53:33
Comment: 463350||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0865	5.752	-1.145	.0344	.3024	.1514	3.444
SDev	.4514	1.026	2.366	.8609	.0912	.0378	.226
%RSD	521.9	17.84	206.6	2499.	30.16	24.98	6.563
#1	.4930	5.343	.7132	.9413	.2574	.1077	3.701
#2	.1656	6.920	-3.810	-.7715	.2425	.1739	3.275
#3	-.3992	4.994	-.3401	-.0664	.4074	.1724	3.356
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1525	.2567	.3616	-.2318	.8661	.0631	.3084
SDev	.2067	.1002	.1416	.2142	.1764	3.771	.6421
%RSD	135.6	39.05	39.15	92.41	20.36	5978.	208.2
#1	.2391	.3616	.4636	.0155	.9918	-1.835	.4122
#2	-.0835	.2465	.4213	-.3610	.6645	4.406	.8923
#3	.3018	.1620	.2000	-.3498	.9419	-2.382	-.3792
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1602	.5737	3.494	-.4185	-.0552	.9775	-.2127
SDev	.0727	.3563	2.902	.5987	2.6309	1.258	1.2963
%RSD	45.39	62.10	83.04	143.1	4766.	128.7	609.4
#1	.1828	.1728	3.595	-1.054	.2094	.2742	1.232
#2	.2190	.8541	6.345	.1358	2.433	.2281	-.5967
#3	.0789	.6942	.5436	-.3378	-2.808	2.430	-1.274
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.383	.1319	.6435	-24.32	.1431	-.0384	1.663
SDev	1.326	.0336	3.870	4.89	.3422	.1431	1.875
%RSD	95.87	25.44	601.4	20.09	239.1	373.1	112.7
#1	1.835	.1441	-3.754	-19.11	.5362	-.1571	3.255
#2	2.424	.1576	3.531	-28.80	-.0181	.1206	-.4030
#3	-.1099	.0940	2.154	-25.05	-.0887	-.0786	2.138

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4225	-.9042	.1954	-.7753	1.853	1.387	-1.012
SDev	.7903	1.6905	.0165	.7308	1.616	1.889	2.525
%RSD	187.0	187.0	8.446	94.26	87.20	136.2	249.6
#1	.3114	.6657	.1767	-1.553	1.186	-.0980	1.896
#2	-.3198	-.6844	.2077	-.6706	.6767	3.514	-2.649
#3	-1.259	-2.694	.2018	-.1026	3.695	.7459	-2.282
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/03/05 17:34:53
Comment: 463350||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	513.0	5080.	498.5	498.6	498.4	506.0	5097.
SDev	4.4	30.	4.6	1.7	1.4	3.5	19.
%RSD	.8621	.5966	.9275	.3437	.2878	.6935	.3706
#1	515.5	5107.	498.6	497.7	500.0	508.4	5118.
#2	515.7	5085.	503.1	497.4	497.3	507.5	5093.
#3	507.9	5047.	493.9	500.5	497.7	501.9	5081.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	500.7	507.7	500.9	505.2	4823.	4938.	5022.
SDev	3.2	3.4	3.0	3.8	31.	16.	16.
%RSD	.6407	.6685	.5963	.7433	.6466	.3248	.3128
#1	502.5	510.1	502.5	508.0	4825.	4954.	5039.
#2	502.6	509.3	502.8	506.8	4791.	4938.	5020.
#3	497.0	503.8	497.5	501.0	4853.	4922.	5008.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	491.1	494.6	10000.	501.4	493.1	500.6	492.2
SDev	1.3	2.3	66.	4.3	3.3	2.3	2.5
%RSD	.2634	.4609	.6554	.8501	.6713	.4572	.5115
#1	492.6	494.2	10060.	504.7	495.2	498.8	494.2
#2	490.2	492.6	10010.	503.0	489.3	503.2	493.0
#3	490.6	497.1	9934.	496.6	494.7	499.9	489.4
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	487.4	512.6	502.5	497.8	492.8	494.7	2729.
SDev	2.3	4.9	2.4	6.1	1.1	1.7	22.
%RSD	.4697	.9545	.4791	1.232	.2204	.3516	.8157
#1	490.0	515.2	503.7	504.9	494.0	496.5	2743.
#2	486.6	515.7	504.2	494.1	491.8	493.1	2741.
#3	485.7	506.9	499.8	494.5	492.8	494.5	2704.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2515.	5379.	503.8	498.3	501.8	490.5	493.1
SDev	20.	42.	2.9	1.1	3.5	2.9	2.5
%RSD	.7875	.7837	.5709	.2108	.6986	.5948	.4982
#1	2533.	5419.	506.1	497.5	499.5	493.5	494.6
#2	2518.	5385.	504.9	497.9	505.8	490.3	494.4
#3	2494.	5335.	500.6	499.5	500.1	487.7	490.2
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/03/05 17:40:48
Comment: 463350||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0740	3.860	1.961	.9998	.2478	.1631	3.454
SDev	.3491	2.725	3.885	1.417	.0432	.0176	.520
%RSD	472.0	70.62	198.2	141.7	17.45	10.77	15.06
#1	-.0737	5.023	6.446	1.247	.2757	.1641	3.921
#2	-.1770	.7454	-.2199	-.5245	.2698	.1451	2.893
#3	.4726	5.810	-.3443	2.276	.1980	.1802	3.547
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2562	-.0104	.4478	-.1687	1.135	7.086	.3615
SDev	.1105	.0615	.2062	.8030	.317	3.337	1.756
%RSD	43.14	589.7	46.05	476.1	27.88	47.10	485.8
#1	.2738	-.0624	.5365	.7413	1.359	6.270	1.354
#2	.3568	.0574	.5948	-.7780	.7732	4.232	-1.667
#3	.1379	-.0263	.2121	-.4693	1.274	10.76	1.397
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1529	.3169	-7.634	-1.027	4.437	.4891	.8845
SDev	.0478	.3947	1.432	.236	2.063	1.044	1.534
%RSD	31.25	124.5	18.75	22.93	46.51	213.5	173.4
#1	.1891	.7632	-7.234	-.8888	5.040	-.1132	1.857
#2	.0988	.1738	-6.445	-.8938	6.131	-.1145	-.8834
#3	.1709	.0138	-9.223	-1.299	2.139	1.695	1.680
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.517	.2286	1.009	-12.94	.2416	.0589	-12.42
SDev	1.044	.0743	2.160	11.66	.4305	.0677	4.30
%RSD	68.83	32.51	214.0	90.09	178.2	114.9	34.63
#1	.4000	.3090	3.491	-12.41	.6955	.1021	-13.37
#2	1.682	.2142	-.4413	-1.554	.1899	.0937	-7.726
#3	2.468	.1625	-.0224	-24.85	-.1607	-.0191	-16.17

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.278	2.734	.1759	.1333	.6667	2.852	-.0979
SDev	3.744	8.009	.0252	1.906	.8568	2.399	1.5777
%RSD	292.9	293.0	14.34	1430.	128.5	84.11	1612.
#1	.8898	1.903	.1787	-1.739	.6986	2.540	1.516
#2	5.201	11.13	.1494	.0680	-.2056	.6248	-1.636
#3	-2.257	-4.827	.1996	2.071	1.507	5.392	-.1736
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/03/05 18:39:50
Comment: 462062||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	510.8	5034.	501.2	496.5	492.4	504.2	5056.
SDev	9.7	130.	15.3	11.9	12.5	11.3	123.
%RSD	1.894	2.586	3.048	2.392	2.530	2.236	2.442
#1	521.9	5184.	518.7	510.1	506.8	517.2	5199.
#2	504.4	4955.	490.3	488.5	485.5	496.9	4983.
#3	506.1	4963.	494.6	490.8	484.8	498.6	4987.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	499.7	506.5	498.3	500.5	4746.	4904.	4998.
SDev	10.5	11.8	11.6	11.6	130.	100.	127.
%RSD	2.099	2.336	2.332	2.309	2.733	2.032	2.545
#1	511.7	520.2	511.7	513.8	4896.	5020.	5145.
#2	492.6	499.1	491.3	493.4	4678.	4844.	4921.
#3	494.7	500.3	491.9	494.2	4665.	4850.	4928.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	485.8	486.9	9953.	499.4	488.6	498.3	489.7
SDev	12.3	13.1	209.	10.8	15.1	10.9	12.6
%RSD	2.533	2.687	2.097	2.164	3.096	2.181	2.574
#1	500.0	502.0	10190.	511.8	505.7	510.7	504.2
#2	478.7	480.5	9816.	491.8	476.9	490.7	481.6
#3	478.6	478.3	9849.	494.5	483.2	493.4	483.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	482.9	511.2	499.0	499.2	486.3	490.3	Q2853.
SDev	10.2	10.9	9.8	9.2	12.5	12.9	30.
%RSD	2.122	2.123	1.967	1.839	2.578	2.624	1.037
#1	494.6	523.6	507.4	506.0	500.8	505.1	Q2886.
#2	475.4	503.6	501.4	488.7	479.5	483.9	Q2830.
#3	478.7	506.2	488.2	502.8	478.7	481.8	Q2842.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2501.	5350.	499.5	491.5	501.7	487.6	490.8
SDev	61.	131.	11.7	10.5	11.0	14.4	12.2
%RSD	2.445	2.445	2.351	2.143	2.199	2.948	2.482
#1	2572.	5501.	513.1	503.5	514.3	503.1	504.8
#2	2461.	5263.	492.2	484.0	494.1	474.8	484.9
#3	2472.	5287.	493.3	486.9	496.6	484.8	482.6
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/03/05 18:45:45
Comment: 462062||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0428	11.83	1.973	.7167	.4352	.3343	7.938
SDev	.6706	3.91	2.361	.1632	.3117	.2654	3.450
%RSD	1566.	33.08	119.6	22.77	71.62	79.41	43.46
#1	-.3265	12.24	2.457	.9034	.2612	.1924	6.101
#2	-.5250	7.729	-.5920	.6014	.2494	.1699	5.794
#3	.7230	15.53	4.055	.6453	.7950	.6405	11.92
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4390	.1014	.7723	.1795	2.671	12.78	.2013
SDev	.4190	.2453	.8662	.2418	2.193	3.34	3.008
%RSD	95.44	242.0	112.2	134.7	82.10	26.16	1495.
#1	.2706	-.1774	.6858	.3781	1.189	16.63	-1.087
#2	.1304	.1970	-.0475	-.0897	1.633	10.65	-1.948
#3	.9160	.2844	1.679	.2502	5.189	11.05	3.639
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4012	-.1184	-10.46	-.4420	3.563	.8035	2.601
SDev	.2705	.1958	6.33	1.0734	.887	1.787	3.744
%RSD	67.42	165.4	60.51	242.8	24.89	222.4	144.0
#1	.3273	-.3237	-15.35	-1.169	2.700	1.028	5.900
#2	.1754	-.0975	-12.73	-.9476	4.472	-1.085	-1.469
#3	.7010	.0662	-3.311	.7908	3.518	2.468	3.371
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.262	.2915	2.482	-16.52	.3490	.0832	.1646
SDev	.512	.2975	2.286	8.11	.6227	.3493	7.167
%RSD	40.54	102.0	92.10	49.10	178.4	419.7	4354.
#1	1.096	.2036	.3537	-7.280	.4268	-.1518	6.642
#2	.8539	.0479	4.898	-19.82	-.3089	-.0831	1.385
#3	1.836	.6231	2.193	-22.46	.9292	.4846	-7.534

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.404	20.12	.3291	.5522	.9289	1.705	3.048
SDev	1.208	2.58	.2555	1.149	2.834	2.015	6.601
%RSD	12.84	12.84	77.62	208.1	305.1	118.2	216.6
#1	10.79	23.08	.2110	1.827	.6283	.2762	8.708
#2	8.574	18.34	.1541	.2335	-1.743	4.010	-4.204
#3	8.848	18.93	.6222	-.4042	3.901	.8290	4.640
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/03/05 19:44:48
Comment: 462503||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	525.1	5150.	512.1	505.5	501.4	518.4	5176.
SDev	10.0	120.	9.2	10.3	12.4	10.6	121.
%RSD	1.906	2.330	1.797	2.029	2.472	2.046	2.344
#1	536.6	5288.	522.7	517.3	515.6	530.7	5316.
#2	518.7	5094.	507.9	498.8	495.9	512.5	5114.
#3	519.9	5068.	505.8	500.5	492.7	512.1	5099.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	514.5	520.8	511.7	513.4	4808.	4987.	5120.
SDev	10.1	11.2	11.5	10.8	128.	94.	119.
%RSD	1.964	2.149	2.247	2.096	2.662	1.891	2.318
#1	526.2	533.7	524.9	525.8	4955.	5096.	5257.
#2	508.9	514.8	505.8	507.5	4753.	4938.	5056.
#3	508.4	513.9	504.2	506.8	4717.	4927.	5047.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	495.0	495.5	10170.	514.6	495.1	513.8	502.3
SDev	11.5	13.3	246.	11.2	13.8	10.9	12.1
%RSD	2.333	2.692	2.424	2.167	2.789	2.118	2.412
#1	508.2	510.1	10450.	527.5	510.8	526.3	516.3
#2	489.6	492.6	10040.	508.3	485.1	509.1	495.2
#3	487.1	483.8	10010.	508.1	489.3	506.2	495.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	495.2	527.7	507.0	507.0	495.6	497.5	2733.
SDev	11.3	10.0	11.8	24.8	12.0	12.7	32.
%RSD	2.284	1.899	2.324	4.899	2.426	2.551	1.154
#1	508.1	539.3	520.6	532.2	509.4	512.1	Q2768.
#2	490.6	521.8	500.4	506.2	490.1	491.4	2707.
#3	486.9	522.0	500.0	482.5	487.3	489.1	2724.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2576.	5510.	511.8	506.0	517.7	500.8	503.1
SDev	58.	124.	11.3	11.7	10.5	12.2	12.1
%RSD	2.246	2.246	2.203	2.307	2.027	2.429	2.403
#1	2643.	5653.	524.8	519.3	529.8	514.9	517.1
#2	2543.	5440.	506.1	501.2	513.0	493.8	495.9
#3	2542.	5438.	504.5	497.5	510.5	493.9	496.3
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/03/05 19:50:43
Comment: 462503||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0517	5.369	.9226	.3321	.2572	.1989	6.750
SDev	.3161	4.494	1.558	.6819	.0292	.0139	.690
%RSD	611.8	83.71	168.9	205.3	11.37	6.990	10.23
#1	-.2686	9.014	1.364	1.120	.2237	.1981	7.521
#2	.3634	6.746	-.8089	-.0597	.2777	.2131	6.541
#3	.0601	.3472	2.213	-.0635	.2701	.1854	6.188
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0592	-.0282	-.1226	-.3788	1.332	3.388	-.9536
SDev	.2741	.0508	.3063	.4006	.445	6.510	1.2736
%RSD	462.8	180.0	249.8	105.8	33.43	192.1	133.6
#1	.2408	.0271	.0638	-.6033	1.165	7.907	.4559
#2	-.2561	-.0728	.0445	.0837	1.837	6.331	-2.022
#3	.1929	-.0390	-.4762	-.6168	.9953	-4.074	-1.295
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1770	.8345	4.802	-.6787	1.965	2.379	1.398
SDev	.0206	.6573	.726	1.1256	3.034	.808	3.176
%RSD	11.64	78.77	15.11	165.9	154.4	33.95	227.2
#1	.1667	.7493	5.463	-1.820	.4098	2.713	3.038
#2	.2007	1.530	4.917	.4300	5.461	2.966	-2.263
#3	.1636	.2239	4.025	-.6455	.0233	1.458	3.419
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.133	.2017	-2.675	-18.99	.2122	-.0930	-7.791
SDev	2.714	.0934	3.020	8.23	.1482	.1958	4.080
%RSD	86.62	46.33	112.9	43.31	69.86	210.5	52.37
#1	4.779	.2725	-5.206	-23.23	.3306	-.0358	-5.423
#2	4.619	.2368	.6674	-24.24	.2600	-.3111	-12.50
#3	.0008	.0958	-3.485	-9.513	.0459	.0678	-5.448

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.026	8.611	.1943	1.790	2.673	3.587	.3050
SDev	2.345	5.017	.0256	2.456	1.011	1.712	3.932
%RSD	58.25	58.26	13.18	137.2	37.83	47.72	1289.
#1	5.939	12.70	.2148	.4567	3.839	4.067	2.524
#2	4.729	10.11	.2025	4.624	2.138	1.687	-4.235
#3	1.410	3.015	.1656	.2883	2.042	5.008	2.626
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/03/05 20:55:42
Comment: 463356||6010 SOIL
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	526.3	5137.	513.3	498.1	499.3	521.6	5186.
SDev	2.5	23.	2.6	1.4	1.5	2.0	12.
%RSD	.4757	.4412	.5138	.2877	.2987	.3794	.2344
#1	524.6	5127.	510.5	496.5	499.6	520.1	5178.
#2	529.1	5163.	513.5	499.2	500.6	523.8	5200.
#3	525.1	5122.	515.8	498.5	497.7	520.7	5181.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	514.7	523.5	513.6	512.0	4776.	4948.	5121.
SDev	2.3	1.5	2.1	1.8	27.	14.	13.
%RSD	.4460	.2787	.4097	.3555	.5563	.2930	.2609
#1	513.2	522.6	512.2	510.7	4789.	4944.	5124.
#2	517.4	525.2	516.1	514.0	4794.	4964.	5133.
#3	513.6	522.9	512.7	511.2	4746.	4935.	5107.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	496.4	491.0	10130.	517.0	494.9	511.9	496.3
SDev	1.8	2.7	69.	2.7	3.7	4.8	3.8
%RSD	.3693	.5552	.6796	.5253	.7516	.9317	.7565
#1	496.3	492.1	10100.	513.9	493.5	506.7	495.8
#2	498.2	493.0	10200.	519.1	499.1	516.0	500.2
#3	494.6	487.9	10070.	517.9	492.1	513.1	492.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	492.4	533.6	509.7	500.2	494.6	494.5	2729.
SDev	4.0	2.6	3.8	15.9	2.3	2.9	27.
%RSD	.8134	.4801	.7430	3.180	.4646	.5782	.9791
#1	492.4	531.3	510.8	517.5	495.3	493.7	2699.
#2	496.4	536.4	512.8	486.2	496.4	497.6	Q2751.
#3	488.4	533.3	505.5	496.8	492.0	492.0	2737.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2562.	5479.	512.7	506.9	514.4	496.1	496.4
SDev	14.	30.	1.5	.5	7.2	3.3	5.7
%RSD	.5549	.5503	.2994	.1084	1.404	.6661	1.142
#1	2552.	5459.	512.2	507.2	506.4	492.3	497.6
#2	2578.	5514.	514.5	507.2	520.3	498.1	501.3
#3	2555.	5465.	511.5	506.2	516.6	497.9	490.2
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/03/05 21:01:37
Comment: 463356||6010 SOIL
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1240	10.77	.4595	.9557	.3032	.2701	6.751
SDev	.1409	1.87	3.955	.6167	.1694	.1218	1.013
%RSD	113.6	17.33	860.8	64.53	55.87	45.10	15.01
#1	-.0386	11.51	-3.789	.2460	.1630	.2106	7.003
#2	.2050	8.643	1.133	1.261	.2552	.1896	5.636
#3	.2058	12.15	4.034	1.361	.4914	.4103	7.615
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1774	-.1609	.0701	-1.162	6.357	12.72	-.4589
SDev	.1069	.3492	.2975	.256	1.326	3.63	2.5302
%RSD	60.24	217.0	424.6	22.03	20.86	28.51	551.4
#1	.0557	.2164	-.1362	-1.347	6.344	14.02	-2.309
#2	.2559	-.2263	-.0647	-1.270	5.037	8.627	-1.492
#3	.2208	-.4727	.4112	-.8699	7.689	15.53	2.424
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5027	.2699	-54.64	-.7235	.7315	.4789	2.579
SDev	.1650	.4451	5.82	.1674	2.851	1.209	.295
%RSD	32.82	164.9	10.65	23.14	389.8	252.5	11.46
#1	.4393	.7332	-59.80	-.5818	-1.913	-.4849	2.268
#2	.3789	.2308	-55.78	-.9083	.3547	1.836	2.611
#3	.6900	-.1544	-48.33	-.6804	3.752	.0857	2.856
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.425	.2721	3.458	-24.29	-.0910	.0637	-13.20
SDev	.627	.0720	2.594	3.63	.4110	.0615	7.93
%RSD	44.01	26.45	75.01	14.95	451.6	96.52	60.06
#1	1.984	.2644	5.966	-27.74	-.4608	.0572	-11.50
#2	1.545	.2042	.7866	-20.50	-.1638	.0058	-21.84
#3	.7467	.3475	3.620	-24.64	.3515	.1283	-6.263

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.098	2.348	.2568	2.783	-.6713	4.617	1.561
SDev	.596	1.274	.1249	.843	2.1605	5.480	2.445
%RSD	54.24	54.25	48.64	30.29	321.8	118.7	156.6
#1	1.605	3.433	.2310	2.879	-2.164	2.430	2.188
#2	1.247	2.666	.1468	1.896	1.806	.5680	3.632
#3	.4422	.9455	.3927	3.574	-1.656	10.85	-1.136
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV2 Operator: HSC
Run Time: 10/03/05 22:06:38
Comment: 463356||6010 SOIL
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	506.5	4973.	490.1	479.4	483.1	501.7	5005.
SDev	1.2	23.	5.1	1.4	3.5	.9	24.
%RSD	.2375	.4617	1.038	.2840	.7221	.1866	.4751
#1	507.1	4999.	493.7	481.0	487.0	502.8	5032.
#2	505.1	4964.	484.2	478.5	482.1	501.0	4993.
#3	507.3	4955.	492.3	478.9	480.2	501.3	4990.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	495.3	503.7	494.9	490.6	4658.	4804.	4958.
SDev	1.8	2.3	2.2	1.1	46.	21.	23.
%RSD	.3731	.4474	.4347	.2151	.9827	.4370	.4724
#1	496.8	506.3	497.3	491.8	4706.	4828.	4984.
#2	493.2	502.3	494.6	489.7	4654.	4796.	4947.
#3	495.8	502.5	493.0	490.5	4615.	4789.	4941.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	480.8	477.8	9816.	496.3	474.6	493.6	479.6
SDev	2.7	3.8	25.	1.9	4.4	2.6	3.1
%RSD	.5696	.7925	.2515	.3768	.9228	.5230	.6456
#1	483.7	481.5	9844.	498.5	475.5	495.9	483.1
#2	480.4	477.9	9803.	495.0	469.9	490.8	477.5
#3	478.2	474.0	9800.	495.5	478.5	494.2	478.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	476.9	512.7	500.1	481.6	478.7	477.7	2635.
SDev	.7	1.4	1.5	7.5	3.4	3.2	45.
%RSD	.1547	.2736	.2915	1.563	.7166	.6691	1.690
#1	477.7	512.8	501.7	490.2	482.5	481.0	2685.
#2	476.6	511.2	499.6	476.2	477.4	477.6	2622.
#3	476.2	514.0	499.0	478.4	476.0	474.6	2599.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2460.	5261.	494.8	487.6	496.7	476.4	481.1
SDev	6.	12.	1.8	3.8	4.3	4.5	5.6
%RSD	.2346	.2346	.3720	.7721	.8755	.9429	1.166
#1	2466.	5275.	497.0	490.4	498.7	475.7	486.8
#2	2457.	5256.	493.7	489.2	491.7	481.3	475.6
#3	2455.	5252.	493.9	483.3	499.6	472.4	480.9
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB2 Operator: HSC
Run Time: 10/03/05 22:12:34
Comment: 463356||6010 SOIL
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2006	21.48	1.339	.1628	.2713	.2281	13.42
SDev	.5267	.99	.813	.6995	.0476	.0098	.29
%RSD	262.6	4.587	60.76	429.7	17.55	4.298	2.136
#1	-.3809	22.48	1.368	.6895	.2223	.2247	13.52
#2	.6458	20.51	.5111	-.6308	.3174	.2391	13.64
#3	.3367	21.46	2.137	.4297	.2742	.2204	13.09
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2901	.1835	.3194	-.6430	10.87	23.06	4.780
SDev	.1776	.0767	.1442	.5482	1.59	3.60	.586
%RSD	61.21	41.83	45.14	85.26	14.64	15.59	12.25
#1	.4942	.1838	.1760	-.0286	12.65	19.16	4.420
#2	.2050	.1065	.4643	-1.082	10.40	26.25	5.455
#3	.1711	.2600	.3179	-.8182	9.577	23.77	4.464
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5432	-.3018	-101.0	-.5475	2.530	.4419	1.419
SDev	.0730	.4345	3.5	.4590	3.763	1.623	1.224
%RSD	13.43	144.0	3.481	83.83	148.7	367.3	86.30
#1	.5907	.1802	-97.26	-.2000	3.485	.2234	.2081
#2	.5796	-.4221	-101.7	-1.068	5.722	-1.061	2.656
#3	.4592	-.6634	-104.2	-.3747	-1.619	2.164	1.392
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.787	.5699	3.181	-31.37	.0453	1.277	-14.58
SDev	.866	.0737	.820	8.79	.3037	.068	7.78
%RSD	31.09	12.94	25.79	28.03	670.7	5.297	53.33
#1	2.516	.6545	3.766	-39.84	-.0874	1.272	-5.696
#2	2.088	.5193	2.243	-31.96	-.1695	1.212	-20.14
#3	3.756	.5359	3.534	-22.29	.3928	1.347	-17.91

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.600	16.26	.2180	.6234	.3513	3.265	.4968
SDev	2.413	5.16	.0188	2.012	2.854	7.077	1.747
%RSD	31.74	31.74	8.649	322.7	812.3	216.8	351.7
#1	8.669	18.54	.2376	-1.545	1.106	-4.322	2.469
#2	9.294	19.88	.2164	2.430	-2.804	9.688	-.8547
#3	4.838	10.35	.2000	.9856	2.752	4.428	-.1244
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV2 Operator: HSC
Run Time: 10/03/05 23:11:42
Comment: 463346||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	531.6	5205.	516.1	507.5	508.7	527.7	5258.
SDev	2.3	3.	3.5	2.1	2.0	1.7	8.
%RSD	.4408	.0531	.6800	.4119	.3932	.3266	.1592
#1	532.6	5206.	516.5	505.1	508.1	528.8	5259.
#2	533.3	5207.	519.5	508.6	507.1	528.7	5250.
#3	528.9	5202.	512.5	508.9	510.9	525.7	5266.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	521.2	529.3	520.9	518.4	4880.	5122.	5219.
SDev	2.6	1.0	.5	1.5	43.	22.	8.
%RSD	.5028	.1903	.1023	.2875	.8814	.4368	.1468
#1	523.4	529.8	521.3	518.9	4857.	5145.	5214.
#2	521.9	530.0	521.1	519.6	4853.	5120.	5215.
#3	518.3	528.2	520.3	516.8	4929.	5101.	5227.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	504.5	499.8	10270.	523.7	502.0	520.0	505.2
SDev	1.5	2.7	17.	2.6	1.8	2.6	1.6
%RSD	.3006	.5494	.1675	.5015	.3643	.5016	.3155
#1	503.7	497.7	10290.	524.3	503.1	519.8	507.0
#2	503.5	498.7	10280.	525.9	503.0	522.7	504.4
#3	506.2	502.9	10250.	520.8	499.9	517.4	504.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	502.7	537.2	518.5	524.7	503.9	503.4	Q2779.
SDev	1.3	3.2	8.5	6.2	2.3	1.6	41.
%RSD	.2634	.5876	1.630	1.176	.4496	.3116	1.458
#1	502.8	539.0	520.2	531.3	504.2	503.0	Q2812.
#2	501.3	539.1	509.3	519.1	501.5	502.0	2734.
#3	503.9	533.6	525.9	523.6	506.0	505.1	Q2791.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2588.	5535.	521.1	514.8	522.6	504.7	505.4
SDev	9.	19.	.7	1.4	3.6	2.6	3.1
%RSD	.3440	.3464	.1430	.2653	.6840	.5124	.6049
#1	2593.	5546.	521.8	516.0	521.7	503.5	508.8
#2	2593.	5546.	521.0	515.0	526.5	507.7	502.8
#3	2578.	5513.	520.3	513.3	519.5	503.0	504.6
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB2 Operator: HSC
Run Time: 10/03/05 23:17:39
Comment: 463346||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4461	15.60	1.110	1.816	.4098	.3199	13.22
SDev	.4264	3.90	2.252	.672	.2189	.0470	.65
%RSD	95.58	24.97	203.0	36.97	53.42	14.69	4.928
#1	-.0082	20.10	3.317	1.994	.6286	.3739	13.38
#2	-.8600	13.17	-1.185	2.381	.4098	.2981	13.77
#3	-.4700	13.54	1.196	1.074	.1908	.2878	12.50
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3968	.0410	.3864	-.0825	2.625	66.70	3.080
SDev	.1027	.4675	.3289	.4216	.679	9.48	1.750
%RSD	25.89	1139.	85.12	511.0	25.87	14.22	56.82
#1	.5115	.5735	.0067	-.1598	3.345	75.79	5.019
#2	.3656	-.1483	.5831	.3724	1.996	67.44	1.620
#3	.3133	-.3021	.5693	-.4601	2.536	56.87	2.599
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2673	.1404	-85.46	-.0954	5.251	.4995	2.619
SDev	.0503	.4595	2.90	.6230	1.531	1.910	.619
%RSD	18.83	327.3	3.392	653.2	29.16	382.5	23.62
#1	.2206	-.1835	-82.44	.5475	6.821	-.6437	1.910
#2	.2608	-.0616	-85.72	-.6964	5.171	-.5629	3.052
#3	.3206	.6663	-88.21	-.1372	3.762	2.705	2.894
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.969	.2353	2.264	-19.64	.0179	1.016	-14.54
SDev	1.056	.0678	6.805	5.21	.2601	.023	.68
%RSD	35.57	28.81	300.6	26.56	1451.	2.260	4.671
#1	3.996	.3130	1.677	-22.71	-.1713	1.004	-13.96
#2	3.024	.1881	9.343	-13.62	.3146	1.002	-14.36
#3	1.886	.2049	-4.229	-22.58	-.0896	1.043	-15.29

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.665	12.12	.3365	1.751	-.1254	4.462	1.699
SDev	4.155	8.89	.0283	3.367	1.2018	3.639	1.257
%RSD	73.34	73.34	8.412	192.3	958.6	81.56	73.99
#1	9.004	19.26	.3690	-.5725	-.6792	1.616	2.057
#2	6.979	14.93	.3230	.2133	-.9504	8.562	.3017
#3	1.012	2.165	.3175	5.612	1.253	3.207	2.738
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV2 Operator: HSC
Run Time: 10/04/05 00:22:45
Comment: 462863||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	536.8	5252.	522.9	510.1	512.9	533.8	5323.
SDev	5.3	21.	5.8	4.7	1.4	3.9	26.
%RSD	.9946	.3996	1.108	.9171	.2801	.7364	.4915
#1	530.6	5228.	521.1	505.0	511.4	529.3	5293.
#2	539.8	5265.	529.3	510.9	514.3	536.1	5342.
#3	539.8	5264.	518.1	514.3	512.9	536.1	5333.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	527.1	534.8	527.0	523.1	4900.	5048.	5263.
SDev	3.6	3.6	3.3	3.6	14.	22.	24.
%RSD	.6892	.6822	.6203	.6811	.2803	.4306	.4611
#1	523.0	530.6	523.2	519.0	4910.	5023.	5235.
#2	529.7	536.8	528.8	524.9	4906.	5062.	5279.
#3	528.7	537.0	528.9	525.4	4884.	5058.	5274.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	507.8	502.4	10320.	529.0	505.9	524.9	507.7
SDev	1.3	2.3	47.	4.2	4.7	5.1	2.4
%RSD	.2645	.4487	.4582	.8017	.9365	.9664	.4699
#1	506.3	504.9	10270.	524.1	501.9	519.2	505.2
#2	508.9	500.6	10350.	530.8	511.1	528.7	508.0
#3	508.1	501.6	10350.	532.0	504.6	526.9	509.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	506.4	543.2	529.0	516.9	507.8	507.5	Q2965.
SDev	3.3	5.1	8.4	11.5	1.9	2.1	47.
%RSD	.6514	.9434	1.585	2.219	.3650	.4168	1.581
#1	503.1	537.3	519.3	528.1	506.1	506.0	Q2912.
#2	506.5	545.8	533.9	517.4	509.8	509.9	Q2981.
#3	509.7	546.4	533.8	505.2	507.4	506.6	Q3001.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2629.	5624.	525.3	518.1	528.3	509.7	506.7
SDev	16.	33.	3.2	2.8	6.2	.7	3.7
%RSD	.5920	.5945	.6094	.5368	1.177	.1285	.7233
#1	2611.	5586.	521.6	515.0	521.3	509.6	503.0
#2	2639.	5644.	527.0	520.3	532.9	510.5	506.8
#3	2638.	5642.	527.4	519.0	530.9	509.2	510.3
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB2 Operator: HSC
Run Time: 10/04/05 00:28:41
Comment: 462863||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0154	13.78	2.191	1.399	.3268	.2372	8.335
SDev	.4972	4.34	.696	.350	.0165	.0324	.327
%RSD	3222.	31.52	31.79	25.03	5.054	13.65	3.928
#1	-.5518	18.19	2.657	1.371	.3078	.2644	8.693
#2	.2223	9.506	2.525	1.063	.3343	.2459	8.259
#3	.3758	13.64	1.390	1.762	.3381	.2014	8.052
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2273	-.1153	.1721	-.9084	1.413	22.49	.0348
SDev	.3384	.3250	.4797	.2208	.096	4.20	3.657
%RSD	148.9	281.9	278.8	24.30	6.793	18.67	10510.
#1	.2791	-.4254	-.3688	-1.149	1.506	22.27	-4.049
#2	.5369	-.1432	.3393	-.8595	1.314	26.80	3.005
#3	-.1340	.2228	.5457	-.7161	1.420	18.41	1.149
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2194	.8269	-102.3	-.8004	2.311	.0318	3.239
SDev	.0228	.9600	7.8	1.3473	3.431	1.198	4.547
%RSD	10.40	116.1	7.575	168.3	148.5	3772.	140.4
#1	.2434	1.102	-110.3	-2.158	2.136	.3746	8.317
#2	.2167	1.619	-94.79	.5364	5.826	1.021	1.857
#3	.1980	-.2408	-102.0	-.7796	-1.030	-1.300	-.4572
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.227	.2583	1.106	-27.33	.1817	.4979	-7.884
SDev	1.125	.1343	2.689	3.16	.1708	.0849	2.487
%RSD	91.74	51.99	243.0	11.56	94.00	17.05	31.54
#1	1.355	.3806	-1.629	-30.90	.3221	.5626	-10.75
#2	2.282	.2797	1.203	-24.89	.2316	.5293	-6.277
#3	.0425	.1146	3.746	-26.21	-.0085	.4018	-6.626

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	86.56	185.2	.2045	-.8364	.4652	5.183	2.268
SDev	126.2	269.9	.0160	1.3258	1.137	4.493	5.392
%RSD	145.8	145.8	7.840	158.5	244.5	86.70	237.7
#1	Q232.3	496.9	.2209	-.5753	.8488	7.966	8.492
#2	14.62	31.28	.1889	.3393	1.361	7.583	-1.002
#3	12.79	27.35	.2036	-2.273	-.8145	-.0009	-.6851
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV3 Operator: HSC
Run Time: 10/04/05 01:16:04
Comment: 462861||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	542.7	5315.	530.7	518.6	518.8	541.4	5382.
SDev	2.8	18.	2.7	2.6	1.2	2.6	14.
%RSD	.5142	.3401	.5086	.5101	.2384	.4875	.2619
#1	539.5	5294.	528.3	516.8	517.9	538.3	5366.
#2	543.8	5328.	530.2	521.7	520.2	542.7	5393.
#3	544.8	5323.	533.6	517.5	518.3	543.0	5387.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	535.0	542.9	533.4	529.4	4968.	5098.	5339.
SDev	2.7	2.4	1.5	2.0	13.	15.	16.
%RSD	.5039	.4506	.2860	.3836	.2642	.2925	.2946
#1	531.9	540.1	531.6	527.1	4978.	5081.	5322.
#2	536.6	544.4	534.4	530.4	4972.	5107.	5353.
#3	536.5	544.2	534.1	530.7	4953.	5106.	5343.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	514.8	512.0	10640.	534.2	512.6	529.6	511.9
SDev	.9	1.5	339.	2.1	4.0	4.2	1.1
%RSD	.1804	.2971	3.184	.3992	.7819	.7932	.2075
#1	513.9	510.6	10420.	531.9	517.0	524.8	511.2
#2	515.8	513.6	Q11030.	536.0	509.1	532.3	513.1
#3	514.9	511.9	10460.	534.8	511.7	531.8	511.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	513.4	549.1	528.1	528.0	514.0	515.9	Q2863.
SDev	4.1	4.3	8.9	11.0	1.7	.5	45.
%RSD	.7896	.7823	1.684	2.076	.3321	.1033	1.582
#1	508.9	544.2	517.8	515.4	513.6	515.6	Q2814.
#2	514.6	Q551.0	533.2	533.2	515.9	516.5	Q2903.
#3	516.7	Q552.2	533.3	535.4	512.6	515.6	Q2873.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2657.	5684.	531.3	524.6	532.1	511.6	512.0
SDev	12.	26.	2.2	3.2	4.7	1.8	1.8
%RSD	.4660	.4660	.4100	.6095	.8843	.3543	.3426
#1	2643.	5654.	528.7	521.0	526.7	509.7	511.9
#2	2662.	5694.	532.6	526.5	535.2	511.6	513.8
#3	2666.	5704.	532.5	526.5	534.4	513.4	510.3
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB3 Operator: HSC
Run Time: 10/04/05 01:22:01
Comment: 462861||6010 WATER
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0439	7.767	2.498	.6579	.3255	.2448	6.877
SDev	.1972	2.913	2.680	1.062	.1180	.0609	.235
%RSD	449.1	37.51	107.3	161.3	36.26	24.86	3.423
#1	.1782	6.919	-.3580	1.001	.2790	.1838	6.637
#2	.1361	11.01	4.957	-.5326	.2377	.2451	6.887
#3	-.1825	5.372	2.895	1.506	.4596	.3055	7.108
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4193	.1999	.5340	-1.029	1.478	12.77	-1.984
SDev	.0935	.4927	.2852	.517	.740	3.59	3.365
%RSD	22.29	246.5	53.41	50.28	50.11	28.09	169.6
#1	.4763	.6400	.4664	-1.047	.8906	16.90	-5.843
#2	.3115	-.3323	.2886	-1.537	1.233	10.89	.3441
#3	.4702	.2920	.8469	-.5030	2.310	10.51	-.4545
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2292	1.146	-62.40	-1.052	1.573	1.052	2.129
SDev	.1041	.520	1.24	.931	2.368	.850	2.319
%RSD	45.41	45.36	1.993	88.50	150.6	80.80	108.9
#1	.1095	.6914	-63.15	-.0864	1.751	1.306	4.749
#2	.2801	1.033	-63.09	-1.944	3.847	.1041	.3387
#3	.2980	1.712	-60.97	-1.126	-.8793	1.747	1.299
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.157	.2353	5.908	-24.63	-.0124	-.0915	-16.53
SDev	1.156	.0664	2.430	14.56	.3779	.1514	8.12
%RSD	53.57	28.24	41.14	59.12	3058.	165.6	49.13
#1	2.342	.1702	4.555	-31.93	-.0113	-.2177	-8.553
#2	3.209	.2328	8.714	-7.865	.3651	-.1332	-16.26
#3	.9200	.3030	4.456	-34.10	-.3908	.0764	-24.79

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	8.461	18.10	.2338	1.534	.8117	2.262	2.062
SDev	.178	.38	.0670	.234	1.193	3.253	1.891
%RSD	2.109	2.109	28.67	15.25	147.0	143.8	91.69
#1	8.661	18.53	.1625	1.404	1.257	5.768	4.240
#2	8.405	17.98	.2434	1.395	-.5403	-.6584	.8366
#3	8.317	17.79	.2956	1.805	1.718	1.677	1.110
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: 1200937536 Operator: HSC
Run Time: 10/04/05 01:27:57
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1659	24.68	2.018	2.189	.1702	.0833	36.98
SDev	.2483	4.58	.798	.741	.0574	.0027	.66
%RSD	149.7	18.55	39.57	33.87	33.75	3.306	1.772
#1	.1072	29.81	1.097	1.873	.2197	.0861	37.59
#2	-.2268	23.25	2.524	3.036	.1072	.0833	37.06
#3	-.3780	21.00	2.431	1.658	.1837	.0806	36.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000	200.0	15.00	50.00	5.000	5.000	100.0
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2161	-.1587	.0235	-.9232	9.209	15.89	1.905
SDev	.0314	.3576	.5132	.1495	.281	2.54	1.018
%RSD	14.55	225.3	2184.	16.20	3.056	15.99	53.46
#1	.1836	.1645	-.2780	-1.085	9.079	13.37	2.013
#2	.2464	-.0977	.6161	-.8951	9.532	15.85	2.865
#3	.2182	-.5429	-.2676	-.7898	9.017	18.45	.8371
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000	5.000	5.000	10.00	100.0	150.0	300.0
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2235	-.1365	-72.69	-1.274	4.043	1.748	.2887
SDev	.0256	.8554	7.93	.716	3.280	.506	1.793
%RSD	11.45	626.7	10.90	56.19	81.14	28.95	621.3
#1	.2530	-1.005	-81.26	-1.075	4.956	1.575	1.505
#2	.2103	.7055	-71.20	-2.069	.4029	1.350	-1.771
#3	.2072	-.1103	-65.62	-.6791	6.770	2.317	1.132
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	10.00	150.0	5.000	10.00	10.00	15.00
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3743	.1483	2.831	-22.19	-.1689	2.517	-10.95
SDev	1.371	.0641	2.404	16.20	.0766	.109	7.71
%RSD	366.3	43.21	84.90	72.99	45.39	4.322	70.42
#1	-1.101	.0768	1.043	-30.55	-.2470	2.501	-3.284
#2	.6149	.1675	5.564	-32.51	-.1659	2.632	-18.71
#3	1.609	.2005	1.887	-3.522	-.0937	2.417	-10.87

High	10.00	5.000	20.00	50.00	10.00	10.00	
Low	-10.00	-5.000	-20.00	-50.00	-10.00	-10.00	
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	13.64	29.18	.1652	1.206	2.018	6.132	-2.629
SDev	3.56	7.62	.0109	1.701	1.089	.999	2.280
%RSD	26.13	26.13	6.581	141.0	53.95	16.29	86.75
#1	15.59	33.34	.1629	-.7135	2.718	7.199	-1.338
#2	15.81	33.82	.1771	2.525	.7637	5.220	-5.261
#3	9.529	20.38	.1557	1.807	2.572	5.976	-1.286
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	100.0		10.00				
Low	-100.0		-10.00				

Method: TRACE2 Sample Name: 1200937549 Operator: HSC
Run Time: 10/04/05 01:33:52
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	532.0	5263.	524.8	511.5	518.9	526.4	5269.
SDev	3.6	17.	3.3	1.0	.5	2.5	14.
%RSD	.6708	.3309	.6374	.1860	.1000	.4743	.2583
#1	528.5	5244.	525.5	510.4	518.4	524.0	5256.
#2	531.7	5265.	527.7	512.0	518.8	526.4	5268.
#3	535.7	5278.	521.1	512.0	519.4	529.0	5283.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	520.3	527.0	516.8	525.8	4892.	4930.	5220.
SDev	2.5	2.5	1.3	3.2	13.	19.	16.
%RSD	.4858	.4767	.2492	.6099	.2594	.3861	.3053
#1	518.0	524.3	515.7	522.3	4906.	4911.	5204.
#2	519.8	527.5	516.6	526.4	4881.	4930.	5222.
#3	523.0	529.2	518.2	528.7	4889.	4949.	5235.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	508.0	500.7	5106.	522.6	504.3	522.4	494.8
SDev	1.2	2.5	34.	1.5	1.9	2.9	2.5
%RSD	.2312	.5012	.6572	.2789	.3702	.5610	.5150
#1	507.7	503.5	5068.	521.8	504.4	521.9	495.4
#2	507.0	498.9	5131.	521.6	502.3	519.7	492.0
#3	509.3	499.7	5120.	524.2	506.0	525.5	497.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	505.7	539.6	519.8	514.1	503.1	514.0	564.7
SDev	3.5	4.5	2.1	4.3	.2	.7	11.8
%RSD	.6887	.8256	.3996	.8300	.0369	.1277	2.084
#1	502.4	535.2	518.5	509.2	503.3	513.2	556.7
#2	505.5	539.6	518.7	516.0	502.9	514.4	559.2
#3	509.3	544.1	522.2	517.0	503.1	514.4	578.2

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5101.	10910.	518.5	515.7	525.7	491.5	496.4
SDev	29.	62.	1.9	1.5	3.8	1.9	4.5
%RSD	.5630	.5649	.3611	.2900	.7247	.3901	.8972
#1	5071.	10850.	516.8	514.5	525.6	493.0	496.6
#2	5104.	10920.	518.3	515.2	521.9	492.2	491.9
#3	5128.	10970.	520.5	517.4	529.5	489.4	500.8
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 145579001 Operator: HSC
Run Time: 10/04/05 01:39:48
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2858	77.27	3.180	83.12	149.8	1.326	20600.
SDev	.4255	3.98	1.978	1.22	.4	.014	12.
%RSD	148.9	5.150	62.20	1.468	.2348	1.024	.0595
#1	-.7364	72.99	3.796	82.06	149.9	1.339	20610.
#2	-.2303	80.85	4.777	82.83	150.0	1.327	20600.
#3	.1093	77.99	.9676	84.45	149.4	1.312	20590.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.7522	1.203	5.158	9.797	28.74	9572.	5189.
SDev	.1645	.397	.573	.175	.27	2.	3.
%RSD	21.87	32.98	11.12	1.784	.9414	.0206	.0532
#1	.8534	.8219	4.497	9.833	28.71	9569.	5192.
#2	.5624	1.174	5.452	9.951	29.03	9573.	5187.
#3	.8409	1.614	5.525	9.607	28.49	9572.	5189.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.890	69.39	90860.	5.457	4.327	4.103	-.0035
SDev	.043	.29	409.	1.071	1.845	.869	1.0910
%RSD	2.301	.4200	.4503	19.63	42.64	21.18	30860.
#1	1.900	69.69	90470.	6.022	3.552	3.730	-1.250
#2	1.927	69.11	90830.	4.221	6.433	5.096	.7773
#3	1.842	69.38	91280.	6.128	2.995	3.482	.4622
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.482	.4651	2.911	-21.84	3.132	34.78	67.37
SDev	1.113	.0710	4.420	26.14	.496	.20	3.08
%RSD	24.83	15.27	151.8	119.7	15.84	.5714	4.571
#1	5.347	.3892	7.414	-7.941	3.584	34.66	66.08
#2	3.227	.4761	2.739	-5.589	2.601	35.01	65.15
#3	4.872	.5300	-1.420	L-51.99	3.209	34.68	70.89

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	17730.	37910.	136.2	2.937	4.684	1.600	-.8040
SDev	33.	72.	.1	.578	1.015	5.082	4.0210
%RSD	.1885	.1898	.0496	19.68	21.67	317.7	500.1
#1	17690.	37840.	136.2	2.732	4.228	6.983	-5.360
#2	17730.	37920.	136.2	3.590	5.848	.9317	.7002
#3	17760.	37980.	136.3	2.490	3.978	-3.115	2.248
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 145579002 Operator: HSC
Run Time: 10/04/05 01:45:43
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0719	39.07	.8410	31.66	19.45	.5086	36540.
SDev	.4317	4.09	1.698	1.40	.30	.0225	603.
%RSD	600.7	10.46	201.9	4.410	1.545	4.417	1.650
#1	.5063	43.75	1.580	33.27	19.79	.5317	37230.
#2	.0664	36.27	2.043	30.82	19.30	.5074	36310.
#3	-.3571	37.18	-1.101	30.89	19.25	.4868	36100.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3209	.5173	29.35	18.43	28.47	839.5	5725.
SDev	.0872	.2780	1.00	.32	.41	14.4	93.
%RSD	27.18	53.74	3.403	1.752	1.449	1.712	1.626
#1	.2928	.7858	30.45	18.64	28.95	855.8	5830.
#2	.4187	.2307	29.12	18.59	28.23	834.3	5689.
#3	.2513	.5355	28.50	18.06	28.24	828.5	5655.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.489	1.612	24280.	5.514	4.819	1.344	-.2550
SDev	.129	.563	367.	.667	4.722	.604	4.9155
%RSD	1.725	34.94	1.511	12.09	97.99	44.93	1928.
#1	7.622	2.132	24690.	5.754	10.24	.9170	-.8985
#2	7.479	1.692	24200.	4.760	1.574	2.034	-4.817
#3	7.365	1.014	23970.	6.027	2.647	1.079	4.951
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.885	.1491	.1088	-24.59	1.457	52.91	40.63
SDev	2.247	.0989	2.392	5.24	.413	.73	.93
%RSD	119.2	66.34	2198.	21.32	28.36	1.370	2.299
#1	2.357	.2482	.4797	-22.87	1.915	53.67	41.41
#2	3.859	.1490	2.294	-20.42	1.342	52.84	39.60
#3	-.5600	.0503	-2.447	-30.48	1.113	52.22	40.88

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	32920.	70400.	176.9	1.788	1.122	-.7074	-.0292
SDev	515.	1100.	3.2	.878	.631	5.2150	4.8535
%RSD	1.564	1.562	1.802	49.10	56.23	737.2	16640.
#1	33510.	71670.	180.6	1.817	.4679	-2.621	-.0387
#2	32660.	69860.	175.4	2.651	1.727	-4.696	-4.878
#3	32580.	69690.	174.8	.8959	1.171	5.194	4.829
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 145579003 Operator: HSC
Run Time: 10/04/05 01:51:39
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2162	2270.	2.371	79.72	133.1	.6677	15630.
SDev	.2400	30.	2.004	1.20	1.8	.0100	183.
%RSD	111.0	1.329	84.51	1.504	1.337	1.491	1.169
#1	-.0630	2304.	.4481	81.10	135.2	.6792	15840.
#2	-.4928	2260.	2.218	79.01	132.5	.6611	15550.
#3	-.0930	2246.	4.448	79.04	131.8	.6628	15510.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2301	.7320	3.981	1.500	1020.	11900.	4041.
SDev	.1064	.1033	.175	.050	17.	104.	44.
%RSD	46.26	14.12	4.390	3.309	1.619	.8733	1.100
#1	.2047	.6554	4.005	1.554	1039.	12020.	4091.
#2	.1386	.8495	3.795	1.457	1014.	11840.	4025.
#3	.3469	.6911	4.142	1.489	1008.	11840.	4007.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.606	98.33	69420.	3.658	1.472	1.312	.2937
SDev	.129	1.67	520.	.462	2.865	1.393	2.780
%RSD	1.702	1.701	.7490	12.62	194.7	106.1	946.4
#1	7.754	100.3	70000.	3.955	4.602	.3975	-2.893
#2	7.514	97.24	69000.	3.893	-1.022	.6245	2.220
#3	7.550	97.51	69260.	3.126	.8351	2.915	1.554
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8387	31.65	1.024	-37.88	3.959	19.59	110.9
SDev	1.169	.37	2.143	12.71	.224	.30	7.5
%RSD	139.4	1.165	209.2	33.55	5.651	1.510	6.764
#1	2.145	31.91	-1.028	-27.51	4.215	19.93	111.9
#2	.4814	31.82	.8527	-34.07	3.862	19.40	117.9
#3	-.1103	31.23	3.248	L-52.06	3.800	19.44	103.0

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	20950.	44810.	102.7	3.740	.1006	-.9390	.9091
SDev	188.	401.	1.0	1.846	1.186	1.7060	5.003
%RSD	.8974	.8940	.9933	49.35	1179.	181.7	550.3
#1	21170.	45270.	103.9	2.273	-.5387	1.023	-4.848
#2	20840.	44570.	102.1	3.134	-.6285	-1.763	4.208
#3	20840.	44580.	102.2	5.812	1.469	-2.077	3.367
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 145579004 Operator: HSC
Run Time: 10/04/05 01:57:34
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2679	161.0	.9319	77.12	176.9	.0905	20750.
SDev	.5101	4.5	2.737	1.15	1.3	.0196	100.
%RSD	190.4	2.780	293.8	1.496	.7227	21.69	.4811
#1	.1400	163.0	-1.076	78.18	178.3	.0679	20850.
#2	-.8398	155.8	-.1788	75.89	176.6	.1027	20740.
#3	-.1038	164.0	4.050	77.28	175.7	.1009	20650.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1772	.3048	1.033	.3268	68.82	15130.	5210.
SDev	.1123	.2488	.491	.4739	.74	38.	28.
%RSD	63.33	81.63	47.58	145.0	1.077	.2526	.5289
#1	.1432	.5774	1.292	.2088	69.67	15160.	5237.
#2	.3026	.2469	.4660	.8485	68.47	15140.	5210.
#3	.0860	.0900	1.340	-.0770	68.32	15090.	5182.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4683	74.71	76300.	1.592	2.561	-.5594	.0318
SDev	.1015	1.62	158.	.614	2.111	2.4015	2.775
%RSD	21.68	2.174	.2071	38.57	82.44	429.3	8734.
#1	.5831	76.36	76300.	1.994	1.401	.3923	-2.708
#2	.4312	73.11	76450.	1.897	4.999	-3.291	2.840
#3	.3905	74.65	76130.	.8852	1.284	1.220	-.0362
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8197	1.908	.6065	-22.42	3.264	6.573	369.2
SDev	1.393	.061	3.718	26.05	.492	.305	8.5
%RSD	170.0	3.203	613.0	116.2	15.07	4.641	2.297
#1	.6550	1.970	3.677	-16.85	3.351	6.879	376.5
#2	-.4841	1.905	1.670	.4054	2.734	6.571	371.2
#3	2.288	1.848	-3.527	L-50.80	3.706	6.269	359.9

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18720.	40040.	139.1	2.069	-1.872	2.186	-1.044
SDev	11.	24.	.6	1.653	4.306	5.570	2.320
%RSD	.0579	.0593	.4601	79.88	230.1	254.8	222.3
#1	18730.	40060.	139.7	.5142	.3315	-.7295	-3.696
#2	18720.	40050.	139.3	3.804	-6.833	8.608	-.0401
#3	18710.	40010.	138.4	1.888	.8870	-1.321	.6054
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 145579005 Operator: HSC
Run Time: 10/04/05 02:03:30
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6865	137.4	1.273	78.48	148.5	.0578	20390.
SDev	.4818	3.2	1.952	.32	.6	.0131	94.
%RSD	70.19	2.348	153.3	.4104	.4117	22.64	.4612
#1	-1.050	139.1	2.471	78.79	149.1	.0618	20500.
#2	-.8692	139.3	-.9788	78.14	147.9	.0432	20350.
#3	-.1400	133.7	2.327	78.50	148.5	.0685	20330.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2465	-.5840	1.374	.0468	62.50	9563.	5122.
SDev	.0784	.4066	.117	.2075	.81	51.	25.
%RSD	31.79	69.62	8.482	443.6	1.301	.5359	.4917
#1	-.2038	-.8808	1.469	.2376	62.69	9617.	5151.
#2	-.3369	-.7506	1.244	-.1741	61.61	9557.	5108.
#3	-.1988	-.1206	1.410	.0767	63.20	9515.	5107.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.470	69.11	89290.	4.060	3.698	.3578	-1.406
SDev	.055	.31	957.	.586	2.433	1.504	.585
%RSD	3.775	.4454	1.072	14.44	65.80	420.4	41.58
#1	1.533	69.18	90080.	4.323	4.556	1.567	-.7915
#2	1.429	68.77	89560.	4.467	5.586	.8333	-1.470
#3	1.447	69.37	88230.	3.388	.9519	-1.327	-1.955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.048	1.989	-.5739	-32.40	1.458	4.493	67.19
SDev	1.680	.048	2.7741	3.02	.312	.189	7.87
%RSD	82.00	2.428	483.3	9.315	21.39	4.217	11.71
#1	.3380	1.969	-2.624	-35.46	1.101	4.701	75.21
#2	3.695	1.955	-1.680	-29.43	1.600	4.329	59.49
#3	2.111	2.044	2.583	-32.33	1.674	4.451	66.86

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	17690.	37840.	133.7	1.122	-.0236	-4.138	-.0414
SDev	78.	167.	.7	2.566	1.5760	2.168	1.1139
%RSD	.4386	.4423	.5505	228.7	6672.	52.38	2691.
#1	17750.	37970.	134.5	1.193	1.754	-2.334	-.0213
#2	17720.	37890.	133.6	3.652	-.5738	-6.543	1.062
#3	17600.	37650.	133.1	-1.479	-1.251	-3.537	-1.165
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: CCV3 Operator: HSC
Run Time: 10/04/05 02:09:26
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	539.2	5274.	524.8	516.9	513.8	533.8	5304.
SDev	3.6	21.	3.7	.3	.9	2.6	11.
%RSD	.6766	.3945	.7062	.0552	.1767	.4945	.2081
#1	543.1	5297.	527.0	516.5	514.7	536.8	5317.
#2	535.9	5256.	520.5	516.9	513.8	531.6	5300.
#3	538.4	5269.	526.9	517.1	512.9	533.0	5297.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	528.1	536.3	525.6	527.1	4884.	5087.	5253.
SDev	1.8	2.2	2.6	2.6	21.	19.	9.
%RSD	.3388	.4035	.4887	.4943	.4204	.3677	.1773
#1	530.0	538.5	528.3	529.8	4873.	5109.	5263.
#2	526.5	534.2	523.1	524.6	4908.	5079.	5248.
#3	527.9	536.3	525.5	526.8	4872.	5074.	5247.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	506.4	506.3	10880.	528.7	508.7	526.4	513.4
SDev	1.0	1.9	361.	3.1	2.3	2.4	2.6
%RSD	.2028	.3714	3.320	.5898	.4570	.4632	.5093
#1	507.3	504.9	10470.	532.1	510.6	529.2	516.4
#2	506.5	508.5	Q11030.	525.9	509.3	524.9	512.4
#3	505.3	505.6	Q11140.	528.3	506.1	525.2	511.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	505.0	542.7	524.5	526.9	506.5	510.7	Q2886.
SDev	.9	3.9	5.1	2.9	1.1	1.5	45.
%RSD	.1759	.7188	.9765	.5484	.2231	.2846	1.567
#1	505.7	546.9	519.1	524.3	506.7	510.2	Q2934.
#2	505.3	539.2	525.0	526.4	507.6	512.3	Q2881.
#3	504.0	542.0	529.4	530.0	505.3	509.5	Q2844.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2659.	5688.	524.5	519.8	529.7	513.6	513.3
SDev	18.	39.	2.4	2.0	2.6	2.6	4.9
%RSD	.6790	.6790	.4571	.3887	.4997	.4993	.9449
#1	2680.	5732.	527.3	522.2	532.8	512.1	518.5
#2	2645.	5658.	523.0	518.6	528.0	512.2	512.5
#3	2653.	5675.	523.3	518.8	528.4	516.6	508.9
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB3 Operator: HSC
Run Time: 10/04/05 02:15:23
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1046	10.63	-.0013	.5941	.2469	.1668	7.921
SDev	.2292	2.14	3.3136	.6758	.0924	.0046	.994
%RSD	219.1	20.09	246600.	113.8	37.42	2.775	12.55
#1	-.0794	8.168	-1.824	1.251	.1958	.1653	9.047
#2	.0319	11.90	-2.004	-.0992	.3535	.1720	7.552
#3	.3613	11.84	3.824	.6304	.1913	.1631	7.164
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0478	.2368	.5926	-.7357	1.092	10.79	1.154
SDev	.1937	.0950	.3237	.5879	.270	6.13	1.644
%RSD	405.6	40.14	54.62	79.91	24.75	56.81	142.5
#1	.2547	.2897	.3161	-1.387	1.400	4.299	.3621
#2	-.1293	.1271	.5131	-.2436	.9809	11.59	3.044
#3	.0178	.2936	.9486	-.5769	.8945	16.48	.0556
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1336	1.047	-36.70	-.4345	1.600	1.613	1.476
SDev	.0794	1.316	1.86	.4116	3.352	.671	2.351
%RSD	59.45	125.6	5.057	94.73	209.5	41.58	159.2
#1	.2227	1.544	-38.79	-.5623	-.4427	2.261	-.5673
#2	.1079	2.042	-36.08	-.7672	5.469	.9214	.9508
#3	.0702	-.4442	-35.24	.0258	-.2257	1.657	4.045
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.768	.2461	1.286	-30.99	.1906	-.3497	-8.519
SDev	1.349	.0720	4.357	21.20	.2861	.1505	1.757
%RSD	76.28	29.23	338.8	68.41	150.1	43.04	20.63
#1	2.613	.2797	4.565	-13.99	.5177	-.5166	-9.188
#2	2.478	.1635	-3.659	-24.24	-.0129	-.3083	-9.844
#3	.2127	.2951	2.951	Q-54.75	.0671	-.2243	-6.526

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	13.32	28.50	.1823	-.9478	2.892	.5488	1.939
SDev	2.86	6.12	.0172	2.1404	1.394	3.375	1.879
%RSD	21.46	21.46	9.420	225.8	48.21	614.9	96.88
#1	16.26	34.77	.2000	-2.096	4.435	-2.750	.5224
#2	13.17	28.18	.1812	-2.269	2.514	.4014	1.225
#3	10.54	22.55	.1657	1.522	1.725	3.995	4.070
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: 1200937537 Operator: HSC
Run Time: 10/04/05 02:21:19
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1020	138.7	-.4583	74.91	142.2	.0964	19530.
SDev	.2906	.8	.9291	.88	.1	.0098	22.
%RSD	285.0	.5600	202.7	1.172	.0364	10.13	.1129
#1	-.1874	137.8	.2002	73.90	142.2	.0852	19550.
#2	.3938	139.2	-1.521	75.46	142.1	.1026	19540.
#3	.0994	139.2	-.0541	75.37	142.2	.1015	19510.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0883	-.1792	1.633	.2071	59.23	9210.	4905.
SDev	.0634	.4546	.443	.4598	.24	11.	9.
%RSD	71.81	253.7	27.14	222.0	.3977	.1196	.1923
#1	.0913	-.6953	1.259	.0449	59.42	9211.	4912.
#2	.0234	.1618	2.122	.7260	59.30	9220.	4908.
#3	.1501	-.0040	1.517	-.1495	58.97	9198.	4894.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.452	66.10	84710.	3.479	.8170	.7411	-.2430
SDev	.034	.49	148.	.348	2.879	1.405	2.5864
%RSD	2.330	.7416	.1742	10.01	352.4	189.6	1064.
#1	1.417	65.69	84760.	3.759	2.313	-.7656	-3.206
#2	1.455	66.65	84830.	3.089	-2.502	2.015	1.565
#3	1.485	65.97	84540.	3.589	2.640	.9738	.9112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5776	2.059	3.238	-30.64	1.986	3.648	55.51
SDev	1.542	.029	2.446	11.57	.424	.103	6.85
%RSD	267.0	1.393	75.55	37.75	21.33	2.832	12.34
#1	2.341	2.083	1.052	-27.26	1.963	3.529	63.29
#2	-.0904	2.067	5.880	-43.52	2.421	3.698	52.90
#3	-.5181	2.027	2.782	-21.14	1.574	3.717	50.35

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	16630.	35570.	128.0	-.2735	1.248	-.4058	-.1618
SDev	191.	410.	.2	1.9296	2.040	1.7136	3.0448
%RSD	1.151	1.153	.1602	705.5	163.5	422.2	1882.
#1	16410.	35090.	128.0	-1.675	-.3115	-2.277	-3.669
#2	16730.	35780.	128.2	-1.073	3.557	1.087	1.804
#3	16750.	35830.	127.8	1.927	.4978	-.0271	1.380
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937545 Operator: HSC
Run Time: 10/04/05 02:27:15
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	511.6	5163.	504.1	566.1	641.2	506.2	24500.
SDev	1.3	5.	2.9	.6	2.6	.9	35.
%RSD	.2607	.0936	.5796	.1101	.4089	.1695	.1437
#1	512.5	5167.	504.9	566.4	638.2	507.1	24460.
#2	512.1	5158.	506.6	566.6	643.2	506.2	24510.
#3	510.0	5166.	500.9	565.4	642.2	505.4	24520.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	497.3	503.6	492.3	505.8	4774.	13830.	9892.
SDev	.7	.7	.2	.8	32.	12.	18.
%RSD	.1460	.1345	.0398	.1605	.6731	.0833	.1780
#1	497.0	504.1	492.6	506.8	4737.	13820.	9875.
#2	498.2	503.8	492.3	505.4	4790.	13840.	9891.
#3	496.8	502.8	492.2	505.3	4795.	13840.	9910.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	489.1	545.8	90420.	501.9	484.8	499.4	471.1
SDev	1.3	5.5	133.	1.4	2.0	.4	.8
%RSD	.2564	1.014	.1466	.2837	.4105	.0813	.1739
#1	487.6	539.4	90570.	503.3	482.6	499.1	470.2
#2	489.9	549.7	90360.	502.0	486.5	499.3	471.8
#3	489.7	548.2	90330.	500.5	485.3	499.8	471.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	488.0	518.7	502.0	483.2	484.9	494.9	592.0
SDev	1.1	1.9	5.6	9.7	1.5	2.5	15.0
%RSD	.2293	.3743	1.117	2.006	.3110	.4981	2.530
#1	488.2	520.8	503.1	472.3	483.2	492.1	608.6
#2	486.8	518.4	495.9	486.8	485.8	496.3	579.4
#3	489.0	516.9	507.0	490.6	485.8	496.4	588.1

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	21580.	46170.	623.6	494.7	501.7	468.1	472.6
SDev	11.	22.	.4	2.5	.7	1.6	1.0
%RSD	.0493	.0480	.0669	.4973	.1490	.3494	.2026
#1	21570.	46140.	623.5	492.0	502.6	467.5	471.6
#2	21590.	46180.	624.0	495.3	501.2	470.0	472.8
#3	21590.	46180.	623.2	496.7	501.4	466.9	473.5

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937541|5| Operator: HSC
Run Time: 10/04/05 02:33:10
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2515	46.66	2.268	15.54	29.00	.1285	3990.
SDev	.1962	2.50	2.682	.67	.05	.0003	9.
%RSD	78.02	5.360	118.2	4.280	.1568	.2290	.2260
#1	-.4637	43.81	-.8024	14.80	28.96	.1282	3980.
#2	-.0765	48.51	3.456	16.09	29.05	.1286	3998.
#3	-.2144	47.65	4.152	15.73	29.00	.1287	3993.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0518	-.2494	.9254	-.2259	16.77	1873.	998.6
SDev	.1354	.1806	.1887	.2999	.50	8.	1.9
%RSD	261.5	72.42	20.39	132.8	2.979	.4167	.1870
#1	-.0823	-.4168	.7926	.0161	17.31	1864.	996.6
#2	.1885	-.0579	.8422	-.5614	16.68	1878.	999.1
#3	.0491	-.2735	1.141	-.1324	16.32	1877.	1000.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4265	13.75	16270.	.0760	4.716	.0009	3.631
SDev	.0473	.84	180.	1.191	2.958	1.111	3.100
%RSD	11.09	6.120	1.106	1568.	62.72	118800.	85.36
#1	.4322	13.28	16070.	-.9845	4.781	-1.264	5.919
#2	.4707	13.25	16420.	-.1526	1.726	.4491	.1036
#3	.3765	14.72	16320.	1.365	7.640	.8175	4.870
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.209	.5612	1.931	-16.37	.4546	.8868	1.321
SDev	.858	.1185	2.373	15.50	.2708	.1125	6.793
%RSD	38.84	21.11	122.9	94.67	59.58	12.68	514.1
#1	1.856	.6512	-.7463	-29.50	.5317	.8425	8.482
#2	3.187	.4270	3.777	.7252	.6785	.8032	.5122
#3	1.584	.6054	2.761	-20.34	.1535	1.015	-5.031

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3426.	7328.	26.10	-.0246	.0137	2.146	4.373
SDev	22.	47.	.07	.4709	1.598	4.963	2.425
%RSD	.6456	.6477	.2845	1914.	11680.	231.3	55.46
#1	3401.	7274.	26.02	-.1274	-1.831	4.233	6.761
#2	3435.	7346.	26.17	-.4356	.8908	-3.520	1.913
#3	3442.	7363.	26.11	.4892	.9814	5.724	4.444
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 145579006 Operator: HSC
Run Time: 10/04/05 02:39:06
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3677	412.8	1.568	27.73	20.07	.0981	35600.
SDev	.1386	2.1	2.727	.61	.08	.0088	81.
%RSD	37.70	.5013	173.8	2.185	.3827	8.946	.2263
#1	-.2899	414.2	.5924	28.08	20.05	.1067	35690.
#2	-.5277	410.4	-.5358	28.08	20.00	.0891	35540.
#3	-.2854	413.8	4.649	27.03	20.15	.0984	35580.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1930	.5272	61.34	33.32	507.4	831.0	5624.
SDev	.3748	.2511	.30	.22	2.5	3.9	12.
%RSD	194.2	47.63	.4949	.6551	.4891	.4653	.2154
#1	-.0576	.2815	61.47	33.08	510.3	829.3	5638.
#2	.0128	.5168	61.56	33.50	506.1	828.4	5620.
#3	.6239	.7835	61.00	33.38	505.9	835.5	5614.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.246	1.770	22600.	14.06	2.578	2.701	-4.730
SDev	.065	.885	107.	.49	3.601	.892	3.059
%RSD	.7071	50.04	.4714	3.483	139.7	33.02	64.67
#1	9.290	.7878	22540.	13.55	6.507	2.718	-2.816
#2	9.277	2.508	22550.	14.11	-.5651	3.584	-8.257
#3	9.171	2.013	22730.	14.52	1.793	1.801	-3.115
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.100	13.84	1.000	-27.33	1.321	23.55	43.12
SDev	1.390	.11	.883	15.78	.173	.03	5.77
%RSD	126.3	.7628	88.29	57.75	13.08	.1193	13.39
#1	-1.511	13.95	.4481	-11.08	1.218	23.58	38.57
#2	-2.238	13.81	2.019	-42.59	1.520	23.55	49.61
#3	.4485	13.75	.5340	-28.31	1.224	23.53	41.17

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	33210.	71030.	173.4	2.385	2.859	-3.989	-5.099
SDev	54.	116.	.3	1.378	1.039	.515	4.445
%RSD	.1631	.1628	.1627	57.77	36.34	12.92	87.17
#1	33160.	70930.	173.7	3.622	2.267	-3.394	-2.527
#2	33200.	71000.	173.2	2.634	4.058	-4.302	-10.23
#3	33270.	71160.	173.3	.8998	2.251	-4.270	-2.539
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937538 Operator: HSC
Run Time: 10/04/05 02:45:01
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2200	420.2	.4604	28.80	20.92	.0728	36350.
SDev	.3594	2.7	.5827	.19	.08	.0194	241.
%RSD	163.4	.6421	126.6	.6607	.4027	26.65	.6623
#1	-.6219	423.0	1.065	28.99	21.02	.0882	36630.
#2	-.1086	420.1	-.0981	28.61	20.87	.0792	36190.
#3	.0706	417.6	.4145	28.82	20.87	.0510	36240.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1286	.0978	62.44	34.48	524.6	846.9	5740.
SDev	.2985	.4498	.06	.78	4.1	8.0	37.
%RSD	232.2	460.2	.0985	2.256	.7745	.9437	.6423
#1	.1973	-.3562	62.37	35.36	526.7	856.1	5782.
#2	-.3889	.1061	62.46	34.21	519.9	841.8	5712.
#3	-.1941	.5434	62.49	33.87	527.2	842.9	5726.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.420	1.594	23070.	14.21	1.752	.1455	-.7761
SDev	.082	1.015	180.	.93	3.671	.8079	2.7426
%RSD	.8703	63.72	.7809	6.578	209.6	555.3	353.4
#1	9.514	2.765	23150.	13.93	.5902	.3224	-3.881
#2	9.379	1.040	23190.	13.45	-1.198	.8503	.2360
#3	9.366	.9749	22860.	15.26	5.863	-.7362	1.317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5727	14.27	.3412	-41.05	1.547	25.15	49.67
SDev	.6864	.13	3.009	6.54	.476	.31	6.91
%RSD	119.8	.9022	881.9	15.94	30.78	1.241	13.92
#1	.9727	14.35	-2.703	-38.18	1.653	25.24	46.53
#2	-.2198	14.34	3.315	-48.53	1.962	24.80	44.89
#3	.9653	14.12	.4118	-36.43	1.027	25.41	57.60

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	34160.	73080.	177.2	1.054	-.3082	-.4693	-.9292
SDev	314.	674.	1.3	2.131	1.1270	4.3631	4.5237
%RSD	.9194	.9221	.7356	202.2	365.6	929.6	486.8
#1	34500.	73800.	178.7	3.365	-1.197	-1.787	-4.926
#2	34110.	72960.	176.8	.6317	.9594	4.401	-1.843
#3	33880.	72470.	176.2	-.8342	-.6872	-4.022	3.982
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937546 Operator: HSC
Run Time: 10/04/05 02:50:57
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	525.5	5682.	517.5	533.3	535.1	523.3	41060.
SDev	1.3	15.	4.6	1.1	.7	1.1	55.
%RSD	.2470	.2650	.8857	.2050	.1348	.2085	.1332
#1	525.1	5671.	520.5	533.2	534.5	523.3	41030.
#2	524.4	5676.	512.2	534.4	534.9	522.2	41030.
#3	526.9	5699.	519.7	532.2	535.9	524.4	41120.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	508.8	517.6	572.5	550.0	5442.	5753.	10820.
SDev	1.0	.8	.9	1.5	13.	7.	14.
%RSD	.1975	.1587	.1515	.2750	.2302	.1207	.1321
#1	509.2	517.6	571.7	549.6	5433.	5753.	10810.
#2	507.6	516.8	572.4	548.8	5456.	5746.	10820.
#3	509.5	518.4	573.4	551.7	5437.	5760.	10840.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	513.1	495.7	28230.	526.7	498.7	511.6	485.9
SDev	.2	.6	24.	1.6	2.5	1.8	1.1
%RSD	.0457	.1262	.0859	.3084	.5027	.3586	.2296
#1	512.9	495.4	28210.	527.3	497.8	509.6	487.2
#2	513.0	495.2	28250.	524.8	501.6	513.3	485.3
#3	513.3	496.4	28230.	527.9	496.8	511.8	485.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	498.2	548.8	517.8	502.2	498.3	524.5	618.7
SDev	2.7	1.8	3.3	6.6	.2	1.2	6.2
%RSD	.5409	.3269	.6414	1.311	.0430	.2239	.9941
#1	500.3	549.3	521.5	497.2	498.1	523.3	617.0
#2	495.2	546.8	516.7	499.8	498.5	524.8	613.5
#3	499.0	550.3	515.1	509.7	498.4	525.6	625.5

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	36700.	78500.	685.5	505.2	514.7	480.9	488.4
SDev	327.	699.	1.2	1.3	2.1	1.5	2.4
%RSD	.8904	.8904	.1767	.2591	.4077	.3142	.4942
#1	36370.	77790.	685.6	503.8	512.5	479.2	491.1
#2	36710.	78510.	684.2	506.4	516.7	482.0	486.9
#3	37020.	79180.	686.6	505.5	514.9	481.5	487.0
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937542|5| Operator: HSC
Run Time: 10/04/05 02:56:52
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1215	93.68	.7281	5.832	4.203	.1175	7187.
SDev	.2056	3.10	2.366	1.277	.082	.0098	12.
%RSD	169.2	3.305	324.9	21.89	1.944	8.348	.1614
#1	-.0391	90.13	3.382	5.868	4.111	.1232	7197.
#2	.0301	95.83	-.0381	7.090	4.266	.1231	7191.
#3	-.3556	95.07	-1.159	4.538	4.232	.1061	7175.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0766	-.0690	13.02	6.338	102.0	176.8	1133.
SDev	.2222	.3318	.29	.135	.7	3.8	6.
%RSD	290.0	480.8	2.200	2.123	.6496	2.165	.4970
#1	.1795	-.4245	12.99	6.422	102.2	179.7	1139.
#2	-.1910	.2327	13.33	6.409	102.5	178.2	1133.
#3	-.2184	-.0153	12.76	6.183	101.3	172.4	1127.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.988	.7486	4281.	2.620	.8136	1.212	2.230
SDev	.079	.7380	12.	.222	3.170	1.859	1.397
%RSD	3.991	98.58	.2867	8.488	389.7	153.3	62.66
#1	2.025	1.229	4285.	2.401	4.279	3.327	1.877
#2	2.042	1.118	4290.	2.611	.1028	-.1616	1.043
#3	1.897	-.1011	4267.	2.846	-1.941	.4709	3.769
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.723	2.988	1.690	-23.87	.6214	4.617	-2.147
SDev	2.209	.019	2.466	5.11	.2612	.188	8.923
%RSD	128.2	.6359	146.0	21.41	42.04	4.073	415.7
#1	2.491	2.998	1.559	-23.49	.6461	4.811	7.911
#2	3.447	2.966	4.219	-18.96	.3486	4.435	-9.111
#3	-.7671	3.000	-.7083	-29.16	.8694	4.607	-5.240

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6711.	14360.	35.05	1.126	1.255	2.896	1.897
SDev	51.	110.	.08	.686	3.122	2.736	2.809
%RSD	.7660	.7658	.2144	60.95	248.6	94.45	148.1
#1	6656.	14240.	35.05	.3957	4.791	.1415	2.743
#2	6758.	14450.	35.12	1.757	-1.120	5.612	-1.238
#3	6720.	14380.	34.97	1.224	.0949	2.935	4.186

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: CCV3 Operator: HSC
Run Time: 10/04/05 03:02:48
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	538.8	5283.	526.8	518.6	515.9	535.0	5325.
SDev	2.3	12.	1.0	1.6	2.5	1.7	15.
%RSD	.4263	.2272	.1807	.3102	.4872	.3239	.2911
#1	538.9	5274.	527.6	516.8	513.9	534.5	5308.
#2	541.0	5297.	526.9	519.9	515.1	537.0	5328.
#3	536.4	5279.	525.7	519.1	518.7	533.6	5339.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	530.1	536.2	527.2	527.3	4944.	5083.	5281.
SDev	1.8	1.6	1.7	1.6	38.	12.	16.
%RSD	.3485	.3053	.3260	.2965	.7611	.2303	.3107
#1	529.3	535.1	525.3	526.7	4921.	5077.	5263.
#2	532.2	538.1	528.6	529.1	4924.	5096.	5286.
#3	528.9	535.5	527.7	526.1	4988.	5075.	5294.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	509.8	510.7	10600.	530.3	512.9	526.6	515.7
SDev	1.7	5.5	408.	2.3	3.2	.8	4.5
%RSD	.3342	1.086	3.850	.4405	.6257	.1590	.8646
#1	508.1	505.7	10360.	528.9	516.5	526.2	513.8
#2	509.6	509.7	Q11070.	533.0	511.5	527.5	520.8
#3	511.5	516.7	10370.	529.0	510.5	525.9	512.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	506.4	543.1	525.9	514.0	509.2	512.9	Q2864.
SDev	2.6	3.1	3.1	3.0	2.0	2.2	20.
%RSD	.5125	.5661	.5857	.5922	.3990	.4297	.6850
#1	503.4	543.1	527.6	517.1	507.5	510.8	Q2843.
#2	507.4	546.2	527.7	513.8	508.7	512.7	Q2881.
#3	508.3	540.0	522.3	511.0	511.5	515.2	Q2870.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2665.	5700.	525.9	519.1	530.3	512.9	517.1
SDev	16.	34.	1.3	2.2	.5	2.2	5.7
%RSD	.5969	.5969	.2425	.4208	.0992	.4341	1.111
#1	2670.	5711.	524.8	517.4	530.7	513.2	514.0
#2	2677.	5727.	527.3	521.6	530.5	514.9	523.7
#3	2647.	5662.	525.5	518.5	529.7	510.5	513.6
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB3 Operator: HSC
Run Time: 10/04/05 03:08:45
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1213	9.248	.5187	.8233	.2891	.2251	8.031
SDev	.1378	.621	2.890	1.047	.0859	.0341	1.252
%RSD	113.6	6.710	557.2	127.2	29.70	15.16	15.59
#1	-.0378	9.779	-.1635	-.2401	.3715	.2633	8.741
#2	.1995	8.566	3.689	1.854	.2001	.2143	8.767
#3	.2022	9.399	-1.969	.8564	.2957	.1976	6.586
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2225	.1159	.2543	.1092	1.774	4.284	.9716
SDev	.1481	.4573	.2306	.3300	.947	3.095	4.012
%RSD	66.56	394.4	90.70	302.3	53.39	72.24	413.0
#1	.2021	-.3194	.1639	.4532	2.435	5.896	-1.156
#2	.0857	.0749	.0825	.0791	2.200	6.241	5.600
#3	.3798	.5924	.5164	-.2048	.6889	.7160	-1.529
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2072	1.049	-16.76	-.3636	3.837	.3824	3.723
SDev	.0473	1.082	3.66	.6198	3.073	1.394	1.534
%RSD	22.85	103.1	21.85	170.4	80.10	364.6	41.20
#1	.1712	2.208	-13.91	-.2228	6.705	1.991	2.593
#2	.1894	.8717	-15.48	.1736	.5935	-.3776	3.108
#3	.2608	.0671	-20.89	-1.042	4.211	-.4666	5.470
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.176	.2527	1.931	-20.17	.2445	-.1368	-6.840
SDev	2.296	.0466	3.172	6.87	.3597	.0401	5.305
%RSD	195.1	18.45	164.3	34.06	147.1	29.30	77.56
#1	3.620	.2797	4.818	-17.31	.1962	-.1376	-2.301
#2	-.9351	.2797	2.439	-15.19	.6259	-.0964	-5.546
#3	.8442	.1989	-1.465	-28.01	-.0887	-.1765	-12.67

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18.36	39.28	.2419	1.767	-.3091	5.079	3.046
SDev	6.87	14.69	.0460	.230	2.1785	2.226	1.449
%RSD	37.41	37.41	19.00	13.01	704.8	43.83	47.58
#1	26.29	56.24	.2583	1.561	2.206	4.651	1.565
#2	14.62	31.27	.2775	2.015	-1.572	3.099	3.113
#3	14.18	30.33	.1900	1.726	-1.561	7.489	4.462
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: 145579007 Operator: HSC
Run Time: 10/04/05 03:14:42
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0354	3234.	.6783	78.78	140.1	.2808	16260.
SDev	.2303	27.	2.167	1.39	.8	.0087	95.
%RSD	650.7	.8328	319.5	1.768	.5908	3.094	.5860
#1	-.2948	3224.	1.007	78.69	140.1	.2875	16250.
#2	.1452	3213.	-1.635	77.44	139.3	.2710	16170.
#3	.0434	3264.	2.663	80.22	140.9	.2839	16360.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1067	.0103	2.893	1.011	1463.	11830.	4288.
SDev	.2122	.2431	.412	.452	5.	64.	25.
%RSD	198.9	2355.	14.23	44.73	.3107	.5376	.5794
#1	-.0271	.1597	2.798	.8139	1467.	11820.	4285.
#2	-.0042	-.2701	3.344	1.528	1458.	11770.	4264.
#3	.3513	.1414	2.538	.6904	1465.	11900.	4314.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.53	93.91	71500.	3.868	4.261	1.004	-1.211
SDev	.08	1.16	726.	.457	3.695	.529	1.027
%RSD	.7450	1.237	1.015	11.82	86.72	52.66	84.82
#1	10.52	93.69	70910.	3.956	6.026	.5938	-.7962
#2	10.46	92.87	71270.	3.373	6.742	1.601	-2.381
#3	10.62	95.16	72310.	4.275	.0145	.8183	-.4564
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.715	42.66	1.680	-22.98	4.210	12.65	107.1
SDev	1.349	.32	3.514	5.44	.361	.11	6.5
%RSD	78.63	.7389	209.1	23.69	8.579	.8759	6.064
#1	1.210	42.44	-2.120	-29.19	4.626	12.59	100.9
#2	.6920	42.51	2.350	-20.72	3.978	12.59	106.6
#3	3.243	43.02	4.811	-19.03	4.025	12.78	113.9

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	22130.	47330.	106.9	3.798	-.3903	-3.503	-.0670
SDev	268.	572.	.7	1.889	.3620	3.341	3.1822
%RSD	1.209	1.208	.6676	49.74	92.76	95.37	4751.
#1	21910.	46860.	106.7	3.041	-.6281	-5.725	1.665
#2	22050.	47170.	106.4	5.949	-.5691	.3388	-3.739
#3	22430.	47970.	107.7	2.405	.0263	-5.124	1.874
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937539 Operator: HSC
Run Time: 10/04/05 03:20:38
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2349	3286.	1.153	80.40	142.8	.2469	16560.
SDev	.1499	39.	3.020	1.08	1.5	.0124	173.
%RSD	63.81	1.181	261.9	1.345	1.021	5.040	1.047
#1	-.4073	3330.	1.469	79.82	144.4	.2478	16760.
#2	-.1628	3274.	4.002	79.73	141.7	.2341	16460.
#3	-.1347	3255.	-2.012	81.65	142.2	.2589	16460.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0655	.5121	2.962	1.126	1485.	12180.	4366.
SDev	.1535	.3997	.356	.859	19.	110.	48.
%RSD	234.4	78.05	12.03	76.28	1.301	.9042	1.103
#1	-.2390	.7039	3.373	.9746	1503.	12310.	4422.
#2	-.0106	.0527	2.742	.3530	1465.	12140.	4335.
#3	.0531	.7798	2.771	2.051	1488.	12100.	4343.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.63	95.87	73310.	4.636	6.539	1.475	-.5355
SDev	.17	.70	960.	.089	4.021	2.132	3.8510
%RSD	1.565	.7310	1.310	1.918	61.49	144.6	719.1
#1	10.81	96.66	74240.	4.730	8.910	3.859	-4.979
#2	10.50	95.67	73370.	4.625	8.809	.8111	1.544
#3	10.57	95.30	72330.	4.553	1.896	-.2466	1.829
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.434	44.33	3.466	-15.39	4.263	11.81	108.8
SDev	1.365	.88	2.696	18.92	.270	.26	8.9
%RSD	95.24	1.989	77.80	122.9	6.341	2.207	8.210
#1	1.436	45.28	4.605	-31.86	4.381	11.51	109.0
#2	.0672	44.16	.3869	-19.58	3.954	11.98	117.7
#3	2.798	43.54	5.405	5.275	4.455	11.94	99.85

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	22310.	47710.	109.1	2.540	.9429	.3877	-.9964
SDev	198.	425.	1.2	.507	3.077	1.092	5.2287
%RSD	.8895	.8905	1.115	19.95	326.3	281.6	524.7
#1	22520.	48170.	110.5	2.949	4.314	-.8713	-7.030
#2	22270.	47650.	108.6	1.973	.2310	.9612	1.834
#3	22130.	47330.	108.2	2.696	-1.716	1.073	2.207
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937547 Operator: HSC
Run Time: 10/04/05 03:26:33
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	521.7	8462.	515.2	581.9	646.3	517.5	21020.
SDev	4.0	32.	4.3	.9	.5	3.4	45.
%RSD	.7757	.3744	.8426	.1616	.0706	.6620	.2156
#1	526.2	8496.	519.5	582.6	646.5	521.3	21070.
#2	518.3	8433.	510.8	580.8	646.7	514.7	20980.
#3	520.7	8457.	515.4	582.2	645.8	516.4	21010.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	507.4	514.5	501.2	515.0	6274.	16430.	9325.
SDev	3.1	2.9	2.1	3.6	24.	51.	21.
%RSD	.6063	.5720	.4234	.6936	.3814	.3100	.2268
#1	510.9	517.8	503.4	519.0	6247.	16490.	9348.
#2	505.2	512.0	499.2	512.0	6288.	16390.	9308.
#3	506.0	513.7	500.9	514.0	6288.	16410.	9318.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	507.1	580.6	75790.	510.5	494.5	510.6	480.2
SDev	.7	5.5	561.	2.9	1.8	1.0	5.8
%RSD	.1446	.9470	.7402	.5674	.3703	.1912	1.214
#1	507.7	574.3	76440.	513.8	495.8	510.7	486.7
#2	506.3	583.0	75460.	508.8	492.4	511.5	475.4
#3	507.2	584.5	75470.	508.9	495.3	509.6	478.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	492.9	566.3	511.1	513.4	493.5	509.1	672.8
SDev	3.8	4.9	2.7	16.5	.5	.6	17.0
%RSD	.7705	.8656	.5325	3.217	.0929	.1165	2.525
#1	497.0	571.7	514.3	504.7	493.7	508.6	690.1
#2	489.5	562.2	509.9	532.4	493.0	508.9	656.1
#3	492.3	565.1	509.2	502.9	493.8	509.7	672.3

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	25020.	53520.	609.5	506.5	512.7	478.2	481.2
SDev	75.	159.	3.0	4.5	2.3	4.0	6.9
%RSD	.2977	.2978	.4865	.8977	.4516	.8358	1.424
#1	25080.	53650.	612.6	511.6	510.2	482.8	488.6
#2	24940.	53350.	606.7	504.9	514.8	476.0	475.1
#3	25050.	53570.	609.1	502.9	512.9	475.8	480.0
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937543|5| Operator: HSC
Run Time: 10/04/05 03:32:29
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0264	654.4	.8239	15.69	28.25	.1733	3263.
SDev	.3948	1.7	1.827	.74	.28	.0142	16.
%RSD	1496.	.2602	221.7	4.692	.9757	8.199	.5052
#1	.4154	656.3	-.3492	16.34	28.54	.1862	3281.
#2	-.3739	654.0	2.929	14.89	28.24	.1756	3261.
#3	.0377	653.0	-.1076	15.84	27.99	.1581	3248.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1479	-.0178	.7348	.1081	291.8	2418.	857.6
SDev	.0964	.3055	.4254	.1441	3.7	10.	5.8
%RSD	65.19	1718.	57.90	133.3	1.269	.4258	.6739
#1	.2471	-.1420	1.063	.2693	295.4	2430.	863.9
#2	.0546	-.2416	.2542	-.0084	291.9	2413.	856.2
#3	.1418	.3302	.8867	.0635	288.0	2411.	852.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.136	18.95	13580.	.5127	2.281	1.948	-.2232
SDev	.017	.88	161.	.5926	4.538	.748	.7652
%RSD	.7905	4.622	1.183	115.6	199.0	38.37	342.8
#1	2.154	19.69	13420.	-.1013	7.223	1.099	-1.006
#2	2.121	17.98	13570.	1.081	1.318	2.238	-.1861
#3	2.133	19.18	13740.	.5580	-1.699	2.508	.5228
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.517	8.817	-.2300	-10.06	1.282	2.322	2.185
SDev	.459	.171	.2568	10.99	.121	.031	7.942
%RSD	30.29	1.938	111.6	109.3	9.457	1.351	363.5
#1	2.001	9.011	-.1613	1.952	1.142	2.353	.1565
#2	1.463	8.750	-.5143	-19.62	1.354	2.291	-4.546
#3	1.086	8.690	-.0146	-12.51	1.349	2.323	10.94

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4404.	9420.	21.56	1.623	2.111	1.118	-.8929
SDev	12.	25.	.09	1.818	1.613	5.114	2.5114
%RSD	.2668	.2643	.4337	112.0	76.41	457.4	281.3
#1	4391.	9392.	21.67	1.786	.7563	2.393	-2.703
#2	4408.	9428.	21.54	3.354	1.681	-4.513	1.974
#3	4413.	9440.	21.48	-.2709	3.895	5.475	-1.950
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 145579008 Operator: HSC
Run Time: 10/04/05 03:38:25
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1937	237.5	.2987	76.97	173.5	.1023	20350.
SDev	.0869	.7	1.664	.61	.2	.0176	1.
%RSD	44.89	.2827	557.2	.7867	.1165	17.17	.0070
#1	.1000	237.0	2.114	77.59	173.7	.1071	20350.
#2	.2718	237.4	-1.154	76.38	173.5	.1169	20350.
#3	.2094	238.3	-.0646	76.95	173.3	.0828	20350.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0127	.3336	1.270	.6199	93.31	14760.	5100.
SDev	.1006	.3911	.383	.2396	.61	12.	4.
%RSD	793.7	117.2	30.14	38.66	.6558	.0799	.0833
#1	.0252	.6891	1.461	.4589	93.30	14750.	5102.
#2	-.1268	.3970	.8290	.5055	93.92	14770.	5095.
#3	.0635	-.0853	1.519	.8953	92.70	14770.	5103.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.9394	74.60	74530.	2.257	2.734	.7664	2.480
SDev	.0663	.90	369.	.233	1.744	1.905	1.699
%RSD	7.060	1.213	.4953	10.34	63.78	248.6	68.52
#1	.8703	75.29	74120.	2.516	3.293	2.795	1.171
#2	1.003	73.58	74620.	2.194	.7791	-.9850	4.400
#3	.9453	74.93	74840.	2.062	4.129	.4895	1.869
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.411	3.183	1.955	-20.19	3.084	4.715	361.7
SDev	.462	.016	2.024	14.70	.156	.158	2.0
%RSD	19.18	.4894	103.5	72.81	5.045	3.343	.5601
#1	2.019	3.186	4.268	-11.06	2.953	4.537	363.3
#2	2.292	3.197	.5090	-12.37	3.042	4.773	362.4
#3	2.921	3.166	1.087	-37.16	3.256	4.837	359.5

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18460.	39490.	136.0	.2611	1.019	1.025	3.206
SDev	13.	29.	.2	1.032	2.408	4.108	1.548
%RSD	.0731	.0735	.1243	395.3	236.4	401.0	48.28
#1	18450.	39450.	135.8	1.450	3.466	.6570	1.427
#2	18460.	39490.	136.0	-.2597	-1.347	5.304	3.949
#3	18470.	39510.	136.2	-.4069	.9371	-2.888	4.244
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937540 Operator: HSC
Run Time: 10/04/05 03:44:21
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2504	214.6	.7732	77.66	176.8	.0730	20710.
SDev	.2432	3.2	1.192	.67	.7	.0207	65.
%RSD	97.11	1.502	154.2	.8610	.4207	28.39	.3141
#1	-.0007	211.3	-.5492	77.32	176.4	.0927	20700.
#2	.4848	214.8	1.102	78.42	177.7	.0514	20770.
#3	.2672	217.7	1.767	77.22	176.4	.0750	20640.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0787	.4910	1.257	.9911	99.47	14970.	5194.
SDev	.3786	.1184	.330	.3802	.47	42.	10.
%RSD	481.0	24.12	26.28	38.36	.4692	.2805	.1964
#1	.4083	.4339	.8852	1.378	98.94	14970.	5193.
#2	-.3348	.6272	1.517	.6184	99.76	15010.	5205.
#3	.1626	.4120	1.367	.9766	99.73	14920.	5185.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.101	75.50	75470.	1.848	6.630	1.897	-.3266
SDev	.071	.82	716.	.497	1.102	.537	.7430
%RSD	6.425	1.088	.9484	26.90	16.62	28.31	227.5
#1	1.168	75.09	75600.	2.415	6.036	1.289	.1972
#2	1.027	76.45	76110.	1.488	5.953	2.307	-1.177
#3	1.109	74.97	74700.	1.640	7.901	2.095	-.0001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.449	3.239	-.6647	-11.32	3.030	3.533	378.6
SDev	.714	.091	1.7877	17.40	.196	.035	4.6
%RSD	49.28	2.815	268.9	153.7	6.470	.9894	1.216
#1	1.698	3.185	-2.697	-21.90	2.912	3.493	379.9
#2	2.005	3.344	.6633	-20.82	2.923	3.549	382.4
#3	.6437	3.189	.0398	8.765	3.257	3.557	373.4

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18670.	39930.	138.2	-.9402	3.314	-1.534	.2760
SDev	108.	231.	.7	1.8162	1.696	3.348	1.571
%RSD	.5796	.5781	.5066	193.2	51.19	218.3	569.0
#1	18710.	40010.	138.1	.9308	1.468	2.237	-.8211
#2	18750.	40110.	139.0	-2.696	4.805	-2.681	-.4260
#3	18550.	39670.	137.6	-1.055	3.668	-4.157	2.075
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937548 Operator: HSC
Run Time: 10/04/05 03:50:17
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	517.4	5344.	514.6	579.9	685.5	512.9	25940.
SDev	1.3	7.	1.7	.9	1.2	.9	4.
%RSD	.2531	.1346	.3237	.1474	.1807	.1685	.0138
#1	517.2	5352.	516.2	580.7	686.9	512.2	25950.
#2	516.2	5338.	512.9	579.0	685.0	512.6	25950.
#3	518.8	5342.	514.9	580.1	684.6	513.8	25940.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	505.2	509.9	499.0	515.6	4970.	19770.	10340.
SDev	1.0	.6	.5	.9	19.	14.	2.
%RSD	.1899	.1176	.1012	.1793	.3827	.0700	.0202
#1	505.6	509.7	498.9	515.8	4979.	19780.	10330.
#2	504.1	509.4	498.6	514.6	4983.	19750.	10340.
#3	505.8	510.6	499.6	516.5	4948.	19770.	10340.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	498.5	567.3	81450.	507.6	494.7	505.9	478.7
SDev	.3	.5	204.	1.5	1.4	3.3	1.3
%RSD	.0614	.0961	.2511	.2983	.2826	.6460	.2793
#1	498.7	567.5	81460.	507.2	496.2	507.3	477.2
#2	498.6	567.7	81240.	506.3	494.4	502.2	479.8
#3	498.1	566.7	81650.	509.2	493.5	508.2	479.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	496.9	524.8	511.6	502.2	495.5	507.3	893.3
SDev	1.0	1.8	7.2	8.0	.3	2.1	15.3
%RSD	.2106	.3433	1.400	1.595	.0699	.4048	1.707
#1	496.0	524.0	519.0	511.4	495.5	509.0	904.6
#2	496.7	523.6	511.1	498.4	495.2	508.0	899.4
#3	498.1	526.9	504.7	496.7	495.8	505.0	875.9

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	23630.	50540.	641.4	502.4	507.7	477.5	479.3
SDev	93.	198.	.7	1.8	4.3	2.3	1.1
%RSD	.3935	.3919	.1097	.3499	.8426	.4781	.2305
#1	23540.	50340.	641.2	504.2	508.9	475.0	478.3
#2	23630.	50540.	640.8	500.7	502.9	478.4	480.5
#3	23720.	50740.	642.2	502.3	511.2	479.3	479.0
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1200937544|5| Operator: HSC
Run Time: 10/04/05 03:56:12
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7279	49.92	-.2071	14.60	34.87	.1356	4072.
SDev	.2188	2.37	1.8641	1.08	.12	.0127	5.
%RSD	30.06	4.744	900.2	7.409	.3403	9.338	.1278
#1	-.8197	47.19	-1.679	13.42	34.83	.1495	4073.
#2	-.4782	51.43	-.8308	15.54	34.77	.1327	4067.
#3	-.8858	51.13	1.889	14.83	35.00	.1247	4077.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.	500000.	50000.	50000.	15000.	10000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2006	-.0876	.0766	-.0891	18.90	3012.	1014.
SDev	.2596	.4685	.3691	.4806	.40	7.	2.
%RSD	129.4	535.0	481.6	539.5	2.097	.2206	.2083
#1	.1995	-.3760	.0866	.4612	18.50	3010.	1015.
#2	.4607	.4530	.4407	-.4261	19.30	3006.	1012.
#3	-.0585	-.3397	-.2974	-.3024	18.89	3019.	1016.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	50000.	50000.	25000.	500000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2420	14.84	14000.	-.3173	1.277	-.6073	.4201
SDev	.0273	.59	116.	.3440	1.356	2.4194	3.044
%RSD	11.28	3.972	.8312	108.4	106.1	398.4	724.6
#1	.2122	15.43	13900.	-.0938	-.2460	1.791	-2.173
#2	.2657	14.83	14130.	-.7135	1.727	-.5660	3.771
#3	.2482	14.26	13960.	-.1447	2.351	-3.047	-.3386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	50000.	200000.	50000.	50000.	50000.	50000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3297	.7080	1.531	-19.93	.4090	.8968	50.53
SDev	.4801	.1618	2.875	10.00	.1502	.0604	3.79
%RSD	145.6	22.86	187.9	50.14	36.72	6.732	7.492
#1	.2177	.8264	-1.213	-16.96	.5767	.8435	48.16
#2	-.5274	.7742	1.283	-11.76	.2868	.9624	54.90
#3	-.6793	.5236	4.522	-31.08	.3635	.8846	48.54

High	50000.	10000.	50000.	50000.	50000.	5000.	50000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3718.	7954.	27.24	.7364	-1.278	.4490	.4056
SDev	3.	6.	.02	1.823	2.769	3.214	3.008
%RSD	.0730	.0717	.0748	247.6	216.7	715.8	741.6
#1	3720.	7957.	27.21	2.780	1.298	-1.735	-2.391
#2	3715.	7947.	27.24	.1519	-.9245	4.140	3.587
#3	3720.	7957.	27.25	-.7230	-4.207	-1.058	.0204
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 10/04/05 04:02:08
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	514.3	5041.	501.0	496.5	492.5	509.0	5104.
SDev	6.7	54.	7.7	3.8	4.3	6.4	52.
%RSD	1.302	1.069	1.531	.7652	.8735	1.249	1.022
#1	520.4	5095.	505.5	500.2	497.4	515.3	5162.
#2	515.5	5039.	505.3	496.8	490.2	509.3	5089.
#3	507.1	4988.	492.1	492.6	489.7	502.6	5061.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	505.4	510.4	501.4	502.8	4770.	4886.	5049.
SDev	5.9	6.7	5.4	6.7	35.	43.	48.
%RSD	1.174	1.308	1.068	1.336	.7270	.8826	.9510
#1	511.5	517.3	507.0	509.1	4806.	4931.	5103.
#2	505.2	510.0	500.9	503.6	4737.	4882.	5031.
#3	499.6	503.9	496.4	495.7	4767.	4845.	5012.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	488.6	488.4	9938.	505.3	490.1	501.7	489.0
SDev	4.3	5.3	64.	5.9	4.7	5.6	2.9
%RSD	.8771	1.083	.6439	1.173	.9535	1.122	.5979
#1	493.5	494.5	9994.	511.5	495.3	506.0	491.3
#2	486.8	485.0	9952.	504.8	486.2	503.7	490.0
#3	485.5	485.6	9868.	499.6	488.8	495.3	485.7
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	488.5	515.5	505.8	504.4	488.0	491.5	2635.
SDev	6.1	8.0	5.9	16.7	4.2	5.1	15.
%RSD	1.258	1.556	1.168	3.317	.8626	1.039	.5743
#1	495.0	522.5	508.2	508.1	492.7	497.4	2652.
#2	487.8	517.3	510.1	486.2	486.6	488.5	2629.
#3	482.8	506.8	499.0	519.0	484.6	488.7	2624.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2521.	5393.	501.9	497.5	503.7	491.1	487.9
SDev	30.	65.	5.8	4.9	6.0	6.7	3.9
%RSD	1.206	1.205	1.154	.9842	1.195	1.359	.7970
#1	2547.	5449.	508.1	501.8	508.1	498.6	487.6
#2	2528.	5407.	500.8	498.7	506.2	485.9	492.0
#3	2488.	5322.	496.7	492.2	496.9	488.7	484.2
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 10/04/05 04:08:03
Comment: 463364||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1834	6.837	.6594	.3127	.3174	.2557	7.407
SDev	.4214	4.494	2.322	.4577	.1296	.0662	.763
%RSD	229.7	65.74	352.2	146.4	40.82	25.88	10.30
#1	.4565	11.47	1.474	.4374	.2675	.2477	7.338
#2	-.3019	2.497	-1.961	-.1944	.2202	.1938	6.682
#3	.3958	6.542	2.465	.6951	.4646	.3255	8.203
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1257	-.2438	.0518	.3201	2.014	15.87	1.839
SDev	.4542	.6273	.3577	.2068	.493	1.85	3.243
%RSD	361.4	257.3	690.3	64.59	24.50	11.67	176.3
#1	-.3893	.4669	-.3413	.3549	2.118	16.51	3.824
#2	.2971	-.7205	.1389	.5073	1.477	17.33	-1.903
#3	.4692	-.4778	.3579	.0982	2.447	13.79	3.596
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2980	.5689	-36.86	-.0878	4.823	1.110	.1339
SDev	.0379	1.117	7.06	.8810	.656	2.054	5.658
%RSD	12.71	196.3	19.15	1003.	13.60	185.1	4225.
#1	.2935	1.467	-28.71	-.7900	5.111	-1.107	3.266
#2	.2626	-.6815	-41.21	-.3742	5.285	1.488	-6.397
#3	.3380	.9211	-40.65	.9008	4.072	2.949	3.533
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.709	.2040	1.130	-15.47	.3174	.1480	-10.35
SDev	.747	.0912	3.844	12.14	.4612	.1176	6.04
%RSD	43.70	44.69	340.2	78.45	145.3	79.41	58.32
#1	1.105	.2489	-3.284	-12.55	-.1662	.0222	-16.36
#2	1.479	.0991	2.932	-5.064	.3662	.2550	-4.284
#3	2.544	.2640	3.741	-28.81	.7523	.1670	-10.41

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52.62	112.6	.2610	1.417	.9561	1.205	-.4009
SDev	60.79	130.0	.0679	3.200	2.568	4.347	6.5018
%RSD	115.5	115.5	26.02	225.8	268.6	360.7	1622.
#1	23.52	50.30	.2499	-1.587	-.8673	5.026	2.387
#2	Q122.5	262.0	.1993	4.783	-.1577	-3.524	-7.832
#3	11.85	25.34	.3338	1.056	3.893	2.114	4.242
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Calculation Data Logbook

Report run on: October 10, 2005 11:53 AM

Batch Id: 470263 **Sop:** GL-GC-E-107
Employee: Jamie Johnson
Instrument: No instrument-calculation method.

Samp Id	Sample Type	Parmname	Run Date	Calcium mg/L	Magnesium mg/L	Result	Units
145579001	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	20.6	5.19	72.8	mg/L
145579002	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	36.5	5.72	115	mg/L
145579003	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	15.6	4.04	55.7	mg/L
145579004	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	20.7	5.21	73.3	mg/L
145579005	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	20.4	5.12	72.0	mg/L
145579006	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	35.6	5.62	112	mg/L
145579007	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	16.3	4.29	58.3	mg/L
145579008	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	20.3	5.10	71.8	mg/L
145739001	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	31.7	2.86	91.0	mg/L
145739002	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	11.2	3.63	42.9	mg/L
145739003	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	11.0	3.95	43.8	mg/L
145739004	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	32.4	2.93	92.9	mg/L
145739005	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	11.7	3.82	45.1	mg/L
145739006	SAMPLE	Hardness as CaCO3	07-OCT-2005 12:09	10.8	3.88	43.0	mg/L

Calculation: (2.497 * Calcium) + (4.118 * Magnesium)

ICPMS#3 Instrument Tuning Report

File Name: 051003.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	596	2070	0.680
Be	9.0	9.0	2040	2080	0.678
Mg	24.0	24.0	5707	2100	0.713
Mg	25.0	25.0	5866	2050	0.649
Mg	26.0	26.0	6237	2130	0.642
Co	58.9	58.9	14184	2140	0.626
Rh	102.9	102.9	24870	2190	0.665
In	114.9	114.9	27791	2200	0.670
Ce	139.9	139.9	33881	2220	0.725
Pb	206.0	206.0	49955	2310	0.651
Pb	207.0	206.9	50250	2370	0.681
Pb	208.0	208.0	50431	2330	0.622
U	238.1	238.0	57786	2390	0.654

PB 10/3/05

Report Date/Time: Monday, October 03, 2005 09:57:25
Page 1

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, October 03, 2005 10:00:47
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.2706
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	4147.6	4147.602	58.025	1.4
	Mg	24.0	34717.7	34717.743	544.753	1.6
	Co	58.9	32106.4	32106.444	441.364	1.4
	Rh	102.9	72148.2	72148.157	1007.509	1.4
	In	114.9	104745.6	104745.635	1046.682	1.0
	Pb	208.0	78795.5	78795.524	766.880	1.0
>	Ba	137.9	100128.7	100128.689	750.314	0.7
	Ba++	69.0	1223.8	0.012	0.000	2.6
>	Ce	139.9	123829.0	123829.030	1584.434	1.3
	CeO	155.9	3413.2	0.028	0.000	1.6
	Bkgd	220.0	2.9	2.900	0.822	28.3

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
7.50	Lens Voltage
1450.00	ICP RF Power
-1850.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-7.00	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

PB 10/3/05

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	25	6.8	4452.4
Co	59	25	7.0	61951.7
In	115	25	7.8	178031.1

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, October 03, 2005 22:21:39
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\Blank.178

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Sc	45		ug/L		628368	
Ni	60		ug/L		25	
> Ge	74		ug/L		124903	
Se	77		ug/L		794	
Se	82		ug/L		3	
Ag	107		ug/L		19	
Cd	111		ug/L		12	
Cd	114		ug/L		26	
> In	115		ug/L		105870	
Sb	121		ug/L		147	
Sb	123		ug/L		104	
> Ta	181		ug/L		224427	
Tl	205		ug/L		3583	
Pb	208		ug/L		263	
U	238		ug/L		76	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Simple Linear	
Ge	74	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Linear Thru Zero	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ta	181	Linear Thru Zero	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45					
	Ni	60					
>	Ge	74					
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	Ta	181					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, October 03, 2005 22:25:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\Standard 1.179

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		629607	629607.283
	Ni	60	10.000	ug/L	3.638	3204	0.005
>	Ge	74		ug/L		125814	125814.259
	Se	77		ug/L		1064	0.002
	Se	82	10.000	ug/L	6.126	394	0.003
	Ag	107	10.000	ug/L	1.270	18128	0.171
	Cd	111	10.000	ug/L	0.819	5020	0.047
	Cd	114		ug/L		12091	0.114
>	In	115		ug/L		106182	106182.237
	Sb	121	10.000	ug/L	0.945	16523	0.154
	Sb	123		ug/L		13040	0.122
>	Ta	181		ug/L		225573	225573.250
	Tl	205	10.000	ug/L	1.383	94733	0.404
	Pb	208	10.000	ug/L	0.786	106821	0.472
	U	238	10.000	ug/L	1.248	131625	0.583

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45					
⌊	Ni	60					
⌈>	Ge	74					
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181					
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, October 03, 2005 22:28:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\Standard 2.180

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		637204	637204.394
	Ni	60	**99.966**	ug/L	1.194	31137	0.049
>	Ge	74		ug/L		127022	127021.895
	Se	77		ug/L		3658	0.022
	Se	82	**99.910**	ug/L	2.318	3619	0.028
	Ag	107	**99.984**	ug/L	1.843	174410	1.679
	Cd	111	**99.985**	ug/L	1.145	48301	0.465
	Cd	114		ug/L		116587	1.122
>	In	115		ug/L		103917	103916.912
	Sb	121	**100.005**	ug/L	2.119	161196	1.550
	Sb	123		ug/L		127333	1.225
>	Ta	181		ug/L		225605	225605.423
	Tl	205	**99.925**	ug/L	0.111	851112	3.757
	Pb	208	**99.937**	ug/L	0.718	1002350	4.442
	U	238	**99.909**	ug/L	1.016	1205043	5.341

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45					
	Ni	60					
>	Ge	74					
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	Ta	181					
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, October 03, 2005 22:32:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 1.181

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		641002	641001.876
[	Ni	60	**51.354**	ug/L	1.338	16103	0.025
[>	Ge	74		ug/L		127683	127682.787
[	Se	77		ug/L		2349	0.012
[	Se	82	**52.892**	ug/L	2.015	1927	0.015
[	Ag	107	**52.791**	ug/L	1.214	92119	0.886
[	Cd	111	**50.850**	ug/L	2.015	24572	0.236
[	Cd	114		ug/L		58953	0.567
[>	In	115		ug/L		103910	103909.620
[	Sb	121	**52.611**	ug/L	2.606	84898	0.816
[	Sb	123		ug/L		66649	0.640
[>	Ta	181		ug/L		226215	226215.365
[	Tl	205	**50.833**	ug/L	1.645	435932	1.911
[	Pb	208	**51.711**	ug/L	0.952	520180	2.298
[	U	238	**52.867**	ug/L	0.562	639459	2.826

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		102.0			
	Ni	60	102.708				
>	Ge	74		102.2			
	Se	77					
	Se	82	105.783				
	Ag	107	105.581				
	Cd	111	101.700				
	Cd	114					
>	In	115		98.1			
	Sb	121	105.222				
	Sb	123					
>	Ta	181		100.8			
	Tl	205	101.667				
	Pb	208	103.422				
	U	238	105.735				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, October 03, 2005 22:36:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 2.182

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		637219	637218.791
[	Ni	60	**0.010**	ug/L	311.573	28	0.000
[>	Ge	74		ug/L		125674	125674.428
|	Se	77		ug/L		792	-0.000
[	Se	82	**0.051**	ug/L	886.675	5	0.000
[	Ag	107	**0.006**	ug/L	78.201	30	0.000
|	Cd	111	**-0.007**	ug/L	190.484	8	-0.000
|	Cd	114		ug/L		28	0.000
|>	In	115		ug/L		105297	105297.009
|	Sb	121	**0.231**	ug/L	14.875	523	0.004
[	Sb	123		ug/L		421	0.003
[>	Ta	181		ug/L		223063	223063.083
|	Tl	205	**-0.061**	ug/L	13.115	3053	-0.002
|	Pb	208	**0.002**	ug/L	158.688	280	0.000
[	U	238	**0.007**	ug/L	26.768	153	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Sc	45		101.4			
Ni	60					
Ge	74		100.6			
Se	77					
Se	82					
Ag	107					
Cd	111					
Cd	114					
In	115		99.5			
Sb	121					
Sb	123					
Ta	181		99.4			
Tl	205					
Pb	208					
U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, October 03, 2005 22:39:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 3.183

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		633740	633739.725
	Ni	60	**2.086**	ug/L	4.806	671	0.001
>	Ge	74		ug/L		124656	124656.263
	Se	77		ug/L		912	0.001
	Se	82	**5.456**	ug/L	10.479	197	0.002
	Ag	107	**1.020**	ug/L	2.888	1824	0.017
	Cd	111	**1.007**	ug/L	5.744	505	0.005
	Cd	114		ug/L		1163	0.011
>	In	115		ug/L		105495	105494.742
	Sb	121	**1.941**	ug/L	3.020	3319	0.030
	Sb	123		ug/L		2651	0.024
>	Ta	181		ug/L		223991	223990.538
	Tl	205	**0.858**	ug/L	2.775	10803	0.032
	Pb	208	**2.107**	ug/L	1.283	21238	0.094
	U	238	**0.209**	ug/L	0.509	2583	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		100.9			
⌊	Ni	60	104.298				
⌈>	Ge	74		99.8			
|	Se	77					
⌊	Se	82	109.124				
⌈	Ag	107	101.972				
|	Cd	111	100.704				
|	Cd	114					
|>	In	115		99.6			
|	Sb	121	97.035				
⌊	Sb	123					
⌈>	Ta	181		99.8			
|	Tl	205	85.789				
|	Pb	208	105.366				
⌊	U	238	104.661				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, October 03, 2005 22:43:24
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 4.184

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		578934	578933.802
[	Ni	60	**3.019**	ug/L	2.485	877	0.001
[>	Ge	74		ug/L		110853	110852.939
[	Se	77		ug/L		1449	0.007
[	Se	82	**-0.488**	ug/L	169.150	-13	-0.000
[	Ag	107	**0.057**	ug/L	9.689	100	0.001
[	Cd	111	**0.276**	ug/L	31.748	123	0.001
[	Cd	114		ug/L		2212	0.025
[>	In	115		ug/L		88584	88584.300
[	Sb	121	**0.558**	ug/L	4.064	889	0.009
[	Sb	123		ug/L		666	0.007
[>	Ta	181		ug/L		199725	199724.950
[	Tl	205	**-0.214**	ug/L	1.527	1583	-0.008
[	Pb	208	**0.342**	ug/L	0.335	3271	0.015
[	U	238	**0.009**	ug/L	7.568	165	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		92.1			
	Ni	60	125.800				
>	Ge	74		88.8			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111	138.075				
	Cd	114					
>	In	115		83.7			
	Sb	121	111.508				
	Sb	123					
>	Ta	181		89.0			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, October 03, 2005 22:47:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 5.185

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		584832	584831.767
⌊	Ni	60	**22.145**	ug/L	1.688	6349	0.011
⌈>	Ge	74		ug/L		112552	112551.773
|	Se	77		ug/L		1882	0.010
⌊	Se	82	**18.546**	ug/L	2.525	597	0.005
⌈	Ag	107	**19.752**	ug/L	1.364	29880	0.332
|	Cd	111	**19.580**	ug/L	1.035	8205	0.091
|	Cd	114		ug/L		21408	0.237
|>	In	115		ug/L		90057	90056.819
|	Sb	121	**21.959**	ug/L	0.129	30782	0.340
⌊	Sb	123		ug/L		24339	0.269
⌈>	Ta	181		ug/L		201963	201963.424
|	Tl	205	**18.531**	ug/L	1.741	143940	0.697
|	Pb	208	**19.542**	ug/L	0.531	175647	0.868
⌊	U	238	**21.066**	ug/L	0.778	227514	1.126

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		93.1			
	Ni	60	98.862				
>	Ge	74		90.1			
	Se	77					
	Se	82	92.732				
	Ag	107	98.762				
	Cd	111	96.932				
	Cd	114					
>	In	115		85.1			
	Sb	121	107.118				
	Sb	123					
>	Ta	181		90.0			
	Tl	205	92.657				
	Pb	208	97.709				
	U	238	105.330				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, October 03, 2005 22:50:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 6.186

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		654143	654143.206
[	Ni	60	**50.836**	ug/L	1.949	16272	0.025
[>	Ge	74		ug/L		128362	128361.537
[	Se	77		ug/L		2391	0.012
[	Se	82	**52.208**	ug/L	2.098	1913	0.015
[	Ag	107	**52.905**	ug/L	1.403	94224	0.888
[	Cd	111	**51.144**	ug/L	0.837	25223	0.238
[	Cd	114		ug/L		60289	0.568
[>	In	115		ug/L		106052	106051.833
[	Sb	121	**51.947**	ug/L	1.498	85557	0.805
[	Sb	123		ug/L		66692	0.628
[>	Ta	181		ug/L		234584	234583.552
[	Tl	205	**49.380**	ug/L	7.075	437571	1.856
[	Pb	208	**50.533**	ug/L	7.480	524977	2.246
[	U	238	**50.940**	ug/L	7.627	636281	2.723

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		104.1			
⌊	Ni	60	101.673				
⌈>	Ge	74		102.8			
|	Se	77					
⌊	Se	82	104.415				
⌈	Ag	107	105.809				
|	Cd	111	102.288				
|	Cd	114					
|>	In	115		100.2			
|	Sb	121	103.893				
⌊	Sb	123					
⌈>	Ta	181		104.5			
|	Tl	205	98.760				
|	Pb	208	101.065				
⌊	U	238	101.880				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, October 03, 2005 22:54:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 7.187

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		649615	649615.175
	Ni	60	-0.006	ug/L	220.225	24	-0.000
>	Ge	74		ug/L		126927	126927.012
	Se	77		ug/L		867	0.000
	Se	82	0.122	ug/L	337.790	8	0.000
	Ag	107	0.006	ug/L	26.876	29	0.000
	Cd	111	-0.009	ug/L	62.078	7	-0.000
	Cd	114		ug/L		28	0.000
>	In	115		ug/L		105023	105023.315
	Sb	121	0.150	ug/L	11.979	389	0.002
	Sb	123		ug/L		318	0.002
>	Ta	181		ug/L		221870	221869.665
	Tl	205	-0.096	ug/L	23.815	2743	-0.004
	Pb	208	0.000	ug/L	5704.944	260	0.000
	U	238	0.007	ug/L	39.396	153	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		103.4			
	Ni	60					
>	Ge	74		101.6			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		99.2			
	Sb	121					
	Sb	123					
>	Ta	181		98.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, October 03, 2005 23:19:44
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 6.194

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		632339	632339.047
	Ni	60	**48.614**	ug/L	0.914	15042	0.024
>	Ge	74		ug/L		123053	123053.316
	Se	77		ug/L		2300	0.012
	Se	82	**52.786**	ug/L	4.841	1855	0.015
	Ag	107	**51.859**	ug/L	0.234	89921	0.871
	Cd	111	**51.299**	ug/L	1.598	24630	0.238
	Cd	114		ug/L		58311	0.564
>	In	115		ug/L		103250	103249.809
	Sb	121	**51.515**	ug/L	1.921	82601	0.799
	Sb	123		ug/L		64399	0.623
>	Ta	181		ug/L		223253	223253.112
	Tl	205	**50.924**	ug/L	0.902	430943	1.914
	Pb	208	**52.181**	ug/L	1.084	517995	2.319
	U	238	**53.179**	ug/L	1.273	634748	2.843

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		100.6			
	Ni	60	97.229				
>	Ge	74		98.5			
	Se	77					
	Se	82	105.572				
	Ag	107	103.717				
	Cd	111	102.599				
	Cd	114					
>	In	115		97.5			
	Sb	121	103.030				
	Sb	123					
>	Ta	181		99.5			
	Tl	205	101.847				
	Pb	208	104.363				
	U	238	106.358				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, October 03, 2005 23:23:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 7.195

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		632298	632297.875
[	Ni	60	**0.001**	ug/L	935.411	25	0.000
[>	Ge	74		ug/L		122638	122638.106
[	Se	77		ug/L		762	-0.000
[	Se	82	**-0.225**	ug/L	206.212	-5	-0.000
[	Ag	107	**0.007**	ug/L	51.257	30	0.000
[	Cd	111	**-0.002**	ug/L	357.373	11	-0.000
[	Cd	114		ug/L		23	-0.000
[>	In	115		ug/L		103489	103489.366
[	Sb	121	**0.125**	ug/L	8.782	344	0.002
[	Sb	123		ug/L		288	0.002
[>	Ta	181		ug/L		222418	222417.924
[	Tl	205	**-0.119**	ug/L	15.858	2551	-0.004
[	Pb	208	**-0.001**	ug/L	228.712	246	-0.000
[	U	238	**0.006**	ug/L	18.002	144	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		100.6			
	Ni	60					
>	Ge	74		98.2			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		97.8			
	Sb	121					
	Sb	123					
>	Ta	181		99.1			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, October 03, 2005 23:45:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 6.201

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		606232	606232.028
	Ni	60	**47.009**	ug/L	1.129	13947	0.023
>	Ge	74		ug/L		115345	115345.061
	Se	77		ug/L		2207	0.013
	Se	82	**53.020**	ug/L	1.698	1746	0.015
	Ag	107	**50.499**	ug/L	1.967	85474	0.848
	Cd	111	**50.962**	ug/L	1.146	23883	0.237
	Cd	114		ug/L		56771	0.563
>	In	115		ug/L		100778	100777.867
	Sb	121	**51.529**	ug/L	1.823	80650	0.799
	Sb	123		ug/L		63465	0.629
>	Ta	181		ug/L		225614	225613.799
	Tl	205	**50.435**	ug/L	1.094	431372	1.896
	Pb	208	**52.140**	ug/L	0.554	523025	2.317
	U	238	**52.709**	ug/L	0.693	635778	2.818

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		96.5			
	Ni	60	94.018				
>	Ge	74		92.3			
	Se	77					
	Se	82	106.039				
	Ag	107	100.999				
	Cd	111	101.923				
	Cd	114					
>	In	115		95.2			
	Sb	121	103.058				
	Sb	123					
>	Ta	181		100.5			
	Tl	205	100.869				
	Pb	208	104.280				
	U	238	105.419				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, October 03, 2005 23:48:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 7.202

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		568964	568963.793
	Ni	60	-0.024	ug/L	51.043	16	-0.000
>	Ge	74		ug/L		108386	108386.116
	Se	77		ug/L		734	0.000
	Se	82	0.151	ug/L	80.855	7	0.000
	Ag	107	0.004	ug/L	24.487	23	0.000
	Cd	111	0.001	ug/L	1830.600	11	0.000
	Cd	114		ug/L		23	-0.000
>	In	115		ug/L		97602	97601.835
	Sb	121	0.145	ug/L	4.325	354	0.002
	Sb	123		ug/L		291	0.002
>	Ta	181		ug/L		218305	218304.769
	Tl	205	-0.211	ug/L	5.640	1756	-0.008
	Pb	208	-0.001	ug/L	66.071	246	-0.000
	U	238	0.006	ug/L	3.193	142	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		90.5			
	Ni	60					
>	Ge	74		86.8			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.2			
	Sb	121					
	Sb	123					
>	Ta	181		97.3			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, October 04, 2005 00:25:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 6.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		612607	612607.335
⌊	Ni	60	**46.655**	ug/L	0.800	13987	0.023
⌈>	Ge	74		ug/L		115937	115936.512
|	Se	77		ug/L		2298	0.013
⌊	Se	82	**52.673**	ug/L	2.163	1742	0.015
⌈	Ag	107	**50.255**	ug/L	1.127	85773	0.844
|	Cd	111	**50.979**	ug/L	0.805	24091	0.237
|	Cd	114		ug/L		57919	0.570
|>	In	115		ug/L		101628	101628.400
|	Sb	121	**51.599**	ug/L	2.186	81437	0.800
⌊	Sb	123		ug/L		63925	0.628
⌈>	Ta	181		ug/L		225326	225326.333
|	Tl	205	**50.297**	ug/L	0.823	429672	1.891
|	Pb	208	**52.042**	ug/L	1.045	521391	2.313
⌊	U	238	**52.959**	ug/L	0.811	638098	2.831

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Sc	45		97.5			
Ni	60	93.310				
Ge	74		92.8			
Se	77					
Se	82	105.345				
Ag	107	100.510				
Cd	111	101.957				
Cd	114					
In	115		96.0			
Sb	121	103.198				
Sb	123					
Ta	181		100.4			
Tl	205	100.595				
Pb	208	104.084				
U	238	105.919				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, October 04, 2005 00:28:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 7.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		591845	591845.302
[	Ni	60	**-0.019**	ug/L	6.197	18	-0.000
[>	Ge	74		ug/L		112328	112328.370
[	Se	77		ug/L		810	0.001
[	Se	82	**0.331**	ug/L	143.102	13	0.000
[	Ag	107	**0.006**	ug/L	30.197	28	0.000
[	Cd	111	**0.000**	ug/L	2908.929	11	0.000
[	Cd	114		ug/L		19	-0.000
[>	In	115		ug/L		101241	101241.257
[	Sb	121	**0.132**	ug/L	17.862	347	0.002
[	Sb	123		ug/L		273	0.002
[>	Ta	181		ug/L		223724	223723.926
[	Tl	205	**-0.192**	ug/L	10.008	1956	-0.007
[	Pb	208	**-0.001**	ug/L	95.267	247	-0.000
[	U	238	**0.006**	ug/L	17.425	145	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		94.2			
	Ni	60					
>	Ge	74		89.9			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.6			
	Sb	121					
	Sb	123					
>	Ta	181		99.7			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937674
Sample Date/Time: Tuesday, October 04, 2005 00:32:41
Sample Type:
Sample Description: ESHL 6020 MB
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937674.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		549682	549682.079
[	Ni	60	0.014	ug/L	68.052	26	0.000
[>	Ge	74		ug/L		99294	99293.606
[	Se	77		ug/L		1907	0.013
[	Se	82	0.090	ug/L	431.946	5	0.000
[	Ag	107	-0.001	ug/L	511.023	14	-0.000
[	Cd	111	-0.009	ug/L	144.997	7	-0.000
[	Cd	114		ug/L		12	-0.000
[>	In	115		ug/L		89855	89855.204
[	Sb	121	0.045	ug/L	28.934	187	0.001
[	Sb	123		ug/L		143	0.001
[>	Ta	181		ug/L		204754	204753.558
[	Tl	205	-0.299	ug/L	1.361	968	-0.011
[	Pb	208	-0.002	ug/L	48.846	221	-0.000
[	U	238	-0.002	ug/L	31.936	43	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		87.5			
⌊	Ni	60					
⌈>	Ge	74		79.5			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		84.9			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		91.2			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937687
Sample Date/Time: Tuesday, October 04, 2005 00:36:21
Sample Type:
Sample Description: ESHL 6020 LCS
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937687.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		550589	550588.666
[	Ni	60	**43.315**	ug/L	1.469	11670	0.021
[>	Ge	74		ug/L		99990	99989.714
[	Se	77		ug/L		3092	0.025
[	Se	82	**53.548**	ug/L	4.548	1528	0.015
[	Ag	107	**47.739**	ug/L	0.850	73528	0.802
[	Cd	111	**48.510**	ug/L	1.106	20692	0.225
[	Cd	114		ug/L		50484	0.550
[>	In	115		ug/L		91718	91717.940
[	Sb	121	**51.957**	ug/L	1.183	74003	0.805
[	Sb	123		ug/L		58553	0.637
[>	Ta	181		ug/L		210643	210643.261
[	Tl	205	**46.957**	ug/L	2.038	375187	1.765
[	Pb	208	**50.029**	ug/L	2.032	468580	2.223
[	U	238	**51.457**	ug/L	1.387	579501	2.751

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		87.6			
	Ni	60					
>	Ge	74		80.1			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		86.6			
	Sb	121					
	Sb	123					
>	Ta	181		93.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579001
Sample Date/Time: Tuesday, October 04, 2005 00:40:01
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579001.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		560775	560775.338
⌊	Ni	60	**3.917**	ug/L	2.213	1095	0.002
⌈>	Ge	74		ug/L		97708	97707.690
|	Se	77		ug/L		2199	0.016
⌊	Se	82	**0.771**	ug/L	65.040	24	0.000
⌈	Ag	107	**0.008**	ug/L	65.374	27	0.000
|	Cd	111	**0.023**	ug/L	136.234	19	0.000
|	Cd	114		ug/L		96	0.001
|>	In	115		ug/L		87395	87394.561
|	Sb	121	**0.068**	ug/L	3.680	213	0.001
⌊	Sb	123		ug/L		185	0.001
⌈>	Ta	181		ug/L		202632	202632.483
|	Tl	205	**0.042**	ug/L	73.434	3551	0.002
|	Pb	208	**0.066**	ug/L	2.144	836	0.003
⌊	U	238	**1.198**	ug/L	0.558	13043	0.064

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		89.2			
	Ni	60					
>	Ge	74		78.2			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		82.5			
	Sb	121					
	Sb	123					
>	Ta	181		90.3			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579002
Sample Date/Time: Tuesday, October 04, 2005 00:43:40
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579002.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		555296	555296.348
⌊	Ni	60	**5.128**	ug/L	2.325	1413	0.003
⌈>	Ge	74		ug/L		93517	93516.823
|	Se	77		ug/L		2510	0.020
⌊	Se	82	**-0.020**	ug/L	1075.887	2	-0.000
⌈	Ag	107	**-0.000**	ug/L	2026.743	15	-0.000
|	Cd	111	**-0.008**	ug/L	95.950	7	-0.000
|	Cd	114		ug/L		20	-0.000
|>	In	115		ug/L		85210	85209.937
|	Sb	121	**0.037**	ug/L	34.295	167	0.001
⌊	Sb	123		ug/L		149	0.001
⌈>	Ta	181		ug/L		199158	199158.053
|	Tl	205	**-0.214**	ug/L	3.822	1579	-0.008
|	Pb	208	**0.304**	ug/L	0.553	2928	0.014
⌊	U	238	**0.228**	ug/L	3.086	2498	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		88.4			
⌊	Ni	60					
⌈>	Ge	74		74.9			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		80.5			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		88.7			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579003
Sample Date/Time: Tuesday, October 04, 2005 00:47:21
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579003.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		569515	569514.695
[	Ni	60	**4.192**	ug/L	3.202	1188	0.002
[>	Ge	74		ug/L		97647	97646.803
[	Se	77		ug/L		2447	0.019
[	Se	82	**0.736**	ug/L	34.409	23	0.000
[	Ag	107	**0.034**	ug/L	4.764	65	0.001
[	Cd	111	**0.155**	ug/L	32.755	72	0.001
[	Cd	114		ug/L		195	0.002
[>	In	115		ug/L		86082	86081.506
[	Sb	121	**0.163**	ug/L	8.684	337	0.003
[	Sb	123		ug/L		264	0.002
[>	Ta	181		ug/L		202083	202083.280
[	Tl	205	**-0.117**	ug/L	6.265	2338	-0.004
[	Pb	208	**1.126**	ug/L	0.324	10353	0.050
[	U	238	**1.258**	ug/L	0.567	13660	0.067

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		90.6			
	Ni	60					
>	Ge	74		78.2			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		81.3			
	Sb	121					
	Sb	123					
>	Ta	181		90.0			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579004
Sample Date/Time: Tuesday, October 04, 2005 00:51:02
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579004.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		581535	581534.672
⌊	Ni	60	**3.305**	ug/L	0.721	962	-0.002
⌈>	Ge	74		ug/L		100040	100040.407
|	Se	77		ug/L		2708	0.021
⌊	Se	82	**1.010**	ug/L	50.343	31	0.000
⌈	Ag	107	**0.008**	ug/L	68.480	27	0.000
|	Cd	111	**0.202**	ug/L	3.262	92	0.001
|	Cd	114		ug/L		275	0.003
|>	In	115		ug/L		87184	87184.011
|	Sb	121	**0.260**	ug/L	6.381	472	0.004
⌊	Sb	123		ug/L		372	0.003
⌈>	Ta	181		ug/L		202163	202162.947
|	Tl	205	**-0.040**	ug/L	54.281	2928	-0.001
|	Pb	208	**0.819**	ug/L	1.122	7597	0.036
⌊	U	238	**28.526**	ug/L	0.209	308381	1.525

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		92.5			
⌊	Ni	60					
⌈>	Ge	74		80.1			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		82.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		90.1			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579005
Sample Date/Time: Tuesday, October 04, 2005 00:54:43
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579005.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		582927	582926.626
⌊	Ni	60	**3.927**	ug/L	4.648	1141	0.002
⌈>	Ge	74		ug/L		100195	100195.202
|	Se	77		ug/L		2613	0.020
⌊	Se	82	**1.074**	ug/L	21.912	33	0.000
⌈	Ag	107	**0.011**	ug/L	34.647	32	0.000
|	Cd	111	**0.009**	ug/L	111.476	13	0.000
|	Cd	114		ug/L		86	0.001
|>	In	115		ug/L		87618	87617.980
|	Sb	121	**0.023**	ug/L	41.783	152	0.000
⌊	Sb	123		ug/L		142	0.001
⌈>	Ta	181		ug/L		201764	201763.613
|	Tl	205	**-0.320**	ug/L	1.185	794	-0.012
|	Pb	208	**0.177**	ug/L	3.248	1824	0.008
⌊	U	238	**1.229**	ug/L	1.965	13329	0.066

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		92.8			
⌊	Ni	60					
⌈>	Ge	74		80.2			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		82.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		89.9			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937675
Sample Date/Time: Tuesday, October 04, 2005 00:58:26
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937675.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		575050	575049.906
[	Ni	60	**3.868**	ug/L	5.312	1109	0.002
[>	Ge	74		ug/L		98950	98950.198
|	Se	77		ug/L		2633	0.020
[	Se	82	**0.886**	ug/L	63.888	27	0.000
[	Ag	107	**0.006**	ug/L	16.628	24	0.000
|	Cd	111	**0.012**	ug/L	206.828	15	0.000
|	Cd	114		ug/L		93	0.001
|>	In	115		ug/L		87016	87015.922
|	Sb	121	**0.017**	ug/L	25.273	144	0.000
[	Sb	123		ug/L		150	0.001
[>	Ta	181		ug/L		201206	201206.178
|	Tl	205	**-0.326**	ug/L	2.025	744	-0.012
|	Pb	208	**0.138**	ug/L	2.033	1466	0.006
[	U	238	**1.791**	ug/L	0.572	19332	0.096

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		91.5			
	Ni	60					
>	Ge	74		79.2			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		82.2			
	Sb	121					
	Sb	123					
>	Ta	181		89.7			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937683
Sample Date/Time: Tuesday, October 04, 2005 01:02:07
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937683.222

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		591567	591566.993
	Ni	60	**44.687**	ug/L	0.985	12936	0.022
>	Ge	74		ug/L		100860	100860.254
	Se	77		ug/L		2919	0.023
	Se	82	**11.279**	ug/L	3.555	327	0.003
	Ag	107	**46.605**	ug/L	1.365	69468	0.783
	Cd	111	**5.388**	ug/L	3.345	2233	0.025
	Cd	114		ug/L		4957	0.056
>	In	115		ug/L		88764	88763.716
	Sb	121	**104.841**	ug/L	0.228	144393	1.625
	Sb	123		ug/L		112833	1.270
>	Ta	181		ug/L		204313	204312.848
	Tl	205	**45.195**	ug/L	1.231	350424	1.699
	Pb	208	**19.936**	ug/L	1.181	181277	0.886
	U	238	**54.826**	ug/L	1.564	598969	2.931

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		94.1			
⌊	Ni	60					
⌈>	Ge	74		80.8			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		83.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		91.0			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937679
Sample Date/Time: Tuesday, October 04, 2005 01:05:47
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 463410|5|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937679.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		610298	610297.964
	Ni	60	**0.841**	ug/L	3.000	275	0.000
>	Ge	74		ug/L		111020	111019.882
	Se	77		ug/L		1309	0.005
	Se	82	**-0.009**	ug/L	1085.043	2	-0.000
	Ag	107	**0.003**	ug/L	44.059	23	0.000
	Cd	111	**0.005**	ug/L	481.633	13	0.000
	Cd	114		ug/L		27	0.000
>	In	115		ug/L		98086	98085.672
	Sb	121	**-0.018**	ug/L	39.020	108	-0.000
	Sb	123		ug/L		89	-0.000
>	Ta	181		ug/L		217411	217411.492
	Tl	205	**0.027**	ug/L	147.834	3687	0.001
	Pb	208	**0.025**	ug/L	4.714	499	0.001
	U	238	**0.252**	ug/L	1.839	2999	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		97.1			
	Ni	60					
>	Ge	74		88.9			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.6			
	Sb	121					
	Sb	123					
>	Ta	181		96.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, October 04, 2005 01:09:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 6.224

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Sc	45		ug/L		617273	617273.097
Ni	60	**46.385**	ug/L	0.640	14011	0.023
Ge	74		ug/L		115414	115413.858
Se	77		ug/L		2274	0.013
Se	82	**54.216**	ug/L	2.045	1786	0.015
Ag	107	**50.401**	ug/L	0.154	86697	0.846
Cd	111	**50.109**	ug/L	0.875	23866	0.233
Cd	114		ug/L		57803	0.564
In	115		ug/L		102429	102428.776
Sb	121	**50.583**	ug/L	1.562	80467	0.784
Sb	123		ug/L		63472	0.619
Ta	181		ug/L		224191	224191.262
Tl	205	**50.157**	ug/L	1.086	426325	1.886
Pb	208	**52.533**	ug/L	0.861	523700	2.335
U	238	**52.839**	ug/L	0.812	633347	2.825

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		98.2			
	Ni	60	92.770				
>	Ge	74		92.4			
	Se	77					
	Se	82	108.432				
	Ag	107	100.802				
	Cd	111	100.218				
	Cd	114					
>	In	115		96.8			
	Sb	121	101.166				
	Sb	123					
>	Ta	181		99.9			
	Tl	205	100.313				
	Pb	208	105.067				
	U	238	105.677				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, October 04, 2005 01:13:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 7.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		602675	602674.725
[	Ni	60	-0.033	ug/L	31.247	14	-0.000
[>	Ge	74		ug/L		111758	111757.597
|	Se	77		ug/L		779	0.001
[	Se	82	-0.193	ug/L	159.733	-4	-0.000
[	Ag	107	0.004	ug/L	42.642	24	0.000
|	Cd	111	-0.011	ug/L	76.124	6	-0.000
|	Cd	114		ug/L		21	-0.000
\>	In	115		ug/L		100651	100651.358
|	Sb	121	0.120	ug/L	5.298	327	0.002
[	Sb	123		ug/L		260	0.002
[>	Ta	181		ug/L		221861	221860.641
|	Tl	205	-0.185	ug/L	7.151	2001	-0.007
|	Pb	208	-0.002	ug/L	37.158	236	-0.000
[	U	238	0.007	ug/L	28.884	156	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		95.9			
⌊	Ni	60					
⌈>	Ge	74		89.5			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		95.1			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		98.9			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579006
Sample Date/Time: Tuesday, October 04, 2005 01:16:44
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579006.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		557698	557698.489
[	Ni	60	10.051	ug/L	2.039	2760	0.005
[>	Ge	74		ug/L		93328	93327.791
[	Se	77		ug/L		2327	0.019
[	Se	82	0.085	ug/L	734.900	4	0.000
[	Ag	107	0.126	ug/L	3.249	198	0.002
[	Cd	111	0.002	ug/L	728.015	10	0.000
[	Cd	114		ug/L		17	-0.000
[>	In	115		ug/L		86510	86510.075
[	Sb	121	0.129	ug/L	6.799	293	0.002
[	Sb	123		ug/L		241	0.002
[>	Ta	181		ug/L		199799	199798.846
[	Tl	205	-0.292	ug/L	0.778	995	-0.011
[	Pb	208	0.558	ug/L	2.024	5186	0.025
[	U	238	0.118	ug/L	2.263	1333	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		88.8			
⌊	Ni	60					
⌈>	Ge	74		74.7			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		81.7			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		89.0			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937676
Sample Date/Time: Tuesday, October 04, 2005 01:20:25
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937676.227

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
> Sc	45		ug/L		565234	565233.686
Ni	60	**10.342**	ug/L	2.228	2877	0.005
> Ge	74		ug/L		95772	95772.005
Se	77		ug/L		2408	0.019
Se	82	**0.590**	ug/L	132.146	19	0.000
Ag	107	**0.088**	ug/L	10.908	145	0.001
Cd	111	**0.016**	ug/L	108.125	16	0.000
Cd	114		ug/L		22	-0.000
> In	115		ug/L		87805	87804.656
Sb	121	**0.061**	ug/L	4.030	205	0.001
Sb	123		ug/L		180	0.001
> Ta	181		ug/L		200491	200490.580
Tl	205	**-0.321**	ug/L	2.190	781	-0.012
Pb	208	**0.594**	ug/L	0.981	5525	0.026
U	238	**0.115**	ug/L	4.268	1301	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		90.0			
	Ni	60					
>	Ge	74		76.7			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		82.9			
	Sb	121					
	Sb	123					
>	Ta	181		89.3			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937684
Sample Date/Time: Tuesday, October 04, 2005 01:24:07
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937684.228

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		600461	600460.793
[	Ni	60	53.530	ug/L	0.909	15727	0.026
[>	Ge	74		ug/L		101043	101042.606
|	Se	77		ug/L		2783	0.021
[	Se	82	10.672	ug/L	5.157	310	0.003
[	Ag	107	48.312	ug/L	1.175	72155	0.811
|	Cd	111	5.543	ug/L	3.517	2300	0.026
|	Cd	114		ug/L		4963	0.056
|>	In	115		ug/L		88947	88946.981
|	Sb	121	106.198	ug/L	1.088	146539	1.646
[	Sb	123		ug/L		114700	1.289
[>	Ta	181		ug/L		202862	202861.983
|	Tl	205	47.066	ug/L	1.014	362178	1.769
|	Pb	208	20.912	ug/L	1.350	188724	0.929
[	U	238	54.515	ug/L	0.975	591198	2.914

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		95.6			
⌊	Ni	60					
⌈>	Ge	74		80.9			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		84.0			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		90.4			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937680
Sample Date/Time: Tuesday, October 04, 2005 01:27:49
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 463410|5|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937680.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		617417	617416.511
[	Ni	60	**2.222**	ug/L	2.210	695	0.001
[>	Ge	74		ug/L		112910	112910.443
[	Se	77		ug/L		1373	0.006
[	Se	82	**-0.366**	ug/L	133.277	-9	-0.000
[	Ag	107	**0.027**	ug/L	11.494	62	0.000
[	Cd	111	**-0.014**	ug/L	42.211	5	-0.000
[	Cd	114		ug/L		16	-0.000
[>	In	115		ug/L		98573	98572.769
[	Sb	121	**0.019**	ug/L	60.730	166	0.000
[	Sb	123		ug/L		131	0.000
[>	Ta	181		ug/L		215682	215682.365
[	Tl	205	**0.026**	ug/L	158.667	3650	0.001
[	Pb	208	**0.102**	ug/L	4.194	1228	0.005
[	U	238	**0.027**	ug/L	5.546	381	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		98.3			
	Ni	60					
>	Ge	74		90.4			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		93.1			
	Sb	121					
	Sb	123					
>	Ta	181		96.1			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579007
Sample Date/Time: Tuesday, October 04, 2005 01:31:32
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579007.230

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		601416	601416.393
	Ni	60	**4.294**	ug/L	1.547	1286	0.002
>	Ge	74		ug/L		101226	101225.530
	Se	77		ug/L		2613	0.019
	Se	82	**0.191**	ug/L	95.682	8	0.000
	Ag	107	**0.035**	ug/L	10.722	68	0.001
	Cd	111	**0.066**	ug/L	56.796	37	0.000
	Cd	114		ug/L		107	0.001
>	In	115		ug/L		88511	88511.469
	Sb	121	**0.070**	ug/L	18.422	218	0.001
	Sb	123		ug/L		195	0.001
>	Ta	181		ug/L		199859	199859.191
	Tl	205	**-0.216**	ug/L	4.480	1571	-0.008
	Pb	208	**1.000**	ug/L	0.952	9112	0.044
	U	238	**0.893**	ug/L	0.985	9607	0.048

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		95.7			
⌊	Ni	60					
⌈>	Ge	74		81.0			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		83.6			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		89.1			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937677
Sample Date/Time: Tuesday, October 04, 2005 01:35:13
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937677.231

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Sc	45		ug/L		601444	601443.963
Ni	60	**4.178**	ug/L	1.515	1251	0.002
Ge	74		ug/L		101722	101721.616
Se	77		ug/L		2497	0.018
Se	82	**0.487**	ug/L	108.685	16	0.000
Ag	107	**0.110**	ug/L	14.575	178	0.002
Cd	111	**0.130**	ug/L	4.477	63	0.001
Cd	114		ug/L		128	0.001
In	115		ug/L		87725	87724.512
Sb	121	**0.076**	ug/L	15.396	225	0.001
Sb	123		ug/L		194	0.001
Ta	181		ug/L		199988	199987.880
Tl	205	**-0.271**	ug/L	4.061	1158	-0.010
Pb	208	**1.143**	ug/L	1.029	10393	0.051
U	238	**0.874**	ug/L	2.018	9419	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		95.7			
⌊	Ni	60					
⌈>	Ge	74		81.4			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		82.9			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		89.1			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937685
Sample Date/Time: Tuesday, October 04, 2005 01:38:54
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937685.232

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		599990	599990.188
[	Ni	60	**44.890**	ug/L	1.749	13178	0.022
[>	Ge	74		ug/L		102847	102847.054
|	Se	77		ug/L		2655	0.019
[	Se	82	**11.288**	ug/L	5.298	333	0.003
[	Ag	107	**47.825**	ug/L	0.933	71342	0.803
|	Cd	111	**5.568**	ug/L	1.537	2310	0.026
|	Cd	114		ug/L		5016	0.056
|>	In	115		ug/L		88831	88831.176
|	Sb	121	**106.020**	ug/L	1.510	146085	1.644
[	Sb	123		ug/L		114352	1.287
[>	Ta	181		ug/L		205173	205173.101
|	Tl	205	**45.565**	ug/L	0.476	354703	1.713
|	Pb	208	**21.233**	ug/L	1.760	193788	0.944
[	U	238	**54.240**	ug/L	1.040	594927	2.900

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		95.5			
	Ni	60					
>	Ge	74		82.3			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		83.9			
	Sb	121					
	Sb	123					
>	Ta	181		91.4			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937681
Sample Date/Time: Tuesday, October 04, 2005 01:42:35
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 463410|5|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937681.233

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Sc	45		ug/L		622374	622374.306
Ni	60	0.850	ug/L	3.791	283	0.000
Ge	74		ug/L		112474	112473.546
Se	77		ug/L		1319	0.005
Se	82	0.343	ug/L	41.593	14	0.000
Ag	107	0.016	ug/L	33.114	43	0.000
Cd	111	0.015	ug/L	109.988	18	0.000
Cd	114		ug/L		34	0.000
In	115		ug/L		98144	98143.977
Sb	121	0.016	ug/L	33.244	161	0.000
Sb	123		ug/L		141	0.000
Ta	181		ug/L		217504	217503.566
Tl	205	0.015	ug/L	266.366	3594	0.001
Pb	208	0.190	ug/L	6.016	2093	0.008
U	238	0.184	ug/L	3.215	2209	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		99.0			
	Ni	60					
>	Ge	74		90.0			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		92.7			
	Sb	121					
	Sb	123					
>	Ta	181		96.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, October 04, 2005 01:46:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 6.234

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		632487	632486.781
[	Ni	60	46.057	ug/L	0.743	14254	0.022
[>	Ge	74		ug/L		118075	118075.193
[	Se	77		ug/L		2278	0.013
[	Se	82	52.376	ug/L	2.355	1765	0.015
[	Ag	107	50.817	ug/L	1.286	87080	0.853
[	Cd	111	50.693	ug/L	1.508	24052	0.236
[	Cd	114		ug/L		58391	0.572
[>	In	115		ug/L		102047	102047.009
[	Sb	121	51.087	ug/L	1.755	80949	0.792
[	Sb	123		ug/L		63689	0.623
[>	Ta	181		ug/L		224494	224494.211
[	Tl	205	50.513	ug/L	1.596	429805	1.899
[	Pb	208	51.998	ug/L	0.974	519022	2.311
[	U	238	52.232	ug/L	0.921	626878	2.792

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		100.7			
	Ni	60	92.115				
>	Ge	74		94.5			
	Se	77					
	Se	82	104.752				
	Ag	107	101.633				
	Cd	111	101.387				
	Cd	114					
>	In	115		96.4			
	Sb	121	102.174				
	Sb	123					
>	Ta	181		100.0			
	Tl	205	101.025				
	Pb	208	103.996				
	U	238	104.463				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, October 04, 2005 01:49:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 7.235

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		622177	622177.000
[	Ni	60	-0.022	ug/L	53.839	18	-0.000
[>	Ge	74		ug/L		114632	114632.296
|	Se	77		ug/L		849	0.001
[	Se	82	-0.598	ug/L	108.708	-17	-0.000
[	Ag	107	0.006	ug/L	87.533	27	0.000
|	Cd	111	-0.002	ug/L	278.076	11	-0.000
|	Cd	114		ug/L		17	-0.000
|>	In	115		ug/L		101211	101210.697
|	Sb	121	0.129	ug/L	7.807	343	0.002
[	Sb	123		ug/L		288	0.002
[>	Ta	181		ug/L		219568	219568.499
|	Tl	205	-0.169	ug/L	10.722	2109	-0.006
|	Pb	208	-0.001	ug/L	146.968	252	-0.000
[	U	238	0.007	ug/L	18.830	161	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		99.0			
	Ni	60					
>	Ge	74		91.8			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		95.6			
	Sb	121					
	Sb	123					
>	Ta	181		97.8			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 145579008
Sample Date/Time: Tuesday, October 04, 2005 01:53:34
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\145579008.236

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		595304	595304.473
	Ni	60	2.635	ug/L	5.289	789	0.001
>	Ge	74		ug/L		100716	100716.128
	Se	77		ug/L		2570	0.019
	Se	82	1.374	ug/L	1.618	42	0.000
	Ag	107	0.010	ug/L	18.491	30	0.000
	Cd	111	0.032	ug/L	97.955	23	0.000
	Cd	114		ug/L		90	0.001
>	In	115		ug/L		88345	88344.838
	Sb	121	0.159	ug/L	18.060	340	0.002
	Sb	123		ug/L		266	0.002
>	Ta	181		ug/L		199527	199526.625
	Tl	205	-0.290	ug/L	1.317	1013	-0.011
	Pb	208	0.146	ug/L	0.630	1526	0.006
	U	238	0.974	ug/L	1.903	10451	0.052

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		94.7			
	Ni	60					
>	Ge	74		80.6			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		83.4			
	Sb	121					
	Sb	123					
>	Ta	181		88.9			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937678
Sample Date/Time: Tuesday, October 04, 2005 01:57:16
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937678.237

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		598933	598933.409
⌊	Ni	60	2.795	ug/L	2.061	842	0.001
⌈>	Ge	74		ug/L		100331	100331.173
|	Se	77		ug/L		2560	0.019
⌊	Se	82	0.294	ug/L	190.934	11	0.000
⌈	Ag	107	0.009	ug/L	16.338	29	0.000
|	Cd	111	0.035	ug/L	20.168	24	0.000
|	Cd	114		ug/L		112	0.001
|>	In	115		ug/L		87380	87379.779
|	Sb	121	0.097	ug/L	7.535	252	0.001
⌊	Sb	123		ug/L		210	0.001
⌈>	Ta	181		ug/L		200643	200643.384
|	Tl	205	-0.286	ug/L	2.121	1047	-0.011
|	Pb	208	0.209	ug/L	1.860	2097	0.009
⌊	U	238	1.550	ug/L	1.405	16694	0.083

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		95.3			
	Ni	60					
>	Ge	74		80.3			
	Se	77					
	Se	82					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		82.5			
	Sb	121					
	Sb	123					
>	Ta	181		89.4			
	Tl	205					
	Pb	208					
	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937686
Sample Date/Time: Tuesday, October 04, 2005 02:00:58
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 463410|1|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937686.238

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Sc	45		ug/L		607091	607091.134
Ni	60	**42.816**	ug/L	2.653	12724	0.021
Ge	74		ug/L		102300	102300.085
Se	77		ug/L		2929	0.022
Se	82	**10.945**	ug/L	15.363	322	0.003
Ag	107	**47.063**	ug/L	3.467	70114	0.790
Cd	111	**5.338**	ug/L	4.522	2210	0.025
Cd	114		ug/L		4889	0.055
In	115		ug/L		88752	88751.939
Sb	121	**104.364**	ug/L	2.626	143672	1.618
Sb	123		ug/L		112521	1.267
Ta	181		ug/L		202785	202785.306
Tl	205	**45.329**	ug/L	1.804	348821	1.704
Pb	208	**19.848**	ug/L	0.639	179119	0.882
U	238	**54.159**	ug/L	0.683	587226	2.895

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		96.6			
⌊	Ni	60					
⌈>	Ge	74		81.9			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		83.8			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		90.4			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: 1200937682
Sample Date/Time: Tuesday, October 04, 2005 02:04:42
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 463410|5|prb
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\1200937682.239

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		629159	629158.903
[	Ni	60	0.574	ug/L	1.668	201	0.000
[>	Ge	74		ug/L		112676	112676.475
|	Se	77		ug/L		1369	0.006
[	Se	82	-0.120	ug/L	647.720	-1	-0.000
[	Ag	107	0.008	ug/L	22.016	30	0.000
|	Cd	111	-0.017	ug/L	165.488	3	-0.000
|	Cd	114		ug/L		33	0.000
|>	In	115		ug/L		97520	97519.743
|	Sb	121	-0.005	ug/L	71.799	127	-0.000
[	Sb	123		ug/L		97	0.000
[>	Ta	181		ug/L		214933	214932.523
|	Tl	205	0.029	ug/L	137.319	3669	0.001
|	Pb	208	0.018	ug/L	3.871	423	0.001
[	U	238	0.206	ug/L	2.969	2435	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		100.1			
⌊	Ni	60					
⌈>	Ge	74		90.2			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		92.1			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		95.8			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, October 04, 2005 02:08:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 6.240

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		638833	638833.394
[	Ni	60	**45.733**	ug/L	0.706	14297	0.022
[>	Ge	74		ug/L		116878	116878.138
[	Se	77		ug/L		2321	0.013
[	Se	82	**53.207**	ug/L	1.707	1774	0.015
[	Ag	107	**50.542**	ug/L	1.132	86084	0.849
[	Cd	111	**51.208**	ug/L	0.647	24148	0.238
[	Cd	114		ug/L		57145	0.563
[>	In	115		ug/L		101407	101406.968
[	Sb	121	**51.384**	ug/L	1.313	80908	0.797
[	Sb	123		ug/L		63312	0.623
[>	Ta	181		ug/L		220773	220772.642
[	Tl	205	**50.777**	ug/L	0.820	424993	1.909
[	Pb	208	**52.275**	ug/L	0.946	513141	2.323
[	U	238	**53.032**	ug/L	0.576	626023	2.835

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		101.7			
	Ni	60	91.466				
>	Ge	74		93.6			
	Se	77					
	Se	82	106.414				
	Ag	107	101.085				
	Cd	111	102.417				
	Cd	114					
>	In	115		95.8			
	Sb	121	102.769				
	Sb	123					
>	Ta	181		98.4			
	Tl	205	101.554				
	Pb	208	104.550				
	U	238	106.065				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, October 04, 2005 02:12:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\eshl.mth
Dataset File: C:\elandata\Dataset\051003\QC Std 7.241

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Sc	45		ug/L		634461	634461.032
Ni	60	-0.014	ug/L	59.299	21	-0.000
Ge	74		ug/L		116976	116975.865
Se	77		ug/L		844	0.001
Se	82	-0.023	ug/L	2386.279	2	-0.000
Ag	107	0.004	ug/L	11.240	24	0.000
Cd	111	-0.001	ug/L	1551.908	11	-0.000
Cd	114		ug/L		21	-0.000
In	115		ug/L		101021	101020.700
Sb	121	0.135	ug/L	5.750	352	0.002
Sb	123		ug/L		260	0.002
Ta	181		ug/L		219418	219417.873
Tl	205	-0.178	ug/L	6.522	2031	-0.007
Pb	208	-0.002	ug/L	38.167	237	-0.000
U	238	0.007	ug/L	37.368	153	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		101.0			
⌊	Ni	60					
⌈>	Ge	74		93.7			
|	Se	77					
⌊	Se	82					
⌈	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		95.4			
|	Sb	121					
⌊	Sb	123					
⌈>	Ta	181		97.8			
|	Tl	205					
|	Pb	208					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: WATER1
Method Description: 7470A, 245.2, ILM04 ANALYST NOR1
Element: Hg

Date: 09/21/2005
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: 092105W1.SIF Results Data Set Name: 092105W1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 09/21/2005
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0054	0.0054	10:44:09	No
2			0.0054	0.0054	10:44:43	No
Mean:			0.0054			
SD :			0.0000			
%RSD:			0.5410			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 09/21/2005
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0037	0.0092	10:46:05	No
2			0.0037	0.0091	10:46:40	No
Mean:			0.0037			
SD :			0.0000			
%RSD:			0.2594			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.01870

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 09/21/2005
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0089	0.0143	10:48:03	No
2			0.0087	0.0141	10:48:37	No
Mean:			0.0088			
SD :			0.0001			
%RSD:			1.6252			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99866 Slope: 0.01780

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 09/21/2005
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0341	0.0395	10:50:02	No
2			0.0337	0.0391	10:50:36	No
Mean:			0.0339			
SD :			0.0003			
%RSD:			0.8873			

[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99978 Slope: 0.01700

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 09/21/2005
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0810	0.0864	10:52:01	No
2			0.0802	0.0856	10:52:36	No
Mean:			0.0806			
SD :			0.0006			
%RSD:			0.7256			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99960 Slope: 0.01626

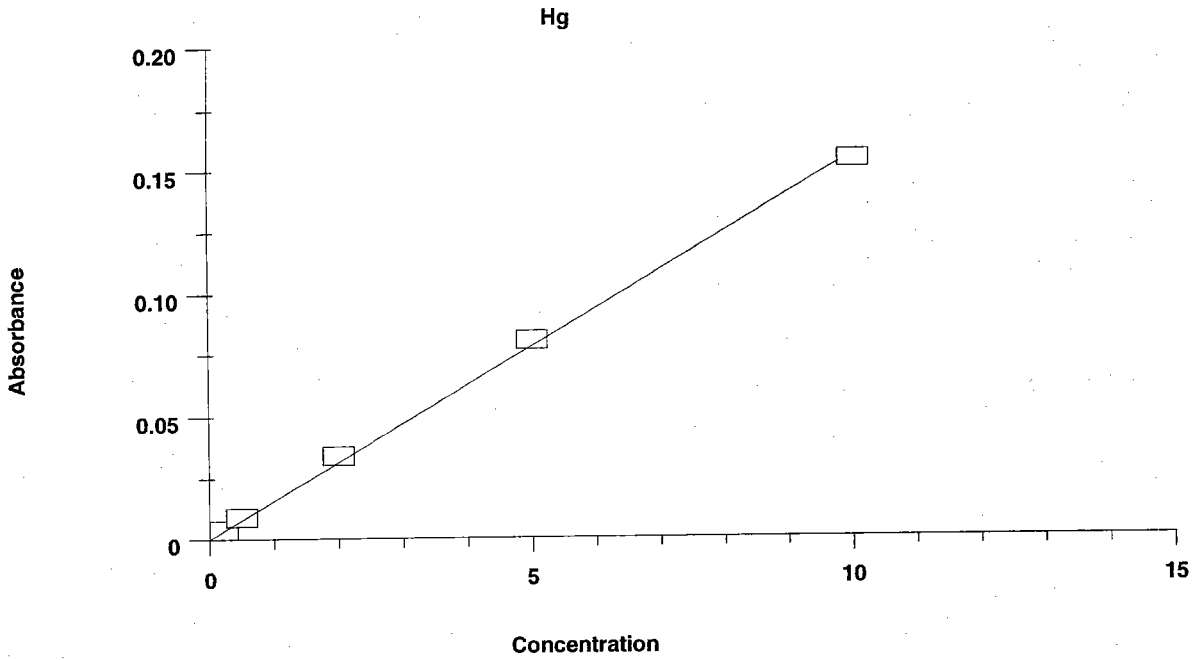
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 09/21/2005
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.1546	0.1600	10:54:03	No
2			0.1537	0.1591	10:54:38	No
Mean:			0.1541			
SD :			0.0007			
%RSD:			0.4254			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99942 Slope: 0.01561

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0054	---	----	----	----
S0.2	0.0037	0.200	0.240	0.0000	0.3
S0.5	0.0088	0.500	0.565	0.0001	1.6
S2.0	0.0339	2.000	2.170	0.0003	0.9
S5.0	0.0806	5.000	5.163	0.0006	0.7
S10	0.1541	10.000	9.873	0.0007	0.4
Correlation Coefficient: 0.99942		Slope:	0.01561	----	



Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 09/21/2005
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.166	5.166	0.0807	0.0861	10:56:06	No
2	5.114	5.114	0.0798	0.0853	10:56:41	No
Mean:	5.140	5.140	0.0803			
SD :	0.0370	0.0370	0.0006			
%RSD:	0.7	0.7	0.7202			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 09/21/2005
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.009	0.009	0.0001	0.0056	10:58:03	No
2	0.005	0.005	0.0001	0.0055	10:58:38	No
Mean:	0.007	0.007	0.0001			
SD :	0.0027	0.0027	0.0000			
%RSD:	36.4	36.4	36.4392			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 09/21/2005
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.284	0.284	0.0044	0.0098	10:59:59	No
2	0.278	0.278	0.0043	0.0098	11:00:34	No
Mean:	0.281	0.281	0.0044			
SD :	0.0039	0.0039	0.0001			
%RSD:	1.4	1.4	1.3896			

QC value within specified limits.

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 09/21/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.123	5.123	0.0800	0.0854	11:01:59	No
2	5.108	5.108	0.0797	0.0852	11:02:34	No
Mean:	5.115	5.115	0.0799			
SD :	0.0107	0.0107	0.0002			
%RSD:	0.2	0.2	0.2097			

QC value within specified limits.

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 09/21/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0002	0.0056	11:04:02	No
2	0.002	0.002	0.0000	0.0055	11:04:37	No
Mean:	0.007	0.007	0.0001			
SD :	0.0062	0.0062	0.0001			
%RSD:	91.0	91.0	90.9820			

QC value within specified limits.

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 09/21/2005
Sample ID: 1200937948|i||463520|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.014	0.014	0.0002	0.0056	11:06:03	No
2	0.011	0.011	0.0002	0.0056	11:06:37	No
Mean:	0.013	0.013	0.0002			
SD :	0.0020	0.0020	0.0000			
%RSD:	15.7	15.7	15.6523			

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 09/21/2005
Sample ID: 1200937961|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.235	2.235	0.0349	0.0403	11:08:02	No
2	2.216	2.216	0.0346	0.0400	11:08:37	No
Mean:	2.226	2.226	0.0347			
SD :	0.0133	0.0133	0.0002			
%RSD:	0.6	0.6	0.5984			

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 09/21/2005
Sample ID: 145511002|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.080	0.080	0.0012	0.0067	11:10:03	No
2	0.074	0.074	0.0011	0.0066	11:10:38	No
Mean:	0.077	0.077	0.0012			
SD :	0.0043	0.0043	0.0001			
%RSD:	5.6	5.6	5.5946			

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 09/21/2005
Sample ID: 145579001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0056	11:12:04	No
2	0.008	0.008	0.0001	0.0055	11:12:39	No
Mean:	0.012	0.012	0.0002			
SD :	0.0045	0.0045	0.0001			
%RSD:	38.7	38.7	38.7459			

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 09/21/2005
Sample ID: 145579002|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0002	0.0057	11:14:07	No
2	0.014	0.014	0.0002	0.0056	11:14:42	No
Mean:	0.015	0.015	0.0002			
SD :	0.0008	0.0008	0.0000			
%RSD:	5.5	5.5	5.4773			

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 09/21/2005
Sample ID: 145579003|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.021	0.021	0.0003	0.0057	11:16:06	No
2	0.017	0.017	0.0003	0.0057	11:16:40	No
Mean:	0.019	0.019	0.0003			
SD :	0.0030	0.0030	0.0000			
%RSD:	15.5	15.5	15.5183			

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 09/21/2005
Sample ID: 145579004|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.016	0.016	0.0003	0.0057	11:18:02	No
2	0.000	0.000	0.0000	0.0054	11:18:37	No
Mean:	0.008	0.008	0.0001			
SD :	0.0111	0.0111	0.0002			
%RSD:	133.2	133.2	133.2313			

Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 09/21/2005
Sample ID: 145579005|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.012	0.012	0.0002	0.0056	11:19:58	No
2	0.005	0.005	0.0001	0.0055	11:20:32	No
Mean:	0.009	0.009	0.0001			
SD :	0.0046	0.0046	0.0001			
%RSD:	54.4	54.4	54.3537			

Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 09/21/2005
Sample ID: 1200937949|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0055	11:21:54	No
2	0.003	0.003	0.0000	0.0055	11:22:28	No
Mean:	0.005	0.005	0.0001			
SD :	0.0037	0.0037	0.0001			

%RSD: 69.8 69.8 69.8023

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 09/21/2005
Sample ID: 1200937957|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.123	2.123	0.0331	0.0386	11:23:50	No
2	2.113	2.113	0.0330	0.0384	11:24:25	No
Mean:	2.118	2.118	0.0331			
SD :	0.0070	0.0070	0.0001			
%RSD:	0.3	0.3	0.3328			

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 09/21/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.136	5.136	0.0802	0.0856	11:25:50	No
2	5.065	5.065	0.0791	0.0845	11:26:25	No
Mean:	5.100	5.100	0.0796			
SD :	0.0501	0.0501	0.0008			
%RSD:	1.0	1.0	0.9813			

QC value within specified limits.

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 09/21/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0054	11:27:54	No
2	-0.003	-0.003	0.0000	0.0054	11:28:29	No
Mean:	-0.001	-0.001	0.0000			
SD :	0.0031	0.0031	0.0000			
%RSD:	519.4	519.4	519.3835			

QC value within specified limits.

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 09/21/2005
Sample ID: 1200937953|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0053	11:29:54	No
2	-0.015	-0.015	-0.0002	0.0052	11:30:29	No
Mean:	-0.012	-0.012	-0.0002			
SD :	0.0046	0.0046	0.0001			
%RSD:	38.1	38.1	38.1455			

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 09/21/2005
Sample ID: 145579006|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0054	11:31:53	No
2	-0.010	-0.010	-0.0002	0.0053	11:32:28	No
Mean:	-0.006	-0.006	-0.0001			
SD :	0.0060	0.0060	0.0001			
%RSD:	99.8	99.8	99.8279			

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 09/21/2005
Sample ID: 1200937950|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0053	11:33:52	No
2	-0.014	-0.014	-0.0002	0.0052	11:34:27	No
Mean:	-0.011	-0.011	-0.0002			
SD :	0.0029	0.0029	0.0000			
%RSD:	25.7	25.7	25.6903			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 09/21/2005
Sample ID: 1200937958|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.314	2.314	0.0361	0.0416	11:35:51	No
2	2.294	2.294	0.0358	0.0412	11:36:26	No
Mean:	2.304	2.304	0.0360			
SD :	0.0148	0.0148	0.0002			
%RSD:	0.6	0.6	0.6417			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 09/21/2005
Sample ID: 1200937954|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0002	0.0056	11:37:51	No
2	-0.010	-0.010	-0.0002	0.0053	11:38:25	No
Mean:	0.001	0.001	0.0000			
SD :	0.0164	0.0164	0.0003			
%RSD:	1382	1382	1381.7126			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 09/21/2005
Sample ID: 145579007|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0004	0.0058	11:39:50	No
2	0.019	0.019	0.0003	0.0057	11:40:25	No
Mean:	0.023	0.023	0.0004			
SD :	0.0054	0.0054	0.0001			
%RSD:	23.6	23.6	23.6364			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 09/21/2005
Sample ID: 1200937951|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0002	0.0056	11:41:51	No
2	-0.001	-0.001	0.0000	0.0054	11:42:26	No
Mean:	0.005	0.005	0.0001			
SD :	0.0085	0.0085	0.0001			
%RSD:	164.9	164.9	164.8894			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 09/21/2005
Sample ID: 1200937959|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.125	2.125	0.0332	0.0386	11:43:52	No
2	2.106	2.106	0.0329	0.0383	11:44:27	No
Mean:	2.115	2.115	0.0330			
SD :	0.0131	0.0131	0.0002			

%RSD: 0.6 0.6 0.6171

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 09/21/2005
Sample ID: 1200937955|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	0.0052	11:45:54	No
2	-0.021	-0.021	-0.0003	0.0051	11:46:29	No
Mean:	-0.017	-0.017	-0.0003			
SD :	0.0057	0.0057	0.0001			
%RSD:	33.8	33.8	33.7909			

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 09/21/2005
Sample ID: 145579008|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0002	0.0052	11:47:56	No
2	-0.014	-0.014	-0.0002	0.0052	11:48:31	No
Mean:	-0.013	-0.013	-0.0002			
SD :	0.0016	0.0016	0.0000			
%RSD:	11.9	11.9	11.9093			

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 09/21/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.140	5.140	0.0802	0.0857	11:49:58	No
2	5.086	5.086	0.0794	0.0848	11:50:32	No
Mean:	5.113	5.113	0.0798			
SD :	0.0379	0.0379	0.0006			
%RSD:	0.7	0.7	0.7421			

QC value within specified limits.

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 09/21/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0054	11:52:01	No
2	-0.004	-0.004	-0.0001	0.0054	11:52:36	No
Mean:	-0.002	-0.002	0.0000			
SD :	0.0026	0.0026	0.0000			
%RSD:	109.5	109.5	109.5284			

QC value within specified limits.

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 09/21/2005
Sample ID: 1200937952|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0001	0.0053	11:54:00	No
2	-0.011	-0.011	-0.0002	0.0052	11:54:35	No
Mean:	-0.008	-0.008	-0.0001			
SD :	0.0039	0.0039	0.0001			
%RSD:	48.4	48.4	48.3861			

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 09/21/2005
Sample ID: 1200937960|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.129	2.129	0.0332	0.0387	11:55:55	No
2	2.107	2.107	0.0329	0.0383	11:56:30	No
Mean:	2.118	2.118	0.0331			
SD :	0.0154	0.0154	0.0002			
%RSD:	0.7	0.7	0.7247			

Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 09/21/2005
Sample ID: 1200937956|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0054	11:57:51	No
2	-0.023	-0.023	-0.0004	0.0051	11:58:26	No
Mean:	-0.012	-0.012	-0.0002			
SD :	0.0149	0.0149	0.0002			
%RSD:	121.8	121.8	121.7806			

Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 09/21/2005
Sample ID: 1200937962|i||463522|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0003	0.0051	11:59:47	No
2	-0.028	-0.028	-0.0004	0.0050	12:00:23	No
Mean:	-0.024	-0.024	-0.0004			
SD :	0.0057	0.0057	0.0001			
%RSD:	23.9	23.9	23.9478			

Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 09/21/2005
Sample ID: 1200937963|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.252	2.252	0.0352	0.0406	12:01:45	No
2	2.232	2.232	0.0348	0.0403	12:02:20	No
Mean:	2.242	2.242	0.0350			
SD :	0.0144	0.0144	0.0002			
%RSD:	0.6	0.6	0.6445			

Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 09/21/2005
Sample ID: 145509001|i|

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.025	-0.025	-0.0004	0.0050	12:03:42	No
2	-0.039	-0.039	-0.0006	0.0048	12:04:17	No
Mean:	-0.032	-0.032	-0.0005			
SD :	0.0099	0.0099	0.0002			
%RSD:	31.0	31.0	30.9968			

Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 09/21/2005
Sample ID: 1200937964|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.030	-0.030	-0.0005	0.0050	12:05:40	No
2	-0.036	-0.036	-0.0006	0.0049	12:06:15	No
Mean:	-0.033	-0.033	-0.0005			
SD :	0.0042	0.0042	0.0001			

%RSD: 12.7 12.7 12.7384

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 09/21/2005
Sample ID: 1200937965|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.065	2.065	0.0322	0.0377	12:07:38	No
2	2.045	2.045	0.0319	0.0373	12:08:12	No
Mean:	2.055	2.055	0.0321			
SD :	0.0138	0.0138	0.0002			
%RSD:	0.7	0.7	0.6714			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 09/21/2005
Sample ID: 1200937966|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.025	-0.025	-0.0004	0.0050	12:09:36	No
2	-0.038	-0.038	-0.0006	0.0048	12:10:10	No
Mean:	-0.032	-0.032	-0.0005			
SD :	0.0090	0.0090	0.0001			
%RSD:	28.6	28.6	28.5655			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 09/21/2005
Sample ID: 1200927415|i||459193|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0007	0.0047	12:11:34	No
2	-0.054	-0.054	-0.0008	0.0046	12:12:09	No
Mean:	-0.050	-0.050	-0.0008			
SD :	0.0054	0.0054	0.0001			
%RSD:	10.9	10.9	10.8898			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 09/21/2005
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.098	5.098	0.0796	0 0850	12:13:35	No
2	5.076	5.076	0.0792	0.0847	12:14:10	No
Mean:	5.087	5.087	0.0794			
SD :	0.0159	0.0159	0.0002			
%RSD:	0.3	0.3	0.3116			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 09/21/2005
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0002	0.0052	12:15:38	No
2	-0.021	-0.021	-0.0003	0.0051	12:16:12	No
Mean:	-0.018	-0.018	-0.0003			
SD :	0.0051	0.0051	0.0001			
%RSD:	28.6	28.6	28.6016			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 09/21/2005
Sample ID: 1200927422|i|||LCS

Miscellaneous

Prep LogBook

Analyst: RG2 Verified by:_____

Batch: 463363

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200937549	UI050815-01	.25	mL
LCS	1200937549	UI050815-06	.25	mL
MS	1200937545	UI050815-01	.25	mL
MS	1200937545	UI050815-06	.25	mL
MS	1200937546	UI050815-01	.25	mL
MS	1200937546	UI050815-06	.25	mL
MS	1200937547	UI050815-01	.25	mL
MS	1200937547	UI050815-06	.25	mL
MS	1200937548	UI050815-01	.25	mL
MS	1200937548	UI050815-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200937536		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
LCS	1200937549		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579001		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579002		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579003		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579004		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579005		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
DUP	1200937537	145579005	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200937541	145579005	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
MS	1200937545	145579005	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579006		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
DUP	1200937538	145579006	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200937542	145579006	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
MS	1200937546	145579006	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579007		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
DUP	1200937539	145579007	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200937543	145579007	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
MS	1200937547	145579007	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579008		SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
DUP	1200937540	145579008	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
SDILT	1200937544	145579008	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER
MS	1200937548	145579008	SW846 3005A	03-OCT-2005 08:30	50 mL	50 mL	1	GROUND WATER

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Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
346784	2.5 mL	HYDROCHLORIC ACID	
346786	1 mL	Nitric Acid CONC.	

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Prep LogBook

Analyst: PRB Verified by:_____

Batch: 463409

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200937687	UI050923A	.5	mL
MS	1200937683	UI050923-04	.5	mL
MS	1200937684	UI050923-04	.5	mL
MS	1200937685	UI050923-04	.5	mL
MS	1200937686	UI050923-04	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200937674		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
LCS	1200937687		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579001		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579002		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579003		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579004		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579005		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1200937675	145579005	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200937679	145579005	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
MS	1200937683	145579005	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579006		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1200937676	145579006	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200937680	145579006	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
MS	1200937684	145579006	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579007		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1200937677	145579007	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200937681	145579007	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
MS	1200937685	145579007	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579008		SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1200937678	145579008	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1200937682	145579008	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER
MS	1200937686	145579008	SW846 3005A	02-OCT-2005 11:00	50 mL	50 mL	1	GROUND WATER

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Reagent/Solvent Lot ID	Amount	Description
340680	2.5 mL	HYDROCHLORIC ACID
320603	1 mL	Nitric Acid CONC.

Comments

Prep LogBook

Analyst: ETL Verified by:_____

Batch: 463519

Lab SOP: GL-MA-E-010 REV# 16

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200937961	WHG050920-13	.2	mL
MS	1200937957	WHG050920-13	.2	mL
MS	1200937958	WHG050920-13	.2	mL
MS	1200937959	WHG050920-13	.2	mL
MS	1200937960	WHG050920-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200937948		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
LCS	1200937961		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145511002		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	WASTE WATER
SAMPLE	145579001		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579002		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579003		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579004		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579005		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
DUP	1200937949	145579005	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SDILT	1200937953	145579005	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
MS	1200937957	145579005	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579006		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
DUP	1200937950	145579006	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SDILT	1200937954	145579006	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
MS	1200937958	145579006	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579007		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
DUP	1200937951	145579007	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SDILT	1200937955	145579007	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
MS	1200937959	145579007	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579008		EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
DUP	1200937952	145579008	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
SDILT	1200937956	145579008	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER
MS	1200937960	145579008	EPA 245.1/245.2 Prep	20-SEP-2005 12:00	20 mL	20 mL	1	GROUND WATER

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Reagent/Solvent Lot ID	Amount	Description
337510	1 mL	Sulfuric Acid, Concentrated
337512-1	.5 mL	NITRIC ACID
317568-C	1.5 mL	5% Potassium Persulfate
337514-C	3 mL	5% KMnO4 solution

Comments Digestion Start Date: 20-SEP-05 12:00
Digestion End Date: 20-SEP-05 14:00

Prep LogBook

337516-C	1 mL	Hg reducing agent
WHG050920-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG050920-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG050920-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG050920-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG050920-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG050920-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

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General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 253617
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
04-OCT-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3005/6020	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
463410	See Below		

Potentially affected work order(s)(SDG): 145579

Application Issues:

Failed RPD for DUP

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed RPD for DUP: QC 1200937675DUP	The dup failed for U. The data is qualified and reported as is.

Originator's Name:

Paul Boyd 04-OCT-05

Data Validator/Group Leader:

Jamie Johnson 10-OCT-05

Quality Review:

Director:

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (ESHL)
SDG 145579

Method/Analysis Information

Product: **Carbon, Total Organic**

Analytical Batch: 464823 and 464895 **Method:** SW846 9060

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9060:

Sample ID	Client ID
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200941204	Method Blank (MB)
1200941205	145267002(GU05090GMC501) Sample Duplicate (DUP)
1200941207	145267002(GU05090GMC501) Post Spike (PS)
1200941209	Laboratory Control Sample (LCS)
1200941372	Method Blank (MB)
1200941373	145312007(GU05090PE1E01) Sample Duplicate (DUP)
1200941374	145452004(GU0509PWF1E01) Sample Duplicate (DUP)
1200941375	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200941376	145782003(GU05090G4BM01) Sample Duplicate (DUP)
1200941377	145892003(GU05090G4TM01) Sample Duplicate (DUP)
1200941378	145312007(GU05090PE1E01) Post Spike (PS)
1200941379	145452004(GU0509PWF1E01) Post Spike (PS)
1200941380	145579006(GU05090GMC401) Post Spike (PS)
1200941381	145782003(GU05090G4BM01) Post Spike (PS)
1200941382	145892003(GU05090G4TM01) Post Spike (PS)
1200941383	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-093 REV# 5.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Carbon analysis was performed on a O-I Analytical Model 1010 Total Organic Carbon Analyzer.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement

The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation

Samples 145267002 (GU05090GMC501)- Batch 464823, 145312007 (GU05090PE1E01), 145452004 (GU0509PWF1E01), 145579006 (GU05090GMC401), 145782003 (GU05090G4BM01) and 145892003 (GU05090G4TM01)- Batch 464895 were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the samples and duplicates for this sample group are less than 5 times the Practical Quantitation Limit (PQL) and within one PQL value of each other; therefore, the RPD is not applicable for samples 1200941375 (GU05090GMC401) and 145579006 (GU05090GMC401)- Batch 464895.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
A 15 mg/L Total Inorganic Carbon check standard is analyzed with each analytical run to prove that the instrument is effectively sparging away the inorganic carbon.

Method/Analysis Information

Product:	**Specific Conductivity**		
Analytical Batch:	469197 and 470004	**Method:**	EPA 120.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 120.1:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200951410	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200951411	Laboratory Control Sample (LCS)
1200951412	145579001(GF05090G3TM01) Sample Duplicate (DUP)
1200953251	145739002(GF0509G33R101) Sample Duplicate (DUP)
1200953254	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-009 REV# 6.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Conductivity analysis was performed on a Orion 160 Conductivity Meter.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation
Samples 145579001 (GF05090G3TM01), 145579006 (GU05090GMC401)- Batch 469197 and 145739002 (GF0509G33R101)- Batch 470004 were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **pH**

Analytical Batch: 463337 **Method:** EPA 150.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 150.1:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200937461	145579005(GU05090G3TM01) Sample Duplicate (DUP)
1200937462	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200937463	145579007(GU05090G57M01) Sample Duplicate (DUP)
1200937464	145579008(GU05090G7CM01) Sample Duplicate (DUP)
1200937465	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 10.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Electrode analysis was performed on a Orion EA940 pH/Ion Selective Electrode Meter .

Initial Calibration
All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 145579005 (GU05090G3TM01), 145579006 (GU05090GMC401), 145579007 (GU05090G57M01) and 145579008 (GU05090G7CM01) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
The following samples from this sample group were received by the lab outside of the method specified holding time: 145579001 (GF05090G3TM01), 145579002 (GF05090GMC401), 145579003 (GF05090G57M01), 145579004 (GF05090G7CM01), 145579005 (GU05090G3TM01), 145579006 (GU05090GMC401), 145579007 (GU05090G57M01) and 145579008 (GU05090G7CM01).

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	465671	**Method:**	EPA 335.3
Prep Batch :	465670	**Method:**	EPA 335.3

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
1200943201	Method Blank (MB)
1200943202	Laboratory Control Sample (LCS)
1200943205	145579001(GF05090G3TM01) Sample Duplicate (DUP)
1200943206	145579001(GF05090G3TM01) Matrix Spike (MS)
1200944904	145892002(GF05090G1TM01) Matrix Spike Duplicate (MSD)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Flow Injection analysis was performed on a Lachat QuickChem FIA+.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 145579001 (GF05090G3TM01) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery for this sample set was within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation

A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Ion Chromatography**		
Analytical Batch:	464388	**Method:**	EPA 300.0

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200940114	Method Blank (MB)
1200940115	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200940116	145782003(GU05090G4BM01) Sample Duplicate (DUP)
1200940117	145579006(GU05090GMC401) Post Spike (PS)
1200940118	145782003(GU05090G4BM01) Post Spike (PS)
1200940119	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Ion Chromatography analysis was performed on a Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 145579006 (GU05090GMC401) and 145782003 (GU05090G4BM01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for samples 1200940115 (GU05090GMC401), 1200940116 (GU05090G4BM01), 1200940117 (GU05090GMC401), 1200940118 (GU05090G4BM01), 145579001 (GF05090G3TM01), 145579002 (GF05090GMC401), 145579003 (GF05090G57M01), 145579004 (GF05090G7CM01), 145579005 (GU05090G3TM01), 145579006 (GU05090GMC401), 145579007 (GU05090G57M01) and 145579008 (GU05090G7CM01).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 145579003 (GF05090G57M01).

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Perchlorate**		
Analytical Batch:	464200	**Method:**	EPA 314.0 DOE-AL

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 314.0 DOE-AL:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
1200939629	Method Blank (MB)
1200939630	145452001(GF0509PWF1E01) Sample Duplicate (DUP)
1200939631	145457009(GU05080G01R01) Sample Duplicate (DUP)
1200939632	145527001(05.71337) Sample Duplicate (DUP)
1200939634	145452001(GF0509PWF1E01) Post Spike (PS)
1200939635	145457009(GU05080G01R01) Post Spike (PS)
1200939636	145527001(05.71337) Post Spike (PS)
1200939638	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-096 REV# 4.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Ion Chromatography analysis was performed on a Dionex Ion Chromatograph.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 145452001 (GF0509PWF1E01), 145457009 (GU05080G01R01) and 145527001 (05.71337) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for sample 145579002 (GF05090GMC401).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
The following samples from this sample group had to be manually integrated due to errors in the

instrument software peak integration: 1200939629 (MB), 1200939634 (GF0509PWF1E01) and 145579003 (GF05090G57M01).

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Kjeldahl Nitrogen**		
Analytical Batch:	469154	**Method:**	EPA 351.2
Prep Batch :	469152	**Method:**	EPA 351.2 Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 351.2:

Sample ID	Client ID
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200951341	Method Blank (MB)
1200951342	Laboratory Control Sample (LCS)
1200951343	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200951344	145579006(GU05090GMC401) Matrix Spike (MS)
1200951348	145579006(GU05090GMC401) Matrix Spike Duplicate (MSD)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-104 REV# 2.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 145579006 (GU05090GMC401) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery for samples 1200951344 (GU05090GMC401) and 145579006 (GU05090GMC401) were outside of the required acceptance limits due to matrix interference.

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery for the following samples was outside of the required acceptance limits due to matrix interference: 1200951348 (GU05090GMC401) and 145579006 (GU05090GMC401).

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The following sample was re-analyzed to verify the result: 1200951343 (GU05090GMC401).

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 255377 1200951344 (GU05090GMC401),

1200951348 (GU05090GMC401) and 145579006 (GU05090GMC401).

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Nitrate + Nitrite**		
Analytical Batch:	469150	**Method:**	EPA 353.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 353.1:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
1200951331	Method Blank (MB)
1200951332	Laboratory Control Sample (LCS)
1200951339	145579001(GF05090G3TM01) Sample Duplicate (DUP)
1200951340	145579001(GF05090G3TM01) Post Spike (PS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-108 REV# 1.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Konelab 20.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Sample 145579001 (GF05090G3TM01) was designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for samples 1200951339 (GF05090G3TM01), 1200951340 (GF05090G3TM01), 145579001 (GF05090G3TM01), 145579002 (GF05090GMC401), 145579003 (GF05090G57M01) and 145579004 (GF05090G7CM01).

Sample Re-analysis
The following samples were re-analyzed due to CCB failure: 1200951331 (MB), 1200951332 (LCS), 1200951339 (GF05090G3TM01), 1200951340 (GF05090G3TM01), 145579001 (GF05090G3TM01), 145579002 (GF05090GMC401), 145579003 (GF05090G57M01) and 145579004 (GF05090G7CM01).

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Phosphorus**		
Analytical Batch:	468773	**Method:**	EPA 365.4
Prep Batch :	468768	**Method:**	EPA 365.4 Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 365.4:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
1200950473	Method Blank (MB)
1200950474	Laboratory Control Sample (LCS)
1200950475	145452001(GF0509PWF1E01) Sample Duplicate (DUP)
1200950476	145452001(GF0509PWF1E01) Matrix Spike (MS)
1200950502	145579001(GF05090G3TM01) Sample Duplicate (DUP)
1200950503	145579001(GF05090G3TM01) Matrix Spike (MS)
1200950504	145579001(GF05090G3TM01) Matrix Spike Duplicate (MSD)
1200950505	145452001(GF0509PWF1E01) Matrix Spike Duplicate (MSD)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-103 REV# 2.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 145452001 (GF0509PWF1E01) and 145579001 (GF05090G3TM01) were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the samples and duplicates for this sample group are less than 5 times the Practical Quantitation Limit (PQL) and within one PQL value of each other; therefore, the RPD is not applicable for samples 1200950475 (GF0509PWF1E01), 1200950502 (GF05090G3TM01) and 145579001 (GF05090G3TM01).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis

The following sample was reanalyzed due to the instrument detecting the peak incorrectly. 145579002 (GF05090GMC401).

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Solids, Total Dissolved**		
Analytical Batch:	463882	**Method:**	EPA 160.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 160.1:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200938917	Method Blank (MB)
1200938918	145527001(05.71337) Sample Duplicate (DUP)
1200938919	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200938920	Laboratory Control Sample (LCS)
1200938926	145579001(GF05090G3TM01) Sample Duplicate (DUP)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-001 REV# 7.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Solids analysis was performed on a Sartorius Balance.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 145527001 (05.71337), 145579001 (GF05090G3TM01) and 145579006 (GU05090GMC401) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Solids, Total Suspended**		
Analytical Batch:	463885	**Method:**	EPA 160.2

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 160.2:

Sample ID	Client ID
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200938931	Method Blank (MB)
1200938932	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200938933	145741002(NQ02A129050915) Sample Duplicate (DUP)
1200938934	145784001(NRA03A199050915) Sample Duplicate (DUP)
1200938935	Laboratory Control Sample (LCS)
1200938937	145509001(NPDES0905.12A) Sample Duplicate (DUP)
1200938938	145511001(NQ03A113050914) Sample Duplicate (DUP)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-012 REV# 6.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Solids analysis was performed on a Sartorius Balance.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
Samples 145509001 (NPDES0905.12A), 145511001 (NQ03A113050914), 145579006 (GU05090GMC401), 145741002 (NQ02A129050915) and 145784001 (NRA03A199050915) were designated for QC analysis.

Duplicate Relative Percent Difference (RPD) Statement
The values for the samples and duplicates for this sample group are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable for samples 1200938933 (NQ02A129050915), 1200938934 (NRA03A199050915), 1200938937 (NPDES0905.12A) and 1200938938 (NQ03A113050914).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Alkalinity**

Analytical Batch: 466409 and 466649 **Method:** EPA 310.1

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 310.1:

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200944827	Laboratory Control Sample (LCS)
1200944830	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200944831	145579006(GU05090GMC401) Matrix Spike (MS)
1200944832	145312007(GU05090PE1E01) Sample Duplicate (DUP)
1200944833	145312007(GU05090PE1E01) Matrix Spike (MS)
1200944840	145457001(GF05080G01R01) Sample Duplicate (DUP)
1200944842	145457001(GF05080G01R01) Matrix Spike (MS)
1200945420	Laboratory Control Sample (LCS)
1200945421	145892003(GU05090G4TM01) Sample Duplicate (DUP)
1200945422	145892003(GU05090G4TM01) Matrix Spike (MS)
1200945423	145579004(GF05090G7CM01) Sample Duplicate (DUP)
1200945424	145579004(GF05090G7CM01) Matrix Spike (MS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-033 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Titration analysis was performed on a Titration.

Initial Standardization
The titrant was properly standardized

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation
Samples 145312007 (GU05090PE1E01), 145457001 (GF05080G01R01), 145579006 (GU05090GMC401)- Batch 466409, 145579004 (GF05090G7CM01) and 145892003 (GU05090G4TM01)- Batch 466649 were designated for QC analysis.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Tom Lewis, Jr. **Date:** 14 Oct 05

Sample Data Summary

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 145579 GEL Work Order: 145579

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GF05090G3TM01
Sample ID: 145579001
Matrix: Ground Water
Collect Date: 13-SEP-05 15:00
Receive Date: 15-SEP-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		485	1.00	1.00	umhos/cm	1	JAR2	10/06/05	0043	469197	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 18.7C	H	6.89	0.010	0.100	SU	1	JAR2	09/15/05	2254	463337	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total Federal											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	ADF	09/26/05	1505	465671	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide	J	0.106	0.041	0.200	mg/L	1	MAR1	09/22/05	1646	464388	4
Fluoride		1.53	0.030	0.100	mg/L	1					
Sulfate		26.0	0.057	0.400	mg/L	1					
Chloride		39.6	0.265	1.00	mg/L	5	MAR1	09/23/05	2210	464388	5
EPA 314.0 Perchlorate by IC											
Perchlorate		50.8	4.00	12.0	ug/L	1	AXM1	09/27/05	1552	464200	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		2.21	0.170	0.500	mg/L	10	KLP1	10/05/05	1523	469150	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.165	0.010	0.050	mg/L	1	JXM	10/06/05	1607	468773	8
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		319	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	9
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		135	1.45	2.00	mg/L		DXR1	09/26/05	1707	466409	10
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXM2	10/05/05	1449	468768

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Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GF05090G3TM01
Sample ID: 145579001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 314.0 DOE-AL	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 160.1	
10	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GF05090GMC401
Sample ID: 145579002
Matrix: Ground Water
Collect Date: 13-SEP-05 07:30
Receive Date: 15-SEP-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		332	1.00	1.00	umhos/cm	1	JAR2	10/06/05	0045	469197	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 19.1C	H	6.98	0.010	0.100	SU	1	JAR2	09/15/05	2255	463337	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total Federal											
Cyanide, Total	J	4.04	2.50	5.00	ug/L	1	ADF	09/26/05	1513	465671	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.401	0.041	0.200	mg/L	1	MAR1	09/22/05	1706	464388	4
Fluoride		0.230	0.030	0.100	mg/L	1					
Sulfate		29.2	0.057	0.400	mg/L	1					
Chloride		19.4	0.106	0.400	mg/L	2	MAR1	09/23/05	2230	464388	5
EPA 314.0 Perchlorate by IC											
Perchlorate		151	20.0	60.0	ug/L	5	AXM1	09/28/05	1522	464200	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		14.2	0.170	0.500	mg/L	10	KLP1	10/05/05	1523	469150	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.108	0.010	0.050	mg/L	1	JXM	10/06/05	1613	468773	8
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		306	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	9
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		38.0	1.45	2.00	mg/L		DXR1	09/26/05	1715	466409	10
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXM2	10/05/05	1449	468768

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GF05090GMC401
Sample ID: 145579002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 314.0 DOE-AL	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 160.1	
10	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID:	GF05090G57M01	Project:	ESHL00701
Sample ID:	145579003	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	13-SEP-05 12:55		
Receive Date:	15-SEP-05		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		389	1.00	1.00	umhos/cm	1	JAR2	10/06/05	0045	469197	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 19.8C	H	6.92	0.010	0.100	SU	1	JAR2	09/15/05	2257	463337	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total Federal											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	ADF	09/26/05	1514	465671	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide	J	0.078	0.041	0.200	mg/L	1	MAR1	09/22/05	1727	464388	4
Fluoride		1.77	0.030	0.100	mg/L	1					
Sulfate		18.9	0.057	0.400	mg/L	1					
Chloride		31.0	0.106	0.400	mg/L	2	MAR1	09/23/05	2251	464388	5
EPA 314.0 Perchlorate by IC											
Perchlorate		33.7	4.00	12.0	ug/L	1	AXM1	09/27/05	1622	464200	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		1.39	0.170	0.500	mg/L	10	KLP1	10/05/05	1523	469150	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.140	0.010	0.050	mg/L	1	JXM	10/06/05	1611	468773	8
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		272	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	9
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		113	1.45	2.00	mg/L		DXR1	09/26/05	1719	466409	10
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXM2	10/05/05	1449	468768

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GF05090G57M01
Sample ID: 145579003

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 314.0 DOE-AL	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 160.1	
10	EPA 310.1	

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Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GF05090G7CM01
Sample ID: 145579004
Matrix: Ground Water
Collect Date: 14-SEP-05 09:32
Receive Date: 15-SEP-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		481	1.00	1.00	umhos/cm	1	JAR2	10/06/05	0046	469197	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.7C	H	6.98	0.010	0.100	SU	1	JAR2	09/15/05	2258	463337	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total Federal											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	ADF	09/26/05	1514	465671	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide	J	0.106	0.041	0.200	mg/L	1	MAR1	09/22/05	1747	464388	4
Fluoride		1.43	0.030	0.100	mg/L	1					
Sulfate		21.7	0.057	0.400	mg/L	1					
Chloride		51.3	0.265	1.00	mg/L	5	MAR1	09/23/05	2311	464388	5
EPA 314.0 Perchlorate by IC											
Perchlorate		38.2	4.00	12.0	ug/L	1	AXM1	09/27/05	1638	464200	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		1.95	0.170	0.500	mg/L	10	KLP1	10/05/05	1524	469150	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.416	0.010	0.050	mg/L	1	JXM	10/06/05	1612	468773	8
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		310	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	9
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		113	1.45	2.00	mg/L		DXR1	09/27/05	1546	466649	10
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	GXM2	10/05/05	1449	468768

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GF05090G7CM01
Sample ID: 145579004

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 314.0 DOE-AL	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 160.1	
10	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090G3TM01
Sample ID: 145579005
Matrix: Ground Water
Collect Date: 13-SEP-05 15:00
Receive Date: 15-SEP-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis Federal											
SW 9060 Total Organic Carbon											
Total Organic Carbon Average		3.16	0.074	1.00	mg/L	1	TSM	09/23/05	1809	464823	1
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		493	1.00	1.00	umhos/cm	1	JAR2	10/06/05	0047	469197	2
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.7C	H	7.06	0.010	0.100	SU	1	JAR2	09/15/05	2300	463337	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide	J	0.105	0.041	0.200	mg/L	1	MAR1	09/22/05	1808	464388	4
Fluoride		1.50	0.030	0.100	mg/L	1					
Sulfate		26.0	0.057	0.400	mg/L	1					
Chloride		39.8	0.265	1.00	mg/L	5	MAR1	09/23/05	2332	464388	5
Nutrient Analysis Federal											
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl	J	0.083	0.010	0.100	mg/L	1	JXM	10/07/05	1135	469154	6
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		320	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	7
EPA 160.2 Total Suspended Liq											
Total Suspended Solids	J	1.71	1.22	5.34	mg/L		GXA2	09/19/05	1434	463885	8
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		135	1.45	2.00	mg/L		DXR1	09/26/05	1730	466409	9
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	10/07/05	0957	469152

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9060	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090G3TM01
Sample ID: 145579005

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
2	EPA 120.1									
3	EPA 150.1									
4	EPA 300.0									
5	EPA 300.0									
6	EPA 351.2									
7	EPA 160.1									
8	EPA 160.2									
9	EPA 310.1									

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Company : Los Alamos National Labs
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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090GMC401
Sample ID: 145579006
Matrix: Ground Water
Collect Date: 13-SEP-05 07:30
Receive Date: 15-SEP-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis Federal											
SW 9060 Total Organic Carbon											
Total Organic Carbon Average		1.37	0.074	1.00	mg/L	1	TSM	09/24/05	0338	464895	1
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		342	1.00	1.00	umhos/cm	1	JAR2	10/06/05	0048	469197	2
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.8C	H	6.98	0.010	0.100	SU	1	JAR2	09/15/05	2302	463337	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide		0.388	0.041	0.200	mg/L	1	MAR1	09/22/05	1828	464388	4
Fluoride		0.227	0.030	0.100	mg/L	1					
Sulfate		29.1	0.057	0.400	mg/L	1					
Chloride		19.4	0.106	0.400	mg/L	2	MAR1	09/23/05	2352	464388	5
Nutrient Analysis Federal											
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl		0.185	0.010	0.100	mg/L	1	JXM	10/07/05	1136	469154	6
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		311	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	7
EPA 160.2 Total Suspended Liq											
Total Suspended Solids		10.9	2.48	10.9	mg/L		GXA2	09/19/05	1434	463885	8
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		41.0	1.45	2.00	mg/L		DXR1	09/26/05	1733	466409	9
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	10/07/05	0957	469152

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9060	

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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090GMC401
Sample ID: 145579006

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
2	EPA 120.1									
3	EPA 150.1									
4	EPA 300.0									
5	EPA 300.0									
6	EPA 351.2									
7	EPA 160.1									
8	EPA 160.2									
9	EPA 310.1									

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090G57M01
Sample ID: 145579007
Matrix: Ground Water
Collect Date: 13-SEP-05 12:55
Receive Date: 15-SEP-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis Federal											
SW 9060 Total Organic Carbon											
Total Organic Carbon Average		3.52	0.074	1.00	mg/L	1	TSM	09/23/05	1842	464823	1
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		447	1.00	1.00	umhos/cm	1	JAR2	10/09/05	1517	470004	2
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 21.2C	H	7.10	0.010	0.100	SU	1	JAR2	09/15/05	2306	463337	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide	J	0.100	0.041	0.200	mg/L	1	MAR1	09/22/05	2011	464388	4
Fluoride		1.78	0.030	0.100	mg/L	1					
Sulfate		20.2	0.057	0.400	mg/L	1					
Chloride		30.7	0.265	1.00	mg/L	5	MAR1	09/24/05	0135	464388	5
Nutrient Analysis Federal											
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl		0.150	0.010	0.100	mg/L	1	JXM	10/07/05	1143	469154	6
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		288	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	7
EPA 160.2 Total Suspended Liq											
Total Suspended Solids	U	ND	1.14	5.00	mg/L		GXA2	09/19/05	1434	463885	8
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		116	1.45	2.00	mg/L		DXR1	09/26/05	1745	466409	9
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	10/07/05	0957	469152

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9060	

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090G57M01
Sample ID: 145579007

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
2	EPA 120.1										
3	EPA 150.1										
4	EPA 300.0										
5	EPA 300.0										
6	EPA 351.2										
7	EPA 160.1										
8	EPA 160.2										
9	EPA 310.1										

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090G7CM01
Sample ID: 145579008
Matrix: Ground Water
Collect Date: 14-SEP-05 09:32
Receive Date: 15-SEP-05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis Federal											
SW 9060 Total Organic Carbon											
Total Organic Carbon Average		3.62	0.074	1.00	mg/L	1	TSM	09/23/05	1916	464823	1
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		523	1.00	1.00	umhos/cm	1	JAR2	10/09/05	1519	470004	2
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 21.4C	H	6.99	0.010	0.100	SU	1	JAR2	09/15/05	2310	463337	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Bromide	J	0.117	0.041	0.200	mg/L	1	MAR1	09/22/05	2031	464388	4
Fluoride		1.40	0.030	0.100	mg/L	1					
Sulfate		21.7	0.057	0.400	mg/L	1					
Chloride		52.0	0.265	1.00	mg/L	5	MAR1	09/24/05	0155	464388	5
Nutrient Analysis Federal											
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl		0.158	0.010	0.100	mg/L	1	JXM	10/07/05	1144	469154	6
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		311	2.38	10.0	mg/L		GXA2	09/19/05	1637	463882	7
EPA 160.2 Total Suspended Liq											
Total Suspended Solids	U	ND	1.20	5.26	mg/L		GXA2	09/19/05	1434	463885	8
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		112	1.45	2.00	mg/L		DXR1	09/27/05	1608	466649	9
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	10/07/05	0957	469152

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9060	

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Certificate of Analysis

Company : Los Alamos National Labs
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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: **Groundwater**

Report Date: October 11, 2005

Client Sample ID: GU05090G7CM01
Sample ID: 145579008

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
2	EPA 120.1										
3	EPA 150.1										
4	EPA 300.0										
5	EPA 300.0										
6	EPA 351.2										
7	EPA 160.1										
8	EPA 160.2										
9	EPA 310.1										

Quality Control Summary

QC Summary

Report Date: October 11, 2005

Los Alamos National Labs
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico

Contact: **Billy Turney**

Workorder: **145579**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 464823										
QC1200941205 145267002 DUP										
Total Organic Carbon Average		1.05	J	0.962	mg/L	9 ^		(+/-1.00)	TSM	09/23/05 15:27
QC1200941209 LCS										
Total Organic Carbon Average	10.0			9.93	mg/L		99	(85%-115%)		09/23/05 14:45
QC1200941204 MB										
Total Organic Carbon Average			J	0.183	mg/L					09/23/05 14:34
QC1200941207 145267002 PS										
Total Organic Carbon Average	10.0	1.05		11.0	mg/L		100	(80%-120%)		09/23/05 15:46
Batch 464895										
QC1200941373 145312007 DUP										
Total Organic Carbon Average		6.54		6.44	mg/L	2		(0%-20%)	TSM	09/24/05 01:47
QC1200941374 145452004 DUP										
Total Organic Carbon Average		16.5		16.5	mg/L	0		(0%-20%)		09/24/05 02:49
QC1200941375 145579006 DUP										
Total Organic Carbon Average		1.37		1.07	mg/L	25 ^		(+/-1.00)		09/24/05 04:11
QC1200941376 145782003 DUP										
Total Organic Carbon Average		6.90		6.61	mg/L	4		(0%-20%)		09/24/05 05:14
QC1200941377 145892003 DUP										
Total Organic Carbon Average		2.63		2.47	mg/L	6 ^		(+/-1.00)		09/24/05 06:37
QC1200941383 LCS										
Total Organic Carbon Average	10.0			10.6	mg/L		106	(85%-115%)		09/24/05 01:05
QC1200941372 MB										
Total Organic Carbon Average			J	0.128	mg/L					09/24/05 00:55
QC1200941378 145312007 PS										
Total Organic Carbon Average	10.0	6.54		16.2	mg/L		96	(80%-120%)		09/24/05 02:07
QC1200941379 145452004 PS										
Total Organic Carbon Average	10.0	16.5		28.4	mg/L		119	(80%-120%)		09/24/05 03:09
QC1200941380 145579006 PS										
Total Organic Carbon Average	10.0	1.37		10.8	mg/L		94	(80%-120%)		09/24/05 04:31
QC1200941381 145782003 PS										
Total Organic Carbon Average	10.0	6.90		16.5	mg/L		96	(80%-120%)		09/24/05 05:33
QC1200941382 145892003 PS										
Total Organic Carbon Average	10.0	2.63		12.7	mg/L		101	(80%-120%)		09/24/05 06:57
Conductivity Analysis										
Batch 469197										
QC1200951410 145579006 DUP										
Conductivity		342		343	umhos/cm	0		(0%-10%)	JAR2	10/06/05 00:49
QC1200951412 145579001 DUP										
Conductivity		485		490	umhos/cm	1		(0%-10%)		10/06/05 00:44
QC1200951411 LCS										
Conductivity	1410			1470	umhos/cm		104	(95%-105%)		10/06/05 00:33
Batch 470004										
QC1200953251 145739002 DUP										
Conductivity		120		121	umhos/cm	1		(0%-10%)	JAR2	10/09/05 15:28

QC Summary

Workorder: 145579

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Conductivity Analysis										
Batch 470004										
QC1200953254 LCS										
Conductivity	1410			1470	umhos/cm		104	(95%-105%)	JAR2	10/09/05 15:15
Electrode Analysis										
Batch 463337										
QC1200937461 145579005 DUP										
pH	H	7.06	H	7.07	SU	0		(0%-10%)	JAR2	09/15/05 23:01
QC1200937462 145579006 DUP										
pH	H	6.98	H	6.97	SU	0		(0%-10%)		09/15/05 23:04
QC1200937463 145579007 DUP										
pH	H	7.10	H	7.11	SU	0		(0%-10%)		09/15/05 23:08
QC1200937464 145579008 DUP										
pH	H	6.99	H	7.00	SU	0		(0%-10%)		09/15/05 23:11
QC1200937465 LCS										
pH	7.00			7.04	SU		101	(95%-105%)		09/15/05 22:53
Flow Injection Analysis										
Batch 465671										
QC1200943205 145579001 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A		(+/-5.00)	ADF	09/26/05 15:10
QC1200943202 LCS										
Cyanide, Total	50.0			49.8	ug/L		100	(90%-110%)		09/26/05 14:52
QC1200943201 MB										
Cyanide, Total			U	ND	ug/L					09/26/05 14:51
QC1200943206 145579001 MS										
Cyanide, Total	100 U	ND		104	ug/L		103	(73%-117%)		09/26/05 15:11
QC1200944904 145892002 MSD										
Cyanide, Total	100 U	ND		106	ug/L	2	105	(0%-20%)		09/26/05 15:12
Ion Chromatography										
Batch 464200										
QC1200939630 145452001 DUP										
Perchlorate	U	ND	U	ND	ug/L	N/A		(+/-12.0)	AXM1	09/27/05 12:20
QC1200939631 145457009 DUP										
Perchlorate	U	ND	U	ND	ug/L	N/A		(+/-12.0)		09/27/05 13:36
QC1200939632 145527001 DUP										
Perchlorate	U	ND	U	ND	ug/L	N/A		(+/-12.0)		09/27/05 15:22
QC1200939638 LCS										
Perchlorate	50.0			50.7	ug/L		101	(90%-110%)		09/27/05 11:50
QC1200939629 MB										
Perchlorate			U	ND	ug/L					09/27/05 11:35
QC1200939634 145452001 PS										
Perchlorate	10.0 U	ND	J	10.4	ug/L		104	(86%-126%)		09/27/05 12:35
QC1200939635 145457009 PS										
Perchlorate	10.0 U	ND	J	11.0	ug/L		110	(86%-126%)		09/27/05 13:51
QC1200939636 145527001 PS										
Perchlorate	10.0 U	ND	J	10.7	ug/L		107	(86%-126%)		09/27/05 15:37
Batch 464388										
QC1200940115 145579006 DUP										
Bromide		0.388		0.397	mg/L	2 ^		(+/-0.200)	MAR1	09/22/05 18:49
Chloride		19.4		19.4	mg/L	0		(0%-20%)		09/24/05 00:13
Fluoride		0.227		0.227	mg/L	0 ^		(+/-0.100)		09/22/05 18:49

QC Summary

Workorder: 145579

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 464388											
Sulfate			29.1		29.1	mg/L	0		(0%-20%)		
QC1200940116 145782003 DUP											
Bromide		U	ND	U	ND	mg/L	N/A		(+/-0.200)	MAR1	09/23/05 00:37
Chloride			31.5		31.3	mg/L	1		(0%-20%)		09/24/05 03:58
Fluoride			0.981		0.978	mg/L	0		(0%-20%)		09/23/05 00:37
Sulfate			12.9		12.9	mg/L	0		(0%-20%)		
QC1200940119 LCS											
Bromide	2.50				2.52	mg/L		101	(90%-110%)		09/22/05 16:25
Chloride	10.0				9.71	mg/L		97	(90%-110%)		
Fluoride	5.00				4.84	mg/L		97	(90%-110%)		
Sulfate	20.0				20.0	mg/L		100	(90%-110%)		
QC1200940114 MB											
Bromide				U	ND	mg/L					09/22/05 16:05
Chloride				U	ND	mg/L					
Fluoride				U	ND	mg/L					
Sulfate				U	ND	mg/L					
QC1200940117 145579006 PS											
Bromide	2.50		0.388		2.74	mg/L		94	(90%-110%)		09/22/05 19:09
Chloride	10.0		9.68		20.7	mg/L		110	(90%-110%)		09/24/05 00:33
Fluoride	5.00		0.227		4.94	mg/L		94	(90%-110%)		09/22/05 19:09
Sulfate	20.0		29.1		50.7	mg/L		108	(90%-110%)		
QC1200940118 145782003 PS											
Bromide	2.50	U	ND		2.50	mg/L		100	(90%-110%)		09/23/05 00:57
Chloride	10.0		6.29		16.9	mg/L		106	(90%-110%)		09/24/05 04:19
Fluoride	5.00		0.981		5.89	mg/L		98	(90%-110%)		09/23/05 00:57
Sulfate	20.0		12.9		33.6	mg/L		103	(90%-110%)		
Nutrient Analysis											
Batch 468773											
QC1200950475 145452001 DUP											
Phosphorus, Total as P			0.069		0.052	mg/L	28 ^		(+/-0.050)	JXM	10/06/05 15:57
QC1200950502 145579001 DUP											
Phosphorus, Total as P			0.165		0.129	mg/L	25 ^		(+/-0.050)		10/06/05 16:07
QC1200950474 LCS											
Phosphorus, Total as P	1.00				1.05	mg/L		105	(80%-115%)		10/06/05 15:55
QC1200950473 MB											
Phosphorus, Total as P				J	0.017	mg/L					10/06/05 15:54
QC1200950476 145452001 MS											
Phosphorus, Total as P	1.00		0.069		1.13	mg/L		106	(80%-115%)		10/06/05 15:58
QC1200950503 145579001 MS											
Phosphorus, Total as P	1.00		0.165		1.21	mg/L		104	(80%-115%)		10/06/05 16:08
QC1200950504 145579001 MSD											
Phosphorus, Total as P	1.00		0.165		1.11	mg/L	8	95	(0%-20%)		10/06/05 16:09
QC1200950505 145452001 MSD											
Phosphorus, Total as P	1.00		0.069		1.05	mg/L	7	98	(0%-20%)		10/06/05 15:58
Batch 469150											
QC1200951339 145579001 DUP											
Nitrogen, Nitrate/Nitrite			2.21		2.29	mg/L	3 ^		(+/-0.500)	KLP1	10/05/05 15:23
QC1200951332 LCS											
Nitrogen, Nitrate/Nitrite	1.00				0.989	mg/L		99	(90%-110%)		10/05/05 15:14

QC Summary

Workorder: 145579

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Nutrient Analysis										
Batch 469150										
QC1200951331 MB										
Nitrogen, Nitrate/Nitrite			U	ND	mg/L				KLP1	10/05/05 15:14
QC1200951340 145579001 PS										
Nitrogen, Nitrate/Nitrite	1.00	0.221		1.20	mg/L		98	(80%-120%)		10/05/05 15:23
Batch 469154										
QC1200951343 145579006 DUP										
Nitrogen, Total Kjeldahl		0.185		0.187	mg/L	1 ^		(+/-0.100)	JXM	10/07/05 12:07
QC1200951342 LCS										
Nitrogen, Total Kjeldahl	1.00			1.02	mg/L		102	(90%-110%)		10/07/05 11:31
QC1200951341 MB										
Nitrogen, Total Kjeldahl			J	0.086	mg/L					10/07/05 11:30
QC1200951344 145579006 MS										
Nitrogen, Total Kjeldahl	1.00	0.185		1.06	mg/L		87*	(90%-110%)		10/07/05 11:38
QC1200951348 145579006 MSD										
Nitrogen, Total Kjeldahl	1.00	0.185		0.936	mg/L	12	75*	(0%-20%)		10/07/05 11:42
Solids Analysis										
Batch 463885										
QC1200938935 LCS										
Total Suspended Solids	500			496	mg/L		99	(95%-105%)	GXA2	09/19/05 14:34
QC1200938931 MB										
Total Suspended Solids			U	ND	mg/L					
Solids Analysis Federal										
Batch 463882										
QC1200938918 145527001 DUP										
Total Dissolved Solids		334		337	mg/L	1		(0%-10%)	GXA2	09/19/05 16:37
QC1200938919 145579006 DUP										
Total Dissolved Solids		311		305	mg/L	2		(0%-10%)		
QC1200938926 145579001 DUP										
Total Dissolved Solids		319		325	mg/L	2		(0%-10%)		
QC1200938920 LCS										
Total Dissolved Solids	300			291	mg/L		97	(95%-105%)		
QC1200938917 MB										
Total Dissolved Solids			U	ND	mg/L					
Batch 463885										
QC1200938932 145579006 DUP										
Total Suspended Solids		10.9		11.7	mg/L	8 ^		(+/-10.9)	GXA2	09/19/05 14:34
QC1200938933 145741002 DUP										
Total Suspended Solids	U	ND	U	ND	mg/L	N/A		(+/-4.85)		
QC1200938934 145784001 DUP										
Total Suspended Solids	J	2.11	U	ND	mg/L	N/A		(+/-5.26)		
QC1200938937 145509001 DUP										
Total Suspended Solids	U	ND	U	ND	mg/L	N/A		(+/-5.21)		
QC1200938938 145511001 DUP										
Total Suspended Solids	U	ND	U	ND	mg/L	N/A		(+/-5.21)		
Titration Analysis										
Batch 466409										
QC1200944830 145579006 DUP										
Alkalinity, Total as CaCO3		41.0		42.0	mg/L	2		(0%-20%)	DXR1	09/26/05 17:37

QC Summary

Workorder: 145579

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Titration Analysis											
Batch 466409											
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A		(+/-2.00)		
QC1200944832 145312007 DUP											
Alkalinity, Total as CaCO3			141		140	mg/L	1		(0%-20%)	DXR1	09/26/05 16:07
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A		(+/-2.00)		
QC1200944840 145457001 DUP											
Alkalinity, Total as CaCO3			60.1		61.1	mg/L	2		(0%-20%)		09/26/05 16:34
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A		(+/-2.00)		
QC1200944827 LCS											
Alkalinity, Total as CaCO3	1000				981	mg/L		98	(90%-110%)		09/26/05 15:37
QC1200944831 145579006 MS											
Alkalinity, Total as CaCO3	100		41.0		142	mg/L		101	(80%-120%)		09/26/05 17:41
QC1200944833 145312007 MS											
Alkalinity, Total as CaCO3	100		141		238	mg/L		97	(80%-120%)		09/26/05 16:10
QC1200944842 145457001 MS											
Alkalinity, Total as CaCO3	100		60.1		160	mg/L		100	(80%-120%)		09/26/05 16:39
Batch 466649											
QC1200945421 145892003 DUP											
Alkalinity, Total as CaCO3			137		138	mg/L	1		(0%-20%)	DXR1	09/27/05 17:49
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A		(+/-2.00)		
QC1200945423 145579004 DUP											
Alkalinity, Total as CaCO3			113		112	mg/L	1		(0%-20%)		09/27/05 15:51
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A		(+/-2.00)		
QC1200945420 LCS											
Alkalinity, Total as CaCO3	1000				981	mg/L		98	(90%-110%)		09/27/05 15:41
QC1200945422 145892003 MS											
Alkalinity, Total as CaCO3	100		137		235	mg/L		98	(80%-120%)		09/27/05 17:54
QC1200945424 145579004 MS											
Alkalinity, Total as CaCO3	100		113		209	mg/L		96	(80%-120%)		09/27/05 15:53

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- ** Indicates the analyte is a surrogate compound.
- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- P The response between the confirmation and the primary columns is >40% Different.
- R Sample results are rejected.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.

QC Summary

Workorder: **145579**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.

d The 2:1 depletion requirement was not met for this sample

h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 145579

Carbon Analysis

Method: SW846 9060 Concentration Units:mg/L

Instrument: O-I Analytical Model 1010 Total Organic Carbon Analyzer

Parmname: Total Organic Carbon
Average

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	23-SEP-2005 11:08:00	XO007.rlt	9.967	10	99.7	(90%-110%)	Yes
CCV	23-SEP-2005 12:37:00	XO013.rlt	9.998	10	100	(90%-110%)	Yes
CCV	23-SEP-2005 17:04:00	XO022.rlt	10.362	10	104	(90%-110%)	Yes
CCV	23-SEP-2005 20:58:00	XO032.rlt	10.804	10	108	(90%-110%)	Yes
CCV	24-SEP-2005 00:34:00	XO041.rlt	10.78	10	108	(90%-110%)	Yes
CCV	24-SEP-2005 03:19:00	XO051.rlt	10.851	10	109	(90%-110%)	Yes
CCV	24-SEP-2005 05:44:00	XO059.rlt	10.081	10	101	(90%-110%)	Yes
CCV	24-SEP-2005 07:07:00	XO064.rlt	8.997	10	90.0	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	23-SEP-2005 11:19:00	XO008.rlt	0.067	0.2	Yes
CCB	23-SEP-2005 12:47:00	XO014.rlt	0.131	0.2	Yes
CCB	23-SEP-2005 17:14:00	XO023.rlt	0.084	0.2	Yes
CCB	23-SEP-2005 21:08:00	XO033.rlt	0.115	0.2	Yes
CCB	24-SEP-2005 00:44:00	XO042.rlt	0.136	0.2	Yes
CCB	24-SEP-2005 03:29:00	XO052.rlt	0.238	0.2	No
CCB	24-SEP-2005 05:54:00	XO060.rlt	0.598	0.2	No
CCB	24-SEP-2005 07:17:00	XO065.rlt	0.205	0.2	No

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 145579

Flow Injection Analysis

Method: EPA 335.3 Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	26-SEP-2005 14:14:33	OM_9-26-2005_14-04-02	158	150	105	(90%-110%)	Yes
CCV	26-SEP-2005 14:41:16	OM_9-26-2005_14-04-02	102	100	102	(90%-110%)	Yes
CCV	26-SEP-2005 14:53:46	OM_9-26-2005_14-04-02	102	100	102	(90%-110%)	Yes
CCV	26-SEP-2005 15:06:51	OM_9-26-2005_14-04-02	102	100	102	(90%-110%)	Yes
CCV	26-SEP-2005 15:19:41	OM_9-26-2005_14-04-02	102	100	102	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	26-SEP-2005 14:16:23	OM_9-26-2005_14-04-02	-1.22	5	Yes
CCB	26-SEP-2005 14:43:06	OM_9-26-2005_14-04-02	-0.793	5	Yes
CCB	26-SEP-2005 14:55:40	OM_9-26-2005_14-04-02	-0.573	5	Yes
CCB	26-SEP-2005 15:08:42	OM_9-26-2005_14-04-02	-0.993	5	Yes
CCB	26-SEP-2005 15:21:34	OM_9-26-2005_14-04-02	-0.647	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: **ESHL00701**

SDG #: **145579**

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Bromide

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	22-SEP-2005 11:19:04	AZIVKC01.D02	2.634	2.5	105	(90%-110%)	Yes
CCV	22-SEP-2005 15:24:28	AZIVKC01.D14	2.55	2.5	102	(90%-110%)	Yes
CCV	22-SEP-2005 19:30:15	AZIVKC01.D26	3.739	3.75	99.7	(90%-110%)	Yes
CCV	22-SEP-2005 23:36:00	AZIVKC01.D38	2.549	2.5	102	(90%-110%)	Yes
CCV	23-SEP-2005 01:38:54	AZIVKC01.D44	3.789	3.75	101	(90%-110%)	Yes
ICV	23-SEP-2005 14:39:58	AZIWKC01.D02	2.65	2.5	106	(90%-110%)	Yes
CCV	23-SEP-2005 21:29:24	AZIWKC01.D22	2.554	2.5	102	(90%-110%)	Yes
CCV	24-SEP-2005 00:54:12	AZIWKC01.D32	3.855	3.75	103	(90%-110%)	Yes
CCV	24-SEP-2005 04:59:58	AZIWKC01.D44	2.611	2.5	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	22-SEP-2005 11:39:33	AZIVKC01.D03	0	0.2	Yes
CCB	22-SEP-2005 15:44:57	AZIVKC01.D15	0	0.2	Yes
CCB	22-SEP-2005 19:50:43	AZIVKC01.D27	0	0.2	Yes
CCB	22-SEP-2005 23:56:29	AZIVKC01.D39	0	0.2	Yes
CCB	23-SEP-2005 01:59:22	AZIVKC01.D45	0	0.2	Yes
ICB	23-SEP-2005 15:00:27	AZIWKC01.D03	0	0.2	Yes
CCB	23-SEP-2005 21:49:53	AZIWKC01.D23	0	0.2	Yes
CCB	24-SEP-2005 01:14:41	AZIWKC01.D33	0	0.2	Yes
CCB	24-SEP-2005 05:20:27	AZIWKC01.D45	0	0.2	Yes

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	22-SEP-2005 11:19:04	AZIVKC01.D02	9.722	10	97.2	(90%-110%)	Yes
CCV	22-SEP-2005 15:24:28	AZIVKC01.D14	9.865	10	98.7	(90%-110%)	Yes
CCV	22-SEP-2005 19:30:15	AZIVKC01.D26	15.222	15	101	(90%-110%)	Yes
CCV	22-SEP-2005 23:36:00	AZIVKC01.D38	9.899	10	99.0	(90%-110%)	Yes
CCV	23-SEP-2005 01:38:54	AZIVKC01.D44	15.402	15	103	(90%-110%)	Yes
ICV	23-SEP-2005 14:39:58	AZIWKC01.D02	9.778	10	97.8	(90%-110%)	Yes
CCV	23-SEP-2005 21:29:24	AZIWKC01.D22	9.767	10	97.7	(90%-110%)	Yes
CCV	24-SEP-2005 00:54:12	AZIWKC01.D32	15.327	15	102	(90%-110%)	Yes
CCV	24-SEP-2005 04:59:58	AZIWKC01.D44	9.733	10	97.3	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	22-SEP-2005 11:39:33	AZIVKC01.D03	0	0.2	Yes
CCB	22-SEP-2005 15:44:57	AZIVKC01.D15	0	0.2	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: **ESHL00701**

SDG #: **145579**

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Limits	Within Limits
CCB	22-SEP-2005 19:50:43	AZIVKC01.D27	0	0.2	Yes
CCB	22-SEP-2005 23:56:29	AZIVKC01.D39	0	0.2	Yes
CCB	23-SEP-2005 01:59:22	AZIVKC01.D45	0	0.2	Yes
ICB	23-SEP-2005 15:00:27	AZIWKC01.D03	0	0.2	Yes
CCB	23-SEP-2005 21:49:53	AZIWKC01.D23	0	0.2	Yes
CCB	24-SEP-2005 01:14:41	AZIWKC01.D33	0	0.2	Yes
CCB	24-SEP-2005 05:20:27	AZIWKC01.D45	0	0.2	Yes

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	22-SEP-2005 11:19:04	AZIVKC01.D02	4.95	5	99.0	(90%-110%)	Yes
CCV	22-SEP-2005 15:24:28	AZIVKC01.D14	4.952	5	99.0	(90%-110%)	Yes
CCV	22-SEP-2005 19:30:15	AZIVKC01.D26	7.371	7.5	98.3	(90%-110%)	Yes
CCV	22-SEP-2005 23:36:00	AZIVKC01.D38	4.874	5	97.5	(90%-110%)	Yes
CCV	23-SEP-2005 01:38:54	AZIVKC01.D44	7.508	7.5	100	(90%-110%)	Yes
ICV	23-SEP-2005 14:39:58	AZIWKC01.D02	4.939	5	98.8	(90%-110%)	Yes
CCV	23-SEP-2005 21:29:24	AZIWKC01.D22	4.885	5	97.7	(90%-110%)	Yes
CCV	24-SEP-2005 00:54:12	AZIWKC01.D32	7.479	7.5	99.7	(90%-110%)	Yes
CCV	24-SEP-2005 04:59:58	AZIWKC01.D44	4.852	5	97.0	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	22-SEP-2005 11:39:33	AZIVKC01.D03	0	0.1	Yes
CCB	22-SEP-2005 15:44:57	AZIVKC01.D15	0	0.1	Yes
CCB	22-SEP-2005 19:50:43	AZIVKC01.D27	0	0.1	Yes
CCB	22-SEP-2005 23:56:29	AZIVKC01.D39	0	0.1	Yes
CCB	23-SEP-2005 01:59:22	AZIVKC01.D45	0	0.1	Yes
ICB	23-SEP-2005 15:00:27	AZIWKC01.D03	0	0.1	Yes
CCB	23-SEP-2005 21:49:53	AZIWKC01.D23	0	0.1	Yes
CCB	24-SEP-2005 01:14:41	AZIWKC01.D33	0	0.1	Yes
CCB	24-SEP-2005 05:20:27	AZIWKC01.D45	0	0.1	Yes

Parmname: Sulfate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	22-SEP-2005 11:19:04	AZIVKC01.D02	20.093	20	100	(90%-110%)	Yes
CCV	22-SEP-2005 15:24:28	AZIVKC01.D14	19.923	20	99.6	(90%-110%)	Yes
CCV	22-SEP-2005 19:30:15	AZIVKC01.D26	30.519	30	102	(90%-110%)	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 145579

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Sulfate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
CCV	22-SEP-2005 23:36:00	AZIVKC01.D38	20.14	20	101	(90%-110%)	Yes
CCV	23-SEP-2005 01:38:54	AZIVKC01.D44	30.673	30	102	(90%-110%)	Yes
ICV	23-SEP-2005 14:39:58	AZIWKC01.D02	20.164	20	101	(90%-110%)	Yes
CCV	23-SEP-2005 21:29:24	AZIWKC01.D22	19.925	20	99.6	(90%-110%)	Yes
CCV	24-SEP-2005 00:54:12	AZIWKC01.D32	31.028	30	103	(90%-110%)	Yes
CCV	24-SEP-2005 04:59:58	AZIWKC01.D44	20.133	20	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	22-SEP-2005 11:39:33	AZIVKC01.D03	0	0.4	Yes
CCB	22-SEP-2005 15:44:57	AZIVKC01.D15	0	0.4	Yes
CCB	22-SEP-2005 19:50:43	AZIVKC01.D27	0	0.4	Yes
CCB	22-SEP-2005 23:56:29	AZIVKC01.D39	0	0.4	Yes
CCB	23-SEP-2005 01:59:22	AZIVKC01.D45	0	0.4	Yes
ICB	23-SEP-2005 15:00:27	AZIWKC01.D03	0	0.4	Yes
CCB	23-SEP-2005 21:49:53	AZIWKC01.D23	0	0.4	Yes
CCB	24-SEP-2005 01:14:41	AZIWKC01.D33	0	0.4	Yes
CCB	24-SEP-2005 05:20:27	AZIWKC01.D45	0	0.4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 145579

Ion Chromatography

Method: EPA 314.0 DOE-AL Concentration Units:ug/L

Instrument: Dionex Ion Chromatograph

Parmname: Perchlorate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	27-SEP-2005 10:04:13	050927_002.DXD	49.53649	50	99.1	(90%-110%)	Yes
CCV	27-SEP-2005 11:04:50	050927_006.DXD	75.63013	75	101	(90%-110%)	Yes
CCV	27-SEP-2005 14:06:39	050927_018.DXD	25.37593	25	102	(90%-110%)	Yes
CCV	27-SEP-2005 17:08:23	050927_030.DXD	76.75769	75	102	(90%-110%)	Yes
ICV	28-SEP-2005 11:05:02	050928_002.DXD	49.97002	50	99.9	(90%-110%)	Yes
CCV	28-SEP-2005 14:52:13	050928_017.DXD	27.19148	25	109	(90%-110%)	Yes
CCV	28-SEP-2005 15:37:40	050928_020.DXD	76.10381	75	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	27-SEP-2005 10:19:22	050927_003.DXD	0	4	Yes
CCB	27-SEP-2005 11:19:58	050927_007.DXD	0	4	Yes
CCB	27-SEP-2005 14:21:48	050927_019.DXD	0	4	Yes
CCB	27-SEP-2005 17:23:32	050927_031.DXD	0	4	Yes
ICB	28-SEP-2005 11:20:11	050928_003.DXD	0	4	Yes
CCB	28-SEP-2005 15:07:22	050928_018.DXD	0	4	Yes
CCB	28-SEP-2005 15:52:49	050928_021.DXD	0	4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 145579

Nutrient Analysis

Method: EPA 351.2 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Nitrogen, Total Kjeldahl

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	07-OCT-2005 11:26:54	OM_10-7-2005_11-19-14	0.997	1	99.7	(90%-110%)	Yes
CCV	07-OCT-2005 11:39:06	OM_10-7-2005_11-19-14	0.942	1	94.2	(90%-110%)	Yes
CCV	07-OCT-2005 11:51:11	OM_10-7-2005_11-19-14	1.004	1	100	(90%-110%)	Yes
CCV	07-OCT-2005 12:03:20	OM_10-7-2005_11-19-14	1.003	1	100	(90%-110%)	Yes
CCV	07-OCT-2005 12:14:40	OM_10-7-2005_11-19-14	1.012	1	101	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	07-OCT-2005 11:28:50	OM_10-7-2005_11-19-14	0.009	0.1	Yes
CCB	07-OCT-2005 11:41:01	OM_10-7-2005_11-19-14	-0.01	0.1	Yes
CCB	07-OCT-2005 11:53:07	OM_10-7-2005_11-19-14	-0.01	0.1	Yes
CCB	07-OCT-2005 12:05:16	OM_10-7-2005_11-19-14	-0.007	0.1	Yes
CCB	07-OCT-2005 12:16:36	OM_10-7-2005_11-19-14	0.002	0.1	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 145579

Nutrient Analysis

Method: EPA 353.1 Concentration Units:mg/L

Instrument: Konelab 20

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	05-OCT-2005 09:18:19	Kone2005_10_05_16_35_50.dat	1.08284	1	108	(90%-110%)	Yes
CCV	05-OCT-2005 15:14:27	Kone2005_10_05_16_35_50.dat	1.06116	1	106	(90%-110%)	Yes
CCV	05-OCT-2005 15:23:51	Kone2005_10_05_16_35_50.dat	1.06385	1	106	(90%-110%)	Yes
CCV	05-OCT-2005 15:28:04	Kone2005_10_05_16_35_50.dat	0.96853	1	96.9	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	05-OCT-2005 09:18:20	Kone2005_10_05_16_35_50.dat	-0.02867	0.02	Yes
CCB	05-OCT-2005 15:14:28	Kone2005_10_05_16_35_50.dat	-0.04495	0.02	Yes
CCB	05-OCT-2005 15:23:52	Kone2005_10_05_16_35_50.dat	-0.04771	0.02	Yes
CCB	05-OCT-2005 15:28:05	Kone2005_10_05_16_35_50.dat	-0.04376	0.02	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 11-OCT-2005 17:29

General Engineering Laboratories, LLC

Contract: **ESHL00701**

SDG #: **145579**

Nutrient Analysis

Method: EPA 365.4 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Phosphorus, Total as P

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	06-OCT-2005 15:50:32	OM_10-6-2005_15-42-00	0.967	1	96.7	(85%-115%)	Yes
CCV	06-OCT-2005 16:03:01	OM_10-6-2005_15-42-00	0.998	1	99.8	(85%-115%)	Yes
CCV	06-OCT-2005 16:14:29	OM_10-6-2005_15-42-00	0.997	1	99.7	(85%-115%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	06-OCT-2005 15:52:37	OM_10-6-2005_15-42-00	0.019	0.05	Yes
CCB	06-OCT-2005 16:05:06	OM_10-6-2005_15-42-00	0.007	0.05	Yes
CCB	06-OCT-2005 16:16:34	OM_10-6-2005_15-42-00	0.006	0.05	Yes

Alkalinity

Alkalinity LogBook

Analyst: DXR1
Batch: 466409
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 26-SEP-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200944827	WAL050822-02	1000	98.098
MS	1200944829	WAL050822-02	100	98.098
MS	1200944831	WAL050822-02	100	101.101
MS	1200944833	WAL050822-02	100	97.097
MS	1200944842	WAL050822-02	100	100.1

Type	Sample Id	Rpd(%)	Parmname
DUP	1200944828	.608	Alkalinity, Total as CaCO3
DUP	1200944830	2.41	Alkalinity, Total as CaCO3
DUP	1200944830	2.41	Carbonate alkalinity (CaCO3)
DUP	1200944832	.712	Alkalinity, Total as CaCO3
DUP	1200944832	7.607	Carbonate alkalinity (CaCO3)
DUP	1200944840	1.653	Alkalinity, Total as CaCO3
DUP	1200944840	6.245	Carbonate alkalinity (CaCO3)
DUP	1200944841	2.02	Alkalinity, Total as CaCO3
DUP	1200944841	2.011	Bicarbonate alkalinity (CaCO3)
DUP	1200944841	8.913	Carbonate alkalinity (CaCO3)

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
LCS	1200944827		15:37	7.96	5	mL	0.02002	0	4.9	980.98							mg/L
SAMPLE	145274008		15:42	7.23	50	mL	0.02002	0	8.25	165.17							mg/L
DUP	1200944828	145274008	15:49	7.27	50	mL	0.02002	0	8.2	164.16	163.87				0.28683		mg/L
MS	1200944829	145274008	15:55	8.6	50	mL	0.02002	0	13.15	263.26							mg/L
SAMPLE	145312007		16:04	7.12	50	mL	0.02002	0	7.05	141.14					0.17467		mg/L
DUP	1200944832	145312007	16:07	7.09	50	mL	0.02002	0	7	140.14	139.97				0.16187		mg/L
MS	1200944833	145312007	16:10	8.48	50	mL	0.02002	0	11.9	238.24							mg/L
SAMPLE	145312008		16:14	7.26	50	mL	0.02002	0	6.5	130.13					0.22219		mg/L
SAMPLE	145442008		16:21	7.31	50	mL	0.02002	0	11.45	229.23							mg/L
SAMPLE	145452004		16:26	6.6	50	mL	0.02002	0	4.1	82.082					0.030705		mg/L
SAMPLE	145457001		16:30	7.36	50	mL	0.02002	0	3	60.060					0.12903		mg/L
DUP	1200944840	145457001	16:34	7.38	50	mL	0.02002	0	3.05	61.061	60.912				0.13735		mg/L
MS	1200944842	145457001	16:39	8.56	50	mL	0.02002	0	8	160.16							mg/L
SAMPLE	145457002		16:43	7.37	50	mL	0.02002	0	3.05	61.061					0.13423		mg/L
SAMPLE	145457009		16:47	7.41	50	mL	0.02002	0	3	60.060					0.14473		mg/L
SAMPLE	145457010		16:49	7.42	50	mL	0.02002	0	3	60.060					0.14810		mg/L
SAMPLE	145457012		16:52	4.26	50	mL	0.02002	0	0	0.0000					0.0000		mg/L
SAMPLE	145506001		16:56	7.12	50	mL	0.02002	0	2.45	49.049	48.982				0.060696		mg/L
DUP	1200944841	145506001	17:00	7.15	50	mL	0.02002	0	2.5	50.050	49.977				0.066358		mg/L
SAMPLE	145579001		17:07	6.93	50	mL	0.02002	0	6.75	135.14					0.10803		mg/L

Alkalinity LogBook

Analyst: DXR1
Batch: 466409
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 26-SEP-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200944827	WAL050822-02	1000	98.098
MS	1200944829	WAL050822-02	100	98.098
MS	1200944831	WAL050822-02	100	101.101
MS	1200944833	WAL050822-02	100	97.097
MS	1200944842	WAL050822-02	100	100.1

Type	Sample Id	Rpd(%)	Parmname
DUP	1200944828	.608	Alkalinity, Total as CaCO3
DUP	1200944830	2.41	Alkalinity, Total as CaCO3
DUP	1200944830	2.41	Carbonate alkalinity (CaCO3)
DUP	1200944832	.712	Alkalinity, Total as CaCO3
DUP	1200944832	7.607	Carbonate alkalinity (CaCO3)
DUP	1200944840	1.653	Alkalinity, Total as CaCO3
DUP	1200944840	6.245	Carbonate alkalinity (CaCO3)
DUP	1200944841	2.02	Alkalinity, Total as CaCO3
DUP	1200944841	2.011	Bicarbonate alkalinity (CaCO3)
DUP	1200944841	8.913	Carbonate alkalinity (CaCO3)

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
SAMPLE	145579002		17:15	6.86	50	mL	0.02002	0	1.9	38.038					0.025883		mg/L
SAMPLE	145579003		17:19	6.86	50	mL	0.02002	0	5.65	113.11					0.076972		mg/L
SAMPLE	145579005		17:30	7.18	50	mL	0.02002	0	6.75	135.14					0.19198		mg/L
SAMPLE	145579006		17:33	7.11	50	mL	0.02002	0	2.05	41.041					0.049631		mg/L
DUP	1200944830	145579006	17:37	7.11	50	mL	0.02002	0	2.1	42.042	41.985				0.050842		mg/L
MS	1200944831	145579006	17:41	8.77	50	mL	0.02002	0	7.1	142.14							mg/L
SAMPLE	145579007		17:45	7.19	50	mL	0.02002	0	5.8	116.12					0.16879		mg/L

Run Date: 26-SEP-05 00:51
Instrument: PHX060
Analyst: JAR2

Standard	Observed	Theoretical		%Recovery
UPH345165-02	10.01	10	SU	100.1
050420-A	12.04	12	SU	100.33
310030	2.01	2	SU	100.5
UPH305147-01	4.01	4	SU	100.25
UPH297361-01	7.01	7	SU	100.14
UPH305149-02	7.01	7	SU	100.14

Comments:

Run Date: 08-SEP-2005 11:44
Instrument: TIT001
Analyst: DXR1

Na2CO3 Std. ID	Na2CO3, 0.05 N g Na2C03/L	H2SO4 N (approx.)	NA2CO3 titrated	Acid to pH 3.7	Actual Normality	Normality Average
243145	2.4974	.02	15	35.2	.01997	.02002
				35.3	.02002	
				35.4	.02008	

Alkalinity LogBook

Analyst: DXR1
Batch: 466649
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 27-SEP-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200945420	WAL050822-02	1000	98.098
MS	1200945422	WAL050822-02	100	98.098
MS	1200945424	WAL050822-02	100	96.096
MS	1200945426	WAL050822-02	100	99.099

Type	Sample Id	Rpd(%)	Parmname
DUP	1200945421	.727	Alkalinity, Total as CaCO3
DUP	1200945421	3.026	Carbonate alkalinity (CaCO3)
DUP	1200945423	.889	Alkalinity, Total as CaCO3
DUP	1200945423	.889	Carbonate alkalinity (CaCO3)
DUP	1200945425	1.149	Alkalinity, Total as CaCO3

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
LCS	1200945420		15:41	8.51	5	mL	0.02002	0	4.9	980.98							mg/L
SAMPLE	145579004		15:46	6.73	50	mL	0.02002	0	5.65	113.11					0.05707		mg/L
DUP	1200945423	145579004	15:51	6.73	50	mL	0.02002	0	5.6	112.11					0.056565		mg/L
MS	1200945424	145579004	15:53	8.47	50	mL	0.02002	0	10.45	209.21							mg/L
SAMPLE	145579008		16:08	6.85	50	mL	0.02002	0	5.6	112.11					0.074555		mg/L
SAMPLE	145644032		16:12	7.36	50	mL	0.02002	0	8.75	175.18							mg/L
DUP	1200945425	145644032	16:18	7.4	50	mL	0.02002	0	8.65	173.17					0.40790		mg/L
MS	1200945426	145644032	16:21	8.63	50	mL	0.02002	0	13.7	274.27							mg/L
SAMPLE	145644033		16:26	7.28	50	mL	0.02002	0	10.3	206.21							mg/L
SAMPLE	145644034		16:33	7.38	50	mL	0.02002	0	8.65	173.17							mg/L
SAMPLE	145644035		16:36	7.34	50	mL	0.02002	0	11.05	221.22							mg/L
SAMPLE	145739001		16:41	6.98	50	mL	0.02002	0	6.45	129.13					0.11581		mg/L
SAMPLE	145739002		16:45	7.47	50	mL	0.02002	0	2.85	57.057					0.15781		mg/L
SAMPLE	145739003		16:48	7.88	50	mL	0.02002	0	6.6	132.13					0.93524		mg/L
SAMPLE	145739004		16:52	7.33	50	mL	0.02002	0	3	60.060					0.12044		mg/L
SAMPLE	145739005		16:56	7.33	50	mL	0.02002	0	2.9	58.058					0.11642		mg/L
SAMPLE	145739006		17:00	6.95	50	mL	0.02002	0	5.2	104.10					0.087139		mg/L
SAMPLE	145782001		17:05	6.78	50	mL	0.02002	0	5.75	115.12					0.065163		mg/L
SAMPLE	145782002		17:16	6.88	50	mL	0.02002	0	5.7	114.11					0.08131		mg/L
SAMPLE	145782003		17:16	7.67	50	mL	0.02002	0	5.15	103.10					0.45123		mg/L
SAMPLE	145782004		17:34	7.55	50	mL	0.02002	0	5.7	114.11					0.37927		mg/L
SAMPLE	145892001		17:38	7.26	50	mL	0.02002	0	6.8	136.14					0.23245		mg/L
SAMPLE	145892002		17:42	7	50	mL	0.02002	0	4.5	90.090					0.08460		mg/L
SAMPLE	145892003		17:45	7.17	50	mL	0.02002	0	6.85	137.14					0.19040		mg/L

Alkalinity LogBook

Analyst: DXR1
Batch: 466649
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 27-SEP-2005

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200945420	WAL050822-02	1000	98.098
MS	1200945422	WAL050822-02	100	98.098
MS	1200945424	WAL050822-02	100	96.096
MS	1200945426	WAL050822-02	100	99.099

Type	Sample Id	Rpd(%)	Parmname
DUP	1200945421	.727	Alkalinity, Total as CaCO3
DUP	1200945421	3.026	Carbonate alkalinity (CaCO3)
DUP	1200945423	.889	Alkalinity, Total as CaCO3
DUP	1200945423	.889	Carbonate alkalinity (CaCO3)
DUP	1200945425	1.149	Alkalinity, Total as CaCO3

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
DUP	1200945421	145892003	17:49	7.18	50	mL	0.02002	0	6.9	138.14					0.19625		mg/L
MS	1200945422	145892003	17:54	8.61	50	mL	0.02002	0	11.75	235.24							mg/L
SAMPLE	145892004		17:56	6.92	50	mL	0.02002	0	4.5	90.090					0.070379		mg/L

Run Date: 27-SEP-05 15:29
Instrument: PHX060
Analyst: DXR1

Standard	Observed	Theoretical		%Recovery
050420-A	11.98	12	SU	99.833
310030	2.03	2	SU	101.5
UPH305147-01	3.99	4	SU	99.75
UPH305149-02	7	7	SU	100
UPH297361-01	7.02	7	SU	100.29
UPH050906b-02	9.99	10	SU	99.9

Comments:

Run Date: 08-SEP-2005 11:44
Instrument: TIT001
Analyst: DXR1

Na2CO3 Std. ID	Na2CO3, 0.05 N g Na2C03/L	H2SO4 N (approx.)	NA2CO3 titrated	Acid to pH 3.7	Actual Normality	Normality Average
243145	2.4974	.02	15	35.2	.01997	.02002
				35.3	.02002	
				35.4	.02008	

Carbon, Total Organic

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
ICAL-01		1	TSM	23-Sep-05 10:17	XO002.rlt
ICAL-02		1	TSM	23-Sep-05 10:27	XO003.rlt
ICAL-03		1	TSM	23-Sep-05 10:38	XO004.rlt
ICAL-04		1	TSM	23-Sep-05 10:48	XO005.rlt
ICAL-05		1	TSM	23-Sep-05 10:58	XO006.rlt
ICV		1	TSM	23-Sep-05 11:08	XO007.rlt
ICB		1	TSM	23-Sep-05 11:19	XO008.rlt
TIC	464823	1	TSM	23-Sep-05 11:29	XO009.rlt
CCV		1	TSM	23-Sep-05 11:59	XO010.rlt
CCB		1	TSM	23-Sep-05 12:09	XO011.rlt
145784001	464222	1	TSM	23-Sep-05 12:17	XO012.rlt
CCV		1	TSM	23-Sep-05 12:37	XO013.rlt
CCB		1	TSM	23-Sep-05 12:47	XO014.rlt

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
1200941204	464823	1	TSM	23-Sep-05 14:34	XO015.rlt

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
1200941209	464823	1	TSM	23-Sep-05 14:45	XO016.rlt
145267002	464823	1	TSM	23-Sep-05 14:53	XO017.rlt
1200941205	464823	1	TSM	23-Sep-05 15:27	XO018.rlt
1200941207	464823	1	TSM	23-Sep-05 15:46	XO019.rlt
145457010	464823	1	TSM	23-Sep-05 15:55	XO020.rlt
145457012	464823	1	TSM	23-Sep-05 16:28	XO021.rlt
CCV		1	TSM	23-Sep-05 17:04	XO022.rlt
CCB		1	TSM	23-Sep-05 17:14	XO023.rlt
145506001	464823	1	TSM	23-Sep-05 17:22	XO024.rlt
1200943565	464823	1	TSM	23-Sep-05 17:40	XO025.rlt
1200943566	464823	1	TSM	23-Sep-05 18:00	XO026.rlt
145579005	464823	1	TSM	23-Sep-05 18:09	XO027.rlt
145579007	464823	1	TSM	23-Sep-05 18:42	XO028.rlt
145579008	464823	1	TSM	23-Sep-05 19:16	XO029.rlt
145739004	464823	1	TSM	23-Sep-05 19:49	XO030.rlt
145739005	464823	1	TSM	23-Sep-05 20:23	XO031.rlt
CCV		1	TSM	23-Sep-05 20:58	XO032.rlt
CCB		1	TSM	23-Sep-05 21:08	XO033.rlt
145739006	464823	1	TSM	23-Sep-05 21:17	XO034.rlt
145782004	464823	1	TSM	23-Sep-05 21:50	XO035.rlt
145892004	464823	1	TSM	23-Sep-05 22:24	XO036.rlt
145898034	464823	1	TSM	23-Sep-05 22:57	XO037.rlt
145898035	464823	1	TSM	23-Sep-05 23:31	XO038.rlt
1200941206	464823	1	TSM	24-Sep-05 0:04	XO039.rlt
1200941208	464823	1	TSM	24-Sep-05 0:24	XO040.rlt
CCV		1	TSM	24-Sep-05 0:34	XO041.rlt
CCB		1	TSM	24-Sep-05 0:44	XO042.rlt
1200941372	464895	1	TSM	24-Sep-05 0:55	XO043.rlt
1200941383	464895	1	TSM	24-Sep-05 1:05	XO044.rlt
145312007	464895	1	TSM	24-Sep-05 1:13	XO045.rlt
1200941373	464895	1	TSM	24-Sep-05 1:47	XO046.rlt
1200941378	464895	1	TSM	24-Sep-05 2:07	XO047.rlt
145452004	464895	1	TSM	24-Sep-05 2:15	XO048.rlt
12009411374	464895	1	TSM	24-Sep-05 2:49	XO049.rlt
12009411379	464895	1	TSM	24-Sep-05 3:09	XO050.rlt
CCV		1	TSM	24-Sep-05 3:19	XO051.rlt
CCB		1	TSM	24-Sep-05 3:29	XO052.rlt
145579006	464895	1	TSM	24-Sep-05 3:38	XO053.rlt
1200941375	464895	1	TSM	24-Sep-05 4:11	XO054.rlt
1200941380	464895	1	TSM	24-Sep-05 4:31	XO055.rlt
145782003	464895	1	TSM	24-Sep-05 4:40	XO056.rlt
1200941376	464895	1	TSM	24-Sep-05 5:14	XO057.rlt
1200941381	464895	1	TSM	24-Sep-05 5:33	XO058.rlt
CCV		1	TSM	24-Sep-05 5:44	XO059.rlt
CCB		1	TSM	24-Sep-05 5:54	XO060.rlt
145892003	464895	1	TSM	24-Sep-05 6:03	XO061.rlt
1200941377	464895	1	TSM	24-Sep-05 6:37	XO062.rlt
1200941382	464895	1	TSM	24-Sep-05 6:57	XO063.rlt
CCV		1	TSM	24-Sep-05 7:07	XO064.rlt
CCB		1	TSM	24-Sep-05 7:17	XO065.rlt

****
** CONFIGURATION **
****

Analysis Mode: TOC Spl Intro: Autosampler 53
Remote Start : OFF

Loop Size: 5 mL

	Actual Volume	1mL	5mL	10mL	25mL
Loop A (uL):	1000	4900	10000	25000	
Loop B (uL):	1000	4900	10000	25000	

Tray Type: 53 Vial
Needle Depth: 97 %
Wash Needle Depth: 94 %
Vial Option: Neither
Preacid Volume (uL): 200
Preacid Purge Time (min:sec): 0:30

	TIC	TOC	TC
Blank	----	----	----
Average:	254	495	784

Linearization Coeff: 53000

Sample Transfer Times (sec)

	Initial Fill			Loop Fill			Sample Inject
	Non-AS	AS	AS w/Sep	Non-AS	AS	AS w/Sep	(all)
1mL:	6.0	4.5	3.5	1.2	1.2	1.0	4.5
5mL:	8.1	7.0	8.0	5.1	3.0	5.5	10.3
10mL:	14.2	12.2	11.0	10.5	10.5	11.0	16.5
25mL:	35.0	35.0	32.0	n/a	n/a	n/a	38.0

Analog Concentration Signal indicates TOC
Analog Conc. Signal Timer is OFF, Timer duration (h:m:s): 00:00:00
Min Signal Range: 0.000 ppmC, Max Signal Range: 0.000 ppmC

Alarms DISABLED
Alarm Relay Timer is OFF, Timer duration (h:m:s): 00:00:00

Conc. Alarm Setpoints (ppm C)

	Low	High
TIC:	0.000	0.000
TOC:	0.000	0.000
TC:	0.000	0.000

****
** CALIBRATION **
****

09/23/05 Fri Sep 23 10:58:30 2005

Std. #	Used	Conc. (ppm)	Volume (mL)
1	Yes	20.000	5.000
2	Yes	10.000	5.000
3	Yes	1.000	5.000
4	Yes	0.200	5.000
5	Yes	0.000	5.000

RF (ugC/k-cts): 1.090
R-Squared: 0.9997
Offset (cts): 1113
Offset (ugC): -1.214
Calibration Mode: TOC
Allow Editing: No

Rep	Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
1	91592	44897	5831	2110	1417
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-

(* = unused)

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
1	Blk	1	23Sep2005	09:49	-	-	-	688	-	-	-	-	-
1	Blk	2	23Sep2005	09:57	-	-	-	760	-	-	-	-	-
1	Blk	3	23Sep2005	10:07	-	-	-	726	-	-	-	-	-

** Std1 Name: ICAL-01 Data File: XO002
Remarks: 464823|1|1|WTC050923-01

1	Std1	1	23Sep2005	10:17	-	-	-	91592	98.000	20.000	-	-	-

** Calibration: RF (ugC/k-cts): 1.078
R-Squared: 1.0000
Offset (cts): 0
Offset (ugC): 0.000

** Std2 Name: ICAL-02 Data File: XO003
Remarks: 464823|1|1|WTC050923-02

2	Std2	1	23Sep2005	10:27	-	-	-	44897	49.000	10.000	-	-	-

** Calibration: RF (ugC/k-cts): 1.049
R-Squared: 1.0000
Offset (cts): -1797
Offset (ugC): 1.887

** Std3 Name: ICAL-03 Data File: XO004
Remarks: 464823|1|1|WTC050923-03

3	Std3	1	23Sep2005	10:38	-	-	-	5831	4.900	1.000	-	-	-

** Calibration: RF (ugC/k-cts): 1.084
R-Squared: 0.9996
Offset (cts): 747
Offset (ugC): -0.811

** Std4 Name: ICAL-04 Data File: XO005
Remarks: 464823|1|1|WTC050923-04

4	Std4	1	23Sep2005	10:48	-	-	-	2110	0.980	0.200	-	-	-

** Calibration: RF (ugC/k-cts): 1.088
R-Squared: 0.9997
Offset (cts): 967
Offset (ugC): -1.052

** Std5 Name: ICAL-05 Data File: XO006
Remarks: 464823|1|1|

5	Std5	1	23Sep2005	10:58	-	-	-	1417	0.000	0.000	-	-	-

** Calibration: RF (ugC/k-cts): 1.090
R-Squared: 0.9997
Offset (cts): 1113
Offset (ugC): -1.214

** Chk2 Name: ICV Data File: XO007

```
            Remarks: 464823|1|1|WTC050923-05

6    Chk2   1 23Sep2005 11:08      -       -          -    45926  48.838      9.967      -       -          -


** Chk5     Name:    ICB                          Data File: XO008
            Remarks: 464823|1|1|

7    Chk5   1 23Sep2005 11:19      -       -          -     1416   0.329      0.067      -       -          -


** Spl      Name:    TIC                          Data File: XO009
            Remarks: 464823|1|1|WIC050923-01

8    Spl    1 23Sep2005 11:29      -       -          -     1526   0.874      0.178      -       -          -
```

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Chk2	Name: CCV						Data File: XO010						
	Remarks: 464222|1|2|WTC050923-02												
9	Chk2	1	23Sep2005	11:59	-	-	-	45455	48.325	9.862	-	-	-
** Chk5	Name: CCB						Data File: XO011						
	Remarks: 464222|1|2|												
10	Chk5	1	23Sep2005	12:09	-	-	-	1792	0.739	0.151	-	-	-
** Spl	Name: 145784001						Data File: XO012						
	Remarks: 464222|1|2|												
11	Spl	1	23Sep2005	12:17	-	-	-	52215	56.117	11.452	-	-	-
11	Spl	2	23Sep2005	12:27	-	-	-	53299	57.298	11.693	-	-	-
11	Spl	Avg						52757	56.707	11.573			
11	Spl	SDev						766.504					
11	Spl	%RSD						1.45					
** Chk2	Name: CCV						Data File: XO013						
	Remarks: 464222|1|2|WTC050923-02												
12	Chk2	1	23Sep2005	12:37	-	-	-	46066	48.990	9.998	-	-	-
** Chk5	Name: CCB						Data File: XO014						
	Remarks: 464222|1|2|												
13	Chk5	1	23Sep2005	12:47	-	-	-	1702	0.641	0.131	-	-	-

Pos/ Vial	Run Type	Rep #	Run Date	Run Time	TIC Area (cts)	TIC Mass (ugC)	TIC Conc (ppm)	TOC Area (cts)	TOC Mass (ugC)	TOC Conc (ppm)	TC Area (cts)	TC Mass (ugC)	TC Conc (ppm)
** Chk5	Name: 1200941204						Data File: XO015						
	Remarks: 464823|1|1|METH BLK												
1	Chk5	1	23Sep2005	14:34	-	-	-	1936	0.896	0.183	-	-	-
** Chk2	Name: 1200941209						Data File: XO016						
	Remarks: 464823|1|1|WTC050923-05:LCS												
2	Chk2	1	23Sep2005	14:45	-	-	-	45773	48.671	9.933	-	-	-
** Spl	Name: 145267002						Data File: XO017						
	Remarks: 464823|1|1|											
3	Spl	1	23Sep2005	14:53	-	-	-	5781	5.511	1.125	-	-	-
3	Spl	2	23Sep2005	15:01	-	-	-	5593	5.306	1.083	-	-	-
3	Spl	3	23Sep2005	15:09	-	-	-	5162	4.837	0.987	-	-	-
3	Spl	4	23Sep2005	15:18	-	-	-	5280	4.965	1.013	-	-	-
3	Spl	Avg						5454	5.155	1.052			
3	Spl	SDev						283.896					
3	Spl	%RSD						5.21					
** Spl	Name: 1200941205						Data File: XO018						
	Remarks: 464823|1|1|145267002:DUP												
4	Spl	1	23Sep2005	15:27	-	-	-	5222	4.902	1.000	-	-	-
4	Spl	2	23Sep2005	15:36	-	-	-	4878	4.527	0.924	-	-	-
4	Spl	Avg						5050	4.715	0.962			
4	Spl	SDev						243.245					
4	Spl	%RSD						4.82					
** Spl	Name: 1200941207						Data File: XO019						
	Remarks: 464823|1|1|145267002:PS												
5	Spl	1	23Sep2005	15:46	-	-	-	50315	54.046	11.030	-	-	-
** Spl	Name: 145457010						Data File: XO020						
	Remarks: 464823|1|1|											
6	Spl	1	23Sep2005	15:55	-	-	-	2951	2.427	0.495	-	-	-
6	Spl	2	23Sep2005	16:03	-	-	-	3054	2.539	0.518	-	-	-
6	Spl	3	23Sep2005	16:10	-	-	-	3182	2.679	0.547	-	-	-
6	Spl	4	23Sep2005	16:20	-	-	-	3398	2.914	0.595	-	-	-
6	Spl	Avg						3146	2.640	0.539			
6	Spl	SDev						192.604					
6	Spl	%RSD						6.12					
** Spl	Name: 145457012						Data File: XO021						
	Remarks: 464823|1|1|											
7	Spl	1	23Sep2005	16:28	-	-	-	3572	3.104	0.633	-	-	-
7	Spl	2	23Sep2005	16:36	-	-	-	3691	3.234	0.660	-	-	-
7	Spl	3	23Sep2005	16:44	-	-	-	3743	3.290	0.672	-	-	-
7	Spl	4	23Sep2005	16:54	-	-	-	3873	3.432	0.700	-	-	-
7	Spl	Avg						3719	3.265	0.666			

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7    Spl  SDev                                    124.743
7    Spl  %RSD                                       3.35


** Chk2     Name:    CCV                         Data File: XO022
            Remarks: 464823|1|1|WTC050923-02

8    Chk2   1 23Sep2005 17:04      -       -          -    47702  50.773     10.362      -       -          -


** Chk5     Name:    CCB                         Data File: XO023
            Remarks: 464823|1|1|

9    Chk5   1 23Sep2005 17:14      -       -          -     1493   0.413      0.084      -       -          -


** Spl      Name:    145506001                   Data File: XO024
            Remarks: 464823|1|1|

10   Spl    1 23Sep2005 17:22      -       -          -     5171   4.846      0.989      -       -          -
10   Spl    2 23Sep2005 17:32      -       -          -     5425   5.123      1.046      -       -          -
10   Spl  Avg                                         5298   4.985      1.017
10   Spl  SDev                                     179.605
10   Spl  %RSD                                        3.39


** Spl      Name:    1200943565                  Data File: XO025
            Remarks: 464823|1|1|145506001:DUP

11   Spl    1 23Sep2005 17:40      -       -          -     5674   5.395      1.101      -       -          -
11   Spl    2 23Sep2005 17:50      -       -          -     5733   5.459      1.114      -       -          -
11   Spl  Avg                                         5703   5.427      1.107
11   Spl  SDev                                      41.719
11   Spl  %RSD                                        0.73


** Spl      Name:    1200943566                  Data File: XO026
            Remarks: 464823|1|1|145506001:PS

12   Spl    1 23Sep2005 18:00      -       -          -    51854  55.723     11.372      -       -          -


** Spl      Name:    145579005                   Data File: XO027
            Remarks: 464823|1|1|

13   Spl    1 23Sep2005 18:09      -       -          -    14990  15.548      3.173      -       -          -
13   Spl    2 23Sep2005 18:16      -       -          -    14740  15.275      3.117      -       -          -
13   Spl    3 23Sep2005 18:24      -       -          -    14855  15.400      3.143      -       -          -
13   Spl    4 23Sep2005 18:34      -       -          -    15057  15.621      3.188      -       -          -
13   Spl  Avg                                        14910  15.461      3.155
13   Spl  SDev                                     141.342
13   Spl  %RSD                                        0.95


** Spl      Name:    145579007                   Data File: XO028
            Remarks: 464823|1|1|

14   Spl    1 23Sep2005 18:42      -       -          -    16328  17.006      3.471      -       -          -
14   Spl    2 23Sep2005 18:50      -       -          -    16989  17.726      3.618      -       -          -
14   Spl    3 23Sep2005 18:58      -       -          -    16511  17.205      3.511      -       -          -
14   Spl    4 23Sep2005 19:07      -       -          -    16449  17.138      3.497      -       -          -
14   Spl  Avg                                        16569  17.269      3.524
14   Spl  SDev                                     289.968
14   Spl  %RSD                                        1.75
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** Spl      Name:    145579008                  Data File: XO029
            Remarks: 464823|1|1|

15   Spl    1 23Sep2005 19:16      -       -          -    16907  17.637      3.599      -       -          -
15   Spl    2 23Sep2005 19:23      -       -          -    17402  18.176      3.709      -       -          -
15   Spl    3 23Sep2005 19:31      -       -          -    16911  17.641      3.600      -       -          -
15   Spl    4 23Sep2005 19:41      -       -          -    16784  17.503      3.572      -       -          -
15   Spl  Avg                                             17001  17.739      3.620
15   Spl  SDev                                          273.755
15   Spl  %RSD                                            1.61


** Spl      Name:    145739004                  Data File: XO030
            Remarks: 464823|1|1|

16   Spl    1 23Sep2005 19:49      -       -          -    21793  22.962      4.686      -       -          -
16   Spl    2 23Sep2005 19:57      -       -          -    22293  23.507      4.797      -       -          -
16   Spl    3 23Sep2005 20:05      -       -          -    22291  23.504      4.797      -       -          -
16   Spl    4 23Sep2005 20:14      -       -          -    22338  23.556      4.807      -       -          -
16   Spl  Avg                                             22178  23.382      4.772
16   Spl  SDev                                          258.081
16   Spl  %RSD                                            1.16


** Spl      Name:    145739005                  Data File: XO031
            Remarks: 464823|1|1|

17   Spl    1 23Sep2005 20:23      -       -          -     5837   5.572      1.137      -       -          -
17   Spl    2 23Sep2005 20:30      -       -          -     6038   5.791      1.182      -       -          -
17   Spl    3 23Sep2005 20:38      -       -          -     6070   5.826      1.189      -       -          -
17   Spl    4 23Sep2005 20:48      -       -          -     6024   5.776      1.179      -       -          -
17   Spl  Avg                                              5992   5.742      1.172
17   Spl  SDev                                          105.275
17   Spl  %RSD                                            1.76


** Chk2     Name:    CCV                        Data File: XO032
            Remarks: 464823|1|1|WTC050923-02

18   Chk2   1 23Sep2005 20:58      -       -          -    49689  52.939     10.804      -       -          -


** Chk5     Name:    CCB                        Data File: XO033
            Remarks: 464823|1|1|

19   Chk5   1 23Sep2005 21:08      -       -          -     1629   0.562      0.115      -       -          -


** Spl      Name:    145739006                  Data File: XO034
            Remarks: 464823|1|1|

20   Spl    1 23Sep2005 21:17      -       -          -     4357   3.959      0.808      -       -          -
20   Spl    2 23Sep2005 21:24      -       -          -     4457   4.068      0.830      -       -          -
20   Spl    3 23Sep2005 21:32      -       -          -     4417   4.025      0.821      -       -          -
20   Spl    4 23Sep2005 21:42      -       -          -     4433   4.042      0.825      -       -          -
20   Spl  Avg                                              4416   4.024      0.821
20   Spl  SDev                                           42.630
20   Spl  %RSD                                             0.97


** Spl      Name:    145782004                  Data File: XO035
            Remarks: 464823|1|1|

21   Spl    1 23Sep2005 21:50      -       -          -    24957  26.410      5.390      -       -          -
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21   Spl    2 23Sep2005 21:58      -       -          -    24983  26.438      5.396      -       -          -
21   Spl    3 23Sep2005 22:06      -       -          -    25057  26.519      5.412      -       -          -
21   Spl    4 23Sep2005 22:15      -       -          -    25202  26.677      5.444      -       -          -
21   Spl  Avg                                             25049  26.511      5.410
21   Spl  SDev                                          109.986
21   Spl  %RSD                                            0.44


** Spl      Name:    145892004                  Data File: XO036
            Remarks: 464823|1|1|

22   Spl    1 23Sep2005 22:24      -       -          -    19659  20.636      4.211      -       -          -
22   Spl    2 23Sep2005 22:31      -       -          -    19326  20.273      4.137      -       -          -
22   Spl    3 23Sep2005 22:39      -       -          -    19404  20.358      4.155      -       -          -
22   Spl    4 23Sep2005 22:49      -       -          -    18829  19.731      4.027      -       -          -
22   Spl  Avg                                             19304  20.250      4.133
22   Spl  SDev                                          347.435
22   Spl  %RSD                                            1.80


** Spl      Name:    145898034                  Data File: XO037
            Remarks: 464823|1|1|

23   Spl    1 23Sep2005 22:57      -       -          -     4288   3.884      0.793      -       -          -
23   Spl    2 23Sep2005 23:05      -       -          -     4410   4.017      0.820      -       -          -
23   Spl    3 23Sep2005 23:13      -       -          -     4302   3.899      0.796      -       -          -
23   Spl    4 23Sep2005 23:22      -       -          -     4281   3.877      0.791      -       -          -
23   Spl  Avg                                              4320   3.919      0.800
23   Spl  SDev                                           60.467
23   Spl  %RSD                                             1.40


** Spl      Name:    145898035                  Data File: XO038
            Remarks: 464823|1|1|

24   Spl    1 23Sep2005 23:31      -       -          -     4961   4.618      0.942      -       -          -
24   Spl    2 23Sep2005 23:38      -       -          -     5207   4.886      0.997      -       -          -
24   Spl    3 23Sep2005 23:46      -       -          -     4997   4.657      0.950      -       -          -
24   Spl    4 23Sep2005 23:56      -       -          -     5137   4.809      0.982      -       -          -
24   Spl  Avg                                              5075   4.742      0.968
24   Spl  SDev                                          115.970
24   Spl  %RSD                                             2.28


** Spl      Name:    1200941206                 Data File: XO039
            Remarks: 464823|1|1|145898035:DUP

25   Spl    1 24Sep2005 00:04      -       -          -     4150   3.734      0.762      -       -          -
25   Spl    2 24Sep2005 00:14      -       -          -     4126   3.708      0.757      -       -          -
25   Spl  Avg                                              4138   3.721      0.759
25   Spl  SDev                                           16.971
25   Spl  %RSD                                             0.41


** Spl      Name:    1200941208                 Data File: XO040
            Remarks: 464823|1|1|145898035:PS

26   Spl    1 24Sep2005 00:24      -       -          -    49604  53.271     10.872      -       -          -


** Chk2     Name:    CCV                        Data File: XO041
            Remarks: 464823|1|1|WTC050923-02

27   Chk2   1 24Sep2005 00:34      -       -          -    49583  52.823     10.780      -       -          -
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** Chk5     Name:    CCB                          Data File: XO042
            Remarks: 464823|1|1|

28   Chk5   1 24Sep2005 00:44      -       -          -     1724   0.665      0.136      -       -          -


** Chk5     Name:    1200941372                   Data File: XO043
            Remarks: 464895|1|1|METH BLK

29   Chk5   1 24Sep2005 00:55      -       -          -     1689   0.627      0.128      -       -          -


** Chk2     Name:    1200941383                   Data File: XO044
            Remarks: 464895|1|1|WTC050923-05:LCS

30   Chk2   1 24Sep2005 01:05      -       -          -    48786  51.955     10.603      -       -          -


** Spl      Name:    145312007                    Data File: XO045
            Remarks: 464895|1|1|

31   Spl    1 24Sep2005 01:13      -       -          -    30145  32.064      6.544      -       -          -
31   Spl    2 24Sep2005 01:21      -       -          -    30061  31.972      6.525      -       -          -
31   Spl    3 24Sep2005 01:29      -       -          -    30270  32.200      6.571      -       -          -
31   Spl    4 24Sep2005 01:39      -       -          -    29953  31.855      6.501      -       -          -
31   Spl  Avg                                          30107  32.023      6.535
31   Spl  SDev                                       133.971
31   Spl  %RSD                                         0.44


** Spl      Name:    1200941373                   Data File: XO046
            Remarks: 464895|1|1|145312007:DUP

32   Spl    1 24Sep2005 01:47      -       -          -    29462  31.320      6.392      -       -          -
32   Spl    2 24Sep2005 01:57      -       -          -    29867  31.761      6.482      -       -          -
32   Spl  Avg                                          29664  31.540      6.437
32   Spl  SDev                                       286.378
32   Spl  %RSD                                         0.97


** Spl      Name:    1200941378                   Data File: XO047
            Remarks: 464895|1|1|145312007:PS

33   Spl    1 24Sep2005 02:07      -       -          -    73462  79.272     16.178      -       -          -


** Spl      Name:    145452004                    Data File: XO048
            Remarks: 464895|1|1|

34   Spl    1 24Sep2005 02:15      -       -          -    67675  72.965     14.891      -       -          -
34   Spl    2 24Sep2005 02:23      -       -          -    75990  82.027     16.740      -       -          -
34   Spl    3 24Sep2005 02:31      -       -          -    77485  83.657     17.073      -       -          -
34   Spl    4 24Sep2005 02:40      -       -          -    79069  85.383     17.425      -       -          -
34   Spl  Avg                                          75054  81.008     16.532
34   Spl  SDev                                      5077.917
34   Spl  %RSD                                         6.77


** Spl      Name:    12009411374                  Data File: XO049
            Remarks: 464895|1|1|145452004:DUP

35   Spl    1 24Sep2005 02:49      -       -          -    74588  80.499     16.428      -       -          -
35   Spl    2 24Sep2005 02:58      -       -          -    75457  81.447     16.622      -       -          -
35   Spl  Avg                                          75022  80.973     16.525
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35   Spl  SDev                                      614.476
35   Spl  %RSD                                        0.82


** Spl      Name:    12009411379                  Data File: XO050
            Remarks: 464895|1|1|145452004:PS

36   Spl    1 24Sep2005 03:09      -       -          -   128376 139.119     28.392      -       -          -


** Chk2     Name:    CCV                          Data File: XO051
            Remarks: 464895|1|1|WTC050923-02

37   Chk2   1 24Sep2005 03:19      -       -          -    49900  53.169     10.851      -       -          -


** Chk5     Name:    CCB                          Data File: XO052
            Remarks: 464895|1|1|

38   Chk5   1 24Sep2005 03:29      -       -          -     2185   1.167      0.238      -       -          -


** Spl      Name:    145579006                    Data File: XO053
            Remarks: 464895|1|1|

39   Spl    1 24Sep2005 03:38      -       -          -     7018   6.859      1.400      -       -          -
39   Spl    2 24Sep2005 03:45      -       -          -     6950   6.785      1.385      -       -          -
39   Spl    3 24Sep2005 03:53      -       -          -     6850   6.676      1.362      -       -          -
39   Spl    4 24Sep2005 04:03      -       -          -     6794   6.615      1.350      -       -          -
39   Spl  Avg                                          6903   6.734      1.374
39   Spl  SDev                                       100.206
39   Spl  %RSD                                         1.45


** Spl      Name:    1200941375                   Data File: XO054
            Remarks: 464895|1|1|145579006:DUP

40   Spl    1 24Sep2005 04:11      -       -          -     5540   5.249      1.071      -       -          -
40   Spl    2 24Sep2005 04:21      -       -          -     5507   5.213      1.064      -       -          -
40   Spl  Avg                                          5523   5.231      1.067
40   Spl  SDev                                        23.335
40   Spl  %RSD                                         0.42


** Spl      Name:    1200941380                   Data File: XO055
            Remarks: 464895|1|1|145579006:PS

41   Spl    1 24Sep2005 04:31      -       -          -    49215  52.847     10.785      -       -          -


** Spl      Name:    145782003                    Data File: XO056
            Remarks: 464895|1|1|

42   Spl    1 24Sep2005 04:40      -       -          -    31861  33.934      6.925      -       -          -
42   Spl    2 24Sep2005 04:48      -       -          -    31623  33.675      6.872      -       -          -
42   Spl    3 24Sep2005 04:55      -       -          -    31889  33.965      6.932      -       -          -
42   Spl    4 24Sep2005 05:05      -       -          -    31566  33.613      6.860      -       -          -
42   Spl  Avg                                         31734  33.797      6.897
42   Spl  SDev                                       164.009
42   Spl  %RSD                                         0.52


** Spl      Name:    1200941376                   Data File: XO057
            Remarks: 464895|1|1|145782003:DUP
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43	Spl	1	24Sep2005 05:14	-	-	-	30384	32.324	6.597	-	-	-
43	Spl	2	24Sep2005 05:23	-	-	-	30464	32.412	6.615	-	-	-
43	Spl	Avg					30424	32.368	6.606			
43	Spl	SDev					56.569					
43	Spl	%RSD					0.19					

** Spl Name: 1200941381 Data File: XO058
Remarks: 464895|1|1|145782003:PS

44	Spl	1	24Sep2005 05:33	-	-	-	74772	80.700	16.469	-	-	-

** Chk2 Name: CCV Data File: XO059
Remarks: 464895|1|1|WTC050923-02

45	Chk2	1	24Sep2005 05:44	-	-	-	46437	49.395	10.081	-	-	-

** Chk5 Name: CCB Data File: XO060
Remarks: 464895|1|1|

46	Chk5	1	24Sep2005 05:54	-	-	-	3801	2.929	0.598	-	-	-

** Spl Name: 145892003 Data File: XO061
Remarks: 464895|1|1|

47	Spl	1	24Sep2005 06:03	-	-	-	12522	12.858	2.624	-	-	-
47	Spl	2	24Sep2005 06:11	-	-	-	12792	13.152	2.684	-	-	-
47	Spl	3	24Sep2005 06:18	-	-	-	12259	12.571	2.566	-	-	-
47	Spl	4	24Sep2005 06:28	-	-	-	12621	12.966	2.646	-	-	-
47	Spl	Avg					12548	12.887	2.630			
47	Spl	SDev					222.906					
47	Spl	%RSD					1.78					

** Spl Name: 1200941377 Data File: XO062
Remarks: 464895|1|1|145892003:DUP

48	Spl	1	24Sep2005 06:37	-	-	-	11754	12.021	2.453	-	-	-
48	Spl	2	24Sep2005 06:46	-	-	-	11876	12.154	2.480	-	-	-
48	Spl	Avg					11815	12.087	2.467			
48	Spl	SDev					86.267					
48	Spl	%RSD					0.73					

** Spl Name: 1200941382 Data File: XO063
Remarks: 464895|1|1|145892003:PS

49	Spl	1	24Sep2005 06:57	-	-	-	57770	62.171	12.688	-	-	-

** Chk2 Name: CCV Data File: XO064
Remarks: 464895|1|1|WTC050923-02

50	Chk2	1	24Sep2005 07:07	-	-	-	41567	44.087	8.997	-	-	-

** Chk5 Name: CCB Data File: XO065
Remarks: 464895|1|1|

51	Chk5	1	24Sep2005 07:17	-	-	-	2035	1.004	0.205	-	-	-

Cyanide, Total

Prep LogBook

Analyst: GXM2 Verified by:_____

Batch: 465670

Lab SOP: GL-GC-E-067 REV# 7

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200943202	URF050613-01	.025	mL
MS	1200943204	URF050613-01	.05	mL
MS	1200943206	URF050613-01	.05	mL
MS	1200943222	URF050613-01	.05	mL
MSD	1200943223	URF050613-01	.05	mL
MSD	1200944903	URF050613-01	.05	mL
MSD	1200944904	URF050613-01	.05	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200943201		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
LCS	1200943202		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145318001		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145318002		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145318003		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145423001		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
DUP	1200943203	145423001	SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
MS	1200943204	145423001	SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
MSD	1200944903	145892002	EPA 335.3	26-SEP-2005 12:35	50 mL	50 mL	1	GROUND WATER
SAMPLE	145423002		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145423003		SW846 9010B Prep	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579001		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
DUP	1200943205	145579001	EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
MS	1200943206	145579001	EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
MSD	1200944904	145892002	EPA 335.3	26-SEP-2005 12:35	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579002		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579003		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145579004		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145739001		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145739002		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145739003		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145782001		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145782002		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145784001		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	WASTE WATER
DUP	1200943221	145784001	EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	WASTE WATER
MS	1200943222	145784001	EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	WASTE WATER

Prep LogBook

Analyst: GXM2 Verified by:_____

Batch: 465670

Lab SOP: GL-GC-E-067 REV# 7

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200943202	URF050613-01	.025	mL
MS	1200943204	URF050613-01	.05	mL
MS	1200943206	URF050613-01	.05	mL
MS	1200943222	URF050613-01	.05	mL
MSD	1200943223	URF050613-01	.05	mL
MSD	1200944903	URF050613-01	.05	mL
MSD	1200944904	URF050613-01	.05	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MSD	1200943223	145784001	EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	WASTE WATER
SAMPLE	145892001		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER
SAMPLE	145892002		EPA 335.3	26-SEP-2005 12:24	50 mL	50 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
342110-C	50 mL	0.25N Sodium Hydroxide Solution
332281-C	2.5 mL	Bismuth Nitrate Solution
340338-C	5 mL	50% H2SO4 CN Prep
340350-C	2 mL	51% Magnesium Chloride Solution
338002-C	2.5 mL	Sulfamic Acid Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	adf	9/26/2005 14:07:25	OM_9-26-2005_14-04-02
150 ppb		1	adf	9/26/2005 14:08:17	OM_9-26-2005_14-04-02
100 ppb		1	adf	9/26/2005 14:09:09	OM_9-26-2005_14-04-02
50 ppb		1	adf	9/26/2005 14:10:02	OM_9-26-2005_14-04-02
10 ppb		1	adf	9/26/2005 14:10:55	OM_9-26-2005_14-04-02
CRDL 5.0 ppb		1	adf	9/26/2005 14:11:49	OM_9-26-2005_14-04-02
ICAL-00		1	adf	9/26/2005 14:12:43	OM_9-26-2005_14-04-02
ICV		1	adf	9/26/2005 14:14:33	OM_9-26-2005_14-04-02
ICB		1	adf	9/26/2005 14:16:23	OM_9-26-2005_14-04-02
CRDL		1	adf	9/26/2005 14:18:13	OM_9-26-2005_14-04-02
1200943189	465669	1	adf	9/26/2005 14:20:03	OM_9-26-2005_14-04-02
1200943196	465669	50	adf	9/26/2005 14:20:56	OM_9-26-2005_14-04-02
145440001	465669	1	adf	9/26/2005 14:21:49	OM_9-26-2005_14-04-02
1200943190	465669	1	adf	9/26/2005 14:22:42	OM_9-26-2005_14-04-02
1200943192	465669	1	adf	9/26/2005 14:23:35	OM_9-26-2005_14-04-02
1200943194	465669	1	adf	9/26/2005 14:24:28	OM_9-26-2005_14-04-02
145529001	465669	1	adf	9/26/2005 14:25:21	OM_9-26-2005_14-04-02
145529002	465669	1	adf	9/26/2005 14:26:14	OM_9-26-2005_14-04-02
145529003	465669	1	adf	9/26/2005 14:27:06	OM_9-26-2005_14-04-02
145529004	465669	1	adf	9/26/2005 14:27:59	OM_9-26-2005_14-04-02
CCV		1	adf	9/26/2005 14:28:51	OM_9-26-2005_14-04-02
CCB		1	adf	9/26/2005 14:30:41	OM_9-26-2005_14-04-02
145529005	465669	1	adf	9/26/2005 14:32:29	OM_9-26-2005_14-04-02
145529006	465669	1	adf	9/26/2005 14:33:21	OM_9-26-2005_14-04-02
145529007	465669	1	adf	9/26/2005 14:34:13	OM_9-26-2005_14-04-02
145529008	465669	1	adf	9/26/2005 14:35:04	OM_9-26-2005_14-04-02
145529009	465669	1	adf	9/26/2005 14:35:57	OM_9-26-2005_14-04-02
145529010	465669	1	adf	9/26/2005 14:36:50	OM_9-26-2005_14-04-02
145529011	465669	1	adf	9/26/2005 14:37:44	OM_9-26-2005_14-04-02
145529012	465669	1	adf	9/26/2005 14:38:37	OM_9-26-2005_14-04-02
145529013	465669	1	adf	9/26/2005 14:39:31	OM_9-26-2005_14-04-02
145529014	465669	1	adf	9/26/2005 14:40:24	OM_9-26-2005_14-04-02
CCV		1	adf	9/26/2005 14:41:16	OM_9-26-2005_14-04-02
CCB		1	adf	9/26/2005 14:43:06	OM_9-26-2005_14-04-02
145727001	465669	1	adf	9/26/2005 14:44:55	OM_9-26-2005_14-04-02
145737013	465669	1	adf	9/26/2005 14:45:48	OM_9-26-2005_14-04-02
1200943191	465669	1	adf	9/26/2005 14:46:41	OM_9-26-2005_14-04-02
1200943193	465669	1	adf	9/26/2005 14:47:33	OM_9-26-2005_14-04-02
1200943195	465669	1	adf	9/26/2005 14:48:26	OM_9-26-2005_14-04-02
145737014	465669	1	adf	9/26/2005 14:49:18	OM_9-26-2005_14-04-02
145737015	465669	1	adf	9/26/2005 14:50:11	OM_9-26-2005_14-04-02
145737016	465669	1	adf	9/26/2005 14:51:03	OM_9-26-2005_14-04-02
1200943201	465671	1	adf	9/26/2005 14:51:57	OM_9-26-2005_14-04-02
1200943202	465671	1	adf	9/26/2005 14:52:50	OM_9-26-2005_14-04-02
CCV		1	adf	9/26/2005 14:53:46	OM_9-26-2005_14-04-02
CCB		1	adf	9/26/2005 14:55:40	OM_9-26-2005_14-04-02
145318001	465671	1	adf	9/26/2005 14:57:40	OM_9-26-2005_14-04-02
145318002	465671	1	adf	9/26/2005 14:58:36	OM_9-26-2005_14-04-02
145318003	465671	1	adf	9/26/2005 14:59:32	OM_9-26-2005_14-04-02
145423001	465671	1	adf	9/26/2005 15:00:29	OM_9-26-2005_14-04-02
1200943203	465671	1	adf	9/26/2005 15:01:26	OM_9-26-2005_14-04-02
1200943204	465671	1	adf	9/26/2005 15:02:22	OM_9-26-2005_14-04-02
1200944903	465671	1	adf	9/26/2005 15:03:18	OM_9-26-2005_14-04-02
145423002	465671	1	adf	9/26/2005 15:04:13	OM_9-26-2005_14-04-02
145423003	465671	1	adf	9/26/2005 15:05:07	OM_9-26-2005_14-04-02
145579001	465671	1	adf	9/26/2005 15:05:59	OM_9-26-2005_14-04-02
CCV		1	adf	9/26/2005 15:06:51	OM_9-26-2005_14-04-02
CCB		1	adf	9/26/2005 15:08:42	OM_9-26-2005_14-04-02

1200943205	465671	1	adf	9/26/2005 15:10:30	OM_9-26-2005_14-04-02
1200943206	465671	1	adf	9/26/2005 15:11:23	OM_9-26-2005_14-04-02
1200944904	465671	1	adf	9/26/2005 15:12:15	OM_9-26-2005_14-04-02
145579002	465671	1	adf	9/26/2005 15:13:07	OM_9-26-2005_14-04-02
145579003	465671	1	adf	9/26/2005 15:14:01	OM_9-26-2005_14-04-02
145579004	465671	1	adf	9/26/2005 15:14:59	OM_9-26-2005_14-04-02
145739001	465671	1	adf	9/26/2005 15:15:55	OM_9-26-2005_14-04-02
145739002	465671	1	adf	9/26/2005 15:16:53	OM_9-26-2005_14-04-02
145739003	465671	1	adf	9/26/2005 15:17:49	OM_9-26-2005_14-04-02
145782001	465671	1	adf	9/26/2005 15:18:45	OM_9-26-2005_14-04-02
CCV		1	adf	9/26/2005 15:19:41	OM_9-26-2005_14-04-02
CCB		1	adf	9/26/2005 15:21:34	OM_9-26-2005_14-04-02
145782002	465671	1	adf	9/26/2005 15:23:28	OM_9-26-2005_14-04-02
145784001	465671	1	adf	9/26/2005 15:24:22	OM_9-26-2005_14-04-02
1200943221	465671	1	adf	9/26/2005 15:25:20	OM_9-26-2005_14-04-02
1200943222	465671	1	adf	9/26/2005 15:26:15	OM_9-26-2005_14-04-02
1200943223	465671	1	adf	9/26/2005 15:27:11	OM_9-26-2005_14-04-02
145892001	465671	1	adf	9/26/2005 15:28:07	OM_9-26-2005_14-04-02
145892002	465671	1	adf	9/26/2005 15:29:03	OM_9-26-2005_14-04-02
CCV		1	adf	9/26/2005 15:30:00	OM_9-26-2005_14-04-02
CCB		1	adf	9/26/2005 15:31:54	OM_9-26-2005_14-04-02

Author: adf Date : 9/26/2005

Original Run Filename: OM_9-26-2005_14-04-02.OMN created 9/26/2005 14:04:02
Original Run Author's Signature: [adf]
Current Run Filename: OM_9-26-2005_14-04-02.OMN last modified 9/26/2005 15:33:01
Current Run Author's Signature: [adf]

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN050926-01	1	S1	200	7.74	9/26/2005@14:07:25			200 ppb
WCN050926-02	1	S2	150	5.68	9/26/2005@14:08:17			150 ppb
WCN050926-03	1	S3	100	4.01	9/26/2005@14:09:09			100 ppb
WCN050926-04	1	S4	50.0	1.99	9/26/2005@14:10:02			50 ppb
WCN050926-05	1	S5	10.0	0.419	9/26/2005@14:10:55			10 ppb
WCN050926-06	1	S6	5.00	0.223	9/26/2005@14:11:49			CRDL 5.0 ppb
0.0	1	S7	0.00	0.0258	9/26/2005@14:12:43			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99970 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN050926-07	1	S8	158	6.11	9/26/2005@14:14:33			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	5.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	5.4 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB/CCB	1	S7	-1.22	-0.00155	9/26/2005@14:16:23			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.22 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.22 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN050926-06	1	S6	4.28	0.210	9/26/2005@14:18:13			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	4.28 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	4.28 > 2.50					
		Message	CRDL Passed					
		Action	Continue					
1200943189|465669|MB	1	1	-0.500	0.0261	9/26/2005@14:20:03			
1200943196||LCS	1	2	41.2	1.63	9/26/2005@14:20:56		50.00	
145440001	1	3	-0.361	0.0314	9/26/2005@14:21:49			
1200943190||DUP	1	4	-0.373	0.0310	9/26/2005@14:22:42			
1200943192||MS	1	5	101	3.92	9/26/2005@14:23:35			
1200943194||MSD	1	6	80.5	3.14	9/26/2005@14:24:28			
145529001	1	7	-0.00834	0.0449	9/26/2005@14:25:21			
145529002	1	8	5.52	0.257	9/26/2005@14:26:14			
145529003	1	9	0.0468	0.0471	9/26/2005@14:27:06			
145529004	1	10	0.970	0.0825	9/26/2005@14:27:59			
WCN050926-03	1	S3	102	3.95	9/26/2005@14:28:51			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								

		Result:	1.9 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-0.580	0.0230	9/26/2005@14:30:41			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.580 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.580 > -5.00					
		Message	CCB Passed					
		Action	Continue					
145529005	1	11	1.92	0.119	9/26/2005@14:32:29			
145529006	1	12	2.92	0.157	9/26/2005@14:33:21			
145529007	1	13	3.33	0.173	9/26/2005@14:34:13			
145529008	1	14	0.707	0.0724	9/26/2005@14:35:04			
145529009	1	15	0.396	0.0604	9/26/2005@14:35:57			
145529010	1	16	-0.669	0.0196	9/26/2005@14:36:50			
145529011	1	17	0.289	0.0563	9/26/2005@14:37:44			
145529012	1	18	0.966	0.0823	9/26/2005@14:38:37			
145529013	1	19	0.815	0.0765	9/26/2005@14:39:31			
145529014	1	20	-0.306	0.0335	9/26/2005@14:40:24			
WCN050926-03	1	S3	102	3.97	9/26/2005@14:41:16			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-0.793	0.0148	9/26/2005@14:43:06			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.793 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.793 > -5.00					
		Message	CCB Passed					
		Action	Continue					
145727001	1	21	-0.576	0.0232	9/26/2005@14:44:55			
145737013	1	22	0.141	0.0507	9/26/2005@14:45:48			
1200943191||DUP	1	23	1.48	0.102	9/26/2005@14:46:41			
1200943193||MS	1	24	78.2	3.04	9/26/2005@14:47:33			
1200943195||MSD	1	25	91.3	3.55	9/26/2005@14:48:26			
145737014	1	26	-0.421	0.0291	9/26/2005@14:49:18			
145737015	1	27	0.0355	0.0466	9/26/2005@14:50:11			
145737016	1	28	-0.356	0.0316	9/26/2005@14:51:03			
1200943201|465671|MB	1	29	2.17	0.128	9/26/2005@14:51:57			
1200943202||LCS	1	30	49.8	1.96	9/26/2005@14:52:50			
WCN050926-03	1	S3	102	3.95	9/26/2005@14:53:46			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-0.573	0.0233	9/26/2005@14:55:40			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.573 < 5.00					
		Message	CCB Passed					

		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.573 > -5.00					
		Message	CCB Passed					
		Action	Continue					
145318001	1	31	-0.194	0.0378	9/26/2005@14:57:40			
145318002	1	32	-0.517	0.0254	9/26/2005@14:58:36			
145318003	1	33	1.05	0.0857	9/26/2005@14:59:32			
145423001	1	34	0.166	0.0516	9/26/2005@15:00:29			
1200943203||DUP	1	35	0.326	0.0578	9/26/2005@15:01:26			
1200943204||MS	1	36	103	4.01	9/26/2005@15:02:22			
1200944903||MSD	1	37	102	3.96	9/26/2005@15:03:18			
145423002	1	38	0.0271	0.0463	9/26/2005@15:04:13			
145423003	1	39	0.753	0.0742	9/26/2005@15:05:07			
145579001	1	40	1.44	0.101	9/26/2005@15:05:59			
WCN050926-03	1	S3	102	3.94	9/26/2005@15:06:51			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-0.993	0.00714	9/26/2005@15:08:42			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.993 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.993 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1200943205||DUP	1	41	1.85	0.116	9/26/2005@15:10:30			
1200943206||MS	1	42	104	4.04	9/26/2005@15:11:23			
1200944904||MSD	1	43	106	4.11	9/26/2005@15:12:15			
145579002	1	44	4.04	0.200	9/26/2005@15:13:07			
145579003	1	45	-0.00775	0.0450	9/26/2005@15:14:01			
145579004	1	46	0.274	0.0558	9/26/2005@15:14:59			
145739001	1	47	0.275	0.0558	9/26/2005@15:15:55			
145739002	1	48	0.439	0.0621	9/26/2005@15:16:53			
145739003	1	49	1.17	0.0902	9/26/2005@15:17:49			
145782001	1	50	-0.120	0.0407	9/26/2005@15:18:45			
WCN050926-03	1	S3	102	3.94	9/26/2005@15:19:41			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	1.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	1.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-0.647	0.0204	9/26/2005@15:21:34			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.647 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.647 > -5.00					
		Message	CCB Passed					
		Action	Continue					
145782002	1	51	0.128	0.0502	9/26/2005@15:23:28			
145784001	1	52	0.490	0.0641	9/26/2005@15:24:22			
1200943221||DUP	1	53	0.549	0.0663	9/26/2005@15:25:20			

1200943222||MS	1	54	97.2	3.78	9/26/2005@15:26:15			
1200943223||MSD	1	55	96.3	3.74	9/26/2005@15:27:11			
145892001	1	56	1.39	0.0988	9/26/2005@15:28:07			
145892002	1	57	1.39	0.0985	9/26/2005@15:29:03			
WCN050926-03	1	S3	102	3.94	9/26/2005@15:30:00			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.6 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.6 < 10.0					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	-0.706	0.0182	9/26/2005@15:31:54			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.706 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.706 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_9-26-2005_14-04-02.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Author: adf Date : 9/26/2005

Channel 1: Current View

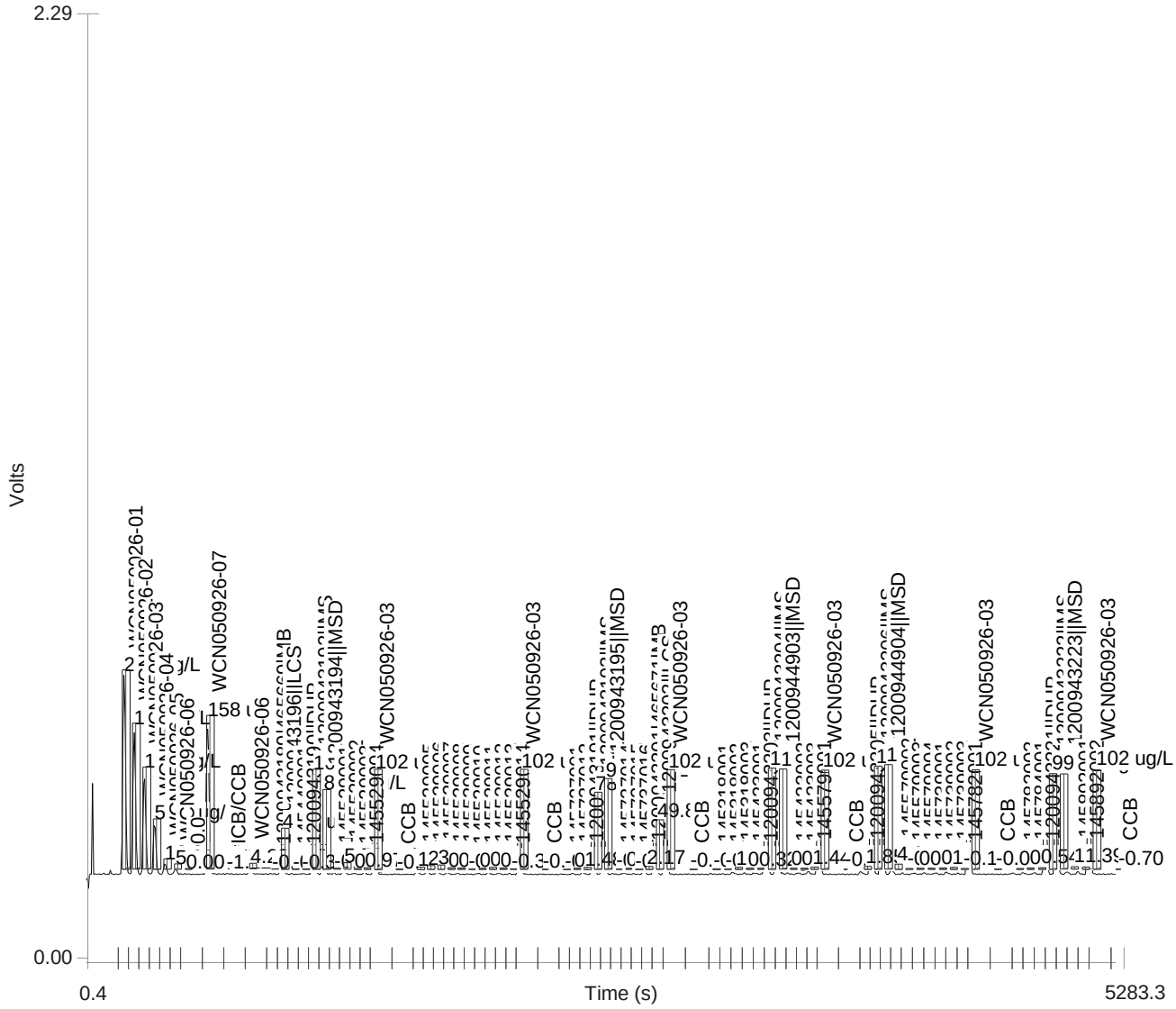
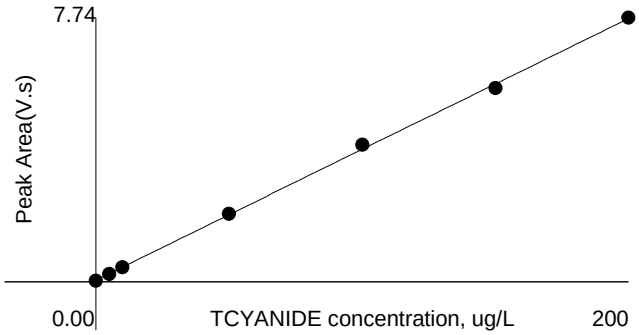


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	7.74	0.481	-0.3	9/26/2005	14:08:27
2	150	1	5.68	0.352	2.1	9/26/2005	14:09:19
3	100	1	4.01	0.247	-3.2	9/26/2005	14:10:12
4	50.0	1	1.99	0.122	-1.1	9/26/2005	14:11:05
5	10.0	1	0.419	0.0248	2.7	9/26/2005	14:11:58
6	5.00	1	0.223	0.0129	6.6	9/26/2005	14:12:51
7	0.00	1	0.0258	0.00187		9/26/2005	14:13:46

Author: adf Date : 9/26/2005

Figure 1: TCYANIDE



Area = 0.0384 * Conc + 0.0470
Conc = 26.1 * Area - 1.18
Correlation Coefficient (r) = 0.99970

No Weighting

Ion Chromatography

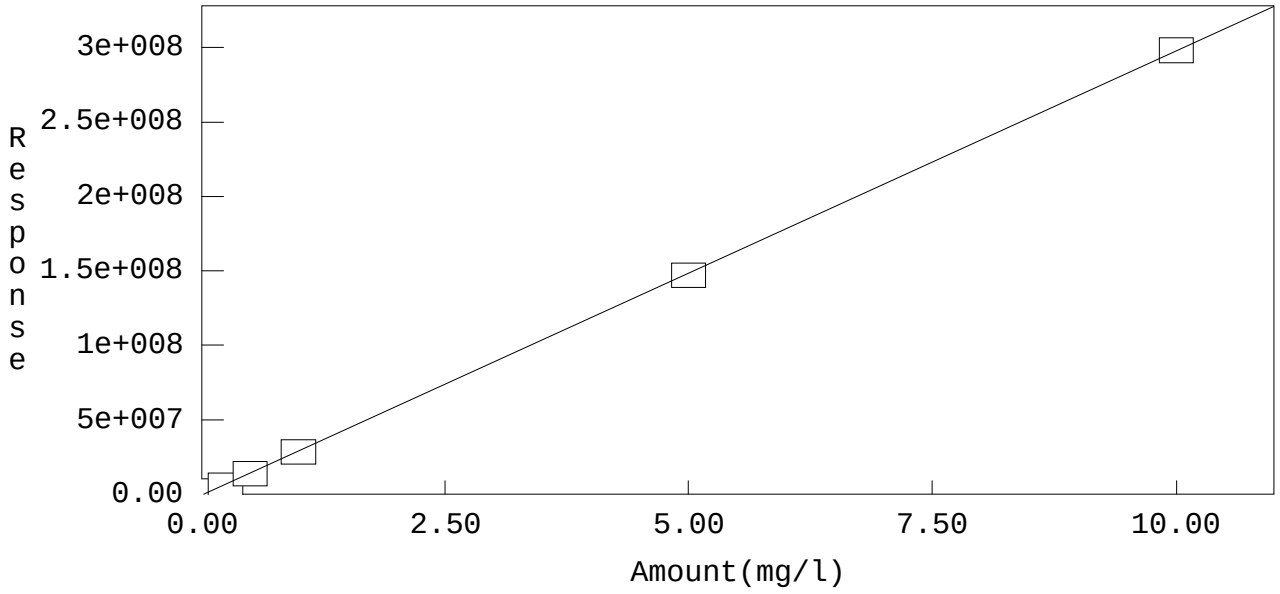
METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			MAR1	08/30/2005 08:46:32	AZH0KC01.R01
WIC050830-02ICV:1		1	MAR1	08/30/2005 09:07:01	AZH0KC01.R02
ICB:			MAR1	08/30/2005 09:27:29	AZH0KC01.R03
AUTOCAL7:			MAR1	08/30/2005 09:47:59	AZH0KC01.R04
AUTOCAL6:			MAR1	08/30/2005 10:08:29	AZH0KC01.R05
AUTOCAL5:			MAR1	08/30/2005 10:28:58	AZH0KC01.R06
AUTOCAL4:			MAR1	08/30/2005 10:49:28	AZH0KC01.R07
AUTOCAL3:			MAR1	08/30/2005 11:09:58	AZH0KC01.R08
AUTOCAL2:			MAR1	08/30/2005 11:30:28	AZH0KC01.R09
AUTOCAL1:			MAR1	08/30/2005 11:50:49	AZH0KC01.R10
WIC050830-02ICV:1		1	MAR1	08/30/2005 12:11:26	AZH0KC01.R11
ICB:			MAR1	08/30/2005 12:31:54	AZH0KC01.R12
1200917959:2	455216	1	MAR1	08/30/2005 12:52:37	AZH0KC01.R13
1200917962:2	455216	10	MAR1	08/30/2005 13:13:06	AZH0KC01.R14
1200917963:2	455216	10	MAR1	08/30/2005 13:33:25	AZH0KC01.R15
143447001:2	455216	1	MAR1	08/30/2005 13:53:54	AZH0KC01.R16
1200917960:2	455216	1	MAR1	08/30/2005 14:14:20	AZH0KC01.R17
1200917961:2	455216	1	MAR1	08/30/2005 14:34:50	AZH0KC01.R18
143491001:2	455216	1	MAR1	08/30/2005 14:55:13	AZH0KC01.R19
143882001:2	455216	1	MAR1	08/30/2005 15:15:41	AZH0KC01.R20
WIC050830-02CCV:1		1	MAR1	08/30/2005 15:36:14	AZH0KC01.R21
CCB:			MAR1	08/30/2005 15:56:34	AZH0KC01.R22
1200917831:1	455156	1	MAR1	08/30/2005 16:16:52	AZH0KC01.R23
1200917842:1	455156	1	MAR1	08/30/2005 16:37:16	AZH0KC01.R24
142820001:1	455156	1	MAR1	08/30/2005 16:57:45	AZH0KC01.R25
1200917832:1	455156	1	MAR1	08/30/2005 17:18:14	AZH0KC01.R26
1200917837:1	455156	1	MAR1	08/30/2005 17:38:43	AZH0KC01.R27
142825001:1	455156	1	MAR1	08/30/2005 17:59:11	AZH0KC01.R28
142825002:1	455156	1	MAR1	08/30/2005 18:19:40	AZH0KC01.R29
142825003:1	455156	1	MAR1	08/30/2005 18:40:09	AZH0KC01.R30
WIC050830-02CVH:1		1	MAR1	08/30/2005 19:00:38	AZH0KC01.R31
CCB:			MAR1	08/30/2005 19:21:06	AZH0KC01.R32
143031001:1	455156	1	MAR1	08/30/2005 19:41:35	AZH0KC01.R33
1200917833:1	455156	1	MAR1	08/30/2005 20:02:04	AZH0KC01.R34
1200917838:1	455156	1	MAR1	08/30/2005 20:22:32	AZH0KC01.R35
143033005:1	455156	1	MAR1	08/30/2005 20:43:01	AZH0KC01.R36
143107001:1	455156	1	MAR1	08/30/2005 21:03:30	AZH0KC01.R37
143107003:1	455156	1	MAR1	08/30/2005 21:24:00	AZH0KC01.R38
143519001:1	455156	1	MAR1	08/30/2005 21:44:30	AZH0KC01.R39
143519002:1	455156	1	MAR1	08/30/2005 22:04:59	AZH0KC01.R40
143666001:1	455156	1	MAR1	08/30/2005 22:25:28	AZH0KC01.R41
143666007:1	455156	1	MAR1	08/30/2005 22:45:58	AZH0KC01.R42
WIC050830-02CCV:1		1	MAR1	08/30/2005 23:06:27	AZH0KC01.R43
CCB:			MAR1	08/30/2005 23:26:55	AZH0KC01.R44
1200917851:1	455172	1	MAR1	08/30/2005 23:47:24	AZH0KC01.R45
1200917858:1	455172	1	MAR1	08/31/2005 00:07:53	AZH0KC01.R46
143340001:1	455172	1	MAR1	08/31/2005 00:28:22	AZH0KC01.R47
1200917853:1	455172	1	MAR1	08/31/2005 00:48:50	AZH0KC01.R48
1200917856:1	455172	1	MAR1	08/31/2005 01:09:19	AZH0KC01.R49
143571001:1	455172	1	MAR1	08/31/2005 01:29:48	AZH0KC01.R50
1200917854:1	455172	1	MAR1	08/31/2005 01:50:17	AZH0KC01.R51
1200917857:1	455172	1	MAR1	08/31/2005 02:10:45	AZH0KC01.R52
143571002:1	455172	1	MAR1	08/31/2005 02:31:14	AZH0KC01.R53
143571003:1	455172	1	MAR1	08/31/2005 02:51:43	AZH0KC01.R54
WIC050830-02CVH:1		1	MAR1	08/31/2005 03:12:12	AZH0KC01.R55

```
CCB:                                MAR1  08/31/2005 03:32:40 AZH0KC01.R56
143582008:1          455172   1     MAR1  08/31/2005 03:53:09 AZH0KC01.R57
1200917852:1         455172   1     MAR1  08/31/2005 04:13:38 AZH0KC01.R58
1200917855:1         455172   1     MAR1  08/31/2005 04:34:07 AZH0KC01.R59
WIC050830-02CCV:1             1     MAR1  08/31/2005 04:54:35 AZH0KC01.R60
CCB:                                MAR1  08/31/2005 05:15:04 AZH0KC01.R61
```

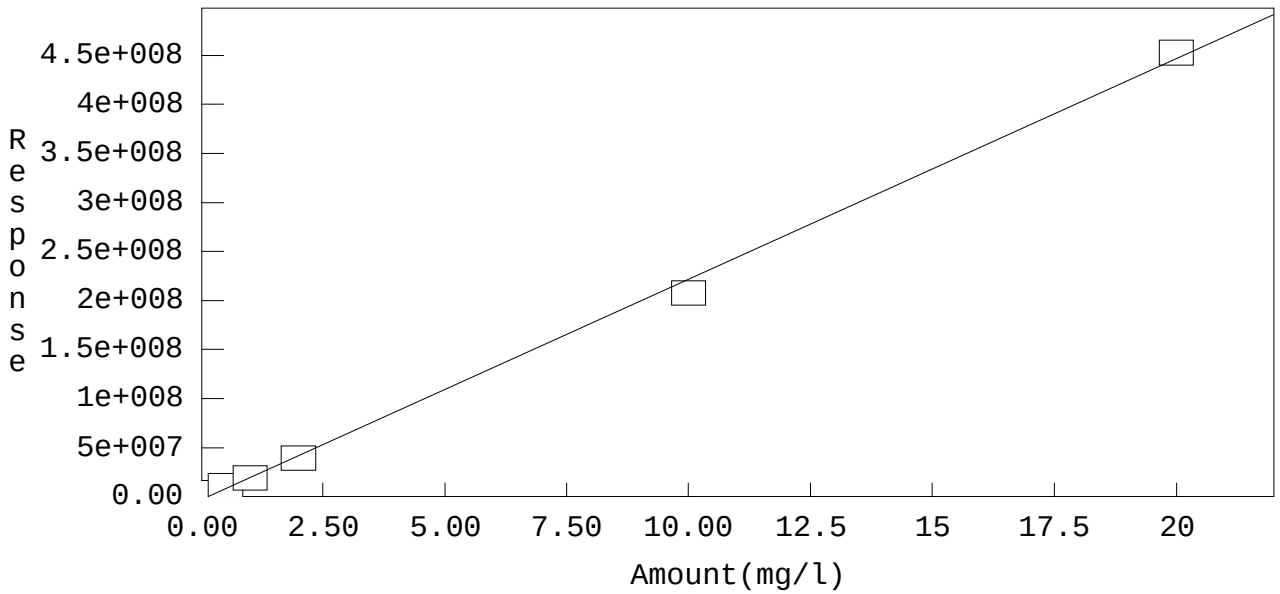
Method: AUG30.MET - Last Updated: 13:39 on Tue, 30 Aug 2005

Component: Fluoride
Fit Type: Linear
r^2 = 0.999956
Amt = Resp * 3.353e-008 + 0.03243
Resp = Amt * 2.982e+007 + -9.671e+005
Standardization: External
Calibration: Area



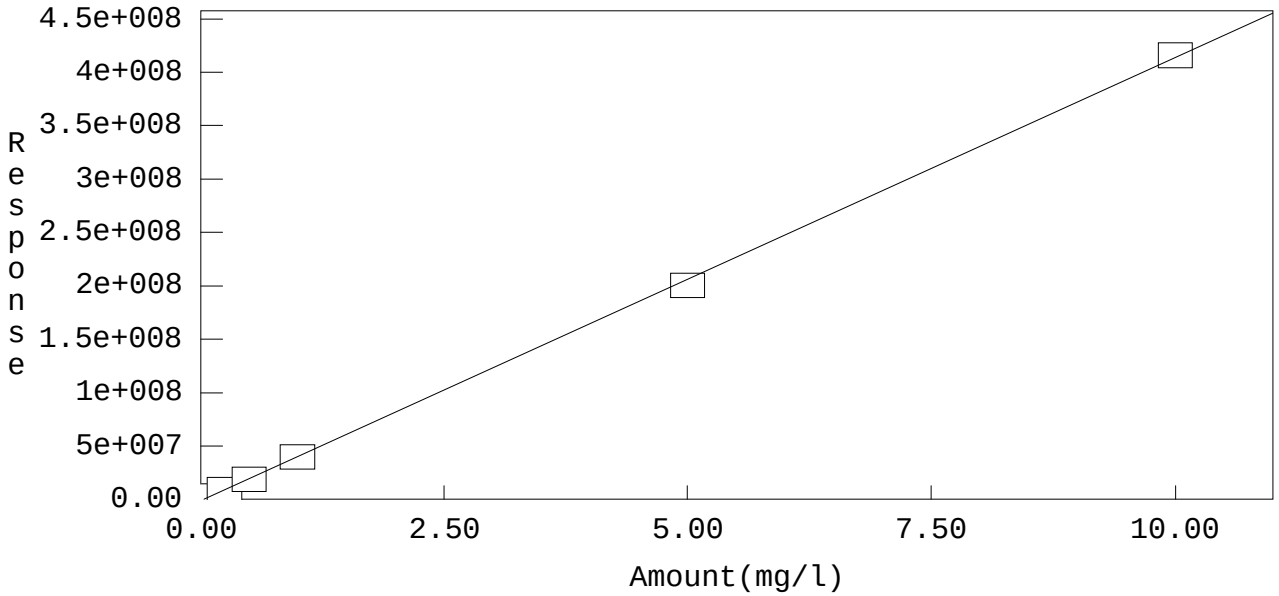
Method: C:\DX\METHOD\AUG30.MET

Component: Chloride
Fit Type: Linear
r^2 = 0.998531
Amt = Resp * 4.449e-008 + 0.1409
Resp = Amt * 2.248e+007 + -3.166e+006
Standardization: External
Calibration: Area



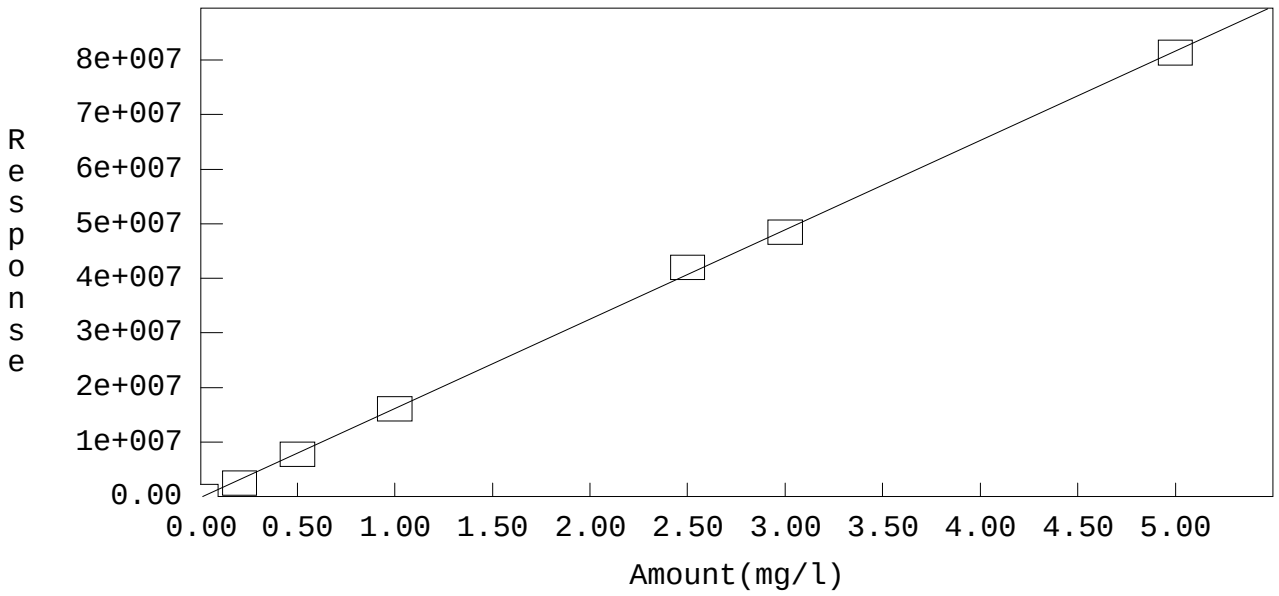
Method: C:\DX\METHOD\AUG30.MET

Component: Nitrite-N
Fit Type: Linear
r^2 = 0.999747
Amt = Resp * 2.41e-008 + 0.0372
Resp = Amt * 4.149e+007 + -1.544e+006
Standardization: External
Calibration: Area



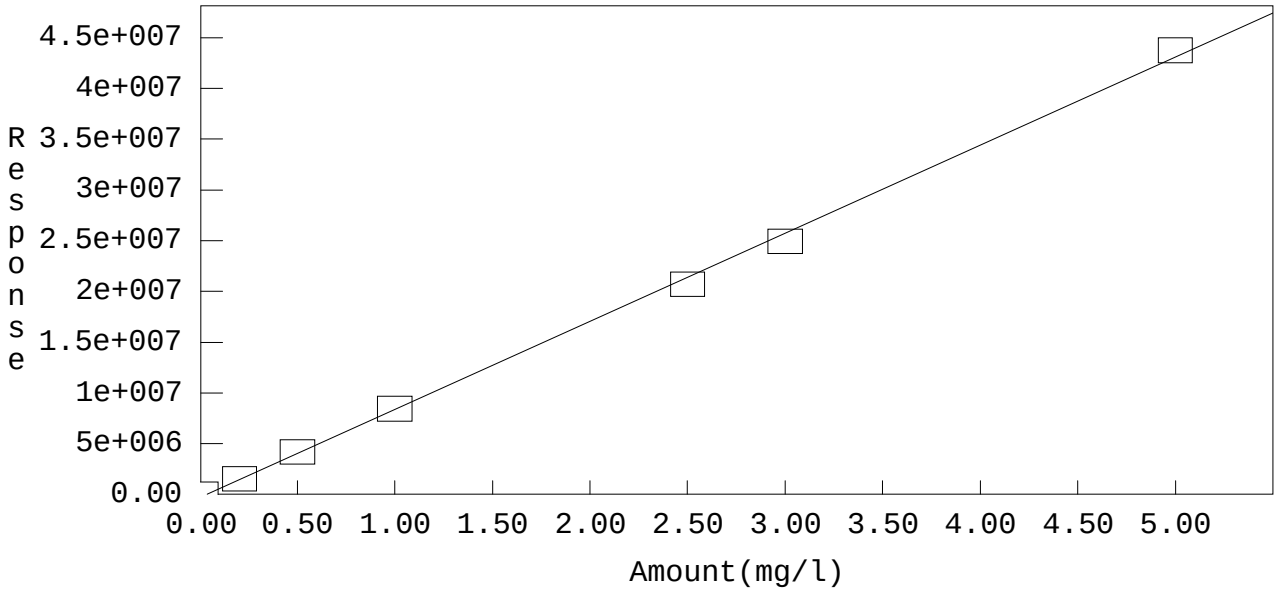
Method: C:\DX\METHOD\AUG30.MET

Component: O-Phosphate-P
Fit Type: Linear
r^2 = 0.999544
Amt = Resp * 6.101e-008 + 0.01646
Resp = Amt * 1.639e+007 + -2.698e+005
Standardization: External
Calibration: Area



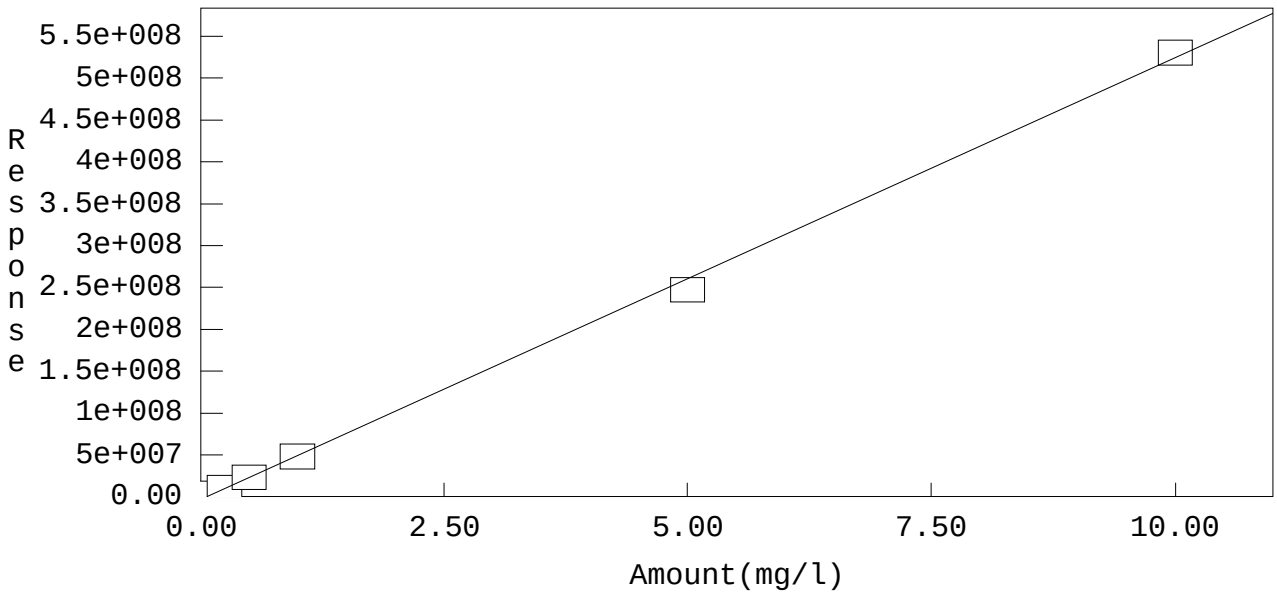
Method: C:\DX\METHOD\AUG30.MET

Component: Bromide
Fit Type: Linear
r^2 = 0.998913
Amt = Resp * 1.153e-007 + 0.03842
Resp = Amt * 8.671e+006 + -3.331e+005
Standardization: External
Calibration: Area



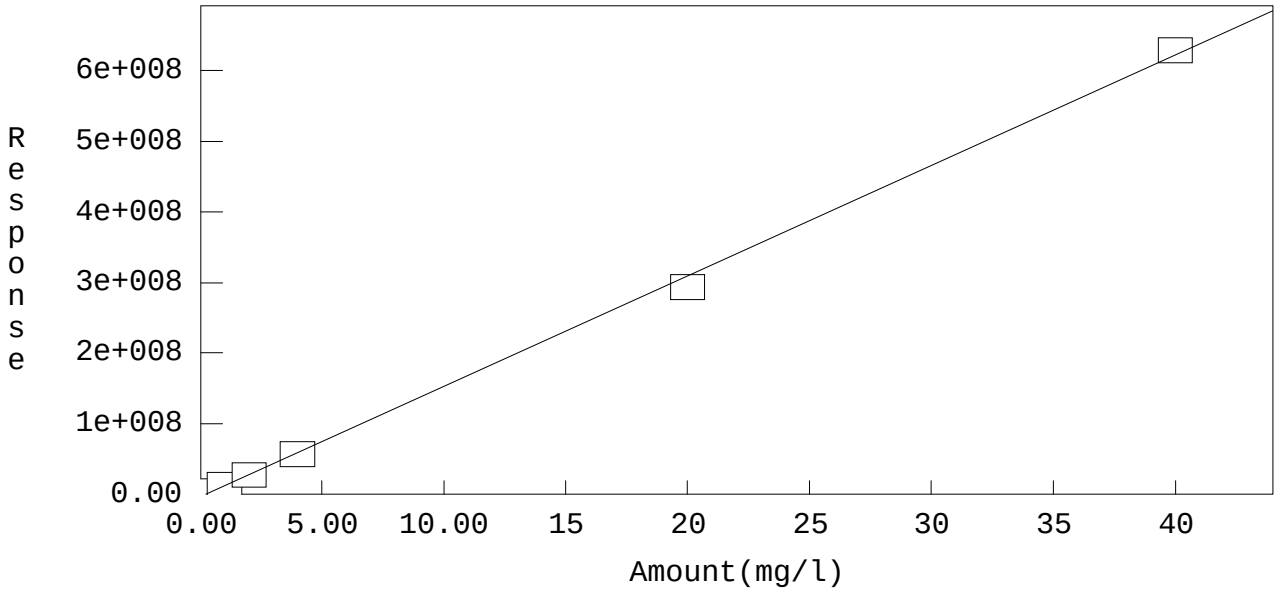
Method: C:\DX\METHOD\AUG30.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.998991
Amt = Resp * 1.894e-008 + 0.07029
Resp = Amt * 5.279e+007 + -3.71e+006
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\AUG30.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999094
Amt = Resp * 6.391e-008 + 0.26
Resp = Amt * 1.565e+007 + -4.068e+006
Standardization: External
Calibration: Area

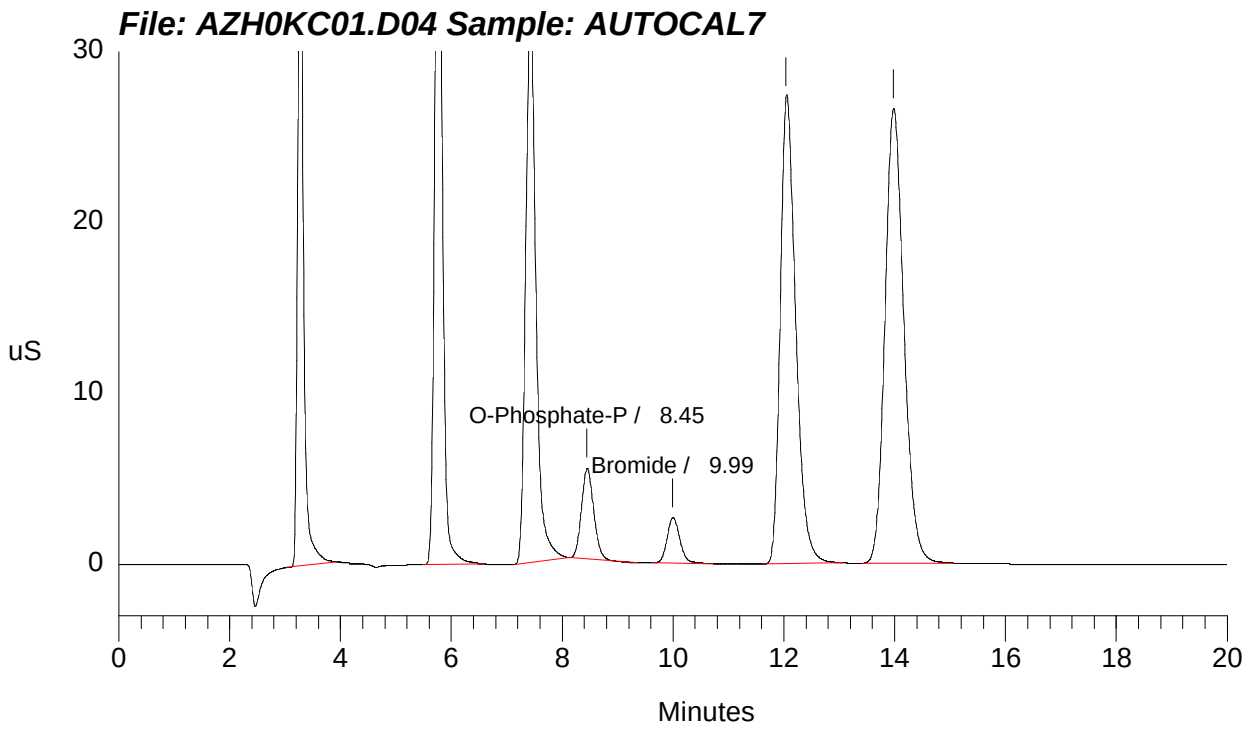


```
================================================================================
| Sample Name: AUTOCAL7                          Date: 08/30/2005 09:47:59     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D04                                     |
| Method     : C:\DX\METHOD\AUG29.MET                                          |
| ACI Address: 1  System: 1  Inject#: 4                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.27 Fluoride                10.000   41170689  297920298    1   0.00
   2   5.76 Chloride                20.000   49038140  452663222    1   0.00
   3   7.42 Nitrite-N               10.000   31824493  415861967    1   0.00
   4   8.45 O-Phosphate-P            5.000    5290146   81340540    1   0.00
   5   9.99 Bromide                  5.000    2645932   43724687    1   0.00
   6  12.04 Nitrate-N               10.000   27299023  530382542    1   0.00
   7  13.98 Sulfate                 40.000   26561517  628799912    1   0.00
                                ----------------------------------
                         Totals     100.000  183829940 2450693168
```



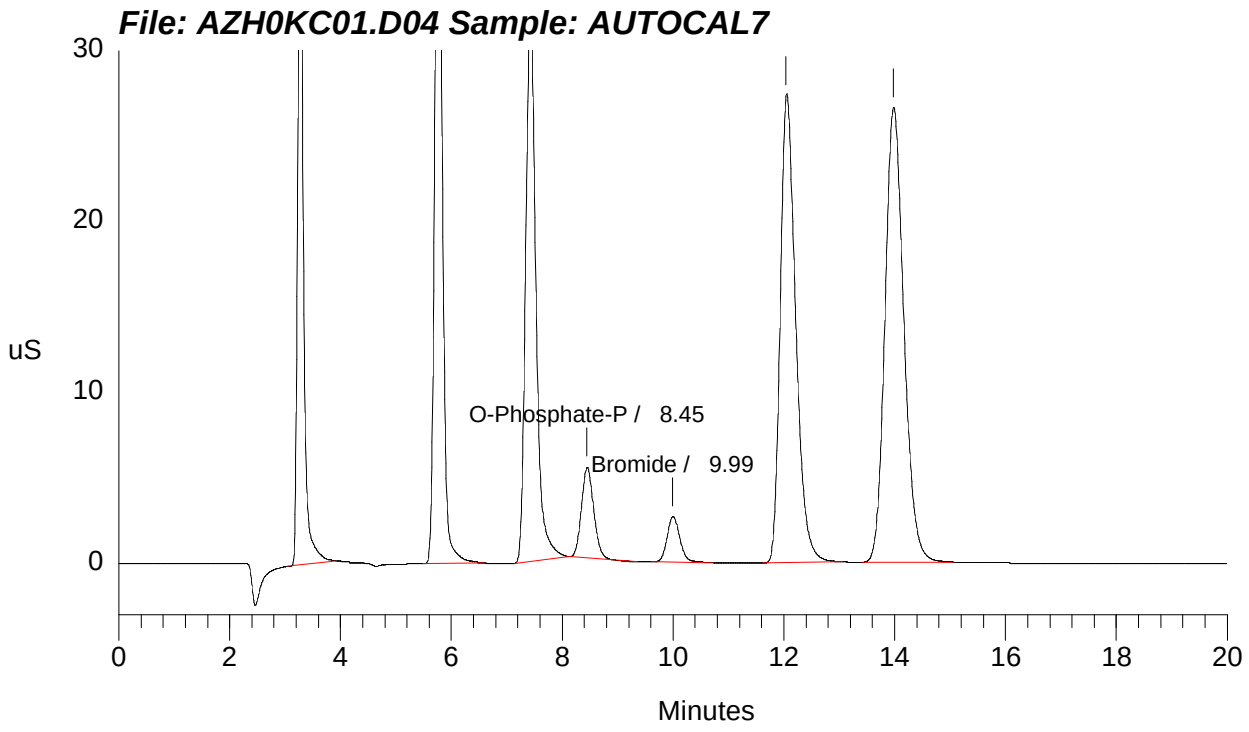
Data Reprocessed On 08/30/2005 11:49:40

Sample Name: AUTOCAL7		Date: 08/30/2005 09:47:59	
Data File : C:\TMP\HORIZON\AZH0KC01.D04			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 4		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	10.000	41170689	297920298	1	0.00
2	5.76	Chloride	20.000	49038140	452663222	1	0.00
3	7.42	Nitrite-N	10.000	31824493	415861967	1	0.00
4	8.45	O-Phosphate-P	5.000	5290146	81340540	1	0.00
5	9.99	Bromide	5.000	2645932	43724687	1	0.00
6	12.04	Nitrate-N	10.000	27299023	530382542	1	0.00
7	13.98	Sulfate	40.000	26561517	628799912	1	0.00
		Totals	100.000	183829940	2450693168		



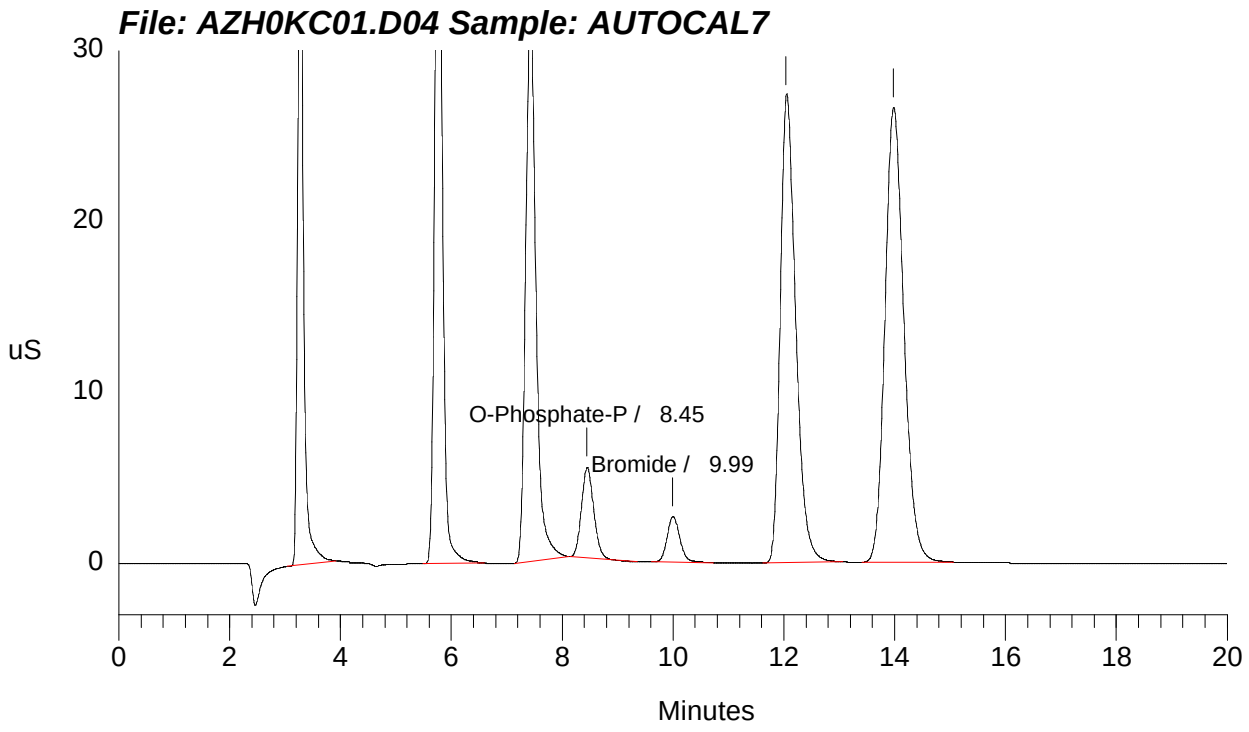
Data Reprocessed On 08/30/2005 11:49:57

Sample Name: AUTOCAL7		Date: 08/30/2005 09:47:59	
Data File : C:\TMP\HORIZON\AZH0KC01.D04			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 4		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	10.000	41170689	297920298	1	0.00
2	5.76	Chloride	20.000	49038140	452663222	1	0.00
3	7.42	Nitrite-N	10.000	31824493	415861967	1	0.00
4	8.45	O-Phosphate-P	5.000	5290146	81340540	1	0.00
5	9.99	Bromide	5.000	2645932	43724687	1	0.00
6	12.04	Nitrate-N	10.000	27299023	530382542	1	0.00
7	13.98	Sulfate	40.000	26561517	628799912	1	0.00
		Totals	100.000	183829940	2450693168		



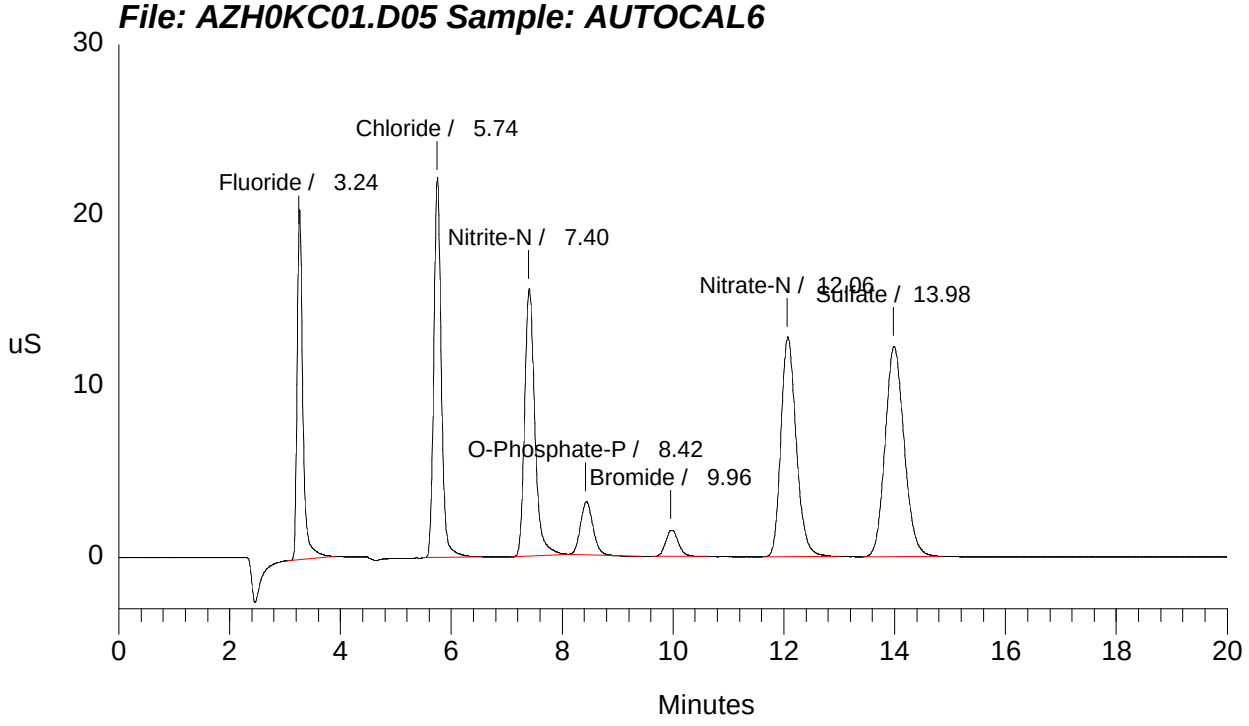
```
================================================================================
| Sample Name: AUTOCAL6                          Date: 08/30/2005 10:08:29     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D05                                     |
| Method     : C:\DX\METHOD\AUG29.MET                                          |
| ACI Address: 1  System: 1  Inject#: 5                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.000	18988355	146878841	1	0.00
2	5.74	Chloride	10.000	22035027	208103998	1	0.00
3	7.40	Nitrite-N	5.000	15579975	200663649	1	0.00
4	8.42	O-Phosphate-P	3.000	3066693	48421213	1	0.00
5	9.96	Bromide	3.000	1555463	24921896	1	0.00
6	12.06	Nitrate-N	5.000	12810638	246907378	1	0.00
7	13.98	Sulfate	20.000	12268021	293878092	1	0.00
		Totals	51.000	86304171	1169775067		

File: AZH0KC01.D05 Sample: AUTOCAL6



Data Reprocessed On 08/30/2005 11:49:40

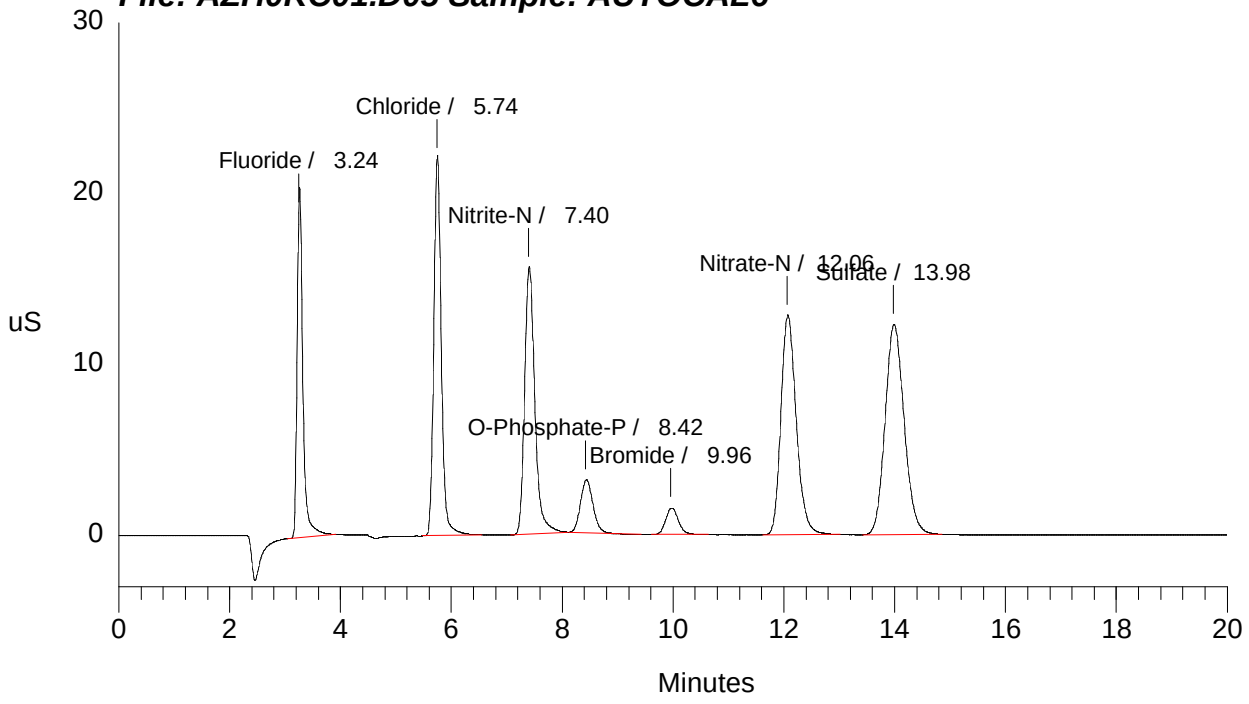
Sample Name: AUTOCAL6		Date: 08/30/2005 10:08:29	
Data File : C:\TMP\HORIZON\AZH0KC01.D05			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 5		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.000	18988355	146878841	1	0.00
2	5.74	Chloride	10.000	22035027	208103998	1	0.00
3	7.40	Nitrite-N	5.000	15579975	200663649	1	0.00
4	8.42	O-Phosphate-P	3.000	3066693	48421213	1	0.00
5	9.96	Bromide	3.000	1555463	24921896	1	0.00
6	12.06	Nitrate-N	5.000	12810638	246907378	1	0.00
7	13.98	Sulfate	20.000	12268021	293878092	1	0.00
		Totals	51.000	86304171	1169775067		

File: AZH0KC01.D05 Sample: AUTOCAL6



Data Reprocessed On 08/30/2005 11:50:00

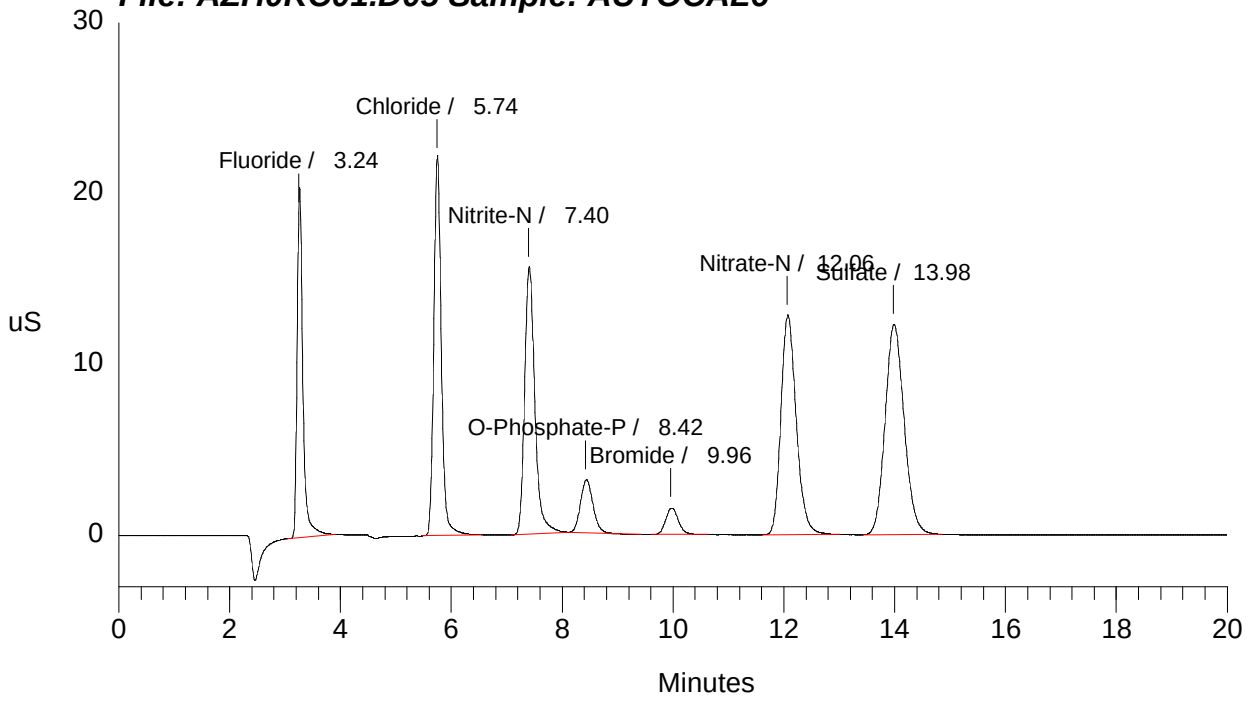
Sample Name: AUTOCAL6		Date: 08/30/2005 10:08:29	
Data File : C:\TMP\HORIZON\AZH0KC01.D05			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 5		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.000	18988355	146878841	1	0.00
2	5.74	Chloride	10.000	22035027	208103998	1	0.00
3	7.40	Nitrite-N	5.000	15579975	200663649	1	0.00
4	8.42	O-Phosphate-P	3.000	3066693	48421213	1	0.00
5	9.96	Bromide	3.000	1555463	24921896	1	0.00
6	12.06	Nitrate-N	5.000	12810638	246907378	1	0.00
7	13.98	Sulfate	20.000	12268021	293878092	1	0.00
		Totals	51.000	86304171	1169775067		

File: AZH0KC01.D05 Sample: AUTOCAL6



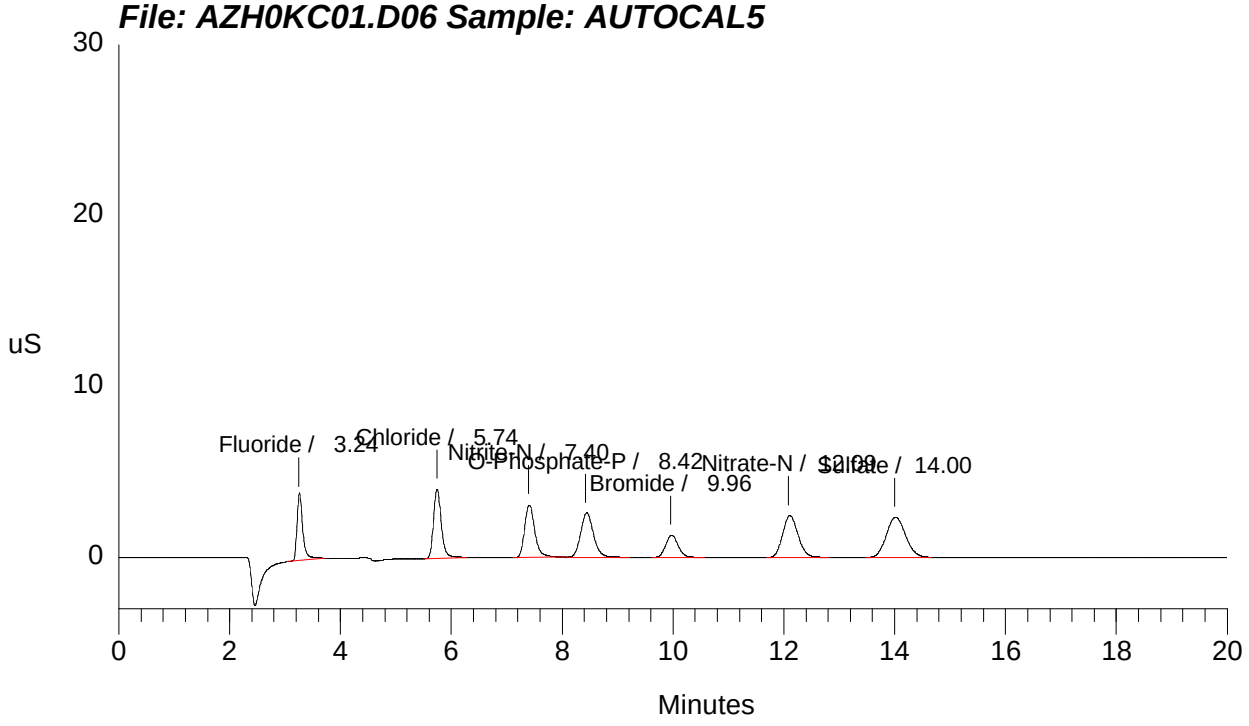
```
================================================================================
| Sample Name: AUTOCAL5                          Date: 08/30/2005 10:28:58     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D06                                     |
| Method     : C:\DX\METHOD\AUG29.MET                                          |
| ACI Address: 1  System: 1  Inject#: 6                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                1.000    3696800   28482519    1   0.00
   2   5.74 Chloride                2.000    4049654   39717602    1   0.00
   3   7.40 Nitrite-N               1.000    3076409   40096924    1   0.00
   4   8.42 O-Phosphate-P           2.500    2557342   42022000    1   0.00
   5   9.96 Bromide                 2.500    1303199   20694708    1   0.00
   6  12.09 Nitrate-N               1.000    2430362   47851306    1   0.00
   7  14.00 Sulfate                 4.000    2351616   57245758    1   0.00
                                ----------------------------------
                         Totals     14.000   19465383  276110817
```

File: AZH0KC01.D06 Sample: AUTOCAL5



Data Reprocessed On 08/30/2005 11:49:41

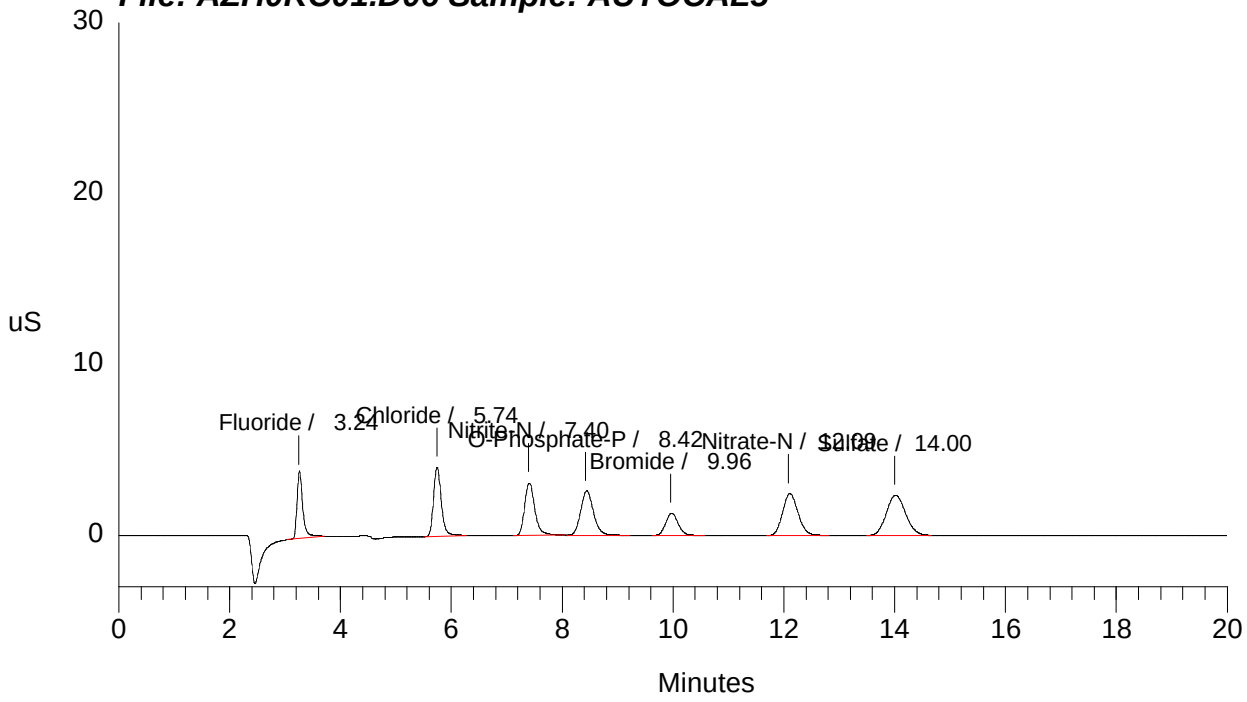
Sample Name: AUTOCAL5		Date: 08/30/2005 10:28:58	
Data File : C:\TMP\HORIZON\AZH0KC01.D06			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 6		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	1.000	3696800	28482519	1	0.00
2	5.74	Chloride	2.000	4049654	39717602	1	0.00
3	7.40	Nitrite-N	1.000	3076409	40096924	1	0.00
4	8.42	O-Phosphate-P	2.500	2557342	42022000	1	0.00
5	9.96	Bromide	2.500	1303199	20694708	1	0.00
6	12.09	Nitrate-N	1.000	2430362	47851306	1	0.00
7	14.00	Sulfate	4.000	2351616	57245758	1	0.00
		Totals	14.000	19465383	276110817		

File: AZH0KC01.D06 Sample: AUTOCAL5



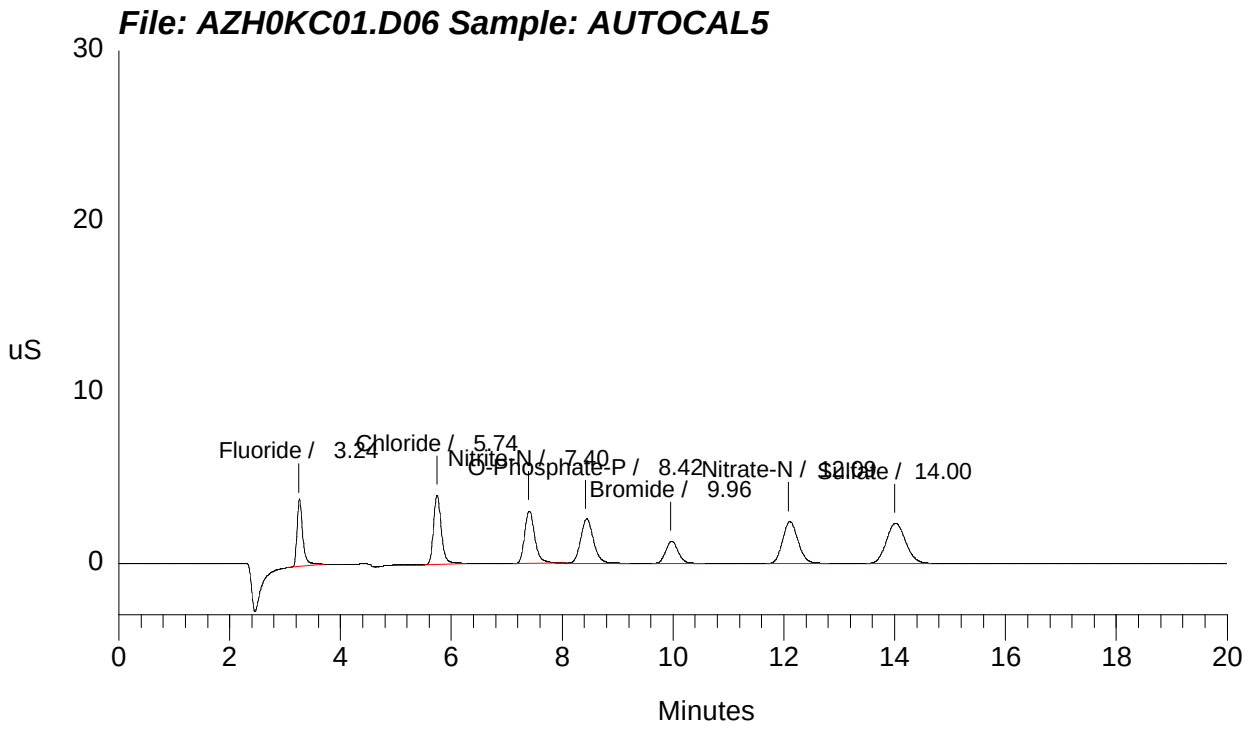
Data Reprocessed On 08/30/2005 11:50:01

Sample Name: AUTOCAL5		Date: 08/30/2005 10:28:58	
Data File : C:\TMP\HORIZON\AZH0KC01.D06			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 6		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	1.000	3696800	28482519	1	0.00
2	5.74	Chloride	2.000	4049654	39717602	1	0.00
3	7.40	Nitrite-N	1.000	3076409	40096924	1	0.00
4	8.42	O-Phosphate-P	2.500	2557342	42022000	1	0.00
5	9.96	Bromide	2.500	1303199	20694708	1	0.00
6	12.09	Nitrate-N	1.000	2430362	47851306	1	0.00
7	14.00	Sulfate	4.000	2351616	57245758	1	0.00
		Totals	14.000	19465383	276110817		



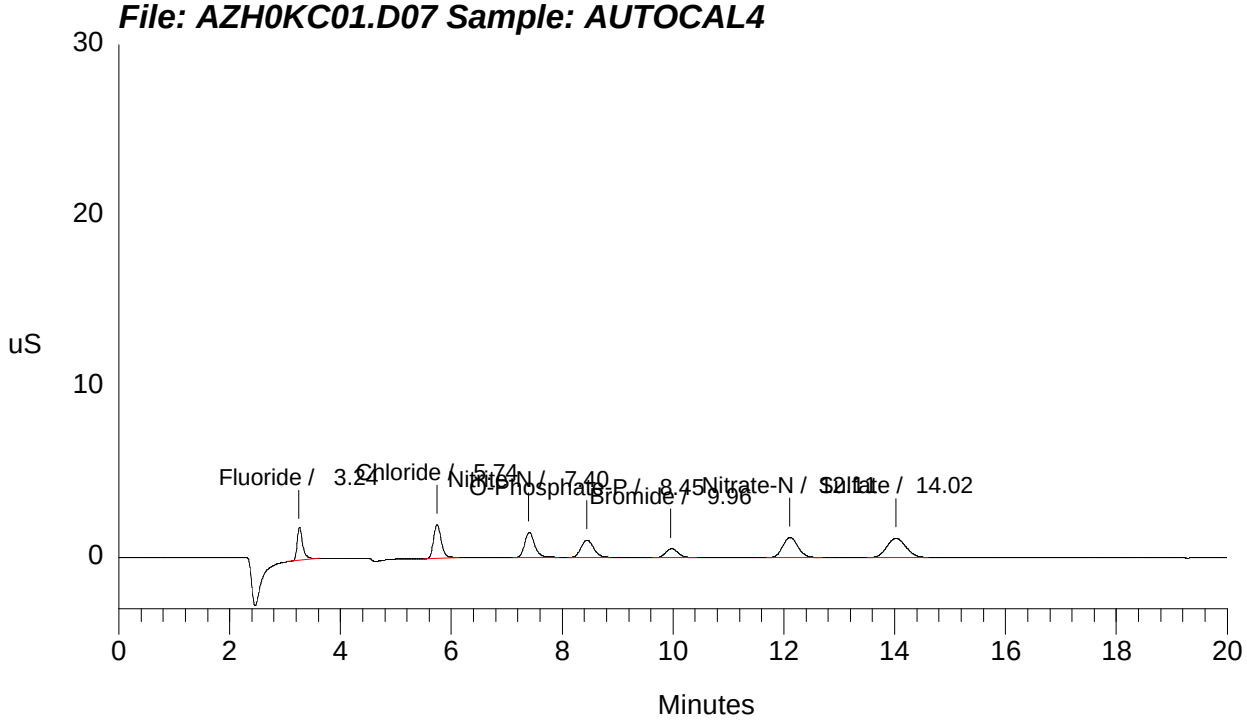
```
================================================================================
| Sample Name: AUTOCAL4                          Date: 08/30/2005 10:49:28     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D07                                     |
| Method     : C:\DX\METHOD\AUG29.MET                                          |
| ACI Address: 1  System: 1  Inject#: 7                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.500    1819246   13804194    1   0.00
   2   5.74 Chloride                 1.000    1960970   19357534    1   0.00
   3   7.40 Nitrite-N                0.500    1472671   18965702    1   0.00
   4   8.45 O-Phosphate-P            1.000    1017320   16060266    1   0.00
   5   9.96 Bromide                  1.000     527853    8418552    1   0.00
   6  12.11 Nitrate-N                0.500    1187977   23053800    1   0.00
   7  14.02 Sulfate                  2.000    1136725   27459226    1   0.00
                          ----------------------------------
                    Totals          6.500    9122761  127119274
```

File: AZH0KC01.D07 Sample: AUTOCAL4



Data Reprocessed On 08/30/2005 11:49:42

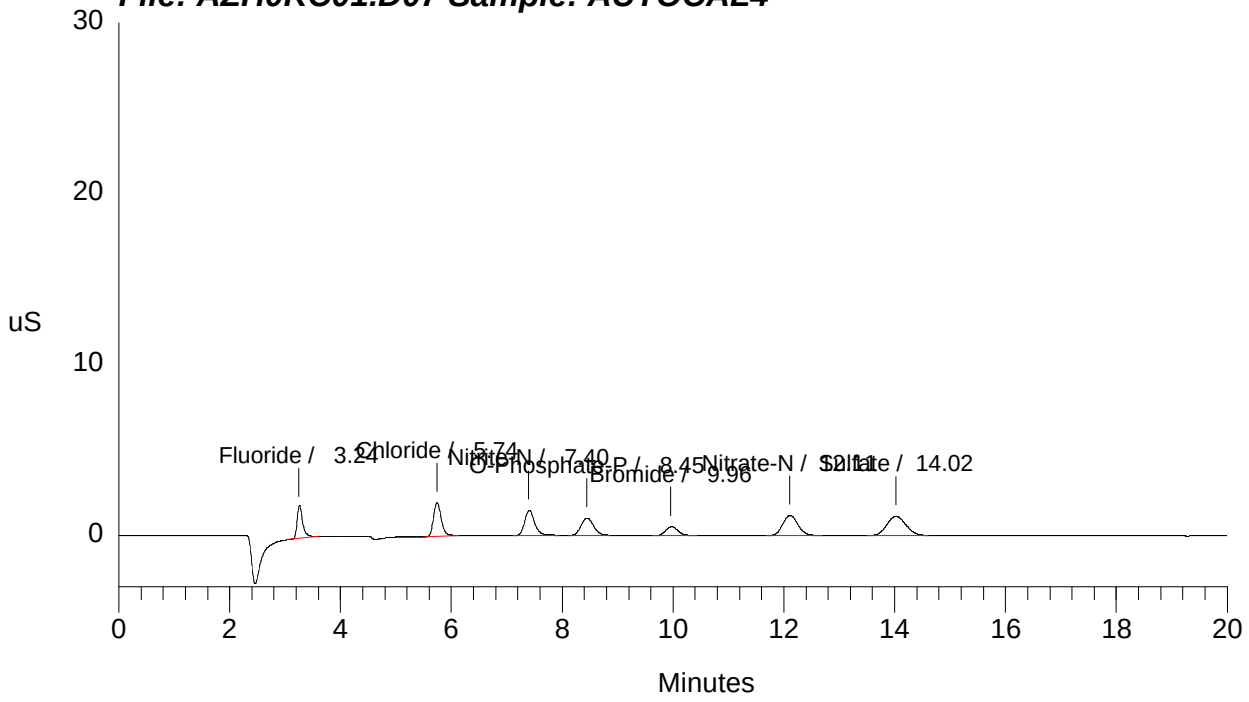
Sample Name: AUTOCAL4		Date: 08/30/2005 10:49:28	
Data File : C:\TMP\HORIZON\AZH0KC01.D07			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 7		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.500	1819246	13804194	1	0.00
2	5.74	Chloride	1.000	1960970	19357534	1	0.00
3	7.40	Nitrite-N	0.500	1472671	18965702	1	0.00
4	8.45	O-Phosphate-P	1.000	1017320	16060266	1	0.00
5	9.96	Bromide	1.000	527853	8418552	1	0.00
6	12.11	Nitrate-N	0.500	1187977	23053800	1	0.00
7	14.02	Sulfate	2.000	1136725	27459226	1	0.00
		Totals	6.500	9122761	127119274		

File: AZH0KC01.D07 Sample: AUTOCAL4



Data Reprocessed On 08/30/2005 11:50:02

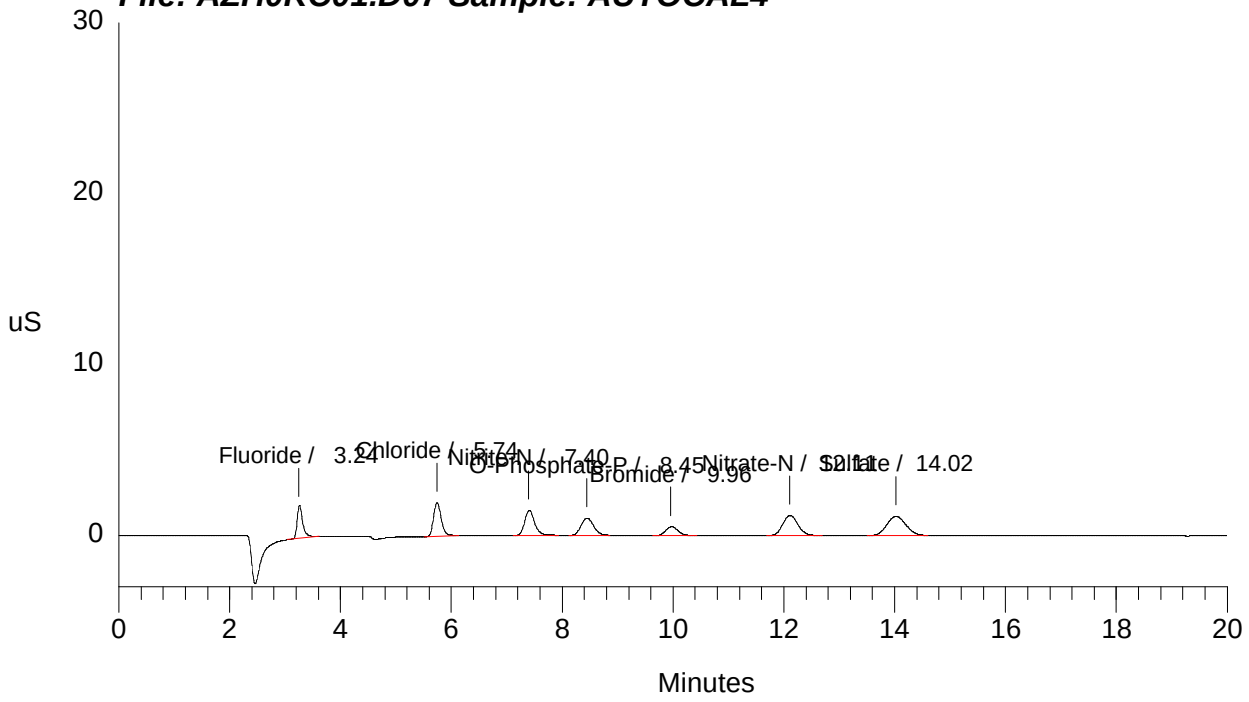
Sample Name:	AUTOCAL4	Date:	08/30/2005 10:49:28
Data File :	C:\TMP\HORIZON\AZH0KC01.D07		
Method :	C:\DX\METHOD\AUG30.MET		
ACI Address: 1	System: 1 Inject#: 7	Detector:	CDM-2
Analyst :	MAR1	Column:	AS9-HC;GL-GC-E-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.500	1819246	13804194	1	0.00
2	5.74	Chloride	1.000	1960970	19357534	1	0.00
3	7.40	Nitrite-N	0.500	1472671	18965702	1	0.00
4	8.45	O-Phosphate-P	1.000	1017320	16060266	1	0.00
5	9.96	Bromide	1.000	527853	8418552	1	0.00
6	12.11	Nitrate-N	0.500	1187977	23053800	1	0.00
7	14.02	Sulfate	2.000	1136725	27459226	1	0.00
		Totals	6.500	9122761	127119274		

File: AZH0KC01.D07 Sample: AUTOCAL4



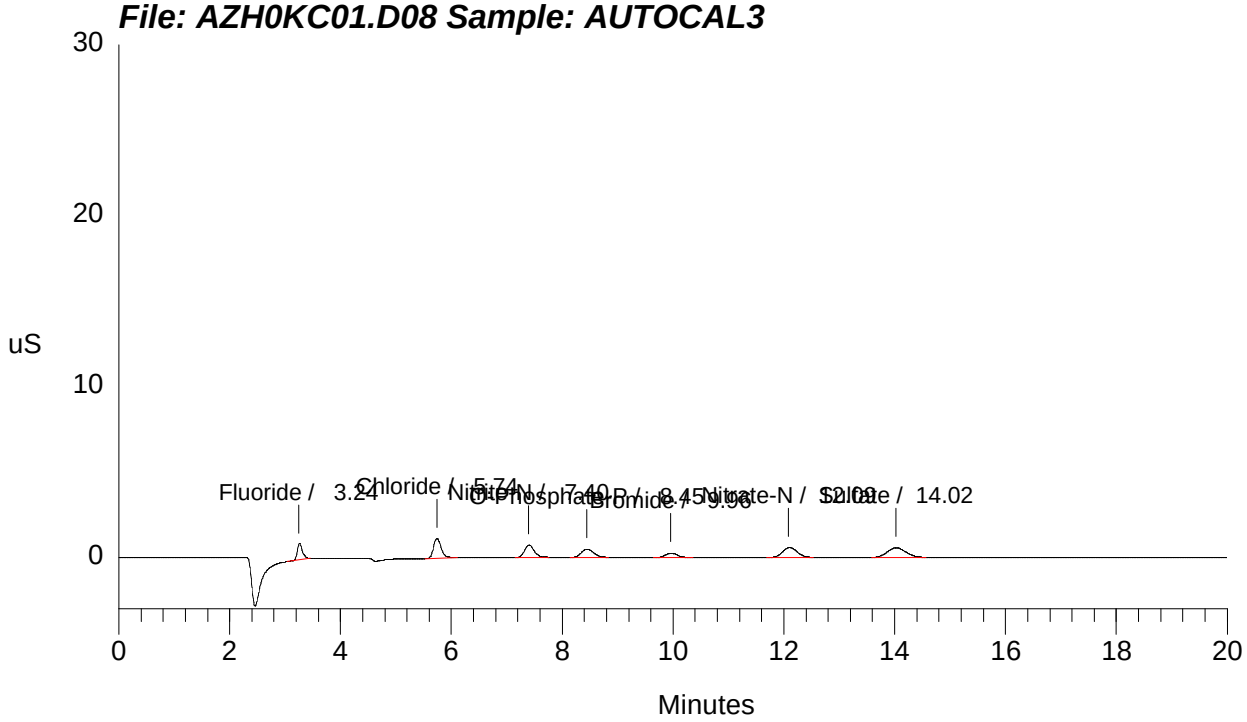
```
| Sample Name: AUTOCAL3                          Date: 08/30/2005 11:09:58     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D08                                     |
| Method     : C:\DX\METHOD\AUG29.MET                                          |
| ACI Address: 1  System: 1  Inject#: 8                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.250	904647	6224454	1	0.00
2	5.74	Chloride	0.500	1146483	11216058	1	0.00
3	7.40	Nitrite-N	0.250	734989	9109002	1	0.00
4	8.45	O-Phosphate-P	0.500	497213	7799984	1	0.00
5	9.96	Bromide	0.500	268175	4204866	1	0.00
6	12.09	Nitrate-N	0.250	583851	11012258	1	0.00
7	14.02	Sulfate	1.000	569426	13575068	1	0.00
		Totals	3.250	4704783	63141690		

File: AZH0KC01.D08 Sample: AUTOCAL3



Data Reprocessed On 08/30/2005 11:49:43

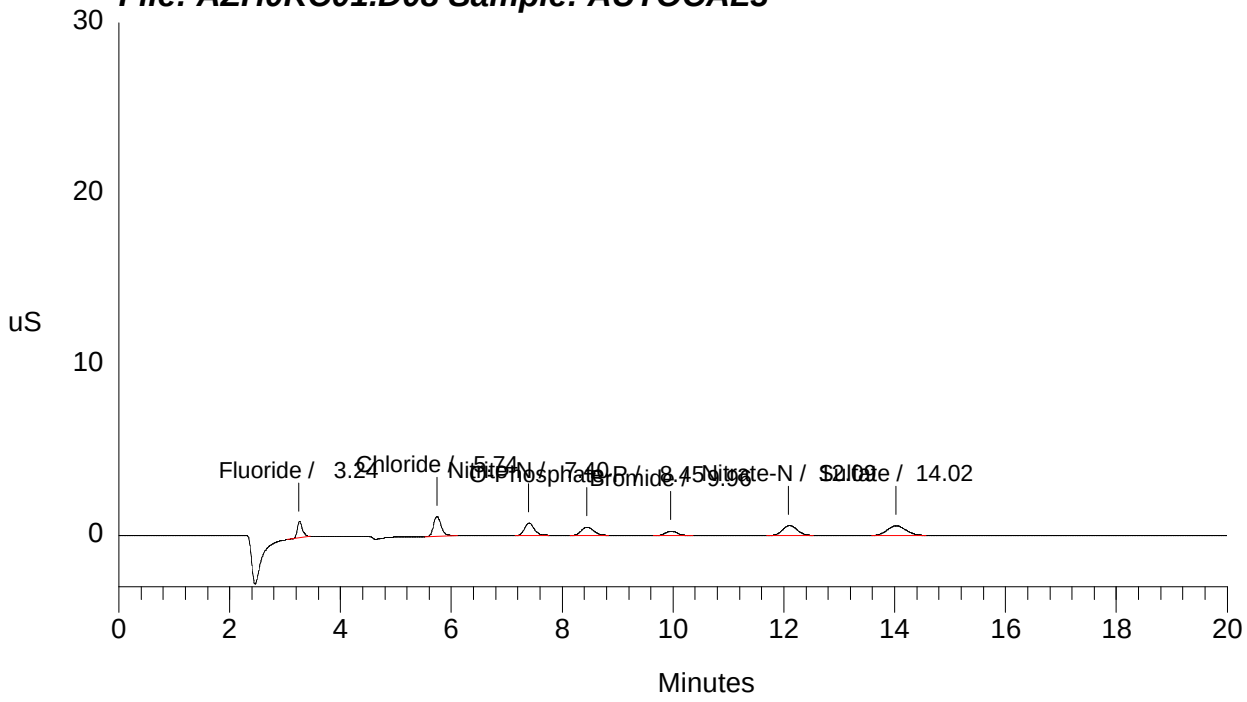
Sample Name: AUTOCAL3		Date: 08/30/2005 11:09:58	
Data File : C:\TMP\HORIZON\AZH0KC01.D08			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1	Inject#: 8	Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.250	904647	6224454	1	0.00
2	5.74	Chloride	0.500	1146483	11216058	1	0.00
3	7.40	Nitrite-N	0.250	734989	9109002	1	0.00
4	8.45	O-Phosphate-P	0.500	497213	7799984	1	0.00
5	9.96	Bromide	0.500	268175	4204866	1	0.00
6	12.09	Nitrate-N	0.250	583851	11012258	1	0.00
7	14.02	Sulfate	1.000	569426	13575068	1	0.00
		Totals	3.250	4704783	63141690		

File: AZH0KC01.D08 Sample: AUTOCAL3



Data Reprocessed On 08/30/2005 11:50:03

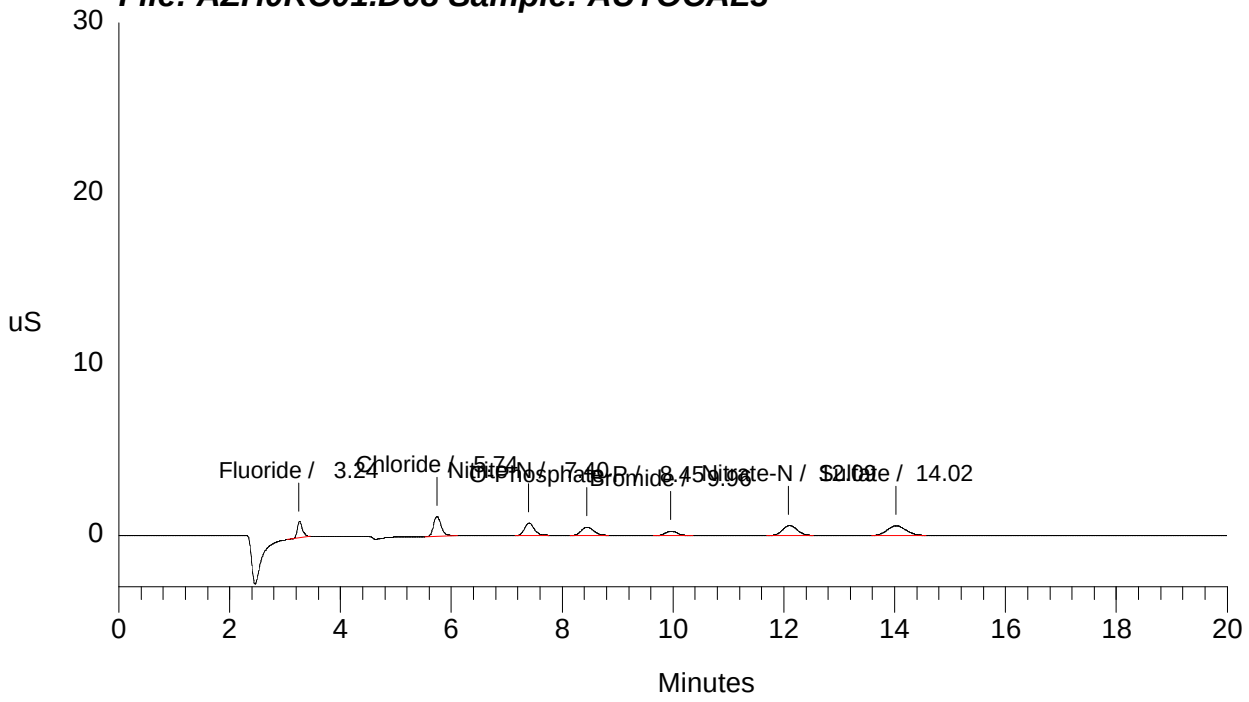
Sample Name: AUTOCAL3		Date: 08/30/2005 11:09:58	
Data File : C:\TMP\HORIZON\AZH0KC01.D08			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1	Inject#: 8	Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.250	904647	6224454	1	0.00
2	5.74	Chloride	0.500	1146483	11216058	1	0.00
3	7.40	Nitrite-N	0.250	734989	9109002	1	0.00
4	8.45	O-Phosphate-P	0.500	497213	7799984	1	0.00
5	9.96	Bromide	0.500	268175	4204866	1	0.00
6	12.09	Nitrate-N	0.250	583851	11012258	1	0.00
7	14.02	Sulfate	1.000	569426	13575068	1	0.00
		Totals	3.250	4704783	63141690		

File: AZH0KC01.D08 Sample: AUTOCAL3



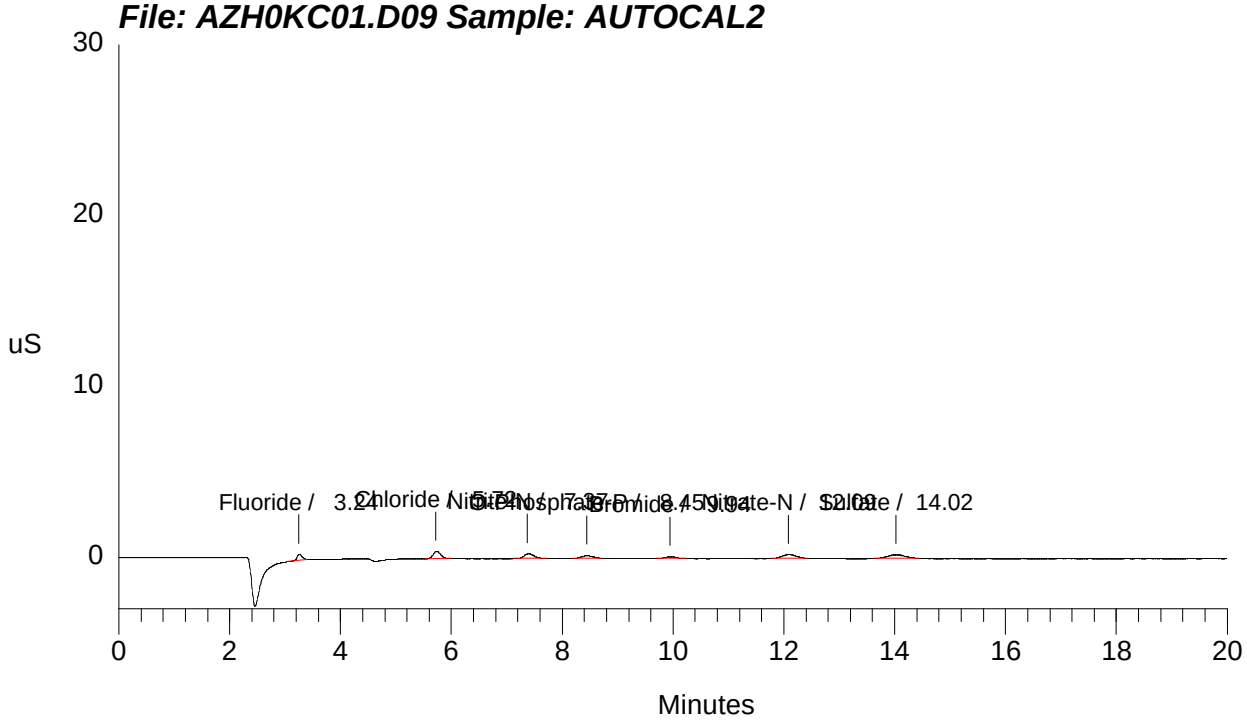
```
| Sample Name: AUTOCAL2                          Date: 08/30/2005 11:30:28     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D09                                     |
| Method     : C:\DX\METHOD\AUG29.MET                                          |
| ACI Address: 1  System: 1  Inject#: 9                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.100	356338	2420580	1	0.00
2	5.72	Chloride	0.200	421978	4264310	1	0.00
3	7.37	Nitrite-N	0.100	280654	3596444	1	0.00
4	8.45	O-Phosphate-P	0.200	164829	2446942	1	0.00
5	9.94	Bromide	0.200	99696	1491768	1	0.00
6	12.09	Nitrate-N	0.100	231462	4258556	1	0.00
7	14.02	Sulfate	0.400	223396	5091802	1	0.00
		Totals	1.300	1778352	23570402		

File: AZH0KC01.D09 Sample: AUTOCAL2



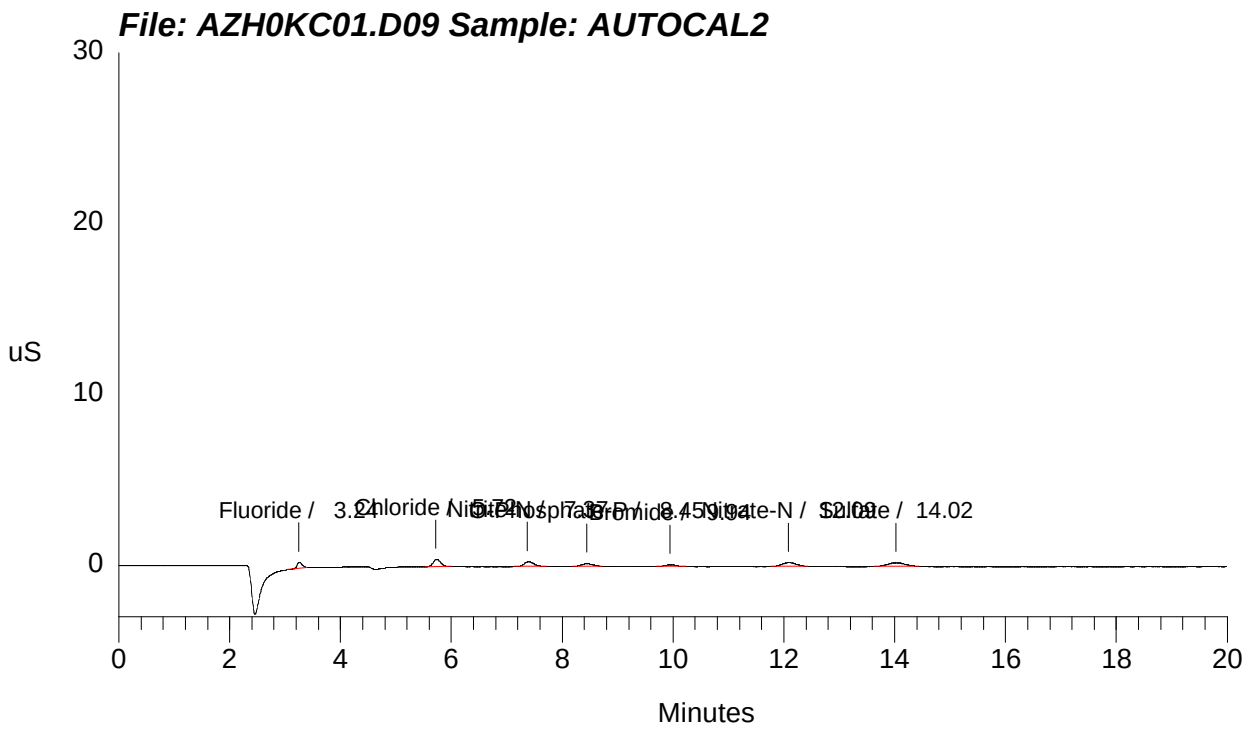
Data Reprocessed On 08/30/2005 11:49:43

Sample Name:	AUTOCAL2	Date:	08/30/2005 11:30:28
Data File :	C:\TMP\HORIZON\AZH0KC01.D09		
Method :	C:\DX\METHOD\AUG30.MET		
ACI Address: 1	System: 1 Inject#: 9	Detector:	CDM-2
Analyst :	MAR1 Column:	AS9-HC;GL-GC-E-086;300;9056	

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.100	356338	2420580	1	0.00
2	5.72	Chloride	0.200	421978	4264310	1	0.00
3	7.37	Nitrite-N	0.100	280654	3596444	1	0.00
4	8.45	O-Phosphate-P	0.200	164829	2446942	1	0.00
5	9.94	Bromide	0.200	99696	1491768	1	0.00
6	12.09	Nitrate-N	0.100	231462	4258556	1	0.00
7	14.02	Sulfate	0.400	223396	5091802	1	0.00
		Totals	1.300	1778352	23570402		



Data Reprocessed On 08/30/2005 11:50:03

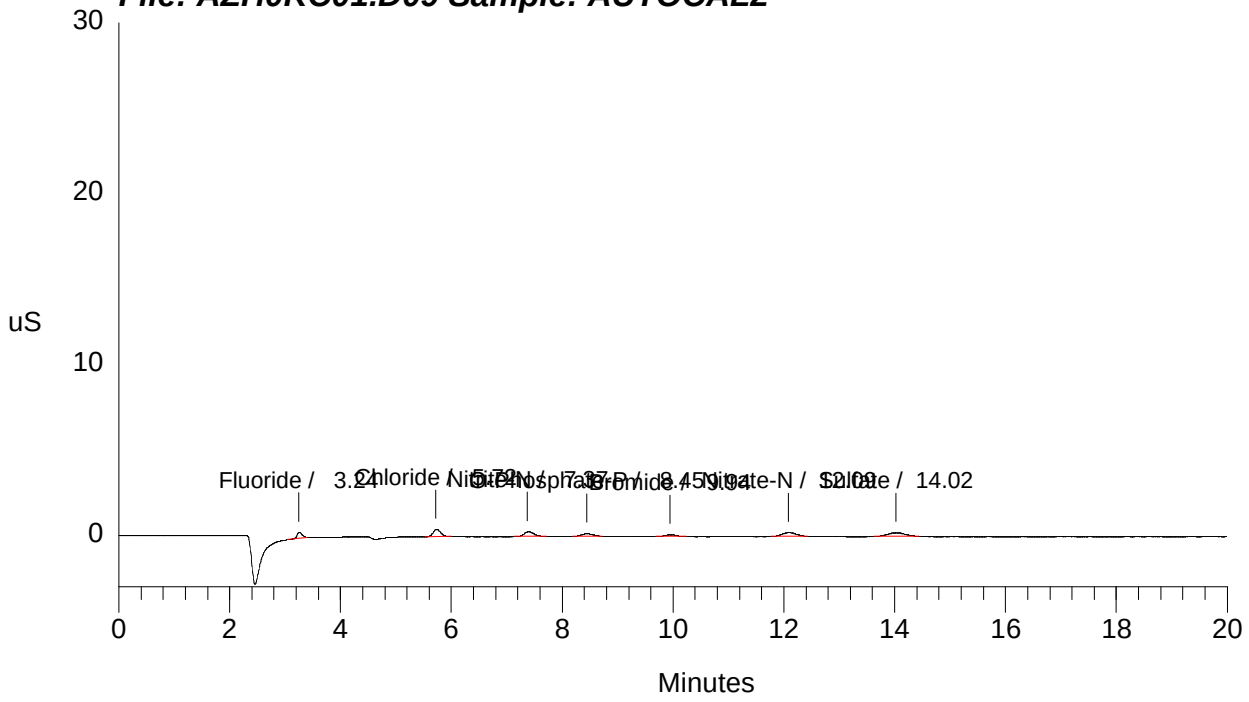
Sample Name: AUTOCAL2		Date: 08/30/2005 11:30:28	
Data File : C:\TMP\HORIZON\AZH0KC01.D09			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 9		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.100	356338	2420580	1	0.00
2	5.72	Chloride	0.200	421978	4264310	1	0.00
3	7.37	Nitrite-N	0.100	280654	3596444	1	0.00
4	8.45	O-Phosphate-P	0.200	164829	2446942	1	0.00
5	9.94	Bromide	0.200	99696	1491768	1	0.00
6	12.09	Nitrate-N	0.100	231462	4258556	1	0.00
7	14.02	Sulfate	0.400	223396	5091802	1	0.00
		Totals	1.300	1778352	23570402		

File: AZH0KC01.D09 Sample: AUTOCAL2



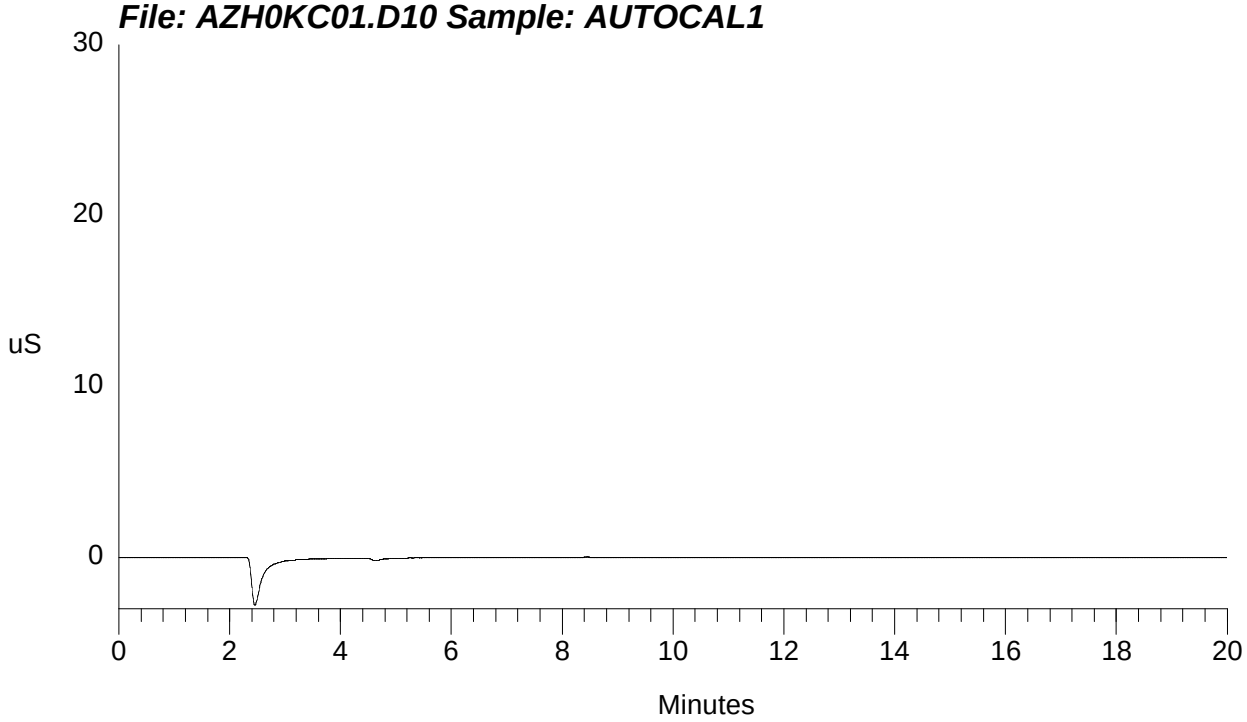
```
================================================================================
| Sample Name: AUTOCAL1                          Date: 08/30/2005 11:50:49     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D10                                     |
| Method     : C:\DX\METHOD\AUG29.MET                                          |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZH0KC01.D10 Sample: AUTOCAL1



Data Reprocessed On 08/30/2005 11:58:29

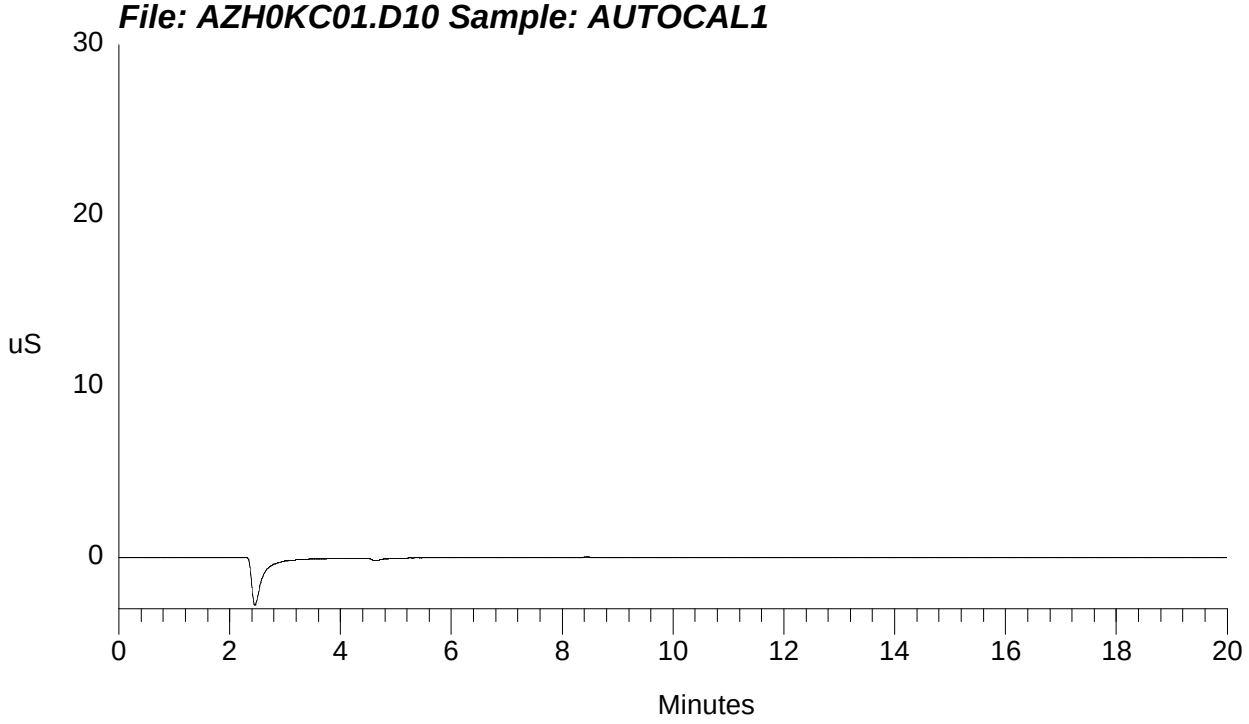
Sample Name: AUTOCAL1		Date: 08/30/2005 11:50:49	
Data File : C:\TMP\HORIZON\AZH0KC01.D10			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1	Inject#: 10	Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		

File: AZH0KC01.D10 Sample: AUTOCAL1



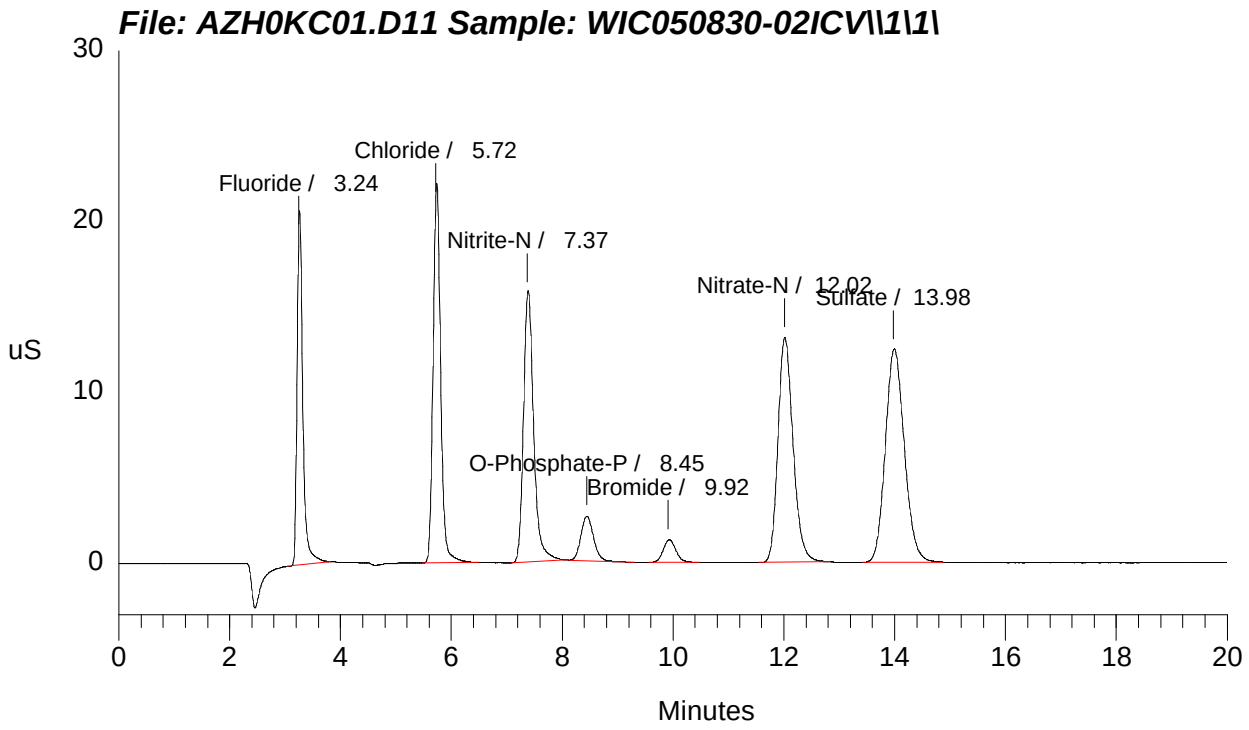
Data Reprocessed On 08/30/2005 14:59:14

Sample Name:	WIC050830-02ICV\\1\1\	Date:	08/30/2005 12:11:26
Data File :	C:\TMP\HORIZON\AZH0KC01.D11		
Method :	C:\DX\METHOD\AUG30.MET		
ACI Address:	1 System: 1 Inject#: 11	Detector:	CDM-2
Analyst :	MAR1	Column:	AS9-HC;GL-GC-E-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	5.016	19289076	148631794	1	0.00
2	5.72	Chloride	9.452	21062453	209278856	1	0.00
3	7.37	Nitrite-N	4.909	15710960	202142215	1	0.00
4	8.45	O-Phosphate-P	2.492	2603775	40578610	1	0.00
5	9.92	Bromide	2.432	1302608	20756802	1	0.00
6	12.02	Nitrate-N	4.796	13134402	249431126	1	0.00
7	13.98	Sulfate	19.264	12410349	297332250	1	0.00
		Totals	48.361	85513624	1168151653		



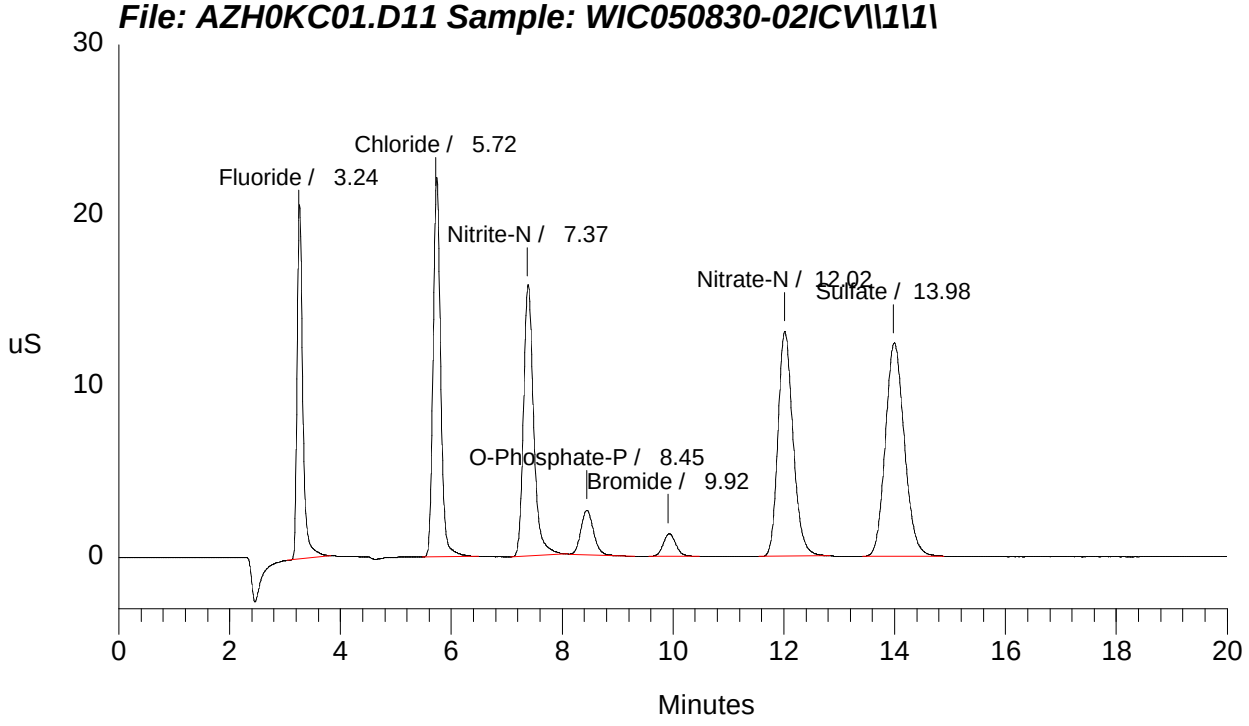
```
================================================================================
| Sample Name: WIC050830-02ICV\\1\1\          Date: 08/30/2005 12:11:26     |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D11                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 11                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.24 Fluoride                5.016   19289076  148631794    1   0.00
   2   5.72 Chloride                9.452   21062453  209278856    1   0.00
   3   7.37 Nitrite-N               4.909   15710960  202142215    1   0.00
   4   8.45 O-Phosphate-P           2.486    2603775   40578610    1   0.00
   5   9.92 Bromide                 2.432    1302608   20756802    1   0.00
   6  12.02 Nitrate-N               4.796   13134402  249431126    1   0.00
   7  13.98 Sulfate                19.264   12410349  297332250    1   0.00
                                ----------------------------------
                        Totals      48.355   85513624 1168151653
```

File: AZH0KC01.D11 Sample: WIC050830-02ICV\\1\1



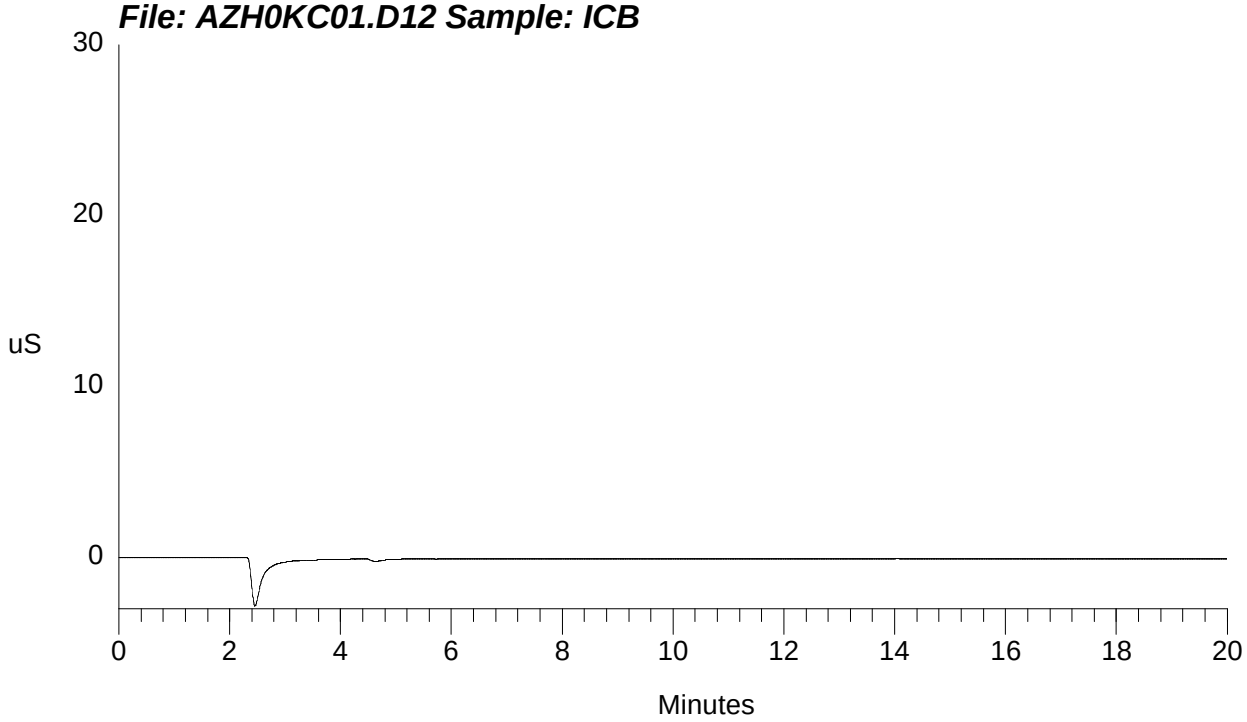
```
================================================================================
| Sample Name: ICB                              Date: 08/30/2005 12:31:54      |
| Data File  : C:\TMP\HORIZON\AZH0KC01.D12                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 12                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZH0KC01.D12 Sample: ICB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			MAR1	09/22/2005 10:58:35	AZIVKC01.R01
WIC050922-02ICV:1		1	MAR1	09/22/2005 11:19:04	AZIVKC01.R02
ICB:			MAR1	09/22/2005 11:39:33	AZIVKC01.R03
144718003:2	464532	50	MAR1	09/22/2005 12:00:02	AZIVKC01.R04
1200940419:2	464532	50	MAR1	09/22/2005 12:20:31	AZIVKC01.R05
1200940420:2	464532	50	MAR1	09/22/2005 12:40:59	AZIVKC01.R06
1200940421:2	464532	50	MAR1	09/22/2005 13:01:28	AZIVKC01.R07
144718004:2	464532	50	MAR1	09/22/2005 13:21:55	AZIVKC01.R08
WIC050922-02CVH:1		1	MAR1	09/22/2005 13:42:13	AZIVKC01.R09
CCB:			MAR1	09/22/2005 14:02:42	AZIVKC01.R10
145195017:2	464176	5	MAR1	09/22/2005 14:23:11	AZIVKC01.R11
145312008:2	464176	5	MAR1	09/22/2005 14:43:30	AZIVKC01.R12
145452004:2	464176	2	MAR1	09/22/2005 15:04:00	AZIVKC01.R13
WIC050921-02CCV:1		1	MAR1	09/22/2005 15:24:28	AZIVKC01.R14
CCB:			MAR1	09/22/2005 15:44:57	AZIVKC01.R15
1200940114:1	464388	1	MAR1	09/22/2005 16:05:26	AZIVKC01.R16
1200940119:1	464388	1	MAR1	09/22/2005 16:25:54	AZIVKC01.R17
145579001:1	464388	1	MAR1	09/22/2005 16:46:23	AZIVKC01.R18
145579002:1	464388	1	MAR1	09/22/2005 17:06:52	AZIVKC01.R19
145579003:1	464388	1	MAR1	09/22/2005 17:27:21	AZIVKC01.R20
145579004:1	464388	1	MAR1	09/22/2005 17:47:50	AZIVKC01.R21
145579005:1	464388	1	MAR1	09/22/2005 18:08:19	AZIVKC01.R22
145579006:1	464388	1	MAR1	09/22/2005 18:28:48	AZIVKC01.R23
1200940115:1	464388	1	MAR1	09/22/2005 18:49:17	AZIVKC01.R24
1200940117:1	464388	1	MAR1	09/22/2005 19:09:46	AZIVKC01.R25
WIC050922-02CVH:1		1	MAR1	09/22/2005 19:30:15	AZIVKC01.R26
CCB:			MAR1	09/22/2005 19:50:43	AZIVKC01.R27
145579007:1	464388	1	MAR1	09/22/2005 20:11:12	AZIVKC01.R28
145579008:1	464388	1	MAR1	09/22/2005 20:31:41	AZIVKC01.R29
145739001:1	464388	1	MAR1	09/22/2005 20:52:10	AZIVKC01.R30
145739002:1	464388	1	MAR1	09/22/2005 21:12:39	AZIVKC01.R31
145739003:1	464388	1	MAR1	09/22/2005 21:33:08	AZIVKC01.R32
145739004:1	464388	1	MAR1	09/22/2005 21:53:37	AZIVKC01.R33
145739005:1	464388	1	MAR1	09/22/2005 22:14:05	AZIVKC01.R34
145739006:1	464388	1	MAR1	09/22/2005 22:34:34	AZIVKC01.R35
145782001:1	464388	1	MAR1	09/22/2005 22:55:03	AZIVKC01.R36
145782002:1	464388	1	MAR1	09/22/2005 23:15:32	AZIVKC01.R37
WIC050921-02CCV:1		1	MAR1	09/22/2005 23:36:00	AZIVKC01.R38
CCB:			MAR1	09/22/2005 23:56:29	AZIVKC01.R39
145782003:1	464388	1	MAR1	09/23/2005 00:16:58	AZIVKC01.R40
1200940116:1	464388	1	MAR1	09/23/2005 00:37:27	AZIVKC01.R41
1200940118:1	464388	1	MAR1	09/23/2005 00:57:56	AZIVKC01.R42
145782004:1	464388	1	MAR1	09/23/2005 01:18:25	AZIVKC01.R43
WIC050922-02CVH:1		1	MAR1	09/23/2005 01:38:54	AZIVKC01.R44
CCB:			MAR1	09/23/2005 01:59:22	AZIVKC01.R45
1200940120:1	464391	1	MAR1	09/23/2005 02:19:51	AZIVKC01.R46
1200940127:1	464391	1	MAR1	09/23/2005 02:40:20	AZIVKC01.R47
145529011:1	464391	1	MAR1	09/23/2005 03:00:49	AZIVKC01.R48
1200940121:1	464391	1	MAR1	09/23/2005 03:21:18	AZIVKC01.R49
1200940123:1	464391	1	MAR1	09/23/2005 03:41:46	AZIVKC01.R50
1200940125:1	464391	1	MAR1	09/23/2005 04:02:15	AZIVKC01.R51
145529012:1	464391	1	MAR1	09/23/2005 04:22:44	AZIVKC01.R52
145529013:1	464391	1	MAR1	09/23/2005 04:43:13	AZIVKC01.R53
145529014:1	464391	1	MAR1	09/23/2005 05:03:41	AZIVKC01.R54
145727001:1	464391	1	MAR1	09/23/2005 05:24:10	AZIVKC01.R55

```
WIC050921-02CCV:1             1     MAR1  09/23/2005 05:44:39 AZIVKC01.R56
CCB:                                MAR1  09/23/2005 06:05:08 AZIVKC01.R57
145727002:1          464391   1     MAR1  09/23/2005 06:25:37 AZIVKC01.R58
1200940122:1         464391   1     MAR1  09/23/2005 06:46:06 AZIVKC01.R59
1200940124:1         464391   1     MAR1  09/23/2005 07:06:35 AZIVKC01.R60
1200940126:1         464391   1     MAR1  09/23/2005 07:27:03 AZIVKC01.R61
145731001:1          464391   1     MAR1  09/23/2005 07:47:32 AZIVKC01.R62
145731002:1          464391   1     MAR1  09/23/2005 08:08:01 AZIVKC01.R63
145731003:1          464391   1     MAR1  09/23/2005 08:28:30 AZIVKC01.R64
145731004:1          464391   1     MAR1  09/23/2005 08:48:59 AZIVKC01.R65
145731005:1          464391   1     MAR1  09/23/2005 09:09:28 AZIVKC01.R66
145731006:1          464391   1     MAR1  09/23/2005 09:29:47 AZIVKC01.R67
WIC050922-02CVH:1             1     MAR1  09/23/2005 09:50:15 AZIVKC01.R68
CCB:                                MAR1  09/23/2005 10:10:44 AZIVKC01.R69
145731007:1          464391   1     MAR1  09/23/2005 10:31:02 AZIVKC01.R70
145738001:1          464391   1     MAR1  09/23/2005 10:51:31 AZIVKC01.R71
WIC050921-02CCV:1             1     MAR1  09/23/2005 11:12:00 AZIVKC01.R72
CCB:                                MAR1  09/23/2005 11:32:26 AZIVKC01.R73
```

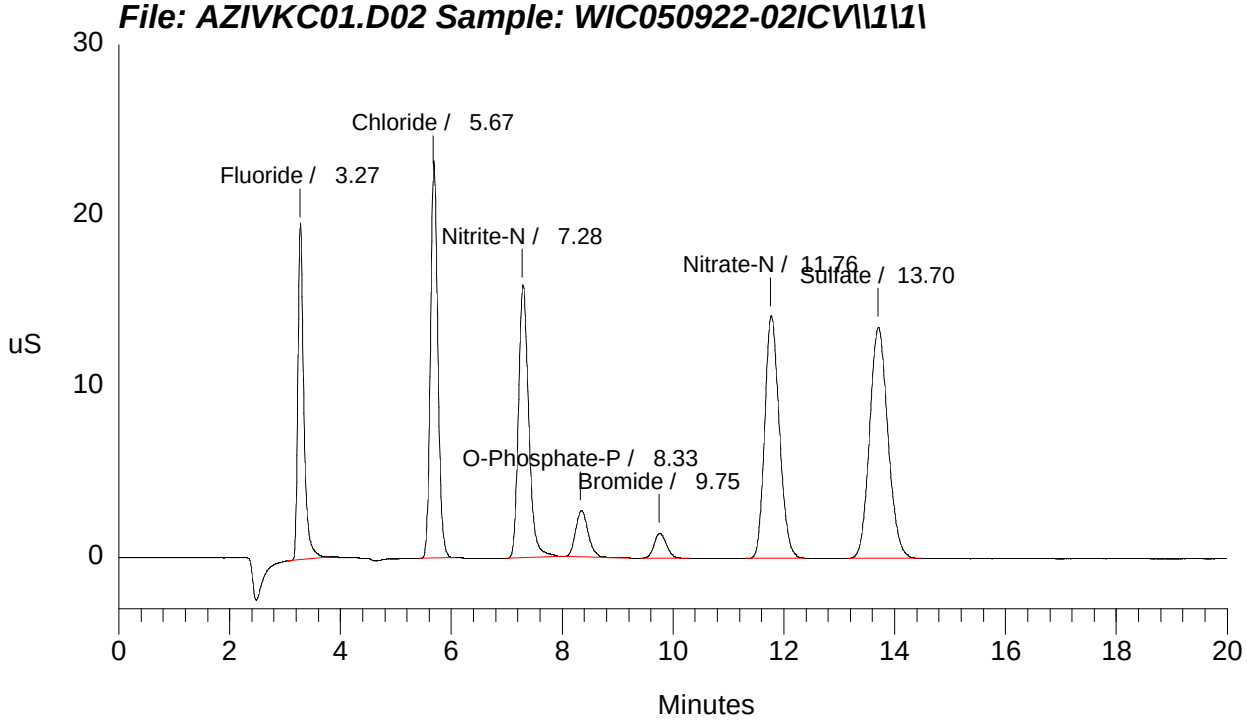
```
================================================================================
| Sample Name: WIC050922-02ICV\\1\1\          Date: 09/22/2005 11:19:04      |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D02                                   |
| Method     : C:\DX\METHOD\AUG30.MET                                        |
| ACI Address: 1  System: 1  Inject#: 2                   Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.27 Fluoride                4.950   19400533  146647166    1   0.00
   2   5.67 Chloride                9.722   22409745  215351968    1   0.00
   3   7.28 Nitrite-N               4.996   15768340  205733514    1   0.00
   4   8.33 O-Phosphate-P           2.619    2674645   42662648    1   0.00
   5   9.75 Bromide                 2.634    1447718   22504082    1   0.00
   6  11.76 Nitrate-N               5.002   14111541  260315428    1   0.00
   7  13.70 Sulfate                20.093   13500731  310305322    1   0.00
                              ------------------------------------
                      Totals       50.015   89313253 1203520128
```

File: AZIVKC01.D02 Sample: WIC050922-02ICV\\1\1



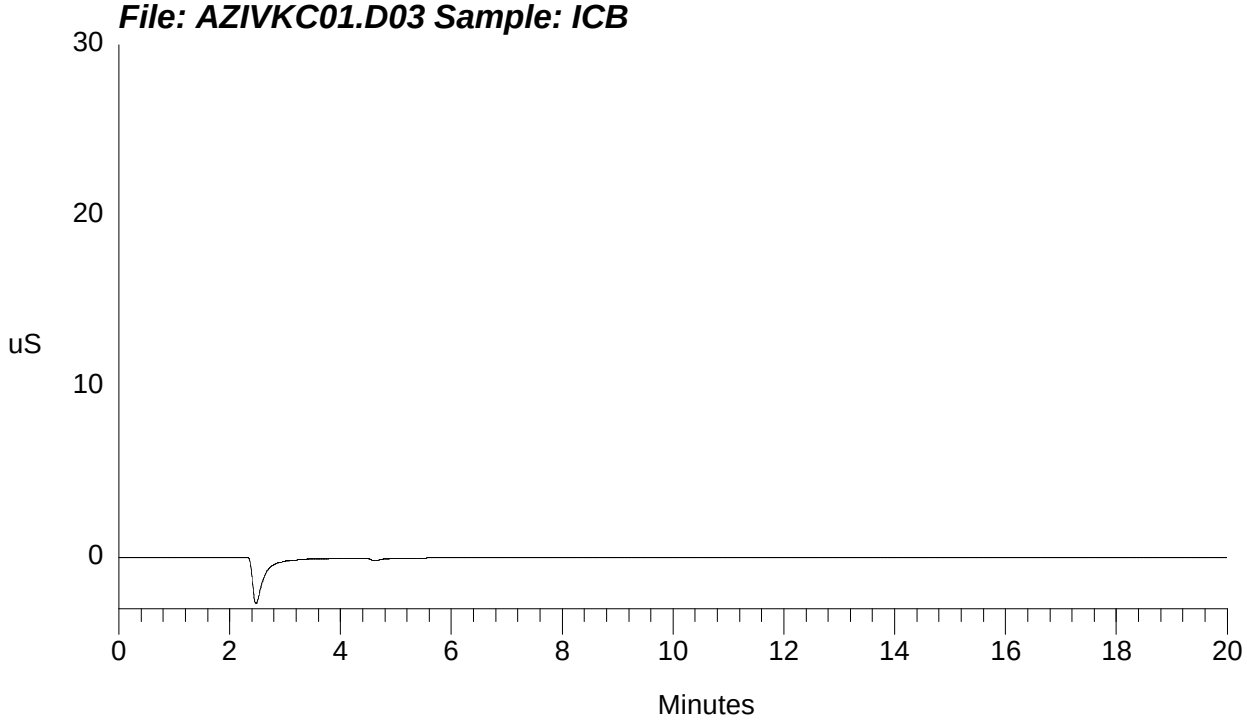
```
================================================================================
| Sample Name: ICB                              Date: 09/22/2005 11:39:33      |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D03                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZIVKC01.D03 Sample: ICB



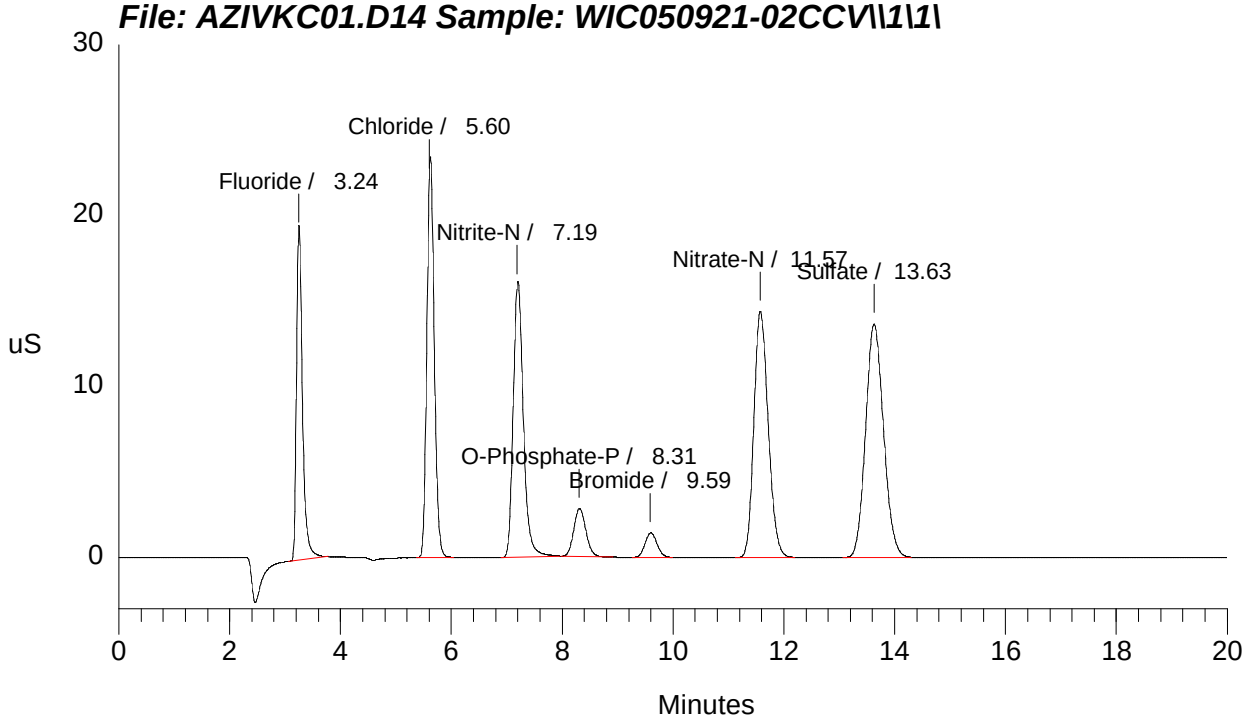
```
================================================================================
| Sample Name: WIC050921-02CCV\\1\1\          Date: 09/22/2005 15:24:28     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D14                                   |
| Method     : C:\DX\METHOD\AUG30.MET                                        |
| ACI Address: 1  System: 1  Inject#: 14                  Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.24 Fluoride                4.952   19124104  146705621    1   0.00
   2   5.60 Chloride                9.865   22137779  218567562    1   0.00
   3   7.19 Nitrite-N               4.977   15929571  204953442    1   0.00
   4   8.31 O-Phosphate-P           2.615    2794012   42590636    1   0.00
   5   9.59 Bromide                 2.550    1438114   21776802    1   0.00
   6  11.57 Nitrate-N               4.975   14405365  258890082    1   0.00
   7  13.63 Sulfate                19.923   13661999  307648762    1   0.00
                                 ----------------------------------
                        Totals     49.856   89490945 1201132907
```

File: AZIVKC01.D14 Sample: WIC050921-02CCV\\1\1



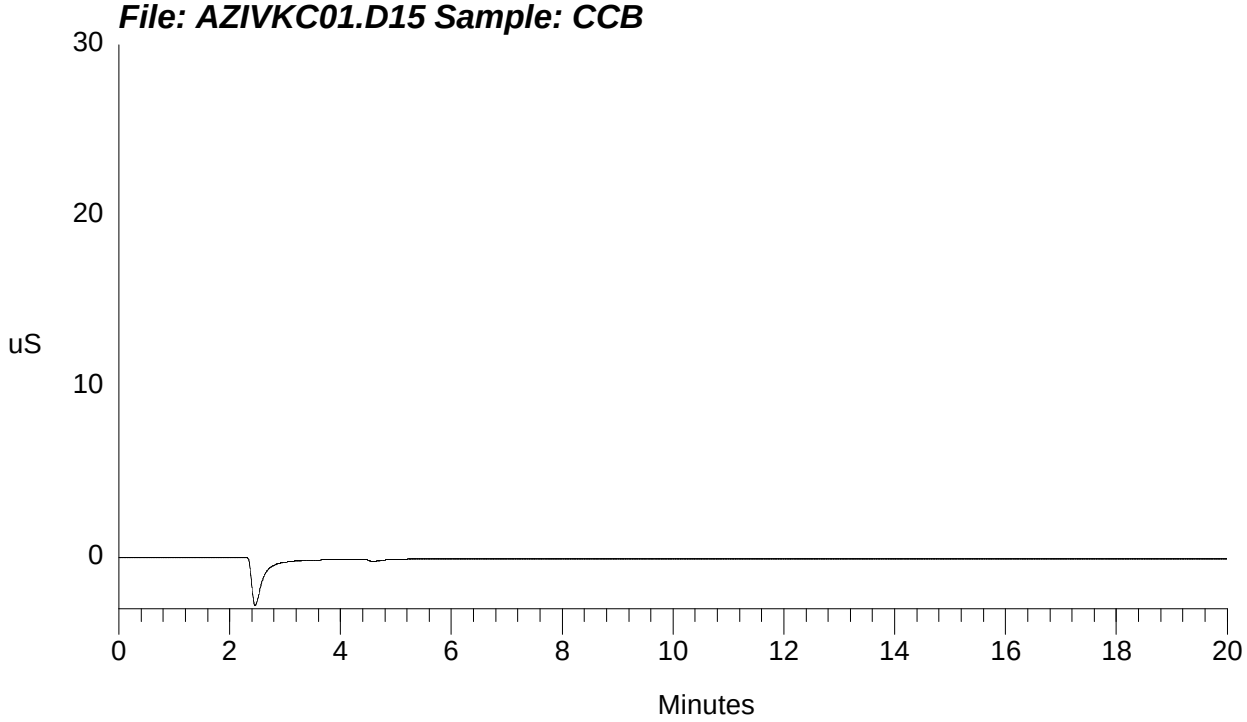
```
================================================================================
| Sample Name: CCB                              Date: 09/22/2005 15:44:57      |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D15                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 15                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZIVKC01.D15 Sample: CCB



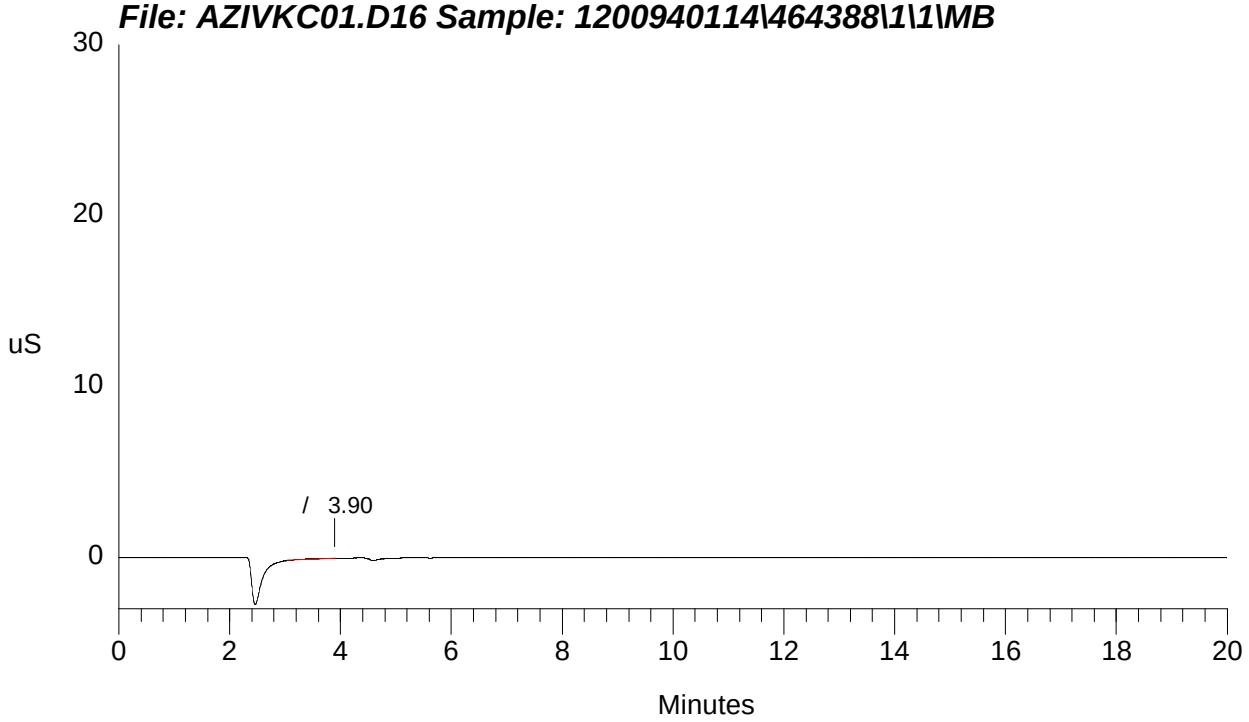
```
================================================================================
| Sample Name: 1200940114\464388\1\1\MB       Date: 09/22/2005 16:05:26     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D16                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 16                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                          ----------------------------------
                     Totals         0.000          0          0
```

File: AZIVKC01.D16 Sample: 1200940114\464388\1\1\MB



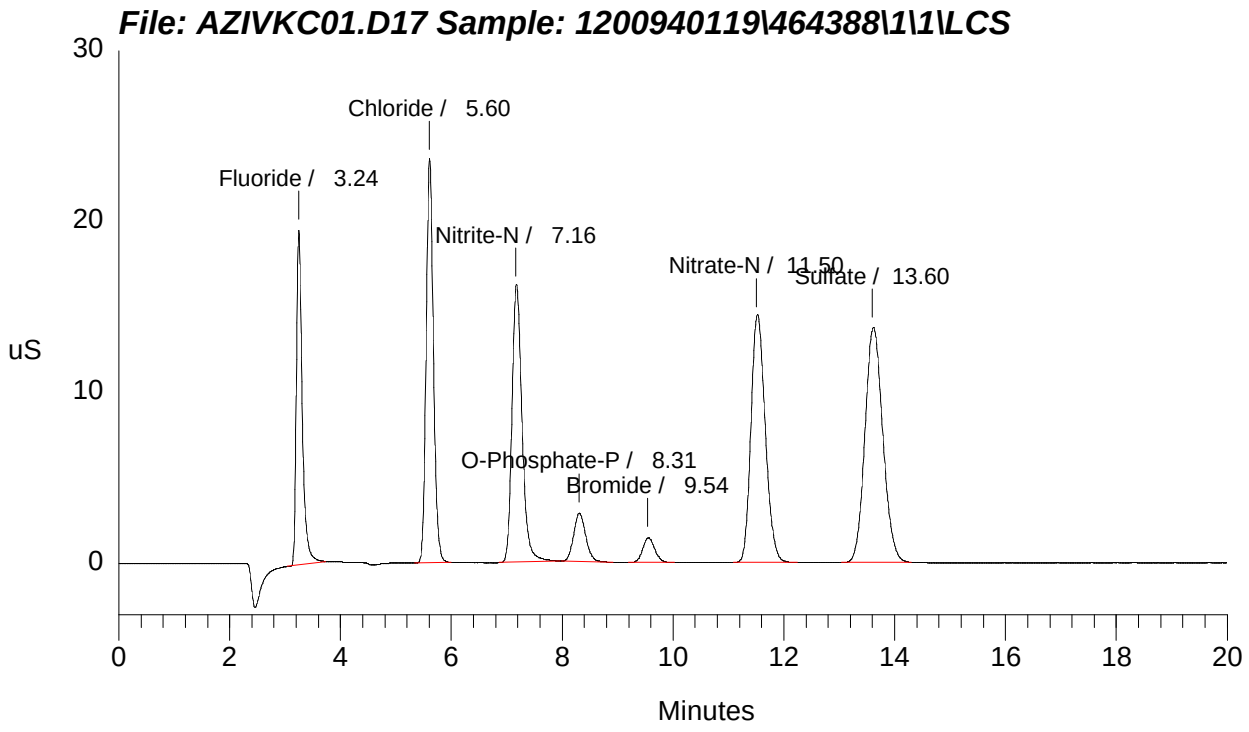
Data Reprocessed On 09/23/2005 11:33:26

Sample Name: 1200940119\464388\1\1\LCS		Date: 09/22/2005 16:25:54	
Data File : C:\TMP\HORIZON\AZIVKC01.D17			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1	Inject#: 17		Detector:CDM-2
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.842	19572720	143444738	1	0.00
2	5.60	Chloride	9.714	23513381	215184494	1	0.00
3	7.16	Nitrite-N	4.981	16068409	205125960	1	0.00
4	8.31	O-Phosphate-P	2.634	2819923	42899580	1	0.00
5	9.54	Bromide	2.517	1430715	21492140	1	0.00
6	11.50	Nitrate-N	4.998	14282826	260132882	1	0.00
7	13.60	Sulfate	19.999	13700909	308840210	1	0.00
		Totals	49.686	91388883	1197120004		



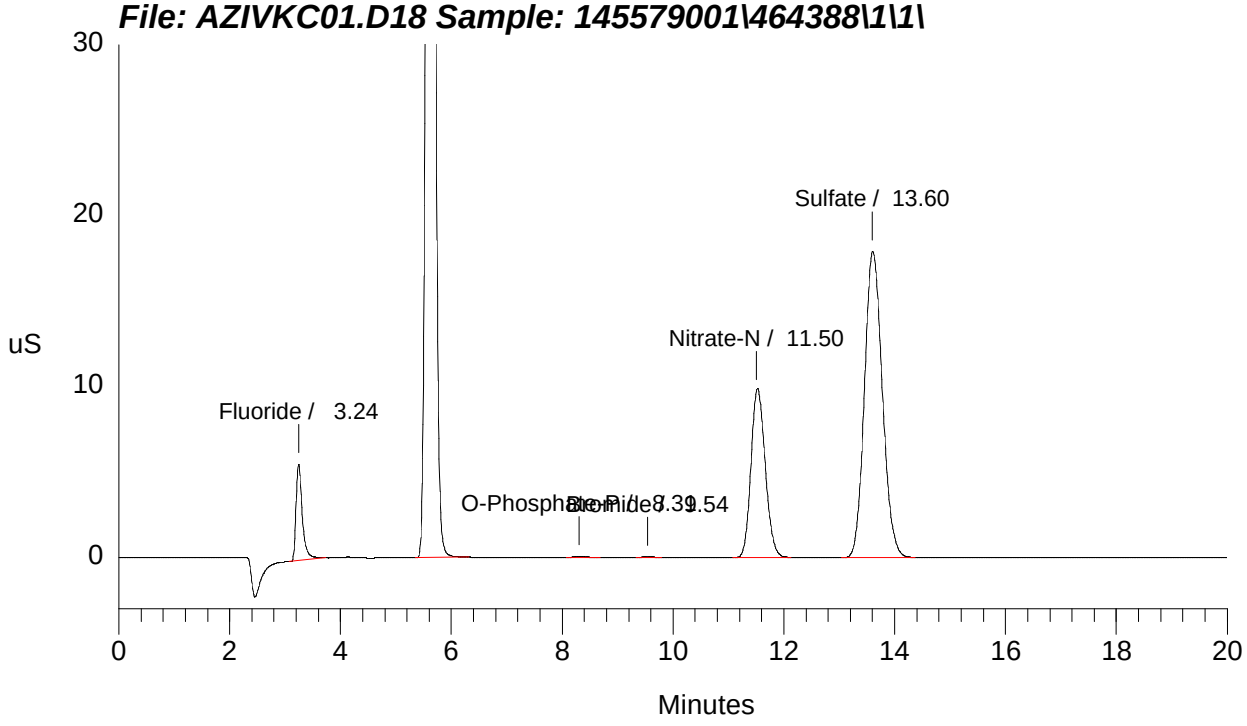
```
================================================================================
| Sample Name: 145579001\464388\1\1\          Date: 09/22/2005 16:46:23     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D18                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 18                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                     Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 1.533    5678034   44755673    1   0.00
   2   5.62 Chloride                49.471  125302335 1108811990    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   3   8.31 O-Phosphate-P            0.095      87074    1288694    1   0.00
   4   9.54 Bromide                  0.106      41429     586296    1   0.00
   5  11.50 Nitrate-N                3.421    9753774  176883916    1   0.00
   6  13.60 Sulfate                 25.983   17913456  402463022    1   0.00
                                ----------------------------------
                        Totals       80.610  158776102 1734789591
```

File: AZIVKC01.D18 Sample: 145579001\464388\1\1



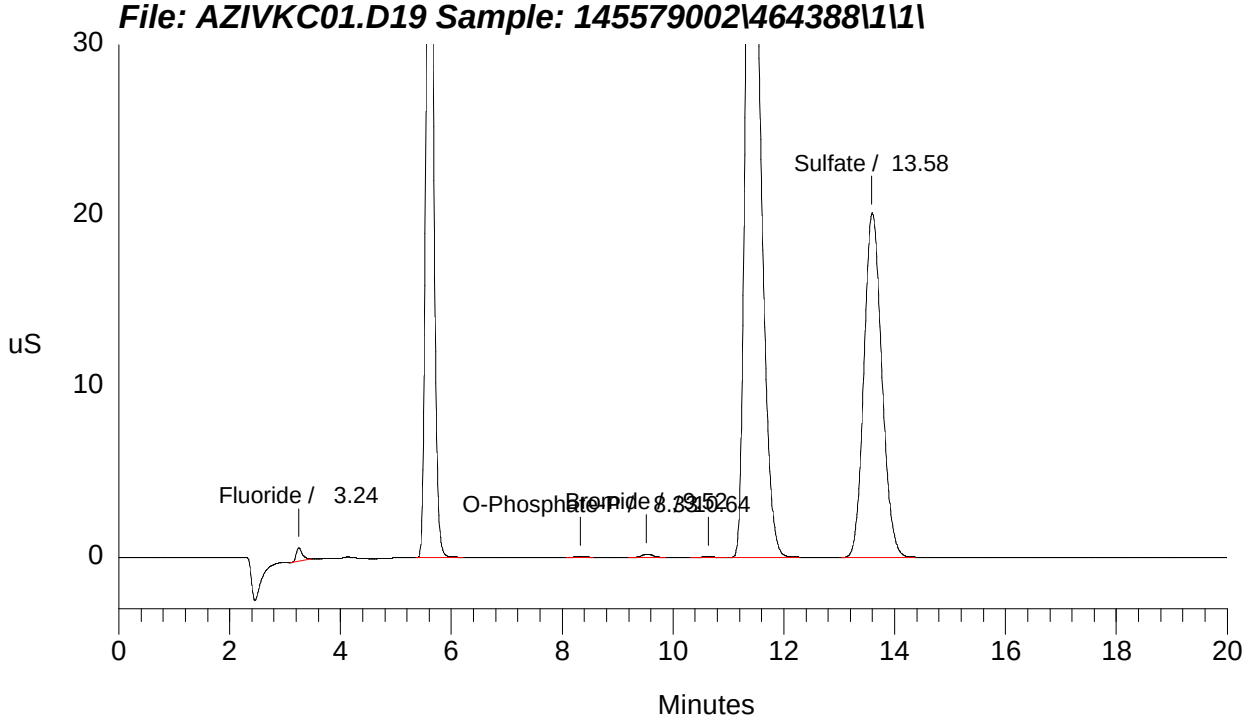
```
================================================================================
| Sample Name: 145579002\464388\1\1\          Date: 09/22/2005 17:06:52     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D19                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 19                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                0.230     767581    5882353    1   0.00
   2   5.60 Chloride               21.057   52197660  470150346    1   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   3   8.33 O-Phosphate-P           0.065      56905     799134    1   0.00
   4   9.52 Bromide                 0.401     204758    3148004    1   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   7  13.58 Sulfate                29.162   20021193  452198502    1   0.00
                                ----------------------------------
                      Totals       50.916   73248097  932178339
```

File: AZIVKC01.D19 Sample: 145579002\464388\1\1



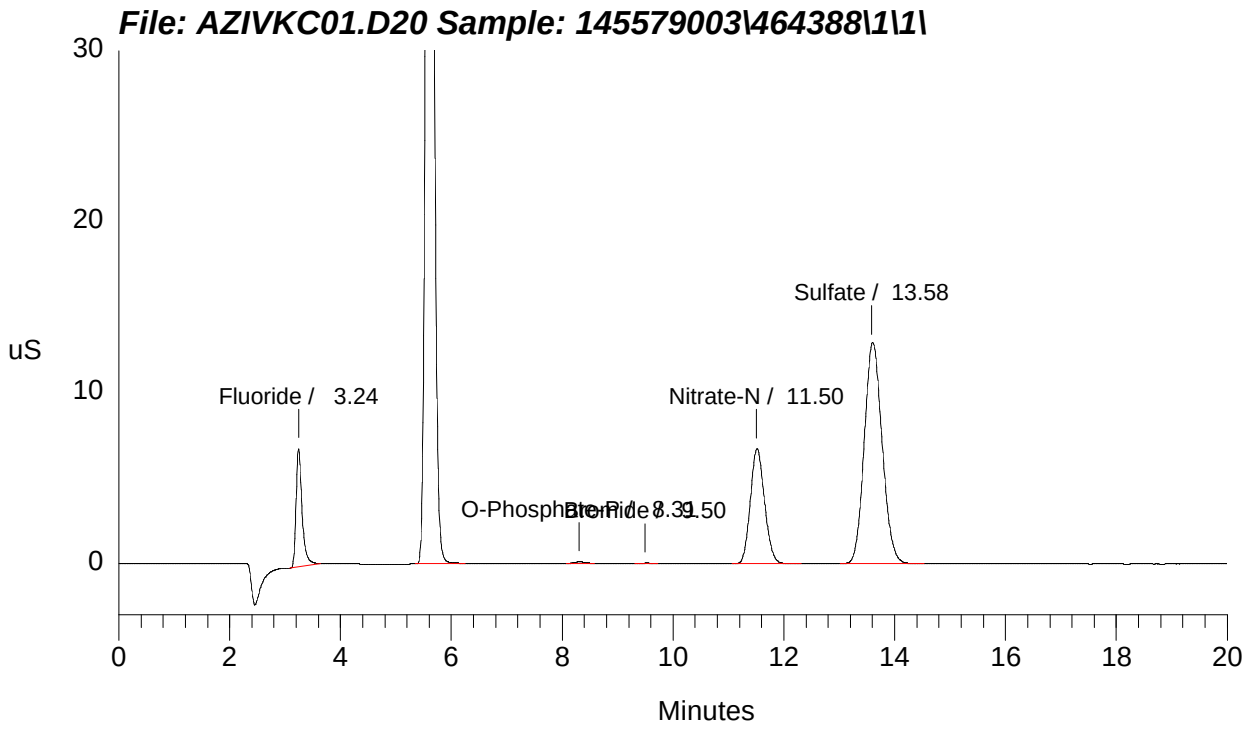
Data Reprocessed On 09/23/2005 09:30:21

Sample Name: 145579003\464388\1\1\		Date: 09/22/2005 17:27:21	
Data File : C:\TMP\HORIZON\AZIVKC01.D20			
Method : C:\DX\METHOD\AUG30.MET			
ACI Address: 1 System: 1 Inject#: 20		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	1.772	6900765	51877623	1	0.00
2	5.60	Chloride	34.076	84904463	762782720	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
3	8.31	O-Phosphate-P	0.111	106474	1545124	1	0.00
4	9.50	Bromide	0.078	27228	343412	1	0.00
5	11.50	Nitrate-N	2.348	6713079	120237656	1	0.00
6	13.58	Sulfate	18.882	12783644	291350756	1	0.00
		Totals	57.267	111435653	1228137291		



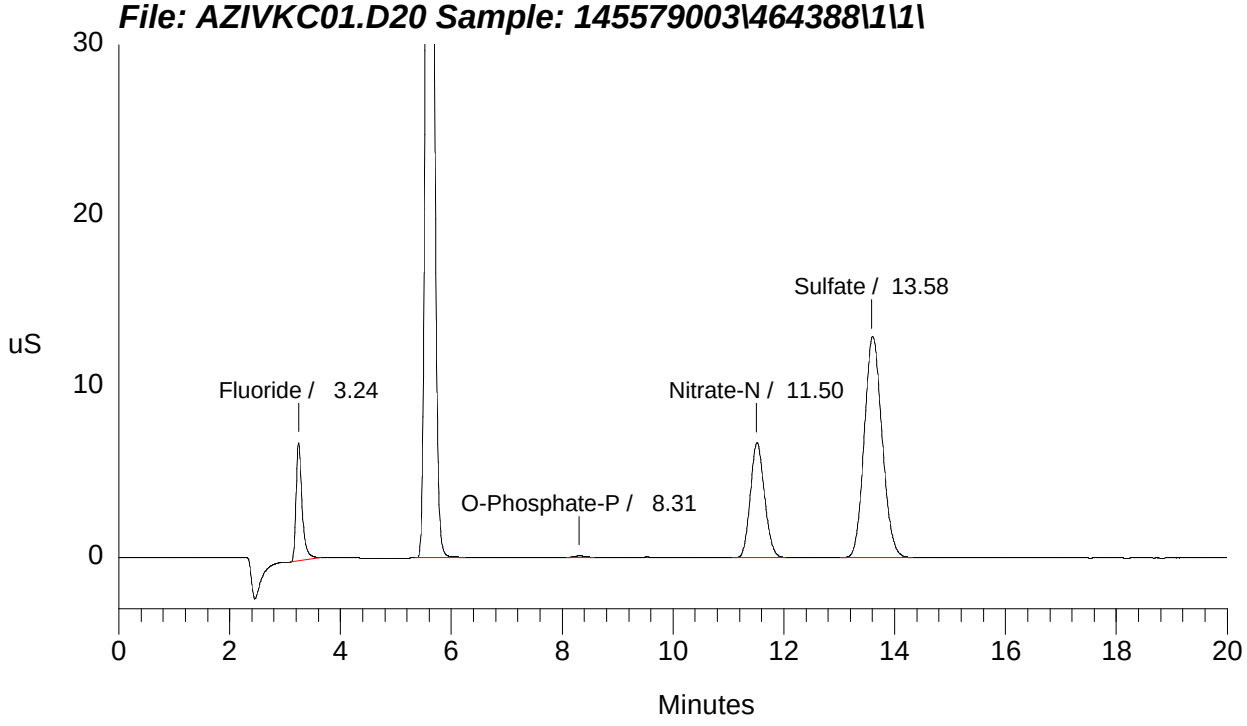
```
================================================================================
| Sample Name: 145579003\464388\1\1\          Date: 09/22/2005 17:27:21     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D20                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 20                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	1.772	6900765	51877623	1	0.00
2	5.60	Chloride	34.076	84904463	762782720	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
3	8.31	O-Phosphate-P	0.111	106474	1545124	1	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
4	11.50	Nitrate-N	2.333	6703760	119449224	1	0.00
5	13.58	Sulfate	18.844	12778267	290766764	1	0.00
		Totals	57.137	111393729	1226421455		

File: AZIVKC01.D20 Sample: 145579003\464388\1\1

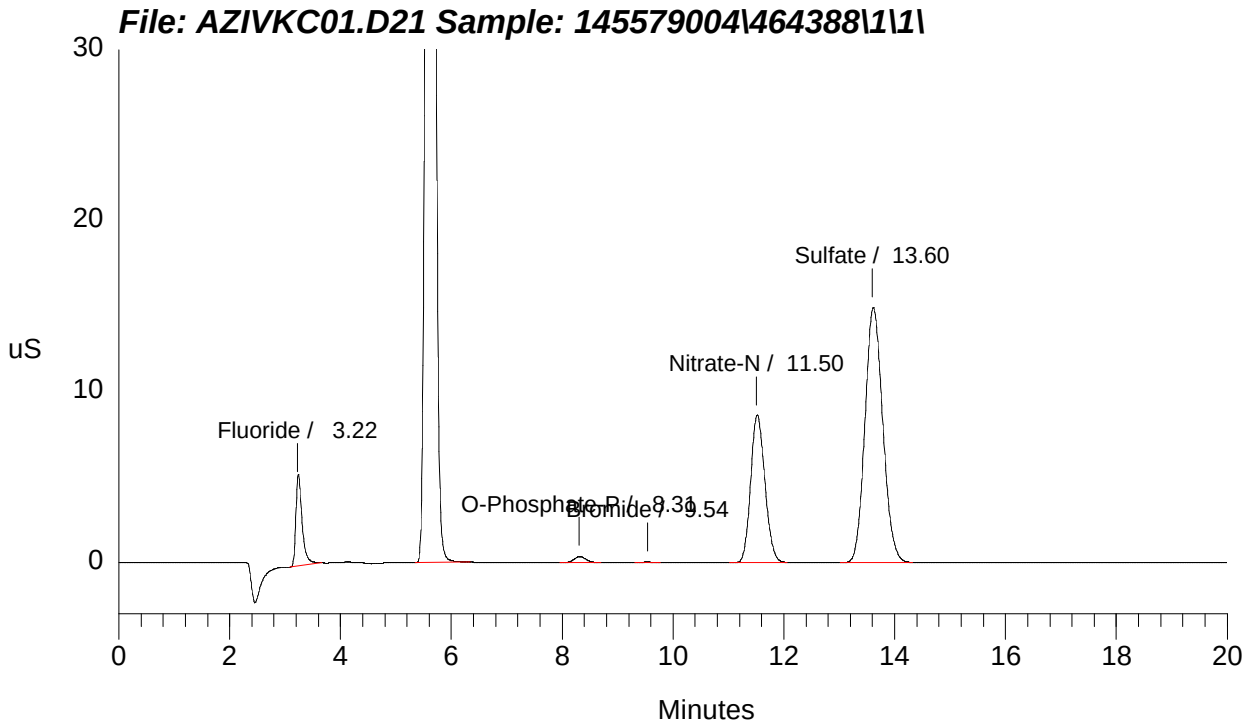


```
================================================================================
| Sample Name: 145579004\464388\1\1\          Date: 09/22/2005 17:47:50     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D21                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 21                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.22	Fluoride	1.427	4877344	41587206	1	0.00
2	5.62	Chloride	63.508	159903224	1424337804	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
3	8.31	O-Phosphate-P	0.365	364072	5714870	1	0.00
4	9.54	Bromide	0.106	42439	587800	1	0.00
5	11.50	Nitrate-N	2.992	8573253	154237478	1	0.00
6	13.60	Sulfate	21.650	14873376	334666284	1	0.00
		Totals	90.049	188633708	1961131442		



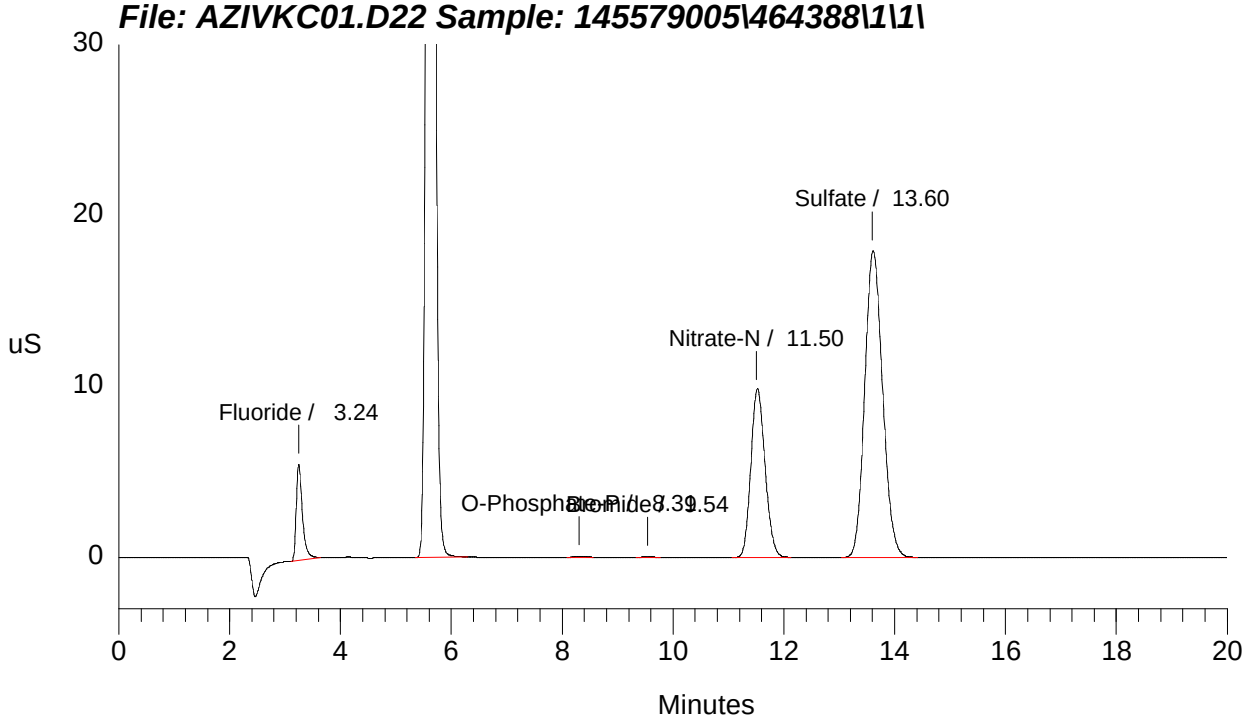
```
================================================================================
| Sample Name: 145579005\464388\1\1\          Date: 09/22/2005 18:08:19     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D22                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 22                 Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                     Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 1.495    5636884   43622549    1   0.00
   2   5.62 Chloride                49.268  124692435 1104250856    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   3   8.31 O-Phosphate-P            0.091      85255    1217940    1   0.00
   4   9.54 Bromide                  0.105      42691     574548    1   0.00
   5  11.50 Nitrate-N                3.404    9746378  175968854    1   0.00
   6  13.60 Sulfate                 26.002   17901990  402748232    1   0.00
                                ----------------------------------
                        Totals       80.364  158105634 1728382979
```

File: AZIVKC01.D22 Sample: 145579005\464388\1\1



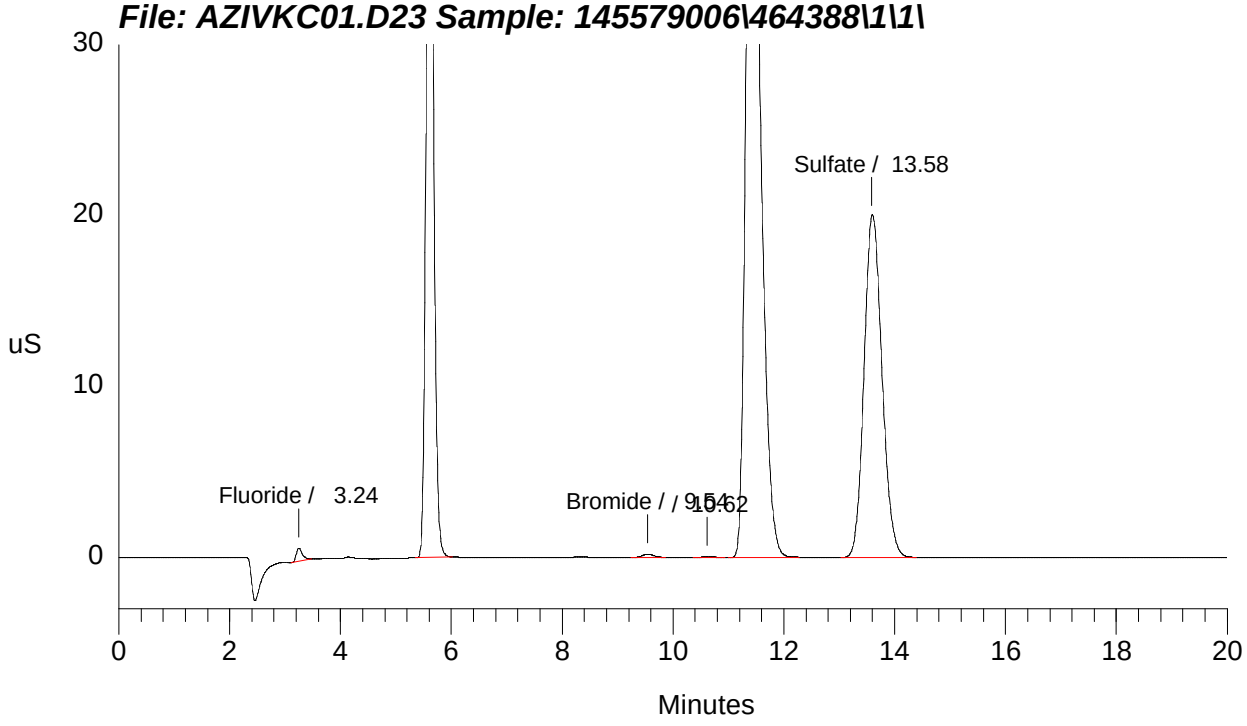
```
================================================================================
| Sample Name: 145579006\464388\1\1\          Date: 09/22/2005 18:28:48     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D23                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 23                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.227     756895    5800703    1   0.00
   2   5.60 Chloride                20.952   51647337  467784136    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   3   9.54 Bromide                  0.388     204561    3028214    1   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   6  13.58 Sulfate                 29.073   19944967  450810028    1   0.00
                          ----------------------------------
                    Totals         50.640   72553759  927423081
```

File: AZIVKC01.D23 Sample: 145579006\464388\1\1



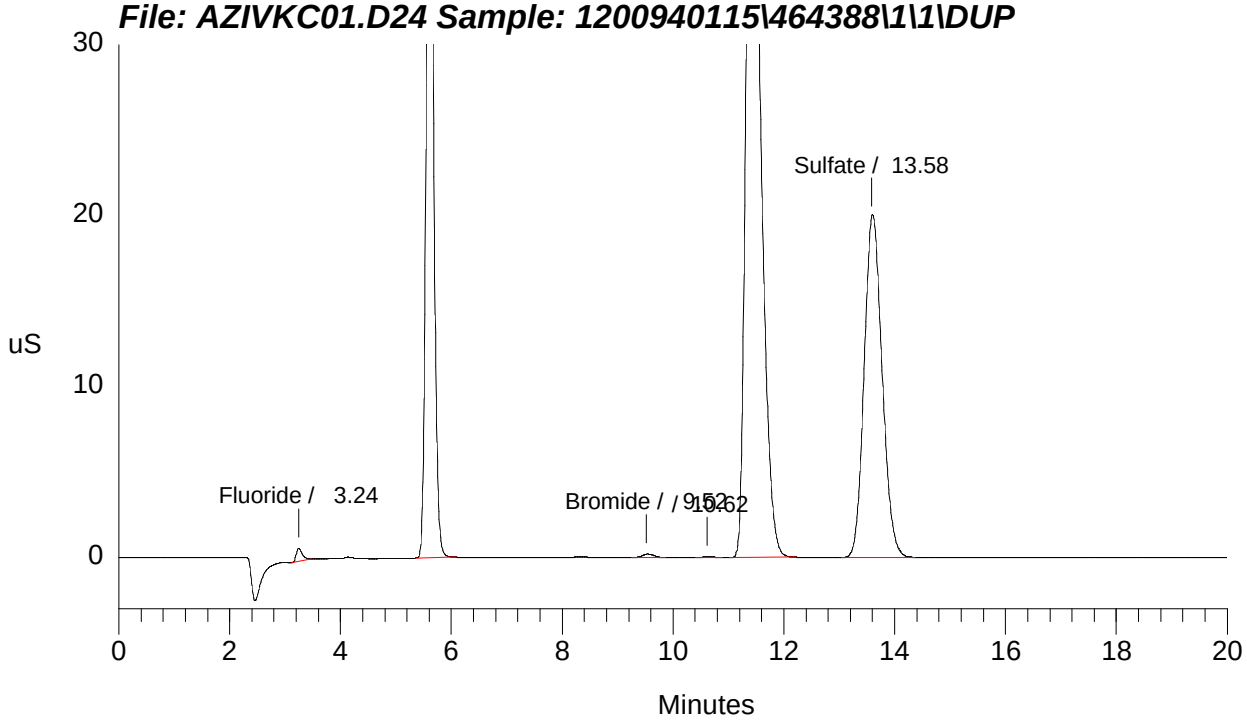
```
================================================================================
| Sample Name: 1200940115\464388\1\1\DUP      Date: 09/22/2005 18:49:17     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D24                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 24                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.227     761351    5800680     1   0.00
   2   5.60 Chloride                20.830   51897901  465038588     1   0.00
   0   0.00 Nitrite-N                0.000          0          0     0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0     0   0.00
   3   9.52 Bromide                  0.397     205362    3112064     1   0.00
   0   0.00 Nitrate-N                0.000          0          0     0   0.00
   6  13.58 Sulfate                 29.085   19885664  450990920     1   0.00
                          ----------------------------------
                    Totals         50.539   72750278  924942252
```

File: AZIVKC01.D24 Sample: 1200940115\464388\1\1\DUP



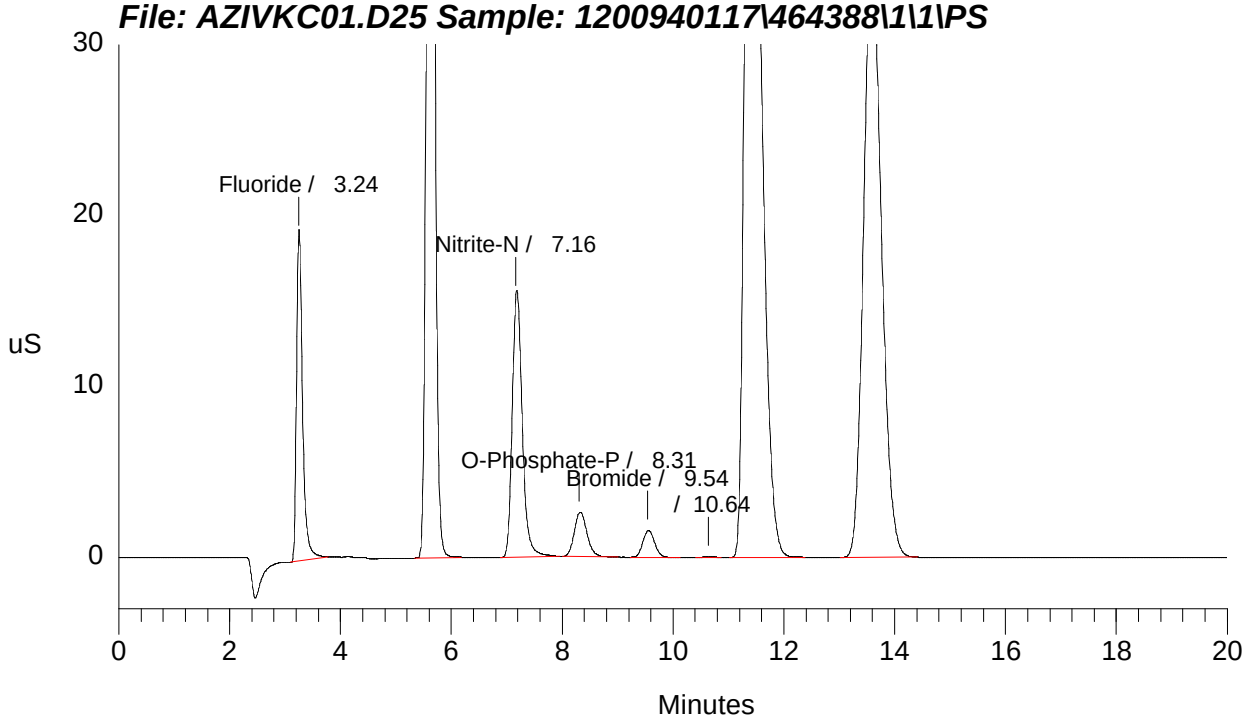
```
| Sample Name: 1200940117\464388\1\1\PS       Date: 09/22/2005 19:09:46     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D25                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 25                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.937	19001406	146249963	1	0.00
2	5.62	Chloride	32.783	83178917	733709378	1	0.00
3	7.16	Nitrite-N	4.769	15232554	196307534	1	0.00
4	8.31	O-Phosphate-P	2.541	2580824	41388368	1	0.00
5	9.54	Bromide	2.740	1569452	23426036	1	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
8	13.58	Sulfate	50.746	35297978	789896240	1	0.00
		Totals	98.516	156861131	1930977519		

File: AZIVKC01.D25 Sample: 1200940117\464388\1\1\PS

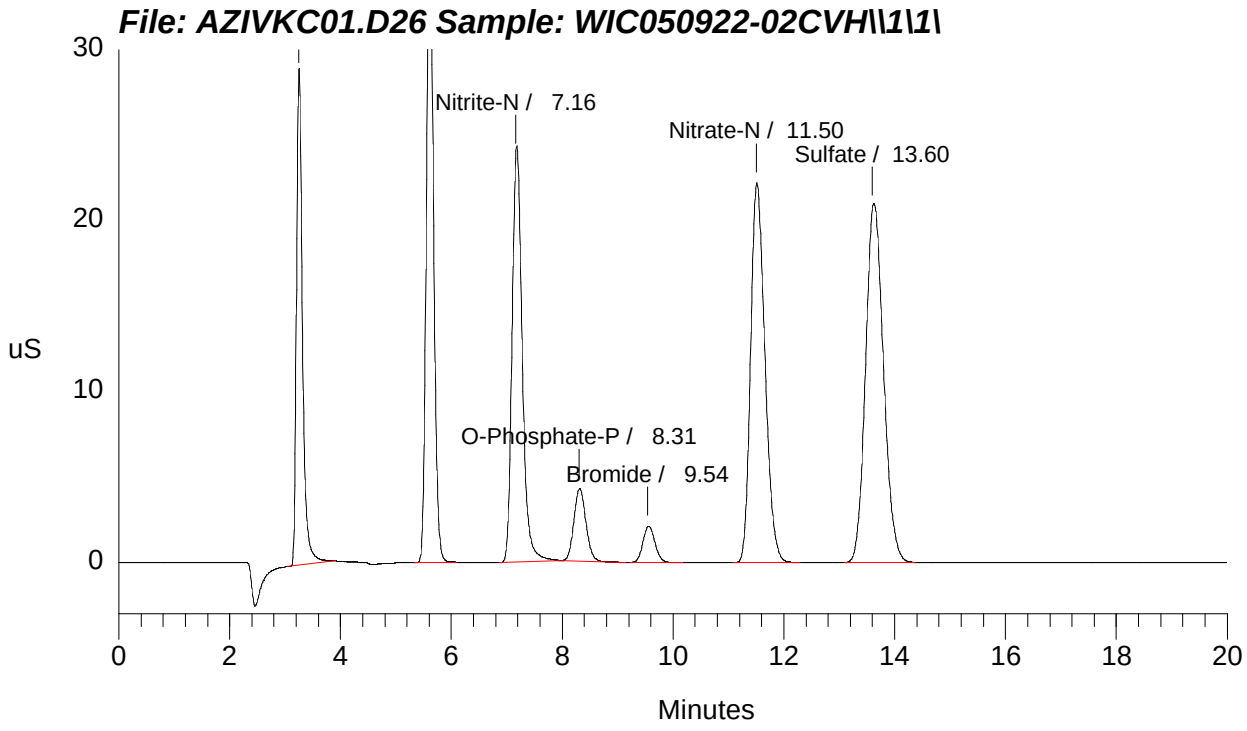


```
================================================================================
| Sample Name: WIC050922-02CVH\\1\1\          Date: 09/22/2005 19:30:15     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D26                                   |
| Method     : C:\DX\METHOD\AUG30.MET                                        |
| ACI Address: 1  System: 1  Inject#: 26                  Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 7.371   28745305  218849624    1   0.00
   2   5.60 Chloride                15.222   35991874  338992870    1   0.00
   3   7.16 Nitrite-N                7.483   23840586  308903590    1   0.00
   4   8.31 O-Phosphate-P            3.905    4224893   63747952    1   0.00
   5   9.54 Bromide                  3.739    2104680   32090946    1   0.00
   6  11.50 Nitrate-N                7.628   22175122  398951268    1   0.00
   7  13.60 Sulfate                 30.519   20853935  473423192    1   0.00
                                ----------------------------------
                         Totals      75.868  137936395 1834959442
```



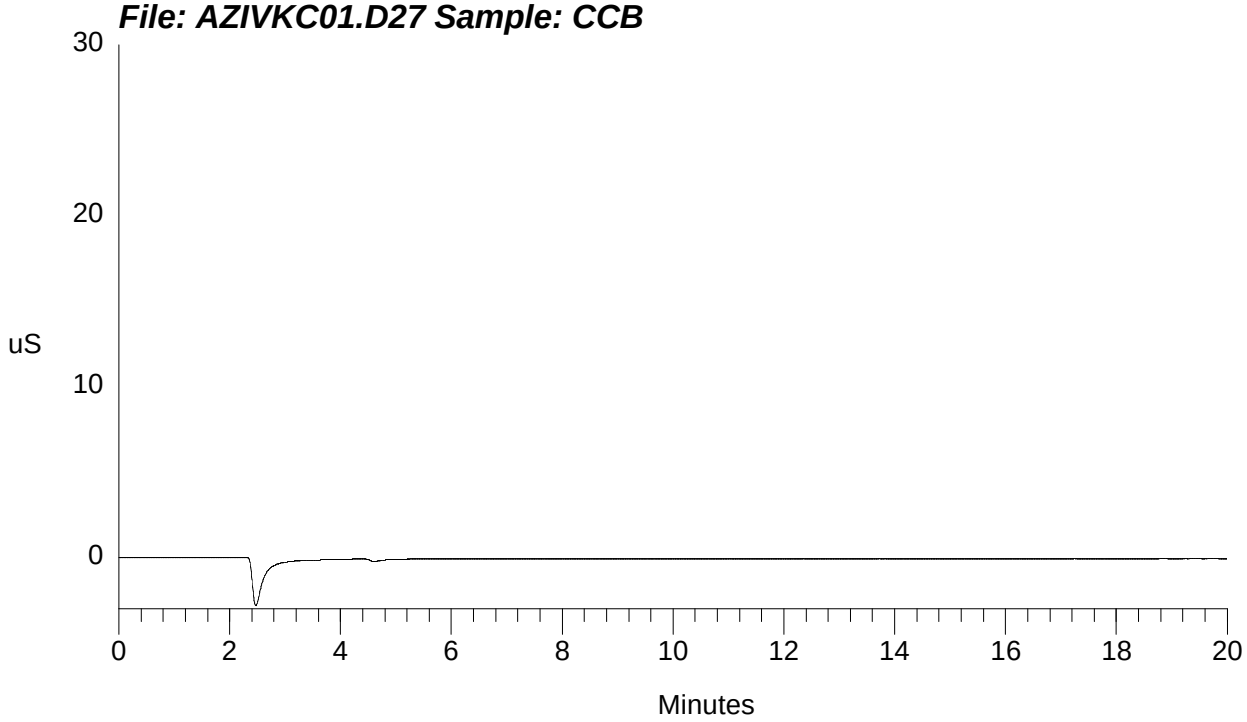
```
================================================================================
| Sample Name: CCB                              Date: 09/22/2005 19:50:43      |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D27                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 27                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZIVKC01.D27 Sample: CCB



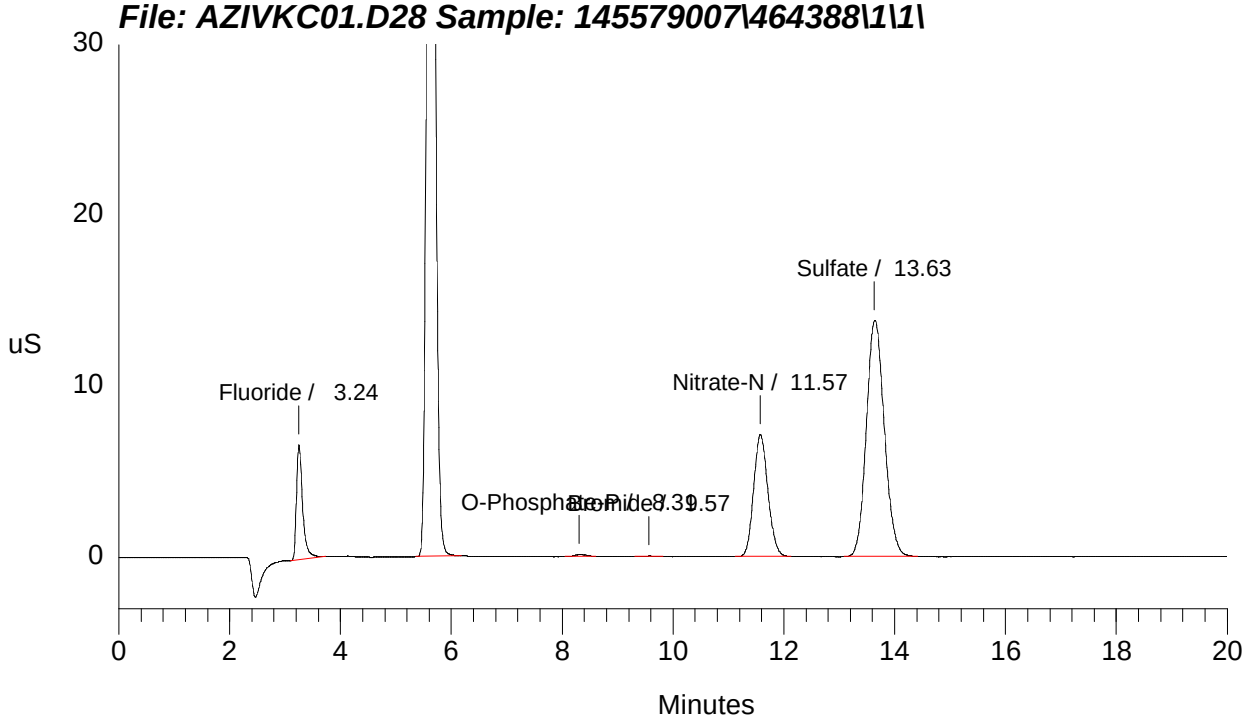
```
================================================================================
| Sample Name: 145579007\464388\1\1\          Date: 09/22/2005 20:11:12     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D28                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 28                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 1.782    6704180   52178256    1   0.00
   2   5.62 Chloride                36.207   91378933  810679716    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   3   8.31 O-Phosphate-P            0.122     111046    1734178    1   0.00
   4   9.57 Bromide                  0.100      36170     534562    1   0.00
   5  11.57 Nitrate-N                2.489    7122175  127695392    1   0.00
   6  13.63 Sulfate                 20.185   13763700  311742604    1   0.00
                                ----------------------------------
                         Totals     60.886  119116204 1304564708
```

File: AZIVKC01.D28 Sample: 145579007\464388\1\1



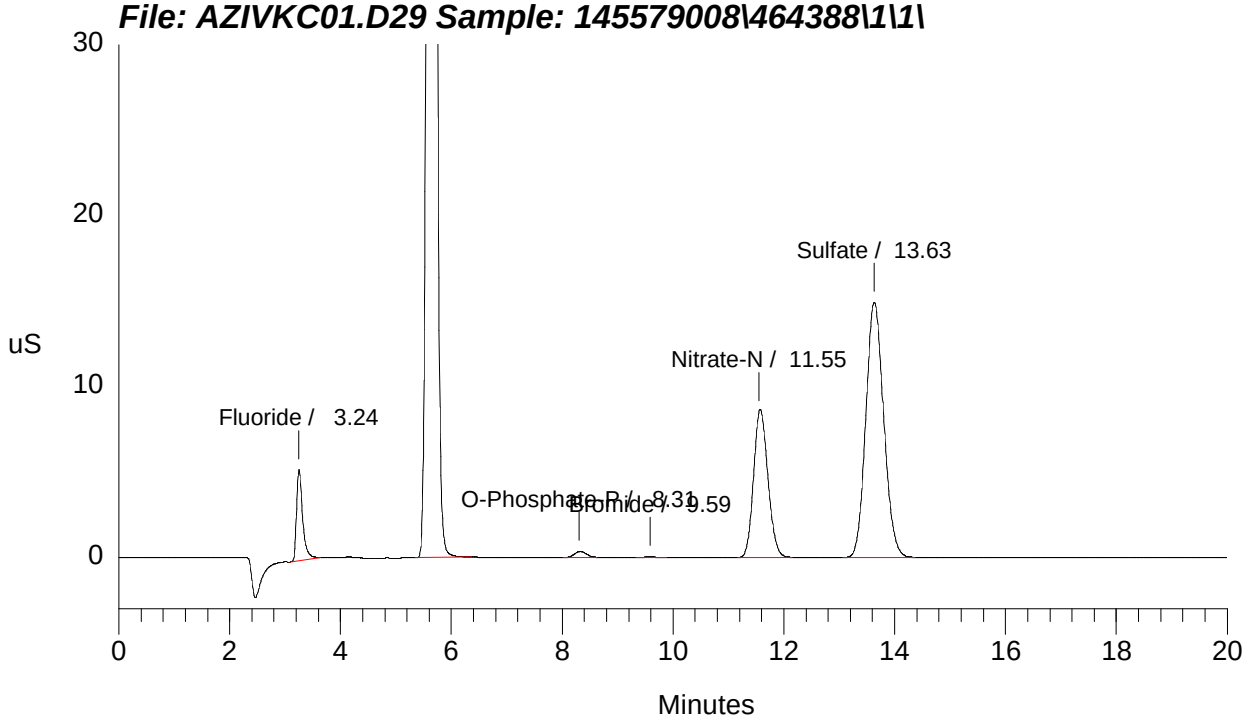
```
================================================================================
| Sample Name: 145579008\464388\1\1\          Date: 09/22/2005 20:31:41     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D29                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 29                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	1.401	5289640	40824024	1	0.00
2	5.65	Chloride	64.086	160300809	1437326118	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
3	8.31	O-Phosphate-P	0.354	357110	5531270	1	0.00
4	9.59	Bromide	0.117	44632	684464	1	0.00
5	11.55	Nitrate-N	3.015	8517840	155413074	1	0.00
6	13.63	Sulfate	21.726	14903853	335854878	1	0.00
		Totals	90.700	189413884	1975633828		

File: AZIVKC01.D29 Sample: 145579008\464388\1\1



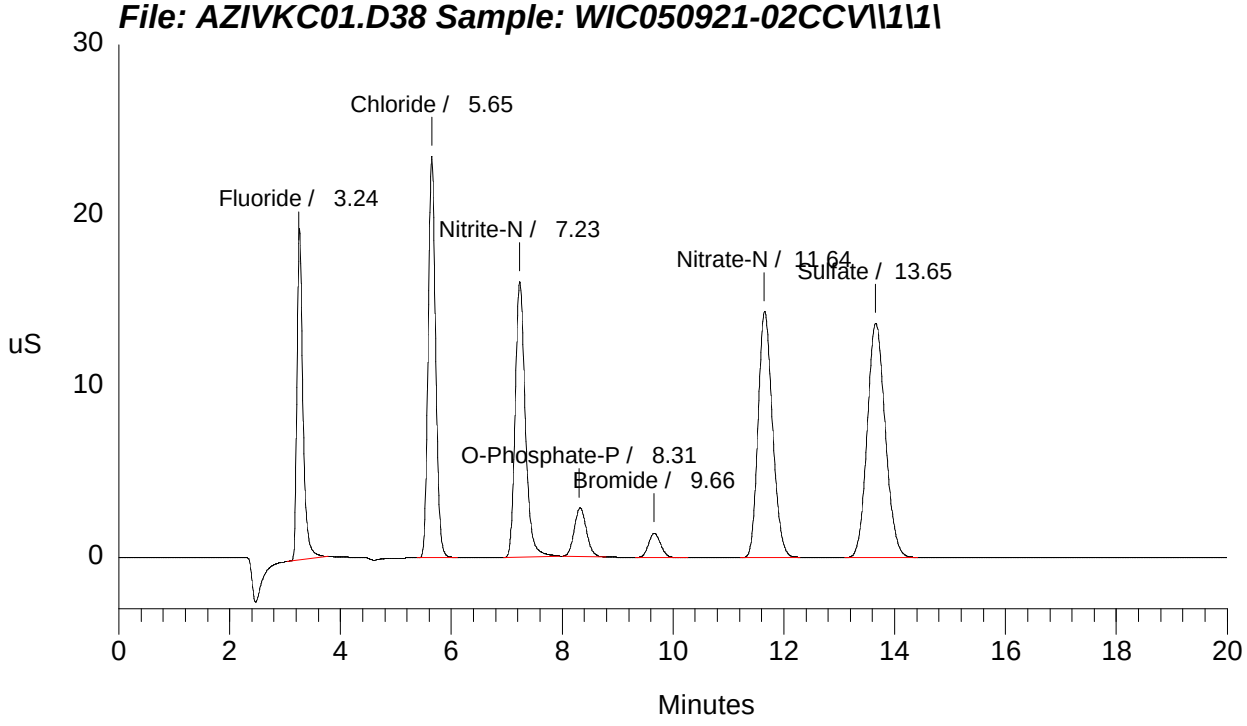
```
================================================================================
| Sample Name: WIC050921-02CCV\\1\1\          Date: 09/22/2005 23:36:00     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D38                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 38                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                4.874   18055970  144380380    1   0.00
   2   5.65 Chloride                9.899   23480302  219327364    1   0.00
   3   7.23 Nitrite-N               4.972   16107103  204756704    1   0.00
   4   8.31 O-Phosphate-P           2.656    2812223   43273372    1   0.00
   5   9.66 Bromide                 2.549    1434513   21766506    1   0.00
   6  11.64 Nitrate-N               5.015   14373465  261006596    1   0.00
   7  13.65 Sulfate                20.140   13691172  311033940    1   0.00
                                ----------------------------------
                        Totals      50.104   89954747 1205544862
```

File: AZIVKC01.D38 Sample: WIC050921-02CCV\\1\1



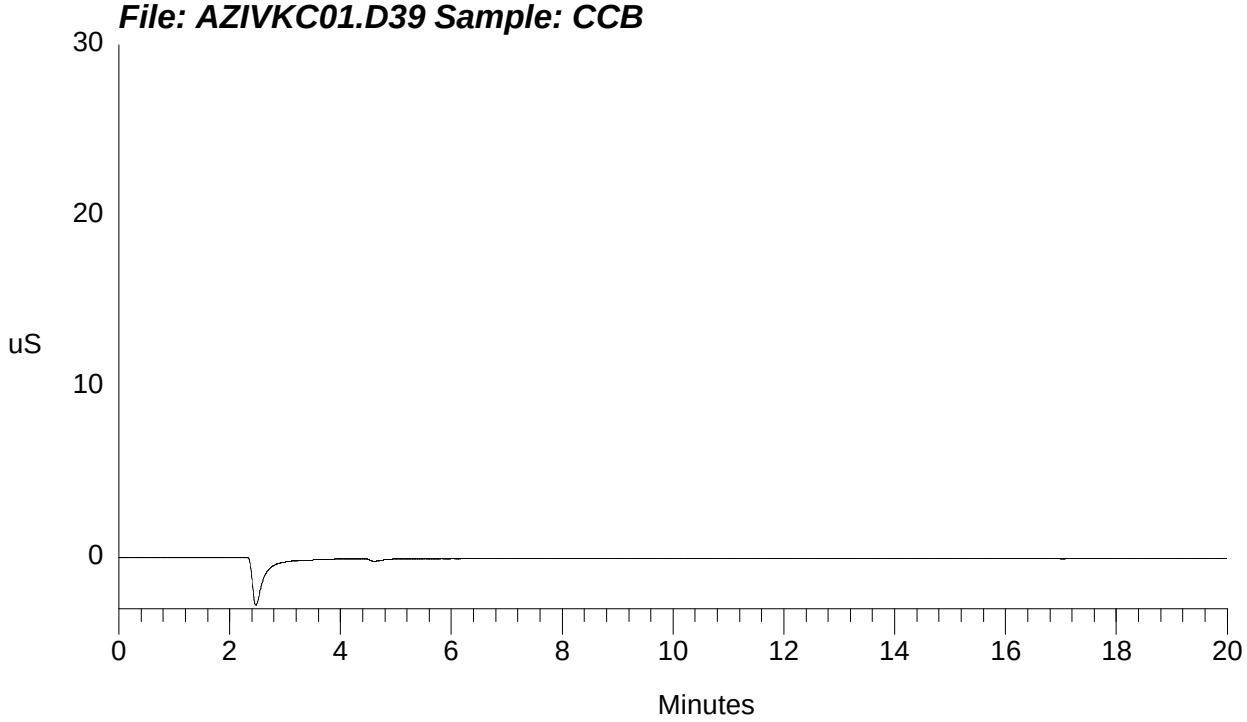
```
================================================================================
| Sample Name: CCB                              Date: 09/22/2005 23:56:29      |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D39                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 39                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZIVKC01.D39 Sample: CCB



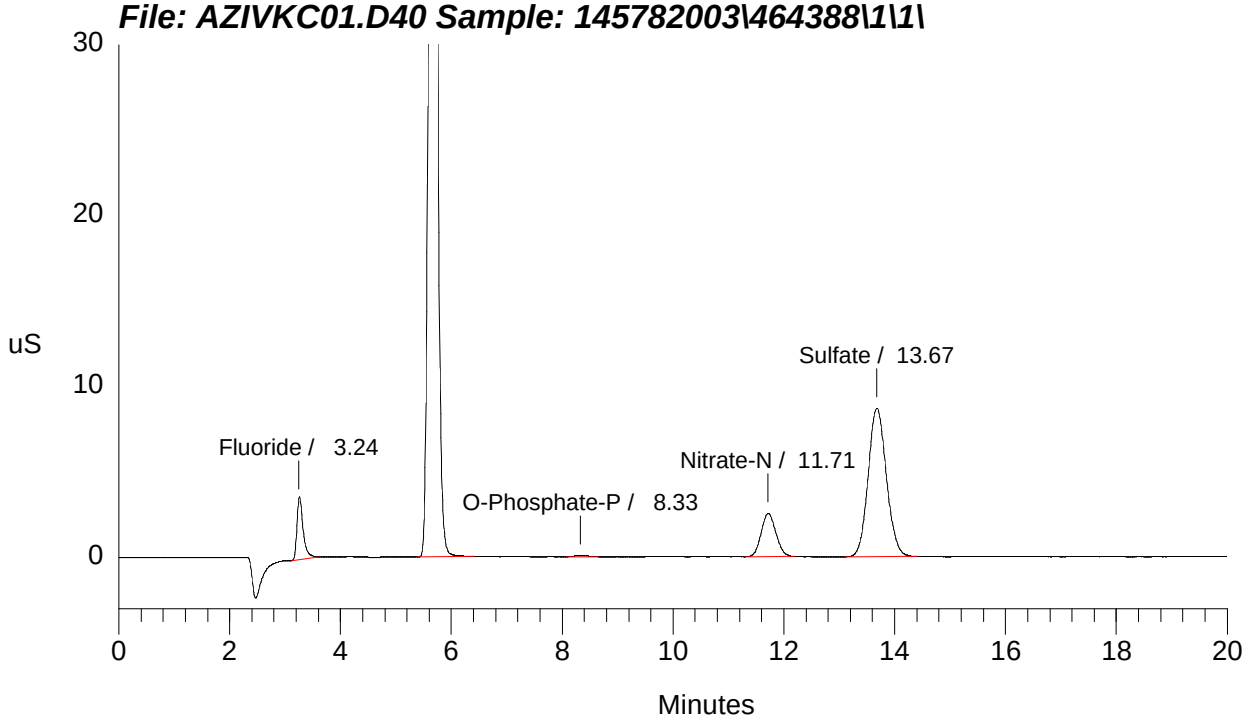
```
================================================================================
| Sample Name: 145782003\464388\1\1\          Date: 09/23/2005 00:16:58     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D40                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 40                 Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.981    3484499   28292192    1   0.00
   2   5.67 Chloride                37.333   93319005  835975762    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   3   8.33 O-Phosphate-P            0.099      81414    1348114    1   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   4  11.71 Nitrate-N                0.949    2527879   46398936    1   0.00
   5  13.67 Sulfate                 12.944    8665227  198452336    1   0.00
                                  ----------------------------------
                        Totals       52.306  108078023 1110467340
```

File: AZIVKC01.D40 Sample: 145782003\464388\1\1



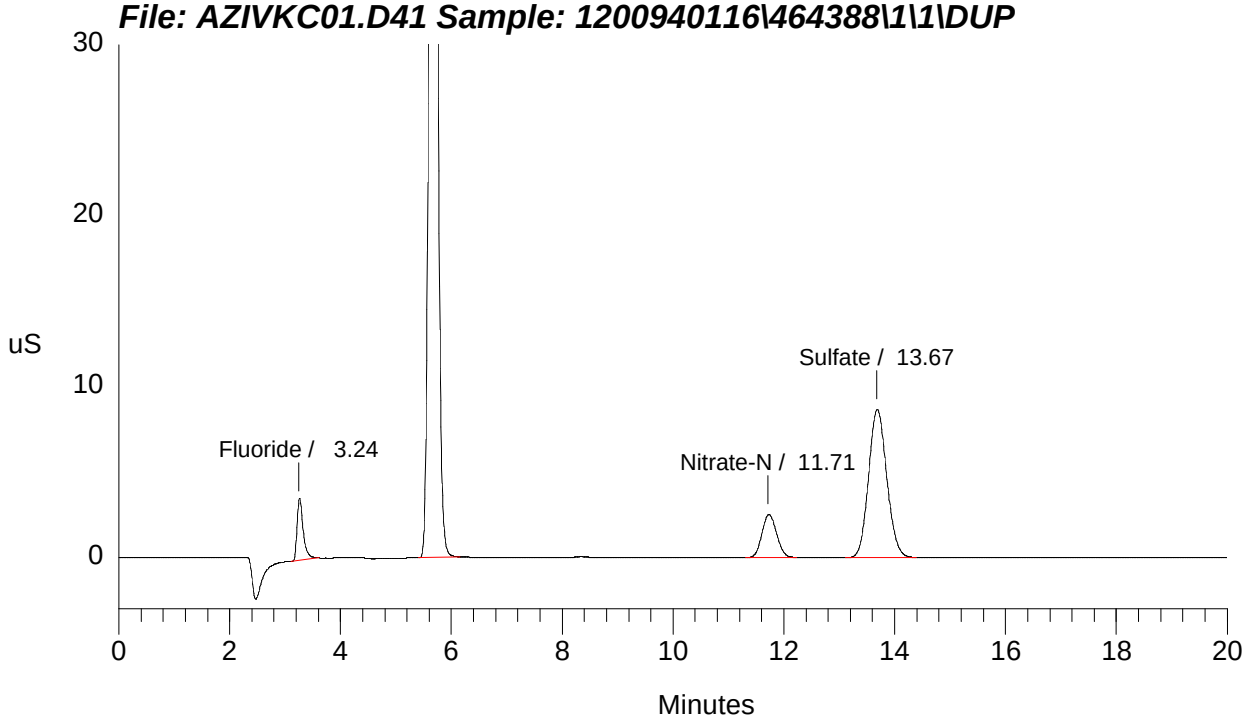
```
================================================================================
| Sample Name: 1200940116\464388\1\1\DUP      Date: 09/23/2005 00:37:27     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D41                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 41                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.24 Fluoride                0.978    3436855   28205903    1   0.00
   2   5.67 Chloride               37.408   93210037  837665018    1   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   3  11.71 Nitrate-N               0.953    2504385   46610902    1   0.00
   4  13.67 Sulfate                12.930    8628774  198233206    1   0.00
                          ----------------------------------
                    Totals          52.270  107780051 1110715029
```

File: AZIVKC01.D41 Sample: 1200940116\464388\1\1\DUP

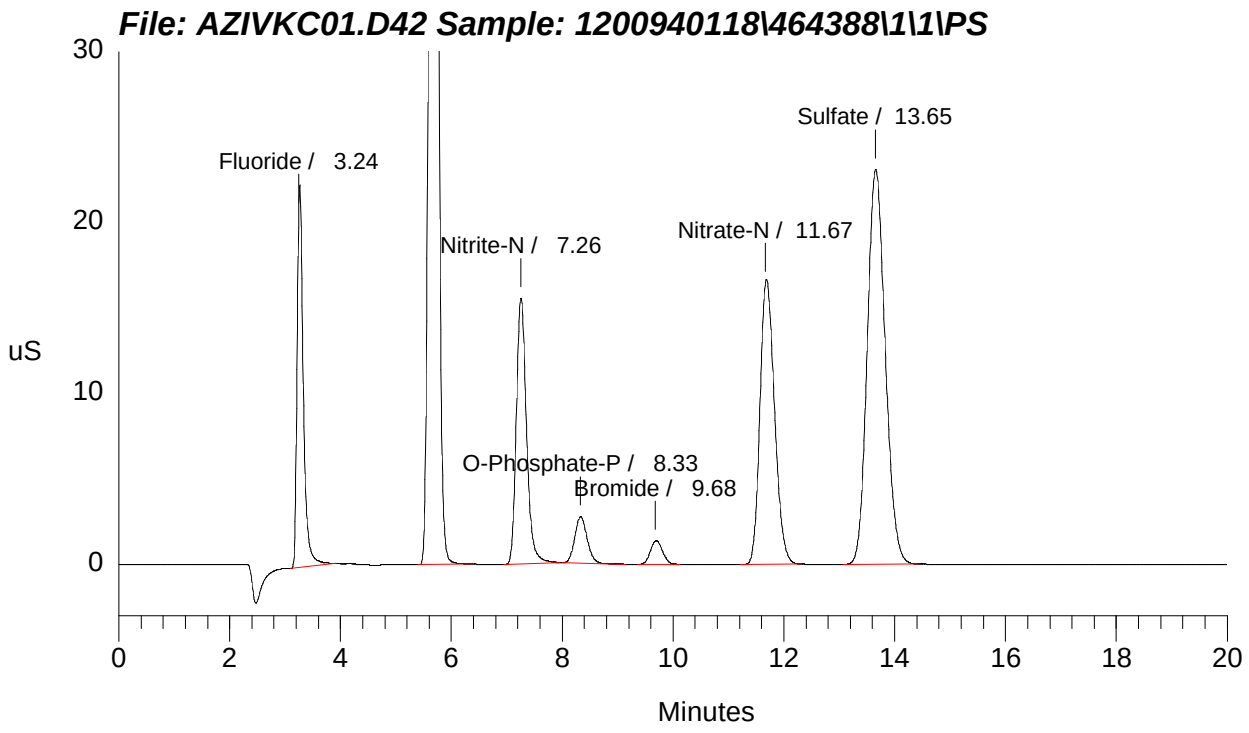


```
================================================================================
| Sample Name: 1200940118\464388\1\1\PS       Date: 09/23/2005 00:57:56     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D42                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 42                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                5.890   20701477  174692929    1   0.00
   2   5.67 Chloride               49.946  122101247 1119491832    1   0.00
   3   7.26 Nitrite-N               4.829   15552453  198816527    1   0.00
   4   8.33 O-Phosphate-P           2.594    2729634   42253306    1   0.00
   5   9.68 Bromide                 2.499    1380421   21331856    1   0.00
   6  11.67 Nitrate-N               5.838   16477183  304431402    1   0.00
   7  13.65 Sulfate                33.619   23089642  521927820    1   0.00
                          ----------------------------------
                    Totals       105.215  202032058 2382945672
```

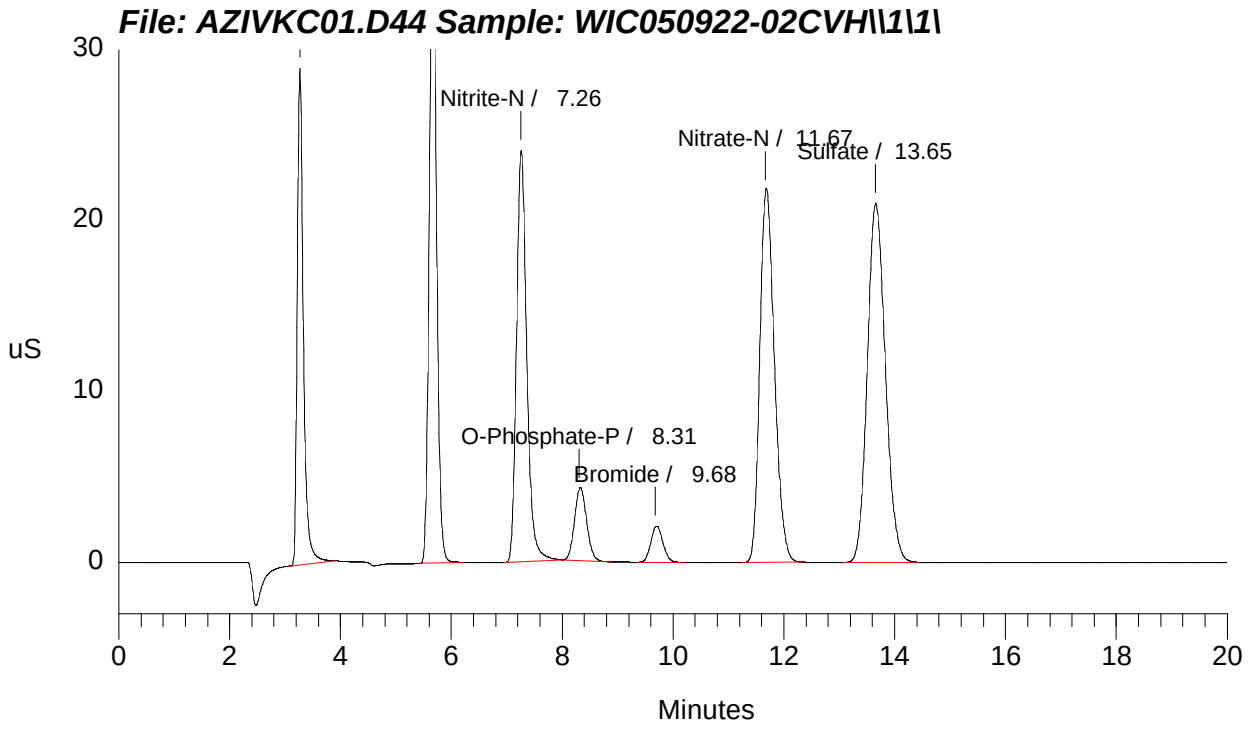


```
================================================================================
| Sample Name: WIC050922-02CVH\\1\1\          Date: 09/23/2005 01:38:54     |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D44                                   |
| Method     : C:\DX\METHOD\AUG30.MET                                        |
| ACI Address: 1  System: 1  Inject#: 44                  Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	7.508	29043993	222938198	1	0.00
2	5.65	Chloride	15.402	35466520	343038716	1	0.00
3	7.26	Nitrite-N	7.480	24043121	308814446	1	0.00
4	8.31	O-Phosphate-P	3.960	4186766	64637018	1	0.00
5	9.68	Bromide	3.789	2091043	32522570	1	0.00
6	11.67	Nitrate-N	7.667	21718190	400996796	1	0.00
7	13.65	Sulfate	30.673	20979028	475833170	1	0.00
		Totals	76.479	137528662	1848780914		



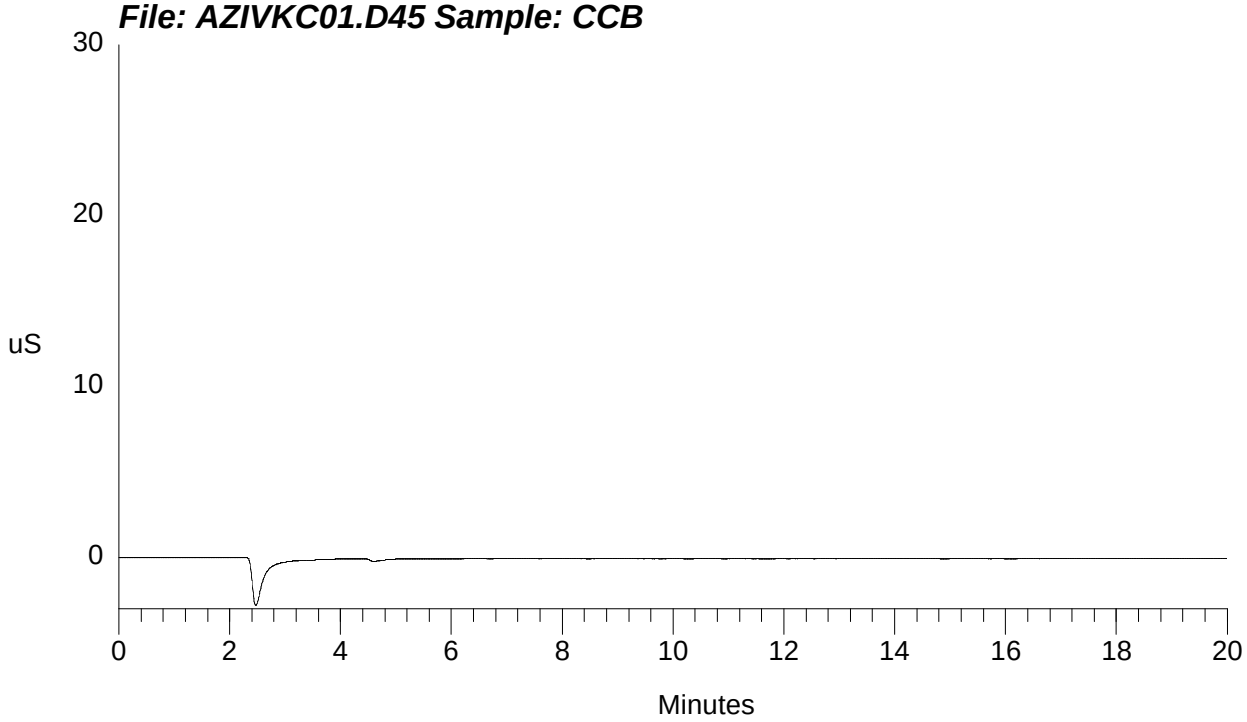
```
================================================================================
| Sample Name: CCB                              Date: 09/23/2005 01:59:22      |
| Data File  : C:\TMP\HORIZON\AZIVKC01.D45                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 45                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.     Ret Component          Concentration     Height       Area  Bl. %Delta
 Num    Time Name                      mg/l                        Code
--------------------------------------------------------------------------------
   0    0.00 Fluoride                 0.000          0          0    0   0.00
   0    0.00 Chloride                 0.000          0          0    0   0.00
   0    0.00 Nitrite-N                0.000          0          0    0   0.00
   0    0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0    0.00 Bromide                  0.000          0          0    0   0.00
   0    0.00 Nitrate-N                0.000          0          0    0   0.00
   0    0.00 Sulfate                  0.000          0          0    0   0.00
                                   ----------------------------------
                        Totals       0.000          0          0
```

File: AZIVKC01.D45 Sample: CCB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			MAR1	09/23/2005 14:19:29	AZIWKC01.R01
WIC050923-02ICV:1		1	MAR1	09/23/2005 14:39:58	AZIWKC01.R02
ICB:			MAR1	09/23/2005 15:00:27	AZIWKC01.R03
1200931138:1	460766	1	MAR1	09/23/2005 15:20:55	AZIWKC01.R04
144836001:1	460766	1	MAR1	09/23/2005 15:41:24	AZIWKC01.R05
144836002:1	460766	1	MAR1	09/23/2005 16:01:53	AZIWKC01.R06
144836003:1	460766	1	MAR1	09/23/2005 16:22:22	AZIWKC01.R07
144836004:1	460766	1	MAR1	09/23/2005 16:42:51	AZIWKC01.R08
144836005:1	460766	1	MAR1	09/23/2005 17:03:19	AZIWKC01.R09
144836006:1	460766	1	MAR1	09/23/2005 17:23:48	AZIWKC01.R10
144836007:1	460766	1	MAR1	09/23/2005 17:44:17	AZIWKC01.R11
WIC050923-02CVH:1		1	MAR1	09/23/2005 18:04:46	AZIWKC01.R12
CCB:			MAR1	09/23/2005 18:25:15	AZIWKC01.R13
1200931149:1	460772	1	MAR1	09/23/2005 18:45:33	AZIWKC01.R14
144836013:1	460772	1	MAR1	09/23/2005 19:06:02	AZIWKC01.R15
144836014:1	460772	1	MAR1	09/23/2005 19:26:31	AZIWKC01.R16
144836015:1	460772	1	MAR1	09/23/2005 19:47:00	AZIWKC01.R17
144836016:1	460772	1	MAR1	09/23/2005 20:07:29	AZIWKC01.R18
144836017:1	460772	1	MAR1	09/23/2005 20:27:58	AZIWKC01.R19
144836018:1	460772	1	MAR1	09/23/2005 20:48:26	AZIWKC01.R20
144836019:1	460772	1	MAR1	09/23/2005 21:08:55	AZIWKC01.R21
WIC050923-02CCV:1		1	MAR1	09/23/2005 21:29:24	AZIWKC01.R22
CCB:			MAR1	09/23/2005 21:49:53	AZIWKC01.R23
145579001:2	464388	5	MAR1	09/23/2005 22:10:22	AZIWKC01.R24
145579002:2	464388	2	MAR1	09/23/2005 22:30:50	AZIWKC01.R25
145579003:2	464388	2	MAR1	09/23/2005 22:51:19	AZIWKC01.R26
145579004:2	464388	5	MAR1	09/23/2005 23:11:48	AZIWKC01.R27
145579005:2	464388	5	MAR1	09/23/2005 23:32:17	AZIWKC01.R28
145579006:2	464388	2	MAR1	09/23/2005 23:52:46	AZIWKC01.R29
1200940115:2	464388	2	MAR1	09/24/2005 00:13:14	AZIWKC01.R30
1200940117:2	464388	2	MAR1	09/24/2005 00:33:43	AZIWKC01.R31
WIC050923-02CVH:1		1	MAR1	09/24/2005 00:54:12	AZIWKC01.R32
CCB:			MAR1	09/24/2005 01:14:41	AZIWKC01.R33
145579007:2	464388	5	MAR1	09/24/2005 01:35:10	AZIWKC01.R34
145579008:2	464388	5	MAR1	09/24/2005 01:55:39	AZIWKC01.R35
145739001:2	464388	5	MAR1	09/24/2005 02:16:08	AZIWKC01.R36
145739004:2	464388	5	MAR1	09/24/2005 02:36:36	AZIWKC01.R37
145782001:2	464388	2	MAR1	09/24/2005 02:57:05	AZIWKC01.R38
145782002:2	464388	5	MAR1	09/24/2005 03:17:34	AZIWKC01.R39
145782003:2	464388	5	MAR1	09/24/2005 03:38:03	AZIWKC01.R40
1200940116:2	464388	5	MAR1	09/24/2005 03:58:32	AZIWKC01.R41
1200940118:2	464388	5	MAR1	09/24/2005 04:19:00	AZIWKC01.R42
145782004:2	464388	5	MAR1	09/24/2005 04:39:29	AZIWKC01.R43
WIC050923-02CCV:1		1	MAR1	09/24/2005 04:59:58	AZIWKC01.R44
CCB:			MAR1	09/24/2005 05:20:27	AZIWKC01.R45
1200942684:1	465453	1	MAR1	09/24/2005 05:40:56	AZIWKC01.R46
1200942687:1	465453	1	MAR1	09/24/2005 06:01:24	AZIWKC01.R47
146168006:1	465453	1	MAR1	09/24/2005 06:21:53	AZIWKC01.R48
1200942685:1	465453	1	MAR1	09/24/2005 06:42:22	AZIWKC01.R49
1200942686:1	465453	1	MAR1	09/24/2005 07:02:51	AZIWKC01.R50
146168007:1	465453	1	MAR1	09/24/2005 07:23:20	AZIWKC01.R51
146168008:1	465453	1	MAR1	09/24/2005 07:43:49	AZIWKC01.R52
146168009:1	465453	1	MAR1	09/24/2005 08:04:18	AZIWKC01.R53
146168013:1	465453	1	MAR1	09/24/2005 08:24:46	AZIWKC01.R54
146168014:1	465453	1	MAR1	09/24/2005 08:45:15	AZIWKC01.R55

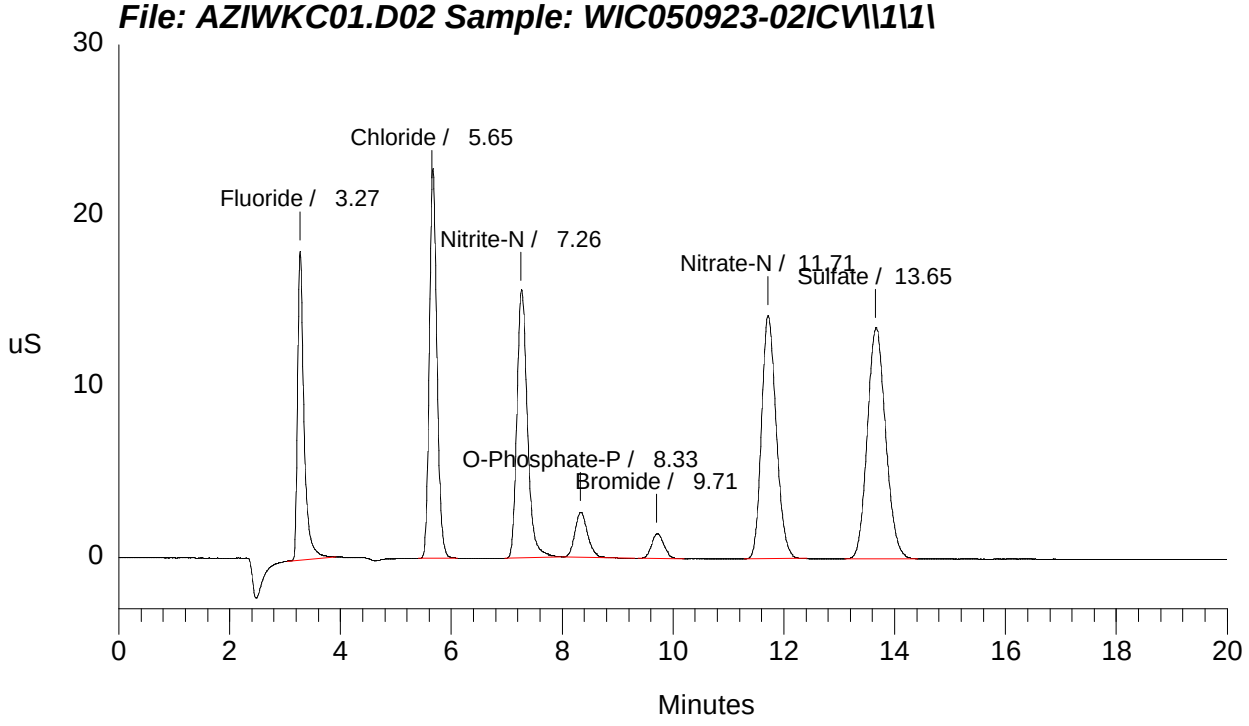
```
================================================================================
| Sample Name: WIC050923-02ICV\\1\1\          Date: 09/23/2005 14:39:58     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D02                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.27 Fluoride                 4.939   18057796  146324034    1   0.00
   2   5.65 Chloride                 9.778   21574243  216609382    1   0.00
   3   7.26 Nitrite-N                5.019   15594141  206696314    1   0.00
   4   8.33 O-Phosphate-P            2.568    2642750   41831536    1   0.00
   5   9.71 Bromide                  2.650    1451930   22642674    1   0.00
   6  11.71 Nitrate-N                5.046   14221066  262624214    1   0.00
   7  13.65 Sulfate                 20.164   13442988  311410102    1   0.00
                                  ----------------------------------
                        Totals      50.163   86984915 1208138256
```

File: AZIWKC01.D02 Sample: WIC050923-02ICV\\1\1



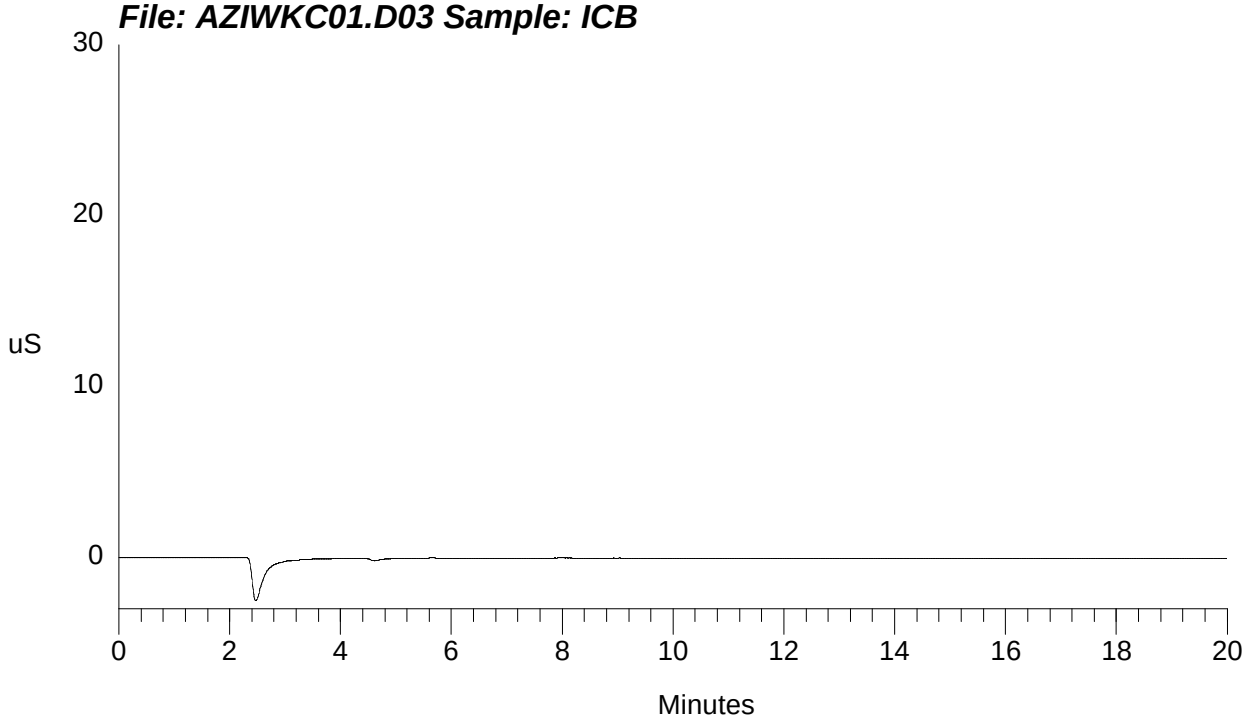
```
================================================================================
| Sample Name: ICB                              Date: 09/23/2005 15:00:27      |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D03                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                      Totals        0.000          0          0
```

File: AZIWKC01.D03 Sample: ICB



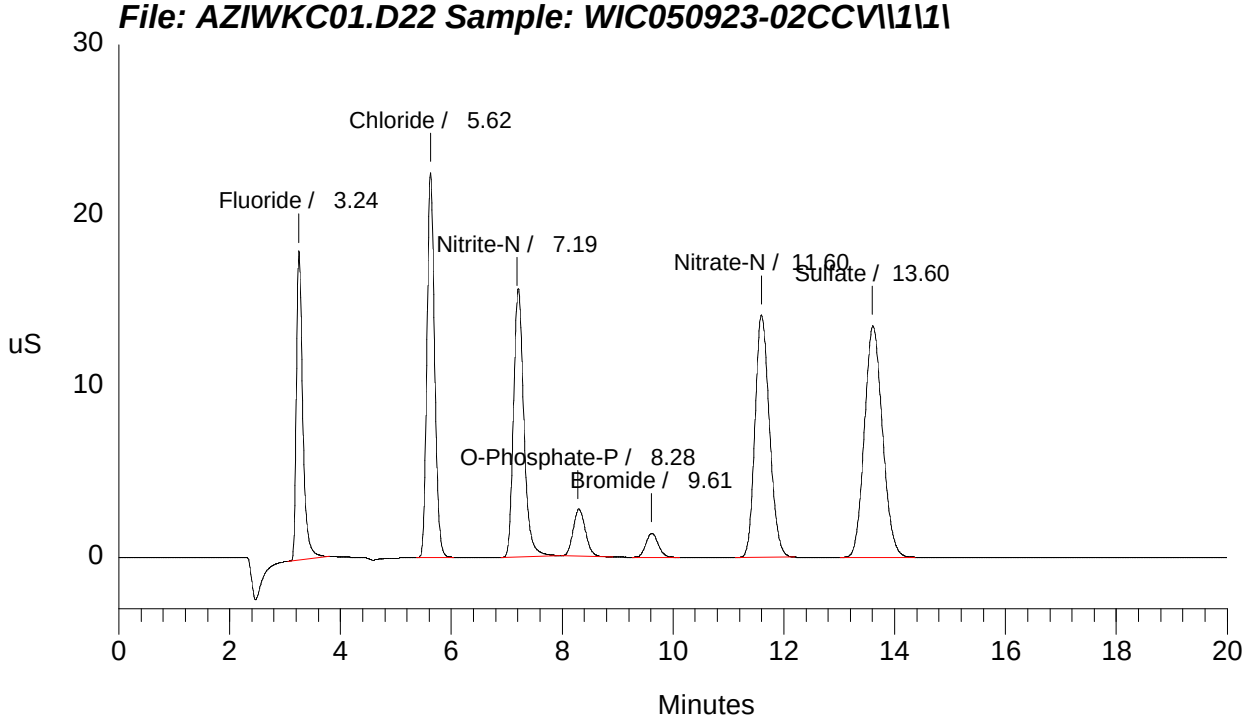
```
| Sample Name: WIC050923-02CCV\\1\1\          Date: 09/23/2005 21:29:24     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D22                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 22                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.885	17934323	144706749	1	0.00
2	5.62	Chloride	9.767	22527947	216361678	1	0.00
3	7.19	Nitrite-N	4.961	15241827	204282894	1	0.00
4	8.28	O-Phosphate-P	2.614	2714703	42576271	1	0.00
5	9.61	Bromide	2.554	1407005	21812714	1	0.00
6	11.60	Nitrate-N	4.955	14155910	257827820	1	0.00
7	13.60	Sulfate	19.925	13556701	307680424	1	0.00
		Totals	49.660	87538414	1195248550		

File: AZIWKC01.D22 Sample: WIC050923-02CCV\\1\1



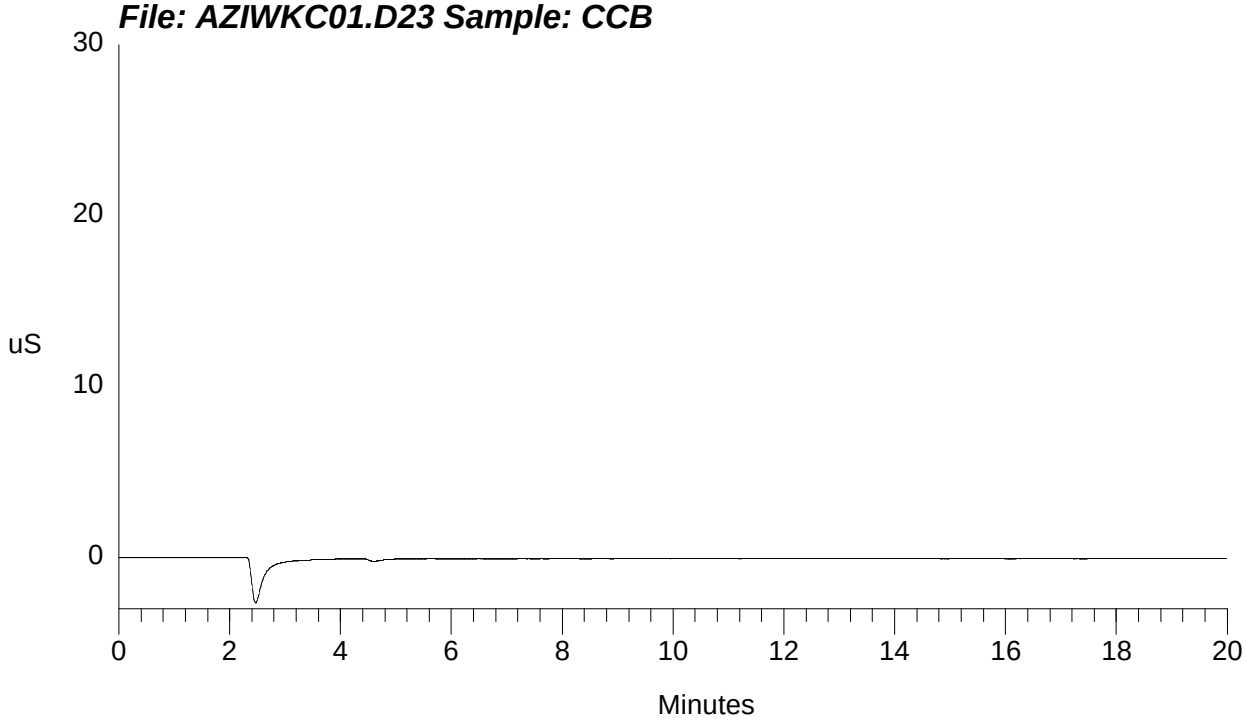
```
================================================================================
| Sample Name: CCB                              Date: 09/23/2005 21:49:53      |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D23                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 23                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZIWKC01.D23 Sample: CCB



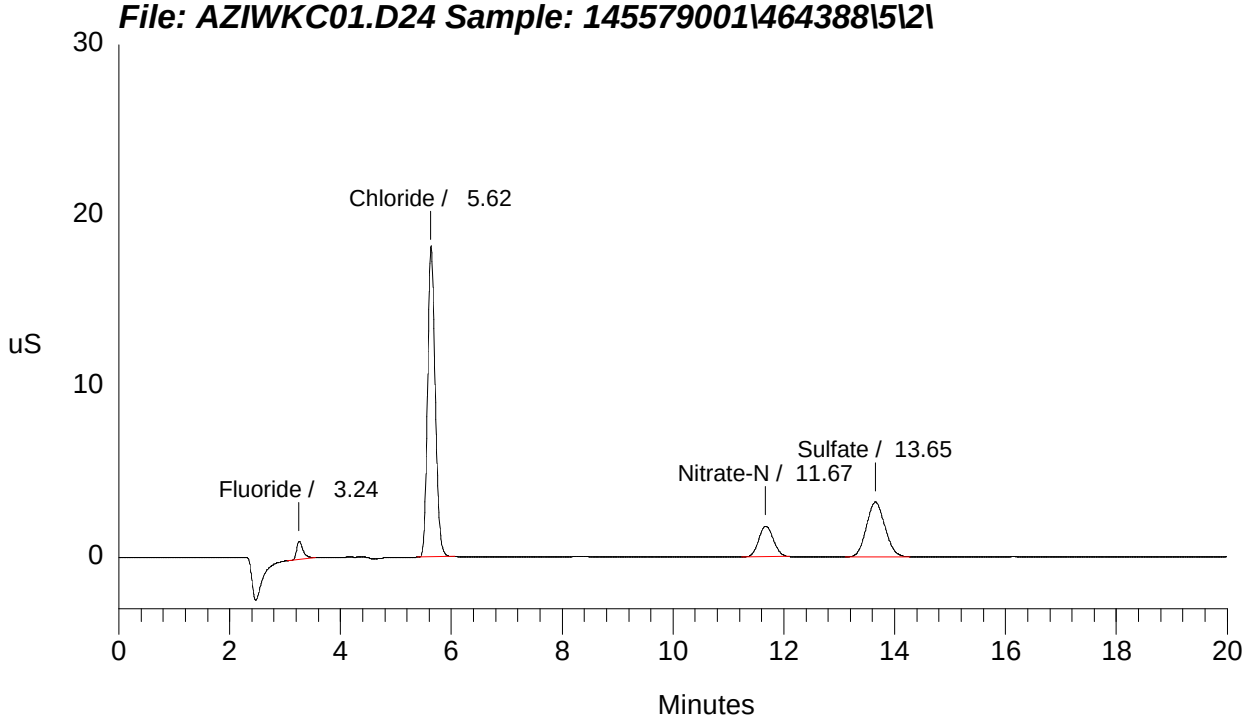
```
| Sample Name: 145579001\464388\5\2\          Date: 09/23/2005 22:10:22     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D24                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 24                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.320	1037880	8571103	1	0.00
2	5.62	Chloride	7.915	17912456	174742506	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.67	Nitrate-N	0.695	1797858	32949756	1	0.00
4	13.65	Sulfate	4.999	3194660	74151512	1	0.00
		Totals	13.929	23942853	290414877		

File: AZIWKC01.D24 Sample: 145579001\464388\5\2



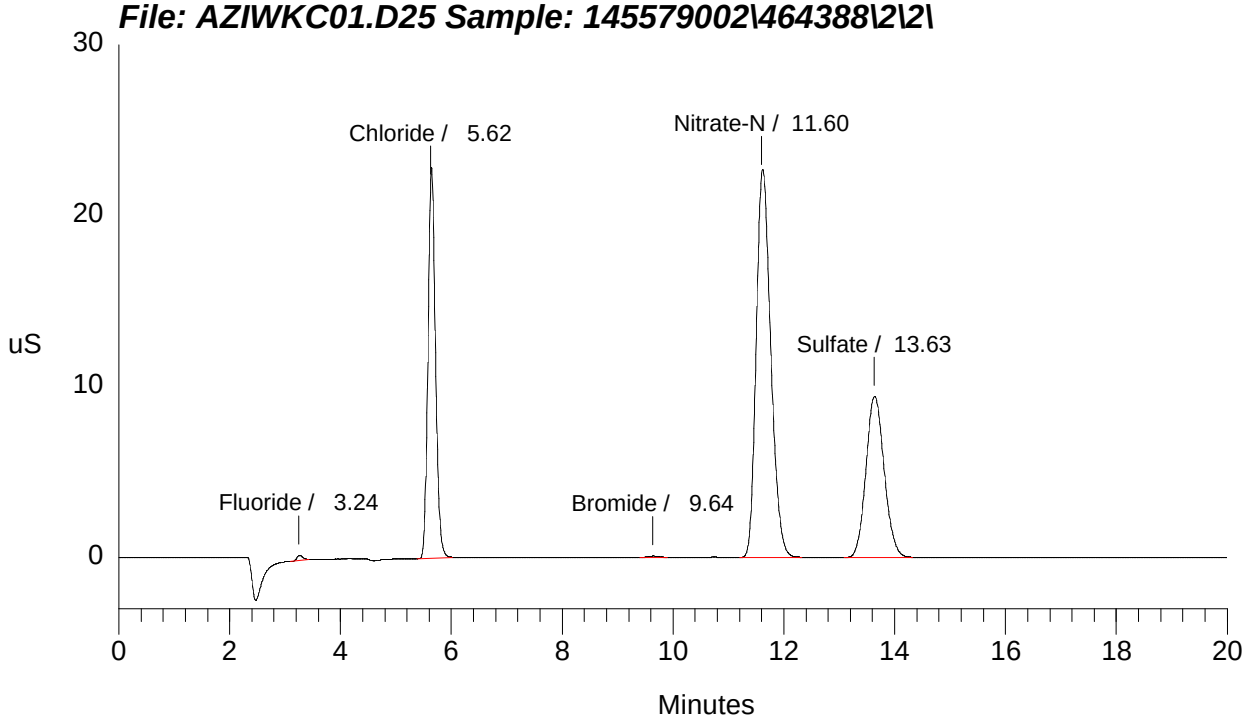
```
================================================================================
| Sample Name: 145579002\464388\2\2\          Date: 09/23/2005 22:30:50     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D25                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 25                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.114     308733    2423514    1   0.00
   2   5.62 Chloride                 9.688   21803984  214588358    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   3   9.64 Bromide                  0.185      91922    1273792    1   0.00
   4  11.60 Nitrate-N                7.938   22340357  415277334    1   0.00
   5  13.63 Sulfate                 14.081    9408732  216240122    1   0.00
                                  ----------------------------------
                        Totals       32.005   53953728  849803120
```

File: AZIWKC01.D25 Sample: 145579002\464388\2\2



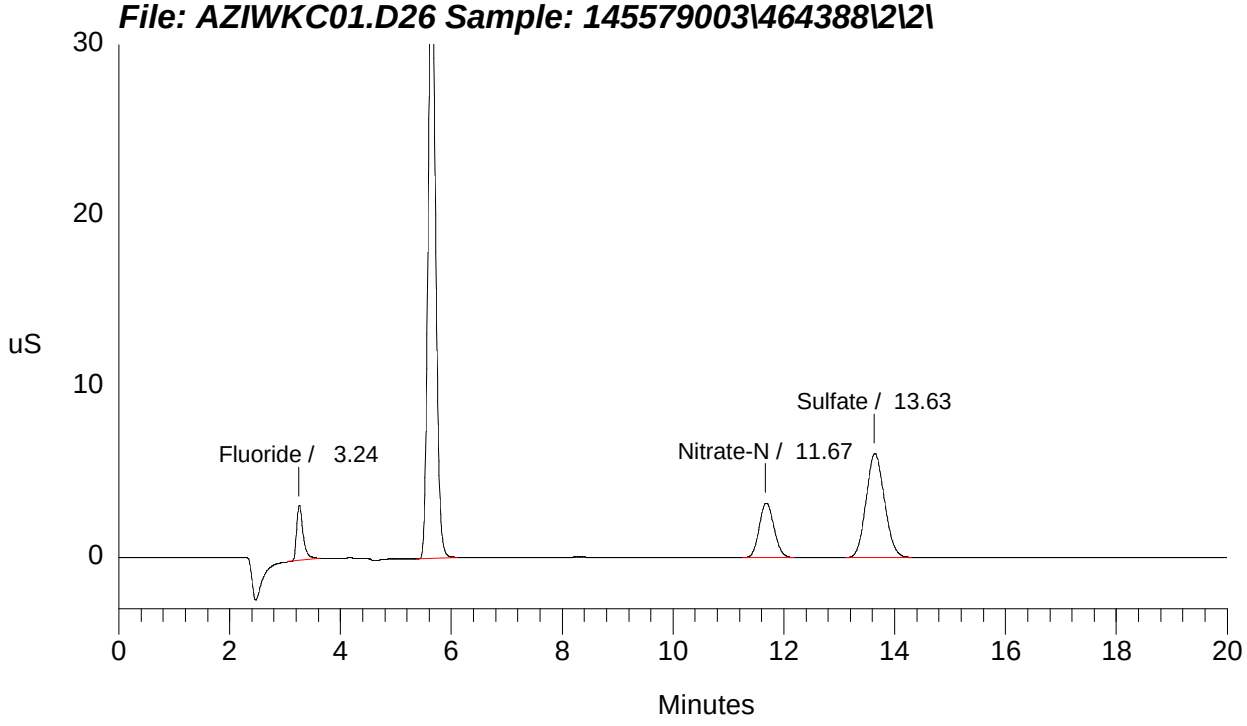
```
================================================================================
| Sample Name: 145579003\464388\2\2\          Date: 09/23/2005 22:51:19     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D26                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 26                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.914    3132012   26285245    1   0.00
   2   5.65 Chloride                15.481   36833136  344799868    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   3  11.67 Nitrate-N                1.195    3179378   59356162    1   0.00
   4  13.63 Sulfate                  9.240    6064066  140503432    1   0.00
                                ----------------------------------
                         Totals      26.830   49208593  570944707
```

File: AZIWKC01.D26 Sample: 145579003\464388\2\2



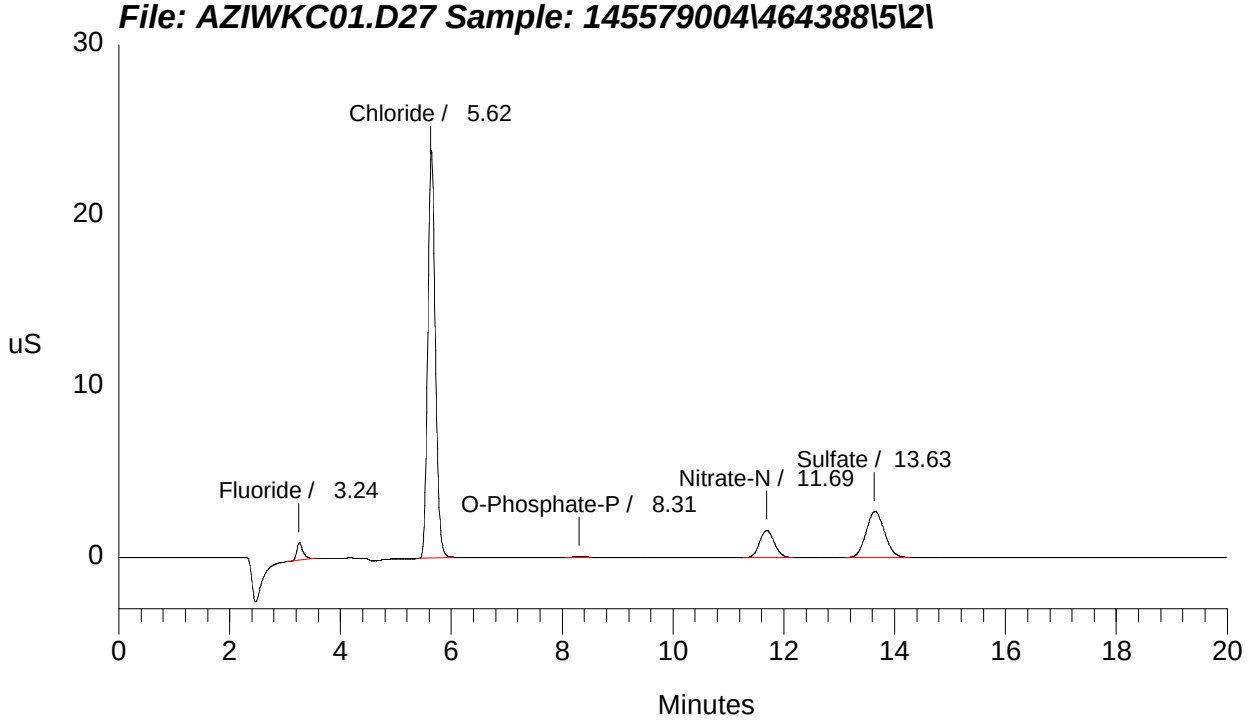
```
================================================================================
| Sample Name: 145579004\464388\5\2\          Date: 09/23/2005 23:11:48     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D27                                   |
| Method     : C:\DX\METHOD\AUG30.MET                                        |
| ACI Address: 1  System: 1  Inject#: 27                  Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component          Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                   0.303     989984    8058686    1   0.00
   2   5.62 Chloride                  10.256   22983663  227362736    1   0.00
   0   0.00 Nitrite-N                  0.000          0          0    0   0.00
   3   8.31 O-Phosphate-P              0.073      65805     929954    1   0.00
   0   0.00 Bromide                    0.000          0          0    0   0.00
   4  11.69 Nitrate-N                  0.627    1587973   29402736    1   0.00
   5  13.63 Sulfate                    4.279    2685948   62877414    1   0.00
                          ----------------------------------
                    Totals         15.538   28313373  328631526
```

File: AZIWKC01.D27 Sample: 145579004\464388\5\2



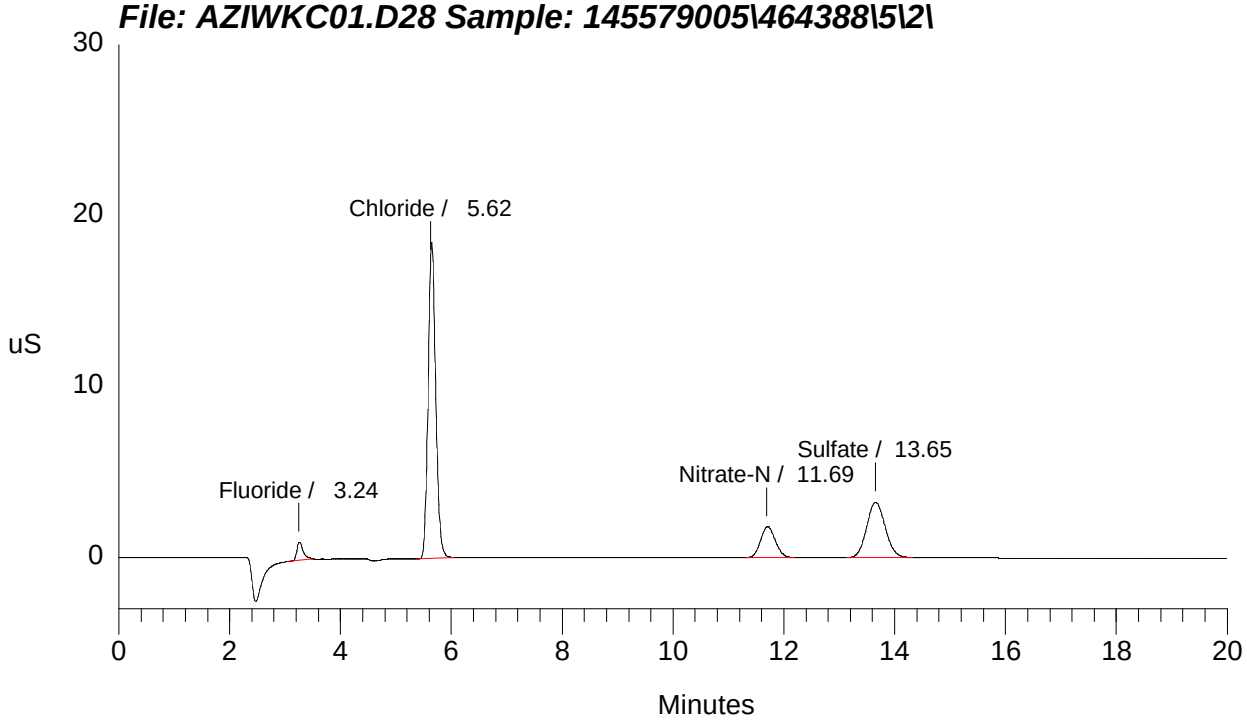
```
| Sample Name: 145579005\464388\5\2\          Date: 09/23/2005 23:32:17     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D28                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 28                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.323	1051364	8652671	1	0.00
2	5.62	Chloride	7.961	17392990	175774112	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.69	Nitrate-N	0.702	1788217	33350086	1	0.00
4	13.65	Sulfate	5.066	3224143	75186228	1	0.00
		Totals	14.051	23456713	292963097		

File: AZIWKC01.D28 Sample: 145579005\464388\5\2



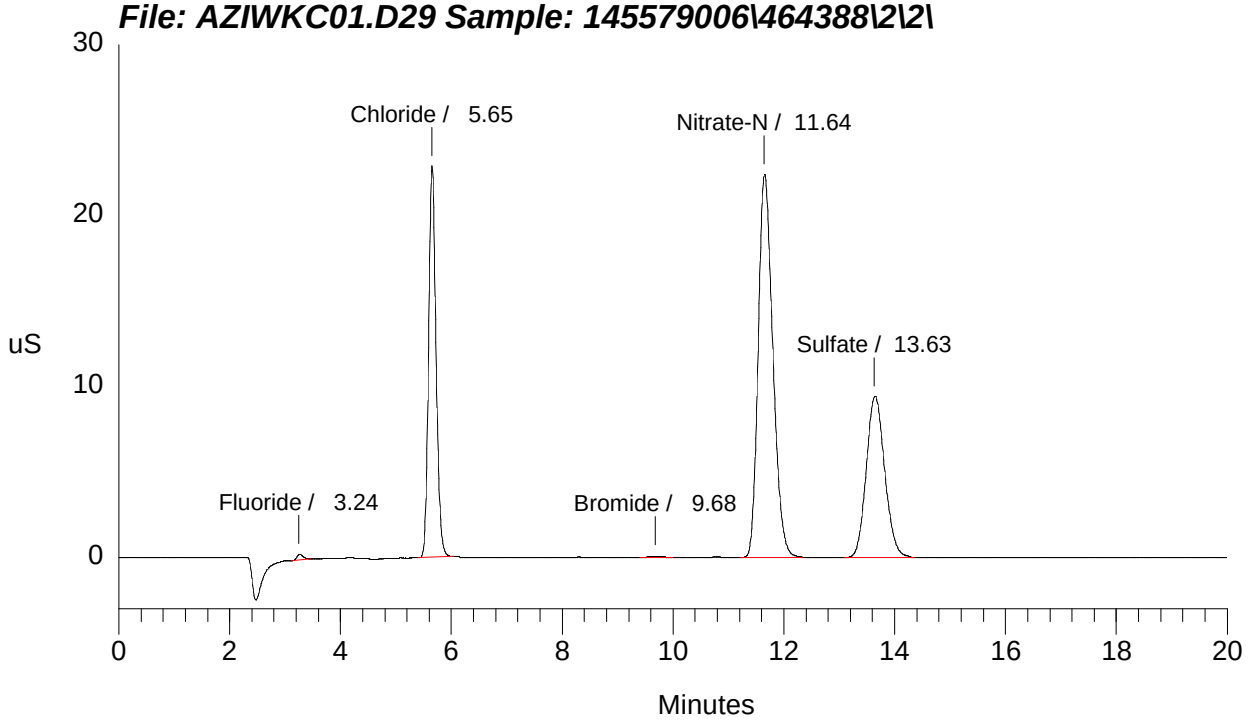
```
================================================================================
| Sample Name: 145579006\464388\2\2\          Date: 09/23/2005 23:52:46     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D29                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 29                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.116     307437    2506148    1   0.00
   2   5.65 Chloride                 9.684   22837622  214493320    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   3   9.68 Bromide                  0.208      95183    1471448    1   0.00
   4  11.64 Nitrate-N                7.878   22363482  412122124    1   0.00
   5  13.63 Sulfate                 14.222    9371742  218448950    1   0.00
                                 ----------------------------------
                      Totals        32.108   54975467  849041990
```

File: AZIWKC01.D29 Sample: 145579006\464388\2\2



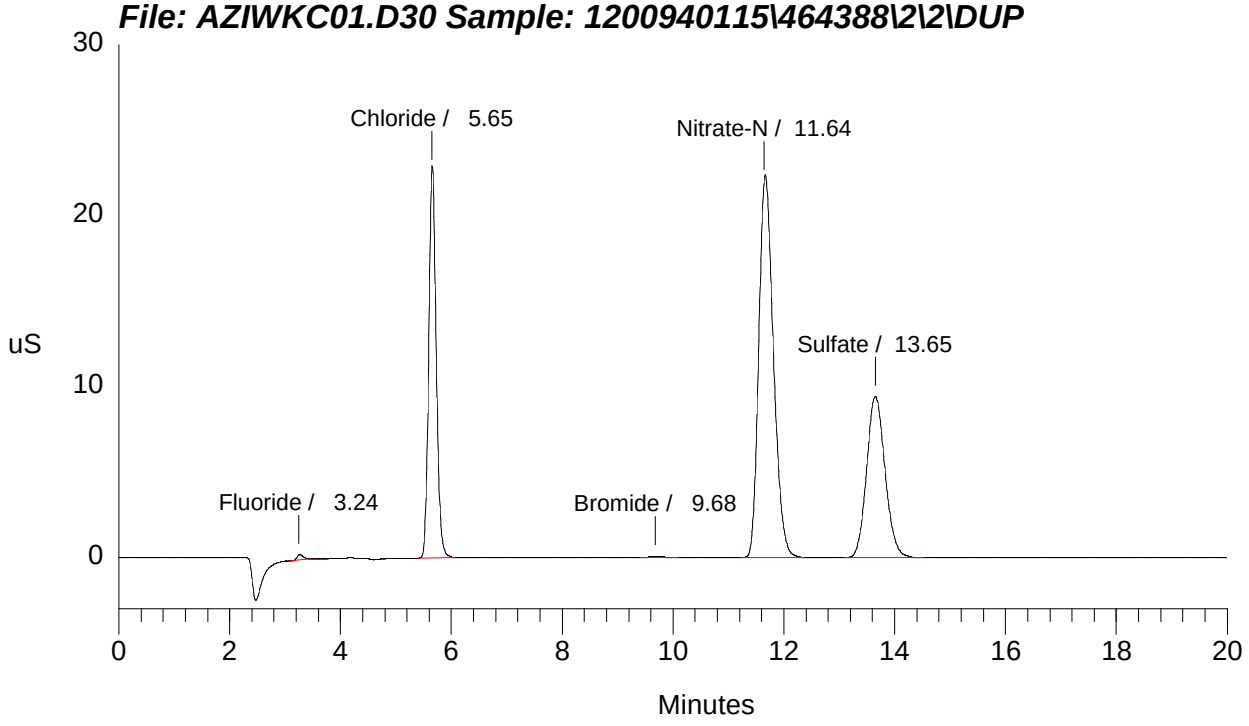
```
| Sample Name: 1200940115\464388\2\2\DUP      Date: 09/24/2005 00:13:14     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D30                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 30                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.117	304372	2529625	1	0.00
2	5.65	Chloride	9.703	22664391	214935638	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
3	9.68	Bromide	0.236	109358	1711712	1	0.00
4	11.64	Nitrate-N	7.864	22030139	411388392	1	0.00
5	13.65	Sulfate	14.212	9415171	218285522	1	0.00
		Totals	32.132	54523431	848850889		

File: AZIWKC01.D30 Sample: 1200940115\464388\2\2\DUP

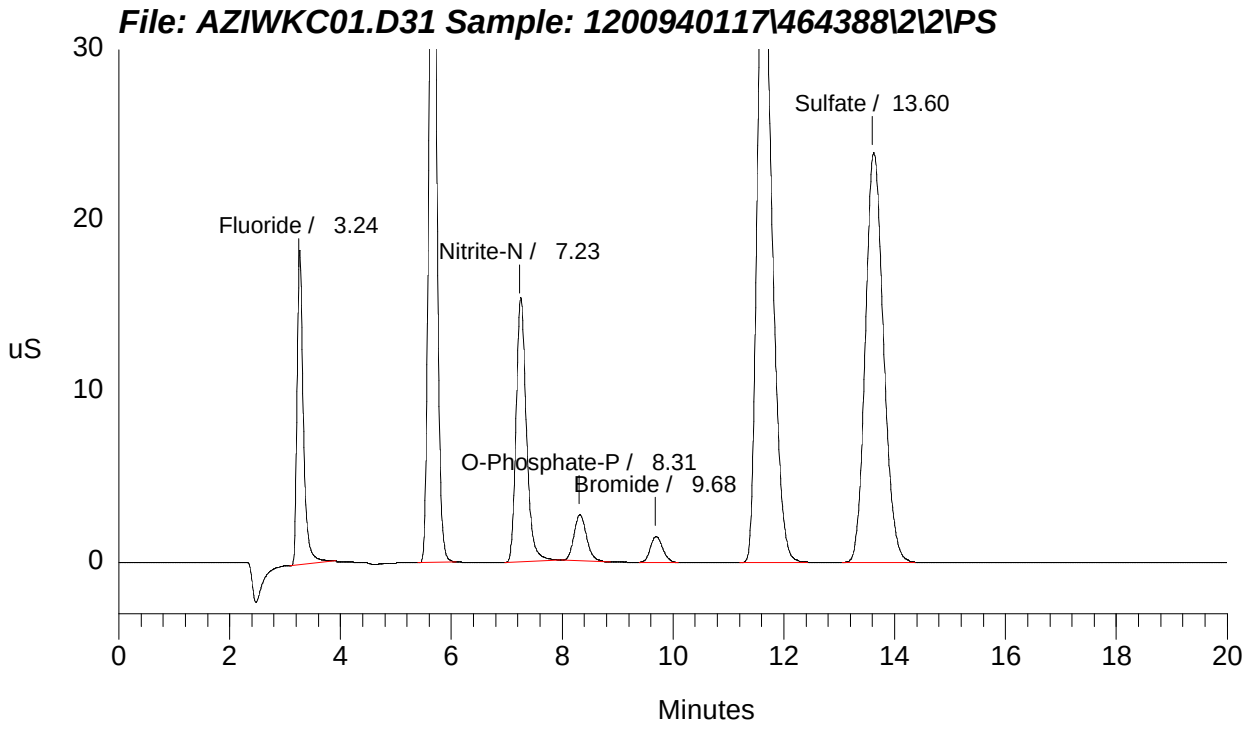


```
| Sample Name: 1200940117\464388\2\2\PS       Date: 09/24/2005 00:33:43     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D31                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 31                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	4.909	16786445	145416936	1	0.00
2	5.65	Chloride	20.731	48370497	462803068	1	0.00
3	7.23	Nitrite-N	4.838	15068188	199180591	1	0.00
4	8.31	O-Phosphate-P	2.611	2681029	42525095	1	0.00
5	9.68	Bromide	2.743	1511134	23453770	1	0.00
6	11.62	Nitrate-N	13.517	37865474	709797826	1	0.00
7	13.60	Sulfate	35.079	23777500	544772652	1	0.00
		Totals	84.427	146060268	2127949938		

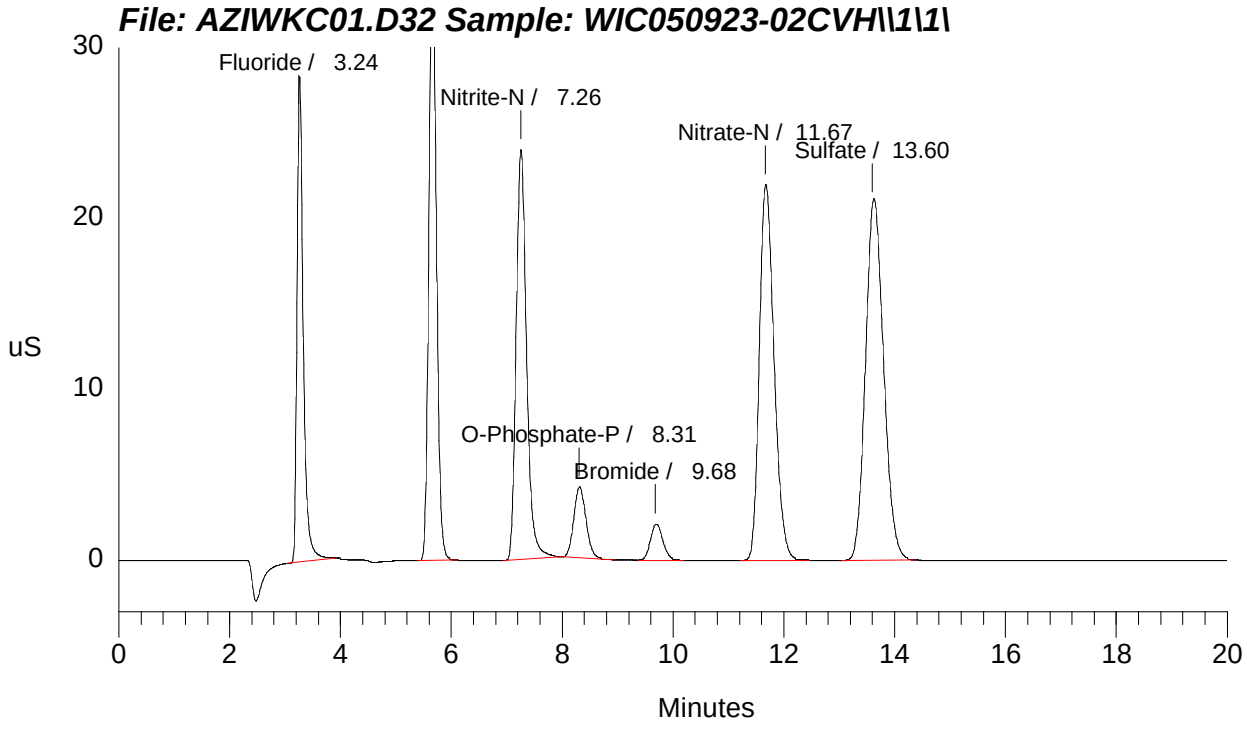


```
| Sample Name: WIC050923-02CVH\\1\1\          Date: 09/24/2005 00:54:12     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D32                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 32                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	7.479	26181513	222079058	1	0.00
2	5.65	Chloride	15.327	35766330	341351806	1	0.00
3	7.26	Nitrite-N	7.575	23965931	312736666	1	0.00
4	8.31	O-Phosphate-P	3.894	4136768	63567499	1	0.00
5	9.68	Bromide	3.855	2111892	33091464	1	0.00
6	11.67	Nitrate-N	7.764	21956226	406102884	1	0.00
7	13.60	Sulfate	31.028	20914004	481385126	1	0.00
		Totals	76.922	135032662	1860314503		



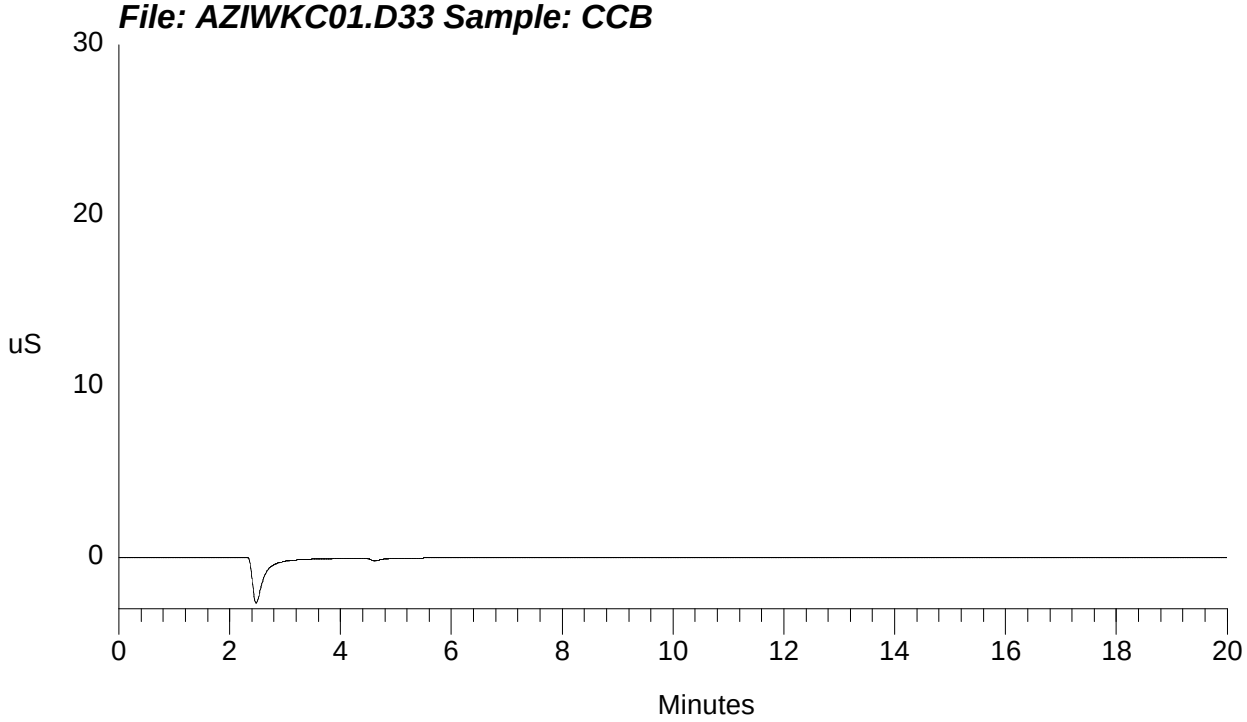
```
================================================================================
| Sample Name: CCB                              Date: 09/24/2005 01:14:41      |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D33                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 33                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZIWKC01.D33 Sample: CCB



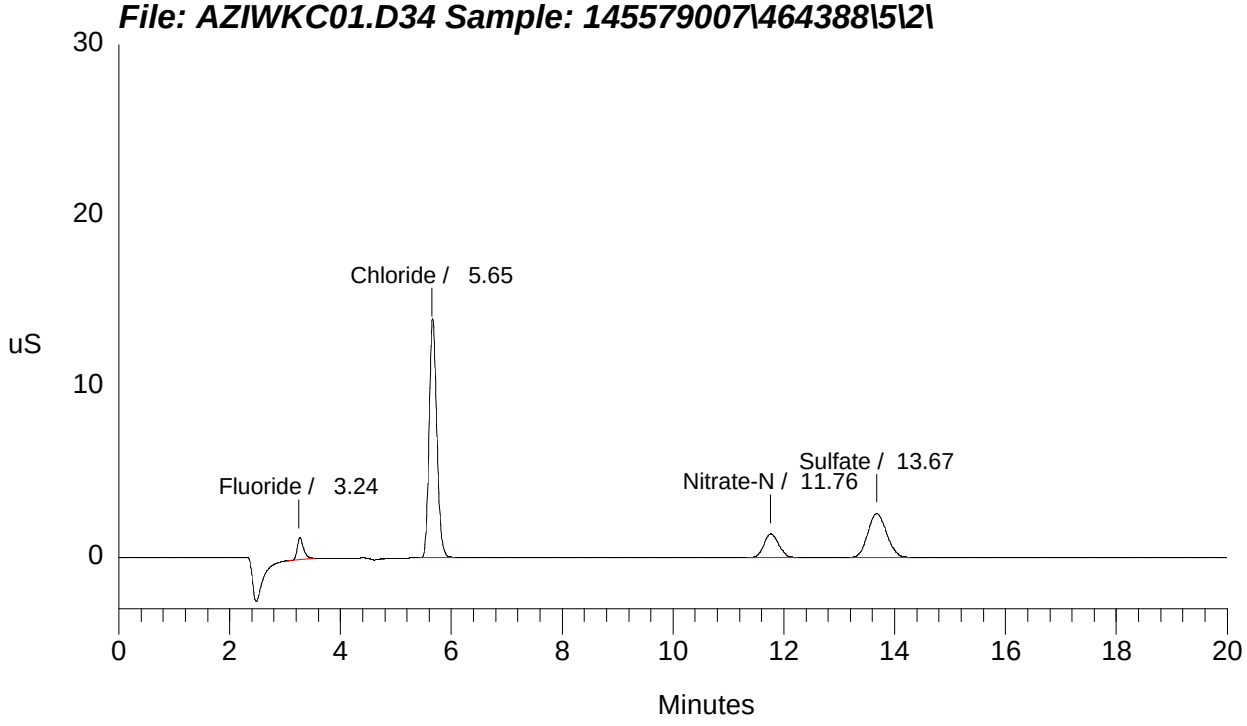
```
================================================================================
| Sample Name: 145579007\464388\5\2\          Date: 09/24/2005 01:35:10     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D34                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 34                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.376    1182805   10242569    1   0.00
   2   5.65 Chloride                 6.138   13475169  134802052    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   3  11.76 Nitrate-N                0.558    1375903   25762020    1   0.00
   4  13.67 Sulfate                  4.130    2571822   60541002    1   0.00
                                ----------------------------------
                        Totals       11.202   18605699  231347643
```

File: AZIWKC01.D34 Sample: 145579007\464388\5\2



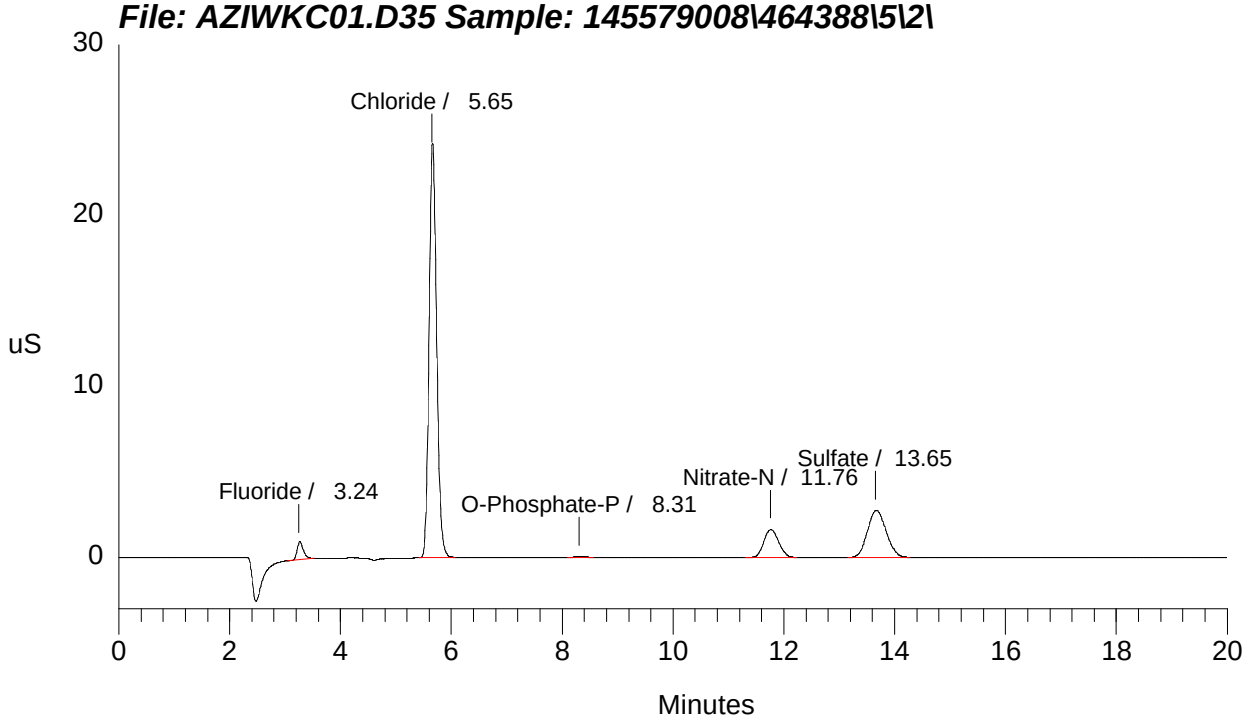
```
================================================================================
| Sample Name: 145579008\464388\5\2\          Date: 09/24/2005 01:55:39     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D35                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 35                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.312     931687    8340028    1   0.00
   2   5.65 Chloride                10.405   23655984  230703352    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   3   8.31 O-Phosphate-P            0.077      70264     985988    1   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   4  11.76 Nitrate-N                0.657    1646291   30966924    1   0.00
   5  13.65 Sulfate                  4.412    2740388   64965104    1   0.00
                          ----------------------------------
                    Totals        15.863   29044614  335961396
```

File: AZIWKC01.D35 Sample: 145579008\464388\5\2



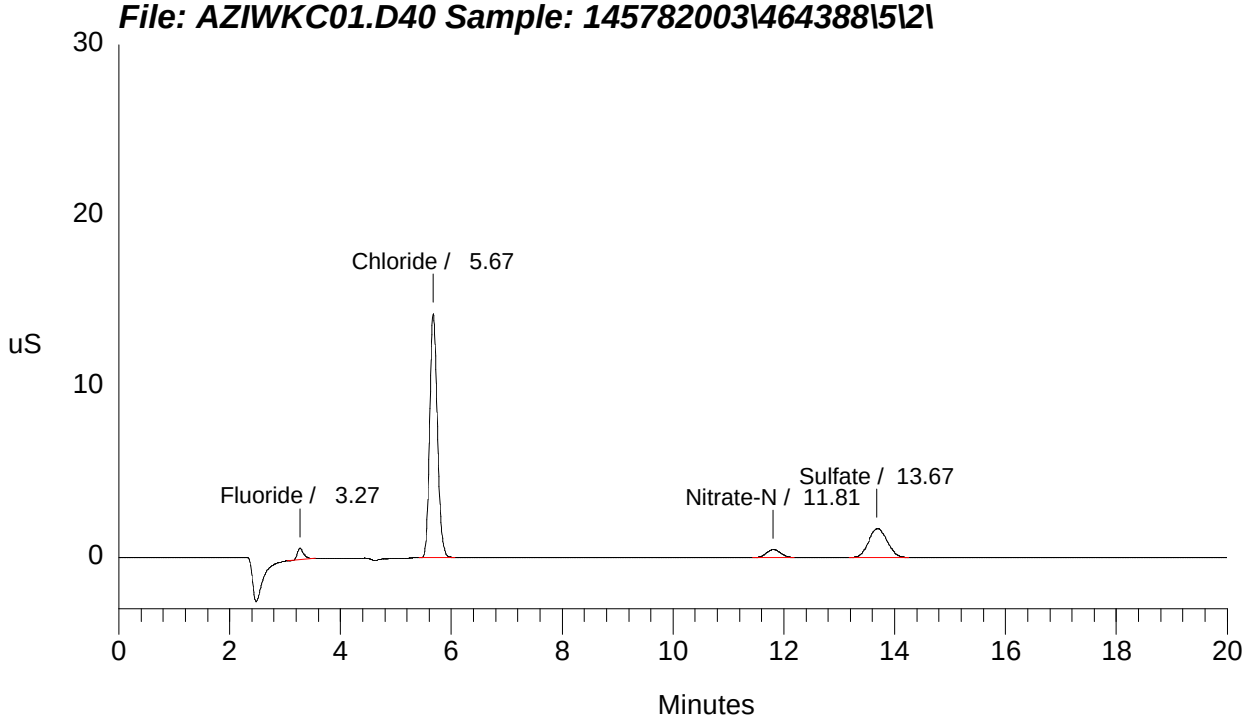
```
================================================================================
| Sample Name: 145782003\464388\5\2\          Date: 09/24/2005 03:38:03     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D40                                   |
| Method     : C:\DX\METHOD\AUG30.MET                                        |
| ACI Address: 1  System: 1  Inject#: 40                  Detector:CDM-2     |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056            |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.27 Fluoride                 0.218     684777    5535369    1   0.00
   2   5.67 Chloride                 6.294   14282973  138300650    1   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   3  11.81 Nitrate-N                0.236     477220    8746804    1   0.00
   4  13.67 Sulfate                  2.809    1699493   39881328    1   0.00
                                  ---------------------------------
                        Totals        9.557   17144463  192464151
```

File: AZIWKC01.D40 Sample: 145782003\464388\5\2



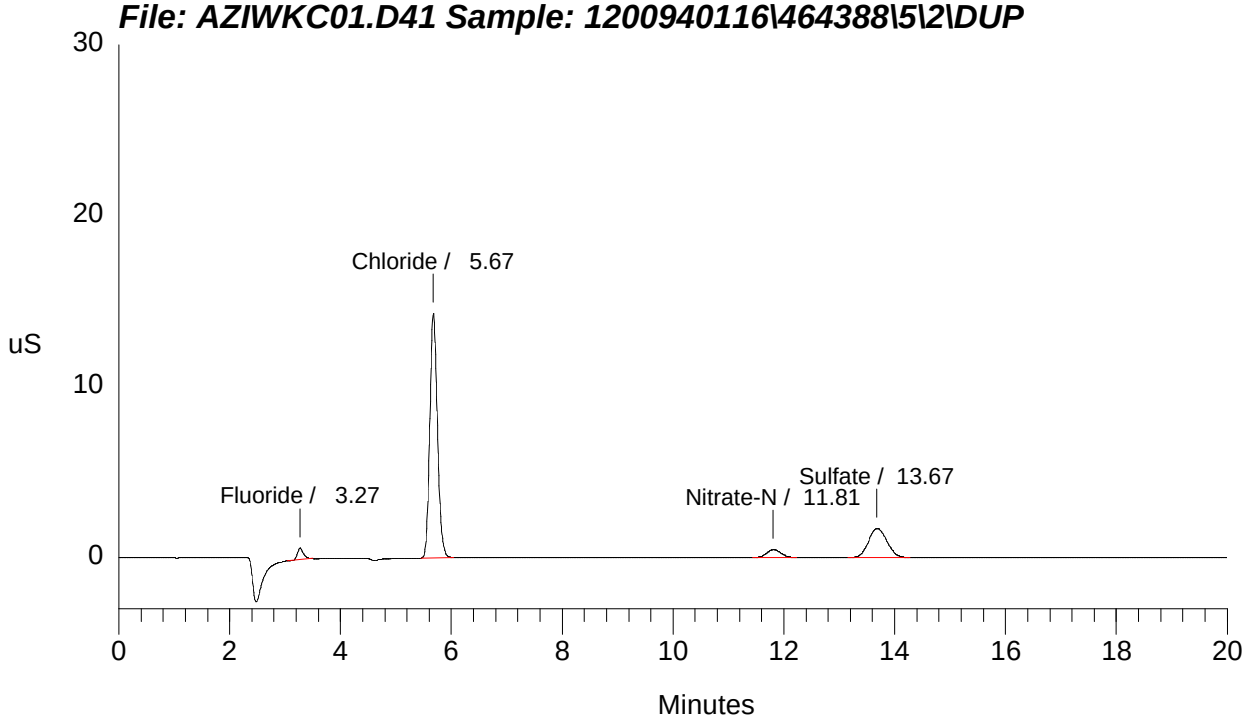
```
| Sample Name: 1200940116\464388\5\2\DUP      Date: 09/24/2005 03:58:32     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D41                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 41                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	0.210	683134	5285608	1	0.00
2	5.67	Chloride	6.252	14290727	137362346	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.81	Nitrate-N	0.237	475314	8791420	1	0.00
4	13.67	Sulfate	2.820	1711883	40056482	1	0.00
		Totals	9.519	17161058	191495856		

File: AZIWKC01.D41 Sample: 1200940116\464388\5\2\DUP



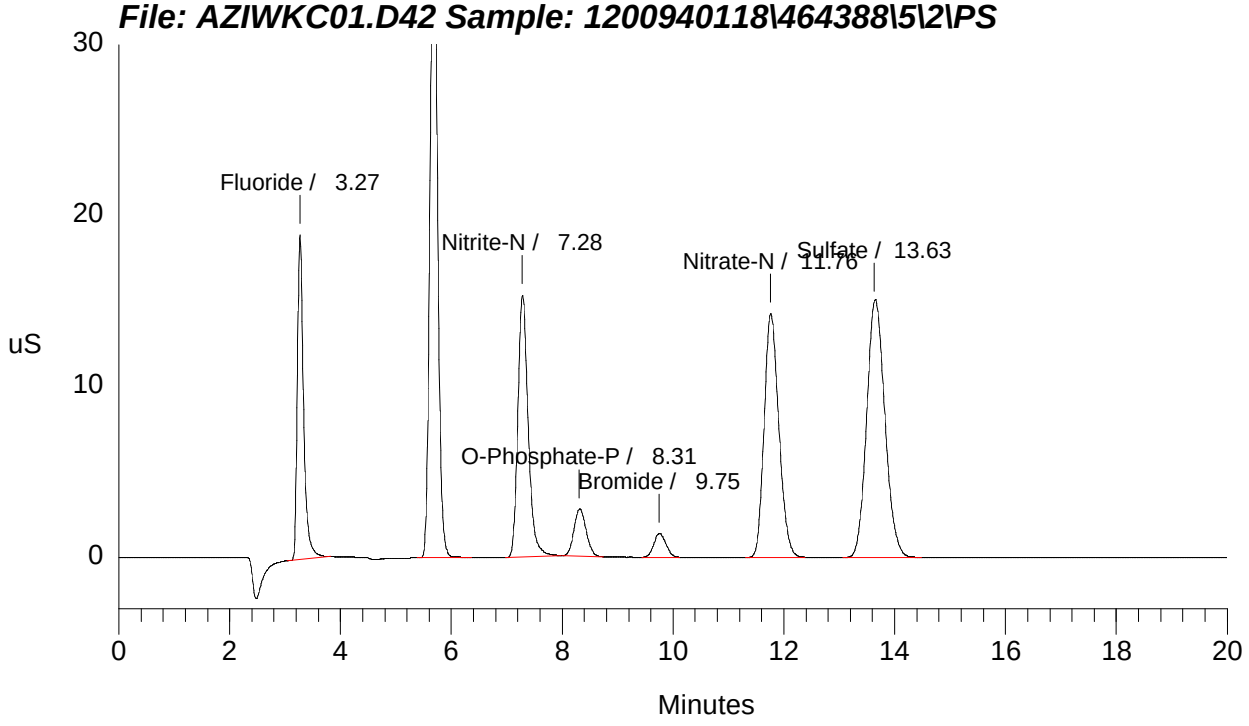
```
================================================================================
| Sample Name: 1200940118\464388\5\2\PS       Date: 09/24/2005 04:19:00     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D42                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 42                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	5.020	19002627	148735195	1	0.00
2	5.67	Chloride	16.896	39602134	376608660	1	0.00
3	7.28	Nitrite-N	4.829	15342151	198796906	1	0.00
4	8.31	O-Phosphate-P	2.591	2735042	42206389	1	0.00
5	9.75	Bromide	2.506	1403320	21398952	1	0.00
6	11.76	Nitrate-N	5.057	14262550	263235008	1	0.00
7	13.63	Sulfate	22.373	14931222	345980226	1	0.00
		Totals	59.272	107279047	1396961336		

File: AZIWKC01.D42 Sample: 1200940118\464388\5\2\PS

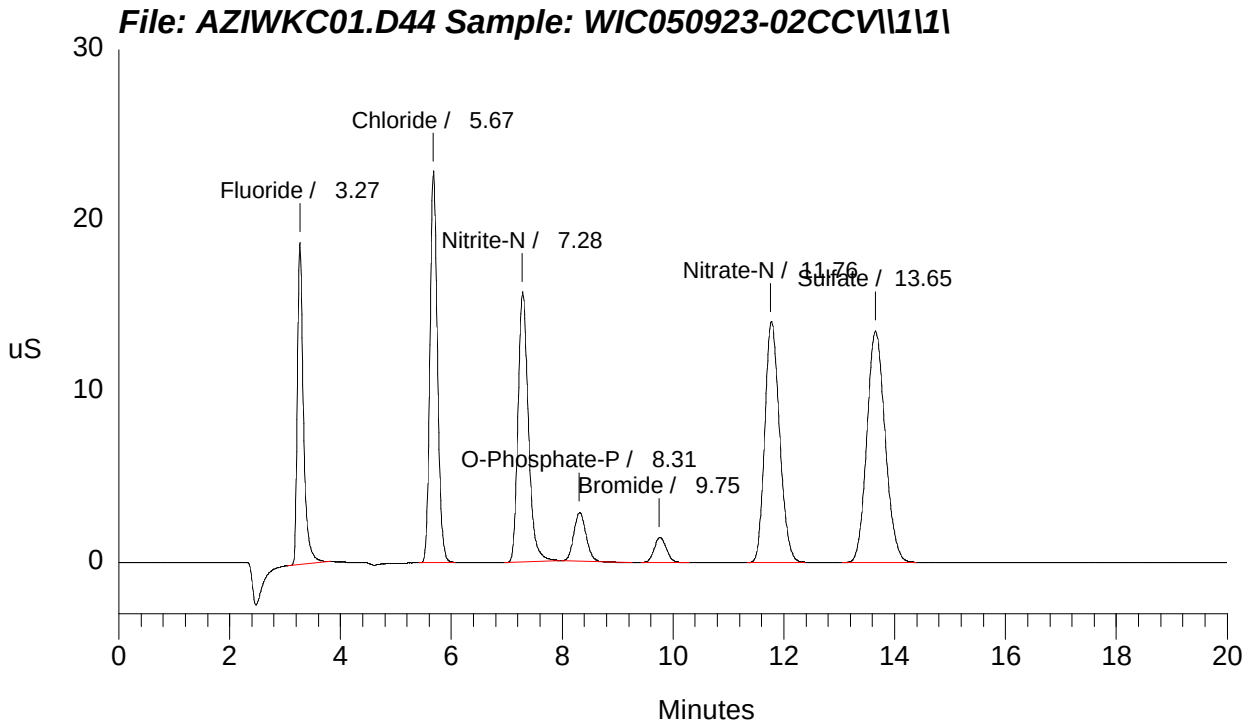


```
| Sample Name: WIC050923-02CCV\\1\1\          Date: 09/24/2005 04:59:58     |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D44                                  |
| Method     : C:\DX\METHOD\AUG30.MET                                       |
| ACI Address: 1  System: 1  Inject#: 44                  Detector:CDM-2    |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056           |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.27	Fluoride	4.852	18820644	143730397	1	0.00
2	5.67	Chloride	9.733	22837957	215599004	1	0.00
3	7.28	Nitrite-N	4.994	15742851	205651554	1	0.00
4	8.31	O-Phosphate-P	2.662	2833839	43372692	1	0.00
5	9.75	Bromide	2.611	1443988	22309368	1	0.00
6	11.76	Nitrate-N	5.011	14019750	260774636	1	0.00
7	13.65	Sulfate	20.133	13544729	310931330	1	0.00
		Totals	49.996	89243759	1202368981		



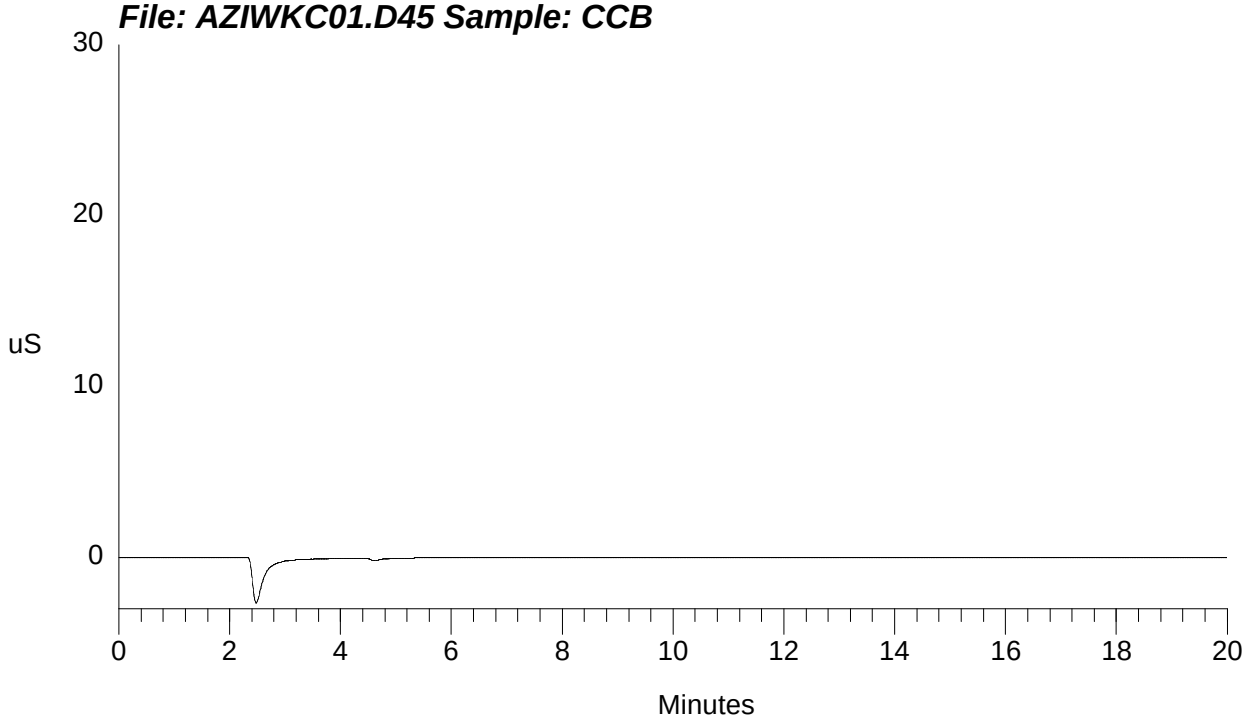
```
================================================================================
| Sample Name: CCB                              Date: 09/24/2005 05:20:27      |
| Data File  : C:\TMP\HORIZON\AZIWKC01.D45                                     |
| Method     : C:\DX\METHOD\AUG30.MET                                          |
| ACI Address: 1  System: 1  Inject#: 45                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC;GL-GC-E-086;300;9056              |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZIWKC01.D45 Sample: CCB



Nitrate + Nitrite

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
NOx0	469146	NOx	10/05/2005 09:18:11	KLP1	1	
NOx.05	469146	NOx	10/05/2005 09:18:12	KLP1	1	
NOx.1	469146	NOx	10/05/2005 09:18:13	KLP1	1	
NOx.5	469146	NOx	10/05/2005 09:18:14	KLP1	1	
NOx1	469146	NOx	10/05/2005 09:18:15	KLP1	1	
NOx2	469146	NOx	10/05/2005 09:18:16	KLP1	1	
NOx5	469146	NOx	10/05/2005 09:18:17	KLP1	1	
NOx ICV	469146	NOx	10/05/2005 09:18:19	KLP1	1	WTR051005-08
NOx ICB	469146	NOx	10/05/2005 09:18:20	KLP1	1	WTR051005-10
NOx-CCV	469146	NOx	10/05/2005 11:28:39	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 11:28:40	KLP1	1	WTR051005-10
1200951321	469146	NOx	10/05/2005 11:28:41	KLP1	1	
1200951322	469146	NOx	10/05/2005 11:28:42	KLP1	1	
145643010	469146	NOx	10/05/2005 11:28:43	KLP1	1	
1200951323	469146	NOx	10/05/2005 11:28:44	KLP1	1	
1200951324	469146	NOx	10/05/2005 11:28:45	KLP1	1	
145643011	469146	NOx	10/05/2005 11:28:46	KLP1	1	
145644027	469146	NOx	10/05/2005 11:28:47	KLP1	10	
145644028	469146	NOx	10/05/2005 11:28:48	KLP1	10	
1200951325	469146	NOx	10/05/2005 11:28:49	KLP1	10	
1200951326	469146	NOx	10/05/2005 11:28:50	KLP1	10	
NOx-CCV	469146	NOx	10/05/2005 11:38:40	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 11:38:41	KLP1	1	WTR051005-10
145644029	469146	NOx	10/05/2005 11:38:42	KLP1	10	
145644030	469146	NOx	10/05/2005 11:38:43	KLP1	10	
145644031	469146	NOx	10/05/2005 11:38:44	KLP1	10	
145701002	469146	NOx	10/05/2005 11:38:45	KLP1	1	
145701003	469146	NOx	10/05/2005 11:38:46	KLP1	1	
145701004	469146	NOx	10/05/2005 11:38:47	KLP1	1	
145701005	469146	NOx	10/05/2005 11:38:48	KLP1	1	
145701006	469146	NOx	10/05/2005 11:38:49	KLP1	1	
145701007	469146	NOx	10/05/2005 11:38:50	KLP1	10	
145701008	469146	NOx	10/05/2005 11:38:51	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 11:48:40	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 11:48:41	KLP1	1	WTR051005-10
145701009	469146	NOx	10/05/2005 11:48:42	KLP1	1	
145701010	469146	NOx	10/05/2005 11:48:43	KLP1	1	
145701011	469146	NOx	10/05/2005 11:48:44	KLP1	1	
145701012	469146	NOx	10/05/2005 11:48:45	KLP1	1	
145701013	469146	NOx	10/05/2005 11:48:46	KLP1	1	
145701014	469146	NOx	10/05/2005 11:48:47	KLP1	1	
1200951331	469150	NOx	10/05/2005 11:48:48	KLP1	1	
1200951332	469150	NOx	10/05/2005 11:48:49	KLP1	1	
145423001	469150	NOx	10/05/2005 11:48:50	KLP1	10	
1200951337	469150	NOx	10/05/2005 11:48:51	KLP1	10	
NOx-CCB	469150	NOx	10/05/2005 12:04:10	KLP1	1	WTR051005-10
NOx-CCV	469150	NOx	10/05/2005 12:04:11	KLP1	1	WTR051005-04
NOx-CCB	469150	NOx	10/05/2005 12:04:12	KLP1	1	WTR051005-10
1200951338	469150	NOx	10/05/2005 12:04:13	KLP1	10	
145423002	469150	NOx	10/05/2005 12:04:14	KLP1	10	
145423003	469150	NOx	10/05/2005 12:04:15	KLP1	10	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
145506001	469150	NOx	10/05/2005 12:04:16	KLP1	1	
1200951335	469150	NOx	10/05/2005 12:04:17	KLP1	1	
1200951336	469150	NOx	10/05/2005 12:04:18	KLP1	1	
1455579001	469150	NOx	10/05/2005 12:04:19	KLP1	10	
1200951339	469150	NOx	10/05/2005 12:04:20	KLP1	10	
1200951340	469150	NOx	10/05/2005 12:04:21	KLP1	10	
145579002	469150	NOx	10/05/2005 12:04:22	KLP1	10	
NOx-CCV	469150	NOx	10/05/2005 12:14:13	KLP1	1	WTR051005-04
1200951321	469146	NOx	10/05/2005 12:14:15	KLP1	1	
145643010	469146	NOx	10/05/2005 12:14:17	KLP1	1	
1200951323	469146	NOx	10/05/2005 12:14:18	KLP1	1	
1200951324	469146	NOx	10/05/2005 12:14:19	KLP1	1	
145643011	469146	NOx	10/05/2005 12:14:20	KLP1	1	
145644027	469146	NOx	10/05/2005 12:14:21	KLP1	10	
145579003	469150	NOx	10/05/2005 12:14:22	KLP1	10	
145579004	469150	NOx	10/05/2005 12:14:23	KLP1	10	
145783003	469150	NOx	10/05/2005 12:14:24	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 12:24:15	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 12:24:16	KLP1	1	WTR051005-10
1200951322	469146	NOx	10/05/2005 12:24:17	KLP1	1	
145644031	469146	NOx	10/05/2005 12:24:18	KLP1	10	
145701002	469146	NOx	10/05/2005 12:24:19	KLP1	1	
145701005	469146	NOx	10/05/2005 12:24:20	KLP1	1	
145701006	469146	NOx	10/05/2005 12:24:21	KLP1	1	
145701007	469146	NOx	10/05/2005 12:24:22	KLP1	10	
145701008	469146	NOx	10/05/2005 12:24:23	KLP1	1	
145701009	469146	NOx	10/05/2005 12:24:24	KLP1	1	
145701010	469146	NOx	10/05/2005 12:24:25	KLP1	1	
145701011	469146	NOx	10/05/2005 12:24:26	KLP1	1	
145701003	469146	NO3NO2	10/05/2005 12:31:49	KLP1	1	
145701004	469146	NO3NO2	10/05/2005 12:31:50	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 12:37:38	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 12:37:39	KLP1	1	WTR051005-10
145644028	469146	NOx	10/05/2005 12:37:40	KLP1	10	
1200951325	469146	NOx	10/05/2005 12:37:41	KLP1	10	
1200951326	469146	NOx	10/05/2005 12:37:42	KLP1	10	
145644029	469146	NOx	10/05/2005 12:37:43	KLP1	10	
145701012	469146	NOx	10/05/2005 12:37:44	KLP1	1	
145701013	469146	NOx	10/05/2005 12:37:45	KLP1	1	
145701014	469146	NOx	10/05/2005 12:37:46	KLP1	1	
1200951331	469150	NOx	10/05/2005 12:37:47	KLP1	1	
1200951332	469150	NOx	10/05/2005 12:37:48	KLP1	1	
145423001	469150	NOx	10/05/2005 12:37:49	KLP1	10	
NOx-CCV	469146	NOx	10/05/2005 12:47:40	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 12:47:41	KLP1	1	WTR051005-10
145644030	469146	NOx	10/05/2005 12:47:42	KLP1	10	
1200951338	469150	NOx	10/05/2005 12:47:43	KLP1	10	
145423002	469150	NOx	10/05/2005 12:47:44	KLP1	10	
145423003	469150	NOx	10/05/2005 12:47:45	KLP1	10	
145506001	469150	NOx	10/05/2005 12:47:46	KLP1	1	
1200951335	469150	NOx	10/05/2005 12:47:47	KLP1	1	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
1200951336	469150	NOx	10/05/2005 12:47:48	KLP1	1	
1455579001	469150	NOx	10/05/2005 12:47:49	KLP1	10	
1200951339	469150	NOx	10/05/2005 12:47:50	KLP1	10	
1200951340	469150	NOx	10/05/2005 12:47:51	KLP1	10	
NOx-CCV	469146	NOx	10/05/2005 12:57:42	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 12:57:43	KLP1	1	WTR051005-10
1200951321	469146	NOx	10/05/2005 12:57:44	KLP1	1	
145643010	469146	NOx	10/05/2005 12:57:45	KLP1	1	
1200951323	469146	NOx	10/05/2005 12:57:46	KLP1	1	
1200951324	469146	NOx	10/05/2005 12:57:47	KLP1	1	
145643011	469146	NOx	10/05/2005 12:57:48	KLP1	1	
145644027	469146	NOx	10/05/2005 12:57:49	KLP1	10	
145579002	469150	NOx	10/05/2005 12:57:50	KLP1	10	
145579003	469150	NOx	10/05/2005 12:57:51	KLP1	10	
145579004	469150	NOx	10/05/2005 12:57:52	KLP1	10	
145783003	469150	NOx	10/05/2005 12:57:53	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 13:03:03	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 13:03:04	KLP1	1	WTR051005-10
145701003	469146	NOx	10/05/2005 13:03:05	KLP1	1	
145701004	469146	NOx	10/05/2005 13:03:06	KLP1	1	
1200951337	469150	NOx	10/05/2005 13:06:24	KLP1	100	
NOx-CCV	469146	NOx	10/05/2005 13:09:32	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 13:09:33	KLP1	1	WTR051005-10
NOx-CCV	469146	NOx	10/05/2005 13:36:08	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 13:36:09	KLP1	1	WTR051005-10
1200951321	469146	NOx	10/05/2005 13:36:10	KLP1	1	
1200951322	469146	NOx	10/05/2005 13:36:11	KLP1	1	
145643010	469146	NOx	10/05/2005 13:36:12	KLP1	1	
1200951323	469146	NOx	10/05/2005 13:36:13	KLP1	1	
1200951324	469146	NOx	10/05/2005 13:36:14	KLP1	1	
145643011	469146	NOx	10/05/2005 13:36:15	KLP1	1	
145644027	469146	NOx	10/05/2005 13:36:16	KLP1	10	
145644028	469146	NOx	10/05/2005 13:36:17	KLP1	10	
1200951325	469146	NOx	10/05/2005 13:36:18	KLP1	10	
1200951326	469146	NOx	10/05/2005 13:36:19	KLP1	10	
NOx-CCV	469146	NOx	10/05/2005 13:46:09	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 13:46:10	KLP1	1	WTR051005-10
145644029	469146	NOx	10/05/2005 13:46:11	KLP1	10	
145644030	469146	NOx	10/05/2005 13:46:12	KLP1	10	
145644031	469146	NOx	10/05/2005 13:46:13	KLP1	10	
145701002	469146	NOx	10/05/2005 13:46:14	KLP1	1	
145701003	469146	NOx	10/05/2005 13:46:15	KLP1	1	
145701004	469146	NOx	10/05/2005 13:46:16	KLP1	1	
145701005	469146	NOx	10/05/2005 13:46:17	KLP1	1	
145701006	469146	NOx	10/05/2005 13:46:18	KLP1	1	
145701007	469146	NOx	10/05/2005 13:46:19	KLP1	10	
145701008	469146	NOx	10/05/2005 13:46:20	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 13:56:11	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 13:56:12	KLP1	1	WTR051005-10
145701009	469146	NOx	10/05/2005 13:56:13	KLP1	1	
145701010	469146	NOx	10/05/2005 13:56:14	KLP1	1	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
145701011	469146	NOx	10/05/2005 13:56:15	KLP1	1	
145701012	469146	NOx	10/05/2005 13:56:16	KLP1	1	
145701013	469146	NOx	10/05/2005 13:56:17	KLP1	1	
145701014	469146	NOx	10/05/2005 13:56:18	KLP1	1	
1200951331	469150	NOx	10/05/2005 13:56:19	KLP1	1	
1200951332	469150	NOx	10/05/2005 13:56:20	KLP1	1	
145423001	469150	NOx	10/05/2005 13:56:21	KLP1	10	
1200951337	469150	NOx	10/05/2005 13:56:22	KLP1	10	
NOx-CCV	469146	NOx	10/05/2005 14:06:12	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 14:06:13	KLP1	1	WTR051005-10
1200951338	469150	NOx	10/05/2005 14:06:14	KLP1	10	
145423002	469150	NOx	10/05/2005 14:06:15	KLP1	10	
145423003	469150	NOx	10/05/2005 14:06:16	KLP1	10	
145506001	469150	NOx	10/05/2005 14:06:17	KLP1	1	
1200951335	469150	NOx	10/05/2005 14:06:18	KLP1	1	
1200951336	469150	NOx	10/05/2005 14:06:19	KLP1	1	
1455579001	469150	NOx	10/05/2005 14:06:20	KLP1	10	
1200951339	469150	NOx	10/05/2005 14:06:21	KLP1	10	
1200951340	469150	NOx	10/05/2005 14:06:22	KLP1	10	
145579002	469150	NOx	10/05/2005 14:06:23	KLP1	10	
NOx-CCB	469146	NOx	10/05/2005 14:10:02	KLP1	1	WTR051005-10
NOx-CCV	469146	NOx	10/05/2005 14:10:02	KLP1	1	WTR051005-04
NOx-CCV	469146	NOx	10/05/2005 14:13:18	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 14:13:19	KLP1	1	WTR051005-10
1200951321	469146	NOx	10/05/2005 14:13:20	KLP1	1	WTR051005-10
1200951331	469150	NOx	10/05/2005 14:13:21	KLP1	1	
145579003	469150	NOx	10/05/2005 14:13:22	KLP1	10	
145579004	469150	NOx	10/05/2005 14:13:23	KLP1	10	
145783003	469150	NOx	10/05/2005 14:13:24	KLP1	1	
145701009	469146	NOx	10/05/2005 14:25:53	KLP1	1	
145701010	469146	NOx	10/05/2005 14:25:54	KLP1	1	
145701011	469146	NOx	10/05/2005 14:25:55	KLP1	1	
145701012	469146	NOx	10/05/2005 14:25:56	KLP1	1	
145701013	469146	NOx	10/05/2005 14:25:57	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 14:25:58	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 14:25:59	KLP1	1	WTR051005-10
145701014	469146	NOx	10/05/2005 14:26:00	KLP1	1	
1200951332	469150	NOx	10/05/2005 14:26:01	KLP1	1	
145423001	469150	NOx	10/05/2005 14:26:02	KLP1	10	
1200951337	469150	NOx	10/05/2005 14:26:03	KLP1	10	
1200951338	469150	NOx	10/05/2005 14:26:04	KLP1	10	
NOx-CCB	469146	NOx	10/05/2005 14:28:06	KLP1	1	WTR051005-10
NOx-CCV	469146	NOx	10/05/2005 14:28:06	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 14:31:27	KLP1	1	WTR051005-10
NOx-CCV	469146	NOx	10/05/2005 14:44:22	KLP1	1	WTR051005-04
1200951338	469150	NOx	10/05/2005 14:44:24	KLP1	10	
145423002	469150	NOx	10/05/2005 14:44:25	KLP1	10	
145423003	469150	NOx	10/05/2005 14:44:26	KLP1	10	
145506001	469150	NOx	10/05/2005 14:44:27	KLP1	1	
1200951335	469150	NOx	10/05/2005 14:44:28	KLP1	1	
1200951336	469150	NOx	10/05/2005 14:44:29	KLP1	1	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
1455579001	469150	NOx	10/05/2005 14:44:30	KLP1	10	
1200951339	469150	NOx	10/05/2005 14:44:31	KLP1	10	
1200951340	469150	NOx	10/05/2005 14:44:32	KLP1	10	
145579002	469150	NOx	10/05/2005 14:44:33	KLP1	10	
NOx-CCV	469146	NOx	10/05/2005 14:54:23	KLP1	1	WTR051005-04
145423002	469150	NOx	10/05/2005 14:54:24	KLP1	10	
145423003	469150	NOx	10/05/2005 14:54:25	KLP1	10	
145506001	469150	NOx	10/05/2005 14:54:26	KLP1	1	
1200951335	469150	NOx	10/05/2005 14:54:27	KLP1	1	
1200951336	469150	NOx	10/05/2005 14:54:28	KLP1	1	
1455579001	469150	NOx	10/05/2005 14:54:29	KLP1	10	
1200951339	469150	NOx	10/05/2005 14:54:30	KLP1	10	
1200951340	469150	NOx	10/05/2005 14:54:31	KLP1	10	
145579003	469150	NOx	10/05/2005 14:54:33	KLP1	10	
145579004	469150	NOx	10/05/2005 14:54:34	KLP1	10	
NOx-CCV	469146	NOx	10/05/2005 15:04:25	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 15:04:26	KLP1	1	WTR051005-10
145579002	469150	NOx	10/05/2005 15:04:27	KLP1	10	
1200951321	469146	NOx	10/05/2005 15:04:28	KLP1	1	
145644027	469146	NOx	10/05/2005 15:04:29	KLP1	10	
145644028	469146	NOx	10/05/2005 15:04:30	KLP1	10	
1200951325	469146	NOx	10/05/2005 15:04:31	KLP1	10	
1200951326	469146	NOx	10/05/2005 15:04:32	KLP1	10	
145644029	469146	NOx	10/05/2005 15:04:33	KLP1	10	
145644030	469146	NOx	10/05/2005 15:04:34	KLP1	10	
145644031	469146	NOx	10/05/2005 15:04:35	KLP1	10	
145701002	469146	NOx	10/05/2005 15:04:36	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 15:14:27	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 15:14:28	KLP1	1	WTR051005-10
145701003	469146	NOx	10/05/2005 15:14:29	KLP1	1	
145701004	469146	NOx	10/05/2005 15:14:30	KLP1	1	
1200951331	469150	NOx	10/05/2005 15:14:31	KLP1	1	
1200951332	469150	NOx	10/05/2005 15:14:32	KLP1	1	
145423001	469150	NOx	10/05/2005 15:14:33	KLP1	10	
1200951337	469150	NOx	10/05/2005 15:14:34	KLP1	10	
1200951338	469150	NOx	10/05/2005 15:14:35	KLP1	10	
145423002	469150	NOx	10/05/2005 15:14:36	KLP1	10	
145423003	469150	NOx	10/05/2005 15:14:37	KLP1	10	
145506001	469150	NOx	10/05/2005 15:14:38	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 15:23:51	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 15:23:52	KLP1	1	WTR051005-10
1200951335	469150	NOx	10/05/2005 15:23:53	KLP1	1	
1200951336	469150	NOx	10/05/2005 15:23:54	KLP1	1	
1455579001	469150	NOx	10/05/2005 15:23:55	KLP1	10	
1200951339	469150	NOx	10/05/2005 15:23:56	KLP1	10	
1200951340	469150	NOx	10/05/2005 15:23:57	KLP1	10	
145579002	469150	NOx	10/05/2005 15:23:58	KLP1	10	
145579003	469150	NOx	10/05/2005 15:23:59	KLP1	10	
145579004	469150	NOx	10/05/2005 15:24:00	KLP1	10	
145783003	469150	NOx	10/05/2005 15:24:01	KLP1	1	WTR051005-04
NOx-CCV	469146	NOx	10/05/2005 15:28:04	KLP1	1	WTR051005-10

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
NOx-CCB	469146	NOx	10/05/2005 15:28:05	KLP1	1	WTR051005-04
NOx-CCV	469146	NOx	10/05/2005 15:55:24	KLP1	1	WTR051005-10
NOx-CCB	469146	NOx	10/05/2005 15:55:25	KLP1	1	
145701010	469146	NOx	10/05/2005 15:55:26	KLP1	1	
145701011	469146	NOx	10/05/2005 15:55:27	KLP1	1	
145701012	469146	NOx	10/05/2005 15:55:28	KLP1	1	
145701013	469146	NOx	10/05/2005 15:55:29	KLP1	1	
145701014	469146	NOx	10/05/2005 15:55:30	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 15:59:12	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 15:59:13	KLP1	1	WTR051005-10
NOx-CCV	469146	NOx	10/05/2005 16:25:28	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 16:25:29	KLP1	1	WTR051005-10
145701009	469146	NOx	10/05/2005 16:25:30	KLP1	1	
NOx-CCV	469146	NOx	10/05/2005 16:28:53	KLP1	1	WTR051005-04
NOx-CCB	469146	NOx	10/05/2005 16:28:54	KLP1	1	WTR051005-10

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
NOx0	NOx	10/05/2005 09:18:11	0.01105	-0.022921	mg/l as N	1		0
NOx.05	NOx	10/05/2005 09:18:12	0.02299	0.031253	mg/l as N	1		0.05
NOx.1	NOx	10/05/2005 09:18:13	0.03	0.063083	mg/l as N	1		0.1
NOx.5	NOx	10/05/2005 09:18:14	0.1126	0.437844	mg/l as N	1		0.5
NOx1	NOx	10/05/2005 09:18:15	0.25692	1.092692	mg/l as N	1		1
NOx2	NOx	10/05/2005 09:18:16	0.47873	2.099075	mg/l as N	1		2
NOx5	NOx	10/05/2005 09:18:17	1.10684	4.948973	mg/l as N	1		5
NOx ICV	NOx	10/05/2005 09:18:19	0.25475	1.082837	mg/l as N	1		1
NOx ICB	NOx	10/05/2005 09:18:20	0.00978	-0.028666	mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 11:28:39	0.26908	1.147858	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 11:28:40	0.0105	-0.02541	mg/l as N	1		0
1200951321	NOx	10/05/2005 11:28:41	0.00935	-0.030634	mg/l as N	1	1	
1200951322	NOx	10/05/2005 11:28:42	0.26171	1.114397	mg/l as N	1	1	
145643010	NOx	10/05/2005 11:28:43	0.0119	-0.019043	mg/l as N	1	1	
1200951323	NOx	10/05/2005 11:28:44	0.01684	0.003381	mg/l as N	1	1	
1200951324	NOx	10/05/2005 11:28:45	0.23464	0.991603	mg/l as N	1	1	
145643011	NOx	10/05/2005 11:28:46	0.20137	0.840639	mg/l as N	1	1	
145644027	NOx	10/05/2005 11:28:47	0.15731	6.407201	mg/l as N	1	10	
145644028	NOx	10/05/2005 11:28:48	0.07859	2.835565	mg/l as N	1	10	
1200951325	NOx	10/05/2005 11:28:49	0.07904	2.856037	mg/l as N	1	10	
1200951326	NOx	10/05/2005 11:28:50	0.31337	13.487967	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 11:38:40	0.27053	1.154449	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 11:38:41	0.00732	-0.039804	mg/l as N	1		0
145644029	NOx	10/05/2005 11:38:42	0.11265	4.381027	mg/l as N	1	10	
145644030	NOx	10/05/2005 11:38:43	0.08134	2.960415	mg/l as N	1	10	
145644031	NOx	10/05/2005 11:38:44	0.08096	2.942784	mg/l as N	1	10	
145701002	NOx	10/05/2005 11:38:45	0.28015	1.198058	mg/l as N	1	1	
145701003	NOx	10/05/2005 11:38:46	0.09848	0.373807	mg/l as N	1	1	
145701004	NOx	10/05/2005 11:38:47	0.10508	0.403719	mg/l as N	1	1	
145701005	NOx	10/05/2005 11:38:48	0.01196	-0.018765	mg/l as N	1	1	
145701006	NOx	10/05/2005 11:38:49	0.0127	-0.015424	mg/l as N	1	1	
145701007	NOx	10/05/2005 11:38:50	0.12637	5.003139	mg/l as N	1	10	
145701008	NOx	10/05/2005 11:38:51	0.00667	-0.04278	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 11:48:40	0.2684	1.14474	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 11:48:41	0.00616	-0.045075	mg/l as N	1		0

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
145701009	NOx	10/05/2005 11:48:42	0.02256	0.029305	mg/l as N	1	1	
145701010	NOx	10/05/2005 11:48:43	0.10206	0.390054	mg/l as N	1	1	
145701011	NOx	10/05/2005 11:48:44	0.00728	-0.039996	mg/l as N	1	1	
145701012	NOx	10/05/2005 11:48:45	0.00977	-0.028727	mg/l as N	1	1	
145701013	NOx	10/05/2005 11:48:46	0.10686	0.411798	mg/l as N	1	1	
145701014	NOx	10/05/2005 11:48:47	0.04304	0.122262	mg/l as N	1	1	
1200951331	NOx	10/05/2005 11:48:48	0.00676	-0.04235	mg/l as N	1	1	
1200951332	NOx	10/05/2005 11:48:49	0.24344	1.031508	mg/l as N	1	1	
145423001	NOx	10/05/2005 11:48:50	0.85703	38.155312	mg/l as N	1	10	
1200951337	NOx	10/05/2005 11:48:51	1.27754	57.234772	mg/l as N	1	10	
NOx-CCB	NOx	10/05/2005 12:04:10			mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 12:04:11	0.22447	0.945429	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 12:04:12	0.00548	-0.04816	mg/l as N	1		0
1200951338	NOx	10/05/2005 12:04:13	0.98531	43.975655	mg/l as N	1	10	
145423002	NOx	10/05/2005 12:04:14	0.34147	14.763023	mg/l as N	1	10	
145423003	NOx	10/05/2005 12:04:15	0.02203	0.26938	mg/l as N	1	10	
145506001	NOx	10/05/2005 12:04:16	0.07603	0.271922	mg/l as N	1	1	
1200951335	NOx	10/05/2005 12:04:17	0.0747	0.265878	mg/l as N	1	1	
1200951336	NOx	10/05/2005 12:04:18	0.27475	1.173583	mg/l as N	1	1	
1455579001	NOx	10/05/2005 12:04:19	0.05843	1.920699	mg/l as N	1	10	
1200951339	NOx	10/05/2005 12:04:20	0.05782	1.893276	mg/l as N	1	10	
1200951340	NOx	10/05/2005 12:04:21	0.56709	25.000046	mg/l as N	1	10	
145579002	NOx	10/05/2005 12:04:22	0.30014	12.887627	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 12:14:13	0.22594	0.952099	mg/l as N	1		1
1200951321	NOx	10/05/2005 12:14:15	0.00465	-0.051948	mg/l as N	1	1	
145643010	NOx	10/05/2005 12:14:17	0.00693	-0.041596	mg/l as N	1	1	
1200951323	NOx	10/05/2005 12:14:18	0.00695	-0.041524	mg/l as N	1	1	
1200951324	NOx	10/05/2005 12:14:19	0.19358	0.805303	mg/l as N	1	1	
145643011	NOx	10/05/2005 12:14:20	0.13141	0.523205	mg/l as N	1	1	
145644027	NOx	10/05/2005 12:14:21	0.12741	5.050495	mg/l as N	1	10	
145579003	NOx	10/05/2005 12:14:22	0.04079	1.120598	mg/l as N	1	10	
145579004	NOx	10/05/2005 12:14:23	0.06749	2.331639	mg/l as N	1	10	
145783003	NOx	10/05/2005 12:14:24	0.11843	0.464319	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 12:24:15	0.22653	0.954776	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 12:24:16	0.0051	-0.049886	mg/l as N	1		0
1200951322	NOx	10/05/2005 12:24:17	0.22175	0.933121	mg/l as N	1	1	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
145644031	NOx	10/05/2005 12:24:18	0.06842	2.373955	mg/l as N	1	10	
145701002	NOx	10/05/2005 12:24:19	0.23297	0.984007	mg/l as N	1	1	
145701005	NOx	10/05/2005 12:24:20	0.00969	-0.029079	mg/l as N	1	1	
145701006	NOx	10/05/2005 12:24:21	0.00981	-0.028512	mg/l as N	1	1	
145701007	NOx	10/05/2005 12:24:22	0.11053	4.284441	mg/l as N	1	10	
145701008	NOx	10/05/2005 12:24:23	0.00509	-0.049933	mg/l as N	1	1	
145701009	NOx	10/05/2005 12:24:24	0.02742	0.051382	mg/l as N	1	1	
145701010	NOx	10/05/2005 12:24:25	0.08308	0.303929	mg/l as N	1	1	
145701011	NOx	10/05/2005 12:24:26	0.00657	-0.043224	mg/l as N	1	1	
145701003	NO3NO2	10/05/2005 12:31:49	0.05717	0.235193	mg/l as N	1	1	
145701004	NO3NO2	10/05/2005 12:31:50	0.02259	0.072176	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 12:37:38	0.22227	0.935466	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 12:37:39	0.00583	-0.046576	mg/l as N	1		0
145644028	NOx	10/05/2005 12:37:40	0.06508	2.222406	mg/l as N	1	10	
1200951325	NOx	10/05/2005 12:37:41	0.06444	2.193285	mg/l as N	1	10	
1200951326	NOx	10/05/2005 12:37:42	0.26766	11.413974	mg/l as N	1	10	
145644029	NOx	10/05/2005 12:37:43	0.10015	3.813663	mg/l as N	1	10	
145701012	NOx	10/05/2005 12:37:44	0.01023	-0.026616	mg/l as N	1	1	
145701013	NOx	10/05/2005 12:37:45	0.0894	0.332574	mg/l as N	1	1	
145701014	NOx	10/05/2005 12:37:46	0.0394	0.105735	mg/l as N	1	1	
1200951331	NOx	10/05/2005 12:37:47	0.00758	-0.038667	mg/l as N	1	1	
1200951332	NOx	10/05/2005 12:37:48	0.2066	0.864359	mg/l as N	1	1	
145423001	NOx	10/05/2005 12:37:49	0.78274	34.784477	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 12:47:40	0.228	0.961445	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 12:47:41	0.00443	-0.052943	mg/l as N	1		0
145644030	NOx	10/05/2005 12:47:42	0.06598	2.263207	mg/l as N	1	10	
1200951338	NOx	10/05/2005 12:47:43	0.98624	44.017914	mg/l as N	1	10	
145423002	NOx	10/05/2005 12:47:44	0.34886	15.098281	mg/l as N	1	10	
145423003	NOx	10/05/2005 12:47:45	0.02168	0.253481	mg/l as N	1	10	
145506001	NOx	10/05/2005 12:47:46	0.0735	0.260453	mg/l as N	1	1	
1200951335	NOx	10/05/2005 12:47:47	0.07351	0.260513	mg/l as N	1	1	
1200951336	NOx	10/05/2005 12:47:48	0.27413	1.170764	mg/l as N	1	1	
1455579001	NOx	10/05/2005 12:47:49	0.0576	1.882974	mg/l as N	1	10	
1200951339	NOx	10/05/2005 12:47:50	0.05784	1.894105	mg/l as N	1	10	
1200951340	NOx	10/05/2005 12:47:51	0.25367	10.779181	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 12:57:42	0.22771	0.96014	mg/l as N	1		1

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Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
NOx-CCB	NOx	10/05/2005 12:57:43	0.00837	-0.035072	mg/l as N	1		0
1200951321	NOx	10/05/2005 12:57:44	0.00666	-0.042836	mg/l as N	1	1	
145643010	NOx	10/05/2005 12:57:45	0.00881	-0.033049	mg/l as N	1	1	
1200951323	NOx	10/05/2005 12:57:46	0.01753	0.006523	mg/l as N	1	1	
1200951324	NOx	10/05/2005 12:57:47	0.19785	0.824642	mg/l as N	1	1	
145643011	NOx	10/05/2005 12:57:48	0.13246	0.527982	mg/l as N	1	1	
145644027	NOx	10/05/2005 12:57:49	0.12953	5.14668	mg/l as N	1	10	
145579002	NOx	10/05/2005 12:57:50	0.30673	13.186647	mg/l as N	1	10	
145579003	NOx	10/05/2005 12:57:51	0.04262	1.203614	mg/l as N	1	10	
145579004	NOx	10/05/2005 12:57:52	0.05129	1.596995	mg/l as N	1	10	
145783003	NOx	10/05/2005 12:57:53	0.11712	0.458355	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 13:03:03	0.22384	0.942595	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 13:03:04	0.00548	-0.048156	mg/l as N	1		0
145701003	NOx	10/05/2005 13:03:05	0.07621	0.272727	mg/l as N	1	1	
145701004	NOx	10/05/2005 13:03:06	0.05418	0.172803	mg/l as N	1	1	
1200951337	NOx	10/05/2005 13:06:24	0.05964	19.756912	mg/l as N	10	10	
NOx-CCV	NOx	10/05/2005 13:09:32	0.21017	0.880547	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 13:09:33	0.00639	-0.044027	mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 13:36:08	0.23791	1.00641	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 13:36:09	0.02487	0.039792	mg/l as N	1		0
1200951321	NOx	10/05/2005 13:36:10	0.00493	-0.050649	mg/l as N	1	1	
1200951322	NOx	10/05/2005 13:36:11	0.23133	0.97655	mg/l as N	1	1	
145643010	NOx	10/05/2005 13:36:12	0.007	-0.041292	mg/l as N	1	1	
1200951323	NOx	10/05/2005 13:36:13	0.0069	-0.041729	mg/l as N	1	1	
1200951324	NOx	10/05/2005 13:36:14	0.21036	0.88141	mg/l as N	1	1	
145643011	NOx	10/05/2005 13:36:15	0.14055	0.564654	mg/l as N	1	1	
145644027	NOx	10/05/2005 13:36:16	0.13595	5.437902	mg/l as N	1	10	
145644028	NOx	10/05/2005 13:36:17	0.06714	2.316096	mg/l as N	1	10	
1200951325	NOx	10/05/2005 13:36:18	0.06597	2.2627	mg/l as N	1	10	
1200951326	NOx	10/05/2005 13:36:19	0.26882	11.46674	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 13:46:09	0.23392	0.988329	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 13:46:10	0.00507	-0.050018	mg/l as N	1		0
145644029	NOx	10/05/2005 13:46:11	0.09661	3.653274	mg/l as N	1	10	
145644030	NOx	10/05/2005 13:46:12	0.06915	2.40709	mg/l as N	1	10	
145644031	NOx	10/05/2005 13:46:13	0.06931	2.414421	mg/l as N	1	10	
145701002	NOx	10/05/2005 13:46:14	0.24131	1.021847	mg/l as N	1	1	

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Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
145701003	NOx	10/05/2005 13:46:15	0.084	0.308109	mg/l as N	1	1	
145701004	NOx	10/05/2005 13:46:16	0.21129	0.885621	mg/l as N	1	1	
145701005	NOx	10/05/2005 13:46:17	0.00991	-0.02807	mg/l as N	1	1	
145701006	NOx	10/05/2005 13:46:18	0.01	-0.027662	mg/l as N	1	1	
145701007	NOx	10/05/2005 13:46:19	0.11132	4.320339	mg/l as N	1	10	
145701008	NOx	10/05/2005 13:46:20	0.00786	-0.037391	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 13:56:11	0.23876	1.010265	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 13:56:12	0.00506	-0.050089	mg/l as N	1		0
145701009	NOx	10/05/2005 13:56:13	0.02736	0.051098	mg/l as N	1	1	
145701010	NOx	10/05/2005 13:56:14	0.08654	0.319638	mg/l as N	1	1	
145701011	NOx	10/05/2005 13:56:15	0.00628	-0.044539	mg/l as N	1	1	
145701012	NOx	10/05/2005 13:56:16	0.00747	-0.039135	mg/l as N	1	1	
145701013	NOx	10/05/2005 13:56:17	0.09546	0.360087	mg/l as N	1	1	
145701014	NOx	10/05/2005 13:56:18	0.03964	0.106841	mg/l as N	1	1	
1200951331	NOx	10/05/2005 13:56:19	0.45295	1.982095	mg/l as N	1	1	
1200951332	NOx	10/05/2005 13:56:20	0.21809	0.916473	mg/l as N	1	1	
145423001	NOx	10/05/2005 13:56:21	0.78765	35.007511	mg/l as N	1	10	
1200951337	NOx	10/05/2005 13:56:22	0.77833	34.584339	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 14:06:12	0.23828	1.008117	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 14:06:13	0.00422	-0.053872	mg/l as N	1		0
1200951338	NOx	10/05/2005 14:06:14	1.00724	44.970913	mg/l as N	1	10	
145423002	NOx	10/05/2005 14:06:15	0.35619	15.431075	mg/l as N	1	10	
145423003	NOx	10/05/2005 14:06:16	0.02274	0.301505	mg/l as N	1	10	
145506001	NOx	10/05/2005 14:06:17	0.07971	0.288615	mg/l as N	1	1	
1200951335	NOx	10/05/2005 14:06:18	0.07566	0.270254	mg/l as N	1	1	
1200951336	NOx	10/05/2005 14:06:19	0.28473	1.218871	mg/l as N	1	1	
1455579001	NOx	10/05/2005 14:06:20	0.05993	1.988933	mg/l as N	1	10	
1200951339	NOx	10/05/2005 14:06:21	0.06118	2.045344	mg/l as N	1	10	
1200951340	NOx	10/05/2005 14:06:22	0.26536	11.309742	mg/l as N	1	10	
145579002	NOx	10/05/2005 14:06:23	0.31747	13.674003	mg/l as N	1	10	
NOx-CCB	NOx	10/05/2005 14:10:02			mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 14:10:02			mg/l as N	1		1
NOx-CCV	NOx	10/05/2005 14:13:18	0.25126	1.066984	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 14:13:19	0.00992	-0.028028	mg/l as N	1		0
1200951321	NOx	10/05/2005 14:13:20	0.00766	-0.038298	mg/l as N	1	1	
1200951331	NOx	10/05/2005 14:13:21	0.0108	-0.024018	mg/l as N	1	1	

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Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
145579003	NOx	10/05/2005 14:13:22	0.05235	1.645054	mg/l as N	1	10	
145579004	NOx	10/05/2005 14:13:23	0.06138	2.054457	mg/l as N	1	10	
145783003	NOx	10/05/2005 14:13:24	0.13156	0.523905	mg/l as N	1	1	
145701009	NOx	10/05/2005 14:25:53	0.025	0.040398	mg/l as N	1	1	
145701010	NOx	10/05/2005 14:25:54	0.09189	0.343913	mg/l as N	1	1	
145701011	NOx	10/05/2005 14:25:55	0.00534	-0.048795	mg/l as N	1	1	
145701012	NOx	10/05/2005 14:25:56	0.00706	-0.041009	mg/l as N	1	1	
145701013	NOx	10/05/2005 14:25:57	0.09724	0.368166	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 14:25:58	0.24012	1.016465	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 14:25:59	0.00451	-0.052565	mg/l as N	1		0
145701014	NOx	10/05/2005 14:26:00	0.04019	0.109329	mg/l as N	1	1	
1200951332	NOx	10/05/2005 14:26:01	0.22925	0.967121	mg/l as N	1	1	
145423001	NOx	10/05/2005 14:26:02	0.82245	36.586521	mg/l as N	1	10	
1200951337	NOx	10/05/2005 14:26:03	0.81435	36.218922	mg/l as N	1	10	
1200951338	NOx	10/05/2005 14:26:04	1.06902	47.773941	mg/l as N	1	10	
NOx-CCB	NOx	10/05/2005 14:28:06			mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 14:28:06			mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 14:31:27			mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 14:44:22	0.23734	1.003857	mg/l as N	1		1
1200951338	NOx	10/05/2005 14:44:24	1.03267	46.124329	mg/l as N	1	10	
145423002	NOx	10/05/2005 14:44:25	0.36383	15.777699	mg/l as N	1	10	
145423003	NOx	10/05/2005 14:44:26	0.02733	0.509591	mg/l as N	1	10	
145506001	NOx	10/05/2005 14:44:27	0.08711	0.322213	mg/l as N	1	1	
1200951335	NOx	10/05/2005 14:44:28	0.0839	0.307632	mg/l as N	1	1	
1200951336	NOx	10/05/2005 14:44:29	0.29908	1.283964	mg/l as N	1	1	
1455579001	NOx	10/05/2005 14:44:30	0.06588	2.258954	mg/l as N	1	10	
1200951339	NOx	10/05/2005 14:44:31	0.06629	2.27754	mg/l as N	1	10	
1200951340	NOx	10/05/2005 14:44:32	0.27911	11.933564	mg/l as N	1	10	
145579002	NOx	10/05/2005 14:44:33	0.3392	14.659967	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 14:54:23	0.25181	1.069488	mg/l as N	1		1
145423002	NOx	10/05/2005 14:54:24	0.37453	16.262888	mg/l as N	1	10	
145423003	NOx	10/05/2005 14:54:25	0.02647	0.470617	mg/l as N	1	10	
145506001	NOx	10/05/2005 14:54:26	0.08339	0.305311	mg/l as N	1	1	
1200951335	NOx	10/05/2005 14:54:27	0.08314	0.304171	mg/l as N	1	1	
1200951336	NOx	10/05/2005 14:54:28	0.29858	1.281699	mg/l as N	1	1	
1455579001	NOx	10/05/2005 14:54:29	0.06422	2.183558	mg/l as N	1	10	

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Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
1200951339	NOx	10/05/2005 14:54:30	0.06517	2.226464	mg/l as N	1	10	
1200951340	NOx	10/05/2005 14:54:31	0.28046	11.99472	mg/l as N	1	10	
145579003	NOx	10/05/2005 14:54:33	0.04573	1.344488	mg/l as N	1	10	
145579004	NOx	10/05/2005 14:54:34	0.05652	1.833997	mg/l as N	1	10	
NOx-CCV	NOx	10/05/2005 15:04:25	0.25152	1.068161	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 15:04:26	0.00741	-0.039409	mg/l as N	1		0
145579002	NOx	10/05/2005 15:04:27	0.337	14.560117	mg/l as N	1	10	
1200951321	NOx	10/05/2005 15:04:28	0.00724	-0.040202	mg/l as N	1	1	
145644027	NOx	10/05/2005 15:04:29	0.13929	5.589736	mg/l as N	1	10	
145644028	NOx	10/05/2005 15:04:30	0.07268	2.567276	mg/l as N	1	10	
1200951325	NOx	10/05/2005 15:04:31	0.06991	2.44142	mg/l as N	1	10	
1200951326	NOx	10/05/2005 15:04:32	0.28501	12.201307	mg/l as N	1	10	
145644029	NOx	10/05/2005 15:04:33	0.0991	3.765949	mg/l as N	1	10	
145644030	NOx	10/05/2005 15:04:34	0.0749	2.668203	mg/l as N	1	10	
145644031	NOx	10/05/2005 15:04:35	0.0728	2.57281	mg/l as N	1	10	
145701002	NOx	10/05/2005 15:04:36	0.24704	1.047863	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 15:14:27	0.24997	1.061162	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 15:14:28	0.00619	-0.04495	mg/l as N	1		0
145701003	NOx	10/05/2005 15:14:29	0.08873	0.329542	mg/l as N	1	1	
145701004	NOx	10/05/2005 15:14:30	0.1852	0.767272	mg/l as N	1	1	
1200951331	NOx	10/05/2005 15:14:31	0.00701	-0.04125	mg/l as N	1	1	
1200951332	NOx	10/05/2005 15:14:32	0.23399	0.988627	mg/l as N	1	1	
145423001	NOx	10/05/2005 15:14:33	0.80759	35.912128	mg/l as N	1	10	
1200951337	NOx	10/05/2005 15:14:34	0.80878	35.966129	mg/l as N	1	10	
1200951338	NOx	10/05/2005 15:14:35	1.01946	45.525059	mg/l as N	1	10	
145423002	NOx	10/05/2005 15:14:36	0.36622	15.886044	mg/l as N	1	10	
145423003	NOx	10/05/2005 15:14:37	0.02449	0.380721	mg/l as N	1	10	
145506001	NOx	10/05/2005 15:14:38	0.08111	0.294965	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 15:23:51	0.25057	1.063846	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 15:23:52	0.00558	-0.047708	mg/l as N	1		0
1200951335	NOx	10/05/2005 15:23:53	0.08621	0.318113	mg/l as N	1	1	
1200951336	NOx	10/05/2005 15:23:54	0.29716	1.27524	mg/l as N	1	1	
1455579001	NOx	10/05/2005 15:23:55	0.06486	2.212631	mg/l as N	1	10	
1200951339	NOx	10/05/2005 15:23:56	0.06657	2.289968	mg/l as N	1	10	
1200951340	NOx	10/05/2005 15:23:57	0.28089	12.014444	mg/l as N	1	10	
145579002	NOx	10/05/2005 15:23:58	0.32954	14.221908	mg/l as N	1	10	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
145579003	NOx	10/05/2005 15:23:59	0.04682	1.394121	mg/l as N	1	10	
145579004	NOx	10/05/2005 15:24:00	0.05911	1.951721	mg/l as N	1	10	
145783003	NOx	10/05/2005 15:24:01	0.13401	0.535003	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 15:28:04	0.22956	0.968525	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 15:28:05	0.00645	-0.043761	mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 15:55:24	0.25419	1.080295	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 15:55:25	0.00558	-0.047742	mg/l as N	1		0
145701010	NOx	10/05/2005 15:55:26	0.09719	0.367931	mg/l as N	1	1	
145701011	NOx	10/05/2005 15:55:27	0.00783	-0.037502	mg/l as N	1	1	
145701012	NOx	10/05/2005 15:55:28	0.00947	-0.030084	mg/l as N	1	1	
145701013	NOx	10/05/2005 15:55:29	0.10155	0.387724	mg/l as N	1	1	
145701014	NOx	10/05/2005 15:55:30	0.03361	0.079447	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 15:59:12	0.22633	0.953866	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 15:59:13	0.00629	-0.044518	mg/l as N	1		0
NOx-CCV	NOx	10/05/2005 16:25:28	0.23699	1.002268	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 16:25:29	0.00614	-0.045159	mg/l as N	1		0
145701009	NOx	10/05/2005 16:25:30	0.00753	-0.038872	mg/l as N	1	1	
NOx-CCV	NOx	10/05/2005 16:28:53	0.22886	0.965367	mg/l as N	1		1
NOx-CCB	NOx	10/05/2005 16:28:54	0.00622	-0.04481	mg/l as N	1		0

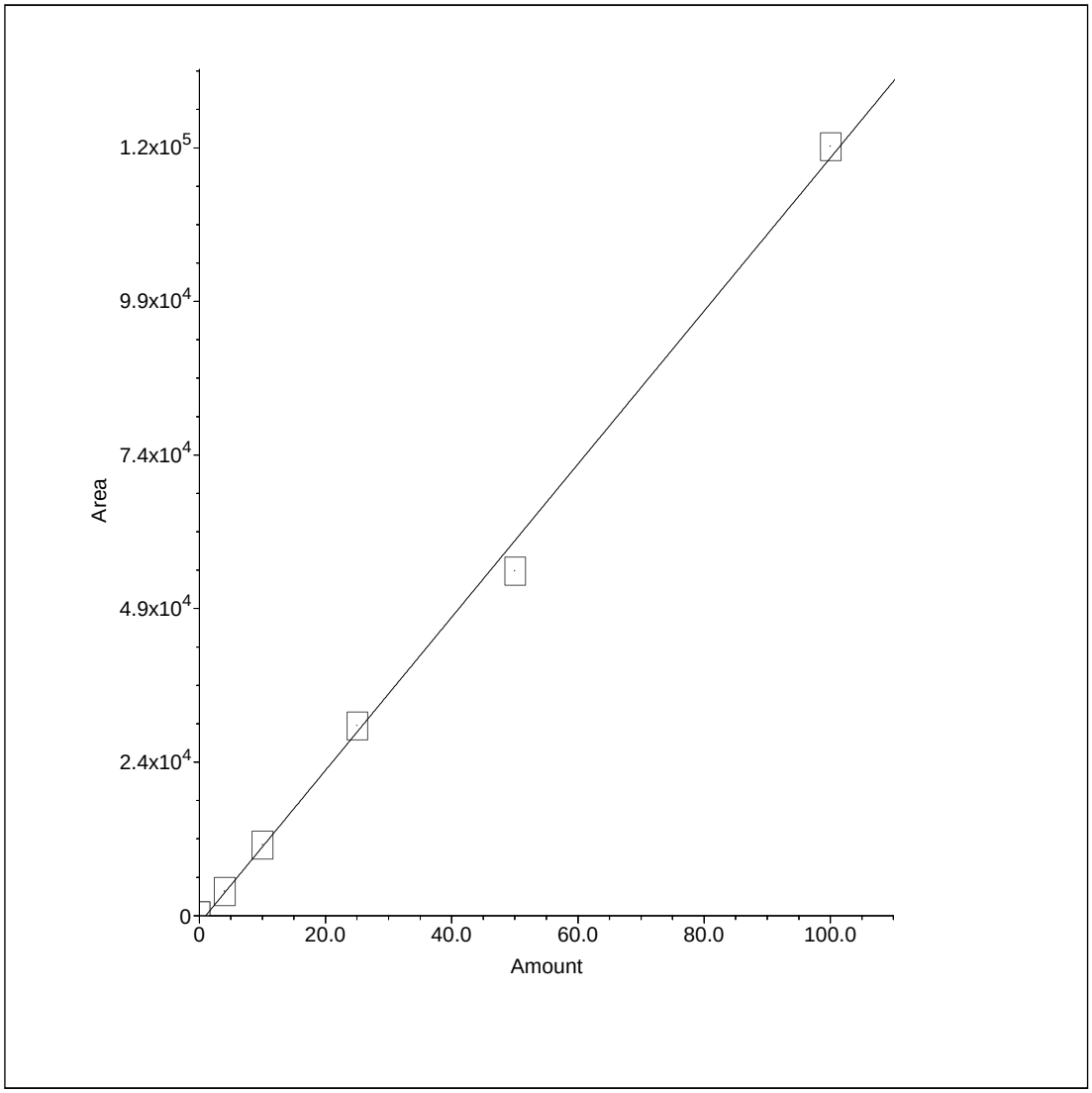
1244

Perchlorate

METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	AXM1	9/7/2005 10:09:11	050907_001.DXD
AUTOCAL6		1	AXM1	9/7/2005 10:24:19	050907_002.DXD
AUTOCAL5		1	AXM1	9/7/2005 10:39:28	050907_003.DXD
AUTOCAL4		1	AXM1	9/7/2005 10:54:37	050907_004.DXD
AUTOCAL3		1	AXM1	9/7/2005 11:09:46	050907_005.DXD
AUTOCAL2		1	AXM1	9/7/2005 11:24:56	050907_006.DXD
AUTOCAL1		1	AXM1	9/7/2005 11:40:05	050907_007.DXD
WPC050809-03ICV		1	AXM1	9/7/2005 11:55:13	050907_008.DXD
ICB		1	AXM1	9/7/2005 12:10:24	050907_009.DXD
IPC-25-TREATED		1	AXM1	9/7/2005 12:25:33	050907_010.DXD
PQL-4		1	AXM1	9/7/2005 12:40:41	050907_011.DXD
MRL-4-TREATED		1	AXM1	9/7/2005 12:55:51	050907_012.DXD
WPC050906-03CVH		1	AXM1	9/7/2005 13:10:59	050907_013.DXD
CCB		1	AXM1	9/7/2005 13:26:08	050907_014.DXD
1200923070	457416	1	AXM1	9/7/2005 13:41:17	050907_015.DXD
1200923079	457416	1	AXM1	9/7/2005 13:56:26	050907_016.DXD
144084001	457416	1	AXM1	9/7/2005 14:11:34	050907_017.DXD
1200923071	457416	1	AXM1	9/7/2005 14:26:42	050907_018.DXD
1200923075	457416	1	AXM1	9/7/2005 14:41:50	050907_019.DXD
144117007	457416	1	AXM1	9/7/2005 14:56:59	050907_020.DXD
144117008	457416	1	AXM1	9/7/2005 15:12:08	050907_021.DXD
144119001	457416	1	AXM1	9/7/2005 15:27:17	050907_022.DXD
144119002	457416	1	AXM1	9/7/2005 15:42:26	050907_023.DXD
144119003	457416	1	AXM1	9/7/2005 15:57:35	050907_024.DXD
WPC050906-03CVL		1	AXM1	9/7/2005 16:12:44	050907_025.DXD
CCB		1	AXM1	9/7/2005 16:27:53	050907_026.DXD
144139010	457416	1	AXM1	9/7/2005 16:43:01	050907_027.DXD
1200923072	457416	1	AXM1	9/7/2005 16:58:10	050907_028.DXD
1200923076	457416	1	AXM1	9/7/2005 17:13:20	050907_029.DXD
144179016	457416	1	AXM1	9/7/2005 17:28:28	050907_030.DXD
144189007	457416	1	AXM1	9/7/2005 17:43:36	050907_031.DXD
1200923073	457416	1	AXM1	9/7/2005 17:58:44	050907_032.DXD
1200923077	457416	1	AXM1	9/7/2005 18:13:53	050907_033.DXD
144189008	457416	1	AXM1	9/7/2005 18:29:02	050907_034.DXD
WPC050906-03CVH		1	AXM1	9/7/2005 18:44:11	050907_035.DXD
CCB		1	AXM1	9/7/2005 18:59:20	050907_036.DXD
144190003	457416	1	AXM1	9/7/2005 19:14:29	050907_037.DXD
1200923074	457416	1	AXM1	9/7/2005 19:29:39	050907_038.DXD
1200923078	457416	1	AXM1	9/7/2005 19:44:47	050907_039.DXD
144190004	457416	1	AXM1	9/7/2005 19:59:55	050907_040.DXD
144190005	457416	1	AXM1	9/7/2005 20:15:03	050907_041.DXD
144191005	457416	1	AXM1	9/7/2005 20:30:11	050907_042.DXD
144191006	457416	1	AXM1	9/7/2005 20:45:20	050907_043.DXD
144191007	457416	1	AXM1	9/7/2005 21:00:29	050907_044.DXD
144191008	457416	1	AXM1	9/7/2005 21:15:38	050907_045.DXD
WPC050906-03CVL		1	AXM1	9/7/2005 21:30:47	050907_046.DXD
CCB		1	AXM1	9/7/2005 21:45:56	050907_047.DXD

2. Component:Perchlorate
Standard:External Fit Type:Linear
Origin:Ignore Calibration:Area
r^2=0.997271
Amt=0.0008045*Resp+1.026



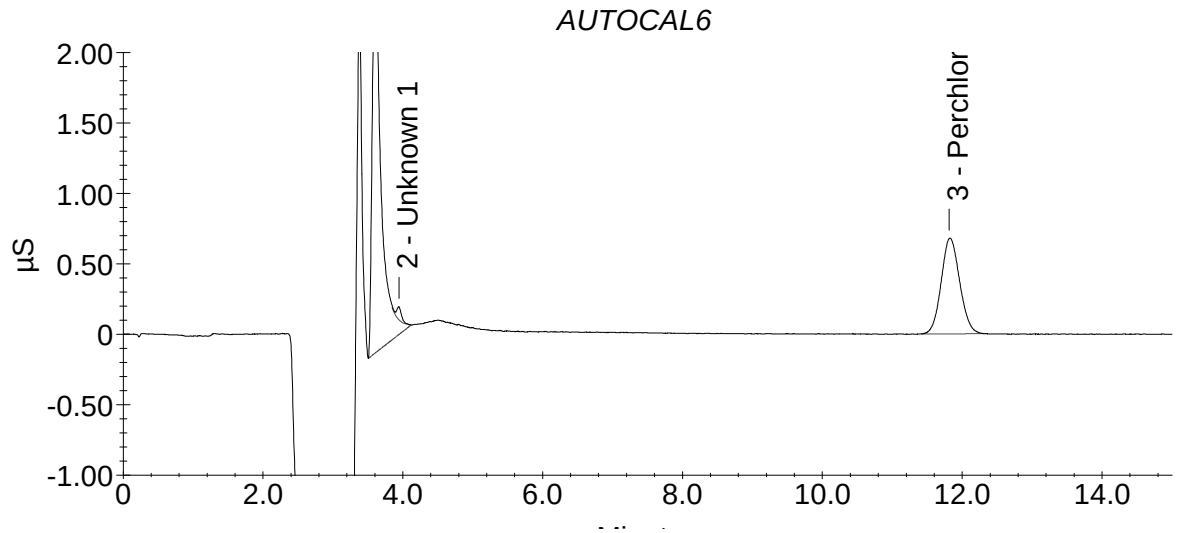
Calibration Update Report

Sample Name : AUTOCAL6
Data File Name : C:\PEAKNET\DATA\050907_002.DXD

Method File Name : c:\peaknet\method\050907.met
Schedule File Name : c:\peaknet\schedule\050907.sch
Date Time Collected : 9/7/2005 10:24:19
Calibration Date : 9/7/2005 10:39:24
System Operator : AXM1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.60		246914	
3	Perchlorate	100.00	11.81	126424	124915	124915



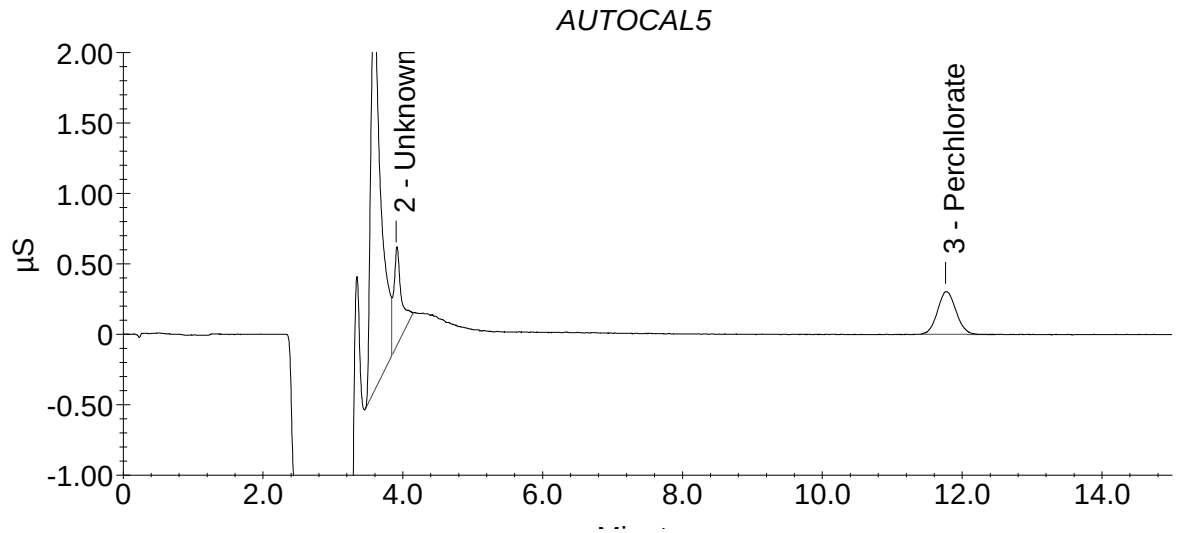
Calibration Update Report

Sample Name : AUTOCAL5
Data File Name : C:\PEAKNET\DATA\050907_003.DXD

Method File Name : c:\peaknet\method\050907.met
Schedule File Name : c:\peaknet\schedule\050907.sch
Date Time Collected : 9/7/2005 10:39:28
Calibration Date : 9/7/2005 10:54:33
System Operator : AXM1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.59		281394	
3	Perchlorate	50.00	11.76	60448	55966	55966



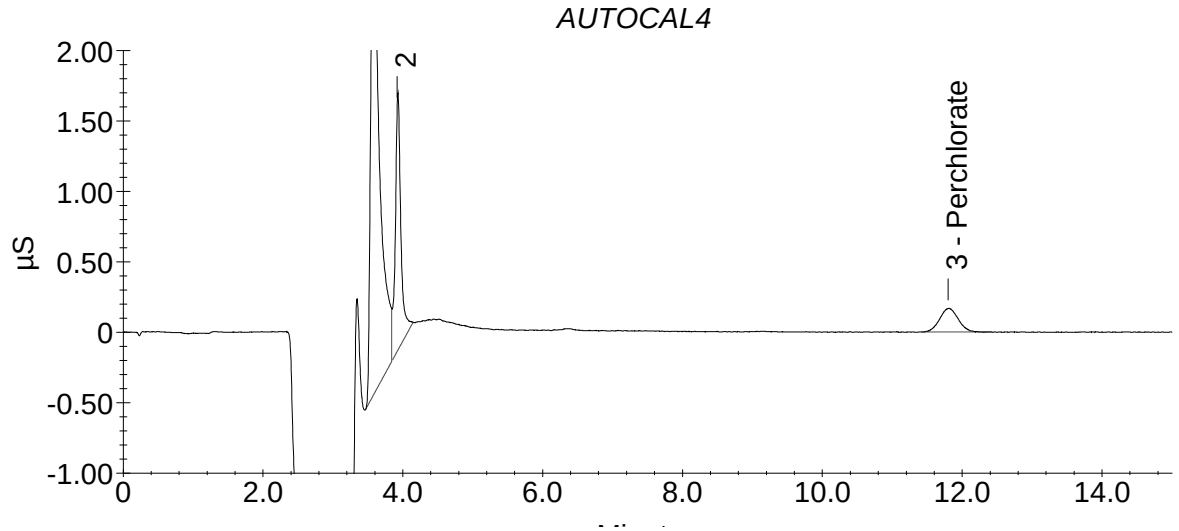
Calibration Update Report

Sample Name : AUTOCAL4
Data File Name : C:\PEAKNET\DATA\050907_004.DXD

Method File Name : c:\peaknet\method\050907.met
Schedule File Name : c:\peaknet\schedule\050907.sch
Date Time Collected : 9/7/2005 10:54:37
Calibration Date : 9/7/2005 11:09:42
System Operator : AXM1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.57		304948	
3	Perchlorate	25.00	11.80	29199	30896	30896



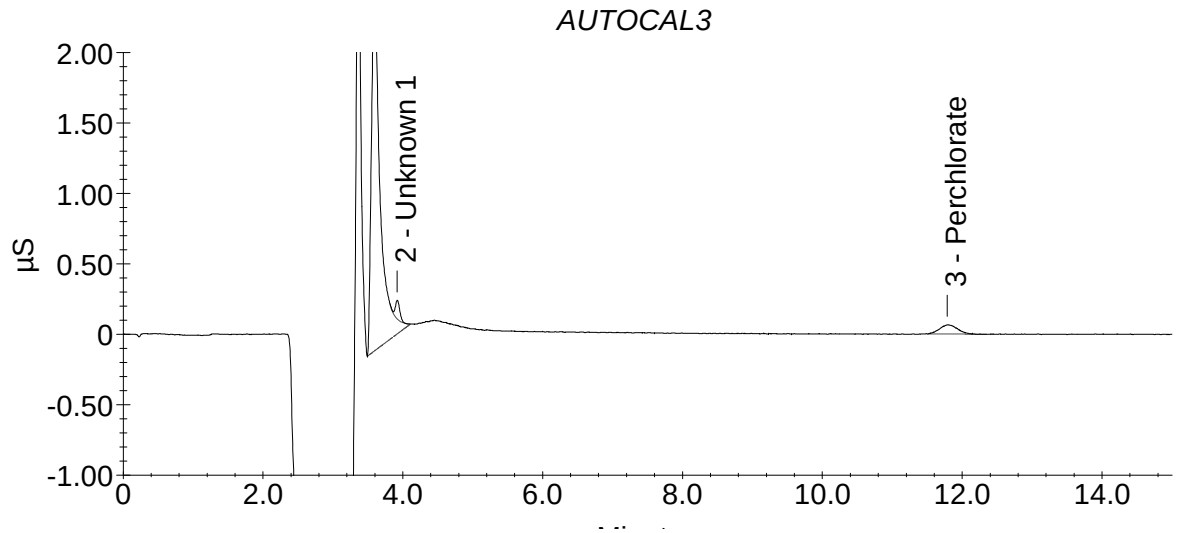
Calibration Update Report

Sample Name : AUTOCAL3
Data File Name : C:\PEAKNET\DATA\050907_005.DXD

Method File Name : c:\peaknet\method\050907.met
Schedule File Name : c:\peaknet\schedule\050907.sch
Date Time Collected : 9/7/2005 11:09:46
Calibration Date : 9/7/2005 11:24:51
System Operator : AXM1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.59		228930	
3	Perchlorate	10.00	11.79	11768	11539	11539



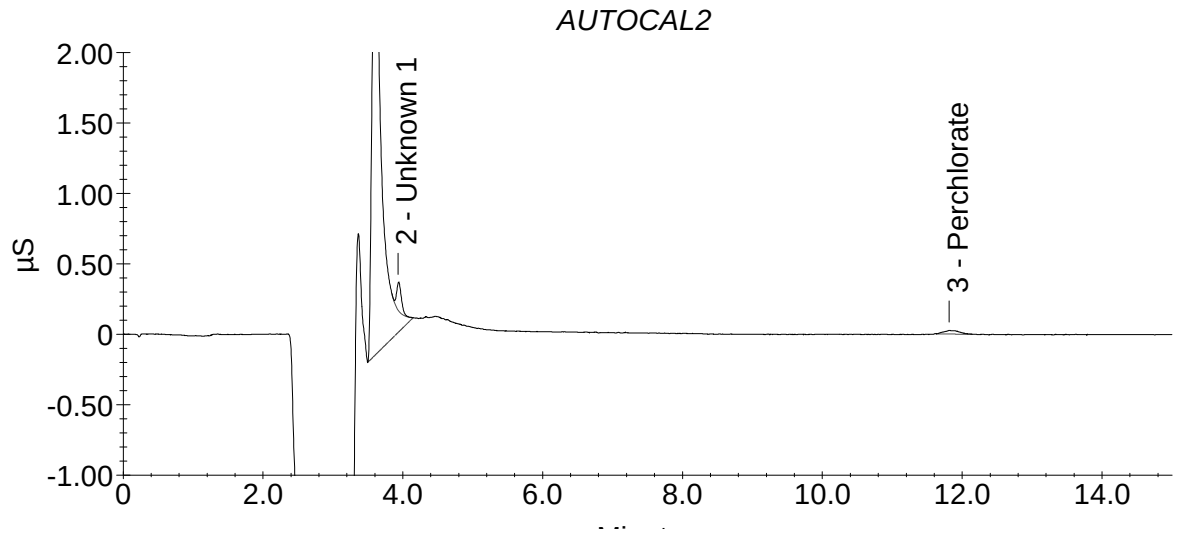
Calibration Update Report

Sample Name : AUTOCAL2
Data File Name : C:\PEAKNET\DATA\050907_006.DXD

Method File Name : c:\peaknet\method\050907.met
Schedule File Name : c:\peaknet\schedule\050907.sch
Date Time Collected : 9/7/2005 11:24:56
Calibration Date : 9/7/2005 11:40:01
System Operator : AXM1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.61		301378	
3	Perchlorate	4.00	11.81	4750	3965	3965



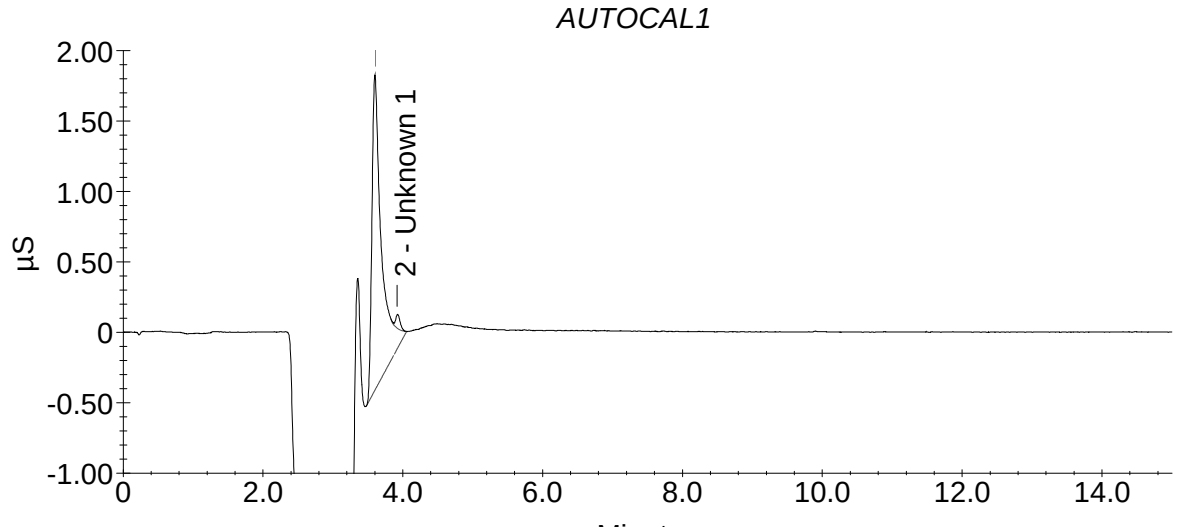
Calibration Update Report

Sample Name : AUTOCAL1
Data File Name : C:\PEAKNET\DATA\050907_007.DXD

Method File Name : c:\peaknet\method\050907.met
Schedule File Name : c:\peaknet\schedule\050907.sch
Date Time Collected : 9/7/2005 11:40:05
Calibration Date : 9/7/2005 11:55:10
System Operator : AXM1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak Perchlorate	0.00	3.60		211711	



Sample Analysis Report

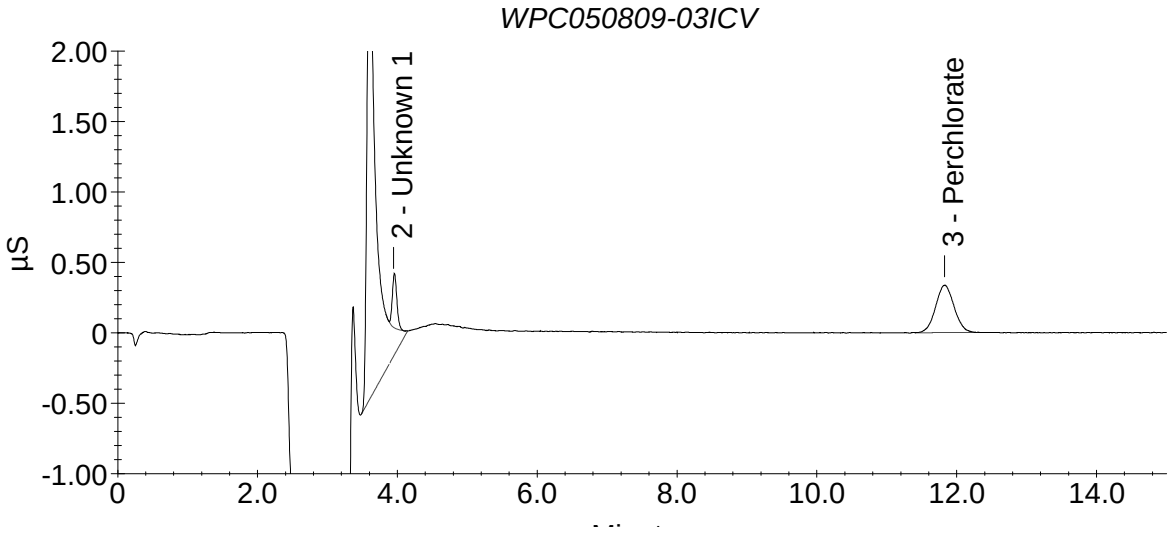
Sample Name : WPC050809-03ICV
Data File Name : C:\PEAKNET\DATA\050907_008.DXD
Date Time Updated : 9/7/2005 12:10:19

Method : ...\050907.met	Inject# : 8	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/7/2005 11:55:13	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.60	0.00	302787	31655
3	Perchlorate	11.83	50.83	61905	3372



Sample Analysis Report

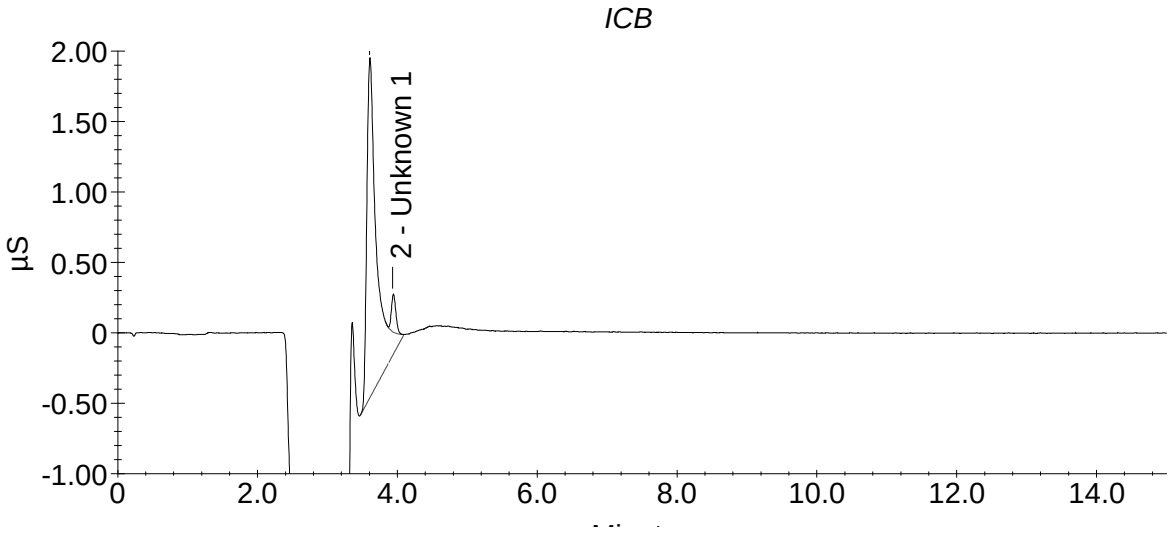
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\050907_009.DXD
Date Time Updated : 9/7/2005 12:25:29

Method : ...\050907.met	Inject# : 9	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/7/2005 12:10:24	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.60	0.00	232944	23825



METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	AXM1	9/27/2005 09:49:06	050927_001.DXD
WPC050906-03ICV		1	AXM1	9/27/2005 10:04:13	050927_002.DXD
ICB		1	AXM1	9/27/2005 10:19:22	050927_003.DXD
IPC-25-TREATED		1	AXM1	9/27/2005 10:34:31	050927_004.DXD
PQL-4		1	AXM1	9/27/2005 10:49:41	050927_005.DXD
WPC050906-03CVH		1	AXM1	9/27/2005 11:04:50	050927_006.DXD
CCB		1	AXM1	9/27/2005 11:19:58	050927_007.DXD
1200939629	464200	1	AXM1	9/27/2005 11:35:07	050927_008.DXD
1200939638	464200	1	AXM1	9/27/2005 11:50:17	050927_009.DXD
145452001	464200	1	AXM1	9/27/2005 12:05:26	050927_010.DXD
1200939630	464200	1	AXM1	9/27/2005 12:20:36	050927_011.DXD
1200939634	464200	1	AXM1	9/27/2005 12:35:45	050927_012.DXD
145457001	464200	1	AXM1	9/27/2005 12:50:54	050927_013.DXD
145457002	464200	1	AXM1	9/27/2005 13:06:04	050927_014.DXD
145457009	464200	1	AXM1	9/27/2005 13:21:13	050927_015.DXD
1200939631	464200	1	AXM1	9/27/2005 13:36:22	050927_016.DXD
1200939635	464200	1	AXM1	9/27/2005 13:51:31	050927_017.DXD
WPC050906-03CVL		1	AXM1	9/27/2005 14:06:39	050927_018.DXD
CCB		1	AXM1	9/27/2005 14:21:48	050927_019.DXD
145457010	464200	1	AXM1	9/27/2005 14:36:57	050927_020.DXD
145457012	464200	1	AXM1	9/27/2005 14:52:04	050927_021.DXD
145527001	464200	1	AXM1	9/27/2005 15:07:12	050927_022.DXD
1200939632	464200	1	AXM1	9/27/2005 15:22:20	050927_023.DXD
1200939636	464200	1	AXM1	9/27/2005 15:37:29	050927_024.DXD
145579001	464200	1	AXM1	9/27/2005 15:52:38	050927_025.DXD
145579002	464200	1	AXM1	9/27/2005 16:07:48	050927_026.DXD
145579003	464200	1	AXM1	9/27/2005 16:22:56	050927_027.DXD
145579004	464200	1	AXM1	9/27/2005 16:38:05	050927_028.DXD
145739001	464200	1	AXM1	9/27/2005 16:53:14	050927_029.DXD
WPC050906-03CVH		1	AXM1	9/27/2005 17:08:23	050927_030.DXD
CCB		1	AXM1	9/27/2005 17:23:32	050927_031.DXD
145739002	464200	1	AXM1	9/27/2005 17:38:40	050927_032.DXD
145739003	464200	1	AXM1	9/27/2005 17:53:49	050927_033.DXD
145782001	464200	1	AXM1	9/27/2005 18:08:57	050927_034.DXD
145782002	464200	1	AXM1	9/27/2005 18:24:07	050927_035.DXD
WPC050906-03CVL		1	AXM1	9/27/2005 18:39:15	050927_036.DXD
CCB		1	AXM1	9/27/2005 18:54:23	050927_037.DXD
144836016	460784	1	AXM1	9/27/2005 19:09:33	050927_038.DXD
144836017	460784	1	AXM1	9/27/2005 19:24:42	050927_039.DXD
WPC050906-03CVH		1	AXM1	9/27/2005 19:39:50	050927_040.DXD
CCB		1	AXM1	9/27/2005 19:54:59	050927_041.DXD
144836004	460770	1	AXM1	9/27/2005 20:10:08	050927_042.DXD
144836005	460770	1	AXM1	9/27/2005 20:25:15	050927_043.DXD
WPC050906-03CVL		1	AXM1	9/27/2005 20:40:25	050927_044.DXD
CCB		1	AXM1	9/27/2005 20:55:34	050927_045.DXD

Sample Analysis Report

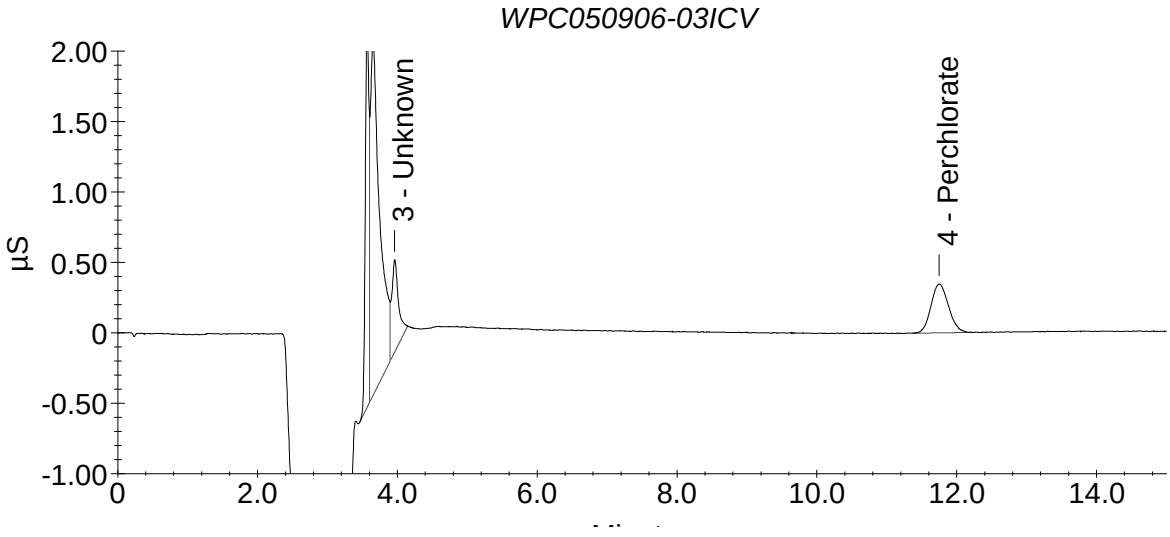
Sample Name : WPC050906-03ICV
Data File Name : C:\PEAKNET\DATA\050927_002.DXD
Date Time Updated : 9/27/2005 10:19:19

Method : ...\050907.met	Inject# : 2	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 10:04:13	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	224193	25251
4	Perchlorate	11.75	49.54	60301	3463



Sample Analysis Report

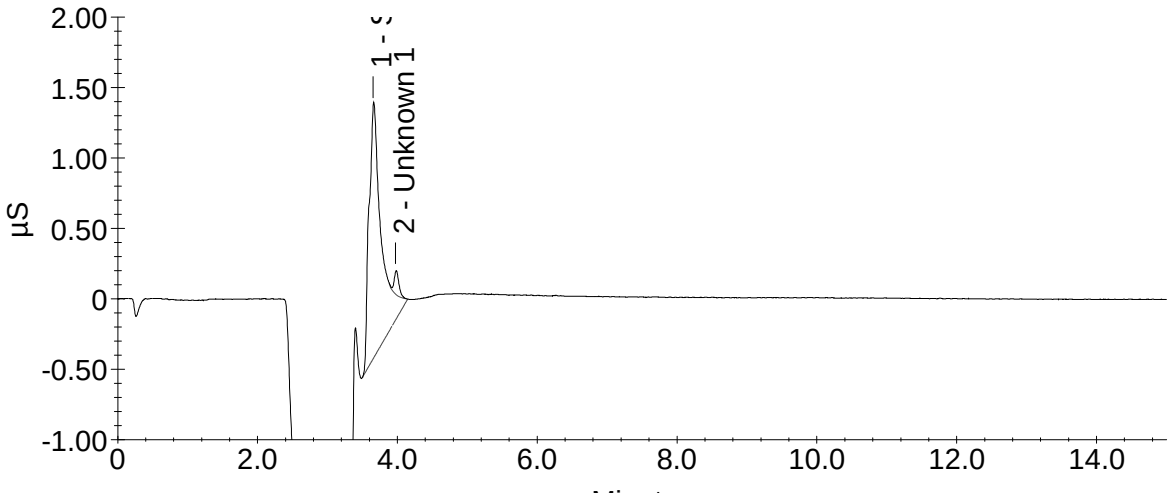
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\050927_003.DXD
Date Time Updated : 9/27/2005 10:34:27

Method : ...\050907.met	Inject# : 3	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 10:19:22	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.65	0.00	220282	17940



Sample Analysis Report

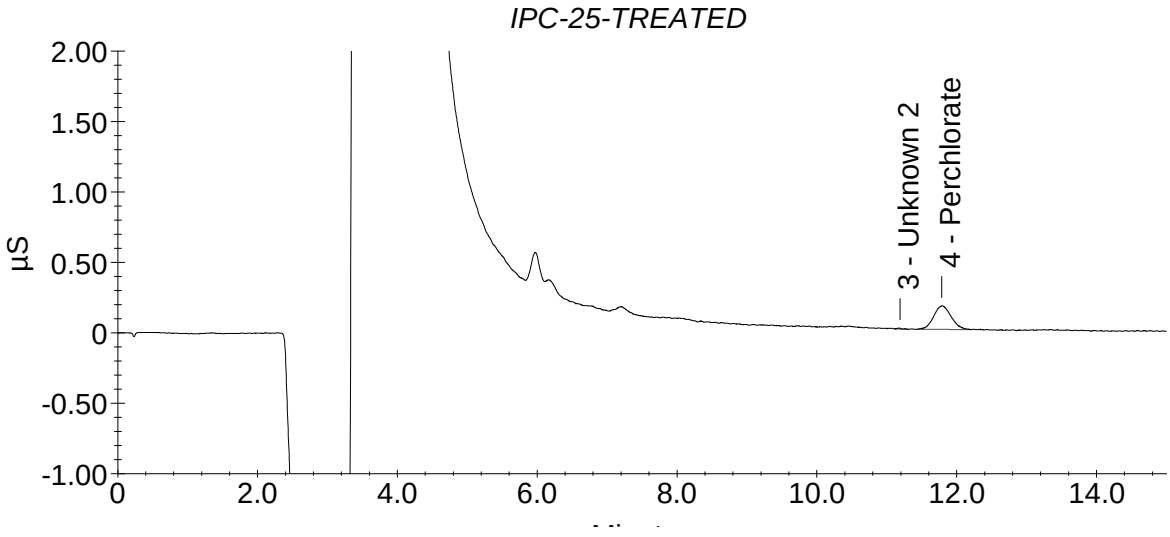
Sample Name : IPC-25-TREATED
Data File Name : C:\PEAKNET\DATA\050927_004.DXD
Date Time Updated : 9/27/2005 10:49:37

Method : ...\050907.met	Inject# : 4	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 10:34:31	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.56	0.00	327266	93234
4	Perchlorate	11.79	24.39	29045	1666



Sample Analysis Report

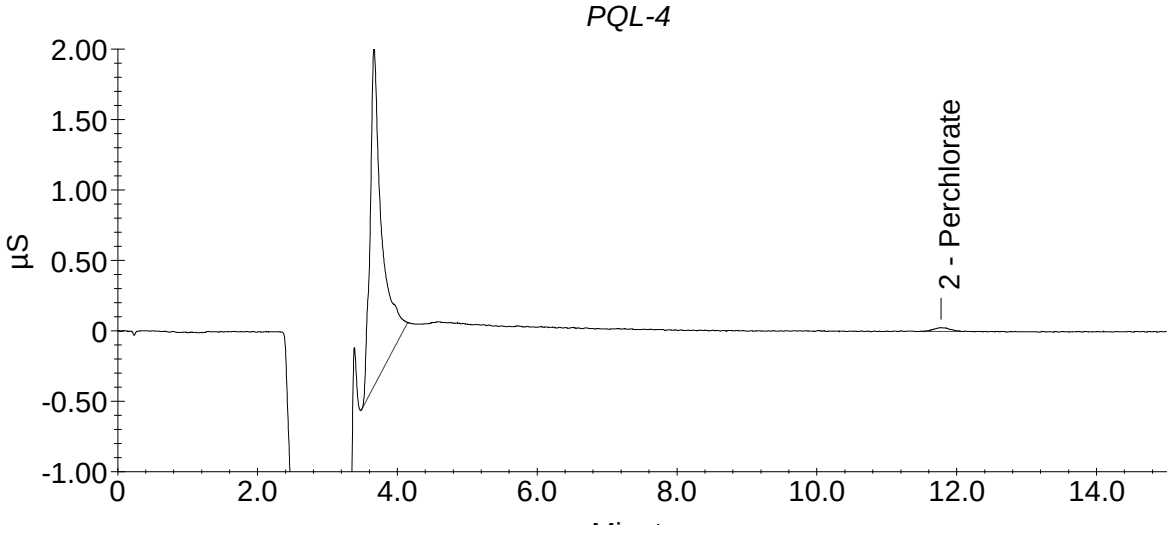
Sample Name : PQL-4
Data File Name : C:\PEAKNET\DATA\050927_005.DXD
Date Time Updated : 9/27/2005 11:04:46

Method : ...\050907.met	Inject# : 5	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 10:49:41	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.67	0.00	277968	24055
2	Perchlorate	11.77	4.70	4564	269



Sample Analysis Report

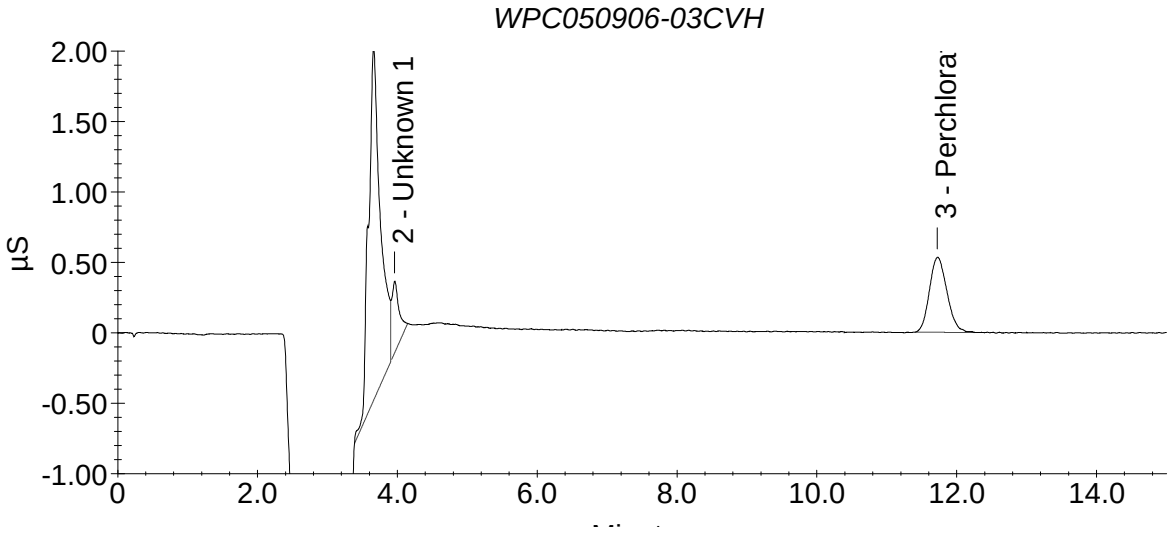
Sample Name : WPC050906-03CVH
Data File Name : C:\PEAKNET\DATA\050927_006.DXD
Date Time Updated : 9/27/2005 11:19:54

Method : ...\050907.met	Inject# : 6	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 11:04:50	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.65	0.00	295827	25047
3	Perchlorate	11.72	75.63	92736	5315



Sample Analysis Report

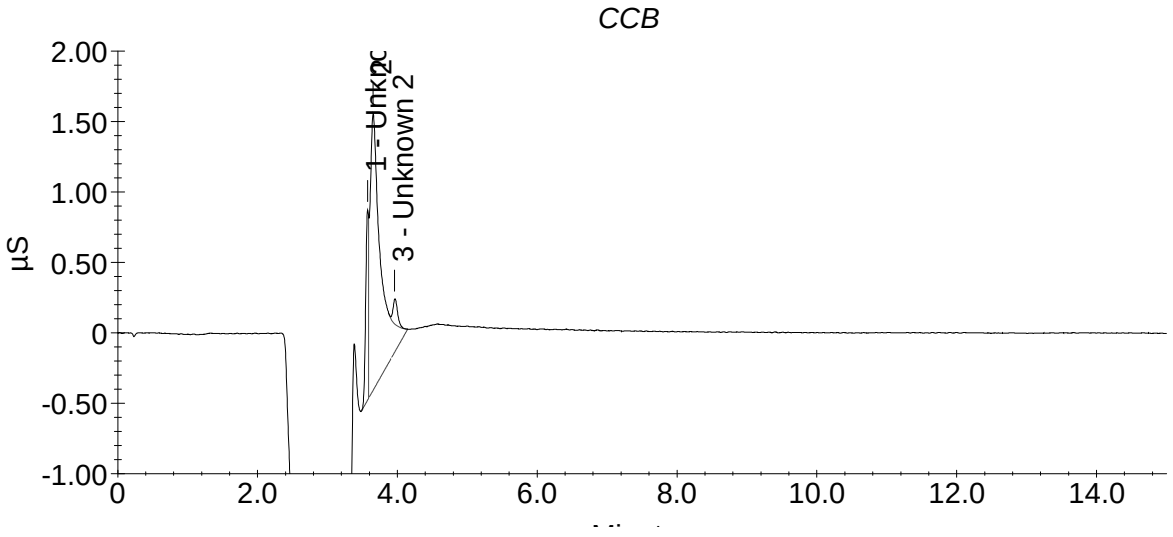
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050927_007.DXD
Date Time Updated : 9/27/2005 11:54:28

Method : ...\050907.met	Inject# : 7	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 11:19:58	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.65	0.00	201805	19670



Sample Analysis Report

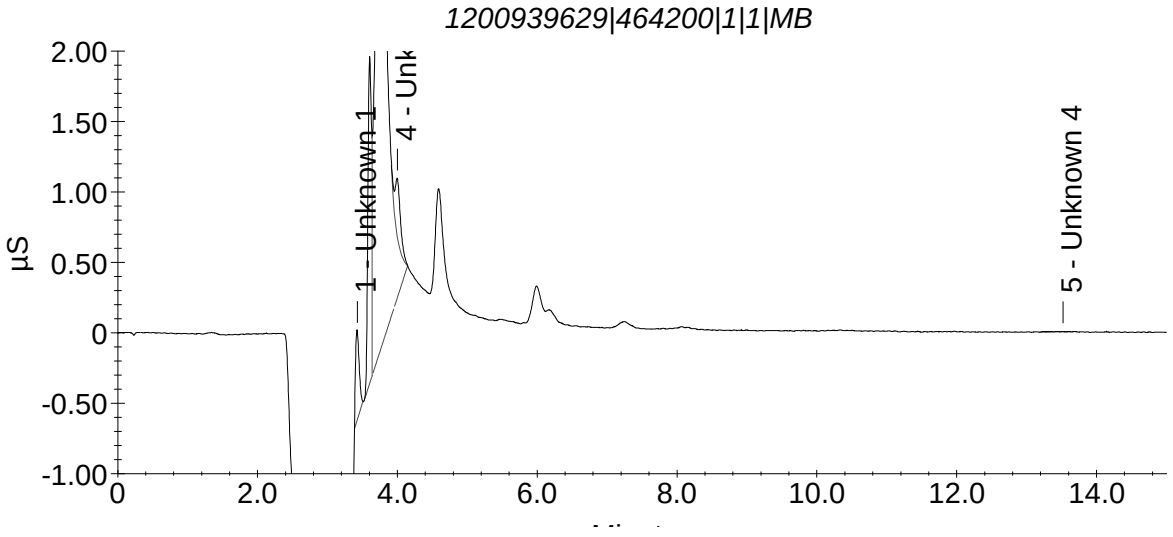
Sample Name : 1200939629|464200|1|1|MB
Data File Name : C:\PEAKNET\DATA\050927_008.DXD
Date Time Updated : 9/27/2005 11:57:31

Method : ...\050907.met	Inject# : 8	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 11:35:07	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
3	Solvent peak Perchlorate	3.73	0.00	655355	82881



Sample Analysis Report

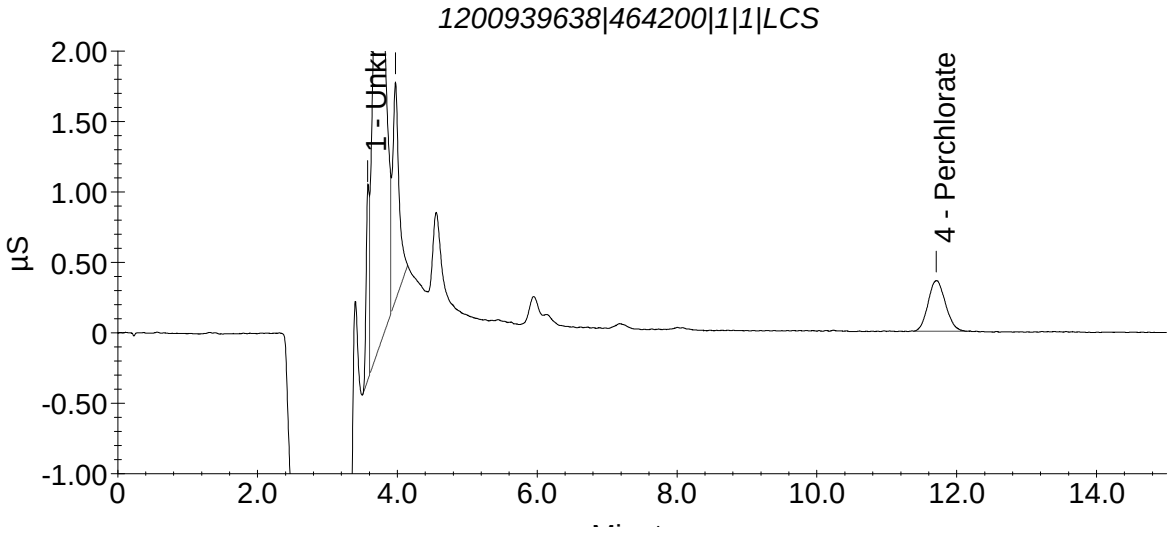
Sample Name : 1200939638|464200|1|1|LCS
Data File Name : C:\PEAKNET\DATA\050927_009.DXD
Date Time Updated : 9/27/2005 12:05:22

Method : ...\050907.met	Inject# : 9	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 11:50:17	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.71	0.00	595522	77204
4	Perchlorate	11.71	50.70	61743	3590



Sample Analysis Report

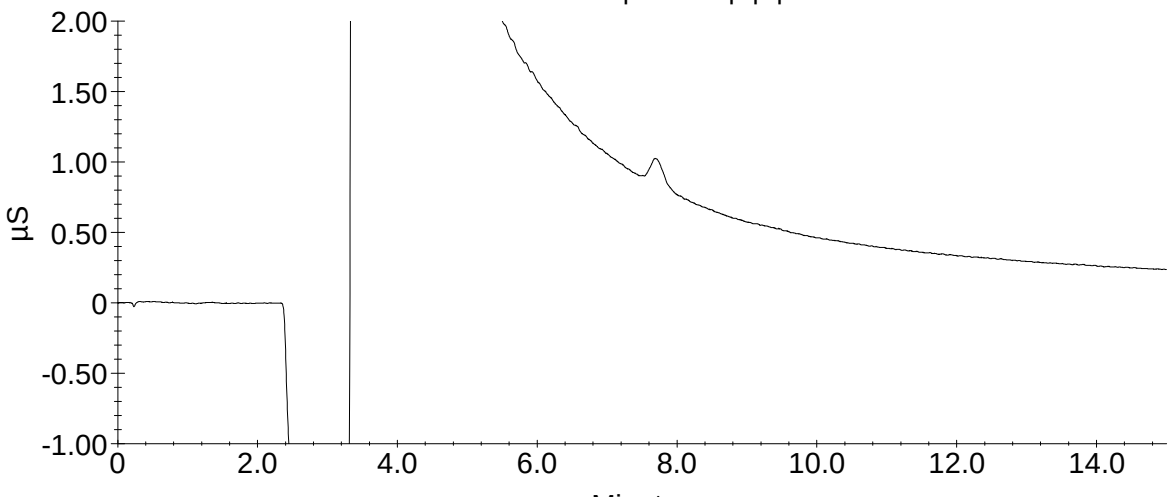
Sample Name : 145452001|464200|1|1|
Data File Name : C:\PEAKNET\DATA\050927_010.DXD
Date Time Updated : 9/27/2005 12:20:32

Method : ...\050907.met	Inject# : 10	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 12:05:26	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.89	0.00	487148	57342



Sample Analysis Report

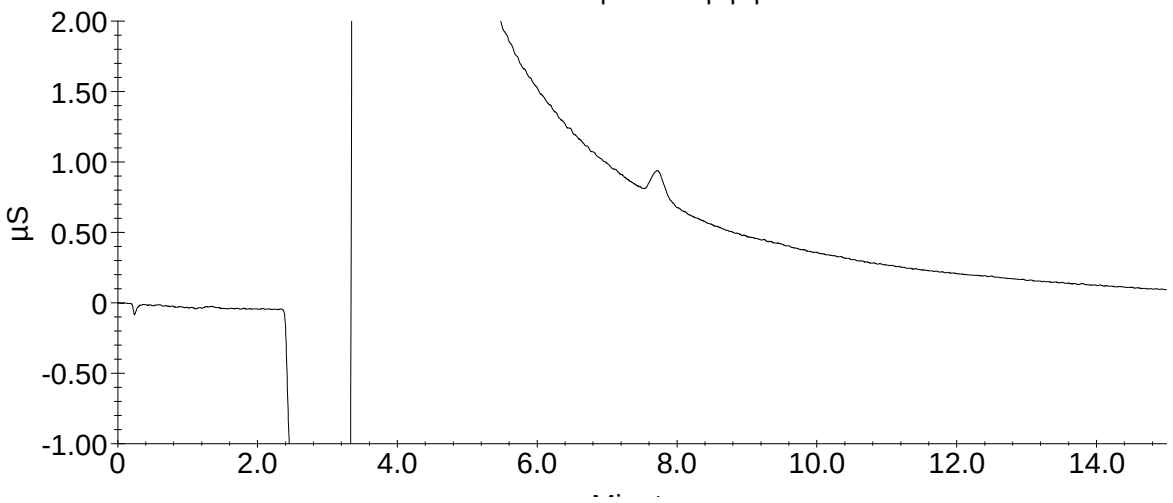
Sample Name : 1200939630|464200|1|1|DUP
Data File Name : C:\PEAKNET\DATA\050927_011.DXD
Date Time Updated : 9/27/2005 12:35:41

Method : ...\050907.met	Inject# : 11	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 12:20:36	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.89	0.00	499426	62095



Sample Analysis Report

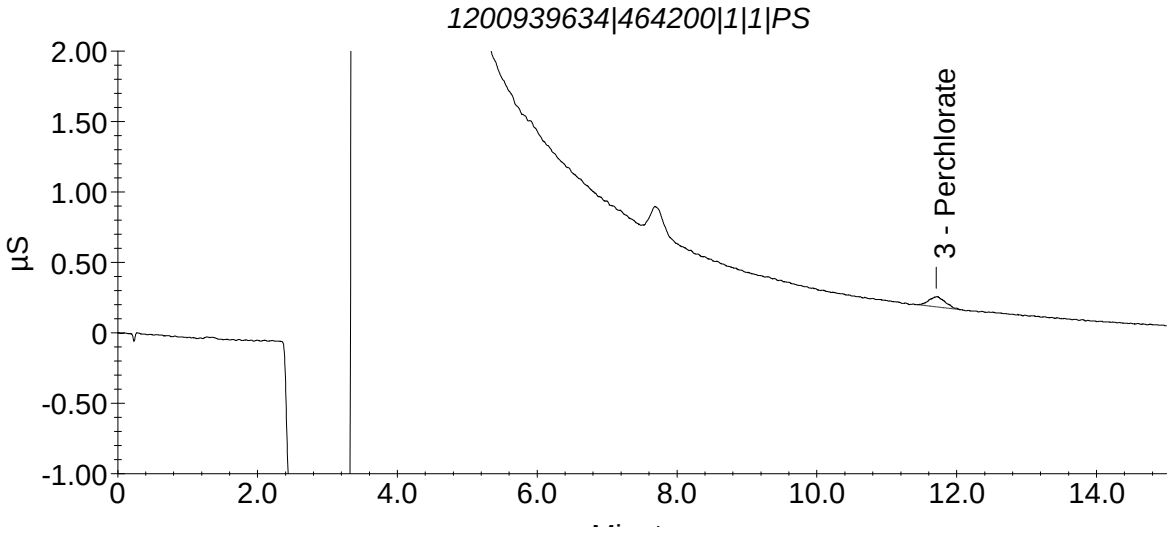
Sample Name : 1200939634|464200|1|1|PS
Data File Name : C:\PEAKNET\DATA\050927_012.DXD
Date Time Updated : 9/27/2005 13:00:31

Method : ...\050907.met	Inject# : 12	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 12:35:45	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.59	0.00	15111	6175
3	Perchlorate	11.71	10.44	11706	709



Sample Analysis Report

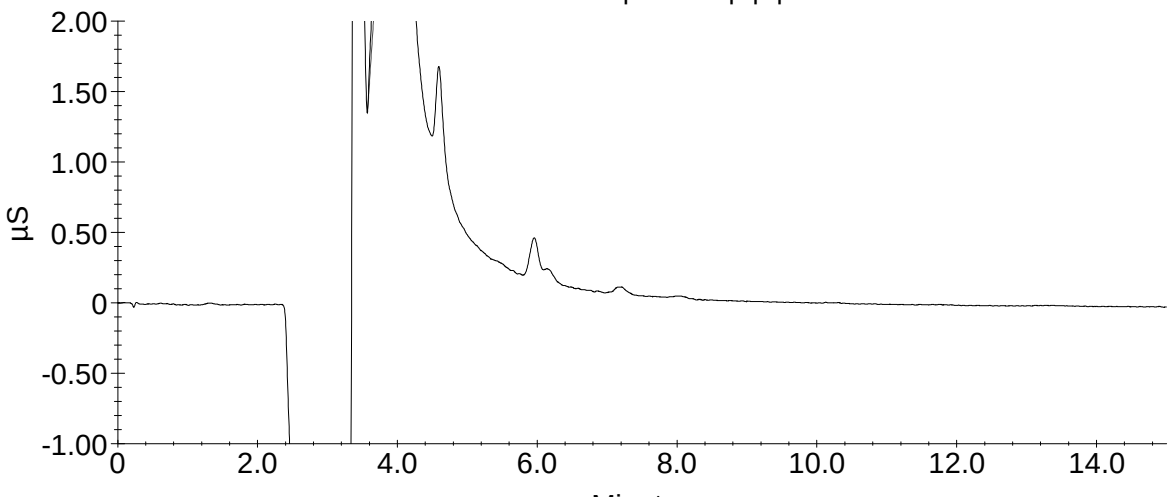
Sample Name : 145457009|464200|1|1|
Data File Name : C:\PEAKNET\DATA\050927_015.DXD
Date Time Updated : 9/27/2005 13:36:18

Method : ...\050907.met	Inject# : 15	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 13:21:13	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.83	0.00	12288127	3298926



Sample Analysis Report

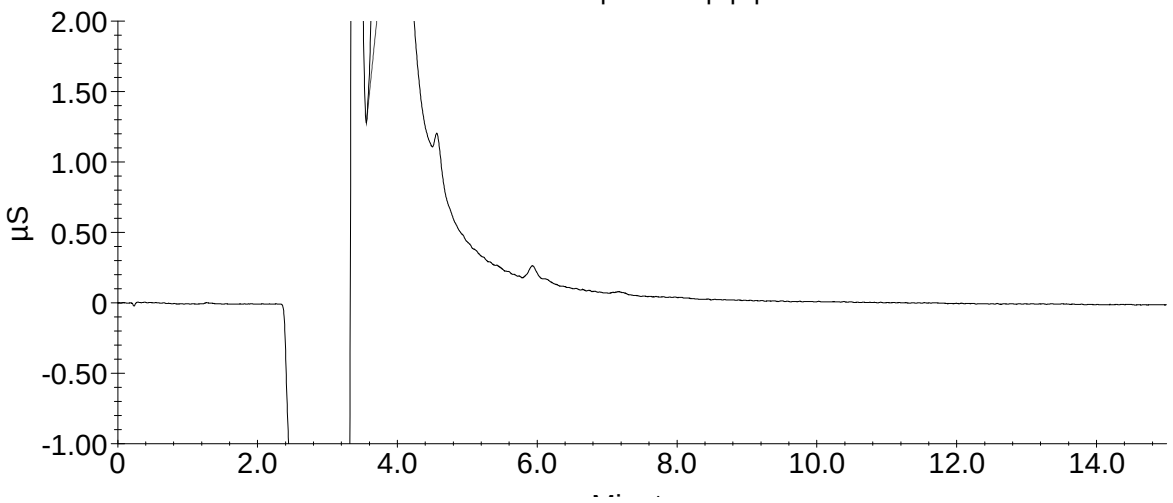
Sample Name : 1200939631|464200|1|1|DUP
Data File Name : C:\PEAKNET\DATA\050927_016.DXD
Date Time Updated : 9/27/2005 13:51:27

Method : ...\050907.met	Inject# : 16	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 13:36:22	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.80	0.00	12148087	3027324



Sample Analysis Report

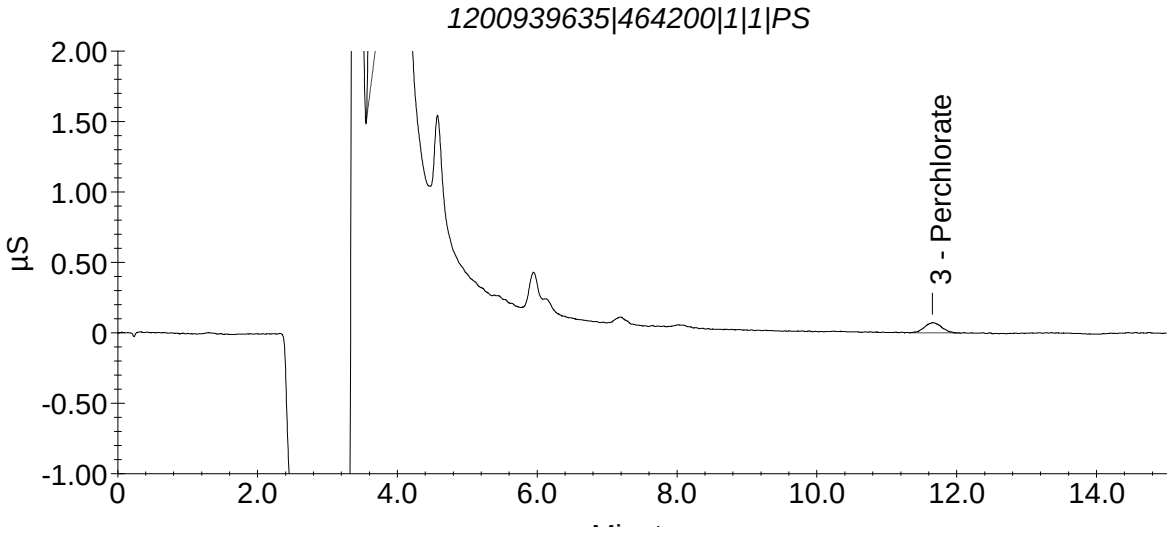
Sample Name : 1200939635|464200|1|1|PS
Data File Name : C:\PEAKNET\DATA\050927_017.DXD
Date Time Updated : 9/27/2005 14:06:35

Method : ...\050907.met	Inject# : 17	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 13:51:31	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.79	0.00	12547365	3138868
3	Perchlorate	11.65	11.02	12421	720



Sample Analysis Report

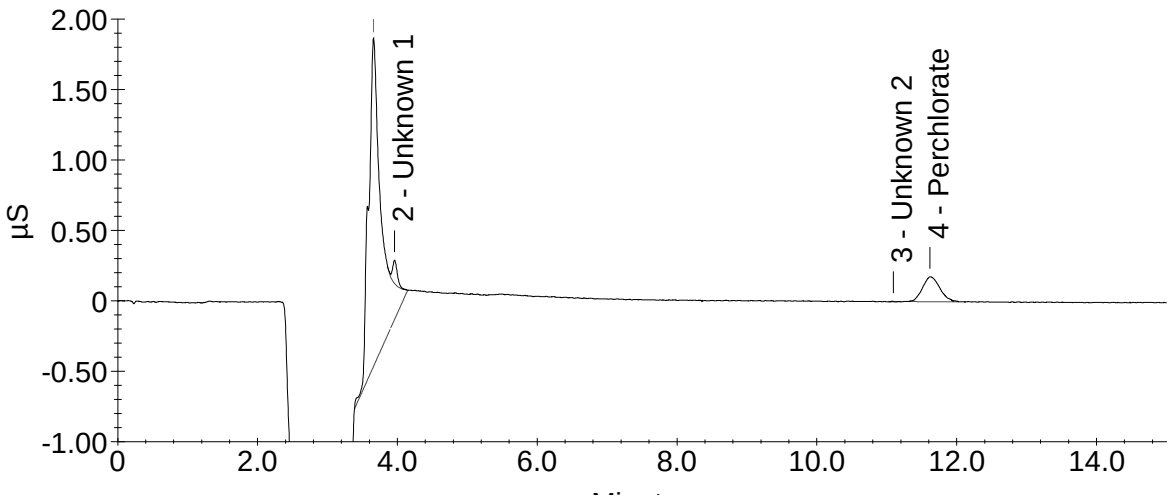
Sample Name : WPC050906-03CVL
Data File Name : C:\PEAKNET\DATA\050927_018.DXD
Date Time Updated : 9/27/2005 14:21:44

Method : ...\050907.met	Inject# : 18	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 14:06:39	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.65	0.00	290633	23221
4	Perchlorate	11.61	25.38	30268	1752



Sample Analysis Report

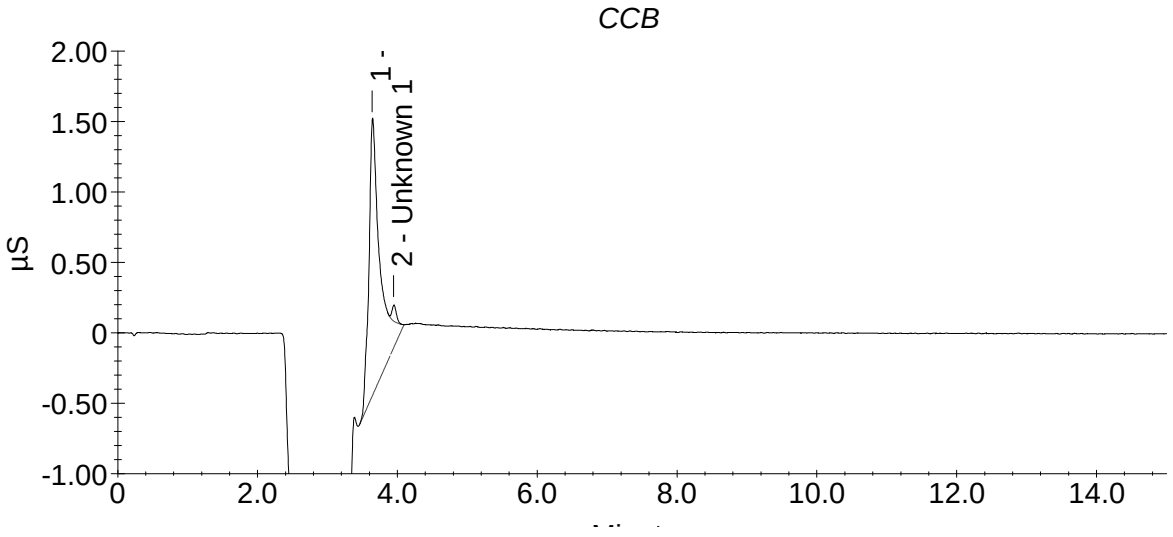
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050927_019.DXD
Date Time Updated : 9/27/2005 14:36:53

Method : ...\050907.met	Inject# : 19	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 14:21:48	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.64	0.00	213215	19591



Sample Analysis Report

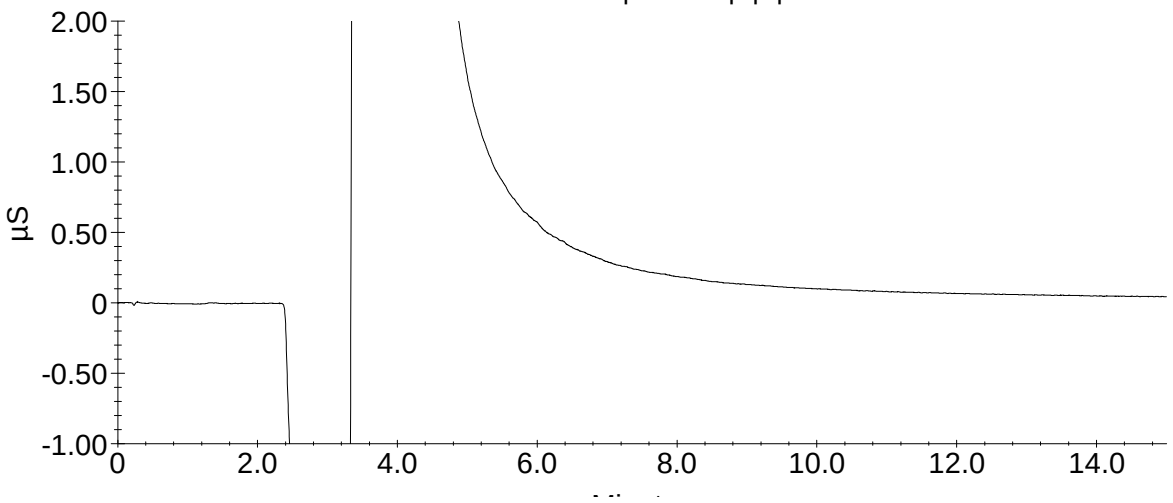
Sample Name : 145527001|464200|1|1|
Data File Name : C:\PEAKNET\DATA\050927_022.DXD
Date Time Updated : 9/27/2005 15:22:16

Method : ...\050907.met	Inject# : 22	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 15:07:12	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.68	0.00	14120044	1791430



Sample Analysis Report

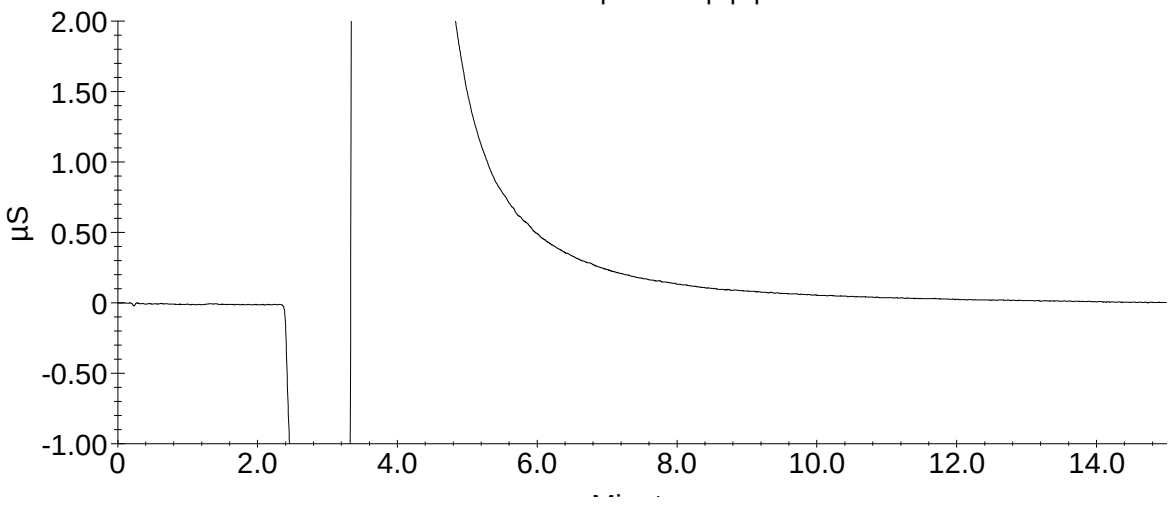
Sample Name : 1200939632|464200|1|1|DUP
Data File Name : C:\PEAKNET\DATA\050927_023.DXD
Date Time Updated : 9/27/2005 15:37:25

Method : ...\050907.met	Inject# : 23	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 15:22:20	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.68	0.00	14521513	1822285



Sample Analysis Report

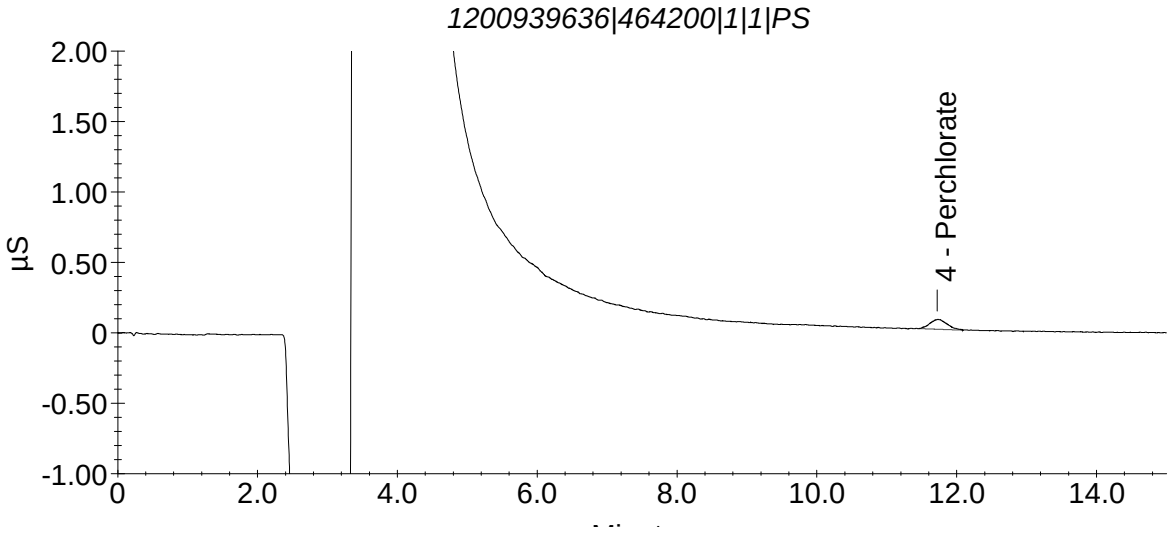
Sample Name : 1200939636|464200|1|1|PS
Data File Name : C:\PEAKNET\DATA\050927_024.DXD
Date Time Updated : 9/27/2005 15:52:34

Method : ...\050907.met	Inject# : 24	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 15:37:29	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.69	0.00	12601142	1714414
4	Perchlorate	11.72	10.68	11999	688



Sample Analysis Report

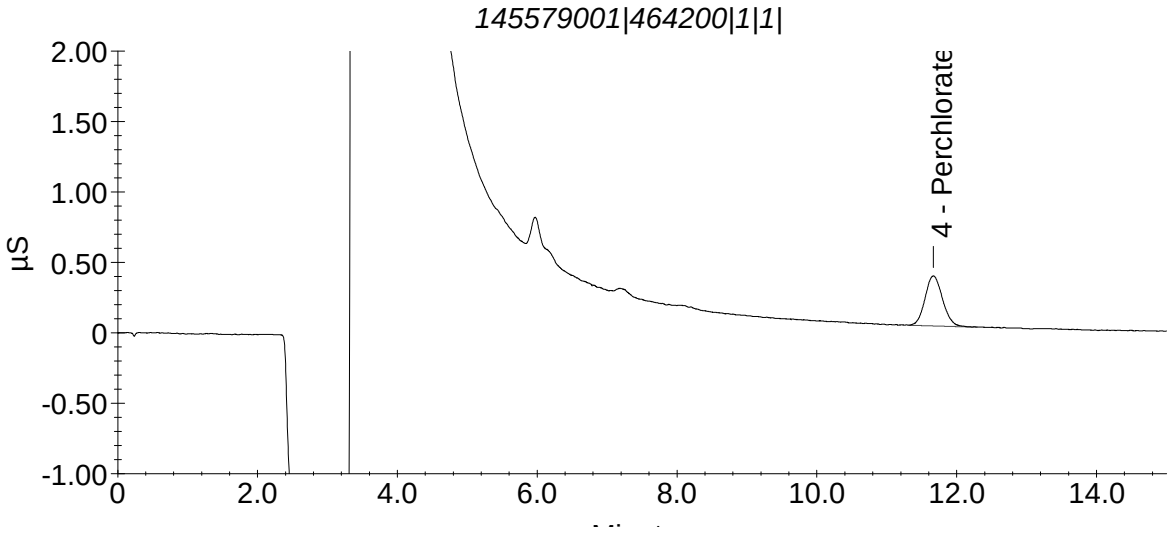
Sample Name : 145579001|464200|1|1|
Data File Name : C:\PEAKNET\DATA\050927_025.DXD
Date Time Updated : 9/27/2005 16:07:43

Method : ...\050907.met	Inject# : 25	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 15:52:38	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.59	0.00	138297	49264
4	Perchlorate	11.67	50.83	61915	3549



Sample Analysis Report

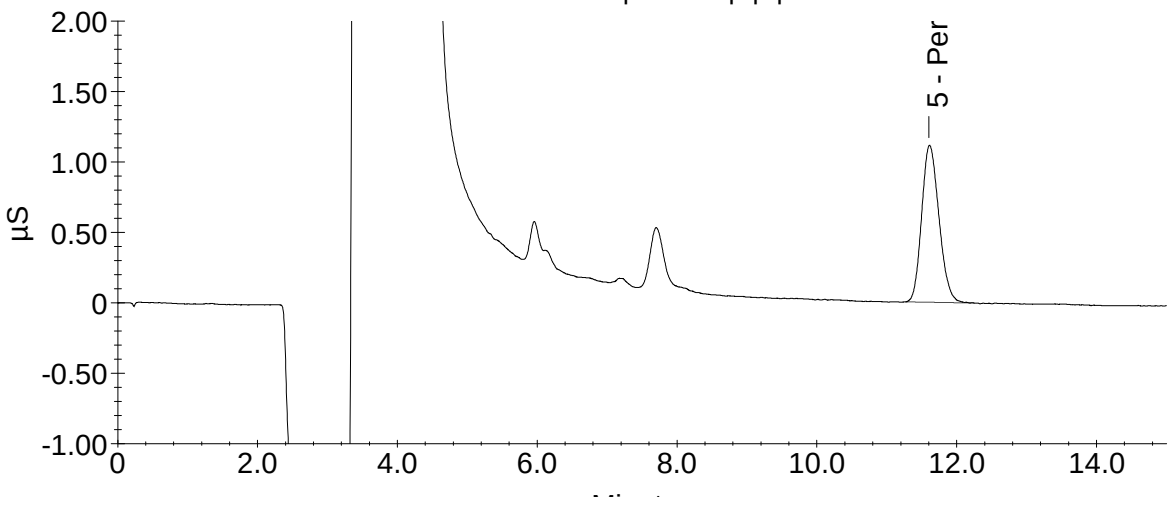
Sample Name : 145579002|464200|1|1|
Data File Name : C:\PEAKNET\DATA\050927_026.DXD
Date Time Updated : 9/27/2005 16:22:52

Method : ...\050907.met	Inject# : 26	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 16:07:48	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.71	0.00	96066	23070
5	Perchlorate	11.60	155.24	191700	11100



Sample Analysis Report

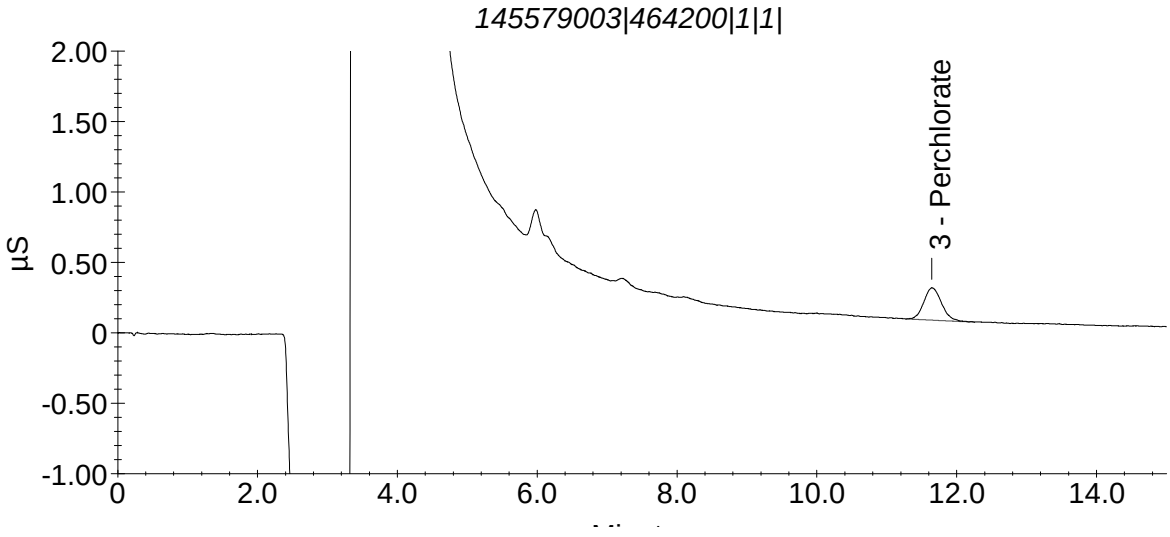
Sample Name : 145579003|464200|1|1|
Data File Name : C:\PEAKNET\DATA\050927_027.DXD
Date Time Updated : 9/27/2005 16:38:01

Method : ...\050907.met	Inject# : 27	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 16:22:56	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.85	0.00	64338641	12684796
3	Perchlorate	11.64	33.72	40637	2292



Sample Analysis Report

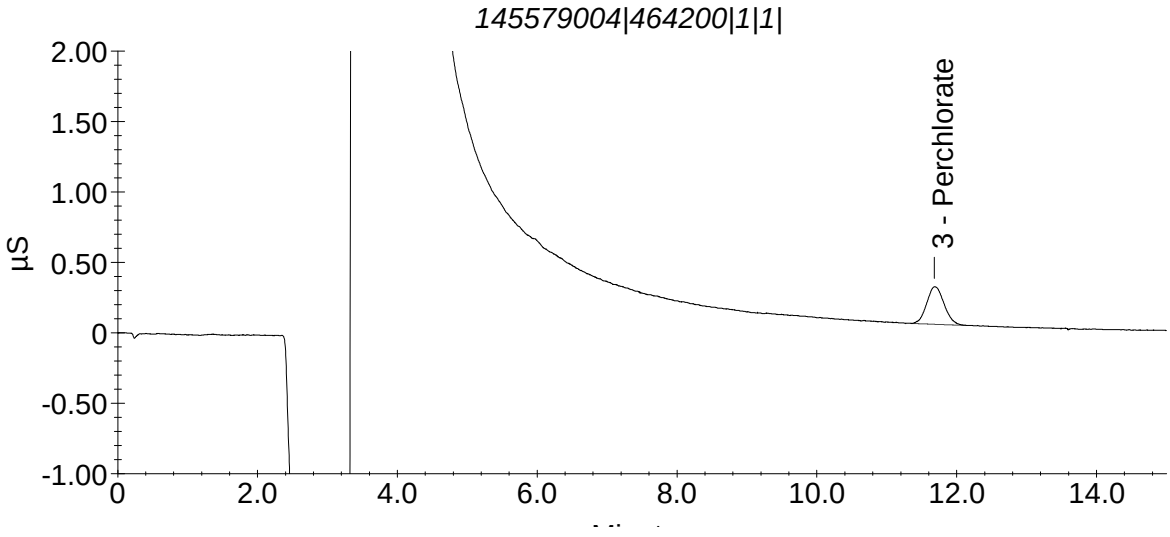
Sample Name : 145579004|464200|1|1|
Data File Name : C:\PEAKNET\DATA\050927_028.DXD
Date Time Updated : 9/27/2005 16:53:10

Method : ...\050907.met	Inject# : 28	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 16:38:05	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.87	0.00	70199907	13399807
3	Perchlorate	11.68	38.19	46196	2665



Sample Analysis Report

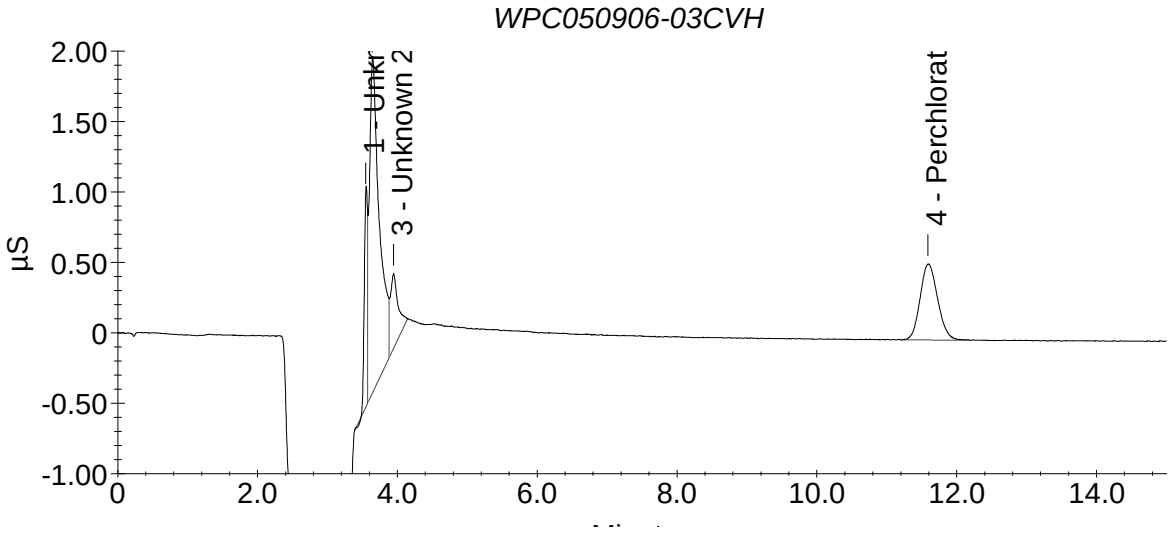
Sample Name : WPC050906-03CVH
Data File Name : C:\PEAKNET\DATA\050927_030.DXD
Date Time Updated : 9/27/2005 17:23:28

Method : ...\050907.met	Inject# : 30	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 17:08:23	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.64	0.00	226955	23632
4	Perchlorate	11.59	76.76	94138	5393



Sample Analysis Report

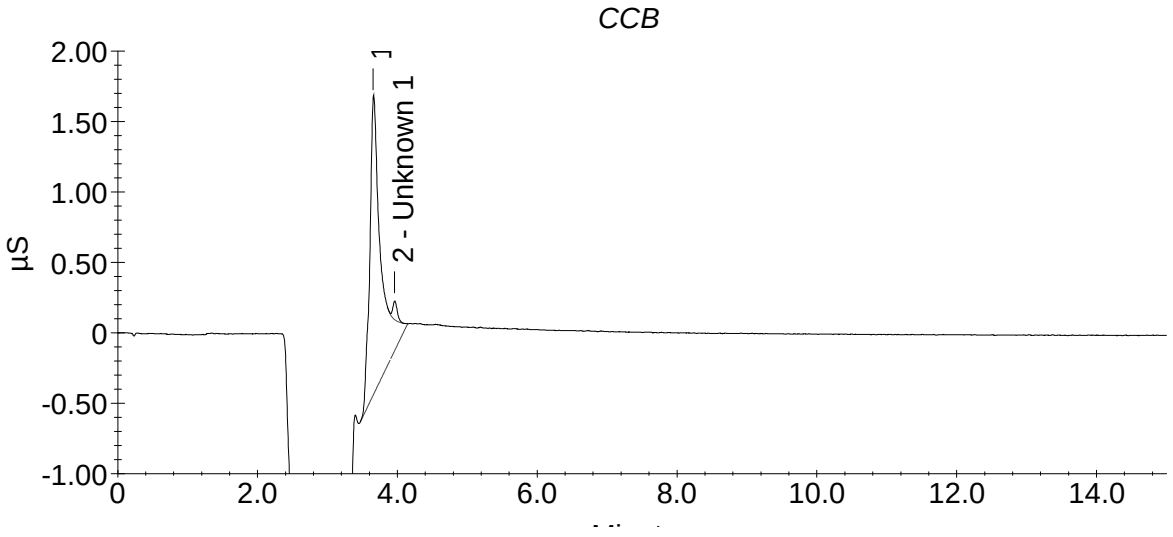
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050927_031.DXD
Date Time Updated : 9/27/2005 17:38:36

Method : ...\050907.met	Inject# : 31	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/27/2005 17:23:32	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.65	0.00	232871	21096



METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	AXM1	9/28/2005 10:49:56	050928_001.DXD
WPC050906-03ICV		1	AXM1	9/28/2005 11:05:02	050928_002.DXD
ICB		1	AXM1	9/28/2005 11:20:11	050928_003.DXD
IPC-25-TREATED		1	AXM1	9/28/2005 11:35:21	050928_004.DXD
PQL-4		1	AXM1	9/28/2005 11:50:30	050928_005.DXD
WPC050906-03CVH		1	AXM1	9/28/2005 12:05:39	050928_006.DXD
CCB		1	AXM1	9/28/2005 12:20:47	050928_007.DXD
1200936150	462756	1	AXM1	9/28/2005 12:35:55	050928_008.DXD
1200936155	462756	1	AXM1	9/28/2005 12:51:03	050928_009.DXD
145267001	462756	1	AXM1	9/28/2005 13:06:12	050928_010.DXD
1200936151	462756	1	AXM1	9/28/2005 13:21:21	050928_011.DXD
1200936153	462756	1	AXM1	9/28/2005 13:36:29	050928_012.DXD
145312001	462756	1	AXM1	9/28/2005 13:51:38	050928_013.DXD
1200936152	462756	1	AXM1	9/28/2005 14:06:46	050928_014.DXD
1200936154	462756	1	AXM1	9/28/2005 14:21:55	050928_015.DXD
145312002	462756	1	AXM1	9/28/2005 14:37:04	050928_016.DXD
WPC050906-03CVL		1	AXM1	9/28/2005 14:52:13	050928_017.DXD
CCB		1	AXM1	9/28/2005 15:07:22	050928_018.DXD
145579002	464200	5	AXM1	9/28/2005 15:22:31	050928_019.DXD
WPC050906-03CVH		1	AXM1	9/28/2005 15:37:40	050928_020.DXD
CCB		1	AXM1	9/28/2005 15:52:49	050928_021.DXD
144836018	460784	1	AXM1	9/28/2005 16:07:59	050928_022.DXD
144836019	460784	1	AXM1	9/28/2005 16:23:08	050928_023.DXD
WPC050906-03CVL		1	AXM1	9/28/2005 16:38:17	050928_024.DXD
CCB		1	AXM1	9/28/2005 16:53:27	050928_025.DXD
144836006	460770	1	AXM1	9/28/2005 17:08:35	050928_026.DXD
144836007	460770	1	AXM1	9/28/2005 17:23:44	050928_027.DXD
WPC050906-03CVH		1	AXM1	9/28/2005 17:38:53	050928_028.DXD
CCB		1	AXM1	9/28/2005 17:54:02	050928_029.DXD
145267001	462756	2	AXM1	9/28/2005 18:09:12	050928_030.DXD
1200936151	462756	2	AXM1	9/28/2005 18:24:21	050928_031.DXD
1200936153	462756	2	AXM1	9/28/2005 18:39:29	050928_032.DXD
WPC050906-03CVL		1	AXM1	9/28/2005 18:54:38	050928_033.DXD
CCB		1	AXM1	9/28/2005 19:09:47	050928_034.DXD

Sample Analysis Report

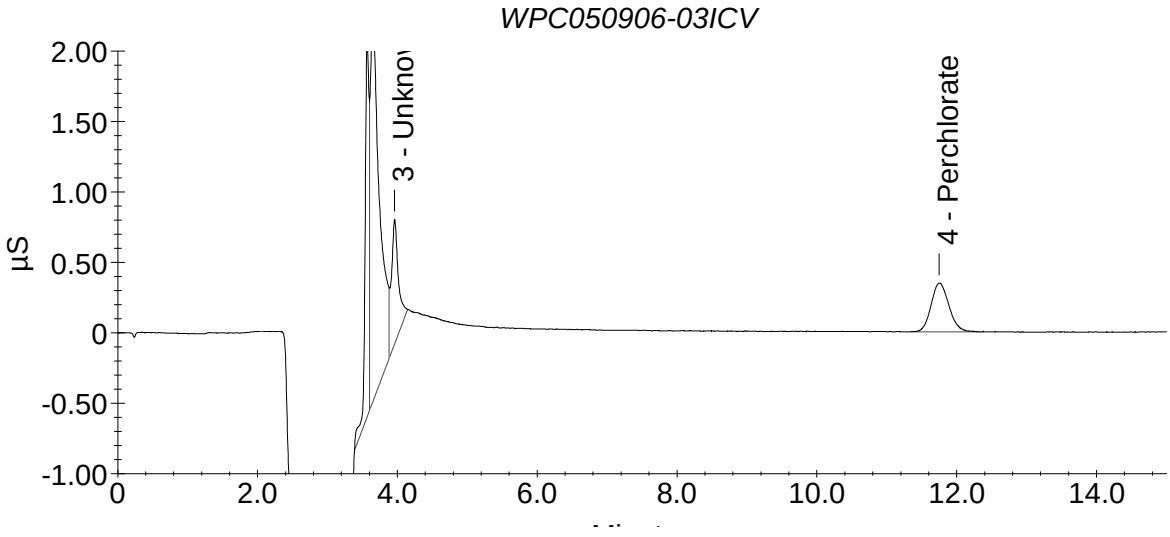
Sample Name : WPC050906-03ICV
Data File Name : C:\PEAKNET\DATA\050928_002.DXD
Date Time Updated : 9/28/2005 11:20:07

Method : ...\050907.met	Inject# : 2	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 11:05:02	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	240758	27821
4	Perchlorate	11.75	49.97	60840	3441



Sample Analysis Report

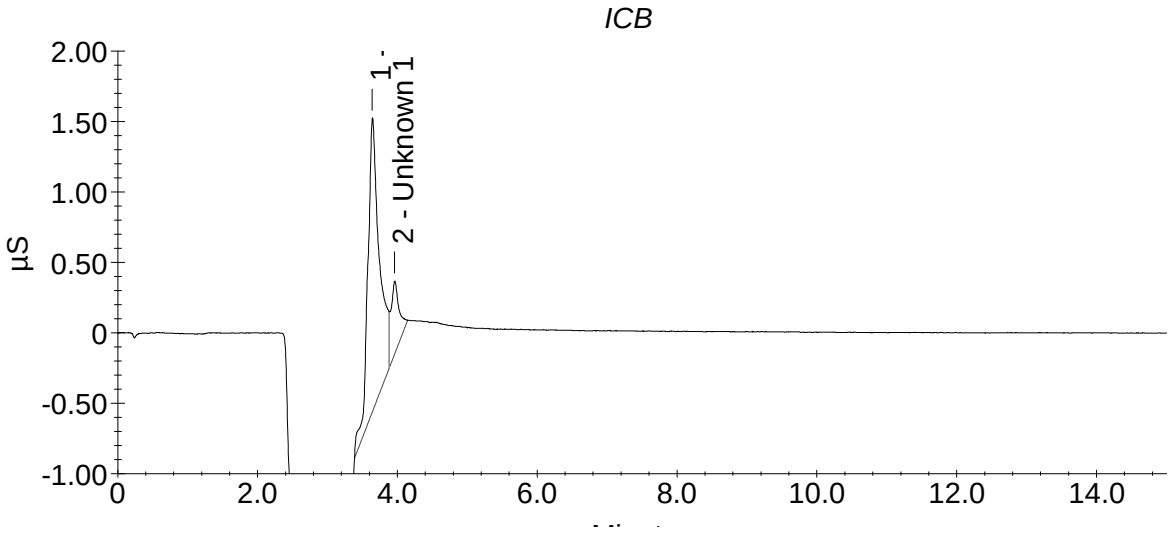
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\050928_003.DXD
Date Time Updated : 9/28/2005 11:35:17

Method : ...\050907.met	Inject# : 3	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 11:20:11	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.64	0.00	238887	20840



Sample Analysis Report

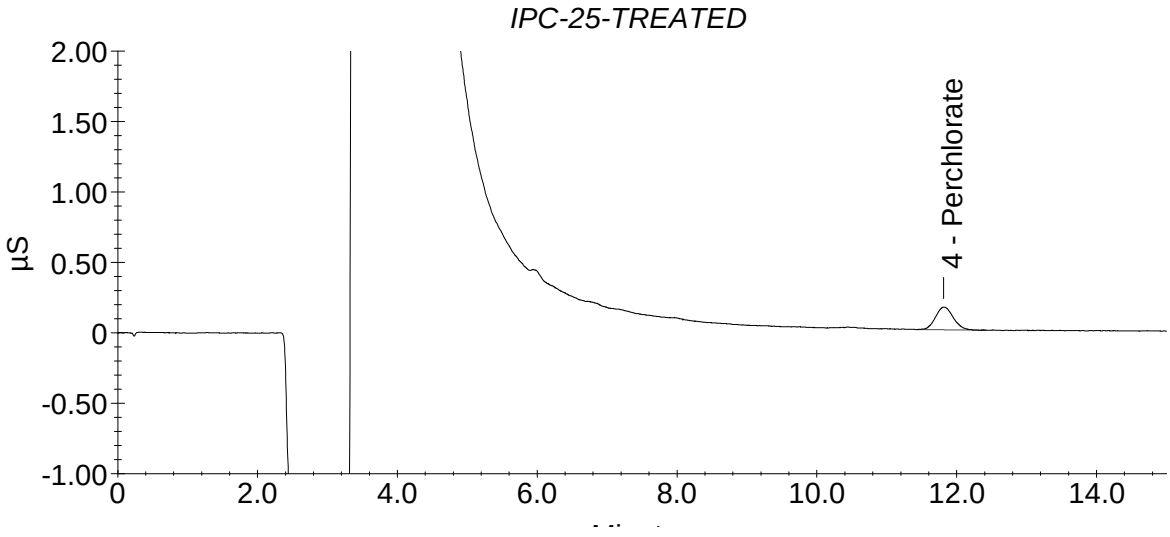
Sample Name : IPC-25-TREATED
Data File Name : C:\PEAKNET\DATA\050928_004.DXD
Date Time Updated : 9/28/2005 11:50:26

Method : ...\050907.met	Inject# : 4	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 11:35:21	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.57	0.00	231769	79465
4	Perchlorate	11.81	23.96	28507	1613



Sample Analysis Report

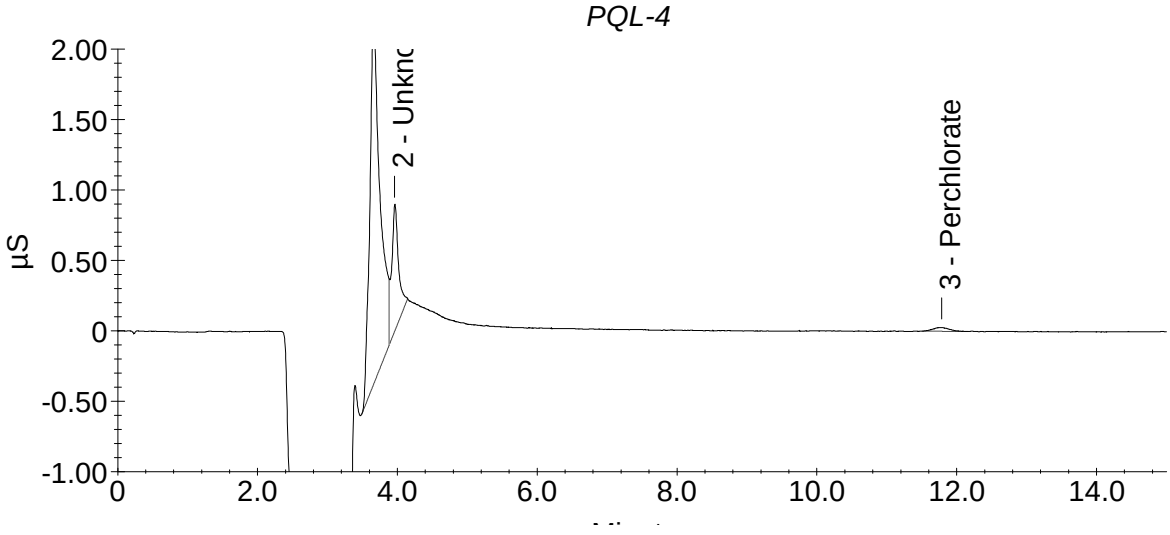
Sample Name : PQL-4
Data File Name : C:\PEAKNET\DATA\050928_005.DXD
Date Time Updated : 9/28/2005 12:05:35

Method : ...\050907.met	Inject# : 5	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 11:50:30	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.65	0.00	261945	25881
3	Perchlorate	11.79	4.57	4403	269



Sample Analysis Report

Sample Name : WPC050906-03CVL
Data File Name : C:\PEAKNET\DATA\050928_017.DXD
Date Time Updated : 9/28/2005 15:07:18

Method : ...\050907.met
Analyst : AXM1
Date : 9/28/2005 14:52:13
Units : ug/L

Inject# : 17
Detector : CD20
Column Type : AS16,
Dilution : 1.00

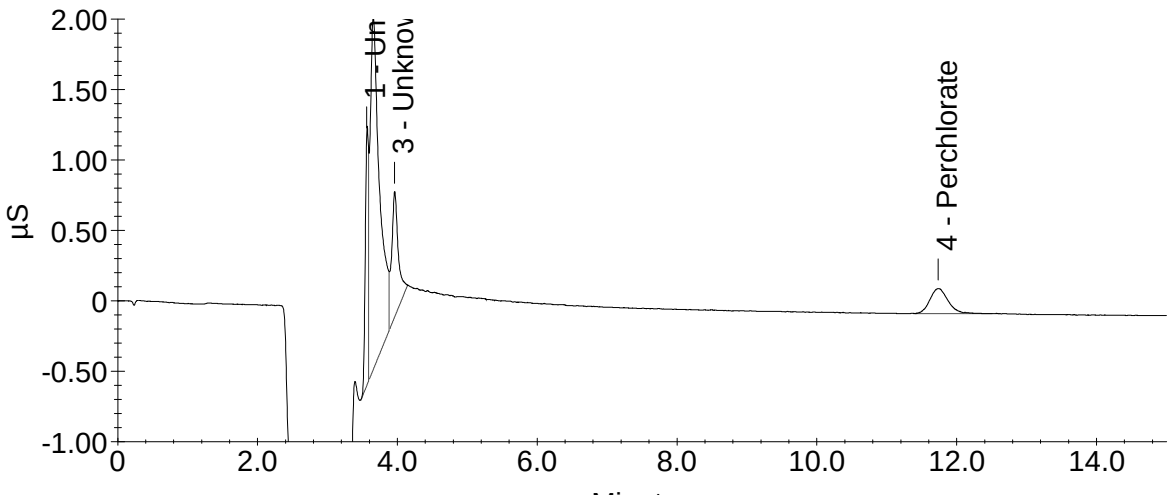
System Name : DX-500
Calibration Type : EXTERNAL

SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	228708	25181
4	Perchlorate	11.73	27.19	32525	1784



Sample Analysis Report

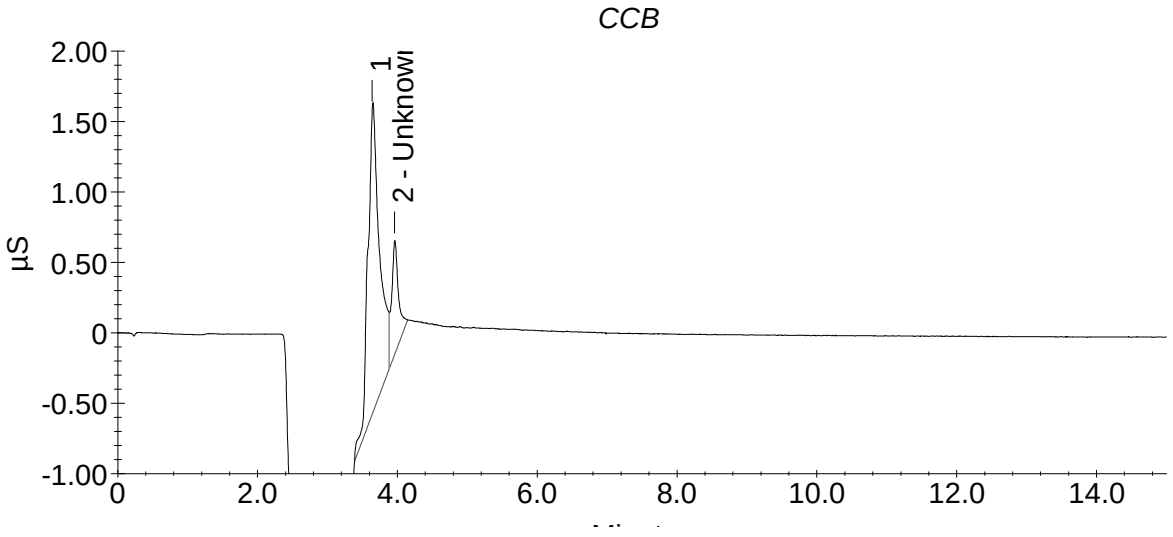
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050928_018.DXD
Date Time Updated : 9/28/2005 15:22:27

Method : ...\050907.met	Inject# : 18	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 15:07:22	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.64	0.00	251951	21628



Sample Analysis Report

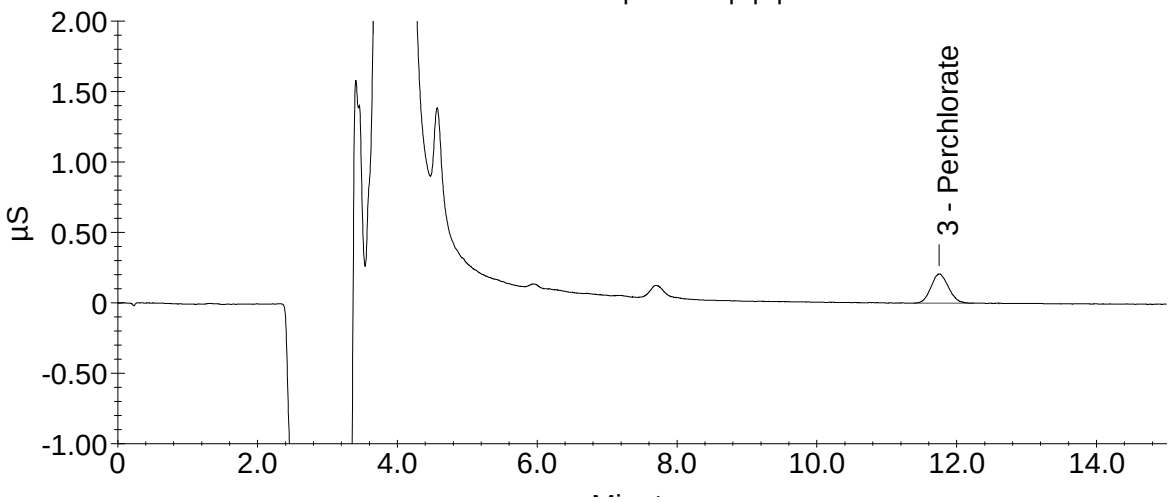
Sample Name : 145579002|464200|5|2|
Data File Name : C:\PEAKNET\DATA\050928_019.DXD
Date Time Updated : 9/28/2005 15:37:36

Method : ...\050907.met	Inject# : 19	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 15:22:31	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.73	0.00	20618336	4347866
3	Perchlorate	11.75	30.10	36146	2072



Sample Analysis Report

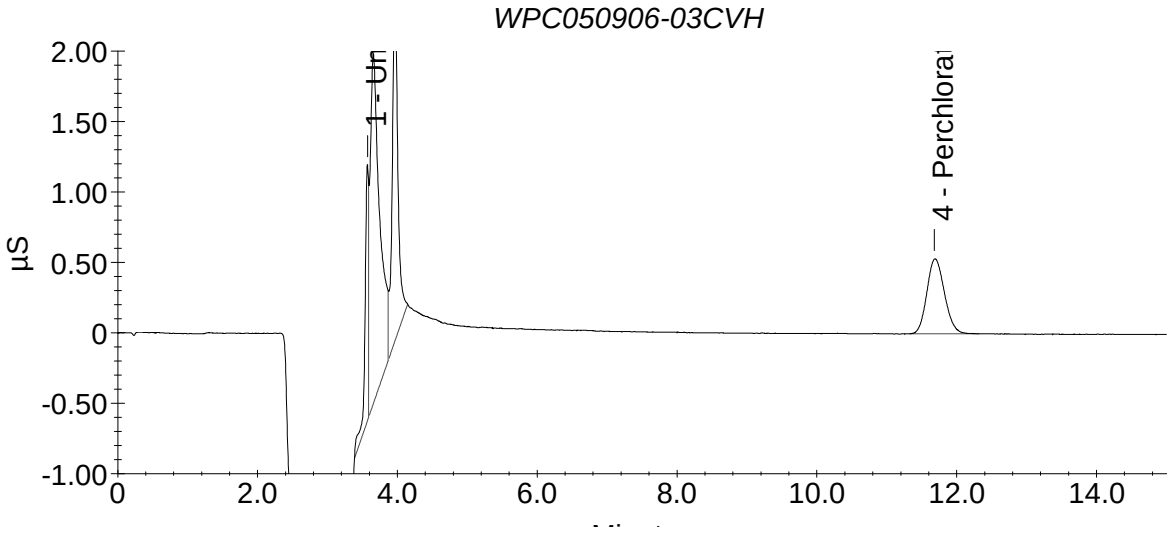
Sample Name : WPC050906-03CVH
Data File Name : C:\PEAKNET\DATA\050928_020.DXD
Date Time Updated : 9/28/2005 15:52:46

Method : ...\050907.met	Inject# : 20	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 15:37:40	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.65	0.00	228981	24883
4	Perchlorate	11.68	76.10	93325	5308



Sample Analysis Report

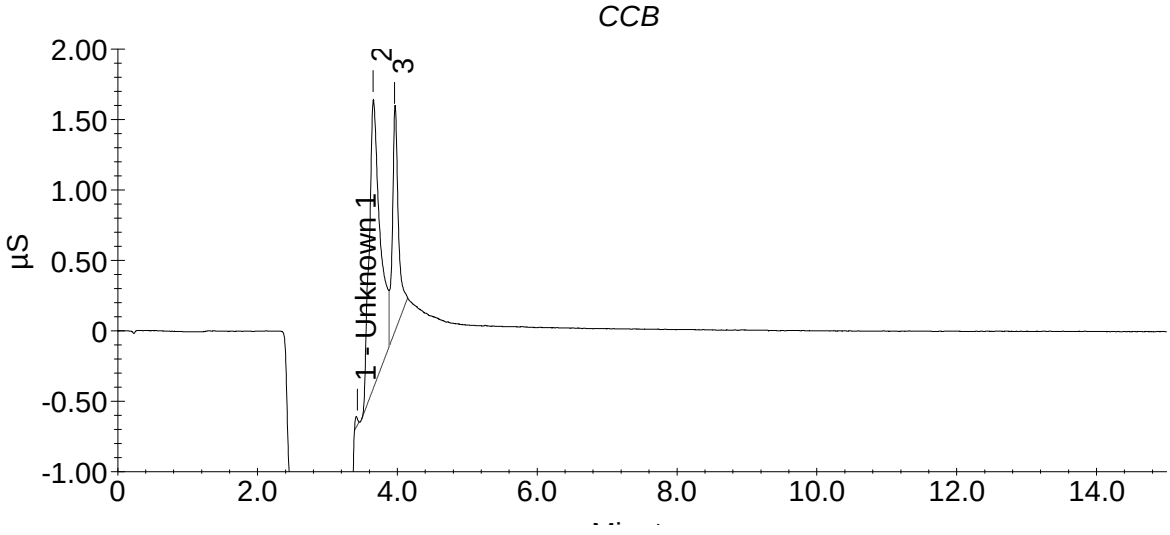
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\050928_021.DXD
Date Time Updated : 9/28/2005 16:07:55

Method : ...\050907.met	Inject# : 21	System Name : DX-500
Analyst : AXM1	Detector : CD20	Calibration Type : EXTERNAL
Date : 9/28/2005 15:52:49	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.65	0.00	220628	20499



Solids, Total Dissolved

Batch: 463882.0
Analyst: GXA2

TDS/TS/VS LogBook

Procedure Code BALDSEP_LF
Procedure Description EPA 160.1 Solids, Dissolved
Lab Sop GL-GC-E-001

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200938920	WTD050711-01	300	97

Sample Type	Sample Id	Rpd(%)
DUP	1200938918	.89418777943368
DUP	1200938919	1.9480519480519
DUP	1200938926	1.8633540372671

Sample Id	Sample Type	Original Hsn	Instrument	Run Date	Crucible ID	Aliquot (L)	Crucible Wt(g)	Final Wt Event 1	Final Wt Event 2	Final Wt Event 3	Final Wt Event 4	Result	Units
1200938917	MB		BAL216	19-SEP-2005 16:37	C2	0.1	49.2463	49.2463	49.2459			-4	mg/L
1200938920	LCS		BAL216	19-SEP-2005 16:37	K6	0.1	56.5345	56.5635	56.5636			291	mg/L
145527001	SAMPLE		BAL216	19-SEP-2005 16:37	FU	0.1	54.0356	54.0686	54.069			334	mg/L
1200938918	DUP	145527001	BAL216	19-SEP-2005 16:37	MB	0.1	52.8013	52.8347	52.835			337	mg/L
145579001	SAMPLE		BAL216	19-SEP-2005 16:37	R4	0.1	53.0598	53.0912	53.0917			319	mg/L
1200938926	DUP	145579001	BAL216	19-SEP-2005 16:37	2E	0.1	52.4565	52.4885	52.489			325	mg/L
145579002	SAMPLE		BAL216	19-SEP-2005 16:37	K9	0.1	56.3892	56.4194	56.4198			306	mg/L
145579003	SAMPLE		BAL216	19-SEP-2005 16:37	J9	0.1	49.9085	49.9356	49.9357			272	mg/L
145579004	SAMPLE		BAL216	19-SEP-2005 16:37	KR1	0.1	50.8266	50.8573	50.8576			310	mg/L
145579005	SAMPLE		BAL216	19-SEP-2005 16:37	SC	0.1	51.9022	51.934	51.9342			320	mg/L
145579006	SAMPLE		BAL216	19-SEP-2005 16:37	J1	0.1	50.3694	50.4001	50.4005			311	mg/L
1200938919	DUP	145579006	BAL216	19-SEP-2005 16:37	D8	0.1	57.0047	57.0349	57.0352			305	mg/L
145579007	SAMPLE		BAL216	19-SEP-2005 16:37	J2	0.1	48.8532	48.8817	48.882			288	mg/L
145579008	SAMPLE		BAL216	19-SEP-2005 16:37	LDM	0.1	55.5806	55.6114	55.6117			311	mg/L
145739001	SAMPLE		BAL216	19-SEP-2005 16:37	Q2	0.1	54.6022	54.6306	54.631			288	mg/L
145739002	SAMPLE		BAL216	19-SEP-2005 16:37	K15	0.1	47.4183	47.4325	47.4322			139	mg/L
145739003	SAMPLE		BAL216	19-SEP-2005 16:37	R7	0.1	55.5545	55.5685	55.5688			143	mg/L
145739004	SAMPLE		BAL216	19-SEP-2005 16:37	A	0.1	51.3657	51.396	51.3961			304	mg/L
145739005	SAMPLE		BAL216	19-SEP-2005 16:37	BLK	0.1	50.616	50.6295	50.63			140	mg/L
145739006	SAMPLE		BAL216	19-SEP-2005 16:37	FO	0.1	55.2556	55.2699	55.2703			147	mg/L
145782001	SAMPLE		BAL216	19-SEP-2005 16:37	Z81	0.1	50.6181	50.6428	50.6432			251	mg/L
145782002	SAMPLE		BAL216	19-SEP-2005 16:37	J4	0.1	51.893	51.9194	51.9199			269	mg/L
145782003	SAMPLE		BAL216	19-SEP-2005 16:37	4E	0.1	50.3477	50.3717	50.3716			239	mg/L
145782004	SAMPLE		BAL216	19-SEP-2005 16:37	ST	0.1	57.9892	58.0156	58.0162			270	mg/L

Comments: **All Weights are in Grams**

A) Result = (Final - Crucible)/Aliquot * 1000

B) Prep Factor = 0.5 / Aliquot

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS

Solids, Total Suspended

TSS/VSS LogBook

Batch: 463885.0
Analyst: GXA2
Procedure Code TSS160.2L
Procedure Description EPA 160.2 Total Suspended Solids
Lab Sop GL-GC-E-012

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1200938935	WTS342562	500	99.2

Sample Type	Sample Id	Rpd(%)
DUP	1200938932	7.6923076923077
DUP	1200938933	133.33333333333
DUP	1200938934	66.666666666667
DUP	1200938936	28.571428571429
DUP	1200938937	40.000000000000
DUP	1200938938	66.666666666667

Sample Id	Run Date	Instrument	Filter ID	Aliquot (L)	Initial Filter Wt Event 1	Initial Filter Wt Event 2	Final Filter Wt Event 1	Final Filter Wt Event 2	Final Filter Wt Event 3	Final Filter Wt Event 4	Result (mg/L)
1200938931-MB	19-SEP-2005 14:34	BAL216	1	0.5	0.1102	0.1101	0.1102	0.1101			0
1200938935-LCS	19-SEP-2005 14:34	BAL216	2	0.1	0.1091	0.1091	0.1592	0.1587			496
145506001	19-SEP-2005 14:34	BAL216	3	1	0.109	0.1087	0.1144	0.1147			6
1200938936-DUP (145506001)	19-SEP-2005 14:34	BAL216	4	1	0.1089	0.1088	0.1133	0.1133			4.5
145509001	19-SEP-2005 14:34	BAL216	5	0.48	0.1079	0.1079	0.108	0.1081			0.41667
1200938937-DUP (145509001)	19-SEP-2005 14:34	BAL216	6	0.48	0.1082	0.1081	0.1084	0.1084			0.625
145511001	19-SEP-2005 14:34	BAL216	11	0.48	0.1086	0.1082	0.1084	0.1084			0.41667
1200938938-DUP (145511001)	19-SEP-2005 14:34	BAL216	8	0.48	0.1106	0.1106	0.1105	0.1107			0.20833
145579005	19-SEP-2005 14:34	BAL216	9	0.468	0.1114	0.1113	0.112	0.1121			1.7094
145579006	19-SEP-2005 14:34	BAL216	10	0.23	0.1081	0.1079	0.1103	0.1104			10.86957
1200938932-DUP (145579006)	19-SEP-2005 14:34	BAL216	7	0.23	0.1086	0.1084	0.1111	0.1111			11.73913
145579007	19-SEP-2005 14:34	BAL216	12	0.5	0.1079	0.1079	0.1083	0.1082			0.6
145579008	19-SEP-2005 14:34	BAL216	13	0.475	0.1094	0.1096	0.1097	0.1098			0.42105
145630001	19-SEP-2005 14:34	BAL216	14	1	0.1088	0.1088	0.1147	0.1147			5.9
145649001	19-SEP-2005 14:34	BAL216	15	0.414	0.1106	0.1105	0.1182	0.1183			18.84058
145688002	19-SEP-2005 14:34	BAL216	16	0.8	0.1089	0.1093	0.1098	0.11			0.875
145690001	19-SEP-2005 14:34	BAL216	17	0.84	0.1118	0.112	0.1123	0.1126			0.71429
145739004	19-SEP-2005 14:34	BAL216	18	0.9	0.1092	0.1097	0.1094	0.1097			0
145739005	19-SEP-2005 14:34	BAL216	19	0.975	0.1114	0.1119	0.1118	0.1121			0.20513
145739006	19-SEP-2005 14:34	BAL216	20	0.98	0.1101	0.1102	0.1102	0.1105			0.30612
145741002	19-SEP-2005 14:34	BAL216	21	0.515	0.1081	0.1082	0.108	0.1083			0.19417
1200938933-DUP (145741002)	19-SEP-2005 14:34	BAL216	22	0.515	0.1075	0.1073	0.1074	0.1078			0.97087
145782003	19-SEP-2005 14:34	BAL216	23	0.9	0.1121	0.1123	0.1125	0.113			0.77778
145782004	19-SEP-2005 14:34	BAL216	24	0.9	0.1081	0.1084	0.1181	0.1186			11.33333
145784001	19-SEP-2005 14:34	BAL216	25	0.475	0.1106	0.1105	0.111	0.1115			2.10526
1200938934-DUP (145784001)	19-SEP-2005 14:34	BAL216	26	0.475	0.1089	0.109	0.1092	0.1095			1.05263

Comments:

A) TSS Result = (Final Filter Wt - Initial Filter Wt) * 1000 / Aliquot

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS
All Weights are in Grams

Specific Conductivity

Analytical Logbook

Conductivity and Salinity

Batch ID: **469197.0**
Analyst: **James Robinson**
Method: **EPA 120.1**
Lab SOP: **GL-GC-E-009 REV# 6**
Instrument: **Orion 160 Conductivity Meter**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO335693-06	25	mL
LCS	1200951411	Conductivity LCS	WCO335693-06	150	mL

Sample ID	Run Date	Dilution	Temperature (C)	Conductivity Result (umhos/cm)
1200951411 LCS	06-OCT-2005 00:33:17	1	25.3	1468
145312007	06-OCT-2005 00:34:31	1	16.1	326
1200951407 DUP (145312007)	06-OCT-2005 00:35:25	1	16.4	328
145312008	06-OCT-2005 00:35:42	1	14.2	365
145452004	06-OCT-2005 00:36:35	1	14.7	243
CCV	06-OCT-2005 00:37:19	1	25.3	1468
		1	25.3	1468
1200951408 DUP (145452004)	06-OCT-2005 00:37:40	1	14.8	244
145457001	06-OCT-2005 00:38:21	1	14.6	121.4
145457002	06-OCT-2005 00:39:10	1	15.5	124.7
145457009	06-OCT-2005 00:39:32	1	17.2	127.3
145457010	06-OCT-2005 00:40:22	1	17.6	131.8
CCV	06-OCT-2005 00:41:15	1	25.3	1468
145457012	06-OCT-2005 00:41:51	1	18	1.42
1200951409 DUP (145457012)	06-OCT-2005 00:42:10	1	18.5	1.46
145506001	06-OCT-2005 00:42:29	1	18.8	126.6
145579001	06-OCT-2005 00:43:17	1	18.4	485
1200951412 DUP (145579001)	06-OCT-2005 00:44:00	1	19.1	490
CCV	06-OCT-2005 00:44:58	1	25.3	1468
145579002	06-OCT-2005 00:45:24	1	18.6	332
145579003	06-OCT-2005 00:45:41	1	19.7	389
145579004	06-OCT-2005 00:46:21	1	19.5	481
145579005	06-OCT-2005 00:47:06	1	19.3	493
145579006	06-OCT-2005 00:48:38	1	20.6	342
CCV	06-OCT-2005 00:49:03	1	25.3	1468
1200951410 DUP (145579006)	06-OCT-2005 00:49:21	1	20.7	343
CCV	06-OCT-2005 00:50:55	1	25.3	1468

Comments:

Analytical Logbook

Batch ID: **469197.0**
Analyst: **James Robinson**
Method: **EPA 120.1**
Lab SOP: **GL-GC-E-009 REV# 6**
Instrument: **Orion 160 Conductivity Meter**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO335693-06	25	mL
LCS	1200951411	Conductivity LCS	WCO335693-06	150	mL

Sample ID	Run Date	Dilution	Temperature (C)	Conductivity Result (umhos/cm)

Calibration Information:

Run Date: 05-OCT-05 23:57
Instrument: CON160
Analyst: JAR2

Standard	Observed	Theoretical		%Recovery
WCO051005-05	15.32	14.5	umhos/cm	105.66
WCO051005-03	1406	1413	umhos/cm	99.505
WCO051005-04	1924	1900	umhos/cm	101.26
WCO051005-08	25000	24800	umhos/cm	100.81
WCO051005-01	256	250	umhos/cm	102.4
WCO051005-02	744	750	umhos/cm	99.2

Analytical Logbook

Conductivity and Salinity

Batch ID: **470004.0**
Analyst: **James Robinson**
Method: **EPA 120.1**
Lab SOP: **GL-GC-E-009 REV# 6**
Instrument: **Orion 160 Conductivity Meter**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO335693-06	25	mL
LCS	1200953254	Conductivity LCS	WCO335693-06	150	mL

Sample ID	Run Date	Dilution	Temperature (C)	Conductivity Result (umhos/cm)
1200953254 LCS	09-OCT-2005 15:15:26	1	23.5	1467
145579007	09-OCT-2005 15:17:21	1	23.3	447
145579008	09-OCT-2005 15:19:06	1	23.3	523
145739001	09-OCT-2005 15:20:08	1	15.9	447
145739002	09-OCT-2005 15:23:10	1	15.4	119.8
CCV	09-OCT-2005 15:25:13	1	23.5	1467
		1	23.5	1467
1200953251 DUP (145739002)	09-OCT-2005 15:28:11	1	15.7	120.6
145739003	09-OCT-2005 15:28:34	1	15.9	122.1
145739004	09-OCT-2005 15:29:41	1	23	536
145739005	09-OCT-2005 15:30:18	1	22.4	145.9
145739006	09-OCT-2005 15:31:14	1	23	147.5
CCV	09-OCT-2005 15:32:00	1	23.5	1467
145782001	09-OCT-2005 15:32:35	1	16.8	338
145782002	09-OCT-2005 15:32:51	1	17.5	378
145782003	09-OCT-2005 15:33:36	1	17.9	337
1200953252 DUP (145782003)	09-OCT-2005 15:34:12	1	17.9	338
145782004	09-OCT-2005 15:34:26	1	17.2	382
CCV	09-OCT-2005 15:35:13	1	23.5	1467
145892001	09-OCT-2005 15:35:41	1	22.1	509
145892002	09-OCT-2005 15:36:00	1	22.1	330
145892003	09-OCT-2005 15:36:39	1	18.9	476
1200953253 DUP (145892003)	09-OCT-2005 15:37:25	1	19.7	478
CCV	09-OCT-2005 15:37:41	1	23.5	1467

Calibration Information:

Run Date: 09-OCT-05 15:10
Instrument: CON160
Analyst: JAR2

Standard	Observed	Theoretical		%Recovery
WCO051009-05	15.26	14.5	umhos/cm	105.24
WCO051009-03	1404	1413	umhos/cm	99.363
WCO051009-04	1915	1900	umhos/cm	100.79
WCO051009-08	24900	24800	umhos/cm	100.40
WCO051009-01	255	250	umhos/cm	102

Comments:

Analytical Logbook

Batch ID: **470004.0**
Analyst: **James Robinson**
Method: **EPA 120.1**
Lab SOP: **GL-GC-E-009 REV# 6**
Instrument: **Orion 160 Conductivity Meter**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO335693-06	25	mL
LCS	1200953254	Conductivity LCS	WCO335693-06	150	mL

Sample ID	Run Date	Dilution	Temperature (C)	Conductivity Result (umhos/cm)	
WCO051009-02	741	750	umhos/cm	98.8	

Total Kjeldahl Nitrogen

Prep LogBook

Analyst: LXW1 Verified by:_____

Batch: 469152

Lab SOP: GL-GC-E-071 REV# 6

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200951342	UTR050805-01	.2	mL
MS	1200951344	UTR050805-01	.2	mL
MS	1200951346	UTR050805-01	.2	mL
MSD	1200951347	UTR050805-01	.2	mL
MSD	1200951348	UTR050805-01	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200951341		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
LCS	1200951342		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145527001		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	WASTE WATER
DUP	1200951345	145527001	EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	WASTE WATER
MS	1200951346	145527001	EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	WASTE WATER
MSD	1200951347	145527001	EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	WASTE WATER
SAMPLE	145579005		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579006		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
DUP	1200951343	145579006	EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
MS	1200951344	145579006	EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
MSD	1200951348	145579006	EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579007		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579008		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145701009		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145701010		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145701011		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145701012		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145701013		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145701014		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145739004		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145739005		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145739006		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145783003		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145783004		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145783005		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER
SAMPLE	145783006		EPA 351.2 Prep	07-OCT-2005 09:57	20 mL	20 mL	1	GROUND WATER

Reagent/Solvent Lot ID Amount Description

Prep LogBook

347114-C	5 mL	TKN/PO4 Digestion Solution	Comments:

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	10/7/2005 11:20:46	OM_10-7-2005_11-19-14
3.0 ppm Std.		1	jxm	10/7/2005 11:21:34	OM_10-7-2005_11-19-14
1.0 ppm Std.		1	jxm	10/7/2005 11:22:24	OM_10-7-2005_11-19-14
0.5 ppm Std		1	jxm	10/7/2005 11:23:14	OM_10-7-2005_11-19-14
0.1 ppm Std		1	jxm	10/7/2005 11:24:05	OM_10-7-2005_11-19-14
ICAL-00		1	jxm	10/7/2005 11:24:57	OM_10-7-2005_11-19-14
ICV		1	jxm	10/7/2005 11:26:54	OM_10-7-2005_11-19-14
ICB		1	jxm	10/7/2005 11:28:50	OM_10-7-2005_11-19-14
1200951341	469154	1	jxm	10/7/2005 11:30:45	OM_10-7-2005_11-19-14
1200951342	469154	1	jxm	10/7/2005 11:31:36	OM_10-7-2005_11-19-14
145527001	469154	1	jxm	10/7/2005 11:32:27	OM_10-7-2005_11-19-14
1200951345	469154	1	jxm	10/7/2005 11:33:18	OM_10-7-2005_11-19-14
1200951346	469154	1	jxm	10/7/2005 11:34:08	OM_10-7-2005_11-19-14
1200951347	469154	1	jxm	10/7/2005 11:34:59	OM_10-7-2005_11-19-14
145579005	469154	1	jxm	10/7/2005 11:35:49	OM_10-7-2005_11-19-14
145579006	469154	1	jxm	10/7/2005 11:36:38	OM_10-7-2005_11-19-14
1200951343	469154	1	jxm	10/7/2005 11:37:27	OM_10-7-2005_11-19-14
1200951344	469154	1	jxm	10/7/2005 11:38:16	OM_10-7-2005_11-19-14
CCV		1	jxm	10/7/2005 11:39:06	OM_10-7-2005_11-19-14
CCB		1	jxm	10/7/2005 11:41:01	OM_10-7-2005_11-19-14
1200951348	469154	1	jxm	10/7/2005 11:42:55	OM_10-7-2005_11-19-14
145579007	469154	1	jxm	10/7/2005 11:43:43	OM_10-7-2005_11-19-14
145579008	469154	1	jxm	10/7/2005 11:44:31	OM_10-7-2005_11-19-14
145701009	469154	1	jxm	10/7/2005 11:45:19	OM_10-7-2005_11-19-14
145701010	469154	1	jxm	10/7/2005 11:46:06	OM_10-7-2005_11-19-14
145701011	469154	1	jxm	10/7/2005 11:46:56	OM_10-7-2005_11-19-14
145701012	469154	1	jxm	10/7/2005 11:47:47	OM_10-7-2005_11-19-14
145701013	469154	1	jxm	10/7/2005 11:48:38	OM_10-7-2005_11-19-14
145701014	469154	1	jxm	10/7/2005 11:49:30	OM_10-7-2005_11-19-14
145739004	469154	1	jxm	10/7/2005 11:50:20	OM_10-7-2005_11-19-14
CCV		1	jxm	10/7/2005 11:51:11	OM_10-7-2005_11-19-14
CCB		1	jxm	10/7/2005 11:53:07	OM_10-7-2005_11-19-14
145739005	469154	1	jxm	10/7/2005 11:55:01	OM_10-7-2005_11-19-14
145739006	469154	1	jxm	10/7/2005 11:55:51	OM_10-7-2005_11-19-14
145783003	469154	1	jxm	10/7/2005 11:56:41	OM_10-7-2005_11-19-14
145783004	469154	1	jxm	10/7/2005 11:57:31	OM_10-7-2005_11-19-14
145783005	469154	1	jxm	10/7/2005 11:58:20	OM_10-7-2005_11-19-14
145783006	469154	1	jxm	10/7/2005 11:59:09	OM_10-7-2005_11-19-14
145527001	469154	5	jxm	10/7/2005 11:59:59	OM_10-7-2005_11-19-14
1200951345	469154	5	jxm	10/7/2005 12:00:50	OM_10-7-2005_11-19-14
1200951346	469154	5	jxm	10/7/2005 12:01:40	OM_10-7-2005_11-19-14
1200951347	469154	5	jxm	10/7/2005 12:02:30	OM_10-7-2005_11-19-14
CCV		1	jxm	10/7/2005 12:03:20	OM_10-7-2005_11-19-14
CCB		1	jxm	10/7/2005 12:05:16	OM_10-7-2005_11-19-14
1200951343	469154	1	jxm	10/7/2005 12:07:10	OM_10-7-2005_11-19-14
145701010	469154	4	jxm	10/7/2005 12:07:58	OM_10-7-2005_11-19-14
145701011	469154	4	jxm	10/7/2005 12:08:47	OM_10-7-2005_11-19-14
145701013	469154	4	jxm	10/7/2005 12:09:39	OM_10-7-2005_11-19-14
145739004	469154	4	jxm	10/7/2005 12:10:30	OM_10-7-2005_11-19-14
145739005	469154	4	jxm	10/7/2005 12:11:20	OM_10-7-2005_11-19-14
145739006	469154	4	jxm	10/7/2005 12:12:11	OM_10-7-2005_11-19-14
145783003	469154	4	jxm	10/7/2005 12:13:01	OM_10-7-2005_11-19-14
145783005	469154	4	jxm	10/7/2005 12:13:50	OM_10-7-2005_11-19-14
CCV		1	jxm	10/7/2005 12:14:40	OM_10-7-2005_11-19-14
CCB		1	jxm	10/7/2005 12:16:36	OM_10-7-2005_11-19-14

Author: jxm Date : 10/7/2005

Original Run Filename: OM_10-7-2005_11-19-14.OMN created 10/7/2005 11:19:14
Original Run Author's Signature: [jxm]
Current Run Filename: OM_10-7-2005_11-19-14.OMN last modified 10/7/2005 12:17:47
Current Run Author's Signature: [jxm]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Channel 1 TKN Area (Vs)	Detection Time	ADF	MDF	Description
WTR051007-01	1	S9	5.000	8.991	10/7/2005@11:20:46			5.0 ppm Std.
WTR051007-02	1	S10	3.000	5.467	10/7/2005@11:21:34			3.0 ppm Std.
WTR051007-04	1	S11	1.000	1.702	10/7/2005@11:22:24			1.0 ppm Std.
WTR051007-05	1	S12	0.500	0.900	10/7/2005@11:23:14			0.5 ppm Std
WTR051007-06	1	S13	0.100	0.143	10/7/2005@11:24:05			0.1 ppm Std
WTR051007-10 0.0 ppm	1	S15	0.000	0.018	10/7/2005@11:24:57			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99989 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR051007-08 ICV	1	S16	0.997	1.781	10/7/2005@11:26:54			ICV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.997 < 1.104					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.997 > 0.895					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S15	0.009	-0.006	10/7/2005@11:28:50			ICB/CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.009 < 0.100					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.009 > -0.100					
		Message	ICB Passed					
		Action	Continue					
1200951341|469154|MB	1	1	0.086	0.132	10/7/2005@11:30:45			
1200951342||LCS	1	2	1.017	1.816	10/7/2005@11:31:36			
145527001	1	3	4.701	8.477	10/7/2005@11:32:27			
1200951345||DUP	1	4	4.678	8.435	10/7/2005@11:33:18			
1200951346||MS	1	5	5.684	10.253	10/7/2005@11:34:08			
1200951347||MSD	1	6	5.597	10.095	10/7/2005@11:34:59			
145579005	1	7	0.083	0.128	10/7/2005@11:35:49			
145579006	1	8	0.185	0.312	10/7/2005@11:36:38			
1200951343||DUP	1	9	0.330	0.575	10/7/2005@11:37:27			
1200951344||MS	1	10	1.055	1.885	10/7/2005@11:38:16			
WTR051007-04 CCV	1	S11	0.942	1.680	10/7/2005@11:39:06			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.942 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.942 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.010	-0.041	10/7/2005@11:41:01			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.010 < 0.100					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								

		Result:	-0.010 > -0.100					
		Message	CCB Passed					
		Action	Continue					
1200951348||MSD	1	11	0.936	1.669	10/7/2005@11:42:55			
145579007	1	12	0.150	0.248	10/7/2005@11:43:43			
145579008	1	13	0.158	0.264	10/7/2005@11:44:31			
145701009	1	14	0.713	1.266	10/7/2005@11:45:19			
145701010	1	15	-0.136	-0.268	10/7/2005@11:46:06			
145701011	1	16	-0.125	-0.249	10/7/2005@11:46:56			
145701012	1	17	3.641	6.559	10/7/2005@11:47:47			
145701013	1	18	-0.016	-0.051	10/7/2005@11:48:38			
145701014	1	19	0.012	-1.395e-4	10/7/2005@11:49:30			
145739004	1	20	0.487	0.858	10/7/2005@11:50:20			
WTR051007-04 CCV	1	S11	1.004	1.793	10/7/2005@11:51:11			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.004 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.004 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.010	-0.041	10/7/2005@11:53:07			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.010 < 0.100					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.010 > -0.100					
		Message	CCB Passed					
		Action	Continue					
145739005	1	21	-0.116	-0.232	10/7/2005@11:55:01			
145739006	1	22	-0.104	-0.211	10/7/2005@11:55:51			
145783003	1	23	-0.057	-0.126	10/7/2005@11:56:41			
145783004	1	24	0.170	0.285	10/7/2005@11:57:31			
145783005	1	25	-0.063	-0.136	10/7/2005@11:58:20			
145783006	1	26	0.115	0.185	10/7/2005@11:59:09			
145527001	1	3	1.299	2.326	10/7/2005@11:59:59		5.00	
1200951345||DUP	1	4	1.276	2.285	10/7/2005@12:00:50		5.00	
1200951346||MS	1	5	1.541	2.763	10/7/2005@12:01:40		5.00	
1200951347||MSD	1	6	1.492	2.675	10/7/2005@12:02:30		5.00	
WTR051007-04 CCV	1	S11	1.003	1.792	10/7/2005@12:03:20			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.003 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.003 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.007	-0.036	10/7/2005@12:05:16			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.007 < 0.100					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.007 > -0.100					
		Message	CCB Passed					
		Action	Continue					
1200951343||DUP	1	9	0.187	0.315	10/7/2005@12:07:10			
145701010	1	15	0.203	0.344	10/7/2005@12:07:58		4.00	
145701011	1	16	0.198	0.336	10/7/2005@12:08:47		4.00	
145701013	1	18	0.238	0.408	10/7/2005@12:09:39		4.00	
145739004	1	20	0.374	0.653	10/7/2005@12:10:30		4.00	

145739005	1	21	0.152	0.252	10/7/2005@12:11:20		4.00	
145739006	1	22	0.124	0.202	10/7/2005@12:12:11		4.00	
145783003	1	23	0.168	0.282	10/7/2005@12:13:01		4.00	
145783005	1	25	0.169	0.283	10/7/2005@12:13:50		4.00	
WTR051007-04 CCV	1	S11	1.012	1.806	10/7/2005@12:14:40			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.012 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.012 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	0.002	-0.019	10/7/2005@12:16:36			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.002 < 0.100					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.002 > -0.100					
Message			CCB Passed					
Action			Continue					

Author: jxm Date : 10/7/2005

Channel 1 (TKN) : Current View

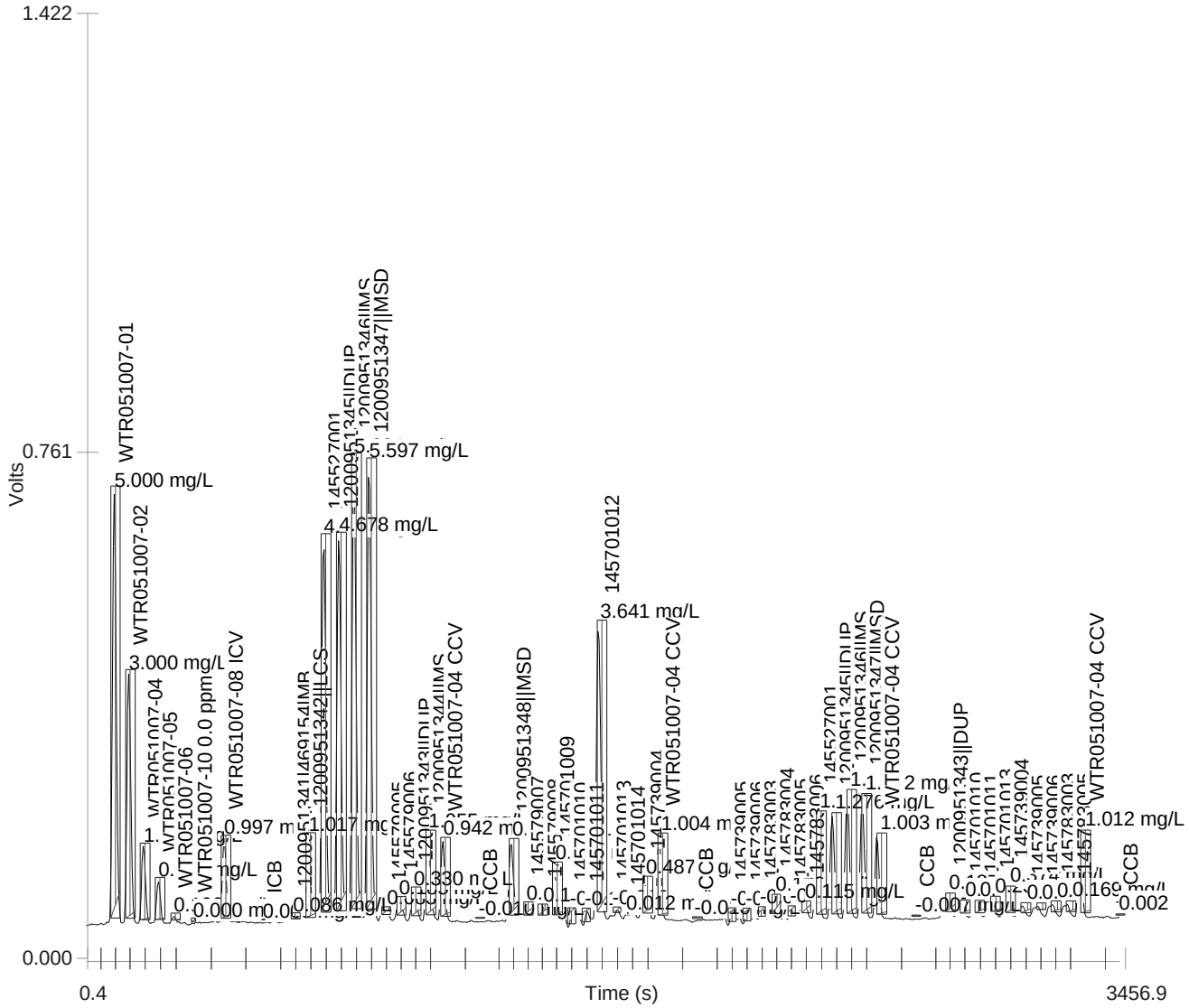


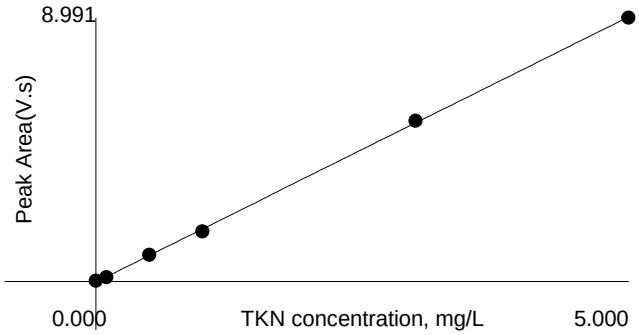
Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	8.991	0.631	0.3	10/7/2005	11:21:54
2	3.000	1	5.467	0.370	-1.2	10/7/2005	11:22:43
3	1.000	1	1.702	0.114	4.7	10/7/2005	11:23:32
4	0.500	1	0.900	0.062	-2.1	10/7/2005	11:24:22
5	0.100	1	0.143	0.010	10.2	10/7/2005	11:25:13
6	0.000	1	0.018	0.003		10/7/2005	11:26:06

Author: jxm

Date : 10/7/2005

Figure 1: TKN



Area = 1.807 * Conc - 0.022
Conc = 0.553 * Area + 0.013
Correlation Coefficient (r) = 0.99989

No Weighting

Total Phosphorus

Prep LogBook

Analyst: GXM2 Verified by:_____

Batch: 468768

Lab SOP: GL-GC-E-071 REV# 6

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1200950474	UTR050805-01	.2	mL
MS	1200950476	UTR050805-01	.2	mL
MS	1200950478	UTR050805-01	.2	mL
MS	1200950503	UTR050805-01	.2	mL
MSD	1200950504	UTR050805-01	.2	mL
MSD	1200950505	UTR050805-01	.2	mL
MSD	1200950506	UTR050805-01	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1200950473		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	SURFACE WATER
LCS	1200950474		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	SURFACE WATER
SAMPLE	145452001		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	SURFACE WATER
DUP	1200950475	145452001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	SURFACE WATER
MS	1200950476	145452001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	SURFACE WATER
MSD	1200950505	145452001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	SURFACE WATER
SAMPLE	145506001		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	WATER
DUP	1200950477	145506001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	WATER
MS	1200950478	145506001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	WATER
MSD	1200950506	145506001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	WATER
SAMPLE	145579001		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	GROUND WATER
DUP	1200950502	145579001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	GROUND WATER
MS	1200950503	145579001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	GROUND WATER
MSD	1200950504	145579001	EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579002		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579003		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	GROUND WATER
SAMPLE	145579004		EPA 365.4 Prep	05-OCT-2005 14:49	20 mL	20 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
347114-C	5 mL	TKN/PO4 Digestion Solution

Comments:

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	jxm	10/6/2005 15:43:27	OM_10-6-2005_15-42-00
3.0 ppm Std.		1	jxm	10/6/2005 15:44:15	OM_10-6-2005_15-42-00
1.0 ppm Std.		1	jxm	10/6/2005 15:45:04	OM_10-6-2005_15-42-00
0.5 ppm Std		1	jxm	10/6/2005 15:45:54	OM_10-6-2005_15-42-00
0.1 ppm Std		1	jxm	10/6/2005 15:46:44	OM_10-6-2005_15-42-00
0.05 ppm Std		1	jxm	10/6/2005 15:47:35	OM_10-6-2005_15-42-00
ICAL-00		1	jxm	10/6/2005 15:48:27	OM_10-6-2005_15-42-00
ICV		1	jxm	10/6/2005 15:50:32	OM_10-6-2005_15-42-00
ICB		1	jxm	10/6/2005 15:52:37	OM_10-6-2005_15-42-00
1200950473	468773	1	jxm	10/6/2005 15:54:41	OM_10-6-2005_15-42-00
1200950474	468773	1	jxm	10/6/2005 15:55:32	OM_10-6-2005_15-42-00
145452001	468773	1	jxm	10/6/2005 15:56:23	OM_10-6-2005_15-42-00
1200950475	468773	1	jxm	10/6/2005 15:57:14	OM_10-6-2005_15-42-00
1200950476	468773	1	jxm	10/6/2005 15:58:05	OM_10-6-2005_15-42-00
1200950505	468773	1	jxm	10/6/2005 15:58:55	OM_10-6-2005_15-42-00
145506001	468773	1	jxm	10/6/2005 15:59:45	OM_10-6-2005_15-42-00
1200950477	468773	1	jxm	10/6/2005 16:00:34	OM_10-6-2005_15-42-00
1200950478	468773	1	jxm	10/6/2005 16:01:23	OM_10-6-2005_15-42-00
1200950506	468773	1	jxm	10/6/2005 16:02:12	OM_10-6-2005_15-42-00
CCV		1	jxm	10/6/2005 16:03:01	OM_10-6-2005_15-42-00
CCB		1	jxm	10/6/2005 16:05:06	OM_10-6-2005_15-42-00
145579001	468773	1	jxm	10/6/2005 16:07:09	OM_10-6-2005_15-42-00
1200950502	468773	1	jxm	10/6/2005 16:07:57	OM_10-6-2005_15-42-00
1200950503	468773	1	jxm	10/6/2005 16:08:45	OM_10-6-2005_15-42-00
1200950504	468773	1	jxm	10/6/2005 16:09:33	OM_10-6-2005_15-42-00
145579002	468773	1	jxm	10/6/2005 16:10:21	OM_10-6-2005_15-42-00
145579003	468773	1	jxm	10/6/2005 16:11:10	OM_10-6-2005_15-42-00
145579004	468773	1	jxm	10/6/2005 16:12:02	OM_10-6-2005_15-42-00
1200950477	468773	1	jxm	10/6/2005 16:12:52	OM_10-6-2005_15-42-00
145579002	468773	1	jxm	10/6/2005 16:13:41	OM_10-6-2005_15-42-00
CCV		1	jxm	10/6/2005 16:14:29	OM_10-6-2005_15-42-00
CCB		1	jxm	10/6/2005 16:16:34	OM_10-6-2005_15-42-00

Author: jxm Date : 10/6/2005

Original Run Filename: OM_10-6-2005_15-42-00.OMN created 10/6/2005 15:42:00
Original Run Author's Signature: [jxm]
Current Run Filename: OM_10-6-2005_15-42-00.OMN last modified 10/6/2005 16:17:56
Current Run Author's Signature: [jxm]
Description: Total Phosphorus EPA Method 365.4 GEL SOP:GL-GC-E-103 Rev 0
Detection wavelength: 880 nM

Sample	Rep.	Cup No.	Channel 1 TLPOS Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR051006-01	1	S1	5.000	23.094	10/6/2005@15:43:27			5.0 ppm Std.
WTR051006-02	1	S2	3.000	13.445	10/6/2005@15:44:15			3.0 ppm Std.
WTR051006-04	1	S3	1.000	4.427	10/6/2005@15:45:04			1.0 ppm Std.
WTR051006-05	1	S4	0.500	2.360	10/6/2005@15:45:54			0.5 ppm Std
WTR051006-06	1	S5	0.100	0.416	10/6/2005@15:46:44			0.1 ppm Std
WTR051006-07	1	S6	0.050	0.174	10/6/2005@15:47:35			0.05 ppm Std
WTR051006-10 0.0	1	S7	0.000	-0.032	10/6/2005@15:48:27			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99985 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR051006-08 ICV	1	S8	0.967	4.378	10/6/2005@15:50:32			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.967 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.967 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S7	0.019	0.016	10/6/2005@15:52:37			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.019 < 0.050					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.019 > -0.050					
Message			ICB Passed					
Action			Continue					
1200950473|468773|MB	1	1	0.017	0.005	10/6/2005@15:54:41			
1200950474||LCS	1	2	1.053	4.771	10/6/2005@15:55:32			
145452001	1	3	0.069	0.246	10/6/2005@15:56:23			
1200950475||DUP	1	4	0.052	0.170	10/6/2005@15:57:14			
1200950476||MS	1	5	1.126	5.107	10/6/2005@15:58:05			
1200950505||MSD	1	6	1.050	4.757	10/6/2005@15:58:55			
145506001	1	7	0.097	0.377	10/6/2005@15:59:45			
1200950477||DUP	1	8	0.034	0.087	10/6/2005@16:00:34			
1200950478||MS	1	9	1.016	4.603	10/6/2005@16:01:23			
1200950506||MSD	1	10	1.143	5.185	10/6/2005@16:02:12			
WTR051006-04 CCV	1	S3	0.998	4.519	10/6/2005@16:03:01			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.998 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.998 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	0.007	-0.038	10/6/2005@16:05:06			CCB
Known Conc:			0.000					

DQM Test: > + Concentration Limit								
Result:			0.007 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.007 > -0.050					
Message			CCB Passed					
Action			Continue					
145579001	1	11	0.165	0.687	10/6/2005@16:07:09			
1200950502||DUP	1	12	0.129	0.521	10/6/2005@16:07:57			
1200950503||MS	1	13	1.205	5.471	10/6/2005@16:08:45			
1200950504||MSD	1	14	1.111	5.037	10/6/2005@16:09:33			
145579002	1	15	-0.086	-0.465	10/6/2005@16:10:21			
145579003	1	16	0.140	0.575	10/6/2005@16:11:10			
145579004	1	17	0.416	1.844	10/6/2005@16:12:02			
1200950477||DUP	1	8	0.093	0.358	10/6/2005@16:12:52			
145579002	1	15	0.108	0.426	10/6/2005@16:13:41			
WTR051006-04 CCV	1	S3	0.997	4.513	10/6/2005@16:14:29			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.997 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.997 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	0.006	-0.043	10/6/2005@16:16:34			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.006 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.006 > -0.050					
Message			CCB Passed					
Action			Continue					

Author: jxm

Date : 10/6/2005

Channel 1 (TLPOS) : Current View

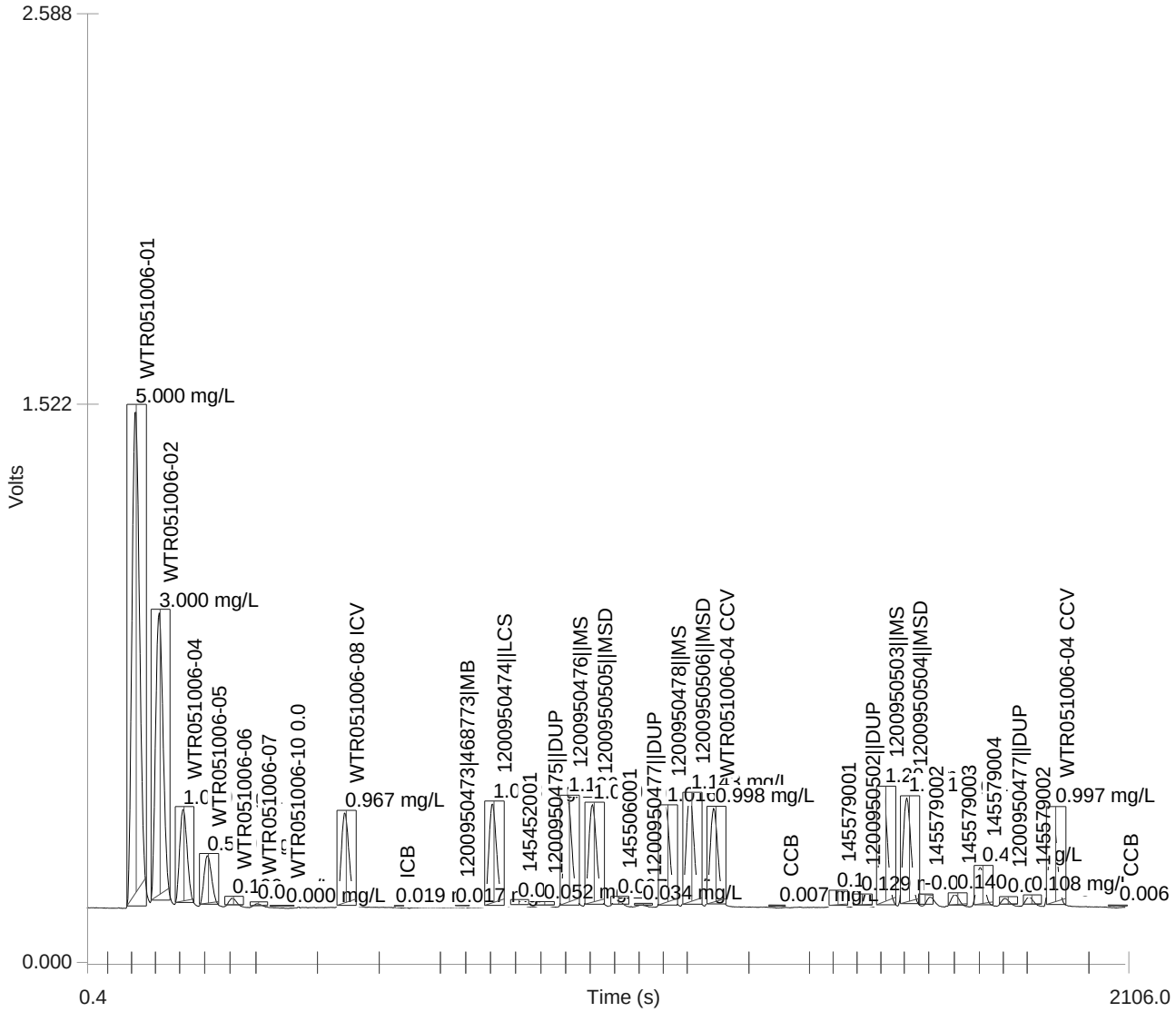


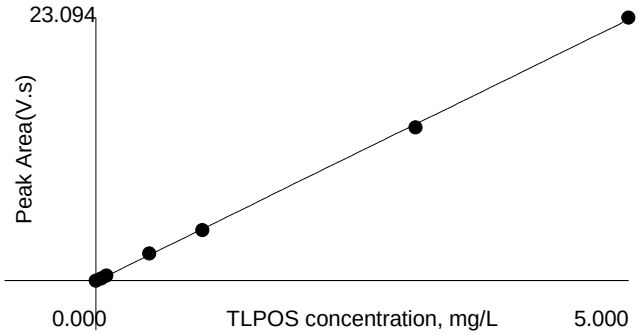
Table 1: TLPOS

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	23.094	1.330	-0.8	10/6/2005	15:44:47
2	3.000	1	13.445	0.778	2.0	10/6/2005	15:45:35
3	1.000	1	4.427	0.257	2.2	10/6/2005	15:46:24
4	0.500	1	2.360	0.135	-5.9	10/6/2005	15:47:14
5	0.100	1	0.416	0.024	-6.4	10/6/2005	15:48:04
6	0.050	1	0.174	0.010	-8.5	10/6/2005	15:48:55
7	0.000	1	-0.032	-0.001		10/6/2005	15:49:47

Author: jxm

Date : 10/6/2005

Figure 1: TLPOS



Area = 4.598 * Conc - 0.069
Conc = 0.217 * Area + 0.015
Correlation Coefficient (r) = 0.99985

No Weighting

pH

pH / Corrosivity LogBook

Analyst: JAR2
Batch: 463337
Lab SOP: GL-GC-E-008 REV# 10
Description: pH

Type	Sample Id	Serial Number	Description
CCV	240	UPH297361-01	PH 7 BUFFER FOR PH
LCS	1200937465	UPH305149-02	LCS BUFFER SOLUTION

Type	Sample id	Parent Sample Id	Matrix	Method	Run Date	Run Time	Parmname	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
LCS	1200937465		Ground Water		15-SEP-05	22:53	pH	7.04	22.3'C	7	100.571	
LCS	1200937465		Ground Water		15-SEP-05	22:53	pH 2	7.04	22.3'C	7	100.571	
SAMPLE	145579001		Ground Water	EPA 150.1	15-SEP-05	22:54	pH	6.89	18.7'C			
SAMPLE	145579001		Ground Water	EPA 150.1	15-SEP-05	22:54	pH 2	6.89	18.7'C			
SAMPLE	145579002		Ground Water	EPA 150.1	15-SEP-05	22:55	pH	6.98	19.1'C			
SAMPLE	145579002		Ground Water	EPA 150.1	15-SEP-05	22:55	pH 2	6.99	19.1'C			
SAMPLE	145579003		Ground Water	EPA 150.1	15-SEP-05	22:57	pH	6.92	19.8'C			
SAMPLE	145579003		Ground Water	EPA 150.1	15-SEP-05	22:57	pH 2	6.92	19.8'C			
SAMPLE	145579004		Ground Water	EPA 150.1	15-SEP-05	22:58	pH	6.98	20.7'C			
SAMPLE	145579004		Ground Water	EPA 150.1	15-SEP-05	22:58	pH 2	6.99	20.7'C			
CCV					15-SEP-05	22:59	pH	7.04	22.3'C			
CCV					15-SEP-05	22:59	pH 2	7.04	22.3'C			
SAMPLE	145579005		Ground Water	EPA 150.1	15-SEP-05	23:00	pH	7.06	20.7'C			
SAMPLE	145579005		Ground Water	EPA 150.1	15-SEP-05	23:00	pH 2	7.06	20.7'C			
DUP	1200937461	145579005	Ground Water	EPA 150.1	15-SEP-05	23:01	pH	7.07	20.7'C			.142
DUP	1200937461	145579005	Ground Water	EPA 150.1	15-SEP-05	23:01	pH 2	7.07	20.7'C			.142
SAMPLE	145579006		Ground Water	EPA 150.1	15-SEP-05	23:02	pH	6.98	20.8'C			
SAMPLE	145579006		Ground Water	EPA 150.1	15-SEP-05	23:02	pH 2	6.98	20.8'C			
DUP	1200937462	145579006	Ground Water	EPA 150.1	15-SEP-05	23:04	pH	6.97	20.8'C			.143
DUP	1200937462	145579006	Ground Water	EPA 150.1	15-SEP-05	23:04	pH 2	6.97	20.8'C			.143
SAMPLE	145579007		Ground Water	EPA 150.1	15-SEP-05	23:06	pH	7.1	21.2'C			
SAMPLE	145579007		Ground Water	EPA 150.1	15-SEP-05	23:06	pH 2	7.1	21.2'C			
CCV					15-SEP-05	23:07	pH	7.04	22.3'C			
CCV					15-SEP-05	23:07	pH 2	7.04	22.3'C			
DUP	1200937463	145579007	Ground Water	EPA 150.1	15-SEP-05	23:08	pH	7.11	21.2'C			.141
DUP	1200937463	145579007	Ground Water	EPA 150.1	15-SEP-05	23:08	pH 2	7.11	21.2'C			.141
SAMPLE	145579008		Ground Water	EPA 150.1	15-SEP-05	23:10	pH	6.99	21.4'C			
SAMPLE	145579008		Ground Water	EPA 150.1	15-SEP-05	23:10	pH 2	6.99	21.4'C			
DUP	1200937464	145579008	Ground Water	EPA 150.1	15-SEP-05	23:11	pH	7	21.4'C			.143
DUP	1200937464	145579008	Ground Water	EPA 150.1	15-SEP-05	23:11	pH 2	7	21.4'C			.143

pH / Corrosivity LogBook

Type	Sample id	Parent Sample Id	Matrix	Method	Run Date	Run Time	Parmname	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
CCV					15-SEP-05	23:12	pH	7.04	22.3'C			
CCV					15-SEP-05	23:12	pH 2	7.04	22.3'C			

Calibration Information:

Run Date: 15-SEP-05 11:36
Instrument: PHX060
Analyst: DXR1

	Standard	Observed	Theoretical		C	%Recovery
11:36	UPH305147-01	4	4	SU	22.9	100
11:36	UPH297361-01	6.99	7	SU	22.9	99.857
11:36	UPH050906-02	10.02	10	SU	22.9	100.2
11:36	310030	2.02	2	SU	22.9	101
11:36	050420-A	11.99	12	SU	22.9	99.917
11:36	UPH305149-02	6.97	7	SU	22.9	99.571

Comments:

Miscellaneous

NCR Report No.: 255377
Revision No.:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-OCT-05	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 351.2	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
469154	See Below		

Potentially affected work order(s)(SDG): 145527,145579,145701,145739,145783

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1200951344MS,1200951348MSD	1. Sample spike duplicate failed due to matrix interference. A matrix spike duplicate was run with the QC set to verify the spike recovery failure.

Originator's Name:

James Maestas 07-OCT-05

Data Validator/Group Leader:

Quality Review:

Director:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (ESHL)
Work Order 145579

Method/Analysis Information

Product:	**Alphaspec Am241 Liquid**
Analytical Method:	DOE EML HASL-300, Am-05-RC Modified
Analytical Batch Number:	468542

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200949862	Method Blank (MB)
1200949863	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200949864	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145579006 (GU05090GMC401).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package. Aliquots for samples 1200949862 (MB) and 1200949864 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec Pu, Liquid**
Analytical Method:	DOE EML HASL-300, Pu-11-RC Modified
Analytical Batch Number:	468544

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200949865	Method Blank (MB)
1200949866	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200949867	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145579006 (GU05090GMC401).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 145579001 (GF05090G3TM01) was recounted due to a peak shift.
Sample 1200949866 (GU05090GMC401) was reprepped due to poor resolution.
Sample 145579003 (GF05090G57M01) was recounted to verify results.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package.
Aliquots for samples 1200949865 (MB) and 1200949867 (LCS) were changed to 1.0 per client request.
The duplicate, 1200949866, did not meet the client's yield requirement. It is less than 110 percent and meets GEL's standard yield requirement.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec U, Liquid**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Analytical Batch Number:	468545

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01

145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200949868	Method Blank (MB)
1200949869	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200949870	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 14.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145579006 (GU05090GMC401).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 145579002 (GF05090GMC401) was recounted due to poor resolution.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Manual Integration

No manual integrations were performed on data in this batch.

Additional Comments
A spreadsheet for MDA calculations using a blank population is included in the Raw Data section of the package.
Aliquots for samples 1200949868 (MB) and 1200949870 (LCS) were changed to 1.0 per client request.
U-233/234 and U-235 blank activity is greater than the DLC, but less than the MDA.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**Gammaspec, Gamma, Liquid**
Analytical Method:	EPA 901.1
Analytical Batch Number:	465316

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200942441	Method Blank (MB)
1200942442	145782003(GU05090G4BM01) Sample Duplicate (DUP)
1200942443	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-013 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed in December 2004, January 2005, March 2005, July 2005, and September 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145782003 (GU05090G4BM01).
The QC sample is from ESHL work order 145782.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information

Qualifier	Reason	Analyte	Sample
UI	Data rejected due to no valid peak.	Cesium-137	145579007
		Potassium-40	145579007

Method/Analysis Information

Product: **GFPC, Sr90, liquid**
Analytical Method: EPA 905.0 Modified
Analytical Batch Number: 467348

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200947133	Method Blank (MB)
1200947134	145892003(GU05090G4TM01) Sample Duplicate (DUP)
1200947135	145892003(GU05090G4TM01) Matrix Spike (MS)
1200947136	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-004 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.

The initial calibrations were performed on November 2, 2004 and on October 1, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145892003 (GU05090G4TM01).
The QC sample is from ESHL work order 145892.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples 145579001 (GF05090G3TM01) and 145579005 (GU05090G3TM01) were recounted due to a negative result greater than three times the error.
Sample 1200947134 (GU05090G4TM01) was recounted due to high relative percent difference/relative error ratio.
Samples 145579004 (GF05090G7CM01) and 145579008 (GU05090G7CM01) were recounted at least five days from the separation date to verify sample results. Second counts being reported.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200947133 (MB) and 1200947136 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**TC99**
Analytical Method:	DOE EML HASL-300, Tc-02-RC Modified
Analytical Batch Number:	465185

Sample ID	Client ID
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200942132	Method Blank (MB)
1200942133	145782003(GU05090G4BM01) Sample Duplicate (DUP)
1200942134	145782003(GU05090G4BM01) Matrix Spike (MS)
1200942135	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-005 REV# 12.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibrations were performed on June 20, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145782003 (GU05090G4BM01).
The QC sample is from ESHL work order 145782.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Sample 1200942133 (GU05090G4BM01) was recounted due to a suspected blank false positive.
Samples 145579005 (GU05090G3TM01) and 145579007 (GU05090G57M01) were recounted due to low/high carrier/tracer yield.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced

SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200942132 (MB) and 1200942135 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product:	**LSC, Tritium Dist, Liquid**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	467509

Sample ID	Client ID
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200947555	Method Blank (MB)
1200947556	145782003(GU05090G4BM01) Sample Duplicate (DUP)
1200947557	145782003(GU05090G4BM01) Matrix Spike (MS)
1200947558	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on April 8, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145782003 (GU05090G4BM01).
The QC sample is from ESHL work order 145782.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Qualifier information
Manual qualifiers were not required.

Method/Analysis Information

Product: **GFPC, Gross A/B, liquid**
Analytical Method: EPA 900.0
Analytical Batch Number: 471889

Sample ID	Client ID
145579001	GF05090G3TM01
145579002	GF05090GMC401
145579003	GF05090G57M01
145579004	GF05090G7CM01
145579005	GU05090G3TM01
145579006	GU05090GMC401
145579007	GU05090G57M01
145579008	GU05090G7CM01
1200957879	Method Blank (MB)
1200957880	145579006(GU05090GMC401) Sample Duplicate (DUP)
1200957881	145579006(GU05090GMC401) Matrix Spike (MS)
1200957882	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-001 REV# 9.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met. The initial calibration was performed on Aug 18, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 145579006 (GU05090GMC401).

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
Samples were reprepped due to low/high recovery.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Gross Alpha/Beta Preparation Information
High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating, especially to a dull red heat. For this sample set, the prepared planchet was counted for beta activity before being flamed. After flaming, the planchet was counted for alpha activity. This sequence causes the alpha count run data to record over the beta count run data in AlphaLims, therefore only the alpha count data will appear on the instrument runlog.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Additional Comments
Aliquots for samples 1200957879 (MB) and 1200957882 (LCS) were changed to 1.0 per client request.

Qualifier information
Manual qualifiers were not required.

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

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP

or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer: L Gunderson 10/20/06

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 145579 GEL Work Order: 145579

The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID:	GF05090G3TM01	Project:	ESHL00701
Sample ID:	145579001	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	13−SEP−05		
Receive Date:	15−SEP−05		
Collector:	Client		

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.0942	0.0354	+/−0.0158	0.050	pCi/L		BJB1	10/11/05	1825	468542	1
Alphaspec Pu, Liquid												
Plutonium−238	U	−0.0125	0.0431	+/−0.0106	0.050	pCi/L		BJB1	10/12/05	1701	468544	2
Plutonium−239/240	U	−0.0083	0.0364	+/−0.00881	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.533	0.0918	+/−0.0488	1.00	pCi/L		BJB1	10/10/05	2036	468545	3
Uranium−235/236	U	0.0409	0.0691	+/−0.0136	1.00	pCi/L						
Uranium−238		0.413	0.065	+/−0.0409	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	U	−0.677	3.14	+/−0.919	10.0	pCi/L		MJH1	10/13/05	1040	465316	4
Cobalt−60	U	1.24	4.12	+/−1.00	10.0	pCi/L						
Gross Gamma	U	50.5	235	+/−66.9	120	pCi/L						
Neptunium−237	U	−2.93	25.2	+/−7.54	10.0	pCi/L						
Potassium−40	U	45.7	58.2	+/−13.6	10.0	pCi/L						
Sodium−22	U	1.47	3.20	+/−1.87	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	1.14	2.41	+/−0.646	3.00	pCi/L		CXO1	10/18/05	1428	471889	5
Beta		21.8	2.58	+/−1.21	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90	U	−0.0503	0.207	+/−0.0418	0.400	pCi/L		EXW1	10/13/05	0954	467348	7

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	GXM2	10/05/05	1449	468768
SW846 3005A	ICP−MS 3005 PREP	PRB	10/02/05	1100	463409
SW846 3005A	ICP−TRACE SW846 3005A	RG2	10/03/05	0830	463363
SW846 8321A Mo	SW846 8321A Perchlorate Extraction in Liquid	CXM1	10/08/05	0844	468257

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GF05090G3TM01
Sample ID: 145579001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	70	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	84	(15%−125%)
Uranium−232	Alphaspec U, Liquid	67	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	91	(25%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

GENERAL ENGINEERING LABORATORIES, LLC
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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GF05090GMC401
Sample ID: 145579002
Matrix: Ground Water
Collect Date: 13−SEP−05
Receive Date: 15−SEP−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241	U	−0.00662	0.0302	+/−0.00408	0.050	pCi/L		BJB1	10/11/05	1825	468542	1
Alphaspec Pu, Liquid												
Plutonium−238	U	0.00353	0.0366	+/−0.0025	0.050	pCi/L		BJB1	10/10/05	2036	468544	2
Plutonium−239/240	U	−0.00353	0.0309	+/−0.00558	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.106	0.0644	+/−0.0163	1.00	pCi/L		BJB1	10/13/05	1433	468545	3
Uranium−235/236	U	0.0131	0.0485	+/−0.00786	1.00	pCi/L						
Uranium−238	U	0.0423	0.0456	+/−0.0101	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	U	0.522	3.98	+/−1.06	10.0	pCi/L		MJH1	10/13/05	1041	465316	4
Cobalt−60	U	−0.329	4.15	+/−1.15	10.0	pCi/L						
Gross Gamma	U	67.6	274	+/−107	120	pCi/L						
Neptunium−237	U	−11.3	31.3	+/−9.30	10.0	pCi/L						
Potassium−40	U	31.0	49.7	+/−11.3	10.0	pCi/L						
Sodium−22	U	0.301	4.48	+/−1.20	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	−0.354	1.96	+/−0.351	3.00	pCi/L		CXO1	10/18/05	1423	471889	5
Beta		3.35	2.52	+/−0.719	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90	U	−0.0888	0.169	+/−0.047	0.400	pCi/L		EXW1	10/10/05	2345	467348	7

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	GXM2	10/05/05	1449	468768
SW846 3005A	ICP−MS 3005 PREP	PRB	10/02/05	1100	463409
SW846 3005A	ICP−TRACE SW846 3005A	RG2	10/03/05	0830	463363
SW846 8321A Mo	SW846 8321A Perchlorate Extraction in Liquid	CXM1	10/08/05	0844	468257

The following Analytical Methods were performed

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GF05090GMC401
Sample ID: 145579002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	82	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	89	(15%−125%)
Uranium−232	Alphaspec U, Liquid	89	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	64	(25%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GF05090G57M01
Sample ID: 145579003
Matrix: Ground Water
Collect Date: 13−SEP−05
Receive Date: 15−SEP−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.118	0.0313	+/−0.0193	0.050	pCi/L		BJB1	10/11/05	1825	468542	1
Alphaspec Pu, Liquid												
Plutonium−238		0.0479	0.0452	+/−0.0181	0.050	pCi/L		BJB1	10/12/05	1701	468544	2
Plutonium−239/240		0.0718	0.0382	+/−0.0199	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.267	0.0761	+/−0.030	1.00	pCi/L		BJB1	10/10/05	2036	468545	3
Uranium−235/236	U	0.037	0.0573	+/−0.0125	1.00	pCi/L						
Uranium−238		0.250	0.0539	+/−0.0284	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	U	2.09	4.32	+/−1.13	10.0	pCi/L		MJH1	10/13/05	1041	465316	4
Cobalt−60	U	1.32	4.01	+/−0.997	10.0	pCi/L						
Gross Gamma	U	80.0	259	+/−71.8	120	pCi/L						
Neptunium−237	U	−12.9	24.8	+/−7.70	10.0	pCi/L						
Potassium−40	U	31.3	53.3	+/−15.1	10.0	pCi/L						
Sodium−22	U	1.10	4.54	+/−1.19	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	1.25	2.47	+/−0.656	3.00	pCi/L		CXO1	10/18/05	1423	471889	5
Beta		23.1	2.57	+/−1.21	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90	U	−0.0366	0.120	+/−0.0339	0.400	pCi/L		EXW1	10/10/05	2345	467348	7

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	GXM2	10/05/05	1449	468768
SW846 3005A	ICP−MS 3005 PREP	PRB	10/02/05	1100	463409
SW846 3005A	ICP−TRACE SW846 3005A	RG2	10/03/05	0830	463363
SW846 8321A Mo	SW846 8321A Perchlorate Extraction in Liquid	CXM1	10/08/05	0844	468257

The following Analytical Methods were performed

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GF05090G57M01
Sample ID: 145579003

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	81	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	89	(15%−125%)
Uranium−232	Alphaspec U, Liquid	66	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	87	(25%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
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Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GF05090G7CM01
Sample ID: 145579004
Matrix: Ground Water
Collect Date: 14−SEP−05
Receive Date: 15−SEP−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.0644	0.034	+/−0.0155	0.050	pCi/L		BJB1	10/11/05	1825	468542	1
Alphaspec Pu, Liquid												
Plutonium−238	U	0.0229	0.0365	+/−0.011	0.050	pCi/L		BJB1	10/10/05	2036	468544	2
Plutonium−239/240	U	0.00352	0.0309	+/−0.00825	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.406	0.0842	+/−0.0393	1.00	pCi/L		BJB1	10/10/05	2036	468545	3
Uranium−235/236	U	0.0375	0.0634	+/−0.0134	1.00	pCi/L						
Uranium−238		0.284	0.0596	+/−0.0321	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	U	1.22	4.30	+/−1.29	10.0	pCi/L		MJH1	10/13/05	1041	465316	4
Cobalt−60	U	0.832	5.03	+/−1.32	10.0	pCi/L						
Gross Gamma	U	245	579	+/−176	120	pCi/L						
Neptunium−237	U	1.25	30.4	+/−9.38	10.0	pCi/L						
Potassium−40	U	23.9	35.9	+/−21.7	10.0	pCi/L						
Sodium−22	U	3.49	5.43	+/−1.28	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	1.46	2.90	+/−0.755	3.00	pCi/L		CXO1	10/18/05	1423	471889	5
Beta		29.3	2.72	+/−1.38	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		0.428	0.226	+/−0.0737	0.400	pCi/L		EXW1	10/13/05	0955	467348	7

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 335.3	EPA 335.3 Total Cyanide	GXM2	09/26/05	1224	465670
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	GXM2	10/05/05	1449	468768
SW846 3005A	ICP−MS 3005 PREP	PRB	10/02/05	1100	463409
SW846 3005A	ICP−TRACE SW846 3005A	RG2	10/03/05	0830	463363
SW846 8321A Mo	SW846 8321A Perchlorate Extraction in Liquid	CXM1	10/08/05	0844	468257

The following Analytical Methods were performed

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Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GF05090G7CM01
Sample ID: 145579004

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	81	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	91	(15%−125%)
Uranium−232	Alphaspec U, Liquid	70	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	83	(25%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

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< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G3TM01
Sample ID: 145579005
Matrix: Ground Water
Collect Date: 13−SEP−05
Receive Date: 15−SEP−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.138	0.0351	+/−0.0204	0.050	pCi/L		BJB1	10/11/05	1825	468542	1
Alphaspec Pu, Liquid												
Plutonium−238	U	0.00399	0.0414	+/−0.0109	0.050	pCi/L		BJB1	10/11/05	1416	468544	2
Plutonium−239/240	U	0.00599	0.035	+/−0.00773	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.450	0.0847	+/−0.042	1.00	pCi/L		BJB1	10/10/05	2036	468545	3
Uranium−235/236	U	0.0583	0.0638	+/−0.0152	1.00	pCi/L						
Uranium−238		0.391	0.060	+/−0.0388	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	U	1.41	3.49	+/−0.666	10.0	pCi/L		MJH1	10/13/05	1042	465316	4
Cobalt−60	U	4.29	4.40	+/−1.06	10.0	pCi/L						
Gross Gamma	U	78.5	202	+/−85.4	120	pCi/L						
Neptunium−237	U	7.21	23.5	+/−6.51	10.0	pCi/L						
Potassium−40	U	36.2	50.4	+/−11.6	10.0	pCi/L						
Sodium−22	U	2.53	5.03	+/−1.23	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	1.63	2.58	+/−1.01	3.00	pCi/L		CXO1	10/18/05	1423	471889	5
Beta		24.6	3.08	+/−1.80	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90	U	−0.0152	0.209	+/−0.0451	0.400	pCi/L		EXW1	10/13/05	0955	467348	7
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		3680	231	+/−134	200	pCi/L		MXP1	10/12/05	1832	467509	8
TC99												
Technetium−99		17.4	2.94	+/−1.20	5.00	pCi/L		BXF1	10/02/05	0336	465185	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160.2	EPA 160.2 Total Suspended Solids	GXA2	09/19/05	1434	463885
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa	JXM	10/07/05	1135	469154

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G3TM01
Sample ID: 145579005

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep			LXW1	10/07/05	0957	469152			
SW846 3005A	ICP−MS 3005 PREP			PRB	10/02/05	1100	463409			
SW846 3005A	ICP−TRACE SW846 3005A			RG2	10/03/05	0830	463363			
SW846 3510C	3510C−8270C BNA Appendix 9 Prep Fed			AXH1	09/16/05	1353	463559			
SW846 8260B	VOA Library Search						463422			
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL			CDS1	09/26/05	1233	465842			
SW846 8270C	BNA Library Search						464386			

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified
8	EPA 906.0 Modified
9	DOE EML HASL−300, Tc−02−RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	88	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	91	(15%−125%)
Uranium−232	Alphaspec U, Liquid	61	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	94	(25%−125%)
Carrier/Tracer Recovery	TC99	105	(15%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
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< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G3TM01
Sample ID: 145579005

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090GMC401
Sample ID: 145579006
Matrix: Ground Water
Collect Date: 13−SEP−05
Receive Date: 15−SEP−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241	U	−0.0107	0.0323	+/−0.0124	0.050	pCi/L		BJB1	10/11/05	1825	468542	1
Alphaspec Pu, Liquid												
Plutonium−238	U	−0.0156	0.0405	+/−0.00997	0.050	pCi/L		BJB1	10/11/05	1416	468544	2
Plutonium−239/240	U	0.00781	0.0342	+/−0.00731	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.132	0.0694	+/−0.019	1.00	pCi/L		BJB1	10/10/05	2036	468545	3
Uranium−235/236	U	0.0366	0.0523	+/−0.0103	1.00	pCi/L						
Uranium−238	U	0.0387	0.0492	+/−0.0106	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	U	0.263	3.48	+/−0.960	10.0	pCi/L		MJH1	10/13/05	1042	465316	4
Cobalt−60	U	1.63	4.13	+/−1.00	10.0	pCi/L						
Gross Gamma	U	68.1	227	+/−99.4	120	pCi/L						
Neptunium−237	U	−6.27	21.4	+/−6.14	10.0	pCi/L						
Potassium−40	U	21.0	29.1	+/−21.0	10.0	pCi/L						
Sodium−22	U	0.00403	3.54	+/−0.946	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	−0.435	2.08	+/−0.400	3.00	pCi/L		CXO1	10/18/05	1423	471889	5
Beta	U	3.14	3.34	+/−0.887	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90	U	−0.0688	0.128	+/−0.0355	0.400	pCi/L		EXW1	10/10/05	2345	467348	7
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		11800	234	+/−235	200	pCi/L		MXP1	10/12/05	2033	467509	8
TC99												
Technetium−99		5.76	2.98	+/−0.993	5.00	pCi/L		BXF1	10/02/05	0353	465185	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160.2	EPA 160.2 Total Suspended Solids	GXA2	09/19/05	1434	463885
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa	JXM	10/07/05	1136	469154

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Certificate of Analysis

Company : Los Alamos National Labs
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090GMC401
Sample ID: 145579006

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep			LXW1	10/07/05	0957	469152			
SW846 3005A	ICP−MS 3005 PREP			PRB	10/02/05	1100	463409			
SW846 3005A	ICP−TRACE SW846 3005A			RG2	10/03/05	0830	463363			
SW846 3510C	3510C−8270C BNA Appendix 9 Prep Fed			AXH1	09/16/05	1353	463559			
SW846 8260B	VOA Library Search						463422			
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL			CDS1	09/26/05	1259	465842			
SW846 8270C	BNA Library Search						464386			

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified
8	EPA 906.0 Modified
9	DOE EML HASL−300, Tc−02−RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	81	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	96	(15%−125%)
Uranium−232	Alphaspec U, Liquid	82	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	85	(25%−125%)
Carrier/Tracer Recovery	TC99	103	(15%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

** Indicates the analyte is a surrogate compound.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.

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Report Date: October 20, 2005

Client Sample ID: GU05090GMC401
Sample ID: 145579006

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M

J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G57M01
Sample ID: 145579007
Matrix: Ground Water
Collect Date: 13−SEP−05
Receive Date: 15−SEP−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.320	0.0364	+/−0.0332	0.050	pCi/L		BJB1	10/11/05	1417	468542	1
Alphaspec Pu, Liquid												
Plutonium−238		0.236	0.0449	+/−0.0246	0.050	pCi/L		BJB1	10/11/05	1416	468544	2
Plutonium−239/240		0.324	0.0379	+/−0.0295	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.315	0.0857	+/−0.0341	1.00	pCi/L		BJB1	10/10/05	2036	468545	3
Uranium−235/236	U	0.0313	0.0645	+/−0.0126	1.00	pCi/L						
Uranium−238		0.275	0.0607	+/−0.0313	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	UI	5.41	4.28	+/−1.88	10.0	pCi/L		MJH1	10/13/05	1043	465316	4
Cobalt−60	U	2.91	4.67	+/−1.09	10.0	pCi/L						
Gross Gamma	U	90.8	340	+/−24.6	120	pCi/L						
Neptunium−237	U	0.738	28.8	+/−8.65	10.0	pCi/L						
Potassium−40	UI	60.3	33.4	+/−20.3	10.0	pCi/L						
Sodium−22	U	1.51	4.32	+/−1.07	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	2.40	2.57	+/−0.965	3.00	pCi/L		CXO1	10/18/05	1423	471889	5
Beta		19.9	2.60	+/−1.23	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90	U	0.0688	0.198	+/−0.0508	0.400	pCi/L		EXW1	10/11/05	1307	467348	7
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		3030	227	+/−123	200	pCi/L		MXP1	10/12/05	2234	467509	8
TC99												
Technetium−99		13.2	2.96	+/−1.13	5.00	pCi/L		BXF1	10/02/05	0410	465185	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160.2	EPA 160.2 Total Suspended Solids	GXA2	09/19/05	1434	463885
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa	JXM	10/07/05	1143	469154

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Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G57M01
Sample ID: 145579007

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep			LXW1	10/07/05	0957	469152			
SW846 3005A	ICP−MS 3005 PREP			PRB	10/02/05	1100	463409			
SW846 3005A	ICP−TRACE SW846 3005A			RG2	10/03/05	0830	463363			
SW846 3510C	3510C−8270C BNA Appendix 9 Prep Fed			AXH1	09/16/05	1353	463559			
SW846 8260B	VOA Library Search						463422			
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL			CDS1	09/26/05	1351	465842			
SW846 8270C	BNA Library Search						464386			

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified
8	EPA 906.0 Modified
9	DOE EML HASL−300, Tc−02−RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	79	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	90	(15%−125%)
Uranium−232	Alphaspec U, Liquid	67	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	80	(25%−125%)
Carrier/Tracer Recovery	TC99	105	(15%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
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> Result is greater than amount reported.
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BD Results below the MDC or low tracer recovery.
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.

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Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G57M01
Sample ID: 145579007

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

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Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G7CM01
Sample ID: 145579008
Matrix: Ground Water
Collect Date: 14−SEP−05
Receive Date: 15−SEP−05
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Alpha Spec Analysis												
Alphaspec Am241 Liquid												
Americium−241		0.043	0.0327	+/−0.0131	0.050	pCi/L		BJB1	10/11/05	1417	468542	1
Alphaspec Pu, Liquid												
Plutonium−238	U	0.00905	0.0376	+/−0.00702	0.050	pCi/L		BJB1	10/11/05	1416	468544	2
Plutonium−239/240	U	0.0109	0.0317	+/−0.00678	0.050	pCi/L						
Alphaspec U, Liquid												
Uranium−234		0.365	0.087	+/−0.0382	1.00	pCi/L		BJB1	10/10/05	2036	468545	3
Uranium−235/236	U	0.0211	0.0655	+/−0.015	1.00	pCi/L						
Uranium−238		0.336	0.0616	+/−0.036	0.500	pCi/L						
Rad Gamma Spec Analysis												
Gammaspec, Gamma, Liquid												
Cesium−137	U	−0.225	3.30	+/−0.936	10.0	pCi/L		MJH1	10/13/05	1043	465316	4
Cobalt−60	U	−0.985	3.51	+/−1.02	10.0	pCi/L						
Gross Gamma	U	72.5	267	+/−90.4	120	pCi/L						
Neptunium−237	U	5.60	27.2	+/−7.66	10.0	pCi/L						
Potassium−40		44.4	38.0	+/−18.9	10.0	pCi/L						
Sodium−22	U	2.28	4.25	+/−0.997	10.0	pCi/L						
Rad Gas Flow Proportional Counting												
GFPC, Gross A/B, liquid												
Alpha	U	1.99	2.29	+/−0.884	3.00	pCi/L		CXO1	10/18/05	1423	471889	5
Beta		24.6	2.53	+/−1.27	3.00	pCi/L						
GFPC, Sr90, liquid												
Strontium−90		0.678	0.253	+/−0.0918	0.400	pCi/L		EXW1	10/13/05	0955	467348	7
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		2460	229	+/−114	200	pCi/L		MXP1	10/13/05	0035	467509	8
TC99												
Technetium−99		13.2	2.96	+/−1.13	5.00	pCi/L		BXF1	10/02/05	0427	465185	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160.2	EPA 160.2 Total Suspended Solids	GXA2	09/19/05	1434	463885
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	09/20/05	1200	463519
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa	JXM	10/07/05	1144	469154

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Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Billy Turney
Project: Groundwater

Report Date: October 20, 2005

Client Sample ID: GU05090G7CM01
Sample ID: 145579008

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep			LXW1	10/07/05	0957	469152				
SW846 3005A	ICP−MS 3005 PREP			PRB	10/02/05	1100	463409				
SW846 3005A	ICP−TRACE SW846 3005A			RG2	10/03/05	0830	463363				
SW846 3510C	3510C−8270C BNA Appendix 9 Prep Fed			AXH1	09/16/05	1353	463559				
SW846 8260B	VOA Library Search						463422				
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL			CDS1	09/26/05	1417	465842				
SW846 8270C	BNA Library Search						464386				

The following Analytical Methods were performed

Method	Description
1	DOE EML HASL−300, Am−05−RC Modified
2	DOE EML HASL−300, Pu−11−RC Modified
3	DOE EML HASL−300, U−02−RC Modified
4	EPA 901.1
5	EPA 900.0
6	EPA 900.0
7	EPA 905.0 Modified
8	EPA 906.0 Modified
9	DOE EML HASL−300, Tc−02−RC Modified

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits
Americium−243	Alphaspec Am241 Liquid	84	(25%−125%)
Plutonium−242	Alphaspec Pu, Liquid	90	(15%−125%)
Uranium−232	Alphaspec U, Liquid	63	(25%−125%)
Carrier/Tracer Recovery	GFPC, Sr90, liquid	73	(25%−125%)
Carrier/Tracer Recovery	TC99	105	(15%−125%)

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
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H Analytical holding time exceeded.

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Report Date: October 20, 2005

Client Sample ID: GU05090G7CM01
Sample ID: 145579008

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

QUALITY CONTROL DATA

QC Summary

Report Date: October 20, 2005

Client : **Los Alamos National Labs**
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico
Contact: **Billy Turney**

Workorder: **145579**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 468542										
QC1200949863 145579006 DUP										
Americium-241		U	U	0.00403	pCi/L	0.480		(0% - 100%)	BJB1	10/11/05 14:17
	TPU:	+/-0.0124		+/-0.00294						
	Yield:	80.8		80.3						
QC1200949864 LCS										
Americium-241	2.72			2.53	pCi/L		93	(75%-125%)		
	TPU:			+/-0.131						
	Yield:			91.2						
QC1200949862 MB										
Americium-241			U	-0.0053	pCi/L					
	TPU:			+/-0.00644						
	Yield:			79.6						
Batch 468544										
QC1200949866 145579006 DUP										
Plutonium-238		U	U	-0.0018	pCi/L	0.407		(0% - 100%)	BJB1	10/12/05 17:01
	TPU:	+/-0.00997		+/-0.00697						
	Yield:	95.9		108						
Plutonium-239/240		U	U	-0.0018	pCi/L	0.362		(0% - 100%)		
	TPU:	+/-0.00731		+/-0.00596						
	Yield:	95.9		108						
QC1200949867 LCS										
Plutonium-238			U	0.0131	pCi/L			(75%-125%)		10/11/05 14:17
	TPU:			+/-0.0052						
	Yield:			90.8						
Plutonium-239/240	2.52			2.35	pCi/L		93	(75%-125%)		
	TPU:			+/-0.103						
	Yield:			90.8						
QC1200949865 MB										
Plutonium-238			U	0.00426	pCi/L					
	TPU:			+/-0.00711						
	Yield:			104						
Plutonium-239/240			U	-0.00995	pCi/L					
	TPU:			+/-0.00587						
	Yield:			104						

QC Summary

Workorder: 145579

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 468545										
QC1200949869 145579006 DUP										
Uranium-234		0.132		0.110	pCi/L	0.314		(0% - 100%)	BJB1	10/10/05 20:36
	TPU:	+/-0.019		+/-0.016						
	Yield:	81.7		87.1						
Uranium-235/236	U	0.0366	U	0.0295	pCi/L	0.175		(0% - 100%)		
	TPU:	+/-0.0103		+/-0.00995						
	Yield:	81.7		87.1						
Uranium-238	U	0.0387		0.0518	pCi/L	0.300		(0% - 100%)		
	TPU:	+/-0.0106		+/-0.0112						
	Yield:	81.7		87.1						
QC1200949870 LCS										
Uranium-234				2.37	pCi/L			(75%-125%)		
	TPU:			+/-0.132						
	Yield:			84.1						
Uranium-235/236				0.180	pCi/L			(75%-125%)		
	TPU:			+/-0.0213						
	Yield:			84.1						
Uranium-238	2.42			2.37	pCi/L		98	(75%-125%)		
	TPU:			+/-0.132						
	Yield:			84.1						
QC1200949868 MB										
Uranium-234			U	0.0282	pCi/L					
	TPU:			+/-0.00809						
	Yield:			90.7						
Uranium-235/236			U	0.00773	pCi/L					
	TPU:			+/-0.00475						
	Yield:			90.7						
Uranium-238			U	0.00469	pCi/L					
	TPU:			+/-0.0047						
	Yield:			90.7						
Rad Gamma Spec										
Batch 465316										
QC1200942442 145782003 DUP										
Cesium-137	U	3.07	U	-1.19	pCi/L	0.572		(0% - 100%)	MJH1	10/13/05 15:00
	TPU:	+/-2.63		+/-1.08						
Cobalt-60	U	1.42	U	2.10	pCi/L	0.149		(0% - 100%)		
	TPU:	+/-1.04		+/-1.23						

QC Summary

Workorder: 145579

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch 465316											
Gross Gamma		U 114	U	83.0	pCi/L	0.0749		(0% - 100%)			
		TPU: +/-91.1		+/-113							
Neptunium-237		U 6.68	U	9.10	pCi/L	0.0797		(0% - 100%)			
		TPU: +/-8.85		+/-6.33							
Potassium-40		U 7.55	U	12.3	pCi/L	0.0514		(0% - 100%)			
		TPU: +/-20.2		+/-25.5							
Sodium-22		U 0.533	U	2.15	pCi/L	0.347		(0% - 100%)			
		TPU: +/-1.11		+/-1.21							
QC1200942443 LCS											
Americium-241	1220			1280	pCi/L		105	(75%-125%)		10/13/05	11:40
	TPU:			+/-88.2							
Cesium-137	469			503	pCi/L		107	(75%-125%)			
	TPU:			+/-25.0							
Cobalt-60	710			739	pCi/L		104	(75%-125%)			
	TPU:			+/-26.8							
Gross Gamma	4550			4640	pCi/L		102				
	TPU:			+/-1440							
Neptunium-237				3970	pCi/L						
	TPU:			+/-132							
Potassium-40			U	28.5	pCi/L						
	TPU:			+/-61.6							
Sodium-22			U	15.9	pCi/L						
	TPU:			+/-14.0							
QC1200942441 MB											
Cesium-137			U	-0.514	pCi/L					10/13/05	14:59
	TPU:			+/-1.04							
Cobalt-60			U	-0.00458	pCi/L						
	TPU:			+/-1.05							
Gross Gamma			U	55.5	pCi/L						
	TPU:			+/-58.8							
Neptunium-237			U	-0.387	pCi/L						
	TPU:			+/-8.55							
Potassium-40			U	20.3	pCi/L						
	TPU:			+/-11.6							
Sodium-22			U	-0.568	pCi/L						

QC Summary

Workorder: 145579

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date Time
Rad Gamma Spec										
Batch 465316										
	TPU:			+/-1.07						
Rad Gas Flow										
Batch 467348										
QC1200947134 145892003 DUP										
Strontium-90	U	-0.0481	U	-0.0772	pCi/L	0.140		(0% - 100%)	[illegible]XW1	10/13/05 09:57
	TPU:	+/-0.0441		+/-0.0599						
	Yield:	90.9		66.2						
QC1200947136 LCS										
Strontium-90	15.6			15.0	pCi/L		96	(75%-125%)		10/11/05 14:23
	TPU:			+/-0.451						
	Yield:			96.5						
QC1200947133 MB										
Strontium-90			U	-0.00551	pCi/L					10/11/05 14:24
	TPU:			+/-0.0328						
	Yield:			95.3						
QC1200947135 145892003 MS										
Strontium-90	39.1 U	-0.0481		35.3	pCi/L		90	(75%-125%)		10/11/05 14:24
	TPU:	+/-0.0441		+/-1.34						
	Yield:	90.9		63.9						
Batch 471889										
QC1200957880 145579006 DUP										
Alpha	U	-0.435	U	0.525	pCi/L	0.484		(0% - 100%)	[illegible]XO1	10/18/05 14:23
	TPU:	+/-0.400		+/-0.591						
Beta	U	3.14	U	1.84	pCi/L	0.414		(0% - 100%)		
	TPU:	+/-0.887		+/-0.679						
QC1200957882 LCS										
Alpha	10.8			11.1	pCi/L		103	(75%-125%)		10/18/05 14:50
	TPU:			+/-0.625						
Beta	31.2			32.4	pCi/L		104	(75%-125%)		
	TPU:			+/-2.48						
QC1200957879 MB										
Alpha			U	0.0741	pCi/L					10/18/05 14:23
	TPU:			+/-0.0892						
Beta			U	-0.0226	pCi/L					
	TPU:			+/-0.0856						
QC1200957881 145579006 MS										
Alpha	71.9 U	-0.435		57.4	pCi/L		80	(75%-125%)		
				+/-8.96						

QC Summary

Workorder: 145579

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch 471889											
	TPU:	+/-0.400									
Beta	208	3.14	U	224	pCi/L		108	(75%-125%)			
	TPU:	+/-0.887		+/-8.71							
Rad Liquid Scintillation											
Batch 465185											
QC1200942133 145782003 DUP											
Technetium-99		6.25		5.70	pCi/L	0.135		(0% - 100%)	BXF1	10/02/05	06:59
	TPU:	+/-1.01		+/-1.02							
	Yield:	102		100							
QC1200942135 LCS											
Technetium-99	118			116	pCi/L		98	(75%-125%)		10/02/05	07:33
	TPU:			+/-2.62							
	Yield:			101							
QC1200942132 MB											
Technetium-99			U	-1.08	pCi/L					10/08/05	10:52
	TPU:			+/-0.826							
	Yield:			104							
QC1200942134 145782003 MS											
Technetium-99	131	6.25		127	pCi/L		92	(75%-125%)		10/02/05	07:16
	TPU:	+/-1.01		+/-2.95							
	Yield:	102		97.0							
Batch 467509											
QC1200947556 145782003 DUP											
Tritium		362		485	pCi/L	0.394		(0% - 100%)	MXP1	10/13/05	15:17
	TPU:	+/-76.3		+/-79.2							
QC1200947558 LCS											
Tritium	3030			2900	pCi/L		96	(75%-125%)		10/13/05	19:19
	TPU:			+/-120							
QC1200947555 MB											
Tritium			U	-40.4	pCi/L					10/13/05	13:16
	TPU:			+/-67.0							
QC1200947557 145782003 MS											
Tritium	3030	362		3900	pCi/L		117	(75%-125%)		10/13/05	17:18
	TPU:	+/-76.3		+/-139							

Notes:
The Qualifiers in this report are defined as follows:

** Indicates the analyte is a surrogate compound.

QC Summary

Workorder: **145579**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

<	Result is less than amount reported.
>	Result is greater than amount reported.
B	Target analyte was detected in the sample as well as the associated blank.
BD	Results below the MDC or low tracer recovery.
E	Concentration of the target analyte exceeds the instrument calibration range.
H	Analytical holding time exceeded.
J	Indicates an estimated value.
P	The response between the confirmation and the primary columns is >40% Different.
R	Sample results are rejected.
U	Target analyte was analyzed for but not detected above the MDL or LOD.
UI	Uncertain identification for gamma spectroscopy.
X	Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y	QC Samples were not spiked with this compound.
Z	Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d	The 2:1 depletion requirement was not met for this sample
h	Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist, Rev 4

Batch# 468542 Product: AM Date: 10/12/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg for GAB.			NA
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

2/22/2005

Primary Review Performed By: [signature] 10/12/05

Secondary Review Performed By: [signature] 10/12/05

10/8 - 10/13

ESHL

Am/Cm Que Sheet

03-OCT-05

Batch #: 468542 **Analyst:** BJB1 **Minimum DueDate:** 08-OCT-05 **Comments:**

Tracer(s): Am243/Cm244 **Tracer Code:** 445-96-2-BB **Expiration Date:** 9/10/06 **Vol:** 0.1 mL

LCS Isotope(s): Am241/Cm244 **LCS Code(s):** 0533-E / NA **Expiration Date:** 9/10/06 / NA **Vol(s):** 0.1mL / NA

Spike Isotope(s): Am241/Cm244 **Spike Code(s):** NA / NA **Expiration Date:** NA / NA **Vol(s):** NA / NA

Prep Date: 10/4/05 **Initials:** BJB **Pipet ID:** 4497313 **Balance ID:** 11750207 **Witness:** ~~MMB~~ BJB 10/4/05

Sample I	Client Description	Type	Hazard Code	Min	Matrix	Client	Collection Date	Label #	Aliquot (g/mL/f)	Am/Cm D	Ash Weight (g)
145579001	GF05090G3TM01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		13-SEP-05	61	0.800	87	37
145579002	GF05090GMC401	SAMPLE		.05 pCi/L	GROUND WATIESHL001		13-SEP-05	62	0.800	90	38
145579003	GF05090G57M01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		13-SEP-05	63	0.800	91	39
145579004	GF05090G7CM01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		14-SEP-05	64	0.800	92	40
145579005	GU05090G3TM01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		13-SEP-05	65	0.800	93	41
145579006	GU05090GMC401	SAMPLE		.05 pCi/L	GROUND WATIESHL001		13-SEP-05	66	0.800	94	42
145579007	GU05090G57M01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		13-SEP-05	67	0.800	95	
145579008	GU05090G7CM01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		14-SEP-05	68	0.800	96	
145739001	GF05090G6CM01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		14-SEP-05	69	0.800	97	
145739002	GF0509G33R101	SAMPLE		.05 pCi/L	GROUND WATIESHL001		14-SEP-05	70	0.800	99	
145739003	GF0509G33R201	SAMPLE		.05 pCi/L	GROUND WATIESHL001		15-SEP-05	71	0.800	100	
145739004	GU05090G6CM01	SAMPLE		.05 pCi/L	GROUND WATIESHL001		14-SEP-05	72	0.800	101	
145739005	GU0509G33R101	SAMPLE		.05 pCi/L	GROUND WATIESHL001		14-SEP-05	73	0.800	102	
145739006	GU0509G33R201	SAMPLE		.05 pCi/L	GROUND WATIESHL001		15-SEP-05	74	0.800	103	
1200949862	MB for batch 468542	MB		.05 pCi/L	GROUND WATIQC ACCOUNT			75	1.00	104	
1200949863	GU05090GMC401(145579006DUP)	DUP		.05 pCi/L	GROUND WATIQC ACCOUNT		13-SEP-05	76	0.800	105	
1200949864	LCS for batch 468542	LCS		.05 pCi/L	GROUND WATIQC ACCOUNT			77	1.00	106	

DE 10/11/05 BJB 10/5/05

1367

Solid Sample Dissolution by: **LEACH or DIGESTION** BJB 10/4/05

Circle One

Data Reviewed By: 10/12/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200949863	DUP	Americium-241	0.800 L	0.00403	0.00294	0.0337	-.006625	pCi/L	NO
1200949864	LCS	Americium-241	1.00 L	2.53	0.131	0.0227	-.0053	pCi/L	NO
1200949862	MB	Americium-241	1.00 L	-0.0053	0.00644	0.0304	-.0053	pCi/L	NO
145579001	GF05090G3TM01	Americium-241	0.800 L	0.0942	0.0158	0.0354	-.006625	pCi/L	NO
145579002	GF05090GMC401	Americium-241	0.800 L	-0.00662	0.00408	0.0302	-.006625	pCi/L	NO
145579003	GF05090G57M01	Americium-241	0.800 L	0.118	0.0193	0.0313	-.006625	pCi/L	NO
145579004	GF05090G7CM01	Americium-241	0.800 L	0.0644	0.0155	0.034	-.006625	pCi/L	NO
145579005	GU05090G3TM01	Americium-241	0.800 L	0.138	0.0204	0.0351	-.006625	pCi/L	NO
145579006	GU05090GMC401	Americium-241	0.800 L	-0.0107	0.0124	0.0323	-.006625	pCi/L	NO
145579007	GU05090G57M01	Americium-241	0.800 L	0.320	0.0332	0.0364	-.006625	pCi/L	NO
145579008	GU05090G7CM01	Americium-241	0.800 L	0.043	0.0131	0.0327	-.006625	pCi/L	NO
145739001	GF05090G6CM01	Americium-241	0.800 L	0.0852	0.0148	0.0309	-.006625	pCi/L	NO
145739002	GF0509G33R101	Americium-241	0.800 L	0.00263	0.00524	0.0366	-.006625	pCi/L	NO
145739003	GF0509G33R201	Americium-241	0.800 L	0.00145	0.00333	0.0319	-.006625	pCi/L	NO
145739004	GU05090G6CM01	Americium-241	0.800 L	0.0613	0.0125	0.0307	-.006625	pCi/L	NO
145739005	GU0509G33R101	Americium-241	0.800 L	0.00223	0.00664	0.035	-.006625	pCi/L	NO
145739006	GU0509G33R201	Americium-241	0.800 L	0.00153	0.00529	0.0322	-.006625	pCi/L	NO

Calculation of MDA using a Blank Population. **Sg** **Updated:** 7/29/2004

Batch: 468542 **Am-241** 2.81724

sample	isotope	eff (dec)	yield (dec)	volume (Liter)	abundance (dec)	count time (min)	**MDA (pCi/Liter)**
145579001	Am-241	0.35768	0.70285	0.8	0.9994	1000	**0.035**
145579002	Am-241	0.358399	0.82243	0.8	0.9994	1000	**0.030**
145579003	Am-241	0.353498	0.80601	0.8	0.9994	1000	**0.031**
145579004	Am-241	0.322495	0.81234	0.8	0.9994	1000	**0.034**
145579005	Am-241	0.288015	0.88061	0.8	0.9994	1000	**0.035**
145579006	Am-241	0.341818	0.80783	0.8	0.9994	1000	**0.032**
145579007	Am-241	0.312005	0.78472	0.8	0.9994	1000	**0.036**
145579008	Am-241	0.324802	0.83914	0.8	0.9994	1000	**0.033**
145739001	Am-241	0.347359	0.83012	0.8	0.9994	1000	**0.031**
145739002	Am-241	0.338418	0.71995	0.8	0.9994	1000	**0.037**
145739003	Am-241	0.3423	0.8154	0.8	0.9994	1000	**0.032**
145739004	Am-241	0.347586	0.83473	0.8	0.9994	1000	**0.031**
145739005	Am-241	0.331486	0.76828	0.8	0.9994	1000	**0.035**
145739006	Am-241	0.341931	0.80887	0.8	0.9994	1000	**0.032**
1200949862	Am-241	0.294773	0.79622	1	0.9994	1000	**0.030**
1200949863	Am-241	0.329118	0.80324	0.8	0.9994	1000	**0.034**
1200949864	Am-241	0.343771	0.91161	1	0.9994	1000	**0.023**

10/12/05

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579001_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :32690
AVERAGE %EFFICIENCY :35.7680
% YIELD : 70.285

COUNT DATE:11-OCT-2005 18:25:15
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B037.CNF;638
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406239
MSD PCI/L : 3.406239
LCS PCI/L : 3.406239
TRACER DPM : 6.7254
EFF FILE : W037.CNF;194
CAL DATE: 3-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

NUCLIDE ACTIVITY SUMMARY

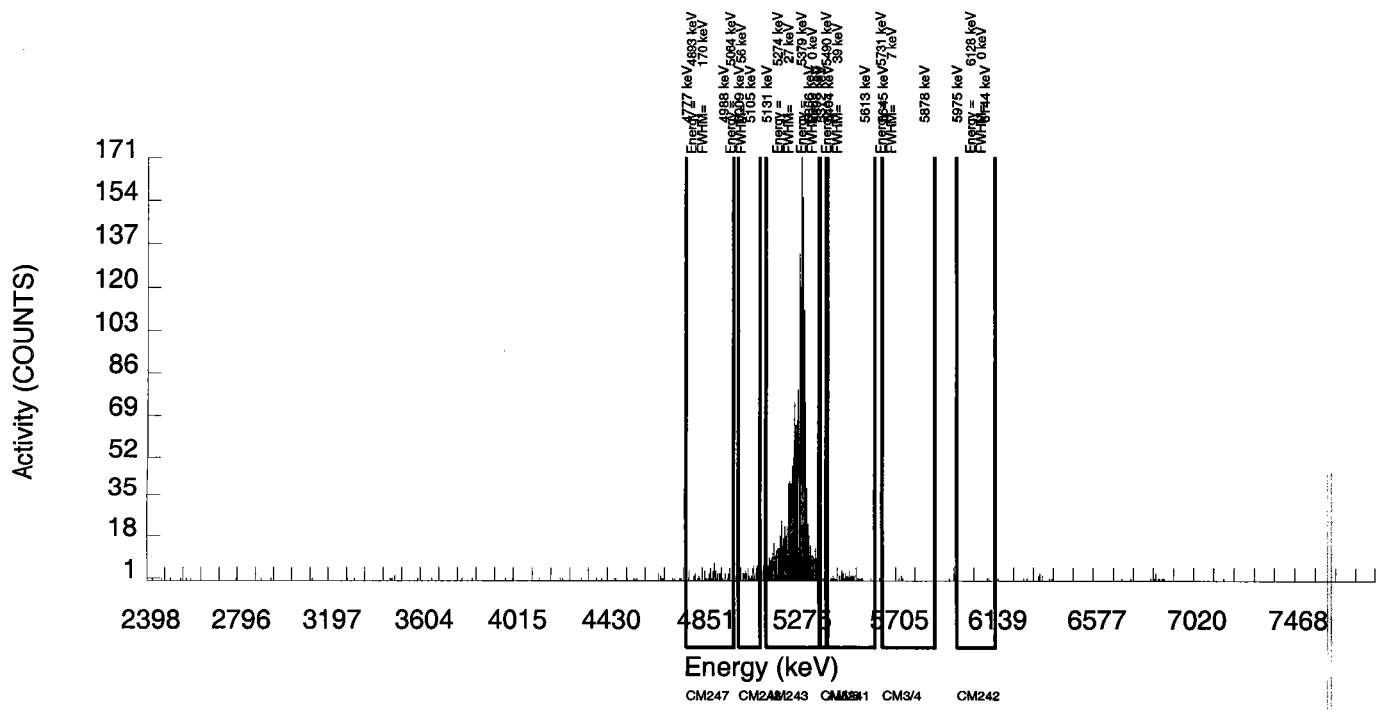
NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-10.000	15.000	100.0000	-2.25E-02	1.01E-02	2.02E-02	4.65E-02	1.00E-02
CM-5/6	5386.000	13.000	0.000	86.09000	3.38E-02	9.51E-03	0.00E+00	7.05E-03	9.38E-03
AM-241	5479.150	42.045	2.000	99.94000	9.42E-02	1.58E-02	7.37E-03	2.08E-02	1.52E-02
CM-242	6102.000	1.000	2.000	100.0000	2.54E-03	5.67E-03	8.34E-03	2.35E-02	5.67E-03
AM243	5270.000	1687.000	3.000	99.78000	3.79E+00	2.01E-01	9.04E-03	2.42E-02	9.24E-02
CM-247	4946.000	42.000	34.000	79.30000	1.19E-01	3.01E-02	3.83E-02	8.42E-02	2.96E-02
CM-248	5078.600	54.000	2.000	91.00000	1.33E-01	1.98E-02	8.10E-03	2.29E-02	1.87E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE :

10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579002_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :19323
AVERAGE %EFFICIENCY :35.8399
% YIELD : 82.243

COUNT DATE:11-OCT-2005 18:25:15
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B038.CNF;638
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406239
MSD PCI/L : 3.406239
LCS PCI/L : 3.406239
TRACER DPM : 6.7254
EFF FILE : W038.CNF;199
CAL DATE: 3-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

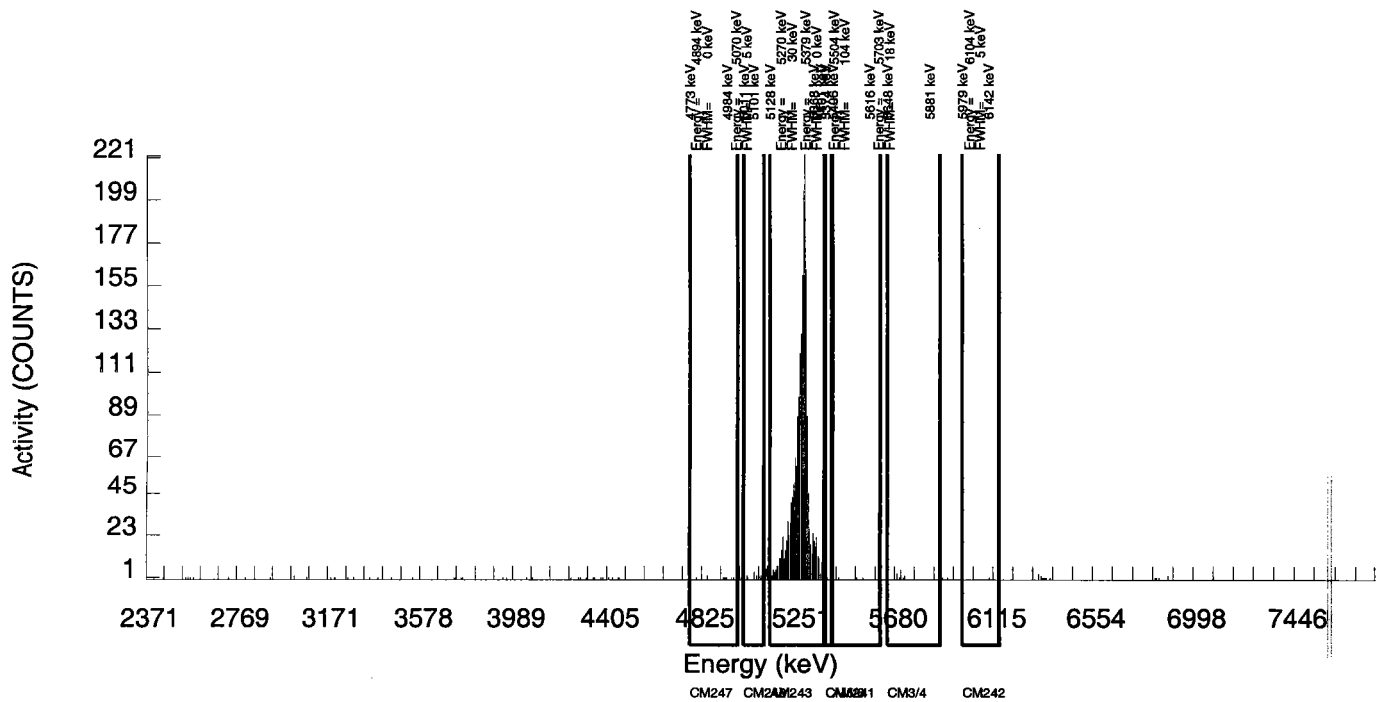
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	7.000	7.000	100.0000	1.34E-02	8.80E-03	1.18E-02	2.88E-02	8.78E-03
CM-5/6	5386.000	3.000	0.000	86.09000	6.66E-03	3.86E-03	0.00E+00	6.01E-03	3.84E-03
AM-241	5479.150	-3.465	4.000	99.94000	-6.62E-03	4.08E-03	8.89E-03	2.30E-02	4.07E-03
CM-242	6102.000	-2.000	3.000	100.0000	-4.32E-03	4.33E-03	8.71E-03	2.33E-02	4.32E-03
AM243	5270.000	1978.000	9.000	99.78000	3.79E+00	1.95E-01	1.34E-02	3.19E-02	8.55E-02
CM-247	4946.000	9.000	3.000	79.30000	2.17E-02	9.38E-03	9.71E-03	2.59E-02	9.33E-03
CM-248	5078.600	14.000	0.000	91.00000	2.94E-02	7.97E-03	0.00E+00	5.69E-03	7.85E-03

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/20/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579003_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33212
AVERAGE %EFFICIENCY :35.3498
% YIELD : 80.601

COUNT DATE:11-OCT-2005 18:25:15
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B039.CNF;637
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406239
MSD PCI/L : 3.406239
LCS PCI/L : 3.406239
TRACER DPM : 6.7254
EFF FILE : W039.CNF;183
CAL DATE: 3-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

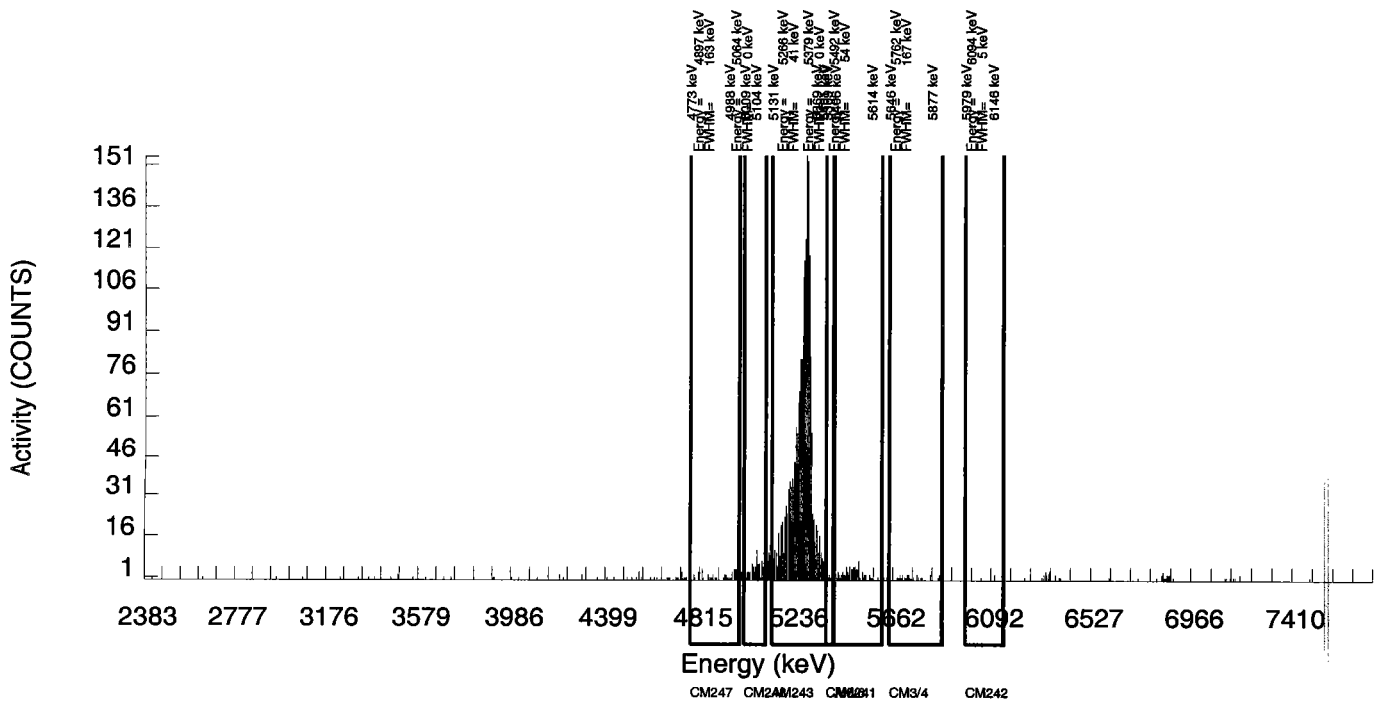
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	17.000	12.000	100.0000	3.37E-02	1.28E-02	1.60E-02	3.73E-02	1.27E-02
CM-5/6	5386.000	15.000	3.000	86.09000	3.44E-02	1.06E-02	9.25E-03	2.47E-02	1.05E-02
AM-241	5479.150	59.651	14.000	99.94000	1.18E-01	1.93E-02	1.72E-02	3.98E-02	1.85E-02
CM-242	6102.000	2.000	1.000	100.0000	4.47E-03	4.48E-03	5.20E-03	1.65E-02	4.47E-03
AM243	5270.000	1912.000	8.000	99.78000	3.79E+00	1.96E-01	1.30E-02	3.14E-02	8.70E-02
CM-247	4946.000	53.000	1.000	79.30000	1.32E-01	1.95E-02	5.80E-03	1.83E-02	1.85E-02
CM-248	5078.600	71.000	6.000	91.00000	1.54E-01	2.10E-02	1.24E-02	3.06E-02	1.98E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 14-SEP-2005 00:00:00

SAMPLE ID : S0145579004_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :30446
AVERAGE %EFFICIENCY :32.2495
% YIELD : 81.234

COUNT DATE:11-OCT-2005 18:25:15
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B040.CNF;638
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406219
MSD PCI/L : 3.406219
LCS PCI/L : 3.406219
TRACER DPM : 6.7254
EFF FILE : W040.CNF;187
CAL DATE: 3-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

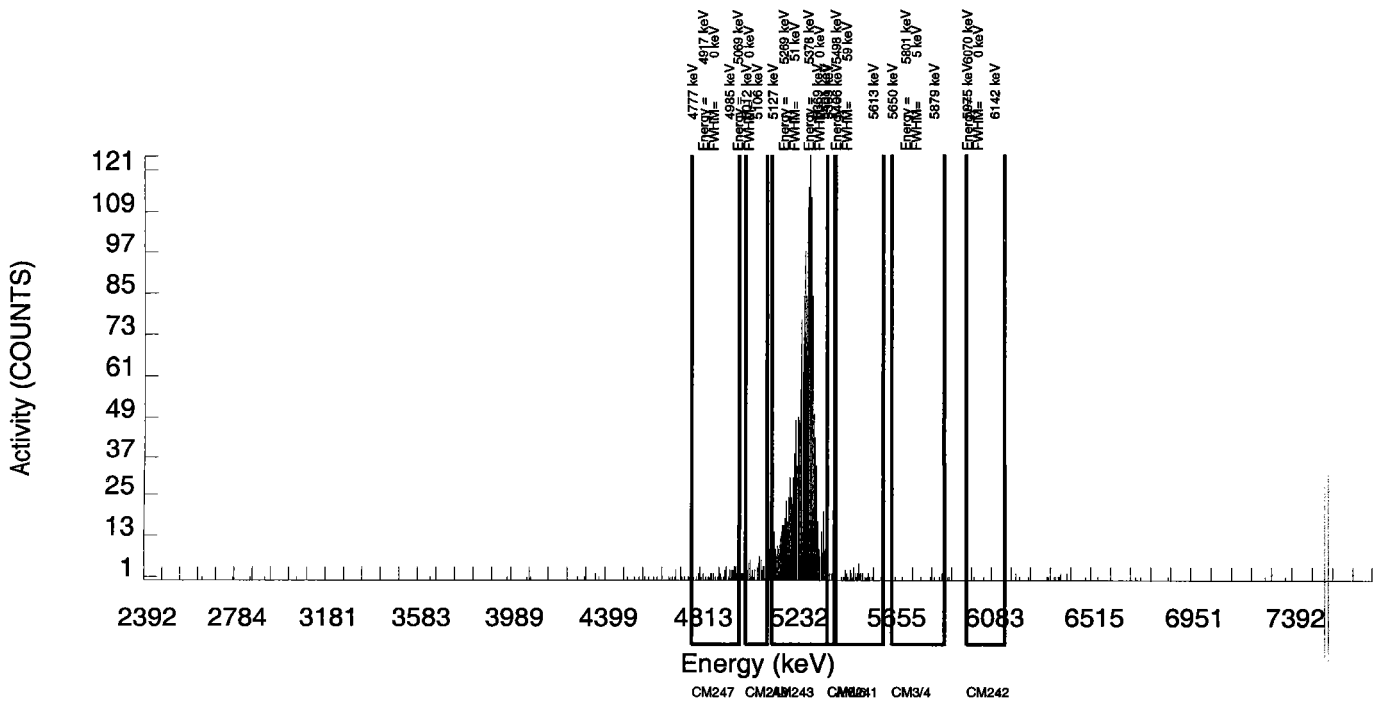
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-7.000	17.000	100.0000	-1.51E-02	1.12E-02	2.07E-02	4.72E-02	1.12E-02
CM-5/6	5386.000	11.000	3.000	86.09000	2.75E-02	1.04E-02	1.01E-02	2.69E-02	1.03E-02
AM-241	5479.150	29.921	10.000	99.94000	6.44E-02	1.55E-02	1.58E-02	3.75E-02	1.52E-02
CM-242	6102.000	0.000	3.000	100.0000	0.00E+00	5.93E-03	9.76E-03	2.61E-02	5.93E-03
AM243	5270.000	1758.000	8.000	99.78000	3.79E+00	2.00E-01	1.42E-02	3.42E-02	9.07E-02
CM-247	4946.000	47.000	9.000	79.30000	1.27E-01	2.27E-02	1.89E-02	4.52E-02	2.19E-02
CM-248	5078.600	68.000	2.000	91.00000	1.61E-01	2.14E-02	7.77E-03	2.19E-02	2.00E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579005_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :22834
AVERAGE %EFFICIENCY :28.8015
% YIELD : 88.061

COUNT DATE:11-OCT-2005 18:25:15
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B041.CNF;633
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406239
MSD PCI/L : 3.406239
LCS PCI/L : 3.406239
TRACER DPM : 6.7254
EFF FILE : W041.CNF;180
CAL DATE: 3-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

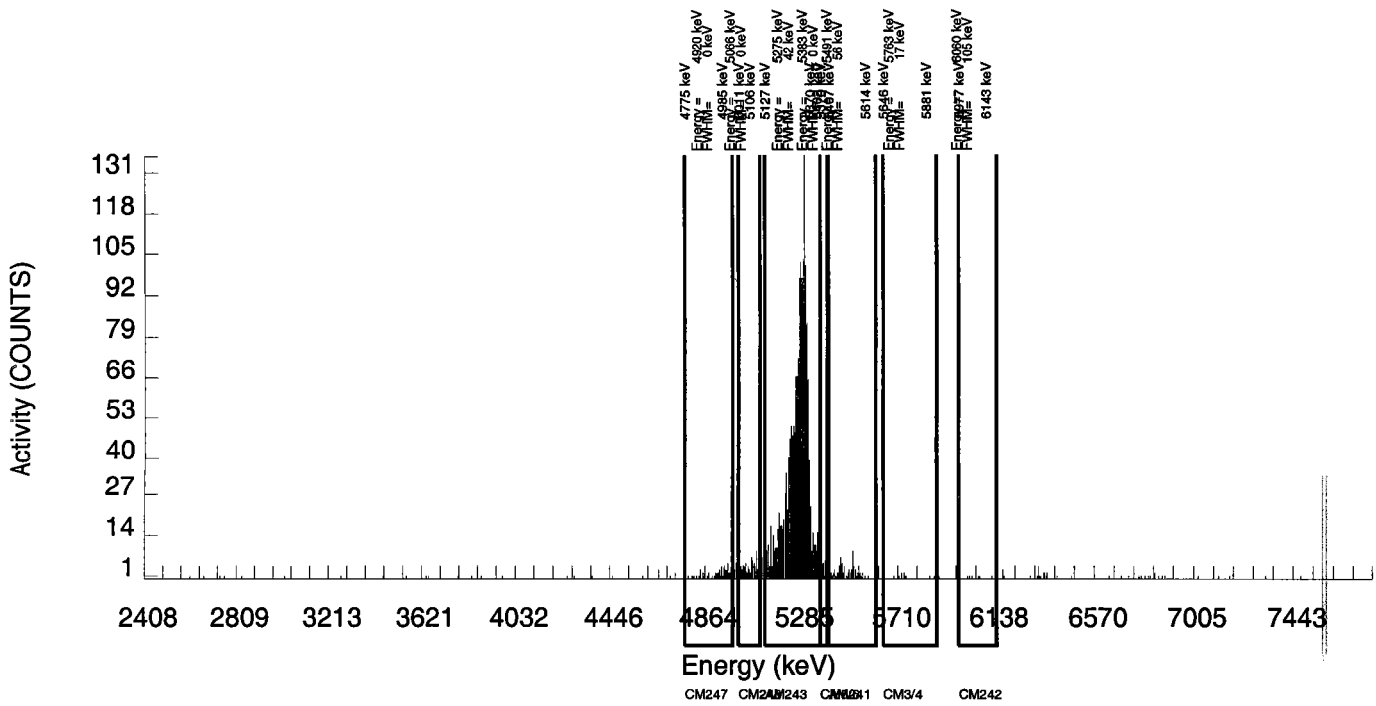
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	3.000	10.000	100.0000	6.68E-03	1.07E-02	1.64E-02	3.88E-02	1.07E-02
CM-5/6	5386.000	36.000	1.000	86.09000	9.28E-02	1.65E-02	6.00E-03	1.90E-02	1.59E-02
AM-241	5479.150	62.019	7.000	99.94000	1.38E-01	2.04E-02	1.37E-02	3.34E-02	1.94E-02
CM-242	6102.000	4.000	2.000	100.0000	1.01E-02	7.12E-03	8.27E-03	2.33E-02	7.11E-03
AM243	5270.000	1702.000	6.000	99.78000	3.79E+00	2.01E-01	1.27E-02	3.14E-02	9.21E-02
CM-247	4946.000	53.000	0.000	79.30000	1.48E-01	2.16E-02	0.00E+00	7.59E-03	2.04E-02
CM-248	5078.600	77.000	4.000	91.00000	1.88E-01	2.42E-02	1.14E-02	2.93E-02	2.25E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579006_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :32695
AVERAGE %EFFICIENCY :34.1818
% YIELD : 80.783

COUNT DATE:11-OCT-2005 18:25:15
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B042.CNF;630
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406239
MSD PCI/L : 3.406239
LCS PCI/L : 3.406239
TRACER DPM : 6.7254
EFF FILE : W042.CNF;173
CAL DATE: 3-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

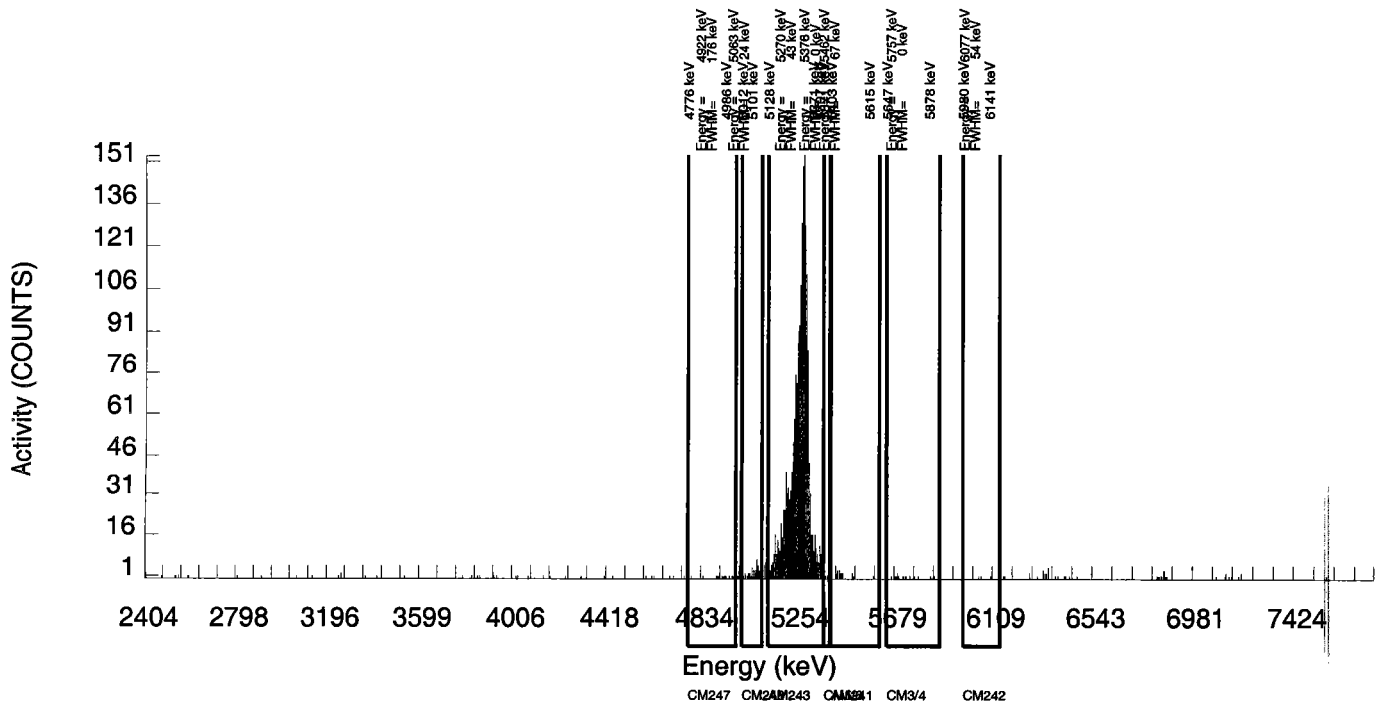
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-11.000	28.000	100.0000	-2.25E-02	1.38E-02	2.52E-02	5.59E-02	1.37E-02
CM-5/6	5386.000	13.000	2.000	86.09000	3.08E-02	9.87E-03	7.79E-03	2.20E-02	9.77E-03
AM-241	5479.150	-5.246	21.000	99.94000	-1.07E-02	1.24E-02	2.18E-02	4.90E-02	1.24E-02
CM-242	6102.000	0.000	3.000	100.0000	0.00E+00	5.65E-03	9.30E-03	2.48E-02	5.65E-03
AM243	5270.000	1853.000	17.000	99.78000	3.79E+00	1.98E-01	1.96E-02	4.47E-02	8.88E-02
CM-247	4946.000	7.000	5.000	79.30000	1.80E-02	1.06E-02	1.34E-02	3.87E-02	1.06E-02
CM-248	5078.600	39.000	4.000	91.00000	8.74E-02	1.59E-02	1.04E-02	2.69E-02	1.54E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579007_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :30428
AVERAGE %EFFICIENCY :31.2005
% YIELD : 78.472

COUNT DATE:11-OCT-2005 14:17:05
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B095.CNF;200
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406239
MSD PCI/L : 3.406239
LCS PCI/L : 3.406239
TRACER DPM : 6.7254
EFF FILE : W095.CNF;61
CAL DATE: 4-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

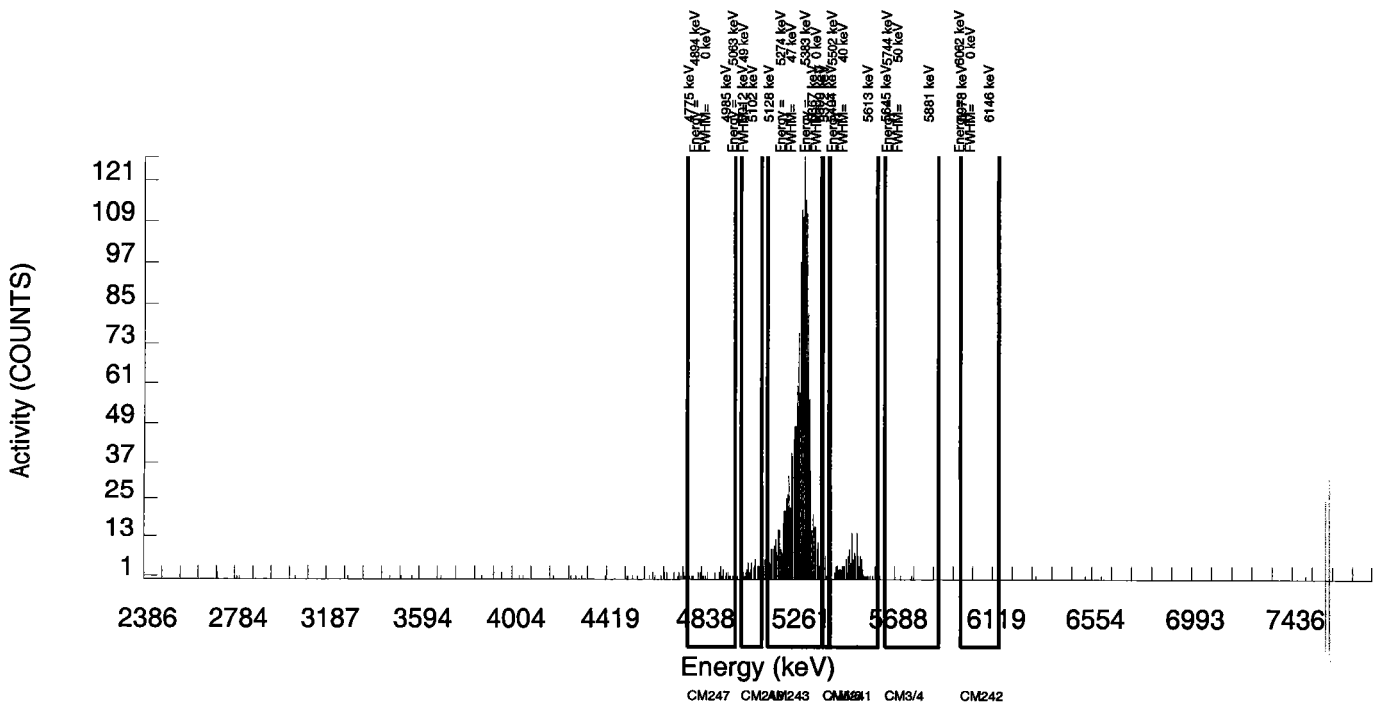
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	1.000	1.000	100.0000	2.31E-03	4.00E-03	5.37E-03	1.70E-02	4.00E-03
CM-5/6	5386.000	27.000	1.000	86.09000	7.21E-02	1.50E-02	6.21E-03	1.97E-02	1.44E-02
AM-241	5479.150	139.122	3.000	99.94000	3.20E-01	3.32E-02	9.27E-03	2.48E-02	2.77E-02
CM-242	6102.000	-2.000	2.000	100.0000	-5.20E-03	4.51E-03	8.56E-03	2.42E-02	4.51E-03
AM243	5270.000	1643.000	7.000	99.78000	3.79E+00	2.35E-01	1.42E-02	3.46E-02	9.38E-02
CM-247	4946.000	32.000	2.000	79.30000	9.28E-02	1.82E-02	9.54E-03	2.69E-02	1.74E-02
CM-248	5078.600	47.000	0.000	91.00000	1.19E-01	1.86E-02	0.00E+00	6.85E-03	1.73E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 14-SEP-2005 00:00:00

SAMPLE ID : S0145579008_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :30429
AVERAGE %EFFICIENCY :32.4802
% YIELD : 83.914

COUNT DATE:11-OCT-2005 14:17:05
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B096.CNF;198
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406219
MSD PCI/L : 3.406219
LCS PCI/L : 3.406219
TRACER DPM : 6.7254
EFF FILE : W096.CNF;52
CAL DATE: 4-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

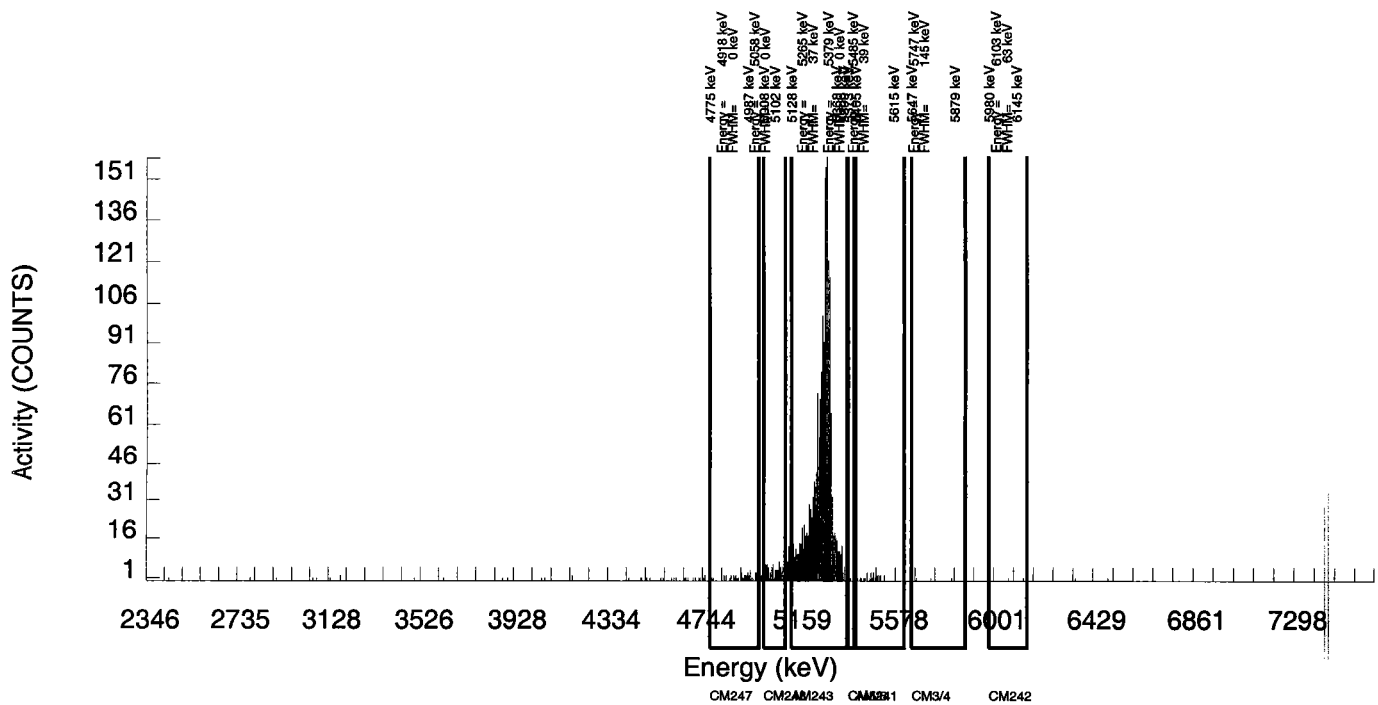
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-5.000	9.000	100.0000	-1.04E-02	7.49E-03	1.45E-02	3.45E-02	7.47E-03
CM-5/6	5386.000	8.000	1.000	86.09000	1.92E-02	7.66E-03	5.58E-03	1.77E-02	7.59E-03
AM-241	5479.150	20.796	9.000	99.94000	4.30E-02	1.31E-02	1.44E-02	3.44E-02	1.29E-02
CM-242	6102.000	1.000	1.000	100.0000	2.33E-03	4.03E-03	5.41E-03	1.71E-02	4.03E-03
AM243	5270.000	1829.000	4.000	99.78000	3.79E+00	2.31E-01	9.63E-03	2.49E-02	8.87E-02
CM-247	4946.000	47.000	1.000	79.30000	1.22E-01	1.95E-02	6.06E-03	1.92E-02	1.82E-02
CM-248	5078.600	78.000	0.000	91.00000	1.77E-01	2.24E-02	0.00E+00	6.15E-03	2.00E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 4-OCT-2005 00:00:00.

SAMPLE ID : S1200949862_AM
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :30436
AVERAGE %EFFICIENCY :29.4773
% YIELD : 79.622

COUNT DATE:11-OCT-2005 14:17:08
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B104.CNF;202
BKG DATE: 9-OCT-2005

MS PCI/L : 2.724736
MSD PCI/L : 2.724736
LCS PCI/L : 2.724736
TRACER DPM : 6.7254
EFF FILE : W104.CNF;57
CAL DATE: 10-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

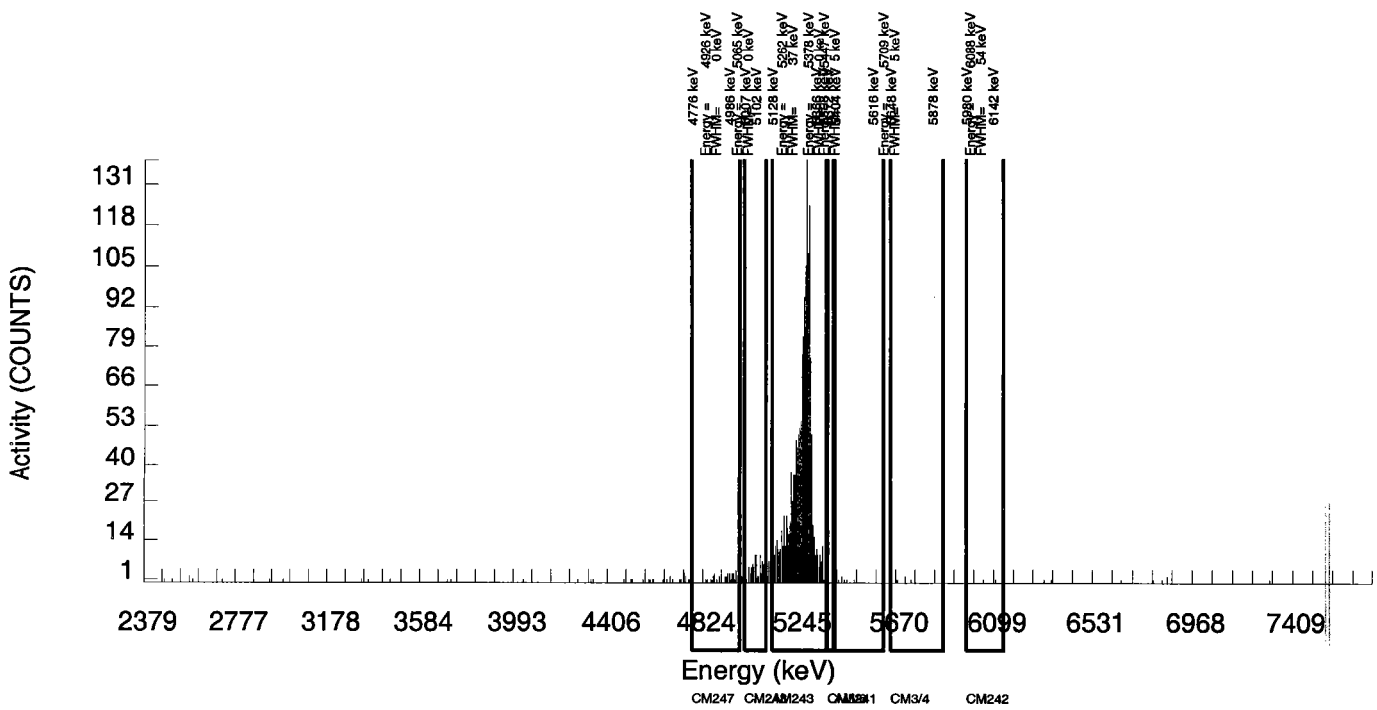
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-1.000	6.000	100.0000	-1.92E-03	6.37E-03	1.09E-02	2.71E-02	6.37E-03
CM-5/6	5386.000	5.000	1.000	86.09000	1.11E-02	5.92E-03	5.19E-03	1.64E-02	5.90E-03
AM-241	5479.150	-2.759	7.000	99.94000	-5.30E-03	6.44E-03	1.18E-02	2.88E-02	6.44E-03
CM-242	6102.000	2.000	0.000	100.0000	3.97E-03	2.81E-03	0.00E+00	5.38E-03	2.81E-03
AM243	5270.000	1575.000	1.000	99.78000	3.03E+00	1.63E-01	4.47E-03	1.42E-02	7.64E-02
CM-247	4946.000	42.000	2.000	79.30000	1.02E-01	1.71E-02	7.96E-03	2.25E-02	1.64E-02
CM-248	5078.600	83.000	0.000	91.00000	1.75E-01	2.09E-02	0.00E+00	5.72E-03	1.92E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S1200949863_AM
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :45381
AVERAGE %EFFICIENCY :32.9118
% YIELD : 80.324

COUNT DATE:11-OCT-2005 14:17:08
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B105.CNF;202
BKG DATE: 9-OCT-2005

MS PCI/L : 3.406239
MSD PCI/L : 3.406239
LCS PCI/L : 3.406239
TRACER DPM : 6.7254
EFF FILE : W105.CNF;52
CAL DATE: 4-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

NUCLIDE ACTIVITY SUMMARY

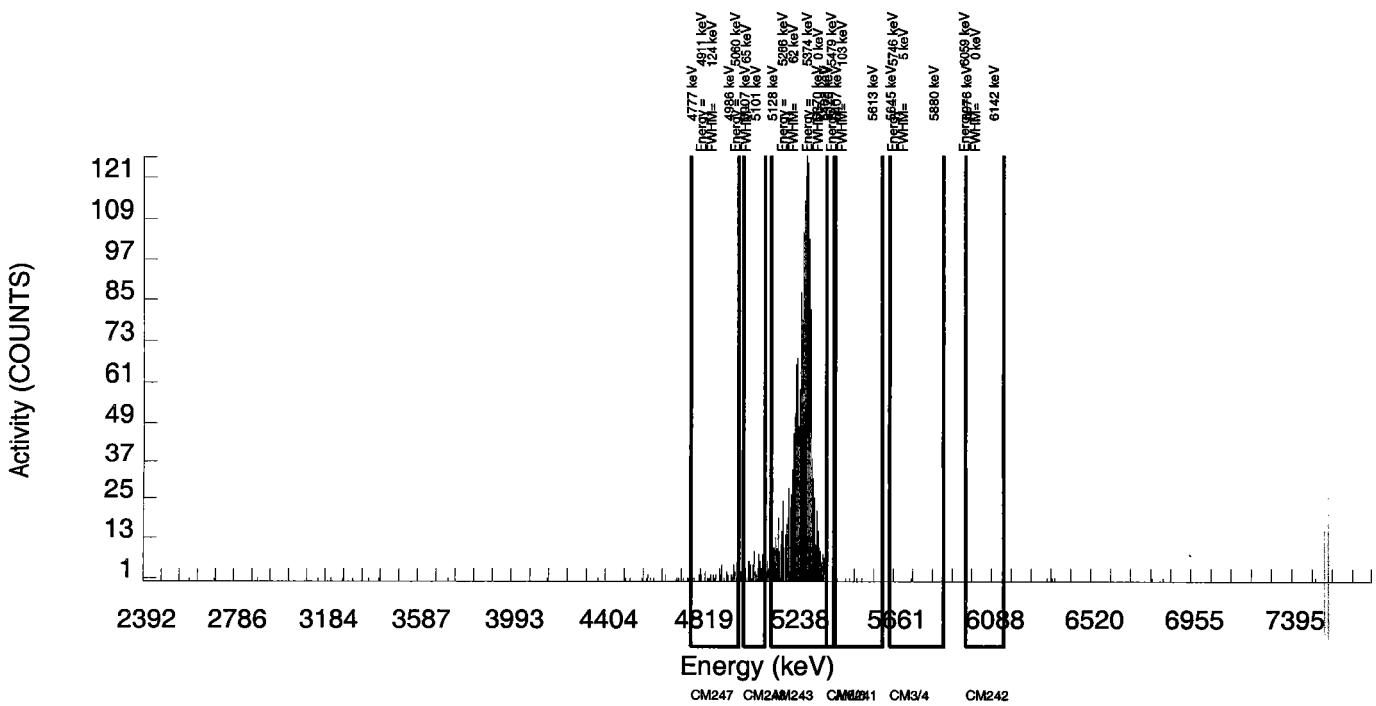
NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	0.000	1.000	100.0000	0.00E+00	3.02E-03	4.97E-03	1.57E-02	3.02E-03
CM-5/6	5386.000	9.000	1.000	86.09000	2.23E-02	8.27E-03	5.76E-03	1.82E-02	8.21E-03
AM-241	5479.150	1.893	0.000	99.94000	4.03E-03	2.94E-03	0.00E+00	5.78E-03	2.93E-03
CM-242	6102.000	-2.000	2.000	100.0000	-4.82E-03	4.17E-03	7.93E-03	2.24E-02	4.17E-03
AM243	5270.000	1774.000	1.000	99.78000	3.79E+00	1.99E-01	4.97E-03	1.57E-02	9.00E-02
CM-247	4946.000	46.000	2.000	79.30000	1.24E-01	1.99E-02	8.84E-03	2.49E-02	1.90E-02
CM-248	5078.600	77.000	1.000	91.00000	1.80E-01	2.25E-02	5.45E-03	1.72E-02	2.08E-02

REVIEWED BY:

NOTE: Corrections made to AM-241

DATE : 10/12/05

AM241 = 0.480



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468542
SAMPLE DATE : 4-OCT-2005 00:00:00.

SAMPLE ID : S1200949864_AM
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :45382
AVERAGE %EFFICIENCY :34.3771
% YIELD : 91.161

COUNT DATE:11-OCT-2005 14:17:08
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0533-E
MSD : 0533-E
LCS : 0533-E
TRACER : 445-96-2-BB
BKG FILE: B106.CNF;202
BKG DATE: 9-OCT-2005

MS PCI/L : 2.724736
MSD PCI/L : 2.724736
LCS PCI/L : 2.724736
TRACER DPM : 6.7254
EFF FILE : W106.CNF;52
CAL DATE: 7-OCT-2005

MS ISOTOPE : AM-241
MSD ISOTOPE: AM-241
LCS ISOTOPE: AM-241
TRACER ISOTOPE: AM243
LIB FILE : ENV_ALPHA_AM.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
CM-3/4	5795.020	-1.000	1.000	100.0000	-1.44E-03	2.03E-03	3.35E-03	1.06E-02	2.03E-03
CM-5/6	5386.000	92.000	1.000	86.09000	1.54E-01	1.77E-02	3.88E-03	1.23E-02	1.62E-02
AM-241	5479.150	1761.316	2.000	99.94000	2.53E+00	1.31E-01	4.73E-03	1.34E-02	6.04E-02
CM-242	6102.000	0.000	0.000	100.0000	0.00E+00	1.49E-03	0.00E+00	4.03E-03	1.49E-03
AM243	5270.000	2103.000	3.000	99.78000	3.03E+00	1.54E-01	5.80E-03	1.55E-02	6.62E-02
CM-247	4946.000	56.000	1.000	79.30000	1.02E-01	1.46E-02	4.22E-03	1.33E-02	1.38E-02
CM-248	5078.600	119.000	1.000	91.00000	1.88E-01	1.94E-02	3.67E-03	1.16E-02	1.74E-02

REVIEWED BY:

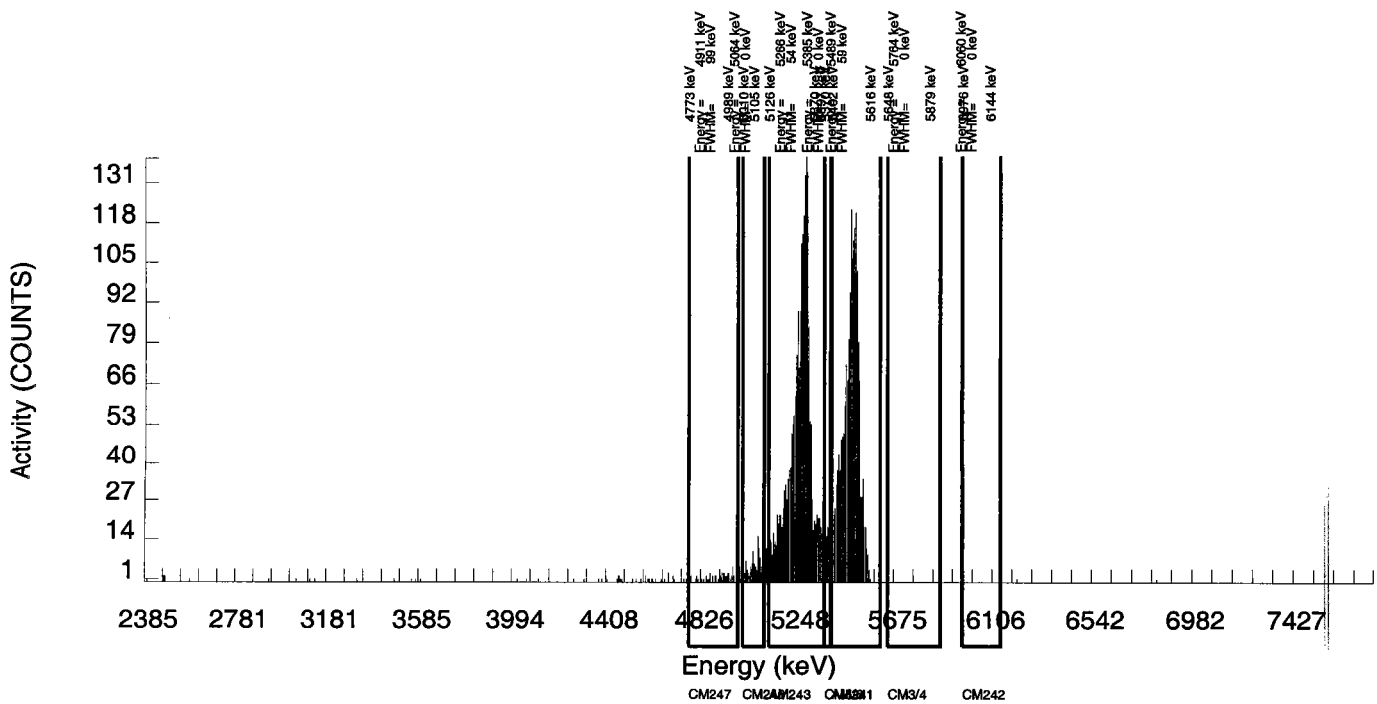
NOTE: Corrections made to AM-241

DATE :

10/12/05

LCS = 2.53 / 2.722 = 93.0%

DLD 10/12/05



Radiochemistry Batch Checklist, Rev 4

Batch# 468544 Product: Pu Date: 10/13/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg for GAB.			NA
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.		✓	NCR# 257649
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓ NA 10/13/05	✓	Case narrative
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	✓		NCR# 257649

General Engineering Laboratories

2/22/2005

Primary Review Performed By: [signature] 10/13/05

Secondary Review Performed By: [signature] 10/13/05

10/8-10/15
ESHC

Plutonium Que Sheet

03-OCT-05

Batch #: 468544 **Analyst:** BJB1 **Minimum DueDate:** 08-OCT-05

Tracer Isotope(s): Pu-242/Pu-236 **Tracer Code:** 0826-A **Expiration Date:** 9/26/06 **Vol:** 0.1mL

LCS Isotope(s): Pu-239/Pu-238 **LCS Code:** 0338-R **Expiration Date:** 7/19/06 **Vol:** 0.1mL

Spike Isotope(s): Pu-239/Pu-238 **Spike Code:** NA **Expiration Date:** NA **Vol:** 0 NA BJB 10/4/05

Prep Date: 10/4/05 **Initials:** BJB **Pipet ID:** 4497313 **Balance ID:** 16750207 **Witness:** [illegible] 10/4/05

Sample ID	Client	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label #	Aliquot (g / (1) f)	Pu Det #	Ash Weight (g)
145579001	GF05090G3TM01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-SEP-05	61	0.800	57	
145579002	GF05090GMC401	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-SEP-05	62	0.800	37	
145579003	GF05090G57M01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-SEP-05	63	0.800	59	
145579004	GF05090G7CM01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-SEP-05	64	0.800	39	
145579005	GU05090G3TM01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-SEP-05	65	0.800	67	
145579006	GU05090GMC401	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-SEP-05	66	0.800	68	
145579007	GU05090G57M01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	13-SEP-05	67	0.800	69	
145579008	GU05090G7CM01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-SEP-05	68	0.800	70	
145739001	GF05090G6CM01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-SEP-05	69	0.800	62	
145739002	GF0509G33R101	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-SEP-05	70	0.800	72	
145739003	GF0509G33R201	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	15-SEP-05	71	0.800	73	
145739004	GU05090G6CM01	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-SEP-05	72	0.800	74	
145739005	GU0509G33R101	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	14-SEP-05	73	0.800	75	
145739006	GU0509G33R201	SAMPLE		.05 pCi/L	GROUND WATI	ESHL001	15-SEP-05	74	0.800	76	
1200949865	MB for batch 468544	MB		.05 pCi/L	GROUND WATI	QC ACCOUNT		75	1.00	83	
1200949866	GU05090GMC401(145579006DUP)	DUP		.05 pCi/L	GROUND WATI	QC ACCOUNT	13-SEP-05	76	0.800	64	
1200949867	LCS for batch 468544	LCS		.05 pCi/L	GROUND WATI	QC ACCOUNT		77	1.00	85	

1382

Solid Sample Dissolution by: LEACH or DIGESTION (Circle One) BJB 10/4/05

Data Reviewed By: MA 10/12/05

General Engineering Laboratories, Radiochemistry Division

10/13/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200949866	DUP	Plutonium-238	0.800 L	-0.0018	0.00697	0.0373	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.0018	0.00596	0.0315	-.0124375	pCi/L	NO
1200949867	LCS	Plutonium-238	1.00 L	0.0131	0.0052	0.034	.00426	pCi/L	YES
		Plutonium-239/240	1.00 L	2.35	0.103	0.0287	-.00995	pCi/L	NO
1200949865	MB	Plutonium-238	1.00 L	0.00426	0.00711	0.0295	.00426	pCi/L	YES
		Plutonium-239/240	1.00 L	-0.00995	0.00587	0.0249	-.00995	pCi/L	NO
145579001	GF05090G3TM01	Plutonium-238	0.800 L	-0.0125	0.0106	0.0431	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.0083	0.00881	0.0364	-.0124375	pCi/L	NO
145579002	GF05090GMC401	Plutonium-238	0.800 L	0.00353	0.0025	0.0366	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00353	0.00558	0.0309	-.0124375	pCi/L	NO
145579003	GF05090G57M01	Plutonium-238	0.800 L	0.0479	0.0181	0.0452	.005325	pCi/L	NO
		Plutonium-239/240	0.800 L	0.0718	0.0199	0.0382	-.0124375	pCi/L	NO
145579004	GF05090G7CM01	Plutonium-238	0.800 L	0.0229	0.011	0.0365	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00352	0.00825	0.0309	-.0124375	pCi/L	NO
145579005	GU05090G3TM01	Plutonium-238	0.800 L	0.00399	0.0109	0.0414	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00599	0.00773	0.035	-.0124375	pCi/L	NO
145579006	GU05090GMC401	Plutonium-238	0.800 L	-0.0156	0.00997	0.0405	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	0.00781	0.00731	0.0342	-.0124375	pCi/L	NO
145579007	GU05090G57M01	Plutonium-238	0.800 L	0.236	0.0246	0.0449	.005325	pCi/L	NO
		Plutonium-239/240	0.800 L	0.324	0.0295	0.0379	-.0124375	pCi/L	NO
145579008	GU05090G7CM01	Plutonium-238	0.800 L	0.00905	0.00702	0.0376	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0109	0.00678	0.0317	-.0124375	pCi/L	NO
145739001	GF05090G6CM01	Plutonium-238	0.800 L	0.0212	0.0124	0.0401	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00772	0.0082	0.0339	-.0124375	pCi/L	NO
145739002	GF0509G33R101	Plutonium-238	0.800 L	0.0135	0.0143	0.0698	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0269	0.0107	0.059	-.0124375	pCi/L	NO
145739003	GF0509G33R201	Plutonium-238	0.800 L	-0.0109	0.0079	0.0454	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00875	0.00876	0.0384	-.0124375	pCi/L	NO
145739004	GU05090G6CM01	Plutonium-238	0.800 L	0.00938	0.0124	0.0486	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	0.0305	0.0113	0.0411	-.0124375	pCi/L	NO
145739005	GU0509G33R101	Plutonium-238	0.800 L	0.00215	0.0108	0.0447	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.00645	0.00986	0.0377	-.0124375	pCi/L	NO
145739006	GU0509G33R201	Plutonium-238	0.800 L	0.0222	0.0089	0.046	.005325	pCi/L	YES
		Plutonium-239/240	0.800 L	-0.0199	0.0111	0.0389	-.0124375	pCi/L	NO

MA 10/12/05

Calculation of MDA using a Blank Population.

Batch: 468544

Sq	
Pu-238	3.881
Pu-239	3.187

Updated: 06-Apr-05

sample	isotope	eff (dec)	yield (dec)	volume (Liter)	abundance (dec)	count time (min)	MDA (pCi/Liter)
145579001	Pu-238	0.324937	0.8357	0.8	0.999	1000	**0.043**
	Pu-239	0.324937	0.8357	0.8	0.999	1000	**0.036**
145579002	Pu-238	0.35768	0.89381	0.8	0.999	1000	**0.037**
	Pu-239	0.35768	0.89381	0.8	0.999	1000	**0.031**
145579003	Pu-238	0.290671	0.89074	0.8	0.999	1000	**0.045**
	Pu-239	0.290671	0.89074	0.8	0.999	1000	**0.038**
145579004	Pu-238	0.353498	0.90643	0.8	0.999	1000	**0.037**
	Pu-239	0.353498	0.90643	0.8	0.999	1000	**0.031**
145579005	Pu-238	0.311942	0.90563	0.8	0.999	1000	**0.041**
	Pu-239	0.311942	0.90563	0.8	0.999	1000	**0.035**
145579006	Pu-238	0.301007	0.95932	0.8	0.999	1000	**0.041**
	Pu-239	0.301007	0.95932	0.8	0.999	1000	**0.034**
145579007	Pu-238	0.291079	0.89611	0.8	0.999	1000	**0.045**
	Pu-239	0.291079	0.89611	0.8	0.999	1000	**0.038**
145579008	Pu-238	0.347113	0.89744	0.8	0.999	1000	**0.038**
	Pu-239	0.347113	0.89744	0.8	0.999	1000	**0.032**
145739001	Pu-238	0.332635	0.87788	0.8	0.999	1000	**0.040**
	Pu-239	0.332635	0.87788	0.8	0.999	1000	**0.034**
145739002	Pu-238	0.276913	0.60551	0.8	0.999	1000	**0.070**
	Pu-239	0.276913	0.60551	0.8	0.999	1000	**0.059**
145739003	Pu-238	0.334889	0.76918	0.8	0.999	1000	**0.045**
	Pu-239	0.334889	0.76918	0.8	0.999	1000	**0.038**
145739004	Pu-238	0.271708	0.88557	0.8	0.999	1000	**0.049**
	Pu-239	0.271708	0.88557	0.8	0.999	1000	**0.041**
145739005	Pu-238	0.331452	0.79059	0.8	0.999	1000	**0.045**
	Pu-239	0.331452	0.79059	0.8	0.999	1000	**0.038**
145739006	Pu-238	0.318558	0.7984	0.8	0.999	1000	**0.046**
	Pu-239	0.318558	0.7984	0.8	0.999	1000	**0.039**

MA 10/13/05

1200949865	Pu-238	0.306297	1.03589	1	0.999	1000	**0.030**
	Pu-239	0.306297	1.03589	1	0.999	1000	**0.025**
1200949866	Pu-238	0.291347	1.07582	0.8	0.999	1000	**0.037**
	Pu-239	0.291347	1.07582	0.8	0.999	1000	**0.032**
1200949867	Pu-238	0.30304	0.9084	1	0.999	1000	**0.034**
	Pu-239	0.30304	0.9084	1	0.999	1000	**0.029**

MA 10/13/16

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

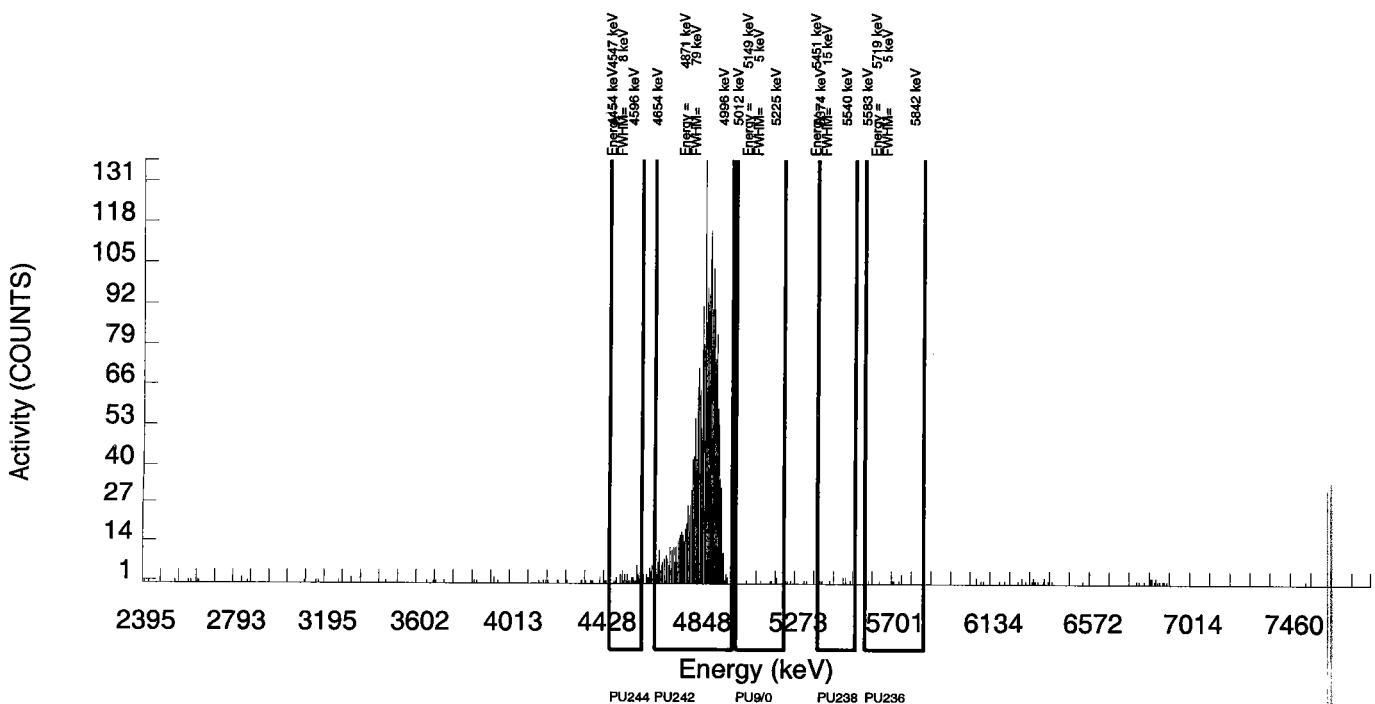
BATCH NUMBER: 468544 SAMPLE DATE : 13-SEP-2005 00:00:00	SAMPLE ID : S0145579001_PU SAMPLE QTY: 0.800 L
DETECTOR NUMBER :29274 AVERAGE %EFFICIENCY :32.4937 % YIELD : 83.570	COUNT DATE:12-OCT-2005 17:01:18 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :BJB1

MS : 0338-R MSD : 0338-R LCS : 0338-R TRACER : 0826-A BKG FILE: B057.CNF;586 BKG DATE: 9-OCT-2005	MS PCI/L : 3.145570 MSD PCI/L : 3.145570 LCS PCI/L : 3.145570 TRACER DPM : 8.3078 EFF FILE : W057.CNF;138 CAL DATE: 4-OCT-2005	MS ISOTOPE : PU-9/0 MSD ISOTOPE: PU-9/0 LCS ISOTOPE: PU-9/0 TRACER ISOTOPE: PU242 LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	-4.000 ✓	11.000	99.90000	-8.30E-03	8.81E-03	1.60E-02	3.76E-02	8.81E-03
PU-236	5749.000	-1.000	10.000	100.0000	-2.12E-03	9.22E-03	1.56E-02	3.68E-02	9.22E-03
PU-238	5499.000	-6.000 ✓	16.000	99.90000	-1.25E-02	1.06E-02	1.93E-02	4.43E-02	1.06E-02
PU242	4890.000	2256.000	10.000	100.0000	4.68E+00	2.41E-01	1.53E-02	3.61E-02	9.89E-02
PU-244	4589.000	33.000	4.000	99.90000	6.85E-02	1.37E-02	9.66E-03	2.49E-02	1.33E-02

REVIEWED BY: DATE : MA 10/19/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

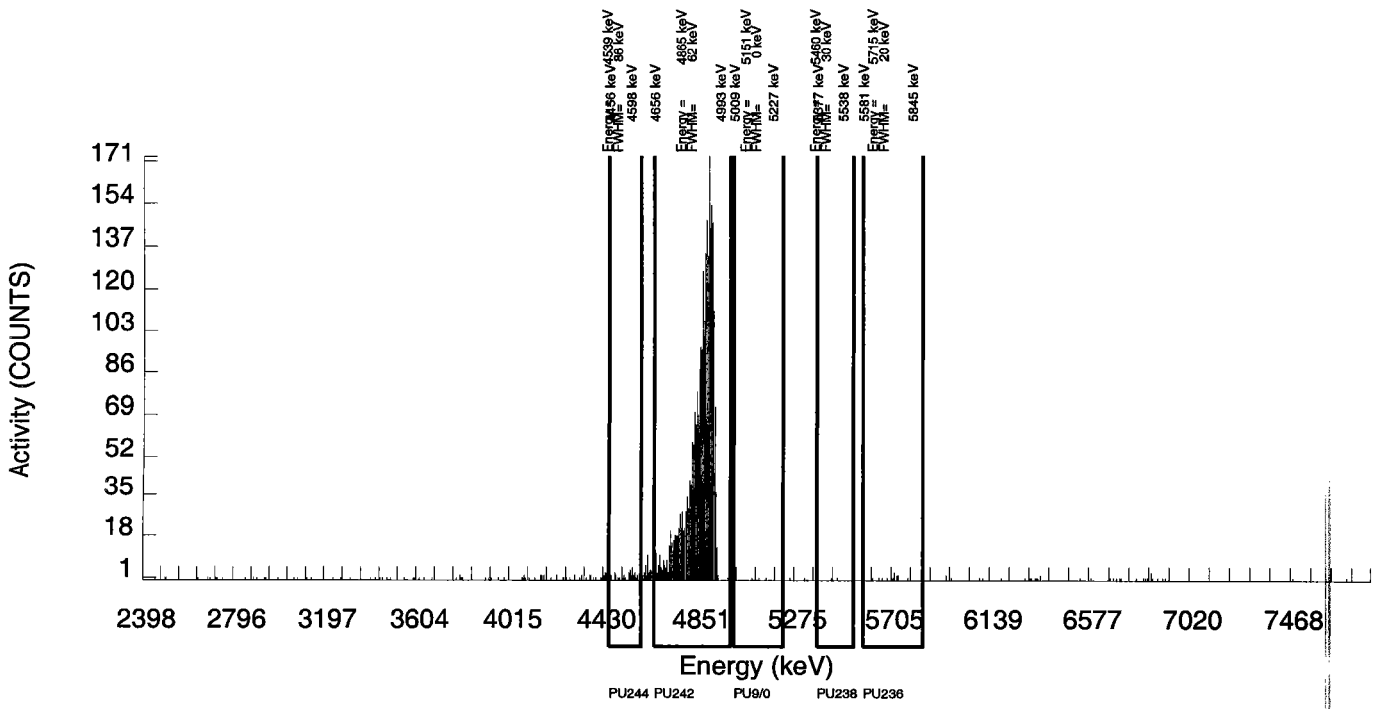
BATCH NUMBER: 468544	SAMPLE ID : S0145579002_PU
SAMPLE DATE : 13-SEP-2005 00:00:00	SAMPLE QTY: 0.800 L
DETECTOR NUMBER :32690	COUNT DATE:10-OCT-2005 20:36:59
AVERAGE %EFFICIENCY :35.7680	ELAPSED LIVE TIME(SEC): 60000.00
% YIELD : 89.381	ANALYST :BJB1

MS : 0338-R	MS PCI/L : 3.145570	MS ISOTOPE : PU-9/0
MSD : 0338-R	MSD PCI/L : 3.145570	MSD ISOTOPE: PU-9/0
LCS : 0338-R	LCS PCI/L : 3.145570	LCS ISOTOPE: PU-9/0
TRACER : 0826-A	TRACER DPM : 8.3078	TRACER ISOTOPE: PU242
BKG FILE: B037.CNF;638	EFF FILE : W037.CNF;194	LIB FILE : ENV_ALPHA_PU.N
BKG DATE: 9-OCT-2005	CAL DATE: 3-OCT-2005	

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	-2.000 ✓	6.000	99.90000	-3.53E-03	5.58E-03	1.00E-02	2.49E-02	5.58E-03
PU-236	5749.000	-1.000	15.000	100.0000	-1.79E-03	9.66E-03	1.62E-02	3.72E-02	9.66E-03
PU-238	5499.000	2.000	0.000	99.90000	3.53E-03	2.50E-03	0.00E+00	4.78E-03	2.49E-03
PU242	4890.000	2656.000	41.000	100.0000	4.68E+00	1.84E-01	2.62E-02	5.72E-02	9.22E-02
PU-244	4589.000	36.000	5.000	99.90000	6.35E-02	1.22E-02	9.17E-03	2.31E-02	1.20E-02

REVIEWED BY: DATE : mar 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579003_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :30426
AVERAGE %EFFICIENCY :29.0671
% YIELD : 89.074

COUNT DATE:12-OCT-2005 17:01:18
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B059.CNF;614
BKG DATE: 9-OCT-2005

MS PCI/L : 3.145570
MSD PCI/L : 3.145570
LCS PCI/L : 3.145570
TRACER DPM : 8.3078
EFF FILE : W059.CNF;163
CAL DATE: 4-OCT-2005

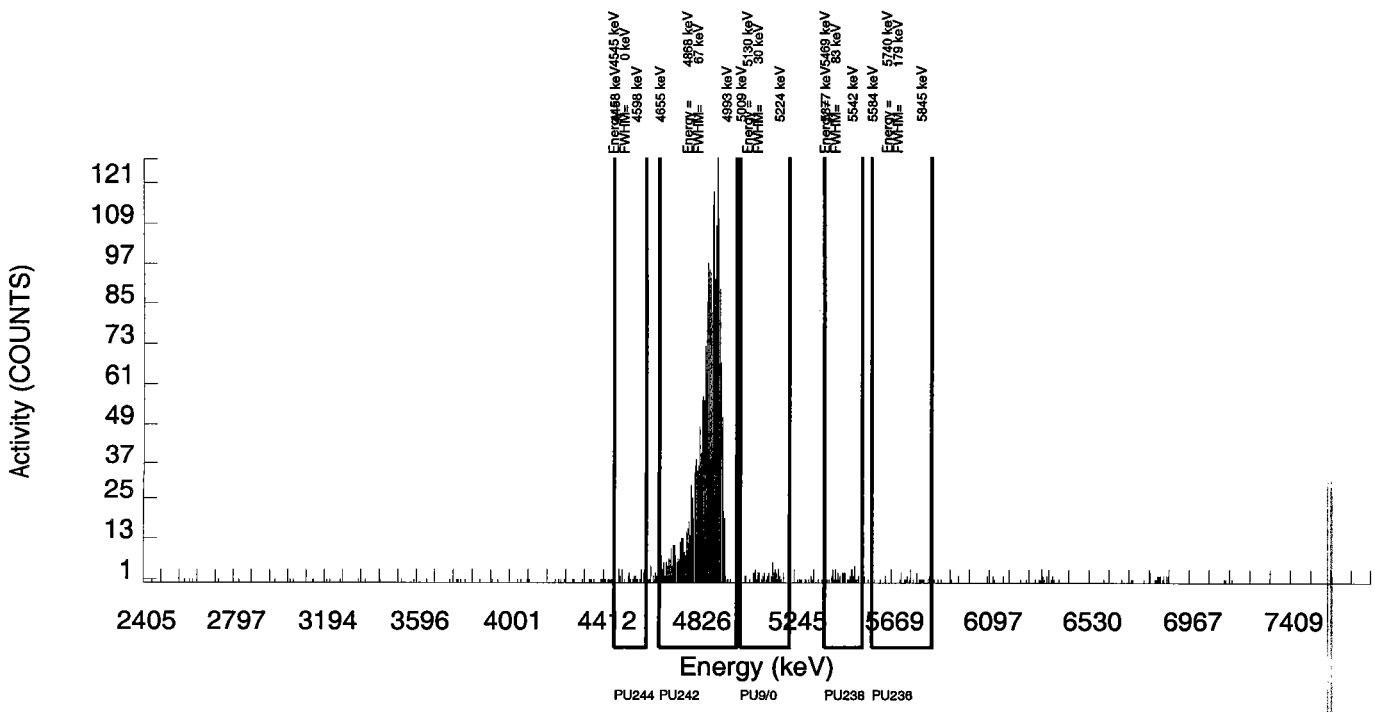
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	33.000	24.000	99.90000	7.18E-02	1.99E-02	2.48E-02	5.55E-02	1.96E-02
PU-236	5749.000	-1.000	30.000	100.0000	-2.22E-03	1.70E-02	2.83E-02	6.25E-02	1.70E-02
PU-238	5499.000	22.000	23.000	99.90000	4.79E-02	1.81E-02	2.43E-02	5.45E-02	1.80E-02
PU242	4890.000	2151.000	8.000	100.0000	4.68E+00	2.43E-01	1.43E-02	3.45E-02	1.01E-01
PU-244	4589.000	23.000	6.000	99.90000	5.01E-02	1.31E-02	1.24E-02	3.07E-02	1.29E-02

REVIEWED BY:

DATE : MD 10/13/06



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 14-SEP-2005 00:00:00

SAMPLE ID : S0145579004_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33212
AVERAGE %EFFICIENCY :35.3498
% YIELD : 90.643

COUNT DATE:10-OCT-2005 20:36:59
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B039.CNF;637
BKG DATE: 9-OCT-2005

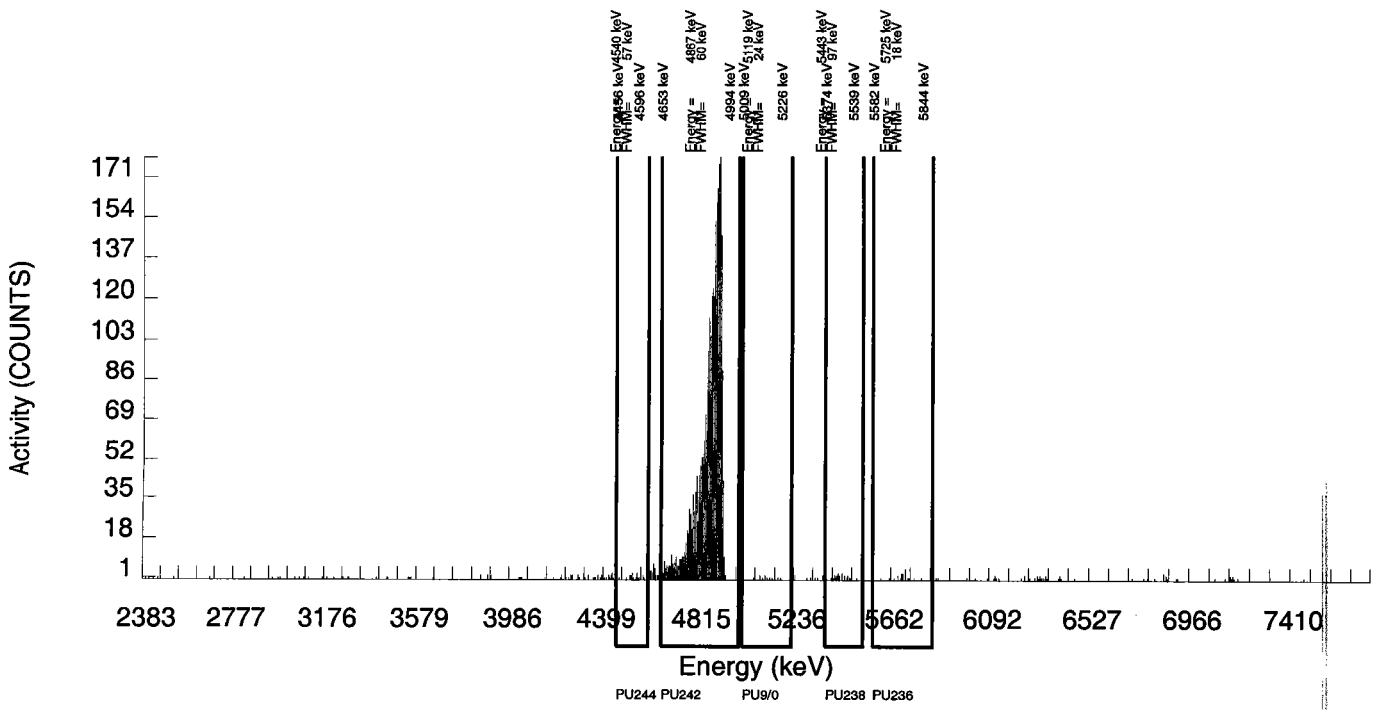
MS PCI/L : 3.145570
MSD PCI/L : 3.145570
LCS PCI/L : 3.145570
TRACER DPM : 8.3078
EFF FILE : W039.CNF;183
CAL DATE: 3-OCT-2005

MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	2.000	10.000	99.90000	3.52E-03	8.25E-03	1.29E-02	3.06E-02	8.25E-03
PU-236	5749.000	8.000	14.000	100.0000	1.43E-02	1.07E-02	1.56E-02	3.60E-02	1.07E-02
PU-238	5499.000	13.000	13.000	99.90000	2.29E-02	1.10E-02	1.48E-02	3.43E-02	1.10E-02
PU242	4890.000	2662.000	4.000	100.0000	4.68E+00	1.83E-01	8.18E-03	2.11E-02	9.08E-02
PU-244	4589.000	21.000	2.000	99.90000	3.69E-02	8.88E-03	5.79E-03	1.63E-02	8.80E-03

REVIEWED BY: DATE : 10/26/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579005_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33205
AVERAGE %EFFICIENCY :31.1942
% YIELD : 90.563

COUNT DATE:11-OCT-2005 14:16:51
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B067.CNF;625
BKG DATE: 9-OCT-2005

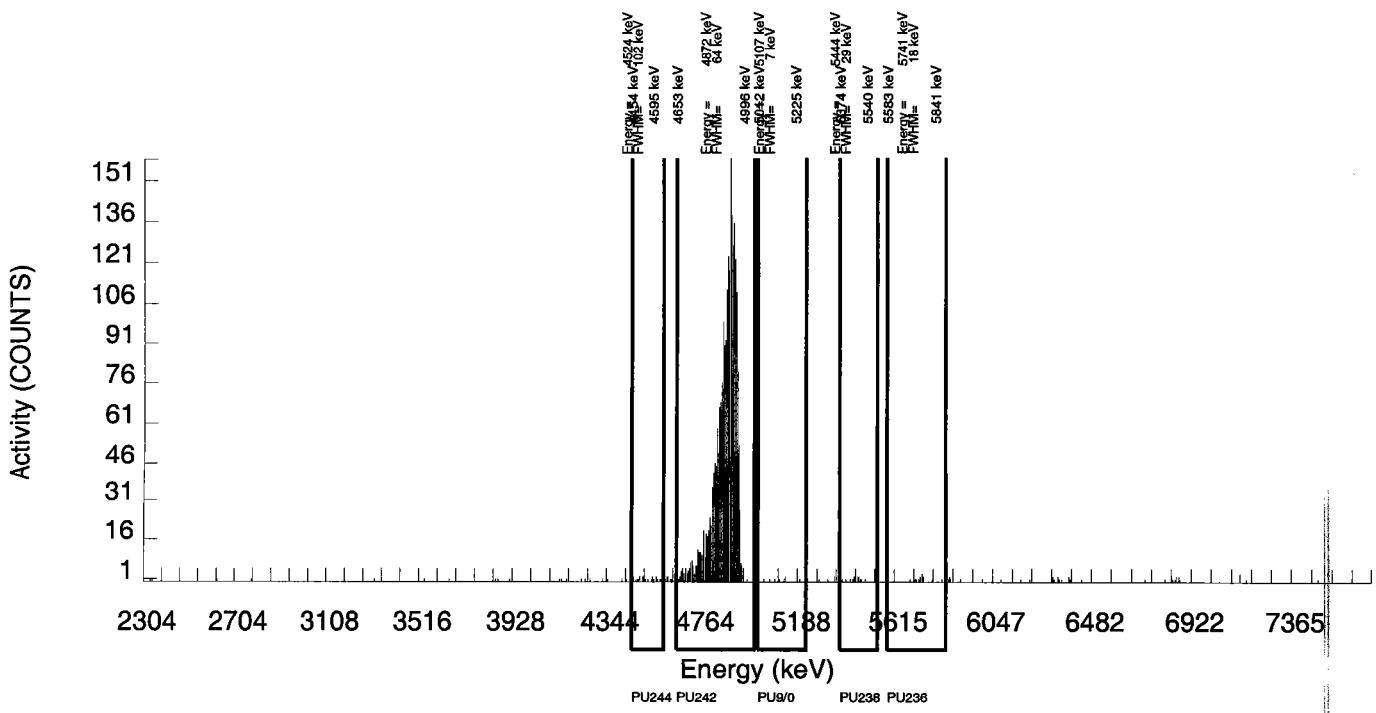
MS PCI/L : 3.145570
MSD PCI/L : 3.145570
LCS PCI/L : 3.145570
TRACER DPM : 8.3078
EFF FILE : W067.CNF;150
CAL DATE: 5-OCT-2005

MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	3.000	6.000	99.90000	5.99E-03	7.73E-03	1.14E-02	2.81E-02	7.73E-03
PU-236	5749.000	-1.000	15.000	100.0000	-2.03E-03	1.09E-02	1.83E-02	4.21E-02	1.09E-02
PU-238	5499.000	2.000	14.000	99.90000	3.99E-03	1.09E-02	1.74E-02	4.01E-02	1.09E-02
PU242	4890.000	2347.000	3.000	100.0000	4.68E+00	1.89E-01	8.03E-03	2.15E-02	9.67E-02
PU-244	4589.000	21.000	2.000	99.90000	4.19E-02	1.01E-02	6.56E-03	1.85E-02	9.98E-03

REVIEWED BY: DATE : mp 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579006_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33204
AVERAGE %EFFICIENCY :30.1007
% YIELD : 95.932

COUNT DATE:11-OCT-2005 14:16:51
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B068.CNF;622
BKG DATE: 9-OCT-2005

MS PCI/L : 3.145570
MSD PCI/L : 3.145570
LCS PCI/L : 3.145570
TRACER DPM : 8.3078
EFF FILE : W068.CNF;157
CAL DATE: 5-OCT-2005

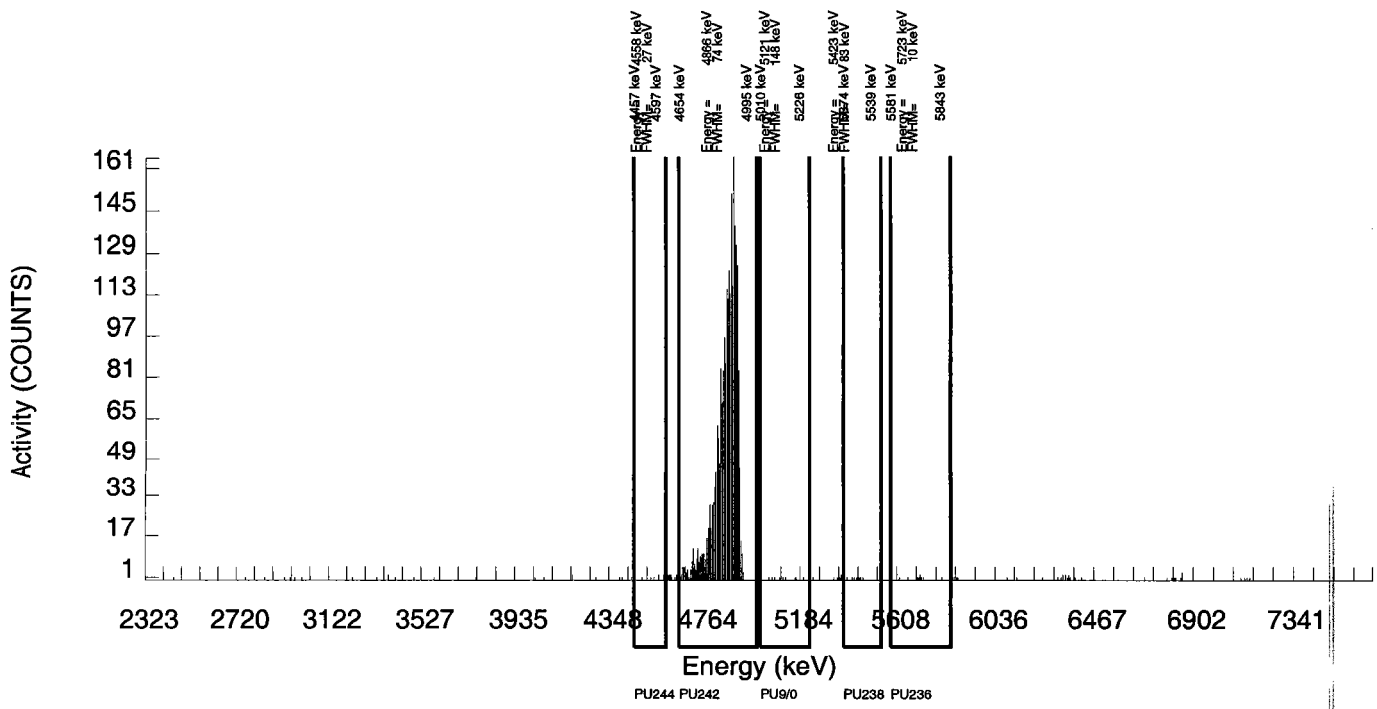
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	4.000	5.000	99.90000	7.81E-03	7.31E-03	1.02E-02	2.56E-02	7.30E-03
PU-236	5749.000	-5.000	15.000	100.0000	-9.94E-03	9.95E-03	1.79E-02	4.12E-02	9.94E-03
PU-238	5499.000	-8.000 ✓	17.000	99.90000	-1.56E-02	9.97E-03	1.87E-02	4.27E-02	9.96E-03
PU242	4890.000	2399.000	9.000	100.0000	4.68E+00	1.89E-01	1.36E-02	3.25E-02	9.59E-02
PU-244	4589.000	9.000	0.000	99.90000	1.76E-02	5.89E-03	0.00E+00	5.29E-03	5.86E-03

REVIEWED BY:

DATE : MA 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

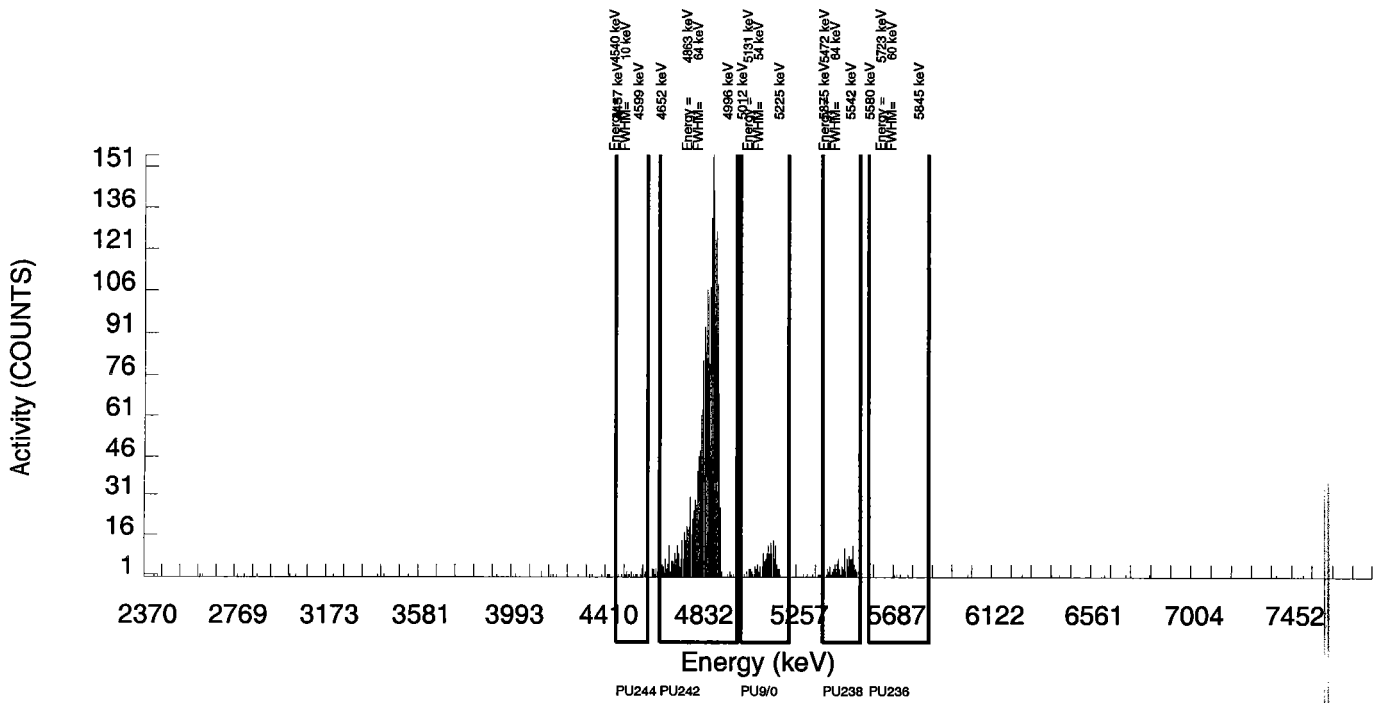
BATCH NUMBER: 468544 SAMPLE DATE : 13-SEP-2005 00:00:00	SAMPLE ID : S0145579007_PU SAMPLE QTY: 0.800 L
DETECTOR NUMBER :39172 AVERAGE %EFFICIENCY :29.1079 % YIELD : 89.611	COUNT DATE:11-OCT-2005 14:16:51 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :BJB1

MS : 0338-R MSD : 0338-R LCS : 0338-R TRACER : 0826-A BKG FILE: B069.CNF;626 BKG DATE: 9-OCT-2005	MS PCI/L : 3.145570 MSD PCI/L : 3.145570 LCS PCI/L : 3.145570 TRACER DPM : 8.3078 EFF FILE : W069.CNF;164 CAL DATE: 5-OCT-2005	MS ISOTOPE : PU-9/0 MSD ISOTOPE: PU-9/0 LCS ISOTOPE: PU-9/0 TRACER ISOTOPE: PU242 LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	150.000	4.000	99.90000	3.24E-01	2.95E-02	1.01E-02	2.60E-02	2.72E-02
PU-236	5749.000	-1.000	5.000	100.0000	-2.20E-03	6.60E-03	1.14E-02	2.88E-02	6.60E-03
PU-238	5499.000	109.000	3.000	99.90000	2.36E-01	2.46E-02	8.71E-03	2.33E-02	2.32E-02
PU242	4890.000	2167.000	4.000	100.0000	4.68E+00	1.94E-01	1.00E-02	2.59E-02	1.01E-01
PU-244	4589.000	28.000	0.000	99.90000	6.05E-02	1.16E-02	0.00E+00	5.86E-03	1.14E-02

REVIEWED BY: DATE : mr 10/21/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 14-SEP-2005 00:00:00

SAMPLE ID : S0145579008_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33207
AVERAGE %EFFICIENCY :34.7113
% YIELD : 89.744

COUNT DATE:11-OCT-2005 14:16:51
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B070.CNF;629
BKG DATE: 9-OCT-2005

MS PCI/L : 3.145570
MSD PCI/L : 3.145570
LCS PCI/L : 3.145570
TRACER DPM : 8.3078
EFF FILE : W070.CNF;155
CAL DATE: 5-OCT-2005

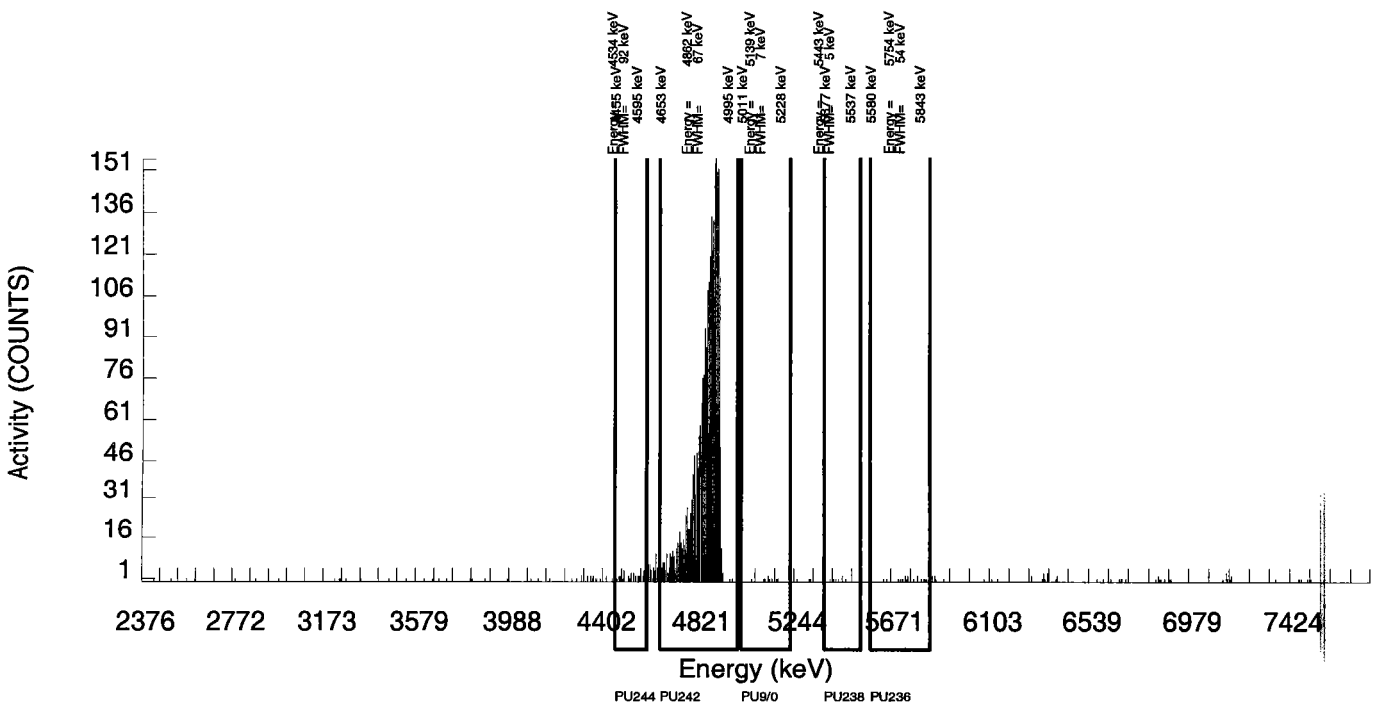
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	6.000	4.000	99.90000	1.09E-02	6.78E-03	8.42E-03	2.17E-02	6.77E-03
PU-236	5749.000	2.000	16.000	100.0000	3.68E-03	1.07E-02	1.71E-02	3.92E-02	1.07E-02
PU-238	5499.000	5.000	5.000	99.90000	9.05E-03	7.02E-03	9.42E-03	2.37E-02	7.01E-03
PU242	4890.000	2588.000	4.000	100.0000	4.68E+00	1.84E-01	8.41E-03	2.17E-02	9.21E-02
PU-244	4589.000	38.000	0.000	99.90000	6.88E-02	1.14E-02	0.00E+00	4.90E-03	1.12E-02

REVIEWED BY:

DATE : MA 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 4-OCT-2005 00:00:00.

SAMPLE ID : S1200949865_PU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :34436
AVERAGE %EFFICIENCY :30.6297
% YIELD : 103.589

COUNT DATE:11-OCT-2005 14:17:01
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B083.CNF;547
BKG DATE: 9-OCT-2005

MS PCI/L : 2.516451
MSD PCI/L : 2.516451
LCS PCI/L : 2.516451
TRACER DPM : 8.3078
EFF FILE : W083.CNF;175
CAL DATE: 5-OCT-2005

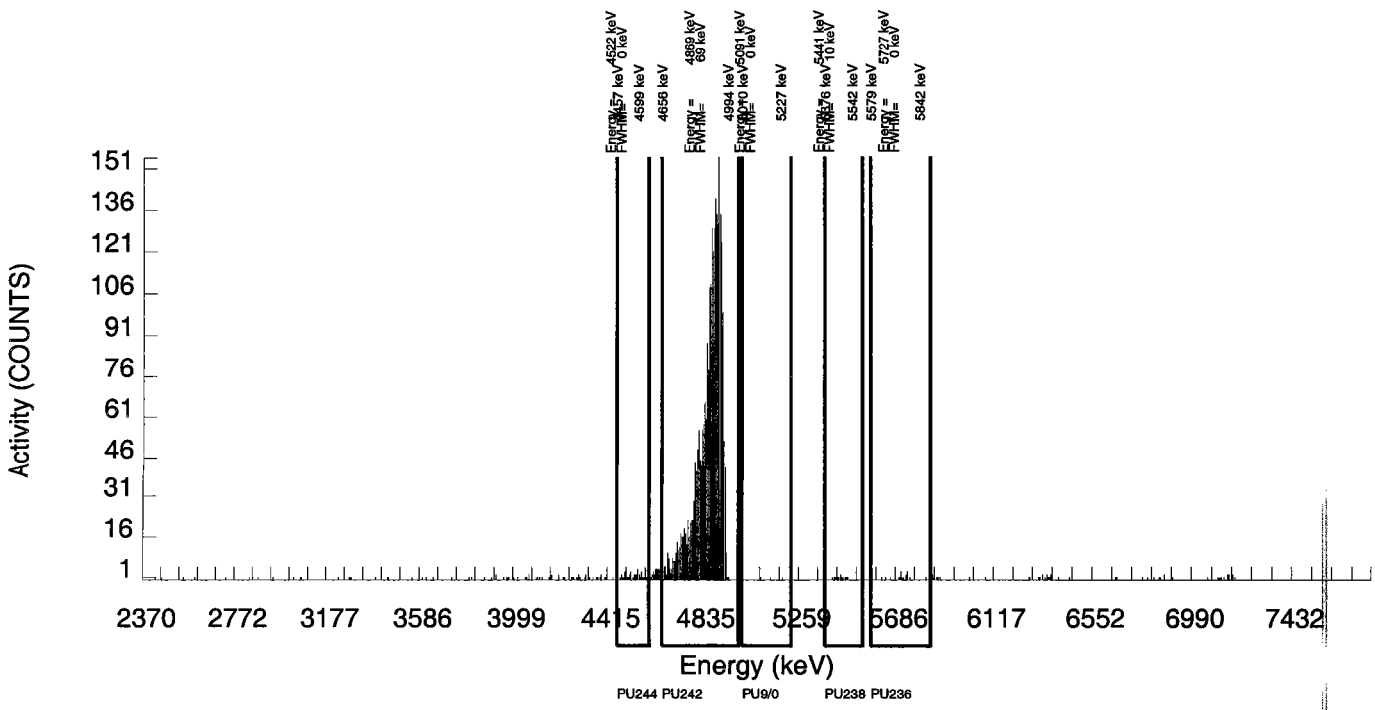
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	-7.000 ✓	12.000	99.90000	-9.95E-03	5.87E-03	1.15E-02	2.67E-02	5.86E-03
PU-236	5749.000	4.000	16.000	100.0000	5.71E-03	8.57E-03	1.33E-02	3.04E-02	8.56E-03
PU-238	5499.000	3.000	11.000	99.90000	4.26E-03	7.11E-03	1.10E-02	2.58E-02	7.11E-03
PU242	4890.000	2636.000	10.000	100.0000	3.74E+00	1.47E-01	1.04E-02	2.47E-02	7.32E-02
PU-244	4589.000	51.000	1.000	99.90000	7.25E-02	1.06E-02	3.31E-03	1.05E-02	1.03E-02

REVIEWED BY:

DATE : mm 10/12/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S1200949866_PU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :31698
AVERAGE %EFFICIENCY :29.1347
% YIELD : 107.582

COUNT DATE:12-OCT-2005 17:01:18
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B064.CNF;589
BKG DATE: 9-OCT-2005

MS PCI/L : 3.145570
MSD PCI/L : 3.145570
LCS PCI/L : 3.145570
TRACER DPM : 8.3078
EFF FILE : W064.CNF;150
CAL DATE: 4-OCT-2005

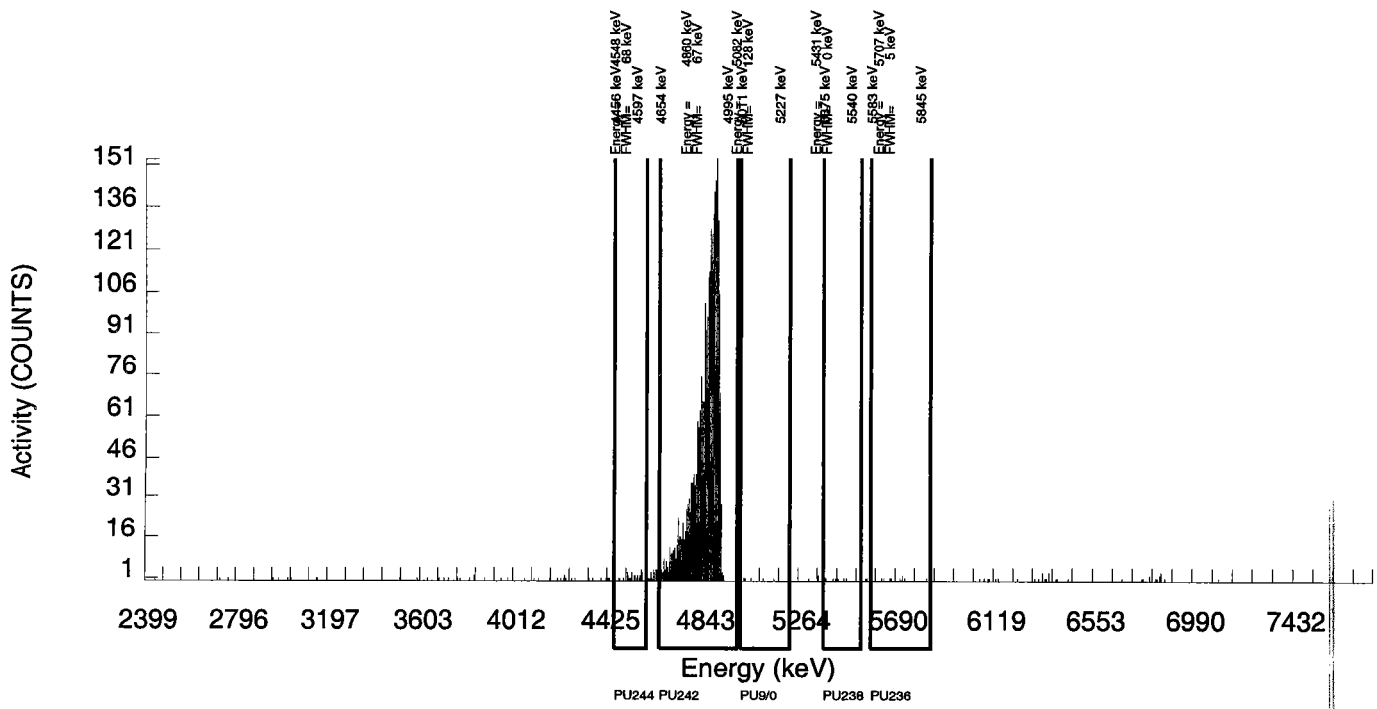
MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	-1.000 ✓	6.000	99.90000	-1.80E-03	5.96E-03	1.02E-02	2.54E-02	5.96E-03
PU-236	5749.000	-3.000	13.000	100.0000	-5.50E-03	8.79E-03	1.54E-02	3.57E-02	8.79E-03
PU-238	5499.000	-1.000 ✓	8.000	99.90000	-1.80E-03	6.97E-03	1.18E-02	2.85E-02	6.97E-03
PU242	4890.000	2604.000	5.000	100.0000	4.68E+00	2.36E-01	9.34E-03	2.35E-02	9.18E-02
PU-244	4589.000	34.000	0.000	99.90000	6.11E-02	1.09E-02	0.00E+00	4.87E-03	1.05E-02

REVIEWED BY: DATE : MD 10/18/05

RtR=
Pu-9/0 = 0.362
Pu-238 = 0.407



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468544
SAMPLE DATE : 4-OCT-2005 00:00:00.

SAMPLE ID : S1200949867_PU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :30451
AVERAGE %EFFICIENCY :30.3040
% YIELD : 90.840

COUNT DATE:11-OCT-2005 14:17:01
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0338-R
MSD : 0338-R
LCS : 0338-R
TRACER : 0826-A
BKG FILE: B085.CNF;552
BKG DATE: 9-OCT-2005

MS PCI/L : 2.516451
MSD PCI/L : 2.516451
LCS PCI/L : 2.516451
TRACER DPM : 8.3078
EFF FILE : W085.CNF;193
CAL DATE: 5-OCT-2005

MS ISOTOPE : PU-9/0
MSD ISOTOPE: PU-9/0
LCS ISOTOPE: PU-9/0
TRACER ISOTOPE: PU242
LIB FILE : ENV_ALPHA_PU.N

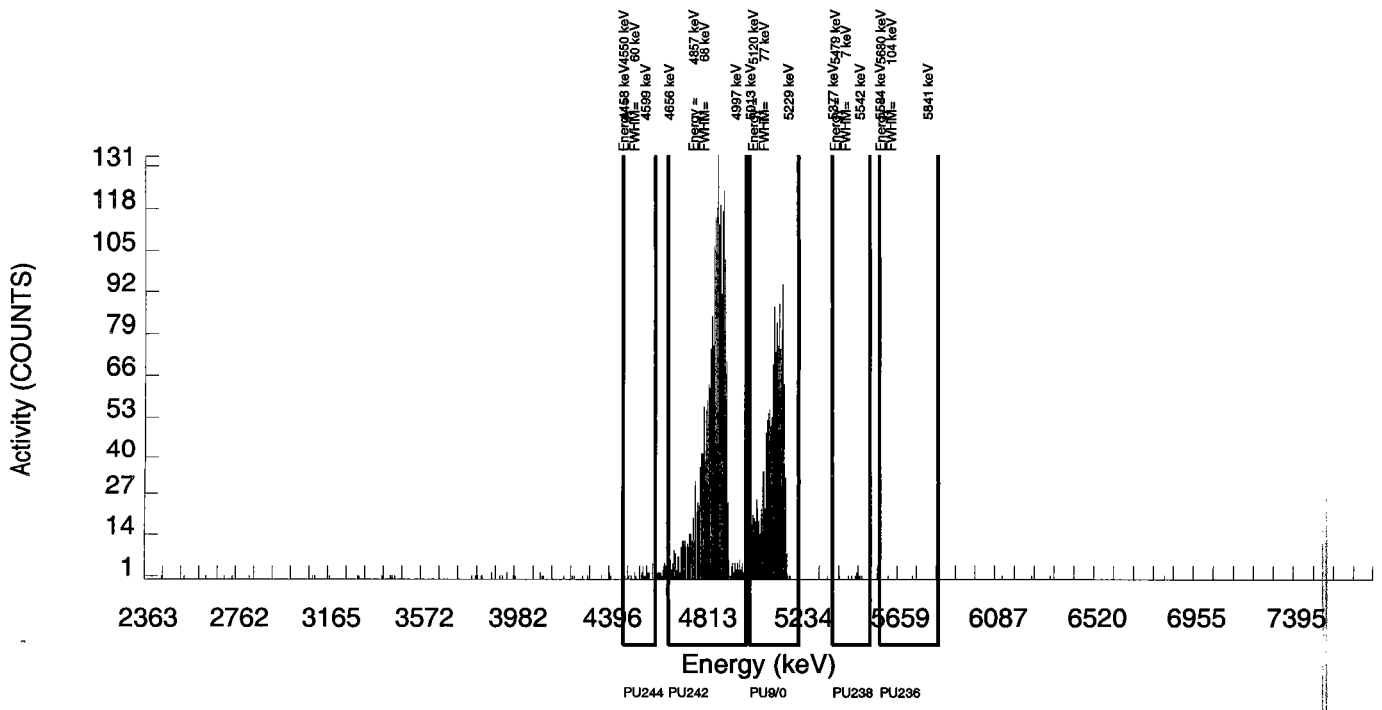
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
PU-9/0	5155.000	1435.000	0.000	99.90000	2.35E+00	1.03E-01	0.00E+00	4.44E-03	6.20E-02
PU-236	5749.000	0.000	2.000	100.0000	-3.92E-10	3.29E-03	5.41E-03	1.53E-02	3.29E-03
PU-238	5499.000	8.000	1.000	99.90000	1.31E-02	5.20E-03	3.81E-03	1.21E-02	5.18E-03
PU242	4890.000	2287.000	0.000	100.0000	3.74E+00	1.52E-01	0.00E+00	4.43E-03	7.83E-02
PU-244	4589.000	30.000	1.000	99.90000	4.91E-02	9.42E-03	3.81E-03	1.21E-02	9.27E-03

REVIEWED BY:

DATE : MA 10/11/2005

$$LCS = \frac{2.35}{2.52} = 93.3\%$$



Radiochemistry Batch Checklist, Rev 4

Batch# 468545 Product: U Date: 10/14/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg for GAB.			NA
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

2/22/2005

Primary Review Performed By: 10/14/05

Secondary Review Performed By: 10/14/05

10/8 - 10/13

ESH2

Uranium Que Sheet

03-OCT-05

Batch #: 468545 **Analyst:** BJB1 **Minimum DueDate:** 08-OCT-05

Tracer Isotope: U-232/U-236 **Tracer Code:** D688-E **Expiration Date:** 5/4/06 **Vol:** 0.1 mL

LCS Isotope: U-238 **LCS Code:** 0389-I **Expiration Date:** 7/17/06 **Vol:** 0.1 mL

Spike Isotope: U-238 **Spike Code:** NA **Expiration Date:** NA **Vol:** NA

Prep Date: 10/4/05 **Initials:** BJB **Pipet ID:** 4497313 **Balance ID:** 16750207 **Witness:** HACB 10/4/05

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label #	Aliquot (g / mL / f)	U Det #	Ash Weight (g)
145579001	GF05090G3TM01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		13-SEP-05	61	0.800	18	
145579002	GF05090GMC401	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		13-SEP-05	62	0.800	24	
145579003	GF05090G57M01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		13-SEP-05	63	0.800	20	
145579004	GF05090G7CM01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		14-SEP-05	64	0.800	21	
145579005	GU05090G3TM01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		13-SEP-05	65	0.800	22	
145579006	GU05090GMC401	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		13-SEP-05	66	0.800	23	
145579007	GU05090G57M01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		13-SEP-05	67	0.800	24	
145579008	GU05090G7CM01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		14-SEP-05	68	0.800	25	
145739001	GF05090G6CM01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		14-SEP-05	69	0.800	26	
145739002	GF0509G33R101	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		14-SEP-05	70	0.800	27	
145739003	GF0509G33R201	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		15-SEP-05	71	0.800	28	
145739004	GU05090G6CM01	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		14-SEP-05	72	0.800	29	
145739005	GU0509G33R101	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		14-SEP-05	73	0.800	30	
145739006	GU0509G33R201	SAMPLE		UCF pCi/L	to pGROUND WATIESHL001		15-SEP-05	74	0.800	31	
1200949868	MB for batch 468545	MB		UCF pCi/L	to pGROUND WATIQC ACCOUNT			75	1.00	32	
1200949869	GU05090GMC401(145579006DUP)	DUP		UCF pCi/L	to pGROUND WATIQC ACCOUNT		13-SEP-05	76	0.800	33	
1200949870	LCS for batch 468545	LCS		UCF pCi/L	to pGROUND WATIQC ACCOUNT			77	1.00	36	

0.5 pCi/L

BJB 10/5/05

1398

Solid Sample Dissolution by: ~~BJB 10/4/05~~ **LEACH or DIGESTION**
Circle One

Data Reviewed By: 10/14/05

General Engineering Laboratories, Radiochemistry Division

10/14/05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200949869	DUP	Uranium-233/234	0.800 L	0.110	0.016	0.0608	.03525	pCi/L	YES
		Uranium-235/236	0.800 L	0.0295	0.00995	0.0457	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.0518	0.0112	0.043	.0058625	pCi/L	NO
1200949870	LCS	Uranium-233/234	1.00 L	2.37	0.132	0.0503	.0282	pCi/L	NO
		Uranium-235/236	1.00 L	0.180	0.0213	0.0379	.00773	pCi/L	NO
		Uranium-238	1.00 L	2.37	0.132	0.0356	.00469	pCi/L	NO
1200949868	MB	Uranium-233/234	1.00 L	0.0282	0.00809	0.0477	.0282	pCi/L	YES
		Uranium-235/236	1.00 L	0.00773	0.00475	0.0359	.00773	pCi/L	YES
		Uranium-238	1.00 L	0.00469	0.0047	0.0338	.00469	pCi/L	YES
145579001	GF05090G3TM01	Uranium-233/234	0.800 L	0.533	0.0488	0.0918	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0409	0.0136	0.0691	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.413	0.0409	0.065	.0058625	pCi/L	NO
145579002	GF05090GMC401	Uranium-233/234	0.800 L	0.106	0.0163	0.0644	.03525	pCi/L	YES
		Uranium-235/236	0.800 L	0.0131	0.00786	0.0485	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.0423	0.0101	0.0456	.0058625	pCi/L	NO
145579003	GF05090G57M01	Uranium-233/234	0.800 L	0.267	0.030	0.0761	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.037	0.0125	0.0573	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.250	0.0284	0.0539	.0058625	pCi/L	NO
145579004	GF05090G7CM01	Uranium-233/234	0.800 L	0.406	0.0393	0.0842	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0375	0.0134	0.0634	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.284	0.0321	0.0596	.0058625	pCi/L	NO
145579005	GU05090G3TM01	Uranium-233/234	0.800 L	0.450	0.042	0.0847	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0583	0.0152	0.0638	.0096625	pCi/L	NO
		Uranium-238	0.800 L	0.391	0.0388	0.060	.0058625	pCi/L	NO
145579006	GU05090GMC401	Uranium-233/234	0.800 L	0.132	0.019	0.0694	.03525	pCi/L	YES
		Uranium-235/236	0.800 L	0.0366	0.0103	0.0523	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.0387	0.0106	0.0492	.0058625	pCi/L	NO
145579007	GU05090G57M01	Uranium-233/234	0.800 L	0.315	0.0341	0.0857	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0313	0.0126	0.0645	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.275	0.0313	0.0607	.0058625	pCi/L	NO
145579008	GU05090G7CM01	Uranium-233/234	0.800 L	0.365	0.0382	0.087	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0211	0.015	0.0655	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.336	0.036	0.0616	.0058625	pCi/L	NO
145739001	GF05090G6CM01	Uranium-233/234	0.800 L	0.908	0.0615	0.0805	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.062	0.0158	0.0606	.0096625	pCi/L	NO
		Uranium-238	0.800 L	0.314	0.0321	0.057	.0058625	pCi/L	NO
145739002	GF0509G33R101	Uranium-233/234	0.800 L	0.501	0.0385	0.0662	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0456	0.0124	0.0498	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.273	0.027	0.0469	.0058625	pCi/L	NO
145739003	GF0509G33R201	Uranium-233/234	0.800 L	0.654	0.0495	0.0794	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0322	0.0129	0.0598	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.328	0.0325	0.0562	.0058625	pCi/L	NO

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
145739004	GU05090G6CM01	Uranium-233/234	0.800 L	0.812	0.0609	0.0935	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0682	0.0172	0.0704	.0096625	pCi/L	NO
		Uranium-238	0.800 L	0.319	0.034	0.0662	.0058625	pCi/L	NO
145739005	GU0509G33R101	Uranium-233/234	0.800 L	0.526	0.0394	0.0657	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0266	0.010	0.0495	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.271	0.0263	0.0465	.0058625	pCi/L	NO
145739006	GU0509G33R201	Uranium-233/234	0.800 L	0.626	0.0464	0.0584	.03525	pCi/L	NO
		Uranium-235/236	0.800 L	0.0355	0.0105	0.044	.0096625	pCi/L	YES
		Uranium-238	0.800 L	0.333	0.0301	0.0413	.0058625	pCi/L	NO

10/14/25

Calculation of MDA using a Blank Population.

Batch: 468545

Sg	
U-234	5.97252
U-235	3.41012
U-238	4.05878

Updated: 4/27/2004

sample	isotope	eff (dec)	yield (dec)	volume (l)	abundance (dec)	count time (min)	MDA (pCi/Liter)
145579001	U-234	0.279602	0.66873	0.8	1	1000	**0.092**
	U-235	0.279602	0.66873	0.8	0.809	1000	**0.069**
	U-238	0.279602	0.66873	0.8	1	1000	**0.065**
145579002	U-234	0.300199	0.88774	0.8	1	1000	**0.064**
	U-235	0.300199	0.88774	0.8	0.809	1000	**0.049**
	U-238	0.300199	0.88774	0.8	1	1000	**0.046**
145579003	U-234	0.340347	0.66293	0.8	1	1000	**0.076**
	U-235	0.340347	0.66293	0.8	0.809	1000	**0.057**
	U-238	0.340347	0.66293	0.8	1	1000	**0.054**
145579004	U-234	0.291492	0.69953	0.8	1	1000	**0.084**
	U-235	0.291492	0.69953	0.8	0.809	1000	**0.063**
	U-238	0.291492	0.69953	0.8	1	1000	**0.060**
145579005	U-234	0.333778	0.6076	0.8	1	1000	**0.085**
	U-235	0.333778	0.6076	0.8	0.809	1000	**0.064**
	U-238	0.333778	0.6076	0.8	1	1000	**0.060**
145579006	U-234	0.302685	0.81716	0.8	1	1000	**0.069**
	U-235	0.302685	0.81716	0.8	0.809	1000	**0.052**
	U-238	0.302685	0.81716	0.8	1	1000	**0.049**
145579007	U-234	0.300199	0.6676	0.8	1	1000	**0.086**
	U-235	0.300199	0.6676	0.8	0.809	1000	**0.065**
	U-238	0.300199	0.6676	0.8	1	1000	**0.061**
145579008	U-234	0.311385	0.63416	0.8	1	1000	**0.087**
	U-235	0.311385	0.63416	0.8	0.809	1000	**0.065**
	U-238	0.311385	0.63416	0.8	1	1000	**0.062**
145739001	U-234	0.313628	0.68009	0.8	1	1000	**0.081**
	U-235	0.313628	0.68009	0.8	0.809	1000	**0.061**
	U-238	0.313628	0.68009	0.8	1	1000	**0.057**
145739002	U-234	0.282383	0.91892	0.8	1	1000	**0.066**
	U-235	0.282383	0.91892	0.8	0.809	1000	**0.050**
	U-238	0.282383	0.91892	0.8	1	1000	**0.047**
145739003	U-234	0.266235	0.81221	0.8	1	1000	**0.079**

10/14/05

	U-235	0.266235	0.81221	0.8	0.809	1000	**0.060**
	U-238	0.266235	0.81221	0.8	1	1000	**0.056**
145739004	U-234	0.288207	0.63727	0.8	1	1000	**0.094**
	U-235	0.288207	0.63727	0.8	0.809	1000	**0.070**
	U-238	0.288207	0.63727	0.8	1	1000	**0.066**
145739005	U-234	0.303193	0.86192	0.8	1	1000	**0.066**
	U-235	0.303193	0.86192	0.8	0.809	1000	**0.049**
	U-238	0.303193	0.86192	0.8	1	1000	**0.047**
145739006	U-234	0.351507	0.83664	0.8	1	1000	**0.058**
	U-235	0.351507	0.83664	0.8	0.809	1000	**0.044**
	U-238	0.351507	0.83664	0.8	1	1000	**0.041**
1200949868	U-234	0.317484	0.90717	1	1	1000	**0.048**
	U-235	0.317484	0.90717	1	0.809	1000	**0.036**
	U-238	0.317484	0.90717	1	1	1000	**0.034**
1200949869	U-234	0.324426	0.87131	0.8	1	1000	**0.061**
	U-235	0.324426	0.87131	0.8	0.809	1000	**0.046**
	U-238	0.324426	0.87131	0.8	1	1000	**0.043**
1200949870	U-234	0.324449	0.84118	1	1	1000	**0.050**
	U-235	0.324449	0.84118	1	0.809	1000	**0.038**
	U-238	0.324449	0.84118	1	1	1000	**0.036**

10/14/25

Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579001_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :21063
AVERAGE %EFFICIENCY :27.9602
% YIELD : 66.873

COUNT DATE:10-OCT-2005 20:36:54
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B018.CNF;613
BKG DATE: 9-OCT-2005

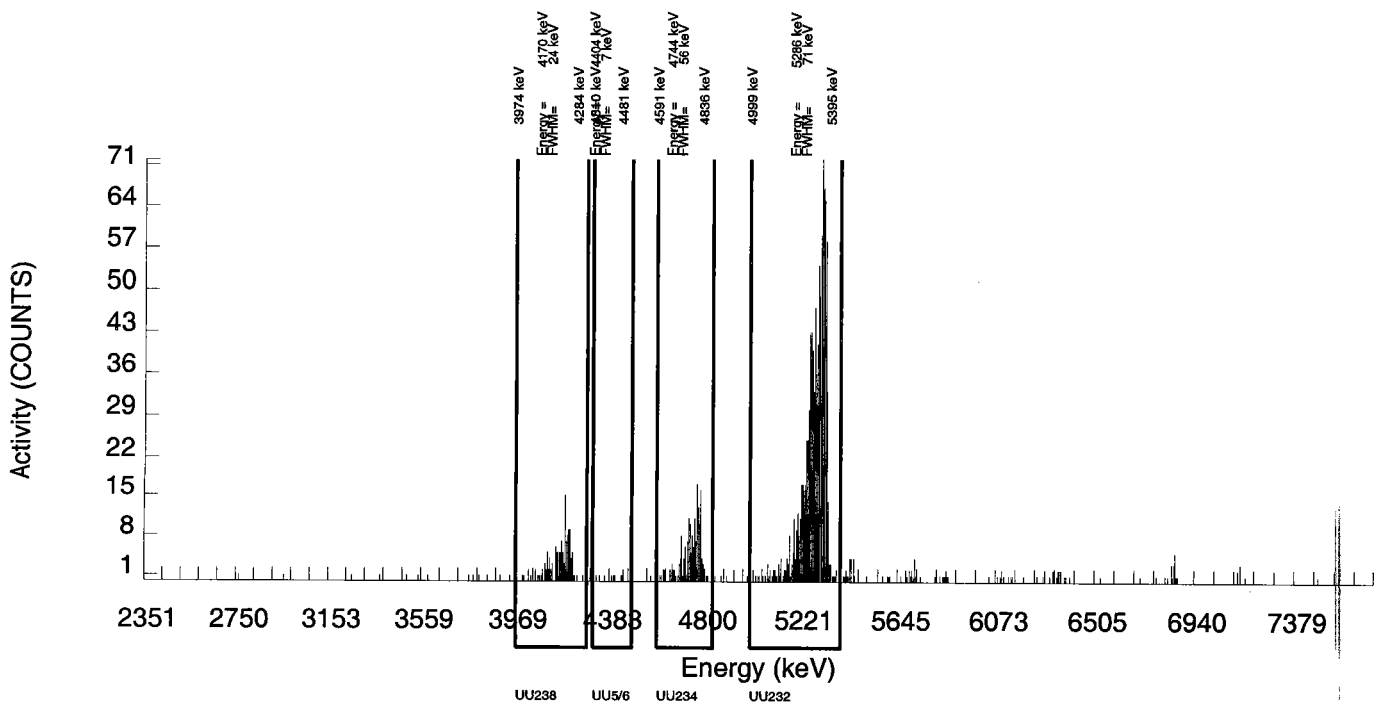
MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4379
EFF FILE : W018.CNF;174
CAL DATE: 3-OCT-2005

MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	177.000	3.000	100.0000	5.33E-01	4.88E-02	1.21E-02	3.24E-02	4.07E-02
U232	5302.100	1016.000	10.000	100.0000	3.06E+00	1.82E-01	2.22E-02	5.25E-02	9.70E-02
U-235	4391.000	11.000	1.000	80.90000	4.09E-02	1.36E-02	8.66E-03	2.74E-02	1.34E-02
U-238	4184.730	137.000	0.000	100.0000	4.13E-01	4.09E-02	0.00E+00	8.16E-03	3.52E-02

REVIEWED BY: DATE : 10/13/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579002_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :23881
AVERAGE %EFFICIENCY :30.0199
% YIELD : 88.774

COUNT DATE:13-OCT-2005 14:33:12
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B024.CNF;623
BKG DATE: 9-OCT-2005

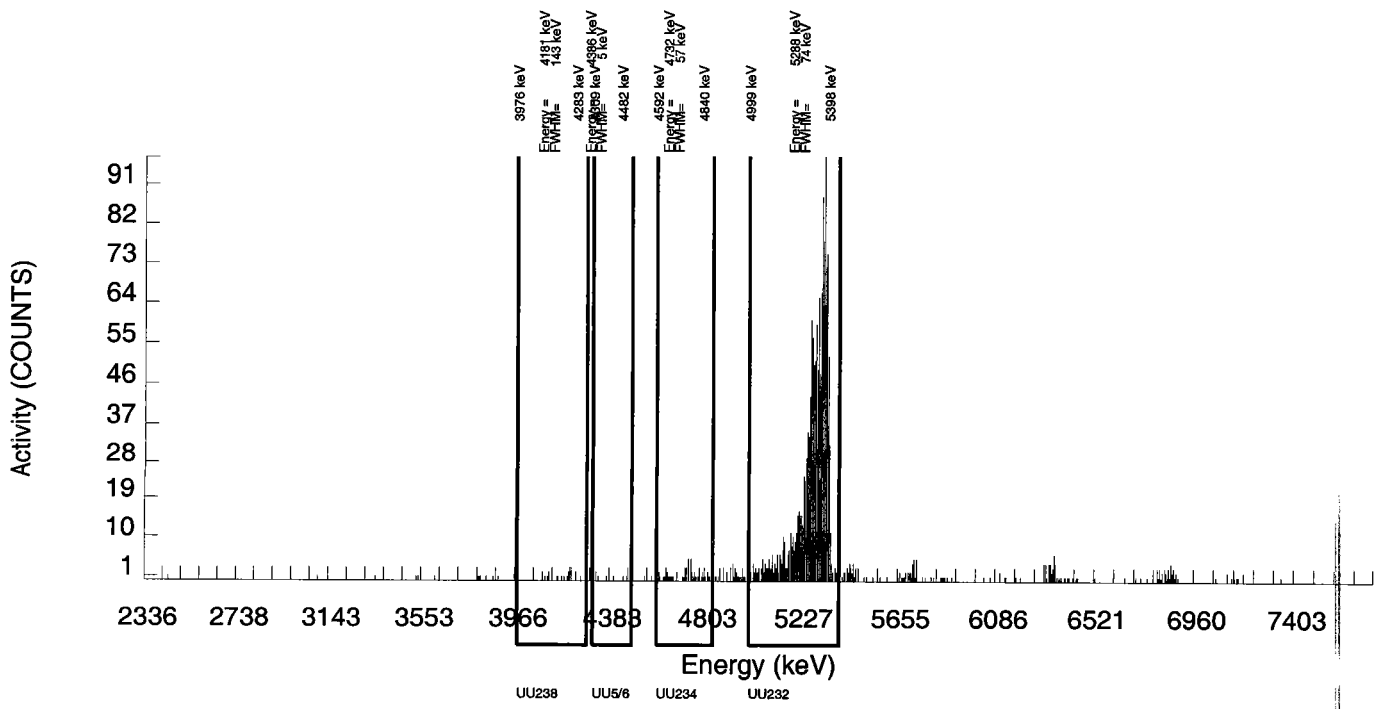
MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4379
EFF FILE : W024.CNF;157
CAL DATE: 3-OCT-2005

MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	50.000	2.000	100.0000	1.06E-01	1.63E-02	6.95E-03	1.96E-02	1.55E-02
U232	5302.100	1448.000	18.000	100.0000	3.06E+00	1.66E-01	2.09E-02	4.74E-02	8.15E-02
U-235	4391.000	5.000	2.000	80.90000	1.31E-02	7.86E-03	8.59E-03	2.43E-02	7.83E-03
U-238	4184.730	20.000	1.000	100.0000	4.23E-02	1.01E-02	4.92E-03	1.56E-02	9.91E-03

REVIEWED BY: DATE :



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579003_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33093
AVERAGE %EFFICIENCY :34.0347
% YIELD : 66.293

COUNT DATE:10-OCT-2005 20:36:55
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B020.CNF;622
BKG DATE: 9-OCT-2005

MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4379
EFF FILE : W020.CNF;167
CAL DATE: 3-OCT-2005

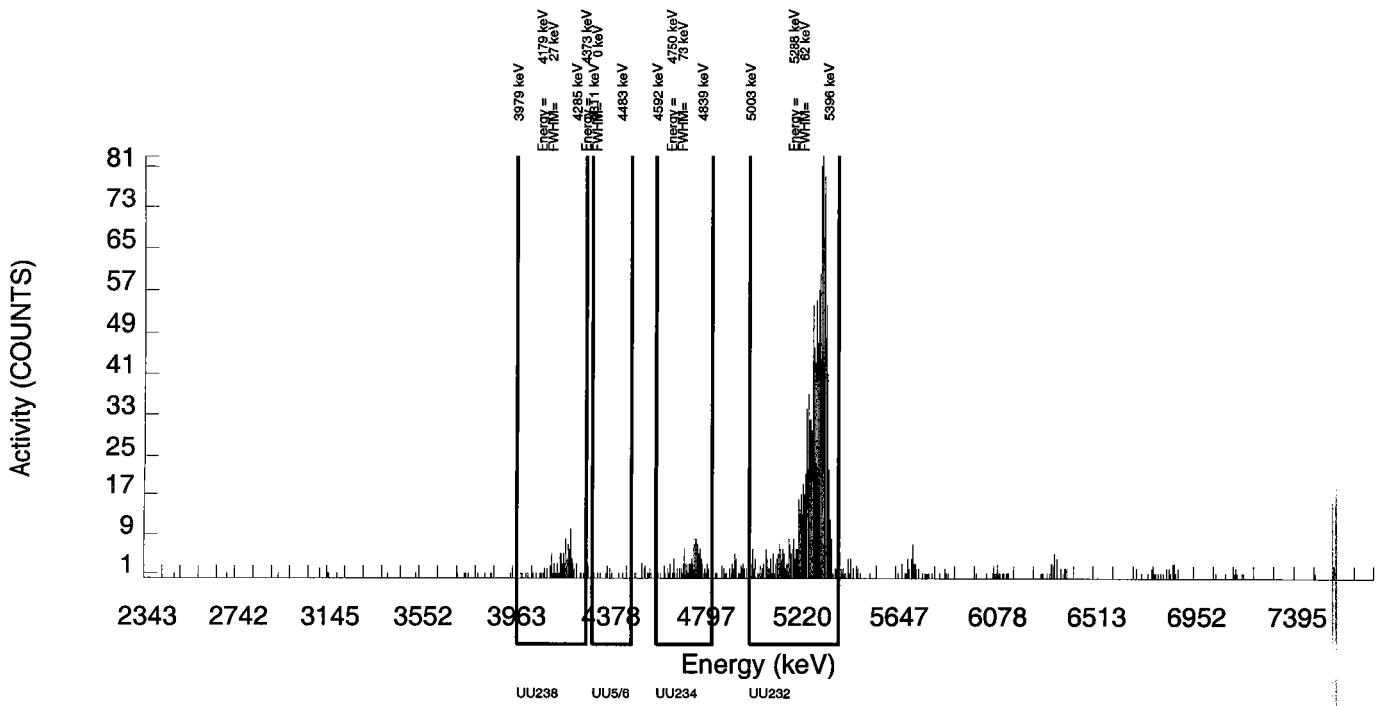
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	107.000	5.000	100.0000	2.67E-01	3.00E-02	1.30E-02	3.27E-02	2.70E-02
U232	5302.100	1226.000	20.000	100.0000	3.06E+00	1.73E-01	2.60E-02	5.87E-02	8.89E-02
U-235	4391.000	12.000	2.000	80.90000	3.70E-02	1.25E-02	1.01E-02	2.86E-02	1.23E-02
U-238	4184.730	100.000	3.000	100.0000	2.50E-01	2.84E-02	1.01E-02	2.69E-02	2.57E-02

REVIEWED BY:

DATE : 10/13/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 14-SEP-2005 00:00:00

SAMPLE ID : S0145579004_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33893
AVERAGE %EFFICIENCY :29.1492
% YIELD : 69.953

COUNT DATE:10-OCT-2005 20:36:55
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B021.CNF;624
BKG DATE: 9-OCT-2005

MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4377
EFF FILE : W021.CNF;185
CAL DATE: 3-OCT-2005

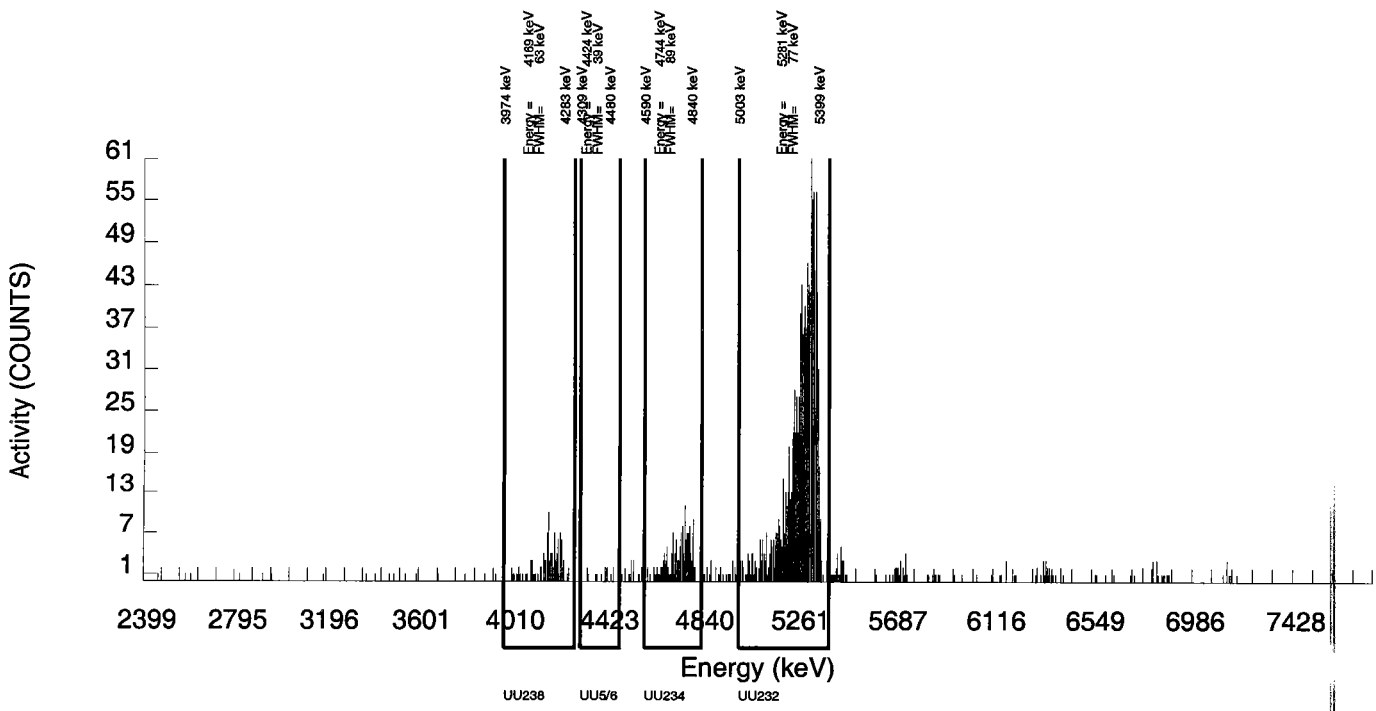
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	147.000	1.000	100.0000	4.06E-01	3.93E-02	6.42E-03	2.03E-02	3.37E-02
U232	5302.100	1108.000	18.000	100.0000	3.06E+00	1.78E-01	2.73E-02	6.20E-02	9.35E-02
U-235	4391.000	11.000	2.000	80.90000	3.75E-02	1.34E-02	1.12E-02	3.17E-02	1.32E-02
U-238	4184.730	103.000	3.000	100.0000	2.84E-01	3.21E-02	1.11E-02	2.97E-02	2.88E-02

REVIEWED BY:

DATE : 10/13/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579005_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :33894
AVERAGE %EFFICIENCY :33.3778
% YIELD : 60.760

COUNT DATE:10-OCT-2005 20:36:55
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B022.CNF;628
BKG DATE: 9-OCT-2005

MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4379
EFF FILE : W022.CNF;176
CAL DATE: 3-OCT-2005

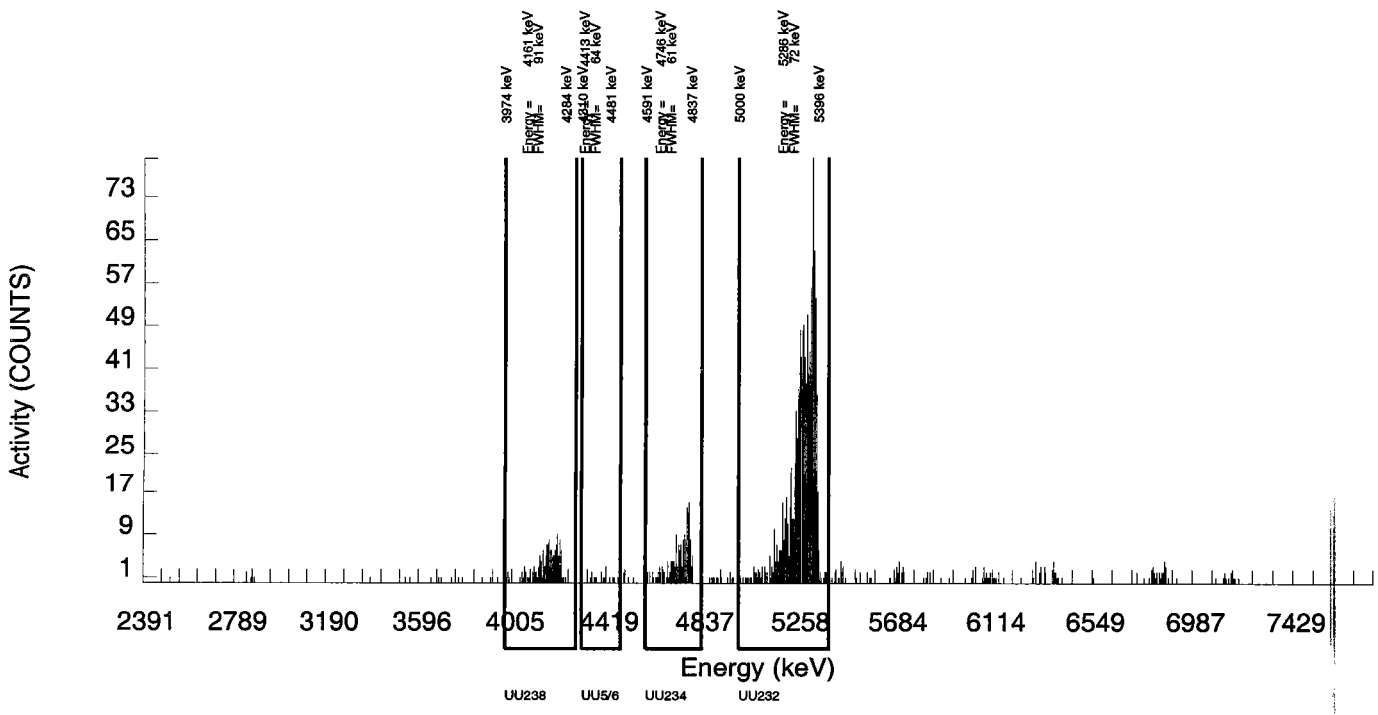
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	162.000	1.000	100.0000	4.50E-01	4.20E-02	6.46E-03	2.04E-02	3.56E-02
U232	5302.100	1102.000	14.000	100.0000	3.06E+00	1.78E-01	2.42E-02	5.59E-02	9.34E-02
U-235	4391.000	17.000	1.000	80.90000	5.83E-02	1.52E-02	7.98E-03	2.53E-02	1.50E-02
U-238	4184.730	141.000	3.000	100.0000	3.91E-01	3.88E-02	1.12E-02	2.99E-02	3.37E-02

REVIEWED BY:

DATE : 10/13/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579006_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :22873
AVERAGE %EFFICIENCY :30.2685
% YIELD : 81.716

COUNT DATE:10-OCT-2005 20:36:55
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B023.CNF;630
BKG DATE: 9-OCT-2005

MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4379
EFF FILE : W023.CNF;169
CAL DATE: 3-OCT-2005

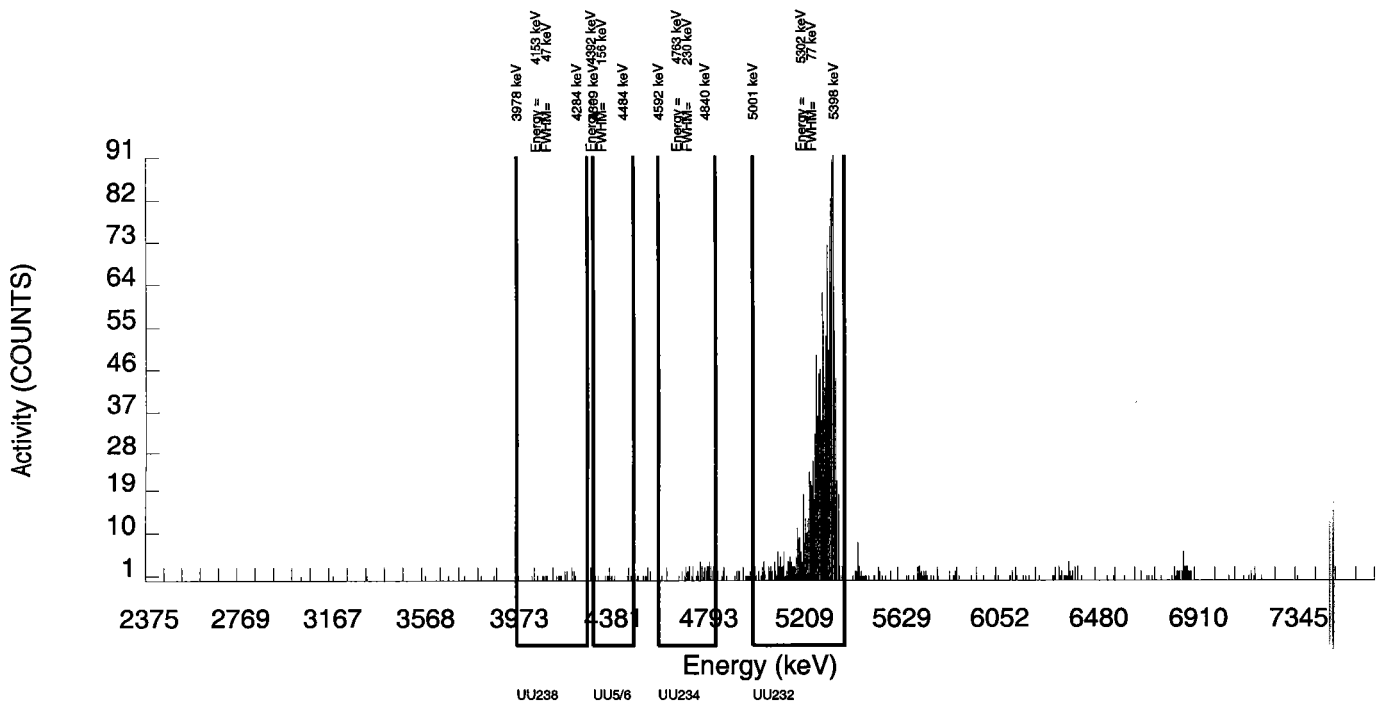
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	58.000	2.000	100.0000	1.32E-01	1.90E-02	7.49E-03	2.11E-02	1.79E-02
U232	5302.100	1344.000	17.000	100.0000	3.06E+00	1.69E-01	2.19E-02	4.99E-02	8.46E-02
U-235	4391.000	13.000	0.000	80.90000	3.66E-02	1.03E-02	0.00E+00	7.63E-03	1.01E-02
U-238	4184.730	17.000	2.000	100.0000	3.87E-02	1.06E-02	7.49E-03	2.11E-02	1.04E-02

REVIEWED BY:

DATE : 10/13/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S0145579007_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :23881
AVERAGE %EFFICIENCY :30.0199
% YIELD : 66.760

COUNT DATE:10-OCT-2005 20:36:55
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B024.CNF;623
BKG DATE: 9-OCT-2005

MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4379
EFF FILE : W024.CNF;157
CAL DATE: 3-OCT-2005

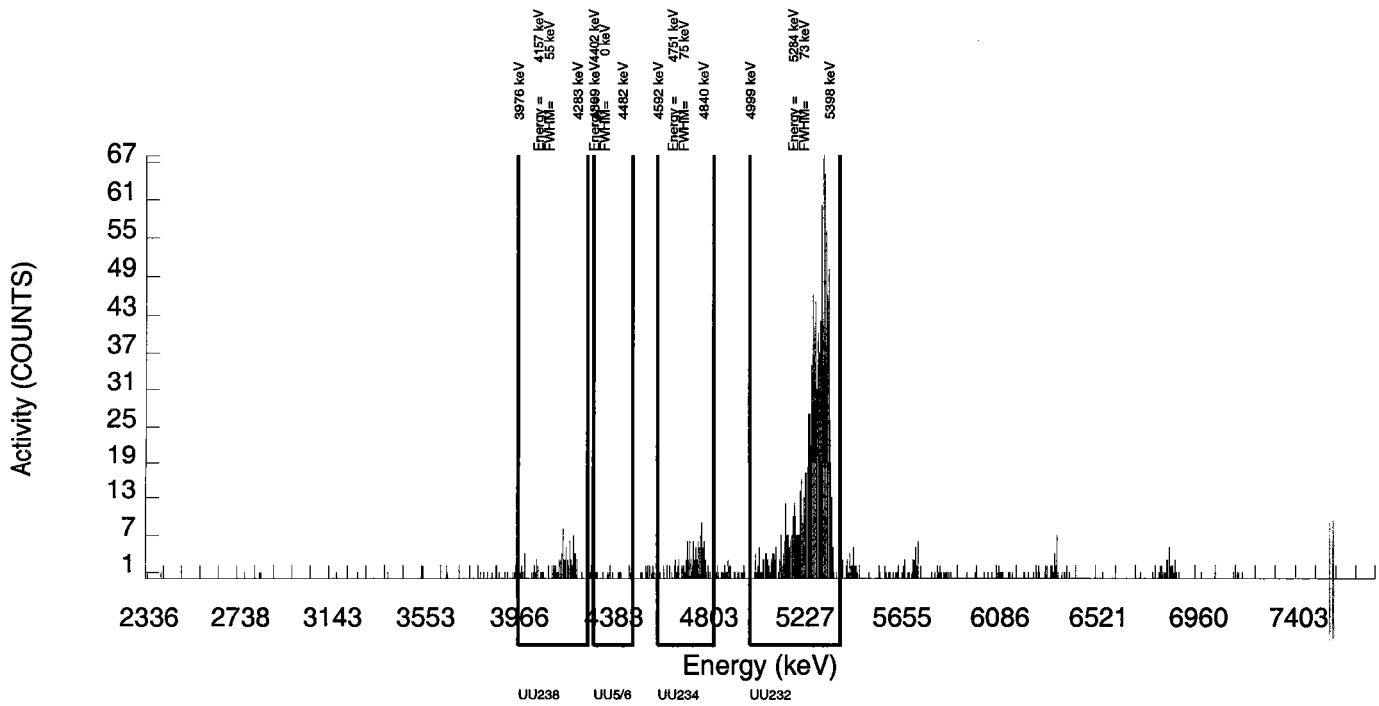
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	112.000	2.000	100.0000	3.15E-01	3.41E-02	9.24E-03	2.61E-02	3.03E-02
U232	5302.100	1089.000	18.000	100.0000	3.06E+00	1.79E-01	2.78E-02	6.31E-02	9.43E-02
U-235	4391.000	9.000	2.000	80.90000	3.13E-02	1.26E-02	1.14E-02	3.22E-02	1.25E-02
U-238	4184.730	98.000	1.000	100.0000	2.75E-01	3.13E-02	6.54E-03	2.07E-02	2.81E-02

REVIEWED BY:

DATE : 10/13/05 10/13/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 14-SEP-2005 00:00:00

SAMPLE ID : S0145579008_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :22769
AVERAGE %EFFICIENCY :31.1385
% YIELD : 63.416

COUNT DATE:10-OCT-2005 20:36:56
ELAPSED LIVE TIME(SEC): 59999.99
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B025.CNF;634
BKG DATE: 9-OCT-2005

MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4377
EFF FILE : W025.CNF;208
CAL DATE: 3-OCT-2005

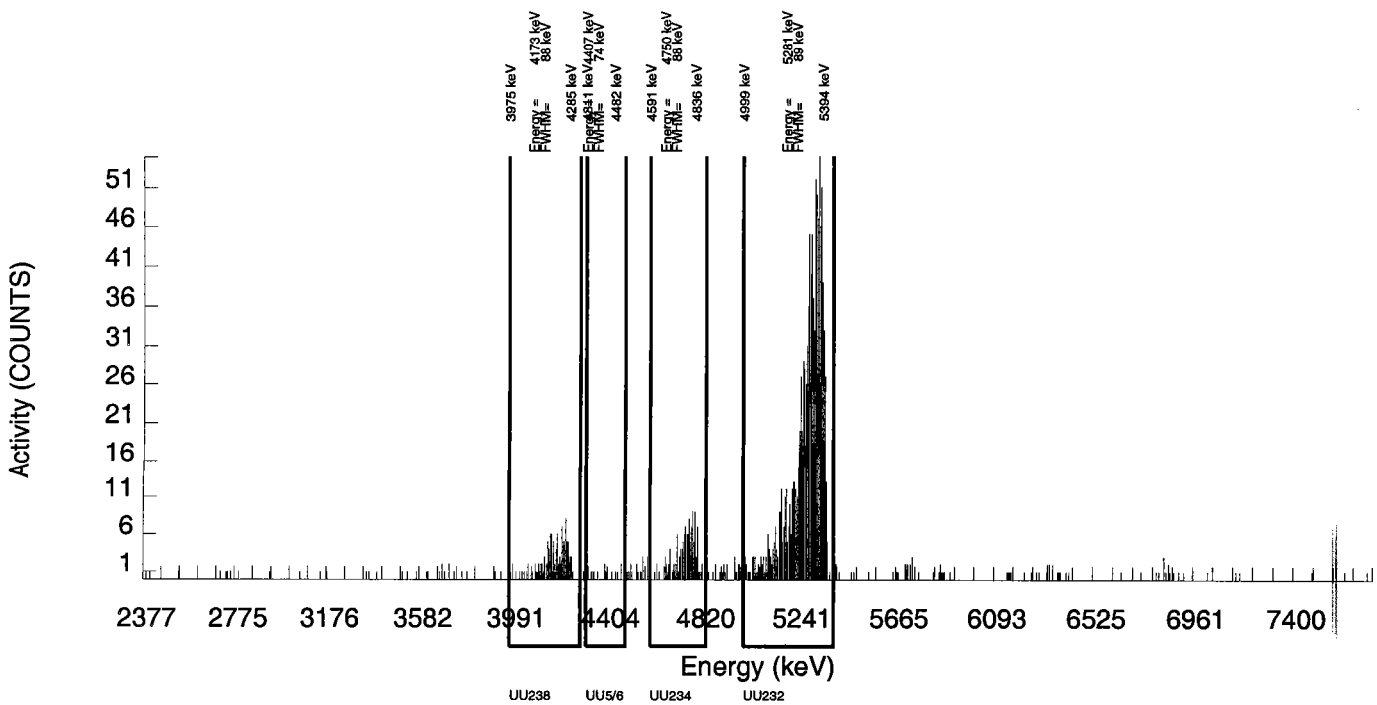
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	128.000	4.000	100.0000	3.65E-01	3.82E-02	1.33E-02	3.42E-02	3.33E-02
U232	5302.100	1073.000	11.000	100.0000	3.06E+00	1.84E-01	2.20E-02	5.17E-02	9.44E-02
U-235	4391.000	6.000	6.000	80.90000	2.11E-02	1.50E-02	2.01E-02	4.97E-02	1.50E-02
U-238	4184.730	118.000	2.000	100.0000	3.36E-01	3.60E-02	9.38E-03	2.65E-02	3.15E-02

REVIEWED BY:

DATE : 10/13/05



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 4-OCT-2005 00:00:00.

SAMPLE ID : S1200949868_UU
SAMPLE QTY: 1.000 L

DETECTOR NUMBER :33207
AVERAGE %EFFICIENCY :31.7484
% YIELD : 90.717

COUNT DATE:10-OCT-2005 20:36:57
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B032.CNF;646
BKG DATE: 9-OCT-2005

MS PCI/L : 2.419550
MSD PCI/L : 2.419550
LCS PCI/L : 2.419550
TRACER DPM : 5.4348
EFF FILE : W032.CNF;230
CAL DATE: 3-OCT-2005

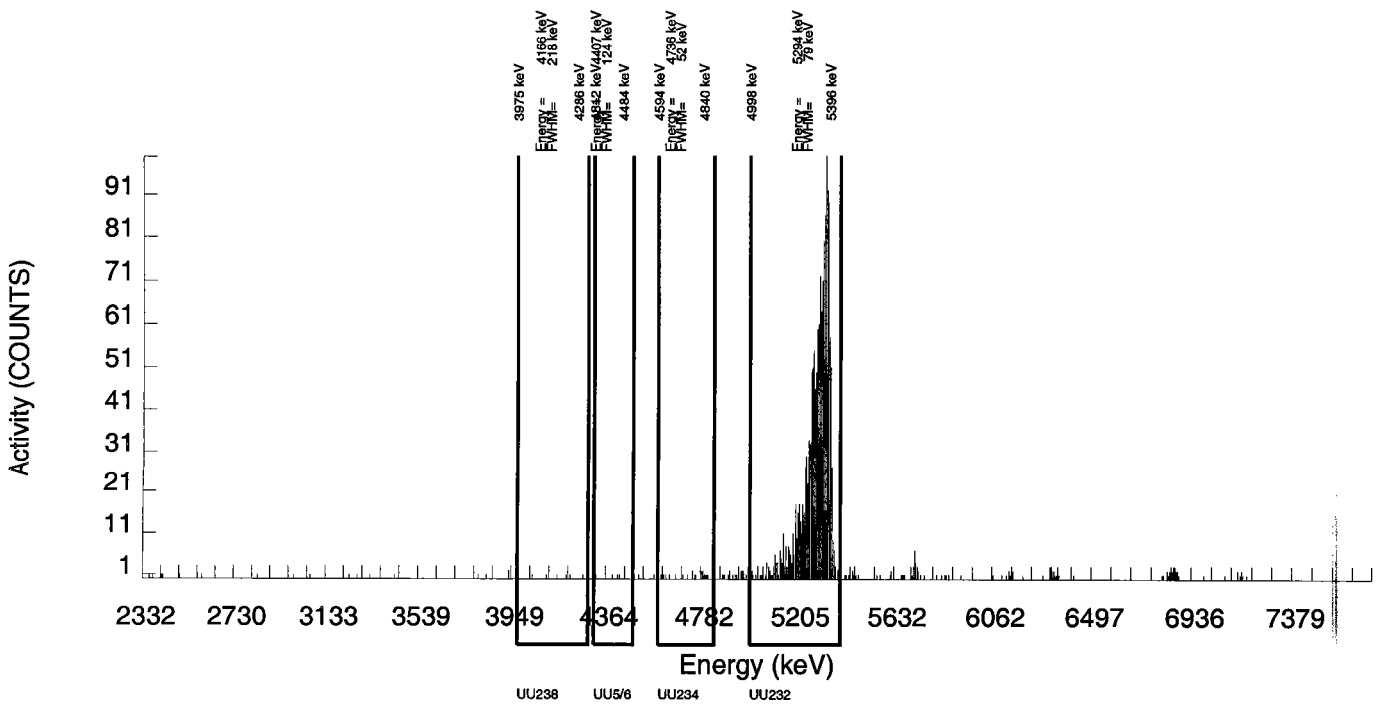
MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	18.000	4.000	100.0000	2.82E-02	8.09E-03	7.28E-03	1.88E-02	7.97E-03
U232	5302.100	1565.000	12.000	100.0000	2.45E+00	1.35E-01	1.26E-02	2.94E-02	6.24E-02
U-235	4391.000	4.000	1.000	80.90000	7.73E-03	4.75E-03	4.50E-03	1.42E-02	4.74E-03
U-238	4184.730	3.000	3.000	100.0000	4.69E-03	4.70E-03	6.30E-03	1.68E-02	4.69E-03

REVIEWED BY:

DATE : 10/BJB



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545
SAMPLE DATE : 13-SEP-2005 00:00:00

SAMPLE ID : S1200949869_UU
SAMPLE QTY: 0.800 L

DETECTOR NUMBER :28647
AVERAGE %EFFICIENCY :32.4425
% YIELD : 87.131

COUNT DATE:10-OCT-2005 20:36:57
ELAPSED LIVE TIME(SEC): 60000.00
ANALYST :BJB1

MS : 0389-I
MSD : 0389-I
LCS : 0389-I
TRACER : 0688-E
BKG FILE: B033.CNF;632
BKG DATE: 9-OCT-2005

MS PCI/L : 3.024437
MSD PCI/L : 3.024437
LCS PCI/L : 3.024437
TRACER DPM : 5.4379
EFF FILE : W033.CNF;203
CAL DATE: 3-OCT-2005

MS ISOTOPE : U-238
MSD ISOTOPE: U-238
LCS ISOTOPE: U-238
TRACER ISOTOPE: U232
LIB FILE : ENV_ALPHA_UU.N

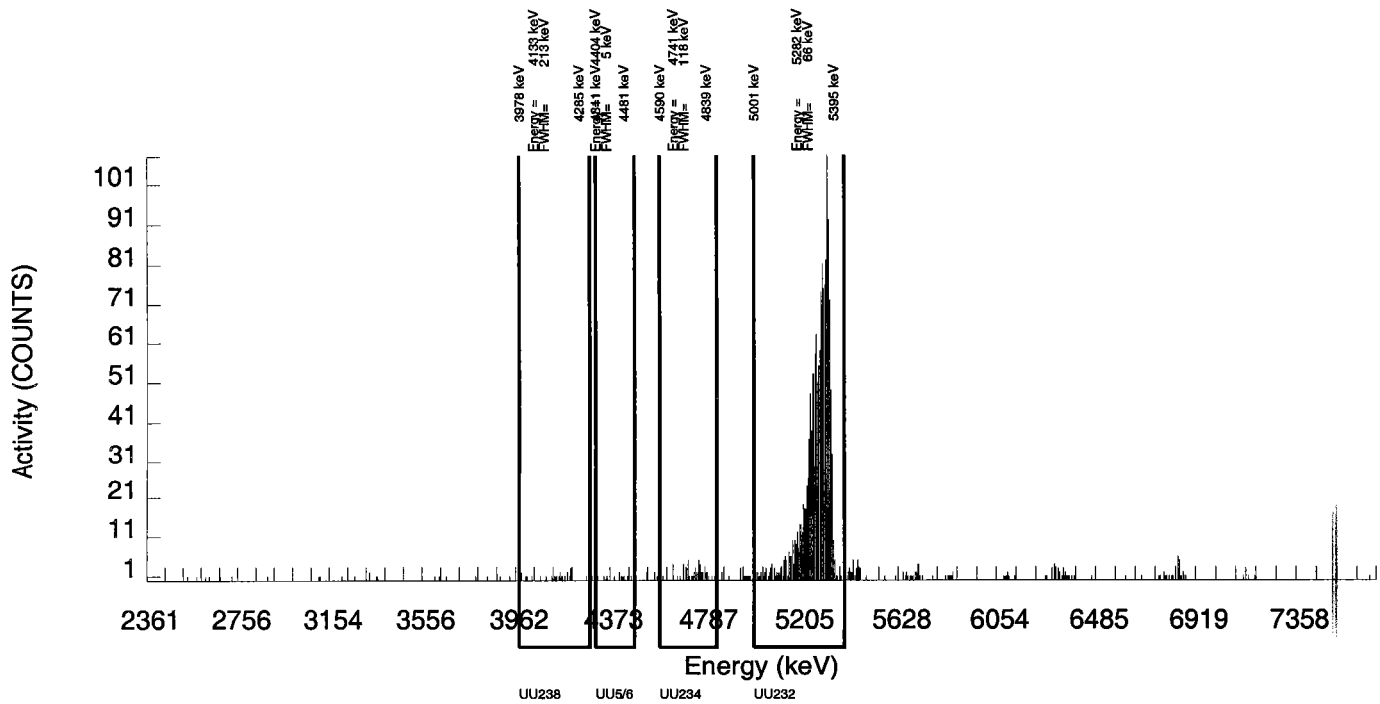
NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	55.000	1.000	100.0000	1.10E-01	1.60E-02	4.63E-03	1.47E-02	1.50E-02
U232	5302.100	1536.000	20.000	100.0000	3.06E+00	1.69E-01	2.07E-02	4.69E-02	7.91E-02
U-235	4391.000	12.000	2.000	80.90000	2.95E-02	9.95E-03	8.10E-03	2.29E-02	9.85E-03
U-238	4184.730	26.000	2.000	100.0000	5.18E-02	1.12E-02	6.55E-03	1.85E-02	1.09E-02

REVIEWED BY:

DATE : 10/13/05

$U^{3/4} = 0.314$
$U\text{-}235 = 0.175$
$U\text{-}238 = 0.300$



Alpha Spectroscopy Software Version 2.0
effective date: 09-Mar-1997

GENERAL ENGINEERING LABORATORIES, LLC.
ALPHA SPECTROSCOPY REPORT

BATCH NUMBER: 468545 SAMPLE DATE : 4-OCT-2005 00:00:00.	SAMPLE ID : S1200949870_UU SAMPLE QTY: 1.000 L
DETECTOR NUMBER :29275 AVERAGE %EFFICIENCY :32.4449 % YIELD : 84.118	COUNT DATE:10-OCT-2005 20:36:57 ELAPSED LIVE TIME(SEC): 60000.00 ANALYST :BJB1

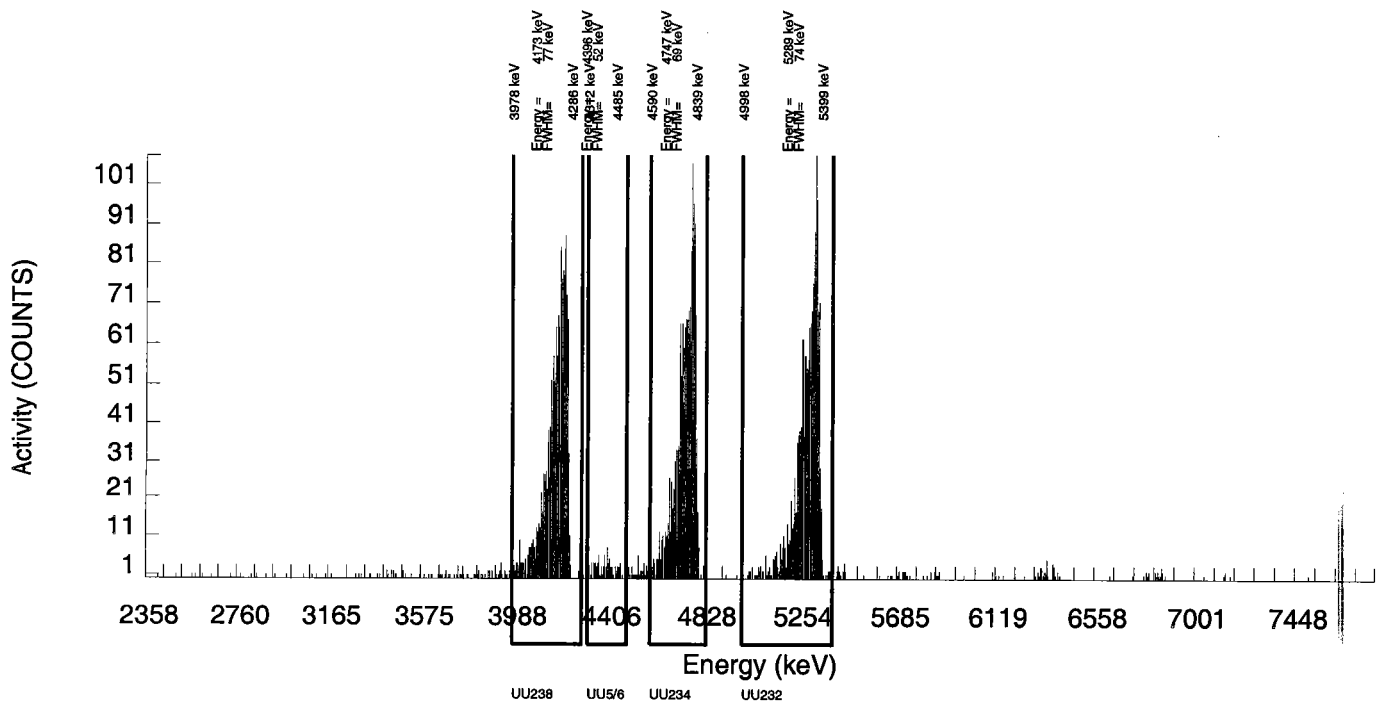
MS : 0389-I MSD : 0389-I LCS : 0389-I TRACER : 0688-E BKG FILE: B036.CNF;625 BKG DATE: 9-OCT-2005	MS PCI/L : 2.419550 MSD PCI/L : 2.419550 LCS PCI/L : 2.419550 TRACER DPM : 5.4348 EFF FILE : W036.CNF;203 CAL DATE: 3-OCT-2005	MS ISOTOPE : U-238 MSD ISOTOPE: U-238 LCS ISOTOPE: U-238 TRACER ISOTOPE: U232 LIB FILE : ENV_ALPHA_UU.N

NUCLIDE ACTIVITY SUMMARY

NUCLIDE	ENERGY	NET AREA	BKG AREA	%ABUN	ACTIVITY pCi/L	TPU 1-SIGMA	DLC pCi/L	MDC pCi/L	UNC pCi/L
U-3/4	4763.020	1438.000	6.000	100.0000	2.37E+00	1.32E-01	9.41E-03	2.33E-02	6.28E-02
U232	5302.100	1483.000	22.000	100.0000	2.45E+00	1.37E-01	1.80E-02	4.05E-02	6.45E-02
U-235	4391.000	88.000	1.000	80.90000	1.80E-01	2.13E-02	4.75E-03	1.50E-02	1.94E-02
U-238	4184.730	1434.000	1.000	100.0000	2.37E+00	1.32E-01	3.84E-03	1.21E-02	6.25E-02

REVIEWED BY: DATE : 10/13/05

LCS = $\frac{2.37}{2.42}$ = 97.9%



Radiochemistry Batch Checklist, Rev 4

Batch# 465316 Product: YL / ESHL Date: 10/14/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg for GAB.			N/A
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			N/A
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			N/A
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			N/A

General Engineering Laboratories

2/22/2005

Primary Review Performed By: [signature] 10/14/05

Secondary Review Performed By: Bill Gulank 10/14/05

10/8-10/15

Gamma Spec Que Sheet

09/22/2005

Batch #:465316 **Analyst: MJH1** **Minimum DueDate: 10/08/2005**

Gamma Spike Isotope: Mixed Gamma **Spike Code:** N/A **Expiration Date:** N/A **Vol:** N/A **Nominal Concentration:** N/A

Gamma LCS Isotope: Mixed Gamma **LCS Code:** 0781-A **Expiration Date:** 4/27/06 **Vol:** 1.0mL **Nominal Concentration:** Cs137-4691.3 Co60-710.1 Am241-1220

Initials: DAS **Prep Date:** 9-29-05 **Witness:** N/A

Sample ID	Client Description	Type	Hazard Code	RDL	Client	Matrix	Collect Date	Aliquot (1 g / F)	Detector	Sealing Date/Time (if Applicable)
145579001	GF05090G3TM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-SEP-05 15:00:00	2.0	1	
145579002	GF05090GMC401	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-SEP-05 07:30:00	2.0	2	
145579003	GF05090G57M01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-SEP-05 12:55:00	2.0	3	
145579004	GF05090G7CM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-SEP-05 09:32:00	2.0	6	
145579005	GU05090G3TM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-SEP-05 15:00:00	2.0	7	
145579006	GU05090GMC401	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-SEP-05 07:30:00	2.0	8	
145579007	GU05090G57M01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	13-SEP-05 12:55:00	2.0	9	
145579008	GU05090G7CM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-SEP-05 09:32:00	2.0	10	
145739001	GF05090G6CM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-SEP-05 12:00:00	2.0	11	
145739002	GF0509G33R101	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-SEP-05 09:07:00	2.0	12	
145739003	GF0509G33R201	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	15-SEP-05 09:35:00	2.0	15	
145739004	GU05090G6CM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-SEP-05 12:00:00	2.0	17	
145739005	GU0509G33R101	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	14-SEP-05 09:07:00	2.0	4	
145739006	GU0509G33R201	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	15-SEP-05 09:35:00	2.0	1	
145782001	GF05090G4BM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	15-SEP-05 13:45:00	2.0	7	
145782002	GF05090G5CM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	15-SEP-05 10:38:00	2.0	8	
145782003	GU05090G4BM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	15-SEP-05 13:45:00	2.0	14	
145782004	GU05090G5CM01	SAMPLE		10 pCi/L	ESHL001	GROUND WATER	15-SEP-05 10:38:00	2.0	12	
1200942441	MB for batch 465316	MB		10 pCi/L	QC ACCOUNT	GROUND WATER	9/29/05	2.0	9	
1200942442	GU05090G4BM01(145782003DUP)	DUP		10 pCi/L	QC ACCOUNT	GROUND WATER	15-SEP-05 13:45:00	2.0	15	
1200942443	LCS for batch 465316	LCS		10 pCi/L	QC ACCOUNT	GROUND WATER	9/29/05	2.0	WELL	

1415

10/11/05

Bill Eberle 10/14/05

Michael Hutton 10/14/05

General Engineering Laboratories, Radiochemistry Division

Data Reviewed By: 10/11/05

Failed RDL Report

Batch Id	Samp Id	Sample Type	Run Date	Parmname	Result	MDA	RDL
465316	145579001	SAMPLE	13-OCT-05	Gross Gamma	50.5	235.1	120
				Neptunium-237	-2.932	25.23	10.0
				Potassium-40	45.66	58.19	10.0
465316	145579002	SAMPLE	13-OCT-05	Gross Gamma	67.63	273.7	120
				Neptunium-237	-11.31	31.27	10.0
				Potassium-40	31.04	49.68	10.0
465316	145579003	SAMPLE	13-OCT-05	Gross Gamma	80.04	259.4	120
				Neptunium-237	-12.91	24.83	10.0
				Potassium-40	31.28	53.3	10.0
465316	145579004	SAMPLE	13-OCT-05	Gross Gamma	244.9	578.8	120
				Neptunium-237	1.251	30.39	10.0
				Potassium-40	23.91	35.87	10.0
465316	145579005	SAMPLE	13-OCT-05	Gross Gamma	78.52	201.8	120
				Neptunium-237	7.207	23.5	10.0
				Potassium-40	36.24	50.44	10.0
465316	145579006	SAMPLE	13-OCT-05	Gross Gamma	68.14	227.1	120
				Neptunium-237	-6.271	21.41	10.0
				Potassium-40	21.03	29.1	10.0
465316	145579007	SAMPLE	13-OCT-05	Gross Gamma	90.83	340.4	120
				Neptunium-237	0.738	28.76	10.0
465316	145579008	SAMPLE	13-OCT-05	Gross Gamma	72.48	266.6	120
				Neptunium-237	5.602	27.19	10.0
465316	145739001	SAMPLE	13-OCT-05	Gross Gamma	90.83	387	120
				Neptunium-237	20.03	31.97	10.0
				Potassium-40	32.3	35.76	10.0
465316	145739002	SAMPLE	13-OCT-05	Gross Gamma	85.67	283.2	120
				Neptunium-237	2.778	24.22	10.0
				Potassium-40	14.46	30.7	10.0
465316	145739003	SAMPLE	13-OCT-05	Gross Gamma	85.67	283.2	120
				Neptunium-237	5.573	16.99	10.0
				Potassium-40	49.92	59.11	10.0
465316	145739004	SAMPLE	13-OCT-05	Gross Gamma	68.3	263.6	120
				Neptunium-237	15.01	15.92	10.0
				Potassium-40	21.78	54.92	10.0
465316	145739005	SAMPLE	13-OCT-05	Gross Gamma	777.7	1420	120
				Neptunium-237	-1.756	25.92	10.0
				Potassium-40	20.36	34.92	10.0
465316	145739006	SAMPLE	13-OCT-05	Gross Gamma	116.4	370.8	120
				Neptunium-237	-1.895	24.6	10.0
				Potassium-40	10.31	33.02	10.0
465316	145782001	SAMPLE	13-OCT-05	Gross Gamma	83.68	235	120
				Neptunium-237	12.89	24.02	10.0
				Potassium-40	34.9	37.75	10.0
465316	145782002	SAMPLE	13-OCT-05	Gross Gamma	62.05	239.9	120

Failed RDL Report

Batch Id	Samp Id	Sample Type	Run Date	Parmname	Result	MDA	RDL
465316	145782002	SAMPLE	13-OCT-05	Neptunium-237	2.062	22.93	10.0
				Potassium-40	13.83	42.66	10.0
465316	145782003	SAMPLE	13-OCT-05	Gross Gamma	113.6	297.5	120
				Neptunium-237	6.683	31.04	10.0
				Potassium-40	7.551	34.98	10.0
465316	145782004	SAMPLE	13-OCT-05	Gross Gamma	68.3	263.6	120
				Neptunium-237	-1.226	24.59	10.0
465316	1200942441	MB	13-OCT-05	Gross Gamma	55.53	217.4	120
				Neptunium-237	-0.3868	25.34	10.0
				Potassium-40	20.25	46.64	10.0
465316	1200942442	DUP	13-OCT-05	Gross Gamma	83	281.5	120
				Neptunium-237	9.102	15.95	10.0
				Potassium-40	12.25	35.42	10.0
465316	1200942443	LCS	13-OCT-05	Potassium-40	28.49	229.5	10.0
				Sodium-22	15.92	19.4	10.0

GEL QUALS

Batch ID: 465316

Report run on: October 14, 2005 8:03 AM

Samp Id	Parmname	Cofa	Edd	Qual	Comments	Auto	Result	MDA	Uncert	SQL
145579007-1 13-OCT-2005 10:43	Cesium-137	UI	UI	UI	Data rejected due to no valid peak.		5.41			
	Potassium-40	UI	UI	UI	Data rejected due to no valid peak.		60.3			
145782004-1 13-OCT-2005 14:59	Sodium-22	UI	UI	UI	Data rejected due to no valid peak.		3.967			

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL
465316	145579001	SAMPLE	13-OCT-05	Cerium-143	1.598E+07	6.633E+06	pCi/L	0	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-135	4.348E+32	0	pCi/L	0	N
				Molybdenum-99	3075	2076	pCi/L	0	N
				Niobium-95m	231.3	1040	pCi/L	0	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Sodium-24	2.069E+13	2.026E+14	pCi/L	0	N
				Technetium-99m	1.338E+36	0	pCi/L	0	N
465316	145579002	SAMPLE	13-OCT-05	Annihilation Rad.	16.09	1.731	pCi/L	6.798	N
				Cadmium-115	29020	38200	pCi/L	0	N
				Gadolinium-153 ǂǂ E	18.25	6.624	pCi/L	12.69	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	3098	3835	pCi/L	0	N
				Niobium-95m	2901	1188	pCi/L	0	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Sodium-24	4.620E+14	3.997E+14	pCi/L	0	N
				Technetium-99m	2.962E+36	0	pCi/L	0	N
				Tellurium-132	1269	571.3	pCi/L	0	N
465316	145579003	SAMPLE	13-OCT-05	Iodine-133	5.894E+09	2.303E+10	pCi/L	0	N
				Krypton-85 ǂǂE	1065	220.9	pCi/L	897.8	N
				Lanthanum-140	71490	2.804E+05	pCi/L	0	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	3665	2201	pCi/L	0	N
				Promethium-149	4.699E+05	2.759E+05	pCi/L	0	N
				Technetium-99m	1.987E+36	0	pCi/L	0	N
				Uranium-234	16.56	11.02	pCi/L	14.61	N
465316	145579004	SAMPLE	13-OCT-05	Annihilation Rad.	16.89	1.542	pCi/L	6.636	N
				Cadmium-115	1.300E+05	49000	pCi/L	0	N
				Cerium-143	7.342E+05	5.455E+06	pCi/L	0	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Lanthanum-140	1.240E+05	2.073E+05	pCi/L	0	N
				Molybdenum-99	7801	2611	pCi/L	0	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Promethium-149	35020	2.619E+05	pCi/L	0	N
				Technetium-99m	4.875E+35	0	pCi/L	0	N
				Thulium-171 ǂǂE	5184	1551	pCi/L	4571	N
465316	145579005	SAMPLE	13-OCT-05	Iodine-132	1.000E+41	0	pCi/L	0	N

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL	
465316	145579005	SAMPLE	13-OCT-05	Krypton-85	1416	295	pCi/L	1075	N	
				Lanthanum-140	57120	2.683E+05	pCi/L	0	N	
				Molybdenum-99	7113	2860	pCi/L	0	N	
				Niobium-95m	1021	1076	pCi/L	0	N	
				Promethium-149	3.520E+05	2.980E+05	pCi/L	0	N	
				Sodium-24	8.243E+13	2.048E+14	pCi/L	0	N	
				Technetium-99m	3.105E+36	0	pCi/L	0	N	
				Thulium-171	5385	1396	pCi/L	3722	N	
465316	145579006	SAMPLE	13-OCT-05	Annihilation Rad.	13.51	1.38	pCi/L	5.879	N	
				Cadmium-115	30060	31190	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	5.676E+09	2.702E+10	pCi/L	0	N	
				Lanthanum-140	14110	3.052E+05	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99	7341	3112	pCi/L	0	N	
				Niobium-95m	273.4	1021	pCi/L	0	N	
				Sodium-24	4.186E+14	3.028E+14	pCi/L	0	N	
				Technetium-99m	7.039E+36	0	pCi/L	0	N	
465316	145579007	SAMPLE	13-OCT-05	Cadmium-115	61910	33340	pCi/L	0	N	
				Cesium-137	5.41	1.883	pCi/L	4.276	10.0	U T
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	2.616E+10	2.623E+10	pCi/L	0	N	
				Iodine-135	1.303E+33	0	pCi/L	0	N	
				Krypton-85	2116	307.7	pCi/L	1196	N	
				Lanthanum-140	5.396E+05	2.648E+05	pCi/L	0	N	
				Molybdenum-99	3721	3131	pCi/L	0	N	
				Niobium-95m	702.2	1287	pCi/L	0	N	
				Potassium-40	60.3	20.34	pCi/L	33.35	10.0	U T
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Sodium-24	7.753E+13	2.447E+14	pCi/L	0	N	
				Strontium-85	12.68	1.844	pCi/L	7.169	N	
				Technetium-99m	2.025E+36	0	pCi/L	0	N	
				Tellurium-132	921.7	567.4	pCi/L	0	N	
465316	145579008	SAMPLE	13-OCT-05	Annihilation Rad.	15.46	1.51	pCi/L	6.109	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Iodine-133	4.257E+08	9.604E+09	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL
465316	145579008	SAMPLE	13-OCT-05	Molybdenum-99	1935	2013	pCi/L	0	N
				Potassium-40 ✓	44.37	18.91	pCi/L	37.95	10.0
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Promethium-149	2.121E+05	2.045E+05	pCi/L	0	N
				Sodium-24	3.044E+13	1.007E+14	pCi/L	0	N
				Technetium-99m	1.213E+35	0	pCi/L	0	N
465316	145739001	SAMPLE	13-OCT-05	Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-133	1.554E+10	1.476E+10	pCi/L	0	N
				Krypton-85 ~~	2880	356.5	pCi/L	1439	N
				Lanthanum-140	1.825E+05	1.437E+05	pCi/L	0	N
				Molybdenum-99	968.3	1605	pCi/L	0	N
				Niobium-95m	2079	1073	pCi/L	0	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Strontium-85 ~~	17.09	2.115	pCi/L	8.535	N
				Technetium-99m	4.690E+34	0	pCi/L	0	N
				Tellurium-132	1444	500	pCi/L	0	N
465316	145739002	SAMPLE	13-OCT-05	Annihilation Rad.	16.09	1.44	pCi/L	5.826	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-133	1.682E+10	1.168E+10	pCi/L	0	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	875.5	1320	pCi/L	0	N
				Sodium-24	1.051E+13	9.052E+13	pCi/L	0	N
				Technetium-99m	5.741E+34	0	pCi/L	0	N
				Thulium-171 HE	3593	1175	pCi/L	3321	N
				Uranium-238 HE	146.3	71.09	pCi/L	145.7	N
465316	145739003	SAMPLE	13-OCT-05	Annihilation Rad.	13.32	1.528	pCi/L	5.992	N
				Bismuth-210 ~~	145.3	20.96	pCi/L	76.72	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-133	2.668E+07	5.008E+09	pCi/L	0	N
				Iodine-135	2.208E+31	0	pCi/L	0	N
				Lanthanum-140	44680	1.270E+05	pCi/L	0	N
				Lead-210 ~~	145.3	20.96	pCi/L	76.72	N
				Molybdenum-99	2621	1114	pCi/L	0	N
				Sodium-24	3.640E+13	3.691E+13	pCi/L	0	N
				Technetium-99m	1.323E+34	0	pCi/L	0	N
				Thorium-234 ~~	147	24.47	pCi/L	76.69	N
				Uranium-238 ~~	147	24.47	pCi/L	76.69	N

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL
465316	145739004	SAMPLE	13-OCT-05	Annihilation Rad.	13.56	1.677	pCi/L	6.584	N
				Cadmium-115	21290	25970	pCi/L	0	N
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-135	8.957E+31	0	pCi/L	0	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	232.4	1170	pCi/L	0	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Promethium-149	96400	2.140E+05	pCi/L	0	N
				Sodium-24	5.275E+13	1.381E+14	pCi/L	0	N
				Technetium-99m	1.128E+34	0	pCi/L	0	N
				Tellurium-132	13.53	354.9	pCi/L	0	N
465316	145739005	SAMPLE	13-OCT-05	Annihilation Rad.	13.72	1.49	pCi/L	6.037	N
				Cadmium-115	55860	20070	pCi/L	0	N
				Cerium-143	2.508E+06	4.393E+06	pCi/L	0	N
				Iodine-133	2.943E+10	1.108E+10	pCi/L	0	N
				Lanthanum-140	2.692E+05	1.740E+05	pCi/L	0	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	4430	1873	pCi/L	0	N
				Niobium-95m	1336	912.7	pCi/L	0	N
				Promethium-149	3.125E+05	2.292E+05	pCi/L	0	N
				Radium-224 HC	90.91	36.41	pCi/L	61.8	N
				Technetium-99m	3.205E+35	0	pCi/L	0	N
465316	145739006	SAMPLE	13-OCT-05	Annihilation Rad.	14.91	1.386	pCi/L	6.011	N
				Cadmium-115	729.1	14520	pCi/L	0	N
				Cerium-143	4.470E+06	4.237E+06	pCi/L	0	N
				Iodine-135	5.853E+30	0	pCi/L	0	N
				Manganese-56	1.000E+41	0	pCi/L	0	N
				Molybdenum-99	2150	1350	pCi/L	0	N
				Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Promethium-149	54400	1.576E+05	pCi/L	0	N
				Technetium-99m	1.689E+34	0	pCi/L	0	N
465316	145782001	SAMPLE	13-OCT-05	Annihilation Rad.	17.33	1.485	pCi/L	6.419	N
				Cadmium-115	46400	19990	pCi/L	0	N
				Cerium-143	2.087E+06	3.838E+06	pCi/L	0	N
				Chromium-51 HC	54.01	23.51	pCi/L	48.38	N
				Iodine-133	2.566E+10	8.932E+09	pCi/L	0	N
				Iodine-135	1.009E+31	0	pCi/L	0	N

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertainty	Units	MDA	RDL	
465316	145782001	SAMPLE	13-OCT-05	Molybdenum-99	1810	1047	pCi/L	0	N	
				Neodymium-147	168.8	58.76	pCi/L	145.4	N	
				Radium-224	72.59	26.39	pCi/L	61.33	N	
				Sodium-24	5.938E+13	3.634E+13	pCi/L	0	N	
				Technetium-99m	9.195E+33	0	pCi/L	0	N	
				Uranium-235	57.99	19.83	pCi/L	22.29	N	
465316	145782002	SAMPLE	13-OCT-05	Cadmium-115	14860	15770	pCi/L	0	N	
				Cerium-143	6.955E+06	3.617E+06	pCi/L	0	N	
				Iodine-132	1.000E+41	0	pCi/L	0	N	
				Lanthanum-140	28310	1.412E+05	pCi/L	0	N	
				Molybdenum-99	3391	1883	pCi/L	0	N	
				Sodium-24	3.624E+13	3.796E+13	pCi/L	0	N	
				Technetium-99m	2.390E+34	0	pCi/L	0	N	
465316	145782003	SAMPLE	13-OCT-05	Annihilation Rad.	17.46	1.751	pCi/L	6.845	N	
				Iodine-133	7.393E+09	4.658E+09	pCi/L	0	N	
				Iodine-135	9.826E+30	0	pCi/L	0	N	
				Lanthanum-140	48720	98130	pCi/L	0	N	
				Lead-212	10.48	5.153	pCi/L	8.546	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99	2243	1825	pCi/L	0	N	
				Promethium-149	92860	1.680E+05	pCi/L	0	N	
				Sodium-24	1.182E+12	2.498E+13	pCi/L	0	N	
				Technetium-99m	5.343E+33	0	pCi/L	0	N	
				Thorium-228	10.48	5.153	pCi/L	6.997	N	
				Thorium-232	10.19	5.013	pCi/L	8.312	N	
				Thulium-171	5660	2178	pCi/L	4185	N	
465316	145782004	SAMPLE	13-OCT-05	Annihilation Rad.	18.7	1.512	pCi/L	6.111	N	
				Cadmium-115	22970	16630	pCi/L	0	N	
				Cerium-143	2.760E+05	2.683E+06	pCi/L	0	N	
				Manganese-56	1.000E+41	0	pCi/L	0	N	
				Molybdenum-99	1546	1454	pCi/L	0	N	
				Potassium-40	63.08	19.31	pCi/L	28.85	10.0	
				Praseodymium-144	1.000E+41	0	pCi/L	0	N	
				Promethium-149	2.213E+05	1.605E+05	pCi/L	0	N	
				Radium-224	97.4	42.86	pCi/L	61.85	N	
				Sodium-22	3.967	1.015	pCi/L	3.383	10.0	U
				Technetium-99m	1.091E+34	0	pCi/L	0	N	

Result Greater Than MDA

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	MDA	RDL
465316	145782004	SAMPLE	13-OCT-05	Thorium-234	166.9	76.65	pCi/L	151.3	N
				Thulium-171	3557	1500	pCi/L	3212	N
				Uranium-238	166.9	76.65	pCi/L	151.3	N
465316	1200942441	MB	13-OCT-05	Krypton-85	2017	284.7	pCi/L	1133	N
				Lanthanum-140	684.7	480	pCi/L	0	N
				Sodium-24	4.334E+06	9.964E+06	pCi/L	0	N
				Strontium-85	10.29	1.453	pCi/L	5.78	N
				Thorium-234	209.7	56.33	pCi/L	190.1	N
				Uranium-238	209.7	56.33	pCi/L	190.1	N
465316	1200942442	DUP	13-OCT-05	Cadmium-115	20870	16190	pCi/L	0	N
				Krypton-85	981.8	208.9	pCi/L	852.8	N
				Lanthanum-140	1.798E+05	1.319E+05	pCi/L	0	N
				Molybdenum-99	3106	1456	pCi/L	0	N
				Promethium-149	92900	1.453E+05	pCi/L	0	N
				Sodium-24	1.184E+13	3.498E+13	pCi/L	0	N
				Technetium-99m	1.583E+34	0	pCi/L	0	N
465316	1200942443	LCS	13-OCT-05	Americium-241	1275	88.2	pCi/L	129.5	N
				Annihilation Rad.	27.34	9.977	pCi/L	17.74	N
				Barium-137m	475.8	23.65	pCi/L	27.07	N
				Cadmium-109	13500	449.3	pCi/L	606	N
				Cerium-139	239.6	10.66	pCi/L	18.79	N
				Cesium-137	503	25	pCi/L	28.62	10.0
				Cobalt-57	255.8	13.74	pCi/L	37.86	N
				Cobalt-60	738.5	26.78	pCi/L	14.06	10.0
				Gross Gamma	4641	1441	pCi/L	2595	120
				Iodine-132	1.000E+41	0	pCi/L	0	N
				Iodine-133	6.038E+05	7.016E+05	pCi/L	0	N
				Lanthanum-140	3154	2959	pCi/L	0	N
				Mercury-203	46.39	14.65	pCi/L	21.79	N
				Neptunium-237	3974	132.3	pCi/L	181.5	10.0
				Promethium-147	1.078E+08	1.366E+08	pCi/L	3.860E+07	N
				Sodium-24	8.750E+07	4.681E+07	pCi/L	0	N
				Tin-113	322	24.33	pCi/L	26.74	N
				Tin-126	1353	45.04	pCi/L	61.05	N
				Yttrium-88	499.5	27.46	pCi/L	16.85	N

Result Greater Than DL

Batch Id	Sample Id	Sample Type	Run Date	Parmname	Result	Uncertanty	Units	DL	RDL
465316	145782004	SAMPLE	13-OCT-05	Praseodymium-144	1.000E+41	0	pCi/L	0	N
				Promethium-149	2.213E+05	1.605E+05	pCi/L	0	N
				Protactinium-234	14.71	7.722	pCi/L	14.06	N
				Protactinium-234m	229.6	100.7	pCi/L	190.4	N
				Radium-224	97.4	42.86	pCi/L	29.43	N
				Sodium-22	3.967	1.015	pCi/L	1.498	10.0
				Technetium-99m	1.091E+34	0	pCi/L	0	N
				Thorium-234	166.9	76.65	pCi/L	72.71	N
				Thulium-171	3557	1500	pCi/L	1544	N
				Uranium-238	166.9	76.65	pCi/L	72.71	N
465316	1200942441	MB	13-OCT-05	Krypton-85	2017	284.7	pCi/L	542	N
				Lanthanum-140	684.7	480	pCi/L	0	N
				Radium-224	43.25	24.61	pCi/L	38.27	N
				Sodium-24	4.334E+06	9.964E+06	pCi/L	0	N
				Strontium-85	10.29	1.453	pCi/L	2.766	N
				Thorium-234	209.7	56.33	pCi/L	91.61	N
				Uranium-235	15.57	7.091	pCi/L	12.6	N
				Uranium-238	209.7	56.33	pCi/L	91.61	N
465316	1200942442	DUP	13-OCT-05	Bismuth-212	19.55	8.77	pCi/L	15.76	N
				Cadmium-109	31.56	21.69	pCi/L	27.09	N
				Cadmium-115	20870	16190	pCi/L	0	N
				Cobalt-60	2.1	1.234	pCi/L	1.91	10.0
				Krypton-85	981.8	208.9	pCi/L	403.1	N
				Lanthanum-140	1.798E+05	1.319E+05	pCi/L	0	N
				Molybdenum-99	3106	1456	pCi/L	0	N
				Neptunium-237	9.102	6.327	pCi/L	7.657	10.0
				Promethium-149	92900	1.453E+05	pCi/L	0	N
				Protactinium-234m	319.9	121.1	pCi/L	231	N
				Sodium-24	1.184E+13	3.498E+13	pCi/L	0	N
				Technetium-99m	1.583E+34	0	pCi/L	0	N
				Thulium-171	791	525.3	pCi/L	658.1	N
465316	1200942443	LCS	13-OCT-05	Actinium-227	141.6	69.15	pCi/L	121.4	N
				Americium-241	1275	88.2	pCi/L	63.38	N
				Annihilation Rad.	27.34	9.977	pCi/L	8.338	N
				Barium-137m	475.8	23.65	pCi/L	12.79	N
				Barium-140	94.34	46.46	pCi/L	81.49	N
				Bismuth-214	27.52	13.36	pCi/L	23.27	N

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:41:09.36

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579001.CNF;1
Sample date      : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:40:36
Sample ID        : G145579001           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA1               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.37  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 5933088
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	66.39*	2	185	1.32	142.03	139	7	1.44E-04	*****	
2	0	140.15*	36	164	1.70	288.99	286	7	2.47E-03	67.5	
3	0	176.16	54	164	1.68	360.73	357	9	3.77E-03	45.0	
4	0	185.89*	60	206	1.36	380.12	375	12	4.18E-03	54.5	
5	0	238.08*	5	170	1.65	484.09	479	10	3.51E-04	544.7	
6	0	269.22*	22	125	2.33	546.13	542	10	1.51E-03	111.3	
7	0	294.87	36	65	1.79	597.23	594	7	2.47E-03	41.5	
8	0	332.95	39	135	0.57	673.10	667	14	2.68E-03	66.1	
9	0	351.39*	9	90	1.93	709.83	707	11	6.57E-04	223.2	
10	0	414.55	32	59	1.30	835.67	832	10	2.22E-03	48.0	
11	0	511.31*	12	105	2.22	1028.43	1023	18	8.32E-04	273.7	
12	0	583.28*	29	54	1.89	1171.80	1162	17	2.03E-03	66.3	
13	0	595.95*	11	41	0.86	1197.05	1194	9	7.29E-04	124.3	
14	0	609.77*	2	36	1.12	1224.58	1219	11	1.27E-04	836.1	
15	0	704.38	20	23	2.84	1413.05	1410	9	1.37E-03	49.0	
16	0	807.43	13	13	1.67	1618.33	1616	6	8.91E-04	53.0	
17	0	929.43	10	19	0.94	1861.36	1858	12	7.06E-04	89.6	
18	0	1122.74	39	22	7.86	2246.42	2235	28	2.73E-03	36.6	
19	0	1149.58	9	11	0.76	2299.88	2298	8	6.11E-04	71.9	
20	0	1157.15	13	1	0.97	2314.96	2312	6	8.75E-04	32.0	
21	0	1245.87*	8	8	0.69	2491.69	2488	7	5.35E-04	80.5	
22	0	1274.41*	9	19	0.67	2548.54	2542	15	5.94E-04	127.6	
23	0	1344.82*	4	4	0.65	2688.79	2686	6	2.46E-04	134.5	
24	0	1377.89	9	6	1.79	2754.65	2753	9	6.30E-04	55.3	
25	0	1453.88*	2	0	0.56	2906.00	2904	6	1.28E-04	240.4	
26	0	1547.59	5	3	1.30	3092.66	3091	5	3.56E-04	65.1	
27	0	1705.54*	2	2	1.82	3407.24	3405	7	1.65E-04	205.7	
28	0	1763.50*	2	7	1.23	3522.67	3518	9	1.20E-04	329.6	
29	0	1809.50	22	4	7.32	3614.28	3606	17	1.54E-03	30.0	
30	0	1869.73	16	4	1.37	3734.24	3727	15	1.14E-03	35.7	
31	0	2010.46	9	4	0.55	4014.51	4004	19	6.04E-04	68.6	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:41:13

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579001.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:40:36
Sample ID : G145579001 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry : 3190-H
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:01.37 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.56 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	+	1274.53	*	1.469E+00	3.748E+00	3.201E+00	0.000E+00	0.459
AL-26	+	511.00		5.837E-01	3.195E+00	1.804E+00	0.000E+00	0.324
	+	1808.65	*	4.732E+00	2.838E+00	4.421E+00	0.000E+00	1.070
CS-135	+	268.24	*	6.879E+00	1.532E+01	1.500E+01	0.000E+00	0.459
TL-208		75.00		1.437E+00	7.067E+01	1.202E+02	0.000E+00	0.012
		277.35		-1.866E+00	2.060E+01	3.653E+01	0.000E+00	-0.051
	+	510.84		4.555E+00	2.493E+01	1.592E+01	0.000E+00	0.286
	+	583.14	*	3.148E+00	4.174E+00	2.946E+00	0.000E+00	1.069
		763.30		-4.595E+01	1.141E+02	1.920E+02	0.000E+00	-0.239
		860.37		-2.197E+00	1.544E+01	2.685E+01	0.000E+00	-0.082
		1093.90		1.498E+02	4.869E+02	9.626E+02	0.000E+00	0.156
BI-211	+	351.07	*	4.429E+00	1.977E+01	1.777E+01	0.000E+00	0.249
RA-226	+	295.21		9.930E+00	8.243E+00	1.388E+01	0.000E+00	0.715
	+	351.92		1.541E+00	6.878E+00	6.699E+00	0.000E+00	0.230
	+	609.31	*	3.605E-01	6.029E+00	6.693E+00	0.000E+00	0.054
TH-228		84.40		4.523E+00	1.640E+02	2.782E+02	0.000E+00	0.016
	+	238.60	*	5.470E-01	5.960E+00	6.408E+00	0.000E+00	0.085
		300.10		3.043E+01	4.341E+01	8.068E+01	0.000E+00	0.377
TH-230	+	295.21		9.929E+00	8.243E+00	1.388E+01	0.000E+00	0.715
	+	351.92		1.541E+00	6.877E+00	6.699E+00	0.000E+00	0.230
	+	609.31	*	3.605E-01	6.028E+00	6.693E+00	0.000E+00	0.054
U-234	+	67.67		4.725E+01	1.125E+03	1.261E+03	0.000E+00	0.037
		241.98		1.154E+00	2.256E+01	3.548E+01	0.000E+00	0.033
	+	295.21	*	9.929E+00	8.243E+00	1.388E+01	0.000E+00	0.715
	+	351.92		1.541E+00	6.877E+00	6.699E+00	0.000E+00	0.230
ANH-511	+	511.00	*	9.551E-01	5.228E+00	2.952E+00	0.000E+00	0.324

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	2.084E+00	2.116E+01	3.805E+01	0.000E+00	0.055
K-40		1460.81	*	4.566E+01	2.722E+01	5.819E+01	0.000E+00	0.785
SC-46		889.25	*	-6.562E-01	1.848E+00	3.370E+00	0.000E+00	-0.195

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1120.51		2.809E+00	2.517E+00	5.350E+00	0.000E+00	0.525
V-48		944.10		6.308E+01	7.450E+01	1.571E+02	0.000E+00	0.402
		983.50	*	-5.657E-01	5.805E+00	1.093E+01	0.000E+00	-0.052
		1312.09		-6.973E+00	7.537E+00	1.206E+01	0.000E+00	-0.578
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	8.887E+00	3.127E+01	5.666E+01	0.000E+00	0.157
MN-54		834.83	*	5.864E-01	1.731E+00	3.259E+00	0.000E+00	0.180
CO-56		846.75	*	-1.080E+00	2.343E+00	3.901E+00	0.000E+00	-0.277
		1037.82		1.207E+01	1.803E+01	3.635E+01	0.000E+00	0.332
		1238.25		-4.884E-01	3.964E+00	7.298E+00	0.000E+00	-0.067
CO-57		122.06	*	6.485E-02	1.838E+00	3.089E+00	0.000E+00	0.021
		136.47		-1.017E+01	1.603E+01	2.583E+01	0.000E+00	-0.394
CO-58		810.78	*	-3.776E-01	2.330E+00	3.549E+00	0.000E+00	-0.106
FE-59		192.35		-1.634E+01	7.613E+01	1.246E+02	0.000E+00	-0.131
		1099.25	*	2.818E-01	4.999E+00	9.542E+00	0.000E+00	0.030
		1291.60		5.677E-01	6.855E+00	1.318E+01	0.000E+00	0.043
CO-60		1173.24		4.325E-01	1.712E+00	3.399E+00	0.000E+00	0.127
		1332.50	*	1.236E+00	2.007E+00	4.122E+00	0.000E+00	0.300
ZN-65		1115.55	*	1.430E-01	4.348E+00	7.217E+00	0.000E+00	0.020
SE-75	+	66.05		2.054E+01	4.890E+02	7.016E+02	0.000E+00	0.029
		96.73		-4.705E+00	5.933E+01	9.960E+01	0.000E+00	-0.047
		121.11		-2.985E+00	1.037E+01	1.711E+01	0.000E+00	-0.174
		136.00		-1.380E+00	3.054E+00	4.972E+00	0.000E+00	-0.278
		198.60		1.470E+02	1.318E+02	2.317E+02	0.000E+00	0.634
		264.65	*	-8.293E-01	2.682E+00	4.690E+00	0.000E+00	-0.177
		279.53		-7.458E-01	6.411E+00	1.135E+01	0.000E+00	-0.066
		303.91		-7.743E+00	1.264E+02	2.243E+02	0.000E+00	-0.035
		400.65		-1.672E+00	1.540E+01	2.716E+01	0.000E+00	-0.062
KR-85		513.99	*	9.058E+02	4.670E+02	9.269E+02	0.000E+00	0.977
SR-85		513.99	*	5.423E+00	2.796E+00	5.549E+00	0.000E+00	0.977
Y-88		898.02		8.877E-02	2.396E+00	4.497E+00	0.000E+00	0.020
		1836.01	*	-1.539E+00	2.394E+00	3.942E+00	0.000E+00	-0.390
Y-91		557.57	*	-1.191E+00	2.286E+00	3.849E+00	0.000E+00	-0.309
		1204.90		2.763E+02	1.005E+03	1.939E+03	0.000E+00	0.142
NB-94	+	702.63	*	2.025E+00	1.985E+00	3.268E+00	0.000E+00	0.620
		871.10		-7.907E-01	2.145E+00	3.589E+00	0.000E+00	-0.220
NB-95		765.79	*	1.119E+00	3.318E+00	6.101E+00	0.000E+00	0.183
ZR-95		724.18		-8.445E-01	5.437E+00	9.483E+00	0.000E+00	-0.089
		756.74	*	3.382E+00	4.455E+00	8.591E+00	0.000E+00	0.394
RU-103		497.08	*	-7.673E-01	2.963E+00	5.138E+00	0.000E+00	-0.149
	+	610.33		5.047E+00	8.440E+01	9.058E+01	0.000E+00	0.056
RH-106	+	511.85		4.905E+00	2.685E+01	1.518E+01	0.000E+00	0.323
		621.84	*	4.304E-01	1.929E+01	3.413E+01	0.000E+00	0.013
		1050.47		1.555E+01	1.154E+02	2.202E+02	0.000E+00	0.071
RU-106		622.20	*	2.204E+00	1.881E+01	3.367E+01	0.000E+00	0.065
AG-108M		433.93	*	-2.013E+00	1.772E+00	2.824E+00	0.000E+00	-0.713
		614.37		7.120E-01	2.021E+00	3.721E+00	0.000E+00	0.191
		722.95		-4.851E-02	1.982E+00	3.531E+00	0.000E+00	-0.014
CD-109		88.03	*	2.296E+01	5.021E+01	8.703E+01	0.000E+00	0.264

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AG-110M		657.75	*	5.937E-01	1.729E+00	3.232E+00	0.000E+00	0.184
		677.61		-9.833E+00	1.660E+01	2.743E+01	0.000E+00	-0.358
		706.67		-2.470E+00	1.426E+01	2.134E+01	0.000E+00	-0.116
		763.93		-2.281E+00	8.571E+00	1.472E+01	0.000E+00	-0.155
		884.67		9.289E-01	2.324E+00	4.640E+00	0.000E+00	0.200
		937.48		-2.235E+00	4.747E+00	8.479E+00	0.000E+00	-0.264
		1384.27		1.352E+00	9.295E+00	1.784E+01	0.000E+00	0.076
SN-113		391.69	*	2.558E+00	2.661E+00	5.098E+00	0.000E+00	0.502
SN-115		484.47		-9.698E+01	1.290E+03	2.276E+03	0.000E+00	-0.043
		933.00	*	5.438E+01	2.004E+02	3.538E+02	0.000E+00	0.154
		1290.58		-3.267E+02	4.975E+02	8.417E+02	0.000E+00	-0.388
SN-117M		156.02		-7.734E+01	3.202E+02	5.259E+02	0.000E+00	-0.147
		158.56	*	-3.869E+00	7.864E+00	1.272E+01	0.000E+00	-0.304
TE-123M		159.00	*	1.150E-01	2.057E+00	3.437E+00	0.000E+00	0.033
SB-124		602.73		4.367E-01	2.364E+00	4.282E+00	0.000E+00	0.102
		645.85		1.200E+01	3.145E+01	5.841E+01	0.000E+00	0.205
		713.78		1.910E+01	1.046E+02	1.893E+02	0.000E+00	0.101
		722.79		3.285E+00	2.039E+01	3.722E+01	0.000E+00	0.088
		1368.16		7.476E+00	9.483E+01	1.857E+02	0.000E+00	0.040
		1690.98	*	1.658E+00	6.785E+00	1.310E+01	0.000E+00	0.127
SB-125	+	176.33		3.241E+01	2.917E+01	3.637E+01	0.000E+00	0.891
		427.89	*	-6.501E-01	5.638E+00	9.885E+00	0.000E+00	-0.066
		463.38		2.869E-01	1.410E+01	2.525E+01	0.000E+00	0.011
		600.56		3.513E+00	1.058E+01	1.727E+01	0.000E+00	0.203
		606.64		-4.953E-01	3.900E+01	6.040E+01	0.000E+00	-0.008
		635.90		4.597E+00	1.337E+01	2.498E+01	0.000E+00	0.184
TE-125M		109.28	*	-1.107E+03	7.803E+02	1.207E+03	0.000E+00	-0.917
I-126		388.63		-1.233E+01	2.520E+01	4.306E+01	0.000E+00	-0.286
		666.33	*	1.748E+01	2.016E+01	3.936E+01	0.000E+00	0.444
		753.82		-7.112E+01	1.775E+02	2.989E+02	0.000E+00	-0.238
SB-126		666.33		7.552E+00	8.713E+00	1.701E+01	0.000E+00	0.444
		695.00		-1.018E+00	1.060E+01	1.842E+01	0.000E+00	-0.055
		697.00		1.652E+01	3.603E+01	6.615E+01	0.000E+00	0.250
		720.50	*	-4.459E+00	1.580E+01	2.725E+01	0.000E+00	-0.164
SN-126		64.28		3.205E+01	5.351E+01	6.817E+01	0.000E+00	0.470
		86.94		-6.399E+00	2.101E+01	3.496E+01	0.000E+00	-0.183
		87.57	*	-6.757E-01	5.037E+00	8.458E+00	0.000E+00	-0.080
SB-127		252.40		1.088E+03	3.658E+03	6.624E+03	0.000E+00	0.164
		411.60		-4.630E+03	1.006E+04	1.487E+04	0.000E+00	-0.311
		444.90		2.974E+03	7.131E+03	1.327E+04	0.000E+00	0.224
		473.00		2.361E+02	1.342E+03	2.423E+03	0.000E+00	0.097
		543.30		6.215E+03	1.363E+04	2.521E+04	0.000E+00	0.246
		603.50		3.751E+03	8.330E+03	1.550E+04	0.000E+00	0.242
		685.70	*	-2.088E+02	9.711E+02	1.690E+03	0.000E+00	-0.124
		698.50		1.020E+04	1.121E+04	2.184E+04	0.000E+00	0.467
		783.70		6.857E+01	2.371E+03	4.273E+03	0.000E+00	0.016
I-131		284.30		1.803E+01	3.096E+02	5.530E+02	0.000E+00	0.033
		364.48	*	1.790E+00	2.427E+01	4.335E+01	0.000E+00	0.041
		636.97		-6.237E+01	2.588E+02	4.522E+02	0.000E+00	-0.138

Sample ID : G145579001 Acquisition date : 13-OCT-2005 10:40:36

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BA-133		79.62		-2.421E+01	7.850E+01	1.311E+02	0.000E+00	-0.185
		81.00		-5.753E+00	5.979E+00	9.593E+00	0.000E+00	-0.600
		276.40		6.841E+00	1.992E+01	3.631E+01	0.000E+00	0.188
		302.85		-4.825E+00	8.207E+00	1.401E+01	0.000E+00	-0.344
		356.02	*	-2.451E+00	2.990E+00	4.267E+00	0.000E+00	-0.574
		383.85		6.987E-01	1.717E+01	3.063E+01	0.000E+00	0.023
CS-134		563.23		7.330E+00	1.884E+01	3.495E+01	0.000E+00	0.210
		569.32		1.017E+01	9.354E+00	1.881E+01	0.000E+00	0.541
		604.70		-2.610E-01	2.032E+00	3.093E+00	0.000E+00	-0.084
		795.84	*	4.286E-01	1.827E+00	3.411E+00	0.000E+00	0.126
		801.93		2.125E+01	2.120E+01	4.210E+01	0.000E+00	0.505
		1365.15		-8.992E+00	5.401E+01	1.018E+02	0.000E+00	-0.088
CS-136	+	66.88		6.811E+00	1.621E+02	1.934E+02	0.000E+00	0.035
		86.36		-2.563E+01	1.460E+02	2.447E+02	0.000E+00	-0.105
		153.25		5.335E+01	9.687E+01	1.662E+02	0.000E+00	0.321
		163.92		-2.295E+01	1.530E+02	2.525E+02	0.000E+00	-0.091
	+	176.60		7.794E+01	7.015E+01	8.962E+01	0.000E+00	0.870
		273.65		1.008E+01	5.881E+01	9.392E+01	0.000E+00	0.107
		340.55		-2.829E+00	1.449E+01	2.541E+01	0.000E+00	-0.111
		818.51		2.241E+00	8.191E+00	1.518E+01	0.000E+00	0.148
		1048.07	*	-9.155E+00	1.171E+01	1.967E+01	0.000E+00	-0.466
		1235.36		7.800E+00	4.845E+01	9.317E+01	0.000E+00	0.084
BA-137M		661.65	*	-6.358E-01	1.738E+00	2.970E+00	0.000E+00	-0.214
CS-137		661.66	*	-6.771E-01	1.837E+00	3.137E+00	0.000E+00	-0.216
CE-139		165.85	*	-3.499E-01	2.076E+00	3.422E+00	0.000E+00	-0.102
BA-140		162.67		-1.939E+01	1.116E+02	1.839E+02	0.000E+00	-0.105
		304.87		-3.130E+01	1.616E+02	2.836E+02	0.000E+00	-0.110
		423.73		8.305E+01	2.394E+02	4.376E+02	0.000E+00	0.190
		537.31	*	5.237E-02	3.077E+01	5.489E+01	0.000E+00	0.001
CE-141		145.44	*	-5.840E+00	5.631E+00	8.830E+00	0.000E+00	-0.661
CE-144		133.51	*	1.597E+00	1.479E+01	2.486E+01	0.000E+00	0.064
PM-144		476.78		3.773E-01	3.766E+00	6.773E+00	0.000E+00	0.056
		618.01		-3.506E-02	1.855E+00	3.277E+00	0.000E+00	-0.011
		696.49	*	2.244E-01	2.112E+00	3.744E+00	0.000E+00	0.060
PM-146		453.88	*	1.247E+00	2.267E+00	4.261E+00	0.000E+00	0.293
		633.25		-7.199E+00	6.867E+01	1.216E+02	0.000E+00	-0.059
		735.93		-1.721E+00	6.950E+00	1.209E+01	0.000E+00	-0.142
		747.24		7.866E-02	4.897E+00	8.714E+00	0.000E+00	0.009
ND-147		91.11		1.716E+01	4.646E+01	7.955E+01	0.000E+00	0.216
		531.02	*	-2.598E+01	7.581E+01	1.305E+02	0.000E+00	-0.199
PM-147		121.30	*	-1.363E+06	3.751E+06	6.165E+06	0.000E+00	-0.221
EU-152		121.78		-1.262E+00	5.221E+00	8.638E+00	0.000E+00	-0.146
		344.31	*	2.080E+00	5.650E+00	1.029E+01	0.000E+00	0.202
		963.37		-5.633E+00	1.427E+01	2.531E+01	0.000E+00	-0.223
GD-153		69.67		-1.418E+01	1.213E+02	1.833E+02	0.000E+00	-0.077
		83.37		2.242E+02	9.361E+02	1.610E+03	0.000E+00	0.139
		97.43	*	1.094E+00	5.744E+00	9.790E+00	0.000E+00	0.112
		103.18		-2.377E+00	7.717E+00	1.278E+01	0.000E+00	-0.186
EU-154		123.07		1.131E+00	3.655E+00	6.231E+00	0.000E+00	0.182

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		247.93		-7.395E+00	2.113E+01	3.686E+01	0.000E+00	-0.201
		591.76		-1.648E+01	3.893E+01	6.573E+01	0.000E+00	-0.251
		723.30		-1.988E+00	8.695E+00	1.504E+01	0.000E+00	-0.132
		756.86		3.025E+01	4.128E+01	7.945E+01	0.000E+00	0.381
		873.20		7.033E+00	1.648E+01	3.079E+01	0.000E+00	0.228
		996.30		-4.849E+00	1.711E+01	3.110E+01	0.000E+00	-0.156
		1004.76		-9.192E-01	1.122E+01	2.070E+01	0.000E+00	-0.044
	+	1274.51	*	4.072E+00	1.039E+01	1.272E+01	0.000E+00	0.320
EU-155		86.54		-1.267E+00	6.207E+00	1.039E+01	0.000E+00	-0.122
		105.31	*	2.738E+00	7.482E+00	1.286E+01	0.000E+00	0.213
TB-160		86.79		-8.425E+00	1.908E+01	3.149E+01	0.000E+00	-0.267
		298.57		-1.834E+00	7.574E+00	1.322E+01	0.000E+00	-0.139
		879.36	*	-1.305E+00	7.568E+00	1.327E+01	0.000E+00	-0.098
		962.29		4.281E+00	3.010E+01	5.673E+01	0.000E+00	0.075
		966.15		2.158E+00	1.080E+01	2.056E+01	0.000E+00	0.105
		1177.93		-7.362E+00	1.513E+01	2.670E+01	0.000E+00	-0.276
TM-171		51.87		-3.601E+02	9.796E+02	1.464E+03	0.000E+00	-0.246
		59.40		7.896E+02	2.197E+03	3.461E+03	0.000E+00	0.228
	+	66.72	*	1.149E+02	2.735E+03	3.627E+03	0.000E+00	0.032
HF-181		56.28		-2.757E+01	1.015E+02	1.526E+02	0.000E+00	-0.181
		57.53		-6.127E+01	5.619E+01	7.852E+01	0.000E+00	-0.780
	+	65.20		4.561E+00	1.086E+02	1.740E+02	0.000E+00	0.026
		133.02		3.038E+00	5.786E+00	9.946E+00	0.000E+00	0.305
		136.25		-3.356E+01	4.863E+01	7.810E+01	0.000E+00	-0.430
		345.85		4.217E+00	1.377E+01	2.503E+01	0.000E+00	0.168
		482.03	*	1.170E+00	3.087E+00	5.666E+00	0.000E+00	0.206
TA-182	+	67.75		4.991E-01	1.188E+01	1.328E+01	0.000E+00	0.038
		100.10		-2.842E+00	1.374E+01	2.291E+01	0.000E+00	-0.124
		222.10		-1.010E+01	2.195E+01	3.810E+01	0.000E+00	-0.265
	+	1121.28		2.039E+01	1.494E+01	1.049E+01	0.000E+00	1.945
		1189.05		-5.332E+00	1.419E+01	2.527E+01	0.000E+00	-0.211
		1221.42	*	2.311E+00	8.331E+00	1.637E+01	0.000E+00	0.141
		1230.97		-2.269E+01	2.257E+01	3.601E+01	0.000E+00	-0.630
IR-192	+	295.96		8.692E+00	7.216E+00	1.201E+01	0.000E+00	0.724
		308.46		-1.555E+00	6.447E+00	1.128E+01	0.000E+00	-0.138
		316.51	*	-1.390E+00	2.136E+00	3.630E+00	0.000E+00	-0.383
		468.07		-1.208E+00	4.085E+00	7.080E+00	0.000E+00	-0.171
		604.41		2.312E+00	2.693E+01	4.821E+01	0.000E+00	0.048
		612.46		2.396E+00	4.728E+01	7.395E+01	0.000E+00	0.032
HG-203		70.83		3.605E+00	8.061E+01	1.380E+02	0.000E+00	0.026
		72.87		-1.634E+01	4.671E+01	7.800E+01	0.000E+00	-0.209
		82.60		6.333E+00	8.372E+01	1.428E+02	0.000E+00	0.044
		279.20	*	-1.116E+00	2.804E+00	4.865E+00	0.000E+00	-0.229
BI-207		569.67		1.664E+00	1.452E+00	2.931E+00	0.000E+00	0.568
		897.83		1.115E+02	1.264E+03	2.384E+03	0.000E+00	0.047
		1063.62	*	-1.074E+00	2.445E+00	4.332E+00	0.000E+00	-0.248
		1442.20		4.532E+02	1.229E+03	2.505E+03	0.000E+00	0.181
		1770.23		2.259E+00	2.936E+01	5.672E+01	0.000E+00	0.040
BI-210		46.50	*	1.205E+02	3.306E+02	5.265E+02	0.000E+00	0.229

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PB-210		46.50	*	1.205E+02	3.306E+02	5.265E+02	0.000E+00	0.229
PB-211		404.84	*	1.051E+01	5.083E+01	9.199E+01	0.000E+00	0.114
		427.08		-2.379E+01	1.263E+02	2.199E+02	0.000E+00	-0.108
		831.96		4.219E+00	5.042E+01	9.286E+01	0.000E+00	0.045
BI-212		727.18	*	3.029E+00	1.595E+01	2.880E+01	0.000E+00	0.105
PB-212		74.80		2.228E-01	2.276E+01	3.870E+01	0.000E+00	0.006
		87.30		-8.314E+00	2.383E+01	3.955E+01	0.000E+00	-0.210
		115.19		7.190E+00	2.569E+02	4.320E+02	0.000E+00	0.017
	+	238.63	*	5.470E-01	5.960E+00	6.935E+00	0.000E+00	0.079
		300.09		3.033E+01	4.340E+01	8.066E+01	0.000E+00	0.376
BI-214	+	609.31	*	3.605E-01	6.029E+00	8.137E+00	0.000E+00	0.044
		768.36		2.784E+00	3.831E+01	6.803E+01	0.000E+00	0.041
		934.06		-6.609E+00	5.606E+01	9.091E+01	0.000E+00	-0.073
		1120.29		1.517E+01	1.311E+01	2.794E+01	0.000E+00	0.543
		1238.11		-1.909E+00	3.388E+01	6.308E+01	0.000E+00	-0.030
	+	1377.67		3.936E+01	4.352E+01	9.387E+01	0.000E+00	0.419
PB-214		74.81		3.925E-01	3.807E+01	6.472E+01	0.000E+00	0.006
		77.11		1.090E+01	2.088E+01	3.648E+01	0.000E+00	0.299
		87.30		-1.464E+01	4.196E+01	6.965E+01	0.000E+00	-0.210
		241.98		1.153E+00	2.253E+01	3.544E+01	0.000E+00	0.033
	+	295.21		9.930E+00	8.243E+00	1.431E+01	0.000E+00	0.694
	+	351.92	*	1.541E+00	6.878E+00	8.424E+00	0.000E+00	0.183
RN-219		271.23		-7.677E-01	1.479E+01	2.313E+01	0.000E+00	-0.033
		401.81	*	-9.432E+00	2.285E+01	3.926E+01	0.000E+00	-0.240
RA-223		122.32		5.217E+01	1.201E+02	2.065E+02	0.000E+00	0.253
		144.24		3.126E+01	4.328E+01	7.534E+01	0.000E+00	0.415
		154.21		1.464E+01	2.659E+01	4.564E+01	0.000E+00	0.321
	+	269.46		8.093E+00	1.802E+01	1.759E+01	0.000E+00	0.460
		323.87	*	-1.326E+01	4.064E+01	7.041E+01	0.000E+00	-0.188
		338.28		-5.090E+01	5.978E+01	8.510E+01	0.000E+00	-0.598
		445.03		4.714E+01	1.167E+02	2.168E+02	0.000E+00	0.217
RA-224		240.98	*	3.322E+01	4.327E+01	7.177E+01	0.000E+00	0.463
AC-227		79.80		-6.388E+01	1.022E+02	1.675E+02	0.000E+00	-0.381
		236.00		2.635E+00	1.478E+01	2.349E+01	0.000E+00	0.112
		256.20	*	-1.749E+00	2.380E+01	4.208E+01	0.000E+00	-0.042
		286.10		1.580E-01	8.999E+01	1.602E+02	0.000E+00	0.001
		299.80		4.010E+01	7.996E+01	1.468E+02	0.000E+00	0.273
		304.40		-5.038E+01	1.066E+02	1.836E+02	0.000E+00	-0.274
		329.70		1.802E+01	6.259E+01	1.001E+02	0.000E+00	0.180
	+	334.20		1.997E+02	2.641E+02	2.371E+02	0.000E+00	0.842
TH-227		79.80		-6.276E+01	1.004E+02	1.646E+02	0.000E+00	-0.381
		94.00		8.803E+01	1.344E+02	2.332E+02	0.000E+00	0.377
		236.00		2.592E+00	1.454E+01	2.310E+01	0.000E+00	0.112
		256.20	*	-1.720E+00	2.340E+01	4.137E+01	0.000E+00	-0.042
		286.10		1.554E-01	8.852E+01	1.576E+02	0.000E+00	0.001
		299.80		3.934E+01	7.845E+01	1.440E+02	0.000E+00	0.273
		304.40		-4.951E+01	1.047E+02	1.804E+02	0.000E+00	-0.274
		329.70		1.773E+01	6.157E+01	9.845E+01	0.000E+00	0.180
	+	334.20		1.957E+02	2.589E+02	2.323E+02	0.000E+00	0.842

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AC-228		209.25		8.541E+00	3.240E+01	5.846E+01	0.000E+00	0.146
		338.32		-1.295E+01	1.456E+01	2.063E+01	0.000E+00	-0.628
		463.01		3.527E+00	3.274E+01	5.913E+01	0.000E+00	0.060
		794.95		-6.017E+00	3.464E+01	6.075E+01	0.000E+00	-0.099
		911.21	*	5.042E+00	7.437E+00	1.470E+01	0.000E+00	0.343
		964.77		-8.471E+00	3.834E+01	6.959E+01	0.000E+00	-0.122
		969.11		1.862E-01	1.167E+01	2.183E+01	0.000E+00	0.009
RA-228		209.25		8.541E+00	3.240E+01	5.846E+01	0.000E+00	0.146
		338.32		-1.295E+01	1.456E+01	2.063E+01	0.000E+00	-0.628
		463.01		3.527E+00	3.274E+01	5.913E+01	0.000E+00	0.060
		794.95		-6.017E+00	3.464E+01	6.075E+01	0.000E+00	-0.099
		911.21	*	5.042E+00	7.437E+00	1.470E+01	0.000E+00	0.343
		964.77		-8.471E+00	3.834E+01	6.959E+01	0.000E+00	-0.122
		969.11		1.862E-01	1.167E+01	2.183E+01	0.000E+00	0.009
TH-229		85.43		-1.006E+00	1.141E+01	1.924E+01	0.000E+00	-0.052
		88.47		1.168E+00	6.780E+00	1.157E+01	0.000E+00	0.101
		100.00		-2.770E+00	1.305E+01	2.175E+01	0.000E+00	-0.127
		193.63	*	1.139E+00	3.236E+01	5.380E+01	0.000E+00	0.021
		210.97		6.053E+00	4.230E+01	7.595E+01	0.000E+00	0.080
PA-231		283.67	*	2.997E+01	8.803E+01	1.601E+02	0.000E+00	0.187
		301.29		-1.135E+01	3.199E+01	5.551E+01	0.000E+00	-0.204
		330.00		3.397E+01	1.371E+02	2.185E+02	0.000E+00	0.156
TH-231		84.21		4.190E+00	3.019E+01	5.152E+01	0.000E+00	0.081
		236.00		2.628E+00	1.474E+01	2.343E+01	0.000E+00	0.112
		256.20		-1.745E+00	2.373E+01	4.197E+01	0.000E+00	-0.042
	+	269.46	*	8.093E+00	1.802E+01	1.993E+01	0.000E+00	0.406
		271.23		-7.677E-01	1.479E+01	2.313E+01	0.000E+00	-0.033
		283.67		2.997E+01	8.803E+01	1.601E+02	0.000E+00	0.187
		301.29		-1.135E+01	3.199E+01	5.551E+01	0.000E+00	-0.204
		329.85		1.227E+01	4.293E+01	6.863E+01	0.000E+00	0.179
	+	351.07		4.429E+00	1.977E+01	2.285E+01	0.000E+00	0.194
		401.81		-9.432E+00	2.285E+01	3.926E+01	0.000E+00	-0.240
TH-232	+	238.59	*	5.310E-01	5.785E+00	6.726E+00	0.000E+00	0.079
		911.20		5.029E+00	7.369E+00	1.457E+01	0.000E+00	0.345
		964.40		-9.312E+00	3.902E+01	7.054E+01	0.000E+00	-0.132
		969.11		1.844E-01	1.155E+01	2.161E+01	0.000E+00	0.009
PA-233		75.28		5.843E+01	1.837E+02	3.176E+02	0.000E+00	0.184
		86.59		-2.124E+01	1.002E+02	1.676E+02	0.000E+00	-0.127
		300.12		1.536E+01	2.178E+01	4.049E+01	0.000E+00	0.379
		311.98	*	-1.162E+00	3.681E+00	6.409E+00	0.000E+00	-0.181
		340.50		-7.358E+00	3.224E+01	5.639E+01	0.000E+00	-0.130
		398.62		6.350E+00	1.139E+02	2.038E+02	0.000E+00	0.031
	+	415.76		1.343E+02	1.289E+02	1.520E+02	0.000E+00	0.883
PA-234		63.00		4.308E+01	1.335E+02	2.073E+02	0.000E+00	0.208
		94.67		-1.408E+01	1.194E+01	1.889E+01	0.000E+00	-0.745
		98.44		2.938E+00	6.474E+00	1.118E+01	0.000E+00	0.263
		99.70		3.455E+00	3.341E+01	5.667E+01	0.000E+00	0.061
		111.00		6.360E+00	1.267E+01	2.190E+01	0.000E+00	0.290
		131.20		-2.158E+00	7.278E+00	1.197E+01	0.000E+00	-0.180

Sample ID : G145579001 Acquisition date : 13-OCT-2005 10:40:36

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		152.70		7.568E+00	2.188E+01	3.714E+01	0.000E+00	0.204
	+	186.00		1.238E+02	1.350E+02	1.209E+02	0.000E+00	1.024
		226.40		1.418E+01	2.281E+01	4.206E+01	0.000E+00	0.337
		227.20		-5.800E+00	2.464E+01	4.333E+01	0.000E+00	-0.134
		248.90		-5.766E+01	4.948E+01	8.182E+01	0.000E+00	-0.705
	+	293.70		4.766E+01	3.957E+01	5.430E+01	0.000E+00	0.878
		369.80		-1.191E+00	4.942E+01	8.769E+01	0.000E+00	-0.014
		568.70		5.139E+01	4.756E+01	9.527E+01	0.000E+00	0.539
		569.50		1.474E+01	1.287E+01	2.598E+01	0.000E+00	0.567
		574.00		-7.519E+01	6.768E+01	1.045E+02	0.000E+00	-0.720
		699.00		2.111E+01	3.846E+01	7.199E+01	0.000E+00	0.293
	+	706.10		6.329E+01	6.203E+01	1.046E+02	0.000E+00	0.605
		733.00		-1.834E+00	1.784E+01	3.156E+01	0.000E+00	-0.058
		742.81		3.382E+01	7.521E+01	1.400E+02	0.000E+00	0.242
		796.30		9.543E+00	3.900E+01	7.291E+01	0.000E+00	0.131
	+	805.80		4.330E+01	4.591E+01	1.112E+02	0.000E+00	0.389
		819.60		-6.466E+01	6.653E+01	1.021E+02	0.000E+00	-0.633
		826.30		-1.553E+01	3.972E+01	6.721E+01	0.000E+00	-0.231
		831.60		-7.238E+00	2.771E+01	4.802E+01	0.000E+00	-0.151
		876.40		-5.624E+00	4.366E+01	7.638E+01	0.000E+00	-0.074
		880.51		-2.709E+00	1.249E+01	2.312E+01	0.000E+00	-0.117
		883.24		-5.190E-01	1.341E+01	2.529E+01	0.000E+00	-0.021
		899.00		-2.972E+01	4.454E+01	7.680E+01	0.000E+00	-0.387
		925.00		4.964E+00	6.051E+01	1.145E+02	0.000E+00	0.043
		926.50		3.019E+00	9.402E+00	1.639E+01	0.000E+00	0.184
		946.00	*	9.535E-01	1.371E+01	2.623E+01	0.000E+00	0.036
		949.00		-6.194E+00	2.036E+01	3.703E+01	0.000E+00	-0.167
		980.50		-2.571E+01	3.420E+01	5.803E+01	0.000E+00	-0.443
		1394.10		9.085E+00	6.524E+01	1.256E+02	0.000E+00	0.072
PA-234M		766.40		4.967E+02	8.692E+02	1.640E+03	0.000E+00	0.303
		1001.03	*	1.407E+02	2.334E+02	4.644E+02	0.000E+00	0.303
TH-234		63.29	*	5.364E+01	1.417E+02	1.768E+02	0.000E+00	0.303
		92.38		7.765E+01	3.586E+01	6.630E+01	0.000E+00	1.171
		112.81		3.930E+02	6.374E+02	1.105E+03	0.000E+00	0.356
U-235		89.95		-1.523E+02	7.506E+01	1.134E+02	0.000E+00	-1.343
		93.35		7.464E+01	4.266E+01	7.754E+01	0.000E+00	0.963
		105.00		1.335E+01	7.278E+01	1.239E+02	0.000E+00	0.108
		143.76	*	6.299E+00	1.372E+01	2.351E+01	0.000E+00	0.268
		163.33		-5.115E+00	3.133E+01	5.163E+01	0.000E+00	-0.099
	+	185.71		4.586E+00	4.998E+00	4.475E+00	0.000E+00	1.025
		205.31		-8.218E+00	2.808E+01	4.925E+01	0.000E+00	-0.167
NP-237		86.48	*	-2.932E+00	1.507E+01	2.523E+01	0.000E+00	-0.116
		95.87		-9.151E+01	6.839E+01	1.070E+02	0.000E+00	-0.855
U-238		63.29	*	5.364E+01	1.417E+02	1.768E+02	0.000E+00	0.303
NP-239		99.55		4.309E-01	1.105E+01	1.868E+01	0.000E+00	0.023
		117.00	*	6.691E-01	1.289E+01	2.174E+01	0.000E+00	0.031
		209.75		2.724E+01	4.295E+01	7.902E+01	0.000E+00	0.345
		228.18		-1.690E+01	1.301E+01	2.144E+01	0.000E+00	-0.788
		277.60		-6.924E-01	9.667E+00	1.716E+01	0.000E+00	-0.040

Sample ID : G145579001 Acquisition date : 13-OCT-2005 10:40:36

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	334.31		1.103E+02	1.459E+02	1.198E+02	0.000E+00	0.921
AM-241		59.54	*	4.699E+00	1.256E+01	1.981E+01	0.000E+00	0.237
AM-242		99.55		1.006E+01	2.580E+02	4.359E+02	0.000E+00	0.023
		103.70	*	-8.457E+01	1.523E+02	2.488E+02	0.000E+00	-0.340
CM-247		278.00		3.713E+00	4.023E+01	7.216E+01	0.000E+00	0.051
		287.40		3.484E+01	6.661E+01	1.231E+02	0.000E+00	0.283
		402.60	*	1.594E-01	2.045E+00	3.661E+00	0.000E+00	0.044
CF-249		252.85		7.752E+00	5.116E+01	9.192E+01	0.000E+00	0.084
	+	333.44		1.452E+01	1.921E+01	1.721E+01	0.000E+00	0.844
		387.95	*	-7.514E-01	2.231E+00	3.862E+00	0.000E+00	-0.195
CF-251	+	176.00	*	1.236E+01	1.113E+01	1.494E+01	0.000E+00	0.827
		227.00		1.736E+00	2.171E+01	3.887E+01	0.000E+00	0.045
		285.00		-3.670E+01	9.910E+01	1.722E+02	0.000E+00	-0.213

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579001    *
* Acquisition date : 13-OCT-2005 10:40:36 Detector SN#    : 5933088     *
* Detector ID      : GAMMA1               Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.37     Half life ratio :  8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 15:00:00 Nuclide Library : FERMC       *
* Sample ID        : G145579001           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME : 13-JAN-2005 10:47:40 MS Isotope      :             *
* MSD DPM          : ********            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
NA-22	1.469E+00	3.748E+00	3.201E+00	0.000E+00
AL-26	4.732E+00	2.838E+00	4.421E+00	0.000E+00
CS-135	6.879E+00	1.532E+01	1.500E+01	0.000E+00
TL-208	3.148E+00	4.174E+00	2.946E+00	0.000E+00
BI-211	4.429E+00	1.977E+01	1.777E+01	0.000E+00
RA-226	3.605E-01	6.029E+00	6.693E+00	0.000E+00
TH-228	5.470E-01	5.960E+00	6.408E+00	0.000E+00
TH-230	3.605E-01	6.028E+00	6.693E+00	0.000E+00
U-234	9.929E+00	8.243E+00	1.388E+01	0.000E+00
ANH-511	9.551E-01	5.228E+00	2.952E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Act error) Ided	MDA (pCi/LITER	)	
BE-7	2.084E+00	2.116E+01	3.805E+01	0.000E+00	NOT IDENT.
NA-24	0.000E+00	4.052E+14	0.000E+00	0.000E+00	SHORT HLIF
K-40	4.566E+01	2.722E+01	5.819E+01	0.000E+00	NOT IDENT.
SC-46	-6.562E-01	1.848E+00	3.370E+00	0.000E+00	NOT IDENT.
V-48	-5.657E-01	5.805E+00	1.093E+01	0.000E+00	NOT IDENT.
CR-51	8.887E+00	3.127E+01	5.666E+01	0.000E+00	NOT IDENT.
MN-54	5.864E-01	1.731E+00	3.259E+00	0.000E+00	NOT IDENT.
CO-56	-1.080E+00	2.343E+00	3.901E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	6.485E-02	1.838E+00	3.089E+00	0.000E+00	NOT IDENT.
CO-58	-3.776E-01	2.330E+00	3.549E+00	0.000E+00	NOT IDENT.
FE-59	2.818E-01	4.999E+00	9.542E+00	0.000E+00	NOT IDENT.
CO-60	1.236E+00	2.007E+00	4.122E+00	0.000E+00	NOT IDENT.
ZN-65	1.430E-01	4.348E+00	7.217E+00	0.000E+00	NOT IDENT.
SE-75	-8.293E-01	2.682E+00	4.690E+00	0.000E+00	FAIL ABUN
KR-85	9.058E+02	4.670E+02	9.269E+02	0.000E+00	NOT IDENT.
SR-85	5.423E+00	2.796E+00	5.549E+00	0.000E+00	NOT IDENT.

Y-88	-1.539E+00	2.394E+00	3.942E+00	0.000E+00 NOT IDENT.
Y-91	-1.191E+00	2.286E+00	3.849E+00	0.000E+00 NOT IDENT.
NB-94	2.025E+00	1.985E+00	3.268E+00	0.000E+00 FAIL ABUN
NB-95	1.119E+00	3.318E+00	6.101E+00	0.000E+00 NOT IDENT.
NB-95M	0.000E+00	2.080E+03	0.000E+00	0.000E+00 SHORT HLIF
ZR-95	3.382E+00	4.455E+00	8.591E+00	0.000E+00 NOT IDENT.
MO-99	0.000E+00	4.151E+03	0.000E+00	0.000E+00 SHORT HLIF
TC-99M	0.000E+00	1.807E+36	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-7.673E-01	2.963E+00	5.138E+00	0.000E+00 FAIL ABUN
RH-106	4.304E-01	1.929E+01	3.413E+01	0.000E+00 FAIL ABUN
RU-106	2.204E+00	1.881E+01	3.367E+01	0.000E+00 NOT IDENT.
AG-108M	-2.013E+00	1.772E+00	2.824E+00	0.000E+00 NOT IDENT.
CD-109	2.296E+01	5.021E+01	8.703E+01	0.000E+00 NOT IDENT.
AG-110M	5.937E-01	1.729E+00	3.232E+00	0.000E+00 NOT IDENT.
SN-113	2.558E+00	2.661E+00	5.098E+00	0.000E+00 NOT IDENT.
CD-115	0.000E+00	5.623E+04	0.000E+00	0.000E+00 SHORT HLIF
SN-115	5.438E+01	2.004E+02	3.538E+02	0.000E+00 NOT IDENT.
SN-117M	-3.869E+00	7.864E+00	1.272E+01	0.000E+00 NOT IDENT.
TE-123M	1.150E-01	2.057E+00	3.437E+00	0.000E+00 NOT IDENT.
SB-124	1.658E+00	6.785E+00	1.310E+01	0.000E+00 NOT IDENT.
SB-125	-6.501E-01	5.638E+00	9.885E+00	0.000E+00 FAIL ABUN
TE-125M	-1.107E+03	7.803E+02	1.207E+03	0.000E+00 NOT IDENT.
I-126	1.748E+01	2.016E+01	3.936E+01	0.000E+00 NOT IDENT.
SB-126	-4.459E+00	1.580E+01	2.725E+01	0.000E+00 NOT IDENT.
SN-126	-6.757E-01	5.037E+00	8.458E+00	0.000E+00 NOT IDENT.
SB-127	-2.088E+02	9.711E+02	1.690E+03	0.000E+00 NOT IDENT.
I-131	1.790E+00	2.427E+01	4.335E+01	0.000E+00 NOT IDENT.
I-132	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	0.000E+00	9.143E+02	0.000E+00	0.000E+00 SHORT HLIF
BA-133	-2.451E+00	2.990E+00	4.267E+00	0.000E+00 NOT IDENT.
I-133	0.000E+00	4.234E+10	0.000E+00	0.000E+00 SHORT HLIF
CS-134	4.286E-01	1.827E+00	3.411E+00	0.000E+00 NOT IDENT.
I-135	0.000E+00	2.983E+33	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-9.155E+00	1.171E+01	1.967E+01	0.000E+00 FAIL ABUN
BA-137M	-6.358E-01	1.738E+00	2.970E+00	0.000E+00 NOT IDENT.
CS-137	-6.771E-01	1.837E+00	3.137E+00	0.000E+00 NOT IDENT.
CE-139	-3.499E-01	2.076E+00	3.422E+00	0.000E+00 NOT IDENT.
BA-140	5.237E-02	3.077E+01	5.489E+01	0.000E+00 NOT IDENT.
LA-140	0.000E+00	4.355E+05	0.000E+00	0.000E+00 SHORT HLIF
CE-141	-5.840E+00	5.631E+00	8.830E+00	0.000E+00 NOT IDENT.
CE-143	0.000E+00	1.327E+07	0.000E+00	0.000E+00 SHORT HLIF
CE-144	1.597E+00	1.479E+01	2.486E+01	0.000E+00 NOT IDENT.
PM-144	2.244E-01	2.112E+00	3.744E+00	0.000E+00 NOT IDENT.
PR-144	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	1.247E+00	2.267E+00	4.261E+00	0.000E+00 NOT IDENT.
ND-147	-2.598E+01	7.581E+01	1.305E+02	0.000E+00 NOT IDENT.
PM-147	-1.363E+06	3.751E+06	6.165E+06	0.000E+00 NOT IDENT.
PM-149	0.000E+00	5.354E+05	0.000E+00	0.000E+00 SHORT HLIF
EU-152	2.080E+00	5.650E+00	1.029E+01	0.000E+00 NOT IDENT.
GD-153	1.094E+00	5.744E+00	9.790E+00	0.000E+00 NOT IDENT.
EU-154	4.072E+00	1.039E+01	1.272E+01	0.000E+00 FAIL ABUN
EU-155	2.738E+00	7.482E+00	1.286E+01	0.000E+00 NOT IDENT.
TB-160	-1.305E+00	7.568E+00	1.327E+01	0.000E+00 NOT IDENT.
TM-171	1.149E+02	2.735E+03	3.627E+03	0.000E+00 FAIL ABUN
HF-181	1.170E+00	3.087E+00	5.666E+00	0.000E+00 FAIL ABUN
TA-182	2.311E+00	8.331E+00	1.637E+01	0.000E+00 FAIL ABUN
IR-192	-1.390E+00	2.136E+00	3.630E+00	0.000E+00 FAIL ABUN
HG-203	-1.116E+00	2.804E+00	4.865E+00	0.000E+00 NOT IDENT.
BI-207	-1.074E+00	2.445E+00	4.332E+00	0.000E+00 NOT IDENT.
BI-210	1.205E+02	3.306E+02	5.265E+02	0.000E+00 NOT IDENT.
PB-210	1.205E+02	3.306E+02	5.265E+02	0.000E+00 NOT IDENT.
PB-211	1.051E+01	5.083E+01	9.199E+01	0.000E+00 NOT IDENT.
BI-212	3.029E+00	1.595E+01	2.880E+01	0.000E+00 NOT IDENT.
PB-212	5.470E-01	5.960E+00	6.935E+00	0.000E+00 FAIL ABUN
BI-214	3.605E-01	6.029E+00	8.137E+00	0.000E+00 FAIL ABUN
PB-214	1.541E+00	6.878E+00	8.424E+00	0.000E+00 FAIL ABUN
RN-219	-9.432E+00	2.285E+01	3.926E+01	0.000E+00 NOT IDENT.
RA-223	-1.326E+01	4.064E+01	7.041E+01	0.000E+00 FAIL ABUN
RA-224	3.322E+01	4.327E+01	7.177E+01	0.000E+00 NOT IDENT.
AC-227	-1.749E+00	2.380E+01	4.208E+01	0.000E+00 FAIL ABUN
TH-227	-1.720E+00	2.340E+01	4.137E+01	0.000E+00 FAIL ABUN
AC-228	5.042E+00	7.437E+00	1.470E+01	0.000E+00 NOT IDENT.
RA-228	5.042E+00	7.437E+00	1.470E+01	0.000E+00 NOT IDENT.
TH-229	1.139E+00	3.236E+01	5.380E+01	0.000E+00 NOT IDENT.
PA-231	2.997E+01	8.803E+01	1.601E+02	0.000E+00 NOT IDENT.
TH-231	8.093E+00	1.802E+01	1.993E+01	0.000E+00 FAIL ABUN
TH-232	5.310E-01	5.785E+00	6.726E+00	0.000E+00 FAIL ABUN
PA-233	-1.162E+00	3.681E+00	6.409E+00	0.000E+00 FAIL ABUN

PA-234	9.535E-01	1.371E+01	2.623E+01	0.000E+00 FAIL ABUN
PA-234M	1.407E+02	2.334E+02	4.644E+02	0.000E+00 NOT IDENT.
TH-234	5.364E+01	1.417E+02	1.768E+02	0.000E+00 NOT IDENT.
U-235	6.299E+00	1.372E+01	2.351E+01	0.000E+00 FAIL ABUN
NP-237	-2.932E+00	1.507E+01	2.523E+01	0.000E+00 NOT IDENT.
U-238	5.364E+01	1.417E+02	1.768E+02	0.000E+00 NOT IDENT.
NP-239	6.691E-01	1.289E+01	2.174E+01	0.000E+00 FAIL ABUN
AM-241	4.699E+00	1.256E+01	1.981E+01	0.000E+00 NOT IDENT.
AM-242	-8.457E+01	1.523E+02	2.488E+02	0.000E+00 NOT IDENT.
CM-247	1.594E-01	2.045E+00	3.661E+00	0.000E+00 NOT IDENT.
CF-249	-7.514E-01	2.231E+00	3.862E+00	0.000E+00 FAIL ABUN
CF-251	1.236E+01	1.113E+01	1.494E+01	0.000E+00 FAIL ABUN

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:41:05.68

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579001.CNF;1
Sample date      : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:40:36
Sample ID        : G145579001           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA1               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.37  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 5933088
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.65	38	185	0.81	136.57	133	7	2.64E-03	61.3	
2	0	66.39	27	185	1.32	142.03	139	7	1.87E-03	86.8	
3	0	92.66	109	197	1.45	194.36	191	8	7.60E-03	24.2	
4	0	140.15	50	164	1.70	288.99	286	7	3.44E-03	45.8	
5	0	176.16	54	164	1.68	360.73	357	9	3.77E-03	45.0	
6	0	185.89	140	206	1.36	380.12	375	12	9.75E-03	22.0	
7	0	198.32	51	156	1.19	404.88	401	8	3.57E-03	44.3	
8	0	238.08	57	170	1.65	484.09	479	10	3.96E-03	44.8	
9	0	269.22	27	125	2.33	546.13	542	10	1.87E-03	79.8	
10	0	294.87	36	65	1.79	597.23	594	7	2.47E-03	41.5	
11	0	332.95	39	135	0.57	673.10	667	14	2.68E-03	66.1	
12	0	351.39	48	90	1.93	709.83	707	11	3.33E-03	40.2	
13	0	414.55	32	59	1.30	835.67	832	10	2.22E-03	48.0	
14	0	511.31	270	105	2.22	1028.43	1023	18	1.87E-02	11.0	
15	0	583.28	48	54	1.89	1171.80	1162	17	3.30E-03	38.6	
16	0	595.95	27	41	0.86	1197.05	1194	9	1.86E-03	47.2	
17	0	609.77	41	36	1.12	1224.58	1219	11	2.87E-03	32.0	
18	0	704.38	20	23	2.84	1413.05	1410	9	1.37E-03	49.0	
19	0	807.43	13	13	1.67	1618.33	1616	6	8.91E-04	53.0	
20	0	929.43	10	19	0.94	1861.36	1858	12	7.06E-04	89.6	
21	0	942.32	6	5	0.96	1887.03	1885	5	4.01E-04	71.9	
22	0	1122.74	39	22	7.86	2246.42	2235	28	2.73E-03	36.6	
23	0	1149.58	9	11	0.76	2299.88	2298	8	6.11E-04	71.9	
24	0	1157.15	13	1	0.97	2314.96	2312	6	8.75E-04	32.0	
25	0	1245.87	10	8	0.69	2491.69	2488	7	6.94E-04	57.7	
26	0	1274.41	14	19	0.67	2548.54	2542	15	9.77E-04	72.2	
27	0	1344.82	9	4	0.65	2688.79	2686	6	6.06E-04	50.9	
28	0	1377.89	9	6	1.79	2754.65	2753	9	6.30E-04	55.3	
29	0	1453.88	9	0	0.56	2906.00	2904	6	6.25E-04	33.3	
30	0	1461.02	24	14	1.91	2920.23	2917	8	1.65E-03	34.3	
31	0	1547.59	5	3	1.30	3092.66	3091	5	3.56E-04	65.1	
32	0	1705.54	10	2	1.82	3407.24	3405	7	6.80E-04	39.6	
33	0	1763.50	7	7	1.23	3522.67	3518	9	5.08E-04	73.8	
34	0	1809.50	22	4	7.32	3614.28	3606	17	1.54E-03	30.0	
35	0	1869.73	16	4	1.37	3734.24	3727	15	1.14E-03	35.7	
36	0	2010.46	9	4	0.55	4014.51	4004	19	6.04E-04	68.6	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:41:11.63

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*********************************************************************
*                          GENERAL ENG. LABS, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579001.CNF;1
Sample date      : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:40:36
Sample ID        : G145579001           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA1               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.37  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 5933088
Matrix Spike DPM :                      LCS DPM          :
*********************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
NA-22	1274.53	9	99.94*	5.591E-01	1.437E+00	1.469E+00	255.17
AL-26	511.00	12	163.62	1.177E+00	5.837E-01	5.837E-01	547.36
	1808.65	22	99.76*	4.401E-01	4.732E+00	4.732E+00	59.98
CS-135	268.24	22	16.00*	1.856E+00	6.879E+00	6.879E+00	222.67
TL-208	75.00	------	3.43	1.485E+00	------	Line Not Found	------
	277.35	------	6.80	1.821E+00	------	Line Not Found	------
	510.84	12	21.60	1.177E+00	4.422E+00	4.555E+00	547.36
	583.14	29	84.20*	1.064E+00	3.056E+00	3.148E+00	132.58
	763.30	------	1.64	8.566E-01	------	Line Not Found	------
	860.37	------	12.46	7.754E-01	------	Line Not Found	------
	1093.90	------	0.37	6.336E-01	------	Line Not Found	------
BI-211	351.07	9	12.94*	1.550E+00	4.429E+00	4.429E+00	446.41
RA-226	295.21	36	19.20	1.748E+00	9.929E+00	9.930E+00	83.02
	351.92	9	37.20	1.550E+00	1.541E+00	1.541E+00	446.41
	609.31	2	46.30*	1.027E+00	3.605E-01	3.605E-01	1672.24
TH-228	84.40	------	1.21	1.829E+00	------	Line Not Found	------
	238.60	5	44.60*	2.003E+00	5.310E-01	5.470E-01	1089.42
	300.10	------	3.41	1.728E+00	------	Line Not Found	------
TH-230	295.21	36	19.20	1.748E+00	9.929E+00	9.929E+00	83.02
	351.92	9	37.20	1.550E+00	1.541E+00	1.541E+00	446.41
	609.31	2	46.30*	1.027E+00	3.605E-01	3.605E-01	1672.24
U-234	67.67	2	0.37	1.103E+00	4.725E+01	4.725E+01	2380.50
	241.98	------	7.49	1.983E+00	------	Line Not Found	------
	295.21	36	19.20*	1.748E+00	9.929E+00	9.929E+00	83.02
	351.92	9	37.20	1.550E+00	1.541E+00	1.541E+00	446.41
ANH-511	511.00	12	100.00*	1.177E+00	9.551E-01	9.551E-01	547.36

Flag: "*" = Keyline

Sample ID : G145579001 Acquisition date : 13-OCT-2005 10:40:36

Total number of lines in spectrum 31
Number of unidentified lines 11
Number of lines tentatively identified by NID 20 64.52%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NA-22	2.60Y	1.02	1.437E+00	1.469E+00	3.748E+00	255.17	
AL-26	7.20E+05Y	1.00	4.732E+00	4.732E+00	2.838E+00	59.98	
CS-135	2.30E+06Y	1.00	6.879E+00	6.879E+00	15.32E+00	222.67	
TL-208	1.91Y	1.03	3.056E+00	3.148E+00	4.174E+00	132.58	
BI-211	7.04E+08Y	1.00	4.429E+00	4.429E+00	19.77E+00	446.41	
RA-226	1600.00Y	1.00	3.605E-01	3.605E-01	60.29E-01	1672.24	
TH-228	1.91Y	1.03	5.310E-01	5.470E-01	59.60E-01	1089.42	
TH-230	7.70E+04Y	1.00	3.605E-01	3.605E-01	60.28E-01	1672.24	
U-234	2.45E+05Y	1.00	9.929E+00	9.929E+00	8.243E+00	83.02	
ANH-511	1.00E+09Y	1.00	9.551E-01	9.551E-01	52.28E-01	547.36	
Total Activity :			3.267E+01	3.281E+01			

Grand Total Activity : 3.267E+01 3.281E+01

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579001 Acquisition date : 13-OCT-2005 10:40:36

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	140.15	36	164	1.70	288.99	286	7	2.47E-03	****	2.46E+00	T
0	176.16	54	164	1.68	360.73	357	9	3.77E-03	90.0	2.33E+00	T
0	185.89	60	206	1.36	380.12	375	12	4.18E-03	****	2.28E+00	T
0	332.95	39	135	0.57	673.10	667	14	2.68E-03	****	1.61E+00	T
0	414.55	32	59	1.30	835.67	832	10	2.22E-03	96.0	1.38E+00	T
0	595.95	11	41	0.86	1197.05	1194	9	7.29E-04	****	1.05E+00	
0	704.38	20	23	2.84	1413.05	1410	9	1.37E-03	98.0	9.15E-01	T
0	807.43	13	13	1.67	1618.33	1616	6	8.91E-04	****	8.18E-01	T
0	929.43	10	19	0.94	1861.36	1858	12	7.06E-04	****	7.27E-01	
0	1122.74	39	22	7.86	2246.42	2235	28	2.73E-03	73.3	6.20E-01	T
0	1149.58	9	11	0.76	2299.88	2298	8	6.11E-04	****	6.08E-01	
0	1157.15	13	1	0.97	2314.96	2312	6	8.75E-04	63.9	6.05E-01	
0	1245.87	8	8	0.69	2491.69	2488	7	5.35E-04	****	5.69E-01	
0	1344.82	4	4	0.65	2688.79	2686	6	2.46E-04	****	5.36E-01	
0	1377.89	9	6	1.79	2754.65	2753	9	6.30E-04	****	5.26E-01	T
0	1453.88	2	0	0.56	2906.00	2904	6	1.28E-04	****	5.05E-01	
0	1547.59	5	3	1.30	3092.66	3091	5	3.56E-04	****	4.84E-01	
0	1705.54	2	2	1.82	3407.24	3405	7	1.65E-04	****	4.55E-01	T
0	1763.50	2	7	1.23	3522.67	3518	9	1.20E-04	****	4.46E-01	
0	1869.73	16	4	1.37	3734.24	3727	15	1.14E-03	71.4	4.33E-01	
0	2010.46	9	4	0.55	4014.51	4004	19	6.04E-04	****	4.20E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:41:19.31

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579001.CNF;1     *
* Acquisition date : 13-OCT-2005 10:40:36  Detector SN#    : 5933088        *
* Detector ID      : GAMMA1                Sensitivity     : 3.00000        *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000        *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000       *
* Elapsed real time: 0 04:00:01.37         Half life ratio : 8.00000        *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 13-SEP-2005 15:00:00  Nuclide Library : EPI            *
* Sample ID        : G145579001            Analyst initials: MJH1           *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 13-JAN-2005 10:47:40.8MS Isotope      :               *
* MSD DPM          :                       MSD Isotope     :               *
* LCS DPM          :                       LCS Isotope     :               *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	1.469E+00	3.748E+00	3.201E+00	0.000E+00	0.459
AL-26	4.732E+00	2.838E+00	4.421E+00	0.000E+00	1.070
CS-135	6.879E+00	1.532E+01	1.500E+01	0.000E+00	0.459
TL-208	3.148E+00	4.174E+00	2.946E+00	0.000E+00	1.069
BI-211	4.429E+00	1.977E+01	1.777E+01	0.000E+00	0.249
RA-226	3.605E-01	6.029E+00	6.693E+00	0.000E+00	0.054
TH-228	5.470E-01	5.960E+00	6.408E+00	0.000E+00	0.085
TH-230	3.605E-01	6.028E+00	6.693E+00	0.000E+00	0.054
U-234	9.929E+00	8.243E+00	1.388E+01	0.000E+00	0.715
ANH-511	9.551E-01	5.228E+00	2.952E+00	0.000E+00	0.324

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	2.084E+00		2.116E+01	3.805E+01	0.000E+00	0.055
K-40	4.566E+01		2.722E+01	5.819E+01	0.000E+00	0.785

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
SC-46	-6.562E-01		1.848E+00	3.370E+00	0.000E+00	-0.195
V-48	-5.657E-01		5.805E+00	1.093E+01	0.000E+00	-0.052
CR-51	8.887E+00		3.127E+01	5.666E+01	0.000E+00	0.157
MN-54	5.864E-01		1.731E+00	3.259E+00	0.000E+00	0.180
CO-56	-1.080E+00		2.343E+00	3.901E+00	0.000E+00	-0.277
CO-57	6.485E-02		1.838E+00	3.089E+00	0.000E+00	0.021
CO-58	-3.776E-01		2.330E+00	3.549E+00	0.000E+00	-0.106
FE-59	2.818E-01		4.999E+00	9.542E+00	0.000E+00	0.030
CO-60	1.236E+00		2.007E+00	4.122E+00	0.000E+00	0.300
ZN-65	1.430E-01		4.348E+00	7.217E+00	0.000E+00	0.020
SE-75	-8.293E-01		2.682E+00	4.690E+00	0.000E+00	-0.177
KR-85	9.058E+02		4.670E+02	9.269E+02	0.000E+00	0.977
SR-85	5.423E+00		2.796E+00	5.549E+00	0.000E+00	0.977
Y-88	-1.539E+00		2.394E+00	3.942E+00	0.000E+00	-0.390
Y-91	-1.191E+00		2.286E+00	3.849E+00	0.000E+00	-0.309
NB-94	2.025E+00	+	1.985E+00	3.268E+00	0.000E+00	0.620
NB-95	1.119E+00		3.318E+00	6.101E+00	0.000E+00	0.183
ZR-95	3.382E+00		4.455E+00	8.591E+00	0.000E+00	0.394
RU-103	-7.673E-01		2.963E+00	5.138E+00	0.000E+00	-0.149
RH-106	4.304E-01		1.929E+01	3.413E+01	0.000E+00	0.013
RU-106	2.204E+00		1.881E+01	3.367E+01	0.000E+00	0.065
AG-108M	-2.013E+00		1.772E+00	2.824E+00	0.000E+00	-0.713
CD-109	2.296E+01		5.021E+01	8.703E+01	0.000E+00	0.264
AG-110M	5.937E-01		1.729E+00	3.232E+00	0.000E+00	0.184
SN-113	2.558E+00		2.661E+00	5.098E+00	0.000E+00	0.502
SN-115	5.438E+01		2.004E+02	3.538E+02	0.000E+00	0.154
SN-117M	-3.869E+00		7.864E+00	1.272E+01	0.000E+00	-0.304
TE-123M	1.150E-01		2.057E+00	3.437E+00	0.000E+00	0.033
SB-124	1.658E+00		6.785E+00	1.310E+01	0.000E+00	0.127
SB-125	-6.501E-01		5.638E+00	9.885E+00	0.000E+00	-0.066
TE-125M	-1.107E+03		7.803E+02	1.207E+03	0.000E+00	-0.917
I-126	1.748E+01		2.016E+01	3.936E+01	0.000E+00	0.444
SB-126	-4.459E+00		1.580E+01	2.725E+01	0.000E+00	-0.164
SN-126	-6.757E-01		5.037E+00	8.458E+00	0.000E+00	-0.080
SB-127	-2.088E+02		9.711E+02	1.690E+03	0.000E+00	-0.124
I-131	1.790E+00		2.427E+01	4.335E+01	0.000E+00	0.041
BA-133	-2.451E+00		2.990E+00	4.267E+00	0.000E+00	-0.574
CS-134	4.286E-01		1.827E+00	3.411E+00	0.000E+00	0.126
CS-136	-9.155E+00		1.171E+01	1.967E+01	0.000E+00	-0.466
BA-137M	-6.358E-01		1.738E+00	2.970E+00	0.000E+00	-0.214
CS-137	-6.771E-01		1.837E+00	3.137E+00	0.000E+00	-0.216
CE-139	-3.499E-01		2.076E+00	3.422E+00	0.000E+00	-0.102
BA-140	5.237E-02		3.077E+01	5.489E+01	0.000E+00	0.001
CE-141	-5.840E+00		5.631E+00	8.830E+00	0.000E+00	-0.661
CE-144	1.597E+00		1.479E+01	2.486E+01	0.000E+00	0.064
PM-144	2.244E-01		2.112E+00	3.744E+00	0.000E+00	0.060
PM-146	1.247E+00		2.267E+00	4.261E+00	0.000E+00	0.293
ND-147	-2.598E+01		7.581E+01	1.305E+02	0.000E+00	-0.199

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-147	-1.363E+06		3.751E+06	6.165E+06	0.000E+00	-0.221
EU-152	2.080E+00		5.650E+00	1.029E+01	0.000E+00	0.202
GD-153	1.094E+00		5.744E+00	9.790E+00	0.000E+00	0.112
EU-154	4.072E+00	+	1.039E+01	1.272E+01	0.000E+00	0.320
EU-155	2.738E+00		7.482E+00	1.286E+01	0.000E+00	0.213
TB-160	-1.305E+00		7.568E+00	1.327E+01	0.000E+00	-0.098
TM-171	1.149E+02	+	2.735E+03	3.627E+03	0.000E+00	0.032
HF-181	1.170E+00		3.087E+00	5.666E+00	0.000E+00	0.206
TA-182	2.311E+00		8.331E+00	1.637E+01	0.000E+00	0.141
IR-192	-1.390E+00		2.136E+00	3.630E+00	0.000E+00	-0.383
HG-203	-1.116E+00		2.804E+00	4.865E+00	0.000E+00	-0.229
BI-207	-1.074E+00		2.445E+00	4.332E+00	0.000E+00	-0.248
BI-210	1.205E+02		3.306E+02	5.265E+02	0.000E+00	0.229
PB-210	1.205E+02		3.306E+02	5.265E+02	0.000E+00	0.229
PB-211	1.051E+01		5.083E+01	9.199E+01	0.000E+00	0.114
BI-212	3.029E+00		1.595E+01	2.880E+01	0.000E+00	0.105
PB-212	5.470E-01	+	5.960E+00	6.935E+00	0.000E+00	0.079
BI-214	3.605E-01	+	6.029E+00	8.137E+00	0.000E+00	0.044
PB-214	1.541E+00	+	6.878E+00	8.424E+00	0.000E+00	0.183
RN-219	-9.432E+00		2.285E+01	3.926E+01	0.000E+00	-0.240
RA-223	-1.326E+01		4.064E+01	7.041E+01	0.000E+00	-0.188
RA-224	3.322E+01		4.327E+01	7.177E+01	0.000E+00	0.463
AC-227	-1.749E+00		2.380E+01	4.208E+01	0.000E+00	-0.042
TH-227	-1.720E+00		2.340E+01	4.137E+01	0.000E+00	-0.042
AC-228	5.042E+00		7.437E+00	1.470E+01	0.000E+00	0.343
RA-228	5.042E+00		7.437E+00	1.470E+01	0.000E+00	0.343
TH-229	1.139E+00		3.236E+01	5.380E+01	0.000E+00	0.021
PA-231	2.997E+01		8.803E+01	1.601E+02	0.000E+00	0.187
TH-231	8.093E+00	+	1.802E+01	1.993E+01	0.000E+00	0.406
TH-232	5.310E-01	+	5.785E+00	6.726E+00	0.000E+00	0.079
PA-233	-1.162E+00		3.681E+00	6.409E+00	0.000E+00	-0.181
PA-234	9.535E-01		1.371E+01	2.623E+01	0.000E+00	0.036
PA-234M	1.407E+02		2.334E+02	4.644E+02	0.000E+00	0.303
TH-234	5.364E+01		1.417E+02	1.768E+02	0.000E+00	0.303
U-235	6.299E+00		1.372E+01	2.351E+01	0.000E+00	0.268
NP-237	-2.932E+00		1.507E+01	2.523E+01	0.000E+00	-0.116
U-238	5.364E+01		1.417E+02	1.768E+02	0.000E+00	0.303
NP-239	6.691E-01		1.289E+01	2.174E+01	0.000E+00	0.031
AM-241	4.699E+00		1.256E+01	1.981E+01	0.000E+00	0.237
AM-242	-8.457E+01		1.523E+02	2.488E+02	0.000E+00	-0.340
CM-247	1.594E-01		2.045E+00	3.661E+00	0.000E+00	0.044
CF-249	-7.514E-01		2.231E+00	3.862E+00	0.000E+00	-0.195
CF-251	1.236E+01	+	1.113E+01	1.494E+01	0.000E+00	0.827

VAX/VMS Nuclide Identification Report Generated

```
*************************************************************************
*                          Environmental Physics, Inc.                  *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579001        *
* Acquisition date : 13-OCT-2005 10:40:36 Detector SN#    : 5933088     *
* Detector ID      : GAMMA1               Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.37     Half life ratio : 8.000       *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 15:00:00 Nuclide Library : FERMC       *
* Sample ID        : G145579001           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 13-JAN-2005 10:47:40 MS Isotope      :             *
* MSD DPM          : ********             MSD Isotope     :             *
* LCS DPM          :    0.000             LCS Isotope     :             *
* LCSD DPM         :    0.000             LCSD Isotope    :             *
*************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
NA-22	1.469E+00	3.748E+00	1.369E+00	1.874E+00
AL-26	4.732E+00	2.838E+00	1.922E+00	1.419E+00
CS-135	6.879E+00	1.532E+01	7.075E+00	7.659E+00
TL-208	3.148E+00	4.174E+00	1.327E+00	2.087E+00
BI-211	4.429E+00	1.977E+01	8.254E+00	9.885E+00
RA-226	3.605E-01	6.029E+00	3.081E+00	3.014E+00
TH-228	5.470E-01	5.960E+00	3.059E+00	2.980E+00
TH-230	3.605E-01	6.028E+00	3.081E+00	3.014E+00
U-234	9.929E+00	8.243E+00	6.565E+00	4.122E+00
ANH-511	9.551E-01	5.228E+00	1.369E+00	2.614E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	2.084E+00	2.116E+01	1.758E+01	1.058E+01	NOT IDENT.
NA-24	2.069E+13	4.052E+14	0.000E+00	2.026E+14	SHORT HLIF
K-40	4.566E+01	2.722E+01	2.675E+01	1.361E+01	NOT IDENT.
SC-46	-6.562E-01	1.848E+00	1.470E+00	9.241E-01	NOT IDENT.
V-48	-5.657E-01	5.805E+00	4.795E+00	2.902E+00	NOT IDENT.
CR-51	8.887E+00	3.127E+01	2.669E+01	1.563E+01	NOT IDENT.
MN-54	5.864E-01	1.731E+00	1.459E+00	8.654E-01	NOT IDENT.
CO-56	-1.080E+00	2.343E+00	1.741E+00	1.171E+00	NOT IDENT.
MN-56	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	6.485E-02	1.838E+00	1.480E+00	9.189E-01	NOT IDENT.
CO-58	-3.776E-01	2.330E+00	1.565E+00	1.165E+00	NOT IDENT.
FE-59	2.818E-01	4.999E+00	4.206E+00	2.500E+00	NOT IDENT.
CO-60	1.236E+00	2.007E+00	1.824E+00	1.004E+00	NOT IDENT.
ZN-65	1.430E-01	4.348E+00	3.173E+00	2.174E+00	NOT IDENT.
SE-75	-8.293E-01	2.682E+00	2.212E+00	1.341E+00	FAIL ABUN
KR-85	9.058E+02	4.670E+02	4.386E+02	2.335E+02	NOT IDENT.
SR-85	5.423E+00	2.796E+00	2.626E+00	1.398E+00	NOT IDENT.

Y-88	-1.539E+00	2.394E+00	1.616E+00	1.197E+00 NOT IDENT.
Y-91	-1.191E+00	2.286E+00	1.753E+00	1.143E+00 NOT IDENT.
NB-94	2.025E+00	1.985E+00	1.496E+00	9.925E-01 FAIL ABUN
NB-95	1.119E+00	3.318E+00	2.783E+00	1.659E+00 NOT IDENT.
NB-95M	2.313E+02	2.080E+03	0.000E+00	1.040E+03 SHORT HLIF
ZR-95	3.382E+00	4.455E+00	3.930E+00	2.227E+00 NOT IDENT.
MO-99	3.075E+03	4.151E+03	0.000E+00	2.076E+03 SHORT HLIF
TC-99M	1.338E+36	1.807E+36	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-7.673E-01	2.963E+00	2.369E+00	1.481E+00 FAIL ABUN
RH-106	4.304E-01	1.929E+01	1.572E+01	9.645E+00 FAIL ABUN
RU-106	2.204E+00	1.881E+01	1.549E+01	9.405E+00 NOT IDENT.
AG-108M	-2.013E+00	1.772E+00	1.296E+00	8.862E-01 NOT IDENT.
CD-109	2.296E+01	5.021E+01	4.173E+01	2.510E+01 NOT IDENT.
AG-110M	5.937E-01	1.729E+00	1.465E+00	8.643E-01 NOT IDENT.
SN-113	2.558E+00	2.661E+00	2.387E+00	1.331E+00 NOT IDENT.
CD-115	-9.238E+03	5.623E+04	0.000E+00	2.812E+04 SHORT HLIF
SN-115	5.438E+01	2.004E+02	1.560E+02	1.002E+02 NOT IDENT.
SN-117M	-3.869E+00	7.864E+00	6.082E+00	3.932E+00 NOT IDENT.
TE-123M	1.150E-01	2.057E+00	1.645E+00	1.028E+00 NOT IDENT.
SB-124	1.658E+00	6.785E+00	5.754E+00	3.392E+00 NOT IDENT.
SB-125	-6.501E-01	5.638E+00	4.616E+00	2.819E+00 FAIL ABUN
TE-125M	-1.107E+03	7.803E+02	5.766E+02	3.902E+02 NOT IDENT.
I-126	1.748E+01	2.016E+01	1.805E+01	1.008E+01 NOT IDENT.
SB-126	-4.459E+00	1.580E+01	1.223E+01	7.902E+00 NOT IDENT.
SN-126	-6.757E-01	5.037E+00	4.053E+00	2.519E+00 NOT IDENT.
SB-127	-2.088E+02	9.711E+02	7.623E+02	4.856E+02 NOT IDENT.
I-131	1.790E+00	2.427E+01	2.032E+01	1.214E+01 NOT IDENT.
I-132	1.000E+41	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	-1.182E+03	9.143E+02	0.000E+00	4.571E+02 SHORT HLIF
BA-133	-2.451E+00	2.990E+00	1.996E+00	1.495E+00 NOT IDENT.
I-133	-4.888E+09	4.234E+10	0.000E+00	2.117E+10 SHORT HLIF
CS-134	4.286E-01	1.827E+00	1.522E+00	9.136E-01 NOT IDENT.
I-135	4.348E+32	2.983E+33	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-9.155E+00	1.171E+01	8.663E+00	5.853E+00 FAIL ABUN
BA-137M	-6.358E-01	1.738E+00	1.339E+00	8.692E-01 NOT IDENT.
CS-137	-6.771E-01	1.837E+00	1.414E+00	9.186E-01 NOT IDENT.
CE-139	-3.499E-01	2.076E+00	1.635E+00	1.038E+00 NOT IDENT.
BA-140	5.237E-02	3.077E+01	2.519E+01	1.538E+01 NOT IDENT.
LA-140	-1.570E+05	4.355E+05	0.000E+00	2.178E+05 SHORT HLIF
CE-141	-5.840E+00	5.631E+00	4.215E+00	2.816E+00 NOT IDENT.
CE-143	1.598E+07	1.327E+07	0.000E+00	6.633E+06 SHORT HLIF
CE-144	1.597E+00	1.479E+01	1.192E+01	7.394E+00 NOT IDENT.
PM-144	2.244E-01	2.112E+00	1.727E+00	1.056E+00 NOT IDENT.
PR-144	1.000E+41	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	1.247E+00	2.267E+00	1.973E+00	1.134E+00 NOT IDENT.
ND-147	-2.598E+01	7.581E+01	5.968E+01	3.790E+01 NOT IDENT.
PM-147	-1.363E+06	3.751E+06	2.951E+06	1.875E+06 NOT IDENT.
PM-149	-1.696E+04	5.354E+05	0.000E+00	2.677E+05 SHORT HLIF
EU-152	2.080E+00	5.650E+00	4.843E+00	2.825E+00 NOT IDENT.
GD-153	1.094E+00	5.744E+00	4.693E+00	2.872E+00 NOT IDENT.
EU-154	4.072E+00	1.039E+01	5.717E+00	5.195E+00 FAIL ABUN
EU-155	2.738E+00	7.482E+00	6.162E+00	3.741E+00 NOT IDENT.
TB-160	-1.305E+00	7.568E+00	5.858E+00	3.784E+00 NOT IDENT.
TM-171	1.149E+02	2.735E+03	1.741E+03	1.367E+03 FAIL ABUN
HF-181	1.170E+00	3.087E+00	2.631E+00	1.543E+00 FAIL ABUN
TA-182	2.311E+00	8.331E+00	7.219E+00	4.166E+00 FAIL ABUN
IR-192	-1.390E+00	2.136E+00	1.694E+00	1.068E+00 FAIL ABUN
HG-203	-1.116E+00	2.804E+00	2.292E+00	1.402E+00 NOT IDENT.
BI-207	-1.074E+00	2.445E+00	1.905E+00	1.223E+00 NOT IDENT.
BI-210	1.205E+02	3.306E+02	2.505E+02	1.653E+02 NOT IDENT.
PB-210	1.205E+02	3.306E+02	2.505E+02	1.653E+02 NOT IDENT.
PB-211	1.051E+01	5.083E+01	4.289E+01	2.542E+01 NOT IDENT.
BI-212	3.029E+00	1.595E+01	1.316E+01	7.974E+00 NOT IDENT.
PB-212	5.470E-01	5.960E+00	3.323E+00	2.980E+00 FAIL ABUN
BI-214	3.605E-01	6.029E+00	3.803E+00	3.014E+00 FAIL ABUN
PB-214	1.541E+00	6.878E+00	3.993E+00	3.439E+00 FAIL ABUN
RN-219	-9.432E+00	2.285E+01	1.825E+01	1.142E+01 NOT IDENT.
RA-223	-1.326E+01	4.064E+01	3.323E+01	2.032E+01 FAIL ABUN
RA-224	3.322E+01	4.327E+01	3.424E+01	2.163E+01 NOT IDENT.
AC-227	-1.749E+00	2.380E+01	1.998E+01	1.190E+01 FAIL ABUN
TH-227	-1.720E+00	2.340E+01	1.964E+01	1.170E+01 FAIL ABUN
AC-228	5.042E+00	7.437E+00	6.727E+00	3.719E+00 NOT IDENT.
RA-228	5.042E+00	7.437E+00	6.727E+00	3.719E+00 NOT IDENT.
TH-229	1.139E+00	3.236E+01	2.568E+01	1.618E+01 NOT IDENT.
PA-231	2.997E+01	8.803E+01	7.566E+01	4.401E+01 NOT IDENT.
TH-231	8.093E+00	1.802E+01	9.469E+00	9.011E+00 FAIL ABUN
TH-232	5.310E-01	5.785E+00	3.222E+00	2.893E+00 FAIL ABUN
PA-233	-1.162E+00	3.681E+00	3.010E+00	1.840E+00 FAIL ABUN

PA-234	9.535E-01	1.371E+01	1.164E+01	6.854E+00 FAIL ABUN
PA-234M	1.407E+02	2.334E+02	2.103E+02	1.167E+02 NOT IDENT.
TH-234	5.364E+01	1.417E+02	8.497E+01	7.087E+01 NOT IDENT.
U-235	6.299E+00	1.372E+01	1.127E+01	6.861E+00 FAIL ABUN
NP-237	-2.932E+00	1.507E+01	1.209E+01	7.535E+00 NOT IDENT.
U-238	5.364E+01	1.417E+02	8.497E+01	7.087E+01 NOT IDENT.
NP-239	6.691E-01	1.289E+01	1.040E+01	6.443E+00 FAIL ABUN
AM-241	4.699E+00	1.256E+01	9.455E+00	6.281E+00 NOT IDENT.
AM-242	-8.457E+01	1.523E+02	1.189E+02	7.616E+01 NOT IDENT.
CM-247	1.594E-01	2.045E+00	1.707E+00	1.023E+00 NOT IDENT.
CF-249	-7.514E-01	2.231E+00	1.799E+00	1.116E+00 FAIL ABUN
CF-251	1.236E+01	1.113E+01	7.165E+00	5.563E+00 FAIL ABUN

```
*****************************************************************************
*                                                                           *
*                          General Engineering Labs, LLC                    *
*                                2040 SAVAGE ROAD                           *
*                             CHARLESTON ,SC 29417                          *
*                              GROSS GAMMA REPORT                           *
*                                                                           *
*                                                                           *
*****************************************************************************
*                                                                           *
*   BATCH ID     : 465316                    SAMPLE ID  : G145579001        *
*   ANALYST      : MJH1                      DETECTOR   : GAMMA1            *
*   SAMPLE DATE  : 13-SEP-2005 15:00:00.00   COUNT TIME :    0 04:00:00.00  *
*   ANALYSIS DATE: 13-OCT-2005 10:40:36.28   SAMPLE ALQT:    2.000 LITER    *
*                                                                           *
*****************************************************************************
```

GROSS GAMMA ACTIVITY (pCi/LITER)	: 5.050E+01
GROSS GAMMA ERROR (pCi/LITER)	: 6.690E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.351E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.124E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:42:04.68

```
*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579002.CNF;1
Sample date      : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:41:00
Sample ID        : G145579002           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA2               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.40  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 7933154
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	2	63.17*	1	210	1.74	126.09	121	15	5.56E-05	*****	1.09E+00
2	2	66.15*	58	168	1.41	132.05	121	15	4.04E-03	46.2	
3	0	98.40	107	302	3.68	196.51	191	14	7.43E-03	36.0	
4	0	127.38	58	247	1.17	254.43	250	10	4.01E-03	52.6	
5	0	139.30*	29	285	3.03	278.25	273	12	2.03E-03	123.7	
6	0	166.93*	39	188	2.36	333.49	329	11	2.72E-03	78.3	
7	0	212.69	24	78	1.08	424.96	423	5	1.63E-03	59.9	
8	0	238.82*	38	135	1.29	477.18	473	10	2.62E-03	68.1	
9	0	248.54	27	83	2.28	496.62	493	7	1.86E-03	59.7	
10	1	489.31	27	19	1.95	977.91	973	22	1.86E-03	41.4	2.09E+00
11	1	491.45	25	26	1.95	982.20	973	22	1.70E-03	52.1	
12	0	581.99*	2	39	4.70	1163.20	1157	12	1.07E-04	960.5	
13	0	595.16	23	33	0.96	1189.53	1186	10	1.60E-03	50.9	
14	0	609.86*	29	39	3.15	1218.93	1214	12	2.03E-03	58.3	
15	0	795.88	12	18	1.37	1590.84	1586	8	8.13E-04	71.5	
16	0	814.70*	16	30	6.84	1628.46	1617	24	1.12E-03	103.1	
17	0	936.06	29	60	16.90	1871.14	1858	39	2.04E-03	87.2	
18	0	990.14	13	17	2.78	1979.27	1969	14	9.32E-04	71.2	
19	0	1052.70*	11	3	1.76	2104.38	2102	6	7.40E-04	46.3	
20	0	1156.92	9	11	1.13	2312.80	2308	9	6.20E-04	75.4	
21	0	1181.08	24	4	5.28	2361.12	2356	14	1.65E-03	26.6	
22	0	1207.39*	1	21	6.53	2413.72	2410	16	5.30E-05	*****	
23	0	1268.20	6	0	0.96	2535.33	2533	5	4.17E-04	40.8	
24	0	1337.75	16	2	4.16	2674.45	2670	11	1.10E-03	31.8	
25	3	1557.30	20	6	2.92	3113.58	3108	15	1.41E-03	26.2	1.96E+00
26	3	1560.65	11	3	1.78	3120.27	3108	15	7.40E-04	28.3	
27	0	1581.38	10	1	1.44	3161.74	3159	7	6.76E-04	38.6	
28	0	1645.04*	5	12	0.70	3289.08	3281	16	3.48E-04	166.8	
29	0	1733.23	6	0	0.58	3465.50	3464	5	4.17E-04	40.8	
30	0	1767.21	7	11	0.49	3533.47	3526	10	4.98E-04	97.9	
31	0	1950.60	9	10	4.86	3900.35	3891	15	6.34E-04	85.7	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:42:08

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579002.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:41:00
Sample ID : G145579002 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : gamma2 Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:01.40 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CE-139	+	165.85	*	2.548E+00	3.993E+00	4.144E+00	2.961E-01	0.615
TH-228		84.40		2.215E+01	2.004E+02	3.522E+02	5.139E+01	0.063
	+	238.60	*	4.660E+00	6.356E+00	7.017E+00	6.073E-01	0.664
		300.10		-1.434E+01	5.542E+01	9.260E+01	5.474E+01	-0.155
U-238	+	63.29	*	2.667E+00	2.013E+02	2.124E+02	4.311E+01	0.013

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-1.680E+00	2.319E+01	4.006E+01	3.227E+00	-0.042
NA-22		1274.53	*	3.014E-01	2.396E+00	4.481E+00	2.755E-01	0.067
AL-26		511.00		9.835E+00	2.116E+00	4.155E+00	3.062E-01	2.367
		1808.65	*	1.325E-01	1.815E+00	3.709E+00	2.109E-01	0.036
K-40		1460.81	*	3.104E+01	2.252E+01	4.968E+01	2.992E+00	0.625
SC-46		889.25	*	1.727E-01	2.797E+00	5.127E+00	3.418E-01	0.034
		1120.51		2.581E+00	2.862E+00	5.846E+00	4.116E-01	0.441
V-48		944.10		1.866E+01	8.411E+01	1.619E+02	1.089E+01	0.115
		983.50	*	-1.821E+00	8.382E+00	1.284E+01	8.759E-01	-0.142
		1312.09		-4.757E+00	7.909E+00	1.318E+01	7.550E-01	-0.361
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	5.637E+00	3.860E+01	6.718E+01	5.310E+00	0.084
MN-54		834.83	*	-4.156E-01	2.316E+00	4.129E+00	2.882E-01	-0.101
CO-56		846.75	*	6.061E-01	2.514E+00	4.750E+00	3.286E-01	0.128
		1037.82		1.467E+01	1.835E+01	3.754E+01	2.811E+00	0.391
		1238.25		-1.410E+00	4.111E+00	7.212E+00	4.925E-01	-0.195
CO-57		122.06	*	-2.149E+00	2.166E+00	3.577E+00	2.496E-01	-0.601
		136.47		-6.423E-01	2.055E+01	3.123E+01	2.405E+00	-0.021
CO-58		810.78	*	4.352E-01	2.898E+00	4.747E+00	3.380E-01	0.092
FE-59		192.35		2.455E+01	9.302E+01	1.622E+02	2.039E+01	0.151
		1099.25	*	-4.085E+00	7.200E+00	1.211E+01	9.517E-01	-0.337
		1291.60		-3.509E+00	7.767E+00	1.335E+01	1.007E+00	-0.263
CO-60		1173.24		1.676E-01	2.107E+00	3.954E+00	2.801E-01	0.042
		1332.50	*	-3.292E-01	2.300E+00	4.153E+00	2.281E-01	-0.079

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
ZN-65		1115.55	*	1.033E+00	4.593E+00	8.728E+00	6.150E-01	0.118
SE-75	+	66.05		7.304E+02	6.826E+02	8.278E+02	1.113E+02	0.882
	+	96.73		1.829E+02	1.342E+02	1.524E+02	2.133E+01	1.200
		121.11		3.791E-01	1.210E+01	2.105E+01	2.115E+00	0.018
		136.00		1.249E+00	3.979E+00	6.179E+00	4.304E-01	0.202
		198.60		7.592E+01	1.512E+02	2.663E+02	2.224E+01	0.285
		264.65	*	1.329E+00	3.246E+00	5.766E+00	4.321E-01	0.231
		279.53		5.666E+00	8.445E+00	1.513E+01	1.184E+00	0.374
		303.91		-9.465E+01	1.674E+02	2.764E+02	2.931E+01	-0.342
		400.65		-5.632E+00	1.830E+01	3.076E+01	3.041E+00	-0.183
KR-85		513.99	*	-1.403E+03	7.584E+02	1.112E+03	8.200E+01	-1.262
SR-85		513.99	*	-8.427E+00	4.555E+00	6.677E+00	4.925E-01	-1.262
Y-88		898.02		-1.078E+00	2.662E+00	4.637E+00	3.090E-01	-0.232
		1836.01	*	1.009E+00	2.677E+00	5.562E+00	3.158E-01	0.181
Y-91		557.57	*	-2.310E+00	2.714E+00	4.563E+00	3.405E-01	-0.506
		1204.90		-1.600E+02	1.294E+03	1.997E+03	1.360E+02	-0.080
NB-94		702.63	*	5.749E-02	1.949E+00	3.565E+00	2.655E-01	0.016
		871.10		7.265E-01	1.910E+00	3.678E+00	2.493E-01	0.198
NB-95		765.79	*	-6.117E-01	3.425E+00	6.160E+00	4.485E-01	-0.099
ZR-95		724.18		-4.036E+00	5.538E+00	9.323E+00	7.697E-01	-0.433
		756.74	*	3.505E+00	4.596E+00	9.120E+00	7.586E-01	0.384
RU-103		497.08	*	-3.797E+00	4.294E+00	5.617E+00	7.537E-01	-0.676
	+	610.33		8.836E+01	1.040E+02	9.550E+01	1.542E+01	0.925
RH-106		511.85		9.156E+01	1.796E+01	3.551E+01	2.618E+00	2.578
		621.84	*	-7.282E+00	1.884E+01	3.321E+01	2.498E+00	-0.219
		1050.47		1.056E+01	1.236E+02	2.052E+02	1.425E+01	0.051
RU-106		622.20	*	-8.755E+00	1.848E+01	3.225E+01	4.088E+00	-0.271
AG-108M		433.93	*	-6.906E-01	2.156E+00	3.617E+00	2.723E-01	-0.191
		614.37		-4.008E-01	2.503E+00	3.899E+00	3.082E-01	-0.103
		722.95		-2.101E+00	2.120E+00	3.435E+00	2.677E-01	-0.612
CD-109		88.03	*	-6.360E-01	6.320E+01	1.102E+02	1.188E+01	-0.006
AG-110M		657.75	*	-8.379E-01	2.060E+00	3.619E+00	2.826E-01	-0.232
		677.61		-3.301E+00	1.875E+01	3.370E+01	2.619E+00	-0.098
		706.67		3.271E+00	1.234E+01	2.316E+01	1.787E+00	0.141
		763.93		-7.624E-01	9.270E+00	1.684E+01	1.274E+00	-0.045
		884.67		9.834E-01	2.834E+00	5.449E+00	3.841E-01	0.180
	+	937.48		1.322E+01	2.309E+01	1.004E+01	7.139E-01	1.317
		1384.27		8.318E+00	9.568E+00	2.030E+01	1.205E+00	0.410
SN-113		391.69	*	-1.153E+00	3.316E+00	5.551E+00	4.024E-01	-0.208
SN-115		484.47		7.097E+02	1.451E+03	2.376E+03	1.734E+02	0.299
		933.00	*	1.463E+02	2.249E+02	4.508E+02	3.021E+01	0.324
		1290.58		-6.531E+02	5.929E+02	8.828E+02	5.265E+01	-0.740
SN-117M		156.02		1.809E+02	3.800E+02	6.711E+02	4.712E+01	0.269
		158.56	*	-7.138E+00	8.900E+00	1.475E+01	1.040E+00	-0.484
TE-123M		159.00	*	-8.048E-01	2.295E+00	3.904E+00	2.779E-01	-0.206
SB-124		602.73		2.271E-01	2.531E+00	4.676E+00	3.514E-01	0.049
		645.85		-3.889E+00	3.420E+01	6.206E+01	5.032E+00	-0.063
		713.78		3.150E+01	1.095E+02	2.067E+02	2.317E+01	0.152
		722.79		-1.556E+01	2.159E+01	3.641E+01	2.774E+00	-0.427

Sample ID : G145579002 Acquisition date : 13-OCT-2005 10:41:00

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1368.16		4.347E+01	1.379E+02	2.644E+02	3.106E+01	0.164
		1690.98	*	5.375E-02	5.781E+00	1.145E+01	7.156E-01	0.005
SB-125		176.33		1.936E+01	2.496E+01	4.469E+01	4.290E+00	0.433
		427.89	*	-2.899E+00	6.021E+00	9.948E+00	7.255E-01	-0.291
		463.38		-4.537E+00	1.685E+01	2.844E+01	2.281E+00	-0.160
		600.56		-6.378E+00	1.041E+01	1.790E+01	1.473E+00	-0.356
		606.64		2.897E-01	4.265E+01	6.788E+01	5.651E+00	0.004
		635.90		7.848E+00	1.760E+01	3.324E+01	2.762E+00	0.236
TE-125M		109.28	*	-1.009E+02	9.239E+02	1.599E+03	1.557E+02	-0.063
I-126		388.63		8.639E+00	2.978E+01	5.274E+01	3.664E+00	0.164
		666.33	*	-9.958E+00	2.404E+01	4.206E+01	3.158E+00	-0.237
		753.82		6.417E+01	1.822E+02	3.474E+02	2.541E+01	0.185
SB-126		666.33		-4.306E+00	1.040E+01	1.819E+01	1.366E+00	-0.237
		695.00		5.747E-01	1.001E+01	1.844E+01	1.377E+00	0.031
		697.00		1.577E+01	3.653E+01	6.928E+01	5.168E+00	0.228
		720.50	*	-2.359E+00	1.688E+01	3.073E+01	2.276E+00	-0.077
SN-126	+	64.28		1.056E+00	7.969E+01	7.949E+01	1.405E+01	0.013
		86.94		-2.004E+01	2.704E+01	4.334E+01	1.814E+01	-0.462
		87.57	*	-2.613E+00	6.154E+00	1.053E+01	1.134E+00	-0.248
SB-127		252.40		3.631E+01	4.832E+03	8.329E+03	3.628E+03	0.004
		411.60		6.753E+03	1.181E+04	2.127E+04	4.101E+03	0.317
		444.90		-6.985E+03	8.585E+03	1.353E+04	2.277E+03	-0.516
		473.00		-5.604E+01	1.717E+03	2.950E+03	5.052E+02	-0.019
		543.30		-3.206E+03	1.442E+04	2.592E+04	4.776E+03	-0.124
		603.50		3.830E+03	9.429E+03	1.790E+04	3.038E+03	0.214
		685.70	*	-5.069E+02	1.106E+03	1.930E+03	3.116E+02	-0.263
		698.50		7.376E+03	1.343E+04	2.559E+04	4.994E+03	0.288
		783.70		-1.360E+02	2.423E+03	4.507E+03	7.558E+02	-0.030
I-131		284.30		-1.891E+02	3.746E+02	6.238E+02	5.078E+01	-0.303
		364.48	*	-3.701E+00	2.899E+01	4.955E+01	3.904E+00	-0.075
		636.97		1.494E+02	3.556E+02	6.719E+02	5.538E+01	0.222
BA-133		79.62		-1.110E+02	1.027E+02	1.680E+02	2.773E+01	-0.660
		81.00		-5.089E+00	7.615E+00	1.284E+01	2.196E+00	-0.396
		276.40		7.738E+00	2.470E+01	4.349E+01	5.994E+00	0.178
		302.85		1.763E-01	1.015E+01	1.750E+01	2.195E+00	0.010
		356.02	*	1.010E+00	3.051E+00	5.378E+00	6.625E-01	0.188
		383.85		8.977E+00	1.900E+01	3.423E+01	3.953E+00	0.262
CS-134		563.23		-1.148E+00	2.102E+01	3.832E+01	2.899E+00	-0.030
		569.32		2.624E+00	1.091E+01	2.052E+01	1.563E+00	0.128
		604.70		-1.014E+00	1.980E+00	3.435E+00	2.590E-01	-0.295
	+	795.84	*	1.732E+00	2.480E+00	4.407E+00	3.182E-01	0.393
		801.93		1.236E+01	2.101E+01	4.143E+01	2.980E+00	0.298
		1365.15		2.465E+01	7.987E+01	1.539E+02	9.441E+00	0.160
CS-135		268.24	*	1.418E+00	1.059E+01	1.845E+01	1.655E+00	0.077
CS-136	+	66.88		2.457E+02	2.313E+02	2.623E+02	4.593E+01	0.937
		86.36		-1.059E+02	1.820E+02	3.086E+02	4.435E+01	-0.343
		153.25		9.131E+01	1.152E+02	2.058E+02	1.694E+01	0.444
		163.92		2.374E+01	1.979E+02	3.036E+02	2.540E+01	0.078
		176.60		2.252E+01	6.200E+01	1.089E+02	8.483E+00	0.207

---- Non-Identified Nuclides ----

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		273.65		-4.420E+01	6.633E+01	1.092E+02	8.871E+00	-0.405
		340.55		3.799E+00	1.843E+01	3.219E+01	2.448E+00	0.118
		818.51		7.630E-01	9.934E+00	1.620E+01	1.150E+00	0.047
		1048.07	*	-1.645E+01	1.279E+01	1.886E+01	1.399E+00	-0.872
		1235.36		1.733E+01	5.037E+01	9.908E+01	1.035E+01	0.175
BA-137M		661.65	*	4.914E-01	2.006E+00	3.764E+00	2.829E-01	0.131
CS-137		661.66	*	5.222E-01	2.121E+00	3.980E+00	2.999E-01	0.131
BA-140		162.67		7.233E+01	1.377E+02	2.176E+02	1.676E+01	0.332
		304.87		-1.062E+02	2.151E+02	3.540E+02	9.799E+01	-0.300
		423.73		-1.395E+02	2.661E+02	4.321E+02	1.384E+02	-0.323
		537.31	*	-9.073E+00	3.649E+01	6.137E+01	2.016E+01	-0.148
CE-141		145.44	*	8.687E-01	6.646E+00	1.158E+01	8.247E-01	0.075
CE-144		133.51	*	-9.863E+00	1.736E+01	2.919E+01	4.285E+00	-0.338
PM-144		476.78		-9.718E-01	4.144E+00	7.033E+00	5.782E-01	-0.138
		618.01		1.064E+00	1.916E+00	3.685E+00	2.874E-01	0.289
		696.49	*	1.159E+00	2.088E+00	4.001E+00	2.990E-01	0.290
PM-146		453.88	*	-3.222E-01	2.910E+00	4.973E+00	4.781E-01	-0.065
		633.25		-3.531E+00	8.995E+01	1.629E+02	6.050E+01	-0.022
		735.93		6.543E+00	8.548E+00	1.659E+01	4.688E+00	0.394
		747.24		-9.671E-01	5.061E+00	9.109E+00	1.210E+00	-0.106
ND-147		91.11		9.120E+01	5.850E+01	1.063E+02	1.143E+01	0.858
		531.02	*	-7.047E+01	9.563E+01	1.515E+02	2.165E+01	-0.465
PM-147		121.30	*	-5.904E+05	4.348E+06	7.508E+06	5.261E+05	-0.079
EU-152		121.78		-4.657E+00	6.102E+00	1.020E+01	8.716E-01	-0.457
		344.31	*	2.138E-01	6.656E+00	1.151E+01	9.054E-01	0.019
		963.37		-9.770E+00	1.399E+01	2.330E+01	1.578E+00	-0.419
GD-153		69.67		1.558E+02	1.487E+02	2.471E+02	2.832E+01	0.630
		83.37		9.259E+02	1.179E+03	2.127E+03	2.275E+02	0.435
	+	97.43	*	1.825E+01	1.325E+01	1.269E+01	1.155E+00	1.437
		103.18		-5.290E+00	1.009E+01	1.495E+01	1.256E+00	-0.354
EU-154		123.07		-4.609E+00	4.920E+00	7.017E+00	7.129E-01	-0.657
	+	247.93		2.241E+01	2.686E+01	4.233E+01	4.490E+00	0.529
		591.76		-1.176E+01	4.162E+01	6.378E+01	6.934E+00	-0.184
		723.30		-1.087E+01	8.780E+00	1.364E+01	1.152E+00	-0.797
		756.86		3.356E+01	4.282E+01	8.495E+01	9.401E+00	0.395
		873.20		6.770E+00	1.553E+01	3.041E+01	3.350E+00	0.223
		996.30		-5.707E+00	1.982E+01	3.508E+01	5.955E+00	-0.163
		1004.76		-8.516E-01	1.365E+01	2.454E+01	2.553E+00	-0.035
		1274.51	*	8.354E-01	6.640E+00	1.242E+01	1.187E+00	0.067
EU-155		86.54		-4.772E+00	7.596E+00	1.287E+01	1.391E+00	-0.371
		105.31	*	7.377E+00	8.869E+00	1.600E+01	1.327E+00	0.461
TB-160		86.79		-1.709E+01	2.315E+01	3.899E+01	4.189E+00	-0.438
		298.57		-6.464E+00	9.191E+00	1.504E+01	1.118E+00	-0.430
		879.36	*	-2.950E+00	7.914E+00	1.400E+01	9.421E-01	-0.211
		962.29		-1.079E+01	2.931E+01	5.140E+01	3.480E+00	-0.210
		966.15		-5.119E+00	1.169E+01	2.023E+01	1.371E+00	-0.253
		1177.93		4.360E+00	2.256E+01	3.758E+01	2.648E+00	0.116
TM-171		51.87		-1.428E+03	1.639E+03	2.384E+03	3.556E+02	-0.599
		59.40		4.233E+02	4.165E+03	4.804E+03	6.753E+02	0.088

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	66.72	*	4.079E+03	3.804E+03	5.225E+03	6.244E+02	0.781
HF-181		56.28		-3.687E+01	1.603E+02	2.461E+02	3.580E+01	-0.150
		57.53		6.778E+01	7.928E+01	1.303E+02	1.869E+01	0.520
	+	65.20		1.627E+02	1.518E+02	1.890E+02	2.319E+01	0.861
		133.02		-7.447E-01	6.759E+00	1.165E+01	8.032E-01	-0.064
		136.25		1.486E+01	6.214E+01	9.607E+01	6.620E+00	0.155
		345.85		-1.142E+01	1.696E+01	2.768E+01	2.008E+00	-0.413
		482.03	*	-5.470E-01	3.265E+00	5.579E+00	4.067E-01	-0.098
TA-182	+	67.75		1.775E+01	1.655E+01	1.769E+01	2.080E+00	1.004
	+	100.10		4.458E+01	3.237E+01	2.708E+01	2.369E+00	1.646
		222.10		-2.169E-01	2.702E+01	4.659E+01	3.424E+00	-0.005
		1121.28		4.471E+00	7.802E+00	1.532E+01	1.079E+00	0.292
		1189.05		1.247E+01	1.519E+01	3.151E+01	2.190E+00	0.396
		1221.42	*	-2.531E+00	9.043E+00	1.608E+01	1.071E+00	-0.157
		1230.97		-6.036E+00	2.077E+01	3.695E+01	2.427E+00	-0.163
IR-192		295.96		1.060E+01	8.469E+00	1.563E+01	1.174E+00	0.678
		308.46		4.293E+00	8.066E+00	1.437E+01	1.072E+00	0.299
		316.51	*	-2.150E+00	2.868E+00	4.666E+00	3.457E-01	-0.461
		468.07		2.628E+00	5.021E+00	9.068E+00	7.230E-01	0.290
		604.41		-1.080E+01	3.002E+01	5.289E+01	6.513E+00	-0.204
		612.46		5.751E+00	5.570E+01	8.924E+01	7.994E+00	0.064
HG-203		70.83		-1.478E+01	1.042E+02	1.763E+02	2.724E+01	-0.084
		72.87		-8.741E+01	5.902E+01	9.361E+01	1.398E+01	-0.934
		82.60		7.192E+01	1.045E+02	1.878E+02	2.841E+01	0.383
		279.20	*	2.272E+00	3.543E+00	6.351E+00	4.912E-01	0.358
BI-207		569.67		-8.782E-02	1.737E+00	3.171E+00	2.372E-01	-0.028
		897.83		-5.280E+02	1.396E+03	2.441E+03	1.614E+02	-0.216
		1063.62	*	8.311E-01	2.483E+00	4.869E+00	3.392E-01	0.171
		1442.20		-2.332E+02	1.189E+03	2.196E+03	1.238E+02	-0.106
		1770.23		9.416E+00	2.641E+01	5.233E+01	2.990E+00	0.180
TL-208		75.00		5.938E+01	8.508E+01	1.535E+02	2.148E+01	0.387
		277.35		3.537E-01	2.682E+01	4.623E+01	5.340E+00	0.008
		510.84		7.787E+01	1.764E+01	3.232E+01	3.595E+00	2.410
	+	583.14	*	1.814E-01	3.484E+00	4.321E+00	3.543E-01	0.042
		763.30		-5.357E+01	1.209E+02	2.102E+02	2.769E+01	-0.255
		860.37		2.973E+00	1.458E+01	2.777E+01	2.118E+00	0.107
		1093.90		4.152E+01	6.896E+02	1.260E+03	2.863E+02	0.033
BI-210		46.50	*	-1.701E+02	6.031E+02	9.275E+02	1.146E+02	-0.183
PB-210		46.50	*	-1.701E+02	6.031E+02	9.275E+02	1.146E+02	-0.183
BI-211		351.07	*	4.362E+00	1.489E+01	2.607E+01	2.019E+00	0.167
PB-211		404.84	*	2.529E+01	6.271E+01	1.085E+02	6.775E+01	0.233
		427.08		-4.187E+01	1.325E+02	2.184E+02	1.353E+02	-0.192
		831.96		6.811E+00	7.482E+01	1.370E+02	8.558E+01	0.050
BI-212		727.18	*	7.123E+00	1.620E+01	3.104E+01	2.785E+00	0.229
PB-212		74.80		1.536E+01	2.720E+01	4.887E+01	7.033E+00	0.314
		87.30		-1.476E+01	2.920E+01	4.973E+01	7.304E+00	-0.297
		115.19		5.673E+01	3.080E+02	5.393E+02	3.982E+01	0.105
	+	238.63	*	4.660E+00	6.356E+00	8.473E+00	7.333E-01	0.550
		300.09		-1.445E+01	5.478E+01	9.257E+01	8.762E+00	-0.156

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BI-214	+	609.31	*	6.277E+00	7.337E+00	9.552E+00	8.721E-01	0.657
		768.36		2.239E+01	3.613E+01	7.090E+01	6.659E+00	0.316
		934.06		3.097E+01	5.730E+01	1.137E+02	1.041E+01	0.272
		1120.29		1.034E+01	1.499E+01	2.983E+01	2.883E+00	0.347
		1238.11		-1.705E+01	3.584E+01	6.132E+01	5.311E+00	-0.278
		1377.67		-9.586E+00	5.322E+01	9.597E+01	8.083E+00	-0.100
PB-214		74.81		2.599E+01	4.546E+01	8.175E+01	1.080E+01	0.318
		77.11		2.725E+01	2.574E+01	4.687E+01	6.199E+00	0.581
		87.30		-2.599E+01	5.139E+01	8.754E+01	1.182E+01	-0.297
		241.98		1.299E+01	2.497E+01	3.949E+01	3.668E+00	0.329
		295.21		1.333E+01	9.626E+00	1.783E+01	1.732E+00	0.748
		351.92	*	4.102E+00	5.048E+00	9.146E+00	8.536E-01	0.449
RN-219		271.23		1.214E+01	1.584E+01	2.865E+01	2.681E+00	0.424
		401.81	*	-1.068E+01	2.748E+01	4.577E+01	6.474E+00	-0.233
RA-223		122.32		-1.382E+02	1.436E+02	2.375E+02	1.836E+01	-0.582
		144.24		-2.317E+01	6.069E+01	8.995E+01	7.339E+00	-0.258
		154.21		3.528E+01	3.140E+01	5.679E+01	4.563E+00	0.621
		269.46		6.524E+00	1.225E+01	2.188E+01	1.676E+00	0.298
		323.87	*	5.492E+00	4.773E+01	8.269E+01	1.416E+01	0.066
		338.28		1.914E+01	6.714E+01	1.178E+02	1.346E+01	0.162
		445.03		-1.099E+02	1.321E+02	2.088E+02	2.316E+01	-0.527
RA-224		240.98	*	7.493E+01	5.043E+01	8.501E+01	6.298E+00	0.881
RA-226		295.21		1.333E+01	9.626E+00	1.783E+01	1.732E+00	0.748
		351.92		4.102E+00	5.042E+00	9.146E+00	6.626E-01	0.449
	+	609.31	*	6.277E+00	7.337E+00	9.552E+00	8.721E-01	0.657
AC-227		79.80		-1.212E+02	1.317E+02	2.159E+02	4.899E+01	-0.561
		236.00		1.945E+01	1.636E+01	2.707E+01	3.116E+00	0.718
		256.20	*	-1.444E+00	2.789E+01	4.794E+01	7.131E+00	-0.030
		286.10		-6.947E+01	1.072E+02	1.761E+02	2.215E+01	-0.394
		299.80		-7.620E+01	1.040E+02	1.687E+02	2.895E+01	-0.452
		304.40		-9.369E+01	1.412E+02	2.301E+02	4.171E+01	-0.407
		329.70		-1.041E+01	6.095E+01	1.038E+02	1.389E+01	-0.100
		334.20		-9.069E+01	1.538E+02	2.518E+02	4.822E+01	-0.360
TH-227		79.80		-1.191E+02	1.294E+02	2.121E+02	4.813E+01	-0.561
		94.00		3.684E+02	1.997E+02	3.098E+02	6.874E+01	1.189
		236.00		1.913E+01	1.606E+01	2.663E+01	2.703E+00	0.718
		256.20	*	-1.419E+00	2.742E+01	4.713E+01	8.261E+00	-0.030
		286.10		-6.833E+01	1.255E+02	1.732E+02	1.737E+02	-0.394
		299.80		-7.476E+01	1.021E+02	1.655E+02	2.802E+01	-0.452
		304.40		-9.206E+01	1.387E+02	2.261E+02	4.048E+01	-0.407
		329.70		-1.023E+01	5.995E+01	1.021E+02	1.353E+01	-0.100
		334.20		-8.888E+01	1.507E+02	2.468E+02	4.656E+01	-0.360
AC-228		209.25		-1.837E+01	4.191E+01	6.760E+01	4.330E+01	-0.272
		338.32		4.770E+00	1.636E+01	2.853E+01	1.170E+01	0.167
		463.01		-4.957E+00	3.933E+01	6.730E+01	1.605E+01	-0.074
	+	794.95		3.158E+01	4.575E+01	7.825E+01	1.791E+01	0.404
		911.21	*	1.228E+01	7.859E+00	1.655E+01	1.624E+00	0.742
		964.77		-1.432E+01	4.016E+01	7.013E+01	1.687E+01	-0.204
		969.11		1.383E+01	1.422E+01	2.796E+01	6.354E+00	0.495

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
RA-228		209.25		-1.837E+01	4.191E+01	6.760E+01	4.330E+01	-0.272
		338.32		4.770E+00	1.636E+01	2.853E+01	1.170E+01	0.167
		463.01		-4.957E+00	3.933E+01	6.730E+01	1.605E+01	-0.074
	+	794.95		3.158E+01	4.575E+01	7.825E+01	1.791E+01	0.404
		911.21	*	1.228E+01	7.859E+00	1.655E+01	1.624E+00	0.742
		964.77		-1.432E+01	4.016E+01	7.013E+01	1.687E+01	-0.204
		969.11		1.383E+01	1.422E+01	2.796E+01	6.354E+00	0.495
TH-229		85.43		-3.162E+00	1.407E+01	2.435E+01	2.609E+00	-0.130
		88.47		-3.983E-01	8.566E+00	1.491E+01	1.592E+00	-0.027
	+	100.00		4.223E+01	3.066E+01	2.763E+01	2.421E+00	1.529
		193.63	*	-6.137E+00	3.942E+01	6.734E+01	4.871E+00	-0.091
	+	210.97		3.609E+01	4.329E+01	9.650E+01	7.051E+00	0.374
TH-230		295.21		1.333E+01	9.626E+00	1.783E+01	1.732E+00	0.748
		351.92		4.102E+00	5.042E+00	9.146E+00	6.626E-01	0.449
	+	609.31	*	6.276E+00	7.337E+00	9.552E+00	8.721E-01	0.657
PA-231		283.67	*	-6.601E+01	1.072E+02	1.764E+02	2.567E+01	-0.374
		301.29		-8.687E+00	3.964E+01	6.717E+01	7.681E+00	-0.129
		330.00		3.469E-01	1.331E+02	2.298E+02	7.269E+01	0.002
TH-231		84.21		1.496E+01	3.715E+01	6.592E+01	1.248E+01	0.227
		236.00		1.940E+01	1.632E+01	2.700E+01	3.108E+00	0.718
		256.20		-1.440E+00	2.782E+01	4.781E+01	7.112E+00	-0.030
		269.46	*	6.524E+00	1.225E+01	2.188E+01	1.895E+00	0.298
		271.23		1.214E+01	1.585E+01	2.865E+01	3.039E+00	0.424
		283.67		-6.601E+01	1.072E+02	1.764E+02	2.567E+01	-0.374
		301.29		-8.687E+00	3.964E+01	6.717E+01	6.469E+00	-0.129
		329.85		-6.199E+00	4.187E+01	7.144E+01	1.024E+01	-0.087
		351.07		4.362E+00	1.489E+01	2.607E+01	2.019E+00	0.167
		401.81		-1.068E+01	2.746E+01	4.577E+01	5.295E+00	-0.233
TH-232	+	238.59	*	4.522E+00	6.168E+00	8.222E+00	7.115E-01	0.550
		911.20		1.213E+01	7.776E+00	1.637E+01	1.607E+00	0.741
		964.40		-2.373E+01	3.866E+01	6.456E+01	1.553E+01	-0.368
		969.11		1.369E+01	1.408E+01	2.768E+01	6.291E+00	0.495
PA-233		75.28		2.631E+02	2.274E+02	4.125E+02	6.906E+01	0.638
		86.59		-8.470E+01	1.247E+02	2.074E+02	5.719E+01	-0.408
		300.12		-7.079E+00	2.749E+01	4.646E+01	6.604E+00	-0.152
		311.98	*	-6.777E-01	4.607E+00	7.855E+00	6.036E-01	-0.086
		340.50		8.336E+00	4.048E+01	7.063E+01	1.652E+01	0.118
		398.62		-1.127E+02	1.463E+02	2.304E+02	6.024E+01	-0.489
		415.76		5.690E+01	1.142E+02	2.036E+02	4.269E+01	0.280
PA-234	+	63.00		3.109E+00	2.347E+02	2.518E+02	4.579E+01	0.012
		94.67		2.990E+00	1.632E+01	2.525E+01	3.291E+00	0.118
	+	98.44		2.062E+01	1.879E+01	1.367E+01	7.634E+00	1.508
	+	99.70		1.091E+02	7.921E+01	7.155E+01	6.296E+00	1.525
		111.00		-9.934E+00	1.545E+01	2.600E+01	2.975E+00	-0.382
		131.20		1.636E+00	9.430E+00	1.455E+01	1.003E+00	0.112
		152.70		9.681E+00	2.571E+01	4.511E+01	7.344E+00	0.215
		186.00		1.581E+02	1.115E+02	1.835E+02	5.663E+01	0.861
		226.40		4.209E+00	2.776E+01	4.838E+01	6.008E+00	0.087
		227.20		2.568E+01	2.885E+01	5.246E+01	3.865E+00	0.489

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	248.90		5.247E+01	6.376E+01	1.049E+02	2.379E+01	0.500
		293.70		-7.963E+00	4.678E+01	7.946E+01	1.330E+01	-0.100
		369.80		2.889E+01	6.059E+01	1.076E+02	2.284E+01	0.268
		568.70		1.933E+01	5.462E+01	1.038E+02	7.760E+00	0.186
		569.50		-1.070E+00	1.537E+01	2.801E+01	2.095E+00	-0.038
		574.00		2.330E+01	8.653E+01	1.623E+02	1.215E+01	0.144
		699.00		2.181E+01	4.234E+01	8.046E+01	1.495E+01	0.271
		706.10		1.281E+01	6.053E+01	1.123E+02	4.984E+01	0.114
		733.00		-8.300E+00	2.207E+01	3.861E+01	8.396E+00	-0.215
		742.81		6.847E+01	8.611E+01	1.480E+02	9.930E+01	0.463
	+	796.30		3.688E+01	5.366E+01	7.797E+01	2.076E+01	0.473
		805.80		-3.171E+01	5.709E+01	9.648E+01	2.919E+01	-0.329
		819.60		1.007E+01	7.040E+01	1.169E+02	4.407E+01	0.086
		826.30		-2.208E+01	4.945E+01	8.409E+01	3.738E+01	-0.263
		831.60		5.342E+00	3.840E+01	7.078E+01	2.082E+01	0.075
		876.40		-1.125E+01	4.029E+01	6.951E+01	7.136E+01	-0.162
		880.51		4.242E+00	1.395E+01	2.708E+01	1.820E+00	0.157
		883.24		9.857E+00	1.707E+01	3.123E+01	2.093E+01	0.316
		899.00		3.080E+01	4.623E+01	8.890E+01	3.855E+01	0.346
		925.00		-6.024E+00	5.434E+01	1.006E+02	6.719E+00	-0.060
		926.50		-2.655E+00	8.930E+00	1.588E+01	3.919E+00	-0.167
		946.00	*	6.823E+00	1.749E+01	3.023E+01	5.434E+00	0.226
		949.00		1.253E+00	2.451E+01	4.016E+01	2.707E+00	0.031
		980.50		1.463E+01	3.852E+01	7.488E+01	5.101E+00	0.195
		1394.10		5.595E+01	7.741E+01	1.446E+02	9.366E+01	0.387
PA-234M		766.40		-8.400E+01	8.950E+02	1.621E+03	1.241E+03	-0.052
		1001.03	*	-4.755E+01	2.734E+02	4.870E+02	4.124E+01	-0.098
TH-234	+	63.29	*	2.667E+00	2.013E+02	2.436E+02	4.945E+01	0.011
		92.38		1.187E+02	4.988E+01	8.509E+01	1.593E+01	1.395
		112.81		1.131E+02	7.490E+02	1.310E+03	2.298E+02	0.086
U-234	+	67.67		1.677E+03	1.575E+03	1.677E+03	2.732E+02	1.000
		241.98		1.301E+01	2.500E+01	3.954E+01	3.674E+00	0.329
		295.21	*	1.333E+01	9.626E+00	1.783E+01	1.732E+00	0.748
		351.92		4.102E+00	5.048E+00	9.146E+00	8.536E-01	0.449
U-235		89.95		-1.781E+02	1.063E+02	1.445E+02	4.534E+01	-1.233
		93.35		1.294E+02	6.477E+01	1.008E+02	2.862E+01	1.284
		105.00		6.991E+01	8.833E+01	1.552E+02	4.613E+01	0.451
		143.76	*	-1.854E+00	1.823E+01	2.757E+01	4.613E+00	-0.067
		163.33		1.378E+01	3.853E+01	6.007E+01	1.108E+01	0.229
		185.71		6.750E+00	3.736E+00	6.848E+00	4.932E-01	0.986
		205.31		-9.804E+00	3.514E+01	5.959E+01	1.048E+01	-0.165
NP-237		86.48	*	-1.131E+01	1.859E+01	3.127E+01	7.273E+00	-0.362
		95.87		-2.765E+02	1.272E+02	1.398E+02	3.479E+01	-1.978
NP-239	+	99.55		3.563E+01	2.587E+01	2.339E+01	2.063E+00	1.523
		117.00	*	-7.355E+00	1.645E+01	2.797E+01	2.032E+00	-0.263
		209.75		-3.344E+01	6.200E+01	8.975E+01	6.554E+00	-0.373
		228.18		1.688E+01	1.494E+01	2.752E+01	2.029E+00	0.613
		277.60		5.774E+00	1.231E+01	2.185E+01	1.629E+00	0.264
		334.31		-5.720E+01	8.401E+01	1.372E+02	1.004E+01	-0.417

Sample ID : G145579002 Acquisition date : 13-OCT-2005 10:41:00

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AM-241		59.54	*	1.415E+00	2.371E+01	2.720E+01	3.925E+00	0.052
AM-242	+	99.55		8.316E+02	6.038E+02	5.461E+02	4.815E+01	1.523
		103.70	*	-7.577E+01	2.057E+02	3.081E+02	2.570E+01	-0.246
CM-247		278.00		2.149E+01	5.187E+01	9.169E+01	6.834E+00	0.234
		287.40		-1.883E+01	8.381E+01	1.425E+02	1.061E+01	-0.132
		402.60	*	2.312E-01	2.445E+00	4.253E+00	2.967E-01	0.054
CF-249		252.85		1.763E+01	6.380E+01	1.118E+02	8.311E+00	0.158
		333.44		-3.979E+00	1.116E+01	1.873E+01	1.371E+00	-0.212
		387.95	*	6.308E-01	2.565E+00	4.531E+00	3.151E-01	0.139
CF-251		176.00	*	7.716E+00	9.518E+00	1.708E+01	1.225E+00	0.452
		227.00		2.314E+01	2.565E+01	4.667E+01	3.438E+00	0.496
		285.00		-5.603E+01	1.214E+02	2.028E+02	1.511E+01	-0.276
ANH-511		511.00	*	1.609E+01	3.462E+00	6.798E+00	5.010E-01	2.367

VAX/VMS Nuclide Identification Report Generated

```
*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579002    *
* Acquisition date : 13-OCT-2005 10:41:00 Detector SN#    : 7933154     *
* Detector ID      : GAMMA2               Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.40     Half life ratio :  8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 07:30:00 Nuclide Library :             *
* Sample ID        : G145579002           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME : 13-JAN-2005 15:26:31 MS Isotope      :             *
* MSD DPM          :    0.000            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
*************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
CE-139	2.548E+00	3.993E+00	4.144E+00	0.000E+00
TH-228	4.660E+00	6.356E+00	7.017E+00	0.000E+00
U-238	2.667E+00	2.013E+02	2.124E+02	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Ided	Act error	MDA (pCi/LITER	)
BE-7	-1.680E+00	2.319E+01	4.006E+01	0.000E+00	NOT IDENT.
NA-22	3.014E-01	2.396E+00	4.481E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	7.995E+14	0.000E+00	0.000E+00	SHORT HLIF
AL-26	1.325E-01	1.815E+00	3.709E+00	0.000E+00	NOT IDENT.
K-40	3.104E+01	2.252E+01	4.968E+01	0.000E+00	NOT IDENT.
SC-46	1.727E-01	2.797E+00	5.127E+00	0.000E+00	NOT IDENT.
V-48	-1.821E+00	8.382E+00	1.284E+01	0.000E+00	NOT IDENT.
CR-51	5.637E+00	3.860E+01	6.718E+01	0.000E+00	NOT IDENT.
MN-54	-4.156E-01	2.316E+00	4.129E+00	0.000E+00	NOT IDENT.
CO-56	6.061E-01	2.514E+00	4.750E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	4.152E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-2.149E+00	2.166E+00	3.577E+00	0.000E+00	NOT IDENT.
CO-58	4.352E-01	2.898E+00	4.747E+00	0.000E+00	NOT IDENT.
FE-59	-4.085E+00	7.200E+00	1.211E+01	0.000E+00	NOT IDENT.
CO-60	-3.292E-01	2.300E+00	4.153E+00	0.000E+00	NOT IDENT.
ZN-65	1.033E+00	4.593E+00	8.728E+00	0.000E+00	NOT IDENT.
SE-75	1.329E+00	3.246E+00	5.766E+00	0.000E+00	FAIL ABUN
KR-85	-1.403E+03	7.584E+02	1.112E+03	0.000E+00	NOT IDENT.
SR-85	-8.427E+00	4.555E+00	6.677E+00	0.000E+00	NOT IDENT.
Y-88	1.009E+00	2.677E+00	5.562E+00	0.000E+00	NOT IDENT.
Y-91	-2.310E+00	2.714E+00	4.563E+00	0.000E+00	NOT IDENT.
NB-94	5.749E-02	1.949E+00	3.565E+00	0.000E+00	NOT IDENT.
NB-95	-6.117E-01	3.425E+00	6.160E+00	0.000E+00	NOT IDENT.
NB-95M	0.000E+00	2.377E+03	0.000E+00	0.000E+00	SHORT HLIF

ZR-95	3.505E+00	4.596E+00	9.120E+00	0.000E+00	NOT IDENT.
MO-99	0.000E+00	7.670E+03	0.000E+00	0.000E+00	SHORT HLIF
TC-99M	0.000E+00	7.516E+36	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-3.797E+00	4.294E+00	5.617E+00	0.000E+00	FAIL ABUN
RH-106	-7.282E+00	1.884E+01	3.321E+01	0.000E+00	NOT IDENT.
RU-106	-8.755E+00	1.848E+01	3.225E+01	0.000E+00	NOT IDENT.
AG-108M	-6.906E-01	2.156E+00	3.617E+00	0.000E+00	NOT IDENT.
CD-109	-6.360E-01	6.320E+01	1.102E+02	0.000E+00	NOT IDENT.
AG-110M	-8.379E-01	2.060E+00	3.619E+00	0.000E+00	FAIL ABUN
SN-113	-1.153E+00	3.316E+00	5.551E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	7.640E+04	0.000E+00	0.000E+00	SHORT HLIF
SN-115	1.463E+02	2.249E+02	4.508E+02	0.000E+00	NOT IDENT.
SN-117M	-7.138E+00	8.900E+00	1.475E+01	0.000E+00	NOT IDENT.
TE-123M	-8.048E-01	2.295E+00	3.904E+00	0.000E+00	NOT IDENT.
SB-124	5.375E-02	5.781E+00	1.145E+01	0.000E+00	NOT IDENT.
SB-125	-2.899E+00	6.021E+00	9.948E+00	0.000E+00	NOT IDENT.
TE-125M	-1.009E+02	9.239E+02	1.599E+03	0.000E+00	NOT IDENT.
I-126	-9.958E+00	2.404E+01	4.206E+01	0.000E+00	NOT IDENT.
SB-126	-2.359E+00	1.688E+01	3.073E+01	0.000E+00	NOT IDENT.
SN-126	-2.613E+00	6.154E+00	1.053E+01	0.000E+00	FAIL ABUN
SB-127	-5.069E+02	1.106E+03	1.930E+03	0.000E+00	NOT IDENT.
I-131	-3.701E+00	2.899E+01	4.955E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	6.130E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	0.000E+00	1.143E+03	0.000E+00	0.000E+00	SHORT HLIF
BA-133	1.010E+00	3.051E+00	5.378E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	6.949E+10	0.000E+00	0.000E+00	SHORT HLIF
CS-134	1.732E+00	2.480E+00	4.407E+00	0.000E+00	FAIL ABUN
CS-135	1.418E+00	1.059E+01	1.845E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	7.265E+33	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-1.645E+01	1.279E+01	1.886E+01	0.000E+00	FAIL ABUN
BA-137M	4.914E-01	2.006E+00	3.764E+00	0.000E+00	NOT IDENT.
CS-137	5.222E-01	2.121E+00	3.980E+00	0.000E+00	NOT IDENT.
BA-140	-9.073E+00	3.649E+01	6.137E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	5.949E+05	0.000E+00	0.000E+00	SHORT HLIF
CE-141	8.687E-01	6.646E+00	1.158E+01	0.000E+00	NOT IDENT.
CE-143	0.000E+00	1.915E+07	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-9.863E+00	1.736E+01	2.919E+01	0.000E+00	NOT IDENT.
PM-144	1.159E+00	2.088E+00	4.001E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	1.801E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-3.222E-01	2.910E+00	4.973E+00	0.000E+00	NOT IDENT.
ND-147	-7.047E+01	9.563E+01	1.515E+02	0.000E+00	NOT IDENT.
PM-147	-5.904E+05	4.348E+06	7.508E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	6.996E+05	0.000E+00	0.000E+00	SHORT HLIF
EU-152	2.138E-01	6.656E+00	1.151E+01	0.000E+00	NOT IDENT.
GD-153	0.000E+00	1.325E+01	1.269E+01	0.000E+00	FAIL ABUN
EU-154	8.354E-01	6.640E+00	1.242E+01	0.000E+00	FAIL ABUN
EU-155	7.377E+00	8.869E+00	1.600E+01	0.000E+00	NOT IDENT.
TB-160	-2.950E+00	7.914E+00	1.400E+01	0.000E+00	NOT IDENT.
TM-171	4.079E+03	3.804E+03	5.225E+03	0.000E+00	FAIL ABUN
HF-181	-5.470E-01	3.265E+00	5.579E+00	0.000E+00	FAIL ABUN
TA-182	-2.531E+00	9.043E+00	1.608E+01	0.000E+00	FAIL ABUN
IR-192	-2.150E+00	2.868E+00	4.666E+00	0.000E+00	NOT IDENT.
HG-203	2.272E+00	3.543E+00	6.351E+00	0.000E+00	NOT IDENT.
BI-207	8.311E-01	2.483E+00	4.869E+00	0.000E+00	NOT IDENT.
TL-208	1.814E-01	3.484E+00	4.321E+00	0.000E+00	FAIL ABUN
BI-210	-1.701E+02	6.031E+02	9.275E+02	0.000E+00	NOT IDENT.
PB-210	-1.701E+02	6.031E+02	9.275E+02	0.000E+00	NOT IDENT.
BI-211	4.362E+00	1.489E+01	2.607E+01	0.000E+00	NOT IDENT.
PB-211	2.529E+01	6.271E+01	1.085E+02	0.000E+00	NOT IDENT.
BI-212	7.123E+00	1.620E+01	3.104E+01	0.000E+00	NOT IDENT.
PB-212	4.660E+00	6.356E+00	8.473E+00	0.000E+00	FAIL ABUN
BI-214	6.277E+00	7.337E+00	9.552E+00	0.000E+00	FAIL ABUN
PB-214	4.102E+00	5.048E+00	9.146E+00	0.000E+00	NOT IDENT.
RN-219	-1.068E+01	2.748E+01	4.577E+01	0.000E+00	NOT IDENT.
RA-223	5.492E+00	4.773E+01	8.269E+01	0.000E+00	NOT IDENT.
RA-224	7.493E+01	5.043E+01	8.501E+01	0.000E+00	NOT IDENT.
RA-226	6.277E+00	7.337E+00	9.552E+00	0.000E+00	FAIL ABUN
AC-227	-1.444E+00	2.789E+01	4.794E+01	0.000E+00	NOT IDENT.
TH-227	-1.419E+00	2.742E+01	4.713E+01	0.000E+00	NOT IDENT.
AC-228	1.228E+01	7.859E+00	1.655E+01	0.000E+00	FAIL ABUN
RA-228	1.228E+01	7.859E+00	1.655E+01	0.000E+00	FAIL ABUN
TH-229	-6.137E+00	3.942E+01	6.734E+01	0.000E+00	FAIL ABUN
TH-230	6.276E+00	7.337E+00	9.552E+00	0.000E+00	FAIL ABUN
PA-231	-6.601E+01	1.072E+02	1.764E+02	0.000E+00	NOT IDENT.
TH-231	6.524E+00	1.225E+01	2.188E+01	0.000E+00	NOT IDENT.
TH-232	4.522E+00	6.168E+00	8.222E+00	0.000E+00	FAIL ABUN
PA-233	-6.777E-01	4.607E+00	7.855E+00	0.000E+00	NOT IDENT.
PA-234	6.823E+00	1.749E+01	3.023E+01	0.000E+00	FAIL ABUN

PA-234M	-4.755E+01	2.734E+02	4.870E+02	0.000E+00 NOT IDENT.
TH-234	2.667E+00	2.013E+02	2.436E+02	0.000E+00 FAIL ABUN
U-234	1.333E+01	9.626E+00	1.783E+01	0.000E+00 FAIL ABUN
U-235	-1.854E+00	1.823E+01	2.757E+01	0.000E+00 NOT IDENT.
NP-237	-1.131E+01	1.859E+01	3.127E+01	0.000E+00 NOT IDENT.
NP-239	-7.355E+00	1.645E+01	2.797E+01	0.000E+00 FAIL ABUN
AM-241	1.415E+00	2.371E+01	2.720E+01	0.000E+00 NOT IDENT.
AM-242	-7.577E+01	2.057E+02	3.081E+02	0.000E+00 FAIL ABUN
CM-247	2.312E-01	2.445E+00	4.253E+00	0.000E+00 NOT IDENT.
CF-249	6.308E-01	2.565E+00	4.531E+00	0.000E+00 NOT IDENT.
CF-251	7.716E+00	9.518E+00	1.708E+01	0.000E+00 NOT IDENT.
ANH-511	0.000E+00	3.462E+00	6.798E+00	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:42:01.48

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579002.CNF;1
Sample date      : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:41:00
Sample ID        : G145579002           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA2               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.40  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 7933154
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	2	63.17	78	210	1.74	126.09	121	15	5.40E-03	36.8	1.09E+00
2	2	66.15	104	168	1.41	132.05	121	15	7.23E-03	23.8	
3	0	92.84	138	267	1.66	185.38	181	10	9.55E-03	23.9	
4	0	98.40	107	302	3.68	196.51	191	14	7.43E-03	36.0	
5	0	127.38	58	247	1.17	254.43	250	10	4.01E-03	52.6	
6	0	139.30	41	285	3.03	278.25	273	12	2.83E-03	84.7	
7	0	166.93	51	188	2.36	333.49	329	11	3.52E-03	54.7	
8	0	185.77	98	210	1.64	371.14	366	10	6.81E-03	29.5	
9	0	212.69	24	78	1.08	424.96	423	5	1.63E-03	59.9	
10	0	238.82	95	135	1.29	477.18	473	10	6.60E-03	25.1	
11	0	248.54	27	83	2.28	496.62	493	7	1.86E-03	59.7	
12	1	489.31	27	19	1.95	977.91	973	22	1.86E-03	41.4	2.09E+00
13	1	491.45	25	26	1.95	982.20	973	22	1.70E-03	52.1	
14	0	511.11	256	110	2.58	1021.51	1013	23	1.78E-02	12.3	
15	0	581.99	29	39	4.70	1163.20	1157	12	2.02E-03	46.7	
16	0	595.16	23	33	0.96	1189.53	1186	10	1.60E-03	50.9	
17	0	609.86	53	39	3.15	1218.93	1214	12	3.65E-03	27.5	
18	0	795.88	12	18	1.37	1590.84	1586	8	8.13E-04	71.5	
19	0	814.70	37	30	6.84	1628.46	1617	24	2.60E-03	42.0	
20	0	936.06	29	60	16.90	1871.14	1858	39	2.04E-03	87.2	
21	0	990.14	13	17	2.78	1979.27	1969	14	9.32E-04	71.2	
22	0	1052.70	12	3	1.76	2104.38	2102	6	8.33E-04	36.8	
23	0	1156.92	9	11	1.13	2312.80	2308	9	6.20E-04	75.4	
24	0	1181.08	24	4	5.28	2361.12	2356	14	1.65E-03	26.6	
25	0	1207.39	9	21	6.53	2413.72	2410	16	6.28E-04	115.9	
26	0	1268.20	6	0	0.96	2535.33	2533	5	4.17E-04	40.8	
27	0	1337.75	16	2	4.16	2674.45	2670	11	1.10E-03	31.8	
28	3	1557.30	20	6	2.92	3113.58	3108	15	1.41E-03	26.2	1.96E+00
29	3	1560.65	11	3	1.78	3120.27	3108	15	7.40E-04	28.3	
30	0	1581.38	10	1	1.44	3161.74	3159	7	6.76E-04	38.6	
31	0	1645.04	7	12	0.70	3289.08	3281	16	5.15E-04	110.3	
32	0	1733.23	6	0	0.58	3465.50	3464	5	4.17E-04	40.8	
33	0	1767.21	7	11	0.49	3533.47	3526	10	4.98E-04	97.9	
34	0	1950.60	9	10	4.86	3900.35	3891	15	6.34E-04	85.7	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:42:06.42

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*****************************************************************************
*                           GENERAL ENG. LABS, LLC.                         *
*                               2040 Savage Road                            *
*                             Charleston, SC 29414                          *
*****************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579002.CNF;1
Sample date      : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:41:00
Sample ID        : G145579002           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA2               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.40  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 7933154
Matrix Spike DPM :                      LCS DPM          :
*****************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
CE-139	165.85	39	80.35*	2.087E+00	2.188E+00	2.548E+00	156.75
TH-228	84.40	------	1.21	1.578E+00	------	Line Not Found	------
	238.60	38	44.60*	1.756E+00	4.522E+00	4.660E+00	136.41
	300.10	------	3.41	1.530E+00	------	Line Not Found	------
U-238	63.29	1	3.80*	7.415E-01	2.667E+00	2.667E+00	7547.18

Flag: "*" = Keyline

Sample ID : G145579002 Acquisition date : 13-OCT-2005 10:41:00

Total number of lines in spectrum	31	
Number of unidentified lines	16	
Number of lines tentatively identified by NID	15	48.39%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
CE-139	137.66D	1.16	2.188E+00	2.548E+00	3.993E+00	156.75	
TH-228	1.91Y	1.03	4.522E+00	4.660E+00	6.356E+00	136.41	
U-238	4.47E+09Y	1.00	2.667E+00	2.667E+00	201.3E+00	7547.18	
	Total Activity :		9.378E+00	9.875E+00			
	Grand Total Activity :		9.378E+00	9.875E+00			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579002 Acquisition date : 13-OCT-2005 10:41:00

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	66.15	58	168	1.41	132.05	121	15	4.04E-03	92.5	8.72E-01	T
0	98.40	107	302	3.68	196.51	191	14	7.43E-03	72.0	1.92E+00	T
0	127.38	58	247	1.17	254.43	250	10	4.01E-03	****	2.17E+00	
0	139.30	29	285	3.03	278.25	273	12	2.03E-03	****	2.17E+00	T
0	212.69	24	78	1.08	424.96	423	5	1.63E-03	****	1.87E+00	T
0	248.54	27	83	2.28	496.62	493	7	1.86E-03	****	1.72E+00	T
1	489.31	27	19	1.95	977.91	973	22	1.86E-03	82.7	1.11E+00	T
1	491.45	25	26	1.95	982.20	973	22	1.70E-03	****	1.11E+00	T
0	581.99	2	39	4.70	1163.20	1157	12	1.07E-04	****	9.78E-01	T
0	595.16	23	33	0.96	1189.53	1186	10	1.60E-03	****	9.62E-01	
0	609.86	29	39	3.15	1218.93	1214	12	2.03E-03	****	9.44E-01	T
0	795.88	12	18	1.37	1590.84	1586	8	8.13E-04	****	7.63E-01	T
0	814.70	16	30	6.84	1628.46	1617	24	1.12E-03	****	7.48E-01	T
0	936.06	29	60	16.90	1871.14	1858	39	2.04E-03	****	6.64E-01	T
0	990.14	13	17	2.78	1979.27	1969	14	9.32E-04	****	6.33E-01	
0	1052.70	11	3	1.76	2104.38	2102	6	7.40E-04	92.6	6.00E-01	
0	1156.92	9	11	1.13	2312.80	2308	9	6.20E-04	****	5.52E-01	
0	1181.08	24	4	5.28	2361.12	2356	14	1.65E-03	53.3	5.43E-01	
0	1207.39	1	21	6.53	2413.72	2410	16	5.30E-05	****	5.33E-01	
0	1268.20	6	0	0.96	2535.33	2533	5	4.17E-04	81.6	5.11E-01	
0	1337.75	16	2	4.16	2674.45	2670	11	1.10E-03	63.6	4.90E-01	
3	1557.30	20	6	2.92	3113.58	3108	15	1.41E-03	52.3	4.38E-01	
3	1560.65	11	3	1.78	3120.27	3108	15	7.40E-04	56.7	4.38E-01	
0	1581.38	10	1	1.44	3161.74	3159	7	6.76E-04	77.1	4.34E-01	
0	1645.04	5	12	0.70	3289.08	3281	16	3.48E-04	****	4.24E-01	
0	1733.23	6	0	0.58	3465.50	3464	5	4.17E-04	81.6	4.12E-01	
0	1767.21	7	11	0.49	3533.47	3526	10	4.98E-04	****	4.09E-01	
0	1950.60	9	10	4.86	3900.35	3891	15	6.34E-04	****	3.95E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:42:17.60

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579002.CNF;1     *
* Acquisition date : 13-OCT-2005 10:41:00  Detector SN#    : 7933154        *
* Detector ID      : GAMMA2                Sensitivity     : 3.00000        *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000        *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000       *
* Elapsed real time: 0 04:00:01.40         Half life ratio : 8.00000        *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 13-SEP-2005 07:30:00  Nuclide Library : EPI            *
* Sample ID        : G145579002            Analyst initials: MJH1           *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 13-JAN-2005 15:26:31.3MS Isotope      :               *
* MSD DPM          :                      MSD Isotope     :               *
* LCS DPM          :                      LCS Isotope     :               *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CE-139	2.548E+00	3.993E+00	4.144E+00	2.961E-01	0.615
TH-228	4.660E+00	6.356E+00	7.017E+00	6.073E-01	0.664
U-238	2.667E+00	2.013E+02	2.124E+02	4.311E+01	0.013

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-1.680E+00		2.319E+01	4.006E+01	3.227E+00	-0.042
NA-22	3.014E-01		2.396E+00	4.481E+00	2.755E-01	0.067
AL-26	1.325E-01		1.815E+00	3.709E+00	2.109E-01	0.036
K-40	3.104E+01		2.252E+01	4.968E+01	2.992E+00	0.625
SC-46	1.727E-01		2.797E+00	5.127E+00	3.418E-01	0.034
V-48	-1.821E+00		8.382E+00	1.284E+01	8.759E-01	-0.142
CR-51	5.637E+00		3.860E+01	6.718E+01	5.310E+00	0.084
MN-54	-4.156E-01		2.316E+00	4.129E+00	2.882E-01	-0.101
CO-56	6.061E-01		2.514E+00	4.750E+00	3.286E-01	0.128

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CO-57	-2.149E+00		2.166E+00	3.577E+00	2.496E-01	-0.601
CO-58	4.352E-01		2.898E+00	4.747E+00	3.380E-01	0.092
FE-59	-4.085E+00		7.200E+00	1.211E+01	9.517E-01	-0.337
CO-60	-3.292E-01		2.300E+00	4.153E+00	2.281E-01	-0.079
ZN-65	1.033E+00		4.593E+00	8.728E+00	6.150E-01	0.118
SE-75	1.329E+00		3.246E+00	5.766E+00	4.321E-01	0.231
KR-85	-1.403E+03		7.584E+02	1.112E+03	8.200E+01	-1.262
SR-85	-8.427E+00		4.555E+00	6.677E+00	4.925E-01	-1.262
Y-88	1.009E+00		2.677E+00	5.562E+00	3.158E-01	0.181
Y-91	-2.310E+00		2.714E+00	4.563E+00	3.405E-01	-0.506
NB-94	5.749E-02		1.949E+00	3.565E+00	2.655E-01	0.016
NB-95	-6.117E-01		3.425E+00	6.160E+00	4.485E-01	-0.099
ZR-95	3.505E+00		4.596E+00	9.120E+00	7.586E-01	0.384
RU-103	-3.797E+00		4.294E+00	5.617E+00	7.537E-01	-0.676
RH-106	-7.282E+00		1.884E+01	3.321E+01	2.498E+00	-0.219
RU-106	-8.755E+00		1.848E+01	3.225E+01	4.088E+00	-0.271
AG-108M	-6.906E-01		2.156E+00	3.617E+00	2.723E-01	-0.191
CD-109	-6.360E-01		6.320E+01	1.102E+02	1.188E+01	-0.006
AG-110M	-8.379E-01		2.060E+00	3.619E+00	2.826E-01	-0.232
SN-113	-1.153E+00		3.316E+00	5.551E+00	4.024E-01	-0.208
SN-115	1.463E+02		2.249E+02	4.508E+02	3.021E+01	0.324
SN-117M	-7.138E+00		8.900E+00	1.475E+01	1.040E+00	-0.484
TE-123M	-8.048E-01		2.295E+00	3.904E+00	2.779E-01	-0.206
SB-124	5.375E-02		5.781E+00	1.145E+01	7.156E-01	0.005
SB-125	-2.899E+00		6.021E+00	9.948E+00	7.255E-01	-0.291
TE-125M	-1.009E+02		9.239E+02	1.599E+03	1.557E+02	-0.063
I-126	-9.958E+00		2.404E+01	4.206E+01	3.158E+00	-0.237
SB-126	-2.359E+00		1.688E+01	3.073E+01	2.276E+00	-0.077
SN-126	-2.613E+00		6.154E+00	1.053E+01	1.134E+00	-0.248
SB-127	-5.069E+02		1.106E+03	1.930E+03	3.116E+02	-0.263
I-131	-3.701E+00		2.899E+01	4.955E+01	3.904E+00	-0.075
BA-133	1.010E+00		3.051E+00	5.378E+00	6.625E-01	0.188
CS-134	1.732E+00	+	2.480E+00	4.407E+00	3.182E-01	0.393
CS-135	1.418E+00		1.059E+01	1.845E+01	1.655E+00	0.077
CS-136	-1.645E+01		1.279E+01	1.886E+01	1.399E+00	-0.872
BA-137M	4.914E-01		2.006E+00	3.764E+00	2.829E-01	0.131
CS-137	5.222E-01		2.121E+00	3.980E+00	2.999E-01	0.131
BA-140	-9.073E+00		3.649E+01	6.137E+01	2.016E+01	-0.148
CE-141	8.687E-01		6.646E+00	1.158E+01	8.247E-01	0.075
CE-144	-9.863E+00		1.736E+01	2.919E+01	4.285E+00	-0.338
PM-144	1.159E+00		2.088E+00	4.001E+00	2.990E-01	0.290
PM-146	-3.222E-01		2.910E+00	4.973E+00	4.781E-01	-0.065
ND-147	-7.047E+01		9.563E+01	1.515E+02	2.165E+01	-0.465
PM-147	-5.904E+05		4.348E+06	7.508E+06	5.261E+05	-0.079
EU-152	2.138E-01		6.656E+00	1.151E+01	9.054E-01	0.019
GD-153	1.825E+01	+	1.325E+01	1.269E+01	1.155E+00	1.437
EU-154	8.354E-01		6.640E+00	1.242E+01	1.187E+00	0.067
EU-155	7.377E+00		8.869E+00	1.600E+01	1.327E+00	0.461

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
TB-160	-2.950E+00		7.914E+00	1.400E+01	9.421E-01	-0.211
TM-171	4.079E+03	+	3.804E+03	5.225E+03	6.244E+02	0.781
HF-181	-5.470E-01		3.265E+00	5.579E+00	4.067E-01	-0.098
TA-182	-2.531E+00		9.043E+00	1.608E+01	1.071E+00	-0.157
IR-192	-2.150E+00		2.868E+00	4.666E+00	3.457E-01	-0.461
HG-203	2.272E+00		3.543E+00	6.351E+00	4.912E-01	0.358
BI-207	8.311E-01		2.483E+00	4.869E+00	3.392E-01	0.171
TL-208	1.814E-01	+	3.484E+00	4.321E+00	3.543E-01	0.042
BI-210	-1.701E+02		6.031E+02	9.275E+02	1.146E+02	-0.183
PB-210	-1.701E+02		6.031E+02	9.275E+02	1.146E+02	-0.183
BI-211	4.362E+00		1.489E+01	2.607E+01	2.019E+00	0.167
PB-211	2.529E+01		6.271E+01	1.085E+02	6.775E+01	0.233
BI-212	7.123E+00		1.620E+01	3.104E+01	2.785E+00	0.229
PB-212	4.660E+00	+	6.356E+00	8.473E+00	7.333E-01	0.550
BI-214	6.277E+00	+	7.337E+00	9.552E+00	8.721E-01	0.657
PB-214	4.102E+00		5.048E+00	9.146E+00	8.536E-01	0.449
RN-219	-1.068E+01		2.748E+01	4.577E+01	6.474E+00	-0.233
RA-223	5.492E+00		4.773E+01	8.269E+01	1.416E+01	0.066
RA-224	7.493E+01		5.043E+01	8.501E+01	6.298E+00	0.881
RA-226	6.277E+00	+	7.337E+00	9.552E+00	8.721E-01	0.657
AC-227	-1.444E+00		2.789E+01	4.794E+01	7.131E+00	-0.030
TH-227	-1.419E+00		2.742E+01	4.713E+01	8.261E+00	-0.030
AC-228	1.228E+01		7.859E+00	1.655E+01	1.624E+00	0.742
RA-228	1.228E+01		7.859E+00	1.655E+01	1.624E+00	0.742
TH-229	-6.137E+00		3.942E+01	6.734E+01	4.871E+00	-0.091
TH-230	6.276E+00	+	7.337E+00	9.552E+00	8.721E-01	0.657
PA-231	-6.601E+01		1.072E+02	1.764E+02	2.567E+01	-0.374
TH-231	6.524E+00		1.225E+01	2.188E+01	1.895E+00	0.298
TH-232	4.522E+00	+	6.168E+00	8.222E+00	7.115E-01	0.550
PA-233	-6.777E-01		4.607E+00	7.855E+00	6.036E-01	-0.086
PA-234	6.823E+00		1.749E+01	3.023E+01	5.434E+00	0.226
PA-234M	-4.755E+01		2.734E+02	4.870E+02	4.124E+01	-0.098
TH-234	2.667E+00	+	2.013E+02	2.436E+02	4.945E+01	0.011
U-234	1.333E+01		9.626E+00	1.783E+01	1.732E+00	0.748
U-235	-1.854E+00		1.823E+01	2.757E+01	4.613E+00	-0.067
NP-237	-1.131E+01		1.859E+01	3.127E+01	7.273E+00	-0.362
NP-239	-7.355E+00		1.645E+01	2.797E+01	2.032E+00	-0.263
AM-241	1.415E+00		2.371E+01	2.720E+01	3.925E+00	0.052
AM-242	-7.577E+01		2.057E+02	3.081E+02	2.570E+01	-0.246
CM-247	2.312E-01		2.445E+00	4.253E+00	2.967E-01	0.054
CF-249	6.308E-01		2.565E+00	4.531E+00	3.151E-01	0.139
CF-251	7.716E+00		9.518E+00	1.708E+01	1.225E+00	0.452
ANH-511	1.609E+01		3.462E+00	6.798E+00	5.010E-01	2.367

VAX/VMS Nuclide Identification Report Generated

```
*********************************************************************
*                        Environmental Physics, Inc.                *
*                            2040 Savage Road                       *
*                          Charleston, SC 29414                     *
*********************************************************************
*                                                                   *
*                            DETECTOR DATA                          *
*                                                                   *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579002    *
* Acquisition date : 13-OCT-2005 10:41:00 Detector SN#    : 7933154 *
* Detector ID      : GAMMA2               Sensitivity     : 3.000   *
* Geometry         : 2L_MB                Energy tolerance: 2.000   *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000  *
* Elapsed real time:    0 04:00:01.40     Half life ratio : 8.000   *
*********************************************************************
*                                                                   *
*                            SAMPLE DATA                            *
*                                                                   *
* Sample date      : 13-SEP-2005 07:30:00 Nuclide Library :         *
* Sample ID        : G145579002           Analyst initials: MJH1    *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER *
* Recovery         :    1.00000           Carrier Weight :    0.00000 *
*********************************************************************
*                                                                   *
*                              QC DATA                              *
*                                                                   *
* CALIB. DATE/TIME : 13-JAN-2005 15:26:31 MS Isotope      :         *
* MSD DPM          :    0.000             MSD Isotope     :         *
* LCS DPM          :    0.000             LCS Isotope     :         *
* LCSD DPM         :    0.000             LCSD Isotope    :         *
*********************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
CE-139	2.548E+00	3.993E+00	1.985E+00	1.997E+00
TH-228	4.660E+00	6.356E+00	3.343E+00	3.178E+00
U-238	2.667E+00	2.013E+02	1.018E+02	1.007E+02

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-1.680E+00	2.319E+01	1.844E+01	1.160E+01	NOT IDENT.
NA-22	3.014E-01	2.396E+00	1.986E+00	1.198E+00	NOT IDENT.
NA-24	4.620E+14	7.995E+14	0.000E+00	3.997E+14	SHORT HLIF
AL-26	1.325E-01	1.815E+00	1.540E+00	9.073E-01	NOT IDENT.
K-40	3.104E+01	2.252E+01	2.225E+01	1.126E+01	NOT IDENT.
SC-46	1.727E-01	2.797E+00	2.330E+00	1.399E+00	NOT IDENT.
V-48	-1.821E+00	8.382E+00	5.685E+00	4.191E+00	NOT IDENT.
CR-51	5.637E+00	3.860E+01	3.173E+01	1.930E+01	NOT IDENT.
MN-54	-4.156E-01	2.316E+00	1.880E+00	1.158E+00	NOT IDENT.
CO-56	6.061E-01	2.514E+00	2.147E+00	1.257E+00	NOT IDENT.
MN-56	1.000E+41	4.152E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-2.149E+00	2.166E+00	1.715E+00	1.083E+00	NOT IDENT.
CO-58	4.352E-01	2.898E+00	2.146E+00	1.449E+00	NOT IDENT.
FE-59	-4.085E+00	7.200E+00	5.434E+00	3.600E+00	NOT IDENT.
CO-60	-3.292E-01	2.300E+00	1.816E+00	1.150E+00	NOT IDENT.
ZN-65	1.033E+00	4.593E+00	3.887E+00	2.297E+00	NOT IDENT.
SE-75	1.329E+00	3.246E+00	2.731E+00	1.623E+00	FAIL ABUN
KR-85	-1.403E+03	7.584E+02	5.286E+02	3.792E+02	NOT IDENT.
SR-85	-8.427E+00	4.555E+00	3.175E+00	2.278E+00	NOT IDENT.
Y-88	1.009E+00	2.677E+00	2.395E+00	1.339E+00	NOT IDENT.
Y-91	-2.310E+00	2.714E+00	2.093E+00	1.357E+00	NOT IDENT.
NB-94	5.749E-02	1.949E+00	1.633E+00	9.745E-01	NOT IDENT.
NB-95	-6.117E-01	3.425E+00	2.788E+00	1.713E+00	NOT IDENT.
NB-95M	2.901E+03	2.377E+03	0.000E+00	1.188E+03	SHORT HLIF

ZR-95	3.505E+00	4.596E+00	4.162E+00	2.298E+00 NOT IDENT.
MO-99	3.098E+03	7.670E+03	0.000E+00	3.835E+03 SHORT HLIF
TC-99M	2.962E+36	7.516E+36	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-3.797E+00	4.294E+00	2.588E+00	2.147E+00 FAIL ABUN
RH-106	-7.282E+00	1.884E+01	1.514E+01	9.419E+00 NOT IDENT.
RU-106	-8.755E+00	1.848E+01	1.466E+01	9.238E+00 NOT IDENT.
AG-108M	-6.906E-01	2.156E+00	1.680E+00	1.078E+00 NOT IDENT.
CD-109	-6.360E-01	6.320E+01	5.306E+01	3.160E+01 NOT IDENT.
AG-110M	-8.379E-01	2.060E+00	1.646E+00	1.030E+00 FAIL ABUN
SN-113	-1.153E+00	3.316E+00	2.595E+00	1.658E+00 NOT IDENT.
CD-115	2.902E+04	7.640E+04	0.000E+00	3.820E+04 SHORT HLIF
SN-115	1.463E+02	2.249E+02	2.026E+02	1.125E+02 NOT IDENT.
SN-117M	-7.138E+00	8.900E+00	7.058E+00	4.450E+00 NOT IDENT.
TE-123M	-8.048E-01	2.295E+00	1.868E+00	1.148E+00 NOT IDENT.
SB-124	5.375E-02	5.781E+00	4.850E+00	2.890E+00 NOT IDENT.
SB-125	-2.899E+00	6.021E+00	4.613E+00	3.011E+00 NOT IDENT.
TE-125M	-1.009E+02	9.239E+02	7.689E+02	4.620E+02 NOT IDENT.
I-126	-9.958E+00	2.404E+01	1.923E+01	1.202E+01 NOT IDENT.
SB-126	-2.359E+00	1.688E+01	1.383E+01	8.439E+00 NOT IDENT.
SN-126	-2.613E+00	6.154E+00	5.064E+00	3.077E+00 FAIL ABUN
SB-127	-5.069E+02	1.106E+03	8.704E+02	5.532E+02 NOT IDENT.
I-131	-3.701E+00	2.899E+01	2.322E+01	1.450E+01 NOT IDENT.
I-132	-1.000E+41	6.130E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	1.269E+03	1.143E+03	0.000E+00	5.713E+02 SHORT HLIF
BA-133	1.010E+00	3.051E+00	2.535E+00	1.526E+00 NOT IDENT.
I-133	-6.391E+10	6.949E+10	0.000E+00	3.474E+10 SHORT HLIF
CS-134	1.732E+00	2.480E+00	2.004E+00	1.240E+00 FAIL ABUN
CS-135	1.418E+00	1.059E+01	8.743E+00	5.297E+00 NOT IDENT.
I-135	-5.627E+33	7.265E+33	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-1.645E+01	1.279E+01	8.132E+00	6.397E+00 FAIL ABUN
BA-137M	4.914E-01	2.006E+00	1.723E+00	1.003E+00 NOT IDENT.
CS-137	5.222E-01	2.121E+00	1.822E+00	1.060E+00 NOT IDENT.
BA-140	-9.073E+00	3.649E+01	2.818E+01	1.825E+01 NOT IDENT.
LA-140	-5.015E+04	5.949E+05	0.000E+00	2.975E+05 SHORT HLIF
CE-141	8.687E-01	6.646E+00	5.560E+00	3.323E+00 NOT IDENT.
CE-143	-1.654E+07	1.915E+07	0.000E+00	9.573E+06 SHORT HLIF
CE-144	-9.863E+00	1.736E+01	1.402E+01	8.682E+00 NOT IDENT.
PM-144	1.159E+00	2.088E+00	1.842E+00	1.044E+00 NOT IDENT.
PR-144	1.000E+41	1.801E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	-3.222E-01	2.910E+00	2.312E+00	1.455E+00 NOT IDENT.
ND-147	-7.047E+01	9.563E+01	6.953E+01	4.782E+01 NOT IDENT.
PM-147	-5.904E+05	4.348E+06	3.605E+06	2.174E+06 NOT IDENT.
PM-149	-3.161E+05	6.996E+05	0.000E+00	3.498E+05 SHORT HLIF
EU-152	2.138E-01	6.656E+00	5.414E+00	3.328E+00 NOT IDENT.
GD-153	1.825E+01	1.325E+01	6.117E+00	6.624E+00 FAIL ABUN
EU-154	8.354E-01	6.640E+00	5.505E+00	3.320E+00 FAIL ABUN
EU-155	7.377E+00	8.869E+00	7.696E+00	4.435E+00 NOT IDENT.
TB-160	-2.950E+00	7.914E+00	6.154E+00	3.957E+00 NOT IDENT.
TM-171	4.079E+03	3.804E+03	2.522E+03	1.902E+03 FAIL ABUN
HF-181	-5.470E-01	3.265E+00	2.566E+00	1.632E+00 FAIL ABUN
TA-182	-2.531E+00	9.043E+00	6.978E+00	4.522E+00 FAIL ABUN
IR-192	-2.150E+00	2.868E+00	2.196E+00	1.434E+00 NOT IDENT.
HG-203	2.272E+00	3.543E+00	3.016E+00	1.771E+00 NOT IDENT.
BI-207	8.311E-01	2.483E+00	2.149E+00	1.241E+00 NOT IDENT.
TL-208	1.814E-01	3.484E+00	2.002E+00	1.742E+00 FAIL ABUN
BI-210	-1.701E+02	6.031E+02	4.423E+02	3.016E+02 NOT IDENT.
PB-210	-1.701E+02	6.031E+02	4.423E+02	3.016E+02 NOT IDENT.
BI-211	4.362E+00	1.489E+01	1.233E+01	7.447E+00 NOT IDENT.
PB-211	2.529E+01	6.271E+01	5.079E+01	3.135E+01 NOT IDENT.
BI-212	7.123E+00	1.620E+01	1.418E+01	8.102E+00 NOT IDENT.
PB-212	4.660E+00	6.356E+00	4.072E+00	3.178E+00 FAIL ABUN
BI-214	6.277E+00	7.337E+00	4.488E+00	3.668E+00 FAIL ABUN
PB-214	4.102E+00	5.048E+00	4.328E+00	2.524E+00 NOT IDENT.
RN-219	-1.068E+01	2.748E+01	2.136E+01	1.374E+01 NOT IDENT.
RA-223	5.492E+00	4.773E+01	3.912E+01	2.386E+01 NOT IDENT.
RA-224	7.493E+01	5.043E+01	4.063E+01	2.522E+01 NOT IDENT.
RA-226	6.277E+00	7.337E+00	4.488E+00	3.668E+00 FAIL ABUN
AC-227	-1.444E+00	2.789E+01	2.276E+01	1.394E+01 NOT IDENT.
TH-227	-1.419E+00	2.742E+01	2.238E+01	1.371E+01 NOT IDENT.
AC-228	1.228E+01	7.859E+00	7.597E+00	3.929E+00 FAIL ABUN
RA-228	1.228E+01	7.859E+00	7.597E+00	3.929E+00 FAIL ABUN
TH-229	-6.137E+00	3.942E+01	3.228E+01	1.971E+01 FAIL ABUN
TH-230	6.276E+00	7.337E+00	4.488E+00	3.668E+00 FAIL ABUN
PA-231	-6.601E+01	1.072E+02	8.323E+01	5.360E+01 NOT IDENT.
TH-231	6.524E+00	1.225E+01	1.038E+01	6.124E+00 NOT IDENT.
TH-232	4.522E+00	6.168E+00	3.951E+00	3.084E+00 FAIL ABUN
PA-233	-6.777E-01	4.607E+00	3.709E+00	2.304E+00 NOT IDENT.
PA-234	6.823E+00	1.749E+01	1.351E+01	8.744E+00 FAIL ABUN

PA-234M	-4.755E+01	2.734E+02	2.196E+02	1.367E+02 NOT IDENT.
TH-234	2.667E+00	2.013E+02	1.174E+02	1.007E+02 FAIL ABUN
U-234	1.333E+01	9.626E+00	8.492E+00	4.813E+00 FAIL ABUN
U-235	-1.854E+00	1.823E+01	1.323E+01	9.114E+00 NOT IDENT.
NP-237	-1.131E+01	1.859E+01	1.503E+01	9.295E+00 NOT IDENT.
NP-239	-7.355E+00	1.645E+01	1.345E+01	8.226E+00 FAIL ABUN
AM-241	1.415E+00	2.371E+01	1.300E+01	1.186E+01 NOT IDENT.
AM-242	-7.577E+01	2.057E+02	1.478E+02	1.028E+02 FAIL ABUN
CM-247	2.312E-01	2.445E+00	1.990E+00	1.222E+00 NOT IDENT.
CF-249	6.308E-01	2.565E+00	2.118E+00	1.282E+00 NOT IDENT.
CF-251	7.716E+00	9.518E+00	8.196E+00	4.759E+00 NOT IDENT.
ANH-511	1.609E+01	3.462E+00	3.283E+00	1.731E+00 NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145579002
ANALYST	: MJH1	DETECTOR	: GAMMA2
SAMPLE DATE	: 13-SEP-2005 07:30:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 10:41:00.31	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 6.763E+01
GROSS GAMMA ERROR (pCi/LITER)	: 1.071E+02
GROSS GAMMA MDA (pCi/LITER)	: 2.737E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.313E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:43:02.51

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579003.CNF;1
Sample date      : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:41:26
Sample ID        : G145579003           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA3               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.39  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 12922955
Matrix Spike DPM :                      LCS DPM          :
*****************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.38*	86	198	1.33	107.60	104	9	5.98E-03	33.1	
2	0	63.53*	17	271	1.02	127.87	125	8	1.17E-03	192.3	
3	0	140.16*	44	198	1.42	280.90	278	7	3.03E-03	60.0	
4	0	158.56	51	212	1.93	317.66	313	10	3.52E-03	55.5	
5	0	185.70*	12	252	1.00	371.85	367	11	8.34E-04	305.4	
6	0	198.44*	46	189	1.91	397.29	394	9	3.21E-03	61.8	
7	0	230.50*	26	172	1.42	461.33	456	10	1.77E-03	108.0	
8	0	238.43*	8	175	1.87	477.16	472	10	5.83E-04	341.6	
9	0	296.96	64	263	2.17	594.05	583	22	4.41E-03	66.4	
10	0	332.43	29	91	1.29	664.90	661	9	2.05E-03	61.4	
11	0	510.79*	56	79	3.14	1021.14	1013	22	3.89E-03	61.4	
12	0	546.05*	38	103	11.07	1091.56	1077	26	2.63E-03	76.9	
13	0	553.04*	7	47	0.66	1105.52	1103	10	4.56E-04	223.4	
14	0	583.10*	10	58	1.92	1165.56	1161	14	6.87E-04	193.4	
15	0	608.63*	14	70	3.03	1216.55	1208	17	9.83E-04	156.9	
16	0	746.20	18	56	2.92	1491.36	1486	17	1.27E-03	96.3	
17	3	839.44	17	8	1.53	1677.62	1676	36	1.17E-03	27.5	1.70E+00
18	3	843.33	32	43	2.80	1685.39	1676	36	2.24E-03	49.3	
19	0	999.56*	22	33	10.33	1997.50	1986	26	1.50E-03	85.2	
20	0	1165.61	6	11	0.78	2329.24	2329	8	4.33E-04	97.6	
21	0	1228.09	14	4	1.22	2454.07	2450	9	9.99E-04	36.9	
22	1	1293.61	23	2	2.42	2585.00	2583	11	1.58E-03	14.6	9.02E+00
23	1	1296.62*	11	3	2.42	2591.00	2583	11	7.35E-04	57.3	
24	0	1324.66	11	3	1.34	2647.03	2644	6	7.89E-04	37.9	
25	0	1350.11	7	8	0.72	2697.89	2696	7	4.75E-04	80.6	
26	0	1458.79*	14	20	0.84	2915.05	2905	16	9.67E-04	94.8	
27	0	1492.15	18	3	0.70	2981.71	2977	11	1.25E-03	29.7	
28	0	1500.08	19	10	2.90	2997.56	2992	13	1.32E-03	41.0	
29	0	1517.01	8	5	0.56	3031.38	3029	5	5.56E-04	54.8	
30	0	1728.51	16	3	0.53	3454.05	3447	14	1.10E-03	35.4	
31	0	1806.78	15	0	1.03	3610.47	3607	12	1.04E-03	25.8	
32	8	1862.27	16	1	3.35	3721.37	3716	37	1.14E-03	26.7	3.81E-01
33	8	1868.50	15	6	3.66	3733.82	3716	37	1.07E-03	47.3	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:43:06

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579003.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:41:26
Sample ID : G145579003 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:01.39 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	+	511.00		2.488E+00	3.058E+00	1.642E+00	1.055E-01	1.515
	+	1808.65	*	2.807E+00	1.458E+00	4.093E+00	2.318E-01	0.686
SN-117M		156.02		-1.691E+01	3.367E+02	4.981E+02	3.014E+01	-0.034
	+	158.56	*	9.994E+00	1.112E+01	1.230E+01	7.448E-01	0.812
TE-123M	+	159.00	*	2.649E+00	2.947E+00	3.166E+00	1.941E-01	0.837
TL-208		75.00		1.959E+01	7.700E+01	1.338E+02	1.514E+01	0.146
		277.35		1.684E+00	2.164E+01	3.810E+01	4.152E+00	0.044
	+	510.84		1.942E+01	2.392E+01	1.281E+01	1.348E+00	1.516
	+	583.14	*	9.707E-01	3.756E+00	3.574E+00	2.560E-01	0.272
		763.30		-6.883E+01	1.107E+02	1.841E+02	2.368E+01	-0.374
		860.37		3.394E+00	1.467E+01	2.691E+01	2.155E+00	0.126
		1093.90		3.797E+02	5.406E+02	1.067E+03	2.415E+02	0.356
TH-228		84.40		-1.009E+00	1.658E+02	2.843E+02	3.518E+01	-0.004
	+	238.60	*	8.500E-01	5.807E+00	6.493E+00	5.020E-01	0.131
		300.10		6.172E+00	5.040E+01	7.797E+01	4.600E+01	0.079
PA-234M		766.40		3.356E+02	8.975E+02	1.595E+03	1.220E+03	0.210
	+	1001.03	*	3.127E+02	5.338E+02	3.762E+02	3.275E+01	0.831
U-238	+	63.29	*	4.099E+01	1.578E+02	1.606E+02	2.800E+01	0.255
ANH-511	+	511.00	*	4.071E+00	5.004E+00	2.687E+00	1.725E-01	1.515

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-2.314E-01	2.220E+01	3.818E+01	2.780E+00	-0.006
NA-22		1274.53	*	1.101E+00	2.376E+00	4.540E+00	2.631E-01	0.242
K-40		1460.81	*	3.128E+01	3.013E+01	5.330E+01	3.192E+00	0.587
SC-46		889.25	*	-9.337E-01	2.512E+00	4.261E+00	3.163E-01	-0.219
		1120.51		2.125E+00	2.340E+00	4.816E+00	3.152E-01	0.441
V-48		944.10		-2.225E+01	9.172E+01	1.578E+02	1.160E+01	-0.141
		983.50	*	-1.001E+00	6.424E+00	1.177E+01	8.493E-01	-0.085
		1312.09		-5.125E-01	7.014E+00	1.291E+01	7.222E-01	-0.040
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-3.728E+00	3.127E+01	5.412E+01	3.803E+00	-0.069

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MN-54		834.83	*	-7.371E-01	2.019E+00	3.444E+00	2.452E-01	-0.214
CO-56		846.75	*	1.627E-01	2.477E+00	4.432E+00	3.186E-01	0.037
		1037.82		-9.190E+00	1.908E+01	3.323E+01	2.508E+00	-0.277
		1238.25		-6.388E-01	3.529E+00	6.409E+00	4.040E-01	-0.100
CO-57		122.06	*	7.059E-01	1.949E+00	3.337E+00	2.101E-01	0.212
		136.47		-5.273E+00	1.580E+01	2.599E+01	1.820E+00	-0.203
CO-58		810.78	*	2.816E-01	2.145E+00	3.935E+00	2.758E-01	0.072
FE-59		192.35		-1.350E+01	7.160E+01	1.257E+02	1.506E+01	-0.107
		1099.25	*	-1.837E+00	5.118E+00	9.086E+00	6.863E-01	-0.202
		1291.60		-3.351E+00	8.538E+00	1.242E+01	9.119E-01	-0.270
CO-60		1173.24		1.080E+00	2.028E+00	3.970E+00	2.462E-01	0.272
		1332.50	*	1.322E+00	1.994E+00	4.009E+00	2.200E-01	0.330
ZN-65		1115.55	*	-1.045E+00	4.304E+00	7.704E+00	5.074E-01	-0.136
SE-75		66.05		3.577E+02	4.407E+02	7.140E+02	6.683E+01	0.501
		96.73		-4.957E+01	6.191E+01	1.008E+02	1.271E+01	-0.492
		121.11		5.291E+00	1.099E+01	1.892E+01	1.806E+00	0.280
		136.00		9.848E-01	2.982E+00	5.079E+00	3.143E-01	0.194
	+	198.60		1.511E+02	1.871E+02	2.047E+02	1.518E+01	0.738
		264.65	*	-3.597E-01	2.857E+00	4.975E+00	3.198E-01	-0.072
		279.53		1.806E+00	6.610E+00	1.179E+01	8.052E-01	0.153
		303.91		1.588E+02	1.416E+02	2.388E+02	2.372E+01	0.665
		400.65		-5.680E+00	1.526E+01	2.564E+01	2.411E+00	-0.222
KR-85		513.99	*	1.065E+03	4.417E+02	8.978E+02	5.765E+01	1.186
SR-85		513.99	*	6.381E+00	2.647E+00	5.380E+00	3.455E-01	1.186
Y-88		898.02		-1.655E-01	2.593E+00	4.553E+00	3.424E-01	-0.036
		1836.01	*	-1.852E+00	2.541E+00	4.243E+00	2.402E-01	-0.437
Y-91		557.57	*	-1.435E+00	2.685E+00	3.937E+00	2.514E-01	-0.365
		1204.90		-2.750E+02	1.031E+03	1.825E+03	1.111E+02	-0.151
NB-94		702.63	*	-2.722E-01	1.848E+00	3.250E+00	2.063E-01	-0.084
		871.10		-1.075E+00	1.877E+00	3.111E+00	2.279E-01	-0.346
NB-95		765.79	*	7.097E-01	3.209E+00	5.868E+00	3.949E-01	0.121
ZR-95		724.18		3.717E-01	5.342E+00	9.662E+00	7.188E-01	0.038
		756.74	*	-2.241E-01	4.122E+00	7.373E+00	5.726E-01	-0.030
RU-103		497.08	*	7.758E-01	3.335E+00	5.804E+00	7.511E-01	0.134
	+	610.33		3.553E+01	1.116E+02	9.513E+01	1.484E+01	0.373
RH-106	+	511.85		2.091E+01	2.570E+01	1.382E+01	8.875E-01	1.513
		621.84	*	-7.011E+00	1.756E+01	3.048E+01	1.903E+00	-0.230
		1050.47		1.913E+01	1.196E+02	2.246E+02	1.556E+01	0.085
RU-106		622.20	*	-5.679E+00	1.737E+01	3.035E+01	3.631E+00	-0.187
AG-108M		433.93	*	-1.720E+00	1.981E+00	3.155E+00	2.146E-01	-0.545
		614.37		6.831E-01	2.322E+00	3.766E+00	2.532E-01	0.181
		722.95		9.568E-02	2.099E+00	3.780E+00	2.613E-01	0.025
CD-109		88.03	*	1.470E+01	5.086E+01	8.826E+01	6.663E+00	0.167
AG-110M		657.75	*	-2.627E+00	2.131E+00	3.362E+00	2.175E-01	-0.781
		677.61		-4.615E+00	1.662E+01	2.909E+01	1.899E+00	-0.159
		706.67		-4.548E+00	1.159E+01	1.992E+01	1.332E+00	-0.228
		763.93		6.902E-01	8.475E+00	1.531E+01	1.075E+00	0.045
		884.67		-8.733E-01	2.901E+00	4.966E+00	3.834E-01	-0.176
		937.48		-2.278E+00	6.415E+00	1.086E+01	8.395E-01	-0.210

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1384.27		-4.870E+00	7.836E+00	1.312E+01	7.767E-01	-0.371
SN-113		391.69	*	-1.097E-01	2.922E+00	5.035E+00	3.320E-01	-0.022
SN-115		484.47		-3.655E+02	1.243E+03	2.085E+03	1.337E+02	-0.175
		933.00	*	-2.779E+01	2.327E+02	4.066E+02	3.001E+01	-0.068
		1290.58		-2.465E+02	5.712E+02	8.244E+02	4.702E+01	-0.299
SB-124		602.73		-2.105E+00	3.056E+00	4.351E+00	2.741E-01	-0.484
		645.85		-2.949E+01	3.014E+01	4.880E+01	3.350E+00	-0.604
		713.78		-7.698E+01	1.020E+02	1.679E+02	1.775E+01	-0.458
		722.79		2.301E-01	2.182E+01	3.918E+01	2.631E+00	0.006
		1368.16		-2.195E+00	1.072E+02	1.984E+02	2.330E+01	-0.011
		1690.98	*	1.473E+00	5.554E+00	1.109E+01	6.880E-01	0.133
SB-125		176.33		7.078E+00	2.284E+01	3.837E+01	3.385E+00	0.184
		427.89	*	2.603E+00	5.334E+00	9.582E+00	6.283E-01	0.272
		463.38		7.156E+00	1.500E+01	2.699E+01	1.964E+00	0.265
		600.56		-3.118E+00	1.071E+01	1.869E+01	1.336E+00	-0.167
	+	606.64		2.385E+01	7.485E+01	5.927E+01	4.290E+00	0.402
		635.90		-9.083E+00	1.373E+01	2.317E+01	1.653E+00	-0.392
TE-125M		109.28	*	-5.165E+02	8.057E+02	1.319E+03	1.141E+02	-0.392
I-126		388.63		9.506E+00	2.574E+01	4.588E+01	2.865E+00	0.207
		666.33	*	-1.689E+01	2.274E+01	3.782E+01	2.317E+00	-0.447
		753.82		-6.558E+01	1.890E+02	2.775E+02	1.846E+01	-0.236
SB-126		666.33		-7.299E+00	9.829E+00	1.635E+01	1.001E+00	-0.447
		695.00		1.055E+00	9.060E+00	1.646E+01	1.037E+00	0.064
		697.00		-2.236E+01	3.238E+01	5.396E+01	3.406E+00	-0.414
		720.50	*	1.384E+00	1.732E+01	3.127E+01	2.018E+00	0.044
SN-126	+	64.28		1.622E+01	6.246E+01	7.020E+01	1.018E+01	0.231
		86.94		-1.804E+01	2.250E+01	3.485E+01	1.434E+01	-0.518
		87.57	*	-2.030E+00	5.016E+00	8.415E+00	6.336E-01	-0.241
SB-127		252.40		-9.168E+02	4.034E+03	6.944E+03	3.010E+03	-0.132
		411.60		8.183E+02	9.367E+03	1.637E+04	3.102E+03	0.050
		444.90		1.883E+02	8.725E+03	1.501E+04	2.466E+03	0.013
		473.00		7.120E+02	1.431E+03	2.556E+03	4.267E+02	0.279
		543.30		-8.124E+03	1.333E+04	2.274E+04	4.083E+03	-0.357
		603.50		-5.267E+03	1.070E+04	1.560E+04	2.554E+03	-0.338
		685.70	*	4.263E+02	1.020E+03	1.907E+03	2.959E+02	0.224
		698.50		1.147E+03	1.169E+04	2.108E+04	4.013E+03	0.054
		783.70		1.893E+03	2.252E+03	4.463E+03	7.372E+02	0.424
I-131		284.30		-3.792E+01	3.084E+02	5.364E+02	3.861E+01	-0.071
		364.48	*	-8.233E-01	2.560E+01	4.423E+01	3.166E+00	-0.019
		636.97		-5.761E+01	2.694E+02	4.787E+02	3.373E+01	-0.120
BA-133		79.62		-3.173E+01	8.782E+01	1.480E+02	2.146E+01	-0.214
		81.00		-3.913E-01	6.495E+00	1.112E+01	1.689E+00	-0.035
		276.40		-7.327E+00	2.139E+01	3.663E+01	4.851E+00	-0.200
		302.85		7.437E+00	9.192E+00	1.507E+01	1.806E+00	0.493
		356.02	*	-1.457E+00	2.590E+00	4.301E+00	5.098E-01	-0.339
		383.85		7.621E-01	1.717E+01	2.990E+01	3.327E+00	0.025
CS-134		563.23		-5.323E-02	1.832E+01	3.327E+01	2.159E+00	-0.002
		569.32		-2.753E+00	9.867E+00	1.747E+01	1.140E+00	-0.158
		604.70		1.322E-01	2.086E+00	3.280E+00	2.073E-01	0.040

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		795.84	*	1.170E+00	2.291E+00	4.275E+00	2.975E-01	0.274
		801.93		-1.268E+00	2.057E+01	3.657E+01	2.557E+00	-0.035
		1365.15		1.017E+01	6.070E+01	1.164E+02	7.126E+00	0.087
CS-135		268.24	*	-9.835E-01	9.120E+00	1.588E+01	1.287E+00	-0.062
CS-136		66.88		2.828E+01	1.407E+02	2.206E+02	3.249E+01	0.128
		86.36		-7.800E+01	1.450E+02	2.414E+02	2.928E+01	-0.323
		153.25		1.885E+01	9.012E+01	1.523E+02	1.135E+01	0.124
		163.92		1.492E+02	1.512E+02	2.644E+02	1.981E+01	0.564
		176.60		2.371E+01	5.555E+01	9.383E+01	6.384E+00	0.253
		273.65		2.299E+01	5.632E+01	1.009E+02	7.230E+00	0.228
		340.55		1.459E+00	1.507E+01	2.638E+01	1.784E+00	0.055
		818.51		5.446E+00	8.764E+00	1.666E+01	1.177E+00	0.327
		1048.07	*	6.934E+00	1.182E+01	2.321E+01	1.721E+00	0.299
		1235.36		1.564E+01	4.279E+01	8.427E+01	8.510E+00	0.186
BA-137M		661.65	*	1.972E+00	2.140E+00	4.084E+00	2.490E-01	0.483
CS-137		661.66	*	2.091E+00	2.263E+00	4.319E+00	2.644E-01	0.484
CE-139		165.85	*	-3.659E-01	2.180E+00	3.583E+00	2.177E-01	-0.102
BA-140		162.67		-1.022E+01	1.257E+02	1.846E+02	1.248E+01	-0.055
		304.87		5.643E+01	1.650E+02	2.932E+02	8.042E+01	0.192
		423.73		-4.737E+01	2.445E+02	4.149E+02	1.323E+02	-0.114
		537.31	*	1.875E+01	3.471E+01	5.777E+01	1.885E+01	0.325
CE-141		145.44	*	9.164E-02	5.958E+00	9.947E+00	6.247E-01	0.009
CE-144		133.51	*	2.506E+00	1.476E+01	2.496E+01	3.579E+00	0.100
PM-144		476.78		-1.989E+00	4.131E+00	6.783E+00	5.065E-01	-0.293
		618.01		2.579E-01	1.782E+00	3.249E+00	2.141E-01	0.079
		696.49	*	-1.193E+00	1.898E+00	3.184E+00	2.014E-01	-0.375
PM-146		453.88	*	5.146E-01	2.603E+00	4.551E+00	4.106E-01	0.113
		633.25		8.718E+00	7.082E+01	1.296E+02	4.782E+01	0.067
		735.93		-1.048E+00	7.901E+00	1.396E+01	3.916E+00	-0.075
	+	747.24		4.955E+00	9.560E+00	9.349E+00	1.206E+00	0.530
ND-147		91.11		5.391E+01	5.293E+01	9.294E+01	7.539E+00	0.580
		531.02	*	-1.933E+01	7.839E+01	1.391E+02	1.919E+01	-0.139
PM-147		121.30	*	1.828E+06	3.937E+06	6.774E+06	4.258E+05	0.270
EU-152		121.78		1.103E+00	5.486E+00	9.319E+00	7.443E-01	0.118
		344.31	*	-2.463E+00	5.669E+00	9.547E+00	6.749E-01	-0.258
		963.37		1.404E+00	1.436E+01	2.560E+01	1.866E+00	0.055
GD-153		69.67		-8.826E+01	1.234E+02	2.057E+02	1.481E+01	-0.429
		83.37		6.423E+02	9.876E+02	1.745E+03	1.284E+02	0.368
		97.43	*	1.144E+00	5.917E+00	1.017E+01	6.972E-01	0.112
		103.18		-1.681E+00	7.873E+00	1.323E+01	8.744E-01	-0.127
EU-154		123.07		8.944E-01	3.800E+00	6.467E+00	6.273E-01	0.138
		247.93		1.616E+00	2.134E+01	3.770E+01	3.722E+00	0.043
		591.76		-4.823E+01	3.528E+01	5.501E+01	5.553E+00	-0.877
		723.30		2.363E+00	8.700E+00	1.604E+01	1.225E+00	0.147
		756.86		-5.856E+00	3.896E+01	6.884E+01	7.338E+00	-0.085
		873.20		-8.797E+00	1.581E+01	2.625E+01	2.987E+00	-0.335
		996.30		1.597E+01	2.079E+01	3.703E+01	6.335E+00	0.431
		1004.76		8.368E+00	1.086E+01	1.981E+01	2.097E+00	0.422
		1274.51	*	3.086E+00	6.596E+00	1.260E+01	1.176E+00	0.245

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
EU-155		86.54		-5.339E+00	6.248E+00	1.023E+01	7.759E-01	-0.522
		105.31	*	4.176E+00	7.924E+00	1.376E+01	9.189E-01	0.303
TB-160		86.79		-1.653E+01	1.905E+01	3.117E+01	2.336E+00	-0.530
	+	298.57		1.564E+01	2.079E+01	1.289E+01	8.282E-01	1.213
		879.36	*	8.437E+00	8.468E+00	1.674E+01	1.234E+00	0.504
		962.29		6.870E+00	3.046E+01	5.508E+01	4.016E+00	0.125
		966.15		2.118E-01	1.074E+01	1.907E+01	1.388E+00	0.011
		1177.93		-1.004E+01	1.930E+01	3.316E+01	2.052E+00	-0.303
TM-171	+	51.87		1.928E+03	1.287E+03	1.431E+03	1.129E+02	1.347
		59.40		3.626E+02	2.017E+03	3.550E+03	2.700E+02	0.102
		66.72	*	6.163E+02	2.382E+03	3.749E+03	2.722E+02	0.164
HF-181		56.28		-3.276E+01	1.009E+02	1.551E+02	1.202E+01	-0.211
		57.53		-6.209E+00	5.552E+01	8.649E+01	6.654E+00	-0.072
	+	65.20		4.037E+01	1.553E+02	1.551E+02	1.134E+01	0.260
		133.02		-4.734E-01	5.869E+00	9.800E+00	6.006E-01	-0.048
		136.25		4.335E+00	4.709E+01	7.921E+01	4.833E+00	0.055
		345.85		2.005E+00	1.382E+01	2.432E+01	1.554E+00	0.082
		482.03	*	1.397E+00	2.866E+00	5.191E+00	3.329E-01	0.269
TA-182		67.75		-6.152E-01	8.951E+00	1.542E+01	1.115E+00	-0.040
		100.10		3.789E+00	1.401E+01	2.414E+01	1.624E+00	0.157
		222.10		3.517E+00	2.229E+01	3.963E+01	2.473E+00	0.089
		1121.28		3.193E+00	6.264E+00	1.237E+01	8.089E-01	0.258
		1189.05		-8.428E+00	1.460E+01	2.492E+01	1.531E+00	-0.338
		1221.42	*	-1.768E+00	9.164E+00	1.643E+01	9.888E-01	-0.108
		1230.97		1.616E+01	1.970E+01	3.735E+01	2.233E+00	0.433
IR-192	+	295.96		1.451E+01	1.929E+01	1.188E+01	7.730E-01	1.221
		308.46		-7.285E+00	6.274E+00	1.004E+01	6.514E-01	-0.726
		316.51	*	8.983E-01	2.359E+00	4.215E+00	2.720E-01	0.213
		468.07		-1.032E+00	4.264E+00	7.186E+00	5.184E-01	-0.144
		604.41		-5.679E+00	3.267E+01	4.983E+01	5.785E+00	-0.114
		612.46		-1.074E+01	5.137E+01	7.785E+01	6.182E+00	-0.138
HG-203		70.83		-1.071E+01	8.770E+01	1.507E+02	1.921E+01	-0.071
		72.87		-1.265E+01	5.154E+01	8.777E+01	1.080E+01	-0.144
		82.60		2.290E+01	8.907E+01	1.547E+02	2.007E+01	0.148
		279.20	*	4.853E-01	2.857E+00	5.061E+00	3.405E-01	0.096
BI-207		569.67		-7.619E-01	1.590E+00	2.755E+00	1.754E-01	-0.277
		897.83		-1.450E+02	1.351E+03	2.362E+03	1.764E+02	-0.061
		1063.62	*	-1.633E+00	2.227E+00	3.756E+00	2.577E-01	-0.435
		1442.20		2.164E+02	1.206E+03	2.328E+03	1.305E+02	0.093
		1770.23		-1.863E+01	2.718E+01	4.603E+01	2.615E+00	-0.405
BI-210		46.50	*	2.490E+02	3.242E+02	5.406E+02	4.429E+01	0.461
PB-210		46.50	*	2.490E+02	3.242E+02	5.406E+02	4.429E+01	0.461
BI-211		351.07	*	1.360E+01	1.193E+01	2.222E+01	1.546E+00	0.612
PB-211		404.84	*	1.445E+01	5.288E+01	9.221E+01	5.753E+01	0.157
		427.08		-3.915E+01	1.246E+02	2.053E+02	1.270E+02	-0.191
		831.96		2.298E+01	6.371E+01	1.153E+02	7.202E+01	0.199
BI-212		727.18	*	-8.755E+00	1.502E+01	2.525E+01	2.082E+00	-0.347
PB-212		74.80		1.256E+00	2.488E+01	4.287E+01	5.052E+00	0.029
		87.30		-2.058E+01	2.436E+01	3.974E+01	4.971E+00	-0.518

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		115.19		-1.260E+02	2.614E+02	4.308E+02	2.729E+01	-0.293
	+	238.63	*	8.500E-01	5.807E+00	7.144E+00	5.523E-01	0.119
		300.09		6.172E+00	5.027E+01	7.797E+01	6.782E+00	0.079
BI-214	+	609.31	*	2.534E+00	7.951E+00	7.858E+00	6.398E-01	0.322
		768.36		2.179E+01	3.595E+01	6.792E+01	6.106E+00	0.321
		934.06		-4.316E+01	6.224E+01	1.006E+02	9.717E+00	-0.429
		1120.29		1.137E+01	1.217E+01	2.505E+01	2.333E+00	0.454
		1238.11		-6.900E+00	3.035E+01	5.477E+01	4.521E+00	-0.126
		1377.67		2.415E+01	4.821E+01	9.519E+01	8.006E+00	0.254
PB-214		74.81		2.157E+00	4.161E+01	7.169E+01	7.396E+00	0.030
		77.11		-2.363E+00	2.315E+01	3.956E+01	4.149E+00	-0.060
		87.30		-3.624E+01	4.284E+01	6.997E+01	7.765E+00	-0.518
		241.98		1.084E+01	2.240E+01	3.585E+01	3.025E+00	0.302
	+	295.21		1.656E+01	2.204E+01	1.353E+01	1.213E+00	1.223
		351.92	*	3.035E+00	4.209E+00	7.635E+00	6.639E-01	0.397
RN-219		271.23		3.569E+00	1.400E+01	2.486E+01	2.121E+00	0.144
		401.81	*	-3.096E+00	2.298E+01	3.939E+01	5.440E+00	-0.079
RA-223		122.32		3.421E+01	1.291E+02	2.200E+02	1.567E+01	0.155
		144.24		2.012E+01	4.731E+01	8.055E+01	5.996E+00	0.250
		154.21		-1.063E+01	2.495E+01	4.063E+01	2.934E+00	-0.262
		269.46		-3.963E+00	1.108E+01	1.898E+01	1.257E+00	-0.209
		323.87	*	5.822E+00	3.873E+01	6.808E+01	1.140E+01	0.086
		338.28		1.754E+01	5.311E+01	9.466E+01	1.030E+01	0.185
		445.03		5.955E+00	1.409E+02	2.429E+02	2.575E+01	0.025
RA-224		240.98	*	4.331E+01	4.445E+01	7.334E+01	4.625E+00	0.590
RA-226	+	295.21		1.656E+01	2.204E+01	1.461E+01	1.309E+00	1.133
		351.92		3.035E+00	4.205E+00	7.635E+00	4.888E-01	0.397
	+	609.31	*	2.534E+00	7.951E+00	7.858E+00	6.398E-01	0.322
AC-227		79.80		-4.081E+01	1.131E+02	1.904E+02	4.050E+01	-0.214
		236.00		-3.295E+00	1.362E+01	2.076E+01	2.249E+00	-0.159
		256.20	*	-1.353E+00	2.382E+01	4.162E+01	5.979E+00	-0.033
		286.10		9.011E+01	9.011E+01	1.665E+02	1.997E+01	0.541
		299.80		1.132E+01	9.211E+01	1.428E+02	2.393E+01	0.079
		304.40		4.700E+01	1.115E+02	1.993E+02	3.536E+01	0.236
		329.70		-1.334E+01	6.477E+01	9.662E+01	1.246E+01	-0.138
	+	334.20		1.408E+02	1.750E+02	2.375E+02	4.470E+01	0.593
TH-227		79.80		-4.009E+01	1.111E+02	1.870E+02	3.979E+01	-0.214
		94.00		1.549E+02	1.590E+02	2.733E+02	5.797E+01	0.567
		236.00		-3.241E+00	1.340E+01	2.042E+01	1.915E+00	-0.159
		256.20	*	-1.330E+00	2.342E+01	4.092E+01	6.996E+00	-0.033
		286.10		8.863E+01	1.250E+02	1.637E+02	1.641E+02	0.541
		299.80		1.110E+01	9.037E+01	1.401E+02	2.315E+01	0.079
		304.40		4.619E+01	1.096E+02	1.958E+02	3.430E+01	0.236
		329.70		-1.312E+01	6.371E+01	9.504E+01	1.213E+01	-0.138
	+	334.20		1.380E+02	1.715E+02	2.327E+02	4.313E+01	0.593
AC-228		209.25		-1.752E+01	3.417E+01	5.548E+01	3.547E+01	-0.316
		338.32		4.550E+00	1.300E+01	2.297E+01	9.385E+00	0.198
		463.01		2.351E+01	3.497E+01	6.326E+01	1.494E+01	0.372
		794.95		1.377E+01	4.153E+01	7.610E+01	1.735E+01	0.181

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		911.21	*	8.014E+00	7.644E+00	1.482E+01	1.537E+00	0.541
		964.77		-1.002E+01	3.913E+01	6.688E+01	1.618E+01	-0.150
		969.11		-1.523E+00	1.148E+01	2.004E+01	4.584E+00	-0.076
RA-228		209.25		-1.752E+01	3.417E+01	5.548E+01	3.547E+01	-0.316
		338.32		4.550E+00	1.300E+01	2.297E+01	9.385E+00	0.198
		463.01		2.351E+01	3.497E+01	6.326E+01	1.494E+01	0.372
		794.95		1.377E+01	4.153E+01	7.610E+01	1.735E+01	0.181
		911.21	*	8.014E+00	7.644E+00	1.482E+01	1.537E+00	0.541
		964.77		-1.002E+01	3.913E+01	6.688E+01	1.618E+01	-0.150
		969.11		-1.523E+00	1.148E+01	2.004E+01	4.584E+00	-0.076
TH-229		85.43		-4.017E+00	1.142E+01	1.924E+01	1.431E+00	-0.209
		88.47		-7.297E-02	7.066E+00	1.207E+01	9.059E-01	-0.006
		100.00		4.414E+00	1.334E+01	2.305E+01	1.552E+00	0.192
		193.63	*	7.821E+00	3.029E+01	5.434E+01	3.334E+00	0.144
		210.97		-1.356E+00	4.261E+01	7.521E+01	4.661E+00	-0.018
TH-230	+	295.21		1.656E+01	2.204E+01	1.461E+01	1.309E+00	1.133
		351.92		3.034E+00	4.205E+00	7.635E+00	4.888E-01	0.397
	+	609.31	*	2.534E+00	7.951E+00	7.858E+00	6.398E-01	0.322
PA-231		283.67	*	-2.654E+01	8.790E+01	1.510E+02	2.121E+01	-0.176
		301.29		-5.271E+00	3.756E+01	5.678E+01	6.139E+00	-0.093
		330.00		3.593E+01	1.363E+02	2.120E+02	6.662E+01	0.169
TH-231		84.21		5.977E+00	3.038E+01	5.260E+01	9.091E+00	0.114
		236.00		-3.286E+00	1.359E+01	2.071E+01	2.243E+00	-0.159
		256.20		-1.349E+00	2.375E+01	4.152E+01	5.963E+00	-0.033
		269.46	*	-3.963E+00	1.108E+01	1.898E+01	1.473E+00	-0.209
		271.23		3.569E+00	1.400E+01	2.486E+01	2.458E+00	0.144
		283.67		-2.654E+01	8.790E+01	1.510E+02	2.121E+01	-0.176
		301.29		-5.271E+00	3.755E+01	5.678E+01	5.043E+00	-0.093
		329.85		1.160E+01	4.249E+01	6.630E+01	9.202E+00	0.175
		351.07		1.360E+01	1.193E+01	2.222E+01	1.546E+00	0.612
		401.81		-3.096E+00	2.298E+01	3.939E+01	4.394E+00	-0.079
TH-232	+	238.59	*	8.250E-01	5.637E+00	6.937E+00	5.363E-01	0.119
		911.20		7.951E+00	7.571E+00	1.468E+01	1.522E+00	0.542
		964.40		-9.062E+00	3.820E+01	6.551E+01	1.585E+01	-0.138
		969.11		-1.508E+00	1.136E+01	1.985E+01	4.539E+00	-0.076
PA-233		75.28		8.066E+01	2.037E+02	3.554E+02	5.185E+01	0.227
		86.59		-8.648E+01	1.033E+02	1.652E+02	4.373E+01	-0.524
		300.12		3.095E+00	2.522E+01	3.910E+01	5.364E+00	0.079
		311.98	*	8.927E-01	3.813E+00	6.752E+00	4.559E-01	0.132
		340.50		3.483E+00	3.350E+01	5.864E+01	1.356E+01	0.059
		398.62		-2.028E+01	1.122E+02	1.918E+02	4.980E+01	-0.106
		415.76		3.835E+01	8.900E+01	1.596E+02	3.309E+01	0.240
PA-234	+	63.00		4.778E+01	1.839E+02	1.877E+02	2.789E+01	0.255
		94.67		-2.656E+01	1.385E+01	2.102E+01	2.385E+00	-1.264
		98.44		2.993E+00	6.924E+00	1.167E+01	6.482E+00	0.256
		99.70		1.913E+01	3.458E+01	6.034E+01	4.072E+00	0.317
		111.00		-9.688E-01	1.317E+01	2.221E+01	2.359E+00	-0.044
		131.20		-4.142E+00	7.365E+00	1.199E+01	7.374E-01	-0.345
		152.70		-1.799E+00	2.102E+01	3.491E+01	5.551E+00	-0.052

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	186.00		2.328E+01	1.424E+02	1.236E+02	3.785E+01	0.188
		226.40		-1.140E+01	2.647E+01	3.976E+01	4.690E+00	-0.287
		227.20		-5.454E+00	2.787E+01	4.272E+01	2.673E+00	-0.128
		248.90		-1.396E+00	5.198E+01	9.113E+01	2.036E+01	-0.015
		293.70		8.298E+00	3.763E+01	6.650E+01	1.085E+01	0.125
		369.80		1.260E+01	5.191E+01	9.136E+01	1.916E+01	0.138
		568.70		-2.205E+01	5.141E+01	8.953E+01	5.703E+00	-0.246
		569.50		-7.728E+00	1.400E+01	2.409E+01	1.534E+00	-0.321
		574.00		1.313E+01	7.888E+01	1.447E+02	9.203E+00	0.091
		699.00		1.142E+01	3.736E+01	6.873E+01	1.248E+01	0.166
		706.10		1.281E+01	5.520E+01	1.005E+02	4.443E+01	0.127
		733.00		-4.947E+00	2.019E+01	3.516E+01	7.549E+00	-0.141
		742.81		6.244E+01	9.273E+01	1.421E+02	9.521E+01	0.439
		796.30		3.640E+01	4.864E+01	9.133E+01	2.425E+01	0.399
		805.80		-2.467E+01	5.264E+01	8.817E+01	2.665E+01	-0.280
		819.60		7.872E+01	7.173E+01	1.315E+02	4.959E+01	0.598
		826.30		-2.393E+01	4.339E+01	7.025E+01	3.124E+01	-0.341
		831.60		9.183E+00	3.192E+01	5.865E+01	1.727E+01	0.157
		876.40		-1.495E+01	4.850E+01	7.870E+01	8.083E+01	-0.190
		880.51		1.906E+00	1.583E+01	2.844E+01	2.098E+00	0.067
		883.24		-7.120E+00	1.722E+01	2.787E+01	1.870E+01	-0.255
		899.00		1.192E+01	4.540E+01	8.254E+01	3.591E+01	0.144
		925.00		3.590E+01	5.775E+01	1.113E+02	8.245E+00	0.322
		926.50		-3.470E+00	9.299E+00	1.570E+01	3.908E+00	-0.221
		946.00	*	1.176E+00	1.600E+01	2.863E+01	5.214E+00	0.041
		949.00		-6.261E-01	2.371E+01	4.190E+01	3.073E+00	-0.015
		980.50		5.247E+00	3.459E+01	6.572E+01	4.749E+00	0.080
		1394.10		3.785E+01	6.501E+01	1.223E+02	7.923E+01	0.309
TH-234	+	63.29	*	4.099E+01	1.578E+02	2.004E+02	3.493E+01	0.205
		92.38		1.843E+02	5.296E+01	8.214E+01	1.433E+01	2.244
		112.81		6.643E+02	6.510E+02	1.138E+03	1.943E+02	0.584
U-234		67.67		-4.865E+01	8.499E+02	1.465E+03	1.960E+02	-0.033
		241.98		1.085E+01	2.243E+01	3.590E+01	3.030E+00	0.302
	+	295.21	*	1.656E+01	2.204E+01	1.461E+01	1.309E+00	1.133
		351.92		3.034E+00	4.209E+00	7.635E+00	6.639E-01	0.397
U-235		89.95		-2.998E+02	1.242E+02	1.209E+02	3.690E+01	-2.480
		93.35		2.015E+02	7.386E+01	9.463E+01	2.612E+01	2.129
		105.00		3.265E+01	7.748E+01	1.331E+02	3.901E+01	0.245
		143.76	*	1.293E-01	1.490E+01	2.485E+01	4.075E+00	0.005
		163.33		7.001E+00	3.104E+01	5.218E+01	9.429E+00	0.134
	+	185.71		8.621E-01	5.266E+00	4.575E+00	2.796E-01	0.188
		205.31		1.230E+01	2.864E+01	5.152E+01	8.836E+00	0.239
NP-237		86.48	*	-1.291E+01	1.539E+01	2.483E+01	5.450E+00	-0.520
		95.87		-2.862E+02	1.046E+02	1.117E+02	2.693E+01	-2.562
NP-239		99.55		6.750E+00	1.133E+01	1.980E+01	1.338E+00	0.341
		117.00	*	-1.200E+00	1.340E+01	2.254E+01	1.423E+00	-0.053
		209.75		-1.432E+01	4.327E+01	7.519E+01	4.656E+00	-0.190
		228.18		-4.047E-01	1.484E+01	2.303E+01	1.442E+00	-0.018
		277.60		3.119E-01	1.015E+01	1.781E+01	1.140E+00	0.018

Sample ID : G145579003 Acquisition date : 13-OCT-2005 10:41:26

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	334.31		7.779E+01	9.572E+01	1.332E+02	8.535E+00	0.584
AM-241		59.54	*	1.063E+00	1.163E+01	2.037E+01	1.691E+00	0.052
AM-242		99.55		1.576E+02	2.645E+02	4.623E+02	3.122E+01	0.341
		103.70	*	-9.053E+01	1.618E+02	2.669E+02	1.758E+01	-0.339
CM-247		278.00		1.445E+01	4.177E+01	7.474E+01	4.784E+00	0.193
		287.40		1.590E+01	7.103E+01	1.261E+02	8.090E+00	0.126
		402.60	*	7.761E-01	2.012E+00	3.601E+00	2.256E-01	0.216
CF-249		252.85		-3.622E+00	5.439E+01	9.502E+01	6.026E+00	-0.038
	+	333.44		1.024E+01	1.260E+01	1.603E+01	1.028E+00	0.639
		387.95	*	3.168E-01	2.290E+00	4.011E+00	2.506E-01	0.079
CF-251		176.00	*	1.422E+00	8.793E+00	1.465E+01	8.919E-01	0.097
		227.00		-4.307E+00	2.479E+01	3.806E+01	2.382E+00	-0.113
		285.00		1.387E+01	9.972E+01	1.764E+02	1.131E+01	0.079

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579003    *
* Acquisition date : 13-OCT-2005 10:41:26 Detector SN#    : 12922955     *
* Detector ID      : GAMMA3               Sensitivity     : 3.000        *
* Geometry         : 2L_MB                Energy tolerance: 2.000        *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000       *
* Elapsed real time:    0 04:00:01.39     Half life ratio :  8.000       *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 12:55:00 Nuclide Library :              *
* Sample ID        : G145579003           Analyst initials: MJH1         *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000    *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :             *
* MSD DPM          :    0.000            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
AL-26	2.807E+00	1.458E+00	4.093E+00	0.000E+00
SN-117M	9.994E+00	1.112E+01	1.230E+01	0.000E+00
TE-123M	2.649E+00	2.947E+00	3.166E+00	0.000E+00
TL-208	9.707E-01	3.756E+00	3.574E+00	0.000E+00
TH-228	8.500E-01	5.807E+00	6.493E+00	0.000E+00
PA-234M	3.127E+02	5.338E+02	3.762E+02	0.000E+00
U-238	4.099E+01	1.578E+02	1.606E+02	0.000E+00
ANH-511	4.071E+00	5.004E+00	2.687E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)		
BE-7	-2.314E-01	2.220E+01	3.818E+01	0.000E+00	NOT IDENT.
NA-22	1.101E+00	2.376E+00	4.540E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	5.253E+14	0.000E+00	0.000E+00	SHORT HLIF
K-40	3.128E+01	3.013E+01	5.330E+01	0.000E+00	NOT IDENT.
SC-46	-9.337E-01	2.512E+00	4.261E+00	0.000E+00	NOT IDENT.
V-48	-1.001E+00	6.424E+00	1.177E+01	0.000E+00	NOT IDENT.
CR-51	-3.728E+00	3.127E+01	5.412E+01	0.000E+00	NOT IDENT.
MN-54	-7.371E-01	2.019E+00	3.444E+00	0.000E+00	NOT IDENT.
CO-56	1.627E-01	2.477E+00	4.432E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	1.517E+42	0.000E+00	0.000E+00	SHORT HLIF
CO-57	7.059E-01	1.949E+00	3.337E+00	0.000E+00	NOT IDENT.
CO-58	2.816E-01	2.145E+00	3.935E+00	0.000E+00	NOT IDENT.
FE-59	-1.837E+00	5.118E+00	9.086E+00	0.000E+00	NOT IDENT.
CO-60	1.322E+00	1.994E+00	4.009E+00	0.000E+00	NOT IDENT.
ZN-65	-1.045E+00	4.304E+00	7.704E+00	0.000E+00	NOT IDENT.
SE-75	-3.597E-01	2.857E+00	4.975E+00	0.000E+00	FAIL ABUN
KR-85	0.000E+00	4.417E+02	8.978E+02	0.000E+00	NOT IDENT.
SR-85	0.000E+00	2.647E+00	5.380E+00	0.000E+00	NOT IDENT.
Y-88	-1.852E+00	2.541E+00	4.243E+00	0.000E+00	NOT IDENT.

Y-91	-1.435E+00	2.685E+00	3.937E+00	0.000E+00	NOT IDENT.
NB-94	-2.722E-01	1.848E+00	3.250E+00	0.000E+00	NOT IDENT.
NB-95	7.097E-01	3.209E+00	5.868E+00	0.000E+00	NOT IDENT.
NB-95M	0.000E+00	1.956E+03	0.000E+00	0.000E+00	SHORT HLIF
ZR-95	-2.241E-01	4.122E+00	7.373E+00	0.000E+00	NOT IDENT.
MO-99	0.000E+00	4.402E+03	0.000E+00	0.000E+00	SHORT HLIF
TC-99M	0.000E+00	2.627E+36	0.000E+00	0.000E+00	SHORT HLIF
RU-103	7.758E-01	3.335E+00	5.804E+00	0.000E+00	FAIL ABUN
RH-106	-7.011E+00	1.756E+01	3.048E+01	0.000E+00	FAIL ABUN
RU-106	-5.679E+00	1.737E+01	3.035E+01	0.000E+00	NOT IDENT.
AG-108M	-1.720E+00	1.981E+00	3.155E+00	0.000E+00	NOT IDENT.
CD-109	1.470E+01	5.086E+01	8.826E+01	0.000E+00	NOT IDENT.
AG-110M	-2.627E+00	2.131E+00	3.362E+00	0.000E+00	NOT IDENT.
SN-113	-1.097E-01	2.922E+00	5.035E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	6.014E+04	0.000E+00	0.000E+00	SHORT HLIF
SN-115	-2.779E+01	2.327E+02	4.066E+02	0.000E+00	NOT IDENT.
SB-124	1.473E+00	5.554E+00	1.109E+01	0.000E+00	NOT IDENT.
SB-125	2.603E+00	5.334E+00	9.582E+00	0.000E+00	FAIL ABUN
TE-125M	-5.165E+02	8.057E+02	1.319E+03	0.000E+00	NOT IDENT.
I-126	-1.689E+01	2.274E+01	3.782E+01	0.000E+00	NOT IDENT.
SB-126	1.384E+00	1.732E+01	3.127E+01	0.000E+00	NOT IDENT.
SN-126	-2.030E+00	5.016E+00	8.415E+00	0.000E+00	FAIL ABUN
SB-127	4.263E+02	1.020E+03	1.907E+03	0.000E+00	NOT IDENT.
I-131	-8.233E-01	2.560E+01	4.423E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	6.153E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	0.000E+00	1.062E+03	0.000E+00	0.000E+00	SHORT HLIF
BA-133	-1.457E+00	2.590E+00	4.301E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	4.606E+10	0.000E+00	0.000E+00	SHORT HLIF
CS-134	1.170E+00	2.291E+00	4.275E+00	0.000E+00	NOT IDENT.
CS-135	-9.835E-01	9.120E+00	1.588E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	4.229E+33	0.000E+00	0.000E+00	SHORT HLIF
CS-136	6.934E+00	1.182E+01	2.321E+01	0.000E+00	NOT IDENT.
BA-137M	1.972E+00	2.140E+00	4.084E+00	0.000E+00	NOT IDENT.
CS-137	2.091E+00	2.263E+00	4.319E+00	0.000E+00	NOT IDENT.
CE-139	-3.659E-01	2.180E+00	3.583E+00	0.000E+00	NOT IDENT.
BA-140	1.875E+01	3.471E+01	5.777E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	5.609E+05	0.000E+00	0.000E+00	SHORT HLIF
CE-141	9.164E-02	5.958E+00	9.947E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	1.504E+07	0.000E+00	0.000E+00	SHORT HLIF
CE-144	2.506E+00	1.476E+01	2.496E+01	0.000E+00	NOT IDENT.
PM-144	-1.193E+00	1.898E+00	3.184E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	1.591E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	5.146E-01	2.603E+00	4.551E+00	0.000E+00	FAIL ABUN
ND-147	-1.933E+01	7.839E+01	1.391E+02	0.000E+00	NOT IDENT.
PM-147	1.828E+06	3.937E+06	6.774E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	5.518E+05	0.000E+00	0.000E+00	SHORT HLIF
EU-152	-2.463E+00	5.669E+00	9.547E+00	0.000E+00	NOT IDENT.
GD-153	1.144E+00	5.917E+00	1.017E+01	0.000E+00	NOT IDENT.
EU-154	3.086E+00	6.596E+00	1.260E+01	0.000E+00	NOT IDENT.
EU-155	4.176E+00	7.924E+00	1.376E+01	0.000E+00	NOT IDENT.
TB-160	8.437E+00	8.468E+00	1.674E+01	0.000E+00	FAIL ABUN
TM-171	6.163E+02	2.382E+03	3.749E+03	0.000E+00	FAIL ABUN
HF-181	1.397E+00	2.866E+00	5.191E+00	0.000E+00	FAIL ABUN
TA-182	-1.768E+00	9.164E+00	1.643E+01	0.000E+00	NOT IDENT.
IR-192	8.983E-01	2.359E+00	4.215E+00	0.000E+00	FAIL ABUN
HG-203	4.853E-01	2.857E+00	5.061E+00	0.000E+00	NOT IDENT.
BI-207	-1.633E+00	2.227E+00	3.756E+00	0.000E+00	NOT IDENT.
BI-210	2.490E+02	3.242E+02	5.406E+02	0.000E+00	NOT IDENT.
PB-210	2.490E+02	3.242E+02	5.406E+02	0.000E+00	NOT IDENT.
BI-211	1.360E+01	1.193E+01	2.222E+01	0.000E+00	NOT IDENT.
PB-211	1.445E+01	5.288E+01	9.221E+01	0.000E+00	NOT IDENT.
BI-212	-8.755E+00	1.502E+01	2.525E+01	0.000E+00	NOT IDENT.
PB-212	8.500E-01	5.807E+00	7.144E+00	0.000E+00	FAIL ABUN
BI-214	2.534E+00	7.951E+00	7.858E+00	0.000E+00	FAIL ABUN
PB-214	3.035E+00	4.209E+00	7.635E+00	0.000E+00	FAIL ABUN
RN-219	-3.096E+00	2.298E+01	3.939E+01	0.000E+00	NOT IDENT.
RA-223	5.822E+00	3.873E+01	6.808E+01	0.000E+00	NOT IDENT.
RA-224	4.331E+01	4.445E+01	7.334E+01	0.000E+00	NOT IDENT.
RA-226	2.534E+00	7.951E+00	7.858E+00	0.000E+00	FAIL ABUN
AC-227	-1.353E+00	2.382E+01	4.162E+01	0.000E+00	FAIL ABUN
TH-227	-1.330E+00	2.342E+01	4.092E+01	0.000E+00	FAIL ABUN
AC-228	8.014E+00	7.644E+00	1.482E+01	0.000E+00	NOT IDENT.
RA-228	8.014E+00	7.644E+00	1.482E+01	0.000E+00	NOT IDENT.
TH-229	7.821E+00	3.029E+01	5.434E+01	0.000E+00	NOT IDENT.
TH-230	2.534E+00	7.951E+00	7.858E+00	0.000E+00	FAIL ABUN
PA-231	-2.654E+01	8.790E+01	1.510E+02	0.000E+00	NOT IDENT.
TH-231	-3.963E+00	1.108E+01	1.898E+01	0.000E+00	NOT IDENT.
TH-232	8.250E-01	5.637E+00	6.937E+00	0.000E+00	FAIL ABUN

PA-233	8.927E-01	3.813E+00	6.752E+00	0.000E+00 NOT IDENT.
PA-234	1.176E+00	1.600E+01	2.863E+01	0.000E+00 FAIL ABUN
TH-234	4.099E+01	1.578E+02	2.004E+02	0.000E+00 FAIL ABUN
U-234	0.000E+00	2.204E+01	1.461E+01	0.000E+00 FAIL ABUN
U-235	1.293E-01	1.490E+01	2.485E+01	0.000E+00 FAIL ABUN
NP-237	-1.291E+01	1.539E+01	2.483E+01	0.000E+00 NOT IDENT.
NP-239	-1.200E+00	1.340E+01	2.254E+01	0.000E+00 FAIL ABUN
AM-241	1.063E+00	1.163E+01	2.037E+01	0.000E+00 NOT IDENT.
AM-242	-9.053E+01	1.618E+02	2.669E+02	0.000E+00 NOT IDENT.
CM-247	7.761E-01	2.012E+00	3.601E+00	0.000E+00 NOT IDENT.
CF-249	3.168E-01	2.290E+00	4.011E+00	0.000E+00 FAIL ABUN
CF-251	1.422E+00	8.793E+00	1.465E+01	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:42:57.85

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579003.CNF;1
Sample date      : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:41:26
Sample ID        : G145579003           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA3               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.39  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 12922955
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	53.38	92	198	1.33	107.60	104	9	6.39E-03	29.5	
2	0	63.53	104	271	1.02	127.87	125	8	7.25E-03	28.9	
3	0	92.69	227	348	1.69	186.10	181	10	1.57E-02	16.8	
4	0	140.16	53	198	1.42	280.90	278	7	3.69E-03	45.8	
5	0	158.56	51	212	1.93	317.66	313	10	3.52E-03	55.5	
6	0	185.70	161	252	1.00	371.85	367	11	1.12E-02	20.6	
7	0	198.44	59	189	1.91	397.29	394	9	4.09E-03	43.9	
8	0	230.50	36	172	1.42	461.33	456	10	2.48E-03	70.8	
9	0	238.43	75	175	1.87	477.16	472	10	5.19E-03	35.1	
10	0	296.96	64	263	2.17	594.05	583	22	4.41E-03	66.4	
11	0	332.43	29	91	1.29	664.90	661	9	2.05E-03	61.4	
12	0	510.79	352	79	3.14	1021.14	1013	22	2.44E-02	8.3	
13	0	546.05	43	103	11.07	1091.56	1077	26	3.01E-03	66.2	
14	0	553.04	22	47	0.66	1105.52	1103	10	1.52E-03	61.7	
15	0	583.10	42	58	1.92	1165.56	1161	14	2.92E-03	40.9	
16	0	608.63	51	70	3.03	1216.55	1208	17	3.53E-03	40.7	
17	0	746.20	18	56	2.92	1491.36	1486	17	1.27E-03	96.3	
18	3	839.44	17	8	1.53	1677.62	1676	36	1.17E-03	27.5	1.70E+00
19	3	843.33	32	43	2.80	1685.39	1676	36	2.24E-03	49.3	
20	0	999.56	41	33	10.33	1997.50	1986	26	2.86E-03	41.0	
21	0	1102.32	8	4	1.36	2202.80	2201	6	5.79E-04	48.7	
22	0	1165.61	6	11	0.78	2329.24	2329	8	4.33E-04	97.6	
23	0	1228.09	14	4	1.22	2454.07	2450	9	9.99E-04	36.9	
24	1	1293.61	23	2	2.42	2585.00	2583	11	1.58E-03	14.6	9.02E+00
25	1	1296.62	18	3	2.42	2591.00	2583	11	1.22E-03	20.1	
26	0	1324.66	11	3	1.34	2647.03	2644	6	7.89E-04	37.9	
27	0	1350.11	7	8	0.72	2697.89	2696	7	4.75E-04	80.6	
28	0	1458.79	32	20	0.84	2915.05	2905	16	2.21E-03	38.2	
29	0	1492.15	18	3	0.70	2981.71	2977	11	1.25E-03	29.7	
30	0	1500.08	19	10	2.90	2997.56	2992	13	1.32E-03	41.0	
31	0	1517.01	8	5	0.56	3031.38	3029	5	5.56E-04	54.8	
32	0	1728.51	16	3	0.53	3454.05	3447	14	1.10E-03	35.4	
33	0	1763.89	8	8	1.54	3524.74	3520	9	5.34E-04	78.3	
34	0	1806.78	15	0	1.03	3610.47	3607	12	1.04E-03	25.8	
35	8	1862.27	16	1	3.35	3721.37	3716	37	1.14E-03	26.7	3.81E-01
36	8	1868.50	15	6	3.66	3733.82	3716	37	1.07E-03	47.3	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:43:04.78

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579003.CNF;1
Sample date      : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:41:26
Sample ID        : G145579003           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA3               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.39  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 12922955
Matrix Spike DPM :                      LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
AL-26	511.00	56	163.62	1.290E+00	2.488E+00	2.488E+00	122.90
	1808.65	15	99.76*	5.026E-01	2.807E+00	2.807E+00	51.95
SN-117M	156.02	------	2.11	2.552E+00	------	Line Not Found	------
	158.56	51	86.40*	2.543E+00	2.167E+00	9.994E+00	111.24
TE-123M	159.00	51	84.10*	2.543E+00	2.227E+00	2.649E+00	111.25
TL-208	75.00	------	3.43	1.548E+00	------	Line Not Found	------
	277.35	------	6.80	1.958E+00	------	Line Not Found	------
	510.84	56	21.60	1.290E+00	1.885E+01	1.942E+01	123.18
	583.14	10	84.20*	1.170E+00	9.422E-01	9.707E-01	386.93
	763.30	------	1.64	9.506E-01	------	Line Not Found	------
	860.37	------	12.46	8.645E-01	------	Line Not Found	------
	1093.90	------	0.37	7.131E-01	------	Line Not Found	------
TH-228	84.40	------	1.21	1.904E+00	------	Line Not Found	------
	238.60	8	44.60*	2.141E+00	8.250E-01	8.500E-01	683.18
	300.10	------	3.41	1.863E+00	------	Line Not Found	------
PA-234M	766.40	------	0.21	9.476E-01	------	Line Not Found	------
	1001.03	22	0.85*	7.665E-01	3.127E+02	3.127E+02	170.68
U-238	63.29	17	3.80*	1.017E+00	4.099E+01	4.099E+01	385.07
ANH-511	511.00	56	100.00*	1.290E+00	4.071E+00	4.071E+00	122.90

Flag: "*" = Keyline

Sample ID : G145579003 Acquisition date : 13-OCT-2005 10:41:26

Total number of lines in spectrum	33	
Number of unidentified lines	14	
Number of lines tentatively identified by NID	19	57.58%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
AL-26	7.20E+05Y	1.00	2.807E+00	2.807E+00	1.458E+00	51.95	
SN-117M	13.60D	4.61	2.167E+00	9.994E+00	11.12E+00	111.24	
TE-123M	119.70D	1.19	2.227E+00	2.649E+00	2.947E+00	111.25	
TL-208	1.91Y	1.03	9.422E-01	9.707E-01	37.56E-01	386.93	
TH-228	1.91Y	1.03	8.250E-01	8.500E-01	58.07E-01	683.18	
PA-234M	4.47E+09Y	1.00	3.127E+02	3.127E+02	5.338E+02	170.68	
U-238	4.47E+09Y	1.00	4.099E+01	4.099E+01	15.78E+01	385.07	
ANH-511	1.00E+09Y	1.00	4.071E+00	4.071E+00	5.004E+00	122.90	
			---------	---------			
	Total Activity :		3.668E+02	3.751E+02			
	Grand Total Activity :		3.668E+02	3.751E+02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579003 Acquisition date : 13-OCT-2005 10:41:26

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.38	86	198	1.33	107.60	104	9	5.98E-03	66.3	5.34E-01	T
0	140.16	44	198	1.42	280.90	278	7	3.03E-03	****	2.58E+00	T
0	185.70	12	252	1.00	371.85	367	11	8.34E-04	****	2.42E+00	T
0	198.44	46	189	1.91	397.29	394	9	3.21E-03	****	2.35E+00	T
0	230.50	26	172	1.42	461.33	456	10	1.77E-03	****	2.18E+00	T
0	296.96	64	263	2.17	594.05	583	22	4.41E-03	****	1.88E+00	T
0	332.43	29	91	1.29	664.90	661	9	2.05E-03	****	1.74E+00	T
0	546.05	38	103	11.07	1091.56	1077	26	2.63E-03	****	1.23E+00	T
0	553.04	7	47	0.66	1105.52	1103	10	4.56E-04	****	1.22E+00	
0	608.63	14	70	3.03	1216.55	1208	17	9.83E-04	****	1.13E+00	T
0	746.20	18	56	2.92	1491.36	1486	17	1.27E-03	****	9.68E-01	T
3	839.44	17	8	1.53	1677.62	1676	36	1.17E-03	55.0	8.82E-01	
3	843.33	32	43	2.80	1685.39	1676	36	2.24E-03	98.7	8.78E-01	
0	1165.61	6	11	0.78	2329.24	2329	8	4.33E-04	****	6.78E-01	
0	1228.09	14	4	1.22	2454.07	2450	9	9.99E-04	73.7	6.51E-01	
1	1293.61	23	2	2.42	2585.00	2583	11	1.58E-03	29.1	6.26E-01	
1	1296.62	11	3	2.42	2591.00	2583	11	7.35E-04	****	6.25E-01	T
0	1324.66	11	3	1.34	2647.03	2644	6	7.89E-04	75.7	6.15E-01	
0	1350.11	7	8	0.72	2697.89	2696	7	4.75E-04	****	6.06E-01	
0	1458.79	14	20	0.84	2915.05	2905	16	9.67E-04	****	5.73E-01	T
0	1492.15	18	3	0.70	2981.71	2977	11	1.25E-03	59.3	5.64E-01	
0	1500.08	19	10	2.90	2997.56	2992	13	1.32E-03	82.0	5.62E-01	
0	1517.01	8	5	0.56	3031.38	3029	5	5.56E-04	****	5.58E-01	
0	1728.51	16	3	0.53	3454.05	3447	14	1.10E-03	70.8	5.15E-01	
8	1862.27	16	1	3.35	3721.37	3716	37	1.14E-03	53.3	4.95E-01	
8	1868.50	15	6	3.66	3733.82	3716	37	1.07E-03	94.7	4.94E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:43:12.26

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579003.CNF;1     *
* Acquisition date : 13-OCT-2005 10:41:26  Detector SN#    : 12922955          *
* Detector ID      : GAMMA3                Sensitivity     : 3.00000           *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000           *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000          *
* Elapsed real time: 0 04:00:01.39         Half life ratio : 8.00000           *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 12:55:00  Nuclide Library : EPI               *
* Sample ID        : G145579003            Analyst initials: MJH1              *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19.2MS Isotope      :                  *
* MSD DPM          :                       MSD Isotope     :                  *
* LCS DPM          :                       LCS Isotope     :                  *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	2.807E+00	1.458E+00	4.093E+00	2.318E-01	0.686
SN-117M	9.994E+00	1.112E+01	1.230E+01	7.448E-01	0.812
TE-123M	2.649E+00	2.947E+00	3.166E+00	1.941E-01	0.837
TL-208	9.707E-01	3.756E+00	3.574E+00	2.560E-01	0.272
TH-228	8.500E-01	5.807E+00	6.493E+00	5.020E-01	0.131
PA-234M	3.127E+02	5.338E+02	3.762E+02	3.275E+01	0.831
U-238	4.099E+01	1.578E+02	1.606E+02	2.800E+01	0.255
ANH-511	4.071E+00	5.004E+00	2.687E+00	1.725E-01	1.515

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-2.314E-01		2.220E+01	3.818E+01	2.780E+00	-0.006
NA-22	1.101E+00		2.376E+00	4.540E+00	2.631E-01	0.242
K-40	3.128E+01		3.013E+01	5.330E+01	3.192E+00	0.587
SC-46	-9.337E-01		2.512E+00	4.261E+00	3.163E-01	-0.219

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
V-48	-1.001E+00		6.424E+00	1.177E+01	8.493E-01	-0.085
CR-51	-3.728E+00		3.127E+01	5.412E+01	3.803E+00	-0.069
MN-54	-7.371E-01		2.019E+00	3.444E+00	2.452E-01	-0.214
CO-56	1.627E-01		2.477E+00	4.432E+00	3.186E-01	0.037
CO-57	7.059E-01		1.949E+00	3.337E+00	2.101E-01	0.212
CO-58	2.816E-01		2.145E+00	3.935E+00	2.758E-01	0.072
FE-59	-1.837E+00		5.118E+00	9.086E+00	6.863E-01	-0.202
CO-60	1.322E+00		1.994E+00	4.009E+00	2.200E-01	0.330
ZN-65	-1.045E+00		4.304E+00	7.704E+00	5.074E-01	-0.136
SE-75	-3.597E-01		2.857E+00	4.975E+00	3.198E-01	-0.072
KR-85	1.065E+03		4.417E+02	8.978E+02	5.765E+01	1.186
SR-85	6.381E+00		2.647E+00	5.380E+00	3.455E-01	1.186
Y-88	-1.852E+00		2.541E+00	4.243E+00	2.402E-01	-0.437
Y-91	-1.435E+00		2.685E+00	3.937E+00	2.514E-01	-0.365
NB-94	-2.722E-01		1.848E+00	3.250E+00	2.063E-01	-0.084
NB-95	7.097E-01		3.209E+00	5.868E+00	3.949E-01	0.121
ZR-95	-2.241E-01		4.122E+00	7.373E+00	5.726E-01	-0.030
RU-103	7.758E-01		3.335E+00	5.804E+00	7.511E-01	0.134
RH-106	-7.011E+00		1.756E+01	3.048E+01	1.903E+00	-0.230
RU-106	-5.679E+00		1.737E+01	3.035E+01	3.631E+00	-0.187
AG-108M	-1.720E+00		1.981E+00	3.155E+00	2.146E-01	-0.545
CD-109	1.470E+01		5.086E+01	8.826E+01	6.663E+00	0.167
AG-110M	-2.627E+00		2.131E+00	3.362E+00	2.175E-01	-0.781
SN-113	-1.097E-01		2.922E+00	5.035E+00	3.320E-01	-0.022
SN-115	-2.779E+01		2.327E+02	4.066E+02	3.001E+01	-0.068
SB-124	1.473E+00		5.554E+00	1.109E+01	6.880E-01	0.133
SB-125	2.603E+00		5.334E+00	9.582E+00	6.283E-01	0.272
TE-125M	-5.165E+02		8.057E+02	1.319E+03	1.141E+02	-0.392
I-126	-1.689E+01		2.274E+01	3.782E+01	2.317E+00	-0.447
SB-126	1.384E+00		1.732E+01	3.127E+01	2.018E+00	0.044
SN-126	-2.030E+00		5.016E+00	8.415E+00	6.336E-01	-0.241
SB-127	4.263E+02		1.020E+03	1.907E+03	2.959E+02	0.224
I-131	-8.233E-01		2.560E+01	4.423E+01	3.166E+00	-0.019
BA-133	-1.457E+00		2.590E+00	4.301E+00	5.098E-01	-0.339
CS-134	1.170E+00		2.291E+00	4.275E+00	2.975E-01	0.274
CS-135	-9.835E-01		9.120E+00	1.588E+01	1.287E+00	-0.062
CS-136	6.934E+00		1.182E+01	2.321E+01	1.721E+00	0.299
BA-137M	1.972E+00		2.140E+00	4.084E+00	2.490E-01	0.483
CS-137	2.091E+00		2.263E+00	4.319E+00	2.644E-01	0.484
CE-139	-3.659E-01		2.180E+00	3.583E+00	2.177E-01	-0.102
BA-140	1.875E+01		3.471E+01	5.777E+01	1.885E+01	0.325
CE-141	9.164E-02		5.958E+00	9.947E+00	6.247E-01	0.009
CE-144	2.506E+00		1.476E+01	2.496E+01	3.579E+00	0.100
PM-144	-1.193E+00		1.898E+00	3.184E+00	2.014E-01	-0.375
PM-146	5.146E-01		2.603E+00	4.551E+00	4.106E-01	0.113
ND-147	-1.933E+01		7.839E+01	1.391E+02	1.919E+01	-0.139
PM-147	1.828E+06		3.937E+06	6.774E+06	4.258E+05	0.270
EU-152	-2.463E+00		5.669E+00	9.547E+00	6.749E-01	-0.258

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
GD-153	1.144E+00		5.917E+00	1.017E+01	6.972E-01	0.112
EU-154	3.086E+00		6.596E+00	1.260E+01	1.176E+00	0.245
EU-155	4.176E+00		7.924E+00	1.376E+01	9.189E-01	0.303
TB-160	8.437E+00		8.468E+00	1.674E+01	1.234E+00	0.504
TM-171	6.163E+02		2.382E+03	3.749E+03	2.722E+02	0.164
HF-181	1.397E+00		2.866E+00	5.191E+00	3.329E-01	0.269
TA-182	-1.768E+00		9.164E+00	1.643E+01	9.888E-01	-0.108
IR-192	8.983E-01		2.359E+00	4.215E+00	2.720E-01	0.213
HG-203	4.853E-01		2.857E+00	5.061E+00	3.405E-01	0.096
BI-207	-1.633E+00		2.227E+00	3.756E+00	2.577E-01	-0.435
BI-210	2.490E+02		3.242E+02	5.406E+02	4.429E+01	0.461
PB-210	2.490E+02		3.242E+02	5.406E+02	4.429E+01	0.461
BI-211	1.360E+01		1.193E+01	2.222E+01	1.546E+00	0.612
PB-211	1.445E+01		5.288E+01	9.221E+01	5.753E+01	0.157
BI-212	-8.755E+00		1.502E+01	2.525E+01	2.082E+00	-0.347
PB-212	8.500E-01	+	5.807E+00	7.144E+00	5.523E-01	0.119
BI-214	2.534E+00	+	7.951E+00	7.858E+00	6.398E-01	0.322
PB-214	3.035E+00		4.209E+00	7.635E+00	6.639E-01	0.397
RN-219	-3.096E+00		2.298E+01	3.939E+01	5.440E+00	-0.079
RA-223	5.822E+00		3.873E+01	6.808E+01	1.140E+01	0.086
RA-224	4.331E+01		4.445E+01	7.334E+01	4.625E+00	0.590
RA-226	2.534E+00	+	7.951E+00	7.858E+00	6.398E-01	0.322
AC-227	-1.353E+00		2.382E+01	4.162E+01	5.979E+00	-0.033
TH-227	-1.330E+00		2.342E+01	4.092E+01	6.996E+00	-0.033
AC-228	8.014E+00		7.644E+00	1.482E+01	1.537E+00	0.541
RA-228	8.014E+00		7.644E+00	1.482E+01	1.537E+00	0.541
TH-229	7.821E+00		3.029E+01	5.434E+01	3.334E+00	0.144
TH-230	2.534E+00	+	7.951E+00	7.858E+00	6.398E-01	0.322
PA-231	-2.654E+01		8.790E+01	1.510E+02	2.121E+01	-0.176
TH-231	-3.963E+00		1.108E+01	1.898E+01	1.473E+00	-0.209
TH-232	8.250E-01	+	5.637E+00	6.937E+00	5.363E-01	0.119
PA-233	8.927E-01		3.813E+00	6.752E+00	4.559E-01	0.132
PA-234	1.176E+00		1.600E+01	2.863E+01	5.214E+00	0.041
TH-234	4.099E+01	+	1.578E+02	2.004E+02	3.493E+01	0.205
U-234	1.656E+01	+	2.204E+01	1.461E+01	1.309E+00	1.133
U-235	1.293E-01		1.490E+01	2.485E+01	4.075E+00	0.005
NP-237	-1.291E+01		1.539E+01	2.483E+01	5.450E+00	-0.520
NP-239	-1.200E+00		1.340E+01	2.254E+01	1.423E+00	-0.053
AM-241	1.063E+00		1.163E+01	2.037E+01	1.691E+00	0.052
AM-242	-9.053E+01		1.618E+02	2.669E+02	1.758E+01	-0.339
CM-247	7.761E-01		2.012E+00	3.601E+00	2.256E-01	0.216
CF-249	3.168E-01		2.290E+00	4.011E+00	2.506E-01	0.079
CF-251	1.422E+00		8.793E+00	1.465E+01	8.919E-01	0.097

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579003            *
* Acquisition date : 13-OCT-2005 10:41:26 Detector SN#    : 12922955       *
* Detector ID      : GAMMA3               Sensitivity     : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 04:00:01.39     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 13-SEP-2005 12:55:00 Nuclide Library :                 *
* Sample ID        : G145579003           Analyst initials: MJH1            *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 24-MAR-2005 14:55:19 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
AL-26	2.807E+00	1.458E+00	1.794E+00	7.292E-01
SN-117M	9.994E+00	1.112E+01	5.888E+00	5.559E+00
TE-123M	2.649E+00	2.947E+00	1.513E+00	1.473E+00
TL-208	9.707E-01	3.756E+00	1.655E+00	1.878E+00
TH-228	8.500E-01	5.807E+00	3.111E+00	2.904E+00
PA-234M	3.127E+02	5.338E+02	1.685E+02	2.669E+02
U-238	4.099E+01	1.578E+02	7.704E+01	7.892E+01
ANH-511	4.071E+00	5.004E+00	1.246E+00	2.502E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-2.314E-01	2.220E+01	1.777E+01	1.110E+01	NOT IDENT.
NA-22	1.101E+00	2.376E+00	2.066E+00	1.188E+00	NOT IDENT.
NA-24	-7.255E+13	5.253E+14	0.000E+00	2.626E+14	SHORT HLIF
K-40	3.128E+01	3.013E+01	2.458E+01	1.506E+01	NOT IDENT.
SC-46	-9.337E-01	2.512E+00	1.938E+00	1.256E+00	NOT IDENT.
V-48	-1.001E+00	6.424E+00	5.287E+00	3.212E+00	NOT IDENT.
CR-51	-3.728E+00	3.127E+01	2.554E+01	1.564E+01	NOT IDENT.
MN-54	-7.371E-01	2.019E+00	1.569E+00	1.009E+00	NOT IDENT.
CO-56	1.627E-01	2.477E+00	2.028E+00	1.239E+00	NOT IDENT.
MN-56	1.000E+41	1.517E+42	0.000E+00	0.000E+00	SHORT HLIF
CO-57	7.059E-01	1.949E+00	1.606E+00	9.747E-01	NOT IDENT.
CO-58	2.816E-01	2.145E+00	1.779E+00	1.073E+00	NOT IDENT.
FE-59	-1.837E+00	5.118E+00	4.041E+00	2.559E+00	NOT IDENT.
CO-60	1.322E+00	1.994E+00	1.796E+00	9.971E-01	NOT IDENT.
ZN-65	-1.045E+00	4.304E+00	3.465E+00	2.152E+00	NOT IDENT.
SE-75	-3.597E-01	2.857E+00	2.363E+00	1.429E+00	FAIL ABUN
KR-85	1.065E+03	4.417E+02	4.262E+02	2.209E+02	NOT IDENT.
SR-85	6.381E+00	2.647E+00	2.554E+00	1.324E+00	NOT IDENT.
Y-88	-1.852E+00	2.541E+00	1.811E+00	1.271E+00	NOT IDENT.

Y-91	-1.435E+00	2.685E+00	1.812E+00	1.342E+00 NOT IDENT.
NB-94	-2.722E-01	1.848E+00	1.501E+00	9.239E-01 NOT IDENT.
NB-95	7.097E-01	3.209E+00	2.693E+00	1.604E+00 NOT IDENT.
NB-95M	-1.174E+03	1.956E+03	0.000E+00	9.781E+02 SHORT HLIF
ZR-95	-2.241E-01	4.122E+00	3.356E+00	2.061E+00 NOT IDENT.
MO-99	3.665E+03	4.402E+03	0.000E+00	2.201E+03 SHORT HLIF
TC-99M	1.987E+36	2.627E+36	0.000E+00	0.000E+00 SHORT HLIF
RU-103	7.758E-01	3.335E+00	2.719E+00	1.667E+00 FAIL ABUN
RH-106	-7.011E+00	1.756E+01	1.402E+01	8.782E+00 FAIL ABUN
RU-106	-5.679E+00	1.737E+01	1.395E+01	8.684E+00 NOT IDENT.
AG-108M	-1.720E+00	1.981E+00	1.471E+00	9.904E-01 NOT IDENT.
CD-109	1.470E+01	5.086E+01	4.241E+01	2.543E+01 NOT IDENT.
AG-110M	-2.627E+00	2.131E+00	1.545E+00	1.065E+00 NOT IDENT.
SN-113	-1.097E-01	2.922E+00	2.368E+00	1.461E+00 NOT IDENT.
CD-115	-4.699E+03	6.014E+04	0.000E+00	3.007E+04 SHORT HLIF
SN-115	-2.779E+01	2.327E+02	1.846E+02	1.163E+02 NOT IDENT.
SB-124	1.473E+00	5.554E+00	4.843E+00	2.777E+00 NOT IDENT.
SB-125	2.603E+00	5.334E+00	4.491E+00	2.667E+00 FAIL ABUN
TE-125M	-5.165E+02	8.057E+02	6.333E+02	4.028E+02 NOT IDENT.
I-126	-1.689E+01	2.274E+01	1.742E+01	1.137E+01 NOT IDENT.
SB-126	1.384E+00	1.732E+01	1.438E+01	8.662E+00 NOT IDENT.
SN-126	-2.030E+00	5.016E+00	4.038E+00	2.508E+00 FAIL ABUN
SB-127	4.263E+02	1.020E+03	8.779E+02	5.099E+02 NOT IDENT.
I-131	-8.233E-01	2.560E+01	2.086E+01	1.280E+01 NOT IDENT.
I-132	-1.000E+41	6.153E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	-4.039E+01	1.062E+03	0.000E+00	5.308E+02 SHORT HLIF
BA-133	-1.457E+00	2.590E+00	2.024E+00	1.295E+00 NOT IDENT.
I-133	5.894E+09	4.606E+10	0.000E+00	2.303E+10 SHORT HLIF
CS-134	1.170E+00	2.291E+00	1.972E+00	1.146E+00 NOT IDENT.
CS-135	-9.835E-01	9.120E+00	7.545E+00	4.560E+00 NOT IDENT.
I-135	-3.894E+33	4.229E+33	0.000E+00	0.000E+00 SHORT HLIF
CS-136	6.934E+00	1.182E+01	1.056E+01	5.911E+00 NOT IDENT.
BA-137M	1.972E+00	2.140E+00	1.910E+00	1.070E+00 NOT IDENT.
CS-137	2.091E+00	2.263E+00	2.020E+00	1.132E+00 NOT IDENT.
CE-139	-3.659E-01	2.180E+00	1.719E+00	1.090E+00 NOT IDENT.
BA-140	1.875E+01	3.471E+01	2.682E+01	1.735E+01 NOT IDENT.
LA-140	7.149E+04	5.609E+05	0.000E+00	2.804E+05 SHORT HLIF
CE-141	9.164E-02	5.958E+00	4.783E+00	2.979E+00 NOT IDENT.
CE-143	-3.402E+06	1.504E+07	0.000E+00	7.522E+06 SHORT HLIF
CE-144	2.506E+00	1.476E+01	1.200E+01	7.381E+00 NOT IDENT.
PM-144	-1.193E+00	1.898E+00	1.460E+00	9.490E-01 NOT IDENT.
PR-144	-1.000E+41	1.591E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	5.146E-01	2.603E+00	2.131E+00	1.302E+00 FAIL ABUN
ND-147	-1.933E+01	7.839E+01	6.444E+01	3.919E+01 NOT IDENT.
PM-147	1.828E+06	3.937E+06	3.261E+06	1.968E+06 NOT IDENT.
PM-149	4.699E+05	5.518E+05	0.000E+00	2.759E+05 SHORT HLIF
EU-152	-2.463E+00	5.669E+00	4.493E+00	2.835E+00 NOT IDENT.
GD-153	1.144E+00	5.917E+00	4.889E+00	2.959E+00 NOT IDENT.
EU-154	3.086E+00	6.596E+00	5.733E+00	3.298E+00 NOT IDENT.
EU-155	4.176E+00	7.924E+00	6.626E+00	3.962E+00 NOT IDENT.
TB-160	8.437E+00	8.468E+00	7.677E+00	4.234E+00 FAIL ABUN
TM-171	6.163E+02	2.382E+03	1.805E+03	1.191E+03 FAIL ABUN
HF-181	1.397E+00	2.866E+00	2.411E+00	1.433E+00 FAIL ABUN
TA-182	-1.768E+00	9.164E+00	7.360E+00	4.582E+00 NOT IDENT.
IR-192	8.983E-01	2.359E+00	1.996E+00	1.180E+00 FAIL ABUN
HG-203	4.853E-01	2.857E+00	2.400E+00	1.429E+00 NOT IDENT.
BI-207	-1.633E+00	2.227E+00	1.646E+00	1.113E+00 NOT IDENT.
BI-210	2.490E+02	3.242E+02	2.586E+02	1.621E+02 NOT IDENT.
PB-210	2.490E+02	3.242E+02	2.586E+02	1.621E+02 NOT IDENT.
BI-211	1.360E+01	1.193E+01	1.053E+01	5.965E+00 NOT IDENT.
PB-211	1.445E+01	5.288E+01	4.325E+01	2.644E+01 NOT IDENT.
BI-212	-8.755E+00	1.502E+01	1.151E+01	7.508E+00 NOT IDENT.
PB-212	8.500E-01	5.807E+00	3.437E+00	2.904E+00 FAIL ABUN
BI-214	2.534E+00	7.951E+00	3.688E+00	3.976E+00 FAIL ABUN
PB-214	3.035E+00	4.209E+00	3.616E+00	2.104E+00 FAIL ABUN
RN-219	-3.096E+00	2.298E+01	1.843E+01	1.149E+01 NOT IDENT.
RA-223	5.822E+00	3.873E+01	3.221E+01	1.936E+01 NOT IDENT.
RA-224	4.331E+01	4.445E+01	3.513E+01	2.223E+01 NOT IDENT.
RA-226	2.534E+00	7.951E+00	3.688E+00	3.976E+00 FAIL ABUN
AC-227	-1.353E+00	2.382E+01	1.982E+01	1.191E+01 FAIL ABUN
TH-227	-1.330E+00	2.342E+01	1.949E+01	1.171E+01 FAIL ABUN
AC-228	8.014E+00	7.644E+00	6.853E+00	3.822E+00 NOT IDENT.
RA-228	8.014E+00	7.644E+00	6.853E+00	3.822E+00 NOT IDENT.
TH-229	7.821E+00	3.029E+01	2.602E+01	1.514E+01 NOT IDENT.
TH-230	2.534E+00	7.951E+00	3.688E+00	3.975E+00 FAIL ABUN
PA-231	-2.654E+01	8.790E+01	7.142E+01	4.395E+01 NOT IDENT.
TH-231	-3.963E+00	1.108E+01	9.027E+00	5.542E+00 NOT IDENT.
TH-232	8.250E-01	5.637E+00	3.337E+00	2.818E+00 FAIL ABUN

PA-233	8.927E-01	3.813E+00	3.196E+00	1.906E+00 NOT IDENT.
PA-234	1.176E+00	1.600E+01	1.300E+01	7.998E+00 FAIL ABUN
TH-234	4.099E+01	1.578E+02	9.692E+01	7.892E+01 FAIL ABUN
U-234	1.656E+01	2.204E+01	6.958E+00	1.102E+01 FAIL ABUN
U-235	1.293E-01	1.490E+01	1.196E+01	7.448E+00 FAIL ABUN
NP-237	-1.291E+01	1.539E+01	1.191E+01	7.697E+00 NOT IDENT.
NP-239	-1.200E+00	1.340E+01	1.082E+01	6.700E+00 FAIL ABUN
AM-241	1.063E+00	1.163E+01	9.760E+00	5.813E+00 NOT IDENT.
AM-242	-9.053E+01	1.618E+02	1.282E+02	8.089E+01 NOT IDENT.
CM-247	7.761E-01	2.012E+00	1.687E+00	1.006E+00 NOT IDENT.
CF-249	3.168E-01	2.290E+00	1.884E+00	1.145E+00 FAIL ABUN
CF-251	1.422E+00	8.793E+00	7.040E+00	4.396E+00 NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145579003
ANALYST	: MJH1	DETECTOR	: GAMMA3
SAMPLE DATE	: 13-SEP-2005 12:55:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 10:41:26.35	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 8.004E+01
GROSS GAMMA ERROR (pCi/LITER)	: 7.176E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.594E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.247E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:43:54.67

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579004.CNF;1
Sample date      : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:41:49
Sample ID        : G145579004           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA6               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.22  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1922827
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	35.29*	32	186	1.51	70.68	68	6	2.21E-03	81.4	
2	0	47.49*	39	185	1.04	95.04	92	7	2.73E-03	69.2	
3	0	63.50*	47	282	1.39	127.03	123	8	3.28E-03	67.5	
4	0	66.77*	88	210	1.45	133.56	131	6	6.12E-03	29.9	
5	0	105.18	49	223	1.55	210.32	208	6	3.38E-03	50.7	
6	0	123.54	66	268	1.75	247.00	244	7	4.58E-03	42.9	
7	0	140.11*	104	302	1.04	280.11	276	9	7.22E-03	33.5	
8	0	144.17*	71	270	1.93	288.23	285	8	4.91E-03	44.8	
9	0	186.54*	44	341	1.26	372.90	368	10	3.02E-03	90.1	
10	0	239.28*	16	235	1.01	478.29	475	9	1.13E-03	196.9	
11	0	258.33	23	128	1.50	516.35	516	7	1.63E-03	82.9	
12	0	492.44	62	42	2.84	984.23	979	10	4.32E-03	23.3	
13	0	526.17	52	72	2.47	1051.63	1045	15	3.64E-03	37.7	
14	0	566.71	29	17	1.77	1132.66	1130	6	2.02E-03	29.4	
15	0	608.80*	30	72	2.15	1216.80	1211	12	2.11E-03	66.1	
16	0	664.06	22	74	0.70	1327.26	1319	16	1.55E-03	89.8	
17	0	693.22	13	32	1.36	1385.55	1384	7	8.81E-04	78.9	
18	0	749.71	18	14	1.19	1498.46	1496	6	1.25E-03	40.2	
19	0	767.27	8	52	4.03	1533.57	1528	14	5.47E-04	198.0	
20	0	785.95*	3	22	1.47	1570.91	1567	8	1.93E-04	376.3	
21	0	835.37*	12	27	0.50	1669.71	1663	10	8.16E-04	99.9	
22	0	882.79	53	72	17.31	1764.51	1745	42	3.67E-03	56.7	
23	0	909.38*	30	50	5.21	1817.66	1804	22	2.11E-03	68.3	
24	0	976.29*	16	11	4.40	1951.43	1947	11	1.08E-03	53.5	
25	0	1085.17	9	4	1.21	2169.14	2166	6	5.98E-04	51.6	
26	0	1240.84	14	9	1.47	2480.41	2477	8	9.37E-04	48.0	
27	0	1276.76	36	30	7.52	2552.25	2542	23	2.51E-03	45.0	
28	0	1401.16*	4	5	0.94	2801.02	2799	5	2.73E-04	132.2	
29	0	1460.05*	13	15	1.40	2918.78	2914	13	9.28E-04	90.9	
30	0	1528.18*	2	14	6.20	3055.06	3048	15	1.10E-04	594.5	
31	0	1533.55	8	15	3.38	3065.80	3063	11	5.81E-04	93.2	
32	0	1762.74*	9	19	1.73	3524.22	3517	15	5.99E-04	134.0	
33	0	1848.36	14	19	10.92	3695.51	3684	27	9.57E-04	94.5	
34	0	2016.67	11	9	2.71	4032.23	4028	16	7.57E-04	66.2	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:43:58

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579004.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:41:49
Sample ID : G145579004 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry : 3190-H
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:01.22 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.56 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	2.391E+01	4.346E+01	3.587E+01	0.000E+00	0.667
MN-54	+	834.83	*	1.501E+00	2.998E+00	3.310E+00	0.000E+00	0.453
CO-57	+	122.06	*	3.366E+00	2.889E+00	3.612E+00	0.000E+00	0.932
		136.47		4.814E-01	1.882E+01	2.978E+01	0.000E+00	0.016
NB-95	+	765.79	*	1.566E+00	6.201E+00	6.859E+00	0.000E+00	0.228
CE-141	+	145.44	*	1.099E+01	9.838E+00	1.130E+01	0.000E+00	0.972
BI-210	+	46.50	*	3.949E+02	5.466E+02	7.184E+02	0.000E+00	0.550
PB-210	+	46.50	*	3.949E+02	5.466E+02	7.184E+02	0.000E+00	0.550
RA-224	+	240.98	*	2.100E+01	8.271E+01	7.685E+01	0.000E+00	0.273
TH-228		84.40		3.953E+01	2.110E+02	3.443E+02	0.000E+00	0.115
	+	238.60	*	1.860E+00	7.325E+00	7.113E+00	0.000E+00	0.261
		300.10		-4.999E+01	5.512E+01	8.859E+01	0.000E+00	-0.564
TH-232	+	238.59	*	1.807E+00	7.116E+00	6.910E+00	0.000E+00	0.261
	+	911.20		1.410E+01	1.926E+01	1.323E+01	0.000E+00	1.066
		964.40		1.159E+01	4.418E+01	8.049E+01	0.000E+00	0.144
		969.11		1.276E+01	1.345E+01	2.642E+01	0.000E+00	0.483
U-235		89.95		2.274E+01	8.406E+01	1.374E+02	0.000E+00	0.166
		93.35		1.351E+02	4.882E+01	9.467E+01	0.000E+00	1.427
	+	105.00		9.986E+01	1.013E+02	1.428E+02	0.000E+00	0.699
	+	143.76	*	2.720E+01	2.436E+01	2.650E+01	0.000E+00	1.027
		163.33		5.158E+00	3.651E+01	6.400E+01	0.000E+00	0.081
	+	185.71		3.520E+00	6.345E+00	5.699E+00	0.000E+00	0.618
		205.31		4.055E+01	3.525E+01	6.417E+01	0.000E+00	0.632
U-238	+	63.29	*	1.315E+02	1.776E+02	1.876E+02	0.000E+00	0.701

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	2.935E+01	2.460E+01	4.832E+01	0.000E+00	0.607
NA-22		1274.53	*	3.486E+00	2.553E+00	5.425E+00	0.000E+00	0.643
AL-26		511.00		1.032E+01	1.884E+00	4.056E+00	0.000E+00	2.545
		1808.65	*	9.986E-01	2.272E+00	4.592E+00	0.000E+00	0.217
SC-46		889.25	*	-2.321E-02	2.317E+00	4.182E+00	0.000E+00	-0.006

Sample ID : G145579004 Acquisition date : 13-OCT-2005 10:41:49

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1120.51		3.552E+00	2.936E+00	6.146E+00	0.000E+00	0.578
V-48		944.10		1.768E+00	9.935E+01	1.770E+02	0.000E+00	0.010
		983.50	*	2.585E+00	7.677E+00	1.422E+01	0.000E+00	0.182
		1312.09		1.950E+00	7.319E+00	1.442E+01	0.000E+00	0.135
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	1.430E+01	3.618E+01	6.355E+01	0.000E+00	0.225
CO-56		846.75	*	-1.223E+00	2.472E+00	4.173E+00	0.000E+00	-0.293
		1037.82		-1.622E+00	1.646E+01	2.946E+01	0.000E+00	-0.055
		1238.25		5.002E+00	4.260E+00	8.588E+00	0.000E+00	0.582
CO-58		810.78	*	-3.683E-01	2.294E+00	4.081E+00	0.000E+00	-0.090
FE-59		192.35		4.570E+00	8.946E+01	1.552E+02	0.000E+00	0.029
		1099.25	*	3.284E+00	5.791E+00	1.160E+01	0.000E+00	0.283
		1291.60		4.150E+00	9.183E+00	1.786E+01	0.000E+00	0.232
CO-60		1173.24		2.163E+00	2.176E+00	4.554E+00	0.000E+00	0.475
		1332.50	*	8.323E-01	2.632E+00	5.033E+00	0.000E+00	0.165
ZN-65		1115.55	*	-2.773E+00	4.734E+00	8.243E+00	0.000E+00	-0.336
SE-75	+	66.05		9.235E+02	5.528E+02	6.823E+02	0.000E+00	1.354
		96.73		-5.661E+01	6.310E+01	1.083E+02	0.000E+00	-0.523
		121.11		-4.047E+00	1.307E+01	2.041E+01	0.000E+00	-0.198
		136.00		-5.221E-01	3.360E+00	5.861E+00	0.000E+00	-0.089
		198.60		1.136E+02	1.437E+02	2.576E+02	0.000E+00	0.441
		264.65	*	1.280E+00	3.603E+00	6.294E+00	0.000E+00	0.203
		279.53		4.978E+00	8.522E+00	1.507E+01	0.000E+00	0.330
		303.91		3.799E+00	1.567E+02	2.684E+02	0.000E+00	0.014
		400.65		-3.471E-01	1.802E+01	3.059E+01	0.000E+00	-0.011
KR-85		513.99	*	-1.775E+03	6.460E+02	9.668E+02	0.000E+00	-1.836
SR-85		513.99	*	-1.054E+01	3.836E+00	5.741E+00	0.000E+00	-1.836
Y-88		898.02		3.077E-02	2.532E+00	4.552E+00	0.000E+00	0.007
		1836.01	*	1.506E-01	2.163E+00	4.288E+00	0.000E+00	0.035
Y-91		557.57	*	-1.825E-01	2.563E+00	4.616E+00	0.000E+00	-0.040
		1204.90		-5.941E+02	1.124E+03	1.958E+03	0.000E+00	-0.303
NB-94		702.63	*	3.015E-01	1.757E+00	3.237E+00	0.000E+00	0.093
		871.10		-1.594E+00	2.363E+00	3.263E+00	0.000E+00	-0.488
ZR-95		724.18		-3.772E-01	6.550E+00	1.162E+01	0.000E+00	-0.032
		756.74	*	4.465E+00	4.672E+00	9.224E+00	0.000E+00	0.484
RU-103		497.08	*	-1.777E+00	3.257E+00	5.651E+00	0.000E+00	-0.314
	+	610.33		8.412E+01	1.112E+02	1.094E+02	0.000E+00	0.769
RH-106		511.85		8.150E+01	1.555E+01	3.334E+01	0.000E+00	2.444
		621.84	*	-9.799E+00	2.058E+01	3.541E+01	0.000E+00	-0.277
		1050.47		3.231E+01	1.322E+02	2.430E+02	0.000E+00	0.133
RU-106		622.20	*	-8.867E+00	2.030E+01	3.509E+01	0.000E+00	-0.253
AG-108M		433.93	*	1.659E-01	2.213E+00	3.771E+00	0.000E+00	0.044
		614.37		4.439E-01	2.430E+00	4.420E+00	0.000E+00	0.100
		722.95		4.347E-02	2.399E+00	4.306E+00	0.000E+00	0.010
CD-109		88.03	*	4.826E+00	6.425E+01	1.040E+02	0.000E+00	0.046
AG-110M		657.75	*	1.218E+00	2.371E+00	4.012E+00	0.000E+00	0.304
		677.61		1.415E+01	1.849E+01	3.578E+01	0.000E+00	0.396
		706.67		2.814E+00	1.249E+01	2.292E+01	0.000E+00	0.123
		763.93		-2.592E+00	1.132E+01	1.714E+01	0.000E+00	-0.151

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	884.67		9.874E+00	1.120E+01	4.895E+00	0.000E+00	2.017
		937.48		-4.754E+00	6.597E+00	1.067E+01	0.000E+00	-0.445
		1384.27		-4.314E+00	9.434E+00	1.657E+01	0.000E+00	-0.260
SN-113		391.69	*	-3.537E+00	3.179E+00	4.885E+00	0.000E+00	-0.724
SN-115		484.47		8.070E+02	1.304E+03	2.494E+03	0.000E+00	0.324
		933.00	*	1.192E+02	2.557E+02	4.791E+02	0.000E+00	0.249
		1290.58		4.905E+02	6.360E+02	1.290E+03	0.000E+00	0.380
SN-117M		156.02		-1.225E+02	3.488E+02	6.000E+02	0.000E+00	-0.204
		158.56	*	2.452E+00	8.405E+00	1.487E+01	0.000E+00	0.165
TE-123M		159.00	*	8.475E-01	2.342E+00	4.153E+00	0.000E+00	0.204
SB-124		602.73		5.127E-02	2.507E+00	4.545E+00	0.000E+00	0.011
		645.85		9.158E+00	3.242E+01	6.053E+01	0.000E+00	0.151
		713.78		-1.029E+00	1.111E+02	1.996E+02	0.000E+00	-0.005
		722.79		-1.691E+00	2.456E+01	4.373E+01	0.000E+00	-0.039
		1368.16		-3.728E+01	1.253E+02	2.250E+02	0.000E+00	-0.166
		1690.98	*	-1.545E+00	6.300E+00	1.137E+01	0.000E+00	-0.136
SB-125		176.33		-8.010E-01	2.573E+01	4.463E+01	0.000E+00	-0.018
		427.89	*	-7.493E-01	6.197E+00	1.039E+01	0.000E+00	-0.072
		463.38		1.805E+00	1.776E+01	3.237E+01	0.000E+00	0.056
		600.56		-7.133E+00	1.066E+01	1.804E+01	0.000E+00	-0.395
		606.64		2.965E+01	4.481E+01	7.610E+01	0.000E+00	0.390
		635.90		-7.108E+00	1.639E+01	2.834E+01	0.000E+00	-0.251
TE-125M		109.28	*	4.891E+02	8.670E+02	1.571E+03	0.000E+00	0.311
I-126		388.63		7.980E-01	2.922E+01	4.974E+01	0.000E+00	0.016
		666.33	*	4.509E+00	2.208E+01	3.637E+01	0.000E+00	0.124
		753.82		-2.775E+02	1.840E+02	2.732E+02	0.000E+00	-1.016
SB-126		666.33		1.945E+00	9.524E+00	1.569E+01	0.000E+00	0.124
	+	695.00		6.667E+00	1.052E+01	1.826E+01	0.000E+00	0.365
		697.00		1.562E+01	3.589E+01	6.038E+01	0.000E+00	0.259
		720.50	*	-7.201E+00	1.774E+01	3.056E+01	0.000E+00	-0.236
SN-126	+	64.28		5.204E+01	7.031E+01	6.653E+01	0.000E+00	0.782
		86.94		-1.244E+01	2.688E+01	4.232E+01	0.000E+00	-0.294
		87.57	*	1.652E+00	6.223E+00	1.019E+01	0.000E+00	0.162
SB-127		252.40		2.356E+02	4.220E+03	7.251E+03	0.000E+00	0.032
		411.60		2.152E+03	1.008E+04	1.737E+04	0.000E+00	0.124
		444.90		-4.303E+03	9.019E+03	1.457E+04	0.000E+00	-0.295
		473.00		-9.357E+02	1.253E+03	2.144E+03	0.000E+00	-0.436
		543.30		8.562E+02	1.173E+04	2.151E+04	0.000E+00	0.040
		603.50		-3.462E+03	8.011E+03	1.389E+04	0.000E+00	-0.249
		685.70	*	4.504E+02	9.570E+02	1.808E+03	0.000E+00	0.249
		698.50		-2.762E+02	1.020E+04	1.834E+04	0.000E+00	-0.015
		783.70		3.108E+02	2.676E+03	4.310E+03	0.000E+00	0.072
I-131		284.30		3.717E+00	3.509E+02	6.020E+02	0.000E+00	0.006
		364.48	*	4.639E+00	2.644E+01	4.563E+01	0.000E+00	0.102
		636.97		6.207E+01	3.006E+02	5.540E+02	0.000E+00	0.112
BA-133		79.62		-2.117E+00	1.086E+02	1.756E+02	0.000E+00	-0.012
		81.00		-2.173E+00	8.128E+00	1.297E+01	0.000E+00	-0.168
		276.40		-2.959E+00	2.640E+01	4.488E+01	0.000E+00	-0.066
		302.85		1.587E+00	9.789E+00	1.693E+01	0.000E+00	0.094

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		356.02	*	2.679E-01	3.124E+00	5.337E+00	0.000E+00	0.050
		383.85		-1.947E+00	2.048E+01	3.455E+01	0.000E+00	-0.056
CS-134		563.23		-3.752E+00	2.074E+01	3.702E+01	0.000E+00	-0.101
		569.32		-2.844E+00	1.255E+01	1.949E+01	0.000E+00	-0.146
		604.70		4.285E-01	2.085E+00	3.408E+00	0.000E+00	0.126
		795.84	*	6.845E-01	2.333E+00	4.320E+00	0.000E+00	0.158
		801.93		-1.449E+00	2.370E+01	4.210E+01	0.000E+00	-0.034
		1365.15		3.685E+01	7.964E+01	1.573E+02	0.000E+00	0.234
CS-135		268.24	*	-2.673E+00	1.126E+01	1.903E+01	0.000E+00	-0.140
CS-136	+	66.88		2.953E+02	1.768E+02	2.100E+02	0.000E+00	1.407
		86.36		1.255E+01	1.743E+02	2.826E+02	0.000E+00	0.044
		153.25		8.265E+00	1.021E+02	1.792E+02	0.000E+00	0.046
		163.92		8.934E+01	1.718E+02	3.059E+02	0.000E+00	0.292
		176.60		-2.003E+01	5.964E+01	1.020E+02	0.000E+00	-0.196
		273.65		1.127E+01	6.549E+01	1.133E+02	0.000E+00	0.099
		340.55		-3.596E+00	1.625E+01	2.730E+01	0.000E+00	-0.132
		818.51		3.476E+00	8.239E+00	1.567E+01	0.000E+00	0.222
		1048.07	*	-9.859E-01	1.335E+01	2.342E+01	0.000E+00	-0.042
		1235.36		-1.955E+01	4.889E+01	8.720E+01	0.000E+00	-0.224
BA-137M		661.65	*	1.154E+00	2.431E+00	4.065E+00	0.000E+00	0.284
CS-137		661.66	*	1.215E+00	2.570E+00	4.296E+00	0.000E+00	0.283
CE-139		165.85	*	-9.538E-01	2.511E+00	4.297E+00	0.000E+00	-0.222
BA-140		162.67		-2.319E+01	1.236E+02	2.136E+02	0.000E+00	-0.109
		304.87		-7.072E+01	1.856E+02	3.093E+02	0.000E+00	-0.229
		423.73		2.584E+02	2.738E+02	4.997E+02	0.000E+00	0.517
		537.31	*	1.744E+01	3.590E+01	6.715E+01	0.000E+00	0.260
CE-144		133.51	*	4.226E+00	1.689E+01	2.996E+01	0.000E+00	0.141
PM-144		476.78		3.156E+00	4.373E+00	8.344E+00	0.000E+00	0.378
		618.01		-5.099E-02	1.976E+00	3.553E+00	0.000E+00	-0.014
		696.49	*	2.783E-01	2.279E+00	3.658E+00	0.000E+00	0.076
PM-146		453.88	*	1.666E+00	2.831E+00	5.340E+00	0.000E+00	0.312
		633.25		2.945E+01	8.735E+01	1.617E+02	0.000E+00	0.182
		735.93		-2.370E-01	8.490E+00	1.525E+01	0.000E+00	-0.016
		747.24		-3.387E+00	6.172E+00	8.898E+00	0.000E+00	-0.381
ND-147		91.11		-1.688E+02	5.844E+01	8.041E+01	0.000E+00	-2.099
		531.02	*	-1.446E+01	8.782E+01	1.382E+02	0.000E+00	-0.105
PM-147		121.30	*	-1.420E+06	4.708E+06	7.358E+06	0.000E+00	-0.193
EU-152	+	121.78		9.444E+00	8.107E+00	1.014E+01	0.000E+00	0.932
		344.31	*	2.316E+00	6.137E+00	1.082E+01	0.000E+00	0.214
		963.37		1.258E+01	1.598E+01	3.075E+01	0.000E+00	0.409
GD-153		69.67		-9.457E+01	1.422E+02	2.237E+02	0.000E+00	-0.423
		83.37		4.587E+02	1.251E+03	2.060E+03	0.000E+00	0.223
		97.43	*	1.762E-01	6.176E+00	1.103E+01	0.000E+00	0.016
		103.18		-1.909E+00	9.353E+00	1.483E+01	0.000E+00	-0.129
EU-154	+	123.07		6.637E+00	5.698E+00	7.200E+00	0.000E+00	0.922
		247.93		3.759E+00	2.707E+01	4.686E+01	0.000E+00	0.080
		591.76		-7.801E+00	3.683E+01	6.533E+01	0.000E+00	-0.119
		723.30		1.601E+00	1.021E+01	1.855E+01	0.000E+00	0.086
		756.86		4.087E+01	4.489E+01	8.793E+01	0.000E+00	0.465

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		873.20		-1.067E+01	1.838E+01	2.580E+01	0.000E+00	-0.413
		996.30		-1.197E+01	2.063E+01	3.390E+01	0.000E+00	-0.353
		1004.76		7.827E-01	1.131E+01	2.047E+01	0.000E+00	0.038
		1274.51	*	9.659E+00	7.079E+00	1.504E+01	0.000E+00	0.642
EU-155		86.54		-2.964E+00	7.904E+00	1.251E+01	0.000E+00	-0.237
	+	105.31	*	1.024E+01	1.039E+01	1.579E+01	0.000E+00	0.649
TB-160		86.79		-1.025E+01	2.387E+01	3.765E+01	0.000E+00	-0.272
		298.57		-2.447E+00	9.358E+00	1.569E+01	0.000E+00	-0.156
		879.36	*	-1.037E+00	8.211E+00	1.463E+01	0.000E+00	-0.071
		962.29		4.592E+00	3.422E+01	6.138E+01	0.000E+00	0.075
		966.15		-4.542E+00	1.321E+01	2.236E+01	0.000E+00	-0.203
		1177.93		-4.838E+00	1.806E+01	3.300E+01	0.000E+00	-0.147
TM-171		51.87		-9.744E+02	1.152E+03	1.815E+03	0.000E+00	-0.537
		59.40		-7.283E+02	2.480E+03	4.022E+03	0.000E+00	-0.181
	+	66.72	*	5.184E+03	3.103E+03	4.571E+03	0.000E+00	1.134
HF-181		56.28		-1.281E+02	1.272E+02	1.979E+02	0.000E+00	-0.647
		57.53		1.327E+01	6.317E+01	1.056E+02	0.000E+00	0.126
	+	65.20		2.034E+02	1.217E+02	1.562E+02	0.000E+00	1.302
		133.02		2.269E+00	6.672E+00	1.187E+01	0.000E+00	0.191
		136.25		-4.000E+00	5.155E+01	9.022E+01	0.000E+00	-0.044
		345.85		-6.975E+00	1.506E+01	2.484E+01	0.000E+00	-0.281
		482.03	*	-4.301E+00	3.238E+00	5.242E+00	0.000E+00	-0.821
TA-182	+	67.75		2.243E+01	1.343E+01	1.639E+01	0.000E+00	1.369
		100.10		1.096E+00	1.472E+01	2.631E+01	0.000E+00	0.042
		222.10		1.522E+01	2.813E+01	4.975E+01	0.000E+00	0.306
		1121.28		6.282E+00	7.798E+00	1.577E+01	0.000E+00	0.398
		1189.05		-4.712E+00	1.604E+01	2.897E+01	0.000E+00	-0.163
		1221.42	*	2.369E+00	7.779E+00	1.565E+01	0.000E+00	0.151
		1230.97		1.138E+01	2.163E+01	4.354E+01	0.000E+00	0.261
IR-192		295.96		-2.558E+00	8.924E+00	1.493E+01	0.000E+00	-0.171
		308.46		3.806E+00	7.582E+00	1.341E+01	0.000E+00	0.284
		316.51	*	1.143E+00	2.894E+00	5.058E+00	0.000E+00	0.226
		468.07		-5.963E-01	4.625E+00	8.322E+00	0.000E+00	-0.072
		604.41		-1.838E+00	3.251E+01	5.130E+01	0.000E+00	-0.036
		612.46		3.285E+00	5.638E+01	8.939E+01	0.000E+00	0.037
HG-203		70.83		3.350E+01	9.888E+01	1.650E+02	0.000E+00	0.203
		72.87		5.746E+00	5.740E+01	9.420E+01	0.000E+00	0.061
		82.60		1.760E+01	1.125E+02	1.833E+02	0.000E+00	0.096
		279.20	*	2.579E+00	3.631E+00	6.466E+00	0.000E+00	0.399
BI-207		569.67		-1.359E-01	1.961E+00	3.108E+00	0.000E+00	-0.044
		897.83		2.843E+02	1.319E+03	2.433E+03	0.000E+00	0.117
		1063.62	*	-1.258E+00	3.042E+00	5.091E+00	0.000E+00	-0.247
		1442.20		2.202E+01	1.089E+03	2.153E+03	0.000E+00	0.010
		1770.23		1.144E+01	2.763E+01	5.771E+01	0.000E+00	0.198
TL-208		75.00		4.029E+01	8.680E+01	1.448E+02	0.000E+00	0.278
		277.35		3.337E+00	2.839E+01	4.882E+01	0.000E+00	0.068
		510.84		8.031E+01	1.468E+01	3.159E+01	0.000E+00	2.542
		583.14	*	7.735E-01	2.368E+00	4.364E+00	0.000E+00	0.177
		763.30		4.480E+01	1.420E+02	2.329E+02	0.000E+00	0.192

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		860.37		4.808E+00	1.576E+01	2.937E+01	0.000E+00	0.164
		1093.90		-1.858E+02	5.533E+02	1.002E+03	0.000E+00	-0.185
BI-211		351.07	*	1.954E+01	1.450E+01	2.682E+01	0.000E+00	0.729
PB-211		404.84	*	4.572E+01	5.951E+01	1.076E+02	0.000E+00	0.425
		427.08		-3.944E+01	1.394E+02	2.302E+02	0.000E+00	-0.171
		831.96		-2.422E+01	8.040E+01	1.197E+02	0.000E+00	-0.202
BI-212		727.18	*	1.354E+01	1.689E+01	3.266E+01	0.000E+00	0.415
PB-212		74.80		1.868E+01	2.768E+01	4.671E+01	0.000E+00	0.400
		87.30		-1.159E+01	3.066E+01	4.848E+01	0.000E+00	-0.239
		115.19		1.070E+02	2.926E+02	5.249E+02	0.000E+00	0.204
	+	238.63	*	1.860E+00	7.325E+00	8.509E+00	0.000E+00	0.219
		300.09		-5.019E+01	5.511E+01	8.854E+01	0.000E+00	-0.567
BI-214	+	609.31	*	6.090E+00	8.048E+00	1.015E+01	0.000E+00	0.600
	+	768.36		1.743E+01	6.904E+01	6.918E+01	0.000E+00	0.252
		934.06		2.702E+01	6.578E+01	1.229E+02	0.000E+00	0.220
		1120.29		1.849E+01	1.528E+01	3.198E+01	0.000E+00	0.578
		1238.11		2.156E+01	4.054E+01	7.291E+01	0.000E+00	0.296
		1377.67		3.552E+01	4.630E+01	9.896E+01	0.000E+00	0.359
PB-214		74.81		3.128E+01	4.632E+01	7.816E+01	0.000E+00	0.400
		77.11		1.051E+01	2.697E+01	4.468E+01	0.000E+00	0.235
		87.30		-2.043E+01	5.403E+01	8.544E+01	0.000E+00	-0.239
		241.98		2.185E+01	2.491E+01	4.090E+01	0.000E+00	0.534
		295.21		-9.047E+00	1.040E+01	1.680E+01	0.000E+00	-0.539
		351.92	*	6.035E+00	5.080E+00	9.302E+00	0.000E+00	0.649
RN-219		271.23		-9.062E+00	1.673E+01	2.773E+01	0.000E+00	-0.327
		401.81	*	-1.235E+01	2.684E+01	4.382E+01	0.000E+00	-0.282
RA-223	+	122.32		2.245E+02	1.927E+02	2.387E+02	0.000E+00	0.940
	+	144.24		8.816E+01	7.895E+01	8.901E+01	0.000E+00	0.991
		154.21		1.596E+01	2.935E+01	5.253E+01	0.000E+00	0.304
		269.46		7.533E-01	1.285E+01	2.211E+01	0.000E+00	0.034
		323.87	*	5.362E+00	4.522E+01	7.783E+01	0.000E+00	0.069
		338.28		-2.964E+01	6.546E+01	1.079E+02	0.000E+00	-0.275
		445.03		-6.457E+01	1.710E+02	2.785E+02	0.000E+00	-0.232
RA-226		295.21		-9.047E+00	1.040E+01	1.680E+01	0.000E+00	-0.539
		351.92		6.035E+00	5.080E+00	9.302E+00	0.000E+00	0.649
	+	609.31	*	6.090E+00	8.048E+00	1.015E+01	0.000E+00	0.600
AC-227		79.80		-5.990E+00	1.395E+02	2.253E+02	0.000E+00	-0.027
		236.00		-1.748E+01	1.846E+01	2.646E+01	0.000E+00	-0.661
		256.20	*	4.280E+00	3.054E+01	5.266E+01	0.000E+00	0.081
		286.10		-1.774E+01	1.135E+02	1.924E+02	0.000E+00	-0.092
		299.80		-6.263E+01	1.003E+02	1.644E+02	0.000E+00	-0.381
		304.40		-2.206E+01	1.321E+02	2.233E+02	0.000E+00	-0.099
		329.70		-9.511E-01	6.152E+01	1.049E+02	0.000E+00	-0.009
		334.20		6.293E+01	1.659E+02	2.892E+02	0.000E+00	0.218
TH-227		79.80		-5.885E+00	1.370E+02	2.214E+02	0.000E+00	-0.027
		94.00		4.446E+02	1.547E+02	3.011E+02	0.000E+00	1.477
		236.00		-1.720E+01	1.816E+01	2.603E+01	0.000E+00	-0.661
		256.20	*	4.209E+00	3.003E+01	5.178E+01	0.000E+00	0.081
		286.10		-1.745E+01	1.117E+02	1.892E+02	0.000E+00	-0.092

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		299.80		-6.145E+01	9.843E+01	1.613E+02	0.000E+00	-0.381
		304.40		-2.168E+01	1.298E+02	2.195E+02	0.000E+00	-0.099
		329.70		-9.356E-01	6.051E+01	1.032E+02	0.000E+00	-0.009
		334.20		6.168E+01	1.626E+02	2.834E+02	0.000E+00	0.218
AC-228		209.25		1.224E+01	3.954E+01	6.939E+01	0.000E+00	0.176
		338.32		-7.212E+00	1.583E+01	2.608E+01	0.000E+00	-0.277
		463.01		3.003E+01	4.080E+01	7.765E+01	0.000E+00	0.387
		794.95		-6.529E+00	4.274E+01	7.538E+01	0.000E+00	-0.087
	+	911.21	*	1.424E+01	1.945E+01	1.770E+01	0.000E+00	0.804
		964.77		-1.370E+01	4.581E+01	7.805E+01	0.000E+00	-0.176
		969.11		1.288E+01	1.358E+01	2.667E+01	0.000E+00	0.483
RA-228		209.25		1.224E+01	3.954E+01	6.939E+01	0.000E+00	0.176
		338.32		-7.212E+00	1.583E+01	2.608E+01	0.000E+00	-0.277
		463.01		3.003E+01	4.080E+01	7.765E+01	0.000E+00	0.387
		794.95		-6.529E+00	4.274E+01	7.538E+01	0.000E+00	-0.087
	+	911.21	*	1.424E+01	1.945E+01	1.770E+01	0.000E+00	0.804
		964.77		-1.370E+01	4.581E+01	7.805E+01	0.000E+00	-0.176
		969.11		1.288E+01	1.358E+01	2.667E+01	0.000E+00	0.483
TH-229		85.43		-3.075E+00	1.503E+01	2.401E+01	0.000E+00	-0.128
		88.47		9.695E-01	8.566E+00	1.390E+01	0.000E+00	0.070
		100.00		3.404E+00	1.388E+01	2.500E+01	0.000E+00	0.136
		193.63	*	-3.062E+01	3.862E+01	6.434E+01	0.000E+00	-0.476
		210.97		-9.383E+00	5.213E+01	8.931E+01	0.000E+00	-0.105
TH-230		295.21		-9.047E+00	1.040E+01	1.680E+01	0.000E+00	-0.539
		351.92		6.035E+00	5.080E+00	9.302E+00	0.000E+00	0.649
	+	609.31	*	6.090E+00	8.048E+00	1.015E+01	0.000E+00	0.600
PA-231		283.67	*	-7.532E+00	1.050E+02	1.795E+02	0.000E+00	-0.042
		301.29		-1.703E+01	3.882E+01	6.444E+01	0.000E+00	-0.264
		330.00		-5.453E+01	1.379E+02	2.286E+02	0.000E+00	-0.239
TH-231		84.21		9.207E+00	3.897E+01	6.373E+01	0.000E+00	0.144
		236.00		-1.744E+01	1.841E+01	2.640E+01	0.000E+00	-0.661
		256.20		4.270E+00	3.046E+01	5.253E+01	0.000E+00	0.081
		269.46	*	7.533E-01	1.285E+01	2.211E+01	0.000E+00	0.034
		271.23		-9.062E+00	1.673E+01	2.773E+01	0.000E+00	-0.327
		283.67		-7.532E+00	1.050E+02	1.795E+02	0.000E+00	-0.042
		301.29		-1.703E+01	3.882E+01	6.444E+01	0.000E+00	-0.264
		329.85		-1.485E+01	4.323E+01	7.192E+01	0.000E+00	-0.207
		351.07		1.954E+01	1.450E+01	2.682E+01	0.000E+00	0.729
		401.81		-1.235E+01	2.684E+01	4.382E+01	0.000E+00	-0.282
PA-233		75.28		8.666E+00	2.312E+02	3.768E+02	0.000E+00	0.023
		86.59		-4.925E+01	1.276E+02	2.018E+02	0.000E+00	-0.244
		300.12		-2.488E+01	2.768E+01	4.451E+01	0.000E+00	-0.559
		311.98	*	-2.229E+00	4.623E+00	7.638E+00	0.000E+00	-0.292
		340.50		-6.708E+00	3.788E+01	6.384E+01	0.000E+00	-0.105
		398.62		2.113E+00	1.374E+02	2.339E+02	0.000E+00	0.009
		415.76		-2.010E+01	1.092E+02	1.824E+02	0.000E+00	-0.110
PA-234	+	63.00		1.533E+02	2.070E+02	2.220E+02	0.000E+00	0.690
		94.67		6.272E+00	1.298E+01	2.349E+01	0.000E+00	0.267
		98.44		3.324E+00	6.965E+00	1.266E+01	0.000E+00	0.263

Sample ID : G145579004 Acquisition date : 13-OCT-2005 10:41:49

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		99.70		7.413E+00	3.705E+01	6.650E+01	0.000E+00	0.111
		111.00		-5.603E-01	1.467E+01	2.593E+01	0.000E+00	-0.022
		131.20		3.472E+00	8.455E+00	1.509E+01	0.000E+00	0.230
		152.70		-6.201E+00	2.408E+01	4.164E+01	0.000E+00	-0.149
	+	186.00		9.504E+01	1.713E+02	1.507E+02	0.000E+00	0.631
		226.40		-8.333E-01	2.970E+01	5.108E+01	0.000E+00	-0.016
		227.20		-2.462E+01	3.154E+01	5.209E+01	0.000E+00	-0.473
		248.90		2.028E+01	6.383E+01	1.115E+02	0.000E+00	0.182
		293.70		1.435E+00	4.760E+01	8.128E+01	0.000E+00	0.018
		369.80		-8.403E+00	5.699E+01	9.601E+01	0.000E+00	-0.088
	+	568.70		8.536E+01	5.015E+01	1.095E+02	0.000E+00	0.779
		569.50		-4.479E+00	1.708E+01	2.641E+01	0.000E+00	-0.170
		574.00		9.161E+01	9.506E+01	1.839E+02	0.000E+00	0.498
		699.00		-1.875E+01	4.069E+01	6.970E+01	0.000E+00	-0.269
		706.10		5.992E+00	5.918E+01	1.074E+02	0.000E+00	0.056
		733.00		1.061E+01	1.993E+01	3.815E+01	0.000E+00	0.278
		742.81		5.829E+01	8.355E+01	1.595E+02	0.000E+00	0.365
		796.30		5.587E+00	5.156E+01	9.329E+01	0.000E+00	0.060
		805.80		-1.248E+01	5.238E+01	9.198E+01	0.000E+00	-0.136
		819.60		1.533E+01	6.147E+01	1.156E+02	0.000E+00	0.133
		826.30		3.105E+01	4.448E+01	8.683E+01	0.000E+00	0.358
		831.60		-1.550E+01	4.131E+01	6.074E+01	0.000E+00	-0.255
		876.40		7.296E+00	4.477E+01	8.252E+01	0.000E+00	0.088
		880.51		7.892E-01	1.484E+01	2.702E+01	0.000E+00	0.029
	+	883.24		5.510E+01	6.249E+01	2.727E+01	0.000E+00	2.020
		899.00		1.010E+00	4.405E+01	7.976E+01	0.000E+00	0.013
		925.00		7.070E+01	5.690E+01	1.208E+02	0.000E+00	0.585
		926.50		-1.331E+00	9.831E+00	1.732E+01	0.000E+00	-0.077
		946.00	*	1.354E+01	1.859E+01	3.566E+01	0.000E+00	0.380
		949.00		-2.701E+00	2.864E+01	5.004E+01	0.000E+00	-0.054
		980.50		-1.904E+01	4.879E+01	7.042E+01	0.000E+00	-0.270
		1394.10		1.271E+01	6.830E+01	1.326E+02	0.000E+00	0.096
PA-234M	+	766.40		4.183E+02	1.657E+03	1.891E+03	0.000E+00	0.221
		1001.03	*	1.251E+02	2.417E+02	4.616E+02	0.000E+00	0.271
TH-234	+	63.29	*	1.315E+02	1.776E+02	2.143E+02	0.000E+00	0.613
		92.38		6.133E+01	4.457E+01	7.610E+01	0.000E+00	0.806
		112.81		-4.333E+01	7.195E+02	1.270E+03	0.000E+00	-0.034
U-234	+	67.67		2.134E+03	1.277E+03	1.564E+03	0.000E+00	1.364
		241.98		2.188E+01	2.494E+01	4.095E+01	0.000E+00	0.534
		295.21	*	-9.047E+00	1.040E+01	1.680E+01	0.000E+00	-0.539
		351.92		6.035E+00	5.080E+00	9.302E+00	0.000E+00	0.649
NP-237		86.48	*	1.251E+00	1.875E+01	3.039E+01	0.000E+00	0.041
		95.87		-2.449E+02	7.777E+01	1.210E+02	0.000E+00	-2.024
NP-239		99.55		4.251E+00	1.220E+01	2.203E+01	0.000E+00	0.193
		117.00	*	1.282E+00	1.525E+01	2.704E+01	0.000E+00	0.047
		209.75		1.214E+01	5.406E+01	9.438E+01	0.000E+00	0.129
		228.18		-3.717E+00	1.628E+01	2.772E+01	0.000E+00	-0.134
		277.60		2.754E+00	1.324E+01	2.289E+01	0.000E+00	0.120
		334.31		3.280E+01	9.158E+01	1.594E+02	0.000E+00	0.206

Sample ID : G145579004 Acquisition date : 13-OCT-2005 10:41:49

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AM-241		59.54	*	-4.680E+00	1.414E+01	2.289E+01	0.000E+00	-0.204
AM-242		99.55		9.923E+01	2.848E+02	5.141E+02	0.000E+00	0.193
	+	103.70	*	2.077E+02	2.106E+02	3.097E+02	0.000E+00	0.671
CM-247		278.00		2.868E+01	5.380E+01	9.484E+01	0.000E+00	0.302
		287.40		-2.893E+00	9.107E+01	1.554E+02	0.000E+00	-0.019
		402.60	*	-1.061E+00	2.411E+00	3.943E+00	0.000E+00	-0.269
CF-249		252.85		-4.912E+00	6.845E+01	1.168E+02	0.000E+00	-0.042
		333.44		1.100E+01	1.189E+01	2.146E+01	0.000E+00	0.513
		387.95	*	-1.057E-01	2.722E+00	4.608E+00	0.000E+00	-0.023
CF-251		176.00	*	1.755E+00	9.888E+00	1.730E+01	0.000E+00	0.101
		227.00		-2.248E+01	2.798E+01	4.616E+01	0.000E+00	-0.487
		285.00		2.237E+01	1.257E+02	2.176E+02	0.000E+00	0.103
ANH-511		511.00	*	1.689E+01	3.083E+00	6.636E+00	0.000E+00	2.545

VAX/VMS Nuclide Identification Report Generated

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*********************************************************************************
*                          General Eng. Labs, LLC.                              *
*                              2040 Savage Road                                 *
*                            Charleston, SC 29414                               *
*********************************************************************************
*                                                                               *
*                                DETECTOR DATA                                  *
*                                                                               *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579004            *
* Acquisition date : 13-OCT-2005 10:41:49 Detector SN#    : 1922827            *
* Detector ID      : GAMMA6               Sensitivity     : 3.000              *
* Geometry         : 2L_MB                Energy tolerance: 2.000              *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000             *
* Elapsed real time:    0 04:00:01.22     Half life ratio :  8.000             *
*********************************************************************************
*                                                                               *
*                                SAMPLE DATA                                    *
*                                                                               *
* Sample date      : 14-SEP-2005 09:32:00 Nuclide Library : FERMC              *
* Sample ID        : G145579004           Analyst initials: MJH1               *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER   *
* Recovery         :    1.00000           Carrier Weight :    0.00000          *
*********************************************************************************
*                                                                               *
*                                 QC DATA                                       *
* Standard Weight  :   0.00000                                                  *
* CALIB. DATE/TIME :  3-DEC-2004 08:44:54 MS Isotope      :                     *
* MSD DPM          : ********            MSD Isotope     :                     *
* LCS DPM          :    0.000           LCS Isotope     :                     *
* LCSD DPM         :    0.000           LCSD Isotope    :                     *
*********************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	2.391E+01	4.346E+01	3.587E+01	0.000E+00
MN-54	1.501E+00	2.998E+00	3.310E+00	0.000E+00
CO-57	3.366E+00	2.889E+00	3.612E+00	0.000E+00
NB-95	1.566E+00	6.201E+00	6.859E+00	0.000E+00
CE-141	9.412E+00	1.016E+01	1.130E+01	0.000E+00
BI-210	3.949E+02	5.466E+02	7.184E+02	0.000E+00
PB-210	3.949E+02	5.466E+02	7.184E+02	0.000E+00
RA-224	2.100E+01	8.271E+01	7.685E+01	0.000E+00
TH-228	1.860E+00	7.325E+00	7.113E+00	0.000E+00
TH-232	1.807E+00	7.116E+00	6.910E+00	0.000E+00
U-235	2.720E+01	2.436E+01	2.987E+01	0.000E+00
U-238	1.315E+02	1.776E+02	1.876E+02	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER	K.L. Ided)	Act error	MDA (pCi/LITER)		
BE-7	2.935E+01		2.460E+01	4.832E+01	0.000E+00	NOT IDENT.
NA-22	3.486E+00		2.553E+00	5.425E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00		2.210E+14	0.000E+00	0.000E+00	SHORT HLIF
AL-26	9.986E-01		2.272E+00	4.592E+00	0.000E+00	NOT IDENT.
SC-46	-2.321E-02		2.317E+00	4.182E+00	0.000E+00	NOT IDENT.
V-48	2.585E+00		7.677E+00	1.422E+01	0.000E+00	NOT IDENT.
CR-51	1.430E+01		3.618E+01	6.355E+01	0.000E+00	NOT IDENT.
CO-56	-1.223E+00		2.472E+00	4.173E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00		2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-58	-3.683E-01		2.294E+00	4.081E+00	0.000E+00	NOT IDENT.
FE-59	3.284E+00		5.791E+00	1.160E+01	0.000E+00	NOT IDENT.
CO-60	8.323E-01		2.632E+00	5.033E+00	0.000E+00	NOT IDENT.
ZN-65	-2.773E+00		4.734E+00	8.243E+00	0.000E+00	NOT IDENT.
SE-75	1.280E+00		3.603E+00	6.294E+00	0.000E+00	FAIL ABUN
KR-85	-1.775E+03		6.460E+02	9.668E+02	0.000E+00	NOT IDENT.

SR-85	-1.054E+01	3.836E+00	5.741E+00	0.000E+00 NOT IDENT.
Y-88	1.506E-01	2.163E+00	4.288E+00	0.000E+00 NOT IDENT.
Y-91	-1.825E-01	2.563E+00	4.616E+00	0.000E+00 NOT IDENT.
NB-94	3.015E-01	1.757E+00	3.237E+00	0.000E+00 NOT IDENT.
NB-95M	0.000E+00	1.993E+03	0.000E+00	0.000E+00 SHORT HLIF
ZR-95	4.465E+00	4.672E+00	9.224E+00	0.000E+00 NOT IDENT.
MO-99	0.000E+00	5.221E+03	0.000E+00	0.000E+00 SHORT HLIF
TC-99M	0.000E+00	3.263E+35	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-1.777E+00	3.257E+00	5.651E+00	0.000E+00 FAIL ABUN
RH-106	-9.799E+00	2.058E+01	3.541E+01	0.000E+00 NOT IDENT.
RU-106	-8.867E+00	2.030E+01	3.509E+01	0.000E+00 NOT IDENT.
AG-108M	1.659E-01	2.213E+00	3.771E+00	0.000E+00 NOT IDENT.
CD-109	4.826E+00	6.425E+01	1.040E+02	0.000E+00 NOT IDENT.
AG-110M	1.218E+00	2.371E+00	4.012E+00	0.000E+00 FAIL ABUN
SN-113	-3.537E+00	3.179E+00	4.885E+00	0.000E+00 NOT IDENT.
CD-115	0.000E+00	9.801E+04	0.000E+00	0.000E+00 SHORT HLIF
SN-115	1.192E+02	2.557E+02	4.791E+02	0.000E+00 NOT IDENT.
SN-117M	2.452E+00	8.405E+00	1.487E+01	0.000E+00 NOT IDENT.
TE-123M	8.475E-01	2.342E+00	4.153E+00	0.000E+00 NOT IDENT.
SB-124	-1.545E+00	6.300E+00	1.137E+01	0.000E+00 NOT IDENT.
SB-125	-7.493E-01	6.197E+00	1.039E+01	0.000E+00 NOT IDENT.
TE-125M	4.891E+02	8.670E+02	1.571E+03	0.000E+00 NOT IDENT.
I-126	4.509E+00	2.208E+01	3.637E+01	0.000E+00 NOT IDENT.
SB-126	-7.201E+00	1.774E+01	3.056E+01	0.000E+00 FAIL ABUN
SN-126	1.652E+00	6.223E+00	1.019E+01	0.000E+00 FAIL ABUN
SB-127	4.504E+02	9.570E+02	1.808E+03	0.000E+00 NOT IDENT.
I-131	4.639E+00	2.644E+01	4.563E+01	0.000E+00 NOT IDENT.
I-132	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	0.000E+00	9.704E+02	0.000E+00	0.000E+00 SHORT HLIF
BA-133	2.679E-01	3.124E+00	5.337E+00	0.000E+00 NOT IDENT.
I-133	0.000E+00	2.826E+10	0.000E+00	0.000E+00 SHORT HLIF
CS-134	6.845E-01	2.333E+00	4.320E+00	0.000E+00 NOT IDENT.
CS-135	-2.673E+00	1.126E+01	1.903E+01	0.000E+00 NOT IDENT.
I-135	0.000E+00	5.190E+32	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-9.859E-01	1.335E+01	2.342E+01	0.000E+00 FAIL ABUN
BA-137M	1.154E+00	2.431E+00	4.065E+00	0.000E+00 NOT IDENT.
CS-137	1.215E+00	2.570E+00	4.296E+00	0.000E+00 NOT IDENT.
CE-139	-9.538E-01	2.511E+00	4.297E+00	0.000E+00 NOT IDENT.
BA-140	1.744E+01	3.590E+01	6.715E+01	0.000E+00 NOT IDENT.
LA-140	0.000E+00	4.146E+05	0.000E+00	0.000E+00 SHORT HLIF
CE-143	0.000E+00	1.091E+07	0.000E+00	0.000E+00 SHORT HLIF
CE-144	4.226E+00	1.689E+01	2.996E+01	0.000E+00 NOT IDENT.
PM-144	2.783E-01	2.279E+00	3.658E+00	0.000E+00 NOT IDENT.
PR-144	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	1.666E+00	2.831E+00	5.340E+00	0.000E+00 NOT IDENT.
ND-147	-1.446E+01	8.782E+01	1.382E+02	0.000E+00 NOT IDENT.
PM-147	-1.420E+06	4.708E+06	7.358E+06	0.000E+00 NOT IDENT.
PM-149	0.000E+00	5.237E+05	0.000E+00	0.000E+00 SHORT HLIF
EU-152	2.316E+00	6.137E+00	1.082E+01	0.000E+00 FAIL ABUN
GD-153	1.762E-01	6.176E+00	1.103E+01	0.000E+00 NOT IDENT.
EU-154	9.659E+00	7.079E+00	1.504E+01	0.000E+00 FAIL ABUN
EU-155	1.024E+01	1.039E+01	1.579E+01	0.000E+00 FAIL ABUN
TB-160	-1.037E+00	8.211E+00	1.463E+01	0.000E+00 NOT IDENT.
TM-171	0.000E+00	3.103E+03	4.571E+03	0.000E+00 FAIL ABUN
HF-181	-4.301E+00	3.238E+00	5.242E+00	0.000E+00 FAIL ABUN
TA-182	2.369E+00	7.779E+00	1.565E+01	0.000E+00 FAIL ABUN
IR-192	1.143E+00	2.894E+00	5.058E+00	0.000E+00 NOT IDENT.
HG-203	2.579E+00	3.631E+00	6.466E+00	0.000E+00 NOT IDENT.
BI-207	-1.258E+00	3.042E+00	5.091E+00	0.000E+00 NOT IDENT.
TL-208	7.735E-01	2.368E+00	4.364E+00	0.000E+00 NOT IDENT.
BI-211	1.954E+01	1.450E+01	2.682E+01	0.000E+00 NOT IDENT.
PB-211	4.572E+01	5.951E+01	1.076E+02	0.000E+00 NOT IDENT.
BI-212	1.354E+01	1.689E+01	3.266E+01	0.000E+00 NOT IDENT.
PB-212	1.860E+00	7.325E+00	8.509E+00	0.000E+00 FAIL ABUN
BI-214	6.090E+00	8.048E+00	1.015E+01	0.000E+00 FAIL ABUN
PB-214	6.035E+00	5.080E+00	9.302E+00	0.000E+00 NOT IDENT.
RN-219	-1.235E+01	2.684E+01	4.382E+01	0.000E+00 NOT IDENT.
RA-223	5.362E+00	4.522E+01	7.783E+01	0.000E+00 FAIL ABUN
RA-226	6.090E+00	8.048E+00	1.015E+01	0.000E+00 FAIL ABUN
AC-227	4.280E+00	3.054E+01	5.266E+01	0.000E+00 NOT IDENT.
TH-227	4.209E+00	3.003E+01	5.178E+01	0.000E+00 NOT IDENT.
AC-228	1.424E+01	1.945E+01	1.770E+01	0.000E+00 FAIL ABUN
RA-228	1.424E+01	1.945E+01	1.770E+01	0.000E+00 FAIL ABUN
TH-229	-3.062E+01	3.862E+01	6.434E+01	0.000E+00 NOT IDENT.
TH-230	6.090E+00	8.048E+00	1.015E+01	0.000E+00 FAIL ABUN
PA-231	-7.532E+00	1.050E+02	1.795E+02	0.000E+00 NOT IDENT.
TH-231	7.533E-01	1.285E+01	2.211E+01	0.000E+00 NOT IDENT.
PA-233	-2.229E+00	4.623E+00	7.638E+00	0.000E+00 NOT IDENT.

PA-234	1.354E+01	1.859E+01	3.566E+01	0.000E+00 FAIL ABUN
PA-234M	1.251E+02	2.417E+02	4.616E+02	0.000E+00 FAIL ABUN
TH-234	1.315E+02	1.776E+02	2.143E+02	0.000E+00 FAIL ABUN
U-234	-9.047E+00	1.040E+01	1.680E+01	0.000E+00 FAIL ABUN
NP-237	1.251E+00	1.875E+01	3.039E+01	0.000E+00 NOT IDENT.
NP-239	1.282E+00	1.525E+01	2.704E+01	0.000E+00 NOT IDENT.
AM-241	-4.680E+00	1.414E+01	2.289E+01	0.000E+00 NOT IDENT.
AM-242	2.077E+02	2.106E+02	3.097E+02	0.000E+00 FAIL ABUN
CM-247	-1.061E+00	2.411E+00	3.943E+00	0.000E+00 NOT IDENT.
CF-249	-1.057E-01	2.722E+00	4.608E+00	0.000E+00 NOT IDENT.
CF-251	1.755E+00	9.888E+00	1.730E+01	0.000E+00 NOT IDENT.
ANH-511	0.000E+00	3.083E+00	6.636E+00	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:43:51.48

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579004.CNF;1
Sample date      : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:41:49
Sample ID        : G145579004           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA6               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.22  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1922827
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	35.29	52	186	1.51	70.68	68	6	3.59E-03	44.2	
2	0	47.49	78	185	1.04	95.04	92	7	5.38E-03	31.4	
3	0	63.50	93	282	1.39	127.03	123	8	6.45E-03	33.0	
4	0	66.77	96	210	1.45	133.56	131	6	6.70E-03	25.8	
5	0	93.38	149	233	1.08	186.74	185	6	1.03E-02	18.2	
6	0	105.18	49	223	1.55	210.32	208	6	3.38E-03	50.7	
7	0	123.54	66	268	1.75	247.00	244	7	4.58E-03	42.9	
8	0	140.11	121	302	1.04	280.11	276	9	8.41E-03	27.5	
9	0	144.17	95	270	1.93	288.23	285	8	6.63E-03	31.5	
10	0	186.54	127	341	1.26	372.90	368	10	8.83E-03	28.6	
11	0	239.28	77	235	1.01	478.29	475	9	5.32E-03	38.0	
12	0	258.33	23	128	1.50	516.35	516	7	1.63E-03	82.9	
13	0	352.00	22	189	0.67	703.54	696	13	1.55E-03	128.6	
14	0	492.44	62	42	2.84	984.23	979	10	4.32E-03	23.3	
15	0	511.31	254	155	2.44	1021.95	1015	19	1.76E-02	13.5	
16	0	526.17	52	72	2.47	1051.63	1045	15	3.64E-03	37.7	
17	0	566.71	29	17	1.77	1132.66	1130	6	2.02E-03	29.4	
18	0	583.18	26	33	1.77	1165.59	1162	7	1.80E-03	41.8	
19	0	608.80	66	72	2.15	1216.80	1211	12	4.56E-03	28.6	
20	0	664.06	22	74	0.70	1327.26	1319	16	1.55E-03	89.8	
21	0	693.22	13	32	1.36	1385.55	1384	7	8.81E-04	78.9	
22	0	749.71	18	14	1.19	1498.46	1496	6	1.25E-03	40.2	
23	0	767.27	8	52	4.03	1533.57	1528	14	5.47E-04	198.0	
24	0	785.95	12	22	1.47	1570.91	1567	8	8.49E-04	72.3	
25	0	835.37	21	27	0.50	1669.71	1663	10	1.46E-03	51.2	
26	0	882.79	53	72	17.31	1764.51	1745	42	3.67E-03	56.7	
27	0	909.38	54	50	5.21	1817.66	1804	22	3.75E-03	35.9	
28	0	976.29	23	11	4.40	1951.43	1947	11	1.60E-03	34.9	
29	0	1085.17	9	4	1.21	2169.14	2166	6	5.98E-04	51.6	
30	0	1120.57	22	29	5.09	2239.91	2233	15	1.52E-03	58.3	
31	0	1240.84	14	9	1.47	2480.41	2477	8	9.37E-04	48.0	
32	0	1276.76	36	30	7.52	2552.25	2542	23	2.51E-03	45.0	
33	0	1401.16	8	5	0.94	2801.02	2799	5	5.37E-04	56.8	
34	0	1460.05	43	15	1.40	2918.78	2914	13	2.95E-03	24.8	
35	0	1528.18	5	14	6.20	3055.06	3048	15	3.71E-04	162.4	
36	0	1533.55	8	15	3.38	3065.80	3063	11	5.81E-04	93.2	
37	0	1762.74	33	19	1.73	3524.22	3517	15	2.30E-03	33.3	
38	0	1848.36	14	19	10.92	3695.51	3684	27	9.57E-04	94.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	2016.67	11	9	2.71	4032.23	4028	16	7.57E-04	66.2	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:43:56.47

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579004.CNF;1
Sample date      : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:41:49
Sample ID        : G145579004           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA6               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.22  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1922827
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	13	10.67*	4.916E-01	2.391E+01	2.391E+01	181.75
MN-54	834.83	12	99.83*	7.851E-01	1.407E+00	1.501E+00	199.70
CO-57	122.06	66	85.51*	2.319E+00	3.124E+00	3.366E+00	85.84
	136.47	------	10.47	2.334E+00	------ Line Not Found		------
NB-95	765.79	8	99.81*	8.421E-01	8.802E-01	1.566E+00	396.09
CE-141	145.44	71	48.40*	2.323E+00	5.902E+00	1.099E+01	89.55
BI-210	46.50	39	4.05*	2.315E-01	3.939E+02	3.949E+02	138.42
PB-210	46.50	39	4.05*	2.315E-01	3.939E+02	3.949E+02	138.42
TH-228	84.40	------	1.21	1.733E+00	------ Line Not Found		------
	238.60	16	44.60*	1.890E+00	1.807E+00	1.860E+00	393.85
	300.10	------	3.41	1.646E+00	------ Line Not Found		------
TH-232	238.59	16	44.60*	1.890E+00	1.807E+00	1.807E+00	393.85
	911.20	30	27.70	7.309E-01	1.410E+01	1.410E+01	136.58
	964.40	------	5.20	6.952E-01	------ Line Not Found		------
	969.11	------	16.60	6.923E-01	------ Line Not Found		------
U-235	89.95	------	2.70	1.891E+00	------ Line Not Found		------
	93.35	------	4.50	1.972E+00	------ Line Not Found		------
	105.00	49	2.10	2.179E+00	9.986E+01	9.986E+01	101.39
	143.76	71	10.50*	2.323E+00	2.720E+01	2.720E+01	89.55
	163.33	------	4.70	2.259E+00	------ Line Not Found		------
	185.71	44	54.00	2.149E+00	3.520E+00	3.520E+00	180.24
	205.31	------	5.00	2.054E+00	------ Line Not Found		------
U-238	63.29	47	3.80*	8.880E-01	1.315E+02	1.315E+02	135.10

Nuclide Type: NATURAL

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
RA-224	240.98	16	3.95*	1.890E+00	2.040E+01	2.100E+01	393.85

Flag: "*" = Keyline

Sample ID : G145579004 Acquisition date : 13-OCT-2005 10:41:49

Total number of lines in spectrum	34	
Number of unidentified lines	13	
Number of lines tentatively identified by NID	21	61.76%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.391E+01	2.391E+01	4.346E+01	181.75	
MN-54	312.70D	1.07	1.407E+00	1.501E+00	2.998E+00	199.70	
CO-57	270.90D	1.08	3.124E+00	3.366E+00	2.889E+00	85.84	
NB-95	35.06D	1.78	8.802E-01	1.566E+00	6.201E+00	396.09	
CE-141	32.50D	1.86	5.902E+00	1.099E+01	0.984E+01	89.55	
BI-210	22.26Y	1.00	3.939E+02	3.949E+02	5.466E+02	138.42	
PB-210	22.26Y	1.00	3.939E+02	3.949E+02	5.466E+02	138.42	
TH-228	1.91Y	1.03	1.807E+00	1.860E+00	7.325E+00	393.85	
TH-232	1.41E+10Y	1.00	1.807E+00	1.807E+00	7.116E+00	393.85	
U-235	7.04E+08Y	1.00	2.720E+01	2.720E+01	2.436E+01	89.55	
U-238	4.47E+09Y	1.00	1.315E+02	1.315E+02	1.776E+02	135.10	
Total Activity :			9.853E+02	9.934E+02			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RA-224	1.91Y	1.03	2.040E+01	2.100E+01	8.271E+01	393.85	
Total Activity :			2.040E+01	2.100E+01			

Grand Total Activity :	1.006E+03	1.014E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579004 Acquisition date : 13-OCT-2005 10:41:49

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	35.29	32	186	1.51	70.68	68	6	2.21E-03	****	2.09E-02	
0	66.77	88	210	1.45	133.56	131	6	6.12E-03	59.9	1.04E+00	T
0	140.11	104	302	1.04	280.11	276	9	7.22E-03	66.9	2.33E+00	T
0	258.33	23	128	1.50	516.35	516	7	1.63E-03	****	1.81E+00	
0	492.44	62	42	2.84	984.23	979	10	4.32E-03	46.6	1.18E+00	T
0	526.17	52	72	2.47	1051.63	1045	15	3.64E-03	75.4	1.13E+00	T
0	566.71	29	17	1.77	1132.66	1130	6	2.02E-03	58.7	1.07E+00	T
0	608.80	30	72	2.15	1216.80	1211	12	2.11E-03	****	1.01E+00	T
0	664.06	22	74	0.70	1327.26	1319	16	1.55E-03	****	9.45E-01	T
0	693.22	13	32	1.36	1385.55	1384	7	8.81E-04	****	9.14E-01	T
0	749.71	18	14	1.19	1498.46	1496	6	1.25E-03	80.4	8.58E-01	T
0	785.95	3	22	1.47	1570.91	1567	8	1.93E-04	****	8.26E-01	
0	882.79	53	72	17.31	1764.51	1745	42	3.67E-03	****	7.50E-01	T
0	976.29	16	11	4.40	1951.43	1947	11	1.08E-03	****	6.88E-01	
0	1085.17	9	4	1.21	2169.14	2166	6	5.98E-04	****	6.28E-01	
0	1240.84	14	9	1.47	2480.41	2477	8	9.37E-04	96.0	5.60E-01	
0	1276.76	36	30	7.52	2552.25	2542	23	2.51E-03	90.0	5.47E-01	
0	1401.16	4	5	0.94	2801.02	2799	5	2.73E-04	****	5.07E-01	
0	1528.18	2	14	6.20	3055.06	3048	15	1.10E-04	****	4.75E-01	
0	1533.55	8	15	3.38	3065.80	3063	11	5.81E-04	****	4.74E-01	
0	1762.74	9	19	1.73	3524.22	3517	15	5.99E-04	****	4.33E-01	
0	1848.36	14	19	10.92	3695.51	3684	27	9.57E-04	****	4.22E-01	
0	2016.67	11	9	2.71	4032.23	4028	16	7.57E-04	****	4.07E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:44:07.96

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579004.CNF;1     *
* Acquisition date : 13-OCT-2005 10:41:49  Detector SN#    : 1922827          *
* Detector ID      : GAMMA6                Sensitivity     : 3.00000          *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000          *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000         *
* Elapsed real time: 0 04:00:01.22         Half life ratio : 8.00000          *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 14-SEP-2005 09:32:00  Nuclide Library : EPI              *
* Sample ID        : G145579004            Analyst initials: MJH1             *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 3-DEC-2004 08:44:54.61MS Isotope      :            *
* MSD DPM          :                       MSD Isotope     :            *
* LCS DPM          :                       LCS Isotope     :            *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	2.391E+01	4.346E+01	3.587E+01	0.000E+00	0.667
MN-54	1.501E+00	2.998E+00	3.310E+00	0.000E+00	0.453
CO-57	3.366E+00	2.889E+00	3.612E+00	0.000E+00	0.932
NB-95	1.566E+00	6.201E+00	6.859E+00	0.000E+00	0.228
CE-141	9.412E+00	1.016E+01	1.130E+01	0.000E+00	0.833
BI-210	3.949E+02	5.466E+02	7.184E+02	0.000E+00	0.550
PB-210	3.949E+02	5.466E+02	7.184E+02	0.000E+00	0.550
RA-224	2.100E+01	8.271E+01	7.685E+01	0.000E+00	0.273
TH-228	1.860E+00	7.325E+00	7.113E+00	0.000E+00	0.261
TH-232	1.807E+00	7.116E+00	6.910E+00	0.000E+00	0.261
U-235	2.720E+01	2.436E+01	2.987E+01	0.000E+00	0.911
U-238	1.315E+02	1.776E+02	1.876E+02	0.000E+00	0.701

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	2.935E+01		2.460E+01	4.832E+01	0.000E+00	0.607

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	3.486E+00		2.553E+00	5.425E+00	0.000E+00	0.643
AL-26	9.986E-01		2.272E+00	4.592E+00	0.000E+00	0.217
SC-46	-2.321E-02		2.317E+00	4.182E+00	0.000E+00	-0.006
V-48	2.585E+00		7.677E+00	1.422E+01	0.000E+00	0.182
CR-51	1.430E+01		3.618E+01	6.355E+01	0.000E+00	0.225
CO-56	-1.223E+00		2.472E+00	4.173E+00	0.000E+00	-0.293
CO-58	-3.683E-01		2.294E+00	4.081E+00	0.000E+00	-0.090
FE-59	3.284E+00		5.791E+00	1.160E+01	0.000E+00	0.283
CO-60	8.323E-01		2.632E+00	5.033E+00	0.000E+00	0.165
ZN-65	-2.773E+00		4.734E+00	8.243E+00	0.000E+00	-0.336
SE-75	1.280E+00		3.603E+00	6.294E+00	0.000E+00	0.203
KR-85	-1.775E+03		6.460E+02	9.668E+02	0.000E+00	-1.836
SR-85	-1.054E+01		3.836E+00	5.741E+00	0.000E+00	-1.836
Y-88	1.506E-01		2.163E+00	4.288E+00	0.000E+00	0.035
Y-91	-1.825E-01		2.563E+00	4.616E+00	0.000E+00	-0.040
NB-94	3.015E-01		1.757E+00	3.237E+00	0.000E+00	0.093
ZR-95	4.465E+00		4.672E+00	9.224E+00	0.000E+00	0.484
RU-103	-1.777E+00		3.257E+00	5.651E+00	0.000E+00	-0.314
RH-106	-9.799E+00		2.058E+01	3.541E+01	0.000E+00	-0.277
RU-106	-8.867E+00		2.030E+01	3.509E+01	0.000E+00	-0.253
AG-108M	1.659E-01		2.213E+00	3.771E+00	0.000E+00	0.044
CD-109	4.826E+00		6.425E+01	1.040E+02	0.000E+00	0.046
AG-110M	1.218E+00		2.371E+00	4.012E+00	0.000E+00	0.304
SN-113	-3.537E+00		3.179E+00	4.885E+00	0.000E+00	-0.724
SN-115	1.192E+02		2.557E+02	4.791E+02	0.000E+00	0.249
SN-117M	2.452E+00		8.405E+00	1.487E+01	0.000E+00	0.165
TE-123M	8.475E-01		2.342E+00	4.153E+00	0.000E+00	0.204
SB-124	-1.545E+00		6.300E+00	1.137E+01	0.000E+00	-0.136
SB-125	-7.493E-01		6.197E+00	1.039E+01	0.000E+00	-0.072
TE-125M	4.891E+02		8.670E+02	1.571E+03	0.000E+00	0.311
I-126	4.509E+00		2.208E+01	3.637E+01	0.000E+00	0.124
SB-126	-7.201E+00		1.774E+01	3.056E+01	0.000E+00	-0.236
SN-126	1.652E+00		6.223E+00	1.019E+01	0.000E+00	0.162
SB-127	4.504E+02		9.570E+02	1.808E+03	0.000E+00	0.249
I-131	4.639E+00		2.644E+01	4.563E+01	0.000E+00	0.102
BA-133	2.679E-01		3.124E+00	5.337E+00	0.000E+00	0.050
CS-134	6.845E-01		2.333E+00	4.320E+00	0.000E+00	0.158
CS-135	-2.673E+00		1.126E+01	1.903E+01	0.000E+00	-0.140
CS-136	-9.859E-01		1.335E+01	2.342E+01	0.000E+00	-0.042
BA-137M	1.154E+00		2.431E+00	4.065E+00	0.000E+00	0.284
CS-137	1.215E+00		2.570E+00	4.296E+00	0.000E+00	0.283
CE-139	-9.538E-01		2.511E+00	4.297E+00	0.000E+00	-0.222
BA-140	1.744E+01		3.590E+01	6.715E+01	0.000E+00	0.260
CE-144	4.226E+00		1.689E+01	2.996E+01	0.000E+00	0.141
PM-144	2.783E-01		2.279E+00	3.658E+00	0.000E+00	0.076
PM-146	1.666E+00		2.831E+00	5.340E+00	0.000E+00	0.312
ND-147	-1.446E+01		8.782E+01	1.382E+02	0.000E+00	-0.105
PM-147	-1.420E+06		4.708E+06	7.358E+06	0.000E+00	-0.193

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
EU-152	2.316E+00		6.137E+00	1.082E+01	0.000E+00	0.214
GD-153	1.762E-01		6.176E+00	1.103E+01	0.000E+00	0.016
EU-154	9.659E+00		7.079E+00	1.504E+01	0.000E+00	0.642
EU-155	1.024E+01	+	1.039E+01	1.579E+01	0.000E+00	0.649
TB-160	-1.037E+00		8.211E+00	1.463E+01	0.000E+00	-0.071
TM-171	5.184E+03	+	3.103E+03	4.571E+03	0.000E+00	1.134
HF-181	-4.301E+00		3.238E+00	5.242E+00	0.000E+00	-0.821
TA-182	2.369E+00		7.779E+00	1.565E+01	0.000E+00	0.151
IR-192	1.143E+00		2.894E+00	5.058E+00	0.000E+00	0.226
HG-203	2.579E+00		3.631E+00	6.466E+00	0.000E+00	0.399
BI-207	-1.258E+00		3.042E+00	5.091E+00	0.000E+00	-0.247
TL-208	7.735E-01		2.368E+00	4.364E+00	0.000E+00	0.177
BI-211	1.954E+01		1.450E+01	2.682E+01	0.000E+00	0.729
PB-211	4.572E+01		5.951E+01	1.076E+02	0.000E+00	0.425
BI-212	1.354E+01		1.689E+01	3.266E+01	0.000E+00	0.415
PB-212	1.860E+00	+	7.325E+00	8.509E+00	0.000E+00	0.219
BI-214	6.090E+00	+	8.048E+00	1.015E+01	0.000E+00	0.600
PB-214	6.035E+00		5.080E+00	9.302E+00	0.000E+00	0.649
RN-219	-1.235E+01		2.684E+01	4.382E+01	0.000E+00	-0.282
RA-223	5.362E+00		4.522E+01	7.783E+01	0.000E+00	0.069
RA-226	6.090E+00	+	8.048E+00	1.015E+01	0.000E+00	0.600
AC-227	4.280E+00		3.054E+01	5.266E+01	0.000E+00	0.081
TH-227	4.209E+00		3.003E+01	5.178E+01	0.000E+00	0.081
AC-228	1.424E+01	+	1.945E+01	1.770E+01	0.000E+00	0.804
RA-228	1.424E+01	+	1.945E+01	1.770E+01	0.000E+00	0.804
TH-229	-3.062E+01		3.862E+01	6.434E+01	0.000E+00	-0.476
TH-230	6.090E+00	+	8.048E+00	1.015E+01	0.000E+00	0.600
PA-231	-7.532E+00		1.050E+02	1.795E+02	0.000E+00	-0.042
TH-231	7.533E-01		1.285E+01	2.211E+01	0.000E+00	0.034
PA-233	-2.229E+00		4.623E+00	7.638E+00	0.000E+00	-0.292
PA-234	1.354E+01		1.859E+01	3.566E+01	0.000E+00	0.380
PA-234M	1.251E+02		2.417E+02	4.616E+02	0.000E+00	0.271
TH-234	1.315E+02	+	1.776E+02	2.143E+02	0.000E+00	0.613
U-234	-9.047E+00		1.040E+01	1.680E+01	0.000E+00	-0.539
NP-237	1.251E+00		1.875E+01	3.039E+01	0.000E+00	0.041
NP-239	1.282E+00		1.525E+01	2.704E+01	0.000E+00	0.047
AM-241	-4.680E+00		1.414E+01	2.289E+01	0.000E+00	-0.204
AM-242	2.077E+02	+	2.106E+02	3.097E+02	0.000E+00	0.671
CM-247	-1.061E+00		2.411E+00	3.943E+00	0.000E+00	-0.269
CF-249	-1.057E-01		2.722E+00	4.608E+00	0.000E+00	-0.023
CF-251	1.755E+00		9.888E+00	1.730E+01	0.000E+00	0.101
ANH-511	1.689E+01		3.083E+00	6.636E+00	0.000E+00	2.545

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          Environmental Physics, Inc.                  *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579004        *
* Acquisition date : 13-OCT-2005 10:41:49 Detector SN#    : 1922827     *
* Detector ID      : GAMMA6               Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.22     Half life ratio : 8.000       *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 14-SEP-2005 09:32:00 Nuclide Library : FERMC       *
* Sample ID        : G145579004           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME :  3-DEC-2004 08:44:54 MS Isotope      :             *
* MSD DPM          : ********            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	2.391E+01	4.346E+01	1.552E+01	2.173E+01
MN-54	1.501E+00	2.998E+00	1.483E+00	1.499E+00
CO-57	3.366E+00	2.889E+00	1.738E+00	1.445E+00
NB-95	1.566E+00	6.201E+00	3.163E+00	3.101E+00
CE-141	9.412E+00	1.016E+01	5.441E+00	5.082E+00
BI-210	3.949E+02	5.466E+02	3.439E+02	2.733E+02
PB-210	3.949E+02	5.466E+02	3.439E+02	2.733E+02
RA-224	2.100E+01	8.271E+01	3.669E+01	4.135E+01
TH-228	1.860E+00	7.325E+00	3.403E+00	3.663E+00
TH-232	1.807E+00	7.116E+00	3.306E+00	3.558E+00
U-235	2.720E+01	2.436E+01	1.442E+01	1.218E+01
U-238	1.315E+02	1.776E+02	9.005E+01	8.881E+01

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	2.935E+01	2.460E+01	2.270E+01	1.230E+01	NOT IDENT.
NA-22	3.486E+00	2.553E+00	2.477E+00	1.277E+00	NOT IDENT.
NA-24	-2.384E+13	2.210E+14	0.000E+00	1.105E+14	SHORT HLIF
AL-26	9.986E-01	2.272E+00	1.999E+00	1.136E+00	NOT IDENT.
SC-46	-2.321E-02	2.317E+00	1.875E+00	1.158E+00	NOT IDENT.
V-48	2.585E+00	7.677E+00	6.455E+00	3.839E+00	NOT IDENT.
CR-51	1.430E+01	3.618E+01	3.009E+01	1.809E+01	NOT IDENT.
CO-56	-1.223E+00	2.472E+00	1.876E+00	1.236E+00	NOT IDENT.
MN-56	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-58	-3.683E-01	2.294E+00	1.830E+00	1.147E+00	NOT IDENT.
FE-59	3.284E+00	5.791E+00	5.231E+00	2.895E+00	NOT IDENT.
CO-60	8.323E-01	2.632E+00	2.275E+00	1.316E+00	NOT IDENT.
ZN-65	-2.773E+00	4.734E+00	3.680E+00	2.367E+00	NOT IDENT.
SE-75	1.280E+00	3.603E+00	3.007E+00	1.801E+00	FAIL ABUN
KR-85	-1.775E+03	6.460E+02	4.579E+02	3.230E+02	NOT IDENT.

SR-85	-1.054E+01	3.836E+00	2.719E+00	1.918E+00	NOT IDENT.
Y-88	1.506E-01	2.163E+00	1.780E+00	1.081E+00	NOT IDENT.
Y-91	-1.825E-01	2.563E+00	2.134E+00	1.282E+00	NOT IDENT.
NB-94	3.015E-01	1.757E+00	1.479E+00	8.787E-01	NOT IDENT.
NB-95M	-2.300E+03	1.993E+03	0.000E+00	9.964E+02	SHORT HLIF
ZR-95	4.465E+00	4.672E+00	4.244E+00	2.336E+00	NOT IDENT.
MO-99	7.801E+03	5.221E+03	0.000E+00	2.611E+03	SHORT HLIF
TC-99M	4.875E+35	3.263E+35	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.777E+00	3.257E+00	2.624E+00	1.629E+00	FAIL ABUN
RH-106	-9.799E+00	2.058E+01	1.634E+01	1.029E+01	NOT IDENT.
RU-106	-8.867E+00	2.030E+01	1.617E+01	1.015E+01	NOT IDENT.
AG-108M	1.659E-01	2.213E+00	1.766E+00	1.106E+00	NOT IDENT.
CD-109	4.826E+00	6.425E+01	5.015E+01	3.212E+01	NOT IDENT.
AG-110M	1.218E+00	2.371E+00	1.854E+00	1.186E+00	FAIL ABUN
SN-113	-3.537E+00	3.179E+00	2.275E+00	1.590E+00	NOT IDENT.
CD-115	1.300E+05	9.801E+04	0.000E+00	4.900E+04	SHORT HLIF
SN-115	1.192E+02	2.557E+02	2.187E+02	1.278E+02	NOT IDENT.
SN-117M	2.452E+00	8.405E+00	7.154E+00	4.203E+00	NOT IDENT.
TE-123M	8.475E-01	2.342E+00	1.999E+00	1.171E+00	NOT IDENT.
SB-124	-1.545E+00	6.300E+00	4.870E+00	3.150E+00	NOT IDENT.
SB-125	-7.493E-01	6.197E+00	4.860E+00	3.099E+00	NOT IDENT.
TE-125M	4.891E+02	8.670E+02	7.574E+02	4.335E+02	NOT IDENT.
I-126	4.509E+00	2.208E+01	1.660E+01	1.104E+01	NOT IDENT.
SB-126	-7.201E+00	1.774E+01	1.393E+01	8.871E+00	FAIL ABUN
SN-126	1.652E+00	6.223E+00	4.909E+00	3.111E+00	FAIL ABUN
SB-127	4.504E+02	9.570E+02	8.311E+02	4.785E+02	NOT IDENT.
I-131	4.639E+00	2.644E+01	2.150E+01	1.322E+01	NOT IDENT.
I-132	1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-2.216E+02	9.704E+02	0.000E+00	4.852E+02	SHORT HLIF
BA-133	2.679E-01	3.124E+00	2.525E+00	1.562E+00	NOT IDENT.
I-133	-3.826E+09	2.826E+10	0.000E+00	1.413E+10	SHORT HLIF
CS-134	6.845E-01	2.333E+00	1.974E+00	1.166E+00	NOT IDENT.
CS-135	-2.673E+00	1.126E+01	9.069E+00	5.631E+00	NOT IDENT.
I-135	-7.845E+31	5.190E+32	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-9.859E-01	1.335E+01	1.057E+01	6.676E+00	FAIL ABUN
BA-137M	1.154E+00	2.431E+00	1.884E+00	1.216E+00	NOT IDENT.
CS-137	1.215E+00	2.570E+00	1.991E+00	1.285E+00	NOT IDENT.
CE-139	-9.538E-01	2.511E+00	2.068E+00	1.255E+00	NOT IDENT.
BA-140	1.744E+01	3.590E+01	3.137E+01	1.795E+01	NOT IDENT.
LA-140	1.240E+05	4.146E+05	0.000E+00	2.073E+05	SHORT HLIF
CE-143	7.342E+05	1.091E+07	0.000E+00	5.455E+06	SHORT HLIF
CE-144	4.226E+00	1.689E+01	1.445E+01	8.444E+00	NOT IDENT.
PM-144	2.783E-01	2.279E+00	1.682E+00	1.139E+00	NOT IDENT.
PR-144	1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	1.666E+00	2.831E+00	2.508E+00	1.415E+00	NOT IDENT.
ND-147	-1.446E+01	8.782E+01	6.366E+01	4.391E+01	NOT IDENT.
PM-147	-1.420E+06	4.708E+06	3.541E+06	2.354E+06	NOT IDENT.
PM-149	3.502E+04	5.237E+05	0.000E+00	2.619E+05	SHORT HLIF
EU-152	2.316E+00	6.137E+00	5.093E+00	3.069E+00	FAIL ABUN
GD-153	1.762E-01	6.176E+00	5.303E+00	3.088E+00	NOT IDENT.
EU-154	9.659E+00	7.079E+00	6.867E+00	3.540E+00	FAIL ABUN
EU-155	1.024E+01	1.039E+01	7.615E+00	5.193E+00	FAIL ABUN
TB-160	-1.037E+00	8.211E+00	6.535E+00	4.105E+00	NOT IDENT.
TM-171	5.184E+03	3.103E+03	2.207E+03	1.551E+03	FAIL ABUN
HF-181	-4.301E+00	3.238E+00	2.416E+00	1.619E+00	FAIL ABUN
TA-182	2.369E+00	7.779E+00	6.841E+00	3.889E+00	FAIL ABUN
IR-192	1.143E+00	2.894E+00	2.404E+00	1.447E+00	NOT IDENT.
HG-203	2.579E+00	3.631E+00	3.087E+00	1.815E+00	NOT IDENT.
BI-207	-1.258E+00	3.042E+00	2.281E+00	1.521E+00	NOT IDENT.
TL-208	7.735E-01	2.368E+00	2.034E+00	1.184E+00	NOT IDENT.
BI-211	1.954E+01	1.450E+01	1.276E+01	7.250E+00	NOT IDENT.
PB-211	4.572E+01	5.951E+01	5.060E+01	2.975E+01	NOT IDENT.
BI-212	1.354E+01	1.689E+01	1.508E+01	8.445E+00	NOT IDENT.
PB-212	1.860E+00	7.325E+00	4.102E+00	3.663E+00	FAIL ABUN
BI-214	6.090E+00	8.048E+00	4.805E+00	4.024E+00	FAIL ABUN
PB-214	6.035E+00	5.080E+00	4.424E+00	2.540E+00	NOT IDENT.
RN-219	-1.235E+01	2.684E+01	2.048E+01	1.342E+01	NOT IDENT.
RA-223	5.362E+00	4.522E+01	3.684E+01	2.261E+01	FAIL ABUN
RA-226	6.090E+00	8.048E+00	4.805E+00	4.024E+00	FAIL ABUN
AC-227	4.280E+00	3.054E+01	2.522E+01	1.527E+01	NOT IDENT.
TH-227	4.209E+00	3.003E+01	2.479E+01	1.501E+01	NOT IDENT.
AC-228	1.424E+01	1.945E+01	8.221E+00	9.724E+00	FAIL ABUN
RA-228	1.424E+01	1.945E+01	8.221E+00	9.724E+00	FAIL ABUN
TH-229	-3.062E+01	3.862E+01	3.088E+01	1.931E+01	NOT IDENT.
TH-230	6.090E+00	8.048E+00	4.805E+00	4.024E+00	FAIL ABUN
PA-231	-7.532E+00	1.050E+02	8.512E+01	5.252E+01	NOT IDENT.
TH-231	7.533E-01	1.285E+01	1.053E+01	6.423E+00	NOT IDENT.
PA-233	-2.229E+00	4.623E+00	3.616E+00	2.312E+00	NOT IDENT.

PA-234	1.354E+01	1.859E+01	1.634E+01	9.296E+00	FAIL ABUN
PA-234M	1.251E+02	2.417E+02	2.086E+02	1.208E+02	FAIL ABUN
TH-234	1.315E+02	1.776E+02	1.034E+02	8.881E+01	FAIL ABUN
U-234	-9.047E+00	1.040E+01	8.004E+00	5.201E+00	FAIL ABUN
NP-237	1.251E+00	1.875E+01	1.464E+01	9.377E+00	NOT IDENT.
NP-239	1.282E+00	1.525E+01	1.303E+01	7.624E+00	NOT IDENT.
AM-241	-4.680E+00	1.414E+01	1.095E+01	7.072E+00	NOT IDENT.
AM-242	2.077E+02	2.106E+02	1.491E+02	1.053E+02	FAIL ABUN
CM-247	-1.061E+00	2.411E+00	1.843E+00	1.206E+00	NOT IDENT.
CF-249	-1.057E-01	2.722E+00	2.167E+00	1.361E+00	NOT IDENT.
CF-251	1.755E+00	9.888E+00	8.330E+00	4.944E+00	NOT IDENT.
ANH-511	1.689E+01	3.083E+00	3.209E+00	1.542E+00	NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145579004
ANALYST	: MJH1	DETECTOR	: GAMMA6
SAMPLE DATE	: 14-SEP-2005 09:32:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 10:41:49.66	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 2.449E+02
GROSS GAMMA ERROR (pCi/LITER)	: 1.763E+02
GROSS GAMMA MDA (pCi/LITER)	: 5.788E+02
GROSS GAMMA DLC (pCi/LITER)	: 2.778E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:45:03.14

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579005.CNF;1
Sample date      : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:42:14
Sample ID        : G145579005           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA7               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.61  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1943199
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	5	63.30*	9	227	1.68	126.99	122	15	6.10E-04	349.7	1.36E+00
2	5	66.28*	100	151	1.49	132.96	122	15	6.97E-03	25.9	
3	0	77.24*	44	175	2.19	154.88	152	8	3.07E-03	58.8	
4	0	92.73*	8	243	0.89	185.89	181	10	5.56E-04	422.9	
5	0	139.94	83	259	1.11	280.35	275	12	5.77E-03	40.2	
6	0	175.63	21	135	0.96	351.75	346	7	1.47E-03	93.7	
7	0	186.02*	28	260	1.24	372.54	366	14	1.93E-03	137.0	
8	0	198.49*	19	162	2.23	397.49	394	8	1.34E-03	132.4	
9	0	238.89*	34	191	0.90	478.35	472	12	2.37E-03	93.7	
10	0	352.44*	21	73	2.43	705.56	700	12	1.46E-03	101.3	
11	0	382.93*	13	58	0.69	766.58	763	9	9.12E-04	115.9	
12	0	411.09*	63	100	4.23	822.93	813	20	4.39E-03	41.4	
13	0	501.64*	10	23	1.35	1004.14	1002	6	7.06E-04	128.1	
14	0	511.38*	22	111	2.58	1023.65	1016	17	1.51E-03	157.1	
15	0	574.96	27	30	4.02	1150.90	1146	11	1.88E-03	43.7	
16	0	583.13*	5	48	1.63	1167.25	1162	12	3.42E-04	343.4	
17	3	595.80	31	45	2.42	1192.61	1185	50	2.13E-03	52.7	1.45E+00
18	3	608.74*	14	45	2.43	1218.50	1185	50	9.82E-04	128.1	
19	6	662.30	12	17	1.37	1325.71	1324	14	8.54E-04	47.4	4.66E+00
20	6	665.79	22	39	2.78	1332.70	1324	14	1.49E-03	60.5	
21	0	751.62	6	12	0.94	1504.48	1501	6	4.28E-04	100.3	
22	0	820.80	11	15	1.49	1642.97	1637	9	7.60E-04	71.6	
23	0	835.60*	6	16	0.83	1672.60	1669	9	4.32E-04	154.1	
24	0	861.29	46	24	1.04	1724.02	1716	19	3.18E-03	29.5	
25	0	1027.83	81	47	19.24	2057.41	2032	47	5.65E-03	32.1	
26	0	1063.33*	0	7	0.80	2128.47	2125	6	1.05E-05	*****	
27	0	1325.97	20	5	0.95	2654.32	2649	10	1.39E-03	30.6	
28	0	1333.86	25	3	3.49	2670.13	2664	13	1.74E-03	24.8	
29	0	1476.30	12	19	0.96	2955.36	2944	15	8.21E-04	85.1	
30	0	1503.12	15	10	3.48	3009.07	3000	20	1.04E-03	57.7	
31	0	1569.47	24	32	11.84	3141.94	3116	43	1.65E-03	84.7	
32	0	1670.78	10	5	8.17	3344.83	3338	20	6.62E-04	66.3	
33	0	1683.49	8	19	0.57	3370.29	3358	26	5.39E-04	159.8	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:45:07

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579005.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:42:14
Sample ID : G145579005 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry : 3190-H
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:02.61 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.24 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 4.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MN-54	+	834.83	*	7.740E-01	2.386E+00	3.528E+00	0.000E+00	0.219
BA-137M	+	661.65	*	1.329E+00	1.260E+00	3.305E+00	0.000E+00	0.402
CS-137	+	661.66	*	1.405E+00	1.332E+00	3.494E+00	0.000E+00	0.402
TL-208		75.00		3.025E+01	6.479E+01	1.067E+02	0.000E+00	0.283
		277.35		-3.566E+00	2.120E+01	3.740E+01	0.000E+00	-0.095
	+	510.84		8.297E+00	2.607E+01	1.555E+01	0.000E+00	0.534
	+	583.14	*	5.307E-01	3.645E+00	3.727E+00	0.000E+00	0.142
		763.30		2.147E+00	1.078E+02	1.969E+02	0.000E+00	0.011
	+	860.37		4.514E+01	2.665E+01	2.718E+01	0.000E+00	1.661
		1093.90		4.279E+01	4.879E+02	9.373E+02	0.000E+00	0.046
BI-211	+	351.07	*	9.956E+00	2.018E+01	2.041E+01	0.000E+00	0.488
RA-226		295.21		8.036E-01	7.701E+00	1.377E+01	0.000E+00	0.058
	+	351.92		3.463E+00	7.019E+00	6.611E+00	0.000E+00	0.524
	+	609.31	*	2.781E+00	7.123E+00	6.338E+00	0.000E+00	0.439
TH-228		84.40		3.038E+01	1.410E+02	2.508E+02	0.000E+00	0.121
	+	238.60	*	3.728E+00	6.989E+00	6.037E+00	0.000E+00	0.618
		300.10		-1.331E+01	4.420E+01	7.693E+01	0.000E+00	-0.173
TH-230		295.21		8.036E-01	7.701E+00	1.376E+01	0.000E+00	0.058
	+	351.92		3.463E+00	7.019E+00	6.611E+00	0.000E+00	0.524
	+	609.31	*	2.780E+00	7.122E+00	6.337E+00	0.000E+00	0.439
TH-234	+	63.29	*	2.179E+01	1.524E+02	1.513E+02	0.000E+00	0.144
	+	92.38		6.578E+00	5.564E+01	4.797E+01	0.000E+00	0.137
		112.81		-5.742E+02	5.851E+02	9.589E+02	0.000E+00	-0.599
U-238	+	63.29	*	2.179E+01	1.524E+02	1.513E+02	0.000E+00	0.144
ANH-511	+	511.00	*	1.740E+00	5.465E+00	3.261E+00	0.000E+00	0.533

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	5.779E+00	2.326E+01	4.149E+01	0.000E+00	0.139
NA-22		1274.53	*	2.531E+00	2.451E+00	5.029E+00	0.000E+00	0.503
AL-26	+	511.00		1.063E+00	3.340E+00	1.993E+00	0.000E+00	0.533
		1808.65	*	3.669E-01	2.134E+00	4.231E+00	0.000E+00	0.087

Sample ID : G145579005 Acquisition date : 13-OCT-2005 10:42:14

---- Non-Identified Nuclides ----

Nuclide		Line Energy (KEV)	Ided	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40		1460.81	*		3.624E+01	2.312E+01	5.044E+01	0.000E+00	0.719
SC-46		889.25	*		3.676E-01	2.616E+00	4.762E+00	0.000E+00	0.077
		1120.51			2.026E+00	2.584E+00	5.272E+00	0.000E+00	0.384
V-48		944.10			1.697E+01	7.416E+01	1.413E+02	0.000E+00	0.120
		983.50	*		4.787E+00	6.537E+00	1.304E+01	0.000E+00	0.367
		1312.09			-7.784E-01	7.108E+00	1.320E+01	0.000E+00	-0.059
		2240.34			0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*		7.344E+00	3.207E+01	5.768E+01	0.000E+00	0.127
CO-56		846.75	*		-4.592E-01	2.344E+00	4.150E+00	0.000E+00	-0.111
		1037.82			-1.277E+00	2.385E+01	3.616E+01	0.000E+00	-0.035
		1238.25			1.522E+00	4.154E+00	8.081E+00	0.000E+00	0.188
CO-57		122.06	*		-2.559E-01	1.626E+00	2.783E+00	0.000E+00	-0.092
		136.47			-1.014E+01	1.545E+01	2.249E+01	0.000E+00	-0.451
CO-58		810.78	*		-3.596E-01	2.599E+00	4.614E+00	0.000E+00	-0.078
FE-59		192.35			1.760E+01	7.282E+01	1.244E+02	0.000E+00	0.142
		1099.25	*		-1.643E+00	5.438E+00	9.822E+00	0.000E+00	-0.167
		1291.60			4.190E+00	7.872E+00	1.566E+01	0.000E+00	0.268
CO-60		1173.24			1.754E+00	1.841E+00	3.920E+00	0.000E+00	0.447
	+	1332.50	*		4.294E+00	2.125E+00	4.399E+00	0.000E+00	0.976
ZN-65		1115.55	*		7.154E-01	4.574E+00	8.657E+00	0.000E+00	0.083
SE-75	+	66.05			9.628E+02	4.992E+02	5.927E+02	0.000E+00	1.625
		96.73			-1.117E+01	4.824E+01	8.335E+01	0.000E+00	-0.134
		121.11			-7.582E+00	9.344E+00	1.539E+01	0.000E+00	-0.493
		136.00			-1.361E+00	2.964E+00	4.384E+00	0.000E+00	-0.310
	+	198.60			6.712E+01	1.777E+02	1.945E+02	0.000E+00	0.345
		264.65	*		3.659E-01	2.927E+00	5.250E+00	0.000E+00	0.070
		279.53			2.053E+00	6.659E+00	1.210E+01	0.000E+00	0.170
		303.91			4.692E+01	1.317E+02	2.393E+02	0.000E+00	0.196
		400.65			1.264E+01	1.590E+01	2.976E+01	0.000E+00	0.425
KR-85		513.99	*		1.416E+03	5.900E+02	1.075E+03	0.000E+00	1.318
SR-85		513.99	*		8.479E+00	3.532E+00	6.434E+00	0.000E+00	1.318
Y-88		898.02			-1.331E+00	2.558E+00	4.308E+00	0.000E+00	-0.309
		1836.01	*		5.045E-01	2.644E+00	5.247E+00	0.000E+00	0.096
Y-91		557.57	*		1.278E+00	2.576E+00	4.686E+00	0.000E+00	0.273
		1204.90			-1.730E+02	9.698E+02	1.770E+03	0.000E+00	-0.098
NB-94		702.63	*		-1.602E+00	1.978E+00	3.289E+00	0.000E+00	-0.487
		871.10			3.829E-01	1.720E+00	3.223E+00	0.000E+00	0.119
NB-95		765.79	*		1.640E+00	2.870E+00	5.621E+00	0.000E+00	0.292
ZR-95		724.18			-2.934E+00	5.830E+00	1.001E+01	0.000E+00	-0.293
		756.74	*		6.202E+00	4.428E+00	9.177E+00	0.000E+00	0.676
RU-103		497.08	*		-2.222E+00	3.185E+00	5.172E+00	0.000E+00	-0.430
	+	610.33			3.893E+01	9.972E+01	8.886E+01	0.000E+00	0.438
RH-106	+	511.85			8.935E+00	2.807E+01	1.677E+01	0.000E+00	0.533
		621.84	*		7.750E+00	1.847E+01	3.497E+01	0.000E+00	0.222
		1050.47			3.975E+01	1.271E+02	2.365E+02	0.000E+00	0.168
RU-106		622.20	*		7.763E+00	1.849E+01	3.499E+01	0.000E+00	0.222
AG-108M		433.93	*		7.337E-01	1.869E+00	3.398E+00	0.000E+00	0.216
		614.37			-2.984E-01	2.256E+00	3.535E+00	0.000E+00	-0.084
		722.95			-1.725E-01	2.242E+00	4.029E+00	0.000E+00	-0.043

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CD-109		88.03	*	1.829E+01	4.397E+01	7.882E+01	0.000E+00	0.232
AG-110M		657.75	*	-6.983E-01	1.835E+00	3.230E+00	0.000E+00	-0.216
		677.61		3.922E+00	1.791E+01	3.325E+01	0.000E+00	0.118
		706.67		4.074E+00	1.226E+01	2.285E+01	0.000E+00	0.178
		763.93		-8.391E-01	8.381E+00	1.509E+01	0.000E+00	-0.056
		884.67		1.498E+00	3.031E+00	5.731E+00	0.000E+00	0.261
		937.48		1.840E+00	5.975E+00	1.121E+01	0.000E+00	0.164
		1384.27		1.530E+00	9.656E+00	1.837E+01	0.000E+00	0.083
SN-113		391.69	*	2.144E+00	2.707E+00	5.086E+00	0.000E+00	0.422
SN-115		484.47		-2.605E+02	1.291E+03	2.216E+03	0.000E+00	-0.118
		933.00	*	1.658E+02	2.450E+02	4.726E+02	0.000E+00	0.351
		1290.58		1.385E+02	5.882E+02	1.125E+03	0.000E+00	0.123
SN-117M		156.02		5.149E+01	2.964E+02	5.091E+02	0.000E+00	0.101
		158.56	*	1.919E+00	7.303E+00	1.259E+01	0.000E+00	0.152
TE-123M		159.00	*	1.002E+00	1.906E+00	3.338E+00	0.000E+00	0.300
SB-124		602.73		2.619E+00	2.563E+00	5.053E+00	0.000E+00	0.518
		645.85		1.172E+01	3.387E+01	6.363E+01	0.000E+00	0.184
		713.78		-6.602E+00	9.830E+01	1.784E+02	0.000E+00	-0.037
		722.79		-1.375E+00	2.342E+01	4.217E+01	0.000E+00	-0.033
		1368.16		-1.001E+01	1.010E+02	1.890E+02	0.000E+00	-0.053
		1690.98	*	-9.899E-01	7.841E+00	1.197E+01	0.000E+00	-0.083
SB-125	+	176.33		1.258E+01	2.357E+01	3.473E+01	0.000E+00	0.362
		427.89	*	7.259E-01	5.204E+00	9.275E+00	0.000E+00	0.078
		463.38		-1.742E+00	1.611E+01	2.787E+01	0.000E+00	-0.062
		600.56		8.900E+00	1.001E+01	1.959E+01	0.000E+00	0.454
		606.64		4.502E+01	3.716E+01	7.399E+01	0.000E+00	0.608
		635.90		-6.970E+00	1.477E+01	2.576E+01	0.000E+00	-0.271
TE-125M		109.28	*	5.356E+02	7.144E+02	1.284E+03	0.000E+00	0.417
I-126		388.63		1.336E+01	2.511E+01	4.624E+01	0.000E+00	0.289
	+	666.33	*	2.592E+01	3.135E+01	4.303E+01	0.000E+00	0.602
		753.82		-2.233E+02	2.124E+02	2.760E+02	0.000E+00	-0.809
SB-126	+	666.33		1.120E+01	1.355E+01	1.658E+01	0.000E+00	0.676
		695.00		-6.120E-01	1.113E+01	1.987E+01	0.000E+00	-0.031
		697.00		-1.189E+00	3.707E+01	6.647E+01	0.000E+00	-0.018
		720.50	*	1.271E+01	1.774E+01	3.446E+01	0.000E+00	0.369
SN-126	+	64.28		8.624E+00	6.032E+01	5.719E+01	0.000E+00	0.151
		86.94		8.207E+00	1.820E+01	3.270E+01	0.000E+00	0.251
		87.57	*	1.018E+00	4.381E+00	7.777E+00	0.000E+00	0.131
SB-127		252.40		2.904E+03	3.882E+03	7.195E+03	0.000E+00	0.404
	+	411.60		2.742E+04	2.269E+04	1.706E+04	0.000E+00	1.608
		444.90		-6.172E+03	7.396E+03	1.195E+04	0.000E+00	-0.516
		473.00		1.832E+02	1.444E+03	2.547E+03	0.000E+00	0.072
		543.30		-1.081E+03	1.350E+04	2.334E+04	0.000E+00	-0.046
		603.50		7.706E+03	8.958E+03	1.750E+04	0.000E+00	0.440
		685.70	*	-2.700E+01	1.017E+03	1.854E+03	0.000E+00	-0.015
		698.50		1.247E+03	1.281E+04	2.327E+04	0.000E+00	0.054
		783.70		-3.139E+02	2.526E+03	4.538E+03	0.000E+00	-0.069
I-131		284.30		3.335E+02	3.289E+02	6.185E+02	0.000E+00	0.539
		364.48	*	4.585E+00	2.272E+01	4.096E+01	0.000E+00	0.112

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		636.97		4.898E+01	2.949E+02	5.488E+02	0.000E+00	0.089
BA-133		79.62		7.366E+01	7.765E+01	1.314E+02	0.000E+00	0.561
		81.00		-1.286E+00	5.483E+00	9.539E+00	0.000E+00	-0.135
		276.40		-1.690E+01	2.116E+01	3.577E+01	0.000E+00	-0.472
		302.85		-2.196E+00	8.228E+00	1.435E+01	0.000E+00	-0.153
		356.02	*	-5.479E-01	2.726E+00	4.148E+00	0.000E+00	-0.132
	+	383.85		9.851E+00	2.283E+01	2.812E+01	0.000E+00	0.350
CS-134		563.23		-6.199E+00	1.956E+01	3.290E+01	0.000E+00	-0.188
		569.32		1.688E+00	1.069E+01	1.896E+01	0.000E+00	0.089
		604.70		1.488E+00	1.834E+00	3.571E+00	0.000E+00	0.417
		795.84	*	-1.207E+00	2.101E+00	3.557E+00	0.000E+00	-0.339
		801.93		-7.040E+00	2.166E+01	3.776E+01	0.000E+00	-0.186
		1365.15		1.599E+01	6.032E+01	1.199E+02	0.000E+00	0.133
CS-135		268.24	*	-1.264E+00	9.063E+00	1.601E+01	0.000E+00	-0.079
CS-136	+	66.88		3.193E+02	1.655E+02	1.839E+02	0.000E+00	1.736
		86.36		4.972E+01	1.271E+02	2.275E+02	0.000E+00	0.219
		153.25		6.041E+01	8.616E+01	1.526E+02	0.000E+00	0.396
		163.92		-2.762E+01	1.497E+02	2.509E+02	0.000E+00	-0.110
	+	176.60		3.025E+01	5.669E+01	8.267E+01	0.000E+00	0.366
		273.65		1.315E+01	5.633E+01	1.016E+02	0.000E+00	0.129
		340.55		1.749E+01	1.557E+01	2.951E+01	0.000E+00	0.593
		818.51		2.058E+00	1.073E+01	1.725E+01	0.000E+00	0.119
		1048.07	*	2.106E+00	1.336E+01	2.422E+01	0.000E+00	0.087
		1235.36		1.592E+01	5.071E+01	9.851E+01	0.000E+00	0.162
CE-139		165.85	*	-6.557E-01	2.022E+00	3.363E+00	0.000E+00	-0.195
BA-140		162.67		5.498E+01	1.047E+02	1.829E+02	0.000E+00	0.301
		304.87		6.835E+01	1.621E+02	2.961E+02	0.000E+00	0.231
		423.73		1.232E+01	2.449E+02	4.319E+02	0.000E+00	0.029
		537.31	*	-1.052E+01	3.275E+01	5.515E+01	0.000E+00	-0.191
CE-141		145.44	*	1.340E+00	5.171E+00	8.965E+00	0.000E+00	0.149
CE-144		133.51	*	7.071E+00	1.366E+01	2.404E+01	0.000E+00	0.294
PM-144		476.78		8.902E-01	4.165E+00	7.404E+00	0.000E+00	0.120
		618.01		-1.068E+00	2.104E+00	3.110E+00	0.000E+00	-0.343
		696.49	*	-9.272E-01	2.202E+00	3.807E+00	0.000E+00	-0.244
PM-146		453.88	*	-1.138E+00	2.501E+00	4.201E+00	0.000E+00	-0.271
		633.25		1.854E+01	7.667E+01	1.433E+02	0.000E+00	0.129
		735.93		-5.662E+00	7.319E+00	1.216E+01	0.000E+00	-0.466
		747.24		1.086E+00	5.633E+00	9.151E+00	0.000E+00	0.119
ND-147	+	91.11		8.394E+00	7.100E+01	6.340E+01	0.000E+00	0.132
		531.02	*	-3.010E+01	7.726E+01	1.295E+02	0.000E+00	-0.232
PM-147		121.30	*	-2.361E+06	3.374E+06	5.595E+06	0.000E+00	-0.422
EU-152		121.78		-3.139E+00	4.707E+00	7.818E+00	0.000E+00	-0.402
		344.31	*	-3.094E+00	5.326E+00	9.020E+00	0.000E+00	-0.343
		963.37		3.639E+00	1.343E+01	2.503E+01	0.000E+00	0.145
GD-153		69.67		8.085E+01	1.133E+02	1.895E+02	0.000E+00	0.427
		83.37		-7.391E+02	8.527E+02	1.431E+03	0.000E+00	-0.517
		97.43	*	-4.843E-01	4.729E+00	8.233E+00	0.000E+00	-0.059
		103.18		6.283E+00	6.884E+00	1.254E+01	0.000E+00	0.501
EU-154		123.07		1.803E+00	3.280E+00	5.823E+00	0.000E+00	0.310

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		247.93		8.627E+00	2.030E+01	3.732E+01	0.000E+00	0.231
		591.76		-2.497E+01	3.790E+01	5.492E+01	0.000E+00	-0.455
		723.30		-3.060E+00	9.479E+00	1.660E+01	0.000E+00	-0.184
		756.86		5.768E+01	4.118E+01	8.535E+01	0.000E+00	0.676
		873.20		-6.191E+00	1.589E+01	2.738E+01	0.000E+00	-0.226
		996.30		4.215E-01	2.149E+01	3.832E+01	0.000E+00	0.011
		1004.76		-8.906E+00	1.176E+01	1.890E+01	0.000E+00	-0.471
		1274.51	*	6.999E+00	6.791E+00	1.393E+01	0.000E+00	0.502
EU-155		86.54		2.895E+00	5.360E+00	9.670E+00	0.000E+00	0.299
		105.31	*	-2.698E+00	6.636E+00	1.129E+01	0.000E+00	-0.239
TB-160		86.79		8.764E+00	1.624E+01	2.931E+01	0.000E+00	0.299
		298.57		6.091E-01	7.078E+00	1.265E+01	0.000E+00	0.048
		879.36	*	-2.180E+00	8.701E+00	1.524E+01	0.000E+00	-0.143
		962.29		1.538E+01	2.778E+01	5.373E+01	0.000E+00	0.286
		966.15		-1.248E+01	1.151E+01	1.766E+01	0.000E+00	-0.707
		1177.93		-1.721E+01	1.748E+01	2.812E+01	0.000E+00	-0.612
TM-171		51.87		-1.110E+01	8.457E+02	1.376E+03	0.000E+00	-0.008
		59.40		-1.128E+02	2.520E+03	3.230E+03	0.000E+00	-0.035
	+	66.72	*	5.385E+03	2.792E+03	3.722E+03	0.000E+00	1.447
HF-181		56.28		-1.178E+02	8.966E+01	1.305E+02	0.000E+00	-0.903
		57.53		1.969E+00	4.684E+01	7.612E+01	0.000E+00	0.026
	+	65.20		2.138E+02	1.108E+02	1.364E+02	0.000E+00	1.567
		133.02		1.828E+00	5.290E+00	9.239E+00	0.000E+00	0.198
		136.25		-3.032E+01	4.700E+01	6.847E+01	0.000E+00	-0.443
		345.85		-1.109E-01	1.348E+01	2.389E+01	0.000E+00	-0.005
		482.03	*	-3.881E-01	3.186E+00	5.501E+00	0.000E+00	-0.071
TA-182	+	67.75		2.339E+01	1.213E+01	1.319E+01	0.000E+00	1.773
		100.10		-1.224E+00	1.178E+01	2.044E+01	0.000E+00	-0.060
		222.10		6.572E+00	2.296E+01	3.914E+01	0.000E+00	0.168
		1121.28		1.514E+00	6.874E+00	1.320E+01	0.000E+00	0.115
		1189.05		3.123E+00	1.503E+01	2.881E+01	0.000E+00	0.108
		1221.42	*	-6.232E+00	8.853E+00	1.492E+01	0.000E+00	-0.418
		1230.97		-5.636E+00	2.149E+01	3.871E+01	0.000E+00	-0.146
IR-192		295.96		2.555E+00	6.633E+00	1.208E+01	0.000E+00	0.212
		308.46		-2.234E+00	6.497E+00	1.126E+01	0.000E+00	-0.198
		316.51	*	-1.656E+00	2.237E+00	3.761E+00	0.000E+00	-0.440
		468.07		-4.418E-01	4.419E+00	7.656E+00	0.000E+00	-0.058
		604.41		2.396E+01	2.821E+01	5.505E+01	0.000E+00	0.435
		612.46		9.070E+00	4.085E+01	7.628E+01	0.000E+00	0.119
HG-203		70.83		5.284E+01	7.606E+01	1.395E+02	0.000E+00	0.379
		72.87		-1.948E+00	4.201E+01	7.422E+01	0.000E+00	-0.026
		82.60		-3.380E+01	7.525E+01	1.293E+02	0.000E+00	-0.261
		279.20	*	7.947E-01	2.867E+00	5.197E+00	0.000E+00	0.153
BI-207		569.67		-1.140E-01	1.718E+00	2.963E+00	0.000E+00	-0.038
		897.83		-4.733E+02	1.301E+03	2.240E+03	0.000E+00	-0.211
	+	1063.62	*	2.863E-02	2.383E+00	5.336E+00	0.000E+00	0.005
		1442.20		2.437E+02	1.491E+03	2.836E+03	0.000E+00	0.086
		1770.23		-4.097E+01	3.536E+01	5.484E+01	0.000E+00	-0.747
BI-210		46.50	*	5.214E+01	3.180E+02	4.852E+02	0.000E+00	0.107

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PB-210		46.50	*	5.214E+01	3.180E+02	4.852E+02	0.000E+00	0.107
PB-211		404.84	*	-5.435E+01	6.168E+01	8.486E+01	0.000E+00	-0.641
		427.08		5.934E+01	1.147E+02	2.111E+02	0.000E+00	0.281
		831.96		-3.147E+01	7.665E+01	1.114E+02	0.000E+00	-0.282
BI-212		727.18	*	3.556E+00	1.571E+01	2.916E+01	0.000E+00	0.122
PB-212		74.80		1.036E+00	2.133E+01	3.408E+01	0.000E+00	0.030
		87.30		1.088E+01	2.065E+01	3.725E+01	0.000E+00	0.292
		115.19		5.413E+01	2.290E+02	4.012E+02	0.000E+00	0.135
	+	238.63	*	3.728E+00	6.989E+00	7.344E+00	0.000E+00	0.508
		300.09		-1.328E+01	4.420E+01	7.694E+01	0.000E+00	-0.173
BI-214	+	609.31	*	2.781E+00	7.123E+00	8.674E+00	0.000E+00	0.321
		768.36		-2.964E+01	3.366E+01	5.482E+01	0.000E+00	-0.541
		934.06		2.116E+01	6.325E+01	1.178E+02	0.000E+00	0.180
		1120.29		8.817E+00	1.338E+01	2.693E+01	0.000E+00	0.327
		1238.11		1.395E+01	3.612E+01	7.040E+01	0.000E+00	0.198
		1377.67		3.676E+01	4.842E+01	1.009E+02	0.000E+00	0.364
PB-214		74.81		1.890E+00	3.568E+01	5.703E+01	0.000E+00	0.033
	+	77.11		2.433E+01	2.863E+01	3.550E+01	0.000E+00	0.685
		87.30		1.916E+01	3.637E+01	6.560E+01	0.000E+00	0.292
		241.98		2.681E+01	1.902E+01	3.380E+01	0.000E+00	0.793
		295.21		8.036E-01	7.701E+00	1.377E+01	0.000E+00	0.058
	+	351.92	*	3.463E+00	7.019E+00	7.911E+00	0.000E+00	0.438
RN-219		271.23		1.211E+01	1.386E+01	2.592E+01	0.000E+00	0.467
		401.81	*	6.498E+00	2.336E+01	4.206E+01	0.000E+00	0.154
RA-223		122.32		4.513E+00	1.095E+02	1.894E+02	0.000E+00	0.024
		144.24		1.710E+01	4.475E+01	7.037E+01	0.000E+00	0.243
		154.21		8.441E+00	2.444E+01	4.240E+01	0.000E+00	0.199
		269.46		-8.901E+00	1.099E+01	1.860E+01	0.000E+00	-0.479
		323.87	*	-1.142E+01	4.278E+01	7.403E+01	0.000E+00	-0.154
		338.28		1.175E+00	6.105E+01	1.074E+02	0.000E+00	0.011
		445.03		-1.325E+02	1.245E+02	1.959E+02	0.000E+00	-0.676
RA-224		240.98	*	6.339E+01	3.916E+01	7.002E+01	0.000E+00	0.905
AC-227		79.80		9.555E+01	9.943E+01	1.684E+02	0.000E+00	0.567
		236.00		3.770E+00	1.548E+01	2.335E+01	0.000E+00	0.161
		256.20	*	-7.684E+00	2.475E+01	4.327E+01	0.000E+00	-0.178
		286.10		4.887E+01	9.923E+01	1.808E+02	0.000E+00	0.270
		299.80		-5.555E+00	8.116E+01	1.435E+02	0.000E+00	-0.039
		304.40		6.062E+01	1.092E+02	2.010E+02	0.000E+00	0.302
		329.70		-2.615E+01	5.510E+01	9.409E+01	0.000E+00	-0.278
		334.20		5.830E+01	1.439E+02	2.601E+02	0.000E+00	0.224
TH-227		79.80		9.387E+01	9.768E+01	1.655E+02	0.000E+00	0.567
	+	94.00		2.542E+01	2.150E+02	1.813E+02	0.000E+00	0.140
		236.00		3.708E+00	1.522E+01	2.296E+01	0.000E+00	0.161
		256.20	*	-7.554E+00	2.433E+01	4.254E+01	0.000E+00	-0.178
		286.10		4.807E+01	9.761E+01	1.779E+02	0.000E+00	0.270
		299.80		-5.450E+00	7.963E+01	1.408E+02	0.000E+00	-0.039
		304.40		5.956E+01	1.073E+02	1.975E+02	0.000E+00	0.302
		329.70		-2.572E+01	5.420E+01	9.255E+01	0.000E+00	-0.278
		334.20		5.714E+01	1.410E+02	2.549E+02	0.000E+00	0.224

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AC-228		209.25		2.399E+01	3.154E+01	5.568E+01	0.000E+00	0.431
		338.32		3.260E-01	1.477E+01	2.600E+01	0.000E+00	0.013
		463.01		3.813E+00	3.752E+01	6.613E+01	0.000E+00	0.058
		794.95		6.622E+00	3.755E+01	6.984E+01	0.000E+00	0.095
		911.21	*	7.146E+00	7.074E+00	1.420E+01	0.000E+00	0.503
		964.77		-4.504E+01	4.042E+01	6.170E+01	0.000E+00	-0.730
		969.11		1.232E+01	1.207E+01	2.432E+01	0.000E+00	0.507
RA-228		209.25		2.399E+01	3.154E+01	5.568E+01	0.000E+00	0.431
		338.32		3.260E-01	1.477E+01	2.600E+01	0.000E+00	0.013
		463.01		3.813E+00	3.752E+01	6.613E+01	0.000E+00	0.058
		794.95		6.622E+00	3.755E+01	6.984E+01	0.000E+00	0.095
		911.21	*	7.146E+00	7.074E+00	1.420E+01	0.000E+00	0.503
		964.77		-4.504E+01	4.042E+01	6.170E+01	0.000E+00	-0.730
		969.11		1.232E+01	1.207E+01	2.432E+01	0.000E+00	0.507
TH-229		85.43		-3.190E+00	1.007E+01	1.739E+01	0.000E+00	-0.183
		88.47		5.798E-01	5.849E+00	1.031E+01	0.000E+00	0.056
		100.00		-1.093E+00	1.119E+01	1.943E+01	0.000E+00	-0.056
		193.63	*	1.217E+00	3.177E+01	5.352E+01	0.000E+00	0.023
		210.97		7.248E+00	4.342E+01	7.365E+01	0.000E+00	0.098
PA-231		283.67	*	3.534E+01	9.526E+01	1.727E+02	0.000E+00	0.205
		301.29		-1.072E+01	3.086E+01	5.358E+01	0.000E+00	-0.200
		330.00		-6.286E+01	1.218E+02	2.074E+02	0.000E+00	-0.303
TH-231		84.21		5.294E+00	2.593E+01	4.612E+01	0.000E+00	0.115
		236.00		3.761E+00	1.544E+01	2.329E+01	0.000E+00	0.161
		256.20		-7.664E+00	2.468E+01	4.316E+01	0.000E+00	-0.178
		269.46	*	-8.901E+00	1.099E+01	1.860E+01	0.000E+00	-0.479
		271.23		1.211E+01	1.386E+01	2.592E+01	0.000E+00	0.467
		283.67		3.534E+01	9.526E+01	1.727E+02	0.000E+00	0.205
		301.29		-1.072E+01	3.086E+01	5.358E+01	0.000E+00	-0.200
		329.85		-2.048E+01	3.800E+01	6.458E+01	0.000E+00	-0.317
	+	351.07		9.956E+00	2.018E+01	2.041E+01	0.000E+00	0.488
		401.81		6.498E+00	2.336E+01	4.206E+01	0.000E+00	0.154
TH-232	+	238.59	*	3.619E+00	6.785E+00	7.122E+00	0.000E+00	0.508
		911.20		7.057E+00	7.002E+00	1.406E+01	0.000E+00	0.502
		964.40		-4.466E+01	4.069E+01	6.235E+01	0.000E+00	-0.716
		969.11		1.220E+01	1.195E+01	2.408E+01	0.000E+00	0.507
PA-233	+	75.28		2.027E+02	2.385E+02	2.640E+02	0.000E+00	0.768
		86.59		4.574E+01	8.652E+01	1.560E+02	0.000E+00	0.293
		300.12		-6.709E+00	2.217E+01	3.858E+01	0.000E+00	-0.174
		311.98	*	3.821E+00	3.821E+00	7.218E+00	0.000E+00	0.529
		340.50		4.020E+01	3.481E+01	6.610E+01	0.000E+00	0.608
		398.62		3.997E+01	1.135E+02	2.067E+02	0.000E+00	0.193
		415.76		3.448E+00	1.087E+02	1.680E+02	0.000E+00	0.021
PA-234	+	63.00		2.540E+01	1.776E+02	1.788E+02	0.000E+00	0.142
	+	94.67		2.267E+00	1.917E+01	1.583E+01	0.000E+00	0.143
		98.44		-1.982E+00	5.374E+00	9.204E+00	0.000E+00	-0.215
		99.70		-8.721E+00	2.909E+01	4.994E+01	0.000E+00	-0.175
		111.00		8.720E+00	1.206E+01	2.161E+01	0.000E+00	0.403
		131.20		-2.180E+00	6.985E+00	1.177E+01	0.000E+00	-0.185

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		152.70		-4.036E+00	1.983E+01	3.339E+01	0.000E+00	-0.121
	+	186.00		5.714E+01	1.566E+02	1.121E+02	0.000E+00	0.510
		226.40		-5.475E+00	2.468E+01	4.060E+01	0.000E+00	-0.135
		227.20		-1.783E+01	2.666E+01	4.244E+01	0.000E+00	-0.420
		248.90		-4.524E+00	4.961E+01	8.828E+01	0.000E+00	-0.051
		293.70		-9.830E+00	3.578E+01	6.250E+01	0.000E+00	-0.157
		369.80		1.881E+01	4.777E+01	8.723E+01	0.000E+00	0.216
		568.70		-7.964E+00	5.389E+01	9.235E+01	0.000E+00	-0.086
		569.50		3.440E+00	1.472E+01	2.629E+01	0.000E+00	0.131
	+	574.00		1.180E+02	1.033E+02	1.447E+02	0.000E+00	0.816
		699.00		5.763E+00	4.221E+01	7.694E+01	0.000E+00	0.075
		706.10		1.900E+01	5.805E+01	1.083E+02	0.000E+00	0.175
		733.00		-9.097E+00	1.924E+01	3.323E+01	0.000E+00	-0.274
		742.81		-3.822E+01	6.884E+01	1.176E+02	0.000E+00	-0.325
		796.30		-2.691E+01	4.463E+01	7.528E+01	0.000E+00	-0.357
		805.80		3.402E+01	5.579E+01	1.071E+02	0.000E+00	0.318
	+	819.60		4.650E+01	6.661E+01	1.230E+02	0.000E+00	0.378
		826.30		1.823E+01	4.180E+01	8.012E+01	0.000E+00	0.228
		831.60		-1.628E+01	3.967E+01	5.766E+01	0.000E+00	-0.282
		876.40		9.286E+00	4.390E+01	8.169E+01	0.000E+00	0.114
		880.51		-1.155E+01	1.609E+01	2.642E+01	0.000E+00	-0.437
		883.24		-3.660E+00	1.669E+01	2.920E+01	0.000E+00	-0.125
		899.00		1.028E+00	4.373E+01	7.941E+01	0.000E+00	0.013
		925.00		1.283E+01	5.841E+01	1.094E+02	0.000E+00	0.117
		926.50		-2.597E+00	9.190E+00	1.601E+01	0.000E+00	-0.162
		946.00	*	2.203E+00	1.411E+01	2.634E+01	0.000E+00	0.084
		949.00		-6.853E+00	2.284E+01	3.963E+01	0.000E+00	-0.173
		980.50		-2.661E+01	3.815E+01	6.207E+01	0.000E+00	-0.429
		1394.10		-1.166E+01	6.821E+01	1.239E+02	0.000E+00	-0.094
PA-234M		766.40		-2.637E+01	7.759E+02	1.415E+03	0.000E+00	-0.019
		1001.03	*	-8.428E+00	2.511E+02	4.463E+02	0.000E+00	-0.019
U-234	+	67.67		2.215E+03	1.148E+03	1.177E+03	0.000E+00	1.881
		241.98		2.685E+01	1.905E+01	3.384E+01	0.000E+00	0.793
		295.21	*	8.036E-01	7.701E+00	1.376E+01	0.000E+00	0.058
	+	351.92		3.463E+00	7.019E+00	6.611E+00	0.000E+00	0.524
U-235		89.95		-1.826E+01	6.344E+01	9.778E+01	0.000E+00	-0.187
	+	93.35		7.908E+00	6.689E+01	5.702E+01	0.000E+00	0.139
		105.00		-8.125E+00	6.518E+01	1.126E+02	0.000E+00	-0.072
		143.76	*	6.645E+00	1.364E+01	2.164E+01	0.000E+00	0.307
		163.33		1.428E+01	2.962E+01	5.159E+01	0.000E+00	0.277
	+	185.71		2.116E+00	5.799E+00	4.148E+00	0.000E+00	0.510
		205.31		-4.055E+00	2.926E+01	4.862E+01	0.000E+00	-0.083
NP-237		86.48	*	7.207E+00	1.302E+01	2.350E+01	0.000E+00	0.307
		95.87		1.087E+01	5.960E+01	9.491E+01	0.000E+00	0.115
NP-239		99.55		-1.978E+00	9.403E+00	1.623E+01	0.000E+00	-0.122
		117.00	*	-2.029E+00	1.202E+01	2.059E+01	0.000E+00	-0.099
		209.75		5.423E+00	4.324E+01	7.320E+01	0.000E+00	0.074
		228.18		-2.827E+00	1.401E+01	2.305E+01	0.000E+00	-0.123
		277.60		-9.323E-01	9.987E+00	1.770E+01	0.000E+00	-0.053

Sample ID : G145579005 Acquisition date : 13-OCT-2005 10:42:14

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		334.31		3.349E+01	7.962E+01	1.440E+02	0.000E+00	0.233
AM-241		59.54	*	-1.010E+00	1.438E+01	1.838E+01	0.000E+00	-0.055
AM-242		99.55		-4.616E+01	2.195E+02	3.789E+02	0.000E+00	-0.122
		103.70	*	7.815E+01	1.388E+02	2.486E+02	0.000E+00	0.314
CM-247		278.00		2.507E+01	4.105E+01	7.603E+01	0.000E+00	0.330
		287.40		2.229E+01	7.856E+01	1.414E+02	0.000E+00	0.158
		402.60	*	5.903E-01	2.045E+00	3.694E+00	0.000E+00	0.160
CF-249		252.85		3.649E+01	5.475E+01	1.011E+02	0.000E+00	0.361
		333.44		7.272E+00	1.025E+01	1.891E+01	0.000E+00	0.385
		387.95	*	3.354E-01	2.202E+00	3.940E+00	0.000E+00	0.085
CF-251	+	176.00	*	4.797E+00	8.990E+00	1.371E+01	0.000E+00	0.350
		227.00		-1.351E+01	2.382E+01	3.822E+01	0.000E+00	-0.354
		285.00		1.033E+02	1.109E+02	2.071E+02	0.000E+00	0.499

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579005    *
* Acquisition date : 13-OCT-2005 10:42:14 Detector SN#    : 1943199     *
* Detector ID      : GAMMA7               Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:02.61     Half life ratio :  8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 15:00:00 Nuclide Library : FERMC       *
* Sample ID        : G145579005           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME : 28-DEC-2004 12:36:42 MS Isotope      : TOPLOADER   *
* MSD DPM          :   21.334            MSD Isotope      : TOPLOADER   *
* LCS DPM          :    0.000            LCS Isotope      : TOPLOADER   *
* LCSD DPM         :    0.000            LCSD Isotope     : TOPLOADER   *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
MN-54	7.740E-01	2.386E+00	3.528E+00	0.000E+00
BA-137M	1.329E+00	1.260E+00	3.305E+00	0.000E+00
CS-137	1.405E+00	1.332E+00	3.494E+00	0.000E+00
TL-208	5.307E-01	3.645E+00	3.727E+00	0.000E+00
BI-211	9.956E+00	2.018E+01	2.041E+01	0.000E+00
RA-226	2.781E+00	7.123E+00	6.338E+00	0.000E+00
TH-228	3.728E+00	6.989E+00	6.037E+00	0.000E+00
TH-230	2.780E+00	7.122E+00	6.337E+00	0.000E+00
TH-234	2.179E+01	1.524E+02	1.513E+02	0.000E+00
U-238	2.179E+01	1.524E+02	1.513E+02	0.000E+00
ANH-511	1.740E+00	5.465E+00	3.261E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)		
BE-7	5.779E+00	2.326E+01	4.149E+01	0.000E+00	NOT IDENT.
NA-22	2.531E+00	2.451E+00	5.029E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	4.096E+14	0.000E+00	0.000E+00	SHORT HLIF
AL-26	3.669E-01	2.134E+00	4.231E+00	0.000E+00	FAIL ABUN
K-40	3.624E+01	2.312E+01	5.044E+01	0.000E+00	NOT IDENT.
SC-46	3.676E-01	2.616E+00	4.762E+00	0.000E+00	NOT IDENT.
V-48	4.787E+00	6.537E+00	1.304E+01	0.000E+00	NOT IDENT.
CR-51	7.344E+00	3.207E+01	5.768E+01	0.000E+00	NOT IDENT.
CO-56	-4.592E-01	2.344E+00	4.150E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-2.559E-01	1.626E+00	2.783E+00	0.000E+00	NOT IDENT.
CO-58	-3.596E-01	2.599E+00	4.614E+00	0.000E+00	NOT IDENT.
FE-59	-1.643E+00	5.438E+00	9.822E+00	0.000E+00	NOT IDENT.
CO-60	4.294E+00	2.125E+00	4.399E+00	0.000E+00	FAIL ABUN
ZN-65	7.154E-01	4.574E+00	8.657E+00	0.000E+00	NOT IDENT.
SE-75	3.659E-01	2.927E+00	5.250E+00	0.000E+00	FAIL ABUN

KR-85	0.000E+00	5.900E+02	1.075E+03	0.000E+00	NOT IDENT.
SR-85	0.000E+00	3.532E+00	6.434E+00	0.000E+00	NOT IDENT.
Y-88	5.045E-01	2.644E+00	5.247E+00	0.000E+00	NOT IDENT.
Y-91	1.278E+00	2.576E+00	4.686E+00	0.000E+00	NOT IDENT.
NB-94	-1.602E+00	1.978E+00	3.289E+00	0.000E+00	NOT IDENT.
NB-95	1.640E+00	2.870E+00	5.621E+00	0.000E+00	NOT IDENT.
NB-95M	0.000E+00	2.152E+03	0.000E+00	0.000E+00	SHORT HLIF
ZR-95	6.202E+00	4.428E+00	9.177E+00	0.000E+00	NOT IDENT.
MO-99	0.000E+00	5.721E+03	0.000E+00	0.000E+00	SHORT HLIF
TC-99M	0.000E+00	2.497E+36	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-2.222E+00	3.185E+00	5.172E+00	0.000E+00	FAIL ABUN
RH-106	7.750E+00	1.847E+01	3.497E+01	0.000E+00	FAIL ABUN
RU-106	7.763E+00	1.849E+01	3.499E+01	0.000E+00	NOT IDENT.
AG-108M	7.337E-01	1.869E+00	3.398E+00	0.000E+00	NOT IDENT.
CD-109	1.829E+01	4.397E+01	7.882E+01	0.000E+00	NOT IDENT.
AG-110M	-6.983E-01	1.835E+00	3.230E+00	0.000E+00	NOT IDENT.
SN-113	2.144E+00	2.707E+00	5.086E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	5.648E+04	0.000E+00	0.000E+00	SHORT HLIF
SN-115	1.658E+02	2.450E+02	4.726E+02	0.000E+00	NOT IDENT.
SN-117M	1.919E+00	7.303E+00	1.259E+01	0.000E+00	NOT IDENT.
TE-123M	1.002E+00	1.906E+00	3.338E+00	0.000E+00	NOT IDENT.
SB-124	-9.899E-01	7.841E+00	1.197E+01	0.000E+00	NOT IDENT.
SB-125	7.259E-01	5.204E+00	9.275E+00	0.000E+00	FAIL ABUN
TE-125M	5.356E+02	7.144E+02	1.284E+03	0.000E+00	NOT IDENT.
I-126	2.592E+01	3.135E+01	4.303E+01	0.000E+00	FAIL ABUN
SB-126	1.271E+01	1.774E+01	3.446E+01	0.000E+00	FAIL ABUN
SN-126	1.018E+00	4.381E+00	7.777E+00	0.000E+00	FAIL ABUN
SB-127	-2.700E+01	1.017E+03	1.854E+03	0.000E+00	FAIL ABUN
I-131	4.585E+00	2.272E+01	4.096E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	1.210E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	0.000E+00	9.840E+02	0.000E+00	0.000E+00	SHORT HLIF
BA-133	-5.479E-01	2.726E+00	4.148E+00	0.000E+00	FAIL ABUN
I-133	0.000E+00	4.319E+10	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-1.207E+00	2.101E+00	3.557E+00	0.000E+00	NOT IDENT.
CS-135	-1.264E+00	9.063E+00	1.601E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	3.206E+33	0.000E+00	0.000E+00	SHORT HLIF
CS-136	2.106E+00	1.336E+01	2.422E+01	0.000E+00	FAIL ABUN
CE-139	-6.557E-01	2.022E+00	3.363E+00	0.000E+00	NOT IDENT.
BA-140	-1.052E+01	3.275E+01	5.515E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	5.366E+05	0.000E+00	0.000E+00	SHORT HLIF
CE-141	1.340E+00	5.171E+00	8.965E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	1.212E+07	0.000E+00	0.000E+00	SHORT HLIF
CE-144	7.071E+00	1.366E+01	2.404E+01	0.000E+00	NOT IDENT.
PM-144	-9.272E-01	2.202E+00	3.807E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-1.138E+00	2.501E+00	4.201E+00	0.000E+00	NOT IDENT.
ND-147	-3.010E+01	7.726E+01	1.295E+02	0.000E+00	FAIL ABUN
PM-147	-2.361E+06	3.374E+06	5.595E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	5.961E+05	0.000E+00	0.000E+00	SHORT HLIF
EU-152	-3.094E+00	5.326E+00	9.020E+00	0.000E+00	NOT IDENT.
GD-153	-4.843E-01	4.729E+00	8.233E+00	0.000E+00	NOT IDENT.
EU-154	6.999E+00	6.791E+00	1.393E+01	0.000E+00	NOT IDENT.
EU-155	-2.698E+00	6.636E+00	1.129E+01	0.000E+00	NOT IDENT.
TB-160	-2.180E+00	8.701E+00	1.524E+01	0.000E+00	NOT IDENT.
TM-171	0.000E+00	2.792E+03	3.722E+03	0.000E+00	FAIL ABUN
HF-181	-3.881E-01	3.186E+00	5.501E+00	0.000E+00	FAIL ABUN
TA-182	-6.232E+00	8.853E+00	1.492E+01	0.000E+00	FAIL ABUN
IR-192	-1.656E+00	2.237E+00	3.761E+00	0.000E+00	NOT IDENT.
HG-203	7.947E-01	2.867E+00	5.197E+00	0.000E+00	NOT IDENT.
BI-207	2.863E-02	2.383E+00	5.336E+00	0.000E+00	FAIL ABUN
BI-210	5.214E+01	3.180E+02	4.852E+02	0.000E+00	NOT IDENT.
PB-210	5.214E+01	3.180E+02	4.852E+02	0.000E+00	NOT IDENT.
PB-211	-5.435E+01	6.168E+01	8.486E+01	0.000E+00	NOT IDENT.
BI-212	3.556E+00	1.571E+01	2.916E+01	0.000E+00	NOT IDENT.
PB-212	3.728E+00	6.989E+00	7.344E+00	0.000E+00	FAIL ABUN
BI-214	2.781E+00	7.123E+00	8.674E+00	0.000E+00	FAIL ABUN
PB-214	3.463E+00	7.019E+00	7.911E+00	0.000E+00	FAIL ABUN
RN-219	6.498E+00	2.336E+01	4.206E+01	0.000E+00	NOT IDENT.
RA-223	-1.142E+01	4.278E+01	7.403E+01	0.000E+00	NOT IDENT.
RA-224	6.339E+01	3.916E+01	7.002E+01	0.000E+00	NOT IDENT.
AC-227	-7.684E+00	2.475E+01	4.327E+01	0.000E+00	NOT IDENT.
TH-227	-7.554E+00	2.433E+01	4.254E+01	0.000E+00	FAIL ABUN
AC-228	7.146E+00	7.074E+00	1.420E+01	0.000E+00	NOT IDENT.
RA-228	7.146E+00	7.074E+00	1.420E+01	0.000E+00	NOT IDENT.
TH-229	1.217E+00	3.177E+01	5.352E+01	0.000E+00	NOT IDENT.
PA-231	3.534E+01	9.526E+01	1.727E+02	0.000E+00	NOT IDENT.
TH-231	-8.901E+00	1.099E+01	1.860E+01	0.000E+00	FAIL ABUN
TH-232	3.619E+00	6.785E+00	7.122E+00	0.000E+00	FAIL ABUN

PA-233	3.821E+00	3.821E+00	7.218E+00	0.000E+00 FAIL ABUN
PA-234	2.203E+00	1.411E+01	2.634E+01	0.000E+00 FAIL ABUN
PA-234M	-8.428E+00	2.511E+02	4.463E+02	0.000E+00 NOT IDENT.
U-234	8.036E-01	7.701E+00	1.376E+01	0.000E+00 FAIL ABUN
U-235	6.645E+00	1.364E+01	2.164E+01	0.000E+00 FAIL ABUN
NP-237	7.207E+00	1.302E+01	2.350E+01	0.000E+00 NOT IDENT.
NP-239	-2.029E+00	1.202E+01	2.059E+01	0.000E+00 NOT IDENT.
AM-241	-1.010E+00	1.438E+01	1.838E+01	0.000E+00 NOT IDENT.
AM-242	7.815E+01	1.388E+02	2.486E+02	0.000E+00 NOT IDENT.
CM-247	5.903E-01	2.045E+00	3.694E+00	0.000E+00 NOT IDENT.
CF-249	3.354E-01	2.202E+00	3.940E+00	0.000E+00 NOT IDENT.
CF-251	4.797E+00	8.990E+00	1.371E+01	0.000E+00 FAIL ABUN

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:44:59.19

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579005.CNF;1
Sample date      : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:42:14
Sample ID        : G145579005           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA7               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.61  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1943199
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	5	63.30	48	227	1.68	126.99	122	15	3.32E-03	61.0	1.36E+00
2	5	66.28	122	151	1.49	132.96	122	15	8.46E-03	19.0	
3	0	77.24	64	175	2.19	154.88	152	8	4.43E-03	37.8	
4	0	92.73	91	243	0.89	185.89	181	10	6.34E-03	33.6	
5	0	139.94	83	259	1.11	280.35	275	12	5.77E-03	40.2	
6	0	175.63	21	135	0.96	351.75	346	7	1.47E-03	93.7	
7	0	186.02	99	260	1.24	372.54	366	14	6.89E-03	35.9	
8	0	198.49	65	162	2.23	397.49	394	8	4.54E-03	36.0	
9	0	238.89	93	191	0.90	478.35	472	12	6.46E-03	31.5	
10	0	352.44	51	73	2.43	705.56	700	12	3.53E-03	36.7	
11	0	382.93	16	58	0.69	766.58	763	9	1.12E-03	88.6	
12	0	411.09	67	100	4.23	822.93	813	20	4.64E-03	38.6	
13	0	501.64	20	23	1.35	1004.14	1002	6	1.40E-03	43.4	
14	0	511.38	282	111	2.58	1023.65	1016	17	1.96E-02	10.5	
15	0	574.96	27	30	4.02	1150.90	1146	11	1.88E-03	43.7	
16	0	583.13	33	48	1.63	1167.25	1162	12	2.26E-03	47.0	
17	3	595.80	31	45	2.42	1192.61	1185	50	2.13E-03	52.7	1.45E+00
18	3	608.74	37	45	2.43	1218.50	1185	50	2.57E-03	45.2	
19	6	662.30	12	17	1.37	1325.71	1324	14	8.54E-04	47.4	4.66E+00
20	6	665.79	22	39	2.78	1332.70	1324	14	1.49E-03	60.5	
21	0	751.62	6	12	0.94	1504.48	1501	6	4.28E-04	100.3	
22	0	820.80	11	15	1.49	1642.97	1637	9	7.60E-04	71.6	
23	0	835.60	15	16	0.83	1672.60	1669	9	1.04E-03	54.5	
24	0	861.29	46	24	1.04	1724.02	1716	19	3.18E-03	29.5	
25	0	1027.83	81	47	19.24	2057.41	2032	47	5.65E-03	32.1	
26	0	1063.33	11	7	0.80	2128.47	2125	6	7.52E-04	49.9	
27	0	1325.97	20	5	0.95	2654.32	2649	10	1.39E-03	30.6	
28	0	1333.86	25	3	3.49	2670.13	2664	13	1.74E-03	24.8	
29	0	1476.30	12	19	0.96	2955.36	2944	15	8.21E-04	85.1	
30	0	1503.12	15	10	3.48	3009.07	3000	20	1.04E-03	57.7	
31	0	1569.47	24	32	11.84	3141.94	3116	43	1.65E-03	84.7	
32	0	1670.78	10	5	8.17	3344.83	3338	20	6.62E-04	66.3	
33	0	1683.49	8	19	0.57	3370.29	3358	26	5.39E-04	159.8	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:45:05.29

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*********************************************************************
*                          GENERAL ENG. LABS, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579005.CNF;1
Sample date      : 13-SEP-2005 15:00:00 Acquisition date : 13-OCT-2005 10:42:14
Sample ID        : G145579005           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA7               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:02.61  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1943199
Matrix Spike DPM :                      LCS DPM          :
*********************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
MN-54	834.83	6	99.83*	8.064E-01	7.244E-01	7.740E-01	308.29
BA-137M	661.65	12	89.98*	9.669E-01	1.327E+00	1.329E+00	94.80
CS-137	661.66	12	85.12*	9.669E-01	1.403E+00	1.405E+00	94.80
TL-208	75.00	------	3.43	1.535E+00	------	Line Not Found	------
	277.35	------	6.80	1.805E+00	------	Line Not Found	------
	510.84	22	21.60	1.174E+00	8.055E+00	8.297E+00	314.15
	583.14	5	84.20*	1.065E+00	5.152E-01	5.307E-01	686.77
	763.30	------	1.64	8.662E-01	------	Line Not Found	------
	860.37	46	12.46	7.872E-01	4.382E+01	4.514E+01	59.04
	1093.90	------	0.37	6.491E-01	------	Line Not Found	------
BI-211	351.07	21	12.94*	1.532E+00	9.956E+00	9.956E+00	202.67
RA-226	295.21	------	19.20	1.731E+00	------	Line Not Found	------
	351.92	21	37.20	1.532E+00	3.463E+00	3.463E+00	202.67
	609.31	14	46.30*	1.031E+00	2.780E+00	2.781E+00	256.16
TH-228	84.40	------	1.21	1.882E+00	------	Line Not Found	------
	238.60	34	44.60*	1.985E+00	3.619E+00	3.728E+00	187.49
	300.10	------	3.41	1.712E+00	------	Line Not Found	------
TH-230	295.21	------	19.20	1.731E+00	------	Line Not Found	------
	351.92	21	37.20	1.532E+00	3.463E+00	3.463E+00	202.67
	609.31	14	46.30*	1.031E+00	2.780E+00	2.780E+00	256.16
TH-234	63.29	9	3.80*	9.956E-01	2.179E+01	2.179E+01	699.44
	92.38	8	5.41	2.113E+00	6.578E+00	6.578E+00	845.89
	112.81	------	0.24	2.417E+00	------	Line Not Found	------
U-238	63.29	9	3.80*	9.956E-01	2.179E+01	2.179E+01	699.44
ANH-511	511.00	22	100.00*	1.174E+00	1.740E+00	1.740E+00	314.15

Flag: "*" = Keyline

Sample ID : G145579005 Acquisition date : 13-OCT-2005 10:42:14

Total number of lines in spectrum	33	
Number of unidentified lines	9	
Number of lines tentatively identified by NID	24	72.73%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
MN-54	312.70D	1.07	7.244E-01	7.740E-01	23.86E-01	308.29	
BA-137M	30.17Y	1.00	1.327E+00	1.329E+00	1.260E+00	94.80	
CS-137	30.17Y	1.00	1.403E+00	1.405E+00	1.332E+00	94.80	
TL-208	1.91Y	1.03	5.152E-01	5.307E-01	36.45E-01	686.77	
BI-211	7.04E+08Y	1.00	9.956E+00	9.956E+00	20.18E+00	202.67	
RA-226	1600.00Y	1.00	2.780E+00	2.781E+00	7.123E+00	256.16	
TH-228	1.91Y	1.03	3.619E+00	3.728E+00	6.989E+00	187.49	
TH-230	7.70E+04Y	1.00	2.780E+00	2.780E+00	7.122E+00	256.16	
TH-234	4.47E+09Y	1.00	2.179E+01	2.179E+01	15.24E+01	699.44	
U-238	4.47E+09Y	1.00	2.179E+01	2.179E+01	15.24E+01	699.44	
ANH-511	1.00E+09Y	1.00	1.740E+00	1.740E+00	5.465E+00	314.15	
			---------	---------			
	Total Activity :		6.842E+01	6.860E+01			
	Grand Total Activity :		6.842E+01	6.860E+01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579005 Acquisition date : 13-OCT-2005 10:42:14

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	66.28	100	151	1.49	132.96	122	15	6.97E-03	51.8	1.14E+00	T
0	77.24	44	175	2.19	154.88	152	8	3.07E-03	****	1.63E+00	T
0	139.94	83	259	1.11	280.35	275	12	5.77E-03	80.4	2.48E+00	T
0	175.63	21	135	0.96	351.75	346	7	1.47E-03	****	2.33E+00	T
0	186.02	28	260	1.24	372.54	366	14	1.93E-03	****	2.28E+00	T
0	198.49	19	162	2.23	397.49	394	8	1.34E-03	****	2.21E+00	T
0	382.93	13	58	0.69	766.58	763	9	9.12E-04	****	1.45E+00	T
0	411.09	63	100	4.23	822.93	813	20	4.39E-03	82.8	1.37E+00	T
0	501.64	10	23	1.35	1004.14	1002	6	7.06E-04	****	1.19E+00	
0	574.96	27	30	4.02	1150.90	1146	11	1.88E-03	87.5	1.08E+00	T
3	595.80	31	45	2.42	1192.61	1185	50	2.13E-03	****	1.05E+00	
6	665.79	22	39	2.78	1332.70	1324	14	1.49E-03	****	9.63E-01	T
0	751.62	6	12	0.94	1504.48	1501	6	4.28E-04	****	8.77E-01	T
0	820.80	11	15	1.49	1642.97	1637	9	7.60E-04	****	8.18E-01	T
0	1027.83	81	47	19.24	2057.41	2032	47	5.65E-03	64.1	6.83E-01	
0	1063.33	0	7	0.80	2128.47	2125	6	1.05E-05	****	6.64E-01	T
0	1325.97	20	5	0.95	2654.32	2649	10	1.39E-03	61.2	5.57E-01	
0	1333.86	25	3	3.49	2670.13	2664	13	1.74E-03	49.5	5.54E-01	T
0	1476.30	12	19	0.96	2955.36	2944	15	8.21E-04	****	5.14E-01	
0	1503.12	15	10	3.48	3009.07	3000	20	1.04E-03	****	5.07E-01	
0	1569.47	24	32	11.84	3141.94	3116	43	1.65E-03	****	4.92E-01	
0	1670.78	10	5	8.17	3344.83	3338	20	6.62E-04	****	4.71E-01	
0	1683.49	8	19	0.57	3370.29	3358	26	5.39E-04	****	4.69E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:45:14.65

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579005.CNF;1  *
* Acquisition date : 13-OCT-2005 10:42:14  Detector SN#    : 1943199       *
* Detector ID      : GAMMA7                Sensitivity     : 3.00000       *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000       *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000      *
* Elapsed real time: 0 04:00:02.61         Half life ratio : 8.00000       *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 13-SEP-2005 15:00:00  Nuclide Library : EPI            *
* Sample ID        : G145579005            Analyst initials: MJH1          *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 28-DEC-2004 12:36:42.0MS Isotope      : TOPLOADER      *
* MSD DPM          :                       MSD Isotope     :                *
* LCS DPM          :                       LCS Isotope     :                *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MN-54	7.740E-01	2.386E+00	3.528E+00	0.000E+00	0.219
BA-137M	1.329E+00	1.260E+00	3.305E+00	0.000E+00	0.402
CS-137	1.405E+00	1.332E+00	3.494E+00	0.000E+00	0.402
TL-208	5.307E-01	3.645E+00	3.727E+00	0.000E+00	0.142
BI-211	9.956E+00	2.018E+01	2.041E+01	0.000E+00	0.488
RA-226	2.781E+00	7.123E+00	6.338E+00	0.000E+00	0.439
TH-228	3.728E+00	6.989E+00	6.037E+00	0.000E+00	0.618
TH-230	2.780E+00	7.122E+00	6.337E+00	0.000E+00	0.439
TH-234	2.179E+01	1.524E+02	1.513E+02	0.000E+00	0.144
U-238	2.179E+01	1.524E+02	1.513E+02	0.000E+00	0.144
ANH-511	1.740E+00	5.465E+00	3.261E+00	0.000E+00	0.533

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	5.779E+00		2.326E+01	4.149E+01	0.000E+00	0.139

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	2.531E+00		2.451E+00	5.029E+00	0.000E+00	0.503
AL-26	3.669E-01		2.134E+00	4.231E+00	0.000E+00	0.087
K-40	3.624E+01		2.312E+01	5.044E+01	0.000E+00	0.719
SC-46	3.676E-01		2.616E+00	4.762E+00	0.000E+00	0.077
V-48	4.787E+00		6.537E+00	1.304E+01	0.000E+00	0.367
CR-51	7.344E+00		3.207E+01	5.768E+01	0.000E+00	0.127
CO-56	-4.592E-01		2.344E+00	4.150E+00	0.000E+00	-0.111
CO-57	-2.559E-01		1.626E+00	2.783E+00	0.000E+00	-0.092
CO-58	-3.596E-01		2.599E+00	4.614E+00	0.000E+00	-0.078
FE-59	-1.643E+00		5.438E+00	9.822E+00	0.000E+00	-0.167
CO-60	4.294E+00	+	2.125E+00	4.399E+00	0.000E+00	0.976
ZN-65	7.154E-01		4.574E+00	8.657E+00	0.000E+00	0.083
SE-75	3.659E-01		2.927E+00	5.250E+00	0.000E+00	0.070
KR-85	1.416E+03		5.900E+02	1.075E+03	0.000E+00	1.318
SR-85	8.479E+00		3.532E+00	6.434E+00	0.000E+00	1.318
Y-88	5.045E-01		2.644E+00	5.247E+00	0.000E+00	0.096
Y-91	1.278E+00		2.576E+00	4.686E+00	0.000E+00	0.273
NB-94	-1.602E+00		1.978E+00	3.289E+00	0.000E+00	-0.487
NB-95	1.640E+00		2.870E+00	5.621E+00	0.000E+00	0.292
ZR-95	6.202E+00		4.428E+00	9.177E+00	0.000E+00	0.676
RU-103	-2.222E+00		3.185E+00	5.172E+00	0.000E+00	-0.430
RH-106	7.750E+00		1.847E+01	3.497E+01	0.000E+00	0.222
RU-106	7.763E+00		1.849E+01	3.499E+01	0.000E+00	0.222
AG-108M	7.337E-01		1.869E+00	3.398E+00	0.000E+00	0.216
CD-109	1.829E+01		4.397E+01	7.882E+01	0.000E+00	0.232
AG-110M	-6.983E-01		1.835E+00	3.230E+00	0.000E+00	-0.216
SN-113	2.144E+00		2.707E+00	5.086E+00	0.000E+00	0.422
SN-115	1.658E+02		2.450E+02	4.726E+02	0.000E+00	0.351
SN-117M	1.919E+00		7.303E+00	1.259E+01	0.000E+00	0.152
TE-123M	1.002E+00		1.906E+00	3.338E+00	0.000E+00	0.300
SB-124	-9.899E-01		7.841E+00	1.197E+01	0.000E+00	-0.083
SB-125	7.259E-01		5.204E+00	9.275E+00	0.000E+00	0.078
TE-125M	5.356E+02		7.144E+02	1.284E+03	0.000E+00	0.417
I-126	2.592E+01	+	3.135E+01	4.303E+01	0.000E+00	0.602
SB-126	1.271E+01		1.774E+01	3.446E+01	0.000E+00	0.369
SN-126	1.018E+00		4.381E+00	7.777E+00	0.000E+00	0.131
SB-127	-2.700E+01		1.017E+03	1.854E+03	0.000E+00	-0.015
I-131	4.585E+00		2.272E+01	4.096E+01	0.000E+00	0.112
BA-133	-5.479E-01		2.726E+00	4.148E+00	0.000E+00	-0.132
CS-134	-1.207E+00		2.101E+00	3.557E+00	0.000E+00	-0.339
CS-135	-1.264E+00		9.063E+00	1.601E+01	0.000E+00	-0.079
CS-136	2.106E+00		1.336E+01	2.422E+01	0.000E+00	0.087
CE-139	-6.557E-01		2.022E+00	3.363E+00	0.000E+00	-0.195
BA-140	-1.052E+01		3.275E+01	5.515E+01	0.000E+00	-0.191
CE-141	1.340E+00		5.171E+00	8.965E+00	0.000E+00	0.149
CE-144	7.071E+00		1.366E+01	2.404E+01	0.000E+00	0.294
PM-144	-9.272E-01		2.202E+00	3.807E+00	0.000E+00	-0.244
PM-146	-1.138E+00		2.501E+00	4.201E+00	0.000E+00	-0.271

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
ND-147	-3.010E+01		7.726E+01	1.295E+02	0.000E+00	-0.232
PM-147	-2.361E+06		3.374E+06	5.595E+06	0.000E+00	-0.422
EU-152	-3.094E+00		5.326E+00	9.020E+00	0.000E+00	-0.343
GD-153	-4.843E-01		4.729E+00	8.233E+00	0.000E+00	-0.059
EU-154	6.999E+00		6.791E+00	1.393E+01	0.000E+00	0.502
EU-155	-2.698E+00		6.636E+00	1.129E+01	0.000E+00	-0.239
TB-160	-2.180E+00		8.701E+00	1.524E+01	0.000E+00	-0.143
TM-171	5.385E+03	+	2.792E+03	3.722E+03	0.000E+00	1.447
HF-181	-3.881E-01		3.186E+00	5.501E+00	0.000E+00	-0.071
TA-182	-6.232E+00		8.853E+00	1.492E+01	0.000E+00	-0.418
IR-192	-1.656E+00		2.237E+00	3.761E+00	0.000E+00	-0.440
HG-203	7.947E-01		2.867E+00	5.197E+00	0.000E+00	0.153
BI-207	2.863E-02	+	2.383E+00	5.336E+00	0.000E+00	0.005
BI-210	5.214E+01		3.180E+02	4.852E+02	0.000E+00	0.107
PB-210	5.214E+01		3.180E+02	4.852E+02	0.000E+00	0.107
PB-211	-5.435E+01		6.168E+01	8.486E+01	0.000E+00	-0.641
BI-212	3.556E+00		1.571E+01	2.916E+01	0.000E+00	0.122
PB-212	3.728E+00	+	6.989E+00	7.344E+00	0.000E+00	0.508
BI-214	2.781E+00	+	7.123E+00	8.674E+00	0.000E+00	0.321
PB-214	3.463E+00	+	7.019E+00	7.911E+00	0.000E+00	0.438
RN-219	6.498E+00		2.336E+01	4.206E+01	0.000E+00	0.154
RA-223	-1.142E+01		4.278E+01	7.403E+01	0.000E+00	-0.154
RA-224	6.339E+01		3.916E+01	7.002E+01	0.000E+00	0.905
AC-227	-7.684E+00		2.475E+01	4.327E+01	0.000E+00	-0.178
TH-227	-7.554E+00		2.433E+01	4.254E+01	0.000E+00	-0.178
AC-228	7.146E+00		7.074E+00	1.420E+01	0.000E+00	0.503
RA-228	7.146E+00		7.074E+00	1.420E+01	0.000E+00	0.503
TH-229	1.217E+00		3.177E+01	5.352E+01	0.000E+00	0.023
PA-231	3.534E+01		9.526E+01	1.727E+02	0.000E+00	0.205
TH-231	-8.901E+00		1.099E+01	1.860E+01	0.000E+00	-0.479
TH-232	3.619E+00	+	6.785E+00	7.122E+00	0.000E+00	0.508
PA-233	3.821E+00		3.821E+00	7.218E+00	0.000E+00	0.529
PA-234	2.203E+00		1.411E+01	2.634E+01	0.000E+00	0.084
PA-234M	-8.428E+00		2.511E+02	4.463E+02	0.000E+00	-0.019
U-234	8.036E-01		7.701E+00	1.376E+01	0.000E+00	0.058
U-235	6.645E+00		1.364E+01	2.164E+01	0.000E+00	0.307
NP-237	7.207E+00		1.302E+01	2.350E+01	0.000E+00	0.307
NP-239	-2.029E+00		1.202E+01	2.059E+01	0.000E+00	-0.099
AM-241	-1.010E+00		1.438E+01	1.838E+01	0.000E+00	-0.055
AM-242	7.815E+01		1.388E+02	2.486E+02	0.000E+00	0.314
CM-247	5.903E-01		2.045E+00	3.694E+00	0.000E+00	0.160
CF-249	3.354E-01		2.202E+00	3.940E+00	0.000E+00	0.085
CF-251	4.797E+00	+	8.990E+00	1.371E+01	0.000E+00	0.350

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579005            *
* Acquisition date : 13-OCT-2005 10:42:14 Detector SN#    : 1943199        *
* Detector ID      : GAMMA7               Sensitivity     : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 04:00:02.61     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 13-SEP-2005 15:00:00 Nuclide Library : FERMC          *
* Sample ID        : G145579005           Analyst initials: MJH1           *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER *
* Recovery         :    1.00000           Carrier Weight :    0.00000      *
*****************************************************************************
*                                                                           *
*                                QC DATA                                    *
*                                                                           *
* CALIB. DATE/TIME : 28-DEC-2004 12:36:42 MS Isotope      : TOPLOADER      *
* MSD DPM          :   21.334             MSD Isotope     : TOPLOADER      *
* LCS DPM          :    0.000             LCS Isotope     : TOPLOADER      *
* LCSD DPM         :    0.000             LCSD Isotope    : TOPLOADER      *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
MN-54	7.740E-01	2.386E+00	1.596E+00	1.193E+00
BA-137M	1.329E+00	1.260E+00	1.507E+00	6.301E-01
CS-137	1.405E+00	1.332E+00	1.593E+00	6.661E-01
TL-208	5.307E-01	3.645E+00	1.718E+00	1.822E+00
BI-211	9.956E+00	2.018E+01	9.573E+00	1.009E+01
RA-226	2.781E+00	7.123E+00	2.904E+00	3.561E+00
TH-228	3.728E+00	6.989E+00	2.872E+00	3.495E+00
TH-230	2.780E+00	7.122E+00	2.904E+00	3.561E+00
TH-234	2.179E+01	1.524E+02	7.233E+01	7.620E+01
U-238	2.179E+01	1.524E+02	7.233E+01	7.620E+01
ANH-511	1.740E+00	5.465E+00	1.523E+00	2.733E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	5.779E+00	2.326E+01	1.930E+01	1.163E+01	NOT IDENT.
NA-22	2.531E+00	2.451E+00	2.289E+00	1.225E+00	NOT IDENT.
NA-24	8.243E+13	4.096E+14	0.000E+00	2.048E+14	SHORT HLIF
AL-26	3.669E-01	2.134E+00	1.833E+00	1.067E+00	FAIL ABUN
K-40	3.624E+01	2.312E+01	2.293E+01	1.156E+01	NOT IDENT.
SC-46	3.676E-01	2.616E+00	2.170E+00	1.308E+00	NOT IDENT.
V-48	4.787E+00	6.537E+00	5.867E+00	3.268E+00	NOT IDENT.
CR-51	7.344E+00	3.207E+01	2.719E+01	1.603E+01	NOT IDENT.
CO-56	-4.592E-01	2.344E+00	1.869E+00	1.172E+00	NOT IDENT.
MN-56	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-2.559E-01	1.626E+00	1.327E+00	8.130E-01	NOT IDENT.
CO-58	-3.596E-01	2.599E+00	2.101E+00	1.299E+00	NOT IDENT.
FE-59	-1.643E+00	5.438E+00	4.360E+00	2.719E+00	NOT IDENT.
CO-60	4.294E+00	2.125E+00	1.969E+00	1.063E+00	FAIL ABUN
ZN-65	7.154E-01	4.574E+00	3.904E+00	2.287E+00	NOT IDENT.
SE-75	3.659E-01	2.927E+00	2.491E+00	1.463E+00	FAIL ABUN

KR-85	1.416E+03	5.900E+02	5.124E+02	2.950E+02	NOT IDENT.
SR-85	8.479E+00	3.532E+00	3.068E+00	1.766E+00	NOT IDENT.
Y-88	5.045E-01	2.644E+00	2.276E+00	1.322E+00	NOT IDENT.
Y-91	1.278E+00	2.576E+00	2.171E+00	1.288E+00	NOT IDENT.
NB-94	-1.602E+00	1.978E+00	1.508E+00	9.889E-01	NOT IDENT.
NB-95	1.640E+00	2.870E+00	2.546E+00	1.435E+00	NOT IDENT.
NB-95M	1.021E+03	2.152E+03	0.000E+00	1.076E+03	SHORT HLIF
ZR-95	6.202E+00	4.428E+00	4.226E+00	2.214E+00	NOT IDENT.
MO-99	7.113E+03	5.721E+03	0.000E+00	2.860E+03	SHORT HLIF
TC-99M	3.105E+36	2.497E+36	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-2.222E+00	3.185E+00	2.386E+00	1.592E+00	FAIL ABUN
RH-106	7.750E+00	1.847E+01	1.614E+01	9.237E+00	FAIL ABUN
RU-106	7.763E+00	1.849E+01	1.615E+01	9.243E+00	NOT IDENT.
AG-108M	7.337E-01	1.869E+00	1.582E+00	9.345E-01	NOT IDENT.
CD-109	1.829E+01	4.397E+01	3.767E+01	2.199E+01	NOT IDENT.
AG-110M	-6.983E-01	1.835E+00	1.466E+00	9.174E-01	NOT IDENT.
SN-113	2.144E+00	2.707E+00	2.380E+00	1.353E+00	NOT IDENT.
CD-115	-1.128E+04	5.648E+04	0.000E+00	2.824E+04	SHORT HLIF
SN-115	1.658E+02	2.450E+02	2.158E+02	1.225E+02	NOT IDENT.
SN-117M	1.919E+00	7.303E+00	6.020E+00	3.651E+00	NOT IDENT.
TE-123M	1.002E+00	1.906E+00	1.596E+00	9.530E-01	NOT IDENT.
SB-124	-9.899E-01	7.841E+00	5.207E+00	3.920E+00	NOT IDENT.
SB-125	7.259E-01	5.204E+00	4.309E+00	2.602E+00	FAIL ABUN
TE-125M	5.356E+02	7.144E+02	6.156E+02	3.572E+02	NOT IDENT.
I-126	2.592E+01	3.135E+01	1.990E+01	1.568E+01	FAIL ABUN
SB-126	1.271E+01	1.774E+01	1.585E+01	8.871E+00	FAIL ABUN
SN-126	1.018E+00	4.381E+00	3.717E+00	2.190E+00	FAIL ABUN
SB-127	-2.700E+01	1.017E+03	8.450E+02	5.087E+02	FAIL ABUN
I-131	4.585E+00	2.272E+01	1.911E+01	1.136E+01	NOT IDENT.
I-132	1.000E+41	1.210E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-2.010E+02	9.840E+02	0.000E+00	4.920E+02	SHORT HLIF
BA-133	-5.479E-01	2.726E+00	1.935E+00	1.363E+00	FAIL ABUN
I-133	-2.193E+10	4.319E+10	0.000E+00	2.159E+10	SHORT HLIF
CS-134	-1.207E+00	2.101E+00	1.597E+00	1.050E+00	NOT IDENT.
CS-135	-1.264E+00	9.063E+00	7.579E+00	4.531E+00	NOT IDENT.
I-135	-2.600E+33	3.206E+33	0.000E+00	0.000E+00	SHORT HLIF
CS-136	2.106E+00	1.336E+01	1.097E+01	6.679E+00	FAIL ABUN
CE-139	-6.557E-01	2.022E+00	1.605E+00	1.011E+00	NOT IDENT.
BA-140	-1.052E+01	3.275E+01	2.532E+01	1.637E+01	NOT IDENT.
LA-140	5.712E+04	5.366E+05	0.000E+00	2.683E+05	SHORT HLIF
CE-141	1.340E+00	5.171E+00	4.283E+00	2.585E+00	NOT IDENT.
CE-143	-8.731E+06	1.212E+07	0.000E+00	6.062E+06	SHORT HLIF
CE-144	7.071E+00	1.366E+01	1.152E+01	6.829E+00	NOT IDENT.
PM-144	-9.272E-01	2.202E+00	1.759E+00	1.101E+00	NOT IDENT.
PR-144	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-1.138E+00	2.501E+00	1.941E+00	1.251E+00	NOT IDENT.
ND-147	-3.010E+01	7.726E+01	5.917E+01	3.863E+01	FAIL ABUN
PM-147	-2.361E+06	3.374E+06	2.667E+06	1.687E+06	NOT IDENT.
PM-149	3.520E+05	5.961E+05	0.000E+00	2.980E+05	SHORT HLIF
EU-152	-3.094E+00	5.326E+00	4.203E+00	2.663E+00	NOT IDENT.
GD-153	-4.843E-01	4.729E+00	3.919E+00	2.365E+00	NOT IDENT.
EU-154	6.999E+00	6.791E+00	6.343E+00	3.396E+00	NOT IDENT.
EU-155	-2.698E+00	6.636E+00	5.382E+00	3.318E+00	NOT IDENT.
TB-160	-2.180E+00	8.701E+00	6.859E+00	4.351E+00	NOT IDENT.
TM-171	5.385E+03	2.792E+03	1.791E+03	1.396E+03	FAIL ABUN
HF-181	-3.881E-01	3.186E+00	2.548E+00	1.593E+00	FAIL ABUN
TA-182	-6.232E+00	8.853E+00	6.518E+00	4.426E+00	FAIL ABUN
IR-192	-1.656E+00	2.237E+00	1.759E+00	1.119E+00	NOT IDENT.
HG-203	7.947E-01	2.867E+00	2.457E+00	1.433E+00	NOT IDENT.
BI-207	2.863E-02	2.383E+00	2.413E+00	1.191E+00	FAIL ABUN
BI-210	5.214E+01	3.180E+02	2.305E+02	1.590E+02	NOT IDENT.
PB-210	5.214E+01	3.180E+02	2.305E+02	1.590E+02	NOT IDENT.
PB-211	-5.435E+01	6.168E+01	3.930E+01	3.084E+01	NOT IDENT.
BI-212	3.556E+00	1.571E+01	1.335E+01	7.855E+00	NOT IDENT.
PB-212	3.728E+00	6.989E+00	3.526E+00	3.495E+00	FAIL ABUN
BI-214	2.781E+00	7.123E+00	4.073E+00	3.561E+00	FAIL ABUN
PB-214	3.463E+00	7.019E+00	3.735E+00	3.510E+00	FAIL ABUN
RN-219	6.498E+00	2.336E+01	1.964E+01	1.168E+01	NOT IDENT.
RA-223	-1.142E+01	4.278E+01	3.502E+01	2.139E+01	NOT IDENT.
RA-224	6.339E+01	3.916E+01	3.335E+01	1.958E+01	NOT IDENT.
AC-227	-7.684E+00	2.475E+01	2.057E+01	1.237E+01	NOT IDENT.
TH-227	-7.554E+00	2.433E+01	2.022E+01	1.217E+01	FAIL ABUN
AC-228	7.146E+00	7.074E+00	6.489E+00	3.537E+00	NOT IDENT.
RA-228	7.146E+00	7.074E+00	6.489E+00	3.537E+00	NOT IDENT.
TH-229	1.217E+00	3.177E+01	2.554E+01	1.589E+01	NOT IDENT.
PA-231	3.534E+01	9.526E+01	8.195E+01	4.763E+01	NOT IDENT.
TH-231	-8.901E+00	1.099E+01	8.798E+00	5.496E+00	FAIL ABUN
TH-232	3.619E+00	6.785E+00	3.420E+00	3.392E+00	FAIL ABUN

PA-233	3.821E+00	3.821E+00	3.413E+00	1.910E+00 FAIL ABUN
PA-234	2.203E+00	1.411E+01	1.173E+01	7.054E+00 FAIL ABUN
PA-234M	-8.428E+00	2.511E+02	2.017E+02	1.255E+02 NOT IDENT.
U-234	8.036E-01	7.701E+00	6.504E+00	3.851E+00 FAIL ABUN
U-235	6.645E+00	1.364E+01	1.034E+01	6.820E+00 FAIL ABUN
NP-237	7.207E+00	1.302E+01	1.124E+01	6.508E+00 NOT IDENT.
NP-239	-2.029E+00	1.202E+01	9.831E+00	6.010E+00 NOT IDENT.
AM-241	-1.010E+00	1.438E+01	8.761E+00	7.192E+00 NOT IDENT.
AM-242	7.815E+01	1.388E+02	1.189E+02	6.941E+01 NOT IDENT.
CM-247	5.903E-01	2.045E+00	1.722E+00	1.023E+00 NOT IDENT.
CF-249	3.354E-01	2.202E+00	1.837E+00	1.101E+00 NOT IDENT.
CF-251	4.797E+00	8.990E+00	6.551E+00	4.495E+00 FAIL ABUN

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145579005
ANALYST	: MJH1	DETECTOR	: GAMMA7
SAMPLE DATE	: 13-SEP-2005 15:00:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 10:42:14.46	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 7.852E+01
GROSS GAMMA ERROR (pCi/LITER)	: 8.540E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.018E+02
GROSS GAMMA DLC (pCi/LITER)	: 9.634E+01

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:46:01.63

```
*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579006.CNF;1
Sample date      : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:42:40
Sample ID        : G145579006           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA8               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:03.21  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1943234
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.61*	19	158	1.42	79.07	75	9	1.31E-03	136.5	
2	0	53.43*	37	171	1.19	92.77	89	8	2.60E-03	65.8	
3	0	92.89*	32	216	1.18	172.06	169	8	2.25E-03	97.9	
4	0	140.04*	80	254	1.11	266.83	261	11	5.53E-03	42.4	
5	0	143.72*	19	153	0.54	274.22	272	7	1.34E-03	128.1	
6	0	198.39*	26	158	1.25	384.08	381	8	1.79E-03	101.6	
7	0	205.74*	17	101	1.16	398.85	396	6	1.17E-03	112.9	
8	0	238.82*	1	125	1.78	465.33	462	7	4.12E-05	*****	
9	0	269.90*	36	115	1.66	527.78	523	10	2.51E-03	60.6	
10	0	377.30	21	64	1.04	743.65	741	9	1.47E-03	71.9	
11	0	500.13	7	61	1.36	990.52	986	8	4.72E-04	203.9	
12	0	596.68*	18	58	1.01	1184.59	1177	10	1.28E-03	96.3	
13	0	612.47	49	90	7.84	1216.34	1205	22	3.37E-03	53.8	
14	0	676.70	15	16	1.31	1345.44	1343	7	1.03E-03	51.3	
15	0	786.29	18	19	1.54	1565.75	1559	11	1.25E-03	52.8	
16	0	869.45	19	26	1.02	1732.95	1728	13	1.32E-03	59.9	
17	0	951.47*	3	19	1.59	1897.86	1890	12	2.11E-04	339.8	
18	0	1064.94	18	12	1.95	2126.00	2122	11	1.27E-03	42.4	
19	0	1072.17	7	5	1.22	2140.53	2139	6	4.89E-04	61.5	
20	0	1169.54	8	9	0.93	2336.33	2334	7	5.27E-04	78.4	
21	0	1196.40	6	5	1.43	2390.33	2388	5	4.17E-04	69.2	
22	0	1239.85*	11	15	2.25	2477.70	2468	20	7.49E-04	105.4	
23	0	1246.96*	9	7	0.91	2492.01	2488	9	6.31E-04	68.5	
24	0	1462.00*	13	20	2.34	2924.46	2917	16	8.96E-04	100.0	
25	0	1483.24	10	15	4.60	2967.17	2956	19	6.92E-04	107.8	
26	0	1547.88*	23	7	8.24	3097.18	3085	27	1.63E-03	41.1	
27	0	1574.94	13	0	1.65	3151.62	3148	8	9.03E-04	27.7	
28	0	1649.96	14	25	7.60	3302.51	3293	32	9.89E-04	106.7	
29	0	1736.88	3	12	0.75	3477.33	3476	12	2.08E-04	238.0	
30	0	1813.52	36	11	16.18	3631.51	3614	41	2.52E-03	34.0	
31	0	1871.01	7	3	0.71	3747.15	3742	12	4.86E-04	62.3	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:46:05

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579006.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:42:40
Sample ID : G145579006 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry : 3190-I
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:03.21 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.56 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	2.103E+01	4.207E+01	2.910E+01	0.000E+00	0.723
CS-135	+	268.24	*	1.140E+01	1.381E+01	1.511E+01	0.000E+00	0.754
CE-141	+	145.44	*	2.859E+00	7.323E+00	8.558E+00	0.000E+00	0.334
BI-210	+	46.50	*	1.853E+02	5.058E+02	4.554E+02	0.000E+00	0.407
PB-210	+	46.50	*	1.853E+02	5.058E+02	4.554E+02	0.000E+00	0.407
TH-228		84.40		1.054E+02	1.376E+02	2.561E+02	0.000E+00	0.412
	+	238.60	*	6.415E-02	4.872E+00	5.639E+00	0.000E+00	0.011
		300.10		-2.603E+01	4.355E+01	7.057E+01	0.000E+00	-0.369

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-9.704E+00	2.102E+01	3.639E+01	0.000E+00	-0.267
NA-22		1274.53	*	4.027E-03	1.892E+00	3.536E+00	0.000E+00	0.001
AL-26		511.00		8.255E+00	1.687E+00	3.593E+00	0.000E+00	2.297
		1808.65	*	1.077E+00	1.957E+00	4.128E+00	0.000E+00	0.261
SC-46		889.25	*	-3.024E-01	2.128E+00	3.931E+00	0.000E+00	-0.077
		1120.51		2.143E+00	2.673E+00	5.365E+00	0.000E+00	0.399
V-48		944.10		7.556E+00	7.313E+01	1.406E+02	0.000E+00	0.054
		983.50	*	5.754E+00	5.924E+00	1.253E+01	0.000E+00	0.459
		1312.09		-3.429E+00	7.516E+00	1.297E+01	0.000E+00	-0.264
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-2.470E+01	3.060E+01	4.839E+01	0.000E+00	-0.510
MN-54		834.83	*	-5.902E-01	1.900E+00	3.233E+00	0.000E+00	-0.183
CO-56		846.75	*	9.922E-01	2.212E+00	4.169E+00	0.000E+00	0.238
		1037.82		-5.962E+00	1.697E+01	3.022E+01	0.000E+00	-0.197
	+	1238.25		3.223E+00	6.791E+00	6.201E+00	0.000E+00	0.520
CO-57		122.06	*	-3.233E-01	1.633E+00	2.847E+00	0.000E+00	-0.114
		136.47		-9.471E+00	1.507E+01	2.264E+01	0.000E+00	-0.418
CO-58		810.78	*	-1.642E-01	2.176E+00	3.855E+00	0.000E+00	-0.043
FE-59		192.35		-5.158E+01	7.049E+01	1.164E+02	0.000E+00	-0.443
		1099.25	*	-4.782E-01	5.030E+00	9.290E+00	0.000E+00	-0.051
		1291.60		-1.417E+00	6.903E+00	1.248E+01	0.000E+00	-0.114

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CO-60		1173.24		5.813E-01	1.851E+00	3.260E+00	0.000E+00	0.178
		1332.50	*	1.627E+00	1.999E+00	4.129E+00	0.000E+00	0.394
ZN-65		1115.55	*	-4.264E+00	4.328E+00	6.954E+00	0.000E+00	-0.613
SE-75		66.05		2.092E+02	3.718E+02	6.272E+02	0.000E+00	0.334
		96.73		-4.744E+01	5.063E+01	8.580E+01	0.000E+00	-0.553
		121.11		1.203E+00	9.482E+00	1.679E+01	0.000E+00	0.072
		136.00		-1.670E+00	2.894E+00	4.364E+00	0.000E+00	-0.383
	+	198.60		8.951E+01	1.818E+02	1.985E+02	0.000E+00	0.451
		264.65	*	4.254E-01	2.764E+00	4.781E+00	0.000E+00	0.089
		279.53		6.148E+00	6.623E+00	1.208E+01	0.000E+00	0.509
		303.91		-3.758E+01	1.230E+02	2.046E+02	0.000E+00	-0.184
		400.65		-4.527E-01	1.411E+01	2.562E+01	0.000E+00	-0.018
KR-85		513.99	*	-1.347E+03	5.943E+02	8.958E+02	0.000E+00	-1.504
SR-85		513.99	*	-8.093E+00	3.570E+00	5.381E+00	0.000E+00	-1.504
Y-88		898.02		1.074E+00	2.370E+00	4.619E+00	0.000E+00	0.232
		1836.01	*	1.073E+00	2.267E+00	4.786E+00	0.000E+00	0.224
Y-91		557.57	*	-1.157E+00	2.198E+00	3.748E+00	0.000E+00	-0.309
		1204.90		3.520E+02	1.018E+03	1.949E+03	0.000E+00	0.181
NB-94		702.63	*	-1.391E-01	1.661E+00	2.934E+00	0.000E+00	-0.047
	+	871.10		2.197E+00	2.632E+00	2.707E+00	0.000E+00	0.812
NB-95		765.79	*	4.727E-01	3.283E+00	5.907E+00	0.000E+00	0.080
ZR-95		724.18		-5.871E+00	5.283E+00	8.106E+00	0.000E+00	-0.724
		756.74	*	8.542E-01	3.842E+00	7.106E+00	0.000E+00	0.120
RU-103		497.08	*	-2.570E+00	3.531E+00	5.071E+00	0.000E+00	-0.507
		610.33		6.525E+01	5.911E+01	1.136E+02	0.000E+00	0.574
RH-106		511.85		5.968E+01	1.386E+01	2.905E+01	0.000E+00	2.054
		621.84	*	1.366E+00	1.648E+01	2.990E+01	0.000E+00	0.046
		1050.47		-1.187E+01	1.105E+02	2.033E+02	0.000E+00	-0.058
RU-106		622.20	*	-1.630E-01	1.677E+01	3.007E+01	0.000E+00	-0.005
AG-108M		433.93	*	-8.345E-01	1.627E+00	2.827E+00	0.000E+00	-0.295
	+	614.37		5.241E+00	5.644E+00	3.794E+00	0.000E+00	1.381
		722.95		-7.010E-02	1.966E+00	3.502E+00	0.000E+00	-0.020
CD-109		88.03	*	3.269E+00	4.332E+01	7.770E+01	0.000E+00	0.042
AG-110M		657.75	*	-8.858E-02	1.905E+00	3.383E+00	0.000E+00	-0.026
	+	677.61		1.446E+01	1.485E+01	2.801E+01	0.000E+00	0.516
		706.67		-1.360E+00	1.100E+01	1.932E+01	0.000E+00	-0.070
		763.93		1.015E+00	8.341E+00	1.505E+01	0.000E+00	0.067
		884.67		1.123E-01	2.576E+00	4.842E+00	0.000E+00	0.023
		937.48		-7.247E-01	5.071E+00	9.397E+00	0.000E+00	-0.077
		1384.27		-7.458E+00	8.276E+00	1.296E+01	0.000E+00	-0.575
SN-113		391.69	*	-1.517E+00	2.633E+00	4.563E+00	0.000E+00	-0.332
SN-115		484.47		-2.529E+02	1.207E+03	2.139E+03	0.000E+00	-0.118
		933.00	*	1.252E+02	1.904E+02	3.882E+02	0.000E+00	0.323
		1290.58		-1.114E+02	5.312E+02	9.548E+02	0.000E+00	-0.117
SN-117M		156.02		1.415E+01	2.854E+02	4.986E+02	0.000E+00	0.028
		158.56	*	-2.432E+00	6.803E+00	1.162E+01	0.000E+00	-0.209
TE-123M		159.00	*	-6.936E-01	1.745E+00	2.976E+00	0.000E+00	-0.233
SB-124		602.73		5.350E-02	2.358E+00	4.226E+00	0.000E+00	0.013
		645.85		-9.576E+00	2.943E+01	5.095E+01	0.000E+00	-0.188

---- Non-Identified Nuclides ----

Nuclide	Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	713.78		1.430E+00	8.711E+01	1.576E+02	0.000E+00	0.009
	722.79		-1.676E+00	2.081E+01	3.682E+01	0.000E+00	-0.046
	1368.16		6.811E+01	9.594E+01	2.026E+02	0.000E+00	0.336
	1690.98	*	-3.070E+00	5.926E+00	1.048E+01	0.000E+00	-0.293
SB-125	176.33		-1.088E+01	2.002E+01	3.360E+01	0.000E+00	-0.324
	427.89	*	4.638E-01	4.924E+00	8.995E+00	0.000E+00	0.052
	463.38		-6.152E+00	1.359E+01	2.363E+01	0.000E+00	-0.260
	600.56		-1.122E+00	9.908E+00	1.745E+01	0.000E+00	-0.064
	606.64		1.235E+01	3.985E+01	6.471E+01	0.000E+00	0.191
	635.90		4.609E+00	1.502E+01	2.762E+01	0.000E+00	0.167
TE-125M	109.28	*	-2.027E+02	6.934E+02	1.208E+03	0.000E+00	-0.168
I-126	388.63		4.091E+00	2.348E+01	4.332E+01	0.000E+00	0.094
	666.33	*	9.581E+00	2.139E+01	3.983E+01	0.000E+00	0.241
	753.82		6.356E+01	1.668E+02	3.103E+02	0.000E+00	0.205
SB-126	666.33		4.144E+00	9.251E+00	1.722E+01	0.000E+00	0.241
	695.00		1.003E+01	9.000E+00	1.794E+01	0.000E+00	0.559
	697.00		-2.001E+01	3.101E+01	5.114E+01	0.000E+00	-0.391
	720.50	*	1.822E+01	1.634E+01	3.281E+01	0.000E+00	0.555
SN-126	64.28		1.124E+01	3.778E+01	6.261E+01	0.000E+00	0.180
	86.94		-1.093E+01	1.757E+01	3.044E+01	0.000E+00	-0.359
	87.57	*	-9.175E-01	4.230E+00	7.482E+00	0.000E+00	-0.123
SB-127	252.40		2.062E+03	3.898E+03	6.905E+03	0.000E+00	0.299
	411.60		-4.120E+03	9.373E+03	1.640E+04	0.000E+00	-0.251
	444.90		4.123E+03	7.949E+03	1.498E+04	0.000E+00	0.275
	473.00		6.183E+02	1.304E+03	2.460E+03	0.000E+00	0.251
	543.30		1.342E+04	1.268E+04	2.523E+04	0.000E+00	0.532
	603.50		2.946E+03	8.837E+03	1.631E+04	0.000E+00	0.181
	685.70	*	1.212E+02	1.024E+03	1.859E+03	0.000E+00	0.065
	698.50		-1.356E+04	1.158E+04	1.775E+04	0.000E+00	-0.764
	783.70		-1.035E+03	2.978E+03	4.344E+03	0.000E+00	-0.238
I-131	284.30		8.324E+00	2.939E+02	5.048E+02	0.000E+00	0.016
	364.48	*	-1.528E+01	2.499E+01	3.989E+01	0.000E+00	-0.383
	636.97		9.748E+01	3.035E+02	5.603E+02	0.000E+00	0.174
BA-133	79.62		-1.471E+01	6.789E+01	1.208E+02	0.000E+00	-0.122
	81.00		-1.520E+00	5.059E+00	8.955E+00	0.000E+00	-0.170
	276.40		-5.706E+00	2.174E+01	3.631E+01	0.000E+00	-0.157
	302.85		2.400E+00	7.826E+00	1.368E+01	0.000E+00	0.175
	356.02	*	4.473E-01	2.617E+00	4.479E+00	0.000E+00	0.100
	383.85		6.841E-01	1.550E+01	2.834E+01	0.000E+00	0.024
CS-134	563.23		4.612E+00	1.743E+01	3.240E+01	0.000E+00	0.142
	569.32		9.434E+00	1.034E+01	2.015E+01	0.000E+00	0.468
	604.70		-9.928E-01	2.186E+00	3.197E+00	0.000E+00	-0.311
	795.84	*	1.609E+00	2.017E+00	3.940E+00	0.000E+00	0.408
	801.93		3.735E+00	2.231E+01	4.006E+01	0.000E+00	0.093
	1365.15		-9.843E+00	5.904E+01	1.081E+02	0.000E+00	-0.091
CS-136	66.88		8.997E+01	1.152E+02	1.975E+02	0.000E+00	0.455
	86.36		-7.699E+01	1.210E+02	2.096E+02	0.000E+00	-0.367
	153.25		4.084E+01	8.572E+01	1.532E+02	0.000E+00	0.267
	163.92		9.612E+01	1.370E+02	2.474E+02	0.000E+00	0.388

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		176.60		-3.448E+01	4.851E+01	8.062E+01	0.000E+00	-0.428
		273.65		1.315E+01	5.914E+01	9.219E+01	0.000E+00	0.143
		340.55		-9.961E+00	1.492E+01	2.380E+01	0.000E+00	-0.418
		818.51		2.866E+00	8.465E+00	1.569E+01	0.000E+00	0.183
		1048.07	*	-2.542E+00	1.114E+01	2.018E+01	0.000E+00	-0.126
		1235.36		-1.807E+01	5.090E+01	7.597E+01	0.000E+00	-0.238
BA-137M		661.65	*	2.369E-01	1.814E+00	3.287E+00	0.000E+00	0.072
CS-137		661.66	*	2.626E-01	1.919E+00	3.479E+00	0.000E+00	0.075
CE-139		165.85	*	1.038E-01	1.859E+00	3.243E+00	0.000E+00	0.032
BA-140		162.67		-8.768E+00	9.841E+01	1.704E+02	0.000E+00	-0.051
		304.87		-7.227E+01	1.566E+02	2.568E+02	0.000E+00	-0.281
		423.73		1.996E+02	2.438E+02	4.664E+02	0.000E+00	0.428
		537.31	*	-6.588E+00	2.893E+01	5.116E+01	0.000E+00	-0.129
CE-144		133.51	*	-4.757E+00	1.301E+01	2.238E+01	0.000E+00	-0.213
PM-144		476.78		-1.523E+00	3.748E+00	6.521E+00	0.000E+00	-0.234
		618.01		-2.016E-01	1.949E+00	3.014E+00	0.000E+00	-0.067
		696.49	*	-4.436E-01	1.796E+00	3.112E+00	0.000E+00	-0.143
PM-146		453.88	*	5.712E-01	2.275E+00	4.212E+00	0.000E+00	0.136
		633.25		2.312E+01	7.330E+01	1.356E+02	0.000E+00	0.171
		735.93		-4.410E+00	6.443E+00	1.052E+01	0.000E+00	-0.419
		747.24		2.948E+00	4.416E+00	8.552E+00	0.000E+00	0.345
ND-147	+	91.11		3.463E+01	6.778E+01	6.452E+01	0.000E+00	0.537
		531.02	*	-1.426E+01	7.692E+01	1.361E+02	0.000E+00	-0.105
PM-147		121.30	*	5.375E+05	3.403E+06	6.033E+06	0.000E+00	0.089
EU-152		121.78		3.376E-01	4.576E+00	8.090E+00	0.000E+00	0.042
		344.31	*	-1.595E+00	5.176E+00	8.561E+00	0.000E+00	-0.186
		963.37		-1.173E+01	1.157E+01	1.877E+01	0.000E+00	-0.625
GD-153		69.67		-5.255E+01	1.033E+02	1.627E+02	0.000E+00	-0.323
		83.37		5.538E+02	8.107E+02	1.504E+03	0.000E+00	0.368
		97.43	*	9.864E-01	4.885E+00	8.785E+00	0.000E+00	0.112
		103.18		-2.719E+00	6.614E+00	1.150E+01	0.000E+00	-0.236
EU-154		123.07		-2.461E+00	3.287E+00	5.560E+00	0.000E+00	-0.443
		247.93		1.311E+01	2.058E+01	3.687E+01	0.000E+00	0.356
		591.76		1.116E+01	3.549E+01	5.862E+01	0.000E+00	0.190
		723.30		-1.261E+00	8.126E+00	1.428E+01	0.000E+00	-0.088
		756.86		7.340E+00	3.554E+01	6.561E+01	0.000E+00	0.112
		873.20		5.819E+00	1.586E+01	2.659E+01	0.000E+00	0.219
		996.30		4.147E+00	1.757E+01	3.368E+01	0.000E+00	0.123
		1004.76		-5.489E+00	1.021E+01	1.774E+01	0.000E+00	-0.309
		1274.51	*	-8.908E-04	5.243E+00	9.794E+00	0.000E+00	0.000
EU-155		86.54		-2.507E+00	5.066E+00	8.842E+00	0.000E+00	-0.284
		105.31	*	5.826E+00	6.744E+00	1.244E+01	0.000E+00	0.468
TB-160		86.79		-6.691E+00	1.555E+01	2.723E+01	0.000E+00	-0.246
		298.57		-3.438E+00	7.225E+00	1.183E+01	0.000E+00	-0.291
		879.36	*	7.042E+00	7.636E+00	1.536E+01	0.000E+00	0.459
		962.29		-8.288E-01	2.422E+01	4.543E+01	0.000E+00	-0.018
		966.15		-1.829E+00	9.003E+00	1.652E+01	0.000E+00	-0.111
		1177.93		2.788E-01	1.586E+01	2.994E+01	0.000E+00	0.009
TM-171	+	51.87		9.060E+02	1.192E+03	1.287E+03	0.000E+00	0.704

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		59.40		3.042E+02	1.933E+03	3.219E+03	0.000E+00	0.094
		66.72	*	1.697E+03	1.936E+03	3.337E+03	0.000E+00	0.509
HF-181		56.28		-1.543E+01	9.431E+01	1.416E+02	0.000E+00	-0.109
		57.53		-2.312E+01	4.605E+01	7.330E+01	0.000E+00	-0.315
		65.20		-1.097E+00	8.967E+01	1.459E+02	0.000E+00	-0.008
		133.02		1.106E+00	5.119E+00	9.072E+00	0.000E+00	0.122
		136.25		-2.326E+01	4.550E+01	6.895E+01	0.000E+00	-0.337
		345.85		1.513E+00	1.257E+01	2.171E+01	0.000E+00	0.070
		482.03	*	-1.577E+00	2.907E+00	4.991E+00	0.000E+00	-0.316
TA-182		67.75		-6.308E+00	8.201E+00	1.268E+01	0.000E+00	-0.497
		100.10		7.017E+00	1.171E+01	2.145E+01	0.000E+00	0.327
		222.10		7.351E+00	2.141E+01	3.764E+01	0.000E+00	0.195
		1121.28		4.468E+00	7.225E+00	1.421E+01	0.000E+00	0.314
		1189.05		9.027E-02	1.269E+01	2.390E+01	0.000E+00	0.004
		1221.42	*	-4.994E+00	7.671E+00	1.290E+01	0.000E+00	-0.387
		1230.97		-1.066E+01	1.844E+01	3.141E+01	0.000E+00	-0.339
IR-192		295.96		2.289E+00	6.881E+00	1.197E+01	0.000E+00	0.191
		308.46		8.540E-02	6.191E+00	1.057E+01	0.000E+00	0.008
		316.51	*	2.075E+00	2.191E+00	4.029E+00	0.000E+00	0.515
		468.07		-1.565E+00	3.815E+00	6.659E+00	0.000E+00	-0.235
		604.41		-4.398E+00	2.742E+01	4.812E+01	0.000E+00	-0.091
	+	612.46		1.067E+02	1.149E+02	7.707E+01	0.000E+00	1.385
HG-203		70.83		-3.894E+01	7.800E+01	1.228E+02	0.000E+00	-0.317
		72.87		1.802E+01	4.555E+01	7.610E+01	0.000E+00	0.237
		82.60		-4.226E+00	7.362E+01	1.317E+02	0.000E+00	-0.032
		279.20	*	3.312E+00	2.836E+00	5.252E+00	0.000E+00	0.631
BI-207		569.67		1.270E+00	1.571E+00	3.042E+00	0.000E+00	0.418
		897.83		8.596E+02	1.205E+03	2.417E+03	0.000E+00	0.356
	+	1063.62	*	3.329E+00	2.824E+00	4.806E+00	0.000E+00	0.693
		1442.20		-6.841E+02	1.310E+03	2.220E+03	0.000E+00	-0.308
		1770.23		-7.775E+00	2.657E+01	4.935E+01	0.000E+00	-0.158
TL-208		75.00		3.977E+01	6.372E+01	1.177E+02	0.000E+00	0.338
		277.35		-1.060E+01	2.248E+01	3.696E+01	0.000E+00	-0.287
		510.84		6.458E+01	1.306E+01	2.791E+01	0.000E+00	2.314
		583.14	*	-5.363E-01	2.003E+00	3.489E+00	0.000E+00	-0.154
		763.30		-4.974E+00	1.069E+02	1.892E+02	0.000E+00	-0.026
		860.37		9.597E+00	1.524E+01	2.897E+01	0.000E+00	0.331
		1093.90		1.700E+02	5.146E+02	9.985E+02	0.000E+00	0.170
BI-211		351.07	*	6.771E+00	1.129E+01	2.013E+01	0.000E+00	0.336
PB-211		404.84	*	5.251E+00	4.766E+01	8.734E+01	0.000E+00	0.060
		427.08		-4.528E+01	1.121E+02	1.961E+02	0.000E+00	-0.231
		831.96		9.942E+00	6.341E+01	1.142E+02	0.000E+00	0.087
BI-212		727.18	*	6.472E+00	1.408E+01	2.654E+01	0.000E+00	0.244
PB-212		74.80		1.656E+01	2.043E+01	3.806E+01	0.000E+00	0.435
		87.30		-9.791E+00	2.020E+01	3.525E+01	0.000E+00	-0.278
		115.19		-1.910E+02	2.288E+02	3.865E+02	0.000E+00	-0.494
	+	238.63	*	6.415E-02	4.872E+00	7.067E+00	0.000E+00	0.009
		300.09		-2.623E+01	4.353E+01	7.052E+01	0.000E+00	-0.372
BI-214		609.31	*	5.308E+00	4.254E+00	8.242E+00	0.000E+00	0.644

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		768.36		2.158E+00	3.715E+01	6.597E+01	0.000E+00	0.033
		934.06		3.063E+01	5.213E+01	1.045E+02	0.000E+00	0.293
		1120.29		9.750E+00	1.409E+01	2.788E+01	0.000E+00	0.350
	+	1238.11		2.787E+01	5.872E+01	5.361E+01	0.000E+00	0.520
		1377.67		4.248E+01	4.861E+01	1.013E+02	0.000E+00	0.419
PB-214		74.81		2.760E+01	3.415E+01	6.361E+01	0.000E+00	0.434
		77.11		-1.134E+01	1.849E+01	3.220E+01	0.000E+00	-0.352
		87.30		-1.724E+01	3.557E+01	6.206E+01	0.000E+00	-0.278
		241.98		-6.103E+00	2.087E+01	3.493E+01	0.000E+00	-0.175
		295.21		4.042E+00	7.646E+00	1.351E+01	0.000E+00	0.299
		351.92	*	8.640E-01	4.075E+00	7.014E+00	0.000E+00	0.123
RN-219	+	271.23		1.721E+01	2.085E+01	2.282E+01	0.000E+00	0.754
		401.81	*	6.895E+00	2.040E+01	3.819E+01	0.000E+00	0.181
RA-223		122.32		-4.503E+01	1.089E+02	1.876E+02	0.000E+00	-0.240
	+	144.24		2.242E+01	5.742E+01	7.046E+01	0.000E+00	0.318
		154.21		1.536E+01	2.349E+01	4.231E+01	0.000E+00	0.363
	+	269.46		1.341E+01	1.625E+01	1.681E+01	0.000E+00	0.798
		323.87	*	-4.558E+00	4.078E+01	6.833E+01	0.000E+00	-0.067
		338.28		4.573E+01	5.593E+01	1.008E+02	0.000E+00	0.454
		445.03		6.855E+01	1.235E+02	2.333E+02	0.000E+00	0.294
RA-224		240.98	*	2.186E+01	4.437E+01	7.026E+01	0.000E+00	0.311
RA-226		295.21		4.042E+00	7.646E+00	1.351E+01	0.000E+00	0.299
		351.92		8.640E-01	4.075E+00	7.014E+00	0.000E+00	0.123
		609.31	*	5.308E+00	4.254E+00	8.242E+00	0.000E+00	0.644
AC-227		79.80		-2.197E+01	8.710E+01	1.546E+02	0.000E+00	-0.142
		236.00		-2.501E+00	1.405E+01	2.114E+01	0.000E+00	-0.118
		256.20	*	-3.791E+00	2.268E+01	3.834E+01	0.000E+00	-0.099
		286.10		2.135E+01	8.421E+01	1.472E+02	0.000E+00	0.145
		299.80		-7.066E+01	8.117E+01	1.284E+02	0.000E+00	-0.550
		304.40		-1.918E+00	1.006E+02	1.718E+02	0.000E+00	-0.011
		329.70		-6.530E+01	5.307E+01	8.039E+01	0.000E+00	-0.812
		334.20		-3.210E+01	1.395E+02	2.312E+02	0.000E+00	-0.139
TH-227		79.80		-2.158E+01	8.557E+01	1.519E+02	0.000E+00	-0.142
	+	94.00		1.028E+02	2.012E+02	1.793E+02	0.000E+00	0.573
		236.00		-2.460E+00	1.382E+01	2.080E+01	0.000E+00	-0.118
		256.20	*	-3.727E+00	2.229E+01	3.769E+01	0.000E+00	-0.099
		286.10		2.101E+01	8.284E+01	1.448E+02	0.000E+00	0.145
		299.80		-6.932E+01	7.964E+01	1.260E+02	0.000E+00	-0.550
		304.40		-1.884E+00	9.887E+01	1.688E+02	0.000E+00	-0.011
		329.70		-6.423E+01	5.220E+01	7.907E+01	0.000E+00	-0.812
		334.20		-3.146E+01	1.367E+02	2.266E+02	0.000E+00	-0.139
AC-228		209.25		1.054E+00	3.097E+01	5.348E+01	0.000E+00	0.020
		338.32		1.077E+01	1.351E+01	2.430E+01	0.000E+00	0.443
		463.01		-1.173E+01	3.155E+01	5.532E+01	0.000E+00	-0.212
		794.95		-6.887E+00	3.895E+01	6.757E+01	0.000E+00	-0.102
		911.21	*	8.224E+00	6.809E+00	1.416E+01	0.000E+00	0.581
		964.77		-4.323E+01	3.265E+01	5.014E+01	0.000E+00	-0.862
		969.11		1.190E+01	1.040E+01	2.204E+01	0.000E+00	0.540
RA-228		209.25		1.054E+00	3.097E+01	5.348E+01	0.000E+00	0.020

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		338.32		1.077E+01	1.351E+01	2.430E+01	0.000E+00	0.443
		463.01		-1.173E+01	3.155E+01	5.532E+01	0.000E+00	-0.212
		794.95		-6.887E+00	3.895E+01	6.757E+01	0.000E+00	-0.102
		911.21	*	8.224E+00	6.809E+00	1.416E+01	0.000E+00	0.581
		964.77		-4.323E+01	3.265E+01	5.014E+01	0.000E+00	-0.862
		969.11		1.190E+01	1.040E+01	2.204E+01	0.000E+00	0.540
TH-229		85.43		-4.413E+00	9.729E+00	1.702E+01	0.000E+00	-0.259
		88.47		4.417E+00	5.627E+00	1.046E+01	0.000E+00	0.422
		100.00		7.142E+00	1.113E+01	2.042E+01	0.000E+00	0.350
		193.63	*	3.629E+00	2.934E+01	5.104E+01	0.000E+00	0.071
		210.97		-1.135E+01	4.268E+01	7.222E+01	0.000E+00	-0.157
TH-230		295.21		4.041E+00	7.645E+00	1.351E+01	0.000E+00	0.299
		351.92		8.640E-01	4.074E+00	7.014E+00	0.000E+00	0.123
		609.31	*	5.308E+00	4.253E+00	8.242E+00	0.000E+00	0.644
PA-231		283.67	*	-9.661E+00	8.220E+01	1.395E+02	0.000E+00	-0.069
		301.29		1.231E+01	3.023E+01	5.324E+01	0.000E+00	0.231
		330.00		-1.543E+02	1.173E+02	1.763E+02	0.000E+00	-0.875
TH-231		84.21		2.234E+01	2.505E+01	4.692E+01	0.000E+00	0.476
		236.00		-2.494E+00	1.401E+01	2.109E+01	0.000E+00	-0.118
		256.20		-3.781E+00	2.262E+01	3.824E+01	0.000E+00	-0.099
	+	269.46	*	1.341E+01	1.625E+01	1.961E+01	0.000E+00	0.684
	+	271.23		1.721E+01	2.085E+01	2.400E+01	0.000E+00	0.717
		283.67		-9.661E+00	8.220E+01	1.395E+02	0.000E+00	-0.069
		301.29		1.231E+01	3.023E+01	5.324E+01	0.000E+00	0.231
		329.85		-4.862E+01	3.662E+01	5.494E+01	0.000E+00	-0.885
		351.07		6.771E+00	1.129E+01	2.013E+01	0.000E+00	0.336
		401.81		6.895E+00	2.040E+01	3.819E+01	0.000E+00	0.181
TH-232	+	238.59	*	6.225E-02	4.728E+00	6.854E+00	0.000E+00	0.009
		911.20		8.169E+00	6.744E+00	1.403E+01	0.000E+00	0.582
		964.40		-5.225E+01	3.283E+01	4.792E+01	0.000E+00	-1.090
		969.11		1.179E+01	1.030E+01	2.182E+01	0.000E+00	0.540
PA-233		75.28		1.042E+02	1.671E+02	3.085E+02	0.000E+00	0.338
		86.59		-3.946E+01	8.187E+01	1.430E+02	0.000E+00	-0.276
		300.12		-1.285E+01	2.185E+01	3.544E+01	0.000E+00	-0.363
		311.98	*	-1.406E+00	3.560E+00	5.866E+00	0.000E+00	-0.240
		340.50		-2.094E+01	3.281E+01	5.250E+01	0.000E+00	-0.399
		398.62		-1.575E+01	1.038E+02	1.869E+02	0.000E+00	-0.084
		415.76		6.527E+01	7.862E+01	1.538E+02	0.000E+00	0.424
PA-234		63.00		1.035E+02	1.142E+02	1.966E+02	0.000E+00	0.526
	+	94.67		9.169E+00	1.794E+01	1.624E+01	0.000E+00	0.565
		98.44		3.356E+00	5.581E+00	1.021E+01	0.000E+00	0.329
		99.70		2.436E+01	2.856E+01	5.297E+01	0.000E+00	0.460
		111.00		9.189E-01	1.177E+01	2.086E+01	0.000E+00	0.044
		131.20		8.063E-01	6.527E+00	1.151E+01	0.000E+00	0.070
		152.70		9.471E+00	1.871E+01	3.353E+01	0.000E+00	0.282
		186.00		1.159E+02	7.136E+01	1.335E+02	0.000E+00	0.868
		226.40		3.567E+00	2.274E+01	3.948E+01	0.000E+00	0.090
		227.20		6.125E+00	2.401E+01	4.199E+01	0.000E+00	0.146
		248.90		-1.611E+01	4.793E+01	8.027E+01	0.000E+00	-0.201

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Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		293.70		-1.346E+01	3.752E+01	6.202E+01	0.000E+00	-0.217
		369.80		-3.883E+01	4.614E+01	7.852E+01	0.000E+00	-0.495
		568.70		4.226E+01	5.112E+01	9.910E+01	0.000E+00	0.426
		569.50		1.204E+01	1.402E+01	2.723E+01	0.000E+00	0.442
		574.00		3.691E+00	7.891E+01	1.421E+02	0.000E+00	0.026
		699.00		-4.750E+01	3.620E+01	5.428E+01	0.000E+00	-0.875
		706.10		-1.681E+01	5.225E+01	8.970E+01	0.000E+00	-0.187
		733.00		2.254E+00	1.768E+01	3.223E+01	0.000E+00	0.070
		742.81		-2.160E+01	6.034E+01	1.037E+02	0.000E+00	-0.208
		796.30		8.507E+00	4.604E+01	8.331E+01	0.000E+00	0.102
		805.80		-1.598E+01	5.387E+01	9.181E+01	0.000E+00	-0.174
		819.60		1.934E+01	6.221E+01	1.153E+02	0.000E+00	0.168
		826.30		-8.516E+00	3.928E+01	6.821E+01	0.000E+00	-0.125
		831.60		1.699E+01	3.199E+01	6.029E+01	0.000E+00	0.282
		876.40		-3.263E+01	4.222E+01	6.667E+01	0.000E+00	-0.489
		880.51		9.735E+00	1.320E+01	2.689E+01	0.000E+00	0.362
		883.24		-1.253E+01	1.500E+01	2.533E+01	0.000E+00	-0.495
		899.00		2.509E+01	4.080E+01	8.148E+01	0.000E+00	0.308
		925.00		3.800E+01	5.706E+01	1.148E+02	0.000E+00	0.331
		926.50		-1.108E+00	8.866E+00	1.630E+01	0.000E+00	-0.068
		946.00	*	-1.172E+00	1.611E+01	2.599E+01	0.000E+00	-0.045
		949.00		7.671E+00	2.495E+01	4.258E+01	0.000E+00	0.180
		980.50		-1.086E+00	3.185E+01	5.992E+01	0.000E+00	-0.018
		1394.10		3.349E+01	4.725E+01	1.036E+02	0.000E+00	0.323
PA-234M		766.40		1.903E+02	8.408E+02	1.530E+03	0.000E+00	0.124
		1001.03	*	1.122E+02	2.024E+02	4.052E+02	0.000E+00	0.277
TH-234		63.29	*	7.517E+01	9.812E+01	1.674E+02	0.000E+00	0.449
	+	92.38		2.661E+01	5.207E+01	5.069E+01	0.000E+00	0.525
		112.81		5.011E+02	5.677E+02	1.044E+03	0.000E+00	0.480
U-234		67.67		-5.435E+02	7.802E+02	1.213E+03	0.000E+00	-0.448
		241.98		-6.111E+00	2.090E+01	3.498E+01	0.000E+00	-0.175
		295.21	*	4.041E+00	7.645E+00	1.351E+01	0.000E+00	0.299
		351.92		8.640E-01	4.074E+00	7.014E+00	0.000E+00	0.123
U-235		89.95		-9.005E+00	6.482E+01	1.032E+02	0.000E+00	-0.087
	+	93.35		3.199E+01	6.260E+01	8.005E+01	0.000E+00	0.400
		105.00		4.090E+01	6.468E+01	1.183E+02	0.000E+00	0.346
	+	143.76	*	6.919E+00	1.772E+01	2.235E+01	0.000E+00	0.310
		163.33		2.804E+00	2.746E+01	4.804E+01	0.000E+00	0.058
		185.71		4.376E+00	2.646E+00	4.954E+00	0.000E+00	0.883
	+	205.31		1.449E+01	3.272E+01	4.856E+01	0.000E+00	0.298
NP-237		86.48	*	-6.271E+00	1.228E+01	2.141E+01	0.000E+00	-0.293
		95.87		-3.200E+01	6.195E+01	9.582E+01	0.000E+00	-0.334
U-238		63.29	*	7.517E+01	9.812E+01	1.674E+02	0.000E+00	0.449
NP-239		99.55		7.878E+00	9.330E+00	1.730E+01	0.000E+00	0.455
		117.00	*	6.539E+00	1.159E+01	2.105E+01	0.000E+00	0.311
		209.75		1.131E+01	4.110E+01	7.209E+01	0.000E+00	0.157
		228.18		-2.475E+00	1.271E+01	2.156E+01	0.000E+00	-0.115
		277.60		1.657E+00	1.006E+01	1.738E+01	0.000E+00	0.095
		334.31		-2.316E+01	7.769E+01	1.281E+02	0.000E+00	-0.181

Sample ID : G145579006 Acquisition date : 13-OCT-2005 10:42:40

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AM-241		59.54	*	5.827E+00	1.085E+01	1.855E+01	0.000E+00	0.314
AM-242		99.55		1.839E+02	2.178E+02	4.038E+02	0.000E+00	0.455
		103.70	*	6.641E+01	1.366E+02	2.480E+02	0.000E+00	0.268
CM-247		278.00		1.071E+01	4.350E+01	7.535E+01	0.000E+00	0.142
		287.40		-8.198E+00	6.833E+01	1.157E+02	0.000E+00	-0.071
		402.60	*	1.863E-01	1.893E+00	3.467E+00	0.000E+00	0.054
CF-249		252.85		4.869E+01	5.083E+01	9.270E+01	0.000E+00	0.525
		333.44		6.205E+00	9.807E+00	1.743E+01	0.000E+00	0.356
		387.95	*	7.755E-01	2.086E+00	3.899E+00	0.000E+00	0.199
CF-251		176.00	*	-4.780E-01	7.477E+00	1.291E+01	0.000E+00	-0.037
		227.00		1.130E+01	2.079E+01	3.711E+01	0.000E+00	0.305
		285.00		-1.091E+01	9.500E+01	1.612E+02	0.000E+00	-0.068
ANH-511		511.00	*	1.351E+01	2.761E+00	5.879E+00	0.000E+00	2.297

VAX/VMS Nuclide Identification Report Generated

```
*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579006    *
* Acquisition date : 13-OCT-2005 10:42:40 Detector SN#    : 1943234     *
* Detector ID      : GAMMA8               Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:03.21     Half life ratio :  8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 07:30:00 Nuclide Library : FERMC       *
* Sample ID        : G145579006           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME : 23-SEP-2005 12:09:12 MS Isotope      :             *
* MSD DPM          : ********            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
*************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	2.103E+01	4.207E+01	2.910E+01	0.000E+00
CS-135	1.140E+01	1.381E+01	1.511E+01	0.000E+00
CE-141	2.859E+00	7.323E+00	8.558E+00	0.000E+00
BI-210	1.853E+02	5.058E+02	4.554E+02	0.000E+00
PB-210	1.853E+02	5.058E+02	4.554E+02	0.000E+00
TH-228	6.415E-02	4.872E+00	5.639E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	
BE-7	-9.704E+00		2.102E+01	3.639E+01	0.000E+00 NOT IDENT.
NA-22	4.027E-03		1.892E+00	3.536E+00	0.000E+00 NOT IDENT.
NA-24	0.000E+00		6.057E+14	0.000E+00	0.000E+00 SHORT HLIF
AL-26	1.077E+00		1.957E+00	4.128E+00	0.000E+00 NOT IDENT.
SC-46	-3.024E-01		2.128E+00	3.931E+00	0.000E+00 NOT IDENT.
V-48	5.754E+00		5.924E+00	1.253E+01	0.000E+00 NOT IDENT.
CR-51	-2.470E+01		3.060E+01	4.839E+01	0.000E+00 NOT IDENT.
MN-54	-5.902E-01		1.900E+00	3.233E+00	0.000E+00 NOT IDENT.
CO-56	9.922E-01		2.212E+00	4.169E+00	0.000E+00 FAIL ABUN
MN-56	0.000E+00		2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
CO-57	-3.233E-01		1.633E+00	2.847E+00	0.000E+00 NOT IDENT.
CO-58	-1.642E-01		2.176E+00	3.855E+00	0.000E+00 NOT IDENT.
FE-59	-4.782E-01		5.030E+00	9.290E+00	0.000E+00 NOT IDENT.
CO-60	1.627E+00		1.999E+00	4.129E+00	0.000E+00 NOT IDENT.
ZN-65	-4.264E+00		4.328E+00	6.954E+00	0.000E+00 NOT IDENT.
SE-75	4.254E-01		2.764E+00	4.781E+00	0.000E+00 FAIL ABUN
KR-85	-1.347E+03		5.943E+02	8.958E+02	0.000E+00 NOT IDENT.
SR-85	-8.093E+00		3.570E+00	5.381E+00	0.000E+00 NOT IDENT.
Y-88	1.073E+00		2.267E+00	4.786E+00	0.000E+00 NOT IDENT.
Y-91	-1.157E+00		2.198E+00	3.748E+00	0.000E+00 NOT IDENT.
NB-94	-1.391E-01		1.661E+00	2.934E+00	0.000E+00 FAIL ABUN

NB-95	4.727E-01	3.283E+00	5.907E+00	0.000E+00 NOT IDENT.
NB-95M	0.000E+00	2.042E+03	0.000E+00	0.000E+00 SHORT HLIF
ZR-95	8.542E-01	3.842E+00	7.106E+00	0.000E+00 NOT IDENT.
MO-99	0.000E+00	6.225E+03	0.000E+00	0.000E+00 SHORT HLIF
TC-99M	0.000E+00	5.969E+36	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-2.570E+00	3.531E+00	5.071E+00	0.000E+00 NOT IDENT.
RH-106	1.366E+00	1.648E+01	2.990E+01	0.000E+00 NOT IDENT.
RU-106	-1.630E-01	1.677E+01	3.007E+01	0.000E+00 NOT IDENT.
AG-108M	-8.345E-01	1.627E+00	2.827E+00	0.000E+00 FAIL ABUN
CD-109	3.269E+00	4.332E+01	7.770E+01	0.000E+00 NOT IDENT.
AG-110M	-8.858E-02	1.905E+00	3.383E+00	0.000E+00 FAIL ABUN
SN-113	-1.517E+00	2.633E+00	4.563E+00	0.000E+00 NOT IDENT.
CD-115	0.000E+00	6.238E+04	0.000E+00	0.000E+00 SHORT HLIF
SN-115	1.252E+02	1.904E+02	3.882E+02	0.000E+00 NOT IDENT.
SN-117M	-2.432E+00	6.803E+00	1.162E+01	0.000E+00 NOT IDENT.
TE-123M	-6.936E-01	1.745E+00	2.976E+00	0.000E+00 NOT IDENT.
SB-124	-3.070E+00	5.926E+00	1.048E+01	0.000E+00 NOT IDENT.
SB-125	4.638E-01	4.924E+00	8.995E+00	0.000E+00 NOT IDENT.
TE-125M	-2.027E+02	6.934E+02	1.208E+03	0.000E+00 NOT IDENT.
I-126	9.581E+00	2.139E+01	3.983E+01	0.000E+00 NOT IDENT.
SB-126	1.822E+01	1.634E+01	3.281E+01	0.000E+00 NOT IDENT.
SN-126	-9.175E-01	4.230E+00	7.482E+00	0.000E+00 NOT IDENT.
SB-127	1.212E+02	1.024E+03	1.859E+03	0.000E+00 NOT IDENT.
I-131	-1.528E+01	2.499E+01	3.989E+01	0.000E+00 NOT IDENT.
I-132	0.000E+00	1.093E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	0.000E+00	9.549E+02	0.000E+00	0.000E+00 SHORT HLIF
BA-133	4.473E-01	2.617E+00	4.479E+00	0.000E+00 NOT IDENT.
I-133	0.000E+00	5.404E+10	0.000E+00	0.000E+00 SHORT HLIF
CS-134	1.609E+00	2.017E+00	3.940E+00	0.000E+00 NOT IDENT.
I-135	0.000E+00	8.020E+33	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-2.542E+00	1.114E+01	2.018E+01	0.000E+00 NOT IDENT.
BA-137M	2.369E-01	1.814E+00	3.287E+00	0.000E+00 NOT IDENT.
CS-137	2.626E-01	1.919E+00	3.479E+00	0.000E+00 NOT IDENT.
CE-139	1.038E-01	1.859E+00	3.243E+00	0.000E+00 NOT IDENT.
BA-140	-6.588E+00	2.893E+01	5.116E+01	0.000E+00 NOT IDENT.
LA-140	0.000E+00	6.104E+05	0.000E+00	0.000E+00 SHORT HLIF
CE-143	0.000E+00	1.447E+07	0.000E+00	0.000E+00 SHORT HLIF
CE-144	-4.757E+00	1.301E+01	2.238E+01	0.000E+00 NOT IDENT.
PM-144	-4.436E-01	1.796E+00	3.112E+00	0.000E+00 NOT IDENT.
PR-144	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	5.712E-01	2.275E+00	4.212E+00	0.000E+00 NOT IDENT.
ND-147	-1.426E+01	7.692E+01	1.361E+02	0.000E+00 FAIL ABUN
PM-147	5.375E+05	3.403E+06	6.033E+06	0.000E+00 NOT IDENT.
PM-149	0.000E+00	5.619E+05	0.000E+00	0.000E+00 SHORT HLIF
EU-152	-1.595E+00	5.176E+00	8.561E+00	0.000E+00 NOT IDENT.
GD-153	9.864E-01	4.885E+00	8.785E+00	0.000E+00 NOT IDENT.
EU-154	-8.908E-04	5.243E+00	9.794E+00	0.000E+00 NOT IDENT.
EU-155	5.826E+00	6.744E+00	1.244E+01	0.000E+00 NOT IDENT.
TB-160	7.042E+00	7.636E+00	1.536E+01	0.000E+00 NOT IDENT.
TM-171	1.697E+03	1.936E+03	3.337E+03	0.000E+00 FAIL ABUN
HF-181	-1.577E+00	2.907E+00	4.991E+00	0.000E+00 NOT IDENT.
TA-182	-4.994E+00	7.671E+00	1.290E+01	0.000E+00 NOT IDENT.
IR-192	2.075E+00	2.191E+00	4.029E+00	0.000E+00 FAIL ABUN
HG-203	3.312E+00	2.836E+00	5.252E+00	0.000E+00 NOT IDENT.
BI-207	3.329E+00	2.824E+00	4.806E+00	0.000E+00 FAIL ABUN
TL-208	-5.363E-01	2.003E+00	3.489E+00	0.000E+00 NOT IDENT.
BI-211	6.771E+00	1.129E+01	2.013E+01	0.000E+00 NOT IDENT.
PB-211	5.251E+00	4.766E+01	8.734E+01	0.000E+00 NOT IDENT.
BI-212	6.472E+00	1.408E+01	2.654E+01	0.000E+00 NOT IDENT.
PB-212	6.415E-02	4.872E+00	7.067E+00	0.000E+00 FAIL ABUN
BI-214	5.308E+00	4.254E+00	8.242E+00	0.000E+00 FAIL ABUN
PB-214	8.640E-01	4.075E+00	7.014E+00	0.000E+00 NOT IDENT.
RN-219	6.895E+00	2.040E+01	3.819E+01	0.000E+00 FAIL ABUN
RA-223	-4.558E+00	4.078E+01	6.833E+01	0.000E+00 FAIL ABUN
RA-224	2.186E+01	4.437E+01	7.026E+01	0.000E+00 NOT IDENT.
RA-226	5.308E+00	4.254E+00	8.242E+00	0.000E+00 NOT IDENT.
AC-227	-3.791E+00	2.268E+01	3.834E+01	0.000E+00 NOT IDENT.
TH-227	-3.727E+00	2.229E+01	3.769E+01	0.000E+00 FAIL ABUN
AC-228	8.224E+00	6.809E+00	1.416E+01	0.000E+00 NOT IDENT.
RA-228	8.224E+00	6.809E+00	1.416E+01	0.000E+00 NOT IDENT.
TH-229	3.629E+00	2.934E+01	5.104E+01	0.000E+00 NOT IDENT.
TH-230	5.308E+00	4.253E+00	8.242E+00	0.000E+00 NOT IDENT.
PA-231	-9.661E+00	8.220E+01	1.395E+02	0.000E+00 NOT IDENT.
TH-231	1.341E+01	1.625E+01	1.961E+01	0.000E+00 FAIL ABUN
TH-232	6.225E-02	4.728E+00	6.854E+00	0.000E+00 FAIL ABUN
PA-233	-1.406E+00	3.560E+00	5.866E+00	0.000E+00 NOT IDENT.
PA-234	-1.172E+00	1.611E+01	2.599E+01	0.000E+00 FAIL ABUN
PA-234M	1.122E+02	2.024E+02	4.052E+02	0.000E+00 NOT IDENT.

TH-234	7.517E+01	9.812E+01	1.674E+02	0.000E+00 FAIL ABUN
U-234	4.041E+00	7.645E+00	1.351E+01	0.000E+00 NOT IDENT.
U-235	6.919E+00	1.772E+01	2.235E+01	0.000E+00 FAIL ABUN
NP-237	-6.271E+00	1.228E+01	2.141E+01	0.000E+00 NOT IDENT.
U-238	7.517E+01	9.812E+01	1.674E+02	0.000E+00 NOT IDENT.
NP-239	6.539E+00	1.159E+01	2.105E+01	0.000E+00 NOT IDENT.
AM-241	5.827E+00	1.085E+01	1.855E+01	0.000E+00 NOT IDENT.
AM-242	6.641E+01	1.366E+02	2.480E+02	0.000E+00 NOT IDENT.
CM-247	1.863E-01	1.893E+00	3.467E+00	0.000E+00 NOT IDENT.
CF-249	7.755E-01	2.086E+00	3.899E+00	0.000E+00 NOT IDENT.
CF-251	-4.780E-01	7.477E+00	1.291E+01	0.000E+00 NOT IDENT.
ANH-511	0.000E+00	2.761E+00	5.879E+00	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:45:58.58

```
*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579006.CNF;1
Sample date      : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:42:40
Sample ID        : G145579006           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA8               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:03.21  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1943234
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	46.61	40	158	1.42	79.07	75	9	2.75E-03	59.2	
2	0	53.43	45	171	1.19	92.77	89	8	3.15E-03	51.9	
3	0	63.25	35	206	0.91	112.51	110	7	2.42E-03	70.0	
4	0	92.89	143	216	1.18	172.06	169	8	9.92E-03	19.6	
5	0	140.04	86	254	1.11	266.83	261	11	5.95E-03	37.7	
6	0	143.72	37	153	0.54	274.22	272	7	2.60E-03	57.1	
7	0	185.66	70	220	0.97	358.50	353	11	4.86E-03	42.7	
8	0	198.39	63	158	1.25	384.08	381	8	4.35E-03	37.0	
9	0	205.74	29	101	1.16	398.85	396	6	2.05E-03	57.1	
10	0	238.82	67	125	1.78	465.33	462	7	4.67E-03	30.1	
11	0	269.90	44	115	1.66	527.78	523	10	3.09E-03	47.5	
12	0	377.30	21	64	1.04	743.65	741	9	1.47E-03	71.9	
13	0	500.13	7	61	1.36	990.52	986	8	4.72E-04	203.9	
14	0	511.31	244	121	2.61	1013.01	1004	21	1.69E-02	13.0	
15	0	596.68	32	58	1.01	1184.59	1177	10	2.21E-03	48.0	
16	0	612.47	49	90	7.84	1216.34	1205	22	3.37E-03	53.8	
17	0	676.70	15	16	1.31	1345.44	1343	7	1.03E-03	51.3	
18	0	786.29	18	19	1.54	1565.75	1559	11	1.25E-03	52.8	
19	0	869.45	19	26	1.02	1732.95	1728	13	1.32E-03	59.9	
20	0	951.47	12	19	1.59	1897.86	1890	12	8.18E-04	82.3	
21	0	1064.94	18	12	1.95	2126.00	2122	11	1.27E-03	42.4	
22	0	1072.17	7	5	1.22	2140.53	2139	6	4.89E-04	61.5	
23	0	1169.54	8	9	0.93	2336.33	2334	7	5.27E-04	78.4	
24	0	1190.81	9	9	1.54	2379.10	2377	8	6.33E-04	64.0	
25	0	1196.40	6	5	1.43	2390.33	2388	5	4.17E-04	69.2	
26	0	1239.85	20	15	2.25	2477.70	2468	20	1.42E-03	51.2	
27	0	1246.96	11	7	0.91	2492.01	2488	9	7.72E-04	51.8	
28	0	1265.01	8	10	0.53	2528.29	2523	8	5.73E-04	74.7	
29	0	1462.00	31	20	2.34	2924.46	2917	16	2.18E-03	36.5	
30	0	1483.24	10	15	4.60	2967.17	2956	19	6.92E-04	107.8	
31	0	1547.88	28	7	8.24	3097.18	3085	27	1.96E-03	31.9	
32	0	1574.94	13	0	1.65	3151.62	3148	8	9.03E-04	27.7	
33	0	1649.96	14	25	7.60	3302.51	3293	32	9.89E-04	106.7	
34	0	1736.88	3	12	0.75	3477.33	3476	12	2.08E-04	238.0	
35	0	1813.52	36	11	16.18	3631.51	3614	41	2.52E-03	34.0	
36	0	1871.01	7	3	0.71	3747.15	3742	12	4.86E-04	62.3	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:46:03.36

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579006.CNF;1
Sample date      : 13-SEP-2005 07:30:00 Acquisition date : 13-OCT-2005 10:42:40
Sample ID        : G145579006           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA8               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:03.21  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1943234
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	13	10.67*	5.396E-01	2.103E+01	2.103E+01	200.04
CS-135	268.24	36	16.00*	1.862E+00	1.140E+01	1.140E+01	121.15
CE-141	145.44	19	48.40*	2.485E+00	1.501E+00	2.859E+00	256.11
BI-210	46.50	19	4.05*	2.367E-01	1.848E+02	1.853E+02	272.95
PB-210	46.50	19	4.05*	2.367E-01	1.848E+02	1.853E+02	272.95
TH-228	84.40	------	1.21	1.867E+00	------	Line Not Found	------
	238.60	1	44.60*	2.008E+00	6.225E-02	6.415E-02	7595.33
	300.10	------	3.41	1.739E+00	------	Line Not Found	------

Flag: "*" = Keyline

Sample ID : G145579006 Acquisition date : 13-OCT-2005 10:42:40

Total number of lines in spectrum	31	
Number of unidentified lines	16	
Number of lines tentatively identified by NID	15	48.39%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	2.103E+01	2.103E+01	4.207E+01	200.04	
CS-135	2.30E+06Y	1.00	1.140E+01	1.140E+01	1.381E+01	121.15	
CE-141	32.50D	1.90	1.501E+00	2.859E+00	7.323E+00	256.11	
BI-210	22.26Y	1.00	1.848E+02	1.853E+02	5.058E+02	272.95	
PB-210	22.26Y	1.00	1.848E+02	1.853E+02	5.058E+02	272.95	
TH-228	1.91Y	1.03	6.225E-02	6.415E-02	487.2E-02	7595.33	
	Total Activity :		4.036E+02	4.059E+02			
	Grand Total Activity :		4.036E+02	4.059E+02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579006 Acquisition date : 13-OCT-2005 10:42:40

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	53.43	37	171	1.19	92.77	89	8	2.60E-03	****	4.94E-01	T
0	92.89	32	216	1.18	172.06	169	8	2.25E-03	****	2.11E+00	T
0	140.04	80	254	1.11	266.83	261	11	5.53E-03	84.8	2.49E+00	T
0	198.39	26	158	1.25	384.08	381	8	1.79E-03	****	2.22E+00	T
0	205.74	17	101	1.16	398.85	396	6	1.17E-03	****	2.18E+00	T
0	377.30	21	64	1.04	743.65	741	9	1.47E-03	****	1.49E+00	
0	500.13	7	61	1.36	990.52	986	8	4.72E-04	****	1.23E+00	
0	596.68	18	58	1.01	1184.59	1177	10	1.28E-03	****	1.08E+00	
0	612.47	49	90	7.84	1216.34	1205	22	3.37E-03	****	1.06E+00	T
0	676.70	15	16	1.31	1345.44	1343	7	1.03E-03	****	9.85E-01	T
0	786.29	18	19	1.54	1565.75	1559	11	1.25E-03	****	8.78E-01	
0	869.45	19	26	1.02	1732.95	1728	13	1.32E-03	****	8.11E-01	T
0	951.47	3	19	1.59	1897.86	1890	12	2.11E-04	****	7.55E-01	
0	1064.94	18	12	1.95	2126.00	2122	11	1.27E-03	84.8	6.90E-01	T
0	1072.17	7	5	1.22	2140.53	2139	6	4.89E-04	****	6.86E-01	
0	1169.54	8	9	0.93	2336.33	2334	7	5.27E-04	****	6.40E-01	
0	1196.40	6	5	1.43	2390.33	2388	5	4.17E-04	****	6.29E-01	
0	1239.85	11	15	2.25	2477.70	2468	20	7.49E-04	****	6.11E-01	T
0	1246.96	9	7	0.91	2492.01	2488	9	6.31E-04	****	6.08E-01	
0	1483.24	10	15	4.60	2967.17	2956	19	6.92E-04	****	5.34E-01	
0	1547.88	23	7	8.24	3097.18	3085	27	1.63E-03	82.2	5.18E-01	
0	1574.94	13	0	1.65	3151.62	3148	8	9.03E-04	55.5	5.12E-01	
0	1649.96	14	25	7.60	3302.51	3293	32	9.89E-04	****	4.97E-01	
0	1736.88	3	12	0.75	3477.33	3476	12	2.08E-04	****	4.82E-01	
0	1813.52	36	11	16.18	3631.51	3614	41	2.52E-03	68.0	4.71E-01	
0	1871.01	7	3	0.71	3747.15	3742	12	4.86E-04	****	4.63E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:46:14.87

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579006.CNF;1     *
* Acquisition date : 13-OCT-2005 10:42:40  Detector SN#    : 1943234        *
* Detector ID      : GAMMA8                Sensitivity     : 3.00000        *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000        *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000       *
* Elapsed real time: 0 04:00:03.21         Half life ratio : 8.00000        *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 13-SEP-2005 07:30:00  Nuclide Library : EPI            *
* Sample ID        : G145579006            Analyst initials: MJH1           *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 23-SEP-2005 12:09:12.5MS Isotope      :               *
* MSD DPM          :                      MSD Isotope     :               *
* LCS DPM          :                      LCS Isotope     :               *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	2.103E+01	4.207E+01	2.910E+01	0.000E+00	0.723
CS-135	1.140E+01	1.381E+01	1.511E+01	0.000E+00	0.754
CE-141	2.859E+00	7.323E+00	8.558E+00	0.000E+00	0.334
BI-210	1.853E+02	5.058E+02	4.554E+02	0.000E+00	0.407
PB-210	1.853E+02	5.058E+02	4.554E+02	0.000E+00	0.407
TH-228	6.415E-02	4.872E+00	5.639E+00	0.000E+00	0.011

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-9.704E+00		2.102E+01	3.639E+01	0.000E+00	-0.267
NA-22	4.027E-03		1.892E+00	3.536E+00	0.000E+00	0.001
AL-26	1.077E+00		1.957E+00	4.128E+00	0.000E+00	0.261
SC-46	-3.024E-01		2.128E+00	3.931E+00	0.000E+00	-0.077
V-48	5.754E+00		5.924E+00	1.253E+01	0.000E+00	0.459
CR-51	-2.470E+01		3.060E+01	4.839E+01	0.000E+00	-0.510

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MN-54	-5.902E-01		1.900E+00	3.233E+00	0.000E+00	-0.183
CO-56	9.922E-01		2.212E+00	4.169E+00	0.000E+00	0.238
CO-57	-3.233E-01		1.633E+00	2.847E+00	0.000E+00	-0.114
CO-58	-1.642E-01		2.176E+00	3.855E+00	0.000E+00	-0.043
FE-59	-4.782E-01		5.030E+00	9.290E+00	0.000E+00	-0.051
CO-60	1.627E+00		1.999E+00	4.129E+00	0.000E+00	0.394
ZN-65	-4.264E+00		4.328E+00	6.954E+00	0.000E+00	-0.613
SE-75	4.254E-01		2.764E+00	4.781E+00	0.000E+00	0.089
KR-85	-1.347E+03		5.943E+02	8.958E+02	0.000E+00	-1.504
SR-85	-8.093E+00		3.570E+00	5.381E+00	0.000E+00	-1.504
Y-88	1.073E+00		2.267E+00	4.786E+00	0.000E+00	0.224
Y-91	-1.157E+00		2.198E+00	3.748E+00	0.000E+00	-0.309
NB-94	-1.391E-01		1.661E+00	2.934E+00	0.000E+00	-0.047
NB-95	4.727E-01		3.283E+00	5.907E+00	0.000E+00	0.080
ZR-95	8.542E-01		3.842E+00	7.106E+00	0.000E+00	0.120
RU-103	-2.570E+00		3.531E+00	5.071E+00	0.000E+00	-0.507
RH-106	1.366E+00		1.648E+01	2.990E+01	0.000E+00	0.046
RU-106	-1.630E-01		1.677E+01	3.007E+01	0.000E+00	-0.005
AG-108M	-8.345E-01		1.627E+00	2.827E+00	0.000E+00	-0.295
CD-109	3.269E+00		4.332E+01	7.770E+01	0.000E+00	0.042
AG-110M	-8.858E-02		1.905E+00	3.383E+00	0.000E+00	-0.026
SN-113	-1.517E+00		2.633E+00	4.563E+00	0.000E+00	-0.332
SN-115	1.252E+02		1.904E+02	3.882E+02	0.000E+00	0.323
SN-117M	-2.432E+00		6.803E+00	1.162E+01	0.000E+00	-0.209
TE-123M	-6.936E-01		1.745E+00	2.976E+00	0.000E+00	-0.233
SB-124	-3.070E+00		5.926E+00	1.048E+01	0.000E+00	-0.293
SB-125	4.638E-01		4.924E+00	8.995E+00	0.000E+00	0.052
TE-125M	-2.027E+02		6.934E+02	1.208E+03	0.000E+00	-0.168
I-126	9.581E+00		2.139E+01	3.983E+01	0.000E+00	0.241
SB-126	1.822E+01		1.634E+01	3.281E+01	0.000E+00	0.555
SN-126	-9.175E-01		4.230E+00	7.482E+00	0.000E+00	-0.123
SB-127	1.212E+02		1.024E+03	1.859E+03	0.000E+00	0.065
I-131	-1.528E+01		2.499E+01	3.989E+01	0.000E+00	-0.383
BA-133	4.473E-01		2.617E+00	4.479E+00	0.000E+00	0.100
CS-134	1.609E+00		2.017E+00	3.940E+00	0.000E+00	0.408
CS-136	-2.542E+00		1.114E+01	2.018E+01	0.000E+00	-0.126
BA-137M	2.369E-01		1.814E+00	3.287E+00	0.000E+00	0.072
CS-137	2.626E-01		1.919E+00	3.479E+00	0.000E+00	0.075
CE-139	1.038E-01		1.859E+00	3.243E+00	0.000E+00	0.032
BA-140	-6.588E+00		2.893E+01	5.116E+01	0.000E+00	-0.129
CE-144	-4.757E+00		1.301E+01	2.238E+01	0.000E+00	-0.213
PM-144	-4.436E-01		1.796E+00	3.112E+00	0.000E+00	-0.143
PM-146	5.712E-01		2.275E+00	4.212E+00	0.000E+00	0.136
ND-147	-1.426E+01		7.692E+01	1.361E+02	0.000E+00	-0.105
PM-147	5.375E+05		3.403E+06	6.033E+06	0.000E+00	0.089
EU-152	-1.595E+00		5.176E+00	8.561E+00	0.000E+00	-0.186
GD-153	9.864E-01		4.885E+00	8.785E+00	0.000E+00	0.112
EU-154	-8.908E-04		5.243E+00	9.794E+00	0.000E+00	0.000

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
EU-155	5.826E+00		6.744E+00	1.244E+01	0.000E+00	0.468
TB-160	7.042E+00		7.636E+00	1.536E+01	0.000E+00	0.459
TM-171	1.697E+03		1.936E+03	3.337E+03	0.000E+00	0.509
HF-181	-1.577E+00		2.907E+00	4.991E+00	0.000E+00	-0.316
TA-182	-4.994E+00		7.671E+00	1.290E+01	0.000E+00	-0.387
IR-192	2.075E+00		2.191E+00	4.029E+00	0.000E+00	0.515
HG-203	3.312E+00		2.836E+00	5.252E+00	0.000E+00	0.631
BI-207	3.329E+00	+	2.824E+00	4.806E+00	0.000E+00	0.693
TL-208	-5.363E-01		2.003E+00	3.489E+00	0.000E+00	-0.154
BI-211	6.771E+00		1.129E+01	2.013E+01	0.000E+00	0.336
PB-211	5.251E+00		4.766E+01	8.734E+01	0.000E+00	0.060
BI-212	6.472E+00		1.408E+01	2.654E+01	0.000E+00	0.244
PB-212	6.415E-02	+	4.872E+00	7.067E+00	0.000E+00	0.009
BI-214	5.308E+00		4.254E+00	8.242E+00	0.000E+00	0.644
PB-214	8.640E-01		4.075E+00	7.014E+00	0.000E+00	0.123
RN-219	6.895E+00		2.040E+01	3.819E+01	0.000E+00	0.181
RA-223	-4.558E+00		4.078E+01	6.833E+01	0.000E+00	-0.067
RA-224	2.186E+01		4.437E+01	7.026E+01	0.000E+00	0.311
RA-226	5.308E+00		4.254E+00	8.242E+00	0.000E+00	0.644
AC-227	-3.791E+00		2.268E+01	3.834E+01	0.000E+00	-0.099
TH-227	-3.727E+00		2.229E+01	3.769E+01	0.000E+00	-0.099
AC-228	8.224E+00		6.809E+00	1.416E+01	0.000E+00	0.581
RA-228	8.224E+00		6.809E+00	1.416E+01	0.000E+00	0.581
TH-229	3.629E+00		2.934E+01	5.104E+01	0.000E+00	0.071
TH-230	5.308E+00		4.253E+00	8.242E+00	0.000E+00	0.644
PA-231	-9.661E+00		8.220E+01	1.395E+02	0.000E+00	-0.069
TH-231	1.341E+01	+	1.625E+01	1.961E+01	0.000E+00	0.684
TH-232	6.225E-02	+	4.728E+00	6.854E+00	0.000E+00	0.009
PA-233	-1.406E+00		3.560E+00	5.866E+00	0.000E+00	-0.240
PA-234	-1.172E+00		1.611E+01	2.599E+01	0.000E+00	-0.045
PA-234M	1.122E+02		2.024E+02	4.052E+02	0.000E+00	0.277
TH-234	7.517E+01		9.812E+01	1.674E+02	0.000E+00	0.449
U-234	4.041E+00		7.645E+00	1.351E+01	0.000E+00	0.299
U-235	6.919E+00	+	1.772E+01	2.235E+01	0.000E+00	0.310
NP-237	-6.271E+00		1.228E+01	2.141E+01	0.000E+00	-0.293
U-238	7.517E+01		9.812E+01	1.674E+02	0.000E+00	0.449
NP-239	6.539E+00		1.159E+01	2.105E+01	0.000E+00	0.311
AM-241	5.827E+00		1.085E+01	1.855E+01	0.000E+00	0.314
AM-242	6.641E+01		1.366E+02	2.480E+02	0.000E+00	0.268
CM-247	1.863E-01		1.893E+00	3.467E+00	0.000E+00	0.054
CF-249	7.755E-01		2.086E+00	3.899E+00	0.000E+00	0.199
CF-251	-4.780E-01		7.477E+00	1.291E+01	0.000E+00	-0.037
ANH-511	1.351E+01		2.761E+00	5.879E+00	0.000E+00	2.297

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579006            *
* Acquisition date : 13-OCT-2005 10:42:40 Detector SN#    : 1943234        *
* Detector ID      : GAMMA8               Sensitivity     : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 04:00:03.21     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 13-SEP-2005 07:30:00 Nuclide Library : FERMC           *
* Sample ID        : G145579006           Analyst initials: MJH1            *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER *
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 23-SEP-2005 12:09:12 MS Isotope      :                 *
* MSD DPM          : ********             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	2.103E+01	4.207E+01	1.235E+01	2.104E+01
CS-135	1.140E+01	1.381E+01	7.135E+00	6.905E+00
CE-141	2.859E+00	7.323E+00	4.080E+00	3.661E+00
BI-210	1.853E+02	5.058E+02	2.143E+02	2.529E+02
PB-210	1.853E+02	5.058E+02	2.143E+02	2.529E+02
TH-228	6.415E-02	4.872E+00	2.675E+00	2.436E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-9.704E+00	2.102E+01	1.678E+01	1.051E+01	NOT IDENT.
NA-22	4.027E-03	1.892E+00	1.551E+00	9.461E-01	NOT IDENT.
NA-24	4.186E+14	6.057E+14	0.000E+00	3.028E+14	SHORT HLIF
AL-26	1.077E+00	1.957E+00	1.795E+00	9.783E-01	NOT IDENT.
SC-46	-3.024E-01	2.128E+00	1.762E+00	1.064E+00	NOT IDENT.
V-48	5.754E+00	5.924E+00	5.629E+00	2.962E+00	NOT IDENT.
CR-51	-2.470E+01	3.060E+01	2.256E+01	1.530E+01	NOT IDENT.
MN-54	-5.902E-01	1.900E+00	1.455E+00	9.498E-01	NOT IDENT.
CO-56	9.922E-01	2.212E+00	1.885E+00	1.106E+00	FAIL ABUN
MN-56	1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-3.233E-01	1.633E+00	1.360E+00	8.167E-01	NOT IDENT.
CO-58	-1.642E-01	2.176E+00	1.728E+00	1.088E+00	NOT IDENT.
FE-59	-4.782E-01	5.030E+00	4.113E+00	2.515E+00	NOT IDENT.
CO-60	1.627E+00	1.999E+00	1.843E+00	9.996E-01	NOT IDENT.
ZN-65	-4.264E+00	4.328E+00	3.068E+00	2.164E+00	NOT IDENT.
SE-75	4.254E-01	2.764E+00	2.257E+00	1.382E+00	FAIL ABUN
KR-85	-1.347E+03	5.943E+02	4.237E+02	2.972E+02	NOT IDENT.
SR-85	-8.093E+00	3.570E+00	2.545E+00	1.785E+00	NOT IDENT.
Y-88	1.073E+00	2.267E+00	2.061E+00	1.133E+00	NOT IDENT.
Y-91	-1.157E+00	2.198E+00	1.707E+00	1.099E+00	NOT IDENT.
NB-94	-1.391E-01	1.661E+00	1.335E+00	8.304E-01	FAIL ABUN

NB-95	4.727E-01	3.283E+00	2.697E+00	1.641E+00	NOT IDENT.
NB-95M	2.734E+02	2.042E+03	0.000E+00	1.021E+03	SHORT HLIF
ZR-95	8.542E-01	3.842E+00	3.202E+00	1.921E+00	NOT IDENT.
MO-99	7.341E+03	6.225E+03	0.000E+00	3.112E+03	SHORT HLIF
TC-99M	7.039E+36	5.969E+36	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-2.570E+00	3.531E+00	2.340E+00	1.766E+00	NOT IDENT.
RH-106	1.366E+00	1.648E+01	1.365E+01	8.242E+00	NOT IDENT.
RU-106	-1.630E-01	1.677E+01	1.374E+01	8.386E+00	NOT IDENT.
AG-108M	-8.345E-01	1.627E+00	1.299E+00	8.137E-01	FAIL ABUN
CD-109	3.269E+00	4.332E+01	3.710E+01	2.166E+01	NOT IDENT.
AG-110M	-8.858E-02	1.905E+00	1.547E+00	9.524E-01	FAIL ABUN
SN-113	-1.517E+00	2.633E+00	2.121E+00	1.317E+00	NOT IDENT.
CD-115	3.006E+04	6.238E+04	0.000E+00	3.119E+04	SHORT HLIF
SN-115	1.252E+02	1.904E+02	1.743E+02	9.521E+01	NOT IDENT.
SN-117M	-2.432E+00	6.803E+00	5.532E+00	3.401E+00	NOT IDENT.
TE-123M	-6.936E-01	1.745E+00	1.415E+00	8.726E-01	NOT IDENT.
SB-124	-3.070E+00	5.926E+00	4.491E+00	2.963E+00	NOT IDENT.
SB-125	4.638E-01	4.924E+00	4.177E+00	2.462E+00	NOT IDENT.
TE-125M	-2.027E+02	6.934E+02	5.774E+02	3.467E+02	NOT IDENT.
I-126	9.581E+00	2.139E+01	1.832E+01	1.070E+01	NOT IDENT.
SB-126	1.822E+01	1.634E+01	1.505E+01	8.170E+00	NOT IDENT.
SN-126	-9.175E-01	4.230E+00	3.568E+00	2.115E+00	NOT IDENT.
SB-127	1.212E+02	1.024E+03	8.460E+02	5.121E+02	NOT IDENT.
I-131	-1.528E+01	2.499E+01	1.857E+01	1.250E+01	NOT IDENT.
I-132	1.000E+41	1.093E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.755E+02	9.549E+02	0.000E+00	4.775E+02	SHORT HLIF
BA-133	4.473E-01	2.617E+00	2.104E+00	1.309E+00	NOT IDENT.
I-133	5.676E+09	5.404E+10	0.000E+00	2.702E+10	SHORT HLIF
CS-134	1.609E+00	2.017E+00	1.795E+00	1.008E+00	NOT IDENT.
I-135	-2.396E+33	8.020E+33	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-2.542E+00	1.114E+01	8.972E+00	5.570E+00	NOT IDENT.
BA-137M	2.369E-01	1.814E+00	1.503E+00	9.070E-01	NOT IDENT.
CS-137	2.626E-01	1.919E+00	1.591E+00	9.595E-01	NOT IDENT.
CE-139	1.038E-01	1.859E+00	1.546E+00	9.294E-01	NOT IDENT.
BA-140	-6.588E+00	2.893E+01	2.335E+01	1.446E+01	NOT IDENT.
LA-140	1.411E+04	6.104E+05	0.000E+00	3.052E+05	SHORT HLIF
CE-143	-6.374E+06	1.447E+07	0.000E+00	7.233E+06	SHORT HLIF
CE-144	-4.757E+00	1.301E+01	1.069E+01	6.507E+00	NOT IDENT.
PM-144	-4.436E-01	1.796E+00	1.416E+00	8.982E-01	NOT IDENT.
PR-144	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	5.712E-01	2.275E+00	1.951E+00	1.138E+00	NOT IDENT.
ND-147	-1.426E+01	7.692E+01	6.255E+01	3.846E+01	FAIL ABUN
PM-147	5.375E+05	3.403E+06	2.887E+06	1.701E+06	NOT IDENT.
PM-149	-1.191E+04	5.619E+05	0.000E+00	2.809E+05	SHORT HLIF
EU-152	-1.595E+00	5.176E+00	3.980E+00	2.588E+00	NOT IDENT.
GD-153	9.864E-01	4.885E+00	4.195E+00	2.442E+00	NOT IDENT.
EU-154	-8.908E-04	5.243E+00	4.297E+00	2.621E+00	NOT IDENT.
EU-155	5.826E+00	6.744E+00	5.960E+00	3.372E+00	NOT IDENT.
TB-160	7.042E+00	7.636E+00	6.940E+00	3.818E+00	NOT IDENT.
TM-171	1.697E+03	1.936E+03	1.596E+03	9.678E+02	FAIL ABUN
HF-181	-1.577E+00	2.907E+00	2.297E+00	1.453E+00	NOT IDENT.
TA-182	-4.994E+00	7.671E+00	5.543E+00	3.836E+00	NOT IDENT.
IR-192	2.075E+00	2.191E+00	1.894E+00	1.095E+00	FAIL ABUN
HG-203	3.312E+00	2.836E+00	2.486E+00	1.418E+00	NOT IDENT.
BI-207	3.329E+00	2.824E+00	2.158E+00	1.412E+00	FAIL ABUN
TL-208	-5.363E-01	2.003E+00	1.604E+00	1.002E+00	NOT IDENT.
BI-211	6.771E+00	1.129E+01	9.443E+00	5.647E+00	NOT IDENT.
PB-211	5.251E+00	4.766E+01	4.061E+01	2.383E+01	NOT IDENT.
BI-212	6.472E+00	1.408E+01	1.209E+01	7.041E+00	NOT IDENT.
PB-212	6.415E-02	4.872E+00	3.389E+00	2.436E+00	FAIL ABUN
BI-214	5.308E+00	4.254E+00	3.865E+00	2.127E+00	FAIL ABUN
PB-214	8.640E-01	4.075E+00	3.290E+00	2.037E+00	NOT IDENT.
RN-219	6.895E+00	2.040E+01	1.774E+01	1.020E+01	FAIL ABUN
RA-223	-4.558E+00	4.078E+01	3.220E+01	2.039E+01	FAIL ABUN
RA-224	2.186E+01	4.437E+01	3.349E+01	2.218E+01	NOT IDENT.
RA-226	5.308E+00	4.254E+00	3.865E+00	2.127E+00	NOT IDENT.
AC-227	-3.791E+00	2.268E+01	1.811E+01	1.134E+01	NOT IDENT.
TH-227	-3.727E+00	2.229E+01	1.781E+01	1.115E+01	FAIL ABUN
AC-228	8.224E+00	6.809E+00	6.490E+00	3.404E+00	NOT IDENT.
RA-228	8.224E+00	6.809E+00	6.490E+00	3.404E+00	NOT IDENT.
TH-229	3.629E+00	2.934E+01	2.430E+01	1.467E+01	NOT IDENT.
TH-230	5.308E+00	4.253E+00	3.865E+00	2.127E+00	NOT IDENT.
PA-231	-9.661E+00	8.220E+01	6.539E+01	4.110E+01	NOT IDENT.
TH-231	1.341E+01	1.625E+01	9.307E+00	8.124E+00	FAIL ABUN
TH-232	6.225E-02	4.728E+00	3.287E+00	2.364E+00	FAIL ABUN
PA-233	-1.406E+00	3.560E+00	2.741E+00	1.780E+00	NOT IDENT.
PA-234	-1.172E+00	1.611E+01	1.160E+01	8.056E+00	FAIL ABUN
PA-234M	1.122E+02	2.024E+02	1.820E+02	1.012E+02	NOT IDENT.

TH-234	7.517E+01	9.812E+01	8.025E+01	4.906E+01 FAIL ABUN
U-234	4.041E+00	7.645E+00	6.384E+00	3.823E+00 NOT IDENT.
U-235	6.919E+00	1.772E+01	1.069E+01	8.859E+00 FAIL ABUN
NP-237	-6.271E+00	1.228E+01	1.019E+01	6.139E+00 NOT IDENT.
U-238	7.517E+01	9.812E+01	8.025E+01	4.906E+01 NOT IDENT.
NP-239	6.539E+00	1.159E+01	1.006E+01	5.795E+00 NOT IDENT.
AM-241	5.827E+00	1.085E+01	8.826E+00	5.425E+00 NOT IDENT.
AM-242	6.641E+01	1.366E+02	1.187E+02	6.831E+01 NOT IDENT.
CM-247	1.863E-01	1.893E+00	1.612E+00	9.463E-01 NOT IDENT.
CF-249	7.755E-01	2.086E+00	1.819E+00	1.043E+00 NOT IDENT.
CF-251	-4.780E-01	7.477E+00	6.155E+00	3.738E+00 NOT IDENT.
ANH-511	1.351E+01	2.761E+00	2.836E+00	1.380E+00 NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145579006
ANALYST	: MJH1	DETECTOR	: GAMMA8
SAMPLE DATE	: 13-SEP-2005 07:30:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 10:42:40.32	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 6.814E+01
GROSS GAMMA ERROR (pCi/LITER)	: 9.940E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.271E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.082E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:48:51.49

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579007.CNF;1
Sample date      : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:43:04
Sample ID        : G145579007           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA9               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:07.61  0.5%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 10017452
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	54.00*	17	183	1.59	88.40	86	7	1.17E-03	147.2	
2	0	63.59*	22	148	1.57	107.70	105	6	1.49E-03	121.5	
3	0	127.84	28	194	0.99	237.10	235	8	1.92E-03	89.3	
4	0	140.53*	40	265	1.91	262.66	256	10	2.77E-03	84.2	
5	0	186.23*	0	300	1.21	354.70	349	13	2.23E-05	*****	
6	0	198.73*	61	163	1.79	379.89	376	8	4.22E-03	42.4	
7	0	239.25*	6	215	1.19	461.49	457	11	3.96E-04	565.3	
8	0	352.27*	7	88	1.03	689.13	684	10	4.78E-04	293.9	
9	0	500.14	18	47	1.34	986.97	984	8	1.23E-03	71.5	
10	0	511.42*	33	130	2.50	1009.70	999	20	2.29E-03	114.6	
11	0	557.71*	44	55	2.88	1102.93	1096	13	3.05E-03	42.3	
12	0	582.37*	23	52	1.32	1152.60	1145	15	1.63E-03	79.0	
13	0	608.83*	41	82	2.52	1205.92	1198	22	2.84E-03	62.7	
14	0	616.03	9	38	0.72	1220.41	1219	9	5.90E-04	132.6	
15	0	625.32*	11	30	3.72	1239.13	1236	10	7.37E-04	114.6	
16	0	662.78	49	57	3.43	1314.58	1308	13	3.43E-03	34.8	
17	0	791.01	15	79	4.75	1572.91	1567	24	1.07E-03	153.6	
18	3	840.67	23	35	2.72	1672.96	1668	16	1.63E-03	49.0	5.09E+00
19	3	844.17*	31	22	2.04	1680.00	1668	16	2.13E-03	33.3	
20	0	852.41	22	36	5.49	1696.60	1686	16	1.52E-03	64.8	
21	0	891.69*	22	26	5.39	1775.74	1768	15	1.55E-03	57.3	
22	0	932.68	13	39	5.31	1858.32	1854	19	8.99E-04	117.8	
23	0	969.60*	16	18	2.99	1932.70	1927	17	1.08E-03	76.8	
24	0	1218.50	14	10	3.44	2434.18	2428	14	9.94E-04	54.5	
25	0	1234.78	49	35	21.98	2467.00	2443	47	3.43E-03	45.2	
26	0	1286.74	21	9	5.58	2571.68	2563	17	1.42E-03	39.4	
27	0	1298.25	19	17	4.31	2594.87	2589	12	1.30E-03	50.8	
28	0	1342.16	19	31	4.25	2683.37	2676	24	1.33E-03	78.9	
29	0	1440.04	8	2	1.47	2880.59	2878	6	5.42E-04	48.8	
30	0	1461.43*	38	15	3.47	2923.70	2915	19	2.67E-03	33.7	
31	0	1543.19*	3	19	3.98	3088.46	3071	19	1.76E-04	428.5	
32	1	1565.79	14	5	2.43	3134.00	3093	52	9.40E-04	64.1	5.04E-01
33	1	1568.77	15	1	2.43	3140.00	3093	52	1.03E-03	36.4	
34	0	1630.99*	21	25	12.29	3265.40	3253	32	1.42E-03	76.9	
35	0	1684.84	11	14	0.69	3373.93	3362	19	7.44E-04	89.8	
36	0	1764.79*	7	8	0.61	3535.06	3529	15	4.95E-04	129.1	
37	0	1818.03	11	6	2.58	3642.35	3638	12	7.35E-04	55.9	
38	0	1878.57	11	16	6.93	3764.38	3758	20	7.92E-04	88.5	

Sample ID : G145579007 Acquisition date : 13-OCT-2005 10:43:04

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	2011.97	6	1	0.59	4033.24	4031	5	4.17E-04	48.8	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:48:55

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579007.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:43:04
Sample ID : G145579007 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:01:07.61 0.5%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	6.030E+01	4.068E+01	3.335E+01	0.000E+00	1.808
Y-91	+	557.57	*	5.455E+00	4.619E+00	4.691E+00	0.000E+00	1.163
		1204.90		4.680E+02	1.009E+03	1.969E+03	0.000E+00	0.238
BA-137M	+	661.65	*	5.118E+00	3.562E+00	4.045E+00	0.000E+00	1.265
CS-137	+	661.66	*	5.410E+00	3.765E+00	4.276E+00	0.000E+00	1.265
TL-208		75.00		1.915E+01	8.378E+01	1.411E+02	0.000E+00	0.136
		277.35		-9.361E+00	2.774E+01	4.688E+01	0.000E+00	-0.200
	+	510.84		1.236E+01	2.834E+01	1.577E+01	0.000E+00	0.784
	+	583.14	*	2.442E+00	3.860E+00	3.553E+00	0.000E+00	0.687
		763.30		-6.300E+01	1.203E+02	2.036E+02	0.000E+00	-0.309
		860.37		-7.396E-01	1.565E+01	2.789E+01	0.000E+00	-0.027
		1093.90		5.236E+02	5.577E+02	1.142E+03	0.000E+00	0.458
BI-211	+	351.07	*	3.352E+00	1.971E+01	2.365E+01	0.000E+00	0.142
RA-224	+	240.98	*	7.534E+00	8.517E+01	7.886E+01	0.000E+00	0.096
RA-226		295.21		1.180E+01	9.172E+00	1.705E+01	0.000E+00	0.693
	+	351.92		1.166E+00	6.855E+00	8.820E+00	0.000E+00	0.132
	+	609.31	*	7.742E+00	9.711E+00	7.057E+00	0.000E+00	1.097
TH-228		84.40		1.061E+01	1.895E+02	3.158E+02	0.000E+00	0.034
	+	238.60	*	6.672E-01	7.543E+00	7.280E+00	0.000E+00	0.092
		300.10		-3.190E+01	5.234E+01	8.674E+01	0.000E+00	-0.368
TH-230		295.21		1.180E+01	9.171E+00	1.704E+01	0.000E+00	0.693
	+	351.92		1.166E+00	6.855E+00	8.820E+00	0.000E+00	0.132
	+	609.31	*	7.742E+00	9.710E+00	7.057E+00	0.000E+00	1.097
U-238	+	63.29	*	5.488E+01	1.334E+02	1.767E+02	0.000E+00	0.311
ANH-511	+	511.00	*	2.592E+00	5.941E+00	3.307E+00	0.000E+00	0.784

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-4.078E+00	2.660E+01	4.475E+01	0.000E+00	-0.091
NA-22		1274.53	*	1.508E+00	2.143E+00	4.317E+00	0.000E+00	0.349
AL-26	+	511.00		1.584E+00	3.631E+00	2.021E+00	0.000E+00	0.784
		1808.65	*	1.077E+00	2.164E+00	4.307E+00	0.000E+00	0.250

Sample ID : G145579007 Acquisition date : 13-OCT-2005 10:43:04

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
SC-46		889.25	*	1.177E+00	2.556E+00	4.310E+00	0.000E+00	0.273
		1120.51		1.130E+00	2.529E+00	4.958E+00	0.000E+00	0.228
V-48		944.10		2.333E+01	8.434E+01	1.575E+02	0.000E+00	0.148
		983.50	*	2.353E+00	7.768E+00	1.426E+01	0.000E+00	0.165
		1312.09		-4.892E-01	6.582E+00	1.236E+01	0.000E+00	-0.040
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-1.830E+01	3.857E+01	6.431E+01	0.000E+00	-0.285
MN-54		834.83	*	2.012E-01	2.196E+00	3.941E+00	0.000E+00	0.051
CO-56		846.75	*	-1.947E+00	5.044E+00	4.546E+00	0.000E+00	-0.428
		1037.82		5.618E+00	1.504E+01	2.901E+01	0.000E+00	0.194
		1238.25		4.269E-01	3.604E+00	6.892E+00	0.000E+00	0.062
CO-57		122.06	*	9.668E-01	1.949E+00	3.519E+00	0.000E+00	0.275
		136.47		4.575E+00	1.740E+01	2.756E+01	0.000E+00	0.166
CO-58		810.78	*	2.384E+00	2.461E+00	4.864E+00	0.000E+00	0.490
FE-59		192.35		3.812E+01	8.669E+01	1.541E+02	0.000E+00	0.247
		1099.25	*	-2.011E+00	5.872E+00	1.048E+01	0.000E+00	-0.192
		1291.60		-1.991E+00	9.256E+00	1.417E+01	0.000E+00	-0.141
CO-60		1173.24		6.427E-01	2.191E+00	4.184E+00	0.000E+00	0.154
		1332.50	*	2.913E+00	2.182E+00	4.673E+00	0.000E+00	0.623
ZN-65		1115.55	*	-7.156E-01	3.914E+00	7.193E+00	0.000E+00	-0.099
SE-75		66.05		3.627E+02	4.608E+02	7.249E+02	0.000E+00	0.500
		96.73		-1.310E+02	7.337E+01	1.107E+02	0.000E+00	-1.183
		121.11		7.435E-01	1.102E+01	1.953E+01	0.000E+00	0.038
		136.00		1.960E+00	3.358E+00	5.429E+00	0.000E+00	0.361
	+	198.60		2.292E+02	1.943E+02	2.352E+02	0.000E+00	0.975
		264.65	*	2.007E+00	3.380E+00	6.057E+00	0.000E+00	0.331
		279.53		6.597E+00	8.305E+00	1.501E+01	0.000E+00	0.440
		303.91		1.676E+02	1.564E+02	2.880E+02	0.000E+00	0.582
		400.65		-2.612E+00	1.938E+01	3.283E+01	0.000E+00	-0.080
KR-85		513.99	*	2.116E+03	6.154E+02	1.196E+03	0.000E+00	1.769
SR-85		513.99	*	1.268E+01	3.688E+00	7.169E+00	0.000E+00	1.769
Y-88		898.02		1.232E+00	2.457E+00	4.655E+00	0.000E+00	0.265
		1836.01	*	-8.073E-01	2.458E+00	4.322E+00	0.000E+00	-0.187
NB-94		702.63	*	1.030E+00	1.995E+00	3.715E+00	0.000E+00	0.277
		871.10		9.620E-01	1.748E+00	3.359E+00	0.000E+00	0.286
NB-95		765.79	*	3.896E+00	3.240E+00	6.523E+00	0.000E+00	0.597
ZR-95		724.18		-3.093E-01	6.189E+00	1.100E+01	0.000E+00	-0.028
		756.74	*	6.953E-02	4.585E+00	8.241E+00	0.000E+00	0.008
RU-103		497.08	*	-1.701E+00	3.920E+00	5.861E+00	0.000E+00	-0.290
	+	610.33		1.086E+02	1.362E+02	9.909E+01	0.000E+00	1.096
RH-106	+	511.85		1.331E+01	3.052E+01	1.701E+01	0.000E+00	0.783
		621.84	*	-8.030E+00	3.449E+01	3.385E+01	0.000E+00	-0.237
		1050.47		4.238E+01	1.293E+02	2.387E+02	0.000E+00	0.178
RU-106		622.20	*	8.627E+00	2.108E+01	3.481E+01	0.000E+00	0.248
AG-108M		433.93	*	4.267E-01	2.088E+00	3.650E+00	0.000E+00	0.117
	+	614.37		9.172E-01	2.432E+00	3.747E+00	0.000E+00	0.245
		722.95		-1.003E+00	2.337E+00	4.006E+00	0.000E+00	-0.250
CD-109		88.03	*	1.385E+01	5.815E+01	9.762E+01	0.000E+00	0.142
AG-110M		657.75	*	8.329E-01	2.542E+00	4.104E+00	0.000E+00	0.203

Sample ID : G145579007 Acquisition date : 13-OCT-2005 10:43:04

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		677.61		1.621E+00	1.703E+01	3.108E+01	0.000E+00	0.052
		706.67		-4.285E-01	1.297E+01	2.306E+01	0.000E+00	-0.019
		763.93		-9.054E-01	9.013E+00	1.600E+01	0.000E+00	-0.057
		884.67		-3.717E+00	3.047E+00	4.653E+00	0.000E+00	-0.799
		937.48		-8.426E-01	7.266E+00	1.098E+01	0.000E+00	-0.077
		1384.27		-5.845E+00	8.992E+00	1.520E+01	0.000E+00	-0.385
SN-113		391.69	*	2.879E+00	3.229E+00	5.916E+00	0.000E+00	0.487
SN-115		484.47		1.882E+02	1.409E+03	2.571E+03	0.000E+00	0.073
	+	933.00	*	1.858E+02	4.377E+02	3.999E+02	0.000E+00	0.465
		1290.58		-4.339E+02	7.266E+02	1.026E+03	0.000E+00	-0.423
SN-117M		156.02		-9.208E+01	3.521E+02	6.098E+02	0.000E+00	-0.151
		158.56	*	2.540E+00	8.511E+00	1.512E+01	0.000E+00	0.168
TE-123M		159.00	*	7.135E-01	2.234E+00	3.973E+00	0.000E+00	0.180
SB-124		602.73		-8.188E-01	3.104E+00	4.681E+00	0.000E+00	-0.175
		645.85		2.026E+01	3.167E+01	6.088E+01	0.000E+00	0.333
		713.78		-1.456E+01	1.148E+02	2.026E+02	0.000E+00	-0.072
		722.79		-1.785E+01	2.465E+01	4.095E+01	0.000E+00	-0.436
		1368.16		-1.931E+01	1.000E+02	1.841E+02	0.000E+00	-0.105
		1690.98	*	9.504E-01	5.846E+00	9.961E+00	0.000E+00	0.095
SB-125		176.33		2.420E+01	2.462E+01	4.489E+01	0.000E+00	0.539
		427.89	*	3.052E+00	5.922E+00	1.061E+01	0.000E+00	0.288
		463.38		-1.025E+01	1.952E+01	3.179E+01	0.000E+00	-0.322
		600.56		-4.256E+00	1.143E+01	1.981E+01	0.000E+00	-0.215
		606.64		2.842E+01	4.369E+01	7.314E+01	0.000E+00	0.389
		635.90		-6.873E+00	1.619E+01	2.797E+01	0.000E+00	-0.246
TE-125M		109.28	*	-2.789E+02	8.873E+02	1.439E+03	0.000E+00	-0.194
I-126		388.63		-5.335E+00	3.089E+01	5.228E+01	0.000E+00	-0.102
		666.33	*	1.003E+01	2.698E+01	4.387E+01	0.000E+00	0.229
		753.82		-4.510E+01	1.844E+02	3.221E+02	0.000E+00	-0.140
SB-126		666.33		4.334E+00	1.166E+01	1.896E+01	0.000E+00	0.229
		695.00		2.096E+00	1.017E+01	1.854E+01	0.000E+00	0.113
		697.00		1.500E+01	3.682E+01	6.794E+01	0.000E+00	0.221
		720.50	*	-1.777E+01	1.939E+01	3.155E+01	0.000E+00	-0.563
SN-126	+	64.28		2.172E+01	5.280E+01	7.127E+01	0.000E+00	0.305
		86.94		8.203E+00	2.401E+01	4.052E+01	0.000E+00	0.202
		87.57	*	2.645E+00	5.660E+00	9.614E+00	0.000E+00	0.275
SB-127		252.40		3.302E+03	4.401E+03	7.963E+03	0.000E+00	0.415
		411.60		-2.027E+03	1.175E+04	1.985E+04	0.000E+00	-0.102
		444.90		9.849E+02	8.895E+03	1.543E+04	0.000E+00	0.064
		473.00		-4.142E+02	1.612E+03	2.692E+03	0.000E+00	-0.154
		543.30		-7.668E+03	1.449E+04	2.499E+04	0.000E+00	-0.307
		603.50		-3.114E+03	1.135E+04	1.708E+04	0.000E+00	-0.182
		685.70	*	5.295E+02	1.059E+03	2.003E+03	0.000E+00	0.264
		698.50		2.559E+03	1.338E+04	2.420E+04	0.000E+00	0.106
		783.70		3.078E+02	2.698E+03	4.911E+03	0.000E+00	0.063
I-131		284.30		-4.175E+02	3.709E+02	5.941E+02	0.000E+00	-0.703
		364.48	*	1.365E+01	2.877E+01	5.114E+01	0.000E+00	0.267
		636.97		-1.342E+02	3.229E+02	5.587E+02	0.000E+00	-0.240
BA-133		79.62		-1.306E+02	9.426E+01	1.459E+02	0.000E+00	-0.895

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		81.00		-3.084E+00	7.046E+00	1.148E+01	0.000E+00	-0.269
		276.40		-2.951E+00	2.659E+01	4.555E+01	0.000E+00	-0.065
		302.85		-4.787E-01	9.859E+00	1.696E+01	0.000E+00	-0.028
		356.02	*	-2.203E+00	3.276E+00	4.579E+00	0.000E+00	-0.481
		383.85		1.980E+01	2.021E+01	3.722E+01	0.000E+00	0.532
CS-134		563.23		-1.313E+01	2.246E+01	3.842E+01	0.000E+00	-0.342
		569.32		2.635E+00	1.200E+01	2.195E+01	0.000E+00	0.120
		604.70		-4.058E-01	2.226E+00	3.394E+00	0.000E+00	-0.120
		795.84	*	9.756E-01	2.300E+00	4.290E+00	0.000E+00	0.227
		801.93		1.082E+01	2.782E+01	4.509E+01	0.000E+00	0.240
		1365.15		-4.932E+00	5.931E+01	1.112E+02	0.000E+00	-0.044
CS-135		268.24	*	-4.032E+00	1.022E+01	1.729E+01	0.000E+00	-0.233
CS-136		66.88		-4.399E+01	1.434E+02	2.364E+02	0.000E+00	-0.186
		86.36		7.938E-01	1.678E+02	2.787E+02	0.000E+00	0.003
		153.25		-4.065E+01	1.047E+02	1.804E+02	0.000E+00	-0.225
		163.92		2.189E+01	1.707E+02	3.004E+02	0.000E+00	0.073
		176.60		8.225E+01	5.932E+01	1.100E+02	0.000E+00	0.747
		273.65		5.813E+01	6.887E+01	1.245E+02	0.000E+00	0.467
		340.55		6.115E+00	1.832E+01	3.216E+01	0.000E+00	0.190
		818.51		1.191E+00	8.584E+00	1.571E+01	0.000E+00	0.076
		1048.07	*	-2.208E+00	1.274E+01	2.216E+01	0.000E+00	-0.100
	+	1235.36		1.810E+02	1.638E+02	8.438E+01	0.000E+00	2.145
CE-139		165.85	*	4.661E-02	2.278E+00	3.995E+00	0.000E+00	0.012
BA-140		162.67		5.163E+01	1.226E+02	2.187E+02	0.000E+00	0.236
		304.87		2.840E+02	1.986E+02	3.724E+02	0.000E+00	0.763
		423.73		-4.878E+01	3.014E+02	5.081E+02	0.000E+00	-0.096
		537.31	*	1.899E+01	3.571E+01	6.699E+01	0.000E+00	0.284
CE-141		145.44	*	3.007E+00	6.437E+00	1.151E+01	0.000E+00	0.261
CE-144		133.51	*	-3.767E+00	1.466E+01	2.558E+01	0.000E+00	-0.147
PM-144		476.78		1.328E-01	4.580E+00	7.842E+00	0.000E+00	0.017
	+	618.01		8.073E-01	2.141E+00	3.462E+00	0.000E+00	0.233
		696.49	*	1.257E+00	2.124E+00	3.977E+00	0.000E+00	0.316
PM-146		453.88	*	6.351E-01	3.019E+00	5.237E+00	0.000E+00	0.121
		633.25		5.731E+01	7.885E+01	1.515E+02	0.000E+00	0.378
		735.93		1.089E-01	9.437E+00	1.680E+01	0.000E+00	0.006
		747.24		1.987E+00	5.030E+00	9.401E+00	0.000E+00	0.211
ND-147		91.11		-1.403E+02	6.028E+01	8.955E+01	0.000E+00	-1.566
		531.02	*	-3.856E+01	9.096E+01	1.582E+02	0.000E+00	-0.244
PM-147		121.30	*	4.183E+05	3.959E+06	7.030E+06	0.000E+00	0.059
EU-152		121.78		1.502E+00	5.527E+00	9.878E+00	0.000E+00	0.152
		344.31	*	1.360E+00	6.859E+00	1.194E+01	0.000E+00	0.114
		963.37		1.764E+01	1.512E+01	3.001E+01	0.000E+00	0.588
GD-153		69.67		-6.020E+01	1.345E+02	2.200E+02	0.000E+00	-0.274
		83.37		-2.822E+01	1.139E+03	1.890E+03	0.000E+00	-0.015
		97.43	*	-3.255E+00	6.779E+00	1.094E+01	0.000E+00	-0.298
		103.18		-1.248E+01	8.828E+00	1.349E+01	0.000E+00	-0.925
EU-154		123.07		6.007E-01	3.804E+00	6.770E+00	0.000E+00	0.089
		247.93		5.560E+00	2.639E+01	4.624E+01	0.000E+00	0.120
		591.76		-3.512E+01	3.926E+01	6.509E+01	0.000E+00	-0.540

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		723.30		-5.104E-01	9.771E+00	1.739E+01	0.000E+00	-0.029
		756.86		-5.010E-01	4.247E+01	7.615E+01	0.000E+00	-0.007
		873.20		-9.883E+00	1.569E+01	2.603E+01	0.000E+00	-0.380
		996.30		-2.644E+00	1.879E+01	3.306E+01	0.000E+00	-0.080
		1004.76		-5.491E-01	1.061E+01	1.892E+01	0.000E+00	-0.029
		1274.51	*	4.162E+00	5.939E+00	1.196E+01	0.000E+00	0.348
EU-155		86.54		8.574E-01	7.100E+00	1.186E+01	0.000E+00	0.072
		105.31	*	5.724E+00	8.391E+00	1.437E+01	0.000E+00	0.398
TB-160		86.79		7.032E+00	2.145E+01	3.618E+01	0.000E+00	0.194
		298.57		-1.951E+00	8.436E+00	1.435E+01	0.000E+00	-0.136
		879.36	*	1.238E+01	8.946E+00	1.833E+01	0.000E+00	0.675
		962.29		2.984E+01	3.257E+01	6.308E+01	0.000E+00	0.473
		966.15		-4.370E+00	1.338E+01	1.937E+01	0.000E+00	-0.226
		1177.93		6.303E-02	1.966E+01	3.646E+01	0.000E+00	0.002
TM-171		51.87		7.655E+01	1.582E+03	1.895E+03	0.000E+00	0.040
		59.40		-8.911E+02	2.375E+03	3.925E+03	0.000E+00	-0.227
		66.72	*	-9.496E+02	2.432E+03	3.992E+03	0.000E+00	-0.238
HF-181		56.28		4.125E+01	1.280E+02	1.973E+02	0.000E+00	0.209
		57.53		-3.151E+01	6.871E+01	1.001E+02	0.000E+00	-0.315
	+	65.20		5.405E+01	1.314E+02	1.558E+02	0.000E+00	0.347
		133.02		-1.930E+00	5.806E+00	1.009E+01	0.000E+00	-0.191
		136.25		2.950E+01	5.246E+01	8.469E+01	0.000E+00	0.348
		345.85		2.291E+00	1.698E+01	2.947E+01	0.000E+00	0.078
		482.03	*	6.771E-02	3.580E+00	6.125E+00	0.000E+00	0.011
TA-182		67.75		3.506E+00	9.532E+00	1.626E+01	0.000E+00	0.216
		100.10		2.150E+01	1.485E+01	2.644E+01	0.000E+00	0.813
		222.10		-1.221E+01	2.478E+01	4.197E+01	0.000E+00	-0.291
		1121.28		3.521E+00	6.833E+00	1.347E+01	0.000E+00	0.261
		1189.05		-6.016E+00	1.625E+01	2.874E+01	0.000E+00	-0.209
		1221.42	*	5.943E+00	1.206E+01	1.552E+01	0.000E+00	0.383
		1230.97		-9.463E+00	1.722E+01	3.005E+01	0.000E+00	-0.315
IR-192		295.96		2.487E+00	8.195E+00	1.439E+01	0.000E+00	0.173
		308.46		-4.076E+00	7.716E+00	1.284E+01	0.000E+00	-0.317
		316.51	*	2.148E+00	2.820E+00	5.096E+00	0.000E+00	0.422
		468.07		-1.869E+00	4.884E+00	8.073E+00	0.000E+00	-0.232
		604.41		-7.623E+00	3.448E+01	5.228E+01	0.000E+00	-0.146
		612.46		-1.671E+01	4.368E+01	7.593E+01	0.000E+00	-0.220
HG-203		70.83		-2.637E+01	1.005E+02	1.659E+02	0.000E+00	-0.159
		72.87		-3.586E+00	5.723E+01	9.523E+01	0.000E+00	-0.038
		82.60		6.185E+01	9.899E+01	1.698E+02	0.000E+00	0.364
		279.20	*	2.843E+00	3.540E+00	6.403E+00	0.000E+00	0.444
BI-207		569.67		9.357E-01	1.838E+00	3.440E+00	0.000E+00	0.272
		897.83		5.175E+02	1.313E+03	2.452E+03	0.000E+00	0.211
		1063.62	*	-9.145E-02	2.677E+00	4.760E+00	0.000E+00	-0.019
		1442.20		3.086E+02	1.422E+03	2.432E+03	0.000E+00	0.127
		1770.23		-8.207E+00	3.901E+01	5.846E+01	0.000E+00	-0.140
BI-210		46.50	*	1.058E+02	4.459E+02	6.903E+02	0.000E+00	0.153
PB-210		46.50	*	1.058E+02	4.459E+02	6.903E+02	0.000E+00	0.153
PB-211		404.84	*	3.237E+01	6.004E+01	1.074E+02	0.000E+00	0.301

---- Non-Identified Nuclides ----

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		427.08		6.718E+01	1.348E+02	2.404E+02	0.000E+00	0.279
		831.96		-1.992E+01	6.934E+01	1.198E+02	0.000E+00	-0.166
BI-212		727.18	*	2.034E+01	1.771E+01	3.461E+01	0.000E+00	0.588
PB-212		74.80		5.928E+00	2.699E+01	4.545E+01	0.000E+00	0.130
		87.30		1.216E+01	2.711E+01	4.601E+01	0.000E+00	0.264
		115.19		2.404E+01	2.957E+02	4.887E+02	0.000E+00	0.049
	+	238.63	*	6.672E-01	7.543E+00	8.539E+00	0.000E+00	0.078
		300.09		-3.197E+01	5.234E+01	8.673E+01	0.000E+00	-0.369
BI-214	+	609.31	*	7.742E+00	9.711E+00	8.825E+00	0.000E+00	0.877
		768.36		-9.488E+00	3.759E+01	6.554E+01	0.000E+00	-0.145
	+	934.06		4.830E+01	1.138E+02	1.117E+02	0.000E+00	0.432
		1120.29		6.244E+00	1.312E+01	2.579E+01	0.000E+00	0.242
		1238.11		6.051E+00	3.159E+01	6.090E+01	0.000E+00	0.099
		1377.67		1.120E+01	5.059E+01	9.696E+01	0.000E+00	0.115
PB-214		74.81		9.932E+00	4.513E+01	7.600E+01	0.000E+00	0.131
		77.11		3.573E+00	2.445E+01	4.104E+01	0.000E+00	0.087
		87.30		2.142E+01	4.774E+01	8.102E+01	0.000E+00	0.264
		241.98		-8.355E-01	2.654E+01	4.026E+01	0.000E+00	-0.021
		295.21		1.180E+01	9.172E+00	1.705E+01	0.000E+00	0.693
	+	351.92	*	1.166E+00	6.855E+00	8.680E+00	0.000E+00	0.134
RN-219		271.23		1.847E+00	1.633E+01	2.843E+01	0.000E+00	0.065
		401.81	*	-7.367E+00	2.786E+01	4.676E+01	0.000E+00	-0.158
RA-223		122.32		5.737E+01	1.294E+02	2.330E+02	0.000E+00	0.246
		144.24		2.646E+01	5.186E+01	9.281E+01	0.000E+00	0.285
		154.21		-8.244E+00	2.816E+01	4.874E+01	0.000E+00	-0.169
		269.46		-7.671E+00	1.224E+01	2.037E+01	0.000E+00	-0.377
		323.87	*	-6.650E+00	4.470E+01	7.628E+01	0.000E+00	-0.087
		338.28		-1.307E+01	6.825E+01	1.156E+02	0.000E+00	-0.113
		445.03		4.854E+01	1.413E+02	2.504E+02	0.000E+00	0.194
AC-227		79.80		-1.871E+02	1.218E+02	1.870E+02	0.000E+00	-1.001
		236.00		5.982E+00	1.772E+01	2.762E+01	0.000E+00	0.217
		256.20	*	-2.478E+01	2.793E+01	4.582E+01	0.000E+00	-0.541
		286.10		-2.031E+01	1.065E+02	1.820E+02	0.000E+00	-0.112
		299.80		-8.827E+01	9.739E+01	1.581E+02	0.000E+00	-0.559
		304.40		1.908E+02	1.307E+02	2.460E+02	0.000E+00	0.776
		329.70		-2.141E+01	6.198E+01	1.042E+02	0.000E+00	-0.206
		334.20		4.813E+01	1.599E+02	2.805E+02	0.000E+00	0.172
TH-227		79.80		-1.839E+02	1.197E+02	1.837E+02	0.000E+00	-1.001
		94.00		6.223E+02	1.718E+02	3.215E+02	0.000E+00	1.936
		236.00		5.883E+00	1.742E+01	2.717E+01	0.000E+00	0.217
		256.20	*	-2.436E+01	2.746E+01	4.505E+01	0.000E+00	-0.541
		286.10		-1.998E+01	1.047E+02	1.790E+02	0.000E+00	-0.112
		299.80		-8.661E+01	9.555E+01	1.551E+02	0.000E+00	-0.559
		304.40		1.874E+02	1.285E+02	2.417E+02	0.000E+00	0.776
		329.70		-2.106E+01	6.097E+01	1.025E+02	0.000E+00	-0.206
		334.20		4.717E+01	1.567E+02	2.749E+02	0.000E+00	0.172
AC-228		209.25		-2.761E+01	4.014E+01	6.729E+01	0.000E+00	-0.410
		338.32		-3.030E+00	1.652E+01	2.800E+01	0.000E+00	-0.108
		463.01		-2.635E+01	4.521E+01	7.326E+01	0.000E+00	-0.360

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		794.95		2.042E+01	4.220E+01	7.910E+01	0.000E+00	0.258
		911.21	*	2.380E+00	8.115E+00	1.476E+01	0.000E+00	0.161
		964.77		2.465E+01	4.757E+01	7.872E+01	0.000E+00	0.313
	+	969.11		1.171E+01	1.798E+01	2.234E+01	0.000E+00	0.524
RA-228		209.25		-2.761E+01	4.014E+01	6.729E+01	0.000E+00	-0.410
		338.32		-3.030E+00	1.652E+01	2.800E+01	0.000E+00	-0.108
		463.01		-2.635E+01	4.521E+01	7.326E+01	0.000E+00	-0.360
		794.95		2.042E+01	4.220E+01	7.910E+01	0.000E+00	0.258
		911.21	*	2.380E+00	8.115E+00	1.476E+01	0.000E+00	0.161
		964.77		2.465E+01	4.757E+01	7.872E+01	0.000E+00	0.313
	+	969.11		1.171E+01	1.798E+01	2.234E+01	0.000E+00	0.524
TH-229		85.43		-3.425E+00	1.351E+01	2.215E+01	0.000E+00	-0.155
		88.47		1.648E-01	7.638E+00	1.269E+01	0.000E+00	0.013
		100.00		1.658E+01	1.432E+01	2.511E+01	0.000E+00	0.660
		193.63	*	3.402E+01	3.681E+01	6.690E+01	0.000E+00	0.508
		210.97		3.779E+01	5.307E+01	9.539E+01	0.000E+00	0.396
PA-231		283.67	*	-1.333E+02	1.064E+02	1.689E+02	0.000E+00	-0.789
		301.29		-2.332E+01	3.741E+01	6.192E+01	0.000E+00	-0.377
		330.00		-5.265E+01	1.357E+02	2.274E+02	0.000E+00	-0.231
TH-231		84.21		6.818E+00	3.510E+01	5.887E+01	0.000E+00	0.116
		236.00		5.966E+00	1.767E+01	2.755E+01	0.000E+00	0.217
		256.20		-2.471E+01	2.786E+01	4.571E+01	0.000E+00	-0.541
		269.46	*	-7.671E+00	1.224E+01	2.037E+01	0.000E+00	-0.377
		271.23		1.847E+00	1.633E+01	2.843E+01	0.000E+00	0.065
		283.67		-1.333E+02	1.064E+02	1.689E+02	0.000E+00	-0.789
		301.29		-2.332E+01	3.740E+01	6.192E+01	0.000E+00	-0.377
		329.85		-1.557E+01	4.246E+01	7.126E+01	0.000E+00	-0.218
	+	351.07		3.352E+00	1.971E+01	2.365E+01	0.000E+00	0.142
		401.81		-7.367E+00	2.786E+01	4.676E+01	0.000E+00	-0.158
TH-232	+	238.59	*	6.476E-01	7.322E+00	8.295E+00	0.000E+00	0.078
		911.20		2.357E+00	8.035E+00	1.462E+01	0.000E+00	0.161
		964.40		3.423E+01	4.570E+01	7.843E+01	0.000E+00	0.436
	+	969.11		1.160E+01	1.780E+01	2.263E+01	0.000E+00	0.512
PA-233		75.28		1.091E+02	2.178E+02	3.717E+02	0.000E+00	0.294
		86.59		1.332E+01	1.147E+02	1.914E+02	0.000E+00	0.070
		300.12		-1.593E+01	2.626E+01	4.352E+01	0.000E+00	-0.366
		311.98	*	-1.772E+00	4.450E+00	7.474E+00	0.000E+00	-0.237
		340.50		1.510E+01	4.079E+01	7.175E+01	0.000E+00	0.210
		398.62		1.135E+02	1.378E+02	2.513E+02	0.000E+00	0.451
		415.76		5.571E+01	1.101E+02	1.961E+02	0.000E+00	0.284
PA-234	+	63.00		6.397E+01	1.555E+02	2.092E+02	0.000E+00	0.306
		94.67		1.905E+01	1.477E+01	2.559E+01	0.000E+00	0.744
		98.44		-3.292E+00	7.350E+00	1.188E+01	0.000E+00	-0.277
		99.70		2.448E+01	3.803E+01	6.496E+01	0.000E+00	0.377
		111.00		3.468E+00	1.452E+01	2.424E+01	0.000E+00	0.143
		131.20		-1.352E+00	8.189E+00	1.264E+01	0.000E+00	-0.107
		152.70		-8.501E+00	2.324E+01	4.010E+01	0.000E+00	-0.212
	+	186.00		7.153E-01	1.826E+02	1.398E+02	0.000E+00	0.005
		226.40		-6.471E+00	2.787E+01	4.781E+01	0.000E+00	-0.135

Sample ID : G145579007 Acquisition date : 13-OCT-2005 10:43:04

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		227.20		1.963E+00	2.967E+01	5.174E+01	0.000E+00	0.038
		248.90		1.969E+01	6.215E+01	1.095E+02	0.000E+00	0.180
		293.70		2.128E+01	4.459E+01	7.911E+01	0.000E+00	0.269
		369.80		4.493E+01	5.809E+01	1.055E+02	0.000E+00	0.426
		568.70		4.953E+00	5.921E+01	1.073E+02	0.000E+00	0.046
		569.50		4.150E+00	1.643E+01	3.012E+01	0.000E+00	0.138
		574.00		3.158E+01	9.382E+01	1.726E+02	0.000E+00	0.183
		699.00		-5.433E+00	4.459E+01	7.839E+01	0.000E+00	-0.069
		706.10		1.997E+01	5.963E+01	1.099E+02	0.000E+00	0.182
		733.00		7.383E+00	2.395E+01	4.364E+01	0.000E+00	0.169
		742.81		-4.814E+01	7.608E+01	1.275E+02	0.000E+00	-0.377
		796.30		1.034E+01	4.785E+01	8.769E+01	0.000E+00	0.118
		805.80		1.496E+01	6.139E+01	1.115E+02	0.000E+00	0.134
		819.60		4.552E+01	6.373E+01	1.243E+02	0.000E+00	0.366
		826.30		-3.123E-01	4.780E+01	8.528E+01	0.000E+00	-0.004
		831.60		-1.581E+01	3.618E+01	6.147E+01	0.000E+00	-0.257
		876.40		-7.534E+01	4.743E+01	6.796E+01	0.000E+00	-1.109
		880.51		2.603E+01	1.616E+01	3.352E+01	0.000E+00	0.776
		883.24		4.384E+00	1.654E+01	3.036E+01	0.000E+00	0.144
		899.00		-2.575E+01	4.491E+01	7.488E+01	0.000E+00	-0.344
		925.00		-3.021E+01	6.756E+01	1.141E+02	0.000E+00	-0.265
		926.50		1.537E+00	1.001E+01	1.814E+01	0.000E+00	0.085
		946.00	*	-6.091E+00	1.614E+01	2.753E+01	0.000E+00	-0.221
		949.00		5.842E+00	2.279E+01	4.222E+01	0.000E+00	0.138
		980.50		2.572E+00	4.162E+01	7.452E+01	0.000E+00	0.035
		1394.10		2.067E+01	6.545E+01	1.275E+02	0.000E+00	0.162
PA-234M		766.40		8.295E+02	8.746E+02	1.716E+03	0.000E+00	0.484
		1001.03	*	3.041E+02	2.416E+02	4.913E+02	0.000E+00	0.619
TH-234	+	63.29	*	5.488E+01	1.334E+02	2.064E+02	0.000E+00	0.266
		92.38		2.103E+02	4.424E+01	8.599E+01	0.000E+00	2.446
		112.81		1.408E+01	7.297E+02	1.203E+03	0.000E+00	0.012
U-234		67.67		3.704E+02	9.065E+02	1.549E+03	0.000E+00	0.239
		241.98		-8.366E-01	2.657E+01	4.032E+01	0.000E+00	-0.021
		295.21	*	1.180E+01	9.171E+00	1.704E+01	0.000E+00	0.693
	+	351.92		1.166E+00	6.855E+00	8.820E+00	0.000E+00	0.132
U-235		89.95		-3.587E+02	9.127E+01	1.235E+02	0.000E+00	-2.904
		93.35		2.157E+02	5.436E+01	1.027E+02	0.000E+00	2.101
		105.00		4.600E+01	8.139E+01	1.386E+02	0.000E+00	0.332
		143.76	*	3.040E-01	1.630E+01	2.857E+01	0.000E+00	0.011
		163.33		-3.567E+00	3.475E+01	6.051E+01	0.000E+00	-0.059
	+	185.71		2.649E-02	6.763E+00	5.174E+00	0.000E+00	0.005
		205.31		-2.102E+00	3.364E+01	5.834E+01	0.000E+00	-0.036
NP-237		86.48	*	7.380E-01	1.729E+01	2.876E+01	0.000E+00	0.026
		95.87		-3.858E+02	9.240E+01	1.236E+02	0.000E+00	-3.121
NP-239		99.55		7.913E+00	1.242E+01	2.122E+01	0.000E+00	0.373
		117.00	*	9.172E+00	1.498E+01	2.546E+01	0.000E+00	0.360
		209.75		6.583E+00	5.363E+01	9.370E+01	0.000E+00	0.070
		228.18		1.306E+01	1.587E+01	2.873E+01	0.000E+00	0.455
		277.60		-4.892E+00	1.301E+01	2.193E+01	0.000E+00	-0.223

Sample ID : G145579007 Acquisition date : 13-OCT-2005 10:43:04

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		334.31		2.593E+01	8.833E+01	1.548E+02	0.000E+00	0.167
AM-241		59.54	*	-7.392E+00	1.378E+01	2.257E+01	0.000E+00	-0.327
AM-242		99.55		1.847E+02	2.900E+02	4.953E+02	0.000E+00	0.373
		103.70	*	-1.597E+02	1.734E+02	2.726E+02	0.000E+00	-0.586
CM-247		278.00		-1.343E+01	5.323E+01	9.045E+01	0.000E+00	-0.148
		287.40		4.529E+01	8.357E+01	1.496E+02	0.000E+00	0.303
		402.60	*	-1.310E+00	2.544E+00	4.181E+00	0.000E+00	-0.313
CF-249		252.85		2.908E+01	6.061E+01	1.081E+02	0.000E+00	0.269
		333.44		6.954E+00	1.162E+01	2.076E+01	0.000E+00	0.335
		387.95	*	-6.368E-01	2.746E+00	4.626E+00	0.000E+00	-0.138
CF-251		176.00	*	5.613E+00	9.305E+00	1.670E+01	0.000E+00	0.336
		227.00		4.821E-01	2.628E+01	4.573E+01	0.000E+00	0.011
		285.00		-5.638E+01	1.187E+02	1.992E+02	0.000E+00	-0.283

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579007    *
* Acquisition date : 13-OCT-2005 10:43:04 Detector SN#    : 10017452     *
* Detector ID      : GAMMA9               Sensitivity     : 3.000        *
* Geometry         : 2L_MB                Energy tolerance: 2.000        *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000       *
* Elapsed real time:    0 04:01:07.61     Half life ratio :  8.000       *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 12:55:00 Nuclide Library :              *
* Sample ID        : G145579007           Analyst initials: MJH1         *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000    *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME :  8-JUL-2005 12:59:09 MS Isotope      :             *
* MSD DPM          :    0.000             MSD Isotope     :             *
* LCS DPM          :    0.000             LCS Isotope     :             *
* LCSD DPM         :    0.000             LCSD Isotope    :             *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	6.030E+01	4.068E+01	3.335E+01	0.000E+00
Y-91	5.455E+00	4.619E+00	4.691E+00	0.000E+00
BA-137M	5.118E+00	3.562E+00	4.045E+00	0.000E+00
CS-137	5.410E+00	3.765E+00	4.276E+00	0.000E+00
TL-208	2.442E+00	3.860E+00	3.553E+00	0.000E+00
BI-211	3.352E+00	1.971E+01	2.365E+01	0.000E+00
RA-224	7.534E+00	8.517E+01	7.886E+01	0.000E+00
RA-226	7.742E+00	9.711E+00	7.057E+00	0.000E+00
TH-228	6.672E-01	7.543E+00	7.280E+00	0.000E+00
TH-230	7.742E+00	9.710E+00	7.057E+00	0.000E+00
U-238	5.488E+01	1.334E+02	1.767E+02	0.000E+00
ANH-511	2.592E+00	5.941E+00	3.307E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	
BE-7	-4.078E+00		2.660E+01	4.475E+01	0.000E+00 NOT IDENT.
NA-22	1.508E+00		2.143E+00	4.317E+00	0.000E+00 NOT IDENT.
NA-24	0.000E+00		4.893E+14	0.000E+00	0.000E+00 SHORT HLIF
AL-26	1.077E+00		2.164E+00	4.307E+00	0.000E+00 FAIL ABUN
SC-46	1.177E+00		2.556E+00	4.310E+00	0.000E+00 NOT IDENT.
V-48	2.353E+00		7.768E+00	1.426E+01	0.000E+00 NOT IDENT.
CR-51	-1.830E+01		3.857E+01	6.431E+01	0.000E+00 NOT IDENT.
MN-54	2.012E-01		2.196E+00	3.941E+00	0.000E+00 NOT IDENT.
CO-56	-1.947E+00		5.044E+00	4.546E+00	0.000E+00 NOT IDENT.
MN-56	0.000E+00		2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
CO-57	9.668E-01		1.949E+00	3.519E+00	0.000E+00 NOT IDENT.
CO-58	2.384E+00		2.461E+00	4.864E+00	0.000E+00 NOT IDENT.
FE-59	-2.011E+00		5.872E+00	1.048E+01	0.000E+00 NOT IDENT.
CO-60	2.913E+00		2.182E+00	4.673E+00	0.000E+00 NOT IDENT.
ZN-65	-7.156E-01		3.914E+00	7.193E+00	0.000E+00 NOT IDENT.

SE-75	2.007E+00	3.380E+00	6.057E+00	0.000E+00 FAIL ABUN
KR-85	0.000E+00	6.154E+02	1.196E+03	0.000E+00 NOT IDENT.
SR-85	0.000E+00	3.688E+00	7.169E+00	0.000E+00 NOT IDENT.
Y-88	-8.073E-01	2.458E+00	4.322E+00	0.000E+00 NOT IDENT.
NB-94	1.030E+00	1.995E+00	3.715E+00	0.000E+00 NOT IDENT.
NB-95	3.896E+00	3.240E+00	6.523E+00	0.000E+00 NOT IDENT.
NB-95M	0.000E+00	2.575E+03	0.000E+00	0.000E+00 SHORT HLIF
ZR-95	6.953E-02	4.585E+00	8.241E+00	0.000E+00 NOT IDENT.
MO-99	0.000E+00	6.262E+03	0.000E+00	0.000E+00 SHORT HLIF
TC-99M	0.000E+00	3.408E+36	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-1.701E+00	3.920E+00	5.861E+00	0.000E+00 FAIL ABUN
RH-106	-8.030E+00	3.449E+01	3.385E+01	0.000E+00 FAIL ABUN
RU-106	8.627E+00	2.108E+01	3.481E+01	0.000E+00 NOT IDENT.
AG-108M	4.267E-01	2.088E+00	3.650E+00	0.000E+00 FAIL ABUN
CD-109	1.385E+01	5.815E+01	9.762E+01	0.000E+00 NOT IDENT.
AG-110M	8.329E-01	2.542E+00	4.104E+00	0.000E+00 NOT IDENT.
SN-113	2.879E+00	3.229E+00	5.916E+00	0.000E+00 NOT IDENT.
CD-115	0.000E+00	6.668E+04	0.000E+00	0.000E+00 SHORT HLIF
SN-115	1.858E+02	4.377E+02	3.999E+02	0.000E+00 FAIL ABUN
SN-117M	2.540E+00	8.511E+00	1.512E+01	0.000E+00 NOT IDENT.
TE-123M	7.135E-01	2.234E+00	3.973E+00	0.000E+00 NOT IDENT.
SB-124	9.504E-01	5.846E+00	9.961E+00	0.000E+00 NOT IDENT.
SB-125	3.052E+00	5.922E+00	1.061E+01	0.000E+00 NOT IDENT.
TE-125M	-2.789E+02	8.873E+02	1.439E+03	0.000E+00 NOT IDENT.
I-126	1.003E+01	2.698E+01	4.387E+01	0.000E+00 NOT IDENT.
SB-126	-1.777E+01	1.939E+01	3.155E+01	0.000E+00 NOT IDENT.
SN-126	2.645E+00	5.660E+00	9.614E+00	0.000E+00 FAIL ABUN
SB-127	5.295E+02	1.059E+03	2.003E+03	0.000E+00 NOT IDENT.
I-131	1.365E+01	2.877E+01	5.114E+01	0.000E+00 NOT IDENT.
I-132	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	0.000E+00	1.135E+03	0.000E+00	0.000E+00 SHORT HLIF
BA-133	-2.203E+00	3.276E+00	4.579E+00	0.000E+00 NOT IDENT.
I-133	0.000E+00	5.247E+10	0.000E+00	0.000E+00 SHORT HLIF
CS-134	9.756E-01	2.300E+00	4.290E+00	0.000E+00 NOT IDENT.
CS-135	-4.032E+00	1.022E+01	1.729E+01	0.000E+00 NOT IDENT.
I-135	0.000E+00	3.994E+33	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-2.208E+00	1.274E+01	2.216E+01	0.000E+00 FAIL ABUN
CE-139	4.661E-02	2.278E+00	3.995E+00	0.000E+00 NOT IDENT.
BA-140	1.899E+01	3.571E+01	6.699E+01	0.000E+00 NOT IDENT.
LA-140	0.000E+00	5.295E+05	0.000E+00	0.000E+00 SHORT HLIF
CE-141	3.007E+00	6.437E+00	1.151E+01	0.000E+00 NOT IDENT.
CE-143	0.000E+00	1.588E+07	0.000E+00	0.000E+00 SHORT HLIF
CE-144	-3.767E+00	1.466E+01	2.558E+01	0.000E+00 NOT IDENT.
PM-144	1.257E+00	2.124E+00	3.977E+00	0.000E+00 FAIL ABUN
PR-144	0.000E+00	1.689E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	6.351E-01	3.019E+00	5.237E+00	0.000E+00 NOT IDENT.
ND-147	-3.856E+01	9.096E+01	1.582E+02	0.000E+00 NOT IDENT.
PM-147	4.183E+05	3.959E+06	7.030E+06	0.000E+00 NOT IDENT.
PM-149	0.000E+00	6.537E+05	0.000E+00	0.000E+00 SHORT HLIF
EU-152	1.360E+00	6.859E+00	1.194E+01	0.000E+00 NOT IDENT.
GD-153	-3.255E+00	6.779E+00	1.094E+01	0.000E+00 NOT IDENT.
EU-154	4.162E+00	5.939E+00	1.196E+01	0.000E+00 NOT IDENT.
EU-155	5.724E+00	8.391E+00	1.437E+01	0.000E+00 NOT IDENT.
TB-160	1.238E+01	8.946E+00	1.833E+01	0.000E+00 NOT IDENT.
TM-171	-9.496E+02	2.432E+03	3.992E+03	0.000E+00 NOT IDENT.
HF-181	6.771E-02	3.580E+00	6.125E+00	0.000E+00 FAIL ABUN
TA-182	5.943E+00	1.206E+01	1.552E+01	0.000E+00 NOT IDENT.
IR-192	2.148E+00	2.820E+00	5.096E+00	0.000E+00 NOT IDENT.
HG-203	2.843E+00	3.540E+00	6.403E+00	0.000E+00 NOT IDENT.
BI-207	-9.145E-02	2.677E+00	4.760E+00	0.000E+00 NOT IDENT.
BI-210	1.058E+02	4.459E+02	6.903E+02	0.000E+00 NOT IDENT.
PB-210	1.058E+02	4.459E+02	6.903E+02	0.000E+00 NOT IDENT.
PB-211	3.237E+01	6.004E+01	1.074E+02	0.000E+00 NOT IDENT.
BI-212	2.034E+01	1.771E+01	3.461E+01	0.000E+00 NOT IDENT.
PB-212	6.672E-01	7.543E+00	8.539E+00	0.000E+00 FAIL ABUN
BI-214	7.742E+00	9.711E+00	8.825E+00	0.000E+00 FAIL ABUN
PB-214	1.166E+00	6.855E+00	8.680E+00	0.000E+00 FAIL ABUN
RN-219	-7.367E+00	2.786E+01	4.676E+01	0.000E+00 NOT IDENT.
RA-223	-6.650E+00	4.470E+01	7.628E+01	0.000E+00 NOT IDENT.
AC-227	-2.478E+01	2.793E+01	4.582E+01	0.000E+00 NOT IDENT.
TH-227	-2.436E+01	2.746E+01	4.505E+01	0.000E+00 NOT IDENT.
AC-228	2.380E+00	8.115E+00	1.476E+01	0.000E+00 FAIL ABUN
RA-228	2.380E+00	8.115E+00	1.476E+01	0.000E+00 FAIL ABUN
TH-229	3.402E+01	3.681E+01	6.690E+01	0.000E+00 NOT IDENT.
PA-231	-1.333E+02	1.064E+02	1.689E+02	0.000E+00 NOT IDENT.
TH-231	-7.671E+00	1.224E+01	2.037E+01	0.000E+00 FAIL ABUN
TH-232	6.476E-01	7.322E+00	8.295E+00	0.000E+00 FAIL ABUN
PA-233	-1.772E+00	4.450E+00	7.474E+00	0.000E+00 NOT IDENT.

PA-234	-6.091E+00	1.614E+01	2.753E+01	0.000E+00 FAIL ABUN
PA-234M	3.041E+02	2.416E+02	4.913E+02	0.000E+00 NOT IDENT.
TH-234	5.488E+01	1.334E+02	2.064E+02	0.000E+00 FAIL ABUN
U-234	1.180E+01	9.171E+00	1.704E+01	0.000E+00 FAIL ABUN
U-235	3.040E-01	1.630E+01	2.857E+01	0.000E+00 FAIL ABUN
NP-237	7.380E-01	1.729E+01	2.876E+01	0.000E+00 NOT IDENT.
NP-239	9.172E+00	1.498E+01	2.546E+01	0.000E+00 NOT IDENT.
AM-241	-7.392E+00	1.378E+01	2.257E+01	0.000E+00 NOT IDENT.
AM-242	-1.597E+02	1.734E+02	2.726E+02	0.000E+00 NOT IDENT.
CM-247	-1.310E+00	2.544E+00	4.181E+00	0.000E+00 NOT IDENT.
CF-249	-6.368E-01	2.746E+00	4.626E+00	0.000E+00 NOT IDENT.
CF-251	5.613E+00	9.305E+00	1.670E+01	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:48:48.36

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579007.CNF;1
Sample date      : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:43:04
Sample ID        : G145579007           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA9               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:07.61  0.5%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 10017452
Matrix Spike DPM :                      LCS DPM          :
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	54.00	41	183	1.59	88.40	86	7	2.84E-03	57.0	
2	0	63.59	111	148	1.57	107.70	105	6	7.74E-03	19.7	
3	0	92.98	242	251	1.36	166.90	164	8	1.68E-02	13.0	
4	0	127.84	28	194	0.99	237.10	235	8	1.92E-03	89.3	
5	0	140.53	66	265	1.91	262.66	256	10	4.58E-03	47.8	
6	0	186.23	163	300	1.21	354.70	349	13	1.13E-02	23.3	
7	0	198.73	73	163	1.79	379.89	376	8	5.07E-03	32.4	
8	0	239.25	70	215	1.19	461.49	457	11	4.89E-03	42.2	
9	0	352.27	31	88	1.03	689.13	684	10	2.18E-03	58.6	
10	0	500.14	18	47	1.34	986.97	984	8	1.23E-03	71.5	
11	0	511.42	371	130	2.50	1009.70	999	20	2.58E-02	9.1	
12	0	557.71	61	55	2.88	1102.93	1096	13	4.22E-03	28.3	
13	0	582.37	53	52	1.32	1152.60	1145	15	3.67E-03	32.8	
14	0	608.83	68	82	2.52	1205.92	1198	22	4.75E-03	35.9	
15	0	616.03	9	38	0.72	1220.41	1219	9	5.90E-04	132.6	
16	0	625.32	15	30	3.72	1239.13	1236	10	1.04E-03	73.0	
17	0	662.78	49	57	3.43	1314.58	1308	13	3.43E-03	34.8	
18	0	791.01	15	79	4.75	1572.91	1567	24	1.07E-03	153.6	
19	3	840.67	23	35	2.72	1672.96	1668	16	1.63E-03	49.0	5.09E+00
20	3	844.17	36	22	2.04	1680.00	1668	16	2.53E-03	26.5	
21	0	852.41	22	36	5.49	1696.60	1686	16	1.52E-03	64.8	
22	0	891.69	23	26	5.39	1775.74	1768	15	1.59E-03	53.0	
23	0	911.69	18	16	1.35	1816.03	1813	7	1.24E-03	43.9	
24	0	932.68	13	39	5.31	1858.32	1854	19	8.99E-04	117.8	
25	0	969.60	29	18	2.99	1932.70	1927	17	1.99E-03	38.1	
26	0	1218.50	14	10	3.44	2434.18	2428	14	9.94E-04	54.5	
27	0	1234.78	49	35	21.98	2467.00	2443	47	3.43E-03	45.2	
28	0	1286.74	21	9	5.58	2571.68	2563	17	1.42E-03	39.4	
29	0	1298.25	19	17	4.31	2594.87	2589	12	1.30E-03	50.8	
30	0	1342.16	19	31	4.25	2683.37	2676	24	1.33E-03	78.9	
31	0	1440.04	8	2	1.47	2880.59	2878	6	5.42E-04	48.8	
32	0	1461.43	62	15	3.47	2923.70	2915	19	4.27E-03	19.5	
33	0	1543.19	6	19	3.98	3088.46	3071	19	4.01E-04	185.7	
34	1	1565.79	14	5	2.43	3134.00	3093	52	9.40E-04	64.1	5.04E-01
35	1	1568.77	15	1	2.43	3140.00	3093	52	1.03E-03	36.4	
36	0	1630.99	24	25	12.29	3265.40	3253	32	1.70E-03	63.5	
37	0	1684.84	11	14	0.69	3373.93	3362	19	7.44E-04	89.8	
38	0	1764.79	29	8	0.61	3535.06	3529	15	2.01E-03	27.9	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1818.03	11	6	2.58	3642.35	3638	12	7.35E-04	55.9	
40	0	1878.57	11	16	6.93	3764.38	3758	20	7.92E-04	88.5	
41	0	2011.97	6	1	0.59	4033.24	4031	5	4.17E-04	48.8	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:48:53.34

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579007.CNF;1
Sample date      : 13-SEP-2005 12:55:00 Acquisition date : 13-OCT-2005 10:43:04
Sample ID        : G145579007           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA9               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:07.61  0.5%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 10017452
Matrix Spike DPM :                      LCS DPM          :
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	38	10.67*	5.612E-01	6.030E+01	6.030E+01	67.47
Y-91	557.57	44	95.08*	1.133E+00	3.824E+00	5.455E+00	84.67
	1204.90	------	0.30	6.417E-01	------ Line Not Found		------
BA-137M	661.65	49	89.98*	1.010E+00	5.108E+00	5.118E+00	69.59
CS-137	661.66	49	85.12*	1.010E+00	5.400E+00	5.410E+00	69.59
TL-208	75.00	------	3.43	1.507E+00	------ Line Not Found		------
	277.35	------	6.80	1.705E+00	------ Line Not Found		------
	510.84	33	21.60	1.196E+00	1.200E+01	1.236E+01	229.21
	583.14	23	84.20*	1.101E+00	2.371E+00	2.442E+00	158.05
	763.30	------	1.64	9.127E-01	------ Line Not Found		------
	860.37	------	12.46	8.340E-01	------ Line Not Found		------
	1093.90	------	0.37	6.912E-01	------ Line Not Found		------
BI-211	351.07	7	12.94*	1.489E+00	3.352E+00	3.352E+00	587.88
RA-226	295.21	------	19.20	1.646E+00	------ Line Not Found		------
	351.92	7	37.20	1.489E+00	1.166E+00	1.166E+00	587.88
	609.31	41	46.30*	1.070E+00	7.742E+00	7.742E+00	125.42
TH-228	84.40	------	1.21	1.850E+00	------ Line Not Found		------
	238.60	6	44.60*	1.851E+00	6.476E-01	6.672E-01	1130.57
	300.10	------	3.41	1.631E+00	------ Line Not Found		------
TH-230	295.21	------	19.20	1.646E+00	------ Line Not Found		------
	351.92	7	37.20	1.489E+00	1.166E+00	1.166E+00	587.88
	609.31	41	46.30*	1.070E+00	7.742E+00	7.742E+00	125.42
U-238	63.29	22	3.80*	9.676E-01	5.488E+01	5.488E+01	243.07
ANH-511	511.00	33	100.00*	1.196E+00	2.592E+00	2.592E+00	229.21

Nuclide Type: NATURAL

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
RA-224	240.98	6	3.95*	1.851E+00	7.313E+00	7.534E+00	1130.57

Flag: "*" = Keyline

Sample ID : G145579007 Acquisition date : 13-OCT-2005 10:43:04

Total number of lines in spectrum	39	
Number of unidentified lines	22	
Number of lines tentatively identified by NID	17	43.59%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	6.030E+01	6.030E+01	4.068E+01	67.47	
Y-91	58.51D	1.43	3.824E+00	5.455E+00	4.619E+00	84.67	
BA-137M	30.17Y	1.00	5.108E+00	5.118E+00	3.562E+00	69.59	
CS-137	30.17Y	1.00	5.400E+00	5.410E+00	3.765E+00	69.59	
TL-208	1.91Y	1.03	2.371E+00	2.442E+00	3.860E+00	158.05	
BI-211	7.04E+08Y	1.00	3.352E+00	3.352E+00	19.71E+00	587.88	
RA-226	1600.00Y	1.00	7.742E+00	7.742E+00	9.711E+00	125.42	
TH-228	1.91Y	1.03	6.476E-01	6.672E-01	75.43E-01	1130.57	
TH-230	7.70E+04Y	1.00	7.742E+00	7.742E+00	9.710E+00	125.42	
U-238	4.47E+09Y	1.00	5.488E+01	5.488E+01	13.34E+01	243.07	
ANH-511	1.00E+09Y	1.00	2.592E+00	2.592E+00	5.941E+00	229.21	
Total Activity :			1.540E+02	1.557E+02			

Nuclide Type : NATURAL

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
RA-224	1.91Y	1.03	7.313E+00	7.534E+00	85.17E+00	1130.57	
Total Activity :			7.313E+00	7.534E+00			

Grand Total Activity :	1.613E+02	1.632E+02

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579007 Acquisition date : 13-OCT-2005 10:43:04

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	54.00	17	183	1.59	88.40	86	7	1.17E-03	****	4.95E-01	
0	127.84	28	194	0.99	237.10	235	8	1.92E-03	****	2.35E+00	
0	140.53	40	265	1.91	262.66	256	10	2.77E-03	****	2.33E+00	T
0	186.23	0	300	1.21	354.70	349	13	2.23E-05	****	2.11E+00	T
0	198.73	61	163	1.79	379.89	376	8	4.22E-03	84.7	2.04E+00	T
0	500.14	18	47	1.34	986.97	984	8	1.23E-03	****	1.21E+00	
0	616.03	9	38	0.72	1220.41	1219	9	5.90E-04	****	1.06E+00	T
0	625.32	11	30	3.72	1239.13	1236	10	7.37E-04	****	1.05E+00	
0	791.01	15	79	4.75	1572.91	1567	24	1.07E-03	****	8.89E-01	
3	840.67	23	35	2.72	1672.96	1668	16	1.63E-03	98.0	8.49E-01	
3	844.17	31	22	2.04	1680.00	1668	16	2.13E-03	66.7	8.46E-01	
0	852.41	22	36	5.49	1696.60	1686	16	1.52E-03	****	8.40E-01	
0	891.69	22	26	5.39	1775.74	1768	15	1.55E-03	****	8.11E-01	
0	932.68	13	39	5.31	1858.32	1854	19	8.99E-04	****	7.83E-01	T
0	969.60	16	18	2.99	1932.70	1927	17	1.08E-03	****	7.60E-01	T
0	1218.50	14	10	3.44	2434.18	2428	14	9.94E-04	****	6.36E-01	
0	1234.78	49	35	21.98	2467.00	2443	47	3.43E-03	90.5	6.30E-01	T
0	1286.74	21	9	5.58	2571.68	2563	17	1.42E-03	78.7	6.11E-01	
0	1298.25	19	17	4.31	2594.87	2589	12	1.30E-03	****	6.07E-01	T
0	1342.16	19	31	4.25	2683.37	2676	24	1.33E-03	****	5.93E-01	
0	1440.04	8	2	1.47	2880.59	2878	6	5.42E-04	97.6	5.66E-01	
0	1543.19	3	19	3.98	3088.46	3071	19	1.76E-04	****	5.44E-01	
1	1565.79	14	5	2.43	3134.00	3093	52	9.40E-04	****	5.40E-01	
1	1568.77	15	1	2.43	3140.00	3093	52	1.03E-03	72.8	5.39E-01	
0	1630.99	21	25	12.29	3265.40	3253	32	1.42E-03	****	5.29E-01	
0	1684.84	11	14	0.69	3373.93	3362	19	7.44E-04	****	5.22E-01	
0	1764.79	7	8	0.61	3535.06	3529	15	4.95E-04	****	5.13E-01	
0	1818.03	11	6	2.58	3642.35	3638	12	7.35E-04	****	5.09E-01	
0	1878.57	11	16	6.93	3764.38	3758	20	7.92E-04	****	5.05E-01	
0	2011.97	6	1	0.59	4033.24	4031	5	4.17E-04	97.5	5.03E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:49:04.00

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579007.CNF;1  *
* Acquisition date : 13-OCT-2005 10:43:04  Detector SN#    : 10017452      *
* Detector ID      : GAMMA9                Sensitivity     : 3.00000       *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000       *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000      *
* Elapsed real time: 0 04:01:07.61         Half life ratio : 8.00000       *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 13-SEP-2005 12:55:00  Nuclide Library : EPI            *
* Sample ID        : G145579007            Analyst initials: MJH1          *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 8-JUL-2005 12:59:09.79MS Isotope      :               *
* MSD DPM          :                       MSD Isotope     :               *
* LCS DPM          :                       LCS Isotope     :               *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	6.030E+01	4.068E+01	3.335E+01	0.000E+00	1.808
Y-91	5.455E+00	4.619E+00	4.691E+00	0.000E+00	1.163
BA-137M	5.118E+00	3.562E+00	4.045E+00	0.000E+00	1.265
CS-137	5.410E+00	3.765E+00	4.276E+00	0.000E+00	1.265
TL-208	2.442E+00	3.860E+00	3.553E+00	0.000E+00	0.687
BI-211	3.352E+00	1.971E+01	2.365E+01	0.000E+00	0.142
RA-224	7.534E+00	8.517E+01	7.886E+01	0.000E+00	0.096
RA-226	7.742E+00	9.711E+00	7.057E+00	0.000E+00	1.097
TH-228	6.672E-01	7.543E+00	7.280E+00	0.000E+00	0.092
TH-230	7.742E+00	9.710E+00	7.057E+00	0.000E+00	1.097
U-238	5.488E+01	1.334E+02	1.767E+02	0.000E+00	0.311
ANH-511	2.592E+00	5.941E+00	3.307E+00	0.000E+00	0.784

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-4.078E+00		2.660E+01	4.475E+01	0.000E+00	-0.091

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	1.508E+00		2.143E+00	4.317E+00	0.000E+00	0.349
AL-26	1.077E+00		2.164E+00	4.307E+00	0.000E+00	0.250
SC-46	1.177E+00		2.556E+00	4.310E+00	0.000E+00	0.273
V-48	2.353E+00		7.768E+00	1.426E+01	0.000E+00	0.165
CR-51	-1.830E+01		3.857E+01	6.431E+01	0.000E+00	-0.285
MN-54	2.012E-01		2.196E+00	3.941E+00	0.000E+00	0.051
CO-56	-1.947E+00		5.044E+00	4.546E+00	0.000E+00	-0.428
CO-57	9.668E-01		1.949E+00	3.519E+00	0.000E+00	0.275
CO-58	2.384E+00		2.461E+00	4.864E+00	0.000E+00	0.490
FE-59	-2.011E+00		5.872E+00	1.048E+01	0.000E+00	-0.192
CO-60	2.913E+00		2.182E+00	4.673E+00	0.000E+00	0.623
ZN-65	-7.156E-01		3.914E+00	7.193E+00	0.000E+00	-0.099
SE-75	2.007E+00		3.380E+00	6.057E+00	0.000E+00	0.331
KR-85	2.116E+03		6.154E+02	1.196E+03	0.000E+00	1.769
SR-85	1.268E+01		3.688E+00	7.169E+00	0.000E+00	1.769
Y-88	-8.073E-01		2.458E+00	4.322E+00	0.000E+00	-0.187
NB-94	1.030E+00		1.995E+00	3.715E+00	0.000E+00	0.277
NB-95	3.896E+00		3.240E+00	6.523E+00	0.000E+00	0.597
ZR-95	6.953E-02		4.585E+00	8.241E+00	0.000E+00	0.008
RU-103	-1.701E+00		3.920E+00	5.861E+00	0.000E+00	-0.290
RH-106	-8.030E+00		3.449E+01	3.385E+01	0.000E+00	-0.237
RU-106	8.627E+00		2.108E+01	3.481E+01	0.000E+00	0.248
AG-108M	4.267E-01		2.088E+00	3.650E+00	0.000E+00	0.117
CD-109	1.385E+01		5.815E+01	9.762E+01	0.000E+00	0.142
AG-110M	8.329E-01		2.542E+00	4.104E+00	0.000E+00	0.203
SN-113	2.879E+00		3.229E+00	5.916E+00	0.000E+00	0.487
SN-115	1.858E+02	+	4.377E+02	3.999E+02	0.000E+00	0.465
SN-117M	2.540E+00		8.511E+00	1.512E+01	0.000E+00	0.168
TE-123M	7.135E-01		2.234E+00	3.973E+00	0.000E+00	0.180
SB-124	9.504E-01		5.846E+00	9.961E+00	0.000E+00	0.095
SB-125	3.052E+00		5.922E+00	1.061E+01	0.000E+00	0.288
TE-125M	-2.789E+02		8.873E+02	1.439E+03	0.000E+00	-0.194
I-126	1.003E+01		2.698E+01	4.387E+01	0.000E+00	0.229
SB-126	-1.777E+01		1.939E+01	3.155E+01	0.000E+00	-0.563
SN-126	2.645E+00		5.660E+00	9.614E+00	0.000E+00	0.275
SB-127	5.295E+02		1.059E+03	2.003E+03	0.000E+00	0.264
I-131	1.365E+01		2.877E+01	5.114E+01	0.000E+00	0.267
BA-133	-2.203E+00		3.276E+00	4.579E+00	0.000E+00	-0.481
CS-134	9.756E-01		2.300E+00	4.290E+00	0.000E+00	0.227
CS-135	-4.032E+00		1.022E+01	1.729E+01	0.000E+00	-0.233
CS-136	-2.208E+00		1.274E+01	2.216E+01	0.000E+00	-0.100
CE-139	4.661E-02		2.278E+00	3.995E+00	0.000E+00	0.012
BA-140	1.899E+01		3.571E+01	6.699E+01	0.000E+00	0.284
CE-141	3.007E+00		6.437E+00	1.151E+01	0.000E+00	0.261
CE-144	-3.767E+00		1.466E+01	2.558E+01	0.000E+00	-0.147
PM-144	1.257E+00		2.124E+00	3.977E+00	0.000E+00	0.316
PM-146	6.351E-01		3.019E+00	5.237E+00	0.000E+00	0.121
ND-147	-3.856E+01		9.096E+01	1.582E+02	0.000E+00	-0.244

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-147	4.183E+05		3.959E+06	7.030E+06	0.000E+00	0.059
EU-152	1.360E+00		6.859E+00	1.194E+01	0.000E+00	0.114
GD-153	-3.255E+00		6.779E+00	1.094E+01	0.000E+00	-0.298
EU-154	4.162E+00		5.939E+00	1.196E+01	0.000E+00	0.348
EU-155	5.724E+00		8.391E+00	1.437E+01	0.000E+00	0.398
TB-160	1.238E+01		8.946E+00	1.833E+01	0.000E+00	0.675
TM-171	-9.496E+02		2.432E+03	3.992E+03	0.000E+00	-0.238
HF-181	6.771E-02		3.580E+00	6.125E+00	0.000E+00	0.011
TA-182	5.943E+00		1.206E+01	1.552E+01	0.000E+00	0.383
IR-192	2.148E+00		2.820E+00	5.096E+00	0.000E+00	0.422
HG-203	2.843E+00		3.540E+00	6.403E+00	0.000E+00	0.444
BI-207	-9.145E-02		2.677E+00	4.760E+00	0.000E+00	-0.019
BI-210	1.058E+02		4.459E+02	6.903E+02	0.000E+00	0.153
PB-210	1.058E+02		4.459E+02	6.903E+02	0.000E+00	0.153
PB-211	3.237E+01		6.004E+01	1.074E+02	0.000E+00	0.301
BI-212	2.034E+01		1.771E+01	3.461E+01	0.000E+00	0.588
PB-212	6.672E-01	+	7.543E+00	8.539E+00	0.000E+00	0.078
BI-214	7.742E+00	+	9.711E+00	8.825E+00	0.000E+00	0.877
PB-214	1.166E+00	+	6.855E+00	8.680E+00	0.000E+00	0.134
RN-219	-7.367E+00		2.786E+01	4.676E+01	0.000E+00	-0.158
RA-223	-6.650E+00		4.470E+01	7.628E+01	0.000E+00	-0.087
AC-227	-2.478E+01		2.793E+01	4.582E+01	0.000E+00	-0.541
TH-227	-2.436E+01		2.746E+01	4.505E+01	0.000E+00	-0.541
AC-228	2.380E+00		8.115E+00	1.476E+01	0.000E+00	0.161
RA-228	2.380E+00		8.115E+00	1.476E+01	0.000E+00	0.161
TH-229	3.402E+01		3.681E+01	6.690E+01	0.000E+00	0.508
PA-231	-1.333E+02		1.064E+02	1.689E+02	0.000E+00	-0.789
TH-231	-7.671E+00		1.224E+01	2.037E+01	0.000E+00	-0.377
TH-232	6.476E-01	+	7.322E+00	8.295E+00	0.000E+00	0.078
PA-233	-1.772E+00		4.450E+00	7.474E+00	0.000E+00	-0.237
PA-234	-6.091E+00		1.614E+01	2.753E+01	0.000E+00	-0.221
PA-234M	3.041E+02		2.416E+02	4.913E+02	0.000E+00	0.619
TH-234	5.488E+01	+	1.334E+02	2.064E+02	0.000E+00	0.266
U-234	1.180E+01		9.171E+00	1.704E+01	0.000E+00	0.693
U-235	3.040E-01		1.630E+01	2.857E+01	0.000E+00	0.011
NP-237	7.380E-01		1.729E+01	2.876E+01	0.000E+00	0.026
NP-239	9.172E+00		1.498E+01	2.546E+01	0.000E+00	0.360
AM-241	-7.392E+00		1.378E+01	2.257E+01	0.000E+00	-0.327
AM-242	-1.597E+02		1.734E+02	2.726E+02	0.000E+00	-0.586
CM-247	-1.310E+00		2.544E+00	4.181E+00	0.000E+00	-0.313
CF-249	-6.368E-01		2.746E+00	4.626E+00	0.000E+00	-0.138
CF-251	5.613E+00		9.305E+00	1.670E+01	0.000E+00	0.336

VAX/VMS Nuclide Identification Report Generated

```
*************************************************************************
*                          Environmental Physics, Inc.                  *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579007        *
* Acquisition date : 13-OCT-2005 10:43:04 Detector SN#    : 10017452   *
* Detector ID      : GAMMA9               Sensitivity     : 3.000      *
* Geometry         : 2L_MB                Energy tolerance: 2.000      *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000     *
* Elapsed real time:    0 04:01:07.61     Half life ratio : 8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 13-SEP-2005 12:55:00 Nuclide Library :            *
* Sample ID        : G145579007           Analyst initials: MJH1       *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000  *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME :  8-JUL-2005 12:59:09 MS Isotope      :            *
* MSD DPM          :    0.000             MSD Isotope     :            *
* LCS DPM          :    0.000             LCS Isotope     :            *
* LCSD DPM         :    0.000             LCSD Isotope    :            *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	6.030E+01	4.068E+01	1.456E+01	2.034E+01
Y-91	5.455E+00	4.619E+00	2.178E+00	2.309E+00
BA-137M	5.118E+00	3.562E+00	1.884E+00	1.781E+00
CS-137	5.410E+00	3.765E+00	1.991E+00	1.883E+00
TL-208	2.442E+00	3.860E+00	1.636E+00	1.930E+00
BI-211	3.352E+00	1.971E+01	1.117E+01	9.853E+00
RA-224	7.534E+00	8.517E+01	3.766E+01	4.259E+01
RA-226	7.742E+00	9.711E+00	3.274E+00	4.855E+00
TH-228	6.672E-01	7.543E+00	3.484E+00	3.772E+00
TH-230	7.742E+00	9.710E+00	3.274E+00	4.855E+00
U-238	5.488E+01	1.334E+02	8.490E+01	6.669E+01
ANH-511	2.592E+00	5.941E+00	1.548E+00	2.971E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-4.078E+00	2.660E+01	2.094E+01	1.330E+01	NOT IDENT.
NA-22	1.508E+00	2.143E+00	1.948E+00	1.072E+00	NOT IDENT.
NA-24	7.753E+13	4.893E+14	0.000E+00	2.447E+14	SHORT HLIF
AL-26	1.077E+00	2.164E+00	1.904E+00	1.082E+00	FAIL ABUN
SC-46	1.177E+00	2.556E+00	1.956E+00	1.278E+00	NOT IDENT.
V-48	2.353E+00	7.768E+00	6.514E+00	3.884E+00	NOT IDENT.
CR-51	-1.830E+01	3.857E+01	3.043E+01	1.929E+01	NOT IDENT.
MN-54	2.012E-01	2.196E+00	1.812E+00	1.098E+00	NOT IDENT.
CO-56	-1.947E+00	5.044E+00	2.078E+00	2.522E+00	NOT IDENT.
MN-56	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	9.668E-01	1.949E+00	1.692E+00	9.746E-01	NOT IDENT.
CO-58	2.384E+00	2.461E+00	2.237E+00	1.231E+00	NOT IDENT.
FE-59	-2.011E+00	5.872E+00	4.722E+00	2.936E+00	NOT IDENT.
CO-60	2.913E+00	2.182E+00	2.122E+00	1.091E+00	NOT IDENT.
ZN-65	-7.156E-01	3.914E+00	3.198E+00	1.957E+00	NOT IDENT.

SE-75	2.007E+00	3.380E+00	2.886E+00	1.690E+00 FAIL ABUN
KR-85	2.116E+03	6.154E+02	5.738E+02	3.077E+02 NOT IDENT.
SR-85	1.268E+01	3.688E+00	3.438E+00	1.844E+00 NOT IDENT.
Y-88	-8.073E-01	2.458E+00	1.856E+00	1.229E+00 NOT IDENT.
NB-94	1.030E+00	1.995E+00	1.728E+00	9.977E-01 NOT IDENT.
NB-95	3.896E+00	3.240E+00	3.010E+00	1.620E+00 NOT IDENT.
NB-95M	7.022E+02	2.575E+03	0.000E+00	1.287E+03 SHORT HLIF
ZR-95	6.953E-02	4.585E+00	3.776E+00	2.292E+00 NOT IDENT.
MO-99	3.721E+03	6.262E+03	0.000E+00	3.131E+03 SHORT HLIF
TC-99M	2.025E+36	3.408E+36	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-1.701E+00	3.920E+00	2.733E+00	1.960E+00 FAIL ABUN
RH-106	-8.030E+00	3.449E+01	1.563E+01	1.724E+01 FAIL ABUN
RU-106	8.627E+00	2.108E+01	1.611E+01	1.054E+01 NOT IDENT.
AG-108M	4.267E-01	2.088E+00	1.708E+00	1.044E+00 FAIL ABUN
CD-109	1.385E+01	5.815E+01	4.704E+01	2.908E+01 NOT IDENT.
AG-110M	8.329E-01	2.542E+00	1.909E+00	1.271E+00 NOT IDENT.
SN-113	2.879E+00	3.229E+00	2.792E+00	1.615E+00 NOT IDENT.
CD-115	6.191E+04	6.668E+04	0.000E+00	3.334E+04 SHORT HLIF
SN-115	1.858E+02	4.377E+02	1.806E+02	2.189E+02 FAIL ABUN
SN-117M	2.540E+00	8.511E+00	7.262E+00	4.255E+00 NOT IDENT.
TE-123M	7.135E-01	2.234E+00	1.908E+00	1.117E+00 NOT IDENT.
SB-124	9.504E-01	5.846E+00	4.279E+00	2.923E+00 NOT IDENT.
SB-125	3.052E+00	5.922E+00	4.976E+00	2.961E+00 NOT IDENT.
TE-125M	-2.789E+02	8.873E+02	6.920E+02	4.437E+02 NOT IDENT.
I-126	1.003E+01	2.698E+01	2.038E+01	1.349E+01 NOT IDENT.
SB-126	-1.777E+01	1.939E+01	1.446E+01	9.696E+00 NOT IDENT.
SN-126	2.645E+00	5.660E+00	4.633E+00	2.830E+00 FAIL ABUN
SB-127	5.295E+02	1.059E+03	9.222E+02	5.293E+02 NOT IDENT.
I-131	1.365E+01	2.877E+01	2.416E+01	1.439E+01 NOT IDENT.
I-132	1.000E+41	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	9.217E+02	1.135E+03	0.000E+00	5.674E+02 SHORT HLIF
BA-133	-2.203E+00	3.276E+00	2.147E+00	1.638E+00 NOT IDENT.
I-133	2.616E+10	5.247E+10	0.000E+00	2.623E+10 SHORT HLIF
CS-134	9.756E-01	2.300E+00	1.973E+00	1.150E+00 NOT IDENT.
CS-135	-4.032E+00	1.022E+01	8.193E+00	5.112E+00 NOT IDENT.
I-135	1.303E+33	3.994E+33	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-2.208E+00	1.274E+01	1.000E+01	6.369E+00 FAIL ABUN
CE-139	4.661E-02	2.278E+00	1.916E+00	1.139E+00 NOT IDENT.
BA-140	1.899E+01	3.571E+01	3.129E+01	1.786E+01 NOT IDENT.
LA-140	5.396E+05	5.295E+05	0.000E+00	2.648E+05 SHORT HLIF
CE-141	3.007E+00	6.437E+00	5.545E+00	3.218E+00 NOT IDENT.
CE-143	-1.723E+06	1.588E+07	0.000E+00	7.939E+06 SHORT HLIF
CE-144	-3.767E+00	1.466E+01	1.226E+01	7.332E+00 NOT IDENT.
PM-144	1.257E+00	2.124E+00	1.851E+00	1.062E+00 FAIL ABUN
PR-144	1.000E+41	1.689E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	6.351E-01	3.019E+00	2.461E+00	1.509E+00 NOT IDENT.
ND-147	-3.856E+01	9.096E+01	7.364E+01	4.548E+01 NOT IDENT.
PM-147	4.183E+05	3.959E+06	3.379E+06	1.980E+06 NOT IDENT.
PM-149	-1.114E+05	6.537E+05	0.000E+00	3.269E+05 SHORT HLIF
EU-152	1.360E+00	6.859E+00	5.655E+00	3.429E+00 NOT IDENT.
GD-153	-3.255E+00	6.779E+00	5.267E+00	3.389E+00 NOT IDENT.
EU-154	4.162E+00	5.939E+00	5.397E+00	2.970E+00 NOT IDENT.
EU-155	5.724E+00	8.391E+00	6.913E+00	4.196E+00 NOT IDENT.
TB-160	1.238E+01	8.946E+00	8.447E+00	4.473E+00 NOT IDENT.
TM-171	-9.496E+02	2.432E+03	1.924E+03	1.216E+03 NOT IDENT.
HF-181	6.771E-02	3.580E+00	2.862E+00	1.790E+00 FAIL ABUN
TA-182	5.943E+00	1.206E+01	6.877E+00	6.028E+00 NOT IDENT.
IR-192	2.148E+00	2.820E+00	2.421E+00	1.410E+00 NOT IDENT.
HG-203	2.843E+00	3.540E+00	3.052E+00	1.770E+00 NOT IDENT.
BI-207	-9.145E-02	2.677E+00	2.141E+00	1.338E+00 NOT IDENT.
BI-210	1.058E+02	4.459E+02	3.302E+02	2.229E+02 NOT IDENT.
PB-210	1.058E+02	4.459E+02	3.302E+02	2.229E+02 NOT IDENT.
PB-211	3.237E+01	6.004E+01	5.055E+01	3.002E+01 NOT IDENT.
BI-212	2.034E+01	1.771E+01	1.614E+01	8.854E+00 NOT IDENT.
PB-212	6.672E-01	7.543E+00	4.114E+00	3.772E+00 FAIL ABUN
BI-214	7.742E+00	9.711E+00	4.158E+00	4.855E+00 FAIL ABUN
PB-214	1.166E+00	6.855E+00	4.113E+00	3.428E+00 FAIL ABUN
RN-219	-7.367E+00	2.786E+01	2.198E+01	1.393E+01 NOT IDENT.
RA-223	-6.650E+00	4.470E+01	3.606E+01	2.235E+01 NOT IDENT.
AC-227	-2.478E+01	2.793E+01	2.177E+01	1.397E+01 NOT IDENT.
TH-227	-2.436E+01	2.746E+01	2.141E+01	1.373E+01 NOT IDENT.
AC-228	2.380E+00	8.115E+00	6.804E+00	4.057E+00 FAIL ABUN
RA-228	2.380E+00	8.115E+00	6.804E+00	4.057E+00 FAIL ABUN
TH-229	3.402E+01	3.681E+01	3.213E+01	1.840E+01 NOT IDENT.
PA-231	-1.333E+02	1.064E+02	7.977E+01	5.320E+01 NOT IDENT.
TH-231	-7.671E+00	1.224E+01	9.653E+00	6.120E+00 FAIL ABUN
TH-232	6.476E-01	7.322E+00	3.996E+00	3.661E+00 FAIL ABUN
PA-233	-1.772E+00	4.450E+00	3.533E+00	2.225E+00 NOT IDENT.

PA-234	-6.091E+00	1.614E+01	1.240E+01	8.068E+00 FAIL ABUN
PA-234M	3.041E+02	2.416E+02	2.255E+02	1.208E+02 NOT IDENT.
TH-234	5.488E+01	1.334E+02	9.976E+01	6.669E+01 FAIL ABUN
U-234	1.180E+01	9.171E+00	8.125E+00	4.586E+00 FAIL ABUN
U-235	3.040E-01	1.630E+01	1.377E+01	8.149E+00 FAIL ABUN
NP-237	7.380E-01	1.729E+01	1.386E+01	8.646E+00 NOT IDENT.
NP-239	9.172E+00	1.498E+01	1.225E+01	7.488E+00 NOT IDENT.
AM-241	-7.392E+00	1.378E+01	1.083E+01	6.891E+00 NOT IDENT.
AM-242	-1.597E+02	1.734E+02	1.307E+02	8.672E+01 NOT IDENT.
CM-247	-1.310E+00	2.544E+00	1.965E+00	1.272E+00 NOT IDENT.
CF-249	-6.368E-01	2.746E+00	2.177E+00	1.373E+00 NOT IDENT.
CF-251	5.613E+00	9.305E+00	8.024E+00	4.652E+00 NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145579007
ANALYST	: MJH1	DETECTOR	: GAMMA9
SAMPLE DATE	: 13-SEP-2005 12:55:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 10:43:04.18	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 9.083E+01
GROSS GAMMA ERROR (pCi/LITER)	: 2.457E+02
GROSS GAMMA MDA (pCi/LITER)	: 3.404E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.639E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:46:57.37

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579008.CNF;1
Sample date      : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:43:31
Sample ID        : G145579008           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA10              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.46  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 2605
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	8	60.63	16	22	0.50	114.00	113	17	1.13E-03	31.7	1.14E+00
2	8	63.27*	41	276	1.83	119.31	113	17	2.86E-03	86.9	
3	8	66.61	34	201	1.44	126.00	113	17	2.39E-03	68.3	
4	0	92.72*	17	370	1.45	178.48	172	14	1.20E-03	268.4	
5	0	108.47	33	122	1.29	210.12	208	5	2.32E-03	52.9	
6	2	139.00*	21	230	1.44	271.46	265	23	1.45E-03	135.9	1.71E+00
7	2	140.28*	27	225	1.44	274.02	265	23	1.91E-03	104.0	
8	2	144.49*	10	213	1.45	282.49	265	23	6.63E-04	318.4	
9	0	185.75*	17	235	1.55	365.39	360	11	1.15E-03	212.2	
10	0	196.86*	13	287	2.52	387.71	385	12	9.33E-04	260.2	
11	0	393.39*	19	57	1.02	782.54	778	9	1.28E-03	82.0	
12	0	470.08	27	52	1.26	936.61	934	10	1.85E-03	53.7	
13	0	559.05	53	72	2.52	1115.32	1108	20	3.70E-03	40.9	
14	0	570.66*	30	34	3.31	1138.63	1133	11	2.08E-03	54.5	
15	0	583.44*	2	65	0.73	1164.31	1158	13	1.74E-04	742.5	
16	0	596.86*	36	63	1.50	1191.27	1184	14	2.48E-03	56.5	
17	0	635.15	3	46	3.82	1268.18	1262	11	1.75E-04	528.7	
18	0	651.60	17	24	1.67	1301.22	1297	8	1.21E-03	55.2	
19	0	780.37	18	25	1.36	1559.86	1555	10	1.23E-03	59.7	
20	0	867.59	16	9	1.79	1735.03	1732	7	1.11E-03	39.7	
21	3	925.83*	11	17	2.39	1852.00	1843	28	7.71E-04	98.7	1.19E+00
22	3	933.80	16	10	1.80	1868.00	1843	28	1.08E-03	29.8	
23	0	943.60	16	28	2.97	1887.69	1879	14	1.11E-03	74.5	
24	0	1010.28	13	10	1.50	2021.59	2017	9	8.91E-04	54.2	
25	0	1134.45*	5	8	1.46	2270.94	2268	6	3.82E-04	108.2	
26	0	1187.50	3	18	0.58	2377.46	2377	10	2.03E-04	274.8	
27	1	1200.91*	10	4	2.13	2404.39	2401	28	7.09E-04	58.4	1.22E+00
28	1	1206.69	17	9	1.94	2416.00	2401	28	1.21E-03	43.3	
29	1	1209.68	17	11	1.94	2422.00	2401	28	1.17E-03	46.0	
30	7	1216.88*	8	0	1.14	2436.45	2435	12	5.78E-04	64.0	2.50E+00
31	7	1218.95	17	6	2.14	2440.61	2435	12	1.19E-03	39.7	
32	0	1461.12*	28	15	1.45	2926.85	2919	15	1.93E-03	42.5	
33	0	1514.28	14	3	2.95	3033.58	3028	11	1.00E-03	34.4	
34	0	1531.65	2	33	9.31	3068.44	3064	27	1.51E-04	746.6	
35	0	1581.15*	19	5	5.54	3167.82	3158	22	1.31E-03	44.6	
36	0	1631.40	17	0	1.02	3268.71	3263	13	1.18E-03	24.3	
37	1	1765.56*	14	6	2.18	3538.00	3533	16	9.84E-04	50.8	2.36E+00
38	1	1768.76	13	2	2.39	3544.44	3533	16	8.94E-04	41.5	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 14:47:01

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579008.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:43:31
Sample ID : G145579008 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:01.46 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	4.437E+01	3.782E+01	3.795E+01	2.422E+00	1.169
Y-91	+	557.57	*	6.298E+00	5.163E+00	3.163E+00	1.929E-01	1.991
	+	1204.90		1.207E+03	1.049E+03	1.376E+03	8.043E+01	0.878
SN-113	+	391.69	*	2.111E+00	3.464E+00	4.685E+00	2.853E-01	0.450
TE-125M	+	109.28	*	6.855E+02	7.280E+02	1.235E+03	1.128E+02	0.555
CE-141	+	145.44	*	1.387E+00	8.837E+00	8.727E+00	5.916E-01	0.159
TH-234	+	63.29	*	1.350E+02	2.360E+02	1.945E+02	3.659E+01	0.694
	+	92.38		1.537E+01	8.255E+01	5.318E+01	9.649E+00	0.289
		112.81		-4.252E+02	6.059E+02	1.005E+03	1.733E+02	-0.423
U-235		89.95		-2.552E+01	7.546E+01	1.150E+02	3.566E+01	-0.222
	+	93.35		1.848E+01	9.932E+01	6.308E+01	1.768E+01	0.293
		105.00		-7.856E+01	7.544E+01	1.177E+02	3.472E+01	-0.668
	+	143.76	*	3.436E+00	2.189E+01	2.154E+01	3.573E+00	0.159
		163.33		-3.020E+00	3.020E+01	5.130E+01	9.422E+00	-0.059
	+	185.71		1.232E+00	5.229E+00	4.337E+00	2.999E-01	0.284
		205.31		-7.161E+00	2.774E+01	4.635E+01	8.077E+00	-0.155
U-238	+	63.29	*	1.350E+02	2.360E+02	1.945E+02	3.659E+01	0.694
AM-241	+	59.54	*	6.701E+00	4.319E+00	2.317E+01	2.605E+00	0.289

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-5.143E+00	2.158E+01	3.782E+01	2.610E+00	-0.136
NA-22		1274.53	*	2.275E+00	1.994E+00	4.246E+00	2.532E-01	0.536
AL-26		511.00		9.446E+00	1.845E+00	3.734E+00	2.255E-01	2.530
		1808.65	*	-4.812E-01	1.660E+00	3.130E+00	1.761E-01	-0.154
SC-46		889.25	*	4.581E-01	2.116E+00	3.886E+00	2.679E-01	0.118
		1120.51		-2.717E-01	2.266E+00	4.181E+00	2.551E-01	-0.065
V-48	+	944.10		8.770E+01	1.308E+02	1.516E+02	1.033E+01	0.579
		983.50	*	1.872E+00	5.656E+00	1.112E+01	7.451E-01	0.168
		1312.09		7.062E-02	6.252E+00	1.185E+01	7.104E-01	0.006
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-2.178E+01	2.914E+01	4.585E+01	3.254E+00	-0.475

Sample ID : G145579008 Acquisition date : 13-OCT-2005 10:43:31

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
MN-54		834.83	*	-5.207E-01	1.866E+00	3.193E+00	2.149E-01	-0.163
CO-56		846.75	*	8.161E-01	2.465E+00	4.500E+00	3.045E-01	0.181
		1037.82		6.968E+00	1.616E+01	3.184E+01	2.260E+00	0.219
		1238.25		8.362E-01	3.180E+00	6.280E+00	3.930E-01	0.133
CO-57		122.06	*	6.669E-01	1.690E+00	2.987E+00	1.930E-01	0.223
		136.47		-1.157E+00	1.499E+01	2.302E+01	1.687E+00	-0.050
CO-58		810.78	*	2.505E-02	2.143E+00	3.838E+00	2.563E-01	0.007
FE-59		192.35		-6.462E+01	6.903E+01	1.100E+02	1.364E+01	-0.587
		1099.25	*	-3.097E+00	4.907E+00	8.400E+00	6.010E-01	-0.369
		1291.60		4.438E+00	6.935E+00	1.407E+01	1.063E+00	0.315
CO-60		1173.24		1.707E-01	2.030E+00	3.800E+00	2.202E-01	0.045
		1332.50	*	-9.854E-01	2.035E+00	3.511E+00	2.112E-01	-0.281
ZN-65		1115.55	*	-9.701E-01	4.127E+00	7.445E+00	4.573E-01	-0.130
SE-75	+	66.05		4.132E+02	5.663E+02	7.342E+02	8.472E+01	0.563
		96.73		-2.387E+01	5.939E+01	9.031E+01	1.205E+01	-0.264
		121.11		-1.695E+00	9.632E+00	1.652E+01	1.599E+00	-0.103
		136.00		-3.221E-01	2.966E+00	4.539E+00	2.972E-01	-0.071
	+	198.60		4.509E+01	2.347E+02	1.992E+02	1.604E+01	0.226
		264.65	*	-2.808E-01	2.886E+00	4.836E+00	3.321E-01	-0.058
		279.53		3.659E-01	6.144E+00	1.047E+01	7.501E-01	0.035
		303.91		2.800E+01	1.351E+02	2.305E+02	2.319E+01	0.122
		400.65		-4.681E+00	1.405E+01	2.467E+01	2.235E+00	-0.190
KR-85		513.99	*	-1.065E+03	6.220E+02	9.709E+02	5.869E+01	-1.097
SR-85		513.99	*	-6.326E+00	3.694E+00	5.766E+00	3.485E-01	-1.097
Y-88		898.02		-3.243E-01	2.209E+00	3.854E+00	2.686E-01	-0.084
		1836.01	*	7.957E-01	2.157E+00	4.512E+00	2.518E-01	0.176
NB-94		702.63	*	4.470E-01	1.645E+00	3.015E+00	1.885E-01	0.148
		871.10		1.377E+00	1.768E+00	3.170E+00	2.168E-01	0.434
NB-95		765.79	*	4.526E-01	3.003E+00	5.433E+00	3.531E-01	0.083
ZR-95		724.18		-2.397E+00	5.257E+00	8.852E+00	6.478E-01	-0.271
		756.74	*	3.003E-01	3.590E+00	6.548E+00	4.968E-01	0.046
RU-103		497.08	*	5.255E-01	2.871E+00	5.215E+00	6.646E-01	0.101
		610.33		8.438E+01	5.487E+01	1.066E+02	1.657E+01	0.791
RH-106		511.85		6.473E+01	1.547E+01	3.068E+01	1.853E+00	2.110
		621.84	*	1.080E+01	1.611E+01	3.086E+01	1.886E+00	0.350
		1050.47		4.151E+00	1.149E+02	2.146E+02	1.383E+01	0.019
RU-106		622.20	*	4.981E+00	1.695E+01	3.115E+01	3.705E+00	0.160
AG-108M		433.93	*	-5.578E-01	1.820E+00	3.185E+00	2.020E-01	-0.175
		614.37		-2.079E+00	1.982E+00	3.135E+00	2.064E-01	-0.663
		722.95		-4.118E-01	1.916E+00	3.339E+00	2.265E-01	-0.123
CD-109		88.03	*	1.746E+01	5.636E+01	9.036E+01	8.590E+00	0.193
AG-110M		657.75	*	9.765E-01	1.756E+00	3.330E+00	2.146E-01	0.293
		677.61		1.009E+01	1.656E+01	3.134E+01	2.032E+00	0.322
		706.67		8.343E+00	1.031E+01	2.002E+01	1.320E+00	0.417
		763.93		-4.260E+00	8.440E+00	1.407E+01	9.577E-01	-0.303
		884.67		2.498E-01	2.430E+00	4.408E+00	3.184E-01	0.057
		937.48		-1.073E+00	5.572E+00	8.874E+00	6.407E-01	-0.121
		1384.27		-4.310E+00	8.650E+00	1.488E+01	9.490E-01	-0.290
SN-115		484.47		-3.734E+01	1.193E+03	2.135E+03	1.278E+02	-0.017

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	933.00	*	2.185E+02	1.312E+02	3.803E+02	2.602E+01	0.575
		1290.58		-4.846E+02	5.579E+02	9.033E+02	5.392E+01	-0.537
SN-117M		156.02		2.146E+02	2.694E+02	4.829E+02	3.260E+01	0.444
		158.56	*	-4.640E+00	6.759E+00	1.112E+01	7.565E-01	-0.417
TE-123M		159.00	*	-9.192E-01	1.871E+00	3.117E+00	2.143E-01	-0.295
SB-124		602.73		7.821E-01	2.495E+00	4.542E+00	2.779E-01	0.172
		645.85		1.195E+01	2.929E+01	5.473E+01	3.726E+00	0.218
		713.78		1.020E+02	9.332E+01	1.855E+02	1.948E+01	0.549
		722.79		-5.999E+00	1.992E+01	3.431E+01	2.259E+00	-0.175
		1368.16		5.583E+01	1.034E+02	2.092E+02	2.508E+01	0.267
		1690.98	*	1.970E+00	4.397E+00	9.311E+00	5.898E-01	0.212
SB-125		176.33		2.829E-01	1.910E+01	3.273E+01	3.084E+00	0.009
		427.89	*	2.364E-01	5.361E+00	9.625E+00	5.846E-01	0.025
		463.38		-4.799E-01	1.424E+01	2.551E+01	1.755E+00	-0.019
		600.56		8.472E+00	1.085E+01	1.855E+01	1.295E+00	0.457
		606.64		-5.260E+00	3.743E+01	6.523E+01	4.624E+00	-0.081
	+	635.90		1.988E+00	2.102E+01	2.607E+01	1.839E+00	0.076
I-126		388.63		1.168E+01	2.268E+01	4.244E+01	2.435E+00	0.275
		666.33	*	1.204E-01	1.976E+01	3.516E+01	2.145E+00	0.003
		753.82		-9.901E+01	1.529E+02	2.504E+02	1.615E+01	-0.395
SB-126		666.33		5.193E-02	8.526E+00	1.517E+01	9.254E-01	0.003
		695.00		2.667E-01	8.567E+00	1.528E+01	9.504E-01	0.017
		697.00		1.309E+01	2.808E+01	5.264E+01	3.279E+00	0.249
		720.50	*	-5.272E+00	1.408E+01	2.411E+01	1.524E+00	-0.219
SN-126	+	64.28		5.344E+01	9.329E+01	7.263E+01	1.168E+01	0.736
		86.94		9.624E+00	2.184E+01	3.838E+01	1.595E+01	0.251
		87.57	*	2.527E+00	5.055E+00	9.053E+00	8.591E-01	0.279
SB-127		252.40		1.512E+03	3.411E+03	5.815E+03	2.518E+03	0.260
		411.60		5.191E+03	7.955E+03	1.491E+04	2.756E+03	0.348
		444.90		-2.029E+03	6.380E+03	1.116E+04	1.774E+03	-0.182
		473.00		-3.134E+02	1.301E+03	1.990E+03	3.221E+02	-0.158
		543.30		6.044E+03	1.059E+04	1.995E+04	3.497E+03	0.303
		603.50		3.631E+03	7.640E+03	1.409E+04	2.250E+03	0.258
		685.70	*	4.936E+02	8.132E+02	1.549E+03	2.344E+02	0.319
		698.50		-5.812E+03	9.549E+03	1.571E+04	2.939E+03	-0.370
		783.70		-1.333E+02	2.367E+03	3.657E+03	5.876E+02	-0.036
I-131		284.30		-7.948E+01	2.850E+02	4.707E+02	3.518E+01	-0.169
		364.48	*	-2.715E-01	2.061E+01	3.719E+01	2.563E+00	-0.007
	+	636.97		3.744E+01	3.959E+02	4.830E+02	3.359E+01	0.078
BA-133		79.62		-3.865E+01	8.937E+01	1.531E+02	2.394E+01	-0.252
		81.00		-1.426E+00	6.649E+00	1.153E+01	1.877E+00	-0.124
		276.40		6.371E+00	2.007E+01	3.472E+01	4.662E+00	0.183
		302.85		-5.152E+00	8.833E+00	1.413E+01	1.708E+00	-0.365
		356.02	*	-1.743E+00	2.360E+00	4.014E+00	4.713E-01	-0.434
		383.85		-2.397E+01	1.622E+01	2.542E+01	2.764E+00	-0.943
CS-134		563.23		-2.122E+00	2.119E+01	3.283E+01	2.042E+00	-0.065
	+	569.32		1.613E+01	1.761E+01	1.840E+01	1.154E+00	0.877
		604.70		-2.196E+00	1.942E+00	3.066E+00	1.884E-01	-0.716
		795.84	*	-5.655E-01	1.690E+00	2.910E+00	1.940E-01	-0.194

Sample ID : G145579008 Acquisition date : 13-OCT-2005 10:43:31

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		801.93		1.972E+01	1.976E+01	3.916E+01	2.617E+00	0.504
		1365.15		-4.837E+01	6.740E+01	1.113E+02	7.326E+00	-0.434
CS-135		268.24	*	5.253E+00	8.805E+00	1.549E+01	1.308E+00	0.339
CS-136	+	66.88		1.321E+02	1.817E+02	2.326E+02	3.760E+01	0.568
		86.36		3.223E+01	1.425E+02	2.520E+02	3.385E+01	0.128
		153.25		-4.035E+01	8.060E+01	1.344E+02	1.074E+01	-0.300
		163.92		2.747E+01	1.396E+02	2.411E+02	1.976E+01	0.114
		176.60		-9.596E+00	4.476E+01	7.558E+01	5.716E+00	-0.127
		273.65		-4.870E+00	4.979E+01	8.364E+01	6.285E+00	-0.058
		340.55		-2.659E-01	1.274E+01	2.302E+01	1.538E+00	-0.012
		818.51		7.976E-01	6.500E+00	1.201E+01	8.062E-01	0.066
		1048.07	*	-2.824E+00	1.087E+01	1.961E+01	1.366E+00	-0.144
		1235.36		-3.102E+01	4.007E+01	6.600E+01	6.639E+00	-0.470
BA-137M		661.65	*	-2.043E-01	1.772E+00	3.123E+00	1.899E-01	-0.065
CS-137		661.66	*	-2.254E-01	1.872E+00	3.298E+00	2.013E-01	-0.068
CE-139		165.85	*	9.338E-01	1.961E+00	3.440E+00	2.395E-01	0.271
BA-140		162.67		-1.364E+01	1.030E+02	1.747E+02	1.312E+01	-0.078
		304.87		1.291E+02	1.606E+02	2.801E+02	7.695E+01	0.461
		423.73		-4.043E+01	2.133E+02	3.776E+02	1.200E+02	-0.107
		537.31	*	3.041E+00	2.896E+01	5.239E+01	1.706E+01	0.058
CE-144		133.51	*	-4.951E+00	1.319E+01	2.226E+01	3.223E+00	-0.222
PM-144		476.78		-1.295E+00	3.838E+00	6.675E+00	4.736E-01	-0.194
		618.01		9.474E-01	1.765E+00	3.297E+00	2.128E-01	0.287
		696.49	*	6.944E-01	1.759E+00	3.261E+00	2.035E-01	0.213
PM-146		453.88	*	-1.549E+00	2.322E+00	3.928E+00	3.416E-01	-0.394
	+	633.25		1.013E+01	1.071E+02	1.323E+02	4.879E+01	0.077
		735.93		-1.261E+00	7.394E+00	1.292E+01	3.618E+00	-0.098
		747.24		5.876E-01	4.945E+00	8.866E+00	1.136E+00	0.066
ND-147	+	91.11		1.868E+01	1.003E+02	6.817E+01	6.574E+00	0.274
		531.02	*	-4.243E+01	6.250E+01	1.044E+02	1.425E+01	-0.406
PM-147		121.30	*	-7.543E+05	3.525E+06	6.031E+06	3.905E+05	-0.125
EU-152		121.78		2.179E+00	4.763E+00	8.444E+00	6.860E-01	0.258
		344.31	*	-4.964E-01	5.029E+00	9.035E+00	6.294E-01	-0.055
		963.37		1.905E+00	1.240E+01	2.356E+01	1.593E+00	0.081
GD-153		69.67		-1.280E+01	1.449E+02	2.284E+02	2.201E+01	-0.056
		83.37		2.705E+02	1.004E+03	1.782E+03	1.671E+02	0.152
		97.43	*	-2.429E+00	6.033E+00	9.175E+00	7.415E-01	-0.265
		103.18		6.480E+00	7.511E+00	1.360E+01	1.022E+00	0.476
EU-154		123.07		2.015E+00	3.403E+00	6.057E+00	5.946E-01	0.333
		247.93		-5.646E+00	2.214E+01	3.674E+01	3.756E+00	-0.154
		591.76		5.458E+00	3.143E+01	5.131E+01	5.113E+00	0.106
		723.30		-2.829E+00	8.165E+00	1.397E+01	1.051E+00	-0.202
		756.86		5.065E+00	3.397E+01	6.242E+01	6.572E+00	0.081
		873.20		8.143E+00	1.468E+01	2.799E+01	3.098E+00	0.291
		996.30		-2.313E-01	1.727E+01	3.225E+01	5.450E+00	-0.007
		1004.76		-1.170E+00	1.006E+01	1.853E+01	1.900E+00	-0.063
		1274.51	*	6.291E+00	5.545E+00	1.177E+01	1.110E+00	0.535
EU-155		86.54		2.413E+00	6.298E+00	1.122E+01	1.070E+00	0.215
		105.31	*	-1.019E+01	7.397E+00	1.186E+01	8.848E-01	-0.859

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
TB-160		86.79		1.001E+01	1.900E+01	3.405E+01	3.222E+00	0.294
		298.57		6.768E+00	7.784E+00	1.380E+01	9.181E-01	0.491
		879.36	*	1.937E+00	7.317E+00	1.361E+01	9.345E-01	0.142
		962.29		4.310E-01	2.516E+01	4.726E+01	3.196E+00	0.009
		966.15		-2.061E-01	1.060E+01	1.959E+01	1.323E+00	-0.011
		1177.93		1.239E+00	1.695E+01	3.200E+01	1.856E+00	0.039
TM-171		51.87		-1.059E+03	1.590E+03	2.426E+03	2.919E+02	-0.437
	+	59.40		1.162E+03	7.481E+02	4.613E+03	4.963E+02	0.252
	+	66.72	*	2.319E+03	3.176E+03	4.409E+03	4.349E+02	0.526
HF-181		56.28		-9.379E+01	1.526E+02	2.332E+02	2.643E+01	-0.402
		57.53		1.794E+01	7.249E+01	1.180E+02	1.310E+01	0.152
	+	65.20		9.100E+01	1.246E+02	1.692E+02	1.694E+01	0.538
		133.02		-7.636E-01	5.082E+00	8.703E+00	5.612E-01	-0.088
		136.25		-8.988E-01	4.525E+01	6.976E+01	4.513E+00	-0.013
		345.85		-9.926E-01	1.309E+01	2.348E+01	1.470E+00	-0.042
		482.03	*	4.045E-01	2.907E+00	5.271E+00	3.153E-01	0.077
TA-182	+	67.75		1.004E+01	1.375E+01	1.638E+01	1.601E+00	0.613
		100.10		-2.700E+00	1.306E+01	2.253E+01	1.756E+00	-0.120
		222.10		-1.985E+01	2.068E+01	3.274E+01	2.258E+00	-0.607
		1121.28		-6.562E-01	6.082E+00	1.124E+01	6.853E-01	-0.058
	+	1189.05		3.114E+00	1.711E+01	2.297E+01	1.337E+00	0.136
		1221.42	*	5.616E+00	8.128E+00	1.537E+01	9.028E-01	0.365
		1230.97		7.335E+00	1.751E+01	3.517E+01	2.071E+00	0.209
IR-192		295.96		1.575E+00	6.851E+00	1.170E+01	7.902E-01	0.135
		308.46		2.168E+00	6.215E+00	1.077E+01	7.162E-01	0.201
		316.51	*	2.877E-01	2.150E+00	3.675E+00	2.409E-01	0.078
		468.07		2.220E+00	4.167E+00	7.058E+00	4.811E-01	0.315
		604.41		-1.218E+01	2.817E+01	4.783E+01	5.507E+00	-0.255
		612.46		-6.432E+01	4.458E+01	6.737E+01	5.266E+00	-0.955
HG-203		70.83		-2.674E+01	9.322E+01	1.620E+02	2.304E+01	-0.165
		72.87		-4.250E+01	5.374E+01	9.029E+01	1.243E+01	-0.471
		82.60		5.522E+01	8.877E+01	1.599E+02	2.274E+01	0.345
		279.20	*	-1.722E-01	2.582E+00	4.359E+00	3.081E-01	-0.040
BI-207	+	569.67		2.484E+00	2.711E+00	2.879E+00	1.758E-01	0.863
		897.83		-1.853E+02	1.161E+03	2.022E+03	1.399E+02	-0.092
		1063.62	*	4.706E-01	2.271E+00	4.386E+00	2.802E-01	0.107
		1442.20		1.082E+03	1.348E+03	2.801E+03	1.692E+02	0.386
	+	1770.23		3.580E+01	2.978E+01	4.249E+01	2.424E+00	0.843
TL-208		75.00		3.678E+01	8.009E+01	1.434E+02	1.841E+01	0.257
		277.35		2.043E+01	1.949E+01	3.561E+01	3.960E+00	0.574
		510.84		6.771E+01	1.552E+01	2.895E+01	2.980E+00	2.339
	+	583.14	*	2.508E-01	3.725E+00	3.745E+00	2.606E-01	0.067
		763.30		-1.906E+01	1.046E+02	1.821E+02	2.322E+01	-0.105
		860.37		1.004E+01	1.506E+01	2.868E+01	2.179E+00	0.350
		1093.90		2.926E+01	4.750E+02	9.013E+02	2.028E+02	0.032
BI-210		46.50	*	9.571E+02	5.830E+02	1.029E+03	1.162E+02	0.930
PB-210		46.50	*	9.571E+02	5.830E+02	1.029E+03	1.162E+02	0.930
BI-211		351.07	*	1.779E+01	1.100E+01	2.176E+01	1.480E+00	0.818
PB-211		404.84	*	1.353E+01	4.658E+01	8.480E+01	5.286E+01	0.160

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		427.08		1.985E+01	1.164E+02	2.101E+02	1.299E+02	0.094
		831.96		-3.921E+00	5.841E+01	1.029E+02	6.427E+01	-0.038
BI-212		727.18	*	-1.229E+00	1.529E+01	2.684E+01	2.183E+00	-0.046
PB-212		74.80		7.918E+00	2.587E+01	4.604E+01	6.103E+00	0.172
		87.30		1.363E+01	2.424E+01	4.347E+01	5.990E+00	0.314
		115.19		-2.096E+01	2.452E+02	4.230E+02	2.849E+01	-0.050
		238.63	*	4.462E+00	3.629E+00	6.521E+00	5.355E-01	0.684
		300.09		-2.178E+00	4.867E+01	8.122E+01	7.199E+00	-0.027
BI-214		609.31	*	6.809E+00	3.990E+00	7.950E+00	6.373E-01	0.857
		768.36		7.866E+00	3.442E+01	6.260E+01	5.519E+00	0.126
	+	934.06		5.757E+01	3.474E+01	8.353E+01	7.728E+00	0.689
		1120.29		-5.829E-01	1.192E+01	2.218E+01	1.997E+00	-0.026
		1238.11		7.299E+00	2.776E+01	5.481E+01	4.505E+00	0.133
		1377.67		2.679E+01	5.355E+01	1.048E+02	9.163E+00	0.256
PB-214		74.81		1.334E+01	4.329E+01	7.706E+01	9.222E+00	0.173
		77.11		-5.766E+00	2.384E+01	4.131E+01	4.983E+00	-0.140
		87.30		2.402E+01	4.270E+01	7.661E+01	9.585E+00	0.314
		241.98		-7.961E+00	2.090E+01	3.434E+01	3.045E+00	-0.232
		295.21		5.021E-01	7.593E+00	1.285E+01	1.175E+00	0.039
		351.92	*	4.407E+00	3.831E+00	7.386E+00	6.327E-01	0.597
RN-219		271.23		-4.206E+00	1.315E+01	2.169E+01	1.918E+00	-0.194
		401.81	*	-4.529E+00	2.013E+01	3.574E+01	4.853E+00	-0.127
RA-223		122.32		4.674E+01	1.131E+02	2.001E+02	1.455E+01	0.234
	+	144.24		1.113E+01	7.092E+01	6.985E+01	5.485E+00	0.159
		154.21		-5.672E-01	2.284E+01	3.922E+01	3.055E+00	-0.014
		269.46		2.173E+00	1.034E+01	1.774E+01	1.246E+00	0.123
		323.87	*	-9.474E+00	3.674E+01	6.046E+01	1.013E+01	-0.157
		338.28		6.429E+00	4.888E+01	8.921E+01	9.669E+00	0.072
		445.03		-1.471E+01	1.192E+02	2.124E+02	2.191E+01	-0.069
RA-224		240.98	*	1.135E+01	4.020E+01	6.890E+01	4.737E+00	0.165
RA-226		295.21		5.021E-01	7.593E+00	1.285E+01	1.175E+00	0.039
		351.92		4.407E+00	3.822E+00	7.386E+00	4.598E-01	0.597
		609.31	*	6.809E+00	3.990E+00	7.950E+00	6.373E-01	0.857
AC-227		79.80		-3.239E+01	1.145E+02	1.977E+02	4.363E+01	-0.164
		236.00		-1.499E+01	1.345E+01	2.089E+01	2.337E+00	-0.718
		256.20	*	-4.937E+00	2.328E+01	3.873E+01	5.649E+00	-0.127
		286.10		2.811E+01	8.869E+01	1.533E+02	1.865E+01	0.183
		299.80		2.152E+01	8.866E+01	1.509E+02	2.541E+01	0.143
		304.40		7.464E+01	1.112E+02	1.953E+02	3.479E+01	0.382
		329.70		-3.442E+01	5.144E+01	8.825E+01	1.138E+01	-0.390
		334.20		8.024E+01	1.215E+02	2.275E+02	4.279E+01	0.353
TH-227		79.80		-3.182E+01	1.125E+02	1.942E+02	4.287E+01	-0.164
	+	94.00		5.940E+01	3.191E+02	2.010E+02	4.370E+01	0.295
		236.00		-1.475E+01	1.321E+01	2.055E+01	2.011E+00	-0.718
		256.20	*	-4.854E+00	2.290E+01	3.808E+01	6.581E+00	-0.127
		286.10		2.766E+01	9.148E+01	1.508E+02	1.512E+02	0.183
		299.80		2.112E+01	8.699E+01	1.481E+02	2.459E+01	0.143
		304.40		7.335E+01	1.093E+02	1.919E+02	3.375E+01	0.382
		329.70		-3.386E+01	5.060E+01	8.681E+01	1.108E+01	-0.390

---- Non-Identified Nuclides ----

Nuclide	Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	334.20		7.865E+01	1.191E+02	2.229E+02	4.130E+01	0.353
AC-228	209.25		1.169E+01	3.243E+01	5.487E+01	3.512E+01	0.213
	338.32		1.635E+00	1.184E+01	2.159E+01	8.820E+00	0.076
	463.01		-1.464E+00	3.281E+01	5.877E+01	1.381E+01	-0.025
	794.95		1.050E+01	3.012E+01	5.730E+01	1.302E+01	0.183
	911.21	*	5.538E+00	6.786E+00	1.313E+01	1.310E+00	0.422
	964.77		-3.050E+01	3.772E+01	6.230E+01	1.498E+01	-0.490
	969.11		1.651E+01	1.239E+01	2.485E+01	5.644E+00	0.664
RA-228	209.25		1.169E+01	3.243E+01	5.487E+01	3.512E+01	0.213
	338.32		1.635E+00	1.184E+01	2.159E+01	8.820E+00	0.076
	463.01		-1.464E+00	3.281E+01	5.877E+01	1.381E+01	-0.025
	794.95		1.050E+01	3.012E+01	5.730E+01	1.302E+01	0.183
	911.21	*	5.538E+00	6.786E+00	1.313E+01	1.310E+00	0.422
	964.77		-3.050E+01	3.772E+01	6.230E+01	1.498E+01	-0.490
	969.11		1.651E+01	1.239E+01	2.485E+01	5.644E+00	0.664
TH-228	84.40		-7.870E+01	1.719E+02	2.935E+02	4.009E+01	-0.268
	238.60	*	4.424E+00	3.627E+00	6.514E+00	5.349E-01	0.679
	300.10		-2.526E+00	4.867E+01	8.115E+01	4.790E+01	-0.031
TH-229	85.43		3.007E-01	1.180E+01	2.069E+01	1.949E+00	0.015
	88.47		-1.203E+00	7.600E+00	1.180E+01	1.112E+00	-0.102
	100.00		-3.024E+00	1.244E+01	2.142E+01	1.672E+00	-0.141
	193.63	*	-1.735E+01	2.997E+01	4.920E+01	3.399E+00	-0.353
	210.97		-1.790E+01	4.400E+01	7.273E+01	5.020E+00	-0.246
TH-230	295.21		5.021E-01	7.593E+00	1.285E+01	1.175E+00	0.039
	351.92		4.407E+00	3.822E+00	7.386E+00	4.598E-01	0.597
	609.31	*	6.809E+00	3.990E+00	7.950E+00	6.373E-01	0.857
PA-231	283.67	*	-3.324E+01	8.508E+01	1.392E+02	1.977E+01	-0.239
	301.29		-7.077E+00	3.389E+01	5.595E+01	6.120E+00	-0.127
	330.00		-7.777E+01	1.140E+02	1.913E+02	6.014E+01	-0.406
TH-231	84.21		-1.115E+01	3.162E+01	5.429E+01	9.897E+00	-0.205
	236.00		-1.495E+01	1.342E+01	2.084E+01	2.331E+00	-0.718
	256.20		-4.925E+00	2.322E+01	3.863E+01	5.634E+00	-0.127
	269.46	*	2.173E+00	1.034E+01	1.774E+01	1.438E+00	0.123
	271.23		-4.206E+00	1.316E+01	2.169E+01	2.202E+00	-0.194
	283.67		-3.324E+01	8.508E+01	1.392E+02	1.977E+01	-0.239
	301.29		-7.077E+00	3.388E+01	5.595E+01	5.055E+00	-0.127
	329.85		-2.522E+01	3.521E+01	6.013E+01	8.346E+00	-0.419
	351.07		1.779E+01	1.100E+01	2.176E+01	1.480E+00	0.818
	401.81		-4.529E+00	2.012E+01	3.574E+01	3.884E+00	-0.127
TH-232	238.59	*	4.286E+00	3.522E+00	6.326E+00	5.194E-01	0.678
	911.20		5.476E+00	6.720E+00	1.300E+01	1.297E+00	0.421
	964.40		-2.753E+01	3.704E+01	6.192E+01	1.489E+01	-0.445
	969.11		1.635E+01	1.227E+01	2.461E+01	5.590E+00	0.664
PA-233	75.28		1.566E+02	2.099E+02	3.789E+02	5.984E+01	0.413
	86.59		4.039E+01	1.023E+02	1.815E+02	4.918E+01	0.223
	300.12		-1.616E+00	2.440E+01	4.065E+01	5.620E+00	-0.040
	311.98	*	-5.267E+00	3.713E+00	5.453E+00	3.753E-01	-0.966
	340.50		-1.248E+00	2.955E+01	5.330E+01	1.231E+01	-0.023
	398.62		5.565E+01	1.042E+02	1.948E+02	5.032E+01	0.286

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		415.76		-3.850E+01	8.690E+01	1.503E+02	3.094E+01	-0.256
PA-234	+	63.00		1.574E+02	2.748E+02	2.308E+02	3.801E+01	0.682
	+	94.67		5.297E+00	2.844E+01	1.745E+01	2.141E+00	0.304
		98.44		6.412E-01	5.980E+00	1.049E+01	5.841E+00	0.061
		99.70		-1.331E+01	3.232E+01	5.512E+01	4.319E+00	-0.241
		111.00		7.409E+00	1.322E+01	2.136E+01	2.343E+00	0.347
		131.20		5.492E-01	6.602E+00	1.145E+01	7.370E-01	0.048
		152.70		-1.541E+01	1.931E+01	3.138E+01	5.070E+00	-0.491
	+	186.00		3.326E+01	1.415E+02	1.172E+02	3.608E+01	0.284
		226.40		2.393E+01	2.349E+01	4.207E+01	5.110E+00	0.569
		227.20		2.081E+01	2.511E+01	4.472E+01	3.082E+00	0.465
		248.90		-2.431E+01	5.131E+01	8.341E+01	1.877E+01	-0.291
		293.70		-4.627E+01	3.784E+01	5.623E+01	9.234E+00	-0.823
		369.80		-5.667E+01	4.629E+01	7.283E+01	1.520E+01	-0.778
	+	568.70		8.078E+01	8.816E+01	8.907E+01	5.438E+00	0.907
	+	569.50		2.203E+01	2.404E+01	2.513E+01	1.535E+00	0.877
		574.00		-5.921E+00	7.671E+01	1.203E+02	7.347E+00	-0.049
		699.00		-2.350E+01	3.715E+01	6.089E+01	1.104E+01	-0.386
		706.10		6.229E+00	5.373E+01	9.635E+01	4.258E+01	0.065
		733.00		1.312E+00	1.786E+01	3.222E+01	6.902E+00	0.041
		742.81		-8.170E-01	7.212E+01	1.277E+02	8.555E+01	-0.006
		796.30		-1.104E+01	3.539E+01	6.107E+01	1.617E+01	-0.181
		805.80		-4.129E+01	5.445E+01	8.481E+01	2.557E+01	-0.487
		819.60		-2.465E+01	5.604E+01	9.314E+01	3.505E+01	-0.265
		826.30		-4.423E+00	4.308E+01	7.531E+01	3.345E+01	-0.059
		831.60		-1.191E+00	3.088E+01	5.456E+01	1.601E+01	-0.022
		876.40		-5.488E+01	7.120E+01	6.339E+01	6.508E+01	-0.866
		880.51		9.269E-01	1.377E+01	2.476E+01	1.700E+00	0.037
		883.24		-4.901E+00	1.487E+01	2.458E+01	1.647E+01	-0.199
		899.00		1.756E+01	4.107E+01	7.604E+01	3.301E+01	0.231
	+	925.00		4.378E+01	8.652E+01	9.598E+01	6.585E+00	0.456
	+	926.50		6.503E+00	1.294E+01	1.428E+01	3.531E+00	0.455
		946.00	*	6.734E+00	1.745E+01	2.992E+01	5.387E+00	0.225
		949.00		-8.229E+00	2.268E+01	4.048E+01	2.753E+00	-0.203
		980.50		-6.032E+00	3.460E+01	6.348E+01	4.258E+00	-0.095
		1394.10		-4.965E+00	5.996E+01	1.109E+02	7.189E+01	-0.045
PA-234M		766.40		1.955E+02	8.129E+02	1.462E+03	1.118E+03	0.134
		1001.03	*	1.537E+02	2.103E+02	4.248E+02	3.523E+01	0.362
U-234	+	67.67		9.545E+02	1.312E+03	1.564E+03	2.332E+02	0.611
		241.98		-7.971E+00	2.093E+01	3.439E+01	3.050E+00	-0.232
		295.21	*	5.021E-01	7.593E+00	1.285E+01	1.175E+00	0.039
		351.92		4.407E+00	3.831E+00	7.386E+00	6.327E-01	0.597
NP-237		86.48	*	5.602E+00	1.532E+01	2.719E+01	6.172E+00	0.206
		95.87		-8.228E+00	6.607E+01	1.027E+02	2.518E+01	-0.080
NP-239		99.55		-5.106E+00	1.062E+01	1.804E+01	1.417E+00	-0.283
		117.00	*	5.913E+00	1.206E+01	2.148E+01	1.429E+00	0.275
		209.75		1.273E+01	4.269E+01	7.386E+01	5.098E+00	0.172
		228.18		-8.657E+00	1.306E+01	2.113E+01	1.456E+00	-0.410
		277.60		2.382E+00	9.431E+00	1.629E+01	1.102E+00	0.146

Sample ID : G145579008 Acquisition date : 13-OCT-2005 10:43:31

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		334.31		3.952E+01	6.629E+01	1.245E+02	7.938E+00	0.317
AM-242		99.55		-1.192E+02	2.479E+02	4.211E+02	3.306E+01	-0.283
		103.70	*	3.153E+01	1.507E+02	2.650E+02	1.979E+01	0.119
CM-247		278.00		-1.790E+00	3.984E+01	6.720E+01	4.545E+00	-0.027
		287.40		-1.755E+01	7.199E+01	1.191E+02	8.001E+00	-0.147
		402.60	*	-5.543E-01	1.819E+00	3.208E+00	1.841E-01	-0.173
CF-249		252.85		1.778E+01	5.418E+01	9.336E+01	6.396E+00	0.190
		333.44		5.005E+00	8.982E+00	1.678E+01	1.071E+00	0.298
		387.95	*	1.170E+00	2.103E+00	3.946E+00	2.268E-01	0.297
CF-251		176.00	*	1.865E+00	7.363E+00	1.279E+01	8.860E-01	0.146
		227.00		2.102E+01	2.247E+01	4.023E+01	2.773E+00	0.523
		285.00		3.883E+01	9.865E+01	1.717E+02	1.156E+01	0.226
ANH-511		511.00	*	1.546E+01	3.019E+00	6.109E+00	3.689E-01	2.530

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                               DETECTOR DATA                           *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579008    *
* Acquisition date : 13-OCT-2005 10:43:31 Detector SN#    : 2605        *
* Detector ID      : GAMMA10              Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.46     Half life ratio :  8.000      *
*************************************************************************
*                                                                       *
*                               SAMPLE DATA                             *
*                                                                       *
* Sample date      : 14-SEP-2005 09:32:00 Nuclide Library :             *
* Sample ID        : G145579008           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME : 12-JAN-2005 14:39:51 MS Isotope      :             *
* MSD DPM          :    0.000            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	4.437E+01	3.782E+01	3.795E+01	0.000E+00
Y-91	6.298E+00	5.163E+00	3.163E+00	0.000E+00
SN-113	2.111E+00	3.464E+00	4.685E+00	0.000E+00
TE-125M	6.855E+02	7.280E+02	1.235E+03	0.000E+00
CE-141	1.093E+00	8.616E+00	8.727E+00	0.000E+00
TH-234	1.350E+02	2.360E+02	1.945E+02	0.000E+00
U-235	3.436E+00	2.189E+01	2.456E+01	0.000E+00
U-238	1.350E+02	2.360E+02	1.945E+02	0.000E+00
AM-241	6.701E+00	4.319E+00	2.317E+01	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)		
BE-7	-5.143E+00	2.158E+01	3.782E+01	0.000E+00	NOT IDENT.
NA-22	2.275E+00	1.994E+00	4.246E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	2.015E+14	0.000E+00	0.000E+00	SHORT HLIF
AL-26	-4.812E-01	1.660E+00	3.130E+00	0.000E+00	NOT IDENT.
SC-46	4.581E-01	2.116E+00	3.886E+00	0.000E+00	NOT IDENT.
V-48	1.872E+00	5.656E+00	1.112E+01	0.000E+00	FAIL ABUN
CR-51	-2.178E+01	2.914E+01	4.585E+01	0.000E+00	NOT IDENT.
MN-54	-5.207E-01	1.866E+00	3.193E+00	0.000E+00	NOT IDENT.
CO-56	8.161E-01	2.465E+00	4.500E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	3.016E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	6.669E-01	1.690E+00	2.987E+00	0.000E+00	NOT IDENT.
CO-58	2.505E-02	2.143E+00	3.838E+00	0.000E+00	NOT IDENT.
FE-59	-3.097E+00	4.907E+00	8.400E+00	0.000E+00	NOT IDENT.
CO-60	-9.854E-01	2.035E+00	3.511E+00	0.000E+00	NOT IDENT.
ZN-65	-9.701E-01	4.127E+00	7.445E+00	0.000E+00	NOT IDENT.
SE-75	-2.808E-01	2.886E+00	4.836E+00	0.000E+00	FAIL ABUN
KR-85	-1.065E+03	6.220E+02	9.709E+02	0.000E+00	NOT IDENT.
SR-85	-6.326E+00	3.694E+00	5.766E+00	0.000E+00	NOT IDENT.

Y-88	7.957E-01	2.157E+00	4.512E+00	0.000E+00	NOT IDENT.
NB-94	4.470E-01	1.645E+00	3.015E+00	0.000E+00	NOT IDENT.
NB-95	4.526E-01	3.003E+00	5.433E+00	0.000E+00	NOT IDENT.
NB-95M	0.000E+00	1.594E+03	0.000E+00	0.000E+00	SHORT HLIF
ZR-95	3.003E-01	3.590E+00	6.548E+00	0.000E+00	NOT IDENT.
MO-99	0.000E+00	4.025E+03	0.000E+00	0.000E+00	SHORT HLIF
TC-99M	0.000E+00	2.606E+35	0.000E+00	0.000E+00	SHORT HLIF
RU-103	5.255E-01	2.871E+00	5.215E+00	0.000E+00	NOT IDENT.
RH-106	1.080E+01	1.611E+01	3.086E+01	0.000E+00	NOT IDENT.
RU-106	4.981E+00	1.695E+01	3.115E+01	0.000E+00	NOT IDENT.
AG-108M	-5.578E-01	1.820E+00	3.185E+00	0.000E+00	NOT IDENT.
CD-109	1.746E+01	5.636E+01	9.036E+01	0.000E+00	NOT IDENT.
AG-110M	9.765E-01	1.756E+00	3.330E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	4.106E+04	0.000E+00	0.000E+00	SHORT HLIF
SN-115	2.185E+02	1.312E+02	3.803E+02	0.000E+00	FAIL ABUN
SN-117M	-4.640E+00	6.759E+00	1.112E+01	0.000E+00	NOT IDENT.
TE-123M	-9.192E-01	1.871E+00	3.117E+00	0.000E+00	NOT IDENT.
SB-124	1.970E+00	4.397E+00	9.311E+00	0.000E+00	NOT IDENT.
SB-125	2.364E-01	5.361E+00	9.625E+00	0.000E+00	FAIL ABUN
I-126	1.204E-01	1.976E+01	3.516E+01	0.000E+00	NOT IDENT.
SB-126	-5.272E+00	1.408E+01	2.411E+01	0.000E+00	NOT IDENT.
SN-126	2.527E+00	5.055E+00	9.053E+00	0.000E+00	FAIL ABUN
SB-127	4.936E+02	8.132E+02	1.549E+03	0.000E+00	NOT IDENT.
I-131	-2.715E-01	2.061E+01	3.719E+01	0.000E+00	FAIL ABUN
I-132	0.000E+00	6.031E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	0.000E+00	7.838E+02	0.000E+00	0.000E+00	SHORT HLIF
BA-133	-1.743E+00	2.360E+00	4.014E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	1.921E+10	0.000E+00	0.000E+00	SHORT HLIF
CS-134	-5.655E-01	1.690E+00	2.910E+00	0.000E+00	FAIL ABUN
CS-135	5.253E+00	8.805E+00	1.549E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	3.738E+32	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-2.824E+00	1.087E+01	1.961E+01	0.000E+00	FAIL ABUN
BA-137M	-2.043E-01	1.772E+00	3.123E+00	0.000E+00	NOT IDENT.
CS-137	-2.254E-01	1.872E+00	3.298E+00	0.000E+00	NOT IDENT.
CE-139	9.338E-01	1.961E+00	3.440E+00	0.000E+00	NOT IDENT.
BA-140	3.041E+00	2.896E+01	5.239E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	3.281E+05	0.000E+00	0.000E+00	SHORT HLIF
CE-143	0.000E+00	8.426E+06	0.000E+00	0.000E+00	SHORT HLIF
CE-144	-4.951E+00	1.319E+01	2.226E+01	0.000E+00	NOT IDENT.
PM-144	6.944E-01	1.759E+00	3.261E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	2.534E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-1.549E+00	2.322E+00	3.928E+00	0.000E+00	FAIL ABUN
ND-147	-4.243E+01	6.250E+01	1.044E+02	0.000E+00	FAIL ABUN
PM-147	-7.543E+05	3.525E+06	6.031E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	4.089E+05	0.000E+00	0.000E+00	SHORT HLIF
EU-152	-4.964E-01	5.029E+00	9.035E+00	0.000E+00	NOT IDENT.
GD-153	-2.429E+00	6.033E+00	9.175E+00	0.000E+00	NOT IDENT.
EU-154	6.291E+00	5.545E+00	1.177E+01	0.000E+00	NOT IDENT.
EU-155	-1.019E+01	7.397E+00	1.186E+01	0.000E+00	NOT IDENT.
TB-160	1.937E+00	7.317E+00	1.361E+01	0.000E+00	NOT IDENT.
TM-171	2.319E+03	3.176E+03	4.409E+03	0.000E+00	FAIL ABUN
HF-181	4.045E-01	2.907E+00	5.271E+00	0.000E+00	FAIL ABUN
TA-182	5.616E+00	8.128E+00	1.537E+01	0.000E+00	FAIL ABUN
IR-192	2.877E-01	2.150E+00	3.675E+00	0.000E+00	NOT IDENT.
HG-203	-1.722E-01	2.582E+00	4.359E+00	0.000E+00	NOT IDENT.
BI-207	4.706E-01	2.271E+00	4.386E+00	0.000E+00	FAIL ABUN
TL-208	2.508E-01	3.725E+00	3.745E+00	0.000E+00	FAIL ABUN
BI-210	9.571E+02	5.830E+02	1.029E+03	0.000E+00	NOT IDENT.
PB-210	9.571E+02	5.830E+02	1.029E+03	0.000E+00	NOT IDENT.
BI-211	1.779E+01	1.100E+01	2.176E+01	0.000E+00	NOT IDENT.
PB-211	1.353E+01	4.658E+01	8.480E+01	0.000E+00	NOT IDENT.
BI-212	-1.229E+00	1.529E+01	2.684E+01	0.000E+00	NOT IDENT.
PB-212	4.462E+00	3.629E+00	6.521E+00	0.000E+00	NOT IDENT.
BI-214	6.809E+00	3.990E+00	7.950E+00	0.000E+00	FAIL ABUN
PB-214	4.407E+00	3.831E+00	7.386E+00	0.000E+00	NOT IDENT.
RN-219	-4.529E+00	2.013E+01	3.574E+01	0.000E+00	NOT IDENT.
RA-223	-9.474E+00	3.674E+01	6.046E+01	0.000E+00	FAIL ABUN
RA-224	1.135E+01	4.020E+01	6.890E+01	0.000E+00	NOT IDENT.
RA-226	6.809E+00	3.990E+00	7.950E+00	0.000E+00	NOT IDENT.
AC-227	-4.937E+00	2.328E+01	3.873E+01	0.000E+00	NOT IDENT.
TH-227	-4.854E+00	2.290E+01	3.808E+01	0.000E+00	FAIL ABUN
AC-228	5.538E+00	6.786E+00	1.313E+01	0.000E+00	NOT IDENT.
RA-228	5.538E+00	6.786E+00	1.313E+01	0.000E+00	NOT IDENT.
TH-228	4.424E+00	3.627E+00	6.514E+00	0.000E+00	NOT IDENT.
TH-229	-1.735E+01	2.997E+01	4.920E+01	0.000E+00	NOT IDENT.
TH-230	6.809E+00	3.990E+00	7.950E+00	0.000E+00	NOT IDENT.
PA-231	-3.324E+01	8.508E+01	1.392E+02	0.000E+00	NOT IDENT.
TH-231	2.173E+00	1.034E+01	1.774E+01	0.000E+00	NOT IDENT.

TH-232	4.286E+00	3.522E+00	6.326E+00	0.000E+00 NOT IDENT.
PA-233	-5.267E+00	3.713E+00	5.453E+00	0.000E+00 NOT IDENT.
PA-234	6.734E+00	1.745E+01	2.992E+01	0.000E+00 FAIL ABUN
PA-234M	1.537E+02	2.103E+02	4.248E+02	0.000E+00 NOT IDENT.
U-234	5.021E-01	7.593E+00	1.285E+01	0.000E+00 FAIL ABUN
NP-237	5.602E+00	1.532E+01	2.719E+01	0.000E+00 NOT IDENT.
NP-239	5.913E+00	1.206E+01	2.148E+01	0.000E+00 NOT IDENT.
AM-242	3.153E+01	1.507E+02	2.650E+02	0.000E+00 NOT IDENT.
CM-247	-5.543E-01	1.819E+00	3.208E+00	0.000E+00 NOT IDENT.
CF-249	1.170E+00	2.103E+00	3.946E+00	0.000E+00 NOT IDENT.
CF-251	1.865E+00	7.363E+00	1.279E+01	0.000E+00 NOT IDENT.
ANH-511	0.000E+00	3.019E+00	6.109E+00	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:46:54.22

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579008.CNF;1
Sample date      : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:43:31
Sample ID        : G145579008           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA10              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.46  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 2605
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
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Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	8	60.63	16	22	0.50	114.00	113	17	1.13E-03	31.7	1.14E+00
2	8	63.27	106	276	1.83	119.31	113	17	7.36E-03	32.4	
3	8	66.61	34	201	1.44	126.00	113	17	2.39E-03	68.3	
4	0	92.72	193	370	1.45	178.48	172	14	1.34E-02	22.4	
5	0	108.47	33	122	1.29	210.12	208	5	2.32E-03	52.9	
6	2	139.00	40	230	1.44	271.46	265	23	2.79E-03	69.4	1.71E+00
7	2	140.28	47	225	1.44	274.02	265	23	3.25E-03	60.2	
8	2	144.49	53	213	1.45	282.49	265	23	3.67E-03	52.8	
9	0	185.75	138	235	1.55	365.39	360	11	9.60E-03	23.0	
10	0	196.86	18	287	2.52	387.71	385	12	1.24E-03	192.4	
11	0	393.39	22	57	1.02	782.54	778	9	1.55E-03	64.8	
12	0	470.08	27	52	1.26	936.61	934	10	1.85E-03	53.7	
13	0	511.11	247	148	2.69	1019.02	1011	16	1.72E-02	12.7	
14	0	559.05	53	72	2.52	1115.32	1108	20	3.70E-03	40.9	
15	0	570.66	40	34	3.31	1138.63	1133	11	2.78E-03	33.5	
16	0	583.44	23	65	0.73	1164.31	1158	13	1.58E-03	76.0	
17	0	596.86	50	63	1.50	1191.27	1184	14	3.50E-03	36.3	
18	0	635.15	3	46	3.82	1268.18	1262	11	1.75E-04	528.7	
19	0	651.60	17	24	1.67	1301.22	1297	8	1.21E-03	55.2	
20	0	780.37	18	25	1.36	1559.86	1555	10	1.23E-03	59.7	
21	0	867.59	16	9	1.79	1735.03	1732	7	1.11E-03	39.7	
22	3	925.83	15	17	2.39	1852.00	1843	28	1.05E-03	68.5	1.19E+00
23	3	933.80	16	10	1.80	1868.00	1843	28	1.08E-03	29.8	
24	0	943.60	16	28	2.97	1887.69	1879	14	1.11E-03	74.5	
25	0	1002.49	15	21	0.56	2005.94	2002	12	1.01E-03	68.5	
26	0	1010.28	13	10	1.50	2021.59	2017	9	8.91E-04	54.2	
27	0	1067.68	10	3	1.43	2136.85	2134	6	6.94E-04	41.8	
28	0	1134.45	8	8	1.46	2270.94	2268	6	5.82E-04	64.9	
29	0	1187.50	3	18	0.58	2377.46	2377	10	2.03E-04	274.8	
30	1	1200.91	18	4	2.13	2404.39	2401	28	1.25E-03	26.7	1.22E+00
31	1	1206.69	17	9	1.94	2416.00	2401	28	1.21E-03	43.3	
32	1	1209.68	17	11	1.94	2422.00	2401	28	1.17E-03	46.0	
33	7	1216.88	14	0	1.14	2436.45	2435	12	9.55E-04	24.3	2.50E+00
34	7	1218.95	17	6	2.14	2440.61	2435	12	1.19E-03	39.7	
35	0	1461.12	48	15	1.45	2926.85	2919	15	3.33E-03	22.8	
36	0	1514.28	14	3	2.95	3033.58	3028	11	1.00E-03	34.4	
37	0	1531.65	2	33	9.31	3068.44	3064	27	1.51E-04	746.6	
38	0	1581.15	28	5	5.54	3167.82	3158	22	1.97E-03	28.0	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1631.40	17	0	1.02	3268.71	3263	13	1.18E-03	24.3	
40	1	1765.56	25	6	2.18	3538.00	3533	16	1.75E-03	21.4	2.36E+00
41	1	1768.76	13	2	2.39	3544.44	3533	16	8.94E-04	41.5	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:46:59.29

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*********************************************************************
*                          GENERAL ENG. LABS, LLC.                  *
*                              2040 Savage Road                     *
*                            Charleston, SC 29414                   *
*********************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579008.CNF;1
Sample date      : 14-SEP-2005 09:32:00 Acquisition date : 13-OCT-2005 10:43:31
Sample ID        : G145579008           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA10              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.46  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 2605
Matrix Spike DPM :                      LCS DPM          :
*********************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	28	10.67*	5.519E-01	4.437E+01	4.437E+01	85.24
Y-91	557.57	53	95.08*	1.180E+00	4.460E+00	6.298E+00	81.98
	1204.90	17	0.30	6.374E-01	8.548E+02	1.207E+03	86.88
SN-113	391.69	19	64.90*	1.511E+00	1.771E+00	2.111E+00	164.10
TE-125M	109.28	33	0.28*	2.285E+00	4.840E+02	6.855E+02	106.20
CE-141	145.44	10	48.40*	2.484E+00	7.454E-01	1.387E+00	636.92
TH-234	63.29	41	3.80*	7.529E-01	1.350E+02	1.350E+02	174.84
	92.38	17	5.41	1.949E+00	1.537E+01	1.537E+01	537.02
	112.81	------	0.24	2.343E+00	------ Line Not Found		------
U-235	89.95	------	2.70	1.867E+00	------ Line Not Found		------
	93.35	17	4.50	1.949E+00	1.848E+01	1.848E+01	537.45
	105.00	------	2.10	2.229E+00	------ Line Not Found		------
	143.76	10	10.50*	2.484E+00	3.436E+00	3.436E+00	637.10
	163.33	------	4.70	2.438E+00	------ Line Not Found		------
	185.71	17	54.00	2.339E+00	1.232E+00	1.232E+00	424.46
	205.31	------	5.00	2.239E+00	------ Line Not Found		------
U-238	63.29	41	3.80*	7.529E-01	1.350E+02	1.350E+02	174.84
AM-241	59.54	16	35.90*	6.327E-01	6.700E+00	6.701E+00	64.45

Flag: "*" = Keyline

Sample ID : G145579008 Acquisition date : 13-OCT-2005 10:43:31

Total number of lines in spectrum	38	
Number of unidentified lines	14	
Number of lines tentatively identified by NID	24	63.16%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	4.437E+01	4.437E+01	3.782E+01	85.24	
Y-91	58.51D	1.41	4.460E+00	6.298E+00	5.163E+00	81.98	
SN-113	115.10D	1.19	1.771E+00	2.111E+00	3.464E+00	164.10	
TE-125M	58.00D	1.42	4.840E+02	6.855E+02	7.280E+02	106.20	
CE-141	32.50D	1.86	7.454E-01	1.387E+00	8.837E+00	636.92	
TH-234	4.47E+09Y	1.00	1.350E+02	1.350E+02	2.360E+02	174.84	
U-235	7.04E+08Y	1.00	3.436E+00	3.436E+00	21.89E+00	637.10	
U-238	4.47E+09Y	1.00	1.350E+02	1.350E+02	2.360E+02	174.84	
AM-241	432.20Y	1.00	6.700E+00	6.701E+00	4.319E+00	64.45	
	Total Activity :		8.155E+02	1.020E+03			

Grand Total Activity : 8.155E+02 1.020E+03

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145579008 Acquisition date : 13-OCT-2005 10:43:31

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
8	66.61	34	201	1.44	126.00	113	17	2.39E-03	****	9.09E-01	T
2	139.00	21	230	1.44	271.46	265	23	1.45E-03	****	2.48E+00	
2	140.28	27	225	1.44	274.02	265	23	1.91E-03	****	2.49E+00	T
0	196.86	13	287	2.52	387.71	385	12	9.33E-04	****	2.28E+00	T
0	470.08	27	52	1.26	936.61	934	10	1.85E-03	****	1.34E+00	
0	570.66	30	34	3.31	1138.63	1133	11	2.08E-03	****	1.16E+00	T
0	583.44	2	65	0.73	1164.31	1158	13	1.74E-04	****	1.14E+00	T
0	596.86	36	63	1.50	1191.27	1184	14	2.48E-03	****	1.12E+00	
0	635.15	3	46	3.82	1268.18	1262	11	1.75E-04	****	1.07E+00	T
0	651.60	17	24	1.67	1301.22	1297	8	1.21E-03	****	1.05E+00	T
0	780.37	18	25	1.36	1559.86	1555	10	1.23E-03	****	9.12E-01	
0	867.59	16	9	1.79	1735.03	1732	7	1.11E-03	79.5	8.37E-01	T
3	925.83	11	17	2.39	1852.00	1843	28	7.71E-04	****	7.93E-01	T
3	933.80	16	10	1.80	1868.00	1843	28	1.08E-03	59.6	7.87E-01	T
0	943.60	16	28	2.97	1887.69	1879	14	1.11E-03	****	7.81E-01	T
0	1010.28	13	10	1.50	2021.59	2017	9	8.91E-04	****	7.38E-01	
0	1134.45	5	8	1.46	2270.94	2268	6	3.82E-04	****	6.70E-01	T
0	1187.50	3	18	0.58	2377.46	2377	10	2.03E-04	****	6.46E-01	T
1	1200.91	10	4	2.13	2404.39	2401	28	7.09E-04	****	6.40E-01	
1	1209.68	17	11	1.94	2422.00	2401	28	1.17E-03	92.0	6.36E-01	
7	1216.88	8	0	1.14	2436.45	2435	12	5.78E-04	****	6.33E-01	
7	1218.95	17	6	2.14	2440.61	2435	12	1.19E-03	79.4	6.32E-01	
0	1514.28	14	3	2.95	3033.58	3028	11	1.00E-03	68.8	5.39E-01	
0	1531.65	2	33	9.31	3068.44	3064	27	1.51E-04	****	5.35E-01	
0	1581.15	19	5	5.54	3167.82	3158	22	1.31E-03	89.1	5.24E-01	
0	1631.40	17	0	1.02	3268.71	3263	13	1.18E-03	48.5	5.15E-01	
1	1765.56	14	6	2.18	3538.00	3533	16	9.84E-04	****	4.94E-01	
1	1768.76	13	2	2.39	3544.44	3533	16	8.94E-04	83.0	4.94E-01	T

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 14:47:07.58

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145579008.CNF;1     *
* Acquisition date : 13-OCT-2005 10:43:31  Detector SN#    : 2605           *
* Detector ID      : GAMMA10               Sensitivity     : 3.00000        *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000        *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000       *
* Elapsed real time: 0 04:00:01.46         Half life ratio : 8.00000        *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 14-SEP-2005 09:32:00  Nuclide Library : EPI            *
* Sample ID        : G145579008            Analyst initials: MJH1           *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 12-JAN-2005 14:39:51.7MS Isotope      :               *
* MSD DPM          :                      MSD Isotope     :               *
* LCS DPM          :                      LCS Isotope     :               *
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	4.437E+01	3.782E+01	3.795E+01	2.422E+00	1.169
Y-91	6.298E+00	5.163E+00	3.163E+00	1.929E-01	1.991
SN-113	2.111E+00	3.464E+00	4.685E+00	2.853E-01	0.450
TE-125M	6.855E+02	7.280E+02	1.235E+03	1.128E+02	0.555
CE-141	1.093E+00	8.616E+00	8.727E+00	5.916E-01	0.125
TH-234	1.350E+02	2.360E+02	1.945E+02	3.659E+01	0.694
U-235	3.436E+00	2.189E+01	2.456E+01	4.073E+00	0.140
U-238	1.350E+02	2.360E+02	1.945E+02	3.659E+01	0.694
AM-241	6.701E+00	4.319E+00	2.317E+01	2.605E+00	0.289

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-5.143E+00		2.158E+01	3.782E+01	2.610E+00	-0.136
NA-22	2.275E+00		1.994E+00	4.246E+00	2.532E-01	0.536
AL-26	-4.812E-01		1.660E+00	3.130E+00	1.761E-01	-0.154

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
SC-46	4.581E-01		2.116E+00	3.886E+00	2.679E-01	0.118
V-48	1.872E+00		5.656E+00	1.112E+01	7.451E-01	0.168
CR-51	-2.178E+01		2.914E+01	4.585E+01	3.254E+00	-0.475
MN-54	-5.207E-01		1.866E+00	3.193E+00	2.149E-01	-0.163
CO-56	8.161E-01		2.465E+00	4.500E+00	3.045E-01	0.181
CO-57	6.669E-01		1.690E+00	2.987E+00	1.930E-01	0.223
CO-58	2.505E-02		2.143E+00	3.838E+00	2.563E-01	0.007
FE-59	-3.097E+00		4.907E+00	8.400E+00	6.010E-01	-0.369
CO-60	-9.854E-01		2.035E+00	3.511E+00	2.112E-01	-0.281
ZN-65	-9.701E-01		4.127E+00	7.445E+00	4.573E-01	-0.130
SE-75	-2.808E-01		2.886E+00	4.836E+00	3.321E-01	-0.058
KR-85	-1.065E+03		6.220E+02	9.709E+02	5.869E+01	-1.097
SR-85	-6.326E+00		3.694E+00	5.766E+00	3.485E-01	-1.097
Y-88	7.957E-01		2.157E+00	4.512E+00	2.518E-01	0.176
NB-94	4.470E-01		1.645E+00	3.015E+00	1.885E-01	0.148
NB-95	4.526E-01		3.003E+00	5.433E+00	3.531E-01	0.083
ZR-95	3.003E-01		3.590E+00	6.548E+00	4.968E-01	0.046
RU-103	5.255E-01		2.871E+00	5.215E+00	6.646E-01	0.101
RH-106	1.080E+01		1.611E+01	3.086E+01	1.886E+00	0.350
RU-106	4.981E+00		1.695E+01	3.115E+01	3.705E+00	0.160
AG-108M	-5.578E-01		1.820E+00	3.185E+00	2.020E-01	-0.175
CD-109	1.746E+01		5.636E+01	9.036E+01	8.590E+00	0.193
AG-110M	9.765E-01		1.756E+00	3.330E+00	2.146E-01	0.293
SN-115	2.185E+02	+	1.312E+02	3.803E+02	2.602E+01	0.575
SN-117M	-4.640E+00		6.759E+00	1.112E+01	7.565E-01	-0.417
TE-123M	-9.192E-01		1.871E+00	3.117E+00	2.143E-01	-0.295
SB-124	1.970E+00		4.397E+00	9.311E+00	5.898E-01	0.212
SB-125	2.364E-01		5.361E+00	9.625E+00	5.846E-01	0.025
I-126	1.204E-01		1.976E+01	3.516E+01	2.145E+00	0.003
SB-126	-5.272E+00		1.408E+01	2.411E+01	1.524E+00	-0.219
SN-126	2.527E+00		5.055E+00	9.053E+00	8.591E-01	0.279
SB-127	4.936E+02		8.132E+02	1.549E+03	2.344E+02	0.319
I-131	-2.715E-01		2.061E+01	3.719E+01	2.563E+00	-0.007
BA-133	-1.743E+00		2.360E+00	4.014E+00	4.713E-01	-0.434
CS-134	-5.655E-01		1.690E+00	2.910E+00	1.940E-01	-0.194
CS-135	5.253E+00		8.805E+00	1.549E+01	1.308E+00	0.339
CS-136	-2.824E+00		1.087E+01	1.961E+01	1.366E+00	-0.144
BA-137M	-2.043E-01		1.772E+00	3.123E+00	1.899E-01	-0.065
CS-137	-2.254E-01		1.872E+00	3.298E+00	2.013E-01	-0.068
CE-139	9.338E-01		1.961E+00	3.440E+00	2.395E-01	0.271
BA-140	3.041E+00		2.896E+01	5.239E+01	1.706E+01	0.058
CE-144	-4.951E+00		1.319E+01	2.226E+01	3.223E+00	-0.222
PM-144	6.944E-01		1.759E+00	3.261E+00	2.035E-01	0.213
PM-146	-1.549E+00		2.322E+00	3.928E+00	3.416E-01	-0.394
ND-147	-4.243E+01		6.250E+01	1.044E+02	1.425E+01	-0.406
PM-147	-7.543E+05		3.525E+06	6.031E+06	3.905E+05	-0.125
EU-152	-4.964E-01		5.029E+00	9.035E+00	6.294E-01	-0.055
GD-153	-2.429E+00		6.033E+00	9.175E+00	7.415E-01	-0.265

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
EU-154	6.291E+00		5.545E+00	1.177E+01	1.110E+00	0.535
EU-155	-1.019E+01		7.397E+00	1.186E+01	8.848E-01	-0.859
TB-160	1.937E+00		7.317E+00	1.361E+01	9.345E-01	0.142
TM-171	2.319E+03	+	3.176E+03	4.409E+03	4.349E+02	0.526
HF-181	4.045E-01		2.907E+00	5.271E+00	3.153E-01	0.077
TA-182	5.616E+00		8.128E+00	1.537E+01	9.028E-01	0.365
IR-192	2.877E-01		2.150E+00	3.675E+00	2.409E-01	0.078
HG-203	-1.722E-01		2.582E+00	4.359E+00	3.081E-01	-0.040
BI-207	4.706E-01		2.271E+00	4.386E+00	2.802E-01	0.107
TL-208	2.508E-01	+	3.725E+00	3.745E+00	2.606E-01	0.067
BI-210	9.571E+02		5.830E+02	1.029E+03	1.162E+02	0.930
PB-210	9.571E+02		5.830E+02	1.029E+03	1.162E+02	0.930
BI-211	1.779E+01		1.100E+01	2.176E+01	1.480E+00	0.818
PB-211	1.353E+01		4.658E+01	8.480E+01	5.286E+01	0.160
BI-212	-1.229E+00		1.529E+01	2.684E+01	2.183E+00	-0.046
PB-212	4.462E+00		3.629E+00	6.521E+00	5.355E-01	0.684
BI-214	6.809E+00		3.990E+00	7.950E+00	6.373E-01	0.857
PB-214	4.407E+00		3.831E+00	7.386E+00	6.327E-01	0.597
RN-219	-4.529E+00		2.013E+01	3.574E+01	4.853E+00	-0.127
RA-223	-9.474E+00		3.674E+01	6.046E+01	1.013E+01	-0.157
RA-224	1.135E+01		4.020E+01	6.890E+01	4.737E+00	0.165
RA-226	6.809E+00		3.990E+00	7.950E+00	6.373E-01	0.857
AC-227	-4.937E+00		2.328E+01	3.873E+01	5.649E+00	-0.127
TH-227	-4.854E+00		2.290E+01	3.808E+01	6.581E+00	-0.127
AC-228	5.538E+00		6.786E+00	1.313E+01	1.310E+00	0.422
RA-228	5.538E+00		6.786E+00	1.313E+01	1.310E+00	0.422
TH-228	4.424E+00		3.627E+00	6.514E+00	5.349E-01	0.679
TH-229	-1.735E+01		2.997E+01	4.920E+01	3.399E+00	-0.353
TH-230	6.809E+00		3.990E+00	7.950E+00	6.373E-01	0.857
PA-231	-3.324E+01		8.508E+01	1.392E+02	1.977E+01	-0.239
TH-231	2.173E+00		1.034E+01	1.774E+01	1.438E+00	0.123
TH-232	4.286E+00		3.522E+00	6.326E+00	5.194E-01	0.678
PA-233	-5.267E+00		3.713E+00	5.453E+00	3.753E-01	-0.966
PA-234	6.734E+00		1.745E+01	2.992E+01	5.387E+00	0.225
PA-234M	1.537E+02		2.103E+02	4.248E+02	3.523E+01	0.362
U-234	5.021E-01		7.593E+00	1.285E+01	1.175E+00	0.039
NP-237	5.602E+00		1.532E+01	2.719E+01	6.172E+00	0.206
NP-239	5.913E+00		1.206E+01	2.148E+01	1.429E+00	0.275
AM-242	3.153E+01		1.507E+02	2.650E+02	1.979E+01	0.119
CM-247	-5.543E-01		1.819E+00	3.208E+00	1.841E-01	-0.173
CF-249	1.170E+00		2.103E+00	3.946E+00	2.268E-01	0.297
CF-251	1.865E+00		7.363E+00	1.279E+01	8.860E-01	0.146
ANH-511	1.546E+01		3.019E+00	6.109E+00	3.689E-01	2.530

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          Environmental Physics, Inc.                  *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145579008        *
* Acquisition date : 13-OCT-2005 10:43:31 Detector SN#    : 2605        *
* Detector ID      : GAMMA10              Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.46     Half life ratio : 8.000       *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 14-SEP-2005 09:32:00 Nuclide Library :             *
* Sample ID        : G145579008           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 12-JAN-2005 14:39:51 MS Isotope      :             *
* MSD DPM          :    0.000             MSD Isotope     :             *
* LCS DPM          :    0.000             LCS Isotope     :             *
* LCSD DPM         :    0.000             LCSD Isotope    :             *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	4.437E+01	3.782E+01	1.683E+01	1.891E+01
Y-91	6.298E+00	5.163E+00	1.422E+00	2.581E+00
SN-113	2.111E+00	3.464E+00	2.190E+00	1.732E+00
TE-125M	6.855E+02	7.280E+02	5.904E+02	3.640E+02
CE-141	1.093E+00	8.616E+00	4.169E+00	4.308E+00
TH-234	1.350E+02	2.360E+02	9.286E+01	1.180E+02
U-235	3.436E+00	2.189E+01	1.180E+01	1.094E+01
U-238	1.350E+02	2.360E+02	9.286E+01	1.180E+02
AM-241	6.701E+00	4.319E+00	1.099E+01	2.159E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-5.143E+00	2.158E+01	1.758E+01	1.079E+01	NOT IDENT.
NA-22	2.275E+00	1.994E+00	1.911E+00	9.968E-01	NOT IDENT.
NA-24	3.044E+13	2.015E+14	0.000E+00	1.007E+14	SHORT HLIF
AL-26	-4.812E-01	1.660E+00	1.305E+00	8.298E-01	NOT IDENT.
SC-46	4.581E-01	2.116E+00	1.747E+00	1.058E+00	NOT IDENT.
V-48	1.872E+00	5.656E+00	4.969E+00	2.828E+00	FAIL ABUN
CR-51	-2.178E+01	2.914E+01	2.139E+01	1.457E+01	NOT IDENT.
MN-54	-5.207E-01	1.866E+00	1.440E+00	9.329E-01	NOT IDENT.
CO-56	8.161E-01	2.465E+00	2.059E+00	1.232E+00	NOT IDENT.
MN-56	1.000E+41	3.016E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	6.669E-01	1.690E+00	1.429E+00	8.448E-01	NOT IDENT.
CO-58	2.505E-02	2.143E+00	1.728E+00	1.071E+00	NOT IDENT.
FE-59	-3.097E+00	4.907E+00	3.688E+00	2.454E+00	NOT IDENT.
CO-60	-9.854E-01	2.035E+00	1.539E+00	1.018E+00	NOT IDENT.
ZN-65	-9.701E-01	4.127E+00	3.324E+00	2.063E+00	NOT IDENT.
SE-75	-2.808E-01	2.886E+00	2.290E+00	1.443E+00	FAIL ABUN
KR-85	-1.065E+03	6.220E+02	4.623E+02	3.110E+02	NOT IDENT.
SR-85	-6.326E+00	3.694E+00	2.745E+00	1.847E+00	NOT IDENT.

Y-88	7.957E-01	2.157E+00	1.939E+00	1.079E+00 NOT IDENT.
NB-94	4.470E-01	1.645E+00	1.380E+00	8.227E-01 NOT IDENT.
NB-95	4.526E-01	3.003E+00	2.473E+00	1.502E+00 NOT IDENT.
NB-95M	-1.740E+03	1.594E+03	0.000E+00	7.969E+02 SHORT HLIF
ZR-95	3.003E-01	3.590E+00	2.939E+00	1.795E+00 NOT IDENT.
MO-99	1.935E+03	4.025E+03	0.000E+00	2.013E+03 SHORT HLIF
TC-99M	1.213E+35	2.606E+35	0.000E+00	0.000E+00 SHORT HLIF
RU-103	5.255E-01	2.871E+00	2.423E+00	1.435E+00 NOT IDENT.
RH-106	1.080E+01	1.611E+01	1.418E+01	8.053E+00 NOT IDENT.
RU-106	4.981E+00	1.695E+01	1.433E+01	8.477E+00 NOT IDENT.
AG-108M	-5.578E-01	1.820E+00	1.483E+00	9.098E-01 NOT IDENT.
CD-109	1.746E+01	5.636E+01	4.326E+01	2.818E+01 NOT IDENT.
AG-110M	9.765E-01	1.756E+00	1.526E+00	8.780E-01 NOT IDENT.
CD-115	-6.490E+03	4.106E+04	0.000E+00	2.053E+04 SHORT HLIF
SN-115	2.185E+02	1.312E+02	1.712E+02	6.558E+01 FAIL ABUN
SN-117M	-4.640E+00	6.759E+00	5.300E+00	3.379E+00 NOT IDENT.
TE-123M	-9.192E-01	1.871E+00	1.486E+00	9.355E-01 NOT IDENT.
SB-124	1.970E+00	4.397E+00	3.939E+00	2.199E+00 NOT IDENT.
SB-125	2.364E-01	5.361E+00	4.505E+00	2.680E+00 FAIL ABUN
I-126	1.204E-01	1.976E+01	1.613E+01	9.882E+00 NOT IDENT.
SB-126	-5.272E+00	1.408E+01	1.082E+01	7.041E+00 NOT IDENT.
SN-126	2.527E+00	5.055E+00	4.337E+00	2.527E+00 FAIL ABUN
SB-127	4.936E+02	8.132E+02	7.083E+02	4.066E+02 NOT IDENT.
I-131	-2.715E-01	2.061E+01	1.739E+01	1.030E+01 FAIL ABUN
I-132	1.000E+41	6.031E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	-5.072E+02	7.838E+02	0.000E+00	3.919E+02 SHORT HLIF
BA-133	-1.743E+00	2.360E+00	1.876E+00	1.180E+00 NOT IDENT.
I-133	4.257E+08	1.921E+10	0.000E+00	9.604E+09 SHORT HLIF
CS-134	-5.655E-01	1.690E+00	1.286E+00	8.448E-01 FAIL ABUN
CS-135	5.253E+00	8.805E+00	7.341E+00	4.402E+00 NOT IDENT.
I-135	-6.074E+31	3.738E+32	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-2.824E+00	1.087E+01	8.776E+00	5.437E+00 FAIL ABUN
BA-137M	-2.043E-01	1.772E+00	1.426E+00	8.861E-01 NOT IDENT.
CS-137	-2.254E-01	1.872E+00	1.506E+00	9.361E-01 NOT IDENT.
CE-139	9.338E-01	1.961E+00	1.646E+00	9.805E-01 NOT IDENT.
BA-140	3.041E+00	2.896E+01	2.418E+01	1.448E+01 NOT IDENT.
LA-140	-8.743E+03	3.281E+05	0.000E+00	1.640E+05 SHORT HLIF
CE-143	-7.458E+06	8.426E+06	0.000E+00	4.213E+06 SHORT HLIF
CE-144	-4.951E+00	1.319E+01	1.063E+01	6.593E+00 NOT IDENT.
PM-144	6.944E-01	1.759E+00	1.496E+00	8.797E-01 NOT IDENT.
PR-144	1.000E+41	2.534E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	-1.549E+00	2.322E+00	1.816E+00	1.161E+00 FAIL ABUN
ND-147	-4.243E+01	6.250E+01	4.725E+01	3.125E+01 FAIL ABUN
PM-147	-7.543E+05	3.525E+06	2.883E+06	1.763E+06 NOT IDENT.
PM-149	2.121E+05	4.089E+05	0.000E+00	2.045E+05 SHORT HLIF
EU-152	-4.964E-01	5.029E+00	4.228E+00	2.515E+00 NOT IDENT.
GD-153	-2.429E+00	6.033E+00	4.377E+00	3.017E+00 NOT IDENT.
EU-154	6.291E+00	5.545E+00	5.296E+00	2.773E+00 NOT IDENT.
EU-155	-1.019E+01	7.397E+00	5.653E+00	3.698E+00 NOT IDENT.
TB-160	1.937E+00	7.317E+00	6.097E+00	3.659E+00 NOT IDENT.
TM-171	2.319E+03	3.176E+03	2.115E+03	1.588E+03 FAIL ABUN
HF-181	4.045E-01	2.907E+00	2.449E+00	1.453E+00 FAIL ABUN
TA-182	5.616E+00	8.128E+00	6.802E+00	4.064E+00 FAIL ABUN
IR-192	2.877E-01	2.150E+00	1.723E+00	1.075E+00 NOT IDENT.
HG-203	-1.722E-01	2.582E+00	2.046E+00	1.291E+00 NOT IDENT.
BI-207	4.706E-01	2.271E+00	1.954E+00	1.135E+00 FAIL ABUN
TL-208	2.508E-01	3.725E+00	1.738E+00	1.862E+00 FAIL ABUN
BI-210	9.571E+02	5.830E+02	4.923E+02	2.915E+02 NOT IDENT.
PB-210	9.571E+02	5.830E+02	4.923E+02	2.915E+02 NOT IDENT.
BI-211	1.779E+01	1.100E+01	1.028E+01	5.499E+00 NOT IDENT.
PB-211	1.353E+01	4.658E+01	3.946E+01	2.329E+01 NOT IDENT.
BI-212	-1.229E+00	1.529E+01	1.228E+01	7.644E+00 NOT IDENT.
PB-212	4.462E+00	3.629E+00	3.121E+00	1.815E+00 NOT IDENT.
BI-214	6.809E+00	3.990E+00	3.729E+00	1.995E+00 FAIL ABUN
PB-214	4.407E+00	3.831E+00	3.485E+00	1.915E+00 NOT IDENT.
RN-219	-4.529E+00	2.013E+01	1.657E+01	1.006E+01 NOT IDENT.
RA-223	-9.474E+00	3.674E+01	2.834E+01	1.837E+01 FAIL ABUN
RA-224	1.135E+01	4.020E+01	3.286E+01	2.010E+01 NOT IDENT.
RA-226	6.809E+00	3.990E+00	3.729E+00	1.995E+00 NOT IDENT.
AC-227	-4.937E+00	2.328E+01	1.834E+01	1.164E+01 NOT IDENT.
TH-227	-4.854E+00	2.290E+01	1.803E+01	1.145E+01 FAIL ABUN
AC-228	5.538E+00	6.786E+00	5.991E+00	3.393E+00 NOT IDENT.
RA-228	5.538E+00	6.786E+00	5.991E+00	3.393E+00 NOT IDENT.
TH-228	4.424E+00	3.627E+00	3.117E+00	1.813E+00 NOT IDENT.
TH-229	-1.735E+01	2.997E+01	2.341E+01	1.499E+01 NOT IDENT.
TH-230	6.809E+00	3.990E+00	3.729E+00	1.995E+00 NOT IDENT.
PA-231	-3.324E+01	8.508E+01	6.539E+01	4.254E+01 NOT IDENT.
TH-231	2.173E+00	1.034E+01	8.388E+00	5.170E+00 NOT IDENT.

TH-232	4.286E+00	3.522E+00	3.027E+00	1.761E+00 NOT IDENT.
PA-233	-5.267E+00	3.713E+00	2.541E+00	1.857E+00 NOT IDENT.
PA-234	6.734E+00	1.745E+01	1.361E+01	8.727E+00 FAIL ABUN
PA-234M	1.537E+02	2.103E+02	1.922E+02	1.051E+02 NOT IDENT.
U-234	5.021E-01	7.593E+00	6.065E+00	3.797E+00 FAIL ABUN
NP-237	5.602E+00	1.532E+01	1.303E+01	7.660E+00 NOT IDENT.
NP-239	5.913E+00	1.206E+01	1.027E+01	6.029E+00 NOT IDENT.
AM-242	3.153E+01	1.507E+02	1.269E+02	7.537E+01 NOT IDENT.
CM-247	-5.543E-01	1.819E+00	1.487E+00	9.097E-01 NOT IDENT.
CF-249	1.170E+00	2.103E+00	1.848E+00	1.052E+00 NOT IDENT.
CF-251	1.865E+00	7.363E+00	6.095E+00	3.681E+00 NOT IDENT.
ANH-511	1.546E+01	3.019E+00	2.955E+00	1.510E+00 NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145579008
ANALYST	: MJH1	DETECTOR	: GAMMA10
SAMPLE DATE	: 14-SEP-2005 09:32:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 10:43:31.33	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 7.248E+01
GROSS GAMMA ERROR (pCi/LITER)	: 9.040E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.666E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.276E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 11:45:17.71

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145782003.CNF;1
Sample date      : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 07:44:52
Sample ID        : G145782003           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA16              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.04  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1922864
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	52.93*	41	160	2.35	104.45	101	8	2.87E-03	60.6	
2	0	62.27*	12	230	1.95	123.12	119	10	8.31E-04	259.0	
3	0	66.32*	66	156	1.21	131.21	128	8	4.56E-03	38.3	
4	0	92.21*	89	326	1.67	182.95	176	14	6.18E-03	49.1	
5	0	139.21*	38	258	1.06	276.90	274	9	2.67E-03	81.2	
6	0	185.36*	34	193	1.41	369.15	365	10	2.33E-03	90.8	
7	0	198.27*	14	180	1.43	394.96	391	9	9.94E-04	204.7	
8	0	238.37*	85	264	3.48	475.12	468	18	5.92E-03	49.0	
9	0	278.83*	9	151	2.00	556.01	551	11	6.11E-04	319.1	
10	0	356.23	64	225	10.34	710.74	699	25	4.46E-03	65.6	
11	0	421.79	17	50	1.21	841.81	838	7	1.17E-03	74.1	
12	0	558.21*	51	39	1.26	1114.57	1109	11	3.56E-03	30.8	
13	0	583.26*	21	56	1.72	1164.66	1156	15	1.45E-03	93.9	
14	0	595.09	50	49	1.90	1188.31	1183	11	3.44E-03	30.9	
15	0	608.38*	23	54	0.65	1214.90	1209	12	1.62E-03	82.6	
16	0	648.61	45	50	6.36	1295.33	1288	18	3.10E-03	39.9	
17	0	661.41*	28	94	1.39	1320.93	1314	15	1.93E-03	85.9	
18	0	704.08	8	28	1.73	1406.26	1401	8	5.75E-04	115.9	
19	0	734.09	18	22	2.29	1466.28	1462	8	1.25E-03	51.0	
20	0	771.98	19	26	3.13	1542.05	1538	11	1.29E-03	58.9	
21	0	862.51	5	49	2.83	1723.10	1714	14	3.47E-04	300.3	
22	5	883.69	14	10	1.54	1765.47	1763	19	9.75E-04	40.5	2.00E+00
23	5	888.62	26	15	3.06	1775.32	1763	19	1.82E-03	40.2	
24	0	901.29	20	31	5.00	1800.67	1793	18	1.39E-03	69.2	
25	0	1000.92*	7	13	1.13	1999.96	1996	9	4.68E-04	138.3	
26	0	1005.74*	16	8	2.13	2009.60	2006	8	1.13E-03	43.0	
27	0	1054.55	22	14	2.90	2107.24	2101	12	1.52E-03	41.1	
28	0	1140.04	31	15	3.42	2278.24	2270	19	2.18E-03	33.9	
29	0	1148.67*	7	7	0.93	2295.50	2291	10	4.60E-04	110.7	
30	0	1172.43*	6	4	1.29	2343.05	2341	5	4.36E-04	89.2	
31	0	1225.57	10	6	0.91	2449.35	2446	8	7.23E-04	50.8	
32	0	1299.12*	12	8	3.84	2596.52	2590	15	8.47E-04	62.0	
33	0	1377.94*	6	5	1.76	2754.22	2752	6	4.12E-04	112.0	
34	0	1420.12	9	5	1.74	2838.62	2836	6	6.50E-04	48.7	
35	0	1460.30*	5	25	4.30	2919.02	2913	16	3.33E-04	267.8	
36	0	1489.32	14	1	0.65	2977.09	2975	6	9.72E-04	29.7	
37	0	1506.86	19	3	2.28	3012.20	3008	11	1.31E-03	28.9	
38	0	1590.94	41	0	8.19	3180.44	3169	26	2.85E-03	15.6	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1655.60*	2	2	1.26	3309.85	3307	6	1.23E-04	264.9	
40	0	1713.38	9	10	2.75	3425.49	3418	14	6.09E-04	85.2	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 11:45:22

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145782003.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 07:44:52
Sample ID : G145782003 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:01.04 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	7.551E+00	4.045E+01	3.498E+01	3.036E+00	0.216
Y-91	+	557.57	*	6.336E+00	3.922E+00	4.479E+00	3.077E-01	1.415
		1204.90		9.471E+02	1.017E+03	2.038E+03	1.447E+02	0.465
BA-137M	+	661.65	*	2.900E+00	4.984E+00	3.289E+00	1.998E-01	0.882
CS-137	+	661.66	*	3.066E+00	5.269E+00	3.477E+00	2.121E-01	0.882
TM-171	+	51.87		2.347E+03	2.857E+03	3.460E+03	3.741E+02	0.678
		59.40		-2.919E+03	3.796E+03	5.614E+03	4.774E+02	-0.520
	+	66.72	*	5.660E+03	4.357E+03	4.185E+03	3.198E+02	1.352
HG-203		70.83		5.304E+01	1.123E+02	2.001E+02	2.567E+01	0.265
		72.87		3.888E+01	6.363E+01	1.136E+02	1.402E+01	0.342
		82.60		-1.018E+02	1.034E+02	1.681E+02	2.155E+01	-0.606
	+	279.20	*	9.982E-01	6.371E+00	5.488E+00	3.952E-01	0.182
TH-228		84.40		3.290E+01	1.975E+02	3.442E+02	4.193E+01	0.096
	+	238.60	*	1.048E+01	1.031E+01	6.997E+00	5.555E-01	1.497
		300.10		3.931E+01	5.863E+01	9.940E+01	5.872E+01	0.395
PA-234M		766.40		4.650E+02	8.817E+02	1.573E+03	1.206E+03	0.296
	+	1001.03	*	1.005E+02	2.783E+02	4.379E+02	4.967E+01	0.230
TH-234	+	63.29	*	5.509E+01	2.855E+02	2.543E+02	4.501E+01	0.217
	+	92.38		9.118E+01	9.095E+01	6.217E+01	1.088E+01	1.467
		112.81		1.422E+02	7.080E+02	1.221E+03	2.205E+02	0.116
U-238	+	63.29	*	5.509E+01	2.855E+02	2.543E+02	4.501E+01	0.217

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	5.730E+00	2.227E+01	4.027E+01	3.245E+00	0.142
NA-22		1274.53	*	5.328E-01	2.226E+00	4.156E+00	3.362E-01	0.128
AL-26		511.00		1.067E+01	2.141E+00	4.183E+00	2.983E-01	2.551
		1808.65	*	5.219E-01	1.989E+00	3.951E+00	2.413E-01	0.132
SC-46	+	889.25	*	3.802E+00	3.091E+00	4.085E+00	4.700E-01	0.931
		1120.51		1.867E+00	2.549E+00	5.042E+00	3.970E-01	0.370
V-48		944.10		2.840E+01	6.234E+01	1.246E+02	1.384E+01	0.228
		983.50	*	-4.097E+00	6.241E+00	1.049E+01	1.100E+00	-0.391

Sample ID : G145782003 Acquisition date : 13-OCT-2005 07:44:52

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1312.09		-7.122E-01	6.606E+00	1.194E+01	1.029E+00	-0.060
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-1.371E+01	3.522E+01	6.087E+01	4.698E+00	-0.225
MN-54		834.83	*	8.286E-01	1.836E+00	3.543E+00	3.564E-01	0.234
CO-56		846.75	*	2.539E-01	2.568E+00	4.716E+00	4.888E-01	0.054
		1037.82		3.182E+00	1.464E+01	2.813E+01	2.801E+00	0.113
		1238.25		2.637E-03	3.901E+00	7.112E+00	5.581E-01	0.000
CO-57		122.06	*	-4.185E-01	2.114E+00	3.559E+00	3.412E-01	-0.118
		136.47		1.073E+00	1.830E+01	2.783E+01	2.473E+00	0.039
CO-58		810.78	*	8.986E-01	2.135E+00	4.138E+00	3.918E-01	0.217
FE-59		192.35		1.306E+01	8.630E+01	1.456E+02	1.741E+01	0.090
		1099.25	*	2.061E+00	5.253E+00	1.008E+01	9.125E-01	0.204
		1291.60		2.424E+00	6.290E+00	1.237E+01	1.179E+00	0.196
CO-60	+	1173.24		9.061E-01	1.618E+00	3.441E+00	2.295E-01	0.263
		1332.50	*	1.423E+00	2.070E+00	4.130E+00	3.686E-01	0.344
ZN-65		1115.55	*	-3.531E+00	4.369E+00	7.099E+00	5.674E-01	-0.497
SE-75	+	66.05		1.002E+03	7.736E+02	9.269E+02	8.984E+01	1.081
		96.73		-2.759E+01	6.921E+01	1.034E+02	1.340E+01	-0.267
		121.11		4.535E+00	1.185E+01	2.055E+01	2.444E+00	0.221
		136.00		-1.060E-01	3.558E+00	5.376E+00	4.460E-01	-0.020
	+	198.60		5.627E+01	2.304E+02	2.346E+02	1.740E+01	0.240
		264.65	*	-9.973E-01	3.321E+00	5.814E+00	3.973E-01	-0.172
	+	279.53		2.378E+00	1.518E+01	1.319E+01	9.625E-01	0.180
		303.91		-1.614E+01	1.476E+02	2.608E+02	2.703E+01	-0.062
		400.65		-2.929E+00	1.630E+01	2.853E+01	2.927E+00	-0.103
KR-85		513.99	*	-2.393E+03	7.194E+02	9.507E+02	6.764E+01	-2.517
SR-85		513.99	*	-1.402E+01	4.214E+00	5.569E+00	3.963E-01	-2.517
Y-88		898.02		-2.529E-01	2.674E+00	4.200E+00	4.948E-01	-0.060
		1836.01	*	2.948E+00	2.672E+00	5.768E+00	3.397E-01	0.511
NB-94	+	702.63	*	8.074E-01	1.872E+00	3.273E+00	2.269E-01	0.247
		871.10		7.038E-01	1.669E+00	3.233E+00	3.560E-01	0.218
NB-95		765.79	*	1.137E+00	2.872E+00	5.525E+00	4.620E-01	0.206
NB-95M		235.69	*	-7.699E+02	1.848E+03	2.621E+03	3.348E+02	-0.294
ZR-95		724.18		-1.039E+00	5.751E+00	9.803E+00	8.098E-01	-0.106
		756.74	*	2.168E+00	4.075E+00	7.922E+00	7.181E-01	0.274
RU-103		497.08	*	-2.409E+00	3.219E+00	5.251E+00	7.006E-01	-0.459
	+	610.33		6.033E+01	1.001E+02	8.934E+01	1.402E+01	0.675
RH-106		511.85		6.450E+01	1.727E+01	3.318E+01	2.364E+00	1.944
		621.84	*	3.299E+00	1.756E+01	3.155E+01	2.023E+00	0.105
		1050.47		5.398E+00	1.263E+02	2.032E+02	1.891E+01	0.027
RU-106		622.20	*	-6.093E+00	1.845E+01	3.119E+01	3.759E+00	-0.195
AG-108M		433.93	*	6.758E-01	2.114E+00	3.819E+00	2.985E-01	0.177
		614.37		1.163E+00	2.034E+00	3.785E+00	2.618E-01	0.307
		722.95		-5.153E-01	2.123E+00	3.608E+00	2.803E-01	-0.143
CD-109		88.03	*	-2.291E+01	6.590E+01	9.927E+01	7.100E+00	-0.231
AG-110M		657.75	*	1.675E+00	2.315E+00	3.888E+00	2.515E-01	0.431
		677.61		-9.320E+00	1.758E+01	2.889E+01	1.944E+00	-0.323
		706.67		-5.361E-01	1.437E+01	2.161E+01	1.580E+00	-0.025
		763.93		-1.123E+00	7.897E+00	1.441E+01	1.234E+00	-0.078

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	884.67		2.394E+00	1.960E+00	4.699E+00	5.447E-01	0.510
		937.48		1.487E+00	5.817E+00	1.097E+01	1.256E+00	0.136
		1384.27		-1.599E+00	9.922E+00	1.753E+01	1.576E+00	-0.091
SN-113		391.69	*	7.477E-01	3.281E+00	5.872E+00	4.580E-01	0.127
SN-115		484.47		3.532E+02	1.319E+03	2.382E+03	1.727E+02	0.148
		933.00	*	-1.549E+02	2.263E+02	3.801E+02	4.282E+01	-0.407
		1290.58		1.938E+02	4.911E+02	9.564E+02	7.948E+01	0.203
SN-117M		156.02		8.022E+01	3.279E+02	5.599E+02	3.709E+01	0.143
		158.56	*	-3.861E+00	8.030E+00	1.316E+01	8.457E-01	-0.293
TE-123M		159.00	*	-1.423E+00	2.349E+00	3.819E+00	2.468E-01	-0.373
SB-124		602.73		-9.613E-01	2.689E+00	4.522E+00	2.968E-01	-0.213
		645.85		-1.440E+00	3.664E+01	5.580E+01	3.858E+00	-0.026
		713.78		-5.040E+01	1.015E+02	1.668E+02	1.843E+01	-0.302
		722.79		-5.248E+00	2.162E+01	3.673E+01	2.788E+00	-0.143
		1368.16		2.705E+01	1.100E+02	2.086E+02	2.837E+01	0.130
		1690.98	*	-1.950E+00	6.448E+00	1.159E+01	8.638E-01	-0.168
SB-125		176.33		1.774E+01	2.577E+01	4.475E+01	3.905E+00	0.396
		427.89	*	-7.353E+00	5.798E+00	9.087E+00	6.932E-01	-0.809
		463.38		1.034E+01	1.702E+01	3.140E+01	2.548E+00	0.329
		600.56		9.463E+00	1.102E+01	2.058E+01	1.521E+00	0.460
	+	606.64		4.201E+01	6.945E+01	5.755E+01	4.288E+00	0.730
		635.90		-5.129E+00	1.573E+01	2.657E+01	1.919E+00	-0.193
TE-125M		109.28	*	6.456E+02	8.602E+02	1.523E+03	1.549E+02	0.424
I-126		388.63		1.685E+01	2.774E+01	5.083E+01	3.804E+00	0.331
		666.33	*	8.529E+00	2.234E+01	3.597E+01	2.220E+00	0.237
		753.82		-6.033E+01	1.450E+02	2.563E+02	2.070E+01	-0.235
SB-126		666.33		3.669E+00	9.609E+00	1.547E+01	9.547E-01	0.237
		695.00		-3.386E-01	8.775E+00	1.522E+01	1.030E+00	-0.022
		697.00		-5.019E+00	3.021E+01	5.165E+01	3.518E+00	-0.097
		720.50	*	-7.671E+00	1.533E+01	2.519E+01	1.845E+00	-0.305
SN-126		64.28		4.739E+01	7.779E+01	1.026E+02	1.516E+01	0.462
		86.94		-2.185E+00	2.463E+01	4.230E+01	1.737E+01	-0.052
		87.57	*	-4.271E+00	6.644E+00	9.782E+00	6.984E-01	-0.437
SB-127		252.40		6.447E+02	3.091E+03	5.546E+03	2.389E+03	0.116
		411.60		-2.374E+03	7.541E+03	1.297E+04	2.418E+03	-0.183
		444.90		-2.368E+03	6.019E+03	1.025E+04	1.642E+03	-0.231
		473.00		5.722E+01	9.363E+02	1.669E+03	2.711E+02	0.034
		543.30		-2.991E+03	9.701E+03	1.653E+04	2.875E+03	-0.181
		603.50		-2.606E+03	7.546E+03	1.094E+04	1.709E+03	-0.238
		685.70	*	-5.063E+02	7.392E+02	1.184E+03	1.746E+02	-0.428
		698.50		8.496E+02	7.894E+03	1.395E+04	2.579E+03	0.061
		783.70		1.160E+03	1.745E+03	3.415E+03	5.675E+02	0.340
I-131		284.30		-2.182E-01	3.013E+02	5.367E+02	4.098E+01	0.000
		364.48	*	-3.434E+00	2.518E+01	3.876E+01	3.129E+00	-0.089
		636.97		-1.798E+01	2.626E+02	4.568E+02	3.242E+01	-0.039
BA-133		79.62		-1.118E+01	1.015E+02	1.749E+02	2.517E+01	-0.064
		81.00		4.066E+00	7.370E+00	1.312E+01	1.978E+00	0.310
		276.40		-4.571E-01	2.721E+01	4.274E+01	5.762E+00	-0.011
		302.85		-4.340E+00	9.972E+00	1.719E+01	2.121E+00	-0.252

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	356.02	*	7.103E+00	9.366E+00	4.900E+00	6.083E-01	1.450
		383.85		-1.177E+01	1.924E+01	3.240E+01	3.838E+00	-0.363
CS-134		563.23		-3.998E+00	2.314E+01	3.973E+01	2.756E+00	-0.101
		569.32		1.798E+00	1.236E+01	2.186E+01	1.517E+00	0.082
		604.70		-7.691E-01	2.138E+00	3.099E+00	2.038E-01	-0.248
		795.84	*	8.586E-01	1.947E+00	3.777E+00	3.447E-01	0.227
		801.93		1.082E+01	1.950E+01	3.812E+01	3.535E+00	0.284
		1365.15		2.272E+01	7.036E+01	1.340E+02	1.234E+01	0.169
CS-135		268.24	*	3.958E+00	1.059E+01	1.924E+01	1.626E+00	0.206
CS-136	+	66.88		3.015E+02	2.353E+02	2.208E+02	3.293E+01	1.365
		86.36		1.268E+02	1.513E+02	2.714E+02	3.231E+01	0.467
		153.25		1.008E+01	9.739E+01	1.651E+02	1.338E+01	0.061
		163.92		-2.299E+01	1.552E+02	2.592E+02	1.929E+01	-0.089
		176.60		-7.671E-01	5.674E+01	9.498E+01	6.337E+00	-0.008
		273.65		-1.879E+01	5.524E+01	9.652E+01	7.314E+00	-0.195
		340.55		5.225E+00	1.516E+01	2.748E+01	2.088E+00	0.190
		818.51		-2.510E+00	7.139E+00	1.269E+01	1.226E+00	-0.198
		1048.07	*	-1.916E+00	1.036E+01	1.854E+01	1.800E+00	-0.103
		1235.36		2.773E+01	4.596E+01	8.986E+01	9.966E+00	0.309
CE-139		165.85	*	3.272E-01	2.343E+00	3.977E+00	2.332E-01	0.082
BA-140		162.67		1.879E+01	1.115E+02	1.895E+02	1.289E+01	0.099
		304.87		-3.210E+00	1.673E+02	2.971E+02	8.197E+01	-0.011
	+	423.73		1.720E+02	2.608E+02	3.495E+02	1.123E+02	0.492
		537.31	*	-9.083E+00	3.006E+01	5.114E+01	1.675E+01	-0.178
CE-141		145.44	*	-4.408E+00	6.293E+00	1.021E+01	7.799E-01	-0.432
CE-144		133.51	*	1.687E+00	1.546E+01	2.644E+01	4.091E+00	0.064
PM-144		476.78		5.394E-01	3.969E+00	7.116E+00	5.856E-01	0.076
		618.01		-8.386E-01	1.822E+00	3.038E+00	2.056E-01	-0.276
		696.49	*	-5.307E-01	1.962E+00	3.315E+00	2.259E-01	-0.160
PM-146		453.88	*	7.378E-01	2.849E+00	5.111E+00	4.979E-01	0.144
		633.25		7.027E+01	7.927E+01	1.449E+02	5.348E+01	0.485
	+	735.93		8.269E+00	8.757E+00	1.566E+01	4.438E+00	0.528
		747.24		-3.260E+00	4.528E+00	7.700E+00	1.049E+00	-0.423
ND-147	+	91.11		1.021E+02	1.006E+02	7.101E+01	5.747E+00	1.438
		531.02	*	3.251E+01	7.722E+01	1.404E+02	1.979E+01	0.232
PM-147		121.30	*	1.435E+06	4.284E+06	7.414E+06	7.042E+05	0.194
EU-152		121.78		3.473E-01	5.929E+00	1.012E+01	1.087E+00	0.034
		344.31	*	-4.766E+00	6.079E+00	1.017E+01	8.033E-01	-0.469
		963.37		-1.198E+01	1.399E+01	2.287E+01	2.472E+00	-0.524
GD-153		69.67		-1.525E+02	1.748E+02	2.549E+02	1.888E+01	-0.598
		83.37		-6.156E+02	1.159E+03	1.947E+03	1.375E+02	-0.316
		97.43	*	-2.519E+00	6.168E+00	1.038E+01	7.844E-01	-0.243
		103.18		-3.831E+00	8.885E+00	1.487E+01	1.178E+00	-0.258
EU-154		123.07		6.888E-01	4.172E+00	7.155E+00	8.601E-01	0.096
		247.93		1.297E+01	2.583E+01	4.723E+01	4.756E+00	0.275
		591.76		5.935E+00	4.047E+01	6.337E+01	6.525E+00	0.094
		723.30		-4.084E+00	9.233E+00	1.526E+01	1.286E+00	-0.268
		756.86		2.290E+01	3.907E+01	7.616E+01	8.866E+00	0.301
		873.20		-1.577E+01	1.504E+01	2.389E+01	3.363E+00	-0.660

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		996.30		7.444E+00	1.941E+01	3.317E+01	6.178E+00	0.224
	+	1004.76		1.160E+01	1.010E+01	1.230E+01	1.574E+00	0.943
		1274.51	*	1.461E+00	6.176E+00	1.153E+01	1.257E+00	0.127
EU-155		86.54		1.129E+00	7.320E+00	1.273E+01	9.195E-01	0.089
		105.31	*	3.655E+00	8.675E+00	1.517E+01	1.242E+00	0.241
TB-160		86.79		9.343E-02	2.168E+01	3.744E+01	2.666E+00	0.002
		298.57		3.621E+00	8.773E+00	1.589E+01	1.118E+00	0.228
		879.36	*	3.773E+00	9.107E+00	1.724E+01	1.937E+00	0.219
		962.29		-3.031E+00	2.829E+01	5.102E+01	5.524E+00	-0.059
		966.15		-7.503E+00	1.165E+01	1.960E+01	2.110E+00	-0.383
		1177.93		-3.420E+00	1.672E+01	2.989E+01	2.012E+00	-0.114
HF-181		56.28		1.130E+02	1.929E+02	3.177E+02	2.980E+01	0.356
		57.53		2.460E+01	8.637E+01	1.544E+02	1.391E+01	0.159
	+	65.20		2.177E+02	1.676E+02	2.124E+02	1.654E+01	1.025
		133.02		-1.044E+00	5.879E+00	9.897E+00	8.409E-01	-0.106
		136.25		3.396E+00	5.409E+01	8.229E+01	6.758E+00	0.041
		345.85		-5.772E+00	1.511E+01	2.609E+01	1.907E+00	-0.221
		482.03	*	-2.403E+00	3.174E+00	5.203E+00	3.778E-01	-0.462
TA-182	+	67.75		2.433E+01	1.873E+01	1.924E+01	1.453E+00	1.265
		100.10		1.706E+00	1.484E+01	2.568E+01	1.981E+00	0.066
		222.10		-1.483E+01	2.528E+01	4.050E+01	2.589E+00	-0.366
		1121.28		2.352E+00	7.247E+00	1.362E+01	1.070E+00	0.173
		1189.05		1.366E+01	1.529E+01	3.071E+01	2.114E+00	0.445
		1221.42	*	3.299E+00	1.016E+01	1.700E+01	1.246E+00	0.194
		1230.97		4.775E+00	2.067E+01	3.892E+01	2.904E+00	0.123
IR-192		295.96		2.046E+00	8.128E+00	1.460E+01	1.036E+00	0.140
		308.46		-1.417E+00	7.178E+00	1.261E+01	9.023E-01	-0.112
		316.51	*	2.800E+00	2.666E+00	5.026E+00	3.607E-01	0.557
		468.07		-2.129E+00	4.354E+00	7.354E+00	5.910E-01	-0.290
		604.41		-7.875E+00	3.249E+01	4.793E+01	5.632E+00	-0.164
		612.46		-1.041E+01	4.971E+01	7.365E+01	5.975E+00	-0.141
BI-207		569.67		1.952E-02	1.900E+00	3.320E+00	2.255E-01	0.006
		897.83		-1.646E+02	1.416E+03	2.217E+03	2.603E+02	-0.074
		1063.62	*	-6.640E-01	2.460E+00	4.361E+00	3.947E-01	-0.152
		1442.20		-2.339E+02	1.197E+03	2.150E+03	1.830E+02	-0.109
		1770.23		-3.027E+01	3.047E+01	4.804E+01	3.087E+00	-0.630
TL-208		75.00		-6.406E+01	9.357E+01	1.560E+02	1.762E+01	-0.411
	+	277.35		7.712E+00	4.922E+01	4.953E+01	5.542E+00	0.156
		510.84		8.345E+01	1.809E+01	3.262E+01	3.578E+00	2.558
	+	583.14	*	2.210E+00	4.154E+00	4.664E+00	3.489E-01	0.474
		763.30		-4.869E+01	1.036E+02	1.817E+02	2.500E+01	-0.268
		860.37		9.553E+00	1.608E+01	2.817E+01	3.167E+00	0.339
		1093.90		1.111E+02	5.510E+02	1.030E+03	2.390E+02	0.108
BI-210		46.50	*	1.630E+02	1.094E+03	1.756E+03	1.996E+02	0.093
PB-210		46.50	*	1.630E+02	1.094E+03	1.756E+03	1.996E+02	0.093
BI-211		351.07	*	1.651E+01	1.580E+01	2.672E+01	2.096E+00	0.618
PB-211		404.84	*	1.939E+01	5.953E+01	1.056E+02	6.602E+01	0.184
		427.08		-1.701E+01	1.214E+02	2.120E+02	1.314E+02	-0.080
		831.96		3.920E+01	6.395E+01	1.164E+02	7.321E+01	0.337

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BI-212		727.18	*	1.515E+01	1.534E+01	3.061E+01	2.767E+00	0.495
PB-212		74.80		-1.924E+01	3.030E+01	5.067E+01	5.962E+00	-0.380
		87.30		-1.122E+01	3.136E+01	4.719E+01	5.797E+00	-0.238
		115.19		4.303E+01	2.851E+02	4.907E+02	4.367E+01	0.088
	+	238.63	*	1.048E+01	1.031E+01	8.546E+00	6.784E-01	1.226
		300.09		3.895E+01	5.392E+01	9.932E+01	9.106E+00	0.392
BI-214	+	609.31	*	4.469E+00	7.390E+00	8.467E+00	7.047E-01	0.528
		768.36		1.017E+01	3.805E+01	6.363E+01	6.560E+00	0.160
		934.06		1.824E+01	5.946E+01	1.122E+02	1.443E+01	0.163
		1120.29		1.142E+01	1.365E+01	2.717E+01	2.796E+00	0.420
		1238.11		2.834E+00	3.485E+01	6.413E+01	6.082E+00	0.044
	+	1377.67		2.329E+01	5.222E+01	9.672E+01	1.046E+01	0.241
PB-214		74.81		-3.233E+01	5.072E+01	8.489E+01	8.738E+00	-0.381
		77.11		-8.668E+00	2.688E+01	4.580E+01	4.766E+00	-0.189
		87.30		-1.979E+01	5.533E+01	8.327E+01	9.027E+00	-0.238
		241.98		-9.129E+00	2.709E+01	3.871E+01	3.345E+00	-0.236
		295.21		4.364E+00	8.818E+00	1.613E+01	1.515E+00	0.271
		351.92	*	4.814E+00	5.574E+00	9.280E+00	8.746E-01	0.519
RN-219		271.23		1.829E+00	1.575E+01	2.825E+01	2.507E+00	0.065
		401.81	*	-6.942E+00	2.473E+01	4.284E+01	6.171E+00	-0.162
RA-223		122.32		-1.845E+01	1.419E+02	2.397E+02	2.427E+01	-0.077
		144.24		2.861E+01	5.150E+01	8.948E+01	7.784E+00	0.320
		154.21		2.754E-01	3.016E+01	5.087E+01	3.982E+00	0.005
		269.46		1.041E+01	1.218E+01	2.273E+01	1.601E+00	0.458
		323.87	*	-1.650E+01	4.370E+01	7.548E+01	1.287E+01	-0.219
		338.28		4.077E+01	6.188E+01	1.142E+02	1.303E+01	0.357
		445.03		-5.301E+01	1.433E+02	2.448E+02	2.753E+01	-0.217
RA-224		240.98	*	7.115E+00	4.833E+01	8.091E+01	5.318E+00	0.088
RA-226		295.21		4.364E+00	8.818E+00	1.613E+01	1.515E+00	0.271
		351.92		4.814E+00	5.567E+00	9.280E+00	6.832E-01	0.519
	+	609.31	*	4.469E+00	7.390E+00	8.467E+00	7.047E-01	0.528
AC-227		79.80		-6.333E+00	1.308E+02	2.260E+02	4.794E+01	-0.028
		236.00		4.140E+00	1.896E+01	2.840E+01	3.115E+00	0.146
		256.20	*	-5.657E+00	2.744E+01	4.832E+01	7.019E+00	-0.117
		286.10		2.530E+01	1.074E+02	1.936E+02	2.380E+01	0.131
		299.80		4.377E+01	9.836E+01	1.784E+02	3.033E+01	0.245
		304.40		-7.489E+00	1.274E+02	2.255E+02	4.057E+01	-0.033
		329.70		-7.584E+00	5.969E+01	1.050E+02	1.398E+01	-0.072
		334.20		-7.268E+01	1.468E+02	2.506E+02	4.794E+01	-0.290
TH-227		79.80		-6.222E+00	1.285E+02	2.221E+02	4.710E+01	-0.028
	+	94.00		3.523E+02	3.540E+02	2.256E+02	4.810E+01	1.561
		236.00		4.073E+00	1.865E+01	2.793E+01	2.664E+00	0.146
		256.20	*	-5.563E+00	2.699E+01	4.752E+01	8.188E+00	-0.117
		286.10		2.489E+01	1.085E+02	1.905E+02	1.910E+02	0.131
		299.80		4.295E+01	9.652E+01	1.751E+02	2.936E+01	0.245
		304.40		-7.360E+00	1.252E+02	2.216E+02	3.937E+01	-0.033
		329.70		-7.461E+00	5.873E+01	1.033E+02	1.362E+01	-0.072
		334.20		-7.124E+01	1.438E+02	2.457E+02	4.629E+01	-0.290
AC-228		209.25		1.491E+01	3.950E+01	6.570E+01	4.201E+01	0.227

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		338.32		1.008E+01	1.549E+01	2.766E+01	1.134E+01	0.364
		463.01		1.700E+01	4.069E+01	7.356E+01	1.757E+01	0.231
		794.95		1.792E+01	3.709E+01	7.149E+01	1.684E+01	0.251
		911.21	*	1.019E+01	7.131E+00	1.462E+01	1.994E+00	0.697
		964.77		-5.770E+01	4.340E+01	6.217E+01	1.584E+01	-0.928
		969.11		2.364E+01	1.423E+01	2.758E+01	6.673E+00	0.857
RA-228		209.25		1.491E+01	3.950E+01	6.570E+01	4.201E+01	0.227
		338.32		1.008E+01	1.549E+01	2.766E+01	1.134E+01	0.364
		463.01		1.700E+01	4.069E+01	7.356E+01	1.757E+01	0.231
		794.95		1.792E+01	3.709E+01	7.149E+01	1.684E+01	0.251
		911.21	*	1.019E+01	7.131E+00	1.462E+01	1.994E+00	0.697
		964.77		-5.770E+01	4.340E+01	6.217E+01	1.584E+01	-0.928
		969.11		2.364E+01	1.423E+01	2.758E+01	6.673E+00	0.857
TH-229		85.43		8.233E+00	1.365E+01	2.431E+01	1.724E+00	0.339
		88.47		1.747E+00	8.568E+00	1.344E+01	9.630E-01	0.130
		100.00		1.976E+00	1.430E+01	2.477E+01	1.909E+00	0.080
		193.63	*	1.383E+01	3.759E+01	6.424E+01	3.923E+00	0.215
		210.97		2.474E+01	5.134E+01	8.843E+01	5.554E+00	0.280
TH-230		295.21		4.364E+00	8.818E+00	1.613E+01	1.515E+00	0.271
		351.92		4.814E+00	5.566E+00	9.280E+00	6.832E-01	0.519
	+	609.31	*	4.469E+00	7.390E+00	8.467E+00	7.047E-01	0.528
PA-231		283.67	*	-7.228E+01	1.057E+02	1.795E+02	2.565E+01	-0.403
		301.29		5.135E+00	3.844E+01	6.869E+01	7.691E+00	0.075
		330.00		-1.671E+01	1.305E+02	2.294E+02	7.251E+01	-0.073
TH-231		84.21		2.999E+00	3.630E+01	6.302E+01	1.081E+01	0.048
		236.00		4.130E+00	1.892E+01	2.833E+01	3.108E+00	0.146
		256.20		-5.644E+00	2.737E+01	4.820E+01	7.002E+00	-0.117
		269.46	*	1.041E+01	1.218E+01	2.273E+01	1.846E+00	0.458
		271.23		1.829E+00	1.575E+01	2.825E+01	2.876E+00	0.065
		283.67		-7.228E+01	1.057E+02	1.795E+02	2.565E+01	-0.403
		301.29		5.135E+00	3.844E+01	6.869E+01	6.420E+00	0.075
		329.85		5.298E-01	4.035E+01	7.169E+01	1.023E+01	0.007
		351.07		1.651E+01	1.580E+01	2.672E+01	2.096E+00	0.618
		401.81		-6.942E+00	2.473E+01	4.284E+01	5.091E+00	-0.162
TH-232	+	238.59	*	1.019E+01	1.003E+01	8.312E+00	6.598E-01	1.226
		911.20		1.011E+01	7.068E+00	1.449E+01	1.976E+00	0.698
		964.40		-5.063E+01	4.217E+01	6.246E+01	1.591E+01	-0.811
		969.11		2.342E+01	1.410E+01	2.733E+01	6.612E+00	0.857
PA-233		75.28		-1.009E+02	2.415E+02	4.091E+02	5.959E+01	-0.247
		86.59		1.467E+01	1.181E+02	2.051E+02	5.411E+01	0.072
		300.12		2.012E+01	2.723E+01	5.003E+01	7.015E+00	0.402
		311.98	*	1.629E+00	4.262E+00	7.765E+00	5.761E-01	0.210
		340.50		1.357E+01	3.787E+01	6.850E+01	1.602E+01	0.198
		398.62		-1.384E+01	1.268E+02	2.228E+02	5.858E+01	-0.062
		415.76		5.469E+01	1.027E+02	1.881E+02	3.972E+01	0.291
PA-234	+	63.00		6.421E+01	3.327E+02	3.018E+02	4.582E+01	0.213
		94.67		1.873E+01	1.378E+01	2.293E+01	2.659E+00	0.817
		98.44		-3.657E+00	7.230E+00	1.160E+01	6.452E+00	-0.315
		99.70		8.089E+00	3.662E+01	6.376E+01	4.903E+00	0.127

Sample ID : G145782003 Acquisition date : 13-OCT-2005 07:44:52

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		111.00		-7.828E-01	1.438E+01	2.453E+01	2.948E+00	-0.032
		131.20		-4.402E+00	7.583E+00	1.246E+01	1.080E+00	-0.353
		152.70		2.600E+00	2.449E+01	4.154E+01	6.745E+00	0.063
	+	186.00		7.894E+01	1.453E+02	1.427E+02	4.366E+01	0.553
		226.40		2.912E+00	2.792E+01	4.692E+01	5.580E+00	0.062
		227.20		-5.089E+00	3.074E+01	5.068E+01	3.264E+00	-0.100
		248.90		-1.800E+01	6.194E+01	1.084E+02	2.432E+01	-0.166
		293.70		1.498E+00	4.313E+01	7.677E+01	1.271E+01	0.020
		369.80		1.597E+01	5.429E+01	9.826E+01	2.096E+01	0.163
		568.70		3.817E+01	6.124E+01	1.128E+02	7.668E+00	0.338
		569.50		1.620E+00	1.683E+01	2.963E+01	2.013E+00	0.055
		574.00		3.023E+01	8.528E+01	1.549E+02	1.047E+01	0.195
		699.00		6.873E+00	4.479E+01	6.955E+01	1.276E+01	0.099
		706.10		-1.537E+01	7.117E+01	1.036E+02	4.589E+01	-0.148
	+	733.00		2.048E+01	2.137E+01	3.746E+01	8.174E+00	0.547
		742.81		2.266E+01	7.429E+01	1.378E+02	9.251E+01	0.164
		796.30		-3.930E+00	4.181E+01	7.665E+01	2.085E+01	-0.051
		805.80		-1.725E+01	5.276E+01	9.320E+01	2.875E+01	-0.185
		819.60		1.137E+01	6.063E+01	1.144E+02	4.379E+01	0.099
		826.30		-3.318E+01	4.369E+01	6.882E+01	3.096E+01	-0.482
		831.60		1.698E+01	3.145E+01	6.041E+01	1.828E+01	0.281
		876.40		5.164E+00	4.303E+01	7.972E+01	8.215E+01	0.065
		880.51		1.273E+00	1.823E+01	2.920E+01	3.290E+00	0.044
	+	883.24		1.341E+01	1.415E+01	3.051E+01	2.063E+01	0.440
		899.00		-9.560E+00	5.179E+01	7.967E+01	3.540E+01	-0.120
		925.00		-1.611E+01	6.037E+01	1.074E+02	1.223E+01	-0.150
		926.50		5.548E+00	8.972E+00	1.742E+01	4.588E+00	0.318
		946.00	*	2.561E+00	1.190E+01	2.312E+01	4.626E+00	0.111
		949.00		-6.442E+00	1.676E+01	2.988E+01	3.296E+00	-0.216
		980.50		-1.107E+01	3.763E+01	6.651E+01	7.008E+00	-0.167
		1394.10		-2.700E+01	6.500E+01	1.068E+02	6.951E+01	-0.253
U-234	+	67.67		2.332E+03	1.815E+03	1.852E+03	2.512E+02	1.259
		241.98		-9.141E+00	2.712E+01	3.876E+01	3.352E+00	-0.236
		295.21	*	4.364E+00	8.818E+00	1.613E+01	1.515E+00	0.271
		351.92		4.814E+00	5.574E+00	9.280E+00	8.746E-01	0.519
U-235		89.95		3.778E+01	8.600E+01	1.357E+02	4.137E+01	0.279
	+	93.35		1.096E+02	1.118E+02	7.369E+01	2.038E+01	1.488
		105.00		3.698E+01	8.476E+01	1.473E+02	4.372E+01	0.251
		143.76	*	7.084E+00	1.624E+01	2.797E+01	4.761E+00	0.253
		163.33		8.337E+00	3.456E+01	5.900E+01	1.066E+01	0.141
	+	185.71		2.924E+00	5.309E+00	5.325E+00	3.211E-01	0.549
		205.31		7.154E+00	3.397E+01	5.751E+01	9.873E+00	0.124
NP-237		86.48	*	6.683E+00	1.769E+01	3.104E+01	6.775E+00	0.215
		95.87		-1.934E+01	7.869E+01	1.189E+02	2.884E+01	-0.163
NP-239		99.55		2.235E+00	1.195E+01	2.077E+01	1.596E+00	0.108
		117.00	*	-7.553E+00	1.522E+01	2.524E+01	2.289E+00	-0.299
		209.75		3.675E+01	5.204E+01	9.076E+01	5.689E+00	0.405
		228.18		-1.131E+01	1.636E+01	2.595E+01	1.674E+00	-0.436
	+	277.60		3.618E+00	2.309E+01	2.025E+01	1.394E+00	0.179

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		334.31		-6.971E+01	8.298E+01	1.385E+02	1.004E+01	-0.503
AM-241		59.54	*	-1.476E+01	2.175E+01	3.242E+01	2.952E+00	-0.455
AM-242		99.55		5.218E+01	2.790E+02	4.849E+02	3.725E+01	0.108
		103.70	*	-2.056E+01	1.769E+02	3.014E+02	2.398E+01	-0.068
CM-247	+	278.00		1.500E+01	9.575E+01	8.348E+01	5.750E+00	0.180
		287.40		6.167E+01	8.528E+01	1.578E+02	1.098E+01	0.391
		402.60	*	-8.835E-01	2.243E+00	3.847E+00	2.879E-01	-0.230
CF-249		252.85		1.120E+01	6.172E+01	1.111E+02	7.425E+00	0.101
		333.44		-3.449E-01	1.065E+01	1.887E+01	1.368E+00	-0.018
		387.95	*	9.029E-01	2.702E+00	4.875E+00	3.647E-01	0.185
CF-251		176.00	*	1.189E+01	9.664E+00	1.727E+01	1.026E+00	0.689
		227.00		-4.518E+00	2.731E+01	4.502E+01	2.899E+00	-0.100
		285.00		-9.032E+00	1.208E+02	2.139E+02	1.485E+01	-0.042
ANH-511		511.00	*	1.746E+01	3.503E+00	6.845E+00	4.880E-01	2.551

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145782003    *
* Acquisition date : 13-OCT-2005 07:44:52 Detector SN#    : 1922864     *
* Detector ID      : GAMMA16              Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.04     Half life ratio :  8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 15-SEP-2005 13:45:00 Nuclide Library :             *
* Sample ID        : G145782003           Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME : 15-JUL-2005 19:16:33 MS Isotope      :             *
* MSD DPM          :    0.000            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	7.551E+00	4.045E+01	3.498E+01	0.000E+00
Y-91	6.336E+00	3.922E+00	4.479E+00	0.000E+00
BA-137M	2.900E+00	4.984E+00	3.289E+00	0.000E+00
CS-137	3.066E+00	5.269E+00	3.477E+00	0.000E+00
TM-171	5.660E+03	4.357E+03	4.185E+03	0.000E+00
HG-203	9.982E-01	6.371E+00	5.488E+00	0.000E+00
TH-228	1.048E+01	1.031E+01	6.997E+00	0.000E+00
PA-234M	1.005E+02	2.783E+02	4.379E+02	0.000E+00
TH-234	5.509E+01	2.855E+02	2.543E+02	0.000E+00
U-238	5.509E+01	2.855E+02	2.543E+02	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	
BE-7	5.730E+00		2.227E+01	4.027E+01	0.000E+00 NOT IDENT.
NA-22	5.328E-01		2.226E+00	4.156E+00	0.000E+00 NOT IDENT.
NA-24	0.000E+00		4.996E+13	0.000E+00	0.000E+00 SHORT HLIF
AL-26	5.219E-01		1.989E+00	3.951E+00	0.000E+00 NOT IDENT.
SC-46	3.802E+00		3.091E+00	4.085E+00	0.000E+00 FAIL ABUN
V-48	-4.097E+00		6.241E+00	1.049E+01	0.000E+00 NOT IDENT.
CR-51	-1.371E+01		3.522E+01	6.087E+01	0.000E+00 NOT IDENT.
MN-54	8.286E-01		1.836E+00	3.543E+00	0.000E+00 NOT IDENT.
CO-56	2.539E-01		2.568E+00	4.716E+00	0.000E+00 NOT IDENT.
MN-56	0.000E+00		1.011E+42	0.000E+00	0.000E+00 SHORT HLIF
CO-57	-4.185E-01		2.114E+00	3.559E+00	0.000E+00 NOT IDENT.
CO-58	8.986E-01		2.135E+00	4.138E+00	0.000E+00 NOT IDENT.
FE-59	2.061E+00		5.253E+00	1.008E+01	0.000E+00 NOT IDENT.
CO-60	1.423E+00		2.070E+00	4.130E+00	0.000E+00 FAIL ABUN
ZN-65	-3.531E+00		4.369E+00	7.099E+00	0.000E+00 NOT IDENT.
SE-75	-9.973E-01		3.321E+00	5.814E+00	0.000E+00 FAIL ABUN
KR-85	-2.393E+03		7.194E+02	9.507E+02	0.000E+00 NOT IDENT.

SR-85	-1.402E+01	4.214E+00	5.569E+00	0.000E+00 NOT IDENT.
Y-88	2.948E+00	2.672E+00	5.768E+00	0.000E+00 NOT IDENT.
NB-94	8.074E-01	1.872E+00	3.273E+00	0.000E+00 FAIL ABUN
NB-95	1.137E+00	2.872E+00	5.525E+00	0.000E+00 NOT IDENT.
NB-95M	-7.699E+02	1.848E+03	2.621E+03	0.000E+00 NOT IDENT.
ZR-95	2.168E+00	4.075E+00	7.922E+00	0.000E+00 NOT IDENT.
MO-99	0.000E+00	3.649E+03	0.000E+00	0.000E+00 SHORT HLIF
TC-99M	0.000E+00	9.113E+33	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-2.409E+00	3.219E+00	5.251E+00	0.000E+00 FAIL ABUN
RH-106	3.299E+00	1.756E+01	3.155E+01	0.000E+00 NOT IDENT.
RU-106	-6.093E+00	1.845E+01	3.119E+01	0.000E+00 NOT IDENT.
AG-108M	6.758E-01	2.114E+00	3.819E+00	0.000E+00 NOT IDENT.
CD-109	-2.291E+01	6.590E+01	9.927E+01	0.000E+00 NOT IDENT.
AG-110M	1.675E+00	2.315E+00	3.888E+00	0.000E+00 FAIL ABUN
SN-113	7.477E-01	3.281E+00	5.872E+00	0.000E+00 NOT IDENT.
CD-115	0.000E+00	3.364E+04	0.000E+00	0.000E+00 SHORT HLIF
SN-115	-1.549E+02	2.263E+02	3.801E+02	0.000E+00 NOT IDENT.
SN-117M	-3.861E+00	8.030E+00	1.316E+01	0.000E+00 NOT IDENT.
TE-123M	-1.423E+00	2.349E+00	3.819E+00	0.000E+00 NOT IDENT.
SB-124	-1.950E+00	6.448E+00	1.159E+01	0.000E+00 NOT IDENT.
SB-125	-7.353E+00	5.798E+00	9.087E+00	0.000E+00 FAIL ABUN
TE-125M	6.456E+02	8.602E+02	1.523E+03	0.000E+00 NOT IDENT.
I-126	8.529E+00	2.234E+01	3.597E+01	0.000E+00 NOT IDENT.
SB-126	-7.671E+00	1.533E+01	2.519E+01	0.000E+00 NOT IDENT.
SN-126	-4.271E+00	6.644E+00	9.782E+00	0.000E+00 NOT IDENT.
SB-127	-5.063E+02	7.392E+02	1.184E+03	0.000E+00 NOT IDENT.
I-131	-3.434E+00	2.518E+01	3.876E+01	0.000E+00 NOT IDENT.
I-132	0.000E+00	5.464E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	0.000E+00	7.444E+02	0.000E+00	0.000E+00 SHORT HLIF
BA-133	0.000E+00	9.366E+00	4.900E+00	0.000E+00 FAIL ABUN
I-133	0.000E+00	9.315E+09	0.000E+00	0.000E+00 SHORT HLIF
CS-134	8.586E-01	1.947E+00	3.777E+00	0.000E+00 NOT IDENT.
CS-135	3.958E+00	1.059E+01	1.924E+01	0.000E+00 NOT IDENT.
I-135	0.000E+00	1.706E+31	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-1.916E+00	1.036E+01	1.854E+01	0.000E+00 FAIL ABUN
CE-139	3.272E-01	2.343E+00	3.977E+00	0.000E+00 NOT IDENT.
BA-140	-9.083E+00	3.006E+01	5.114E+01	0.000E+00 FAIL ABUN
LA-140	0.000E+00	1.963E+05	0.000E+00	0.000E+00 SHORT HLIF
CE-141	-4.408E+00	6.293E+00	1.021E+01	0.000E+00 NOT IDENT.
CE-143	0.000E+00	5.107E+06	0.000E+00	0.000E+00 SHORT HLIF
CE-144	1.687E+00	1.546E+01	2.644E+01	0.000E+00 NOT IDENT.
PM-144	-5.307E-01	1.962E+00	3.315E+00	0.000E+00 NOT IDENT.
PR-144	0.000E+00	3.697E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	7.378E-01	2.849E+00	5.111E+00	0.000E+00 FAIL ABUN
ND-147	3.251E+01	7.722E+01	1.404E+02	0.000E+00 FAIL ABUN
PM-147	1.435E+06	4.284E+06	7.414E+06	0.000E+00 NOT IDENT.
PM-149	0.000E+00	3.359E+05	0.000E+00	0.000E+00 SHORT HLIF
EU-152	-4.766E+00	6.079E+00	1.017E+01	0.000E+00 NOT IDENT.
GD-153	-2.519E+00	6.168E+00	1.038E+01	0.000E+00 NOT IDENT.
EU-154	1.461E+00	6.176E+00	1.153E+01	0.000E+00 FAIL ABUN
EU-155	3.655E+00	8.675E+00	1.517E+01	0.000E+00 NOT IDENT.
TB-160	3.773E+00	9.107E+00	1.724E+01	0.000E+00 NOT IDENT.
HF-181	-2.403E+00	3.174E+00	5.203E+00	0.000E+00 FAIL ABUN
TA-182	3.299E+00	1.016E+01	1.700E+01	0.000E+00 FAIL ABUN
IR-192	2.800E+00	2.666E+00	5.026E+00	0.000E+00 NOT IDENT.
BI-207	-6.640E-01	2.460E+00	4.361E+00	0.000E+00 NOT IDENT.
TL-208	2.210E+00	4.154E+00	4.664E+00	0.000E+00 FAIL ABUN
BI-210	1.630E+02	1.094E+03	1.756E+03	0.000E+00 NOT IDENT.
PB-210	1.630E+02	1.094E+03	1.756E+03	0.000E+00 NOT IDENT.
BI-211	1.651E+01	1.580E+01	2.672E+01	0.000E+00 NOT IDENT.
PB-211	1.939E+01	5.953E+01	1.056E+02	0.000E+00 NOT IDENT.
BI-212	1.515E+01	1.534E+01	3.061E+01	0.000E+00 NOT IDENT.
PB-212	0.000E+00	1.031E+01	8.546E+00	0.000E+00 FAIL ABUN
BI-214	4.469E+00	7.390E+00	8.467E+00	0.000E+00 FAIL ABUN
PB-214	4.814E+00	5.574E+00	9.280E+00	0.000E+00 NOT IDENT.
RN-219	-6.942E+00	2.473E+01	4.284E+01	0.000E+00 NOT IDENT.
RA-223	-1.650E+01	4.370E+01	7.548E+01	0.000E+00 NOT IDENT.
RA-224	7.115E+00	4.833E+01	8.091E+01	0.000E+00 NOT IDENT.
RA-226	4.469E+00	7.390E+00	8.467E+00	0.000E+00 FAIL ABUN
AC-227	-5.657E+00	2.744E+01	4.832E+01	0.000E+00 NOT IDENT.
TH-227	-5.563E+00	2.699E+01	4.752E+01	0.000E+00 FAIL ABUN
AC-228	1.019E+01	7.131E+00	1.462E+01	0.000E+00 NOT IDENT.
RA-228	1.019E+01	7.131E+00	1.462E+01	0.000E+00 NOT IDENT.
TH-229	1.383E+01	3.759E+01	6.424E+01	0.000E+00 NOT IDENT.
TH-230	4.469E+00	7.390E+00	8.467E+00	0.000E+00 FAIL ABUN
PA-231	-7.228E+01	1.057E+02	1.795E+02	0.000E+00 NOT IDENT.
TH-231	1.041E+01	1.218E+01	2.273E+01	0.000E+00 NOT IDENT.
TH-232	0.000E+00	1.003E+01	8.312E+00	0.000E+00 FAIL ABUN

PA-233	1.629E+00	4.262E+00	7.765E+00	0.000E+00 NOT IDENT.
PA-234	2.561E+00	1.190E+01	2.312E+01	0.000E+00 FAIL ABUN
U-234	4.364E+00	8.818E+00	1.613E+01	0.000E+00 FAIL ABUN
U-235	7.084E+00	1.624E+01	2.797E+01	0.000E+00 FAIL ABUN
NP-237	6.683E+00	1.769E+01	3.104E+01	0.000E+00 NOT IDENT.
NP-239	-7.553E+00	1.522E+01	2.524E+01	0.000E+00 FAIL ABUN
AM-241	-1.476E+01	2.175E+01	3.242E+01	0.000E+00 NOT IDENT.
AM-242	-2.056E+01	1.769E+02	3.014E+02	0.000E+00 NOT IDENT.
CM-247	-8.835E-01	2.243E+00	3.847E+00	0.000E+00 FAIL ABUN
CF-249	9.029E-01	2.702E+00	4.875E+00	0.000E+00 NOT IDENT.
CF-251	1.189E+01	9.664E+00	1.727E+01	0.000E+00 NOT IDENT.
ANH-511	0.000E+00	3.503E+00	6.845E+00	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 11:45:14.27

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145782003.CNF;1
Sample date      : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 07:44:52
Sample ID        : G145782003           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA16              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.04  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1922864
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	52.93	55	160	2.35	104.45	101	8	3.81E-03	42.0	
2	0	62.27	69	230	1.95	123.12	119	10	4.77E-03	42.9	
3	0	66.32	78	156	1.21	131.21	128	8	5.44E-03	29.9	
4	0	92.21	232	326	1.67	182.95	176	14	1.61E-02	17.8	
5	0	139.21	53	258	1.06	276.90	274	9	3.67E-03	56.2	
6	0	185.36	132	193	1.41	369.15	365	10	9.14E-03	21.6	
7	0	198.27	82	180	1.43	394.96	391	9	5.66E-03	31.7	
8	0	238.37	146	264	3.48	475.12	468	18	1.01E-02	27.9	
9	0	278.83	59	151	2.00	556.01	551	11	4.06E-03	42.8	
10	0	356.23	64	225	10.34	710.74	699	25	4.46E-03	65.6	
11	0	421.79	17	50	1.21	841.81	838	7	1.17E-03	74.1	
12	0	510.80	328	104	2.65	1019.77	1011	19	2.28E-02	9.3	
13	0	558.21	64	39	1.26	1114.57	1109	11	4.41E-03	22.7	
14	0	583.26	52	56	1.72	1164.66	1156	15	3.59E-03	34.6	
15	0	595.09	50	49	1.90	1188.31	1183	11	3.44E-03	30.9	
16	0	608.38	43	54	0.65	1214.90	1209	12	2.98E-03	37.5	
17	0	648.61	45	50	6.36	1295.33	1288	18	3.10E-03	39.9	
18	0	661.41	59	94	1.39	1320.93	1314	15	4.08E-03	38.2	
19	0	704.08	8	28	1.73	1406.26	1401	8	5.75E-04	115.9	
20	0	734.09	18	22	2.29	1466.28	1462	8	1.25E-03	51.0	
21	0	771.98	19	26	3.13	1542.05	1538	11	1.29E-03	58.9	
22	0	862.51	5	49	2.83	1723.10	1714	14	3.47E-04	300.3	
23	5	883.69	14	10	1.54	1765.47	1763	19	9.75E-04	40.5	2.00E+00
24	5	888.62	26	15	3.06	1775.32	1763	19	1.82E-03	40.2	
25	0	901.29	20	31	5.00	1800.67	1793	18	1.39E-03	69.2	
26	0	986.67	7	15	0.92	1971.46	1970	8	4.85E-04	101.3	
27	0	1000.92	21	13	1.13	1999.96	1996	9	1.48E-03	37.7	
28	0	1005.74	20	8	2.13	2009.60	2006	8	1.39E-03	33.2	
29	0	1054.55	22	14	2.90	2107.24	2101	12	1.52E-03	41.1	
30	0	1140.04	31	15	3.42	2278.24	2270	19	2.18E-03	33.9	
31	0	1148.67	11	7	0.93	2295.50	2291	10	7.56E-04	55.7	
32	0	1172.43	10	4	1.29	2343.05	2341	5	6.70E-04	46.7	
33	0	1225.57	10	6	0.91	2449.35	2446	8	7.23E-04	50.8	
34	0	1299.12	17	8	3.84	2596.52	2590	15	1.15E-03	43.8	
35	0	1306.22	10	14	2.99	2610.72	2604	18	7.07E-04	90.4	
36	0	1377.94	9	5	1.76	2754.22	2752	6	6.30E-04	50.2	
37	0	1420.12	9	5	1.74	2838.62	2836	6	6.50E-04	48.7	
38	0	1460.30	22	25	4.30	2919.02	2913	16	1.55E-03	53.6	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1489.32	14	1	0.65	2977.09	2975	6	9.72E-04	29.7	
40	0	1506.86	19	3	2.28	3012.20	3008	11	1.31E-03	28.9	
41	0	1590.94	41	0	8.19	3180.44	3169	26	2.85E-03	15.6	
42	0	1655.60	7	2	1.26	3309.85	3307	6	4.63E-04	55.1	
43	0	1713.38	9	10	2.75	3425.49	3418	14	6.09E-04	85.2	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 11:45:19.62

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145782003.CNF;1
Sample date      : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 07:44:52
Sample ID        : G145782003           Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA16              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.04  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 1922864
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	5	10.67*	5.587E-01	7.551E+00	7.551E+00	535.72
Y-91	557.57	51	95.08*	1.112E+00	4.556E+00	6.336E+00	61.89
	1204.90	------	0.30	6.430E-01	------	Line Not Found	------
BA-137M	661.65	28	89.98*	1.002E+00	2.895E+00	2.900E+00	171.84
CS-137	661.66	28	85.12*	1.002E+00	3.061E+00	3.066E+00	171.84
TM-171	51.87	41	0.81	2.096E-01	2.284E+03	2.347E+03	121.72
	59.40	------	0.21	4.230E-01	------	Line Not Found	------
	66.72	66	0.16*	7.085E-01	5.506E+03	5.660E+03	76.98
HG-203	70.83	------	4.75	9.067E-01	------	Line Not Found	------
	72.87	------	8.00	9.957E-01	------	Line Not Found	------
	82.60	------	3.55	1.388E+00	------	Line Not Found	------
	279.20	9	77.30*	1.619E+00	6.599E-01	9.982E-01	638.19
TH-228	84.40	------	1.21	1.452E+00	------	Line Not Found	------
	238.60	85	44.60*	1.761E+00	1.019E+01	1.048E+01	98.36
	300.10	------	3.41	1.556E+00	------	Line Not Found	------
PA-234M	766.40	------	0.21	9.081E-01	------	Line Not Found	------
	1001.03	7	0.85*	7.441E-01	1.005E+02	1.005E+02	276.82
TH-234	63.29	12	3.80*	5.365E-01	5.509E+01	5.509E+01	518.25
	92.38	89	5.41	1.694E+00	9.118E+01	9.118E+01	99.74
	112.81	------	0.24	2.061E+00	------	Line Not Found	------
U-238	63.29	12	3.80*	5.365E-01	5.509E+01	5.509E+01	518.25

Flag: "*" = Keyline

Sample ID : G145782003 Acquisition date : 13-OCT-2005 07:44:52

Total number of lines in spectrum	40	
Number of unidentified lines	12	
Number of lines tentatively identified by NID	28	70.00%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	7.551E+00	7.551E+00	40.45E+00	535.72	
Y-91	58.51D	1.39	4.556E+00	6.336E+00	3.922E+00	61.89	
BA-137M	30.17Y	1.00	2.895E+00	2.900E+00	4.984E+00	171.84	
CS-137	30.17Y	1.00	3.061E+00	3.066E+00	5.269E+00	171.84	
TM-171	1.92Y	1.03	5.506E+03	5.660E+03	4.357E+03	76.98	
HG-203	46.61D	1.51	6.599E-01	9.982E-01	63.71E-01	638.19	
TH-228	1.91Y	1.03	1.019E+01	1.048E+01	1.031E+01	98.36	
PA-234M	4.47E+09Y	1.00	1.005E+02	1.005E+02	2.783E+02	276.82	
TH-234	4.47E+09Y	1.00	5.509E+01	5.509E+01	28.55E+01	518.25	
U-238	4.47E+09Y	1.00	5.509E+01	5.509E+01	28.55E+01	518.25	
			---------	---------			
	Total Activity :		5.746E+03	5.902E+03			
	Grand Total Activity :		5.746E+03	5.902E+03			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G145782003 Acquisition date : 13-OCT-2005 07:44:52

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	139.21	38	258	1.06	276.90	274	9	2.67E-03	****	2.16E+00	T
0	185.36	34	193	1.41	369.15	365	10	2.33E-03	****	1.99E+00	T
0	198.27	14	180	1.43	394.96	391	9	9.94E-04	****	1.93E+00	T
0	356.23	64	225	10.34	710.74	699	25	4.46E-03	****	1.42E+00	T
0	421.79	17	50	1.21	841.81	838	7	1.17E-03	****	1.30E+00	T
0	583.26	21	56	1.72	1164.66	1156	15	1.45E-03	****	1.08E+00	T
0	595.09	50	49	1.90	1188.31	1183	11	3.44E-03	61.9	1.07E+00	
0	608.38	23	54	0.65	1214.90	1209	12	1.62E-03	****	1.06E+00	T
0	648.61	45	50	6.36	1295.33	1288	18	3.10E-03	79.8	1.01E+00	T
0	704.08	8	28	1.73	1406.26	1401	8	5.75E-04	****	9.62E-01	T
0	734.09	18	22	2.29	1466.28	1462	8	1.25E-03	****	9.35E-01	T
0	771.98	19	26	3.13	1542.05	1538	11	1.29E-03	****	9.03E-01	T
0	862.51	5	49	2.83	1723.10	1714	14	3.47E-04	****	8.34E-01	
5	883.69	14	10	1.54	1765.47	1763	19	9.75E-04	81.0	8.19E-01	T
5	888.62	26	15	3.06	1775.32	1763	19	1.82E-03	80.5	8.15E-01	T
0	901.29	20	31	5.00	1800.67	1793	18	1.39E-03	****	8.07E-01	
0	1005.74	16	8	2.13	2009.60	2006	8	1.13E-03	86.1	7.41E-01	T
0	1054.55	22	14	2.90	2107.24	2101	12	1.52E-03	82.1	7.14E-01	
0	1140.04	31	15	3.42	2278.24	2270	19	2.18E-03	67.8	6.72E-01	
0	1148.67	7	7	0.93	2295.50	2291	10	4.60E-04	****	6.68E-01	
0	1172.43	6	4	1.29	2343.05	2341	5	4.36E-04	****	6.57E-01	T
0	1225.57	10	6	0.91	2449.35	2446	8	7.23E-04	****	6.35E-01	
0	1299.12	12	8	3.84	2596.52	2590	15	8.47E-04	****	6.07E-01	T
0	1377.94	6	5	1.76	2754.22	2752	6	4.12E-04	****	5.81E-01	T
0	1420.12	9	5	1.74	2838.62	2836	6	6.50E-04	97.4	5.69E-01	
0	1489.32	14	1	0.65	2977.09	2975	6	9.72E-04	59.3	5.52E-01	T
0	1506.86	19	3	2.28	3012.20	3008	11	1.31E-03	57.9	5.47E-01	
0	1590.94	41	0	8.19	3180.44	3169	26	2.85E-03	31.2	5.30E-01	
0	1655.60	2	2	1.26	3309.85	3307	6	1.23E-04	****	5.19E-01	
0	1713.38	9	10	2.75	3425.49	3418	14	6.09E-04	****	5.11E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 11:45:28.63

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G145782003.CNF;1     *
* Acquisition date : 13-OCT-2005 07:44:52  Detector SN#    : 1922864          *
* Detector ID      : GAMMA16               Sensitivity     : 3.00000          *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000          *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000         *
* Elapsed real time: 0 04:00:01.04         Half life ratio : 8.00000          *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 15-SEP-2005 13:45:00  Nuclide Library : EPI              *
* Sample ID        : G145782003            Analyst initials: MJH1             *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 15-JUL-2005 19:16:33.8MS Isotope      :             *
* MSD DPM          :                       MSD Isotope     :             *
* LCS DPM          :                       LCS Isotope     :             *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	7.551E+00	4.045E+01	3.498E+01	3.036E+00	0.216
Y-91	6.336E+00	3.922E+00	4.479E+00	3.077E-01	1.415
BA-137M	2.900E+00	4.984E+00	3.289E+00	1.998E-01	0.882
CS-137	3.066E+00	5.269E+00	3.477E+00	2.121E-01	0.882
TM-171	5.660E+03	4.357E+03	4.185E+03	3.198E+02	1.352
HG-203	9.982E-01	6.371E+00	5.488E+00	3.952E-01	0.182
TH-228	1.048E+01	1.031E+01	6.997E+00	5.555E-01	1.497
PA-234M	1.005E+02	2.783E+02	4.379E+02	4.967E+01	0.230
TH-234	5.509E+01	2.855E+02	2.543E+02	4.501E+01	0.217
U-238	5.509E+01	2.855E+02	2.543E+02	4.501E+01	0.217

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	5.730E+00		2.227E+01	4.027E+01	3.245E+00	0.142
NA-22	5.328E-01		2.226E+00	4.156E+00	3.362E-01	0.128

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	5.219E-01		1.989E+00	3.951E+00	2.413E-01	0.132
SC-46	3.802E+00	+	3.091E+00	4.085E+00	4.700E-01	0.931
V-48	-4.097E+00		6.241E+00	1.049E+01	1.100E+00	-0.391
CR-51	-1.371E+01		3.522E+01	6.087E+01	4.698E+00	-0.225
MN-54	8.286E-01		1.836E+00	3.543E+00	3.564E-01	0.234
CO-56	2.539E-01		2.568E+00	4.716E+00	4.888E-01	0.054
CO-57	-4.185E-01		2.114E+00	3.559E+00	3.412E-01	-0.118
CO-58	8.986E-01		2.135E+00	4.138E+00	3.918E-01	0.217
FE-59	2.061E+00		5.253E+00	1.008E+01	9.125E-01	0.204
CO-60	1.423E+00		2.070E+00	4.130E+00	3.686E-01	0.344
ZN-65	-3.531E+00		4.369E+00	7.099E+00	5.674E-01	-0.497
SE-75	-9.973E-01		3.321E+00	5.814E+00	3.973E-01	-0.172
KR-85	-2.393E+03		7.194E+02	9.507E+02	6.764E+01	-2.517
SR-85	-1.402E+01		4.214E+00	5.569E+00	3.963E-01	-2.517
Y-88	2.948E+00		2.672E+00	5.768E+00	3.397E-01	0.511
NB-94	8.074E-01	+	1.872E+00	3.273E+00	2.269E-01	0.247
NB-95	1.137E+00		2.872E+00	5.525E+00	4.620E-01	0.206
NB-95M	-7.699E+02		1.848E+03	2.621E+03	3.348E+02	-0.294
ZR-95	2.168E+00		4.075E+00	7.922E+00	7.181E-01	0.274
RU-103	-2.409E+00		3.219E+00	5.251E+00	7.006E-01	-0.459
RH-106	3.299E+00		1.756E+01	3.155E+01	2.023E+00	0.105
RU-106	-6.093E+00		1.845E+01	3.119E+01	3.759E+00	-0.195
AG-108M	6.758E-01		2.114E+00	3.819E+00	2.985E-01	0.177
CD-109	-2.291E+01		6.590E+01	9.927E+01	7.100E+00	-0.231
AG-110M	1.675E+00		2.315E+00	3.888E+00	2.515E-01	0.431
SN-113	7.477E-01		3.281E+00	5.872E+00	4.580E-01	0.127
SN-115	-1.549E+02		2.263E+02	3.801E+02	4.282E+01	-0.407
SN-117M	-3.861E+00		8.030E+00	1.316E+01	8.457E-01	-0.293
TE-123M	-1.423E+00		2.349E+00	3.819E+00	2.468E-01	-0.373
SB-124	-1.950E+00		6.448E+00	1.159E+01	8.638E-01	-0.168
SB-125	-7.353E+00		5.798E+00	9.087E+00	6.932E-01	-0.809
TE-125M	6.456E+02		8.602E+02	1.523E+03	1.549E+02	0.424
I-126	8.529E+00		2.234E+01	3.597E+01	2.220E+00	0.237
SB-126	-7.671E+00		1.533E+01	2.519E+01	1.845E+00	-0.305
SN-126	-4.271E+00		6.644E+00	9.782E+00	6.984E-01	-0.437
SB-127	-5.063E+02		7.392E+02	1.184E+03	1.746E+02	-0.428
I-131	-3.434E+00		2.518E+01	3.876E+01	3.129E+00	-0.089
BA-133	7.103E+00	+	9.366E+00	4.900E+00	6.083E-01	1.450
CS-134	8.586E-01		1.947E+00	3.777E+00	3.447E-01	0.227
CS-135	3.958E+00		1.059E+01	1.924E+01	1.626E+00	0.206
CS-136	-1.916E+00		1.036E+01	1.854E+01	1.800E+00	-0.103
CE-139	3.272E-01		2.343E+00	3.977E+00	2.332E-01	0.082
BA-140	-9.083E+00		3.006E+01	5.114E+01	1.675E+01	-0.178
CE-141	-4.408E+00		6.293E+00	1.021E+01	7.799E-01	-0.432
CE-144	1.687E+00		1.546E+01	2.644E+01	4.091E+00	0.064
PM-144	-5.307E-01		1.962E+00	3.315E+00	2.259E-01	-0.160
PM-146	7.378E-01		2.849E+00	5.111E+00	4.979E-01	0.144
ND-147	3.251E+01		7.722E+01	1.404E+02	1.979E+01	0.232

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-147	1.435E+06		4.284E+06	7.414E+06	7.042E+05	0.194
EU-152	-4.766E+00		6.079E+00	1.017E+01	8.033E-01	-0.469
GD-153	-2.519E+00		6.168E+00	1.038E+01	7.844E-01	-0.243
EU-154	1.461E+00		6.176E+00	1.153E+01	1.257E+00	0.127
EU-155	3.655E+00		8.675E+00	1.517E+01	1.242E+00	0.241
TB-160	3.773E+00		9.107E+00	1.724E+01	1.937E+00	0.219
HF-181	-2.403E+00		3.174E+00	5.203E+00	3.778E-01	-0.462
TA-182	3.299E+00		1.016E+01	1.700E+01	1.246E+00	0.194
IR-192	2.800E+00		2.666E+00	5.026E+00	3.607E-01	0.557
BI-207	-6.640E-01		2.460E+00	4.361E+00	3.947E-01	-0.152
TL-208	2.210E+00	+	4.154E+00	4.664E+00	3.489E-01	0.474
BI-210	1.630E+02		1.094E+03	1.756E+03	1.996E+02	0.093
PB-210	1.630E+02		1.094E+03	1.756E+03	1.996E+02	0.093
BI-211	1.651E+01		1.580E+01	2.672E+01	2.096E+00	0.618
PB-211	1.939E+01		5.953E+01	1.056E+02	6.602E+01	0.184
BI-212	1.515E+01		1.534E+01	3.061E+01	2.767E+00	0.495
PB-212	1.048E+01	+	1.031E+01	8.546E+00	6.784E-01	1.226
BI-214	4.469E+00	+	7.390E+00	8.467E+00	7.047E-01	0.528
PB-214	4.814E+00		5.574E+00	9.280E+00	8.746E-01	0.519
RN-219	-6.942E+00		2.473E+01	4.284E+01	6.171E+00	-0.162
RA-223	-1.650E+01		4.370E+01	7.548E+01	1.287E+01	-0.219
RA-224	7.115E+00		4.833E+01	8.091E+01	5.318E+00	0.088
RA-226	4.469E+00	+	7.390E+00	8.467E+00	7.047E-01	0.528
AC-227	-5.657E+00		2.744E+01	4.832E+01	7.019E+00	-0.117
TH-227	-5.563E+00		2.699E+01	4.752E+01	8.188E+00	-0.117
AC-228	1.019E+01		7.131E+00	1.462E+01	1.994E+00	0.697
RA-228	1.019E+01		7.131E+00	1.462E+01	1.994E+00	0.697
TH-229	1.383E+01		3.759E+01	6.424E+01	3.923E+00	0.215
TH-230	4.469E+00	+	7.390E+00	8.467E+00	7.047E-01	0.528
PA-231	-7.228E+01		1.057E+02	1.795E+02	2.565E+01	-0.403
TH-231	1.041E+01		1.218E+01	2.273E+01	1.846E+00	0.458
TH-232	1.019E+01	+	1.003E+01	8.312E+00	6.598E-01	1.226
PA-233	1.629E+00		4.262E+00	7.765E+00	5.761E-01	0.210
PA-234	2.561E+00		1.190E+01	2.312E+01	4.626E+00	0.111
U-234	4.364E+00		8.818E+00	1.613E+01	1.515E+00	0.271
U-235	7.084E+00		1.624E+01	2.797E+01	4.761E+00	0.253
NP-237	6.683E+00		1.769E+01	3.104E+01	6.775E+00	0.215
NP-239	-7.553E+00		1.522E+01	2.524E+01	2.289E+00	-0.299
AM-241	-1.476E+01		2.175E+01	3.242E+01	2.952E+00	-0.455
AM-242	-2.056E+01		1.769E+02	3.014E+02	2.398E+01	-0.068
CM-247	-8.835E-01		2.243E+00	3.847E+00	2.879E-01	-0.230
CF-249	9.029E-01		2.702E+00	4.875E+00	3.647E-01	0.185
CF-251	1.189E+01		9.664E+00	1.727E+01	1.026E+00	0.689
ANH-511	1.746E+01		3.503E+00	6.845E+00	4.880E-01	2.551

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          Environmental Physics, Inc.                  *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G145782003        *
* Acquisition date : 13-OCT-2005 07:44:52 Detector SN#    : 1922864    *
* Detector ID      : GAMMA16              Sensitivity     : 3.000      *
* Geometry         : 2L_MB                Energy tolerance: 2.000      *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000     *
* Elapsed real time:    0 04:00:01.04     Half life ratio : 8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 15-SEP-2005 13:45:00 Nuclide Library :            *
* Sample ID        : G145782003           Analyst initials: MJH1       *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000  *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 15-JUL-2005 19:16:33 MS Isotope      :            *
* MSD DPM          :    0.000             MSD Isotope     :            *
* LCS DPM          :    0.000             LCS Isotope     :            *
* LCSD DPM         :    0.000             LCSD Isotope    :            *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	7.551E+00	4.045E+01	1.537E+01	2.023E+01
Y-91	6.336E+00	3.922E+00	2.073E+00	1.961E+00
BA-137M	2.900E+00	4.984E+00	1.504E+00	2.492E+00
CS-137	3.066E+00	5.269E+00	1.590E+00	2.634E+00
TM-171	5.660E+03	4.357E+03	1.980E+03	2.178E+03
HG-203	9.982E-01	6.371E+00	2.592E+00	3.185E+00
TH-228	1.048E+01	1.031E+01	3.334E+00	5.153E+00
PA-234M	1.005E+02	2.783E+02	1.988E+02	1.391E+02
TH-234	5.509E+01	2.855E+02	1.215E+02	1.427E+02
U-238	5.509E+01	2.855E+02	1.215E+02	1.427E+02

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	5.730E+00	2.227E+01	1.870E+01	1.114E+01	NOT IDENT.
NA-22	5.328E-01	2.226E+00	1.868E+00	1.113E+00	NOT IDENT.
NA-24	1.182E+12	4.996E+13	0.000E+00	2.498E+13	SHORT HLIF
AL-26	5.219E-01	1.989E+00	1.722E+00	9.943E-01	NOT IDENT.
SC-46	3.802E+00	3.091E+00	1.847E+00	1.545E+00	FAIL ABUN
V-48	-4.097E+00	6.241E+00	4.685E+00	3.120E+00	NOT IDENT.
CR-51	-1.371E+01	3.522E+01	2.873E+01	1.761E+01	NOT IDENT.
MN-54	8.286E-01	1.836E+00	1.614E+00	9.179E-01	NOT IDENT.
CO-56	2.539E-01	2.568E+00	2.167E+00	1.284E+00	NOT IDENT.
MN-56	1.000E+41	1.011E+42	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-4.185E-01	2.114E+00	1.706E+00	1.057E+00	NOT IDENT.
CO-58	8.986E-01	2.135E+00	1.878E+00	1.067E+00	NOT IDENT.
FE-59	2.061E+00	5.253E+00	4.541E+00	2.626E+00	NOT IDENT.
CO-60	1.423E+00	2.070E+00	1.850E+00	1.035E+00	FAIL ABUN
ZN-65	-3.531E+00	4.369E+00	3.154E+00	2.185E+00	NOT IDENT.
SE-75	-9.973E-01	3.321E+00	2.759E+00	1.661E+00	FAIL ABUN
KR-85	-2.393E+03	7.194E+02	4.503E+02	3.597E+02	NOT IDENT.

SR-85	-1.402E+01	4.214E+00	2.638E+00	2.107E+00 NOT IDENT.
Y-88	2.948E+00	2.672E+00	2.578E+00	1.336E+00 NOT IDENT.
NB-94	8.074E-01	1.872E+00	1.505E+00	9.359E-01 FAIL ABUN
NB-95	1.137E+00	2.872E+00	2.521E+00	1.436E+00 NOT IDENT.
NB-95M	-7.699E+02	1.848E+03	1.251E+03	9.242E+02 NOT IDENT.
ZR-95	2.168E+00	4.075E+00	3.624E+00	2.038E+00 NOT IDENT.
MO-99	2.243E+03	3.649E+03	0.000E+00	1.825E+03 SHORT HLIF
TC-99M	5.343E+33	9.113E+33	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-2.409E+00	3.219E+00	2.430E+00	1.610E+00 FAIL ABUN
RH-106	3.299E+00	1.756E+01	1.447E+01	8.780E+00 NOT IDENT.
RU-106	-6.093E+00	1.845E+01	1.429E+01	9.224E+00 NOT IDENT.
AG-108M	6.758E-01	2.114E+00	1.788E+00	1.057E+00 NOT IDENT.
CD-109	-2.291E+01	6.590E+01	4.744E+01	3.295E+01 NOT IDENT.
AG-110M	1.675E+00	2.315E+00	1.801E+00	1.157E+00 FAIL ABUN
SN-113	7.477E-01	3.281E+00	2.766E+00	1.640E+00 NOT IDENT.
CD-115	-3.970E+03	3.364E+04	0.000E+00	1.682E+04 SHORT HLIF
SN-115	-1.549E+02	2.263E+02	1.714E+02	1.132E+02 NOT IDENT.
SN-117M	-3.861E+00	8.030E+00	6.295E+00	4.015E+00 NOT IDENT.
TE-123M	-1.423E+00	2.349E+00	1.826E+00	1.174E+00 NOT IDENT.
SB-124	-1.950E+00	6.448E+00	5.104E+00	3.224E+00 NOT IDENT.
SB-125	-7.353E+00	5.798E+00	4.203E+00	2.899E+00 FAIL ABUN
TE-125M	6.456E+02	8.602E+02	7.308E+02	4.301E+02 NOT IDENT.
I-126	8.529E+00	2.234E+01	1.659E+01	1.117E+01 NOT IDENT.
SB-126	-7.671E+00	1.533E+01	1.142E+01	7.666E+00 NOT IDENT.
SN-126	-4.271E+00	6.644E+00	4.673E+00	3.322E+00 NOT IDENT.
SB-127	-5.063E+02	7.392E+02	5.376E+02	3.696E+02 NOT IDENT.
I-131	-3.434E+00	2.518E+01	1.816E+01	1.259E+01 NOT IDENT.
I-132	-1.000E+41	5.464E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	-5.142E+02	7.444E+02	0.000E+00	3.722E+02 SHORT HLIF
BA-133	7.103E+00	9.366E+00	2.301E+00	4.683E+00 FAIL ABUN
I-133	7.393E+09	9.315E+09	0.000E+00	4.658E+09 SHORT HLIF
CS-134	8.586E-01	1.947E+00	1.717E+00	9.735E-01 NOT IDENT.
CS-135	3.958E+00	1.059E+01	9.145E+00	5.293E+00 NOT IDENT.
I-135	9.826E+30	1.706E+31	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-1.916E+00	1.036E+01	8.312E+00	5.182E+00 FAIL ABUN
CE-139	3.272E-01	2.343E+00	1.902E+00	1.171E+00 NOT IDENT.
BA-140	-9.083E+00	3.006E+01	2.356E+01	1.503E+01 FAIL ABUN
LA-140	4.872E+04	1.963E+05	0.000E+00	9.813E+04 SHORT HLIF
CE-141	-4.408E+00	6.293E+00	4.888E+00	3.147E+00 NOT IDENT.
CE-143	-2.151E+06	5.107E+06	0.000E+00	2.553E+06 SHORT HLIF
CE-144	1.687E+00	1.546E+01	1.264E+01	7.728E+00 NOT IDENT.
PM-144	-5.307E-01	1.962E+00	1.519E+00	9.810E-01 NOT IDENT.
PR-144	-1.000E+41	3.697E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	7.378E-01	2.849E+00	2.393E+00	1.424E+00 FAIL ABUN
ND-147	3.251E+01	7.722E+01	6.533E+01	3.861E+01 FAIL ABUN
PM-147	1.435E+06	4.284E+06	3.557E+06	2.142E+06 NOT IDENT.
PM-149	9.286E+04	3.359E+05	0.000E+00	1.680E+05 SHORT HLIF
EU-152	-4.766E+00	6.079E+00	4.753E+00	3.039E+00 NOT IDENT.
GD-153	-2.519E+00	6.168E+00	4.951E+00	3.084E+00 NOT IDENT.
EU-154	1.461E+00	6.176E+00	5.181E+00	3.088E+00 FAIL ABUN
EU-155	3.655E+00	8.675E+00	7.274E+00	4.337E+00 NOT IDENT.
TB-160	3.773E+00	9.107E+00	7.916E+00	4.553E+00 NOT IDENT.
HF-181	-2.403E+00	3.174E+00	2.403E+00	1.587E+00 FAIL ABUN
TA-182	3.299E+00	1.016E+01	7.633E+00	5.078E+00 FAIL ABUN
IR-192	2.800E+00	2.666E+00	2.383E+00	1.333E+00 NOT IDENT.
BI-207	-6.640E-01	2.460E+00	1.942E+00	1.230E+00 NOT IDENT.
TL-208	2.210E+00	4.154E+00	2.190E+00	2.077E+00 FAIL ABUN
BI-210	1.630E+02	1.094E+03	8.369E+02	5.468E+02 NOT IDENT.
PB-210	1.630E+02	1.094E+03	8.369E+02	5.468E+02 NOT IDENT.
BI-211	1.651E+01	1.580E+01	1.268E+01	7.900E+00 NOT IDENT.
PB-211	1.939E+01	5.953E+01	4.953E+01	2.976E+01 NOT IDENT.
BI-212	1.515E+01	1.534E+01	1.414E+01	7.670E+00 NOT IDENT.
PB-212	1.048E+01	1.031E+01	4.109E+00	5.153E+00 FAIL ABUN
BI-214	4.469E+00	7.390E+00	3.976E+00	3.695E+00 FAIL ABUN
PB-214	4.814E+00	5.574E+00	4.403E+00	2.787E+00 NOT IDENT.
RN-219	-6.942E+00	2.473E+01	1.997E+01	1.237E+01 NOT IDENT.
RA-223	-1.650E+01	4.370E+01	3.556E+01	2.185E+01 NOT IDENT.
RA-224	7.115E+00	4.833E+01	3.859E+01	2.417E+01 NOT IDENT.
RA-226	4.469E+00	7.390E+00	3.976E+00	3.695E+00 FAIL ABUN
AC-227	-5.657E+00	2.744E+01	2.296E+01	1.372E+01 NOT IDENT.
TH-227	-5.563E+00	2.699E+01	2.258E+01	1.349E+01 FAIL ABUN
AC-228	1.019E+01	7.131E+00	6.733E+00	3.565E+00 NOT IDENT.
RA-228	1.019E+01	7.131E+00	6.733E+00	3.565E+00 NOT IDENT.
TH-229	1.383E+01	3.759E+01	3.072E+01	1.880E+01 NOT IDENT.
TH-230	4.469E+00	7.390E+00	3.975E+00	3.695E+00 FAIL ABUN
PA-231	-7.228E+01	1.057E+02	8.482E+01	5.287E+01 NOT IDENT.
TH-231	1.041E+01	1.218E+01	1.080E+01	6.092E+00 NOT IDENT.
TH-232	1.019E+01	1.003E+01	3.996E+00	5.013E+00 FAIL ABUN

PA-233	1.629E+00	4.262E+00	3.669E+00	2.131E+00 NOT IDENT.
PA-234	2.561E+00	1.190E+01	1.020E+01	5.950E+00 FAIL ABUN
U-234	4.364E+00	8.818E+00	7.646E+00	4.409E+00 FAIL ABUN
U-235	7.084E+00	1.624E+01	1.343E+01	8.119E+00 FAIL ABUN
NP-237	6.683E+00	1.769E+01	1.487E+01	8.846E+00 NOT IDENT.
NP-239	-7.553E+00	1.522E+01	1.208E+01	7.609E+00 FAIL ABUN
AM-241	-1.476E+01	2.175E+01	1.539E+01	1.087E+01 NOT IDENT.
AM-242	-2.056E+01	1.769E+02	1.443E+02	8.845E+01 NOT IDENT.
CM-247	-8.835E-01	2.243E+00	1.793E+00	1.121E+00 FAIL ABUN
CF-249	9.029E-01	2.702E+00	2.297E+00	1.351E+00 NOT IDENT.
CF-251	1.189E+01	9.664E+00	8.286E+00	4.832E+00 NOT IDENT.
ANH-511	1.746E+01	3.503E+00	3.316E+00	1.751E+00 NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G145782003
ANALYST	: MJH1	DETECTOR	: GAMMA16
SAMPLE DATE	: 15-SEP-2005 13:45:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 07:44:52.70	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 1.136E+02
GROSS GAMMA ERROR (pCi/LITER)	: 9.107E+01
GROSS GAMMA MDA (pCi/LITER)	: 2.975E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.421E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:03:01.15

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*********************************************************************************
*                            GENERAL ENG. LABS, LLC.                            *
*                                2040 Savage Road                               *
*                              Charleston, SC 29414                             *
*********************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942441.CNF;1
Sample date      : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 14:59:47
Sample ID        : G1200942441          Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA9               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:01.91  0.4%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 10017452
Matrix Spike DPM :                      LCS DPM          :
*********************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	93.00*	40	216	1.70	166.94	162	11	2.80E-03	96.4	
2	0	113.45*	9	190	3.58	208.12	206	10	6.50E-04	298.8	
3	0	176.75*	13	83	0.83	335.61	335	6	8.90E-04	134.4	
4	0	180.38*	20	113	2.21	342.92	340	8	1.38E-03	108.6	
5	0	238.91*	8	98	0.91	460.80	458	6	5.27E-04	287.0	
6	0	255.26	12	49	1.17	493.73	492	5	8.52E-04	90.6	
7	0	377.70	13	55	0.63	740.34	736	7	9.25E-04	96.7	
8	0	511.11*	52	81	1.79	1009.07	1000	19	3.59E-03	65.2	
9	0	518.12	10	48	1.02	1023.19	1021	10	7.00E-04	131.8	
10	0	552.39	46	50	4.59	1092.21	1082	18	3.22E-03	38.5	
11	3	566.23	21	17	1.57	1120.09	1118	17	1.44E-03	29.5	2.27E+00
12	3	569.88*	13	71	2.47	1127.45	1118	17	9.20E-04	159.6	
13	0	790.41	18	40	1.84	1571.69	1568	12	1.23E-03	74.5	
14	0	936.44	29	16	4.38	1865.90	1860	13	1.98E-03	34.6	
15	0	969.44*	26	67	12.46	1932.37	1919	31	1.78E-03	105.6	
16	0	981.89	21	21	3.75	1957.46	1953	13	1.42E-03	49.8	
17	0	1000.97*	5	32	1.64	1995.91	1989	18	3.54E-04	290.5	
18	7	1066.31	17	7	2.62	2127.54	2124	31	1.21E-03	32.4	1.43E+00
19	7	1071.60*	14	13	2.90	2138.22	2124	31	9.78E-04	77.8	
20	0	1099.09	11	6	1.44	2193.60	2189	8	7.78E-04	48.1	
21	0	1106.91*	17	14	3.22	2209.35	2203	12	1.17E-03	60.3	
22	0	1121.31*	1	12	2.84	2238.36	2234	10	7.72E-05	928.6	
23	0	1219.06	10	3	1.48	2435.32	2432	7	7.05E-04	43.1	
24	0	1268.78*	11	2	0.70	2535.51	2531	10	7.61E-04	58.8	
25	0	1277.56	9	10	1.45	2553.20	2552	9	6.05E-04	76.4	
26	0	1294.40	29	2	4.66	2587.12	2582	12	1.98E-03	22.2	
27	0	1337.31	12	48	9.96	2673.58	2655	28	8.00E-04	174.3	
28	0	1346.97	14	1	1.66	2693.05	2690	7	9.42E-04	31.3	
29	0	1517.86	9	4	1.38	3037.41	3035	7	5.90E-04	50.1	
30	0	1643.39	16	6	8.22	3290.39	3282	22	1.11E-03	45.2	
31	0	1770.84	8	4	1.01	3547.25	3543	8	5.56E-04	55.9	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 19:03:06

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942441.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 14:59:47
Sample ID : G1200942441 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:01:01.91 0.4%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
TH-228		84.40		-6.545E+01	1.843E+02	2.667E+02	0.000E+00	-0.245
	+	238.60	*	8.739E-01	5.016E+00	6.904E+00	0.000E+00	0.127
		300.10		-2.739E+01	5.016E+01	8.354E+01	0.000E+00	-0.328
PA-234M		766.40		7.414E+02	9.400E+02	1.800E+03	0.000E+00	0.412
	+	1001.03	*	7.640E+01	4.439E+02	3.298E+02	0.000E+00	0.232
ANH-511	+	511.00	*	4.055E+00	5.287E+00	2.841E+00	0.000E+00	1.427

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	9.337E+00	2.028E+01	3.614E+01	0.000E+00	0.258
NA-22		1274.53	*	-5.682E-01	2.147E+00	3.290E+00	0.000E+00	-0.173
AL-26	+	511.00		2.478E+00	3.231E+00	1.737E+00	0.000E+00	1.427
		1808.65	*	7.935E-02	1.910E+00	3.618E+00	0.000E+00	0.022
K-40		1460.81	*	2.025E+01	2.319E+01	4.664E+01	0.000E+00	0.434
SC-46		889.25	*	-7.175E-01	2.029E+00	3.494E+00	0.000E+00	-0.205
	+	1120.51		1.737E-01	3.225E+00	4.411E+00	0.000E+00	0.039
V-48		944.10		1.107E+01	4.245E+01	7.935E+01	0.000E+00	0.139
	+	983.50	*	4.839E+00	4.823E+00	7.416E+00	0.000E+00	0.652
		1312.09		-9.763E-01	3.467E+00	6.286E+00	0.000E+00	-0.155
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-6.715E+00	2.494E+01	4.226E+01	0.000E+00	-0.159
MN-54		834.83	*	-1.061E+00	1.843E+00	3.090E+00	0.000E+00	-0.344
CO-56		846.75	*	-2.899E-02	2.480E+00	4.384E+00	0.000E+00	-0.007
		1037.82		1.091E+00	1.542E+01	2.794E+01	0.000E+00	0.039
		1238.25		-2.182E+00	3.869E+00	6.657E+00	0.000E+00	-0.328
CO-57		122.06	*	2.232E-01	1.561E+00	2.801E+00	0.000E+00	0.080
		136.47		-9.340E+00	1.284E+01	2.191E+01	0.000E+00	-0.426
CO-58		810.78	*	-1.058E-01	2.167E+00	3.864E+00	0.000E+00	-0.027
FE-59		192.35		3.731E+01	5.905E+01	1.071E+02	0.000E+00	0.349
	+	1099.25	*	3.396E+00	3.264E+00	7.277E+00	0.000E+00	0.467
		1291.60		5.626E+00	6.719E+00	1.244E+01	0.000E+00	0.452
CO-60		1173.24		1.275E-01	1.923E+00	3.633E+00	0.000E+00	0.035

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1332.50	*	-4.578E-03	2.099E+00	3.904E+00	0.000E+00	-0.001
ZN-65		1115.55	*	2.158E-01	4.233E+00	7.908E+00	0.000E+00	0.027
SE-75		66.05		-8.290E+01	3.796E+02	5.608E+02	0.000E+00	-0.148
		96.73		-6.988E+00	5.175E+01	7.615E+01	0.000E+00	-0.092
		121.11		5.580E+00	8.568E+00	1.575E+01	0.000E+00	0.354
		136.00		-1.376E+00	2.363E+00	4.065E+00	0.000E+00	-0.338
		198.60		1.506E+02	1.141E+02	2.133E+02	0.000E+00	0.706
		264.65	*	-4.672E-01	2.854E+00	4.909E+00	0.000E+00	-0.095
		279.53		3.569E+00	6.899E+00	1.238E+01	0.000E+00	0.288
		303.91		3.231E+01	1.291E+02	2.281E+02	0.000E+00	0.142
		400.65		6.774E+00	1.633E+01	2.901E+01	0.000E+00	0.234
KR-85		513.99	*	2.017E+03	5.694E+02	1.133E+03	0.000E+00	1.781
SR-85		513.99	*	1.029E+01	2.906E+00	5.780E+00	0.000E+00	1.781
Y-88		898.02		1.334E+00	2.216E+00	4.243E+00	0.000E+00	0.314
		1836.01	*	-7.855E-02	2.179E+00	4.052E+00	0.000E+00	-0.019
Y-91		557.57	*	8.824E-01	2.480E+00	4.054E+00	0.000E+00	0.218
		1204.90		-2.501E+02	8.414E+02	1.505E+03	0.000E+00	-0.166
NB-94		702.63	*	1.089E+00	2.001E+00	3.733E+00	0.000E+00	0.292
		871.10		-1.946E-01	1.960E+00	3.462E+00	0.000E+00	-0.056
NB-95		765.79	*	1.714E+00	2.634E+00	4.986E+00	0.000E+00	0.344
NB-95M		235.69	*	2.950E+00	1.287E+02	1.966E+02	0.000E+00	0.015
ZR-95		724.18		3.823E+00	4.906E+00	9.454E+00	0.000E+00	0.404
		756.74	*	-4.688E-02	3.725E+00	6.701E+00	0.000E+00	-0.007
MO-99		140.51	*	-1.972E+01	6.906E+01	1.203E+02	0.000E+00	-0.164
	+	181.06		5.708E+02	1.240E+03	1.673E+03	0.000E+00	0.341
		739.58		-5.296E+02	5.741E+02	9.294E+02	0.000E+00	-0.570
RU-103		497.08	*	-1.511E+00	2.401E+00	4.125E+00	0.000E+00	-0.366
		610.33		5.710E+01	4.364E+01	8.615E+01	0.000E+00	0.663
RH-106	+	511.85		2.023E+01	2.639E+01	1.420E+01	0.000E+00	1.425
		621.84	*	1.222E+01	1.839E+01	3.503E+01	0.000E+00	0.349
		1050.47		-3.410E+01	1.109E+02	1.909E+02	0.000E+00	-0.179
RU-106		622.20	*	1.248E+01	1.860E+01	3.539E+01	0.000E+00	0.353
AG-108M		433.93	*	-9.159E-01	2.159E+00	3.568E+00	0.000E+00	-0.257
		614.37		-4.973E-01	2.339E+00	4.111E+00	0.000E+00	-0.121
		722.95		-9.959E-01	2.362E+00	4.049E+00	0.000E+00	-0.246
CD-109		88.03	*	2.036E+01	5.528E+01	8.432E+01	0.000E+00	0.241
AG-110M		657.75	*	3.055E-01	1.858E+00	3.410E+00	0.000E+00	0.090
		677.61		-2.418E+01	1.642E+01	2.487E+01	0.000E+00	-0.972
		706.67		-1.413E-02	1.188E+01	2.125E+01	0.000E+00	-0.001
		763.93		-2.396E+00	8.895E+00	1.548E+01	0.000E+00	-0.155
		884.67		-1.234E-01	2.791E+00	4.964E+00	0.000E+00	-0.025
	+	937.48		1.045E+01	7.239E+00	8.494E+00	0.000E+00	1.230
		1384.27		-5.930E+00	9.198E+00	1.554E+01	0.000E+00	-0.381
SN-113		391.69	*	-7.972E-01	2.895E+00	4.868E+00	0.000E+00	-0.164
CD-115		231.44		-4.636E+03	2.032E+04	3.487E+04	0.000E+00	-0.133
		260.90		1.544E+03	6.885E+03	1.220E+04	0.000E+00	0.127
		492.35		-2.879E+01	2.068E+03	3.718E+03	0.000E+00	-0.008
		527.90	*	-8.948E+01	5.073E+02	9.094E+02	0.000E+00	-0.098
SN-115		484.47		-1.287E+03	1.089E+03	1.783E+03	0.000E+00	-0.722

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		933.00	*	6.409E+01	1.879E+02	3.120E+02	0.000E+00	0.205
		1290.58		-5.664E+01	4.848E+02	7.628E+02	0.000E+00	-0.074
SN-117M		156.02		-2.188E+01	1.362E+02	2.384E+02	0.000E+00	-0.092
		158.56	*	2.470E+00	3.317E+00	6.083E+00	0.000E+00	0.406
TE-123M		159.00	*	8.759E-01	1.758E+00	3.184E+00	0.000E+00	0.275
SB-124		602.73		1.616E+00	2.262E+00	4.285E+00	0.000E+00	0.377
		645.85		3.705E+01	3.015E+01	5.961E+01	0.000E+00	0.622
		713.78		2.477E+01	8.907E+01	1.645E+02	0.000E+00	0.151
		722.79		-9.477E+00	2.060E+01	3.519E+01	0.000E+00	-0.269
		1368.16		-4.958E+00	8.328E+01	1.567E+02	0.000E+00	-0.032
		1690.98	*	-2.159E-01	4.357E+00	8.198E+00	0.000E+00	-0.026
SB-125	+	176.33		8.166E+00	2.195E+01	3.252E+01	0.000E+00	0.251
		427.89	*	-6.490E+00	6.129E+00	9.550E+00	0.000E+00	-0.680
		463.38		8.706E+00	1.703E+01	3.047E+01	0.000E+00	0.286
		600.56		1.322E+00	1.084E+01	1.958E+01	0.000E+00	0.067
		606.64		-4.467E+01	3.840E+01	6.189E+01	0.000E+00	-0.722
		635.90		-2.139E+00	1.618E+01	2.872E+01	0.000E+00	-0.074
TE-125M		109.28	*	2.121E+02	6.075E+02	1.032E+03	0.000E+00	0.206
I-126		388.63		7.346E+00	1.245E+01	2.248E+01	0.000E+00	0.327
		666.33	*	8.630E+00	1.017E+01	1.956E+01	0.000E+00	0.441
		753.82		4.597E+01	7.586E+01	1.451E+02	0.000E+00	0.317
SB-126		666.33		3.602E+00	4.243E+00	8.164E+00	0.000E+00	0.441
		695.00		2.099E-01	4.431E+00	7.950E+00	0.000E+00	0.026
		697.00		-1.190E+01	1.561E+01	2.589E+01	0.000E+00	-0.460
		720.50	*	2.568E+00	7.771E+00	1.438E+01	0.000E+00	0.179
SN-126		64.28		8.226E+01	4.238E+01	7.182E+01	0.000E+00	1.145
		86.94		-9.860E+00	2.386E+01	3.432E+01	0.000E+00	-0.287
		87.57	*	2.852E+00	5.471E+00	8.449E+00	0.000E+00	0.338
SB-127		252.40		1.222E+02	2.825E+02	4.499E+02	0.000E+00	0.272
		411.60		-5.538E+02	6.753E+02	1.079E+03	0.000E+00	-0.513
		444.90		1.527E+02	5.940E+02	1.039E+03	0.000E+00	0.147
		473.00		-1.492E+01	9.352E+01	1.583E+02	0.000E+00	-0.094
		543.30		3.473E+02	8.839E+02	1.654E+03	0.000E+00	0.210
		603.50		8.449E+01	6.080E+02	1.104E+03	0.000E+00	0.077
		685.70	*	6.917E+00	7.546E+01	1.361E+02	0.000E+00	0.051
		698.50		-3.879E+02	8.239E+02	1.407E+03	0.000E+00	-0.276
		783.70		1.730E+02	1.636E+02	3.288E+02	0.000E+00	0.526
I-131		284.30		-7.656E+01	9.404E+01	1.540E+02	0.000E+00	-0.497
		364.48	*	-4.412E+00	6.992E+00	1.146E+01	0.000E+00	-0.385
		636.97		9.898E+00	8.774E+01	1.593E+02	0.000E+00	0.062
TE-132		228.16	*	-1.357E+00	4.113E+01	7.148E+01	0.000E+00	-0.019
BA-133		79.62		-7.346E+01	9.492E+01	1.331E+02	0.000E+00	-0.552
		81.00		-9.079E-01	6.707E+00	9.902E+00	0.000E+00	-0.092
		276.40		-7.299E+00	2.235E+01	3.800E+01	0.000E+00	-0.192
		302.85		8.714E+00	8.830E+00	1.636E+01	0.000E+00	0.533
		356.02	*	-1.354E+00	2.877E+00	4.781E+00	0.000E+00	-0.283
		383.85		-5.418E-02	1.901E+01	3.277E+01	0.000E+00	-0.002
CS-134		563.23		-9.290E+00	2.775E+01	4.154E+01	0.000E+00	-0.224
	+	569.32		7.310E+00	2.333E+01	2.070E+01	0.000E+00	0.353

Sample ID : G1200942441 Acquisition date : 13-OCT-2005 14:59:47

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		604.70		-1.101E+00	1.963E+00	3.352E+00	0.000E+00	-0.329
		795.84	*	2.075E+00	2.438E+00	4.277E+00	0.000E+00	0.485
		801.93		-1.269E+01	2.214E+01	3.716E+01	0.000E+00	-0.342
		1365.15		-8.569E+00	5.780E+01	1.074E+02	0.000E+00	-0.080
CS-135		268.24	*	3.358E+00	1.013E+01	1.795E+01	0.000E+00	0.187
CS-136		66.88		-2.085E+01	5.675E+01	8.289E+01	0.000E+00	-0.252
		86.36		-8.589E-01	7.439E+01	1.103E+02	0.000E+00	-0.008
		153.25		1.014E+01	3.906E+01	6.996E+01	0.000E+00	0.145
		163.92		6.240E+01	6.583E+01	1.216E+02	0.000E+00	0.513
	+	176.60		8.913E+00	2.396E+01	3.598E+01	0.000E+00	0.248
		273.65		-1.979E+00	2.584E+01	4.476E+01	0.000E+00	-0.044
		340.55		3.612E+00	7.417E+00	1.326E+01	0.000E+00	0.272
		818.51		9.008E-02	3.722E+00	6.745E+00	0.000E+00	0.013
		1048.07	*	-3.258E+00	5.402E+00	8.864E+00	0.000E+00	-0.368
		1235.36		-1.013E+01	2.435E+01	4.276E+01	0.000E+00	-0.237
BA-137M		661.65	*	-4.906E-01	1.966E+00	3.454E+00	0.000E+00	-0.142
CS-137		661.66	*	-5.138E-01	2.079E+00	3.653E+00	0.000E+00	-0.141
CE-139		165.85	*	-3.799E-01	1.857E+00	3.235E+00	0.000E+00	-0.117
BA-140		162.67		1.585E+01	4.667E+01	8.363E+01	0.000E+00	0.190
		304.87		-3.703E+01	7.845E+01	1.314E+02	0.000E+00	-0.282
		423.73		6.025E+01	1.199E+02	2.142E+02	0.000E+00	0.281
		537.31	*	-2.837E+00	1.491E+01	2.652E+01	0.000E+00	-0.107
CE-141		145.44	*	1.071E+00	4.149E+00	7.400E+00	0.000E+00	0.145
CE-144		133.51	*	4.179E+00	1.254E+01	2.264E+01	0.000E+00	0.185
PM-144		476.78		-1.816E+00	4.246E+00	6.987E+00	0.000E+00	-0.260
		618.01		1.323E-01	1.883E+00	3.405E+00	0.000E+00	0.039
		696.49	*	-1.196E+00	2.090E+00	3.533E+00	0.000E+00	-0.338
PM-146		453.88	*	1.240E-01	2.807E+00	4.829E+00	0.000E+00	0.026
		633.25		2.234E+01	7.966E+01	1.471E+02	0.000E+00	0.152
		735.93		-5.233E+00	7.964E+00	1.333E+01	0.000E+00	-0.393
		747.24		-5.760E+00	5.204E+00	8.230E+00	0.000E+00	-0.700
ND-147	+	91.11		1.650E+01	3.182E+01	2.757E+01	0.000E+00	0.599
		531.02	*	2.233E+01	3.035E+01	5.854E+01	0.000E+00	0.382
PM-147		121.30	*	2.124E+06	3.318E+06	6.096E+06	0.000E+00	0.348
PM-149		285.95	*	-9.450E+02	5.156E+03	8.836E+03	0.000E+00	-0.107
EU-152		121.78		2.060E+00	4.521E+00	8.245E+00	0.000E+00	0.250
		344.31	*	-1.534E+00	6.199E+00	1.051E+01	0.000E+00	-0.146
		963.37		9.399E+00	1.830E+01	2.994E+01	0.000E+00	0.314
GD-153		69.67		-4.431E+01	1.150E+02	1.675E+02	0.000E+00	-0.264
		83.37		4.230E+02	1.020E+03	1.567E+03	0.000E+00	0.270
		97.43	*	-1.974E+00	5.522E+00	7.955E+00	0.000E+00	-0.248
		103.18		8.672E-02	6.973E+00	1.162E+01	0.000E+00	0.007
EU-154		123.07		-1.546E+00	3.181E+00	5.521E+00	0.000E+00	-0.280
		247.93		-2.247E+01	2.305E+01	3.762E+01	0.000E+00	-0.597
		591.76		-3.241E+00	3.390E+01	6.085E+01	0.000E+00	-0.053
		723.30		-3.980E+00	9.992E+00	1.717E+01	0.000E+00	-0.232
		756.86		-3.945E+00	4.031E+01	7.189E+01	0.000E+00	-0.055
		873.20		4.392E+00	1.711E+01	3.141E+01	0.000E+00	0.140
		996.30		-2.115E+01	2.237E+01	2.799E+01	0.000E+00	-0.756

Sample ID : G1200942441 Acquisition date : 13-OCT-2005 14:59:47

---- Non-Identified Nuclides ----

Nuclide		Line Energy Ided (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		1004.76		-9.828E-01	1.092E+01	1.679E+01	0.000E+00	-0.059
		1274.51	*	-1.692E+00	5.984E+00	9.131E+00	0.000E+00	-0.185
EU-155		86.54		-8.811E-02	6.979E+00	1.035E+01	0.000E+00	-0.009
		105.31	*	-3.826E-01	7.123E+00	1.182E+01	0.000E+00	-0.032
TB-160		86.79		-5.543E+00	1.852E+01	2.687E+01	0.000E+00	-0.206
		298.57		-3.076E+00	7.327E+00	1.231E+01	0.000E+00	-0.250
		879.36	*	-2.549E-01	8.384E+00	1.485E+01	0.000E+00	-0.017
		962.29		2.109E+01	3.097E+01	5.248E+01	0.000E+00	0.402
		966.15		1.845E+01	1.076E+01	2.217E+01	0.000E+00	0.832
		1177.93		1.929E+00	1.451E+01	2.783E+01	0.000E+00	0.069
TM-171		51.87		-8.560E+02	1.129E+03	1.610E+03	0.000E+00	-0.532
		59.40		-8.492E+02	2.139E+03	3.134E+03	0.000E+00	-0.271
		66.72	*	-9.860E+02	2.138E+03	3.098E+03	0.000E+00	-0.318
HF-181		56.28		8.759E+01	8.121E+01	1.345E+02	0.000E+00	0.651
		57.53		-2.559E+01	4.472E+01	6.457E+01	0.000E+00	-0.396
		65.20		1.213E+01	8.124E+01	1.229E+02	0.000E+00	0.099
		133.02		1.447E+00	4.015E+00	7.256E+00	0.000E+00	0.199
		136.25		-2.520E+01	3.163E+01	5.374E+01	0.000E+00	-0.469
		345.85		-5.897E-02	1.193E+01	2.063E+01	0.000E+00	-0.003
		482.03	*	-1.333E+00	2.670E+00	4.361E+00	0.000E+00	-0.306
TA-182		67.75		3.381E+00	7.704E+00	1.203E+01	0.000E+00	0.281
		100.10		3.583E+00	1.137E+01	1.935E+01	0.000E+00	0.185
		222.10		4.138E+00	2.094E+01	3.707E+01	0.000E+00	0.112
	+	1121.28		4.801E-01	8.917E+00	1.277E+01	0.000E+00	0.038
		1189.05		-1.177E+01	1.183E+01	1.907E+01	0.000E+00	-0.617
		1221.42	*	-2.236E+00	8.565E+00	1.316E+01	0.000E+00	-0.170
		1230.97		2.125E+01	2.109E+01	4.320E+01	0.000E+00	0.492
IR-192		295.96		7.153E+00	6.671E+00	1.231E+01	0.000E+00	0.581
		308.46		3.056E+00	5.986E+00	1.077E+01	0.000E+00	0.284
		316.51	*	-7.225E-01	2.226E+00	3.765E+00	0.000E+00	-0.192
		468.07		-2.047E+00	4.161E+00	6.809E+00	0.000E+00	-0.301
		604.41		-1.400E+01	2.673E+01	4.578E+01	0.000E+00	-0.306
		612.46		1.655E+00	4.141E+01	7.430E+01	0.000E+00	0.022
HG-203		70.83		-7.060E+01	7.715E+01	1.073E+02	0.000E+00	-0.658
		72.87		-3.520E+00	4.315E+01	6.417E+01	0.000E+00	-0.055
		82.60		-1.199E+01	7.628E+01	1.123E+02	0.000E+00	-0.107
		279.20	*	4.794E-01	2.609E+00	4.578E+00	0.000E+00	0.105
BI-207	+	569.67		1.140E+00	3.637E+00	3.229E+00	0.000E+00	0.353
		897.83		7.934E+02	1.283E+03	2.460E+03	0.000E+00	0.322
		1063.62	*	1.007E+00	3.025E+00	4.954E+00	0.000E+00	0.203
		1442.20		-1.795E+02	1.064E+03	1.994E+03	0.000E+00	-0.090
	+	1770.23		2.144E+01	2.397E+01	8.938E+01	0.000E+00	0.240
TL-208		75.00		3.567E+01	8.071E+01	1.242E+02	0.000E+00	0.287
		277.35		-5.930E+00	2.323E+01	3.969E+01	0.000E+00	-0.149
	+	510.84		1.905E+01	2.484E+01	1.335E+01	0.000E+00	1.427
		583.14	*	2.594E+00	2.218E+00	4.340E+00	0.000E+00	0.598
		763.30		-3.498E+01	1.145E+02	1.987E+02	0.000E+00	-0.176
		860.37		1.270E+01	1.694E+01	3.232E+01	0.000E+00	0.393
		1093.90		6.238E+02	5.638E+02	1.088E+03	0.000E+00	0.573

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BI-210		46.50	*	3.918E+01	4.509E+02	6.900E+02	0.000E+00	0.057
PB-210		46.50	*	3.918E+01	4.509E+02	6.900E+02	0.000E+00	0.057
BI-211		351.07	*	2.407E+00	1.364E+01	2.375E+01	0.000E+00	0.101
PB-211		404.84	*	2.020E+01	5.822E+01	1.030E+02	0.000E+00	0.196
		427.08		-1.698E+01	1.309E+02	2.225E+02	0.000E+00	-0.076
		831.96		1.500E+01	6.158E+01	1.139E+02	0.000E+00	0.132
BI-212		727.18	*	-1.527E-01	1.607E+01	2.877E+01	0.000E+00	-0.005
PB-212		74.80		1.030E+01	2.596E+01	3.983E+01	0.000E+00	0.259
		87.30		-1.425E+01	2.742E+01	3.909E+01	0.000E+00	-0.365
	+	115.19		6.370E+01	3.807E+02	3.955E+02	0.000E+00	0.161
	+	238.63	*	8.739E-01	5.016E+00	8.020E+00	0.000E+00	0.109
		300.09		-2.742E+01	5.016E+01	8.353E+01	0.000E+00	-0.328
BI-214		609.31	*	3.491E+00	4.094E+00	7.824E+00	0.000E+00	0.446
		768.36		3.847E+01	3.874E+01	7.557E+01	0.000E+00	0.509
		934.06		8.826E+01	5.430E+01	1.117E+02	0.000E+00	0.790
	+	1120.29		1.018E+00	1.891E+01	2.586E+01	0.000E+00	0.039
		1238.11		-1.682E+01	3.774E+01	6.597E+01	0.000E+00	-0.255
		1377.67		3.573E+01	4.845E+01	9.953E+01	0.000E+00	0.359
PB-214		74.81		1.759E+01	4.407E+01	6.762E+01	0.000E+00	0.260
		77.11		5.914E+00	2.430E+01	3.688E+01	0.000E+00	0.160
		87.30		-2.548E+01	4.902E+01	6.989E+01	0.000E+00	-0.365
		241.98		2.328E-01	2.456E+01	3.751E+01	0.000E+00	0.006
		295.21		9.115E+00	8.751E+00	1.613E+01	0.000E+00	0.565
		351.92	*	3.072E+00	4.757E+00	8.544E+00	0.000E+00	0.359
RN-219		271.23		-2.249E+00	1.463E+01	2.519E+01	0.000E+00	-0.089
		401.81	*	-4.680E+00	2.680E+01	4.539E+01	0.000E+00	-0.103
RA-223		122.32		4.966E+00	1.074E+02	1.918E+02	0.000E+00	0.026
		144.24		4.519E+01	4.583E+01	8.439E+01	0.000E+00	0.536
		154.21		-1.127E+01	2.454E+01	4.226E+01	0.000E+00	-0.267
		269.46		-1.914E+00	1.173E+01	2.015E+01	0.000E+00	-0.095
		323.87	*	-2.665E+01	4.376E+01	7.227E+01	0.000E+00	-0.369
		338.28		-3.623E+00	6.190E+01	1.063E+02	0.000E+00	-0.034
		445.03		7.369E+01	1.471E+02	2.629E+02	0.000E+00	0.280
RA-224		240.98	*	4.325E+01	4.922E+01	8.003E+01	0.000E+00	0.540
RA-226		295.21		9.115E+00	8.751E+00	1.613E+01	0.000E+00	0.565
		351.92		3.072E+00	4.757E+00	8.544E+00	0.000E+00	0.359
		609.31	*	3.491E+00	4.094E+00	7.824E+00	0.000E+00	0.446
AC-227		79.80		-9.720E+01	1.216E+02	1.701E+02	0.000E+00	-0.571
		236.00		1.185E+00	1.681E+01	2.577E+01	0.000E+00	0.046
	+	256.20	*	1.039E+01	1.883E+01	3.980E+01	0.000E+00	0.261
		286.10		-1.745E+01	1.011E+02	1.733E+02	0.000E+00	-0.101
		299.80		-6.687E+01	9.433E+01	1.553E+02	0.000E+00	-0.431
		304.40		-5.717E+00	1.194E+02	2.063E+02	0.000E+00	-0.028
		329.70		-2.440E+00	5.880E+01	1.012E+02	0.000E+00	-0.024
		334.20		-1.054E+01	1.466E+02	2.520E+02	0.000E+00	-0.042
TH-227		79.80		-9.562E+01	1.196E+02	1.673E+02	0.000E+00	-0.571
	+	94.00		1.304E+02	2.514E+02	2.958E+02	0.000E+00	0.441
		236.00		1.167E+00	1.655E+01	2.538E+01	0.000E+00	0.046
	+	256.20	*	1.023E+01	1.854E+01	3.918E+01	0.000E+00	0.261

Sample ID : G1200942441 Acquisition date : 13-OCT-2005 14:59:47

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		286.10		-1.718E+01	9.956E+01	1.707E+02	0.000E+00	-0.101
		299.80		-6.569E+01	9.267E+01	1.525E+02	0.000E+00	-0.431
		304.40		-5.625E+00	1.175E+02	2.030E+02	0.000E+00	-0.028
		329.70		-2.403E+00	5.792E+01	9.970E+01	0.000E+00	-0.024
		334.20		-1.034E+01	1.439E+02	2.473E+02	0.000E+00	-0.042
AC-228		209.25		-1.051E+01	3.551E+01	6.097E+01	0.000E+00	-0.172
		338.32		-6.970E-01	1.491E+01	2.563E+01	0.000E+00	-0.027
		463.01		2.036E+01	3.983E+01	7.125E+01	0.000E+00	0.286
		794.95		2.956E+00	4.863E+01	7.589E+01	0.000E+00	0.039
		911.21	*	3.369E+00	6.934E+00	1.310E+01	0.000E+00	0.257
		964.77		1.619E+01	5.105E+01	8.132E+01	0.000E+00	0.199
	+	969.11		1.913E+01	4.040E+01	1.961E+01	0.000E+00	0.975
RA-228		209.25		-1.051E+01	3.551E+01	6.097E+01	0.000E+00	-0.172
		338.32		-6.970E-01	1.491E+01	2.563E+01	0.000E+00	-0.027
		463.01		2.036E+01	3.983E+01	7.125E+01	0.000E+00	0.286
		794.95		2.956E+00	4.863E+01	7.589E+01	0.000E+00	0.039
		911.21	*	3.369E+00	6.934E+00	1.310E+01	0.000E+00	0.257
		964.77		1.619E+01	5.105E+01	8.132E+01	0.000E+00	0.199
	+	969.11		1.913E+01	4.040E+01	1.961E+01	0.000E+00	0.975
TH-229		85.43		9.229E+00	1.263E+01	1.981E+01	0.000E+00	0.466
		88.47		-4.067E-01	7.596E+00	1.123E+01	0.000E+00	-0.036
		100.00		-2.573E-01	1.204E+01	2.006E+01	0.000E+00	-0.013
		193.63	*	-1.214E+01	3.242E+01	5.560E+01	0.000E+00	-0.218
		210.97		6.692E+01	4.672E+01	8.796E+01	0.000E+00	0.761
TH-230		295.21		9.115E+00	8.751E+00	1.613E+01	0.000E+00	0.565
		351.92		3.072E+00	4.757E+00	8.544E+00	0.000E+00	0.359
		609.31	*	3.491E+00	4.094E+00	7.824E+00	0.000E+00	0.446
PA-231		283.67	*	-5.119E+01	1.025E+02	1.717E+02	0.000E+00	-0.298
		301.29		-1.455E+01	3.624E+01	6.098E+01	0.000E+00	-0.239
		330.00		5.930E+00	1.301E+02	2.252E+02	0.000E+00	0.026
TH-231		84.21		-9.500E+00	3.457E+01	5.033E+01	0.000E+00	-0.189
		236.00		1.183E+00	1.678E+01	2.574E+01	0.000E+00	0.046
	+	256.20		1.038E+01	1.881E+01	3.807E+01	0.000E+00	0.273
		269.46	*	-1.914E+00	1.173E+01	2.015E+01	0.000E+00	-0.095
		271.23		-2.249E+00	1.463E+01	2.519E+01	0.000E+00	-0.089
		283.67		-5.119E+01	1.025E+02	1.717E+02	0.000E+00	-0.298
		301.29		-1.455E+01	3.624E+01	6.098E+01	0.000E+00	-0.239
		329.85		8.837E-02	4.052E+01	6.994E+01	0.000E+00	0.001
		351.07		2.407E+00	1.364E+01	2.375E+01	0.000E+00	0.101
		401.81		-4.680E+00	2.680E+01	4.539E+01	0.000E+00	-0.103
TH-232	+	238.59	*	8.612E-01	4.943E+00	7.897E+00	0.000E+00	0.109
		911.20		3.386E+00	6.905E+00	1.305E+01	0.000E+00	0.259
		964.40		2.560E+01	5.059E+01	8.269E+01	0.000E+00	0.310
	+	969.11		1.904E+01	4.021E+01	2.518E+01	0.000E+00	0.756
PA-233		75.28		1.502E+01	2.171E+02	3.253E+02	0.000E+00	0.046
		86.59		-5.082E+00	1.132E+02	1.675E+02	0.000E+00	-0.030
		300.12		-1.391E+01	2.555E+01	4.255E+01	0.000E+00	-0.327
		311.98	*	-3.924E-01	4.167E+00	7.169E+00	0.000E+00	-0.055
		340.50		1.877E+01	3.690E+01	6.604E+01	0.000E+00	0.284

Sample ID : G1200942441 Acquisition date : 13-OCT-2005 14:59:47

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		398.62		4.642E+00	1.349E+02	2.325E+02	0.000E+00	0.020
		415.76		7.214E+01	1.068E+02	1.932E+02	0.000E+00	0.373
PA-234		63.00		2.662E+02	1.287E+02	2.210E+02	0.000E+00	1.205
	+	94.67		1.163E+01	2.242E+01	1.574E+01	0.000E+00	0.739
		98.44		-5.129E-01	6.067E+00	9.583E+00	0.000E+00	-0.054
		99.70		6.461E+00	3.082E+01	5.211E+01	0.000E+00	0.124
		111.00		2.974E+00	1.386E+01	2.080E+01	0.000E+00	0.143
		131.20		3.497E+00	6.487E+00	1.183E+01	0.000E+00	0.296
		152.70		7.180E+00	1.997E+01	3.593E+01	0.000E+00	0.200
		186.00		2.861E+02	8.693E+01	1.726E+02	0.000E+00	1.657
		226.40		9.162E+00	2.548E+01	4.539E+01	0.000E+00	0.202
		227.20		1.765E+00	2.770E+01	4.848E+01	0.000E+00	0.036
		248.90		1.326E+00	5.283E+01	9.236E+01	0.000E+00	0.014
		293.70		3.489E+00	4.090E+01	7.124E+01	0.000E+00	0.049
		369.80		-1.227E+00	5.566E+01	9.579E+01	0.000E+00	-0.013
	+	568.70		3.709E+01	1.184E+02	1.050E+02	0.000E+00	0.353
	+	569.50		1.012E+01	3.229E+01	2.865E+01	0.000E+00	0.353
		574.00		-8.224E+01	9.712E+01	1.353E+02	0.000E+00	-0.608
		699.00		4.487E+00	4.290E+01	7.711E+01	0.000E+00	0.058
		706.10		1.033E+01	6.045E+01	1.097E+02	0.000E+00	0.094
		733.00		6.111E+00	1.961E+01	3.650E+01	0.000E+00	0.167
		742.81		3.399E+01	7.865E+01	1.466E+02	0.000E+00	0.232
		796.30		4.189E+01	5.109E+01	8.979E+01	0.000E+00	0.467
		805.80		2.235E+01	5.594E+01	1.042E+02	0.000E+00	0.214
		819.60		-1.243E+01	6.581E+01	1.159E+02	0.000E+00	-0.107
		826.30		3.998E+00	4.579E+01	8.282E+01	0.000E+00	0.048
		831.60		1.651E+01	3.042E+01	5.844E+01	0.000E+00	0.283
		876.40		-8.938E+00	5.157E+01	8.986E+01	0.000E+00	-0.099
		880.51		3.226E+00	1.695E+01	3.072E+01	0.000E+00	0.105
		883.24		1.364E+01	1.620E+01	3.156E+01	0.000E+00	0.432
		899.00		1.492E+01	4.331E+01	8.108E+01	0.000E+00	0.184
		925.00		-3.561E+01	5.703E+01	9.436E+01	0.000E+00	-0.377
		926.50		-8.296E-03	8.145E+00	1.481E+01	0.000E+00	-0.001
		946.00	*	8.495E+00	1.395E+01	2.735E+01	0.000E+00	0.311
		949.00		-1.005E+01	2.107E+01	3.562E+01	0.000E+00	-0.282
	+	980.50		5.113E+01	5.096E+01	5.318E+01	0.000E+00	0.962
		1394.10		-6.678E+01	6.616E+01	1.046E+02	0.000E+00	-0.638
TH-234		63.29	*	2.097E+02	1.127E+02	1.901E+02	0.000E+00	1.103
	+	92.38		3.375E+01	6.507E+01	5.316E+01	0.000E+00	0.635
	+	112.81		1.575E+02	9.410E+02	1.030E+03	0.000E+00	0.153
U-234		67.67		3.861E+02	8.037E+02	1.259E+03	0.000E+00	0.307
		241.98		2.331E-01	2.459E+01	3.756E+01	0.000E+00	0.006
		295.21	*	9.115E+00	8.751E+00	1.613E+01	0.000E+00	0.565
		351.92		3.072E+00	4.757E+00	8.544E+00	0.000E+00	0.359
U-235		89.95		6.095E+00	9.513E+01	1.114E+02	0.000E+00	0.055
	+	93.35		4.058E+01	7.823E+01	5.726E+01	0.000E+00	0.709
		105.00		-7.452E+00	6.969E+01	1.153E+02	0.000E+00	-0.065
		143.76	*	1.557E+01	1.418E+01	2.623E+01	0.000E+00	0.594
		163.33		1.678E+01	2.978E+01	5.398E+01	0.000E+00	0.311

Sample ID : G1200942441 Acquisition date : 13-OCT-2005 14:59:47

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		185.71		1.010E+01	3.222E+00	6.363E+00	0.000E+00	1.588
		205.31		3.862E+00	2.915E+01	5.144E+01	0.000E+00	0.075
NP-237		86.48	*	-3.868E-01	1.710E+01	2.534E+01	0.000E+00	-0.015
		95.87		8.869E+00	6.366E+01	9.588E+01	0.000E+00	0.093
U-238		63.29	*	2.097E+02	1.127E+02	1.901E+02	0.000E+00	1.103
NP-239		99.55		2.375E+00	1.009E+01	1.708E+01	0.000E+00	0.139
		117.00	*	-7.026E+00	1.489E+01	2.104E+01	0.000E+00	-0.334
		209.75		-1.976E+00	4.913E+01	8.547E+01	0.000E+00	-0.023
		228.18		-3.597E-01	1.485E+01	2.582E+01	0.000E+00	-0.014
		277.60		-4.680E+00	1.125E+01	1.899E+01	0.000E+00	-0.246
		334.31		-5.835E+00	8.112E+01	1.394E+02	0.000E+00	-0.042
AM-241		59.54	*	-3.114E+00	1.242E+01	1.843E+01	0.000E+00	-0.169
AM-242		99.55		5.543E+01	2.354E+02	3.987E+02	0.000E+00	0.139
		103.70	*	-5.138E+00	1.463E+02	2.430E+02	0.000E+00	-0.021
CM-247		278.00		-8.058E+00	4.748E+01	8.146E+01	0.000E+00	-0.099
		287.40		7.976E+01	7.637E+01	1.422E+02	0.000E+00	0.561
		402.60	*	-1.048E+00	2.404E+00	3.982E+00	0.000E+00	-0.263
CF-249		252.85		-2.324E+00	6.264E+01	9.555E+01	0.000E+00	-0.024
		333.44		1.133E+00	1.074E+01	1.868E+01	0.000E+00	0.061
		387.95	*	1.441E+00	2.472E+00	4.464E+00	0.000E+00	0.323
CF-251	+	176.00	*	3.147E+00	8.458E+00	1.469E+01	0.000E+00	0.214
		227.00		2.514E+00	2.467E+01	4.326E+01	0.000E+00	0.058
		285.00		-1.234E+02	1.147E+02	1.842E+02	0.000E+00	-0.670

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                               DETECTOR DATA                           *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942441  *
* Acquisition date : 13-OCT-2005 14:59:47 Detector SN#    : 10017452   *
* Detector ID      : GAMMA9               Sensitivity     : 3.000      *
* Geometry         : 2L_MB                Energy tolerance: 2.000      *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000     *
* Elapsed real time:    0 04:01:01.91     Half life ratio :  8.000     *
*************************************************************************
*                                                                       *
*                               SAMPLE DATA                             *
*                                                                       *
* Sample date      : 29-SEP-2005 00:00:00 Nuclide Library :             *
* Sample ID        : G1200942441          Analyst initials: MJH1       *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000  *
*************************************************************************
*                                                                       *
*                                 QC DATA                               *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME :  8-JUL-2005 12:59:09 MS Isotope      :             *
* MSD DPM          :    0.000             MSD Isotope     :             *
* LCS DPM          :    0.000             LCS Isotope     :             *
* LCSD DPM         :    0.000             LCSD Isotope    :             *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
TH-228	8.739E-01	5.016E+00	6.904E+00	0.000E+00
PA-234M	7.640E+01	4.439E+02	3.298E+02	0.000E+00
ANH-511	4.055E+00	5.287E+00	2.841E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)		
BE-7	9.337E+00	2.028E+01	3.614E+01	0.000E+00	NOT IDENT.
NA-22	-5.682E-01	2.147E+00	3.290E+00	0.000E+00	NOT IDENT.
NA-24	0.000E+00	1.993E+07	0.000E+00	0.000E+00	SHORT HLIF
AL-26	7.935E-02	1.910E+00	3.618E+00	0.000E+00	FAIL ABUN
K-40	2.025E+01	2.319E+01	4.664E+01	0.000E+00	NOT IDENT.
SC-46	-7.175E-01	2.029E+00	3.494E+00	0.000E+00	FAIL ABUN
V-48	4.839E+00	4.823E+00	7.416E+00	0.000E+00	FAIL ABUN
CR-51	-6.715E+00	2.494E+01	4.226E+01	0.000E+00	NOT IDENT.
MN-54	-1.061E+00	1.843E+00	3.090E+00	0.000E+00	NOT IDENT.
CO-56	-2.899E-02	2.480E+00	4.384E+00	0.000E+00	NOT IDENT.
MN-56	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	2.232E-01	1.561E+00	2.801E+00	0.000E+00	NOT IDENT.
CO-58	-1.058E-01	2.167E+00	3.864E+00	0.000E+00	NOT IDENT.
FE-59	3.396E+00	3.264E+00	7.277E+00	0.000E+00	FAIL ABUN
CO-60	-4.578E-03	2.099E+00	3.904E+00	0.000E+00	NOT IDENT.
ZN-65	2.158E-01	4.233E+00	7.908E+00	0.000E+00	NOT IDENT.
SE-75	-4.672E-01	2.854E+00	4.909E+00	0.000E+00	NOT IDENT.
KR-85	0.000E+00	5.694E+02	1.133E+03	0.000E+00	NOT IDENT.
SR-85	0.000E+00	2.906E+00	5.780E+00	0.000E+00	NOT IDENT.
Y-88	-7.855E-02	2.179E+00	4.052E+00	0.000E+00	NOT IDENT.
Y-91	8.824E-01	2.480E+00	4.054E+00	0.000E+00	NOT IDENT.
NB-94	1.089E+00	2.001E+00	3.733E+00	0.000E+00	NOT IDENT.
NB-95	1.714E+00	2.634E+00	4.986E+00	0.000E+00	NOT IDENT.
NB-95M	2.950E+00	1.287E+02	1.966E+02	0.000E+00	NOT IDENT.

ZR-95	-4.688E-02	3.725E+00	6.701E+00	0.000E+00	NOT IDENT.
MO-99	-1.972E+01	6.906E+01	1.203E+02	0.000E+00	FAIL ABUN
TC-99M	0.000E+00	7.498E+17	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.511E+00	2.401E+00	4.125E+00	0.000E+00	NOT IDENT.
RH-106	1.222E+01	1.839E+01	3.503E+01	0.000E+00	FAIL ABUN
RU-106	1.248E+01	1.860E+01	3.539E+01	0.000E+00	NOT IDENT.
AG-108M	-9.159E-01	2.159E+00	3.568E+00	0.000E+00	NOT IDENT.
CD-109	2.036E+01	5.528E+01	8.432E+01	0.000E+00	NOT IDENT.
AG-110M	3.055E-01	1.858E+00	3.410E+00	0.000E+00	FAIL ABUN
SN-113	-7.972E-01	2.895E+00	4.868E+00	0.000E+00	NOT IDENT.
CD-115	-8.948E+01	5.073E+02	9.094E+02	0.000E+00	NOT IDENT.
SN-115	6.409E+01	1.879E+02	3.120E+02	0.000E+00	NOT IDENT.
SN-117M	2.470E+00	3.317E+00	6.083E+00	0.000E+00	NOT IDENT.
TE-123M	8.759E-01	1.758E+00	3.184E+00	0.000E+00	NOT IDENT.
SB-124	-2.159E-01	4.357E+00	8.198E+00	0.000E+00	NOT IDENT.
SB-125	-6.490E+00	6.129E+00	9.550E+00	0.000E+00	FAIL ABUN
TE-125M	2.121E+02	6.075E+02	1.032E+03	0.000E+00	NOT IDENT.
I-126	8.630E+00	1.017E+01	1.956E+01	0.000E+00	NOT IDENT.
SB-126	2.568E+00	7.771E+00	1.438E+01	0.000E+00	NOT IDENT.
SN-126	2.852E+00	5.471E+00	8.449E+00	0.000E+00	NOT IDENT.
SB-127	6.917E+00	7.546E+01	1.361E+02	0.000E+00	NOT IDENT.
I-131	-4.412E+00	6.992E+00	1.146E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.357E+00	4.113E+01	7.148E+01	0.000E+00	NOT IDENT.
BA-133	-1.354E+00	2.877E+00	4.781E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	2.357E+05	0.000E+00	0.000E+00	SHORT HLIF
CS-134	2.075E+00	2.438E+00	4.277E+00	0.000E+00	FAIL ABUN
CS-135	3.358E+00	1.013E+01	1.795E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	6.923E+16	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-3.258E+00	5.402E+00	8.864E+00	0.000E+00	FAIL ABUN
BA-137M	-4.906E-01	1.966E+00	3.454E+00	0.000E+00	NOT IDENT.
CS-137	-5.138E-01	2.079E+00	3.653E+00	0.000E+00	NOT IDENT.
CE-139	-3.799E-01	1.857E+00	3.235E+00	0.000E+00	NOT IDENT.
BA-140	-2.837E+00	1.491E+01	2.652E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	9.600E+02	0.000E+00	0.000E+00	SHORT HLIF
CE-141	1.071E+00	4.149E+00	7.400E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	6.522E+03	0.000E+00	0.000E+00	SHORT HLIF
CE-144	4.179E+00	1.254E+01	2.264E+01	0.000E+00	NOT IDENT.
PM-144	-1.196E+00	2.090E+00	3.533E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	1.748E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	1.240E-01	2.807E+00	4.829E+00	0.000E+00	NOT IDENT.
ND-147	2.233E+01	3.035E+01	5.854E+01	0.000E+00	FAIL ABUN
PM-147	2.124E+06	3.318E+06	6.096E+06	0.000E+00	NOT IDENT.
PM-149	-9.450E+02	5.156E+03	8.836E+03	0.000E+00	NOT IDENT.
EU-152	-1.534E+00	6.199E+00	1.051E+01	0.000E+00	NOT IDENT.
GD-153	-1.974E+00	5.522E+00	7.955E+00	0.000E+00	NOT IDENT.
EU-154	-1.692E+00	5.984E+00	9.131E+00	0.000E+00	NOT IDENT.
EU-155	-3.826E-01	7.123E+00	1.182E+01	0.000E+00	NOT IDENT.
TB-160	-2.549E-01	8.384E+00	1.485E+01	0.000E+00	NOT IDENT.
TM-171	-9.860E+02	2.138E+03	3.098E+03	0.000E+00	NOT IDENT.
HF-181	-1.333E+00	2.670E+00	4.361E+00	0.000E+00	NOT IDENT.
TA-182	-2.236E+00	8.565E+00	1.316E+01	0.000E+00	FAIL ABUN
IR-192	-7.225E-01	2.226E+00	3.765E+00	0.000E+00	NOT IDENT.
HG-203	4.794E-01	2.609E+00	4.578E+00	0.000E+00	NOT IDENT.
BI-207	1.007E+00	3.025E+00	4.954E+00	0.000E+00	FAIL ABUN
TL-208	2.594E+00	2.218E+00	4.340E+00	0.000E+00	FAIL ABUN
BI-210	3.918E+01	4.509E+02	6.900E+02	0.000E+00	NOT IDENT.
PB-210	3.918E+01	4.509E+02	6.900E+02	0.000E+00	NOT IDENT.
BI-211	2.407E+00	1.364E+01	2.375E+01	0.000E+00	NOT IDENT.
PB-211	2.020E+01	5.822E+01	1.030E+02	0.000E+00	NOT IDENT.
BI-212	-1.527E-01	1.607E+01	2.877E+01	0.000E+00	NOT IDENT.
PB-212	8.739E-01	5.016E+00	8.020E+00	0.000E+00	FAIL ABUN
BI-214	3.491E+00	4.094E+00	7.824E+00	0.000E+00	FAIL ABUN
PB-214	3.072E+00	4.757E+00	8.544E+00	0.000E+00	NOT IDENT.
RN-219	-4.680E+00	2.680E+01	4.539E+01	0.000E+00	NOT IDENT.
RA-223	-2.665E+01	4.376E+01	7.227E+01	0.000E+00	NOT IDENT.
RA-224	4.325E+01	4.922E+01	8.003E+01	0.000E+00	NOT IDENT.
RA-226	3.491E+00	4.094E+00	7.824E+00	0.000E+00	NOT IDENT.
AC-227	1.039E+01	1.883E+01	3.980E+01	0.000E+00	FAIL ABUN
TH-227	1.023E+01	1.854E+01	3.918E+01	0.000E+00	FAIL ABUN
AC-228	3.369E+00	6.934E+00	1.310E+01	0.000E+00	FAIL ABUN
RA-228	3.369E+00	6.934E+00	1.310E+01	0.000E+00	FAIL ABUN
TH-229	-1.214E+01	3.242E+01	5.560E+01	0.000E+00	NOT IDENT.
TH-230	3.491E+00	4.094E+00	7.824E+00	0.000E+00	NOT IDENT.
PA-231	-5.119E+01	1.025E+02	1.717E+02	0.000E+00	NOT IDENT.
TH-231	-1.914E+00	1.173E+01	2.015E+01	0.000E+00	FAIL ABUN
TH-232	8.612E-01	4.943E+00	7.897E+00	0.000E+00	FAIL ABUN
PA-233	-3.924E-01	4.167E+00	7.169E+00	0.000E+00	NOT IDENT.

PA-234	8.495E+00	1.395E+01	2.735E+01	0.000E+00 FAIL ABUN
TH-234	0.000E+00	1.127E+02	1.901E+02	0.000E+00 FAIL ABUN
U-234	9.115E+00	8.751E+00	1.613E+01	0.000E+00 NOT IDENT.
U-235	1.557E+01	1.418E+01	2.623E+01	0.000E+00 FAIL ABUN
NP-237	-3.868E-01	1.710E+01	2.534E+01	0.000E+00 NOT IDENT.
U-238	0.000E+00	1.127E+02	1.901E+02	0.000E+00 NOT IDENT.
NP-239	-7.026E+00	1.489E+01	2.104E+01	0.000E+00 NOT IDENT.
AM-241	-3.114E+00	1.242E+01	1.843E+01	0.000E+00 NOT IDENT.
AM-242	-5.138E+00	1.463E+02	2.430E+02	0.000E+00 NOT IDENT.
CM-247	-1.048E+00	2.404E+00	3.982E+00	0.000E+00 NOT IDENT.
CF-249	1.441E+00	2.472E+00	4.464E+00	0.000E+00 NOT IDENT.
CF-251	3.147E+00	8.458E+00	1.469E+01	0.000E+00 FAIL ABUN

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:02:57.97

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942441.CNF;1
Sample date      : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 14:59:47
Sample ID        : G1200942441          Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA9               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:01.91  0.4%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 10017452
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	63.89	80	246	1.63	108.30	104	11	5.58E-03	39.4	
2	0	93.00	302	216	1.70	166.94	162	11	2.09E-02	11.2	
3	0	113.45	26	190	3.58	208.12	206	10	1.81E-03	101.1	
4	0	176.75	22	83	0.83	335.61	335	6	1.52E-03	69.3	
5	0	180.38	35	113	2.21	342.92	340	8	2.40E-03	55.5	
6	0	186.23	115	190	1.07	354.69	350	10	8.02E-03	24.2	
7	0	238.91	72	98	0.91	460.80	458	6	5.02E-03	24.7	
8	0	255.26	12	49	1.17	493.73	492	5	8.52E-04	90.6	
9	0	377.70	13	55	0.63	740.34	736	7	9.25E-04	96.7	
10	0	511.11	389	81	1.79	1009.07	1000	19	2.70E-02	7.5	
11	0	518.12	10	48	1.02	1023.19	1021	10	7.00E-04	131.8	
12	0	552.39	46	50	4.59	1092.21	1082	18	3.22E-03	38.5	
13	3	566.23	21	17	1.57	1120.09	1118	17	1.44E-03	29.5	2.27E+00
14	3	569.88	28	71	2.47	1127.45	1118	17	1.97E-03	68.8	
15	0	790.41	18	40	1.84	1571.69	1568	12	1.23E-03	74.5	
16	0	936.44	29	16	4.38	1865.90	1860	13	1.98E-03	34.6	
17	0	969.44	39	67	12.46	1932.37	1919	31	2.68E-03	68.8	
18	0	981.89	21	21	3.75	1957.46	1953	13	1.42E-03	49.8	
19	0	1000.97	20	32	1.64	1995.91	1989	18	1.40E-03	69.3	
20	7	1066.31	17	7	2.62	2127.54	2124	31	1.21E-03	32.4	1.43E+00
21	7	1071.60	19	13	2.90	2138.22	2124	31	1.34E-03	51.6	
22	0	1099.09	11	6	1.44	2193.60	2189	8	7.78E-04	48.1	
23	0	1106.91	20	14	3.22	2209.35	2203	12	1.38E-03	44.7	
24	0	1121.31	19	12	2.84	2238.36	2234	10	1.31E-03	41.8	
25	0	1219.06	10	3	1.48	2435.32	2432	7	7.05E-04	43.1	
26	0	1268.78	16	2	0.70	2535.51	2531	10	1.10E-03	31.0	
27	0	1277.56	9	10	1.45	2553.20	2552	9	6.05E-04	76.4	
28	0	1294.40	29	2	4.66	2587.12	2582	12	1.98E-03	22.2	
29	0	1337.31	12	48	9.96	2673.58	2655	28	8.00E-04	174.3	
30	0	1346.97	14	1	1.66	2693.05	2690	7	9.42E-04	31.3	
31	0	1517.86	9	4	1.38	3037.41	3035	7	5.90E-04	50.1	
32	0	1643.39	16	6	8.22	3290.39	3282	22	1.11E-03	45.2	
33	0	1770.84	8	4	1.01	3547.25	3543	8	5.56E-04	55.9	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:03:03.32

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942441.CNF;1
Sample date      : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 14:59:47
Sample ID        : G1200942441          Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA9               Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:01:01.91  0.4%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 10017452
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
TH-228	84.40	------	1.21	1.850E+00	------ Line Not Found		------
	238.60	8	44.60*	1.853E+00	8.612E-01	8.739E-01	573.95
	300.10	------	3.41	1.631E+00	------ Line Not Found		------
PA-234M	766.40	------	0.21	9.100E-01	------ Line Not Found		------
	1001.03	5	0.85*	7.412E-01	7.640E+01	7.640E+01	581.02
ANH-511	511.00	52	100.00*	1.196E+00	4.055E+00	4.055E+00	130.40

Flag: "*" = Keyline

Sample ID : G1200942441 Acquisition date : 13-OCT-2005 14:59:47

Total number of lines in spectrum	31	
Number of unidentified lines	16	
Number of lines tentatively identified by NID	15	48.39%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
TH-228	1.91Y	1.01	8.612E-01	8.739E-01	50.16E-01	573.95	
PA-234M	4.47E+09Y	1.00	7.640E+01	7.640E+01	44.39E+01	581.02	
ANH-511	1.00E+09Y	1.00	4.055E+00	4.055E+00	5.287E+00	130.40	
Total Activity :			8.131E+01	8.132E+01			
Grand Total Activity :			8.131E+01	8.132E+01			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1200942441 Acquisition date : 13-OCT-2005 14:59:47

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	93.00	40	216	1.70	166.94	162	11	2.80E-03	****	2.07E+00	T
0	113.45	9	190	3.58	208.12	206	10	6.50E-04	****	2.32E+00	T
0	176.75	13	83	0.83	335.61	335	6	8.90E-04	****	2.16E+00	T
0	180.38	20	113	2.21	342.92	340	8	1.38E-03	****	2.14E+00	T
0	255.26	12	49	1.17	493.73	492	5	8.52E-04	****	1.79E+00	T
0	377.70	13	55	0.63	740.34	736	7	9.25E-04	****	1.43E+00	
0	518.12	10	48	1.02	1023.19	1021	10	7.00E-04	****	1.19E+00	
0	552.39	46	50	4.59	1092.21	1082	18	3.22E-03	76.9	1.14E+00	
3	566.23	21	17	1.57	1120.09	1118	17	1.44E-03	59.0	1.12E+00	
3	569.88	13	71	2.47	1127.45	1118	17	9.20E-04	****	1.12E+00	T
0	790.41	18	40	1.84	1571.69	1568	12	1.23E-03	****	8.89E-01	
0	936.44	29	16	4.38	1865.90	1860	13	1.98E-03	69.3	7.81E-01	T
0	969.44	26	67	12.46	1932.37	1919	31	1.78E-03	****	7.60E-01	T
0	981.89	21	21	3.75	1957.46	1953	13	1.42E-03	99.7	7.52E-01	T
7	1066.31	17	7	2.62	2127.54	2124	31	1.21E-03	64.8	7.05E-01	
7	1071.60	14	13	2.90	2138.22	2124	31	9.78E-04	****	7.02E-01	
0	1099.09	11	6	1.44	2193.60	2189	8	7.78E-04	96.1	6.89E-01	T
0	1106.91	17	14	3.22	2209.35	2203	12	1.17E-03	****	6.85E-01	
0	1121.31	1	12	2.84	2238.36	2234	10	7.72E-05	****	6.78E-01	T
0	1219.06	10	3	1.48	2435.32	2432	7	7.05E-04	86.1	6.36E-01	
0	1268.78	11	2	0.70	2535.51	2531	10	7.61E-04	****	6.18E-01	
0	1277.56	9	10	1.45	2553.20	2552	9	6.05E-04	****	6.14E-01	
0	1294.40	29	2	4.66	2587.12	2582	12	1.98E-03	44.3	6.09E-01	
0	1337.31	12	48	9.96	2673.58	2655	28	8.00E-04	****	5.95E-01	
0	1346.97	14	1	1.66	2693.05	2690	7	9.42E-04	62.7	5.92E-01	
0	1517.86	9	4	1.38	3037.41	3035	7	5.90E-04	****	5.49E-01	
0	1643.39	16	6	8.22	3290.39	3282	22	1.11E-03	90.5	5.27E-01	
0	1770.84	8	4	1.01	3547.25	3543	8	5.56E-04	****	5.12E-01	T

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:03:15.72

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*****************************************************************************
*                          GENERAL ENG. LABS, LLC.                          *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942441.CNF;1    *
* Acquisition date : 13-OCT-2005 14:59:47  Detector SN#    : 10017452        *
* Detector ID      : GAMMA9                Sensitivity     : 3.00000         *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000         *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000        *
* Elapsed real time: 0 04:01:01.91         Half life ratio : 8.00000         *
*****************************************************************************
*                                                                           *
*                                SAMPLE DATA                                *
*                                                                           *
* Sample date      : 29-SEP-2005 00:00:00  Nuclide Library : EPI             *
* Sample ID        : G1200942441           Analyst initials: MJH1            *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME : 8-JUL-2005 12:59:09.79MS Isotope      :                *
* MSD DPM          :                      MSD Isotope     :                *
* LCS DPM          :                      LCS Isotope     :                *
*****************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
TH-228	8.739E-01	5.016E+00	6.904E+00	0.000E+00	0.127
PA-234M	7.640E+01	4.439E+02	3.298E+02	0.000E+00	0.232
ANH-511	4.055E+00	5.287E+00	2.841E+00	0.000E+00	1.427

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	9.337E+00		2.028E+01	3.614E+01	0.000E+00	0.258
NA-22	-5.682E-01		2.147E+00	3.290E+00	0.000E+00	-0.173
AL-26	7.935E-02		1.910E+00	3.618E+00	0.000E+00	0.022
K-40	2.025E+01		2.319E+01	4.664E+01	0.000E+00	0.434
SC-46	-7.175E-01		2.029E+00	3.494E+00	0.000E+00	-0.205
V-48	4.839E+00	+	4.823E+00	7.416E+00	0.000E+00	0.652
CR-51	-6.715E+00		2.494E+01	4.226E+01	0.000E+00	-0.159
MN-54	-1.061E+00		1.843E+00	3.090E+00	0.000E+00	-0.344
CO-56	-2.899E-02		2.480E+00	4.384E+00	0.000E+00	-0.007

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
CO-57	2.232E-01		1.561E+00	2.801E+00	0.000E+00	0.080
CO-58	-1.058E-01		2.167E+00	3.864E+00	0.000E+00	-0.027
FE-59	3.396E+00	+	3.264E+00	7.277E+00	0.000E+00	0.467
CO-60	-4.578E-03		2.099E+00	3.904E+00	0.000E+00	-0.001
ZN-65	2.158E-01		4.233E+00	7.908E+00	0.000E+00	0.027
SE-75	-4.672E-01		2.854E+00	4.909E+00	0.000E+00	-0.095
KR-85	2.017E+03		5.694E+02	1.133E+03	0.000E+00	1.781
SR-85	1.029E+01		2.906E+00	5.780E+00	0.000E+00	1.781
Y-88	-7.855E-02		2.179E+00	4.052E+00	0.000E+00	-0.019
Y-91	8.824E-01		2.480E+00	4.054E+00	0.000E+00	0.218
NB-94	1.089E+00		2.001E+00	3.733E+00	0.000E+00	0.292
NB-95	1.714E+00		2.634E+00	4.986E+00	0.000E+00	0.344
NB-95M	2.950E+00		1.287E+02	1.966E+02	0.000E+00	0.015
ZR-95	-4.688E-02		3.725E+00	6.701E+00	0.000E+00	-0.007
MO-99	-1.972E+01		6.906E+01	1.203E+02	0.000E+00	-0.164
RU-103	-1.511E+00		2.401E+00	4.125E+00	0.000E+00	-0.366
RH-106	1.222E+01		1.839E+01	3.503E+01	0.000E+00	0.349
RU-106	1.248E+01		1.860E+01	3.539E+01	0.000E+00	0.353
AG-108M	-9.159E-01		2.159E+00	3.568E+00	0.000E+00	-0.257
CD-109	2.036E+01		5.528E+01	8.432E+01	0.000E+00	0.241
AG-110M	3.055E-01		1.858E+00	3.410E+00	0.000E+00	0.090
SN-113	-7.972E-01		2.895E+00	4.868E+00	0.000E+00	-0.164
CD-115	-8.948E+01		5.073E+02	9.094E+02	0.000E+00	-0.098
SN-115	6.409E+01		1.879E+02	3.120E+02	0.000E+00	0.205
SN-117M	2.470E+00		3.317E+00	6.083E+00	0.000E+00	0.406
TE-123M	8.759E-01		1.758E+00	3.184E+00	0.000E+00	0.275
SB-124	-2.159E-01		4.357E+00	8.198E+00	0.000E+00	-0.026
SB-125	-6.490E+00		6.129E+00	9.550E+00	0.000E+00	-0.680
TE-125M	2.121E+02		6.075E+02	1.032E+03	0.000E+00	0.206
I-126	8.630E+00		1.017E+01	1.956E+01	0.000E+00	0.441
SB-126	2.568E+00		7.771E+00	1.438E+01	0.000E+00	0.179
SN-126	2.852E+00		5.471E+00	8.449E+00	0.000E+00	0.338
SB-127	6.917E+00		7.546E+01	1.361E+02	0.000E+00	0.051
I-131	-4.412E+00		6.992E+00	1.146E+01	0.000E+00	-0.385
TE-132	-1.357E+00		4.113E+01	7.148E+01	0.000E+00	-0.019
BA-133	-1.354E+00		2.877E+00	4.781E+00	0.000E+00	-0.283
CS-134	2.075E+00		2.438E+00	4.277E+00	0.000E+00	0.485
CS-135	3.358E+00		1.013E+01	1.795E+01	0.000E+00	0.187
CS-136	-3.258E+00		5.402E+00	8.864E+00	0.000E+00	-0.368
BA-137M	-4.906E-01		1.966E+00	3.454E+00	0.000E+00	-0.142
CS-137	-5.138E-01		2.079E+00	3.653E+00	0.000E+00	-0.141
CE-139	-3.799E-01		1.857E+00	3.235E+00	0.000E+00	-0.117
BA-140	-2.837E+00		1.491E+01	2.652E+01	0.000E+00	-0.107
CE-141	1.071E+00		4.149E+00	7.400E+00	0.000E+00	0.145
CE-144	4.179E+00		1.254E+01	2.264E+01	0.000E+00	0.185
PM-144	-1.196E+00		2.090E+00	3.533E+00	0.000E+00	-0.338
PM-146	1.240E-01		2.807E+00	4.829E+00	0.000E+00	0.026
ND-147	2.233E+01		3.035E+01	5.854E+01	0.000E+00	0.382

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-147	2.124E+06		3.318E+06	6.096E+06	0.000E+00	0.348
PM-149	-9.450E+02		5.156E+03	8.836E+03	0.000E+00	-0.107
EU-152	-1.534E+00		6.199E+00	1.051E+01	0.000E+00	-0.146
GD-153	-1.974E+00		5.522E+00	7.955E+00	0.000E+00	-0.248
EU-154	-1.692E+00		5.984E+00	9.131E+00	0.000E+00	-0.185
EU-155	-3.826E-01		7.123E+00	1.182E+01	0.000E+00	-0.032
TB-160	-2.549E-01		8.384E+00	1.485E+01	0.000E+00	-0.017
TM-171	-9.860E+02		2.138E+03	3.098E+03	0.000E+00	-0.318
HF-181	-1.333E+00		2.670E+00	4.361E+00	0.000E+00	-0.306
TA-182	-2.236E+00		8.565E+00	1.316E+01	0.000E+00	-0.170
IR-192	-7.225E-01		2.226E+00	3.765E+00	0.000E+00	-0.192
HG-203	4.794E-01		2.609E+00	4.578E+00	0.000E+00	0.105
BI-207	1.007E+00		3.025E+00	4.954E+00	0.000E+00	0.203
TL-208	2.594E+00		2.218E+00	4.340E+00	0.000E+00	0.598
BI-210	3.918E+01		4.509E+02	6.900E+02	0.000E+00	0.057
PB-210	3.918E+01		4.509E+02	6.900E+02	0.000E+00	0.057
BI-211	2.407E+00		1.364E+01	2.375E+01	0.000E+00	0.101
PB-211	2.020E+01		5.822E+01	1.030E+02	0.000E+00	0.196
BI-212	-1.527E-01		1.607E+01	2.877E+01	0.000E+00	-0.005
PB-212	8.739E-01	+	5.016E+00	8.020E+00	0.000E+00	0.109
BI-214	3.491E+00		4.094E+00	7.824E+00	0.000E+00	0.446
PB-214	3.072E+00		4.757E+00	8.544E+00	0.000E+00	0.359
RN-219	-4.680E+00		2.680E+01	4.539E+01	0.000E+00	-0.103
RA-223	-2.665E+01		4.376E+01	7.227E+01	0.000E+00	-0.369
RA-224	4.325E+01		4.922E+01	8.003E+01	0.000E+00	0.540
RA-226	3.491E+00		4.094E+00	7.824E+00	0.000E+00	0.446
AC-227	1.039E+01	+	1.883E+01	3.980E+01	0.000E+00	0.261
TH-227	1.023E+01	+	1.854E+01	3.918E+01	0.000E+00	0.261
AC-228	3.369E+00		6.934E+00	1.310E+01	0.000E+00	0.257
RA-228	3.369E+00		6.934E+00	1.310E+01	0.000E+00	0.257
TH-229	-1.214E+01		3.242E+01	5.560E+01	0.000E+00	-0.218
TH-230	3.491E+00		4.094E+00	7.824E+00	0.000E+00	0.446
PA-231	-5.119E+01		1.025E+02	1.717E+02	0.000E+00	-0.298
TH-231	-1.914E+00		1.173E+01	2.015E+01	0.000E+00	-0.095
TH-232	8.612E-01	+	4.943E+00	7.897E+00	0.000E+00	0.109
PA-233	-3.924E-01		4.167E+00	7.169E+00	0.000E+00	-0.055
PA-234	8.495E+00		1.395E+01	2.735E+01	0.000E+00	0.311
TH-234	2.097E+02		1.127E+02	1.901E+02	0.000E+00	1.103
U-234	9.115E+00		8.751E+00	1.613E+01	0.000E+00	0.565
U-235	1.557E+01		1.418E+01	2.623E+01	0.000E+00	0.594
NP-237	-3.868E-01		1.710E+01	2.534E+01	0.000E+00	-0.015
U-238	2.097E+02		1.127E+02	1.901E+02	0.000E+00	1.103
NP-239	-7.026E+00		1.489E+01	2.104E+01	0.000E+00	-0.334
AM-241	-3.114E+00		1.242E+01	1.843E+01	0.000E+00	-0.169
AM-242	-5.138E+00		1.463E+02	2.430E+02	0.000E+00	-0.021
CM-247	-1.048E+00		2.404E+00	3.982E+00	0.000E+00	-0.263
CF-249	1.441E+00		2.472E+00	4.464E+00	0.000E+00	0.323
CF-251	3.147E+00	+	8.458E+00	1.469E+01	0.000E+00	0.214

VAX/VMS Nuclide Identification Report Generated

```
*****************************************************************************
*                          Environmental Physics, Inc.                      *
*                              2040 Savage Road                             *
*                            Charleston, SC 29414                           *
*****************************************************************************
*                                                                           *
*                               DETECTOR DATA                               *
*                                                                           *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200942441           *
* Acquisition date : 13-OCT-2005 14:59:47 Detector SN#    : 10017452       *
* Detector ID      : GAMMA9               Sensitivity     : 3.000          *
* Geometry         : 2L_MB                Energy tolerance: 2.000          *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000         *
* Elapsed real time:    0 04:01:01.91     Half life ratio : 8.000          *
*****************************************************************************
*                                                                           *
*                               SAMPLE DATA                                 *
*                                                                           *
* Sample date      : 29-SEP-2005 00:00:00 Nuclide Library :                 *
* Sample ID        : G1200942441          Analyst initials: MJH1            *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER*
* Recovery         :    1.00000           Carrier Weight :    0.00000       *
*****************************************************************************
*                                                                           *
*                                 QC DATA                                   *
*                                                                           *
* CALIB. DATE/TIME :  8-JUL-2005 12:59:09 MS Isotope      :                 *
* MSD DPM          :    0.000             MSD Isotope     :                 *
* LCS DPM          :    0.000             LCS Isotope     :                 *
* LCSD DPM         :    0.000             LCSD Isotope    :                 *
*****************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
TH-228	8.739E-01	5.016E+00	3.298E+00	2.508E+00
PA-234M	7.640E+01	4.439E+02	1.447E+02	2.219E+02
ANH-511	4.055E+00	5.287E+00	1.315E+00	2.644E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	9.337E+00	2.028E+01	1.690E+01	1.014E+01	NOT IDENT.
NA-22	-5.682E-01	2.147E+00	1.437E+00	1.073E+00	NOT IDENT.
NA-24	4.334E+06	1.993E+07	0.000E+00	9.964E+06	SHORT HLIF
AL-26	7.935E-02	1.910E+00	1.560E+00	9.549E-01	FAIL ABUN
K-40	2.025E+01	2.319E+01	2.121E+01	1.159E+01	NOT IDENT.
SC-46	-7.175E-01	2.029E+00	1.571E+00	1.015E+00	FAIL ABUN
V-48	4.839E+00	4.823E+00	3.390E+00	2.411E+00	FAIL ABUN
CR-51	-6.715E+00	2.494E+01	1.995E+01	1.247E+01	NOT IDENT.
MN-54	-1.061E+00	1.843E+00	1.391E+00	9.213E-01	NOT IDENT.
CO-56	-2.899E-02	2.480E+00	2.022E+00	1.240E+00	NOT IDENT.
MN-56	-3.786E+39	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-57	2.232E-01	1.561E+00	1.336E+00	7.803E-01	NOT IDENT.
CO-58	-1.058E-01	2.167E+00	1.764E+00	1.083E+00	NOT IDENT.
FE-59	3.396E+00	3.264E+00	3.230E+00	1.632E+00	FAIL ABUN
CO-60	-4.578E-03	2.099E+00	1.739E+00	1.050E+00	NOT IDENT.
ZN-65	2.158E-01	4.233E+00	3.572E+00	2.117E+00	NOT IDENT.
SE-75	-4.672E-01	2.854E+00	2.324E+00	1.427E+00	NOT IDENT.
KR-85	2.017E+03	5.694E+02	5.420E+02	2.847E+02	NOT IDENT.
SR-85	1.029E+01	2.906E+00	2.766E+00	1.453E+00	NOT IDENT.
Y-88	-7.855E-02	2.179E+00	1.750E+00	1.089E+00	NOT IDENT.
Y-91	8.824E-01	2.480E+00	1.888E+00	1.240E+00	NOT IDENT.
NB-94	1.089E+00	2.001E+00	1.736E+00	1.000E+00	NOT IDENT.
NB-95	1.714E+00	2.634E+00	2.307E+00	1.317E+00	NOT IDENT.
NB-95M	2.950E+00	1.287E+02	9.376E+01	6.435E+01	NOT IDENT.

ZR-95	-4.688E-02	3.725E+00	3.059E+00	1.863E+00	NOT IDENT.
MO-99	-1.972E+01	6.906E+01	5.750E+01	3.453E+01	FAIL ABUN
TC-99M	-2.142E+17	7.498E+17	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-1.511E+00	2.401E+00	1.912E+00	1.200E+00	NOT IDENT.
RH-106	1.222E+01	1.839E+01	1.626E+01	9.195E+00	FAIL ABUN
RU-106	1.248E+01	1.860E+01	1.644E+01	9.300E+00	NOT IDENT.
AG-108M	-9.159E-01	2.159E+00	1.667E+00	1.080E+00	NOT IDENT.
CD-109	2.036E+01	5.528E+01	4.043E+01	2.764E+01	NOT IDENT.
AG-110M	3.055E-01	1.858E+00	1.568E+00	9.290E-01	FAIL ABUN
SN-113	-7.972E-01	2.895E+00	2.283E+00	1.447E+00	NOT IDENT.
CD-115	-8.948E+01	5.073E+02	4.187E+02	2.537E+02	NOT IDENT.
SN-115	6.409E+01	1.879E+02	1.407E+02	9.396E+01	NOT IDENT.
SN-117M	2.470E+00	3.317E+00	2.905E+00	1.659E+00	NOT IDENT.
TE-123M	8.759E-01	1.758E+00	1.520E+00	8.791E-01	NOT IDENT.
SB-124	-2.159E-01	4.357E+00	3.511E+00	2.179E+00	NOT IDENT.
SB-125	-6.490E+00	6.129E+00	4.449E+00	3.064E+00	FAIL ABUN
TE-125M	2.121E+02	6.075E+02	4.927E+02	3.037E+02	NOT IDENT.
I-126	8.630E+00	1.017E+01	9.094E+00	5.083E+00	NOT IDENT.
SB-126	2.568E+00	7.771E+00	6.630E+00	3.885E+00	NOT IDENT.
SN-126	2.852E+00	5.471E+00	4.050E+00	2.736E+00	NOT IDENT.
SB-127	6.917E+00	7.546E+01	6.298E+01	3.773E+01	NOT IDENT.
I-131	-4.412E+00	6.992E+00	5.354E+00	3.496E+00	NOT IDENT.
I-132	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-1.357E+00	4.113E+01	3.403E+01	2.056E+01	NOT IDENT.
BA-133	-1.354E+00	2.877E+00	2.248E+00	1.439E+00	NOT IDENT.
I-133	-3.653E+04	2.357E+05	0.000E+00	1.179E+05	SHORT HLIF
CS-134	2.075E+00	2.438E+00	1.969E+00	1.219E+00	FAIL ABUN
CS-135	3.358E+00	1.013E+01	8.522E+00	5.067E+00	NOT IDENT.
I-135	-1.919E+16	6.923E+16	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-3.258E+00	5.402E+00	3.950E+00	2.701E+00	FAIL ABUN
BA-137M	-4.906E-01	1.966E+00	1.588E+00	9.829E-01	NOT IDENT.
CS-137	-5.138E-01	2.079E+00	1.679E+00	1.039E+00	NOT IDENT.
CE-139	-3.799E-01	1.857E+00	1.542E+00	9.284E-01	NOT IDENT.
BA-140	-2.837E+00	1.491E+01	1.230E+01	7.455E+00	NOT IDENT.
LA-140	6.847E+02	9.600E+02	0.000E+00	4.800E+02	SHORT HLIF
CE-141	1.071E+00	4.149E+00	3.547E+00	2.075E+00	NOT IDENT.
CE-143	-4.031E+03	6.522E+03	0.000E+00	3.261E+03	SHORT HLIF
CE-144	4.179E+00	1.254E+01	1.081E+01	6.271E+00	NOT IDENT.
PM-144	-1.196E+00	2.090E+00	1.633E+00	1.045E+00	NOT IDENT.
PR-144	-1.000E+41	1.748E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	1.240E-01	2.807E+00	2.257E+00	1.404E+00	NOT IDENT.
ND-147	2.233E+01	3.035E+01	2.718E+01	1.517E+01	FAIL ABUN
PM-147	2.124E+06	3.318E+06	2.913E+06	1.659E+06	NOT IDENT.
PM-149	-9.450E+02	5.156E+03	4.175E+03	2.578E+03	NOT IDENT.
EU-152	-1.534E+00	6.199E+00	4.939E+00	3.099E+00	NOT IDENT.
GD-153	-1.974E+00	5.522E+00	3.783E+00	2.761E+00	NOT IDENT.
EU-154	-1.692E+00	5.984E+00	3.984E+00	2.992E+00	NOT IDENT.
EU-155	-3.826E-01	7.123E+00	5.639E+00	3.562E+00	NOT IDENT.
TB-160	-2.549E-01	8.384E+00	6.804E+00	4.192E+00	NOT IDENT.
TM-171	-9.860E+02	2.138E+03	1.477E+03	1.069E+03	NOT IDENT.
HF-181	-1.333E+00	2.670E+00	2.024E+00	1.335E+00	NOT IDENT.
TA-182	-2.236E+00	8.565E+00	5.776E+00	4.283E+00	FAIL ABUN
IR-192	-7.225E-01	2.226E+00	1.772E+00	1.113E+00	NOT IDENT.
HG-203	4.794E-01	2.609E+00	2.170E+00	1.304E+00	NOT IDENT.
BI-207	1.007E+00	3.025E+00	2.238E+00	1.512E+00	FAIL ABUN
TL-208	2.594E+00	2.218E+00	2.032E+00	1.109E+00	FAIL ABUN
BI-210	3.918E+01	4.509E+02	3.300E+02	2.255E+02	NOT IDENT.
PB-210	3.918E+01	4.509E+02	3.300E+02	2.255E+02	NOT IDENT.
BI-211	2.407E+00	1.364E+01	1.123E+01	6.821E+00	NOT IDENT.
PB-211	2.020E+01	5.822E+01	4.833E+01	2.911E+01	NOT IDENT.
BI-212	-1.527E-01	1.607E+01	1.323E+01	8.036E+00	NOT IDENT.
PB-212	8.739E-01	5.016E+00	3.856E+00	2.508E+00	FAIL ABUN
BI-214	3.491E+00	4.094E+00	3.657E+00	2.047E+00	FAIL ABUN
PB-214	3.072E+00	4.757E+00	4.045E+00	2.378E+00	NOT IDENT.
RN-219	-4.680E+00	2.680E+01	2.129E+01	1.340E+01	NOT IDENT.
RA-223	-2.665E+01	4.376E+01	3.405E+01	2.188E+01	NOT IDENT.
RA-224	4.325E+01	4.922E+01	3.827E+01	2.461E+01	NOT IDENT.
RA-226	3.491E+00	4.094E+00	3.657E+00	2.047E+00	NOT IDENT.
AC-227	1.039E+01	1.883E+01	1.876E+01	9.416E+00	FAIL ABUN
TH-227	1.023E+01	1.854E+01	1.847E+01	9.269E+00	FAIL ABUN
AC-228	3.369E+00	6.934E+00	5.976E+00	3.467E+00	FAIL ABUN
RA-228	3.369E+00	6.934E+00	5.976E+00	3.467E+00	FAIL ABUN
TH-229	-1.214E+01	3.242E+01	2.648E+01	1.621E+01	NOT IDENT.
TH-230	3.491E+00	4.094E+00	3.657E+00	2.047E+00	NOT IDENT.
PA-231	-5.119E+01	1.025E+02	8.116E+01	5.123E+01	NOT IDENT.
TH-231	-1.914E+00	1.173E+01	9.540E+00	5.863E+00	FAIL ABUN
TH-232	8.612E-01	4.943E+00	3.797E+00	2.471E+00	FAIL ABUN
PA-233	-3.924E-01	4.167E+00	3.380E+00	2.083E+00	NOT IDENT.

PA-234	8.495E+00	1.395E+01	1.231E+01	6.974E+00 FAIL ABUN
TH-234	2.097E+02	1.127E+02	9.161E+01	5.633E+01 FAIL ABUN
U-234	9.115E+00	8.751E+00	7.667E+00	4.376E+00 NOT IDENT.
U-235	1.557E+01	1.418E+01	1.260E+01	7.091E+00 FAIL ABUN
NP-237	-3.868E-01	1.710E+01	1.215E+01	8.552E+00 NOT IDENT.
U-238	2.097E+02	1.127E+02	9.161E+01	5.633E+01 NOT IDENT.
NP-239	-7.026E+00	1.489E+01	1.004E+01	7.446E+00 NOT IDENT.
AM-241	-3.114E+00	1.242E+01	8.756E+00	6.209E+00 NOT IDENT.
AM-242	-5.138E+00	1.463E+02	1.160E+02	7.313E+01 NOT IDENT.
CM-247	-1.048E+00	2.404E+00	1.865E+00	1.202E+00 NOT IDENT.
CF-249	1.441E+00	2.472E+00	2.097E+00	1.236E+00 NOT IDENT.
CF-251	3.147E+00	8.458E+00	7.017E+00	4.229E+00 FAIL ABUN

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G1200942441
ANALYST	: MJH1	DETECTOR	: GAMMA9
SAMPLE DATE	: 29-SEP-2005 00:00:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 14:59:47.33	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER) : 5.553E+01
GROSS GAMMA ERROR (pCi/LITER) : 5.877E+01
GROSS GAMMA MDA (pCi/LITER) : 2.174E+02
GROSS GAMMA DLC (pCi/LITER) : 1.041E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:02:08.06

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942442.CNF;1
Sample date      : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 15:00:17
Sample ID        : G1200942442          Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA15              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.14  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 2461
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	5	46.66*	13	153	0.85	92.35	89	20	8.79E-04	204.2	2.46E+00
2	5	51.45*	31	237	1.31	101.94	89	20	2.18E-03	96.4	
3	0	63.36*	5	348	0.71	125.81	121	9	3.41E-04	792.5	
4	0	66.54	38	244	1.09	132.16	130	6	2.66E-03	66.3	
5	0	84.11*	12	313	1.58	167.38	164	8	8.55E-04	275.7	
6	0	87.26*	38	214	0.96	173.68	172	6	2.66E-03	68.7	
7	0	129.80	21	217	1.51	258.91	257	7	1.45E-03	119.5	
8	0	139.60*	67	255	1.42	278.55	274	9	4.67E-03	46.7	
9	0	185.58*	28	205	0.76	370.68	366	9	1.96E-03	108.3	
10	1	198.22*	29	162	1.12	396.00	393	10	2.02E-03	86.3	2.00E+00
11	1	199.72*	7	164	1.12	399.00	393	10	4.92E-04	354.2	
12	0	238.65*	1	129	0.90	477.00	475	6	5.17E-05	*****	
13	0	441.40	85	188	7.76	883.26	874	28	5.87E-03	47.9	
14	0	511.06*	21	123	2.69	1022.83	1014	21	1.44E-03	180.4	
15	0	558.37*	44	123	6.57	1117.63	1111	24	3.02E-03	70.8	
16	0	595.76*	29	44	2.21	1192.56	1189	9	2.02E-03	49.2	
17	0	609.34*	13	52	1.01	1219.77	1215	9	9.36E-04	114.6	
18	0	650.88	21	26	1.30	1303.02	1300	6	1.49E-03	43.6	
19	0	699.32	23	24	1.06	1400.10	1396	8	1.62E-03	42.7	
20	0	708.49*	16	46	0.68	1418.47	1415	11	1.11E-03	91.5	
21	0	777.38	36	55	7.02	1556.52	1548	20	2.48E-03	53.7	
22	0	803.68*	31	53	6.15	1609.24	1602	21	2.12E-03	65.5	
23	0	915.93	69	43	12.64	1834.19	1821	30	4.79E-03	30.7	
24	0	935.84*	24	23	2.55	1874.08	1868	14	1.63E-03	52.2	
25	0	1088.45	13	8	1.49	2179.95	2178	6	8.71E-04	45.3	
26	0	1113.69	11	7	1.03	2230.53	2227	7	7.95E-04	48.1	
27	0	1201.52	7	7	0.55	2406.57	2405	5	5.16E-04	62.9	
28	0	1213.44	10	5	1.48	2430.46	2428	6	7.15E-04	45.3	
29	0	1292.94	13	10	1.37	2589.80	2586	8	9.19E-04	49.5	
30	0	1331.75	13	12	1.03	2667.60	2665	11	8.79E-04	58.7	
31	0	1379.27*	17	5	2.63	2762.85	2759	8	1.16E-03	41.2	
32	0	1459.23*	7	28	2.42	2923.12	2913	19	5.19E-04	207.7	
33	0	1479.18	16	2	2.81	2963.11	2960	8	1.09E-03	29.9	
34	0	1528.10	17	6	2.05	3061.18	3056	12	1.18E-03	37.7	
35	0	1710.98	23	15	3.28	3427.77	3419	20	1.58E-03	46.7	
36	0	1738.56	13	3	1.07	3483.07	3479	11	8.90E-04	37.9	
37	0	1763.31*	11	6	2.71	3532.68	3527	12	7.36E-04	89.1	
38	0	1826.01	16	12	0.66	3658.38	3649	15	1.14E-03	50.9	

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1993.78	10	2	1.50	3994.73	3991	9	6.66E-04	43.1	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 19:02:11

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942442.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 15:00:17
Sample ID : G1200942442 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry :
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00 Elapsed real time: 0 04:00:01.14 0.0%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: Yes Systematic Error : 0.00 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	+	1460.81	*	1.225E+01	5.091E+01	3.542E+01	2.240E+00	0.346
ZN-65	+	1115.55	*	3.505E+00	3.381E+00	8.384E+00	6.779E-01	0.418
Y-91	+	557.57	*	5.137E+00	7.285E+00	4.314E+00	3.245E-01	1.191
		1204.90		5.528E+02	1.204E+03	2.045E+03	1.683E+02	0.270
CD-109	+	88.03	*	3.156E+01	4.339E+01	5.638E+01	3.803E+00	0.560
SN-126	+	64.28		1.654E+00	2.622E+01	2.075E+01	2.924E+00	0.080
	+	86.94		1.289E+01	1.847E+01	2.258E+01	9.260E+00	0.571
	+	87.57	*	3.100E+00	4.261E+00	5.329E+00	3.589E-01	0.582
TM-171	+	51.87		1.439E+02	2.776E+02	2.792E+02	1.851E+01	0.515
		59.40		5.367E+01	5.859E+02	1.000E+03	6.586E+01	0.054
	+	66.72	*	7.910E+02	1.051E+03	1.371E+03	8.911E+01	0.577
BI-210	+	46.50	*	1.214E+01	4.957E+01	5.816E+01	4.572E+00	0.209
PB-210	+	46.50	*	1.214E+01	4.957E+01	5.816E+01	4.572E+00	0.209
PB-212		74.80		1.374E+01	1.347E+01	2.330E+01	2.655E+00	0.590
	+	87.30		1.474E+01	2.032E+01	2.562E+01	3.088E+00	0.575
		115.19		-1.942E+01	2.037E+02	3.302E+02	2.718E+01	-0.059
	+	238.63	*	7.117E-02	4.340E+00	5.358E+00	4.429E-01	0.013
		300.09		-2.851E+01	4.320E+01	7.051E+01	6.621E+00	-0.404
TH-228	+	84.40		3.149E+01	1.737E+02	1.717E+02	2.052E+01	0.183
	+	238.60	*	7.117E-02	4.340E+00	5.358E+00	4.428E-01	0.013
		300.10		-2.854E+01	4.630E+01	7.050E+01	4.167E+01	-0.405
NP-237	+	86.48	*	9.102E+00	1.265E+01	1.595E+01	3.461E+00	0.571
		95.87		3.376E+00	4.458E+01	7.388E+01	1.784E+01	0.046
U-238	+	63.29	*	4.179E+00	6.624E+01	5.571E+01	9.518E+00	0.075
ANH-511	+	511.00	*	1.541E+00	5.562E+00	2.478E+00	1.900E-01	0.622

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	-3.641E+00	2.093E+01	3.726E+01	3.148E+00	-0.098
NA-22		1274.53	*	2.146E+00	2.429E+00	4.845E+00	3.349E-01	0.443
AL-26	+	511.00		9.419E-01	3.400E+00	1.514E+00	1.161E-01	0.622
		1808.65	*	1.021E+00	2.162E+00	4.403E+00	2.900E-01	0.232

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
SC-46		889.25	*	-1.771E+00	2.265E+00	3.834E+00	2.181E-01	-0.462
		1120.51		1.741E+00	2.502E+00	5.004E+00	4.071E-01	0.348
V-48		944.10		-2.041E+01	7.779E+01	1.405E+02	8.582E+00	-0.145
		983.50	*	7.429E-01	7.156E+00	1.327E+01	8.683E-01	0.056
		1312.09		-5.362E-01	6.753E+00	1.233E+01	7.551E-01	-0.043
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	1.644E+01	2.891E+01	5.147E+01	4.092E+00	0.319
MN-54		834.83	*	-1.326E+00	2.111E+00	3.420E+00	2.082E-01	-0.388
CO-56		846.75	*	-1.563E-01	2.245E+00	3.948E+00	2.372E-01	-0.040
		1037.82		-4.475E-01	1.698E+01	3.143E+01	2.423E+00	-0.014
		1238.25		2.433E+00	4.549E+00	8.741E+00	6.898E-01	0.278
CO-57		122.06	*	-1.985E-01	1.502E+00	2.422E+00	2.105E-01	-0.082
		136.47		-6.019E+00	1.191E+01	1.860E+01	1.609E+00	-0.324
CO-58		810.78	*	-1.462E+00	2.891E+00	4.056E+00	2.542E-01	-0.361
FE-59		192.35		-1.609E+01	5.980E+01	1.035E+02	1.264E+01	-0.155
		1099.25	*	1.553E+00	6.161E+00	1.153E+01	9.968E-01	0.135
	+	1291.60		7.623E+00	7.576E+00	1.524E+01	1.223E+00	0.500
CO-60		1173.24		-7.905E-01	2.254E+00	3.924E+00	3.445E-01	-0.201
	+	1332.50	*	2.100E+00	2.469E+00	4.267E+00	2.425E-01	0.492
SE-75	+	66.05		1.402E+02	1.865E+02	2.281E+02	1.999E+01	0.615
		96.73		-1.220E+00	4.131E+01	6.793E+01	8.668E+00	-0.018
		121.11		1.121E+00	8.482E+00	1.390E+01	1.559E+00	0.081
		136.00		2.911E-01	2.292E+00	3.740E+00	3.003E-01	0.078
	+	198.60		8.751E+01	1.512E+02	1.738E+02	1.358E+01	0.503
		264.65	*	7.619E-01	2.517E+00	4.445E+00	3.190E-01	0.171
		279.53		1.959E+00	6.849E+00	1.196E+01	9.090E-01	0.164
		303.91		-8.406E+01	1.180E+02	1.915E+02	2.021E+01	-0.439
		400.65		-1.304E+01	1.597E+01	2.495E+01	2.579E+00	-0.523
KR-85		513.99	*	9.818E+02	4.179E+02	8.528E+02	6.535E+01	1.151
SR-85		513.99	*	5.770E+00	2.456E+00	5.012E+00	3.840E-01	1.151
Y-88		898.02		-2.037E-02	2.354E+00	4.372E+00	2.484E-01	-0.005
		1836.01	*	-1.938E+00	2.595E+00	4.273E+00	2.835E-01	-0.454
NB-94		702.63	*	9.502E-02	2.082E+00	3.248E+00	2.178E-01	0.029
		871.10		-1.537E+00	2.081E+00	3.547E+00	2.068E-01	-0.433
NB-95		765.79	*	2.645E+00	3.195E+00	6.151E+00	3.986E-01	0.430
NB-95M		235.69	*	-1.473E+03	1.275E+03	2.037E+03	2.661E+02	-0.723
ZR-95		724.18		-3.088E+00	6.280E+00	1.048E+01	7.945E-01	-0.295
		756.74	*	1.129E+00	4.457E+00	8.110E+00	6.190E-01	0.139
RU-103		497.08	*	-2.718E+00	3.088E+00	5.110E+00	6.959E-01	-0.532
	+	610.33		3.425E+01	7.867E+01	9.400E+01	1.505E+01	0.364
RH-106	+	511.85		7.888E+00	2.847E+01	1.270E+01	9.741E-01	0.621
		621.84	*	1.112E+01	1.762E+01	3.341E+01	2.385E+00	0.333
		1050.47		4.988E+01	1.287E+02	2.460E+02	1.798E+01	0.203
RU-106		622.20	*	9.468E+00	1.768E+01	3.319E+01	4.133E+00	0.285
AG-108M		433.93	*	1.070E-01	1.912E+00	3.463E+00	2.790E-01	0.031
		614.37		1.706E+00	2.195E+00	4.156E+00	3.157E-01	0.411
		722.95		1.547E-01	2.383E+00	4.222E+00	2.988E-01	0.037
AG-110M		657.75	*	1.140E+00	2.141E+00	3.969E+00	2.839E-01	0.287
		677.61		1.005E+01	1.764E+01	3.314E+01	2.344E+00	0.303

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	706.67		1.025E+01	1.877E+01	2.314E+01	1.619E+00	0.443
		763.93		-9.007E+00	9.336E+00	1.458E+01	9.921E-01	-0.618
		884.67		2.971E+00	2.836E+00	5.782E+00	3.547E-01	0.514
	+	937.48		9.287E+00	9.707E+00	9.623E+00	6.231E-01	0.965
		1384.27		-8.280E+00	1.056E+01	1.688E+01	1.040E+00	-0.491
SN-113		391.69	*	-2.025E-01	2.945E+00	4.941E+00	3.883E-01	-0.041
SN-115		484.47		-1.180E+02	1.289E+03	2.300E+03	1.772E+02	-0.051
		933.00	*	5.106E+01	2.498E+02	4.165E+02	2.495E+01	0.123
		1290.58		-1.955E+02	7.795E+02	1.155E+03	7.591E+01	-0.169
SN-117M		156.02		2.049E+01	2.204E+02	3.938E+02	2.721E+01	0.052
		158.56	*	-2.347E+00	5.506E+00	9.563E+00	6.474E-01	-0.245
TE-123M		159.00	*	-2.265E-01	1.570E+00	2.768E+00	1.885E-01	-0.082
SB-124		602.73		-1.189E-01	2.586E+00	4.571E+00	3.326E-01	-0.026
		645.85		7.788E+00	3.555E+01	6.416E+01	4.860E+00	0.121
		713.78		-1.620E+00	1.225E+02	1.891E+02	2.030E+01	-0.009
		722.79		1.724E+00	2.436E+01	4.318E+01	2.973E+00	0.040
		1368.16		9.413E+00	1.179E+02	2.180E+02	2.585E+01	0.043
		1690.98	*	-3.163E-01	5.348E+00	1.023E+01	7.023E-01	-0.031
SB-125		176.33		9.291E-01	1.855E+01	3.272E+01	2.968E+00	0.028
		427.89	*	-5.472E-01	5.071E+00	9.121E+00	7.160E-01	-0.060
		463.38		1.110E+01	1.568E+01	2.960E+01	2.503E+00	0.375
		600.56		4.693E+00	1.057E+01	1.943E+01	1.561E+00	0.241
		606.64		-2.530E+01	4.247E+01	6.102E+01	4.935E+00	-0.415
		635.90		-9.473E+00	1.622E+01	2.714E+01	2.135E+00	-0.349
TE-125M		109.28	*	3.539E+02	5.871E+02	9.922E+02	9.682E+01	0.357
I-126		388.63		1.917E+01	2.510E+01	4.477E+01	3.383E+00	0.428
		666.33	*	-4.313E+00	1.993E+01	3.462E+01	2.350E+00	-0.125
		753.82		-8.007E+01	1.630E+02	2.719E+02	1.775E+01	-0.294
SB-126		666.33		-1.857E+00	8.576E+00	1.490E+01	1.011E+00	-0.125
		695.00		5.455E+00	9.635E+00	1.619E+01	1.089E+00	0.337
		697.00		-2.083E+00	3.595E+01	5.510E+01	3.704E+00	-0.038
		720.50	*	-2.523E+00	1.644E+01	2.862E+01	1.904E+00	-0.088
SB-127		252.40		1.631E+03	2.503E+03	4.345E+03	1.876E+03	0.375
		411.60		-2.105E+03	7.310E+03	1.200E+04	2.258E+03	-0.175
		444.90		-1.677E+03	5.488E+03	9.697E+03	1.578E+03	-0.173
		473.00		-1.316E+02	9.883E+02	1.762E+03	2.914E+02	-0.075
		543.30		-3.675E+03	9.867E+03	1.708E+04	3.031E+03	-0.215
		603.50		1.416E+03	6.580E+03	1.192E+04	1.915E+03	0.119
		685.70	*	-1.610E+02	7.456E+02	1.298E+03	1.941E+02	-0.124
	+	698.50		1.064E+04	9.291E+03	1.573E+04	2.917E+03	0.676
		783.70		-1.805E+02	2.129E+03	3.257E+03	5.082E+02	-0.055
I-131		284.30		-1.272E+02	2.641E+02	4.391E+02	3.480E+01	-0.290
		364.48	*	5.880E+00	1.953E+01	3.413E+01	2.804E+00	0.172
		636.97		-2.100E+02	2.708E+02	4.434E+02	3.438E+01	-0.474
BA-133		79.62		-3.563E+01	4.779E+01	7.592E+01	1.076E+01	-0.469
		81.00		-6.934E-01	3.522E+00	5.806E+00	8.639E-01	-0.119
		276.40		-1.518E+01	2.014E+01	3.276E+01	4.471E+00	-0.463
		302.85		4.997E+00	7.460E+00	1.342E+01	1.677E+00	0.372
		356.02	*	6.520E-01	2.255E+00	3.951E+00	4.945E-01	0.165

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		383.85		-5.950E-01	1.829E+01	3.084E+01	3.671E+00	-0.019
CS-134		563.23		-6.987E+00	1.964E+01	3.406E+01	2.586E+00	-0.205
		569.32		-4.068E+00	1.067E+01	1.844E+01	1.402E+00	-0.221
		604.70		-6.377E-01	1.846E+00	3.180E+00	2.317E-01	-0.201
		795.84	*	9.959E-01	2.184E+00	4.067E+00	2.599E-01	0.245
	+	801.93		3.946E+01	5.178E+01	4.076E+01	2.590E+00	0.968
		1365.15		2.250E+01	7.835E+01	1.474E+02	9.336E+00	0.153
CS-135		268.24	*	3.900E+00	8.198E+00	1.460E+01	1.274E+00	0.267
CS-136	+	66.88		4.280E+01	5.711E+01	7.416E+01	1.066E+01	0.577
	+	86.36		8.012E+01	1.104E+02	1.404E+02	1.638E+01	0.571
		153.25		-8.810E+00	6.666E+01	1.178E+02	9.761E+00	-0.075
		163.92		-9.462E+00	1.142E+02	2.012E+02	1.573E+01	-0.047
		176.60		-6.760E+00	4.090E+01	7.138E+01	5.081E+00	-0.095
		273.65		1.247E+01	4.552E+01	8.006E+01	6.308E+00	0.156
		340.55		-4.241E-01	1.392E+01	2.361E+01	1.841E+00	-0.018
		818.51		-2.759E+00	7.895E+00	1.336E+01	8.321E-01	-0.206
		1048.07	*	1.066E+00	1.194E+01	2.206E+01	1.705E+00	0.048
		1235.36		3.966E+00	5.543E+01	1.007E+02	1.127E+01	0.039
BA-137M		661.65	*	-1.129E+00	2.042E+00	3.417E+00	2.322E-01	-0.330
CS-137		661.66	*	-1.186E+00	2.159E+00	3.615E+00	2.464E-01	-0.328
CE-139		165.85	*	-1.205E+00	1.748E+00	2.982E+00	1.897E-01	-0.404
BA-140		162.67		6.403E+01	7.960E+01	1.463E+02	1.052E+01	0.438
		304.87		-1.759E+02	1.458E+02	2.129E+02	5.889E+01	-0.826
		423.73		3.792E+01	1.981E+02	3.650E+02	1.174E+02	0.104
		537.31	*	4.389E-01	3.027E+01	5.430E+01	1.786E+01	0.008
CE-141		145.44	*	3.537E+00	4.564E+00	8.368E+00	6.408E-01	0.423
CE-144		133.51	*	5.405E+00	1.048E+01	1.921E+01	2.935E+00	0.281
PM-144		476.78		-7.941E-01	3.843E+00	6.818E+00	5.869E-01	-0.116
		618.01		-1.315E+00	1.919E+00	3.185E+00	2.376E-01	-0.413
		696.49	*	-4.343E-02	2.300E+00	3.544E+00	2.387E-01	-0.012
PM-146		453.88	*	6.035E-01	2.244E+00	4.163E+00	4.164E-01	0.145
		633.25		3.424E+01	8.548E+01	1.552E+02	5.750E+01	0.221
		735.93		-1.703E+00	8.487E+00	1.466E+01	4.112E+00	-0.116
		747.24		2.093E+00	5.529E+00	1.008E+01	1.298E+00	0.208
ND-147		91.11		-8.486E+01	3.272E+01	4.601E+01	3.573E+00	-1.844
		531.02	*	-9.168E+01	7.055E+01	1.092E+02	1.573E+01	-0.839
PM-147		121.30	*	4.930E+05	3.078E+06	5.049E+06	4.357E+05	0.098
EU-152		121.78		-8.647E-01	4.284E+00	6.873E+00	6.849E-01	-0.126
		344.31	*	1.415E+00	5.587E+00	9.694E+00	7.838E-01	0.146
		963.37		-6.549E+00	1.461E+01	2.552E+01	1.613E+00	-0.257
GD-153		69.67		9.155E+00	5.339E+01	9.034E+01	5.867E+00	0.101
	+	83.37		1.826E+02	1.007E+03	9.155E+02	6.085E+01	0.199
		97.43	*	1.537E+00	4.248E+00	7.122E+00	5.130E-01	0.216
		103.18		-1.288E+00	5.686E+00	9.215E+00	6.924E-01	-0.140
EU-154		123.07		8.769E-01	2.927E+00	4.842E+00	5.506E-01	0.181
		247.93		1.607E+00	1.962E+01	3.422E+01	3.532E+00	0.047
		591.76		-3.782E+01	3.742E+01	6.002E+01	6.460E+00	-0.630
		723.30		2.960E-01	9.953E+00	1.758E+01	1.369E+00	0.017
		756.86		7.622E+00	4.250E+01	7.668E+01	8.099E+00	0.099

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		873.20		-2.739E+00	1.845E+01	3.341E+01	3.494E+00	-0.082
		996.30		-1.124E+01	1.930E+01	3.299E+01	5.579E+00	-0.341
		1004.76		-7.781E+00	1.208E+01	2.049E+01	2.122E+00	-0.380
		1274.51	*	5.919E+00	6.748E+00	1.343E+01	1.351E+00	0.441
EU-155	+	86.54		3.752E+00	5.158E+00	6.574E+00	4.486E-01	0.571
		105.31	*	1.034E+00	5.519E+00	9.169E+00	7.110E-01	0.113
TB-160	+	86.79		1.129E+01	1.552E+01	1.979E+01	1.329E+00	0.571
		298.57		-2.027E-01	6.722E+00	1.152E+01	8.437E-01	-0.018
		879.36	*	-1.484E+01	8.902E+00	1.329E+01	7.662E-01	-1.117
		962.29		4.176E+00	3.056E+01	5.687E+01	3.588E+00	0.073
		966.15		-1.807E+00	1.100E+01	1.988E+01	1.263E+00	-0.091
		1177.93		-3.707E+00	2.006E+01	3.574E+01	3.109E+00	-0.104
HF-181		56.28		2.112E+01	2.165E+01	3.893E+01	2.562E+00	0.542
		57.53		-9.118E+00	1.283E+01	2.093E+01	1.377E+00	-0.436
	+	65.20		3.057E+01	4.060E+01	4.988E+01	3.245E+00	0.613
		133.02		-2.855E-01	4.490E+00	7.237E+00	5.875E-01	-0.039
		136.25		-4.691E+00	3.465E+01	5.559E+01	4.420E+00	-0.084
		345.85		-1.394E+00	1.328E+01	2.246E+01	1.686E+00	-0.062
		482.03	*	5.813E-01	2.961E+00	5.418E+00	4.175E-01	0.107
TA-182	+	67.75		3.406E+00	4.524E+00	5.968E+00	3.877E-01	0.571
		100.10		-3.627E+00	1.054E+01	1.697E+01	1.246E+00	-0.214
		222.10		1.011E+01	2.043E+01	3.650E+01	2.488E+00	0.277
		1121.28		3.933E+00	7.021E+00	1.374E+01	1.119E+00	0.286
		1189.05		1.437E+00	1.354E+01	2.555E+01	2.173E+00	0.056
		1221.42	*	-4.185E+00	1.063E+01	1.828E+01	1.449E+00	-0.229
		1230.97		1.247E+01	2.430E+01	4.664E+01	3.613E+00	0.267
IR-192		295.96		9.996E-02	6.334E+00	1.088E+01	8.036E-01	0.009
		308.46		-2.494E+00	6.035E+00	1.004E+01	7.453E-01	-0.249
		316.51	*	-1.611E+00	2.208E+00	3.569E+00	2.652E-01	-0.451
		468.07		2.831E+00	4.217E+00	7.965E+00	6.687E-01	0.355
		604.41		5.124E+00	2.716E+01	4.925E+01	5.991E+00	0.104
		612.46		-4.937E+01	5.573E+01	7.672E+01	6.674E+00	-0.643
HG-203		70.83		3.760E+00	4.157E+01	6.989E+01	8.646E+00	0.054
		72.87		-1.712E+01	2.621E+01	4.220E+01	5.035E+00	-0.406
	+	82.60		1.586E+01	8.749E+01	8.060E+01	1.015E+01	0.197
		279.20	*	1.127E+00	2.839E+00	4.994E+00	3.751E-01	0.226
BI-207		569.67		-9.719E-01	1.692E+00	2.866E+00	2.140E-01	-0.339
		897.83		3.587E+02	1.239E+03	2.377E+03	1.335E+02	0.151
		1063.62	*	-2.462E+00	2.723E+00	4.421E+00	3.299E-01	-0.557
		1442.20		-2.042E+02	1.441E+03	2.578E+03	1.531E+02	-0.079
		1770.23		-1.516E+01	2.966E+01	5.168E+01	3.376E+00	-0.293
TL-208		75.00		3.951E+01	4.179E+01	7.218E+01	7.876E+00	0.547
		277.35		-7.421E-01	2.071E+01	3.559E+01	4.054E+00	-0.021
	+	510.84		7.337E+00	2.649E+01	1.179E+01	1.336E+00	0.622
		583.14	*	8.262E-01	2.295E+00	4.183E+00	3.392E-01	0.198
		763.30		-9.117E+01	1.137E+02	1.808E+02	2.304E+01	-0.504
		860.37		7.375E+00	1.861E+01	3.361E+01	2.287E+00	0.219
		1093.90		-3.838E+02	5.978E+02	9.961E+02	2.290E+02	-0.385
BI-211		351.07	*	8.426E+00	1.146E+01	2.055E+01	1.647E+00	0.410

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PB-211		404.84	*	-3.163E+01	5.820E+01	8.775E+01	5.487E+01	-0.360
		427.08		-2.286E+01	1.112E+02	1.971E+02	1.223E+02	-0.116
		831.96		9.096E+00	6.236E+01	1.120E+02	6.984E+01	0.081
BI-212		727.18	*	1.955E+01	1.754E+01	3.388E+01	2.831E+00	0.577
BI-214	+	609.31	*	2.524E+00	5.787E+00	8.563E+00	7.618E-01	0.295
		768.36		3.275E+01	3.783E+01	7.256E+01	6.374E+00	0.451
	+	934.06		9.152E+01	9.581E+01	1.185E+02	1.025E+01	0.772
		1120.29		8.710E+00	1.307E+01	2.607E+01	2.734E+00	0.334
		1238.11		2.142E+01	4.007E+01	7.696E+01	7.330E+00	0.278
	+	1377.67		6.832E+01	5.663E+01	1.152E+02	9.882E+00	0.593
PB-214		74.81		2.294E+01	2.252E+01	3.902E+01	3.852E+00	0.588
		77.11		-1.162E+01	1.286E+01	2.033E+01	2.042E+00	-0.572
	+	87.30		2.601E+01	3.582E+01	4.519E+01	4.781E+00	0.575
		241.98		-4.122E-01	1.768E+01	3.062E+01	2.737E+00	-0.013
		295.21		-2.330E+00	7.503E+00	1.259E+01	1.211E+00	-0.185
		351.92	*	2.516E+00	3.967E+00	7.063E+00	6.757E-01	0.356
RN-219		271.23		-4.759E-01	1.259E+01	2.168E+01	1.981E+00	-0.022
		401.81	*	-5.439E+00	2.363E+01	3.914E+01	5.659E+00	-0.139
RA-223		122.32		-2.133E+01	1.002E+02	1.606E+02	1.493E+01	-0.133
		144.24		7.721E+00	3.699E+01	6.638E+01	5.768E+00	0.116
		154.21		-8.496E+00	2.072E+01	3.606E+01	2.899E+00	-0.236
		269.46		7.859E-01	9.880E+00	1.714E+01	1.264E+00	0.046
		323.87	*	-4.241E+01	3.831E+01	5.878E+01	1.009E+01	-0.722
		338.28		1.211E+00	5.538E+01	9.439E+01	1.090E+01	0.013
		445.03		-4.073E+01	1.233E+02	2.175E+02	2.490E+01	-0.187
RA-224		240.98	*	1.277E+01	3.803E+01	6.062E+01	4.219E+00	0.211
RA-226		295.21		-2.330E+00	7.503E+00	1.259E+01	1.211E+00	-0.185
		351.92		2.516E+00	3.964E+00	7.063E+00	5.327E-01	0.356
	+	609.31	*	2.524E+00	5.787E+00	8.563E+00	7.618E-01	0.295
AC-227		79.80		2.715E+00	5.880E+01	9.840E+01	2.072E+01	0.028
		236.00		6.370E+00	1.259E+01	2.035E+01	2.282E+00	0.313
		256.20	*	4.941E+00	2.133E+01	3.743E+01	5.501E+00	0.132
		286.10		2.980E+01	8.498E+01	1.498E+02	1.868E+01	0.199
		299.80		-5.137E+01	8.006E+01	1.303E+02	2.230E+01	-0.394
		304.40		-8.553E+01	1.010E+02	1.604E+02	2.903E+01	-0.533
		329.70		2.590E+01	5.057E+01	8.939E+01	1.202E+01	0.290
		334.20		1.821E+01	1.259E+02	2.175E+02	4.178E+01	0.084
TH-227		79.80		2.668E+00	5.778E+01	9.668E+01	2.036E+01	0.028
		94.00		-6.367E+01	1.104E+02	1.745E+02	3.700E+01	-0.365
		236.00		6.266E+00	1.238E+01	2.002E+01	1.965E+00	0.313
		256.20	*	4.858E+00	2.098E+01	3.681E+01	6.396E+00	0.132
		286.10		2.932E+01	8.855E+01	1.474E+02	1.478E+02	0.199
		299.80		-5.041E+01	7.855E+01	1.278E+02	2.159E+01	-0.394
		304.40		-8.406E+01	9.920E+01	1.576E+02	2.818E+01	-0.533
		329.70		2.548E+01	4.975E+01	8.794E+01	1.171E+01	0.290
		334.20		1.785E+01	1.235E+02	2.132E+02	4.035E+01	0.084
AC-228		209.25		-5.938E-02	3.003E+01	5.238E+01	3.352E+01	-0.001
		338.32		2.927E-01	1.339E+01	2.282E+01	9.364E+00	0.013
		463.01		3.223E+01	3.732E+01	6.982E+01	1.676E+01	0.462

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		794.95		-4.441E+00	4.289E+01	7.451E+01	1.687E+01	-0.060
		911.21	*	-2.554E+00	9.358E+00	1.432E+01	1.322E+00	-0.178
		964.77		-4.365E+01	4.224E+01	6.621E+01	1.584E+01	-0.659
		969.11		5.284E+00	1.266E+01	2.416E+01	5.461E+00	0.219
RA-228		209.25		-5.938E-02	3.003E+01	5.238E+01	3.352E+01	-0.001
		338.32		2.927E-01	1.339E+01	2.282E+01	9.364E+00	0.013
		463.01		3.223E+01	3.732E+01	6.982E+01	1.676E+01	0.462
		794.95		-4.441E+00	4.289E+01	7.451E+01	1.687E+01	-0.060
		911.21	*	-2.554E+00	9.358E+00	1.432E+01	1.322E+00	-0.178
		964.77		-4.365E+01	4.224E+01	6.621E+01	1.584E+01	-0.659
		969.11		5.284E+00	1.266E+01	2.416E+01	5.461E+00	0.219
TH-229	+	85.43		2.246E+00	1.239E+01	1.218E+01	8.143E-01	0.184
	+	88.47		4.232E+00	5.818E+00	7.561E+00	5.115E-01	0.560
		100.00		-2.775E+00	1.014E+01	1.639E+01	1.203E+00	-0.169
		193.63	*	4.024E+00	2.556E+01	4.535E+01	2.985E+00	0.089
		210.97		-1.490E+01	4.141E+01	7.074E+01	4.758E+00	-0.211
TH-230		295.21		-2.330E+00	7.502E+00	1.259E+01	1.211E+00	-0.185
		351.92		2.516E+00	3.964E+00	7.063E+00	5.327E-01	0.356
	+	609.31	*	2.524E+00	5.787E+00	8.563E+00	7.618E-01	0.295
PA-231		283.67	*	-8.971E+00	8.784E+01	1.500E+02	2.167E+01	-0.060
		301.29		1.381E+01	2.997E+01	5.304E+01	6.035E+00	0.260
		330.00		4.113E+01	1.104E+02	1.926E+02	6.098E+01	0.214
TH-231	+	84.21		5.790E+00	3.194E+01	3.157E+01	5.363E+00	0.183
		236.00		6.355E+00	1.256E+01	2.030E+01	2.276E+00	0.313
		256.20		4.929E+00	2.128E+01	3.734E+01	5.487E+00	0.132
		269.46	*	7.859E-01	9.880E+00	1.714E+01	1.441E+00	0.046
		271.23		-4.759E-01	1.259E+01	2.168E+01	2.257E+00	-0.022
		283.67		-8.970E+00	8.784E+01	1.500E+02	2.167E+01	-0.060
		301.29		1.381E+01	2.996E+01	5.304E+01	5.072E+00	0.260
		329.85		1.513E+01	3.449E+01	6.071E+01	8.736E+00	0.249
		351.07		8.426E+00	1.146E+01	2.055E+01	1.647E+00	0.410
		401.81		-5.439E+00	2.362E+01	3.914E+01	4.677E+00	-0.139
TH-232	+	238.59	*	6.921E-02	4.221E+00	6.329E+00	5.231E-01	0.011
		911.20		-2.539E+00	9.270E+00	1.419E+01	1.310E+00	-0.179
		964.40		-2.963E+01	4.117E+01	6.851E+01	1.640E+01	-0.433
		969.11		5.235E+00	1.254E+01	2.393E+01	5.411E+00	0.219
PA-233		75.28		4.425E+01	1.127E+02	1.904E+02	2.719E+01	0.232
	+	86.59		6.068E+01	8.483E+01	1.063E+02	2.793E+01	0.571
		300.12		-1.437E+01	2.176E+01	3.542E+01	5.017E+00	-0.406
		311.98	*	3.867E+00	3.611E+00	6.632E+00	5.089E-01	0.583
		340.50		-2.109E+00	3.400E+01	5.755E+01	1.350E+01	-0.037
		398.62		3.717E+01	1.178E+02	2.044E+02	5.380E+01	0.182
		415.76		4.413E+01	9.083E+01	1.694E+02	3.586E+01	0.261
PA-234	+	63.00		4.872E+00	7.721E+01	6.503E+01	9.392E+00	0.075
		94.67		-4.985E+01	1.146E+01	1.225E+01	1.394E+00	-4.069
		98.44		2.299E-01	4.953E+00	8.152E+00	4.532E+00	0.028
		99.70		7.718E+00	2.575E+01	4.297E+01	3.147E+00	0.180
		111.00		-3.760E+00	1.072E+01	1.712E+01	1.992E+00	-0.220
	+	131.20		3.188E+00	7.626E+00	9.390E+00	7.710E-01	0.340

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		152.70		1.152E+01	1.657E+01	3.027E+01	4.942E+00	0.380
	+	186.00		5.057E+01	1.106E+02	1.024E+02	3.144E+01	0.494
		226.40		2.031E+01	2.170E+01	3.949E+01	4.787E+00	0.514
		227.20		6.001E+00	2.278E+01	4.027E+01	2.760E+00	0.149
		248.90		-3.085E+01	4.716E+01	7.748E+01	1.747E+01	-0.398
		293.70		-1.966E+00	3.505E+01	5.996E+01	1.000E+01	-0.033
		369.80		-4.607E+00	4.437E+01	7.518E+01	1.607E+01	-0.061
		568.70		-4.276E+01	6.527E+01	9.373E+01	7.003E+00	-0.456
		569.50		-8.870E+00	1.498E+01	2.532E+01	1.891E+00	-0.350
		574.00		3.980E+00	8.591E+01	1.539E+02	1.146E+01	0.026
	+	699.00		4.841E+01	4.227E+01	7.397E+01	1.354E+01	0.654
		706.10		-4.193E+00	7.223E+01	1.101E+02	4.873E+01	-0.038
		733.00		3.810E+00	2.150E+01	3.861E+01	8.300E+00	0.099
		742.81		1.072E-02	8.145E+01	1.433E+02	9.602E+01	0.000
		796.30		2.071E+01	4.836E+01	8.892E+01	2.348E+01	0.233
		805.80		2.412E+01	5.545E+01	1.019E+02	3.064E+01	0.237
		819.60		-2.158E+01	6.819E+01	1.149E+02	4.316E+01	-0.188
		826.30		-2.664E+01	5.295E+01	8.490E+01	3.764E+01	-0.314
		831.60		1.200E+01	3.324E+01	6.091E+01	1.780E+01	0.197
		876.40		6.026E+01	7.789E+01	9.811E+01	1.007E+02	0.614
		880.51		-1.630E+01	1.560E+01	2.554E+01	1.471E+00	-0.638
		883.24		1.979E+01	2.060E+01	3.281E+01	2.195E+01	0.603
		899.00		-1.015E+01	4.324E+01	7.796E+01	3.370E+01	-0.130
		925.00		-1.136E+01	6.777E+01	1.069E+02	6.310E+00	-0.106
		926.50		5.388E+00	8.892E+00	1.752E+01	4.291E+00	0.308
		946.00	*	2.621E+00	1.501E+01	2.850E+01	5.061E+00	0.092
		949.00		7.530E+00	2.226E+01	4.301E+01	2.651E+00	0.175
		980.50		2.624E+01	4.190E+01	8.178E+01	5.325E+00	0.321
		1394.10		2.571E+01	7.526E+01	1.397E+02	9.050E+01	0.184
PA-234M		766.40		9.614E+02	1.170E+03	1.778E+03	1.360E+03	0.541
		1001.03	*	3.199E+02	2.421E+02	5.039E+02	4.221E+01	0.635
TH-234	+	63.29	*	4.179E+00	6.624E+01	7.800E+01	1.333E+01	0.054
		92.38		1.601E+02	3.961E+01	5.651E+01	9.803E+00	2.833
		112.81		5.384E+01	5.218E+02	8.549E+02	1.520E+02	0.063
U-234	+	67.67		3.259E+02	4.344E+02	5.712E+02	7.425E+01	0.571
		241.98		-4.128E-01	1.771E+01	3.066E+01	2.742E+00	-0.013
		295.21	*	-2.330E+00	7.502E+00	1.259E+01	1.211E+00	-0.185
		351.92		2.516E+00	3.967E+00	7.063E+00	6.757E-01	0.356
U-235		89.95		-3.120E+01	5.056E+01	7.242E+01	2.202E+01	-0.431
		93.35		1.548E+02	5.467E+01	6.600E+01	1.820E+01	2.345
		105.00		1.009E+01	5.386E+01	8.936E+01	2.642E+01	0.113
		143.76	*	1.257E+00	1.128E+01	2.017E+01	3.432E+00	0.062
		163.33		6.489E+00	2.508E+01	4.491E+01	8.184E+00	0.144
	+	185.71		1.873E+00	4.057E+00	3.789E+00	2.469E-01	0.494
		205.31		8.784E+00	2.587E+01	4.592E+01	7.961E+00	0.191
NP-239		99.55		3.131E+00	8.437E+00	1.413E+01	1.033E+00	0.222
		117.00	*	-2.913E+00	1.056E+01	1.691E+01	1.412E+00	-0.172
		209.75		-3.961E+00	4.012E+01	6.964E+01	4.676E+00	-0.057
		228.18		-5.326E+00	1.198E+01	2.030E+01	1.393E+00	-0.262

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		277.60		2.625E+00	9.874E+00	1.728E+01	1.246E+00	0.152
		334.31		1.234E+01	6.976E+01	1.208E+02	9.024E+00	0.102
AM-241		59.54	*	5.434E-01	3.392E+00	5.810E+00	4.290E-01	0.094
AM-242		99.55		7.307E+01	1.969E+02	3.297E+02	2.412E+01	0.222
		103.70	*	-8.119E+01	1.164E+02	1.829E+02	1.379E+01	-0.444
CM-247		278.00		4.179E+01	4.109E+01	7.500E+01	5.409E+00	0.557
		287.40		-4.564E+01	6.931E+01	1.137E+02	8.259E+00	-0.402
		402.60	*	4.868E-01	2.062E+00	3.565E+00	2.707E-01	0.137
CF-249		252.85		3.312E+01	4.682E+01	8.471E+01	5.969E+00	0.391
		333.44		-3.604E+00	9.119E+00	1.510E+01	1.128E+00	-0.239
		387.95	*	1.689E+00	2.431E+00	4.319E+00	3.263E-01	0.391
CF-251		176.00	*	-1.076E+00	7.183E+00	1.254E+01	8.076E-01	-0.086
		227.00		7.376E+00	2.037E+01	3.618E+01	2.480E+00	0.204
		285.00		-4.615E+01	9.944E+01	1.655E+02	1.201E+01	-0.279

VAX/VMS Nuclide Identification Report Generated

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*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942442  *
* Acquisition date : 13-OCT-2005 15:00:17 Detector SN#    : 2461        *
* Detector ID      : GAMMA15              Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 04:00:01.14     Half life ratio :  8.000      *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 15-SEP-2005 13:45:00 Nuclide Library :             *
* Sample ID        : G1200942442          Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME :  9-JUL-2005 11:51:32 MS Isotope      :             *
* MSD DPM          :    0.000             MSD Isotope     :             *
* LCS DPM          :    0.000             LCS Isotope     :             *
* LCSD DPM         :    0.000             LCSD Isotope    :             *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
K-40	1.225E+01	5.091E+01	3.542E+01	0.000E+00
ZN-65	3.505E+00	3.381E+00	8.384E+00	0.000E+00
Y-91	5.137E+00	7.285E+00	4.314E+00	0.000E+00
CD-109	3.156E+01	4.339E+01	5.638E+01	0.000E+00
SN-126	3.100E+00	4.261E+00	5.329E+00	0.000E+00
TM-171	7.910E+02	1.051E+03	1.371E+03	0.000E+00
BI-210	1.214E+01	4.957E+01	5.816E+01	0.000E+00
PB-210	1.214E+01	4.957E+01	5.816E+01	0.000E+00
PB-212	7.117E-02	4.340E+00	5.358E+00	0.000E+00
TH-228	7.117E-02	4.340E+00	5.358E+00	0.000E+00
NP-237	9.102E+00	1.265E+01	1.595E+01	0.000E+00
U-238	4.179E+00	6.624E+01	5.571E+01	0.000E+00
ANH-511	1.541E+00	5.562E+00	2.478E+00	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	
BE-7	-3.641E+00		2.093E+01	3.726E+01	0.000E+00 NOT IDENT.
NA-22	2.146E+00		2.429E+00	4.845E+00	0.000E+00 NOT IDENT.
NA-24	0.000E+00		6.995E+13	0.000E+00	0.000E+00 SHORT HLIF
AL-26	1.021E+00		2.162E+00	4.403E+00	0.000E+00 FAIL ABUN
SC-46	-1.771E+00		2.265E+00	3.834E+00	0.000E+00 NOT IDENT.
V-48	7.429E-01		7.156E+00	1.327E+01	0.000E+00 NOT IDENT.
CR-51	1.644E+01		2.891E+01	5.147E+01	0.000E+00 NOT IDENT.
MN-54	-1.326E+00		2.111E+00	3.420E+00	0.000E+00 NOT IDENT.
CO-56	-1.563E-01		2.245E+00	3.948E+00	0.000E+00 NOT IDENT.
MN-56	0.000E+00		1.436E+42	0.000E+00	0.000E+00 SHORT HLIF
CO-57	-1.985E-01		1.502E+00	2.422E+00	0.000E+00 NOT IDENT.
CO-58	-1.462E+00		2.891E+00	4.056E+00	0.000E+00 NOT IDENT.
FE-59	1.553E+00		6.161E+00	1.153E+01	0.000E+00 FAIL ABUN
CO-60	2.100E+00		2.469E+00	4.267E+00	0.000E+00 FAIL ABUN

SE-75	7.619E-01	2.517E+00	4.445E+00	0.000E+00	FAIL ABUN
KR-85	0.000E+00	4.179E+02	8.528E+02	0.000E+00	NOT IDENT.
SR-85	0.000E+00	2.456E+00	5.012E+00	0.000E+00	NOT IDENT.
Y-88	-1.938E+00	2.595E+00	4.273E+00	0.000E+00	NOT IDENT.
NB-94	9.502E-02	2.082E+00	3.248E+00	0.000E+00	NOT IDENT.
NB-95	2.645E+00	3.195E+00	6.151E+00	0.000E+00	NOT IDENT.
NB-95M	-1.473E+03	1.275E+03	2.037E+03	0.000E+00	NOT IDENT.
ZR-95	1.129E+00	4.457E+00	8.110E+00	0.000E+00	NOT IDENT.
MO-99	0.000E+00	2.911E+03	0.000E+00	0.000E+00	SHORT HLIF
TC-99M	0.000E+00	1.695E+34	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-2.718E+00	3.088E+00	5.110E+00	0.000E+00	FAIL ABUN
RH-106	1.112E+01	1.762E+01	3.341E+01	0.000E+00	FAIL ABUN
RU-106	9.468E+00	1.768E+01	3.319E+01	0.000E+00	NOT IDENT.
AG-108M	1.070E-01	1.912E+00	3.463E+00	0.000E+00	NOT IDENT.
AG-110M	1.140E+00	2.141E+00	3.969E+00	0.000E+00	FAIL ABUN
SN-113	-2.025E-01	2.945E+00	4.941E+00	0.000E+00	NOT IDENT.
CD-115	0.000E+00	3.238E+04	0.000E+00	0.000E+00	SHORT HLIF
SN-115	5.106E+01	2.498E+02	4.165E+02	0.000E+00	NOT IDENT.
SN-117M	-2.347E+00	5.506E+00	9.563E+00	0.000E+00	NOT IDENT.
TE-123M	-2.265E-01	1.570E+00	2.768E+00	0.000E+00	NOT IDENT.
SB-124	-3.163E-01	5.348E+00	1.023E+01	0.000E+00	NOT IDENT.
SB-125	-5.472E-01	5.071E+00	9.121E+00	0.000E+00	NOT IDENT.
TE-125M	3.539E+02	5.871E+02	9.922E+02	0.000E+00	NOT IDENT.
I-126	-4.313E+00	1.993E+01	3.462E+01	0.000E+00	NOT IDENT.
SB-126	-2.523E+00	1.644E+01	2.862E+01	0.000E+00	NOT IDENT.
SB-127	-1.610E+02	7.456E+02	1.298E+03	0.000E+00	FAIL ABUN
I-131	5.880E+00	1.953E+01	3.413E+01	0.000E+00	NOT IDENT.
I-132	0.000E+00	6.218E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	0.000E+00	5.797E+02	0.000E+00	0.000E+00	SHORT HLIF
BA-133	6.520E-01	2.255E+00	3.951E+00	0.000E+00	NOT IDENT.
I-133	0.000E+00	1.011E+10	0.000E+00	0.000E+00	SHORT HLIF
CS-134	9.959E-01	2.184E+00	4.067E+00	0.000E+00	FAIL ABUN
CS-135	3.900E+00	8.198E+00	1.460E+01	0.000E+00	NOT IDENT.
I-135	0.000E+00	3.855E+31	0.000E+00	0.000E+00	SHORT HLIF
CS-136	1.066E+00	1.194E+01	2.206E+01	0.000E+00	FAIL ABUN
BA-137M	-1.129E+00	2.042E+00	3.417E+00	0.000E+00	NOT IDENT.
CS-137	-1.186E+00	2.159E+00	3.615E+00	0.000E+00	NOT IDENT.
CE-139	-1.205E+00	1.748E+00	2.982E+00	0.000E+00	NOT IDENT.
BA-140	4.389E-01	3.027E+01	5.430E+01	0.000E+00	NOT IDENT.
LA-140	0.000E+00	2.639E+05	0.000E+00	0.000E+00	SHORT HLIF
CE-141	3.537E+00	4.564E+00	8.368E+00	0.000E+00	NOT IDENT.
CE-143	0.000E+00	4.830E+06	0.000E+00	0.000E+00	SHORT HLIF
CE-144	5.405E+00	1.048E+01	1.921E+01	0.000E+00	NOT IDENT.
PM-144	-4.343E-02	2.300E+00	3.544E+00	0.000E+00	NOT IDENT.
PR-144	0.000E+00	5.296E+42	0.000E+00	0.000E+00	SHORT HLIF
PM-146	6.035E-01	2.244E+00	4.163E+00	0.000E+00	NOT IDENT.
ND-147	-9.168E+01	7.055E+01	1.092E+02	0.000E+00	NOT IDENT.
PM-147	4.930E+05	3.078E+06	5.049E+06	0.000E+00	NOT IDENT.
PM-149	0.000E+00	2.907E+05	0.000E+00	0.000E+00	SHORT HLIF
EU-152	1.415E+00	5.587E+00	9.694E+00	0.000E+00	NOT IDENT.
GD-153	1.537E+00	4.248E+00	7.122E+00	0.000E+00	FAIL ABUN
EU-154	5.919E+00	6.748E+00	1.343E+01	0.000E+00	NOT IDENT.
EU-155	1.034E+00	5.519E+00	9.169E+00	0.000E+00	FAIL ABUN
TB-160	-1.484E+01	8.902E+00	1.329E+01	0.000E+00	FAIL ABUN
HF-181	5.813E-01	2.961E+00	5.418E+00	0.000E+00	FAIL ABUN
TA-182	-4.185E+00	1.063E+01	1.828E+01	0.000E+00	FAIL ABUN
IR-192	-1.611E+00	2.208E+00	3.569E+00	0.000E+00	NOT IDENT.
HG-203	1.127E+00	2.839E+00	4.994E+00	0.000E+00	FAIL ABUN
BI-207	-2.462E+00	2.723E+00	4.421E+00	0.000E+00	NOT IDENT.
TL-208	8.262E-01	2.295E+00	4.183E+00	0.000E+00	FAIL ABUN
BI-211	8.426E+00	1.146E+01	2.055E+01	0.000E+00	NOT IDENT.
PB-211	-3.163E+01	5.820E+01	8.775E+01	0.000E+00	NOT IDENT.
BI-212	1.955E+01	1.754E+01	3.388E+01	0.000E+00	NOT IDENT.
BI-214	2.524E+00	5.787E+00	8.563E+00	0.000E+00	FAIL ABUN
PB-214	2.516E+00	3.967E+00	7.063E+00	0.000E+00	FAIL ABUN
RN-219	-5.439E+00	2.363E+01	3.914E+01	0.000E+00	NOT IDENT.
RA-223	-4.241E+01	3.831E+01	5.878E+01	0.000E+00	NOT IDENT.
RA-224	1.277E+01	3.803E+01	6.062E+01	0.000E+00	NOT IDENT.
RA-226	2.524E+00	5.787E+00	8.563E+00	0.000E+00	FAIL ABUN
AC-227	4.941E+00	2.133E+01	3.743E+01	0.000E+00	NOT IDENT.
TH-227	4.858E+00	2.098E+01	3.681E+01	0.000E+00	NOT IDENT.
AC-228	-2.554E+00	9.358E+00	1.432E+01	0.000E+00	NOT IDENT.
RA-228	-2.554E+00	9.358E+00	1.432E+01	0.000E+00	NOT IDENT.
TH-229	4.024E+00	2.556E+01	4.535E+01	0.000E+00	FAIL ABUN
TH-230	2.524E+00	5.787E+00	8.563E+00	0.000E+00	FAIL ABUN
PA-231	-8.971E+00	8.784E+01	1.500E+02	0.000E+00	NOT IDENT.
TH-231	7.859E-01	9.880E+00	1.714E+01	0.000E+00	FAIL ABUN
TH-232	6.921E-02	4.221E+00	6.329E+00	0.000E+00	FAIL ABUN

PA-233	3.867E+00	3.611E+00	6.632E+00	0.000E+00 FAIL ABUN
PA-234	2.621E+00	1.501E+01	2.850E+01	0.000E+00 FAIL ABUN
PA-234M	3.199E+02	2.421E+02	5.039E+02	0.000E+00 NOT IDENT.
TH-234	4.179E+00	6.624E+01	7.800E+01	0.000E+00 FAIL ABUN
U-234	-2.330E+00	7.502E+00	1.259E+01	0.000E+00 FAIL ABUN
U-235	1.257E+00	1.128E+01	2.017E+01	0.000E+00 FAIL ABUN
NP-239	-2.913E+00	1.056E+01	1.691E+01	0.000E+00 NOT IDENT.
AM-241	5.434E-01	3.392E+00	5.810E+00	0.000E+00 NOT IDENT.
AM-242	-8.119E+01	1.164E+02	1.829E+02	0.000E+00 NOT IDENT.
CM-247	4.868E-01	2.062E+00	3.565E+00	0.000E+00 NOT IDENT.
CF-249	1.689E+00	2.431E+00	4.319E+00	0.000E+00 NOT IDENT.
CF-251	-1.076E+00	7.183E+00	1.254E+01	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:02:04.96

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942442.CNF;1
Sample date      : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 15:00:17
Sample ID        : G1200942442          Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA15              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.14  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 2461
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	5	46.66	176	153	0.85	92.35	89	20	1.22E-02	12.8	2.46E+00
2	5	51.45	46	237	1.31	101.94	89	20	3.17E-03	62.1	
3	0	63.36	217	348	0.71	125.81	121	9	1.50E-02	17.0	
4	0	66.54	38	244	1.09	132.16	130	6	2.66E-03	66.3	
5	0	75.01	75	215	1.25	149.14	147	5	5.19E-03	31.8	
6	0	84.11	68	313	1.58	167.38	164	8	4.74E-03	46.4	
7	0	87.26	59	214	0.96	173.68	172	6	4.09E-03	41.8	
8	0	92.74	284	332	1.22	184.66	181	9	1.97E-02	13.0	
9	0	129.80	21	217	1.51	258.91	257	7	1.45E-03	119.5	
10	0	139.60	82	255	1.42	278.55	274	9	5.68E-03	36.9	
11	0	185.58	167	205	0.76	370.68	366	9	1.16E-02	17.3	
12	1	198.22	54	162	1.12	396.00	393	10	3.75E-03	42.2	2.00E+00
13	1	199.72	32	164	1.12	399.00	393	10	2.23E-03	71.2	
14	0	238.65	68	129	0.90	477.00	475	6	4.72E-03	29.0	
15	0	441.40	85	188	7.76	883.26	874	28	5.87E-03	47.9	
16	0	511.06	332	123	2.69	1022.83	1014	21	2.30E-02	10.2	
17	0	558.37	61	123	6.57	1117.63	1111	24	4.23E-03	49.4	
18	0	582.18	9	78	0.51	1165.34	1163	11	6.49E-04	185.1	
19	0	595.76	37	44	2.21	1192.56	1189	9	2.60E-03	35.6	
20	0	609.34	36	52	1.01	1219.77	1215	9	2.51E-03	39.5	
21	0	650.88	21	26	1.30	1303.02	1300	6	1.49E-03	43.6	
22	0	699.32	23	24	1.06	1400.10	1396	8	1.62E-03	42.7	
23	0	708.49	21	46	0.68	1418.47	1415	11	1.44E-03	67.3	
24	0	777.38	36	55	7.02	1556.52	1548	20	2.48E-03	53.7	
25	0	803.68	45	53	6.15	1609.24	1602	21	3.09E-03	43.4	
26	0	915.93	69	43	12.64	1834.19	1821	30	4.79E-03	30.7	
27	0	935.84	28	23	2.55	1874.08	1868	14	1.97E-03	41.2	
28	0	1088.45	13	8	1.49	2179.95	2178	6	8.71E-04	45.3	
29	0	1113.69	11	7	1.03	2230.53	2227	7	7.95E-04	48.1	
30	0	1201.52	7	7	0.55	2406.57	2405	5	5.16E-04	62.9	
31	0	1213.44	10	5	1.48	2430.46	2428	6	7.15E-04	45.3	
32	0	1292.94	13	10	1.37	2589.80	2586	8	9.19E-04	49.5	
33	0	1331.75	13	12	1.03	2667.60	2665	11	8.79E-04	58.7	
34	0	1379.27	20	5	2.63	2762.85	2759	8	1.38E-03	30.6	
35	0	1459.23	47	28	2.42	2923.12	2913	19	3.28E-03	30.7	
36	0	1479.18	16	2	2.81	2963.11	2960	8	1.09E-03	29.9	
37	0	1528.10	17	6	2.05	3061.18	3056	12	1.18E-03	37.7	
38	0	1710.98	23	15	3.28	3427.77	3419	20	1.58E-03	46.7	

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
39	0	1738.56	13	3	1.07	3483.07	3479	11	8.90E-04	37.9	
40	0	1763.31	25	6	2.71	3532.68	3527	12	1.74E-03	28.0	
41	0	1826.01	16	12	0.66	3658.38	3649	15	1.14E-03	50.9	
42	0	1993.78	10	2	1.50	3994.73	3991	9	6.66E-04	43.1	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:02:09.88

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942442.CNF;1
Sample date      : 15-SEP-2005 13:45:00 Acquisition date : 13-OCT-2005 15:00:17
Sample ID        : G1200942442          Sample quantity  : 2.00000E+00 LITER
Detector name    : GAMMA15              Detector geometry: 2L_MB
Elapsed live time: 0 04:00:00.00        Elapsed real time: 0 04:00:01.14  0.0%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 2461
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
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Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
K-40	1460.81	7	10.67*	5.360E-01	1.225E+01	1.225E+01	415.51
ZN-65	1115.55	11	50.75*	6.539E-01	3.237E+00	3.505E+00	96.45
Y-91	557.57	44	95.08*	1.167E+00	3.681E+00	5.137E+00	141.82
	1204.90	------	0.30	6.155E-01	------ Line Not Found		------
CD-109	88.03	38	3.79*	3.130E+00	3.026E+01	3.156E+01	137.48
SN-126	64.28	5	9.60	2.900E+00	1.654E+00	1.654E+00	1584.97
	86.94	38	8.90	3.130E+00	1.289E+01	1.289E+01	143.30
	87.57	38	37.00*	3.130E+00	3.100E+00	3.100E+00	137.48
TM-171	51.87	31	0.81	2.598E+00	1.400E+02	1.439E+02	192.87
	59.40	------	0.21	2.818E+00	------ Line Not Found		------
	66.72	38	0.16*	2.954E+00	7.693E+02	7.910E+02	132.82
BI-210	46.50	13	4.05*	2.423E+00	1.211E+01	1.214E+01	408.45
PB-210	46.50	13	4.05*	2.423E+00	1.211E+01	1.214E+01	408.45
PB-212	74.80	------	10.70	3.057E+00	------ Line Not Found		------
	87.30	38	8.00	3.130E+00	1.434E+01	1.474E+01	137.84
	115.19	------	0.60	3.087E+00	------ Line Not Found		------
	238.63	1	44.60*	2.263E+00	6.921E-02	7.117E-02	6098.56
	300.09	------	3.41	1.933E+00	------ Line Not Found		------
TH-228	84.40	12	1.21	3.119E+00	3.063E+01	3.149E+01	551.58
	238.60	1	44.60*	2.263E+00	6.921E-02	7.117E-02	6098.56
	300.10	------	3.41	1.933E+00	------ Line Not Found		------
NP-237	86.48	38	12.60*	3.130E+00	9.102E+00	9.102E+00	139.02
	95.87	------	2.60	3.140E+00	------ Line Not Found		------
U-238	63.29	5	3.80*	2.900E+00	4.179E+00	4.179E+00	1585.00
ANH-511	511.00	21	100.00*	1.259E+00	1.541E+00	1.541E+00	360.95

Flag: "*" = Keyline

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

Total number of lines in spectrum	39	
Number of unidentified lines	15	
Number of lines tentatively identified by NID	24	61.54%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
K-40	1.28E+09Y	1.00	1.225E+01	1.225E+01	5.091E+01	415.51	
ZN-65	244.40D	1.08	3.237E+00	3.505E+00	3.381E+00	96.45	
Y-91	58.51D	1.40	3.681E+00	5.137E+00	7.285E+00	141.82	
CD-109	464.00D	1.04	3.026E+01	3.156E+01	4.339E+01	137.48	
SN-126	1.00E+05Y	1.00	3.100E+00	3.100E+00	4.261E+00	137.48	
TM-171	1.92Y	1.03	7.693E+02	7.910E+02	10.51E+02	132.82	
BI-210	22.26Y	1.00	1.211E+01	1.214E+01	4.957E+01	408.45	
PB-210	22.26Y	1.00	1.211E+01	1.214E+01	4.957E+01	408.45	
PB-212	1.91Y	1.03	6.921E-02	7.117E-02	434.0E-02	6098.56	
TH-228	1.91Y	1.03	6.921E-02	7.117E-02	434.0E-02	6098.56	
NP-237	2.14E+06Y	1.00	9.102E+00	9.102E+00	12.65E+00	139.02	
U-238	4.47E+09Y	1.00	4.179E+00	4.179E+00	66.24E+00	1585.00	
ANH-511	1.00E+09Y	1.00	1.541E+00	1.541E+00	5.562E+00	360.95	
			---------	---------			
	Total Activity :		8.610E+02	8.858E+02			
	Grand Total Activity :		8.610E+02	8.858E+02			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1200942442 Acquisition date : 13-OCT-2005 15:00:17

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	129.80	21	217	1.51	258.91	257	7	1.45E-03	****	3.01E+00	T
0	139.60	67	255	1.42	278.55	274	9	4.67E-03	93.4	2.94E+00	T
0	185.58	28	205	0.76	370.68	366	9	1.96E-03	****	2.62E+00	T
1	198.22	29	162	1.12	396.00	393	10	2.02E-03	****	2.53E+00	T
1	199.72	7	164	1.12	399.00	393	10	4.92E-04	****	2.52E+00	
0	441.40	85	188	7.76	883.26	874	28	5.87E-03	95.9	1.43E+00	
0	595.76	29	44	2.21	1192.56	1189	9	2.02E-03	98.3	1.10E+00	
0	609.34	13	52	1.01	1219.77	1215	9	9.36E-04	****	1.08E+00	T
0	650.88	21	26	1.30	1303.02	1300	6	1.49E-03	87.1	1.02E+00	T
0	699.32	23	24	1.06	1400.10	1396	8	1.62E-03	85.4	9.61E-01	T
0	708.49	16	46	0.68	1418.47	1415	11	1.11E-03	****	9.51E-01	T
0	777.38	36	55	7.02	1556.52	1548	20	2.48E-03	****	8.78E-01	
0	803.68	31	53	6.15	1609.24	1602	21	2.12E-03	****	8.54E-01	T
0	915.93	69	43	12.64	1834.19	1821	30	4.79E-03	61.5	7.65E-01	
0	935.84	24	23	2.55	1874.08	1868	14	1.63E-03	****	7.52E-01	T
0	1088.45	13	8	1.49	2179.95	2178	6	8.71E-04	90.5	6.66E-01	
0	1201.52	7	7	0.55	2406.57	2405	5	5.16E-04	****	6.17E-01	
0	1213.44	10	5	1.48	2430.46	2428	6	7.15E-04	90.6	6.12E-01	
0	1292.94	13	10	1.37	2589.80	2586	8	9.19E-04	99.1	5.84E-01	T
0	1331.75	13	12	1.03	2667.60	2665	11	8.79E-04	****	5.72E-01	T
0	1379.27	17	5	2.63	2762.85	2759	8	1.16E-03	82.4	5.57E-01	T
0	1479.18	16	2	2.81	2963.11	2960	8	1.09E-03	59.9	5.31E-01	
0	1528.10	17	6	2.05	3061.18	3056	12	1.18E-03	75.3	5.20E-01	
0	1710.98	23	15	3.28	3427.77	3419	20	1.58E-03	93.3	4.83E-01	
0	1738.56	13	3	1.07	3483.07	3479	11	8.90E-04	75.8	4.79E-01	
0	1763.31	11	6	2.71	3532.68	3527	12	7.36E-04	****	4.75E-01	
0	1826.01	16	12	0.66	3658.38	3649	15	1.14E-03	****	4.65E-01	
0	1993.78	10	2	1.50	3994.73	3991	9	6.66E-04	86.2	4.43E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 19:02:17.85

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942442.CNF;1    *
* Acquisition date : 13-OCT-2005 15:00:17  Detector SN#    : 2461       *
* Detector ID      : GAMMA15               Sensitivity     : 3.00000    *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000    *
* Elapsed live time: 0 04:00:00.00         Abundance limit : 75.00000   *
* Elapsed real time: 0 04:00:01.14         Half life ratio : 8.00000    *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 15-SEP-2005 13:45:00  Nuclide Library : EPI        *
* Sample ID        : G1200942442           Analyst initials: MJH1       *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 9-JUL-2005 11:51:32.65MS Isotope      :           *
* MSD DPM          :                      MSD Isotope      :           *
* LCS DPM          :                      LCS Isotope      :           *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
K-40	1.225E+01	5.091E+01	3.542E+01	2.240E+00	0.346
ZN-65	3.505E+00	3.381E+00	8.384E+00	6.779E-01	0.418
Y-91	5.137E+00	7.285E+00	4.314E+00	3.245E-01	1.191
CD-109	3.156E+01	4.339E+01	5.638E+01	3.803E+00	0.560
SN-126	3.100E+00	4.261E+00	5.329E+00	3.589E-01	0.582
TM-171	7.910E+02	1.051E+03	1.371E+03	8.911E+01	0.577
BI-210	1.214E+01	4.957E+01	5.816E+01	4.572E+00	0.209
PB-210	1.214E+01	4.957E+01	5.816E+01	4.572E+00	0.209
PB-212	7.117E-02	4.340E+00	5.358E+00	4.429E-01	0.013
TH-228	7.117E-02	4.340E+00	5.358E+00	4.428E-01	0.013
NP-237	9.102E+00	1.265E+01	1.595E+01	3.461E+00	0.571
U-238	4.179E+00	6.624E+01	5.571E+01	9.518E+00	0.075
ANH-511	1.541E+00	5.562E+00	2.478E+00	1.900E-01	0.622

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	-3.641E+00		2.093E+01	3.726E+01	3.148E+00	-0.098

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	2.146E+00		2.429E+00	4.845E+00	3.349E-01	0.443
AL-26	1.021E+00		2.162E+00	4.403E+00	2.900E-01	0.232
SC-46	-1.771E+00		2.265E+00	3.834E+00	2.181E-01	-0.462
V-48	7.429E-01		7.156E+00	1.327E+01	8.683E-01	0.056
CR-51	1.644E+01		2.891E+01	5.147E+01	4.092E+00	0.319
MN-54	-1.326E+00		2.111E+00	3.420E+00	2.082E-01	-0.388
CO-56	-1.563E-01		2.245E+00	3.948E+00	2.372E-01	-0.040
CO-57	-1.985E-01		1.502E+00	2.422E+00	2.105E-01	-0.082
CO-58	-1.462E+00		2.891E+00	4.056E+00	2.542E-01	-0.361
FE-59	1.553E+00		6.161E+00	1.153E+01	9.968E-01	0.135
CO-60	2.100E+00	+	2.469E+00	4.267E+00	2.425E-01	0.492
SE-75	7.619E-01		2.517E+00	4.445E+00	3.190E-01	0.171
KR-85	9.818E+02		4.179E+02	8.528E+02	6.535E+01	1.151
SR-85	5.770E+00		2.456E+00	5.012E+00	3.840E-01	1.151
Y-88	-1.938E+00		2.595E+00	4.273E+00	2.835E-01	-0.454
NB-94	9.502E-02		2.082E+00	3.248E+00	2.178E-01	0.029
NB-95	2.645E+00		3.195E+00	6.151E+00	3.986E-01	0.430
NB-95M	-1.473E+03		1.275E+03	2.037E+03	2.661E+02	-0.723
ZR-95	1.129E+00		4.457E+00	8.110E+00	6.190E-01	0.139
RU-103	-2.718E+00		3.088E+00	5.110E+00	6.959E-01	-0.532
RH-106	1.112E+01		1.762E+01	3.341E+01	2.385E+00	0.333
RU-106	9.468E+00		1.768E+01	3.319E+01	4.133E+00	0.285
AG-108M	1.070E-01		1.912E+00	3.463E+00	2.790E-01	0.031
AG-110M	1.140E+00		2.141E+00	3.969E+00	2.839E-01	0.287
SN-113	-2.025E-01		2.945E+00	4.941E+00	3.883E-01	-0.041
SN-115	5.106E+01		2.498E+02	4.165E+02	2.495E+01	0.123
SN-117M	-2.347E+00		5.506E+00	9.563E+00	6.474E-01	-0.245
TE-123M	-2.265E-01		1.570E+00	2.768E+00	1.885E-01	-0.082
SB-124	-3.163E-01		5.348E+00	1.023E+01	7.023E-01	-0.031
SB-125	-5.472E-01		5.071E+00	9.121E+00	7.160E-01	-0.060
TE-125M	3.539E+02		5.871E+02	9.922E+02	9.682E+01	0.357
I-126	-4.313E+00		1.993E+01	3.462E+01	2.350E+00	-0.125
SB-126	-2.523E+00		1.644E+01	2.862E+01	1.904E+00	-0.088
SB-127	-1.610E+02		7.456E+02	1.298E+03	1.941E+02	-0.124
I-131	5.880E+00		1.953E+01	3.413E+01	2.804E+00	0.172
BA-133	6.520E-01		2.255E+00	3.951E+00	4.945E-01	0.165
CS-134	9.959E-01		2.184E+00	4.067E+00	2.599E-01	0.245
CS-135	3.900E+00		8.198E+00	1.460E+01	1.274E+00	0.267
CS-136	1.066E+00		1.194E+01	2.206E+01	1.705E+00	0.048
BA-137M	-1.129E+00		2.042E+00	3.417E+00	2.322E-01	-0.330
CS-137	-1.186E+00		2.159E+00	3.615E+00	2.464E-01	-0.328
CE-139	-1.205E+00		1.748E+00	2.982E+00	1.897E-01	-0.404
BA-140	4.389E-01		3.027E+01	5.430E+01	1.786E+01	0.008
CE-141	3.537E+00		4.564E+00	8.368E+00	6.408E-01	0.423
CE-144	5.405E+00		1.048E+01	1.921E+01	2.935E+00	0.281
PM-144	-4.343E-02		2.300E+00	3.544E+00	2.387E-01	-0.012
PM-146	6.035E-01		2.244E+00	4.163E+00	4.164E-01	0.145
ND-147	-9.168E+01		7.055E+01	1.092E+02	1.573E+01	-0.839

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PM-147	4.930E+05		3.078E+06	5.049E+06	4.357E+05	0.098
EU-152	1.415E+00		5.587E+00	9.694E+00	7.838E-01	0.146
GD-153	1.537E+00		4.248E+00	7.122E+00	5.130E-01	0.216
EU-154	5.919E+00		6.748E+00	1.343E+01	1.351E+00	0.441
EU-155	1.034E+00		5.519E+00	9.169E+00	7.110E-01	0.113
TB-160	-1.484E+01		8.902E+00	1.329E+01	7.662E-01	-1.117
HF-181	5.813E-01		2.961E+00	5.418E+00	4.175E-01	0.107
TA-182	-4.185E+00		1.063E+01	1.828E+01	1.449E+00	-0.229
IR-192	-1.611E+00		2.208E+00	3.569E+00	2.652E-01	-0.451
HG-203	1.127E+00		2.839E+00	4.994E+00	3.751E-01	0.226
BI-207	-2.462E+00		2.723E+00	4.421E+00	3.299E-01	-0.557
TL-208	8.262E-01		2.295E+00	4.183E+00	3.392E-01	0.198
BI-211	8.426E+00		1.146E+01	2.055E+01	1.647E+00	0.410
PB-211	-3.163E+01		5.820E+01	8.775E+01	5.487E+01	-0.360
BI-212	1.955E+01		1.754E+01	3.388E+01	2.831E+00	0.577
BI-214	2.524E+00	+	5.787E+00	8.563E+00	7.618E-01	0.295
PB-214	2.516E+00		3.967E+00	7.063E+00	6.757E-01	0.356
RN-219	-5.439E+00		2.363E+01	3.914E+01	5.659E+00	-0.139
RA-223	-4.241E+01		3.831E+01	5.878E+01	1.009E+01	-0.722
RA-224	1.277E+01		3.803E+01	6.062E+01	4.219E+00	0.211
RA-226	2.524E+00	+	5.787E+00	8.563E+00	7.618E-01	0.295
AC-227	4.941E+00		2.133E+01	3.743E+01	5.501E+00	0.132
TH-227	4.858E+00		2.098E+01	3.681E+01	6.396E+00	0.132
AC-228	-2.554E+00		9.358E+00	1.432E+01	1.322E+00	-0.178
RA-228	-2.554E+00		9.358E+00	1.432E+01	1.322E+00	-0.178
TH-229	4.024E+00		2.556E+01	4.535E+01	2.985E+00	0.089
TH-230	2.524E+00	+	5.787E+00	8.563E+00	7.618E-01	0.295
PA-231	-8.971E+00		8.784E+01	1.500E+02	2.167E+01	-0.060
TH-231	7.859E-01		9.880E+00	1.714E+01	1.441E+00	0.046
TH-232	6.921E-02	+	4.221E+00	6.329E+00	5.231E-01	0.011
PA-233	3.867E+00		3.611E+00	6.632E+00	5.089E-01	0.583
PA-234	2.621E+00		1.501E+01	2.850E+01	5.061E+00	0.092
PA-234M	3.199E+02		2.421E+02	5.039E+02	4.221E+01	0.635
TH-234	4.179E+00	+	6.624E+01	7.800E+01	1.333E+01	0.054
U-234	-2.330E+00		7.502E+00	1.259E+01	1.211E+00	-0.185
U-235	1.257E+00		1.128E+01	2.017E+01	3.432E+00	0.062
NP-239	-2.913E+00		1.056E+01	1.691E+01	1.412E+00	-0.172
AM-241	5.434E-01		3.392E+00	5.810E+00	4.290E-01	0.094
AM-242	-8.119E+01		1.164E+02	1.829E+02	1.379E+01	-0.444
CM-247	4.868E-01		2.062E+00	3.565E+00	2.707E-01	0.137
CF-249	1.689E+00		2.431E+00	4.319E+00	3.263E-01	0.391
CF-251	-1.076E+00		7.183E+00	1.254E+01	8.076E-01	-0.086

VAX/VMS Nuclide Identification Report Generated

```
*********************************************************************
*                        Environmental Physics, Inc.                *
*                            2040 Savage Road                       *
*                          Charleston, SC 29414                     *
*********************************************************************
*                                                                   *
*                            DETECTOR DATA                          *
*                                                                   *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200942442   *
* Acquisition date : 13-OCT-2005 15:00:17 Detector SN#    : 2461    *
* Detector ID      : GAMMA15              Sensitivity     : 3.000   *
* Geometry         : 2L_MB                Energy tolerance: 2.000   *
* Elapsed live time:    0 04:00:00.00     Abundance limit : 75.000  *
* Elapsed real time:    0 04:00:01.14     Half life ratio : 8.000   *
*********************************************************************
*                                                                   *
*                            SAMPLE DATA                            *
*                                                                   *
* Sample date      : 15-SEP-2005 13:45:00 Nuclide Library :         *
* Sample ID        : G1200942442          Analyst initials: MJH1    *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000  *
*********************************************************************
*                                                                   *
*                              QC DATA                              *
*                                                                   *
* CALIB. DATE/TIME :  9-JUL-2005 11:51:32 MS Isotope      :         *
* MSD DPM          :    0.000             MSD Isotope     :         *
* LCS DPM          :    0.000             LCS Isotope     :         *
* LCSD DPM         :    0.000             LCSD Isotope    :         *
*********************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
K-40	1.225E+01	5.091E+01	1.549E+01	2.545E+01
ZN-65	3.505E+00	3.381E+00	3.779E+00	1.691E+00
Y-91	5.137E+00	7.285E+00	1.999E+00	3.643E+00
CD-109	3.156E+01	4.339E+01	2.709E+01	2.169E+01
SN-126	3.100E+00	4.261E+00	2.556E+00	2.131E+00
TM-171	7.910E+02	1.051E+03	6.581E+02	5.253E+02
BI-210	1.214E+01	4.957E+01	2.779E+01	2.479E+01
PB-210	1.214E+01	4.957E+01	2.779E+01	2.479E+01
PB-212	7.117E-02	4.340E+00	2.551E+00	2.170E+00
TH-228	7.117E-02	4.340E+00	2.551E+00	2.170E+00
NP-237	9.102E+00	1.265E+01	7.657E+00	6.327E+00
U-238	4.179E+00	6.624E+01	2.672E+01	3.312E+01
ANH-511	1.541E+00	5.562E+00	1.139E+00	2.781E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	-3.641E+00	2.093E+01	1.732E+01	1.047E+01	NOT IDENT.
NA-22	2.146E+00	2.429E+00	2.204E+00	1.214E+00	NOT IDENT.
NA-24	1.184E+13	6.995E+13	0.000E+00	3.498E+13	SHORT HLIF
AL-26	1.021E+00	2.162E+00	1.930E+00	1.081E+00	FAIL ABUN
SC-46	-1.771E+00	2.265E+00	1.714E+00	1.132E+00	NOT IDENT.
V-48	7.429E-01	7.156E+00	6.041E+00	3.578E+00	NOT IDENT.
CR-51	1.644E+01	2.891E+01	2.433E+01	1.445E+01	NOT IDENT.
MN-54	-1.326E+00	2.111E+00	1.547E+00	1.056E+00	NOT IDENT.
CO-56	-1.563E-01	2.245E+00	1.776E+00	1.122E+00	NOT IDENT.
MN-56	-1.000E+41	1.436E+42	0.000E+00	0.000E+00	SHORT HLIF
CO-57	-1.985E-01	1.502E+00	1.159E+00	7.512E-01	NOT IDENT.
CO-58	-1.462E+00	2.891E+00	1.830E+00	1.445E+00	NOT IDENT.
FE-59	1.553E+00	6.161E+00	5.243E+00	3.080E+00	FAIL ABUN
CO-60	2.100E+00	2.469E+00	1.910E+00	1.234E+00	FAIL ABUN

SE-75	7.619E-01	2.517E+00	2.106E+00	1.259E+00	FAIL ABUN
KR-85	9.818E+02	4.179E+02	4.031E+02	2.089E+02	NOT IDENT.
SR-85	5.770E+00	2.456E+00	2.369E+00	1.228E+00	NOT IDENT.
Y-88	-1.938E+00	2.595E+00	1.806E+00	1.297E+00	NOT IDENT.
NB-94	9.502E-02	2.082E+00	1.492E+00	1.041E+00	NOT IDENT.
NB-95	2.645E+00	3.195E+00	2.828E+00	1.598E+00	NOT IDENT.
NB-95M	-1.473E+03	1.275E+03	9.696E+02	6.376E+02	NOT IDENT.
ZR-95	1.129E+00	4.457E+00	3.710E+00	2.229E+00	NOT IDENT.
MO-99	3.106E+03	2.911E+03	0.000E+00	1.456E+03	SHORT HLIF
TC-99M	1.583E+34	1.695E+34	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-2.718E+00	3.088E+00	2.375E+00	1.544E+00	FAIL ABUN
RH-106	1.112E+01	1.762E+01	1.543E+01	8.811E+00	FAIL ABUN
RU-106	9.468E+00	1.768E+01	1.532E+01	8.841E+00	NOT IDENT.
AG-108M	1.070E-01	1.912E+00	1.625E+00	9.558E-01	NOT IDENT.
AG-110M	1.140E+00	2.141E+00	1.842E+00	1.070E+00	FAIL ABUN
SN-113	-2.025E-01	2.945E+00	2.324E+00	1.472E+00	NOT IDENT.
CD-115	2.087E+04	3.238E+04	0.000E+00	1.619E+04	SHORT HLIF
SN-115	5.106E+01	2.498E+02	1.887E+02	1.249E+02	NOT IDENT.
SN-117M	-2.347E+00	5.506E+00	4.565E+00	2.753E+00	NOT IDENT.
TE-123M	-2.265E-01	1.570E+00	1.321E+00	7.849E-01	NOT IDENT.
SB-124	-3.163E-01	5.348E+00	4.383E+00	2.674E+00	NOT IDENT.
SB-125	-5.472E-01	5.071E+00	4.261E+00	2.536E+00	NOT IDENT.
TE-125M	3.539E+02	5.871E+02	4.762E+02	2.936E+02	NOT IDENT.
I-126	-4.313E+00	1.993E+01	1.589E+01	9.963E+00	NOT IDENT.
SB-126	-2.523E+00	1.644E+01	1.310E+01	8.222E+00	NOT IDENT.
SB-127	-1.610E+02	7.456E+02	5.916E+02	3.728E+02	FAIL ABUN
I-131	5.880E+00	1.953E+01	1.601E+01	9.765E+00	NOT IDENT.
I-132	-1.000E+41	6.218E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-2.503E+02	5.797E+02	0.000E+00	2.899E+02	SHORT HLIF
BA-133	6.520E-01	2.255E+00	1.851E+00	1.128E+00	NOT IDENT.
I-133	-6.113E+09	1.011E+10	0.000E+00	5.057E+09	SHORT HLIF
CS-134	9.959E-01	2.184E+00	1.857E+00	1.092E+00	FAIL ABUN
CS-135	3.900E+00	8.198E+00	6.923E+00	4.099E+00	NOT IDENT.
I-135	-1.104E+31	3.855E+31	0.000E+00	0.000E+00	SHORT HLIF
CS-136	1.066E+00	1.194E+01	1.001E+01	5.971E+00	FAIL ABUN
BA-137M	-1.129E+00	2.042E+00	1.569E+00	1.021E+00	NOT IDENT.
CS-137	-1.186E+00	2.159E+00	1.660E+00	1.080E+00	NOT IDENT.
CE-139	-1.205E+00	1.748E+00	1.426E+00	8.741E-01	NOT IDENT.
BA-140	4.389E-01	3.027E+01	2.523E+01	1.514E+01	NOT IDENT.
LA-140	1.798E+05	2.639E+05	0.000E+00	1.319E+05	SHORT HLIF
CE-141	3.537E+00	4.564E+00	4.022E+00	2.282E+00	NOT IDENT.
CE-143	-4.370E+04	4.830E+06	0.000E+00	2.415E+06	SHORT HLIF
CE-144	5.405E+00	1.048E+01	9.186E+00	5.241E+00	NOT IDENT.
PM-144	-4.343E-02	2.300E+00	1.633E+00	1.150E+00	NOT IDENT.
PR-144	-1.000E+41	5.296E+42	0.000E+00	0.000E+00	SHORT HLIF
PM-146	6.035E-01	2.244E+00	1.936E+00	1.122E+00	NOT IDENT.
ND-147	-9.168E+01	7.055E+01	4.993E+01	3.527E+01	NOT IDENT.
PM-147	4.930E+05	3.078E+06	2.420E+06	1.539E+06	NOT IDENT.
PM-149	9.290E+04	2.907E+05	0.000E+00	1.453E+05	SHORT HLIF
EU-152	1.415E+00	5.587E+00	4.573E+00	2.793E+00	NOT IDENT.
GD-153	1.537E+00	4.248E+00	3.423E+00	2.124E+00	FAIL ABUN
EU-154	5.919E+00	6.748E+00	6.108E+00	3.374E+00	NOT IDENT.
EU-155	1.034E+00	5.519E+00	4.388E+00	2.760E+00	FAIL ABUN
TB-160	-1.484E+01	8.902E+00	5.908E+00	4.451E+00	FAIL ABUN
HF-181	5.813E-01	2.961E+00	2.526E+00	1.481E+00	FAIL ABUN
TA-182	-4.185E+00	1.063E+01	8.233E+00	5.317E+00	FAIL ABUN
IR-192	-1.611E+00	2.208E+00	1.678E+00	1.104E+00	NOT IDENT.
HG-203	1.127E+00	2.839E+00	2.376E+00	1.420E+00	FAIL ABUN
BI-207	-2.462E+00	2.723E+00	1.961E+00	1.361E+00	NOT IDENT.
TL-208	8.262E-01	2.295E+00	1.955E+00	1.147E+00	FAIL ABUN
BI-211	8.426E+00	1.146E+01	9.707E+00	5.732E+00	NOT IDENT.
PB-211	-3.163E+01	5.820E+01	4.104E+01	2.910E+01	NOT IDENT.
BI-212	1.955E+01	1.754E+01	1.576E+01	8.770E+00	NOT IDENT.
BI-214	2.524E+00	5.787E+00	4.030E+00	2.894E+00	FAIL ABUN
PB-214	2.516E+00	3.967E+00	3.334E+00	1.983E+00	FAIL ABUN
RN-219	-5.439E+00	2.363E+01	1.831E+01	1.181E+01	NOT IDENT.
RA-223	-4.241E+01	3.831E+01	2.761E+01	1.915E+01	NOT IDENT.
RA-224	1.277E+01	3.803E+01	2.885E+01	1.901E+01	NOT IDENT.
RA-226	2.524E+00	5.787E+00	4.030E+00	2.894E+00	FAIL ABUN
AC-227	4.941E+00	2.133E+01	1.778E+01	1.067E+01	NOT IDENT.
TH-227	4.858E+00	2.098E+01	1.748E+01	1.049E+01	NOT IDENT.
AC-228	-2.554E+00	9.358E+00	6.562E+00	4.679E+00	NOT IDENT.
RA-228	-2.554E+00	9.358E+00	6.562E+00	4.679E+00	NOT IDENT.
TH-229	4.024E+00	2.556E+01	2.160E+01	1.278E+01	FAIL ABUN
TH-230	2.524E+00	5.787E+00	4.030E+00	2.893E+00	FAIL ABUN
PA-231	-8.971E+00	8.784E+01	7.108E+01	4.392E+01	NOT IDENT.
TH-231	7.859E-01	9.880E+00	8.127E+00	4.940E+00	FAIL ABUN
TH-232	6.921E-02	4.221E+00	3.040E+00	2.110E+00	FAIL ABUN

PA-233	3.867E+00	3.611E+00	3.142E+00	1.805E+00 FAIL ABUN
PA-234	2.621E+00	1.501E+01	1.284E+01	7.503E+00 FAIL ABUN
PA-234M	3.199E+02	2.421E+02	2.310E+02	1.211E+02 NOT IDENT.
TH-234	4.179E+00	6.624E+01	3.787E+01	3.312E+01 FAIL ABUN
U-234	-2.330E+00	7.502E+00	5.959E+00	3.751E+00 FAIL ABUN
U-235	1.257E+00	1.128E+01	9.676E+00	5.641E+00 FAIL ABUN
NP-239	-2.913E+00	1.056E+01	8.090E+00	5.278E+00 NOT IDENT.
AM-241	5.434E-01	3.392E+00	2.781E+00	1.696E+00 NOT IDENT.
AM-242	-8.119E+01	1.164E+02	8.745E+01	5.818E+01 NOT IDENT.
CM-247	4.868E-01	2.062E+00	1.669E+00	1.031E+00 NOT IDENT.
CF-249	1.689E+00	2.431E+00	2.039E+00	1.215E+00 NOT IDENT.
CF-251	-1.076E+00	7.183E+00	6.008E+00	3.591E+00 NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G1200942442
ANALYST	: MJH1	DETECTOR	: GAMMA15
SAMPLE DATE	: 15-SEP-2005 13:45:00.00	COUNT TIME	: 0 04:00:00.00
ANALYSIS DATE	: 13-OCT-2005 15:00:17.89	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 8.300E+01
GROSS GAMMA ERROR (pCi/LITER)	: 1.131E+02
GROSS GAMMA MDA (pCi/LITER)	: 2.815E+02
GROSS GAMMA DLC (pCi/LITER)	: 1.352E+02

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 12:41:16.05

```
*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942443.CNF;1
Sample date      : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 11:40:47
Sample ID        : G1200942443          Sample quantity  : 2.00000E+00 LITER
Detector name    : WELL                 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:02.44  0.1%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 3941466
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	33.37	61	636	1.39	65.96	63	7	1.69E-02	70.0	
2	0	59.43*	1210	1353	1.46	117.75	111	13	3.36E-01	6.9	
3	0	87.96*	2493	1039	1.27	174.44	167	13	6.93E-01	3.3	
4	0	92.85*	6	408	0.93	184.16	181	7	1.55E-03	27.7	
5	0	121.97	1270	748	1.34	242.05	235	14	3.53E-01	5.4	
6	0	136.32	125	441	1.32	270.57	267	9	3.48E-02	31.4	
7	0	148.62*	52	224	0.71	295.02	293	6	1.44E-02	48.2	
8	0	165.83	1053	348	1.29	329.23	326	9	2.92E-01	4.5	
9	0	215.42	43	210	1.40	427.79	424	7	1.19E-02	57.9	
10	0	249.71	23	162	1.10	495.96	494	7	6.39E-03	93.6	
11	0	278.65*	124	277	1.74	553.49	545	16	3.45E-02	31.6	
12	0	312.44*	26	90	0.84	620.66	618	7	7.17E-03	66.2	
13	0	391.33	613	277	1.74	777.50	768	18	1.70E-01	7.6	
14	0	416.20*	25	84	1.54	826.95	824	8	6.98E-03	67.5	
15	0	510.36*	69	95	3.65	1014.18	1006	16	1.91E-02	36.5	
16	0	520.83	11	84	1.43	1034.99	1032	9	3.18E-03	146.6	
17	1	634.64	43	42	1.93	1261.32	1258	17	1.20E-02	31.1	2.92E+00
18	1	639.83	29	42	1.94	1271.65	1258	17	7.93E-03	36.7	
19	0	645.21	16	70	1.93	1282.35	1281	10	4.31E-03	102.8	
20	0	661.20*	862	167	1.80	1314.15	1306	18	2.39E-01	5.0	
21	0	751.57	74	62	4.09	1493.88	1486	17	2.04E-02	27.4	
22	0	758.04*	13	25	1.40	1506.74	1504	7	3.55E-03	72.3	
23	0	762.27	24	59	3.67	1515.16	1511	11	6.73E-03	64.2	
24	0	897.34*	698	128	1.93	1783.84	1777	15	1.94E-01	5.2	
25	0	949.57	29	43	0.80	1887.74	1884	9	7.95E-03	46.0	
26	0	1172.24*	926	54	2.10	2330.77	2322	16	2.57E-01	3.7	
27	0	1232.44	12	9	0.58	2450.57	2445	9	3.31E-03	53.8	
28	0	1274.44	19	34	6.62	2534.14	2517	27	5.30E-03	87.9	
29	0	1331.34*	861	20	2.23	2647.40	2637	19	2.39E-01	3.6	
30	0	1340.19	2	26	3.88	2665.00	2659	17	4.17E-04	775.7	
31	0	1428.53	8	7	1.47	2840.83	2838	7	2.16E-03	67.2	
32	0	1546.85	17	3	2.80	3076.37	3073	9	4.81E-03	28.9	
33	0	1556.02	8	2	1.27	3094.61	3093	5	2.33E-03	40.5	
34	0	1579.60	14	9	0.82	3141.55	3134	11	3.98E-03	47.2	
35	0	1815.69	6	7	3.42	3611.63	3604	11	1.59E-03	104.2	
36	0	1834.49	408	11	2.92	3649.06	3638	26	1.13E-01	5.5	

Flag: "*" = Peak area was modified by background subtraction

VMS Nuclide Identification Report V2.9 Generated 13-OCT-2005 12:41:20

Configuration : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942443.CNF;1
Analyses by : PEAK V16.4,PEAKEFF V2.2,ENBACK V1.5,NID V3.0,MINACT V2.4
Sample title : MJH1
Sample date : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 11:40:47
Sample ID : G1200942443 Sample quantity : 2.0000 LITER
Sample type : EPI Sample geometry : 3190-I
Detector name : Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00 Elapsed real time: 0 01:00:02.44 0.1%
Peak Width (FWHM): 2.50 Confidence level : 5.00 %
Energy tolerance : 2.00 KEV Half life ratio : 8.00
Errors propagated: No Systematic Error : 0.56 %
Efficiency type : Empirical Efficiencies at : Peak Energy
Abundance limit : 75.00 WTM error limit : 3.00

Full Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	+	1274.53	*	1.592E+01	2.799E+01	1.940E+01	0.000E+00	0.821
CO-57	+	122.06	*	2.558E+02	2.748E+01	1.853E+01	0.000E+00	13.811
	+	136.47		2.040E+02	1.283E+02	1.455E+02	0.000E+00	1.402
CO-60	+	1173.24		7.225E+02	5.393E+01	2.260E+01	0.000E+00	31.969
	+	1332.50	*	7.385E+02	5.356E+01	1.406E+01	0.000E+00	52.509
Y-88	+	898.02		5.207E+02	5.397E+01	3.199E+01	0.000E+00	16.278
	+	1836.01	*	4.995E+02	5.493E+01	1.685E+01	0.000E+00	29.639
CD-109	+	88.03	*	1.350E+04	8.987E+02	6.060E+02	0.000E+00	22.278
SN-113	+	391.69	*	3.220E+02	4.866E+01	2.674E+01	0.000E+00	12.039
SN-126		64.28		-6.464E+01	2.347E+02	3.880E+02	0.000E+00	-0.167
	+	86.94		5.626E+03	3.745E+02	2.556E+02	0.000E+00	22.012
	+	87.57	*	1.353E+03	9.008E+01	6.105E+01	0.000E+00	22.167
BA-137M	+	661.65	*	4.758E+02	4.730E+01	2.707E+01	0.000E+00	17.577
CS-137	+	661.66	*	5.030E+02	5.001E+01	2.862E+01	0.000E+00	17.577
CE-139	+	165.85	*	2.396E+02	2.133E+01	1.879E+01	0.000E+00	12.746
PM-147	+	121.30	*	5.326E+08	5.721E+07	3.860E+07	0.000E+00	13.798
HG-203		70.83		2.260E+02	5.000E+02	8.417E+02	0.000E+00	0.269
		72.87		1.517E+01	2.841E+02	4.725E+02	0.000E+00	0.032
		82.60		3.507E+02	6.115E+02	9.220E+02	0.000E+00	0.380
	+	279.20	*	4.639E+01	2.930E+01	2.179E+01	0.000E+00	2.129
PA-233		75.28		-6.029E+02	1.389E+03	2.276E+03	0.000E+00	-0.265
	+	86.59		2.649E+04	1.764E+03	1.208E+03	0.000E+00	21.925
		300.12		-5.551E+01	1.277E+02	2.177E+02	0.000E+00	-0.255
	+	311.98	*	1.713E+01	2.268E+01	4.044E+01	0.000E+00	0.424
		340.50		3.748E+01	2.034E+02	3.573E+02	0.000E+00	0.105
		398.62		1.117E+01	7.028E+02	1.225E+03	0.000E+00	0.009
	+	415.76		5.123E+02	6.915E+02	1.115E+03	0.000E+00	0.459
NP-237	+	86.48	*	3.974E+03	2.645E+02	1.815E+02	0.000E+00	21.897
		95.87		-4.664E+01	4.687E+02	6.888E+02	0.000E+00	-0.068
AM-241	+	59.54	*	1.275E+03	1.764E+02	1.295E+02	0.000E+00	9.842
ANH-511	+	511.00	*	2.734E+01	1.995E+01	1.774E+01	0.000E+00	1.541

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7		477.59	*	5.024E+01	1.335E+02	2.350E+02	0.000E+00	0.214

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---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	+	511.00		1.671E+01	1.220E+01	1.084E+01	0.000E+00	1.541
		1808.65	*	-1.052E+01	9.198E+00	1.372E+01	0.000E+00	-0.767
K-40		1460.81	*	2.849E+01	1.232E+02	2.295E+02	0.000E+00	0.124
SC-46		889.25	*	-5.124E+00	1.727E+01	3.009E+01	0.000E+00	-0.170
		1120.51		-6.358E+00	1.686E+01	2.900E+01	0.000E+00	-0.219
V-48		944.10		-1.513E+02	4.217E+02	7.264E+02	0.000E+00	-0.208
		983.50	*	2.460E+01	2.919E+01	5.522E+01	0.000E+00	0.445
		1312.09		-4.327E+00	2.388E+01	4.234E+01	0.000E+00	-0.102
		2240.34		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
CR-51		320.08	*	-1.580E+01	1.283E+02	2.219E+02	0.000E+00	-0.071
MN-54		834.83	*	1.435E+00	1.400E+01	2.533E+01	0.000E+00	0.057
CO-56		846.75	*	-7.794E+00	1.508E+01	2.597E+01	0.000E+00	-0.300
		1037.82		8.538E+00	1.210E+02	2.170E+02	0.000E+00	0.039
		1238.25		1.111E+01	1.882E+01	3.710E+01	0.000E+00	0.299
CO-58		810.78	*	-9.542E+00	1.656E+01	2.839E+01	0.000E+00	-0.336
FE-59		192.35		5.889E+01	3.014E+02	5.343E+02	0.000E+00	0.110
		1099.25	*	2.712E+00	3.586E+01	6.397E+01	0.000E+00	0.042
		1291.60		-1.070E+00	3.109E+01	5.702E+01	0.000E+00	-0.019
ZN-65		1115.55	*	-3.673E+00	3.165E+01	5.572E+01	0.000E+00	-0.066
SE-75		66.05		7.068E+02	2.316E+03	3.889E+03	0.000E+00	0.182
		96.73		-2.967E+01	3.444E+02	5.689E+02	0.000E+00	-0.052
	+	121.11		1.373E+03	1.475E+02	9.952E+01	0.000E+00	13.794
	+	136.00		3.782E+01	2.378E+01	2.726E+01	0.000E+00	1.387
		198.60		2.611E+02	5.788E+02	1.035E+03	0.000E+00	0.252
		264.65	*	-1.171E+01	1.558E+01	2.621E+01	0.000E+00	-0.447
	+	279.53		1.247E+02	7.878E+01	5.864E+01	0.000E+00	2.127
		303.91		-1.634E+02	6.821E+02	1.176E+03	0.000E+00	-0.139
		400.65		-8.860E+01	8.567E+01	1.384E+02	0.000E+00	-0.640
KR-85		513.99	*	-3.675E+02	2.677E+03	3.996E+03	0.000E+00	-0.092
SR-85		513.99	*	-1.871E+00	1.363E+01	2.035E+01	0.000E+00	-0.092
Y-91		557.57	*	3.298E+00	1.372E+01	2.410E+01	0.000E+00	0.137
		1204.90		-1.466E+03	4.619E+03	8.085E+03	0.000E+00	-0.181
NB-94		702.63	*	-1.721E+00	1.367E+01	2.303E+01	0.000E+00	-0.075
		871.10		8.100E+00	1.378E+01	2.583E+01	0.000E+00	0.314
NB-95		765.79	*	8.924E+00	1.849E+01	3.069E+01	0.000E+00	0.291
NB-95M		235.69	*	-2.749E+02	5.640E+02	9.641E+02	0.000E+00	-0.285
ZR-95		724.18		-1.908E+01	3.495E+01	5.678E+01	0.000E+00	-0.336
	+	756.74	*	1.504E+01	2.173E+01	4.376E+01	0.000E+00	0.344
MO-99		140.51	*	-1.963E+02	4.011E+02	6.457E+02	0.000E+00	-0.304
		181.06		4.423E+01	4.718E+03	8.304E+03	0.000E+00	0.005
		739.58		7.989E+02	3.679E+03	6.757E+03	0.000E+00	0.118
RU-103		497.08	*	-3.381E+00	1.474E+01	2.508E+01	0.000E+00	-0.135
		610.33		1.671E+02	2.871E+02	5.128E+02	0.000E+00	0.326
RH-106	+	511.85		1.364E+02	9.954E+01	8.082E+01	0.000E+00	1.688
		621.84	*	5.856E+01	1.390E+02	2.443E+02	0.000E+00	0.240
		1050.47		2.720E+02	8.123E+02	1.503E+03	0.000E+00	0.181
RU-106		622.20	*	4.813E+01	1.407E+02	2.457E+02	0.000E+00	0.196
AG-108M		433.93	*	1.076E+01	1.239E+01	2.263E+01	0.000E+00	0.476
		614.37		-4.865E+00	1.464E+01	2.444E+01	0.000E+00	-0.199

Sample ID : G1200942443 Acquisition date : 13-OCT-2005 11:40:47

---- Non-Identified Nuclides ----

Nuclide		Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		722.95		-1.781E+01	1.627E+01	2.504E+01	0.000E+00	-0.711
AG-110M		657.75	*	2.511E+01	1.958E+01	3.214E+01	0.000E+00	0.781
		677.61		-7.100E+00	1.301E+02	2.208E+02	0.000E+00	-0.032
		706.67		2.530E+01	8.195E+01	1.434E+02	0.000E+00	0.176
	+	763.93		6.314E+01	8.109E+01	1.051E+02	0.000E+00	0.601
		884.67		1.366E+01	2.149E+01	4.007E+01	0.000E+00	0.341
		937.48		-1.930E-01	5.105E+01	9.034E+01	0.000E+00	-0.002
		1384.27		3.700E+01	4.631E+01	9.512E+01	0.000E+00	0.389
CD-115		231.44		4.156E+04	9.624E+04	1.714E+05	0.000E+00	0.242
		260.90		-1.618E+03	3.760E+04	6.550E+04	0.000E+00	-0.025
		492.35		-1.102E+04	1.171E+04	1.884E+04	0.000E+00	-0.585
		527.90	*	9.474E+02	3.502E+03	6.150E+03	0.000E+00	0.154
SN-115		484.47		4.721E+03	7.378E+03	1.321E+04	0.000E+00	0.357
		933.00	*	-1.328E+03	1.513E+03	2.508E+03	0.000E+00	-0.529
		1290.58		-1.563E+03	2.322E+03	3.846E+03	0.000E+00	-0.406
SN-117M		156.02		-1.249E+02	8.494E+02	1.384E+03	0.000E+00	-0.090
		158.56	*	8.720E+00	2.033E+01	3.397E+01	0.000E+00	0.257
TE-123M		159.00	*	-8.095E-01	1.102E+01	1.801E+01	0.000E+00	-0.045
SB-124		602.73		1.638E+00	1.422E+01	2.465E+01	0.000E+00	0.066
	+	645.85		1.227E+02	2.522E+02	3.509E+02	0.000E+00	0.350
		713.78		1.485E+02	6.388E+02	1.113E+03	0.000E+00	0.133
		722.79		-1.429E+02	1.431E+02	2.225E+02	0.000E+00	-0.642
		1368.16		3.475E+02	4.790E+02	9.853E+02	0.000E+00	0.353
		1690.98	*	7.064E+00	2.253E+01	4.687E+01	0.000E+00	0.151
SB-125		176.33		9.811E+01	1.076E+02	1.963E+02	0.000E+00	0.500
		427.89	*	2.068E+01	3.399E+01	6.122E+01	0.000E+00	0.338
		463.38		-2.400E+01	1.052E+02	1.787E+02	0.000E+00	-0.134
		600.56		-4.233E+01	6.898E+01	1.126E+02	0.000E+00	-0.376
		606.64		6.890E+01	2.557E+02	4.459E+02	0.000E+00	0.155
	+	635.90		1.842E+02	1.145E+02	1.756E+02	0.000E+00	1.049
TE-125M		109.28	*	2.917E+03	4.288E+03	7.248E+03	0.000E+00	0.402
I-126		388.63		2.195E+02	8.676E+01	1.563E+02	0.000E+00	1.405
		666.33	*	1.918E+01	8.316E+01	1.267E+02	0.000E+00	0.151
		753.82		2.271E+01	5.829E+02	9.235E+02	0.000E+00	0.025
SB-126		666.33		8.002E+00	3.469E+01	5.284E+01	0.000E+00	0.151
		695.00		1.990E+00	2.971E+01	5.097E+01	0.000E+00	0.039
		697.00		-3.737E+01	1.055E+02	1.745E+02	0.000E+00	-0.214
		720.50	*	3.708E+01	5.457E+01	9.842E+01	0.000E+00	0.377
SB-127		252.40		-1.718E+03	1.575E+03	2.249E+03	0.000E+00	-0.764
		411.60		8.064E+02	3.948E+03	6.925E+03	0.000E+00	0.116
		444.90		-1.713E+03	3.245E+03	5.417E+03	0.000E+00	-0.316
		473.00		-1.566E+02	5.845E+02	9.904E+02	0.000E+00	-0.158
		543.30		-5.512E+01	5.396E+03	9.333E+03	0.000E+00	-0.006
		603.50		4.015E+01	3.826E+03	6.573E+03	0.000E+00	0.006
		685.70	*	9.598E+01	5.038E+02	8.725E+02	0.000E+00	0.110
		698.50		-3.275E+02	5.599E+03	9.476E+03	0.000E+00	-0.035
		783.70		1.035E+03	1.180E+03	2.264E+03	0.000E+00	0.457
I-131		284.30		1.533E+02	4.368E+02	7.811E+02	0.000E+00	0.196
		364.48	*	-1.298E+01	3.780E+01	6.444E+01	0.000E+00	-0.201

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		636.97		3.643E+02	5.807E+02	1.046E+03	0.000E+00	0.348
TE-132		228.16	*	-5.606E+00	2.077E+02	3.627E+02	0.000E+00	-0.015
BA-133		79.62		-8.552E+02	6.445E+02	1.026E+03	0.000E+00	-0.833
		81.00		-2.653E+01	4.856E+01	7.914E+01	0.000E+00	-0.335
		276.40		4.045E+01	1.377E+02	2.160E+02	0.000E+00	0.187
		302.85		2.000E+01	4.567E+01	8.177E+01	0.000E+00	0.245
		356.02	*	2.747E+00	1.560E+01	2.736E+01	0.000E+00	0.100
		383.85		-7.295E+00	1.055E+02	1.827E+02	0.000E+00	-0.040
CS-134		563.23		5.695E+00	1.265E+02	2.197E+02	0.000E+00	0.026
		569.32		8.681E+01	7.464E+01	1.395E+02	0.000E+00	0.622
		604.70		-2.368E+00	1.280E+01	2.161E+01	0.000E+00	-0.110
		795.84	*	1.277E+00	1.542E+01	2.794E+01	0.000E+00	0.046
		801.93		-1.095E+01	1.466E+02	2.629E+02	0.000E+00	-0.042
		1365.15		-1.131E+02	3.298E+02	5.802E+02	0.000E+00	-0.195
CS-135		268.24	*	3.638E+01	5.372E+01	9.662E+01	0.000E+00	0.377
CS-136		66.88		2.196E+02	3.642E+02	6.164E+02	0.000E+00	0.356
	+	86.36		1.706E+04	1.136E+03	7.804E+02	0.000E+00	21.866
		153.25		1.231E+02	2.418E+02	4.056E+02	0.000E+00	0.304
	+	163.92		8.333E+03	7.419E+02	6.321E+02	0.000E+00	13.184
		176.60		1.135E+02	1.166E+02	2.133E+02	0.000E+00	0.532
		273.65		8.689E+01	1.503E+02	2.414E+02	0.000E+00	0.360
		340.55		8.560E+00	4.060E+01	7.140E+01	0.000E+00	0.120
		818.51		-3.033E+01	2.885E+01	4.750E+01	0.000E+00	-0.638
		1048.07	*	-3.511E+00	3.671E+01	6.531E+01	0.000E+00	-0.054
		1235.36		-3.201E+01	1.466E+02	2.220E+02	0.000E+00	-0.144
BA-140		162.67		-1.118E+02	3.236E+02	4.609E+02	0.000E+00	-0.243
		304.87		-1.647E+02	3.996E+02	6.821E+02	0.000E+00	-0.242
		423.73		-3.035E+02	7.008E+02	1.179E+03	0.000E+00	-0.257
		537.31	*	9.434E+01	9.292E+01	1.728E+02	0.000E+00	0.546
CE-141		145.44	*	-1.116E+01	2.450E+01	3.945E+01	0.000E+00	-0.283
CE-144		133.51	*	5.503E+01	9.222E+01	1.395E+02	0.000E+00	0.395
PM-144		476.78		1.014E+01	2.801E+01	4.928E+01	0.000E+00	0.206
		618.01		-2.204E+00	1.348E+01	2.275E+01	0.000E+00	-0.097
		696.49	*	-6.917E+00	1.389E+01	2.270E+01	0.000E+00	-0.305
PM-146		453.88	*	-1.253E+01	1.712E+01	2.811E+01	0.000E+00	-0.446
	+	633.25		9.432E+02	5.862E+02	8.872E+02	0.000E+00	1.063
		735.93		-3.340E+01	5.431E+01	9.353E+01	0.000E+00	-0.357
		747.24		9.879E+00	3.883E+01	6.286E+01	0.000E+00	0.157
ND-147	+	91.11		9.487E+00	1.191E+02	1.724E+02	0.000E+00	0.055
		531.02	*	-7.861E+00	2.131E+02	3.660E+02	0.000E+00	-0.021
PM-149		285.95	*	1.240E+04	2.398E+04	4.313E+04	0.000E+00	0.287
EU-152	+	121.78		7.438E+02	7.989E+01	5.387E+01	0.000E+00	13.806
		344.31	*	-1.151E+01	3.403E+01	5.806E+01	0.000E+00	-0.198
		963.37		-8.235E+01	1.049E+02	1.749E+02	0.000E+00	-0.471
GD-153		69.67		-2.006E+02	8.085E+02	1.334E+03	0.000E+00	-0.150
		83.37		4.598E+03	8.378E+03	1.261E+04	0.000E+00	0.365
		97.43	*	1.253E+00	3.590E+01	5.955E+01	0.000E+00	0.021
		103.18		-2.779E+01	4.825E+01	7.812E+01	0.000E+00	-0.356
EU-154	+	123.07		5.221E+02	5.609E+01	7.266E+01	0.000E+00	7.186

Sample ID : G1200942443 Acquisition date : 13-OCT-2005 11:40:47

---- Non-Identified Nuclides ----

Nuclide	Iden	Line Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
	+	247.93		7.472E+01	1.399E+02	2.187E+02	0.000E+00	0.342
		591.76		1.204E+02	2.391E+02	4.273E+02	0.000E+00	0.282
		723.30		-6.404E+01	6.936E+01	1.087E+02	0.000E+00	-0.589
	+	756.86		1.647E+02	2.379E+02	4.725E+02	0.000E+00	0.348
		873.20		6.203E+00	1.269E+02	2.275E+02	0.000E+00	0.027
		996.30		4.497E+01	1.434E+02	2.626E+02	0.000E+00	0.171
		1004.76		7.230E+01	8.198E+01	1.569E+02	0.000E+00	0.461
	+	1274.51	*	4.449E+01	7.820E+01	5.836E+01	0.000E+00	0.762
EU-155	+	86.54		1.629E+03	1.085E+02	7.436E+01	0.000E+00	21.912
		105.31	*	-3.576E+01	4.985E+01	8.022E+01	0.000E+00	-0.446
TB-160	+	86.79		4.326E+03	2.880E+02	1.969E+02	0.000E+00	21.974
		298.57		-7.717E+00	3.524E+01	6.081E+01	0.000E+00	-0.127
		879.36	*	-2.676E+01	5.687E+01	9.802E+01	0.000E+00	-0.273
		962.29		-1.764E+01	1.899E+02	3.363E+02	0.000E+00	-0.052
		966.15		-5.199E+00	6.884E+01	1.222E+02	0.000E+00	-0.043
		1177.93		2.781E-01	1.085E+02	1.712E+02	0.000E+00	0.002
TM-171		51.87		-3.320E+03	5.086E+03	8.354E+03	0.000E+00	-0.397
	+	59.40		2.179E+05	3.016E+04	2.226E+04	0.000E+00	9.791
		66.72	*	8.368E+03	1.371E+04	2.321E+04	0.000E+00	0.361
HF-181		56.28		6.566E+01	5.558E+02	8.312E+02	0.000E+00	0.079
	+	57.53		3.868E+03	5.352E+02	4.595E+02	0.000E+00	8.416
		65.20		1.297E+02	4.424E+02	7.431E+02	0.000E+00	0.175
		133.02		2.077E+01	2.879E+01	4.387E+01	0.000E+00	0.473
	+	136.25		5.018E+02	3.156E+02	3.619E+02	0.000E+00	1.387
		345.85		-8.330E+00	6.654E+01	1.149E+02	0.000E+00	-0.072
		482.03	*	-2.002E+01	1.773E+01	2.820E+01	0.000E+00	-0.710
TA-182		67.75		2.130E+01	5.362E+01	9.020E+01	0.000E+00	0.236
		100.10		3.129E+01	8.251E+01	1.384E+02	0.000E+00	0.226
		222.10		-1.834E+01	1.195E+02	2.077E+02	0.000E+00	-0.088
		1121.28		1.027E+01	4.478E+01	8.182E+01	0.000E+00	0.125
		1189.05		-1.602E+00	8.023E+01	1.455E+02	0.000E+00	-0.011
		1221.42	*	3.158E+01	4.201E+01	8.518E+01	0.000E+00	0.371
	+	1230.97		9.118E+01	9.819E+01	1.740E+02	0.000E+00	0.524
IR-192		295.96		8.874E+00	3.366E+01	5.952E+01	0.000E+00	0.149
		308.46		1.360E+01	3.283E+01	5.853E+01	0.000E+00	0.232
		316.51	*	6.986E+00	1.140E+01	2.061E+01	0.000E+00	0.339
		468.07		-1.174E+01	2.604E+01	4.355E+01	0.000E+00	-0.269
		604.41		-3.926E+01	1.715E+02	2.888E+02	0.000E+00	-0.136
		612.46		-1.878E+02	2.659E+02	4.301E+02	0.000E+00	-0.437
BI-207		569.67		1.449E+01	1.164E+01	2.187E+01	0.000E+00	0.662
	+	897.83		3.013E+05	3.123E+04	1.851E+04	0.000E+00	16.281
		1063.62	*	-6.338E+00	1.986E+01	3.441E+01	0.000E+00	-0.184
		1442.20		-7.414E+02	6.931E+03	1.268E+04	0.000E+00	-0.058
		1770.23		-6.448E+00	1.011E+02	2.086E+02	0.000E+00	-0.031
TL-208		75.00		-3.183E+02	5.178E+02	8.439E+02	0.000E+00	-0.377
	+	277.35		4.312E+02	2.723E+02	2.013E+02	0.000E+00	2.142
	+	510.84		1.284E+02	9.372E+01	8.331E+01	0.000E+00	1.541
		583.14	*	1.169E+01	1.449E+01	2.631E+01	0.000E+00	0.444
	+	763.30		8.359E+02	1.073E+03	1.492E+03	0.000E+00	0.560

Sample ID : G1200942443 Acquisition date : 13-OCT-2005 11:40:47

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		860.37		1.211E+02	1.127E+02	2.181E+02	0.000E+00	0.555
		1093.90		3.008E+03	4.653E+03	8.636E+03	0.000E+00	0.348
BI-210		46.50	*	-2.520E+02	1.296E+03	2.163E+03	0.000E+00	-0.116
PB-210		46.50	*	-2.520E+02	1.296E+03	2.163E+03	0.000E+00	-0.116
BI-211		351.07	*	-2.680E+00	7.095E+01	1.231E+02	0.000E+00	-0.022
PB-211		404.84	*	2.487E+02	3.205E+02	5.847E+02	0.000E+00	0.425
		427.08		4.915E+02	7.600E+02	1.371E+03	0.000E+00	0.358
		831.96		-8.108E+01	4.668E+02	8.267E+02	0.000E+00	-0.098
BI-212		727.18	*	8.460E+01	1.045E+02	1.922E+02	0.000E+00	0.440
PB-212		74.80		-1.621E+02	1.689E+02	2.724E+02	0.000E+00	-0.595
	+	87.30		6.350E+03	4.227E+02	2.873E+02	0.000E+00	22.101
		115.19		4.636E+02	1.676E+03	2.790E+03	0.000E+00	0.166
		238.63	*	1.993E+01	1.993E+01	3.617E+01	0.000E+00	0.551
		300.09		-1.112E+02	2.507E+02	4.270E+02	0.000E+00	-0.260
BI-214		609.31	*	2.752E+01	2.673E+01	4.923E+01	0.000E+00	0.559
		768.36		1.020E+02	2.391E+02	4.467E+02	0.000E+00	0.228
		934.06		-3.967E+02	4.950E+02	8.258E+02	0.000E+00	-0.480
		1120.29		-2.576E+01	9.821E+01	1.709E+02	0.000E+00	-0.151
		1238.11		1.027E+02	1.857E+02	3.649E+02	0.000E+00	0.281
		1377.67		-2.019E+01	2.537E+02	4.643E+02	0.000E+00	-0.043
PB-214		74.81		-2.769E+02	2.867E+02	4.624E+02	0.000E+00	-0.599
		77.11		9.203E+01	1.593E+02	2.687E+02	0.000E+00	0.343
	+	87.30		1.135E+04	7.558E+02	5.137E+02	0.000E+00	22.101
		241.98		-1.286E+02	1.141E+02	1.892E+02	0.000E+00	-0.680
		295.21		2.459E+01	4.478E+01	8.025E+01	0.000E+00	0.306
		351.92	*	4.994E+00	2.429E+01	4.276E+01	0.000E+00	0.117
RN-219		271.23		-6.499E+01	7.835E+01	1.312E+02	0.000E+00	-0.496
		401.81	*	-4.355E+01	1.352E+02	2.304E+02	0.000E+00	-0.189
RA-223	+	122.32		1.771E+04	1.903E+03	1.282E+03	0.000E+00	13.815
		144.24		1.348E+02	2.585E+02	4.344E+02	0.000E+00	0.310
		154.21		2.791E+01	1.504E+02	2.488E+02	0.000E+00	0.112
		269.46		-1.557E+01	6.080E+01	1.049E+02	0.000E+00	-0.148
		323.87	*	1.010E+01	2.185E+02	3.823E+02	0.000E+00	0.026
		338.28		3.240E+01	3.337E+02	5.834E+02	0.000E+00	0.056
		445.03		-4.719E+02	8.485E+02	1.413E+03	0.000E+00	-0.334
RA-224		240.98	*	-4.166E+01	2.221E+02	3.844E+02	0.000E+00	-0.108
RA-226		295.21		2.459E+01	4.478E+01	8.025E+01	0.000E+00	0.306
		351.92		4.994E+00	2.429E+01	4.276E+01	0.000E+00	0.117
		609.31	*	2.752E+01	2.673E+01	4.923E+01	0.000E+00	0.559
AC-227		79.80		-1.029E+03	8.329E+02	1.330E+03	0.000E+00	-0.774
		236.00		-2.155E+01	7.650E+01	1.319E+02	0.000E+00	-0.163
		256.20	*	1.416E+02	1.383E+02	2.522E+02	0.000E+00	0.562
		286.10		1.672E+02	5.047E+02	8.987E+02	0.000E+00	0.186
		299.80		-3.751E+02	4.721E+02	7.883E+02	0.000E+00	-0.476
		304.40		-4.490E+02	6.251E+02	1.048E+03	0.000E+00	-0.428
		329.70		2.015E+02	2.869E+02	5.222E+02	0.000E+00	0.386
		334.20		-4.665E+02	7.581E+02	1.274E+03	0.000E+00	-0.366
TH-227		79.80		-1.013E+03	8.194E+02	1.309E+03	0.000E+00	-0.774
	+	94.00		7.593E+01	9.532E+02	1.316E+03	0.000E+00	0.058

Sample ID : G1200942443 Acquisition date : 13-OCT-2005 11:40:47

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		236.00		-2.122E+01	7.534E+01	1.299E+02	0.000E+00	-0.163
		256.20	*	1.394E+02	1.362E+02	2.483E+02	0.000E+00	0.562
		286.10		1.646E+02	4.971E+02	8.852E+02	0.000E+00	0.186
		299.80		-3.685E+02	4.638E+02	7.744E+02	0.000E+00	-0.476
		304.40		-4.418E+02	6.151E+02	1.031E+03	0.000E+00	-0.428
		329.70		1.985E+02	2.826E+02	5.143E+02	0.000E+00	0.386
		334.20		-4.578E+02	7.439E+02	1.250E+03	0.000E+00	-0.366
AC-228		209.25		-4.855E+00	1.864E+02	3.261E+02	0.000E+00	-0.015
		338.32		7.797E+00	8.030E+01	1.404E+02	0.000E+00	0.056
		463.01		2.308E+01	2.420E+02	4.205E+02	0.000E+00	0.055
		794.95		2.184E+02	2.752E+02	5.262E+02	0.000E+00	0.415
		911.21	*	3.171E+01	5.557E+01	1.030E+02	0.000E+00	0.308
		964.77		-1.579E+02	2.916E+02	4.967E+02	0.000E+00	-0.318
		969.11		6.568E+01	8.690E+01	1.649E+02	0.000E+00	0.398
RA-228		209.25		-4.855E+00	1.864E+02	3.261E+02	0.000E+00	-0.015
		338.32		7.797E+00	8.030E+01	1.404E+02	0.000E+00	0.056
		463.01		2.308E+01	2.420E+02	4.205E+02	0.000E+00	0.055
		794.95		2.184E+02	2.752E+02	5.262E+02	0.000E+00	0.415
		911.21	*	3.171E+01	5.557E+01	1.030E+02	0.000E+00	0.308
		964.77		-1.579E+02	2.916E+02	4.967E+02	0.000E+00	-0.318
		969.11		6.568E+01	8.690E+01	1.649E+02	0.000E+00	0.398
TH-228		84.40		1.057E+03	1.478E+03	2.235E+03	0.000E+00	0.473
		238.60	*	2.010E+01	1.993E+01	3.620E+01	0.000E+00	0.555
		300.10		-1.105E+02	2.507E+02	4.272E+02	0.000E+00	-0.259
TH-229		85.43		1.415E+02	1.105E+02	1.698E+02	0.000E+00	0.833
	+	88.47		1.848E+03	1.230E+02	7.087E+01	0.000E+00	26.071
		100.00		3.774E+01	8.618E+01	1.448E+02	0.000E+00	0.261
		193.63	*	-5.124E+01	1.648E+02	2.859E+02	0.000E+00	-0.179
		210.97		-1.319E+02	2.494E+02	4.274E+02	0.000E+00	-0.309
TH-230		295.21		2.459E+01	4.478E+01	8.025E+01	0.000E+00	0.306
		351.92		4.994E+00	2.429E+01	4.276E+01	0.000E+00	0.117
		609.31	*	2.752E+01	2.673E+01	4.923E+01	0.000E+00	0.559
PA-231		283.67	*	-1.220E+02	5.459E+02	8.274E+02	0.000E+00	-0.147
		301.29		8.372E+01	1.777E+02	3.184E+02	0.000E+00	0.263
		330.00		3.971E+02	6.332E+02	1.147E+03	0.000E+00	0.346
TH-231		84.21		1.792E+02	2.757E+02	4.160E+02	0.000E+00	0.431
		236.00		-2.152E+01	7.640E+01	1.318E+02	0.000E+00	-0.163
		256.20		1.414E+02	1.381E+02	2.519E+02	0.000E+00	0.562
		269.46	*	-1.557E+01	6.080E+01	1.049E+02	0.000E+00	-0.148
		271.23		-6.499E+01	7.835E+01	1.312E+02	0.000E+00	-0.496
		283.67		-1.220E+02	5.459E+02	8.274E+02	0.000E+00	-0.147
		301.29		8.372E+01	1.777E+02	3.184E+02	0.000E+00	0.263
		329.85		1.346E+02	1.969E+02	3.579E+02	0.000E+00	0.376
		351.07		-2.680E+00	7.095E+01	1.231E+02	0.000E+00	-0.022
		401.81		-4.355E+01	1.352E+02	2.304E+02	0.000E+00	-0.189
TH-232		238.59	*	1.987E+01	1.965E+01	3.568E+01	0.000E+00	0.557
		911.20		3.138E+01	5.528E+01	1.025E+02	0.000E+00	0.306
		964.40		-1.457E+02	2.824E+02	4.825E+02	0.000E+00	-0.302
		969.11		6.537E+01	8.648E+01	1.641E+02	0.000E+00	0.398

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
PA-234		63.00		-5.760E+02	8.089E+03	1.170E+03	0.000E+00	-0.492
	+	94.67		6.771E+00	8.500E+01	1.153E+02	0.000E+00	0.059
		98.44		6.884E+00	4.224E+01	7.035E+01	0.000E+00	0.098
		99.70		1.643E+02	2.212E+02	3.759E+02	0.000E+00	0.437
		111.00		1.917E+01	8.614E+01	1.432E+02	0.000E+00	0.134
		131.20		-1.914E+01	4.150E+01	6.705E+01	0.000E+00	-0.285
		152.70		1.898E+01	1.236E+02	2.042E+02	0.000E+00	0.093
		186.00		5.192E+02	4.031E+02	7.408E+02	0.000E+00	0.701
		226.40		5.404E+01	1.389E+02	2.468E+02	0.000E+00	0.219
		227.20		1.075E+01	1.482E+02	2.599E+02	0.000E+00	0.041
	+	248.90		1.756E+02	3.288E+02	5.181E+02	0.000E+00	0.339
		293.70		-6.670E+01	2.186E+02	3.750E+02	0.000E+00	-0.178
		369.80		1.812E+02	3.168E+02	5.679E+02	0.000E+00	0.319
		568.70		1.948E+02	3.866E+02	6.894E+02	0.000E+00	0.283
		569.50		1.259E+02	1.031E+02	1.935E+02	0.000E+00	0.651
		574.00		-4.364E+02	5.666E+02	9.150E+02	0.000E+00	-0.477
		699.00		1.332E+01	2.950E+02	5.035E+02	0.000E+00	0.026
		706.10		1.189E+02	4.124E+02	7.202E+02	0.000E+00	0.165
		733.00		-3.813E+01	1.289E+02	2.285E+02	0.000E+00	-0.167
		742.81		2.078E+02	5.005E+02	9.336E+02	0.000E+00	0.223
		796.30		2.992E+01	3.243E+02	5.889E+02	0.000E+00	0.051
		805.80		1.044E+01	3.795E+02	6.849E+02	0.000E+00	0.015
		819.60		-2.308E+02	4.705E+02	8.142E+02	0.000E+00	-0.283
		826.30		6.745E+00	3.127E+02	5.644E+02	0.000E+00	0.012
		831.60		-5.835E+01	2.368E+02	4.174E+02	0.000E+00	-0.140
		876.40		9.257E+01	3.434E+02	6.275E+02	0.000E+00	0.148
		880.51		-1.085E+02	1.163E+02	1.925E+02	0.000E+00	-0.564
		883.24		3.542E+01	1.210E+02	2.209E+02	0.000E+00	0.160
	+	899.00		1.054E+04	1.092E+03	6.389E+02	0.000E+00	16.492
		925.00		9.693E+01	5.376E+02	9.663E+02	0.000E+00	0.100
		926.50		4.136E+01	8.210E+01	1.505E+02	0.000E+00	0.275
		946.00	*	-8.055E+01	1.648E+02	2.403E+02	0.000E+00	-0.335
	+	949.00		2.323E+02	2.137E+02	3.482E+02	0.000E+00	0.667
		980.50		7.937E+00	3.149E+02	5.606E+02	0.000E+00	0.014
		1394.10		-1.947E+02	3.326E+02	5.572E+02	0.000E+00	-0.349
PA-234M		766.40		4.350E+03	6.775E+03	1.139E+04	0.000E+00	0.382
		1001.03	*	3.254E+02	1.801E+03	3.254E+03	0.000E+00	0.100
TH-234		63.29	*	-6.691E+02	6.874E+02	9.839E+02	0.000E+00	-0.680
	+	92.38		1.965E+01	2.467E+02	4.075E+02	0.000E+00	0.048
		112.81		-2.528E+03	4.230E+03	6.823E+03	0.000E+00	-0.371
U-234		67.67		2.083E+03	5.578E+03	9.378E+03	0.000E+00	0.222
		241.98		-1.287E+02	1.142E+02	1.894E+02	0.000E+00	-0.680
		295.21	*	2.459E+01	4.478E+01	8.025E+01	0.000E+00	0.306
		351.92		4.994E+00	2.429E+01	4.276E+01	0.000E+00	0.117
U-235	+	89.95		1.854E+04	1.234E+03	7.233E+02	0.000E+00	25.638
	+	93.35		2.362E+01	2.966E+02	4.091E+02	0.000E+00	0.058
		105.00		-1.936E+02	4.855E+02	7.910E+02	0.000E+00	-0.245
		143.76	*	3.451E+01	7.973E+01	1.335E+02	0.000E+00	0.259
		163.33		4.271E+02	2.198E+02	3.513E+02	0.000E+00	1.216

Sample ID : G1200942443 Acquisition date : 13-OCT-2005 11:40:47

---- Non-Identified Nuclides ----

Nuclide	Line Ided	Energy (KEV)	Key	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
		185.71		1.698E+01	1.496E+01	2.735E+01	0.000E+00	0.621
		205.31		1.701E+01	1.588E+02	2.797E+02	0.000E+00	0.061
U-238		63.29	*	-6.691E+02	6.874E+02	9.839E+02	0.000E+00	-0.680
NP-239		99.55		4.396E+01	7.254E+01	1.227E+02	0.000E+00	0.358
		117.00	*	-2.632E+01	1.003E+02	1.451E+02	0.000E+00	-0.181
		209.75		8.457E+01	2.473E+02	4.394E+02	0.000E+00	0.192
		228.18		5.920E-02	7.816E+01	1.366E+02	0.000E+00	0.000
	+	277.60		2.050E+02	1.295E+02	9.578E+01	0.000E+00	2.140
		334.31		-2.610E+02	4.193E+02	7.043E+02	0.000E+00	-0.371
AM-242		99.55		1.026E+03	1.693E+03	2.863E+03	0.000E+00	0.358
		103.70	*	-1.842E+02	1.019E+03	1.674E+03	0.000E+00	-0.110
CM-247	+	278.00		8.501E+02	5.369E+02	3.977E+02	0.000E+00	2.138
		287.40		-1.352E+02	4.145E+02	7.115E+02	0.000E+00	-0.190
		402.60	*	-4.220E+00	1.248E+01	2.123E+01	0.000E+00	-0.199
CF-249		252.85		-3.682E+02	3.554E+02	5.095E+02	0.000E+00	-0.723
		333.44		-3.272E+01	5.451E+01	9.172E+01	0.000E+00	-0.357
		387.95	*	1.191E+01	1.594E+01	2.587E+01	0.000E+00	0.460
CF-251		176.00	*	3.174E+01	4.129E+01	7.497E+01	0.000E+00	0.423
		227.00		4.268E+01	1.308E+02	2.320E+02	0.000E+00	0.184
		285.00		1.126E+02	5.598E+02	9.908E+02	0.000E+00	0.114

VAX/VMS Nuclide Identification Report Generated

```
*************************************************************************
*                          General Eng. Labs, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration     : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942443  *
* Acquisition date : 13-OCT-2005 11:40:47 Detector SN#    : 3941466    *
* Detector ID      : WELL                 Sensitivity     : 3.000      *
* Geometry         : 2L_MB                Energy tolerance: 2.000      *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000     *
* Elapsed real time:    0 01:00:02.44     Half life ratio :  8.000     *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 29-SEP-2005 00:00:00 Nuclide Library : FERMC       *
* Sample ID        : G1200942443          Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000  *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
* Standard Weight  :   0.00000                                          *
* CALIB. DATE/TIME :  2-DEC-2004 13:17:31 MS Isotope      :             *
* MSD DPM          : ********            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
*************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	
NA-22	1.592E+01	2.799E+01	1.940E+01	0.000E+00
CO-57	2.558E+02	2.748E+01	3.786E+01	0.000E+00
CO-60	7.385E+02	5.356E+01	1.406E+01	0.000E+00
Y-88	4.995E+02	5.493E+01	1.685E+01	0.000E+00
CD-109	1.350E+04	8.987E+02	6.060E+02	0.000E+00
SN-113	3.220E+02	4.866E+01	2.674E+01	0.000E+00
SN-126	1.353E+03	9.008E+01	6.105E+01	0.000E+00
BA-137M	4.758E+02	4.730E+01	2.707E+01	0.000E+00
CS-137	5.030E+02	5.001E+01	2.862E+01	0.000E+00
CE-139	2.396E+02	2.133E+01	1.879E+01	0.000E+00
PM-147	1.078E+08	2.732E+08	3.860E+07	0.000E+00
HG-203	4.639E+01	2.930E+01	2.179E+01	0.000E+00
PA-233	1.713E+01	2.268E+01	4.044E+01	0.000E+00
NP-237	3.974E+03	2.645E+02	1.815E+02	0.000E+00
AM-241	1.275E+03	1.764E+02	1.295E+02	0.000E+00
ANH-511	2.734E+01	1.995E+01	1.774E+01	0.000E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Act error Ided	MDA (pCi/LITER)		
BE-7	5.024E+01	1.335E+02	2.350E+02	0.000E+00	NOT IDENT.
NA-24	0.000E+00	9.362E+07	0.000E+00	0.000E+00	SHORT HLIF
AL-26	-1.052E+01	9.198E+00	1.372E+01	0.000E+00	FAIL ABUN
K-40	2.849E+01	1.232E+02	2.295E+02	0.000E+00	NOT IDENT.
SC-46	-5.124E+00	1.727E+01	3.009E+01	0.000E+00	NOT IDENT.
V-48	2.460E+01	2.919E+01	5.522E+01	0.000E+00	NOT IDENT.
CR-51	-1.580E+01	1.283E+02	2.219E+02	0.000E+00	NOT IDENT.
MN-54	1.435E+00	1.400E+01	2.533E+01	0.000E+00	NOT IDENT.
CO-56	-7.794E+00	1.508E+01	2.597E+01	0.000E+00	NOT IDENT.
MN-56	0.000E+00	1.935E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-58	-9.542E+00	1.656E+01	2.839E+01	0.000E+00	NOT IDENT.

FE-59	2.712E+00	3.586E+01	6.397E+01	0.000E+00 NOT IDENT.
ZN-65	-3.673E+00	3.165E+01	5.572E+01	0.000E+00 NOT IDENT.
SE-75	-1.171E+01	1.558E+01	2.621E+01	0.000E+00 FAIL ABUN
KR-85	-3.675E+02	2.677E+03	3.996E+03	0.000E+00 NOT IDENT.
SR-85	-1.871E+00	1.363E+01	2.035E+01	0.000E+00 NOT IDENT.
Y-91	3.298E+00	1.372E+01	2.410E+01	0.000E+00 NOT IDENT.
NB-94	-1.721E+00	1.367E+01	2.303E+01	0.000E+00 NOT IDENT.
NB-95	8.924E+00	1.849E+01	3.069E+01	0.000E+00 NOT IDENT.
NB-95M	-2.749E+02	5.640E+02	9.641E+02	0.000E+00 NOT IDENT.
ZR-95	1.504E+01	2.173E+01	4.376E+01	0.000E+00 FAIL ABUN
MO-99	-1.963E+02	4.011E+02	6.457E+02	0.000E+00 NOT IDENT.
TC-99M	0.000E+00	2.648E+18	0.000E+00	0.000E+00 SHORT HLIF
RU-103	-3.381E+00	1.474E+01	2.508E+01	0.000E+00 NOT IDENT.
RH-106	5.856E+01	1.390E+02	2.443E+02	0.000E+00 FAIL ABUN
RU-106	4.813E+01	1.407E+02	2.457E+02	0.000E+00 NOT IDENT.
AG-108M	1.076E+01	1.239E+01	2.263E+01	0.000E+00 NOT IDENT.
AG-110M	2.511E+01	1.958E+01	3.214E+01	0.000E+00 FAIL ABUN
CD-115	9.474E+02	3.502E+03	6.150E+03	0.000E+00 NOT IDENT.
SN-115	-1.328E+03	1.513E+03	2.508E+03	0.000E+00 NOT IDENT.
SN-117M	8.720E+00	2.033E+01	3.397E+01	0.000E+00 NOT IDENT.
TE-123M	-8.095E-01	1.102E+01	1.801E+01	0.000E+00 NOT IDENT.
SB-124	7.064E+00	2.253E+01	4.687E+01	0.000E+00 FAIL ABUN
SB-125	2.068E+01	3.399E+01	6.122E+01	0.000E+00 FAIL ABUN
TE-125M	2.917E+03	4.288E+03	7.248E+03	0.000E+00 NOT IDENT.
I-126	1.918E+01	8.316E+01	1.267E+02	0.000E+00 NOT IDENT.
SB-126	3.708E+01	5.457E+01	9.842E+01	0.000E+00 NOT IDENT.
SB-127	9.598E+01	5.038E+02	8.725E+02	0.000E+00 NOT IDENT.
I-131	-1.298E+01	3.780E+01	6.444E+01	0.000E+00 NOT IDENT.
I-132	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
TE-132	-5.606E+00	2.077E+02	3.627E+02	0.000E+00 NOT IDENT.
BA-133	2.747E+00	1.560E+01	2.736E+01	0.000E+00 NOT IDENT.
I-133	0.000E+00	1.403E+06	0.000E+00	0.000E+00 SHORT HLIF
CS-134	1.277E+00	1.542E+01	2.794E+01	0.000E+00 NOT IDENT.
CS-135	3.638E+01	5.372E+01	9.662E+01	0.000E+00 NOT IDENT.
I-135	0.000E+00	2.502E+17	0.000E+00	0.000E+00 SHORT HLIF
CS-136	-3.511E+00	3.671E+01	6.531E+01	0.000E+00 FAIL ABUN
BA-140	9.434E+01	9.292E+01	1.728E+02	0.000E+00 NOT IDENT.
LA-140	0.000E+00	5.918E+03	0.000E+00	0.000E+00 SHORT HLIF
CE-141	-1.116E+01	2.450E+01	3.945E+01	0.000E+00 NOT IDENT.
CE-143	0.000E+00	3.115E+04	0.000E+00	0.000E+00 SHORT HLIF
CE-144	5.503E+01	9.222E+01	1.395E+02	0.000E+00 NOT IDENT.
PM-144	-6.917E+00	1.389E+01	2.270E+01	0.000E+00 NOT IDENT.
PR-144	0.000E+00	2.000E+41	0.000E+00	0.000E+00 SHORT HLIF
PM-146	-1.253E+01	1.712E+01	2.811E+01	0.000E+00 FAIL ABUN
ND-147	-7.861E+00	2.131E+02	3.660E+02	0.000E+00 FAIL ABUN
PM-149	1.240E+04	2.398E+04	4.313E+04	0.000E+00 NOT IDENT.
EU-152	-1.151E+01	3.403E+01	5.806E+01	0.000E+00 FAIL ABUN
GD-153	1.253E+00	3.590E+01	5.955E+01	0.000E+00 NOT IDENT.
EU-154	4.449E+01	7.820E+01	5.836E+01	0.000E+00 FAIL ABUN
EU-155	-3.576E+01	4.985E+01	8.022E+01	0.000E+00 FAIL ABUN
TB-160	-2.676E+01	5.687E+01	9.802E+01	0.000E+00 FAIL ABUN
TM-171	8.368E+03	1.371E+04	2.321E+04	0.000E+00 FAIL ABUN
HF-181	-2.002E+01	1.773E+01	2.820E+01	0.000E+00 FAIL ABUN
TA-182	3.158E+01	4.201E+01	8.518E+01	0.000E+00 FAIL ABUN
IR-192	6.986E+00	1.140E+01	2.061E+01	0.000E+00 NOT IDENT.
BI-207	-6.338E+00	1.986E+01	3.441E+01	0.000E+00 FAIL ABUN
TL-208	1.169E+01	1.449E+01	2.631E+01	0.000E+00 FAIL ABUN
BI-210	-2.520E+02	1.296E+03	2.163E+03	0.000E+00 NOT IDENT.
PB-210	-2.520E+02	1.296E+03	2.163E+03	0.000E+00 NOT IDENT.
BI-211	-2.680E+00	7.095E+01	1.231E+02	0.000E+00 NOT IDENT.
PB-211	2.487E+02	3.205E+02	5.847E+02	0.000E+00 NOT IDENT.
BI-212	8.460E+01	1.045E+02	1.922E+02	0.000E+00 NOT IDENT.
PB-212	1.993E+01	1.993E+01	3.617E+01	0.000E+00 FAIL ABUN
BI-214	2.752E+01	2.673E+01	4.923E+01	0.000E+00 NOT IDENT.
PB-214	4.994E+00	2.429E+01	4.276E+01	0.000E+00 FAIL ABUN
RN-219	-4.355E+01	1.352E+02	2.304E+02	0.000E+00 NOT IDENT.
RA-223	1.010E+01	2.185E+02	3.823E+02	0.000E+00 FAIL ABUN
RA-224	-4.166E+01	2.221E+02	3.844E+02	0.000E+00 NOT IDENT.
RA-226	2.752E+01	2.673E+01	4.923E+01	0.000E+00 NOT IDENT.
AC-227	1.416E+02	1.383E+02	2.522E+02	0.000E+00 NOT IDENT.
TH-227	1.394E+02	1.362E+02	2.483E+02	0.000E+00 FAIL ABUN
AC-228	3.171E+01	5.557E+01	1.030E+02	0.000E+00 NOT IDENT.
RA-228	3.171E+01	5.557E+01	1.030E+02	0.000E+00 NOT IDENT.
TH-228	2.010E+01	1.993E+01	3.620E+01	0.000E+00 NOT IDENT.
TH-229	-5.124E+01	1.648E+02	2.859E+02	0.000E+00 FAIL ABUN
TH-230	2.752E+01	2.673E+01	4.923E+01	0.000E+00 NOT IDENT.
PA-231	-1.220E+02	5.459E+02	8.274E+02	0.000E+00 NOT IDENT.
TH-231	-1.557E+01	6.080E+01	1.049E+02	0.000E+00 NOT IDENT.

TH-232	1.987E+01	1.965E+01	3.568E+01	0.000E+00 NOT IDENT.
PA-234	-8.055E+01	1.648E+02	2.403E+02	0.000E+00 FAIL ABUN
PA-234M	3.254E+02	1.801E+03	3.254E+03	0.000E+00 NOT IDENT.
TH-234	-6.691E+02	6.874E+02	9.839E+02	0.000E+00 FAIL ABUN
U-234	2.459E+01	4.478E+01	8.025E+01	0.000E+00 NOT IDENT.
U-235	3.451E+01	7.973E+01	1.335E+02	0.000E+00 FAIL ABUN
U-238	-6.691E+02	6.874E+02	9.839E+02	0.000E+00 NOT IDENT.
NP-239	-2.632E+01	1.003E+02	1.451E+02	0.000E+00 FAIL ABUN
AM-242	-1.842E+02	1.019E+03	1.674E+03	0.000E+00 NOT IDENT.
CM-247	-4.220E+00	1.248E+01	2.123E+01	0.000E+00 FAIL ABUN
CF-249	1.191E+01	1.594E+01	2.587E+01	0.000E+00 NOT IDENT.
CF-251	3.174E+01	4.129E+01	7.497E+01	0.000E+00 NOT IDENT.

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 12:41:12.30

```
*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942443.CNF;1
Sample date      : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 11:40:47
Sample ID        : G1200942443          Sample quantity  : 2.00000E+00 LITER
Detector name    : WELL                 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:02.44  0.1%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 3941466
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Pk	It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	Fit
1	0	33.37	61	636	1.39	65.96	63	7	1.69E-02	70.0	
2	0	59.43	1214	1353	1.46	117.75	111	13	3.37E-01	6.9	
3	0	87.96	2498	1039	1.27	174.44	167	13	6.94E-01	3.3	
4	0	92.85	75	408	0.93	184.16	181	7	2.08E-02	46.2	
5	0	121.97	1270	748	1.34	242.05	235	14	3.53E-01	5.4	
6	0	136.32	125	441	1.32	270.57	267	9	3.48E-02	31.4	
7	0	148.62	56	224	0.71	295.02	293	6	1.56E-02	44.0	
8	0	165.83	1053	348	1.29	329.23	326	9	2.92E-01	4.5	
9	0	215.42	43	210	1.40	427.79	424	7	1.19E-02	57.9	
10	0	249.71	23	162	1.10	495.96	494	7	6.39E-03	93.6	
11	0	278.65	131	277	1.74	553.49	545	16	3.64E-02	29.8	
12	0	312.44	29	90	0.84	620.66	618	7	8.10E-03	58.2	
13	0	391.33	613	277	1.74	777.50	768	18	1.70E-01	7.6	
14	0	416.20	27	84	1.54	826.95	824	8	7.47E-03	62.6	
15	0	510.36	139	95	3.65	1014.18	1006	16	3.85E-02	17.9	
16	0	520.83	11	84	1.43	1034.99	1032	9	3.18E-03	146.6	
17	1	634.64	43	42	1.93	1261.32	1258	17	1.20E-02	31.1	2.92E+00
18	1	639.83	29	42	1.94	1271.65	1258	17	7.93E-03	36.7	
19	0	645.21	16	70	1.93	1282.35	1281	10	4.31E-03	102.8	
20	0	661.20	893	167	1.80	1314.15	1306	18	2.48E-01	4.8	
21	0	751.57	74	62	4.09	1493.88	1486	17	2.04E-02	27.4	
22	0	758.04	16	25	1.40	1506.74	1504	7	4.31E-03	58.7	
23	0	762.27	24	59	3.67	1515.16	1511	11	6.73E-03	64.2	
24	0	897.34	700	128	1.93	1783.84	1777	15	1.94E-01	5.2	
25	0	949.57	29	43	0.80	1887.74	1884	9	7.95E-03	46.0	
26	0	1172.24	928	54	2.10	2330.77	2322	16	2.58E-01	3.7	
27	0	1232.44	12	9	0.58	2450.57	2445	9	3.31E-03	53.8	
28	0	1274.44	19	34	6.62	2534.14	2517	27	5.30E-03	87.9	
29	0	1331.34	863	20	2.23	2647.40	2637	19	2.40E-01	3.6	
30	0	1340.19	2	26	3.88	2665.00	2659	17	4.17E-04	775.7	
31	0	1428.53	8	7	1.47	2840.83	2838	7	2.16E-03	67.2	
32	0	1546.85	17	3	2.80	3076.37	3073	9	4.81E-03	28.9	
33	0	1556.02	8	2	1.27	3094.61	3093	5	2.33E-03	40.5	
34	0	1579.60	14	9	0.82	3141.55	3134	11	3.98E-03	47.2	
35	0	1815.69	6	7	3.42	3611.63	3604	11	1.59E-03	104.2	
36	0	1834.49	408	11	2.92	3649.06	3638	26	1.13E-01	5.5	

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 12:41:17.94

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942443.CNF;1
Sample date      : 29-SEP-2005 00:00:00 Acquisition date : 13-OCT-2005 11:40:47
Sample ID        : G1200942443          Sample quantity  : 2.00000E+00 LITER
Detector name    : WELL                 Detector geometry: 2L_MB
Elapsed live time: 0 01:00:00.00        Elapsed real time: 0 01:00:02.44  0.1%
Energy tolerance : 2.00000 KEV          Analyst Initials : MJH1
Abundance limit  : 75.00000             Sensitivity      : 3.00000
Batch ID         : 465316               Detector SN#     : 3941466
Matrix Spike DPM :                      LCS DPM          :
*************************************************************************
```

Nuclide Line Activity Report

Nuclide Type:

Nuclide	Energy	Area	%Abn	%Eff	Uncorrected pCi/LITER	Decay Corr pCi/LITER	2-Sigma %Error
NA-22	1274.53	19	99.94*	4.546E-01	1.575E+01	1.592E+01	175.78
CO-57	122.06	1270	85.51*	2.261E+00	2.465E+02	2.558E+02	10.74
	136.47	125	10.47	2.285E+00	1.966E+02	2.040E+02	62.89
CO-60	1173.24	926	99.90	4.839E-01	7.188E+02	7.225E+02	7.46
	1332.50	861	99.98*	4.399E-01	7.346E+02	7.385E+02	7.25
Y-88	898.02	698	93.40	5.917E-01	4.738E+02	5.207E+02	10.37
	1836.01	408	99.38*	3.391E-01	4.545E+02	4.995E+02	11.00
CD-109	88.03	2493	3.79*	1.869E+00	1.321E+04	1.350E+04	6.66
SN-113	391.69	613	64.90*	1.202E+00	2.950E+02	3.220E+02	15.11
SN-126	64.28	------	9.60	1.174E+00	------ Line Not Found		------
	86.94	2493	8.90	1.869E+00	5.626E+03	5.626E+03	6.66
	87.57	2493	37.00*	1.869E+00	1.353E+03	1.353E+03	6.66
BA-137M	661.65	862	89.98*	7.562E-01	4.754E+02	4.758E+02	9.94
CS-137	661.66	862	85.12*	7.562E-01	5.025E+02	5.030E+02	9.94
CE-139	165.85	1053	80.35*	2.209E+00	2.227E+02	2.396E+02	8.90
PM-147	121.30	1270	0.00*	2.261E+00	5.270E+08	5.326E+08	10.74
HG-203	70.83	------	4.75	1.403E+00	------ Line Not Found		------
	72.87	------	8.00	1.469E+00	------ Line Not Found		------
	82.60	------	3.55	1.745E+00	------ Line Not Found		------
	279.20	124	77.30*	1.613E+00	3.739E+01	4.639E+01	63.16
PA-233	75.28	------	1.26	1.544E+00	------ Line Not Found		------
	86.59	2493	1.89	1.869E+00	2.649E+04	2.649E+04	6.66
	300.12	------	6.60	1.517E+00	------ Line Not Found		------
	311.98	26	38.60*	1.466E+00	1.713E+01	1.713E+01	132.40
	340.50	------	4.50	1.360E+00	------ Line Not Found		------
	398.62	------	1.27	1.182E+00	------ Line Not Found		------
	415.76	25	1.62	1.137E+00	5.123E+02	5.123E+02	135.00
NP-237	86.48	2493	12.60*	1.869E+00	3.974E+03	3.974E+03	6.66
	95.87	------	2.60	2.017E+00	------ Line Not Found		------
AM-241	59.54	1210	35.90*	9.926E-01	1.275E+03	1.275E+03	13.84
ANH-511	511.00	69	100.00*	9.463E-01	2.734E+01	2.734E+01	72.98

Flag: "*" = Keyline

Sample ID : G1200942443 Acquisition date : 13-OCT-2005 11:40:47

Total number of lines in spectrum	36	
Number of unidentified lines	10	
Number of lines tentatively identified by NID	26	72.22%

Nuclide Type :

Nuclide	Hlife	Decay	Uncorrected pCi/LITER	Decay Corr pCi/LITER	Decay Corr 2-Sigma Error	2-Sigma %Error	Flags
NA-22	2.60Y	1.01	1.575E+01	1.592E+01	2.799E+01	175.78	
CO-57	270.90D	1.04	2.465E+02	2.558E+02	0.275E+02	10.74	
CO-60	5.27Y	1.01	7.346E+02	7.385E+02	0.536E+02	7.25	
Y-88	106.60D	1.10	4.545E+02	4.995E+02	0.549E+02	11.00	
CD-109	464.00D	1.02	1.321E+04	1.350E+04	0.090E+04	6.66	
SN-113	115.10D	1.09	2.950E+02	3.220E+02	0.487E+02	15.11	
SN-126	1.00E+05Y	1.00	1.353E+03	1.353E+03	0.090E+03	6.66	
BA-137M	30.17Y	1.00	4.754E+02	4.758E+02	0.473E+02	9.94	
CS-137	30.17Y	1.00	5.025E+02	5.030E+02	0.500E+02	9.94	
CE-139	137.66D	1.08	2.227E+02	2.396E+02	0.213E+02	8.90	
PM-147	2.62Y	1.01	5.270E+08	5.326E+08	0.572E+08	10.74	
HG-203	46.61D	1.24	3.739E+01	4.639E+01	2.930E+01	63.16	
PA-233	2.14E+06Y	1.00	1.713E+01	1.713E+01	2.268E+01	132.40	
NP-237	2.14E+06Y	1.00	3.974E+03	3.974E+03	0.265E+03	6.66	
AM-241	432.20Y	1.00	1.275E+03	1.275E+03	0.176E+03	13.84	
ANH-511	1.00E+09Y	1.00	2.734E+01	2.734E+01	1.995E+01	72.98	
			---	---			
	Total Activity :		5.270E+08	5.326E+08			
	Grand Total Activity :		5.270E+08	5.326E+08			

Flags: "K" = Keyline not found "M" = Manually accepted
"E" = Manually edited "A" = Nuclide specific abn. limit

Sample ID : G1200942443 Acquisition date : 13-OCT-2005 11:40:47

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	33.37	61	636	1.39	65.96	63	7	1.69E-02	****	1.30E-01	
0	92.85	6	408	0.93	184.16	181	7	1.55E-03	****	1.97E+00	T
0	148.62	52	224	0.71	295.02	293	6	1.44E-02	96.4	2.27E+00	
0	215.42	43	210	1.40	427.79	424	7	1.19E-02	****	1.94E+00	
0	249.71	23	162	1.10	495.96	494	7	6.39E-03	****	1.76E+00	T
0	520.83	11	84	1.43	1034.99	1032	9	3.18E-03	****	9.29E-01	T
1	634.64	43	42	1.93	1261.32	1258	17	1.20E-02	62.1	7.83E-01	T
1	639.83	29	42	1.94	1271.65	1258	17	7.93E-03	73.5	7.77E-01	
0	645.21	16	70	1.93	1282.35	1281	10	4.31E-03	****	7.72E-01	T
0	751.57	74	62	4.09	1493.88	1486	17	2.04E-02	54.9	6.80E-01	T
0	758.04	13	25	1.40	1506.74	1504	7	3.55E-03	****	6.76E-01	T
0	762.27	24	59	3.67	1515.16	1511	11	6.73E-03	****	6.73E-01	T
0	949.57	29	43	0.80	1887.74	1884	9	7.95E-03	92.0	5.67E-01	T
0	1232.44	12	9	0.58	2450.57	2445	9	3.31E-03	****	4.66E-01	T
0	1340.19	2	26	3.88	2665.00	2659	17	4.17E-04	****	4.38E-01	
0	1428.53	8	7	1.47	2840.83	2838	7	2.16E-03	****	4.17E-01	
0	1546.85	17	3	2.80	3076.37	3073	9	4.81E-03	57.8	3.92E-01	
0	1556.02	8	2	1.27	3094.61	3093	5	2.33E-03	81.0	3.90E-01	
0	1579.60	14	9	0.82	3141.55	3134	11	3.98E-03	94.4	3.85E-01	
0	1815.69	6	7	3.42	3611.63	3604	11	1.59E-03	****	3.42E-01	

Flags: "T" = Tentatively associated

VAX/VMS Nuclide Identification Report Generated 13-OCT-2005 12:41:26.28

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*************************************************************************
*                          GENERAL ENG. LABS, LLC.                      *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : DKA300:[CANBERRA.GAMMA.ARCHIVE.GAMMA]G1200942443.CNF;1    *
* Acquisition date : 13-OCT-2005 11:40:47  Detector SN#    : 3941466    *
* Detector ID      : WELL                  Sensitivity     : 3.00000    *
* Geometry         : 2L_MB                 Energy tolerance: 2.00000    *
* Elapsed live time: 0 01:00:00.00         Abundance limit : 75.00000   *
* Elapsed real time: 0 01:00:02.44         Half life ratio : 8.00000    *
*************************************************************************
*                                                                       *
*                               SAMPLE DATA                             *
*                                                                       *
* Sample date      : 29-SEP-2005 00:00:00  Nuclide Library : EPI        *
* Sample ID        : G1200942443           Analyst initials: MJH1       *
* Batch Number     : 465316                Sample Quantity : 2.00000E+00 LITER *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME : 2-DEC-2004 13:17:31.18MS Isotope      :           *
* MSD DPM          :                      MSD Isotope      :           *
* LCS DPM          :                      LCS Isotope      :           *
*************************************************************************
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Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
NA-22	1.592E+01	2.799E+01	1.940E+01	0.000E+00	0.821
CO-57	2.558E+02	2.748E+01	3.786E+01	0.000E+00	6.757
CO-60	7.385E+02	5.356E+01	1.406E+01	0.000E+00	52.509
Y-88	4.995E+02	5.493E+01	1.685E+01	0.000E+00	29.639
CD-109	1.350E+04	8.987E+02	6.060E+02	0.000E+00	22.278
SN-113	3.220E+02	4.866E+01	2.674E+01	0.000E+00	12.039
SN-126	1.353E+03	9.008E+01	6.105E+01	0.000E+00	22.167
BA-137M	4.758E+02	4.730E+01	2.707E+01	0.000E+00	17.577
CS-137	5.030E+02	5.001E+01	2.862E+01	0.000E+00	17.577
CE-139	2.396E+02	2.133E+01	1.879E+01	0.000E+00	12.746
PM-147	1.078E+08	2.732E+08	3.860E+07	0.000E+00	2.794
HG-203	4.639E+01	2.930E+01	2.179E+01	0.000E+00	2.129
PA-233	1.713E+01	2.268E+01	4.044E+01	0.000E+00	0.424
NP-237	3.974E+03	2.645E+02	1.815E+02	0.000E+00	21.897
AM-241	1.275E+03	1.764E+02	1.295E+02	0.000E+00	9.842
ANH-511	2.734E+01	1.995E+01	1.774E+01	0.000E+00	1.541

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
BE-7	5.024E+01		1.335E+02	2.350E+02	0.000E+00	0.214

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
AL-26	-1.052E+01		9.198E+00	1.372E+01	0.000E+00	-0.767
K-40	2.849E+01		1.232E+02	2.295E+02	0.000E+00	0.124
SC-46	-5.124E+00		1.727E+01	3.009E+01	0.000E+00	-0.170
V-48	2.460E+01		2.919E+01	5.522E+01	0.000E+00	0.445
CR-51	-1.580E+01		1.283E+02	2.219E+02	0.000E+00	-0.071
MN-54	1.435E+00		1.400E+01	2.533E+01	0.000E+00	0.057
CO-56	-7.794E+00		1.508E+01	2.597E+01	0.000E+00	-0.300
CO-58	-9.542E+00		1.656E+01	2.839E+01	0.000E+00	-0.336
FE-59	2.712E+00		3.586E+01	6.397E+01	0.000E+00	0.042
ZN-65	-3.673E+00		3.165E+01	5.572E+01	0.000E+00	-0.066
SE-75	-1.171E+01		1.558E+01	2.621E+01	0.000E+00	-0.447
KR-85	-3.675E+02		2.677E+03	3.996E+03	0.000E+00	-0.092
SR-85	-1.871E+00		1.363E+01	2.035E+01	0.000E+00	-0.092
Y-91	3.298E+00		1.372E+01	2.410E+01	0.000E+00	0.137
NB-94	-1.721E+00		1.367E+01	2.303E+01	0.000E+00	-0.075
NB-95	8.924E+00		1.849E+01	3.069E+01	0.000E+00	0.291
NB-95M	-2.749E+02		5.640E+02	9.641E+02	0.000E+00	-0.285
ZR-95	1.504E+01	+	2.173E+01	4.376E+01	0.000E+00	0.344
MO-99	-1.963E+02		4.011E+02	6.457E+02	0.000E+00	-0.304
RU-103	-3.381E+00		1.474E+01	2.508E+01	0.000E+00	-0.135
RH-106	5.856E+01		1.390E+02	2.443E+02	0.000E+00	0.240
RU-106	4.813E+01		1.407E+02	2.457E+02	0.000E+00	0.196
AG-108M	1.076E+01		1.239E+01	2.263E+01	0.000E+00	0.476
AG-110M	2.511E+01		1.958E+01	3.214E+01	0.000E+00	0.781
CD-115	9.474E+02		3.502E+03	6.150E+03	0.000E+00	0.154
SN-115	-1.328E+03		1.513E+03	2.508E+03	0.000E+00	-0.529
SN-117M	8.720E+00		2.033E+01	3.397E+01	0.000E+00	0.257
TE-123M	-8.095E-01		1.102E+01	1.801E+01	0.000E+00	-0.045
SB-124	7.064E+00		2.253E+01	4.687E+01	0.000E+00	0.151
SB-125	2.068E+01		3.399E+01	6.122E+01	0.000E+00	0.338
TE-125M	2.917E+03		4.288E+03	7.248E+03	0.000E+00	0.402
I-126	1.918E+01		8.316E+01	1.267E+02	0.000E+00	0.151
SB-126	3.708E+01		5.457E+01	9.842E+01	0.000E+00	0.377
SB-127	9.598E+01		5.038E+02	8.725E+02	0.000E+00	0.110
I-131	-1.298E+01		3.780E+01	6.444E+01	0.000E+00	-0.201
TE-132	-5.606E+00		2.077E+02	3.627E+02	0.000E+00	-0.015
BA-133	2.747E+00		1.560E+01	2.736E+01	0.000E+00	0.100
CS-134	1.277E+00		1.542E+01	2.794E+01	0.000E+00	0.046
CS-135	3.638E+01		5.372E+01	9.662E+01	0.000E+00	0.377
CS-136	-3.511E+00		3.671E+01	6.531E+01	0.000E+00	-0.054
BA-140	9.434E+01		9.292E+01	1.728E+02	0.000E+00	0.546
CE-141	-1.116E+01		2.450E+01	3.945E+01	0.000E+00	-0.283
CE-144	5.503E+01		9.222E+01	1.395E+02	0.000E+00	0.395
PM-144	-6.917E+00		1.389E+01	2.270E+01	0.000E+00	-0.305
PM-146	-1.253E+01		1.712E+01	2.811E+01	0.000E+00	-0.446
ND-147	-7.861E+00		2.131E+02	3.660E+02	0.000E+00	-0.021
PM-149	1.240E+04		2.398E+04	4.313E+04	0.000E+00	0.287
EU-152	-1.151E+01		3.403E+01	5.806E+01	0.000E+00	-0.198

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L. Ided	Act error	MDA (pCi/LITER)	MDA error	Act/MDA
GD-153	1.253E+00		3.590E+01	5.955E+01	0.000E+00	0.021
EU-154	4.449E+01	+	7.820E+01	5.836E+01	0.000E+00	0.762
EU-155	-3.576E+01		4.985E+01	8.022E+01	0.000E+00	-0.446
TB-160	-2.676E+01		5.687E+01	9.802E+01	0.000E+00	-0.273
TM-171	8.368E+03		1.371E+04	2.321E+04	0.000E+00	0.361
HF-181	-2.002E+01		1.773E+01	2.820E+01	0.000E+00	-0.710
TA-182	3.158E+01		4.201E+01	8.518E+01	0.000E+00	0.371
IR-192	6.986E+00		1.140E+01	2.061E+01	0.000E+00	0.339
BI-207	-6.338E+00		1.986E+01	3.441E+01	0.000E+00	-0.184
TL-208	1.169E+01		1.449E+01	2.631E+01	0.000E+00	0.444
BI-210	-2.520E+02		1.296E+03	2.163E+03	0.000E+00	-0.116
PB-210	-2.520E+02		1.296E+03	2.163E+03	0.000E+00	-0.116
BI-211	-2.680E+00		7.095E+01	1.231E+02	0.000E+00	-0.022
PB-211	2.487E+02		3.205E+02	5.847E+02	0.000E+00	0.425
BI-212	8.460E+01		1.045E+02	1.922E+02	0.000E+00	0.440
PB-212	1.993E+01		1.993E+01	3.617E+01	0.000E+00	0.551
BI-214	2.752E+01		2.673E+01	4.923E+01	0.000E+00	0.559
PB-214	4.994E+00		2.429E+01	4.276E+01	0.000E+00	0.117
RN-219	-4.355E+01		1.352E+02	2.304E+02	0.000E+00	-0.189
RA-223	1.010E+01		2.185E+02	3.823E+02	0.000E+00	0.026
RA-224	-4.166E+01		2.221E+02	3.844E+02	0.000E+00	-0.108
RA-226	2.752E+01		2.673E+01	4.923E+01	0.000E+00	0.559
AC-227	1.416E+02		1.383E+02	2.522E+02	0.000E+00	0.562
TH-227	1.394E+02		1.362E+02	2.483E+02	0.000E+00	0.562
AC-228	3.171E+01		5.557E+01	1.030E+02	0.000E+00	0.308
RA-228	3.171E+01		5.557E+01	1.030E+02	0.000E+00	0.308
TH-228	2.010E+01		1.993E+01	3.620E+01	0.000E+00	0.555
TH-229	-5.124E+01		1.648E+02	2.859E+02	0.000E+00	-0.179
TH-230	2.752E+01		2.673E+01	4.923E+01	0.000E+00	0.559
PA-231	-1.220E+02		5.459E+02	8.274E+02	0.000E+00	-0.147
TH-231	-1.557E+01		6.080E+01	1.049E+02	0.000E+00	-0.148
TH-232	1.987E+01		1.965E+01	3.568E+01	0.000E+00	0.557
PA-234	-8.055E+01		1.648E+02	2.403E+02	0.000E+00	-0.335
PA-234M	3.254E+02		1.801E+03	3.254E+03	0.000E+00	0.100
TH-234	-6.691E+02		6.874E+02	9.839E+02	0.000E+00	-0.680
U-234	2.459E+01		4.478E+01	8.025E+01	0.000E+00	0.306
U-235	3.451E+01		7.973E+01	1.335E+02	0.000E+00	0.259
U-238	-6.691E+02		6.874E+02	9.839E+02	0.000E+00	-0.680
NP-239	-2.632E+01		1.003E+02	1.451E+02	0.000E+00	-0.181
AM-242	-1.842E+02		1.019E+03	1.674E+03	0.000E+00	-0.110
CM-247	-4.220E+00		1.248E+01	2.123E+01	0.000E+00	-0.199
CF-249	1.191E+01		1.594E+01	2.587E+01	0.000E+00	0.460
CF-251	3.174E+01		4.129E+01	7.497E+01	0.000E+00	0.423

VAX/VMS Nuclide Identification Report Generated

```
*************************************************************************
*                          Environmental Physics, Inc.                  *
*                              2040 Savage Road                         *
*                            Charleston, SC 29414                       *
*************************************************************************
*                                                                       *
*                              DETECTOR DATA                            *
*                                                                       *
* Configuration    : SYS$SYSROOT:[ALPHA.ARCHIVE.GAMMA]G1200942443       *
* Acquisition date : 13-OCT-2005 11:40:47 Detector SN#    : 3941466     *
* Detector ID      : WELL                 Sensitivity     : 3.000       *
* Geometry         : 2L_MB                Energy tolerance: 2.000       *
* Elapsed live time:    0 01:00:00.00     Abundance limit : 75.000      *
* Elapsed real time:    0 01:00:02.44     Half life ratio : 8.000       *
*************************************************************************
*                                                                       *
*                              SAMPLE DATA                              *
*                                                                       *
* Sample date      : 29-SEP-2005 00:00:00 Nuclide Library : FERMC       *
* Sample ID        : G1200942443          Analyst initials: MJH1        *
* Batch Number     : 465316               Sample Quantity : 2.0000E+00 LITER  *
* Recovery         :    1.00000           Carrier Weight :    0.00000   *
*************************************************************************
*                                                                       *
*                                QC DATA                                *
*                                                                       *
* CALIB. DATE/TIME :  2-DEC-2004 13:17:31 MS Isotope      :             *
* MSD DPM          : ********            MSD Isotope     :             *
* LCS DPM          :    0.000            LCS Isotope     :             *
* LCSD DPM         :    0.000            LCSD Isotope    :             *
*************************************************************************
```

Combined Activity-MDA Report

---- Identified Nuclides ----

Nuclide	Activity (pCi/LITER)	Act Error	DLC (pCi/LITER)	TPU
NA-22	1.592E+01	2.799E+01	8.575E+00	1.399E+01
CO-57	2.558E+02	2.748E+01	1.867E+01	1.374E+01
CO-60	7.385E+02	5.356E+01	5.872E+00	2.678E+01
Y-88	4.995E+02	5.493E+01	6.771E+00	2.746E+01
CD-109	1.350E+04	8.987E+02	2.958E+02	4.493E+02
SN-113	3.220E+02	4.866E+01	1.267E+01	2.433E+01
SN-126	1.353E+03	9.008E+01	2.980E+01	4.504E+01
BA-137M	4.758E+02	4.730E+01	1.279E+01	2.365E+01
CS-137	5.030E+02	5.001E+01	1.352E+01	2.500E+01
CE-139	2.396E+02	2.133E+01	9.094E+00	1.066E+01
PM-147	1.078E+08	2.732E+08	1.874E+07	1.366E+08
HG-203	4.639E+01	2.930E+01	1.039E+01	1.465E+01
PA-233	1.713E+01	2.268E+01	1.933E+01	1.134E+01
NP-237	3.974E+03	2.645E+02	8.860E+01	1.323E+02
AM-241	1.275E+03	1.764E+02	6.338E+01	8.820E+01
ANH-511	2.734E+01	1.995E+01	8.338E+00	9.977E+00

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/LITER)	K.L Act error	DLC (pCi/LITER)	TPU	
BE-7	5.024E+01	1.335E+02	1.117E+02	6.676E+01	NOT IDENT.
NA-24	8.750E+07	9.362E+07	0.000E+00	4.681E+07	SHORT HLIF
AL-26	-1.052E+01	9.198E+00	5.377E+00	4.599E+00	FAIL ABUN
K-40	2.849E+01	1.232E+02	1.032E+02	6.162E+01	NOT IDENT.
SC-46	-5.124E+00	1.727E+01	1.409E+01	8.637E+00	NOT IDENT.
V-48	2.460E+01	2.919E+01	2.590E+01	1.459E+01	NOT IDENT.
CR-51	-1.580E+01	1.283E+02	1.059E+02	6.414E+01	NOT IDENT.
MN-54	1.435E+00	1.400E+01	1.183E+01	7.000E+00	NOT IDENT.
CO-56	-7.794E+00	1.508E+01	1.206E+01	7.540E+00	NOT IDENT.
MN-56	-1.000E+41	1.935E+41	0.000E+00	0.000E+00	SHORT HLIF
CO-58	-9.542E+00	1.656E+01	1.328E+01	8.281E+00	NOT IDENT.

FE-59	2.712E+00	3.586E+01	2.978E+01	1.793E+01	NOT IDENT.
ZN-65	-3.673E+00	3.165E+01	2.580E+01	1.583E+01	NOT IDENT.
SE-75	-1.171E+01	1.558E+01	1.256E+01	7.790E+00	FAIL ABUN
KR-85	-3.675E+02	2.677E+03	1.874E+03	1.338E+03	NOT IDENT.
SR-85	-1.871E+00	1.363E+01	9.543E+00	6.815E+00	NOT IDENT.
Y-91	3.298E+00	1.372E+01	1.133E+01	6.859E+00	NOT IDENT.
NB-94	-1.721E+00	1.367E+01	1.081E+01	6.833E+00	NOT IDENT.
NB-95	8.924E+00	1.849E+01	1.434E+01	9.243E+00	NOT IDENT.
NB-95M	-2.749E+02	5.640E+02	4.643E+02	2.820E+02	NOT IDENT.
ZR-95	1.504E+01	2.173E+01	2.030E+01	1.087E+01	FAIL ABUN
MO-99	-1.963E+02	4.011E+02	3.126E+02	2.006E+02	NOT IDENT.
TC-99M	-1.296E+18	2.648E+18	0.000E+00	0.000E+00	SHORT HLIF
RU-103	-3.381E+00	1.474E+01	1.179E+01	7.370E+00	NOT IDENT.
RH-106	5.856E+01	1.390E+02	1.155E+02	6.951E+01	FAIL ABUN
RU-106	4.813E+01	1.407E+02	1.162E+02	7.036E+01	NOT IDENT.
AG-108M	1.076E+01	1.239E+01	1.075E+01	6.197E+00	NOT IDENT.
AG-110M	2.511E+01	1.958E+01	1.534E+01	9.792E+00	FAIL ABUN
CD-115	9.474E+02	3.502E+03	2.903E+03	1.751E+03	NOT IDENT.
SN-115	-1.328E+03	1.513E+03	1.171E+03	7.564E+02	NOT IDENT.
SN-117M	8.720E+00	2.033E+01	1.644E+01	1.017E+01	NOT IDENT.
TE-123M	-8.095E-01	1.102E+01	8.715E+00	5.512E+00	NOT IDENT.
SB-124	7.064E+00	2.253E+01	2.008E+01	1.126E+01	FAIL ABUN
SB-125	2.068E+01	3.399E+01	2.905E+01	1.700E+01	FAIL ABUN
TE-125M	2.917E+03	4.288E+03	3.528E+03	2.144E+03	NOT IDENT.
I-126	1.918E+01	8.316E+01	5.970E+01	4.158E+01	NOT IDENT.
SB-126	3.708E+01	5.457E+01	4.622E+01	2.728E+01	NOT IDENT.
SB-127	9.598E+01	5.038E+02	4.100E+02	2.519E+02	NOT IDENT.
I-131	-1.298E+01	3.780E+01	3.053E+01	1.890E+01	NOT IDENT.
I-132	1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
TE-132	-5.606E+00	2.077E+02	1.747E+02	1.039E+02	NOT IDENT.
BA-133	2.747E+00	1.560E+01	1.304E+01	7.799E+00	NOT IDENT.
I-133	6.038E+05	1.403E+06	0.000E+00	7.016E+05	SHORT HLIF
CS-134	1.277E+00	1.542E+01	1.305E+01	7.712E+00	NOT IDENT.
CS-135	3.638E+01	5.372E+01	4.643E+01	2.686E+01	NOT IDENT.
I-135	-5.444E+15	2.502E+17	0.000E+00	0.000E+00	SHORT HLIF
CS-136	-3.511E+00	3.671E+01	3.007E+01	1.835E+01	FAIL ABUN
BA-140	9.434E+01	9.292E+01	8.149E+01	4.646E+01	NOT IDENT.
LA-140	3.154E+03	5.918E+03	0.000E+00	2.959E+03	SHORT HLIF
CE-141	-1.116E+01	2.450E+01	1.911E+01	1.225E+01	NOT IDENT.
CE-143	-1.342E+04	3.115E+04	0.000E+00	1.558E+04	SHORT HLIF
CE-144	5.503E+01	9.222E+01	6.764E+01	4.611E+01	NOT IDENT.
PM-144	-6.917E+00	1.389E+01	1.063E+01	6.946E+00	NOT IDENT.
PR-144	-1.000E+41	2.000E+41	0.000E+00	0.000E+00	SHORT HLIF
PM-146	-1.253E+01	1.712E+01	1.329E+01	8.559E+00	FAIL ABUN
ND-147	-7.861E+00	2.131E+02	1.725E+02	1.065E+02	FAIL ABUN
PM-149	1.240E+04	2.398E+04	2.060E+04	1.199E+04	NOT IDENT.
EU-152	-1.151E+01	3.403E+01	2.762E+01	1.702E+01	FAIL ABUN
GD-153	1.253E+00	3.590E+01	2.896E+01	1.795E+01	NOT IDENT.
EU-154	4.449E+01	7.820E+01	2.604E+01	3.910E+01	FAIL ABUN
EU-155	-3.576E+01	4.985E+01	3.898E+01	2.492E+01	FAIL ABUN
TB-160	-2.676E+01	5.687E+01	4.562E+01	2.843E+01	FAIL ABUN
TM-171	8.368E+03	1.371E+04	1.135E+04	6.855E+03	FAIL ABUN
HF-181	-2.002E+01	1.773E+01	1.333E+01	8.867E+00	FAIL ABUN
TA-182	3.158E+01	4.201E+01	3.825E+01	2.101E+01	FAIL ABUN
IR-192	6.986E+00	1.140E+01	9.824E+00	5.701E+00	NOT IDENT.
BI-207	-6.338E+00	1.986E+01	1.591E+01	9.930E+00	FAIL ABUN
TL-208	1.169E+01	1.449E+01	1.244E+01	7.244E+00	FAIL ABUN
BI-210	-2.520E+02	1.296E+03	1.057E+03	6.480E+02	NOT IDENT.
PB-210	-2.520E+02	1.296E+03	1.057E+03	6.480E+02	NOT IDENT.
BI-211	-2.680E+00	7.095E+01	5.861E+01	3.548E+01	NOT IDENT.
PB-211	2.487E+02	3.205E+02	2.775E+02	1.603E+02	NOT IDENT.
BI-212	8.460E+01	1.045E+02	8.987E+01	5.225E+01	NOT IDENT.
PB-212	1.993E+01	1.993E+01	1.746E+01	9.963E+00	FAIL ABUN
BI-214	2.752E+01	2.673E+01	2.327E+01	1.336E+01	NOT IDENT.
PB-214	4.994E+00	2.429E+01	2.036E+01	1.214E+01	FAIL ABUN
RN-219	-4.355E+01	1.352E+02	1.086E+02	6.758E+01	NOT IDENT.
RA-223	1.010E+01	2.185E+02	1.820E+02	1.093E+02	FAIL ABUN
RA-224	-4.166E+01	2.221E+02	1.851E+02	1.110E+02	NOT IDENT.
RA-226	2.752E+01	2.673E+01	2.327E+01	1.336E+01	NOT IDENT.
AC-227	1.416E+02	1.383E+02	1.214E+02	6.915E+01	NOT IDENT.
TH-227	1.394E+02	1.362E+02	1.195E+02	6.808E+01	FAIL ABUN
AC-228	3.171E+01	5.557E+01	4.839E+01	2.778E+01	NOT IDENT.
RA-228	3.171E+01	5.557E+01	4.839E+01	2.778E+01	NOT IDENT.
TH-228	2.010E+01	1.993E+01	1.747E+01	9.966E+00	NOT IDENT.
TH-229	-5.124E+01	1.648E+02	1.377E+02	8.239E+01	FAIL ABUN
TH-230	2.752E+01	2.673E+01	2.327E+01	1.336E+01	NOT IDENT.
PA-231	-1.220E+02	5.459E+02	3.939E+02	2.729E+02	NOT IDENT.
TH-231	-1.557E+01	6.080E+01	5.021E+01	3.040E+01	NOT IDENT.

TH-232	1.987E+01	1.965E+01	1.722E+01	9.825E+00	NOT IDENT.
PA-234	-8.055E+01	1.648E+02	1.128E+02	8.240E+01	FAIL ABUN
PA-234M	3.254E+02	1.801E+03	1.517E+03	9.006E+02	NOT IDENT.
TH-234	-6.691E+02	6.874E+02	4.805E+02	3.437E+02	FAIL ABUN
U-234	2.459E+01	4.478E+01	3.842E+01	2.239E+01	NOT IDENT.
U-235	3.451E+01	7.973E+01	6.467E+01	3.986E+01	FAIL ABUN
U-238	-6.691E+02	6.874E+02	4.805E+02	3.437E+02	NOT IDENT.
NP-239	-2.632E+01	1.003E+02	7.056E+01	5.014E+01	FAIL ABUN
AM-242	-1.842E+02	1.019E+03	8.139E+02	5.095E+02	NOT IDENT.
CM-247	-4.220E+00	1.248E+01	1.002E+01	6.241E+00	FAIL ABUN
CF-249	1.191E+01	1.594E+01	1.231E+01	7.970E+00	NOT IDENT.
CF-251	3.174E+01	4.129E+01	3.618E+01	2.064E+01	NOT IDENT.

General Engineering Labs, LLC
2040 SAVAGE ROAD
CHARLESTON ,SC 29417
GROSS GAMMA REPORT

BATCH ID	: 465316	SAMPLE ID	: G1200942443
ANALYST	: MJH1	DETECTOR	: WELL
SAMPLE DATE	: 29-SEP-2005 00:00:00.00	COUNT TIME	: 0 01:00:00.00
ANALYSIS DATE	: 13-OCT-2005 11:40:47.92	SAMPLE ALQT	: 2.000 LITER

GROSS GAMMA ACTIVITY (pCi/LITER)	: 4.641E+03
GROSS GAMMA ERROR (pCi/LITER)	: 1.441E+03
GROSS GAMMA MDA (pCi/LITER)	: 2.595E+03
GROSS GAMMA DLC (pCi/LITER)	: 1.269E+03

Radiochemistry Batch Checklist, Rev 4

Batch# 467348 Product: Sr-90 Date: 10/13/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg for GAB.	NA		
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	NA		
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	NA		

General Engineering Laboratories

2/22/2005

Primary Review Performed By: [signature] 10/13/05

Secondary Review Performed By: [signature] 10/13/05

no 10/13/05

10/6-10/15

ESHL

Strontium 90 Que Sheet

10/10/05

Batch #: 467348 **Analyst:** EXW1 **Minimum DueDate:** 10/08/2005 **Comments**

Sr-90 Spike Code: 0133P **Expiration Date:** 8/15/06 **Vol:** 0.1 **Sr Sep. Date/time:** 10/8/05 14:30

Sr-90 LCS Code: 0133P **Expiration Date:** 8/15/06 **Vol:** 0.1

Sr Carrier Code: 1005753 **Exp Date:** 11/13/06 **Vol:** 0.5 **Sdt Wt:** 8.91

Prep Date: 10/7/05 **Initials:** HEW **Pipet ID:** 44970063 **Balance #:** 512048863 **Analytical Scale #:** 38110047 **Witness:** CHS 10/7/05

Sample ID	Client Description	Type	RDL	Collection Date	Matrix	Client	Rad	Bkr#	Aliquot (mL) or (g)	Det # 1 & 2	Initial Sr wt (g)	Final Sr wt (g)	Net Sr wt (mg)
145579001	GF05090G3TM01	SAMPLE	.4 pCi/L	SEP-13-05 03:00 PM	GROUND WATE	ESHL001		1	800	2B 1B	0.0875	0.0956	8.1
145579002	GF05090GMC401	SAMPLE	.4 pCi/L	SEP-13-05 07:30 AM	GROUND WATE	ESHL001		2	800	5A	0.0835	0.0892	5.7
145579003	GF05090G57M01	SAMPLE	.4 pCi/L	SEP-13-05 12:55 PM	GROUND WATE	ESHL001		3	800	5B	0.0841	0.0919	7.8
145579004	GF05090G7CM01	SAMPLE	.4 pCi/L	SEP-14-05 09:32 AM	GROUND WATE	ESHL001		4	800	5C 1C	0.0836	0.0910	7.4
145579005	GU05090G3TM01	SAMPLE	.4 pCi/L	SEP-13-05 03:00 PM	GROUND WATE	ESHL001		5	800	5D 1D	0.0850	0.0934	8.4
145579006	GU05090GMC401	SAMPLE	.4 pCi/L	SEP-13-05 07:30 AM	GROUND WATE	ESHL001		6	800	6A	0.0845	0.0921	7.6
145579007	GU05090G57M01	SAMPLE	.4 pCi/L	SEP-13-05 12:55 PM	GROUND WATE	ESHL001		7	800	1B	0.0842	0.0913	7.1
145579008	GU05090G7CM01	SAMPLE	.4 pCi/L	SEP-14-05 09:32 AM	GROUND WATE	ESHL001		8	800	1C 2A	0.0846	0.0911	6.5
145782001	GF05090G4BM01	SAMPLE	.4 pCi/L	SEP-15-05 01:45 PM	GROUND WATE	ESHL001		9	800	1D 2B	0.0836	0.0912	7.6
145782002	GF05090G5CM01	SAMPLE	.4 pCi/L	SEP-15-05 10:38 AM	GROUND WATE	ESHL001		10	800	2A 2C	0.0838	0.0918	8.0
145782003	GU05090G4BM01	SAMPLE	.4 pCi/L	SEP-15-05 01:45 PM	GROUND WATE	ESHL001		11	800	2C 2D	0.0838	0.0919	8.1
145782004	GU05090G5CM01	SAMPLE	.4 pCi/L	SEP-15-05 10:38 AM	GROUND WATE	ESHL001		12	800	2D 3A	0.0838	0.0912	7.4
145892001	GF05090G4TM01	SAMPLE	.4 pCi/L	SEP-16-05 03:23 PM	GROUND WATE	ESHL001		13	800	5A	0.0848	0.0923	7.5
145892002	GF05090G1TM01	SAMPLE	.4 pCi/L	SEP-16-05 12:57 PM	GROUND WATE	ESHL001		14	800	5B	0.0847	~~0.0891~~	0.0899 5.2
145892003	GU05090G4TM01	SAMPLE	.4 pCi/L	SEP-16-05 03:23 PM	GROUND WATE	ESHL001		15	800	5C 3B	0.0861	0.0942	8.1
145892004	GU05090G1TM01	SAMPLE	.4 pCi/L	SEP-16-05 12:57 PM	GROUND WATE	ESHL001		16	800	5D	0.0862	0.0908	4.6
1200947133	MB for batch 467348	MB	.4 pCi/L		GROUND WATE	QC ACCOUNT		17	1000	4B 6A	0.0880	0.0965	8.5
1200947134	GU05090G4TM01(145892003DUP)	DUP	.4 pCi/L	SEP-16-05 03:23 PM	GROUND WATE	QC ACCOUNT		18	800	4C 3C	0.0880	0.0939	5.9
1200947135	GU05090G4TM01(145892003MS)	MS	.4 pCi/L	SEP-16-05 03:23 PM	GROUND WATE	QC ACCOUNT		19	400	4D 6B	0.0845	0.0902	5.7
1200947136	LCS for batch 467348	LCS	.4 pCi/L		GROUND WATE	QC ACCOUNT		20	1000	1A	0.0844	0.0930	8.6

1725

Instruments used: LB4110 S/N 8219, ~~PIC S/N 10751-4~~

Solid Sample Dissolution by: **LEACH** or **DIGESTION** (Circle One)

HEW 10/7/05

Data Reviewed By: 10/13/05

WTV

HEW 10/13/05

10/13/05

General Engineering Laboratories, Radiochemistry Division

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200947134	DUP	Strontium-90	0.800 L	-0.0772	0.0599	0.297	-.0068875	pCi/L	YES
1200947136	LCS	Strontium-90	1.00 L	15.0	0.451	0.300	-.00551	pCi/L	NO
1200947133	MB	Strontium-90	1.00 L	-0.00551	0.0328	0.137	-.00551	pCi/L	NO
1200947135	MS	Strontium-90	0.400 L	35.3	1.34	1.22	-.013775	pCi/L	NO
145579001	GF05090G3TM01	Strontium-90	0.800 L	-0.0503	0.0418	0.207	-.0068875	pCi/L	YES
145579002	GF05090GMC401	Strontium-90	0.800 L	-0.0888	0.047	0.169	-.0068875	pCi/L	YES
145579003	GF05090G57M01	Strontium-90	0.800 L	-0.0366	0.0339	0.120	-.0068875	pCi/L	YES
145579004	GF05090G7CM01	Strontium-90	0.800 L	0.428	0.0737	0.226	-.0068875	pCi/L	NO
145579005	GU05090G3TM01	Strontium-90	0.800 L	-0.0152	0.0451	0.209	-.0068875	pCi/L	NO
145579006	GU05090GMC401	Strontium-90	0.800 L	-0.0688	0.0355	0.128	-.0068875	pCi/L	YES
145579007	GU05090G57M01	Strontium-90	0.800 L	0.0688	0.0508	0.198	-.0068875	pCi/L	NO
145579008	GU05090G7CM01	Strontium-90	0.800 L	0.678	0.0918	0.253	-.0068875	pCi/L	NO
145782001	GF05090G4BM01	Strontium-90	0.800 L	29.6	0.713	0.314	-.0068875	pCi/L	NO
145782002	GF05090G5CM01	Strontium-90	0.800 L	26.5	0.677	0.288	-.0068875	pCi/L	NO
145782003	GU05090G4BM01	Strontium-90	0.800 L	32.3	0.745	0.272	-.0068875	pCi/L	NO
145782004	GU05090G5CM01	Strontium-90	0.800 L	27.6	0.780	0.344	-.0068875	pCi/L	NO
145892001	GF05090G4TM01	Strontium-90	0.800 L	-0.0676	0.0433	0.194	-.0068875	pCi/L	YES
145892002	GF05090G1TM01	Strontium-90	0.800 L	-0.0679	0.0608	0.268	-.0068875	pCi/L	YES
145892003	GU05090G4TM01	Strontium-90	0.800 L	-0.0481	0.0441	0.216	-.0068875	pCi/L	YES
145892004	GU05090G1TM01	Strontium-90	0.800 L	0.248	0.0848	0.307	-.0068875	pCi/L	NO

dkp
10/13/06

10 10/13/06

Strontium-90 Water

Filename : SR90.XLS
File type : Excel
Version # : 1

Batch : 467348
Analyst : EXW1
Prep Date : 10/7/2005
Sr-90 Abundance : 1

Calibration Date : 11/2/2004
Calibration Due Date : 11/2/2005

Spike S/N :	0133-P
Spike Exp Date :	8/15/2006
Spike Activity (dpm/ml):	346.36
Spike Volume Added:	0.1
LCS S/N :	0133-P
LCS Exp Date :	8/15/2006
LCS Activity (dpm/ml):	346.36
LCS Volume Added:	0.1
Carrier S/N :	1005753
Carrier Exp Date :	11/13/2006
Carrier Volume Added:	0.5
Carrier Weight (mg/ml):	17.83
Carrier Weight StDev.:	0.07

Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1 ml Stdev : +/-	0.005480	ml
Procedure Code :	GFC90SRL	
Parmname :	Strontium-90	
Required MDC:	0.4	pCi/L
Halflife of Sr-90 :	28.6	years
Halflife of Y-90 :	64.1	hours
Batch counted on :	PIC	
BKG Count time :	500	min

Sample Characteristics				**Carrier Calculations**				
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Carrier Weight (Standard)	Net Weight (Sample)	Net Weight StDev.	Carrier Aliquot (mL)	Carrier Aliquot StDev.
145579001	0.800	2.0861E-05	9/13/2005 15:00	17.83	8.10	0.042144	0.5	0.002564
145579002	0.800	2.0861E-05	9/13/2005 7:30	17.83	5.70	0.031829	0.5	0.002564
145579003	0.800	2.0861E-05	9/13/2005 12:55	17.83	7.80	0.040854	0.5	0.002564
145579004	0.800	2.0861E-05	9/14/2005 9:32	17.83	7.40	0.039135	0.5	0.002564
145579005	0.800	2.0861E-05	9/13/2005 15:00	17.83	8.40	0.043433	0.5	0.002564
145579006	0.800	2.0861E-05	9/13/2005 7:30	17.83	7.60	0.039995	0.5	0.002564
145579007	0.800	2.0861E-05	9/13/2005 12:55	17.83	7.10	0.037846	0.5	0.002564
145579008	0.800	2.0861E-05	9/14/2005 9:32	17.83	6.50	0.035267	0.5	0.002564
145782001	0.800	2.0861E-05	9/15/2005 13:45	17.83	7.60	0.039995	0.5	0.002564
145782002	0.800	2.0861E-05	9/15/2005 10:38	17.83	8.00	0.041714	0.5	0.002564
145782003	0.800	2.0861E-05	9/15/2005 13:45	17.83	8.10	0.042144	0.5	0.002564
145782004	0.800	2.0861E-05	9/15/2005 10:38	17.83	7.40	0.039135	0.5	0.002564
145892001	0.800	2.0861E-05	9/16/2005 15:23	17.83	7.50	0.039565	0.5	0.002564
145892002	0.800	2.0861E-05	9/16/2005 12:57	17.83	5.20	0.029680	0.5	0.002564
145892003	0.800	2.0861E-05	9/16/2005 15:23	17.83	8.10	0.042144	0.5	0.002564
145892004	0.800	2.0861E-05	9/16/2005 12:57	17.83	4.60	0.027101	0.5	0.002564
1200947133	1.000	2.0399E-05	10/7/2005 0:00	17.83	8.50	0.043863	0.5	0.002564
1200947134	0.800	2.0861E-05	9/16/2005 15:23	17.83	5.90	0.032688	0.5	0.002564
1200947135	0.400	1.9669E-05	9/16/2005 15:23	17.83	5.70	0.031829	0.5	0.002564
1200947136	1.000	2.0399E-05	10/7/2005 0:00	17.83	8.60	0.044293	0.5	0.002564

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DGP 10/13/05

10/13/05 RB 10/13/05

Count Raw Data

Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Gross Beta CPM	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency Sr-90	Detector Efficiency Y-90	Detector Efficiency Error	Alpha X-Talk	Count Start Date/Time	Strontium Separation Date/Time	Yttrium Ingrowth	Sr-90 Decay	Sample Recovery %	Sample Recovery Error %
1B	120	12	34	0.273	0.338	500	0.4084	0.5561	0.00409	0.10678	10/13/2005 9:54	10/8/2005 14:30	0.716	0.998	90.86%	0.98%
5A	500	21	154	0.306	0.376	500	0.4194	0.5650	0.00816	0.04324	10/10/2005 23:45	10/8/2005 14:30	0.485	0.998	63.94%	1.02%
5B	500	82	158	0.309	0.348	500	0.4144	0.5650	0.00816	0.04330	10/10/2005 23:45	10/8/2005 14:30	0.485	0.998	87.49%	0.98%
1C	120	7	105	0.871	0.352	500	0.4232	0.5605	0.00344	0.06892	10/13/2005 9:55	10/8/2005 14:30	0.716	0.998	83.01%	0.99%
1D	120	15	45	0.363	0.384	500	0.4127	0.5655	0.00511	0.09407	10/13/2005 9:55	10/8/2005 14:30	0.716	0.998	94.22%	0.98%
6A	500	19	154	0.306	0.378	500	0.4149	0.5650	0.00816	0.04330	10/10/2005 23:45	10/8/2005 14:30	0.485	0.998	85.25%	0.99%
1B	210	42	90	0.407	0.338	500	0.4106	0.5561	0.00409	0.10675	10/11/2005 13:07	10/8/2005 14:30	0.543	0.998	79.64%	0.99%
2A	120	10	129	1.071	0.344	500	0.4225	0.5685	0.00349	0.04435	10/13/2005 9:55	10/8/2005 14:30	0.716	0.998	72.91%	1.00%
2B	60	20	2244	37.354	0.336	500	0.4251	0.5645	0.00383	0.13921	10/13/2005 9:55	10/8/2005 14:30	0.715	0.998	85.25%	0.99%
2C	60	36	2075	34.529	0.296	500	0.4108	0.5631	0.00575	0.09061	10/13/2005 9:56	10/8/2005 14:30	0.715	0.998	89.74%	0.98%
2D	60	47	2595	43.220	0.278	500	0.4177	0.5719	0.00479	0.03868	10/13/2005 9:56	10/8/2005 14:30	0.715	0.998	90.86%	0.98%
3A	60	80	1950	32.445	0.350	500	0.3974	0.5517	0.00943	0.04132	10/13/2005 9:57	10/8/2005 14:30	0.715	0.998	83.01%	0.99%
5A	210	9	64	0.303	0.376	500	0.4152	0.5650	0.00816	0.04329	10/11/2005 14:24	10/8/2005 14:30	0.549	0.998	84.13%	0.99%
5B	210	16	63	0.297	0.348	500	0.4206	0.5650	0.00816	0.04322	10/11/2005 14:24	10/8/2005 14:30	0.549	0.998	58.33%	1.03%
3B	120	7	37	0.305	0.368	500	0.4066	0.5589	0.00655	0.04943	10/13/2005 9:57	10/8/2005 14:30	0.716	0.998	90.86%	0.98%
5D	210	13	111	0.526	0.360	500	0.4220	0.5650	0.00816	0.04320	10/11/2005 14:24	10/8/2005 14:30	0.549	0.998	51.60%	1.05%
6A	210	9	78	0.370	0.378	500	0.4128	0.5650	0.00816	0.04333	10/11/2005 14:24	10/8/2005 14:30	0.549	1.000	95.34%	0.97%
3C	120	9	36	0.297	0.370	500	0.4097	0.5553	0.00535	0.04118	10/13/2005 9:57	10/8/2005 14:30	0.716	0.998	66.18%	1.02%
6D	60	22	908	15.117	0.580	500	0.4194	0.5650	0.00816	0.04324	10/11/2005 14:24	10/8/2005 14:30	0.543	0.998	63.94%	1.02%
1A	60	21	1427	23.757	0.488	500	0.4167	0.5635	0.00600	0.07553	10/11/2005 14:23	10/8/2005 14:30	0.543	1.000	96.47%	0.97%

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10/13/05

10/13/05

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Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.1346	0.0951	0.2075	**-0.0503**	0.8310	-0.0653	0.0543	0.0418	0.0418		SAMPLE				
0.1149	0.0811	0.1692	**-0.0888**	0.5292	-0.0698	0.0369	0.0470	0.0470		SAMPLE				
0.0814	0.0575	0.1200	**-0.0366**	0.9271	-0.0391	0.0362	0.0339	0.0339		SAMPLE				
0.1471	0.1039	0.2263	**0.4278**	0.1723	0.5190	0.0892	0.0735	0.0737		SAMPLE				
0.1365	0.0964	0.2093	**-0.0152**	2.9676	-0.0208	0.0616	0.0451	0.0451		SAMPLE				
0.0870	0.0614	0.1280	**-0.0688**	0.5165	-0.0716	0.0370	0.0355	0.0355		SAMPLE				
0.1314	0.0928	0.1984	**0.0688**	0.7389	0.0692	0.0511	0.0508	0.0508		SAMPLE				
0.1646	0.1162	0.2534	**0.6784**	0.1352	0.7273	0.0981	0.0915	0.0918		SAMPLE				
0.1970	0.1391	0.3141	**29.5685**	0.0238	37.0176	0.7895	0.6306	0.7129		SAMPLE				
0.1789	0.1263	0.2875	**26.4651**	0.0249	34.2330	0.7590	0.5868	0.6767		SAMPLE				
0.1685	0.1190	0.2718	**32.2647**	0.0226	42.9417	0.8490	0.6379	0.7447		SAMPLE				
0.2160	0.1525	0.3438	**27.5514**	0.0267	32.0949	0.7358	0.6317	0.7798		SAMPLE				
0.1289	0.0910	0.1939	**-0.0676**	0.6410	-0.0731	0.0468	0.0433	0.0433		SAMPLE				
0.1775	0.1253	0.2676	**-0.0679**	0.8954	-0.0513	0.0459	0.0608	0.0608		SAMPLE				
0.1404	0.0991	0.2156	**-0.0481**	0.9159	-0.0626	0.0573	0.0441	0.0441		SAMPLE				
0.2037	0.1438	0.3068	**0.2476**	0.3425	0.1659	0.0568	0.0848	0.0848		SAMPLE				
0.0914	0.0645	0.1375	**-0.0055**	5.9512	-0.0084	0.0502	0.0328	0.0328		MB				
0.1932	0.1364	0.2966	**-0.0772**	0.7758	-0.0731	0.0567	0.0599	0.0599	145892003	DUP	0.0%	0.1397		
0.7871	0.5557	1.2209	**35.3180**	0.0370	14.5375	0.5031	1.2223	1.3378	145892003	MS			39.06	90.4%
0.1921	0.1356	0.3004	**15.0412**	0.0294	23.2689	0.6300	0.4072	0.4512		LCS			15.60	96.4%

JKD 10/13/05

PCH 10/13/05

SampleID	Instr	Time	Alpha	Beta	Count Start Time	Count End Time
145579001	1B	120	12	34	10/13/2005 9:54	10/13/2005 11:54
145579002	5A	500	21	154	10/10/2005 23:45	10/11/2005 8:05
145579003	5B	500	82	158	10/10/2005 23:45	10/11/2005 8:05
145579004	1C	120	7	105	10/13/2005 9:55	10/13/2005 11:55
145579005	1D	120	15	45	10/13/2005 9:55	10/13/2005 11:55
145579006	6A	500	19	154	10/10/2005 23:45	10/11/2005 8:05
145579007	1B	210	42	90	10/11/2005 13:07	10/11/2005 16:37
145579008	2A	120	10	129	10/13/2005 9:55	10/13/2005 11:55
145782001	2B	60	20	2244	10/13/2005 9:55	10/13/2005 10:55
145782002	2C	60	36	2075	10/13/2005 9:56	10/13/2005 10:56
145782003	2D	60	47	2595	10/13/2005 9:56	10/13/2005 10:56
145782004	3A	60	80	1950	10/13/2005 9:57	10/13/2005 10:57
145892001	5A	210	9	64	10/11/2005 14:24	10/11/2005 17:54
145892002	5B	210	16	63	10/11/2005 14:24	10/11/2005 17:54
145892003	3B	120	7	37	10/13/2005 9:57	10/13/2005 11:57
145892004	5D	210	13	111	10/11/2005 14:24	10/11/2005 17:54
1200947133	6A	210	9	78	10/11/2005 14:24	10/11/2005 17:54
1200947134	3C	120	9	36	10/13/2005 9:57	10/13/2005 11:57
1200947135	6D	60	22	908	10/11/2005 14:24	10/11/2005 15:24
1200947136	1A	60	21	1427	10/11/2005 14:23	10/11/2005 15:23

10/13/05

10/13/05

10/13/05

Radiochemistry Batch Checklist for LSC, Rev 4

Batch# 465185 Product: Tc-99 Date: 10.10.05

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* MDA, error is 100% or less of sample activity. If greater 10* MDA, error is 20% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	✓		
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	NA		
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	NA		

General Engineering Laboratories
2/22/2005

Primary Review Performed By: Wendy Wicks 10.10.05

Secondary Review Performed By: mo 10/13/05

ESHL
10.6.05 / 10.13.05

Tc-99 Que Sheet

09/22/2005

Batch #: 465185 **Analyst:BXF1** **Minimum DueDate:** 10/06/2005 **Comments**

Spike Isotope: Technetium-99 **Spike Code:** 0718-B **Expiration Date:** 2-4-06 **Vol:** 0.1ml
LCS Isotope: Technetium-99 **LCS Code:** 0718-B **Expiration Date:** 2-4-06 **Vol:** 0.1ml
Tracer Isotope: Technetium-99m Tracer Code: Tc 0683A **Reference Date:** 9-27-05 **Expiration Date:** 9-28-05 **Vol:** 1ml
Prep Date: 9-28-05 **Initials:** BXF **Pipet ID:** 1429303 **Balance ID:** 360402l6 **Witness:** JJW 9128105

Sample I	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Collection Date	Label	Sample Mass (g/mL)	LSC Rack #
145267002	GU05090GMC501	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	09-SEP-05 06:45 AM	1	900	48-2
145312007	GU05090PE1E01	SAMPLE		5 pCi/L	SURFACE WATER	ESHL001	12-SEP-05 10:00 AM	2	900	48-3
145312008	GU05090PE2M01	SAMPLE		5 pCi/L	SURFACE WATER	ESHL001	12-SEP-05 10:00 AM	3	900	48-4
145452004	GU0509PWF1E01	SAMPLE		5 pCi/L	SURFACE WATER	ESHL001	13-SEP-05 09:10 AM	4	900	48-5
145457009	GU05080G01R01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	12-SEP-05 12:37 PM	5	900	48-6
145457010	GU05080G01R90	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	12-SEP-05 12:37 PM	6	900	48-7
145457012	GU05080G01R01-FB	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	12-SEP-05 12:37 PM	7	900	48-8
145579005	GU05090G3TM01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	13-SEP-05 03:00 PM	8	900	48-9
145579006	GU05090GMC401	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	13-SEP-05 07:30 AM	9	900	48-10
145579007	GU05090G57M01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	13-SEP-05 12:55 PM	10	900	48-11
145579008	GU05090G7CM01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	14-SEP-05 09:32 AM	11	900	48-12 10/13/05
145739004	GU05090G6CM01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	14-SEP-05 12:00 PM	12	900	21-1
145739005	GU0509G33R101	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	14-SEP-05 09:07 AM	13	900	21-2
145739006	GU0509G33R201	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	15-SEP-05 09:35 AM	14	900	21-3
145782003	GU05090G4BM01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	15-SEP-05 01:45 PM	15	900	21-4
145782004	GU05090G5CM01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	15-SEP-05 10:38 AM	16	900	21-5
145892003	GU05090G4TM01	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	16-SEP-05 03:23 PM	17	900	21-6
145892004	GU05090G1TM01 10-7-05 BXF	SAMPLE		5 pCi/L	GROUND WATER	ESHL001	16-SEP-05 12:57 PM	18	900	21-7
1200942132	MB for batch 465185	MB		5 pCi/L	GROUND WATER	QC ACCOUNT		19	1000	48-40-2
1200942133	GU05090G4TM01(145892003DUP)	DUP		5 pCi/L	GROUND WATER	QC ACCOUNT	16-SEP-05 03:23 PM	20	900	21-9
1200942134	GU05090G4TM01(145892003MS)	MS		5 pCi/L	GROUND WATER	QC ACCOUNT	16-SEP-05 03:23 PM	21	900	21-10
1200942135	LCS for batch 465185	LCS		5 pCi/L	GROUND WATER	QC ACCOUNT		22	1000	21-11

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Comments:

Data Reviewed By: 10.10.05

10/13/05

Instrument Used: LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Green) 7067404 Wallac (Yellow) 4040127, Wallac (Pink) 2200082, LS6000 (Brown) 7060655, LS6500 (Gold) 7070506, Wallac (White) 4140299

General Engineering Laboratories, Radiochemistry Division

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200942133	DUP	Technetium-99	0.900 L	5.70	1.02	3.09	-1.2	pCi/L	NO
1200942135	LCS	Technetium-99	1.00 L	116	2.62	2.71	-1.08	pCi/L	NO
1200942132	MB	Technetium-99	1.00 L	-1.08	0.826	2.88	-1.08	pCi/L	NO
1200942134	MS	Technetium-99	0.900 L	127	2.95	3.19	-1.2	pCi/L	NO
145267002	GU05090GMC501	Technetium-99	0.900 L	1.17	1.01	3.37	-1.2	pCi/L	NO
145312007	GU05090PE1E01	Technetium-99	0.900 L	1.84	0.938	3.06	-1.2	pCi/L	NO
145312008	GU05090PE2M01	Technetium-99	0.900 L	9.87	1.10	3.08	-1.2	pCi/L	NO
145452004	GU0509PWF1E01	Technetium-99	0.900 L	1.37	0.901	2.97	-1.2	pCi/L	NO
145457009	GU05080G01R01	Technetium-99	0.900 L	1.97	0.951	3.10	-1.2	pCi/L	NO
145457010	GU05080G01R90	Technetium-99	0.900 L	1.27	0.934	3.09	-1.2	pCi/L	NO
145457012	GU05080G01R01 -FB	Technetium-99	0.900 L	1.94	0.922	3.00	-1.2	pCi/L	NO
145579005	GU05090G3TM01	Technetium-99	0.900 L	17.4	1.20	2.94	-1.2	pCi/L	NO
145579006	GU05090GMC401	Technetium-99	0.900 L	5.76	0.993	2.98	-1.2	pCi/L	NO
145579007	GU05090G57M01	Technetium-99	0.900 L	13.2	1.13	2.96	-1.2	pCi/L	NO
145579008	GU05090G7CM01	Technetium-99	0.900 L	13.2	1.13	2.96	-1.2	pCi/L	NO
145739004	GU05090G6CM01	Technetium-99	0.900 L	10.3	1.14	3.17	-1.2	pCi/L	NO
145739005	GU0509G33R101	Technetium-99	0.900 L	1.95	0.925	3.01	-1.2	pCi/L	NO
145739006	GU0509G33R201	Technetium-99	0.900 L	0.385	0.924	3.12	-1.2	pCi/L	NO
145782003	GU05090G4BM01	Technetium-99	0.900 L	6.25	1.01	3.02	-1.2	pCi/L	NO
145782004	GU05090G5CM01	Technetium-99	0.900 L	7.17	1.04	3.06	-1.2	pCi/L	NO
145892003	GU05090G4TM01	Technetium-99	0.900 L	20.2	1.25	2.94	-1.2	pCi/L	NO
145892004	GU05090G1TM01	Technetium-99	0.900 L	7.42	1.09	3.20	-1.2	pCi/L	NO

10-01-05

10/13/05

Tc-99 Water

Filename : TC99.XLS
File type : Excel
Version # : 1

Batch : 465185
Analyst : BXF1
Prep Date : 9/28/2005
Tc-99 Abundance : 1
Calibration Date : 6/20/2005
Calibration Due Date : 6/20/2006
Geometry:
5ml DI/10ml ultima gold

Spike S/N :	0718-B
Spike Exp Date :	2/4/2006
Spike Activity (dpm/ml):	2624.66
Spike Volume Added:	0.1
LCS S/N :	0718-B
LCS Exp Date :	2/4/2006
LCS Activity (dpm/ml):	2624.66
LCS Volume Added:	0.1
Tracer S/N :	TC0683A
Tracer Exp Date :	9/28/2005
Tracer Volume Added:	1.0

Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1 ml Stdev : +/-	0.005480	ml
Procedure Code :	LSC99TCL	
Parmname :	Technetium-99	
Required MDC:	5	pCi/L
Halflife of Tc-99 :	213000	years
Batch counted on :	LSCBLUE	
Detector Effiency Error :	0.00792	
BKG Count time :	15	min

Sample Characteristics				Tracer Calculations					
Sample ID	Sample Aliquot L	Sample Aliquot StDev.	Sample Date/Time	Tracer Concentration (Tc-99 Ref.)	Tracer Ref. Count Uncertainty	Tracer Concentration (Tc-99 Samp.)	Tracer Samp. Count Uncertainty	Tracer Aliquot (mL)	Tracer Aliquot StDev.
145267002	0.900	2.0768E-05	9/9/2005 6:45	4318	1.00%	3906	1.00%	1.0	0.005480
145312007	0.900	2.0768E-05	9/12/2005 10:00	4318	1.00%	4430	1.00%	1.0	0.005480
145312008	0.900	2.0768E-05	9/12/2005 10:00	4318	1.00%	4429	0.99%	1.0	0.005480
145452004	0.900	2.0768E-05	9/13/2005 9:10	4318	1.00%	4446	1.00%	1.0	0.005480
145457009	0.900	2.0768E-05	9/12/2005 12:37	4318	1.00%	4238	1.00%	1.0	0.005480
145457010	0.900	2.0768E-05	9/12/2005 12:37	4318	1.00%	4248	1.00%	1.0	0.005480
145457012	0.900	2.0768E-05	9/12/2005 12:37	4318	1.00%	4366	1.00%	1.0	0.005480
145579005	0.900	2.0768E-05	9/13/2005 15:00	4318	1.00%	4533	1.00%	1.0	0.005480
145579006	0.900	2.0768E-05	9/13/2005 7:30	4318	1.00%	4452	1.00%	1.0	0.005480
145579007	0.900	2.0768E-05	9/13/2005 12:55	4318	1.00%	4536	1.00%	1.0	0.005480
145579008	0.900	2.0768E-05	9/14/2005 9:32	4318	1.00%	4552	1.00%	1.0	0.005480
145739004	0.900	2.0768E-05	9/14/2005 12:00	4318	1.00%	4337	1.00%	1.0	0.005480
145739005	0.900	2.0768E-05	9/14/2005 9:07	4318	1.00%	4354	1.00%	1.0	0.005480
145739006	0.900	2.0768E-05	9/15/2005 9:35	4318	1.00%	4209	1.00%	1.0	0.005480
145782003	0.900	2.0768E-05	9/15/2005 13:45	4318	1.00%	4390	1.00%	1.0	0.005480
145782004	0.900	2.0768E-05	9/15/2005 10:38	4318	1.00%	4409	1.00%	1.0	0.005480
145892003	0.900	2.0768E-05	9/16/2005 15:23	4318	1.00%	4499	1.00%	1.0	0.005480
145892004	0.900	2.0768E-05	9/16/2005 12:57	4318	1.00%	4385	1.00%	1.0	0.005480
1200942132	1.000	2.0399E-05	9/28/2005 0:00	4318	1.00%	4482	1.00%	1.0	0.005480
1200942133	0.900	2.0768E-05	9/16/2005 15:23	4318	1.00%	4320	1.00%	1.0	0.005480
1200942134	0.900	2.0768E-05	9/16/2005 15:23	4318	1.00%	4190	1.00%	1.0	0.005480
1200942135	1.000	2.0399E-05	9/28/2005 0:00	4318	1.00%	4353	1.00%	1.0	0.005480

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10.10.05 mo 10/13/05

Count raw Data

Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time	Sample Decay	Sample Recovery %	Sample Recovery Error %
48-2	15	136.3	20.33	0.8773	0.00792	18.47	15	10/2/2005 1:38	1.000	90.47%	1.05%
48-3	15	165	21.67	0.8505	0.00792	18.47	15	10/2/2005 1:55	1.000	102.61%	1.05%
48-4	15	167.8	35.6	0.8469	0.00792	18.47	15	10/2/2005 2:12	1.000	102.58%	1.05%
48-5	15	141.5	20.93	0.8741	0.00792	18.47	15	10/2/2005 2:29	1.000	102.97%	1.05%
48-6	15	132.5	21.87	0.8791	0.00792	18.47	15	10/2/2005 2:46	1.000	98.17%	1.05%
48-7	15	130.6	20.67	0.8798	0.00792	18.47	15	10/2/2005 3:03	1.000	98.40%	1.05%
48-8	15	126.6	21.93	0.8809	0.00792	18.47	15	10/2/2005 3:19	1.000	101.12%	1.05%
48-9	15	150.7	50.13	0.8666	0.00792	18.47	15	10/2/2005 3:36	1.000	104.98%	1.05%
48-10	15	146	28.8	0.8707	0.00792	18.47	15	10/2/2005 3:53	1.000	103.11%	1.05%
48-11	15	157.1	42.27	0.8600	0.00792	18.47	15	10/2/2005 4:10	1.000	105.05%	1.05%
48-12	15	159.9	42.27	0.8568	0.00792	18.47	15	10/2/2005 4:27	1.000	105.43%	1.05%
21-1	15	172.9	35.87	0.8398	0.00792	18.47	15	10/2/2005 4:44	1.000	100.45%	1.05%
21-2	15	126.6	21.93	0.8809	0.00792	18.47	15	10/2/2005 5:01	1.000	100.84%	1.05%
21-3	15	129.5	19.13	0.8802	0.00792	18.47	15	10/2/2005 5:18	1.000	97.48%	1.05%
21-4	15	145.5	29.53	0.8711	0.00792	18.47	15	10/2/2005 5:35	1.000	101.68%	1.05%
21-5	15	159.8	31	0.8569	0.00792	18.47	15	10/2/2005 5:52	1.000	102.12%	1.05%
21-6	15	141.9	55.27	0.8738	0.00792	18.47	15	10/2/2005 6:09	1.000	104.20%	1.05%
21-7	15	183.6	30.87	0.8237	0.00792	18.47	15	10/2/2005 6:26	1.000	101.57%	1.05%
40-2	15	124	20	0.8814	0.00792	22.20	15	10/8/2005 10:52	1.000	103.81%	1.05%
21-9	15	152.2	28.33	0.8651	0.00792	18.47	15	10/2/2005 6:59	1.000	100.06%	1.05%
21-10	15	154.1	231.07	0.8632	0.00792	18.47	15	10/2/2005 7:16	1.000	97.04%	1.05%
21-11	15	110.5	245.93	0.8795	0.00792	18.47	15	10/2/2005 7:33	1.000	100.81%	1.05%

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10.10.05

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Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	**1 SIGMA** Counting Uncertainty	**1 SIGMA** Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
2.3057	1.6279	3.3695	**1.1729**	0.8648	1.8600	1.6083	1.0142	1.0143		SAMPLE				
2.0969	1.4804	3.0643	**1.8351**	0.5114	3.2000	1.6358	0.9381	0.9384		SAMPLE				
2.1066	1.4872	3.0784	**9.8690**	0.1116	17.1300	1.8986	1.0938	1.1015		SAMPLE				
2.0332	1.4355	2.9713	**1.3679**	0.6590	2.4600	1.6207	0.9012	0.9014		SAMPLE				
2.1206	1.4972	3.0990	**1.9719**	0.4825	3.4000	1.6399	0.9511	0.9515		SAMPLE				
2.1138	1.4924	3.0891	**1.2718**	0.7344	2.2000	1.6153	0.9339	0.9340		SAMPLE				
2.0544	1.4504	3.0022	**1.9440**	0.4745	3.4600	1.6411	0.9221	0.9224		SAMPLE				
2.0116	1.4202	2.9397	**17.4180**	0.0688	31.6600	2.1385	1.1765	1.1986		SAMPLE				
2.0385	1.4392	2.9789	**5.7590**	0.1724	10.3300	1.7752	0.9897	0.9926		SAMPLE				
2.0257	1.4301	2.9602	**13.1851**	0.0856	23.8000	2.0123	1.1148	1.1282		SAMPLE				
2.0259	1.4303	2.9605	**13.1864**	0.0856	23.8000	2.0123	1.1149	1.1283		SAMPLE				
2.1693	1.5315	3.1701	**10.3230**	0.1102	17.4000	1.9033	1.1292	1.1373		SAMPLE				
2.0601	1.4544	3.0105	**1.9494**	0.4745	3.4600	1.6411	0.9246	0.9250		SAMPLE				
2.1330	1.5059	3.1171	**0.3850**	2.3989	0.6600	1.5832	0.9236	0.9236		SAMPLE				
2.0660	1.4586	3.0192	**6.2493**	0.1623	11.0600	1.7889	1.0108	1.0141		SAMPLE				
2.0913	1.4765	3.0562	**7.1666**	0.1455	12.5300	1.8160	1.0387	1.0430		SAMPLE				
2.0098	1.4189	2.9370	**20.2273**	0.0617	36.8000	2.2172	1.2187	1.2474		SAMPLE				
2.1875	1.5444	3.1967	**7.4183**	0.1469	12.4000	1.8137	1.0850	1.0894		SAMPLE				
1.9735	1.3933	2.8754	**-1.0831**	0.7625	-2.2000	1.6773	0.8257	0.8259		MB				
2.1141	1.4926	3.0894	**5.7009**	0.1796	9.8600	1.7664	1.0213	1.0240	145782003	DUP	9.2%	0.1345		
2.1848	1.5425	3.1928	**127.0354**	0.0233	212.6000	4.0787	2.4372	2.9544	145782003	MS			131.36	91.9%
1.8576	1.3115	2.7147	**115.5599**	0.0227	227.4600	4.1984	2.1330	2.6186		LCS			118.23	97.7%

10.10.05

COUNTING

1480, RiaCalc WIZ, program 3.6, serial #4800440

ASSAY 29-Sep-05 16:42:21

Protocol	id	12	TC99_REC
Time	limit	300	
Count	limit	10000	
Isotope	Tc-99m		
Protocol	date	15-Jun-04	6:53:27
Run	id.	38	

POS	RACK	BATCH	TIME	COUNTS	CPM	ERROR	% RECOVERY
1	86	1	141	10148	4317.5	1	
2	86	2	156	10110	3906	1	90.47
3	86	3	139	10161	4430.2	1	102.61
4	86	4	140	10182	4428.9	0.99	102.58
5	86	5	140	10171	4445.7	1	102.97
6	91	6	147	10129	4238.3	1	98.17
7	91	7	147	10102	4248.4	1	98.40
8	91	8	144	10117	4365.8	1	101.12
9	91	9	140	10161	4532.7	1	104.98
10	91	10	143	10144	4451.6	1	103.11
11	94	11	141	10135	4535.7	1	105.05
12	94	12	141	10122	4552.1	1	105.43
13	94	13	149	10142	4336.9	1	100.45
14	94	14	149	10129	4353.7	1	100.84
15	94	15	155	10134	4208.5	1	97.48
16	88	16	149	10106	4390.2	1	101.68
17	88	17	149	10097	4409	1	102.12
18	88	18	147	10113	4499	1	104.20
19	88	19	152	10141	4385.3	1	101.57
20	88	20	149	10108	4482.2	1	103.81
21	85	21	156	10144	4320.2	1	100.06
22	85	22	161	10099	4189.6	1	97.04
23	85	23	156	10110	4352.6	1	100.81

END OF ASSAY

END OF COUNTING

10/10.05

10/13/05

ID: TC-99 2 OCT 2005 01:20

USER: 8 COMMENT:BLUE

PRESET TIME : 15.00

DATA CALC	:	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER		:EDIT
COUNT BLANK	:	NO	IC#	: NO	REPLICATES :	1	RS232		:EDIT
TWO PHASE	:	NO	AQC	: NO	CYCLE REPEATS :	1	DISK		:EDIT
SCINTILLATOR:		LIQUID	LUMEX:	YES	LOW SAMPLE REJ:	0	RWM LIST		: OFF
LOW LEVEL	:	NO	HALF LIFE CORRECTION DATE:				none		

CHAN: 250.0 - 625.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

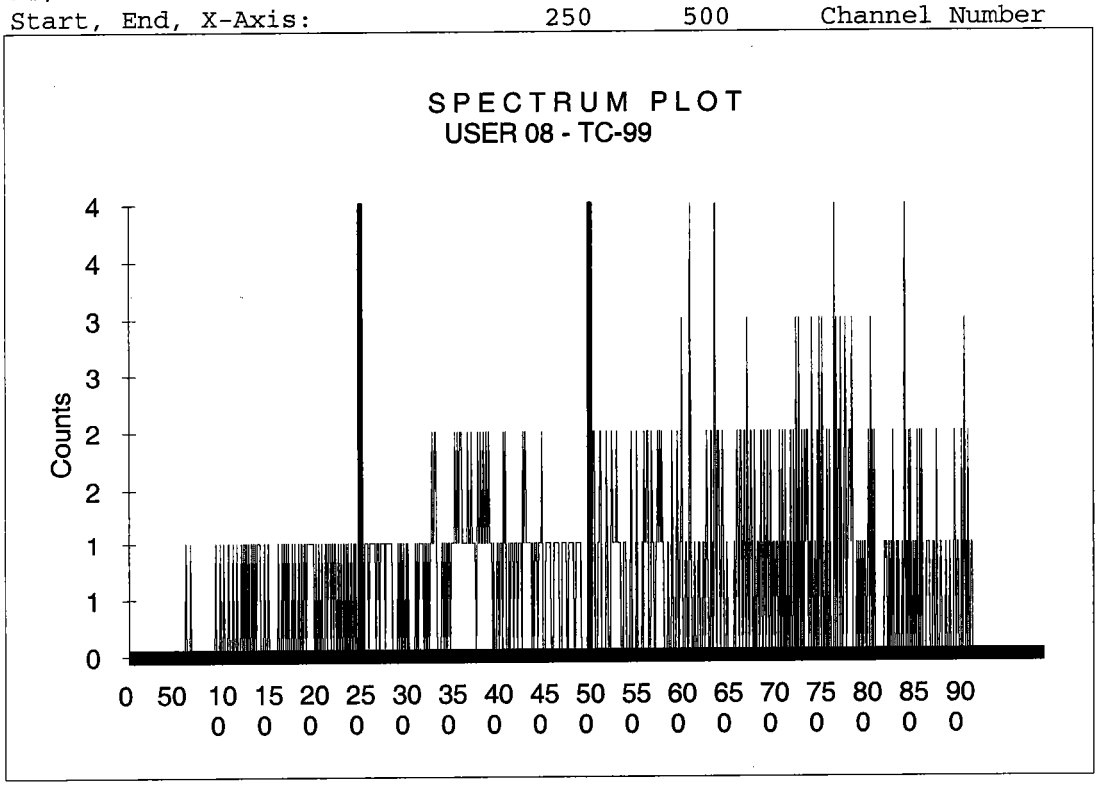
ALPHA-BETA DISCRIMINATION: NO

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	LUMEX %	ELAPSED TIME
1	48-1	15.00	134.0	18.47	12.02	36.00	8.70	2.17	15.89
2	48-2	15.00	136.3	20.33	11.45	40.47	8.15	0.95	32.77
3	48-3	15.00	165.0	21.67	11.09	43.07	7.94	1.73	49.67
4	48-4	15.00	167.8	35.60	8.65	57.60	6.89	2.40	66.61
5	48-5	15.00	141.5	20.93	11.29	42.80	7.97	2.07	83.55
6	48-6	15.00	132.5	21.87	11.04	42.27	8.02	1.88	100.46
7	48-7	15.00	130.6	20.67	11.36	41.60	8.08	1.78	117.40
8	48-8	15.00	126.6	21.93	11.03	41.27	8.10	1.47	134.31
9	48-9	15.00	150.7	50.13	7.29	76.00	5.97	1.68	151.25
10	48-10	15.00	146.0	28.80	9.62	52.00	7.20	1.33	168.17
11	48-11	15.00	157.1	42.27	7.94	64.27	6.48	1.51	185.10
12	48-12	15.00	159.9	42.27	7.94	67.27	6.35	1.82	202.05
13	21-1	15.00	172.9	35.87	8.62	57.67	6.85	1.47	219.08
14	21-2	15.00	126.6	21.93	11.03	42.13	8.01	1.44	236.01
15	21-3	15.00	129.5	19.13	11.81	39.93	8.23	1.62	252.91
16	21-4	15.00	145.5	29.53	9.50	50.60	7.30	1.20	269.82
17	21-5	15.00	159.8	31.00	9.27	50.80	7.30	1.66	286.75
18	21-6	15.00	141.9	55.27	6.95	81.73	5.73	0.75	303.65
19	21-7	15.00	183.6	30.87	9.29	52.20	7.17	0.94	320.56
~~20~~	~~21-8~~	~~15.00~~	~~124.0~~	~~24.00~~	~~10.54~~	~~44.53~~	~~7.78~~	~~1.14~~	~~337.48~~
21	21-9	15.00	152.2	28.33	9.70	47.93	7.52	1.59	354.38
22	21-10	15.00	154.1	231.07	3.40	270.00	3.15	0.33	371.32
23	21-11	15.00	110.5	245.93	3.29	285.60	3.06	0.25	388.23

LLL 10.10.05

10/10/13/05 LLL 10.10.05

Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 01:36:54		
User Filename:	A:\USER08\S08A0212.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	1	48-1	15
H#, Total Counts:	134.0		0
Start, End, X-Axis:	250	500	Channel Number



10/13/05

10-10-05

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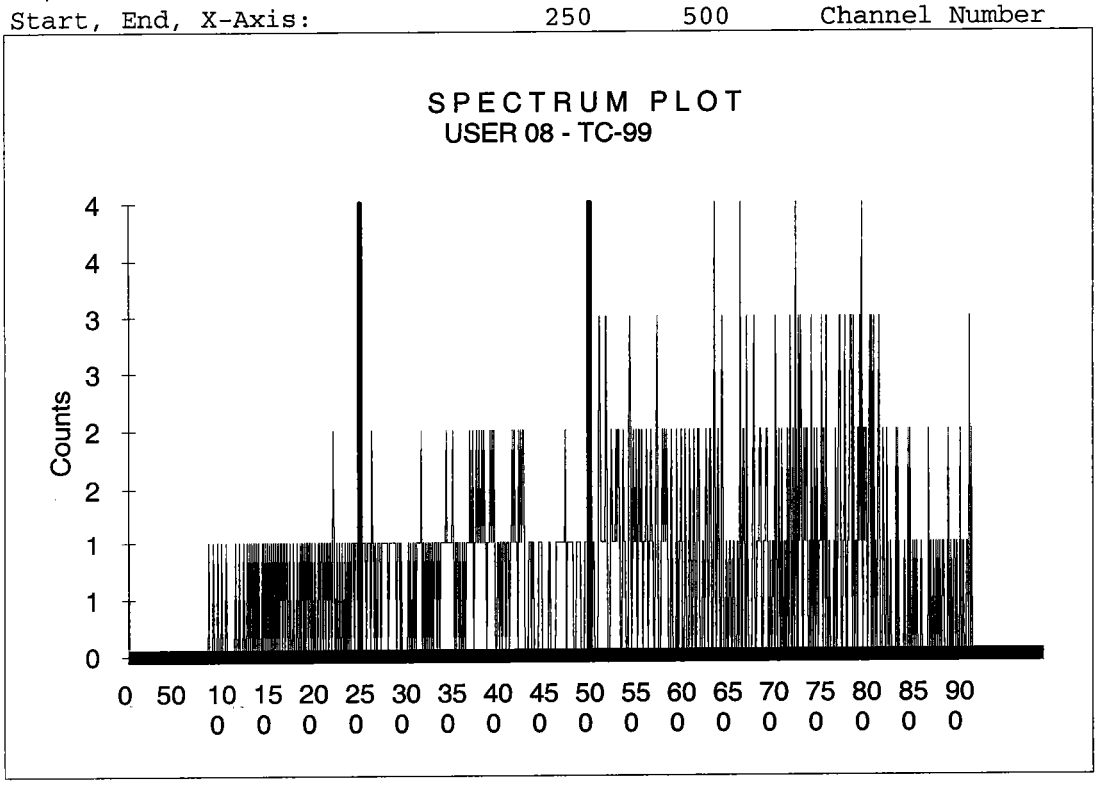
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	2	48-2	15
H#, Total Counts:	136.3		0
Start, End, X-Axis:	250	500	Channel Number



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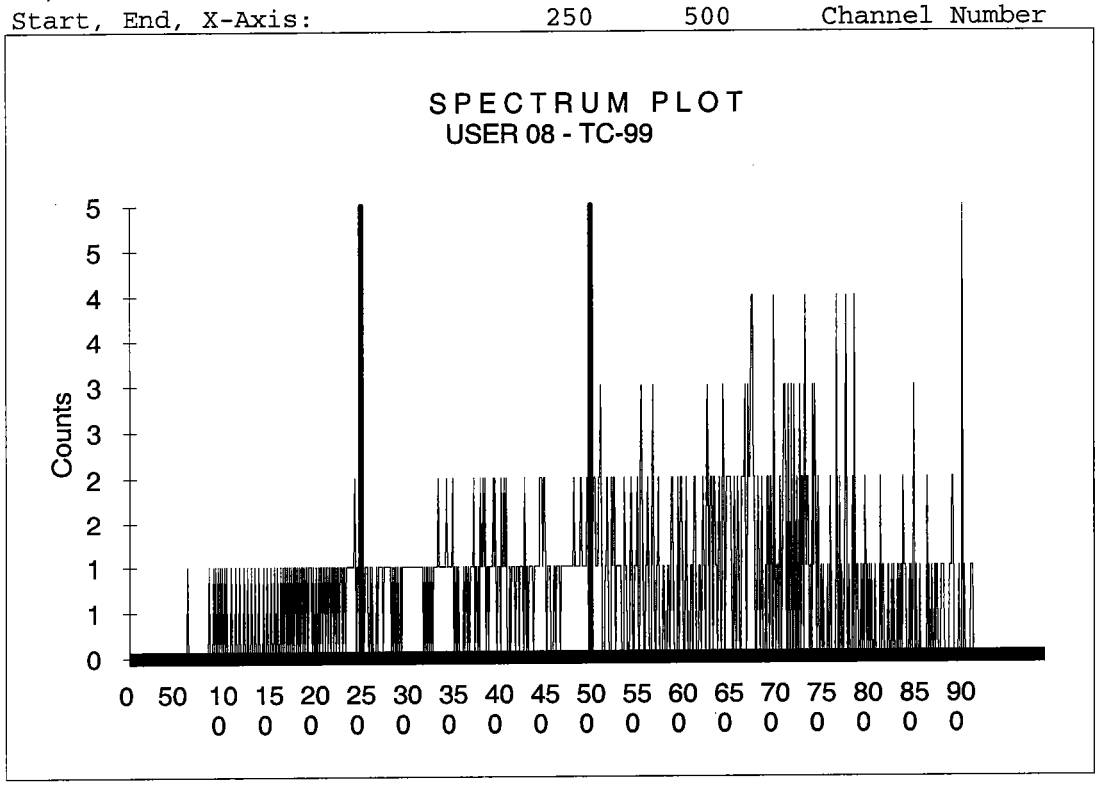
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	3	48-3	15
H#, Total Counts:	165.0		0
Start, End, X-Axis:	250	500	Channel Number



10/13/05

10.10.05

Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 02:27:37		
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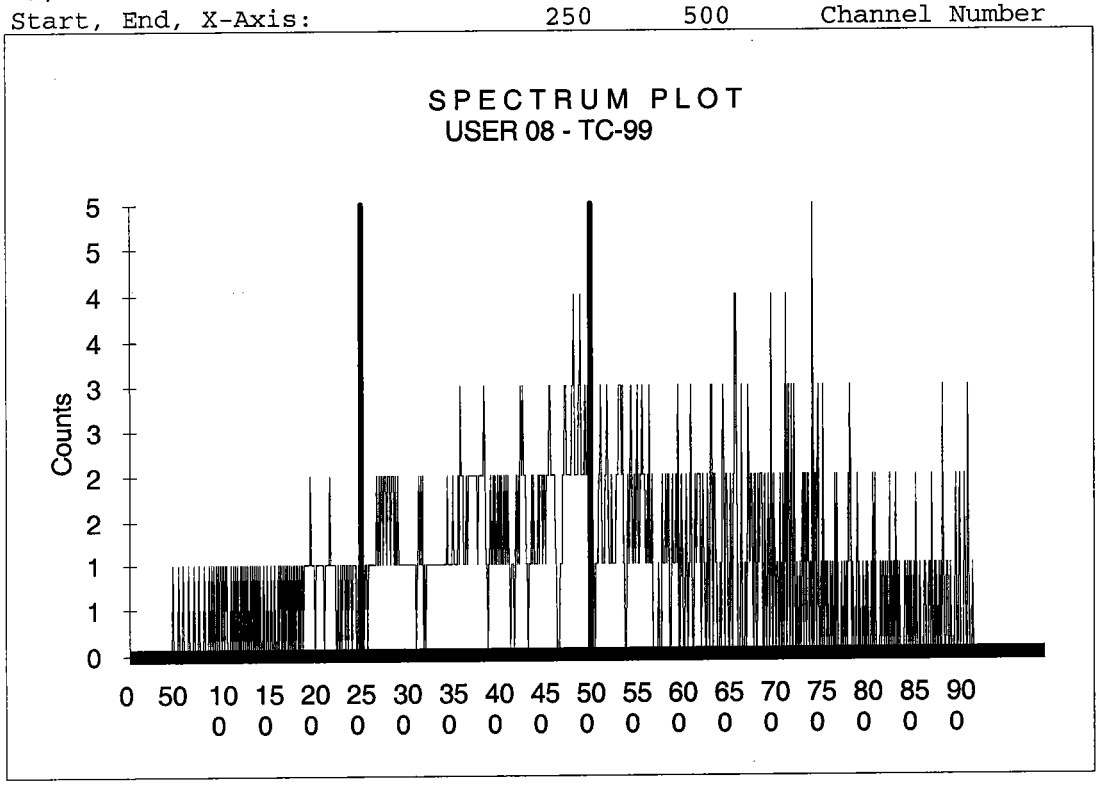
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	4	48-4	15
H#, Total Counts:	167.8		0
Start, End, X-Axis:	250	500	Channel Number



10.10.05

10.10.05

Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 02:44:33		
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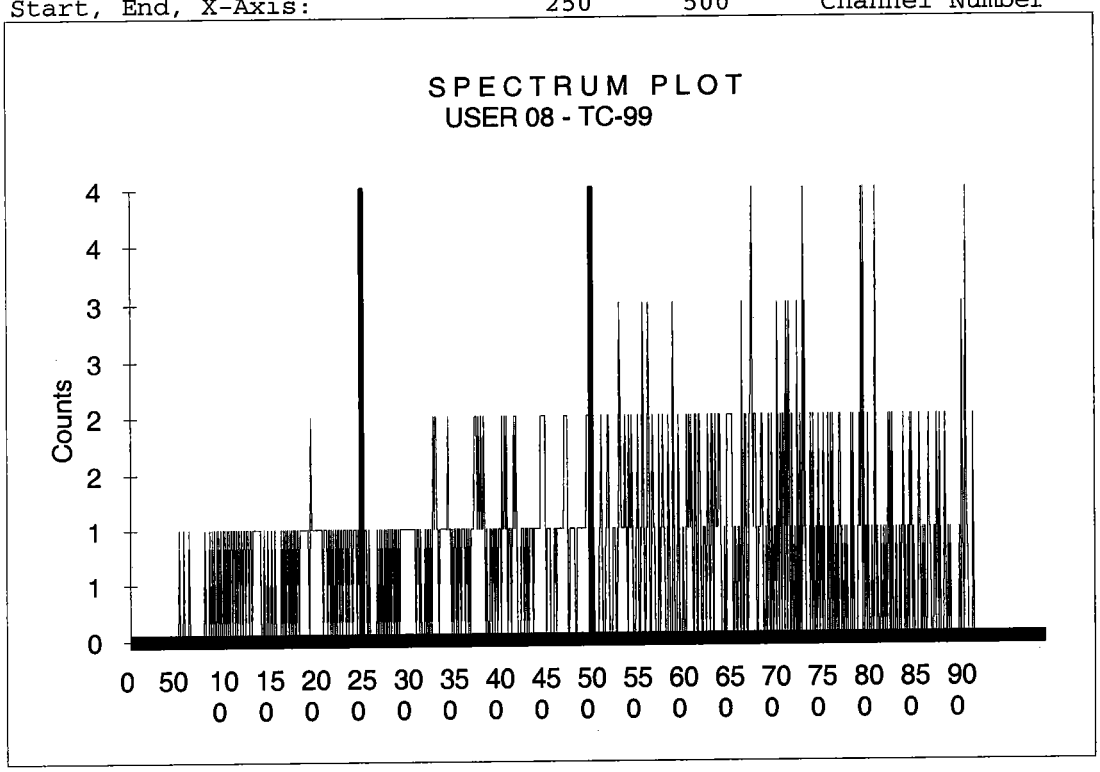
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	5	48-5	15
H#, Total Counts:	141.5		0
Start, End, X-Axis:	250	500	Channel Number



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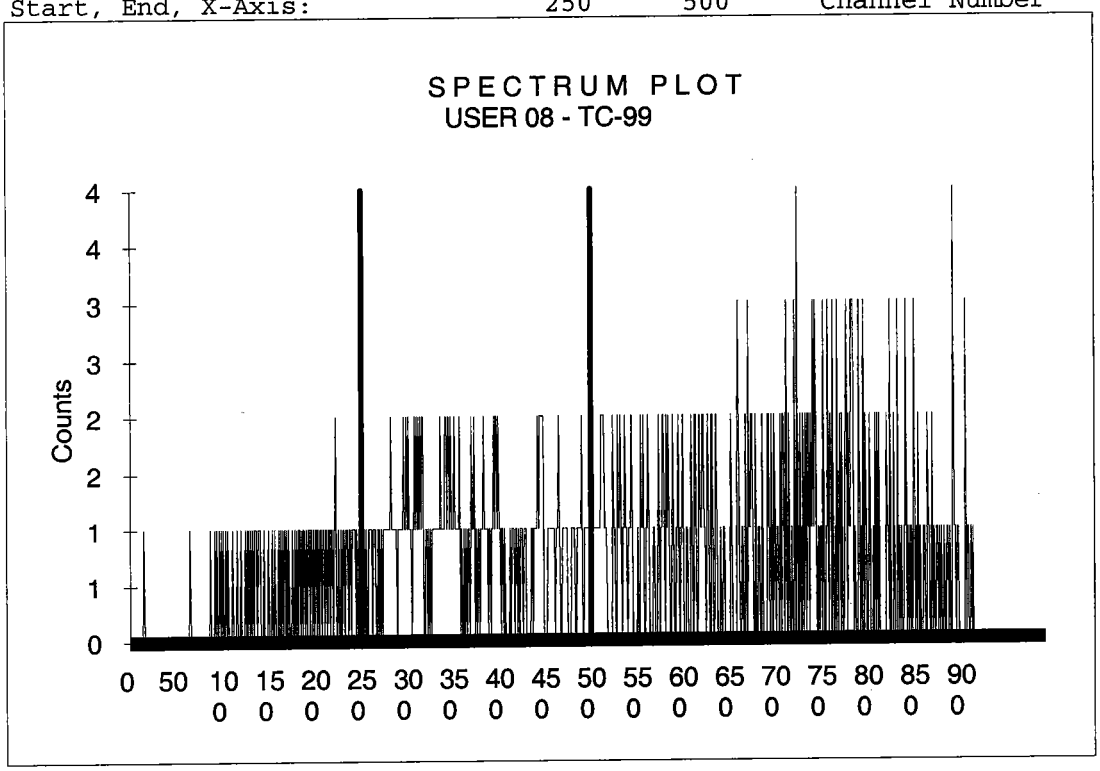
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	6	48-6	15
H#, Total Counts:	132.5		0
Start, End, X-Axis:	250	500	Channel Number



mo 10/13/05

10.10.05

Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 03:18:24		
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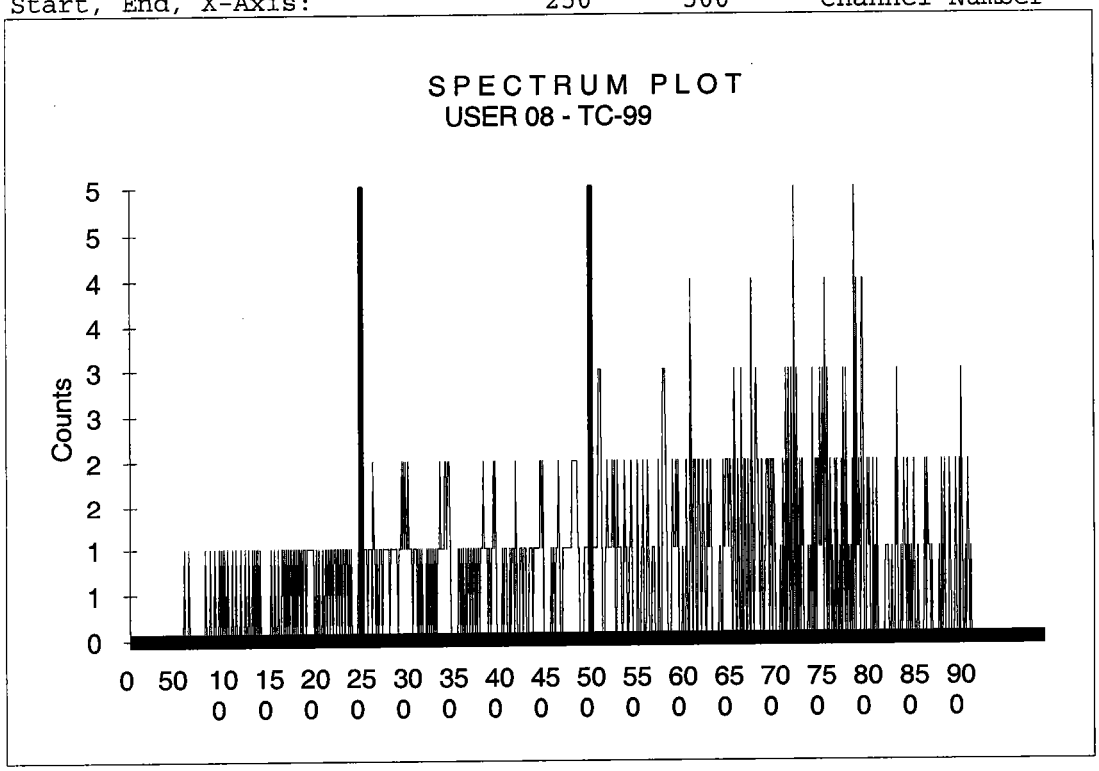
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	7	48-7	15
H#, Total Counts:	130.6		0
Start, End, X-Axis:	250	500	Channel Number



mo 10/13/05

10.10.05

Instrument Type:	LS 6000		
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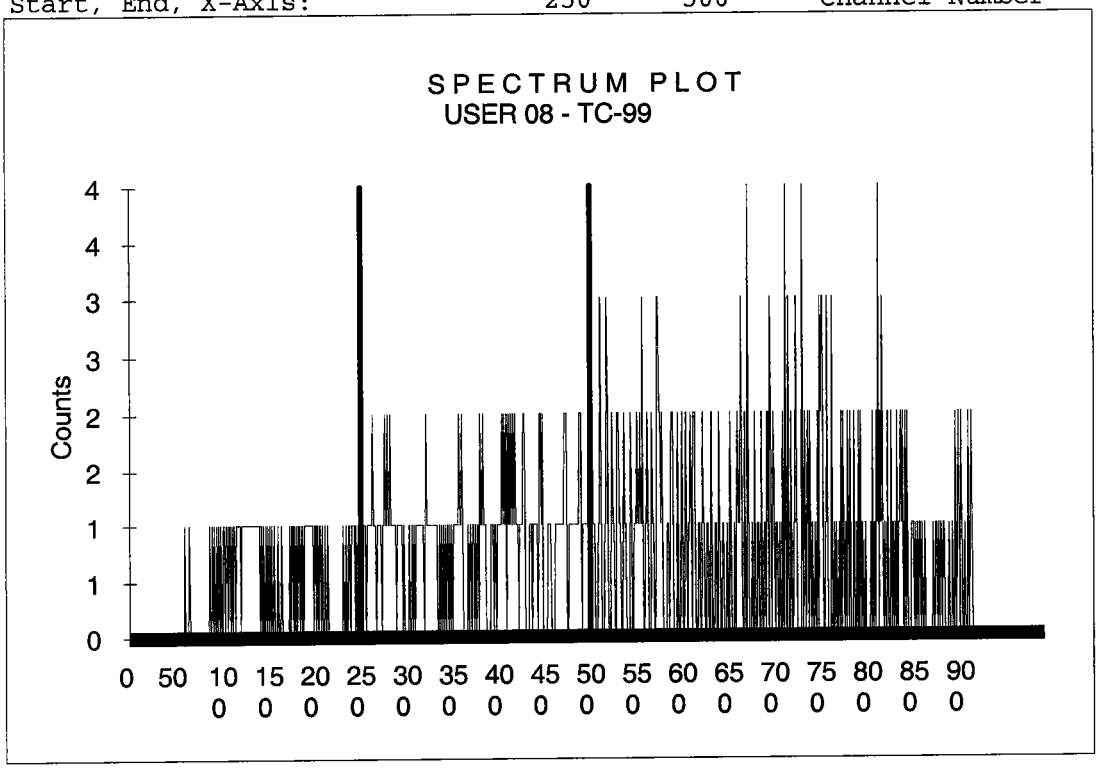
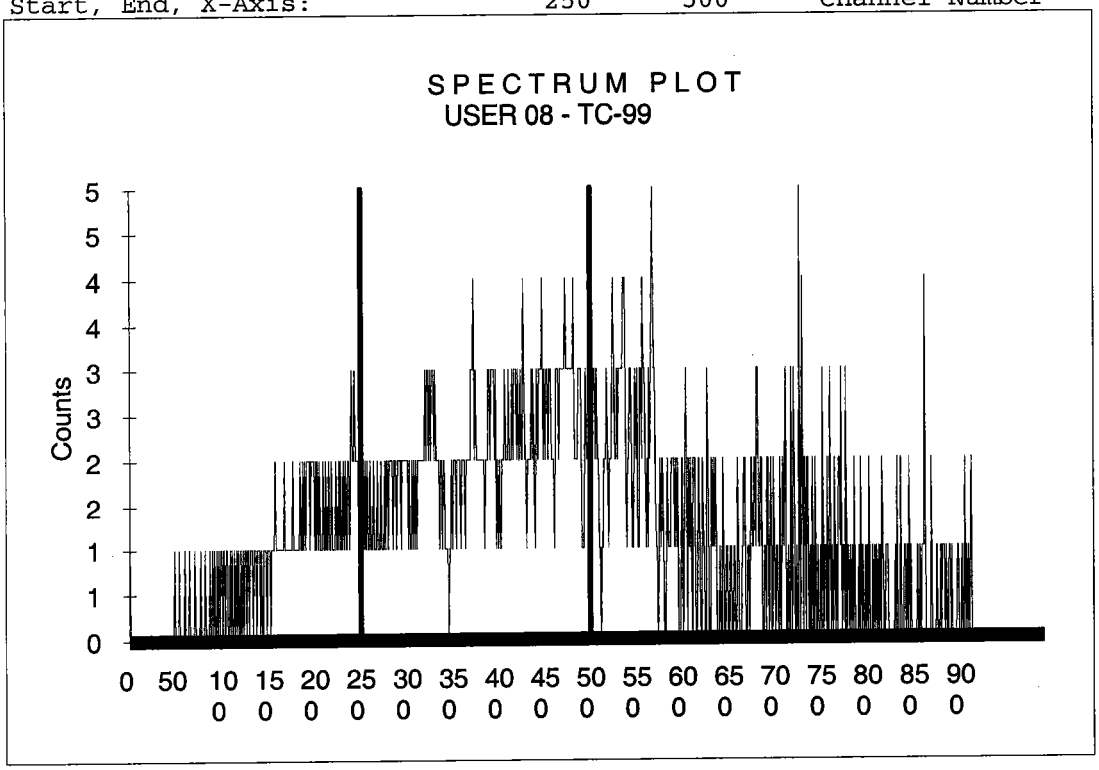
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	8	48-8	15
H#, Total Counts:	126.6		0
Start, End, X-Axis:	250	500	Channel Number



mo 10/13/05

WW 10.10.05

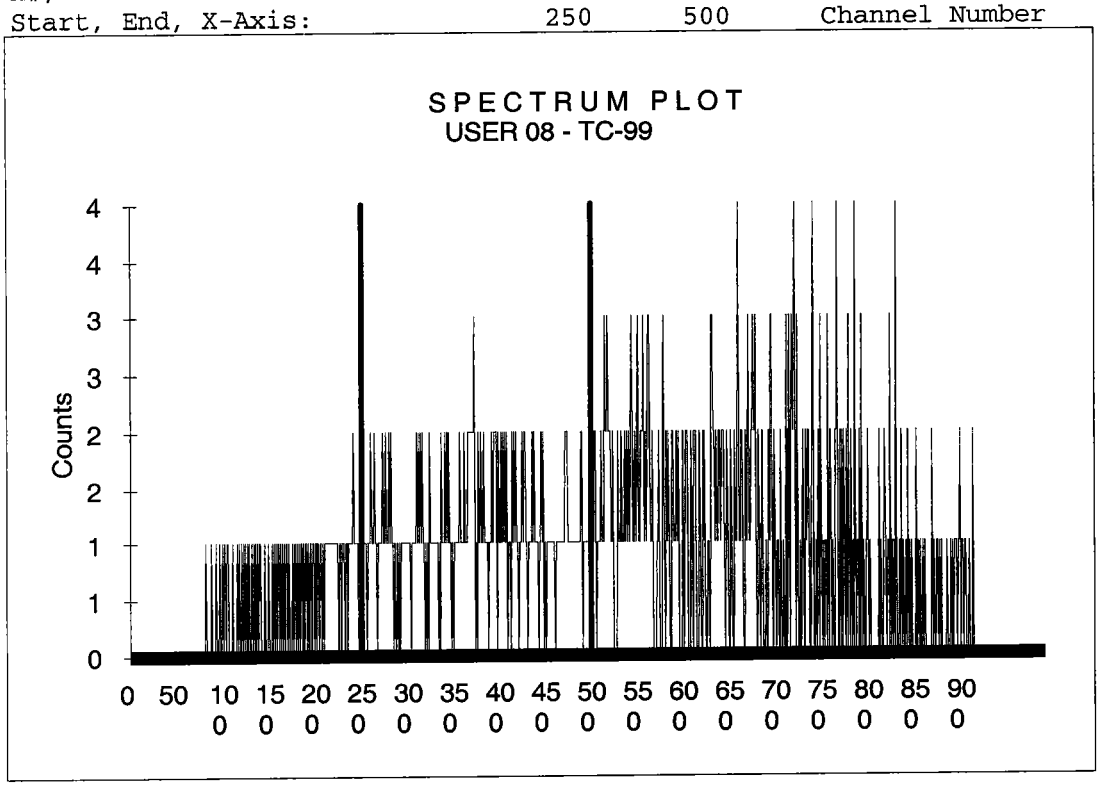
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 03:52:15		
User Filename:	A:\USER08\S08A0220.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	9	48-9	15
H#, Total Counts:	150.7		0
Start, End, X-Axis:	250	500	Channel Number



mo 10/13 for

WH 10.10.05

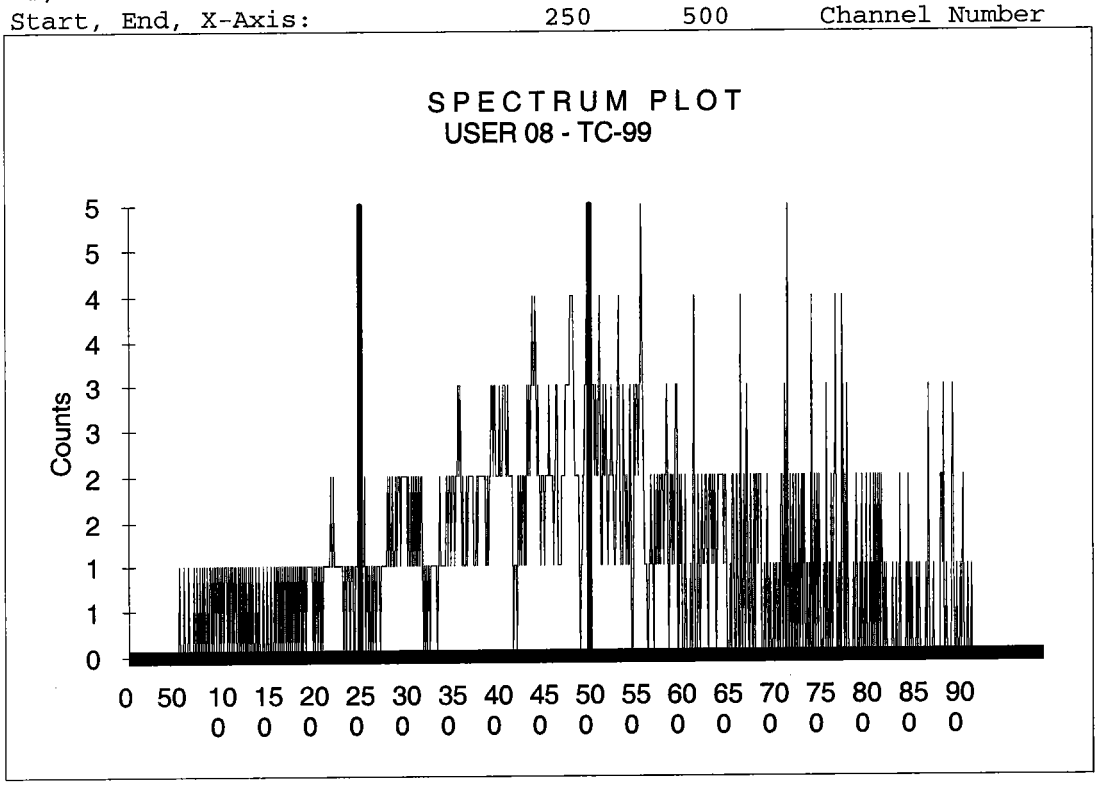
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 04:09:10		
User Filename:	A:\USER08\S08A0221.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	10	48-10	15
H#, Total Counts:	146.0		0
Start, End, X-Axis:	250	500	Channel Number



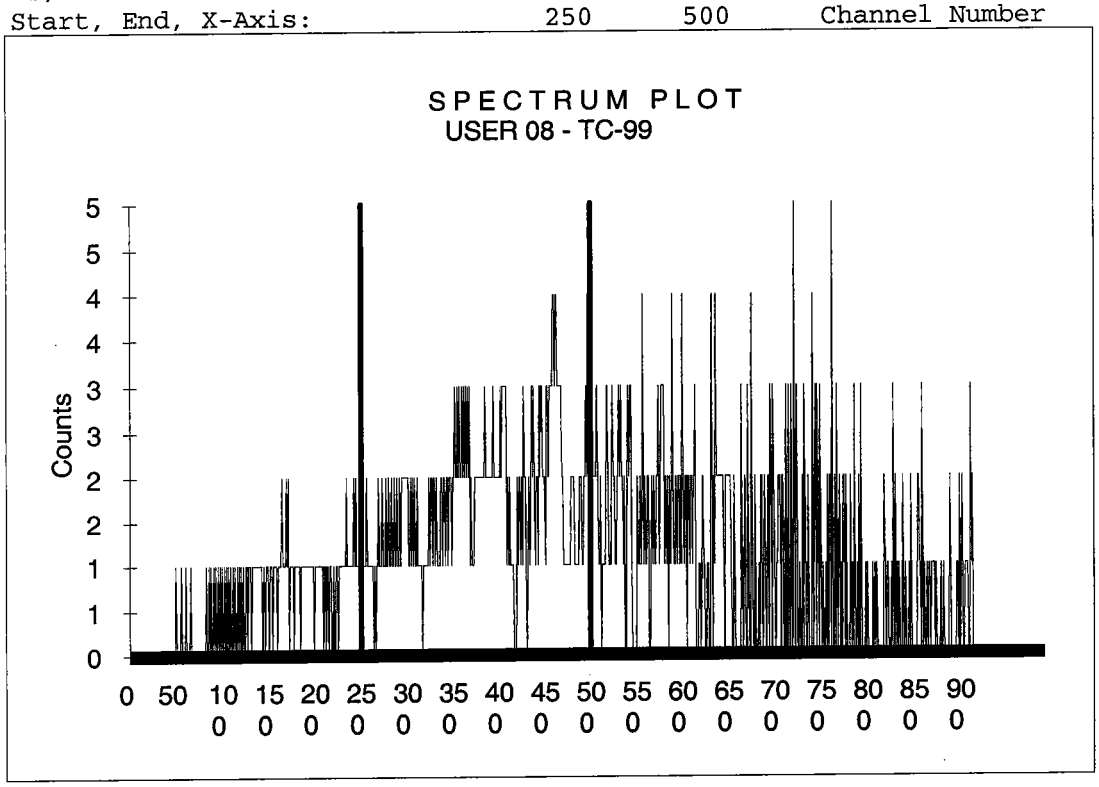
MW 10/13/05

MW 10.10.05

Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 04:26:06		
User Filename:	A:\USER08\S08A0222.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	11	48-11	15
H#, Total Counts:	157.1		0
Start, End, X-Axis:	250	500	Channel Number



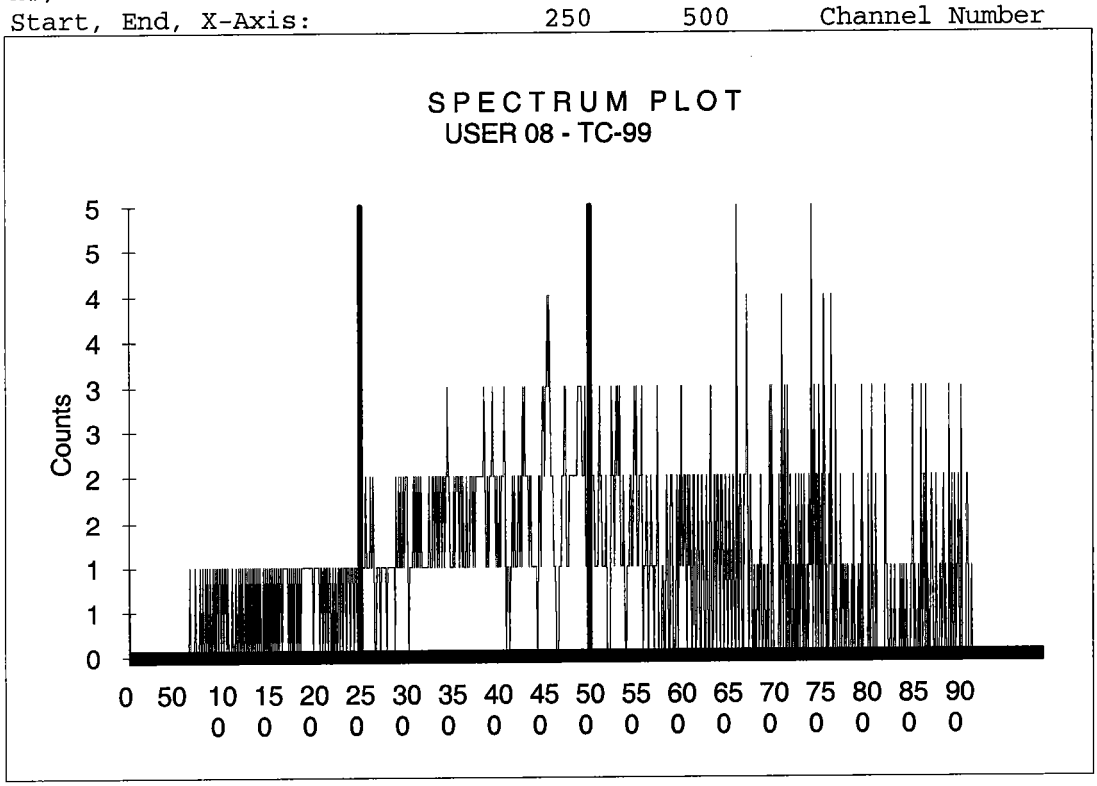
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 04:43:03		
User Filename:	A:\USER08\S08A0223.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	12	48-12	15
H#, Total Counts:	159.9		0
Start, End, X-Axis:	250	500	Channel Number



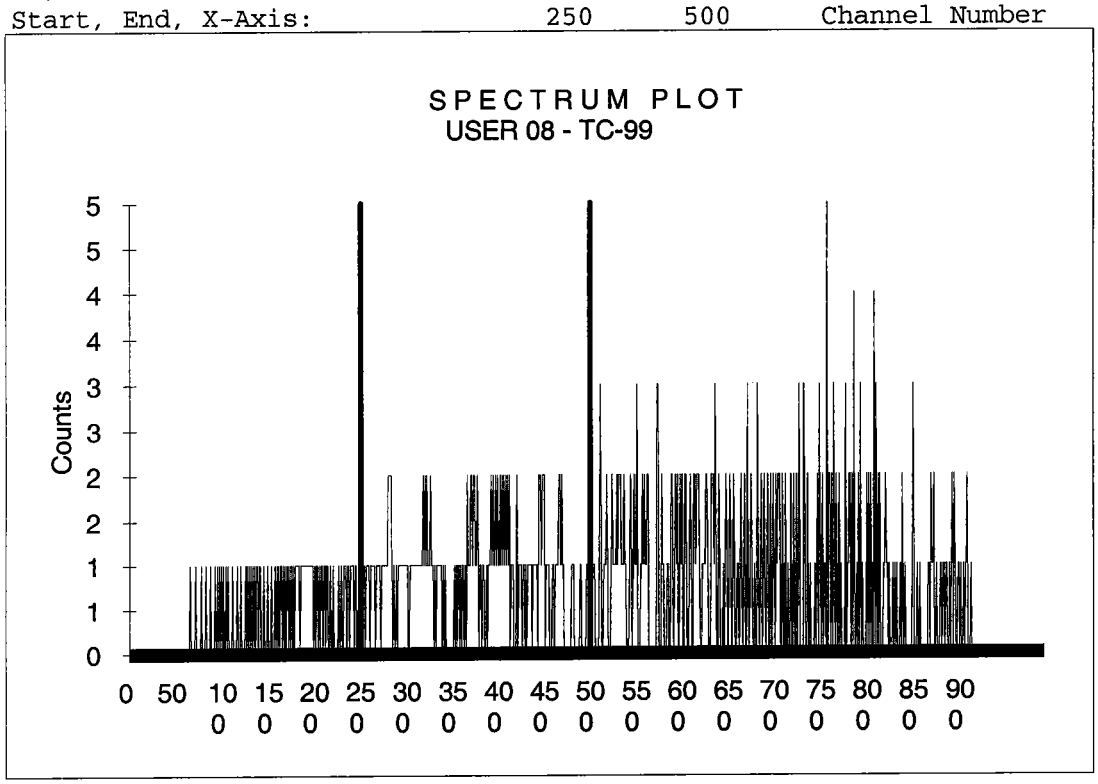
RAO 10/13/15

10.10.25

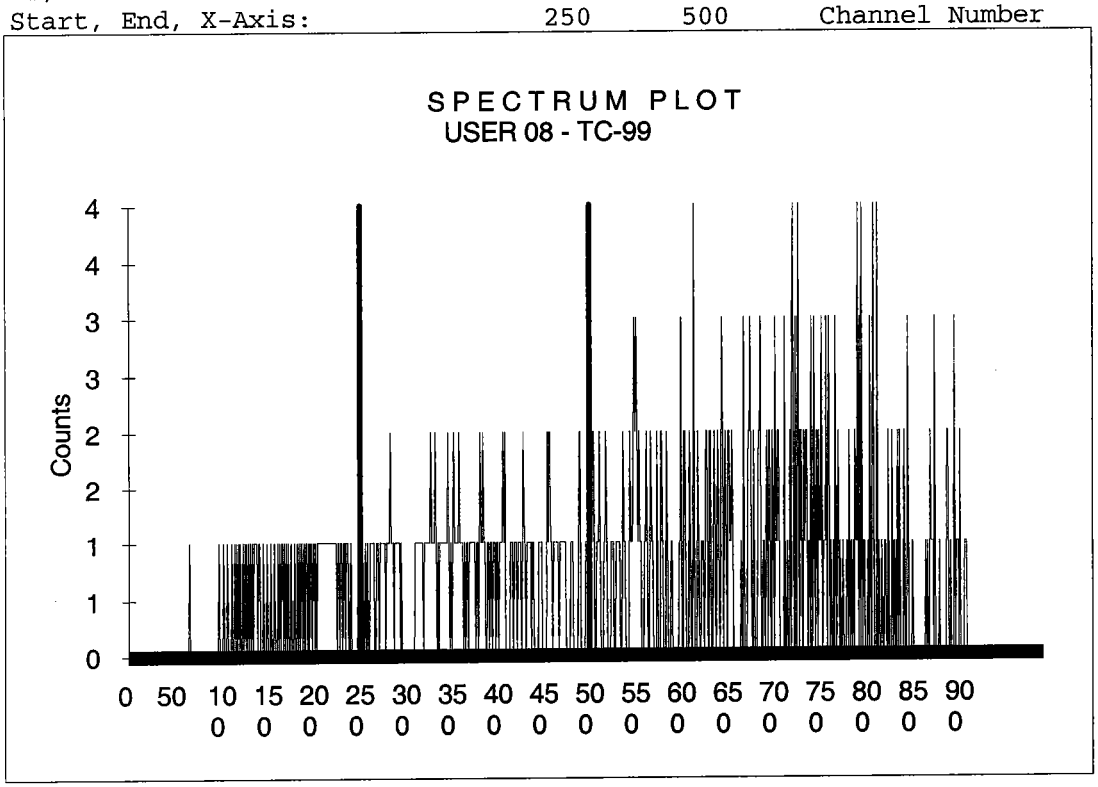
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 05:00:05		
User Filename:	A:\USER08\S08A0224.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	13	21-1	15
H#, Total Counts:	172.9		0
Start, End, X-Axis:	250	500	Channel Number



Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 05:17:00		
User Filename:	A:\USER08\S08A0225.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	14	21-2	15
H#, Total Counts:	126.6		0
Start, End, X-Axis:	250	500	Channel Number



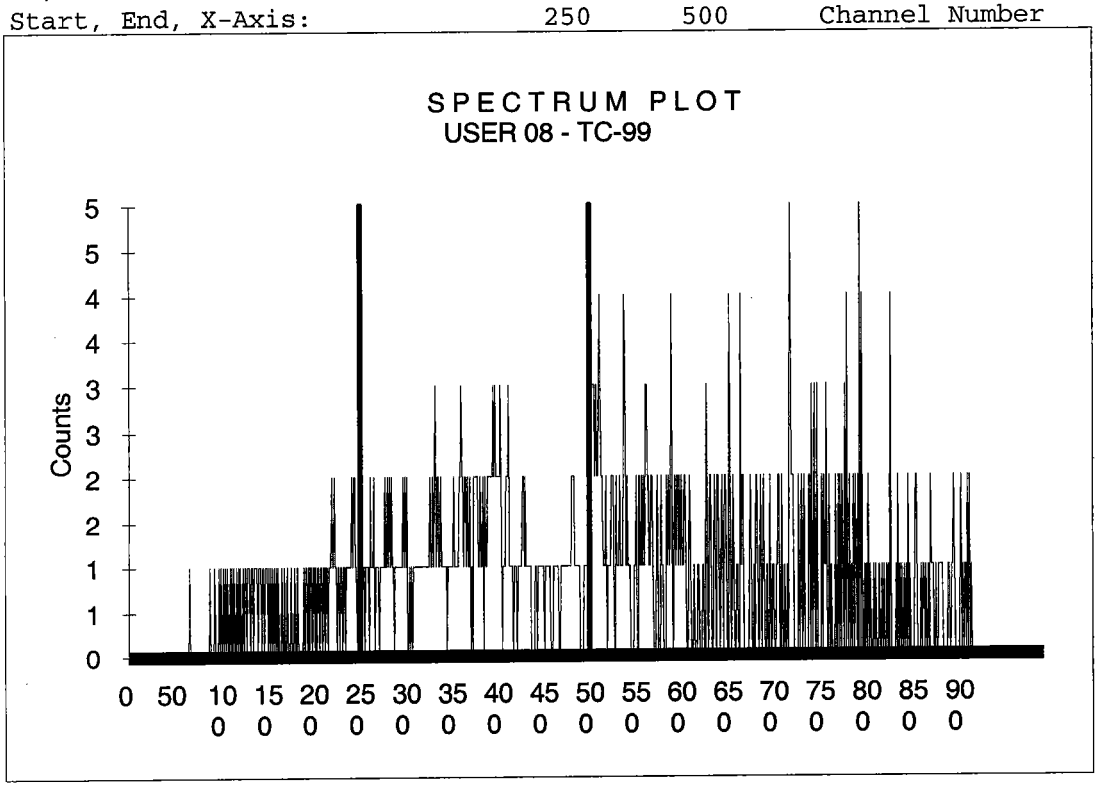
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 05:33:55		
User Filename:	A:\USER08\S08A0226.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	15	21-3	15
H#, Total Counts:	129.5		0
Start, End, X-Axis:	250	500	Channel Number



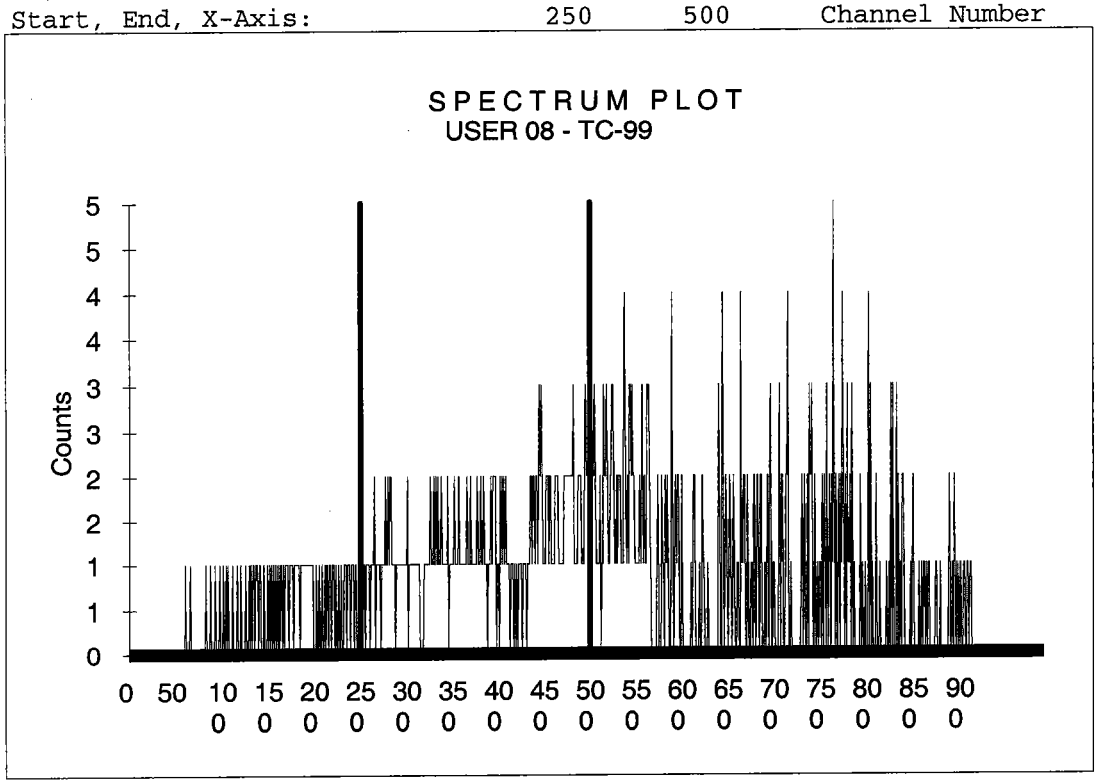
RAD 10/13/05

10.10.05

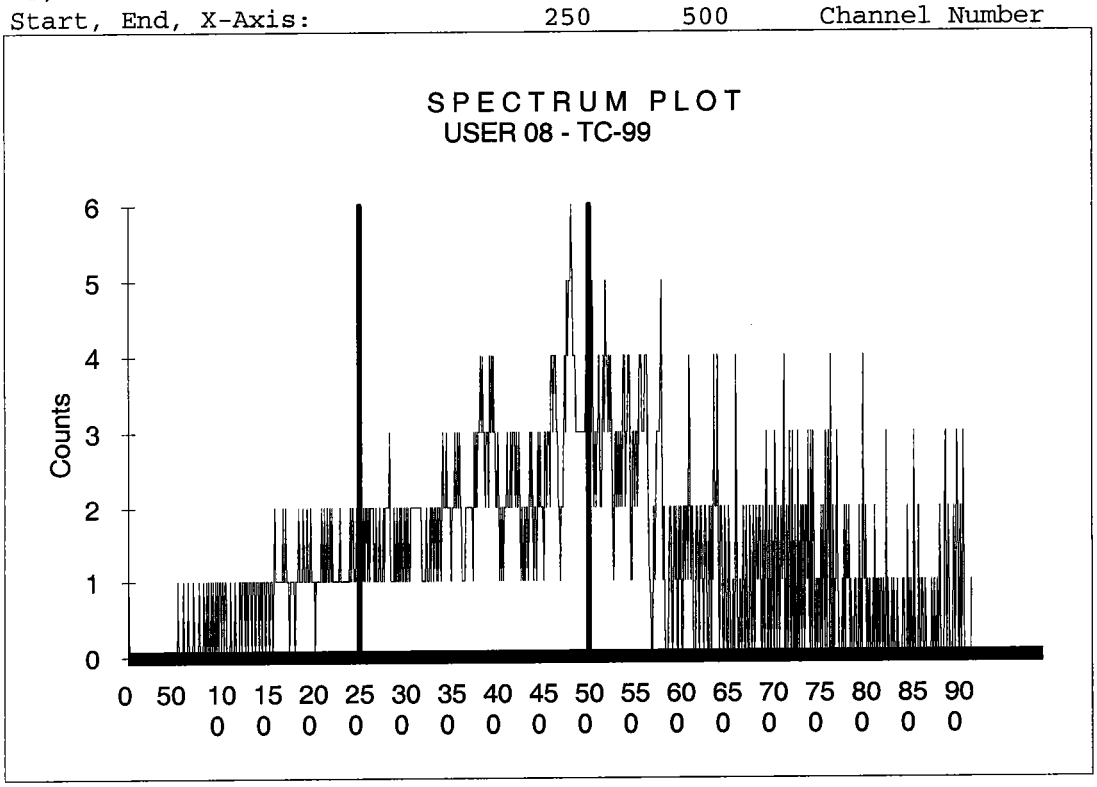
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 05:50:49		
User Filename:	A:\USER08\S08A0227.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	16	21-4	15
H#, Total Counts:	145.5		0
Start, End, X-Axis:	250	500	Channel Number



Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 06:07:44		
User Filename:	A:\USER08\S08A0228.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	17	21-5	15
H#, Total Counts:	159.8		0
Start, End, X-Axis:	250	500	Channel Number



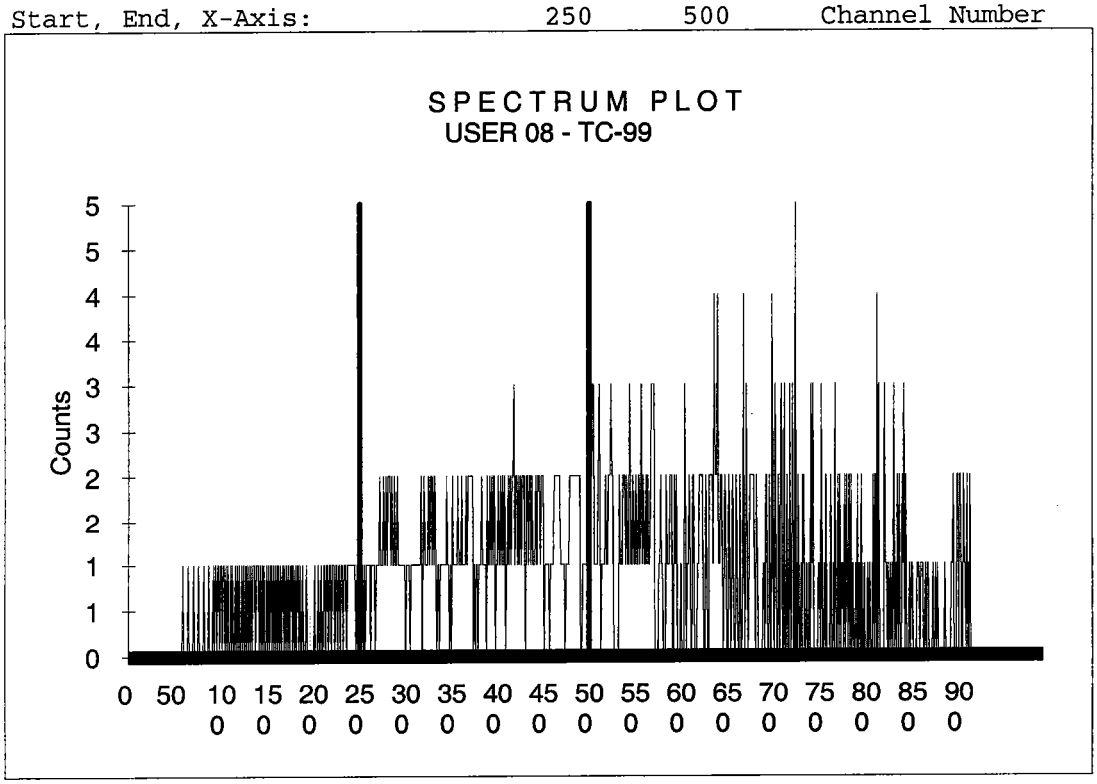
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 06:24:39		
User Filename:	A:\USER08\S08A0229.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	18	21-6	15
H#, Total Counts:	141.9		0
Start, End, X-Axis:	250	500	Channel Number



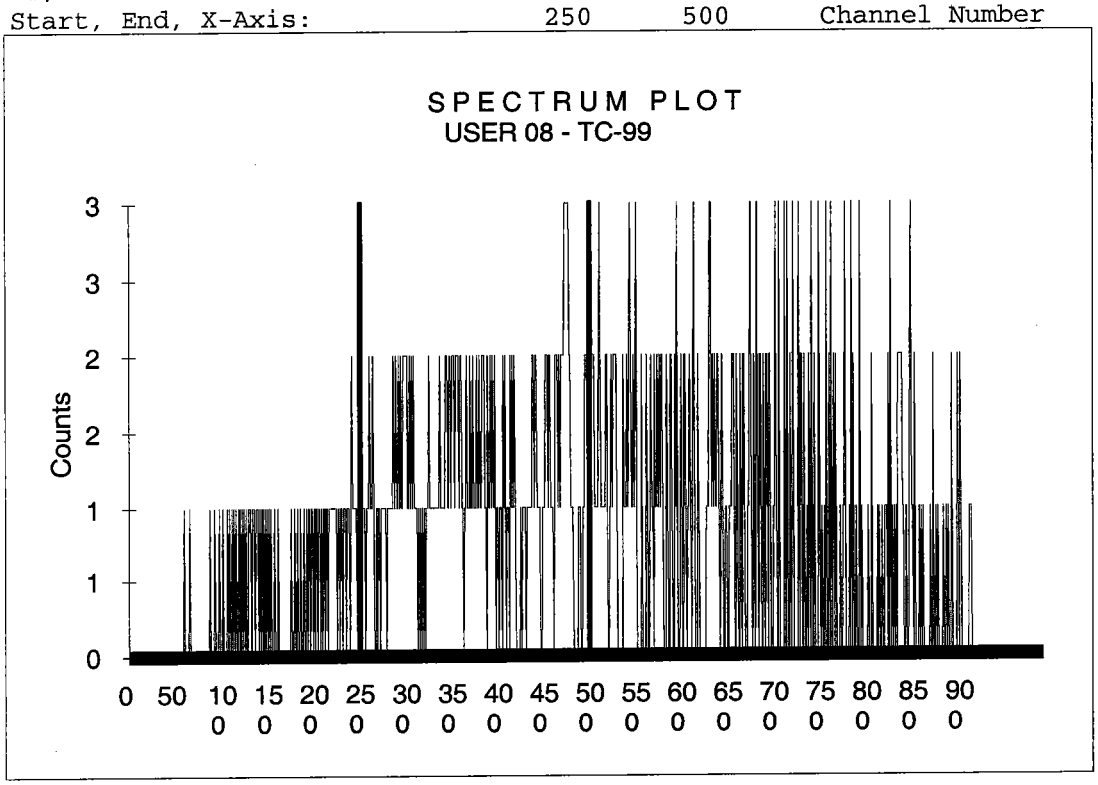
mo 10/13/05

10.20.05

Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 06:41:33		
User Filename:	A:\USER08\S08A0230.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	19	21-7	15
H#, Total Counts:	183.6		0
Start, End, X-Axis:	250	500	Channel Number



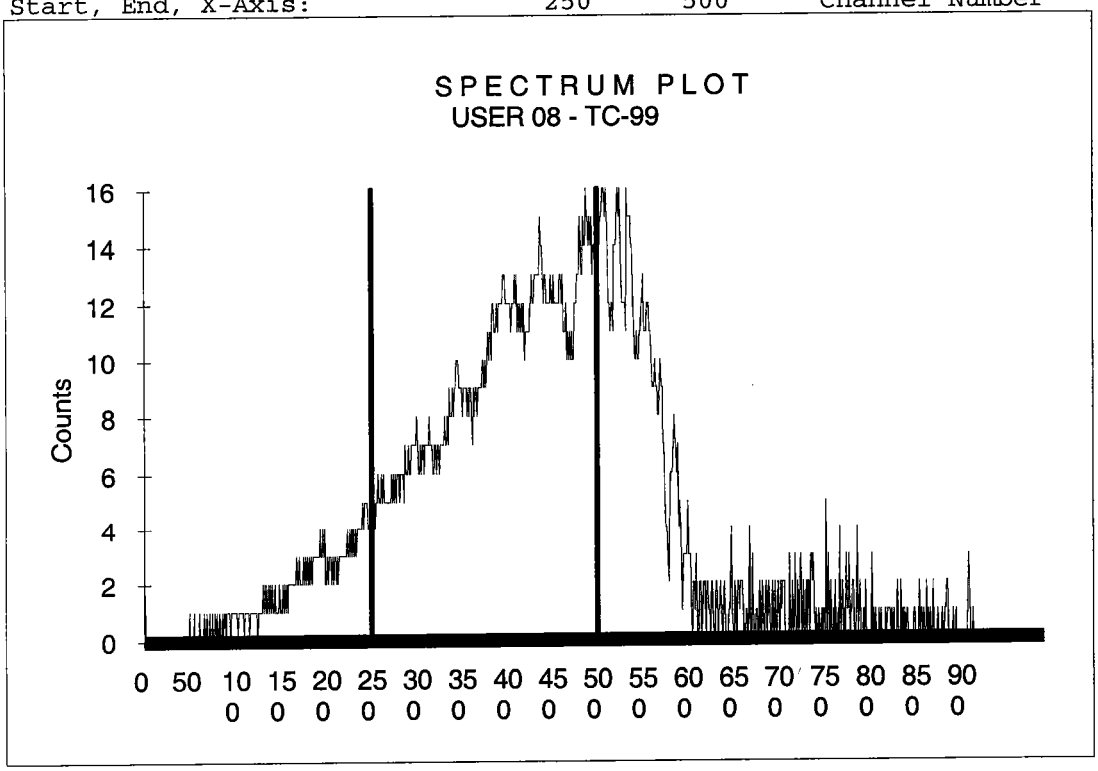
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 07:15:23		
User Filename:	A:\USER08\S08A0232.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	21	21-9	15
H#, Total Counts:	152.2		0
Start, End, X-Axis:	250	500	Channel Number



mo 10/12/05

10.10.05

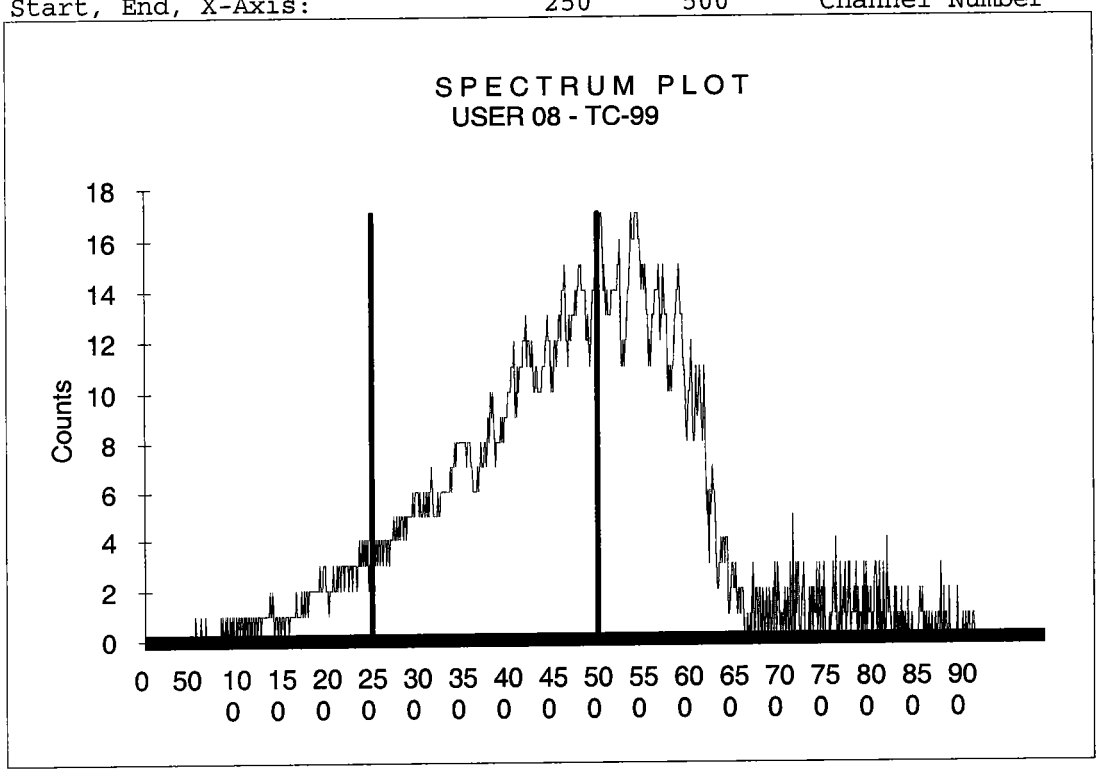
Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 07:32:19		
User Filename:	A:\USER08\S08A0233.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	22	21-10	15
H#, Total Counts:	154.1		0
Start, End, X-Axis:	250	500	Channel Number



rev 10/13/05

10.10.05

Instrument Type:	LS 6000		
Data Capture Date:	2 Oct 2005 07:49:15		
User Filename:	A:\USER08\S08A0234.BSF		
File Info:	A:\USER08\U08A0201.BSF		
USER#:	08		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	23	21-11	15
H#, Total Counts:	110.5		0
Start, End, X-Axis:	250	500	Channel Number



two 11/03/05

LLL 10.10.05

ID:TC-99 8 OCT 2005 10:34

USER: 7 COMMENT:BLUE

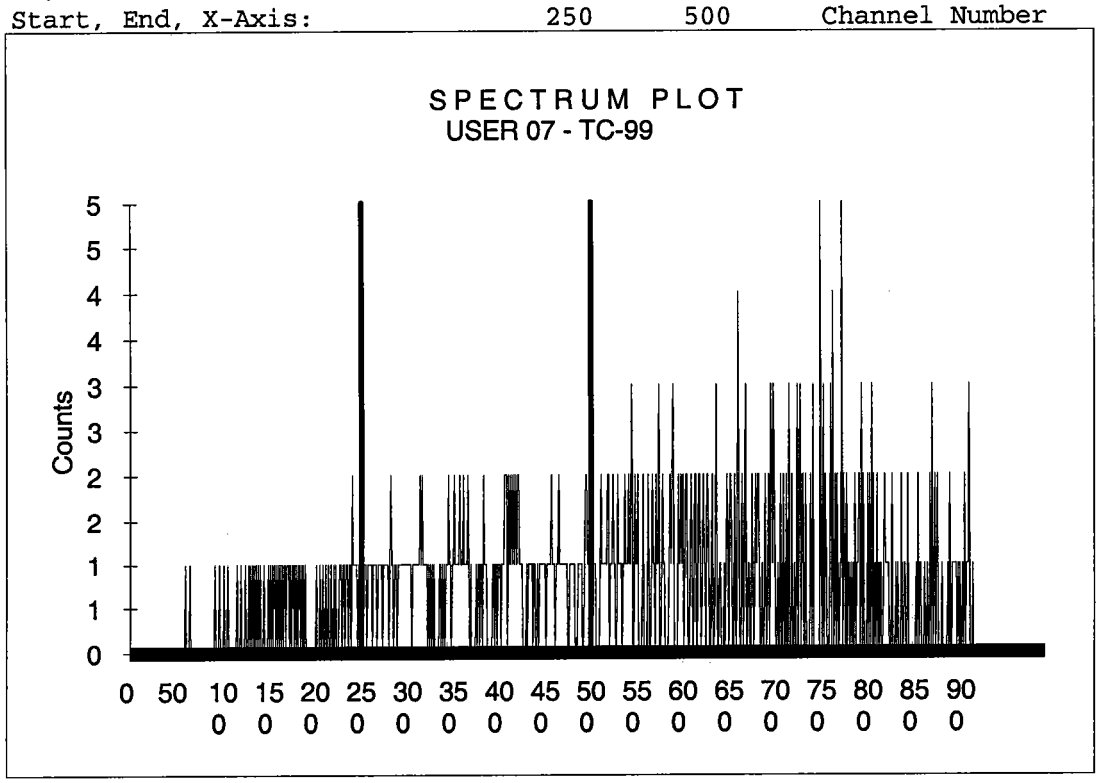
PRESET TIME :	15.00						
DATA CALC :	CPM	H# :YES	SAMPLE REPEATS:	1	PRINTER	:EDIT
COUNT BLANK :	NO	IC# : NO	REPLICATES :	1	RS232	:EDIT
TWO PHASE :	NO	AQC : NO	CYCLE REPEATS :	1	DISK	:EDIT
SCINTILLATOR:	LIQUID	LUMEX:YES	LOW SAMPLE REJ:	0	RWM LIST	: OFF
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:			none	

CHAN: 250.0 - 625.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0
CHAN: 0.0 - 900.0 %ERROR: 2.00 FACTOR: 1.000000 BKG. SUB: 0

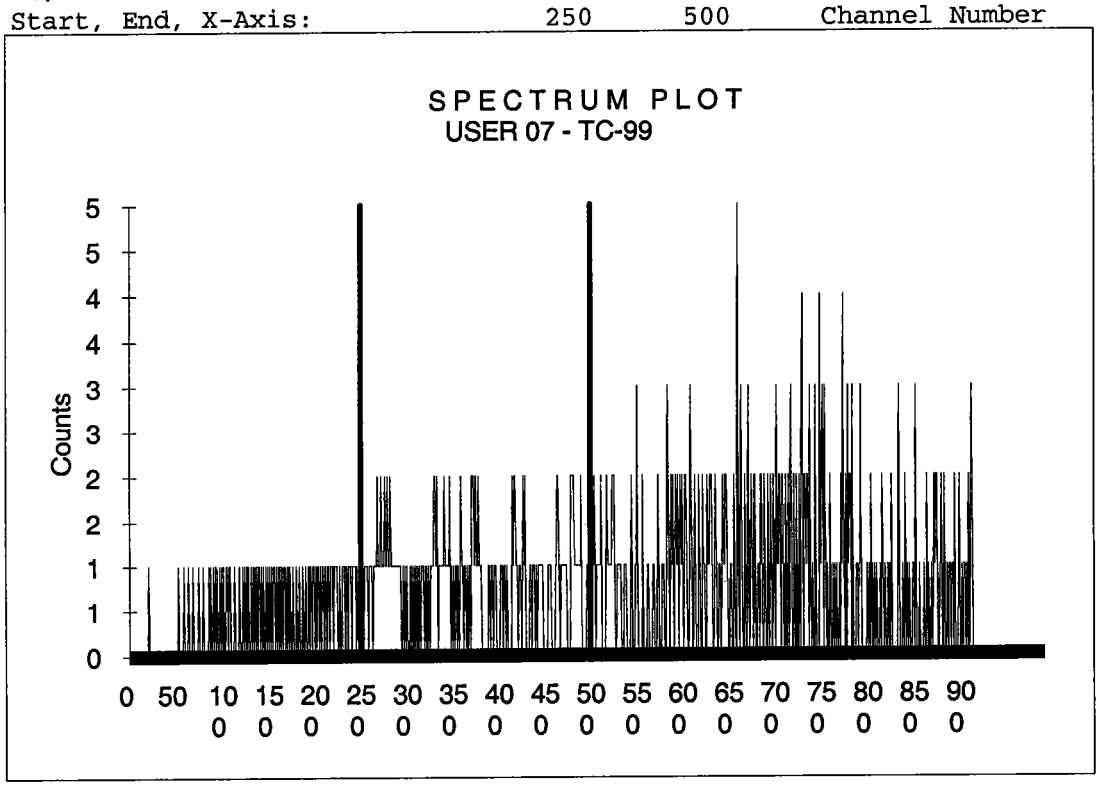
ALPHA-BETA DISCRIMINATION: NO

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	LUMEX %	ELAPSED TIME
1	40-1	15.00	132.7	**22.20**	10.96	**41.67**	8.06	1.43	15.90
2	40-2	15.00	124.0	**20.00**	11.55	**41.73**	8.03	0.93	32.79

Instrument Type:	LS 6000		
Data Capture Date:	8 Oct 2005 10:51:12		
User Filename:	A:\USER07\S07A0806.BSF		
File Info:	A:\USER07\U07A0806.BSF		
USER#:	07		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	1	40-1	15
H#, Total Counts:	132.7		0
Start, End, X-Axis:	250	500	Channel Number



Instrument Type:	LS 6000		
Data Capture Date:	8 Oct 2005 11:08:05		
User Filename:	A:\USER07\S07A0807.BSF		
File Info:	A:\USER07\U07A0806.BSF		
USER#:	07		
User ID:	TC-99		
User Comments:	BLUE		
Scintillator:	LIQUID		
Sample, Rack-Pos, Time:	2	40-2	15
H#, Total Counts:	124.0		0
Start, End, X-Axis:	250	500	Channel Number



Radiochemistry Batch Checklist for LSC, Rev 4

Batch# 467509 Product: H-3 Date: 10/14/05

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* MDA, error is 100% or less of sample activity. If greater 10* MDA, error is 20% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.	NA		
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.	NA		
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.	NA		

General Engineering Laboratories
2/22/2005

Primary Review Performed By: [signature] 10/14/05

Secondary Review Performed By: [signature] 10/14/05

10/6 - 10/13
ESHL

Tritium Que Sheet

29-SEP-05

Batch #: 467509 **Analyst:** MXP1 **Minimum DueDate:** 06-OCT-05

Spike Isotope: Hydrogen-3 **Spike Code:** 0134-H **Expiration Date:** 7/20/06 **Vol:** 0.1mL

LCS Isotope: Hydrogen-3 **LCS Code:** 0134-H **Expiration Date:** 7/20/06 **Vol:** 0.1mL

Prep Date: 10/6/05 **Initials:** MSP **Pipet ID:** 1429303 **Witness:** SLN 10/7/05

Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date		Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Dist Vol (mL)
145267002	GU05090GMC501	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	09-SEP-05	1	10	82-2	335		50		13
145312007	GU05090PE1E01	SAMPLE		.25 pCi/mL	SURFACE WATER	ESHL001	12-SEP-05	2	10	82-3	806		50		13
145312008	GU05090PE2M01	SAMPLE		.25 pCi/mL	SURFACE WATER	ESHL001	12-SEP-05	3	10	82-4	309		50		13
145452004	GU0509PWF1E01	SAMPLE		.25 pCi/mL	SURFACE WATER	ESHL001	13-SEP-05	4	10	82-5	809		50		13
145457009	GU05080G01R01	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	12-SEP-05	5	10	82-6	610	1380	50	MSP	13
145457010	GU05080G01R90	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	12-SEP-05	6	10	82-7	312		50		13
145457012	GU05080G01R01-FB	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	12-SEP-05	7	10	82-8	715		50		13
145579005	GU05090G3TM01	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	13-SEP-05	8	10	89-9	316	10/6/05	50	10/6/05	13
145579006	GU05090GMC401	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	13-SEP-05	9	10	82-10	516		50		13
145579007	GU05090G57M01	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	13-SEP-05	10	10	82-11	808		50		13
145579008	GU05090G7CM01	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	14-SEP-05	11	10	82-12	700		50		13
145739004	GU05090G6CM01	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	14-SEP-05	12	10	98-1	801		50		13
145739005	GU0509G33R101	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	14-SEP-05	13	10	98-2	803		50		13
145739006	GU0509G33R201	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	15-SEP-05	14	10	98-3	325		50		13
145782003	GU05090G4BM01	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	15-SEP-05	15	10	98-4	809		50		13
145782004	GU05090G5CM01	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	15-SEP-05	16	10	98-5	604		50		13
1200947555	MB for batch 467509	MB		.2 pCi/mL	GROUND WAT	QC ACCOUNT		17	10	98-6	342		50		13
1200947556	GU05090G4BM01(145782003DUP)	DUP		.2 pCi/mL	GROUND WAT	QC ACCOUNT	15-SEP-05	18	10	98-7	602		50		13
1200947557	GU05090G4BM01(145782003MS)	MS		.2 pCi/mL	GROUND WAT	QC ACCOUNT	15-SEP-05	19	10	98-8	331		50		13
1200947558	LCS for batch 467509	LCS		.2 pCi/mL	GROUND WAT	QC ACCOUNT		20	10	98-9	621		50		13

1765

Comments:

Instrument Used (circle as appropriate): *LS6000 (Red) 7065155, LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, Wallac (Yellow) 4040127, LS6000 (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299*

General Engineering Laboratories, Radiochemistry Division

Bkg prepared with dead water? (Yes) N

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly via*

Data Reviewed By: [signature] 10/14/05

10/14/05 **Page 1 of 1**

Tritium Water

Filename : H3DST.XLS
File type : Excel
Version # : 1

Batch : 467509
Analyst : MXP1
Prep Date : 10/6/2005
H-3 Abundance : 1
Calibration Date : 4/8/2005
Calibration Due Date : 4/8/2006
Geometry:
13mL Trisafe/10ml sample

Spike S/N : 0134-H
Spike Exp Date : 7/20/2006
Spike Activity (dpm/ml): 3358.21
Spike Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1.0 ml Stdev : +/- 0.005480 ml
Pipet, 5.0 ml Stdev : +/- 0.025729 ml

LCS S/N : 0134-H
LCS Exp Date : 7/20/2006
LCS Activity (dpm/ml): 3358.21
LCS Volume Added: 0.1

Procedure Code : LSCDSH3L
Parmname : Tritium
Required MDC: 200 pCi/L
Halflife of Tritium : 12.28 years
Batch counted on : LSCYELLOW
Detector Effiency Error : 0.00792
BKG Count time : 120 min

Sample Characteristics | **Count raw Data**

Sample ID	Total Sample Volume (L)	Sample Aliquot L	Sample Aliquot StDev.	Distilled Sample Counted L	Sample Counted StDev.	Sample Date/Time	Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time
145267002	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/9/2005 6:45	82-2	120	682	12.3	0.1114	0.00792	1.70	120	10/12/2005 0:44
145312007	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/12/2005 10:00	82-3	120	682.3	4.4	0.1116	0.00792	1.70	120	10/12/2005 2:45
145312008	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/12/2005 10:00	82-4	120	685.16	2.7	0.1139	0.00792	1.70	120	10/12/2005 4:46
145452004	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/13/2005 9:10	82-5	120	677.2	1.6	0.1075	0.00792	1.70	120	10/12/2005 6:47
145457009	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/12/2005 12:37	82-6	120	688.31	1.5	0.1164	0.00792	1.70	120	10/12/2005 12:29
145457010	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/12/2005 12:37	82-7	120	684.63	1.5	0.1135	0.00792	1.70	120	10/12/2005 14:30
145457012	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/12/2005 12:37	82-8	120	680.92	1.3	0.1105	0.00792	1.70	120	10/12/2005 16:31
145579005	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/13/2005 15:00	82-9	120	684.21	10.9	0.1131	0.00792	1.70	120	10/12/2005 18:32
145579006	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/13/2005 7:30	82-10	120	681.94	30.7	0.1113	0.00792	1.70	120	10/12/2005 20:33
145579007	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/13/2005 12:55	82-11	120	686.47	9.4	0.1149	0.00792	1.70	120	10/12/2005 22:34
145579008	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/14/2005 9:32	82-12	120	685.1	7.9	0.1138	0.00792	1.70	120	10/13/2005 0:35
145739004	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/14/2005 12:00	98-1	120	685.58	4.3	0.1142	0.00792	1.70	120	10/13/2005 3:11
145739005	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/14/2005 9:07	98-2	120	687.96	1.5	0.1161	0.00792	1.70	120	10/13/2005 5:12
145739006	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/15/2005 9:35	98-3	120.017	685.28	1.4	0.1140	0.00792	1.70	120	10/13/2005 7:13
145782003	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/15/2005 13:45	98-4	120	683.25	2.6	0.1124	0.00792	1.70	120	10/13/2005 9:14
145782004	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/15/2005 10:38	98-5	120	684.63	3.4	0.1135	0.00792	1.70	120	10/13/2005 11:15
1200947555	0.050	0.050	7.8337E-06	0.010	2.5729E-05	10/6/2005 0:00	98-6	120	682.24	1.6	0.1116	0.00792	1.70	120	10/13/2005 13:16
1200947556	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/15/2005 13:45	98-7	120	682.78	2.9	0.1120	0.00792	1.70	120	10/13/2005 15:17
1200947557	0.050	0.050	7.8337E-06	0.010	2.5729E-05	9/15/2005 13:45	98-8	120	680.56	11.2	0.1102	0.00792	1.70	120	10/13/2005 17:18
1200947558	0.050	0.050	7.8337E-06	0.010	2.5729E-05	10/6/2005 0:00	98-9	120	686.89	9.1	0.1153	0.00792	1.70	120	10/13/2005 19:19

1766

dsl 10/14/05

mo 10/14/05

Sample Decay	Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.995	159.4503	112.5733	234.3144	**4309.4949**	0.0334	10.6000	0.3416	138.8654	143.8571		SAMPLE				
0.995	159.0317	112.2777	233.6994	**1094.8200**	0.0840	2.7000	0.2255	91.4225	91.9193		SAMPLE				
0.995	155.8365	110.0219	229.0039	**397.3419**	0.1917	1.0000	0.1915	76.0852	76.1640		SAMPLE				
0.996	165.0653	116.5375	242.5658	**-42.0873**	1.6583	-0.1000	0.1658	69.7939	69.7949		SAMPLE				
0.995	152.4747	107.6485	224.0638	**-77.7541**	0.8165	-0.2000	0.1633	63.4859	63.4895		SAMPLE				
0.995	156.4259	110.4380	229.8700	**-79.7689**	0.8165	-0.2000	0.1633	65.1311	65.1348		SAMPLE				
0.995	160.6357	113.4102	236.0565	**-163.8315**	0.3954	-0.4000	0.1581	64.7601	64.7758		SAMPLE				
0.995	156.8680	110.7501	230.5197	**3679.7417**	0.0363	9.2000	0.3240	129.6057	133.5163		SAMPLE				
0.995	159.4402	112.5661	234.2996	**11789.3801**	0.0199	29.0000	0.5196	211.2394	234.9127		SAMPLE				
0.995	154.4080	109.0134	226.9048	**3031.4876**	0.0404	7.7000	0.3041	119.7391	122.6205		SAMPLE				
0.996	155.8743	110.0486	229.0596	**2464.1183**	0.0464	6.2000	0.2828	112.4126	114.4465		SAMPLE				
0.996	155.3508	109.6790	228.2902	**1029.8691**	0.0864	2.6000	0.2236	88.5714	89.0253		SAMPLE				
0.996	152.8137	107.8878	224.5619	**-77.9269**	0.8165	-0.2000	0.1633	63.6271	63.6307		SAMPLE				
0.996	155.6492	109.8897	228.7282	**-119.0676**	0.5358	-0.3000	0.1607	63.7895	63.7979		SAMPLE				
0.996	157.9084	111.4847	232.0487	**362.3623**	0.2105	0.9000	0.1893	76.2156	76.2811		SAMPLE				
0.996	156.3762	110.4030	229.7971	**677.8209**	0.1216	1.7000	0.2062	82.1979	82.4100		SAMPLE				
0.999	158.5567	111.9424	233.0013	**-40.4278**	1.6583	-0.1000	0.1658	67.0419	67.0428		MB				
0.996	158.4455	111.8639	232.8379	**484.7930**	0.1634	1.2000	0.1958	79.0976	79.2104	145782003	DUP	28.9%	0.3937		
0.996	161.0065	113.6720	236.6014	**3899.9798**	0.0356	9.5000	0.3279	134.5994	138.8265	145782003	MS			3034.98	116.6%
0.999	153.4458	108.3341	225.4908	**2895.2227**	0.0415	7.4000	0.3000	117.3739	120.0567		LCS			3025.41	95.7%

1767

PROTOCOL : 15 Tritium Tri-safe
DATE : 2005/10/11
TIME : 22:43
ID : P15AS118

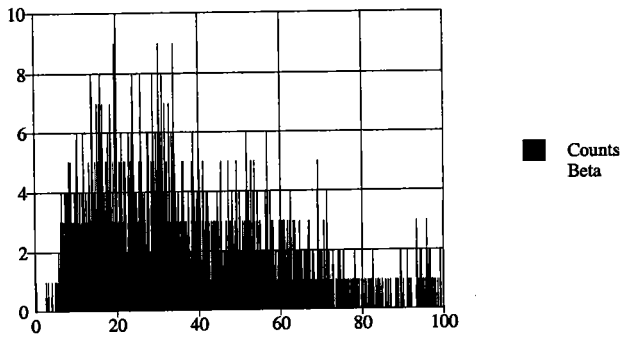
Wallac 1414 WinSpectral v1.40 S/N 4140127
Counting mode : CPM
Isotope(s) : H3
H3 = 5- 350,12.43 y
Protocol name : Tritium Tri-safe
Counting time : 7200
Repeats : 1
Cycles : 1
Replicates : 1
2 sigma % : 0.80
Minimum cpm : 0.00 Checking time: 10
Advanced modes : Chemilum
Output to Display :
POS,FNCT1,RACK,RACKPOS,CTIME,SQPE,DATE,TIME,CPMw1,CPM,SQPI,CPM1,RPT,RPL
Additions to Display : Listing,Spectrum
Spectrum : Beta
Window 1 : 15- 131 /Beta
Window 2 : 1-1024 /Beta
Window 3 : 1-1024 /Beta
Window 4 : 1-1024 /Beta
Window 5 : 1-1024 /Beta
Window 6 : 1-1024 /Beta
FNCT1 = CtTime : ctime/60
FNCT2 = FNCT2 :
FNCT3 = FNCT3 :
FNCT4 = FNCT4 :

Total count rate:
H3 62.5 CPM

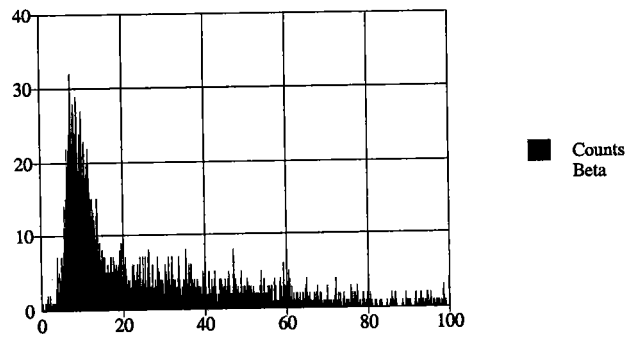
MO 10/14/05

JEP 10/14/05

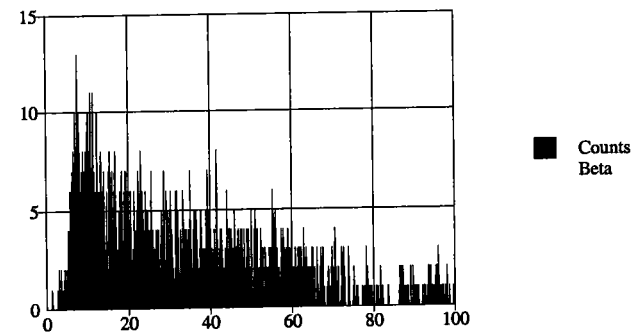
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACKRACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82 1	120.00	688.07	1.70	10/11/2005	10:43 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82 2	120.00	682.00	12.30	10/12/2005	0:44 AM



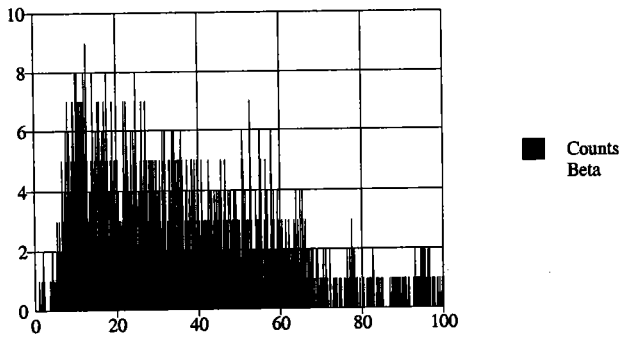
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82 3	120.00	682.30	4.40	10/12/2005	2:45 AM



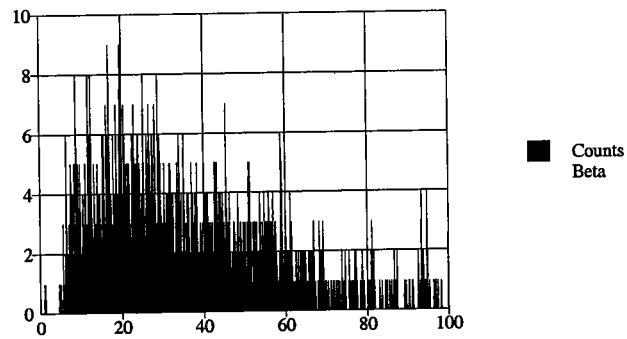
WO to 10/14/05

DF 10/14/05

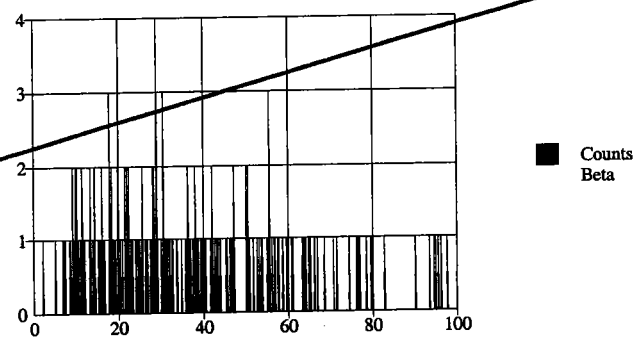
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACKRACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
82	4	120.00	685.16	2.70	10/12/2005 4:46 AM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82	5	120.00	677.20	1.60	10/12/2005 6:47 AM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82	6	16.00	683.67	1.80	10/12/2005 8:48 AM



JCS 10/14/05

WWO 10/14/05

JEP 10/14/05

PROTOCOL : 15 Tritium Tri-safe
DATE : 2005/10/12
TIME : 12:28
ID : P15AS119

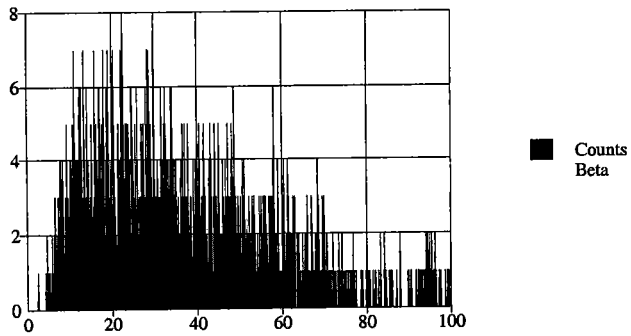
Wallac 1414 WinSpectral v1.40 S/N 4140127
Counting mode : CPM
Isotope(s) : H3
H3 = 5- 350,12.43 y
Protocol name : Tritium Tri-safe
Counting time : 7200
Repeats : 1
Cycles : 1
Replicates : 1
2 sigma % : 0.80
Minimum cpm : 0.00 Checking time: 10
Advanced modes : Chemilum
Output to Display :
POS,FNCT1,RACK,RACKPOS,CTIME,SQPE,DATE,TIME,CPMw1,CPM,SQPI,CPM1,RPT,RPL
Additions to Display : Listing,Spectrum
Spectrum : Beta
Window 1 : 15- 131 /Beta
Window 2 : 1-1024 /Beta
Window 3 : 1-1024 /Beta
Window 4 : 1-1024 /Beta
Window 5 : 1-1024 /Beta
Window 6 : 1-1024 /Beta
FNCT1 = CtTime : ctime/60
FNCT2 = FNCT2 :
FNCT3 = FNCT3 :
FNCT4 = FNCT4 :

Total count rate:
H3 111.9 CPM

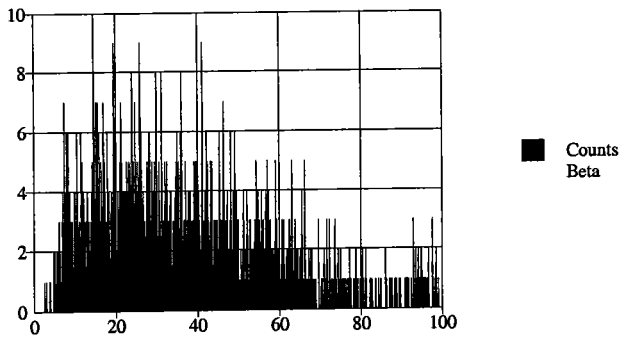
pre 10/14/05

#6 10/14/05

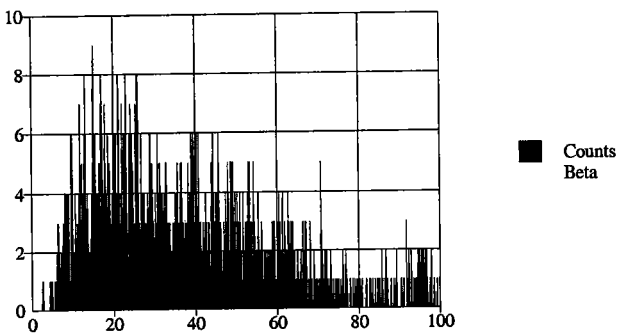
Rack_Position RACKRACKPOS	Count_time(min) FNCT1	Quench_Number SQPE	Tritium_cpm CPMW1	Run_Date DATE	TIME
Rack_Position 82	6	Count_time(min) 120.00	Quench_Number 688.31	Tritium_cpm 1.50	Run_Date 10/12/2005	12:29 PM



Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82	7	120.00	684.63	1.50	10/12/2005	2:30 PM



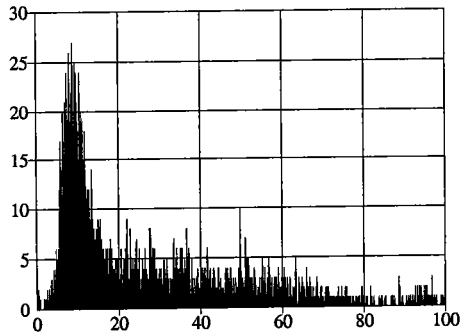
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82	8	120.00	680.92	1.30	10/12/2005	4:31 PM



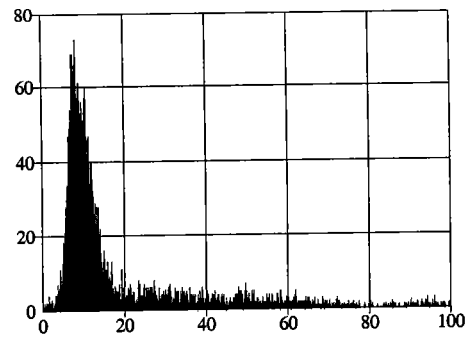
10/14/05

UKP 10/14/05

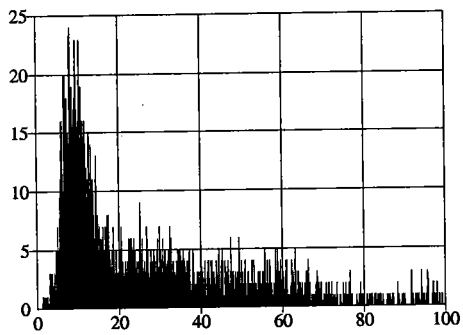
Rack_Position RACK	RACKPOS	Count_time(min) FNCT1	Quench_Number SQPE	Tritium_cpm CPMW1	Run_Date DATE	TIME
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82	9	120.00	684.21	10.90	10/12/2005	6:32 PM



Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82	10	120.00	681.94	30.70	10/12/2005	8:33 PM



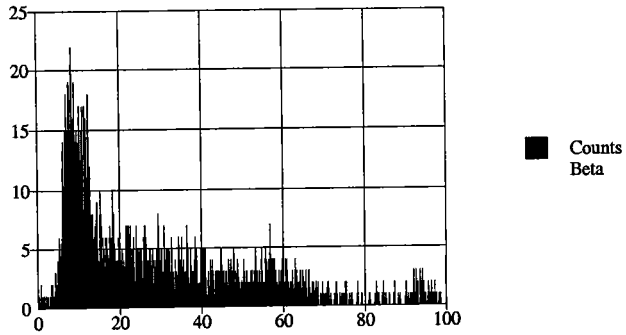
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
82	11	120.00	686.47	9.40	10/12/2005	10:34 PM



10/14/05

10/14/05

Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACKRACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
82	12	120.00	685.10	7.90	10/13/2005 0:35 AM



NAD 10/14/05

JEP 10/14/05

PROTOCOL : 10 Tritium Tri-safe
DATE : 2005/10/13
TIME : 03:11
ID : P10AS161

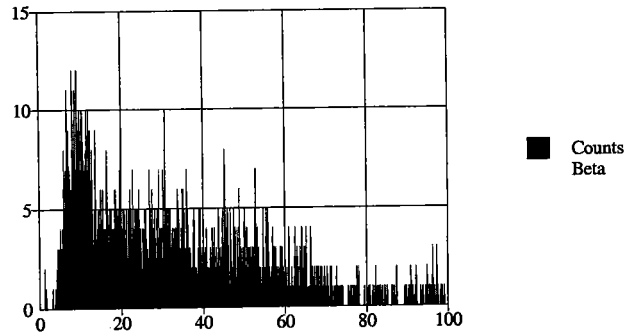
Wallac 1414 WinSpectral v1.40 S/N 4140127
Counting mode : CPM
Isotope(s) : H3
H3 = 5- 350,12.43 y
Protocol name : Tritium Tri-safe
Counting time : 7200
Repeats : 1
Cycles : 1
Replicates : 1
2 sigma % : 0.80
Minimum cpm : 0.00 Checking time: 10
Advanced modes : Chemilum
Output to Display :
POS,FNCT1,RACK,RACKPOS,CTIME,SQPE,DATE,TIME,CPMw1,CPM,SQPI,CPM1,RPT,RPL
Additions to Display : Listing,Spectrum
Spectrum : Beta
Window 1 : 15- 131 /Beta
Window 2 : 1-1024 /Beta
Window 3 : 1-1024 /Beta
Window 4 : 1-1024 /Beta
Window 5 : 1-1024 /Beta
Window 6 : 1-1024 /Beta
FNCT1 = CtTime : ctime/60
FNCT2 = FNCT2 :
FNCT3 = FNCT3 :
FNCT4 = FNCT4 :

Total count rate:
H3 94.7 CPM

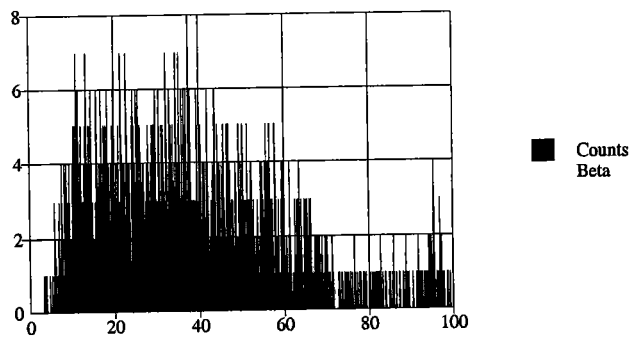
mo 10/14/05

JKL 10/14/05

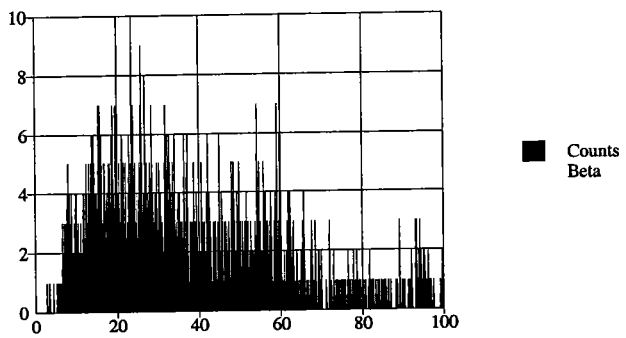
Rack_Position RACKRACKPOS	Count_time(min) FNCT1	Quench_Number SQPE	Tritium_cpm CPMW1	Run_Date DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98 1	120.00	685.58	4.30	10/13/2005	3:11 AM



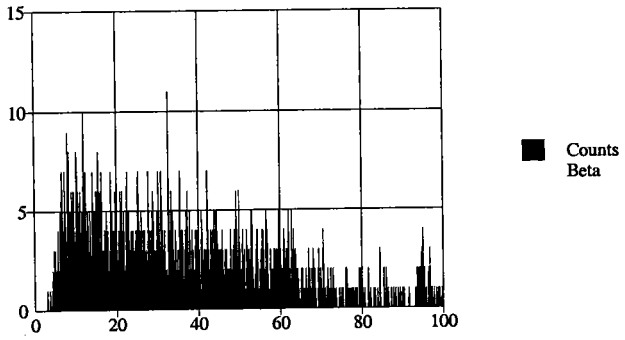
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98 2	120.00	687.96	1.50	10/13/2005	5:12 AM



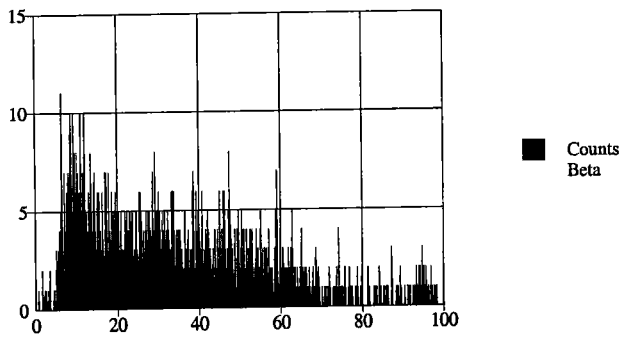
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98 3	120.00	685.28	1.40	10/13/2005	7:13 AM



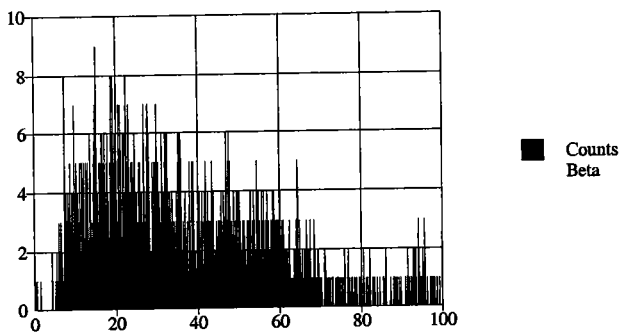
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACK	RACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98	4	120.00	683.25	2.60	10/13/2005	9:14 AM



Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98	5	120.00	684.63	3.40	10/13/2005	11:15 AM



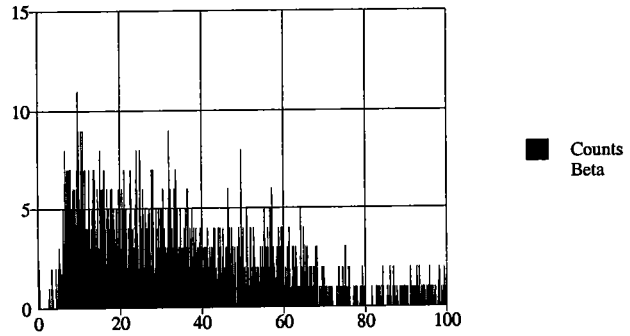
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98	6	120.00	682.24	1.60	10/13/2005	1:16 PM



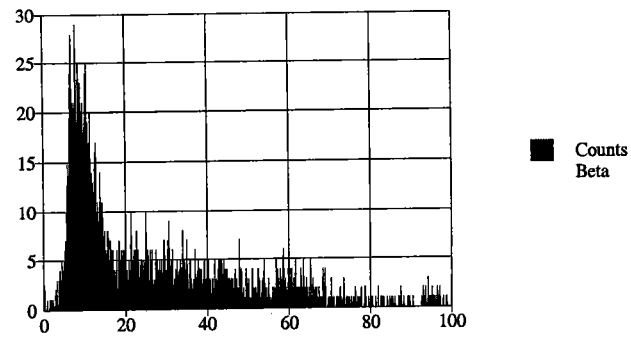
10/14/05

JE 10/14/05

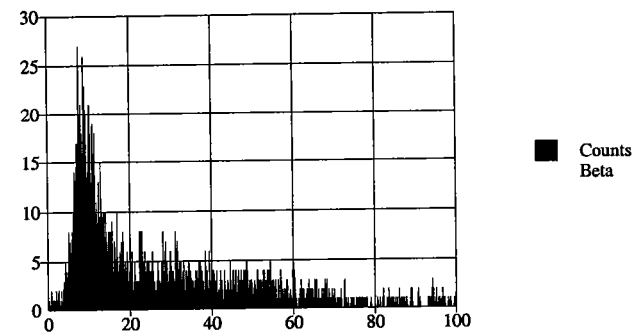
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACKRACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98	7	120.00	682.78	2.90	10/13/2005 3:17 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98	8	120.00	680.56	11.20	10/13/2005 5:18 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
98	9	120.00	686.89	9.10	10/13/2005 7:19 PM



mo 10/14/05

DEP 10/14/05

Radiochemistry Batch Checklist, Rev 4

Batch# 471889 Product: GAB Date: 10/20/05

Criteria:	Yes	No	Comments
Sample Solids are less than 100 mg for GAB.	✓		
If activity less 10* MDA, error is 150% or less of sample activity. If greater 10* MDA, error is 40% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
Sample was run within hold time. Special requirements page checked	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated. No transcription errors are apparent.	✓		
QC data entered into QC database. Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

2/22/2005
Primary Review Performed By: Melanie Quirk 10/20/05

Secondary Review Performed By: [illegible] 10/20/05

10/7-10/14
ESHL

Gross Alpha Beta Que Sheet

10/17/2005 16:51:49

Batch #:471889 Analyst:CXO1 Minimum DueDate: 10/07/2005

Alpha Spike Isotope: Th-230 Spike Code: 0159-0 Vol: 0.1 Balance #: 51204863
Beta Spike Isotope: Sr-90 Spike Code: 0133-P Vol: 0.1 Pipet #: 4497063
Alpha LCS Isotope: Th-230 LCS Code: 0159-6 Vol: 0.1 Prep Date: 10/13/05 Analytical Scale #: C31514
Beta LCS Isotope: Sr-90 LCS Code: 0133-P Vol: 0.1 Initials: CMO Witness: recopied

10% HNO3: 340387
Conc HNO3: 348081.19
Conc HCl: NA
Conc HF: NA
Conc Boric: NA

Sample ID	Client Description	Type	Hazard Code	RDL Alpha/Beta	Client	Matrix	Bkr#	Aliquot (mL or g)	Carrier or Det#	Initial Wt (g)	Final Wt (g)	Net Wt (mg)
145452001	GF0509PWF1E01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	1	150	D3	7.4153	7.4401	24.8
145452004	GU0509PWF1E01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	2	150	D4	7.3532	7.3811	27.9
145457001	GF05080G01R01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	3	150	A1	7.4418	7.4567	14.9
145457002	GF05080G01R90	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	4	150	A2	7.4462	7.4608	14.6
145457009	GU05080G01R01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	5	150	C2 Cl	7.4184	7.4340	15.6
145457010	GU05080G01R90	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	6	150	C2	7.3911	7.4076	16.5
145457012	GU05080G01R01-FB	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	7	150	B3	7.3787	7.3814	2.7
145579001	GF05090G3TM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	8	150	B4	7.4206	7.4667	46.1
145579002	GF05090GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	9	150	F1	7.4208	7.4487	27.9
145579003	GF05090G57M01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	10	150	F2	7.4736	7.5102	36.6
145579004	GF05090G7CM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	11	150	F3	7.4202	7.4661	45.9
145579005	GU05090G3TM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	12	150	H1	7.4513	7.5102	58.9
145579006	GU05090GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	13	150	H2	7.4669	7.4965	29.6
145579007	GU05090G57M01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	14	150	H3	7.4589	7.5021	43.2
145579008	GU05090G7CM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	15	150	H4	7.3739	7.4161	42.2
1200957879	MB for batch 471889	MB		UCF pCi/L to pCi/L	QC ACCOUNT	GROUND WATE	16	1000	E1	7.4643	7.4667	2.4
1200957880	GU05090GMC401(145579006DUP)	DUP		3 pCi/L	QC ACCOUNT	GROUND WATE	17	150	E2	7.3617	7.3866	24.9
1200957881	GU05090GMC401(145579006MS)	MS		3 pCi/L	QC ACCOUNT	GROUND WATE	18	150	E3	7.4064	7.4345	28.1
1200957882	LCS for batch 471889	LCS		UCF pCi/L to pCi/L	QC ACCOUNT	GROUND WATE	19	1000	C2	7.4567	7.4604	3.7
~~MSD~~							~~20~~	~~150~~	C3	7.4750	7.5051	30.1

MA 10/19/05

1780

√ no history

~~Have the planchets~~ been flamed? (Yes) / No

Instrument Used: (Circle One) LB4100 S/N: 8219 PIC S/N:10751-4

Data Reviewed By: MA 10/20/05

Gross Alpha Beta Que Sheet

Batch #:471889 | Analyst:CXO1 | Minimum DueDate: 10/07/2005

Alpha Spike Isotope: Th-230 | Spike Code: 0159-0 | Vol: 0.1 | Balance #: 51204863 | 10% HNO3: 340387
Beta Spike Isotope: Sr-90 | Spike Code: 0133-P | Vol: 0.1 | Pipet #: 4497063 | Conc HNO3: 348081.19
Alpha LCS Isotope: Th-230 | LCS Code: 0159-0 | Vol: 0.1 | Prep Date: 10/13/05 | Analytical Scale # C31514 | Conc HCl: NA
Beta LCS Isotope: Sr-90 | LCS Code: 0133-P | Vol: 0.1 | Initials: CMO | Witness: 88E 10/13/05 | Conc HF: NA | Conc Boric: NA

Sample ID	Client Description	Type	Hazard Code	RDL Alpha/Beta	Client	Matrix	Bkr#	Aliquot (mL or g)	Carrier or Det#	Initial Wt (g)	Final Wt (g)	Net Wt (mg)
145452001	GF0509PWF1E01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	1	150	G4★	7.4153	7.4743	59.0
145452004	GU0509PWF1E01	SAMPLE		3 pCi/L	ESHL001	SURFACE WATE	2	150	H1	7.3532	7.4158	62.6
145457001	GF05080G01R01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	3	150	H2	7.4418	7.4739	32.1
145457002	GF05080G01R90	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	4	150	H3	7.4462	7.4761	29.9
145457009	GU05080G01R01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	5	150	H4	7.4184	7.4552	36.8
145457010	GU05080G01R90	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	6	150	H1	7.3911	7.4269	35.8
145457012	GU05080G01R01-FB	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	7	150	H2	7.3787	7.3795	0.8
145579001	GF05090G3TM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	8	150	H3	7.4206	7.4982	77.6
145579002	GF05090GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	9	150	H4	7.4208	7.4846	63.8
145579003	GF05090G57M01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	10	150	G2	7.4736	7.5416	68.0
145579004	GF05090G7CM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	11	150	G4	7.4202	7.4955	75.3
145579005	GU05090G3TM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	12	150	E3	7.4513	7.5389	87.6
145579006	GU05090GMC401	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	13	150	~~E4~~ B3	7.4669	7.5328	65.9
145579007	GU05090G57M01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	14	150	H1	7.4589	7.5298	70.9
145579008	GU05090G7CM01	SAMPLE		3 pCi/L	ESHL001	GROUND WATE	15	150	H2	7.3739	7.4478	73.9
1200957879	MB for batch 471889	MB		UCF pCi/L to pCi/L	QC ACCOUNT	GROUND WATE	16	1000	H3	7.4643	7.4654	1.1
1200957880	GU05090GMC401(145579006DUP)	DUP		3 pCi/L	QC ACCOUNT	GROUND WATE	17	150	~~H4~~	7.3617	7.4202	58.5
1200957881	GU05090GMC401(145579006MS)	MS		3 pCi/L	QC ACCOUNT	GROUND WATE	18	150	D2	7.4064	7.4710	64.6
1200957882	LCS for batch 471889	LCS		UCF pCi/L to pCi/L	QC ACCOUNT	GROUND WATE	19	1000	D3	7.4567	7.4576	0.9
~~MSD~~							~~20~~	~~150~~	~~D4~~	~~7.4150~~	~~7.5438~~	~~68.8~~

★ 471763A

Have the planchets been flamed? Yes / **No** (circled)

Instrument Used: (Circle One) LB4100 S/N: 8219 (circled) PIC S/N:10751-4

Data Reviewed By: [signature] 10.17.05

Blank Correction Report

GEL Sample ID	Client sample ID	Parameter	Aliquot	Result	TPU	MDA	Aliquot Corrected Blank Result	Units	Activity <5X Corrected Blank
1200957880	DUP	ALPHA	0.150 L	0.525	0.591	2.52	.494	pCi/L	YES
		BETA	0.150 L	1.84	0.679	2.58	-.15066667	pCi/L	NO
1200957882	LCS	ALPHA	1.00 L	11.1	0.625	0.322	.0741	pCi/L	NO
		BETA	1.00 L	32.4	2.48	0.620	-.0226	pCi/L	NO
1200957879	MB	ALPHA	1.00 L	0.0741	0.0892	0.384	.0741	pCi/L	YES
		BETA	1.00 L	-0.0226	0.0856	0.361	-.0226	pCi/L	NO
1200957881	MS	ALPHA	0.150 L	57.4	8.96	1.93	.494	pCi/L	NO
		BETA	0.150 L	224	8.71	4.85	-.15066667	pCi/L	NO
145452001	GF0509PWF1E01	ALPHA	0.150 L	0.651	0.338	1.18	.494	pCi/L	YES
		BETA	0.150 L	5.50	0.807	2.65	-.15066667	pCi/L	NO
145452004	GU0509PWF1E01	ALPHA	0.150 L	0.913	0.388	1.31	.494	pCi/L	YES
		BETA	0.150 L	5.00	0.769	2.47	-.15066667	pCi/L	NO
145457001	GF05080G01R01	ALPHA	0.150 L	0.577	0.396	1.53	.494	pCi/L	YES
		BETA	0.150 L	3.63	0.733	2.57	-.15066667	pCi/L	NO
145457002	GF05080G01R90	ALPHA	0.150 L	0.975	0.488	1.76	.494	pCi/L	YES
		BETA	0.150 L	1.77	0.646	2.45	-.15066667	pCi/L	NO
145457009	GU05080G01R01	ALPHA	0.150 L	14.5	1.39	2.64	.494	pCi/L	NO
		BETA	0.150 L	3.75	0.710	2.43	-.15066667	pCi/L	NO
145457010	GU05080G01R90	ALPHA	0.150 L	2.64	0.551	1.40	.494	pCi/L	NO
		BETA	0.150 L	3.09	0.687	2.40	-.15066667	pCi/L	NO
145457012	GU05080G01R01 -FB	ALPHA	0.150 L	0.244	0.272	1.17	.494	pCi/L	YES
		BETA	0.150 L	0.644	0.628	2.53	-.15066667	pCi/L	NO
145579001	GF05090G3TM01	ALPHA	0.150 L	1.14	0.646	2.41	.494	pCi/L	YES
		BETA	0.150 L	21.8	1.21	2.58	-.15066667	pCi/L	NO
145579002	GF05090GMC401	ALPHA	0.150 L	-0.354	0.351	1.96	.494	pCi/L	YES
		BETA	0.150 L	3.35	0.719	2.52	-.15066667	pCi/L	NO
145579003	GF05090G57M01	ALPHA	0.150 L	1.25	0.656	2.47	.494	pCi/L	YES
		BETA	0.150 L	23.1	1.21	2.57	-.15066667	pCi/L	NO
145579004	GF05090G7CM01	ALPHA	0.150 L	1.46	0.755	2.90	.494	pCi/L	YES
		BETA	0.150 L	29.3	1.38	2.72	-.15066667	pCi/L	NO
145579005	GU05090G3TM01	ALPHA	0.150 L	1.63	1.01	2.58	.494	pCi/L	YES
		BETA	0.150 L	24.6	1.80	3.08	-.15066667	pCi/L	NO
145579006	GU05090GMC401	ALPHA	0.150 L	-0.435	0.400	2.08	.494	pCi/L	YES
		BETA	0.150 L	3.14	0.887	3.34	-.15066667	pCi/L	NO
145579007	GU05090G57M01	ALPHA	0.150 L	2.40	0.965	2.57	.494	pCi/L	YES
		BETA	0.150 L	19.9	1.23	2.60	-.15066667	pCi/L	NO
145579008	GU05090G7CM01	ALPHA	0.150 L	1.99	0.884	2.29	.494	pCi/L	YES
		BETA	0.150 L	24.6	1.27	2.53	-.15066667	pCi/L	NO

10/20/05

Gross Alpha Water

Filename : ALPHA.XLS
File type : Excel
Version # : 1

Batch : 471889
Analyst : CXO1
Prep Date : 10/13/05

Calibration Date : 08/18/05
Calibration Due Date : 08/18/06

Spike S/N : 0159-O
Spike Exp Date : 06/23/06
Spike Activity (dpm/ml): 239.45
Spike Volume Added: 0.1

LCS S/N : 0159-O
LCS Exp Date : 06/23/06
LCS Activity (dpm/ml): 239.45
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : GFCGANBL
Parmname : Alpha
Required MDC: 3 pCi/L
Batch counted on : LB4100
BKG Count time : 500 min

Sample Characteristics | **Count Raw Data**

Sample ID	Sample Aliquot L	Sample Residue Wt. (mg)	Sample Aliquot StDev.	Sample Date/Time	Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency	Detector Efficiency Error	Beta X-Talk	Count Start Date/Time
145452001	0.150	24.8	1.4035E-05	09/13/05 9:10	D3	163	15	178	0.040	500	0.2285	0.08011	0.00230	10/18/05 13:21
145452004	0.150	27.9	1.4035E-05	09/13/05 9:10	D4	163	20	211	0.052	500	0.2290	0.06032	0.00085	10/18/05 13:21
145457001	0.150	14.9	1.4035E-05	09/12/05 12:37	A1	134	12	155	0.046	500	0.2092	0.03687	0.00289	10/18/05 13:50
145457002	0.150	14.6	1.4035E-05	09/12/05 12:37	A2	134	18	136	0.064	500	0.2074	0.03827	0.00292	10/18/05 13:50
145457009	0.150	15.6	1.4035E-05	09/12/05 12:37	C1	180	246	491	0.272	500	0.2228	0.04512	0.00704	10/19/05 15:36
145457010	0.150	16.5	1.4035E-05	09/12/05 12:37	C2	180	45	287	0.060	500	0.2139	0.02803	0.00120	10/19/05 15:36
145457012	0.150	2.7	1.4035E-05	09/12/05 12:37	B3	96	5	125	0.026	500	0.2694	0.04273	0.00322	10/18/05 14:28
145579001	0.150	46.1	1.4035E-05	09/13/05 15:00	B4	96	14	298	0.068	500	0.1898	0.04316	0.00185	10/18/05 14:28
145579002	0.150	27.9	1.4035E-05	09/13/05 7:30	F1	120	7	151	0.078	500	0.2168	0.03764	0.00470	10/18/05 14:23
145579003	0.150	36.6	1.4035E-05	09/13/05 12:55	F2	120	26	412	0.122	500	0.2078	0.03582	0.00242	10/18/05 14:23
145579004	0.150	45.9	1.4035E-05	09/14/05 9:32	F3	120	28	487	0.140	500	0.1880	0.03022	0.00041	10/18/05 14:23
145579005	0.150	58.9	1.4035E-05	09/13/05 15:00	H1	102	33	329	0.072	500	0.1749	0.05164	0.04855	10/18/05 14:23
145579006	0.150	29.0	1.4035E-05	09/13/05 7:30	H2	102	7	118	0.070	500	0.2140	0.04319	0.02561	10/18/05 14:23
145579007	0.150	43.2	1.4035E-05	09/13/05 12:55	H3	102	37	368	0.092	500	0.1939	0.04392	0.03207	10/18/05 14:23
145579008	0.150	42.2	1.4035E-05	09/14/05 9:32	H4	102	29	346	0.062	500	0.1852	0.03557	0.02933	10/18/05 14:23
1200957879	1.000	2.4	2.0399E-05	10/13/05 0:00	E1	102	27	114	0.208	500	0.2775	0.05186	0.00989	10/18/05 14:23
1200957880	0.150	24.9	1.4035E-05	09/13/05 7:30	E2	102	18	198	0.126	500	0.2265	0.04520	0.00562	10/18/05 14:23
1200957881	0.150	28.1	1.4035E-05	09/13/05 7:30	E3	102	475	2944	0.066	500	0.2256	0.13900	0.00962	10/18/05 14:23
1200957882	1.000	3.7	2.0399E-05	10/13/05 0:00	C2	73	437	2241	0.060	500	0.2387	0.02803	0.00120	10/18/05 14:50

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MA10/20/05

Alpha Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.6783	0.4789	1.1760	**0.6506**	0.4945	0.0520	0.0254	0.3336	0.3381		SAMPLE				
0.7718	0.5449	1.3075	**0.9127**	0.4184	0.0707	0.0293	0.3839	0.3879		SAMPLE				
0.8764	0.6187	1.5274	**0.5772**	0.6342	0.0436	0.0276	0.3958	0.3965		SAMPLE				
1.0426	0.7361	1.7645	**0.9753**	0.4796	0.0703	0.0336	0.4868	0.4883		SAMPLE				
1.7266	1.2190	2.6407	**14.4969**	0.0939	1.0947	0.0902	1.2159	1.3863		SAMPLE				
0.8448	0.5964	1.4040	**2.6411**	0.2064	0.1900	0.0388	0.5455	0.5506		SAMPLE				
0.6045	0.4268	1.1678	**0.2440**	0.9358	0.0261	0.0244	0.2718	0.2721		SAMPLE				
1.3879	0.9799	2.4058	**1.1409**	0.5245	0.0778	0.0407	0.6438	0.6460		SAMPLE				
1.1638	0.8216	1.9557	**-0.3544**	1.2890	-0.0197	0.0253	0.3510	0.3512		SAMPLE				
1.5187	1.0722	2.4703	**1.2480**	0.4796	0.0947	0.0453	0.6544	0.6562		SAMPLE				
1.7974	1.2690	2.8981	**1.4642**	0.5062	0.0933	0.0472	0.7532	0.7546		SAMPLE				
1.5030	1.0611	2.5777	**1.6299**	0.2347	0.2515	0.0576	0.9886	1.0134		SAMPLE				
1.2115	0.8554	2.0831	**-0.4351**	20.7716	-0.0014	0.0285	0.4001	0.4001		SAMPLE				
1.5323	1.0818	2.5744	**2.4007**	0.2301	0.2707	0.0612	0.9470	0.9647		SAMPLE				
1.3171	0.9299	2.2899	**1.9913**	0.2453	0.2223	0.0540	0.8748	0.8841		SAMPLE				
0.2415	0.1705	0.3841	**0.0741**	0.9691	0.0567	0.0549	0.0891	0.0892		MB				
1.5355	1.0841	2.5199	**0.5245**	0.8833	0.0505	0.0445	0.5903	0.5910	145579006	DUP	0.0%	0.4841		
1.1159	0.7878	1.9289	**57.4241**	0.1466	4.5909	0.2140	2.8488	8.9606	145579006	MS			71.91	79.9%
0.1783	0.1259	0.3217	**11.1145**	0.0559	5.9263	0.2866	0.5408	0.6251		LCS			10.79	103.0%

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MA 10/20/05

471889r Alpha

SampleID	Instr	Time	Alpha	Beta	Total Counts	Count Start Time	Count End Time	Voltage
145452001	G4	180	19	276	306	10/15/05 12:45	10/15/05 15:45	1470
145452004	H1	180	33	223	304	10/15/05 12:46	10/15/05 15:46	1522.5
145457001	H2	180	17	240	294	10/15/05 12:46	10/15/05 15:46	1522.5
145457002	H3	180	22	183	239	10/15/05 12:46	10/15/05 15:46	1522.5
145457009	C1	180	246	491	818	10/19/05 15:36	10/19/05 18:36	1470
145457010	C2	180	45	287	362	10/19/05 15:36	10/19/05 18:36	1470
145457012	H2	180	10	170	212	10/15/05 15:55	10/15/05 18:55	1522.5
145579001	H3	180	54	630	821	10/15/05 15:55	10/15/05 18:55	1522.5
145579002	H4	180	21	202	263	10/15/05 15:55	10/15/05 18:55	1522.5
145579003	G2	180	26	660	740	10/15/05 15:55	10/15/05 18:55	1470
145579004	G4	180	14	796	849	10/15/05 15:55	10/15/05 18:55	1470
145579005	E3	180	29	714	933	10/15/05 17:13	10/15/05 20:13	1470
145579006	E4	180	28	406	511	10/15/05 17:13	10/15/05 20:13	1470
145579007	H1	180	80	550	771	10/16/05 9:27	10/16/05 12:27	1522.5
145579008	H2	180	36	709	853	10/16/05 9:27	10/16/05 12:27	1522.5
1200957879	H3	180	14	142	178	10/16/05 9:27	10/16/05 12:27	1522.5
1200957880	H4	180	21	171	220	10/16/05 9:27	10/16/05 12:27	1522.5
1200957881	D2	60	155	1818	2192	10/14/05 19:40	10/14/05 20:40	1470
1200957882	D3	60	461	1863	2668	10/14/05 19:40	10/14/05 20:40	1470

mA 10/20/05

Gross Beta Water

Filename : BETA.XLS
File type : Excel
Version # : 1

Batch : 471889
Analyst : CXO1
Prep Date : 10/13/2005

Calibration Date : 8/18/2005
Calibration Due Date : 8/18/2006

Spike S/N : 0133-P
Spike Exp Date : 8/15/2006
Spike Activity (dpm/ml): 346.22
Spike Volume Added: 0.1

LCS S/N : 0133-P
LCS Exp Date : 8/15/2006
LCS Activity (dpm/ml): 346.22
LCS Volume Added: 0.1

Pipet, 0.1 ml Stdev : +/- 0.000701 ml
Pipet, 0.5 ml Stdev : +/- 0.002564 ml
Pipet, 1 ml Stdev : +/- 0.005480 ml

Procedure Code : GFCGANBL
Parmname : Beta
Required MDC: 3 pCi/L
Batch counted on : LB4100
BKG Count time : 500 min

Sample Characteristics | **Count Raw Data**

Sample ID	Sample Aliquot L	Sample Residue Wt. (mg)	Sample Aliquot StDev.	Sample Date/Time	Detector ID	Counting Time	Gross Counts Alpha	Gross Counts Beta	Weekly Bkg CPM	Weekly Bkg Count Time	Detector Efficiency	Detector Efficiency Error	Alpha X-Talk	Count Start Date/Time
145452001	0.150	59.0	1.4035E-05	9/13/2005 9:10	G4	180	19	276	0.840	500	0.3773	0.01264	0.01636	10/15/2005 12:45
145452004	0.150	62.6	1.4035E-05	9/13/2005 9:10	H1	180	33	223	0.642	500	0.3563	0.02167	0.02173	10/15/2005 12:46
145457001	0.150	32.1	1.4035E-05	9/12/2005 12:37	H2	180	17	240	0.858	500	0.3926	0.01656	0.01391	10/15/2005 12:46
145457002	0.150	29.9	1.4035E-05	9/12/2005 12:37	H3	180	22	183	0.782	500	0.3950	0.01564	0.01746	10/15/2005 12:46
145457009	0.150	36.8	1.4035E-05	9/12/2005 12:37	H4	180	19	214	0.712	500	0.3805	0.01752	0.01125	10/15/2005 12:46
145457010	0.150	35.8	1.4035E-05	9/12/2005 12:37	H1	180	24	184	0.642	500	0.3665	0.02167	0.02173	10/15/2005 15:55
145457012	0.150	0.8	1.4035E-05	9/12/2005 12:37	H2	180	10	170	0.858	500	0.3993	0.01656	0.01391	10/15/2005 15:55
145579001	0.150	77.6	1.4035E-05	9/13/2005 15:00	H3	180	54	630	0.782	500	0.3740	0.01564	0.01746	10/15/2005 15:55
145579002	0.150	63.8	1.4035E-05	9/13/2005 7:30	H4	180	21	202	0.712	500	0.3669	0.01752	0.01125	10/15/2005 15:55
145579003	0.150	68.0	1.4035E-05	9/13/2005 12:55	G2	180	26	660	0.780	500	0.3749	0.01093	0.01967	10/15/2005 15:55
145579004	0.150	75.3	1.4035E-05	9/14/2005 9:32	G4	180	14	796	0.840	500	0.3668	0.01264	0.01636	10/15/2005 15:55
145579005	0.150	87.6	1.4035E-05	9/13/2005 15:00	E3	180	29	714	1.032	500	0.3582	0.05054	0.01569	10/15/2005 17:13
145579006	0.150	65.9	1.4035E-05	9/13/2005 7:30	B3	165	9	263	1.204	500	0.3725	0.01849	0.01602	10/17/2005 13:48
145579007	0.150	70.9	1.4035E-05	9/13/2005 12:55	H1	180	80	550	0.700	500	0.3531	0.02167	0.02173	10/16/2005 9:27
145579008	0.150	73.9	1.4035E-05	9/14/2005 9:32	H2	180	36	709	0.790	500	0.3836	0.01656	0.01391	10/16/2005 9:27
1200957879	1.000	1.1	2.0399E-05	10/13/2005 0:00	H3	180	14	142	0.808	500	0.4077	0.01564	0.01746	10/16/2005 9:27
1200957880	0.150	58.5	1.4035E-05	9/13/2005 7:30	B4	165	16	156	0.714	500	0.3749	0.02075	0.01876	10/17/2005 13:48
1200957881	0.150	64.6	1.4035E-05	9/13/2005 7:30	D2	60	155	1818	0.966	500	0.3934	0.03039	0.01288	10/14/2005 19:40
1200957882	1.000	0.9	2.0399E-05	10/13/2005 0:00	D3	60	461	1863	0.784	500	0.4191	0.07231	0.01131	10/14/2005 19:40

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10.17.05

Beta Results

Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
1.7914	1.2647	2.6491	**5.5040**	0.1462	0.6933	0.1010	0.8037	0.8067		SAMPLE				
1.6586	1.1710	2.4687	**4.9972**	0.1529	0.5969	0.0904	0.7617	0.7694		SAMPLE				
1.7401	1.2285	2.5721	**3.6258**	0.2016	0.4753	0.0955	0.7306	0.7331		SAMPLE				
1.6512	1.1658	2.4459	**1.7679**	0.3622	0.2347	0.0849	0.6457	0.6463		SAMPLE				
1.6355	1.1547	2.4280	**3.7541**	0.1887	0.4769	0.0896	0.7071	0.7102		SAMPLE				
1.6123	1.1383	2.3997	**3.0914**	0.2205	0.3802	0.0834	0.6837	0.6870		SAMPLE				
1.7108	1.2078	2.5287	**0.6443**	0.9654	0.0864	0.0834	0.6275	0.6276		SAMPLE				
1.7439	1.2312	2.5831	**21.7820**	0.0556	2.7180	0.1449	1.1638	1.2128		SAMPLE				
1.6960	1.1974	2.5179	**3.3465**	0.2140	0.4102	0.0875	0.7162	0.7186		SAMPLE				
1.7376	1.2267	2.5739	**23.1007**	0.0525	2.8867	0.1481	1.1863	1.2129		SAMPLE				
1.8427	1.3009	2.7249	**29.3137**	0.0470	3.5822	0.1620	1.3262	1.3770		SAMPLE				
2.0915	1.4766	3.0793	**24.5795**	0.0732	2.9347	0.1552	1.3014	1.7998		SAMPLE				
2.2690	1.6019	3.3361	**3.1363**	0.2823	0.3899	0.1099	0.8855	0.8875		SAMPLE				
1.7475	1.2337	2.5953	**19.9495**	0.0615	2.3556	0.1356	1.1528	1.2318		SAMPLE				
1.7089	1.2065	2.5306	**24.6282**	0.0514	3.1489	0.1532	1.1991	1.2667		SAMPLE				
0.2439	0.1722	0.3611	**-0.0226**	4.0527	-0.0191	0.0775	0.0856	0.0856		MB				
1.7361	1.2257	2.5828	**1.8392**	0.3661	0.2315	0.0846	0.6776	0.6787	145579006	DUP	52.1%	0.4141		
3.1912	2.2530	4.8502	**223.6378**	0.0389	29.3340	0.7120	5.4343	8.7070	145579006	MS			207.94	107.5%
0.4048	0.2858	0.6201	**32.4359**	0.0761	30.2660	0.7205	0.7743	2.4763		LCS			31.19	104.0%

1787

10.17.05

471889r.xls Beta

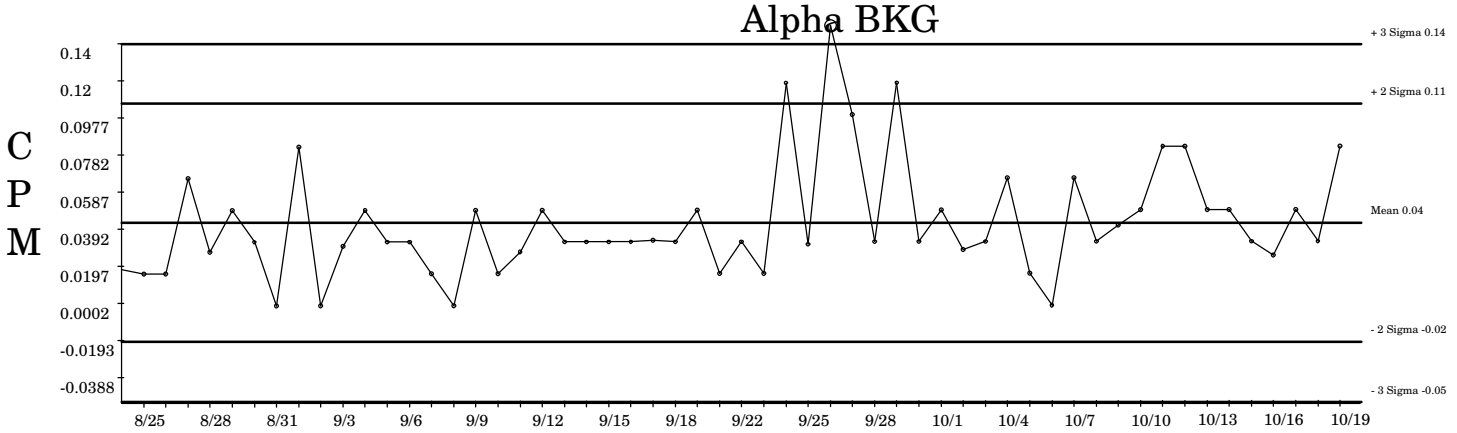
SampleID	Instr	Time	Alpha	Beta	Total Counts	Count Start Time	Count End Time	Voltage
145452001	G4	180	19	276	306	10/15/2005 12:45	10/15/2005 15:45	1470
145452004	H1	180	33	223	304	10/15/2005 12:46	10/15/2005 15:46	1522.5
145457001	H2	180	17	240	294	10/15/2005 12:46	10/15/2005 15:46	1522.5
145457002	H3	180	22	183	239	10/15/2005 12:46	10/15/2005 15:46	1522.5
145457009	H4	180	19	214	264	10/15/2005 12:46	10/15/2005 15:46	1522.5
145457010	H1	180	24	184	242	10/15/2005 15:55	10/15/2005 18:55	1522.5
145457012	H2	180	10	170	212	10/15/2005 15:55	10/15/2005 18:55	1522.5
145579001	H3	180	54	630	821	10/15/2005 15:55	10/15/2005 18:55	1522.5
145579002	H4	180	21	202	263	10/15/2005 15:55	10/15/2005 18:55	1522.5
145579003	G2	180	26	660	740	10/15/2005 15:55	10/15/2005 18:55	1470
145579004	G4	180	14	796	849	10/15/2005 15:55	10/15/2005 18:55	1470
145579005	E3	180	29	714	933	10/15/2005 17:13	10/15/2005 20:13	1470
145579006	B3	165	9	263	323	10/17/2005 13:48	10/17/2005 16:33	1470
145579007	H1	180	80	550	771	10/16/2005 9:27	10/16/2005 12:27	1522.5
145579008	H2	180	36	709	853	10/16/2005 9:27	10/16/2005 12:27	1522.5
1200957879	H3	180	14	142	178	10/16/2005 9:27	10/16/2005 12:27	1522.5
1200957880	B4	165	16	156	197	10/17/2005 13:48	10/17/2005 16:33	1470
1200957881	D2	60	155	1818	2192	10/14/2005 19:40	10/14/2005 20:40	1470
1200957882	D3	60	461	1863	2668	10/14/2005 19:40	10/14/2005 20:40	1470

10/21/05 MM

BACKGROUND AND EFFICIENCY DATA

LB4100B3 10/19/2005

Alpha BKG



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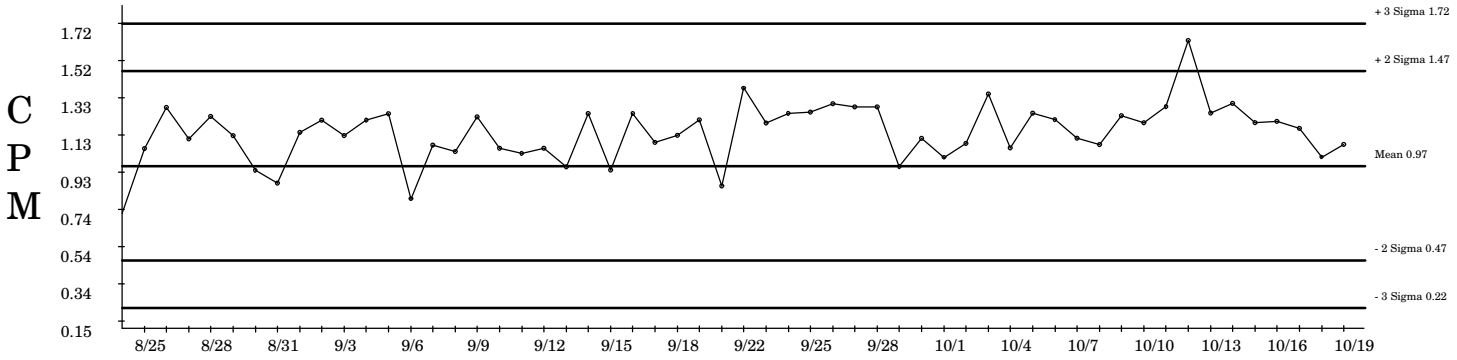

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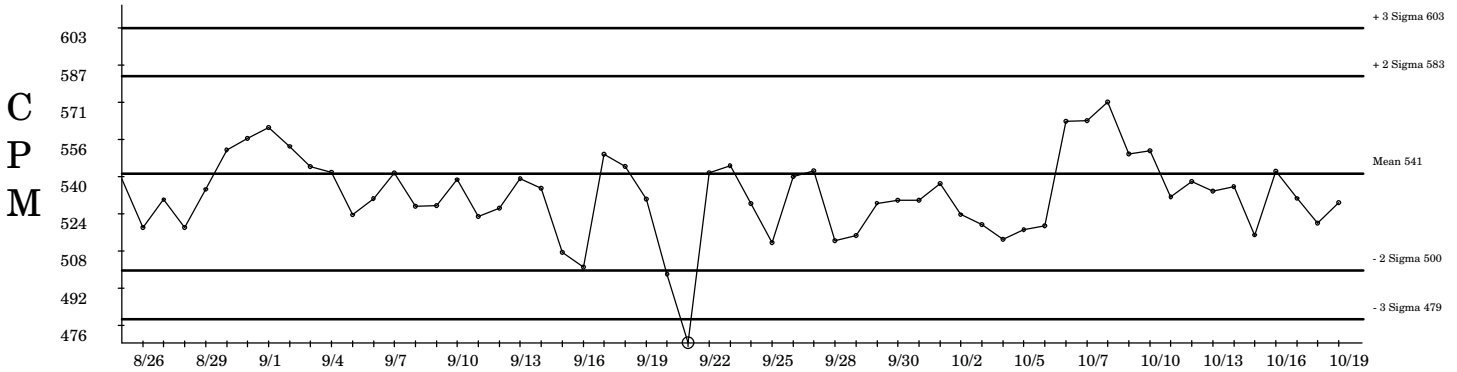

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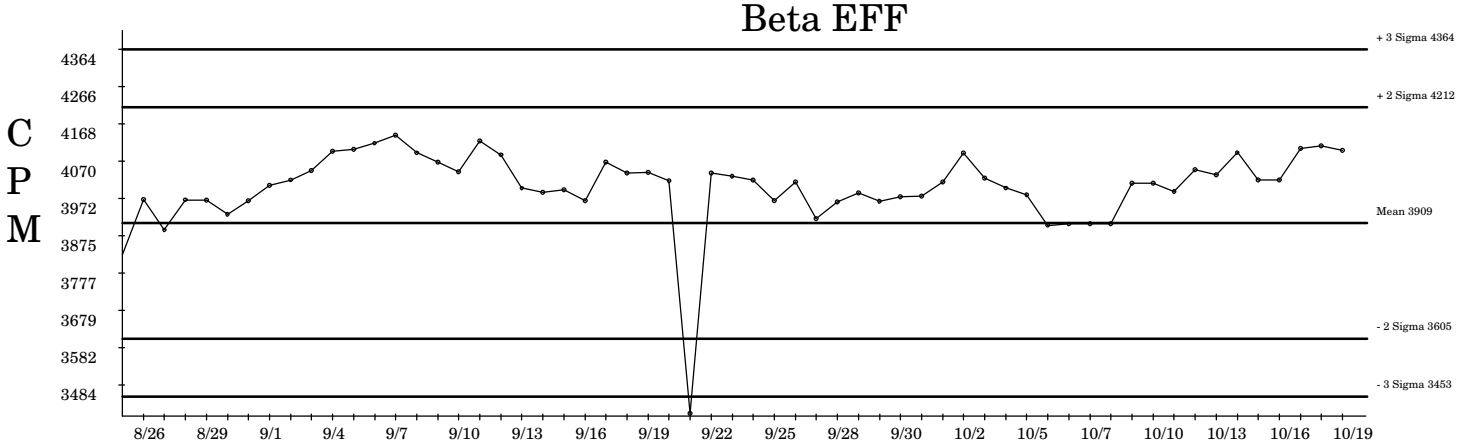

○ Denotes Outlier

LB4100B4 10/19/2005

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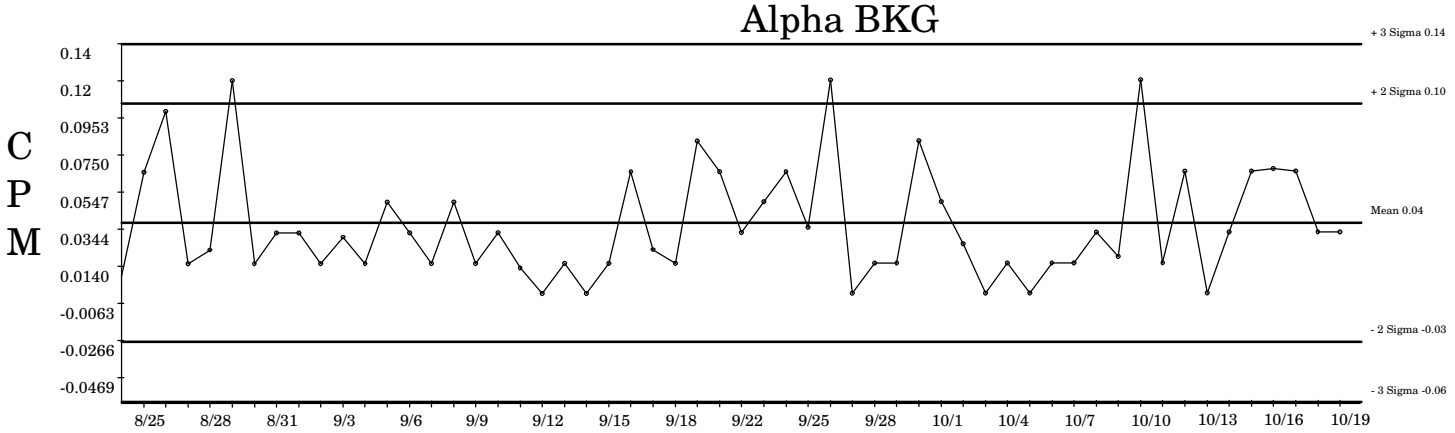

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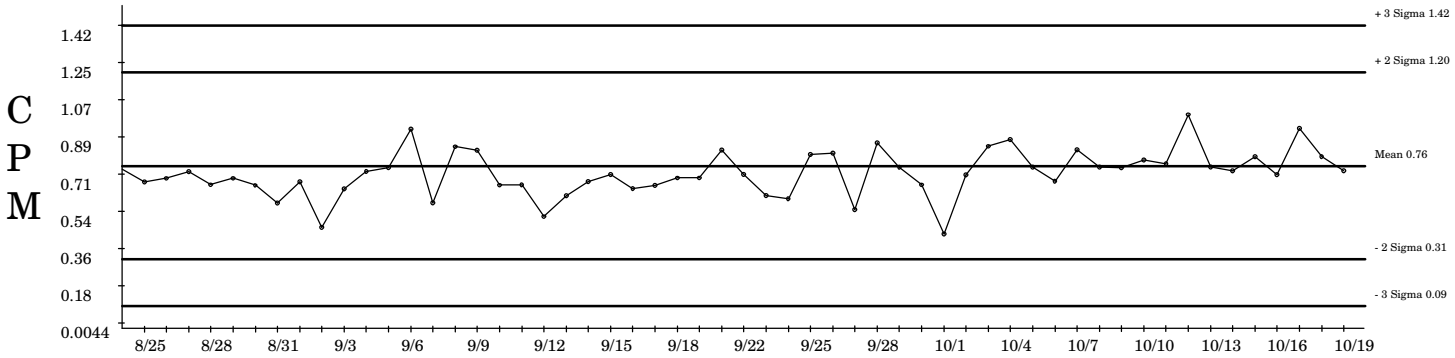

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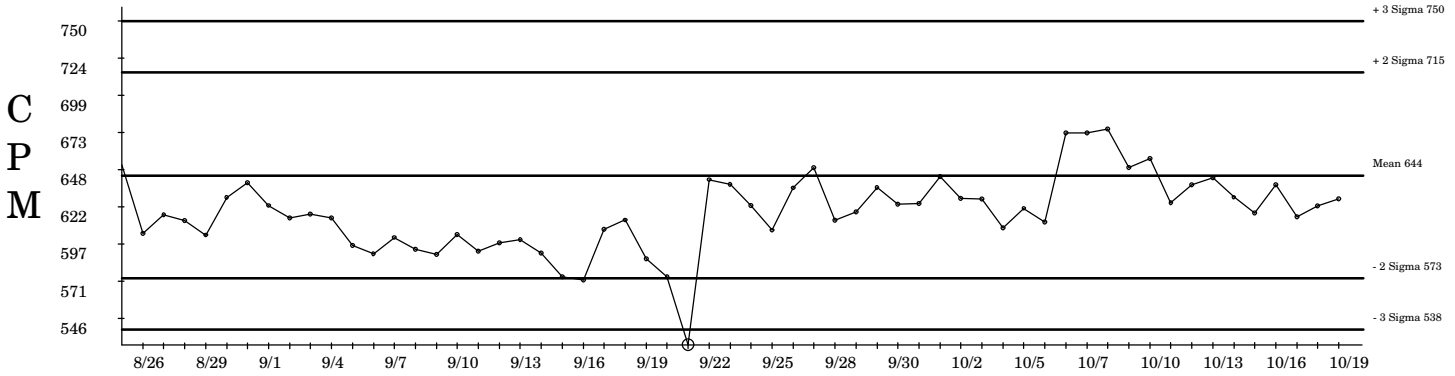

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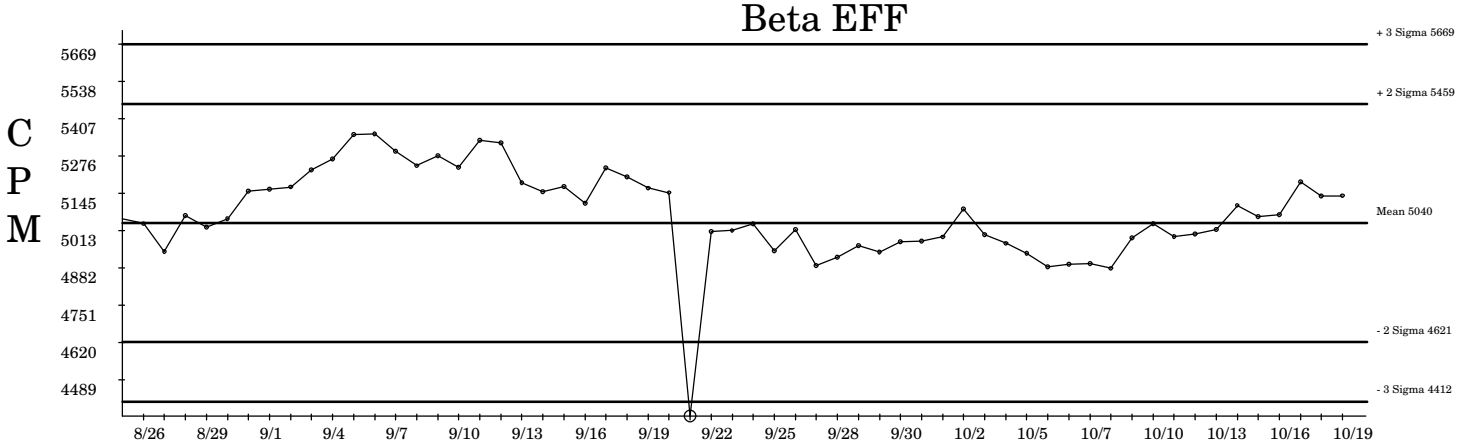

○ Denotes Outlier

LB4100C1 10/20/2005

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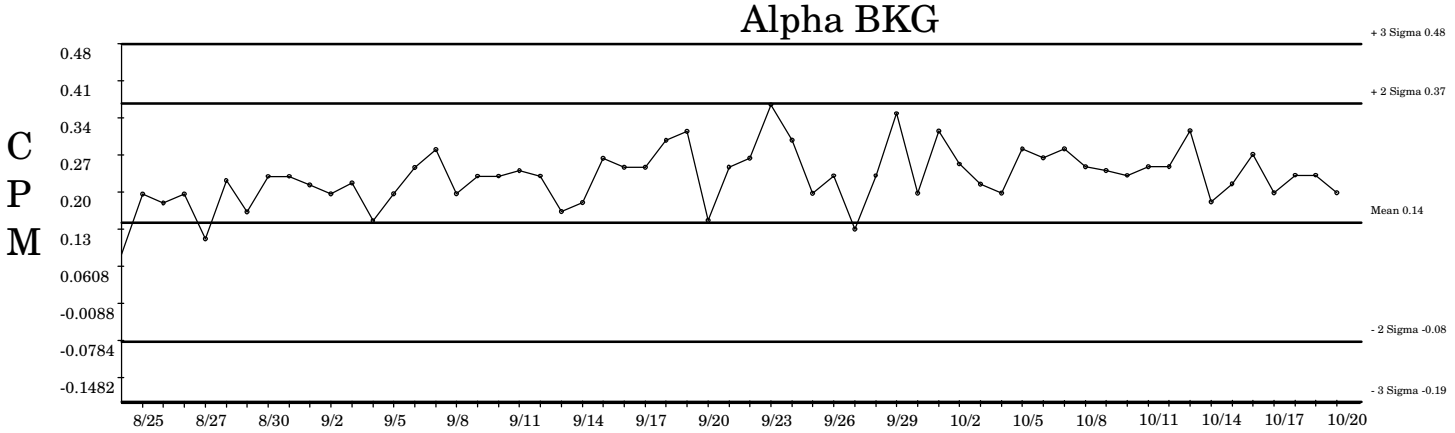

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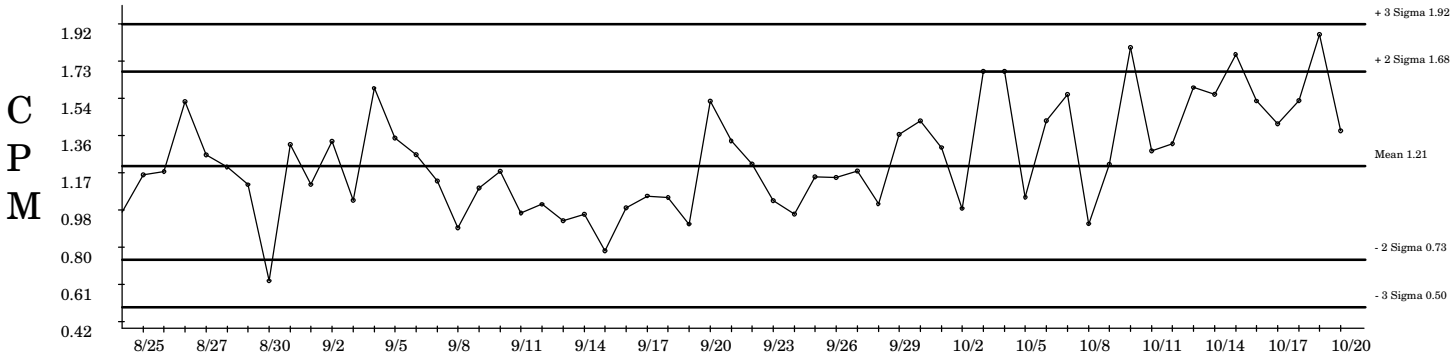

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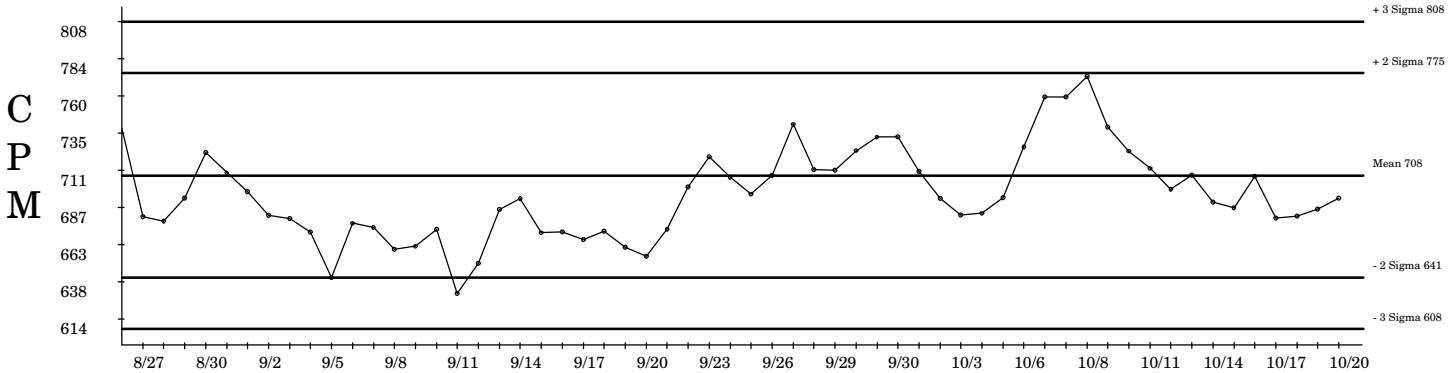

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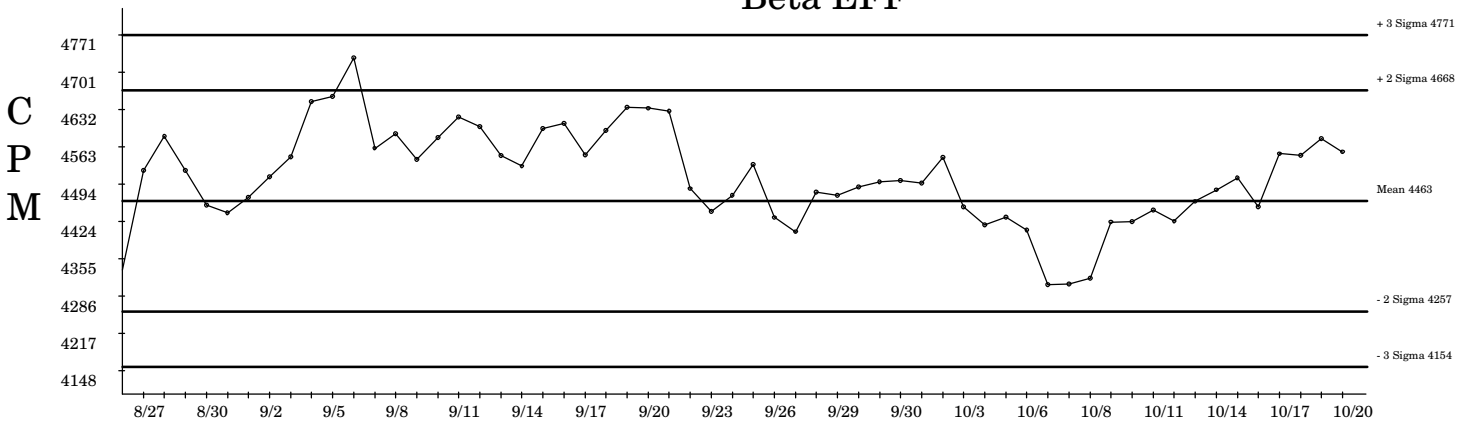

○ Denotes Outlier

LB4100C2 10/19/2005

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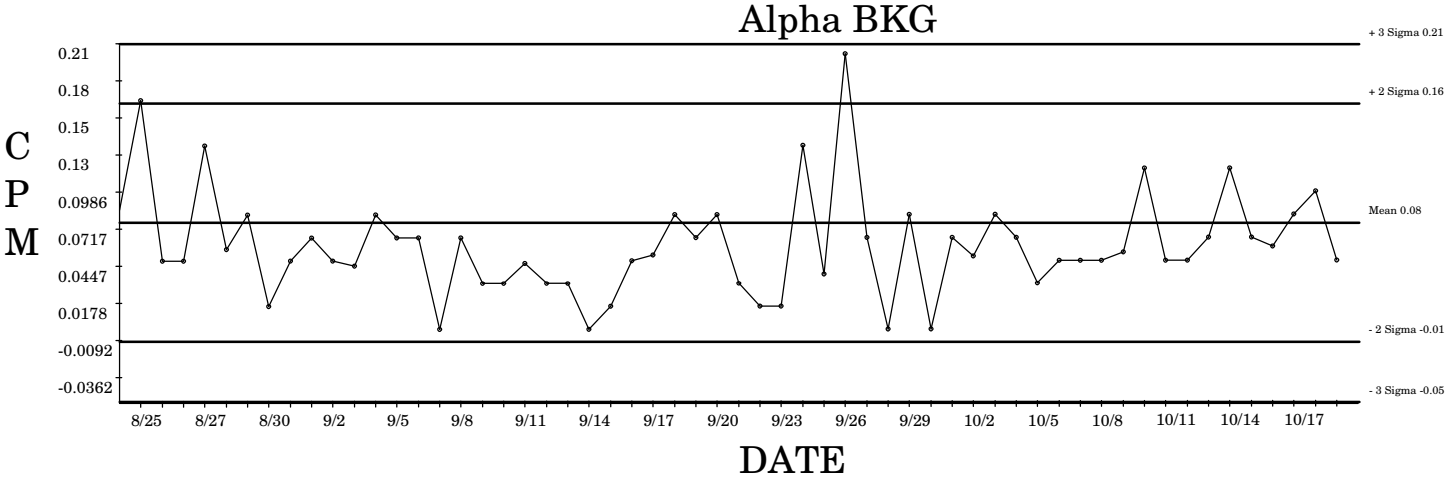

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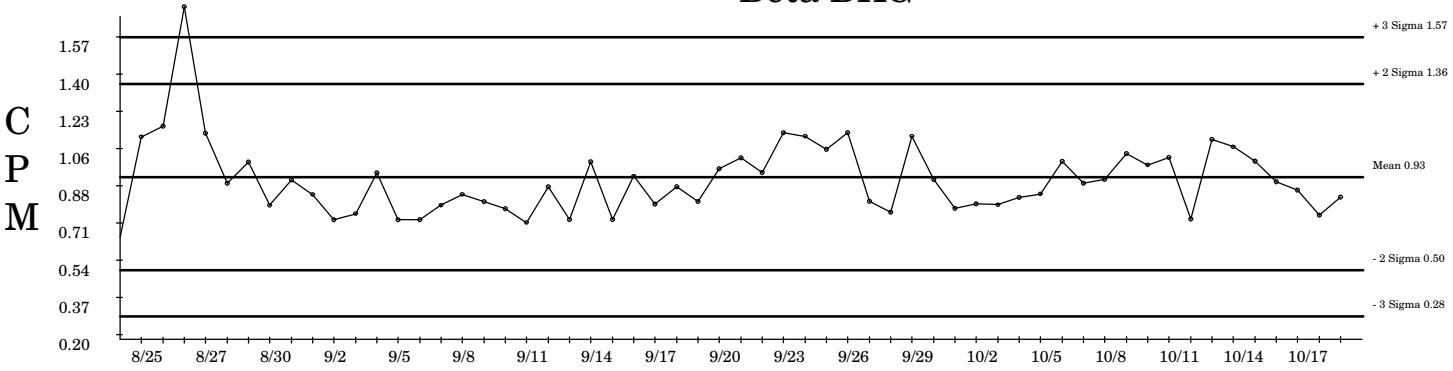

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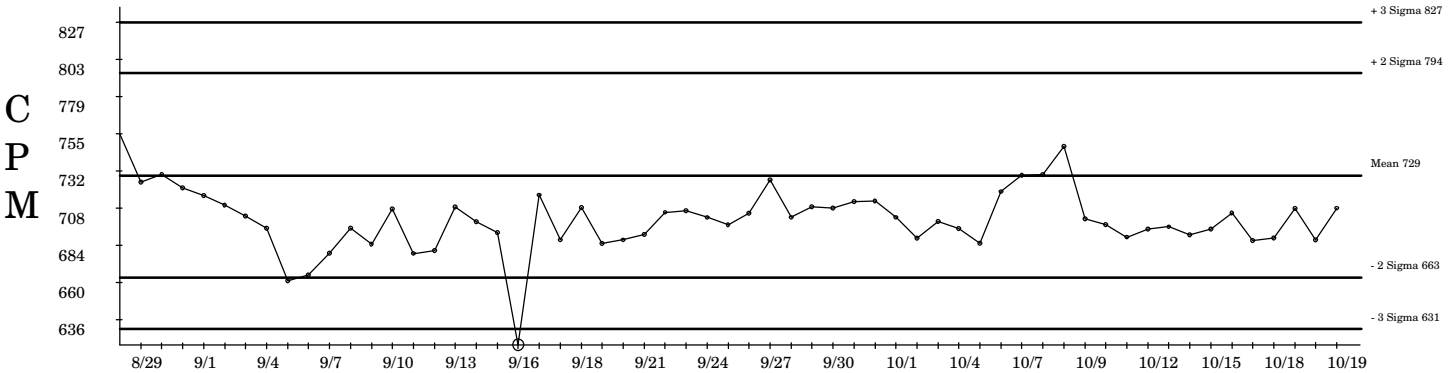

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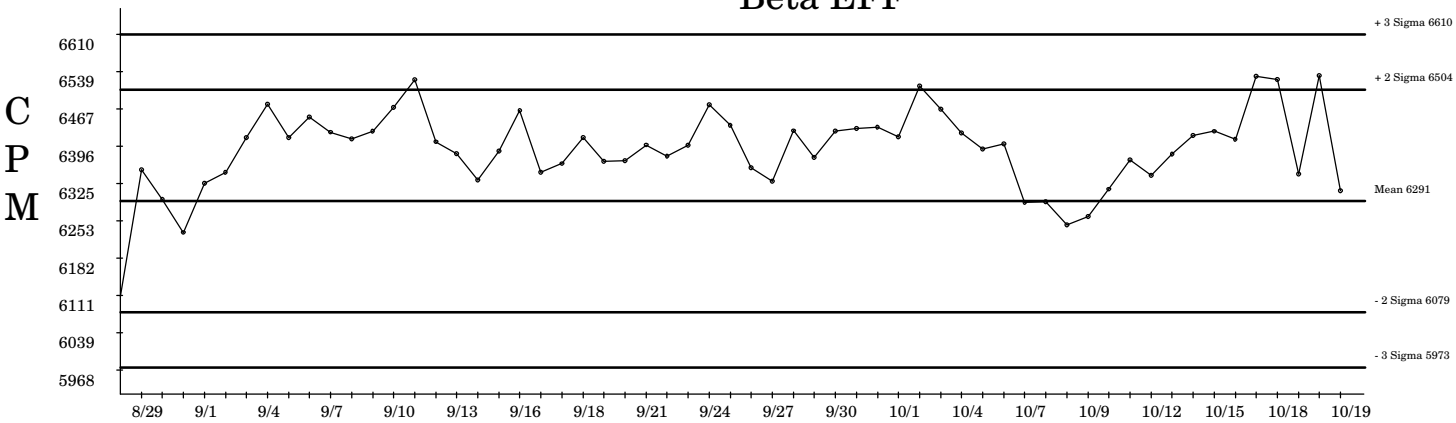

○ Denotes Outlier

LB4100D2 10/19/2005

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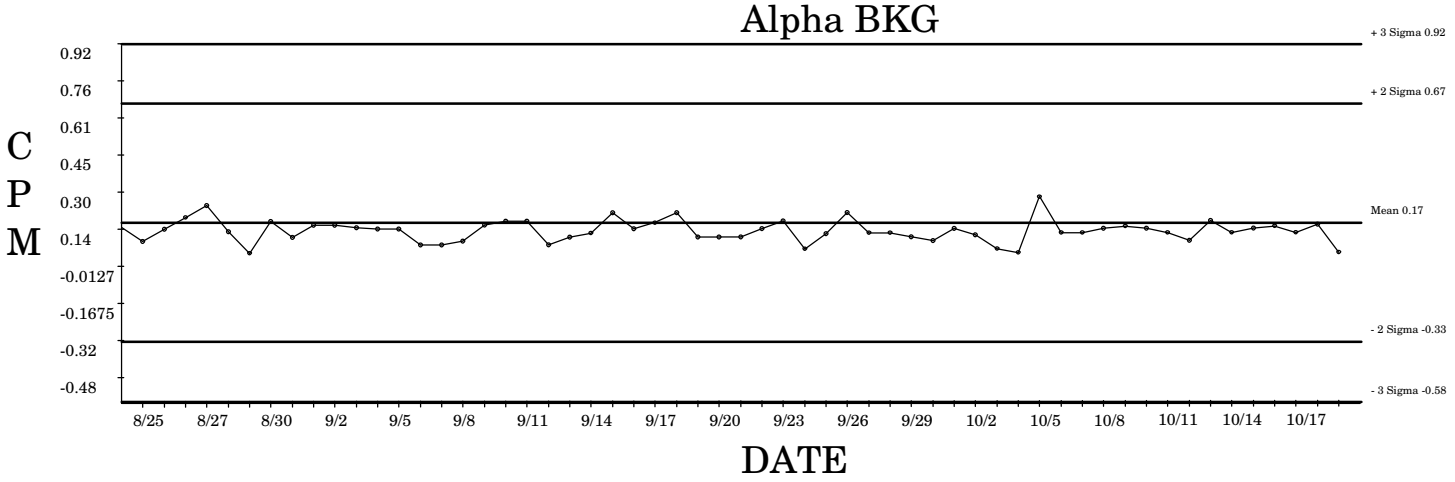

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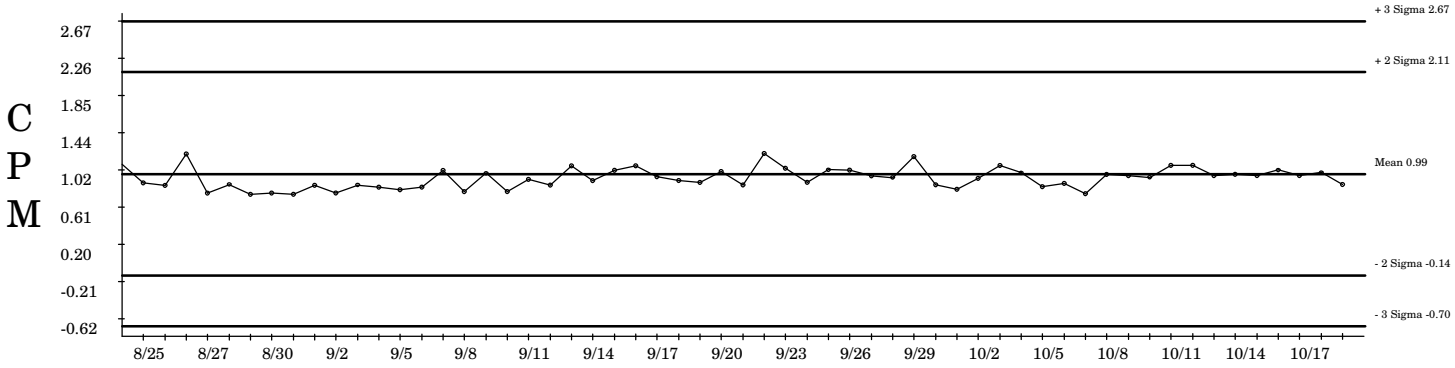

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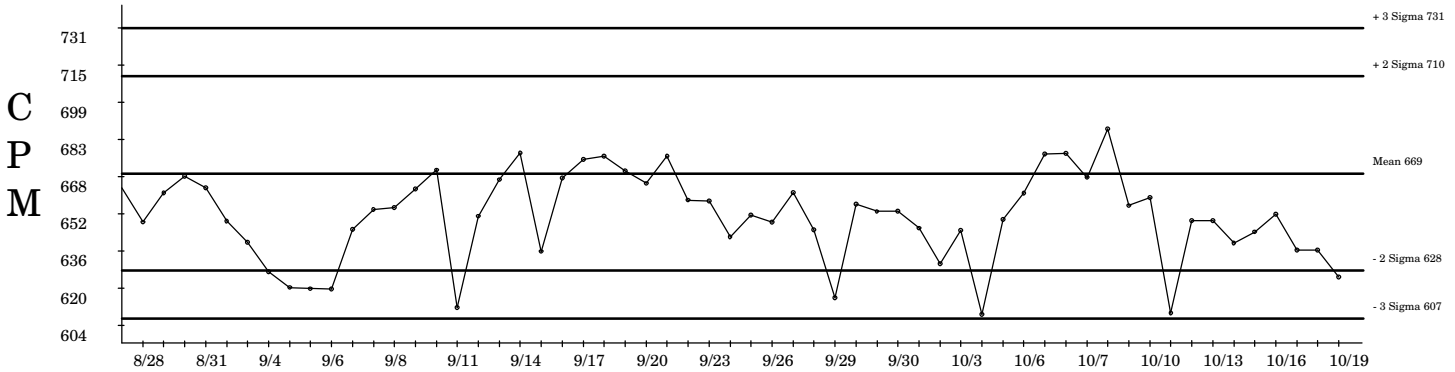

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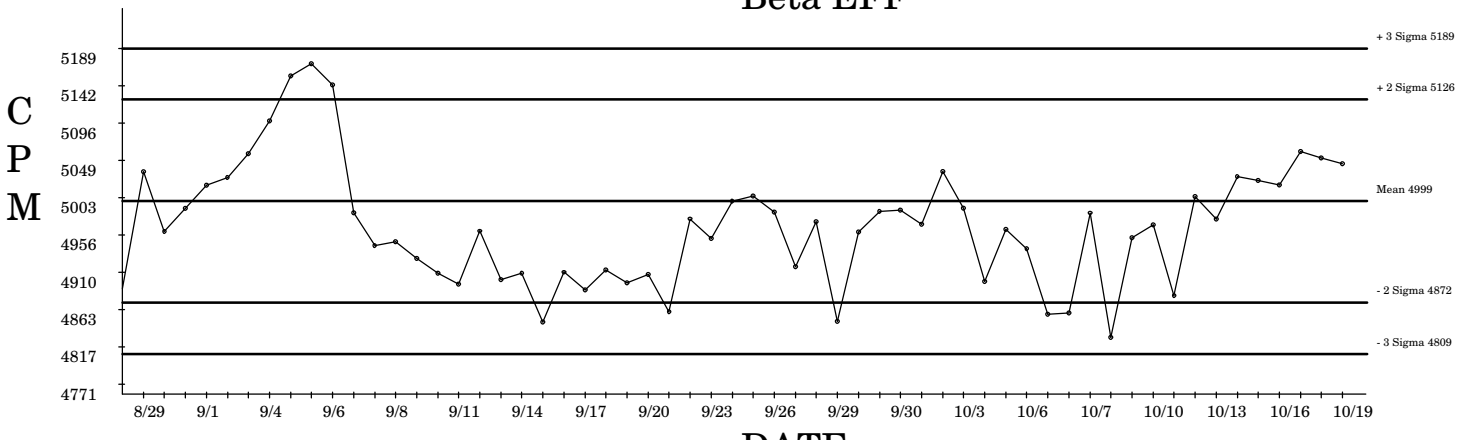
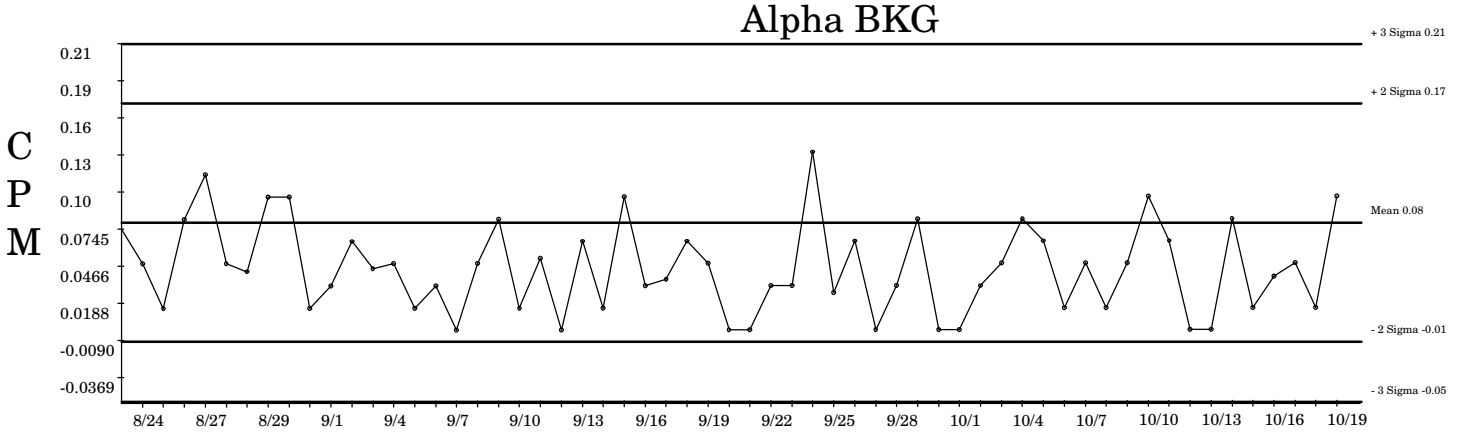


○ Denotes Outlier

LB4100D3 10/19/2005

Alpha BKG



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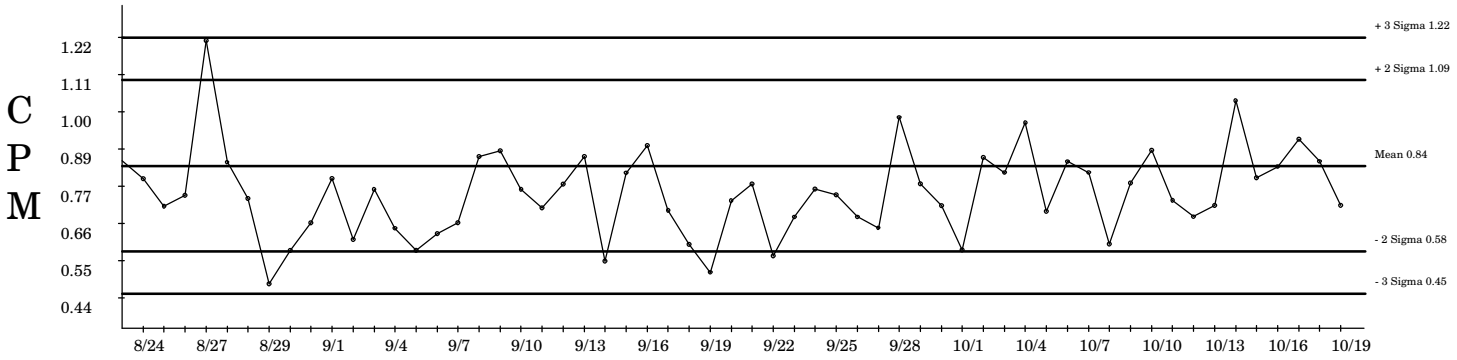

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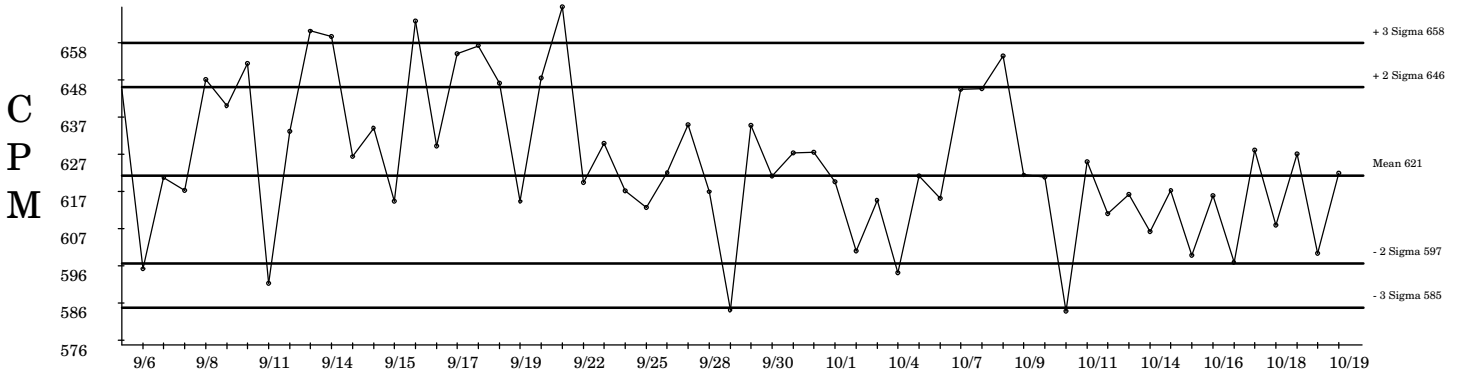

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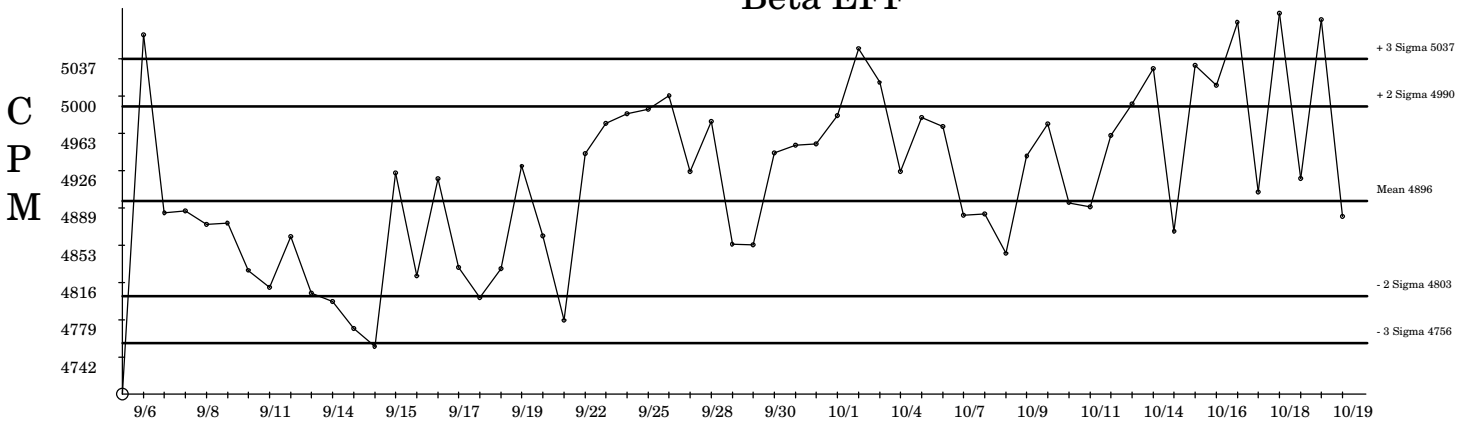
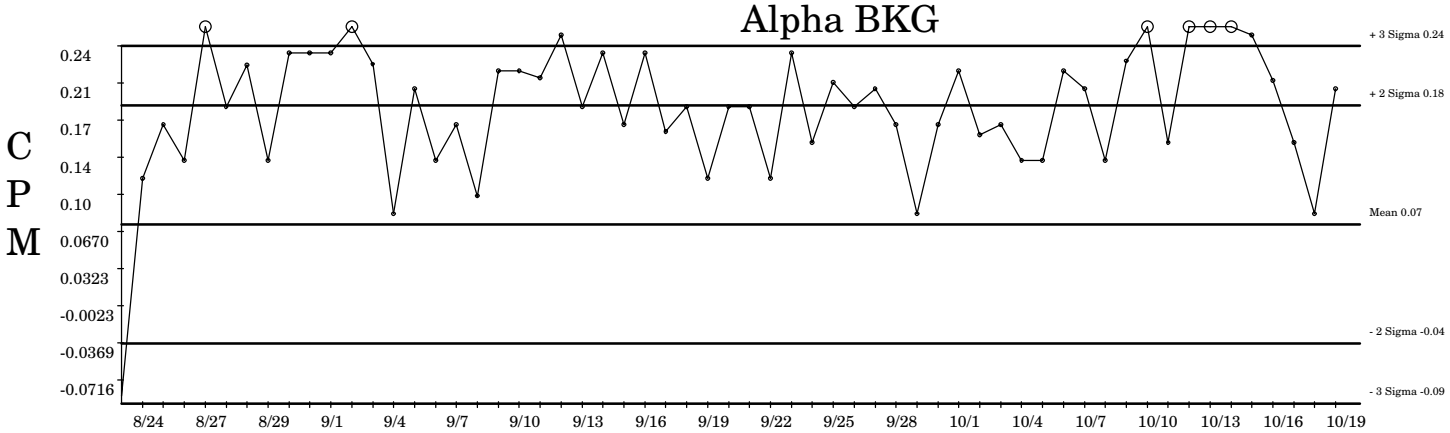


○ Denotes Outlier

LB4100E1 10/19/2005

Alpha BKG



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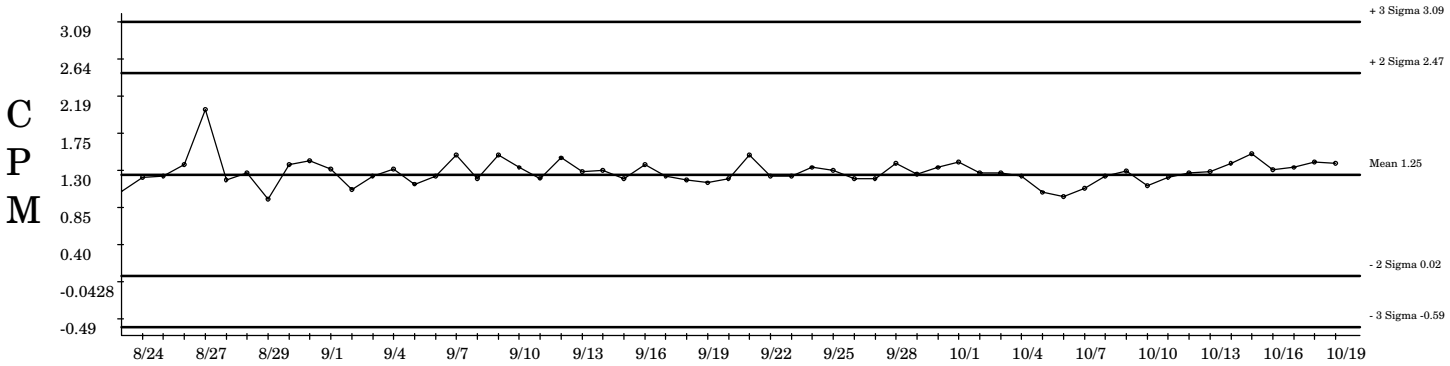
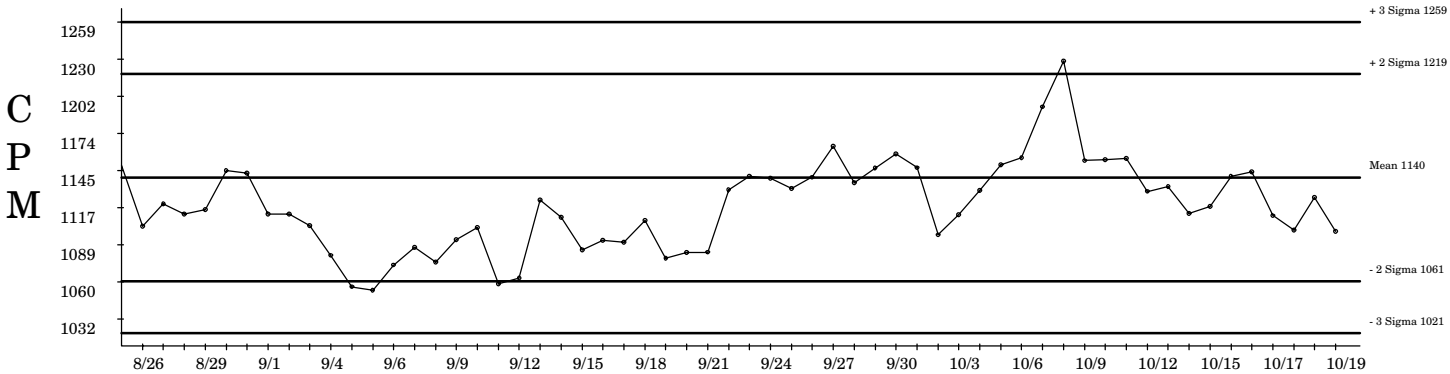


Alpha EFF



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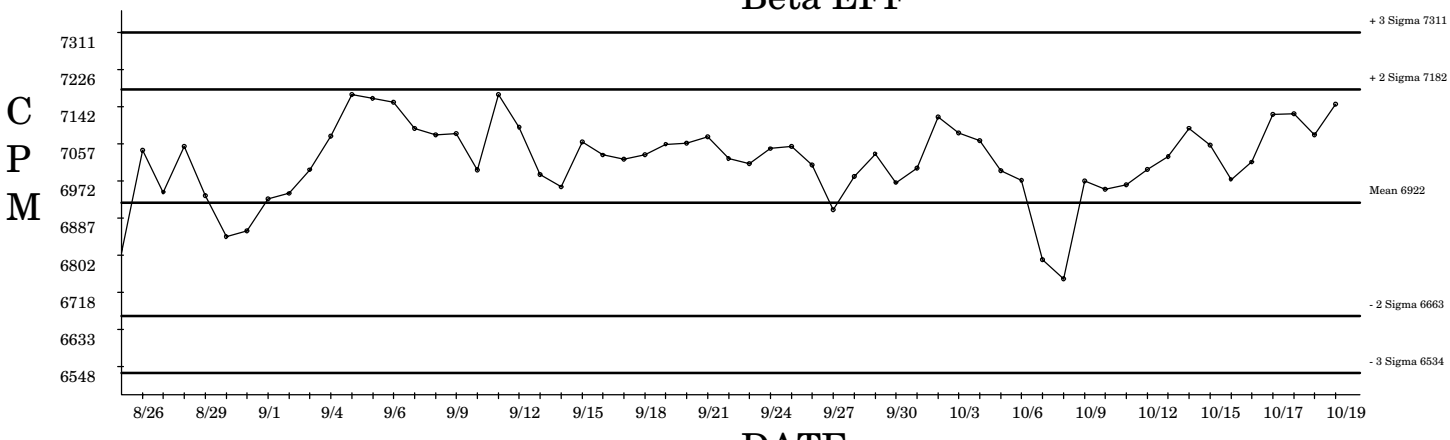
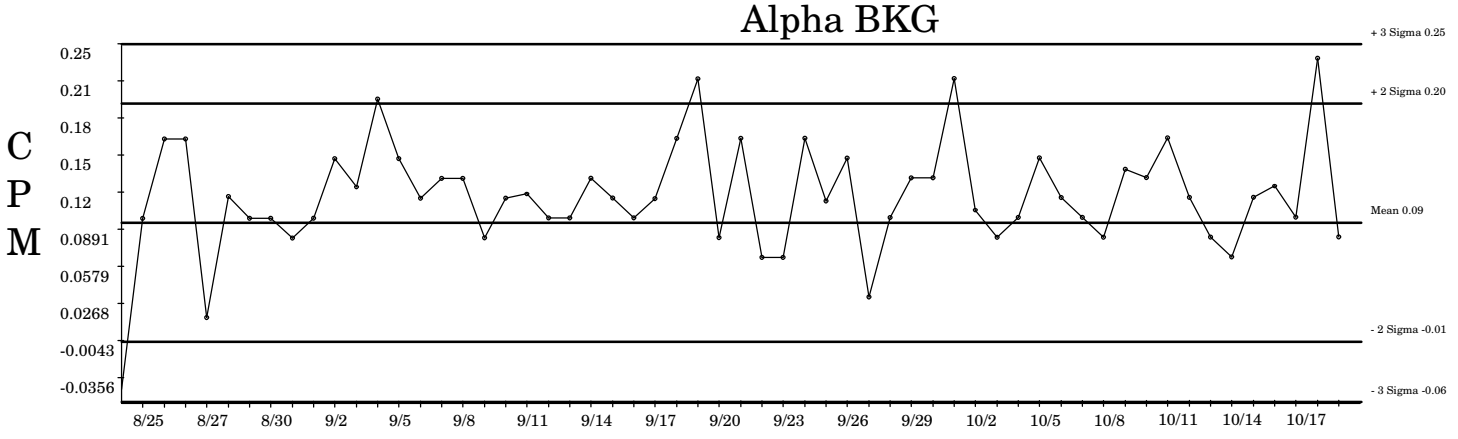


○ Denotes Outlier

LB4100E2 10/19/2005

Alpha BKG



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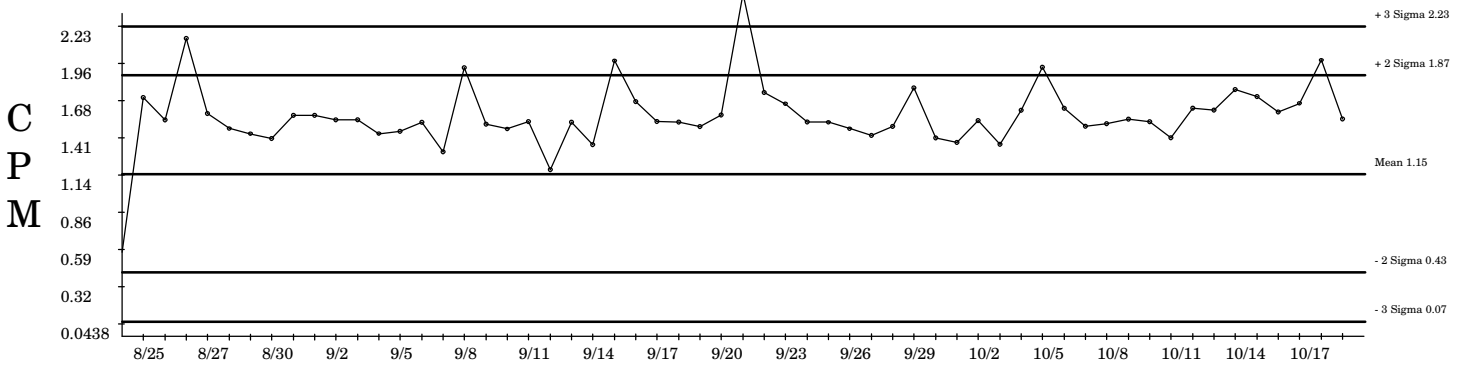

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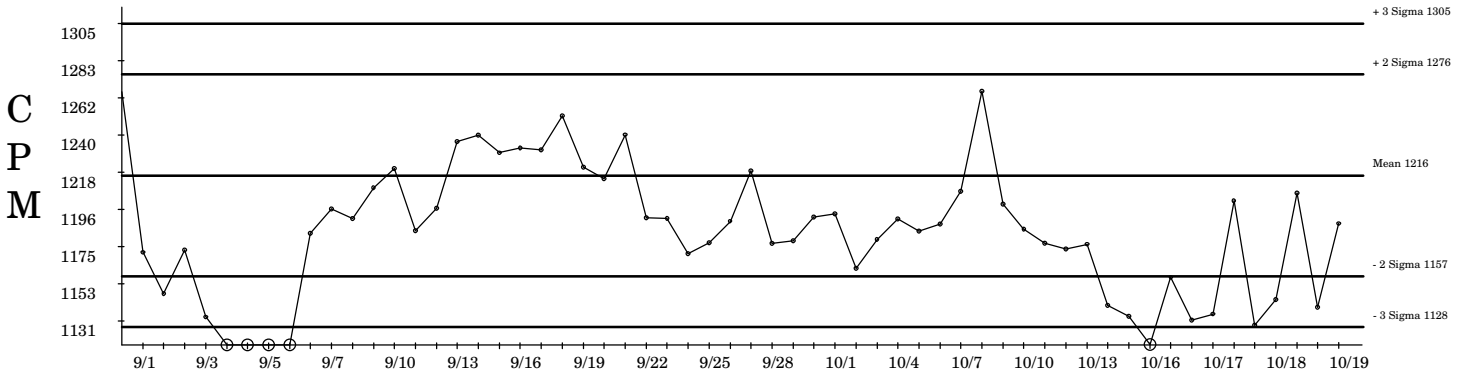

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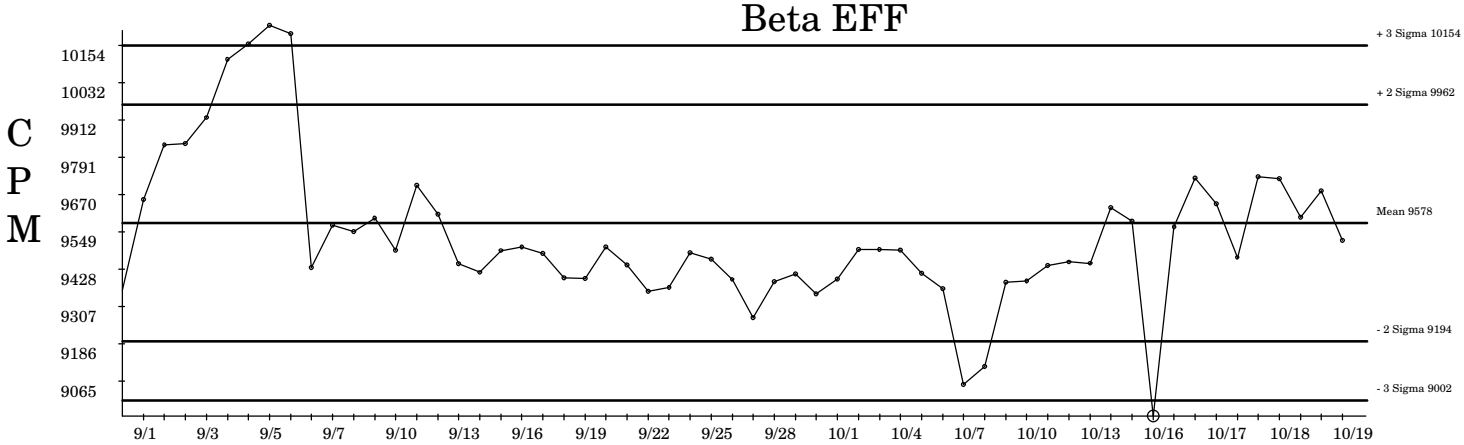

○ Denotes Outlier

LB4100E3 10/19/2005

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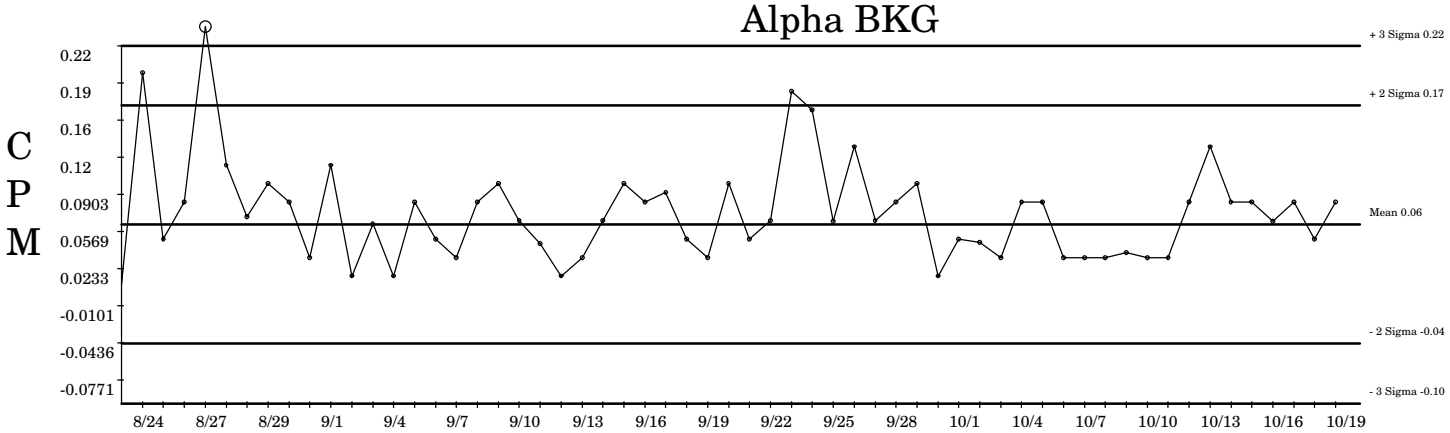

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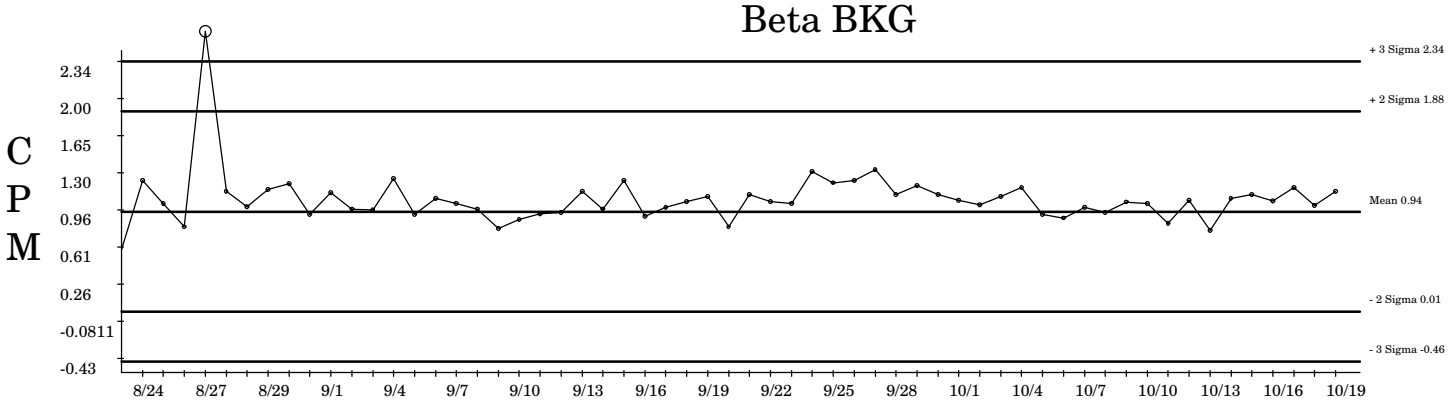

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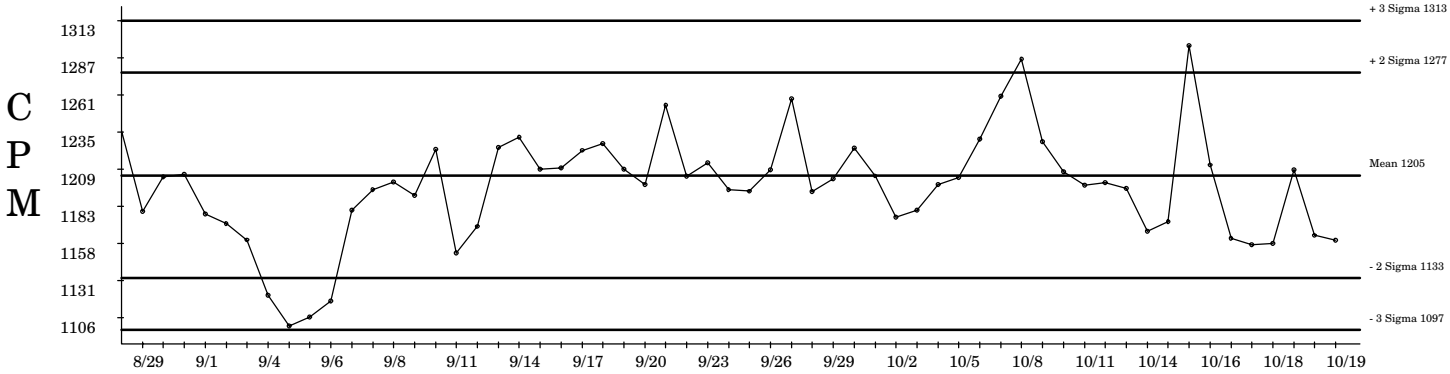

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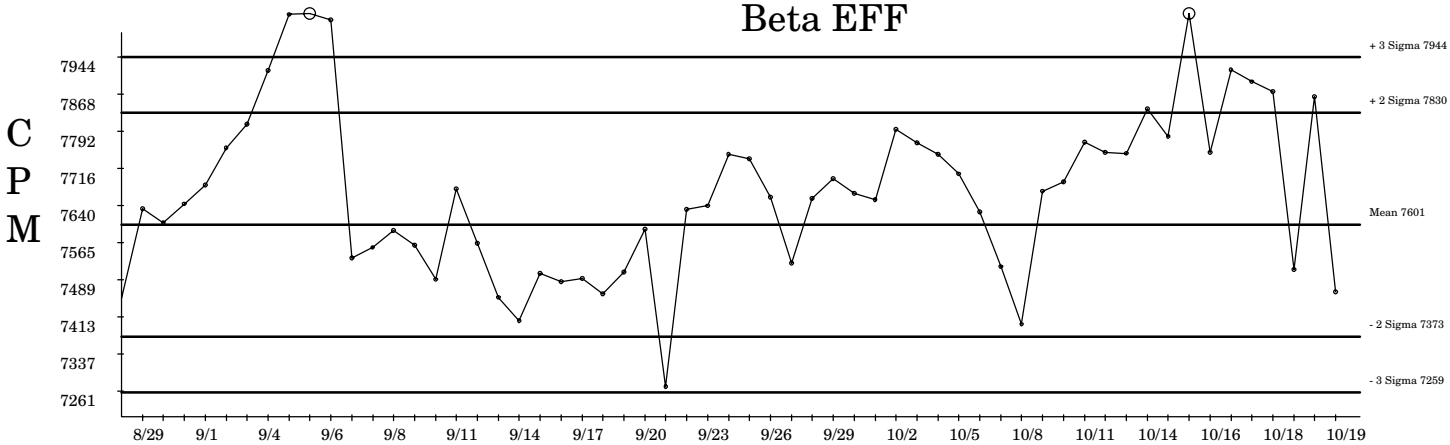

○ Denotes Outlier

LB4100F1 10/19/2005

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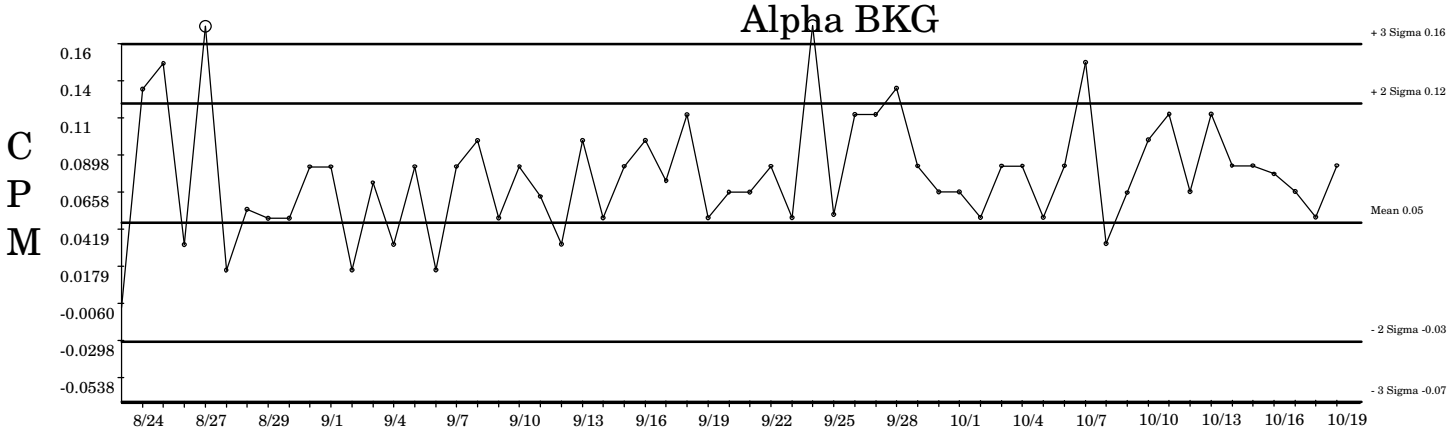

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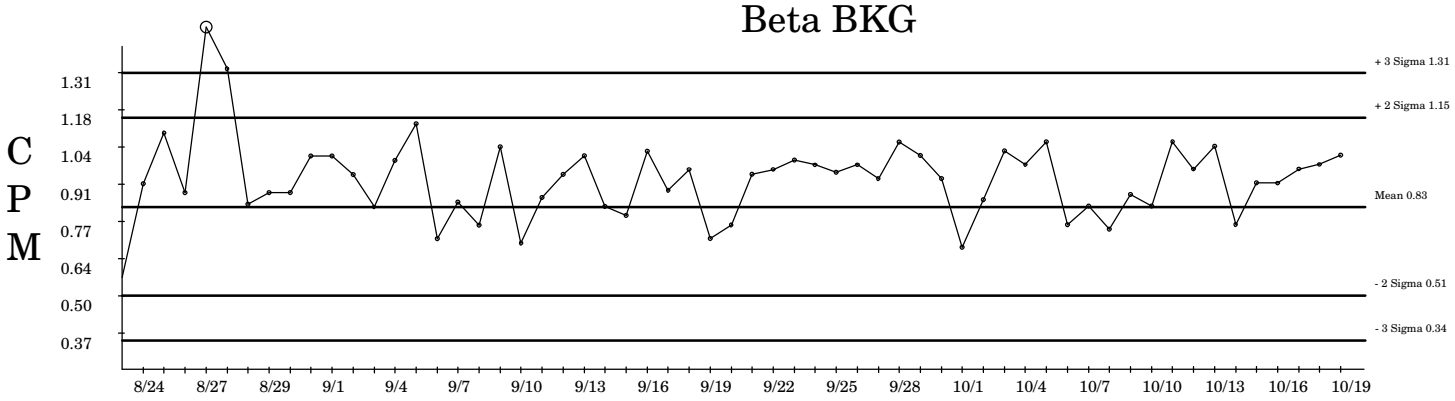

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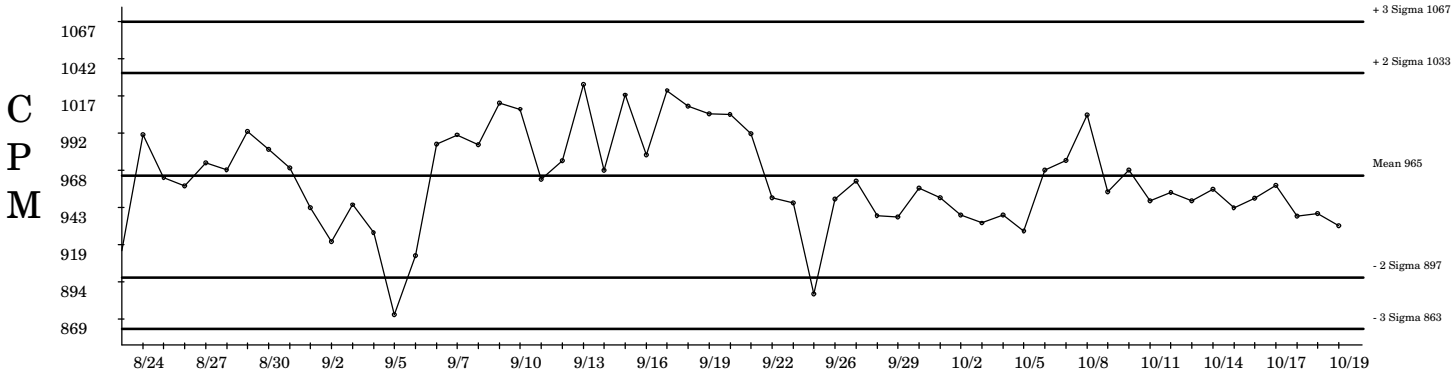

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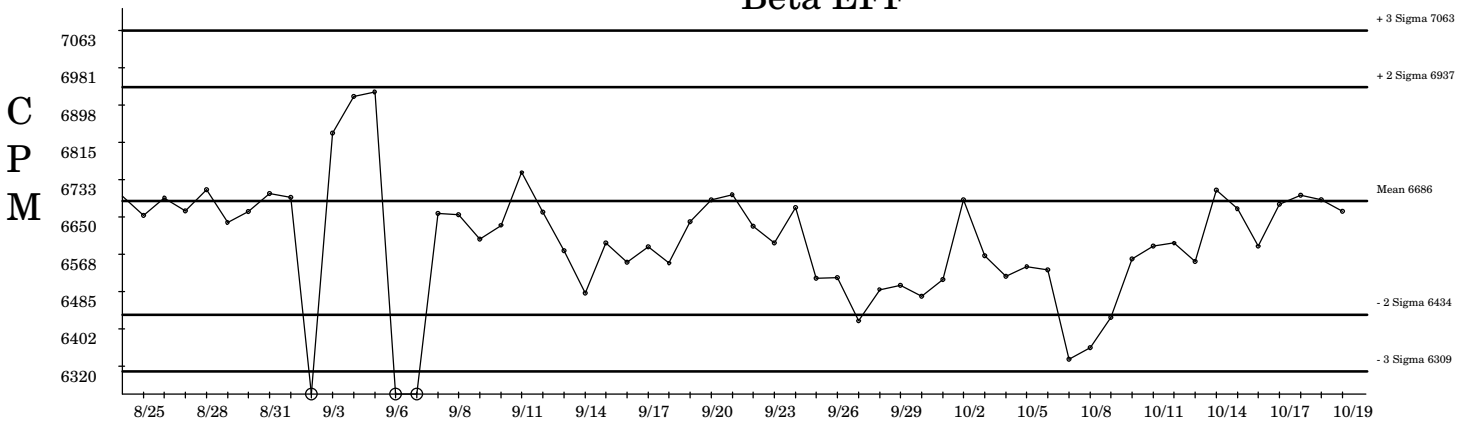

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LB4100F2 10/19/2005

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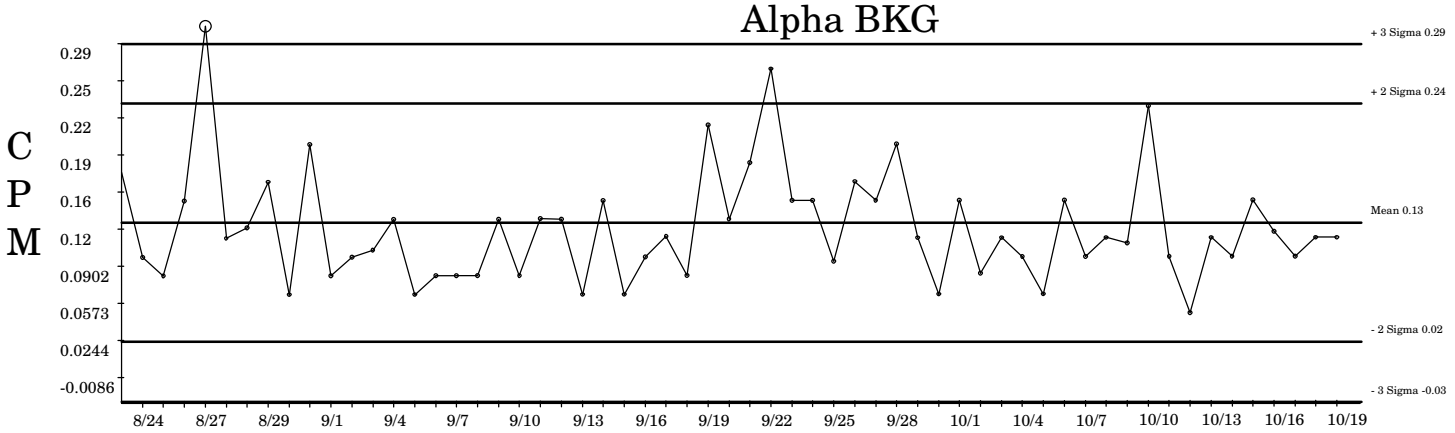

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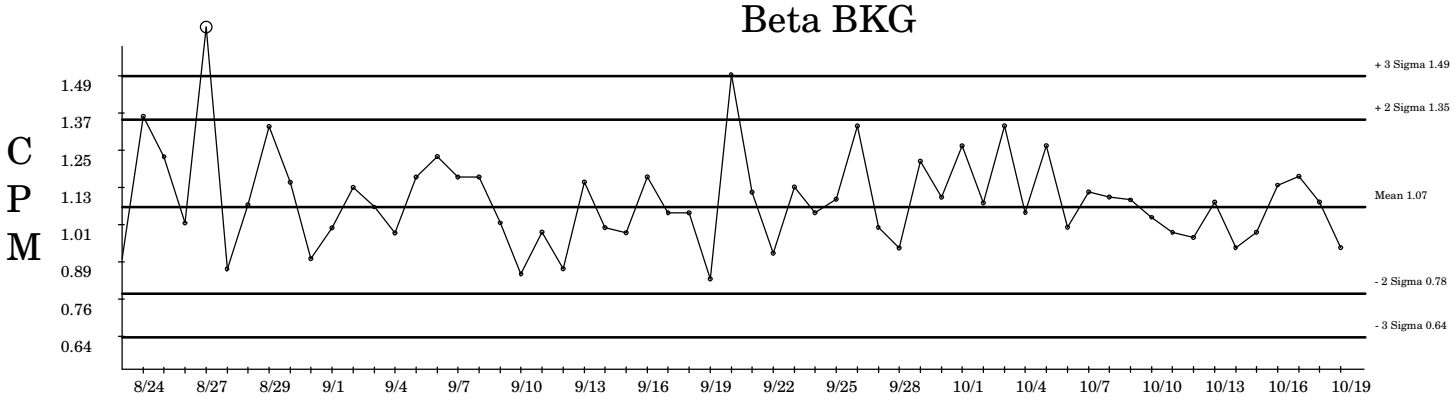

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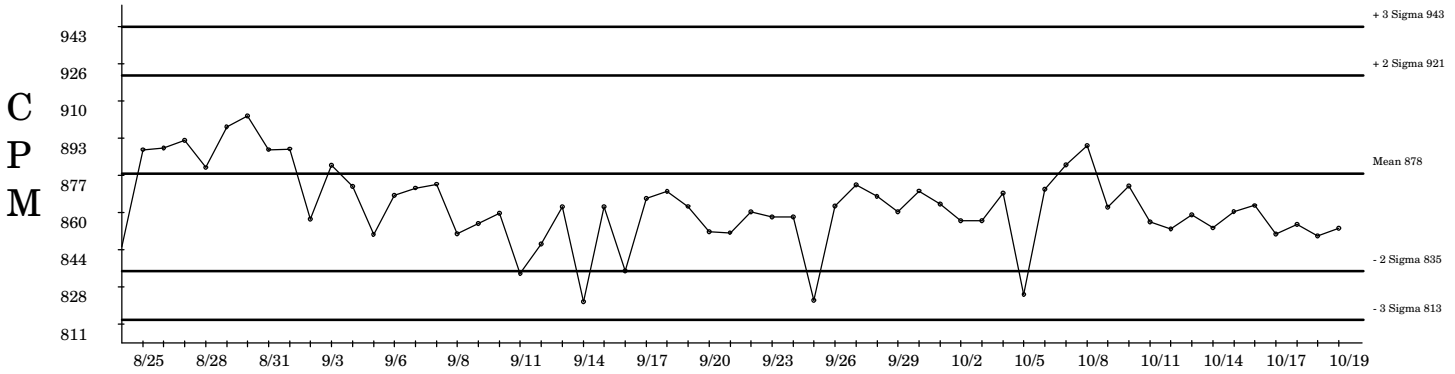

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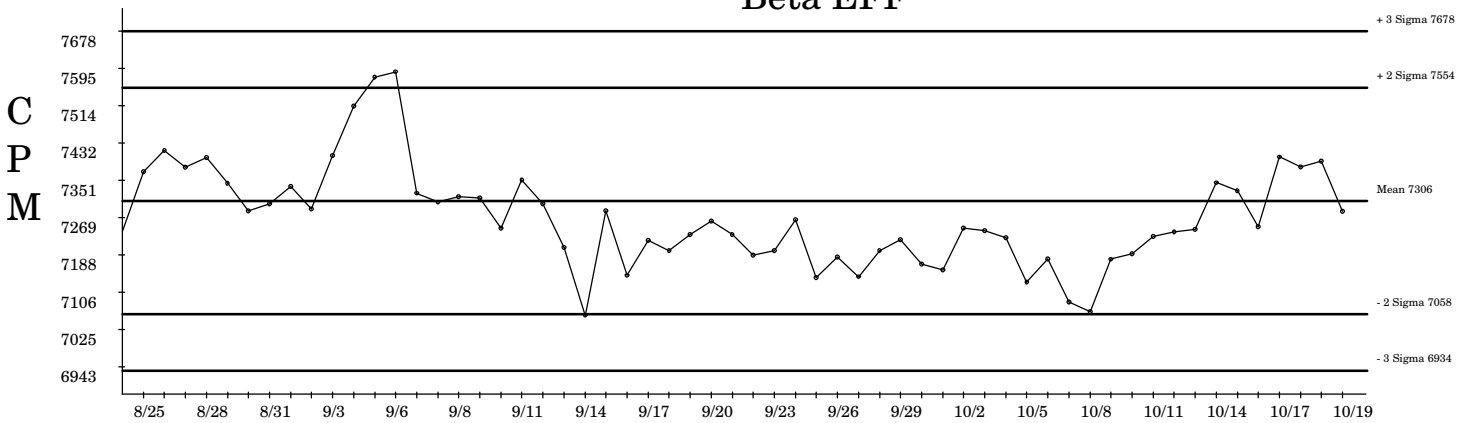

○ Denotes Outlier

LB4100F3 10/19/2005

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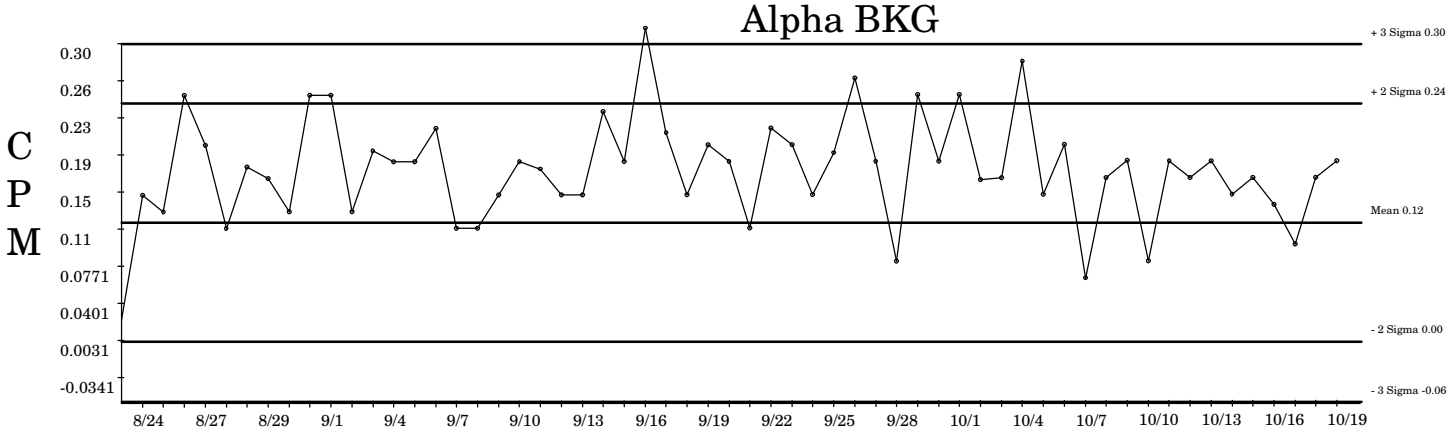

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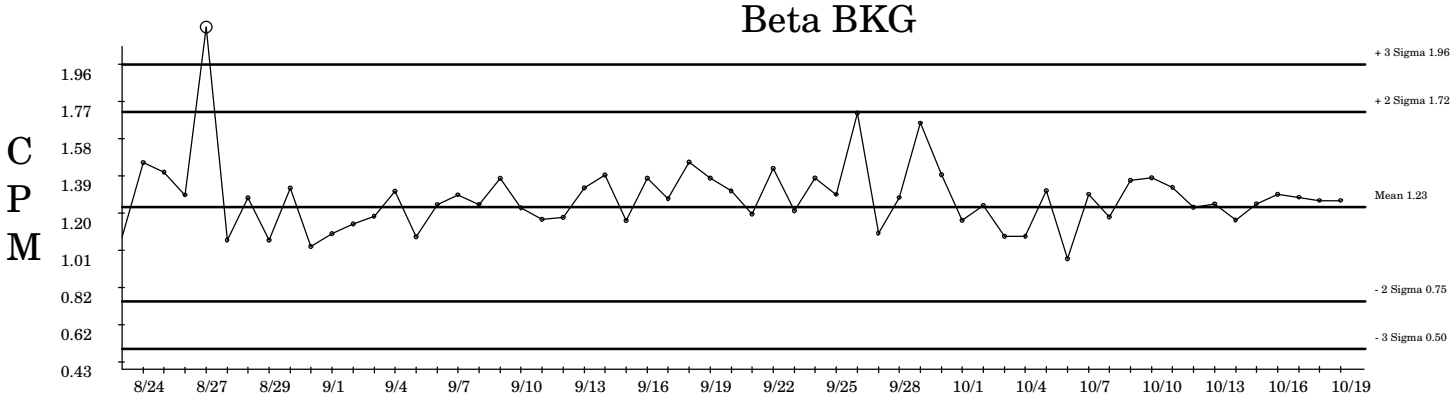

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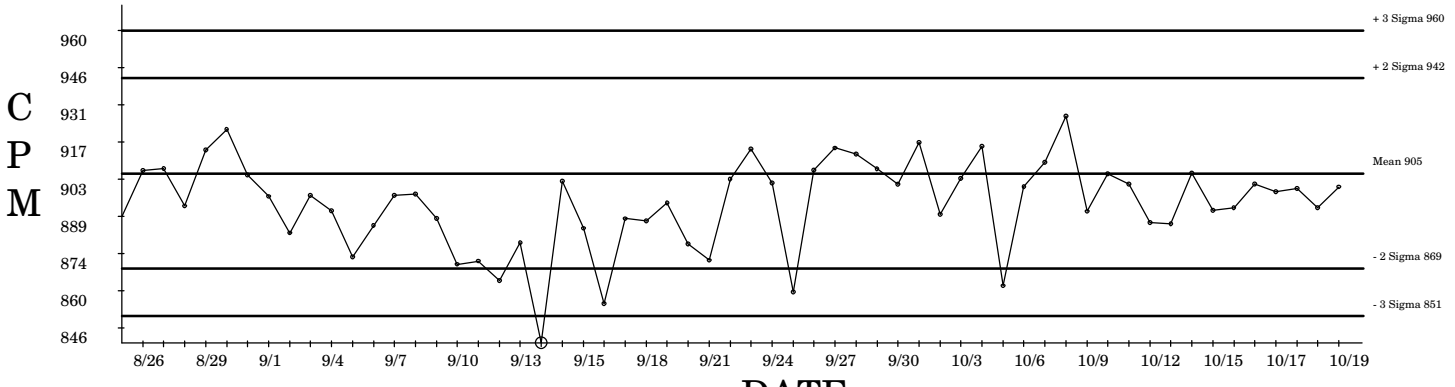

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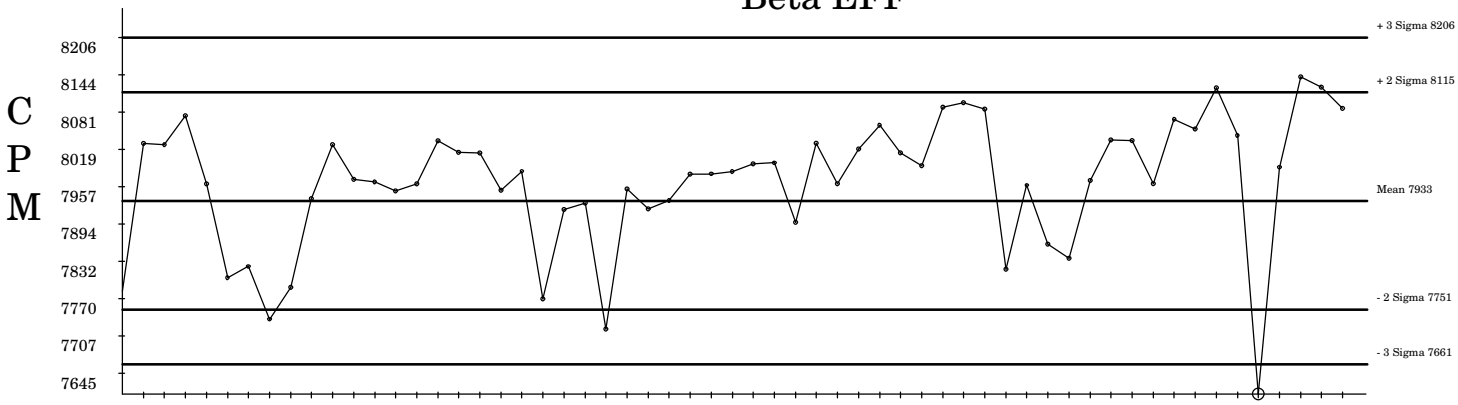

○ Denotes Outlier

LB4100G2 10/19/2005

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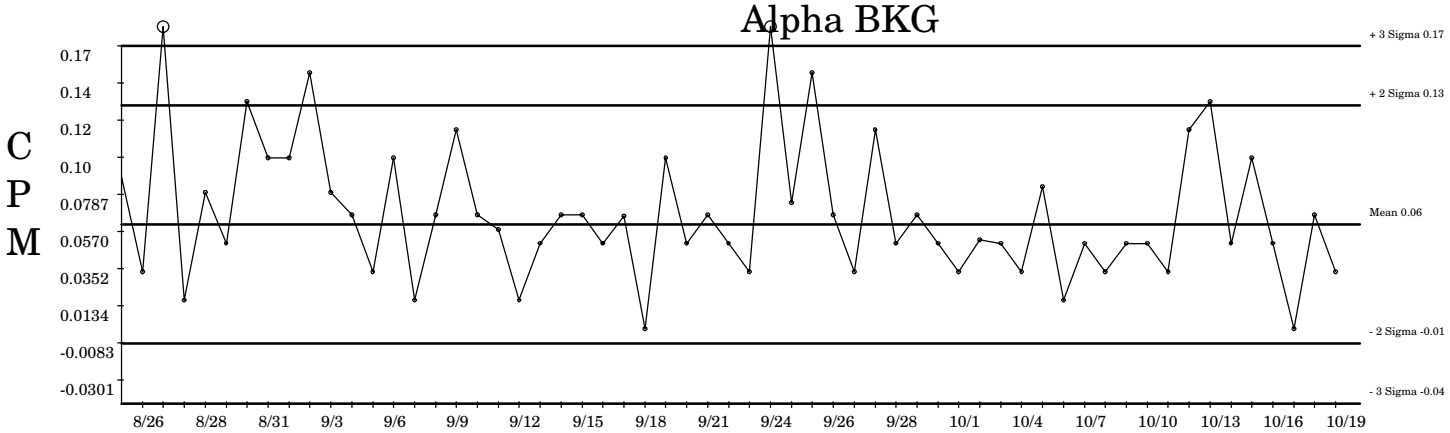

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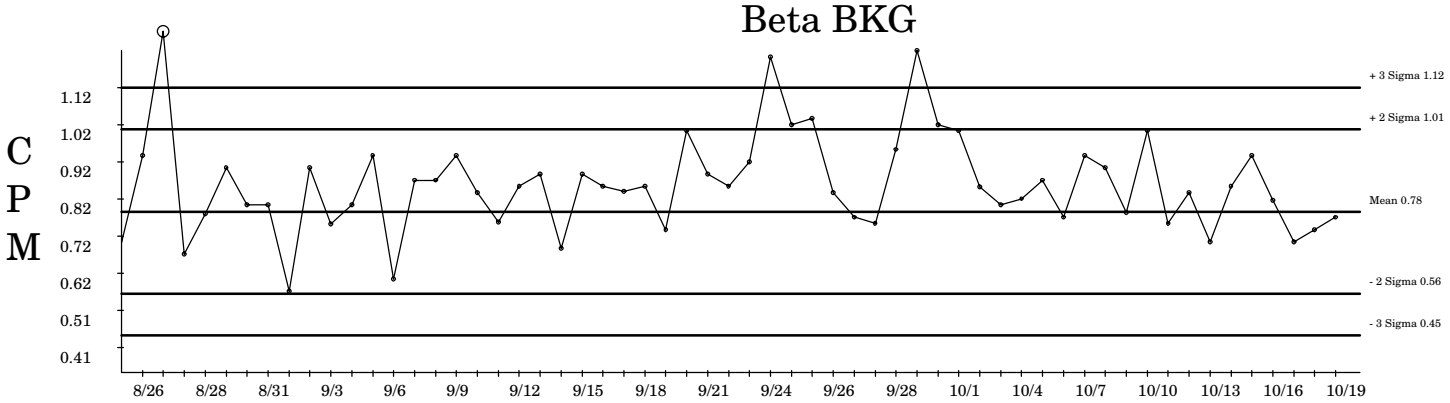

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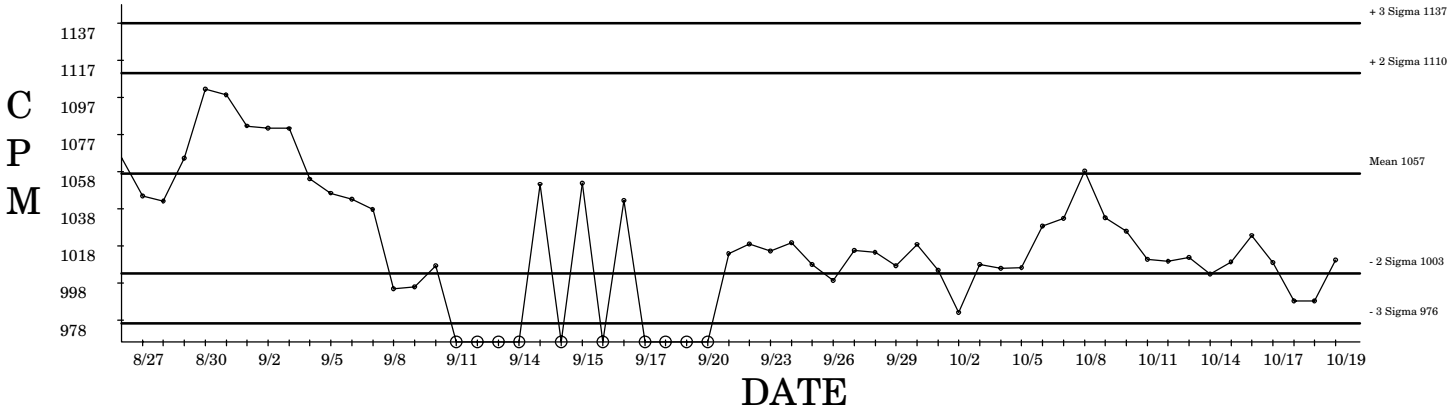

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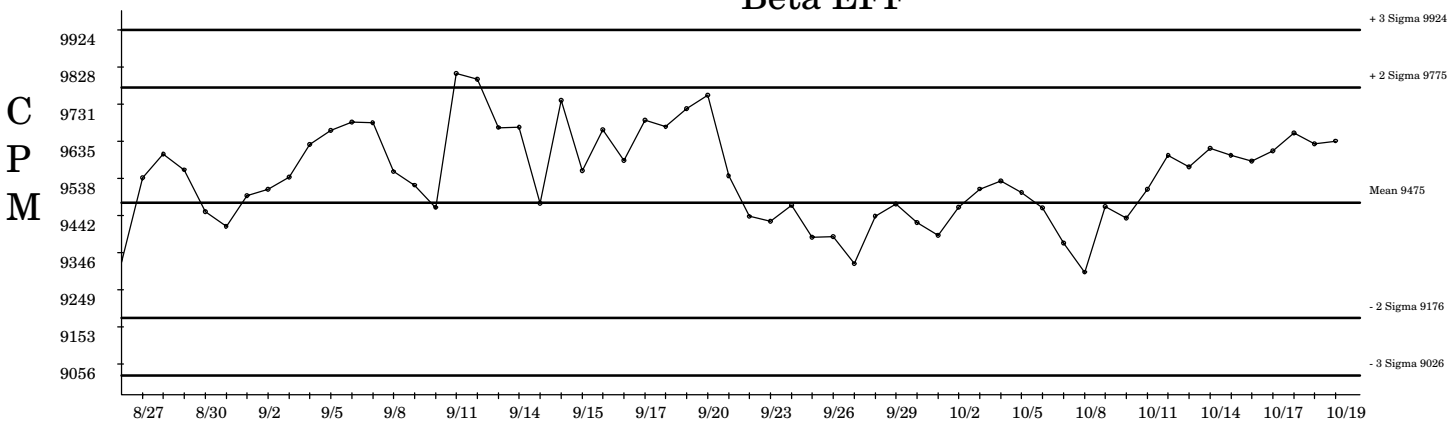

○ Denotes Outlier

LB4100G4 10/20/2005

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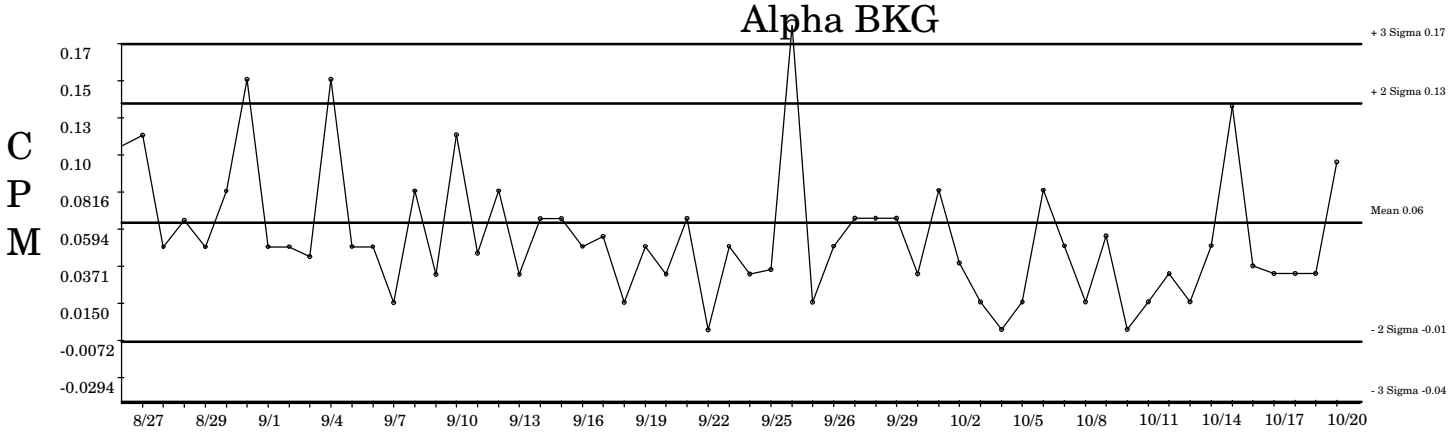

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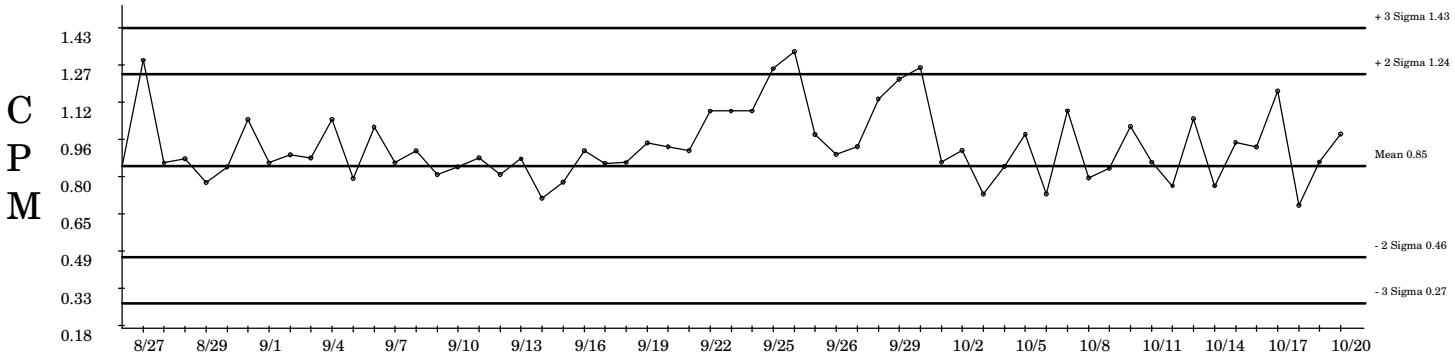

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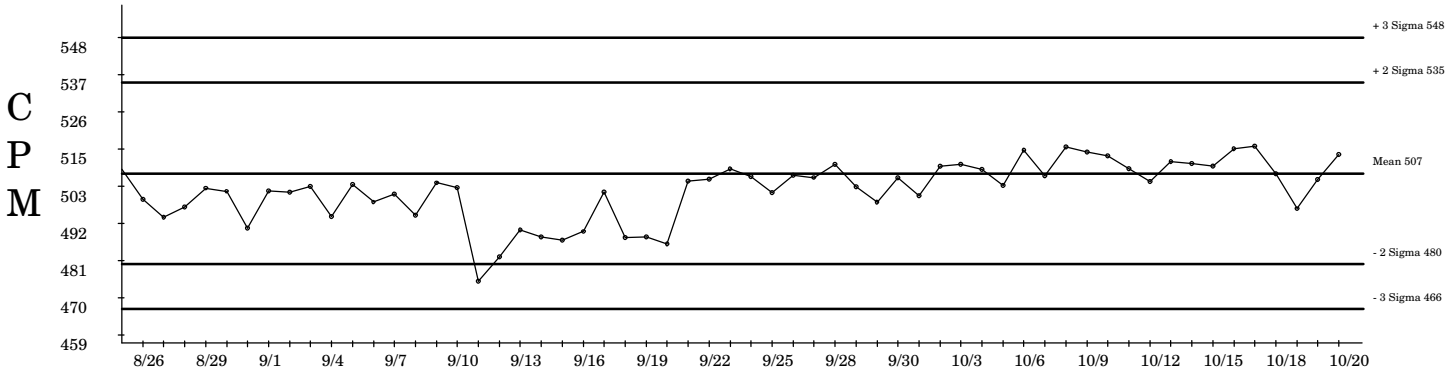

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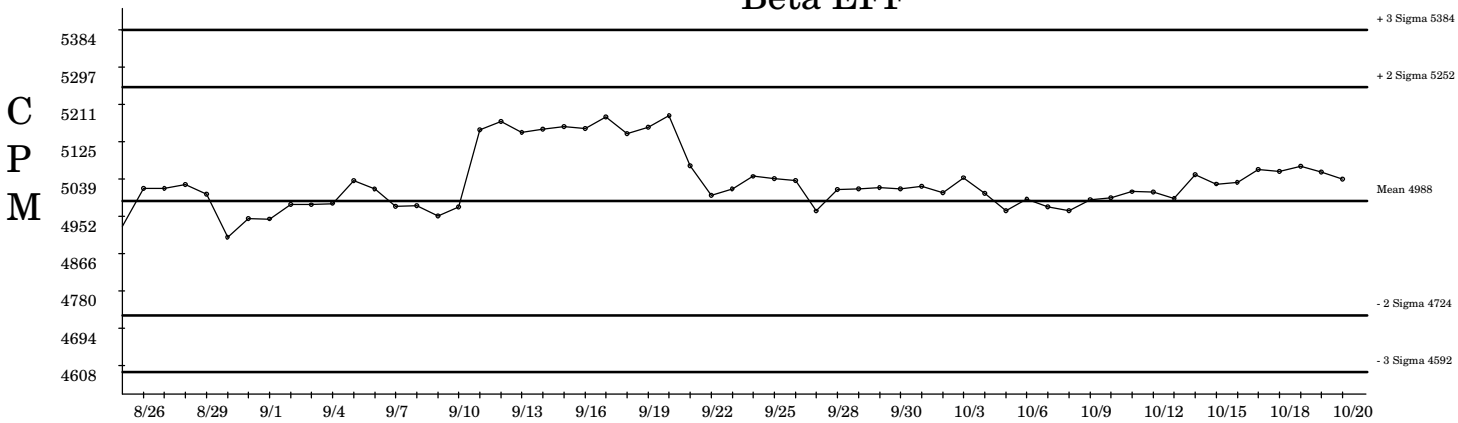

○ Denotes Outlier

LB4100H1 10/20/2005

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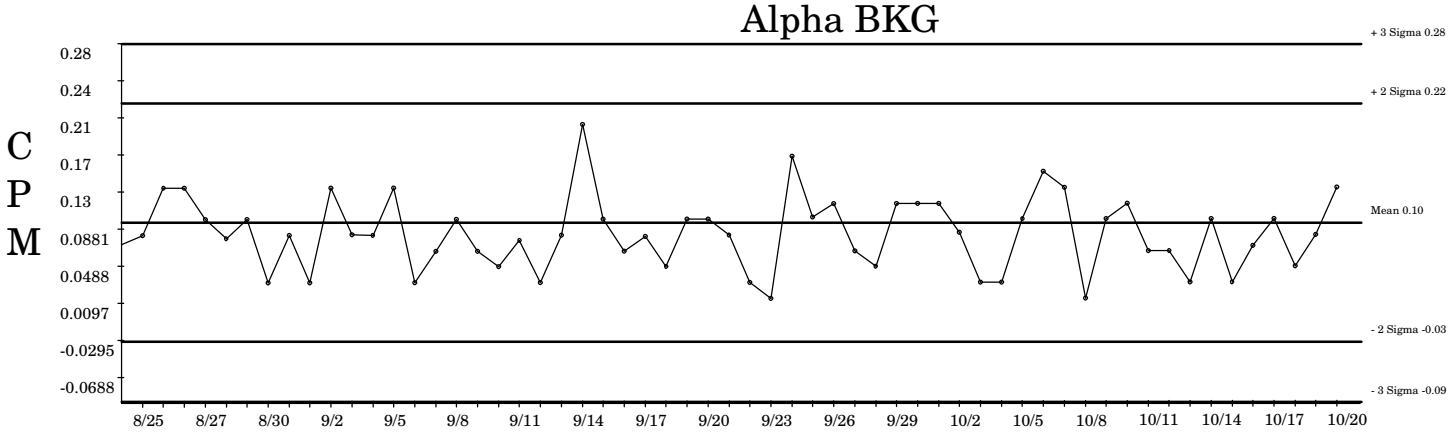

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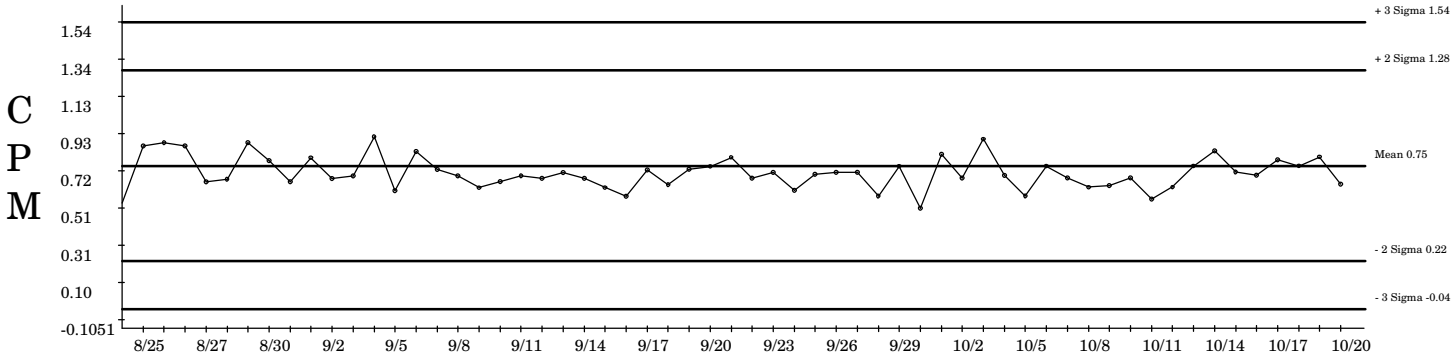

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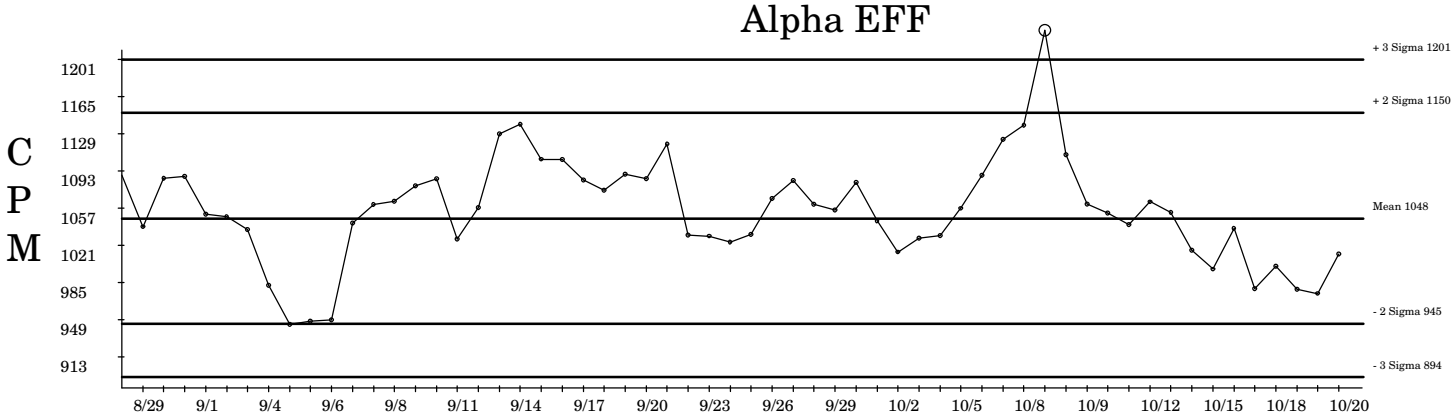

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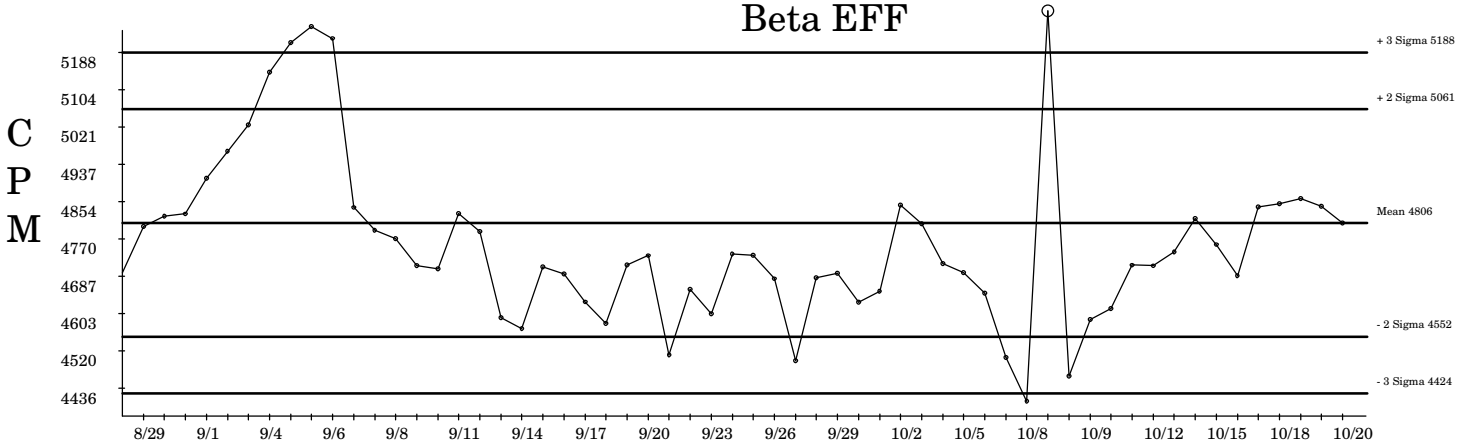

○ Denotes Outlier

LB4100H2 10/20/2005

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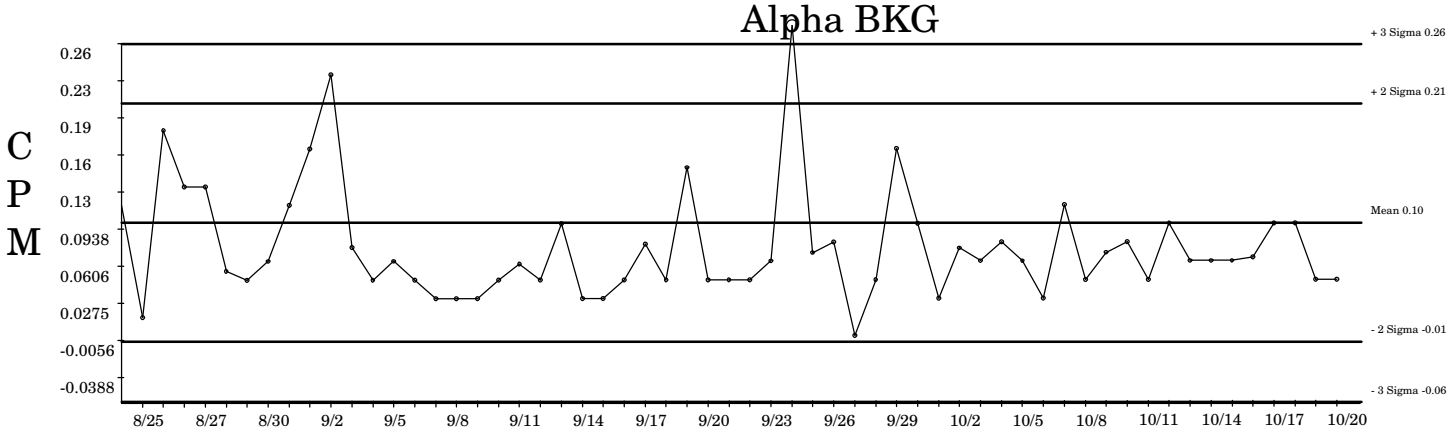

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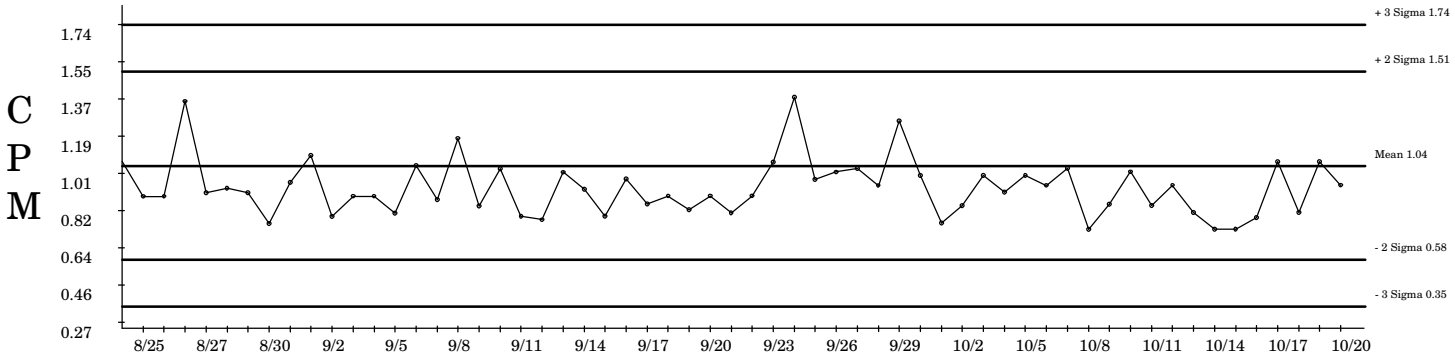

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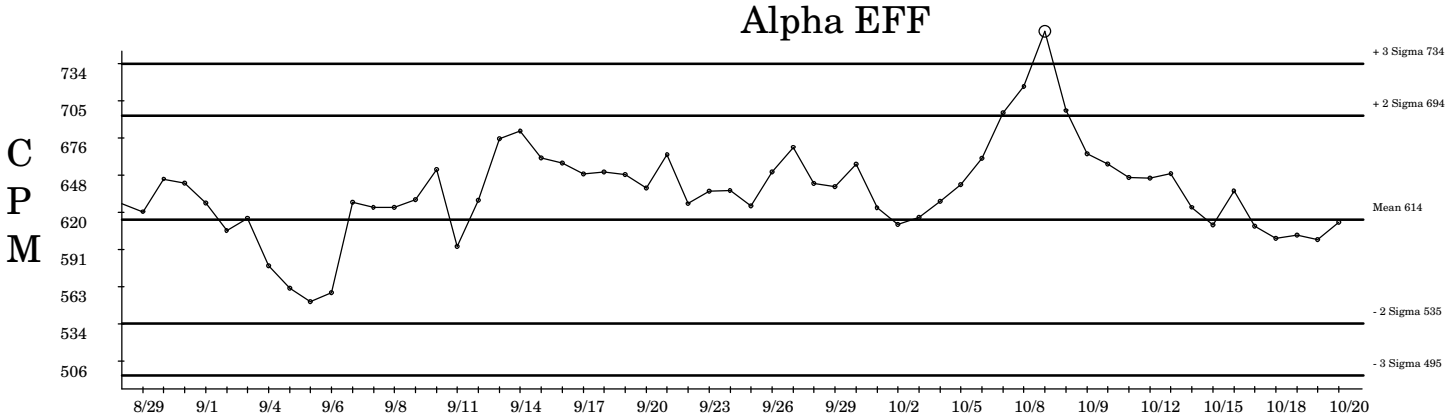

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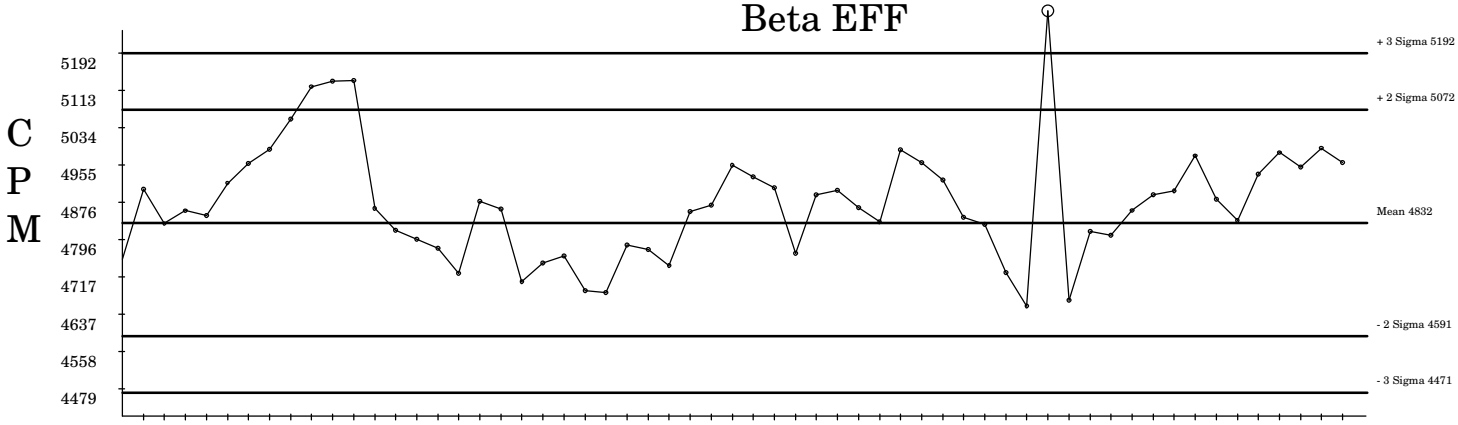

○ Denotes Outlier

LB4100H3 10/19/2005

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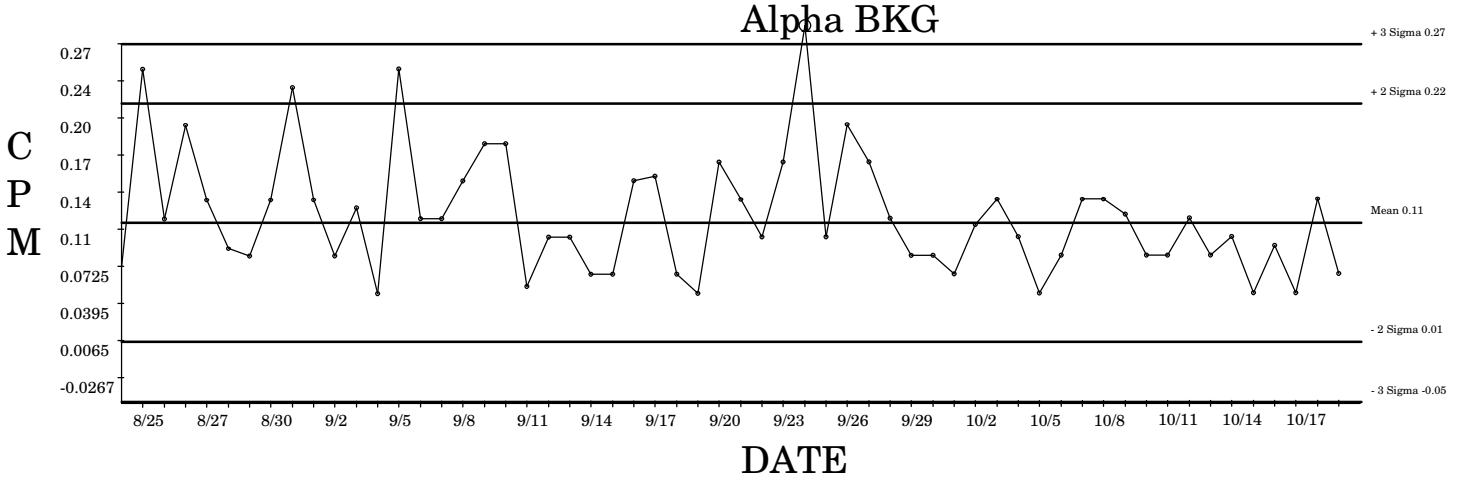

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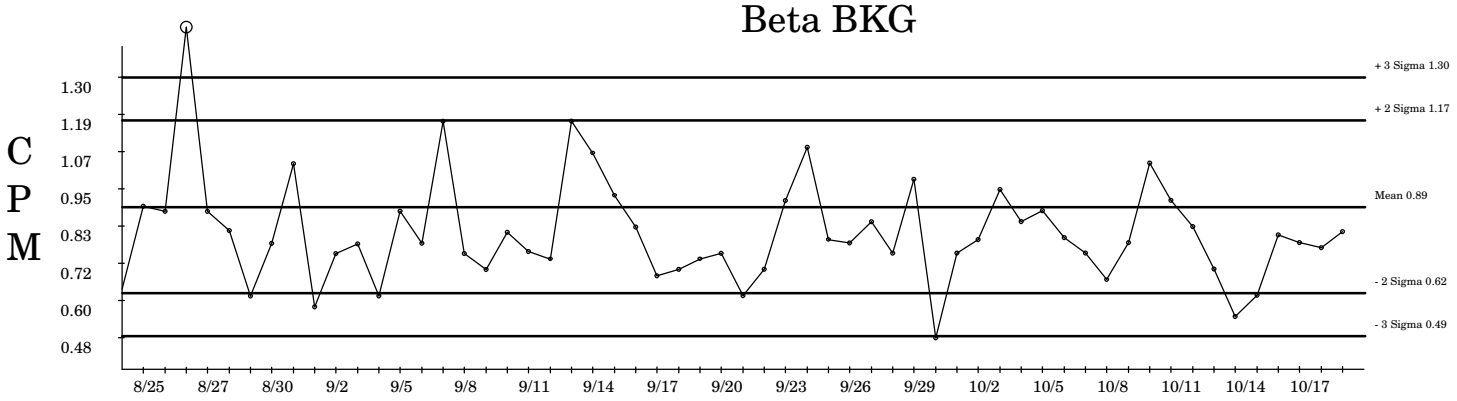

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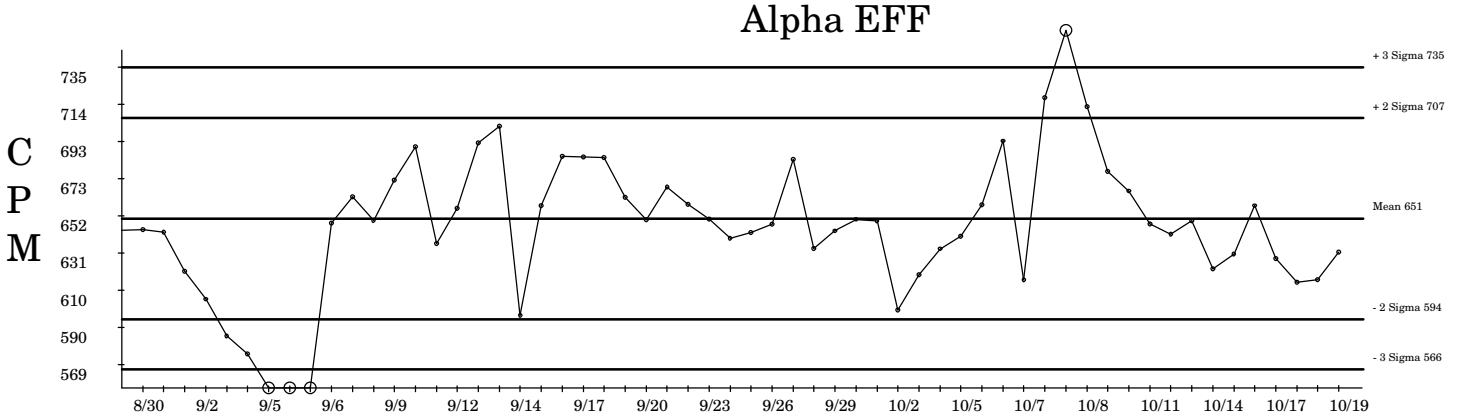

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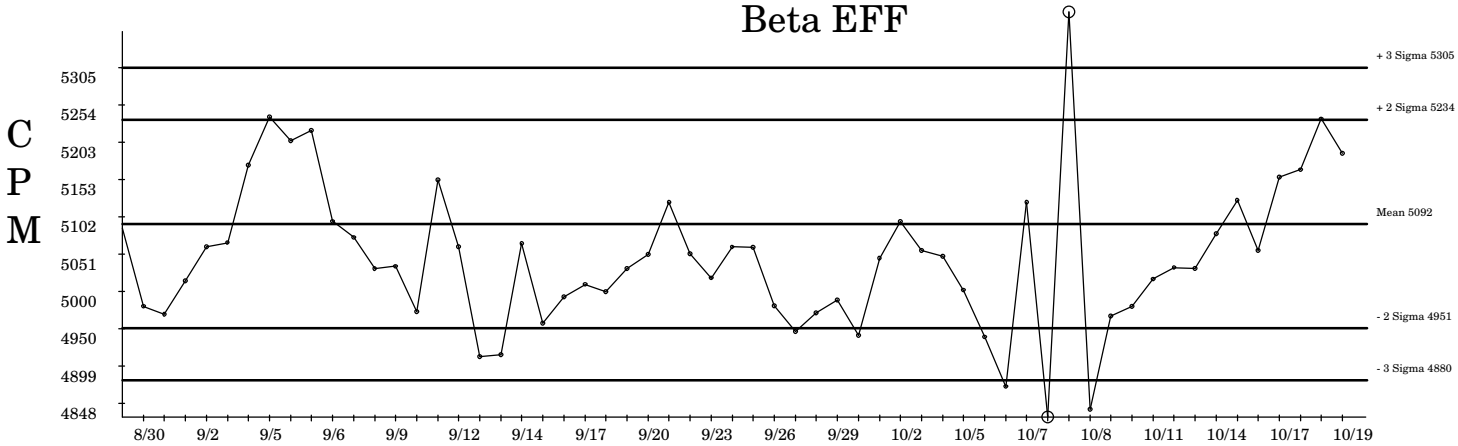

○ Denotes Outlier

LB4100H4 10/19/2005

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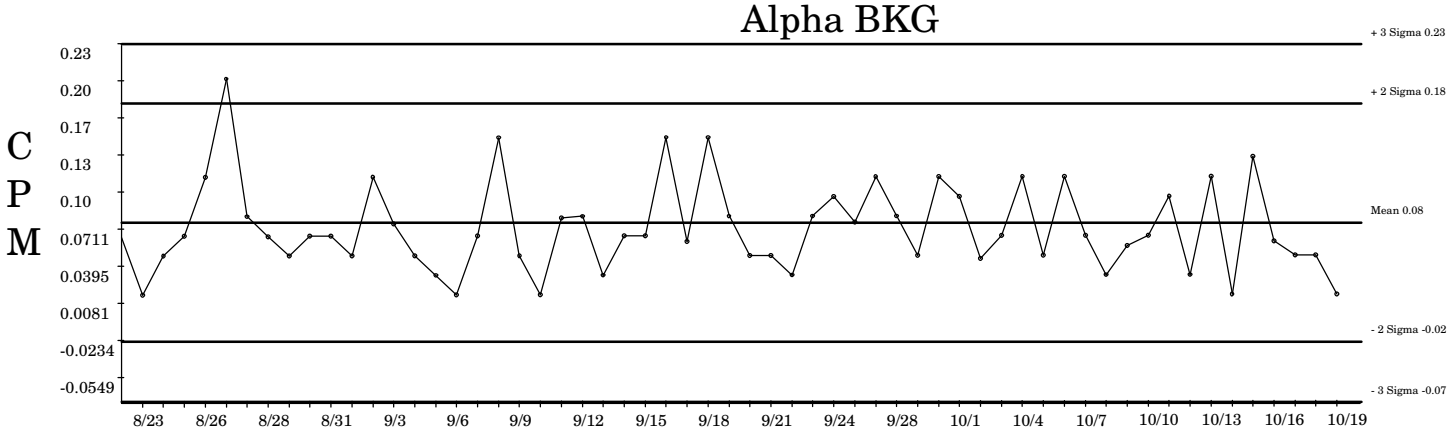

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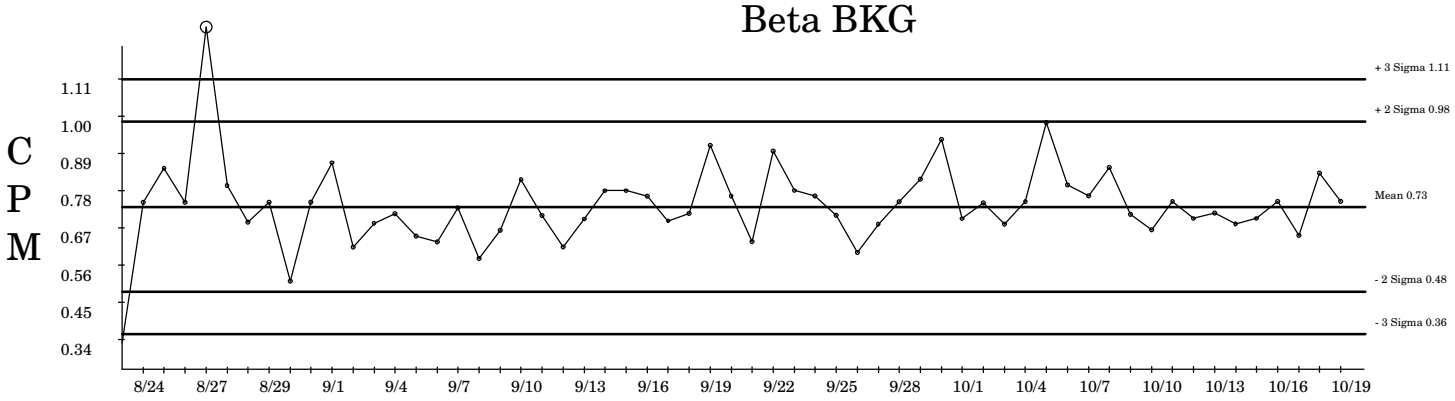

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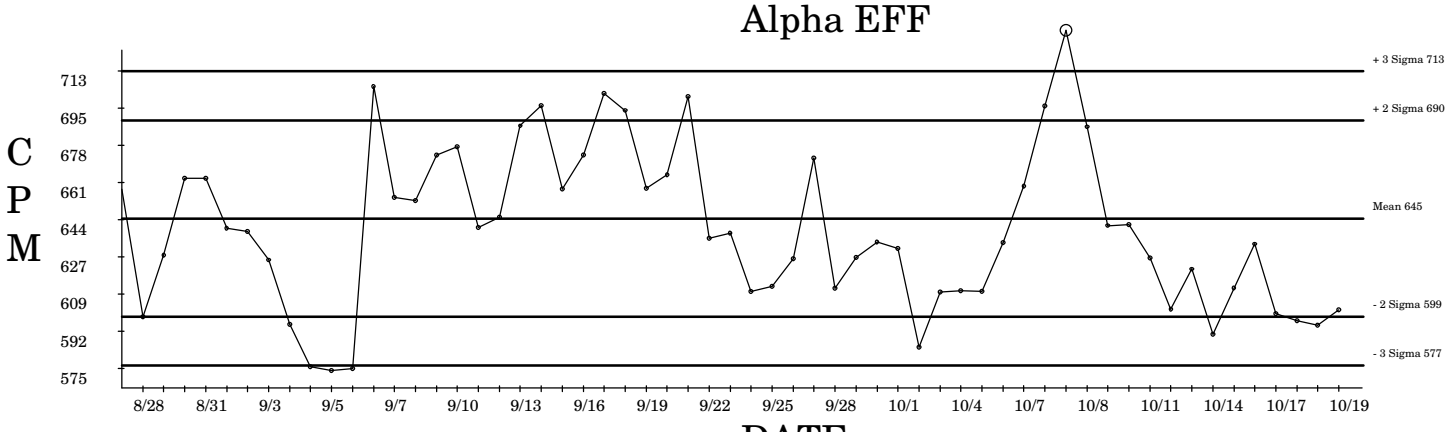

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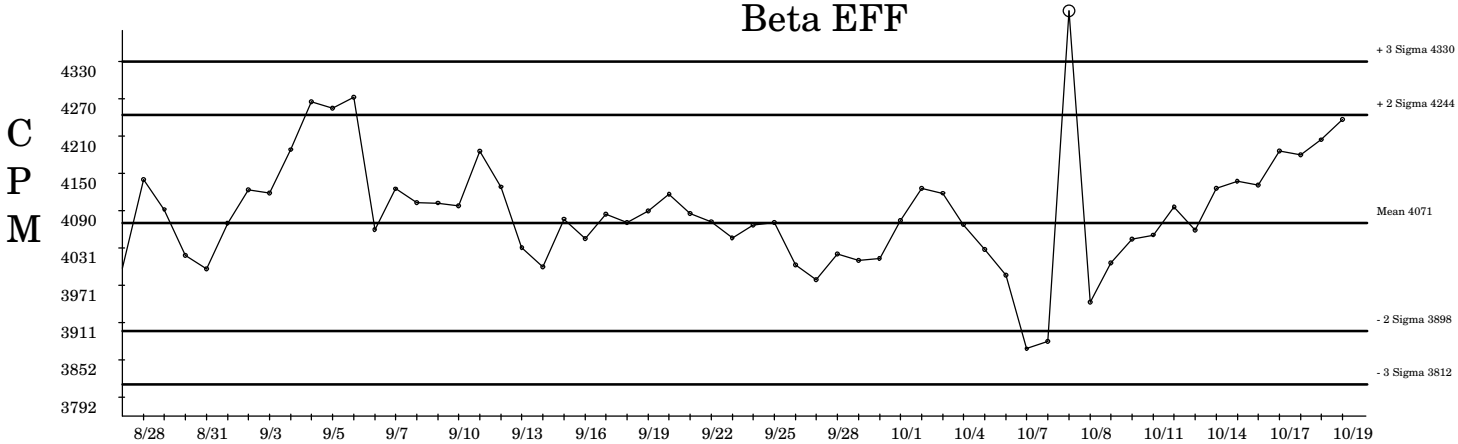
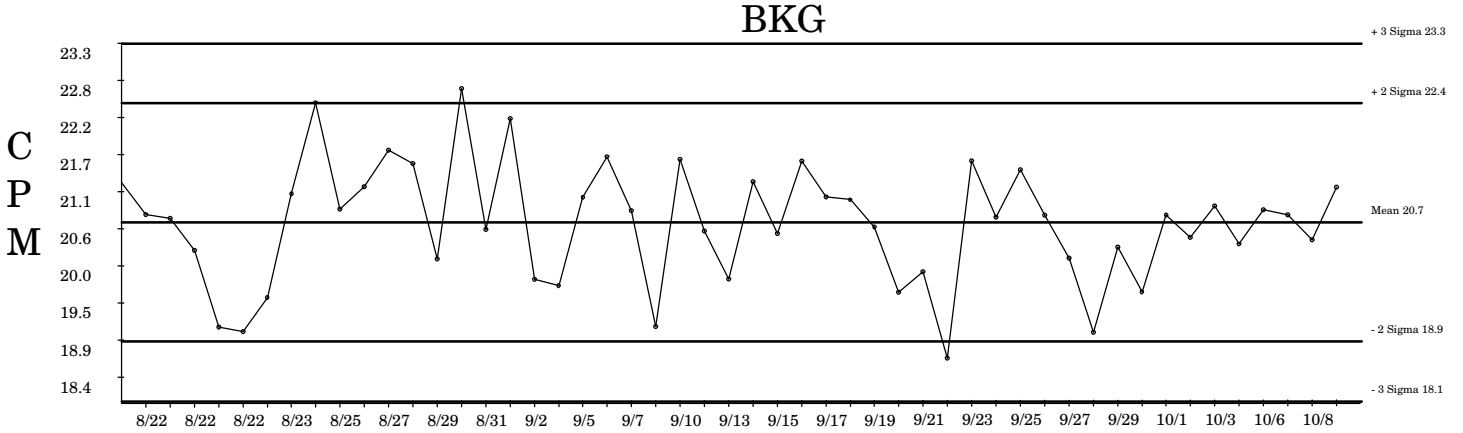


○ Denotes Outlier

LSCBLUE 10/08/2005
BKG



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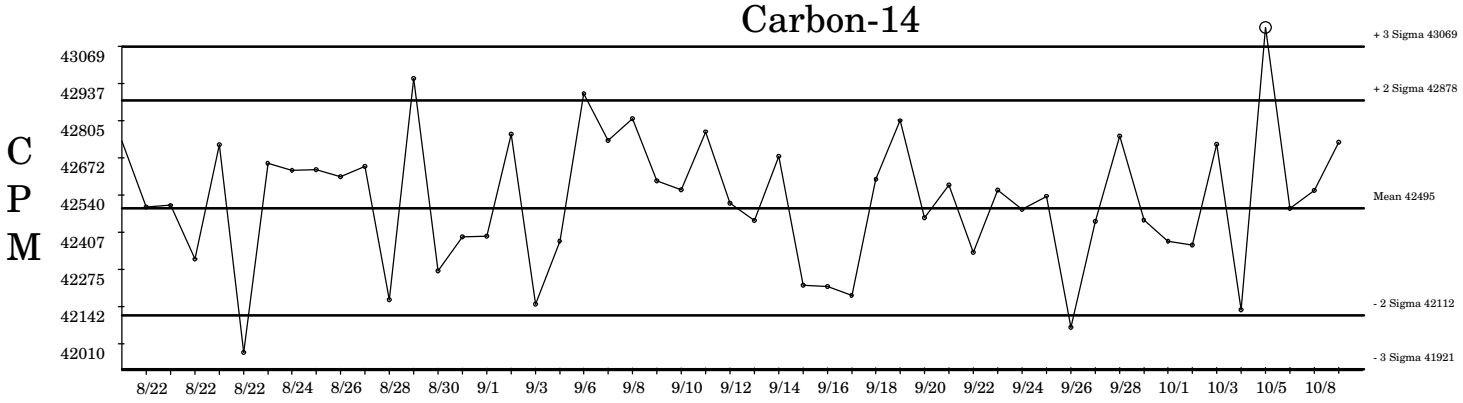

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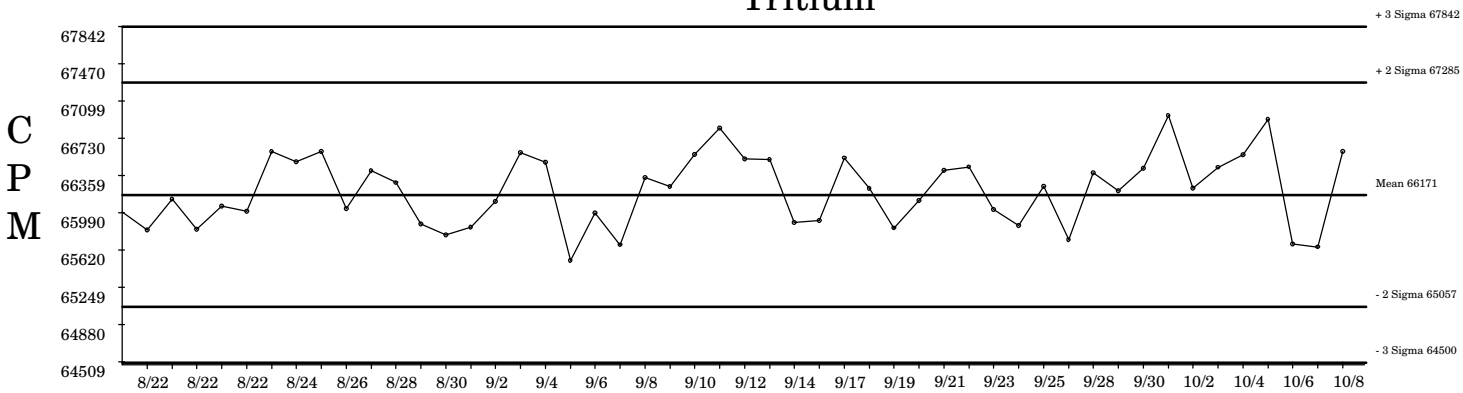
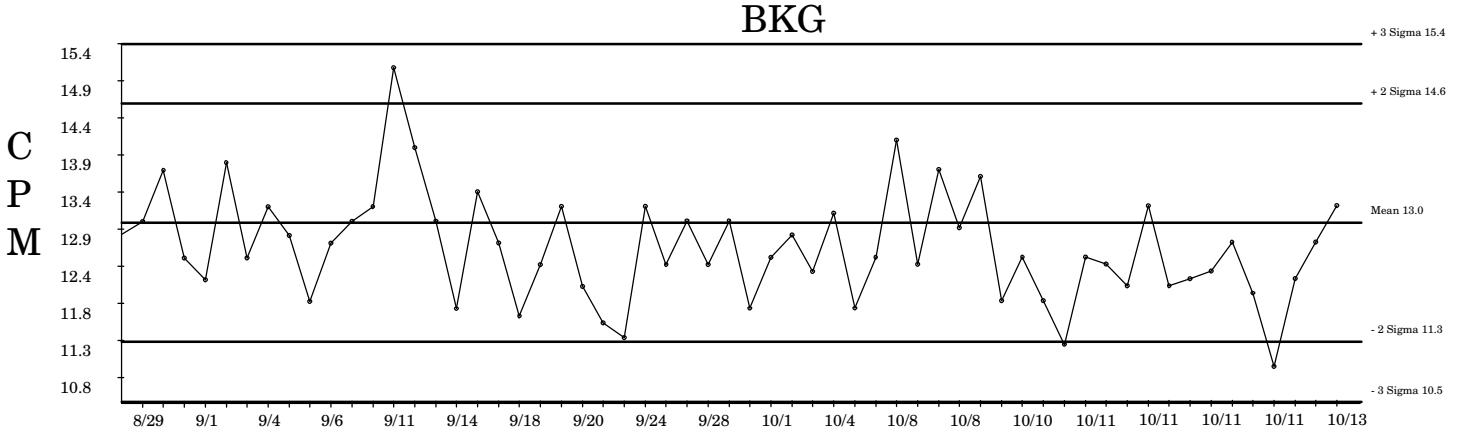


○ Denotes Outlier

LSCYELLOW 10/13/2005

BKG



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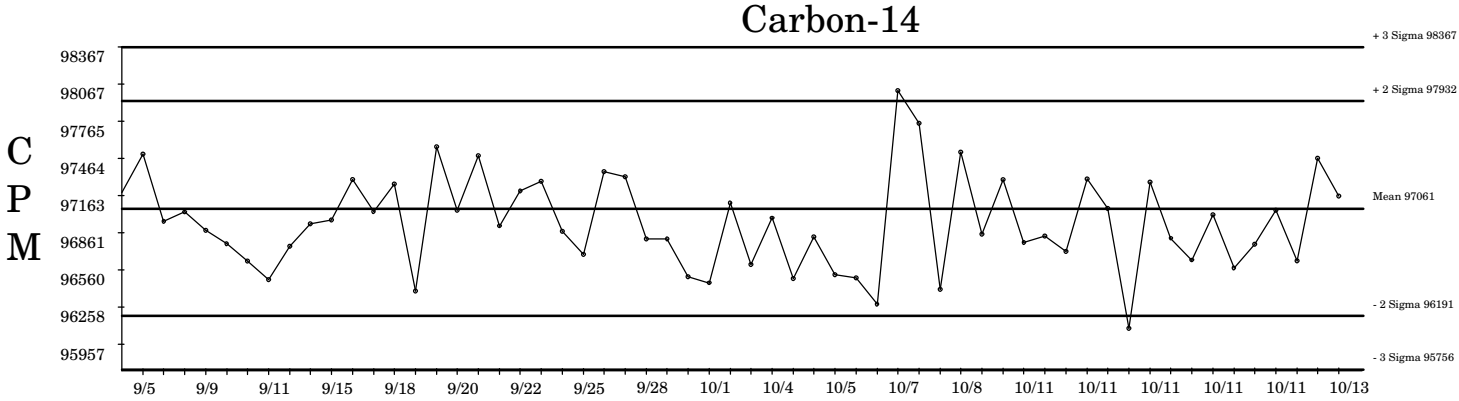

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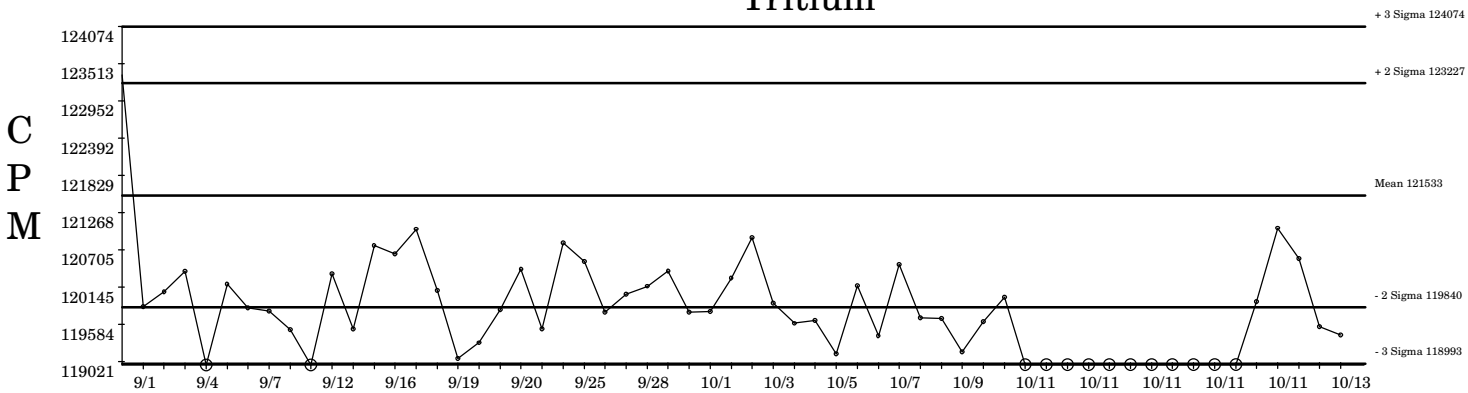
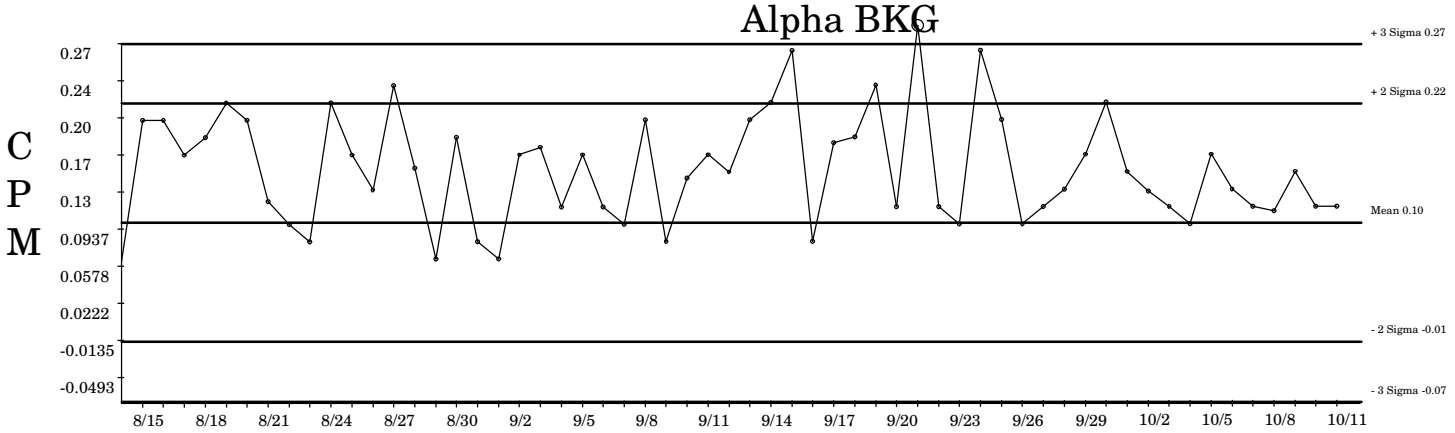


○ Denotes Outlier

PIC1A 10/11/2005

Alpha BKG



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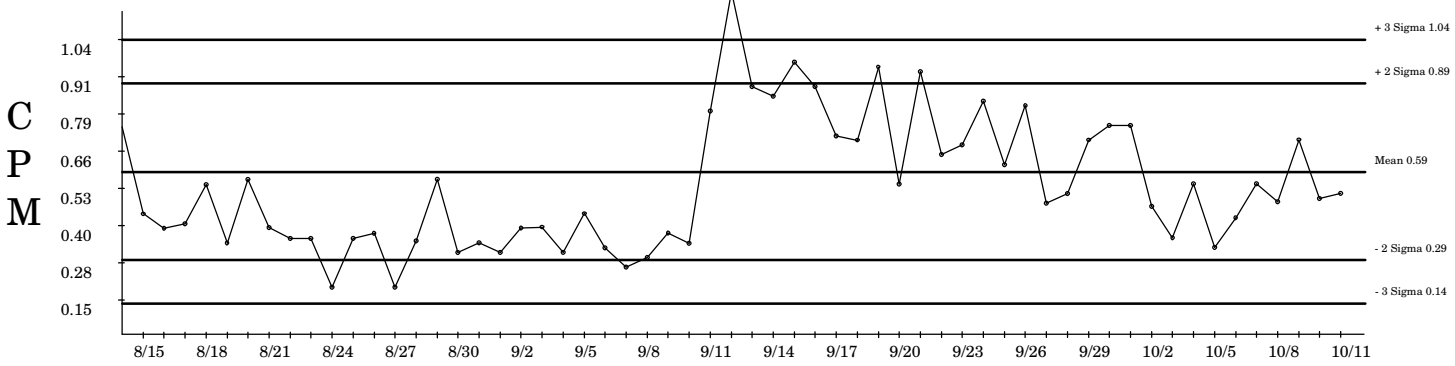

DATE

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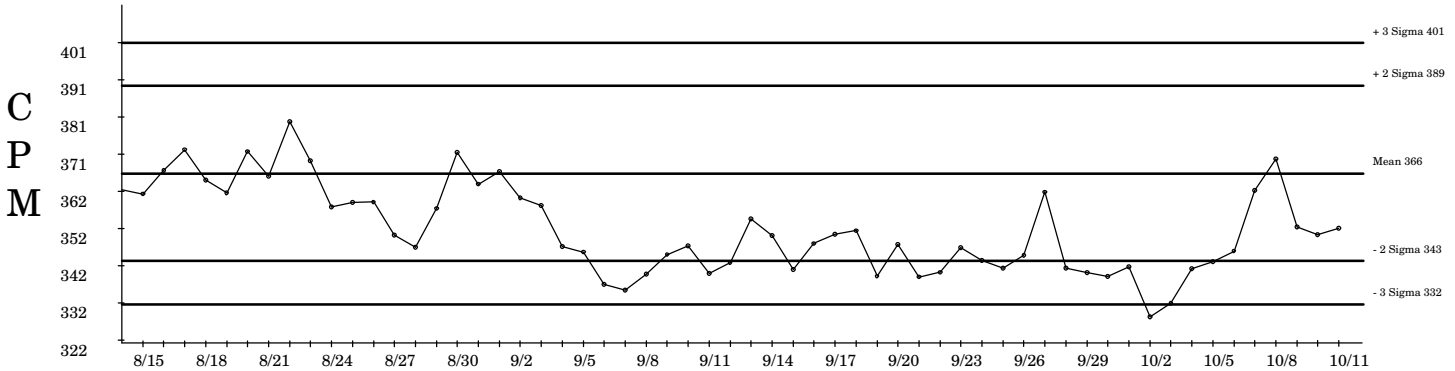
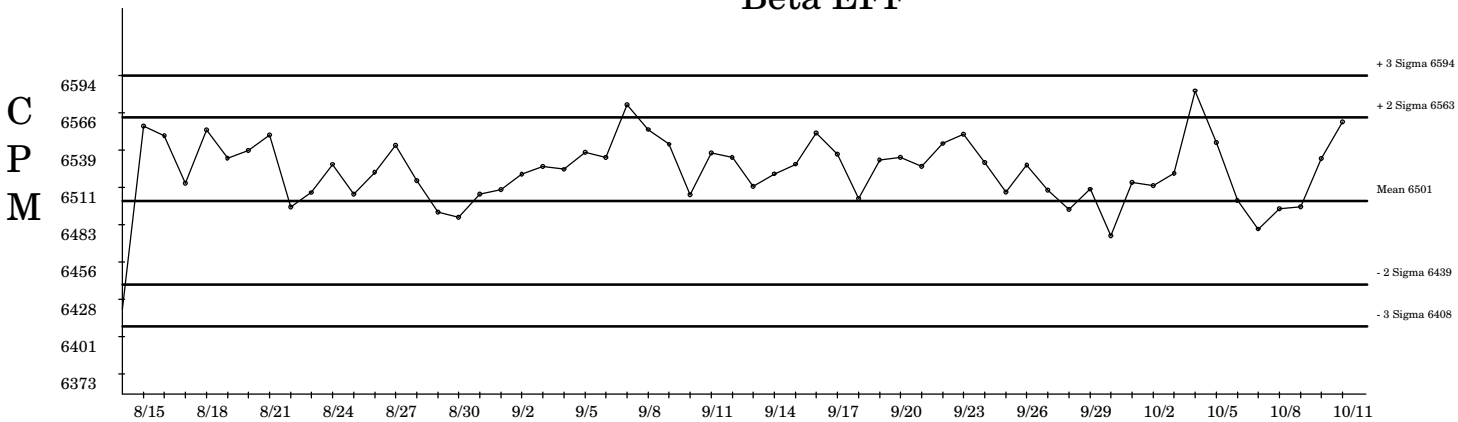


DATE

Beta EFF

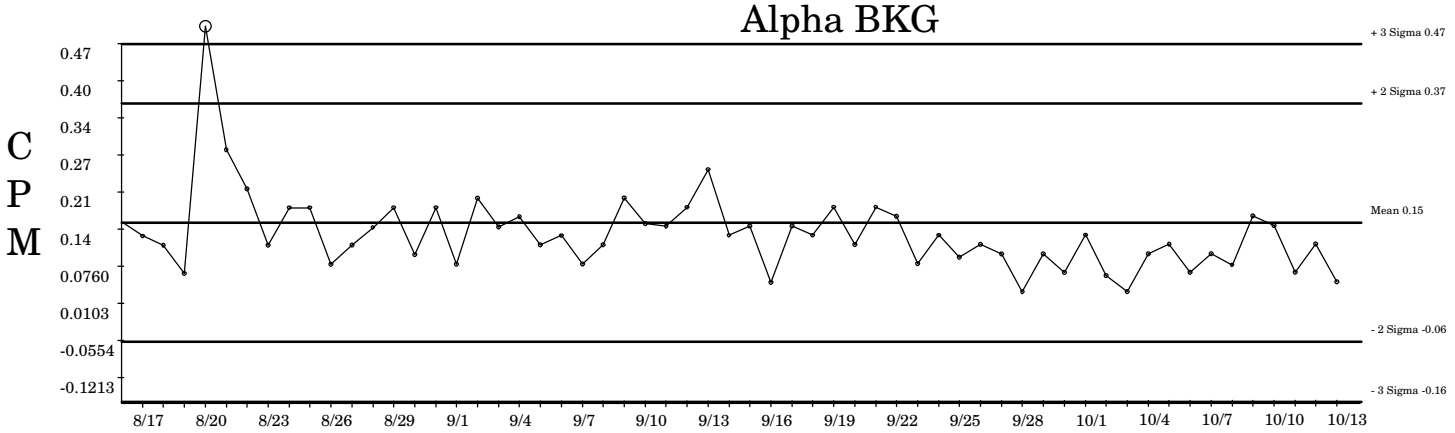


DATE

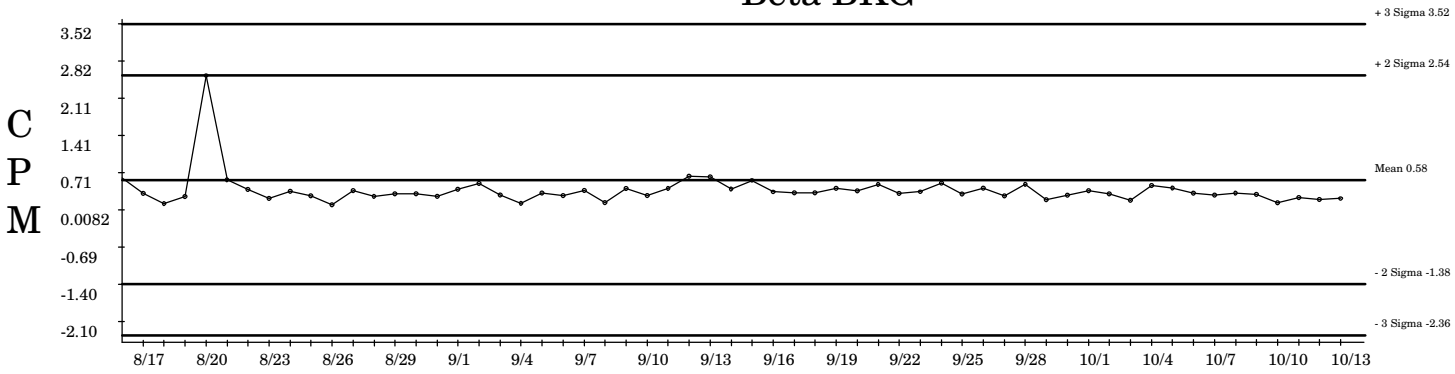
○ Denotes Outlier

PIC1B 10/13/2005

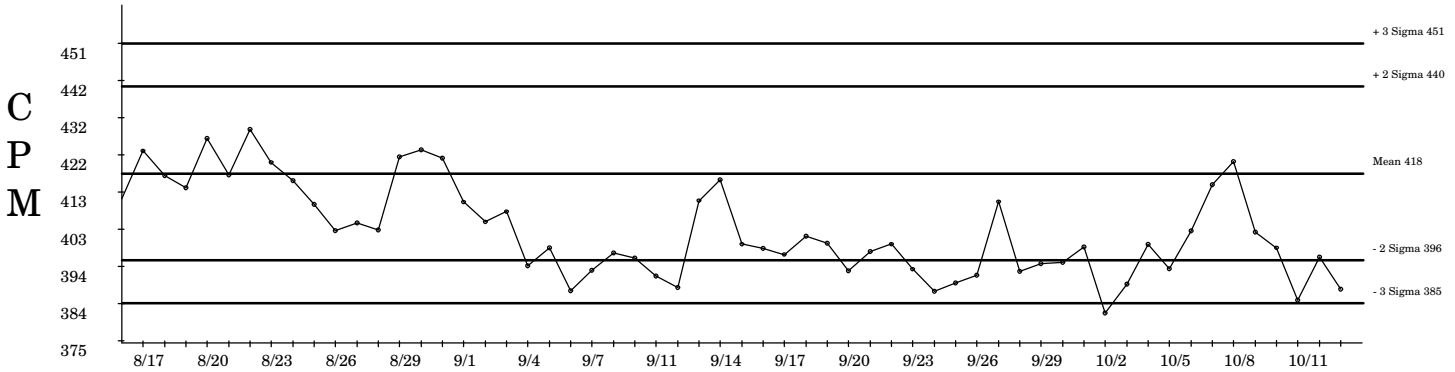
Alpha BKG



Beta BKG



Alpha EFF



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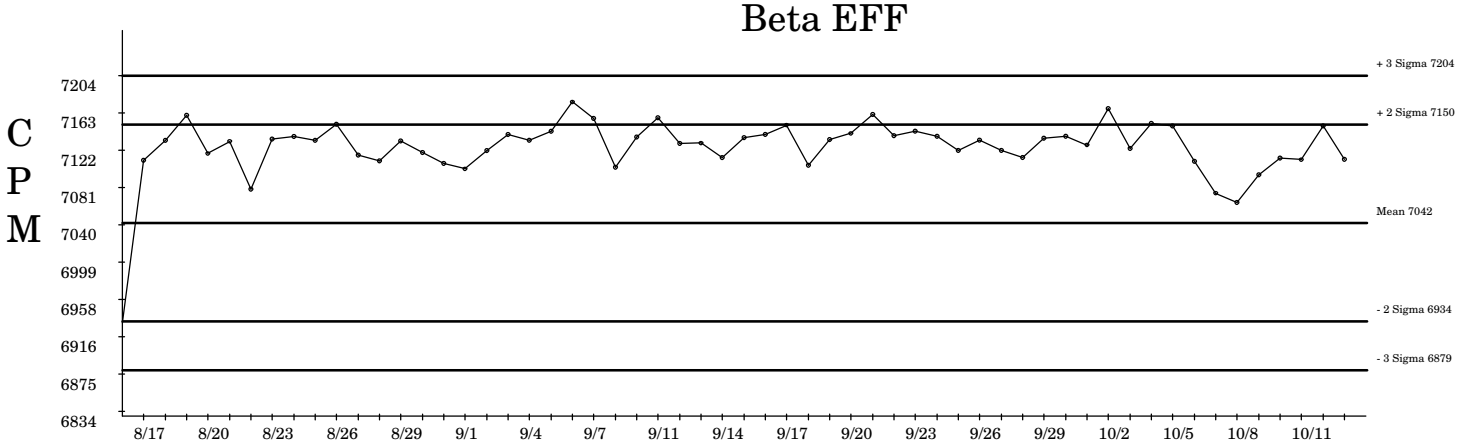
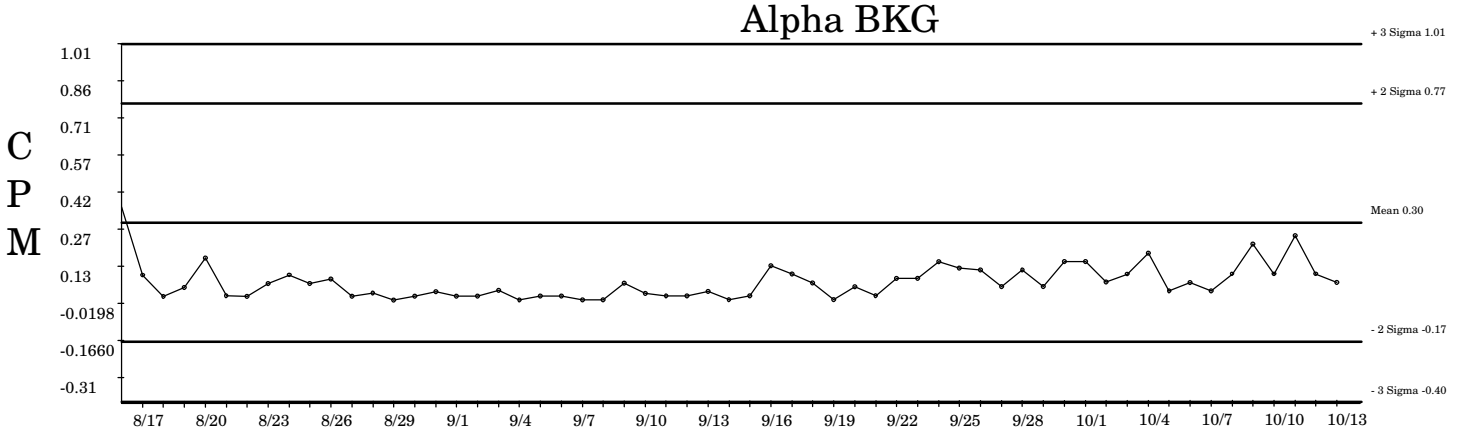


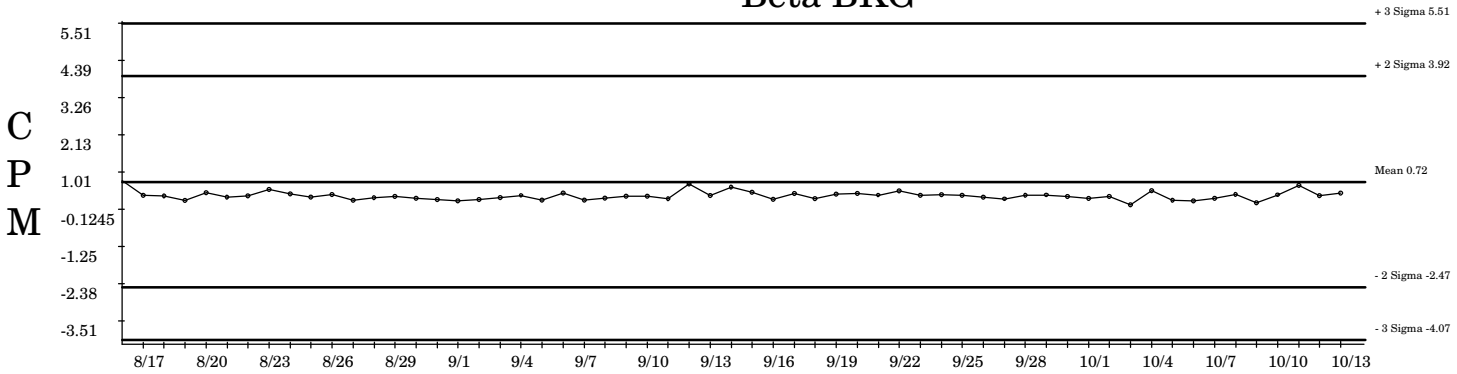
○ Denotes Outlier

PIC1C 10/13/2005

Alpha BKG



Beta BKG



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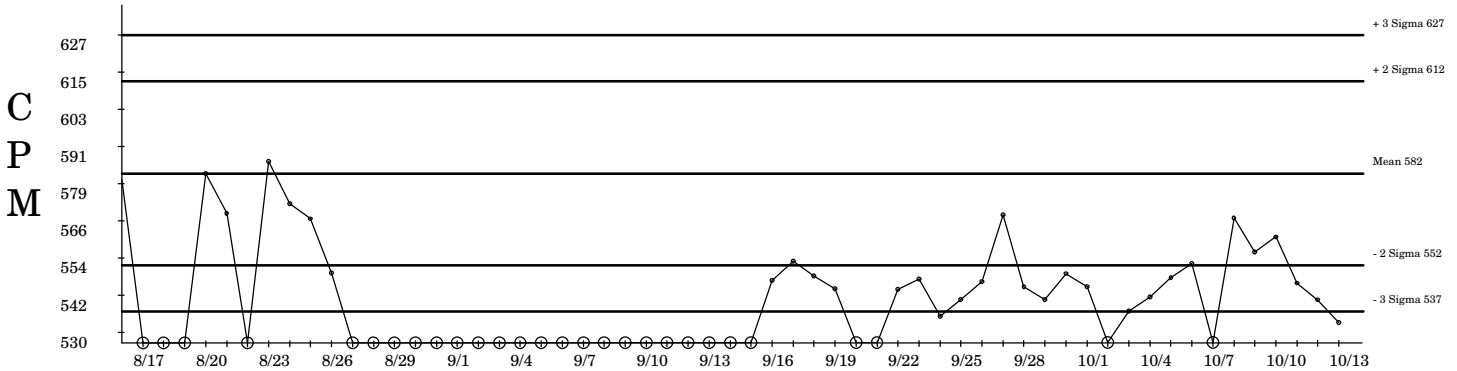

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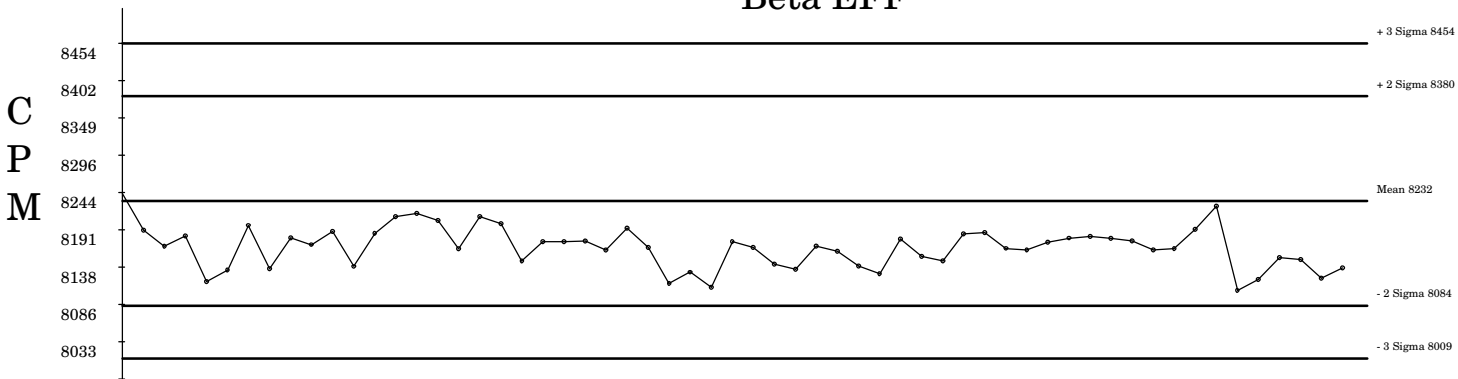
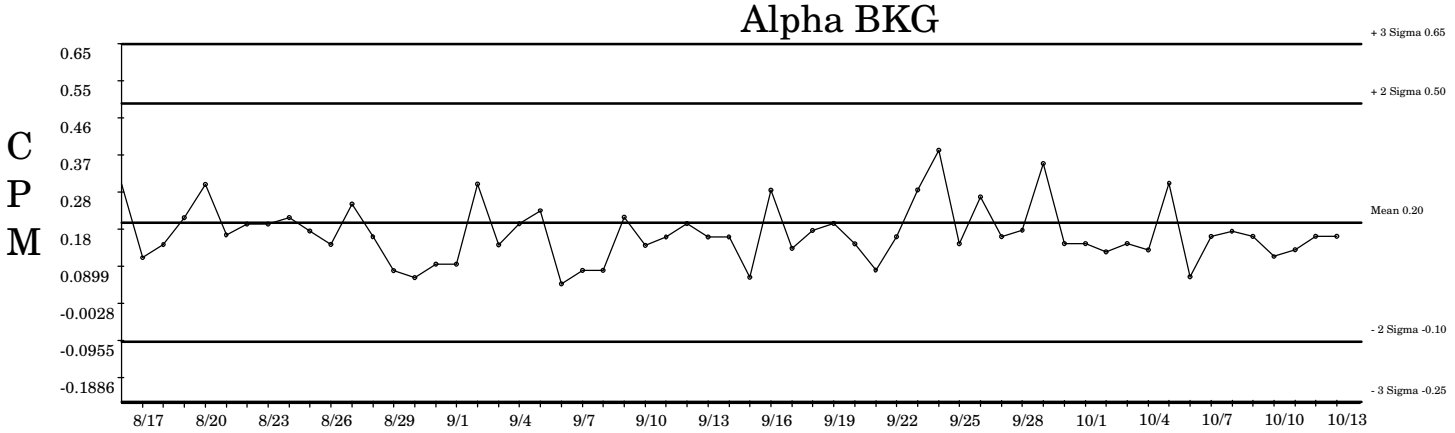


○ Denotes Outlier

PIC1D 10/13/2005

Alpha BKG



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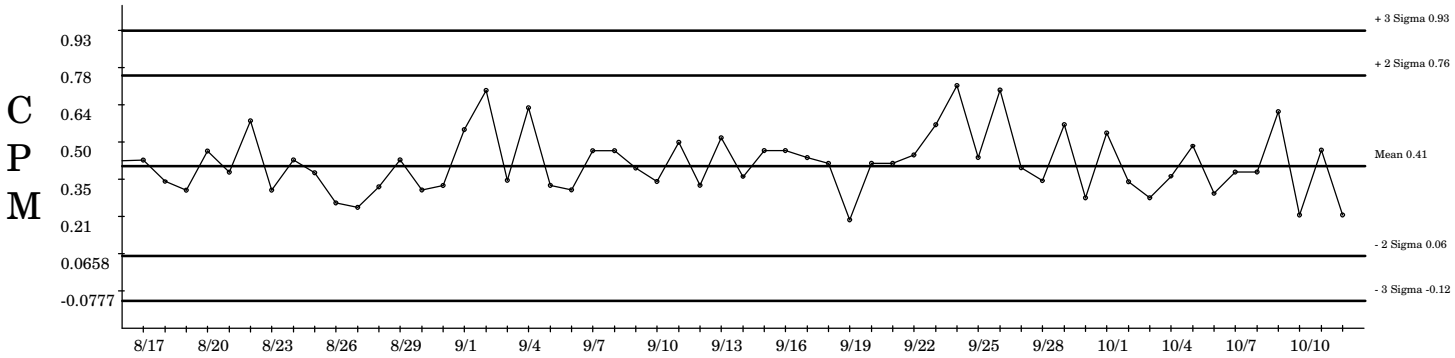

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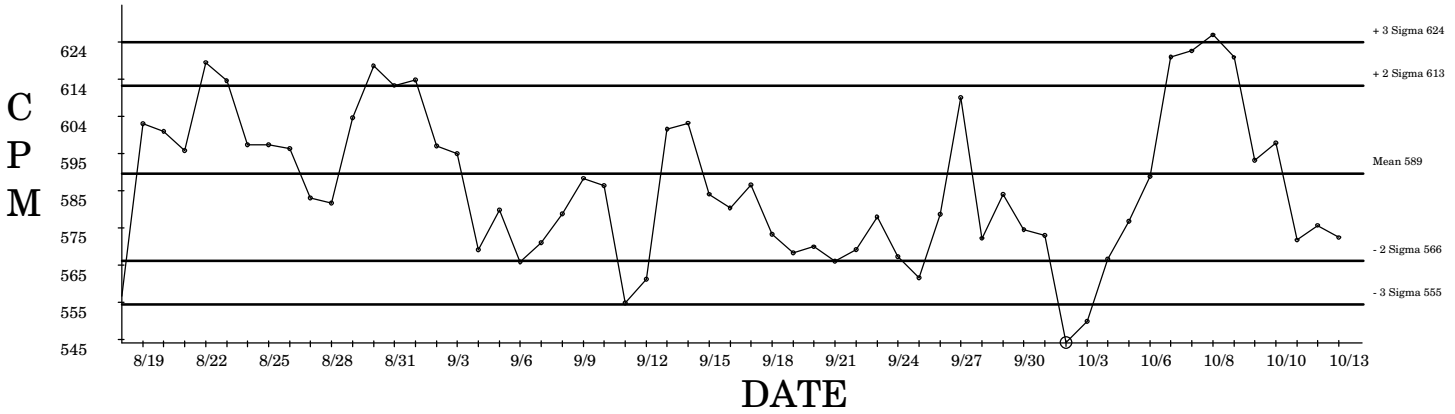

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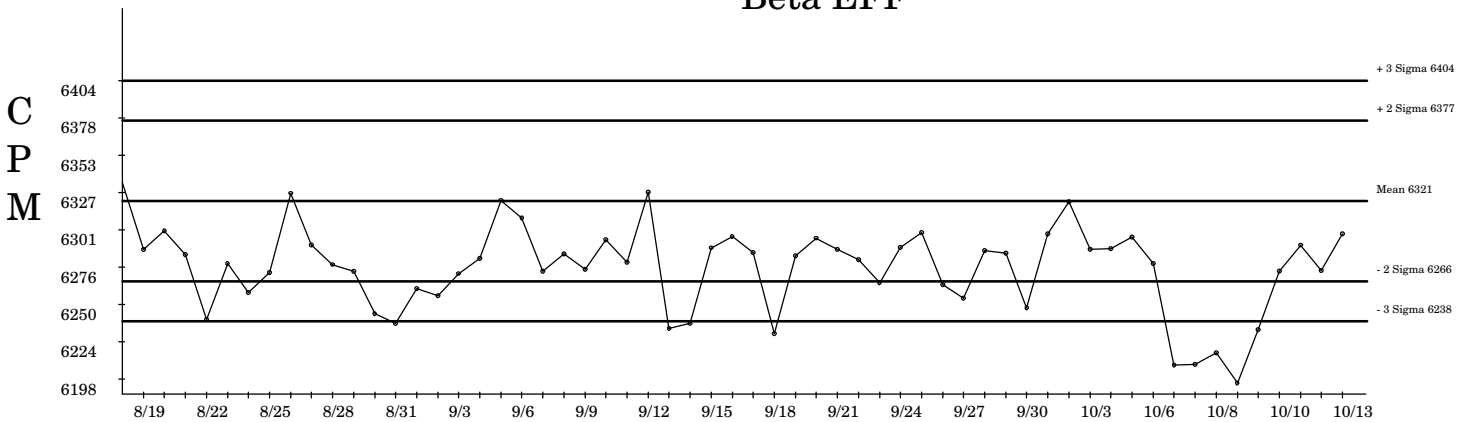
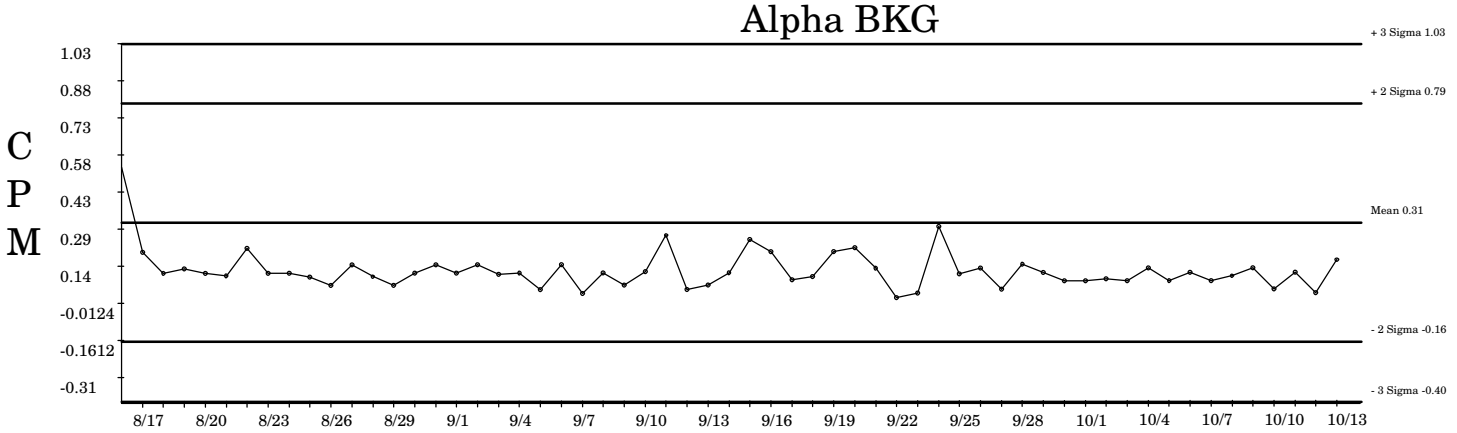


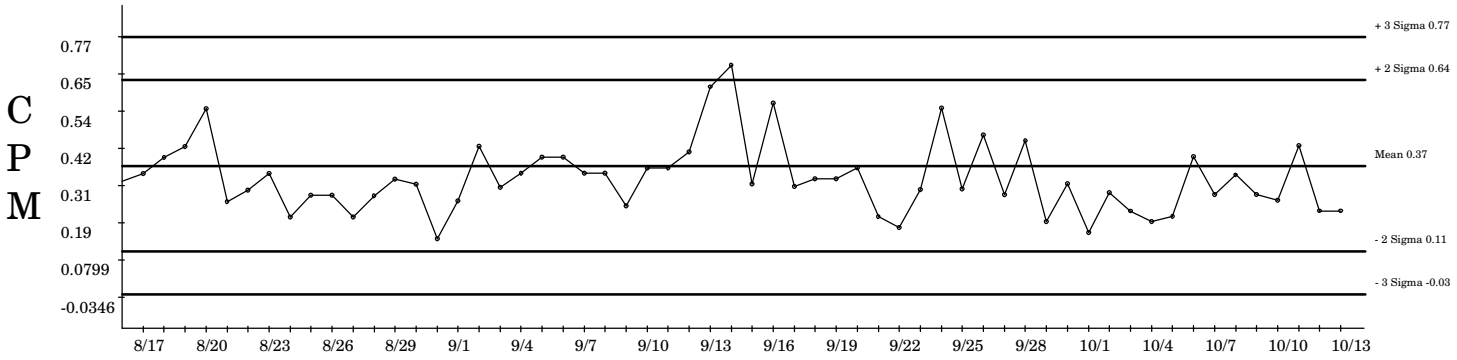
○ Denotes Outlier

PIC2A 10/13/2005

Alpha BKG



Beta BKG



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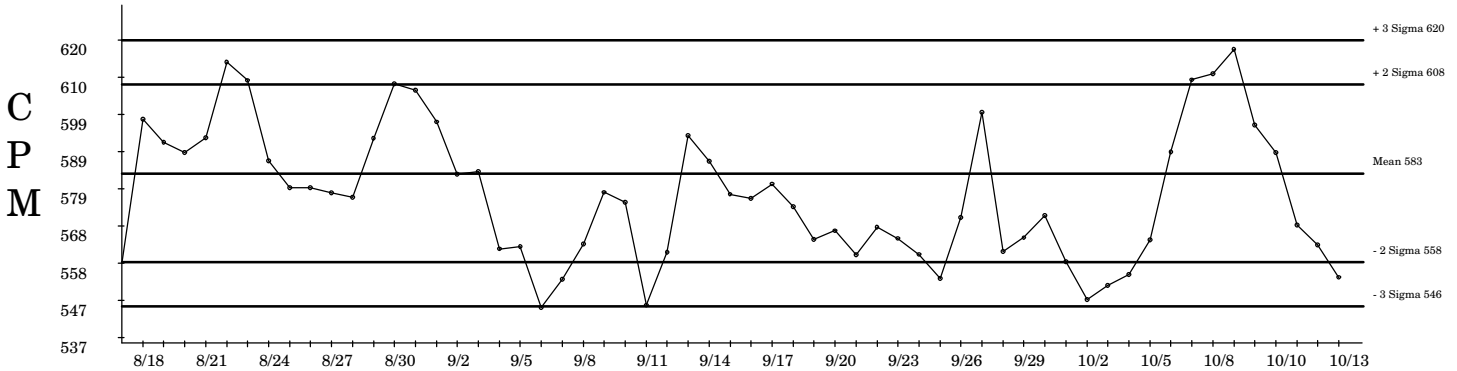

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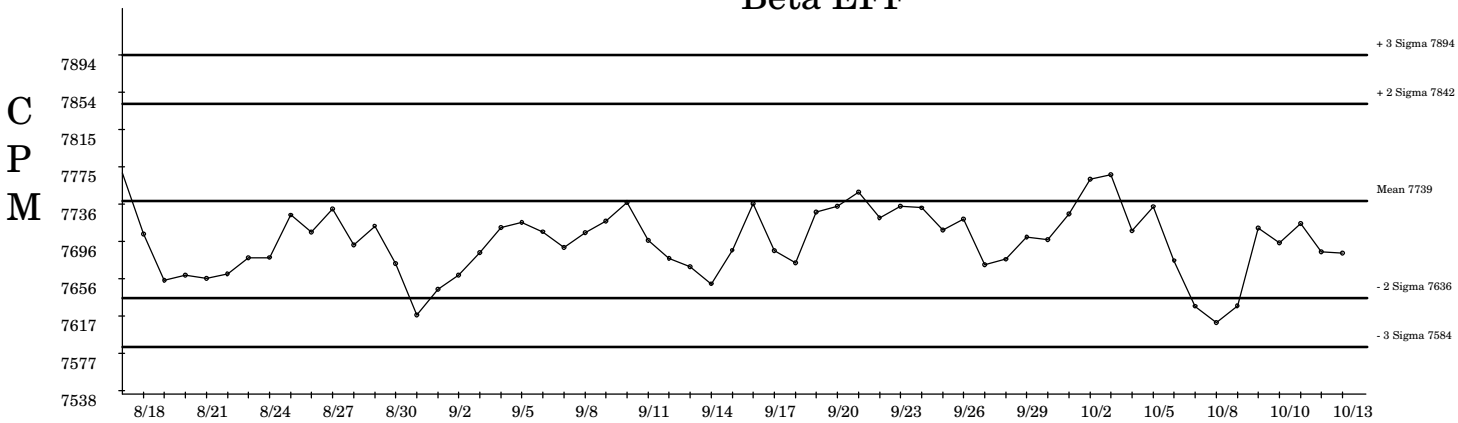
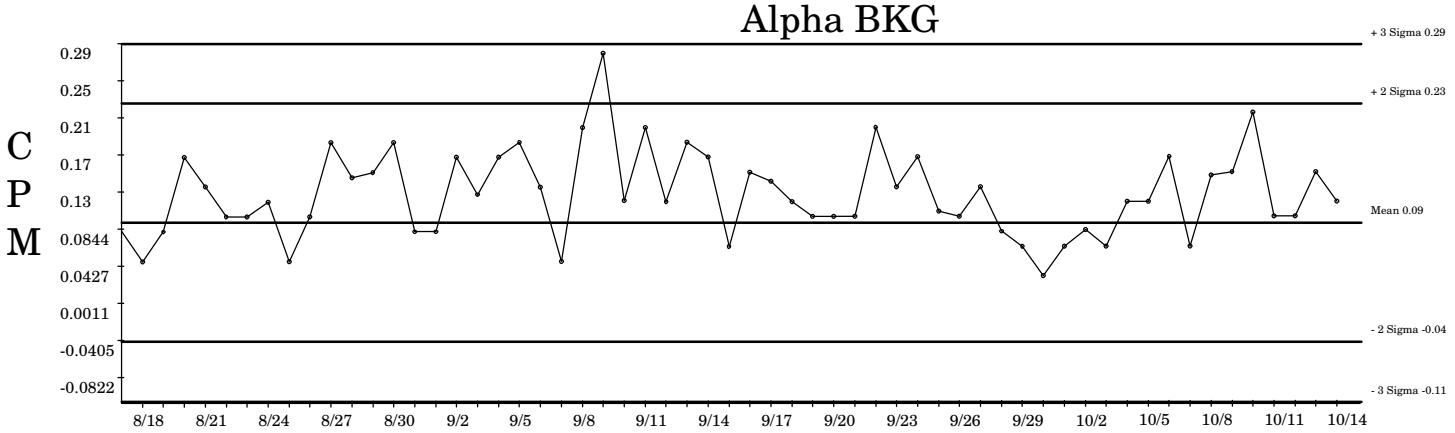


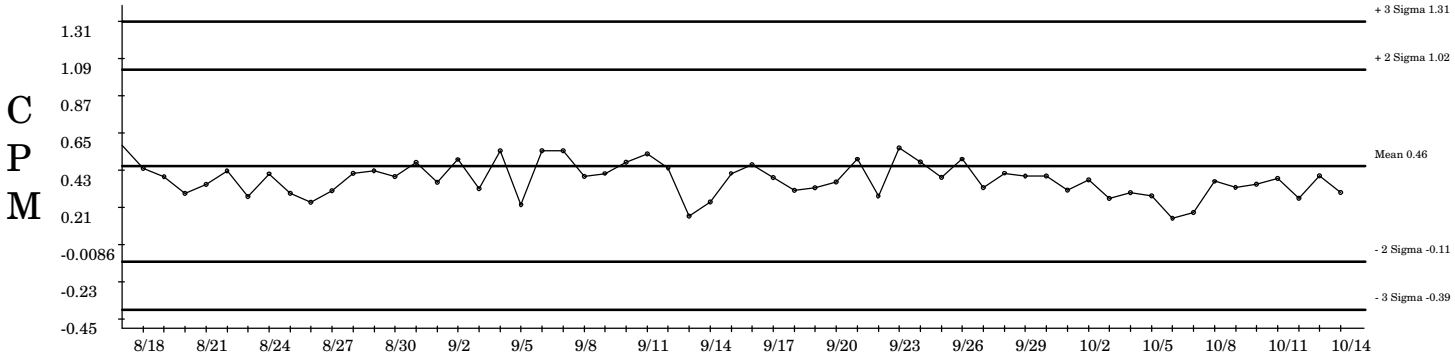
○ Denotes Outlier

PIC3B 10/14/2005

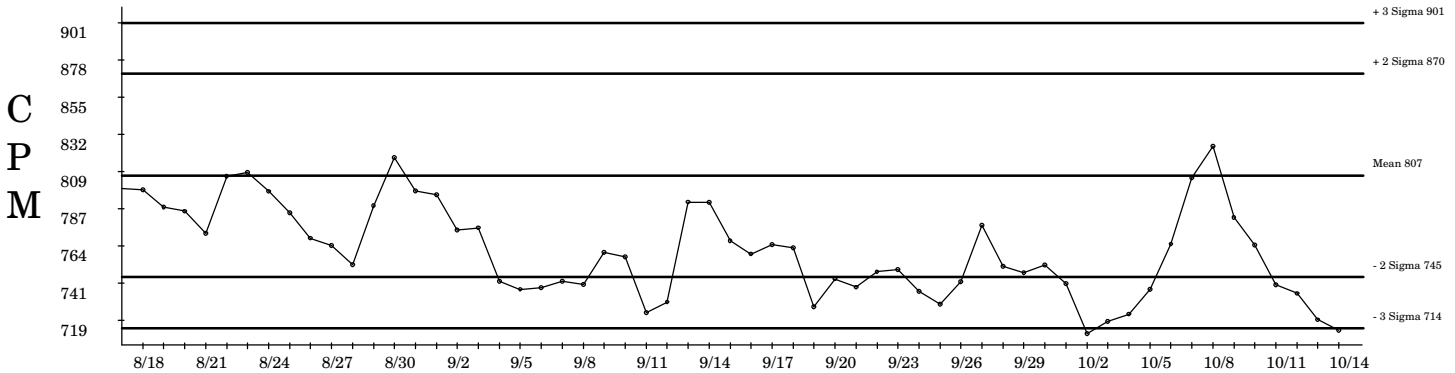
Alpha BKG



Beta BKG



Alpha EFF



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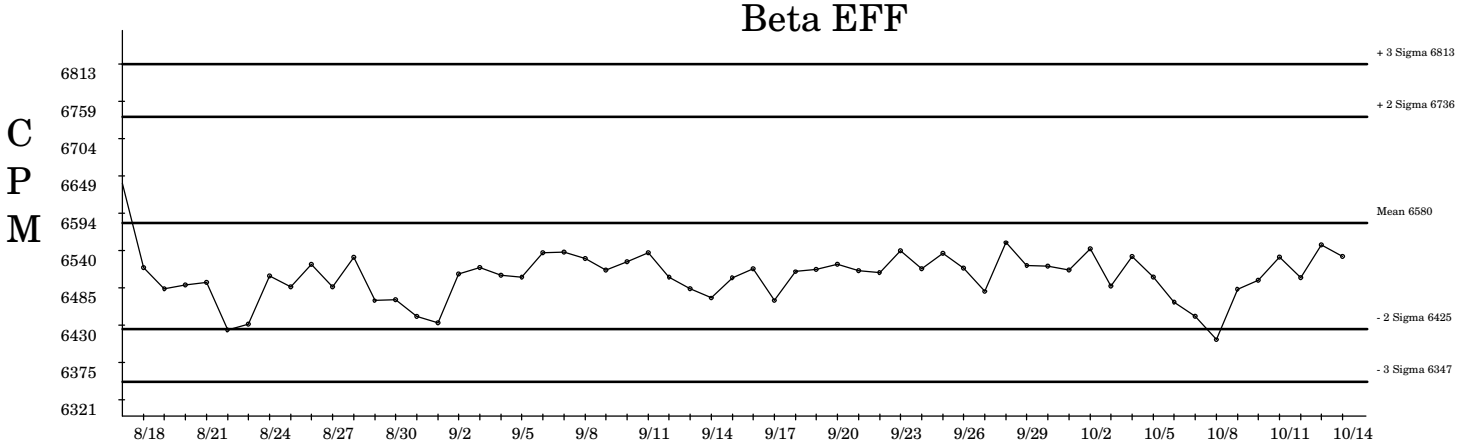
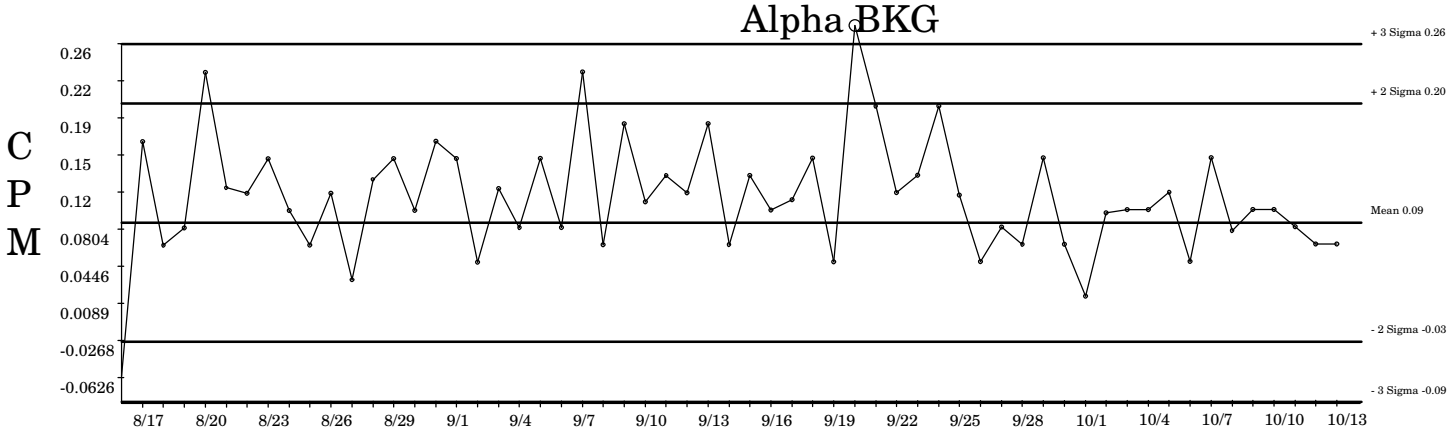


○ Denotes Outlier

PIC3C 10/13/2005

Alpha BKG



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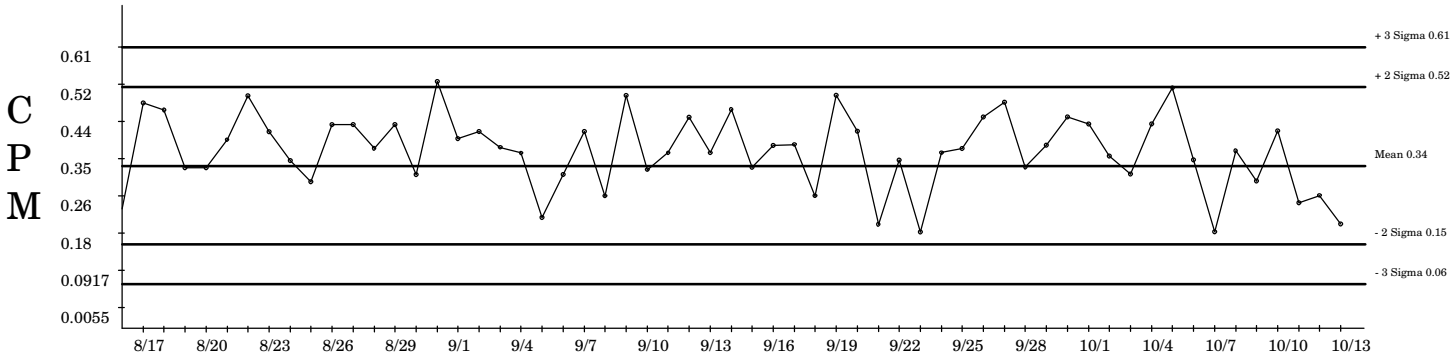

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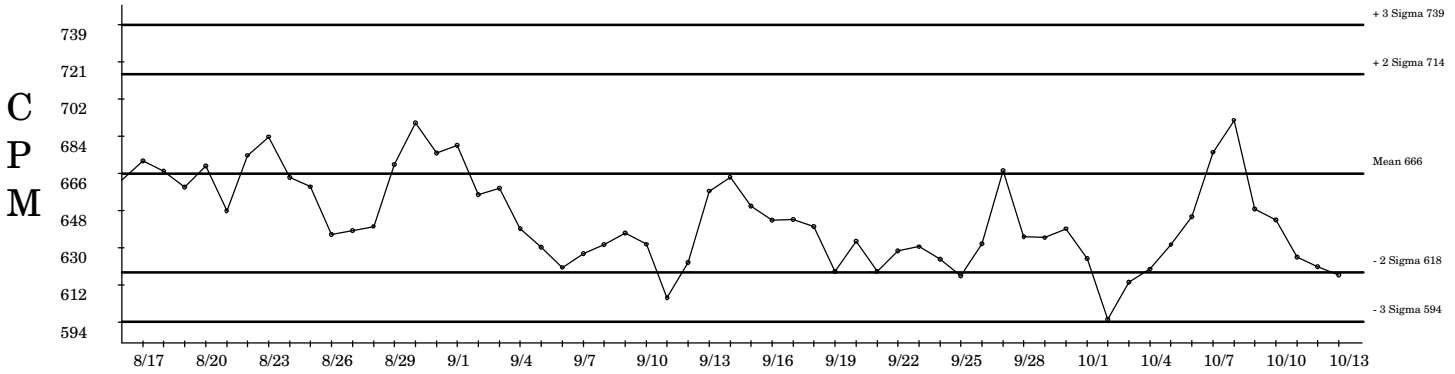

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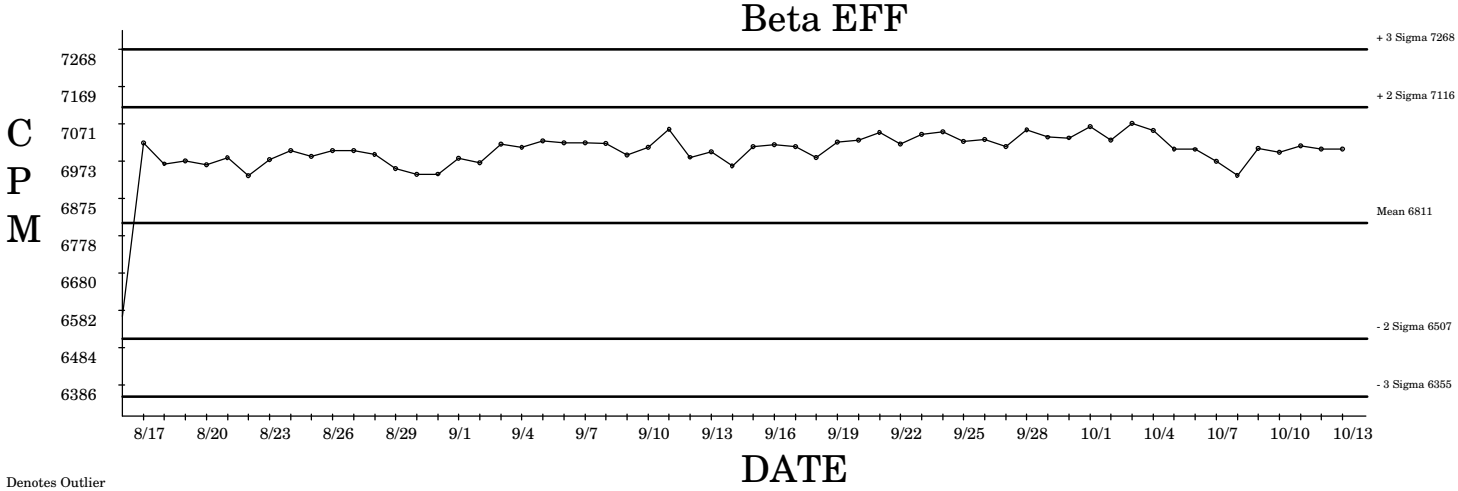
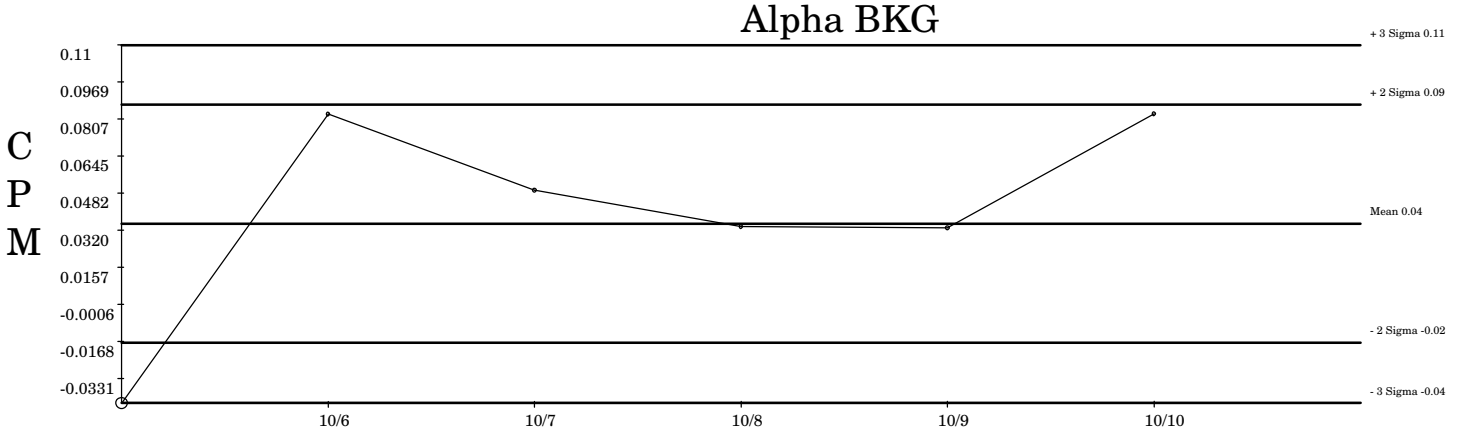


○ Denotes Outlier

PIC5A 10/10/2005

Alpha BKG



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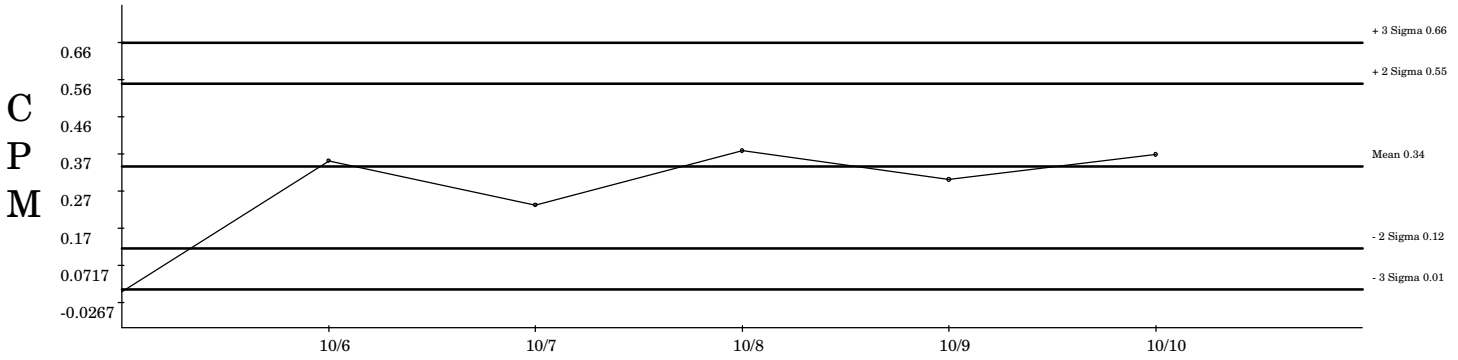

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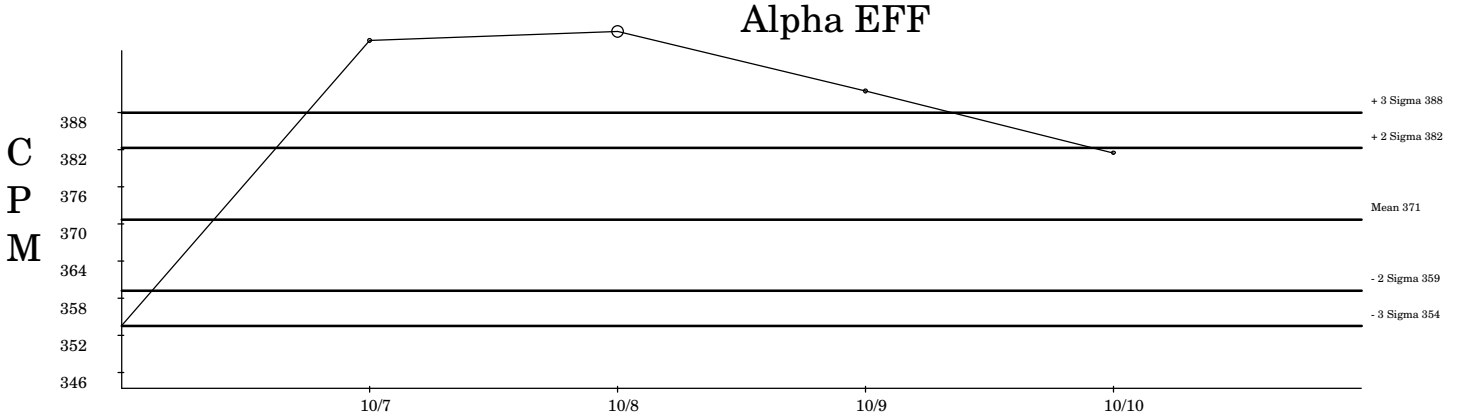

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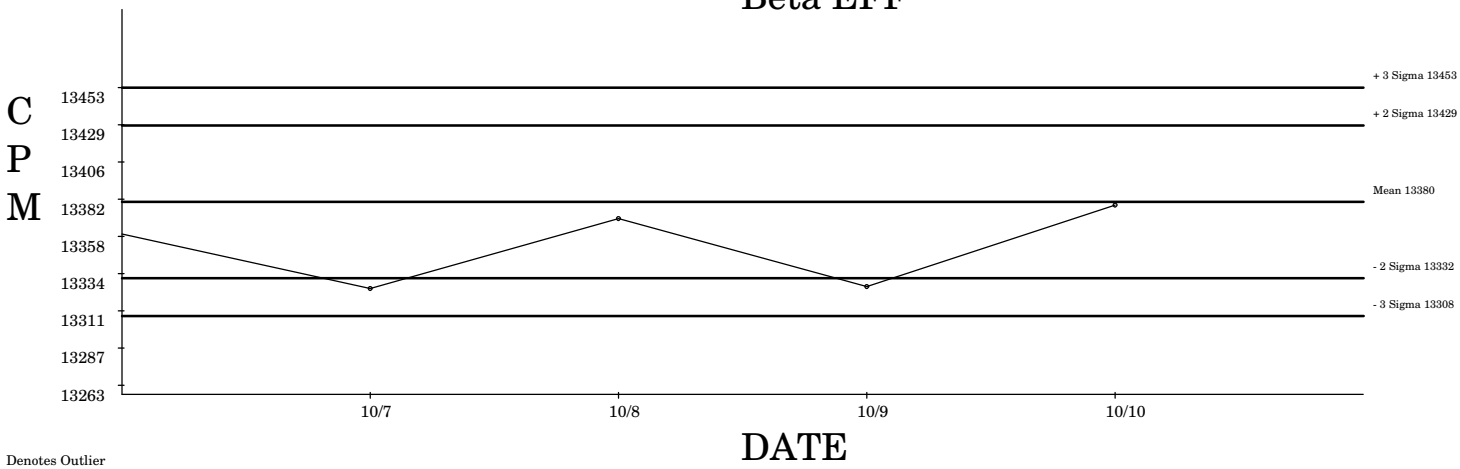
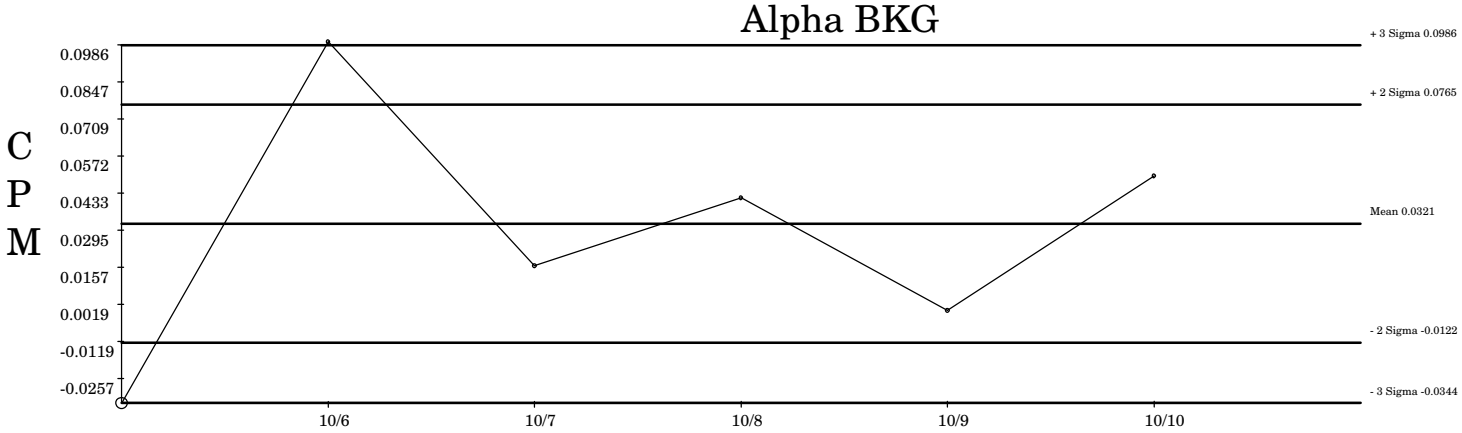


○ Denotes Outlier

PIC5B 10/10/2005

Alpha BKG



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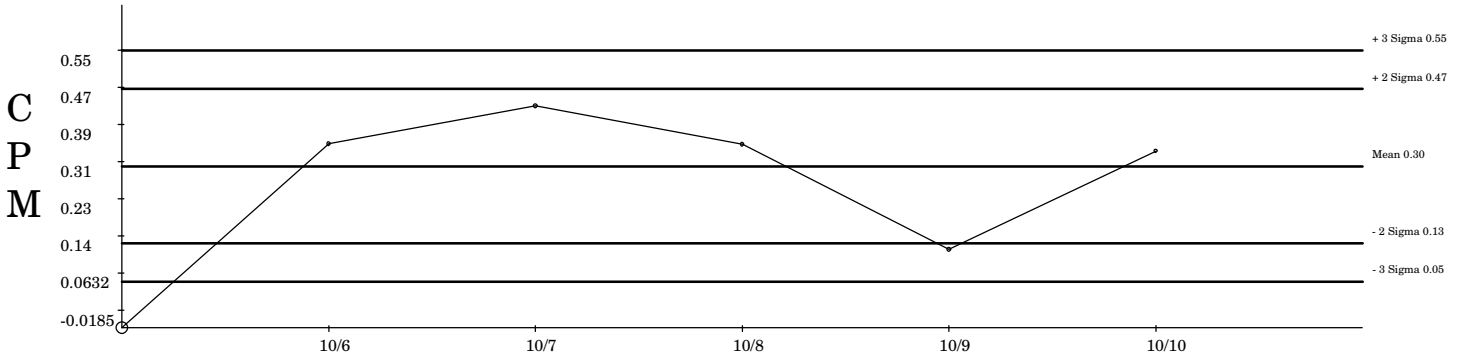

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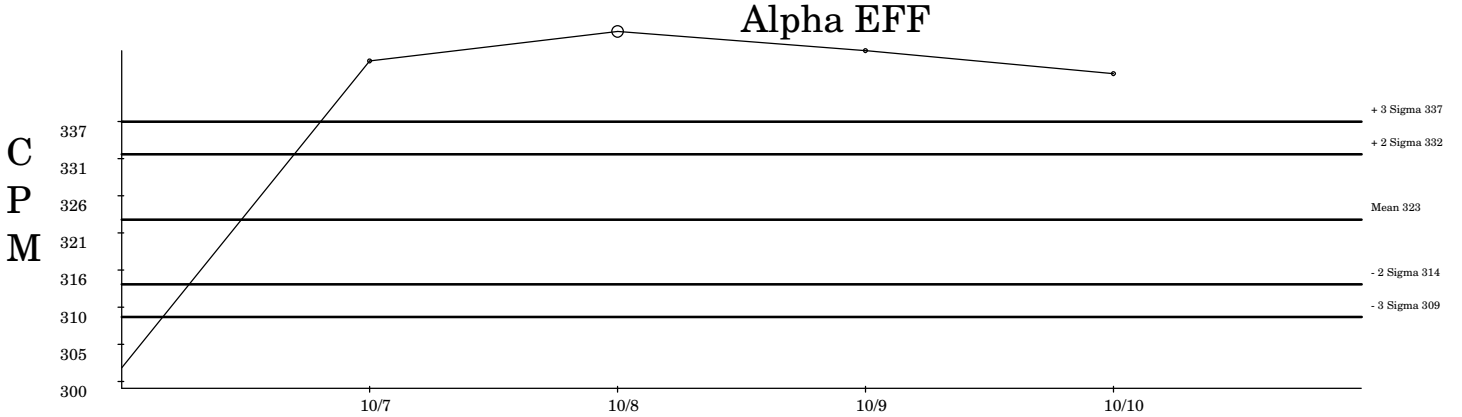

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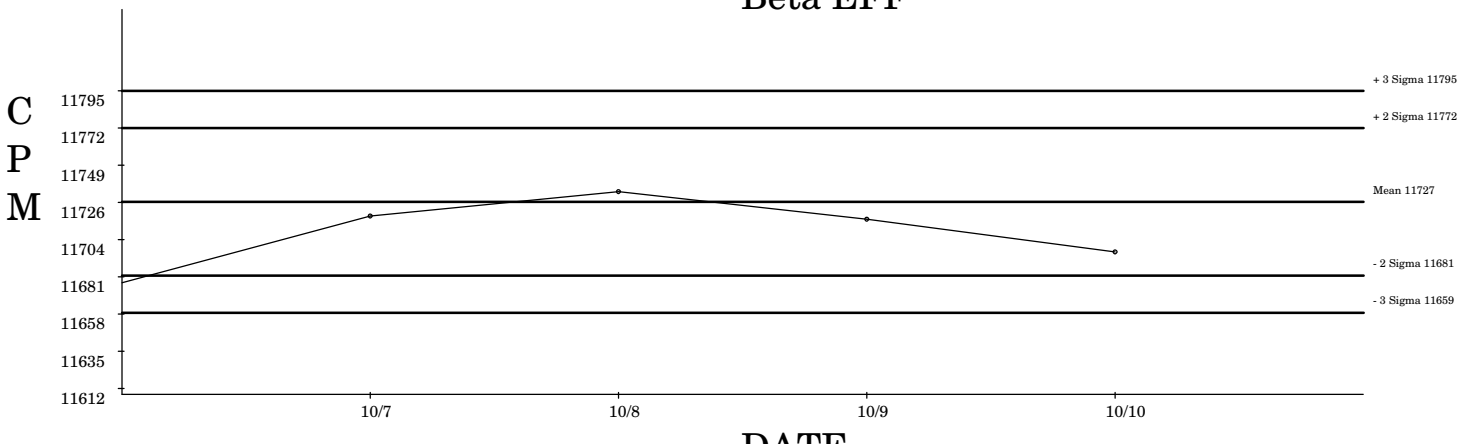
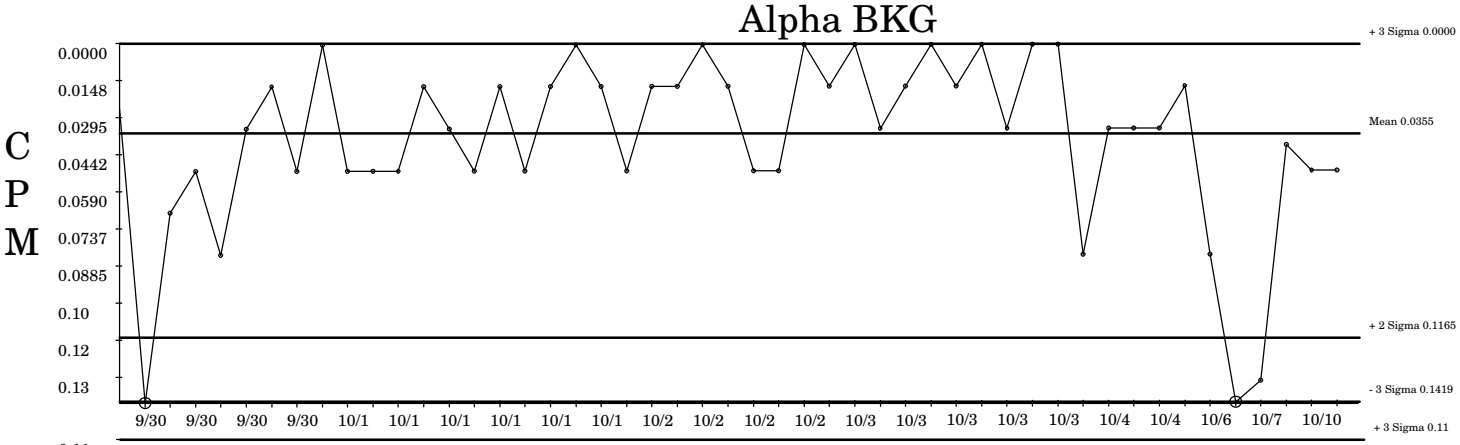


○ Denotes Outlier

PIC6A 10/11/2005

Alpha BKG



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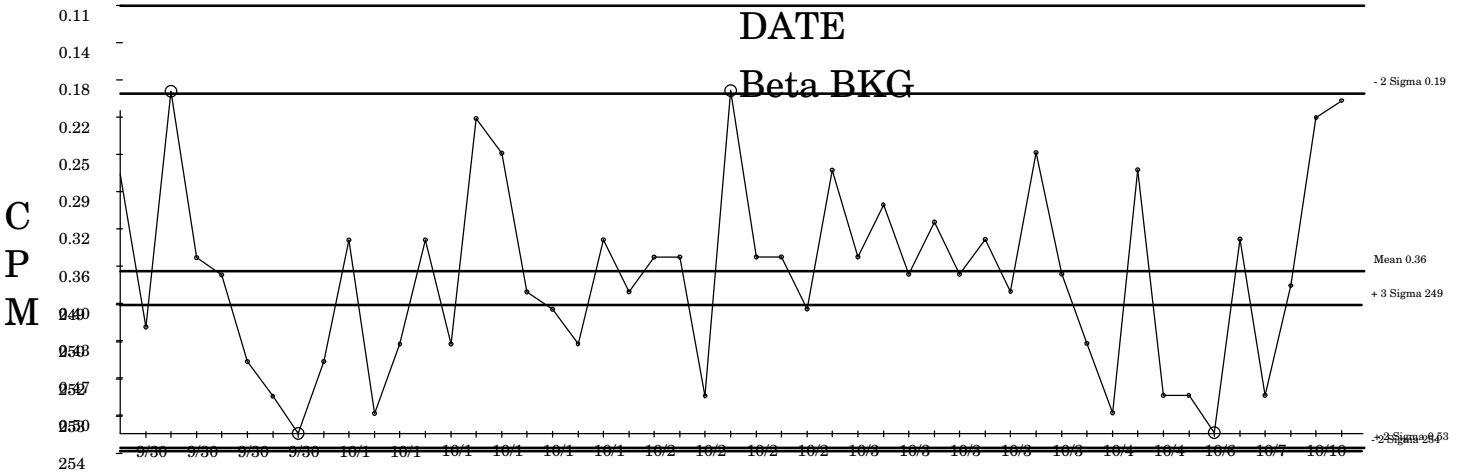

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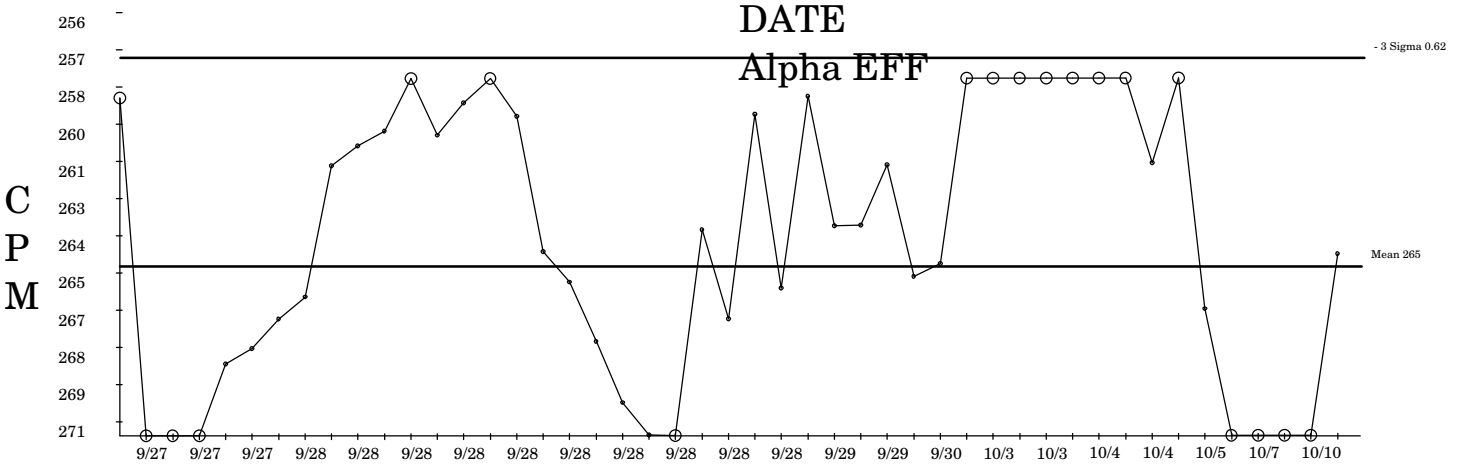

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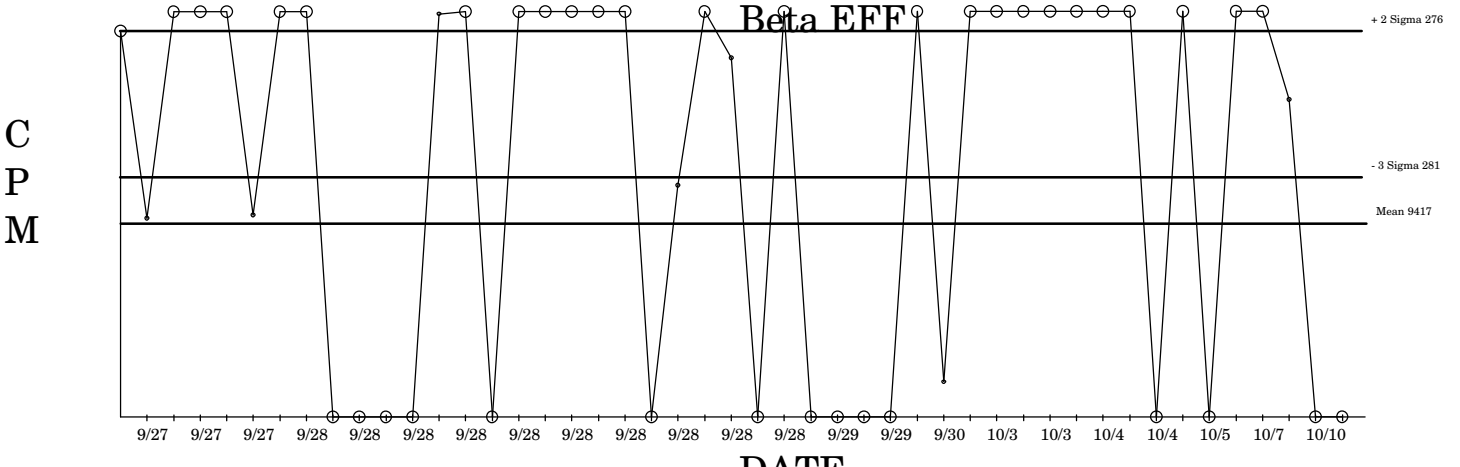

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PIC6D 10/11/2005

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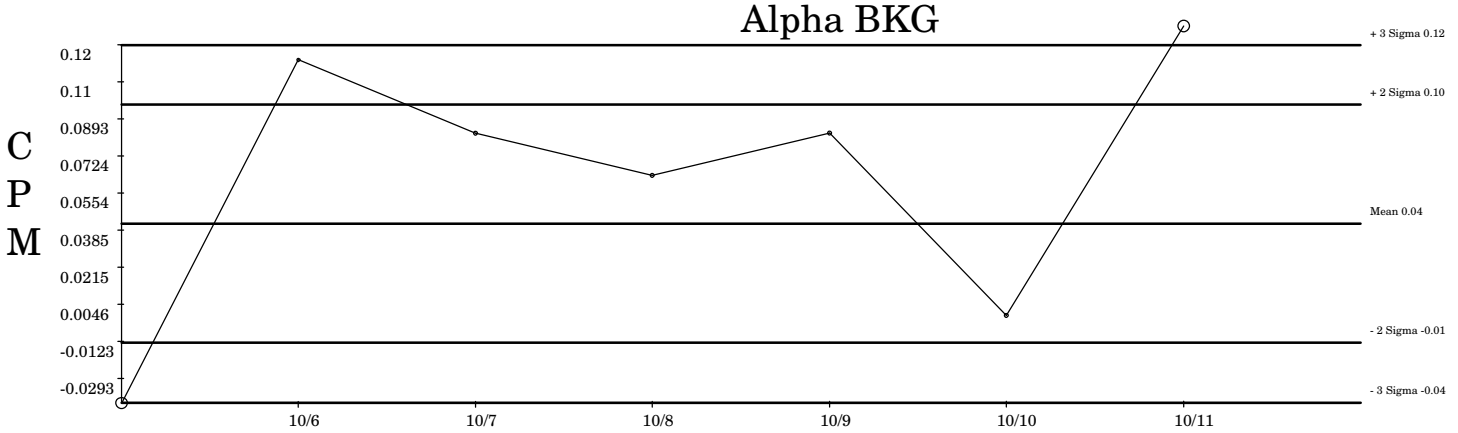

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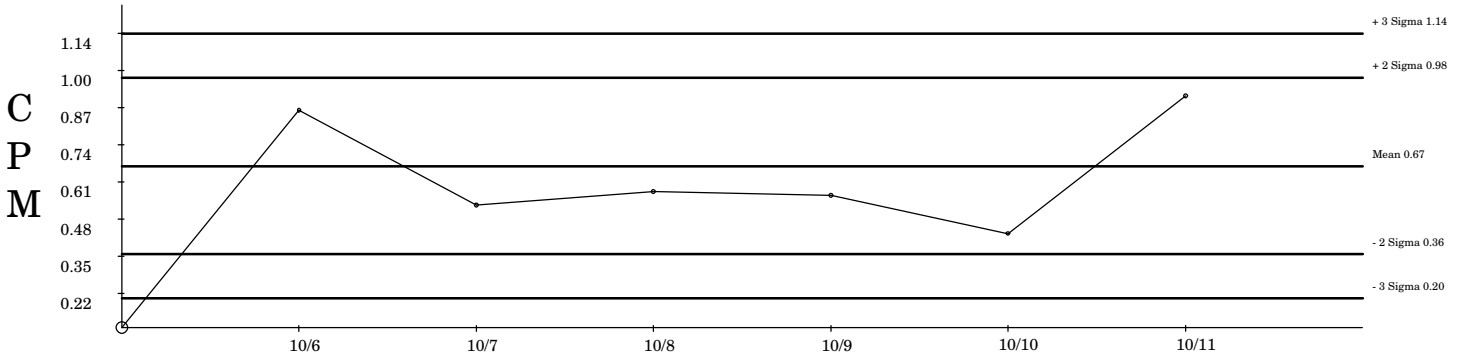

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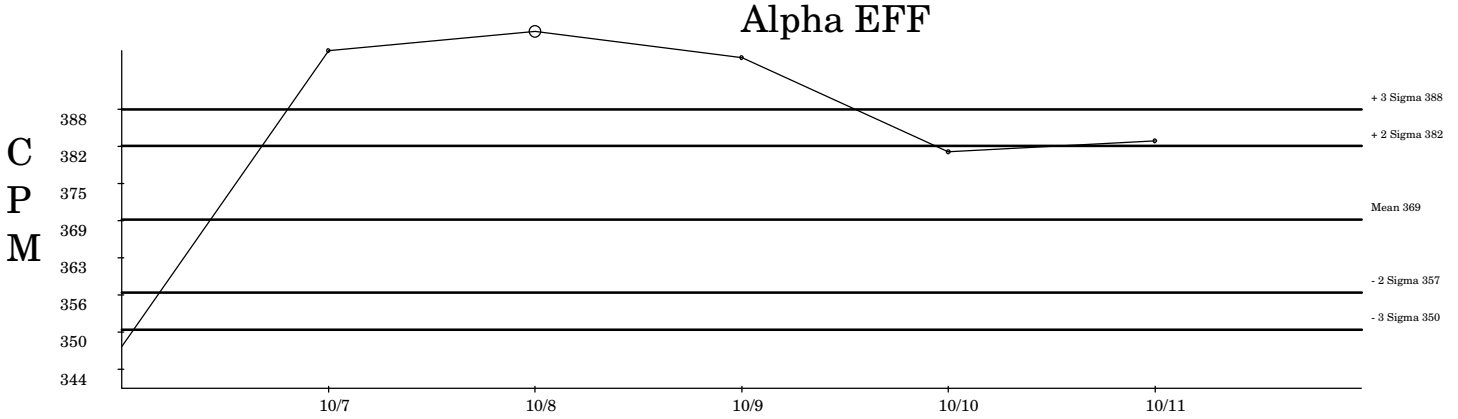
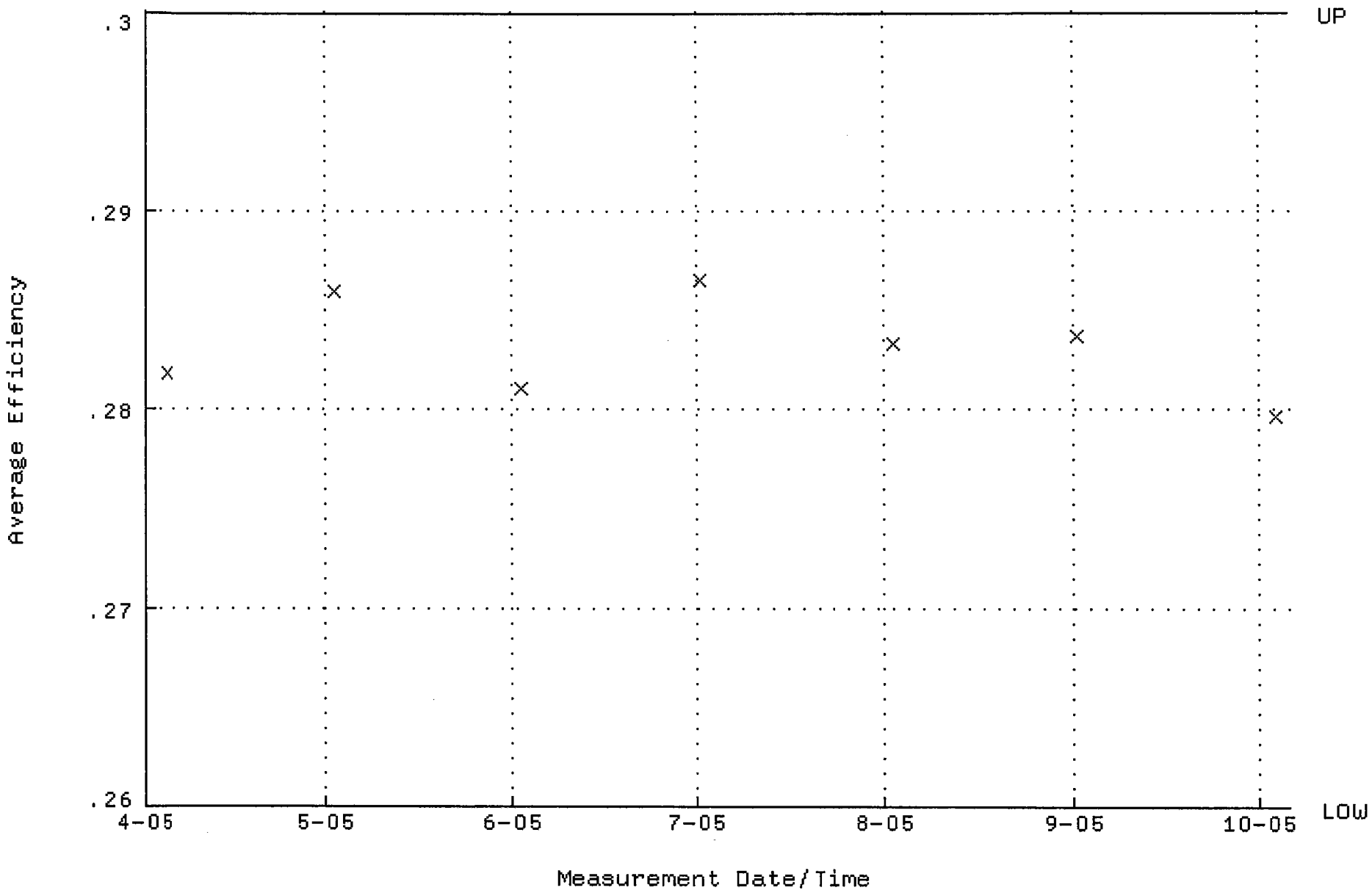


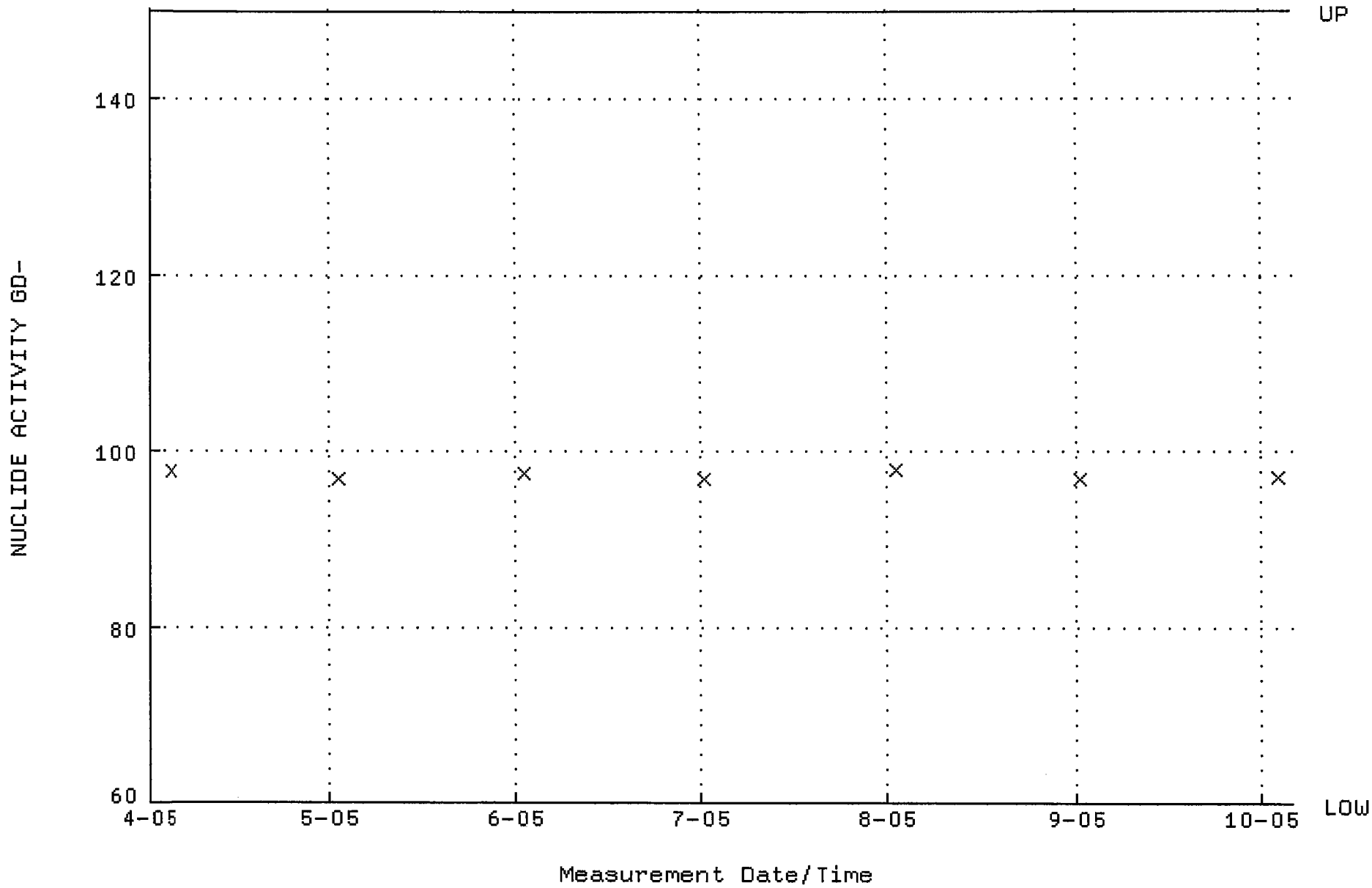
Beta EFF

○ Denotes Outlier

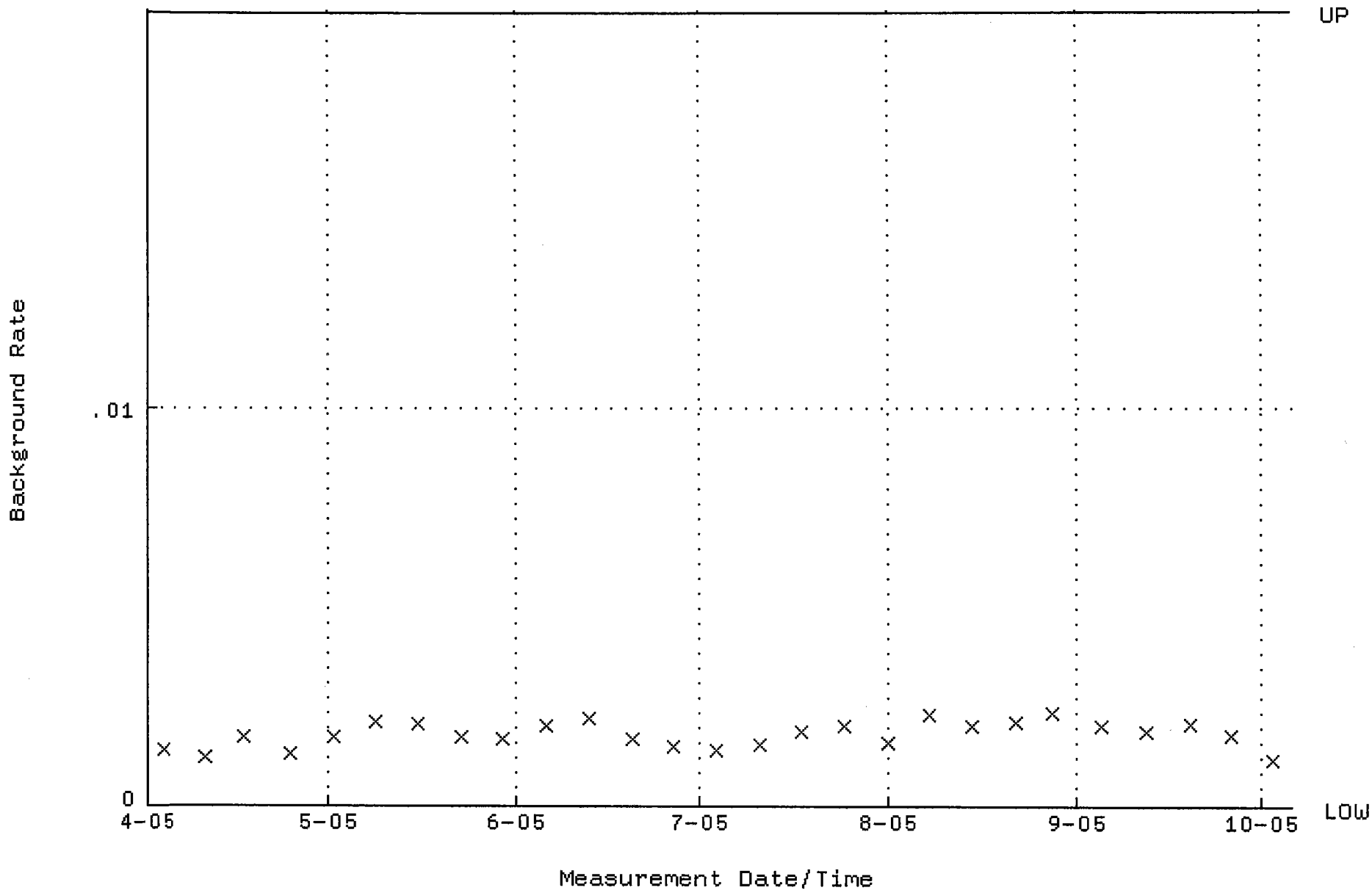
QA filename : DKA100:[ENV_ALPHA.QA.W]W018.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 13:17:39 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.260000 through 0.300000



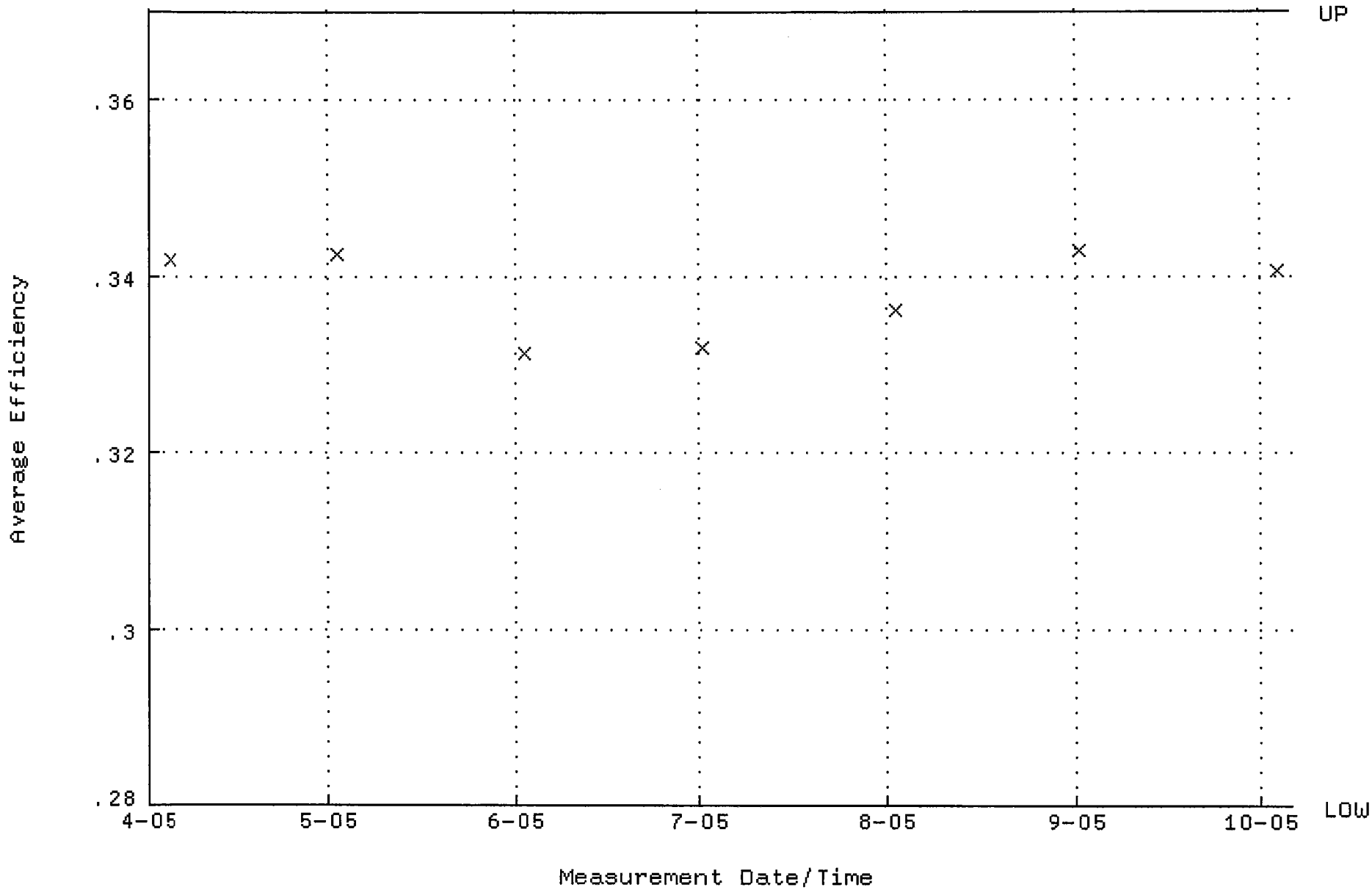
QA filename : DKA100:[ENV_ALPHA.QA.W]W018.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 13:17:39 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



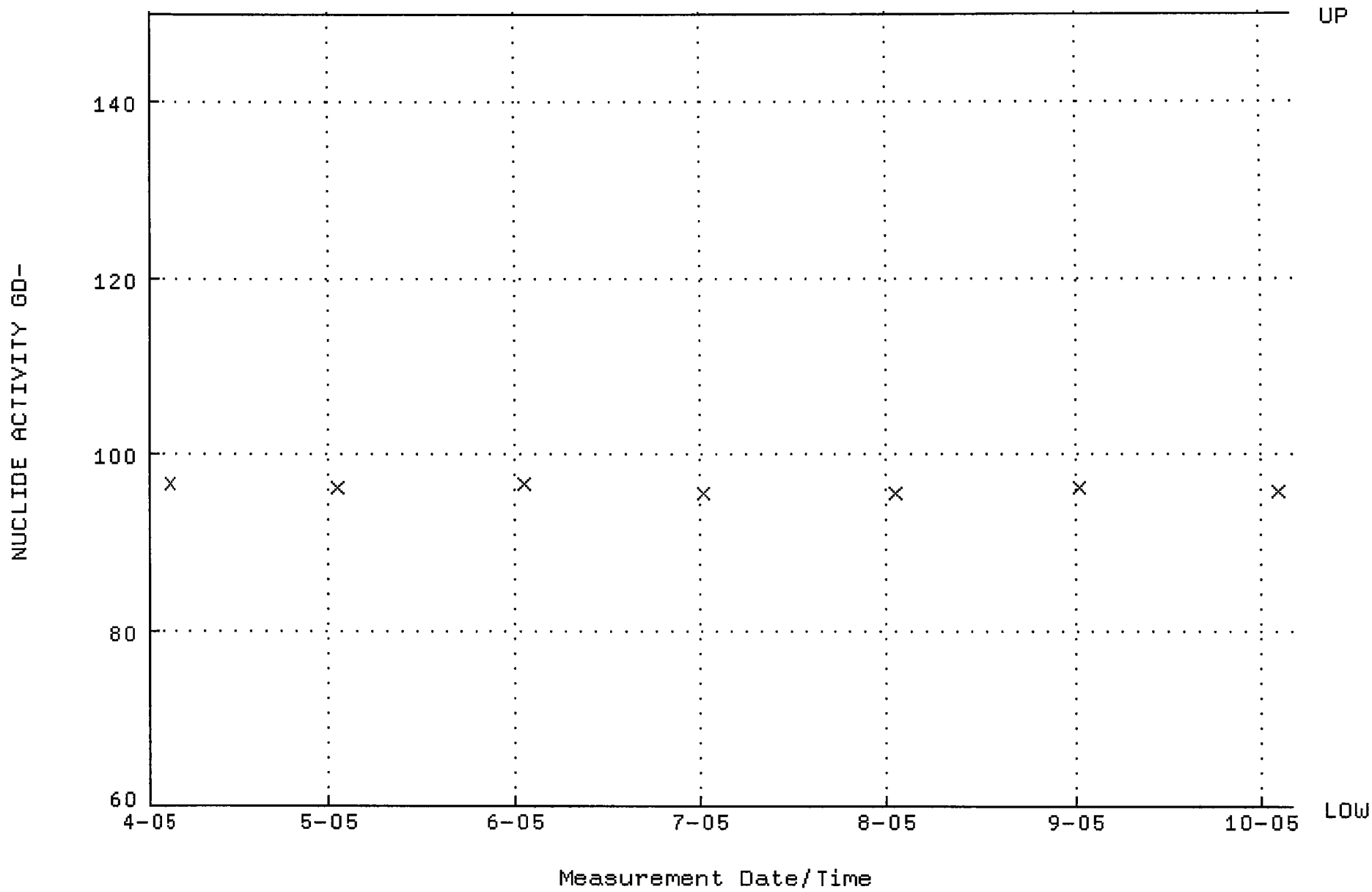
QA filename : DKA100:[ENV_ALPHA.QA.B]B018.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:53 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



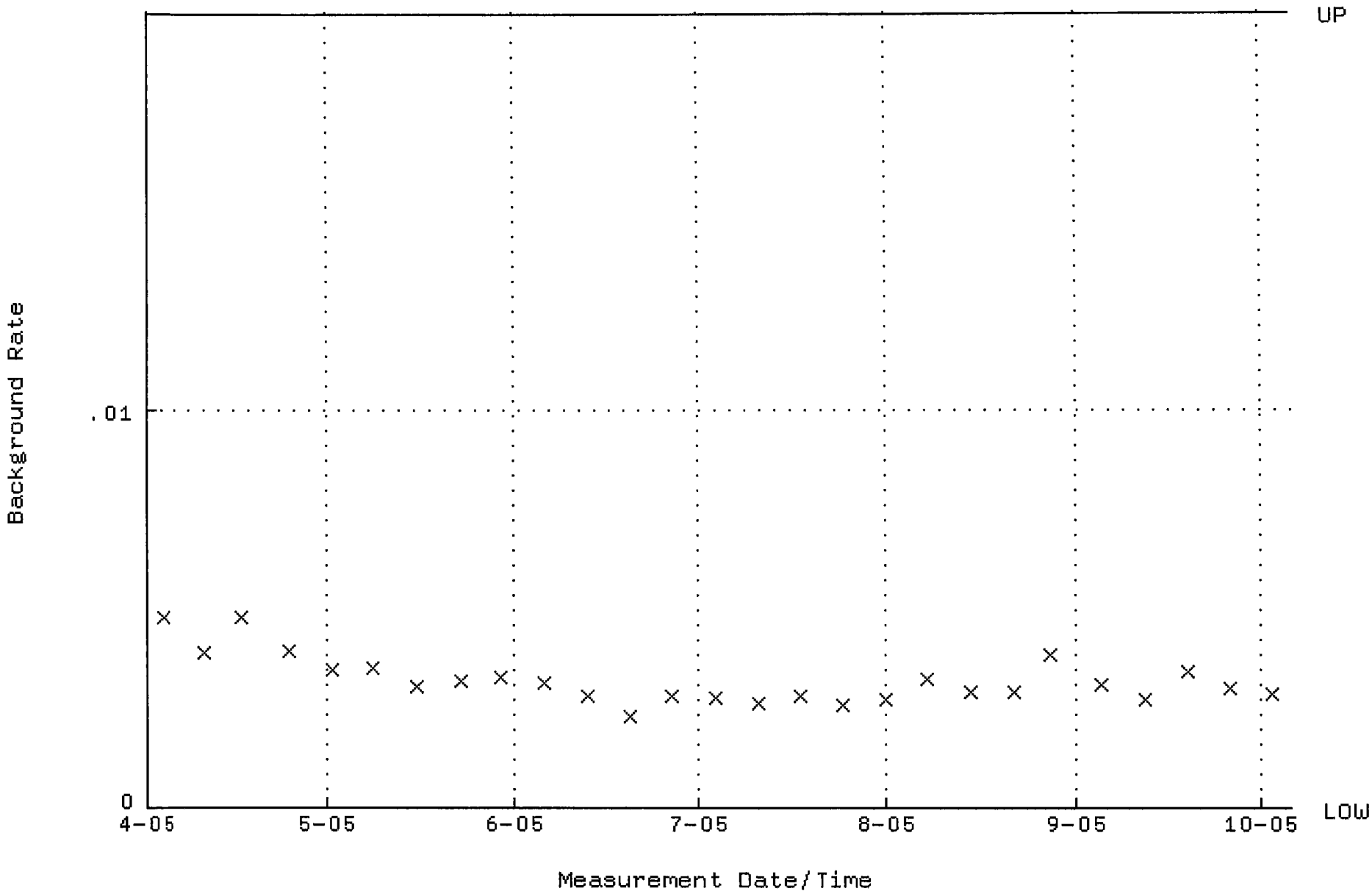
QA filename : DKA100:[ENV_ALPHA.QA.W]W020.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



QA filename : DKA100:[ENV_ALPHA.QA.W]W020.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



QA filename : DKA100:[ENV_ALPHA.QA.B]B020.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:54 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



QA filename : DKA100:[ENV_ALPHA.QA.W]W021.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
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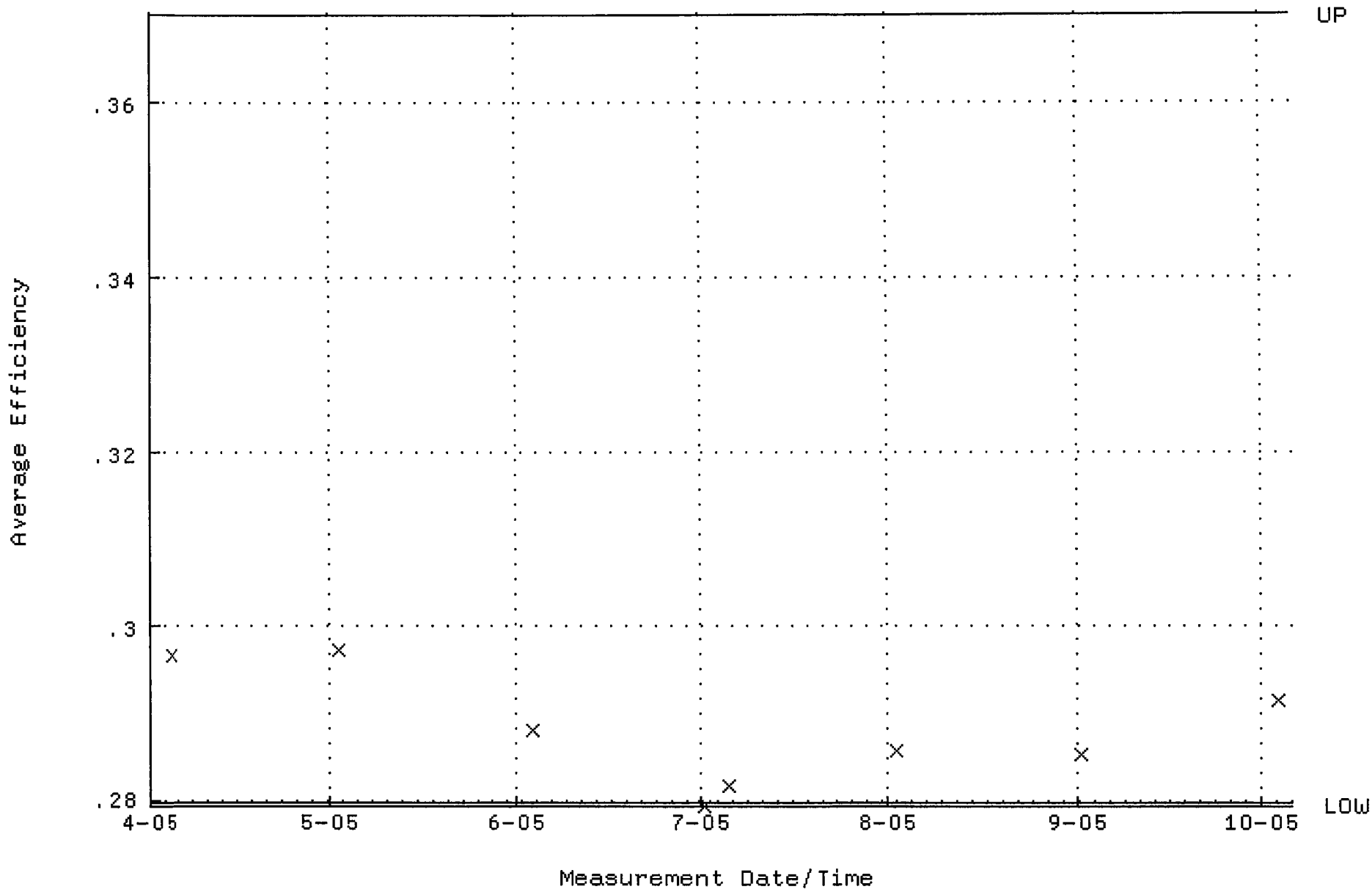
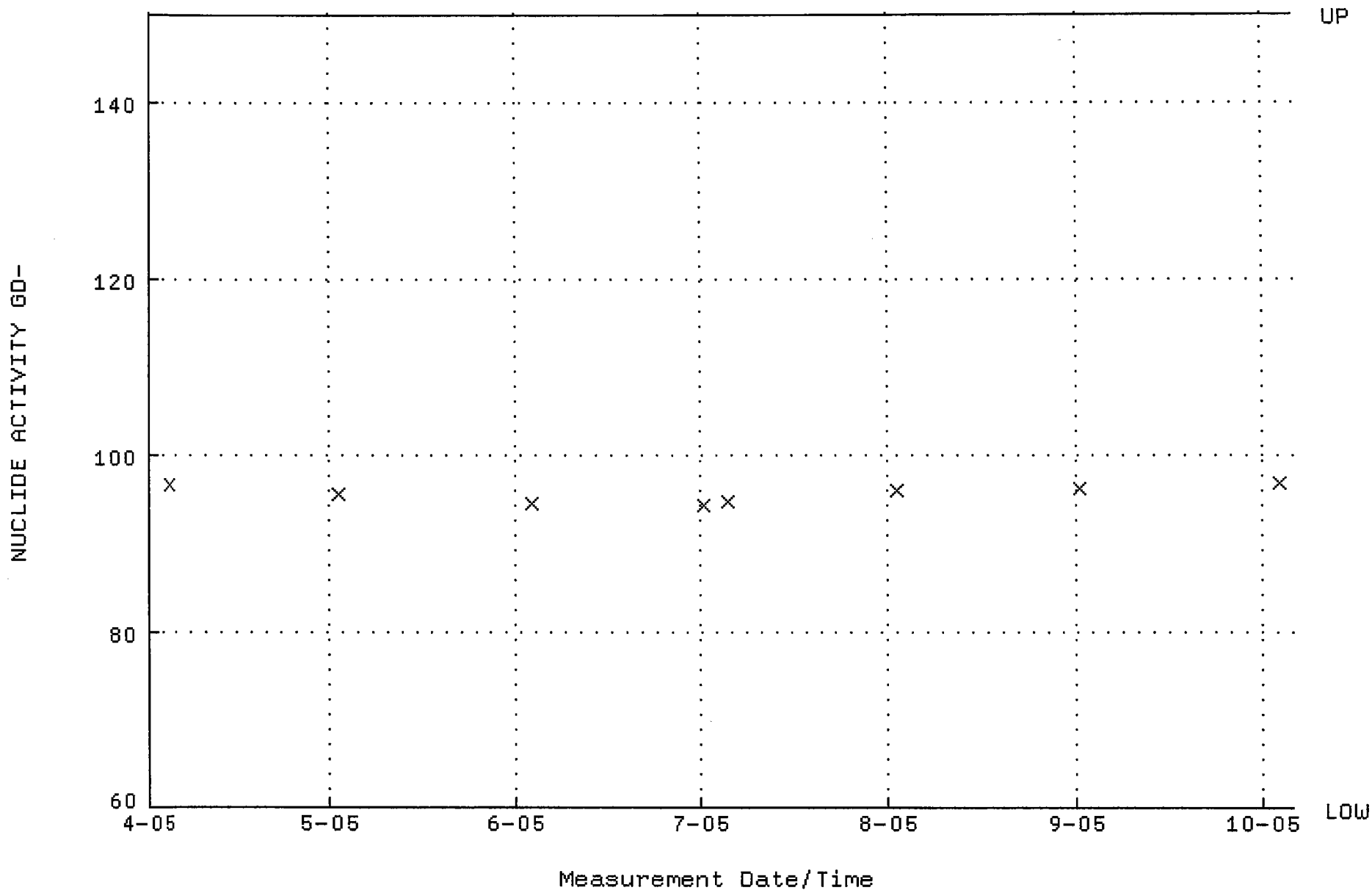
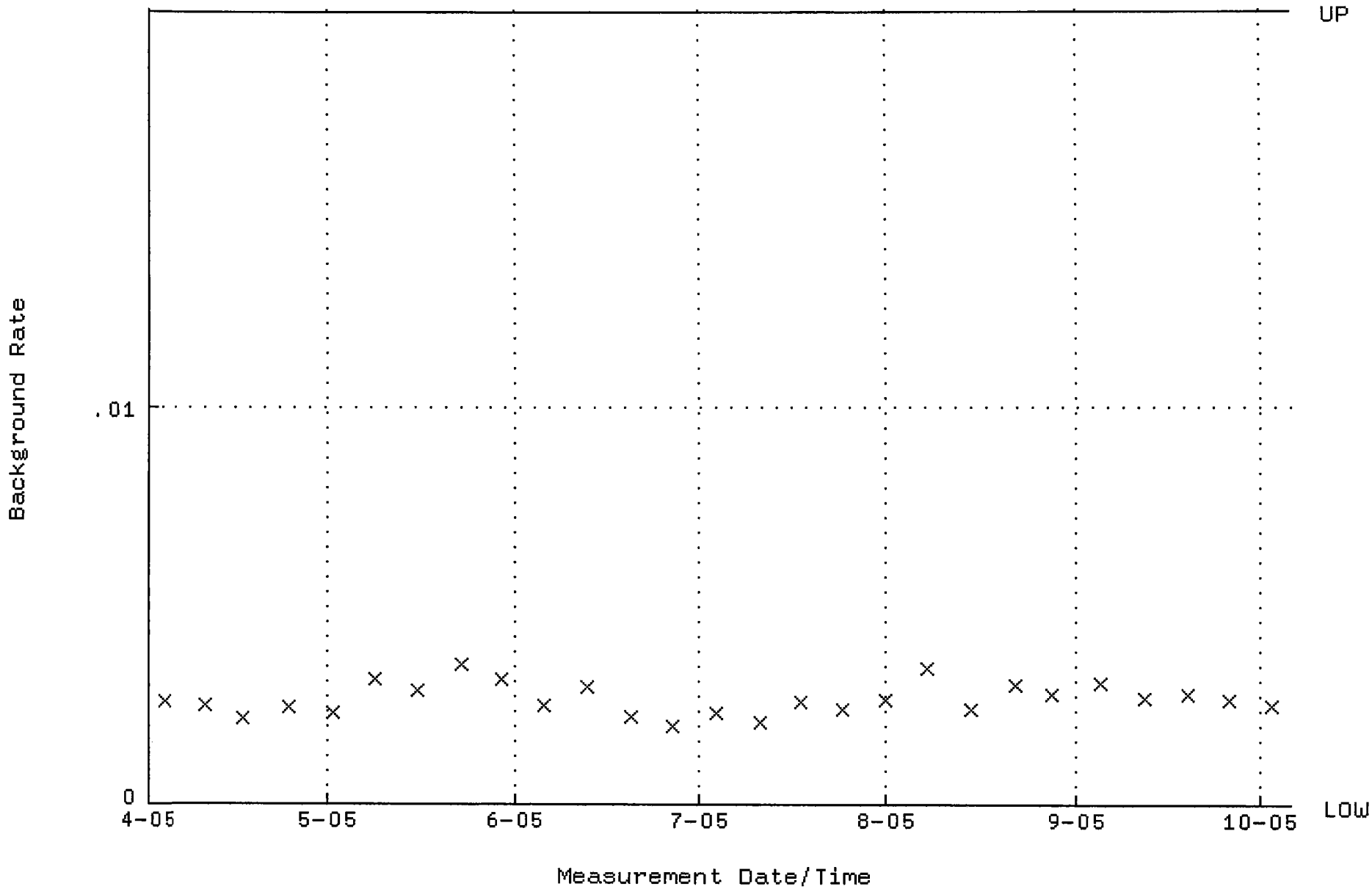
Lower/Upper Lmts: 0.280000 through 0.370000



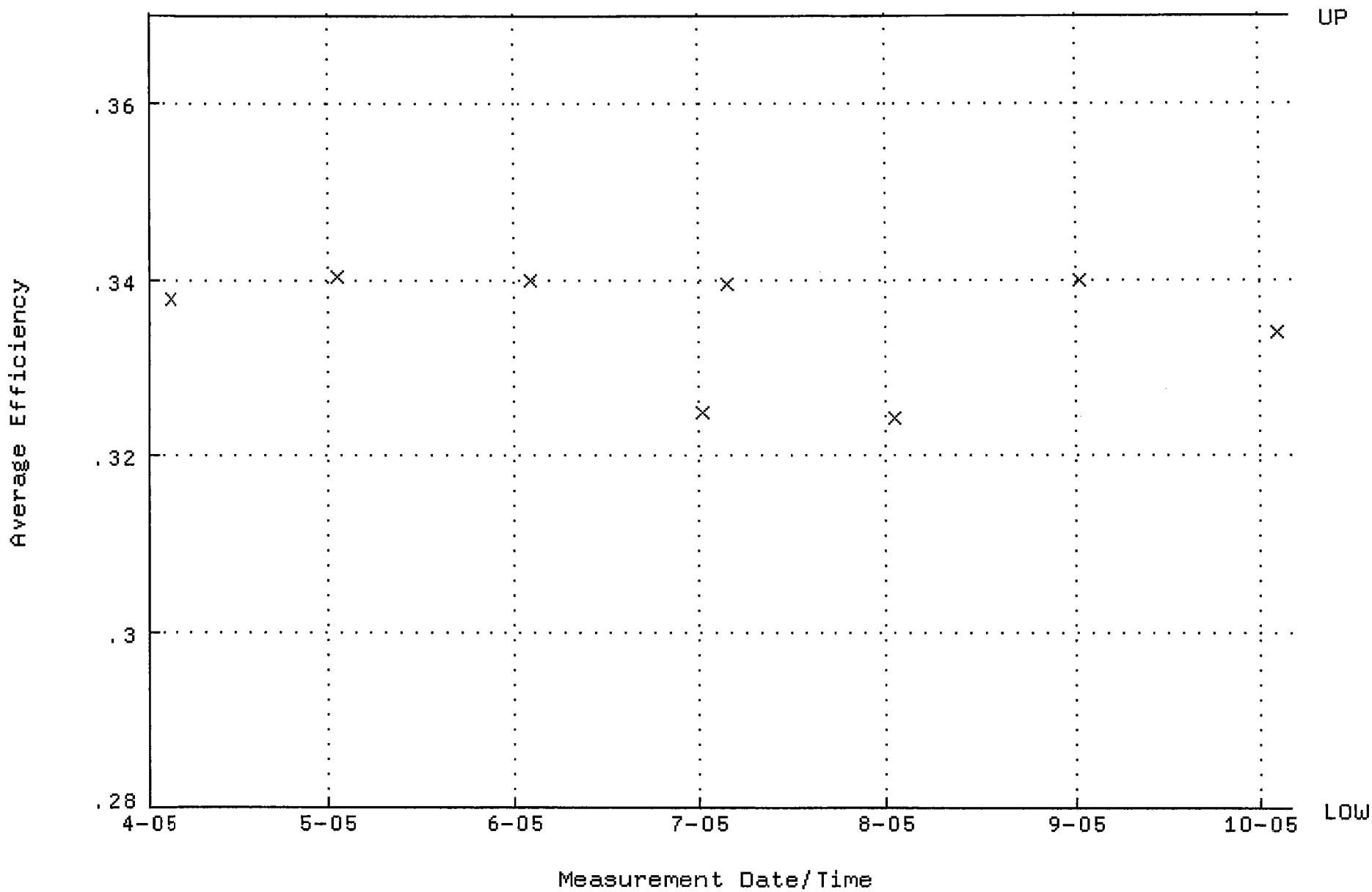
QA filename : DKA100:[ENV_ALPHA.QA.W]W021.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



QA filename : DKA100:[ENV_ALPHA.QA.B]B021.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:54 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

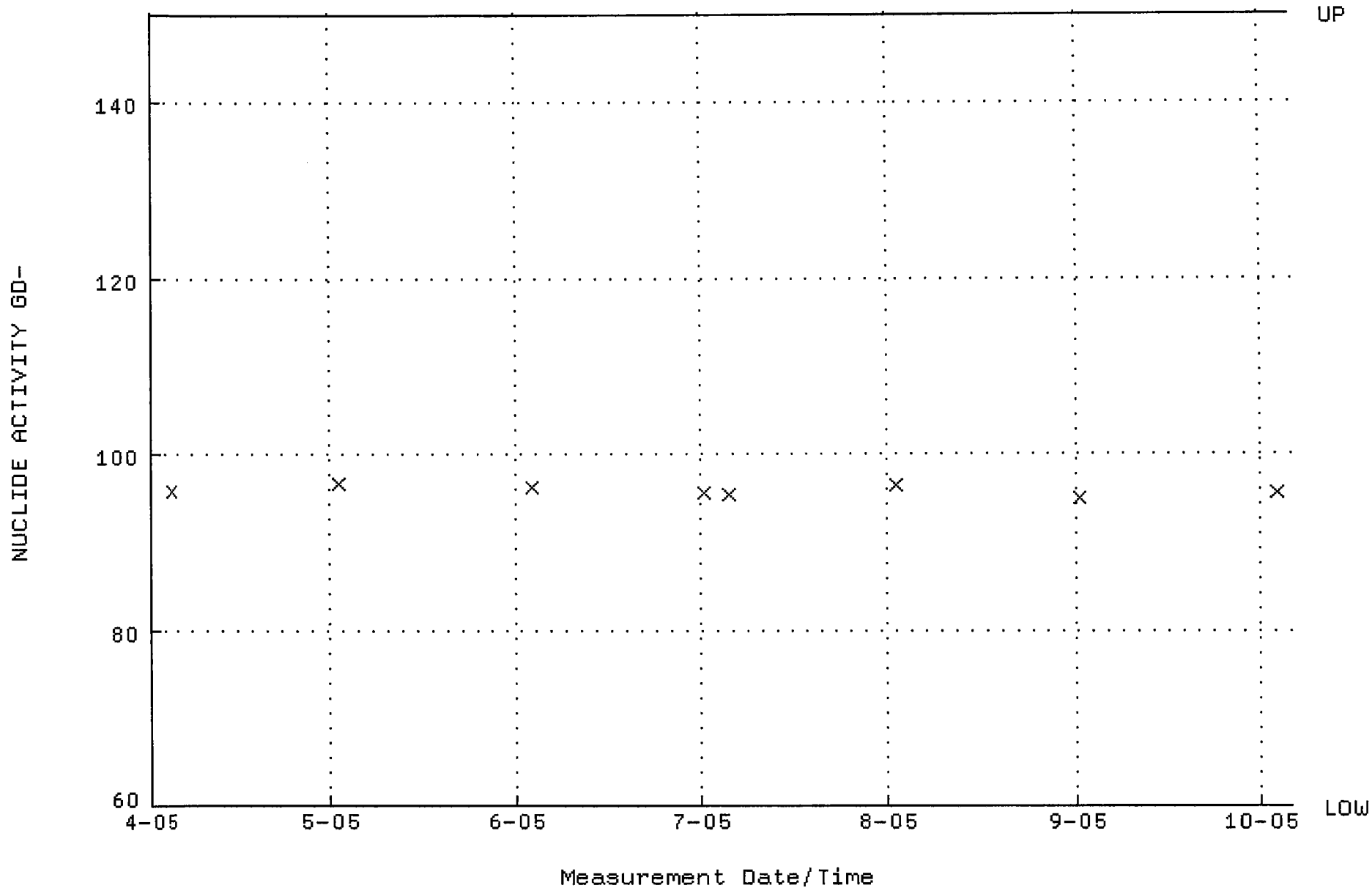


QA filename : DKA100:[ENV_ALPHA.QA.W]W022.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



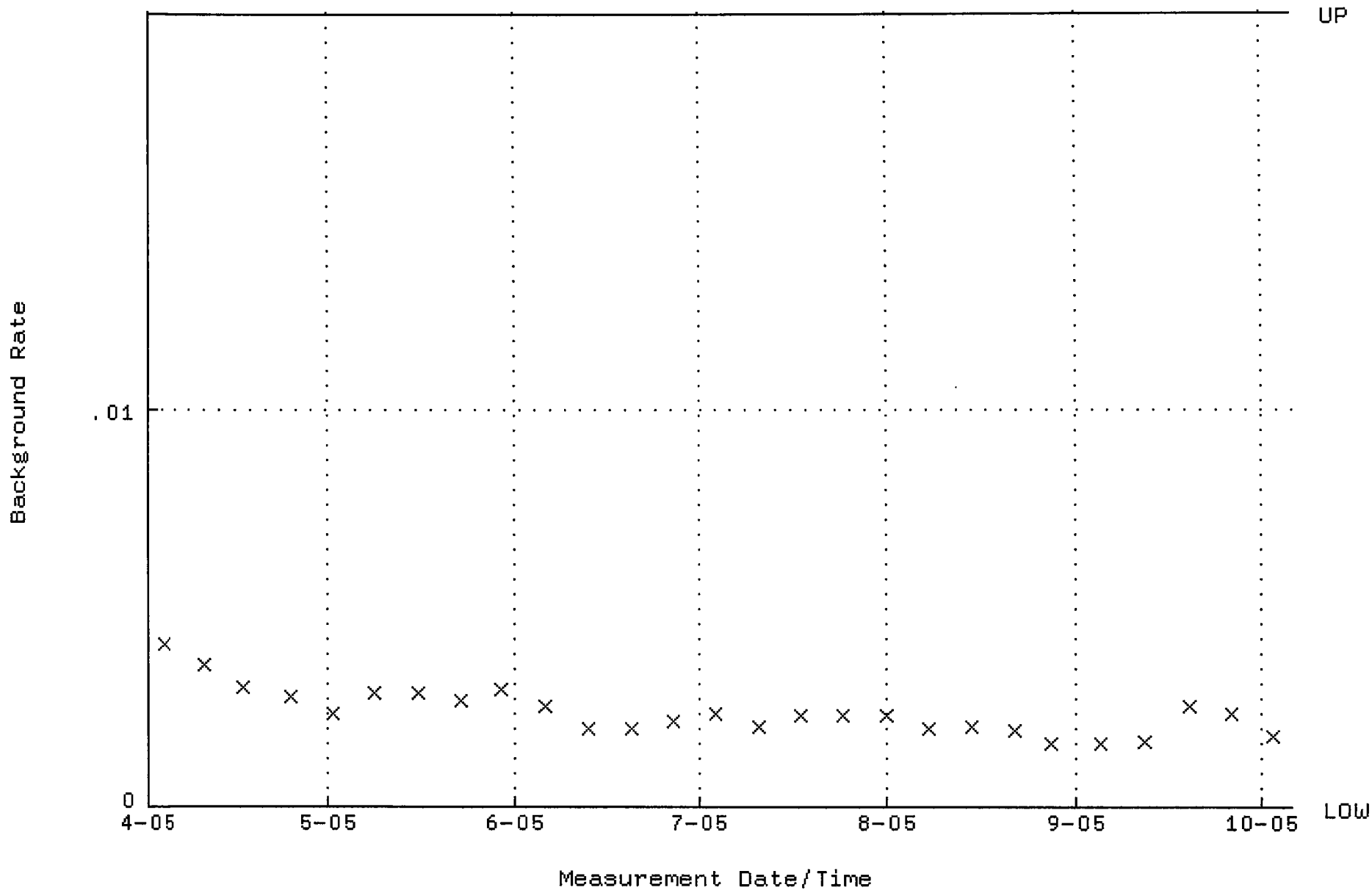
1830

QA filename : DKA100:[ENV_ALPHA.QA.W]W022.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000

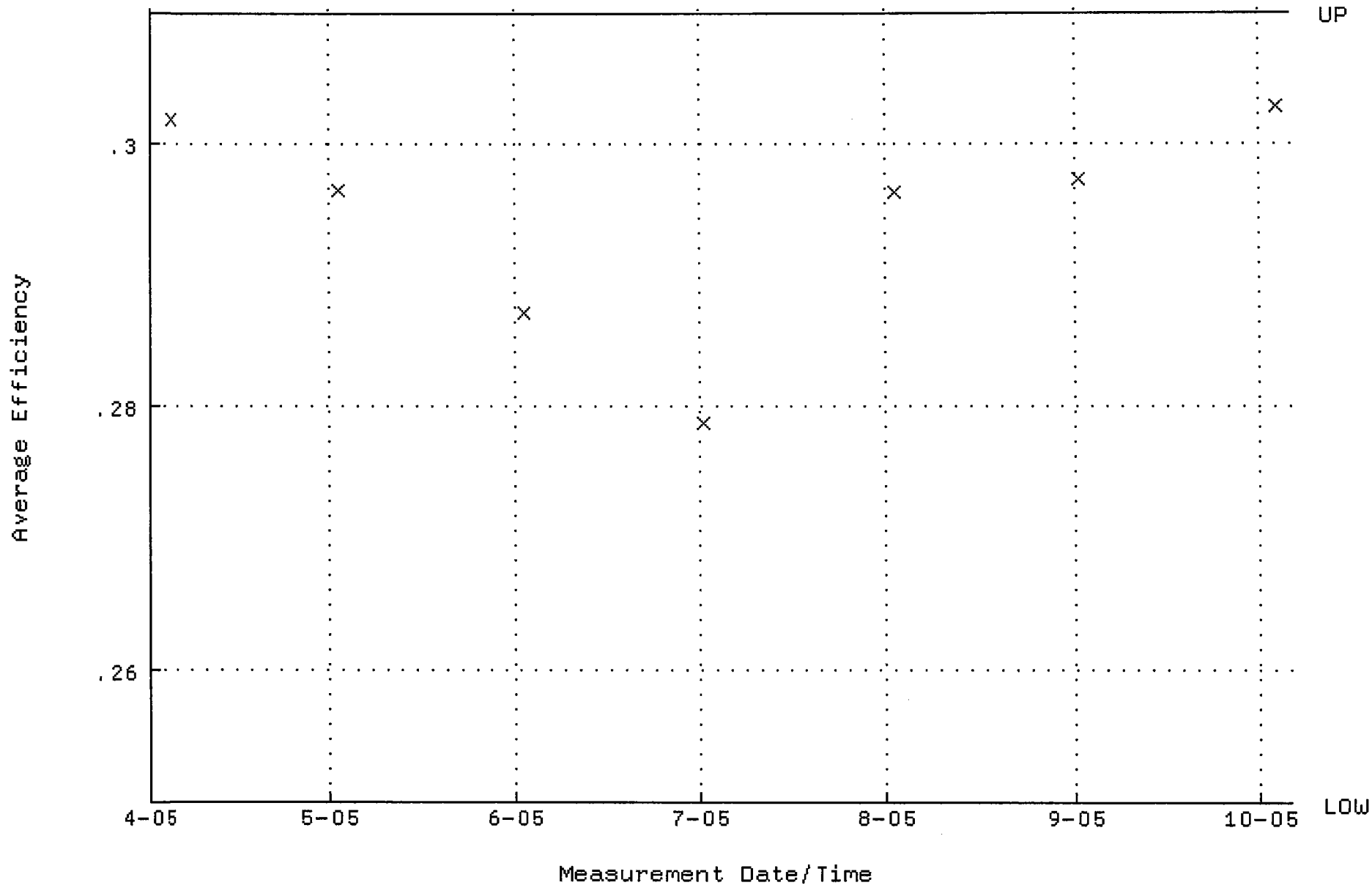


1831

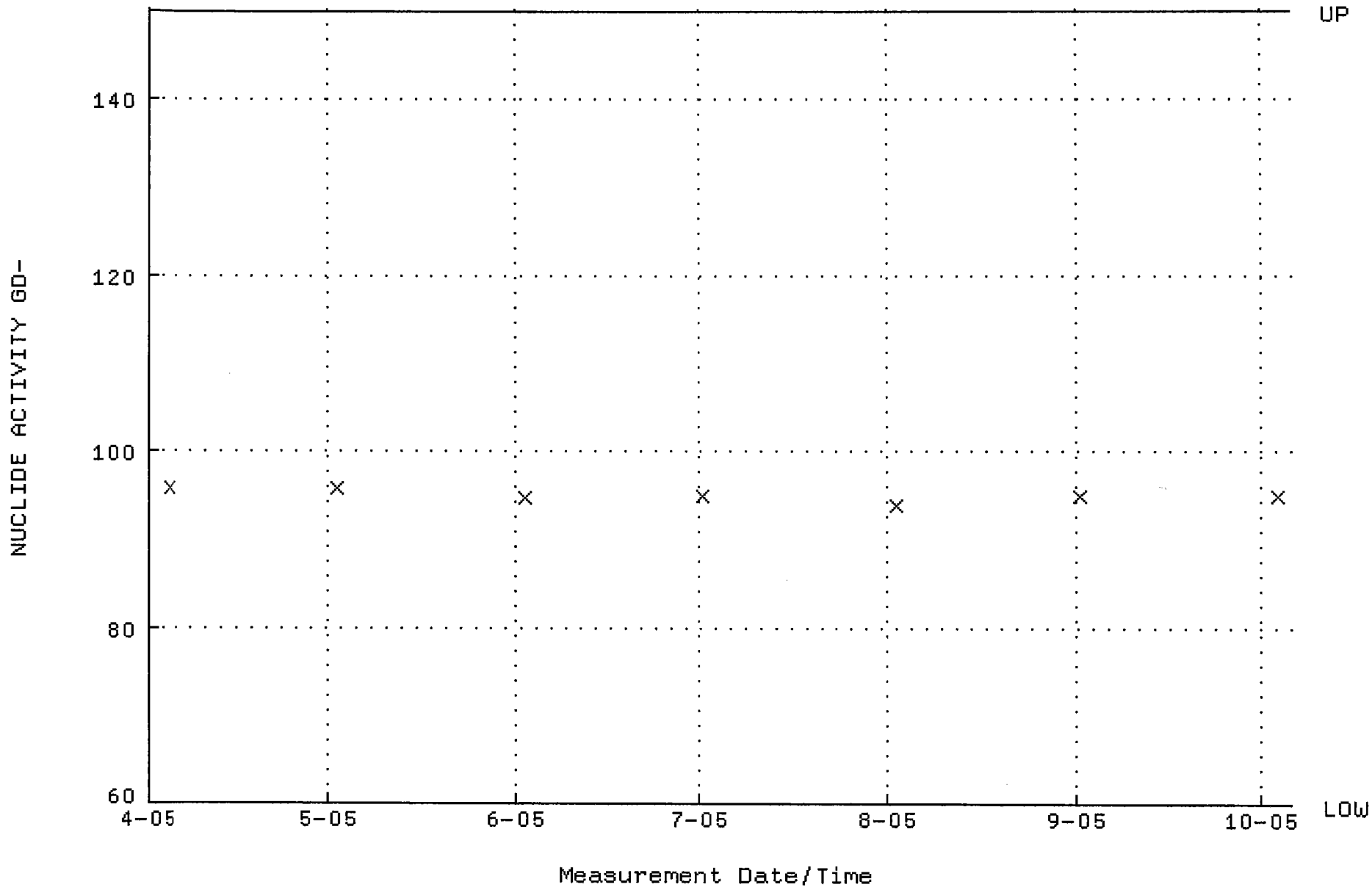
QA filename : DKA100:[ENV_ALPHA.QA.B]B022.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:54 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



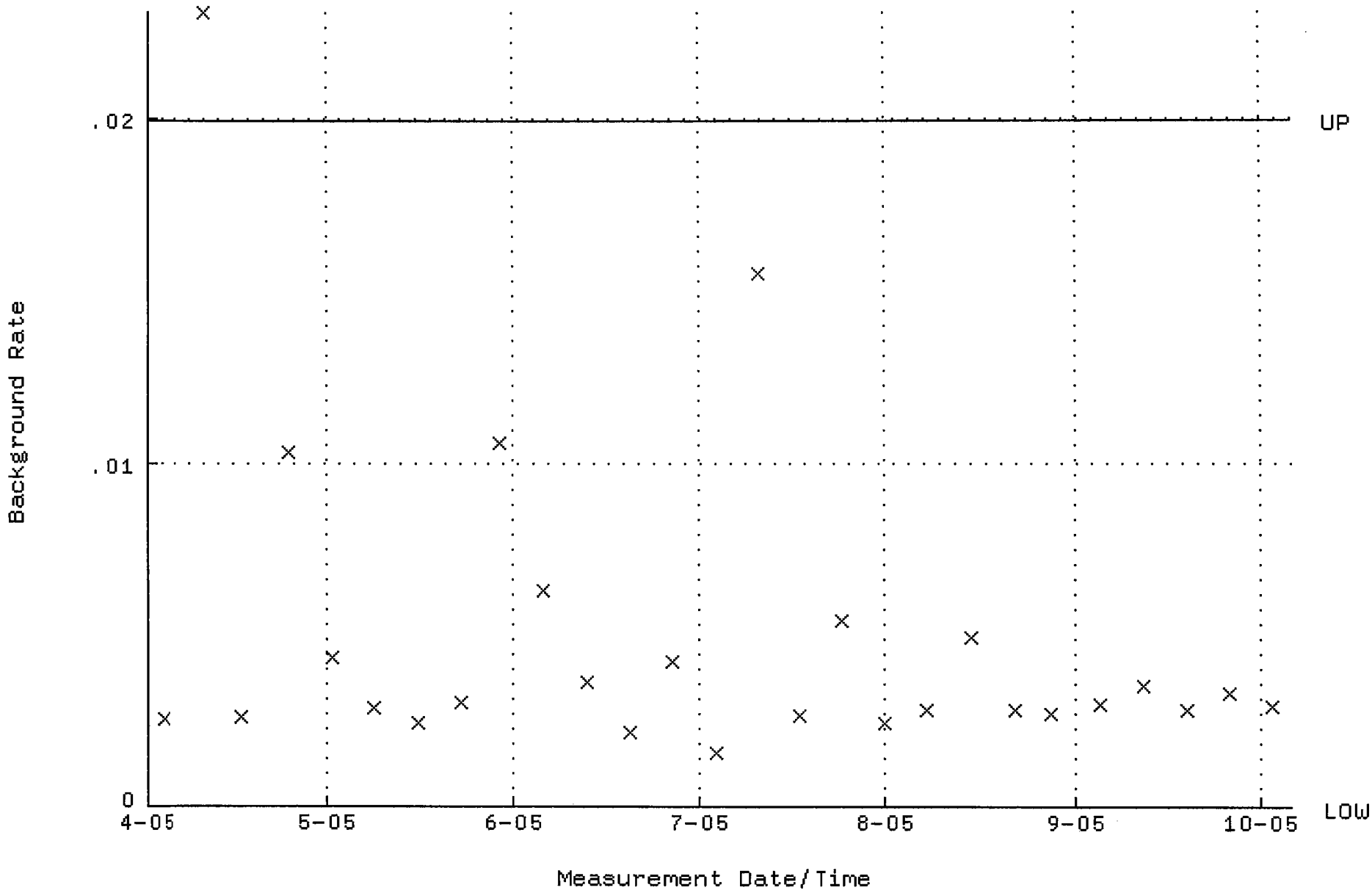
QA filename : DKA100:[ENV_ALPHA.QA.W]W023.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.250000 through 0.310000



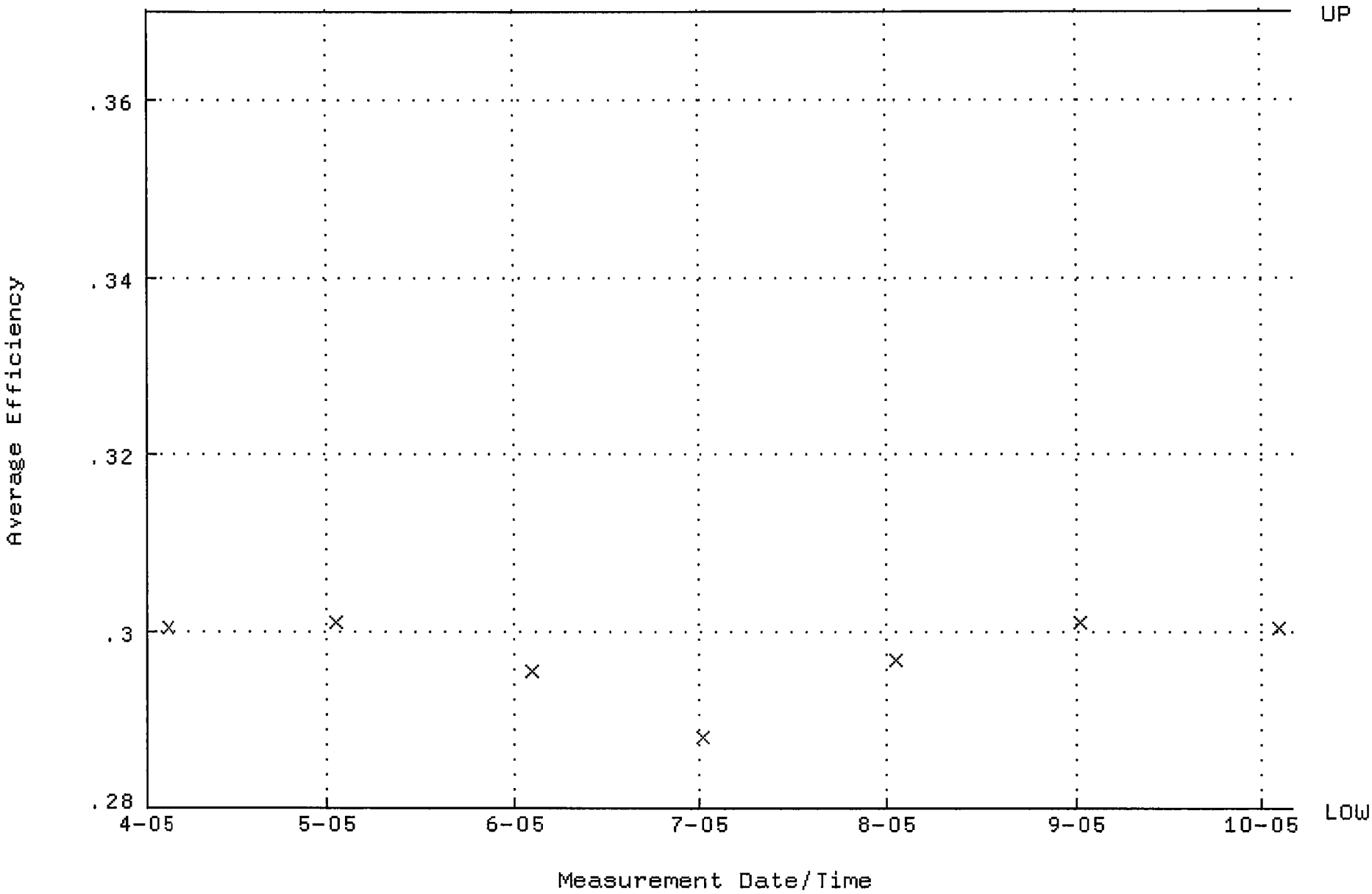
QA filename : DKA100:[ENV_ALPHA.QA.W]W023.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



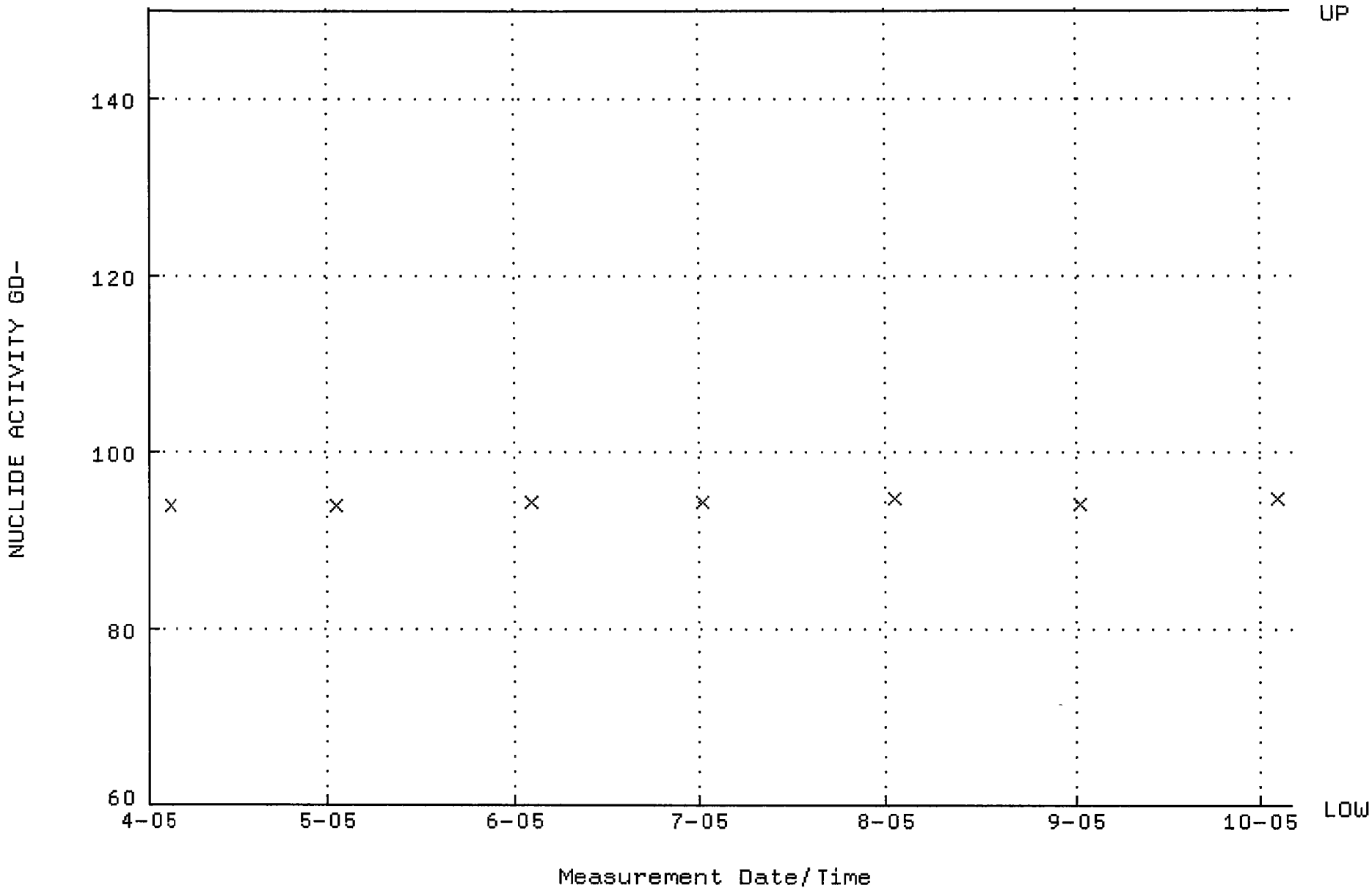
QA filename : DKA100:[ENV_ALPHA.QA.B]B023.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:54 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



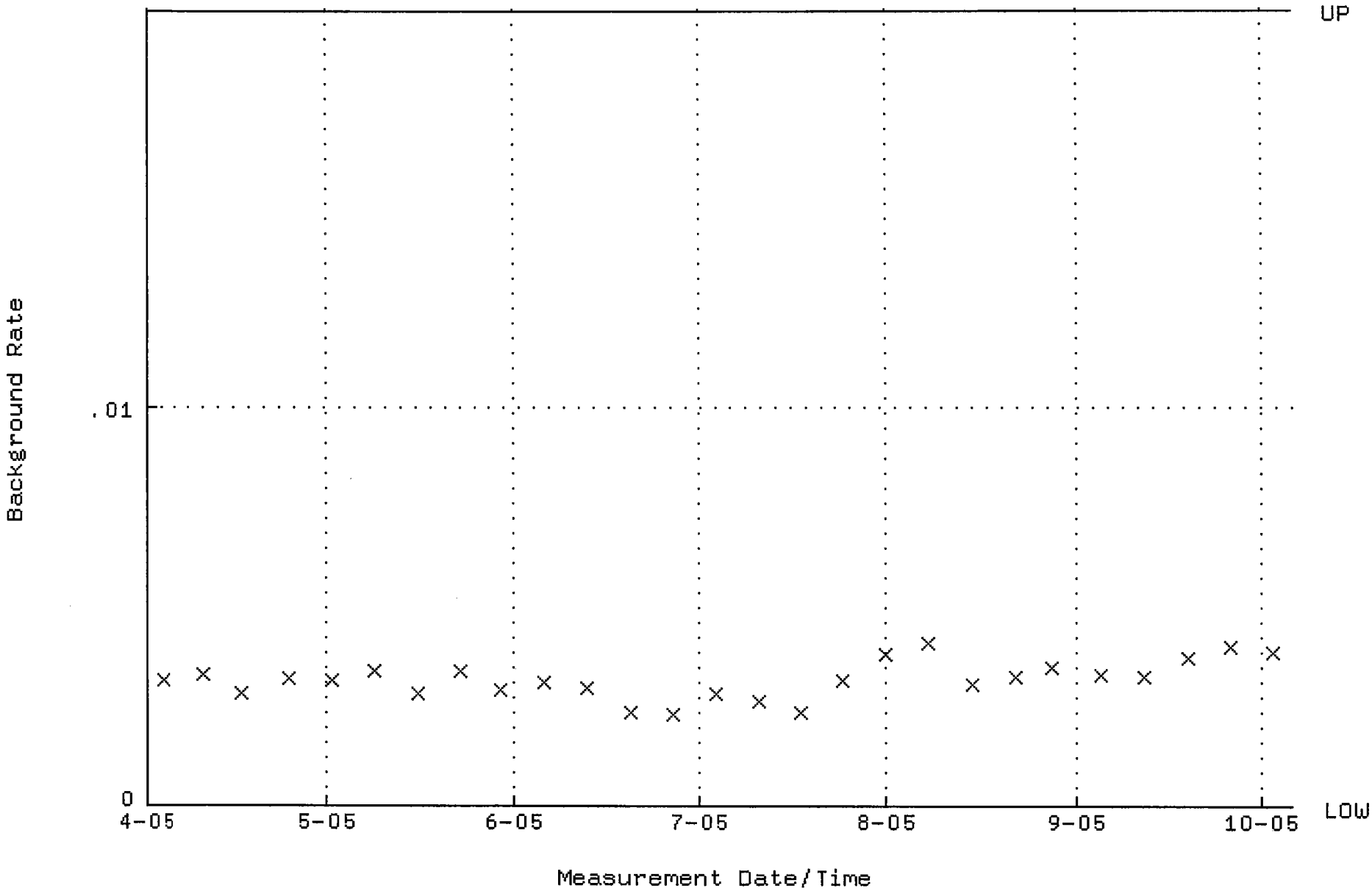
QA filename : DKA100:[ENV_ALPHA.QA.W]W024.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



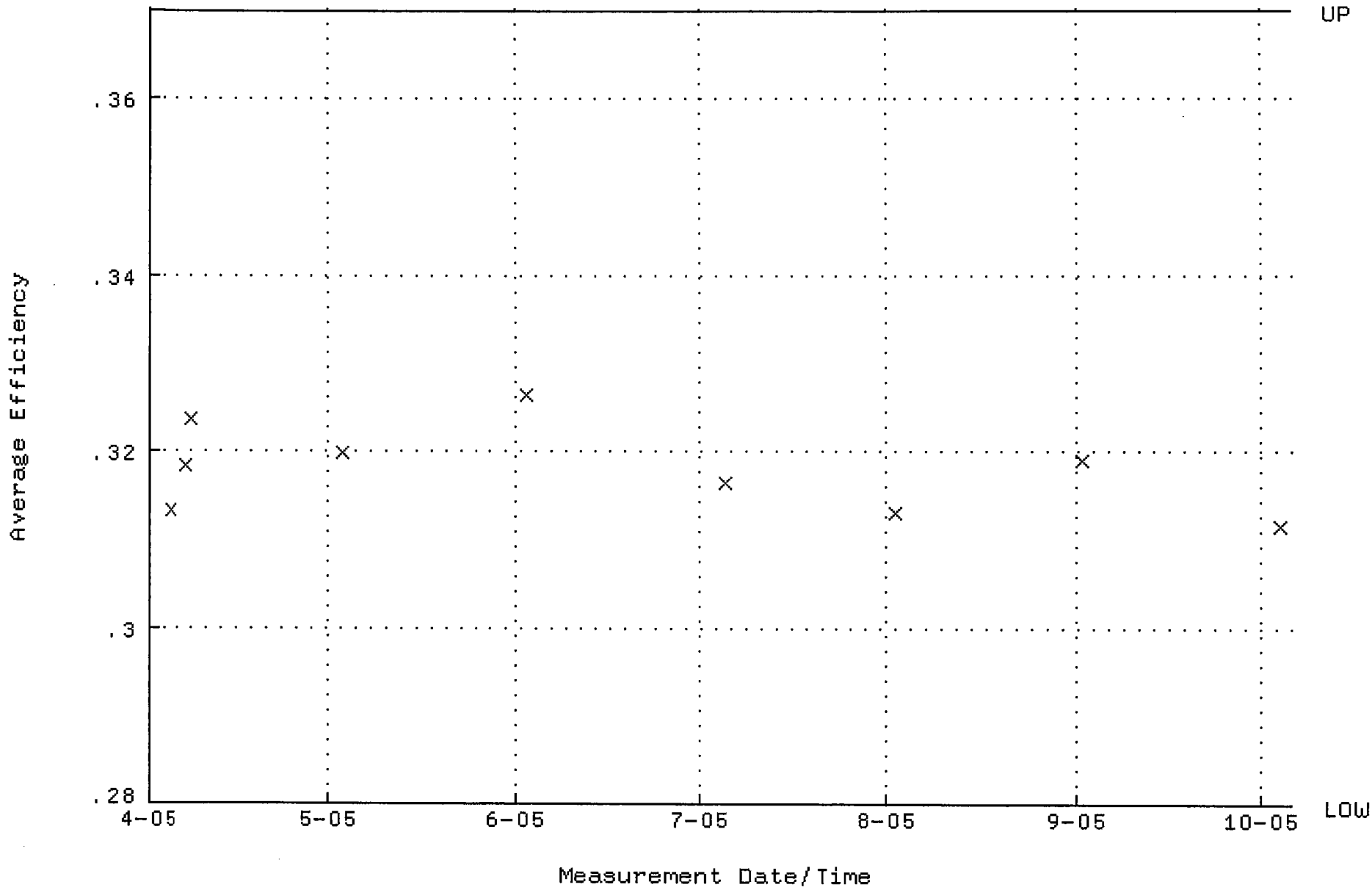
QA filename : DKA100:[ENV_ALPHA.QA.W]W024.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 13:17:40 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



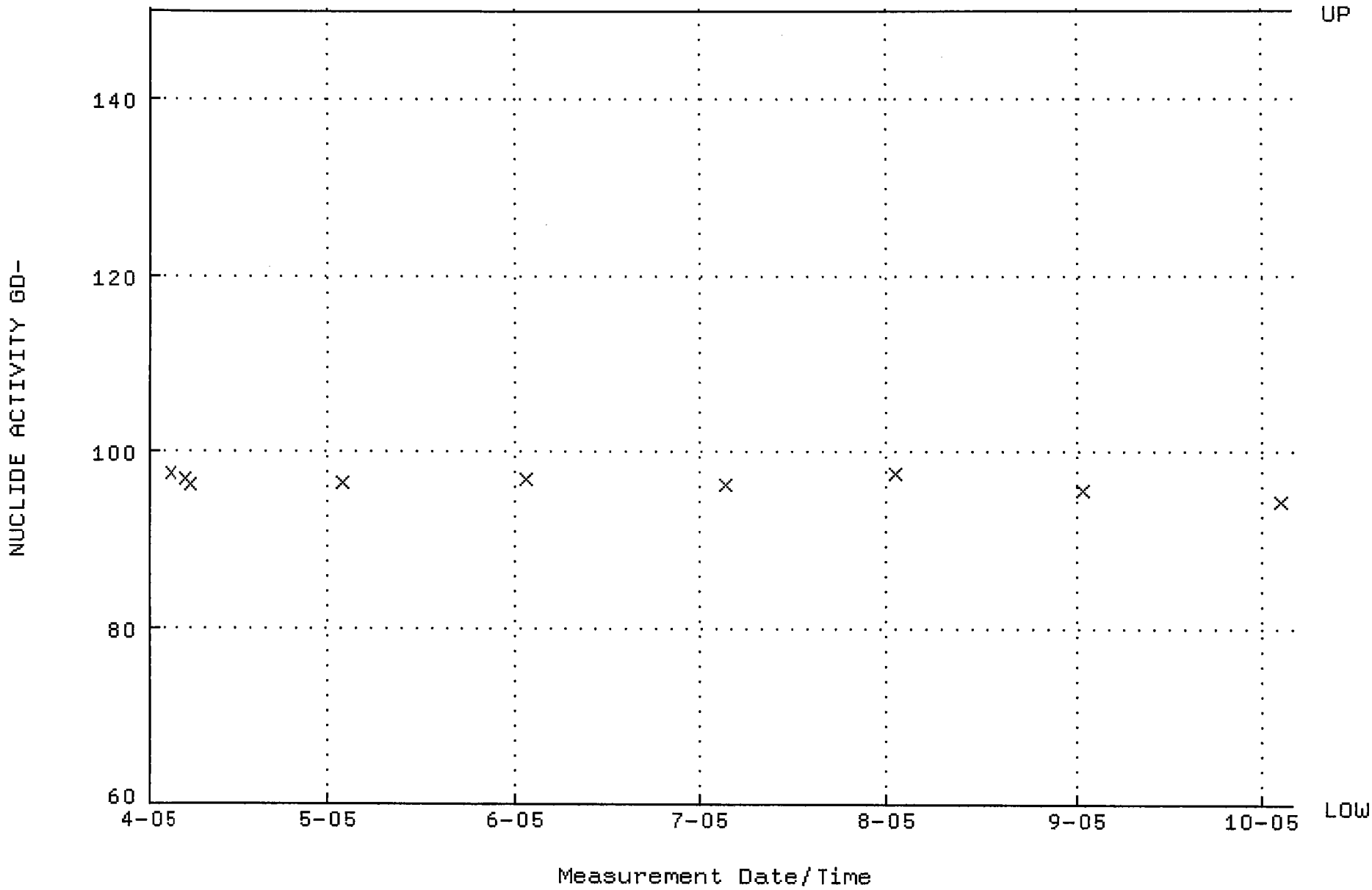
QA filename : DKA100:[ENV_ALPHA.QA.B]B024.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:54 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



QA filename : DKA100:[ENV_ALPHA.QA.W]W025.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:29 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000

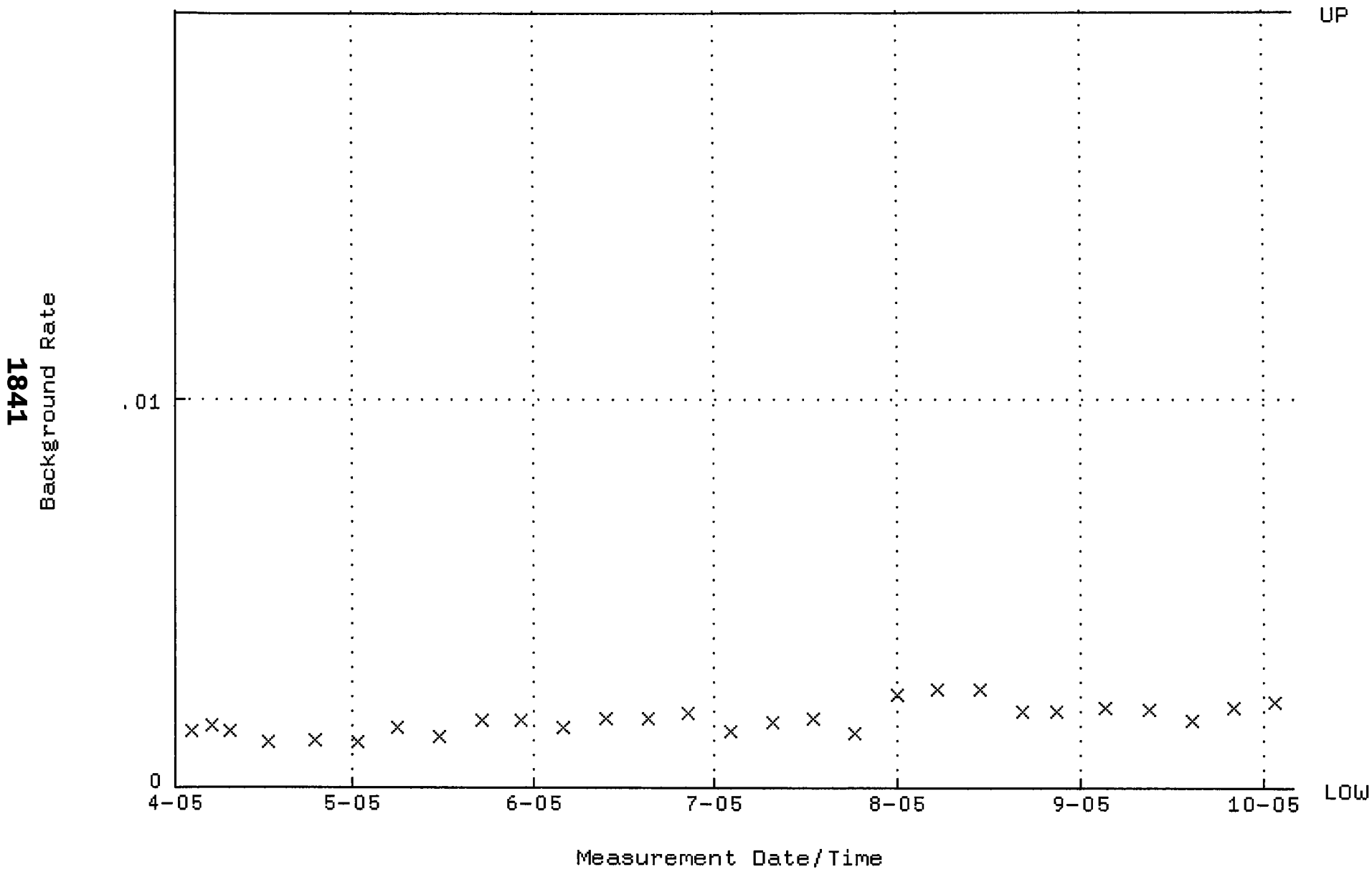


QA filename : DKA100:[ENV_ALPHA.QA.W]W025.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:29 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000

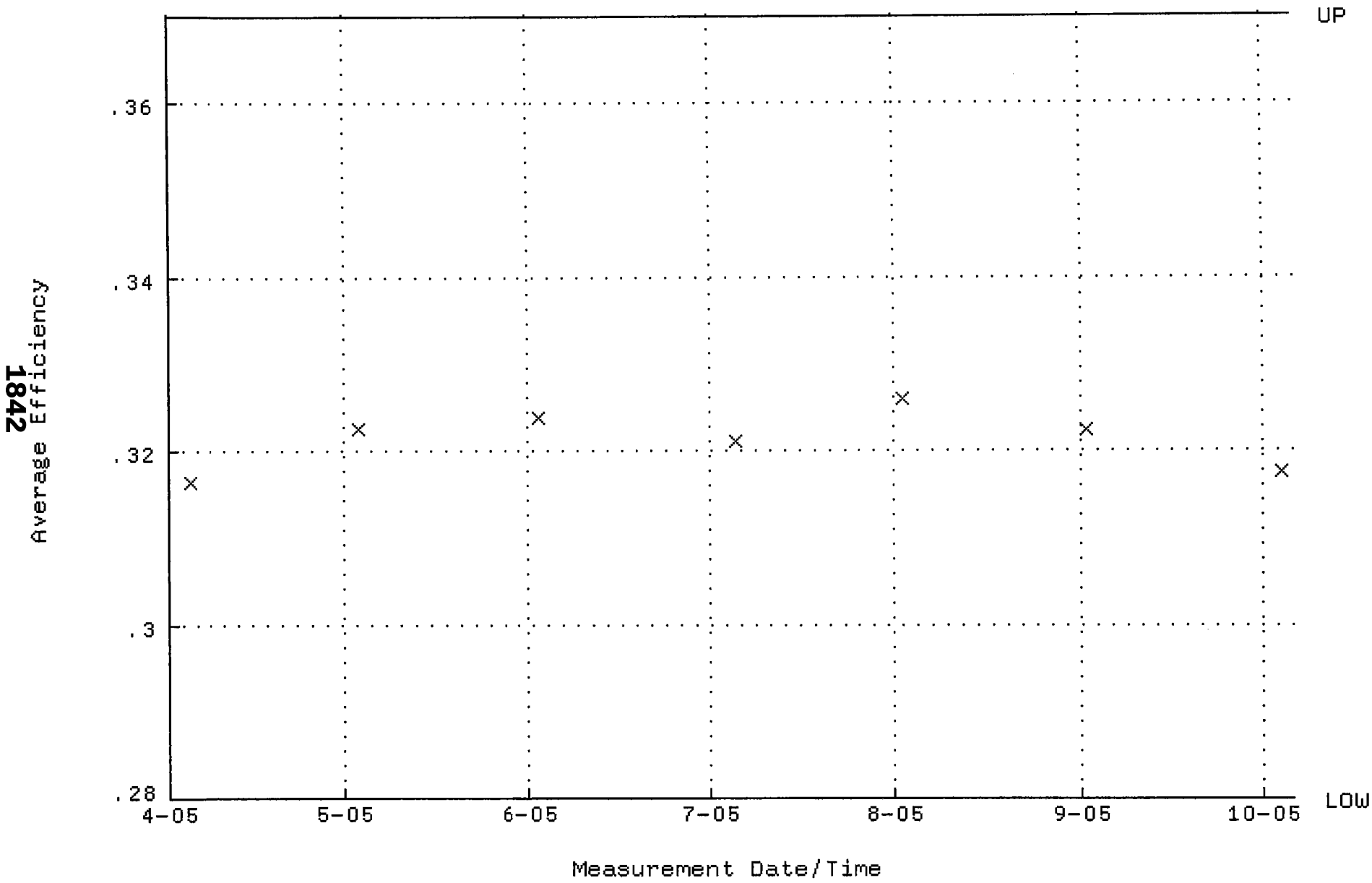


1840

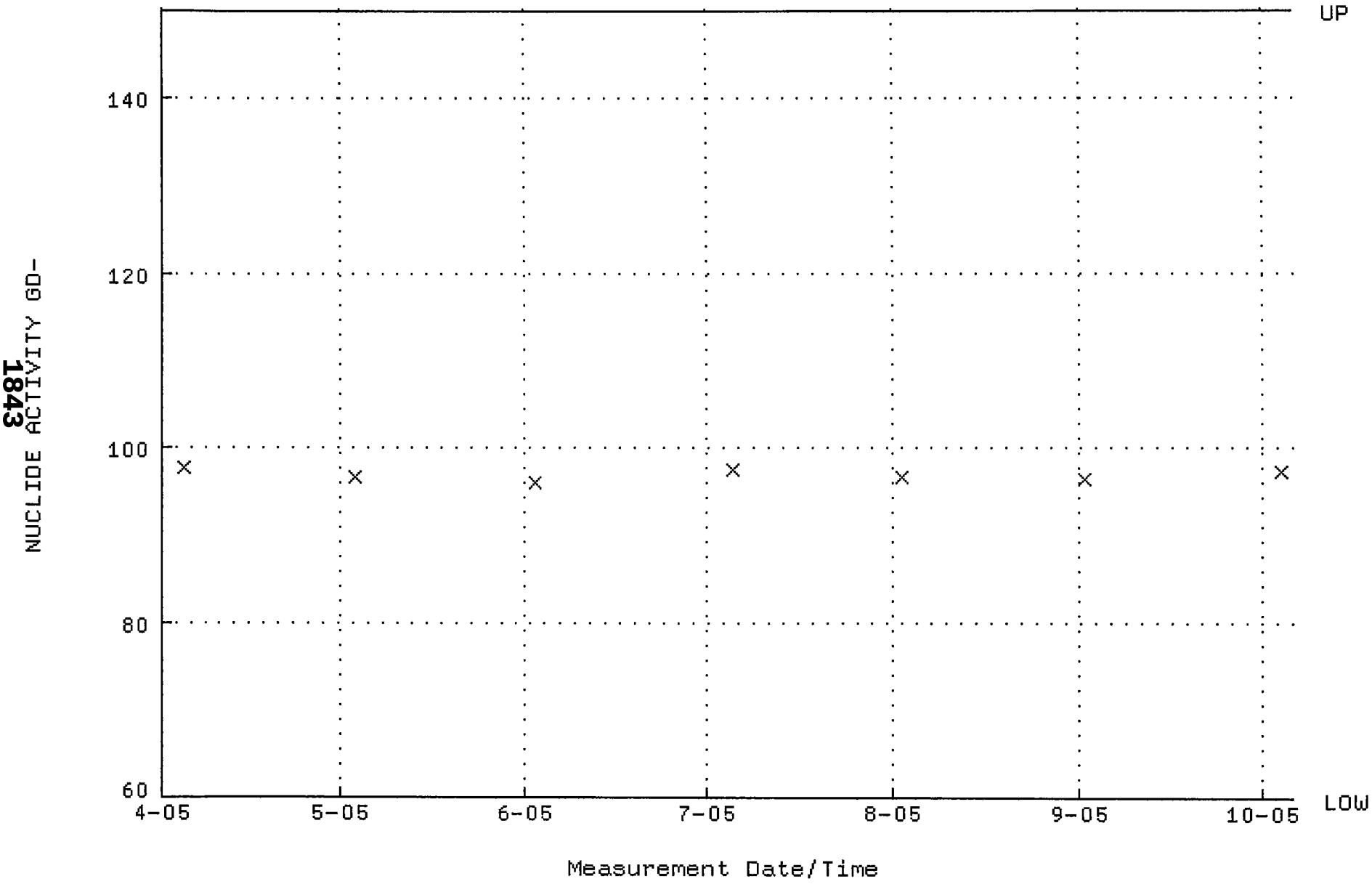
QA filename : DKA100:[ENV_ALPHA.QA.B]B025.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:55 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



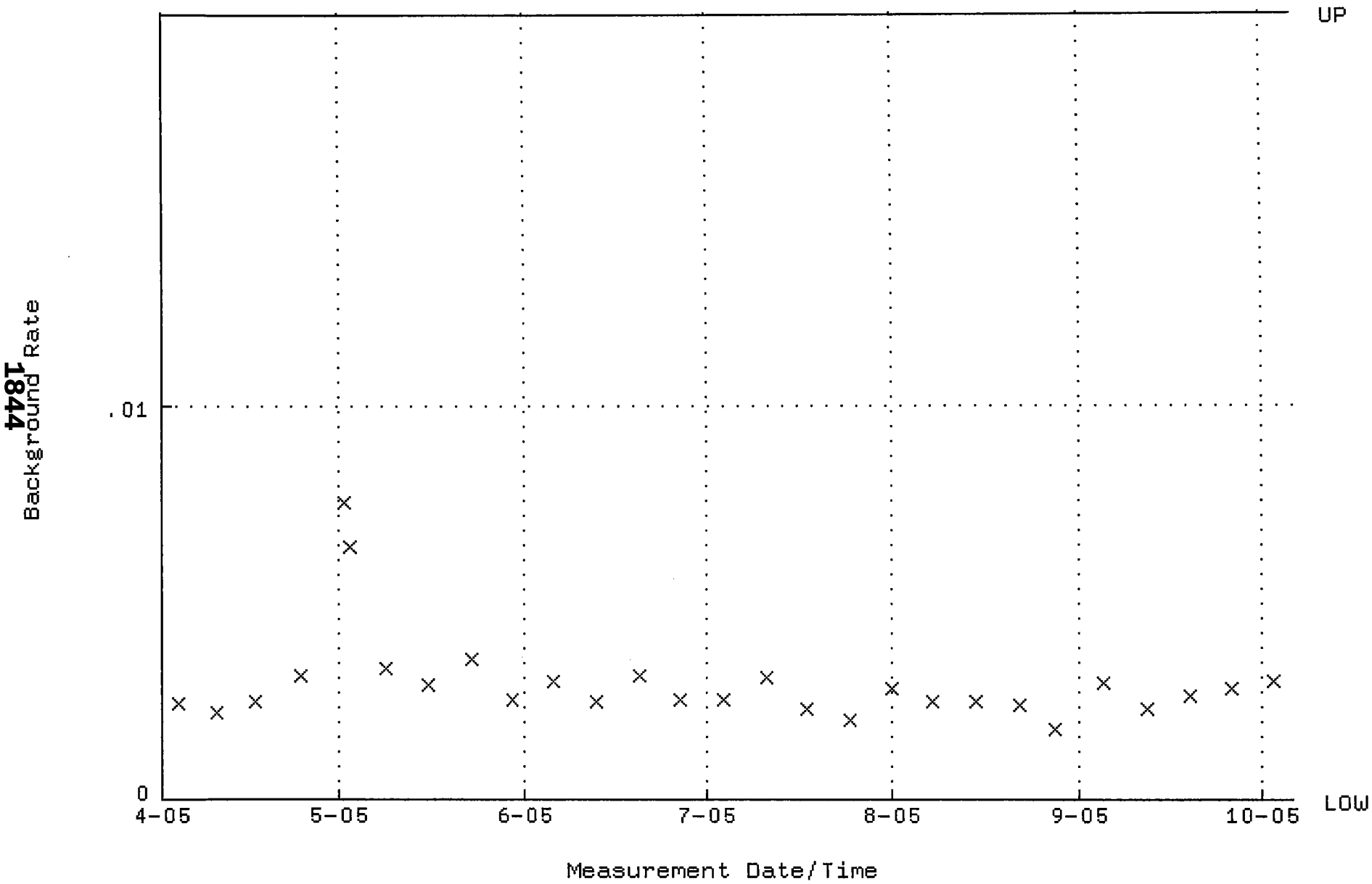
QA filename : DKA100:[ENV_ALPHA.QA.W]W032.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:30 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



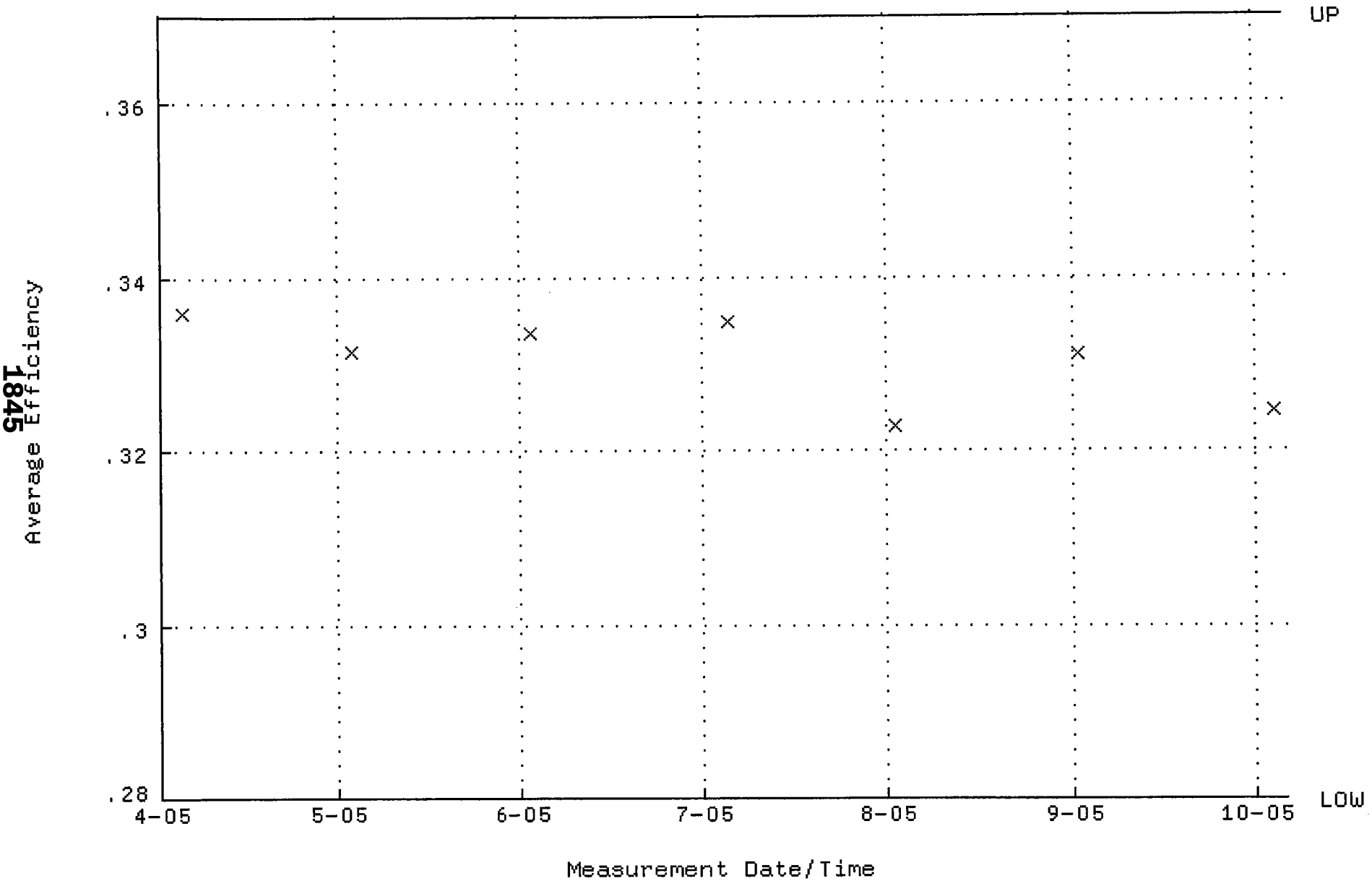
QA filename : DKA100:[ENV_ALPHA.QA.W]W032.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:30 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



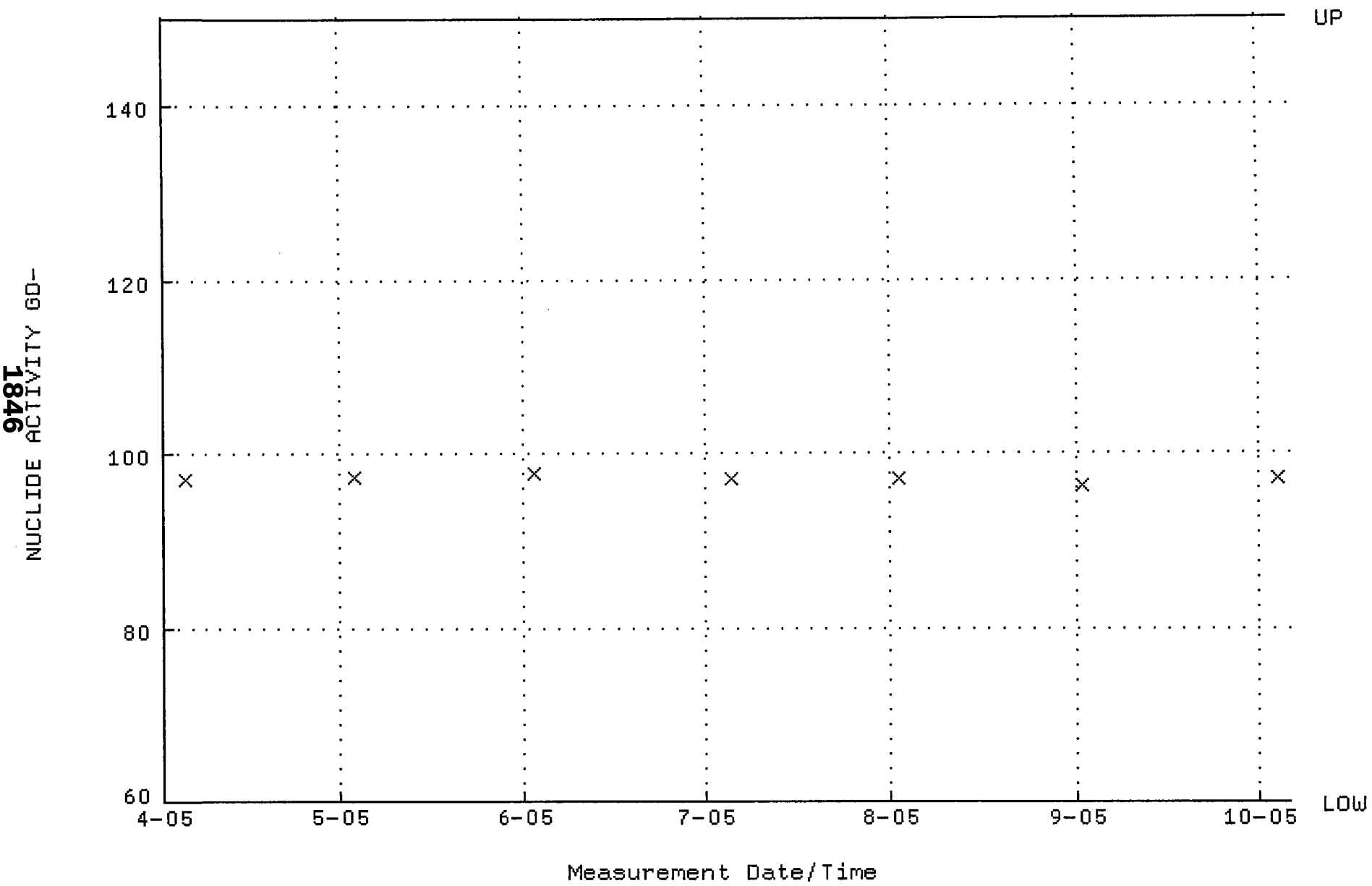
QA filename : DKA100:[ENV_ALPHA.QA.B]B032.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:56 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



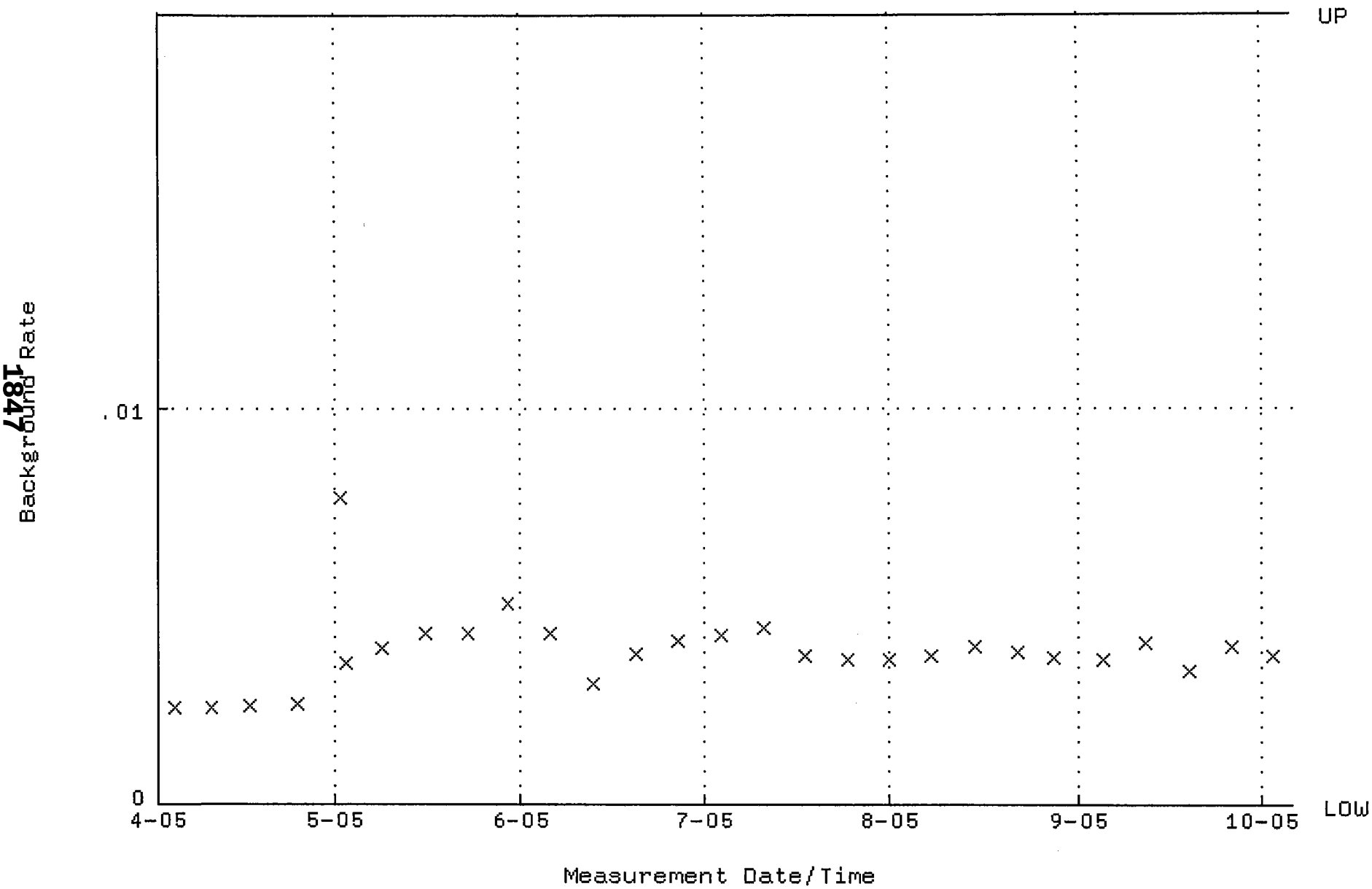
QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:30 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



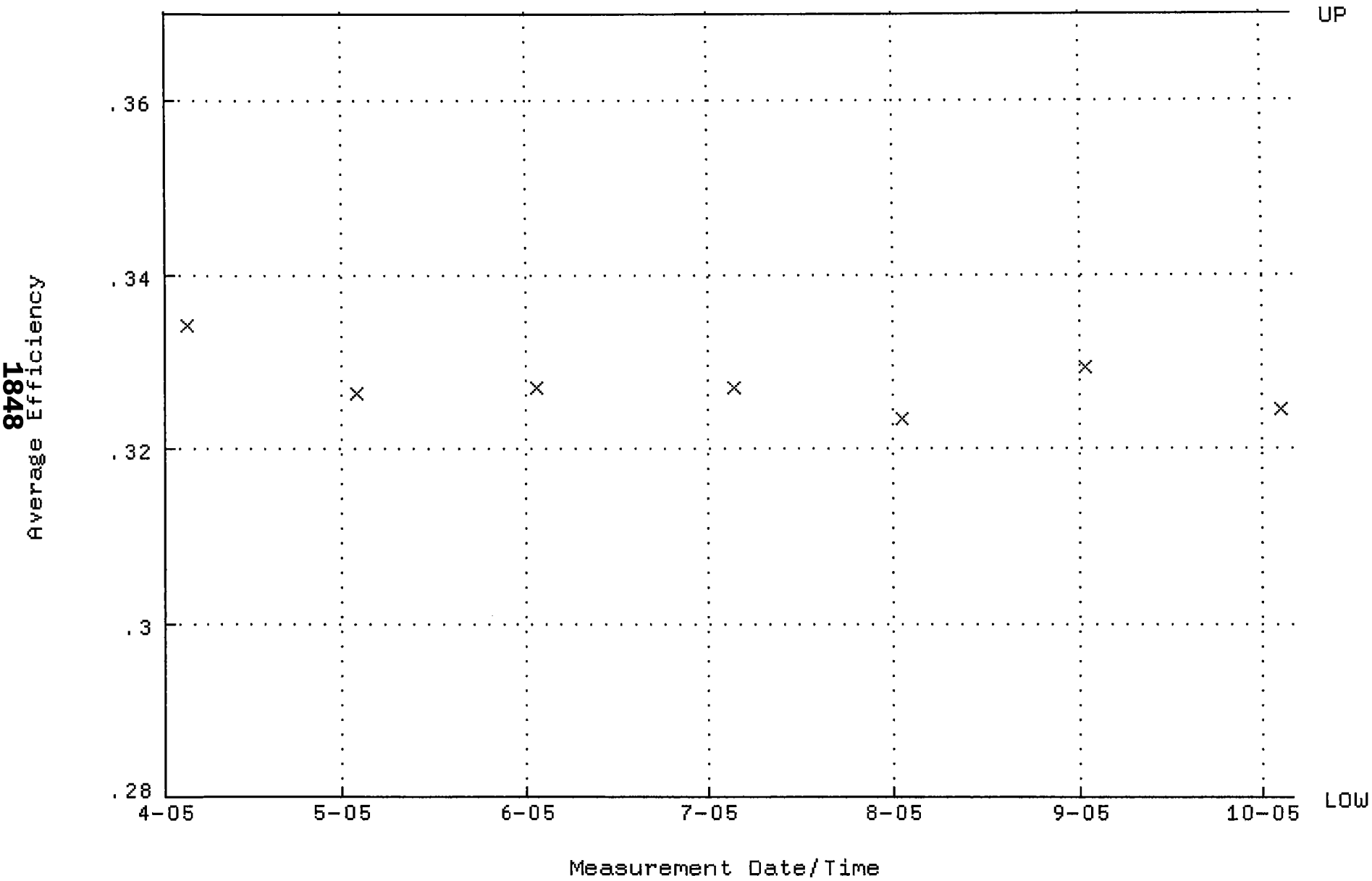
QA filename : DKA100:[ENV_ALPHA.QA.W]W033.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:30 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



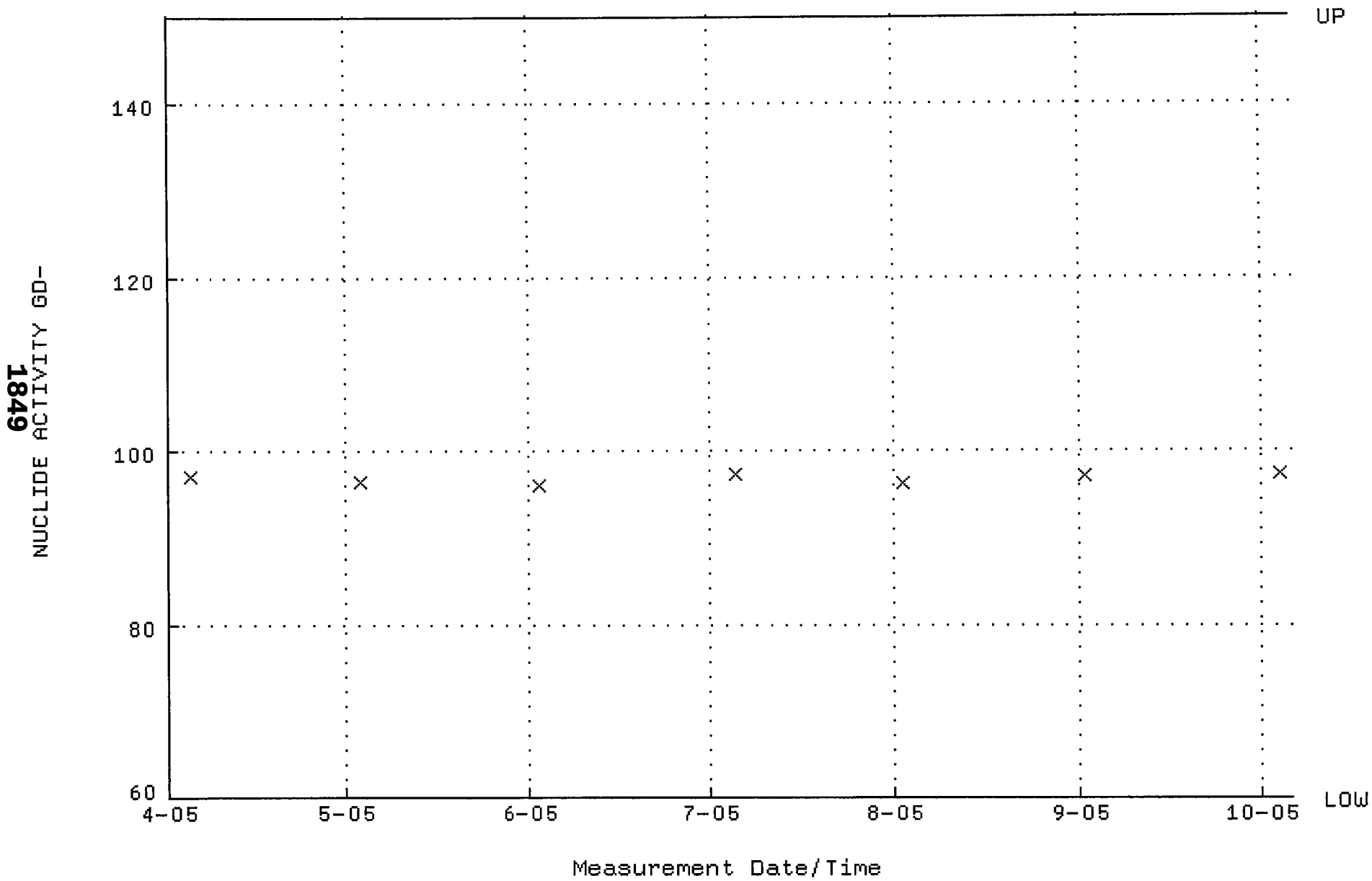
QA filename : DKA100:[ENV_ALPHA.QA.B]B033.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:56 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



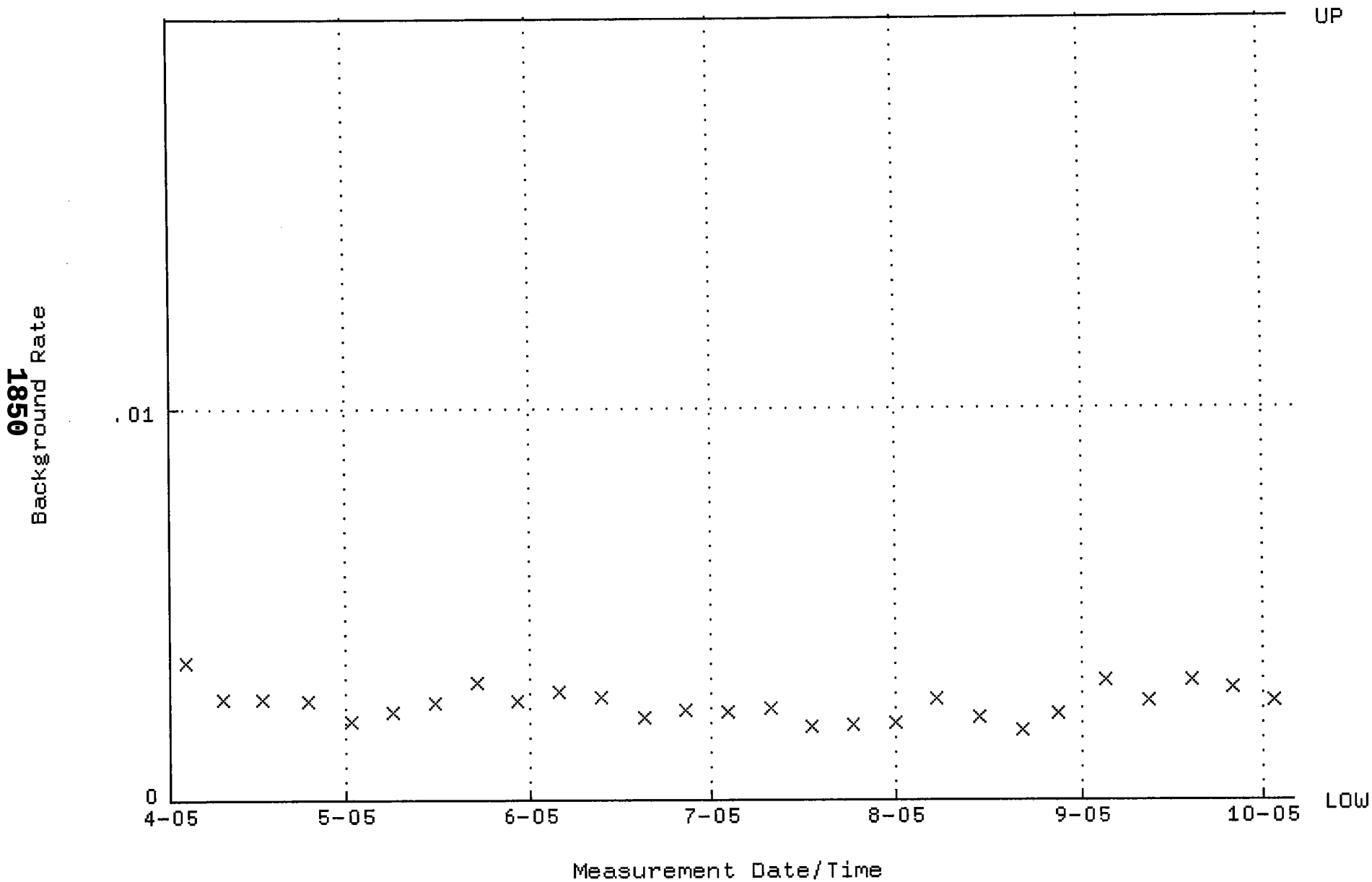
QA filename : DKA100:[ENV_ALPHA.QA.W]W036.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:30 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



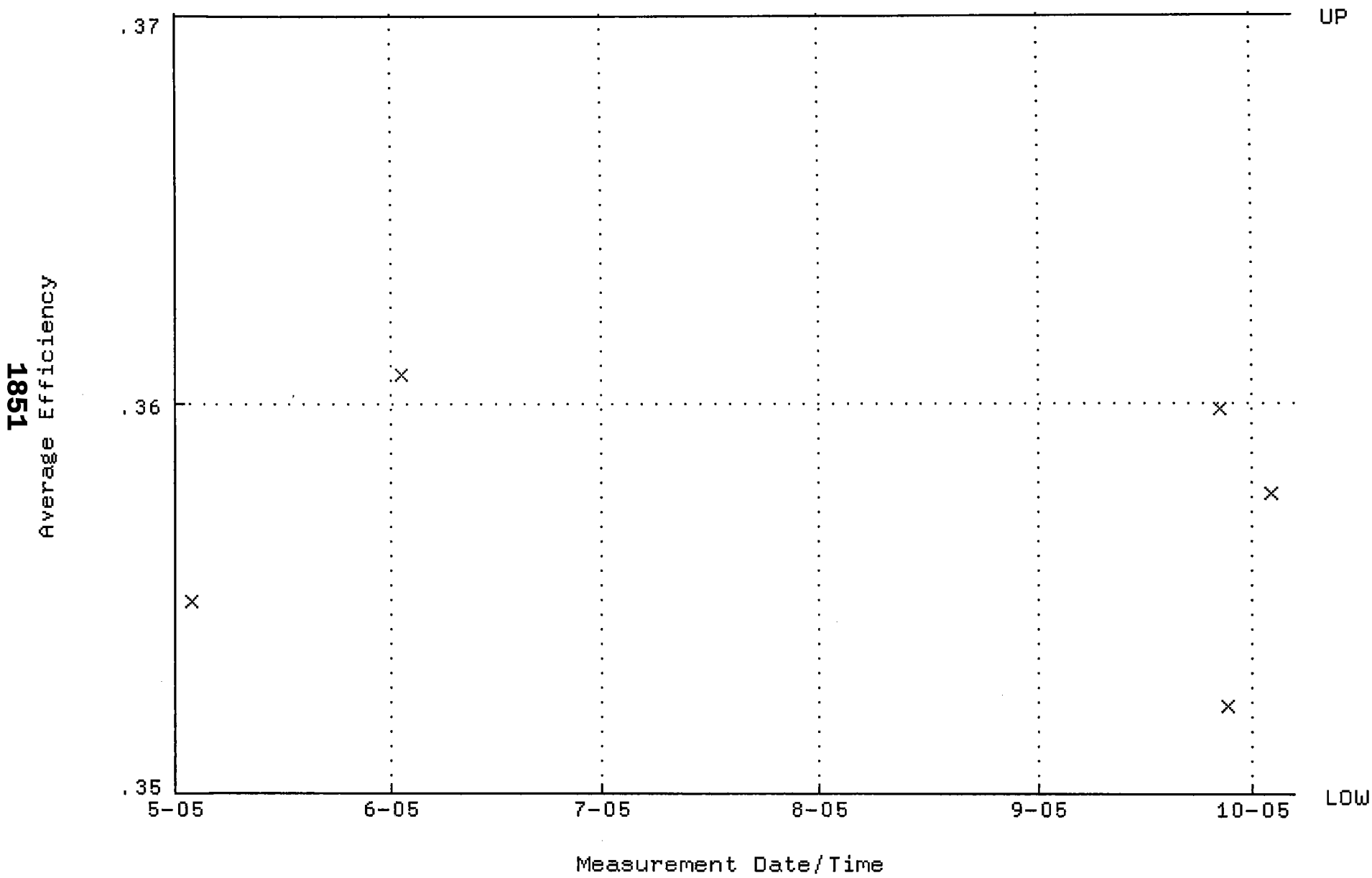
QA filename : DKA100:[ENV_ALPHA.QA.W]W036.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:30 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



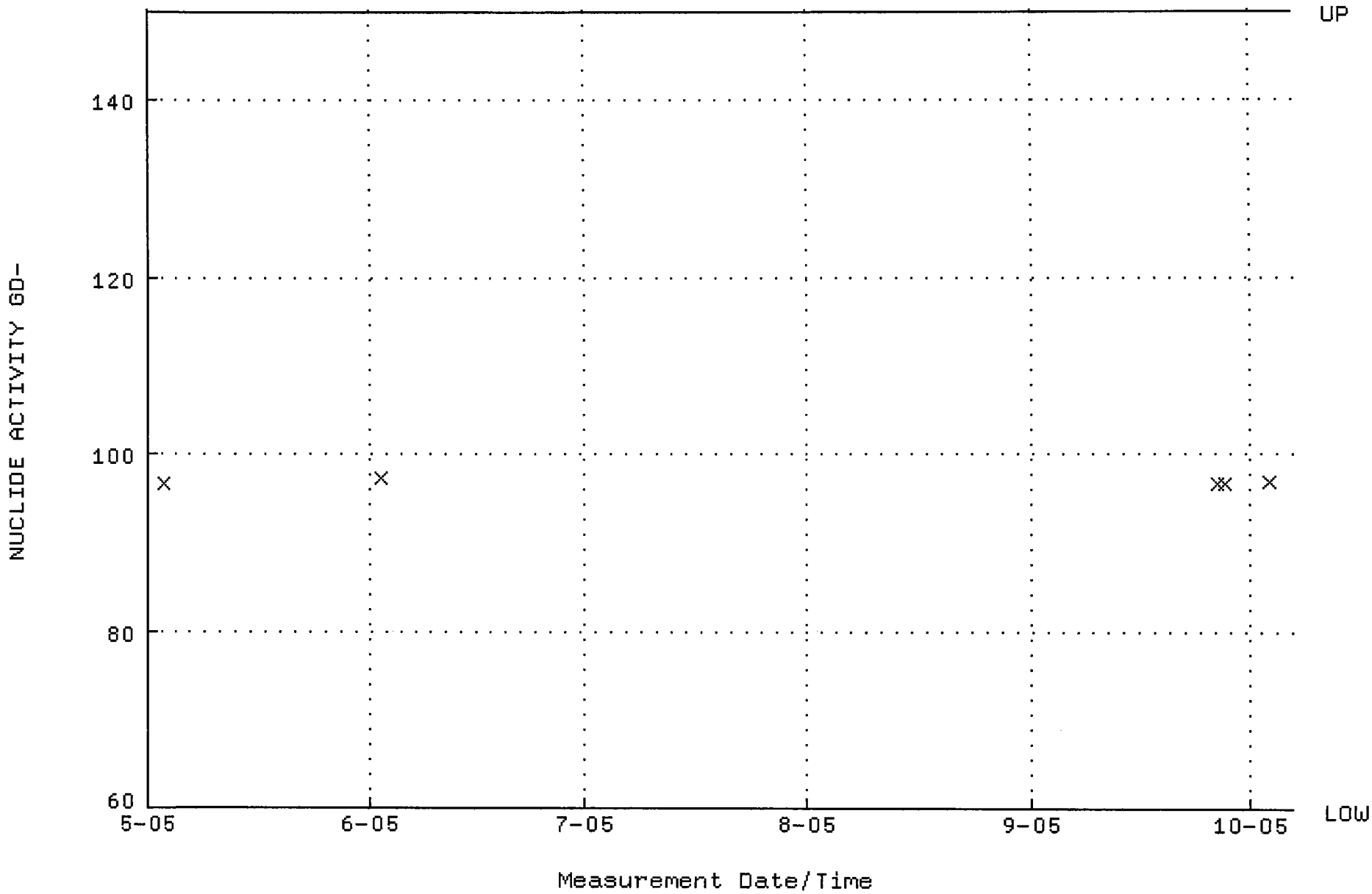
QA filename : DKA100:[ENV_ALPHA.QA.B]B036.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:56 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



QA filename : DKA100:[ENV_ALPHA.QA.W]W037.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-MAY-2005 08:25:26 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.350000 through 0.370000

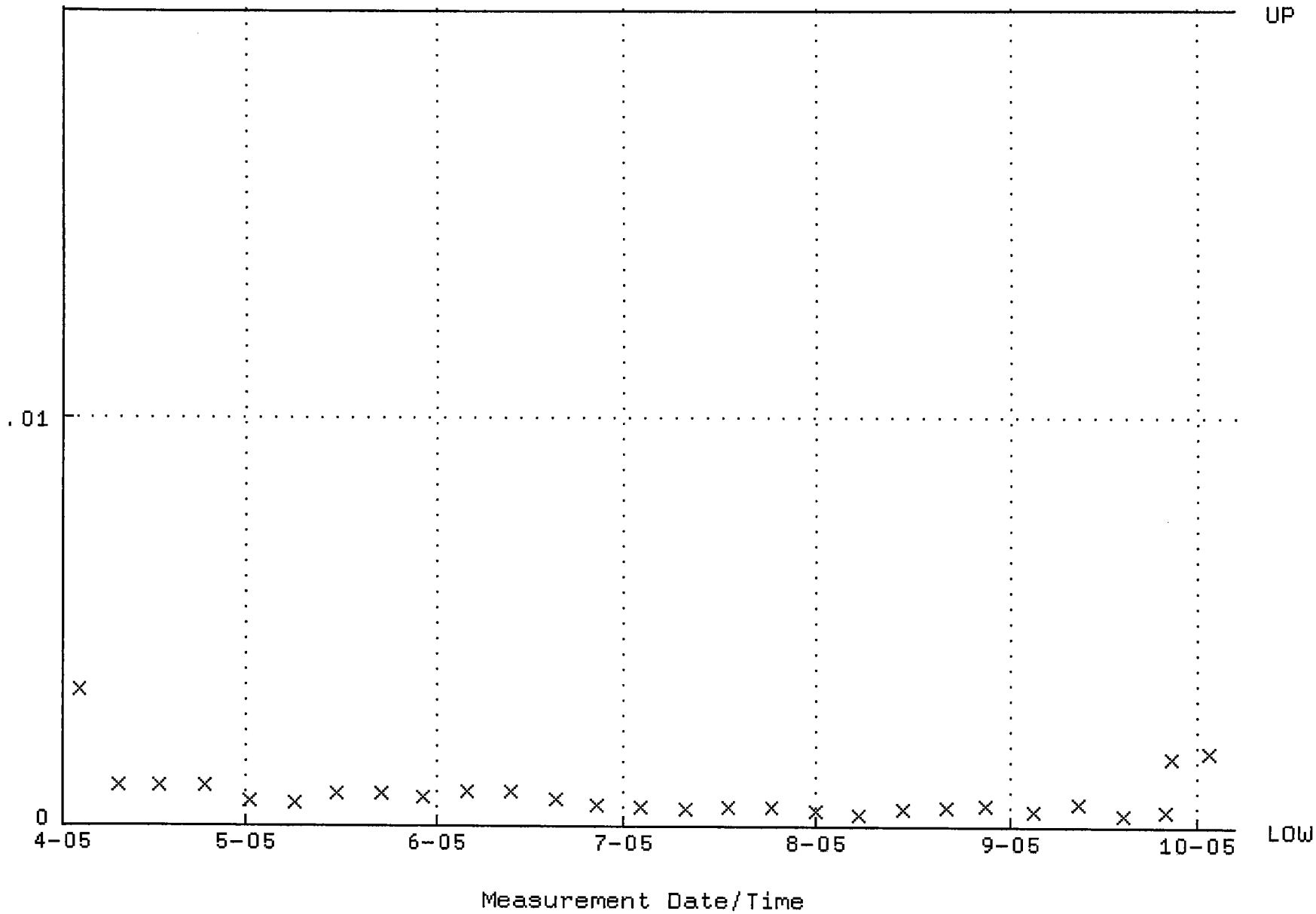


QA filename : DKA100:[ENV_ALPHA.QA.W]W037.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-MAY-2005 08:25:26 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000

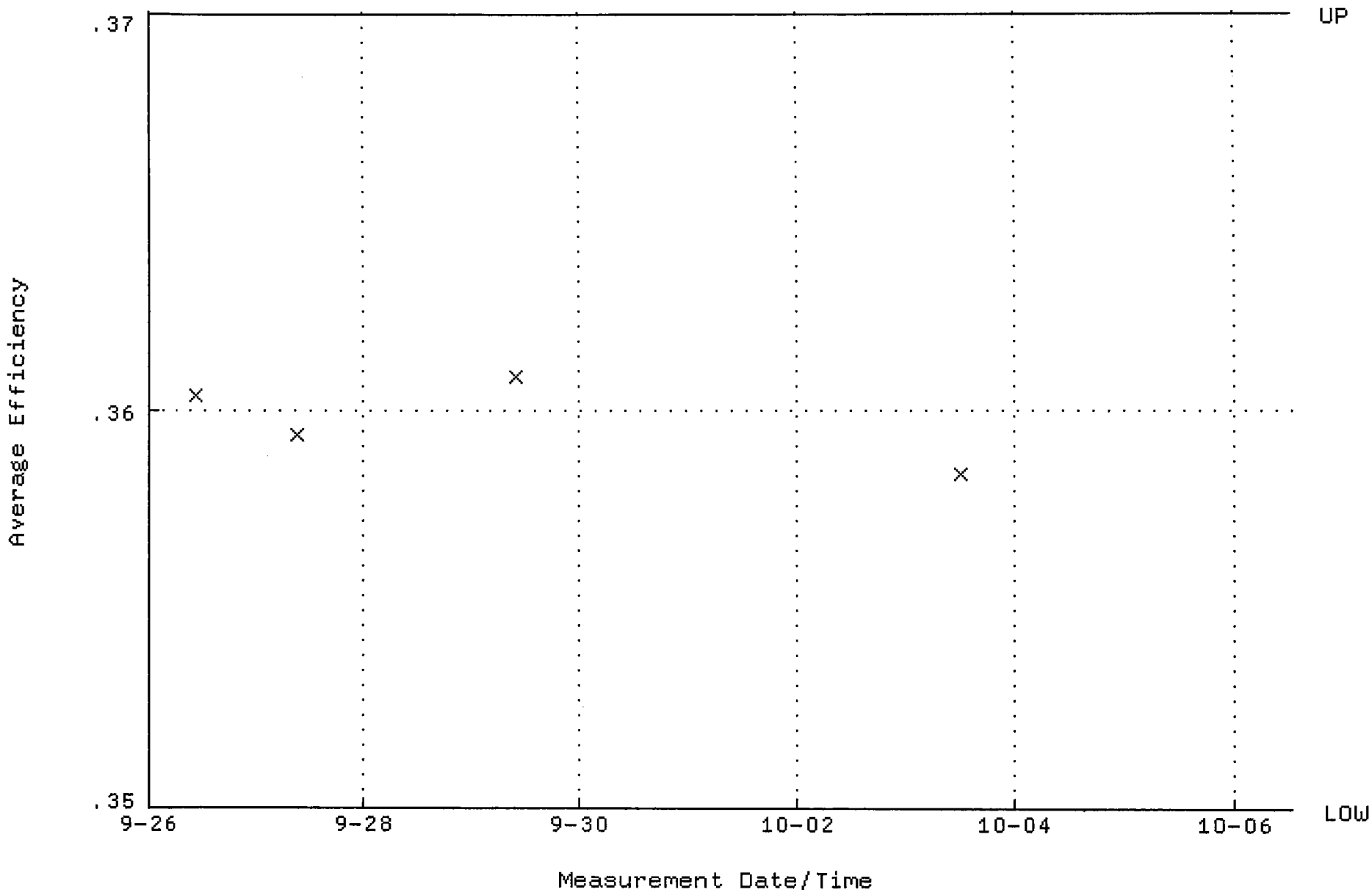


1852

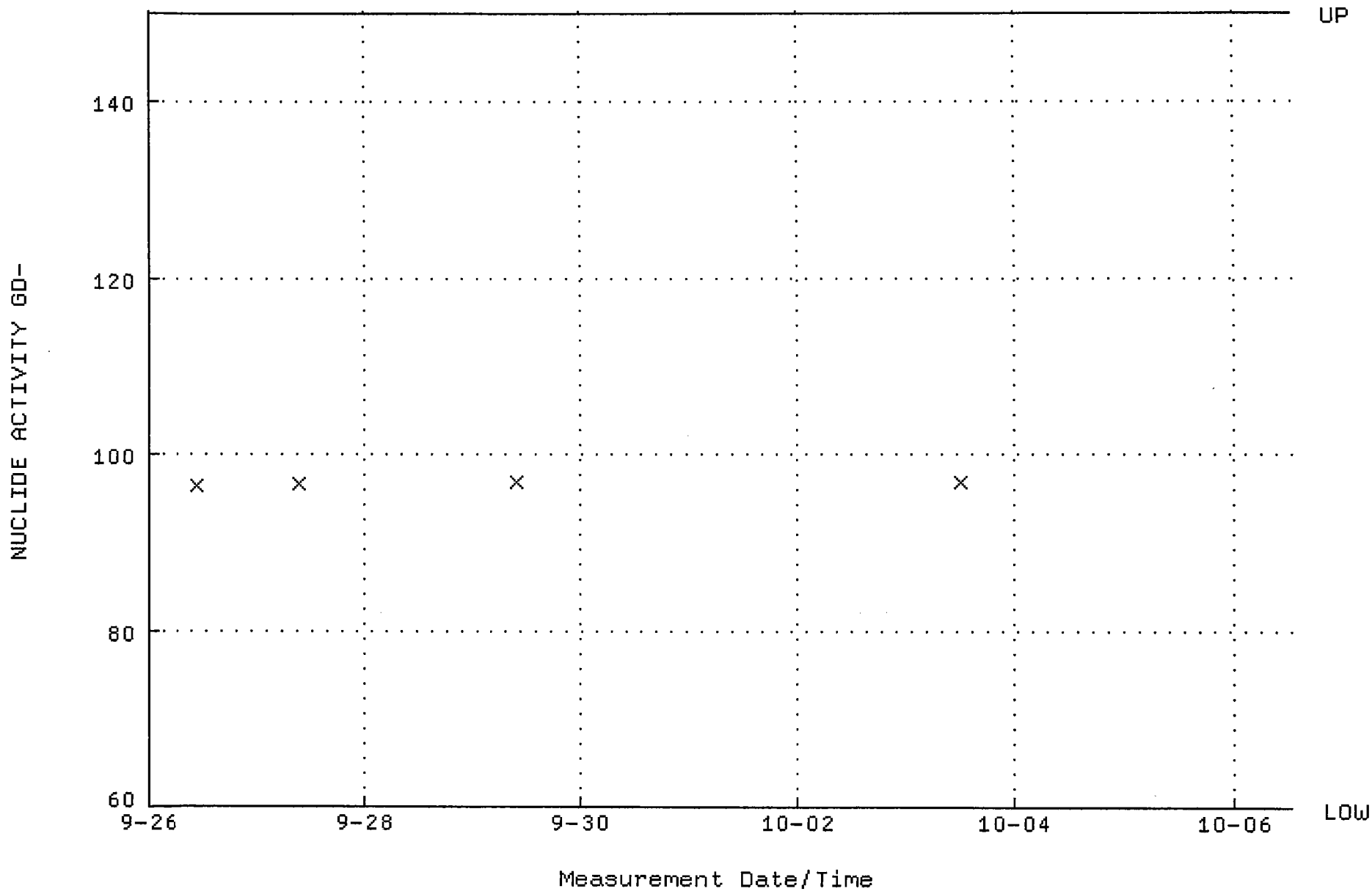
QA filename : DKA100:[ENV_ALPHA.QA.B]B037.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:57 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



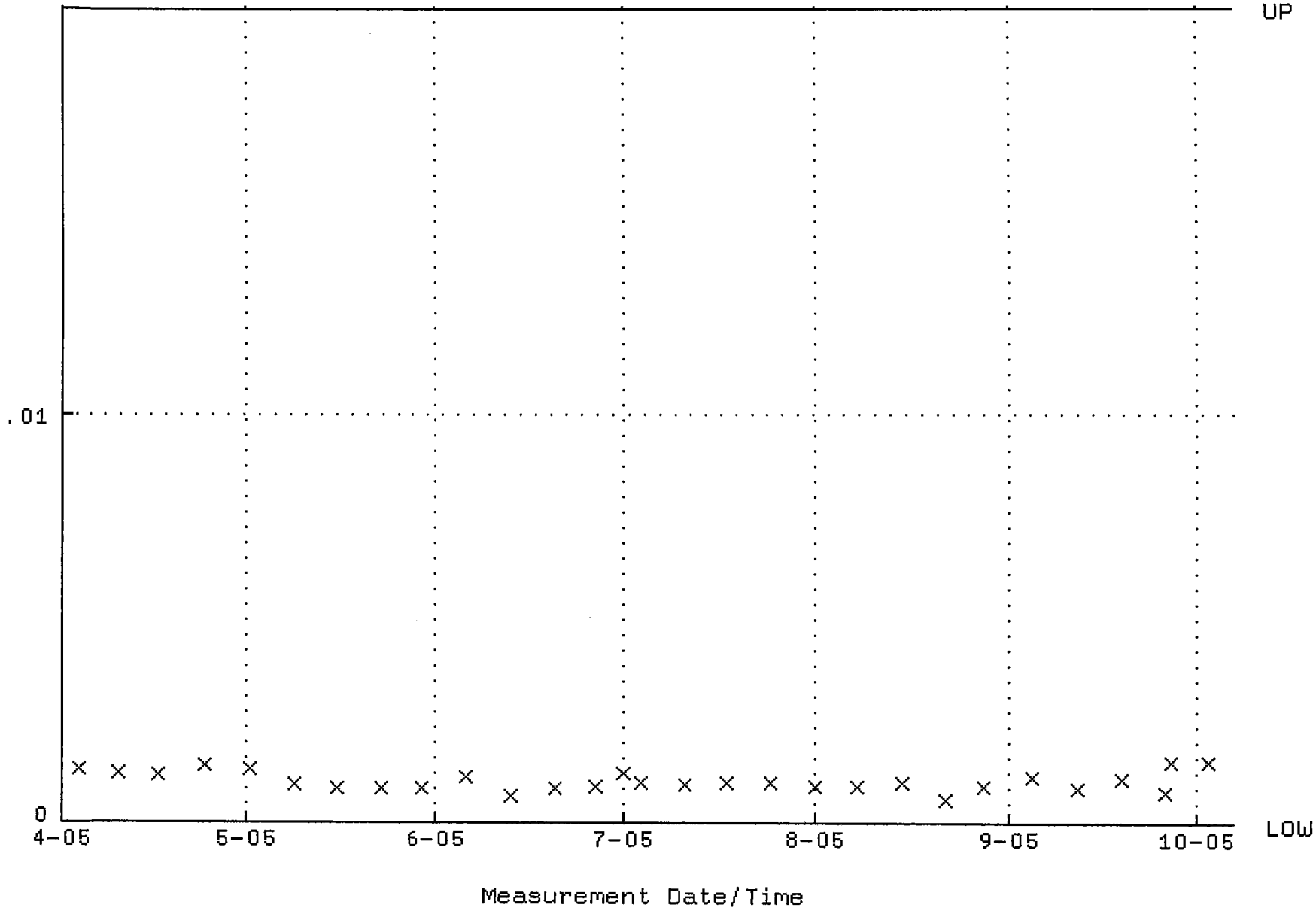
QA filename : DKA100:[ENV_ALPHA.QA.W]W038.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-SEP-2005 11:06:03 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.350000 through 0.370000



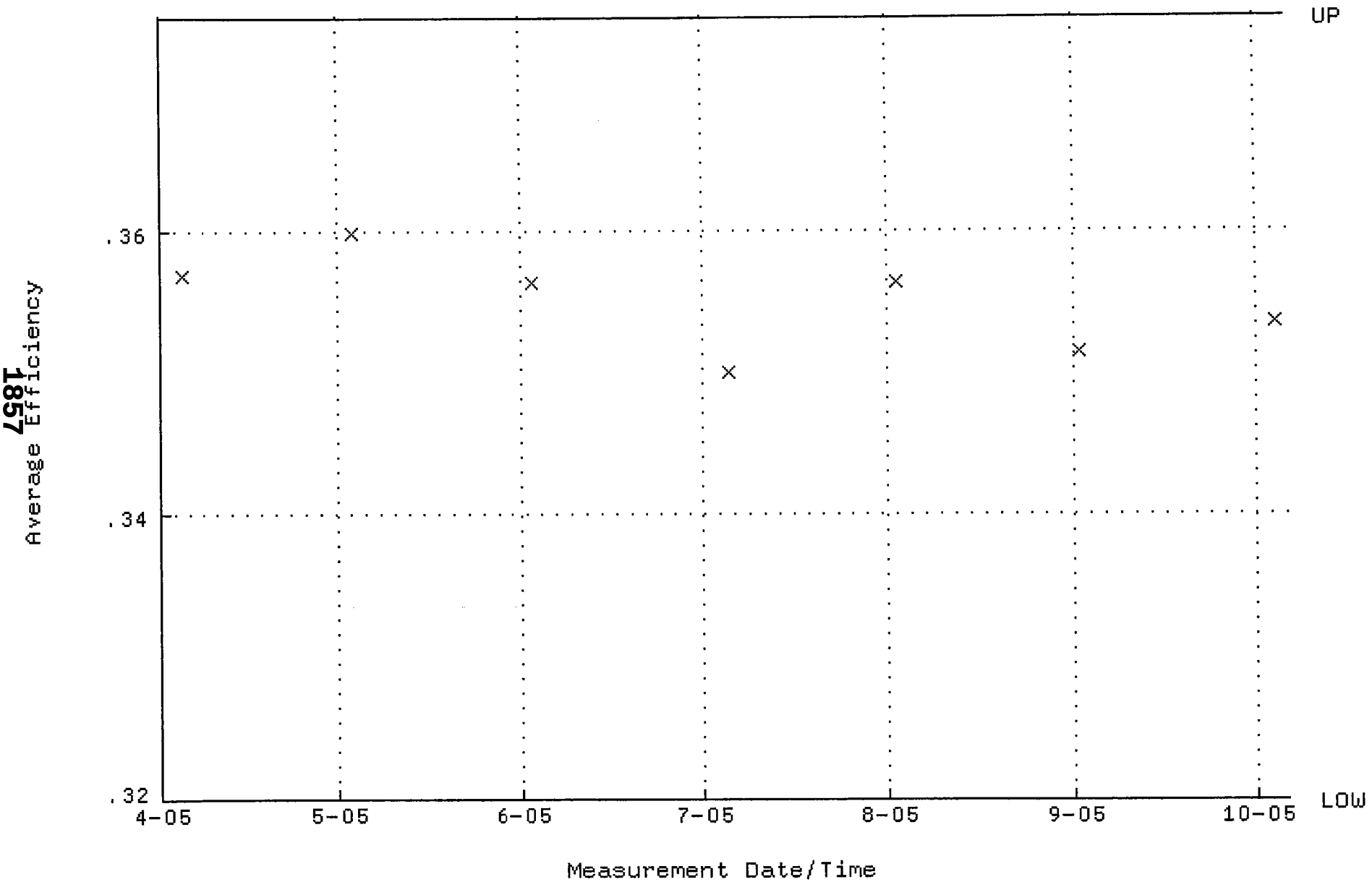
QA filename : DKA100:[ENV_ALPHA.QA.W]W038.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-SEP-2005 11:06:03 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



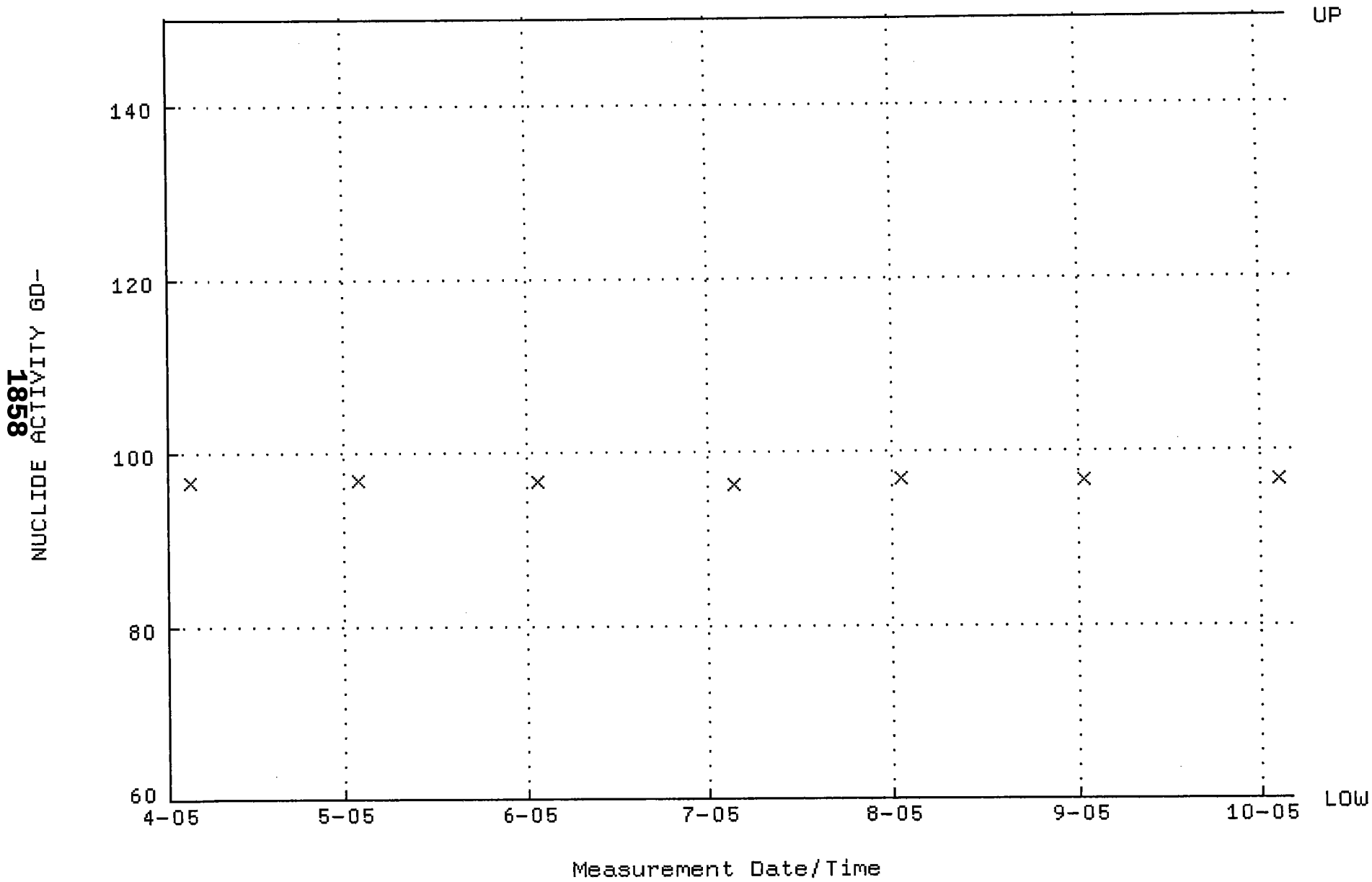
QA filename : DKA100:[ENV_ALPHA.QA.B]B038.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:57 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



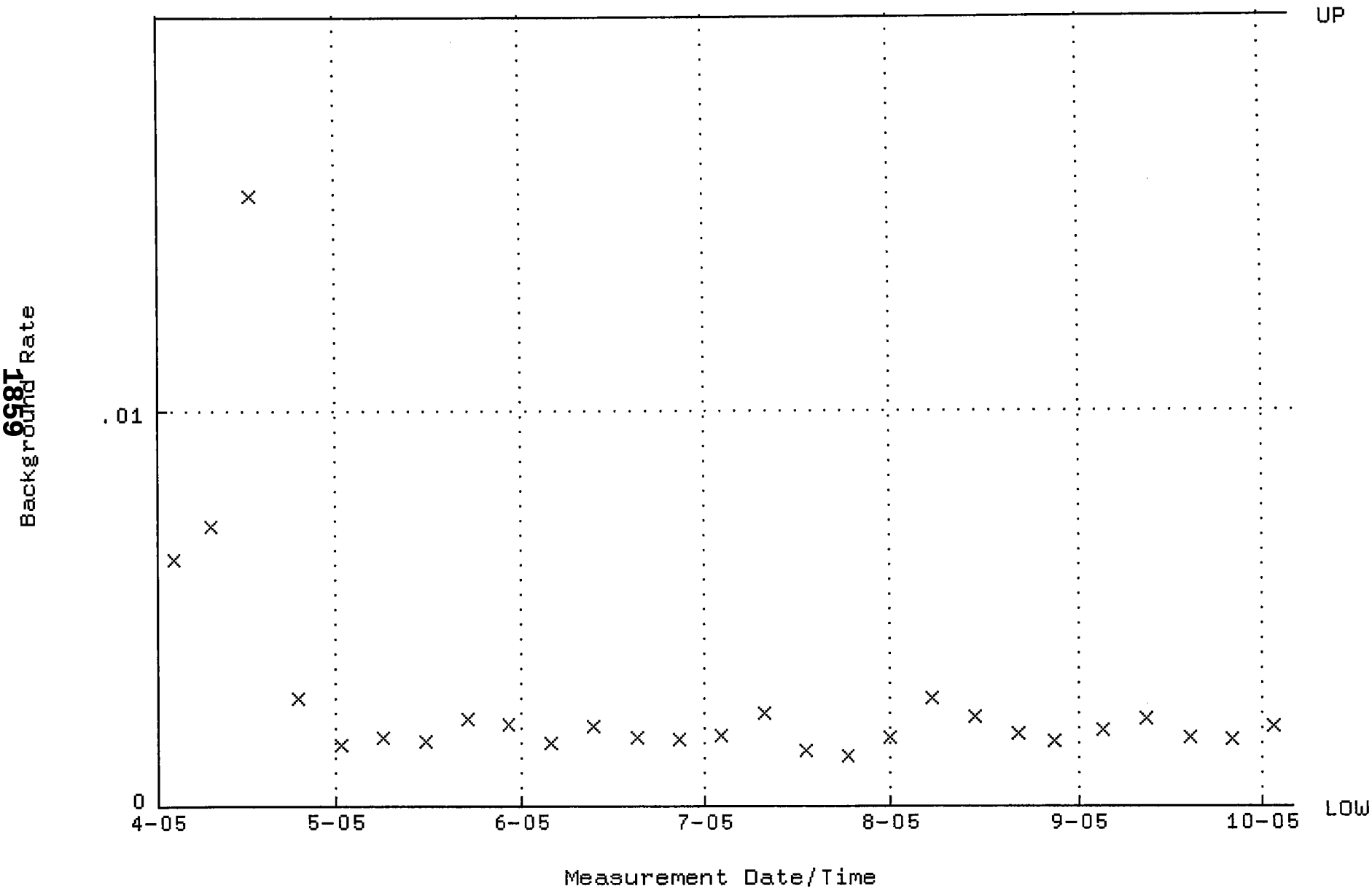
QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.320000 through 0.375000



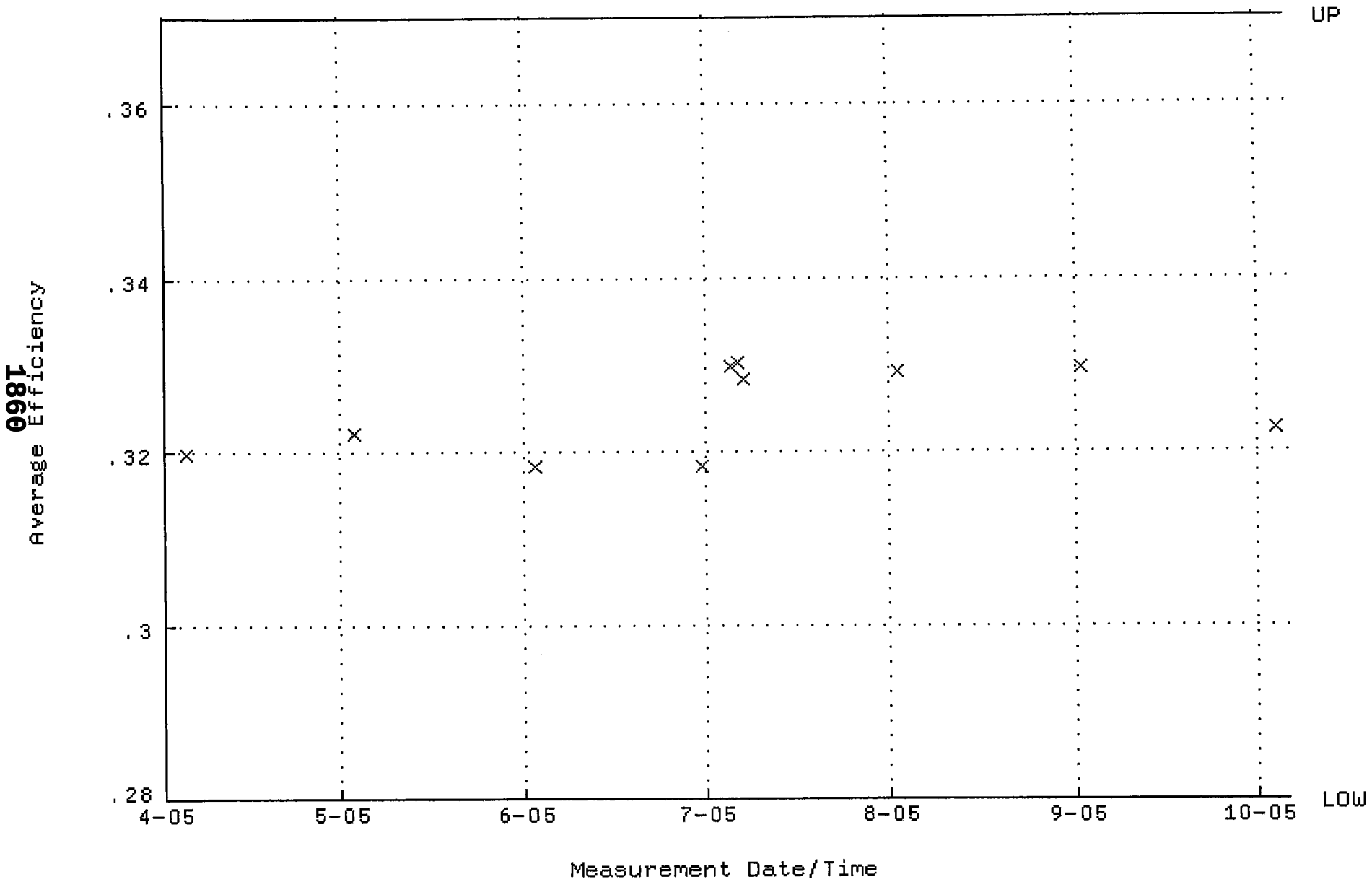
QA filename : DKA100:[ENV_ALPHA.QA.W]W039.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



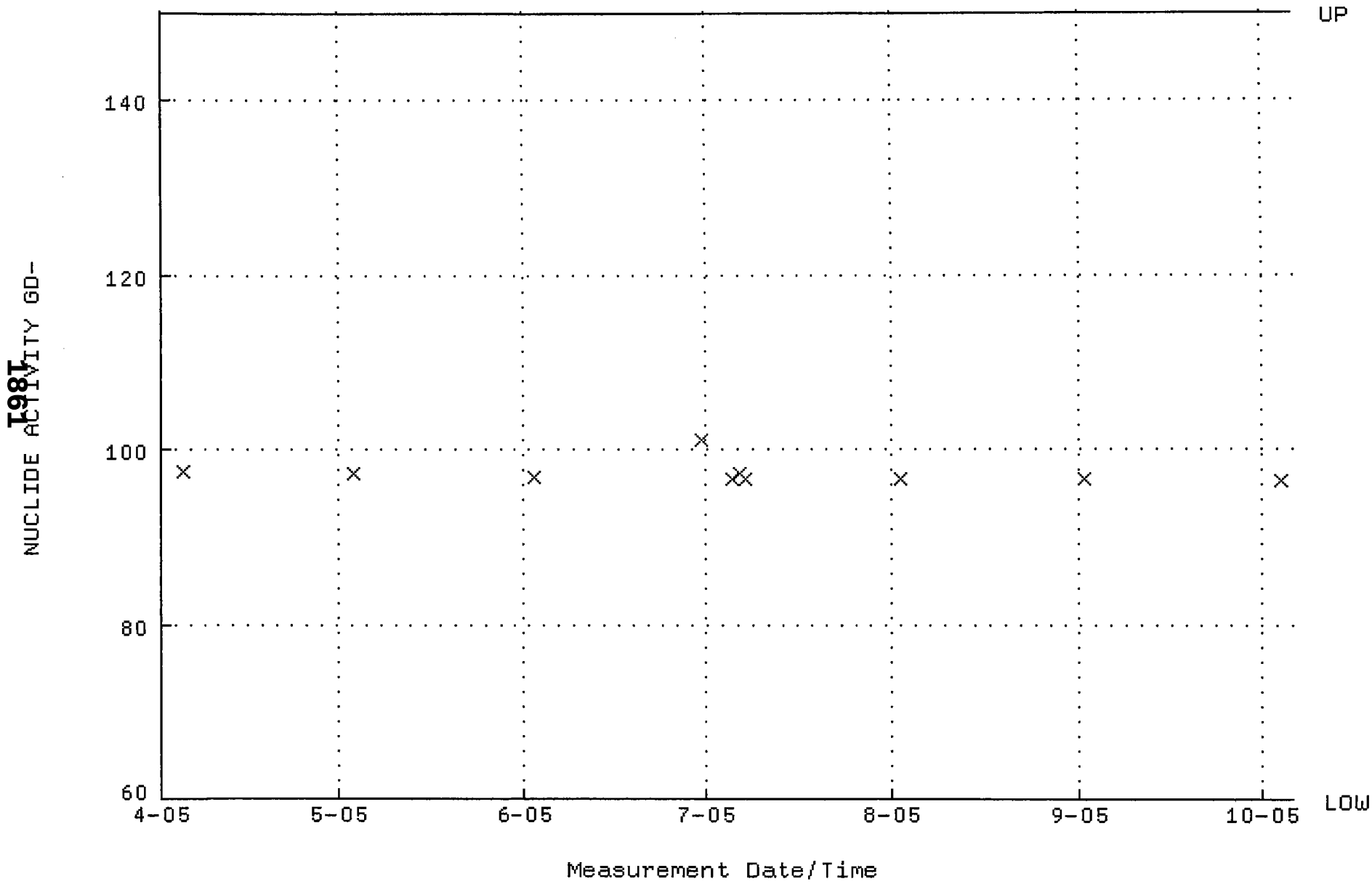
QA filename : DKA100:[ENV_ALPHA.QA.B]B039.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:57 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



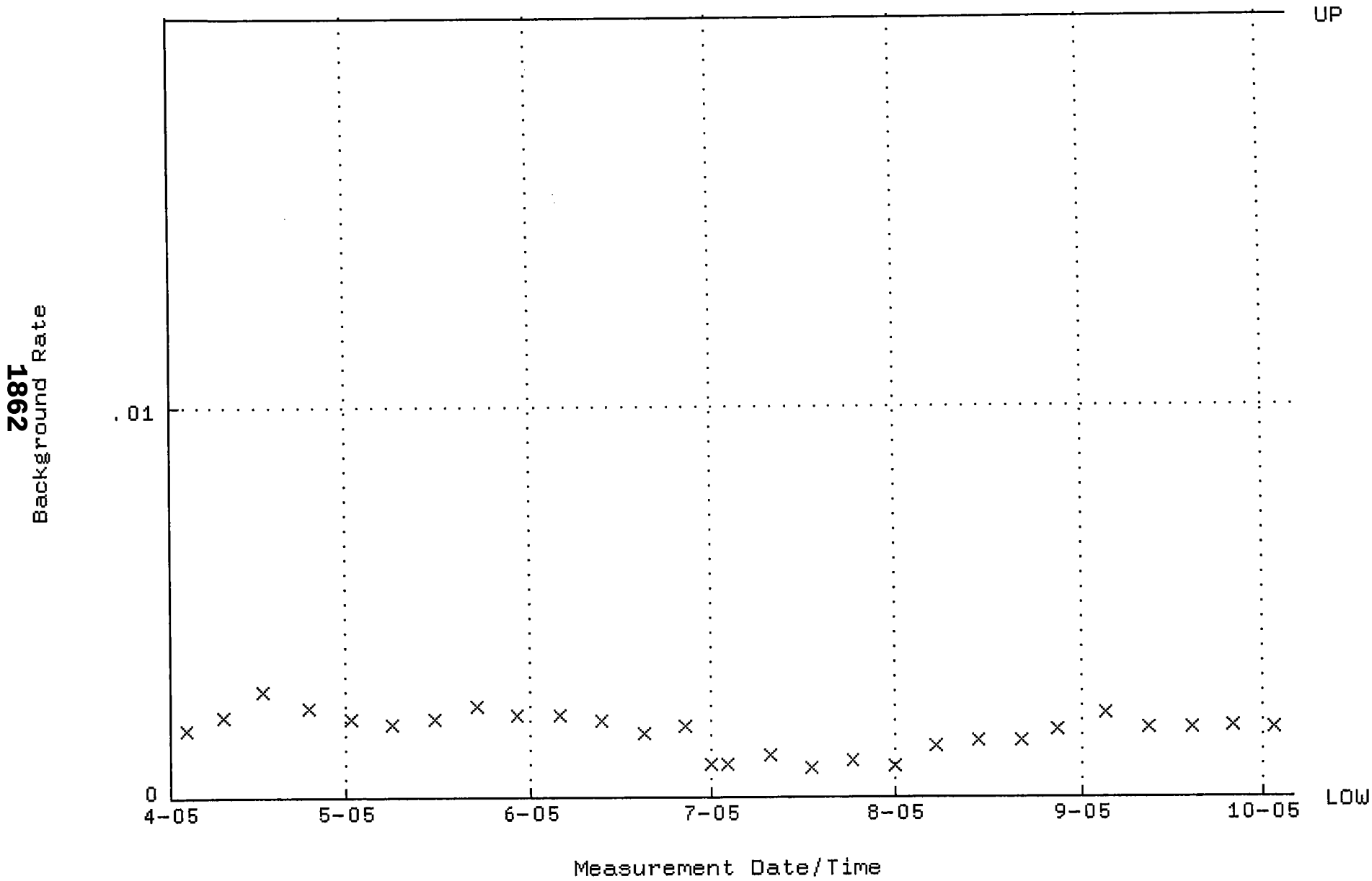
QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



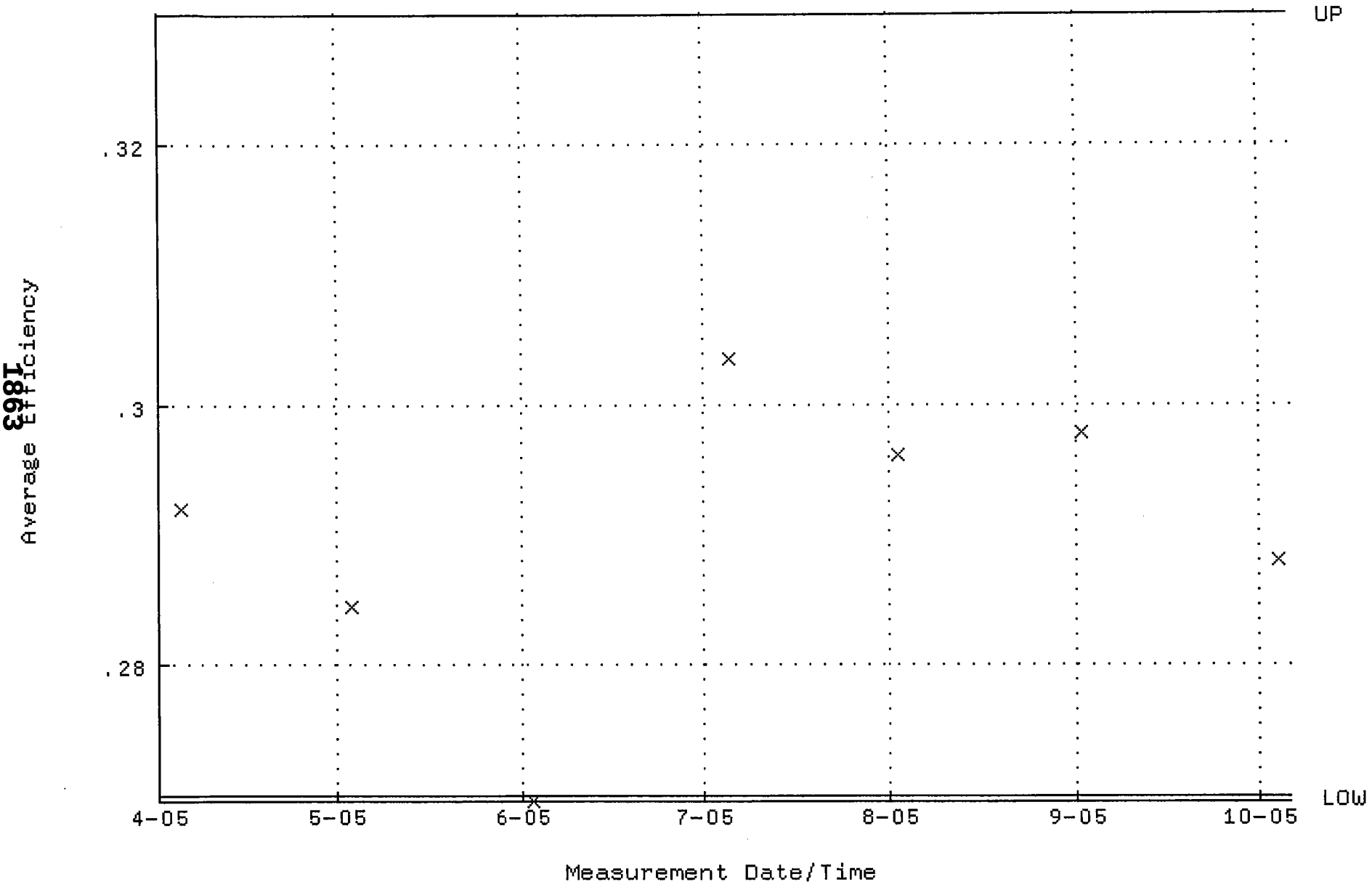
QA filename : DKA100:[ENV_ALPHA.QA.W]W040.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



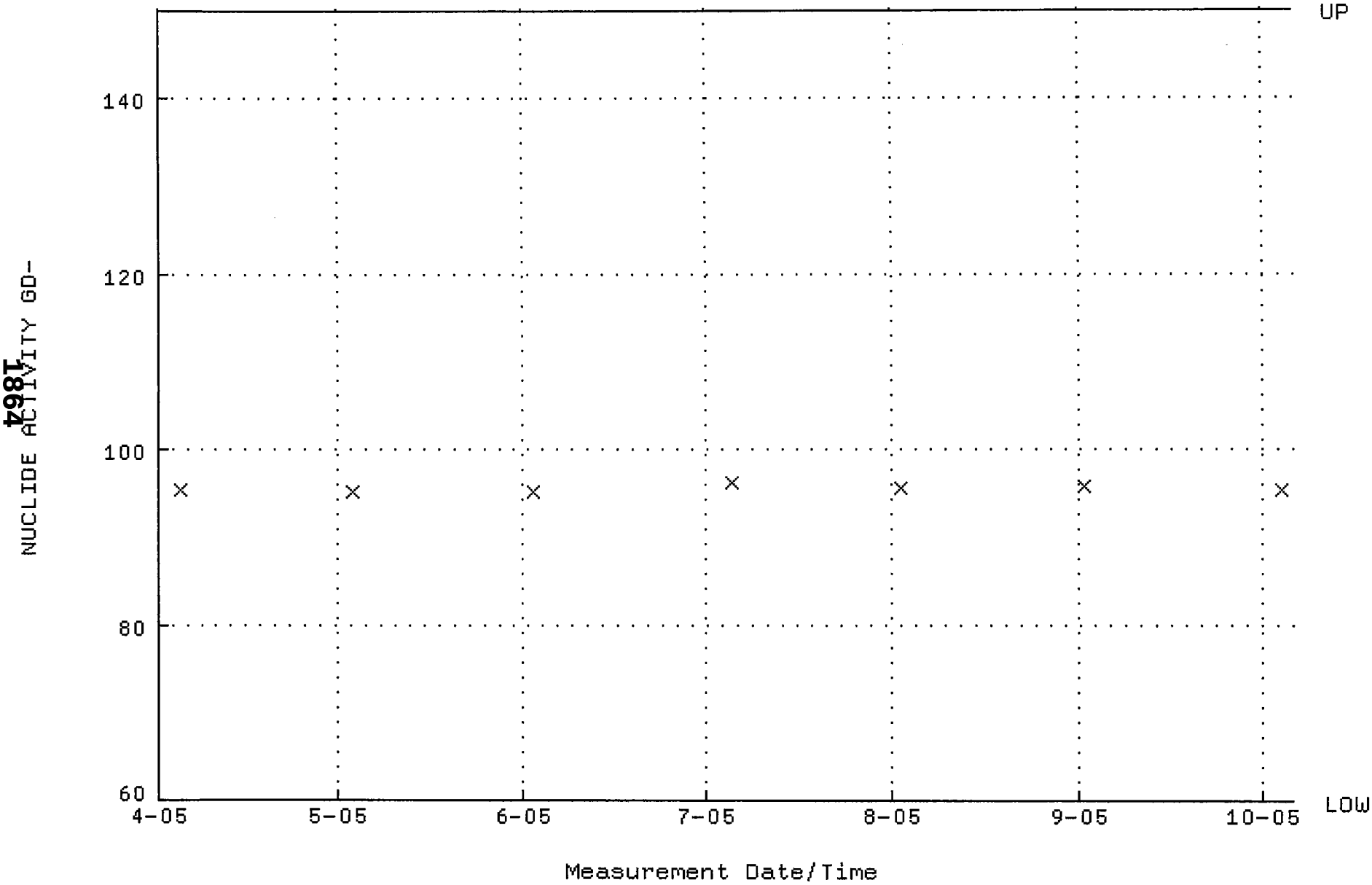
QA filename : DKA100:[ENV_ALPHA.QA.B]B040.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:57 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



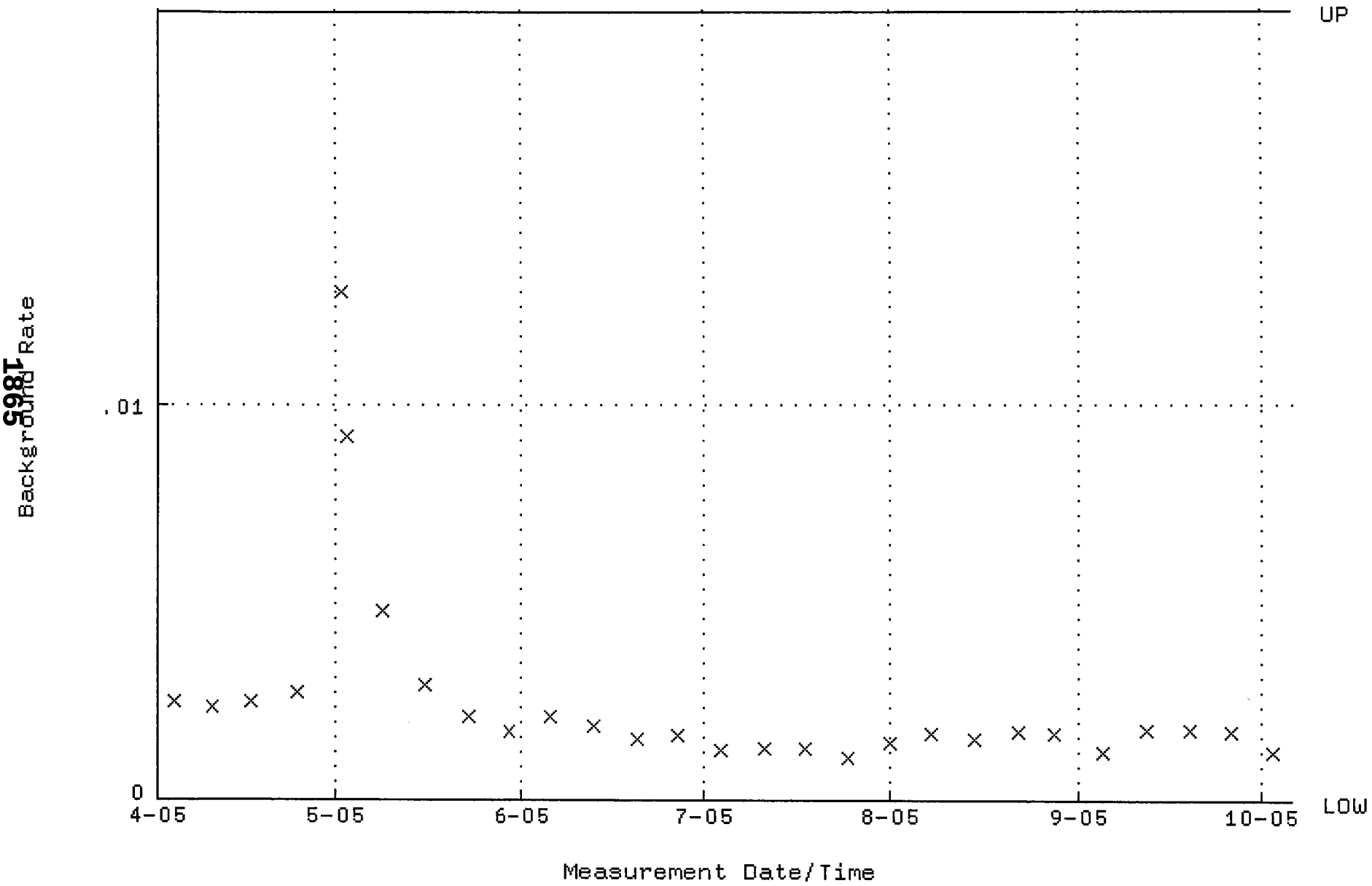
QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;4
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.270000 through 0.330000



QA filename : DKA100:[ENV_ALPHA.QA.W]W041.QAF;4
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000

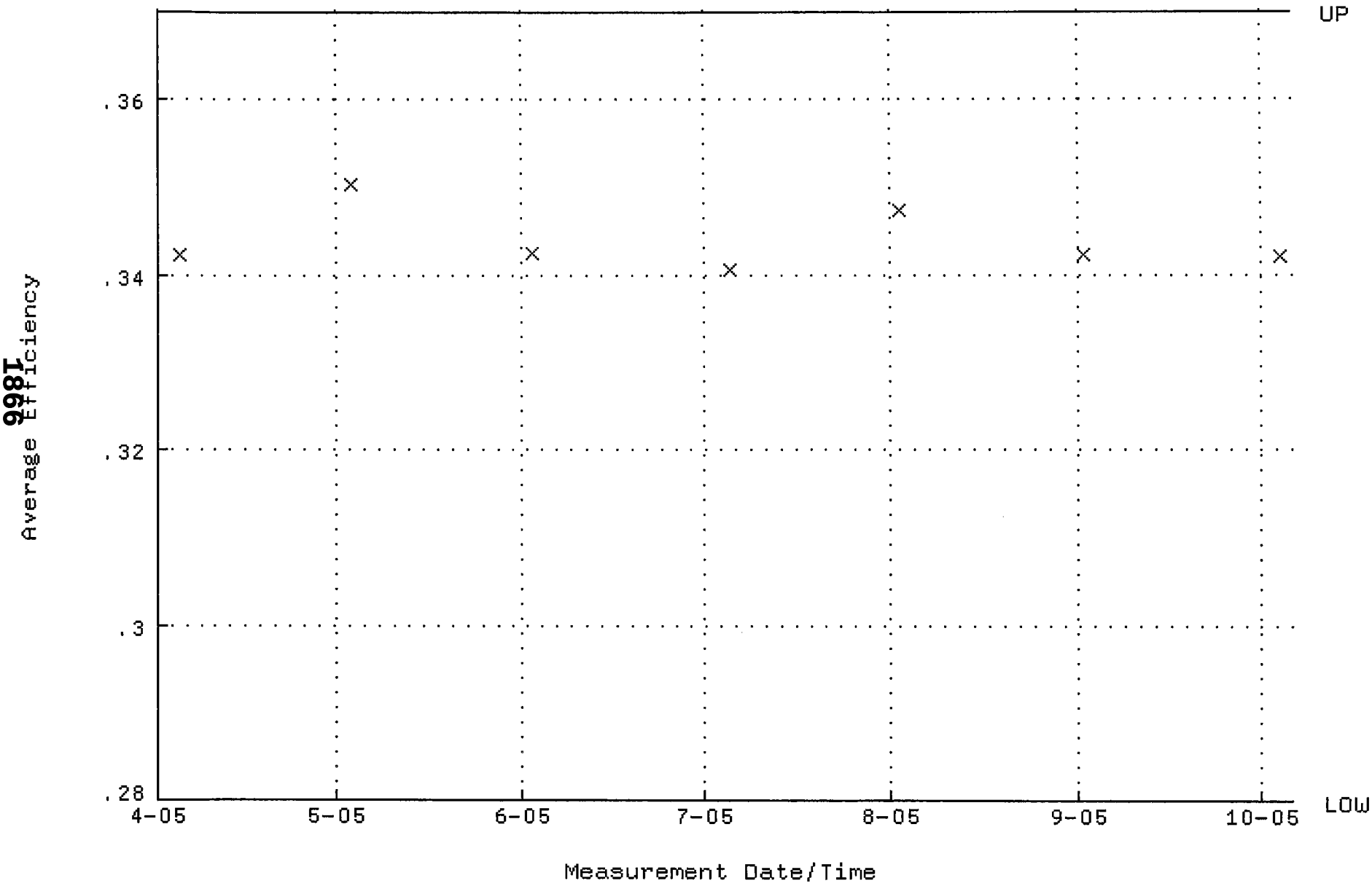


QA filename : DKA100:[ENV_ALPHA.QA.B]B041.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:57 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

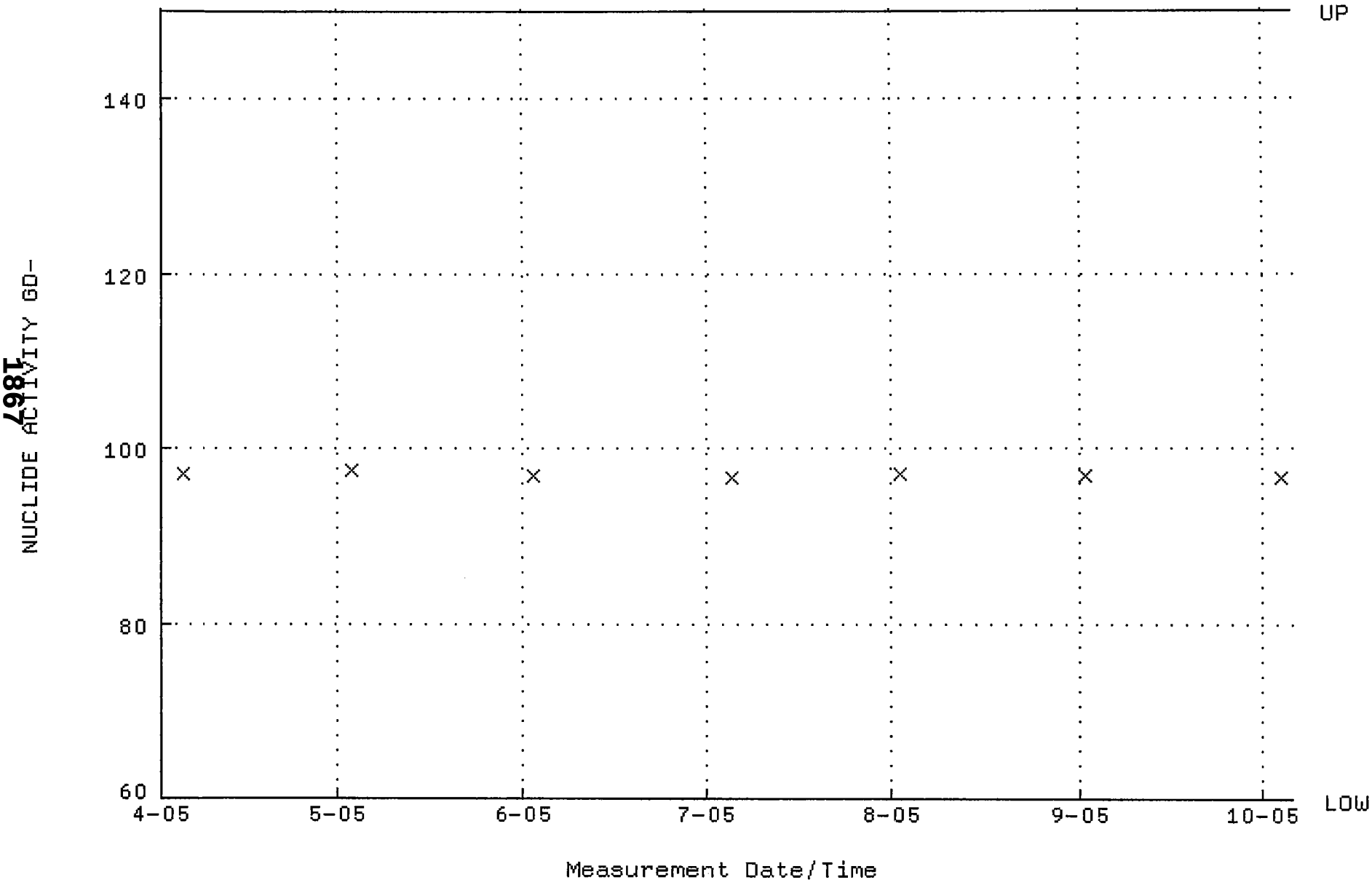


1865

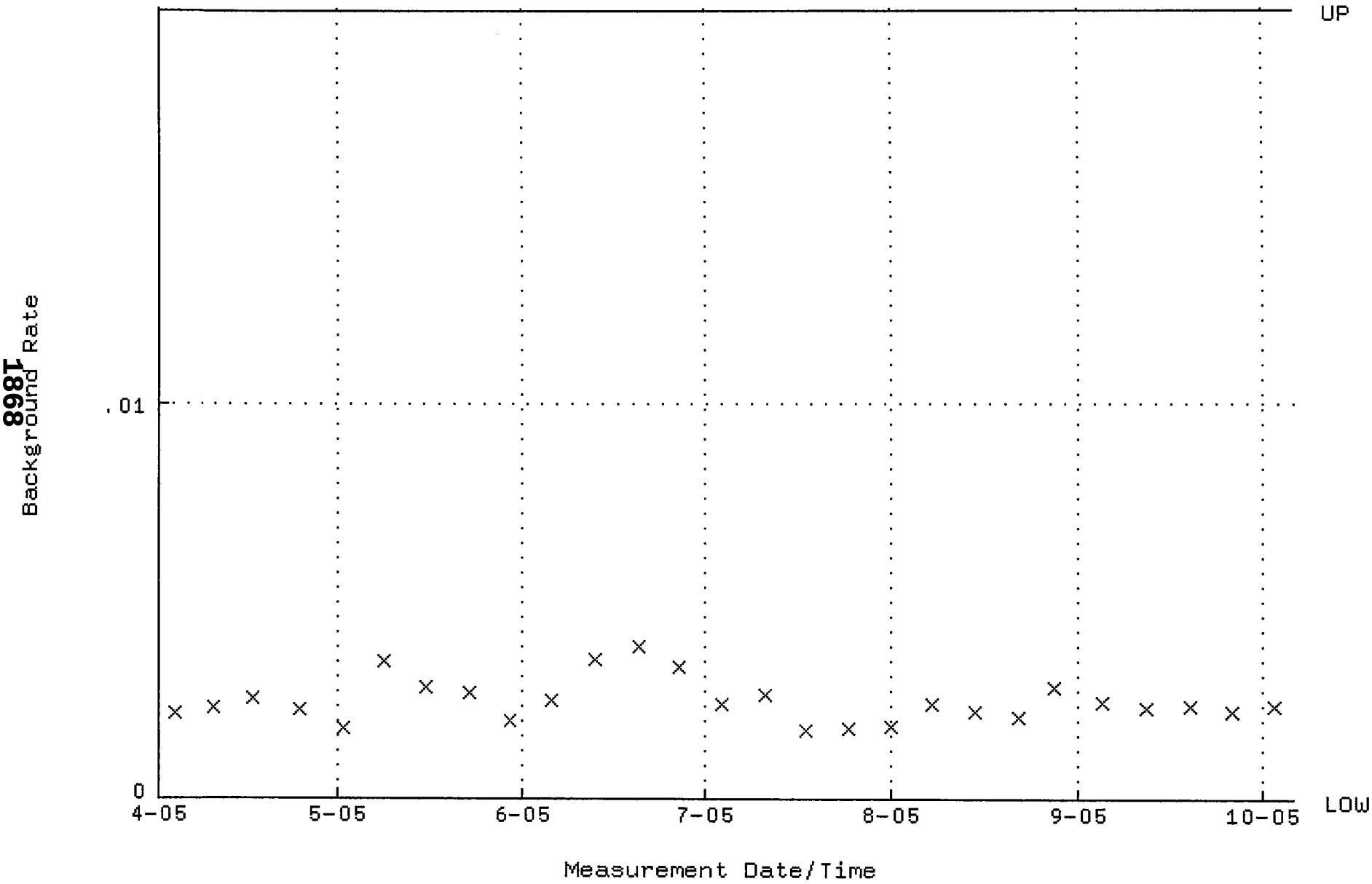
QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



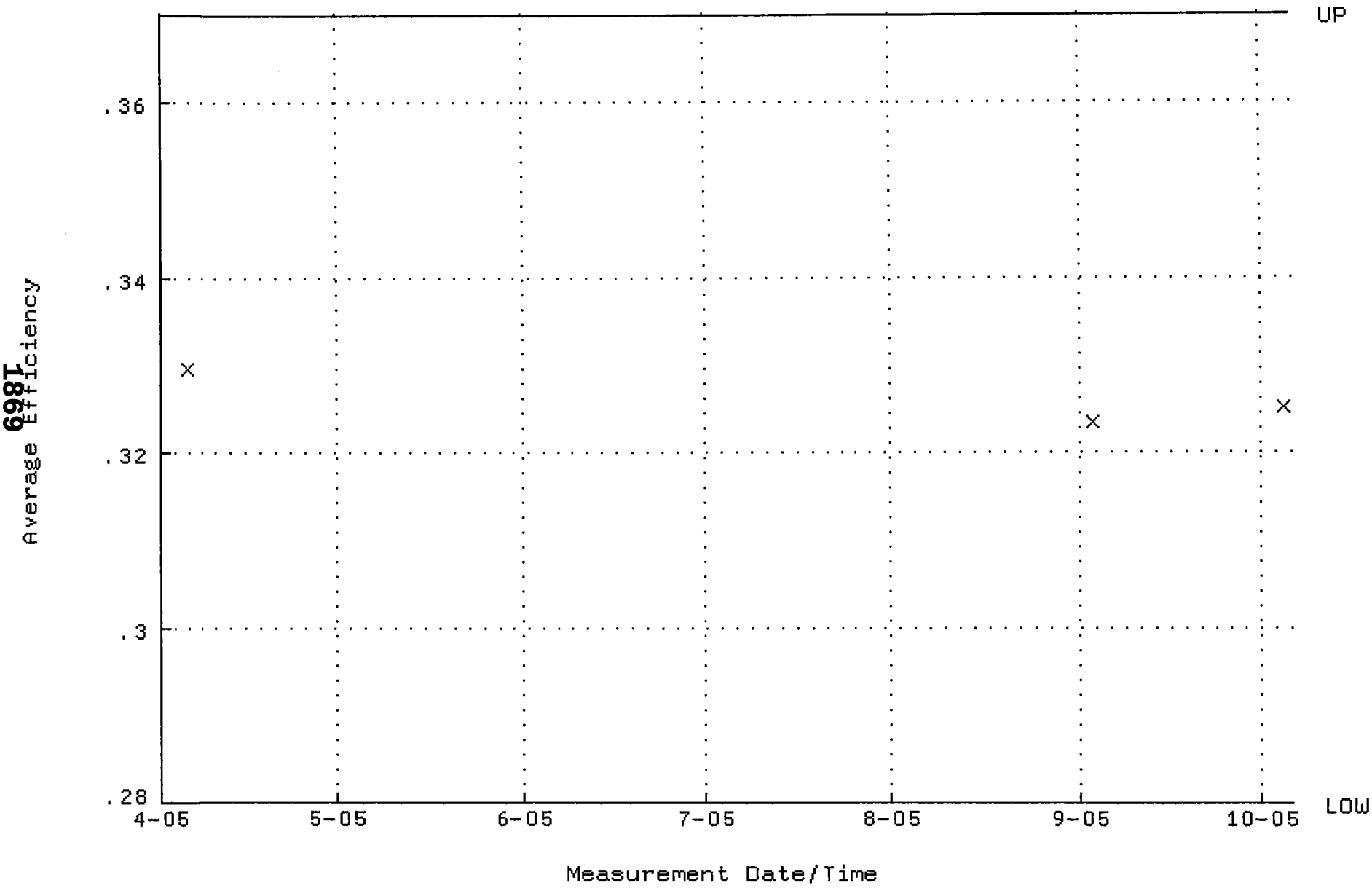
QA filename : DKA100:[ENV_ALPHA.QA.W]W042.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 4-APR-2005 19:08:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



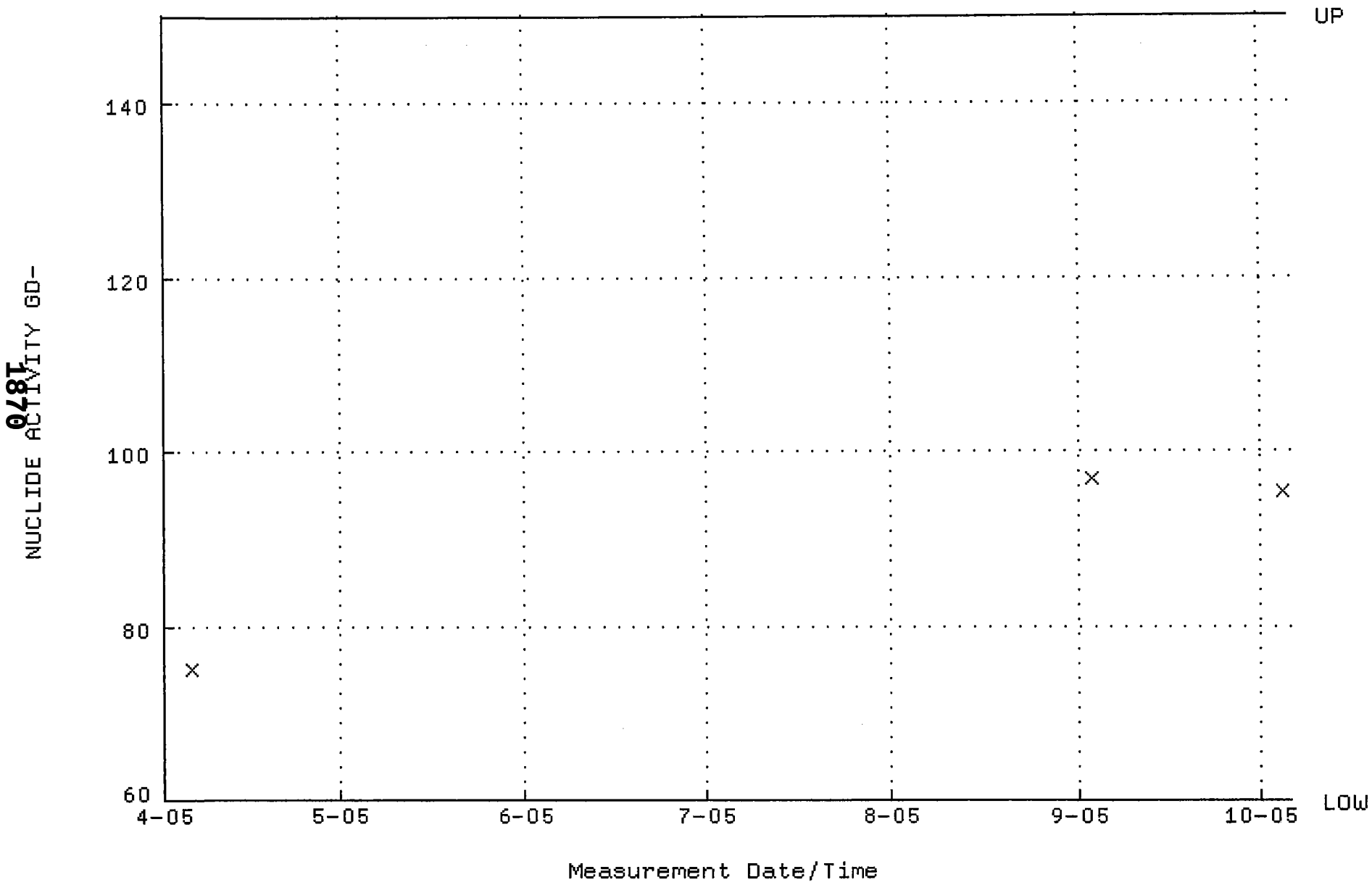
QA filename : DKA100:[ENV_ALPHA.QA.B]B042.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:38:57 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



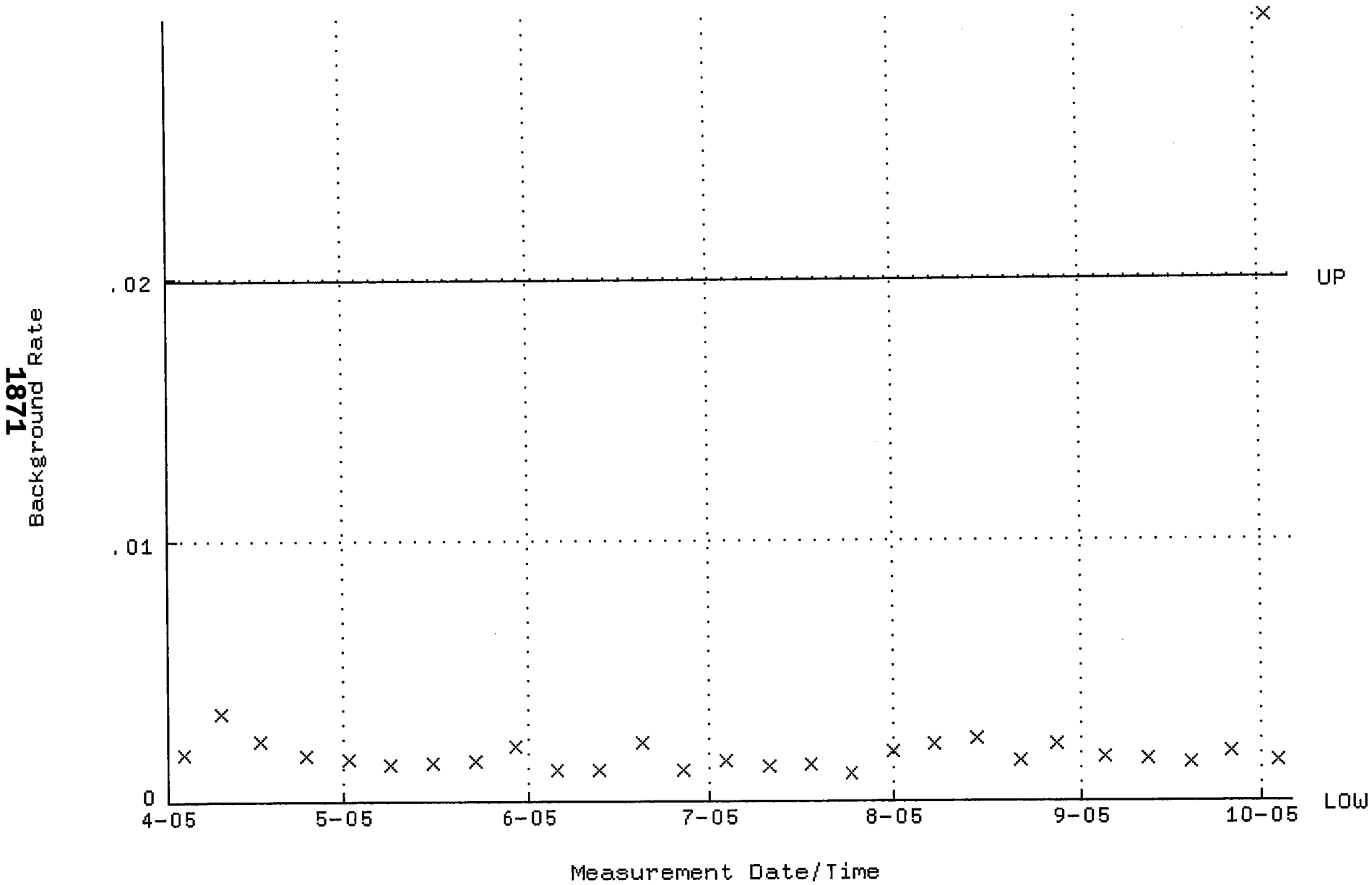
QA filename : DKA100:[ENV_ALPHA.QA.W]W057.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-APR-2005 12:10:03 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



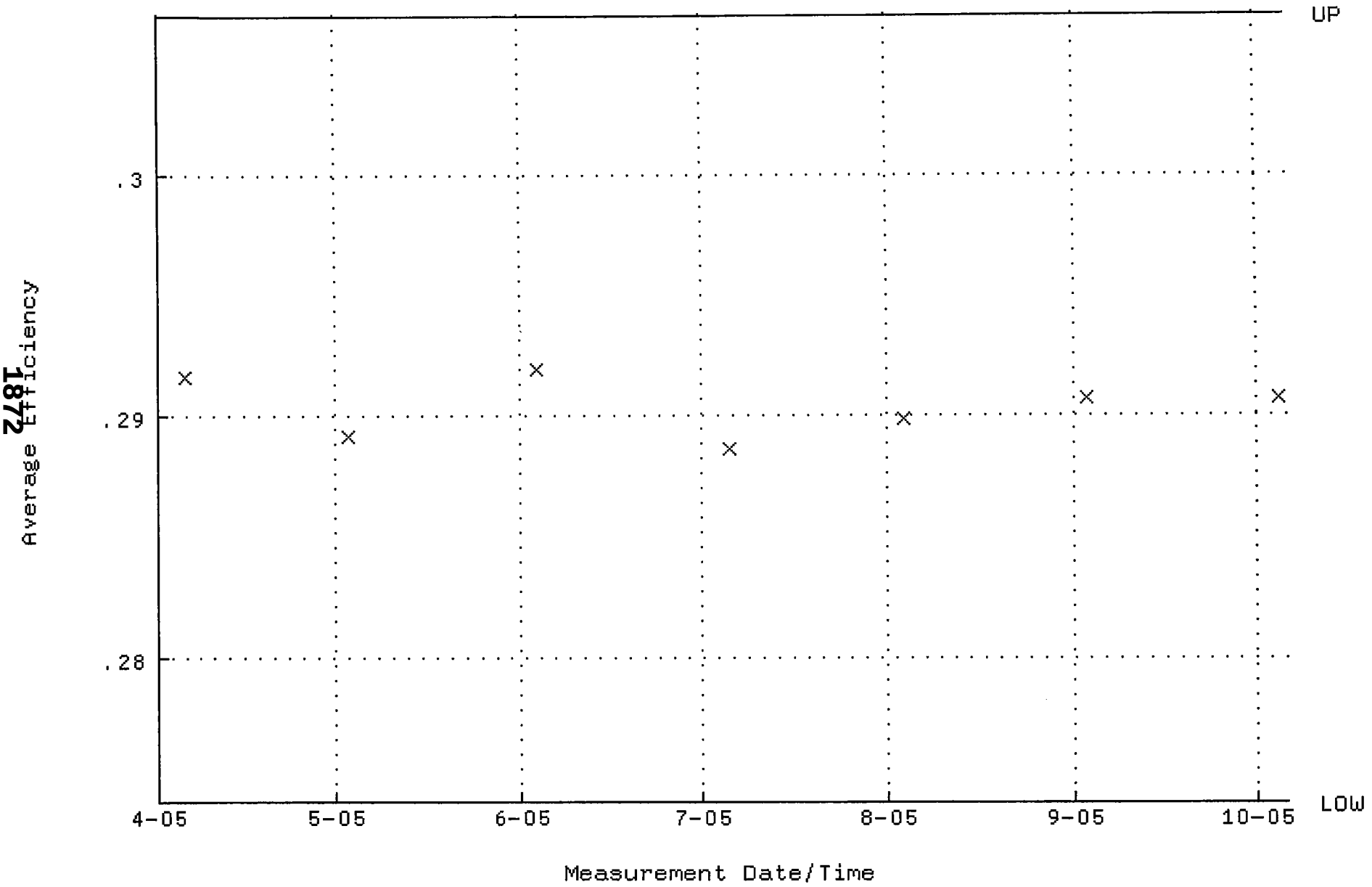
QA filename : DKA100:[ENV_ALPHA.QA.W]W057.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-APR-2005 12:10:03 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



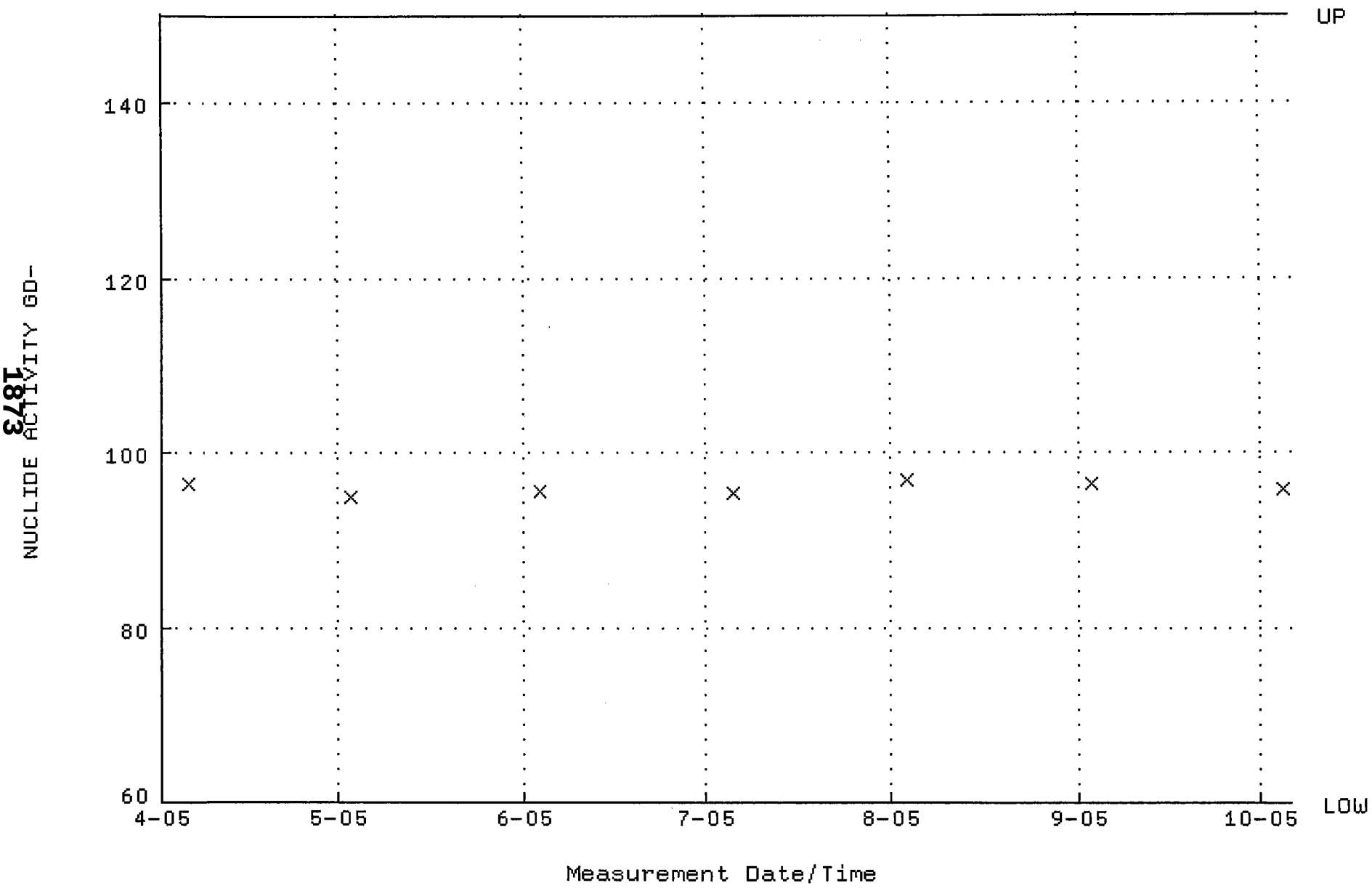
QA filename : DKA100:[ENV_ALPHA.QA.B]B057.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:28 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



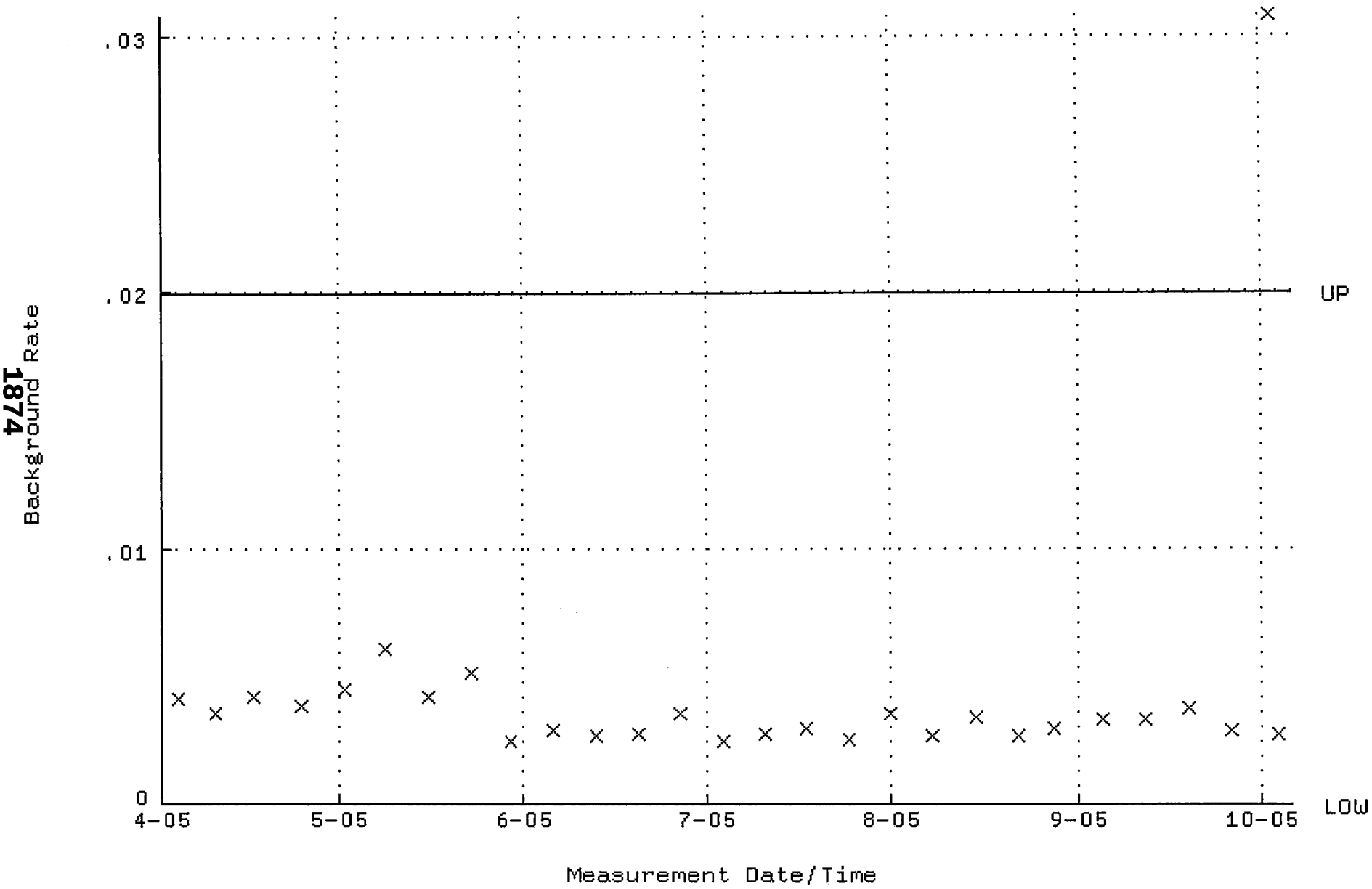
QA filename : DKA100:[ENV_ALPHA.QA.W]W059.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-APR-2005 12:10:03 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.274025 through 0.306575



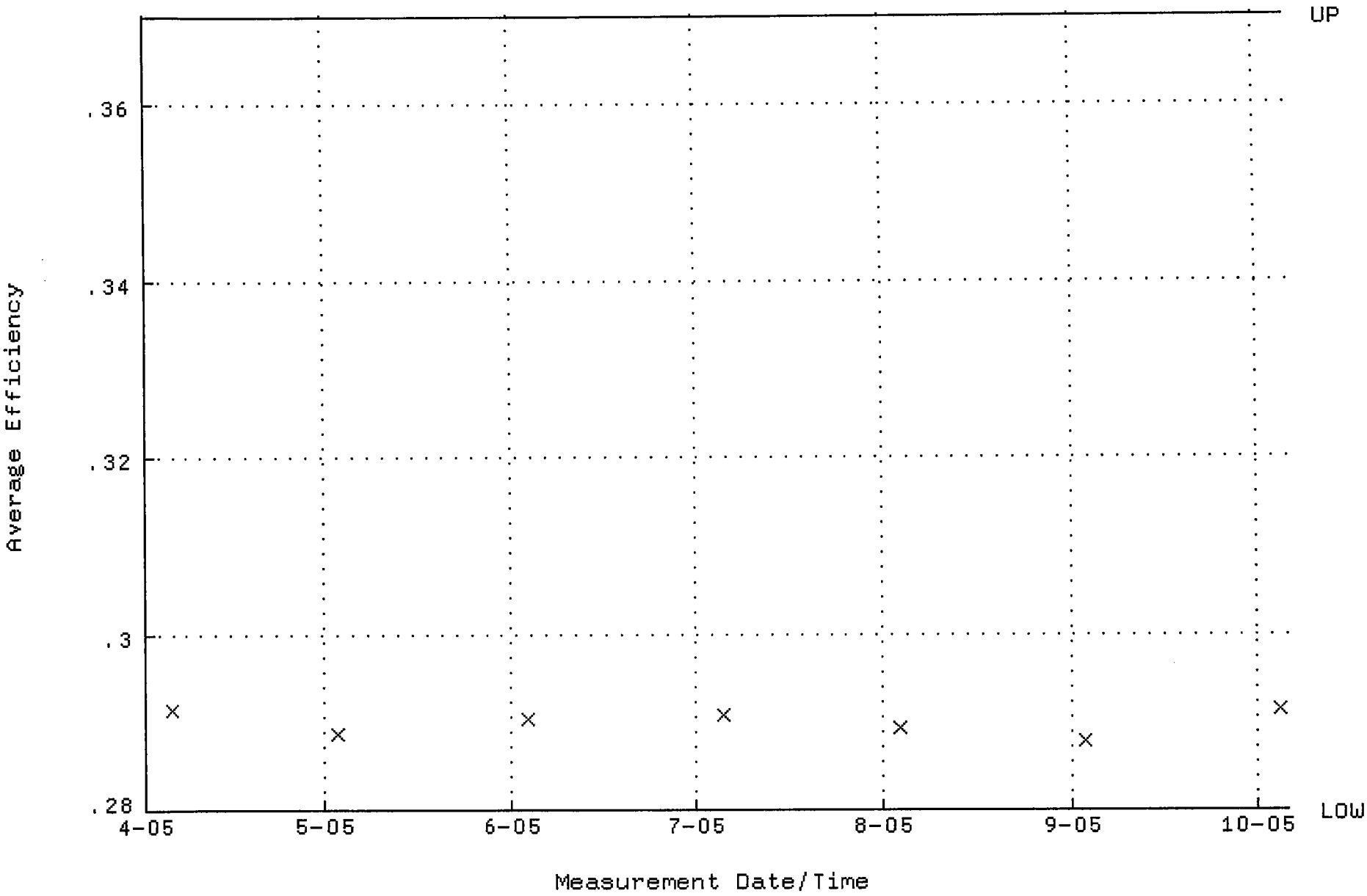
QA filename : DKA100:[ENV_ALPHA.QA.W]W059.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-APR-2005 12:10:03 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



QA filename : DKA100:[ENV_ALPHA.QA.B]B059.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:28 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

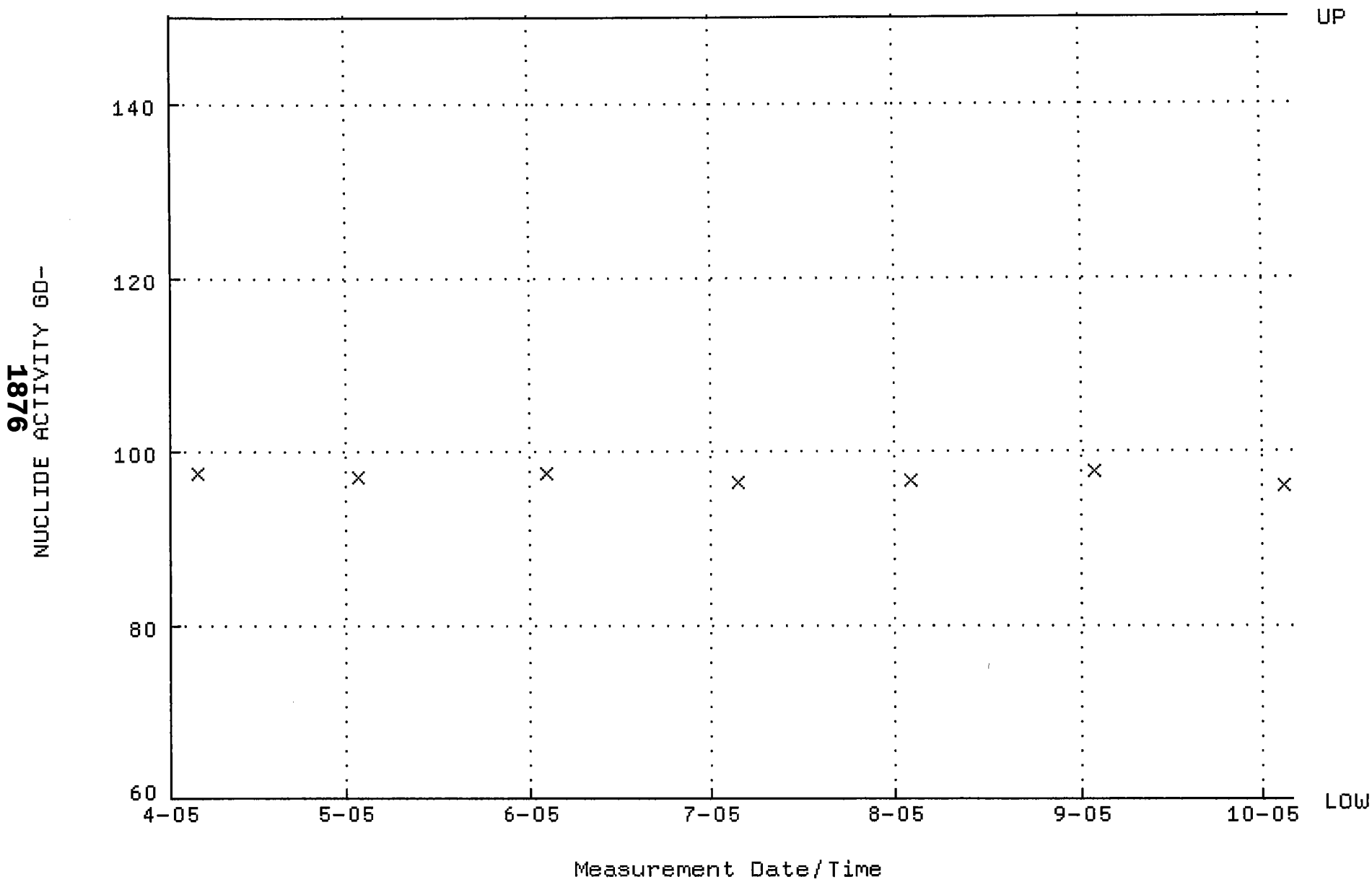


QA filename : DKA100:[ENV_ALPHA.QA.W]W064.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 5-APR-2005 12:10:03 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000

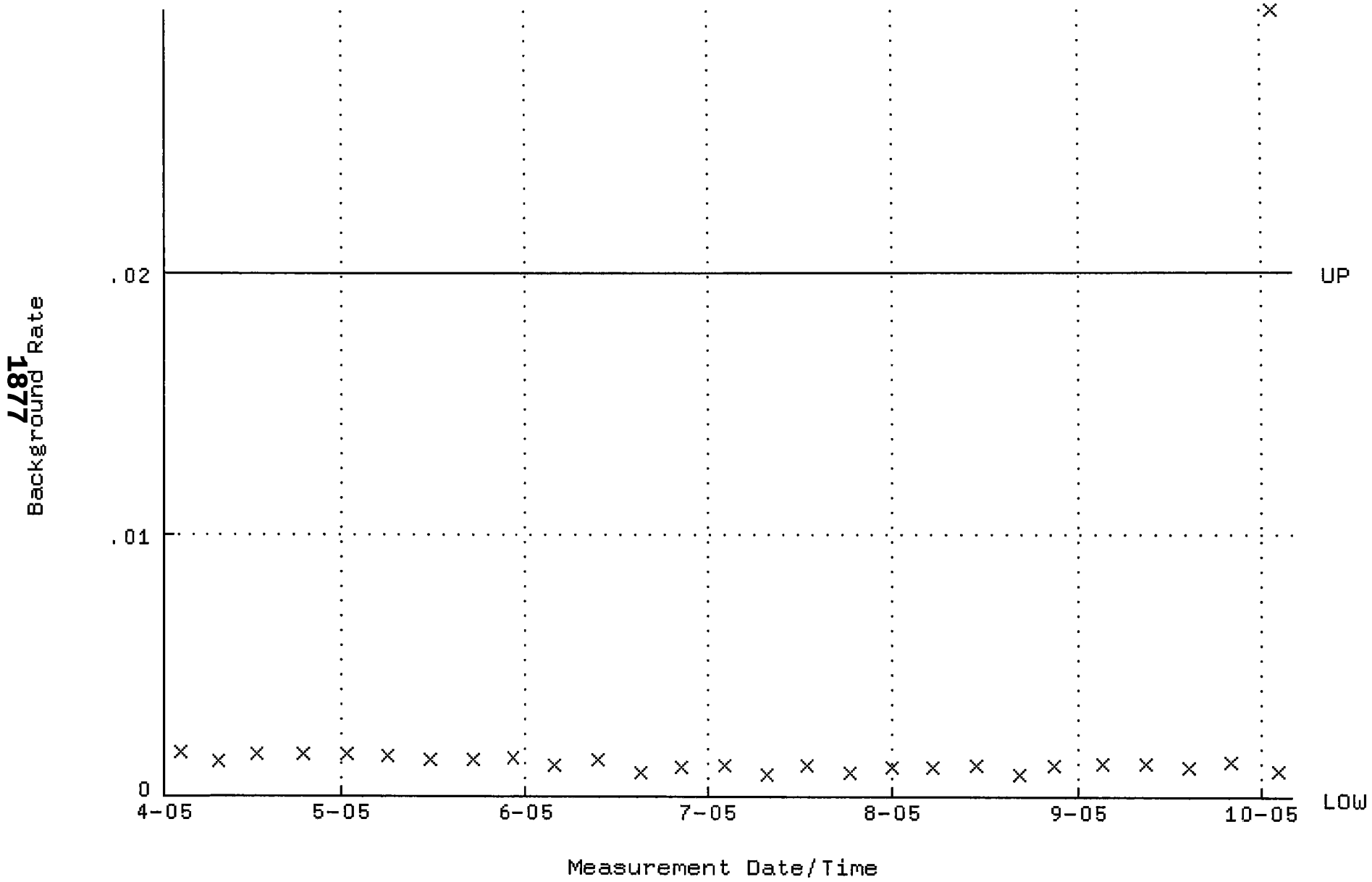


1875

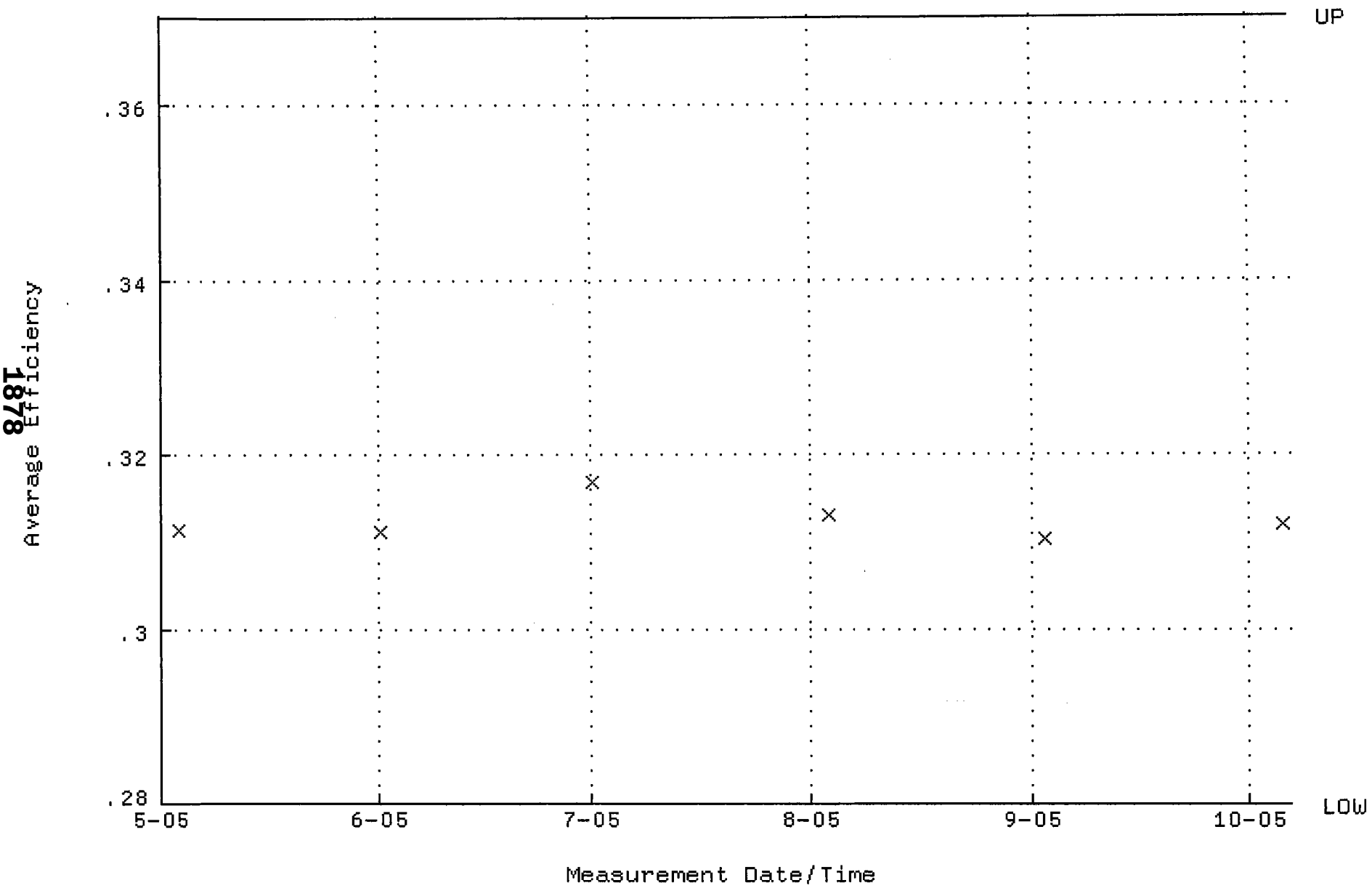
QA filename : DKA100:[ENV_ALPHA.QA.W]W064.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 5-APR-2005 12:10:03 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



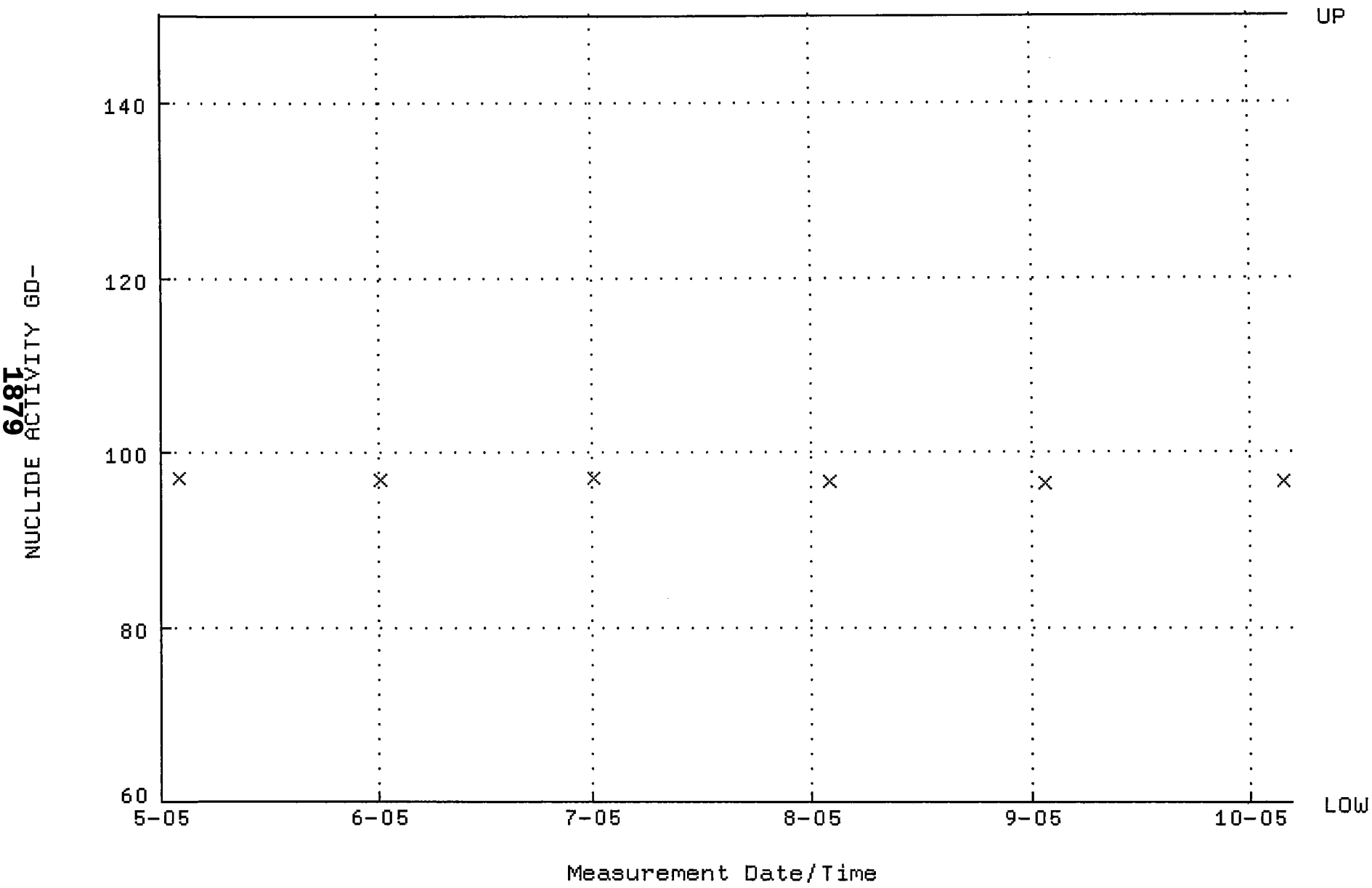
QA filename : DKA100:[ENV_ALPHA.QA.B]B064.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:28 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



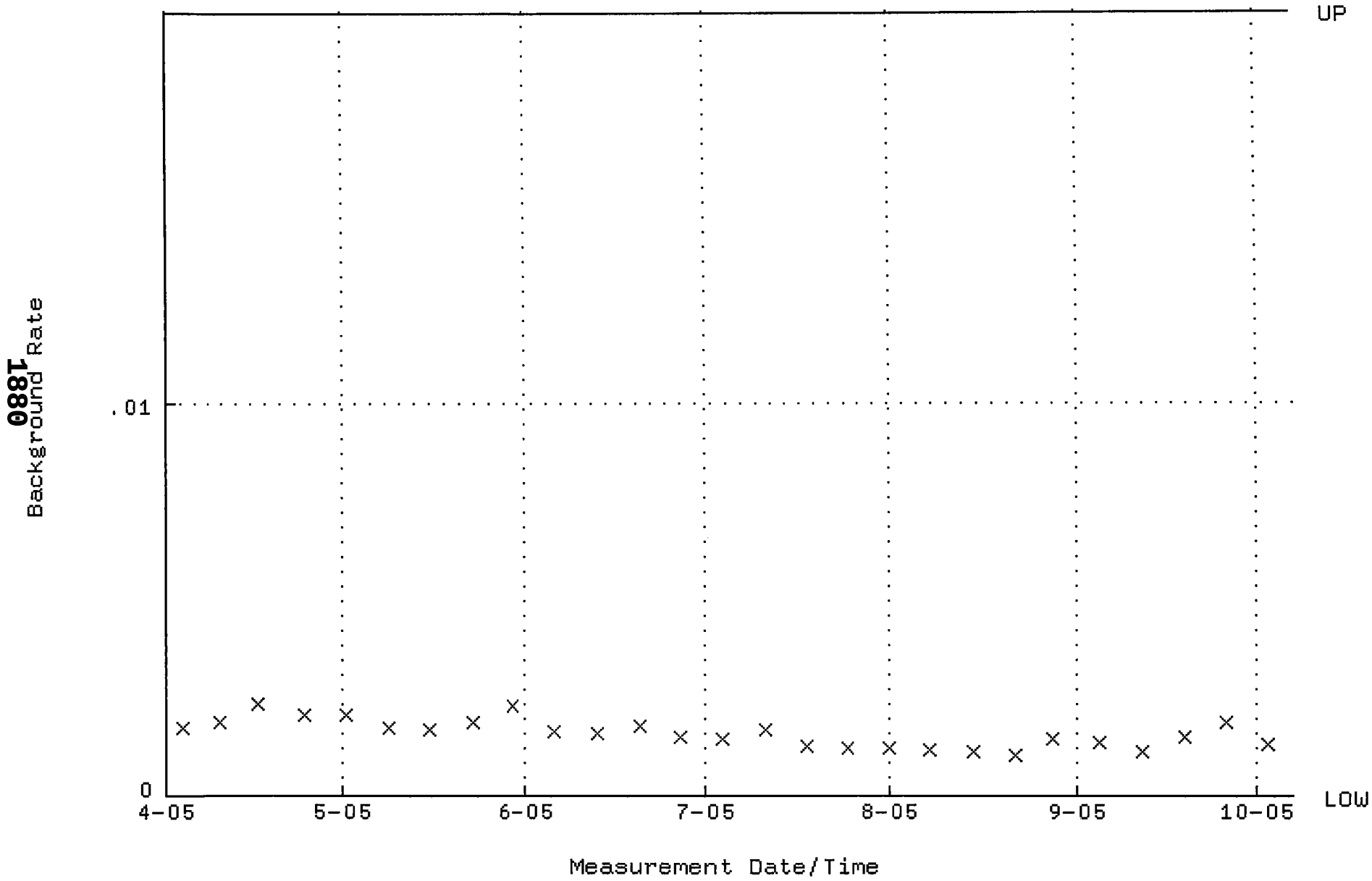
QA filename : DKA100:[ENV_ALPHA.QA.W]W067.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-MAY-2005 12:43:04 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



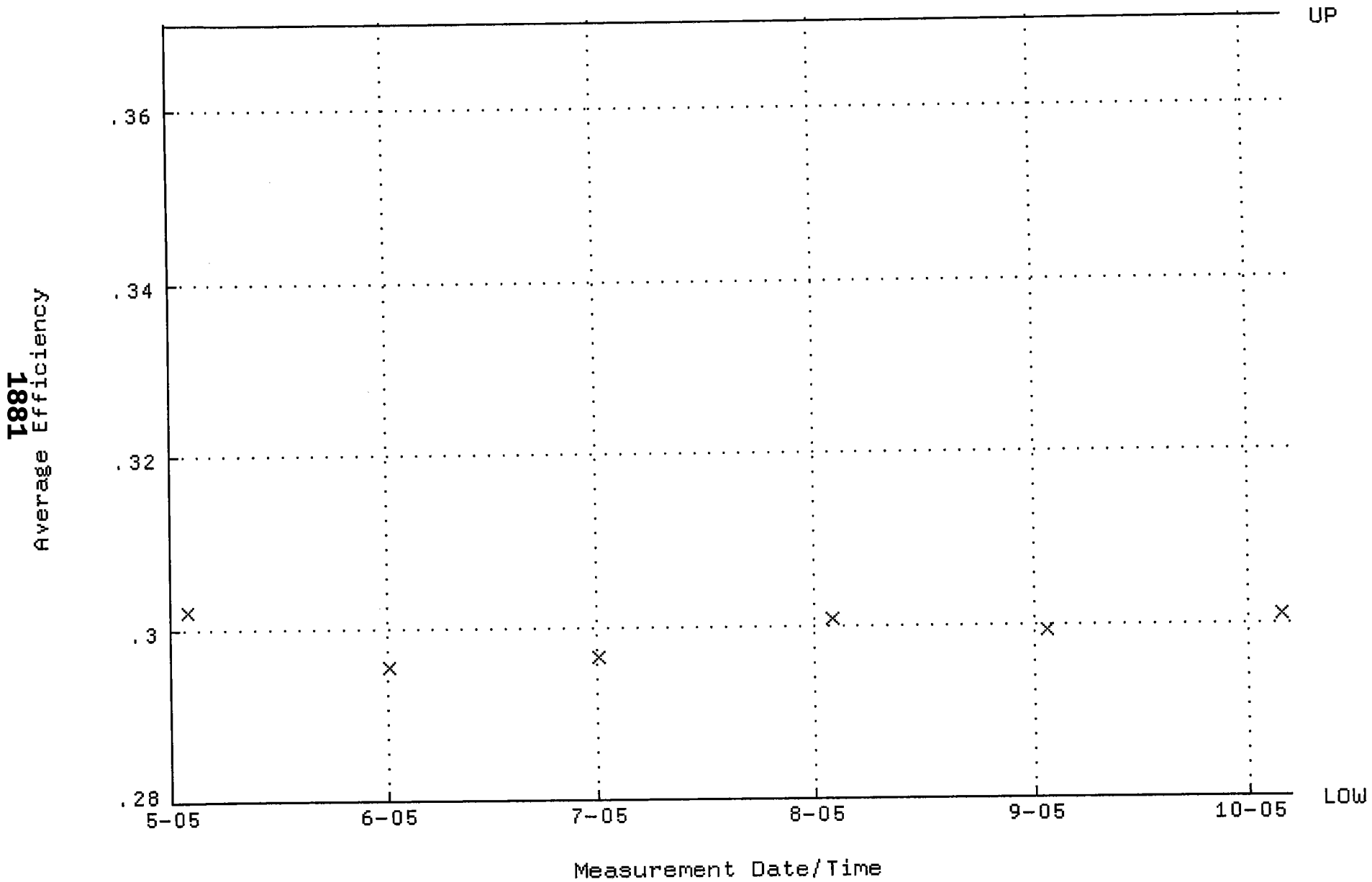
QA filename : DKA100:[ENV_ALPHA.QA.W]W067.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-MAY-2005 12:43:04 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



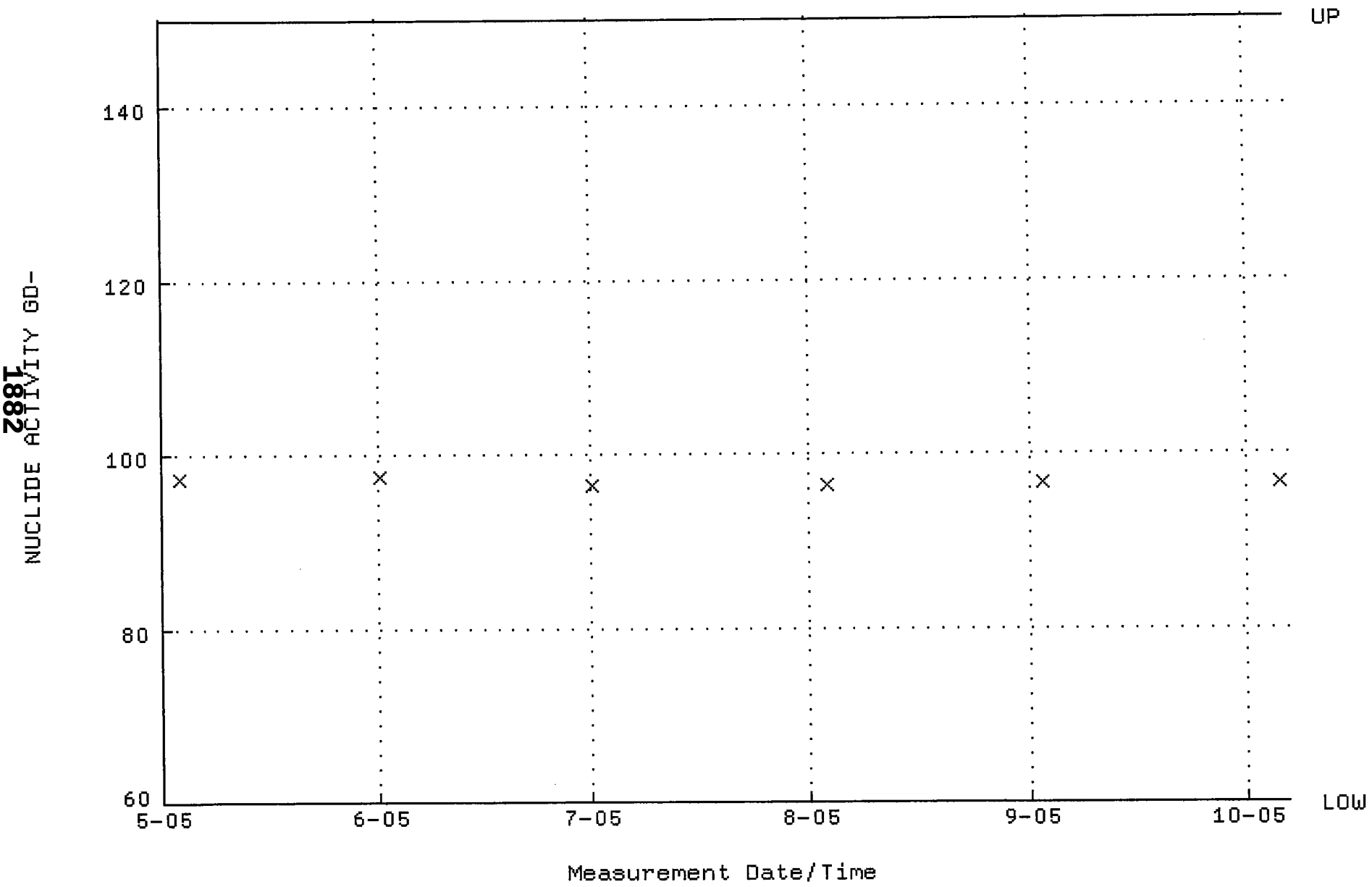
QA filename : DKA100:[ENV_ALPHA.QA.B]B067.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:30 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



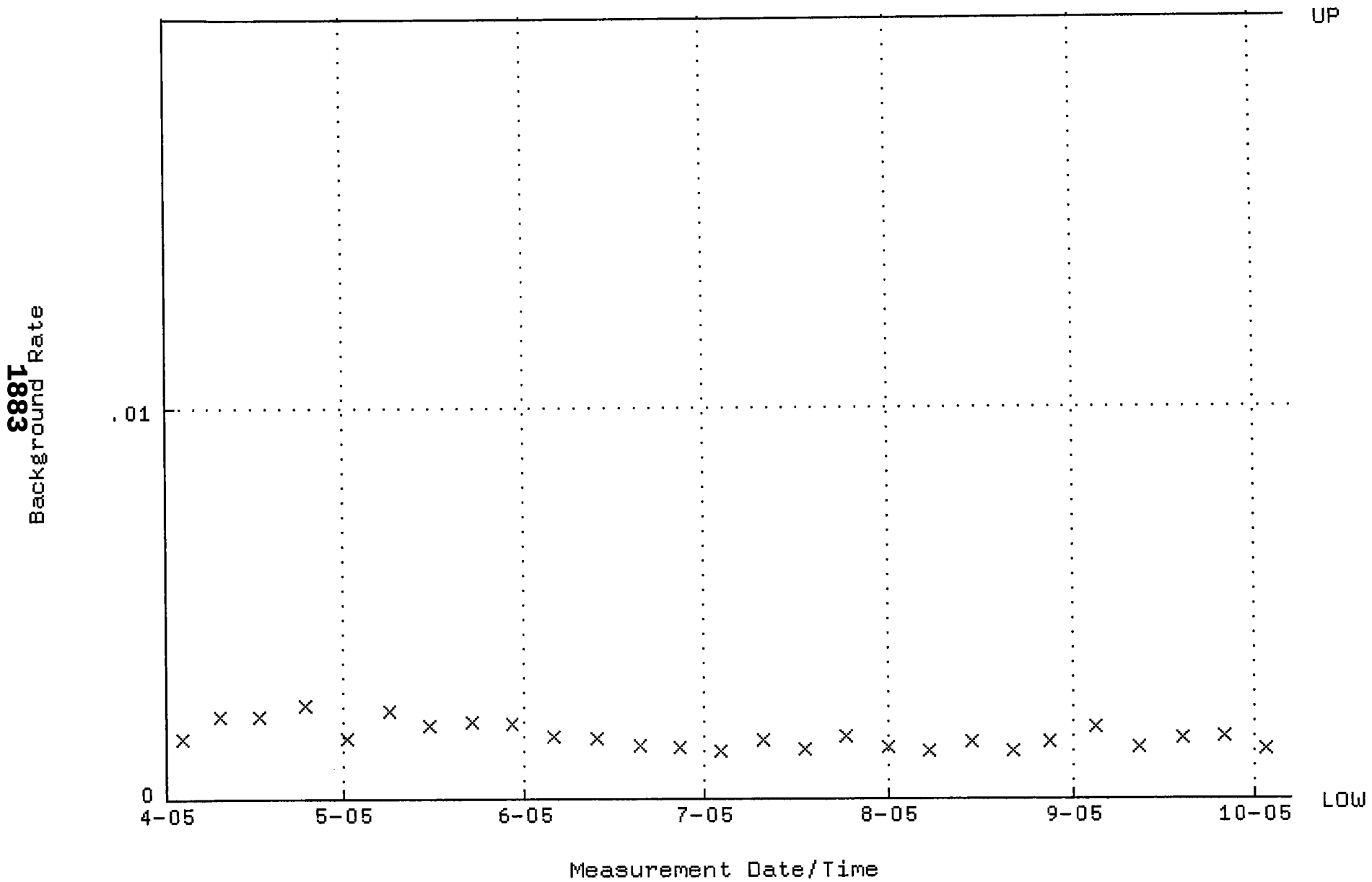
QA filename : DKA100:[ENV_ALPHA.QA.W]W068.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-MAY-2005 12:43:04 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



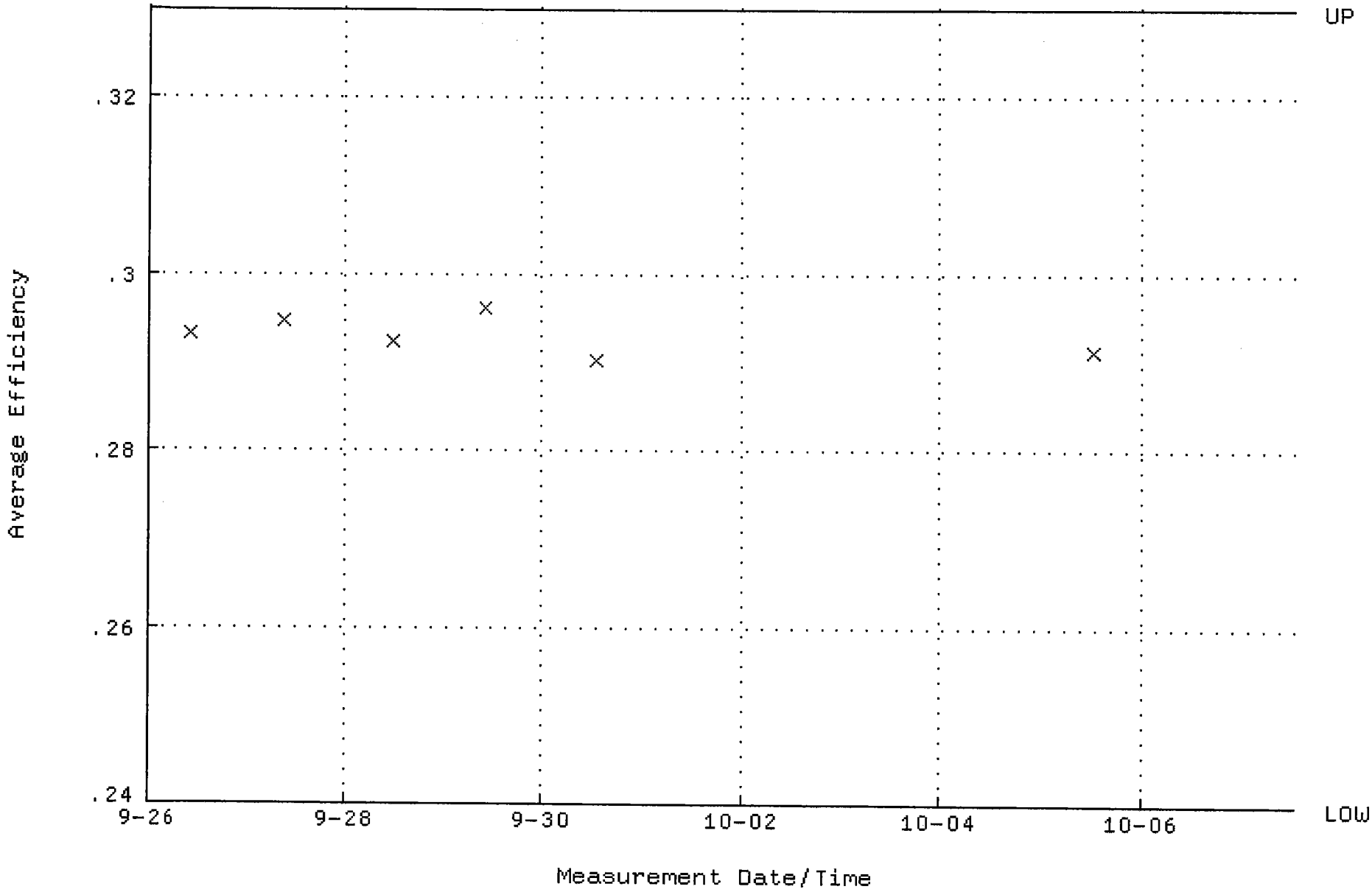
QA filename : DKA100:[ENV_ALPHA.QA.W]W068.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-MAY-2005 12:43:04 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



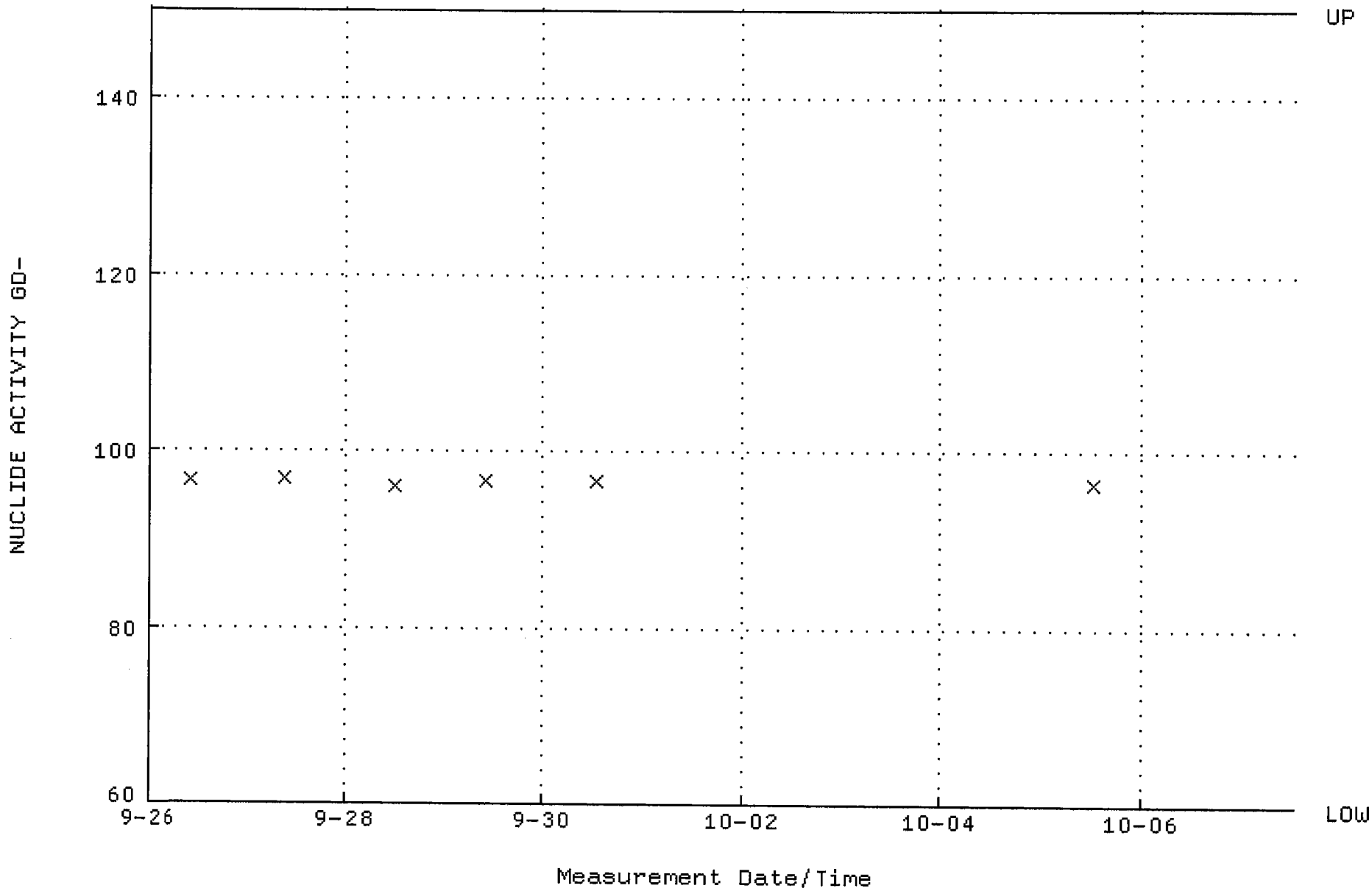
QA filename : DKA100:[ENV_ALPHA.QA.B]B068.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:30 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



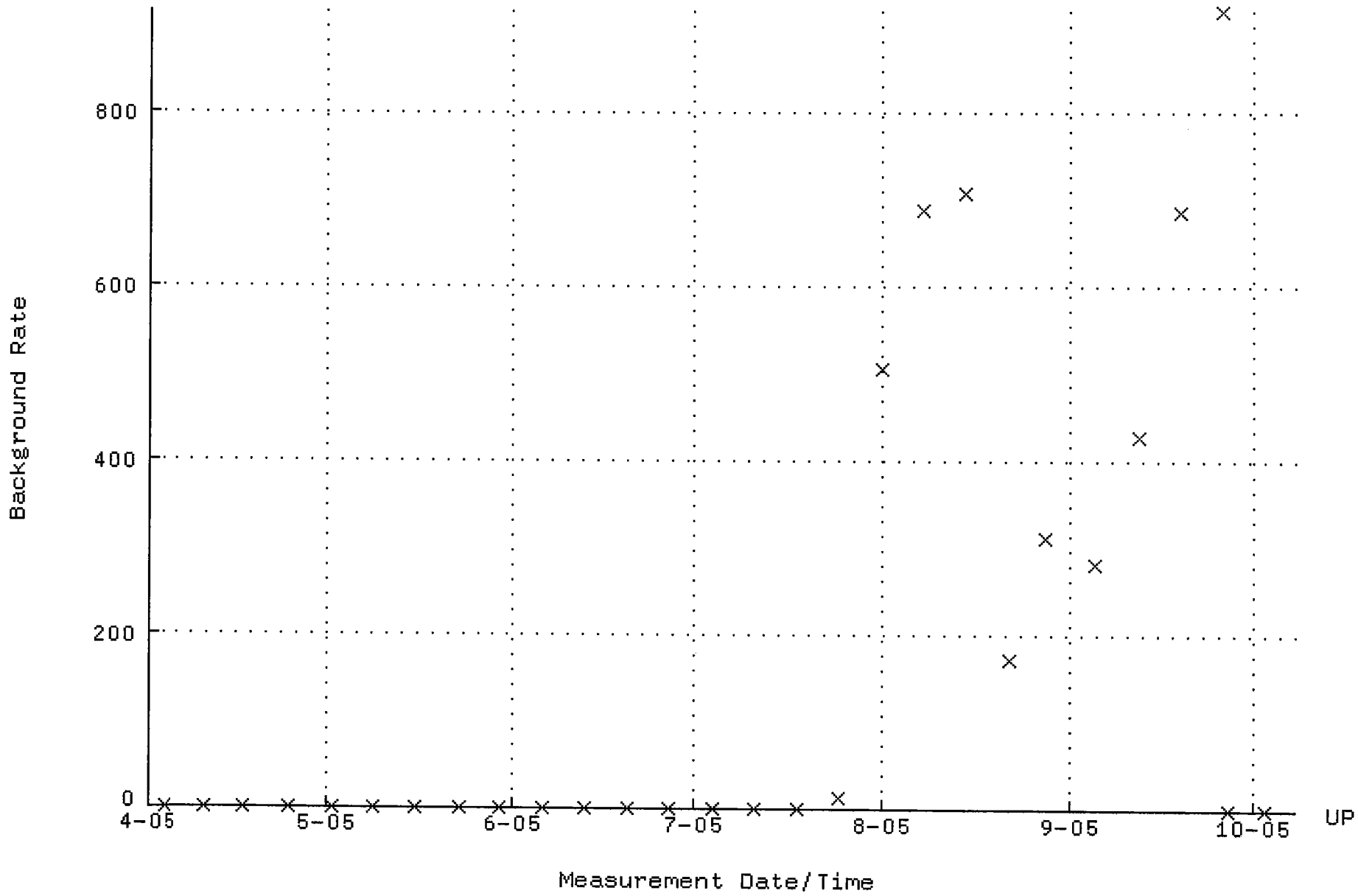
QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-SEP-2005 11:06:07 through 7-OCT-2005 12:00:00
Lower/Upper Lmts: 0.240000 through 0.330000



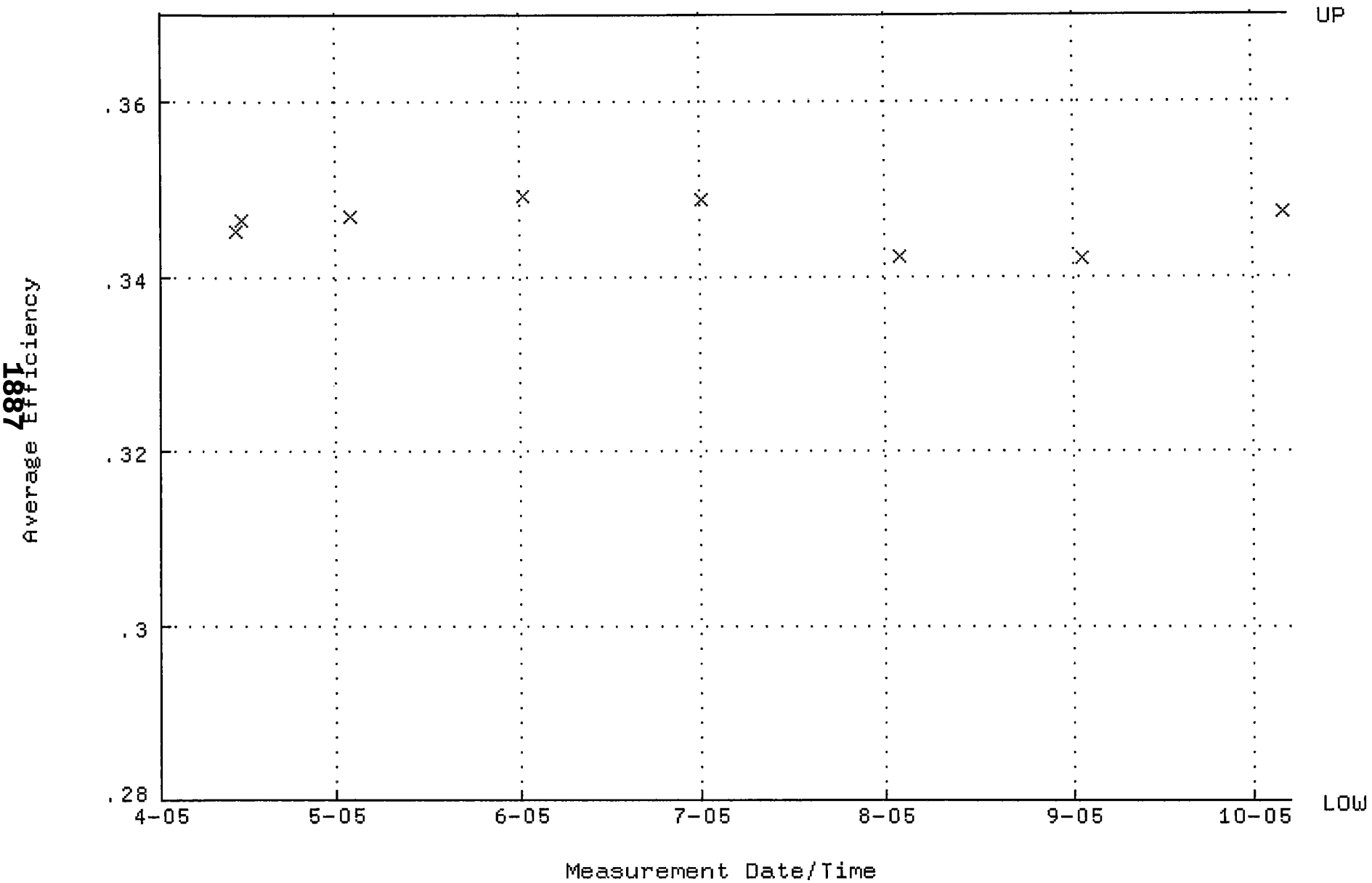
QA filename : DKA100:[ENV_ALPHA.QA.W]W069.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-SEP-2005 11:06:07 through 7-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



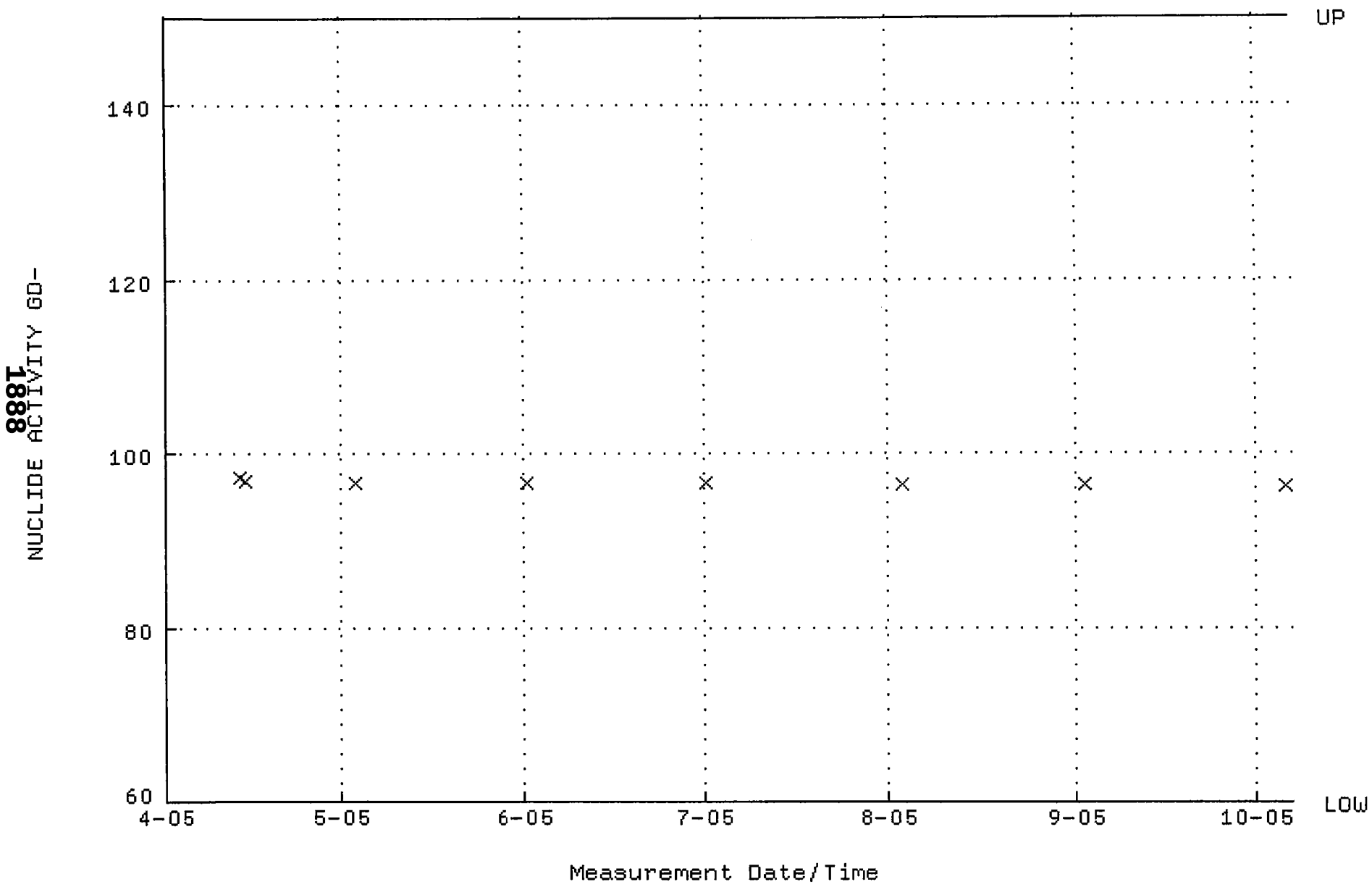
QA filename : DKA100:[ENV_ALPHA.QA.B]B069.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:30 through 7-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



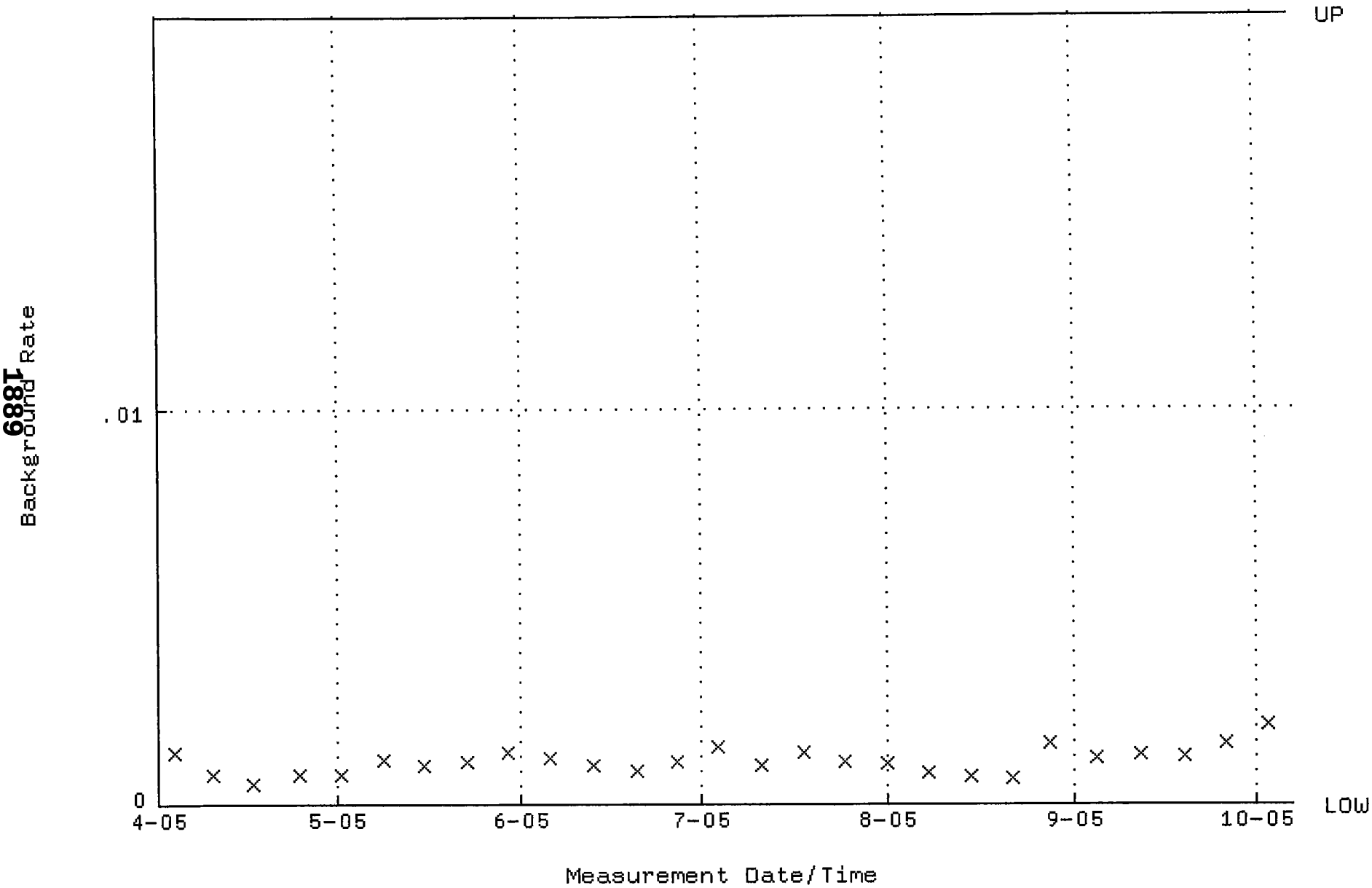
QA filename : DKA100:[ENV_ALPHA.QA.W]W070.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 14-APR-2005 09:42:17 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



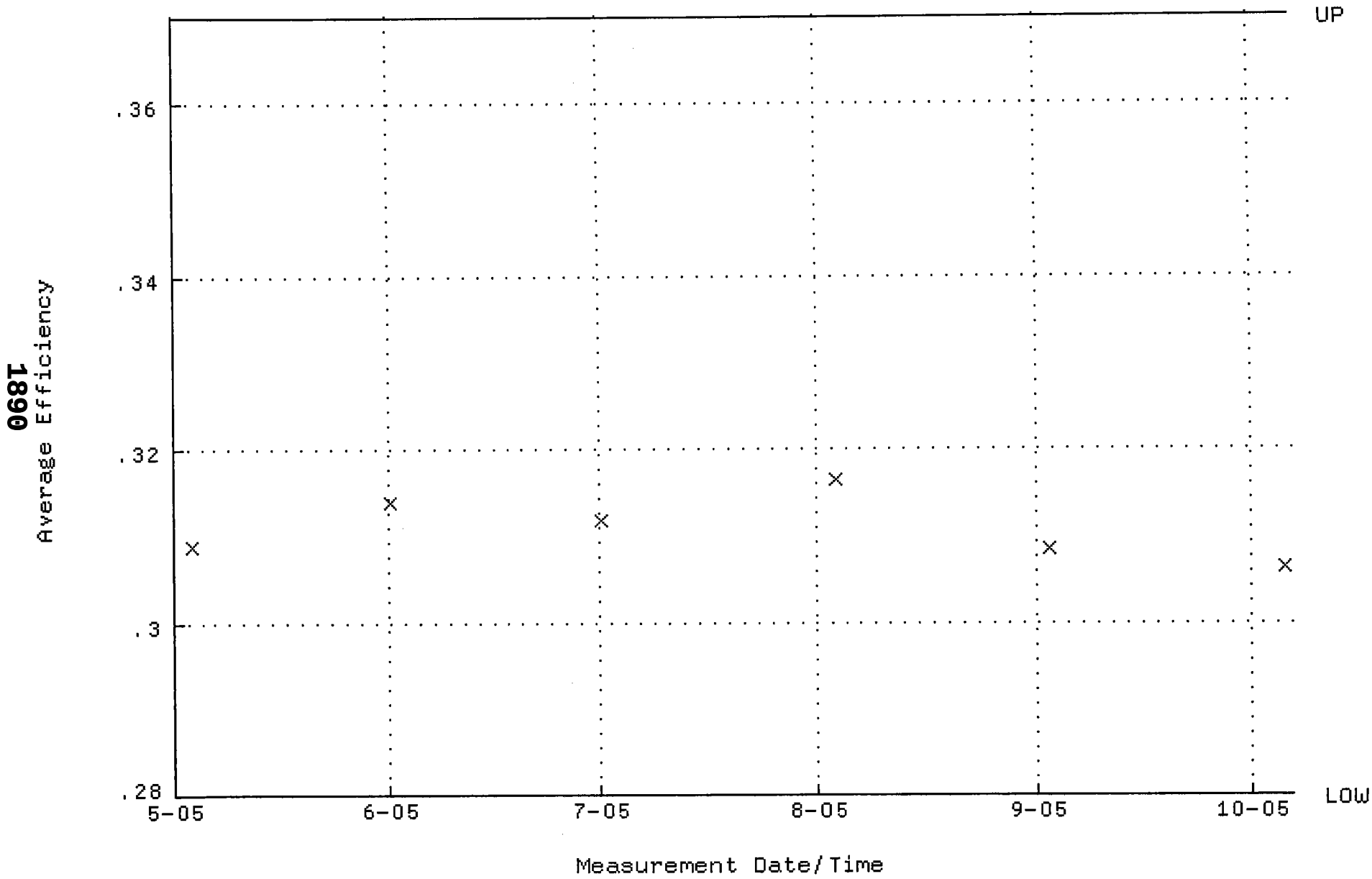
QA filename : DKA100:[ENV_ALPHA.QA.W]W070.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 14-APR-2005 09:42:17 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



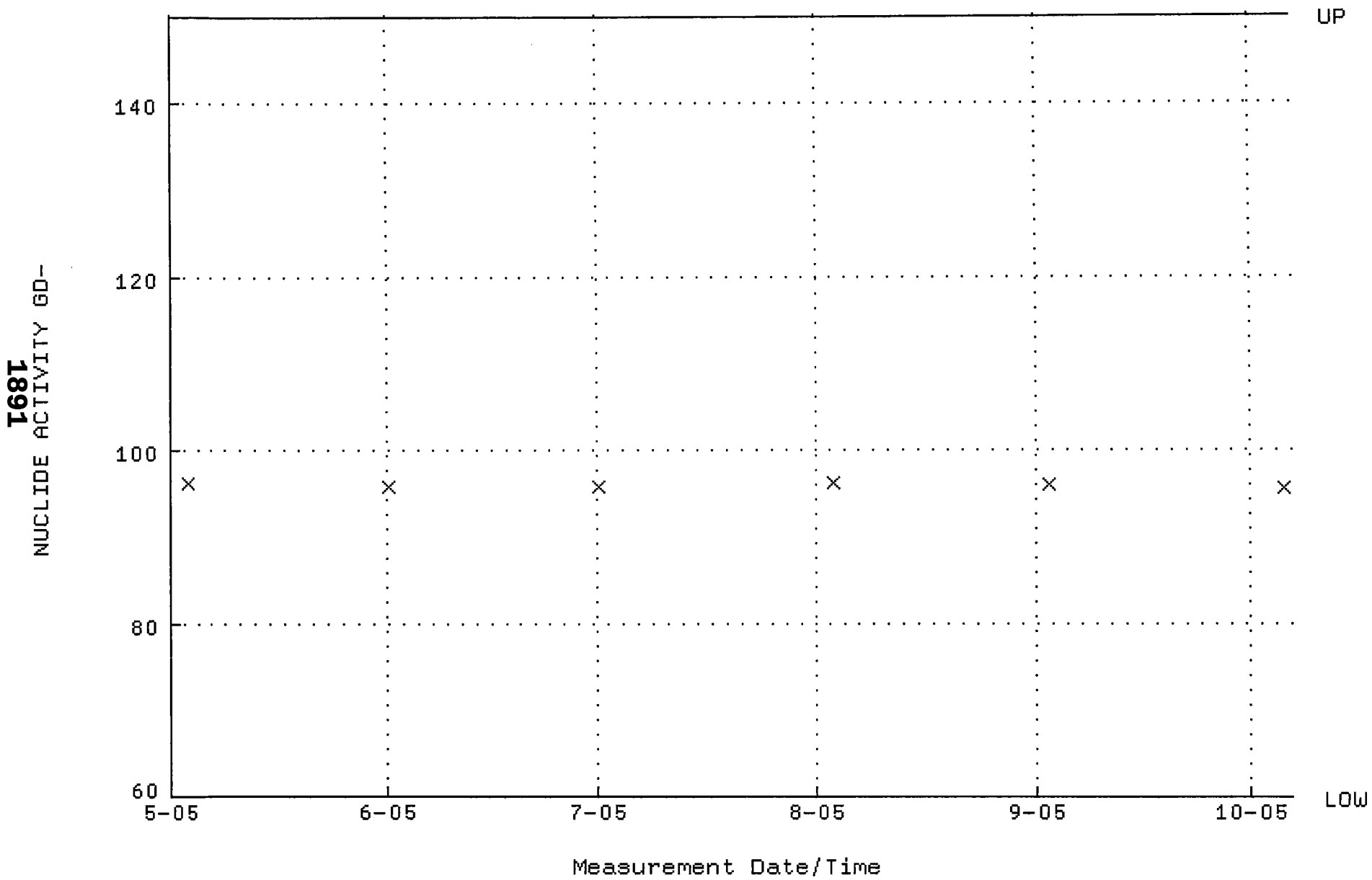
QA filename : DKA100:[ENV_ALPHA.QA.B]B070.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:30 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



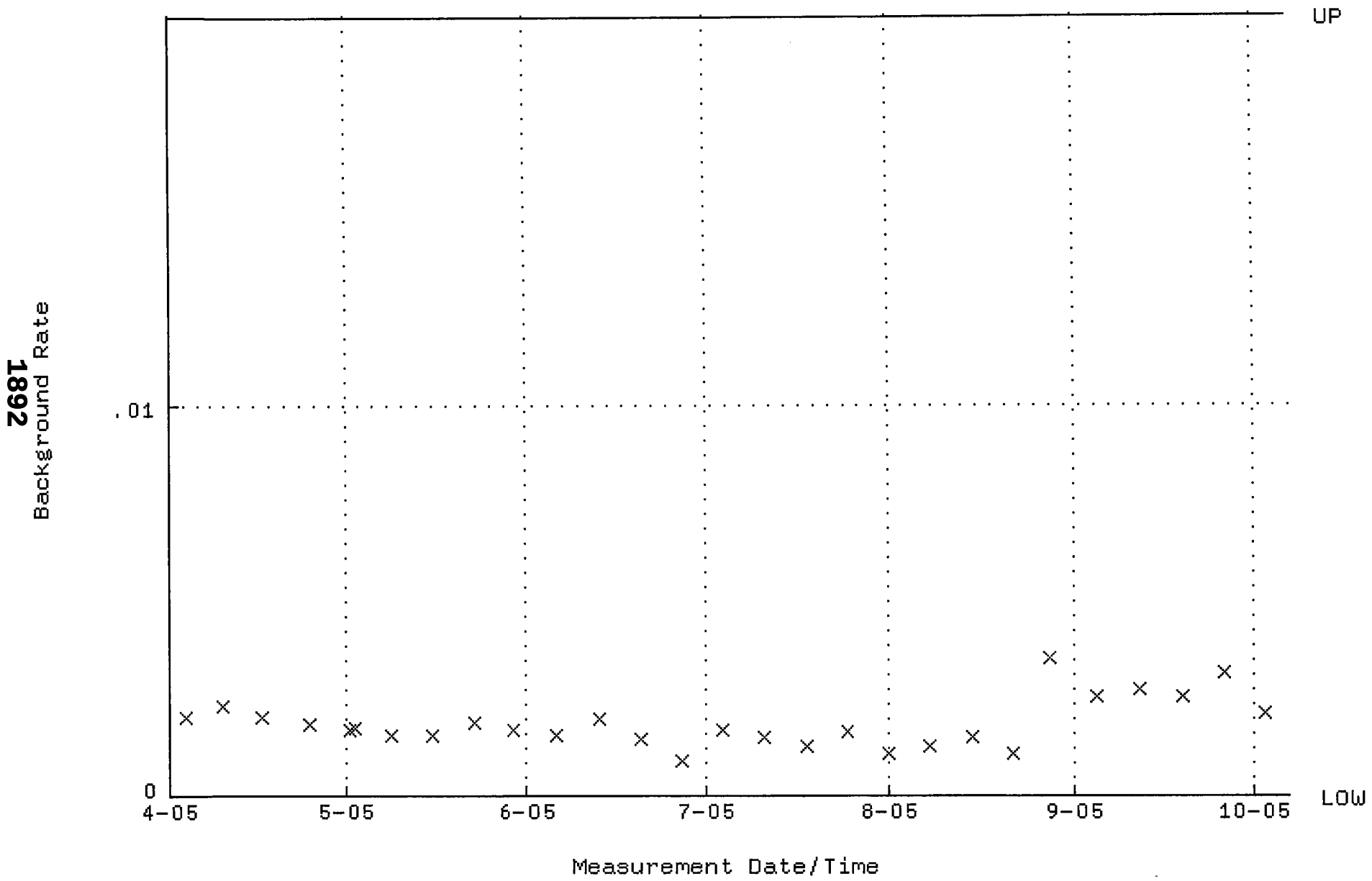
QA filename : DKA100:[ENV_ALPHA.QA.W]W083.QAF;5
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 3-MAY-2005 12:43:07 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.370000



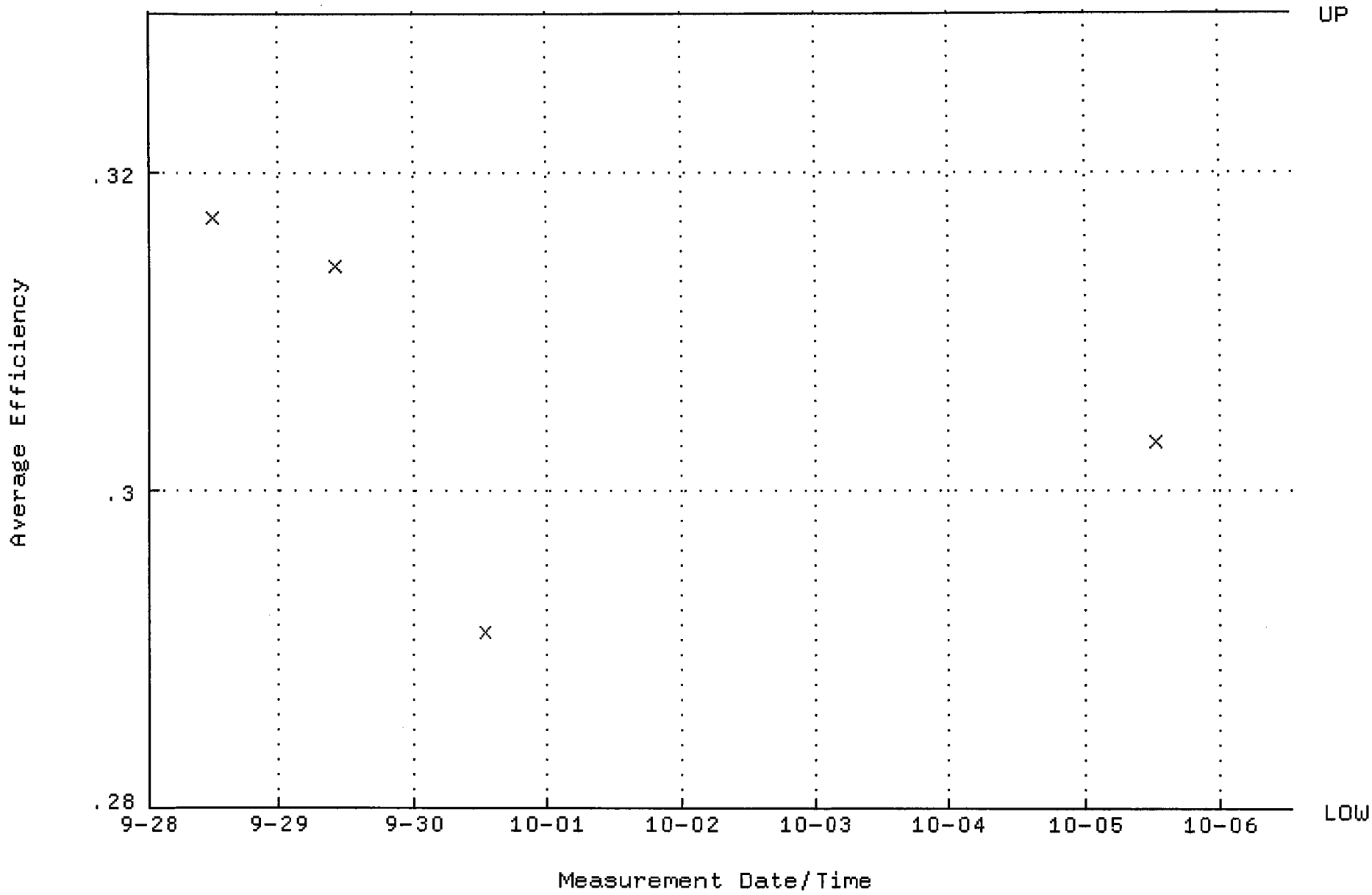
QA filename : DKA100:[ENV_ALPHA.QA.W]W083.QAF;5
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 3-MAY-2005 12:43:07 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



QA filename : DKA100:[ENV_ALPHA.QA.B]B083.QAF;3
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:33 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02

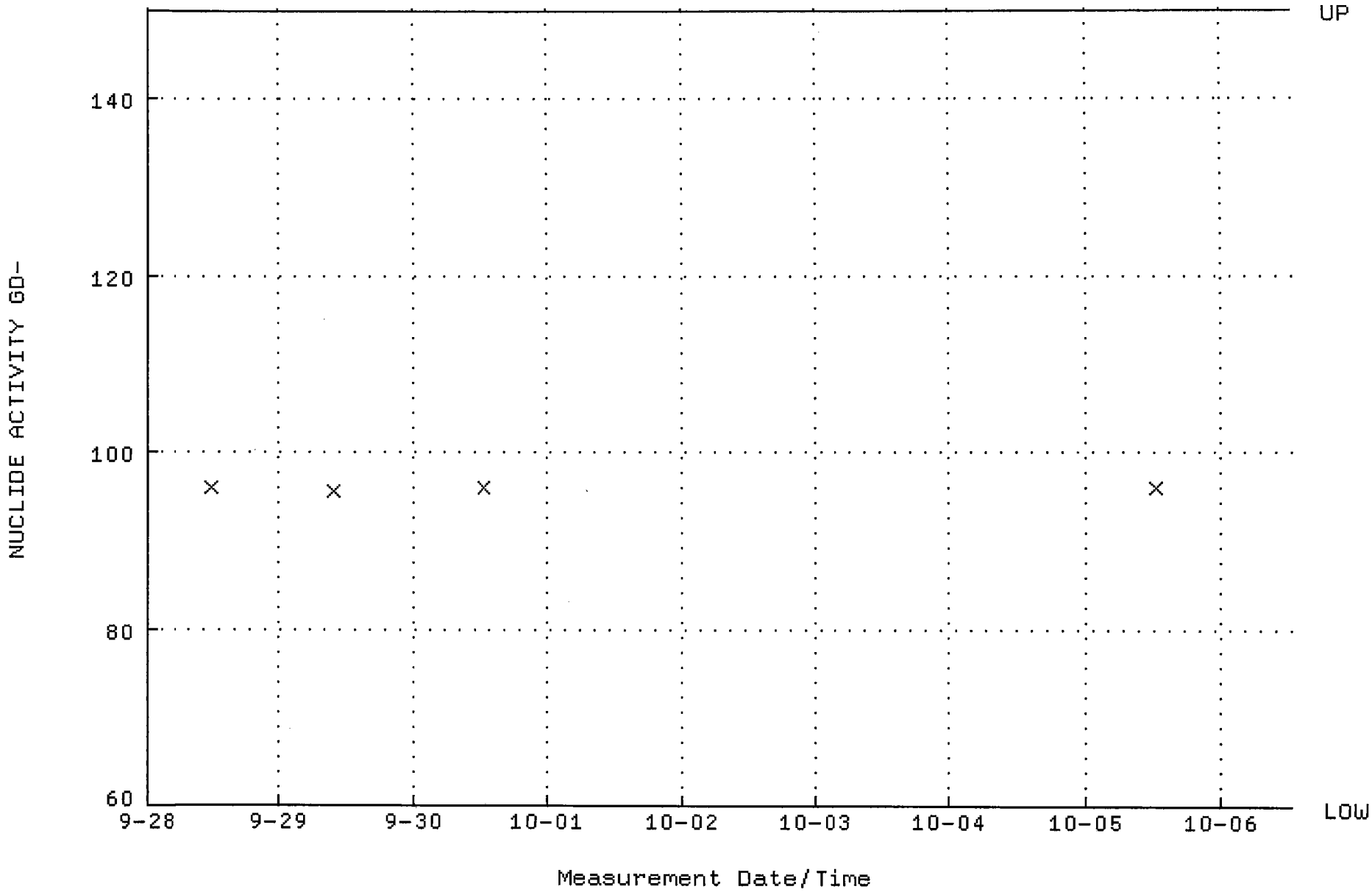


QA filename : DKA100:[ENV_ALPHA.QA.W]W085.QAF;6
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 28-SEP-2005 12:02:14 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.280000 through 0.330000



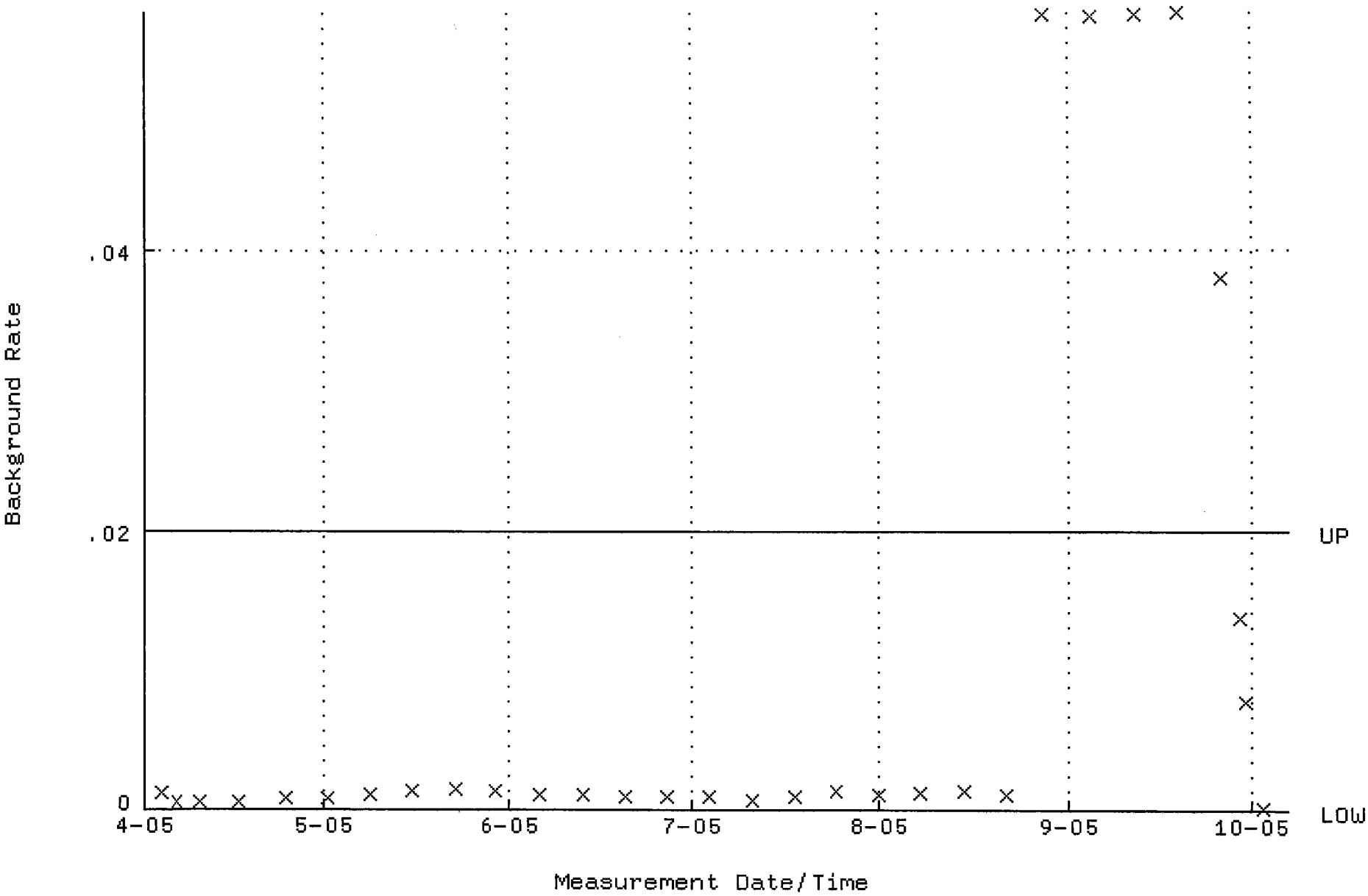
1893

QA filename : DKA100:[ENV_ALPHA.QA.W]W085.QAF;6
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 28-SEP-2005 12:02:14 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000

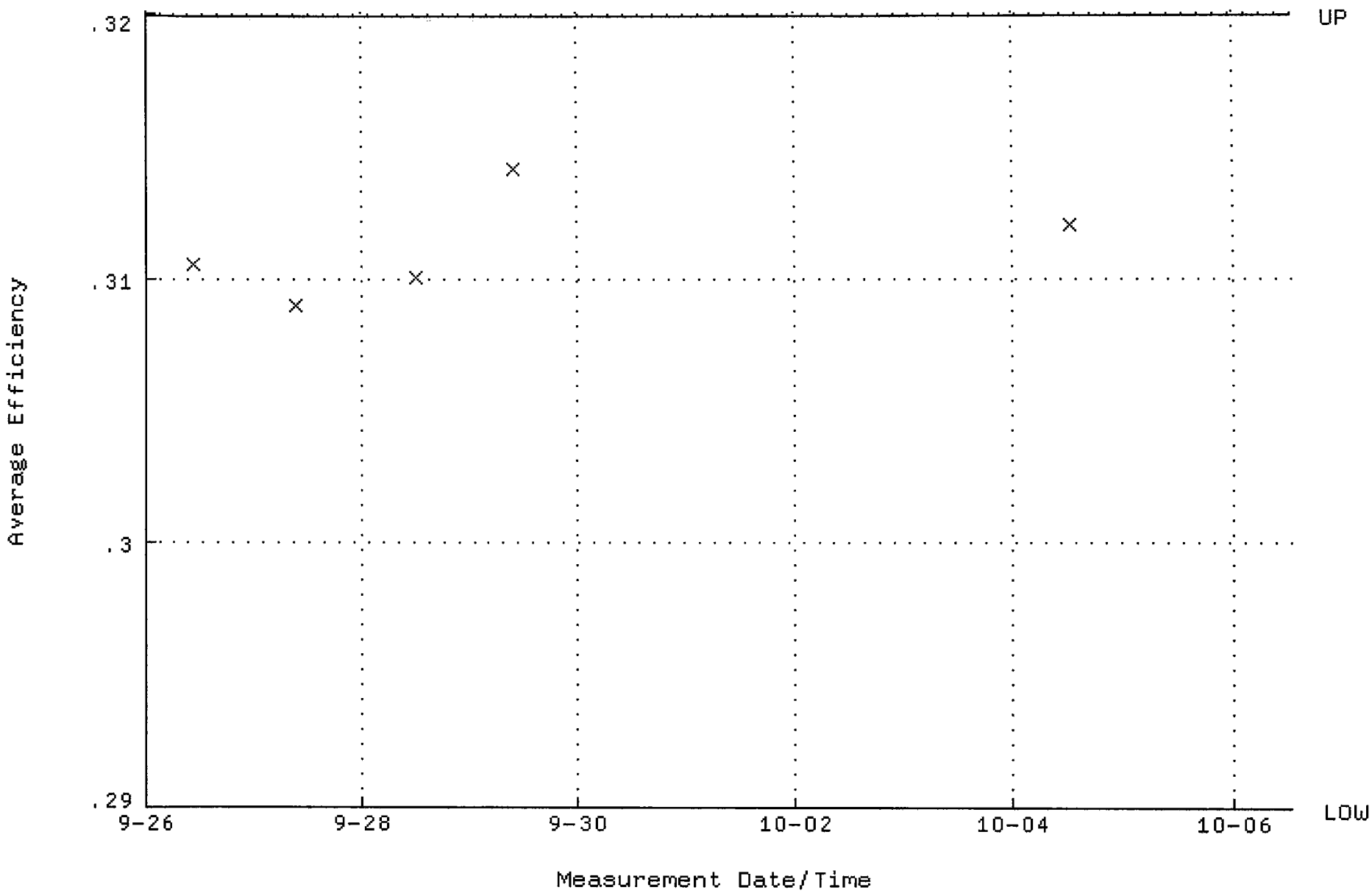


1894

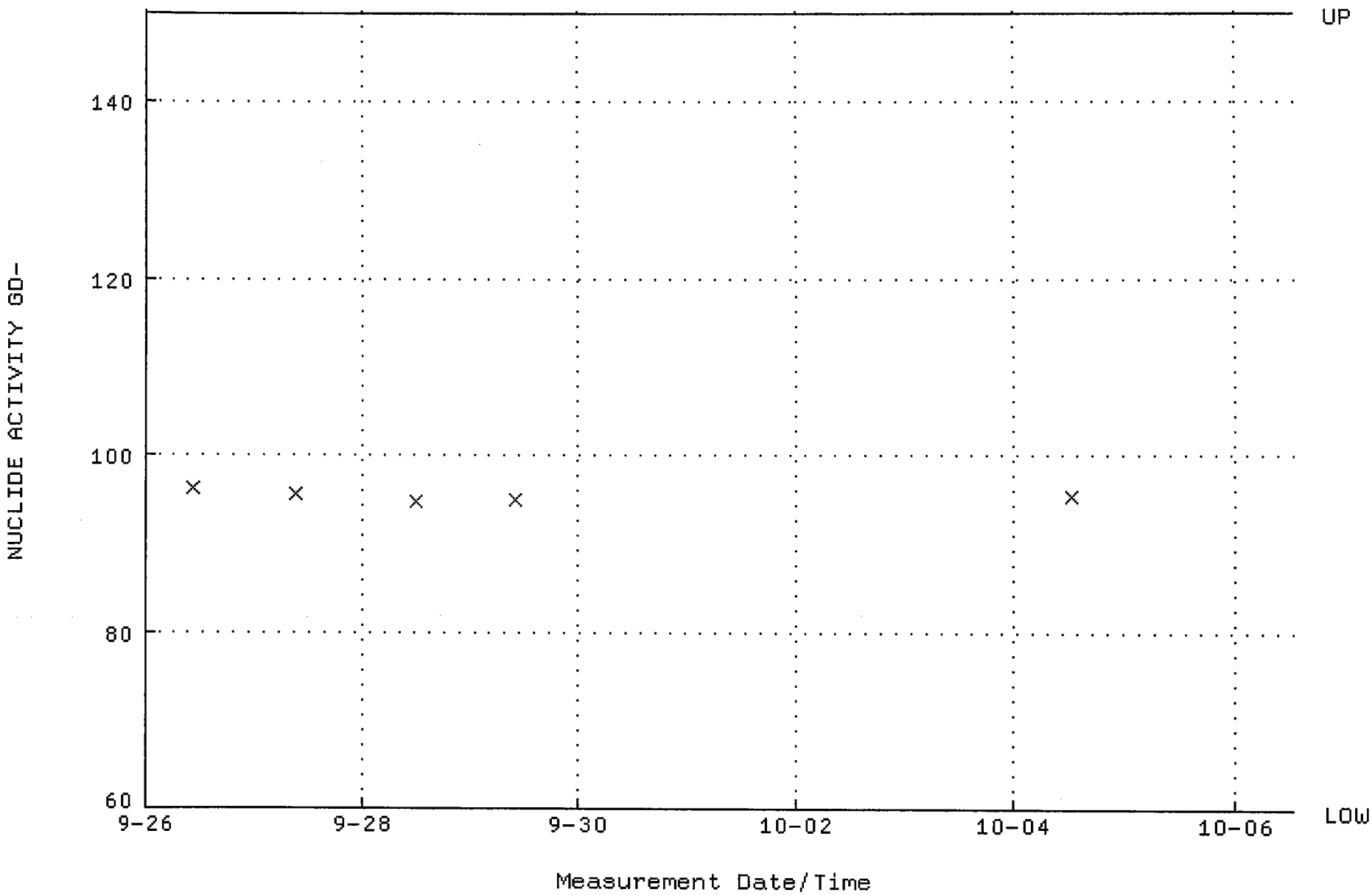
QA filename : DKA100:[ENV_ALPHA.QA.B]B085.QAF;1
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 18:54:33 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 2.000000E-02



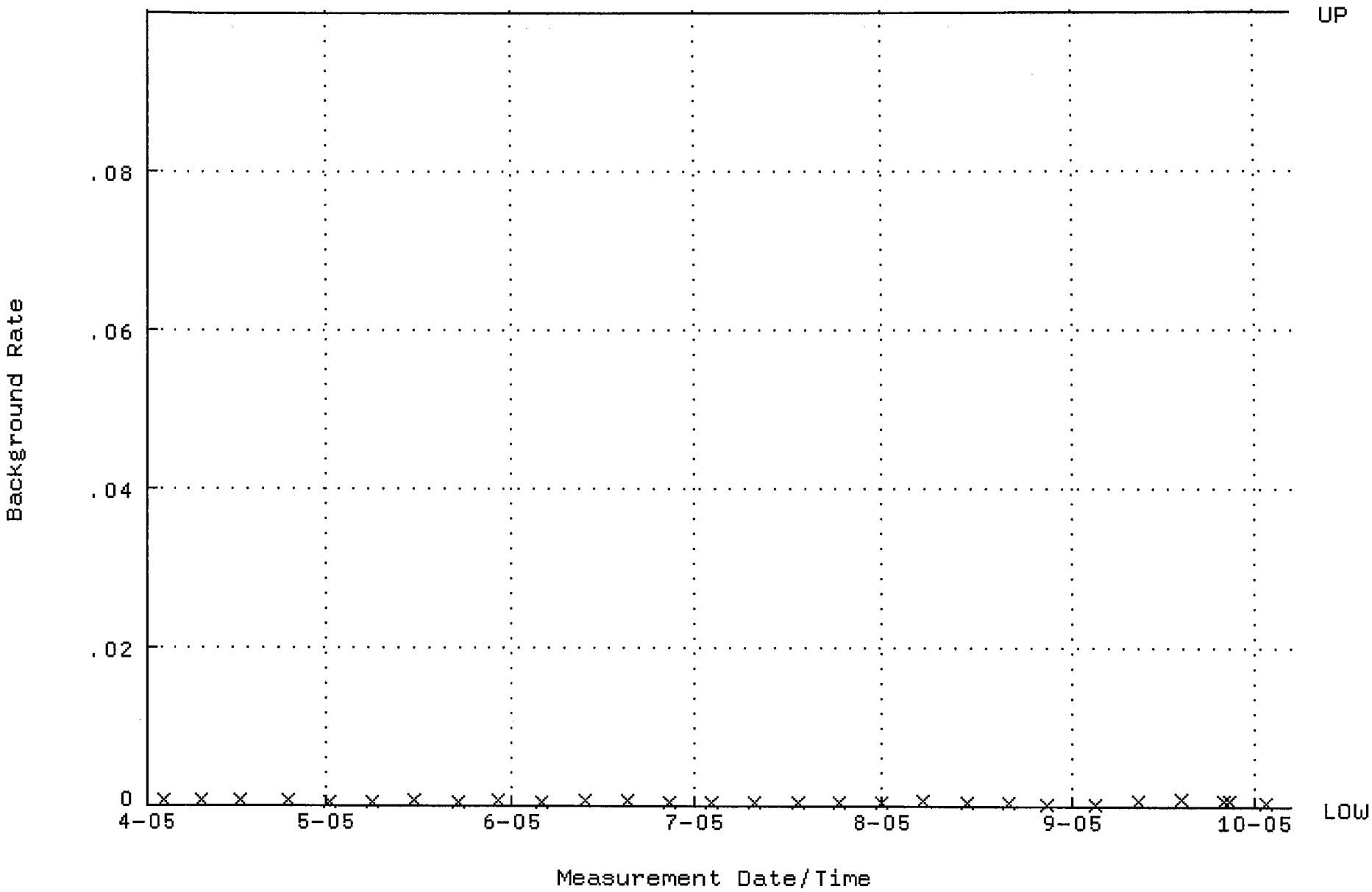
QA filename : DKA100:[ENV_ALPHA.QA.W]W095.QAF;3
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 26-SEP-2005 11:06:12 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.290000 through 0.320000



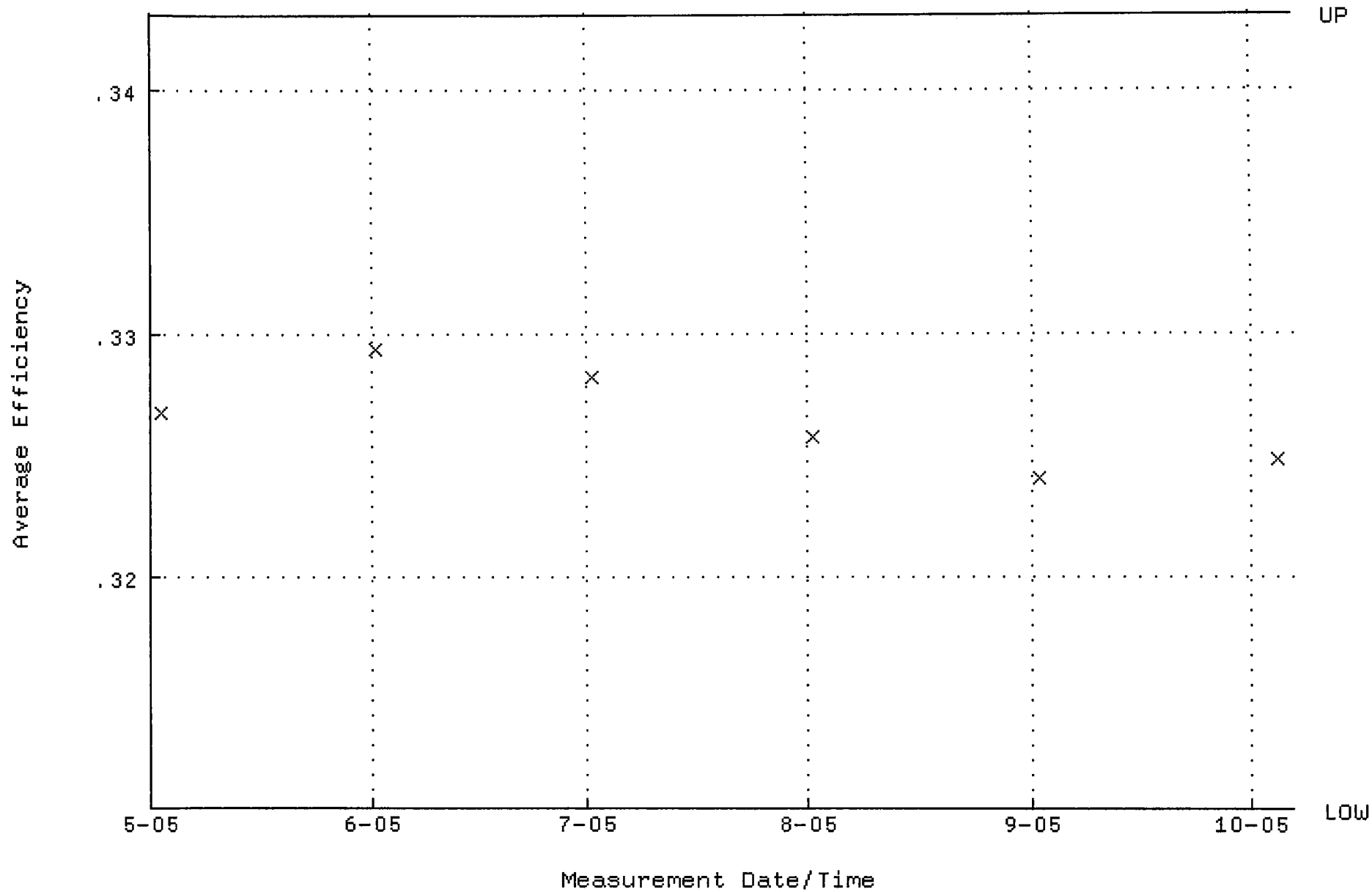
QA filename : DKA100:[ENV_ALPHA.QA.W]W095.QAF;3
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 26-SEP-2005 11:06:12 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



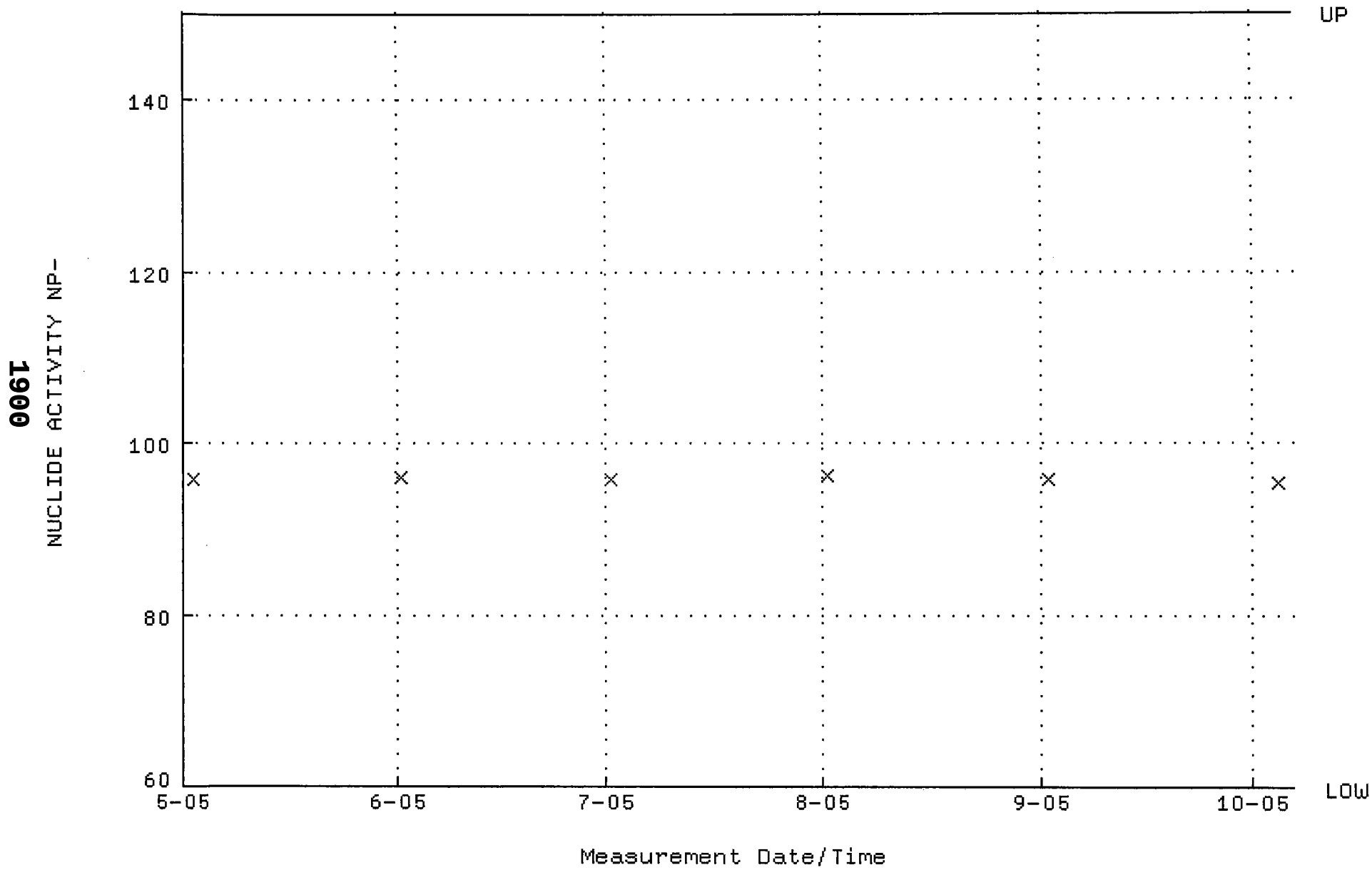
QA filename : DKA100:[ENV_ALPHA.QA.B]B095.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 19:11:04 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



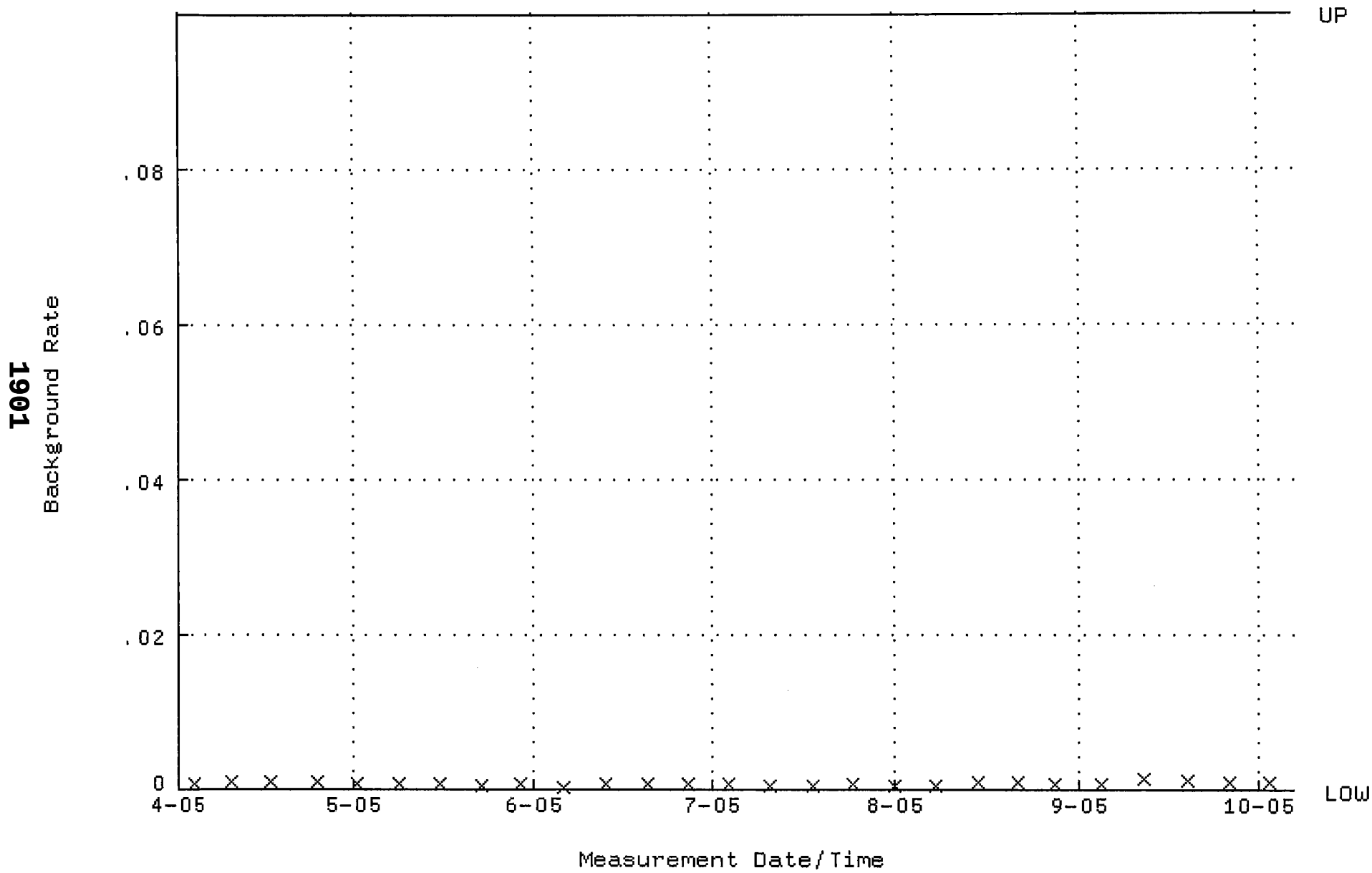
QA filename : DKA100:[ENV_ALPHA.QA.W]W096.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 2-MAY-2005 15:00:01 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.310500 through 0.343100



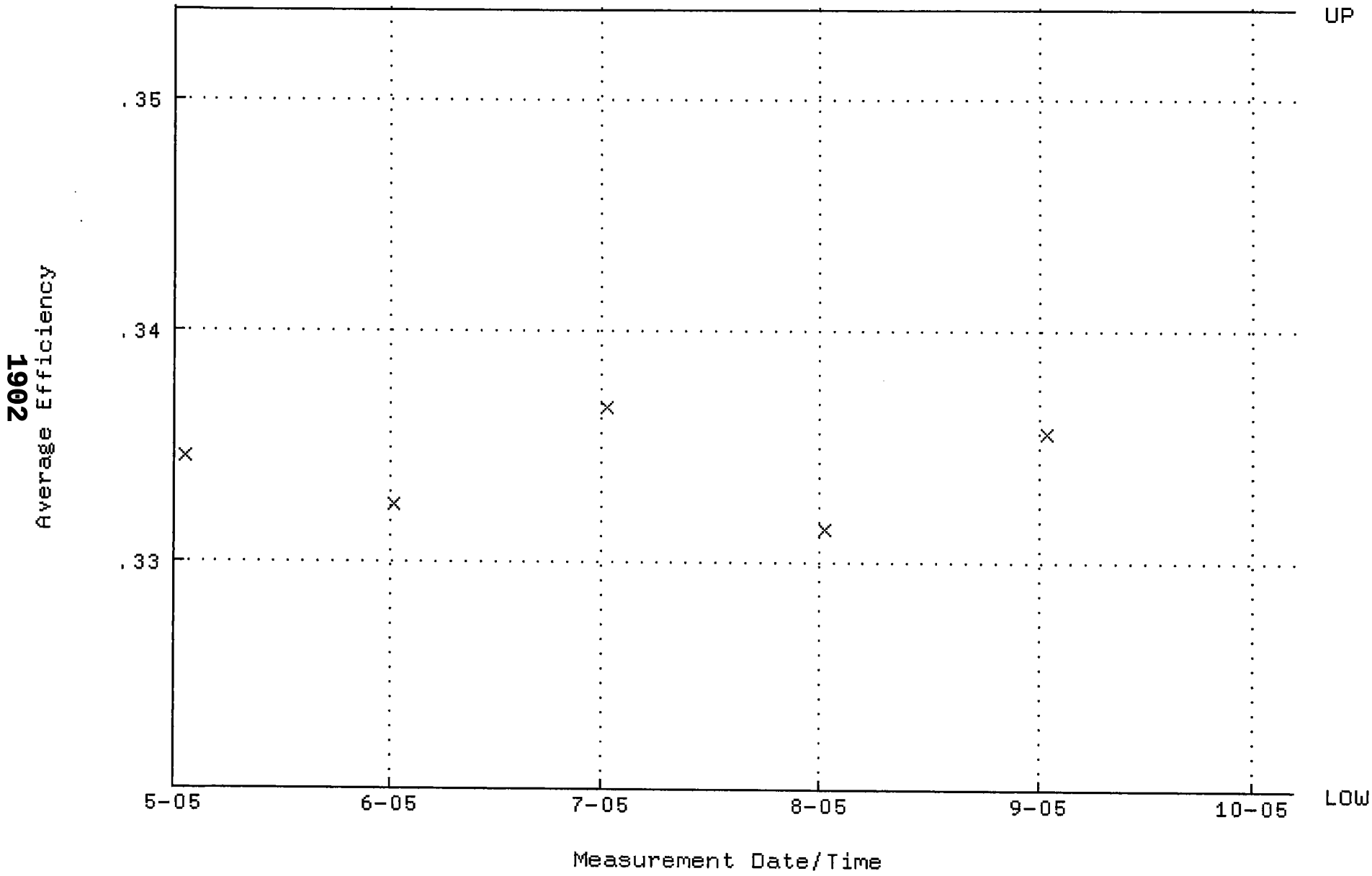
QA filename : DKA100:[ENV_ALPHA.QA.W]W096.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY NP-237)
Start/End Dates : 2-MAY-2005 15:00:01 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



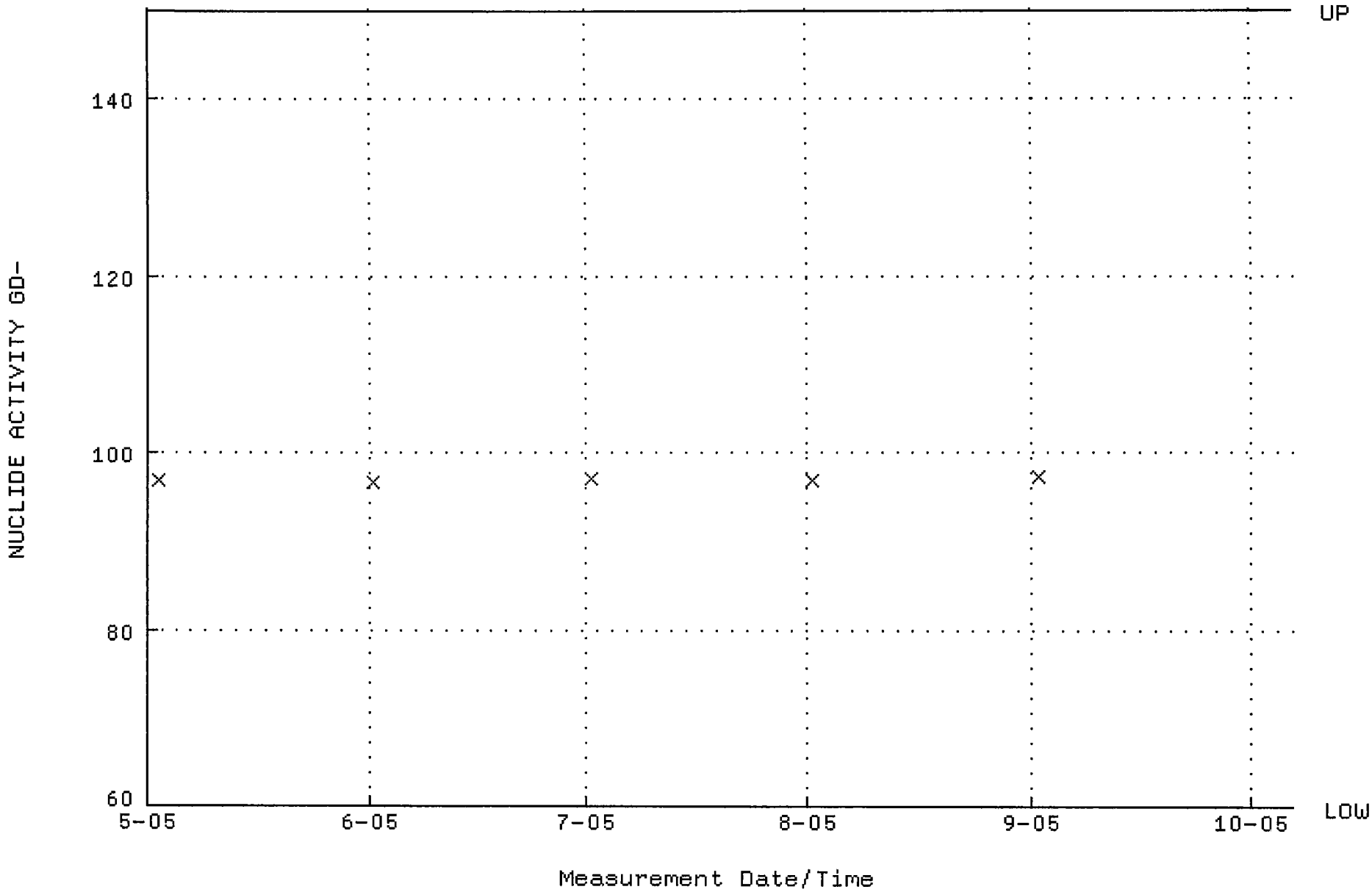
QA filename : DKA100:[ENV_ALPHA.QA.B]B096.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 19:11:04 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



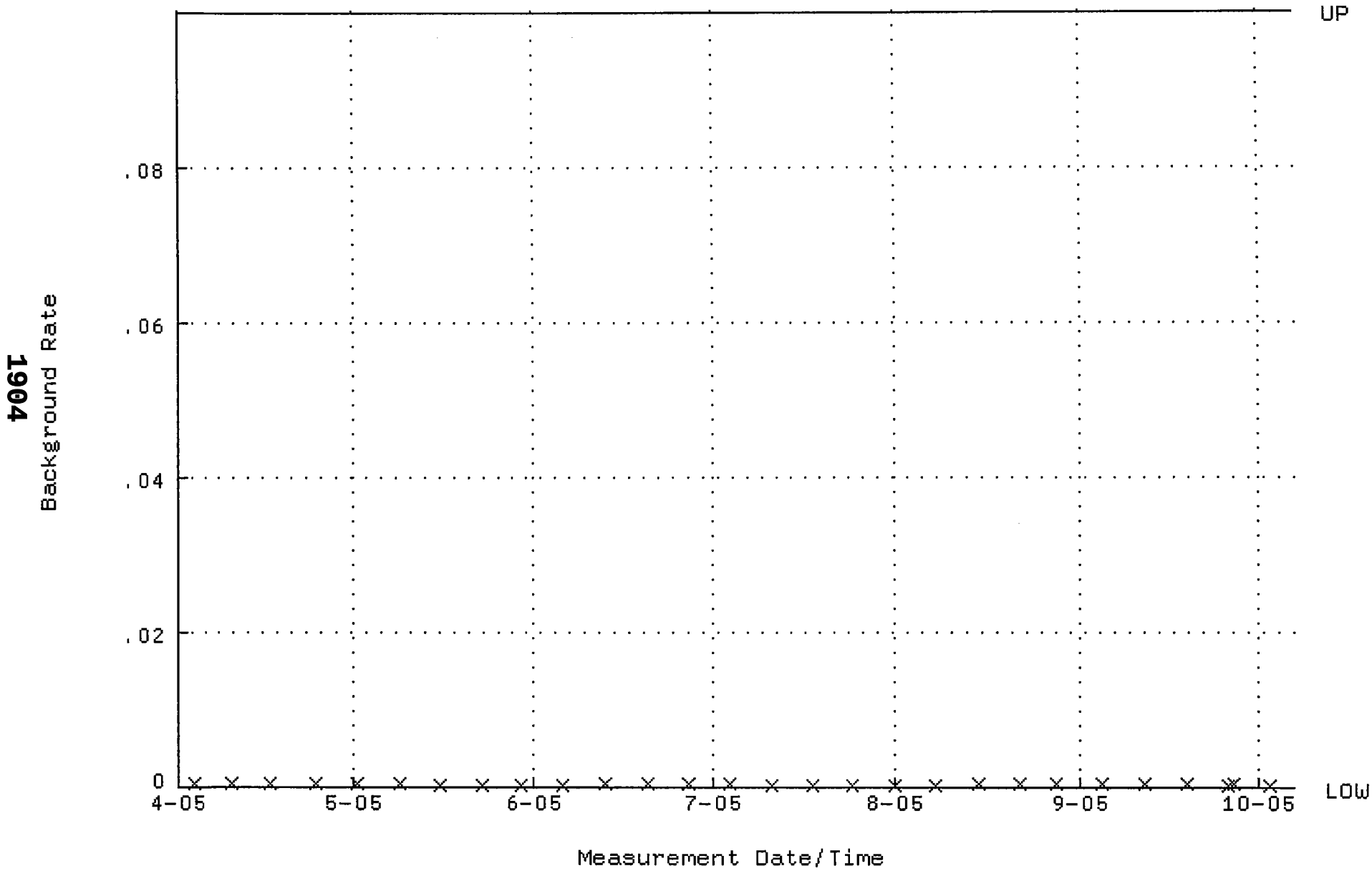
QA filename : DKA100:[ENV_ALPHA.QA.W]W104.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 2-MAY-2005 15:00:02 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.320200 through 0.353900



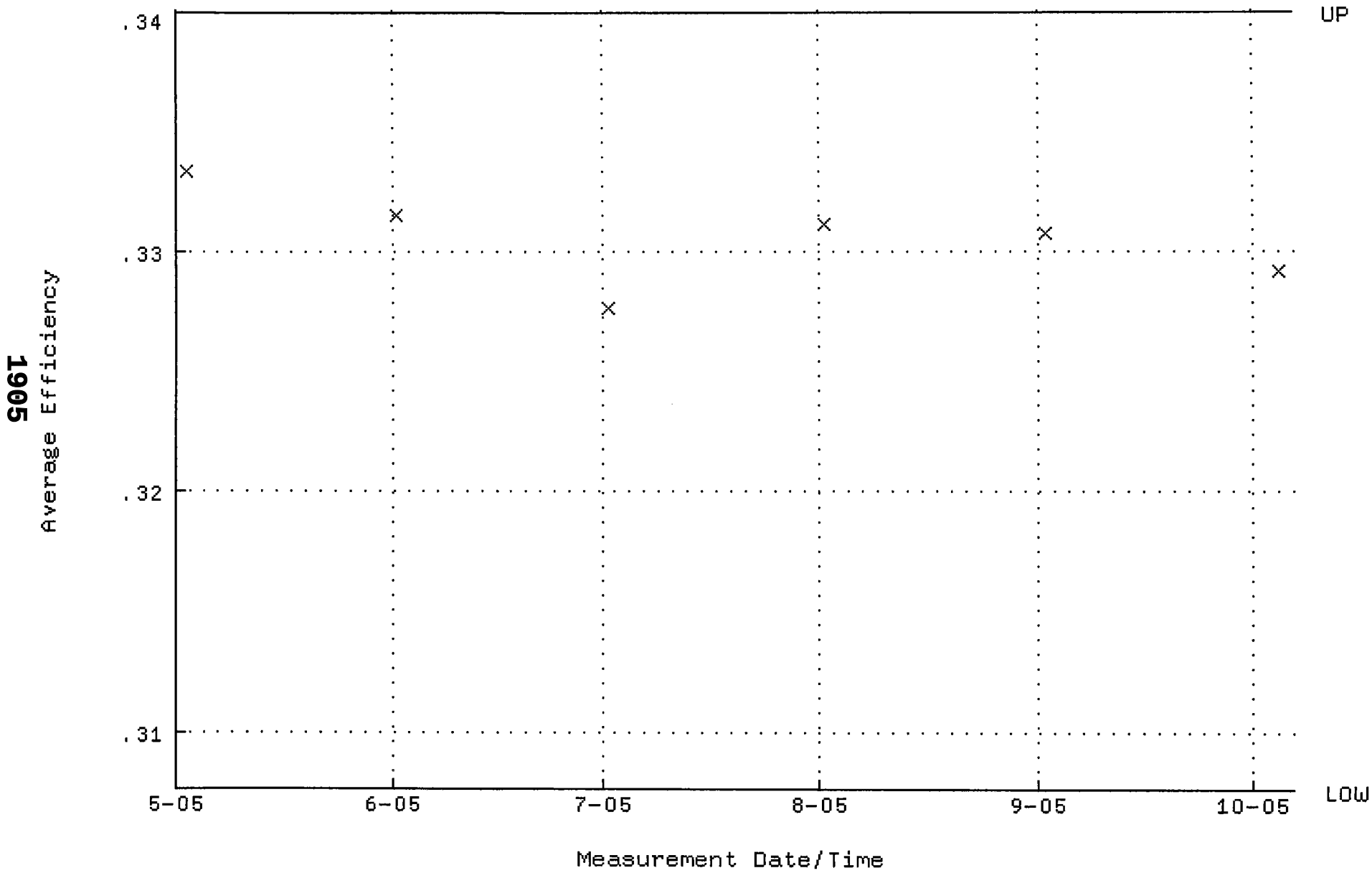
QA filename : DKA100:[ENV_ALPHA.QA.W]W104.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 2-MAY-2005 15:00:02 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



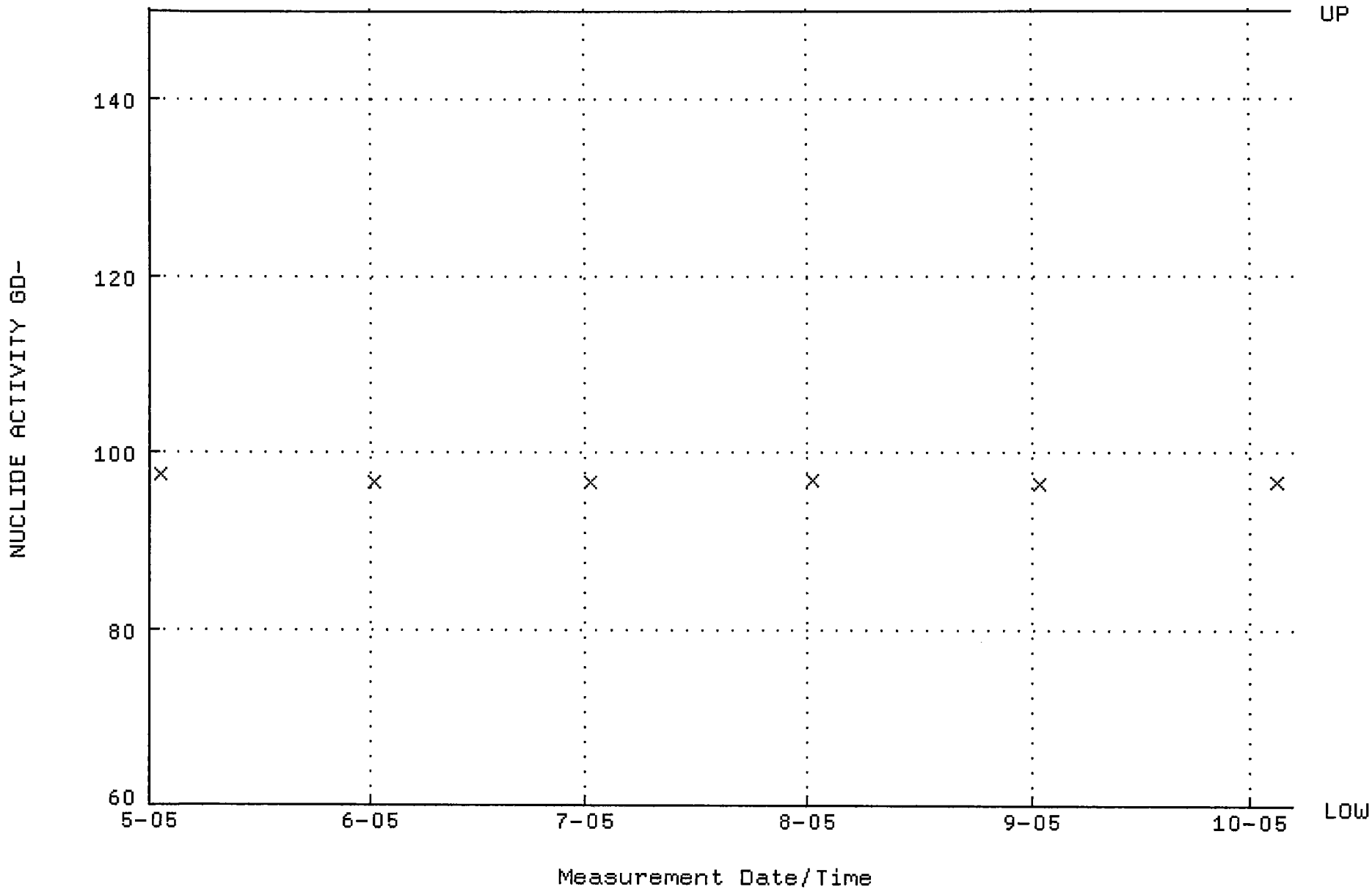
QA filename : DKA100:[ENV_ALPHA.QA.B]B104.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 19:11:05 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



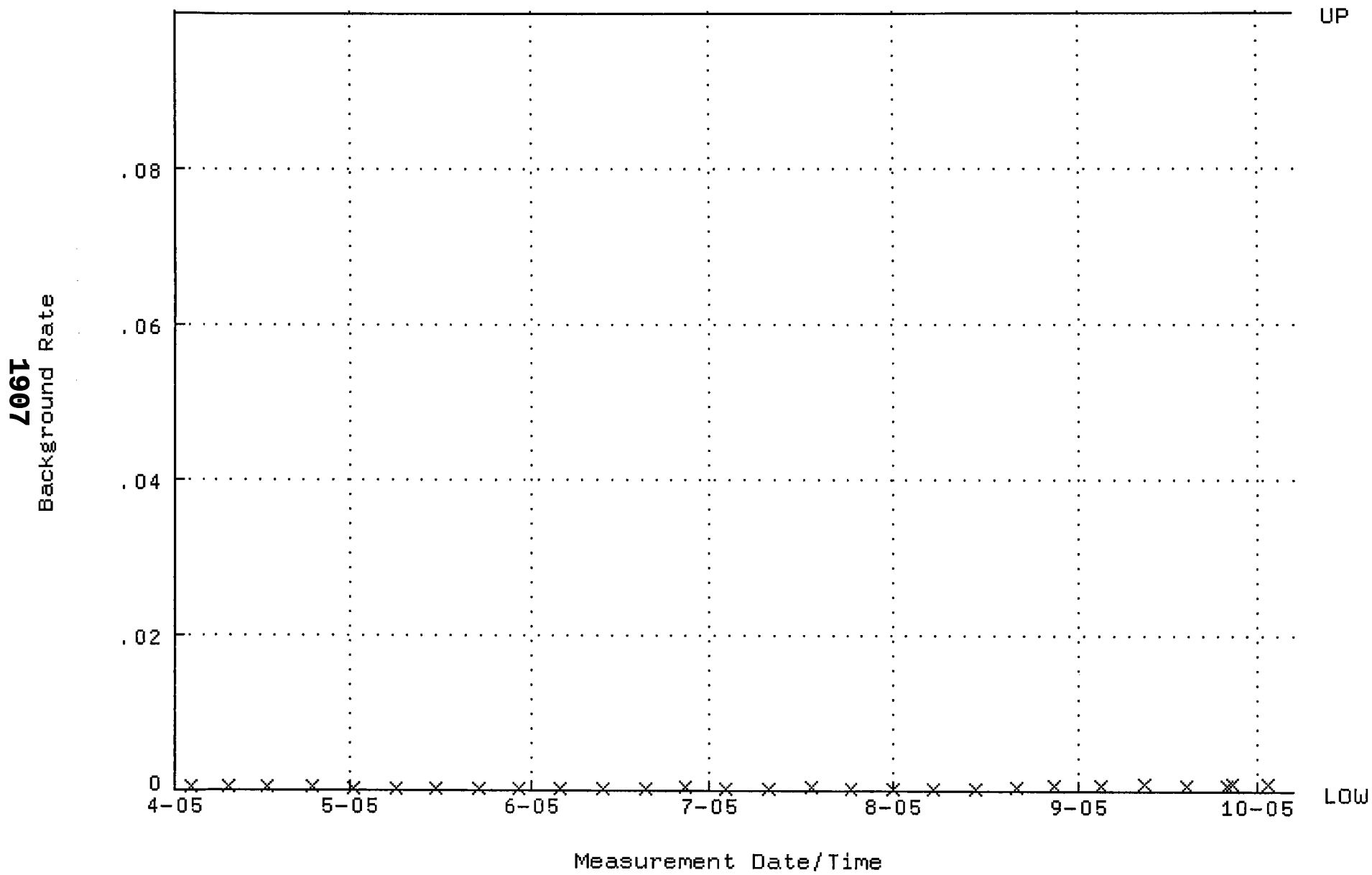
QA filename : DKA100:[ENV_ALPHA.QA.W]W105.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 2-MAY-2005 15:00:02 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.307600 through 0.340000



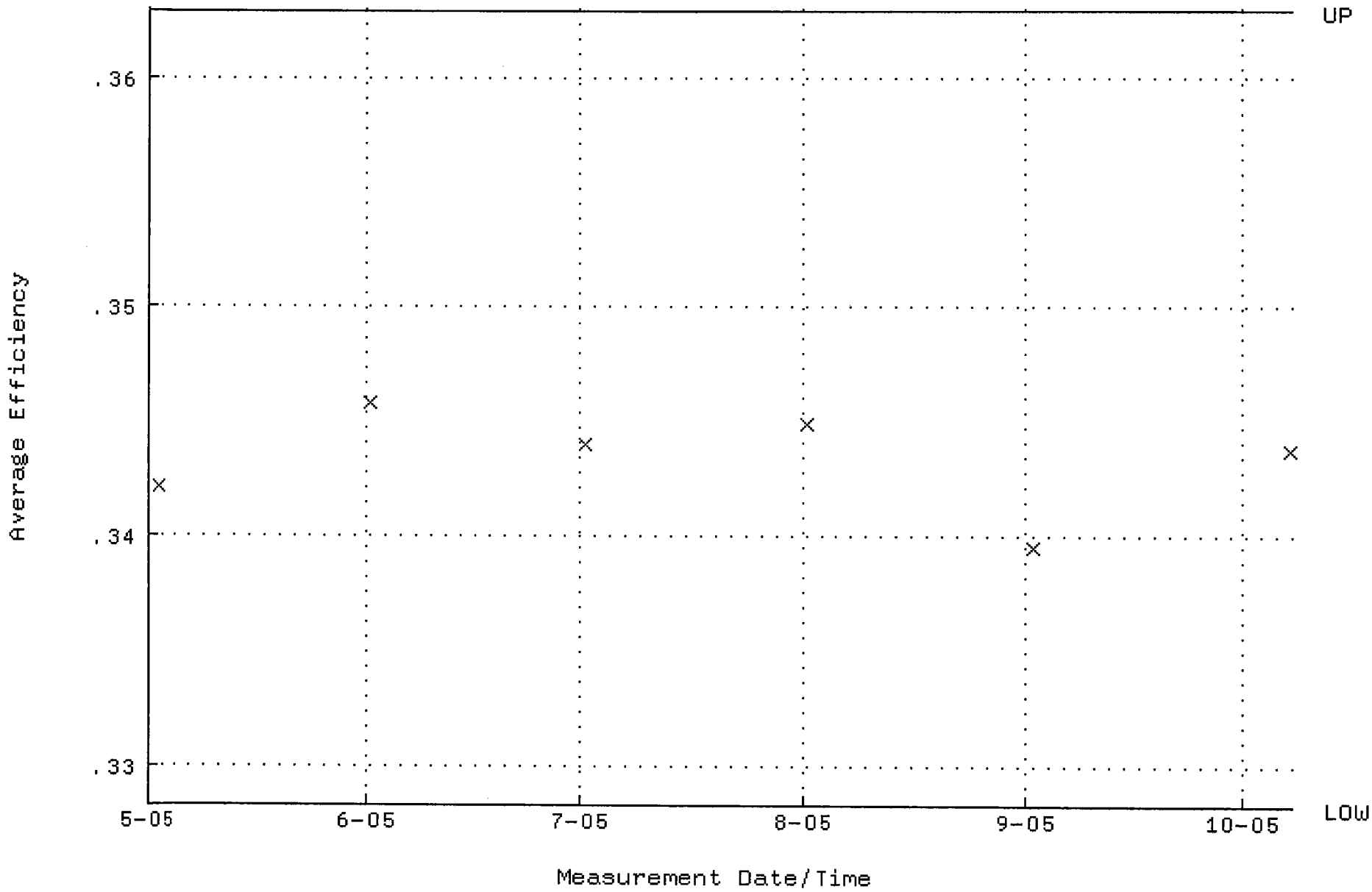
QA filename : DKA100:[ENV_ALPHA.QA.W]W105.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 2-MAY-2005 15:00:02 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



QA filename : DKA100:[ENV_ALPHA.QA.B]B105.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 19:11:05 through 6-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000

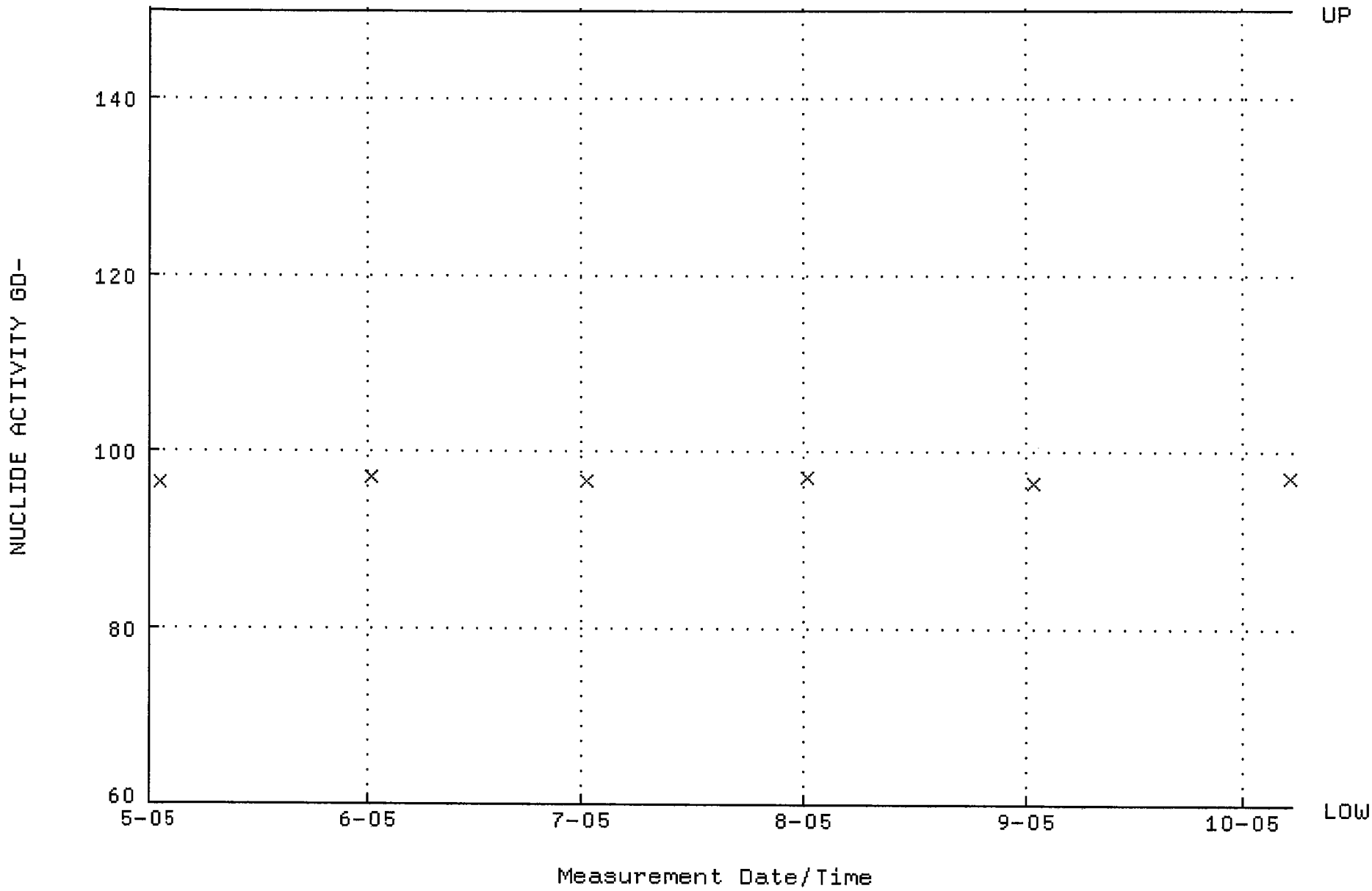


QA filename : DKA100:[ENV_ALPHA.QA.W]W106.QAF;2
Parameter Name : AVRGEFF (Average Efficiency)
Start/End Dates : 2-MAY-2005 15:00:02 through 7-OCT-2005 12:00:00
Lower/Upper Lmts: 0.328300 through 0.362900

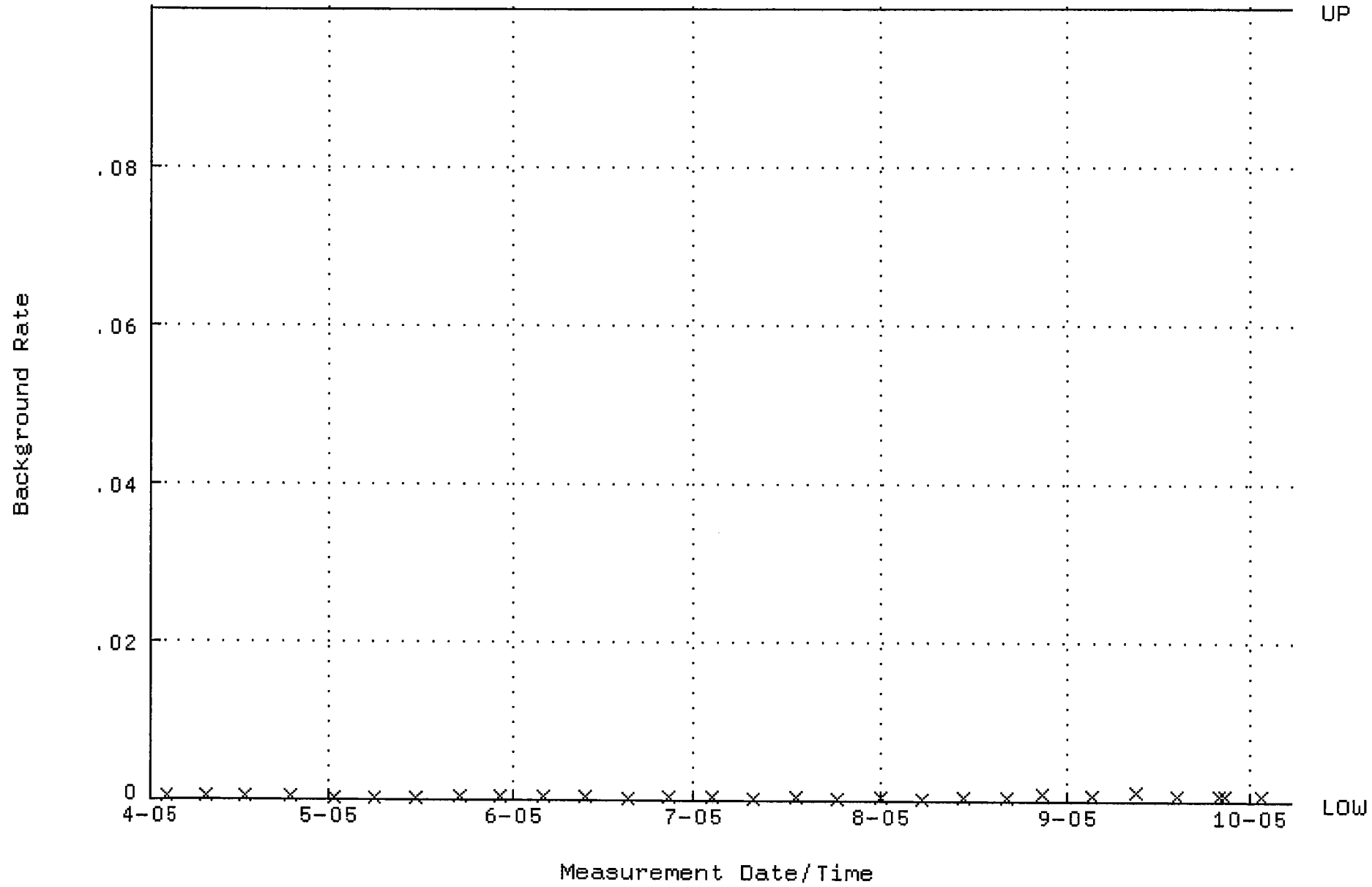


1908

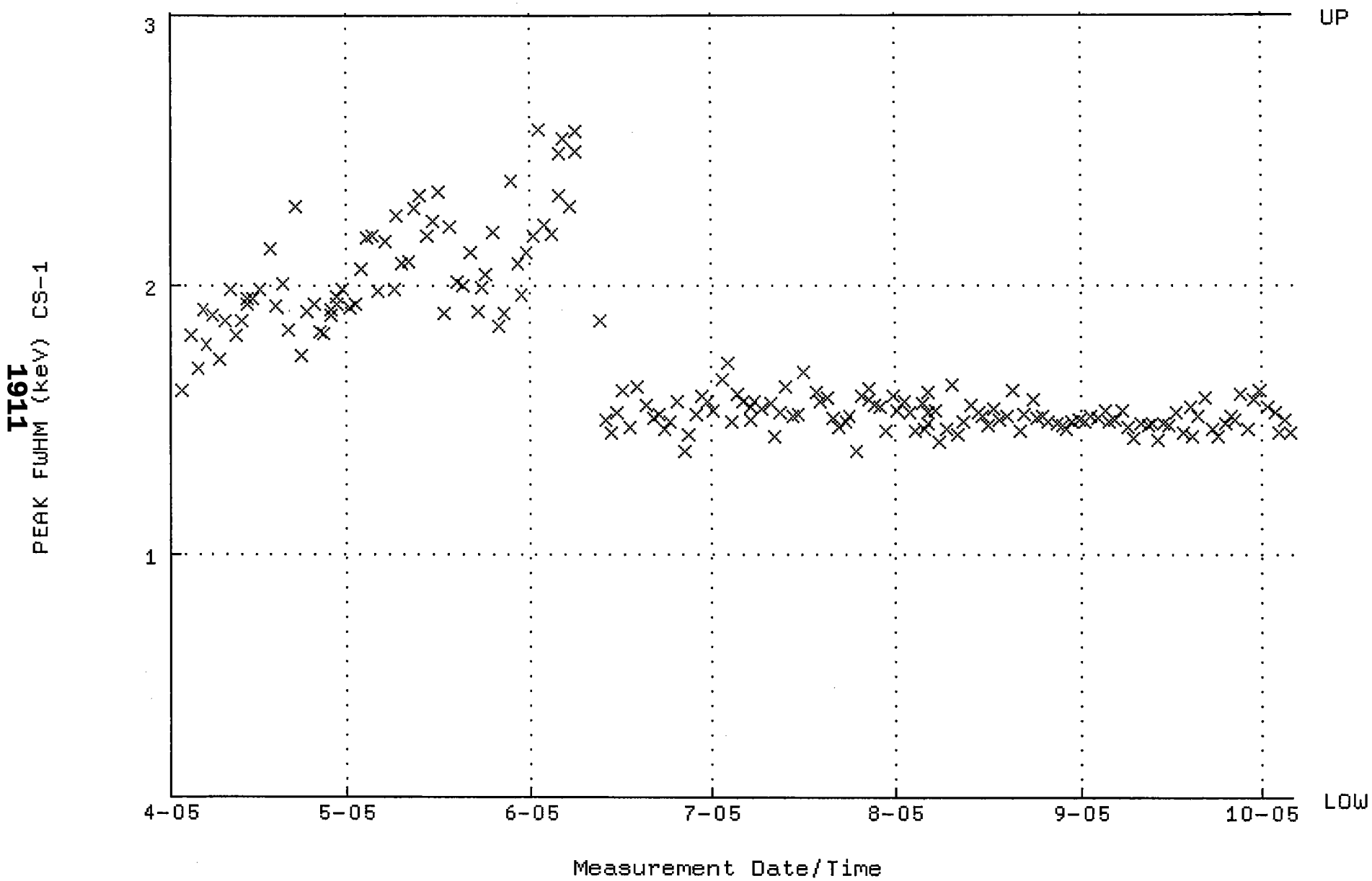
QA filename : DKA100:[ENV_ALPHA.QA.W]W106.QAF;2
Parameter Name : NLACTVTY-GD148 (NUCLIDE ACTIVITY GD-148)
Start/End Dates : 2-MAY-2005 15:00:02 through 7-OCT-2005 12:00:00
Lower/Upper Lmts: 60.0000 through 150.000



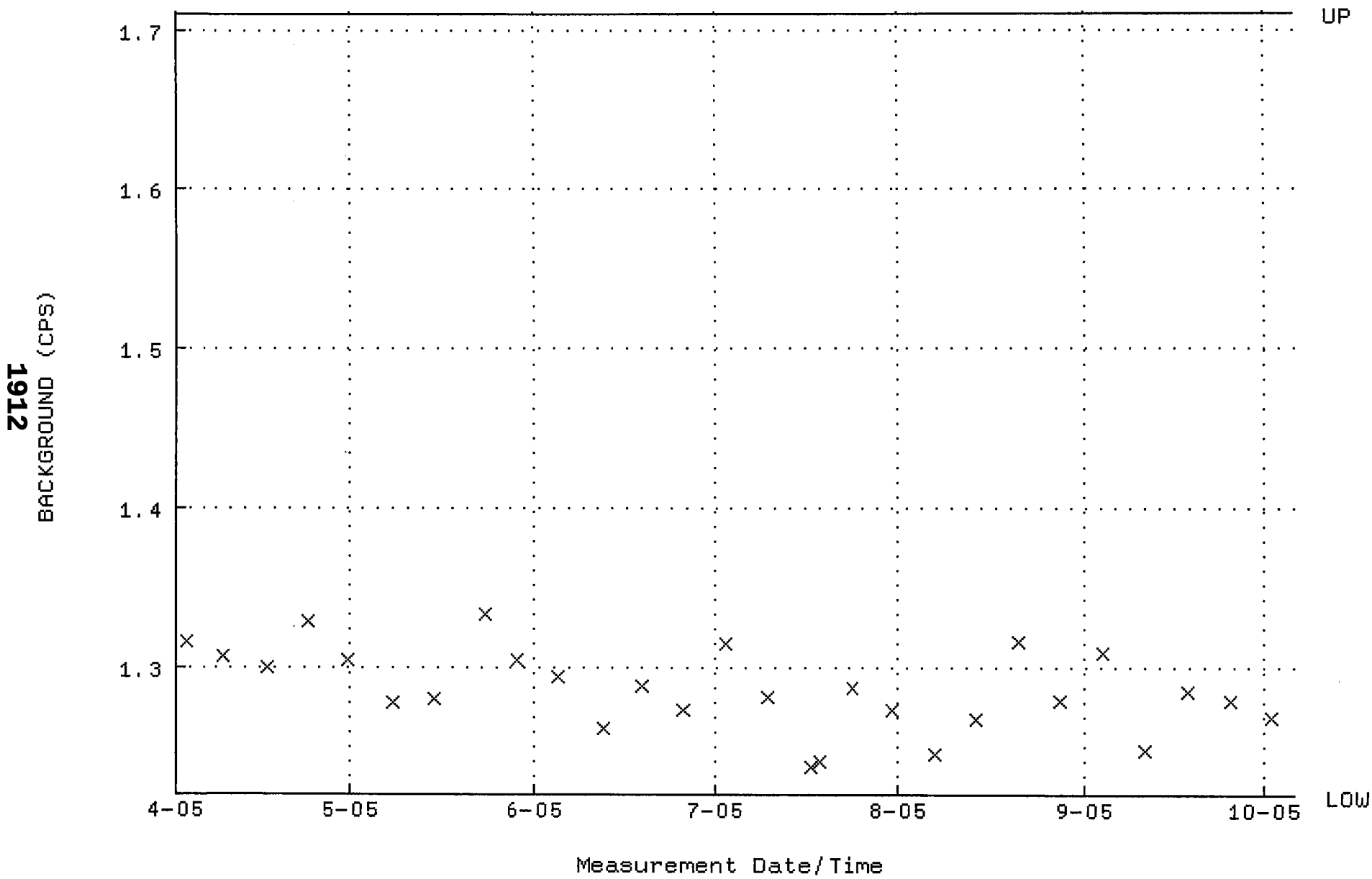
QA filename : DKA100:[ENV_ALPHA.QA.B]B106.QAF;2
Parameter Name : BACKRATE (Background Rate)
Start/End Dates : 3-APR-2005 19:11:05 through 7-OCT-2005 12:00:00
Lower/Upper Lmts: 0.000000E+00 through 0.100000



QA filename : DKA100:[ENV_ALPHA]QC_GAMMA1.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 20:43:41 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000

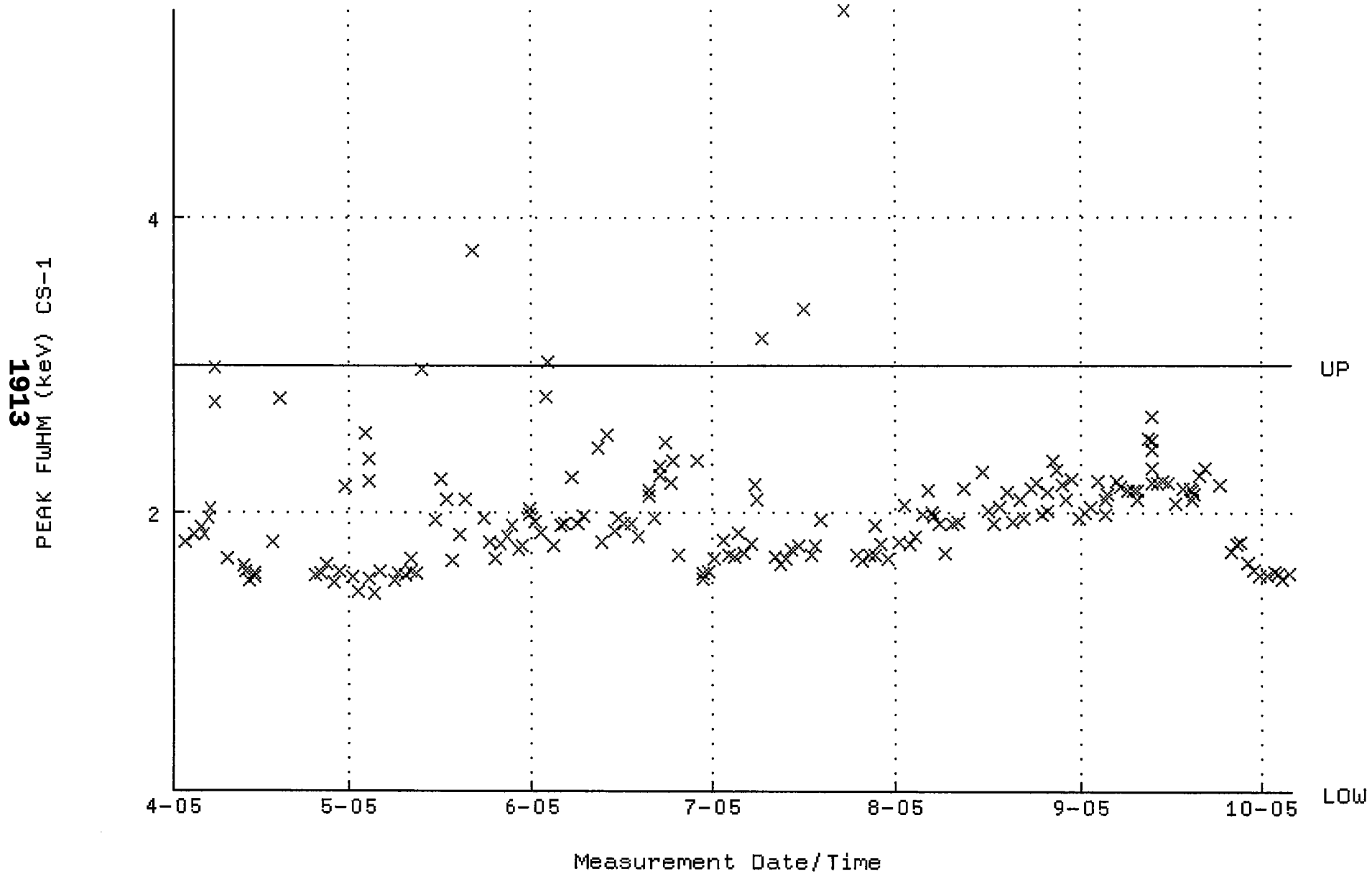


QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA1.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:52:54 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.22000 through 1.71000

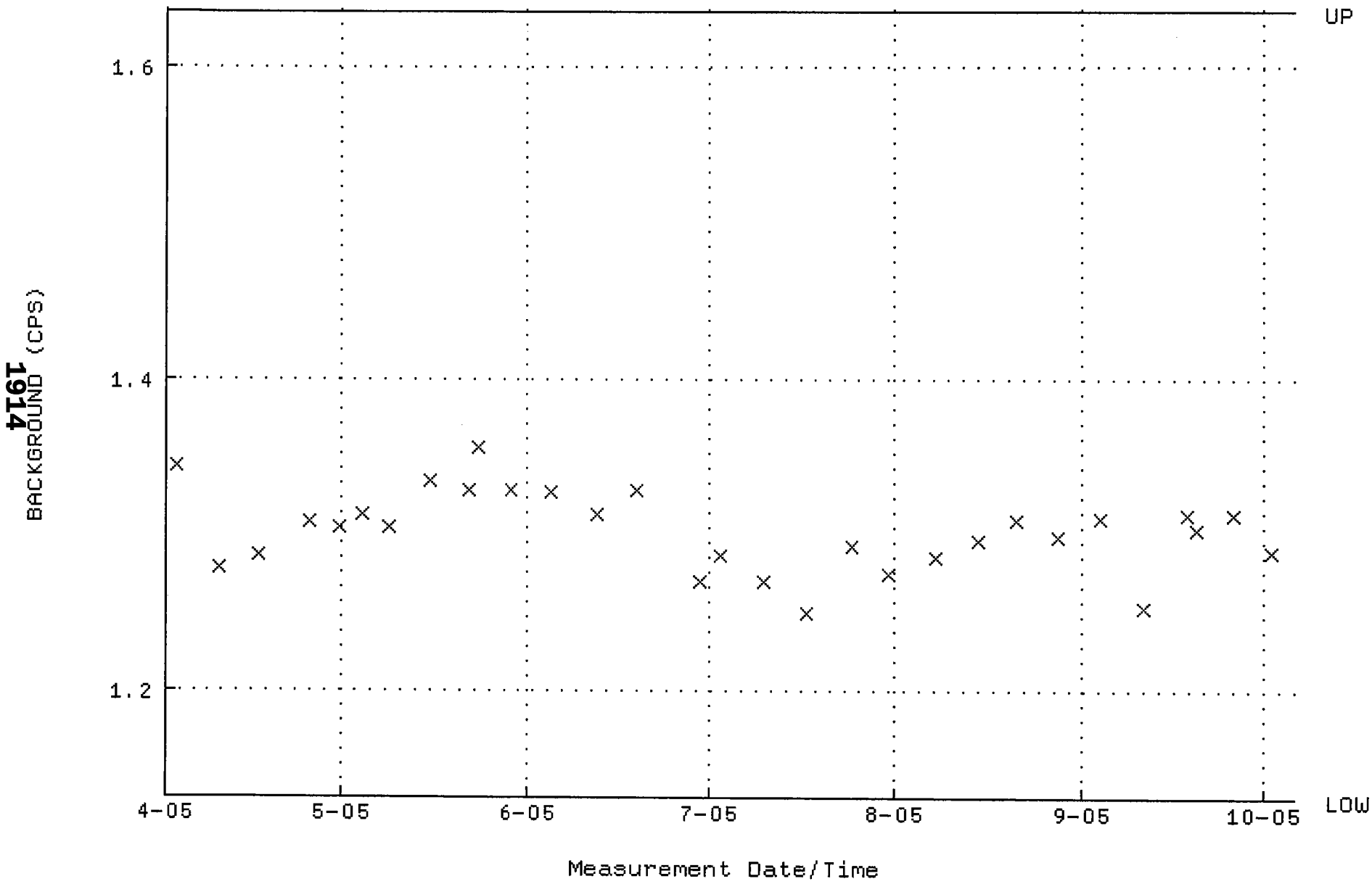


1912

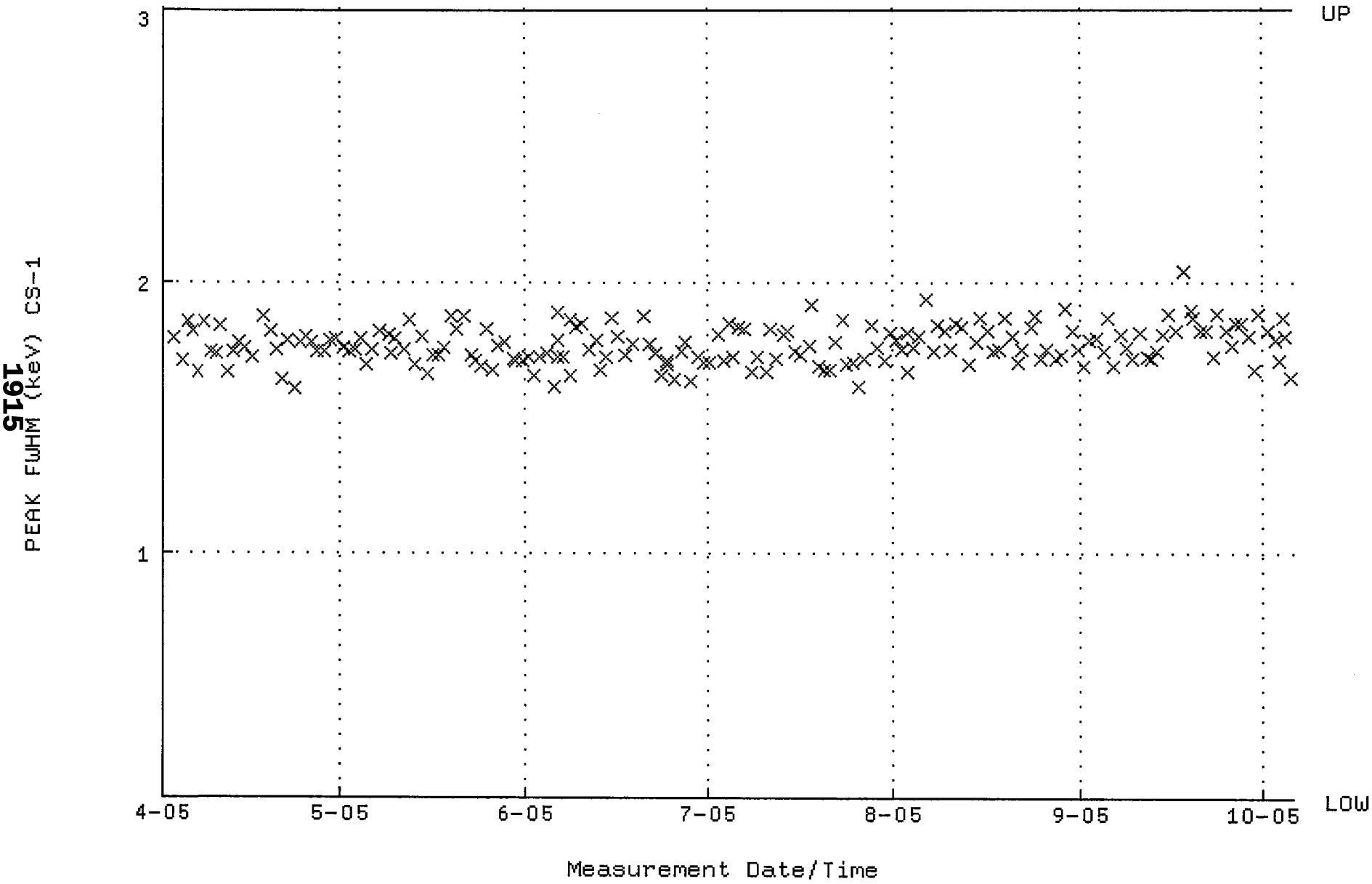
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA2.QAF;4
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 20:55:06 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



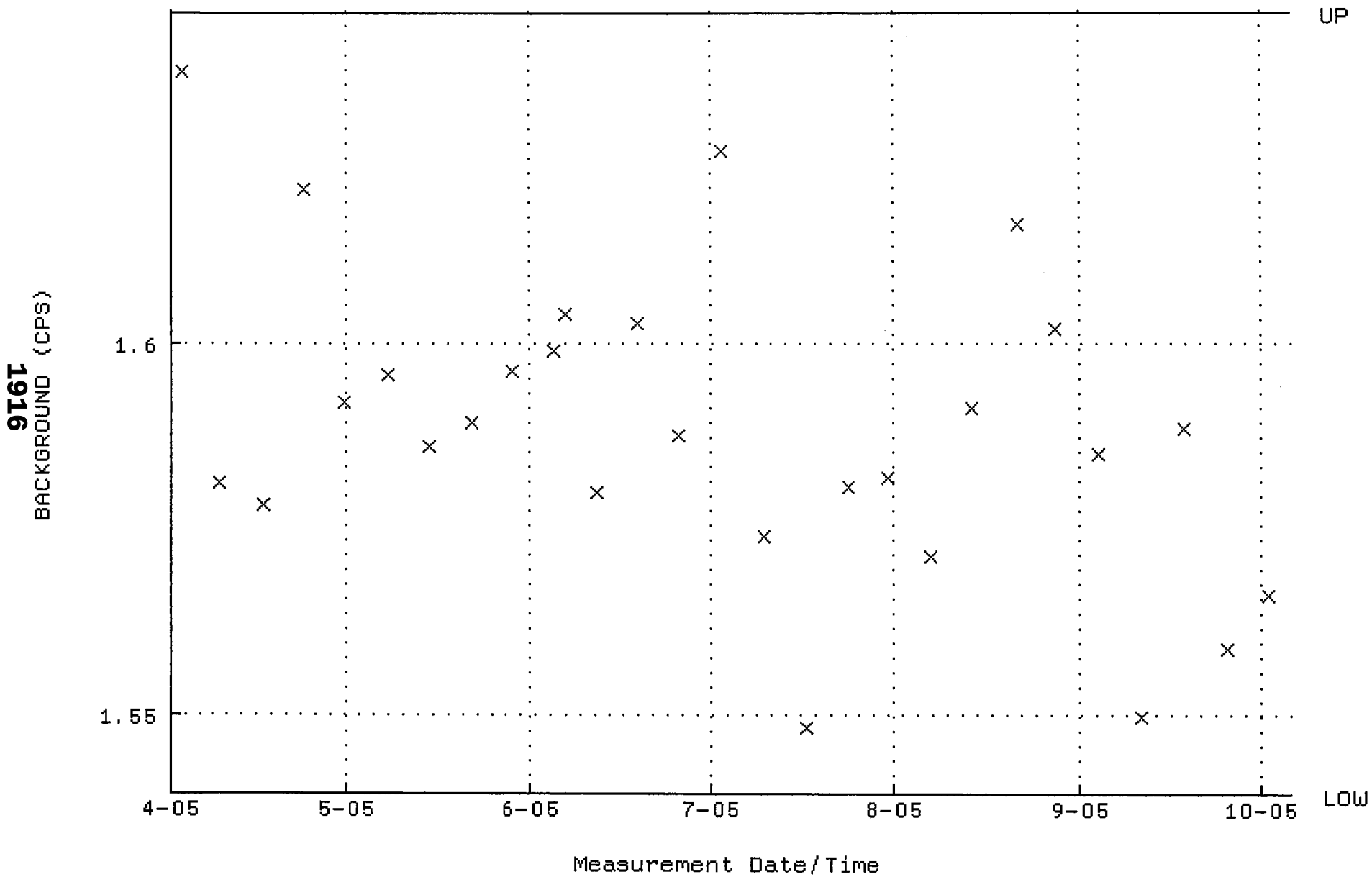
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA2.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:53:01 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.13100 through 1.63600



QA filename : DKA100:[ENV_ALPHA]QC_GAMMA3.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 21:12:31 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000

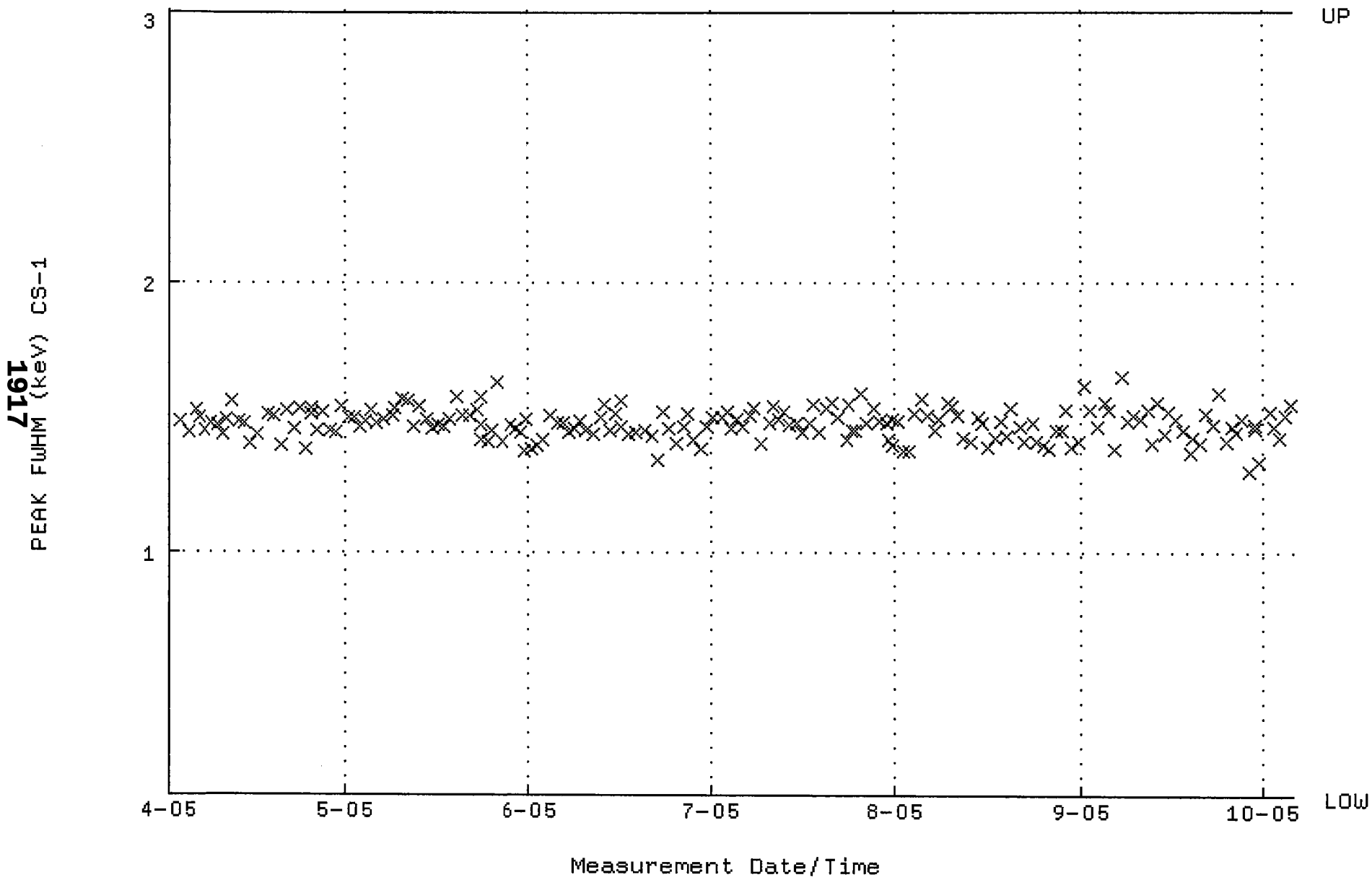


QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA3.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:53:08 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.53950 through 1.64450

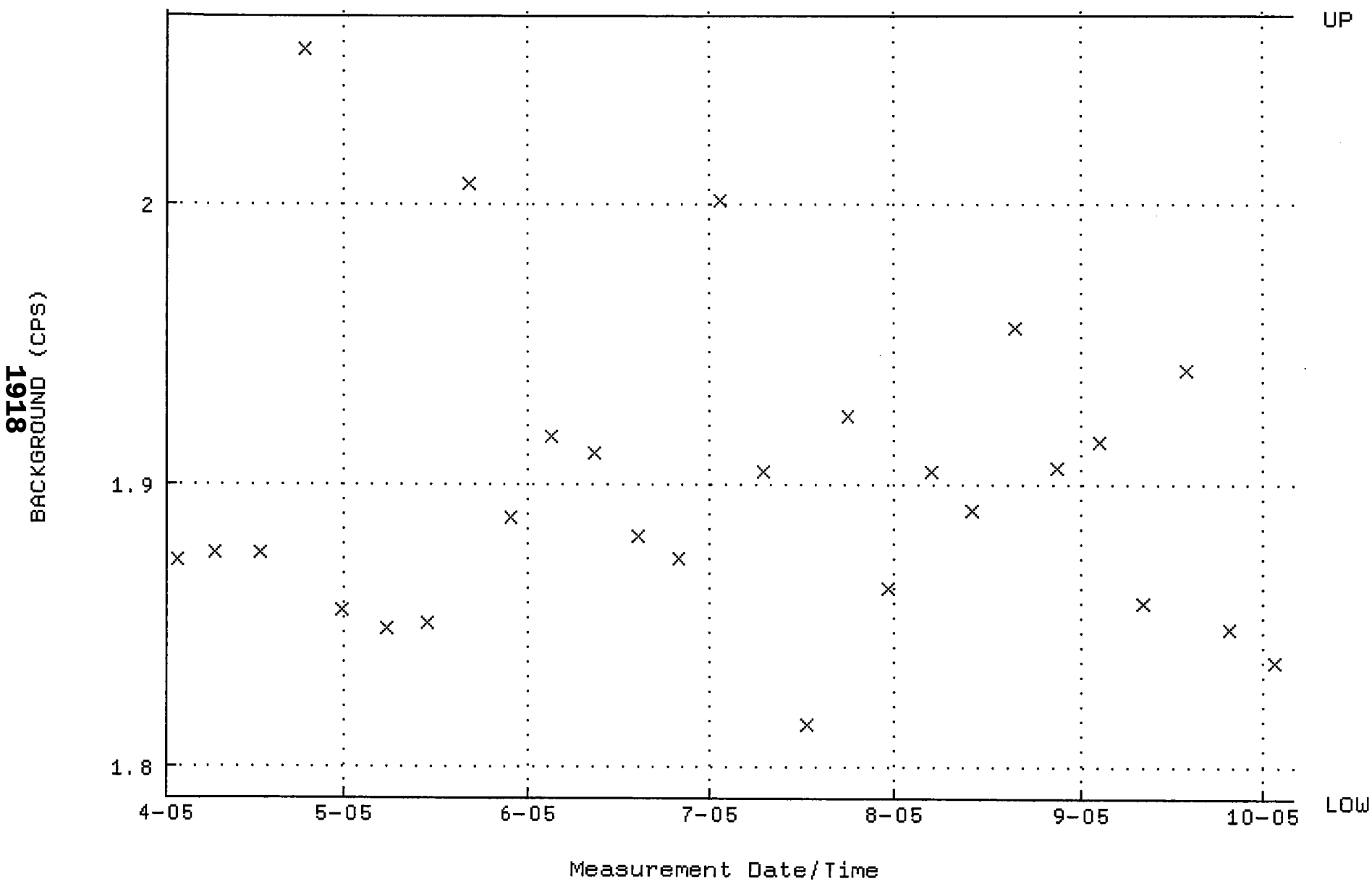


1916

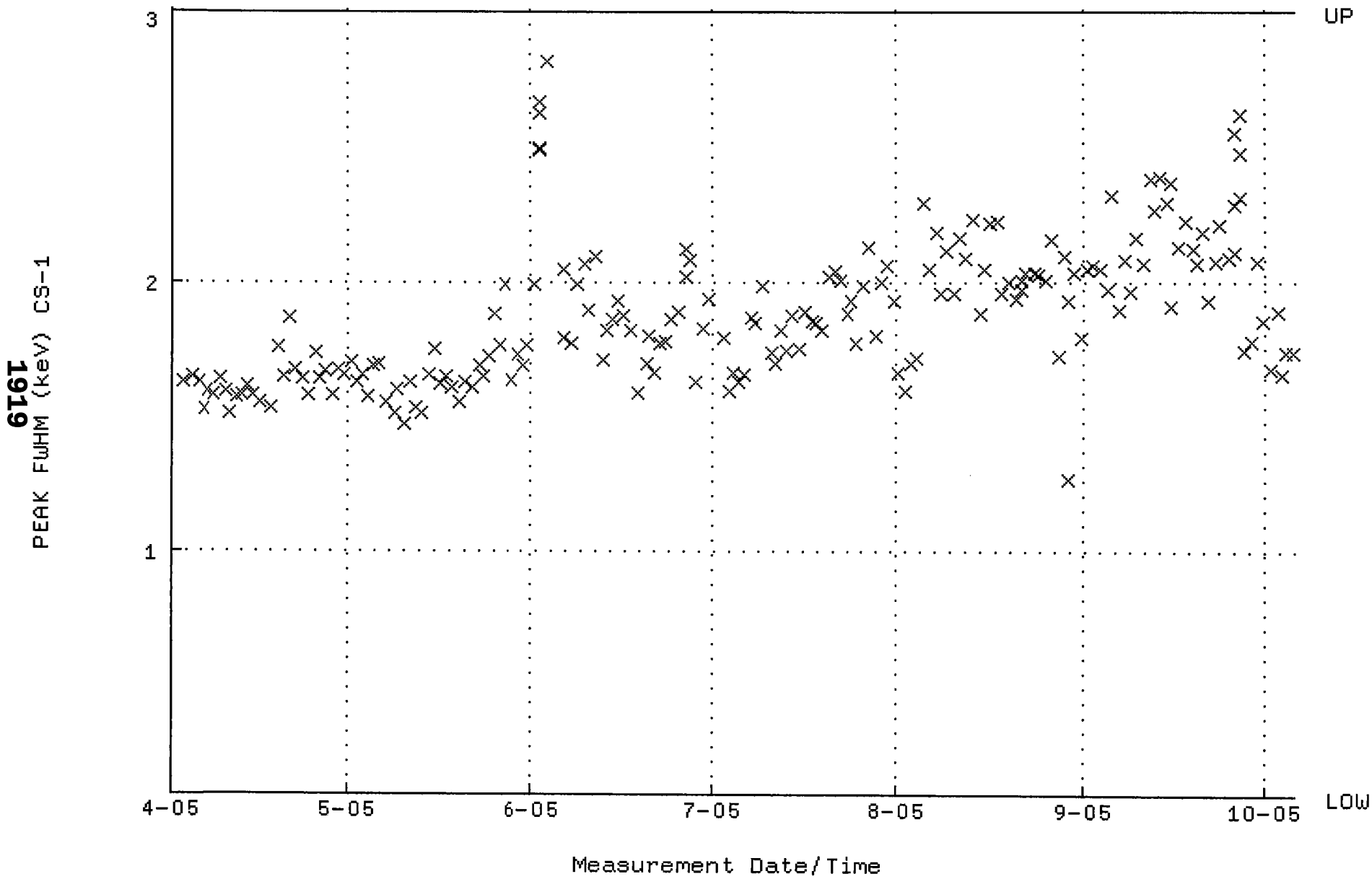
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA6.QAF;5
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 20:43:48 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



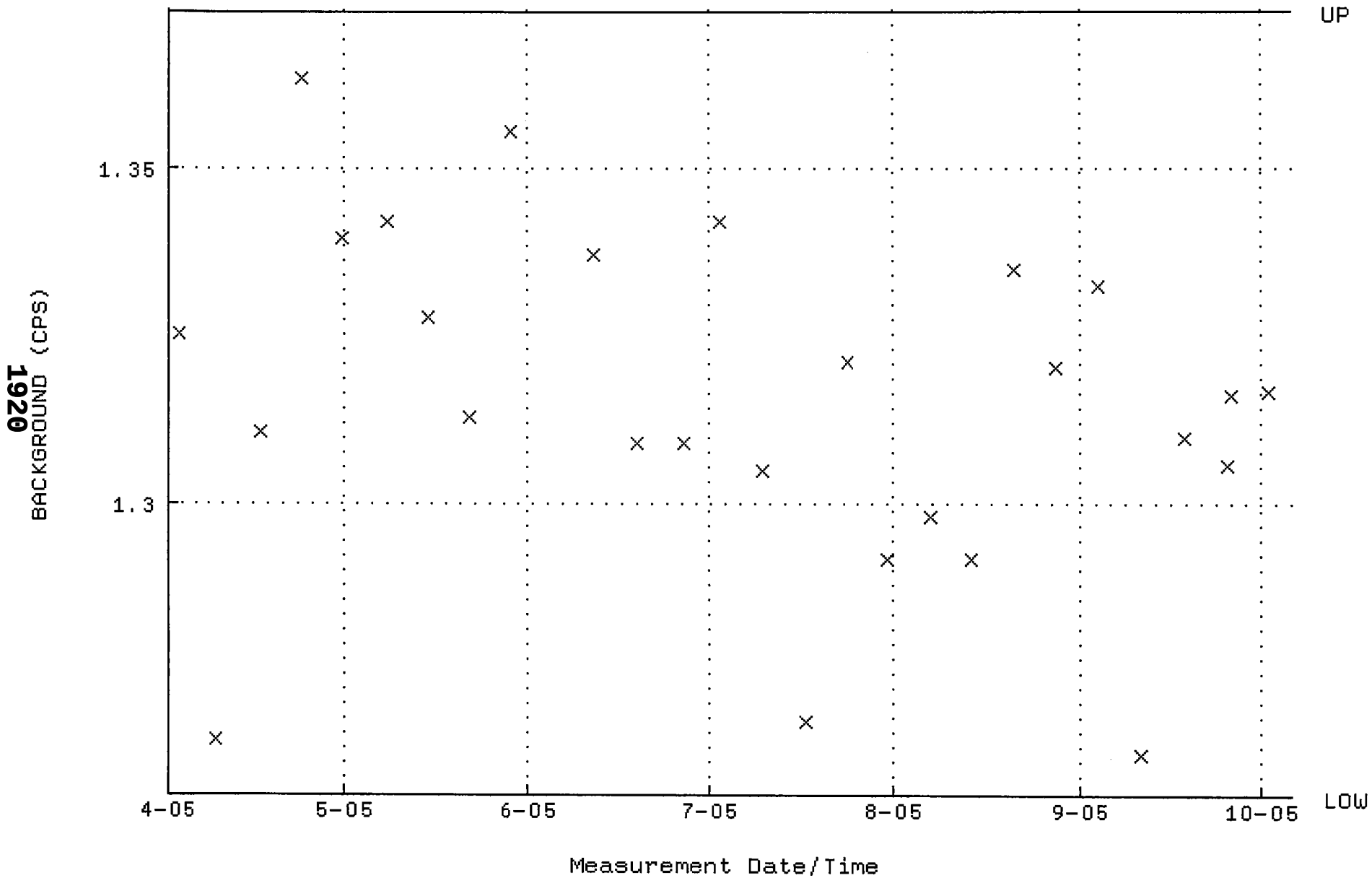
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA6.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:53:28 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.78850 through 2.06800



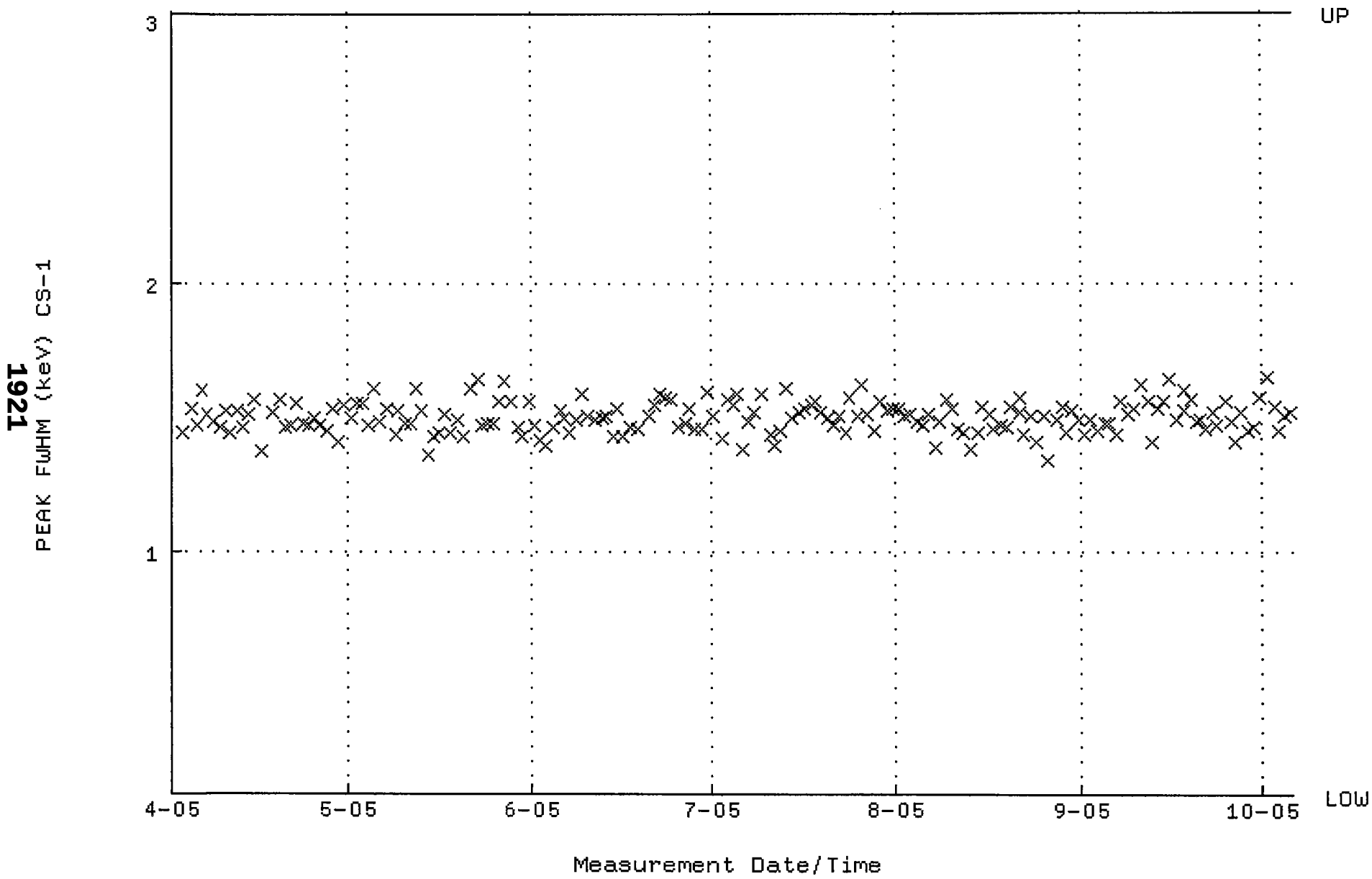
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA7.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 20:43:57 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



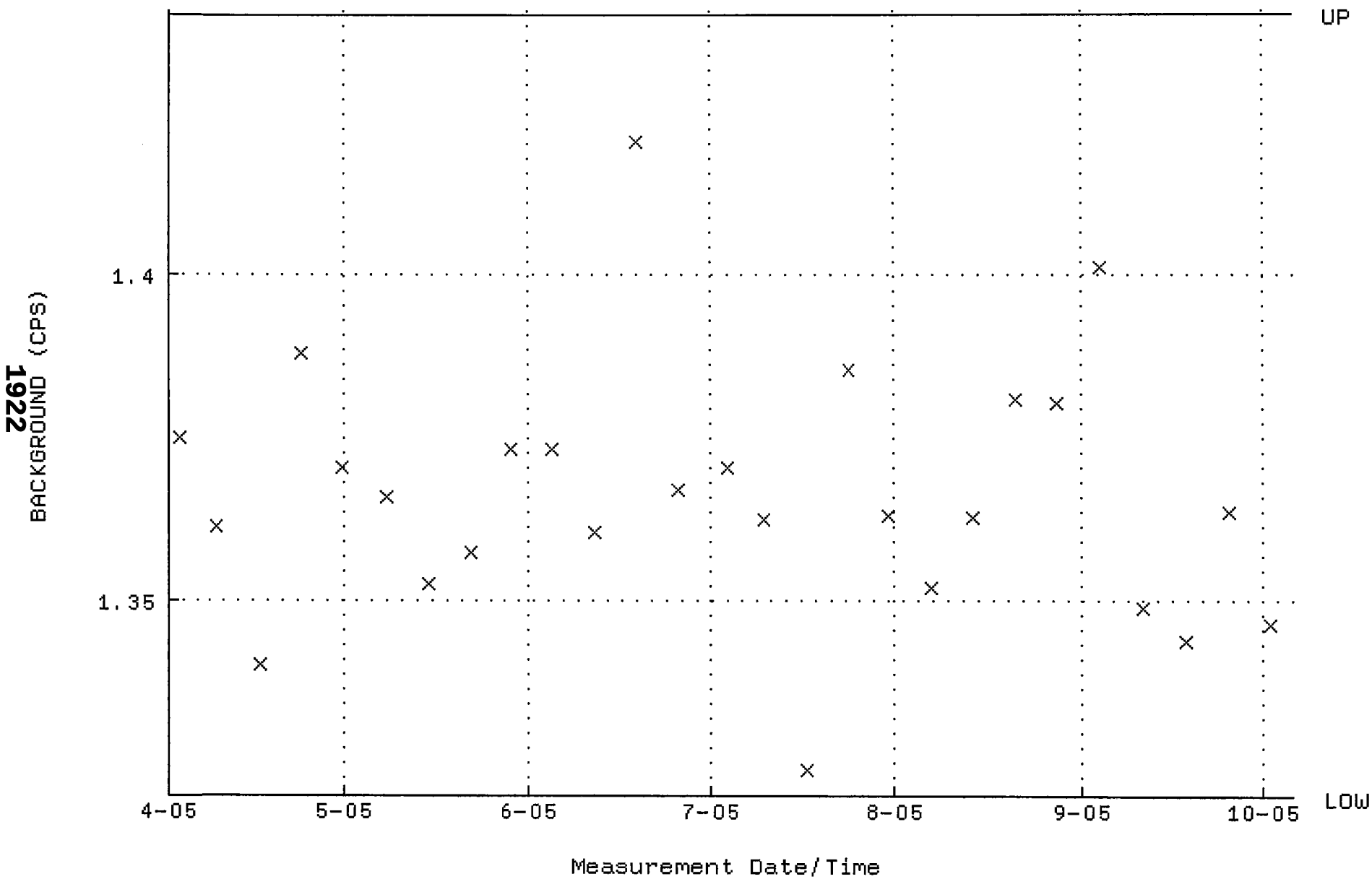
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA7.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:53:34 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.25677 through 1.37323



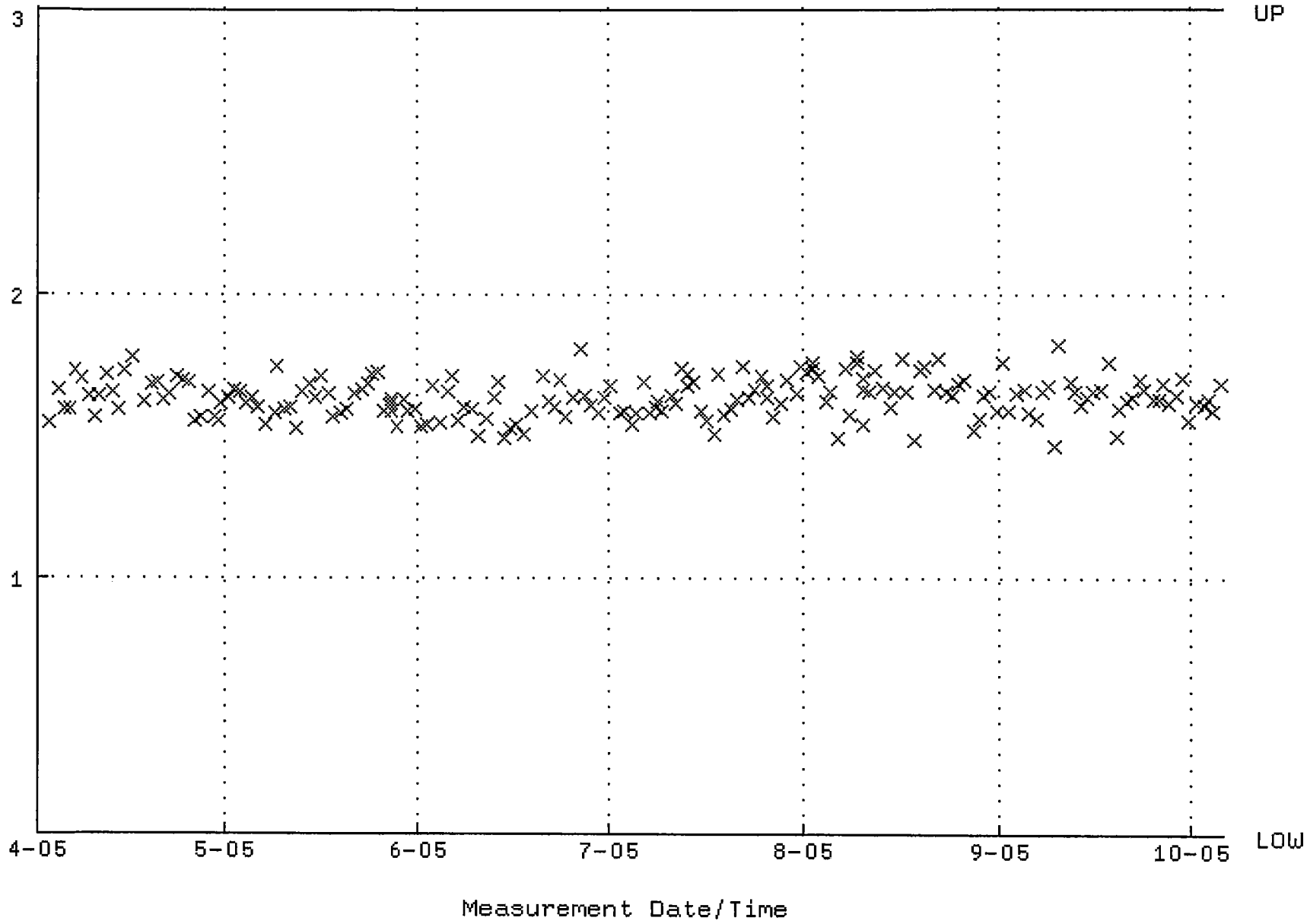
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA8.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 20:56:19 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



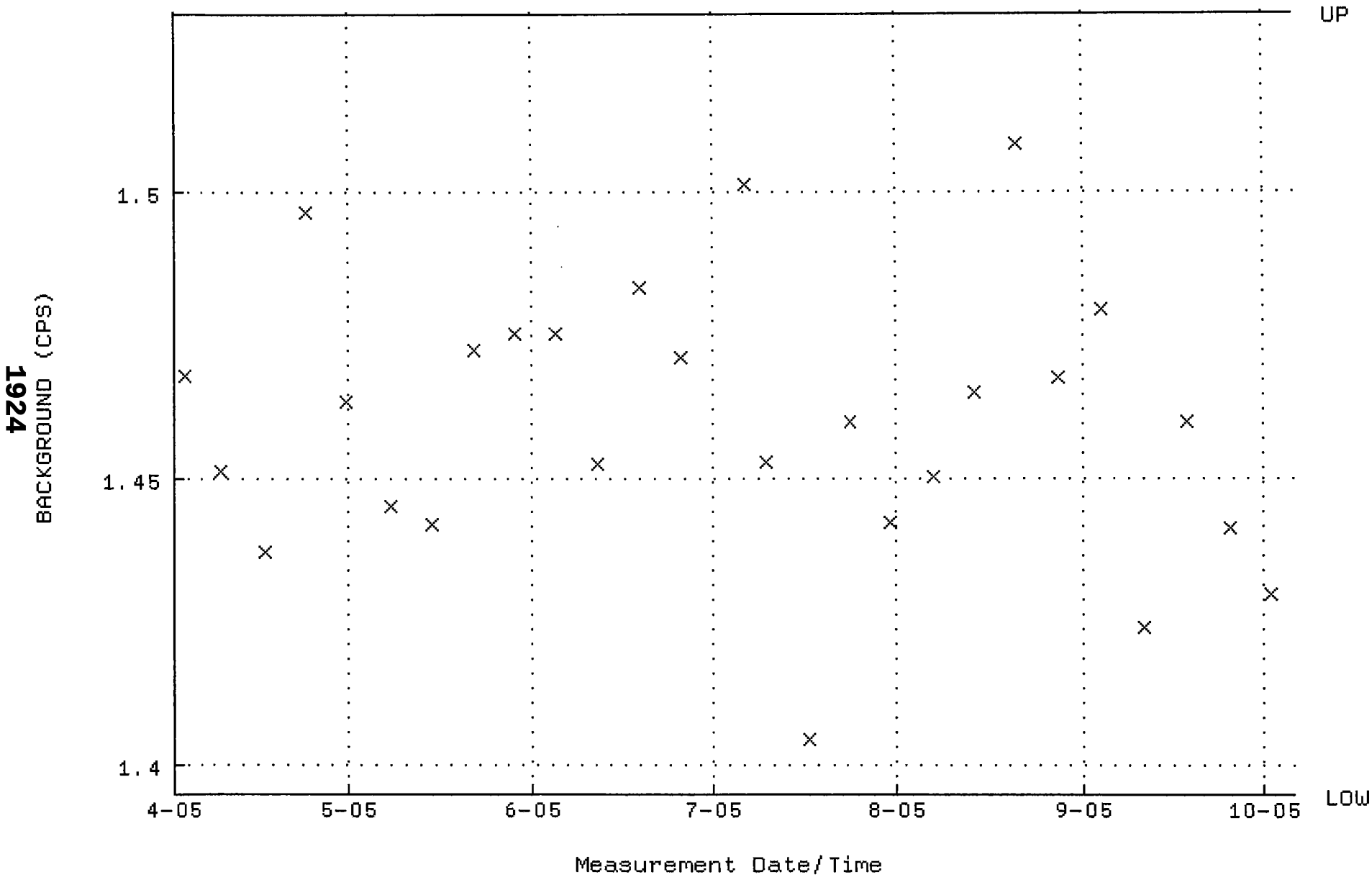
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA8.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:53:41 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.32000 through 1.44000



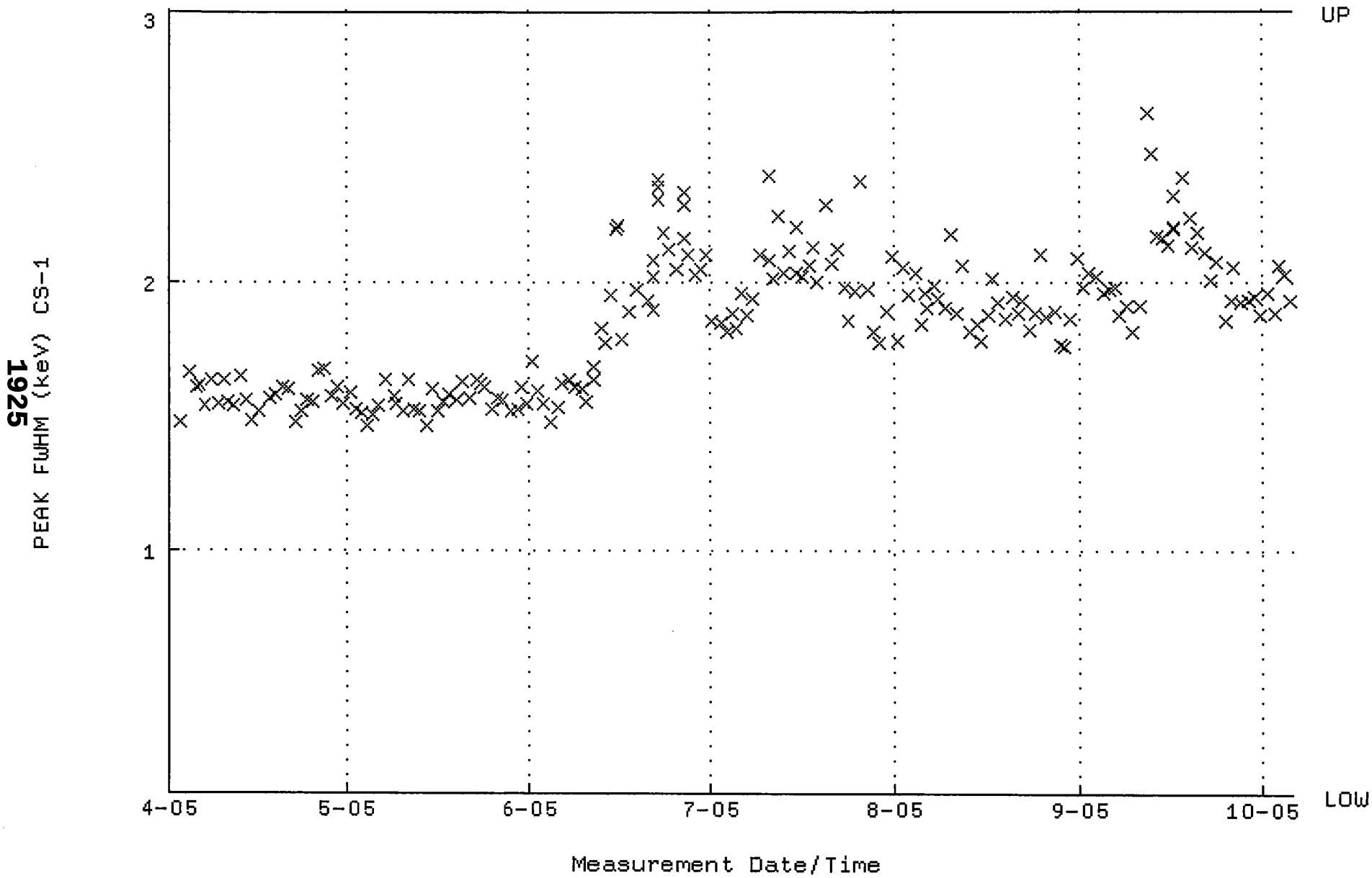
QA filename : DKA100:[ENV_ALPHA]QC_GAMMA9.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 20:55:32 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA9.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:53:47 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.39487 through 1.53113

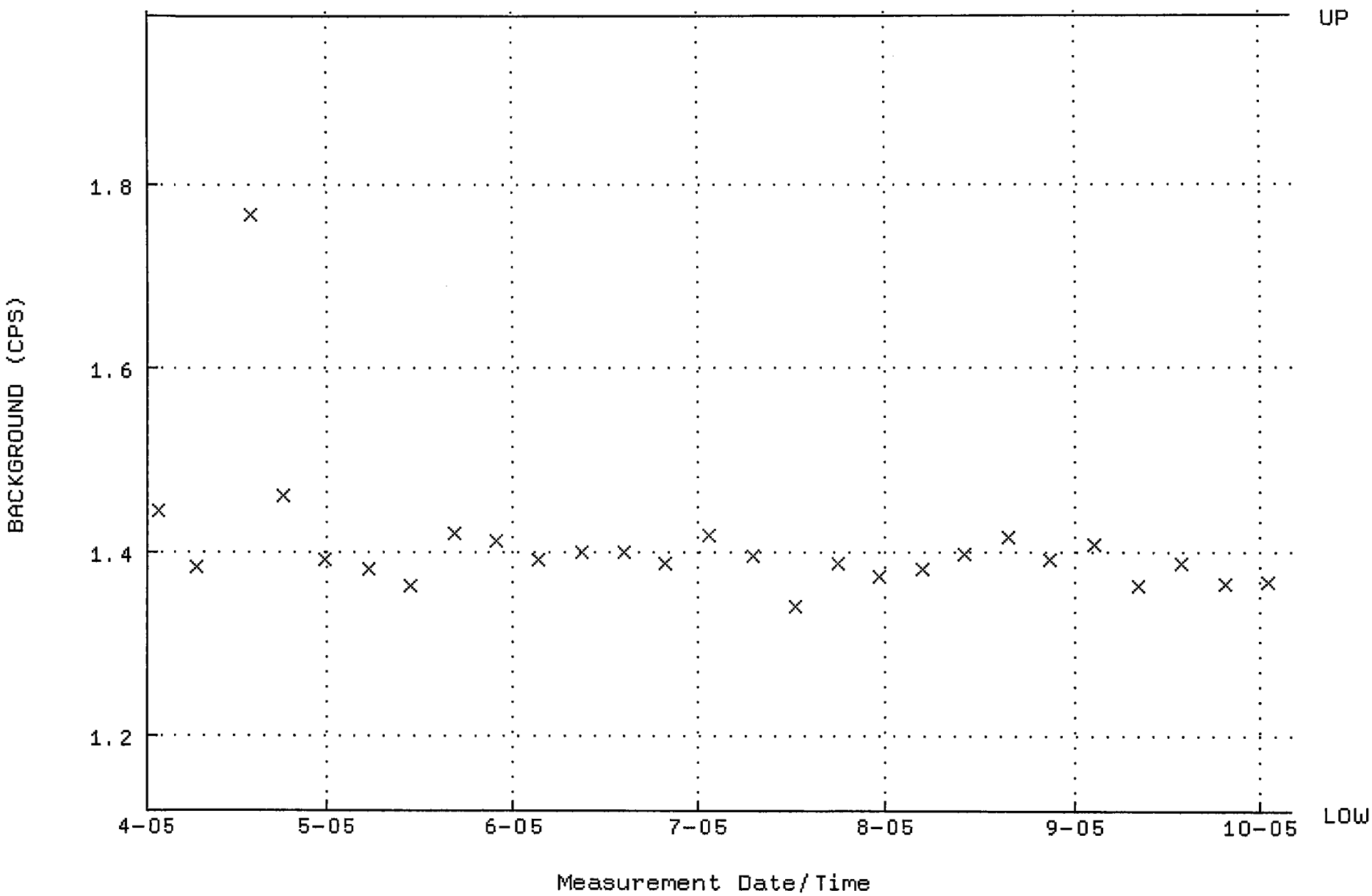


QA filename : DKA100:[ENV_ALPHA]QC_GAMMA10.QAF;3
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 21:12:38 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000

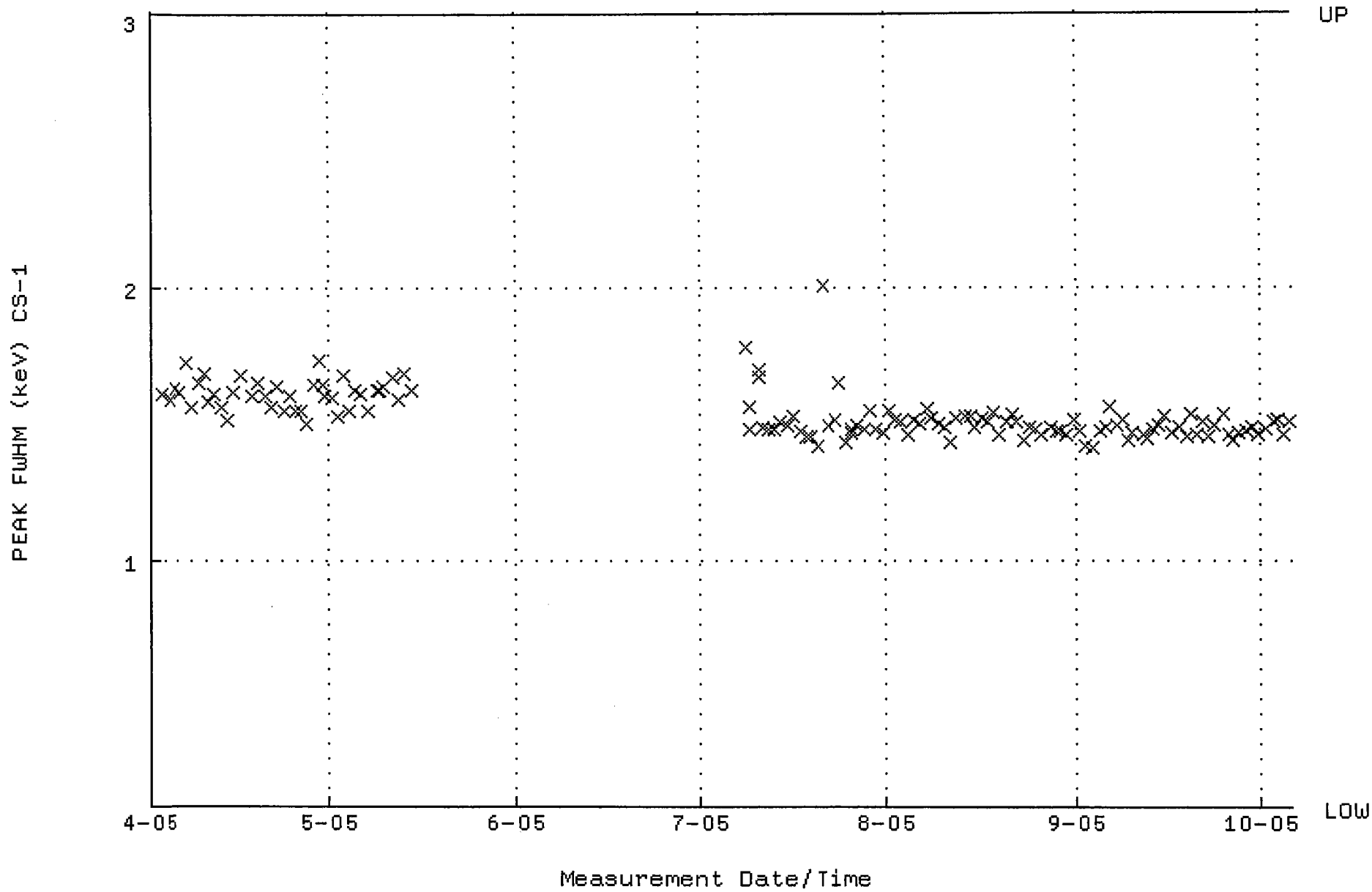


1925

QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA10.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:53:54 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.11730 through 1.98700

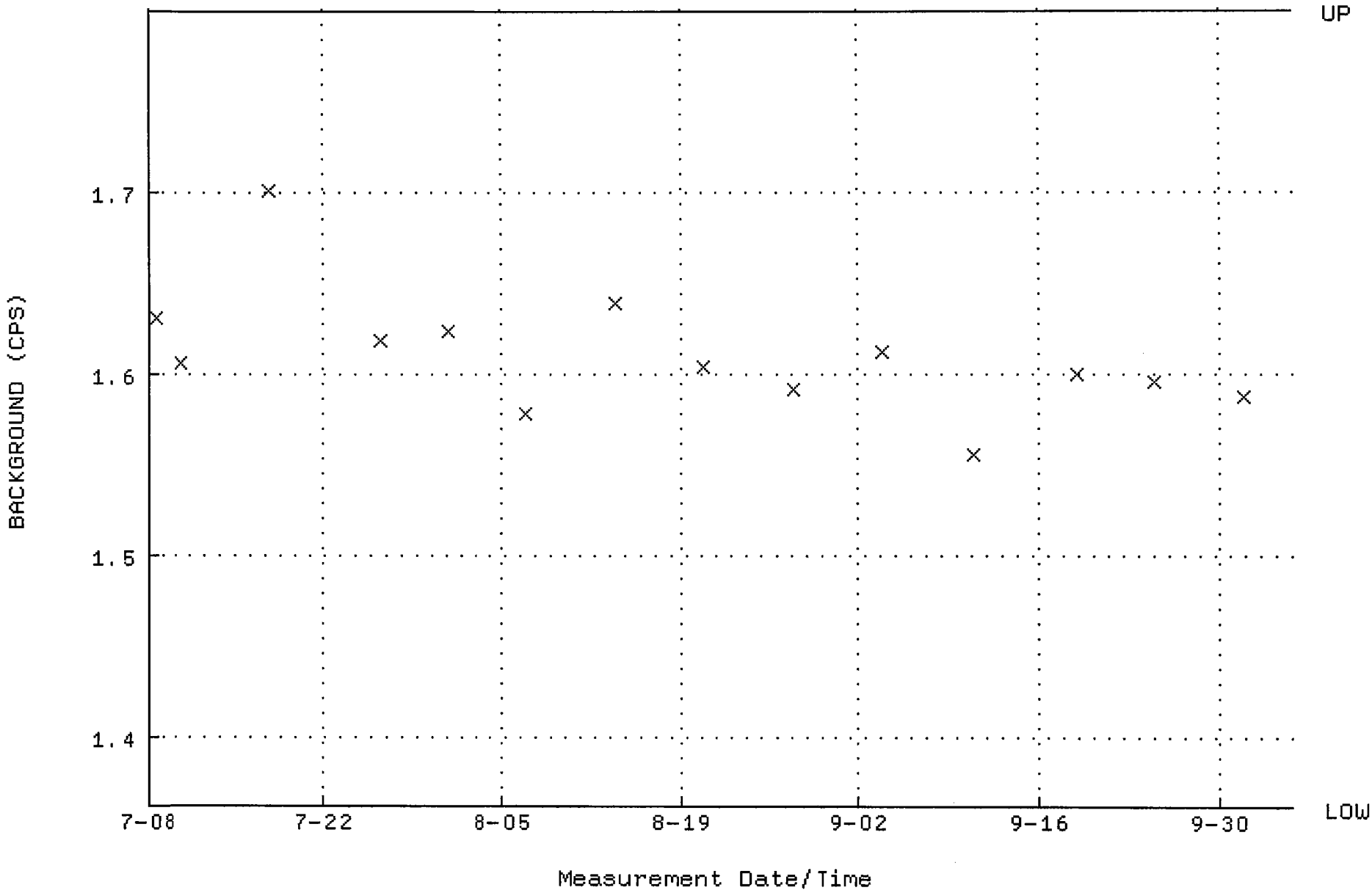


QA filename : DKA100:[ENV_ALPHA]QC_GAMMA15.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 21:13:03 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000

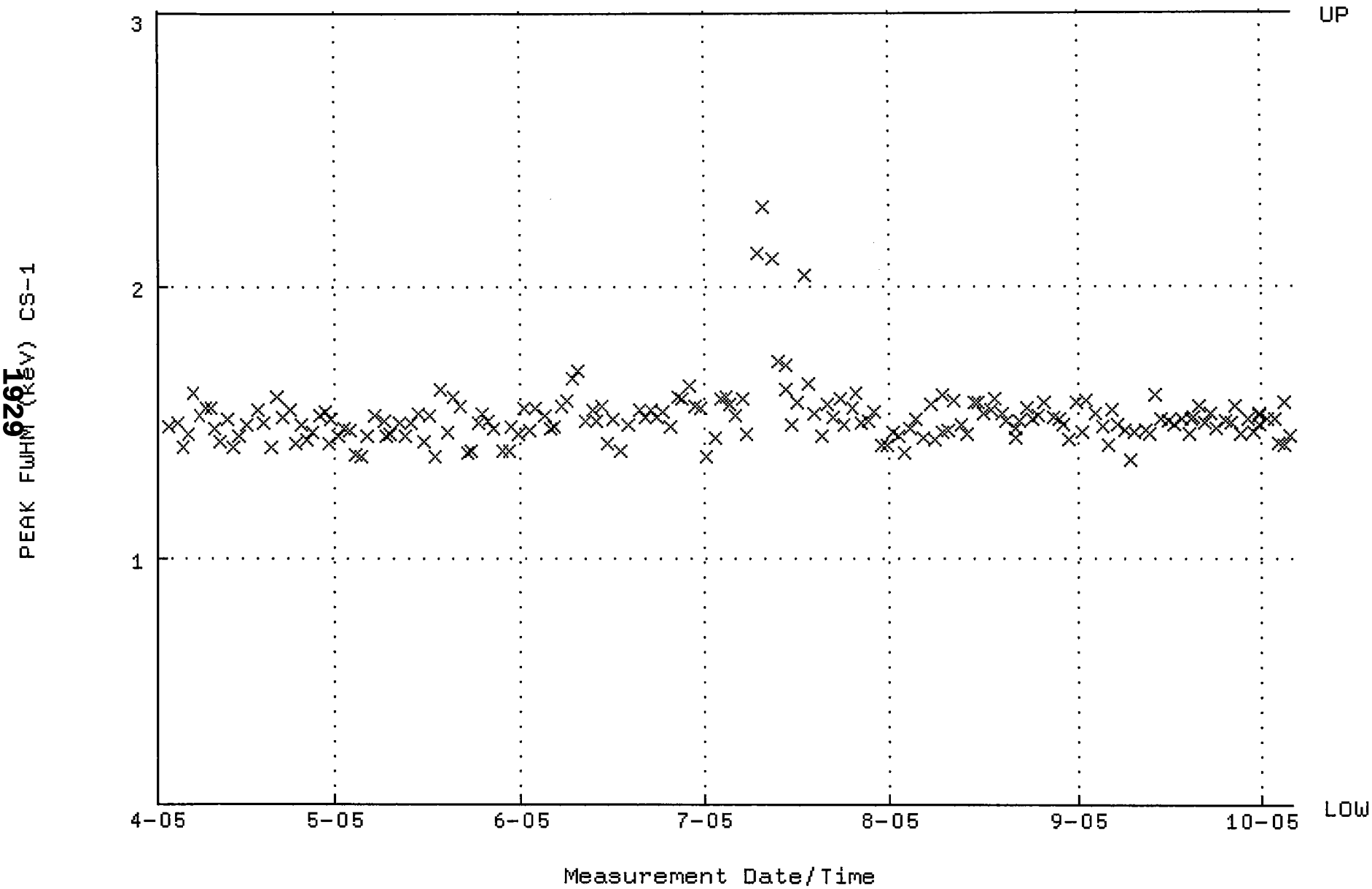


1927

QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA15.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 8-JUL-2005 13:39:16 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.36146 through 1.80000

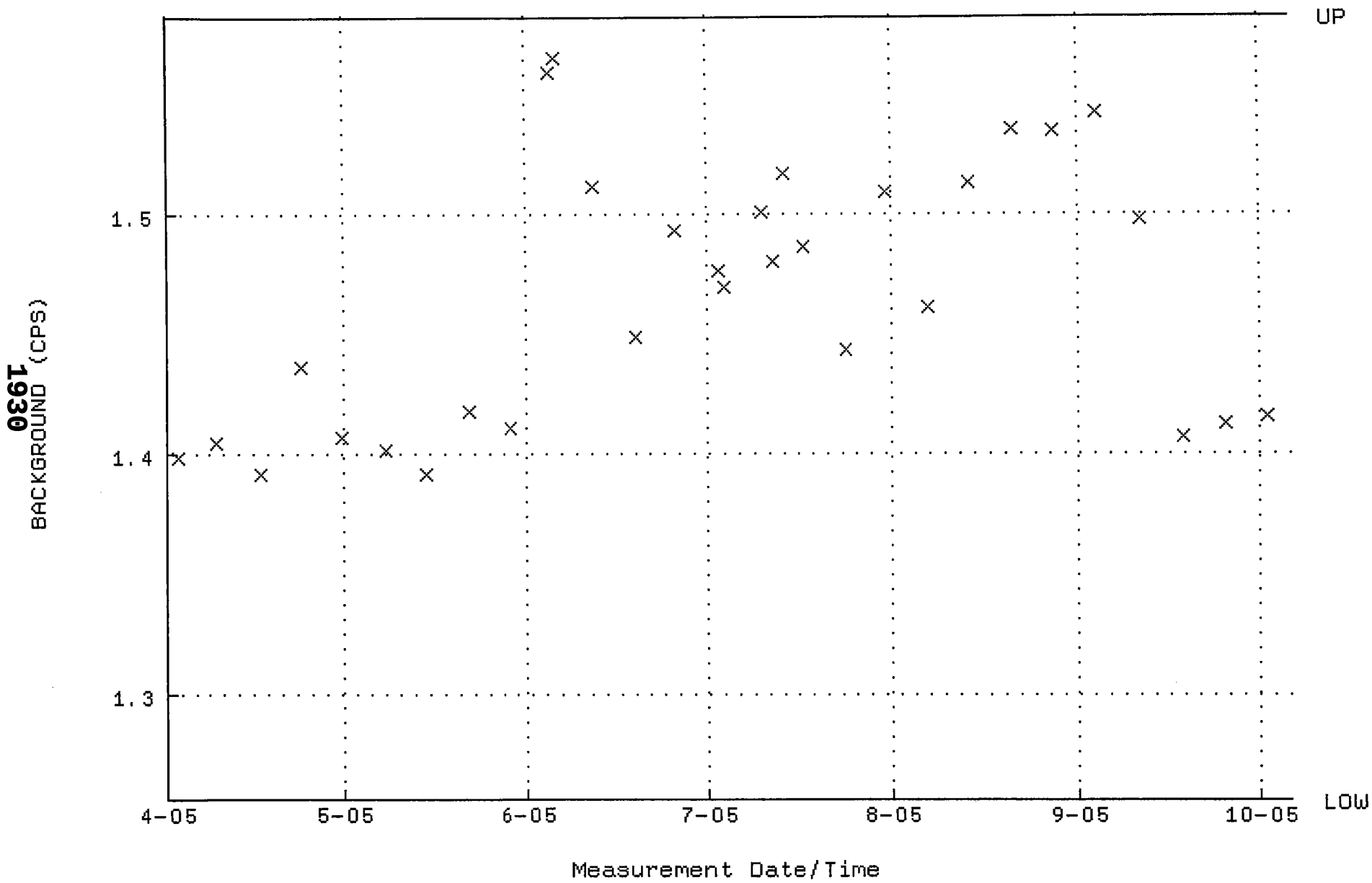


QA filename : DKA100:[ENV_ALPHA]QC_GAMMA16.QAF;2
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 21:12:44 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000

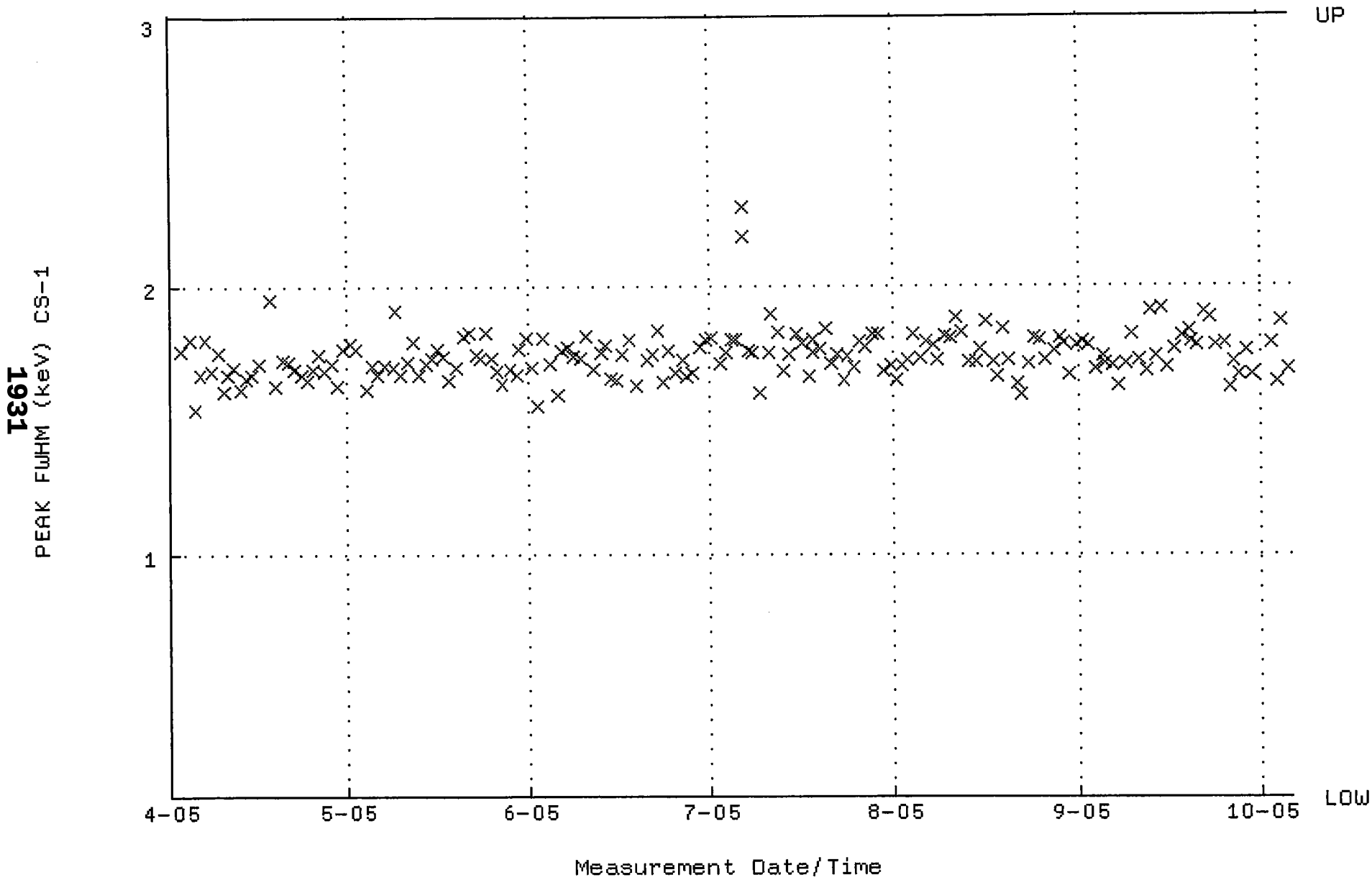


1929

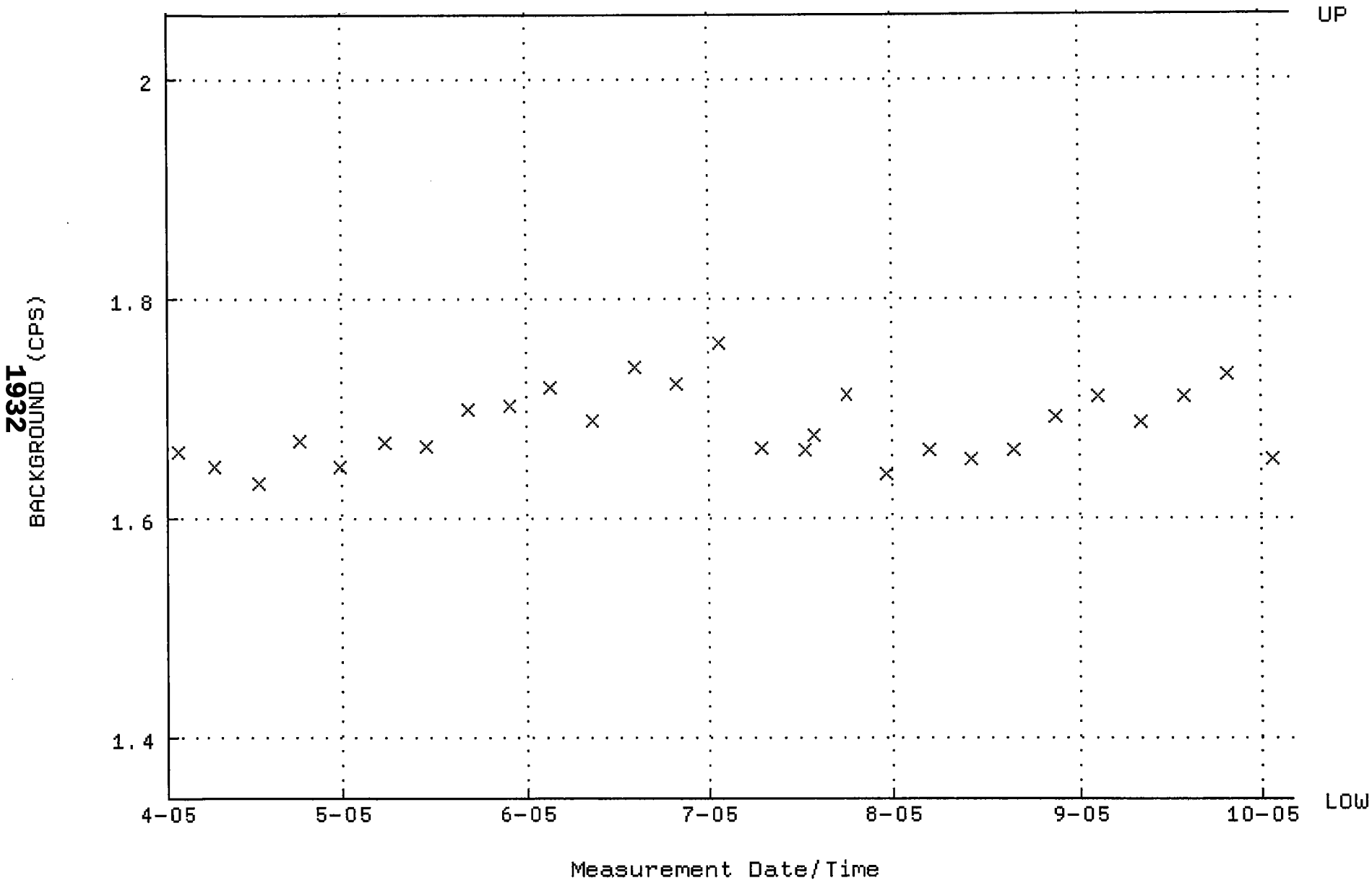
QA filename : DKA100:[ENV_ALPHA]QC_BKG_GAMMA16.QAF;1
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:54:14 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.25600 through 1.58211



QA filename : DKA100:[ENV_ALPHA]QC_WELL.QAF;4
Parameter Name : PSFWHM-661 (PEAK FWHM (keV) CS-137)
Start/End Dates : 2-APR-2005 21:27:49 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 0.100000 through 3.00000



QA filename : DKA100:[ENV_ALPHA]QC_BKG_WELL.QAF;2
Parameter Name : BACKRATE (BACKGROUND (CPS))
Start/End Dates : 2-APR-2005 23:55:36 through 5-OCT-2005 12:00:00
Lower/Upper Lmts: 1.34470 through 2.05930



STANDARDS DATA

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 • U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

0718

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

69416-278

Tc-99 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 25430.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ISOTOPE:	Tc-99
ACTIVITY (dps):	3.660 E4
HALF-LIFE:	2.111 E5 years
CALIBRATION DATE:	October 28, 2004 12:00 EST
RELATIVE EXPANDED UNCERTAINTY (k=2):	2.2%

Impurities: γ-impurities <0.1%

5.00994 grams 0.3M NH_4OH with 225 µg/g $TcO_4(-I)$.

P O NUMBER 3248RD, Item 2

PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 10-28-2004

RECEIVED 11/04

RC-S-039-002

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0718
Prepared By:	Amanda Fehr
Carrier Conc:	DI Water
Reference Date:	10/28/2004
Ampoule Mass (g):	5.00994 g
Uncertainty:	+/- 2.2 %
LogBook No:	RC-S-039-002

A Solution Material Info	
Isotope:	Technetium-99
Prepared By:	Amanda Fehr
Prep Date:	12/21/2004
Verification Date:	02/04/2005
Expiration Date:	02/04/2006
Primary Code:	0718-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.7462 g
Density(g/mL):	0.9976

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.7462 g) * (36600 dps) * (60 dpm/dps) / (5.00994 g * 100 mL) = 20803.9521 dpm/mL
(4.7462 g) * (36600 dps) * (60 dpm/dps) / (0.9976 g/mL)/ (5.00994 g * 100 mL) = 20853.8621 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/31/2005	Amanda Fehr	62.93	500	0718-B	2624.67 dpm/mL	02/04/2005	02/04/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

1935

Verification for Tc-99 Standard 0718-B

Analyst: A. Fehr Date: 2/04/05	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (mL)	Source DPM/mL
	0718-B N1	1263.7000	26.1000	1237.6000	0.95172709	0.5000	2600.745551
	0718-B N2	1291.2000	26.1000	1265.1000	0.95172709	0.5000	2658.535227
	0718-B N3	1244.2000	26.1000	1218.1000	0.95172709	0.5000	2559.767418
						Average =	2606.349399
Mean Value (Counting) =	2606.349399		**99.3019846**	**% of known**			
Stdev =	49.62179332		0.01903881				
Certificate Value =	2624.7						
Lower Limit =	2507.105812						
Upper Limit =	2705.592985						
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**				
Two sigma =	99.24358664						
10 % of Mean =	260.6349399						
Rule 2 (Pass/Fail)	**Pass**						

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

The analyst prepared three standard verification sources for Tc-99 source 0718-B by transferring portions of the standard into tared glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 14 for Tc-99 source standard verification. The Tc-99 efficiency calibration which was used for verification calculations was performed on 2/4/05 using source 0247-A
(Tc-99). Calibration data is recorded in this logbook under Tc-99 0247-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 2/7/05
2/10/05

Tracer Log

Source Code	Tc 0683
Activity	1.0004
Supplier	Lowcountry Diagnostics
Solvent/Carrier	Sodium Pertechnetate
Reference Date	9-27-05

Isotope	Tc99M
Prep Date	9-27-05
Primary Code	Tc 0683A
Prepared By	BXF
Expiration Date	9-28-05

Mass of Parent (g) .3533 Dilution (ml) 100

Show calculation converting parent activity:

$$\frac{1.0004\ \text{mCi}}{5\text{mL}} \left| \frac{\text{mL}}{\text{g}} \right| \frac{.3533\ \text{g}}{100\ \text{mL}} \left| \frac{1000\ \mu\text{Ci}}{1\ \text{mCi}} \right| = .7069\ \frac{\mu\text{Ci}}{\text{mL}}$$

Reviewed By: NE Waters Date: 9/27/05

LOW COUNTRY DIAGNOSTICS
44-A FOLLY ROAD BLVD. CHARLESTON, SC 29407
8435561113

CAUTION
RADIOACTIVE MATERIAL

Rx#:**340655**
Tuesday
Use as directed by
Dr.: COLEMAN
Lic# 362
Run:1 Box:1

Patient: Per Phys Order
c/o
GENERAL ENGINEERING LAB
CHARLESTON, SC 29414

Procedure **CALIBRATION SOURCE**
Pharmaceutical: **TC99M NA TCO4-**

1.0004 mCi@ 17:00 27-Sep-2005
0.07 ml 14.1 mCi/ml

Mo-99 < 0.15 uCi/mCi at 14 hours post calibration time
PRODUCT OF FISSION MO-99

1 LOT: 6-09/27/05
Exp:09/28/05 @06:00

Page: RC-S-038-

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

0159

Radionuclide	Th-230	Customer:	GENERAL ENGINEERING LABS
Half Life:	(7.54 ± 0.03) x 10^4 years	P.O.No.:	2507 RD
Catalog No.:	7230	Reference Date:	1 Sep 99 12:00 PST.
Source No.:	678-28-1	Contained Radioactivity:	Th-230: 9.740 μCi (360.4 kBq)

Description of Solution

a. Mass of solution: 4.89252 grams in 5 mL flame sealed ampoule
b. Chemical form: Thorium nitrate in 0.1M nitric acid
c. Carrier content: 10 μg Th/mL of solution
d. Density: 1.0016 gram/ml @ 20°C.

Radioimpurities

Am-241: See Technical Data Sheet

Radioactive Daughters

Ra-226: See Technical Data Sheet

Radionuclide Concentration

Th-230: 1.991 μCi/gram of solution (73.67 kBq/gram of solution)

Method of Calibration

Weighed aliquots of the solution were assayed using a liquid scintillation counter.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration:	±2.0%
b. Random uncertainty in assay:	±0.8%
c. Random uncertainty in weighing(s):	±0.0%
d. Total uncertainty at the 99% confidence level:	±2.2%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay(and later NIST certification) of Standard Reference Materials. (As in NRC Regulatory Guide 4.15)

2. Nuclear data were taken from Table of Radioactive Isotopes (1986), edited by Virginia Shirley.

Daniel James Van Dalsem
QUALITY CONTROL

26-Aug-99
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 N. KEYSTONE STREET
BURBANK, CALIFORNIA 91504
818·843·7000 FAX 818·843·6168

RC-5-024-102

0159

ISOTOPE PRODUCTS LABORATORIES

Corporate and
Manufacturing
18000 W. Keystone Street
Burbank, California
91504
818-843-7000
FAX 818-843-6163

Th-230 TECHNICAL DATA

The Th-230 used to prepare your order was taken from Isotope Products Laboratories Lot #6481 and had the following composition as of December 15, 1994.

NUCLIDE	ATOM%	ACTIVITY%
Th-229	<0.001	$<1.23 \times 10^{-2}$
Th-230	83.71	99.79
Th-232	16.29	1.08×10^{-4}
Ra-226 (daughter Th-230)	----	0.15
Am-241	----	0.05

Isotopic composition provided by Oak Ridge National Laboratory.

No other alpha emitting nuclides were detected.

If you have any questions, please contact Technical Service.

RC-S-024-102A

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0159
Prepared By:	Joe Davis
Carrier Conc:	0.1M HNO3
Reference Date:	09/01/1999
Ampoule Mass (g):	4.89252 g
Uncertainty:	+/- 2.2 %
LogBook No:	RC S 023 102

A Solution Material Info	
Isotope:	Thorium-230
Prepared By:	Joe Davis
Prep Date:	09/21/1999
Verification Date:	06/19/2004
Expiration Date:	06/19/2005
Primary Code:	0159-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.7484 g
Density(g/mL):	0.9992

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.7484 g) * (1.991 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 209880.2297 dpm/mL
(4.7484 g) * (1.991 uCi/g) * (2220000 dpm/uCi) / (0.9992 g/mL) / (100 mL) = 210051.8397 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/29/2001	Angela Albee	.0992	100	0159-H	208.37 dpm/mL	01/29/2001	01/29/2002
02/28/2001	Angela Albee	1.0451	1000	0159-I-102	219.525 dpm/mL	03/06/2002	03/06/2003
02/28/2001	Angela Albee	1.0451	1000	0159-I-202	219.525 dpm/mL	03/12/2002	03/12/2003
09/21/1999	Joe Davis	.1172	100	0159-B	246.18 dpm/mL	09/21/1999	09/21/2000
09/23/1999	Joe Davis	.1016	100	0159-C	213.41 dpm/mL	09/23/1999	09/23/2000
01/10/2000	Joe Davis	.1008	100	0159-D	211.56 dpm/mL	01/10/2000	01/10/2001
02/16/2000	Richard Kinney	.2422	500	0159-E	101.75 dpm/mL	02/16/2000	02/16/2001
03/20/2000	Joe Davis	.0998	100	0159-F	209.63 dpm/mL	03/20/2000	03/20/2001
07/28/2000	Robert Timm	1.0046	1000	0159-G	211.02 dpm/mL	07/28/2000	07/28/2001
05/10/2001	Angela Albee	.0987	1000	0159-J	210.1569 dpm/mL	05/10/2001	05/10/2002
08/31/2001	Lonnie Morris	.0416	100	0159-K	87.31 dpm/mL	09/23/2002	09/23/2003
06/07/2002	Angela Albee	1.0002	1000	0159-L	207.278 dpm/mL	06/07/2002	06/07/2003
01/16/2003	Angela Albee	4.5144	1000	0159-M	947.483 dpm/mL	01/16/2003	01/16/2004
02/27/2003	Angela Albee	1.1079	1000	0159-N	232.526 dpm/mL	02/27/2004	02/27/2005
06/23/2004	Amanda Fehr	1.14	1000	0159-O	239.459 dpm/mL	07/03/2005	07/03/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Th-230 Standard 0159-O

A. Fehr
7/3/2005

Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Amt Used (mL)	Source DPM/mL
0159-N N1	258.0000	23.3000	234.7000	0.9696	1.0000	242.0585809
0159-N N2	259.3000	23.3000	236.0000	0.9696	1.0000	243.3993399
0159-N N3	255.4000	23.3000	232.1000	0.9696	1.0000	239.3770627

Mean Value (Counting) =	241.6116612	dpm/mL	**100.903182**	**% of known**
Stdev =	2.048043318	dpm/mL	0.00847659	
Certificate Value =	239.449	dpm/mL		
Lower Limit =	237.5155745	dpm/mL		
Upper Limit =	245.7077478	dpm/mL		
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**	
Two sigma =	4.096086636			
10 % of Mean =	24.16116612			
Rule 2 (Pass/Fail)	**Pass**			

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.

The analyst prepared three standard verification sources for Th-230 source 0159-O by transferring 1.0 mL portions of the standard to glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 26 for alpha source standard verification. The alpha efficiency calibration which was used for verification calculations was performed using NIST source 0556-A (Th-230). Calibration data is recorded in this logbook under Th-230 0556-A. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Amanda L. Fehr 7/13/05

Angela A. Johnson 7/15/05

0133

Certificate of calibration of absolutely standardised radioactive solution

P 3574

UKAS ACCREDITED CALIBRATION LABORATORY No. 0146

Measurement

Reference time for solution number **S6/7/19**: **1200 GMT on 1 April 1996**

Radioactive concentration of strontium-90:	477.1	kilobecquerels per gram of solution
which is equivalent to:	12.89	microcuries per gram of solution
Mass of solution:	5.0669	grams
Total activity of strontium-90:	2.417	megabecquerels
which is equivalent to:	65.3	microcuries

Method of measurement used (see page 3 of the certificate): K

Calibration dates: 25 March 1996 to 27 March 1996

The calibration date is provided for added information only, and must not be confused with the reference date on pages 1 and 2 of the certificate. It is the reference date that must be used in all calculations relating to the values of activity.

Accuracy

Expanded uncertainty in the radioactive concentration quoted above: ± 0.80 %

Combined Type A uncertainty : ± 0.05 %

Combined Type B uncertainty : ± 0.40 %

Radionuclidic purity

The estimated activities of any radioactive impurities found by high-resolution gamma ray spectrometry, or in any other examination of the solution, are listed below expressed as percentages of the activity of the principal radionuclide at the reference time.

Other radionuclides 0.0005(3) %

Chemical composition

0.1 M HCl containing 100 micrograms of strontium and 100 micrograms of yttrium per ml.

Physical data

Recommended half life: 29.12 ± 0.24 years (1 year = 365.25 days)

Strontium-90: 100% beta particle emission.
Yttrium-90: 100% beta particle emission. Half life 64.1 ± 0.1 hours.

The activity of the yttrium-90 is equal to the activity of the strontium-90.

Remarks

This product meets the quality assurance requirements for achieving traceability to NIST as defined in ANSI N42.22-1995.

Tests made over a period of 2 years on standardised solutions of strontium-90 stored in glass ampoules have shown that loss of strontium-90 from solution is negligible other than by radioactive decay.

21-5-073-060

Nycomed Amersham plc
Amersham Laboratories

Certificate of calibration of absolutely standardised radioactive solution

P 35374

NAMAS
CALIBRATION
No. 0146

ISSUED BY:	Nycomed Amersham plc Radiation & Radioactivity Calibration Laboratory Amersham Laboratories White Lion Road Amersham Buckinghamshire HP7 9LL	ISSUED FOR:	AEA Technology plc Isotrak Amersham Laboratories White Lion Road Amersham Buckinghamshire HP7 9LL

Description Principal radionuclide: Strontium-90

Product code: SIZ64
Solution number: S6/7/19

Measurement Reference time: 1200 GMT on 1 April 1996

Nuclear data Nuclear data quoted on this certificate are taken from the Joint European File, Version 2.2.

Expression of uncertainties The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k = 2.00$, which for a *t*-distribution with $\nu_{eff} = \infty$ effective degrees of freedom corresponds to a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Unless indicated, all other uncertainties are expressed at the confidence level associated with one standard uncertainty.

The format used for the uncertainties in the values of radionuclidic purity is illustrated by the following examples;

6.5(21)	=	6.5 ± 2.1
6.54(21)	=	6.54 ± 0.21
6.543(21)	=	6.543 ± 0.021

Approved Signatory W. F. Cass

Date of issue 11 May 1999

LC-S-073-060A

1944

Nycomed

Certificate of calibration of absolutely standardised radioactive solution

P 35474

UKAS ACCREDITED CALIBRATION LABORATORY No. 0146

Methods of measurement

The measurement techniques listed below are currently in use at Nycomed Amersham for the absolute standardisation of radioactive solutions. The methods used for this standardisation are indicated on page 2 of the certificate.

Using a gas flow proportional counter

A	4 pi beta counting
B	4 pi alpha counting
C	4 pi internal conversion electron counting
D	4 pi coincidence counting
E	4 pi anticoincidence counting
F	4 pi coincidence and anticoincidence counting

Using a liquid scintillation counter

G	4 pi coincidence counting
H	4 pi anticoincidence counting
J	4 pi coincidence and anticoincidence counting
K	4 pi efficiency tracing

SI unit of radioactivity

The S.I. unit of radioactivity is the becquerel

1 becquerel (Bq) = 1 nuclear transformation per second, therefore

1 curie (Ci) = 3.7×10^{10} becquerels exactly

Useful conversion factors are:

1 microcurie (μCi)	=	3.7×10^{4} Bq	=	37 kilobecquerels (kBq)
1 millicurie (mCi)	=	3.7×10^{7} Bq	=	37 megabecquerels (MBq)
1 kilobecquerel (kBq)	=	27.027 nanocuries (nCi)		
1 megabecquerel (MBq)	=	27.027 microcuries (μCi)		

RC-5-023-060B

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0133
Prepared By:	Joe Davis
Carrier Conc:	0.1 M HCL
Reference Date:	04/01/1996
Ampoule Mass (g):	5.0669 g
Uncertainty:	+/- .8 %
LogBook No:	RC S 023 060

A Solution Material Info	
Isotope:	Strontium-90
Prepared By:	Joe Davis
Prep Date:	09/25/1999
Verification Date:	08/16/2005
Expiration Date:	08/16/2006
Primary Code:	0133-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8374 g
Density(g/mL):	1.0041

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.8374 g) * (12.89 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 1384260.7092 dpm/mL
(4.8374 g) * (12.89 uCi/g) * (2220000 dpm/uCi) / (1.0041 g/mL) / (100 mL) = 1378622.1492 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
09/06/2000	Joe Davis	.0899	1000	0133-F	124.445 dpm/mL	09/06/2000	09/06/2001
12/05/1999	Joe Davis	.9937	100	0133-C	13699.37 dpm/mL	12/05/1999	12/05/2000
12/05/1999	Joe Davis	.0995	100	0133-B	1371.73 dpm/mL	12/05/1999	12/05/2000
02/16/2000	Richard Kinney	.0349	500	0133-D	96.23 dpm/mL	02/16/2000	02/16/2001
03/09/2000	Richard Kinney	.0282	250	0133-E	155.51 dpm/mL	03/09/2000	03/09/2001
10/13/2000	Robert Timm	.3194	1000	0133-G-104	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	1.0865	100	0133-H	14978.73 dpm/mL	10/09/2002	10/09/2003
10/13/2000	Robert Timm	.3194	1000	0133-G-204	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	.3194	1000	0133-G-304	440.332 dpm/mL	10/09/2001	10/09/2002
10/13/2000	Robert Timm	.3194	1000	0133-G-404	440.332 dpm/mL	10/09/2001	10/09/2002
05/10/2001	Angela Albee	1.0005	1000	0133-I	1379.311 dpm/mL	05/11/2001	05/11/2002
05/06/2002	Angela Albee	.3738	1000	0133-J	515.329 dpm/mL	05/09/2002	05/09/2003
06/07/2002	Angela Albee	.1816	1000	0133-K	250.358 dpm/mL	06/07/2002	06/07/2003
01/16/2003	Angela Albee	.2964	1000	0133-L	408.624 dpm/mL	01/16/2003	01/16/2004
04/18/2003	Lonnie Morris	.3247	1000	0133-M	447.6386 dpm/mL	04/16/2004	04/16/2005
10/31/2002	Angela Albee	10.11	1000	0133-G		10/31/2002	10/31/2003
05/25/2004	Amanda Fehr	.361	1000	0133-N	497.6826 dpm/mL	05/24/2005	05/24/2006
07/22/2005	Brenda Burke	.098	500	0133-O	270.2099 dpm/mL	08/16/2005	08/16/2006
08/15/2005	Amanda Fehr	.1582	500	0133-P	436.196 dpm/mL	08/15/2005	08/15/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

1947

STANDARDIZATION OF STRONTIUM CARRIER

DATE: 5/23/2005 EXP. DATE: 11/13/2006

LOT NUMBER 1005753

STRONTIUM PRECIPITATES

	1	2	3	4
Weight of carrier added	1.0324	1.0327	1.0291	1.0318
Aliquot (1.00 mL)				
Crucible + ppt.	17.2738	20.0436	18.1282	17.3798
Crucible	17.2559	20.0258	18.1105	17.3619
Wt. of ppt., g	0.0179	0.0178	0.0177	0.0179
mg Sr/mL	17.90	17.80	17.70	17.90
mg Sr/g	17.34	17.24	17.20	17.35

Must weigh carrier added

Average	**Std. Dev.**	
17.83	± 0.10	0.00537126
17.28	± 0.07	0.00428424
mg Sr/ 0.5 mL		**8.91**
mg Sr/g		17.28

0.5% of Mean Value = 0.089125 Pass

A satisfactory standardization is obtained when results give a standard deviation of less than 0.5% of the mean value.

Amersham International plc
Amersham Laboratories

0134

NAMAS
CALIBRATION
No. 0146

Certificate of calibration of standardized tritium labeled water

Description

Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY·64

Chemical form: water Batch: 111

Measurement

Reference time: 1200 GMT on 1 March 1996

Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water

which is equivalent to: 13.19 microcuries per gram of water

or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement
This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy

The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than ±2.5%

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99·7% confidence level, and the estimated systematic uncertainties.

Purity

No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data

Half-life of tritium: 12·43 ± 0·11 years

Maximum beta energy of tritium: 18·6 keV

Remarks:

The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = $3{\cdot}7 \times 10^{10}$ becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = $3{\cdot}7 \times 10^4$ Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27·027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved signatory

RC-5-024-061

W. F. Case

W.F. Case

1949

Amersham
The Health Science Group

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Albee
Carrier Conc:	DI WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Albee
Prep Date:	02/21/2001
Verification Date:	07/20/2004
Expiration Date:	07/20/2005
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (100 mL) = 985535.5200 dpm/mL
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (1.0004 g/mL) / (100 mL) = 985180.3116 dpm/g

Secondary Standards

1950

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/21/2001	Angela Albee	.5368	100	0134-B	5288.42 dpm/mL	02/21/2001	02/21/2002
05/10/2001	Angela Albee	5.2817	1000	0134-C-103	5203.4505 dpm/mL	05/08/2003	05/08/2004
05/10/2001	Angela Albee	5.2817	1000	0134-C-203	5203.4505 dpm/mL	05/10/2002	05/10/2003
05/10/2001	Angela Albee	5.2817	1000	0134-C-303	5203.4505 dpm/mL	05/10/2002	05/10/2003
03/11/2002	Angela Albee	1.6362	250	0134-D	6447.84 dpm/mL	03/12/2002	03/12/2003
01/16/2003	Angela Albee	6.4157	100	0134-E	63206.501 dpm/mL	01/16/2003	01/16/2004
01/16/2003	Angela Albee	3.2108	250	0134-F	12652.925 dpm/mL	01/16/2003	01/16/2004
07/28/2003	Angela Albee	2.91	500	0134-G	5733.749 dpm/mL	07/28/2003	07/28/2004
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/20/2005	07/20/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for H-3 Standard 0134-H

A. Fehr 7/20/2005	Isotope	Detector CPM	BKG CPM	NET CPM	Detector Eff	Standard Mass. Used (g)	Source DPM/mL
	0134-H N1	580.7000	23.3000	557.4000	0.31748611	0.5023	3495.256536
	0134-H N2	592.6000	23.3000	569.3000	0.31748611	0.5006	3582.000226
	0134-H N3	576.9000	23.3000	553.6000	0.31748611	0.5021	3472.810856
						Average =	3516.689206
Mean Value (Counting) =	3516.689206		**103.390375**	**Pass**			
Stdev =	57.66367242		0.01639715	**Rule 3 (Pass/Fail)**			
Certificate Value =	3401.37	dpm/mL					
Lower Limit =	3401.361861	dpm/mL					
Upper Limit =	3632.016551	dpm/mL					
Rule 1 Pass/Fail	**Pass**						
Two sigma =	115.3273448	dpm/mL					
10 % of Mean =	351.6689206	dpm/mL					
Rule 2 (Pass/Fail)	**Pass**						

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

The analyst prepared three standard verification sources for H-3 source 0134-H by transferring 0.5 mL portions of the standard into glass liquid scintillation vials. Ten mL of Ready Gel liquid scintillation cocktail was added to each vial and the vials were shaken to mix. A Blank vial was prepared in a similar fashion using 1 mL of DI water and 10 mL of Ready Gel cocktail. The standard verification vials and Background source were dark adapted for two hours and counted on LSC Yellow (Wallac) using Protocol 18 for H-3 source standard verification. The H-3 efficiency calibration which was used for verification calculations was performed on 7/19/05 using 0020-A (H-3). Calibration data is recorded in this logbook under H-3 0020. Each verification source calculation was performed as follows:

Source dpm/g = (A - B)/(C)(D)
where:
A = Ver. source cpm,
B = BKG cpm,
C = System efficiency, (cpm/dpm), and
D = mass used for standard verification.

Reference RAD SOP M-001

Angela Johnson 8/1/05
Heather Acar 8/1/05

ANALYTICS

0781

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION
Standard Radionuclide Source

70361-278

5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solution sources. The Am-241 was calibrated by 4 pi alpha liquid scintillation counting. All other radionuclides were calibrated using a germanium gamma spectrometer system. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Analytics maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Rev. 1, February, 1979.

Calibration date: April 1, 2005 12:00 EST

ISOTOPE	GAMMA-RAY ENERGY	HALF-LIFE		GAMMA-RAYS PER SECOND	TOTAL UNCERTAINTY %
Am-241	59.5	432	y	3372	4.5
Cd-109	88	462.6	d	4698	3.3
Co-57	122	271.79	d	2450	3.0
Ce-139	166	137.6	d	3496	2.8
Hg-203	279	46.61	d	7565	2.7
Sn-113	392	115.1	d	4711	2.6
Cs-137	662	30.07	y	3109	3.0
Y-88	898	106.6	d	12320	2.6
Co-60	1173	5.2714	y	5769	2.7
Co-60	1332	5.2714	y	5830	2.6
Y-88	1836	106.6	d	12860	2.6

5.32720 grams 4M HCl solution.
P O NUMBER 2704RD, Item 1

SOURCE PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 04-11-2005

This standard will expire one year after the calibration date.

U.S. DEPARTMENT OF COMMERCE
National Institute of Standards & Technology
Gaithersburg, MD 20899

Certificate of Participation

Analytics, Incorporated
Atlanta, Georgia

is a participant for the period January 1, 2005, through December 31, 2005, in a radioactivity measurements assurance program conducted by the National Institute of Standards and Technology, in cooperation with the Nuclear Energy Institute. Continued participation is evidenced by dated Reports of Traceability issued for particular radionuclides, which indicate the deviation of the participant's reported value from that measured by the National Institute of Standards and Technology. The significance of these Reports is addressed below.*

For the Director,

Michael P. Unterweger, Acting Leader
Radioactivity Group
Physics Laboratory

*As guidance for the proper use of Reports of Traceability, it should be emphasized that the National Institute of Standards and Technology is concerned only with fostering good measurements capability and consistency with the national measurements system. The assurance of the proper application of that capability to the ultimate consumer products is the responsibility of each manufacturer of these products and of the Federal regulatory agencies.

A continuing traceability program in radioactivity demonstrates, to the degree established by the periodic assays of calibrated radioactivity samples, a continuing competence to maintain the methods and standards necessary for accurate measurement. Such a program cannot, however, endorse each and every measurement nor the final product, any more than a spot check can vouch for every unchecked item. Care should be taken, therefore, not to imply such endorsement. The proper use of this Report is governed by section 200.114 of Title 15 of the Code of Federal Regulations. These regulations may be met if Reports are quoted only in their entirety. Excerpts out of context may be misleading.

RC-S-039-065b

ANALYTICS

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ANALYSIS OF UNCERTAINTY FOR MIXED GAMMA STANDARDS

BATCH 120

CALIBRATION DATE: April 1, 2005 12:00 EST

Isotope	Energy (keV)	Calibration Method[1]	Statistics[2]	Calibration[2]	Peak Fitting[2]	Geometry[2]	Impurities[2]	Weighing[2]	Combined Standard Uncertainty[2]	Relative Expanded Uncertinty[2] (k=2)
Cd-109	88	HPGe	0.16	1.1	0.88	0.8	0	0.2	1.64	3.3
Co-57	122	HPGe	0.23	1.1	0.71	0.7	0	0.2	1.52	3.0
Ce-139	166	HPGe	0.17	1.0	0.58	0.7	0	0.2	1.38	2.8
Hg-203	279	HPGe	0.11	1.1	0.34	0.7	0	0.2	1.37	2.7
Sn-113	392	HPGe	0.21	1.0	0.35	0.7	0	0.2	1.30	2.6
Cs-137	662	HPGe	0.36	1.1	0.60	0.7	0	0.2	1.49	3.0
Y-88	898	HPGe	0.19	1.0	0.33	0.7	0	0.2	1.29	2.6
Co-60	1173	HPGe	0.31	.97	0.45	0.7	0	0.2	1.33	2.7
Co-60	1332	HPGe	0.33	.93	0.48	0.7	0	0.2	1.32	2.6
Y-88	1836	HPGe	0.24	1.0	0.35	0.7	0	0.2	1.31	2.6

Optional Additional Isotopes

Pb-210	46.5	4π LS	0.33	1.1	0	0.9	0.30	0.2	1.50	3.0
Am-241	59.5	4π LS	0.33	1.1	0	0.9	0.30	0.2	1.50	3.0
Sr-85	514	IC	0.30	1.1	0	0.7	0.17	0.2	1.36	2.7
Cs-134	605	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Cs-134	796	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Mn-54	835	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7
Zn-65	1116	IC	0.30	1.0	0	0.8	0.17	0.2	1.34	2.7

[1]Calibration Methods:

4π LS (4 pi Liquid Scintillation Counting)
HPGe (High Purity Germanium Gamma Ray Spectrometer)
IC (Gamma Ray Ionization Chamber)

[2]As Percent (%)from counting data

No interfering gamma emitting impurities were detected during calibration. Depending on the resolution and energy dispersion (keV/channel) of the measuring system, the following spectral conflicts may occur: (1) between the 88 keV gamma-ray and the X-rays emitted in the decay of Hg-203, (2) between the 1333 keV gamma-ray and the 1325 keV single escape peak from the 1836 keV gamma-ray.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0781
Prepared By:	Amanda Fehr
Carrier Conc:	4M HCL
Reference Date:	04/01/2005
Ampoule Mass (g):	5.3272 g
Uncertainty:	+/- 3 %
LogBook No:	RC-S-039-065

A Solution Material Info	
Isotope:	Mixed Gamma
Prepared By:	Amanda Fehr
Prep Date:	04/26/2005
Verification Date:	04/27/2005
Expiration Date:	04/27/2006
Primary Code:	0781-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.1233 g
Density(g/mL):	5.4962

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dpm)) * (conversion dpm to dpm) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dpm)) * (conversion dpm to dpm) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.1233 g) * (219149.436 dpm) * (1 dpm/dpm) / (5.3272 g * 100 mL) = 2107.6143 dpm/mL
(5.1233 g) * (219149.436 dpm) * (1 dpm/dpm) / (5.4962 g/mL)/ (5.3272 g * 100 mL) = 383.4709 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

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Verification for Mixed Gamma Standard 0781-A (AM-241 & Cs-137)

A. Fehr
4/29/2005

Am-241	Isotope	Result		Cs-137	Isotope	Result	
	Mixed Gamma N1	9796			Mixed Gamma N1	3753	
	Mixed Gamma N2	9930			Mixed Gamma N2	4015	
	Mixed Gamma N3	10290			Mixed Gamma N3	3878	
Mean Value (Counting) =	10005.33	**102.47**	**Pass**		3882.00	**102.39**	**Pass**
Stdev =	255.471		**Rule 3 (Pass/Fail)**		131.046		**Rule 3 (Pass/I**
Certificate Value =	9764.6				3791.3		
Lower Limit =	9494.391719				3619.908413		
Upper Limit =	10516.27495				4144.091587		
Rule 1 (Pass/Fail)	**Pass**				**Pass**		
Two sigma =	510.9416144				262.091587		
10 % of Mean =	1000.53333333				388.20000000		
Rule 2 (Pass/Fail)	**Pass**				**Pass**		

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

Amanda L. Fehr 4/29/05

Angela A. Johnson 5/6/05

Verification for Mixed Gamma Standard 0781-A (Co-60)

A. Fehr 4/29/2005	**Isotope**	**Result** **pCi/L**	
	Mixed Gamma N1	6132	
	Mixed Gamma N2	6073	
	Mixed Gamma N3	6240	
Mean Value (Counting) =	6148.33	pCi/L	**102.365 Pass**
Stdev =	84.690	pCi/L	**Rule 3 (Pass/Fail)**
Certificate Value =	6006.3	pCi/L	
Lower Limit =	5978.954074	pCi/L	
Upper Limit =	6317.712592	pCi/L	
Rule 1 Pass/Fail	**Pass**		
Two sigma =	169.3792589		
10 % of Mean =	614.8333333		
Rule 2 (Pass/Fail)	**Pass**		

Verification Rules

Rule 1 = The certificate value (NOT including any uncertainty) shall lie within the 95% confidence interval determined from the mean and two sigma standard deviation of the three measurements
Rule 2 = The two sigma value used for the 95% confidence interval shall not exceed 10% of the mean value of the three verification measurements.
Rule 3 = The determined mean value shall be within 10% of the certificate value.

Amanda L. Fehr 4/29/05

Angela A. Johnson 5/6/05

CERTIFICATE OF CALIBRATION
ALPHA STANDARD SOLUTION

Radionuclide	Am-243	Customer:	GENERAL ENGINEERING LABS
Half Life:	7380 ± 40 years	P.O.No.:	9290-RAD
Catalog No.:	7243	Reference Date:	January 1 1994 12:00 PST.
Source No.:	445-96-2	Contained Radioactivity:	(Am-243) 101.2 μCi
		Contained Radioactivity:	(Am-243) 3750 kBq

Description of Solution

a. Mass of solution:	5.3739 g (in a 5 ml Flame Sealed Ampoule)	
b. Chemical form:	Am(NO3)3 in 2N HNO3	
c. Carrier content:	None added	
d. Density:	1.0651	g/ml @ 20°C.

Radioimpurities None detected

Radioactive Daughters

Np-239 (beta active) in equilibrium

Radionuclide Concentration

(Am-243) 18.84 μCi/g

Method of Calibration

Weighed aliquots of the solution were assayed using gamma spectrometry for Np-239:

Energy peak(s) intergrated under:	228, 278	keV.
Branching ratio(s) used:	0.108, 0.1420	gamma rays per decay.

Uncertainty of Measurement

a. Systematic uncertainty in instrument calibration:	±3.0%
b. Random uncertainty in assay:	±0.4%
c. Random uncertainty in weighing(s):	±0.0%
d. Total uncertainty at the 99% confidence level:	±3.0%

NIST Traceability

This calibration is implicitly traceable to the National Institute of Standards and Technology.

Leak Test(s)

See reverse side for Leak Test(s) applied to this source.

Notes

1. Nuclear data were taken from "Table of Radioactive Isotopes", edited by Virginia S. Shirley, 1986.
2. IPL participates in an NIST measurement assurance program to establish and maintain implicit traceability for a number of nuclides, based on the blind assay (and later NIST certification) of Standard Reference Materials (As in NRC Regulatory Guide 4.15).

Anna U. Kuen
QUALITY CONTROL

Jan 3, 1994
Date Signed

ISOTOPE PRODUCTS LABORATORIES
1800 North Keystone Street
Burbank, California 91504
(818) 843 - 7000

RC-S-005-32

THE LEAK TEST(S) INDICATED BY THE CHECKED BOX(ES) WAS(WERE) APPLIED TO DETERMINE THE INTEGRITY OF THE SOURCE DESCRIBED ON THE FRONT SIDE

☑ **1. STANDARD WIPE TEST**

The source is wiped over its entire surface with a moistened filter paper disk. After drying, the disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **2. SOAK TEST**

The source is immersed in distilled water and maintained at 50 ± 10° C for a minimum of four hours. After removal of the source, the liquid is a) checked for activity using a liquid scintillation counter, or b) evaporated in a planchet and the residue is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **3. SOAK TEST -- BERYLLIUM WINDOW**

The source is immersed in distilled water and maintained at 50 ± 10° C for 20 minutes. The entire surface of the source is then wiped with a moistened cotton swab or filter paper disk. After drying, the swab or disk is checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **4. GAS SOURCE TEST (Radioactive Gas)**

The source is placed in a vacuum desiccator and maintained at a pressure of less than 1 mm Hg for not less than 12 hours. The activity is checked by introducing air into the desiccator and monitoring the air with an end-window G.M. tube. Activity levels exceeding 1000 cpm are cause for rejection of the source.

☑ **5. OTHER LEAK TEST**

The ampoule is kept in an inverted position on a filter paper disk for a minimum of 16 hours. The filter paper disk is then checked for activity using a windowless proportional counter or end-window G.M. tube. Activity levels exceeding 0.001 μCi beta-gamma or 0.0001 μCi alpha are cause for rejection of the source.

☐ **6. LEAK TEST NOT APPLICABLE**

The active area of this source is uncovered or is protected by a very thin coating. Although the deposit is adherent, it is not designed or certified to pass a standard leak test. The inactive portions of the source have been checked using the standard wipe test. Levels of removable activity did not exceed 0.001 μCi beta-gamma or 0.0001 μCi alpha at the time of shipment.

Standard Traceability Log Rad

Source Material Info	
Parent Code:	445-96-2
Prepared By:	Genie Bost
Carrier Conc:	2M HNO3
Reference Date:	01/01/1994
Ampoule Mass (g):	5.3739 g
Uncertainty:	+/- 3 %
LogBook No:	RC S 005 032

A Solution Material Info	
Isotope:	Americium-243
Prepared By:	Genie Bost
Prep Date:	01/05/1994
Verification Date:	09/10/2004
Expiration Date:	09/10/2005
Primary Code:	445-96-2-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.3419 g
Density(g/mL):	1.0785

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (uCi/g)) * (conversion dpm to uCi) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (100 mL) = 2234238.9912 dpm/mL
(5.3419 g) * (18.84 uCi/g) * (2220000 dpm/uCi) / (1.0785 g/mL) / (100 mL) = 2071617.0528 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
01/05/1994	Genie Bost	.0058	100	445-96-2-B	120.1 dpm/ml	01/05/1995	01/05/1996
01/05/1994	Genie Bost	.0025	100	445-96-2-C	51.77 dpm/ml	01/05/1995	01/05/1996
03/25/1994	Genie Bost	.0064	100	445-96-2-D	132.53 dpm/ml	01/05/1995	01/05/1996
08/04/1994	Genie Bost	.0094	100	445-96-2-E	194.65 dpm/ml	01/05/1995	01/05/1996
08/04/1994	Genie Bost	.0046	100	445-96-2-F	95.25 dpm/ml	01/05/1995	01/05/1996
09/01/1994	Genie Bost	.0031	100	445-96-2-G	64.19 dpm/ml	01/05/1995	01/05/1996
10/17/1994	Genie Bost	.0969	100	445-96-2-H	2006.52 dpm/ml	01/05/1995	01/05/1996
02/06/1995	Genie Bost	.0043	100	445-96-2-I	89.04 dpm/ml	01/05/1995	01/05/1996

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07/20/1995	Theresa Parrotte	.0041	100	445-96-2-J	84.9 dpm/ml	01/05/1995	01/05/1996
08/10/1995	Garret Ray	.0952	100	445-96-2-K	1971.32 dpm/ml	01/05/1995	01/05/1996
04/28/1998	Richard Kinney	.1264	100	445-96-2-M	2617.4 dpm/ml	04/28/1998	04/28/1999
09/11/1995	Theresa Parrotte	1.0525	100	445-96-2-L	21794.23 dpm/ml	01/05/1995	01/05/1996
09/11/1995	Theresa Parrotte	.5107	100	445-96-2-L-1	111.3 dpm/ml	01/05/1995	01/05/1996
11/10/1999	Joe Davis	.1809	100	445-96-2-P	3745.92 dpm/mL	05/13/1999	05/13/2000
01/28/2000	Angela Albee	.0354	1000	445-96-2-Q	73.3 dpm/mL	02/08/2001	02/08/2002
04/18/2000	Robert Timm	.429	250	445-96-2-R	3553.34 dpm/mL	04/18/2000	04/18/2001
04/21/1999	Greg Smith	.1645	100	445-96-2-O	3406.32 dpm/mL	04/21/1999	04/21/2000
10/12/1999	Richard Kinney	1.5589	100	445-96-2-O-3	50.31 dpm/mL	05/13/1999	05/13/2000
07/27/1999	Gregory Smith	1.567	100	445-96-2-O-2	50.56 dpm/ml	05/13/1999	05/13/2000
10/12/1998	Gregory Smith	.1348	100	445-96-2-N	2791.32 dpm/mL	01/05/1995	01/05/1996
01/25/1999	Gregory Smith	1.9382	100	445-96-2-N-1	50.16 dpm/ml	01/05/1995	01/05/1996
04/21/1999	Greg Smith	1.5309	100	445-96-2-O-1	49.4 dpm/mL	04/21/1999	04/21/2000
04/13/2001	Angela Albee	.1869	100	445-96-2-S	3870.16 dpm/mL	04/13/2001	04/13/2002
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-103	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-203	4153.225 dpm/mL	07/03/2002	07/03/2003
07/03/2001	Lonnie Morris	2.0057	1000	445-96-2-T-303	4153.225 dpm/mL	07/03/2002	07/03/2003
08/23/2001	Angela Albee	.0194	500	445-96-2-U-103	80.34 dpm/mL	08/23/2001	08/23/2002
08/23/2001	Angela Albee	.0194	500	445-96-2-U-203	80.34 dpm/mL	08/23/2001	08/23/2002

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08/23/2001	Angela Albee	.0194	500	445-96-2-U-303	80.34 dpm/ml	08/23/2001	08/23/2002
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-103	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-203	81.586 dpm/mL	08/27/2002	08/27/2003
08/27/2001	Angela Albee	.0394	1000	445-96-2-V-303	81.586 dpm/mL	08/27/2002	08/27/2003
03/17/2003	Angela Albee	2.1108	1000	445-96-2-W	4370.857 dpm/mL	03/14/2005	03/14/2006
04/14/2003	Lonnie Morris	.0315	1000	445-96-2-X	65.2559 dpm/mL	04/14/2004	04/14/2005
05/03/2003	Tim Chandler	.0103	1000	445-96-2-Y	21.3376 dpm/mL	05/05/2003	05/05/2004
05/05/2003	Tim Chandler	.011	1000	445-96-2-Z	22.7877 dpm/mL	05/04/2005	05/04/2006
09/10/2004	Amanda Fehr	.0325	1000	445-96-2-BB	67.328 dpm/mL	09/10/2005	09/10/2006
05/27/2005	Brenda Burke	.000246	100	445-96-2-CC	5.10613 dpm/mL	05/31/2005	05/31/2006
08/16/2005	Brenda Burke	.001224	500	445-96-2-DD	5.07144 dpm/mL	08/18/2005	08/18/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Americium-243 Standard 445-96-2-BB

M. Avins
9/13/2005

Isotope	Value	Uncertainty
445-96-2-BB N1	3.090	0.4570
445-96-2-BB N2	3.140	0.4700
445-96-2-BB N3	2.870	0.4530

Mean Value (Counting) =	3.033		
Stdev =	0.143643076		
Target =	3.03		
Lower Limit =	2.746047181		
Upper Limit =	3.320619486		
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**
Two sigma =	0.287286152		
10 % of Mean =	0.303333333		
Rule 2 (Pass/Fail)	**Pass**		

The analyst prepared three standard verification sources for standard ***445-96-2-BB*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Am-241*** standard ***0533-E*** and 50 micrograms of Nd carrier in a disposable centrifuge tube. Each standard was diluted to 4 mL with 2 M HCl and 2 mL of DI Water. Two mL of 48% HF was added to precipitate Nd(and **Americium**) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for ***Am-243*** were calculated by comparison to ***Am-241*** certified values.

Mary L. Avins 9/16/05
Amanda L. Lee 9/19/05

0533

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

65338-278

Am-241 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared gravimetrically from a calibrated master solution. The master solution was calibrated by liquid scintillation counting.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Am-241
ACTIVITY (dps):	3.920 E4
HALF-LIFE:	4.322 E2 years
CALIBRATION DATE:	January 15, 2003 12:00 EST
TOTAL UNCERTAINTY*:	3.2%
SYSTEMATIC:	2.2%
RANDOM:	1.0%

*99% confidence level.

5.10649 grams 1M HCl solution.

Impurities: γ-impurities <0.1%
α-impurities <0.1%

P O NUMBER 3213 RD, Item 1

SOURCE PREPARED BY: M Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: UM Mc 1-16-03

1965

RC-S-035-048a

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0533
Prepared By:	Angela Albee
Carrier Conc:	1 M HCL
Reference Date:	01/15/2003
Ampoule Mass (g):	5.10649 g
Uncertainty:	+/- 3.2 %
LogBook No:	RC S 035 048

A Solution Material Info	
Isotope:	Americium-241
Prepared By:	Angela Albee
Prep Date:	02/05/2003
Verification Date:	05/02/2005
Expiration Date:	05/02/2006
Primary Code:	0533-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.8225 g
Density(g/mL):	1.0139

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.8225 g) * (39200 dps) * (59.9 dpm/dps) / (5.10649 g * 100 mL) = 22174.9495 dpm/mL
(4.8225 g) * (39200 dps) * (59.9 dpm/dps) / (1.0139 g/mL)/ (5.10649 g * 100 mL) = 21870.7064 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/20/2003	Angela Albee	1.0151	100	0533-B	222.38 dpm/mL	03/01/2005	03/01/2006
02/20/2003	Angela Albee	.6819	250	0533-C	59.754 dpm/mL	02/20/2004	02/20/2005
05/07/2003	Tim Chandler	.1245	100	0533-D	27.2745 dpm/mL	05/03/2004	05/03/2005
09/10/2004	Amanda Fehr	.6933	250	0533-E	60.753 dpm/mL	09/10/2005	09/10/2006
12/17/2004	Brenda Burke	.0093	100	0533-F	2.0374 dpm/mL	12/20/2004	12/20/2005
12/21/2004	Brenda Burke	.009273	100	0533-G	2.0315 dpm/mL	12/23/2004	12/23/2005
04/28/2005	Brenda Burke	.1347	100	0533-H	29.4598 dpm/mL	05/02/2005	05/02/2006

1966

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

Verification for Am-241 Standard *0533-E*

M. Avins
9/13/2005

Isotope	Value	Uncertainty
0533-E #1	2.750	0.5080
0533-E #2	2.890	0.4980
0533-E #3	2.670	0.4660

Mean Value (Counting) =	2.770	1.014898	
Stdev =	0.111355287		
Target =	2.73		
Lower Limit =	2.547289425		
Upper Limit =	2.992710575		
Rule 1 Pass/Fail	**Pass**	**Pass**	**Pass**
Two sigma =	0.222710575		
10 % of Mean =	0.277		
Rule 2 (Pass/Fail)	**Pass**		

The analyst prepared three standard verification sources for standard ***0533-E*** using 0.1 mL for each source. Each standard was combined with 0.1 mL of ***Am_243*** standard ***445-96-2-BB*** and 25 micrograms of neodymium carrier in a disposable centrifuge tube. Each standard was diluted to 20 mL with 0.1 M HCl. Three mL of 48% HF was added to precipitate neodymium(and Americium) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for Am-241 were calculated by comparison to Am-243 certified values.

Mary L. Avins 9/16/05
Amanda L. Lehr 9/19/05

0338

ANALYTICS

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 · U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

60513-278

Pu-239 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 24148.

Radionuclide purity and calibration were checked by germanium gamma-ray spectrometry and liquid scintillation counting. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	Pu-239
ACTIVITY (dps):	3.674 E4
HALF-LIFE:	24131 years
CALIBRATION DATE:	October 30, 2000 12:00 EST
TOTAL UNCERTAINTY*:	5.0%

*99% confidence level.

5.45541 grams 3M HNO_3 solution.

Impurities detected (activity in dps/vial on Oct. 30, 2000):

Am-241 297.28
Pu-240 1208.8
Pu-241 2010.7
Pu-242 0.17

See reverse side for additional information.

P O NUMBER 2528RD, Item 1

PREPARED BY: M. Taskaeva
M. Taskaeva, Radiochemist

Q A APPROVED: 11/13/00

RC-S-028-167

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0338
Prepared By:	Penet Melton
Carrier Conc:	3 M HNO3
Reference Date:	10/30/2000
Ampoule Mass (g):	5.45541 g
Uncertainty:	+/- 5 %
LogBook No:	RC S 028 167

A Solution Material Info	
Isotope:	Plutonium-239
Prepared By:	Penet Melton
Prep Date:	12/01/2000
Verification Date:	05/20/2005
Expiration Date:	05/20/2006
Primary Code:	0338-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.1674 g
Density(g/mL):	1.0120

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(5.1674 g) * (36740 dps) * (59.9 dpm/dps) / (5.45541 g * 100 mL) = 20845.4205 dpm/mL
(5.1674 g) * (36740 dps) * (59.9 dpm/dps) / (1.0120 g/mL)/ (5.45541 g * 100 mL) = 20598.2002 dpm/g

Secondary Standards

1970

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
12/15/2000	Angela Albee	.1183	100	0338-B	24.4083 dpm/mL	12/15/2000	12/15/2001
12/15/2000	Angela Albee	1.0107	100	0338-C	208.5336 dpm/mL	12/15/2000	12/15/2001
01/29/2001	Tim Chandler	10.0017	100	0338-D	2063.61 dpm/mL	12/15/2000	12/15/2001
10/29/2001	Tim Chandler	.3032	250	0338-E	25.0232 dpm/mL	10/16/2003	10/16/2004
12/04/2001	Tim Chandler	10.0308	100	0338-F	2069.614 dpm/mL	10/25/2002	10/25/2003
01/13/2003	Tim Chandler	3	1000	0338-F-1	6.209 dpm/mL	01/13/2003	01/13/2004
10/16/2002	Tim Chandler	.02908	100	0338-G	5.9628 dpm/ml	10/16/2002	10/16/2003
10/16/2002	Tim Chandler	.0478	100	0338-H	9.8624 dpm/mL	10/16/2002	10/16/2003
12/30/2002	Tim Chandler	10.0252	100	0338-I	2068.458 dpm/mL	10/24/2003	10/24/2004
12/31/2002	Tim Chandler	.162	500	0338-J	6.685 dpm/mL	12/31/2002	12/31/2003
08/12/2003	Amanda Fehr	.2282	100	0338-K	47.084 dpm/mL	08/12/2003	08/12/2004
12/09/2003	Amanda Fehr	.2409	100	0338-L	50.2764 dpm/mL	12/09/2003	12/09/2004
03/18/2004	Tim Chandler	10.0192	500	0338-M	413.4441 dpm/ml	03/18/2004	03/18/2005
04/26/2004	Amanda Fehr	.643	250	0338-N	53.067 dpm/mL	04/26/2005	04/26/2006
05/26/2004	Brenda Burke	.355	250	0338-O	29.298 dpm/mL	05/20/2005	05/20/2006
12/20/2004	Brenda Burke	.01957	100	0338-P	4.0371 dpm/mL	12/20/2004	12/20/2005
03/16/2005	Brenda Burke	10.0395	100	0338-Q	2071.4087 dpm/mL	03/16/2005	03/16/2006
07/19/2005	Amanda Fehr	.677	250	0338-R	55.8732 dpm/mL	07/19/2005	07/19/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

1971

0826

National Institute of Standards & Technology

Certificate

Standard Reference Material 4334H
Plutonium-242 Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive plutonium-242 nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard: The SRM ampoule contains plutonium-242 with a total activity of approximately 150 Bq. Plutonium-242 decays by alpha-particle emission. None of the alpha particles escape from the SRM ampoule. During the decay process, X-rays and gamma rays with energies from 10 keV to 160 keV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard: The SRM ampoule contains nitric acid (HNO_3) with a concentration of 3 moles per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling: The SRM should be stored and used at a temperature between 5 °C and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least January 2015. The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation: This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, M.P. Unterweger, Acting Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group. The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program.

RECEIVED 9/4/06 TCW

Lisa R. Karam, Acting Chief
Ionizing Radiation Division

Gaithersburg, Maryland 20899
January 2005

Robert L. Watters, Jr., Chief
Measurement Services Division

*Notes and references are on pages 5 to 7.

1972

RC-5-041-003A

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

RECEIVED

*Notes and references are on pages 5 to 7.

RC-S-041-003B

PROPERTIES OF SRM 4334H

Certified values

Radionuclide	**Plutonium-242**
Reference time	**1200 EST, 07 June 1994 [b]***
Massic activity of the solution [c]	**26.31 Bq·g^{-1}**
Relative expanded uncertainty (k=2)	**0.72%** [d] [e]
Solution density	**(1.105 ± 0.002) g·mL^{-1} at 20 °C** [f]

Uncertified values

Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution mass	Approximately 5.5 g		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O HNO_3 $^{242}Pu^{+6}$	50 3.2 8×10^{-7}	0.81 0.19 2×10^{-7}
Radiological Properties:			
Alpha-particle-emitting impurities	None detected [g] [h]. See table on page 5.		
Beta-particle-emitting impurities	Plutonium-241: (0.092 ± 0.018) Bq·g^{-1} [f] [h]		
Photon-emitting impurities	None detected [i]		
Half lives used	Plutonium-242: (373 500 ± 1100) a [j] [5] Plutonium-241: (14.35 ± 0.10) a [j] [5] Americium-241: (432.2 ± 0.7) a [j] [5]		
Calibration method and measuring instrument(s)	Three 4πα liquid-scintillation counters, a calibrated germanium detector system, and a silicon surface-barrier detector		

*Notes and references are on pages 5 to 7.

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d] [e]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [k]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [m]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [n]
Massic alpha-particle emission rate, corrected for background and decay	Standard deviation of the mean for 80 sets of $4\pi\alpha$ liquid-scintillation measurements (A)	0.05	1.0	0.05
Half life of Pu-242	Standard uncertainty of the half life (A)	0.32 [p]	0.00001 [q]	0.000003
Decay-scheme data	Standard uncertainty of the probability of decay by alpha-particle emission (A)	0.001	1.0	0.001
Extrapolation of alpha-particle-count-rate-versus-energy to zero energy	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Live time [r]	Estimated (B)	0.10	1.0	0.10
Alpha-particle detection efficiency of scintillators	Estimated (B)	0.15	1.0	0.15
Alpha-particle-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Photon-emitting impurities	Limit of detection (B) [s]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)				0.36
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)				0.72

*Notes and references are on pages 5 to 7.

RELATIVE ACTIVITIES OF RADIONUCLIDIC IMPURITIES AT THE REFERENCE TIME [b]

Radionuclide	Half Life (years) [j] [5]	Relative Activity As Determined By	
		LLNL	NIST
Plutonium-242	373 500 ± 1100	1.000 000	1.000 000
Plutonium-241	14.35 ± 0.10	- -	0.0035 ± 0.0004 [t]
Plutonium-240	6 564 ± 11	$^{239}Pu + ^{240}Pu$ <0.000 001 [u]	$^{239}Pu + ^{240}Pu$ 0.000 020 ± 0.000 021 [v]
Plutonium-239	24 110 ± 30		
Plutonium-238	87.7 ± 0.1	$^{238}Pu + ^{241}Am$ <0.000 016 [u]	0.000 009 ± 0.000 016 [v]
Americium-241	432.2 ± 0.7		0.000 000 assumed [t]

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.
Distance from Ampoule (cm): 1 30 100
Approximate Dose Rate (μSv/h): <0.1 - -

[b] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process. The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y. The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty. The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each component of combined standard uncertainty, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic response is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] The stated uncertainty is two times the standard uncertainty.

[g] Estimated limits of detection for alpha-particle-emitting impurities, expressed as massic alpha-particle emission rates (numbers of alpha particles per second per gram), are:
0.003 s−1•g−1 for energies less than 3.1 MeV,
0.03 s−1•g−1 for energies between 3.1 and 4.4 MeV, and
0.003 s−1•g−1 for energies greater than 5.0 MeV.

[h] The plutonium-242 master solution was chemically purified at 1200 EST, 07 June 1994. Americium-241, the daughter of plutonium-241, was removed but has been growing in since that time.

[i] Estimated limits of detection for photon-emitting impurities, expressed as massic photon emission rates (numbers of photons per second per gram), are:
5 × 10-5 s−1•g−1 for energies between 19 and 39 keV,
7 × 10-5 s−1•g−1 for energies between 49 and 92 keV,
2 × 10-5 s−1•g−1 for energies between 106 and 507 keV,
1 × 10-5 s−1•g−1 for energies between 515 and 1456 keV, and
5 × 10-6 s−1•g−1 for energies between 1465 and 2750 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of plutonium-242, plutonium-241, or americium-241.

[j] The stated uncertainty is the standard uncertainty.

[k] Relative standard uncertainty of the input quantity x_i.

[m] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i|\cdot(x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i|\cdot(x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[n] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i|\cdot u(x_i)/y = |\partial y/\partial x_i|\cdot(x_i/y)\cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i|\cdot(x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

DC-S-041-003F

[p] The relative standard uncertainty of $\lambda \cdot t$ is determined by the relative standard uncertainty of λ (i.e., of the half life). The relative standard uncertainty of t is negligible.

[q] $|\partial y/\partial x_i| \cdot (x_i/y) = |\lambda \cdot t|$

[r] The live time is determined by counting the pulses from a gated crystal-controlled oscillator.

[s] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i$ = 100%. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of Pu-242)}•{(Bq of impurity)/(Bq of Pu-242)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

[t] The stated uncertainty is the standard uncertainty. The plutonium-241 activity was calculated from a gamma-ray measurement of the americium-241 ingrowth as of 25 November 1998, assuming that americium-241 was completely removed at the time of chemical purification.

[u] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The value shown is an estimated upper limit based upon background and counting statistics. Measurements were made at the Lawrence Livermore National Laboratory (LLNL) in July of 1994.

[v] Using alpha-particle spectrometry, no alpha-particle emission was detected that could reliably be ascribed to these radionuclides. The stated uncertainty is the standard uncertainty. Measurements were made at the National Institute of Standards and Technology (NIST) in June and July of 1999.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993 (corrected and reprinted, 1995). Available from Global Engineering Documents, 12 Inverness Way East, Englewood, CO 80112, U.S.A. Telephone 1-800-854-7179.

[3] B.N. Taylor and C.E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), January 2005.

RC-S-0411-0036

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0826
Prepared By:	Mary Avins
Carrier Conc:	3.2M HNO3
Reference Date:	06/07/1994
Ampoule Mass (g):	5.2629 g
Uncertainty:	+/- .72 %
LogBook No:	

A Solution Material Info	
Isotope:	Plutonium-242
Prepared By:	Mary Avins
Prep Date:	09/26/2005
Verification Date:	09/26/2005
Expiration Date:	09/26/2006
Primary Code:	0826-A
Dilution(mL):	100 mL
Mass of Parent(g):	5.2629 g
Density(g/mL):	1.0171

Calculations Converting parent activity to dpm/mL | dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(5.2629 g) * (26.31 bq/g) * (60 dpm/bq) / (100 mL) = 83.0801 dpm/mL
(5.2629 g) * (26.31 bq/g) * (60 dpm/bq) / (1.0171 g/mL) / (100 mL) = 81.6801 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

1979

ANALYTICS

0688

1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318 • U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

68509-278

U-232 5 mL Liquid in Flame Sealed Vial

This standard radionuclide source was prepared using an aliquot measured gravimetrically from a master radionuclide solution standard. The master radionuclide solution standard was calibrated by the Department Des Applications Et De La Metrologie Des Rayonnements Ionisants (DAMRI), Paris, France, as Number 23236.

Radionuclide purity and calibration were checked using a germanium gamma spectrometer system. The nuclear decay rate and assay date for this source are given below.

ANALYTICS maintains traceability to the National Institute of Standards and Technology through Measurements Assurance Programs as described in USNRC Reg. Guide 4.15, Revision 1.

ISOTOPE:	U-232
ACTIVITY (dps):	3.779 E3
CALIBRATION DATE:	June 18, 2004 12:00 EST
HALF-LIFE:	68.9 years
RELATIVE EXPANDED UNCERTAINTY (k=2):	3.3%

Impurities: Am-241 <0.15%
U-233 <0.3%

RECEIVED
Tin Laboratory

5.20343 grams 1M HNO_3 solution.

P O NUMBER 3243 RD, Item 1

SOURCE PREPARED BY: M. Dimitrova
M. Dimitrova, Radiochemist

Q A APPROVED: 6/23/04

1980

RC-S-037-081

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0688
Prepared By:	Amanda Fehr
Carrier Conc:	1M HNO3
Reference Date:	06/18/2004
Ampoule Mass (g):	5.20343 g
Uncertainty:	+/- 3.3 %
LogBook No:	RC-S-037-087

A Solution Material Info	
Isotope:	Uranium-232
Prepared By:	Amanda Fehr
Prep Date:	06/25/2004
Verification Date:	06/25/2004
Expiration Date:	06/25/2005
Primary Code:	0688-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.9894 g
Density(g/mL):	1.0276

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / (Ampoule Mass(g) *(Dilution Vol)) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (dps)) * (conversion dpm to dps) / Density / (Ampoule Mass (g) * (Dilution Vol)) = Parent Activity (dpm/g)
(4.9894 g) * (3779 dps) * (59.9 dpm/dps) / (5.20343 g * 100 mL) = 2170.5126 dpm/mL
(4.9894 g) * (3779 dps) * (59.9 dpm/dps) / (1.0276 g/mL)/ (5.20343 g * 100 mL) = 2112.2178 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
06/18/2004	Brenda Burke	2.203	250	0688-B	18.6439 g/mL	06/28/2005	06/28/2006
07/06/2004	Tim Chandler	2.2243	250	0688-C	18.8242 dpm/mL	07/14/2004	07/14/2005
07/06/2004	Amanda Fehr	26.03	1000	0688-D	55.0728 dpm/mL	07/06/2004	07/06/2005
04/19/2005	Amanda Fehr	26.01	1000	0688-E	55.0305 dpm/mL	05/04/2005	05/04/2006

General Engineering Laboratories, LLC
Version 1.0 9/18/2000

1981

Verification for Uranium-232 Standard *0688-E*

Analyst: A.Fehr	**Isotope**	**Value**		**Uncertainty**	
Date: 5/4/05	0688-D N1	2.57	pCi/L	0.364	pCi/L
	0688-D N2	2.40	pCi/L	0.355	pCi/L
	0688-D N3	2.44	pCi/L	0.300	pCi/L
Mean Value (Counting) =	2.470	pCi/L		**1.0046795**	**% of known**
Stdev =	0.088881944	pCi/L			
Target =	2.46	pCi/L			
Lower Limit =	2.292236112	pCi/L			
Upper Limit =	2.647763888	pCi/L			
Rule 1 Pass/Fail	**Pass**	**Pass**		**Pass**	
Two sigma =	0.177763888				
10 % of Mean =	0.247				
Rule 2 (Pass/Fail)	**Pass**				

The analyst prepared three standard verification sources for standard **0688-E** using 0.1 mL for each source. Each standard was combined with 0.1 mL of **U-238** standard **0389-G** and 50 micrograms of Nd carrier in a disposable centrifuge tube. Each standard was diluted to 4 mL with 2 M HCl, and 2 mL of DI water. One mL of TiCl3 was added. Two mL of 48% HF was added to precipitate Nd(and **Uranium**) fluoride. After 30 minutes, each sample was filtered following routine procedures for alpha spectroscopy source preparation. Each source was counted using routine alpha spec procedures. DPM values for **U-232** were calculated by comparison to **U-238** certified values.

Reference SOP RAD M-001

Amanda L. Fehr 5/4/05

Angela L. Johnson 5/6/05

0389

National Institute of Standards & Technology

Certificate

Standard Reference Material 4321C
Natural Uranium Radioactivity Standard

This Standard Reference Material (SRM) consists of radioactive natural uranium nitrate and nitric acid dissolved in 5 mL of distilled water. The solution is contained in a flame-sealed NIST borosilicate-glass ampoule. The SRM is intended for the calibration of alpha-particle counting instruments and for the monitoring of radiochemical procedures.

Radiological Hazard

The SRM ampoule contains uranium-238, uranium-235, and uranium-234 with a total activity of approximately 2600 Bq. Uranium decays by alpha-particle emission. The progeny of uranium-238, uranium-235, and uranium-234 have a total activity of approximately 2600 Bq and decay by alpha- and beta-particle emission. None of the alpha or beta particles escape from the SRM ampoule. During the decay process X-rays and gamma rays with energies from 11 keV to 2.0 MeV are also emitted. Most of these photons escape from the SRM ampoule but their intensities are so small that they do not represent a radiation hazard. Approximate unshielded dose rates at several distances (as of the reference time) are given in note [a]*. The SRM should be used only by persons qualified to handle radioactive material.

Chemical Hazard

The SRM ampoule contains nitric acid (HNO_3) with a concentration of 1 mole per liter of water. The solution is corrosive and represents a health hazard if it comes in contact with eyes or skin. If the ampoule is to be opened to transfer the solution, the recommended procedure is given on page 2. The ampoule should be opened only by persons qualified to handle both radioactive material and strong acid solution.

Storage and Handling

The SRM should be stored and used at a temperature between 5 and 65 °C. The solution in an unopened ampoule should remain stable and homogeneous until at least August 2007.

The ampoule (or any subsequent container) should always be clearly marked as containing radioactive material. If the ampoule is transported it should be packed, marked, labeled, and shipped in accordance with the applicable national, international, and carrier regulations. The solution in the ampoule is a dangerous good (hazardous material) both because of the radioactivity and because of the strong acid.

Preparation

This Standard Reference Material was prepared in the Physics Laboratory, Ionizing Radiation Division, Radioactivity Group, J.M.R. Hutchinson, Group Leader. The overall technical direction and physical measurements leading to certification were provided by L.L. Lucas of the Radioactivity Group.

The support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by N.M. Trahey.

Gaithersburg, Maryland 20899
November 1997

Thomas E. Gills, Chief
Standard Reference Materials Program

*Notes and references are on pages 5 and 6.

RC-S-034-051a

1983

Recommended Procedure for Opening the SRM Ampoule

1) If the SRM solution is to be diluted, it is recommended that the diluting solution have a composition comparable to that of the SRM solution.

2) Wear eye protection, gloves, and protective clothing and work over a tray with absorbent paper in it. Work in a fume hood. In addition to the radioactive material, the solution contains strong acid and is corrosive.

3) Shake the ampoule to wet all of the inside surface of the ampoule. Return the ampoule to the upright position.

4) Check that all of the liquid has drained out of the neck of the ampoule. If necessary, gently tap the neck to speed the process.

5) Holding the ampoule upright, score the narrowest part of the neck with a scribe or diamond pencil.

6) Lightly wet the scored line. This reduces the crack propagation velocity and makes for a cleaner break.

7) Hold the ampoule upright with a paper towel, a wiper, or a support jig. Position the scored line away from you. Using a paper towel or wiper to avoid contamination, snap off the top of the ampoule by pressing the narrowest part of the neck away from you while pulling the tip of the ampoule towards you.

8) Transfer the solution from the ampoule using a pycnometer or a pipet with dispenser handle. NEVER PIPETTE BY MOUTH.

9) Seal any unused SRM solution in a flame-sealed glass ampoule, if possible, to minimize the evaporation loss.

See also reference [4]*.

*Notes and references are on pages 5 and

RC-5-03

1984

PROPERTIES OF SRM 4321C

(Certified values are shown in bold type)

Source identification number	NIST SRM 4321C		
Physical Properties:			
Source description	Liquid in flame-sealed NIST borosilicate-glass ampoule		
Ampoule specifications	Body outside diameter Wall Thickness Barium content Lead-oxide content Other heavy elements	(16.5 ± 0.5) mm (0.60 ± 0.04) mm Less than 2.5% Less than 0.02% Trace quantities	
Solution density	**(1.053 ± 0.001) g·mL^{-1} at 21.4 °C** [b]*		
Solution mass	**(5.258 ± 0.002) g** [b]		
Chemical Properties:			
Solution composition	Chemical Formula	Concentration (mol·L^{-1})	Mass Fraction (g·g^{-1})
	H_2O HNO_3 $UO_2(NO_3)_2$	53 1.0 0.09	0.91 0.06 0.03
Radiological Properties:			
Radionuclide	**Natural Uranium (Mixture of U-238, U-235, and U-234)**		
Reference time	**1200 EST, 1 August 1997**		
Massic activity of the solution [c]	**U-238: 242.0 Bq·g^{-1}** **U-235: 11.14 Bq·g^{-1}** **U-234: 233.1 Bq·g^{-1}**		
Relative expanded uncertainty (k=2)	**U-238: 0.60%** [d] [e] **U-235: 0.62%** [d] [e] **U-234: 0.98%** [d] [e]		
Mass fraction of uranium	**(0.01960 ± 0.00010) g·g^{-1}** [b]		
Photon-emitting impurities	None detected [f]		
Half lives used	Uranium-238: (4.468 ± 0.003) × 10^9 a [g] Uranium-235: (7.038 ± 0.005) × 10^8 a [g] Uranium-234: (2.455 ± 0.006) × 10^5 a [g]		
Measuring instruments	Mass spectrometer, silicon surface-barrier detector, and 4π(α+ß) liquid-scintillation counting systems.		

*Notes and references are on pages 5 and 6.

RC-5-034-051c

EVALUATION OF THE UNCERTAINTY OF THE MASSIC ACTIVITY [d]*

Input Quantity x_i, the source of uncertainty (and individual uncertainty components where appropriate)	Method Used To Evaluate $u(x_i)$, the standard uncertainty of x_i (A) denotes evaluation by statistical methods (B) denotes evaluation by other methods	Relative Uncertainty Of Input Quantity, $u(x_i)/x_i$, (%) [h]	Relative Sensitivity Factor, $\lvert\partial y/\partial x_i\rvert \cdot (x_i/y)$ [i]	Relative Uncertainty Of Output Quantity, $u_i(y)/y$, (%) [j]
Isotopic uranium atom fraction in SRM 960	Standard deviation of the mean for repeated mass-spectrometric measurements (A)	U-238: 0.001 U-235: 0.07 U-234: 0.31	1.0 1.0 1.0	0.001 0.07 0.31
Half life	Standard uncertainty of the half life (A)	U-238: 0.07 U-235: 0.07 U-234: 0.25	1.0 1.0 1.0	0.07 0.07 0.25
Uranium mass fraction in SRM 960	Certificate value (B)	0.003	1.0	0.003
Quantitative dissolution	Estimated (B)	0.25	1.0	0.25
Gravimetric measurements	Estimated (B)	0.10	1.0	0.10
Photon-emitting impurities	Limit of detection (B) [k]	100.	0.001	0.10
Relative Combined Standard Uncertainty of the Output Quantity, $u_c(y)/y$, (%)			U-238: U-235: U-234:	0.30 0.31 0.49
Coverage Factor, k				x 2
Relative Expanded Uncertainty of the Output Quantity, U/y, (%)			U-238: U-235: U-234:	0.60 0.62 0.98

*Notes and references are on pages 5 and

RC-S-034-

NOTES

[a] The Sievert is the SI unit for dose equivalent. See reference [1]. One μSv is equal to 0.1 mrem.

Distance from Ampoule (cm):	1	30	100
Approximate Dose Rate (μSv/h):	<0.1	-	-

[b] The stated uncertainty is two times the standard uncertainty.

[c] **Massic activity** is the preferred name for the quantity activity divided by the total mass of the sample. See reference [1].

[d] The reported value, y, of massic activity (activity per unit mass) at the reference time was not measured directly but was derived from measurements and calculations of other quantities. This can be expressed as $y = f(x_1, x_2, x_3, \ldots x_n)$, where f is a mathematical function derived from the assumed model of the measurement process.

The value, x_i, used for each input quantity i has a **standard uncertainty**, $u(x_i)$, that generates a corresponding uncertainty in y, $u_i(y) \equiv |\partial y/\partial x_i| \cdot u(x_i)$, called a **component of combined standard uncertainty** of y.

The **combined standard uncertainty** of y, $u_c(y)$, is the positive square root of the sum of the squares of the components of combined standard uncertainty.

The combined standard uncertainty is multiplied by a **coverage factor** of $k = 2$ to obtain U, the **expanded uncertainty** of y.

Since it can be assumed that the possible estimated values of the massic activity are approximately normally distributed with approximate standard deviation $u_c(y)$, the unknown value of the massic activity is believed to lie in the interval $y \pm U$ with a level of confidence of approximately 95 percent.

For further information on the expression of uncertainties, see references [2] and [3].

[e] The value of each standard uncertainty component, and hence the value of the expanded uncertainty itself, is a best estimate based upon all available information, but is only approximately known. That is to say, the "uncertainty of the uncertainty" is large and not well known. This is true for uncertainties evaluated by statistical methods (e.g., the relative standard deviation of the standard deviation of the mean for the massic count rate is approximately 50%) and for uncertainties evaluated by other methods (which could easily be over estimated or under estimated by substantial amounts). The unknown value of the expanded uncertainty is believed to lie in the interval $U/2$ to $2U$ (i.e., within a factor of 2 of the estimated value).

[f] Estimated limits of detection for photon-emitting impurities are:
1.4 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 8 and 59 keV,
1.1 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 67 and 88 keV,
0.5 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 102 and 197 keV,
0.3 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 205 and 762 keV,
0.2 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 770 and 996 keV, and
0.1 $\gamma \cdot s^{-1} \cdot g^{-1}$ for energies between 1006 and 1900 keV,
provided that the photons are separated in energy by 4 keV or more from photons emitted in the decay of uranium-238, uranium-235, uranium-234, or their progeny.

[g] The stated uncertainty is the standard uncertainty. See reference [5].

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[h] Relative standard uncertainty of the input quantity x_i.

[i] The relative change in the output quantity y divided by the relative change in the input quantity x_i. If $|\partial y/\partial x_i| \cdot (x_i/y) = 1.0$, then a 1% change in x_i results in a 1% change in y. If $|\partial y/\partial x_i| \cdot (x_i/y) = 0.05$, then a 1% change in x_i results in a 0.05% change in y.

[j] Relative component of combined standard uncertainty of output quantity y, rounded to two significant figures or less. The relative component of combined standard uncertainty of y is given by $u_i(y)/y \equiv |\partial y/\partial x_i| \cdot u(x_i)/y = |\partial y/\partial x_i| \cdot (x_i/y) \cdot u(x_i)/x_i$. The numerical values of $u(x_i)/x_i$, $|\partial y/\partial x_i| \cdot (x_i/y)$, and $u_i(y)/y$, all dimensionless quantities, are listed in columns 3, 4, and 5, respectively. Thus, the value in column 5 is equal to the value in column 4 multiplied by the value in column 3. The input quantities are independent, or very nearly so. Hence the covariances are zero or negligible.

[k] The standard uncertainty for each undetected impurity that might reasonably be expected to be present is estimated to be equal to the estimated limit of detection for that impurity, i.e. $u(x_i)/x_i = 100\%$. $|\partial y/\partial x_i| \cdot (x_i/y)$ = {(response per Bq of impurity)/(response per Bq of U-238)}•{(Bq of impurity)/(Bq of U-238)}. Thus $u_i(y)/y$ is the relative change in y if the impurity were present with a massic activity equal to the estimated limit of detection.

REFERENCES

[1] International Organization for Standardization (ISO), *ISO Standards Handbook - Quantities and Units*, 1993. Available from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, U.S.A. 1-212-642-4900.

[2] International Organization for Standardization (ISO), *Guide to the Expression of Uncertainty in Measurement*, 1993. Available from the American National Standards Institute, 11 West 42nd Street, New York, NY 10036, U.S.A. 1-212-642-4900. (Listed under ISO miscellaneous publications as "ISO Guide to the Expression 1993".)

[3] B. N. Taylor and C. E. Kuyatt, *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*, NIST Technical Note 1297, 1994. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20407, U.S.A.

[4] National Council on Radiation Protection and Measurements Report No. 58, *A Handbook of Radioactivity Measurements Procedures*, Second Edition, 1985. Available from the National Council on Radiation Protection and Measurements, 7910 Woodmont Avenue, Bethesda, MD 20814 U.S.A.

[5] Evaluated Nuclear Structure Data File (ENSDF), August 1997.

1988

RC-S-03

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0389
Prepared By:	Angela Albee
Carrier Conc:	0.5 M HNO3
Reference Date:	08/01/1997
Ampoule Mass (g):	5 g
Uncertainty:	+/- .6 %
LogBook No:	RC S 034 051

A Solution Material Info	
Isotope:	Uranium-238
Prepared By:	Angela Albee
Prep Date:	07/31/2001
Verification Date:	07/20/2005
Expiration Date:	07/20/2006
Primary Code:	0389-A
Dilution(mL):	100 mL
Mass of Parent(g):	4.6846 g
Density(g/mL):	1.0142

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (bq/g)) * (conversion dpm to bq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(4.6846 g) * (242 bq/g) * (60 dpm/bq) / (100 mL) = 680.2039 dpm/mL
(4.6846 g) * (242 bq/g) * (60 dpm/bq) / (1.0142 g/mL) / (100 mL) = 670.6699 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
07/31/2001	Lonnie Morris	20.2428	250	0389-B	54.305 dpm/mL	07/01/2002	07/01/2003
10/31/2002	Lonnie Morris	8.2354	100	0389-C	55.232 dpm/mL	10/31/2002	10/31/2003
02/12/2003	Angela Albee	20.2039	250	0389-D	54.201 dpm/mL	02/02/2004	02/02/2005
01/13/2004	Amanda Fehr	8.2215	100	0389-E	55.14 dpm/mL	01/13/2004	01/13/2005
06/17/2004	Brenda Burke	8.505	250	0389-F	22.8162 dpm/mL	07/27/2005	07/27/2006
07/22/2004	Amanda Fehr	20.12	250	0389-G	53.9755 dpm/mL	07/27/2004	07/27/2005
12/17/2004	Brenda Burke	.6296	100	0389-H	4.2225 dpm/mL	12/20/2004	12/20/2005
07/17/2005	Mary Avins	8.009	100	0389-I	53.714 dpm/mL	07/17/2005	07/17/2006

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1989

RUNLOGS

1990

Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145579007	SAMPLE	BJB1	1095		11-OCT-2005 14:17	468542	DONE		
145579008	SAMPLE	BJB1	1096		11-OCT-2005 14:17	468542	DONE		
145739001	SAMPLE	BJB1	1097		11-OCT-2005 14:17	468542	DONE		
145739002	SAMPLE	BJB1	1099		11-OCT-2005 14:17	468542	DONE		
145739003	SAMPLE	BJB1	1100		11-OCT-2005 14:17	468542	DONE		
145739004	SAMPLE	BJB1	1101		11-OCT-2005 14:17	468542	DONE		
145739005	SAMPLE	BJB1	1102		11-OCT-2005 14:17	468542	DONE		
145739006	SAMPLE	BJB1	1103		11-OCT-2005 14:17	468542	DONE		
1200949862	MB	BJB1	1104		11-OCT-2005 14:17	468542	DONE		
1200949863	DUP	BJB1	1105		11-OCT-2005 14:17	468542	DONE		
1200949864	LCS	BJB1	1106		11-OCT-2005 14:17	468542	DONE		
145579001	SAMPLE	BJB1	1037		11-OCT-2005 18:25	468542	DONE		
145579002	SAMPLE	BJB1	1038		11-OCT-2005 18:25	468542	DONE		
145579003	SAMPLE	BJB1	1039		11-OCT-2005 18:25	468542	DONE		
145579004	SAMPLE	BJB1	1040		11-OCT-2005 18:25	468542	DONE		
145579005	SAMPLE	BJB1	1041		11-OCT-2005 18:25	468542	DONE		
145579006	SAMPLE	BJB1	1042		11-OCT-2005 18:25	468542	DONE		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145579002	SAMPLE	BJB1	1037		10-OCT-2005 20:36	468544	DONE		
145579004	SAMPLE	BJB1	1039		10-OCT-2005 20:36	468544	DONE		
145579005	SAMPLE	BJB1	1067		11-OCT-2005 14:16	468544	DONE		
145579006	SAMPLE	BJB1	1068		11-OCT-2005 14:16	468544	DONE		
145579007	SAMPLE	BJB1	1069		11-OCT-2005 14:16	468544	DONE		
145579008	SAMPLE	BJB1	1070		11-OCT-2005 14:16	468544	DONE		
145739002	SAMPLE	BJB1	1072		11-OCT-2005 14:16	468544	DONE		
145739003	SAMPLE	BJB1	1073		11-OCT-2005 14:16	468544	DONE		
145739004	SAMPLE	BJB1	1074		11-OCT-2005 14:16	468544	DONE		
145739005	SAMPLE	BJB1	1075		11-OCT-2005 14:16	468544	DONE		
145739006	SAMPLE	BJB1	1076		11-OCT-2005 14:16	468544	DONE		
1200949865	MB	BJB1	1083		11-OCT-2005 14:17	468544	DONE		
1200949867	LCS	BJB1	1085		11-OCT-2005 14:17	468544	DONE		
145579001	SAMPLE	BJB1	1057		12-OCT-2005 17:01	468544	DONE		
145579003	SAMPLE	BJB1	1059		12-OCT-2005 17:01	468544	DONE		
145739001	SAMPLE	BJB1	1062		12-OCT-2005 17:01	468544	DONE		
1200949866	DUP	BJB1	1064		12-OCT-2005 17:01	468544	DONE		

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145579001	SAMPLE	BJB1	1018		10-OCT-2005 20:36	468545	DONE		
145579003	SAMPLE	BJB1	1020		10-OCT-2005 20:36	468545	DONE		
145579004	SAMPLE	BJB1	1021		10-OCT-2005 20:36	468545	DONE		
145579005	SAMPLE	BJB1	1022		10-OCT-2005 20:36	468545	DONE		
145579006	SAMPLE	BJB1	1023		10-OCT-2005 20:36	468545	DONE		
145579007	SAMPLE	BJB1	1024		10-OCT-2005 20:36	468545	DONE		
145579008	SAMPLE	BJB1	1025		10-OCT-2005 20:36	468545	DONE		
145739001	SAMPLE	BJB1	1026		10-OCT-2005 20:36	468545	DONE		
145739002	SAMPLE	BJB1	1027		10-OCT-2005 20:36	468545	DONE		
145739003	SAMPLE	BJB1	1028		10-OCT-2005 20:36	468545	DONE		
145739004	SAMPLE	BJB1	1029		10-OCT-2005 20:36	468545	DONE		
145739005	SAMPLE	BJB1	1030		10-OCT-2005 20:36	468545	DONE		
145739006	SAMPLE	BJB1	1031		10-OCT-2005 20:36	468545	DONE		
1200949868	MB	BJB1	1032		10-OCT-2005 20:36	468545	DONE		
1200949869	DUP	BJB1	1033		10-OCT-2005 20:36	468545	DONE		
1200949870	LCS	BJB1	1036		10-OCT-2005 20:36	468545	DONE		
145579002	SAMPLE	BJB1	1024		13-OCT-2005 14:33	468545	DONE		

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General Engineering Laboratories, LLC

Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145782003	SAMPLE	MJH1	GAMMA16		13-OCT-2005 07:44	465316	DONE	2L_MB	15-JUL-2005
145579001	SAMPLE	MJH1	GAMMA1		13-OCT-2005 10:40	465316	DONE	2L_MB	18-JAN-2005
145579002	SAMPLE	MJH1	GAMMA2		13-OCT-2005 10:41	465316	DONE	2L_MB	18-JAN-2005
145579003	SAMPLE	MJH1	GAMMA3		13-OCT-2005 10:41	465316	DONE	2L_MB	24-MAR-2005
145579004	SAMPLE	MJH1	GAMMA6		13-OCT-2005 10:41	465316	DONE	2L_MB	06-DEC-2004
145579005	SAMPLE	MJH1	GAMMA7		13-OCT-2005 10:42	465316	DONE	2L_MB	03-JAN-2005
145579006	SAMPLE	MJH1	GAMMA8		13-OCT-2005 10:42	465316	DONE	2L_MB	23-SEP-2005
145579007	SAMPLE	MJH1	GAMMA9		13-OCT-2005 10:43	465316	DONE	2L_MB	08-JUL-2005
145579008	SAMPLE	MJH1	GAMMA10		13-OCT-2005 10:43	465316	DONE	2L_MB	18-JAN-2005
145739001	SAMPLE	MJH1	GAMMA11		13-OCT-2005 10:43	465316	DONE	2L_MB	18-JAN-2005
145739002	SAMPLE	MJH1	GAMMA12		13-OCT-2005 10:44	465316	DONE	2L_MB	03-JAN-2005
145739003	SAMPLE	MJH1	GAMMA15		13-OCT-2005 10:44	465316	DONE	2L_MB	09-JUL-2005
145739004	SAMPLE	MJH1	GAMMA17		13-OCT-2005 10:45	465316	DONE	2L_MB	06-DEC-2004
145739005	SAMPLE	MJH1	GAMMA4		13-OCT-2005 11:40	465316	DONE	2L_MB	18-JAN-2005
1200942443	LCS	MJH1	WELL		13-OCT-2005 11:40	465316	DONE	2L_MB	06-DEC-2004
145739006	SAMPLE	MJH1	GAMMA1		13-OCT-2005 14:57	465316	DONE	2L_MB	18-JAN-2005
145782001	SAMPLE	MJH1	GAMMA7		13-OCT-2005 14:58	465316	DONE	2L_MB	03-JAN-2005
145782002	SAMPLE	MJH1	GAMMA8		13-OCT-2005 14:58	465316	DONE	2L_MB	23-SEP-2005
145782004	SAMPLE	MJH1	GAMMA12		13-OCT-2005 14:59	465316	DONE	2L_MB	03-JAN-2005
1200942441	MB	MJH1	GAMMA9		13-OCT-2005 14:59	465316	DONE	2L_MB	08-JUL-2005
1200942442	DUP	MJH1	GAMMA15		13-OCT-2005 15:00	465316	DONE	2L_MB	09-JUL-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145579002	SAMPLE	EXW1	PIC5A		10-OCT-2005 23:45	467348	DONE	Tuffryn Filter	01-OCT-2005
145579003	SAMPLE	EXW1	PIC5B		10-OCT-2005 23:45	467348	DONE	Tuffryn Filter	01-OCT-2005
145579006	SAMPLE	EXW1	PIC6A		10-OCT-2005 23:45	467348	DONE	Tuffryn Filter	01-OCT-2005
145579007	SAMPLE	EXW1	PIC1B		11-OCT-2005 13:07	467348	DONE	Tuffryn Filter	02-NOV-2004
1200947136	LCS	EXW1	PIC1A		11-OCT-2005 14:23	467348	DONE	Tuffryn Filter	02-NOV-2004
1200947135	MS	EXW1	PIC6D		11-OCT-2005 14:24	467348	DONE	Tuffryn Filter	01-OCT-2005
145892001	SAMPLE	EXW1	PIC5A		11-OCT-2005 14:24	467348	DONE	Tuffryn Filter	01-OCT-2005
145892002	SAMPLE	EXW1	PIC5B		11-OCT-2005 14:24	467348	DONE	Tuffryn Filter	01-OCT-2005
145892004	SAMPLE	EXW1	PIC5D		11-OCT-2005 14:24	467348	DONE	Tuffryn Filter	01-OCT-2005
1200947133	MB	EXW1	PIC6A		11-OCT-2005 14:24	467348	DONE	Tuffryn Filter	01-OCT-2005
145579001	SAMPLE	EXW1	PIC1B		13-OCT-2005 09:54	467348	DONE	Tuffryn Filter	02-NOV-2004
145579004	SAMPLE	EXW1	PIC1C		13-OCT-2005 09:55	467348	DONE	Tuffryn Filter	02-NOV-2004
145579005	SAMPLE	EXW1	PIC1D		13-OCT-2005 09:55	467348	DONE	Tuffryn Filter	02-NOV-2004
145579008	SAMPLE	EXW1	PIC2A		13-OCT-2005 09:55	467348	DONE	Tuffryn Filter	02-NOV-2004
145782001	SAMPLE	EXW1	PIC2B		13-OCT-2005 09:55	467348	DONE	Tuffryn Filter	02-NOV-2004
145782002	SAMPLE	EXW1	PIC2C		13-OCT-2005 09:56	467348	DONE	Tuffryn Filter	02-NOV-2004
145782003	SAMPLE	EXW1	PIC2D		13-OCT-2005 09:56	467348	DONE	Tuffryn Filter	02-NOV-2004
145782004	SAMPLE	EXW1	PIC3A		13-OCT-2005 09:57	467348	DONE	Tuffryn Filter	02-NOV-2004
145892003	SAMPLE	EXW1	PIC3B		13-OCT-2005 09:57	467348	DONE	Tuffryn Filter	02-NOV-2004
1200947134	DUP	EXW1	PIC3C		13-OCT-2005 09:57	467348	DONE	Tuffryn Filter	02-NOV-2004

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145267002	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 01:38	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145312007	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 01:55	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145312008	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 02:12	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145452004	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 02:29	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145457009	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 02:46	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145457010	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 03:03	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145457012	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 03:19	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145579005	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 03:36	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145579006	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 03:53	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145579007	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 04:10	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145579008	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 04:27	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145739004	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 04:44	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145739005	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 05:01	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145739006	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 05:18	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145782003	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 05:35	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145782004	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 05:52	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145892003	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 06:09	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
145892004	SAMPLE	BXF1	LSCBLUE		02-OCT-2005 06:26	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
1200942133	DUP	BXF1	LSCBLUE		02-OCT-2005 06:59	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
1200942134	MS	BXF1	LSCBLUE		02-OCT-2005 07:16	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
1200942135	LCS	BXF1	LSCBLUE		02-OCT-2005 07:33	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005
1200942132	MB	BXF1	LSCBLUE		08-OCT-2005 10:52	465185	DONE	5ml DI/10ml ultima gold	20-JUN-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145267002	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 00:44	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145312007	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 02:45	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145312008	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 04:46	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145452004	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 06:47	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145457009	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 12:29	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145457010	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 14:30	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145457012	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 16:31	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145579005	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 18:32	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145579006	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 20:33	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145579007	SAMPLE	MXP1	LSCYELLOW		12-OCT-2005 22:34	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145579008	SAMPLE	MXP1	LSCYELLOW		13-OCT-2005 00:35	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145739004	SAMPLE	MXP1	LSCYELLOW		13-OCT-2005 03:11	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145739005	SAMPLE	MXP1	LSCYELLOW		13-OCT-2005 05:12	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145739006	SAMPLE	MXP1	LSCYELLOW		13-OCT-2005 07:13	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145782003	SAMPLE	MXP1	LSCYELLOW		13-OCT-2005 09:14	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
145782004	SAMPLE	MXP1	LSCYELLOW		13-OCT-2005 11:15	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
1200947555	MB	MXP1	LSCYELLOW		13-OCT-2005 13:16	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
1200947556	DUP	MXP1	LSCYELLOW		13-OCT-2005 15:17	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
1200947557	MS	MXP1	LSCYELLOW		13-OCT-2005 17:18	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005
1200947558	LCS	MXP1	LSCYELLOW		13-OCT-2005 19:19	467509	DONE	13mL Trisafe/10ml sample	08-APR-2005

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Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
145452001	SAMPLE	CXO1	LB4100D3		18-OCT-2005 13:21	471889	DONE	2 inch Planchett	18-AUG-2005
145452004	SAMPLE	CXO1	LB4100D4		18-OCT-2005 13:21	471889	DONE	2 inch Planchett	18-AUG-2005
145457001	SAMPLE	CXO1	LB4100A1		18-OCT-2005 13:50	471889	DONE	2 inch Planchett	18-AUG-2005
145457002	SAMPLE	CXO1	LB4100A2		18-OCT-2005 13:50	471889	DONE	2 inch Planchett	18-AUG-2005
145579005	SAMPLE	CXO1	LB4100H1		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
145579006	SAMPLE	CXO1	LB4100H2		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
145579007	SAMPLE	CXO1	LB4100H3		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
145579008	SAMPLE	CXO1	LB4100H4		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
1200957879	MB	CXO1	LB4100E1		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
1200957880	DUP	CXO1	LB4100E2		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
1200957881	MS	CXO1	LB4100E3		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
145579002	SAMPLE	CXO1	LB4100F1		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
145579003	SAMPLE	CXO1	LB4100F2		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
145579004	SAMPLE	CXO1	LB4100F3		18-OCT-2005 14:23	471889	DONE	2 inch Planchett	18-AUG-2005
145457012	SAMPLE	CXO1	LB4100B3		18-OCT-2005 14:28	471889	DONE	2 inch Planchett	18-AUG-2005
145579001	SAMPLE	CXO1	LB4100B4		18-OCT-2005 14:28	471889	DONE	2 inch Planchett	18-AUG-2005
1200957882	LCS	CXO1	LB4100C2		18-OCT-2005 14:50	471889	DONE	2 inch Planchett	18-AUG-2005
145457009	SAMPLE	CXO1	LB4100C1		19-OCT-2005 15:36	471889	DONE	2 inch Planchett	18-AUG-2005
145457010	SAMPLE	CXO1	LB4100C2		19-OCT-2005 15:36	471889	DONE	2 inch Planchett	18-AUG-2005

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General Engineering Laboratories, LLC

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Memorandum

Date: 03/01/06

To: Bart Vanden Plas

From: Allison Evans

Subject: GC/MS Organic Data Review and Validation – LANL WQH
COC: WG-03621-GE, WG-03609-GE, WG-03616-GE
SDG: 154614
Laboratory: GEL
Analysis: VOCs

Data Qualifiers (see following sections for detailed explanations)

Sample GU06010G8WT01	The result for 1,4-dioxane should be **qualified R, V7b** because the initial calibration response factor was < 0.01. The result for carbon disulfide should be **qualified R, VWQ5** due to a negative initial calibration intercept with an absolute value > 3X the MDL. The results for acetonitrile and isobutyl alcohol should be **qualified UJ, V7b** due to initial calibration response factors < 0.05 but > 0.01. The result for acrolein should be **qualified UJ, V7b** due to an initial calibration slope < 0.05 but > 0.01, **UJ, VWQ9** due to a CCV with a percent difference > 40% with a negative bias, and **UJ, V12b** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU06010G8WT01-FTB	The result for 1,4-dioxane should be **qualified R, V7b** because the initial calibration response factor was < 0.01. The result for carbon disulfide should be **qualified R, VWQ5** due to a negative initial calibration intercept with an absolute value > 3X the MDL. The results for acetonitrile and isobutyl alcohol should be **qualified UJ, V7b** due to initial calibration response factors < 0.05 but > 0.01. The result for acrolein should be **qualified UJ, V7b** due to an initial calibration slope < 0.05 but > 0.01, **UJ, VWQ9** due to a CCV with a percent difference > 40% with a negative bias, and **UJ, V12b** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU06010GMC401	The result for 1,4-dioxane should be **qualified J-, V7b** because the initial calibration response factor was < 0.01. The result for carbon disulfide should be **qualified R, VWQ5** due to a negative initial calibration intercept with an absolute value > 3X the MDL.

	The results for acetonitrile and isobutyl alcohol should be **qualified UJ, V7b** due to initial calibration response factors < 0.05 but > 0.01. The result for acrolein should be **qualified UJ, V7b** due to an initial calibration slope < 0.05 but > 0.01, **UJ, VWQ9** due to a CCV with a percent difference > 40% with a negative bias, and **UJ, V12b** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU06010GMC401-FB	The result for 1,4-dioxane should be **qualified R, V7b** because the initial calibration response factor was < 0.01. The result for carbon disulfide should be **qualified R, VWQ5** due to a negative initial calibration intercept with an absolute value > 3X the MDL. The results for acetonitrile and isobutyl alcohol should be **qualified UJ, V7b** due to initial calibration response factors < 0.05 but > 0.01. The result for acrolein should be **qualified UJ, V7b** due to an initial calibration slope < 0.05 but > 0.01, **UJ, VWQ9** due to a CCV with a percent difference > 40% with a negative bias, and **UJ, V12b** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU06010GMC401-FTB	The result for 1,4-dioxane should be **qualified R, V7b** because the initial calibration response factor was < 0.01. The result for carbon disulfide should be **qualified R, VWQ5** due to a negative initial calibration intercept with an absolute value > 3X the MDL. The results for acetonitrile and isobutyl alcohol should be **qualified UJ, V7b** due to initial calibration response factors < 0.05 but > 0.01. The result for acrolein should be **qualified UJ, V7b** due to an initial calibration slope < 0.05 but > 0.01, **UJ, VWQ9** due to a CCV with a percent difference > 40% with a negative bias, and **UJ, V12b** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU0601G14R101	The result for 1,4-dioxane should be **qualified R, V7b** because the initial calibration response factor was < 0.01. The result for carbon disulfide should be **qualified R, VWQ5** due to a negative initial calibration intercept with an absolute value > 3X the MDL. The results for acetonitrile and isobutyl alcohol should be **qualified UJ, V7b** due to initial calibration response factors < 0.05 but > 0.01. The result for acrolein should be **qualified UJ, V7b** due to an initial calibration slope < 0.05 but > 0.01, **UJ, VWQ9** due to a CCV with a percent difference > 40% with a negative bias, and **UJ, V12b** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU0601G14R101-FTB	The result for 1,4-dioxane should be **qualified R, V7b** because the initial calibration response factor was < 0.01. The result for carbon disulfide should be **qualified R, VWQ5** due to a negative initial calibration intercept with an absolute value > 3X the MDL.

The results for acetonitrile and isobutyl alcohol should be **qualified UJ, V7b** due to initial calibration response factors < 0.05 but > 0.01.
The result for acrolein should be **qualified UJ, V7b** due to an initial calibration slope < 0.05 but > 0.01, **UJ, VWQ9** due to a CCV with a percent difference > 40% with a negative bias, and **UJ, V12b** because the LCS recovery was < the lower acceptance limit but > 10%.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using method EPA 8260B (VOCs). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-NNSA Service Center Model Data Validation Procedure Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding time and properly preserved.

Instrument Tune

All instrument tune requirements were met.

Calibration

All initial and continuing calibration QC acceptance criteria were met with the following exceptions. The initial calibration response factor (RF) for 1,4-dioxane was < 0.01. 1,4-dioxane was detected in sample GU06010GMC401, and should therefore be **qualified J-.** 1,4-dioxane was not detected in the other samples, therefore the sample results should be **qualified R.** The initial calibration intercept for carbon disulfide was negative with an absolute value > 3X the MDL. Carbon disulfide was not detected in any of the samples, therefore all the sample results should be **qualified R**. The initial calibration RFs for isobutyl alcohol, acrolein, and acetonitrile were < 0.05 but > 0.01. The compounds were not detected in the samples, therefore the sample results should be **qualified UJ.** The percent difference (%D) for acrolein in the CCV associated with the sample was > 40% with a negative bias. Acrolein was not detected in the samples, therefore all sample results should be **qualified UJ.** The percent differences (%D) for methylene chloride, carbon tetrachloride, 2-chloro-1,3-butadiene, and vinyl acetate in the CCVs associated with the samples were > 20% with a positive bias. The compounds were not detected in the samples and should not be qualified.

The matrix spike and matrix spike duplicate were re-analyzed because the original runs were after the tune window expired. The %Ds for five compounds in the associated CCVs were > 20% with a positive bias. The %Ds for acrolein, isobutyl alcohol, and 1,4-dioxane in the associated CCVs were > 20% with a negative bias. The recoveries (%R) of these compounds were within the acceptance limits in both the MS and MSD, therefore based on professional judgment, no results should be qualified.

Blanks

Because the MS and MSD were rerun on a different day, two method blanks (MBs) were associated with the batch. Both method blanks met all acceptance criteria.

The field blank (FB) and field trip blanks (FTB) met all acceptance criteria, with the following exceptions. Acetone and 2-butanone were detected in FB GU06010GMC401-FB, but not in any other samples, therefore no results should be qualified.

Surrogates

All surrogate recoveries met the acceptance criteria.

Internal Standards

All internal standards met the acceptance criteria.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS and MSD met all acceptance criteria.

Laboratory Control Sample (LCS)

Because the MS and MSD were rerun on a different day, four LCSs were associated with this batch. LCS 1201026795 and 1201028020 were associated with the MS and MSD only. The recoveries for dichlorodifluoromethane and acrolein were < the lower acceptance limits. The MS and MSD met all acceptance criteria, therefore based on professional judgment; no sample results should be qualified.

LCS 1201025326 and 121025327 were associated with the sample analyses. All LCS acceptance criteria were met, with the following exception. The %R for acrolein was < the lower acceptance limit but > 10%. Up to five LCS %R infractions are allowed since 78 LCS analytes were reported, however, because the CCV results were also low, the acrolein results should be **qualified UJ.**

Detection Limits/Dilutions

Detection limits were reported in the data package. The samples were not diluted.

Tentatively Identified Compounds (TICs)

Analysis for TICs was requested and reported but not assessed for data validation.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 03/03/06

To: Bart Vanden Plas

From: Allison Evans

Subject: Radiometric Data Review and Validation – LANL WQH
COC: WG-03621-GE, WG-03609-GE, WG-03616-GE
SDG: 154614
Laboratory: GEL
Analysis: RAD

Data Qualifiers (see following sections for detailed explanations)

Sample GU06010GMC401-FB	The result tritium should be **qualified BD, R5** due to a reported value < the MDC or < the 2-sigma TPU.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using method EPA 906.0 (tritium). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This data validation was performed according to DOE-NNSA Service Center Model Data Validation Procedure Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding time and properly preserved.

Calibration

The case narratives stated that the instrument used was properly calibrated.

Quantification

All sample results which were < the associated 2-sigma total propagated uncertainty (TPU) and/or < the associated minimum detectable concentration (MDC) should be **qualified BD**.

Blanks

The method blank met all acceptance criteria.

Tracer/Carrier Recovery

All tracer/carrier recoveries met QC acceptance criteria.

Matrix Spike (MS)

The MS recovery met the acceptance criteria. The spike analysis was performed on a sample from another LANL WQH SDG. No sample results should be qualified.

Laboratory Replicate

All replicate error ratio (RER) acceptance criteria were met. The replicate analysis was performed on samples from another LANL WQH SDG. No sample results should be qualified.

Laboratory Control Sample

All LCS recoveries met acceptance criteria.

Detection Limits/Dilutions

Detection limits were properly reported.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 03/02/06

To: Bart Vanden Plas

From: Allison Evans

Subject: Inorganic Data Review and Validation – LANL WQH
COC: WG-03621-GE, WG-03609-GE, WG-03616-GE
SDG: 154614
Laboratory: GEL
Analysis: Metals

Data Qualifiers (see following sections for detailed explanations)

Sample GF06010G8WT01	The result for Cr should be **qualified 5.75U, I4a** due to blank contamination. The result for Ni should be **qualified 3.20U, I4a** due to blank contamination.
Sample GF0601G14R101	The result for Cr should be **qualified 5.75U, I4a** due to blank contamination. The result for Ni should be **qualified 3.20U, I4a** due to blank contamination.
Sample GU06010G8WT01	The result for Cr should be **qualified 5.75U, I4a** due to blank contamination. The result for Ni should be **qualified 3.20U, I4a** due to blank contamination.
Sample GU0601G14R101	The result for Cr should be **qualified 5.75U, I4a** due to blank contamination. The result for Ni should be **qualified 3.20U, I4a** due to blank contamination.
Sample GU06010GMC401-FB	The result for SiO2 should be **qualified J-, IWQ6** due to a negative initial calibration intercept with an absolute value > 3X the MDL. The result for Na should be qualified **432U, I4a** due to blank contamination.

Summary/General Comments

All samples were prepared and analyzed with approved procedures using methods EPA 6010B (ICP-AES), EPA 6020 (ICP-MS), EPA 245.2 (CVAA mercury), and SM 2340B (Hardness by calculation). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-NNSA Service Center Model Data Validation Procedure Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times.

ICP-MS Instrument Tune

The ICPMS tunes met all the acceptance criteria.

Calibration

All initial and continuing calibration acceptance criteria were met, with the following exceptions. The initial calibration intercept for SiO_2 was negative with an absolute value > 3X the MDL. All sample results for SiO_2 except the result for GU06010GMC401-FB were > 3X the absolute value of the intercept and should not be qualified. The SiO_2 result for sample GU06010GMC401-FB was < 3X the absolute value of the intercept and should be **qualified J-.**

Reporting Limit Verification

All CRA/CRI acceptance criteria were met.

Blanks

Cr and Na were detected in the method blank (MB) and/or associated CCBs. Cr was detected in samples GF06010G8WT01, GF0601G14R101, GU06010G8WT01, and GU0601G14R101 at concentrations < 5X the highest blank, therefore those Cr results should be **qualified 5.75U.** Cr results in the other samples were either > 5X the blank, or Cr was not detected; therefore no qualification should be applied. All Na results except sample GU06010GMC401-FB were > 5X the associated blanks and should not be qualified. Na was detected in GU06010GMC401-FB at a concentration < 5X the highest associated blank, and should be **qualified 432U.**

SiO_2, Na, and Ni were detected in the field blank (FB) GU06010GMC401-FB. All SiO_2 and Na results were > 5X the FB and should not be qualified. Ni was detected in samples GF06010G8WT01, GF0601G14R101, GU06010G8WT01, and GU0601G14R101 at concentrations < 5X the FB, therefore those Ni results should be **qualified 3.20U.** The Ni results in the other samples were > 5X the FB and should not be qualified.

Because the raw values for Ca and Mg are employed in Hardness by Calculation, Hardness was detected in the field blank although Ca and Mg were not detected in the FB. All field sample results for Hardness by Calculation were > 5X the FB, and should not be qualified.

ICP-MS Internal Standards

All internal standard acceptance criteria were met. Samples GU0601G14R101, GF06010GMC401, and GU06010GMC401 were rerun for Ni due to high ^{45}Sc recovery in the initial runs of the samples. The recoveries were acceptable in the reruns and those Ni results were reported. No sample results should be qualified.

Matrix Spike

All MS acceptance criteria were met, with the following exception. The recovery of SiO_2 was > the upper acceptance limit. The native sample concentration of SiO_2 was > 4X the spike added. SiO2 results may have been qualified for lack of matrix specific accuracy evaluation. The serial dilution is also a measure of matrix accuracy, however, and the serial result for SiO_2 was acceptable. Based on professional judgment, no SiO_2 results should be qualified.

Laboratory Replicate

All laboratory replicate acceptance criteria were met.

Laboratory Control Sample

All LCS acceptance criteria were met.

Detection Limits/Dilutions

All detection limits were properly reported. The samples were not diluted.

ICP Interference Check Sample (ICS)

All ICS acceptance criteria were met. Several analytes were present in the ICSA solution with absolute values >MDL. Aluminum, calcium, iron and magnesium were not present in the samples at concentrations comparable to the ICS solution; therefore no data should be qualified.

Serial Dilution

All serial dilution acceptance criteria were met.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 03/05/06

To: Bart Vanden Plas

From: Allison Evans

Subject: LCMSMS Organic Data Review and Validation – LANL WQH
COC: WG-03621-GE, WG-03609-GE, WG-03616-GE
SDG: 154614
Laboratory: GEL
Analysis: High Explosives by LC/MS/MS

Data Qualifiers (see following sections for detailed explanations)

Sample GU06010G8WT01	The results for o-nitrotoluene, m-nitrotoluene and p-nitrotoluene should be **qualified UJ, LI4** because the initial calibration response factors were < 0.05 but > 0.01. The result for tris(o-cresyl)phosphate should be **qualified UJ, LMS3** because the MS recovery was < the lower acceptance limit but >10% and **UJ, LL3** because the LCS recovery was < the lower acceptance limit but > 10%. The result for 2,4-diamino-6-nitrotoluene should be **qualified UJ, LL3** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU0601G14R101	The results for ALL compounds should be **qualified UJ, LS2** because the surrogate recovery was < the lower acceptance limit but > 10% in both the primary and secondary compounds analyses. The results for o-nitrotoluene, m-nitrotoluene and p-nitrotoluene should be **qualified UJ, LI4** because the initial calibration response factors were < 0.05 but > 0.01. The result for tris(o-cresyl)phosphate should be **qualified UJ, LMS3** because the MS recovery was < the lower acceptance limit but >10% and **UJ, LL3** because the LCS recovery was < the lower acceptance limit but > 10%. The result for 2,4-diamino-6-nitrotoluene should be **qualified UJ, LL3** because the LCS recovery was < the lower acceptance limit but > 10%.
Sample GU0601G14R101RE	The results for o-nitrotoluene, m-nitrotoluene and p-nitrotoluene should be **qualified UJ, LI4** because the initial calibration response factors were < 0.05 but > 0.01. The result for tris(o-cresyl)phosphate should be **qualified UJ, LMS3** because the MS and MSD recoveries were < the lower acceptance limit but >10% and **UJ, LL3** because the LCS

recovery was < the lower acceptance limit but > 10%. The result for HMX should be **qualified UJ, LMS4** because the RPD between the MS and MSD was > the acceptance limit.

Summary/General Comments

All samples were prepared and analyzed with approved procedures using method EPA 8321A modified (High Explosives). Data were reported for all required analytes. For the secondary analyte analysis, internal standard was not added to the sample extracts. No sample data should be qualified as a result.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-NNSA Service Center Model Data Validation Procedure Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

All samples were properly preserved and analyzed within the prescribed holding times, with the following exception. Sample GU0601G14R101 was re-extracted and re-analyzed out of holding due to low surrogate recoveries in the original analysis. The re-extracted, re-analyzed results (noted as sample GU0601G14R101RE) were identical to the original results; therefore based on professional judgment the results should not be qualified for the holding time infraction.

Calibration

Sample GU0601G14R101 was re-extracted and re-analyzed due to low surrogate recoveries. The analysis of the primary compounds for sample GU06010G8WT01 and the original analysis of GU0601G14R101 were run under the calibration performed on 02/2/06 on instrument LCMSMS1. The analysis of the primary analytes for the re-extracted sample GU0601G14R010RE was run under the calibration performed on 02/09/06 on instrument LCMSMS1. All analyses for the secondary compounds were performed under the calibration performed on 02/09/06 on instrument LCMSMS3.

The initial calibration intercept, slope and R2 for PETN was not assessed for the calibration performed on 02/02/06 on LCMSMS1 because the compound was calibrated with a second order (quadratic) curve. All other initial and continuing calibration acceptance criteria were met for the calibration performed on 02/02/06, with the following exceptions. The initial calibration response factors for o-nitrotoluene, m-nitrotoluene, and p-nitrotoluene were < 0.05 but >0.01. The three compounds were not detected in samples GU06010G8WT01 and GU0601G14R101, and should be **qualified UJ**. The percent difference (%D) for tetryl was > 20% with a positive bias in the ICV and an associated CCV. Tetryl was not detected in the samples, and should not be qualified.

The initial calibration intercept, slope and R2 were not assessed for PETN and 4-amino-2,6-dinitrotoluene for the calibration performed on 02/09/06 on instrument LCMSMS1 because the compounds were calibrated with a second order (quadratic) curve. All other initial and continuing calibration acceptance criteria were met for the calibration performed on 02/09/06, with the following exceptions. The initial calibration response factors for o-nitrotoluene, m-nitrotoluene, and p-nitrotoluene were < 0.05 but >0.01. The three compounds were not detected in sample GU0601G14R101RE, and should be **qualified UJ**. The %Ds for m-nitrotoluene and PETN were > 20% with a positive bias in the ICV, but the compounds were not detected in the sample and should not be qualified.

The initial calibration intercept, slope and R2 were not assessed for 2,4-diamino-6-nitrotoluene, 2,6-diamino-4-nitrotoluene, 3,5-dinitroaniline, and tris(o-cresyl)phosphate for the calibration performed on 02/09/06 on instrument LCMSMS3 (the secondary compounds for all samples) because the compounds were calibrated with a second order (quadratic) curve. All other initial and continuing calibration acceptance criteria were met.

It should be noted that the ICV and CCVs were reported as percent recovery instead of %D. Percent difference was calculated for data validation.

Blanks

No target analytes were detected in the method blank or instrument blanks.

Reporting Limit Verification

The CRI percent recoveries (%R) met QC acceptance criteria, with the following exceptions. The PETN percent recovery (%R) in the CRI immediately preceding samples GU06010G8WT01 and GU0601G14R101 was > the upper acceptance limit, but PETN was not detected in the samples and should not be qualified.

The %Rs of p-nitrotoluene, PETN, and HMX were > the upper acceptance limits in the CRI immediately preceding sample GU0601G14R101RE, but the compounds were not detected in the sample and should not be qualified.

Surrogates

All surrogate QC acceptance criteria were met, with the following exception. The surrogate recovery for GU0601G14R101 was < the lower acceptance limit but >10%. The results for ALL compounds should be **qualified UJ.** The sample was re-extracted and rerun with identical results, except the surrogate recoveries were acceptable. Both sets of results were reported.

Internal Standards

All internal standards met QC acceptance criteria.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

All MS/MSD acceptance criteria were met with the following exceptions. The %R for tris(o-cresyl)phosphate was < the lower acceptance limit but > 10% in the MS associated with sample GU06010G8WT01 and GU0601G14R101. Tris(o-cresyl)phosphate was not detected in the samples, and should be **qualified UJ**. The %R for TATB was > the upper acceptance limit in the MSD associated with samples GU06010G8WT01 and GU0601G14R101. TATB was not detected in the samples and should not be qualified.
The %Rs for tris(o-cresyl)phosphate in the MS and MSD associated with sample GU0601G14R101RE were < the lower acceptance limits but > 10%. Tris(o-cresyl)phosphate was not detected in the sample, and should be **qualified UJ.** The relative percent difference (RSD) between the MS and MSD for HMX was > the acceptance limit in the MS and MSD associated with sample GU0601G14R101RE. HMX was not detected in the sample, and the result should be **qualified UJ.**
It should be noted that the MS and MSD analyses were performed on samples from other LANL WQH SDGs for both the original batch and the batch that included GU0601G14R101RE. No results should be qualified.

Laboratory Control Sample (LCS)

All LCS acceptance criteria were met with the following exceptions. The %Rs for tris(o-cresyl)phosphate and 2,4-diamino-6-nitrotoluene were < the lower acceptance limit but > 10% in the LCS associated with samples GU06010G8WT01 and GU0601G14R101. Tris(o-cresyl)phosphate and 2,4-diamino-6-nitrotoluene were not detected in the samples and the results should be **qualified UJ.**
The %R for tris(o-cresyl)phosphate was < the lower acceptance limit in the LCS associated with sample GU0601G14R101RE. Tris(o-cresyl)phosphate was not detected in the sample and should be **qualified UJ.**

Detection Limits/Dilutions

All detection limits were properly reported. All samples were diluted 2X with acidified HPLC grade water.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 03/02/06

To: Bart Vanden Plas

From: Allison Evans

Subject: Inorganic Data Review and Validation – LANL WQH
COC: WG-03621-GE, WG-03609-GE, WG-03616-GE
SDG: 154614
Laboratory: GEL
Analysis: General Chemistry

Data Qualifiers (see following sections for detailed explanations)

Sample GF06010G8WT01	The result for pH should be **qualified J, I9** because the sample was analyzed beyond 2X the holding time. The result for NO_3/NO_2 should be **qualified J-, IWQ6** due to a negative calibration intercept with an absolute value > 3X the MDL. The result for total dissolved solids should be **qualified 120U, I4a** due to field blank contamination. The result for total P should be **qualified 5.6U, I4a** due to field blank contamination.
Sample GF0601G14R101	The result for pH should be **qualified J, I9** because the sample was analyzed beyond 2X the holding time. The result for NO_3/NO_2 should be **qualified J-, IWQ6** due to a negative calibration intercept with an absolute value > 3X the MDL. The result for total dissolved solids should be **qualified 120U, I4a** due to field blank contamination. The result for total P should be **qualified 5.6U, I4a** due to field blank contamination.
Sample GU06010G8WT01	The result for ammonia as nitrogen should be **qualified R, IWQ6** due to a negative initial calibration intercept with an absolute value > 3X the MDL, **UJ, IWQ2** due to a negative method blank result > the MDL, and **UJ, I3e** due to MS and MSD recoveries < the lower acceptance limit but > 30%. The result for TKN should be **qualified R, IWQ6** due to a negative initial calibration intercept with an absolute value > 3X the MDL, and **UJ, IWQ2** due to negative blank results > the MDL.
Sample GU0601G14R101	The result for ammonia as nitrogen should be **qualified R, IWQ6** due to a negative initial calibration intercept with an absolute value > 3X the MDL, **UJ, IWQ2** due to a negative

	method blank result > the MDL, and **UJ, I3e** due to MS and MSD recoveries < the lower acceptance limit but > 30%. The result for TKN should be **qualified J+, IWQ6** due to a calibration intercept > 3X the MDL.
Sample GF06010GMC401	The result for pH should be **qualified J, I9** because the sample was analyzed beyond 2X the holding time. The result for total P should be **qualified 5.6U, I4a** due to field blank contamination.
Sample GU06010GMC401	The result for ammonia as nitrogen should be **qualified R, IWQ6** due to a negative initial calibration intercept with an absolute value > 3X the MDL, **UJ, IWQ2** due to a negative method blank result > the MDL, and **UJ, I3e** due to MS and MSD recoveries < the lower acceptance limit but > 30%.
Sample GU06010GMC401-FB	The result for pH should be **qualified J, I9** because the sample was analyzed beyond 2X the holding time. The result for NO_3/NO_2 should be **qualified R, IWQ6** due to a negative calibration intercept with an absolute value > 3X the MDL. The result for ammonia as nitrogen should be **qualified R, IWQ6** due to a negative initial calibration intercept with an absolute value > 3X the MDL, **UJ, IWQ2** due to a negative method blank result > the MDL, and **UJ, I3e** due to MS and MSD recoveries < the lower acceptance limit but > 30%.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using methods EPA 300.0 (Chloride, bromide, fluoride, sulfate), EPA 310.1 (Alkalinity), EPA 314.0 (Perchlorate), EPA 350.1 (Ammonia as nitrogen), EPA 351.2 (Total Kjeldahl Nitrogen (TKN)), EPA 353.1 (Nitrate/Nitrite (NO_3/NO_2)), EPA 335.3 (Total CN), EPA 365.4 (Total P), EPA 120.1 (Specific Conductivity), EPA 150.1 (pH), and EPA 160.1 (Total Dissolved Solids (TDS)). Data were reported for all required analytes.

See the attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-NNSA Service Center Model Data Validation Procedure Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding times and properly preserved with the following exceptions. The pH analyses for the samples were performed after 2X the holding time. The results for pH should be **qualified J.** It should be noted that the laboratory received the samples the day the 2X holding time for pH expired.

Calibration

Multiple calibrations were applied to various analyses in this SDG; therefore the calibrations and continuing calibrations were assessed and noted individually.

The initial calibration intercept for NO_3/NO_2 was negative with an absolute value > 3X the MDL. NO_3/NO_2 was detected in samples GF06010G8WT01 and GF0601G14R101 at concentrations < 3X the absolute value of the intercept and should be **qualified J-.** NO_3/NO_2 was detected in sample GF06010GMC401 at a concentration > 3X the absolute value of the MDL and should not be qualified. NO_3/NO_2 was not detected in GU06010GMC401-FB and should be **qualified R.**

The initial calibration intercepts for Cl and SO_4 were > 3X the MDL. All Cl and SO4 results were > 3X the intercept, or Cl and SO_4 were not detected, therefore no results should be qualified.

Three initial calibrations were associated with ammonia as nitrogen sample analyses. All three initial calibration intercepts were negative with absolute values > 3X the MDL. Ammonia as nitrogen was not detected in any of the samples, therefore all ammonia as nitrogen results should be **qualified R.**

Three initial calibrations were associated with TKN sample analyses. The initial calibration intercept associated with sample GU06010G8WT01 was negative with an absolute value > 3X the MDL. TKN was not detected in that sample, and the result should be **qualified R.** The initial calibration intercept associated with samples GU0601G14R101 and GU06010GMC401-FB was > 3X the MDL. TKN was detected in sample GU0601G14R101 at a concentration < 3X the intercept, and should be **qualified J+.** TKN was not detected in sample GU06010GMC401-FB and should not be qualified. The TKN calibration associated with sample GU06010GMC401 met all acceptance criteria and no results should be qualified.

Blanks

Because multiple calibrations and/or batches were associated with various analyses, blank results were noted individually.

Total dissolved solids (TDS) and specific conductivity were detected in the field blank GU06010GMC401-FB. All specific conductivity results were > 5X the conductivity of the field blank, and should not be qualified. The TDS results for samples GF06010G8WT01 and GF0601G14R101 were < 5X the amount in the field blank (FB), and should be **qualified 120U.** The TDS result for sample GF06010GMC401 was > 5X the amount in the field blank, therefore the result should not be qualified.

Negative instrument and method blank results were associated with the ammonia as nitrogen analysis of samples GU0601G14R101 and GU06010GMC401-FB. Ammonia as nitrogen was not detected in these samples and the results should be **qualified UJ**. The instrument blank results associated with sample GU06010G8WT01 were acceptable; however, the sample was associated with the negative method blank noted above. Ammonia as nitrogen was not detected in the sample, therefore the results should be **qualified UJ**. Negative instrument and method blank results > the MDL were associated with the ammonia as nitrogen analysis of sample GU06010GMC401. Ammonia as nitrogen was not detected in this sample, and the result should be **qualified UJ.**

Negative instrument blank results > the MDL were associated with the TKN analyses of samples GU0601G8WT01 and GU06010GMC401. TKN was not detected in sample GU06010G8WT01, and should be **qualified UJ.** TKN was detected in sample GU06010GMC401 at a concentration > 5X the MDL, and should not be qualified. The blanks associated with the analyses of samples GU0601G14R101 and GU06010GMC401-FB were acceptable and those results should not be qualified.

Total P was detected in the instrument and method blanks associated with this SDG, and in field blank GU06010GMC401-FB. The total P result for GU06010GMC401-FB was > 5X the highest associated blank and should not be qualified. The total P results for samples GF06010G8WT01, GF0601G14R101, and GF06010GMC401 were < 5X the FB, and should all be **qualified 5.6U.**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

All MS and MSD recoveries and relative percent differences (RPDs) met the acceptance criteria, with the following exceptions. The recoveries of the MS and MSD for ammonia as nitrogen were < the lower acceptance limit but > 30%. Ammonia as nitrogen was not detected in any samples, therefore all the sample results should be **qualified UJ.** The spike analysis for ClO_4 was performed on a sample from another LANL WQH SDG. No results should be qualified.

Laboratory Replicate

The replicate analyses met all acceptance criteria. The replicate analyses were performed on a sample from another LANL WQH SDG for ClO_4, specific conductivity and pH. No data should be qualified.

Laboratory Control Sample (LCS)

All LCS recoveries met QC acceptance criteria.

Detection Limits/Dilutions

All detection limits were properly reported. The following dilutions were performed for the reasons noted by the laboratory. Sample GU06010G8WT01 was diluted 10X for ammonia as nitrogen due to matrix effects. Sample GU0601G14R101 was diluted 10X for ammonia as nitrogen and 5X for TKN due to matrix effects. Sample GF06010GMC401 was diluted 2X for Cl, 5X for ClO_4, and 10X for NO_3/NO_2 in order to bring the raw values within the calibration range of the instrument. Sample GU06010GMC401 was diluted 5X for ammonia as nitrogen due to matrix effects. Sample GU06010GMC401-FB was diluted 10X for TKN due to matrix effects.

Other QC

No other specific issues that affect data quality were identified.

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Memorandum

Date: 03/02/06

To: Bart Vanden Plas

From: Allison Evans

Subject: LCMSMS Inorganic Data Review and Validation – LANL WQH
COC: WG-03621-GE, WG-03609-GE, WG-03616-GE
SDG: 154614
Laboratory: GEL
Analysis: Perchlorate

Data Qualifiers (see following sections for detailed explanations)

No perchlorate results should be qualified in this SDG.

Summary/General Comments

The samples were prepared and analyzed with approved procedures using method EPA 6850 modified (perchlorate by LC/MS/MS). Data were reported for all required analytes.

See attached Data Assessment Worksheets for supporting documentation on the data review and validation.

This validation was performed according to DOE-NNSA Service Center Model Data Validation (MDVP) Procedure Rev. 4.

Sample Shipping/Receiving

All COC, analysis request, and sample receipt documentation was complete and correct.

Holding Times and Preservation

The samples were analyzed within the prescribed holding time and properly preserved.

Calibration

All initial and continuing calibration QC acceptance criteria were met. The initial calibration verification (ICV) and continuing calibration verifications (CCVs) were calculated as percent recovery (%R) instead of percent difference (%D). The ICV and CCVs met the %D criteria as well. No data should be qualified.

Blanks

The method and instrument blanks met all acceptance criteria.

Reporting Limit Verification

The CRI percent recovery met QC acceptance criteria. It should be noted that the CRI spiked concentration was at the MDL, not 2X the MDL as stated in the MDVP. No sample data should be qualified.

Internal Standard

Internal standard retention time acceptance criteria were met for perchlorate-O(18). Recovery of perchlorate-O(18) met matrix spike recovery acceptance criteria.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS and MSD met all acceptance criteria**.**

Laboratory Control Sample

The LCS recovery met all acceptance criteria.

Detection Limits/Dilutions

All detection limits were properly reported. Sample GF06010GMC401 required a 250X dilution in order to bring the raw value within the linear range of the instrument. Perchlorate was not detected in the sample run immediately after the undiluted run. No sample results should be qualified.

Perchlorate Chlorine Ratios

Chlorine isotope ratio acceptance criteria were met for all samples.

Interference Check Standard (ICS)

The ICS recovery met QC acceptance criteria.

Other QC

No other specific issues that affect data quality were identified.

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GENERAL NARRATIVE

CASE NARRATIVE
for
Los Alamos National Laboratory
ESH-18
SDG 154614
Chain of Custody WG-03609-GE, WG-03616-GE, and WG-03621-GE

February 20, 2006

Laboratory Identification:

General Engineering Laboratories, LLC

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Express Mail Delivery and Shipping Address:

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Charleston, South Carolina 29407

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Summary:

Sample receipt

The samples for Los Alamos National Laboratory for ESH-18 arrived at General Engineering Laboratories, LLC, (GEL) Charleston, South Carolina on January 26, 2006 for environmental analyses. All sample containers arrived without any visible signs of tampering. The sample containers were received at 3/4/16°C temperature.

The laboratory received the following samples:

Laboratory Identification	Sample Description
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614003	GU06010G8WT01
154614004	GU0601G14R101
154614005	GU06010G8WT01-FTB
154614006	GU0601G14R101-FTB
154614007	GU06010GMC401-FTB

154614008	GF06010GMC401
154614009	GU06010GMC401
154614010	GU06010GMC401-FB

Internal Chain of Custody:

Custody was maintained for the samples.

Data Package:

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Review Qualifier Flag Sheet, Volatile Analysis, Explosives by LC-MS/MS Analysis, Perchlorates by LC-MS/MS Analysis, Metals Analysis, General Chemistry Analysis, and Radiochemistry Analysis.

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

Valerie S. Davis

Project Manager

CHAIN OF CUSTODY

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03621-GE PO #: Program: Stwd Mon Cost Code: MR1A 01EA 5B00 Collection Date/Time: 1/24/06 939	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178
WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov		
Sampler Initials: RO	Date: 1/24/06	

154614

Analysis Request

Sample Id: **GF0601G14R101** Field Prep: **F**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18301	WG: CN(T)	250 ml poly	1	NaOH		pH>12	
18302	WG: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved			
18300	WG: GEN INORG	1.0 L poly	1	<4C			
18001	WG: Hg	250 ml amber glass	1	HN03		pH<2	
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03		pH<2	
18303	WG: NO2+NO3	1.0 L poly	1	HCL		pH<2	

Total Containers: 6

Sample Id: **GU0601G14R101** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18100	WG: 8260B VOA w/MS+TICs	40 ml amber glass	3	HCl and <4C			
18106	WG: 8321 HEXP NMED w/MS	1.0 L amber glass	3	<4C			
18301	WG: CN(T)	250 ml poly	1	NaOH		pH>12	
18001	WG: Hg	250 ml amber glass	1	HN03		pH<2	
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03		pH<2	
18307	WG: TKN+NH3	1.0 L poly	1	H2SO4		pH<2	

Total Containers: 10

Sample Id: **GU0601G14R101-FTB** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18101	WG: 8260B VOA FTB	40 ml amber glass	1	HCl and <4C			

Total Containers: 1

Grand Total: 17

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03621-GE PO #: Program: Stwd Mon Cost Code: MR1A 01EA 5B00 Collection Date/ Time: 1/24/06 939	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: RO Date: 1/24/06

Analysis Request

Technique: Westbay

Comments: NA

Chain of Custody

Sampling Team: P Smith A Barnar

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
A Barnar (sampler)	1/24/06	1517	[illegible]	1-24-06	1525	
			[illegible]	1/24/06	0920	

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water
Coc Id: WG-03609-GE
PO #:
Program: Stwd Mon
Cost Code: MRIA 0110 AREO
Collection Date/Time: 1/24/06 C 12:40

Ship To:
General Engineering Laboratories, Inc.,
Charleston, SC

2040 Savage Rd.

Charleston, SC 29407

Contact:
Valerie Davis

Phone:
(843) 556-8171

Fax:
(843) 766-1178

WQH Contact:
Bart Vanden Plas
Los Alamos National Laboratory
MS K497 DDP 59011701U
Los Alamos, NM 87545

Phone: 1-505-667-0675
Fax: 1-505-665-9344
Email: bartvan@lanl.gov

Sampler Initials: _____ Date: _____

154614 1.

Analysis Request

Sample Id: **GF06010G8WT01** Field Prep: **F**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18301	WG: CN(T)	250 ml poly	1	NaOH			
18302	WG: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved			
18300	WG: GEN INORG	1.0 L poly	1	<4C			
18001	WG: Hg	250 ml amber glass	1	HN03			
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03			
18303	WG: NO2+NO3	1.0 L poly	1	HCL			

Total Containers: 6

Sample Id: **GF06010G8WT90** Field Prep: **F**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18301	WG: CN(T)	250 ml poly	1	NaOH			
18302	WG: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved			
18300	WG: GEN INORG	1.0 L poly	1	<4C		Not collected. mw mw	
18001	WG: Hg	250 ml amber glass	1	HN03			
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03			
18303	WG: NO2+NO3	1.0 L poly	1	HCL			

Total Containers: 6

Sample Id: **GU06010G8WT01** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18100	WG: 8260B VOA w/MS+TICs	40 ml amber glass	3	HCl and <4C			
18106	WG: 8321 HEXP NMED w/MS	1.0 L amber glass	3	<4C			
18301	WG: CN(T)	250 ml poly	1	NaOH			
18001	WG: Hg	250 ml amber glass	1	HN03			
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03			
18307	WG: TKN+NH3	1.0 L poly	1	H2SO4			

Total Containers: 10

Sample Id: **GU06010G8WT01-FB** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water
Coc Id: WG-03609-GE
PO #:
Program: Stwd Mon
Cost Code:
Collection Date/Time: 1/24/06 @ 12:40

Ship To:
General Engineering Laboratories, Inc.,
Charleston, SC

2040 Savage Rd.

Charleston, SC 29407

Contact:
Valerie Davis

Phone:
(843) 556-8171

Fax:
(843) 766-1178

WQH Contact:
Bart Vanden Plas
Los Alamos National Laboratory
MS K497 DDP 59011701U
Los Alamos, NM 87545

Phone: 1-505-667-0675
Fax: 1-505-665-9344
Email: bartvan@lanl.gov

Sampler Initials: _____ Date: _____

154614 %.

Analysis Request

Sample Id: **GU06010G8WT01-FB** **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18500	WG: 8260B VOA + TICs	40 ml amber glass	2	HCl and <4C			
18505	WG: 8321 HEXP NMED	1.0 L amber glass	1	<4C			
18301	WG: CN(T)	250 ml poly	1	NaOH		Not collected,	
18302	WG: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved		max mass	
18300	WG: GEN INORG	1.0 L poly	1	<4C			
18001	WG: Hg	250 ml amber glass	1	HN03			
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03			
18303	WG: NO2+NO3	1.0 L poly	1	HCL			
18307	WG: TKN+NH3	1.0 L poly	1	H2SO4			

Total Containers: 10

Sample Id: **GU06010G8WT01-FTB** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18101	WG: 8260B VOA FTB	40 ml amber glass	1	HCl and <4C			

Total Containers: 1

Sample Id: **GU06010G8WT90** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18500	WG: 8260B VOA + TICs	40 ml amber glass	2	HCl and <4C			
18505	WG: 8321 HEXP NMED	1.0 L amber glass	1	<4C			
18301	WG: CN(T)	250 ml poly	1	NaOH		Not collected	
18001	WG: Hg	250 ml amber glass	1	HN03		max mass	
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03			
18307	WG: TKN+NH3	1.0 L poly	1	H2SO4			

Total Containers: 7

Grand Total: 40

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water
Coc Id: WG-03609-GE
PO #:
Program: Stwd Mon
Cost Code:
Collection Date/ Time: 1/24/06 @ 12:40

Ship To:
General Engineering Laboratories, Inc.,
Charleston, SC

2040 Savage Rd.

Charleston, SC 29407

Contact:
Valerie Davis

Phone:
(843) 556-8171

Fax:
(843) 766-1178

WQH Contact:
Bart Vanden Plas
Los Alamos National Laboratory
MS K497 DDP 59011701U
Los Alamos, NM 87545

Phone: 1-505-667-0675
Fax: 1-505-665-9344
Email: bartvan@lanl.gov

Sampler Initials: _____ Date: _____

Analysis Request

Technique:

Comments:

Chain of Custody

Sampling Team: Max Maes, Ryan Velasquez

Relinquished By	Date	Time	Received By	Date	Time	Reason for Transfer
Max Maes (sampler)	1/24/06	14:40		1-24-06	1545	
				1-26-06	0920	

6

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03616-GE PO #: Program: Stwd Mon Cost Code: Collection Date/ Time: 1-24-06 0905	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178
WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545	Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov	
Sampler Initials: JJ	Date: 1-24-06	

154614 1,

Analysis Request

Sample Id: **GF06010GMC401** Field Prep: **F**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18301	WG: CN(T)	250 ml poly	1	NaOH		~~pH7/8 1-24-06~~ pH >12	
18001	WG: Hg	250 ml amber glass	1	HN03		pH < 2	
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03		pH < 2	
18300	WG: GEN INORG	1.0 L poly	1	<4C			
18303	WG: NO2+NO3	1.0 L poly	1	HCL		pH < 2	
18302	WG: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved			

Total Containers: 6

Sample Id: **GU06010GMC401** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18301	WG: CN(T)	250 ml poly	1	NaOH		pH >12	
18001	WG: Hg	250 ml amber glass	1	HN03		pH < 2	
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03		pH < 2	
18307	WG: TKN+NH3	1.0 L poly	1	H2SO4		pH < 2	
18100	WG: 8260B VOA w/MS+TICs	40 ml amber glass	3	HCl and <4C		pH not checked	
18201	WG: H-3	250 ml amber glass	1	Not Preserved			

Total Containers: 8

Sample Id: **GU06010GMC401-FB** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
18301	WG: CN(T)	250 ml poly	1	NaOH		pH >12	
18001	WG: Hg	250 ml amber glass	1	HN03		pH < 2	
18000	WG: METAL+B+Sn+Sr+U+SiO2	500 ml poly	1	HN03		pH < 2	
18300	WG: GEN INORG	1.0 L poly	1	<4C			
18303	WG: NO2+NO3	1.0 L poly	1	HCL		pH < 2	
18307	WG: TKN+NH3	1.0 L poly	1	H2SO4		pH < 2	
18302	WG: ClO4 314 & LCMSMS	1.0 L poly	1	Not Preserved			
18500	WG: 8260B VOA + TICs	40 ml amber glass	2	HCl and <4C		pH not checked	
18201	WG: H-3	250 ml amber glass	1	Not Preserved			

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03616-GE PO #: Program: Stwd Mon Cost Code: MR1A 01EA 5B00 Collection Date/ Time: 1-24-06 0905	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: JLS Date: 1-24-06

154614 1,

Analysis Request

Sample Id: **GU06010GMC401-FB** **UF**
Total Containers: 10

Sample Id: **GU06010GMC401-FTB** Field Prep: **UF**

OSI	Order Suite Desc	Container Desc	Qty	Preservative Desc	TAT	WQH Comment	Analytical Lab Comments
* 18101	WG: 8260B VOA FTB	40 ml amber glass	1	HCl and <4C		pH not checked	
Total Containers:	1						

Grand Total: **25**

11

Los Alamos
NATIONAL LABORATORY

Request For Analytical Services
ENV-WQH

Matrix: Ground Water Coc Id: WG-03616-GE PO #: Program: Stwd Mon Cost Code: MR1A 01EA 5B00 Collection Date/ Time: 1-24-06 0905	Ship To: General Engineering Laboratories, Inc., Charleston, SC 2040 Savage Rd. Charleston, SC 29407	Contact: Valerie Davis Phone: (843) 556-8171 Fax: (843) 766-1178	WQH Contact: Bart Vanden Plas Los Alamos National Laboratory MS K497 DDP 59011701U Los Alamos, NM 87545 Phone: 1-505-667-0675 Fax: 1-505-665-9344 Email: bartvan@lanl.gov Sampler Initials: JLT Date: 1-24-06

Analysis Request

Technique: SS bailer

Comments:

Chain of Custody

Sampling Team: J. Jordan, E. Pullin, A. Mares

Relinquished By:	Date	Time	Received By	Date	Time	Reason for Transfer
(sampler)	1-24-06	1345	Marc Mares	1-24-06	1345	From field to Stwd
Marc Mares				1-24-06	1455	
				1/24/06	0920	

12

COOLER RECEIPT CHECKLIST

SAMPLE RECEIPT & REVIEW FORM

PM use only WG-03609-GE, WG-03616-GE WG-03621-GE

Client: LOS ALAMOS	**SDG/ARCOC/Work Order:** ~~N-03A-16200/03A-16001~~ BT
Date Received: 1/26/2006	**PM(A) Review (ensure non-conforming items are resolved prior to signing):** Valen Dam
Received By: L Sallie	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
2	Samples requiring cold preservation within (4 +/- 2 C)? Record preservation method.	✓			Circle Coolant # ice bags (blue ice) dry ice none other describe)
3	Chain of custody documents included with shipment?	✓			
4	Sample containers intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other (describe)
5	Samples requiring chemical preservation at proper pH?	✓			Sample ID's, containers affected and observed pH:
6	VOA vials free of headspace (defined as < 6mm bubble)?		✓		Sample ID's and containers affected:
7	Are Encore containers present? (If yes, immediately deliver to VOA laboratory)			✓	
8	Samples received within holding time?	✓			Id's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Sample ID's affected:
11	Number of containers received match number indicated on COC?	✓			Sample ID's affected:
12	COC form is properly signed in relinquished/received sections?	✓			
14	Air Bill ,Tracking #'s, & Additional Comments	fed ex 7209 7837 6955-4C 6988-16C 6977-4C 6966-3C			

	Suspected Hazard Information	Non-Regulated	Regulated	High Level	
A	Radiological Classification?	✓			RSO RAD Receipt # _____ *If > x2 area background is observed on samples identified as "non-regulated/non-radioactive", contact the Radiation Safety group for further investigation. Maximum Counts Observed*: 60 cpm
B	PCB Regulated?	✓			Comments:
C	Shipped as DOT Hazardous Material? If yes, contact Waste Manager or ESH Manager.	✓			Hazard Class Shipped: UN#:

PM (or PMA) review of Hazard classification: VSD Initials 1/26/06 Date:

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 25JAN06
Actual Wgt: 38.0 LB MAN
System#: 0014176/CAFE2285
Account: S *********

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON, SC 29407

16c ice

FedEx Express

CLS091905/08/15

EF: 7H20MR0A0DEC8V00

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

THU
Deliver By:
26JAN06

TRK# 7209 7837 6988

Form 0201

CHS A1

29407 -SC-US

XX CHSA

Part # 156146-434 NRIT 10-04

LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

Actual Wgt: 41.0 LB MAN
System#: 0014176/CAFE2285
Account: S *********

(843) 556-8171

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON, SC 29407

4c blue ice

FedEx Express

CLS091905/08/15

EF: 7H20MR0A0DEC8V00

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

THU
Deliver By:
26JAN06

TRK# 7209 7837 6977

Form 0201

CHS A1

29407 -SC-US

XX CHSA

Part # 156146-434 NRIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Actual Wgt: 53.0 LB MAN
System#: 0014176/CAFE2285
Account: S *********

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

(843) 556-8171

CHARLESTON, SC 29407

3C
blue Fca

FedEx Express

CLS091905/06/15

EF: 7H20MR0A00EC5V00

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

TRK# 7209 7837 6966 Form 0201

THU
Deliver By:
26JAN06

29407 -SC-US

CHS A1

XX CHSA

Part # 156148-434 NRIT 10-04

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

LOS ALAMOS, NM 87545
UNITED STATES US

Ship Date: 25JAN06
Actual Wgt: 56.0 LB MAN
System#: 0014176/CAFE2285
Account: S *********

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

(843) 556-8171

CHARLESTON, SC 29407

4C
blue Fca

FedEx Express

CLS091905/06/15

EF: 7H20MR0A00EC5V00

Delivery Address Barcode

BILL SENDER

PRIORITY OVERNIGHT

TRK# 7209 7837 6955 Form 0201

THU
Deliver By:
26JAN06

29407 -SC-US

CHS A1

XX CHSA

Part # 156148-434 NRIT 10-04

DATA REVIEW QUALIFIER FLAG DEFINITION SHEET

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR ORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
A	The TIC is suspected aldol-condensation product.	COA, Form 1, and EDD
B	Analyte was detected in the associated method blank as well as in the sample.	COA, Form 1, and EDD
C	Pesticide analyte has been confirmed by GC/MS.	COA, Form 1, and EDD
D	Analyte(s) quantified in an analysis performed at a secondary dilution factor.	COA, Form 1, and EDD
E	Identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.	COA, Form 1, and EDD
J	This flag indicates an estimated value concerning either, (1) estimating a concentration for tentatively identified compounds (TICs), or (2) analyte detected at a level less than the RDL or PQL and greater than or equal to the MDL.	COA, Form 1, and EDD
N	Presumptive evidence based upon a mass spectral library search to make a tentative identification of the analyte.	COA, Form 1, and EDD
NJ	Analyte has been tentatively identified and the associated numerical value is estimated based upon 1:1 response factor to the nearest eluting internal standard.	COA, Form 1, and EDD
P	- Pesticide/PCB target analyte that is greater than 25% difference for the detected concentrations between the two GC columns. - HPLC target analyte that is greater than 40% difference for the detected concentrations between detectors or columns.	Form 1 and EDD
U	Compound analyzed for but not detected (sample quantitation limit has been adjusted to reflect dilutions and percent moisture).	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	COA, Form 1, and EDD
**	Laboratory Control Sample recovery outside of acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.

General Engineering Laboratories, LLC

DATA QUALIFIERS FOR INORGANIC ANALYSES

Data Qualifiers used on Form 1s or Certificates of Analysis (COA) follow the specifications set forth in the technical specifications of the most current CLP Statement of Work and are defined as follows:

Section	Explanation	Location
E	The qualifier that is used when the percent difference between the parent sample and its serial dilution's concentration exceeds 10%. The sample's concentration must be greater than 50 times the IDL/MDL for ICP or 100 times the absolute value of the preparation blank's concentration for ICP-MS. However, if analyzing ILMO 4.0 (ICP-MS), the parent sample's concentration must be 20 times the CRDL before the "E" flag is applied.	Form 1 and EDD
*	The qualifier that is used to indicate the duplicate sample analysis for an analyte is out of control.	Form 1 and EDD
J	The qualifier is used to indicate that the reported result fell above the IDL/MDL but below the CRDL.	Form 1 and EDD
N	This qualifier is used to indicate that the matrix or pre-digested spike sample recovery for an analyte is not within the specified control limit.	Form 1 and EDD
U	Analyte analyzed for but not detected above the PQL/CRDL.	COA, Form 1, and EDD
X	Other reporting flag as defined in report narrative.	Form 1 and EDD
**	Laboratory Control Sample (LCS) recovery for an analyte is outside of specified acceptance limit.	QC Summary Report

All surrogate recoveries and acceptance ranges are reported at the bottom of Form 2 or COA.
Any recoveries falling outside the acceptance range will be flagged with a **.
All flags do not apply to QC Summary and Certificate of Analysis packages.

GC/MS VOLATILE ANALYSIS

GC/MS Volatile Organics
Los Alamos National Laboratory (ESHL)
SDG 154614

Method/Analysis Information

Procedure:	Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometer
Analytical Method:	SW846 8260B DOE-AL
Prep Method:	SW846 5030B
Analytical Batch Number:	500624

Sample Analysis

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

Sample ID	Client ID
154614003	GU06010G8WT01
154614004	GU0601G14R101
154614005	GU06010G8WT01-FTB
154614006	GU0601G14R101-FTB
154614007	GU06010GMC401-FTB
154614009	GU06010GMC401
154614010	GU06010GMC401-FB
1201025323	Method Blank (MB)
1201025326	Laboratory Control Sample (LCS)
1201025327	Laboratory Control Sample (LCS)
1201026794	Method Blank (MB)
1201026795	Laboratory Control Sample (LCS)
1201028020	Laboratory Control Sample (LCS)
1201025324	154614003(GU06010G8WT01) Matrix Spike (MS)
1201025325	154614003(GU06010G8WT01) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 9.

Calibration Information
Due to the limited capacity of software all of the current initial calibration files are not displayed here. If necessary, a calibration history will be inserted in the package prior to the appropriate Form 6.

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

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

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

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

Laboratory Control Sample (LCS) Recovery
The LCS recoveries were not all within the acceptance limits. However, the failures were less than 5% of the requested analyte list. This satisfies the client criteria. Please see the Form III's in the deliverable for a complete list of recoveries and acceptance limits. See NCR 289433.

QC Sample Designation
Sample 154614003 (GU06010G8WT01) was designated for spike analysis in this SDG.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses, in all samples and quality control samples, met the required acceptance criteria.

Technical Information

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

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-extraction/Re-analysis
The MS and MSD were re-analyzed because they were initially analyzed outside the holding time.

Miscellaneous Information

Electronic Package Comment
The following package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Nonconformance (NCR) Documentation
NCR # 289433 was generated for this SDG.

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

TIC Comment
Tentatively identified compounds (TIC) were required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on a HP Mass Spectrometer.

Instrument ID	System Configuration	Column ID	Column Description	P & T Trap
VOA8.I	HP6890/HP5973	RESTEK	RTX-Volatiles, 30m x 0.25 mm, 1.0 um	Trap 10

Certification Statement

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

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Erin Haubert Date: 2/23/06

Roadmap for ESHL 154614 VOA

This roadmap was analyzed by Amy Jamison on 02-07-2006, 16:55.
This roadmap was reviewed by on 02-16-2006, 22:13.
This roadmap was packaged by LySandra Gathers on 02-21-2006, 16:31.
This roadmap was validated by Erin Haubert on 02-23-2006, 09:30.

Sample

exclude	manual	datafile	smpid	clientid	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA8.i/020306v8.b/8v519.d	154614005	GU06010G8WT01-FTB	03-FEB-2006	17:20	154614.sub	1	
☐	N	/chem/VOA8.i/020306v8.b/8v520.d	154614006	GU0601G14R101-FTB	03-FEB-2006	17:49	154614.sub	1	
☐	N	/chem/VOA8.i/020306v8.b/8v521.d	154614007	GU06010GMC401-FTB	03-FEB-2006	18:19	154614.sub	1	
☐	N	/chem/VOA8.i/020306v8.b/8v522.d	154614010	GU06010GMC401-FB	03-FEB-2006	18:49	154614.sub	1	
☐	N	/chem/VOA8.i/020306v8.b/8v523.d	154614003	GU06010G8WT01	03-FEB-2006	19:19	154614.sub	1	
☐	N	/chem/VOA8.i/020306v8.b/8v524.d	154614004	GU0601G14R101	03-FEB-2006	19:48	154614.sub	1	
☐	N	/chem/VOA8.i/020306v8.b/8v525.d	154614009	GU06010GMC401	03-FEB-2006	20:18	154614.sub	1	

QC Sample

exclude	manual	datafile	smpid	clientid	sampletype	injdate	injtime	sublist	dilution	comment
☐	N	/chem/VOA8.i/020306v8.b/8v504leshl.d	1201025326	VBLK01LCS	lcs	03-FEB-2006	09:51	154614.sub	1	
☐	N	/chem/VOA8.i/020306v8.b/8v508beshl.d	1201025323	VBLK01	mb	03-FEB-2006	11:50	154614.sub	1	
■	N	/chem/VOA8.i/020306v8.b/8v526.d	1201025324	GU06010G8WT01MS	ms	03-FEB-2006	20:48	154614.sub	1	
■	N	/chem/VOA8.i/020306v8.b/8v527.d	1201025325	GU06010G8WT01MSD	msd	03-FEB-2006	21:18	154614.sub	1	
☐	N	/chem/VOA8.i/020406v8.b/8v603l154614.d	1201026795	VBLK02LCS	lcs	04-FEB-2006	11:38	154614.sub	1	
☐	N	/chem/VOA8.i/020406v8.b/8v605lshESHL.d	1201028020	VBLK02SLCS	lcs	04-FEB-2006	12:38	154614.sub	1	
☐	N	/chem/VOA8.i/020406v8.b/8v607b154614.d	1201026794	VBLK02	mb	04-FEB-2006	13:38	154614.sub	1	
☐	N	/chem/VOA8.i/020406v8.b/8v622.d	1201025324	GU06010G8WT01MS	ms	04-FEB-2006	21:05	154614.sub	1	
☐	N	/chem/VOA8.i/020406v8.b/8v623.d	1201025325	GU06010G8WT01MSD	msd	04-FEB-2006	21:34	154614.sub	1	

☐	Y	/chem/VOA8.i/020306v8.b/8v505SHESHL.d	1201025327	VBLK01SLCS	lcs	03-FEB-2006	10:21	154614.sub	1.00000	

SAMPLE DATA SUMMARY

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	U	1.00	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	U	50.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.0	50.0	ug/L	98	(75%-119%)
Dibromofluoromethane	46.2	50.0	ug/L	92	(85%-120%)
Toluene-d8	46.2	50.0	ug/L	92	(79%-122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010G8WT01

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V523

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.66	8.7	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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17.					
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24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC OLM03.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.8	50.0	ug/L	100	(75%−119%)
Dibromofluoromethane	46.2	50.0	ug/L	92	(85%−120%)
Toluene−d8	46.2	50.0	ug/L	92	(79%−122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010G
8WT01-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V519

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.58	6.0	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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30.					

FORM I VOA-TIC OLM03.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	J	0.748	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	J	49.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	50.2	50.0	ug/L	100	(75%-119%)
Dibromofluoromethane	47.1	50.0	ug/L	94	(85%-120%)
Toluene-d8	46.8	50.0	ug/L	94	(79%-122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010GMC401

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V525

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.65	7.0	JB
2.					
3.					
4.					
5.					
6.					
7.					
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30.					

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	J	3.52	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	J	3.25	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.5	50.0	ug/L	99	(75%−119%)
Dibromofluoromethane	47.1	50.0	ug/L	94	(85%−120%)
Toluene−d8	46.7	50.0	ug/L	93	(79%−122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010G
MC401-FB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V522

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.58	7.3	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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11.					
12.					
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25.					
26.					
27.					
28.					
29.					
30.					

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.4	50.0	ug/L	99	(75%−119%)
Dibromofluoromethane	47.2	50.0	ug/L	94	(85%−120%)
Toluene−d8	47.0	50.0	ug/L	94	(79%−122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010G
MC401-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V521

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.70	5.8	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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30.					

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	U	1.00	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	U	50.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.3	50.0	ug/L	99	(75%-119%)
Dibromofluoromethane	46.6	50.0	ug/L	93	(85%-120%)
Toluene-d8	46.1	50.0	ug/L	92	(79%-122%)

1E

EPA SAMPLE NO.

GU0601G14R101

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V524

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.57	9.0	J
2.					
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Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	50.0	50.0	ug/L	100	(75%−119%)
Dibromofluoromethane	46.6	50.0	ug/L	93	(85%−120%)
Toluene−d8	46.6	50.0	ug/L	93	(79%−122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU0601G1
4R101-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V520

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.58	7.6	JB
2.					
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QUALITY CONTROL SUMMARY

Volatile

Surrogate Recovery Report

SDG Number: 154614

Matrix: GROUND WATER

CAP Column (1) : DB−624

Sample ID	Client ID	DBF %REC	TOL %REC	BFB %REC
1201025326	LCS for batch 500624	93	93	102
1201025327	LCS for batch 500624	90	92	100
1201025323	MB for batch 500624	93	92	100
154614005	GU06010G8WT01−FTB	92	92	100
154614006	GU0601G14R101−FTB	93	93	100
154614007	GU06010GMC401−FTB	94	94	99
154614010	GU06010GMC401−FB	94	93	99
154614003	GU06010G8WT01	92	92	98
154614004	GU0601G14R101	93	92	99
154614009	GU06010GMC401	94	94	100
1201026795	LCS for batch 500624	92	93	100
1201028020	LCS for batch 500624	90	93	98
1201026794	MB for batch 500624	93	92	100
1201025324	GU06010G8WT01(154614003PS)	92	93	103
1201025325	GU06010G8WT01(154614003PSD)	92	92	99

Surrogate			Acceptance Limits
DBF	=	Dibromofluoromethane	(85%−120%)
TOL	=	Toluene−d8	(79%−122%)
BFB	=	Bromofluorobenzene	(75%−119%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Laboratory Control Sample		
Client ID:	LCS for batch 500624	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201025326				
Instrument:	VOA8.I	**Analysis Date:**	02/03/2006 09:51	**Dilution:**	1
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
630–20–6	LCS	1,1,1,2–Tetrachloroethane	50.0	0.0	57.0	114	82–122
563–58–6	LCS	1,1–Dichloropropene	50.0	0.0	55.5	111	78–123
87–61–6	LCS	1,2,3–Trichlorobenzene	50.0	0.0	53.1	106	70–137
96–18–4	LCS	1,2,3–Trichloropropane	50.0	0.0	50.5	101	72–127
95–63–6	LCS	1,2,4–Trimethylbenzene	50.0	0.0	52.9	106	75–117
108–67–8	LCS	1,3,5–Trimethylbenzene	50.0	0.0	53.2	106	73–117
142–28–9	LCS	1,3–Dichloropropane	50.0	0.0	49.8	100	78–115
594–20–7	LCS	2,2–Dichloropropane	50.0	0.0	61.6	123	78–135
95–49–8	LCS	2–Chlorotoluene	50.0	0.0	52.6	105	76–118
106–43–4	LCS	4–Chlorotoluene	50.0	0.0	51.2	102	76–118
99–87–6	LCS	4–Isopropyltoluene	50.0	0.0	53.8	108	80–135
75–05–8	LCS	Acetonitrile	1250	0.0	1130	91	58–136
108–86–1	LCS	Bromobenzene	50.0	0.0	51.8	104	79–118
74–97–5	LCS	Bromochloromethane	50.0	0.0	50.7	101	78–124
74–95–3	LCS	Dibromomethane	50.0	0.0	52.5	105	82–123
74–88–4	LCS	Iodomethane	250	0.0	230	92	77–134
108–05–4	LCS	Vinyl acetate	250	0.0	332	133	66–142
104–51–8	LCS	n–Butylbenzene	50.0	0.0	55.4	111	71–130
103–65–1	LCS	n–Propylbenzene	50.0	0.0	53.0	106	74–122
135–98–8	LCS	sec–Butylbenzene	50.0	0.0	53.3	107	72–124
98–06–6	LCS	tert–Butylbenzene	50.0	0.0	54.2	108	72–121
75–71–8	LCS	Dichlorodifluoromethane	50.0	0.0	45.5	91	50–142

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Laboratory Control Sample		
Client ID:	LCS for batch 500624	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201025326				
Instrument:	VOA8.I	**Analysis Date:**	02/03/2006 09:51	**Dilution:**	
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
74-87-3	LCS	Chloromethane	50.0	0.0	52.1	104	53-134
75-01-4	LCS	Vinyl chloride	50.0	0.0	53.8	108	60-128
74-83-9	LCS	Bromomethane	50.0	0.0	51.7	103	60-120
75-00-3	LCS	Chloroethane	50.0	0.0	51.2	102	68-129
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	50.8	102	66-136
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	54.6	109	71-125
67-64-1	LCS	Acetone	250	0.0	226	90	62-134
75-15-0	LCS	Carbon disulfide	250	0.0	316	126	74-142
75-09-2	LCS	Methylene chloride	50.0	0.0	57.6	115	71-120
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	54.0	108	77-128
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	52.3	105	72-120
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	53.4	107	79-120
67-66-3	LCS	Chloroform	50.0	0.0	51.4	103	80-121
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	49.7	99	76-128
78-93-3	LCS	2-Butanone	250	0.0	231	92	62-138
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	55.5	111	71-123
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	50.1	100	75-120
120-82-1	LCS	1,2,4-Trichlorobenzene	50.0	0.0	55.7	111	71-135
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	49.8	100	75-119
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	49.6	99	78-116
91-20-3	LCS	Naphthalene	50.0	0.0	54.0	108	63-138
87-68-3	LCS	Hexachlorobutadiene	50.0	0.0	52.9	106	65-128

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Laboratory Control Sample		
Client ID:	LCS for batch 500624	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201025326				
Instrument:	VOA8.I	**Analysis Date:**	02/03/2006 09:51	**Dilution:**	
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
56−23−5	LCS	Carbon tetrachloride	50.0	0.0	62.2	124	77−133
71−43−2	LCS	Benzene	50.0	0.0	58.9	118	69−120
79−01−6	LCS	Trichloroethylene	50.0	0.0	52.8	106	78−118
78−87−5	LCS	1,2−Dichloropropane	50.0	0.0	52.6	105	75−119
75−27−4	LCS	Bromodichloromethane	50.0	0.0	56.6	113	87−134
10061−01−5	LCS	cis−1,3−Dichloropropylene	50.0	0.0	58.8	118	79−125
10061−02−6	LCS	trans−1,3−Dichloropropylene	50.0	0.0	57.1	114	73−126
79−00−5	LCS	1,1,2−Trichloroethane	50.0	0.0	49.5	99	78−120
124−48−1	LCS	Dibromochloromethane	50.0	0.0	56.6	113	78−133
108−10−1	LCS	4−Methyl−2−pentanone	250	0.0	230	92	64−135
108−88−3	LCS	Toluene	50.0	0.0	50.3	101	75−120
127−18−4	LCS	Tetrachloroethylene	50.0	0.0	51.6	103	69−124
591−78−6	LCS	2−Hexanone	250	0.0	225	90	66−141
106−93−4	LCS	1,2−Dibromoethane	50.0	0.0	50.5	101	80−120
108−90−7	LCS	Chlorobenzene	50.0	0.0	50.6	101	80−118
100−41−4	LCS	Ethylbenzene	50.0	0.0	51.2	102	79−120
179601−23−1	LCS	m,p−Xylenes	100	0.0	101	101	79−116
100−42−5	LCS	Styrene	50.0	0.0	52.4	105	78−117
95−47−6	LCS	o−Xylene	50.0	0.0	52.0	104	80−119
98−82−8	LCS	Isopropylbenzene	50.0	0.0	54.0	108	75−120
75−25−2	LCS	Bromoform	50.0	0.0	53.1	106	74−136
79−34−5	LCS	1,1,2,2−Tetrachloroethane	50.0	0.0	51.6	103	72−129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**154614**	**Sample Type:**	**Laboratory Control Sample**	
Client ID:	**LCS for batch 500624**	**Matrix:**	**GROUND WATER**	
Lab Sample ID:	**1201025326**			
Instrument:	**VOA8.I**	**Analysis Date:**	**02/03/2006 09:51**	**Dilution:**
Analyst:	**ACJ**	**Prep Batch ID:**		
Purge Vol:	**5 mL**	**Batch ID:**	**500624**	

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
96-12-8	LCS	1,2-Dibromo-3-chloropropan	50.0	0.0	53.2	106	63-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Laboratory Control Sample		
Client ID:	LCS for batch 500624	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201025327				
Instrument:	VOA8.I	**Analysis Date:**	02/03/2006 10:21	**Dilution:**	1
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
126-99-8	LCS	2-Chloro-1,3-butadiene	50.0	0.0	61.3	123	50-148
107-02-8	LCS	Acrolein	250	0.0	132	53 *	56-148
107-13-1	LCS	Acrylonitrile	250	0.0	260	104	57-126
107-05-1	LCS	Allyl chloride	250	0.0	262	105	65-126
78-83-1	LCS	Isobutyl alcohol	2500	0.0	2430	97	57-137
126-98-7	LCS	Methacrylonitrile	250	0.0	256	103	64-118
107-12-0	LCS	Propionitrile	250	0.0	256	102	58-129
76-13-1	LCS	Trichlorotrifluoroethane	250	0.0	257	103	66-131
123-91-1	LCS	1,4-Dioxane	2500	0.0	2400	96	60-131
80-62-6	LCS	Methyl methacrylate	250	0.0	281	112	68-122
97-63-2	LCS	Ethyl methacrylate	250	0.0	252	101	68-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Laboratory Control Sample		
Client ID:	LCS for batch 500624	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201026795				
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 11:38	**Dilution:**	1
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
630–20–6	LCS	1,1,1,2–Tetrachloroethane	50.0	0.0	48.8	98	82–122
563–58–6	LCS	1,1–Dichloropropene	50.0	0.0	45.6	91	78–123
87–61–6	LCS	1,2,3–Trichlorobenzene	50.0	0.0	46.8	94	70–137
96–18–4	LCS	1,2,3–Trichloropropane	50.0	0.0	41.3	83	72–127
95–63–6	LCS	1,2,4–Trimethylbenzene	50.0	0.0	44.5	89	75–117
108–67–8	LCS	1,3,5–Trimethylbenzene	50.0	0.0	43.9	88	73–117
142–28–9	LCS	1,3–Dichloropropane	50.0	0.0	42.4	85	78–115
594–20–7	LCS	2,2–Dichloropropane	50.0	0.0	51.1	102	78–135
95–49–8	LCS	2–Chlorotoluene	50.0	0.0	43.3	87	76–118
106–43–4	LCS	4–Chlorotoluene	50.0	0.0	41.6	83	76–118
99–87–6	LCS	4–Isopropyltoluene	50.0	0.0	43.9	88	80–135
75–05–8	LCS	Acetonitrile	1250	0.0	921	74	58–136
108–86–1	LCS	Bromobenzene	50.0	0.0	44.2	88	79–118
74–97–5	LCS	Bromochloromethane	50.0	0.0	45.9	92	78–124
74–95–3	LCS	Dibromomethane	50.0	0.0	45.5	91	82–123
74–88–4	LCS	Iodomethane	250	0.0	205	82	77–134
108–05–4	LCS	Vinyl acetate	250	0.0	269	108	66–142
104–51–8	LCS	n–Butylbenzene	50.0	0.0	45.1	90	71–130
103–65–1	LCS	n–Propylbenzene	50.0	0.0	41.1	82	74–122
135–98–8	LCS	sec–Butylbenzene	50.0	0.0	42.9	86	72–124
98–06–6	LCS	tert–Butylbenzene	50.0	0.0	43.7	87	72–121
75–71–8	LCS	Dichlorodifluoromethane	50.0	0.0	23.3	47 *	50–142

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Laboratory Control Sample		
Client ID:	LCS for batch 500624	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201026795				
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 11:38	**Dilution:**	
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
74-87-3	LCS	Chloromethane	50.0	0.0	34.8	70	53-134
75-01-4	LCS	Vinyl chloride	50.0	0.0	36.2	72	60-128
74-83-9	LCS	Bromomethane	50.0	0.0	38.8	78	60-120
75-00-3	LCS	Chloroethane	50.0	0.0	39.5	79	68-129
75-69-4	LCS	Trichlorofluoromethane	50.0	0.0	37.7	75	66-136
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	41.7	83	71-125
67-64-1	LCS	Acetone	250	0.0	266	107	62-134
75-15-0	LCS	Carbon disulfide	250	0.0	247	99	74-142
75-09-2	LCS	Methylene chloride	50.0	0.0	55.4	111	71-120
156-60-5	LCS	trans-1,2-Dichloroethylene	50.0	0.0	42.6	85	77-128
75-34-3	LCS	1,1-Dichloroethane	50.0	0.0	45.5	91	72-120
156-59-2	LCS	cis-1,2-Dichloroethylene	50.0	0.0	45.1	90	79-120
67-66-3	LCS	Chloroform	50.0	0.0	44.3	89	80-121
107-06-2	LCS	1,2-Dichloroethane	50.0	0.0	44.1	88	76-128
78-93-3	LCS	2-Butanone	250	0.0	221	88	62-138
71-55-6	LCS	1,1,1-Trichloroethane	50.0	0.0	46.1	92	71-123
106-46-7	LCS	1,4-Dichlorobenzene	50.0	0.0	42.1	84	75-120
120-82-1	LCS	1,2,4-Trichlorobenzene	50.0	0.0	48.7	97	71-135
541-73-1	LCS	1,3-Dichlorobenzene	50.0	0.0	41.3	83	75-119
95-50-1	LCS	1,2-Dichlorobenzene	50.0	0.0	42.4	85	78-116
91-20-3	LCS	Naphthalene	50.0	0.0	47.2	94	63-138
87-68-3	LCS	Hexachlorobutadiene	50.0	0.0	43.2	86	65-128

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Laboratory Control Sample		
Client ID:	LCS for batch 500624	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201026795				
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 11:38	**Dilution:**	
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
56−23−5	LCS	Carbon tetrachloride	50.0	0.0	52.3	105	77−133
71−43−2	LCS	Benzene	50.0	0.0	50.4	101	69−120
79−01−6	LCS	Trichloroethylene	50.0	0.0	44.3	89	78−118
78−87−5	LCS	1,2−Dichloropropane	50.0	0.0	46.1	92	75−119
75−27−4	LCS	Bromodichloromethane	50.0	0.0	49.3	99	87−134
10061−01−5	LCS	cis−1,3−Dichloropropylene	50.0	0.0	53.8	108	79−125
10061−02−6	LCS	trans−1,3−Dichloropropylene	50.0	0.0	50.8	102	73−126
79−00−5	LCS	1,1,2−Trichloroethane	50.0	0.0	43.4	87	78−120
124−48−1	LCS	Dibromochloromethane	50.0	0.0	47.9	96	78−133
108−10−1	LCS	4−Methyl−2−pentanone	250	0.0	200	80	64−135
108−88−3	LCS	Toluene	50.0	0.0	42.0	84	75−120
127−18−4	LCS	Tetrachloroethylene	50.0	0.0	42.0	84	69−124
591−78−6	LCS	2−Hexanone	250	0.0	214	86	66−141
106−93−4	LCS	1,2−Dibromoethane	50.0	0.0	43.8	88	80−120
108−90−7	LCS	Chlorobenzene	50.0	0.0	43.0	86	80−118
100−41−4	LCS	Ethylbenzene	50.0	0.0	42.3	85	79−120
179601−23−1	LCS	m,p−Xylenes	100	0.0	84.0	84	79−116
100−42−5	LCS	Styrene	50.0	0.0	45.1	90	78−117
95−47−6	LCS	o−Xylene	50.0	0.0	43.7	87	80−119
98−82−8	LCS	Isopropylbenzene	50.0	0.0	42.1	84	75−120
75−25−2	LCS	Bromoform	50.0	0.0	43.9	88	74−136
79−34−5	LCS	1,1,2,2−Tetrachloroethane	50.0	0.0	43.1	86	72−129

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**154614**	**Sample Type:**	**Laboratory Control Sample**	
Client ID:	**LCS for batch 500624**	**Matrix:**	**GROUND WATER**	
Lab Sample ID:	**1201026795**			
Instrument:	**VOA8.I**	**Analysis Date:**	**02/04/2006 11:38**	**Dilution:**
Analyst:	**ACJ**	**Prep Batch ID:**		
Purge Vol:	**5 mL**	**Batch ID:**	**500624**	

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
96-12-8	LCS	1,2-Dibromo-3-chloropropan	50.0	0.0	42.7	85	63-139

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	**154614**	**Sample Type:**	**Laboratory Control Sample**		
Client ID:	**LCS for batch 500624**	**Matrix:**	**GROUND WATER**		
Lab Sample ID:	**1201028020**				
Instrument:	**VOA8.I**	**Analysis Date:**	**02/04/2006 12:38**	**Dilution:**	**1**
Analyst:	**ACJ**	**Prep Batch ID:**			
Purge Vol:	**5 mL**	**Batch ID:**	**500624**		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
126-99-8	LCS	2-Chloro-1,3-butadiene	50.0	0.0	52.7	105	50-148
107-02-8	LCS	Acrolein	250	0.0	123	49 *	56-148
107-13-1	LCS	Acrylonitrile	250	0.0	213	85	57-126
107-05-1	LCS	Allyl chloride	250	0.0	233	93	65-126
78-83-1	LCS	Isobutyl alcohol	2500	0.0	1830	73	57-137
126-98-7	LCS	Methacrylonitrile	250	0.0	218	87	64-118
107-12-0	LCS	Propionitrile	250	0.0	203	81	58-129
76-13-1	LCS	Trichlorotrifluoroethane	250	0.0	219	88	66-131
123-91-1	LCS	1,4-Dioxane	2500	0.0	1750	70	60-131
80-62-6	LCS	Methyl methacrylate	250	0.0	242	97	68-122
97-63-2	LCS	Ethyl methacrylate	250	0.0	227	91	68-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike
Client ID:	GU06010G8WT01(154614003PS)	**Matrix:**	GROUND WATER
Lab Sample ID:	1201025324		
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:05
Analyst:	ACJ	**Prep Batch ID:**	
Purge Vol:	5 mL	**Batch ID:**	500624

Dilution: 1

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
630−20−6	PS	1,1,1,2−Tetrachloroethane	50.0	0.00	U	50.9	102	72−127
563−58−6	PS	1,1−Dichloropropene	50.0	0.00	U	45.1	90	67−116
87−61−6	PS	1,2,3−Trichlorobenzene	50.0	0.00	U	39.1	78	66−129
96−18−4	PS	1,2,3−Trichloropropane	50.0	0.00	U	40.5	81	66−126
95−63−6	PS	1,2,4−Trimethylbenzene	50.0	0.00	U	44.6	89	65−120
108−67−8	PS	1,3,5−Trimethylbenzene	50.0	0.00	U	45.0	90	66−120
142−28−9	PS	1,3−Dichloropropane	50.0	0.00	U	42.7	85	74−117
594−20−7	PS	2,2−Dichloropropane	50.0	0.00	U	49.3	99	62−126
95−49−8	PS	2−Chlorotoluene	50.0	0.00	U	44.9	90	67−115
106−43−4	PS	4−Chlorotoluene	50.0	0.00	U	42.4	85	66−120
99−87−6	PS	4−Isopropyltoluene	50.0	0.00	U	44.6	89	65−118
75−05−8	PS	Acetonitrile	1250	0.00	U	910	73	58−128
108−86−1	PS	Bromobenzene	50.0	0.00	U	45.9	92	74−115
74−97−5	PS	Bromochloromethane	50.0	0.00	U	45.8	92	79−122
74−95−3	PS	Dibromomethane	50.0	0.00	U	45.3	91	78−124
74−88−4	PS	Iodomethane	250	0.00	U	214	86	72−127
108−05−4	PS	Vinyl acetate	250	0.00	U	252	101	55−133
104−51−8	PS	n−Butylbenzene	50.0	0.00	U	43.0	86	60−121
103−65−1	PS	n−Propylbenzene	50.0	0.00	U	42.3	85	65−116
135−98−8	PS	sec−Butylbenzene	50.0	0.00	U	44.6	89	64−118
98−06−6	PS	tert−Butylbenzene	50.0	0.00	U	45.6	91	65−116
75−71−8	PS	Dichlorodifluoromethane	50.0	0.00	U	27.9	56	47−138

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike
Client ID:	GU06010G8WT01(154614003PS)	**Matrix:**	GROUND WATER
Lab Sample ID:	1201025324		
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:05
Analyst:	ACJ	**Prep Batch ID:**	
Purge Vol:	5 mL	**Batch ID:**	500624

Dilution:

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
74–87–3	PS	Chloromethane	50.0	0.00	U	37.0	74	43–140
75–01–4	PS	Vinyl chloride	50.0	0.00	U	36.3	73	53–119
74–83–9	PS	Bromomethane	50.0	0.00	U	40.6	81	57–120
75–00–3	PS	Chloroethane	50.0	0.00	U	40.4	81	63–122
75–69–4	PS	Trichlorofluoromethane	50.0	0.00	U	39.5	79	57–127
75–35–4	PS	1,1–Dichloroethylene	50.0	0.00	U	42.6	85	60–122
67–64–1	PS	Acetone	250	0.00	U	206	83	56–128
75–15–0	PS	Carbon disulfide	250	0.00	U	257	103	66–136
75–09–2	PS	Methylene chloride	50.0	0.00	U	57.8	116	69–120
156–60–5	PS	trans–1,2–Dichloroethylene	50.0	0.00	U	42.8	86	72–120
75–34–3	PS	1,1–Dichloroethane	50.0	0.00	U	47.0	94	67–120
156–59–2	PS	cis–1,2–Dichloroethylene	50.0	0.00	U	45.9	92	75–116
67–66–3	PS	Chloroform	50.0	0.00	U	45.6	91	73–121
107–06–2	PS	1,2–Dichloroethane	50.0	0.00	U	44.9	90	71–127
78–93–3	PS	2–Butanone	250	0.00	U	188	75	62–126
71–55–6	PS	1,1,1–Trichloroethane	50.0	0.00	U	47.1	94	61–123
106–46–7	PS	1,4–Dichlorobenzene	50.0	0.00	U	40.6	81	67–116
120–82–1	PS	1,2,4–Trichlorobenzene	50.0	0.00	U	38.6	77	60–130
541–73–1	PS	1,3–Dichlorobenzene	50.0	0.00	U	40.8	82	67–115
95–50–1	PS	1,2–Dichlorobenzene	50.0	0.00	U	41.9	84	72–115
91–20–3	PS	Naphthalene	50.0	0.00	U	41.8	84	62–132
87–68–3	PS	Hexachlorobutadiene	50.0	0.00	U	39.9	80	57–119

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike
Client ID:	GU06010G8WT01(154614003PS)	**Matrix:**	GROUND WATER
Lab Sample ID:	1201025324		
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:05
Analyst:	ACJ	**Prep Batch ID:**	
Purge Vol:	5 mL	**Batch ID:**	500624

Dilution:

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
56−23−5	PS	Carbon tetrachloride	50.0	0.00	U	53.1	106	66−131
71−43−2	PS	Benzene	50.0	0.00	U	51.6	103	64−120
79−01−6	PS	Trichloroethylene	50.0	0.00	U	44.7	89	71−120
78−87−5	PS	1,2−Dichloropropane	50.0	0.00	U	47.4	95	70−130
75−27−4	PS	Bromodichloromethane	50.0	0.00	U	50.4	101	85−133
10061−01−5	PS	cis−1,3−Dichloropropylene	50.0	0.00	U	53.4	107	73−120
10061−02−6	PS	trans−1,3−Dichloropropylene	50.0	0.00	U	50.2	100	67−121
79−00−5	PS	1,1,2−Trichloroethane	50.0	0.00	U	43.5	87	74−120
124−48−1	PS	Dibromochloromethane	50.0	0.00	U	49.2	98	77−133
108−10−1	PS	4−Methyl−2−pentanone	250	0.00	U	187	75	62−133
108−88−3	PS	Toluene	50.0	0.00	U	42.7	85	68−120
127−18−4	PS	Tetrachloroethylene	50.0	0.00	U	41.2	82	60−120
591−78−6	PS	2−Hexanone	250	0.00	U	181	72	58−140
106−93−4	PS	1,2−Dibromoethane	50.0	0.00	U	43.0	86	74−121
108−90−7	PS	Chlorobenzene	50.0	0.00	U	43.6	87	72−116
100−41−4	PS	Ethylbenzene	50.0	0.00	U	42.7	85	70−120
179601−23−1	PS	m,p−Xylenes	100	0.00	U	83.9	84	69−120
100−42−5	PS	Styrene	50.0	0.00	U	44.5	89	68−116
95−47−6	PS	o−Xylene	50.0	0.00	U	44.7	89	72−117
98−82−8	PS	Isopropylbenzene	50.0	0.00	U	44.0	88	64−120
75−25−2	PS	Bromoform	50.0	0.00	U	45.9	92	70−134
79−34−5	PS	1,1,2,2−Tetrachloroethane	50.0	0.00	U	43.5	87	63−130

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike		
Client ID:	GU06010G8WT01(154614003PS)	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201025324				
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:05	**Dilution:**	
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
96-12-8	PS	1,2-Dibromo-3-chloropropan	50.0	0.00	U	40.3	81	55-138

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike Duplicate
Client ID:	GU06010G8WT01(154614003PSD)	**Matrix:**	GROUND WATER
Lab Sample ID:	1201025325		
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:34
Analyst:	ACJ	**Prep Batch ID:**	
Purge Vol:	5 mL	**Batch ID:**	500624

Dilution: 1

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
630–20–6	PSD	1,1,1,2–Tetrachloroethane	50.0	0.00	U	51.8	104	72–127	2	0–30
563–58–6	PSD	1,1–Dichloropropene	50.0	0.00	U	47.5	95	67–116	5	0–30
87–61–6	PSD	1,2,3–Trichlorobenzene	50.0	0.00	U	44.5	89	66–129	13	0–30
96–18–4	PSD	1,2,3–Trichloropropane	50.0	0.00	U	42.9	86	66–126	6	0–30
95–63–6	PSD	1,2,4–Trimethylbenzene	50.0	0.00	U	44.3	89	65–120	1	0–30
108–67–8	PSD	1,3,5–Trimethylbenzene	50.0	0.00	U	44.8	90	66–120	0	0–30
142–28–9	PSD	1,3–Dichloropropane	50.0	0.00	U	44.6	89	74–117	4	0–30
594–20–7	PSD	2,2–Dichloropropane	50.0	0.00	U	50.9	102	62–126	3	0–30
95–49–8	PSD	2–Chlorotoluene	50.0	0.00	U	44.2	88	67–115	2	0–30
106–43–4	PSD	4–Chlorotoluene	50.0	0.00	U	42.7	85	66–120	1	0–30
99–87–6	PSD	4–Isopropyltoluene	50.0	0.00	U	44.9	90	65–118	1	0–30
75–05–8	PSD	Acetonitrile	1250	0.00	U	980	78	58–128	7	0–30
108–86–1	PSD	Bromobenzene	50.0	0.00	U	45.8	92	74–115	0	0–30
74–97–5	PSD	Bromochloromethane	50.0	0.00	U	46.9	94	79–122	2	0–30
74–95–3	PSD	Dibromomethane	50.0	0.00	U	47.6	95	78–124	5	0–30
74–88–4	PSD	Iodomethane	250	0.00	U	217	87	72–127	1	0–30
108–05–4	PSD	Vinyl acetate	250	0.00	U	265	106	55–133	5	0–30
104–51–8	PSD	n–Butylbenzene	50.0	0.00	U	44.7	89	60–121	4	0–30
103–65–1	PSD	n–Propylbenzene	50.0	0.00	U	42.6	85	65–116	1	0–30
135–98–8	PSD	sec–Butylbenzene	50.0	0.00	U	45.4	91	64–118	2	0–30
98–06–6	PSD	tert–Butylbenzene	50.0	0.00	U	45.6	91	65–116	0	0–30
75–71–8	PSD	Dichlorodifluoromethane	50.0	0.00	U	27.6	55	47–138	1	0–30

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike Duplicate
Client ID:	GU06010G8WT01(154614003PSD)	**Matrix:**	GROUND WATER
Lab Sample ID:	1201025325		
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:34
Analyst:	ACJ	**Prep Batch ID:**	
Purge Vol:	5 mL	**Batch ID:**	500624

Dilution:

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
74–87–3	PSD	Chloromethane	50.0	0.00	U	38.4	77	43–140	4	0–30
75–01–4	PSD	Vinyl chloride	50.0	0.00	U	38.2	76	53–119	5	0–30
74–83–9	PSD	Bromomethane	50.0	0.00	U	40.6	81	57–120	0	0–30
75–00–3	PSD	Chloroethane	50.0	0.00	U	42.5	85	63–122	5	0–30
75–69–4	PSD	Trichlorofluoromethane	50.0	0.00	U	40.4	81	57–127	2	0–30
75–35–4	PSD	1,1–Dichloroethylene	50.0	0.00	U	43.8	88	60–122	3	0–30
67–64–1	PSD	Acetone	250	0.00	U	199	80	56–128	4	0–30
75–15–0	PSD	Carbon disulfide	250	0.00	U	266	107	66–136	4	0–30
75–09–2	PSD	Methylene chloride	50.0	0.00	U	58.1	116	69–120	0	0–30
156–60–5	PSD	trans–1,2–Dichloroethylene	50.0	0.00	U	44.2	88	72–120	3	0–30
75–34–3	PSD	1,1–Dichloroethane	50.0	0.00	U	48.3	97	67–120	3	0–30
156–59–2	PSD	cis–1,2–Dichloroethylene	50.0	0.00	U	47.6	95	75–116	4	0–30
67–66–3	PSD	Chloroform	50.0	0.00	U	46.5	93	73–121	2	0–30
107–06–2	PSD	1,2–Dichloroethane	50.0	0.00	U	45.8	92	71–127	2	0–30
78–93–3	PSD	2–Butanone	250	0.00	U	206	82	62–126	9	0–30
71–55–6	PSD	1,1,1–Trichloroethane	50.0	0.00	U	48.9	98	61–123	4	0–30
106–46–7	PSD	1,4–Dichlorobenzene	50.0	0.00	U	41.1	82	67–116	1	0–30
120–82–1	PSD	1,2,4–Trichlorobenzene	50.0	0.00	U	43.2	86	60–130	11	0–30
541–73–1	PSD	1,3–Dichlorobenzene	50.0	0.00	U	40.9	82	67–115	0	0–30
95–50–1	PSD	1,2–Dichlorobenzene	50.0	0.00	U	42.7	85	72–115	2	0–30
91–20–3	PSD	Naphthalene	50.0	0.00	U	48.4	97	62–132	15	0–30
87–68–3	PSD	Hexachlorobutadiene	50.0	0.00	U	44.0	88	57–119	10	0–30

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike Duplicate
Client ID:	GU06010G8WT01(154614003PSD)	**Matrix:**	GROUND WATER
Lab Sample ID:	1201025325		
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:34
Analyst:	ACJ	**Prep Batch ID:**	
Purge Vol:	5 mL	**Batch ID:**	500624

Dilution:

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
56–23–5	PSD	Carbon tetrachloride	50.0	0.00	U	55.5	111	66–131	4	0–30
71–43–2	PSD	Benzene	50.0	0.00	U	52.7	105	64–120	2	0–30
79–01–6	PSD	Trichloroethylene	50.0	0.00	U	46.1	92	71–120	3	0–30
78–87–5	PSD	1,2–Dichloropropane	50.0	0.00	U	47.9	96	70–130	1	0–30
75–27–4	PSD	Bromodichloromethane	50.0	0.00	U	51.4	103	85–133	2	0–30
10061–01–5	PSD	cis–1,3–Dichloropropylene	50.0	0.00	U	55.0	110	73–120	3	0–30
10061–02–6	PSD	trans–1,3–Dichloropropylene	50.0	0.00	U	51.6	103	67–121	3	0–30
79–00–5	PSD	1,1,2–Trichloroethane	50.0	0.00	U	44.9	90	74–120	3	0–30
124–48–1	PSD	Dibromochloromethane	50.0	0.00	U	50.2	100	77–133	2	0–30
108–10–1	PSD	4–Methyl–2–pentanone	250	0.00	U	206	83	62–133	10	0–30
108–88–3	PSD	Toluene	50.0	0.00	U	43.7	87	68–120	2	0–30
127–18–4	PSD	Tetrachloroethylene	50.0	0.00	U	42.2	84	60–120	2	0–30
591–78–6	PSD	2–Hexanone	250	0.00	U	204	81	58–140	12	0–30
106–93–4	PSD	1,2–Dibromoethane	50.0	0.00	U	45.2	90	74–121	5	0–30
108–90–7	PSD	Chlorobenzene	50.0	0.00	U	44.2	88	72–116	1	0–30
100–41–4	PSD	Ethylbenzene	50.0	0.00	U	44.0	88	70–120	3	0–30
179601–23–1	PSD	m,p–Xylenes	100	0.00	U	86.1	86	69–120	3	0–30
100–42–5	PSD	Styrene	50.0	0.00	U	45.5	91	68–116	2	0–30
95–47–6	PSD	o–Xylene	50.0	0.00	U	45.7	91	72–117	2	0–30
98–82–8	PSD	Isopropylbenzene	50.0	0.00	U	43.8	88	64–120	0	0–30
75–25–2	PSD	Bromoform	50.0	0.00	U	46.7	93	70–134	2	0–30
79–34–5	PSD	1,1,2,2–Tetrachloroethane	50.0	0.00	U	45.2	90	63–130	4	0–30

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number:	154614	**Sample Type:**	Post Spike Duplicate		
Client ID:	GU06010G8WT01(154614003PSD)	**Matrix:**	GROUND WATER		
Lab Sample ID:	1201025325				
Instrument:	VOA8.I	**Analysis Date:**	02/04/2006 21:34	**Dilution:**	
Analyst:	ACJ	**Prep Batch ID:**			
Purge Vol:	5 mL	**Batch ID:**	500624		

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
96-12-8	PSD	1,2-Dibromo-3-chloropropan	50.0	0.00	U	46.1	92	55-138	14	0-30

Method Blank Summary

SDG Number:	**154614**	**Client:**	**ESHL001**	**Matrix:**	**GROUND WATER**
Client ID:	**MB for batch 500624**	**Instrument ID:**	**VOA8.I**	**Data File:**	**8v508beshl.d**
Lab Sample ID:	**1201025323**	**Prep Date:**	**02/03/2006 11:50**	**Analyzed:**	**02/03/06 11:50**

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

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 500624	1201025326	8v504leshl.d	02/03/06	0951
02	LCS for batch 500624	1201025327	8v505SHLeshl.d	02/03/06	1021
03	GU06010G8WT01−FTB	154614005	8v519.d	02/03/06	1720
04	GU0601G14R101−FTB	154614006	8v520.d	02/03/06	1749
05	GU06010GMC401−FTB	154614007	8v521.d	02/03/06	1819
06	GU06010GMC401−FB	154614010	8v522.d	02/03/06	1849
07	GU06010G8WT01	154614003	8v523.d	02/03/06	1919
08	GU0601G14R101	154614004	8v524.d	02/03/06	1948
09	GU06010GMC401	154614009	8v525.d	02/03/06	2018

Method Blank Summary

SDG Number:	**154614**	**Client:**	**ESHL001**	**Matrix:**	**GROUND WATER**
Client ID:	**MB for batch 500624**	**Instrument ID:**	**VOA8.I**	**Data File:**	**8v607b154614.d**
Lab Sample ID:	**1201026794**	**Prep Date:**	**02/04/2006 13:38**	**Analyzed:**	**02/04/06 13:38**

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

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 500624	1201026795	8v603l154614.d	02/04/06	1138
02	LCS for batch 500624	1201028020	8v605lshESHL.d	02/04/06	1238
03	GU06010G8WT01(154614003PS)	1201025324	8v622.d	02/04/06	2105
04	GU06010G8WT01(154614003PSD)	1201025325	8v623.d	02/04/06	2134

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Lab File ID: 8S301 BFB Injection Date: 01/11/06

Instrument ID: VOA8 BFB Injection Time: 1021

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.2
75	30.0 - 60.0% of mass 95	45.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	76.6
175	5.0 - 9.0% of mass 174	5.5 (7.2)1
176	95.0 - 101.0% of mass 174	75.5 (98.7)1
177	5.0 - 9.0% of mass 176	5.1 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0005	W8V060111-01	8S303	01/11/06	1107
02	VSTD001	W8V060111-02	8S305	01/11/06	1207
03	VSTD002	W8V060111-03	8S306	01/11/06	1237
04	VSTD005	W8V060111-04	8S307	01/11/06	1308
05	VSTD010	W8V060111-05	8S308	01/11/06	1338
06	VSTD020	W8V060111-06	8S309	01/11/06	1408
07	VSTD050	W8V060111-07	8S310	01/11/06	1438
08	VSTD100	W8V060111-08	8S311	01/11/06	1508
09	VSTD005S	UVM051208-04	8S313	01/11/06	1608
10	VSTD010S	UVM051208-05	8S314	01/11/06	1639
11	VSTD025S	UVM051208-06	8S315	01/11/06	1709
12	VSTD050S	UVM051208-07	8S316	01/11/06	1739
13	VSTD100S	UVM051208-08	8S317	01/11/06	1808
14	VSTD250S	UVM051208-09	8S318	01/11/06	1839
15	VSTD500S	UVM051208-10	8S319	01/11/06	1909
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Lab File ID: 8V401 BFB Injection Date: 02/02/06

Instrument ID: VOA8 BFB Injection Time: 0911

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	43.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	76.4
175	5.0 - 9.0% of mass 174	5.4 (7.1)1
176	95.0 - 101.0% of mass 174	74.8 (97.9)1
177	5.0 - 9.0% of mass 176	5.0 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SECOND SOURCE	UVM060105-01D	8V402	02/02/06	0927
02	SECOND SOURCE	UVM060123-01A	8V404	02/02/06	1027
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Lab File ID: 8V501 BFB Injection Date: 02/03/06

Instrument ID: VOA8 BFB Injection Time: 0835

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	44.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 100.0% of mass 95	76.9
175	5.0 - 9.0% of mass 174	5.7 (7.4)1
176	95.0 - 101.0% of mass 174	75.3 (98.0)1
177	5.0 - 9.0% of mass 176	5.1 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	W8V060203-01	8V502	02/03/06	0851
02	VBLK01LCS	1201025326	8V504LESHL	02/03/06	0951
03	VSTD250S	UVM060123-01A	8V505	02/03/06	1021
04	VBLK01SLCS	1201025327	8V505SESHL	02/03/06	1021
05	VBLK01	1201025323	8V508BESHL	02/03/06	1150
06	GU06010G8WT01-FTB	154614005	8V519	02/03/06	1720
07	GU0601G14R101-FTB	154614006	8V520	02/03/06	1749
08	GU06010GMC401-FTB	154614007	8V521	02/03/06	1819
09	GU06010GMC401-FB	154614010	8V522	02/03/06	1849
10	GU06010G8WT01	154614003	8V523	02/03/06	1919
11	GU0601G14R101	154614004	8V524	02/03/06	1948
12	GU06010GMC401	154614009	8V525	02/03/06	2018
13					
14					
15					
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21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Lab File ID: 8V601 BFB Injection Date: 02/04/06

Instrument ID: VOA8 BFB Injection Time: 1051

GC Column: RTX-VOLATILES ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.8
75	30.0 - 60.0% of mass 95	43.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	73.1
175	5.0 - 9.0% of mass 174	5.2 (7.2)1
176	95.0 - 101.0% of mass 174	71.6 (97.9)1
177	5.0 - 9.0% of mass 176	4.8 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	W8V060204-01	8V602	02/04/06	1109
02	VBLK02LCS	1201026795	8V603L154614	02/04/06	1138
03	VSTD250S	UVM060123-01A	8V605	02/04/06	1238
04	VBLK02SLCS	1201028020	8V605LSHESHL	02/04/06	1238
05	VBLK02	1201026794	8V607B154614	02/04/06	1338
06	GU06010G8WT01MS	1201025324	8V622	02/04/06	2105
07	GU06010G8WT01MSD	1201025325	8V623	02/04/06	2134
08					
09					
10					
11					
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22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Lab File ID (Standard): 8V502 Date Analyzed: 02/03/06

Instrument ID: VOA8 Time Analyzed: 0851

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1796205	6.25	1302472	10.29	681657	13.70
	UPPER LIMIT	3592410	6.75	2604944	10.79	1363314	14.20
	LOWER LIMIT	898102	5.75	651236	9.79	340828	13.20
	EPA SAMPLE NO.						
01	VBLK01LCS	1714685	6.25	1227612	10.30	614409	13.70
02	VBLK01	1747110	6.25	1255425	10.30	644991	13.70
03	GU06010G8WT01-FTB	1779687	6.25	1270246	10.30	651072	13.70
04	GU0601G14R101-FTB	1704191	6.25	1223519	10.30	629902	13.70
05	GU06010GMC401-FTB	1738726	6.25	1236354	10.30	640373	13.70
06	GU06010GMC401-FB	1702519	6.25	1220485	10.30	625315	13.70
07	GU06010G8WT01	1750175	6.25	1246076	10.30	637786	13.70
08	GU0601G14R101	1715718	6.25	1224538	10.29	626740	13.70
09	GU06010GMC401	1701851	6.25	1222338	10.29	624711	13.70
10	VBLK01SLCS	1670187	6.25	1198733	10.30	610002	13.70
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GEL, LLC. Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Lab File ID (Standard): 8V602 Date Analyzed: 02/04/06

Instrument ID: VOA8 Time Analyzed: 1109

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

		IS1(FLB)		IS2(CBZ)		IS3(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	1634250	6.25	1184627	10.30	611439	13.70
	UPPER LIMIT	3268500	6.75	2369254	10.80	1222878	14.20
	LOWER LIMIT	817125	5.75	592314	9.80	305720	13.20
	EPA SAMPLE NO.						
01	VBLK02LCS	1615526	6.25	1169204	10.30	592744	13.70
02	VBLK02SLCS	1653546	6.25	1187224	10.30	613572	13.70
03	VBLK02	1601317	6.25	1142889	10.30	589015	13.70
04	GU06010G8WT01MS	1522041	6.25	1096490	10.29	536439	13.70
05	GU06010G8WT01MSD	1477985	6.25	1066382	10.30	542581	13.70
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20							
21							
22							

IS1 (FLB) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	U	1.00	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	U	50.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614003**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.0	50.0	ug/L	98	(75%-119%)
Dibromofluoromethane	46.2	50.0	ug/L	92	(85%-120%)
Toluene-d8	46.2	50.0	ug/L	92	(79%-122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010G8WT01

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V523

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.66	8.7	JB
2.					
3.					
4.					
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29.					
30.					

FORM I VOA-TIC OLM03.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v523.d
Lab Smp Id: 154614003 Client Smp ID: GU06010G8WT01
Inj Date : 03-FEB-2006 19:19
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614003|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.246	6.246	(1.000)	1750175	50.0000	
* 61 Chlorobenzene-d5	117	10.298	10.292	(1.000)	1246076	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	637786	50.0000	
$ 35 Dibromofluoromethane	113	5.218	5.212	(0.835)	399507	46.2270	46.2
$ 47 Toluene-d8	98	8.296	8.296	(0.806)	1708196	46.2422	46.2
$ 71 Bromofluorobenzene	95	12.001	12.001	(0.876)	635021	48.9667	49.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v523.d
Lab Smp Id: 154614003 Client Smp ID: GU06010G8WT01
Inj Date : 03-FEB-2006 19:19
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614003|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.246	3721012	50.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.656	648668	8.71628884	8.7	0		0	40

Data File: /chem/VOA8.i/020306v8.b/8v523.d

Page 1

Date : 03-FEB-2006 19:19

Client ID: GU06010G8WT01

Instrument: VOA8.i

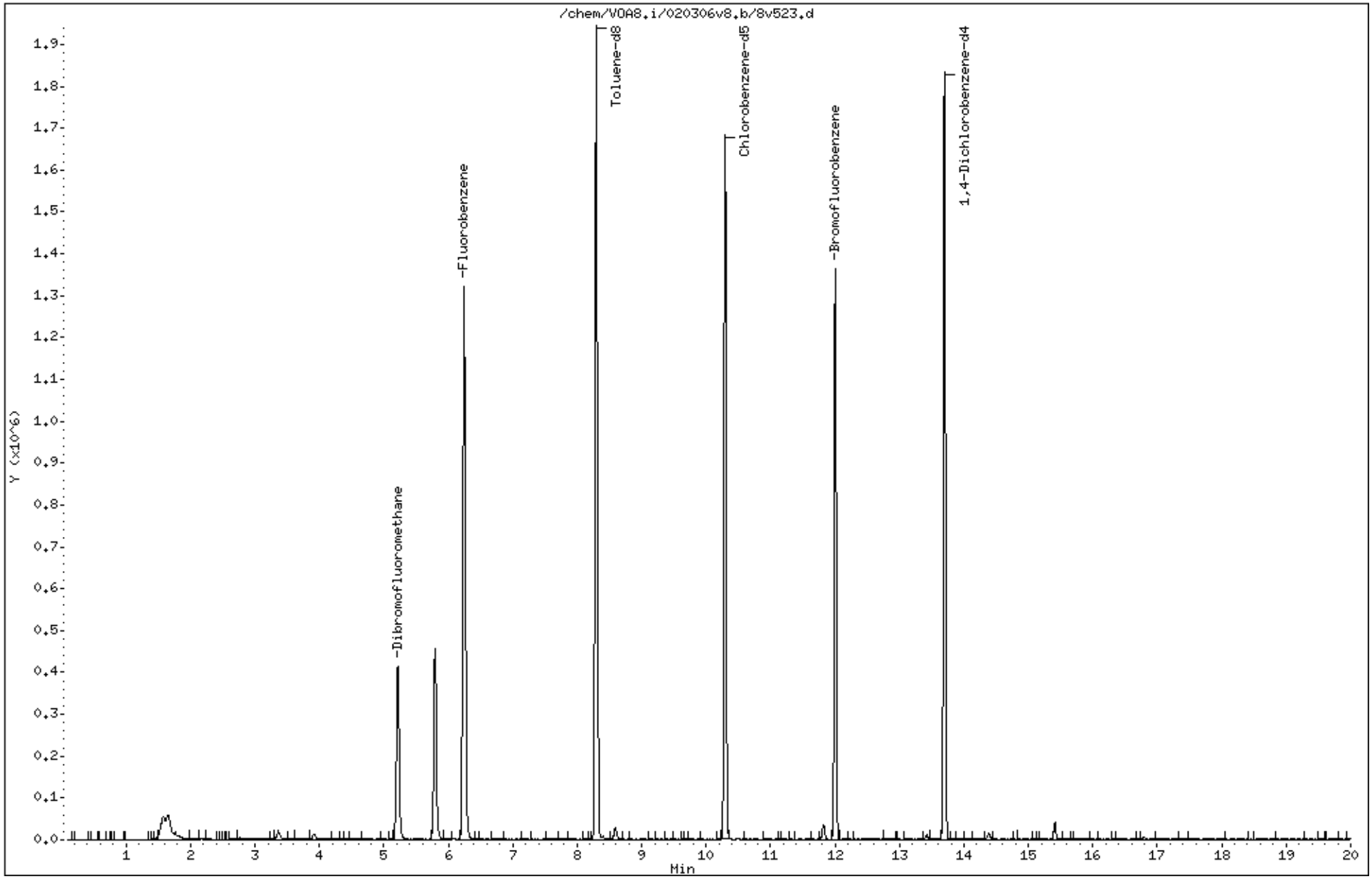
Sample Info: |154614003|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v523.d Page 1

Date : 03-FEB-2006 19:19

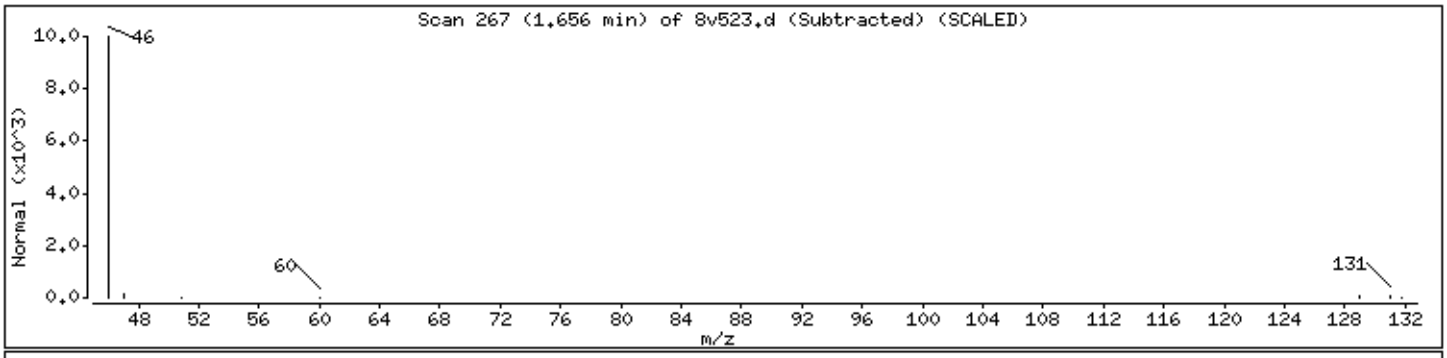
Client ID: GU06010G8WT01 Instrument: VOA8.i

Sample Info: |15461400315006241|1|VOAF|1|

Purge Volume: 5.0 Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614005**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010G8WT01−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:20**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.8	50.0	ug/L	100	(75%−119%)
Dibromofluoromethane	46.2	50.0	ug/L	92	(85%−120%)
Toluene−d8	46.2	50.0	ug/L	92	(79%−122%)

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
GU06010G
8WT01-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V519

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.58	6.0	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v519.d
Lab Smp Id: 154614005 Client Smp ID: GU06010G8WT01-FTB
Inj Date : 03-FEB-2006 17:20
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614005|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.245	6.246	(1.000)	1779687	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.292	(1.000)	1270246	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.697	13.698	(1.000)	651072	50.0000	
$ 35 Dibromofluoromethane	113	5.211	5.212	(0.834)	406340	46.2380	46.2
$ 47 Toluene-d8	98	8.295	8.296	(0.806)	1739782	46.2011	46.2
$ 71 Bromofluorobenzene	95	12.000	12.001	(0.876)	659138	49.8154	49.8

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v519.d
Lab Smp Id: 154614005 Client Smp ID: GU06010G8WT01-FTB
Inj Date : 03-FEB-2006 17:20
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614005|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.245	3777917	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.576	456533	6.04211891	6.0	0		0	40

Data File: /chem/VOA8.i/020306v8.b/8v519.d

Page 1

Date : 03-FEB-2006 17:20

Client ID: GU06010G8WT01-FTB

Instrument: VOA8.i

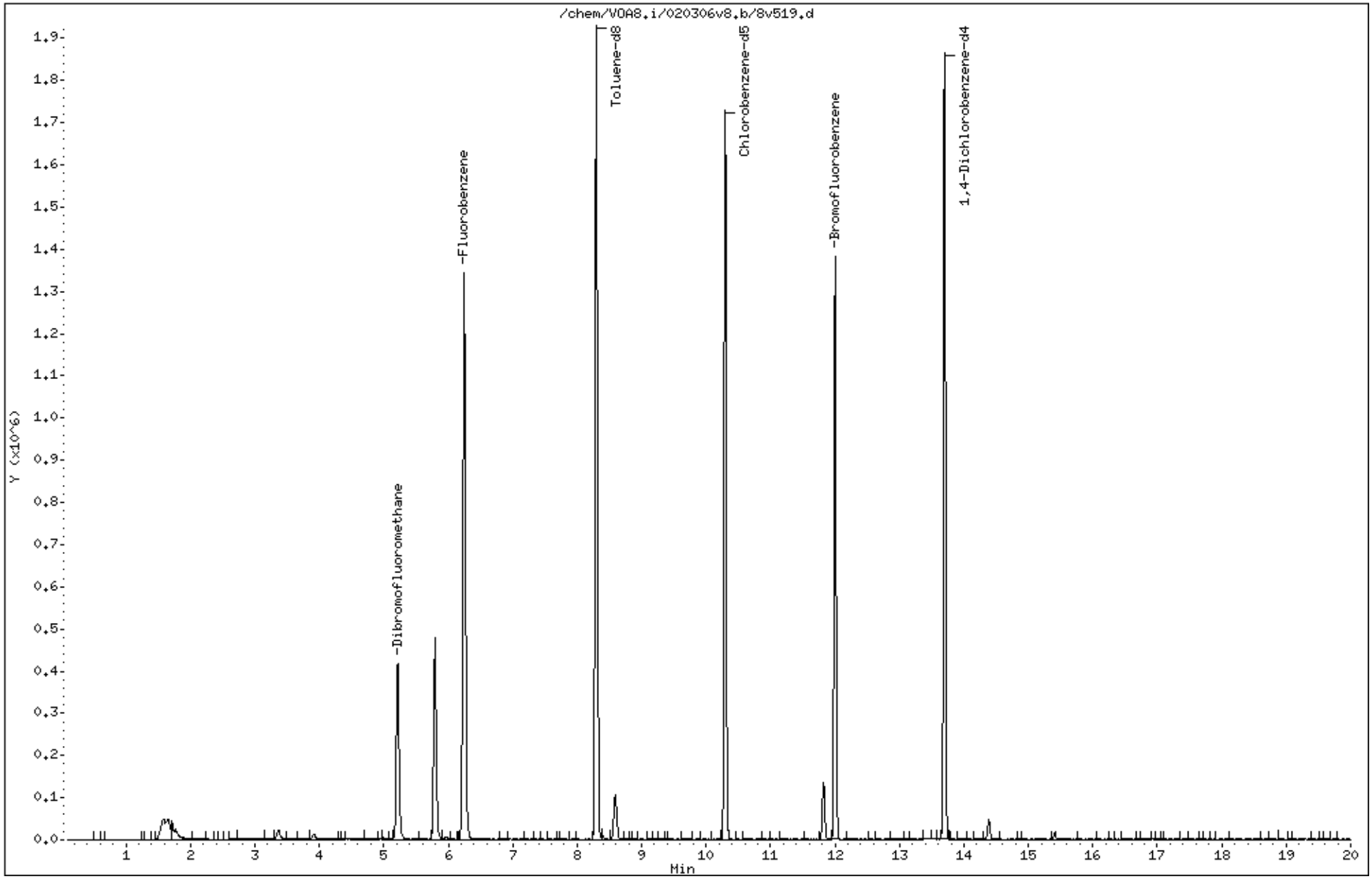
Sample Info: |15461400|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v519.d

Page 1

Date : 03-FEB-2006 17:20

Client ID: GU06010G8WT01-FTB

Instrument: VOA8.i

Sample Info: |15461400|500624|1|VOAF|1|

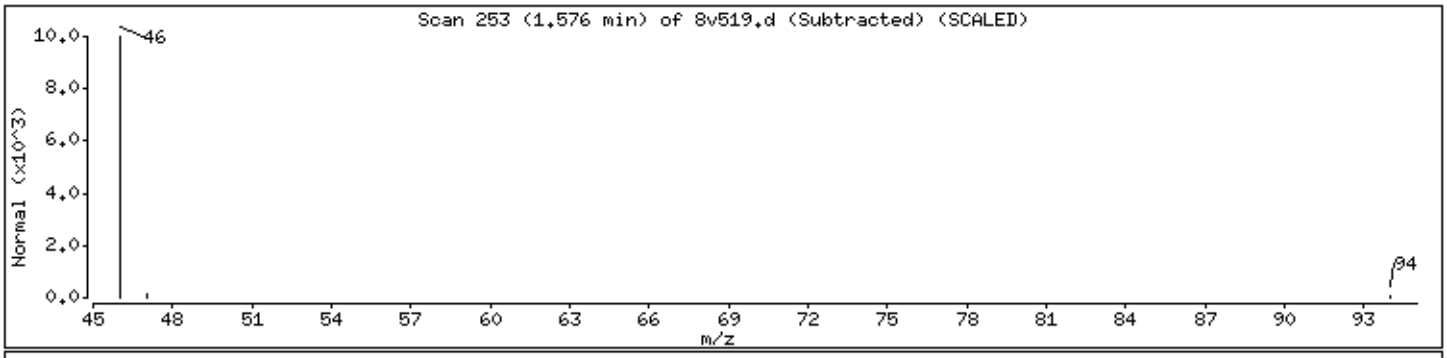
Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	J	0.748	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	J	49.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614009**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 20:18**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	50.2	50.0	ug/L	100	(75%-119%)
Dibromofluoromethane	47.1	50.0	ug/L	94	(85%-120%)
Toluene-d8	46.8	50.0	ug/L	94	(79%-122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010GMC401

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V525

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.65	7.0	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v525.d
Lab Smp Id: 154614009 Client Smp ID: GU06010GMC401
Inj Date : 03-FEB-2006 20:18
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614009|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.247	6.246	(1.000)	1701851	50.0000	
* 61 Chlorobenzene-d5	117	10.292	10.292	(1.000)	1222338	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	624711	50.0000	
$ 35 Dibromofluoromethane	113	5.213	5.212	(0.834)	395470	47.0592	47.0
$ 47 Toluene-d8	98	8.297	8.296	(0.806)	1695044	46.7773	46.8
$ 71 Bromofluorobenzene	95	12.002	12.001	(0.876)	636616	50.1538	50.2
4 Chloromethane	50	1.830	1.838	(0.293)	17900	0.74825	0.75(a)
97 1,4-Dioxane	88	7.244	7.220	(1.160)	6129	48.9704	49.0(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v525.d
Lab Smp Id: 154614009 Client Smp ID: GU06010GMC401
Inj Date : 03-FEB-2006 20:18
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614009|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.247	3610708	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.648	502929	6.96440340	7.0	0		0	40

Data File: /chem/VOA8.i/020306v8.b/8v525.d

Page 1

Date : 03-FEB-2006 20:18

Client ID: GU06010GMC401

Instrument: VOA8.i

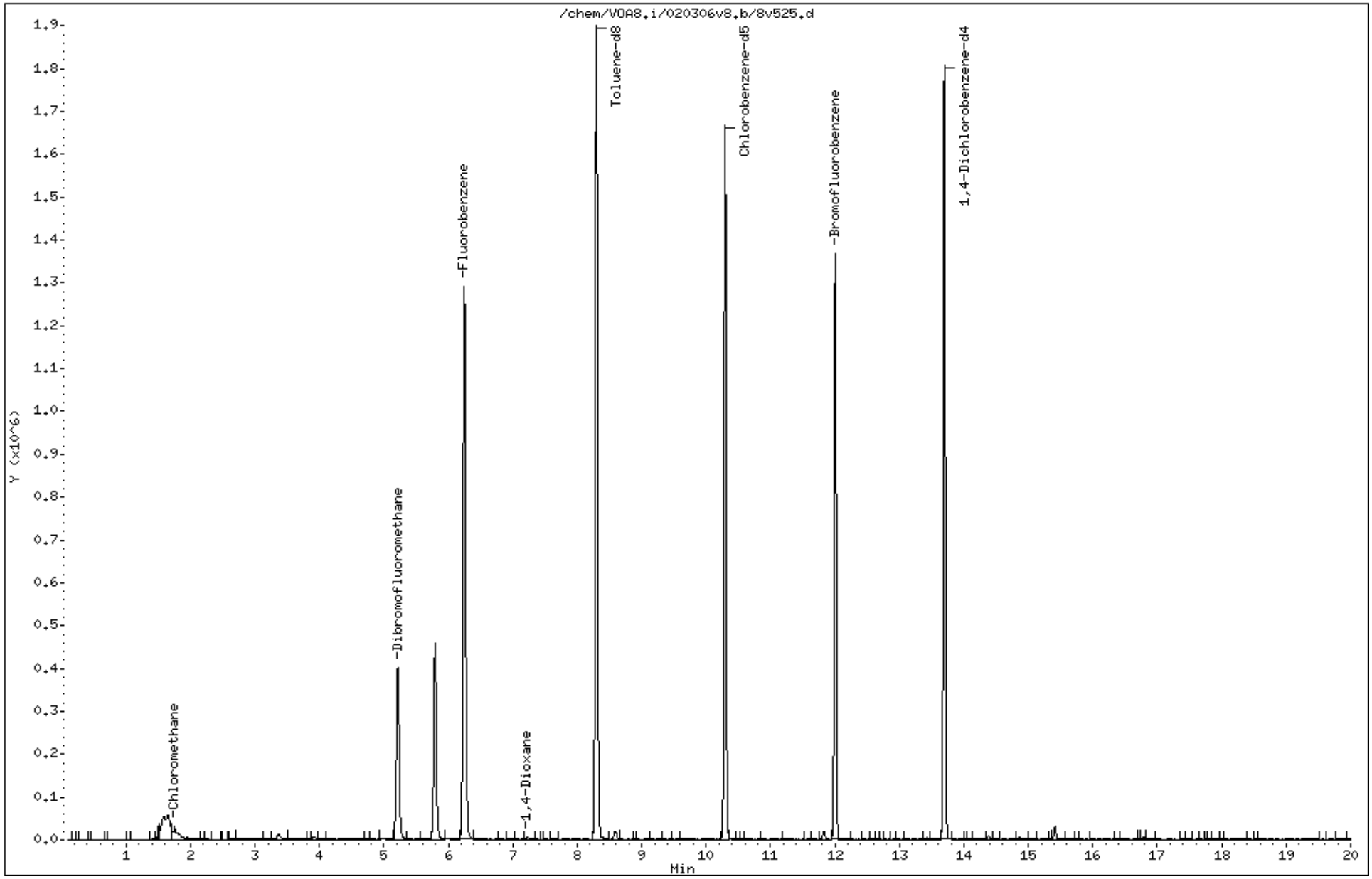
Sample Info: |1546140091500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v525.d

Date : 03-FEB-2006 20:18

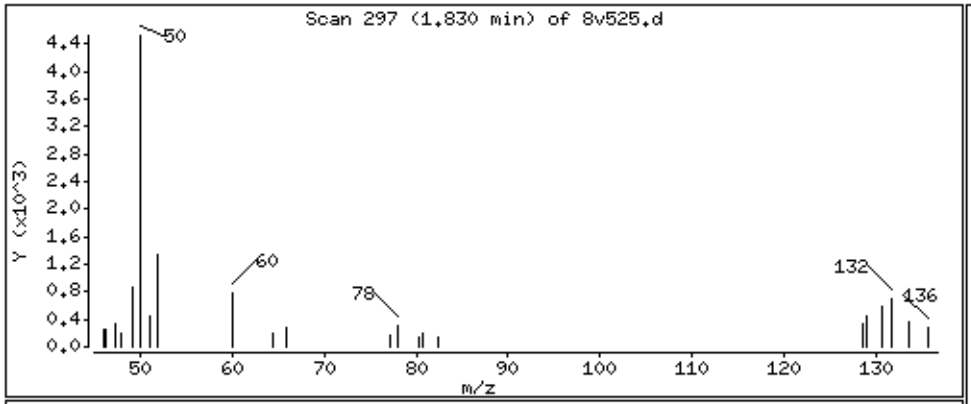
Client ID: GU06010GMC401 Instrument: VOA8.i

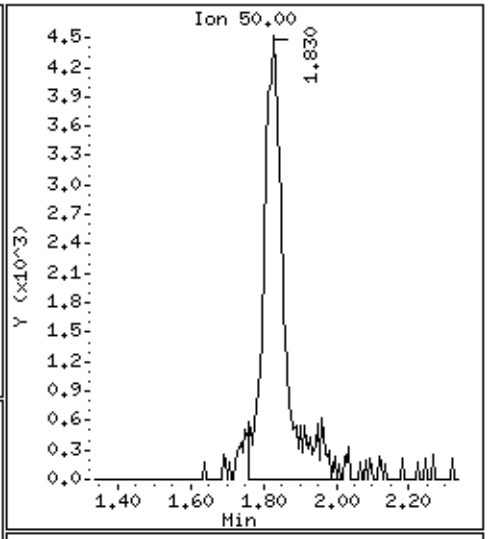
Sample Info: |1546140091500624|1|VOAF|1|

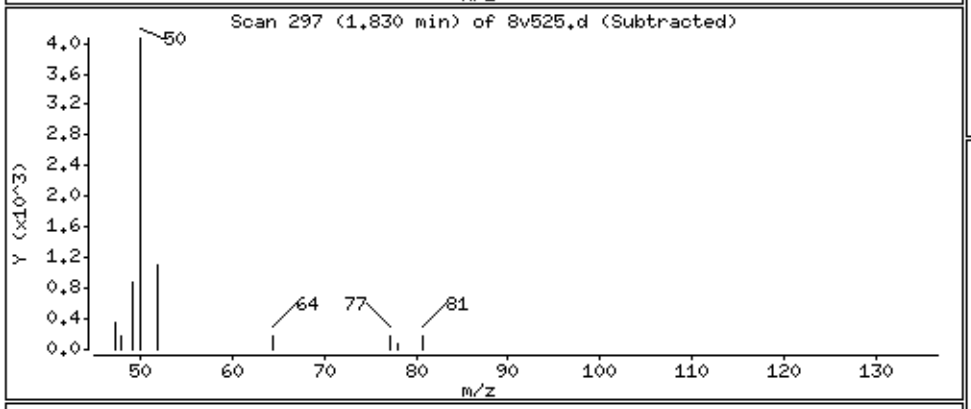
Purge Volume: 5.0 Operator: ACJ

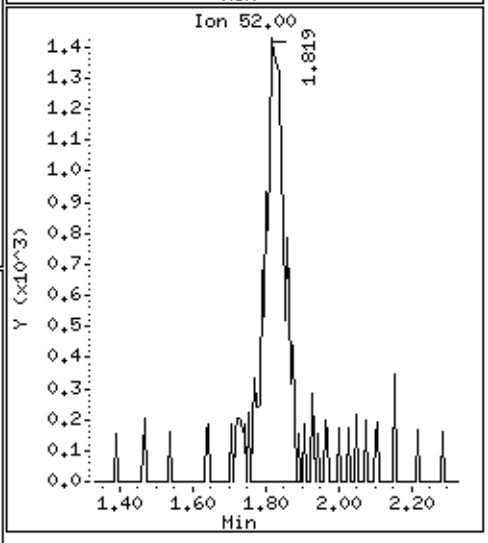
Column phase: DB-624 Column diameter: 0.25

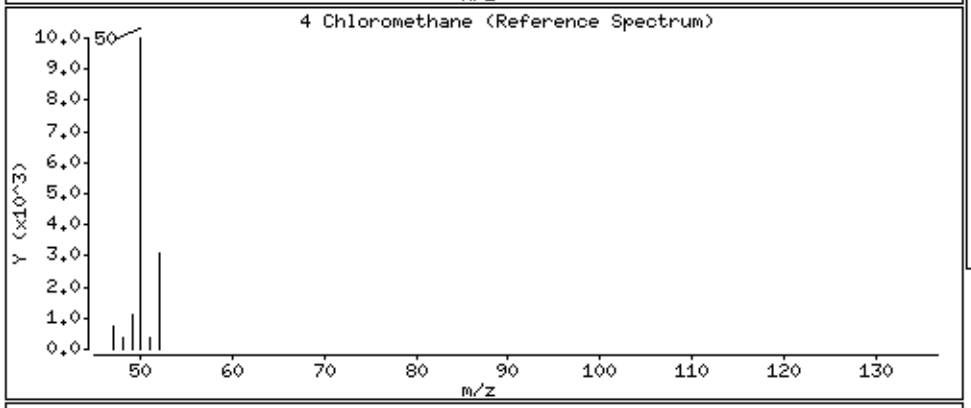
4 Chloromethane Concentration: 0.75 ug/l

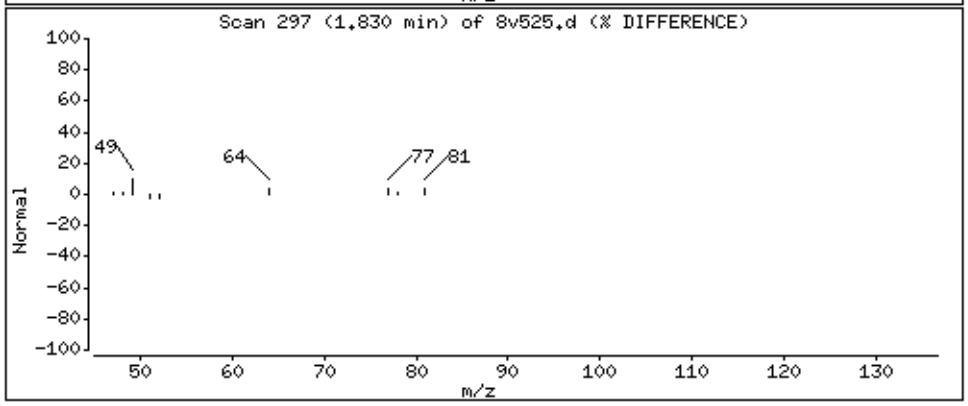












Data File: /chem/VOA8.i/020306v8.b/8v525.d

Date : 03-FEB-2006 20:18

Client ID: GU06010GMC401

Instrument: VOA8.i

Sample Info: |1546140091500624|1|VOAF|1|

Purge Volume: 5.0

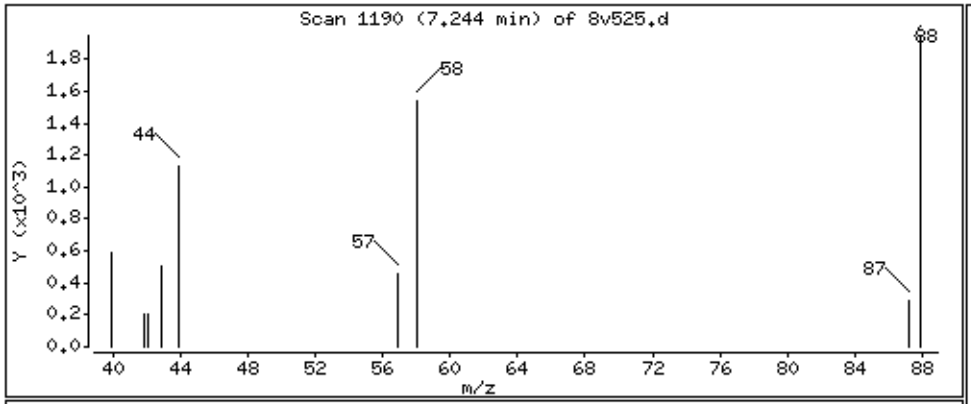
Operator: ACJ

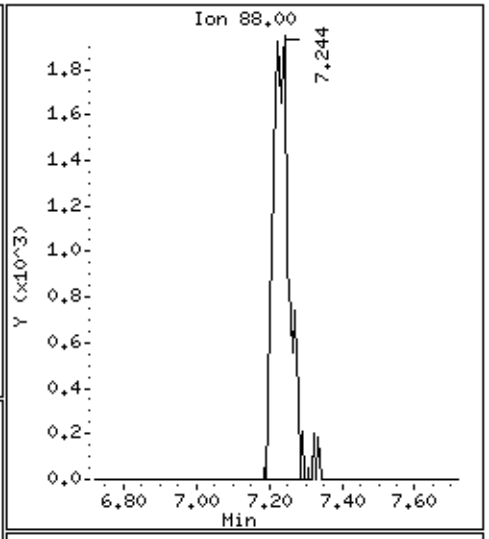
Column phase: DB-624

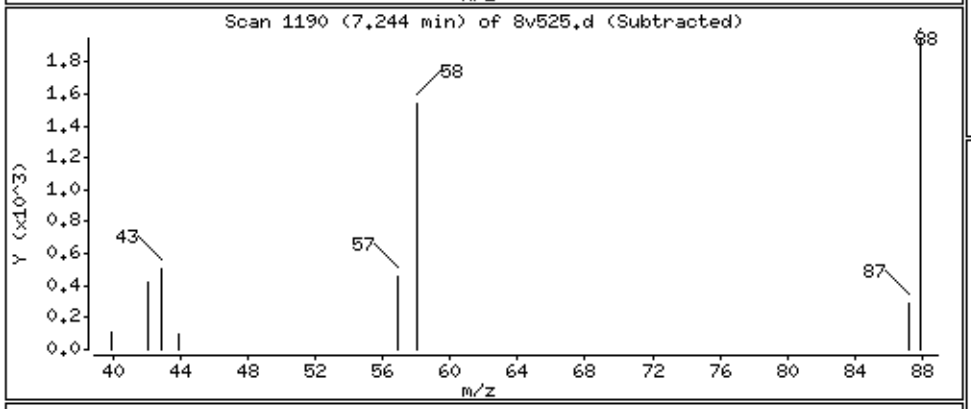
Column diameter: 0.25

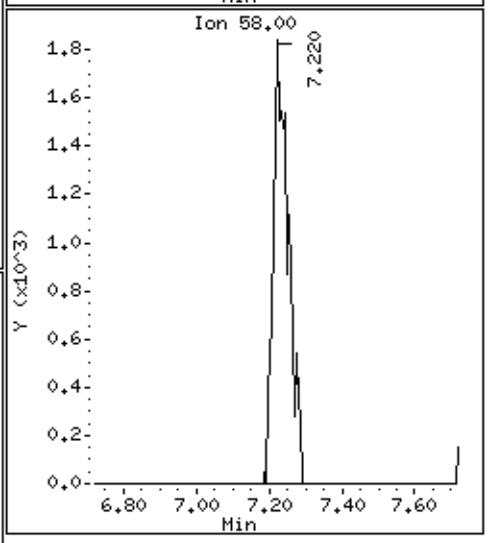
97 1,4-Dioxane

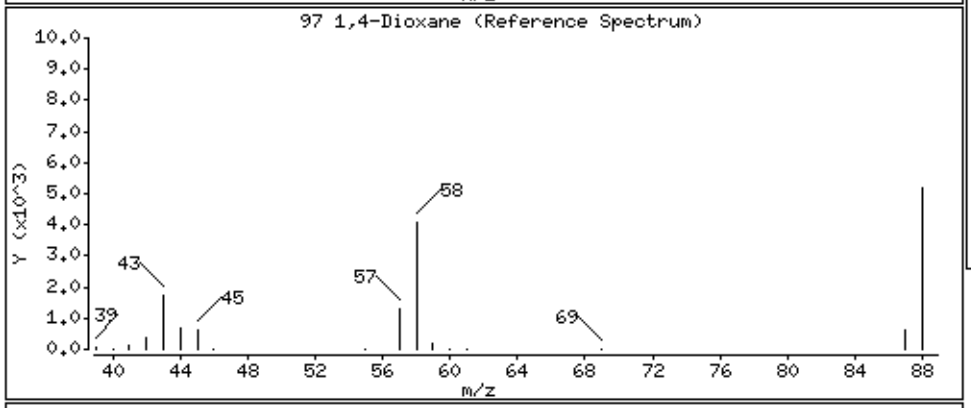
Concentration: 49.0 ug/l

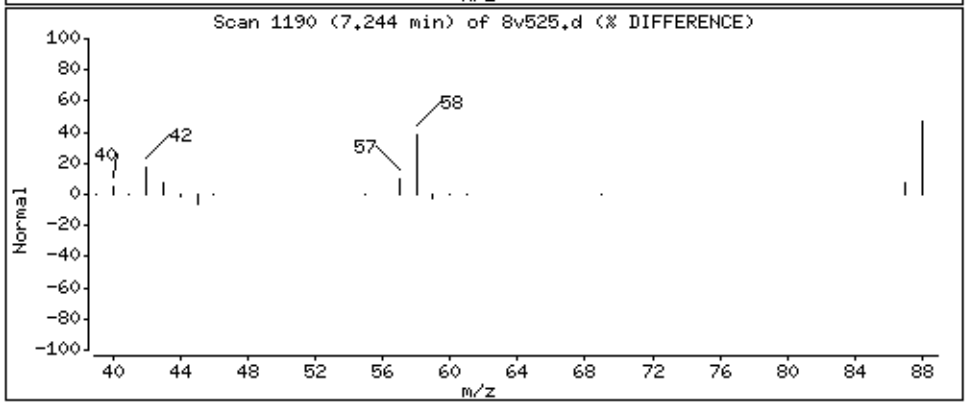












Data File: /chem/VOA8.i/020306v8.b/8v525.d

Date : 03-FEB-2006 20:18

Client ID: GU06010GMC401

Instrument: VOA8.i

Sample Info: |15461400|500624|1|VOAF|1|

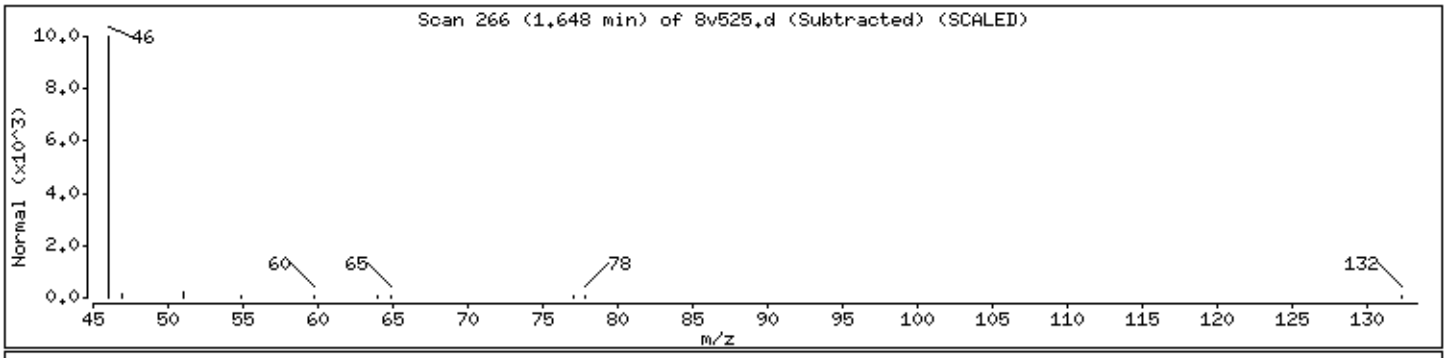
Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	J	3.52	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	J	3.25	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614010**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.5	50.0	ug/L	99	(75%−119%)
Dibromofluoromethane	47.1	50.0	ug/L	94	(85%−120%)
Toluene−d8	46.7	50.0	ug/L	93	(79%−122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010G
MC401-FB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V522

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.58	7.3	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v522.d
Lab Smp Id: 154614010 Client Smp ID: GU06010GMC401-FB
Inj Date : 03-FEB-2006 18:49
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614010|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.245	6.246	(1.000)	1702519	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.292	(1.000)	1220485	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	625315	50.0000	
$ 35 Dibromofluoromethane	113	5.211	5.212	(0.834)	395824	47.0829	47.1
$ 47 Toluene-d8	98	8.296	8.296	(0.806)	1688969	46.6804	46.7
$ 71 Bromofluorobenzene	95	12.000	12.001	(0.876)	629371	49.5159	49.5
10 Acetone	43	2.772	2.760	(0.444)	21519	3.52464	3.5(a)
30 2-Butanone	43	4.572	4.561	(0.732)	18035	3.24958	3.2(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v522.d
Lab Smp Id: 154614010 Client Smp ID: GU06010GMC401-FB
Inj Date : 03-FEB-2006 18:49
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614010|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.245	3624096	50.000

	CONCENTRATIONS			QUANT			
	RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown	1.575	527858	7.28261806	7.3	0	CAS #: 0	0	40

Data File: /chem/VOA8.i/020306v8.b/8v522.d

Page 1

Date : 03-FEB-2006 18:49

Client ID: GU06010GMC401-FB

Instrument: VOA8.i

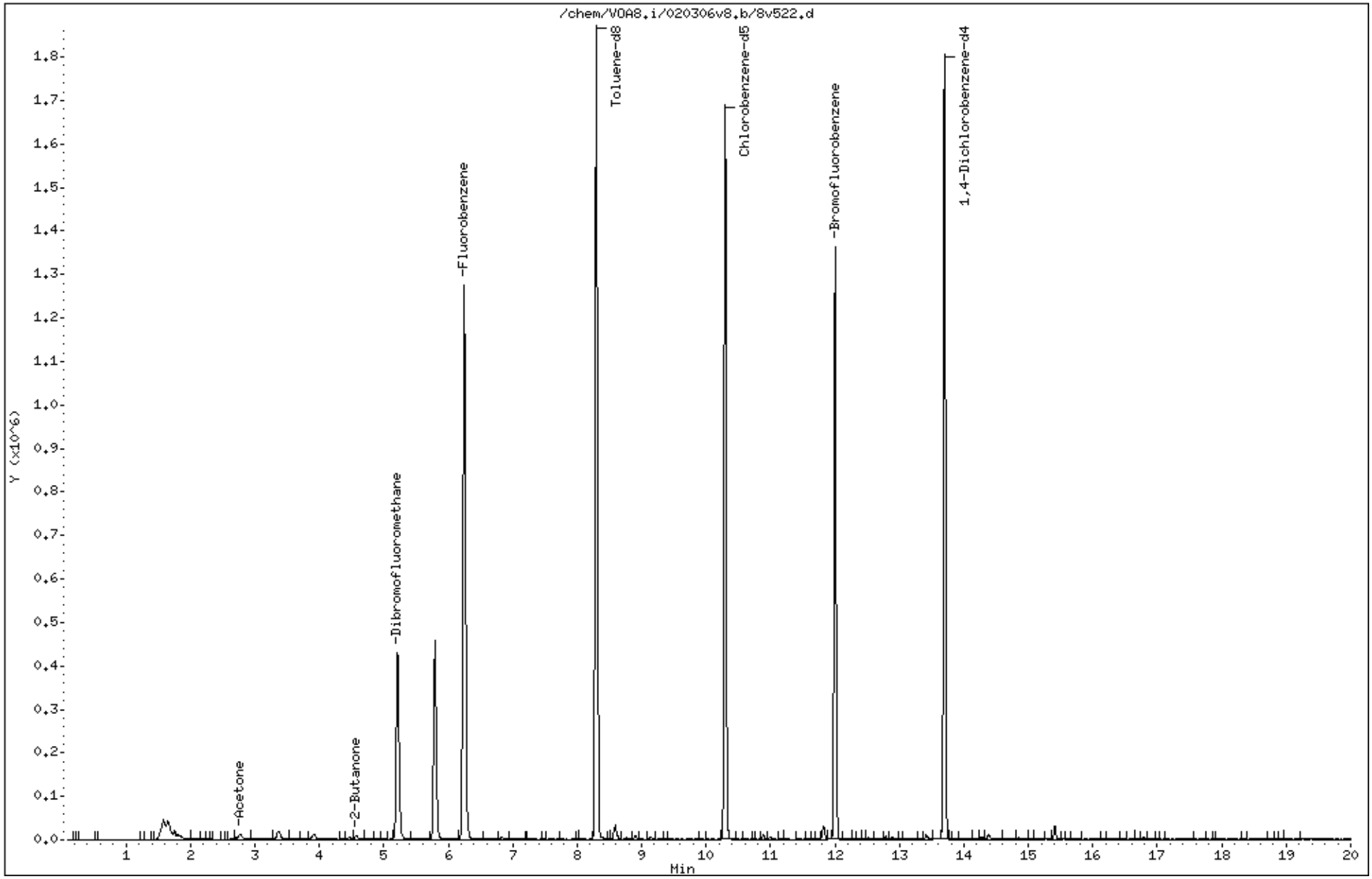
Sample Info: |154614010|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v522.d

Date : 03-FEB-2006 18:49

Client ID: GU06010GMC401-FB

Instrument: VOA8.i

Sample Info: |1546140101500624|1|VOAF|1|

Purge Volume: 5.0

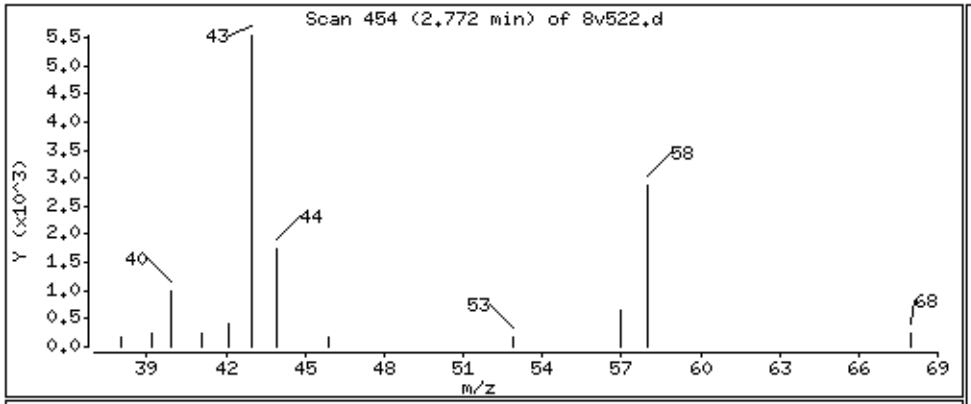
Operator: ACJ

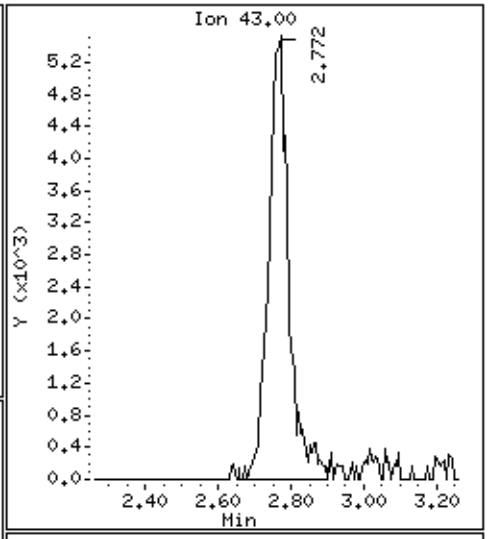
Column phase: DB-624

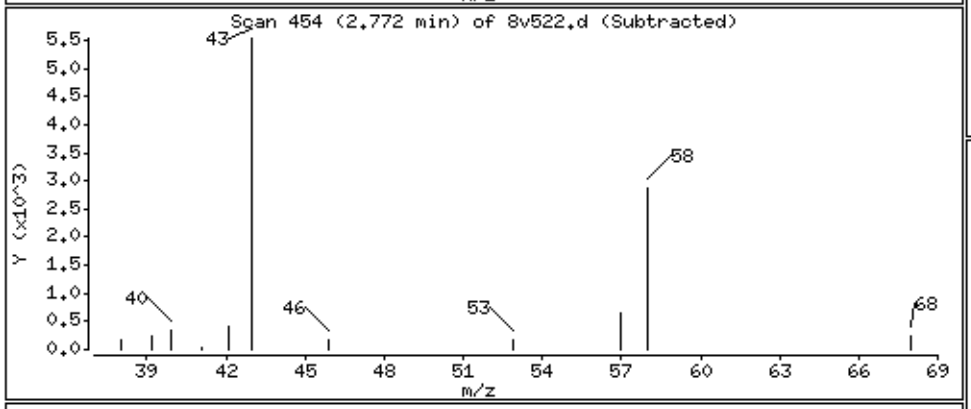
Column diameter: 0.25

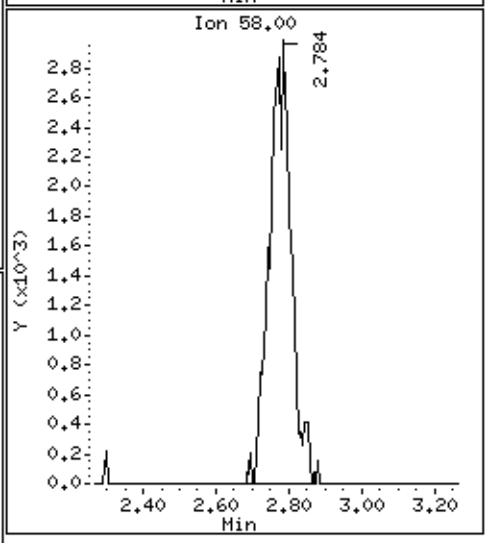
10 Acetone

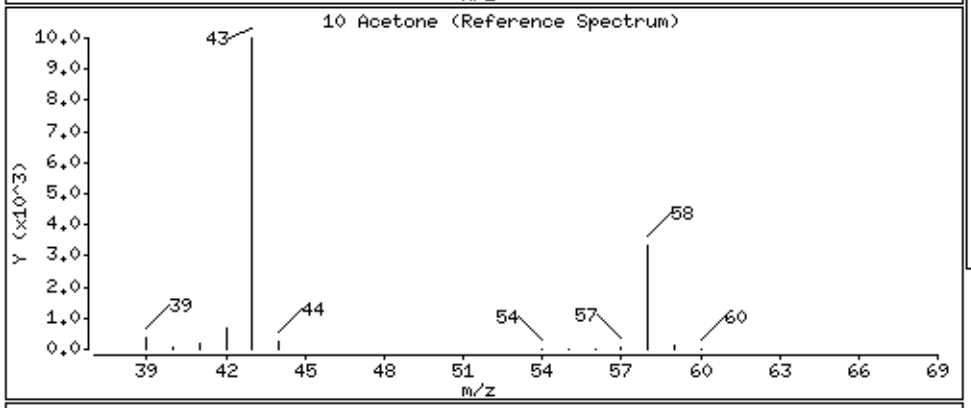
Concentration: 3.5 ug/l

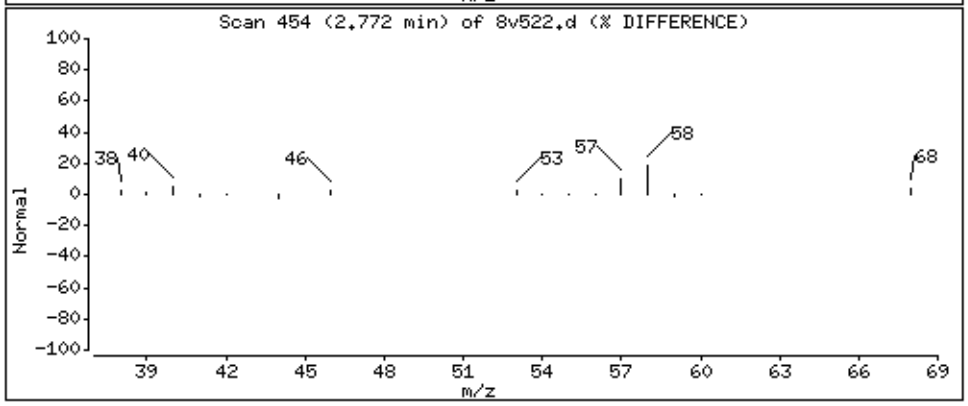












Data File: /chem/VOA8.i/020306v8.b/8v522.d

Date : 03-FEB-2006 18:49

Client ID: GU06010GMC401-FB

Instrument: VOA8.i

Sample Info: |1546140101500624|1|VOAF|1|

Purge Volume: 5.0

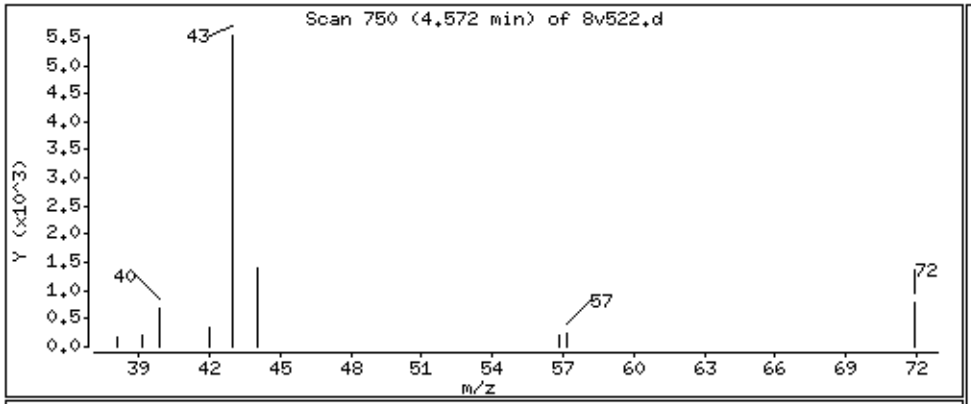
Operator: ACJ

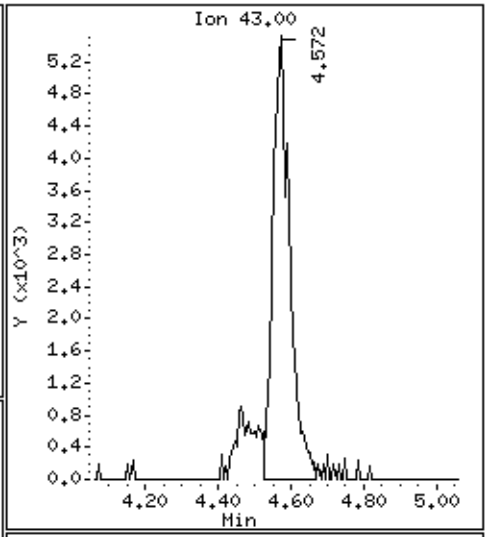
Column phase: DB-624

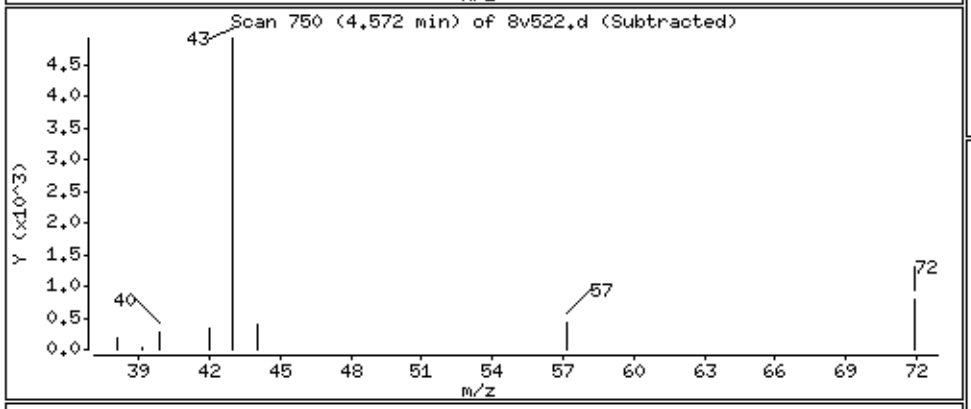
Column diameter: 0.25

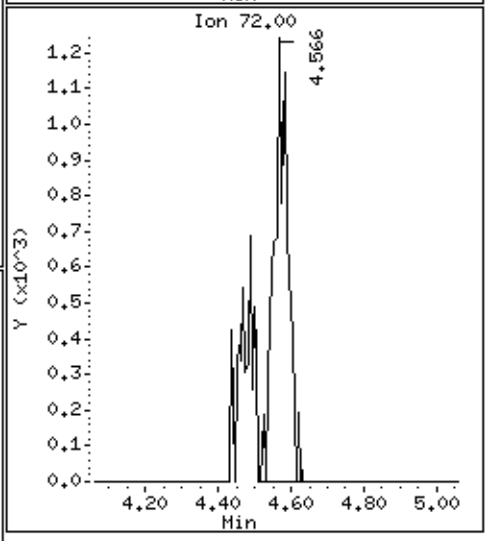
30 2-Butanone

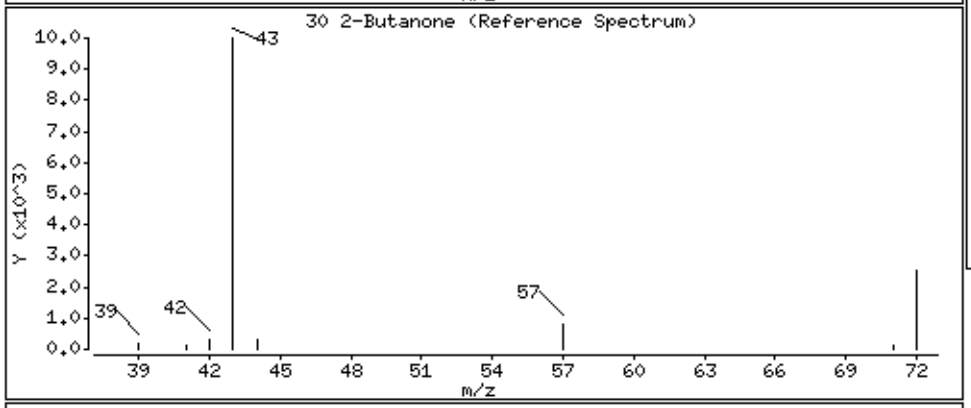
Concentration: 3.2 ug/l

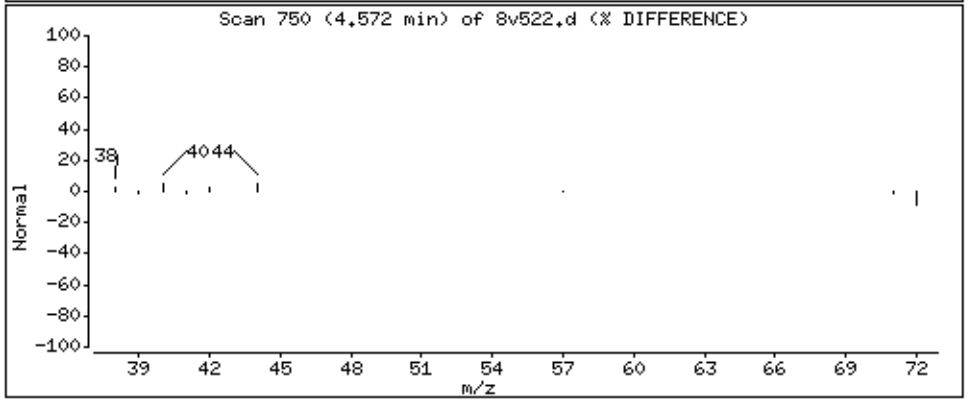












Data File: /chem/VOA8.i/020306v8.b/8v522.d Page 1

Date : 03-FEB-2006 18:49

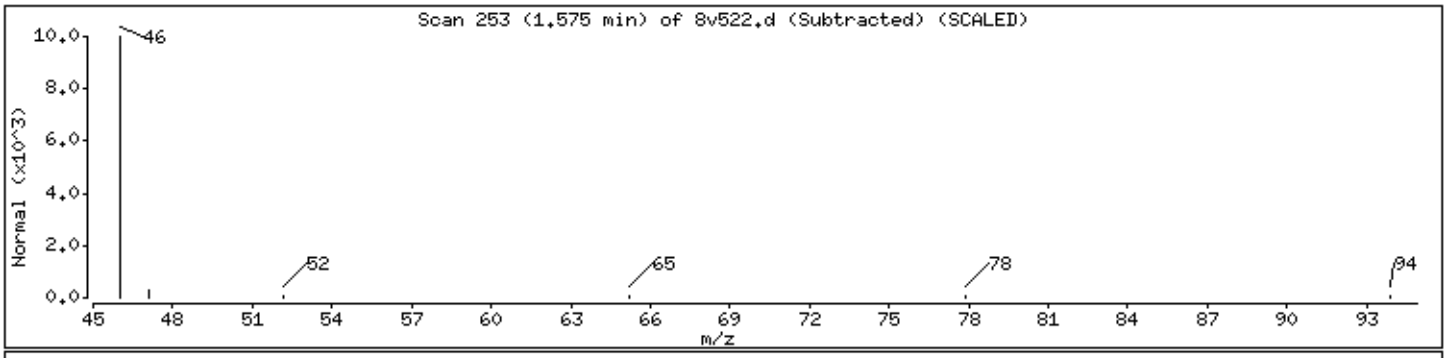
Client ID: GU06010GMC401-FB Instrument: VOA8.i

Sample Info: |15461401O|500624|1|VOAF|1|

Purge Volume: 5.0 Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:05**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614007**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU06010GMC401−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 18:19**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.4	50.0	ug/L	99	(75%−119%)
Dibromofluoromethane	47.2	50.0	ug/L	94	(85%−120%)
Toluene−d8	47.0	50.0	ug/L	94	(79%−122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU06010G
MC401-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V521

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.70	5.8	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
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19.					
20.					
21.					
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23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v521.d
Lab Smp Id: 154614007 Client Smp ID: GU06010GMC401-FTB
Inj Date : 03-FEB-2006 18:19
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614007|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.245	6.246	(1.000)	1738726	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.292	(1.000)	1236354	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	640373	50.0000	
$ 35 Dibromofluoromethane	113	5.211	5.212	(0.834)	405139	47.1874	47.2
$ 47 Toluene-d8	98	8.295	8.296	(0.806)	1722273	46.9899	47.0
$ 71 Bromofluorobenzene	95	12.000	12.001	(0.876)	642531	49.3577	49.4

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v521.d
Lab Smp Id: 154614007 Client Smp ID: GU06010GMC401-FTB
Inj Date : 03-FEB-2006 18:19
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614007|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.245	3696403	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.702	430708	5.82603764	5.8	0		0	40

Data File: /chem/VOA8.i/020306v8.b/8v521.d

Page 1

Date : 03-FEB-2006 18:19

Client ID: GU06010GMC401-FTB

Instrument: VOA8.i

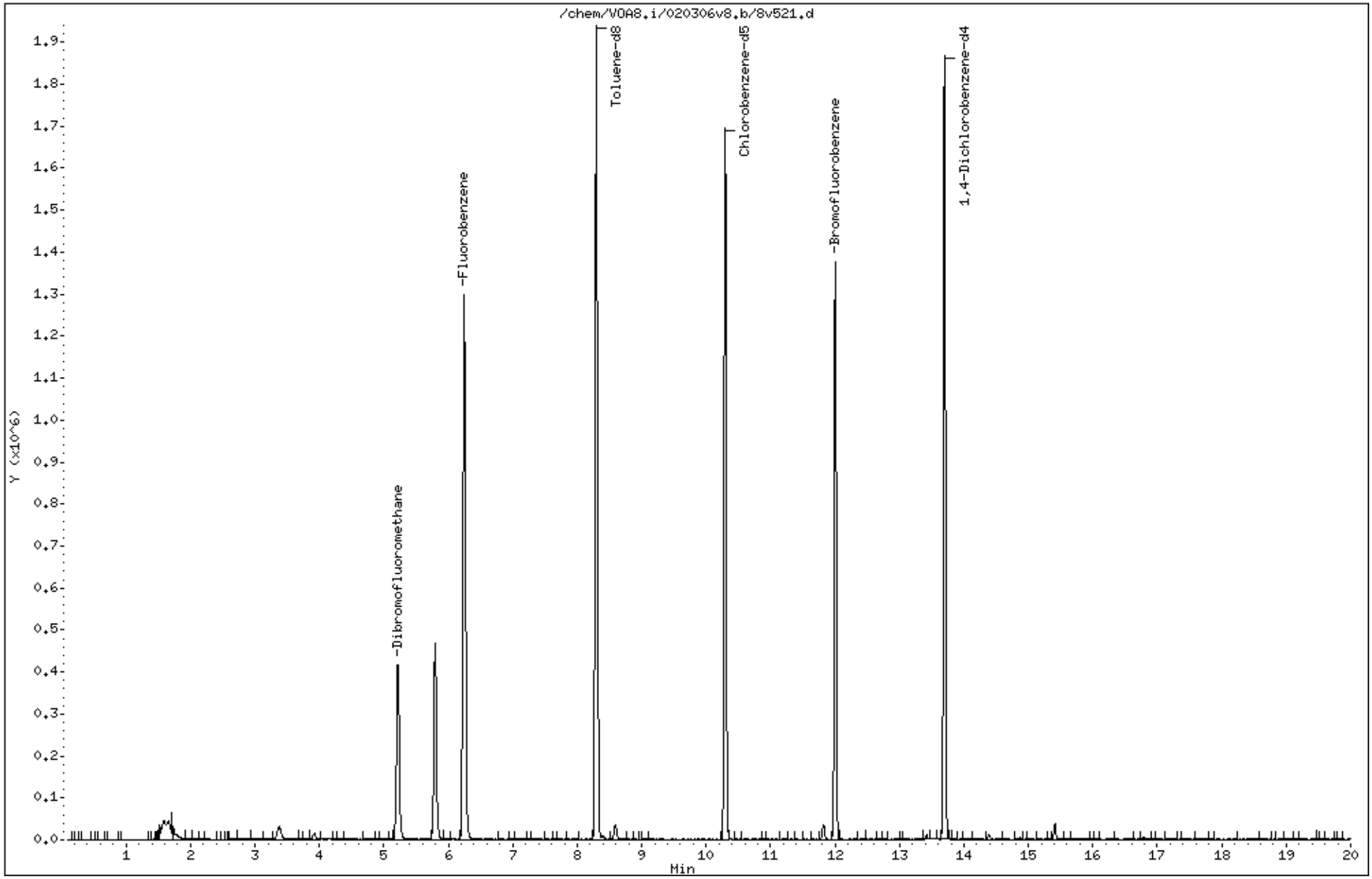
Sample Info: |15461400715006241|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v521.d Page 1

Date : 03-FEB-2006 18:19

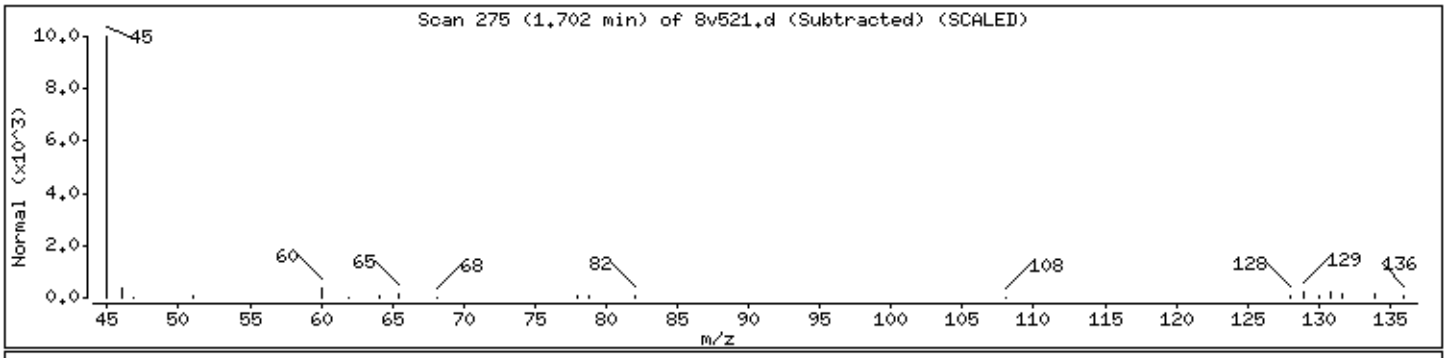
Client ID: GU06010GMC401-FTB Instrument: VOA8.i

Sample Info: |1546140071500624|1|VOAF|1|

Purge Volume: 5.0 Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	U	1.00	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	U	50.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614004**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 19:48**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.3	50.0	ug/L	99	(75%-119%)
Dibromofluoromethane	46.6	50.0	ug/L	93	(85%-120%)
Toluene-d8	46.1	50.0	ug/L	92	(79%-122%)

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
GU0601G14R101

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V524

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.57	9.0	J
2.					
3.					
4.					
5.					
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28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v524.d
Lab Smp Id: 154614004 Client Smp ID: GU0601G14R101
Inj Date : 03-FEB-2006 19:48
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614004|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.247	6.246	(1.000)	1715718	50.0000	
* 61 Chlorobenzene-d5	117	10.292	10.292	(1.000)	1224538	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	626740	50.0000	
$ 35 Dibromofluoromethane	113	5.218	5.212	(0.835)	394543	46.5695	46.6
$ 47 Toluene-d8	98	8.297	8.296	(0.806)	1675081	46.1433	46.1
$ 71 Bromofluorobenzene	95	12.002	12.001	(0.876)	627695	49.2641	49.3

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v524.d
Lab Smp Id: 154614004 Client Smp ID: GU0601G14R101
Inj Date : 03-FEB-2006 19:48
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614004|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.247	3650941	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.569	656522	8.99113239	9.0	0		0	40

Data File: /chem/VOA8.i/020306v8.b/8v524.d

Page 1

Date : 03-FEB-2006 19:48

Client ID: GU0601G14R101

Instrument: VOA8.i

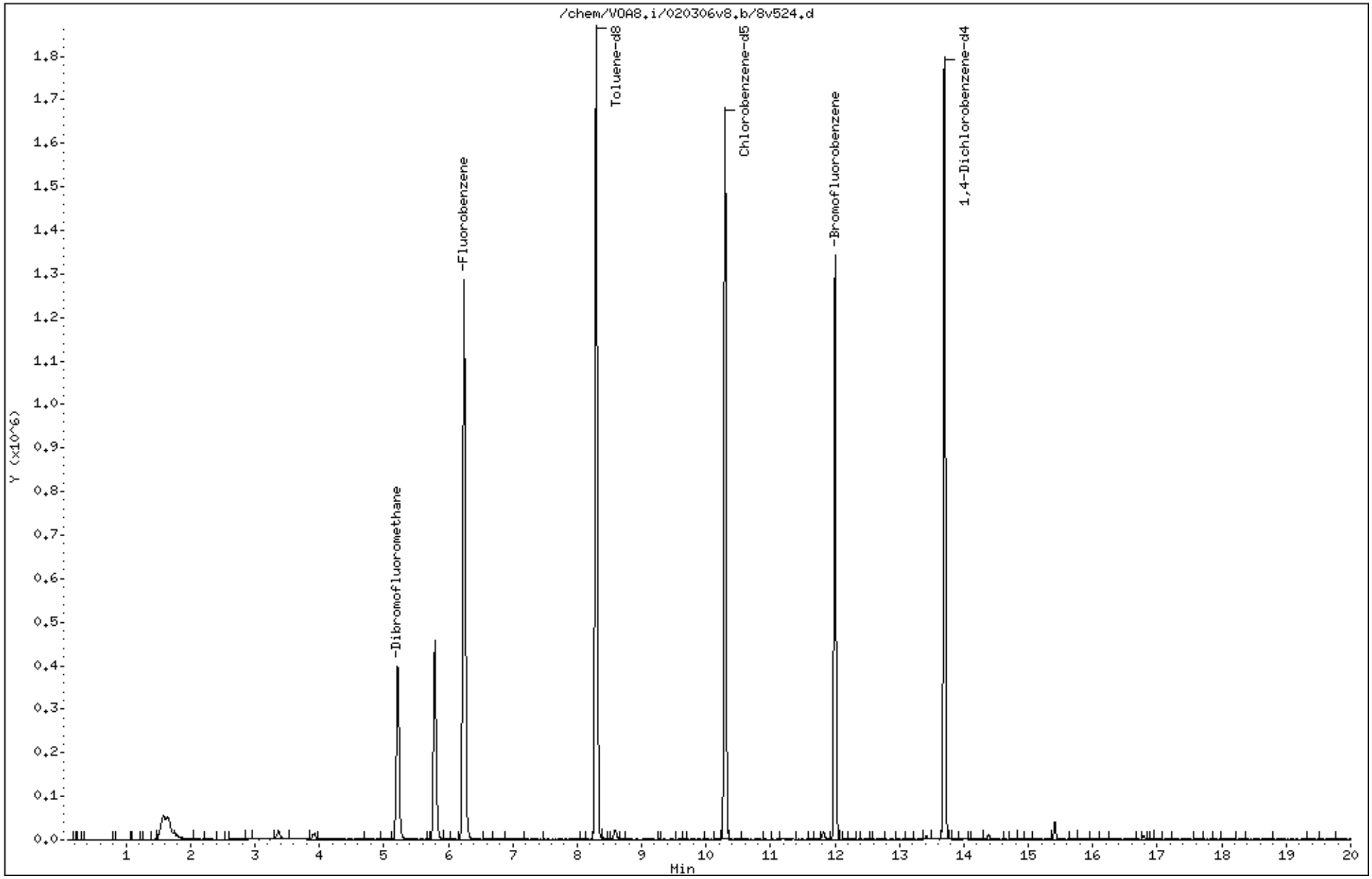
Sample Info: |154614004|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v524.d

Date : 03-FEB-2006 19:48

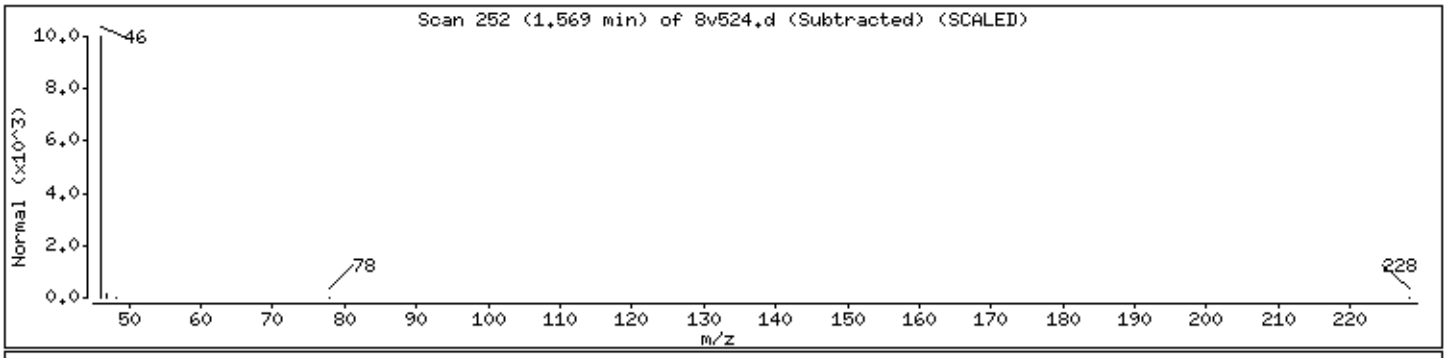
Client ID: GU0601G14R101 Instrument: VOA8.i

Sample Info: |15461400|500624|1|VOAF|1|

Purge Volume: 5.0 Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630−20−6	1,1,1,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563−58−6	1,1−Dichloropropene	U	1.00	ug/L	0.250	1.00
87−61−6	1,2,3−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96−18−4	1,2,3−Trichloropropane	U	1.00	ug/L	0.300	1.00
95−63−6	1,2,4−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108−67−8	1,3,5−Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142−28−9	1,3−Dichloropropane	U	1.00	ug/L	0.250	1.00
594−20−7	2,2−Dichloropropane	U	1.00	ug/L	0.300	1.00
126−99−8	2−Chloro−1,3−butadiene	U	1.00	ug/L	0.300	1.00
95−49−8	2−Chlorotoluene	U	1.00	ug/L	0.250	1.00
106−43−4	4−Chlorotoluene	U	1.00	ug/L	0.250	1.00
99−87−6	4−Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75−05−8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107−02−8	Acrolein	U	5.00	ug/L	3.00	5.00
107−13−1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107−05−1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108−86−1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74−97−5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74−95−3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74−88−4	Iodomethane	U	5.00	ug/L	1.25	5.00
78−83−1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 09:39**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**154614006**	**Date Received:**	**01/26/2006 09:20**		
		Client:	**ESHL001**	**Project:**	**ESHL00701**
Client ID:	**GU0601G14R101−FTB**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 17:49**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124−48−1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108−10−1	4−Methyl−2−pentanone	U	5.00	ug/L	1.25	5.00
108−88−3	Toluene	U	1.00	ug/L	0.250	1.00
127−18−4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591−78−6	2−Hexanone	U	5.00	ug/L	1.25	5.00
106−93−4	1,2−Dibromoethane	U	1.00	ug/L	0.250	1.00
108−90−7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100−41−4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601−23−1	m,p−Xylenes	U	2.00	ug/L	0.250	2.00
100−42−5	Styrene	U	1.00	ug/L	0.250	1.00
95−47−6	o−Xylene	U	1.00	ug/L	0.250	1.00
98−82−8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75−25−2	Bromoform	U	1.00	ug/L	0.250	1.00
79−34−5	1,1,2,2−Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96−12−8	1,2−Dibromo−3−chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	50.0	50.0	ug/L	100	(75%−119%)
Dibromofluoromethane	46.6	50.0	ug/L	93	(85%−120%)
Toluene−d8	46.6	50.0	ug/L	93	(79%−122%)

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

GU0601G1
4R101-FTB

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 154614006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V520

Level: (low/med) LOW Date Received: 01/26/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.58	7.6	JB
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v520.d
Lab Smp Id: 154614006 Client Smp ID: GU0601G14R101-FTB
Inj Date : 03-FEB-2006 17:49
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614006|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.246	6.246	(1.000)	1704191	50.0000	
* 61 Chlorobenzene-d5	117	10.298	10.292	(1.000)	1223519	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	629902	50.0000	
$ 35 Dibromofluoromethane	113	5.218	5.212	(0.835)	392418	46.6320	46.6
$ 47 Toluene-d8	98	8.297	8.296	(0.806)	1690914	46.6182	46.6
$ 71 Bromofluorobenzene	95	12.001	12.001	(0.876)	640432	50.0350	50.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v520.d
Lab Smp Id: 154614006 Client Smp ID: GU0601G14R101-FTB
Inj Date : 03-FEB-2006 17:49
Operator : ACJ Inst ID: VOA8.i
Smp Info : |154614006|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

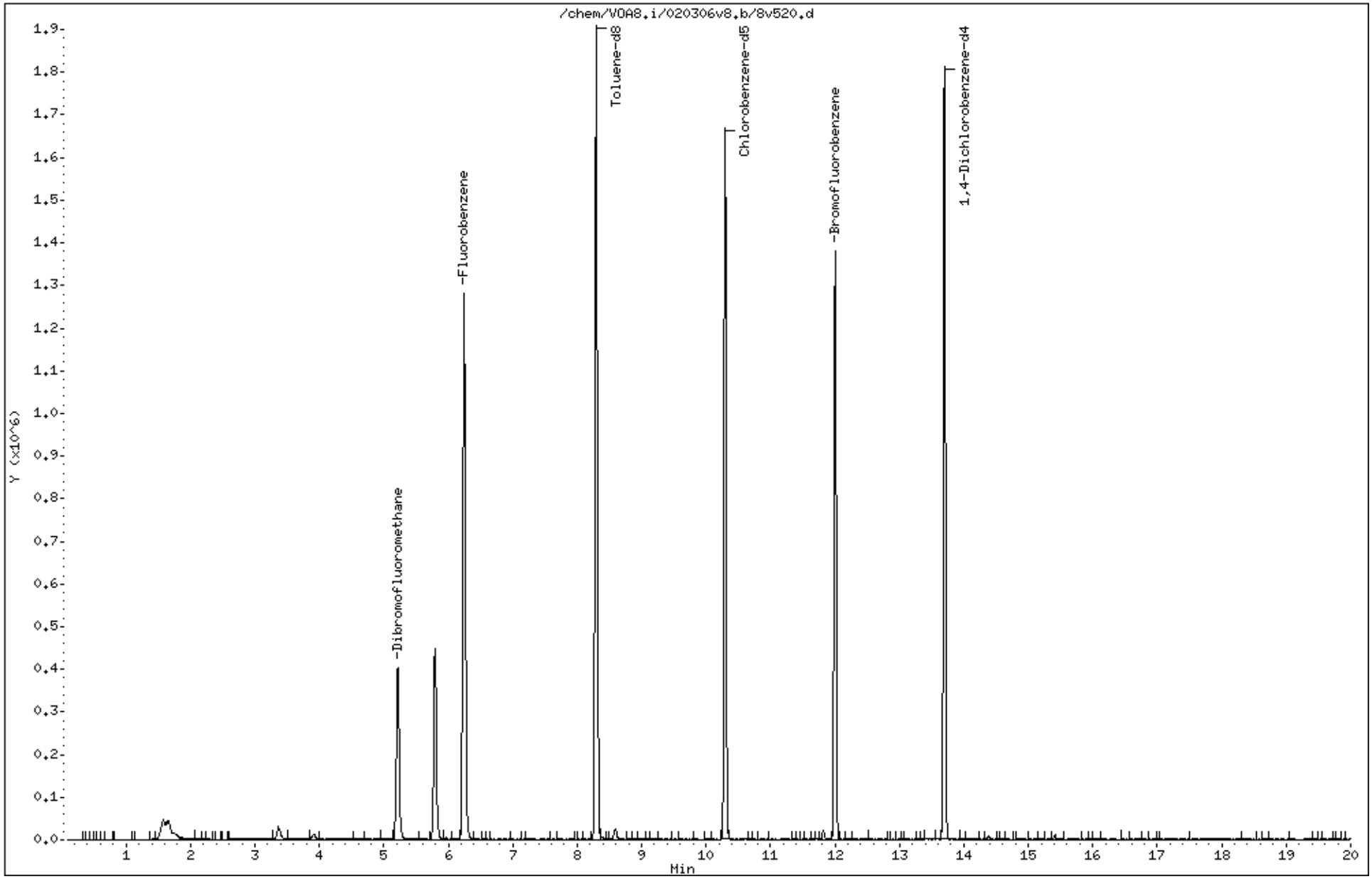
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.246	3612128	50.000

	CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.580	552946	7.65401525	7.6	0		0	40

Data File: /chem/VOA8.i/020306v8.b/8v520.d
Date : 03-FEB-2006 17:49
Client ID: GU0601G14R101-FTB
Sample Info: |154614006|500624|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v520.d

Page 1

Date : 03-FEB-2006 17:49

Client ID: GU0601G14R101-FTB

Instrument: VOA8.i

Sample Info: |1546140061500624|1|VOAF|1|

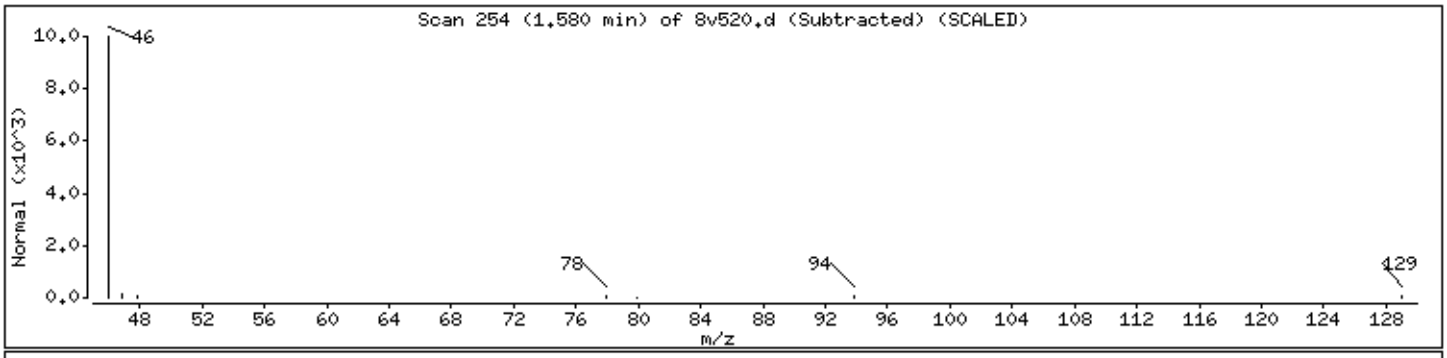
Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



STANDARDS DATA

EPA 524.2/Low level SW846 8260B and Regular level 8260B and EPA 624
Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
Fluorobenzene (IS)									
Dibromofluoromethane (surr)		0.5	1	2	5	10	20	50	100
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol			50	100	250	500	1000	2500	5000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane			5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)									
Toluene-d8 (surr)		0.5	1	2	5	10	20	50	100
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100

	Level 1	Level 1a	Level 2	Level 3	Level 4 #	Level 5	Level 6	Level 7 !	Level 7a
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Stryene		0.5	1	2	5	10	20	50	100
Cyclohexanone			50	100	250	500	1000	2500	5000
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)									
Bromofluorobenzene (surr)		0.5	1	2	5	10	20	50	100
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropane		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Tetrahydrofuran			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range
EPA 524.2	Level 1a	Levels 1a -> 7a
SW 846 8260B low level	Level 1a	Levels 1-> 7a
EPA 624	Level 2	Levels 2-> 7a
SW846 8260B	Level 2	Levels 2-> 7a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Report Date: 03-Feb-2006 09:34

Calibration History

Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Start Cal Date: 11-JAN-2006 11:07
End Cal Date : 11-JAN-2006 19:09

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
11-JAN-2006 16:08	ICALsubS	/chem/VOA8.i/011106v8.b/8s313.d
11-JAN-2006 12:07	CALsubL+	/chem/VOA8.i/011106v8.b/8s305.d
Cal Level: 2 , Cal Amount: 2.00000		
11-JAN-2006 16:39	ICALsubS	/chem/VOA8.i/011106v8.b/8s314.d
11-JAN-2006 12:37	CALsubL+	/chem/VOA8.i/011106v8.b/8s306.d
Cal Level: 3 , Cal Amount: 5.00000		
11-JAN-2006 17:09	ICALsubS	/chem/VOA8.i/011106v8.b/8s315.d
11-JAN-2006 13:08	CALsubL+	/chem/VOA8.i/011106v8.b/8s307.d
Cal Level: 4 , Cal Amount: 10.00000		
11-JAN-2006 17:39	ICALsubS	/chem/VOA8.i/011106v8.b/8s316.d
11-JAN-2006 13:38	CALsubL+	/chem/VOA8.i/011106v8.b/8s308.d
Cal Level: 5 , Cal Amount: 20.00000		
11-JAN-2006 18:08	ICALsubS	/chem/VOA8.i/011106v8.b/8s317.d
11-JAN-2006 14:08	CALsubL+	/chem/VOA8.i/011106v8.b/8s309.d
Cal Level: 6 , Cal Amount: 50.00000		
11-JAN-2006 18:39	ICALsubS	/chem/VOA8.i/011106v8.b/8s318.d
11-JAN-2006 14:38	CALsubL+	/chem/VOA8.i/011106v8.b/8s310.d
Cal Level: 7 , Cal Amount: 100.00000		
11-JAN-2006 19:09	ICALsubS	/chem/VOA8.i/011106v8.b/8s319.d
11-JAN-2006 15:08	CALsubL+	/chem/VOA8.i/011106v8.b/8s311.d
Cal Level: 8 , Cal Amount: 200.00000		
11-JAN-2006 11:07	BENZENE+	/chem/VOA8.i/011106v8.b/8s303.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.0		
11-JAN-2006 14:38	CALsubL+	/chem/VOA8.i/011106v8.b/8s310.d
Ccal Level: 6 , Ccal Amount: 50.0		
11-JAN-2006 18:39	ICALsubS	/chem/VOA8.i/011106v8.b/8s318.d
Ccal Level: 6 , Ccal Amount: 50.0		
11-JAN-2006 19:09	ICALsubS	/chem/VOA8.i/011106v8.b/8s319.d

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2006 11:07
End Cal Date : 11-JAN-2006 19:09
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Calibration File Names:
Level 1: /chem/VOA8.i/011106v8.b/8s313.d
Level 2: /chem/VOA8.i/011106v8.b/8s314.d
Level 3: /chem/VOA8.i/011106v8.b/8s315.d
Level 4: /chem/VOA8.i/011106v8.b/8s316.d
Level 5: /chem/VOA8.i/011106v8.b/8s317.d
Level 6: /chem/VOA8.i/011106v8.b/8s318.d
Level 7: /chem/VOA8.i/011106v8.b/8s319.d
Level 8: /chem/VOA8.i/011106v8.b/8s303.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
M 1 Xylenes (total)	0.82523	0.79757	0.75363	0.76489	0.75277	0.66842					
	0.65401	+++++					AVRG		0.74522		8.46442
M 2 1,2-Dichloroethylene (total)	0.33978	0.31587	0.29502	0.29917	0.29600	0.26819					
	0.27503	+++++					AVRG		0.29844		8.08590
M 135 1,3-Dichloropropylene	0.34393	0.31672	0.31711	0.33392	0.34709	0.32995					
	0.34412	+++++					AVRG		0.33326		3.81310
3 Dichlorodifluoromethane	0.24260	0.28675	0.26732	0.28602	0.26451	0.26363					
	0.27043	+++++					AVRG		0.26875		5.59159
4 Chloromethane	24791	38489	85012	152511	297156	706029					
	1418739	+++++					LINR	-0.01011	0.41943		0.99979

General Engineering Laboratories, LLC

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Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
5 Vinyl chloride	0.28100	0.27263	0.25237	0.24559	0.24477	0.24418					
	0.25173	+++++					AVRG		0.25604		5.76483
6 Bromomethane	9094	16533	34579	65678	127176	311222					
	619333	+++++					LINR	-0.00571	0.18383		0.99991
7 Chloroethane	0.20918	0.20610	0.20098	0.19997	0.20521	0.19634					
	0.20419	+++++					AVRG		0.20314		2.12343
8 Trichlorofluoromethane	0.43037	0.43656	0.45381	0.44817	0.43658	0.42361					
	0.43766	+++++					AVRG		0.43811		2.32526
134 Ethyl Ether	0.28791	0.28324	0.29205	0.29633	0.29114	0.27975					
	0.27926	+++++					AVRG		0.28710		2.27999
9 Acrolein	6996	15911	37501	85542	166332	404950					
	+++++	+++++					LINR	-0.00301	0.04783		0.99960
12 Trichlorotrifluoroethane	0.11960	0.11632	0.12340	0.12686	0.12051	0.11727					
	0.10664	+++++					AVRG		0.11866		5.39553
10 Acetone	26566	44184	98901	197448	381193	694567					
	1607745	+++++					LINR	-0.06473	0.09347		0.99182
11 1,1-Dichloroethylene	0.51646	0.50373	0.47439	0.43740	0.45507	0.39902					
	0.42568	+++++					AVRG		0.45882		9.21603

General Engineering Laboratories, LLC

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Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
13 Iodomethane	0.49822	0.46997	0.43966	0.42805	0.43433	0.36917					
	0.36472	+++++					AVRG		0.42916		11.38510
15 Acetonitrile	0.05468	0.04974	0.04698	0.04527	0.04604	0.03937					
	0.03942	+++++					AVRG		0.04593		11.86343
128 Methyl acetate	0.34320	0.32516	0.30638	0.30287	0.30334	0.25774					
	0.24793	+++++					AVRG		0.29809		11.48388
14 Carbon disulfide	193389	358098	838555	1569483	3103650	6167294					
	11495319	+++++					LINR	-0.25738	0.67871		0.99691
16 Allyl chloride	0.15057	0.15502	0.20498	0.17659	0.16603	0.16009					
	0.14597	+++++					AVRG		0.16561		12.13908
17 Methylene chloride	+++++	30959	55253	97153	183615	376192					
	750015	+++++					LINR	-0.05128	0.21746		0.99895
18 Acrylonitrile	0.12886	0.12499	0.13000	0.13209	0.13078	0.12582					
	0.12163	+++++					AVRG		0.12774		2.91177
20 tert-Butyl methyl ether	0.71974	0.70126	0.67777	0.68149	0.68912	0.63940					
	0.66252	+++++					AVRG		0.68161		3.81479
21 trans-1,2-Dichloroethylene	0.34263	0.31296	0.28279	0.28941	0.28696	0.25611					
	0.26534	+++++					AVRG		0.29089		10.03183

General Engineering Laboratories, LLC

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Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
23 Vinyl acetate	0.45475	0.46838	0.49080	0.49369	0.50403	0.49055					
	0.46881	+++++					AVRG		0.48157		3.66900
22 1,1-Dichloroethane	0.60572	0.56646	0.54998	0.53023	0.53630	0.47584					
	0.48279	+++++					AVRG		0.53533		8.51404
24 2-Chloro-1,3-butadiene	0.47247	0.46332	0.50957	0.53702	0.52513	0.52592					
	0.50401	+++++					AVRG		0.50535		5.52931
26 Ethyl acetate	0.34004	0.33111	0.34091	0.35131	0.35025	0.32334					
	0.30113	+++++					AVRG		0.33401		5.25779
30 2-Butanone	0.18287	0.17337	0.16515	0.16597	0.16465	0.14372					
	0.14522	+++++					AVRG		0.16299		8.69953
31 cis-1,2-Dichloroethylene	0.33693	0.31876	0.30726	0.30893	0.30504	0.28027					
	0.28471	+++++					AVRG		0.30598		6.32288
28 Propionitrile	0.05443	0.05044	0.05355	0.05339	0.05304	0.05060					
	0.04992	+++++					AVRG		0.05220		3.48398
25 2,2-Dichloropropane	0.34337	0.34560	0.33469	0.33618	0.35168	0.33281					
	0.35982	+++++					AVRG		0.34345		2.87065
27 Methacrylonitrile	0.20126	0.19845	0.21318	0.21896	0.22085	0.19981					
	0.18729	+++++					AVRG		0.20568		5.97850

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
29 Bromochloromethane	0.16446	0.13430	0.12684	0.12951	0.12742	0.11409					
	0.11810	+++++					AVRG		0.13067		12.55432
32 Chloroform	0.57565	0.51392	0.48783	0.46382	0.47722	0.42743					
	0.43832	+++++					AVRG		0.48346		10.35834
72 Tetrahydrofuran	31385	54867	117448	207708	475951	1038643					
	1931904	+++++					LINR	-0.14729	0.33424		0.99839
36 1,1,1-Trichloroethane	0.43088	0.38014	0.35818	0.36310	0.36958	0.34177					
	0.36077	+++++					AVRG		0.37206		7.64018
19 Isobutyl alcohol	0.01455	0.01350	0.01395	0.01399	0.01516	0.01458					
	0.01346	+++++					AVRG		0.01417		4.39165
34 1,1-Dichloropropene	0.41285	0.40221	0.35870	0.36018	0.36017	0.32714					
	0.33833	+++++					AVRG		0.36565		8.57729
129 Cyclohexane	0.50510	0.46666	0.45544	0.45598	0.45320	0.41187					
	0.43363	+++++					AVRG		0.45456		6.32904
33 Carbon tetrachloride	0.24669	0.24465	0.23045	0.24265	0.25873	0.24204					
	0.26507	+++++					AVRG		0.24718		4.63325
37 1,2-Dichloroethane	0.44550	0.36614	0.36237	0.34997	0.35312	0.31535					
	0.32321	+++++					AVRG		0.35938		11.83009

General Engineering Laboratories, LLC

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Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	100 Level 7	200 Level 8										
38 Benzene	49138	85618	202212	391107	769473	1701465						
	3355971	28854					LINR	-0.01662	0.99471		0.99957	
131 n-Butyl alcohol	27051	51513	131152	287700	590594	1235152						
	2404250	8458					LINR	-1.56118	0.00717		0.99851	<-
39 Trichloroethylene	0.33560	0.29746	0.27743	0.28211	0.28295	0.25050						
	0.25908	+++++					AVRG		0.28359		9.79904	
42 Methyl methacrylate	0.16711	0.17144	0.18434	0.19031	0.19251	0.18022						
	0.16790	+++++					AVRG		0.17912		5.86495	
41 1,2-Dichloropropane	0.35505	0.33110	0.31038	0.30786	0.31108	0.28107						
	0.28001	+++++					AVRG		0.31093		8.52030	
130 Methylcyclohexane	0.60616	0.58980	0.54541	0.54866	0.56065	0.49031						
	0.50343	+++++					AVRG		0.54920		7.65387	
97 1,4-Dioxane	0.00369	0.00364	0.00373	0.00395	0.00372	0.00363						
	0.00338	+++++					AVRG		0.00368		4.62246	
43 Dibromomethane	0.16096	0.15715	0.15692	0.15385	0.15650	0.13889						
	0.14243	+++++					AVRG		0.15239		5.47118	
45 Bromodichloromethane	0.33008	0.31787	0.30312	0.31011	0.31979	0.30240						
	0.31319	+++++					AVRG		0.31379		3.12140	

General Engineering Laboratories, LLC

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Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
48 2-Nitropropane	8260	18052	47087	107128	270395	736538					
	1513778	+++++					LINR	0.20531	0.09339		0.99881
44 2-Chloroethylvinyl ether	+++++	+++++	0.18342	0.18085	0.18476	0.17193					
	0.16352	+++++					AVRG		0.17690		5.08457
46 cis-1,3-Dichloropropylene	0.38011	0.34886	0.35027	0.36637	0.37765	0.35371					
	0.36769	+++++					AVRG		0.36352		3.52827
49 4-Methyl-2-pentanone	0.19985	0.19416	0.18725	0.19356	0.19686	0.17043					
	0.16984	+++++					AVRG		0.18742		6.62324
50 Toluene	1.22596	1.08120	1.04768	1.03035	1.01258	0.91463					
	0.93001	+++++					AVRG		1.03463		10.04441
51 Ethyl methacrylate	0.43933	0.45903	0.48562	0.52227	0.52089	0.47369					
	0.41620	+++++					AVRG		0.47386		8.36639
53 trans-1,3-Dichloropropylene	0.45655	0.41868	0.41959	0.44504	0.46462	0.44973					
	0.47457	+++++					AVRG		0.44697		4.76947
54 1,1,2-Trichloroethane	0.32408	0.28794	0.27067	0.27845	0.27847	0.25462					
	0.26012	+++++					AVRG		0.27919		8.18349
55 2-Hexanone	0.35848	0.35190	0.34977	0.36322	0.36528	0.30957					
	0.30170	+++++					AVRG		0.34284		7.61828

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
52 1,3-Dichloropropane	0.63364	0.58808	0.55564	0.57409	0.55458	0.50994					
	0.51726	+++++					AVRG		0.56189		7.53860
56 Tetrachloroethylene	0.35778	0.33978	0.32558	0.31686	0.31539	0.28522					
	0.28965	+++++					AVRG		0.31861		8.10208
57 Dibromochloromethane	0.30916	0.27982	0.26921	0.28965	0.30753	0.29677					
	0.31964	+++++					AVRG		0.29597		5.98922
59 1,2-Dibromoethane	0.35936	0.33634	0.31327	0.31484	0.32412	0.29377					
	0.30685	+++++					AVRG		0.32122		6.67197
62 Chlorobenzene	1.19380	1.13185	1.06301	1.07545	1.05666	0.96183					
	0.95552	+++++					AVRG		1.06259		8.04338
58 Ethylbenzene	2.14378	1.94434	1.88042	1.89245	1.87230	1.68300					
	1.65250	+++++					AVRG		1.86697		8.83677
60 1,1,1,2-Tetrachloroethane	0.30322	0.28528	0.28267	0.30319	0.32284	0.31244					
	0.32892	+++++					AVRG		0.30551		5.72891
63 m,p-Xylenes	0.84960	0.81188	0.75863	0.76189	0.74969	0.66170					
	0.64096	+++++					AVRG		0.74776		10.00999
64 o-Xylene	0.77649	0.76893	0.74362	0.77089	0.75891	0.68188					
	0.68011	+++++					AVRG		0.74012		5.64105

General Engineering Laboratories, LLC

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Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
65 Styrene	1.23006	1.19483	1.18183	1.22516	1.21565	1.08686					
	1.06366	+++++					AVRG		1.17115		5.80188
66 Bromoform	2805	6513	16742	38562	81277	204334					
	433338	+++++					LINR	0.03282	0.38814		0.99835
67 Isopropylbenzene	3.62367	3.42128	3.35178	3.46562	3.51169	3.24764					
	3.22627	+++++					AVRG		3.40685		4.19679
68 cis-1,4-Dichloro-2-butene	0.28928	0.29992	0.32314	0.35044	0.36336	0.34048					
	0.31505	+++++					AVRG		0.32595		8.26989
70 Cyclohexanone	0.04636	0.04616	0.05254	0.06267	0.06181	0.05690					
	+++++	+++++					AVRG		0.05441		13.39062
73 1,1,2,2-Tetrachloroethane	0.96135	0.88700	0.85517	0.85117	0.88501	0.79560					
	0.81253	+++++					AVRG		0.86398		6.34291
69 trans-1,4-Dichloro-2-butene	0.28314	0.28508	0.31732	0.33539	0.35422	0.32702					
	0.30278	+++++					AVRG		0.31499		8.36314
74 1,2,3-Trichloropropane	0.26405	0.25730	0.24246	0.25471	0.25662	0.22503					
	0.23526	+++++					AVRG		0.24792		5.66625
75 Bromobenzene	0.87087	0.88212	0.84834	0.83509	0.85961	0.77520					
	0.79564	+++++					AVRG		0.83812		4.70935

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2006 11:07
End Cal Date : 11-JAN-2006 19:09
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
76 n-Propylbenzene	4.85795	4.45316	4.40719	4.42075	4.50203	4.02698					
	3.90336	+++++					AVRG		4.36734		7.25137
78 1,3,5-Trimethylbenzene	3.02675	3.04997	2.97459	2.98835	3.06420	2.74258					
	2.67870	+++++					AVRG		2.93216		5.30906
77 2-Chlorotoluene	2.85890	2.74950	2.53082	2.55545	2.62642	2.42494					
	2.41979	+++++					AVRG		2.59512		6.28872
80 4-Chlorotoluene	3.18291	3.13817	2.96721	2.90068	2.96503	2.56841					
	2.49189	+++++					AVRG		2.88776		9.17247
81 tert-Butylbenzene	3.07323	2.88066	2.85546	2.92317	2.99734	2.76040					
	2.75835	+++++					AVRG		2.89266		4.03041
79 1,2,4-Trimethylbenzene	3.25105	3.06381	3.06688	3.04767	3.11919	2.82779					
	2.73713	+++++					AVRG		3.01622		5.82118
82 Pentachloroethane	0.23116	0.22918	0.25753	0.30884	0.31835	0.32219					
	0.30618	+++++					AVRG		0.28192		14.63693
83 sec-Butylbenzene	4.44055	4.30779	4.18127	4.22359	4.30203	3.90880					
	3.76853	+++++					AVRG		4.16179		5.73284
84 4-Isopropyltoluene	3.34700	3.21390	3.12608	3.22995	3.26777	2.91895					
	2.81055	+++++					AVRG		3.13060		6.24996

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2006 11:07
End Cal Date : 11-JAN-2006 19:09
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
85 1,3-Dichlorobenzene	1.90813	1.83898	1.80627	1.71988	1.68172	1.49828					
	1.43890	+++++					AVRG		1.69888		10.29425
87 1,4-Dichlorobenzene	1.98582	1.87293	1.71446	1.70408	1.69508	1.51858					
	1.50323	+++++					AVRG		1.71345		10.17053
88 Benzyl chloride	50148	112534	319518	736075	1704396	3869159					
	6719867	+++++					LINR	-0.09976	1.19096		0.99391
89 n-Butylbenzene	3.32867	3.07670	3.05110	3.13238	3.19707	2.87086					
	2.74859	+++++					AVRG		3.05791		6.39272
90 1,2-Dichlorobenzene	1.82199	1.73272	1.64065	1.62081	1.63370	1.44271					
	1.44369	+++++					AVRG		1.61947		8.60923
91 bis(2-Chloroisopropyl)ether	0.58277	0.60686	0.64167	0.67940	0.72771	0.66048					
	0.63036	+++++					AVRG		0.64703		7.40890
92 1,2-Dibromo-3-chloropropane	0.14260	0.14204	0.14344	0.14466	0.15503	0.14192					
	0.15187	+++++					AVRG		0.14594		3.62917
93 1,2,4-Trichlorobenzene	1.12673	1.00598	0.94890	0.96626	1.01160	0.88459					
	0.86109	+++++					AVRG		0.97216		9.12053
94 Hexachlorobutadiene	0.64630	0.59893	0.56287	0.54139	0.57033	0.49321					
	0.47632	+++++					AVRG		0.55562		10.58518

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2006 11:07
End Cal Date : 11-JAN-2006 19:09
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	20 Level 5	50 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	100 Level 7	200 Level 8									
95 Naphthalene	2.34394	2.23744	2.27217	2.41284	2.56824	2.17348					
	2.09434	+++++					AVRG		2.30035		6.86444
96 1,2,3-Trichlorobenzene	0.99760	0.96153	0.91086	0.92836	0.94730	0.80181					
	0.77752	+++++					AVRG		0.90357		9.15129
$ 136 1,2-Dichloroethane-d4	+++++	0.38553	0.31309	0.30111	0.29903	0.26192					
	0.26540	+++++					AVRG		0.30435		14.71050
$ 35 Dibromofluoromethane	+++++	0.28672	0.25135	0.23849	0.24017	0.21777					
	+++++	+++++					AVRG		0.24690		10.26660
$ 47 Toluene-d8	+++++	1.79375	1.52048	1.48996	1.47457	1.30936					
	1.30547	+++++					AVRG		1.48226		12.05911
$ 71 Bromofluorobenzene	+++++	41727	77839	139676	261878	577930					
	1122470	+++++					LINR	-0.03118	0.98531		0.99982

General Engineering Laboratories, LLC

INITIAL CALIBRATION DATA

Start Cal Date : 11-JAN-2006 11:07
End Cal Date : 11-JAN-2006 19:09
Quant Method : ISTD
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Cal Date : 03-Feb-2006 13:37 amj

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s303.d
Lab Smp Id: W8V060111-01 Client Smp ID: VSTD0005
Inj Date : 11-JAN-2006 11:07
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-01|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-10C/UVM051216-01A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 09:18 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 11:07 Cal File: 8s303.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: BENZENE+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

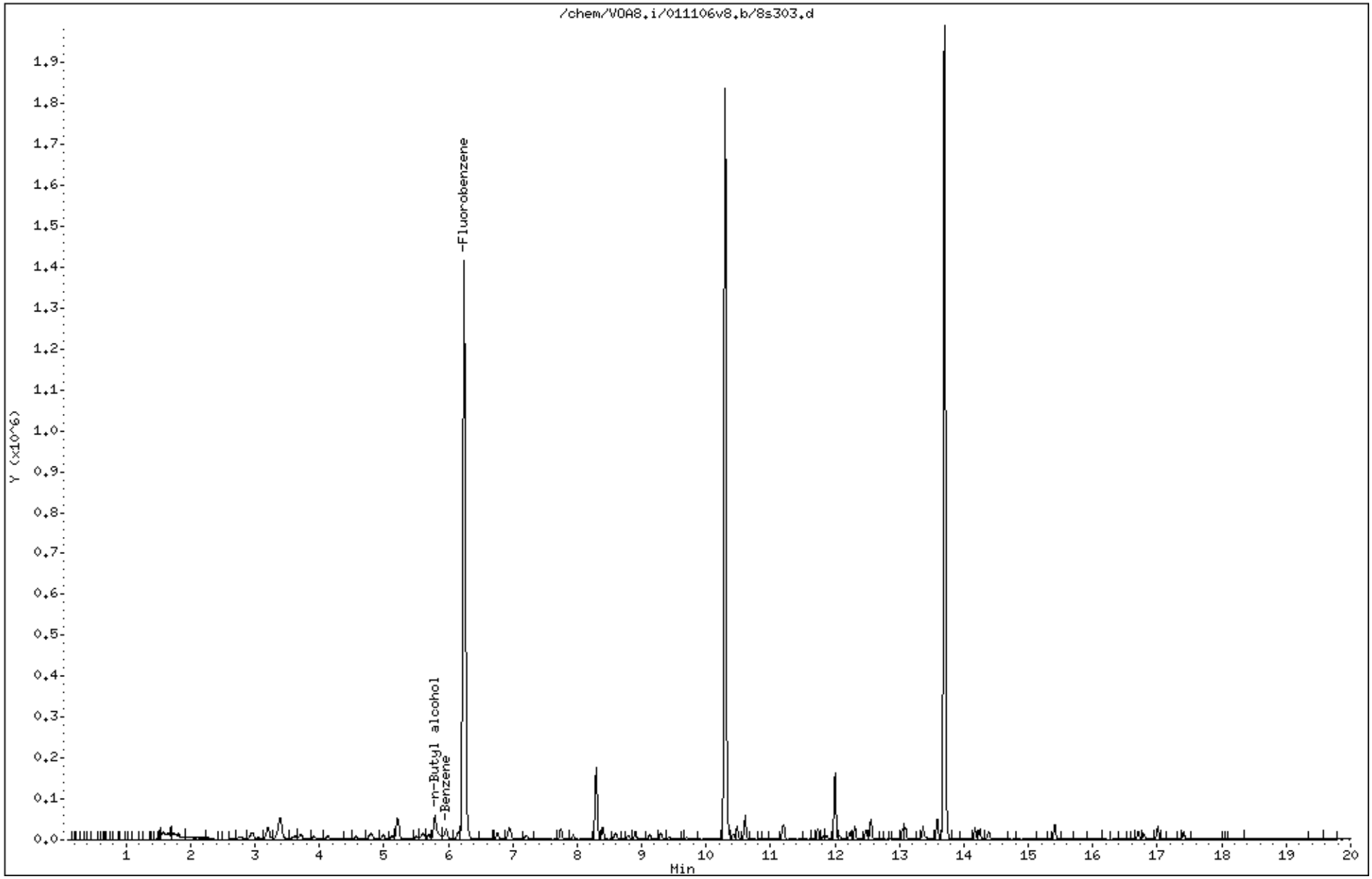
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
38 Benzene	78	5.967	5.967	(0.955)	28854	0.50000	0.50(a)
131 n-Butyl alcohol	41	5.851	5.845	(0.937)	8458	50.0000	50.0(Q)
* 40 Fluorobenzene	96	6.247	6.247	(1.000)	1871203	50.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s303.d
Date : 11-JAN-2006 11:07
Client ID: VSTD0005
Instrument: VOA8.i
Sample Info: |W8V060111-01|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: ACJ
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s305.d
Lab Smp Id: W8V060111-02 Client Smp ID: VSTD001
Inj Date : 11-JAN-2006 12:07
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-02|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-11C/UVM051216-02A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 13:39 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 16:08 Cal File: 8s313.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				56270	3.00000	3.3
$ 136 1,2-Dichloroethane-d4	65	5.785	5.796	(0.926)	17982	1.00000	1.3(Q)
M 2 1,2-Dichloroethylene (total)	96				22916	2.00000	2.3
M 135 1,3-Dichloropropylene	75				23196	2.00000	2.1
3 Dichlorodifluoromethane	85	1.762	1.749	(0.282)	8181	1.00000	0.92(a)
4 Chloromethane	50	1.815	1.825	(0.291)	24791	1.00000	1.2
5 Vinyl chloride	62	1.903	1.925	(0.305)	9476	1.00000	1.1
6 Bromomethane	94	2.197	2.201	(0.352)	9094	1.00000	1.2
7 Chloroethane	64	2.249	2.260	(0.360)	7054	1.00000	1.0
8 Trichlorofluoromethane	101	2.461	2.465	(0.394)	14513	1.00000	0.98(a)
134 Ethyl Ether	59	2.670	2.669	(0.427)	9709	1.00000	1.0
10 Acetone	43	2.773	2.766	(0.444)	26566	5.00000	9.8
15 Acetonitrile	41	2.962	2.961	(0.474)	46099	25.0000	29.8
11 1,1-Dichloroethylene	61	2.962	2.955	(0.474)	17416	1.00000	1.1
128 Methyl acetate	43	3.224	3.210	(0.516)	57867	5.00000	5.8
13 Iodomethane	142	3.199	3.198	(0.512)	84004	5.00000	5.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 tert-Butyl methyl ether	73	3.631	3.624	(0.581)	24271	1.00000	1.0
	21 trans-1,2-Dichloroethylene	96	3.722	3.721	(0.596)	11554	1.00000	1.2
	23 Vinyl acetate	43	4.136	4.141	(0.662)	76675	5.00000	4.7(a)
	22 1,1-Dichloroethane	63	4.130	4.135	(0.661)	20426	1.00000	1.1
	30 2-Butanone	43	4.574	4.567	(0.732)	30834	5.00000	5.6
	31 cis-1,2-Dichloroethylene	96	4.799	4.804	(0.768)	11362	1.00000	1.1
	25 2,2-Dichloropropane	77	4.805	4.810	(0.769)	11579	1.00000	1.00
	32 Chloroform	83	4.988	4.993	(0.798)	19412	1.00000	1.2
	29 Bromochloromethane	128	5.122	5.133	(0.820)	5546	1.00000	1.2(Q)
$	35 Dibromofluoromethane	113	5.213	5.218	(0.834)	12488	1.00000	1.5
	36 1,1,1-Trichloroethane	97	5.511	5.510	(0.882)	14530	1.00000	1.2
	129 Cyclohexane	84	5.614	5.613	(0.899)	17033	1.00000	1.1
	34 1,1-Dichloropropene	75	5.712	5.698	(0.914)	13922	1.00000	1.1
	131 n-Butyl alcohol	41	5.839	5.838	(0.935)	27051	100.000	36.1(a)
	33 Carbon tetrachloride	117	5.809	5.826	(0.930)	8319	1.00000	1.00
	37 1,2-Dichloroethane	62	5.906	5.905	(0.945)	15023	1.00000	1.2
	38 Benzene	78	5.967	5.966	(0.955)	49138	1.00000	0.63(a)
*	40 Fluorobenzene	96	6.247	6.246	(1.000)	1686099	50.0000	
	39 Trichloroethylene	95	6.764	6.763	(1.083)	11317	1.00000	1.2
	41 1,2-Dichloropropane	63	6.947	6.939	(1.112)	11973	1.00000	1.1
	130 Methylcyclohexane	83	6.965	6.964	(1.115)	20441	1.00000	1.1
	45 Bromodichloromethane	83	7.202	7.201	(1.153)	11131	1.00000	1.0
	43 Dibromomethane	93	7.233	7.225	(1.158)	5428	1.00000	1.0
	44 2-Chloroethylvinyl ether	63	7.664	7.663	(1.227)	27201	5.00000	4.6(a)
	49 4-Methyl-2-pentanone	58	7.744	7.742	(0.752)	22712	5.00000	5.3
	46 cis-1,3-Dichloropropylene	75	7.938	7.943	(1.271)	12818	1.00000	1.0
$	47 Toluene-d8	98	8.297	8.296	(0.806)	50891	1.00000	1.5
	50 Toluene	92	8.394	8.400	(0.816)	27865	1.00000	1.2
	53 trans-1,3-Dichloropropylene	75	8.601	8.600	(0.836)	10377	1.00000	1.0
	54 1,1,2-Trichloroethane	83	8.784	8.789	(0.853)	7366	1.00000	1.2
	55 2-Hexanone	43	8.906	8.898	(0.865)	40739	5.00000	5.2
	52 1,3-Dichloropropane	76	9.124	9.123	(0.886)	14402	1.00000	1.1
	56 Tetrachloroethylene	164	9.301	9.300	(0.904)	8132	1.00000	1.1
	57 Dibromochloromethane	129	9.435	9.428	(0.917)	7027	1.00000	1.0
	59 1,2-Dibromoethane	107	9.702	9.701	(0.943)	8168	1.00000	1.1
*	61 Chlorobenzene-d5	117	10.293	10.298	(1.000)	1136453	50.0000	
	62 Chlorobenzene	112	10.341	10.346	(1.005)	27134	1.00000	1.1
	60 1,1,1,2-Tetrachloroethane	131	10.426	10.419	(1.013)	6892	1.00000	0.99(a)
	58 Ethylbenzene	91	10.487	10.486	(1.019)	48726	1.00000	1.1
	63 m,p-Xylenes	106	10.603	10.608	(1.030)	38621	2.00000	2.3
	64 o-Xylene	106	11.187	11.192	(1.087)	17649	1.00000	1.0
	65 Styrene	104	11.217	11.216	(1.090)	27958	1.00000	1.0
	66 Bromoform	173	11.540	11.545	(0.842)	2805	1.00000	2.2
	67 Isopropylbenzene	105	11.734	11.739	(0.857)	42488	1.00000	1.1
	73 1,1,2,2-Tetrachloroethane	83	11.880	11.879	(0.867)	11272	1.00000	1.1
$	71 Bromofluorobenzene	95	12.002	12.001	(0.876)	30342	1.00000	1.1
	74 1,2,3-Trichloropropane	110	12.081	12.074	(0.882)	3096	1.00000	1.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
75	Bromobenzene	156	12.233	12.232	(0.893)	10211	1.00000	1.0
76	n-Propylbenzene	91	12.312	12.311	(0.899)	56960	1.00000	1.1
77	2-Chlorotoluene	91	12.483	12.482	(0.911)	33521	1.00000	1.1
78	1,3,5-Trimethylbenzene	105	12.550	12.548	(0.916)	35489	1.00000	1.0
80	4-Chlorotoluene	91	12.562	12.567	(0.917)	37320	1.00000	1.1
81	tert-Butylbenzene	119	13.048	13.053	(0.952)	36034	1.00000	1.1
79	1,2,4-Trimethylbenzene	105	13.091	13.096	(0.956)	38119	1.00000	1.1
83	sec-Butylbenzene	105	13.371	13.370	(0.976)	52066	1.00000	1.1
84	4-Isopropyltoluene	119	13.584	13.583	(0.992)	39244	1.00000	1.1
85	1,3-Dichlorobenzene	146	13.590	13.589	(0.992)	22373	1.00000	1.1
* 86	1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	586256	50.0000	
87	1,4-Dichlorobenzene	146	13.742	13.741	(1.003)	23284	1.00000	1.2
89	n-Butylbenzene	91	14.174	14.173	(1.035)	39029	1.00000	1.1
90	1,2-Dichlorobenzene	146	14.247	14.246	(1.040)	21363	1.00000	1.1
92	1,2-Dibromo-3-chloropropane	75	15.342	15.341	(1.120)	1672	1.00000	0.98(a)
93	1,2,4-Trichlorobenzene	180	16.698	16.703	(1.219)	13211	1.00000	1.2
94	Hexachlorobutadiene	225	17.015	17.014	(1.242)	7578	1.00000	1.2
95	Naphthalene	128	17.009	17.002	(1.242)	27483	1.00000	1.0
96	1,2,3-Trichlorobenzene	180	17.410	17.409	(1.271)	11697	1.00000	1.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s305.d
Date : 11-JAN-2006 12:07
Client ID: VSTD001
Sample Info: IWBV060111-02|ICAL|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25
Page 1
Y (x10^6)
Min
/chem/VOA8.i/011106v8.b/8s305.d
-1,3-Dichloropropylene
-Dichlorodifluoromethane
-Chloromethane+
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether+
-Acetonitrile+
-Methyl acetate+
-Methylene chloride+
-trans-1,2-Dichloroethylen
-2-Butanone
-cis-1,2-Dichloroethylene+
-Chloroform
-1,1,1-Trichloroethane
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethylene
-1,2-Dichloropropane+
-Bromodichloromethane+
-cis-1,3-Dichloropropylene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone
-1,3-Dichloropropane
-Tetrachloroethylene
-Dibromochloromethane
-1,2-Dibromoethane
Chlorobenzene-d5+
-m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene
-1,1,2,2-Tetrachloroethane
-Bromobenzene
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
-4-Isopropyltoluene+
1,4-Dichlorobenzene-d4+
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s306.d
Lab Smp Id: W8V060111-03 Client Smp ID: VSTD002
Inj Date : 11-JAN-2006 12:37
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-03|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-12C/UVM051216-03A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 13:37 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 16:39 Cal File: 8s314.d
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				111727	6.00000	6.4
$ 136 1,2-Dichloroethane-d4	65	5.789	5.796	(0.927)	26485	2.00000	2.0(Q)
M 2 1,2-Dichloroethylene (total)	96				43399	4.00000	4.2
M 135 1,3-Dichloropropylene	75				43516	4.00000	3.8
3 Dichlorodifluoromethane	85	1.773	1.749	(0.284)	19699	2.00000	2.1
4 Chloromethane	50	1.814	1.825	(0.290)	38489	2.00000	2.2
5 Vinyl chloride	62	1.908	1.925	(0.305)	18729	2.00000	2.1
6 Bromomethane	94	2.195	2.201	(0.351)	16533	2.00000	2.3
7 Chloroethane	64	2.254	2.260	(0.361)	14159	2.00000	2.0
8 Trichlorofluoromethane	101	2.459	2.465	(0.394)	29991	2.00000	2.0
134 Ethyl Ether	59	2.675	2.669	(0.428)	19458	2.00000	2.0
10 Acetone	43	2.778	2.766	(0.445)	44184	10.0000	15.1
15 Acetonitrile	41	2.967	2.961	(0.475)	85429	50.0000	54.2
11 1,1-Dichloroethylene	61	2.954	2.955	(0.473)	34605	2.00000	2.2
128 Methyl acetate	43	3.216	3.210	(0.515)	111691	10.0000	10.9
13 Iodomethane	142	3.198	3.198	(0.512)	161429	10.0000	11.0

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
Compounds		====	==	======	======	========	=======	=======
	14 Carbon disulfide	76	3.405	3.405	(0.545)	358098	10.0000	2.2(a)
	20 tert-Butyl methyl ether	73	3.636	3.624	(0.582)	48175	2.00000	2.0
	21 trans-1,2-Dichloroethylene	96	3.721	3.721	(0.596)	21500	2.00000	2.2
	23 Vinyl acetate	43	4.141	4.141	(0.663)	160885	10.0000	9.7
	22 1,1-Dichloroethane	63	4.135	4.135	(0.662)	38915	2.00000	2.1
	30 2-Butanone	43	4.567	4.567	(0.731)	59551	10.0000	10.6
	31 cis-1,2-Dichloroethylene	96	4.798	4.804	(0.768)	21898	2.00000	2.1
	25 2,2-Dichloropropane	77	4.816	4.810	(0.771)	23742	2.00000	2.0
	32 Chloroform	83	4.980	4.993	(0.797)	35305	2.00000	2.1
	29 Bromochloromethane	128	5.126	5.133	(0.821)	9226	2.00000	2.0
$	35 Dibromofluoromethane	113	5.218	5.218	(0.835)	19697	2.00000	2.3
	36 1,1,1-Trichloroethane	97	5.510	5.510	(0.882)	26115	2.00000	2.0
	129 Cyclohexane	84	5.607	5.613	(0.898)	32059	2.00000	2.0
	34 1,1-Dichloropropene	75	5.704	5.698	(0.913)	27631	2.00000	2.2
	131 n-Butyl alcohol	41	5.844	5.838	(0.936)	51513	200.000	133
	33 Carbon tetrachloride	117	5.820	5.826	(0.932)	16807	2.00000	2.0
	37 1,2-Dichloroethane	62	5.899	5.905	(0.944)	25153	2.00000	2.0
	38 Benzene	78	5.960	5.966	(0.954)	85618	2.00000	1.7
*	40 Fluorobenzene	96	6.246	6.246	(1.000)	1717453	50.0000	
	39 Trichloroethylene	95	6.757	6.763	(1.082)	20435	2.00000	2.1
	41 1,2-Dichloropropane	63	6.933	6.939	(1.110)	22746	2.00000	2.1
	130 Methylcyclohexane	83	6.963	6.964	(1.115)	40518	2.00000	2.1
	45 Bromodichloromethane	83	7.195	7.201	(1.152)	21837	2.00000	2.0
	43 Dibromomethane	93	7.219	7.225	(1.156)	10796	2.00000	2.1
	44 2-Chloroethylvinyl ether	63	7.663	7.663	(1.227)	56498	10.0000	9.3
	49 4-Methyl-2-pentanone	58	7.742	7.742	(0.752)	45332	10.0000	10.4
	46 cis-1,3-Dichloropropylene	75	7.937	7.943	(1.271)	23966	2.00000	1.9
$	47 Toluene-d8	98	8.296	8.296	(0.806)	83758	2.00000	2.4
	50 Toluene	92	8.399	8.400	(0.816)	50486	2.00000	2.1
	53 trans-1,3-Dichloropropylene	75	8.600	8.600	(0.835)	19550	2.00000	1.9
	54 1,1,2-Trichloroethane	83	8.789	8.789	(0.853)	13445	2.00000	2.1
	55 2-Hexanone	43	8.898	8.898	(0.864)	82158	10.0000	10.3
	52 1,3-Dichloropropane	76	9.129	9.123	(0.887)	27460	2.00000	2.1
	56 Tetrachloroethylene	164	9.300	9.300	(0.903)	15866	2.00000	2.1
	57 Dibromochloromethane	129	9.427	9.428	(0.916)	13066	2.00000	1.9
	59 1,2-Dibromoethane	107	9.701	9.701	(0.942)	15705	2.00000	2.1
*	61 Chlorobenzene-d5	117	10.297	10.298	(1.000)	1167362	50.0000	
	62 Chlorobenzene	112	10.346	10.346	(1.005)	52851	2.00000	2.1
	60 1,1,1,2-Tetrachloroethane	131	10.425	10.419	(1.012)	13321	2.00000	1.9
	58 Ethylbenzene	91	10.486	10.486	(1.018)	90790	2.00000	2.1
	63 m,p-Xylenes	106	10.614	10.608	(1.031)	75821	4.00000	4.3
	64 o-Xylene	106	11.191	11.192	(1.087)	35905	2.00000	2.1
	65 Styrene	104	11.216	11.216	(1.089)	55792	2.00000	2.0
	66 Bromoform	173	11.538	11.545	(0.842)	6513	2.00000	3.0
	67 Isopropylbenzene	105	11.739	11.739	(0.857)	82041	2.00000	2.0
	73 1,1,2,2-Tetrachloroethane	83	11.873	11.879	(0.867)	21270	2.00000	2.0
$	71 Bromofluorobenzene	95	12.001	12.001	(0.876)	41727	2.00000	2.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
74	1,2,3-Trichloropropane	110	12.080	12.074	(0.882)	6170	2.00000	2.1
75	Bromobenzene	156	12.238	12.232	(0.893)	21153	2.00000	2.1
76	n-Propylbenzene	91	12.305	12.311	(0.898)	106785	2.00000	2.0
77	2-Chlorotoluene	91	12.487	12.482	(0.912)	65932	2.00000	2.1
78	1,3,5-Trimethylbenzene	105	12.554	12.548	(0.916)	73137	2.00000	2.1
80	4-Chlorotoluene	91	12.566	12.567	(0.917)	75252	2.00000	2.2
81	tert-Butylbenzene	119	13.053	13.053	(0.953)	69077	2.00000	2.0
79	1,2,4-Trimethylbenzene	105	13.096	13.096	(0.956)	73469	2.00000	2.0
83	sec-Butylbenzene	105	13.369	13.370	(0.976)	103299	2.00000	2.1
84	4-Isopropyltoluene	119	13.582	13.583	(0.992)	77068	2.00000	2.0
85	1,3-Dichlorobenzene	146	13.588	13.589	(0.992)	44098	2.00000	2.2
* 86	1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	599490	50.0000	
87	1,4-Dichlorobenzene	146	13.740	13.741	(1.003)	44912	2.00000	2.2
89	n-Butylbenzene	91	14.172	14.173	(1.035)	73778	2.00000	2.0
90	1,2-Dichlorobenzene	146	14.245	14.246	(1.040)	41550	2.00000	2.1
92	1,2-Dibromo-3-chloropropane	75	15.346	15.341	(1.120)	3406	2.00000	1.9
93	1,2,4-Trichlorobenzene	180	16.709	16.703	(1.220)	24123	2.00000	2.1
94	Hexachlorobutadiene	225	17.007	17.014	(1.242)	14362	2.00000	2.2
95	Naphthalene	128	17.007	17.002	(1.242)	53653	2.00000	1.9
96	1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	23057	2.00000	2.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s306.d

Date : 11-JAN-2006 12:37

Client ID: VSTD002

Instrument: VOA8.i

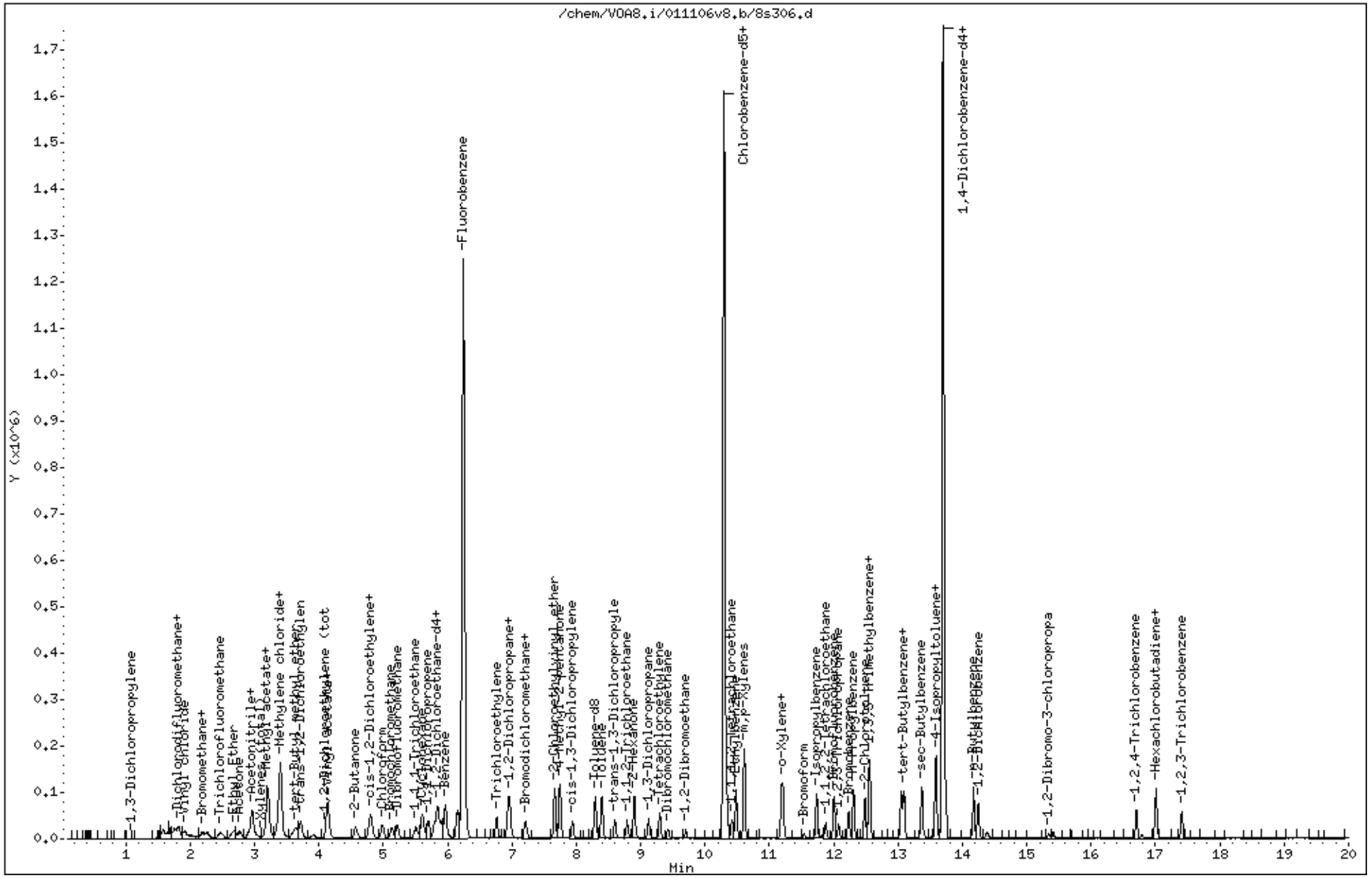
Sample Info: IW8V060111-03|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s307.d
Lab Smp Id: W8V060111-04 Client Smp ID: VSTD005
Inj Date : 11-JAN-2006 13:08
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-04|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-13C/UVM051216-04A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 13:37 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 17:09 Cal File: 8s315.d
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				269170	15.0000	15.2
$ 136 1,2-Dichloroethane-d4	65	5.789	5.796	(0.927)	55081	5.00000	4.2(Q)
M 2 1,2-Dichloroethylene (total)	96				103806	10.0000	9.9
M 135 1,3-Dichloropropylene	75				111577	10.0000	9.5
3 Dichlorodifluoromethane	85	1.769	1.749	(0.283)	47029	5.00000	5.0
4 Chloromethane	50	1.816	1.825	(0.291)	85012	5.00000	5.2
5 Vinyl chloride	62	1.916	1.925	(0.307)	44400	5.00000	4.9
6 Bromomethane	94	2.198	2.201	(0.352)	34579	5.00000	5.1
7 Chloroethane	64	2.251	2.260	(0.360)	35359	5.00000	4.9
8 Trichlorofluoromethane	101	2.474	2.465	(0.396)	79838	5.00000	5.2
134 Ethyl Ether	59	2.662	2.669	(0.426)	51380	5.00000	5.1
10 Acetone	43	2.766	2.766	(0.443)	98901	25.0000	30.4
15 Acetonitrile	41	2.960	2.961	(0.474)	206649	125.000	128
11 1,1-Dichloroethylene	61	2.960	2.955	(0.474)	83459	5.00000	5.2
128 Methyl acetate	43	3.210	3.210	(0.514)	269502	25.0000	25.7
13 Iodomethane	142	3.197	3.198	(0.512)	386740	25.0000	25.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	3.368	3.369	(0.539)	55253	5.00000	4.6(a)
	14 Carbon disulfide	76	3.398	3.405	(0.544)	838555	25.0000	22.1
	20 tert-Butyl methyl ether	73	3.629	3.624	(0.581)	119240	5.00000	5.0
	21 trans-1,2-Dichloroethylene	96	3.721	3.721	(0.596)	49750	5.00000	4.9
	23 Vinyl acetate	43	4.140	4.141	(0.663)	431730	25.0000	25.5
	22 1,1-Dichloroethane	63	4.134	4.135	(0.662)	96757	5.00000	5.1
	30 2-Butanone	43	4.566	4.567	(0.731)	145269	25.0000	25.3
	31 cis-1,2-Dichloroethylene	96	4.804	4.804	(0.769)	54055	5.00000	5.0
	25 2,2-Dichloropropane	77	4.822	4.810	(0.772)	58882	5.00000	4.9
	32 Chloroform	83	4.986	4.993	(0.798)	85824	5.00000	5.0
	29 Bromochloromethane	128	5.126	5.133	(0.821)	22314	5.00000	4.8
$	35 Dibromofluoromethane	113	5.217	5.218	(0.835)	44219	5.00000	5.1
	36 1,1,1-Trichloroethane	97	5.509	5.510	(0.882)	63015	5.00000	4.8
	129 Cyclohexane	84	5.600	5.613	(0.897)	80125	5.00000	5.0
	34 1,1-Dichloropropene	75	5.704	5.698	(0.913)	63106	5.00000	4.9
	131 n-Butyl alcohol	41	5.850	5.838	(0.937)	131152	500.000	444
	33 Carbon tetrachloride	117	5.819	5.826	(0.932)	40543	5.00000	4.7
	37 1,2-Dichloroethane	62	5.905	5.905	(0.945)	63752	5.00000	5.0
	38 Benzene	78	5.965	5.966	(0.955)	202212	5.00000	4.9
*	40 Fluorobenzene	96	6.245	6.246	(1.000)	1759287	50.0000	
	39 Trichloroethylene	95	6.762	6.763	(1.083)	48808	5.00000	4.9
	41 1,2-Dichloropropane	63	6.939	6.939	(1.111)	54604	5.00000	5.0
	130 Methylcyclohexane	83	6.963	6.964	(1.115)	95954	5.00000	5.0
	45 Bromodichloromethane	83	7.200	7.201	(1.153)	53327	5.00000	4.8
	43 Dibromomethane	93	7.219	7.225	(1.156)	27607	5.00000	5.1
	44 2-Chloroethylvinyl ether	63	7.663	7.663	(1.227)	161343	25.0000	25.9
	49 4-Methyl-2-pentanone	58	7.742	7.742	(0.752)	111468	25.0000	25.0
	46 cis-1,3-Dichloropropylene	75	7.937	7.943	(1.271)	61623	5.00000	4.8
$	47 Toluene-d8	98	8.295	8.296	(0.806)	181020	5.00000	5.1
	50 Toluene	92	8.399	8.400	(0.816)	124731	5.00000	5.1
	53 trans-1,3-Dichloropropylene	75	8.600	8.600	(0.835)	49954	5.00000	4.7
	54 1,1,2-Trichloroethane	83	8.788	8.789	(0.853)	32225	5.00000	4.8
	55 2-Hexanone	43	8.898	8.898	(0.864)	208209	25.0000	25.5
	52 1,3-Dichloropropane	76	9.129	9.123	(0.887)	66152	5.00000	4.9
	56 Tetrachloroethylene	164	9.293	9.300	(0.903)	38762	5.00000	5.1
	57 Dibromochloromethane	129	9.421	9.428	(0.915)	32051	5.00000	4.5
	59 1,2-Dibromoethane	107	9.701	9.701	(0.942)	37296	5.00000	4.9
*	61 Chlorobenzene-d5	117	10.297	10.298	(1.000)	1190549	50.0000	
	62 Chlorobenzene	112	10.346	10.346	(1.005)	126557	5.00000	5.0
	60 1,1,1,2-Tetrachloroethane	131	10.425	10.419	(1.012)	33653	5.00000	4.6
	58 Ethylbenzene	91	10.485	10.486	(1.018)	223873	5.00000	5.0
	63 m,p-Xylenes	106	10.607	10.608	(1.030)	180637	10.0000	10.1
	64 o-Xylene	106	11.191	11.192	(1.087)	88532	5.00000	5.0
	65 Styrene	104	11.216	11.216	(1.089)	140703	5.00000	5.0
	66 Bromoform	173	11.550	11.545	(0.843)	16742	5.00000	5.1
	67 Isopropylbenzene	105	11.733	11.739	(0.857)	207596	5.00000	4.9
	73 1,1,2,2-Tetrachloroethane	83	11.879	11.879	(0.867)	52966	5.00000	4.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	12.000	12.001	(0.876)	77839	5.00000	4.8
	74 1,2,3-Trichloropropane	110	12.079	12.074	(0.882)	15017	5.00000	4.9
	75 Bromobenzene	156	12.231	12.232	(0.893)	52543	5.00000	5.1
	76 n-Propylbenzene	91	12.311	12.311	(0.899)	272964	5.00000	5.0
	77 2-Chlorotoluene	91	12.487	12.482	(0.912)	156749	5.00000	4.9
	78 1,3,5-Trimethylbenzene	105	12.554	12.548	(0.916)	184234	5.00000	5.1
	80 4-Chlorotoluene	91	12.566	12.567	(0.917)	183777	5.00000	5.1
	81 tert-Butylbenzene	119	13.053	13.053	(0.953)	176856	5.00000	4.9
	79 1,2,4-Trimethylbenzene	105	13.095	13.096	(0.956)	189950	5.00000	5.1
	83 sec-Butylbenzene	105	13.369	13.370	(0.976)	258971	5.00000	5.0
	84 4-Isopropyltoluene	119	13.582	13.583	(0.992)	193617	5.00000	5.0
	85 1,3-Dichlorobenzene	146	13.594	13.589	(0.992)	111873	5.00000	5.3
*	86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	619360	50.0000	
	87 1,4-Dichlorobenzene	146	13.740	13.741	(1.003)	106187	5.00000	5.0
	89 n-Butylbenzene	91	14.172	14.173	(1.035)	188973	5.00000	5.0
	90 1,2-Dichlorobenzene	146	14.245	14.246	(1.040)	101615	5.00000	5.1
	92 1,2-Dibromo-3-chloropropane	75	15.340	15.341	(1.120)	8884	5.00000	4.9
	93 1,2,4-Trichlorobenzene	180	16.703	16.703	(1.219)	58771	5.00000	4.9
	94 Hexachlorobutadiene	225	17.019	17.014	(1.242)	34862	5.00000	5.1
	95 Naphthalene	128	17.007	17.002	(1.242)	140729	5.00000	4.9
	96 1,2,3-Trichlorobenzene	180	17.408	17.409	(1.271)	56415	5.00000	5.0

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s307.d

Date : 11-JAN-2006 13:08

Client ID: VSTD005

Instrument: VOA8.i

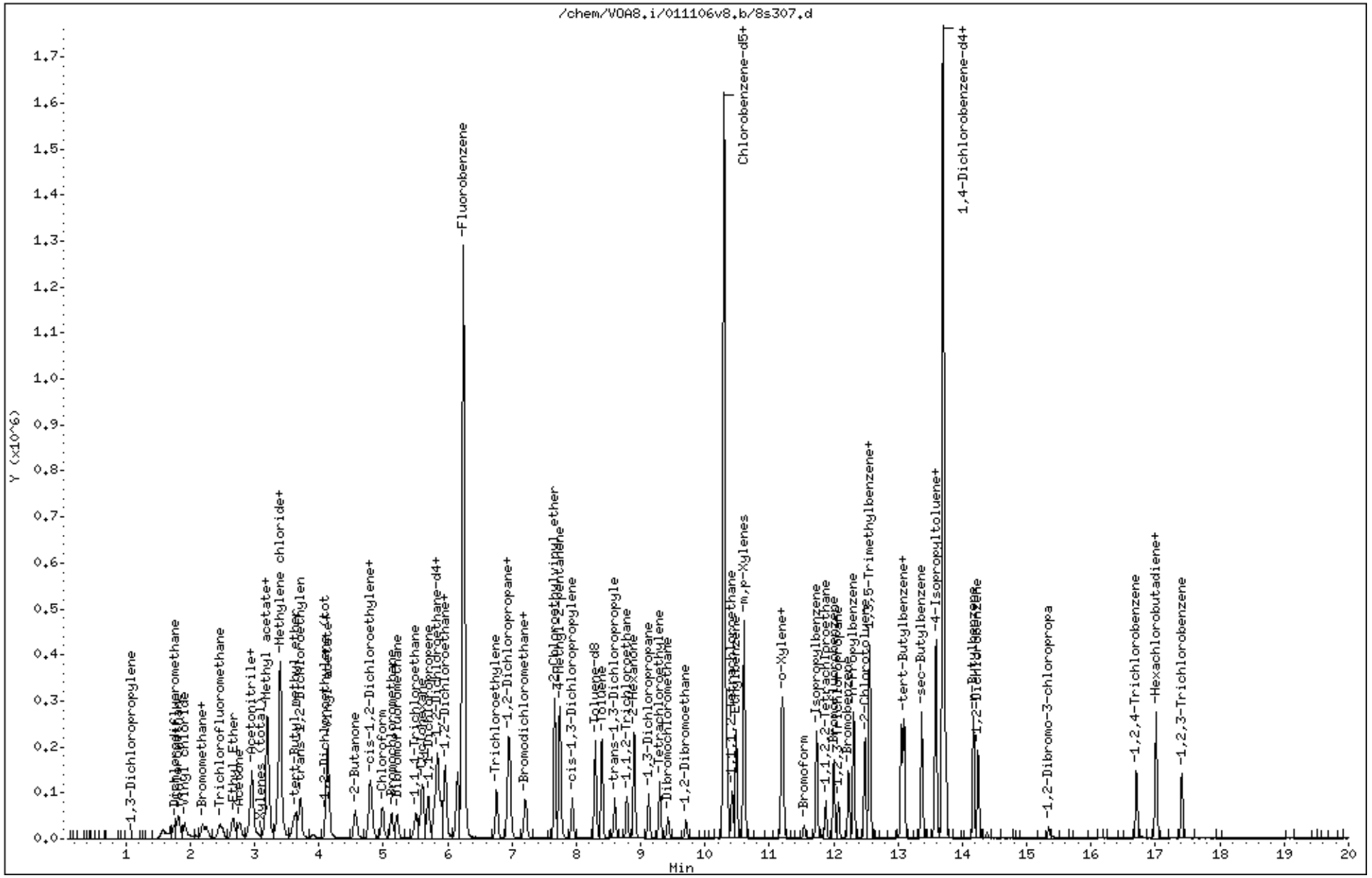
Sample Info: |W8V060111-04|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s308.d
Lab Smp Id: W8V060111-05 Client Smp ID: VSTD010
Inj Date : 11-JAN-2006 13:38
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-05|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-14C/UVM051216-05A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 13:37 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 17:39 Cal File: 8s316.d
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				544446	30.0000	30.8
$ 136 1,2-Dichloroethane-d4	65	5.795	5.796	(0.928)	105471	10.0000	8.4(Q)
M 2 1,2-Dichloroethylene (total)	96				209580	20.0000	20.0
M 135 1,3-Dichloropropylene	75				233923	20.0000	20.0
3 Dichlorodifluoromethane	85	1.758	1.749	(0.281)	100184	10.0000	10.6
4 Chloromethane	50	1.828	1.825	(0.293)	152511	10.0000	9.9
5 Vinyl chloride	62	1.922	1.925	(0.308)	86024	10.0000	9.6
6 Bromomethane	94	2.204	2.201	(0.353)	65678	10.0000	9.9
7 Chloroethane	64	2.262	2.260	(0.362)	70043	10.0000	9.8
8 Trichlorofluoromethane	101	2.462	2.465	(0.394)	156982	10.0000	10.2
134 Ethyl Ether	59	2.674	2.669	(0.428)	103797	10.0000	10.3
10 Acetone	43	2.766	2.766	(0.443)	197448	50.0000	59.0
15 Acetonitrile	41	2.960	2.961	(0.474)	396414	250.000	247
11 1,1-Dichloroethylene	61	2.960	2.955	(0.474)	153209	10.0000	9.5
128 Methyl acetate	43	3.210	3.210	(0.514)	530428	50.0000	50.8
13 Iodomethane	142	3.197	3.198	(0.512)	749666	50.0000	49.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	3.374	3.369	(0.540)	97153	10.0000	10.2
	14 Carbon disulfide	76	3.404	3.405	(0.545)	1569483	50.0000	53.1
	20 tert-Butyl methyl ether	73	3.636	3.624	(0.582)	238705	10.0000	10
	21 trans-1,2-Dichloroethylene	96	3.721	3.721	(0.596)	101372	10.0000	9.9
	23 Vinyl acetate	43	4.140	4.141	(0.663)	864625	50.0000	51.2
	22 1,1-Dichloroethane	63	4.134	4.135	(0.662)	185723	10.0000	9.9
	30 2-Butanone	43	4.566	4.567	(0.731)	290670	50.0000	50.9
	31 cis-1,2-Dichloroethylene	96	4.797	4.804	(0.768)	108208	10.0000	10.1
	25 2,2-Dichloropropane	77	4.810	4.810	(0.770)	117755	10.0000	9.8
	32 Chloroform	83	4.992	4.993	(0.799)	162462	10.0000	9.6
	29 Bromochloromethane	128	5.138	5.133	(0.823)	45364	10.0000	9.9
$	35 Dibromofluoromethane	113	5.217	5.218	(0.835)	83537	10.0000	9.6
	36 1,1,1-Trichloroethane	97	5.509	5.510	(0.882)	127182	10.0000	9.8
	129 Cyclohexane	84	5.613	5.613	(0.899)	159716	10.0000	10.0
	34 1,1-Dichloropropene	75	5.704	5.698	(0.913)	126161	10.0000	9.8
	131 n-Butyl alcohol	41	5.844	5.838	(0.936)	287700	1000.00	1070
	33 Carbon tetrachloride	117	5.819	5.826	(0.932)	84993	10.0000	9.8
	37 1,2-Dichloroethane	62	5.905	5.905	(0.945)	122586	10.0000	9.7
	38 Benzene	78	5.965	5.966	(0.955)	391107	10.0000	10.4
*	40 Fluorobenzene	96	6.245	6.246	(1.000)	1751357	50.0000	
	39 Trichloroethylene	95	6.762	6.763	(1.083)	98816	10.0000	9.9
	41 1,2-Dichloropropane	63	6.939	6.939	(1.111)	107835	10.0000	9.9
	130 Methylcyclohexane	83	6.969	6.964	(1.116)	192181	10.0000	10
	45 Bromodichloromethane	83	7.200	7.201	(1.153)	108621	10.0000	9.9
	43 Dibromomethane	93	7.225	7.225	(1.157)	53891	10.0000	10.1
	44 2-Chloroethylvinyl ether	63	7.663	7.663	(1.227)	316740	50.0000	51.1
	49 4-Methyl-2-pentanone	58	7.742	7.742	(0.752)	229622	50.0000	51.6
	46 cis-1,3-Dichloropropylene	75	7.943	7.943	(1.272)	128329	10.0000	10.1
$	47 Toluene-d8	98	8.295	8.296	(0.806)	353516	10.0000	10.0
	50 Toluene	92	8.399	8.400	(0.816)	244467	10.0000	10
	53 trans-1,3-Dichloropropylene	75	8.600	8.600	(0.835)	105594	10.0000	10
	54 1,1,2-Trichloroethane	83	8.794	8.789	(0.854)	66066	10.0000	10
	55 2-Hexanone	43	8.898	8.898	(0.864)	430902	50.0000	53.0
	52 1,3-Dichloropropane	76	9.129	9.123	(0.887)	136212	10.0000	10.2
	56 Tetrachloroethylene	164	9.299	9.300	(0.903)	75180	10.0000	9.9
	57 Dibromochloromethane	129	9.427	9.428	(0.916)	68724	10.0000	9.8
	59 1,2-Dibromoethane	107	9.701	9.701	(0.942)	74701	10.0000	9.8
*	61 Chlorobenzene-d5	117	10.297	10.298	(1.000)	1186330	50.0000	
	62 Chlorobenzene	112	10.346	10.346	(1.005)	255168	10.0000	10.1
	60 1,1,1,2-Tetrachloroethane	131	10.419	10.419	(1.012)	71936	10.0000	9.9
	58 Ethylbenzene	91	10.485	10.486	(1.018)	449015	10.0000	10.1
	63 m,p-Xylenes	106	10.607	10.608	(1.030)	361540	20.0000	20.4
	64 o-Xylene	106	11.191	11.192	(1.087)	182905	10.0000	10.4
	65 Styrene	104	11.216	11.216	(1.089)	290688	10.0000	10.5
	66 Bromoform	173	11.544	11.545	(0.843)	38562	10.0000	9.7
	67 Isopropylbenzene	105	11.739	11.739	(0.857)	424984	10.0000	10.2
	73 1,1,2,2-Tetrachloroethane	83	11.879	11.879	(0.867)	104378	10.0000	9.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	12.006	12.001	(0.877)	139676	10.0000	10.0
	74 1,2,3-Trichloropropane	110	12.073	12.074	(0.881)	31235	10.0000	10.3
	75 Bromobenzene	156	12.238	12.232	(0.893)	102406	10.0000	10
	76 n-Propylbenzene	91	12.311	12.311	(0.899)	542110	10.0000	10.1
	77 2-Chlorotoluene	91	12.487	12.482	(0.912)	313371	10.0000	9.8
	78 1,3,5-Trimethylbenzene	105	12.554	12.548	(0.916)	366457	10.0000	10.2
	80 4-Chlorotoluene	91	12.566	12.567	(0.917)	355706	10.0000	10.0
	81 tert-Butylbenzene	119	13.053	13.053	(0.953)	358464	10.0000	10.1
	79 1,2,4-Trimethylbenzene	105	13.095	13.096	(0.956)	373732	10.0000	10.1
	83 sec-Butylbenzene	105	13.369	13.370	(0.976)	517933	10.0000	10.1
	84 4-Isopropyltoluene	119	13.582	13.583	(0.992)	396084	10.0000	10.3
	85 1,3-Dichlorobenzene	146	13.594	13.589	(0.992)	210907	10.0000	10.1
*	86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	613143	50.0000	
	87 1,4-Dichlorobenzene	146	13.740	13.741	(1.003)	208969	10.0000	9.9
	89 n-Butylbenzene	91	14.172	14.173	(1.035)	384119	10.0000	10.2
	90 1,2-Dichlorobenzene	146	14.251	14.246	(1.040)	198758	10.0000	10.0
	92 1,2-Dibromo-3-chloropropane	75	15.340	15.341	(1.120)	17740	10.0000	9.9
	93 1,2,4-Trichlorobenzene	180	16.709	16.703	(1.220)	118491	10.0000	9.9
	94 Hexachlorobutadiene	225	17.013	17.014	(1.242)	66390	10.0000	9.7
	95 Naphthalene	128	17.007	17.002	(1.242)	295883	10.0000	10.5
	96 1,2,3-Trichlorobenzene	180	17.408	17.409	(1.271)	113844	10.0000	10.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s308.d

Date : 11-JAN-2006 13:38

Client ID: VSTD010

Instrument: VOA8.i

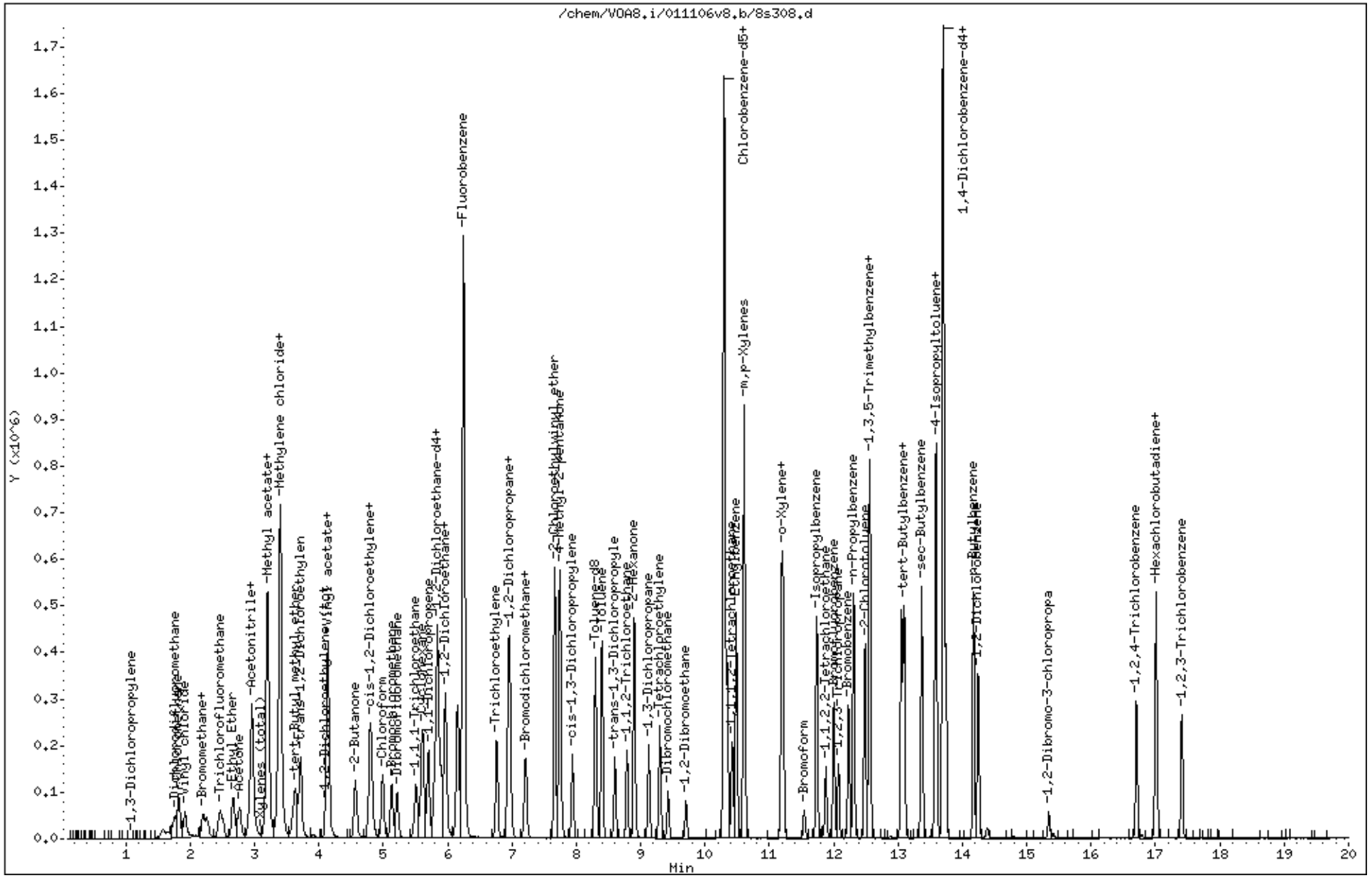
Sample Info: |W8V060111-05|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s309.d
Lab Smp Id: W8V060111-06 Client Smp ID: VSTD020
Inj Date : 11-JAN-2006 14:08
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-06|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-15C/UVM051216-06A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 13:39 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				1060533	60.0000	60.6
$ 136 1,2-Dichloroethane-d4	65	5.796	5.796	(0.928)	206132	20.0000	19.6
M 2 1,2-Dichloroethylene (total)	96				408087	40.0000	39.7
M 135 1,3-Dichloropropylene	75				478527	40.0000	41.6
3 Dichlorodifluoromethane	85	1.749	1.749	(0.280)	182340	20.0000	19.7
4 Chloromethane	50	1.825	1.825	(0.292)	297156	20.0000	20.0
5 Vinyl chloride	62	1.925	1.925	(0.308)	168728	20.0000	19.1
6 Bromomethane	94	2.201	2.201	(0.352)	127176	20.0000	19.8
7 Chloroethane	64	2.260	2.260	(0.362)	141462	20.0000	20.2
8 Trichlorofluoromethane	101	2.465	2.465	(0.395)	300957	20.0000	19.9
134 Ethyl Ether	59	2.669	2.669	(0.427)	200698	20.0000	20.3
10 Acetone	43	2.766	2.766	(0.443)	381193	100.000	115
15 Acetonitrile	41	2.961	2.961	(0.474)	793503	500.000	501
11 1,1-Dichloroethylene	61	2.955	2.955	(0.473)	313700	20.0000	19.8
128 Methyl acetate	43	3.210	3.210	(0.514)	1045540	100.000	102
13 Iodomethane	142	3.198	3.198	(0.512)	1497012	100.000	101

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	17 Methylene chloride	84	3.369	3.369	(0.539)	183615	20.0000	21.9
	14 Carbon disulfide	76	3.405	3.405	(0.545)	3103650	100.000	120
	20 tert-Butyl methyl ether	73	3.624	3.624	(0.580)	475039	20.0000	20.2
	21 trans-1,2-Dichloroethylene	96	3.721	3.721	(0.596)	197812	20.0000	19.7
	23 Vinyl acetate	43	4.141	4.141	(0.663)	1737248	100.000	105
	22 1,1-Dichloroethane	63	4.135	4.135	(0.662)	369692	20.0000	20.0
	30 2-Butanone	43	4.567	4.567	(0.731)	567499	100.000	101
	31 cis-1,2-Dichloroethylene	96	4.804	4.804	(0.769)	210275	20.0000	19.9
	25 2,2-Dichloropropane	77	4.810	4.810	(0.770)	242431	20.0000	20.5
	32 Chloroform	83	4.993	4.993	(0.799)	328969	20.0000	19.7
	29 Bromochloromethane	128	5.133	5.133	(0.822)	87836	20.0000	19.5
$	35 Dibromofluoromethane	113	5.218	5.218	(0.835)	165557	20.0000	19.4
	36 1,1,1-Trichloroethane	97	5.510	5.510	(0.882)	254767	20.0000	19.9
	129 Cyclohexane	84	5.613	5.613	(0.899)	312412	20.0000	19.9
	34 1,1-Dichloropropene	75	5.698	5.698	(0.912)	248282	20.0000	19.7
	131 n-Butyl alcohol	41	5.838	5.838	(0.935)	590594	2000.00	2310
	33 Carbon tetrachloride	117	5.826	5.826	(0.933)	178357	20.0000	20.9
	37 1,2-Dichloroethane	62	5.905	5.905	(0.945)	243423	20.0000	19.6
	38 Benzene	78	5.966	5.966	(0.955)	769473	20.0000	21.6
*	40 Fluorobenzene	96	6.246	6.246	(1.000)	1723361	50.0000	
	39 Trichloroethylene	95	6.763	6.763	(1.083)	195053	20.0000	20.0
	41 1,2-Dichloropropane	63	6.939	6.939	(1.111)	214439	20.0000	20.0
	130 Methylcyclohexane	83	6.964	6.964	(1.115)	386483	20.0000	20.4
	45 Bromodichloromethane	83	7.201	7.201	(1.153)	220447	20.0000	20.4
	43 Dibromomethane	93	7.225	7.225	(1.157)	107881	20.0000	20.5
	44 2-Chloroethylvinyl ether	63	7.663	7.663	(1.227)	636818	100.000	104
	49 4-Methyl-2-pentanone	58	7.742	7.742	(0.752)	462233	100.000	105
	46 cis-1,3-Dichloropropylene	75	7.943	7.943	(1.272)	260334	20.0000	20.8
$	47 Toluene-d8	98	8.296	8.296	(0.806)	692482	20.0000	19.9
	50 Toluene	92	8.400	8.400	(0.816)	475523	20.0000	19.6
	53 trans-1,3-Dichloropropylene	75	8.600	8.600	(0.835)	218193	20.0000	20.8
	54 1,1,2-Trichloroethane	83	8.789	8.789	(0.853)	130776	20.0000	19.9
	55 2-Hexanone	43	8.898	8.898	(0.864)	857708	100.000	106
	52 1,3-Dichloropropane	76	9.123	9.123	(0.886)	260438	20.0000	19.7
	56 Tetrachloroethylene	164	9.300	9.300	(0.903)	148114	20.0000	19.8
	57 Dibromochloromethane	129	9.428	9.428	(0.916)	144419	20.0000	20.8
	59 1,2-Dibromoethane	107	9.701	9.701	(0.942)	152211	20.0000	20.2
*	61 Chlorobenzene-d5	117	10.298	10.298	(1.000)	1174040	50.0000	
	62 Chlorobenzene	112	10.346	10.346	(1.005)	496225	20.0000	19.9
	60 1,1,1,2-Tetrachloroethane	131	10.419	10.419	(1.012)	151611	20.0000	21.1
	58 Ethylbenzene	91	10.486	10.486	(1.018)	879264	20.0000	20.0
	63 m,p-Xylenes	106	10.608	10.608	(1.030)	704135	40.0000	40.1
	64 o-Xylene	106	11.192	11.192	(1.087)	356398	20.0000	20.5
	65 Styrene	104	11.216	11.216	(1.089)	570891	20.0000	20.8
	66 Bromoform	173	11.545	11.545	(0.843)	81277	20.0000	19.2
	67 Isopropylbenzene	105	11.739	11.739	(0.857)	836391	20.0000	20.6
	73 1,1,2,2-Tetrachloroethane	83	11.879	11.879	(0.867)	210785	20.0000	20.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	12.001	12.001	(0.876)	261878	20.0000	20.8
	74 1,2,3-Trichloropropane	110	12.074	12.074	(0.881)	61119	20.0000	20.7
	75 Bromobenzene	156	12.232	12.232	(0.893)	204735	20.0000	20.5
	76 n-Propylbenzene	91	12.311	12.311	(0.899)	1072262	20.0000	20.6
	77 2-Chlorotoluene	91	12.482	12.482	(0.911)	625542	20.0000	20.2
	78 1,3,5-Trimethylbenzene	105	12.548	12.548	(0.916)	729810	20.0000	20.9
	80 4-Chlorotoluene	91	12.567	12.567	(0.917)	706191	20.0000	20.5
	81 tert-Butylbenzene	119	13.053	13.053	(0.953)	713885	20.0000	20.7
	79 1,2,4-Trimethylbenzene	105	13.096	13.096	(0.956)	742907	20.0000	20.7
	83 sec-Butylbenzene	105	13.370	13.370	(0.976)	1024629	20.0000	20.7
	84 4-Isopropyltoluene	119	13.583	13.583	(0.992)	778296	20.0000	20.9
	85 1,3-Dichlorobenzene	146	13.589	13.589	(0.992)	400541	20.0000	19.8
*	86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	595433	50.0000	
	87 1,4-Dichlorobenzene	146	13.741	13.741	(1.003)	403723	20.0000	19.8
	89 n-Butylbenzene	91	14.173	14.173	(1.035)	761457	20.0000	20.9
	90 1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	389104	20.0000	20.2
	92 1,2-Dibromo-3-chloropropane	75	15.341	15.341	(1.120)	36925	20.0000	21.2
	93 1,2,4-Trichlorobenzene	180	16.703	16.703	(1.219)	240936	20.0000	20.8
	94 Hexachlorobutadiene	225	17.014	17.014	(1.242)	135837	20.0000	20.5
	95 Naphthalene	128	17.002	17.002	(1.241)	611686	20.0000	22.3
	96 1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	225622	20.0000	21.0

Data File: /chem/VOA8.i/011106v8.b/8s309.d

Date : 11-JAN-2006 14:08

Client ID: VSTD020

Instrument: VOA8.i

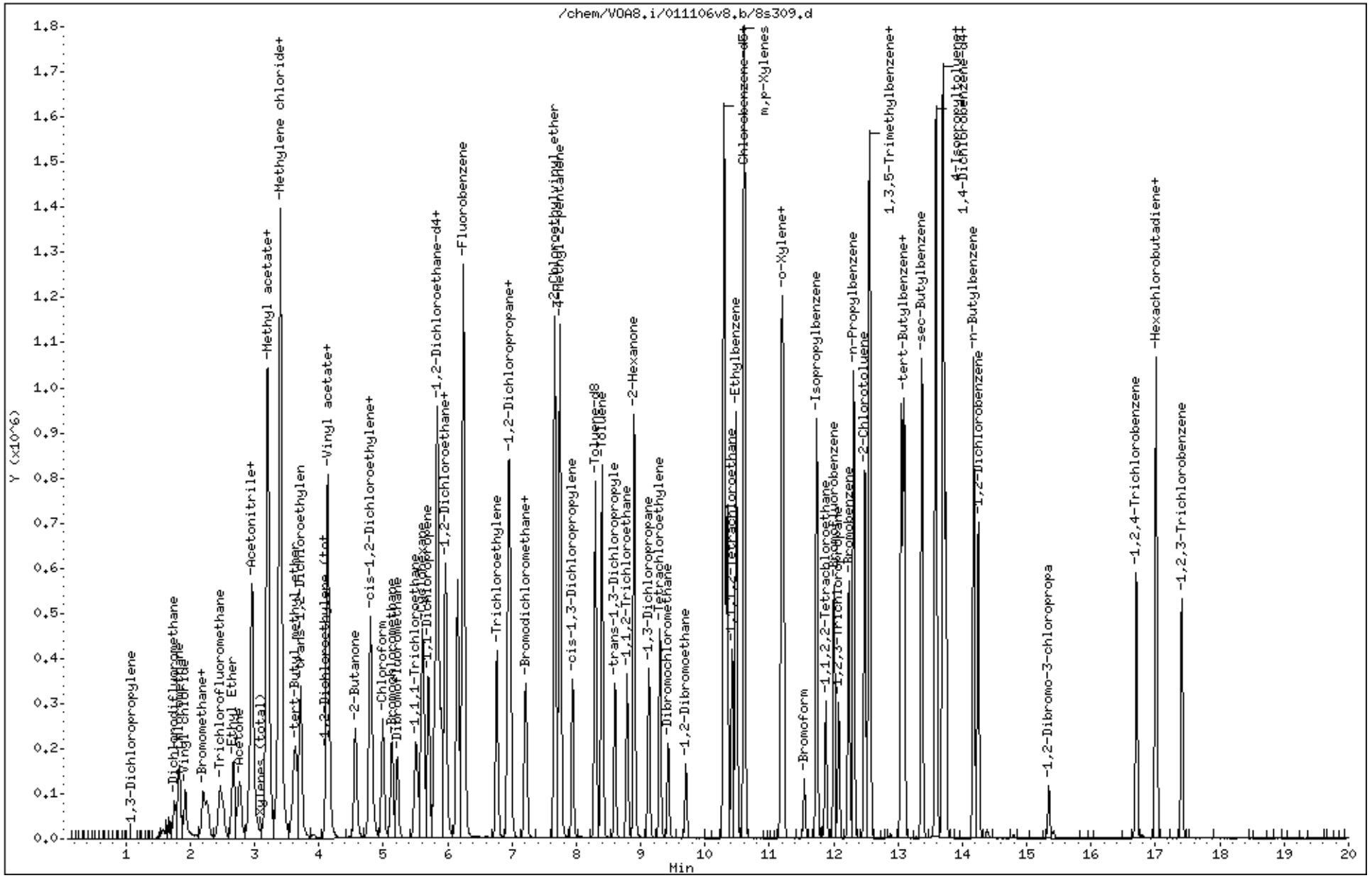
Sample Info: |W8V060111-06|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s310.d
Lab Smp Id: W8V060111-07 Client Smp ID: VSTD050
Inj Date : 11-JAN-2006 14:38
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-07|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-16C/UVM051216-07A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 13:39 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:39 Cal File: 8s318.d
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

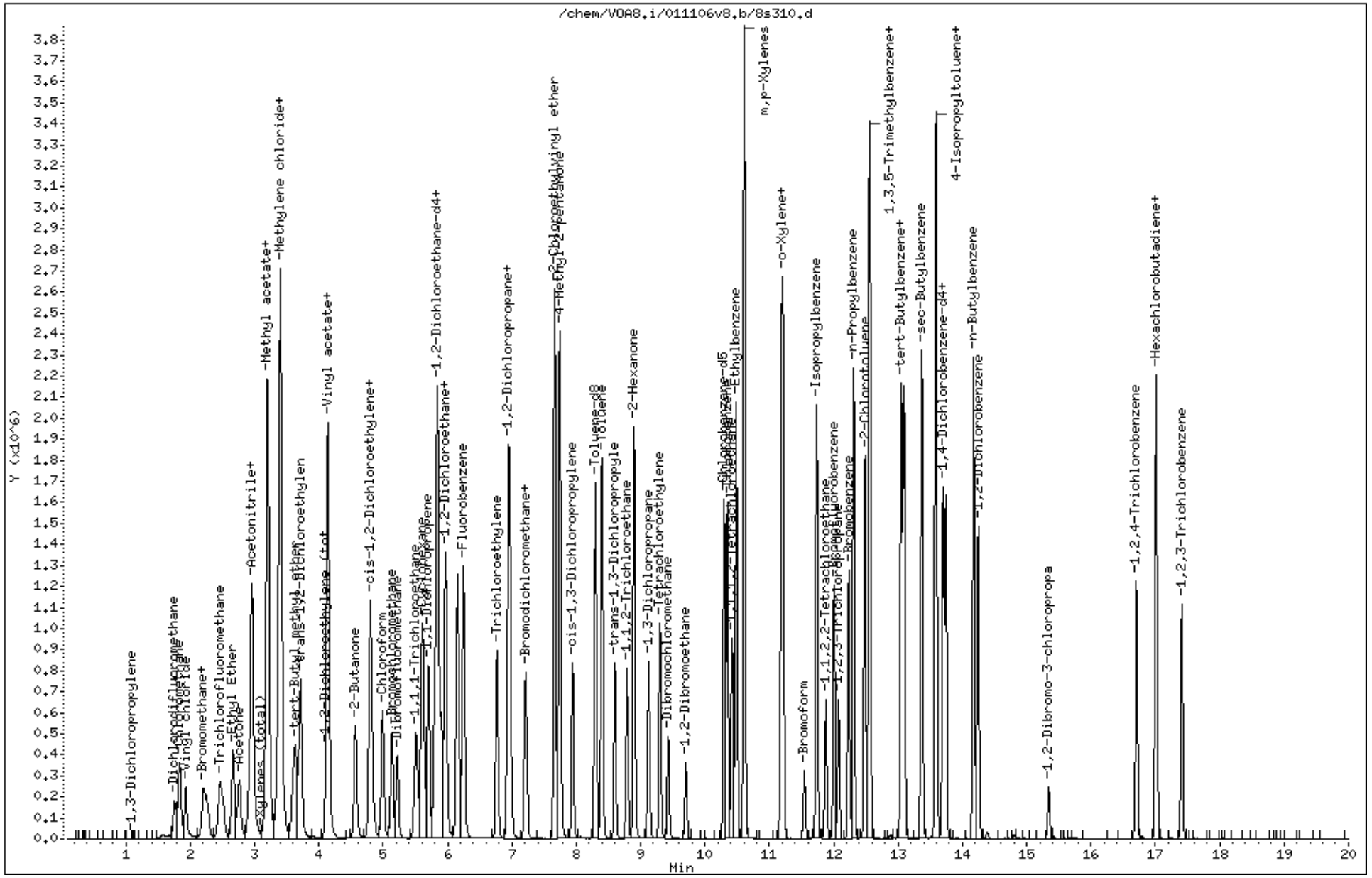
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2326687	150.000	134
$ 136 1,2-Dichloroethane-d4	65	5.796	5.796	(0.928)	446387	50.0000	38.1
M 2 1,2-Dichloroethylene (total)	96				914142	100.000	89.8
M 135 1,3-Dichloropropylene	75				1124637	100.000	99.0
3 Dichlorodifluoromethane	85	1.756	1.749	(0.281)	449287	50.0000	48.8
4 Chloromethane	50	1.832	1.825	(0.293)	706029	50.0000	48.9
5 Vinyl chloride	62	1.932	1.925	(0.309)	416154	50.0000	47.7
6 Bromomethane	94	2.202	2.201	(0.353)	311222	50.0000	49.4
7 Chloroethane	64	2.255	2.260	(0.361)	334615	50.0000	48.3
8 Trichlorofluoromethane	101	2.466	2.465	(0.395)	721949	50.0000	48.3
134 Ethyl Ether	59	2.670	2.669	(0.427)	476771	50.0000	48.7
10 Acetone	43	2.767	2.766	(0.443)	694567	250.000	217
15 Acetonitrile	41	2.962	2.961	(0.474)	1677234	1250.00	1070
11 1,1-Dichloroethylene	61	2.956	2.955	(0.473)	680034	50.0000	43.5
128 Methyl acetate	43	3.211	3.210	(0.514)	2196325	250.000	216
13 Iodomethane	142	3.199	3.198	(0.512)	3145811	250.000	215

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	3.369	3.369	(0.539)	376192	50.0000	48.2
	14 Carbon disulfide	76	3.406	3.405	(0.545)	6167294	250.000	254
	20 tert-Butyl methyl ether	73	3.637	3.624	(0.582)	1089715	50.0000	46.8
	21 trans-1,2-Dichloroethylene	96	3.716	3.721	(0.595)	436485	50.0000	44.0
	23 Vinyl acetate	43	4.142	4.141	(0.663)	4180107	250.000	255
	22 1,1-Dichloroethane	63	4.130	4.135	(0.661)	810958	50.0000	44.4
	30 2-Butanone	43	4.568	4.567	(0.731)	1224687	250.000	220
	31 cis-1,2-Dichloroethylene	96	4.799	4.804	(0.768)	477657	50.0000	45.8
	25 2,2-Dichloropropane	77	4.811	4.810	(0.770)	567192	50.0000	48.4
	32 Chloroform	83	4.993	4.993	(0.799)	728453	50.0000	44.2
	29 Bromochloromethane	128	5.133	5.133	(0.822)	194432	50.0000	43.6
$	35 Dibromofluoromethane	113	5.219	5.218	(0.835)	371131	50.0000	44.1
	36 1,1,1-Trichloroethane	97	5.511	5.510	(0.882)	582475	50.0000	45.9
	129 Cyclohexane	84	5.608	5.613	(0.898)	701938	50.0000	45.3
	34 1,1-Dichloropropene	75	5.699	5.698	(0.912)	557533	50.0000	44.7
	131 n-Butyl alcohol	41	5.845	5.838	(0.936)	1235152	5000.00	4980
	33 Carbon tetrachloride	117	5.821	5.826	(0.932)	412498	50.0000	49.0
	37 1,2-Dichloroethane	62	5.906	5.905	(0.945)	537445	50.0000	43.9
	38 Benzene	78	5.967	5.966	(0.955)	1701465	50.0000	49.4
*	40 Fluorobenzene	96	6.247	6.246	(1.000)	1704265	50.0000	
	39 Trichloroethylene	95	6.764	6.763	(1.083)	426915	50.0000	44.2
	41 1,2-Dichloropropane	63	6.940	6.939	(1.111)	479014	50.0000	45.2
	130 Methylcyclohexane	83	6.965	6.964	(1.115)	835617	50.0000	44.6
	45 Bromodichloromethane	83	7.202	7.201	(1.153)	515372	50.0000	48.2
	43 Dibromomethane	93	7.226	7.225	(1.157)	236710	50.0000	45.6
	44 2-Chloroethylvinyl ether	63	7.664	7.663	(1.227)	1465111	250.000	243
	49 4-Methyl-2-pentanone	58	7.743	7.742	(0.752)	988723	250.000	227
	46 cis-1,3-Dichloropropylene	75	7.944	7.943	(1.272)	602824	50.0000	48.6
$	47 Toluene-d8	98	8.297	8.296	(0.806)	1519227	50.0000	44.2
	50 Toluene	92	8.400	8.400	(0.816)	1061227	50.0000	44.2
	53 trans-1,3-Dichloropropylene	75	8.601	8.600	(0.835)	521812	50.0000	50.3
	54 1,1,2-Trichloroethane	83	8.790	8.789	(0.853)	295434	50.0000	45.6
	55 2-Hexanone	43	8.899	8.898	(0.864)	1795919	250.000	226
	52 1,3-Dichloropropane	76	9.130	9.123	(0.887)	591676	50.0000	45.4
	56 Tetrachloroethylene	164	9.301	9.300	(0.903)	330935	50.0000	44.8
	57 Dibromochloromethane	129	9.428	9.428	(0.916)	344342	50.0000	50.1
	59 1,2-Dibromoethane	107	9.708	9.701	(0.943)	340852	50.0000	45.7
*	61 Chlorobenzene-d5	117	10.298	10.298	(1.000)	1160285	50.0000	
	62 Chlorobenzene	112	10.347	10.346	(1.005)	1116001	50.0000	45.2
	60 1,1,1,2-Tetrachloroethane	131	10.426	10.419	(1.012)	362524	50.0000	51.1
	58 Ethylbenzene	91	10.487	10.486	(1.018)	1952762	50.0000	45.1
	63 m,p-Xylenes	106	10.609	10.608	(1.030)	1535515	100.000	88.5
	64 o-Xylene	106	11.193	11.192	(1.087)	791172	50.0000	46.1
	65 Styrene	104	11.217	11.216	(1.089)	1261065	50.0000	46.4
	66 Bromoform	173	11.545	11.545	(0.843)	204334	50.0000	47.2
	67 Isopropylbenzene	105	11.734	11.739	(0.857)	1876200	50.0000	47.7
	73 1,1,2,2-Tetrachloroethane	83	11.880	11.879	(0.867)	459625	50.0000	46.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
$	71 Bromofluorobenzene	95	12.002	12.001	(0.876)	577930	50.0000	49.2
	74 1,2,3-Trichloropropane	110	12.075	12.074	(0.881)	130003	50.0000	45.4
	75 Bromobenzene	156	12.233	12.232	(0.893)	447842	50.0000	46.2
	76 n-Propylbenzene	91	12.312	12.311	(0.899)	2326434	50.0000	46.1
	77 2-Chlorotoluene	91	12.488	12.482	(0.912)	1400918	50.0000	46.8
	78 1,3,5-Trimethylbenzene	105	12.555	12.548	(0.916)	1584422	50.0000	46.8
	80 4-Chlorotoluene	91	12.567	12.567	(0.917)	1483802	50.0000	44.5
	81 tert-Butylbenzene	119	13.054	13.053	(0.953)	1594714	50.0000	47.7
	79 1,2,4-Trimethylbenzene	105	13.097	13.096	(0.956)	1633646	50.0000	46.9
	83 sec-Butylbenzene	105	13.370	13.370	(0.976)	2258160	50.0000	47.0
	84 4-Isopropyltoluene	119	13.583	13.583	(0.992)	1686314	50.0000	46.6
	85 1,3-Dichlorobenzene	146	13.596	13.589	(0.992)	865573	50.0000	44.1
*	86 1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	577712	50.0000	
	87 1,4-Dichlorobenzene	146	13.742	13.741	(1.003)	877301	50.0000	44.3
	89 n-Butylbenzene	91	14.173	14.173	(1.035)	1658531	50.0000	46.9
	90 1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	833470	50.0000	44.5
	92 1,2-Dibromo-3-chloropropane	75	15.348	15.341	(1.120)	81991	50.0000	48.6
	93 1,2,4-Trichlorobenzene	180	16.704	16.703	(1.219)	511037	50.0000	45.5
	94 Hexachlorobutadiene	225	17.014	17.014	(1.242)	284931	50.0000	44.4
	95 Naphthalene	128	17.002	17.002	(1.241)	1255648	50.0000	47.2
	96 1,2,3-Trichlorobenzene	180	17.410	17.409	(1.271)	463218	50.0000	44.4

Data File: /chem/VOA8.i/011106v8.b/8s310.d
Date : 11-JAN-2006 14:38
Client ID: VSTD050
Instrument: VOA8.i
Sample Info: IW8V060111-07|ICAL|1|VOAF|1|
Purge Volume: 5.0
Operator: ACJ
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s311.d
Lab Smp Id: W8V060111-08 Client Smp ID: VSTD100
Inj Date : 11-JAN-2006 15:08
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060111-08|ICAL|1|VOAF|1|
Misc Info : GEL 10ML N/A UVM051216-17C/UVM051216-08A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 13:39 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 19:09 Cal File: 8s319.d
Als bottle: 10 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				4436905	300.000	263
$ 136 1,2-Dichloroethane-d4	65	5.795	5.796	(0.928)	888555	100.000	66.5(Q)
M 2 1,2-Dichloroethylene (total)	96				1841572	200.000	184
M 135 1,3-Dichloropropylene	75				2304230	200.000	206(A)
3 Dichlorodifluoromethane	85	1.755	1.749	(0.281)	905408	100.000	104(A)
4 Chloromethane	50	1.843	1.825	(0.295)	1418739	100.000	100(A)
5 Vinyl chloride	62	1.937	1.925	(0.310)	842783	100.000	98.3
6 Bromomethane	94	2.207	2.201	(0.353)	619333	100.000	100(A)
7 Chloroethane	64	2.260	2.260	(0.362)	683642	100.000	100(A)
8 Trichlorofluoromethane	101	2.465	2.465	(0.395)	1465272	100.000	99.8
134 Ethyl Ether	59	2.675	2.669	(0.428)	934972	100.000	97.3
10 Acetone	43	2.772	2.766	(0.444)	1607745	500.000	511(A)
15 Acetonitrile	41	2.961	2.961	(0.474)	3299511	2500.00	2160
11 1,1-Dichloroethylene	61	2.954	2.955	(0.473)	1425189	100.000	92.8
128 Methyl acetate	43	3.216	3.210	(0.515)	4150314	500.000	416
13 Iodomethane	142	3.198	3.198	(0.512)	6105348	500.000	425

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	3.368	3.369	(0.539)	750015	100.000	100(A)
	14 Carbon disulfide	76	3.405	3.405	(0.545)	11495319	500.000	493
	20 tert-Butyl methyl ether	73	3.630	3.624	(0.581)	2218107	100.000	104(A)
	21 trans-1,2-Dichloroethylene	96	3.715	3.721	(0.595)	888366	100.000	91.2
	23 Vinyl acetate	43	4.141	4.141	(0.663)	7847927	500.000	487
	22 1,1-Dichloroethane	63	4.135	4.135	(0.662)	1616397	100.000	90.2
	30 2-Butanone	43	4.567	4.567	(0.731)	2431001	500.000	445
	31 cis-1,2-Dichloroethylene	96	4.804	4.804	(0.769)	953205	100.000	93.0
	25 2,2-Dichloropropane	77	4.810	4.810	(0.770)	1204683	100.000	105(A)
	32 Chloroform	83	4.992	4.993	(0.799)	1467507	100.000	90.7
	29 Bromochloromethane	128	5.132	5.133	(0.822)	395397	100.000	90.4
$	35 Dibromofluoromethane	113	5.218	5.218	(0.835)	752378	100.000	91.0
	36 1,1,1-Trichloroethane	97	5.510	5.510	(0.882)	1207870	100.000	97.0
	129 Cyclohexane	84	5.613	5.613	(0.899)	1451793	100.000	95.5
	34 1,1-Dichloropropene	75	5.704	5.698	(0.913)	1132716	100.000	92.5
	131 n-Butyl alcohol	41	5.844	5.838	(0.936)	2404250	10000.0	9940(Q)
	33 Carbon tetrachloride	117	5.826	5.826	(0.933)	887452	100.000	107(A)
	37 1,2-Dichloroethane	62	5.905	5.905	(0.945)	1082092	100.000	89.9
	38 Benzene	78	5.972	5.966	(0.956)	3355971	100.000	99.9
*	40 Fluorobenzene	96	6.246	6.246	(1.000)	1674000	50.0000	
	39 Trichloroethylene	95	6.763	6.763	(1.083)	867404	100.000	91.4
	41 1,2-Dichloropropane	63	6.939	6.939	(1.111)	937467	100.000	90.0
	130 Methylcyclohexane	83	6.963	6.964	(1.115)	1685479	100.000	91.6
	45 Bromodichloromethane	83	7.201	7.201	(1.153)	1048562	100.000	99.8
	43 Dibromomethane	93	7.225	7.225	(1.157)	476861	100.000	93.5
	44 2-Chloroethylvinyl ether	63	7.669	7.663	(1.228)	2737319	500.000	462
	49 4-Methyl-2-pentanone	58	7.742	7.742	(0.752)	1920346	500.000	453
	46 cis-1,3-Dichloropropylene	75	7.943	7.943	(1.272)	1231041	100.000	101(A)
$	47 Toluene-d8	98	8.296	8.296	(0.806)	2952149	100.000	88.1
	50 Toluene	92	8.399	8.400	(0.816)	2103093	100.000	89.9
	53 trans-1,3-Dichloropropylene	75	8.600	8.600	(0.835)	1073189	100.000	106(A)
	54 1,1,2-Trichloroethane	83	8.789	8.789	(0.853)	588240	100.000	93.1
	55 2-Hexanone	43	8.898	8.898	(0.864)	3411296	500.000	440
	52 1,3-Dichloropropane	76	9.129	9.123	(0.887)	1169721	100.000	92.0
	56 Tetrachloroethylene	164	9.300	9.300	(0.903)	655010	100.000	90.9
	57 Dibromochloromethane	129	9.427	9.428	(0.916)	722826	100.000	108(A)
	59 1,2-Dibromoethane	107	9.701	9.701	(0.942)	693909	100.000	95.5
*	61 Chlorobenzene-d5	117	10.297	10.298	(1.000)	1130688	50.0000	
	62 Chlorobenzene	112	10.346	10.346	(1.005)	2160799	100.000	89.9
	60 1,1,1,2-Tetrachloroethane	131	10.425	10.419	(1.012)	743807	100.000	108(A)
	58 Ethylbenzene	91	10.486	10.486	(1.018)	3736913	100.000	88.5
	63 m,p-Xylenes	106	10.607	10.608	(1.030)	2898916	200.000	171
	64 o-Xylene	106	11.191	11.192	(1.087)	1537988	100.000	91.9
	65 Styrene	104	11.216	11.216	(1.089)	2405327	100.000	90.8
	66 Bromoform	173	11.544	11.545	(0.843)	433338	100.000	101(A)
	67 Isopropylbenzene	105	11.739	11.739	(0.857)	3610386	100.000	94.7
	73 1,1,2,2-Tetrachloroethane	83	11.879	11.879	(0.867)	909272	100.000	94.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	12.001	12.001	(0.876)	1122470	100.000	100
	74 1,2,3-Trichloropropane	110	12.080	12.074	(0.882)	263265	100.000	94.9
	75 Bromobenzene	156	12.232	12.232	(0.893)	890371	100.000	94.9
	76 n-Propylbenzene	91	12.311	12.311	(0.899)	4368094	100.000	89.4
	77 2-Chlorotoluene	91	12.487	12.482	(0.912)	2707892	100.000	93.4
	78 1,3,5-Trimethylbenzene	105	12.554	12.548	(0.916)	2997626	100.000	91.4
	80 4-Chlorotoluene	91	12.566	12.567	(0.917)	2788574	100.000	86.3
	81 tert-Butylbenzene	119	13.053	13.053	(0.953)	3086761	100.000	95.4
	79 1,2,4-Trimethylbenzene	105	13.096	13.096	(0.956)	3063012	100.000	90.7
	83 sec-Butylbenzene	105	13.369	13.370	(0.976)	4217210	100.000	90.6
	84 4-Isopropyltoluene	119	13.582	13.583	(0.992)	3145177	100.000	89.8
	85 1,3-Dichlorobenzene	146	13.594	13.589	(0.992)	1610211	100.000	84.7
*	86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	559530	50.0000	
	87 1,4-Dichlorobenzene	146	13.740	13.741	(1.003)	1682199	100.000	87.7
	89 n-Butylbenzene	91	14.172	14.173	(1.035)	3075841	100.000	89.9
	90 1,2-Dichlorobenzene	146	14.245	14.246	(1.040)	1615579	100.000	89.1
	92 1,2-Dibromo-3-chloropropane	75	15.346	15.341	(1.120)	169955	100.000	104(A)
	93 1,2,4-Trichlorobenzene	180	16.703	16.703	(1.219)	963616	100.000	88.6
	94 Hexachlorobutadiene	225	17.013	17.014	(1.242)	533033	100.000	85.7
	95 Naphthalene	128	17.001	17.002	(1.241)	2343690	100.000	91.0
	96 1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	870091	100.000	86.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s311.d

Date : 11-JAN-2006 15:08

Client ID: VSTD100

Instrument: VOA8.i

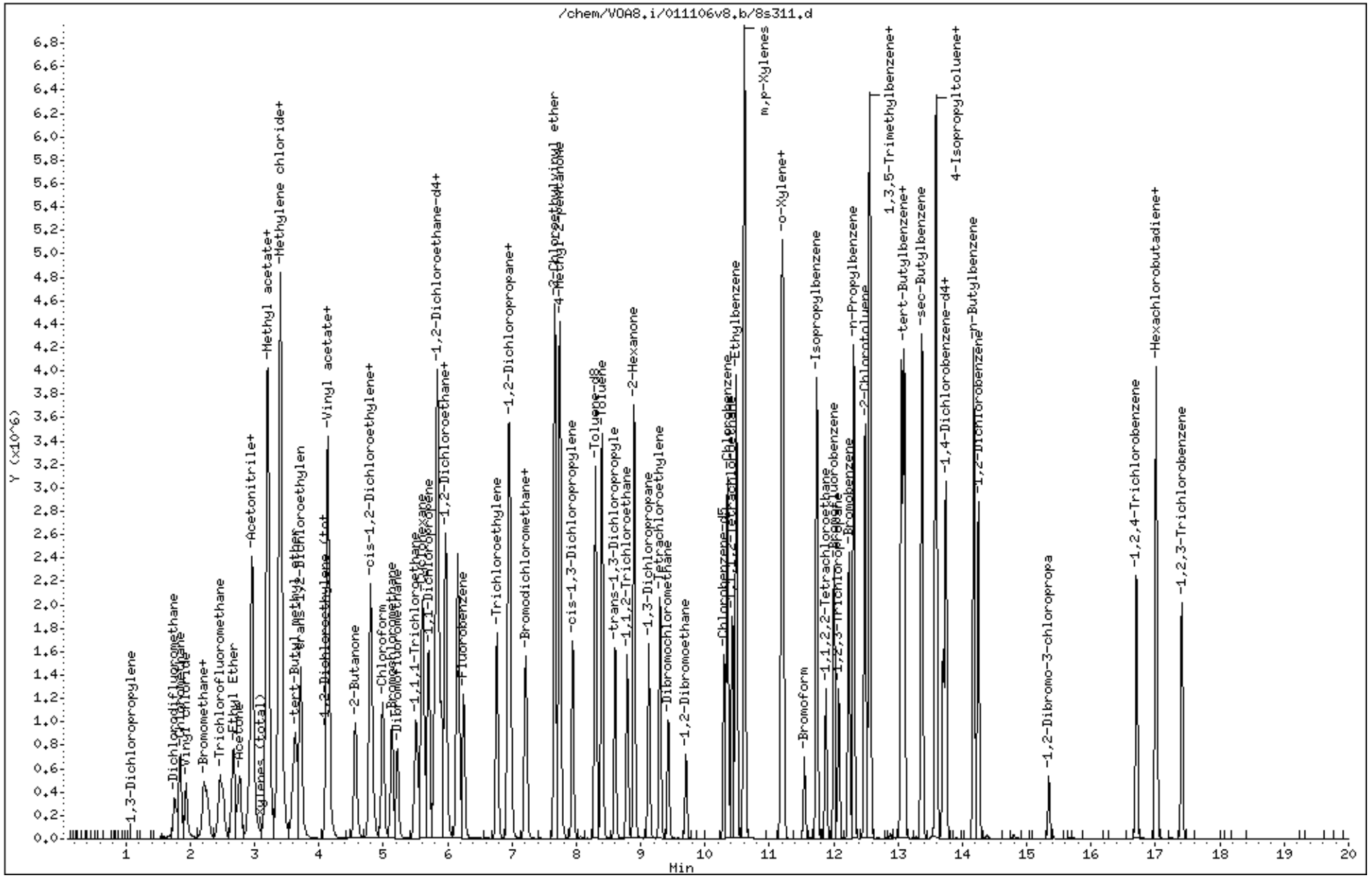
Sample Info: |W8V060111-08|ICAL|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s313.d
Lab Smp Id: UVM051208-04 Client Smp ID: VSTD005S
Inj Date : 11-JAN-2006 16:08
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM051208-04|SHORT|1|VOAF|1|
Misc Info : GEL 10ML N/A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 09:33 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 16:08 Cal File: 8s313.d
Als bottle: 12 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

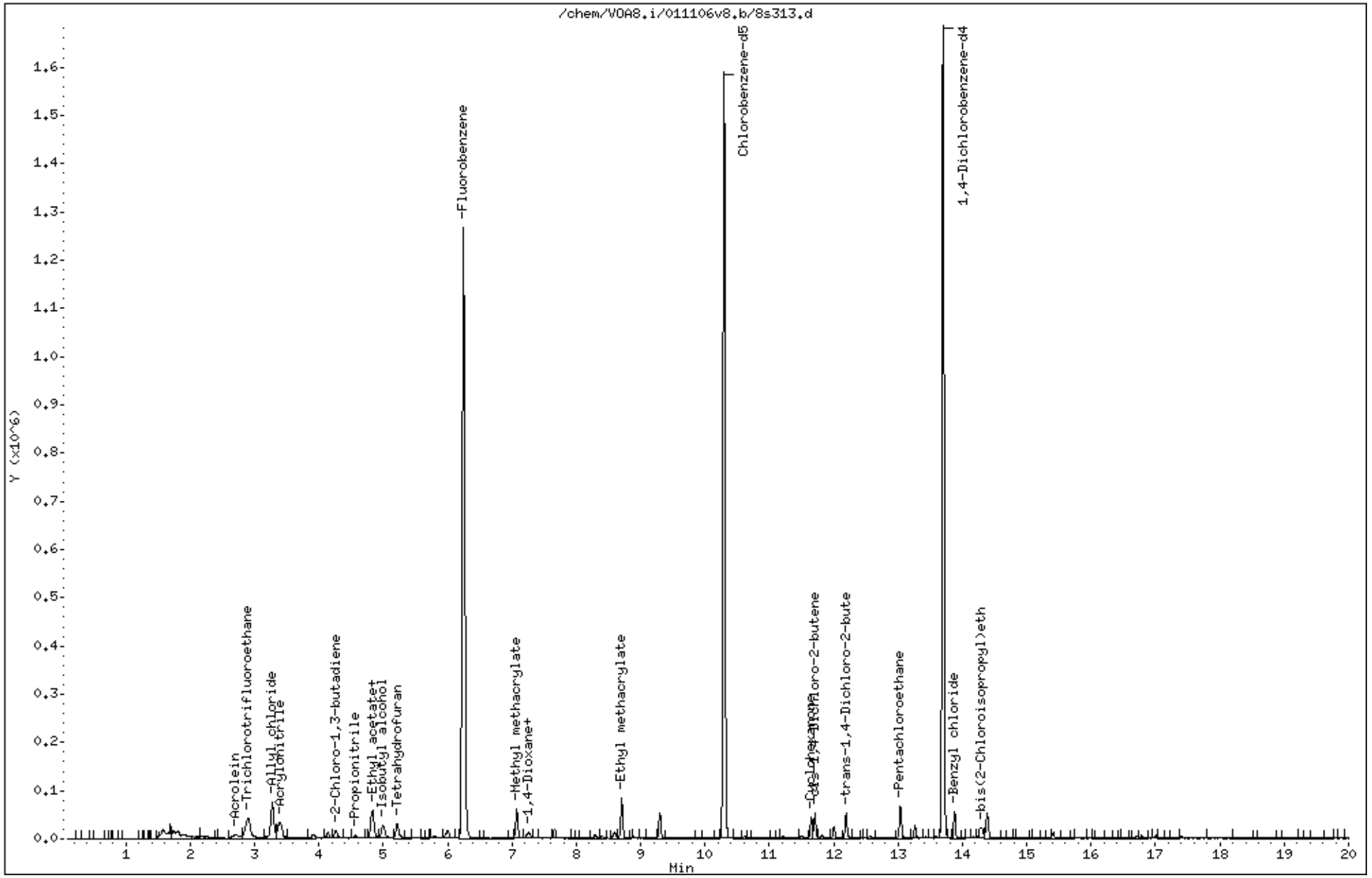
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.723	2.718	(0.436)	6996	5.00000	6.0(a)
12	Trichlorotrifluoroethane	85	2.887	2.900	(0.462)	20211	5.00000	4.2(a)
16	Allyl chloride	76	3.270	3.284	(0.524)	25446	5.00000	3.9(aQ)
18	Acrylonitrile	53	3.410	3.417	(0.546)	21777	5.00000	4.1(a)
24	2-Chloro-1,3-butadiene	53	4.274	4.275	(0.684)	15969	1.00000	0.76(a)
28	Propionitrile	54	4.566	4.561	(0.731)	9199	5.00000	4.2(a)
26	Ethyl acetate	43	4.816	4.811	(0.771)	57465	5.00000	4.2(a)
27	Methacrylonitrile	41	4.840	4.841	(0.775)	34011	5.00000	4.0(a)
19	Isobutyl alcohol	41	4.998	4.987	(0.800)	24589	50.0000	42.2(a)
72	Tetrahydrofuran	42	5.211	5.206	(0.380)	31385	5.00000	12.8
* 40	Fluorobenzene	96	6.245	6.247	(1.000)	1689940	50.0000	
42	Methyl methacrylate	69	7.073	7.080	(1.132)	28241	5.00000	3.9(a)
97	1,4-Dioxane	88	7.225	7.226	(1.157)	6234	50.0000	40.9(a)
48	2-Nitropropane	43	7.261	7.268	(1.163)	8260	5.00000	15.7
51	Ethyl methacrylate	69	8.703	8.704	(0.845)	50140	5.00000	3.9(a)
* 61	Chlorobenzene-d5	117	10.297	10.298	(1.000)	1141294	50.0000	

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	70 Cyclohexanone	55	11.647	11.654	(1.131)	26454	25.0000	66.7
	68 cis-1,4-Dichloro-2-butene	53	11.708	11.715	(0.855)	17097	5.00000	3.7(a)
	69 trans-1,4-Dichloro-2-butene	53	12.189	12.196	(0.890)	16734	5.00000	3.8(a)
*	86 1,4-Dichlorobenzene-d4	152	13.697	13.699	(1.000)	591025	50.0000	
	88 Benzyl chloride	91	13.880	13.887	(1.013)	50148	5.00000	12.2
	91 bis(2-Chloroisopropyl)ether	45	14.300	14.301	(1.044)	34443	5.00000	3.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s313.d
Date : 11-JAN-2006 16:08
Client ID: VSTD005S
Instrument: VOA8.i
Sample Info: |UVM051208-04|SHORT|1|VOAF|1|
Purge Volume: 5.0
Operator: ACJ
Column phase: DB-624
Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s314.d
Lab Smp Id: UVM051208-05 Client Smp ID: VSTD010S
Inj Date : 11-JAN-2006 16:39
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM051208-05|SHORT|1|VOAF|1|
Misc Info : GEL 10ML N/A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 09:33 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 16:39 Cal File: 8s314.d
Als bottle: 13 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

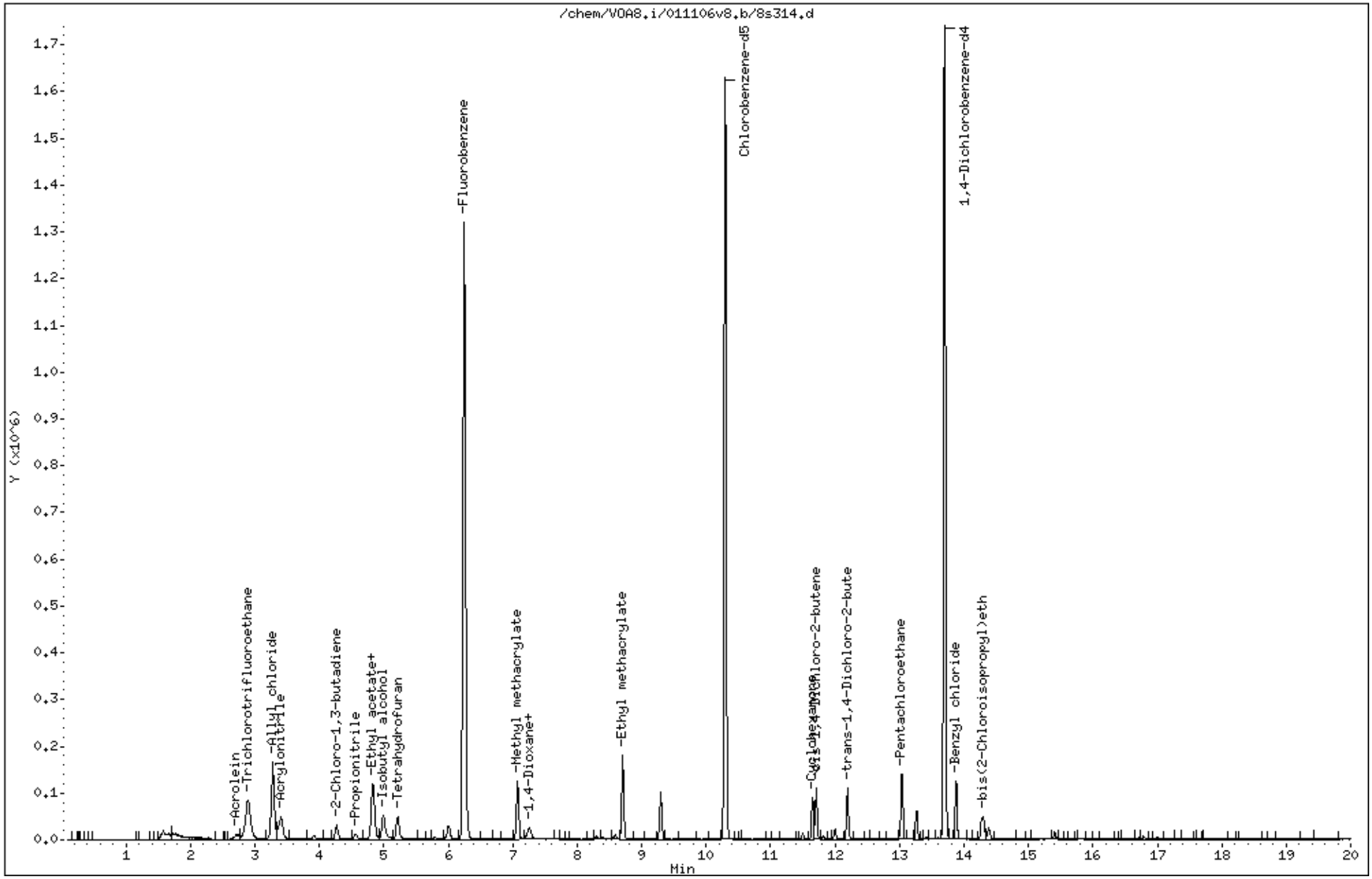
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.722	2.718	(0.436)	15911	10.0000	10.3
12	Trichlorotrifluoroethane	85	2.892	2.900	(0.463)	41163	10.0000	8.1
16	Allyl chloride	76	3.276	3.284	(0.525)	54860	10.0000	8.0(Q)
18	Acrylonitrile	53	3.416	3.417	(0.547)	44232	10.0000	7.9(a)
24	2-Chloro-1,3-butadiene	53	4.267	4.275	(0.683)	32792	2.00000	1.5
28	Propionitrile	54	4.559	4.561	(0.730)	17849	10.0000	7.8
26	Ethyl acetate	43	4.815	4.811	(0.771)	117174	10.0000	8.2
27	Methacrylonitrile	41	4.833	4.841	(0.774)	70226	10.0000	8.0
19	Isobutyl alcohol	41	4.997	4.987	(0.800)	47784	100.000	78.3
72	Tetrahydrofuran	42	5.216	5.206	(0.381)	54867	10.0000	15.5
* 40	Fluorobenzene	96	6.244	6.247	(1.000)	1769403	50.0000	
42	Methyl methacrylate	69	7.072	7.080	(1.132)	60669	10.0000	7.9
97	1,4-Dioxane	88	7.242	7.226	(1.160)	12871	100.000	80.6
48	2-Nitropropane	43	7.260	7.268	(1.163)	18052	10.0000	17.1
51	Ethyl methacrylate	69	8.702	8.704	(0.845)	109352	10.0000	8.1
* 61	Chlorobenzene-d5	117	10.296	10.298	(1.000)	1191121	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	11.647	11.654	(1.131)	54988	50.0000	75.4
68	cis-1,4-Dichloro-2-butene	53	11.713	11.715	(0.855)	36596	10.0000	7.6
69	trans-1,4-Dichloro-2-butene	53	12.194	12.196	(0.890)	34785	10.0000	7.6
82	Pentachloroethane	167	13.040	13.041	(0.952)	27964	10.0000	6.6(Q)
* 86	1,4-Dichlorobenzene-d4	152	13.697	13.699	(1.000)	610100	50.0000	
88	Benzyl chloride	91	13.879	13.887	(1.013)	112534	10.0000	14.3
91	bis(2-Chloroisopropyl)ether	45	14.293	14.301	(1.044)	74049	10.0000	7.8

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s314.d
Date : 11-JAN-2006 16:39
Client ID: VSTD010S
Instrument: VOA8.i
Sample Info: |UVM051208-05|SHORT|1|VOAF|1|
Purge Volume: 5.0
Operator: ACJ
Column phase: DB-624
Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s315.d
Lab Smp Id: UVM051208-06 Client Smp ID: VSTD025S
Inj Date : 11-JAN-2006 17:09
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM051208-06|SHORT|1|VOAF|1|
Misc Info : GEL 10ML N/A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 09:33 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 17:09 Cal File: 8s315.d
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.712	2.718	(0.434)	37501	25.0000	23.1
12	Trichlorotrifluoroethane	85	2.901	2.900	(0.464)	102801	25.0000	22.0
16	Allyl chloride	76	3.284	3.284	(0.526)	170764	25.0000	26.2(Q)
18	Acrylonitrile	53	3.418	3.417	(0.547)	108297	25.0000	21.4
24	2-Chloro-1,3-butadiene	53	4.276	4.275	(0.684)	84903	5.00000	4.2
28	Propionitrile	54	4.568	4.561	(0.731)	44613	25.0000	21.5
26	Ethyl acetate	43	4.811	4.811	(0.770)	284004	25.0000	21.7
27	Methacrylonitrile	41	4.835	4.841	(0.774)	177597	25.0000	22.1
19	Isobutyl alcohol	41	4.994	4.987	(0.799)	116224	250.000	210
72	Tetrahydrofuran	42	5.213	5.206	(0.380)	117448	25.0000	23.9
* 40	Fluorobenzene	96	6.247	6.247	(1.000)	1666162	50.0000	
42	Methyl methacrylate	69	7.074	7.080	(1.132)	153574	25.0000	22.0
97	1,4-Dioxane	88	7.226	7.226	(1.157)	31077	250.000	214
48	2-Nitropropane	43	7.263	7.268	(1.163)	47087	25.0000	22.5
51	Ethyl methacrylate	69	8.704	8.704	(0.845)	276164	25.0000	22.2
* 61	Chlorobenzene-d5	117	10.298	10.298	(1.000)	1137370	50.0000	

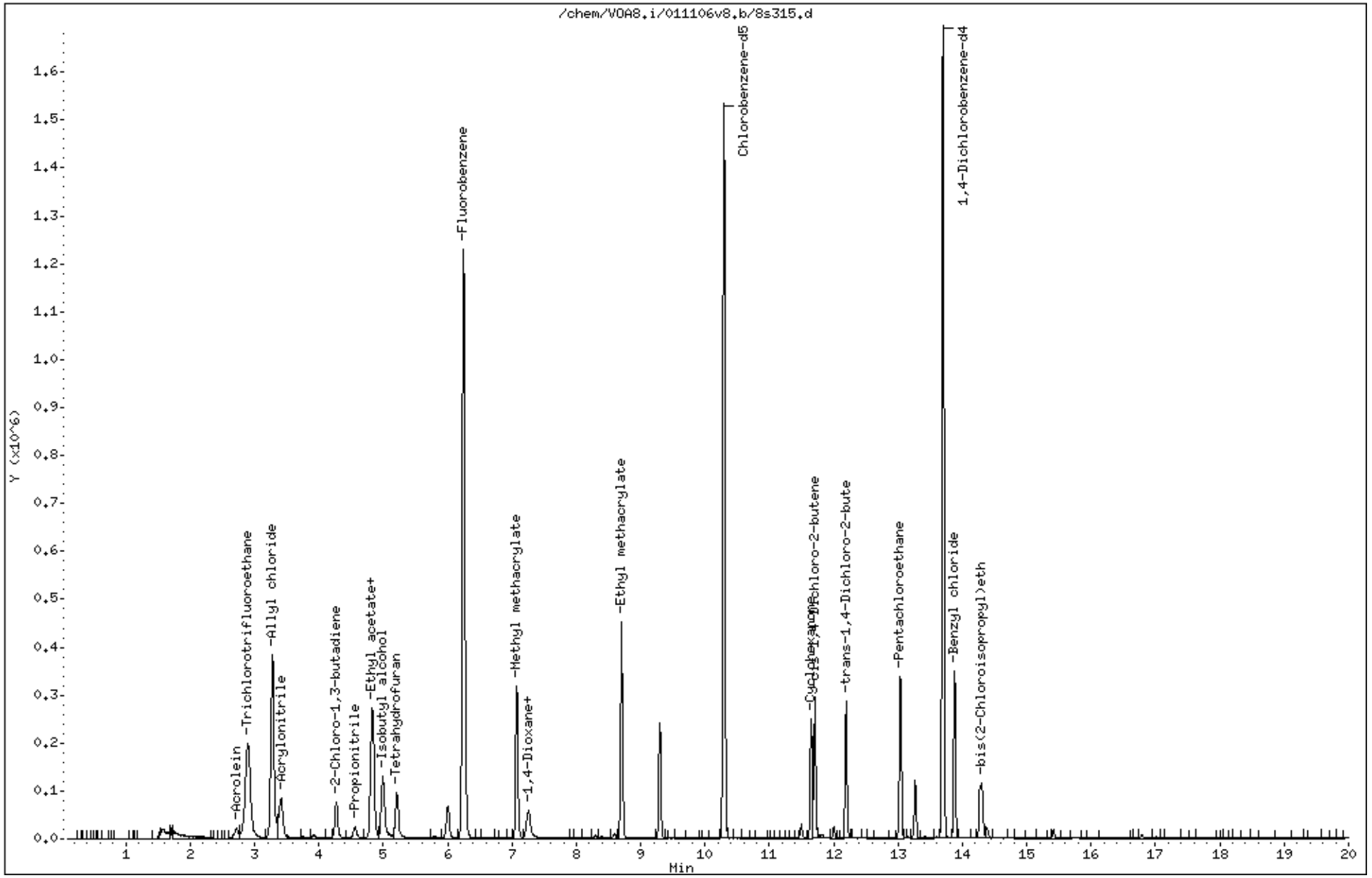
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	70 Cyclohexanone	55	11.649	11.654	(1.131)	149398	125.000	112
	68 cis-1,4-Dichloro-2-butene	53	11.710	11.715	(0.855)	94738	25.0000	21.3
	69 trans-1,4-Dichloro-2-butene	53	12.190	12.196	(0.890)	93032	25.0000	21.7
	82 Pentachloroethane	167	13.042	13.041	(0.952)	75503	25.0000	19.6
*	86 1,4-Dichlorobenzene-d4	152	13.699	13.699	(1.000)	586367	50.0000	
	88 Benzyl chloride	91	13.881	13.887	(1.013)	319518	25.0000	22.6
	91 bis(2-Chloroisopropyl)ether	45	14.301	14.301	(1.044)	188126	25.0000	21.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/011106v8.b/8s315.d
Date : 11-JAN-2006 17:09
Client ID: VSTD025S
Sample Info: |UVM051208-06|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s316.d
Lab Smp Id: UVM051208-07 Client Smp ID: VSTD050S
Inj Date : 11-JAN-2006 17:39
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM051208-07|SHORT|1|VOAF|1|
Misc Info : GEL 10ML N/A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 09:33 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 17:39 Cal File: 8s316.d
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.717	2.718	(0.435)	85542	50.0000	49.0
12	Trichlorotrifluoroethane	85	2.900	2.900	(0.464)	210977	50.0000	45.3
16	Allyl chloride	76	3.283	3.284	(0.526)	293681	50.0000	45.1
18	Acrylonitrile	53	3.429	3.417	(0.549)	219679	50.0000	43.5
24	2-Chloro-1,3-butadiene	53	4.269	4.275	(0.683)	178625	10.0000	9.0
28	Propionitrile	54	4.548	4.561	(0.728)	88800	50.0000	42.8
26	Ethyl acetate	43	4.810	4.811	(0.770)	584261	50.0000	44.7
27	Methacrylonitrile	41	4.834	4.841	(0.774)	364155	50.0000	45.4
19	Isobutyl alcohol	41	4.986	4.987	(0.798)	232668	500.000	422
72	Tetrahydrofuran	42	4.986	5.206	(0.364)	207708	50.0000	35.7
* 40	Fluorobenzene	96	6.246	6.247	(1.000)	1663105	50.0000	
42	Methyl methacrylate	69	7.073	7.080	(1.132)	316498	50.0000	45.4
97	1,4-Dioxane	88	7.225	7.226	(1.157)	65745	500.000	454
48	2-Nitropropane	43	7.262	7.268	(1.163)	107128	50.0000	31.8
51	Ethyl methacrylate	69	8.703	8.704	(0.845)	587954	50.0000	47.7
* 61	Chlorobenzene-d5	117	10.297	10.298	(1.000)	1125762	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	11.654	11.654	(1.132)	352736	250.000	180
68	cis-1,4-Dichloro-2-butene	53	11.715	11.715	(0.855)	200218	50.0000	46.2
69	trans-1,4-Dichloro-2-butene	53	12.195	12.196	(0.890)	191619	50.0000	45.9
82	Pentachloroethane	167	13.041	13.041	(0.952)	176451	50.0000	47.1
* 86	1,4-Dichlorobenzene-d4	152	13.698	13.699	(1.000)	571326	50.0000	
88	Benzyl chloride	91	13.880	13.887	(1.013)	736075	50.0000	37.9
91	bis(2-Chloroisopropyl)ether	45	14.300	14.301	(1.044)	388159	50.0000	45.0

Data File: /chem/VOA8.i/011106v8.b/8s316.d

Date : 11-JAN-2006 17:39

Client ID: VSTD050S

Sample Info: |UVM051208-07|SHORT|1|VOAF|1|

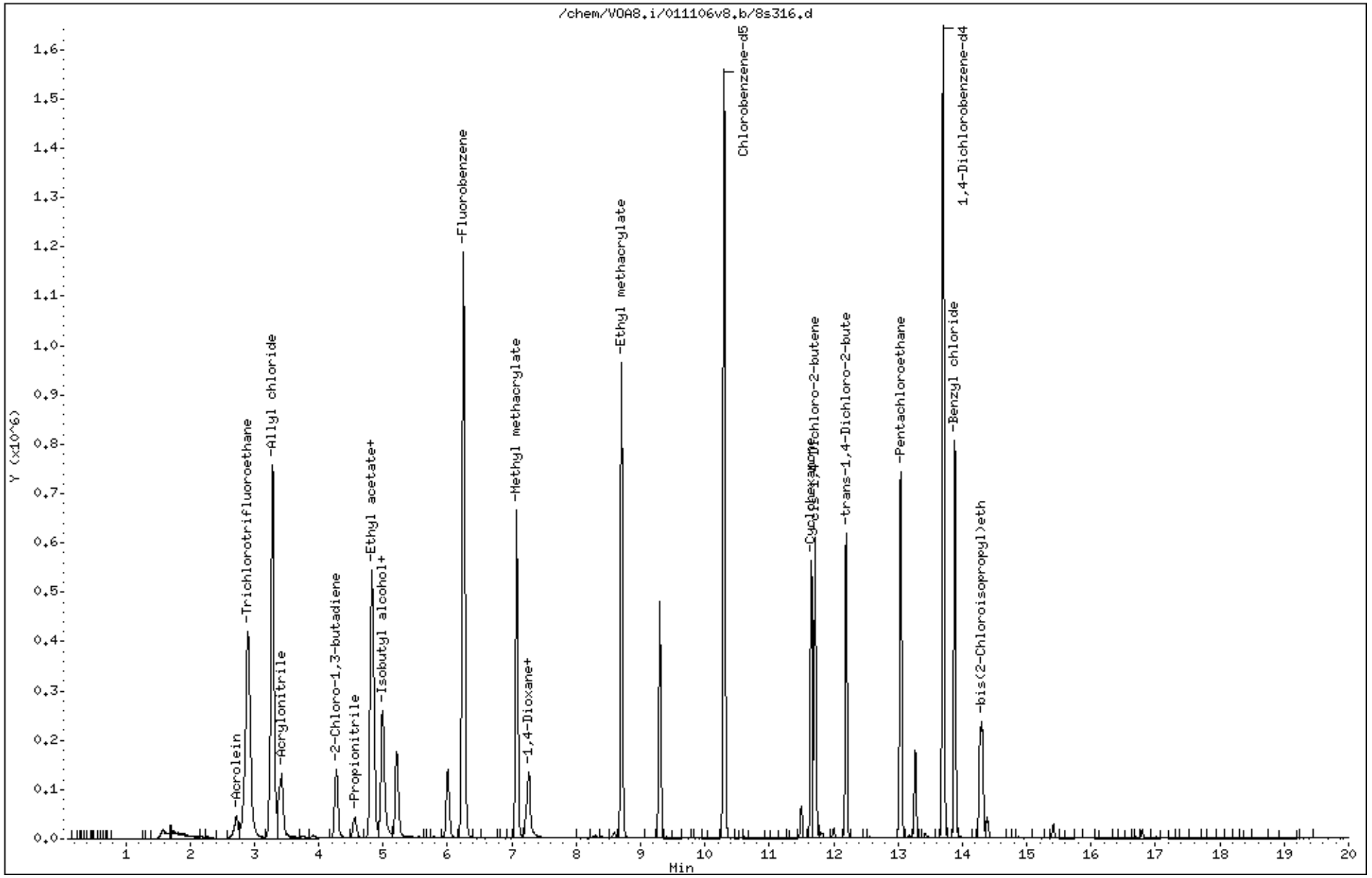
Purge Volume: 5.0

Column phase: DB-624

Instrument: VOA8.i

Operator: ACJ

Column diameter: 0.25



General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s317.d
Lab Smp Id: UVM051208-08 Client Smp ID: VSTD100S
Inj Date : 11-JAN-2006 18:08
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM051208-08|SHORT|1|VOAF|1|
Misc Info : GEL 10ML N/A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 23-Feb-2006 09:20 eh1 Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 16 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

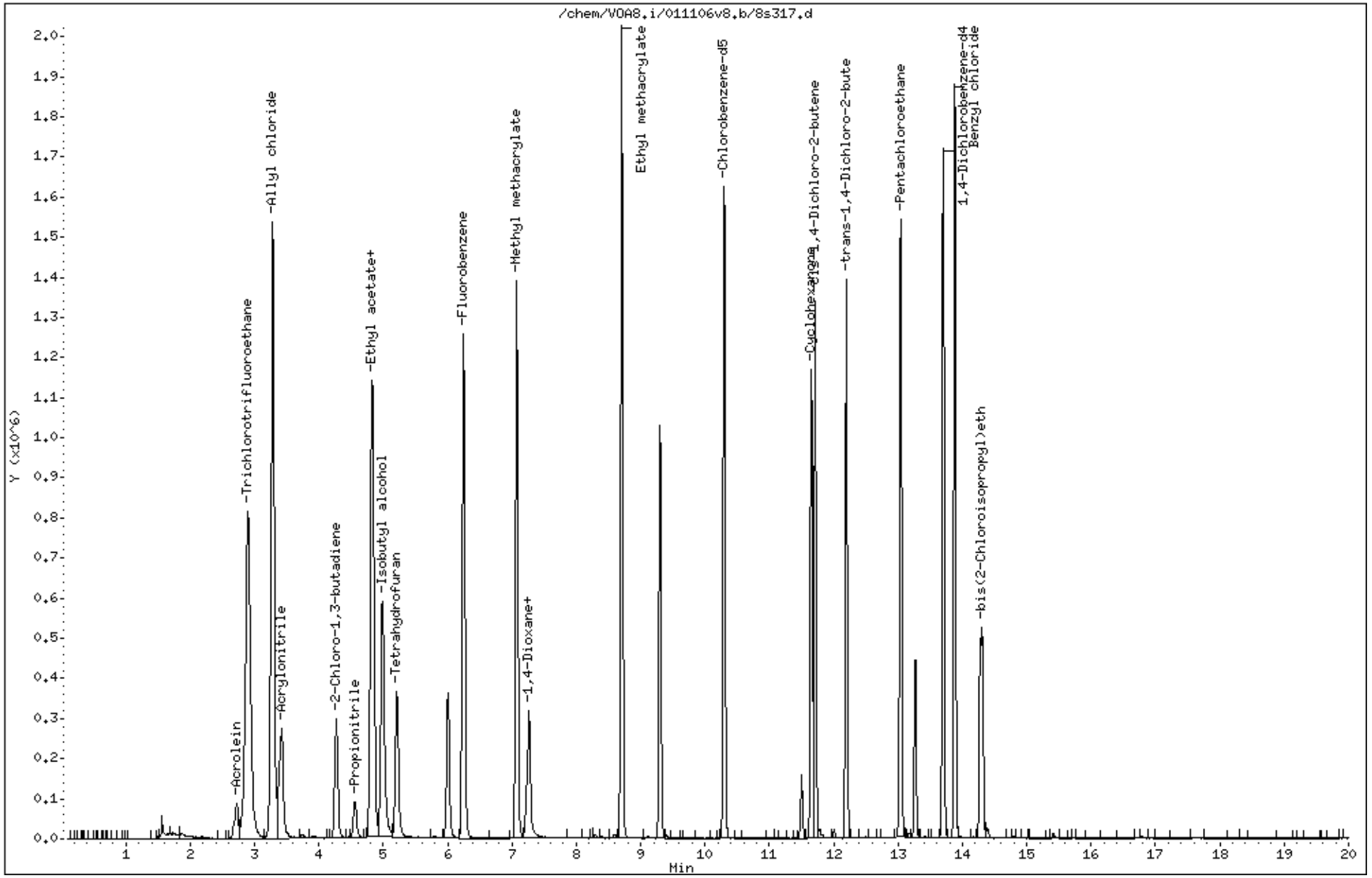
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.724	2.724	(0.436)	166332	100.000	103
12	Trichlorotrifluoroethane	85	2.906	2.906	(0.465)	417434	100.000	102
16	Allyl chloride	76	3.283	3.283	(0.526)	575102	100.000	100
18	Acrylonitrile	53	3.423	3.423	(0.548)	452983	100.000	102
24	2-Chloro-1,3-butadiene	53	4.269	4.269	(0.683)	363794	20.0000	20.8
28	Propionitrile	54	4.555	4.555	(0.729)	183727	100.000	102
26	Ethyl acetate	43	4.810	4.810	(0.770)	1213210	100.000	105
27	Methacrylonitrile	41	4.835	4.835	(0.774)	764978	100.000	107
19	Isobutyl alcohol	41	4.987	4.987	(0.798)	525175	1000.00	1070
72	Tetrahydrofuran	42	5.206	5.206	(0.380)	475951	100.000	111
* 40	Fluorobenzene	96	6.246	6.246	(1.000)	1731912	50.0000	
42	Methyl methacrylate	69	7.073	7.073	(1.132)	666831	100.000	107
97	1,4-Dioxane	88	7.226	7.226	(1.157)	128875	1000.00	1010
48	2-Nitropropane	43	7.268	7.268	(1.164)	270395	100.000	93.8
51	Ethyl methacrylate	69	8.704	8.704	(0.845)	1234906	100.000	110

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 61 Chlorobenzene-d5	117	10.298	10.298	(1.000)	1185386	50.0000	
70 Cyclohexanone	55	11.654	11.654	(1.132)	732655	500.000	568
68 cis-1,4-Dichloro-2-butene	53	11.709	11.709	(0.854)	436477	100.000	111
69 trans-1,4-Dichloro-2-butene	53	12.196	12.196	(0.890)	425494	100.000	112
82 Pentachloroethane	167	13.041	13.041	(0.952)	382415	100.000	113
* 86 1,4-Dichlorobenzene-d4	152	13.704	13.704	(1.000)	600615	50.0000	
88 Benzyl chloride	91	13.881	13.881	(1.013)	1704396	100.000	114
91 bis(2-Chloroisopropyl)ether	45	14.301	14.301	(1.044)	874150	100.000	112

Data File: /chem/VOA8.i/011106v8.b/8s317.d
Date : 11-JAN-2006 18:08
Client ID: VSTD100S
Sample Info: |UVM051208-08|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s318.d
Lab Smp Id: UVM051208-09 Client Smp ID: VSTD250S
Inj Date : 11-JAN-2006 18:39
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM051208-09|SHORT|1|VOAF|1|
Misc Info : GEL 10ML N/A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 09:34 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:39 Cal File: 8s318.d
Als bottle: 17 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

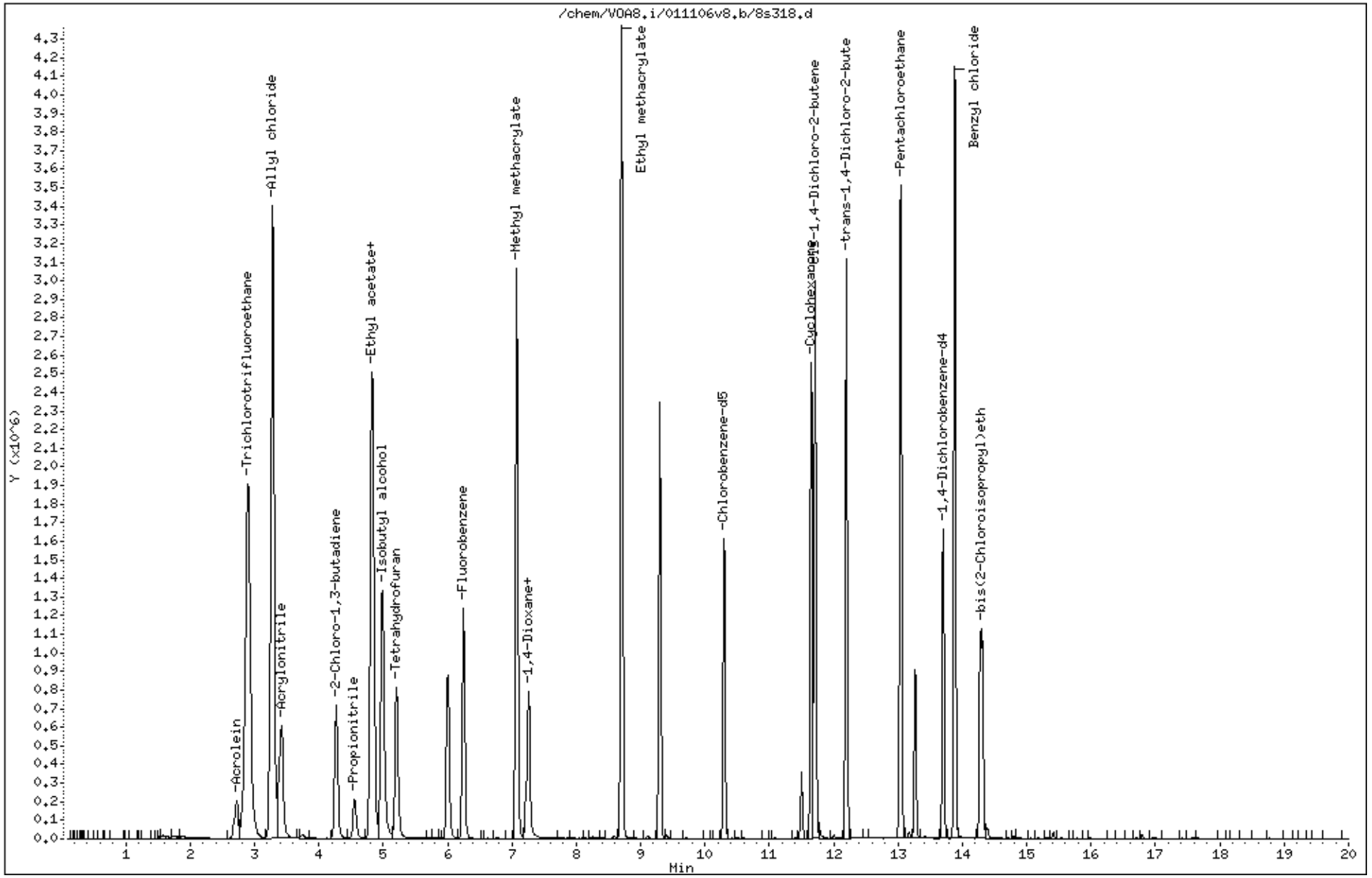
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.724	2.718	(0.436)	404950	250.000	249
12	Trichlorotrifluoroethane	85	2.900	2.900	(0.464)	995146	250.000	243
16	Allyl chloride	76	3.284	3.284	(0.526)	1358488	250.000	237
18	Acrylonitrile	53	3.424	3.417	(0.548)	1067661	250.000	244
24	2-Chloro-1,3-butadiene	53	4.269	4.275	(0.683)	892545	50.0000	52.0
28	Propionitrile	54	4.555	4.561	(0.729)	429341	250.000	240
26	Ethyl acetate	43	4.811	4.811	(0.770)	2743762	250.000	238
27	Methacrylonitrile	41	4.835	4.841	(0.774)	1695493	250.000	239
19	Isobutyl alcohol	41	4.987	4.987	(0.798)	1237250	2500.00	2550
72	Tetrahydrofuran	42	5.212	5.206	(0.380)	1038643	250.000	247
* 40	Fluorobenzene	96	6.246	6.247	(1.000)	1697119	50.0000	
42	Methyl methacrylate	69	7.074	7.080	(1.132)	1529284	250.000	249
97	1,4-Dioxane	88	7.226	7.226	(1.157)	308010	2500.00	2440
48	2-Nitropropane	43	7.268	7.268	(1.164)	736538	250.000	252
51	Ethyl methacrylate	69	8.704	8.704	(0.845)	2740425	250.000	245
* 61	Chlorobenzene-d5	117	10.298	10.298	(1.000)	1157048	50.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
70	Cyclohexanone	55	11.649	11.654	(1.131)	1645796	1250.00	1230
68	cis-1,4-Dichloro-2-butene	53	11.709	11.715	(0.855)	990264	250.000	260
69	trans-1,4-Dichloro-2-butene	53	12.196	12.196	(0.890)	951113	250.000	258
82	Pentachloroethane	167	13.042	13.041	(0.952)	937070	250.000	290
* 86	1,4-Dichlorobenzene-d4	152	13.699	13.699	(1.000)	581684	50.0000	
88	Benzyl chloride	91	13.881	13.887	(1.013)	3869159	250.000	247
91	bis(2-Chloroisopropyl)ether	45	14.307	14.301	(1.044)	1920950	250.000	254

Data File: /chem/VOA8.i/011106v8.b/8s318.d
Date : 11-JAN-2006 18:39
Client ID: VSTD250S
Sample Info: |UVM051208-09|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25



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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/011106v8.b/8s319.d
Lab Smp Id: UVM051208-10 Client Smp ID: VSTD500S
Inj Date : 11-JAN-2006 19:09
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM051208-10|SHORT|1|VOAF|1|
Misc Info : GEL 10ML N/A
Comment :
Method : /chem/VOA8.i/011106v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 09:34 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 19:09 Cal File: 8s319.d
Als bottle: 18 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALsubS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.718	2.718	(0.435)	452335	500.000	405
12	Trichlorotrifluoroethane	85	2.900	2.900	(0.464)	1747861	500.000	449
16	Allyl chloride	76	3.284	3.284	(0.526)	2392582	500.000	441
18	Acrylonitrile	53	3.417	3.417	(0.547)	1993684	500.000	476
24	2-Chloro-1,3-butadiene	53	4.275	4.275	(0.684)	1652222	100.000	99.7
28	Propionitrile	54	4.561	4.561	(0.730)	818177	500.000	478
26	Ethyl acetate	43	4.811	4.811	(0.770)	4935712	500.000	451
27	Methacrylonitrile	41	4.841	4.841	(0.775)	3069850	500.000	455
19	Isobutyl alcohol	41	4.987	4.987	(0.798)	2206467	5000.00	4750
72	Tetrahydrofuran	42	5.206	5.206	(0.380)	1931904	500.000	493
* 40	Fluorobenzene	96	6.246	6.247	(1.000)	1639085	50.0000	
42	Methyl methacrylate	69	7.080	7.080	(1.133)	2751952	500.000	469
97	1,4-Dioxane	88	7.226	7.226	(1.157)	553965	5000.00	4600
48	2-Nitropropane	43	7.268	7.268	(1.164)	1513778	500.000	505(A)
51	Ethyl methacrylate	69	8.704	8.704	(0.845)	4730281	500.000	439
* 61	Chlorobenzene-d5	117	10.298	10.298	(1.000)	1136530	50.0000	

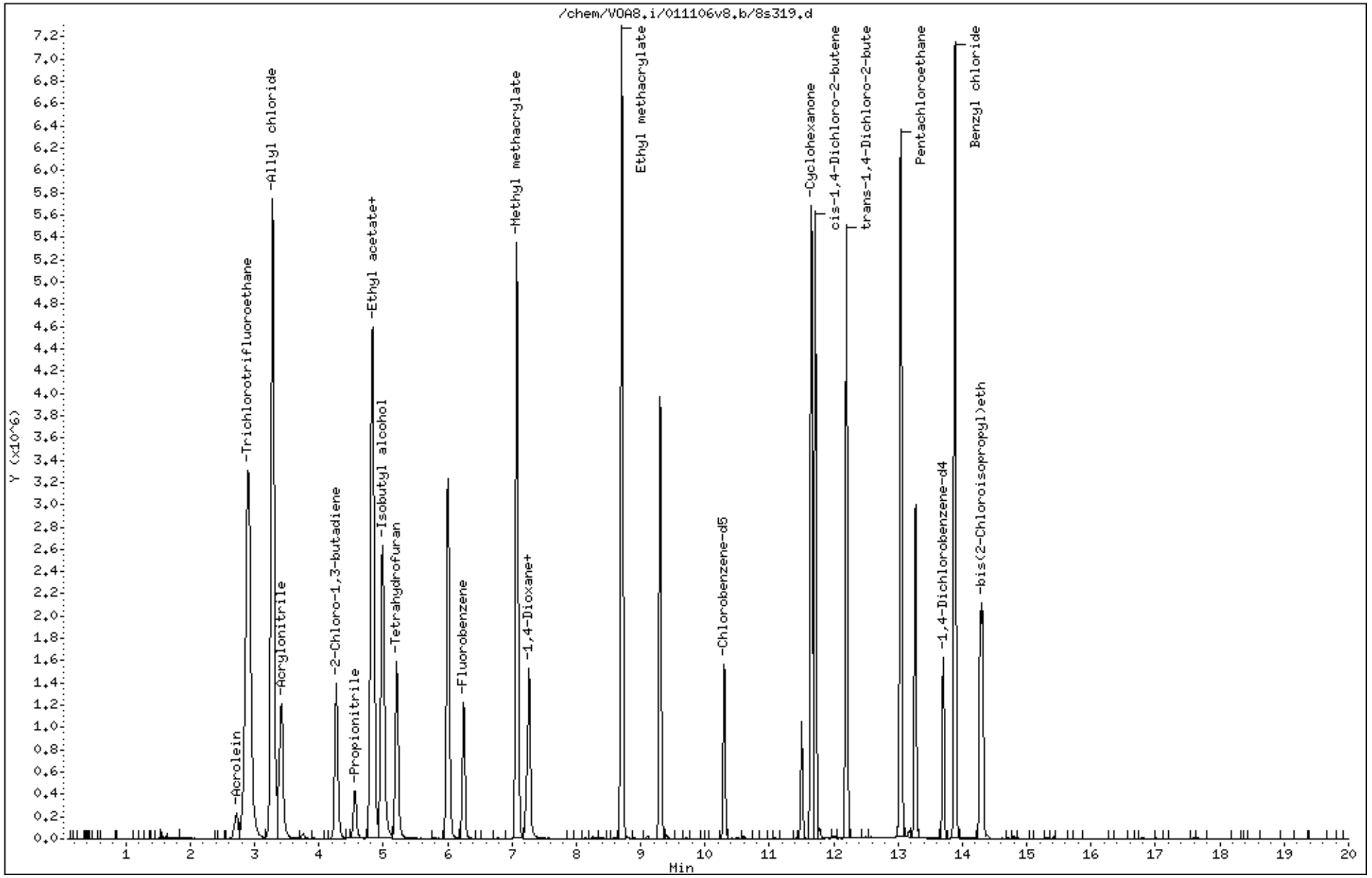
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	70 Cyclohexanone	55	11.654	11.654	(1.132)	3605701	2500.00	2750
	68 cis-1,4-Dichloro-2-butene	53	11.715	11.715	(0.855)	1820444	500.000	483
	69 trans-1,4-Dichloro-2-butene	53	12.196	12.196	(0.890)	1749509	500.000	481
	82 Pentachloroethane	167	13.041	13.041	(0.952)	1769165	500.000	543(A)
*	86 1,4-Dichlorobenzene-d4	152	13.705	13.699	(1.000)	577819	50.0000	
	88 Benzyl chloride	91	13.887	13.887	(1.013)	6719867	500.000	483
	91 bis(2-Chloroisopropyl)ether	45	14.301	14.301	(1.044)	3642338	500.000	487

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/VOA8.i/011106v8.b/8s319.d
Date : 11-JAN-2006 19:09
Client ID: VSTD500S
Sample Info: |UVM051208-10|SHORT|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25



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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 02-FEB-2006 09:27
Lab File ID: 8v402.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: UVM060105-01D Quant Type: ISTD
Method: /chem/VOA8.i/020206v8.b/VOA8-8260B-011106.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.74522	0.73374	0.73374	0.050	-1.54070	40.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.29844	0.30913	0.30913	0.050	3.58193	40.00000	Averaged	
M 135 1,3-Dichloropropylene	0.33326	0.40511	0.40511	0.050	21.55899	40.00000	Averaged	
3 Dichlorodifluoromethane	0.26875	0.20209	0.20209	0.050	-24.80340	40.00000	Averaged	
4 Chloromethane	49.81171	50.00000	0.42209	0.100	-0.37658	40.00000	Linear	spcc
5 Vinyl chloride	0.25604	0.25305	0.25305	0.050	-1.16745	20.00000	Averaged	ccc
6 Bromomethane	49.69252	50.00000	0.18375	0.050	-0.61496	40.00000	Linear	
7 Chloroethane	0.20314	0.19883	0.19883	0.050	-2.12107	40.00000	Averaged	
8 Trichlorofluoromethane	0.43811	0.42035	0.42035	0.050	-4.05333	40.00000	Averaged	
134 Ethyl Ether	0.28710	0.27723	0.27723	0.010	-3.43595	40.00000	Averaged	
10 Acetone	275	250	0.10396	0.050	9.92814	40.00000	Linear	
15 Acetonitrile	0.04593	0.04037	0.04037	0.010	-12.11433	40.00000	Averaged	
11 1,1-Dichloroethylene	0.45882	0.47184	0.47184	0.050	2.83830	20.00000	Averaged	ccc
128 Methyl acetate	0.29809	0.21362	0.21362	0.010	-28.33679	40.00000	Averaged	
13 Iodomethane	0.42916	0.41834	0.41834	0.050	-2.52032	40.00000	Averaged	
17 Methylene chloride	63.65764	50.00000	0.28802	0.050	27.31528	40.00000	Linear	
14 Carbon disulfide	311	250	0.88037	0.050	24.56436	40.00000	Linear	
20 tert-Butyl methyl ether	0.68161	0.71019	0.71019	0.050	4.19181	40.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.29089	0.29782	0.29782	0.050	2.38307	40.00000	Averaged	
23 Vinyl acetate	0.48157	0.58527	0.58527	0.010	21.53379	40.00000	Averaged	
22 1,1-Dichloroethane	0.53533	0.56825	0.56825	0.100	6.15010	40.00000	Averaged	spcc
30 2-Butanone	0.16299	0.16523	0.16523	0.030	1.37392	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.30598	0.32043	0.32043	0.050	4.72262	40.00000	Averaged	
25 2,2-Dichloropropane	0.34345	0.43366	0.43366	0.050	26.26469	40.00000	Averaged	
32 Chloroform	0.48346	0.49060	0.49060	0.010	1.47840	20.00000	Averaged	ccc
29 Bromochloromethane	0.13067	0.13365	0.13365	0.010	2.27547	40.00000	Averaged	
$ 35 Dibromofluoromethane	0.24690	0.22798	0.22798	0.010	-7.66229	40.00000	Averaged	
36 1,1,1-Trichloroethane	0.37206	0.41463	0.41463	0.010	11.44071	40.00000	Averaged	
129 Cyclohexane	0.45456	0.49904	0.49904	0.010	9.78739	40.00000	Averaged	
34 1,1-Dichloropropene	0.36565	0.39860	0.39860	0.010	9.00953	40.00000	Averaged	
131 n-Butyl alcohol	5015	5000	0.00730	0.009	0.29630	40.00000	Linear	<-
33 Carbon tetrachloride	0.24718	0.31874	0.31874	0.010	28.94821	40.00000	Averaged	
37 1,2-Dichloroethane	0.35938	0.34989	0.34989	0.010	-2.63981	40.00000	Averaged	
38 Benzene	58.96572	50.00000	1.18961	0.010	17.93144	40.00000	Linear	
39 Trichloroethylene	0.28359	0.30042	0.30042	0.010	5.93408	40.00000	Averaged	
41 1,2-Dichloropropane	0.31093	0.32325	0.32325	0.010	3.96092	20.00000	Averaged	ccc

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 02-FEB-2006 09:27
Lab File ID: 8v402.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: UVM060105-01D Quant Type: ISTD
Method: /chem/VOA8.i/020206v8.b/VOA8-8260B-011106.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.54920	0.56542	0.56542	0.010	2.95281	40.00000	Averaged
45 Bromodichloromethane	0.31379	0.34556	0.34556	0.010	10.12474	40.00000	Averaged
43 Dibromomethane	0.15239	0.15435	0.15435	0.010	1.28736	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.17690	0.16020	0.16020	0.010	-9.43988	40.00000	Averaged
49 4-Methyl-2-pentanone	0.18742	0.17042	0.17042	0.010	-9.07120	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.36352	0.44151	0.44151	0.010	21.45137	40.00000	Averaged
$ 47 Toluene-d8	1.48226	1.34295	1.34295	0.010	-9.39887	40.00000	Averaged
50 Toluene	1.03463	1.00906	1.00906	0.010	-2.47086	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.44697	0.51127	0.51127	0.010	14.38625	40.00000	Averaged
54 1,1,2-Trichloroethane	0.27919	0.26997	0.26997	0.010	-3.30345	40.00000	Averaged
55 2-Hexanone	0.34284	0.33437	0.33437	0.010	-2.47152	40.00000	Averaged
52 1,3-Dichloropropane	0.56189	0.53008	0.53008	0.010	-5.66144	40.00000	Averaged
56 Tetrachloroethylene	0.31861	0.31351	0.31351	0.010	-1.59974	40.00000	Averaged
57 Dibromochloromethane	0.29597	0.31680	0.31680	0.010	7.03909	40.00000	Averaged
59 1,2-Dibromoethane	0.32122	0.31634	0.31634	0.010	-1.51916	40.00000	Averaged
62 Chlorobenzene	1.06259	1.04101	1.04101	0.300	-2.03063	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.30551	0.34252	0.34252	0.010	12.11386	40.00000	Averaged
58 Ethylbenzene	1.86697	1.83708	1.83708	0.010	-1.60109	20.00000	Averaged ccc
63 m,p-Xylenes	0.74776	0.72597	0.72597	0.010	-2.91455	40.00000	Averaged
64 o-Xylene	0.74012	0.74927	0.74927	0.010	1.23605	40.00000	Averaged
65 Styrene	1.17115	1.19686	1.19686	0.010	2.19536	40.00000	Averaged
66 Bromoform	49.15380	50.00000	0.36883	0.100	-1.69239	40.00000	Linear spcc
67 Isopropylbenzene	3.40685	3.27403	3.27403	0.010	-3.89878	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.86398	0.81184	0.81184	0.300	-6.03478	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	49.22983	50.00000	1.00085	0.010	-1.54033	40.00000	Linear
74 1,2,3-Trichloropropane	0.24792	0.22630	0.22630	0.010	-8.72027	40.00000	Averaged
75 Bromobenzene	0.83812	0.82296	0.82296	0.010	-1.80939	40.00000	Averaged
76 n-Propylbenzene	4.36734	4.09672	4.09672	0.010	-6.19647	40.00000	Averaged
77 2-Chlorotoluene	2.59512	2.56944	2.56944	0.010	-0.98937	40.00000	Averaged
78 1,3,5-Trimethylbenzene	2.93216	2.90203	2.90203	0.010	-1.02773	40.00000	Averaged
80 4-Chlorotoluene	2.88776	2.71867	2.71867	0.010	-5.85518	40.00000	Averaged
81 tert-Butylbenzene	2.89266	2.85780	2.85780	0.010	-1.20494	40.00000	Averaged
79 1,2,4-Trimethylbenzene	3.01622	2.99972	2.99972	0.010	-0.54687	40.00000	Averaged
83 sec-Butylbenzene	4.16179	4.01657	4.01657	0.010	-3.48937	40.00000	Averaged
84 4-Isopropyltoluene	3.13060	3.08031	3.08031	0.010	-1.60645	40.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 02-FEB-2006 09:27
Lab File ID: 8v402.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: UVM060105-01D Quant Type: ISTD
Method: /chem/VOA8.i/020206v8.b/VOA8-8260B-011106.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.69888	1.56621	1.56621	0.010	-7.80897	40.00000	Averaged
87 1,4-Dichlorobenzene	1.71345	1.58455	1.58455	0.010	-7.52316	40.00000	Averaged
89 n-Butylbenzene	3.05791	3.06847	3.06847	0.010	0.34543	40.00000	Averaged
90 1,2-Dichlorobenzene	1.61947	1.48304	1.48304	0.010	-8.42449	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.14594	0.14258	0.14258	0.010	-2.29874	40.00000	Averaged
93 1,2,4-Trichlorobenzene	0.97216	0.95708	0.95708	0.010	-1.55121	40.00000	Averaged
94 Hexachlorobutadiene	0.55562	0.47741	0.47741	0.010	-14.07635	40.00000	Averaged
95 Naphthalene	2.30035	2.22608	2.22608	0.010	-3.22857	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.90357	0.83779	0.83779	0.010	-7.28036	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.00344
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020206v8.b/8v402.d
Lab Smp Id: UVM060105-01D Client Smp ID: Second Source
Inj Date : 02-FEB-2006 09:27
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM060105-01D|CCV/LCS|1|VOAF|1|
Misc Info : GEL 5ML N/A VBLK01LCS
Comment :
Method : /chem/VOA8.i/020206v8.b/VOA8-8260B-011106.m
Meth Date : 23-Feb-2006 09:22 eh1 Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

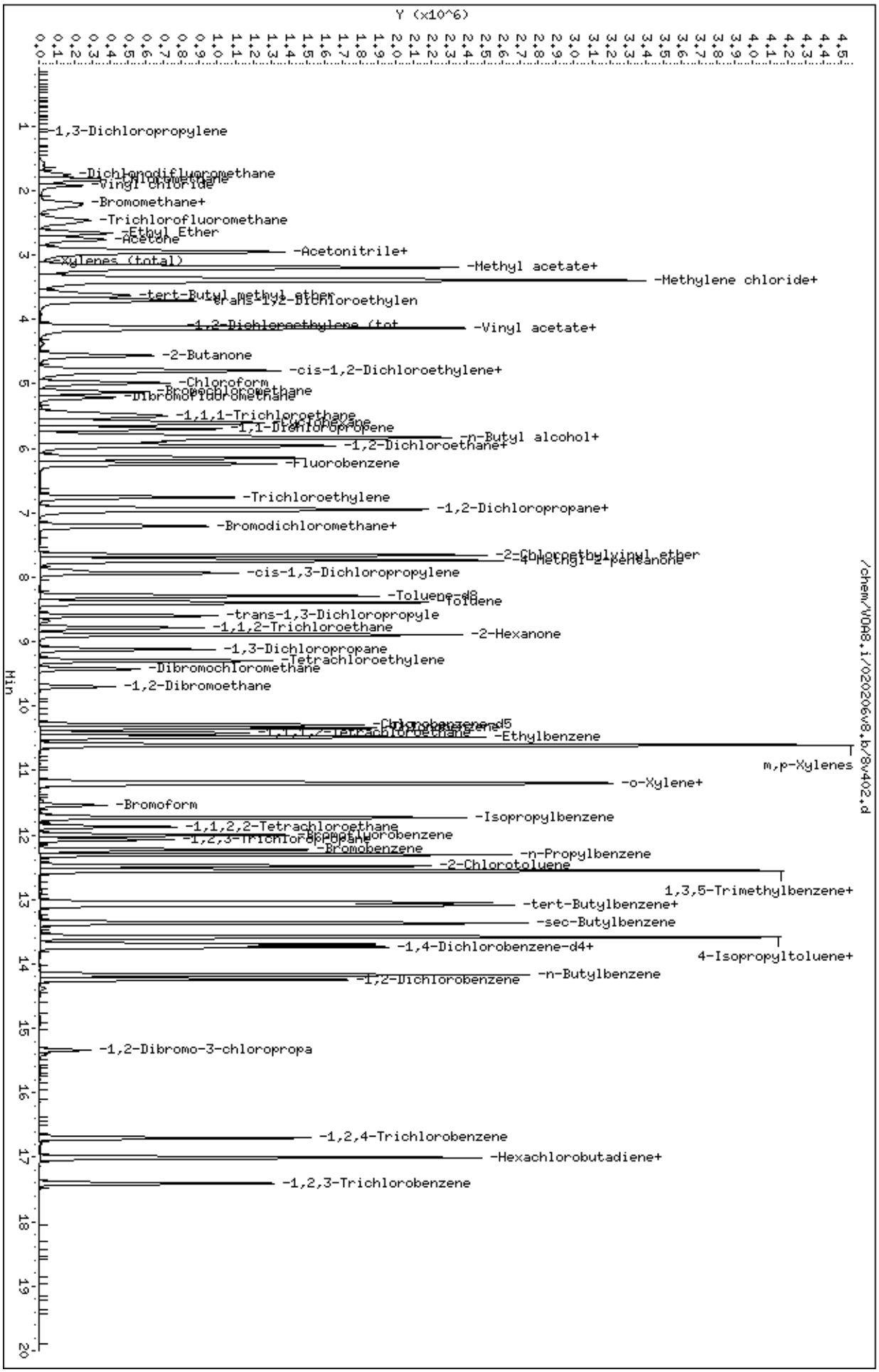
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2863660	150.000	148
M 2 1,2-Dichloroethylene (total)	96				1115292	100.000	104
M 135 1,3-Dichloropropylene	75				1461591	100.000	122
3 Dichlorodifluoromethane	85	1.750	1.750	(0.280)	364562	50.0000	37.6
4 Chloromethane	50	1.832	1.832	(0.293)	761424	50.0000	49.8
5 Vinyl chloride	62	1.926	1.926	(0.308)	456489	50.0000	49.4
6 Bromomethane	94	2.202	2.202	(0.352)	331479	50.0000	49.7
7 Chloroethane	64	2.249	2.249	(0.360)	358682	50.0000	48.9
8 Trichlorofluoromethane	101	2.466	2.466	(0.395)	758292	50.0000	48.0
134 Ethyl Ether	59	2.663	2.663	(0.426)	500116	50.0000	48.3
10 Acetone	43	2.761	2.761	(0.442)	937695	250.000	275
15 Acetonitrile	41	2.955	2.955	(0.473)	1820431	1250.00	1100
11 1,1-Dichloroethylene	61	2.949	2.949	(0.472)	851181	50.0000	51.4
128 Methyl acetate	43	3.205	3.205	(0.513)	1926797	250.000	179
13 Iodomethane	142	3.193	3.193	(0.511)	3773323	250.000	244

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	17 Methylene chloride	84	3.363	3.363	(0.538)	519566	50.0000	63.6
	14 Carbon disulfide	76	3.399	3.399	(0.544)	7940733	250.000	311
	20 tert-Butyl methyl ether	73	3.625	3.625	(0.580)	1281136	50.0000	52.1
	21 trans-1,2-Dichloroethylene	96	3.710	3.710	(0.594)	537246	50.0000	51.2
	23 Vinyl acetate	43	4.136	4.136	(0.662)	5279009	250.000	304
	22 1,1-Dichloroethane	63	4.123	4.123	(0.660)	1025100	50.0000	53.1
	30 2-Butanone	43	4.561	4.561	(0.730)	1490345	250.000	253
	31 cis-1,2-Dichloroethylene	96	4.793	4.793	(0.767)	578046	50.0000	52.4
	25 2,2-Dichloropropane	77	4.805	4.805	(0.769)	782293	50.0000	63.1
	32 Chloroform	83	4.987	4.987	(0.798)	885021	50.0000	50.7
	29 Bromochloromethane	128	5.127	5.127	(0.821)	241091	50.0000	51.1
$	35 Dibromofluoromethane	113	5.212	5.212	(0.834)	411263	50.0000	46.2
	36 1,1,1-Trichloroethane	97	5.510	5.510	(0.882)	747965	50.0000	55.7
	129 Cyclohexane	84	5.608	5.608	(0.898)	900249	50.0000	54.9
	34 1,1-Dichloropropene	75	5.699	5.699	(0.912)	719048	50.0000	54.5
	131 n-Butyl alcohol	41	5.839	5.839	(0.935)	1317648	5000.00	5010
	33 Carbon tetrachloride	117	5.821	5.821	(0.932)	574988	50.0000	64.5
	37 1,2-Dichloroethane	62	5.900	5.900	(0.944)	631189	50.0000	48.7
	38 Benzene	78	5.961	5.961	(0.954)	2145986	50.0000	59.0
*	40 Fluorobenzene	96	6.247	6.247	(1.000)	1803946	50.0000	
	39 Trichloroethylene	95	6.758	6.758	(1.082)	541940	50.0000	53.0
	41 1,2-Dichloropropane	63	6.934	6.934	(1.110)	583126	50.0000	52.0
	130 Methylcyclohexane	83	6.958	6.958	(1.114)	1019989	50.0000	51.5
	45 Bromodichloromethane	83	7.196	7.196	(1.152)	623380	50.0000	55.1
	43 Dibromomethane	93	7.220	7.220	(1.156)	278438	50.0000	50.6
	44 2-Chloroethylvinyl ether	63	7.664	7.664	(1.227)	1444948	250.000	226
	49 4-Methyl-2-pentanone	58	7.743	7.743	(0.752)	1108537	250.000	227
	46 cis-1,3-Dichloropropylene	75	7.938	7.938	(1.271)	796453	50.0000	60.7
$	47 Toluene-d8	98	8.297	8.297	(0.806)	1747104	50.0000	45.3
	50 Toluene	92	8.394	8.394	(0.816)	1312741	50.0000	48.8
	53 trans-1,3-Dichloropropylene	75	8.595	8.595	(0.835)	665138	50.0000	57.2
	54 1,1,2-Trichloroethane	83	8.783	8.783	(0.853)	351218	50.0000	48.3
	55 2-Hexanone	43	8.893	8.893	(0.864)	2174997	250.000	244
	52 1,3-Dichloropropane	76	9.124	9.124	(0.886)	689605	50.0000	47.2
	56 Tetrachloroethylene	164	9.294	9.294	(0.903)	407864	50.0000	49.2
	57 Dibromochloromethane	129	9.428	9.428	(0.916)	412144	50.0000	53.5
	59 1,2-Dibromoethane	107	9.702	9.702	(0.943)	411543	50.0000	49.2
*	61 Chlorobenzene-d5	117	10.292	10.292	(1.000)	1300949	50.0000	
	62 Chlorobenzene	112	10.347	10.347	(1.005)	1354305	50.0000	49.0
	60 1,1,1,2-Tetrachloroethane	131	10.420	10.420	(1.012)	445598	50.0000	56.0
	58 Ethylbenzene	91	10.481	10.481	(1.018)	2389945	50.0000	49.2
	63 m,p-Xylenes	106	10.608	10.608	(1.031)	1888900	100.000	97.1
	64 o-Xylene	106	11.186	11.186	(1.087)	974760	50.0000	50.6
	65 Styrene	104	11.211	11.211	(1.089)	1557054	50.0000	51.1
	66 Bromoform	173	11.539	11.539	(0.843)	247065	50.0000	49.2
	67 Isopropylbenzene	105	11.734	11.734	(0.857)	2193132	50.0000	48.0
	73 1,1,2,2-Tetrachloroethane	83	11.874	11.874	(0.867)	543816	50.0000	47.0

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
Compounds								
$	71 Bromofluorobenzene	95	12.002	12.002	(0.876)	670427	50.0000	49.2
	74 1,2,3-Trichloropropane	110	12.075	12.075	(0.882)	151588	50.0000	45.6
	75 Bromobenzene	156	12.233	12.233	(0.893)	551266	50.0000	49.1
	76 n-Propylbenzene	91	12.306	12.306	(0.899)	2744223	50.0000	46.9
	77 2-Chlorotoluene	91	12.482	12.482	(0.912)	1721162	50.0000	49.5
	78 1,3,5-Trimethylbenzene	105	12.549	12.549	(0.916)	1943946	50.0000	49.5
	80 4-Chlorotoluene	91	12.561	12.561	(0.917)	1821125	50.0000	47.1
	81 tert-Butylbenzene	119	13.048	13.048	(0.953)	1914322	50.0000	49.4
	79 1,2,4-Trimethylbenzene	105	13.090	13.090	(0.956)	2009388	50.0000	49.7
	83 sec-Butylbenzene	105	13.364	13.364	(0.976)	2690534	50.0000	48.2
	84 4-Isopropyltoluene	119	13.577	13.577	(0.992)	2063370	50.0000	49.2
	85 1,3-Dichlorobenzene	146	13.589	13.589	(0.992)	1049141	50.0000	46.1
*	86 1,4-Dichlorobenzene-d4	152	13.693	13.693	(1.000)	669858	50.0000	
	87 1,4-Dichlorobenzene	146	13.741	13.741	(1.004)	1061422	50.0000	46.2
	89 n-Butylbenzene	91	14.173	14.173	(1.035)	2055441	50.0000	50.2
	90 1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	993423	50.0000	45.8
	92 1,2-Dibromo-3-chloropropane	75	15.341	15.341	(1.120)	95511	50.0000	48.8
	93 1,2,4-Trichlorobenzene	180	16.704	16.704	(1.220)	641110	50.0000	49.2
	94 Hexachlorobutadiene	225	17.014	17.014	(1.243)	319797	50.0000	43.0
	95 Naphthalene	128	17.002	17.002	(1.242)	1491159	50.0000	48.4
	96 1,2,3-Trichlorobenzene	180	17.410	17.410	(1.271)	561198	50.0000	46.4



Data File: /chem/VOA8.i/020206v8.b/8v402.d
Date : 02-FEB-2006 09:27
Client ID: Second Source
Sample Info: IUWM060105-01DICCV/LCS1I1VOAF1I1
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25

Report Date: 23-Feb-2006 09:22

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 02-FEB-2006 10:27
Lab File ID: 8v404.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: UVM060123-01A Quant Type: ISTD
Method: /chem/VOA8.i/020206v8.b/VOA8-8260B-011106.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
9 Acrolein	0.04643	0.02210	0.02210	0.001	-52.38856	40.00000	Averaged<-
12 Trichlorotrifluoroethane	0.11866	0.11444	0.11444	0.050	-3.55674	40.00000	Averaged
16 Allyl chloride	0.16561	0.16822	0.16822	0.010	1.57697	40.00000	Averaged
18 Acrylonitrile	0.12774	0.11977	0.11977	0.010	-6.24169	40.00000	Averaged
24 2-Chloro-1,3-butadiene	0.50535	0.58476	0.58476	0.010	15.71432	40.00000	Averaged
28 Propionitrile	0.05220	0.04806	0.04806	0.010	-7.92936	40.00000	Averaged
26 Ethyl acetate	0.33401	0.29779	0.29779	0.010	-10.84410	40.00000	Averaged
27 Methacrylonitrile	0.20568	0.19197	0.19197	0.010	-6.66564	40.00000	Averaged
19 Isobutyl alcohol	0.01417	0.01199	0.01199	0.005	-15.41305	40.00000	Averaged
72 Tetrahydrofuran	208	250	0.28810	0.010	-16.75192	40.00000	Linear
42 Methyl methacrylate	0.17912	0.18390	0.18390	0.010	2.67011	40.00000	Averaged
51 Ethyl methacrylate	0.47386	0.44631	0.44631	0.010	-5.81448	40.00000	Averaged
97 1,4-Dioxane	0.00368	0.00308	0.00308	0.003	-16.21044	40.00000	Averaged
48 2-Nitropropane	231	250	0.08249	0.010	-7.56015	40.00000	Linear
70 Cyclohexanone	0.05441	0.07276	0.07276	0.010	33.73468	40.00000	Averaged
68 cis-1,4-Dichloro-2-butene	0.32595	0.33540	0.33540	0.010	2.89849	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.31499	0.31688	0.31688	0.010	0.60125	40.00000	Averaged
82 Pentachloroethane	0.28192	0.47220	0.47220	0.010	67.49633	40.00000	Averaged<-
88 Benzyl chloride	314	250	1.52188	0.010	25.79091	40.00000	Linear
91 bis(2-Chloroisopropyl)ether	0.64703	0.53397	0.53397	0.010	-17.47503	40.00000	Averaged
$ 35 Dibromofluoromethane	0.24690	0.21980	0.21980	0.010	-10.97369	40.00000	Averaged
$ 47 Toluene-d8	1.48226	1.36914	1.36914	0.010	-7.63151	40.00000	Averaged
$ 71 Bromofluorobenzene	50.04531	50.00000	1.01692	0.010	0.09062	40.00000	Linear

Average %D / Drift Results.

Calculated Average %D/Drift = 14.61000
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020206v8.b/8v404.d
Lab Smp Id: UVM060123-01A Client Smp ID: Second Source
Inj Date : 02-FEB-2006 10:27
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM060123-01A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A VSTD250S/VBLK01SCLS
Comment :
Method : /chem/VOA8.i/020206v8.b/VOA8-8260B-011106.m
Meth Date : 23-Feb-2006 09:22 eh1 Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.712	2.712	(0.434)	185523	250.000	119
12	Trichlorotrifluoroethane	85	2.894	2.894	(0.463)	960496	250.000	241
16	Allyl chloride	76	3.278	3.278	(0.525)	1411919	250.000	254
18	Acrylonitrile	53	3.418	3.418	(0.547)	1005227	250.000	234
24	2-Chloro-1,3-butadiene	53	4.269	4.269	(0.683)	981616	50.0000	57.8
28	Propionitrile	54	4.561	4.561	(0.730)	403359	250.000	230
26	Ethyl acetate	43	4.811	4.811	(0.770)	2499459	250.000	223
27	Methacrylonitrile	41	4.841	4.841	(0.775)	1611296	250.000	233
19	Isobutyl alcohol	41	4.987	4.987	(0.798)	1006100	2500.00	2110
72	Tetrahydrofuran	42	5.206	5.206	(0.380)	880241	250.000	208
42	Methyl methacrylate	69	7.074	7.074	(1.132)	1543540	250.000	257
* 40	Fluorobenzene	96	6.246	6.246	(1.000)	1678660	50.0000	
51	Ethyl methacrylate	69	8.704	8.704	(0.845)	2682216	250.000	235
97	1,4-Dioxane	88	7.226	7.226	(1.157)	258599	2500.00	2090
48	2-Nitropropane	43	7.262	7.262	(1.163)	692369	250.000	231

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	61 Chlorobenzene-d5	117	10.298	10.298	(1.000)	1201955	50.0000	
	70 Cyclohexanone	55	11.649	11.649	(1.131)	2186335	1250.00	1670
	68 cis-1,4-Dichloro-2-butene	53	11.709	11.709	(0.855)	1024776	250.000	257
	69 trans-1,4-Dichloro-2-butene	53	12.196	12.196	(0.890)	968203	250.000	252
	82 Pentachloroethane	167	13.036	13.036	(0.952)	1442761	250.000	419
*	86 1,4-Dichlorobenzene-d4	152	13.699	13.699	(1.000)	611076	50.0000	
	88 Benzyl chloride	91	13.881	13.881	(1.013)	4649922	250.000	314
	91 bis(2-Chloroisopropyl)ether	45	14.301	14.301	(1.044)	1631467	250.000	206
$	35 Dibromofluoromethane	113	5.218	5.218	(0.835)	368976	50.0000	44.5
$	47 Toluene-d8	98	8.297	8.297	(0.806)	1645648	50.0000	46.2
$	71 Bromofluorobenzene	95	12.001	12.001	(0.876)	621415	50.0000	50.0

Data File: /chem/VOA8.i/020206v8.b/8v404.d

Page 1

Date : 02-FEB-2006 10:27

Client ID: Second Source

Instrument: VOA8.i

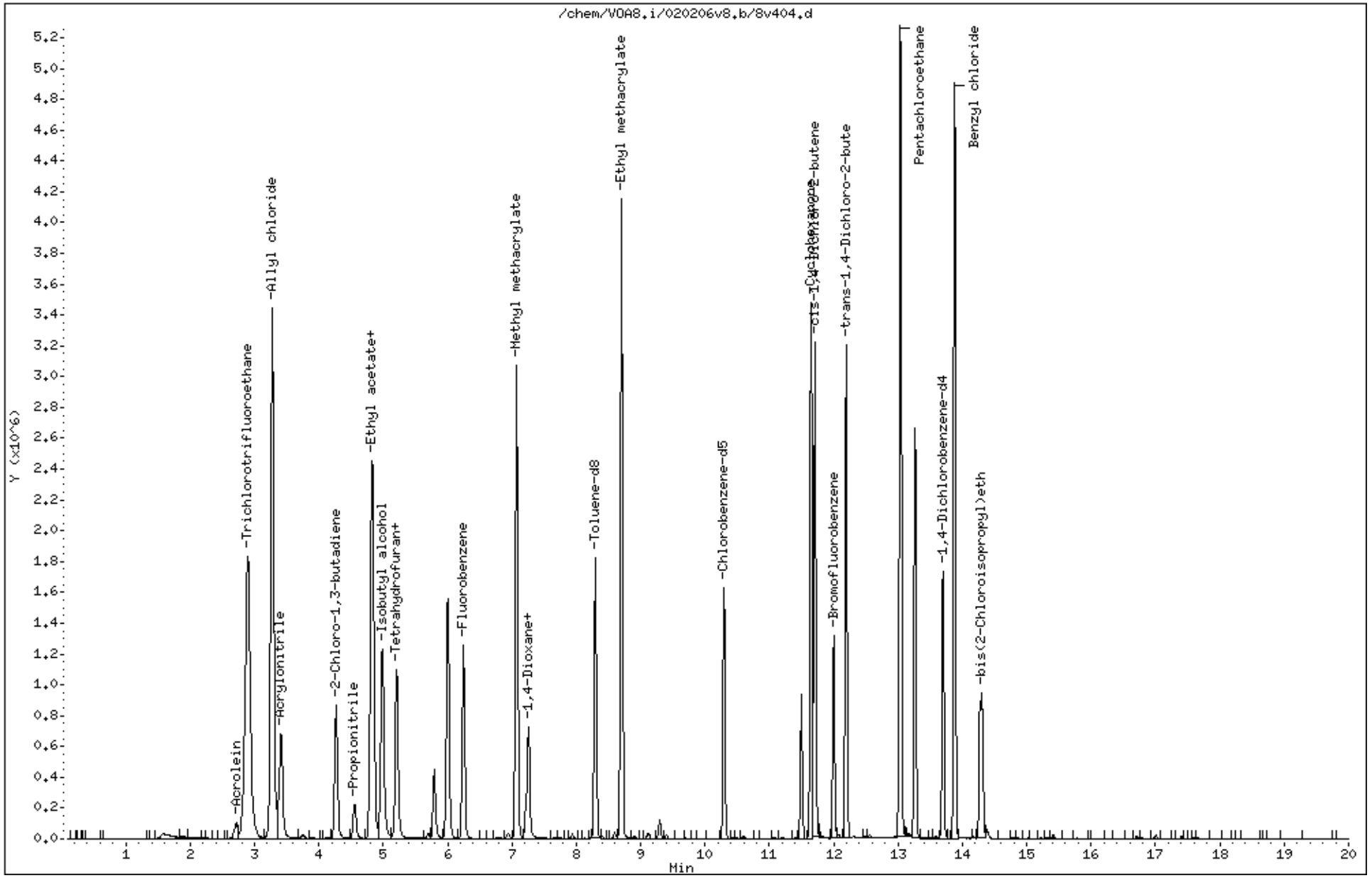
Sample Info: |UVM060123-01A|SHORT|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Report Date: 03-Feb-2006 15:37

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 03-FEB-2006 08:51
Lab File ID: 8v502.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: W8V060203-01 Quant Type: ISTD
Method: /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
M 1 Xylenes (total)	0.74522	0.71374	0.71374	0.050	-4.22441	40.00000	Averaged
M 2 1,2-Dichloroethylene (total	0.29844	0.29391	0.29391	0.050	-1.51600	40.00000	Averaged
M 135 1,3-Dichloropropylene	0.33326	0.36730	0.36730	0.050	10.21329	40.00000	Averaged
3 Dichlorodifluoromethane	0.26875	0.26572	0.26572	0.050	-1.12887	40.00000	Averaged
4 Chloromethane	57.66380	50.00000	0.48796	0.100	15.32759	40.00000	Linear spcc
5 Vinyl chloride	0.25604	0.29186	0.29186	0.050	13.99150	20.00000	Averaged ccc
6 Bromomethane	54.23570	50.00000	0.20046	0.050	8.47139	40.00000	Linear
7 Chloroethane	0.20314	0.20815	0.20815	0.050	2.46593	40.00000	Averaged
8 Trichlorofluoromethane	0.43811	0.45455	0.45455	0.050	3.75277	40.00000	Averaged
134 Ethyl Ether	0.28710	0.27554	0.27554	0.010	-4.02466	40.00000	Averaged
10 Acetone	221	250	0.08388	0.050	-11.55628	40.00000	Linear
15 Acetonitrile	0.04593	0.03918	0.03918	0.010	-14.70487	40.00000	Averaged
11 1,1-Dichloroethylene	0.45882	0.44998	0.44998	0.050	-1.92662	20.00000	Averaged ccc
128 Methyl acetate	0.29809	0.22383	0.22383	0.010	-24.91042	40.00000	Averaged
13 Iodomethane	0.42916	0.37476	0.37476	0.050	-12.67539	40.00000	Averaged
17 Methylene chloride	63.60190	50.00000	0.28777	0.050	27.20380	40.00000	Linear
14 Carbon disulfide	268	250	0.76281	0.050	7.24336	40.00000	Linear
20 tert-Butyl methyl ether	0.68161	0.64441	0.64441	0.050	-5.45777	40.00000	Averaged
21 trans-1,2-Dichloroethylene	0.29089	0.28534	0.28534	0.050	-1.90651	40.00000	Averaged
23 Vinyl acetate	0.48157	0.64463	0.64463	0.010	33.86015	40.00000	Averaged
22 1,1-Dichloroethane	0.53533	0.53472	0.53472	0.100	-0.11440	40.00000	Averaged spcc
30 2-Butanone	0.16299	0.14908	0.14908	0.030	-8.53515	40.00000	Averaged
31 cis-1,2-Dichloroethylene	0.30598	0.30248	0.30248	0.050	-1.14382	40.00000	Averaged
25 2,2-Dichloropropane	0.34345	0.40837	0.40837	0.050	18.90344	40.00000	Averaged
32 Chloroform	0.48346	0.46697	0.46697	0.010	-3.41070	20.00000	Averaged ccc
29 Bromochloromethane	0.13067	0.12828	0.12828	0.010	-1.83352	40.00000	Averaged
$ 35 Dibromofluoromethane	0.24690	0.23660	0.23660	0.010	-4.16973	40.00000	Averaged
36 1,1,1-Trichloroethane	0.37206	0.39601	0.39601	0.010	6.43645	40.00000	Averaged
129 Cyclohexane	0.45456	0.45246	0.45246	0.010	-0.46106	40.00000	Averaged
34 1,1-Dichloropropene	0.36565	0.39585	0.39585	0.010	8.25883	40.00000	Averaged
131 n-Butyl alcohol	5028	5000	0.00732	0.009	0.56222	40.00000	Linear <-
33 Carbon tetrachloride	0.24718	0.30726	0.30726	0.010	24.30340	40.00000	Averaged
37 1,2-Dichloroethane	0.35938	0.33920	0.33920	0.010	-5.61546	40.00000	Averaged
38 Benzene	57.31390	50.00000	1.15674	0.010	14.62781	40.00000	Linear
39 Trichloroethylene	0.28359	0.28517	0.28517	0.010	0.55851	40.00000	Averaged
41 1,2-Dichloropropane	0.31093	0.31724	0.31724	0.010	2.02687	20.00000	Averaged ccc

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 03-FEB-2006 08:51
Lab File ID: 8v502.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: W8V060203-01 Quant Type: ISTD
Method: /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
130 Methylcyclohexane	0.54920	0.54125	0.54125	0.010	-1.44920	40.00000	Averaged
45 Bromodichloromethane	0.31379	0.32763	0.32763	0.010	4.40991	40.00000	Averaged
43 Dibromomethane	0.15239	0.14906	0.14906	0.010	-2.18487	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.17690	0.15844	0.15844	0.010	-10.43322	40.00000	Averaged
49 4-Methyl-2-pentanone	0.18742	0.16440	0.16440	0.010	-12.28120	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.36352	0.39775	0.39775	0.010	9.41363	40.00000	Averaged
$ 47 Toluene-d8	1.48226	1.35446	1.35446	0.010	-8.62239	40.00000	Averaged
50 Toluene	1.03463	0.96595	0.96595	0.010	-6.63804	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.44697	0.46454	0.46454	0.010	3.93171	40.00000	Averaged
54 1,1,2-Trichloroethane	0.27919	0.25901	0.25901	0.010	-7.23099	40.00000	Averaged
55 2-Hexanone	0.34284	0.30309	0.30309	0.010	-11.59648	40.00000	Averaged
52 1,3-Dichloropropane	0.56189	0.51477	0.51477	0.010	-8.38556	40.00000	Averaged
56 Tetrachloroethylene	0.31861	0.29940	0.29940	0.010	-6.02971	40.00000	Averaged
57 Dibromochloromethane	0.29597	0.29642	0.29642	0.010	0.15398	40.00000	Averaged
59 1,2-Dibromoethane	0.32122	0.29315	0.29315	0.010	-8.73813	40.00000	Averaged
62 Chlorobenzene	1.06259	1.01194	1.01194	0.300	-4.76644	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.30551	0.32732	0.32732	0.010	7.14029	40.00000	Averaged
58 Ethylbenzene	1.86697	1.76712	1.76712	0.010	-5.34825	20.00000	Averaged ccc
63 m,p-Xylenes	0.74776	0.70566	0.70566	0.010	-5.63003	40.00000	Averaged
64 o-Xylene	0.74012	0.72988	0.72988	0.010	-1.38351	40.00000	Averaged
65 Styrene	1.17115	1.12803	1.12803	0.010	-3.68163	40.00000	Averaged
66 Bromoform	45.75275	50.00000	0.34243	0.100	-8.49450	40.00000	Linear spcc
67 Isopropylbenzene	3.40685	3.52708	3.52708	0.010	3.52905	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.86398	0.79205	0.79205	0.300	-8.32516	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	49.54726	50.00000	1.00710	0.010	-0.90547	40.00000	Linear
74 1,2,3-Trichloropropane	0.24792	0.22069	0.22069	0.010	-10.98194	40.00000	Averaged
75 Bromobenzene	0.83812	0.75473	0.75473	0.010	-9.94995	40.00000	Averaged
76 n-Propylbenzene	4.36734	4.16329	4.16329	0.010	-4.67234	40.00000	Averaged
77 2-Chlorotoluene	2.59512	2.42338	2.42338	0.010	-6.61763	40.00000	Averaged
78 1,3,5-Trimethylbenzene	2.93216	2.45964	2.45964	0.010	-16.11512	40.00000	Averaged
80 4-Chlorotoluene	2.88776	2.58239	2.58239	0.010	-10.57468	40.00000	Averaged
81 tert-Butylbenzene	2.89266	2.73212	2.73212	0.010	-5.54971	40.00000	Averaged
79 1,2,4-Trimethylbenzene	3.01622	2.55073	2.55073	0.010	-15.43291	40.00000	Averaged
83 sec-Butylbenzene	4.16179	3.93314	3.93314	0.010	-5.49420	40.00000	Averaged
84 4-Isopropyltoluene	3.13060	2.64456	2.64456	0.010	-15.52544	40.00000	Averaged

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 03-FEB-2006 08:51
Lab File ID: 8v502.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: W8V060203-01 Quant Type: ISTD
Method: /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
85 1,3-Dichlorobenzene	1.69888	1.51264	1.51264	0.010	-10.96252	40.00000	Averaged
87 1,4-Dichlorobenzene	1.71345	1.54027	1.54027	0.010	-10.10702	40.00000	Averaged
89 n-Butylbenzene	3.05791	2.68260	2.68260	0.010	-12.27351	40.00000	Averaged
90 1,2-Dichlorobenzene	1.61947	1.45045	1.45045	0.010	-10.43689	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.14594	0.13622	0.13622	0.010	-6.66077	40.00000	Averaged
93 1,2,4-Trichlorobenzene	0.97216	0.93645	0.93645	0.010	-3.67314	40.00000	Averaged
94 Hexachlorobutadiene	0.55562	0.48107	0.48107	0.010	-13.41705	40.00000	Averaged
95 Naphthalene	2.30035	1.92964	1.92964	0.010	-16.11531	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.90357	0.82522	0.82522	0.010	-8.67129	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.14322
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v502.d
Lab Smp Id: W8V060203-01 Client Smp ID: VSTD050
Inj Date : 03-FEB-2006 08:51
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060203-01|CCV|1|VOAF|1|
Misc Info : GEL 5ML N/A VSTD050
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2788866	150.000	144
M 2 1,2-Dichloroethylene (total)	96				1055851	100.000	98.5
M 135 1,3-Dichloropropylene	75				1319487	100.000	110
3 Dichlorodifluoromethane	85	1.755	1.755	(0.281)	477282	50.0000	49.4
4 Chloromethane	50	1.838	1.838	(0.294)	876468	50.0000	57.7
5 Vinyl chloride	62	1.932	1.932	(0.309)	524246	50.0000	57.0
6 Bromomethane	94	2.207	2.207	(0.353)	360060	50.0000	54.2
7 Chloroethane	64	2.254	2.254	(0.361)	373880	50.0000	51.2
8 Trichlorofluoromethane	101	2.460	2.460	(0.394)	816467	50.0000	51.9
134 Ethyl Ether	59	2.663	2.663	(0.426)	494934	50.0000	48.0
10 Acetone	43	2.760	2.760	(0.442)	753318	250.000	221
15 Acetonitrile	41	2.955	2.955	(0.473)	1759190	1250.00	1070
11 1,1-Dichloroethylene	61	2.955	2.955	(0.473)	808259	50.0000	49.0
128 Methyl acetate	43	3.204	3.204	(0.513)	2010258	250.000	188
13 Iodomethane	142	3.198	3.198	(0.512)	3365727	250.000	218

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	17 Methylene chloride	84	3.369	3.369	(0.539)	516901	50.0000	63.6
	14 Carbon disulfide	76	3.399	3.399	(0.544)	6850848	250.000	268
	20 tert-Butyl methyl ether	73	3.630	3.630	(0.581)	1157497	50.0000	47.3(H)
	21 trans-1,2-Dichloroethylene	96	3.709	3.709	(0.594)	512528	50.0000	49.0
	23 Vinyl acetate	43	4.135	4.135	(0.662)	5789473	250.000	335
	22 1,1-Dichloroethane	63	4.129	4.129	(0.661)	960464	50.0000	49.9
	30 2-Butanone	43	4.561	4.561	(0.730)	1338897	250.000	229
	31 cis-1,2-Dichloroethylene	96	4.798	4.798	(0.768)	543323	50.0000	49.4
	25 2,2-Dichloropropane	77	4.810	4.810	(0.770)	733524	50.0000	59.4
	32 Chloroform	83	4.987	4.987	(0.798)	838767	50.0000	48.3
	29 Bromochloromethane	128	5.127	5.127	(0.821)	230412	50.0000	49.1
$	35 Dibromofluoromethane	113	5.212	5.212	(0.834)	424987	50.0000	47.9
	36 1,1,1-Trichloroethane	97	5.504	5.504	(0.881)	711312	50.0000	53.2
	129 Cyclohexane	84	5.607	5.607	(0.898)	812710	50.0000	49.8
	34 1,1-Dichloropropene	75	5.699	5.699	(0.912)	711032	50.0000	54.1
	131 n-Butyl alcohol	41	5.838	5.838	(0.935)	1315419	5000.00	5030
	33 Carbon tetrachloride	117	5.820	5.820	(0.932)	551898	50.0000	62.2
	37 1,2-Dichloroethane	62	5.899	5.899	(0.944)	609272	50.0000	47.2
	38 Benzene	78	5.960	5.960	(0.954)	2077751	50.0000	57.3
*	40 Fluorobenzene	96	6.246	6.246	(1.000)	1796205	50.0000	
	39 Trichloroethylene	95	6.763	6.763	(1.083)	512232	50.0000	50.3
	41 1,2-Dichloropropane	63	6.934	6.934	(1.110)	569822	50.0000	51.0
	130 Methylcyclohexane	83	6.964	6.964	(1.115)	972187	50.0000	49.3
	45 Bromodichloromethane	83	7.201	7.201	(1.153)	588494	50.0000	52.2
	43 Dibromomethane	93	7.219	7.219	(1.156)	267739	50.0000	48.9
	44 2-Chloroethylvinyl ether	63	7.657	7.657	(1.226)	1422966	250.000	224
	49 4-Methyl-2-pentanone	58	7.737	7.737	(0.752)	1070655	250.000	219
	46 cis-1,3-Dichloropropylene	75	7.937	7.937	(1.271)	714433	50.0000	54.7
$	47 Toluene-d8	98	8.296	8.296	(0.806)	1764140	50.0000	45.7
	50 Toluene	92	8.394	8.394	(0.816)	1258122	50.0000	46.7
	53 trans-1,3-Dichloropropylene	75	8.600	8.600	(0.836)	605054	50.0000	52.0
	54 1,1,2-Trichloroethane	83	8.783	8.783	(0.853)	337347	50.0000	46.4
	55 2-Hexanone	43	8.892	8.892	(0.864)	1973808	250.000	221
	52 1,3-Dichloropropane	76	9.124	9.124	(0.886)	670476	50.0000	45.8
	56 Tetrachloroethylene	164	9.300	9.300	(0.904)	389958	50.0000	47.0
	57 Dibromochloromethane	129	9.428	9.428	(0.916)	386085	50.0000	50.1
	59 1,2-Dibromoethane	107	9.701	9.701	(0.943)	381822	50.0000	45.6
*	61 Chlorobenzene-d5	117	10.292	10.292	(1.000)	1302472	50.0000	
	62 Chlorobenzene	112	10.340	10.340	(1.005)	1318027	50.0000	47.6
	60 1,1,1,2-Tetrachloroethane	131	10.419	10.419	(1.012)	426329	50.0000	53.6
	58 Ethylbenzene	91	10.480	10.480	(1.018)	2301624	50.0000	47.3
	63 m,p-Xylenes	106	10.608	10.608	(1.031)	1838217	100.000	94.4
	64 o-Xylene	106	11.186	11.186	(1.087)	950649	50.0000	49.3
	65 Styrene	104	11.210	11.210	(1.089)	1469230	50.0000	48.2
	66 Bromoform	173	11.539	11.539	(0.842)	233420	50.0000	45.8
	67 Isopropylbenzene	105	11.733	11.733	(0.857)	2404259	50.0000	51.8
	73 1,1,2,2-Tetrachloroethane	83	11.873	11.873	(0.867)	539906	50.0000	45.8

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	71 Bromofluorobenzene	95	12.001	12.001	(0.876)	686500	50.0000	49.5
	74 1,2,3-Trichloropropane	110	12.074	12.074	(0.881)	150436	50.0000	44.5
	75 Bromobenzene	156	12.232	12.232	(0.893)	514468	50.0000	45.0
	76 n-Propylbenzene	91	12.305	12.305	(0.898)	2837934	50.0000	47.7
	77 2-Chlorotoluene	91	12.482	12.482	(0.911)	1651916	50.0000	46.7
	78 1,3,5-Trimethylbenzene	105	12.549	12.549	(0.916)	1676631	50.0000	41.9
	80 4-Chlorotoluene	91	12.561	12.561	(0.917)	1760301	50.0000	44.7
	81 tert-Butylbenzene	119	13.047	13.047	(0.952)	1862371	50.0000	47.2
	79 1,2,4-Trimethylbenzene	105	13.090	13.090	(0.956)	1738721	50.0000	42.3
	83 sec-Butylbenzene	105	13.364	13.364	(0.976)	2681050	50.0000	47.2
	84 4-Isopropyltoluene	119	13.577	13.577	(0.991)	1802684	50.0000	42.2
	85 1,3-Dichlorobenzene	146	13.589	13.589	(0.992)	1031101	50.0000	44.5
*	86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	681657	50.0000	
	87 1,4-Dichlorobenzene	146	13.741	13.741	(1.003)	1049939	50.0000	44.9
	89 n-Butylbenzene	91	14.173	14.173	(1.035)	1828611	50.0000	43.9
	90 1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	988706	50.0000	44.8
	92 1,2-Dibromo-3-chloropropane	75	15.341	15.341	(1.120)	92854	50.0000	46.7
	93 1,2,4-Trichlorobenzene	180	16.704	16.704	(1.219)	638341	50.0000	48.2
	94 Hexachlorobutadiene	225	17.014	17.014	(1.242)	327927	50.0000	43.3
	95 Naphthalene	128	17.002	17.002	(1.241)	1315354	50.0000	41.9
	96 1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	562516	50.0000	45.7

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/VOA8.i/020306v8.b/8v502.d

Date : 03-FEB-2006 08:51

Client ID: VSTD050

Instrument: VOA8.i

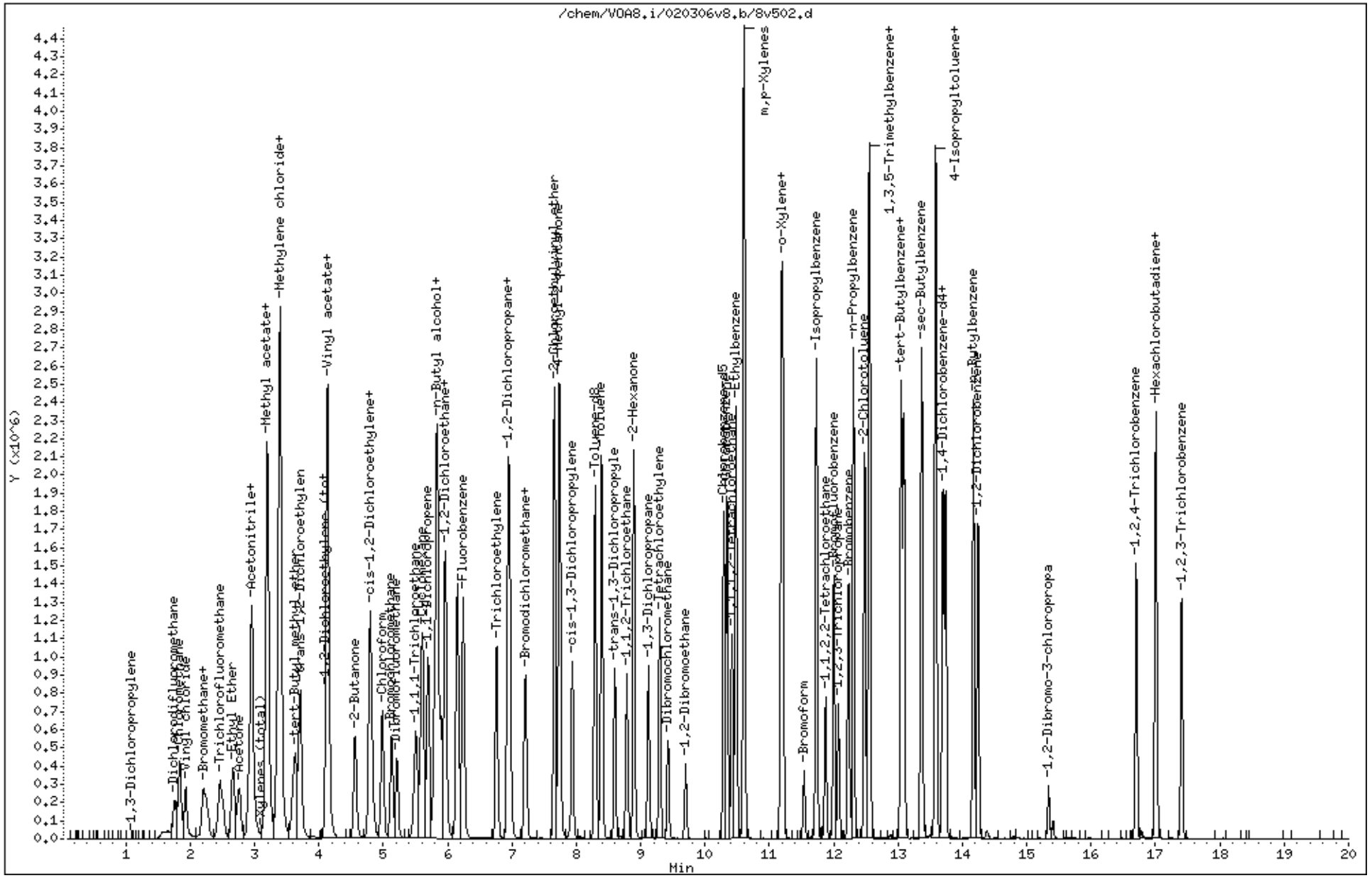
Sample Info: IW8V060203-01ICCVI1IVOAFI1I

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 03-FEB-2006 10:21
Lab File ID: 8v505.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: UVM060123-01A Quant Type: ISTD
Method: /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
9 Acrolein	0.04643	0.02448	0.02448	0.001	-47.28030	40.00000	Averaged<-
12 Trichlorotrifluoroethane	0.11866	0.12216	0.12216	0.050	2.95408	40.00000	Averaged
16 Allyl chloride	0.16561	0.17350	0.17350	0.010	4.76252	40.00000	Averaged
18 Acrylonitrile	0.12774	0.13309	0.13309	0.010	4.18750	40.00000	Averaged
24 2-Chloro-1,3-butadiene	0.50535	0.61977	0.61977	0.010	22.64284	40.00000	Averaged
28 Propionitrile	0.05220	0.05348	0.05348	0.010	2.46807	40.00000	Averaged
26 Ethyl acetate	0.33401	0.32934	0.32934	0.010	-1.39878	40.00000	Averaged
27 Methacrylonitrile	0.20568	0.21098	0.21098	0.010	2.57428	40.00000	Averaged
19 Isobutyl alcohol	0.01417	0.01380	0.01380	0.005	-2.61508	40.00000	Averaged
72 Tetrahydrofuran	232	250	0.32037	0.010	-7.09563	40.00000	Linear
42 Methyl methacrylate	0.17912	0.20145	0.20145	0.010	12.46968	40.00000	Averaged
51 Ethyl methacrylate	0.47386	0.47817	0.47817	0.010	0.90819	40.00000	Averaged
97 1,4-Dioxane	0.00368	0.00353	0.00353	0.003	-3.89954	40.00000	Averaged
48 2-Nitropropane	255	250	0.09133	0.010	1.91043	40.00000	Linear
70 Cyclohexanone	0.05441	0.08114	0.08114	0.010	49.14669	40.00000	Averaged<-
68 cis-1,4-Dichloro-2-butene	0.32595	0.36683	0.36683	0.010	12.54082	40.00000	Averaged
69 trans-1,4-Dichloro-2-butene	0.31499	0.34095	0.34095	0.010	8.24024	40.00000	Averaged
82 Pentachloroethane	0.28192	0.49864	0.49864	0.010	76.87265	40.00000	Averaged<-
88 Benzyl chloride	335	250	1.62053	0.010	34.07412	40.00000	Linear
91 bis(2-Chloroisopropyl)ether	0.64703	0.60283	0.60283	0.010	-6.83139	40.00000	Averaged
$ 35 Dibromofluoromethane	0.24690	0.22288	0.22288	0.010	-9.72786	40.00000	Averaged
$ 47 Toluene-d8	1.48226	1.36909	1.36909	0.010	-7.63509	40.00000	Averaged
$ 71 Bromofluorobenzene	49.82221	50.00000	1.01252	0.010	-0.35558	40.00000	Linear

Average %D / Drift Results.

Calculated Average %D/Drift = 8.14322
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v505.d
Lab Smp Id: UVM060123-01A Client Smp ID: VSTD250S
Inj Date : 03-FEB-2006 10:21
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM060123-01A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A VSTD250S/VBLK01SCLS
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

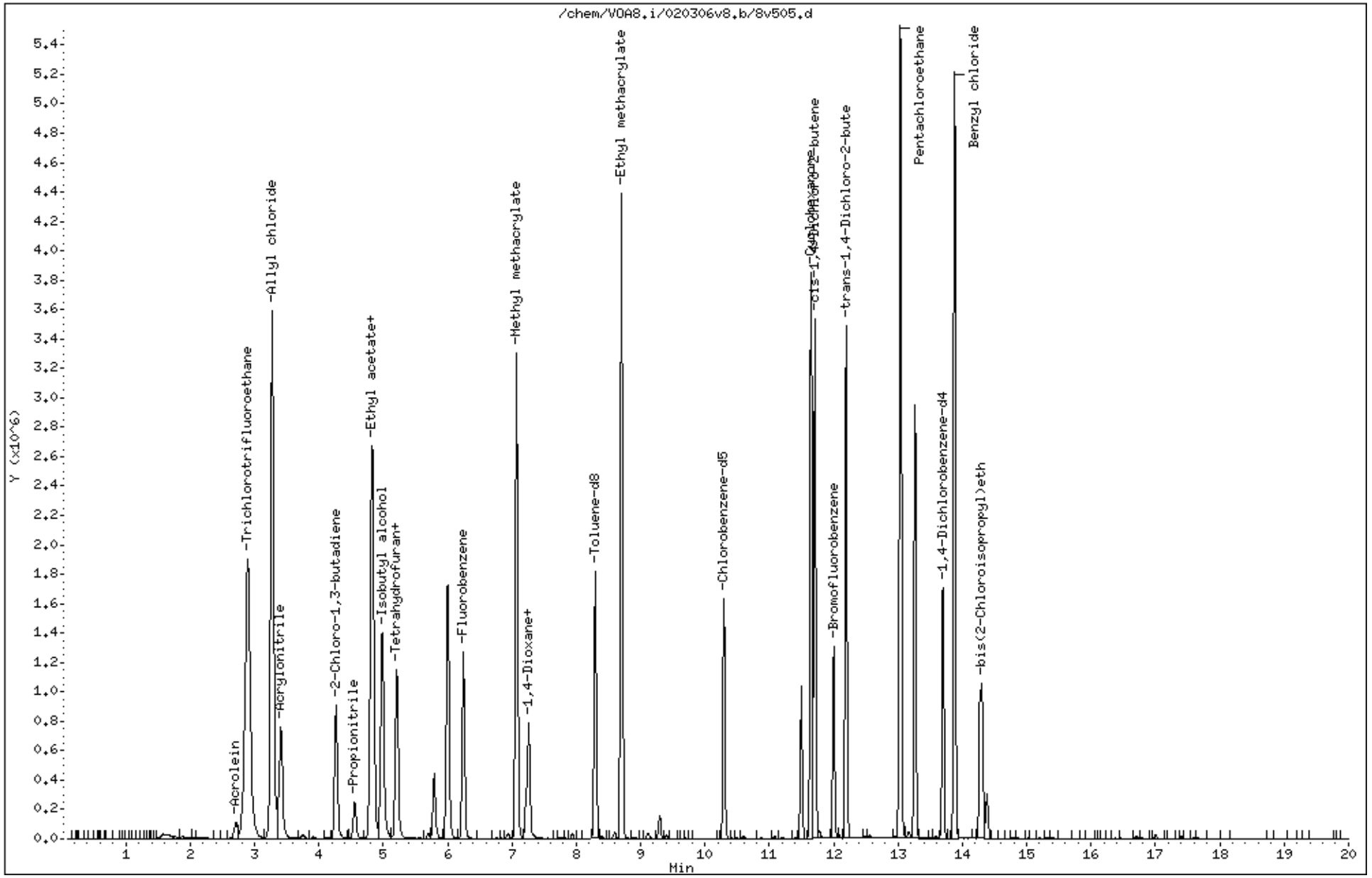
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9	Acrolein	56	2.712	2.712	(0.434)	204391	250.000	132
12	Trichlorotrifluoroethane	85	2.895	2.895	(0.463)	1020163	250.000	257
16	Allyl chloride	76	3.272	3.272	(0.524)	1448848	250.000	262
18	Acrylonitrile	53	3.412	3.412	(0.546)	1111405	250.000	260
24	2-Chloro-1,3-butadiene	53	4.270	4.270	(0.684)	1035140	50.0000	61.3
28	Propionitrile	54	4.556	4.556	(0.729)	446644	250.000	256
26	Ethyl acetate	43	4.811	4.811	(0.770)	2750303	250.000	246
27	Methacrylonitrile	41	4.842	4.842	(0.775)	1761873	250.000	256
19	Isobutyl alcohol	41	4.988	4.988	(0.798)	1152476	2500.00	2430
72	Tetrahydrofuran	42	5.207	5.207	(0.380)	977134	250.000	232
42	Methyl methacrylate	69	7.074	7.074	(1.132)	1682332	250.000	281
* 40	Fluorobenzene	96	6.247	6.246	(1.000)	1670187	50.0000	
51	Ethyl methacrylate	69	8.705	8.705	(0.846)	2865961	250.000	252
97	1,4-Dioxane	88	7.220	7.220	(1.156)	295097	2500.00	2400
48	2-Nitropropane	43	7.263	7.263	(1.163)	762731	250.000	255
* 61	Chlorobenzene-d5	117	10.292	10.292	(1.000)	1198733	50.0000	

			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	70	Cyclohexanone	55	11.649	11.649	(1.132)	2431759	1250.00	1860
	68	cis-1,4-Dichloro-2-butene	53	11.710	11.710	(0.855)	1118835	250.000	281
	69	trans-1,4-Dichloro-2-butene	53	12.190	12.190	(0.890)	1039891	250.000	271
	82	Pentachloroethane	167	13.036	13.036	(0.952)	1520848	250.000	442
*	86	1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	610002	50.0000	
	88	Benzyl chloride	91	13.882	13.882	(1.013)	4942632	250.000	335
	91	bis(2-Chloroisopropyl)ether	45	14.301	14.301	(1.044)	1838648	250.000	233
$	35	Dibromofluoromethane	113	5.213	5.212	(0.834)	372251	50.0000	45.1
$	47	Toluene-d8	98	8.297	8.296	(0.806)	1641173	50.0000	46.2
$	71	Bromofluorobenzene	95	12.002	12.001	(0.876)	617641	50.0000	49.8

Data File: /chem/VOA8.i/020306v8.b/8v505.d
Date : 03-FEB-2006 10:21
Client ID: VSTD250S
Instrument: VOA8.i
Sample Info: |UVM060123-01A|SHORT|1|VOAF|1|
Purge Volume: 5.0
Operator: ACJ
Column phase: DB-624
Column diameter: 0.25



Report Date: 06-Feb-2006 09:02

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 04-FEB-2006 11:09
Lab File ID: 8v602.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: W8V060204-01 Quant Type: ISTD
Method: /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
M 1 Xylenes (total)	0.74522	0.76776	0.76776	0.050	3.02505	40.00000	Averaged	
$ 136 1,2-Dichloroethane-d4	0.30435	0.29667	0.29667	0.010	-2.52086	40.00000	Averaged	
M 2 1,2-Dichloroethylene (total	0.29844	0.31586	0.31586	0.050	5.83832	40.00000	Averaged	
M 135 1,3-Dichloropropylene	0.33326	0.41451	0.41451	0.050	24.38107	40.00000	Averaged	
3 Dichlorodifluoromethane	0.26875	0.24407	0.24407	0.050	-9.18246	40.00000	Averaged	
4 Chloromethane	51.73656	50.00000	0.43823	0.100	3.47312	40.00000	Linear	spcc
5 Vinyl chloride	0.25604	0.26021	0.26021	0.050	1.62933	20.00000	Averaged	ccc
6 Bromomethane	49.81651	50.00000	0.18421	0.050	-0.36698	40.00000	Linear	
7 Chloroethane	0.20314	0.19812	0.19812	0.050	-2.47020	40.00000	Averaged	
8 Trichlorofluoromethane	0.43811	0.41405	0.41405	0.050	-5.49149	40.00000	Averaged	
134 Ethyl Ether	0.28710	0.30583	0.30583	0.010	6.52343	40.00000	Averaged	
10 Acetone	294	250	0.11128	0.050	17.75842	40.00000	Linear	
15 Acetonitrile	0.04593	0.04508	0.04508	0.010	-1.84406	40.00000	Averaged	
11 1,1-Dichloroethylene	0.45882	0.46806	0.46806	0.050	2.01465	20.00000	Averaged	ccc
128 Methyl acetate	0.29809	0.25727	0.25727	0.010	-13.69211	40.00000	Averaged	
13 Iodomethane	0.42916	0.39511	0.39511	0.050	-7.93251	40.00000	Averaged	
17 Methylene chloride	68.74376	50.00000	0.31014	0.050	37.48753	40.00000	Linear	
14 Carbon disulfide	277	250	0.78578	0.050	10.62757	40.00000	Linear	
20 tert-Butyl methyl ether	0.68161	0.75494	0.75494	0.050	10.75827	40.00000	Averaged	
21 trans-1,2-Dichloroethylene	0.29089	0.30378	0.30378	0.050	4.43288	40.00000	Averaged	
23 Vinyl acetate	0.48157	0.70235	0.70235	0.010	45.84417	40.00000	Averaged	<-
22 1,1-Dichloroethane	0.53533	0.57547	0.57547	0.100	7.49825	40.00000	Averaged	spcc
30 2-Butanone	0.16299	0.17443	0.17443	0.030	7.01493	40.00000	Averaged	
31 cis-1,2-Dichloroethylene	0.30598	0.32794	0.32794	0.050	7.17543	40.00000	Averaged	
25 2,2-Dichloropropane	0.34345	0.41899	0.41899	0.050	21.99551	40.00000	Averaged	
32 Chloroform	0.48346	0.51218	0.51218	0.010	5.94226	20.00000	Averaged	ccc
29 Bromochloromethane	0.13067	0.14443	0.14443	0.010	10.52650	40.00000	Averaged	
$ 35 Dibromofluoromethane	0.24690	0.25062	0.25062	0.010	1.50844	40.00000	Averaged	
36 1,1,1-Trichloroethane	0.37206	0.40975	0.40975	0.010	10.13086	40.00000	Averaged	
129 Cyclohexane	0.45456	0.47404	0.47404	0.010	4.28711	40.00000	Averaged	
34 1,1-Dichloropropene	0.36565	0.41126	0.41126	0.010	12.47178	40.00000	Averaged	
131 n-Butyl alcohol	5699	5000	0.00828	0.009	13.97103	40.00000	Linear	<-
33 Carbon tetrachloride	0.24718	0.31230	0.31230	0.010	26.34467	40.00000	Averaged	
37 1,2-Dichloroethane	0.35938	0.38670	0.38670	0.010	7.60295	40.00000	Averaged	
38 Benzene	61.24257	50.00000	1.23490	0.010	22.48514	40.00000	Linear	

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 04-FEB-2006 11:09
Lab File ID: 8v602.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: W8V060204-01 Quant Type: ISTD
Method: /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
39 Trichloroethylene	0.28359	0.30374	0.30374	0.010	7.10569	40.00000	Averaged
41 1,2-Dichloropropane	0.31093	0.35364	0.35364	0.010	13.73497	20.00000	Averaged ccc
130 Methylcyclohexane	0.54920	0.57451	0.57451	0.010	4.60730	40.00000	Averaged
45 Bromodichloromethane	0.31379	0.36619	0.36619	0.010	16.69802	40.00000	Averaged
43 Dibromomethane	0.15239	0.17061	0.17061	0.010	11.96016	40.00000	Averaged
44 2-Chloroethylvinyl ether	0.17690	0.17105	0.17105	0.010	-3.30401	40.00000	Averaged
49 4-Methyl-2-pentanone	0.18742	0.19562	0.19562	0.010	4.37264	40.00000	Averaged
46 cis-1,3-Dichloropropylene	0.36352	0.44546	0.44546	0.010	22.53804	40.00000	Averaged
$ 47 Toluene-d8	1.48226	1.41474	1.41474	0.010	-4.55515	40.00000	Averaged
50 Toluene	1.03463	1.03236	1.03236	0.010	-0.21929	20.00000	Averaged ccc
53 trans-1,3-Dichloropropylene	0.44697	0.52916	0.52916	0.010	18.38766	40.00000	Averaged
54 1,1,2-Trichloroethane	0.27919	0.30345	0.30345	0.010	8.68829	40.00000	Averaged
55 2-Hexanone	0.34284	0.36245	0.36245	0.010	5.71740	40.00000	Averaged
52 1,3-Dichloropropane	0.56189	0.60034	0.60034	0.010	6.84383	40.00000	Averaged
56 Tetrachloroethylene	0.31861	0.32127	0.32127	0.010	0.83603	40.00000	Averaged
57 Dibromochloromethane	0.29597	0.34192	0.34192	0.010	15.52654	40.00000	Averaged
59 1,2-Dibromoethane	0.32122	0.33700	0.33700	0.010	4.91203	40.00000	Averaged
62 Chlorobenzene	1.06259	1.10282	1.10282	0.300	3.78629	40.00000	Averaged spcc
60 1,1,1,2-Tetrachloroethane	0.30551	0.35964	0.35964	0.010	17.71749	40.00000	Averaged
58 Ethylbenzene	1.86697	1.89506	1.89506	0.010	1.50479	20.00000	Averaged ccc
63 m,p-Xylenes	0.74776	0.75781	0.75781	0.010	1.34345	40.00000	Averaged
64 o-Xylene	0.74012	0.78766	0.78766	0.010	6.42368	40.00000	Averaged
65 Styrene	1.17115	1.24128	1.24128	0.010	5.98807	40.00000	Averaged
66 Bromoform	53.58064	50.00000	0.40320	0.100	7.16127	40.00000	Linear spcc
67 Isopropylbenzene	3.40685	3.83008	3.83008	0.010	12.42283	40.00000	Averaged
73 1,1,2,2-Tetrachloroethane	0.86398	0.93926	0.93926	0.300	8.71314	40.00000	Averaged spcc
$ 71 Bromofluorobenzene	53.31609	50.00000	1.08137	0.010	6.63217	40.00000	Linear
74 1,2,3-Trichloropropane	0.24792	0.25812	0.25812	0.010	4.11671	40.00000	Averaged
75 Bromobenzene	0.83812	0.85440	0.85440	0.010	1.94200	40.00000	Averaged
76 n-Propylbenzene	4.36734	4.54254	4.54254	0.010	4.01159	40.00000	Averaged
77 2-Chlorotoluene	2.59512	2.72612	2.72612	0.010	5.04787	40.00000	Averaged
78 1,3,5-Trimethylbenzene	2.93216	2.70970	2.70970	0.010	-7.58680	40.00000	Averaged
80 4-Chlorotoluene	2.88776	2.84826	2.84826	0.010	-1.36762	40.00000	Averaged
81 tert-Butylbenzene	2.89266	2.98679	2.98679	0.010	3.25425	40.00000	Averaged
79 1,2,4-Trimethylbenzene	3.01622	2.79353	2.79353	0.010	-7.38284	40.00000	Averaged
83 sec-Butylbenzene	4.16179	4.32597	4.32597	0.010	3.94481	40.00000	Averaged

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 04-FEB-2006 11:09
Lab File ID: 8v602.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: W8V060204-01 Quant Type: ISTD
Method: /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
84 4-Isopropyltoluene	3.13060	2.89362	2.89362	0.010	-7.56968	40.00000	Averaged
85 1,3-Dichlorobenzene	1.69888	1.69818	1.69818	0.010	-0.04090	40.00000	Averaged
87 1,4-Dichlorobenzene	1.71345	1.74121	1.74121	0.010	1.62003	40.00000	Averaged
89 n-Butylbenzene	3.05791	2.95766	2.95766	0.010	-3.27825	40.00000	Averaged
90 1,2-Dichlorobenzene	1.61947	1.67108	1.67108	0.010	3.18688	40.00000	Averaged
92 1,2-Dibromo-3-chloropropane	0.14594	0.16571	0.16571	0.010	13.55041	40.00000	Averaged
93 1,2,4-Trichlorobenzene	0.97216	1.13044	1.13044	0.010	16.28064	40.00000	Averaged
94 Hexachlorobutadiene	0.55562	0.56490	0.56490	0.010	1.66941	40.00000	Averaged
95 Naphthalene	2.30035	2.39903	2.39903	0.010	4.28965	40.00000	Averaged
96 1,2,3-Trichlorobenzene	0.90357	1.02149	1.02149	0.010	13.05053	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.65606
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v602.d
Lab Smp Id: W8V060204-01 Client Smp ID: VSTD050
Inj Date : 04-FEB-2006 11:09
Operator : ACJ Inst ID: VOA8.i
Smp Info : |W8V060204-01|CCV|1|VOAF|1|
Misc Info : GEL 5ML N/A VSTD050
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:02 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubL+.sub
Target Version: 3.50
Processing Host: kilroy

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
M 1 Xylenes (total)	106				2728531	150.000	154
$ 136 1,2-Dichloroethane-d4	65	5.796	5.796	(0.928)	484839	50.0000	48.7
M 2 1,2-Dichloroethylene (total)	96				1032387	100.000	106
M 135 1,3-Dichloropropylene	75				1354840	100.000	124
3 Dichlorodifluoromethane	85	1.755	1.755	(0.281)	398876	50.0000	45.4
4 Chloromethane	50	1.837	1.837	(0.294)	716185	50.0000	51.7
5 Vinyl chloride	62	1.937	1.937	(0.310)	425250	50.0000	50.8
6 Bromomethane	94	2.207	2.207	(0.353)	301042	50.0000	49.8
7 Chloroethane	64	2.266	2.266	(0.363)	323782	50.0000	48.8
8 Trichlorofluoromethane	101	2.466	2.466	(0.395)	676663	50.0000	47.2
134 Ethyl Ether	59	2.669	2.669	(0.427)	499799	50.0000	53.3
10 Acetone	43	2.760	2.760	(0.442)	909292	250.000	294
15 Acetonitrile	41	2.961	2.961	(0.474)	1841907	1250.00	1230
11 1,1-Dichloroethylene	61	2.955	2.955	(0.473)	764935	50.0000	51.0
128 Methyl acetate	43	3.211	3.211	(0.514)	2102254	250.000	216

							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	13 Iodomethane	142	3.198	3.198	(0.512)	3228577	250.000	230
	17 Methylene chloride	84	3.369	3.369	(0.539)	506842	50.0000	68.7
	14 Carbon disulfide	76	3.405	3.405	(0.545)	6420827	250.000	276
	20 tert-Butyl methyl ether	73	3.636	3.636	(0.582)	1233766	50.0000	55.4
	21 trans-1,2-Dichloroethylene	96	3.716	3.716	(0.595)	496452	50.0000	52.2
	23 Vinyl acetate	43	4.135	4.135	(0.662)	5739042	250.000	365
	22 1,1-Dichloroethane	63	4.129	4.129	(0.661)	940464	50.0000	53.7
	30 2-Butanone	43	4.567	4.567	(0.731)	1425279	250.000	268
	31 cis-1,2-Dichloroethylene	96	4.798	4.798	(0.768)	535935	50.0000	53.6
	25 2,2-Dichloropropane	77	4.811	4.811	(0.770)	684741	50.0000	61.0
	32 Chloroform	83	4.993	4.993	(0.799)	837036	50.0000	53.0
	29 Bromochloromethane	128	5.133	5.133	(0.822)	236032	50.0000	55.3
$	35 Dibromofluoromethane	113	5.218	5.218	(0.835)	409579	50.0000	50.8
	36 1,1,1-Trichloroethane	97	5.510	5.510	(0.882)	669640	50.0000	55.1
	129 Cyclohexane	84	5.607	5.607	(0.898)	774704	50.0000	52.1
	34 1,1-Dichloropropene	75	5.705	5.705	(0.913)	672097	50.0000	56.2
	131 n-Butyl alcohol	41	5.839	5.839	(0.935)	1353956	5000.00	5700
	33 Carbon tetrachloride	117	5.827	5.827	(0.933)	510382	50.0000	63.2
	37 1,2-Dichloroethane	62	5.906	5.906	(0.945)	631971	50.0000	53.8
	38 Benzene	78	5.966	5.966	(0.955)	2018140	50.0000	61.2
*	40 Fluorobenzene	96	6.246	6.246	(1.000)	1634250	50.0000	
	39 Trichloroethylene	95	6.763	6.763	(1.083)	496390	50.0000	53.6
	41 1,2-Dichloropropane	63	6.940	6.940	(1.111)	577938	50.0000	56.9
	130 Methylcyclohexane	83	6.964	6.964	(1.115)	938889	50.0000	52.3
	45 Bromodichloromethane	83	7.201	7.201	(1.153)	598448	50.0000	58.3
	43 Dibromomethane	93	7.220	7.220	(1.156)	278825	50.0000	56.0
	44 2-Chloroethylvinyl ether	63	7.664	7.664	(1.227)	1397715	250.000	242
	49 4-Methyl-2-pentanone	58	7.743	7.743	(0.752)	1158662	250.000	261
	46 cis-1,3-Dichloropropylene	75	7.937	7.937	(1.271)	727987	50.0000	61.3
$	47 Toluene-d8	98	8.296	8.296	(0.806)	1675942	50.0000	47.7
	50 Toluene	92	8.400	8.400	(0.816)	1222961	50.0000	49.9
	53 trans-1,3-Dichloropropylene	75	8.601	8.601	(0.835)	626853	50.0000	59.2
	54 1,1,2-Trichloroethane	83	8.789	8.789	(0.853)	359476	50.0000	54.3
	55 2-Hexanone	43	8.899	8.899	(0.864)	2146817	250.000	264
	52 1,3-Dichloropropane	76	9.124	9.124	(0.886)	711184	50.0000	53.4
	56 Tetrachloroethylene	164	9.300	9.300	(0.903)	380589	50.0000	50.4
	57 Dibromochloromethane	129	9.428	9.428	(0.916)	405051	50.0000	57.8
	59 1,2-Dibromoethane	107	9.702	9.702	(0.942)	399218	50.0000	52.4
*	61 Chlorobenzene-d5	117	10.298	10.298	(1.000)	1184627	50.0000	
	62 Chlorobenzene	112	10.347	10.347	(1.005)	1306434	50.0000	51.9
	60 1,1,1,2-Tetrachloroethane	131	10.426	10.426	(1.012)	426036	50.0000	58.8
	58 Ethylbenzene	91	10.486	10.486	(1.018)	2244944	50.0000	50.8
	63 m,p-Xylenes	106	10.608	10.608	(1.030)	1795444	100.000	101
	64 o-Xylene	106	11.192	11.192	(1.087)	933087	50.0000	53.2
	65 Styrene	104	11.216	11.216	(1.089)	1470452	50.0000	53.0
	66 Bromoform	173	11.545	11.545	(0.843)	246530	50.0000	53.6
	67 Isopropylbenzene	105	11.734	11.734	(0.857)	2341859	50.0000	56.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
73	1,1,2,2-Tetrachloroethane	83	11.880	11.880	(0.867)	574298	50.0000	54.4
$ 71	Bromofluorobenzene	95	12.001	12.001	(0.876)	661194	50.0000	53.3
74	1,2,3-Trichloropropane	110	12.074	12.074	(0.881)	157827	50.0000	52.0
75	Bromobenzene	156	12.238	12.238	(0.893)	522414	50.0000	51.0
76	n-Propylbenzene	91	12.311	12.311	(0.899)	2777489	50.0000	52.0
77	2-Chlorotoluene	91	12.488	12.488	(0.912)	1666854	50.0000	52.5
78	1,3,5-Trimethylbenzene	105	12.555	12.555	(0.916)	1656819	50.0000	46.2
80	4-Chlorotoluene	91	12.567	12.567	(0.917)	1741539	50.0000	49.3
81	tert-Butylbenzene	119	13.054	13.054	(0.953)	1826241	50.0000	51.6
79	1,2,4-Trimethylbenzene	105	13.096	13.096	(0.956)	1708076	50.0000	46.3
83	sec-Butylbenzene	105	13.370	13.370	(0.976)	2645066	50.0000	52.0
84	4-Isopropyltoluene	119	13.583	13.583	(0.992)	1769275	50.0000	46.2
85	1,3-Dichlorobenzene	146	13.595	13.595	(0.992)	1038336	50.0000	50.0
* 86	1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	611439	50.0000	
87	1,4-Dichlorobenzene	146	13.741	13.741	(1.003)	1064645	50.0000	50.8
89	n-Butylbenzene	91	14.173	14.173	(1.035)	1808431	50.0000	48.4
90	1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	1021762	50.0000	51.6
92	1,2-Dibromo-3-chloropropane	75	15.341	15.341	(1.120)	101324	50.0000	56.8
93	1,2,4-Trichlorobenzene	180	16.704	16.704	(1.219)	691194	50.0000	58.1
94	Hexachlorobutadiene	225	17.014	17.014	(1.242)	345400	50.0000	50.8
95	Naphthalene	128	17.002	17.002	(1.241)	1466859	50.0000	52.1
96	1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	624579	50.0000	56.5

Data File: /chem/VOA8.i/020406v8.b/8v602.d
Date : 04-FEB-2006 11:09
Client ID: VSTD050
Sample Info: IW8V060204-01ICCV1IVOAF1I
Purge Volume: 5.0
Column phase: DB-624
Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25
Y (x10^6)
Min
/chem/VOA8.i/020406v8.b/8v602.d
-1,3-Dichloropropylene
-Dichlorodifluoromethane
-Chloromethane
-Vinyl chloride
-Bromomethane+
-Trichlorofluoromethane
-Ethyl Ether
-Acetone
-Acetonitrile+
-Xylenes (total)
-Methyl acetate+
-Methylene chloride+
-tert-Butyl methyl ether
-trans-1,2-Dichloroethylen
-1,2-Dichloroethylene (tot
-Vinyl acetate+
-2-Butanone
-cis-1,2-Dichloroethylene+
-Chloroform
-Bromochloromethane
-Dibromofluoromethane
-1,1,1-Trichloroethane
-Cyclohexane
-1,1-Dichloropropene
-1,2-Dichloroethane-d4+
-1,2-Dichloroethane+
-Fluorobenzene
-Trichloroethylene
-1,2-Dichloropropane+
-Bromodichloromethane+
-2-Chloroethylvinyl ether
4-Methyl-2-pentanone
-cis-1,3-Dichloropropylene
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropyle
-1,1,2-Trichloroethane
-2-Hexanone
-1,3-Dichloropropane
-Tetrachloroethylene
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5
-Ethylbenzene
m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene
-1,1,2,2-Tetrachloroethane
-Bromobenzene
-1,2,3-Trichloropropane
-n-Propylbenzene
-2-Chlorotoluene
1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
-1,4-Dichlorobenzene-d4
4-Isopropyltoluene+
-n-Butylbenzene
-1,2-Dichlorobenzene
-1,2-Dibromo-3-chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene+
-1,2,3-Trichlorobenzene
Page 1

General Engineering Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: VOA8.i Injection Date: 04-FEB-2006 12:38
Lab File ID: 8v605.d Init. Cal. Date(s): 11-JAN-2006 11-JAN-2006
Analysis Type: WATER Init. Cal. Times: 11:07 19:09
Lab Sample ID: UVM060123-01A Quant Type: ISTD
Method: /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
9 Acrolein	0.04643	0.02280	0.02280	0.001	-50.88255	40.00000	Averaged	<-
$ 136 1,2-Dichloroethane-d4	0.30435	0.26061	0.26061	0.010	-14.36937	40.00000	Averaged	
12 Trichlorotrifluoroethane	0.11866	0.10390	0.10390	0.050	-12.43743	40.00000	Averaged	
16 Allyl chloride	0.16561	0.15438	0.15438	0.010	-6.77852	40.00000	Averaged	
18 Acrylonitrile	0.12774	0.10884	0.10884	0.010	-14.79083	40.00000	Averaged	
24 2-Chloro-1,3-butadiene	0.50535	0.53247	0.53247	0.010	5.36638	40.00000	Averaged	
28 Propionitrile	0.05220	0.04240	0.04240	0.010	-18.76871	40.00000	Averaged	
26 Ethyl acetate	0.33401	0.27637	0.27637	0.010	-17.25632	40.00000	Averaged	
27 Methacrylonitrile	0.20568	0.17928	0.17928	0.010	-12.83795	40.00000	Averaged	
19 Isobutyl alcohol	0.01417	0.01039	0.01039	0.005	-26.69654	40.00000	Averaged	
72 Tetrahydrofuran	184	250	0.25565	0.010	-26.45983	40.00000	Linear	
42 Methyl methacrylate	0.17912	0.17357	0.17357	0.010	-3.09626	40.00000	Averaged	
51 Ethyl methacrylate	0.47386	0.43066	0.43066	0.010	-9.11645	40.00000	Averaged	
97 1,4-Dioxane	0.00368	0.00258	0.00258	0.003	-29.90766	40.00000	Averaged	<-
48 2-Nitropropane	192	250	0.06780	0.010	-23.29089	40.00000	Linear	
70 Cyclohexanone	0.05441	0.07144	0.07144	0.010	31.30071	40.00000	Averaged	
68 cis-1,4-Dichloro-2-butene	0.32595	0.31043	0.31043	0.010	-4.76136	40.00000	Averaged	
69 trans-1,4-Dichloro-2-butene	0.31499	0.28952	0.28952	0.010	-8.08493	40.00000	Averaged	
82 Pentachloroethane	0.28192	0.45104	0.45104	0.010	59.98886	40.00000	Averaged	<-
88 Benzyl chloride	285	250	1.38320	0.010	14.14631	40.00000	Linear	
91 bis(2-Chloroisopropyl)ether	0.64703	0.47990	0.47990	0.010	-25.83115	40.00000	Averaged	
$ 35 Dibromofluoromethane	0.24690	0.22119	0.22119	0.010	-10.41371	40.00000	Averaged	
$ 47 Toluene-d8	1.48226	1.37738	1.37738	0.010	-7.07599	40.00000	Averaged	
$ 71 Bromofluorobenzene	49.24586	50.00000	1.00117	0.010	-1.50827	40.00000	Linear	

Average %D / Drift Results.

Calculated Average %D/Drift = 18.13196
Maximun Average %D/Drift = 20.00000
* Passed Average %D/Drift Test.

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v605.d
Lab Smp Id: UVM060123-01A Client Smp ID: VSTD250S
Inj Date : 04-FEB-2006 12:38
Operator : ACJ Inst ID: VOA8.i
Smp Info : |UVM060123-01A|SHORT|1|VOAF|1|
Misc Info : GEL 5ML N/A VSTD250S/VBLK01SCLS
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:01 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CALsubS+SS.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
9 Acrolein	56	2.717	2.717	(0.435)	188528	250.000	123
$ 136 1,2-Dichloroethane-d4	65	5.795	5.795	(0.928)	430936	50.0000	42.8
12 Trichlorotrifluoroethane	85	2.893	2.893	(0.463)	859005	250.000	219
16 Allyl chloride	76	3.277	3.277	(0.525)	1276392	250.000	233
18 Acrylonitrile	53	3.417	3.417	(0.547)	899900	250.000	213
24 2-Chloro-1,3-butadiene	53	4.268	4.268	(0.683)	880461	50.0000	52.7
28 Propionitrile	54	4.554	4.554	(0.729)	350548	250.000	203
26 Ethyl acetate	43	4.810	4.810	(0.770)	2284990	250.000	207
27 Methacrylonitrile	41	4.840	4.840	(0.775)	1482227	250.000	218
19 Isobutyl alcohol	41	4.986	4.986	(0.798)	858847	2500.00	1830
72 Tetrahydrofuran	42	5.205	5.205	(0.380)	784291	250.000	184
42 Methyl methacrylate	69	7.073	7.073	(1.132)	1435053	250.000	242
* 40 Fluorobenzene	96	6.245	6.245	(1.000)	1653546	50.0000	
51 Ethyl methacrylate	69	8.703	8.703	(0.845)	2556462	250.000	227
97 1,4-Dioxane	88	7.225	7.225	(1.157)	213089	2500.00	1750
48 2-Nitropropane	43	7.261	7.261	(1.163)	560556	250.000	192

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
*	61 Chlorobenzene-d5	117	10.297	10.297	(1.000)	1187224	50.0000	
	70 Cyclohexanone	55	11.647	11.647	(1.131)	2120236	1250.00	1640
	68 cis-1,4-Dichloro-2-butene	53	11.708	11.708	(0.855)	952365	250.000	238
	69 trans-1,4-Dichloro-2-butene	53	12.195	12.195	(0.890)	888219	250.000	230
	82 Pentachloroethane	167	13.041	13.041	(0.952)	1383723	250.000	400
*	86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	613572	50.0000	
	88 Benzyl chloride	91	13.880	13.880	(1.013)	4243457	250.000	285
	91 bis(2-Chloroisopropyl)ether	45	14.300	14.300	(1.044)	1472261	250.000	185
$	35 Dibromofluoromethane	113	5.217	5.217	(0.835)	365742	50.0000	44.8
$	47 Toluene-d8	98	8.295	8.295	(0.806)	1635255	50.0000	46.5
$	71 Bromofluorobenzene	95	12.000	12.000	(0.876)	614287	50.0000	49.2

Data File: /chem/VOA8.i/020406v8.b/8v605.d

Page 1

Date : 04-FEB-2006 12:38

Client ID: VSTD250S

Instrument: VOA8.i

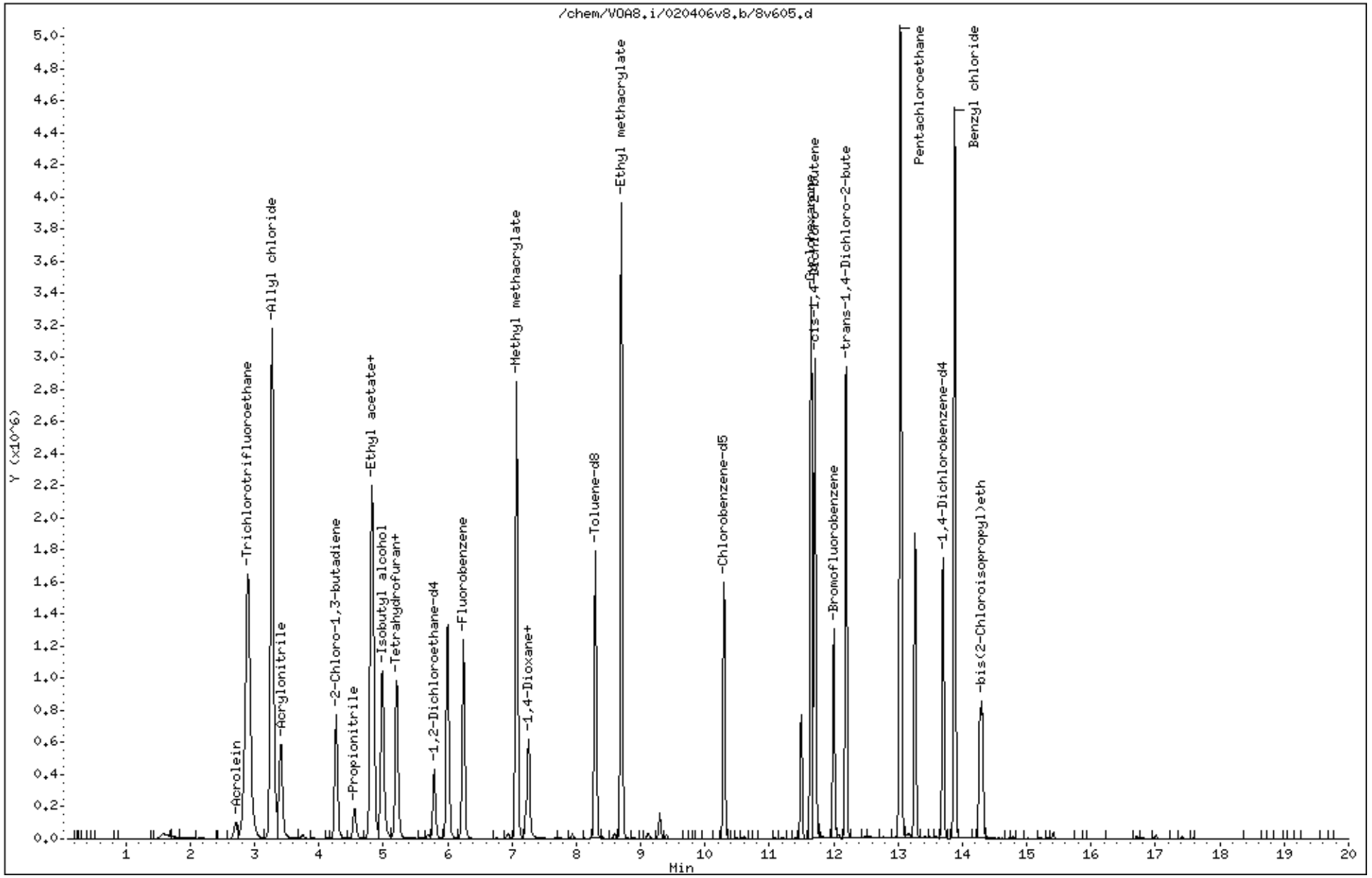
Sample Info: |UVM060123-01A|SHORT|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



QUALITY CONTROL DATA

Data File: /chem/VOA8.i/011106v8.b/8s301.d

Date : 11-JAN-2006 10:21

Client ID: BFB01

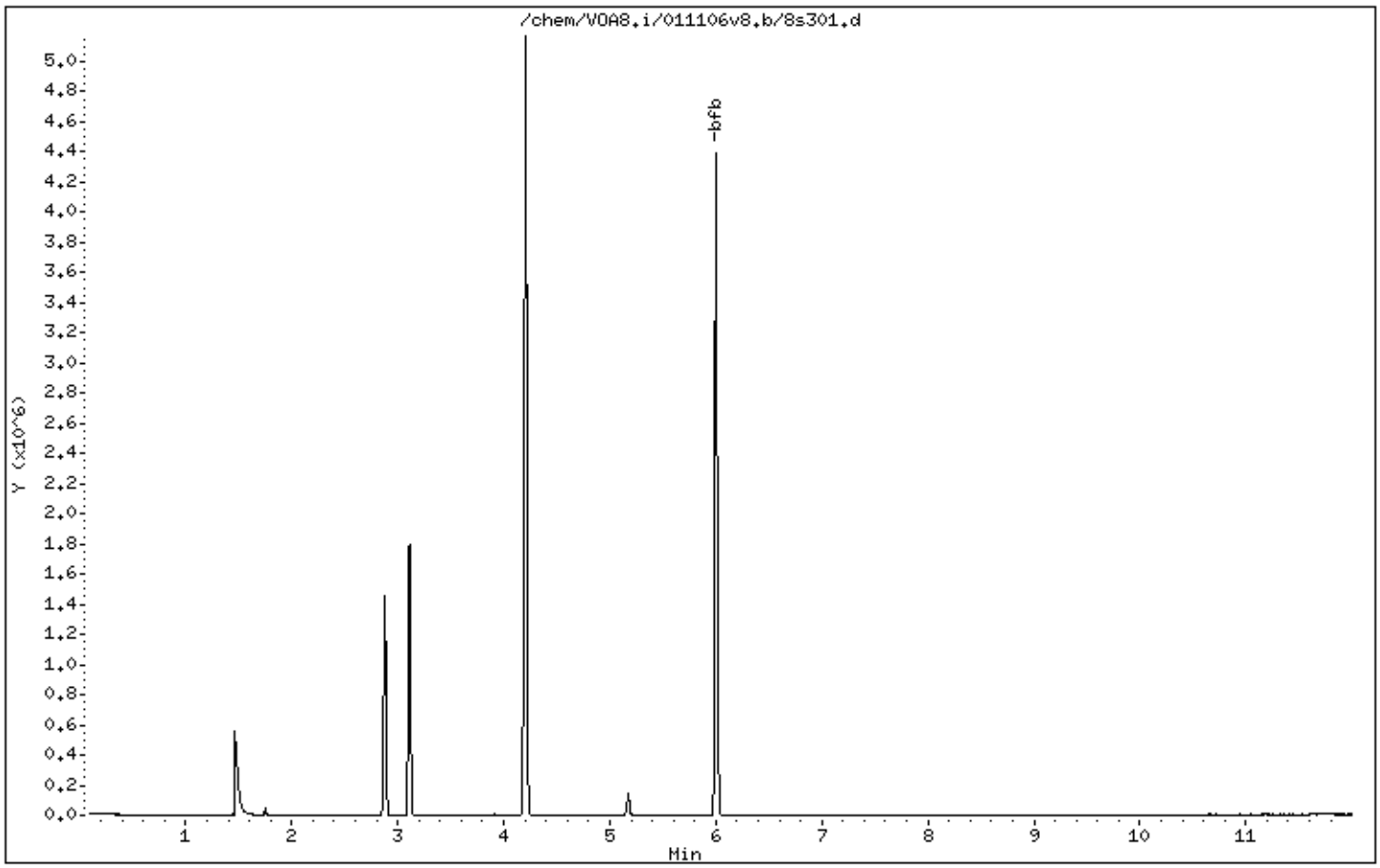
Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25



Data File: /chem/VOA8.i/011106v8.b/8s301.d

Date : 11-JAN-2006 10:21

Client ID: BFB01

Instrument: VOA8.i

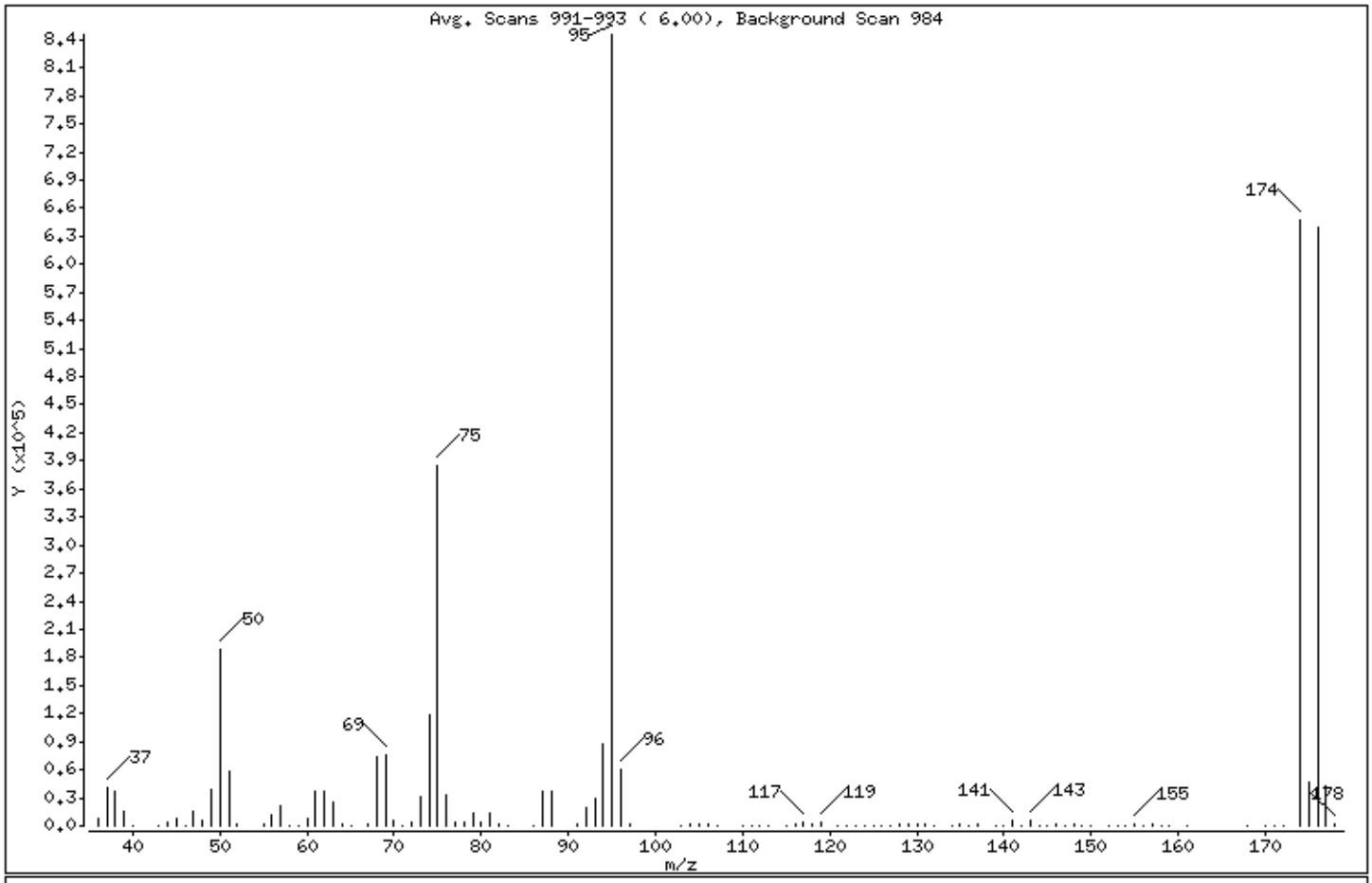
Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.20
75	30.00 - 60.00% of mass 95	45.63
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	76.56
175	5.00 - 9.00% of mass 174	5.54 (7.24)
176	95.00 - 101.00% of mass 174	75.53 (98.66)
177	5.00 - 9.00% of mass 176	5.14 (6.80)

Date : 11-JAN-2006 10:21

Client ID: BFB01 Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 8s301.d
Spectrum: Avg. Scans 991-993 (6.00), Background Scan 984
Location of Maximum: 95.00
Number of points: 113

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6832	70.00	5118	110.00	199	143.00	5391
37.00	41144	71.00	188	111.00	505	144.00	333
38.00	37496	72.00	3977	112.00	309	145.00	609
39.00	15008	73.00	30568	113.00	583	146.00	1053
40.00	505	74.00	118584	115.00	709	147.00	423
43.00	217	75.00	385792	116.00	1903	148.00	1581
44.00	3883	76.00	32936	117.00	3490	149.00	384
45.00	7802	77.00	4856	118.00	2392	150.00	952
46.00	419	78.00	3269	119.00	2925	152.00	418
47.00	14665	79.00	12714	121.00	67	153.00	607
48.00	5433	80.00	4119	122.00	124	154.00	306
49.00	38040	81.00	12844	123.00	308	155.00	1995
50.00	187648	82.00	2187	124.00	376	156.00	286
51.00	57728	83.00	397	125.00	70	157.00	1248
52.00	2555	86.00	961	126.00	195	158.00	242
55.00	2229	87.00	37304	127.00	322	159.00	810
56.00	11669	88.00	36776	128.00	2704	161.00	854
57.00	21768	91.00	1995	129.00	1393	168.00	63
58.00	919	92.00	19688	130.00	2446	170.00	222
59.00	58	93.00	29384	131.00	1059	171.00	433
60.00	6909	94.00	87200	132.00	63	172.00	474
61.00	36128	95.00	845440	134.00	113	174.00	647232
62.00	36632	96.00	59456	135.00	1049	175.00	46864
63.00	25432	97.00	1735	136.00	200	176.00	638528
64.00	2093	103.00	215	137.00	1180	177.00	43424
65.00	106	104.00	2437	139.00	236	178.00	1164
67.00	1219	105.00	994	140.00	371		
68.00	73648	106.00	2540	141.00	6189		
69.00	75176	107.00	732	142.00	778		

Data File: /chem/VOA8.i/020206v8.b/8v401.d

Date : 02-FEB-2006 09:11

Client ID: BFB01

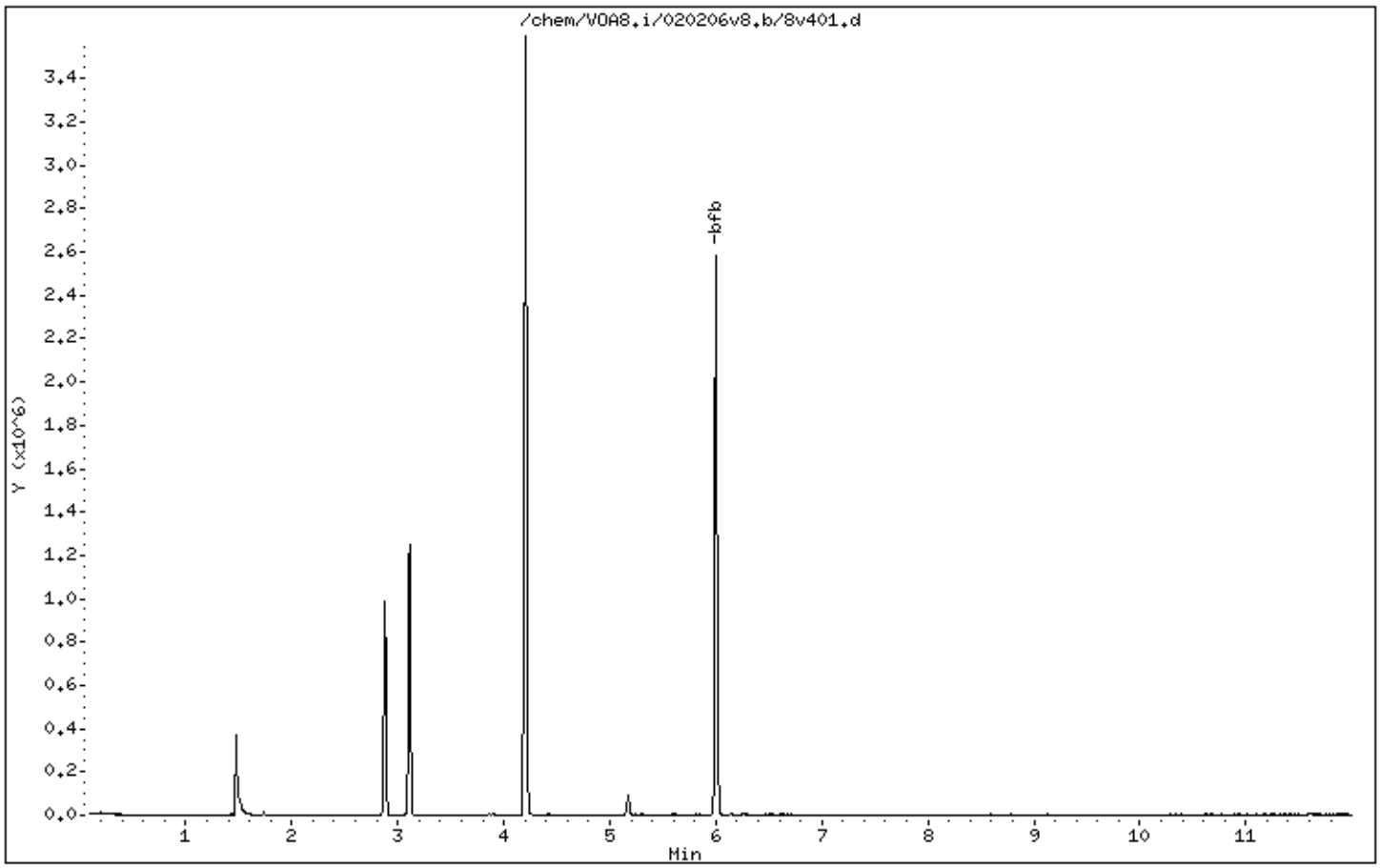
Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25



Data File: /chem/VOA8.i/020206v8.b/8v401.d

Date : 02-FEB-2006 09:11

Client ID: BFB01

Instrument: VOA8.i

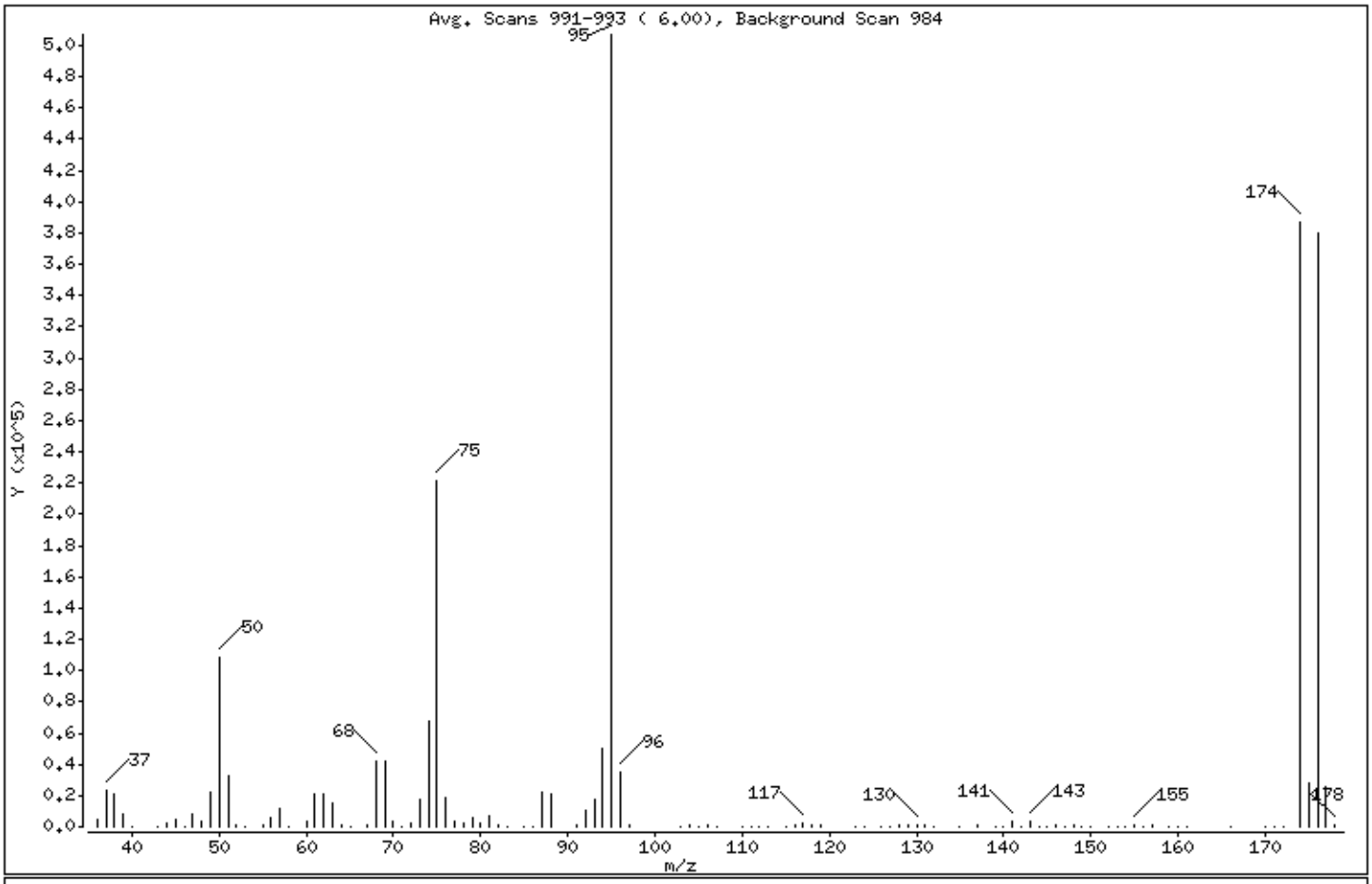
Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.40
75	30.00 - 60.00% of mass 95	43.71
96	5.00 - 9.00% of mass 95	6.87
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	76.41
175	5.00 - 9.00% of mass 174	5.44 (7.11)
176	95.00 - 101.00% of mass 174	74.84 (97.94)
177	5.00 - 9.00% of mass 176	5.03 (6.73)

Date : 02-FEB-2006 09:11

Client ID: BFB01 Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 8v401.d
Spectrum: Avg. Scans 991-993 (6.00), Background Scan 984
Location of Maximum: 95.00
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4578	69.00	42208	105.00	529	144.00	188
37.00	23096	70.00	3125	106.00	1499	145.00	388
38.00	21384	71.00	202	107.00	403	146.00	636
39.00	7981	72.00	2310	110.00	104	147.00	328
40.00	340	73.00	17136	111.00	122	148.00	1003
43.00	139	74.00	67024	112.00	133	149.00	338
44.00	2049	75.00	221568	113.00	287	150.00	243
45.00	4355	76.00	19088	115.00	300	152.00	270
46.00	217	77.00	3150	116.00	1205	153.00	492
47.00	8531	78.00	2159	117.00	1784	154.00	324
48.00	3171	79.00	6237	118.00	1141	155.00	1327
49.00	21616	80.00	2068	119.00	1553	156.00	177
50.00	108504	81.00	7234	123.00	125	157.00	898
51.00	33008	82.00	1367	124.00	161	159.00	421
52.00	1373	83.00	115	126.00	231	160.00	58
53.00	55	85.00	51	127.00	66	161.00	335
55.00	1170	86.00	487	128.00	1481	166.00	72
56.00	6294	87.00	22616	129.00	672	170.00	132
57.00	12178	88.00	21480	130.00	1591	171.00	85
58.00	577	91.00	1160	131.00	583	172.00	168
60.00	4042	92.00	10782	132.00	52	174.00	387392
61.00	20656	93.00	17864	135.00	530	175.00	27560
62.00	21488	94.00	49552	137.00	618	176.00	379456
63.00	14729	95.00	507008	139.00	53	177.00	25520
64.00	1232	96.00	34824	140.00	195	178.00	766
65.00	188	97.00	1181	141.00	3660		
67.00	1172	103.00	116	142.00	385		
68.00	42520	104.00	1529	143.00	3020		

Data File: /chem/VOA8.i/020306v8.b/8v501.d

Date : 03-FEB-2006 08:35

Client ID: BFB01

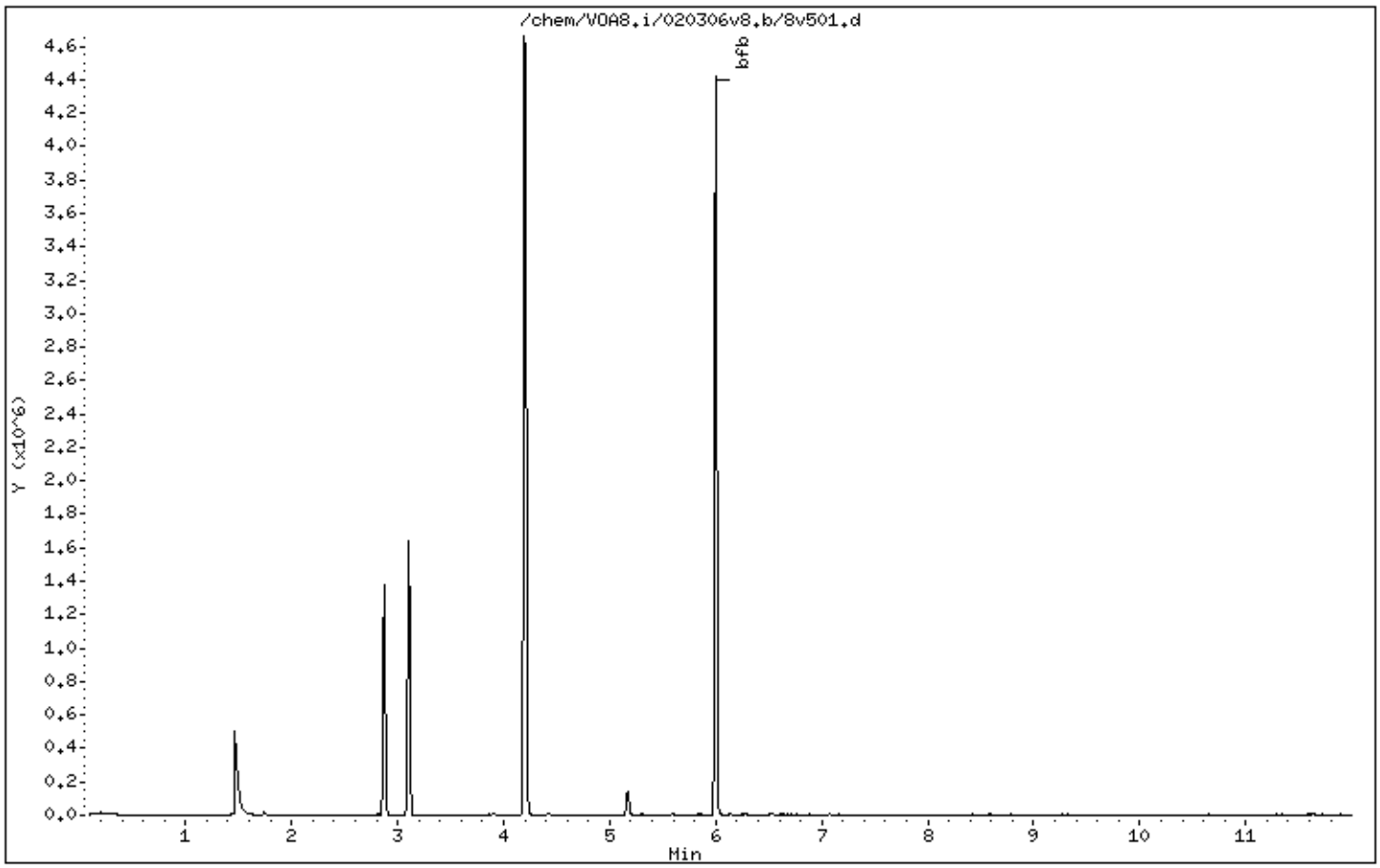
Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v501.d

Date : 03-FEB-2006 08:35

Client ID: BFB01

Instrument: VOA8.i

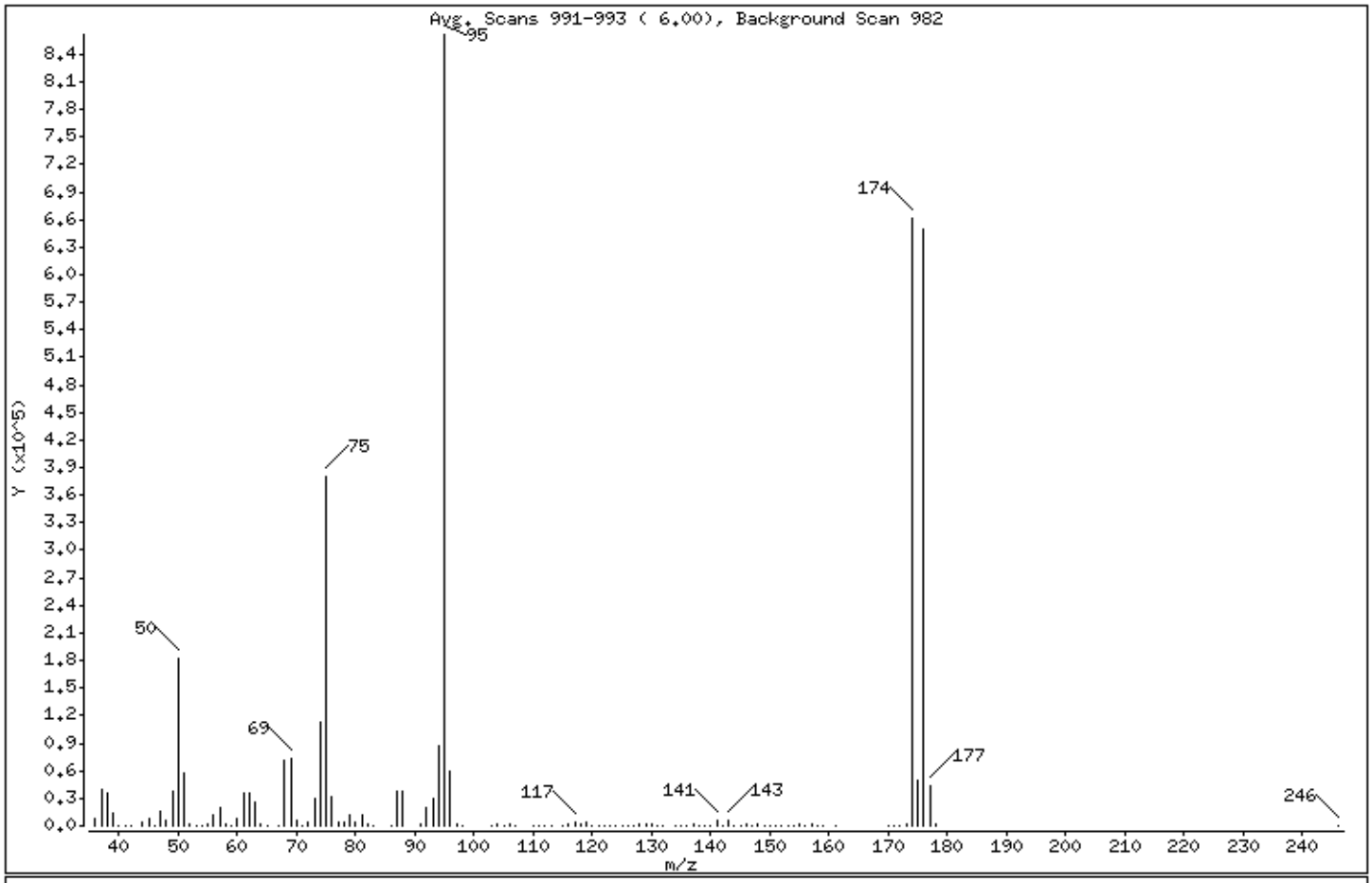
Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.19
75	30.00 - 60.00% of mass 95	44.03
96	5.00 - 9.00% of mass 95	6.88
173	Less than 2.00% of mass 174	0.23 (0.30)
174	50.00 - 100.00% of mass 95	76.86
175	5.00 - 9.00% of mass 174	5.65 (7.36)
176	95.00 - 101.00% of mass 174	75.31 (97.99)
177	5.00 - 9.00% of mass 176	5.11 (6.78)

Date : 03-FEB-2006 08:35

Client ID: BFB01 Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 8v501.d
Spectrum: Avg. Scans 991-993 (6.00), Background Scan 982
Location of Maximum: 95.00
Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7820	69.00	72984	110.00	308	143.00	5583
37.00	40256	70.00	5268	111.00	362	144.00	327
38.00	36600	71.00	118	112.00	230	145.00	514
39.00	13669	72.00	3479	113.00	329	146.00	1021
40.00	115	73.00	30376	115.00	775	147.00	630
41.00	139	74.00	113096	116.00	1979	148.00	1684
42.00	51	75.00	379264	117.00	3152	149.00	517
44.00	3547	76.00	32528	118.00	1819	150.00	660
45.00	7755	77.00	4430	119.00	3014	151.00	56
46.00	478	78.00	3403	120.00	66	152.00	428
47.00	15161	79.00	11901	121.00	58	153.00	606
48.00	5352	80.00	3502	122.00	54	154.00	576
49.00	36968	81.00	12673	123.00	234	155.00	1921
50.00	182528	82.00	2082	124.00	456	156.00	297
51.00	56936	83.00	378	125.00	233	157.00	1242
52.00	2694	86.00	637	126.00	281	158.00	160
53.00	52	87.00	37456	127.00	147	159.00	824
54.00	68	88.00	37440	128.00	2331	161.00	708
55.00	2151	91.00	1879	129.00	1010	170.00	186
56.00	10951	92.00	19208	130.00	2485	171.00	447
57.00	19888	93.00	30064	131.00	967	172.00	498
58.00	1347	94.00	86728	132.00	131	173.00	2011
59.00	185	95.00	861376	134.00	143	174.00	662016
60.00	7013	96.00	59264	135.00	833	175.00	48704
61.00	35744	97.00	1804	136.00	71	176.00	648704
62.00	34728	98.00	55	137.00	1048	177.00	43984
63.00	25040	103.00	222	138.00	55	178.00	1458
64.00	2377	104.00	2466	139.00	296	246.00	53
65.00	78	105.00	939	140.00	476		
67.00	606	106.00	2680	141.00	5759		
68.00	70808	107.00	933	142.00	662		

Data File: /chem/VOA8.i/020406v8.b/8v601.d

Date : 04-FEB-2006 10:51

Client ID: BFB01

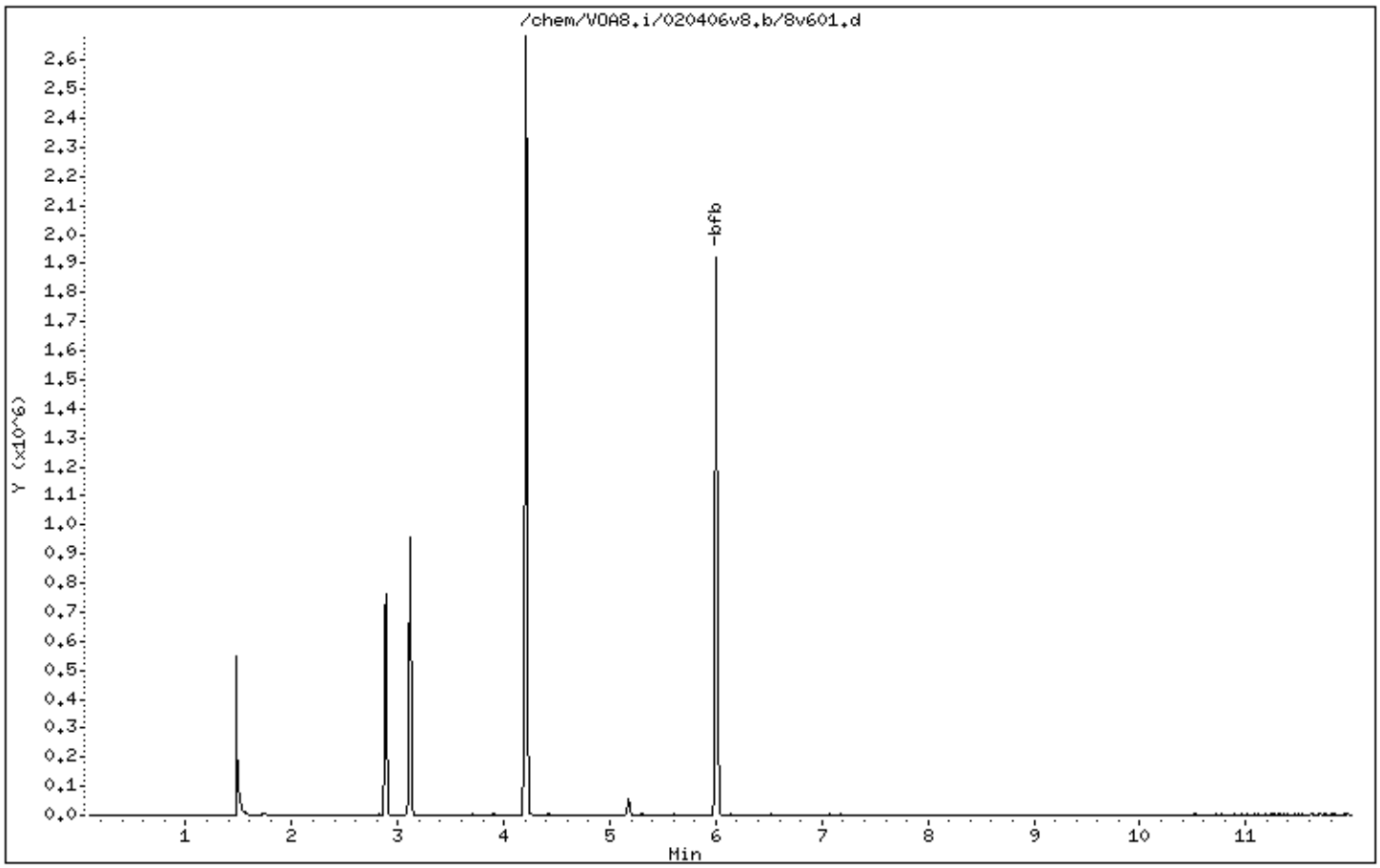
Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25



Data File: /chem/VOA8.i/020406v8.b/8v601.d

Date : 04-FEB-2006 10:51

Client ID: BFB01

Instrument: VOA8.i

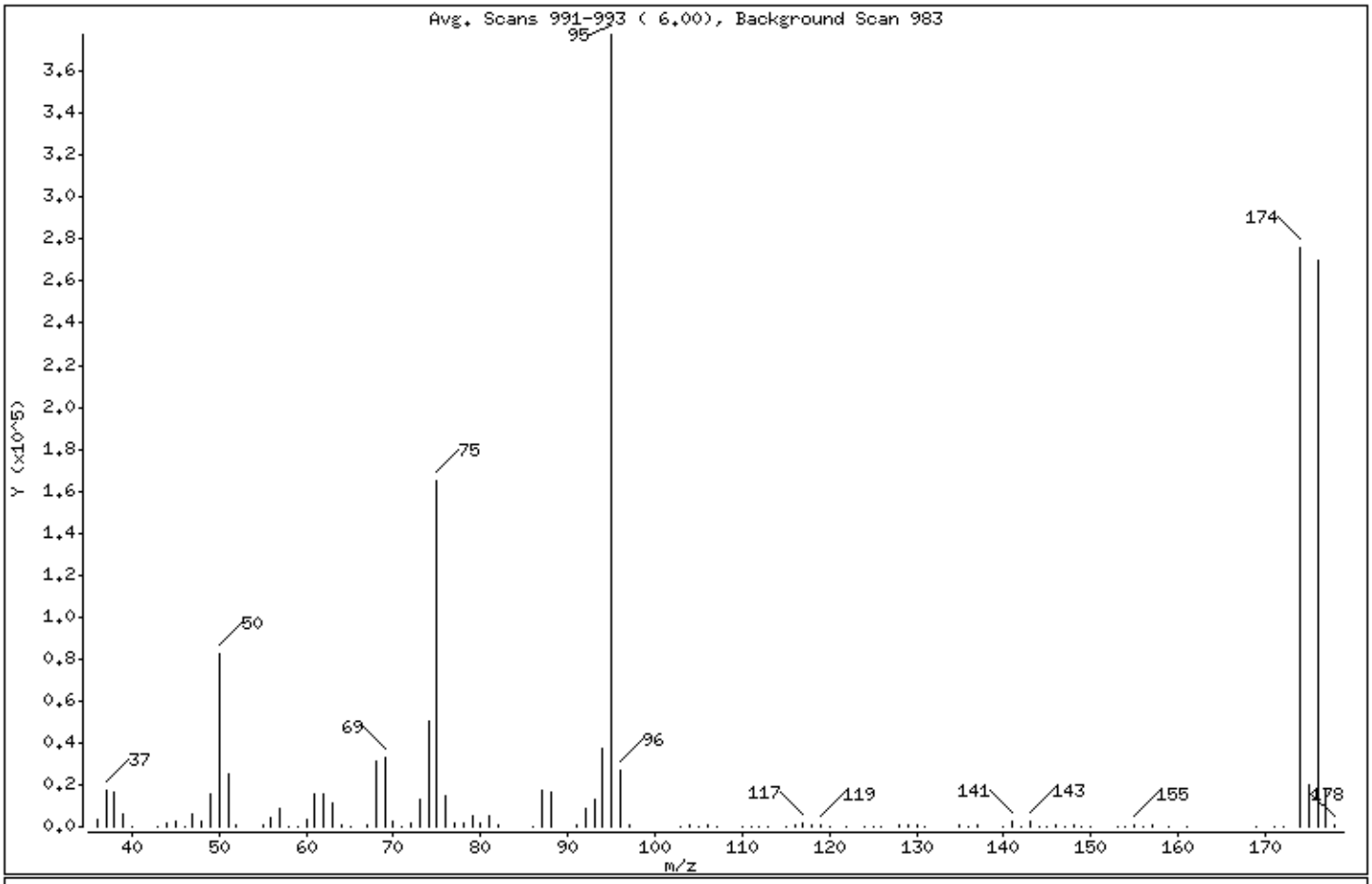
Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.83
75	30.00 - 60.00% of mass 95	43.74
96	5.00 - 9.00% of mass 95	7.02
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	73.10
175	5.00 - 9.00% of mass 174	5.23 (7.16)
176	95.00 - 101.00% of mass 174	71.59 (97.94)
177	5.00 - 9.00% of mass 176	4.82 (6.74)

Data File: /chem/VOA8.i/020406v8.b/8v601.d

Date : 04-FEB-2006 10:51

Client ID: BFB01 Instrument: VOA8.i

Sample Info: |UVM051215-02|BFB|1|VOAF|1|

Operator: ACJ

Column phase: RTX-Volatiles Column diameter: 0.25

Data File: 8v601.d
Spectrum: Avg. Scans 991-993 (6.00), Background Scan 983
Location of Maximum: 95.00
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3106	68.00	31504	105.00	359	143.00	2598
37.00	17120	69.00	33280	106.00	1105	144.00	54
38.00	16480	70.00	2299	107.00	167	145.00	185
39.00	6360	71.00	64	110.00	56	146.00	544
40.00	38	72.00	1536	111.00	159	147.00	339
43.00	75	73.00	12973	112.00	121	148.00	754
44.00	1646	74.00	50384	113.00	235	149.00	251
45.00	2822	75.00	165120	115.00	217	150.00	357
46.00	172	76.00	14607	116.00	992	153.00	218
47.00	6110	77.00	1990	117.00	1348	154.00	134
48.00	2602	78.00	1692	118.00	986	155.00	683
49.00	15733	79.00	5156	119.00	1166	156.00	53
50.00	82416	80.00	1522	120.00	75	157.00	527
51.00	24744	81.00	5277	122.00	50	159.00	282
52.00	1179	82.00	1001	124.00	120	161.00	185
55.00	876	86.00	409	125.00	150	169.00	103
56.00	4650	87.00	17072	126.00	87	171.00	60
57.00	8726	88.00	16309	128.00	1120	172.00	303
58.00	366	91.00	687	129.00	453	174.00	275968
59.00	70	92.00	8585	130.00	1064	175.00	19760
60.00	3187	93.00	12715	131.00	414	176.00	270272
61.00	15948	94.00	37008	135.00	584	177.00	18208
62.00	15451	95.00	377536	136.00	113	178.00	480
63.00	11098	96.00	26488	137.00	545		
64.00	986	97.00	478	140.00	58		
65.00	159	103.00	61	141.00	2700		
67.00	1006	104.00	1256	142.00	302		

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025323**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 11:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025323**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 11:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	U	1.00	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025323**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 11:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025323**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 11:50**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.8	50.0	ug/L	100	(75%-119%)
Dibromofluoromethane	46.5	50.0	ug/L	93	(85%-120%)
Toluene-d8	46.1	50.0	ug/L	92	(79%-122%)

1E

EPA SAMPLE NO.

VBLK01

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 1201025323

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V508BESHL

Level: (low/med) LOW Date Received: 02/03/06

% Moisture: not dec. _____ Date Analyzed: 02/03/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.67	6.7	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v508beshl.d
Lab Smp Id: 1201025323 Client Smp ID: VBLK01
Inj Date : 03-FEB-2006 11:50
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201025323|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.245	6.246	(1.000)	1747110	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.292	(1.000)	1255425	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	644991	50.0000	
$ 35 Dibromofluoromethane	113	5.217	5.212	(0.835)	400782	46.4559	46.4
$ 47 Toluene-d8	98	8.295	8.296	(0.806)	1713859	46.0500	46.0
$ 71 Bromofluorobenzene	95	12.000	12.001	(0.876)	652355	49.7661	49.8

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v508beshl.d
Lab Smp Id: 1201025323 Client Smp ID: VBLK01
Inj Date : 03-FEB-2006 11:50
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201025323|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.245	3705557	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.674	499064	6.73399328	6.7	0		0	40

Data File: /chem/VOA8.i/020306v8.b/8v508beshl.d

Page 1

Date : 03-FEB-2006 11:50

Client ID: VBLK01

Instrument: VOA8.i

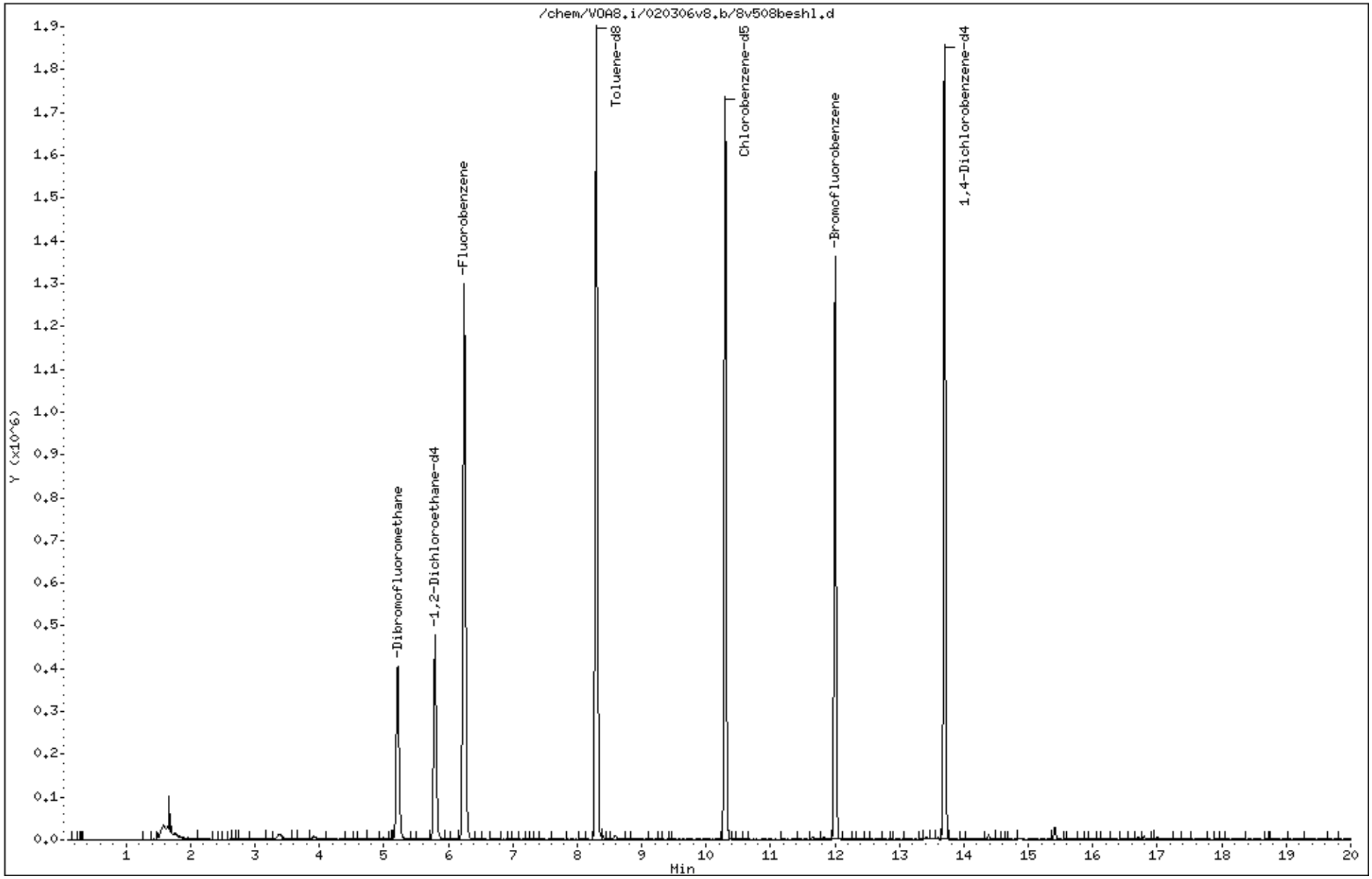
Sample Info: |1201025323|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Data File: /chem/VOA8.i/020306v8.b/8v508beshl.d Page 1

Date : 03-FEB-2006 11:50

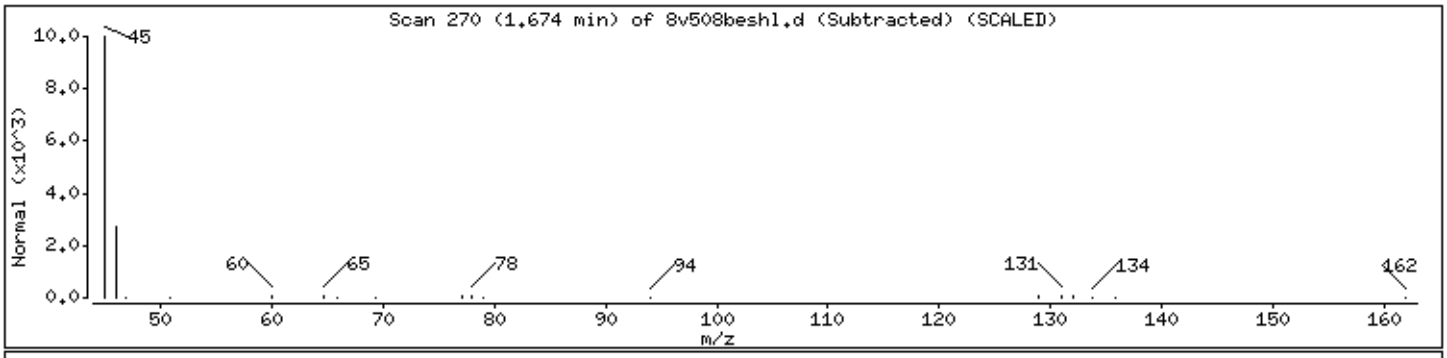
Client ID: VBLK01 Instrument: VOA8.i

Sample Info: |120102532315006241|1|VOAF|1|

Purge Volume: 5.0 Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026794**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 13:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026794**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 13:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107−12−0	Propionitrile	U	5.00	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026794**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 13:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	U	50.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026794**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**MB for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 13:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	50.0	50.0	ug/L	100	(75%-119%)
Dibromofluoromethane	46.3	50.0	ug/L	93	(85%-120%)
Toluene-d8	46.2	50.0	ug/L	92	(79%-122%)

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLK02

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 154614

Matrix: (soil/water) WATER Lab Sample ID: 1201026794

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8V607B154614

Level: (low/med) LOW Date Received: 02/04/06

% Moisture: not dec. _____ Date Analyzed: 02/04/06

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/l

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.58	6.0	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v607b154614.d
Lab Smp Id: 1201026794 Client Smp ID: VBLK02
Inj Date : 04-FEB-2006 13:38
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201026794|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:02 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.246	6.246	(1.000)	1601317	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.298	(1.000)	1142889	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	589015	50.0000	
$ 35 Dibromofluoromethane	113	5.211	5.218	(0.834)	366287	46.3231	46.3
$ 47 Toluene-d8	98	8.296	8.296	(0.806)	1565022	46.1914	46.2
$ 71 Bromofluorobenzene	95	12.001	12.001	(0.876)	598476	50.0018	50.0

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v607b154614.d
Lab Smp Id: 1201026794 Client Smp ID: VBLK02
Inj Date : 04-FEB-2006 13:38
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201026794|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:02 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

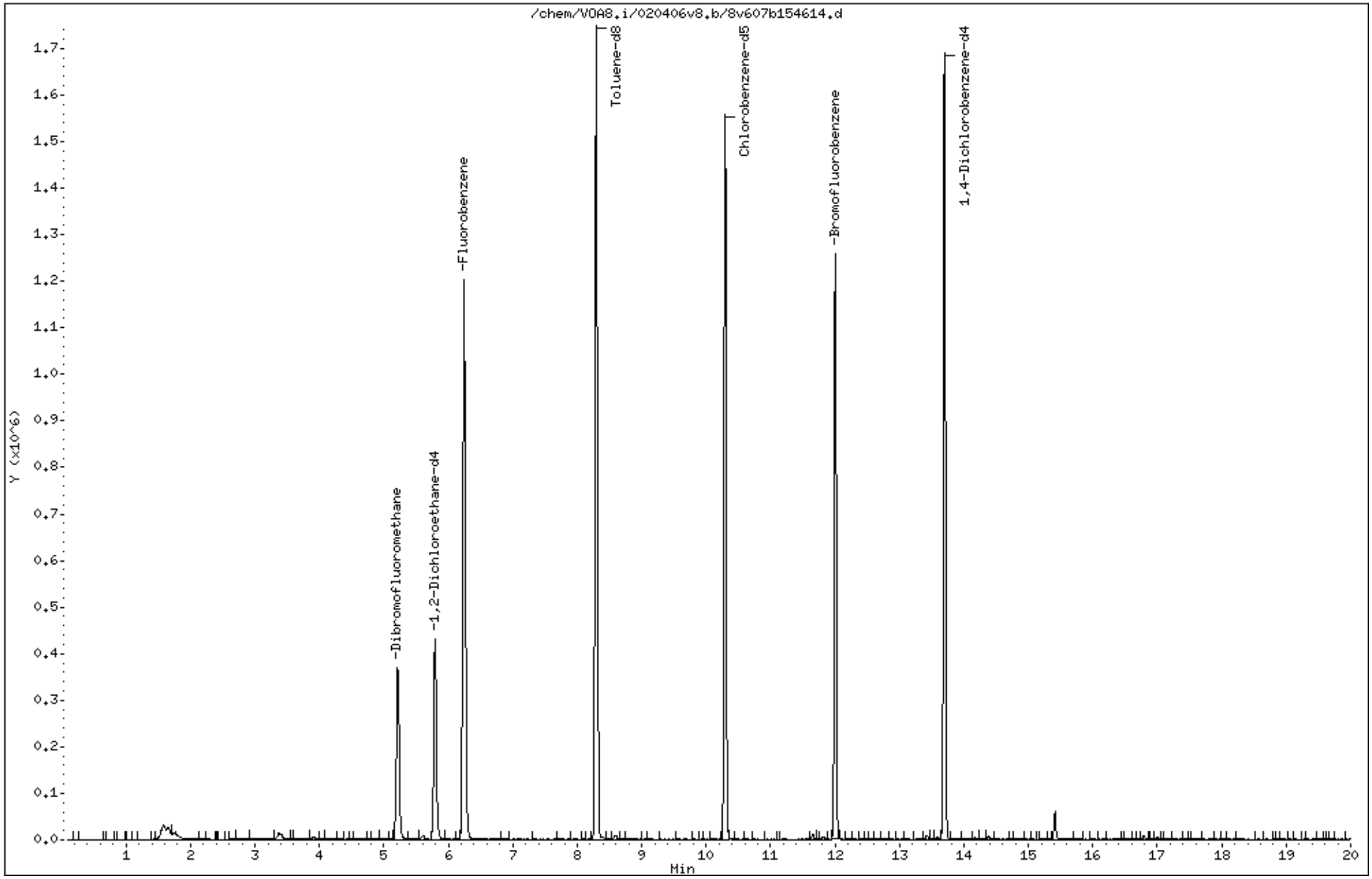
Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Fluorobenzene	6.246	3401561	50.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ug/l)	FINAL(ug/l)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
1.585	407076	5.98366249	6.0	0		0	40

Data File: /chem/VOA8.i/020406v8.b/8v607b154614.d
Date : 04-FEB-2006 13:38
Client ID: VBLK02
Sample Info: |120102679415006241|1|VOAF|1|
Purge Volume: 5.0
Column phase: DB-624

Instrument: VOA8.i
Operator: ACJ
Column diameter: 0.25



Data File: /chem/VOA8.i/020406v8.b/8v607b154614.d Page 1

Date : 04-FEB-2006 13:38

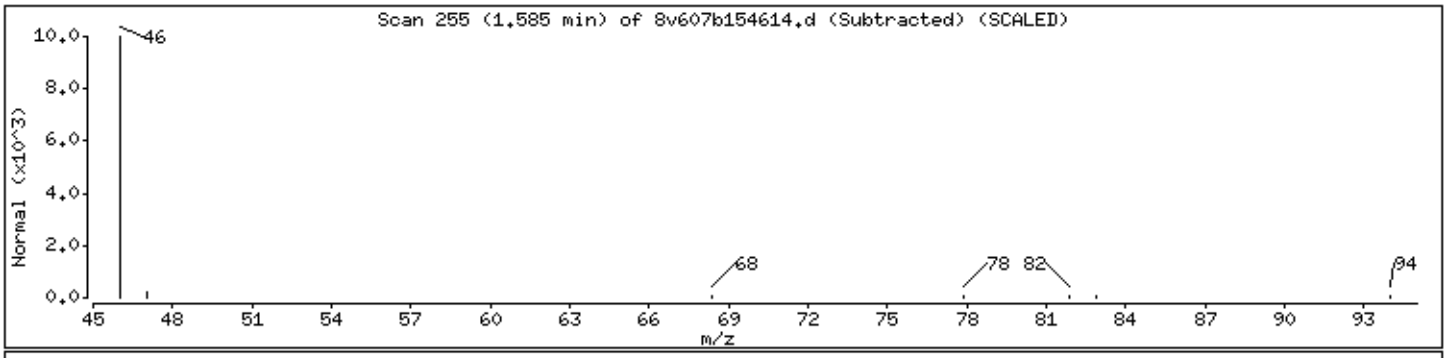
Client ID: VBLK02 Instrument: VOA8.i

Sample Info: |1201026794|500624|1|VOAF|1|

Purge Volume: 5.0 Operator: ACJ

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025326**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 09:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane		57.0	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene		55.5	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		53.1	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane		50.5	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		52.9	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		53.2	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane		49.8	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane		61.6	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene		52.6	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		51.2	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		53.8	ug/L	0.250	1.00
75-05-8	Acetonitrile		1130	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene		51.8	ug/L	0.250	1.00
74-97-5	Bromochloromethane		50.7	ug/L	0.300	1.00
74-95-3	Dibromomethane		52.5	ug/L	0.300	1.00
74-88-4	Iodomethane		230	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025326**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 09:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate		332	ug/L	1.50	5.00
104-51-8	n-Butylbenzene		55.4	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		53.0	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		53.3	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		54.2	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane		45.5	ug/L	0.500	1.00
74-87-3	Chloromethane		52.1	ug/L	0.500	1.00
75-01-4	Vinyl chloride		53.8	ug/L	0.500	1.00
74-83-9	Bromomethane		51.7	ug/L	0.500	1.00
75-00-3	Chloroethane		51.2	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane		50.8	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene		54.6	ug/L	0.300	1.00
67-64-1	Acetone		226	ug/L	1.25	5.00
75-15-0	Carbon disulfide		316	ug/L	1.25	5.00
75-09-2	Methylene chloride		57.6	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene		54.0	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane		52.3	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene		53.4	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025326**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 09:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform		51.4	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane		49.7	ug/L	0.250	1.00
78−93−3	2−Butanone		231	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane		55.5	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene		50.1	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene		55.7	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene		49.8	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene		49.6	ug/L	0.250	1.00
91−20−3	Naphthalene		54.0	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene		52.9	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride		62.2	ug/L	0.250	1.00
71−43−2	Benzene		58.9	ug/L	0.300	1.00
79−01−6	Trichloroethylene		52.8	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane		52.6	ug/L	0.250	1.00
75−27−4	Bromodichloromethane		56.6	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene		58.8	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene		57.1	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane		49.5	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025326**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 09:51**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane		56.6	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone		230	ug/L	1.25	5.00
108-88-3	Toluene		50.3	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene		51.6	ug/L	0.250	1.00
591-78-6	2-Hexanone		225	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane		50.5	ug/L	0.250	1.00
108-90-7	Chlorobenzene		50.6	ug/L	0.250	1.00
100-41-4	Ethylbenzene		51.2	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		101	ug/L	0.250	2.00
100-42-5	Styrene		52.4	ug/L	0.250	1.00
95-47-6	o-Xylene		52.0	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		54.0	ug/L	0.250	1.00
75-25-2	Bromoform		53.1	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		51.6	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		53.2	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	50.9	50.0	ug/L	102	(75%-119%)
Dibromofluoromethane	46.6	50.0	ug/L	93	(85%-120%)
Toluene-d8	46.6	50.0	ug/L	93	(79%-122%)

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v504leshl.d
Lab Smp Id: 1201025326 Client Smp ID: VBLK01LCS
Inj Date : 03-FEB-2006 09:51
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201025326|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A IVM060201-01/UVM051229-01E
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.246	6.246	(1.000)	1714685	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.292	(1.000)	1227612	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	614409	50.0000	
$ 35 Dibromofluoromethane	113	5.218	5.212	(0.835)	394708	46.6170	46.6
$ 47 Toluene-d8	98	8.296	8.296	(0.806)	1694540	46.5625	46.6
$ 71 Bromofluorobenzene	95	12.001	12.001	(0.876)	634673	50.8604	50.9
3 Dichlorodifluoromethane	85	1.750	1.755	(0.280)	419773	45.5460	45.5
4 Chloromethane	50	1.838	1.838	(0.294)	756359	52.0789	52.1
5 Vinyl chloride	62	1.938	1.932	(0.310)	472413	53.8023	53.8
6 Bromomethane	94	2.208	2.207	(0.353)	327619	51.6819	51.7
7 Chloroethane	64	2.255	2.254	(0.361)	356414	51.1615	51.2
8 Trichlorofluoromethane	101	2.466	2.460	(0.395)	762993	50.7836	50.8
11 1,1-Dichloroethylene	61	2.955	2.955	(0.473)	858616	54.5684	54.6
10 Acetone	43	2.760	2.760	(0.442)	734105	225.781	226
14 Carbon disulfide	76	3.405	3.399	(0.545)	7654098	315.977	316
17 Methylene chloride	84	3.368	3.369	(0.539)	448723	57.6056	57.6

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
21 trans-1,2-Dichloroethylene	96	3.709	3.709	(0.594)	538301	53.9622	54.0
22 1,1-Dichloroethane	63	4.129	4.129	(0.661)	960100	52.2974	52.3
31 cis-1,2-Dichloroethylene	96	4.798	4.798	(0.768)	560320	53.3978	53.4
32 Chloroform	83	4.987	4.987	(0.798)	852018	51.3899	51.4
37 1,2-Dichloroethane	62	5.905	5.899	(0.945)	612758	49.7187	49.7
30 2-Butanone	43	4.561	4.561	(0.730)	1290364	230.851	231
36 1,1,1-Trichloroethane	97	5.510	5.504	(0.882)	708500	55.5280	55.5
87 1,4-Dichlorobenzene	146	13.741	13.741	(1.003)	1054786	50.0962	50.1
93 1,2,4-Trichlorobenzene	180	16.703	16.704	(1.219)	665305	55.6921	55.7
85 1,3-Dichlorobenzene	146	13.595	13.589	(0.992)	1039099	49.7745	49.8
90 1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	987811	49.6380	49.6
95 Naphthalene	128	17.001	17.002	(1.241)	1526982	54.0197	54.0
94 Hexachlorobutadiene	225	17.014	17.014	(1.242)	361275	52.9141	52.9
33 Carbon tetrachloride	117	5.820	5.820	(0.932)	527681	62.2497	62.2
38 Benzene	78	5.966	5.960	(0.955)	2039049	58.9437	58.9
39 Trichloroethylene	95	6.763	6.763	(1.083)	513076	52.7564	52.8
41 1,2-Dichloropropane	63	6.939	6.934	(1.111)	560939	52.6057	52.6
45 Bromodichloromethane	83	7.201	7.201	(1.153)	609581	56.6464	56.6
46 cis-1,3-Dichloropropylene	75	7.943	7.937	(1.272)	733366	58.8264	58.8
53 trans-1,3-Dichloropropylene	75	8.600	8.600	(0.835)	626873	57.1230	57.1
54 1,1,2-Trichloroethane	83	8.789	8.783	(0.853)	339368	49.5079	49.5
57 Dibromochloromethane	129	9.428	9.428	(0.916)	411273	56.5969	56.6
49 4-Methyl-2-pentanone	58	7.742	7.737	(0.752)	1056983	229.699	230
50 Toluene	92	8.399	8.394	(0.816)	1278828	50.3427	50.3
56 Tetrachloroethylene	164	9.300	9.300	(0.903)	403630	51.5981	51.6
55 2-Hexanone	43	8.898	8.892	(0.864)	1894952	225.118	225
59 1,2-Dibromoethane	107	9.701	9.701	(0.942)	398574	50.5376	50.5
62 Chlorobenzene	112	10.346	10.340	(1.005)	1319253	50.5675	50.6
58 Ethylbenzene	91	10.486	10.480	(1.018)	2349039	51.2462	51.2
63 m,p-Xylenes	106	10.608	10.608	(1.030)	1859009	101.257	101
65 Styrene	104	11.216	11.210	(1.089)	1506023	52.3755	52.4
64 o-Xylene	106	11.192	11.186	(1.087)	944983	52.0033	52.0
67 Isopropylbenzene	105	11.733	11.733	(0.857)	2259800	53.9796	54.0
66 Bromoform	173	11.545	11.539	(0.843)	245671	53.1495	53.1
73 1,1,2,2-Tetrachloroethane	83	11.879	11.873	(0.867)	547562	51.5755	51.6
92 1,2-Dibromo-3-chloropropane	75	15.347	15.341	(1.120)	95336	53.1617	53.2
60 1,1,1,2-Tetrachloroethane	131	10.425	10.419	(1.012)	427911	57.0478	57.0
34 1,1-Dichloropropene	75	5.704	5.699	(0.913)	695611	55.4731	55.5
52 1,3-Dichloropropane	76	9.123	9.124	(0.886)	687327	49.8220	49.8
80 4-Chlorotoluene	91	12.567	12.561	(0.917)	1815728	51.1685	51.2
15 Acetonitrile	41	2.955	2.955	(0.473)	1782303	1131.55	1130
13 Iodomethane	142	3.198	3.198	(0.512)	3390014	230.341	230
43 Dibromomethane	93	7.219	7.219	(1.156)	274472	52.5211	52.5
29 Bromochloromethane	128	5.133	5.127	(0.822)	227087	50.6748	50.7
75 Bromobenzene	156	12.232	12.232	(0.893)	533402	51.7915	51.8
81 tert-Butylbenzene	119	13.053	13.047	(0.953)	1926701	54.2038	54.2
83 sec-Butylbenzene	105	13.370	13.364	(0.976)	2724369	53.2719	53.3

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
76 n-Propylbenzene	91	12.311	12.305	(0.899)	2845608	53.0237	53.0
89 n-Butylbenzene	91	14.173	14.173	(1.035)	2080789	55.3753	55.4
23 Vinyl acetate	43	4.141	4.135	(0.663)	5485172	332.135	332
84 4-Isopropyltoluene	119	13.583	13.577	(0.992)	2068406	53.7676	53.8
77 2-Chlorotoluene	91	12.488	12.482	(0.912)	1677741	52.6114	52.6
25 2,2-Dichloropropane	77	4.804	4.810	(0.769)	725049	61.5586	61.6
78 1,3,5-Trimethylbenzene	105	12.554	12.549	(0.916)	1918045	53.2333	53.2
96 1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	589347	53.0789	53.1
79 1,2,4-Trimethylbenzene	105	13.096	13.090	(0.956)	1961345	52.9180	52.9
74 1,2,3-Trichloropropane	110	12.074	12.074	(0.881)	153775	50.4766	50.5

Data File: /chem/VOA8.i/020306v8.b/8v504leshl.d

Date : 03-FEB-2006 09:51

Client ID: VBLK01LCS

Instrument: VOA8.i

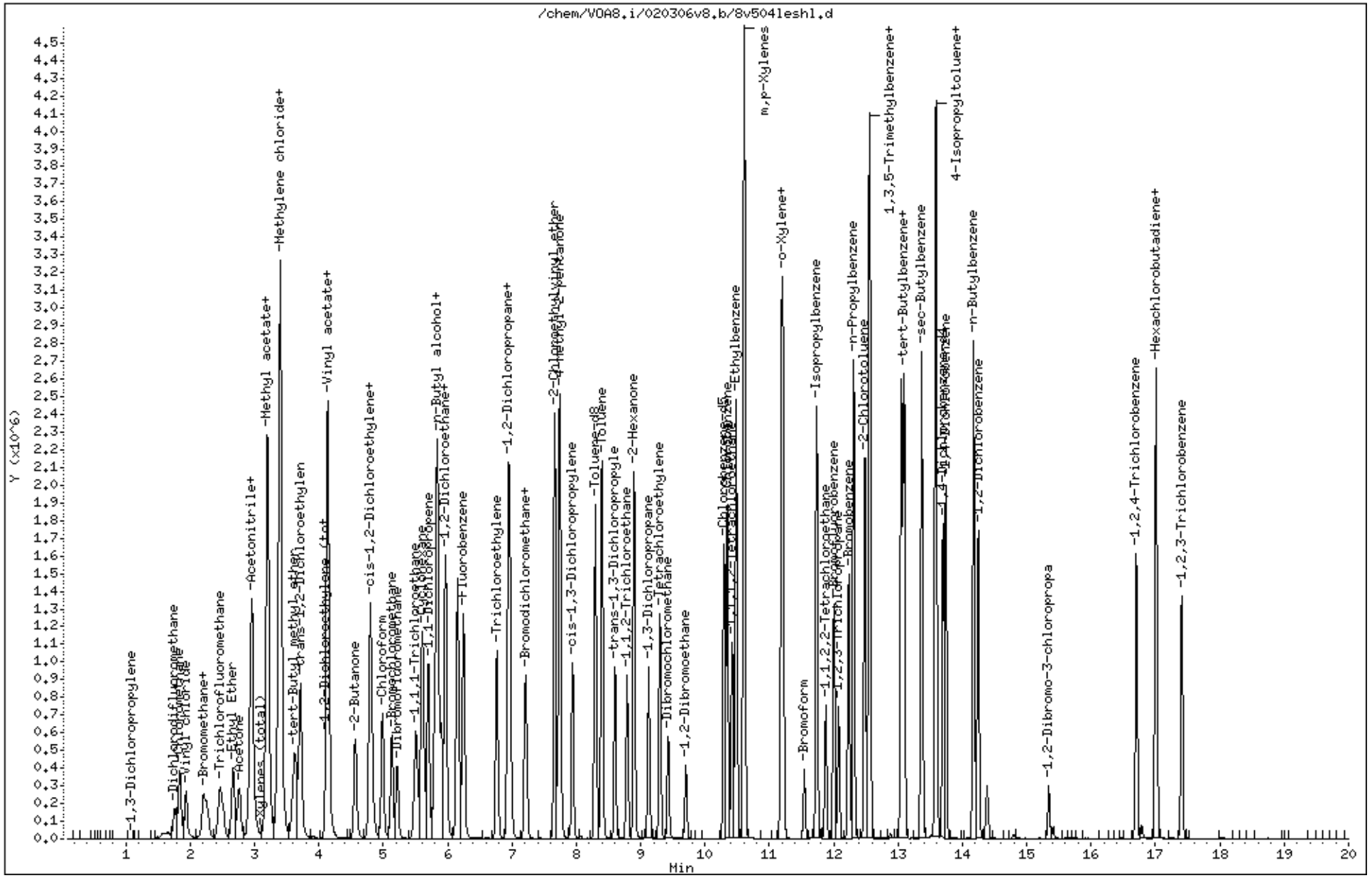
Sample Info: |1201025326|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025327**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 10:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene		61.3	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein		132	ug/L	3.00	5.00
107-13-1	Acrylonitrile		260	ug/L	1.00	5.00
107-05-1	Allyl chloride		262	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol		2430	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025327**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 10:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126−98−7	Methacrylonitrile		256	ug/L	1.00	5.00
107−12−0	Propionitrile		256	ug/L	1.50	5.00
108−05−4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104−51−8	n−Butylbenzene	U	1.00	ug/L	0.250	1.00
103−65−1	n−Propylbenzene	U	1.00	ug/L	0.250	1.00
135−98−8	sec−Butylbenzene	U	1.00	ug/L	0.250	1.00
98−06−6	tert−Butylbenzene	U	1.00	ug/L	0.250	1.00
75−71−8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74−87−3	Chloromethane	U	1.00	ug/L	0.500	1.00
75−01−4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74−83−9	Bromomethane	U	1.00	ug/L	0.500	1.00
75−00−3	Chloroethane	U	1.00	ug/L	0.500	1.00
75−69−4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76−13−1	Trichlorotrifluoroethane		257	ug/L	1.00	5.00
75−35−4	1,1−Dichloroethylene	U	1.00	ug/L	0.300	1.00
67−64−1	Acetone	U	5.00	ug/L	1.25	5.00
75−15−0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75−09−2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156−60−5	trans−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00
75−34−3	1,1−Dichloroethane	U	1.00	ug/L	0.300	1.00
156−59−2	cis−1,2−Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025327**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 10:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform	U	1.00	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane	U	1.00	ug/L	0.250	1.00
78−93−3	2−Butanone	U	5.00	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane	U	1.00	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91−20−3	Naphthalene	U	1.00	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123−91−1	1,4−Dioxane		2400	ug/L	20.0	50.0
80−62−6	Methyl methacrylate		281	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate		252	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71−43−2	Benzene	U	1.00	ug/L	0.300	1.00
79−01−6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane	U	1.00	ug/L	0.250	1.00
75−27−4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene	U	1.00	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025327**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/03/2006 10:21**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.8	50.0	ug/L	100	(75%-119%)
Dibromofluoromethane	45.1	50.0	ug/L	90	(85%-120%)
Toluene-d8	46.2	50.0	ug/L	92	(79%-122%)

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020306v8.b/8v505SESHL.d
Lab Smp Id: 1201025327 Client Smp ID: VBLK01SLCS
Inj Date : 03-FEB-2006 10:21
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201025327|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A VSTD250S/VBLK01SCLS
Comment :
Method : /chem/VOA8.i/020306v8.b/VOA8-8260B-011106.m
Meth Date : 03-Feb-2006 15:36 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50
Processing Host: prdsvr07

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.247	6.246	(1.000)	1670187	50.0000	
* 61 Chlorobenzene-d5	117	10.292	10.292	(1.000)	1198733	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.699	13.698	(1.000)	610002	50.0000	
$ 35 Dibromofluoromethane	113	5.213	5.212	(0.834)	372251	45.1361	45.1
$ 47 Toluene-d8	98	8.297	8.296	(0.806)	1641173	46.1825	46.2
$ 71 Bromofluorobenzene	95	12.002	12.001	(0.876)	617641	49.8222	49.8
12 Trichlorotrifluoroethane	85	2.895	2.895	(0.463)	1020163	257.385	257
97 1,4-Dioxane	88	7.220	7.220	(1.156)	295097	2402.51	2400
42 Methyl methacrylate	69	7.074	7.074	(1.132)	1682332	281.174	281
51 Ethyl methacrylate	69	8.705	8.705	(0.846)	2865961	252.270	252
24 2-Chloro-1,3-butadiene	53	4.270	4.270	(0.684)	1035140	61.3214	61.3
27 Methacrylonitrile	41	4.842	4.842	(0.775)	1761873	256.436	256
19 Isobutyl alcohol	41	4.988	4.988	(0.798)	1152476	2434.62	2430
16 Allyl chloride	76	3.272	3.272	(0.524)	1448848	261.906	262
18 Acrylonitrile	53	3.412	3.412	(0.546)	1111405	260.469	260

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
9 Acrolein	56	2.712	2.712	(0.434)	204391	131.799	132(R)
28 Propionitrile	54	4.556	4.556	(0.729)	446644	256.170	256

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA8.i/020306v8.b/8v505SESHL.d

Page 1

Date : 03-FEB-2006 10:21

Client ID: VBLK01SLCS

Instrument: VOA8.i

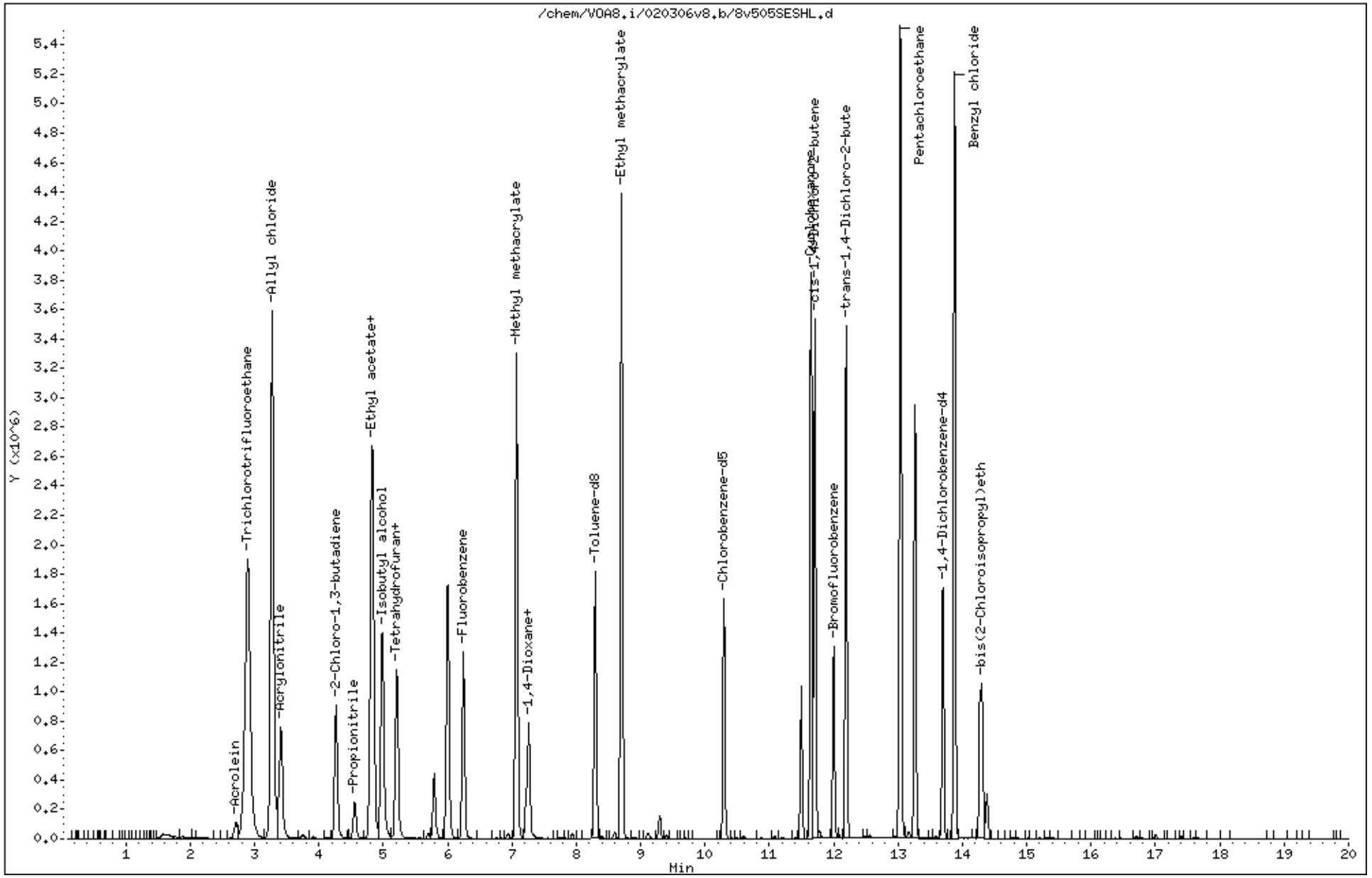
Sample Info: |1201025327|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026795**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 11:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane		48.8	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene		45.6	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		46.8	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane		41.3	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		44.5	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		43.9	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane		42.4	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane		51.1	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	U	1.00	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene		43.3	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		41.6	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		43.9	ug/L	0.250	1.00
75-05-8	Acetonitrile		921	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	U	5.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene		44.2	ug/L	0.250	1.00
74-97-5	Bromochloromethane		45.9	ug/L	0.300	1.00
74-95-3	Dibromomethane		45.5	ug/L	0.300	1.00
74-88-4	Iodomethane		205	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol	U	50.0	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026795**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 11:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile	U	5.00	ug/L	1.00	5.00
107-12-0	Propionitrile	U	5.00	ug/L	1.50	5.00
108-05-4	Vinyl acetate		269	ug/L	1.50	5.00
104-51-8	n-Butylbenzene		45.1	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		41.1	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		42.9	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		43.7	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane		23.3	ug/L	0.500	1.00
74-87-3	Chloromethane		34.8	ug/L	0.500	1.00
75-01-4	Vinyl chloride		36.2	ug/L	0.500	1.00
74-83-9	Bromomethane		38.8	ug/L	0.500	1.00
75-00-3	Chloroethane		39.5	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane		37.7	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene		41.7	ug/L	0.300	1.00
67-64-1	Acetone		266	ug/L	1.25	5.00
75-15-0	Carbon disulfide		247	ug/L	1.25	5.00
75-09-2	Methylene chloride		55.4	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene		42.6	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane		45.5	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene		45.1	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026795**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE−AL**	**SOP Ref:**	**GL−OA−E−038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 11:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67−66−3	Chloroform		44.3	ug/L	0.250	1.00
107−06−2	1,2−Dichloroethane		44.1	ug/L	0.250	1.00
78−93−3	2−Butanone		221	ug/L	1.25	5.00
71−55−6	1,1,1−Trichloroethane		46.1	ug/L	0.300	1.00
106−46−7	1,4−Dichlorobenzene		42.1	ug/L	0.250	1.00
120−82−1	1,2,4−Trichlorobenzene		48.7	ug/L	0.300	1.00
541−73−1	1,3−Dichlorobenzene		41.3	ug/L	0.250	1.00
95−50−1	1,2−Dichlorobenzene		42.4	ug/L	0.250	1.00
91−20−3	Naphthalene		47.2	ug/L	0.250	1.00
87−68−3	Hexachlorobutadiene		43.2	ug/L	0.250	1.00
123−91−1	1,4−Dioxane	U	50.0	ug/L	20.0	50.0
80−62−6	Methyl methacrylate	U	5.00	ug/L	1.00	5.00
97−63−2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56−23−5	Carbon tetrachloride		52.3	ug/L	0.250	1.00
71−43−2	Benzene		50.4	ug/L	0.300	1.00
79−01−6	Trichloroethylene		44.3	ug/L	0.250	1.00
78−87−5	1,2−Dichloropropane		46.1	ug/L	0.250	1.00
75−27−4	Bromodichloromethane		49.3	ug/L	0.250	1.00
10061−01−5	cis−1,3−Dichloropropylene		53.8	ug/L	0.250	1.00
10061−02−6	trans−1,3−Dichloropropylene		50.8	ug/L	0.250	1.00
79−00−5	1,1,2−Trichloroethane		43.4	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201026795**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 11:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane		47.9	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone		200	ug/L	1.25	5.00
108-88-3	Toluene		42.0	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene		42.0	ug/L	0.250	1.00
591-78-6	2-Hexanone		214	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane		43.8	ug/L	0.250	1.00
108-90-7	Chlorobenzene		43.0	ug/L	0.250	1.00
100-41-4	Ethylbenzene		42.3	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		84.0	ug/L	0.250	2.00
100-42-5	Styrene		45.1	ug/L	0.250	1.00
95-47-6	o-Xylene		43.7	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		42.1	ug/L	0.250	1.00
75-25-2	Bromoform		43.9	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		43.1	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		42.7	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.8	50.0	ug/L	100	(75%-119%)
Dibromofluoromethane	46.1	50.0	ug/L	92	(85%-120%)
Toluene-d8	46.3	50.0	ug/L	93	(79%-122%)

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v603l154614.d
Lab Smp Id: 1201026795 Client Smp ID: VBLK02LCS
Inj Date : 04-FEB-2006 11:38
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201026795|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A IVM060201-01/UVM051229-01E
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:02 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.246	6.246	(1.000)	1615526	50.0000	
* 61 Chlorobenzene-d5	117	10.298	10.298	(1.000)	1169204	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	592744	50.0000	
$ 35 Dibromofluoromethane	113	5.218	5.218	(0.835)	367962	46.1256	46.1
$ 47 Toluene-d8	98	8.296	8.296	(0.806)	1605816	46.3288	46.3
$ 71 Bromofluorobenzene	95	12.001	12.001	(0.876)	599485	49.7638	49.8
3 Dichlorodifluoromethane	85	1.755	1.755	(0.281)	202058	23.2693	23.3(R)
4 Chloromethane	50	1.837	1.837	(0.294)	478472	34.8011	34.8
5 Vinyl chloride	62	1.931	1.937	(0.309)	299700	36.2273	36.2
6 Bromomethane	94	2.207	2.207	(0.353)	232242	38.8142	38.8
7 Chloroethane	64	2.265	2.266	(0.363)	258957	39.4536	39.4
8 Trichlorofluoromethane	101	2.471	2.466	(0.396)	533809	37.7102	37.7
11 1,1-Dichloroethylene	61	2.955	2.955	(0.473)	617775	41.6719	41.7
10 Acetone	43	2.766	2.760	(0.443)	813973	266.284	266
14 Carbon disulfide	76	3.405	3.405	(0.545)	5703813	247.227	247
17 Methylene chloride	84	3.369	3.369	(0.539)	407465	55.4268	55.4

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
21 trans-1,2-Dichloroethylene	96	3.715	3.716	(0.595)	399982	42.5574	42.6
22 1,1-Dichloroethane	63	4.129	4.129	(0.661)	787210	45.5118	45.5
31 cis-1,2-Dichloroethylene	96	4.798	4.798	(0.768)	445528	45.0643	45.1
32 Chloroform	83	4.993	4.993	(0.799)	692609	44.3392	44.3
37 1,2-Dichloroethane	62	5.905	5.906	(0.945)	512646	44.1488	44.1
30 2-Butanone	43	4.567	4.567	(0.731)	1164608	221.141	221
36 1,1,1-Trichloroethane	97	5.510	5.510	(0.882)	554057	46.0889	46.1
87 1,4-Dichlorobenzene	146	13.741	13.741	(1.003)	854436	42.0639	42.1
93 1,2,4-Trichlorobenzene	180	16.704	16.704	(1.219)	561558	48.7257	48.7
85 1,3-Dichlorobenzene	146	13.595	13.595	(0.992)	831491	41.2855	41.3
90 1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	814751	42.4381	42.4
95 Naphthalene	128	17.002	17.002	(1.241)	1287134	47.1990	47.2
94 Hexachlorobutadiene	225	17.014	17.014	(1.242)	284386	43.1750	43.2
33 Carbon tetrachloride	117	5.826	5.827	(0.933)	417610	52.2886	52.3
38 Benzene	78	5.966	5.966	(0.955)	1647656	50.4347	50.4
39 Trichloroethylene	95	6.763	6.763	(1.083)	405979	44.3065	44.3
41 1,2-Dichloropropane	63	6.940	6.940	(1.111)	463270	46.1128	46.1
45 Bromodichloromethane	83	7.201	7.201	(1.153)	499615	49.2773	49.3
46 cis-1,3-Dichloropropylene	75	7.943	7.937	(1.272)	631950	53.8028	53.8
53 trans-1,3-Dichloropropylene	75	8.600	8.601	(0.835)	531319	50.8344	50.8
54 1,1,2-Trichloroethane	83	8.789	8.789	(0.853)	283092	43.3612	43.4
57 Dibromochloromethane	129	9.428	9.428	(0.916)	331783	47.9388	47.9
49 4-Methyl-2-pentanone	58	7.743	7.743	(0.752)	878014	200.338	200
50 Toluene	92	8.400	8.400	(0.816)	1015068	41.9557	42.0
56 Tetrachloroethylene	164	9.300	9.300	(0.903)	312896	41.9973	42.0
55 2-Hexanone	43	8.898	8.899	(0.864)	1717477	214.227	214
59 1,2-Dibromoethane	107	9.701	9.702	(0.942)	329197	43.8261	43.8
62 Chlorobenzene	112	10.346	10.347	(1.005)	1068508	43.0023	43.0
58 Ethylbenzene	91	10.486	10.486	(1.018)	1848145	42.3329	42.3
63 m,p-Xylenes	106	10.608	10.608	(1.030)	1468689	83.9934	84.0
65 Styrene	104	11.216	11.216	(1.089)	1233779	45.0510	45.0
64 o-Xylene	106	11.192	11.192	(1.087)	756019	43.6828	43.7
67 Isopropylbenzene	105	11.739	11.734	(0.857)	1702174	42.1457	42.1
66 Bromoform	173	11.545	11.545	(0.843)	194328	43.8738	43.9
73 1,1,2,2-Tetrachloroethane	83	11.879	11.880	(0.867)	441195	43.0756	43.1
92 1,2-Dibromo-3-chloropropane	75	15.347	15.341	(1.120)	73887	42.7071	42.7
60 1,1,1,2-Tetrachloroethane	131	10.425	10.426	(1.012)	348585	48.7938	48.8
34 1,1-Dichloropropene	75	5.705	5.705	(0.913)	538527	45.5820	45.6
52 1,3-Dichloropropane	76	9.124	9.124	(0.886)	557349	42.4186	42.4
80 4-Chlorotoluene	91	12.567	12.567	(0.917)	1424754	41.6181	41.6
15 Acetonitrile	41	2.955	2.961	(0.473)	1366880	921.073	921
13 Iodomethane	142	3.198	3.198	(0.512)	2842808	205.016	205
43 Dibromomethane	93	7.219	7.220	(1.156)	224229	45.5405	45.5
29 Bromochloromethane	128	5.133	5.133	(0.822)	193670	45.8704	45.9
75 Bromobenzene	156	12.232	12.238	(0.893)	439016	44.1850	44.2
81 tert-Butylbenzene	119	13.053	13.054	(0.953)	1499913	43.7393	43.7
83 sec-Butylbenzene	105	13.370	13.370	(0.976)	2118745	42.9438	42.9

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
76 n-Propylbenzene	91	12.311	12.311	(0.899)	2130328	41.1464	41.1
89 n-Butylbenzene	91	14.173	14.173	(1.035)	1636478	45.1428	45.1
23 Vinyl acetate	43	4.135	4.135	(0.662)	4190604	269.321	269
84 4-Isopropyltoluene	119	13.583	13.583	(0.992)	1630818	43.9421	43.9
77 2-Chlorotoluene	91	12.488	12.488	(0.912)	1331523	43.2807	43.3
25 2,2-Dichloropropane	77	4.816	4.811	(0.771)	567419	51.1324	51.1
78 1,3,5-Trimethylbenzene	105	12.555	12.555	(0.916)	1525844	43.8960	43.9
96 1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	501119	46.7824	46.8
79 1,2,4-Trimethylbenzene	105	13.096	13.096	(0.956)	1592076	44.5250	44.5
74 1,2,3-Trichloropropane	110	12.080	12.074	(0.882)	121301	41.2724	41.3

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA8.i/020406v8.b/8v6031154614.d

Page 1

Date : 04-FEB-2006 11:38

Client ID: VBLK02LCS

Instrument: VOA8.i

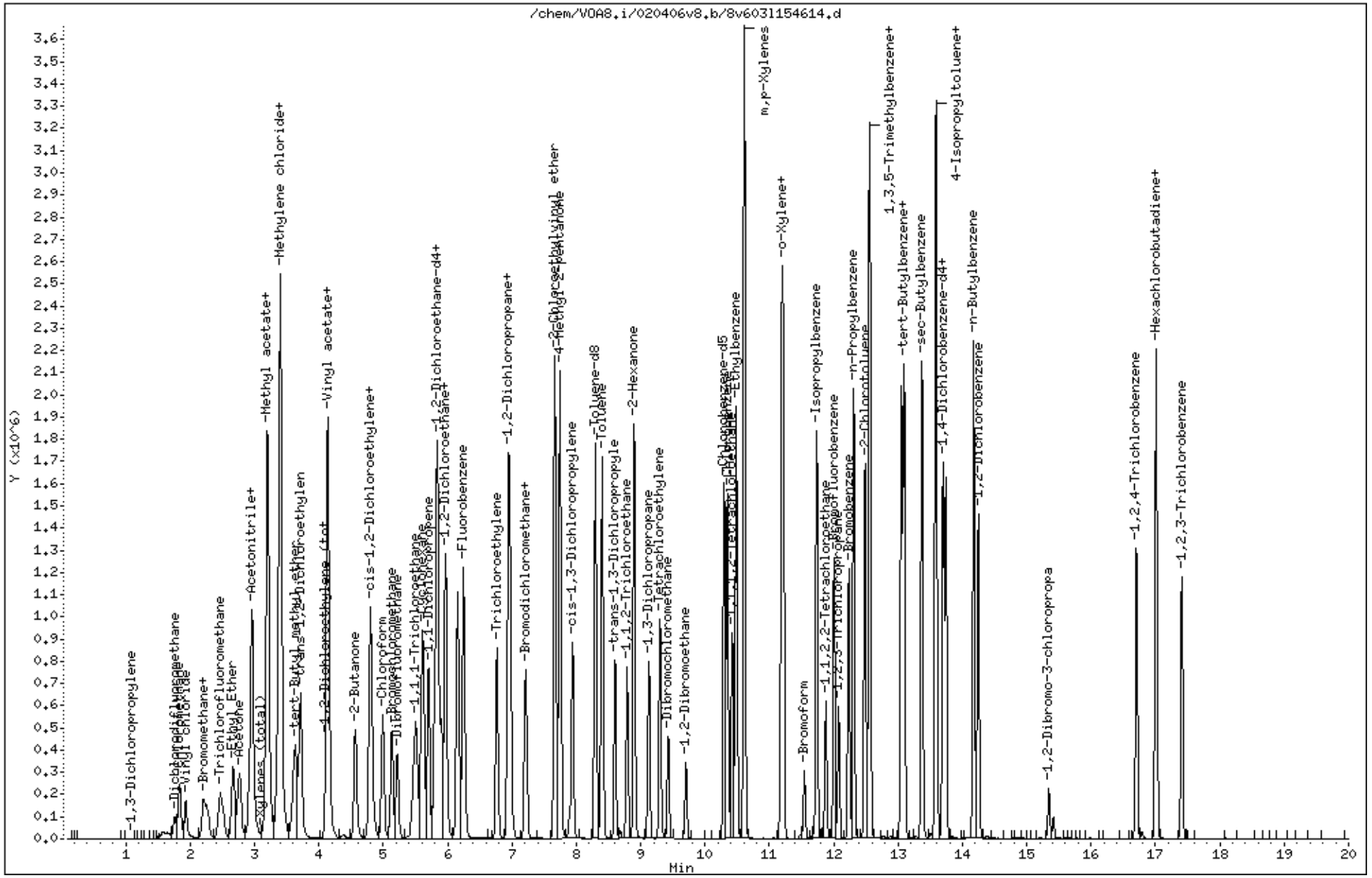
Sample Info: |1201026795|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201028020**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 12:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene	U	1.00	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane	U	1.00	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	1.00	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane	U	1.00	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane	U	1.00	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene		52.7	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene	U	1.00	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	1.00	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	1.00	ug/L	0.250	1.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0
107-02-8	Acrolein		123	ug/L	3.00	5.00
107-13-1	Acrylonitrile		213	ug/L	1.00	5.00
107-05-1	Allyl chloride		233	ug/L	3.70	5.00
108-86-1	Bromobenzene	U	1.00	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	1.00	ug/L	0.300	1.00
74-95-3	Dibromomethane	U	1.00	ug/L	0.300	1.00
74-88-4	Iodomethane	U	5.00	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol		1830	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201028020**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 12:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile		218	ug/L	1.00	5.00
107-12-0	Propionitrile		203	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	5.00	ug/L	1.50	5.00
104-51-8	n-Butylbenzene	U	1.00	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	1.00	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	1.00	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	1.00	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane	U	1.00	ug/L	0.500	1.00
74-87-3	Chloromethane	U	1.00	ug/L	0.500	1.00
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00
74-83-9	Bromomethane	U	1.00	ug/L	0.500	1.00
75-00-3	Chloroethane	U	1.00	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane		219	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00
67-64-1	Acetone	U	5.00	ug/L	1.25	5.00
75-15-0	Carbon disulfide	U	5.00	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	5.00	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201028020**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 12:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00
78-93-3	2-Butanone	U	5.00	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene	U	1.00	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene	U	1.00	ug/L	0.250	1.00
91-20-3	Naphthalene	U	1.00	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene	U	1.00	ug/L	0.250	1.00
123-91-1	1,4-Dioxane		1750	ug/L	20.0	50.0
80-62-6	Methyl methacrylate		242	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate		227	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.250	1.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201028020**				
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**LCS for batch 500624**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 12:38**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone	U	5.00	ug/L	1.25	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	5.00	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane	U	1.00	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	2.00	ug/L	0.250	2.00
100-42-5	Styrene	U	1.00	ug/L	0.250	1.00
95-47-6	o-Xylene	U	1.00	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	1.00	ug/L	0.250	1.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.00	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.2	50.0	ug/L	98	(75%-119%)
Dibromofluoromethane	44.8	50.0	ug/L	90	(85%-120%)
Toluene-d8	46.5	50.0	ug/L	93	(79%-122%)

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v605lshESHL.d
Lab Smp Id: 1201028020 Client Smp ID: VBLK02SLCS
Inj Date : 04-FEB-2006 12:38
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201028020|500624|1|VOAF|1|
Misc Info : GEL 5ML N/A VSTD250S/VBLK02SCLS
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:02 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.245	6.246	(1.000)	1653546	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.298	(1.000)	1187224	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	613572	50.0000	
$ 35 Dibromofluoromethane	113	5.217	5.218	(0.835)	365742	44.7931	44.8
$ 47 Toluene-d8	98	8.295	8.296	(0.806)	1635255	46.4620	46.5
$ 71 Bromofluorobenzene	95	12.000	12.001	(0.876)	614287	49.2459	49.2
12 Trichlorotrifluoroethane	85	2.893	2.893	(0.463)	859005	218.906	219
97 1,4-Dioxane	88	7.225	7.225	(1.157)	213089	1752.31	1750
42 Methyl methacrylate	69	7.073	7.073	(1.132)	1435053	242.259	242
51 Ethyl methacrylate	69	8.703	8.703	(0.845)	2556462	227.209	227
24 2-Chloro-1,3-butadiene	53	4.268	4.268	(0.683)	880461	52.6832	52.7
27 Methacrylonitrile	41	4.840	4.840	(0.775)	1482227	217.905	218
19 Isobutyl alcohol	41	4.986	4.986	(0.798)	858847	1832.59	1830
16 Allyl chloride	76	3.277	3.277	(0.525)	1276392	233.054	233
18 Acrylonitrile	53	3.417	3.417	(0.547)	899900	213.023	213
9 Acrolein	56	2.717	2.717	(0.435)	188528	122.794	123(R)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
28 Propionitrile	54	4.554	4.554	(0.729)	350548	203.078	203

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/VOA8.i/020406v8.b/8v605lshESHL.d

Page 1

Date : 04-FEB-2006 12:38

Client ID: VBLK02SLCS

Instrument: VOA8.i

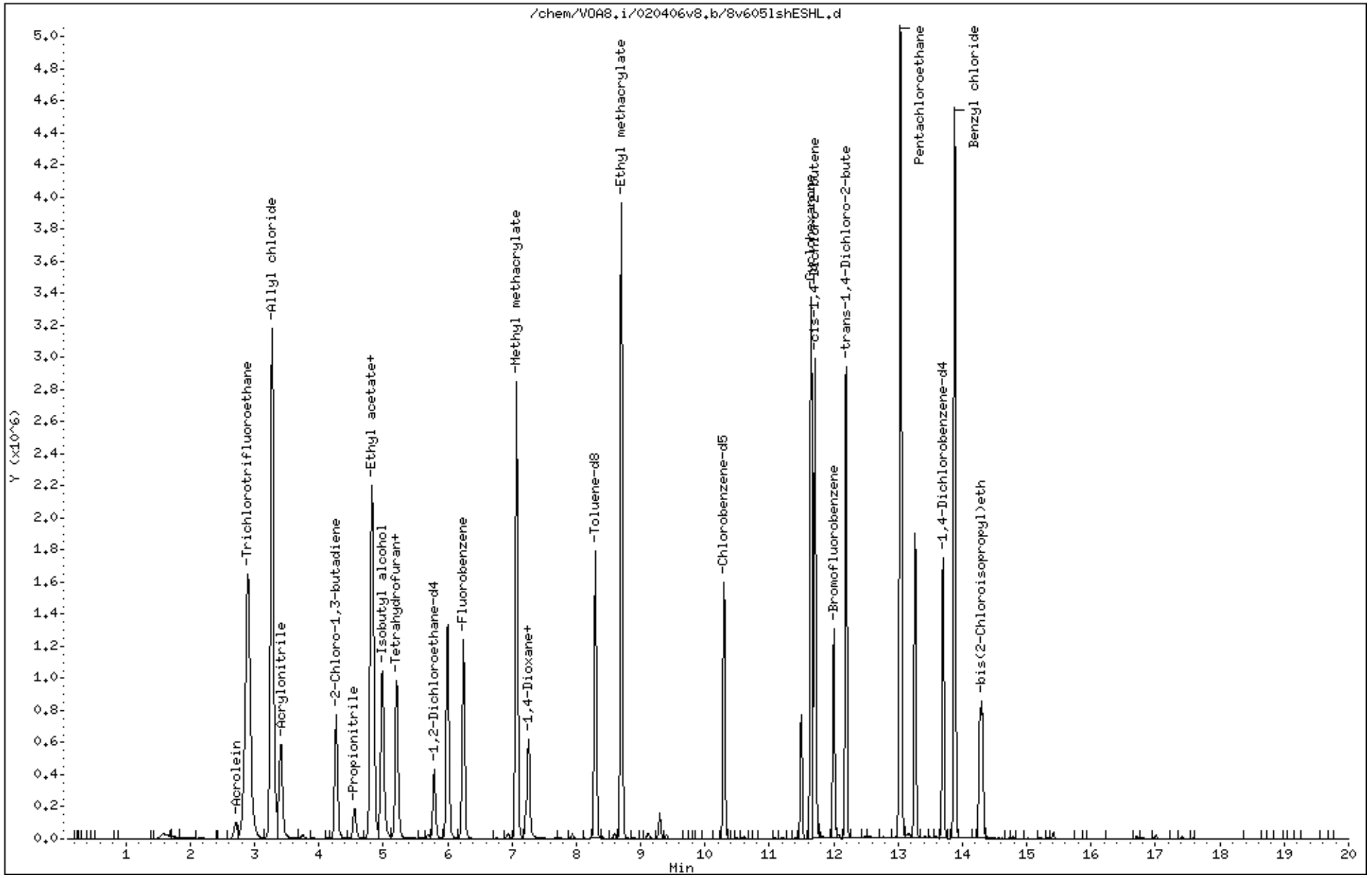
Sample Info: |1201028020|500624|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025324**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PS)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:05**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane		50.9	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene		45.1	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		39.1	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane		40.5	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		44.6	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		45.0	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane		42.7	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane		49.3	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	J	0.453	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene		44.9	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		42.4	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		44.6	ug/L	0.250	1.00
75-05-8	Acetonitrile		910	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	J	3.33	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene		45.9	ug/L	0.250	1.00
74-97-5	Bromochloromethane		45.8	ug/L	0.300	1.00
74-95-3	Dibromomethane		45.3	ug/L	0.300	1.00
74-88-4	Iodomethane		214	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol		895	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025324**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PS)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:05**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile		61.6	ug/L	1.00	5.00
107-12-0	Propionitrile	J	1.56	ug/L	1.50	5.00
108-05-4	Vinyl acetate		252	ug/L	1.50	5.00
104-51-8	n-Butylbenzene		43.0	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		42.3	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		44.6	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		45.6	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane		27.9	ug/L	0.500	1.00
74-87-3	Chloromethane		37.0	ug/L	0.500	1.00
75-01-4	Vinyl chloride		36.3	ug/L	0.500	1.00
74-83-9	Bromomethane		40.6	ug/L	0.500	1.00
75-00-3	Chloroethane		40.4	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane		39.5	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene		42.6	ug/L	0.300	1.00
67-64-1	Acetone		206	ug/L	1.25	5.00
75-15-0	Carbon disulfide		257	ug/L	1.25	5.00
75-09-2	Methylene chloride		57.8	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene		42.8	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane		47.0	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene		45.9	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025324**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PS)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:05**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform		45.6	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane		44.9	ug/L	0.250	1.00
78-93-3	2-Butanone		188	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane		47.1	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene		40.6	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene		38.6	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene		40.8	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene		41.9	ug/L	0.250	1.00
91-20-3	Naphthalene		41.8	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene		39.9	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	U	50.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate		27.1	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride		53.1	ug/L	0.250	1.00
71-43-2	Benzene		51.6	ug/L	0.300	1.00
79-01-6	Trichloroethylene		44.7	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		47.4	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		50.4	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene		53.4	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		50.2	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		43.5	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025324**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PS)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:05**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane		49.2	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone		187	ug/L	1.25	5.00
108-88-3	Toluene		42.7	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene		41.2	ug/L	0.250	1.00
591-78-6	2-Hexanone		181	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane		43.0	ug/L	0.250	1.00
108-90-7	Chlorobenzene		43.6	ug/L	0.250	1.00
100-41-4	Ethylbenzene		42.7	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		83.9	ug/L	0.250	2.00
100-42-5	Styrene		44.5	ug/L	0.250	1.00
95-47-6	o-Xylene		44.7	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		44.0	ug/L	0.250	1.00
75-25-2	Bromoform		45.9	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		43.5	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		40.3	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	51.4	50.0	ug/L	103	(75%-119%)
Dibromofluoromethane	46.0	50.0	ug/L	92	(85%-120%)
Toluene-d8	46.4	50.0	ug/L	93	(79%-122%)

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VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v622.d
Lab Smp Id: 1201025324 Client Smp ID: GU06010G8WT01MS
Inj Date : 04-FEB-2006 21:05
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201025324|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MS 154614003
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:02 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 21 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.246	6.246	(1.000)	1522041	50.0000	
* 61 Chlorobenzene-d5	117	10.292	10.298	(1.000)	1096490	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	536439	50.0000	
$ 35 Dibromofluoromethane	113	5.218	5.218	(0.835)	346000	46.0366	46.0
$ 47 Toluene-d8	98	8.296	8.296	(0.806)	1509098	46.4256	46.4
$ 71 Bromofluorobenzene	95	12.001	12.001	(0.876)	559552	51.3732	51.4
3 Dichlorodifluoromethane	85	1.762	1.755	(0.282)	228499	27.9305	27.9
4 Chloromethane	50	1.838	1.837	(0.294)	479126	37.0209	37.0
5 Vinyl chloride	62	1.932	1.937	(0.309)	283108	36.3237	36.3
6 Bromomethane	94	2.208	2.207	(0.354)	228627	40.5698	40.6
7 Chloroethane	64	2.255	2.266	(0.361)	250082	40.4418	40.4
8 Trichlorofluoromethane	101	2.467	2.466	(0.395)	527242	39.5340	39.5
11 1,1-Dichloroethylene	61	2.955	2.955	(0.473)	594395	42.5575	42.6
10 Acetone	43	2.766	2.760	(0.443)	596480	206.399	206
14 Carbon disulfide	76	3.399	3.405	(0.544)	5570277	256.739	257
17 Methylene chloride	84	3.362	3.369	(0.538)	399558	57.7943	57.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
21 trans-1,2-Dichloroethylene	96	3.715	3.716	(0.595)	378939	42.7949	42.8
22 1,1-Dichloroethane	63	4.129	4.129	(0.661)	765461	46.9726	47.0
31 cis-1,2-Dichloroethylene	96	4.798	4.798	(0.768)	427921	45.9419	45.9
32 Chloroform	83	4.987	4.993	(0.798)	671648	45.6382	45.6
37 1,2-Dichloroethane	62	5.899	5.906	(0.944)	490991	44.8810	44.9
30 2-Butanone	43	4.561	4.567	(0.730)	930502	187.540	188
36 1,1,1-Trichloroethane	97	5.504	5.510	(0.881)	533009	47.0613	47.1
87 1,4-Dichlorobenzene	146	13.741	13.741	(1.003)	746663	40.6164	40.6
93 1,2,4-Trichlorobenzene	180	16.704	16.704	(1.219)	402900	38.6285	38.6
85 1,3-Dichlorobenzene	146	13.595	13.595	(0.992)	744318	40.8363	40.8
90 1,2-Dichlorobenzene	146	14.246	14.246	(1.040)	727866	41.8918	41.9
95 Naphthalene	128	17.002	17.002	(1.241)	1030907	41.7710	41.8
94 Hexachlorobutadiene	225	17.014	17.014	(1.242)	237940	39.9153	39.9
42 Methyl methacrylate	69	6.964	7.073	(1.115)	147795	27.1059	27.1(Q)
33 Carbon tetrachloride	117	5.820	5.827	(0.932)	399281	53.0643	53.1
38 Benzene	78	5.966	5.966	(0.955)	1588185	51.6194	51.6
39 Trichloroethylene	95	6.763	6.763	(1.083)	386273	44.7452	44.7
41 1,2-Dichloropropane	63	6.940	6.940	(1.111)	448255	47.3588	47.4
45 Bromodichloromethane	83	7.201	7.201	(1.153)	481853	50.4446	50.4
46 cis-1,3-Dichloropropylene	75	7.937	7.937	(1.271)	590599	53.3706	53.4
53 trans-1,3-Dichloropropylene	75	8.600	8.601	(0.836)	492141	50.2085	50.2
54 1,1,2-Trichloroethane	83	8.783	8.789	(0.853)	266289	43.4924	43.5
57 Dibromochloromethane	129	9.428	9.428	(0.916)	319216	49.1817	49.2
49 4-Methyl-2-pentanone	58	7.743	7.743	(0.752)	770185	187.388	187
50 Toluene	92	8.393	8.400	(0.816)	968772	42.6975	42.7
56 Tetrachloroethylene	164	9.294	9.300	(0.903)	288125	41.2371	41.2
55 2-Hexanone	43	8.898	8.899	(0.865)	1362230	181.184	181
59 1,2-Dibromoethane	107	9.701	9.702	(0.943)	302968	43.0090	43.0
62 Chlorobenzene	112	10.346	10.347	(1.005)	1015421	43.5758	43.6
58 Ethylbenzene	91	10.486	10.486	(1.019)	1746737	42.6634	42.7
63 m,p-Xylenes	106	10.608	10.608	(1.031)	1375758	83.8963	83.9
65 Styrene	104	11.216	11.216	(1.090)	1143299	44.5157	44.5
64 o-Xylene	106	11.192	11.192	(1.087)	725985	44.7292	44.7
67 Isopropylbenzene	105	11.733	11.734	(0.857)	1608188	43.9980	44.0
66 Bromoform	173	11.539	11.545	(0.842)	184404	45.9237	45.9
73 1,1,2,2-Tetrachloroethane	83	11.879	11.880	(0.867)	403287	43.5073	43.5
92 1,2-Dibromo-3-chloropropane	75	15.341	15.341	(1.120)	63066	40.2791	40.3
60 1,1,1,2-Tetrachloroethane	131	10.419	10.426	(1.012)	340973	50.8935	50.9
34 1,1-Dichloropropene	75	5.705	5.705	(0.913)	502161	45.1146	45.1
52 1,3-Dichloropropane	76	9.124	9.124	(0.886)	525626	42.6571	42.6
24 2-Chloro-1,3-butadiene	53	4.549	4.268	(0.728)	6964	0.45276	0.45(a)
80 4-Chlorotoluene	91	12.567	12.567	(0.917)	1313084	42.3820	42.4
15 Acetonitrile	41	2.955	2.961	(0.473)	1272547	910.175	910(Q)
27 Methacrylonitrile	41	4.804	4.840	(0.769)	385895	61.6328	61.6
19 Isobutyl alcohol	41	4.804	4.986	(0.769)	385895	894.556	894(Q)
13 Iodomethane	142	3.198	3.198	(0.512)	2796291	214.047	214
43 Dibromomethane	93	7.219	7.220	(1.156)	209949	45.2595	45.2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
29 Bromochloromethane	128	5.127	5.133	(0.821)	182271	45.8222	45.8
75 Bromobenzene	156	12.232	12.238	(0.893)	412349	45.8571	45.8
18 Acrylonitrile	53	3.618	3.417	(0.579)	12958	3.33267	3.3(aQ)
81 tert-Butylbenzene	119	13.053	13.054	(0.953)	1416291	45.6357	45.6
83 sec-Butylbenzene	105	13.370	13.370	(0.976)	1989458	44.5557	44.6
76 n-Propylbenzene	91	12.305	12.311	(0.898)	1981492	42.2887	42.3
89 n-Butylbenzene	91	14.173	14.173	(1.035)	1411023	43.0089	43.0
23 Vinyl acetate	43	4.135	4.135	(0.662)	3690778	251.767	252
28 Propionitrile	54	4.573	4.554	(0.732)	2476	1.55842	1.6(a)
84 4-Isopropyltoluene	119	13.583	13.583	(0.992)	1499251	44.6371	44.6
77 2-Chlorotoluene	91	12.482	12.488	(0.911)	1250148	44.9008	44.9
25 2,2-Dichloropropane	77	4.804	4.811	(0.769)	515307	49.2885	49.3
78 1,3,5-Trimethylbenzene	105	12.549	12.555	(0.916)	1414183	44.9539	45.0
96 1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	379503	39.1474	39.1
79 1,2,4-Trimethylbenzene	105	13.090	13.096	(0.956)	1443658	44.6120	44.6
74 1,2,3-Trichloropropane	110	12.074	12.074	(0.881)	107842	40.5443	40.5

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/020406v8.b/8v622.d

Date : 04-FEB-2006 21:05

Client ID: GU06010G8WT01MS

Instrument: VOA8.i

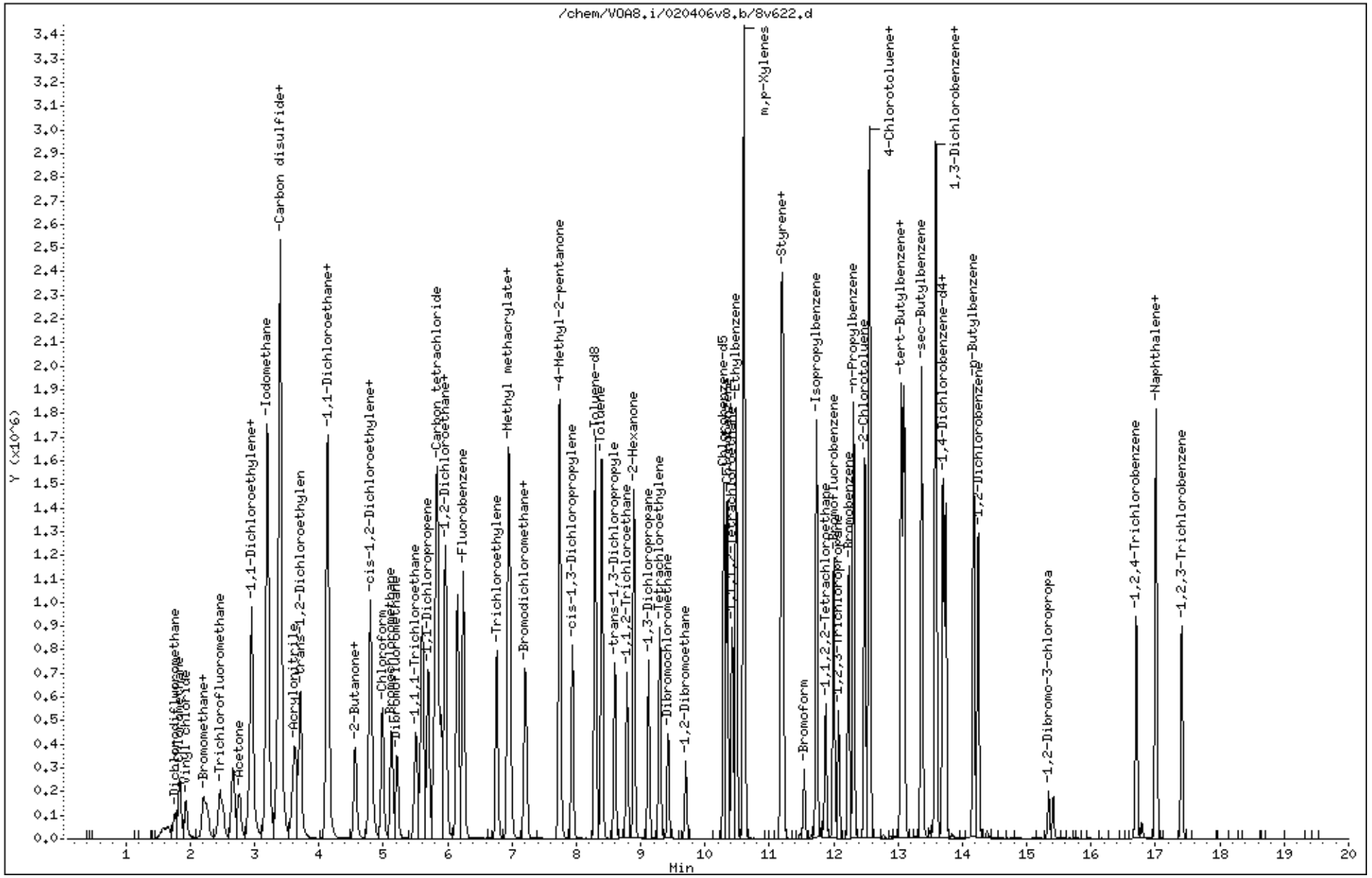
Sample Info: |120102532415006241|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025325**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PSD)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:34**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
630-20-6	1,1,1,2-Tetrachloroethane		51.8	ug/L	0.250	1.00
563-58-6	1,1-Dichloropropene		47.5	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		44.5	ug/L	0.300	1.00
96-18-4	1,2,3-Trichloropropane		42.9	ug/L	0.300	1.00
95-63-6	1,2,4-Trimethylbenzene		44.3	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		44.8	ug/L	0.250	1.00
142-28-9	1,3-Dichloropropane		44.6	ug/L	0.250	1.00
594-20-7	2,2-Dichloropropane		50.9	ug/L	0.300	1.00
126-99-8	2-Chloro-1,3-butadiene	J	0.456	ug/L	0.300	1.00
95-49-8	2-Chlorotoluene		44.2	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		42.7	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		44.9	ug/L	0.250	1.00
75-05-8	Acetonitrile		980	ug/L	6.25	25.0
107-02-8	Acrolein	U	5.00	ug/L	3.00	5.00
107-13-1	Acrylonitrile	J	3.19	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	5.00	ug/L	3.70	5.00
108-86-1	Bromobenzene		45.8	ug/L	0.250	1.00
74-97-5	Bromochloromethane		46.9	ug/L	0.300	1.00
74-95-3	Dibromomethane		47.6	ug/L	0.300	1.00
74-88-4	Iodomethane		217	ug/L	1.25	5.00
78-83-1	Isobutyl alcohol		898	ug/L	12.5	50.0

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025325**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PSD)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:34**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
126-98-7	Methacrylonitrile		61.8	ug/L	1.00	5.00
107-12-0	Propionitrile	J	1.58	ug/L	1.50	5.00
108-05-4	Vinyl acetate		265	ug/L	1.50	5.00
104-51-8	n-Butylbenzene		44.7	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		42.6	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		45.4	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		45.6	ug/L	0.250	1.00
75-71-8	Dichlorodifluoromethane		27.6	ug/L	0.500	1.00
74-87-3	Chloromethane		38.4	ug/L	0.500	1.00
75-01-4	Vinyl chloride		38.2	ug/L	0.500	1.00
74-83-9	Bromomethane		40.6	ug/L	0.500	1.00
75-00-3	Chloroethane		42.5	ug/L	0.500	1.00
75-69-4	Trichlorofluoromethane		40.4	ug/L	0.310	1.00
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	1.00	5.00
75-35-4	1,1-Dichloroethylene		43.8	ug/L	0.300	1.00
67-64-1	Acetone		199	ug/L	1.25	5.00
75-15-0	Carbon disulfide		266	ug/L	1.25	5.00
75-09-2	Methylene chloride		58.1	ug/L	2.00	5.00
156-60-5	trans-1,2-Dichloroethylene		44.2	ug/L	0.300	1.00
75-34-3	1,1-Dichloroethane		48.3	ug/L	0.300	1.00
156-59-2	cis-1,2-Dichloroethylene		47.6	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025325**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PSD)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:34**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
67-66-3	Chloroform		46.5	ug/L	0.250	1.00
107-06-2	1,2-Dichloroethane		45.8	ug/L	0.250	1.00
78-93-3	2-Butanone		206	ug/L	1.25	5.00
71-55-6	1,1,1-Trichloroethane		48.9	ug/L	0.300	1.00
106-46-7	1,4-Dichlorobenzene		41.1	ug/L	0.250	1.00
120-82-1	1,2,4-Trichlorobenzene		43.2	ug/L	0.300	1.00
541-73-1	1,3-Dichlorobenzene		40.9	ug/L	0.250	1.00
95-50-1	1,2-Dichlorobenzene		42.7	ug/L	0.250	1.00
91-20-3	Naphthalene		48.4	ug/L	0.250	1.00
87-68-3	Hexachlorobutadiene		44.0	ug/L	0.250	1.00
123-91-1	1,4-Dioxane	U	50.0	ug/L	20.0	50.0
80-62-6	Methyl methacrylate		29.2	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	5.00	ug/L	1.00	5.00
56-23-5	Carbon tetrachloride		55.5	ug/L	0.250	1.00
71-43-2	Benzene		52.7	ug/L	0.300	1.00
79-01-6	Trichloroethylene		46.1	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		47.9	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		51.4	ug/L	0.250	1.00
10061-01-5	cis-1,3-Dichloropropylene		55.0	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		51.6	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		44.9	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**154614**	**Date Collected:**	**01/24/2006 12:40**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1201025325**	**Date Received:**	**01/26/2006 09:20**		
Client Sample:	**QC for batch 500624**	**Client:**	**ESHL001**	**Project:**	**QC**
Client ID:	**GU06010G8WT01(154614003PSD)**	**Method:**	**SW846 8260B DOE-AL**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**500624**	**Inst:**	**VOA8.I**	**Dilution:**	**1**
Run Date:	**02/04/2006 21:34**	**Analyst:**	**ACJ**	**Purge Vol:**	**5 mL**

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
124-48-1	Dibromochloromethane		50.2	ug/L	0.250	1.00
108-10-1	4-Methyl-2-pentanone		206	ug/L	1.25	5.00
108-88-3	Toluene		43.7	ug/L	0.250	1.00
127-18-4	Tetrachloroethylene		42.2	ug/L	0.250	1.00
591-78-6	2-Hexanone		204	ug/L	1.25	5.00
106-93-4	1,2-Dibromoethane		45.2	ug/L	0.250	1.00
108-90-7	Chlorobenzene		44.2	ug/L	0.250	1.00
100-41-4	Ethylbenzene		44.0	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		86.1	ug/L	0.250	2.00
100-42-5	Styrene		45.5	ug/L	0.250	1.00
95-47-6	o-Xylene		45.7	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		43.8	ug/L	0.250	1.00
75-25-2	Bromoform		46.7	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		45.2	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		46.1	ug/L	0.500	1.00

Surrogate/Tracer recovery	Result	Nominal		Recovery%	Acceptable Limits
Bromofluorobenzene	49.6	50.0	ug/L	99	(75%-119%)
Dibromofluoromethane	45.8	50.0	ug/L	92	(85%-120%)
Toluene-d8	46.1	50.0	ug/L	92	(79%-122%)

General Engineering Laboratories, LLC

VOLATILE GC/MS : SOP# GL-OA-E-038,-039,-026

Data file : /chem/VOA8.i/020406v8.b/8v623.d
Lab Smp Id: 1201025325 Client Smp ID: GU06010G8WT01MSD
Inj Date : 04-FEB-2006 21:34
Operator : ACJ Inst ID: VOA8.i
Smp Info : |1201025325|500624|1|VOAF|1|
Misc Info : ESHL 5ML PH2 MSD 154614003
Comment :
Method : /chem/VOA8.i/020406v8.b/VOA8-8260B-011106.m
Meth Date : 06-Feb-2006 09:02 amj Quant Type: ISTD
Cal Date : 11-JAN-2006 18:08 Cal File: 8s317.d
Als bottle: 22 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 154614.sub
Target Version: 3.50

Concentration Formula: Amt * DF * (Uf/Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	5.00000	ng unit correction factor
Vo	5.00000	sample purged

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 40 Fluorobenzene	96	6.246	6.246	(1.000)	1477985	50.0000	
* 61 Chlorobenzene-d5	117	10.297	10.298	(1.000)	1066382	50.0000	
* 86 1,4-Dichlorobenzene-d4	152	13.698	13.698	(1.000)	542581	50.0000	
$ 35 Dibromofluoromethane	113	5.211	5.218	(0.834)	334565	45.8421	45.8
$ 47 Toluene-d8	98	8.296	8.296	(0.806)	1458865	46.1474	46.1
$ 71 Bromofluorobenzene	95	12.001	12.001	(0.876)	546502	49.5534	49.6
3 Dichlorodifluoromethane	85	1.755	1.755	(0.281)	219529	27.6339	27.6
4 Chloromethane	50	1.838	1.837	(0.294)	482392	38.4029	38.4
5 Vinyl chloride	62	1.937	1.937	(0.310)	289289	38.2231	38.2
6 Bromomethane	94	2.207	2.207	(0.353)	222235	40.6113	40.6
7 Chloroethane	64	2.260	2.266	(0.362)	255006	42.4672	42.5
8 Trichlorofluoromethane	101	2.466	2.466	(0.395)	523597	40.4310	40.4
11 1,1-Dichloroethylene	61	2.961	2.955	(0.474)	594410	43.8271	43.8
10 Acetone	43	2.766	2.760	(0.443)	559444	199.244	199
14 Carbon disulfide	76	3.405	3.405	(0.545)	5603947	266.454	266
17 Methylene chloride	84	3.368	3.369	(0.539)	389773	58.0712	58.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
21 trans-1,2-Dichloroethylene	96	3.715	3.716	(0.595)	379804	44.1711	44.2
22 1,1-Dichloroethane	63	4.129	4.129	(0.661)	764052	48.2837	48.3
31 cis-1,2-Dichloroethylene	96	4.804	4.798	(0.769)	430782	47.6277	47.6
32 Chloroform	83	4.986	4.993	(0.798)	663837	46.4521	46.4
37 1,2-Dichloroethane	62	5.905	5.906	(0.945)	486629	45.8083	45.8
30 2-Butanone	43	4.567	4.567	(0.731)	990648	205.614	206
36 1,1,1-Trichloroethane	97	5.510	5.510	(0.882)	537413	48.8647	48.9
87 1,4-Dichlorobenzene	146	13.740	13.741	(1.003)	764535	41.1178	41.1
93 1,2,4-Trichlorobenzene	180	16.703	16.704	(1.219)	455531	43.1801	43.2
85 1,3-Dichlorobenzene	146	13.594	13.595	(0.992)	754599	40.9316	40.9
90 1,2-Dichlorobenzene	146	14.245	14.246	(1.040)	751125	42.7411	42.7
95 Naphthalene	128	17.001	17.002	(1.241)	1207144	48.3582	48.4
94 Hexachlorobutadiene	225	17.013	17.014	(1.242)	265315	44.0037	44.0
42 Methyl methacrylate	69	6.963	7.073	(1.115)	154534	29.1867	29.2(Q)
33 Carbon tetrachloride	117	5.820	5.827	(0.932)	405531	55.5014	55.5
38 Benzene	78	5.966	5.966	(0.955)	1573809	52.6939	52.7
39 Trichloroethylene	95	6.763	6.763	(1.083)	386694	46.1292	46.1
41 1,2-Dichloropropane	63	6.939	6.940	(1.111)	440096	47.8827	47.9
45 Bromodichloromethane	83	7.201	7.201	(1.153)	476868	51.4107	51.4
46 cis-1,3-Dichloropropylene	75	7.937	7.937	(1.271)	591377	55.0339	55.0
53 trans-1,3-Dichloropropylene	75	8.600	8.601	(0.835)	492316	51.6444	51.6
54 1,1,2-Trichloroethane	83	8.789	8.789	(0.853)	267606	44.9415	44.9
57 Dibromochloromethane	129	9.427	9.428	(0.916)	317180	50.2478	50.2
49 4-Methyl-2-pentanone	58	7.742	7.743	(0.752)	824997	206.391	206
50 Toluene	92	8.399	8.400	(0.816)	963555	43.6666	43.7
56 Tetrachloroethylene	164	9.293	9.300	(0.903)	286983	42.2333	42.2
55 2-Hexanone	43	8.898	8.899	(0.864)	1489760	203.740	204
59 1,2-Dibromoethane	107	9.701	9.702	(0.942)	309805	45.2213	45.2
62 Chlorobenzene	112	10.346	10.347	(1.005)	1001206	44.1789	44.2
58 Ethylbenzene	91	10.480	10.486	(1.018)	1750748	43.9687	44.0
63 m,p-Xylenes	106	10.607	10.608	(1.030)	1373211	86.1052	86.1
65 Styrene	104	11.216	11.216	(1.089)	1136309	45.4927	45.5
64 o-Xylene	106	11.185	11.192	(1.086)	721611	45.7149	45.7
67 Isopropylbenzene	105	11.733	11.734	(0.857)	1619864	43.8158	43.8
66 Bromoform	173	11.538	11.545	(0.842)	189605	46.6570	46.6
73 1,1,2,2-Tetrachloroethane	83	11.879	11.880	(0.867)	423573	45.1785	45.2
92 1,2-Dibromo-3-chloropropane	75	15.340	15.341	(1.120)	73006	46.0993	46.1
60 1,1,1,2-Tetrachloroethane	131	10.425	10.426	(1.012)	337552	51.8054	51.8
34 1,1-Dichloropropene	75	5.704	5.705	(0.913)	513442	47.5031	47.5
52 1,3-Dichloropropane	76	9.123	9.124	(0.886)	534481	44.6004	44.6
24 2-Chloro-1,3-butadiene	53	4.567	4.268	(0.731)	6818	0.45643	0.46(aQ)
80 4-Chlorotoluene	91	12.566	12.567	(0.917)	1339641	42.7497	42.7
15 Acetonitrile	41	2.961	2.961	(0.474)	1329982	979.610	980
27 Methacrylonitrile	41	4.810	4.840	(0.770)	375987	61.8405	61.8
19 Isobutyl alcohol	41	4.810	4.986	(0.770)	375987	897.571	898(Q)
13 Iodomethane	142	3.198	3.198	(0.512)	2754065	217.099	217
43 Dibromomethane	93	7.219	7.220	(1.156)	214270	47.5676	47.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
29 Bromochloromethane	128	5.126	5.133	(0.821)	181304	46.9377	46.9
75 Bromobenzene	156	12.232	12.238	(0.893)	416481	45.7923	45.8
18 Acrylonitrile	53	3.642	3.417	(0.583)	12050	3.19150	3.2(aQ)
81 tert-Butylbenzene	119	13.053	13.054	(0.953)	1431392	45.6002	45.6
83 sec-Butylbenzene	105	13.369	13.370	(0.976)	2049481	45.3804	45.4
76 n-Propylbenzene	91	12.311	12.311	(0.899)	2017582	42.5715	42.6
89 n-Butylbenzene	91	14.172	14.173	(1.035)	1482234	44.6681	44.7
23 Vinyl acetate	43	4.135	4.135	(0.662)	3766468	264.589	264
28 Propionitrile	54	4.554	4.554	(0.729)	2444	1.58405	1.6(aQ)
84 4-Isopropyltoluene	119	13.582	13.583	(0.992)	1526081	44.9216	44.9
77 2-Chlorotoluene	91	12.481	12.488	(0.911)	1245670	44.2335	44.2
25 2,2-Dichloropropane	77	4.810	4.811	(0.770)	516905	50.9151	50.9
78 1,3,5-Trimethylbenzene	105	12.554	12.555	(0.916)	1424159	44.7585	44.8
96 1,2,3-Trichlorobenzene	180	17.409	17.409	(1.271)	436513	44.5186	44.5
79 1,2,4-Trimethylbenzene	105	13.096	13.096	(0.956)	1449517	44.2859	44.3
74 1,2,3-Trichloropropane	110	12.074	12.074	(0.881)	115422	42.9032	42.9

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: /chem/VOA8.i/020406v8.b/8v623.d

Date : 04-FEB-2006 21:34

Client ID: GU06010G8WT01MSD

Instrument: VOA8.i

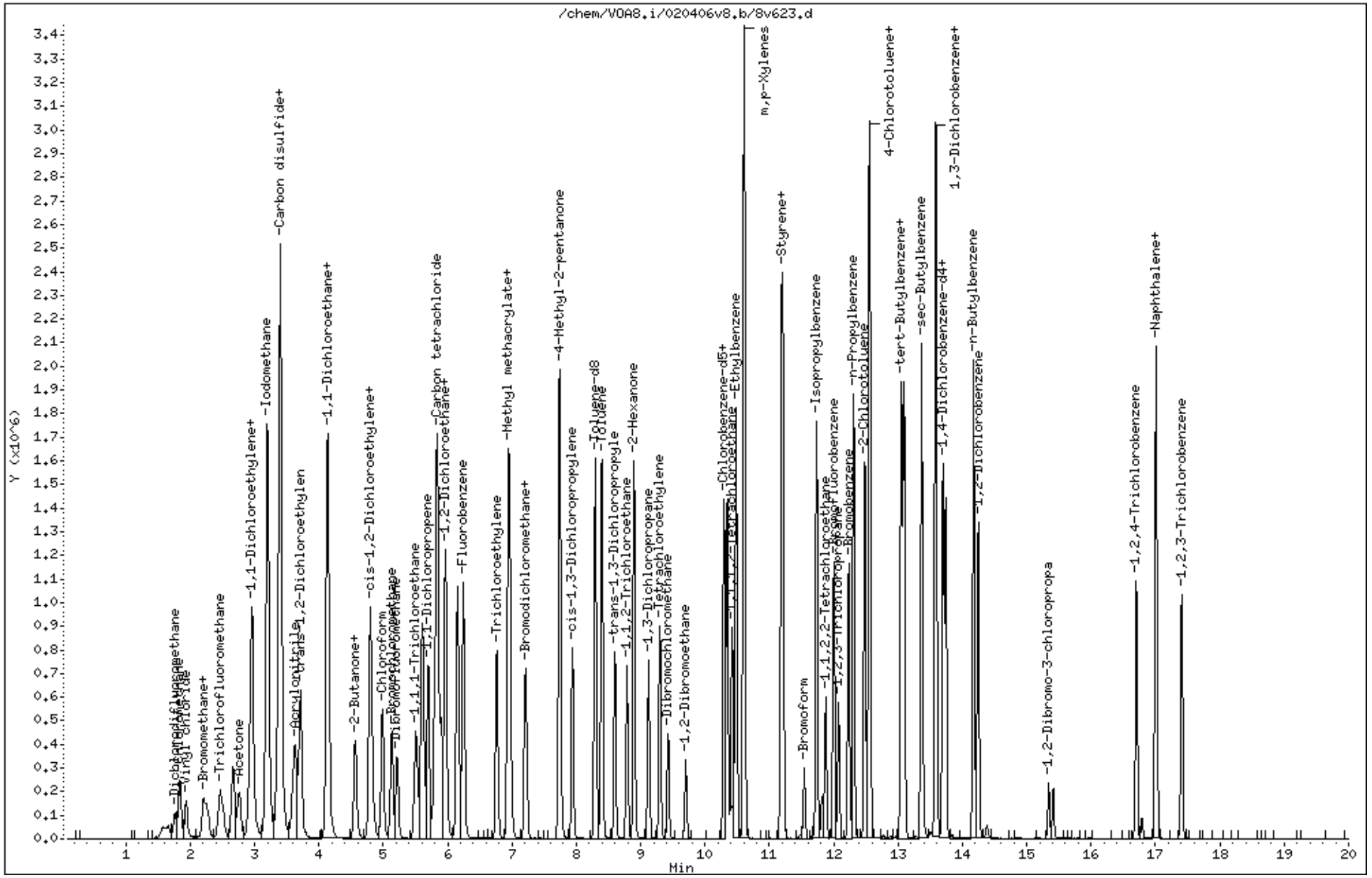
Sample Info: |120102532515006241|1|VOAF|1|

Purge Volume: 5.0

Operator: ACJ

Column phase: DB-624

Column diameter: 0.25



MISCELLANEOUS DATA

General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 289433
Revision No.:

COMPANY – WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
07-FEB-06	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B DOE-AL	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
500624	See Below		

Potentially affected work order(s)(SDG): 154614

Application Issues:

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. 1201025327LCS failed spike recovery low for Acrolein (52.72%, limits 55.8-147.8%). 1201026795LCS failed spike recovery low for Dichlorodifluoromethane (46.54%, limits 50.2-142.1%) 1201028020LCS failed spike recovery low for Acrolein (49.12%, limits 55.8-147.8%).	1. Narrate and report data. Passes client required 5%.

Originator's Name:

Amy Jamison 07-FEB-06

Data Validator/Group Leader:

Erin Haubert 09-FEB-06

Quality Review:

Director:

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA8

Date: 1/11/06 Method 8260 Operator: ACJ

REVIEWED BY: [signature]
DATE: 2/3/06

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2024

CALIBRATION & CC INFORMATION:

Initial Calibration Date: _____

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 011106V8

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM051215-01	1	1	1	
SS	UVM060104-02	1	1	1	
LCS/MS				1	
BFB	UVM051215-02				1
SHORT					
DHEC	N/A				

Purge Amount [signature] 2/03/06

5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
1/11/06	10:21	8S301.D	UVM051215-02	GEL	BFB	N/A	1	N/A	99	N/A	ACJ	O	
1/11/06	10:37	8S302.D	120100---	GEL	BLANK	5ML	1	N/A	1	W	ACJ	X	
1/11/06	11:07	8S303.D	W8V060111-01	GEL	VSTD0005	5ML	1	N/A	2	W	ACJ	O	UVM051216-10C/UVM051216-01
1/11/06	11:37	8S304.D	W8V060111-02	GEL	VSTD001	5ML	1	N/A	3	W	ACJ	O	UVM051216-11C/UVM051216-02
1/11/06	12:07	8S305.D	W8V060111-02	GEL	VSTD001	5ML	1	N/A	4	W	ACJ	X	UVM051216-11C/UVM051216-02
1/11/06	12:37	8S306.D	W8V060111-03	GEL	VSTD002	5ML	1	N/A	5	W	ACJ	O	UVM051216-12C/UVM051216-03
1/11/06	13:08	8S307.D	W8V060111-04	GEL	VSTD005	5ML	1	N/A	6	W	ACJ	O	UVM051216-13C/UVM051216-04
1/11/06	13:38	8S308.D	W8V060111-05	GEL	VSTD010	5ML	1	N/A	7	W	ACJ	O	UVM051216-14C/UVM051216-05
1/11/06	14:08	8S309.D	W8V060111-06	GEL	VSTD020	5ML	1	N/A	8	W	ACJ	O	UVM051216-15C/UVM051216-06
1/11/06	14:38	8S310.D	W8V060111-07	GEL	VSTD050	5ML	1	N/A	9	W	ACJ	O	UVM051216-16C/UVM051216-07
1/11/06	15:08	8S311.D	W8V060111-08	GEL	VSTD100	5ML	1	N/A	10	W	ACJ	O	UVM051216-17C/UVM051216-08
1/11/06	15:38	8S312.D	120100--	GEL	BLANK	5ML	1	N/A	11	W	ACJ	X	
1/11/06	16:08	8S313.D	UVM051208-04	GEL	VSTD005S	5ML	1	N/A	12	W	ACJ	O	
1/11/06	16:39	8S314.D	UVM051208-05	GEL	VSTD010S	5ML	1	N/A	13	W	ACJ	O	
1/11/06	17:09	8S315.D	UVM051208-06	GEL	VSTD025S	5ML	1	N/A	14	W	ACJ	O	
1/11/06	17:39	8S316.D	UVM051208-07	GEL	VSTD050S	5ML	1	N/A	15	W	ACJ	O	
1/11/06	18:08	8S317.D	UVM051208-08	GEL	VSTD100S	5ML	1	N/A	16	W	ACJ	O	
1/11/06	18:39	8S318.D	UVM051208-09	GEL	VSTD250S	5ML	1	N/A	17	W	ACJ	O	
1/11/06	19:09	8S319.D	UVM051208-10	GEL	VSTD500S	5ML	1	N/A	18	W	ACJ	O	

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General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA8

Date: 1/11/06 Method 8260 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2024

CALIBRATION & CC INFORMATION:

Initial Calibration Date: _____

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 011106V8

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV					
IS	UVM051215-01	1	1	1	
SS	UVM060104-02	1	1	1	
LCS/MS				1	
BFB	UVM051215-02				1
SHORT					
DHEC	N/A				

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
1/11/06	19:39	8S320.D	120100---	GEL	BLANK	5ML	1	N/A	19	W	ACJ	X	
1/11/06	20:08	8S321.D	120100---	GEL	BLANK	5ML	1	N/A	20	W	ACJ	X	

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General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA8

Date: 2/2/06 Method 8260 Operator: ACJ

REVIEWED BY: [illegible]
DATE: 2/3/06

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2024

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/06

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 020206V8

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	UVM060105-01D		5		
IS	UVM051215-01	1	1	1	
SS	UVM060104-02	1	1	1	
LCS/MS	UVM060105-01D			1	
BFB	UVM051215-02				1
SHORT	UVM060123-01A		5		
DHEC	UVM051227-01D			5	

Purge Amount

5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
2 Feb 2006	09:11	8V401.D	UVM051215-02	GEL	BFB	N/A	1	N/A	99	N/A	ACJ	O	
2 Feb 2006	09:27	8V402.D	UVM060105-01D	GEL	ICV	5ML	1	N/A	1	W	ACJ	O	
2 Feb 2006	09:57	8V403.D	W8V060201-02	GEL	LCS	5ML	1	N/A	2	W	ACJ	X	NOT NEEDED
2 Feb 2006	10:27	8V404.D	UVM060123-01A	GEL	SHORT	5ML	1	N/A	3	W	ACJ	O	
2 Feb 2006	10:57	8V405.D	UVM051227-01D	GEL	DHEC	5ML	1	N/A	4	W	ACJ	X	
2 Feb 2006	11:27	8V406.D	12010--	GEL	BLANK	5ML	1	N/A	5	W	ACJ	X	
2 Feb 2006	11:57	8V407.D	12010--	GEL	BLANK	5ML	1	N/A	6	W	ACJ	X	

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General Engineering Laboratories, LLC
Revi :11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA8

Date: 2/3/06 Method 8260 Operator: ACJ

REVIEWED BY: [signature]
DATE: 2/6/06

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2024

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/06

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 020306V8

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W8V060203-02		~~5+5~~		
IS	UVM051215-01	1	1	1	
SS	UVM060104-02	1	0/1	1	
LCS/MS	W8V060203-02			5+5	
BFB	UVM051215-02				1
SHORT	UVM060123-01A		5	5	
DHEC	UVM051227-01D			5	

Purge Amount [signature] 2/3/06

5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
3 Feb 2006 08:35	8V501.D	UVM051215-02	[redacted]	BFB	N/A	1	N/A	99	N/A	ACJ	O	
3 Feb 2006 08:51	8V502.D	W8V060203-01		CCV	5ML	1	N/A	1	W	ACJ	O	UVM060124-08A/UVM0202-08A
3 Feb 2006 09:21	8V503.D	UVM060105-01D		LCS	5ML	1	N/A	2	W	ACJ	X	
3 Feb 2006 09:51	8V504.D	W8V060203-02		LCS	5ML	1	N/A	3	W	ACJ	O	UVM051229-01E/IVM060201-01
3 Feb 2006 10:21	8V505.D	UVM060123-01A		SHORT	5ML	1	N/A	4	W	ACJ	O	
3 Feb 2006 10:51	8V506.D	UVM051227-01D		DHEC	5ML	1	N/A	5	W	ACJ	X	
3 Feb 2006 11:20	8V507.D	12010--		BLANK	5ML	1	N/A	6	W	ACJ	X	
3 Feb 2006 11:50	8V508.D	12010--		BLANK	5ML	1	N/A	7	W	ACJ	O	
3 Feb 2006 12:21	8V509.D	153054011		500619	5ML	1	PH2	8	W	ACJ	O	
3 Feb 2006 12:51	8V510.D	153054012		500619	5ML	1	PH2	9	W	ACJ	O	
3 Feb 2006 13:20	8V511.D	153054013		500619	5ML	1	PH2	10	W	ACJ	O	
3 Feb 2006 13:50	8V512.D	153054015		500619	5ML	1	PH7	11	W	ACJ	O	
3 Feb 2006 14:20	8V513.D	153054016		500619	5ML	1	PH2	12	W	ACJ	O	
3 Feb 2006 14:50	8V514.D	153054017		500619	5ML	1	PH2	13	W	ACJ	O	
3 Feb 2006 15:20	8V515.D	153054018		500619	5ML	1	PH2	14	W	ACJ	O	
3 Feb 2006 15:50	8V516.D	153054020		500619	5ML	1	PH7	15	W	ACJ	O	
3 Feb 2006 16:20	8V517.D	153054014		500619	5ML	1	PH7	16	W	ACJ	O	
3 Feb 2006 16:50	8V518.D	153054019		500619	5ML	1	PH7	17	W	ACJ	O	
3 Feb 2006 17:20	8V519.D	154614005	ESHL	500624	5ML	1	PH2	18	W	ACJ	O	
3 Feb 2006 17:49	8V520.D	154614006	ESHL	500624	5ML	1	PH2	19	W	ACJ	O	
3 Feb 2006 18:19	8V521.D	154614007	ESHL	500624	5ML	1	PH2	20	W	ACJ	O	
3 Feb 2006 18:49	8V522.D	154614010	ESHL	500624	5ML	1	PH2	21	W	ACJ	O	
3 Feb 2006 19:19	8V523.D	154614003	ESHL	500624	5ML	1	PH2	22	W	ACJ	O	
3 Feb 2006 19:48	8V524.D	154614004	ESHL	500624	5ML	1	PH2	23	W	ACJ	O	
3 Feb 2006 20:18	8V525.D	154614009	ESHL	500624	5ML	1	PH2	24	W	ACJ	O	
3 Feb 2006 20:48	8V526.D	1201025324	ESHL	500624	5ML	1	PH2	25	W	ACJ	X	MS 154614003
3 Feb 2006 21:18	8V527.D	1201025325	ESHL	500624	5ML	1	PH2	26	W	ACJ	X	MSD 154614003; OUT OF TUNE

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General Engineering Laboratories, LLC
Revi :11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA8

Date: 2/3/06 Method 8260 Operator: ACJ

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2024

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/06

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 020306V8

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W8V060203-02		~~5+5~~		
IS	UVM051215-01	1	1	1	
SS	UVM060104-02	1	0/1	1	
LCS/MS	W8V060203-02			5+5	
BFB	UVM051215-02				1
SHORT	UVM060123-01A		5	5	
DHEC	UVM051227-01D			5	

2572.5 MS 2/2/06

Purge Amount	
5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
3 Feb 2006	21:48	8V528.D	12010----	[redacted]	BLANK	5ML	1	N/A	27	W	ACJ	X	
3 Feb 2006	22:18	8V529.D	12010----	[redacted]	BLANK	5ML	1	N/A	28	W	ACJ	X	

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General Engineering Laboratories, LLC
Revi :11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA8

Date: 2/4/06 Method 8260 Operator: ACJ

REVIEWED BY: YS
DATE: 2/6/06

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 2024

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 1/11/06

(See pg. _____ for ICAL Std. Sci. Ids)

Sequence Number: 020406V8

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W8V060204-01	2.5+2.5			
IS	UVM051215-01	1	1	1	
SS	UVM060104-02	1	0/1	1	
LCS/MS	W8V060204-02			5+5	
BFB	UVM051215-02				1
SHORT	UVM060123-01A		5	5	
DHEC	N/S				

Purge Amount NS 02/04/06

5	Water Purge Vol:
	Soil Purge Wt.
	Mid level ext. MeOH Vol:
	ul
	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Acceptable(√/X)	Comments
4 Feb 2006	10:51	8V601.D	UVM051215-02	[redacted]	BFB	N/A	1	N/A	99	N/A	ACJ	O	
4 Feb 2006	11:09	8V602.D	W8V060204-01		CCV	5ML	1	N/A	1	W	ACJ	O	UVM060202-08A/UVM060124-08A
4 Feb 2006	11:38	8V603.D	W8V060203-02		LCS	5ML	1	N/A	2	W	ACJ	O	UVM051229-01E/IVM060201-01
4 Feb 2006	12:08	8V604.D	W8V060203-02		LCSD	5ML	1	N/A	3	W	ACJ	X	NOT NEEDED
4 Feb 2006	12:38	8V605.D	UVM060123-01A		SHORT	5ML	1	N/A	4	W	ACJ	O	
4 Feb 2006	13:08	8V606.D	12010--		BLANK	5ML	1	N/A	5	W	ACJ	X	
4 Feb 2006	13:38	8V607.D	12010--		BLANK	5ML	1	N/A	6	W	ACJ	O	
4 Feb 2006	14:08	8V608.D	154596001		500992	5ML	1	PH2	7	W	ACJ	O	
4 Feb 2006	14:38	8V609.D	154596002		500992	5ML	1	PH2	8	W	ACJ	O	
4 Feb 2006	15:07	8V610.D	154596003		500992	5ML	1	PH2	9	W	ACJ	O	
4 Feb 2006	15:37	8V611.D	154596004		500992	5ML	1	PH2	10	W	ACJ	O	
4 Feb 2006	16:07	8V612.D	154655001		500992	5ML	1	PH2	11	W	ACJ	O	
4 Feb 2006	16:37	8V613.D	154655002		500992	5ML	1	PH2	12	W	ACJ	O	
4 Feb 2006	17:07	8V614.D	154655003		500992	5ML	1	PH2	13	W	ACJ	O	
4 Feb 2006	17:37	8V615.D	154655004		500992	5ML	1	PH2	14	W	ACJ	O	
4 Feb 2006	18:06	8V616.D	154748001		500992	5ML	1	PH2	15	W	ACJ	O	
4 Feb 2006	18:36	8V617.D	154748002		500992	5ML	1	PH2	16	W	ACJ	O	
4 Feb 2006	19:05	8V618.D	154748003		500992	5ML	1	PH2	17	W	ACJ	O	
4 Feb 2006	19:35	8V619.D	154748004		500992	5ML	1	PH2	18	W	ACJ	O	
4 Feb 2006	20:05	8V620.D	1201026115		500992	5ML	1	PH2	19	W	ACJ	O	MS 154596002
4 Feb 2006	20:35	8V621.D	1201026116		500992	5ML	1	PH2	20	W	ACJ	O	MSD 154596002
4 Feb 2006	21:05	8V622.D	1201025324	ESHL	500624	5ML	1	PH2	21	W	ACJ	O	MS 154614003
4 Feb 2006	21:34	8V623.D	1201025325	ESHL	500624	5ML	1	PH2	22	W	ACJ	O	MSD 154614003
4 Feb 2006	22:04	8V624.D	1201025752	[redacted]	500789	5ML	1	PH2	23	W	ACJ	O	MS 154548001
4 Feb 2006	22:33	8V625.D	1201025753		500789	5ML	1	PH2	24	W	ACJ	O	MSD 154548001

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LC/MS/MS PERCHLORATE ANALYSIS

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Perchlorate by LC/MSMS
Los Alamos National Laboratory (ESHL)
SDG 154614

Method/Analysis Information

Procedure:	**Definitive Low Level Analysis Using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS) By SW-846 Method 6850 Modified (6850M)**
Analytical Method:	EPA 6850 Modified
Prep Method:	EPA 6850 Modified
Analytical Batch Number:	498240
Prep Batch Number:	498239

Sample Analysis

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201019726	Interference Check Sample (ICS)
1201019721	Method Blank (MB)
1201019722	Laboratory Control Sample (LCS)
1201019723	154614001(GF06010G8WT01) Matrix Spike (MS)
1201019724	154614001(GF06010G8WT01) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-056 REV# 6.

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Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG. Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

Low Level Standard (CRI) Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards and may be based off of the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Interference Check Sample (ICS)
The interference check sample (ICS) met all recovery acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 154614001 (GF06010G8WT01) was chosen for matrix spike analysis.

Matrix Spike (MS) Recovery Statement
The matrix spike recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The matrix spike duplicate recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Retention Time Standard Area Acceptance
The retention time standard areas were within the required acceptance criteria for all samples and QC.

During the analysis of perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled perchlorate was added to each sample as a retention time standard/marker. The presence of perchlorate was confirmed by the relative retention time (RRT) of the perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used. In addition to the isotopic ratio, the presence of perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

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Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Sample 154614008 (GF06010GMC401) was diluted to bring the over range concentration within the calibration range.

Sample Re-extraction/Re-analysis
Samples 1201019723 (GF06010G8WT01MS), 1201019724 (GF06010G8WT01MSD) and 154614001 (GF06010G8WT01) failed acceptance criteria. They were re-analyzed and passed acceptance criteria. The re-analyses are reported.

Miscellaneous Information

Nonconformance (NCR) Documentation
A nonconformance report (NCR) was not generated for this SDG.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples required manual integrations due to software limitations.

Method Comments
The samples were originally analyzed using EPA Method 314.0.

Additional Comments
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

Due to software limitations, all initial calibration blanks must be designated as IPB001 in order for the forms to be correct.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred. Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

Perchlorate Isotope Ratio
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples. Please see the isotope ratio criteria in the Miscellaneous Section.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. It is also fitted with an APCI (Atmospheric Pressure chemical Ionization) probe which is operated in the negative ionization mode for explosives analysis. The laboratory utilizes an Agilent 1100 liquid chromatography instrument for secondary analyte analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. It is also fitted with an APCI (Atmospheric Pressure chemical Ionization) probe which is operated in the negative ionization mode for explosives analysis.

Chromatographic Columns

Chromatographic separation of perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Heather M Mann **Date:** 02/22/06

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SAMPLE DATA SUMMARY

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF06010G8WT01

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614001

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.268	ug/L		1	01-FEB-06 14:59	per02010012a
	Perchlorate Isotope Ratio			3.3			1	01-FEB-06 14:59	per02010012a
14797-73-0	Perchlorate-101	.05	.2	0.265	ug/L		1	01-FEB-06 14:59	per02010012a
	Perchlorate-O(18)			0.505	ug/L		1	01-FEB-06 14:59	per02010012a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF0601G14R101

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614002

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.212	ug/L		1	31-JAN-06 21:03	per01310023a
	Perchlorate Isotope Ratio			3.28			1	31-JAN-06 21:03	per01310023a
14797-73-0	Perchlorate-101	.05	.2	0.211	ug/L		1	31-JAN-06 21:03	per01310023a
	Perchlorate-O(18)			0.469	ug/L		1	31-JAN-06 21:03	per01310023a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF06010GMC401

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614008

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	12.5	50	166	ug/L		250	01-FEB-06 15:37	per02010015a
	Perchlorate Isotope Ratio			3.28			250	01-FEB-06 15:37	per02010015a
14797-73-0	Perchlorate-101	12.5	50	166	ug/L		250	01-FEB-06 15:37	per02010015a
	Perchlorate-O(18)			129	ug/L		250	01-FEB-06 15:37	per02010015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration = Instrument Value X $\frac{\text{Concentrated Extract Volume}}{\text{Aliquot}}$ X $\frac{1}{\%\text{Solids}}$

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GU06010GMC401-FB

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614010

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	31-JAN-06 21:32	per01310025a
	Perchlorate Isotope Ratio						1	31-JAN-06 21:32	per01310025a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	31-JAN-06 21:32	per01310025a
	Perchlorate-O(18)			0.493	ug/L		1	31-JAN-06 21:32	per01310025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 154614

Extract Batch Code: 498239

Date Filtered: 27-JAN-06

Matrix: GROUND WATER

Sample ID: 1201019722

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.178	ug/L	89		85 - 115
Perchlorate Isotope Ratio		3.26				-
Perchlorate-101	0.200	.178	ug/L	89		85 - 115
Perchlorate-O(18)		.415	ug/L			-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 154614

Extract Batch Code: 498239

Date Filtered: 27-JAN-06

Matrix: GROUND WATER

Sample ID: 1201019726

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.196	ug/L	98.1		80 - 120
Perchlorate Isotope Ratio		3.07				
Perchlorate-101	0.200	.208	ug/L	104		80 - 120
Perchlorate-O(18)		.436	ug/L			

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

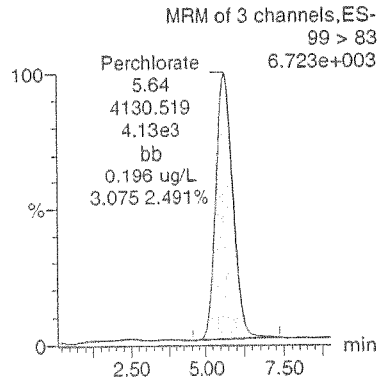
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

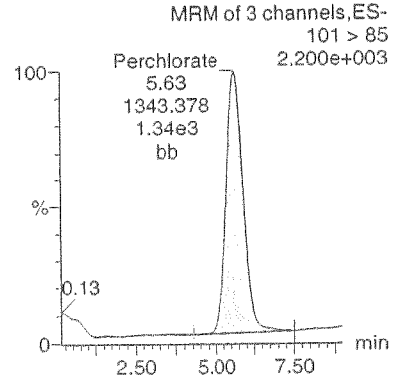
Name: per01310019a
Date: 31-Jan-2006
Time: 20:04:36
ID: 1201019726 | ESHL | 498240 | LCQ | ICS | 1 |
Vial: 1:4,C

mmH 2/1/06

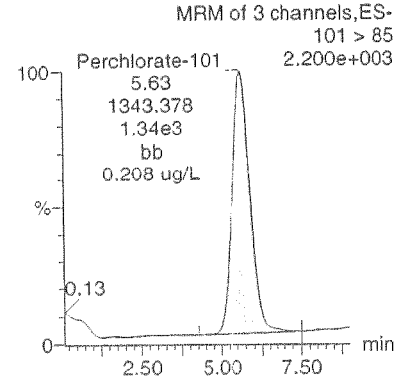
Perchlorate



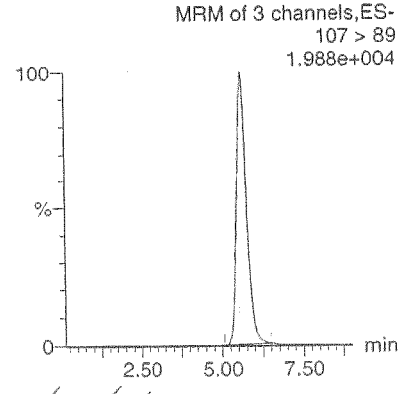
Perchlorate



Perchlorate-101



Perchlorate-O(18)



lynne 02/02/06

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.64	4130.519	4130.519	bb			0.196	98.1	-1.9	2261.1...	3.07
2	Perchlorate-101	101 > 85	5.63	1343.378	1343.378	bb			0.208	104.1	4.1	543.807	
3	Perchlorate-O(18)	107 > 89	5.61	7090.664	7090.664	bb			0.436	87.3	-12.7	8019.5...	

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Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 154614

Extract Batch Code: 498239

Date Extracted: 27-JAN-06

GEL MS/PS ID: 1201019723

Client ID: GF06010G8WT01

GEL MSD/PSD ID: 1201019724

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	0.200	0.268	ug/L	0.459	96	.49	111	6.47	30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.3		3.23		0		-
Perchlorate-101	0.200	0.265	ug/L	0.456	95	.497	116	8.66	30	75 - 125
Perchlorate-O(18)	0	0.505	ug/L	0.493		.523		5.77		-

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

Comments:

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Perchlorate Initial Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	31-JAN-06	per01310001a	IPB001
Perchlorate Isotope Ratio	0.00		NA	31-JAN-06	per01310001a	IPB001
Perchlorate-101	0.00	0	NA	31-JAN-06	per01310001a	IPB001
Perchlorate	0.00	0	NA	31-JAN-06	per01310002a	IPB001
Perchlorate Isotope Ratio	0.00		NA	31-JAN-06	per01310002a	IPB001
Perchlorate-101	0.00	0	NA	31-JAN-06	per01310002a	IPB001
Perchlorate	0.00	0	NA	01-FEB-06	per02010001a	IPB001
Perchlorate Isotope Ratio	0.00		NA	01-FEB-06	per02010001a	IPB001
Perchlorate-101	0.00	0	NA	01-FEB-06	per02010001a	IPB001
Perchlorate	0.00	0	NA	01-FEB-06	per02010002a	IPB001
Perchlorate Isotope Ratio	0.00		NA	01-FEB-06	per02010002a	IPB001
Perchlorate-101	0.00	0	NA	01-FEB-06	per02010002a	IPB001

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

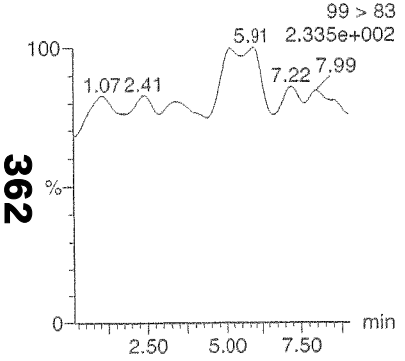
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

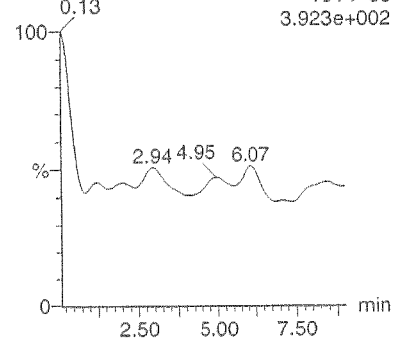
Method: C:\MassLynx\Perchlorate.PRO\MethDB\per013106a.mdb 01 Feb 2006 07:37:32
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per013106a.cdb 01 Feb 2006 07:37:39

Name: per01310001a
Date: 31-Jan-2006
Time: 15:41:36
ID: IPB001
Vial: 1:1,A

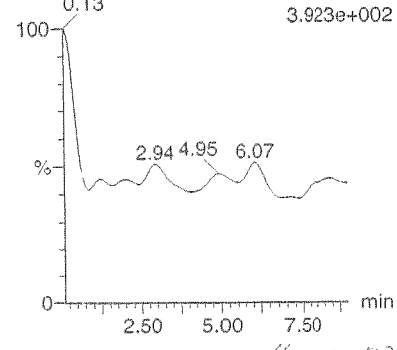
Perchlorate



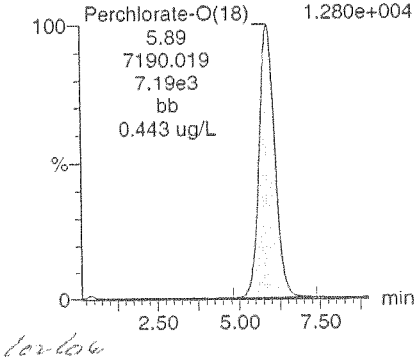
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83											0.00
2 Perchlorate-101	101 > 85											
3 Perchlorate-O(18)	107 > 89	5.89	7190.019	7190.019	bb			0.443	88.5	-11.5	480.955	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

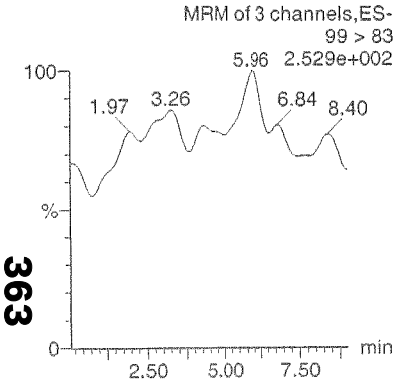
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

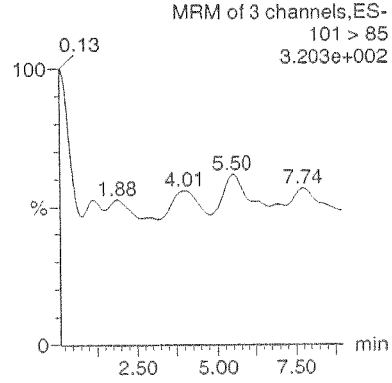
Name: per01310002a
Date: 31-Jan-2006
Time: 15:56:13
ID: IPB001
Vial: 1:1,A

MHT 2/1/06

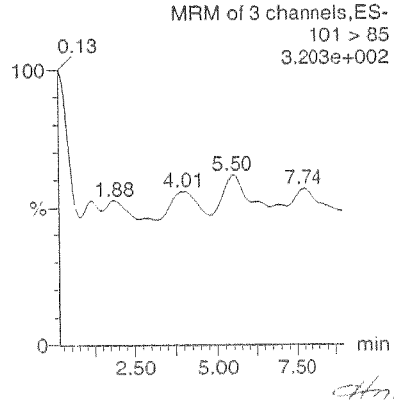
Perchlorate



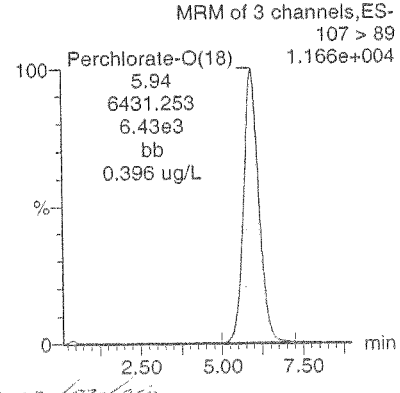
Perchlorate



Perchlorate-101



Perchlorate-O(18)



363

# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83											0.00
2 Perchlorate-101	101 > 85											
3 Perchlorate-O(18)	107 > 89	5.94	6431.253	6431.253	bb			0.396	79.2	-20.8	1762.8...	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

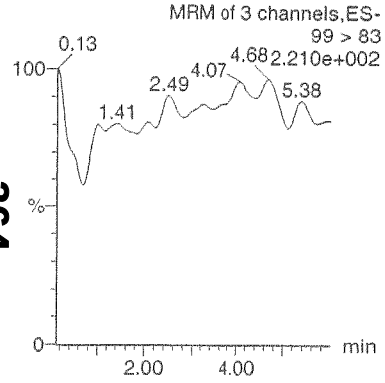
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

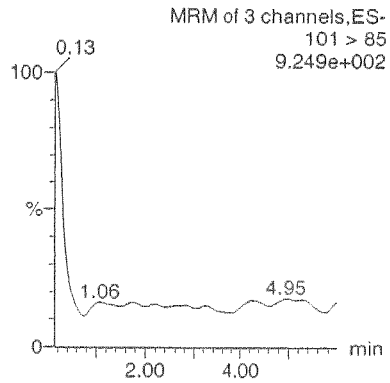
Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020106a.mdb 02 Feb 2006 06:44:18
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020106a.cdb 02 Feb 2006 06:44:21

Name: per02010001a
Date: 01-Feb-2006
Time: 12:02:06
ID: IPB001
Vial: 1:1,A

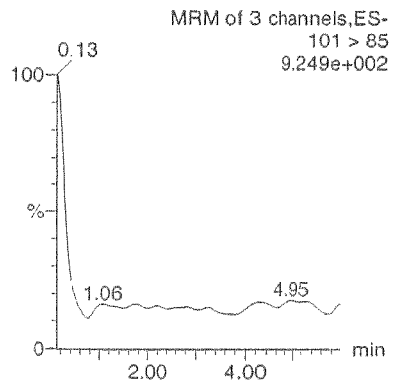
Perchlorate



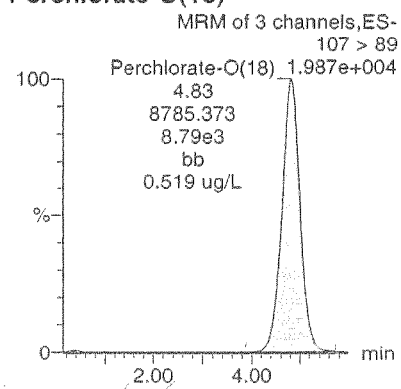
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83											0.00
2	Perchlorate-101	101 > 85											
3	Perchlorate-O(18)	107 > 89	4.83	8785.373	8785.373	bb			0.519	103.9	3.9	625.350	

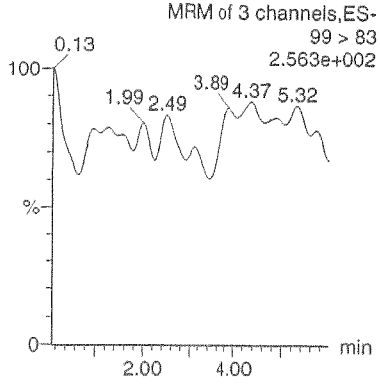
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

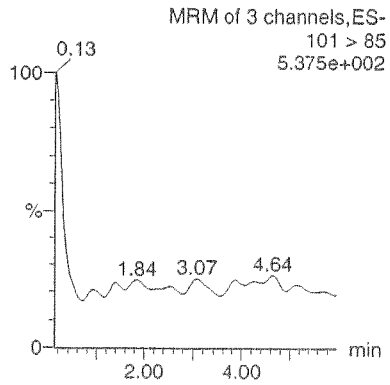
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010002a
Date: 01-Feb-2006
Time: 12:13:43
ID: IPB001
Vial: 1:1,A

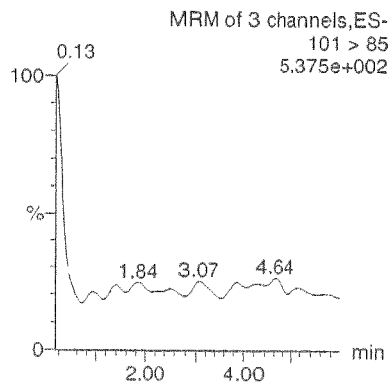
Perchlorate



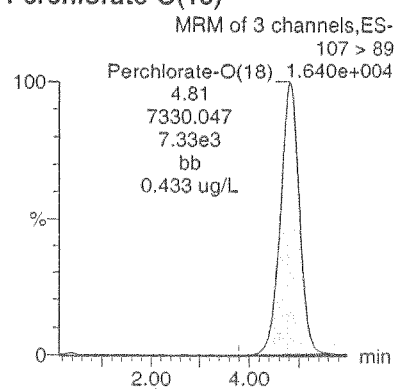
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83											0.00
2	Perchlorate-101	101 > 85											
3	Perchlorate-O(18)	107 > 89	4.81	7330.047	7330.047	bb			0.433	86.6	-13.4	3786.8...	

365

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Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	31-JAN-06	per01310008a	IPB002
Perchlorate Isotope Ratio	0.00		NA	31-JAN-06	per01310008a	IPB002
Perchlorate-101	0.00	0	NA	31-JAN-06	per01310008a	IPB002
Perchlorate	0.00	0	NA	31-JAN-06	per01310010a	IPB003
Perchlorate Isotope Ratio	0.00		NA	31-JAN-06	per01310010a	IPB003
Perchlorate-101	0.00	0	NA	31-JAN-06	per01310010a	IPB003
Perchlorate	0.00	0	NA	31-JAN-06	per01310015a	IPB004
Perchlorate Isotope Ratio	0.00		NA	31-JAN-06	per01310015a	IPB004
Perchlorate-101	0.00	0	NA	31-JAN-06	per01310015a	IPB004
Perchlorate	0.00	0	NA	31-JAN-06	per01310027a	IPB005
Perchlorate Isotope Ratio	0.00		NA	31-JAN-06	per01310027a	IPB005
Perchlorate-101	0.00	0	NA	31-JAN-06	per01310027a	IPB005
Perchlorate	0.00	0	NA	01-FEB-06	per02010008a	IPB002

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate Isotope Ratio	0.00		NA	01-FEB-06	per02010008a	IPB002
Perchlorate-101	0.00	0	NA	01-FEB-06	per02010008a	IPB002
Perchlorate	0.00	0	NA	01-FEB-06	per02010010a	IPB003
Perchlorate Isotope Ratio	0.00		NA	01-FEB-06	per02010010a	IPB003
Perchlorate-101	0.00	0	NA	01-FEB-06	per02010010a	IPB003
Perchlorate	0.00	0	NA	01-FEB-06	per02010016a	IPB004
Perchlorate Isotope Ratio	0.00		NA	01-FEB-06	per02010016a	IPB004
Perchlorate-101	0.00	0	NA	01-FEB-06	per02010016a	IPB004
Perchlorate	0.00	0	NA	01-FEB-06	per02010019a	IPB005
Perchlorate Isotope Ratio	0.00		NA	01-FEB-06	per02010019a	IPB005
Perchlorate-101	0.00	0	NA	01-FEB-06	per02010019a	IPB005

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

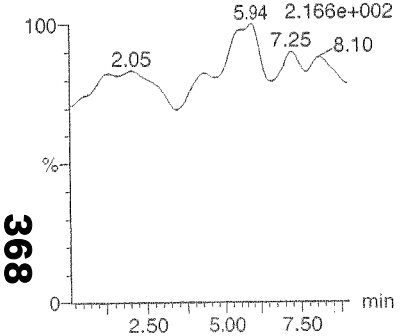
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

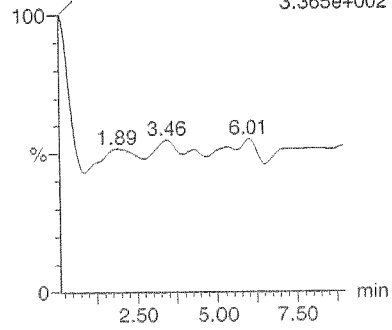
Name: per01310008a
Date: 31-Jan-2006
Time: 17:23:47
ID: IPB002
Vial: 1:1,A

MTT 2/1/06

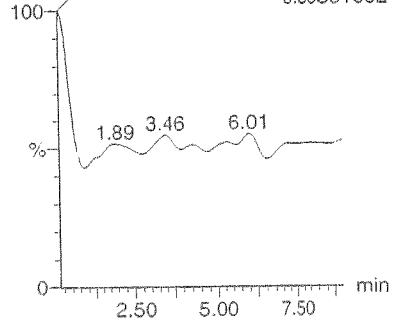
Perchlorate



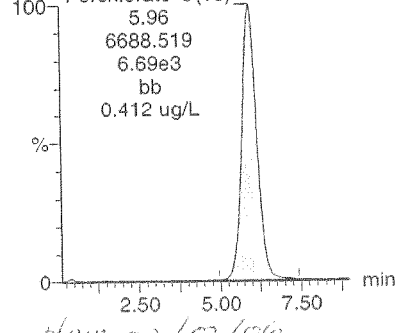
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 2/02/06

# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83											0.00
2 Perchlorate-101	101 > 85											
3 Perchlorate-O(18)	107 > 89	5.96	6688.519	6688.519	bb			0.412	82.3	-17.7	692.264	

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

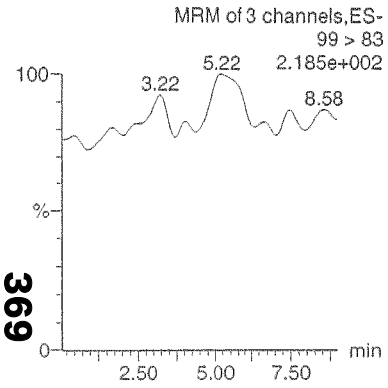
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

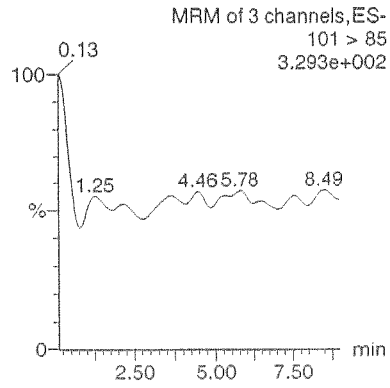
Name: per01310010a
Date: 31-Jan-2006
Time: 17:53:01
ID: IPB003
Vial: 1:1,A

MJT 2/1/06

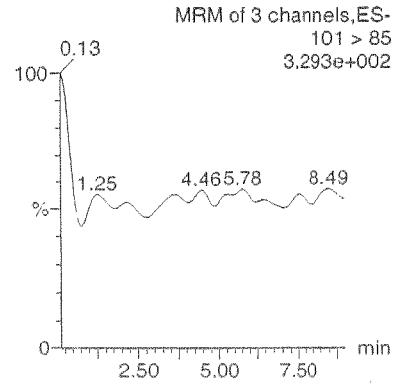
Perchlorate



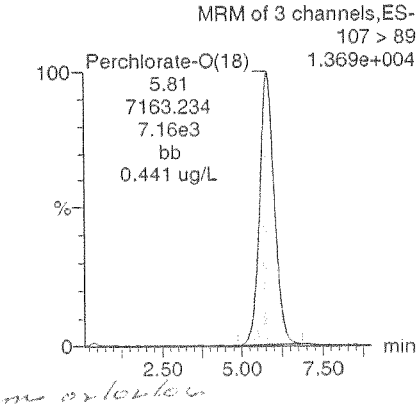
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83											0.00
2	Perchlorate-101	101 > 85											
3	Perchlorate-O(18)	107 > 89	5.81	7163.234	7163.234	bb			0.441	88.2	-11.8	122.506	

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

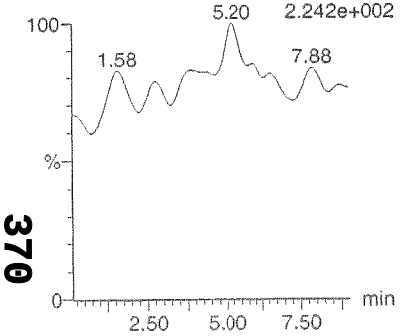
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

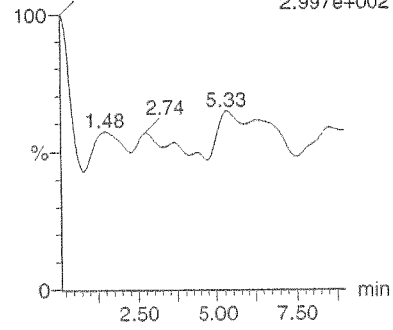
Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Name: per01310015a
Date: 31-Jan-2006
Time: 19:06:06
ID: IPB004
Vial: 1:1,A

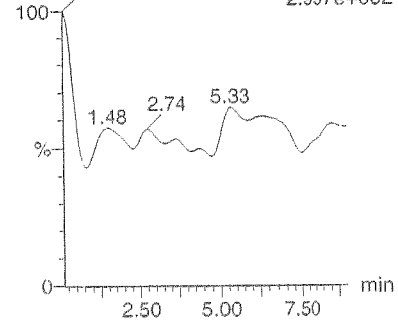
Perchlorate



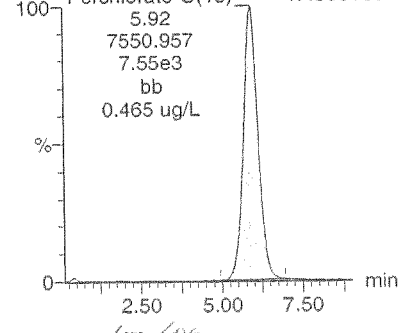
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83											0.00
2 Perchlorate-101	101 > 85											
3 Perchlorate-O(18)	107 > 89	5.92	7550.957	7550.957	bb			0.465	93.0	-7.0	3219.5...	

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

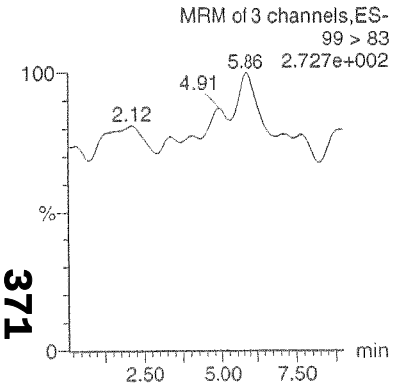
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

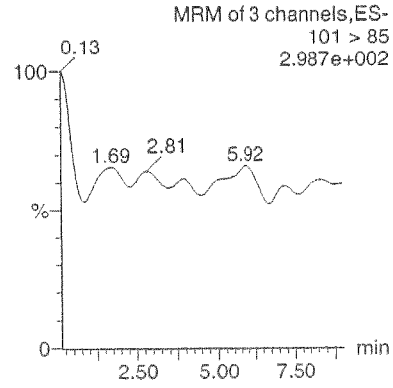
Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Name: per01310027a
Date: 31-Jan-2006
Time: 22:01:34
ID: IPB005
Vial: 1:1,A

Perchlorate



Perchlorate



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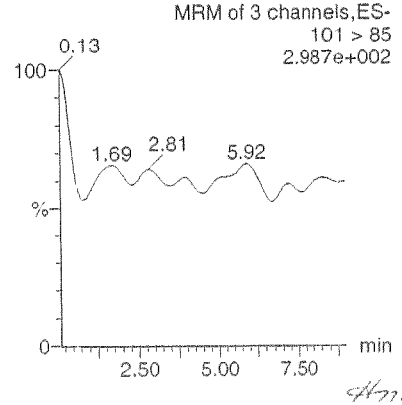
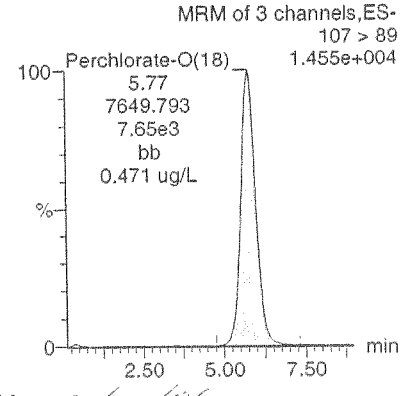


Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83											0.00
2 Perchlorate-101	101 > 85											
3 Perchlorate-O(18)	107 > 89	5.77	7649.793	7649.793	bb			0.471	94.2	-5.8	1441.5...	

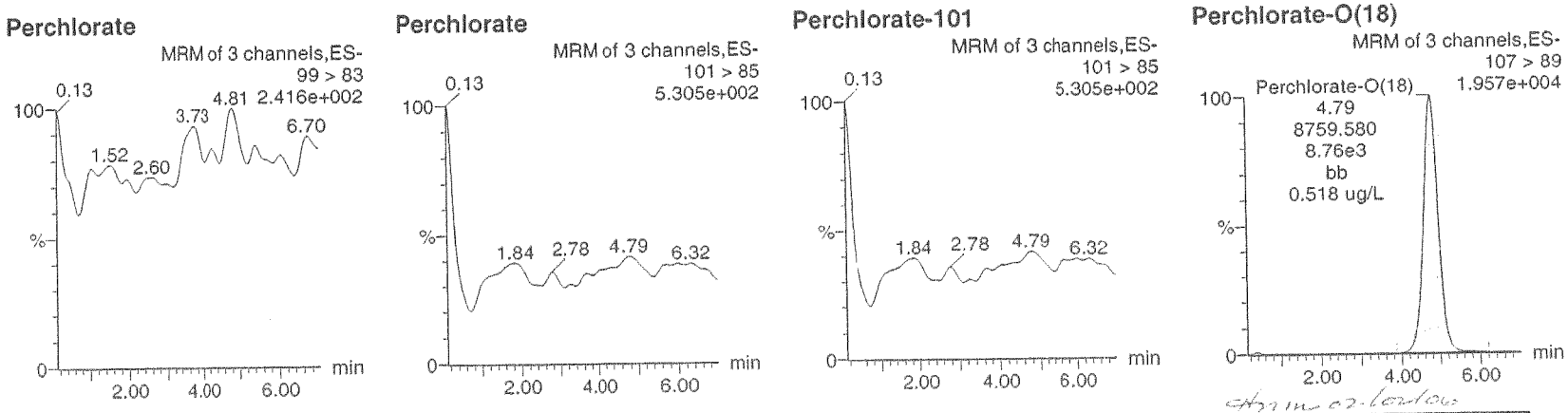
PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010008a
Date: 01-Feb-2006
Time: 13:26:18
ID: IPB002
Vial: 1:1,A



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83											0.00
2 Perchlorate-101	101 > 85											
3 Perchlorate-O(18)	107 > 89	4.79	8759.580	8759.580	bb			0.518	103.5	3.5	389.239	

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

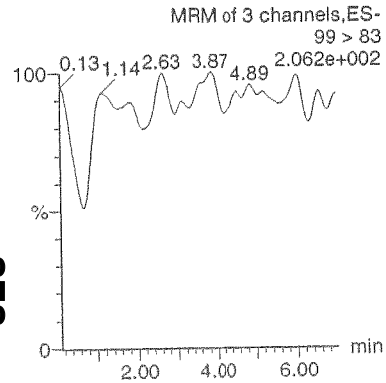
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

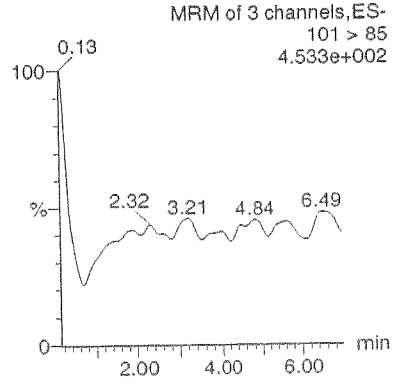
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010010a
Date: 01-Feb-2006
Time: 13:51:32
ID: IPB003
Vial: 1:1,A

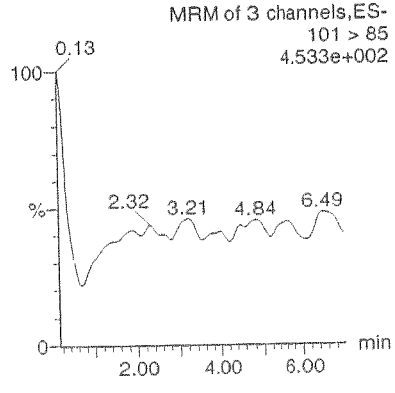
Perchlorate



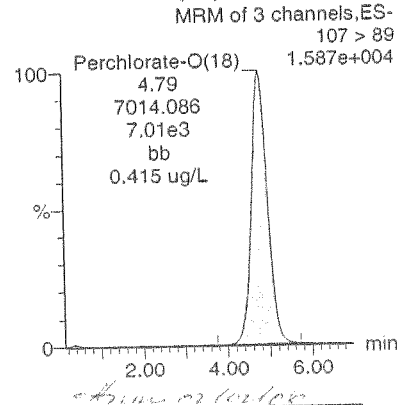
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83											0.00
2	Perchlorate-101	101 > 85											
3	Perchlorate-O(18)	107 > 89	4.79	7014.086	7014.086	bb			0.415	82.9	-17.1	4772.1...	

373

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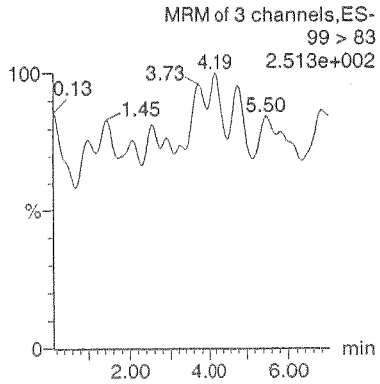
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

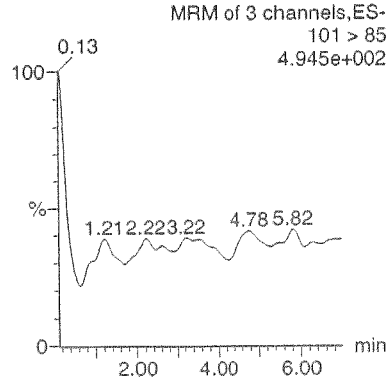
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010016a
Date: 01-Feb-2006
Time: 15:50:19
ID: IPB004
Vial: 1:1,A

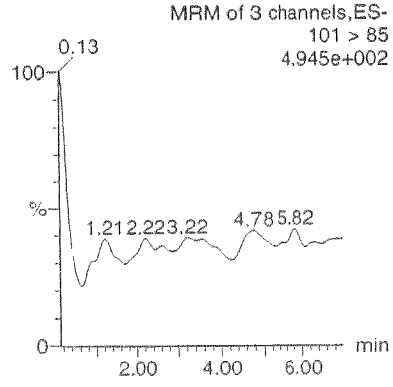
Perchlorate



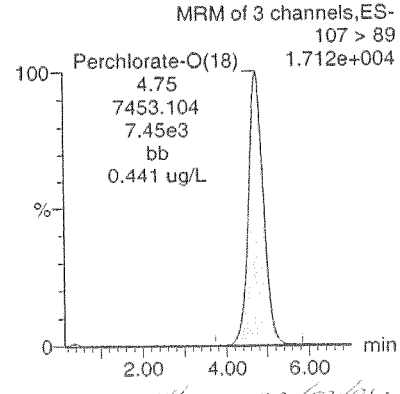
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83											0.00
2	Perchlorate-101	101 > 85											
3	Perchlorate-O(18)	107 > 89	4.75	7453.104	7453.104	bb			0.441	88.1	-11.9	4849.2...	

374

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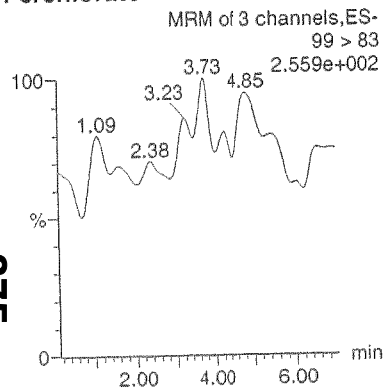
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

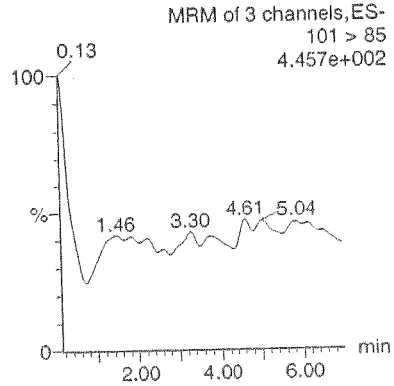
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010019a
Date: 01-Feb-2006
Time: 16:28:12
ID: IPB005
Vial: 1:1,A

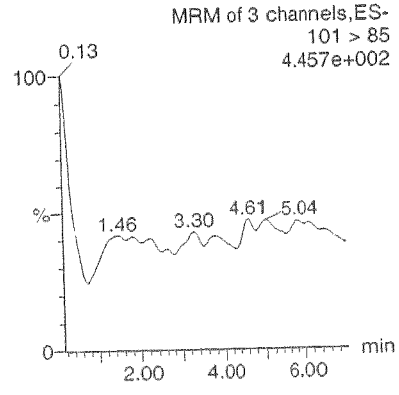
Perchlorate



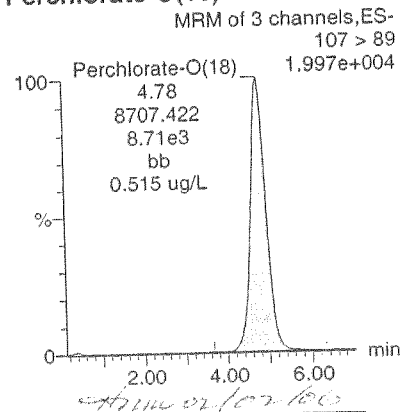
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83											0.00
2 Perchlorate-101	101 > 85											
3 Perchlorate-O(18)	107 > 89	4.78	8707.422	8707.422	bb			0.515	102.9	2.9	2231.2...	

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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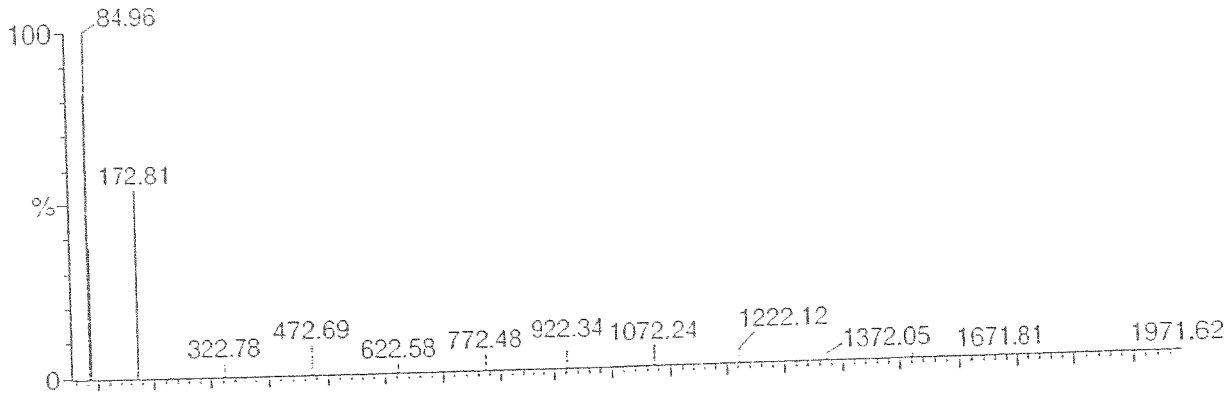
Calibration Report - MS1 Static

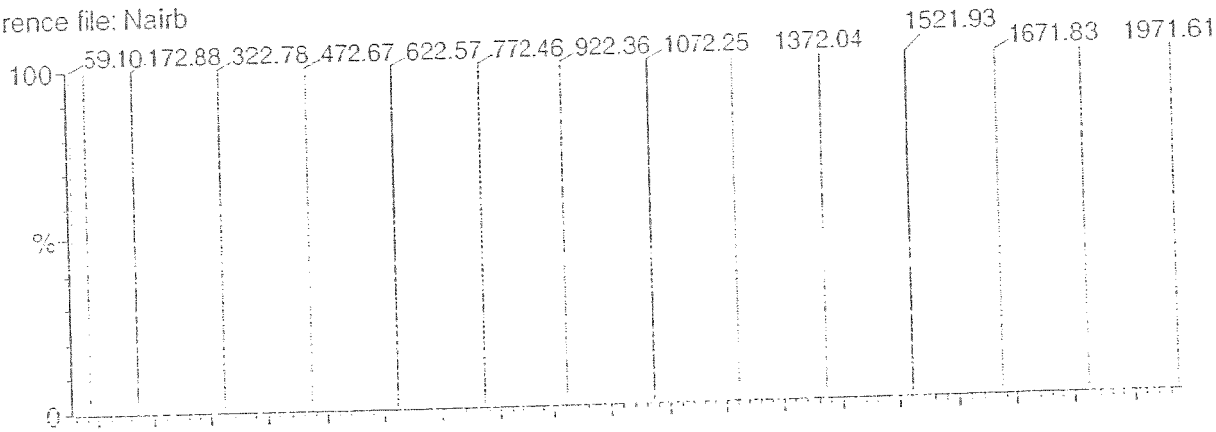
Printed: Tue Nov 22 07:16:55 2005

Data file: STATMS1 - Calibrated

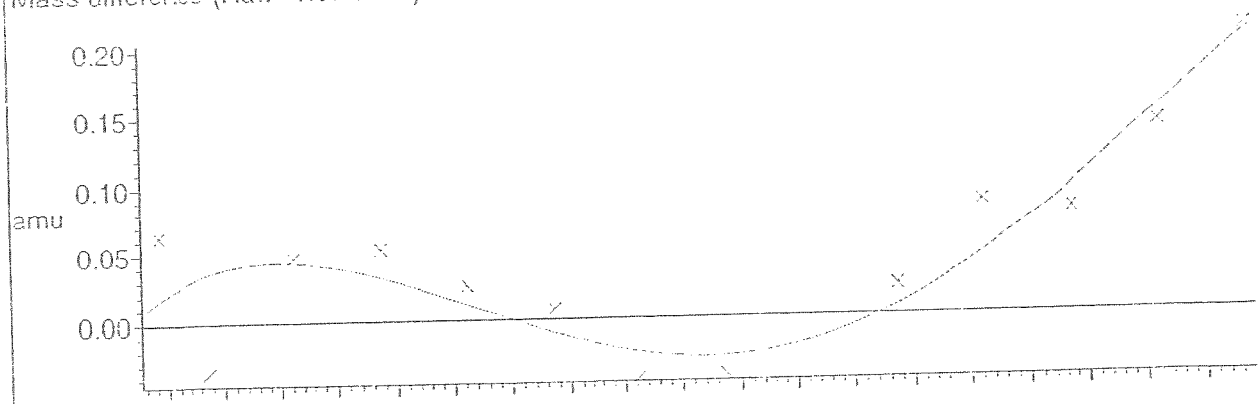
14 matches of 15 tested references



Reference file: Nairb

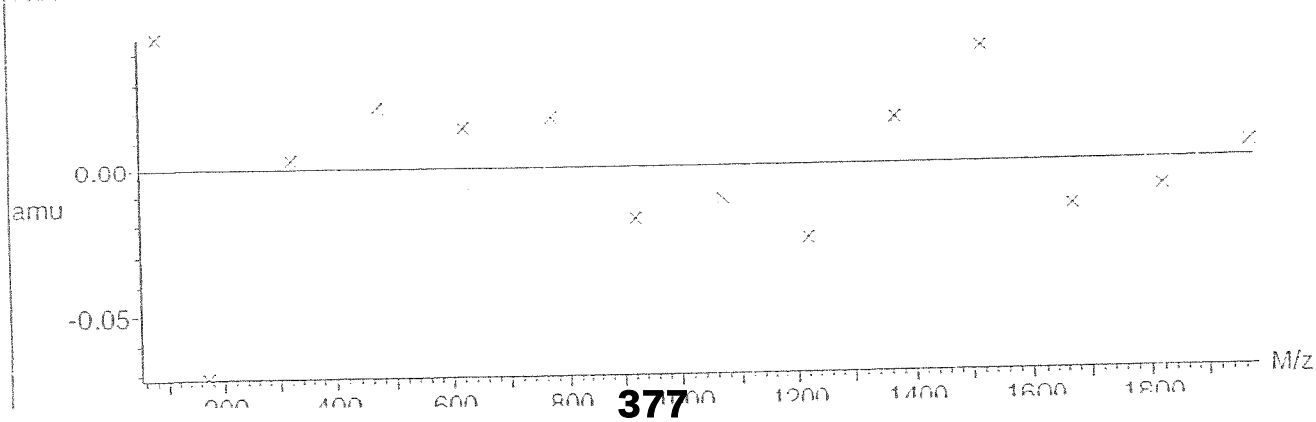


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 2.259473e-2 ± 0.017533



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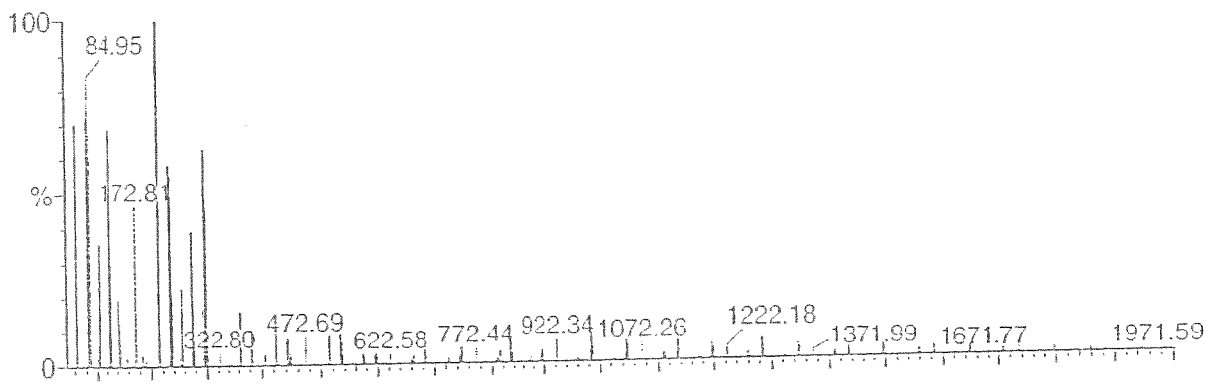
Calibration Report - MS1 Scanning

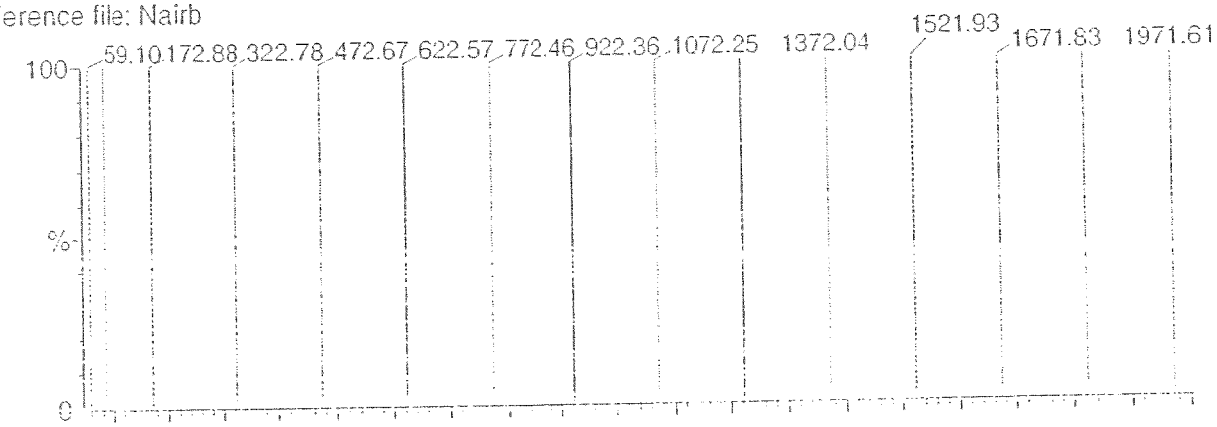
Printed: Tue Nov 22 07:18:01 2005

Data file: SCNMS1 - Calibrated

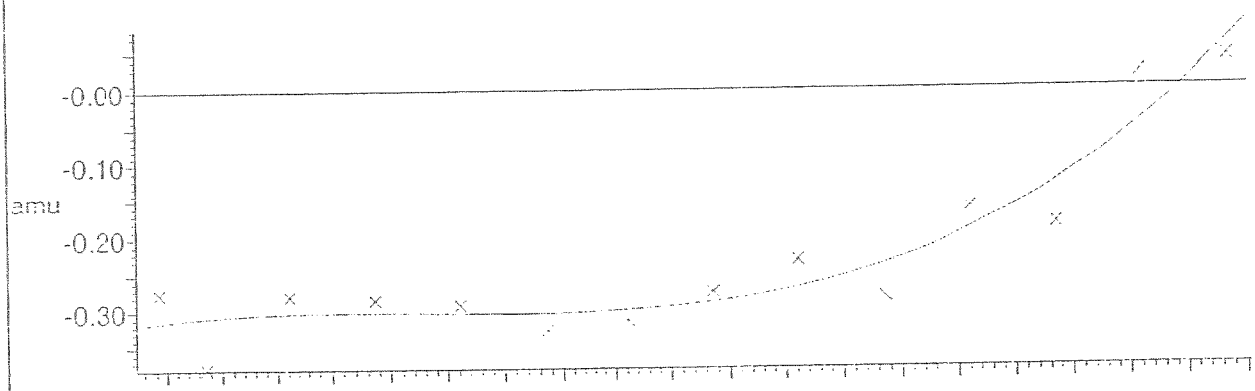
14 matches of 15 tested references



Reference file: Nairb

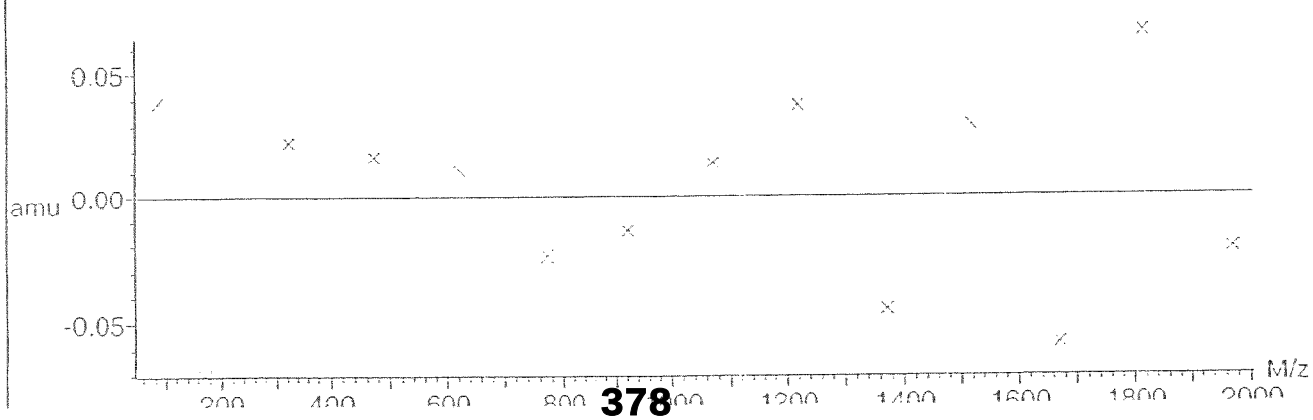


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.329198e-2 ± 0.018851



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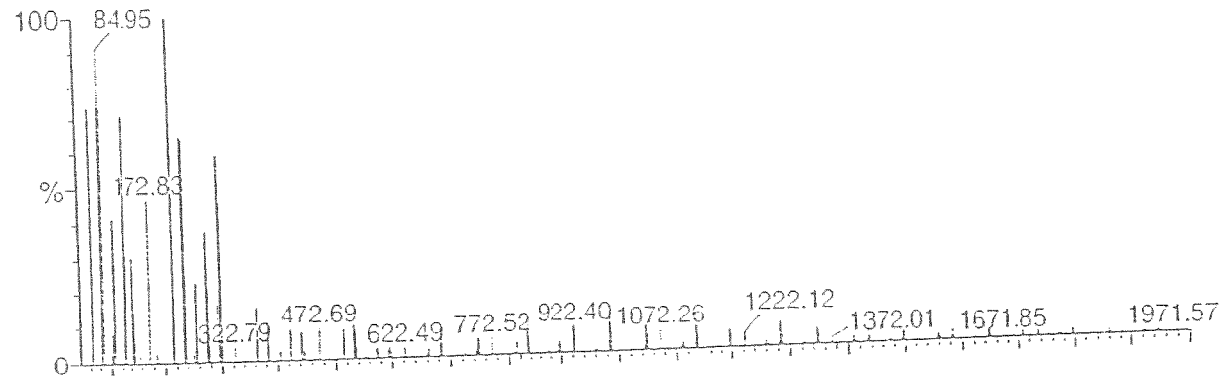
Calibration Report - MS1 Scan Speed Compensation

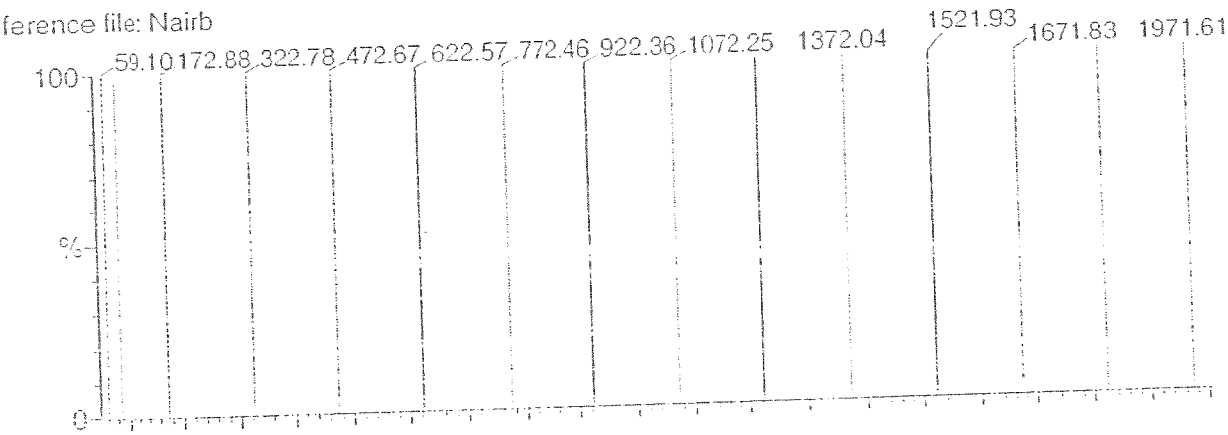
Printed: Tue Nov 22 07:19:07 2005

Data file: FASTMS1 - Calibrated

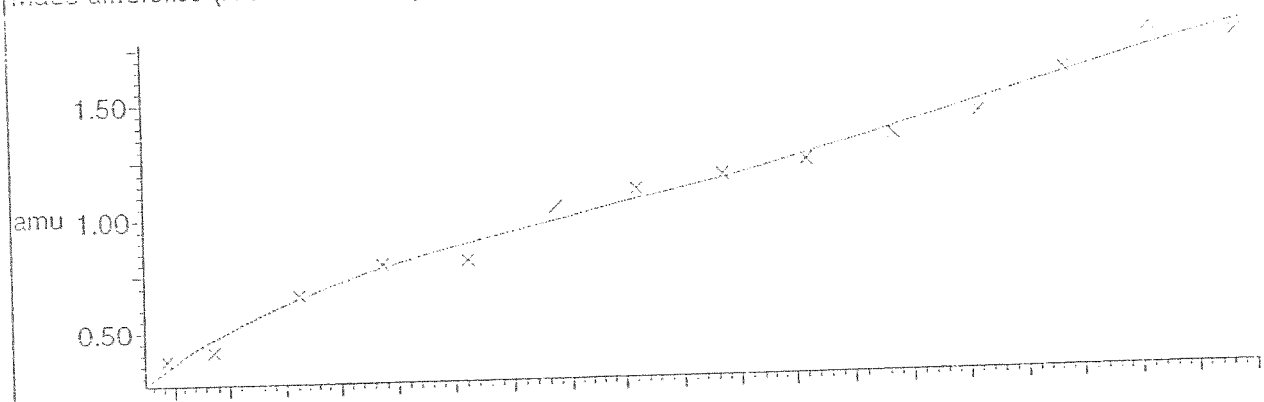
14 matches of 15 tested references



Reference file: Nairb

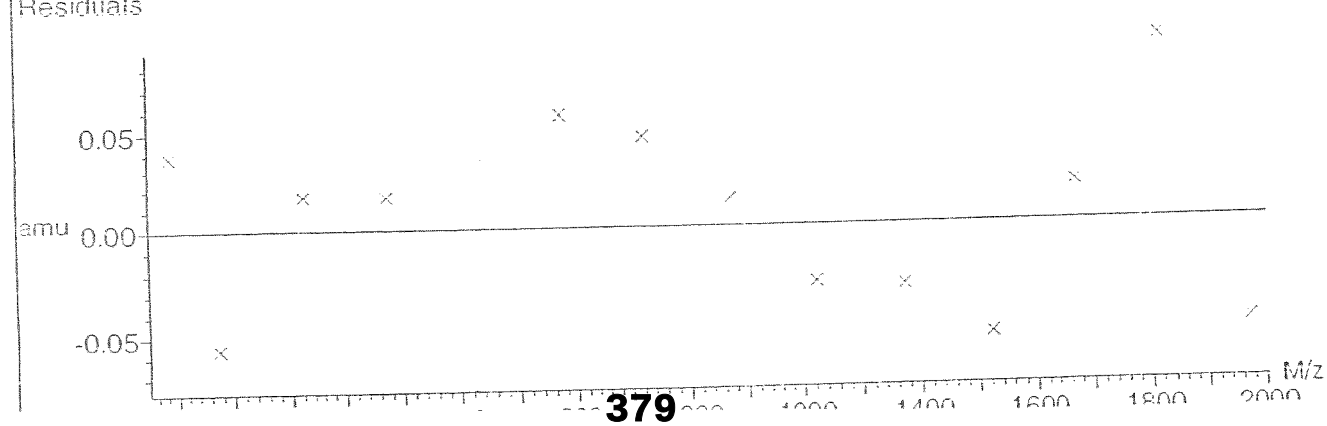


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 4.164964e-2 ± 0.022541



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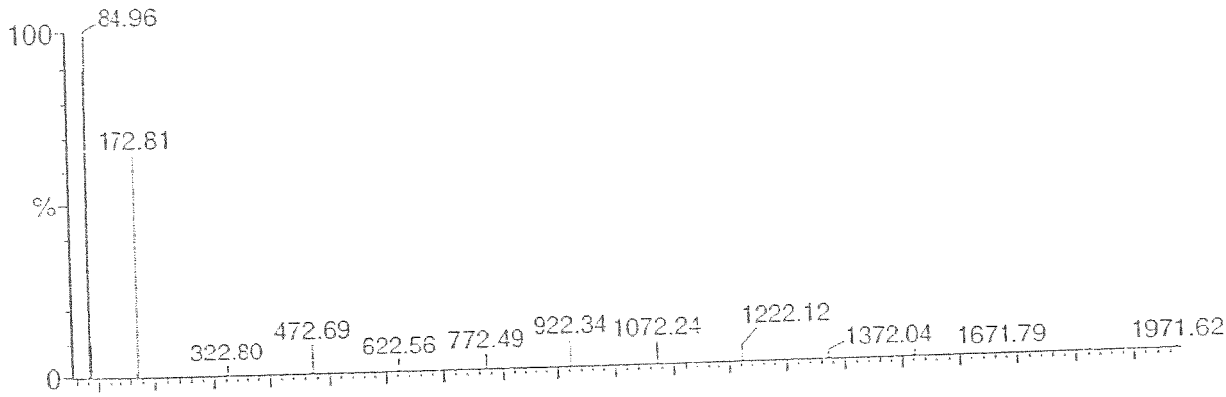
Calibration Report - MS2 Static

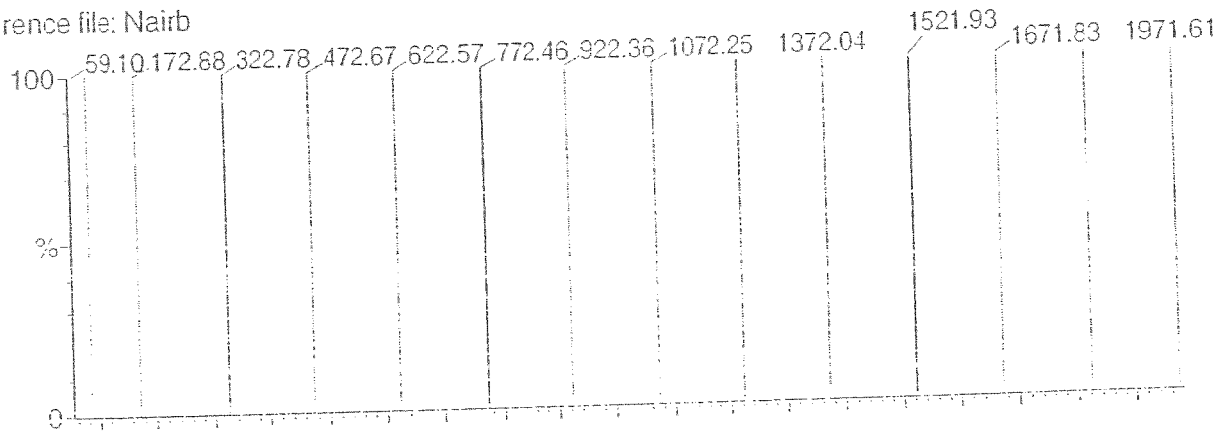
Printed: Tue Nov 22 07:20:11 2005

14 matches of 15 tested references

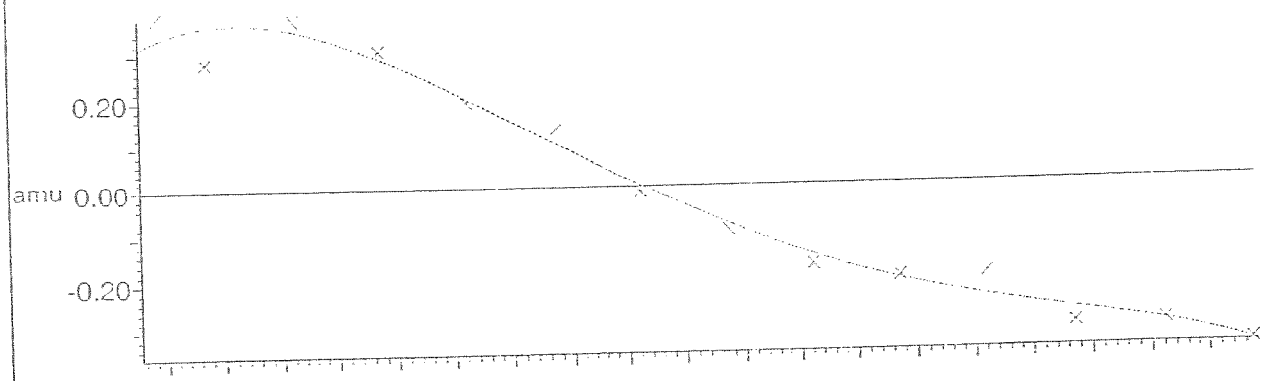
Data file: STATMS2 - Calibrated



Reference file: Nairb

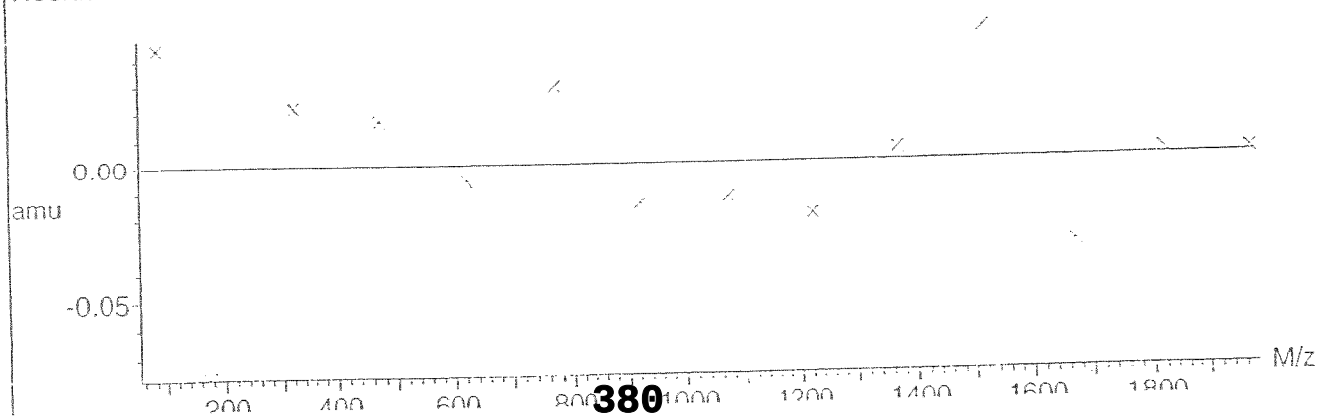


Mass difference (Raw - Ref mass)



Mean residual = 2.356774e-2 ± 0.020341

Residuals



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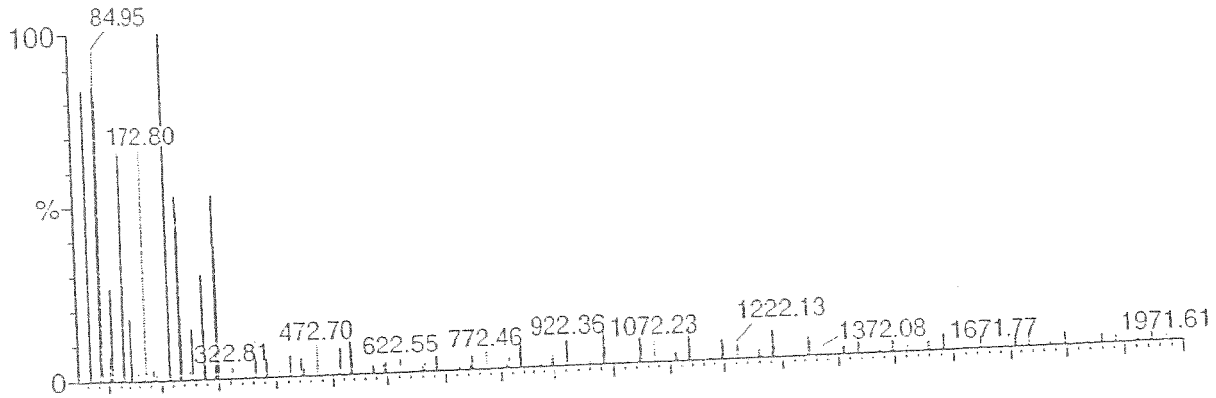
Calibration Report - MS2 Scanning

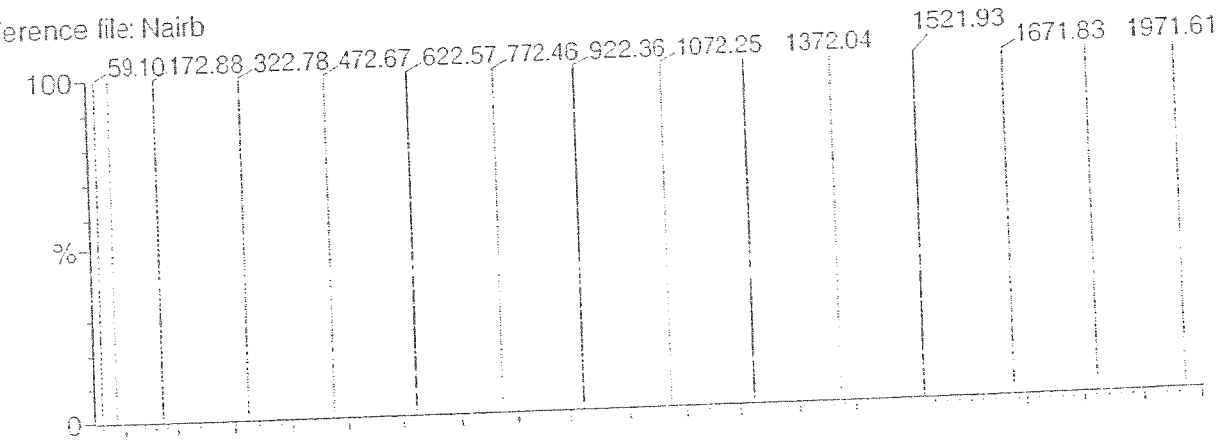
Printed: Tue Nov 22 07:21:17 2005

14 matches of 15 tested references

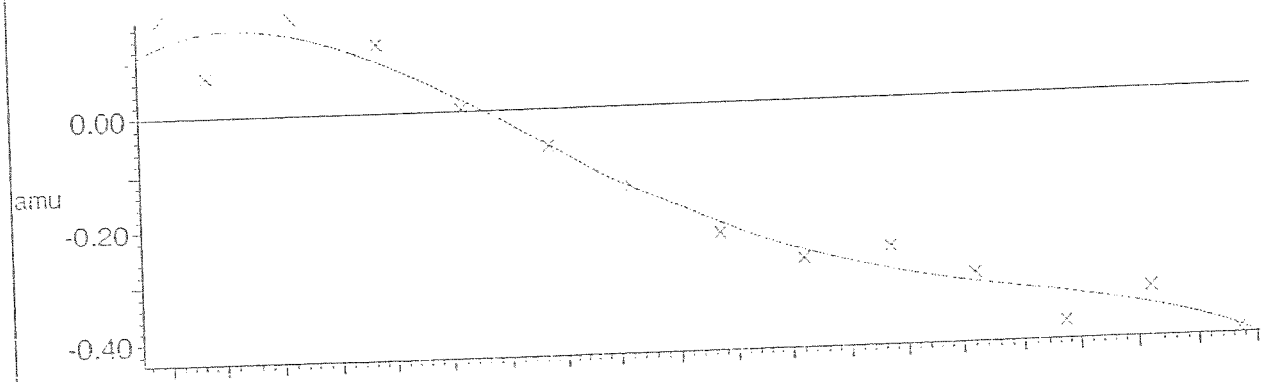
Data file: SCNMS2 - Calibrated



Reference file: Nairb

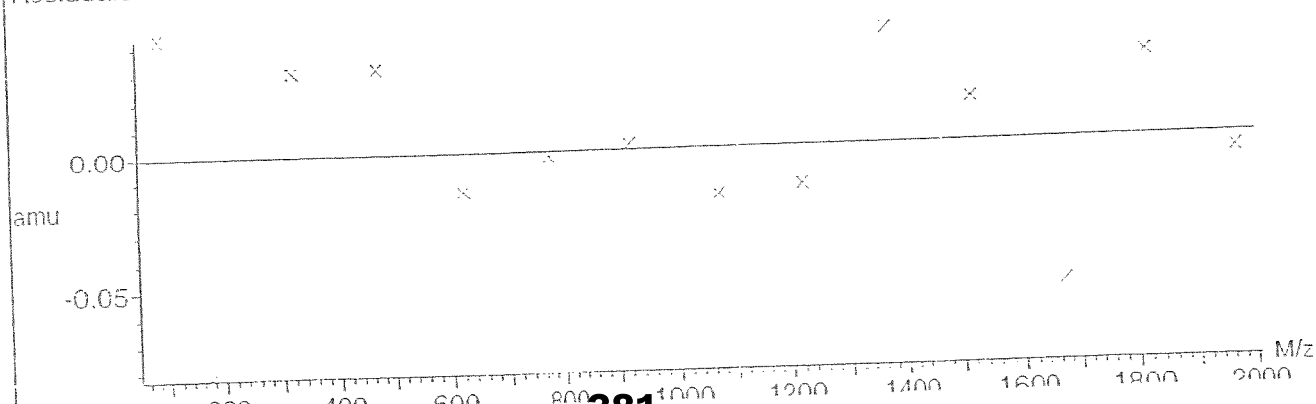


Mass difference (Raw - Ref mass)



Mean residual = 2.736542e-2 ± 0.021411

Residuals



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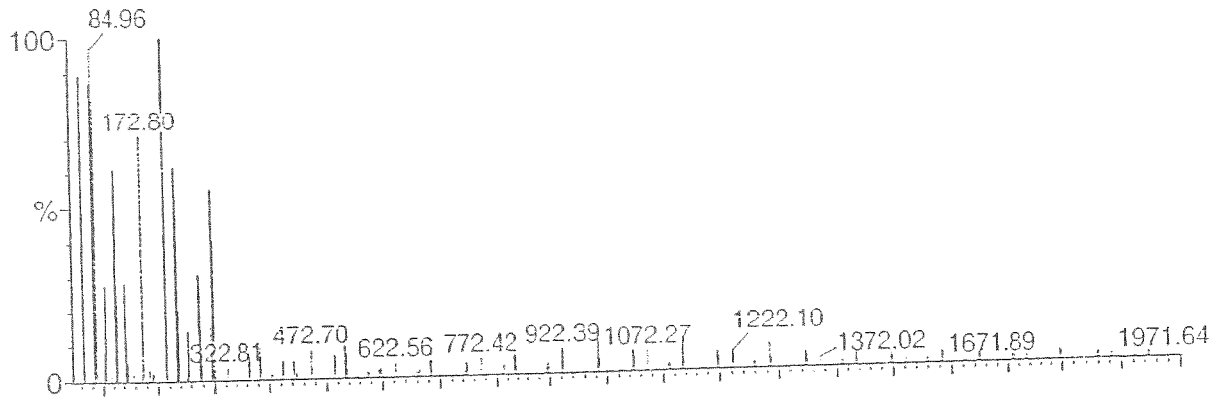
Calibration Report - MS2 Scan Speed Compensation

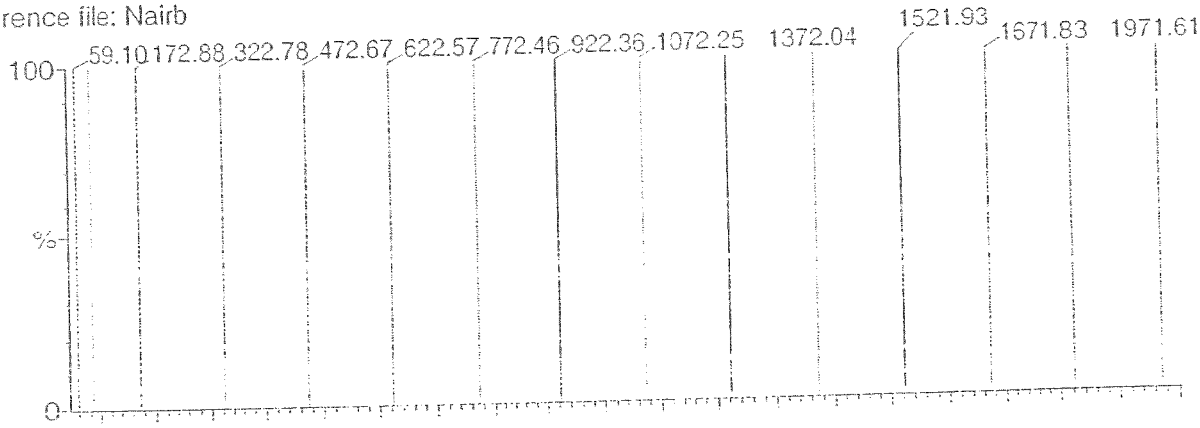
Printed: Tue Nov 22 07:22:23 2005

Data file: FASTMS2 - Calibrated

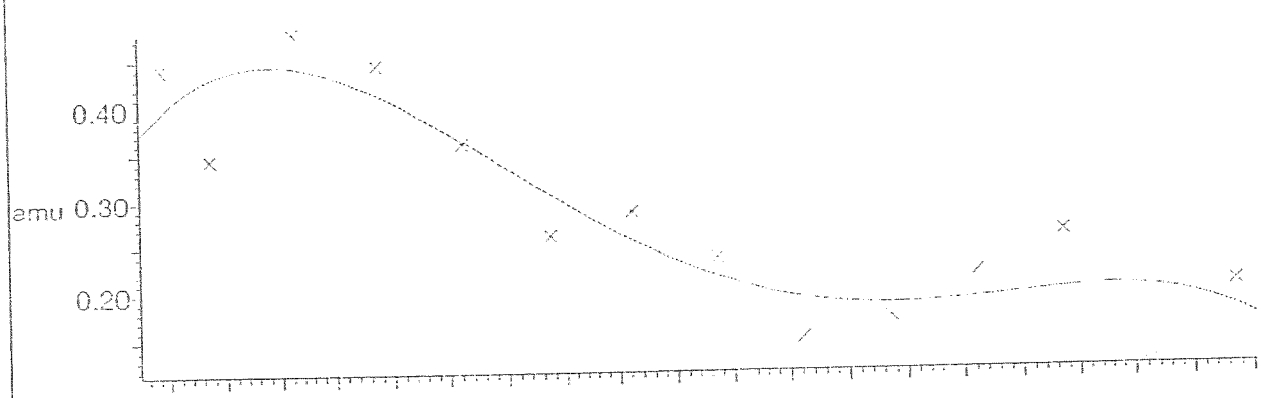
14 matches of 15 tested references



Reference file: Nairb

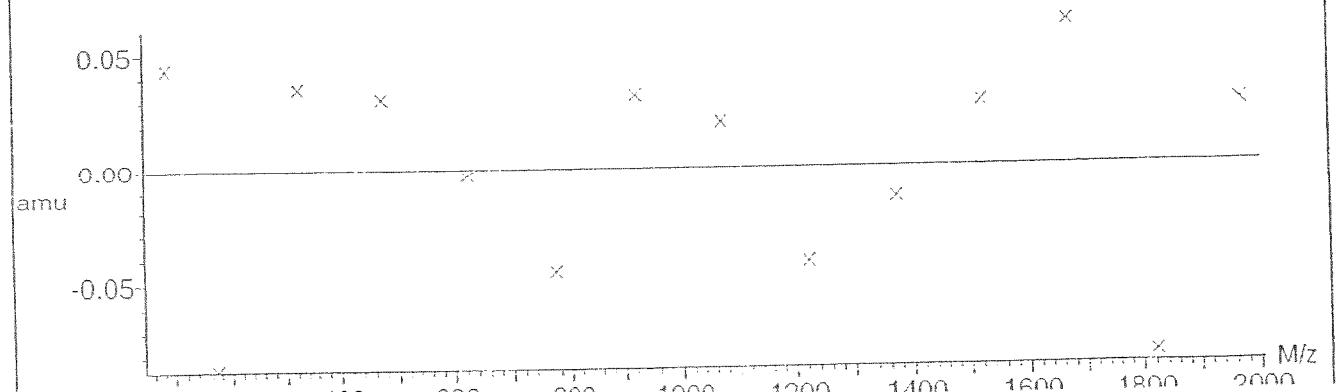


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.914975e-2 ± 0.022717



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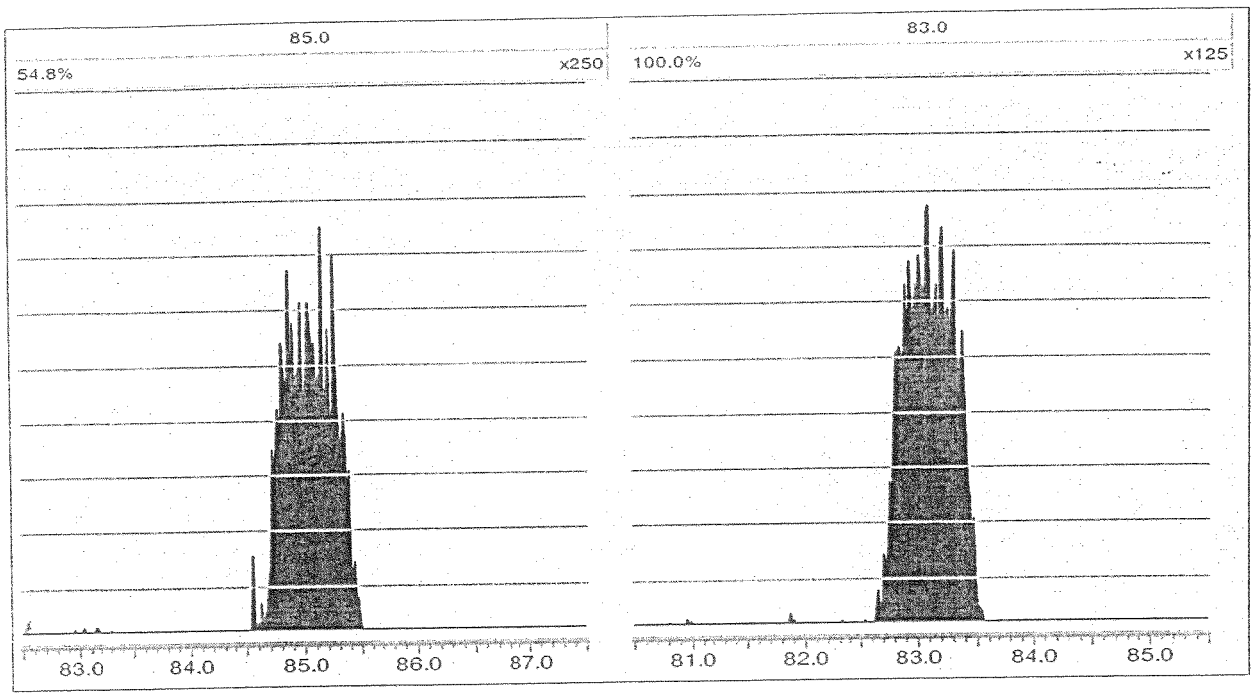
Tune Parameters MassLynx 4.0 SP4

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Tuesday, January 31, 2006 08:28:35 Eastern Standard Time



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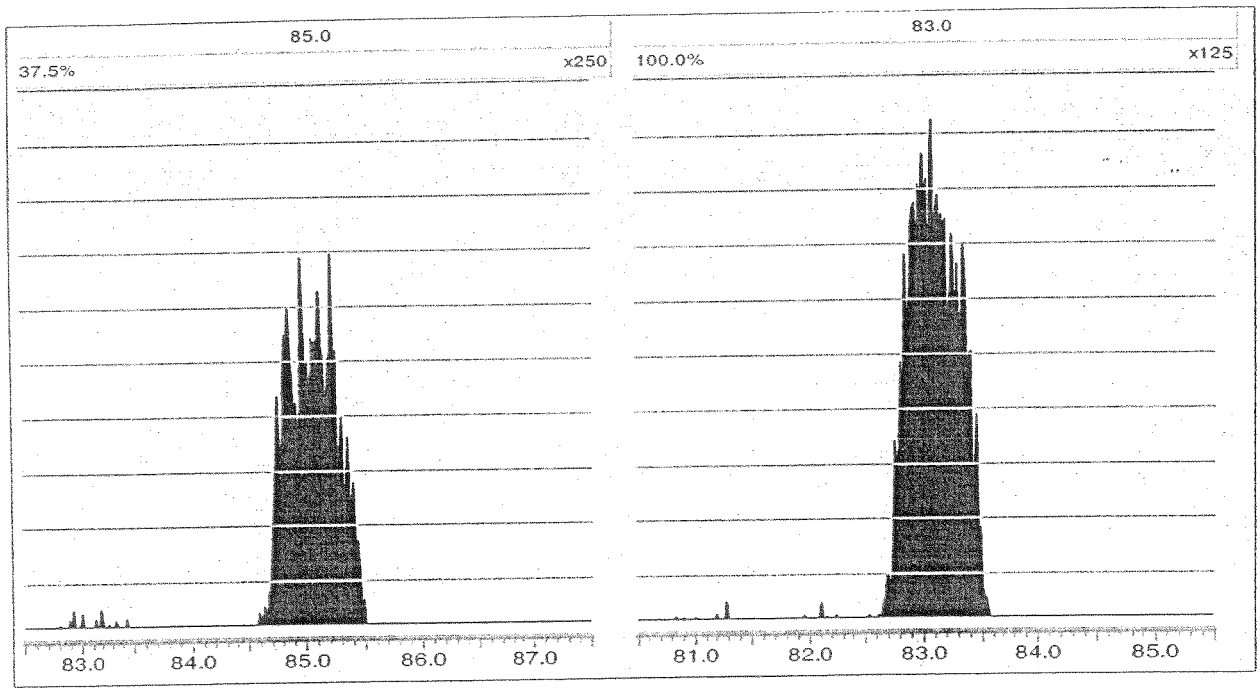
Tune Parameters

MassLynx 4.0 SP4

File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Wednesday, February 01, 2006 08:35:13 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per01310006a**	**31-JAN-06**	**8486.56**				
Lower Area Limit			**4243.28**				
Upper Area Limit			**16973.12**				
1201019721	per01310017a	31-JAN-06 19:35	7908.82	5.94	5.96783	1.005	
1201019722	per01310018a	31-JAN-06 19:49	6748.55	5.84	5.86852	1.005	
1201019726	per01310019a	31-JAN-06 20:04	7090.66	5.61	5.64492	1.006	
154614002	per01310023a	31-JAN-06 21:03	7620.11	5.71	5.73178	1.004	
154614010	per01310025a	31-JAN-06 21:32	8014.11	5.71	5.79417	1.015	

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Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Instrument ID: LCMSMS

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Sample ID	Datafile	Run Date	Area	RT	RT CLO4	RRT	Q 0.98-1.02
MidLevel Standard Area	**per02010006a**	**01-FEB-06**	**8667.33**				
Lower Area Limit			**4333.665**				
Upper Area Limit			**17334.66**				
154614001	per02010012a	01-FEB-06 14:59	8537.94	4.7	4.71318	1.003	
1201019723	per02010013a	01-FEB-06 15:12	8345.84	4.68	4.70073	1.004	
1201019724	per02010014a	01-FEB-06 15:25	8841.46	4.68	4.7008	1.004	
154614008	per02010015a	01-FEB-06 15:37	8750.98	4.71	4.7381	1.006	

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SAMPLE
DATA

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF06010G8WT01

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614001

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.268	ug/L		1	01-FEB-06 14:59	per02010012a
	Perchlorate Isotope Ratio			3.3			1	01-FEB-06 14:59	per02010012a
14797-73-0	Perchlorate-101	.05	.2	0.265	ug/L		1	01-FEB-06 14:59	per02010012a
	Perchlorate-O(18)			0.505	ug/L		1	01-FEB-06 14:59	per02010012a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

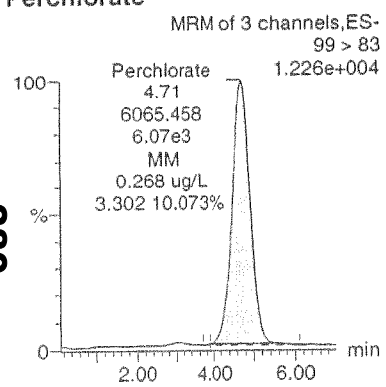
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010012a
Date: 01-Feb-2006
Time: 14:59:50
ID: 154614001
Vial: 1:4,A

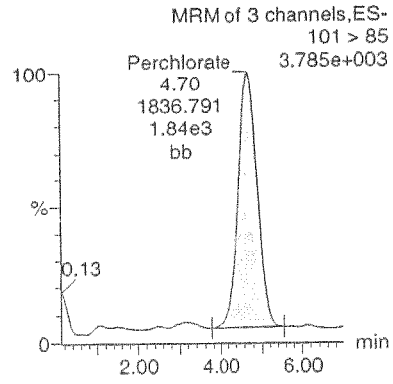
ESHL/498240/Lot/1

mtp 2/2/06

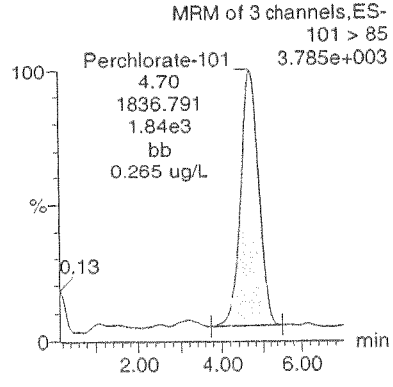
Perchlorate



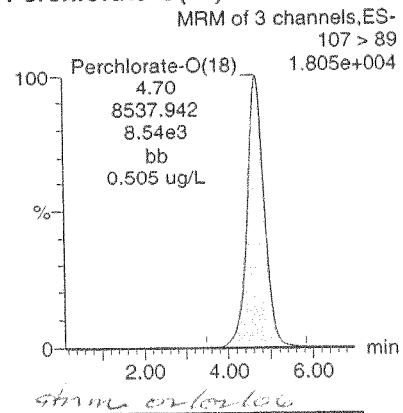
Perchlorate



Perchlorate-101



Perchlorate-O(18)



same as for 16O

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.71	6065.458	6065.458	MM	02-Feb...	06:49:09	0.268			622.061	3.30
2	Perchlorate-101	101 > 85	4.70	1836.791	1836.791	bb			0.265			672.172	
3	Perchlorate-O(18)	107 > 89	4.70	8537.942	8537.942	bb			0.505	100.9	0.9	2323.1...	

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF0601G14R101

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614002

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.212	ug/L		1	31-JAN-06 21:03	per01310023a
	Perchlorate Isotope Ratio			3.28			1	31-JAN-06 21:03	per01310023a
14797-73-0	Perchlorate-101	.05	.2	0.211	ug/L		1	31-JAN-06 21:03	per01310023a
	Perchlorate-O(18)			0.469	ug/L		1	31-JAN-06 21:03	per01310023a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

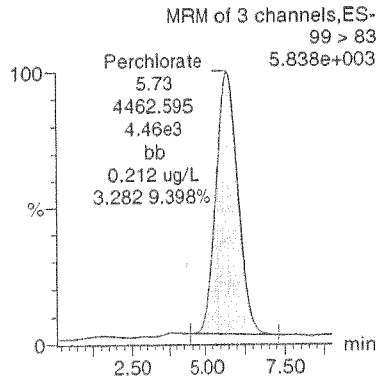
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

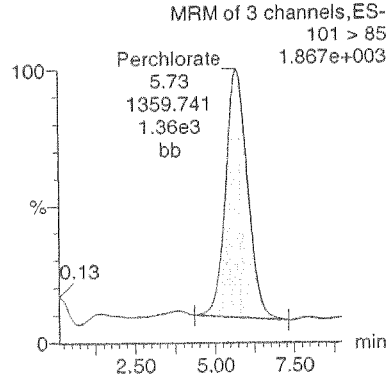
Name: per01310023a
Date: 31-Jan-2006
Time: 21:03:02
ID: 154614002 ESHL | 498240 | LCS | 1 |
Vial: 1:5,A

MHH 2/1/06

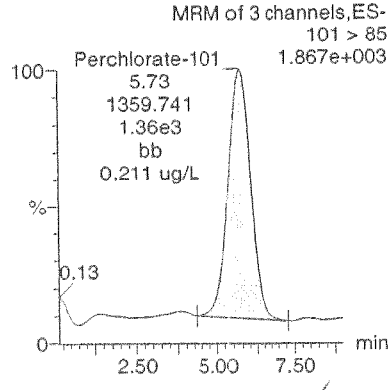
Perchlorate



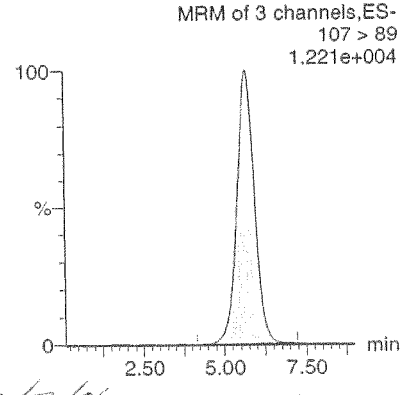
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Lynne 2/1/2006

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.73	4462.595	4462.595	bb			0.212			332.189	3.28
2	Perchlorate-101	101 > 85	5.73	1359.741	1359.741	bb			0.211			261.607	
3	Perchlorate-O(18)	107 > 89	5.71	7620.113	7620.113	bb			0.469	93.8	-6.2	1886.9...	

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF06010GMC401

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614008

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	12.5	50	166	ug/L		250	01-FEB-06 15:37	per02010015a
	Perchlorate Isotope Ratio			3.28			250	01-FEB-06 15:37	per02010015a
14797-73-0	Perchlorate-101	12.5	50	166	ug/L		250	01-FEB-06 15:37	per02010015a
	Perchlorate-O(18)			129	ug/L		250	01-FEB-06 15:37	per02010015a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

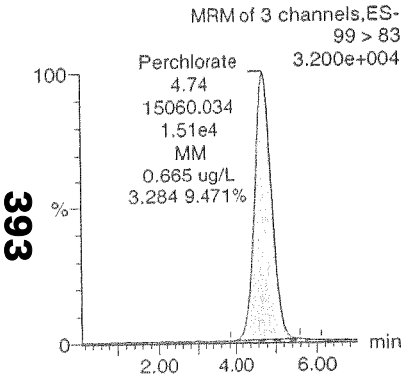
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010015a
Date: 01-Feb-2006
Time: 15:37:43
ID: 154614008
Vial: 1:4,D

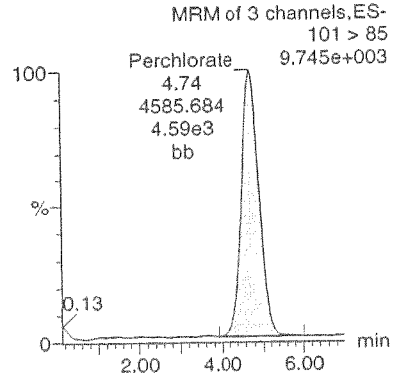
ESHC | 498240 | LCQ | 250

MTH 2/2/06

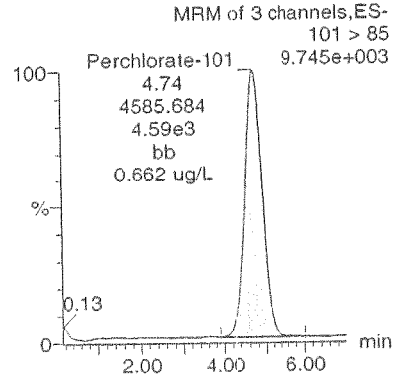
Perchlorate



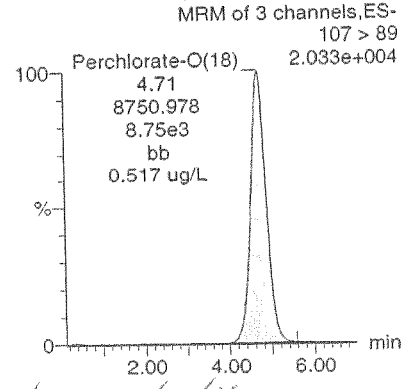
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 2/02/06

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.74	15060.034	15060.034	MM	02-Feb...	06:48:45	0.665			1202.5...	3.28
2	Perchlorate-101	101 > 85	4.74	4585.684	4585.684	bb			0.662			1224.4...	
3	Perchlorate-O(18)	107 > 89	4.71	8750.978	8750.978	bb			0.517	103.4	3.4	551.694	

x250 = 166.25
x250 = 165.5

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PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GU06010GMC401-FB

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 154614010

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	31-JAN-06 21:32	per01310025a
	Perchlorate Isotope Ratio						1	31-JAN-06 21:32	per01310025a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	31-JAN-06 21:32	per01310025a
	Perchlorate-O(18)			0.493	ug/L		1	31-JAN-06 21:32	per01310025a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

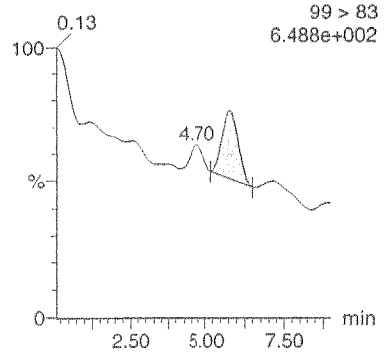
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

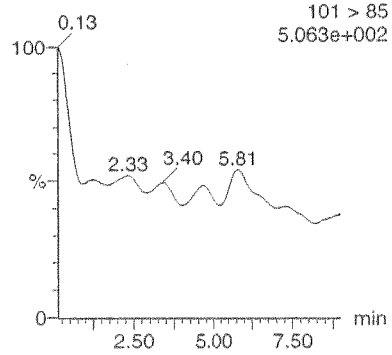
Name: per01310025a
Date: 31-Jan-2006
Time: 21:32:20
ID: 154614010
Vial: 1:5,C

ESLC/498240/LCS/1/ 2/1/06

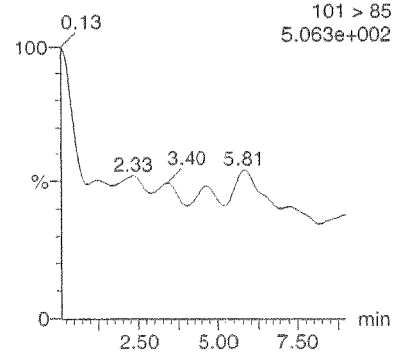
Perchlorate



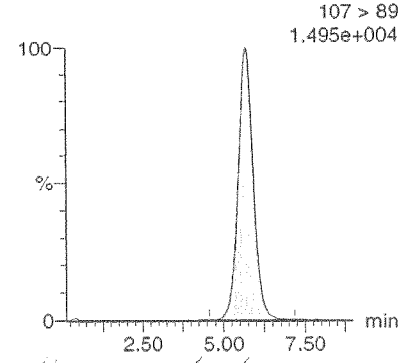
Perchlorate



Perchlorate-101



Perchlorate-O(18)



mm 02/02/06

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.79	97.119	97.119	bb			0.005			34.127	0.00
2	Perchlorate-101	101 > 85											
3	Perchlorate-O(18)	107 > 89	5.71	8014.109	8014.109	bb			0.493	98.7	-1.3	1173.6...	

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STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 31-JAN-06

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 21062.22

Response Type: External Standard

Curve Type: RF

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 31-JAN-06

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 6450.072

Response Type: External Standard

Curve Type: RF

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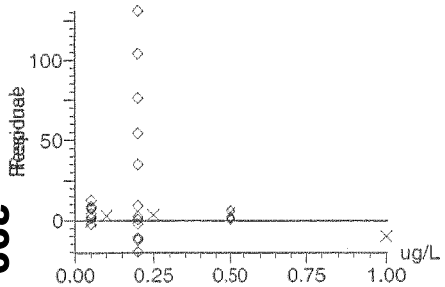
Quantify Calibration Report MassLynx 4.0 SP4
General Engineering Laboratories Analyst: Lynne Sigmon

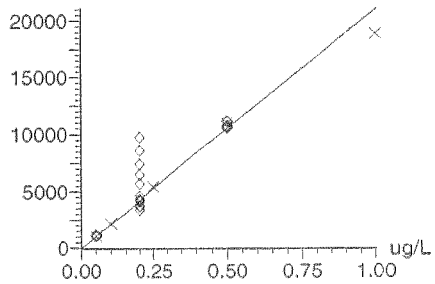
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per013106a.mdb 01 Feb 2006 07:37:32
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per013106a.cdb 01 Feb 2006 07:37:39

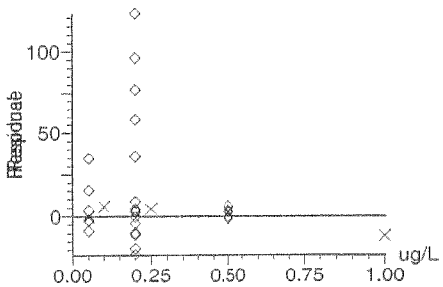
Compound name: Perchlorate
Response Factor: 21062.2
RRF SD: 1282.21, % Relative SD: 6.08773
Response type: External Std, Area
Curve type: RF

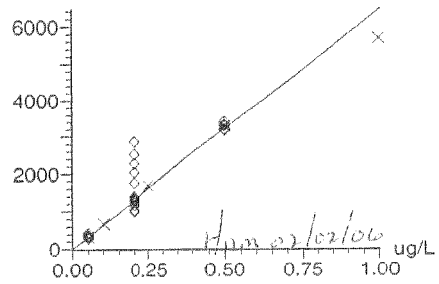




399

Compound name: Perchlorate-101
Response Factor: 6450.07
RRF SD: 446.89, % Relative SD: 6.92844
Response type: External Std, Area
Curve type: RF





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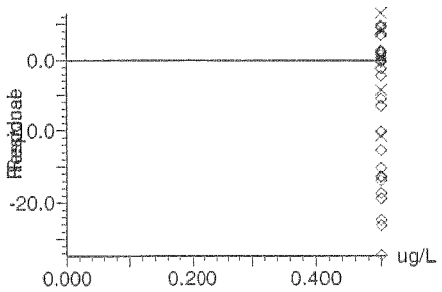
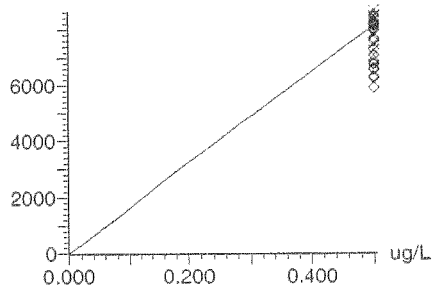
Quantify Calibration Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 16245.2
RRF SD: 1182.2, % Relative SD: 7.27724
Response type: External Std, Area
Curve type: RF





400

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

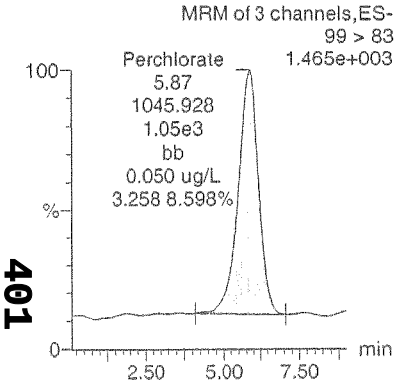
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

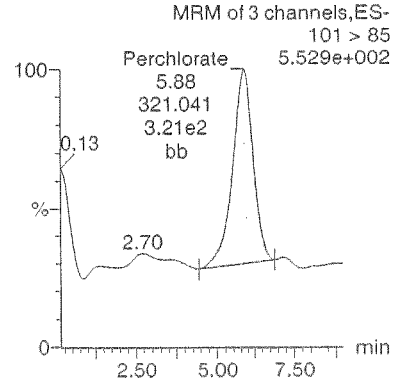
Name: per01310003a
Date: 31-Jan-2006
Time: 16:10:50
ID: WCL060125-01
Vial: 1:1,B

401

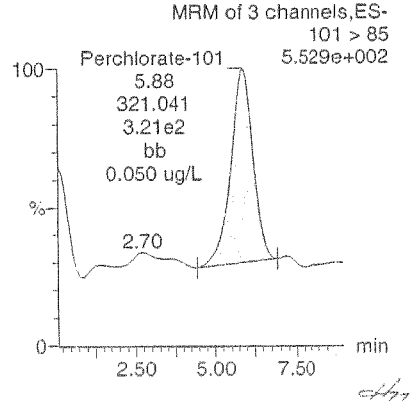
Perchlorate



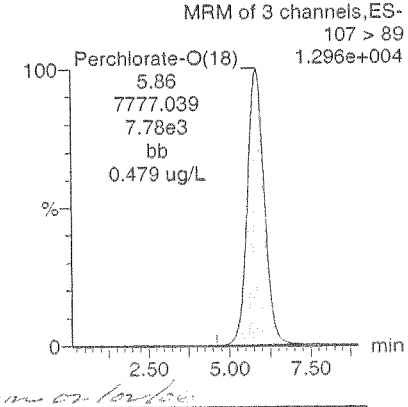
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	5.87	1045.928	1045.928	bb			0.050	99.3	-0.7	643.603	3.26
2 Perchlorate-101	101 > 85	5.88	321.041	321.041	bb			0.050	99.5	-0.5	103.007	
3 Perchlorate-O(18)	107 > 89	5.86	7777.039	7777.039	bb			0.479	95.7	-4.3	1375.6...	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

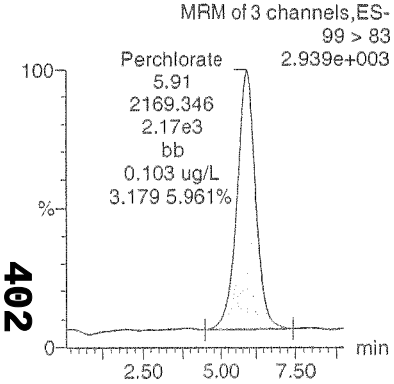
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

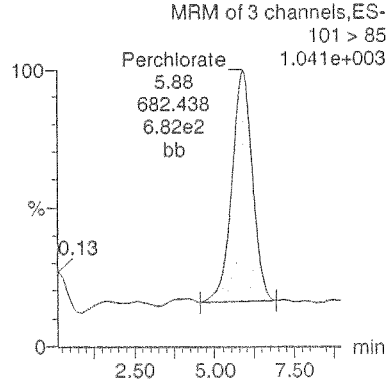
Name: per01310004a
Date: 31-Jan-2006
Time: 16:25:26
ID: WCL060125-02
Vial: 1:1,C

MJT 2/1/06

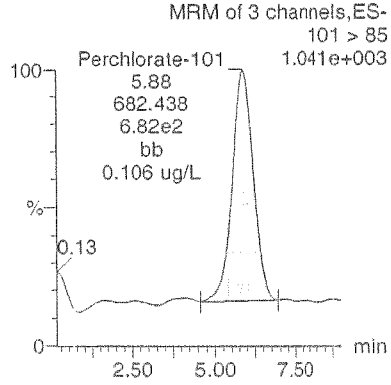
Perchlorate



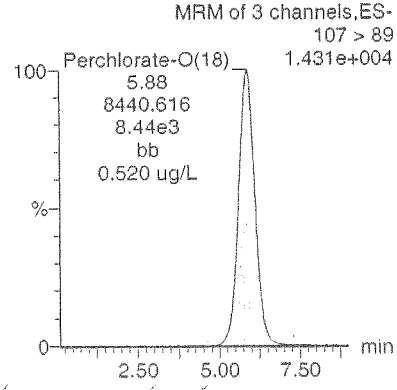
Perchlorate



Perchlorate-101



Perchlorate-O(18)



402

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.91	2169.346	2169.346	bb			0.103	103.0	3.0	1373.8...	3.18
2	Perchlorate-101	101 > 85	5.88	682.438	682.438	bb			0.106	105.8	5.8	126.679	
3	Perchlorate-O(18)	107 > 89	5.88	8440.616	8440.616	bb			0.520	103.9	3.9	1106.4...	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

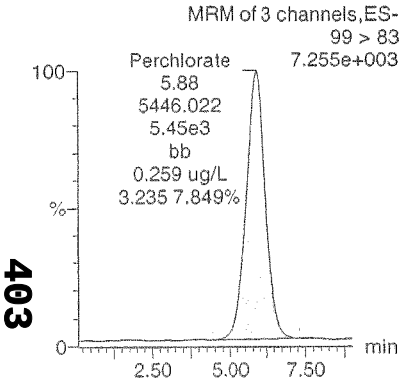
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

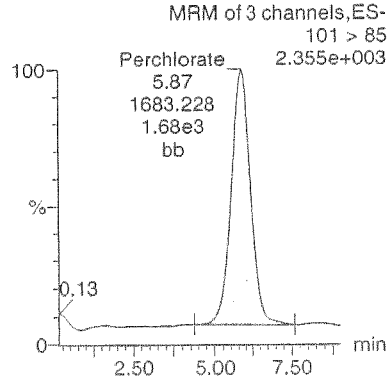
Name: per01310005a
Date: 31-Jan-2006
Time: 16:40:02
ID: WCL060125-03
Vial: 1:1,D

403

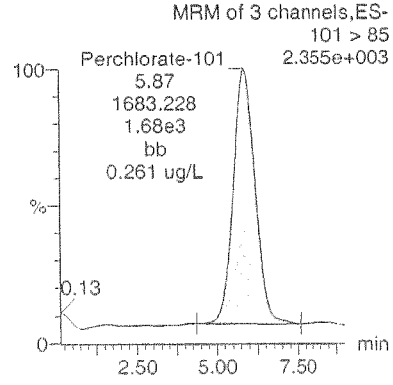
Perchlorate



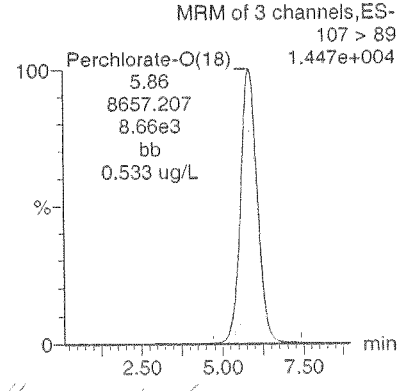
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	5.88	5446.022	5446.022	bb			0.259	103.4	3.4	1323.7...	3.24
2 Perchlorate-101	101 > 85	5.87	1683.228	1683.228	bb			0.261	104.4	4.4	531.625	
3 Perchlorate-O(18)	107 > 89	5.86	8657.207	8657.207	bb			0.533	106.6	6.6	1212.4...	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

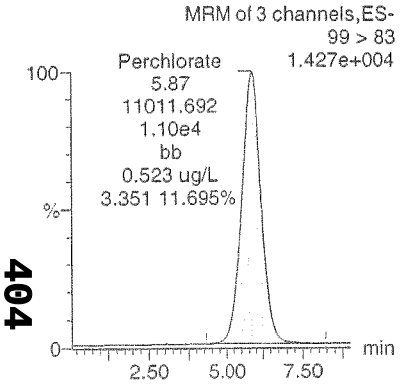
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

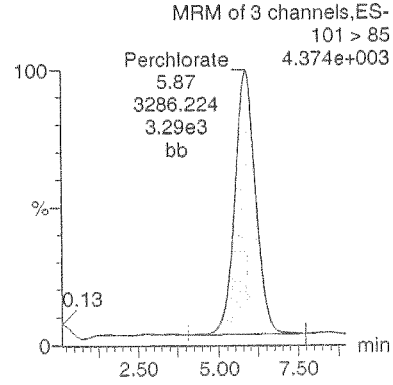
Name: per01310006a
Date: 31-Jan-2006
Time: 16:54:37
ID: WCL060125-04
Vial: 1:1,E

404

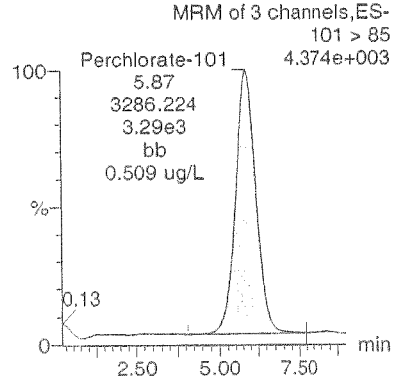
Perchlorate



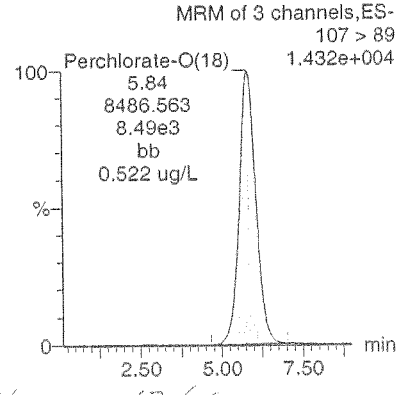
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	5.87	11011.692	11011.692	bb			0.523	104.6	4.6	2134.9...	3.35
2 Perchlorate-101	101 > 85	5.87	3286.224	3286.224	bb			0.509	101.9	1.9	1279.8...	
3 Perchlorate-O(18)	107 > 89	5.84	8486.563	8486.563	bb			0.522	104.5	4.5	119.243	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

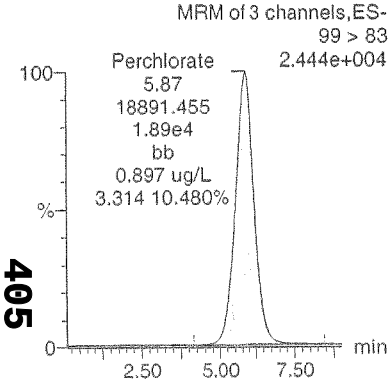
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

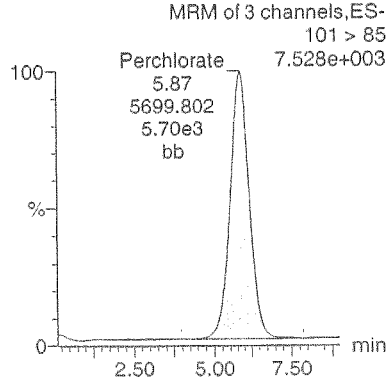
Name: per01310007a
Date: 31-Jan-2006
Time: 17:09:12
ID: WCL060125-05
Vial: 1:1,F

405

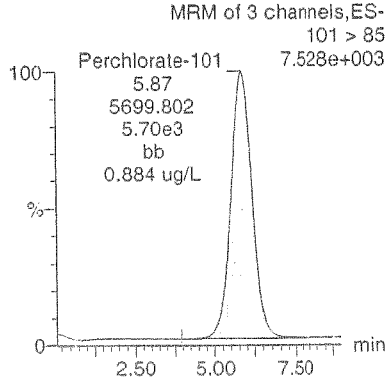
Perchlorate



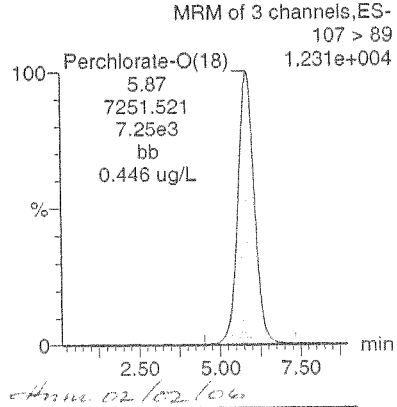
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	5.87	18891.455	18891.455	bb			0.897	89.7	-10.3	9711.5...	3.31
2 Perchlorate-101	101 > 85	5.87	5699.802	5699.802	bb			0.884	88.4	-11.6	1233.4...	
3 Perchlorate-O(18)	107 > 89	5.87	7251.521	7251.521	bb			0.446	89.3	-10.7	863.247	

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 01-FEB-06

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate

Coefficient of Determination:

Calibration Curve: 22659.84

Response Type: External Standard

Curve Type: RF

406

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Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 01-FEB-06

HPLC Column: Phenomenex Ion Pac AG-16 2 X 50 mm

Calibration Level	1	2	3	4	5
Cal Concentration (ug/L)	0.05	0.1	0.25	0.50	1.0

Parmname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 6924.85

Response Type: External Standard

Curve Type: RF

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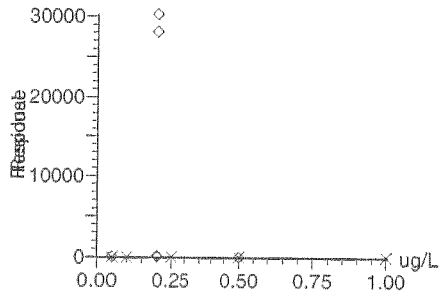
Quantify Calibration Report MassLynx 4.0 SP4
General Engineering Laboratories Analyst: Lynne Sigmon

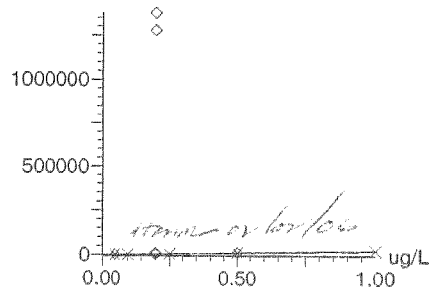
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per020106a.mdb 02 Feb 2006 06:44:18
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per020106a.cdb 02 Feb 2006 06:44:21

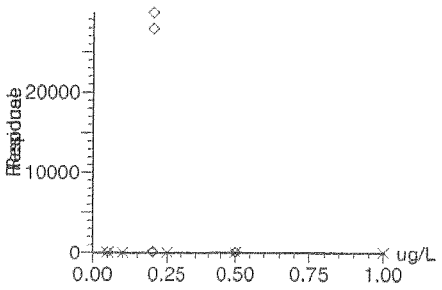
Compound name: Perchlorate
Response Factor: 22659.8
RRF SD: 1071.28, % Relative SD: 4.72767
Response type: External Std, Area
Curve type: RF

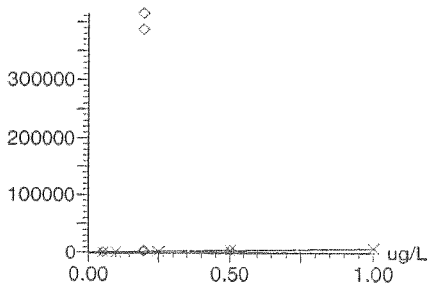




408

Compound name: Perchlorate-101
Response Factor: 6924.85
RRF SD: 322.305, % Relative SD: 4.65433
Response type: External Std, Area
Curve type: RF





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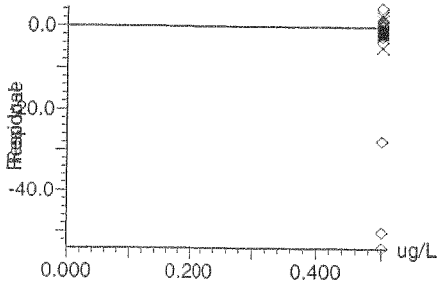
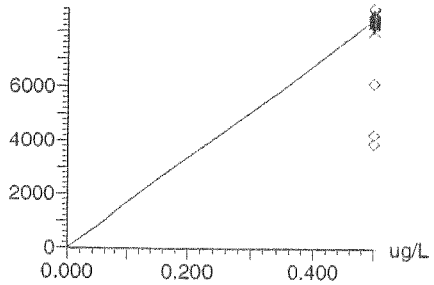
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 16919.3
RRF SD: 555.918, % Relative SD: 3.2857
Response type: External Std, Area
Curve type: RF





2/2/06

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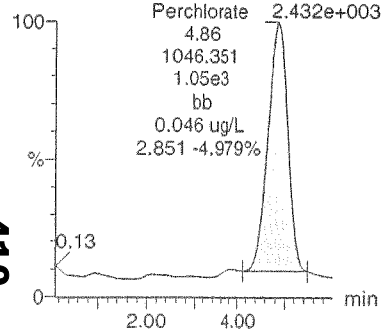
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

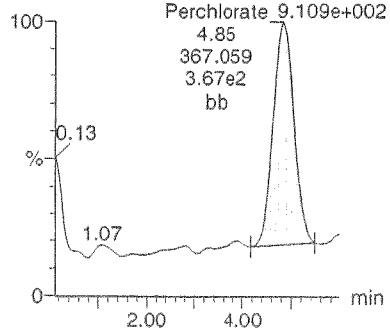
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010003a
Date: 01-Feb-2006
Time: 12:25:20
ID: WCL060125-01
Vial: 1:1,B

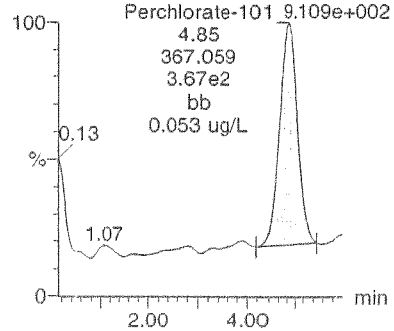
Perchlorate



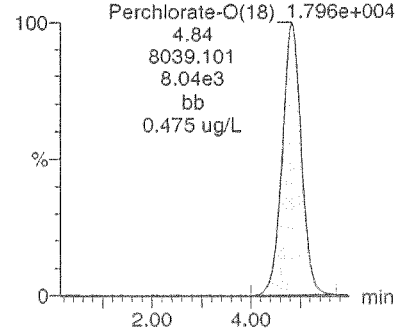
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.86	1046.351	1046.351	bb			0.046	92.4	-7.6	195.147	2.85
2	Perchlorate-101	101 > 85	4.85	367.059	367.059	bb			0.053	106.0	6.0	72.199	
3	Perchlorate-O(18)	107 > 89	4.84	8039.101	8039.101	bb			0.475	95.0	-5.0	7976.3...	

410

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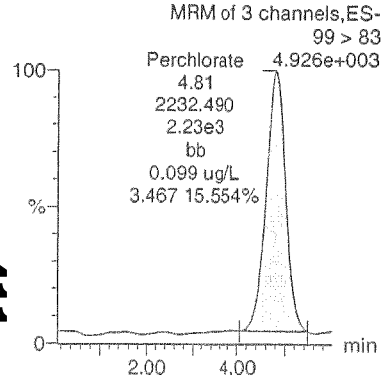
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

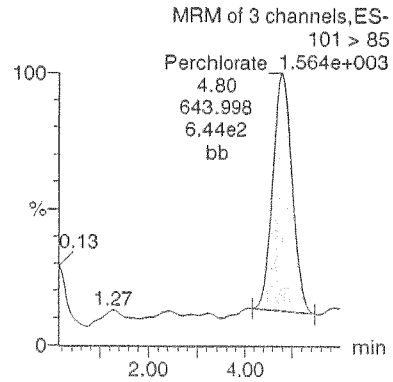
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010004a
Date: 01-Feb-2006
Time: 12:36:56
ID: WCL060125-02
Vial: 1:1,C

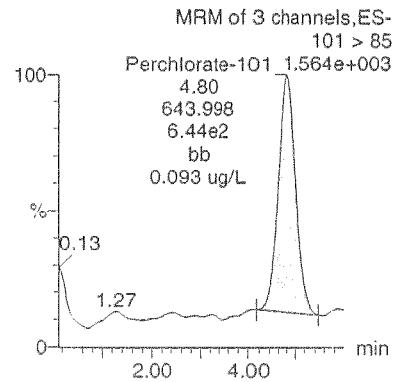
Perchlorate



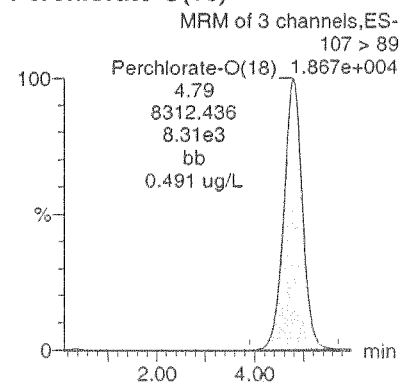
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.81	2232.490	2232.490	bb			0.099	98.5	-1.5	585.496	3.47
2	Perchlorate-101	101 > 85	4.80	643.998	643.998	bb			0.093	93.0	-7.0	175.330	
3	Perchlorate-O(18)	107 > 89	4.79	8312.436	8312.436	bb			0.491	98.3	-1.7	5725.9...	

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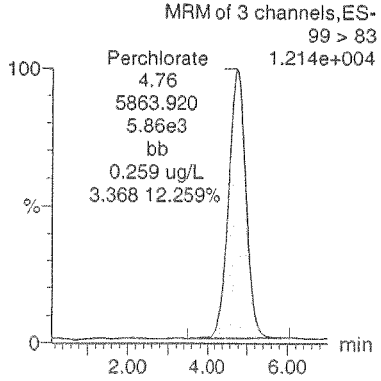
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

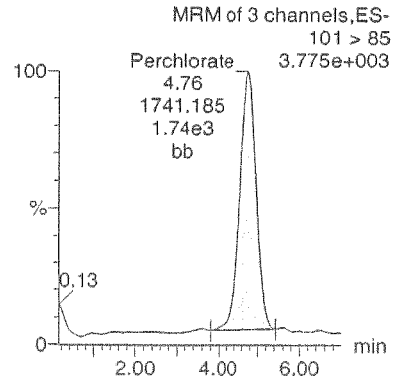
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010005a
Date: 01-Feb-2006
Time: 12:48:31
ID: WCL060125-03
Vial: 1:1,D

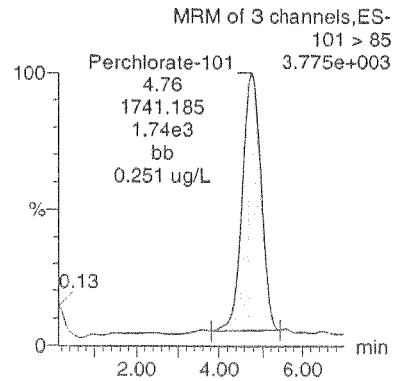
Perchlorate



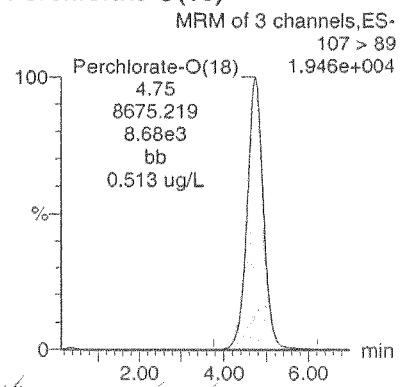
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.76	5863.920	5863.920	bb			0.259	103.5	3.5	614.436	3.37
2	Perchlorate-101	101 > 85	4.76	1741.185	1741.185	bb			0.251	100.6	0.6	244.784	
3	Perchlorate-O(18)	107 > 89	4.75	8675.219	8675.219	bb			0.513	102.5	2.5	5913.6...	

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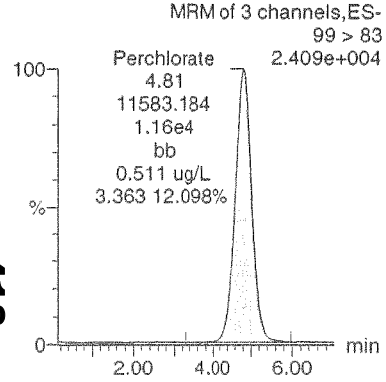
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

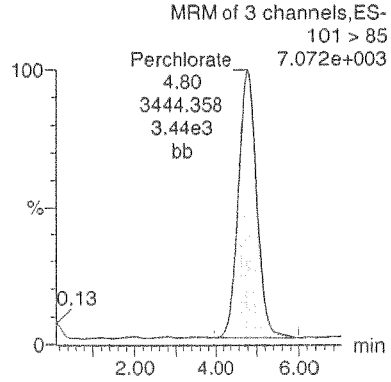
Name: per02010006a
Date: 01-Feb-2006
Time: 13:01:08
ID: WCL060125-04
Vial: 1:1,E

MAT 2/2/06

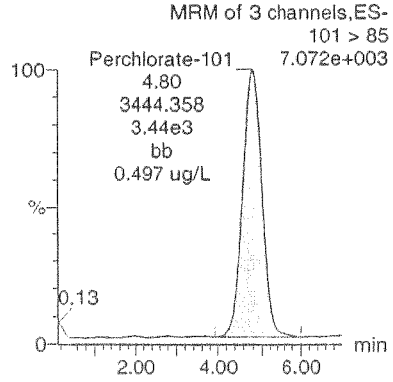
Perchlorate



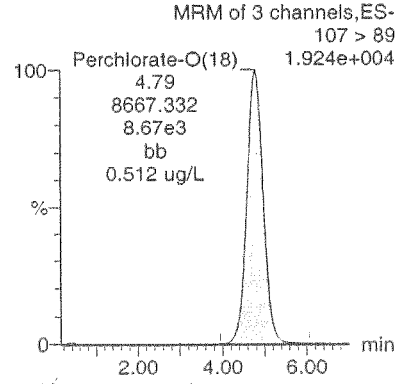
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	4.81	11583.184	11583.184	bb			0.511	102.2	2.2	1645.6...	3.36
2 Perchlorate-101	101 > 85	4.80	3444.358	3444.358	bb			0.497	99.5	-0.5	950.125	
3 Perchlorate-O(18)	107 > 89	4.79	8667.332	8667.332	bb			0.512	102.5	2.5	2479.5...	

413

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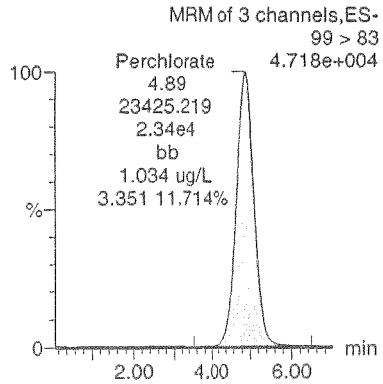
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

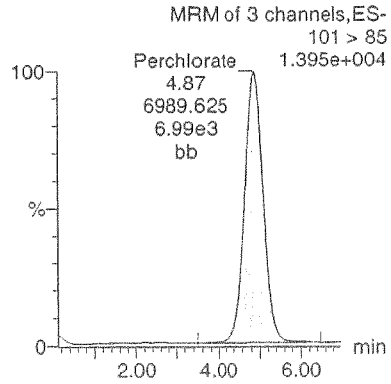
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010007a
Date: 01-Feb-2006
Time: 13:13:43
ID: WCL060125-05
Vial: 1:1,F

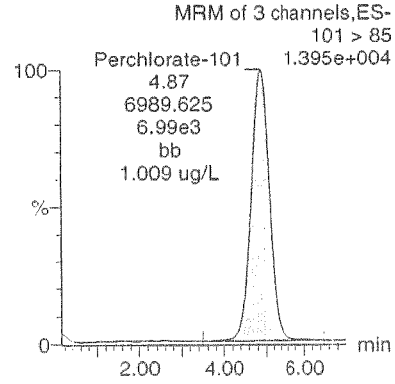
Perchlorate



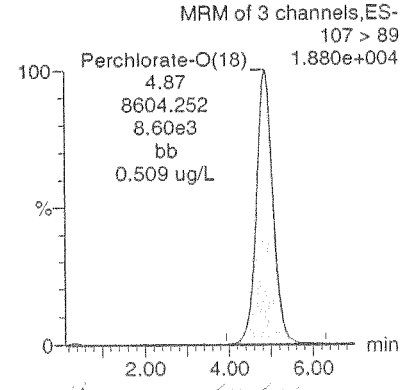
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.89	23425.219	23425.219	bb			1.034	103.4	3.4	5663.1...	3.35
2	Perchlorate-101	101 > 85	4.87	6989.625	6989.625	bb			1.009	100.9	0.9	1388.1...	
3	Perchlorate-O(18)	107 > 89	4.87	8604.252	8604.252	bb			0.509	101.7	1.7	555.755	

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Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 154614

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	106.21	31-JAN-06 17:38	per01310009a
Perchlorate Isotope Ratio		3.27		31-JAN-06 17:38	per01310009a
Perchlorate-101	.5	.53	105.98	31-JAN-06 17:38	per01310009a
Perchlorate	.5	.5	100.41	01-FEB-06 13:38	per02010009a
Perchlorate Isotope Ratio		3.17		01-FEB-06 13:38	per02010009a
Perchlorate-101	.5	.52	103.69	01-FEB-06 13:38	per02010009a

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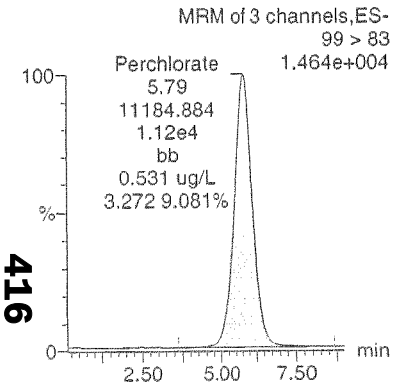
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

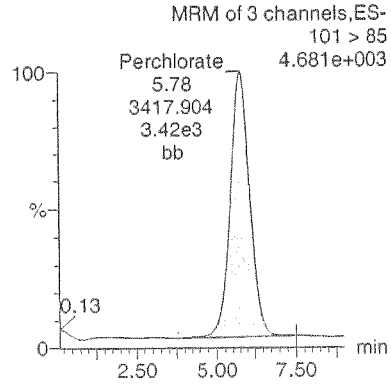
Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Name: per01310009a
Date: 31-Jan-2006
Time: 17:38:24
ID: WCL060125-06ICV
Vial: 1:2,A

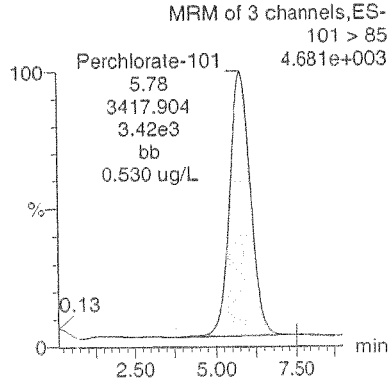
Perchlorate



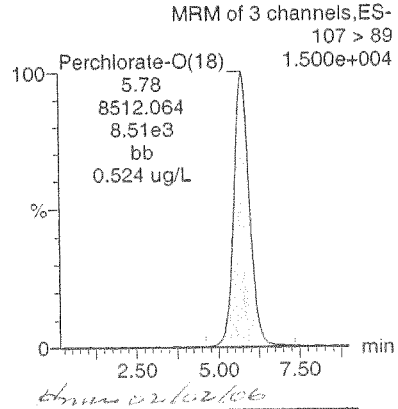
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.79	11184.884	11184.884	bb			0.531	106.2	6.2	1352.4...	3.27
2	Perchlorate-101	101 > 85	5.78	3417.904	3417.904	bb			0.530	106.0	6.0	3202.1...	
3	Perchlorate-O(18)	107 > 89	5.78	8512.064	8512.064	bb			0.524	104.8	4.8	554.153	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

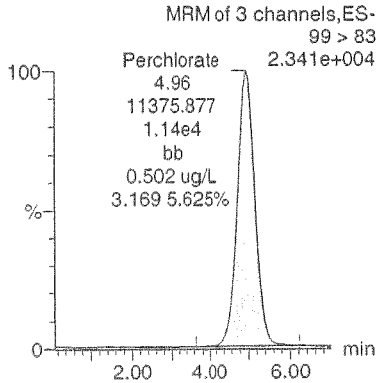
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

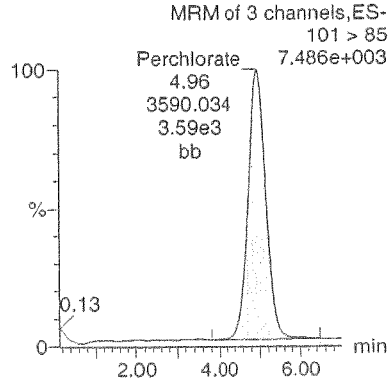
Name: per02010009a
Date: 01-Feb-2006
Time: 13:38:55
ID: WCL060125-06ICV
Vial: 1:2,A

417

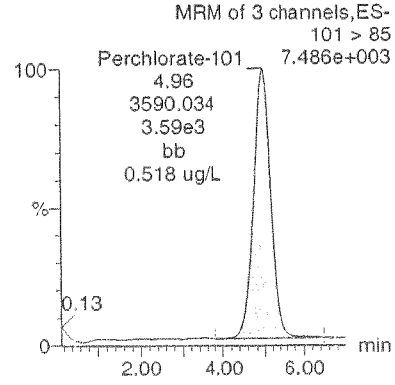
Perchlorate



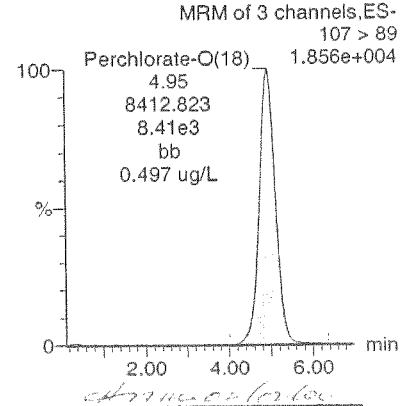
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.96	11375.877	11375.877	bb			0.502	100.4	0.4	2883.0...	3.17
2	Perchlorate-101	101 > 85	4.96	3590.034	3590.034	bb			0.518	103.7	3.7	412.253	
3	Perchlorate-O(18)	107 > 89	4.95	8412.823	8412.823	bb			0.497	99.4	-0.6	3675.6...	

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Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 154614

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.23	31-JAN-06 18:51	per01310014a
Perchlorate Isotope Ratio		3.33		31-JAN-06 18:51	per01310014a
Perchlorate-101	.5	.49	98.38	31-JAN-06 18:51	per01310014a
Perchlorate	.5	.51	102.16	31-JAN-06 21:46	per01310026a
Perchlorate Isotope Ratio		3.25		31-JAN-06 21:46	per01310026a
Perchlorate-101	.5	.51	102.61	31-JAN-06 21:46	per01310026a
Perchlorate	.5	.5	100.53	01-FEB-06 16:15	per02010018a
Perchlorate Isotope Ratio		3.25		01-FEB-06 16:15	per02010018a
Perchlorate-101	.5	.51	101.34	01-FEB-06 16:15	per02010018a

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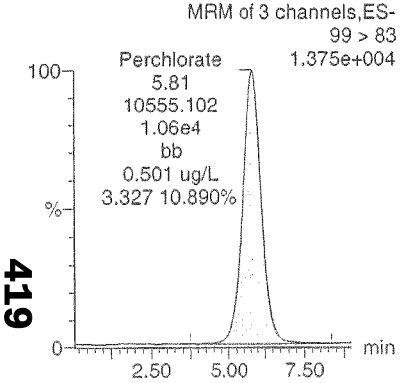
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

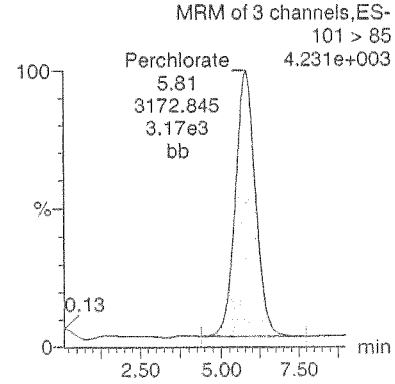
Name: per01310014a
Date: 31-Jan-2006
Time: 18:51:29
ID: WCL060125-06CCV
Vial: 1:2,A

419

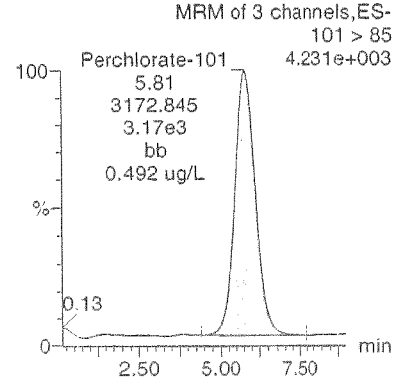
Perchlorate



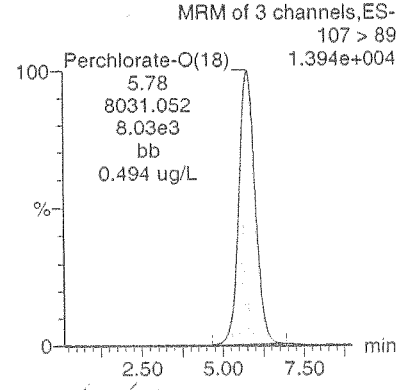
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.81	10555.102	10555.102	bb			0.501	100.2	0.2	3373.8...	3.33
2	Perchlorate-101	101 > 85	5.81	3172.845	3172.845	bb			0.492	98.4	-1.6	1560.6...	
3	Perchlorate-O(18)	107 > 89	5.78	8031.052	8031.052	bb			0.494	98.9	-1.1	1200.5...	

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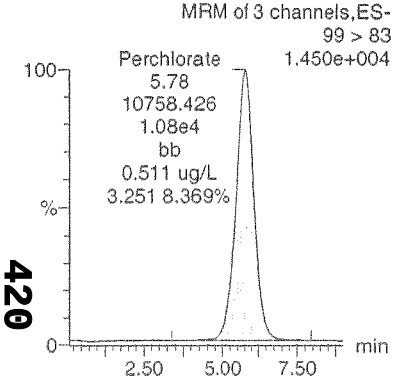
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

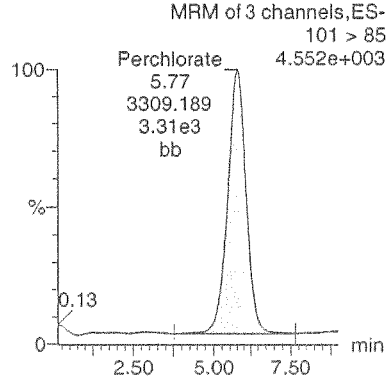
Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Name: per01310026a
Date: 31-Jan-2006
Time: 21:46:58
ID: WCL060125-06CCV
Vial: 1:2,A

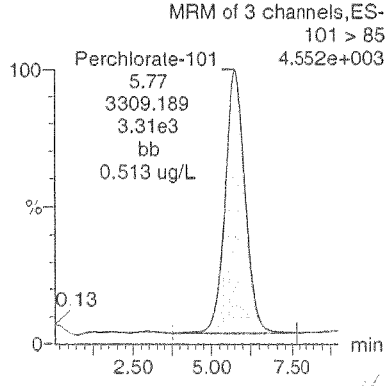
Perchlorate



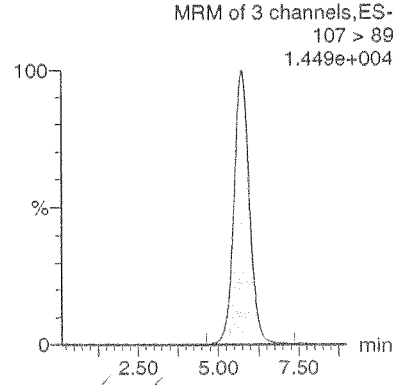
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.78	10758.426	10758.426	bb			0.511	102.2	2.2	3256.2...	3.25
2	Perchlorate-101	101 > 85	5.77	3309.189	3309.189	bb			0.513	102.6	2.6	1475.2...	
3	Perchlorate-O(18)	107 > 89	5.76	8105.723	8105.723	bb			0.499	99.8	-0.2	3669.4...	

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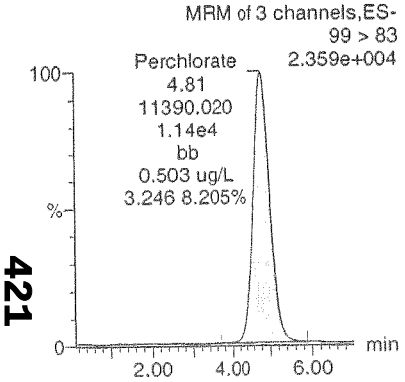
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

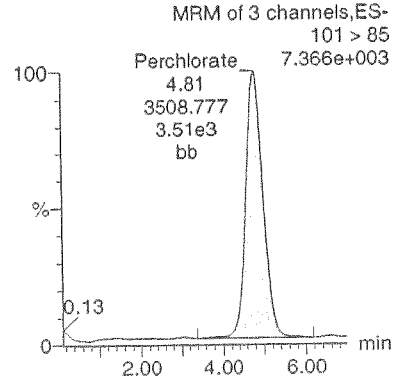
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010018a
Date: 01-Feb-2006
Time: 16:15:34
ID: WCL060125-06CCV
Vial: 1:2,A

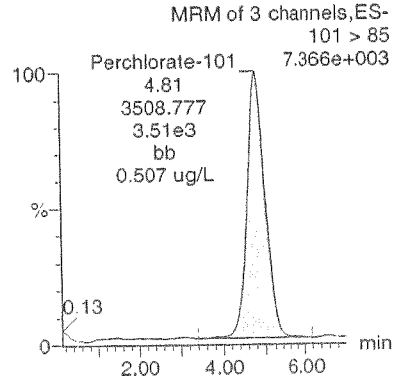
Perchlorate



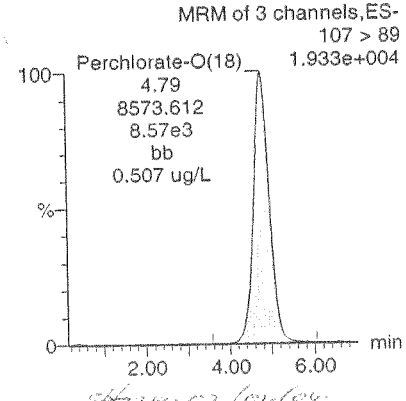
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	4.81	11390.020	11390.020	bb			0.503	100.5	0.5	1097.9...	3.25
2 Perchlorate-101	101 > 85	4.81	3508.777	3508.777	bb			0.507	101.3	1.3	618.948	
3 Perchlorate-O(18)	107 > 89	4.79	8573.612	8573.612	bb			0.507	101.3	1.3	1865.4...	

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Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 154614

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.88	31-JAN-06 18:07	per01310011a
Perchlorate Isotope Ratio		3.5		31-JAN-06 18:07	per01310011a
Perchlorate-101	.05	.05	91.41	31-JAN-06 18:07	per01310011a
Perchlorate	.05	.05	108.59	31-JAN-06 19:20	per01310016a
Perchlorate Isotope Ratio		3.43		31-JAN-06 19:20	per01310016a
Perchlorate-101	.05	.05	103.47	31-JAN-06 19:20	per01310016a
Perchlorate	.05	.05	101.7	31-JAN-06 22:16	per01310028a
Perchlorate Isotope Ratio		2.88		31-JAN-06 22:16	per01310028a
Perchlorate-101	.05	.06	115.49	31-JAN-06 22:16	per01310028a
Perchlorate	.05	.05	108.92	01-FEB-06 14:04	per02010011a
Perchlorate Isotope Ratio		2.93		01-FEB-06 14:04	per02010011a

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 154614

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.06	121.45	01-FEB-06 14:04	per02010011a
Perchlorate	.05	.06	113.31	01-FEB-06 16:40	per02010020a
Perchlorate Isotope Ratio		3.39		01-FEB-06 16:40	per02010020a
Perchlorate-101	.05	.05	109.5	01-FEB-06 16:40	per02010020a

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

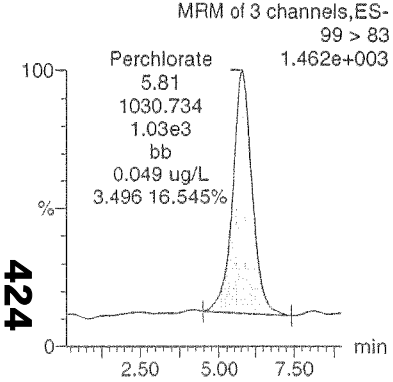
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

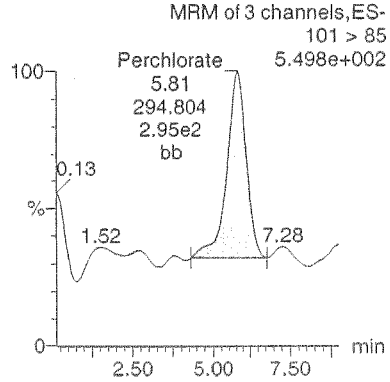
Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Name: per01310011a
Date: 31-Jan-2006
Time: 18:07:38
ID: WCL060125-07CRI
Vial: 1:2,B

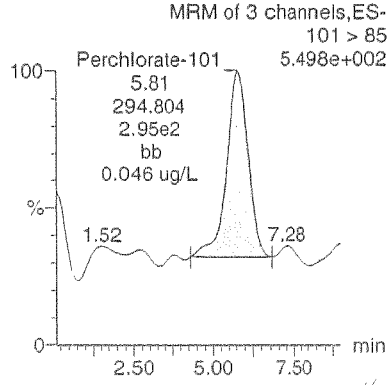
Perchlorate



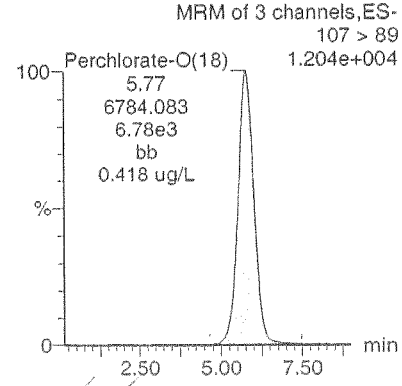
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	5.81	1030.734	1030.734	bb			0.049	97.9	-2.1	275.018	3.50
2 Perchlorate-101	101 > 85	5.81	294.804	294.804	bb			0.046	91.4	-8.6	127.503	
3 Perchlorate-O(18)	107 > 89	5.77	6784.083	6784.083	bb			0.418	83.5	-16.5	1161.4...	

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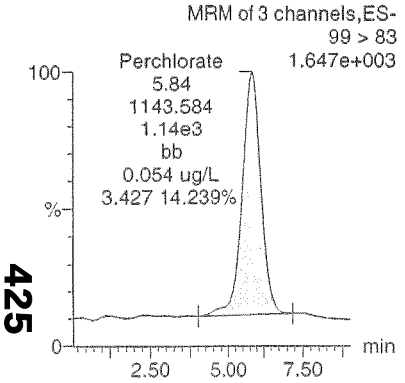
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

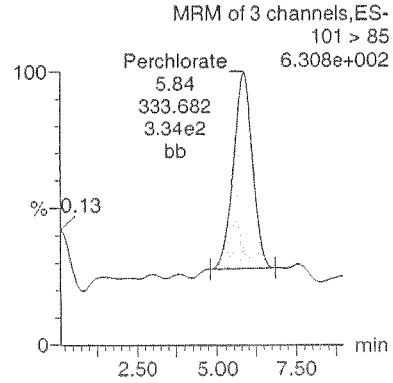
Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

Name: per01310016a
Date: 31-Jan-2006
Time: 19:20:43
ID: WCL060125-07CRI
Vial: 1:2,B

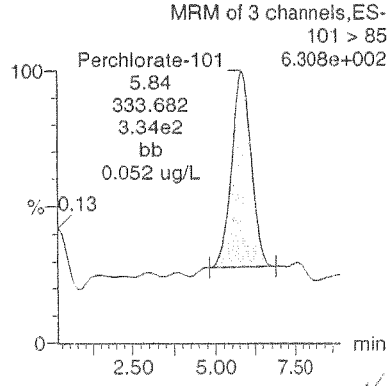
Perchlorate



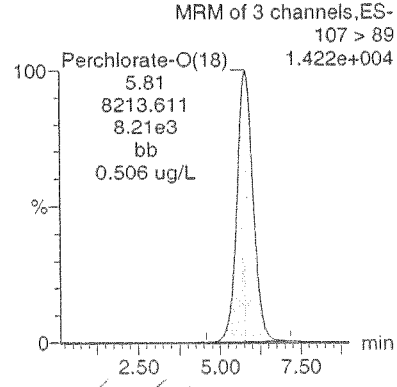
Perchlorate



Perchlorate-101



Perchlorate-O(18)



# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	5.84	1143.584	1143.584	bb			0.054	108.6	8.6	374.972	3.43
2 Perchlorate-101	101 > 85	5.84	333.682	333.682	bb			0.052	103.5	3.5	219.613	
3 Perchlorate-O(18)	107 > 89	5.81	8213.611	8213.611	bb			0.506	101.1	1.1	1566.2...	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

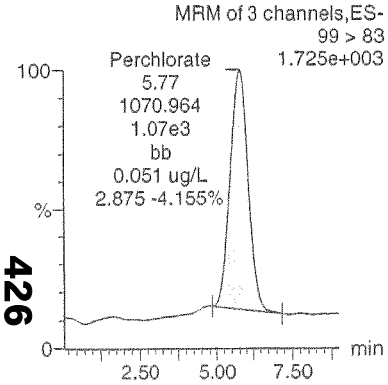
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

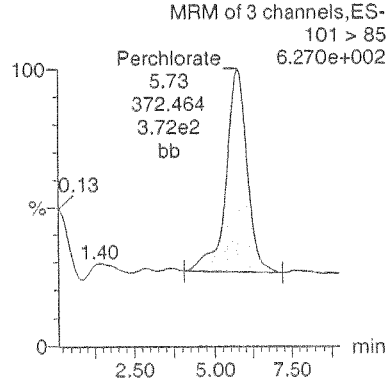
Name: per01310028a
Date: 31-Jan-2006
Time: 22:16:12
ID: WCL060125-07CRI
Vial: 1:2,B

MAP 2/1/06

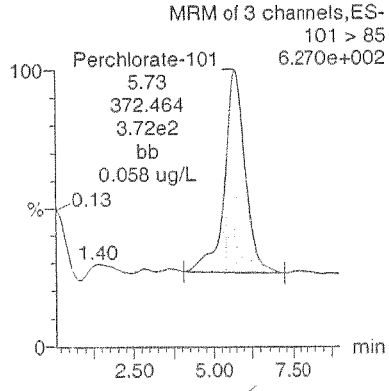
Perchlorate



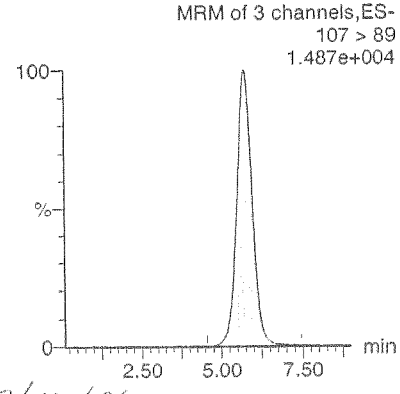
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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02/02/06

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.77	1070.964	1070.964	bb			0.051	101.7	1.7	662.181	2.88
2	Perchlorate-101	101 > 85	5.73	372.464	372.464	bb			0.058	115.5	15.5	79.862	
3	Perchlorate-O(18)	107 > 89	5.74	8186.635	8186.635	bb			0.504	100.8	0.8	2118.0...	

✓

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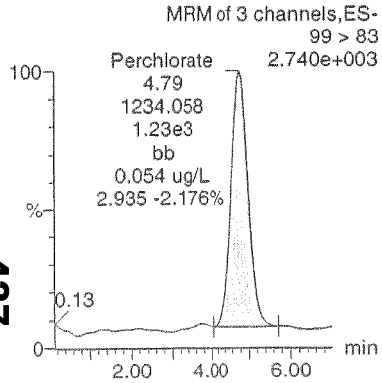
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

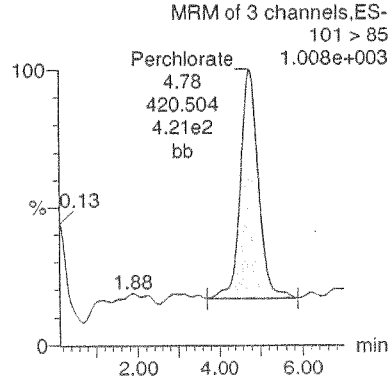
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010011a
Date: 01-Feb-2006
Time: 14:04:09
ID: WCL060125-07CRI
Vial: 1:2,B

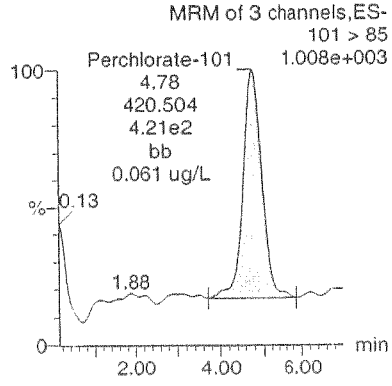
Perchlorate



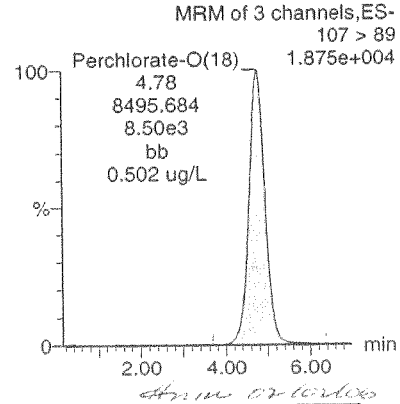
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.79	1234.058	1234.058	bb			0.054	108.9	8.9	410.240	2.93
2	Perchlorate-101	101 > 85	4.78	420.504	420.504	bb			0.061	121.4	21.4	84.691	
3	Perchlorate-O(18)	107 > 89	4.78	8495.684	8495.684	bb			0.502	100.4	0.4	2361.6...	

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

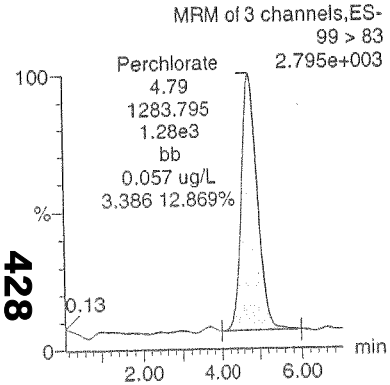
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

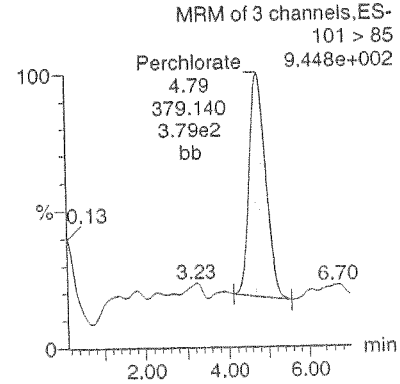
Name: per02010020a
Date: 01-Feb-2006
Time: 16:40:49
ID: WCL060125-07CRI
Vial: 1:2,B

MTT 2/2/06

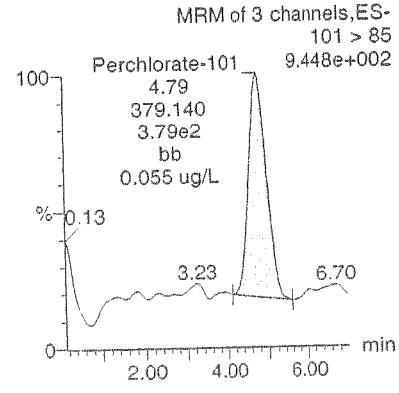
Perchlorate



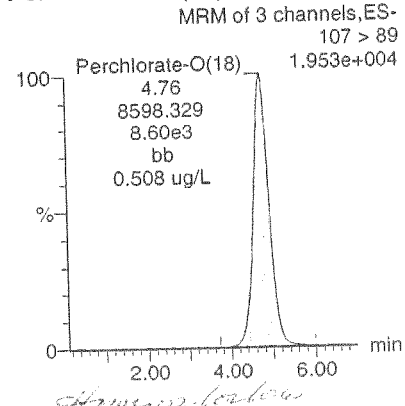
Perchlorate



Perchlorate-101



Perchlorate-O(18)



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Harmon-Taylor

# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	4.79	1283.795	1283.795	bb			0.057	113.3	13.3	479.106	3.39
2 Perchlorate-101	101 > 85	4.79	379.140	379.140	bb			0.055	109.5	9.5	118.215	
3 Perchlorate-O(18)	107 > 89	4.76	8598.329	8598.329	bb			0.508	101.6	1.6	2681.6...	

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QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 27-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 1201019721

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	31-JAN-06 19:35	per01310017a
	Perchlorate Isotope Ratio						1	31-JAN-06 19:35	per01310017a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	31-JAN-06 19:35	per01310017a
	Perchlorate-O(18)			0.487	ug/L		1	31-JAN-06 19:35	per01310017a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

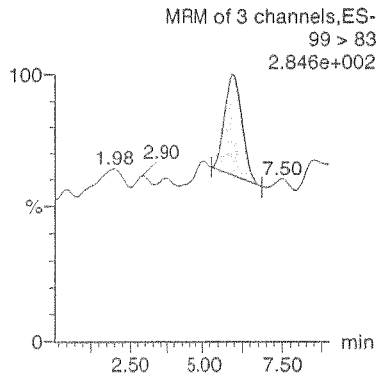
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

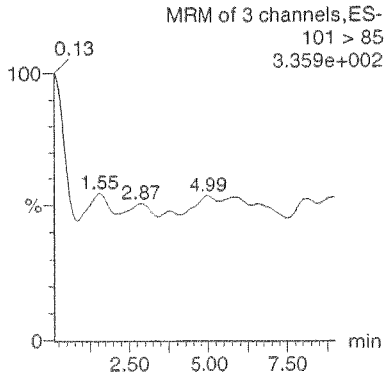
Name: per01310017a
Date: 31-Jan-2006
Time: 19:35:20
ID: 1201019721 IBMS/49240/LIO/MB/1/
Vial: 1:4,A

RMT 2/1/06

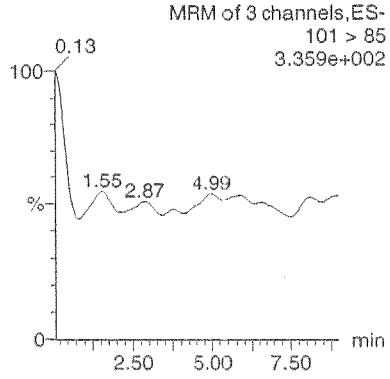
Perchlorate



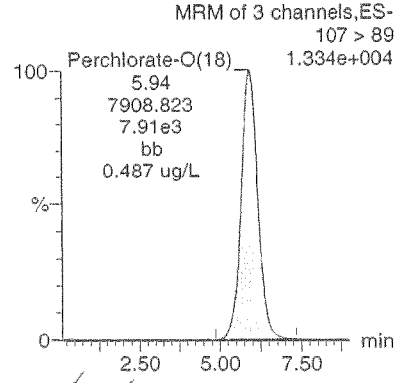
Perchlorate



Perchlorate-101



Perchlorate-O(18)



thm 02-02-06

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.97	70.644	70.644	bb			0.003			54.884	0.00
2	Perchlorate-101	101 > 85											
3	Perchlorate-O(18)	107 > 89	5.94	7908.823	7908.823	bb			0.487	97.4	-2.6	644.096	

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 27-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 1201019722

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.178	ug/L	J	1	31-JAN-06 19:49	per01310018a
	Perchlorate Isotope Ratio			3.26			1	31-JAN-06 19:49	per01310018a
14797-73-0	Perchlorate-101	.05	.2	0.178	ug/L	J	1	31-JAN-06 19:49	per01310018a
	Perchlorate-O(18)			0.415	ug/L		1	31-JAN-06 19:49	per01310018a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

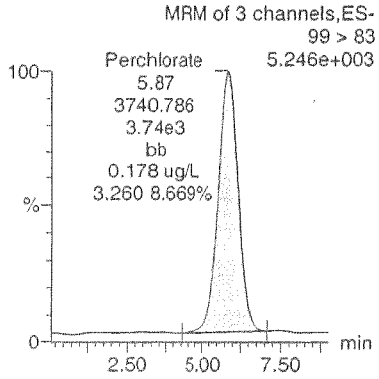
Dataset: C:\MassLynx\Perchlorate.PRO\per013106a.qld

Last Altered: Wednesday, February 01, 2006 7:44:20 AM Eastern Standard Time
Printed: Wednesday, February 01, 2006 7:47:23 AM Eastern Standard Time

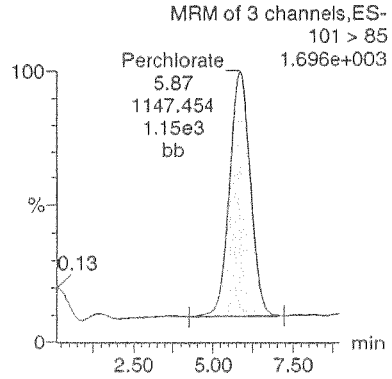
Name: per01310018a
Date: 31-Jan-2006
Time: 19:49:58
ID: 1201019722 | ESHC | 498240 | LCD | LCS | 1 |
Vial: 1:4,B

MAT 4/1/06

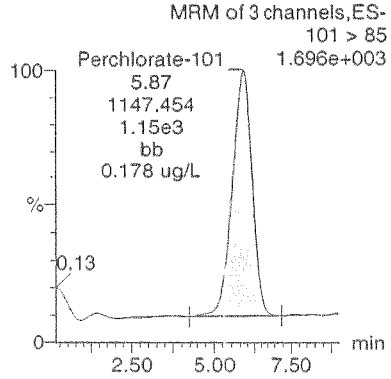
Perchlorate



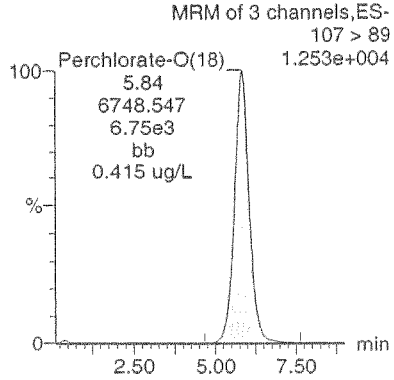
Perchlorate



Perchlorate-101



Perchlorate-O(18)



#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	5.87	3740.786	3740.786	bb			0.178	88.8	-11.2	1530.0...	3.26
2	Perchlorate-101	101 > 85	5.87	1147.454	1147.454	bb			0.178	88.9	-11.1	471.723	
3	Perchlorate-O(18)	107 > 89	5.84	6748.547	6748.547	bb			0.415	83.1	-16.9	2443.7...	

$\frac{3740.786}{21062.2} = 0.1776$

HMM 02/02/06

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF06010G8WT01MS

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 1201019723

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.459	ug/L		1	01-FEB-06 15:12	per02010013a
	Perchlorate Isotope Ratio			3.3			1	01-FEB-06 15:12	per02010013a
14797-73-0	Perchlorate-101	.05	.2	0.456	ug/L		1	01-FEB-06 15:12	per02010013a
	Perchlorate-O(18)			0.493	ug/L		1	01-FEB-06 15:12	per02010013a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

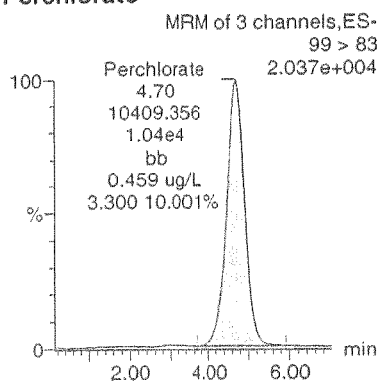
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010013a
Date: 01-Feb-2006
Time: 15:12:28
ID: 1201019723
Vial: 1:4,B

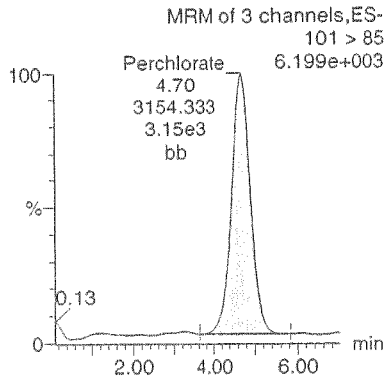
ESI+ | 498240 | LCS | 1546140 01 ms | 1 |

MMT 2/2/06

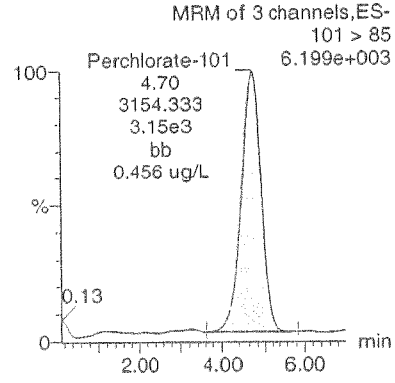
Perchlorate



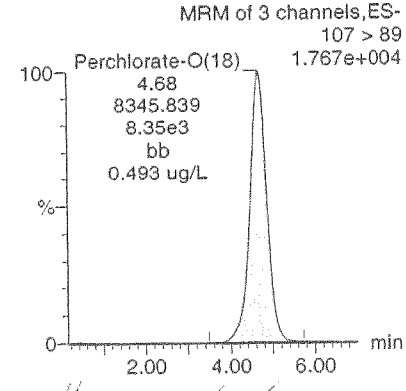
Perchlorate



Perchlorate-101



Perchlorate-O(18)



thru 2/2/06

#	Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1	Perchlorate	99 > 83	4.70	10409.356	10409.356	bb			0.459	229.7	129.7	2303.9...	3.30
2	Perchlorate-101	101 > 85	4.70	3154.333	3154.333	bb			0.456	227.8	127.8	963.085	
3	Perchlorate-O(18)	107 > 89	4.68	8345.839	8345.839	bb			0.493	98.7	-1.3	5425.5...	

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Perchlorate Analysis Data Sheet

Lab Name: General Engineering Laboratories

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: GROUND WATER

Extraction Batch ID: 498239

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
GF06010G8WT01MSD

Date Received: 26-JAN-06

GEL Job No (SDG): 154614

GEL Sample ID: 1201019724

Date Filtered: 27-JAN-06

Injection Volume (uL): 50

%Solids:

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.490	ug/L		1	01-FEB-06 15:25	per02010014a
	Perchlorate Isotope Ratio			3.23			1	01-FEB-06 15:25	per02010014a
14797-73-0	Perchlorate-101	.05	.2	0.497	ug/L		1	01-FEB-06 15:25	per02010014a
	Perchlorate-O(18)			0.523	ug/L		1	01-FEB-06 15:25	per02010014a

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

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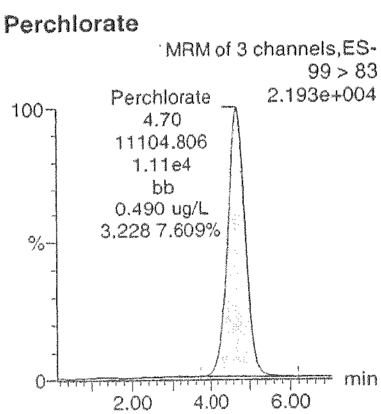
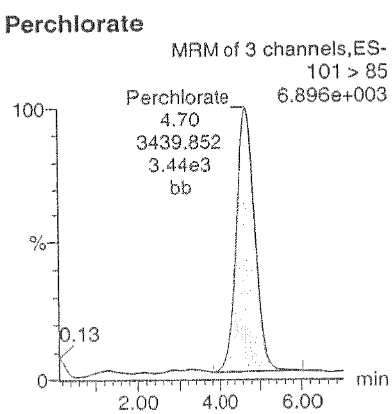
Quantify Sample Report **MassLynx 4.0 SP4**
General Engineering Laboratories Analyst: Lynne Sigmon

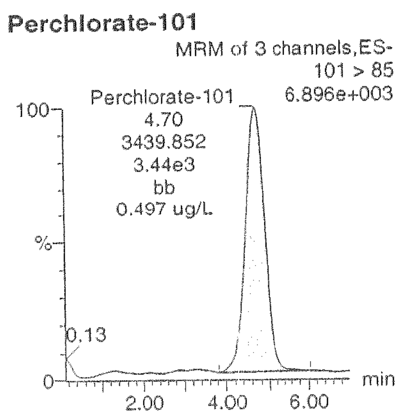
Dataset: C:\MassLynx\Perchlorate.PRO\per020106a.qld

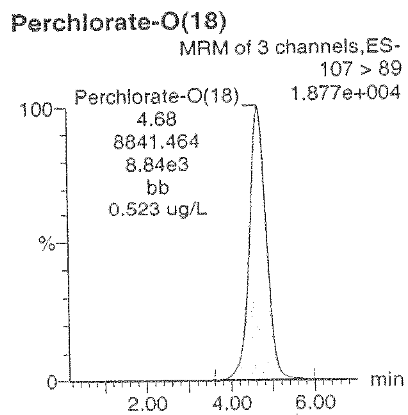
Last Altered: Thursday, February 02, 2006 6:49:43 AM Eastern Standard Time
Printed: Thursday, February 02, 2006 6:52:56 AM Eastern Standard Time

Name: per02010014a
Date: 01-Feb-2006
Time: 15:25:05
ID: 1201019724
Vial: 1:4,C









# Name	Trace	RT	Area	Response	Flags	Mod.D...	Mod.Ti...	ug/L	%Rec	%Dev	S/N	Ion Ratio
1 Perchlorate	99 > 83	4.70	11104.806	11104.806	bb			0.490	245.0	145.0	2856.5...	3.23
2 Perchlorate-101	101 > 85	4.70	3439.852	3439.852	bb			0.497	248.4	148.4	753.642	
3 Perchlorate-O(18)	107 > 89	4.68	8841.464	8841.464	bb			0.523	104.5	4.5	3273.1...	

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MISCELLANEOUS DATA

Prep Logbook

Sample Preparation for Perchlorate Analysis using Liquid Chromatography/Mass Spectrometry/Mass Spectrometry

Batch ID: 498239 Verified by: _____

Analyst: Clayton Moser

Method: EPA 6850 Modified

Lab SOP: GL-OA-E-057 REV# 1

Instrument: MicroMass Quatro Micro

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1201019721 MB	27-JAN-2006 07:25:34	10	10	1
1201019722 LCS	27-JAN-2006 07:25:34	10	10	1
154614001	27-JAN-2006 07:25:34	10	10	1
1201019723 MS (154614001)	27-JAN-2006 07:25:34	10	10	1
1201019724 MSD (154614001)	27-JAN-2006 07:25:34	10	10	1
154614002	27-JAN-2006 07:25:34	10	10	1
154614008	27-JAN-2006 07:25:34	10	10	1
154614010	27-JAN-2006 07:25:34	10	10	1
1201019726 ICS	27-JAN-2006 07:25:34	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1201019726	10 ug/L CCV Second Source	UCL051230-01.1	.2	mL
LCS	1201019722	10 ug/L CCV Second Source	UCL051230-01.1	.2	mL
MS	1201019723	10 ug/L CCV Second Source	UCL051230-01.1	.2	mL
MSD	1201019724	10 ug/L CCV Second Source	UCL051230-01.1	.2	mL
RGNT	All	500 ppm carbonate, bicarbonate, chloride, sulfate	483523	10	mL
RGNT	All	O2SI HPLC Grade Water	490685	10	mL

Comments:

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 1/31/06
Extr. Injection Volume: 10uL
Sequence Number: per013106a
Initial Calibration Date: 013106

Method: 6850-Modified
Int. Std.: UCL051115-02
Mobile Phase Lot#: 490795, 482458
Standard-Samp Reagent Lot#:: 482458

Reviewed BY: dhm
Date: 2/10/06
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID: WCL060125-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per01310001a	IPB001	MAP	1/31/2006 15:41			1		USE	B
per01310002a	IPB001	MAP	1/31/2006 15:56			1		USE	B
per01310003a	WCLICAL-01	MAP	1/31/2006 16:10			1		USE	I
per01310004a	WCLICAL-02	MAP	1/31/2006 16:25			1		USE	I
per01310005a	WCLICAL-03	MAP	1/31/2006 16:40			1		USE	I
per01310006a	WCLICAL-04	MAP	1/31/2006 16:54			1		USE	I
per01310007a	WCLICAL-05	MAP	1/31/2006 17:09			1		USE	I
per01310008a	IPB002	MAP	1/31/2006 17:23			1		USE	B
per01310009a	WCLICV	MAP	1/31/2006 17:38			1		USE	C
per01310010a	IPB003	MAP	1/31/2006 17:53			1		USE	B
per01310011a	WCLCRI	MAP	1/31/2006 18:07			1		USE	C
per01310012a	1201016276	MAP	1/31/2006 18:22	496686	Various	1	LANL	USE	S
per01310013a	1201016273	MAP	1/31/2006 18:36	496686	4371S	1	LANL	USE	S
per01310014a	WCLCCV	MAP	1/31/2006 18:51			1		USE	C
per01310015a	IPB004	MAP	1/31/2006 19:06			1		USE	B
per01310016a	WCLCRI	MAP	1/31/2006 19:20			1		USE	C
per01310017a	1201019721	MAP	1/31/2006 19:35	498240	154614	1	ESHL	USE	S
per01310018a	1201019722	MAP	1/31/2006 19:49	498240	154614	1	ESHL	USE	S
per01310019a	1201019726	MAP	1/31/2006 20:04	498240	154614	1	ESHL	USE	S
per01310020a	154614001	MAP	1/31/2006 20:19	498240	154614	1	ESHL	DUSE	S
per01310021a	1201019723	MAP	1/31/2006 20:33	498240	154614	1	ESHL	DUSE	S
per01310022a	1201019724	MAP	1/31/2006 20:48	498240	154614	1	ESHL	DUSE	S
per01310023a	154614002	MAP	1/31/2006 21:03	498240	154614	1	ESHL	USE	S
per01310024a	154614008	MAP	1/31/2006 21:17	498240	154614	1	ESHL	DUSE	S
per01310025a	154614010	MAP	1/31/2006 21:32	498240	154614	1	ESHL	USE	S
per01310026a	WCLCCV	MAP	1/31/2006 21:46			1		USE	C
per01310027a	IPB005	MAP	1/31/2006 22:01			1		USE	B
per01310028a	WCLCRI	MAP	1/31/2006 22:16			1		USE	C
per01310029a	1201020549	MAP	1/31/2006 22:30	498583	Various	1	LANL	USE	S

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per01310030a	1201020553	MAP	1/31/2006 22:45	498583	Various	1	LANL	DUSE	S
per01310031a	1201020550	MAP	1/31/2006 23:00	498583	Various	1	LANL	USE	S
per01310032a	154581001	MAP	1/31/2006 23:14	498583	4423S	1	LANL	USE	S
per01310033a	154703001	MAP	1/31/2006 23:29	498583	4436S	1	LANL	USE	S
per01310034a	154706001	MAP	1/31/2006 23:43	498583	4442S	1	LANL	USE	S
per01310035a	1201020551	MAP	1/31/2006 23:58	498583	4442S	1	LANL	USE	S
per01310036a	1201020552	MAP	2/1/2006 0:13	498583	4442S	1	LANL	USE	S
per01310037a	154706002	MAP	2/1/2006 0:27	498583	4442S	1	LANL	USE	S
per01310038a	154706003	MAP	2/1/2006 0:42	498583	4442S	1	LANL	USE	S
per01310039a	WCLCCV	MAP	2/1/2006 0:57			1		USE	C
per01310040a	IPB006	MAP	2/1/2006 1:11			1		USE	B
per01310041a	WCLCRI	MAP	2/1/2006 1:26			1		USE	C
per01310042a	154720001	MAP	2/1/2006 1:41	498583	4439S	1	LANL	USE	S
per01310043a	154720002	MAP	2/1/2006 1:55	498583	4439S	1	LANL	USE	S
per01310044a	IPB007	MAP	2/1/2006 2:10			1		USE	B
per01310045a	1201020554	MAP	2/1/2006 2:24	498586	Various	1	ESHL	USE	S
per01310046a	1201020555	MAP	2/1/2006 2:39	498586	Various	1	ESHL	USE	S
per01310047a	1201020558	MAP	2/1/2006 2:54	498586	Various	1	ESHL	USE	S
per01310048a	154721001	MAP	2/1/2006 3:08	498586	154721	1	ESHL	USE	S
per01310049a	154721008	MAP	2/1/2006 3:23	498586	154721	1	ESHL	DUSE	S
per01310050a	154721011	MAP	2/1/2006 3:38	498586	154721	1	ESHL	USE	S
per01310051a	WCLCCV	MAP	2/1/2006 3:52			1		USE	C
per01310052a	IPB008	MAP	2/1/2006 4:07			1		USE	B
per01310053a	WCLCRI	MAP	2/1/2006 4:22			1		USE	C
per01310054a	154759001	MAP	2/1/2006 4:36	498586	154759	1	ESHL	DUSE	S
per01310055a	154759009	MAP	2/1/2006 4:51	498586	154759	1	ESHL	DUSE	S
per01310056a	154759010	MAP	2/1/2006 5:06	498586	154759	1	ESHL	DUSE	S
per01310057a	154760001	MAP	2/1/2006 5:20	498586	154760	1	ESHL	DUSE	S
per01310058a	1201020556	MAP	2/1/2006 5:35	498586	154760	1	ESHL	DUSE	S
per01310059a	1201020557	MAP	2/1/2006 5:49	498586	154760	1	ESHL	DUSE	S
per01310060a	WCLCCV	MAP	2/1/2006 6:04			1		DUSE	C
per01310061a	IPB009	MAP	2/1/2006 6:19			1		DUSE	B
per01310062a	WCLCRI	MAP	2/1/2006 6:33			1		DUSE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 02/01/06
Extr. Injection Volume: 10uL
Sequence Number: per020106a
Initial Calibration Date: 020106

Method: 6850-Modified
Int. Std.: UCL051115-02
Mobile Phase Lot#: 490795, 482458
Standard-Samp Reagent Lot#:: 482458

Reviewed BY: HMM
Date: 02/02/06
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID: WCL060125-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per02010001a	IPB001	MAP	2/1/2006 12:02			1		USE	B
per02010002a	IPB001	MAP	2/1/2006 12:13			1		USE	B
per02010003a	WCLICAL-01	MAP	2/1/2006 12:25			1		USE	I
per02010004a	WCLICAL-02	MAP	2/1/2006 12:36			1		USE	I
per02010005a	WCLICAL-03	MAP	2/1/2006 12:48			1		USE	I
per02010006a	WCLICAL-04	MAP	2/1/2006 13:01			1		USE	I
per02010007a	WCLICAL-05	MAP	2/1/2006 13:13			1		USE	I
per02010008a	IPB002	MAP	2/1/2006 13:26			1		USE	B
per02010009a	WCLICV	MAP	2/1/2006 13:38			1		USE	C
per02010010a	IPB003	MAP	2/1/2006 13:51			1		USE	B
per02010011a	WCLCRI	MAP	2/1/2006 14:04			1		USE	C
per02010012a	154614001	MAP	2/1/2006 14:59	498240	154614	1	ESHL	USE	S
per02010013a	1201019723	MAP	2/1/2006 15:12	498240	154614	1	ESHL	USE	S
per02010014a	1201019724	MAP	2/1/2006 15:25	498240	154614	1	ESHL	USE	S
per02010015a	154614008	MAP	2/1/2006 15:37	498240	154614	250	ESHL	USE	S
per02010016a	IPB004	MAP	2/1/2006 15:50			1		USE	B
per02010017a	1201020553	MAP	2/1/2006 16:02	498583	Various	1	LANL	USE	S
per02010018a	WCLCCV	MAP	2/1/2006 16:15			1		USE	C
per02010019a	IPB005	MAP	2/1/2006 16:28			1		USE	B
per02010020a	WCLCRI	MAP	2/1/2006 16:40			1		USE	C
per02010021a	154721008	MAP	2/1/2006 16:53	498586	154721	1	ESHL	USE	S
per02010022a	154759001	MAP	2/1/2006 17:06	498586	154759	1	ESHL	USE	S
per02010023a	154759009	MAP	2/1/2006 17:18	498586	154759	1	ESHL	USE	S
per02010024a	154759010	MAP	2/1/2006 17:31	498586	154759	1	ESHL	USE	S
per02010025a	154760001	MAP	2/1/2006 17:43	498586	154760	1	ESHL	USE	S
per02010026a	1201020556	MAP	2/1/2006 17:56	498586	154760	1	ESHL	USE	S
per02010027a	1201020557	MAP	2/1/2006 18:09	498586	154760	1	ESHL	USE	S
per02010028a	WCLCCV	MAP	2/1/2006 18:21			1		USE	C
per02010029a	IPB006	MAP	2/1/2006 18:34			1		USE	B

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per02010030a	WCLCRI	MAP	2/1/2006 18:47			1		USE	C
per02010031a	1201022638	MAP	2/1/2006 18:59	499523	154817	1	ESHL	DUSE	S
per02010032a	1201022639	MAP	2/1/2006 19:12	499523	154817	1	ESHL	DUSE	S
per02010033a	1201022642	MAP	2/1/2006 19:24	499523	154817	1	ESHL	DUSE	S
per02010034a	154817001	MAP	2/1/2006 19:37	499523	154817	1	ESHL	DUSE	S
per02010035a	1201022640	MAP	2/1/2006 19:50	499523	154817	1	ESHL	DUSE	S
per02010036a	1201022641	MAP	2/1/2006 20:02	499523	154817	1	ESHL	DUSE	S
per02010037a	WCLCCV	MAP	2/1/2006 20:15			1		USE	C
per02010038a	IPB007	MAP	2/1/2006 20:28			1		USE	B
per02010039a	WCLCRI	MAP	2/1/2006 20:40			1		USE	C

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Isotope Ratio Criteria

Average Isotope Ratio
2.93

Standard Deviation
0.19

Sample Between the MDL and RDL (0.050-0.20ug/L)
Control Limits : 2.36-3.50

Sample Above the RDL (0.20ug/L)
Control Limits : 2.55-3.31

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

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LC/MS/MS EXPLOSIVES ANALYSIS

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LC/MS/MS Case Narrative
Los Alamos National Laboratory (ESHL)
SDG 154614

Method/Analysis Information

Procedure:	**Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)**
Analytical Method:	SW846 3535/8321A Modified
Prep Method:	SW846 Method 3535
Analytical Batch Number:	498841
Prep Batch Number:	498839

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
154614003	GU06010G8WT01
154614004	GU0601G14R101
1201021041	Method Blank (MB)
1201021042	Laboratory Control Sample (LCS)
1201021043	154760002(GU0601G14R201) Matrix Spike (MS)
1201021044	154760002(GU0601G14R201) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

Procedures for preparation, analysis, and reporting of analytical data are documented by General Engineering Laboratories LLC (GEL) as Standard Operating Procedure (SOP) GL-OA-E-056, Rev. 6.

Primary Analytes Analysis
Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG.

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

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CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CRI Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported. Please see nonconformance report 290574.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Client sample 154760002 (GU0601G14R201) from SDG 154760 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples and/or QC were diluted due to matrix interference. According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with acidified HPLC grade water. The final dilution takes the 1:1 v/v dilution into account.

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Sample Re-extraction/Re-analysis
Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported. Please see nonconformance report 290574.

Secondary Analytes Analysis
Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG.

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

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CRI Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported. Please see nonconformance report 290574.

Laboratory Control Sample (LCS) Recovery
The LCS failed recovery limits for tris(o-cresyl) phosphate at 19.2% and for 2,4-Diamino-6-nitrotoluene at 46%. The recovery limits are 50-150%. Please see nonconformance report 290574.

QC Sample Designation
Client sample 154760002 (GU0601G14R201) from SDG 154760 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS failed recovery for tris(o-cresyl)phosphate at 41.4%; the recovery limits are 50-150%. Please see nonconformance report 290574.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD MS failed recovery for TATB at 155%. The recovery limits are 50-150%. Please see nonconformance report 290574.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard was not added to the secondary analyte extracts.

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Technical Information

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

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Samples and/or QC were diluted due to matrix interference. According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with acidified HPLC grade water. The final dilution takes the 1:1 v/v dilution into account.

Sample Re-extraction/Re-analysis
Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported. Please see nonconformance report 290574.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance report 290574 was generated for this SDG.

Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported.

The LCS failed recovery limits for tris(o-cresyl) phosphate at 19.2% and for 2,4-Diamino-6-nitrotoluene at 46%. The recovery limits are 50-150%.

The MS failed recovery for tris(o-cresyl)phosphate at 41.4%; the recovery limits are 50-150%.

The MSD MS failed recovery for TATB at 155%. The recovery limits are 50-150

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples required manual integrations due to software limitations.

Flagging Convention
The samples were not originally analyzed using SW-846 Method 8330.

Additional Comments
Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data. They do not appear on the generated forms.

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Method/Analysis Information

Procedure:	**Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)**
Analytical Method:	SW846 3535/8321A Modified
Prep Method:	SW846 Method 3535
Analytical Batch Number:	501113
Prep Batch Number:	501111

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
154614004	GU0601G14R101RE
1201026408	Method Blank (MB)
1201026409	Laboratory Control Sample (LCS)
1201026410	155265002(GU0601G12R201) Matrix Spike (MS)
1201026411	155265002(GU0601G12R201) Matrix Spike Duplicate (MSD)

Preparation/Analytical Method Verification

Procedures for preparation, analysis, and reporting of analytical data are documented by General Engineering Laboratories LLC (GEL) as Standard Operating Procedure (SOP) GL-OA-E-056, Rev. 6.

Primary Analytes Analysis

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG.

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

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CRI Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

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Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG in this analytical batch.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Client sample 155265002 (GU0601G12R201) from SDG 155265 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD for HMX was 32.5%. The limit is 30%. Please see nonconformance report 390814.

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information

Holding Time Specifications
Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported. Please see nonconformance report 390814. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with acidified HPLC grade water. The samples in this SDG did not require any additional dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG in this analytical batch except for dilutions.

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Secondary Analytes Analysis

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this SDG.

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

CCB Requirements
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

CRI Requirements
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards and may be based off the grand mean average percent recovery of all target analytes.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All the surrogate recoveries were within the established acceptance criteria for this SDG in this analytical batch.

Laboratory Control Sample (LCS) Recovery
The LCS failed recovery for tris(o-cresyl) phosphate at 28.6%. The SPC limits are 50%-150%. Please see nonconformance report 390814.

QC Sample Designation
Client sample 155265002 (GU0601G12R201) from SDG 155265 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement
The MS failed recovery for tris(o-cresyl) phosphate at 36.0%. The SPC limits are 50%-150%. Please see nonconformance report 390814.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD failed recovery for tris(o-cresyl) phosphate at 41.8%. The SPC limits are 50%-150%. Please see nonconformance report 390814.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard was not added to the secondary analyte extracts.

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Technical Information

Holding Time Specifications
Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported. Please see nonconformance report 390814. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
According to the GEL SOP for Method 8321A, all sample and QC extracts are diluted 1:1 v/v with acidified HPLC grade water. The samples in this SDG did not require any additional dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG in this analytical batch except for dilutions.

Miscellaneous Information

Nonconformance (NCR) Documentation
Nonconformance report 290814 was generated for this SDG.

Sample 154614004 (GU0601G14R101) failed surrogate recovery. It was re-extracted out of holding, analyzed and passed surrogate recovery. Both sets of data are reported.

The LCS failed recovery for tris(o-cresyl) phosphate at 28.6%. The SPC limits are 50%-150%.

The MS failed recovery for tris(o-cresyl) phosphate at 36.0%. The SPC limits are 50%-150%.

The MSD failed recovery for tris(o-cresyl) phosphate at 41.8%. The SPC limits are 50%-150%.

The RPD for HMX was 32.5%. The limit is 30%.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples required manual integrations due to software limitations.

Flagging Convention
The sample was not originally analyzed using SW-846 Method 8330.

Additional Comments
The time gap that appears in the analytical sequence is due to the addition of samples after the sequence finished. All continuing calibration verification requirements were met following the restart and sample analysis proceeded.

Due to software limitations, all initial calibration blanks must be designated as XIB001 in order for the forms to be correct.

Due to software limitations in the secondary analyte analysis, false positives and analytes detected below the MDL cannot be deleted from the raw data. They do not appear on the generated forms.

Due to software limitations file extensions, i.e. DL, RE, etc., may not appear on forms and/or raw data.

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System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for primary analyte analysis. It is coupled with a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer. It is fitted with a electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. It is also fitted with a APCI (Atmospheric Pressure chemical Ionization) probe which is operated in the negative ionization mode for explosives analysis. The laboratory utilizes a Agilent 1100 liquid chromatography instrument for secondary analyte analysis. It is coupled with a Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer. It is fitted with a electrospray probe that is operated in the negative electrospray ionization mode for perchlorate analysis. It is also fitted with a APCI (Atmospheric Pressure chemical Ionization) probe which is operated in the negative ionization mode for explosives analysis.

Chromatographic Columns

The detection of the primary analyte nitroaromatic and nitramines is accomplished through analysis on the following reversed phase column: Phenomenex: Ultracarb 5u ODS (20), 250 x 4.60 mm ID.

The detection of the secondary analytes is accomplished through analysis on the following reversed phase column: YMC: J'sphere ODS-H80, 150 x 4.6mm I.D.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Herbert N. Maier **Date:** 02/23/06

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SAMPLE DATA SUMMARY

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU06010G8WT01

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614003

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0202060a
Date Analyzed: 04-FEB-06 00:12

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	U
121-14-2	2,4-Dinitrotoluene	0.325	U
121-82-4	RDX	0.325	U
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	U
2691-41-0	HMX	0.325	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	U
479-45-8	Tetryl	0.649	U
606-20-2	2,6-Dinitrotoluene	0.325	U
78-11-5	PETN	1.3	U
88-72-2	o-Nitrotoluene	0.325	U
98-95-3	Nitrobenzene	0.325	U
99-08-1	m-Nitrotoluene	0.325	U
99-35-4	1,3,5-Trinitrobenzene	0.325	U
99-65-0	m-Dinitrobenzene	0.325	U
99-99-0	p-Nitrotoluene	0.649	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU06010G8WT01

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614003

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209024.wiff
Date Analyzed: 09-FEB-06 22:18

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	U
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	U
618-87-1	3,5-Dinitroaniline	1.3	U
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	U
78-30-8	tris(o-cresyl) phosphate	1.3	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU0601G14R101

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614004

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0202061a
Date Analyzed: 04-FEB-06 00:46

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	U
121-14-2	2,4-Dinitrotoluene	0.325	U
121-82-4	RDX	0.325	U
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	U
2691-41-0	HMX	0.325	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	U
479-45-8	Tetryl	0.649	U
606-20-2	2,6-Dinitrotoluene	0.325	U
78-11-5	PETN	1.3	U
88-72-2	o-Nitrotoluene	0.325	U
98-95-3	Nitrobenzene	0.325	U
99-08-1	m-Nitrotoluene	0.325	U
99-35-4	1,3,5-Trinitrobenzene	0.325	U
99-65-0	m-Dinitrobenzene	0.325	U
99-99-0	p-Nitrotoluene	0.649	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU0601G14R101

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614004

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209025.wiff
Date Analyzed: 09-FEB-06 22:40

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	U
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	U
618-87-1	3,5-Dinitroaniline	1.3	U
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	U
78-30-8	tris(o-cresyl) phosphate	1.3	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU0601G14R101

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614004

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0209015a
Date Analyzed: 09-FEB-06 17:45

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	Uh
121-14-2	2,4-Dinitrotoluene	0.325	Uh
121-82-4	RDX	0.325	Uh
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	Uh
2691-41-0	HMX	0.325	Uh
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	Uh
479-45-8	Tetryl	0.649	Uh
606-20-2	2,6-Dinitrotoluene	0.325	Uh
78-11-5	PETN	1.3	Uh
88-72-2	o-Nitrotoluene	0.325	Uh
98-95-3	Nitrobenzene	0.325	Uh
99-08-1	m-Nitrotoluene	0.325	Uh
99-35-4	1,3,5-Trinitrobenzene	0.325	Uh
99-65-0	m-Dinitrobenzene	0.325	Uh
99-99-0	p-Nitrotoluene	0.649	Uh

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU0601G14R101

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614004

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209056.wiff
Date Analyzed: 10-FEB-06 14:54

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	Uh
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	Uh
618-87-1	3,5-Dinitroaniline	1.3	Uh
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	Uh
78-30-8	tris(o-cresyl) phosphate	1.3	Uh

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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QUALITY CONTROL SUMMARY

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High Explosives Surrogate Recovery Summa

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **HPLC Column:** Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
154614003	GU06010G8WT01	80.6	50 - 150	
154614003	GU06010G8WT01	117	50 - 150	
154614004	GU0601G14R101	13.1	50 - 150	*
154614004	GU0601G14R101	18.2	50 - 150	*
154614004	GU0601G14R101	98.9	50 - 150	
154614004	GU0601G14R101	104	50 - 150	
1201021041	MB for batch 498839	93.5	50 - 150	
1201021041	MB for batch 498839	117	50 - 150	
1201021042	LCS for batch 498839	102	50 - 150	
1201021042	LCS for batch 498839	118	50 - 150	
1201026408	MB for batch 501111	91.5	50 - 150	
1201026408	MB for batch 501111	103	50 - 150	
1201026409	LCS for batch 501111	100	50 - 150	
1201026409	LCS for batch 501111	110	50 - 150	

DNT = 3,4-Dinitrotoluene

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: General Engineering Laboratories

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 498839

Date Extracted: 31-JAN-06

GEL LCS ID: 1201021042

GEL LCSDUP ID:

Analysis Date/Time: 03-FEB-06 23:39

DUP Analysis Date/Time:

Reporting Units: ug/L

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	6.49351	5.54	85.3					50 - 150
2,4,6-Trinitrotoluene	6.49351	6.19	95.4					50 - 150
2,4-Dinitrotoluene	6.49351	6.08	93.7					50 - 150
2,6-Dinitrotoluene	6.49351	6.35	97.8					50 - 150
2-Amino-4,6-dinitrotoluene	6.49351	5.92	91.1					50 - 150
4-Amino-2,6-dinitrotoluene	6.49351	5.82	89.6					50 - 150
HMX	6.49351	6.34	97.6					50 - 150
Nitrobenzene	6.49351	6.2	95.5					50 - 150
PETN	6.49351	6.91	106					50 - 150
RDX	6.49351	6.48	99.8					50 - 150
Tetryl	6.49351	3.39	52.2					50 - 150
m-Dinitrobenzene	6.49351	5.88	90.6					50 - 150
m-Nitrotoluene	6.49351	6.65	102					50 - 150
o-Nitrotoluene	6.49351	6.04	93.1					50 - 150
p-Nitrotoluene	6.49351	6.62	102					50 - 150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: General Engineering Laboratories

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 498839

Date Extracted: 31-JAN-06

GEL LCS ID: 1201021042

GEL LCSDUP ID:

Analysis Date/Time: 09-FEB-06 21:55

DUP Analysis Date/Time:

Reporting Units: ug/L

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec	#	LCSD Conc	LCSD Rec	#	RPD	#	RPD	Recovery Limits
2,4-Diamino-6-nitrotoluene	6.49351	2.99	46	*							50 - 150
2,6-Diamino-4-nitrotoluene	6.49351	3.73	57.4								50 - 150
3,5-Dinitroaniline	6.49351	7.06	109								50 - 150
TATB	6.49351	8.65	133								50 - 150
tris(o-cresyl) phosphate	6.49351	1.24	19.2	*							50 - 150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: General Engineering Laboratories

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 501111

Date Extracted: 07-FEB-06

GEL LCS ID: 1201026409

GEL LCSDUP ID:

Analysis Date/Time: 09-FEB-06 17:20

DUP Analysis Date/Time:

Reporting Units: ug/L

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
1,3,5-Trinitrobenzene	6.49351	5.46	84					50 - 150
2,4,6-Trinitrotoluene	6.49351	6.47	99.6					50 - 150
2,4-Dinitrotoluene	6.49351	6.85	105					50 - 150
2,6-Dinitrotoluene	6.49351	6.4	98.5					50 - 150
2-Amino-4,6-dinitrotoluene	6.49351	6.61	102					50 - 150
4-Amino-2,6-dinitrotoluene	6.49351	6.5	100					50 - 150
HMX	6.49351	6.6	102					50 - 150
Nitrobenzene	6.49351	6.11	94.1					50 - 150
PETN	6.49351	8.44	130					50 - 150
RDX	6.49351	5.48	84.5					50 - 150
Tetryl	6.49351	4.64	71.5					50 - 150
m-Dinitrobenzene	6.49351	6.34	97.6					50 - 150
m-Nitrotoluene	6.49351	7.31	113					50 - 150
o-Nitrotoluene	6.49351	7.21	111					50 - 150
p-Nitrotoluene	6.49351	7.14	110					50 - 150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3B
High Explosives LCS/LCS Duplicate Summary

Lab Name: General Engineering Laboratories

Client ID: LCS

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 501111

Date Extracted: 07-FEB-06

GEL LCS ID: 1201026409

GEL LCSDUP ID:

Analysis Date/Time: 10-FEB-06 14:31

DUP Analysis Date/Time:

Reporting Units: ug/L

QC Type: LCS/LCSD

Compound	Spike Added	LCS Conc	LCS Rec #	LCSD Conc	LCSD Rec #	RPD #	RPD	Recovery Limits
2,4-Diamino-6-nitrotoluene	6.49351	4.81	74					50 - 150
2,6-Diamino-4-nitrotoluene	6.49351	4.49	69.2					50 - 150
3,5-Dinitroaniline	6.49351	6.31	97.2					50 - 150
TATB	6.49351	6.69	103					50 - 150
tris(o-cresyl) phosphate	6.49351	1.86	28.6 *					50 - 150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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3

High Explosives MS/MSD Summary

Lab Name: General Engineering Laboratories

Client ID: GU0601G14R201

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 498839

Date Extracted:31-JAN-06

GEL Spike ID:1201021043

GEL SpikeDup ID:1201021044

Analysis Date/Time: 04-FEB-06 05:47

MSD Analysis Date/Time:

Reporting Units: ug/L

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
1,3,5-Trinitrobenzene	6.49351	0	6.1	93.9	6.53	101	6.84	30	50 – 150
2,4,6-Trinitrotoluene	6.49351	0	6.86	106	7.15	110	4.14	30	50 – 150
2,4-Dinitrotoluene	6.49351	0	5.82	89.6	5.59	86.1	4.03	30	50 – 150
2,6-Dinitrotoluene	6.49351	0	6.07	93.5	5.92	91.1	2.56	30	50 – 150
2-Amino-4,6-dinitrotoluene	6.49351	0	6.17	95	6.23	96	1.09	30	50 – 150
4-Amino-2,6-dinitrotoluene	6.49351	0	6.26	96.3	6.13	94.4	2.06	30	50 – 150
HMX	6.49351	0	6.04	93.1	6.67	103	9.83	30	50 – 150
Nitrobenzene	6.49351	0	5.73	88.2	5.5	84.7	4.05	30	50 – 150
PETN	6.49351	0	7.31	113	6.58	101	10.5	30	50 – 150
RDX	6.49351	0	6.33	97.4	6.37	98.1	.704	30	50 – 150
Tetryl	6.49351	0	3.95	60.9	3.91	60.2	1.08	30	50 – 150
m-Dinitrobenzene	6.49351	0	6.14	94.6	5.88	90.5	4.41	30	50 – 150
m-Nitrotoluene	6.49351	0	6.01	92.6	5.45	84	9.77	30	50 – 150
o-Nitrotoluene	6.49351	0	5.8	89.3	5.26	81	9.77	30	50 – 150
p-Nitrotoluene	6.49351	0	6.19	95.4	5.58	85.9	10.5	30	50 – 150

#Column to be used to flag recovery and RPD values with an asterisk

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3

High Explosives MS/MSD Summary

Lab Name: General Engineering Laboratories

Client ID: GU0601G14R201

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 498839

Date Extracted: 31-JAN-06

GEL Spike ID: 1201021043

GEL SpikeDup ID: 1201021044

Analysis Date/Time: 10-FEB-06 02:02

MSD Analysis Date/Time:

Reporting Units: ug/L

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,4-Diamino-6-nitrotoluene	6.49351	0	4.47	68.8	4.45	68.6	.291	30	50 - 150
2,6-Diamino-4-nitrotoluene	6.49351	0	4.49	69.2	4.36	67.2	2.93	30	50 - 150
3,5-Dinitroaniline	6.49351	0	6.7	103	7.04	108	4.92	30	50 - 150
TATB	6.49351	0	9.51	146	10.1	155 *	5.84	30	50 - 150
tris(o-cresyl) phosphate	6.49351	0	2.69	41.4 *	3.26	50.2	19.2	30	50 - 150

#Column to be used to flag recovery and RPD values with an asterisk

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3

High Explosives MS/MSD Summary

Lab Name: General Engineering Laboratories

Client ID: GU0601G12R201

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 501111

Date Extracted:07-FEB-06

GEL Spike ID:1201026410

GEL SpikeDup ID:1201026411

Analysis Date/Time: 09-FEB-06 19:02

MSD Analysis Date/Time

Reporting Units: ug/L

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
1,3,5-Trinitrobenzene	6.49351	0	5.14	79.2	6.13	94.4	17.5	30	50 - 150
2,4,6-Trinitrotoluene	6.49351	0	6.51	100	6.98	107	6.87	30	50 - 150
2,4-Dinitrotoluene	6.49351	0	6.19	95.3	6.9	106	10.9	30	50 - 150
2,6-Dinitrotoluene	6.49351	0	6.14	94.6	6.48	99.8	5.4	30	50 - 150
Nitrobenzene	6.49351	0	5.49	84.5	6.1	94	10.6	30	50 - 150
RDX	6.49351	0	5.35	82.4	6.65	102	21.7	30	50 - 150
m-Dinitrobenzene	6.49351	0	6.45	99.3	6.13	94.5	5.03	30	50 - 150
o-Nitrotoluene	6.49351	0	6.02	92.7	6.13	94.4	1.83	30	50 - 150
p-Nitrotoluene	6.49351	0	6.44	99.2	6.62	102	2.7	30	50 - 150
m-Nitrotoluene	6.49351	0	6.1	93.9	5.98	92.1	1.99	30	50 - 150
Tetryl	6.49351	0	3.91	60.2	4.27	65.7	8.71	30	50 - 150
PETN	6.49351	0	6.62	102	7.07	109	6.68	30	50 - 150
HMX	6.49351	0	5.51	84.8	7.65	118	32.5 *	30	50 - 150
4-Amino-2,6-dinitrotoluene	6.49351	0	6.32	97.3	6.92	107	9.12	30	50 - 150
2-Amino-4,6-dinitrotoluene	6.49351	0	6.5	100	7.37	113	12.5	30	50 - 150

#Column to be used to flag recovery and RPD values with an asterisk

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3

High Explosives MS/MSD Summary

Lab Name: General Engineering Laboratories

Client ID: GU0601G12R201

Lab Code: GEL

GEL Job No (SDG) 154614

Extract Batch Code: 501111

Date Extracted:07-FEB-06

GEL Spike ID:1201026410

GEL SpikeDup ID:1201026411

Analysis Date/Time: 10-FEB-06 16:01

MSD Analysis Date/Time:

Reporting Units: ug/L

QC Type: MS/MSD

Compound	Spike Added	Sample Conc	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Rec Limits
2,4-Diamino-6-nitrotoluene	6.49351	0	5.66	87.2	5.87	90.4	3.6	30	50 - 150
3,5-Dinitroaniline	6.49351	0	5.86	90.2	6.25	96.2	6.44	30	50 - 150
tris(o-cresyl) phosphate	6.49351	0	2.34	36 *	2.71	41.8 *	14.9	30	50 - 150
TATB	6.49351	0	5.7	87.8	6.39	98.4	11.4	30	50 - 150
2,6-Diamino-4-nitrotoluene	6.49351	0	4.78	73.6	5.18	79.8	8.08	30	50 - 150

#Column to be used to flag recovery and RPD values with an asterisk

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Explosives Initial Calibration Blank

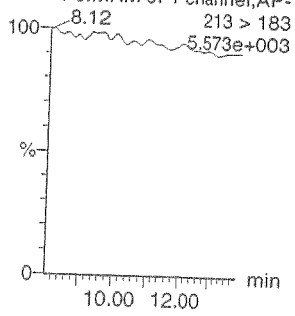
Lab Name: General Engineering Laboratories
GEL Job No(SDG): 154614
Lab Code: GEL
Lab Sample ID: XIBLK01
Analysis Date: 02-FEB-06 15:49
GEL Data File: EXP0202002a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	432.172
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	420.86
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

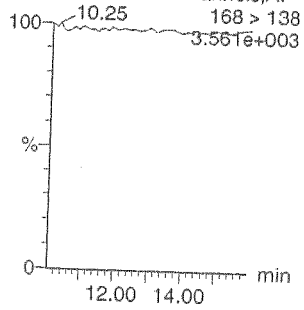
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202002a
Date: 02-Feb-2006
Time: 15:49:15
ID: XIBLK01
Vial: 1:1,A

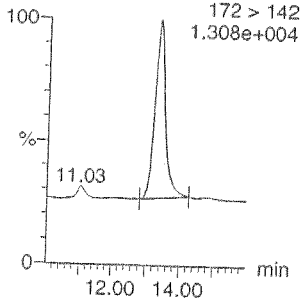
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
8.12 213 > 183
5.573e+003



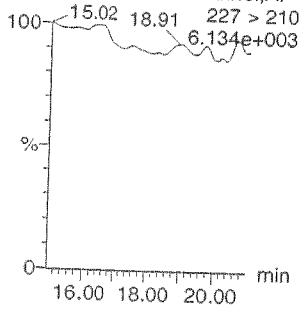
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
10.25 168 > 138
3.561e+003



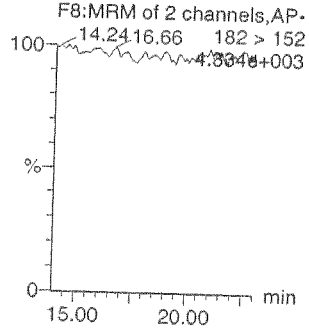
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.308e+004



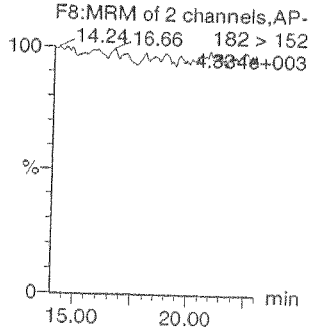
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
15.02 18.91 227 > 210
6.134e+003



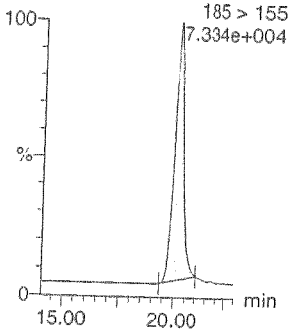
24-dinitrotoluene
F8:MRM of 2 channels,AP-
14.24 16.66 182 > 152
4.334e+003



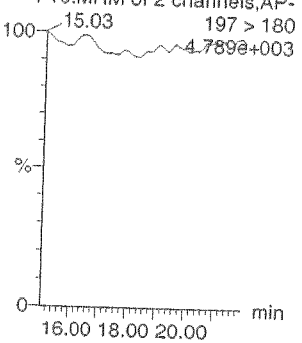
26-dinitrotoluene
F8:MRM of 2 channels,AP-
14.24 16.66 182 > 152
4.334e+003



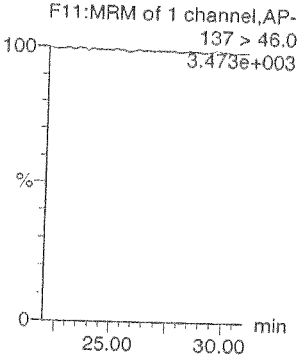
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.334e+004



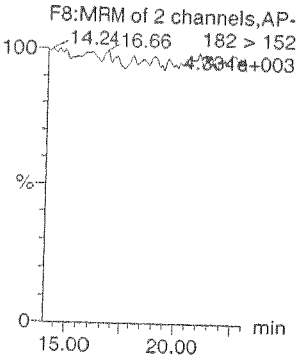
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
15.03 197 > 180
4.789e+003



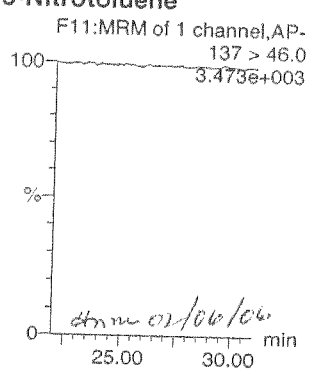
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.473e+003



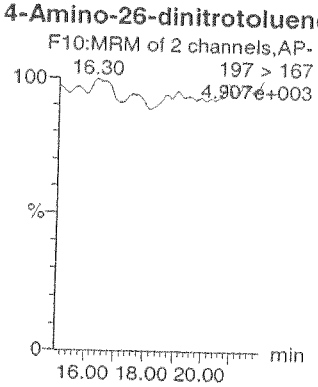
34-dinitrotoluene
F8:MRM of 2 channels,AP-
14.24 16.66 182 > 152
4.334e+003



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.473e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
16.30 197 > 167
4.907e+003



473

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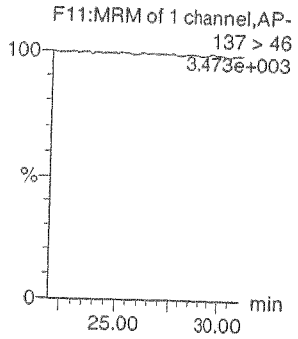
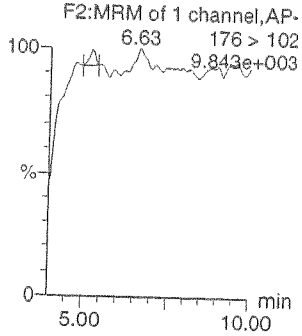
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

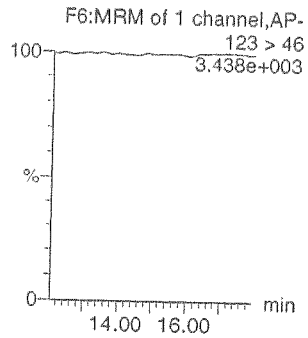
4-Nitrotoluene



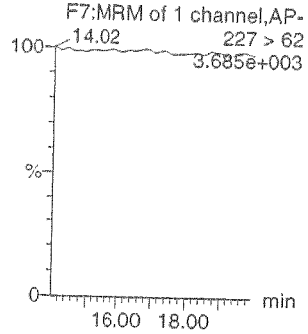
HMX



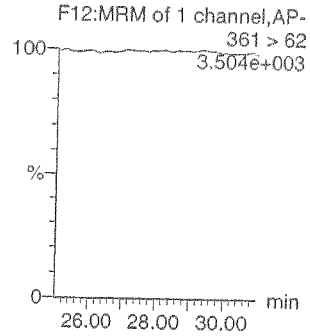
Nitrobenzene



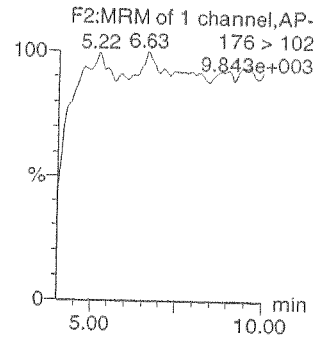
Nitroglycerin



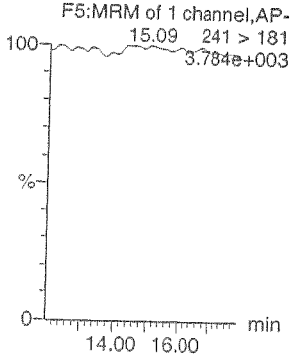
PETN



RDX



Tetryl



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ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102	5.22	135.080	3556.702	135.080	18.990	bb			3.3516			5.8
XIBLK01	RDX	176 > 102			3556.702									
XIBLK01	135-Trinitrobenzene	213 > 183			3556.702									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	13.33	3556.702		3556.702	3556.702	bb			432.1721	86.4	-13.6	283.1
XIBLK01	13-Dinitrobenzene	168 > 138			3556.702									
XIBLK01	Tetryl	241 > 181			3556.702									
XIBLK01	Nitrobenzene	123 > 46			3556.702									
XIBLK01	Nitroglycerin	227 > 62			3556.702									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			32567.520									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			32567.520									
XIBLK01	246-Trinitrotoluene	227 > 210			32567.520									
XIBLK01	34-dinitrotoluene	182 > 152			32567.520									
XIBLK01	26-dinitrotoluene	182 > 152			32567.520									
XIBLK01	24-dinitrotoluene	182 > 152			32567.520									
XIBLK01	26-dinitrotoluene-d3	185 > 155	20.12	32567.520		32567.520	32567.520	bb			420.8598	84.2	-15.8	1604.2
XIBLK01	2-Nitrotoluene	137 > 46.0			32567.520									
XIBLK01	4-Nitrotoluene	137 > 46			32567.520									
XIBLK01	3-Nitrotoluene	137 > 46.0			32567.520									
XIBLK01	PETN	361 > 62			32567.520									

dhm 2/06/06

MM 2/3/06

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Explosives Initial Calibration Blank

Lab Name: General Engineering Laboratories
GEL Job No(SDG): 154614
Lab Code: GEL
Lab Sample ID: XIBLK01
Analysis Date: 02-FEB-06 16:22
GEL Data File: EXP0202003a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	421.194
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	406.327
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202003a
Date: 02-Feb-2006
Time: 16:22:55
ID: XIBLK01
Vial: 1:1,A

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135-Trinitrobenzene
F3:MRM of 1 channel,AP-
8.25 213 > 183
4.640e+003
100 % 0 min
10.00 12.00

13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.490e+003
100 % 0 min
12.00 14.00

13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.292e+004
11.01
100 % 0 min
12.00 14.00

246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
4.942e+003
100 % 0 min
16.00 18.00 20.00

24-dinitrotoluene
F8:MRM of 2 channels,AP-
14.33 182 > 152
4.036e+003
100 % 0 min
15.00 20.00

26-dinitrotoluene
F8:MRM of 2 channels,AP-
14.33 182 > 152
4.036e+003
100 % 0 min
15.00 20.00

26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.649e+004
100 % 0 min
15.00 20.00

2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
17.09 197 > 180
4.337e+003
100 % 0 min
16.00 18.00 20.00

2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.457e+003
100 % 0 min
25.00 30.00

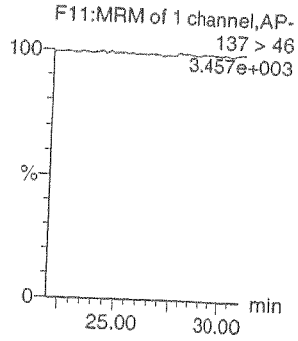
34-dinitrotoluene
F8:MRM of 2 channels,AP-
14.33 182 > 152
4.036e+003
100 % 0 min
15.00 20.00

3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.457e+003
100 % 0 min
25.00 30.00

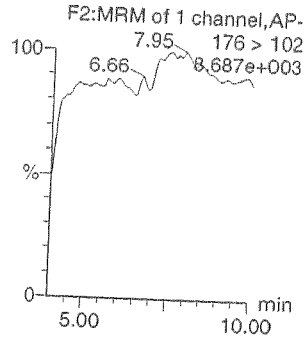
4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
17.05 197 > 167
4.419e+003
100 % 0 min
16.00 18.00 20.00

MM = Manual Modification

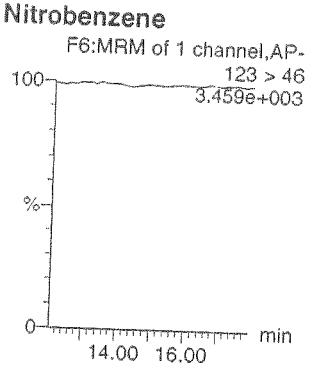
4-Nitrotoluene



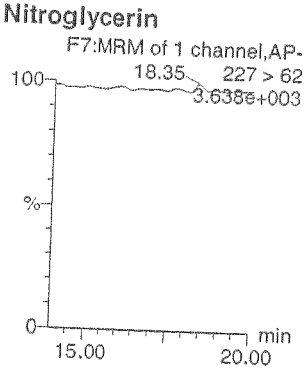
HMX



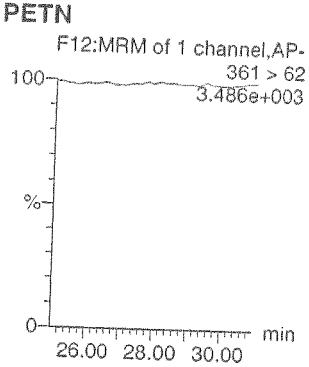
Nitrobenzene



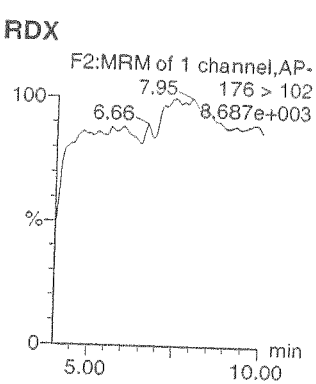
Nitroglycerin



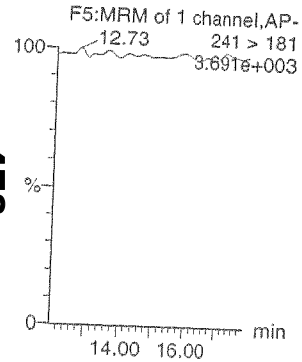
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			3466.353									
XIBLK01	RDX	176 > 102			3466.353									
XIBLK01	135-Trinitrobenzene	213 > 183			3466.353									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	13.29	3466.353		3466.353	3466.353	bb			421.1939	84.2	-15.8	534.9
XIBLK01	13-Dinitrobenzene	168 > 138			3466.353									
XIBLK01	Tetryl	241 > 181			3466.353									
XIBLK01	Nitrobenzene	123 > 46			3466.353									
XIBLK01	Nitroglycerin	227 > 62			3466.353									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			31442.900									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			31442.900									
XIBLK01	246-Trinitrotoluene	227 > 210			31442.900			MM-	03-Feb-06	07:17:23				
XIBLK01	34-dinitrotoluene	182 > 152			31442.900									
XIBLK01	26-dinitrotoluene	182 > 152			31442.900									
XIBLK01	24-dinitrotoluene	182 > 152			31442.900									
XIBLK01	26-dinitrotoluene-d3	185 > 155	20.07	31442.900		31442.900	31442.900	bb			406.3267	81.3	-18.7	2441.1
XIBLK01	2-Nitrotoluene	137 > 46.0			31442.900									
XIBLK01	4-Nitrotoluene	137 > 46			31442.900									
XIBLK01	3-Nitrotoluene	137 > 46.0			31442.900									
XIBLK01	PETN	361 > 62			31442.900									

HMK 02/06/06

MP 2/3/06

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4

Explosives Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 09-FEB-06 11:48

GEL Data File: EXP0209001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	464.432
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	475.888
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

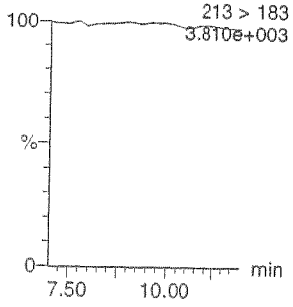
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\020906expA.mdb, Time: Fri Feb 10 06:34:26 2006
Calibration: Untitled, Time: Fri Feb 10 07:12:08 2006

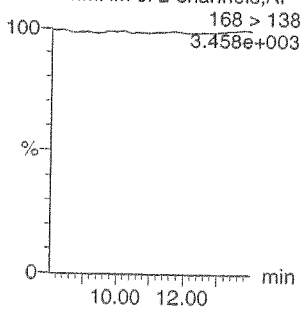
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209001a
Date: 09-Feb-2006
Time: 11:48:31
ID: XIBLK01
Vial: 1:1,A

MM 2/10/06

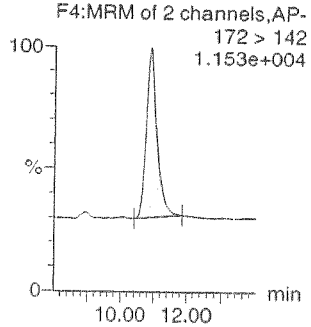
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.810e+003



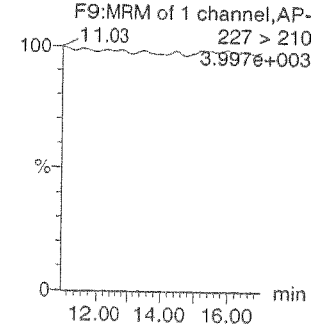
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.458e+003



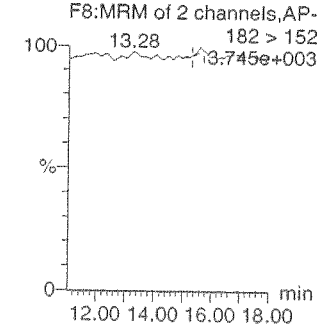
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.153e+004



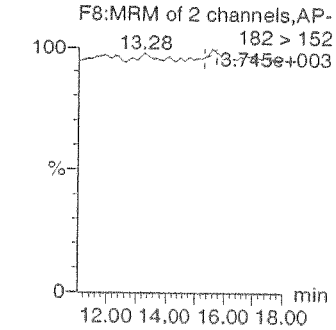
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
11.03
227 > 210
3.997e+003



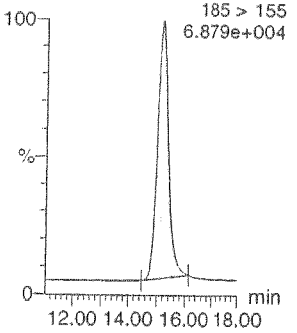
24-dinitrotoluene
F8:MRM of 2 channels,AP-
13.28
182 > 152
3.745e+003



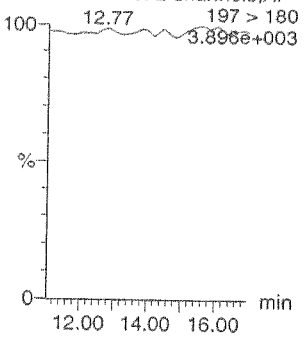
26-dinitrotoluene
F8:MRM of 2 channels,AP-
13.28
182 > 152
3.745e+003



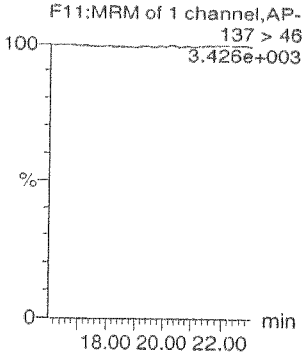
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.879e+004



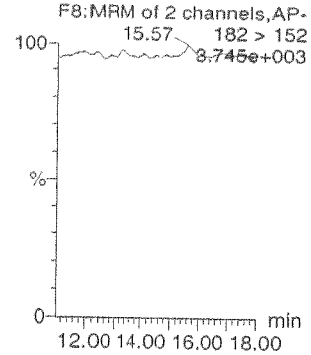
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
12.77
197 > 180
3.896e+003



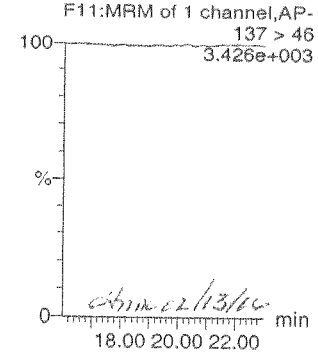
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.426e+003



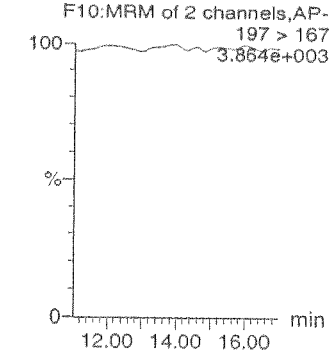
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.57
182 > 152
3.745e+003



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.426e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.864e+003



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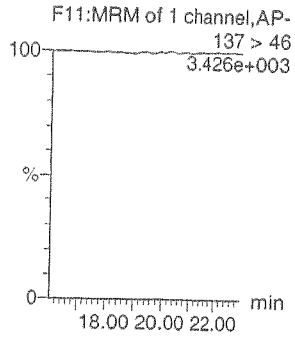
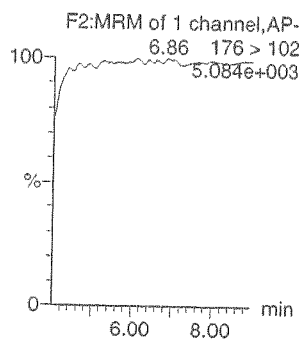
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

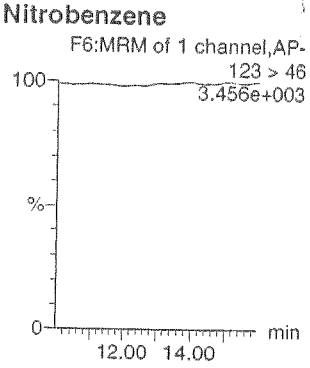
4-Nitrotoluene



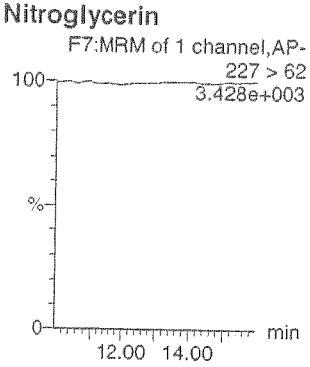
HMX



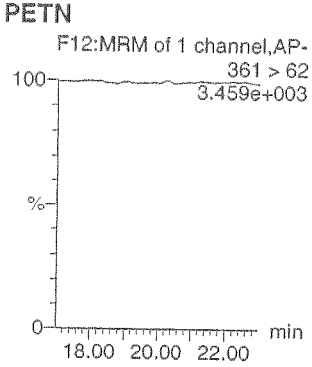
Nitrobenzene



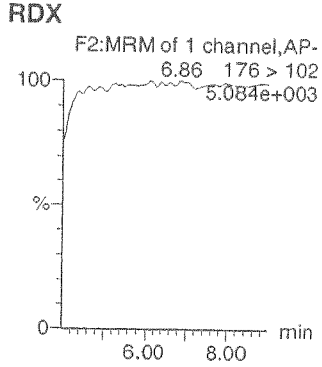
Nitroglycerin



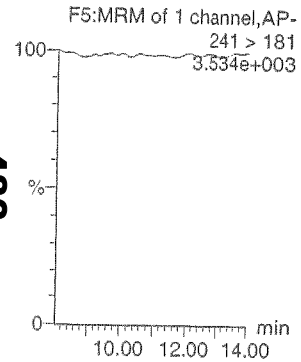
PETN



RDX



Tetryl



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Quantify Sample Report
General Engineering Labs, LLC, Analyst : Lynne Sigmon

Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			3082.178									
XIBLK01	RDX	176 > 102			3082.178									
XIBLK01	135-Trinitrobenzene	213 > 183			3082.178									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	10.88	3082.178		3082.178	3082.178	bb			464.4318	92.9	-7.1	491.9
XIBLK01	13-Dinitrobenzene	168 > 138			3082.178									
XIBLK01	Tetryl	241 > 181			3082.178									
XIBLK01	Nitrobenzene	123 > 46			3082.178									
XIBLK01	Nitroglycerin	227 > 62			3082.178									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			28812.109									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			28812.109									
XIBLK01	246-Trinitrotoluene	227 > 210			28812.109									
XIBLK01	34-dinitrotoluene	182 > 152			28812.109									
XIBLK01	26-dinitrotoluene	182 > 152			28812.109			MM-	10-Feb-06	06:54:22				
XIBLK01	24-dinitrotoluene	182 > 152			28812.109			MM-	10-Feb-06	06:56:58				
XIBLK01	26-dinitrotoluene-d3	185 > 155	15.15	28812.109		28812.109	28812.109	bb			475.8883	95.2	-4.8	1967.4
XIBLK01	2-Nitrotoluene	137 > 46			28812.109									
XIBLK01	4-Nitrotoluene	137 > 46			28812.109									
XIBLK01	3-Nitrotoluene	137 > 46			28812.109									
XIBLK01	PETN	361 > 62			28812.109									

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Explosives Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 09-FEB-06 12:14

GEL Data File: EXP0209002a

Instrument ID: LCMSMS

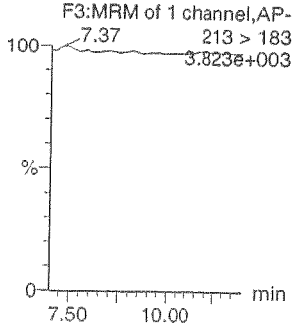
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	516.265
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	506.293
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

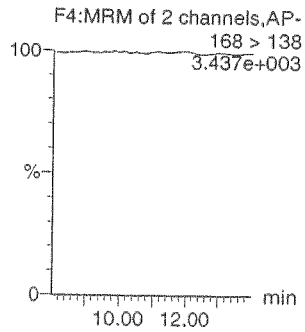
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209002a
Date: 09-Feb-2006
Time: 12:14:10
ID: XIBLK01
Vial: 1:1,A

MM 2/10/06

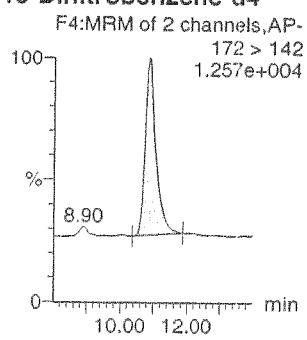
135-Trinitrobenzene



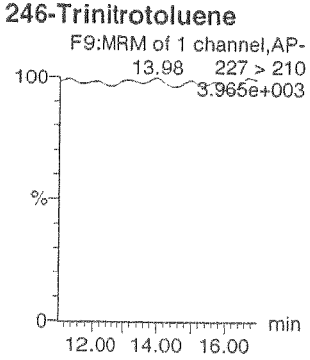
13-Dinitrobenzene



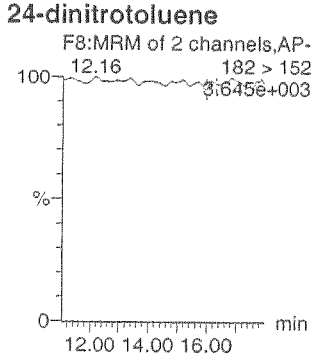
13-Dinitrobenzene-d4



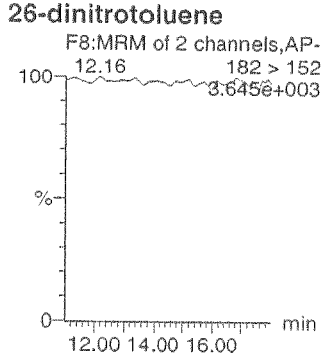
246-Trinitrotoluene



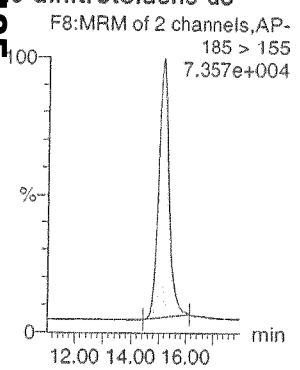
24-dinitrotoluene



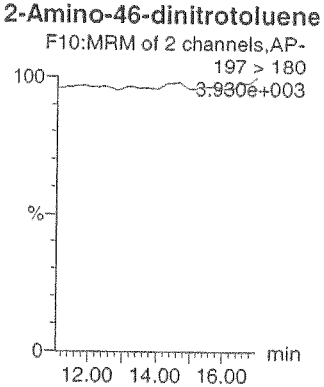
26-dinitrotoluene



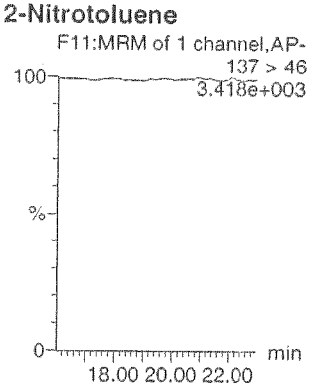
26-dinitrotoluene-d3



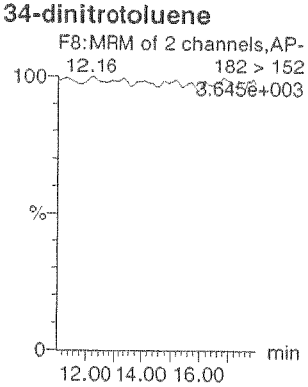
2-Amino-46-dinitrotoluene



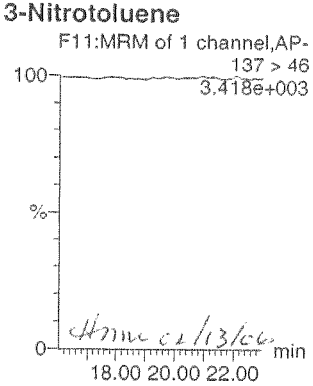
2-Nitrotoluene



34-dinitrotoluene

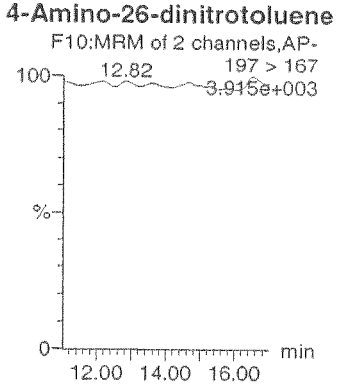


3-Nitrotoluene



Hmc 2/13/06

4-Amino-26-dinitrotoluene



485

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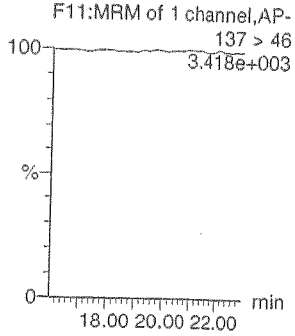
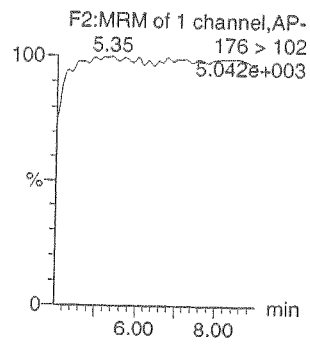
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

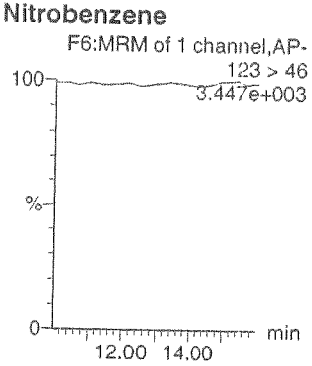
4-Nitrotoluene



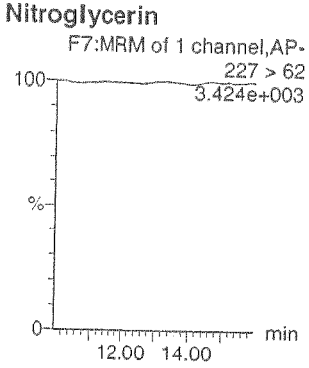
HMX



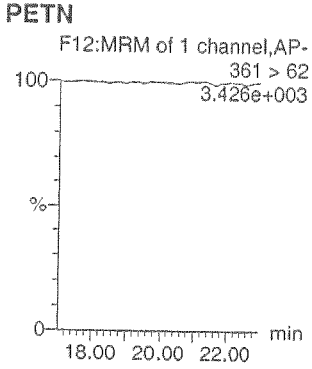
Nitrobenzene



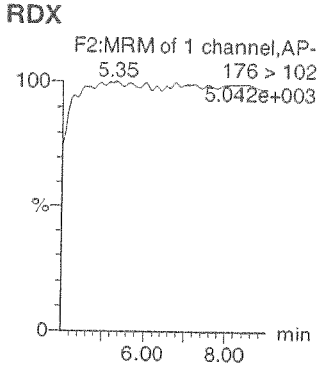
Nitroglycerin



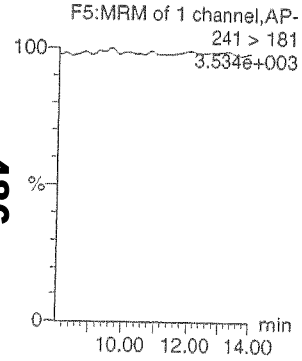
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			3426.165									
XIBLK01	RDX	176 > 102			3426.165									
XIBLK01	135-Trinitrobenzene	213 > 183			3426.165									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	10.85	3426.165		3426.165	3426.165	bb			516.2647	103.3	3.3	411.9
XIBLK01	13-Dinitrobenzene	168 > 138			3426.165									
XIBLK01	Tetryl	241 > 181			3426.165									
XIBLK01	Nitrobenzene	123 > 46			3426.165									
XIBLK01	Nitroglycerin	227 > 62			3426.165									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			30652.932									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			30652.932									
XIBLK01	246-Trinitrotoluene	227 > 210			30652.932									
XIBLK01	34-dinitrotoluene	182 > 152			30652.932									
XIBLK01	26-dinitrotoluene	182 > 152			30652.932									
XIBLK01	24-dinitrotoluene	182 > 152			30652.932									
XIBLK01	26-dinitrotoluene-d3	185 > 155	15.13	30652.932		30652.932	30652.932	MM-bb	10-Feb-06	06:56:54	506.2931	101.3	1.3	1715.9
XIBLK01	2-Nitrotoluene	137 > 46			30652.932									
XIBLK01	4-Nitrotoluene	137 > 46			30652.932									
XIBLK01	3-Nitrotoluene	137 > 46			30652.932									
XIBLK01	PETN	361 > 62			30652.932									

CH2M HILL 2/13/06

2/10/06

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Explosives Initial Calibration Blank

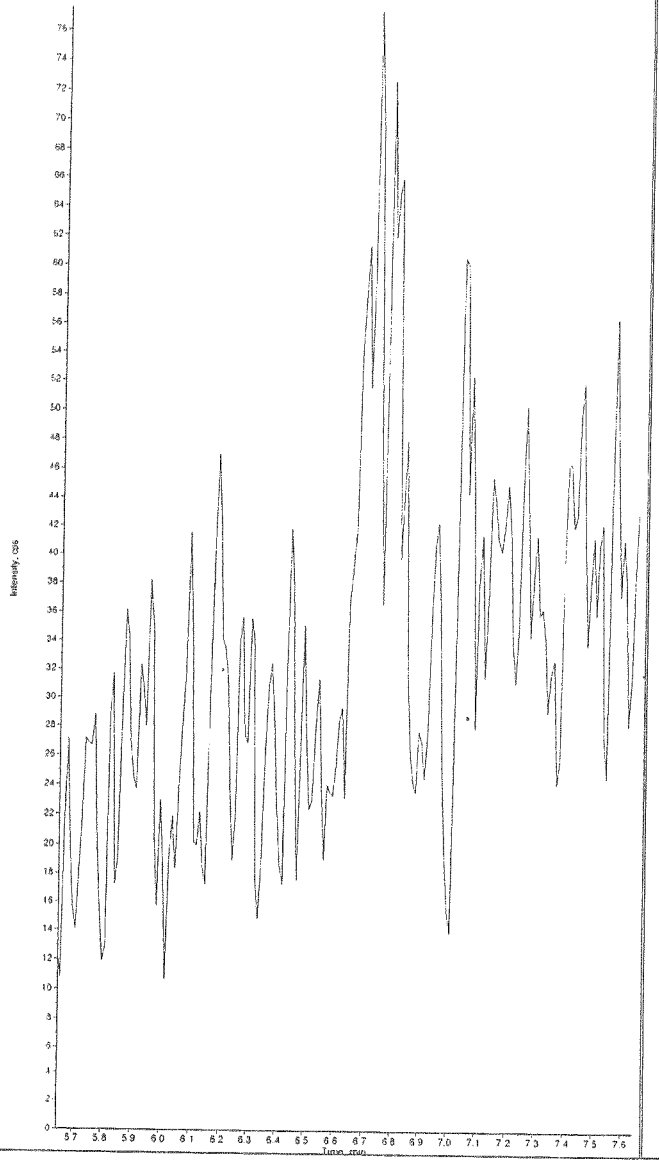
Lab Name: General Engineering Laboratories
GEL Job No(SDG): 154614
Lab Code: GEL
Lab Sample ID: XIBLK01
Analysis Date: 09-FEB-06 13:42
GEL Data File: EXS0209001.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

JRS 2/10/06

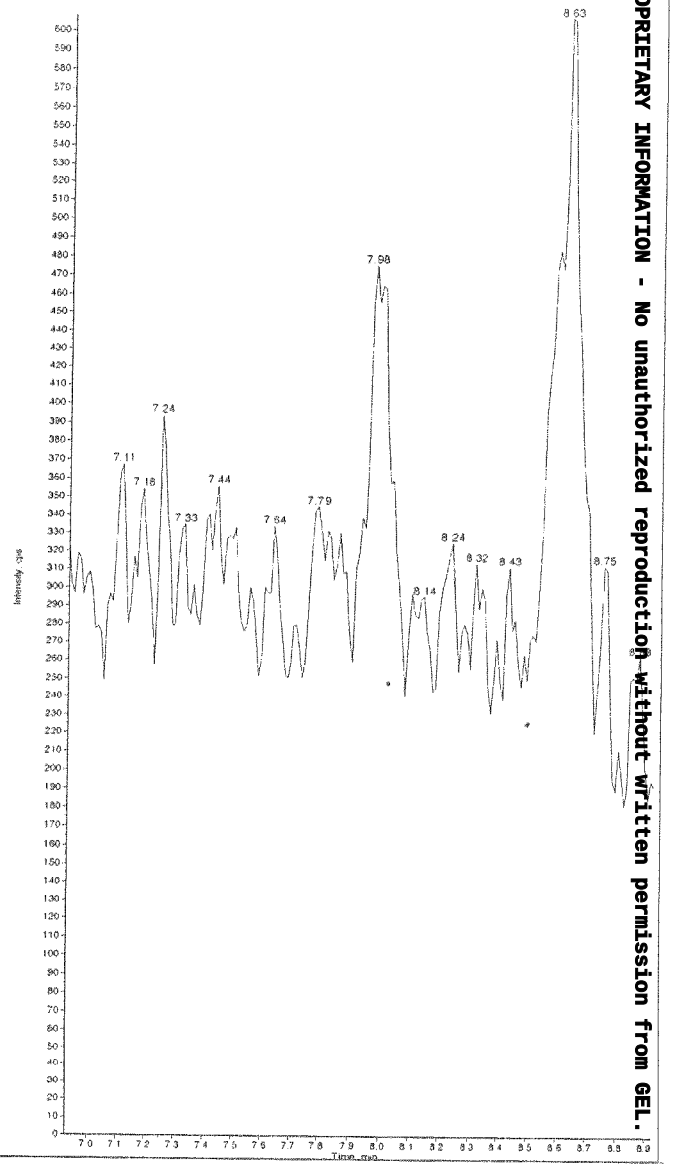
Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209001.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	01:42:24 PM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209001.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	01:42:24 PM
Modified:	No



dtime 2/13/06

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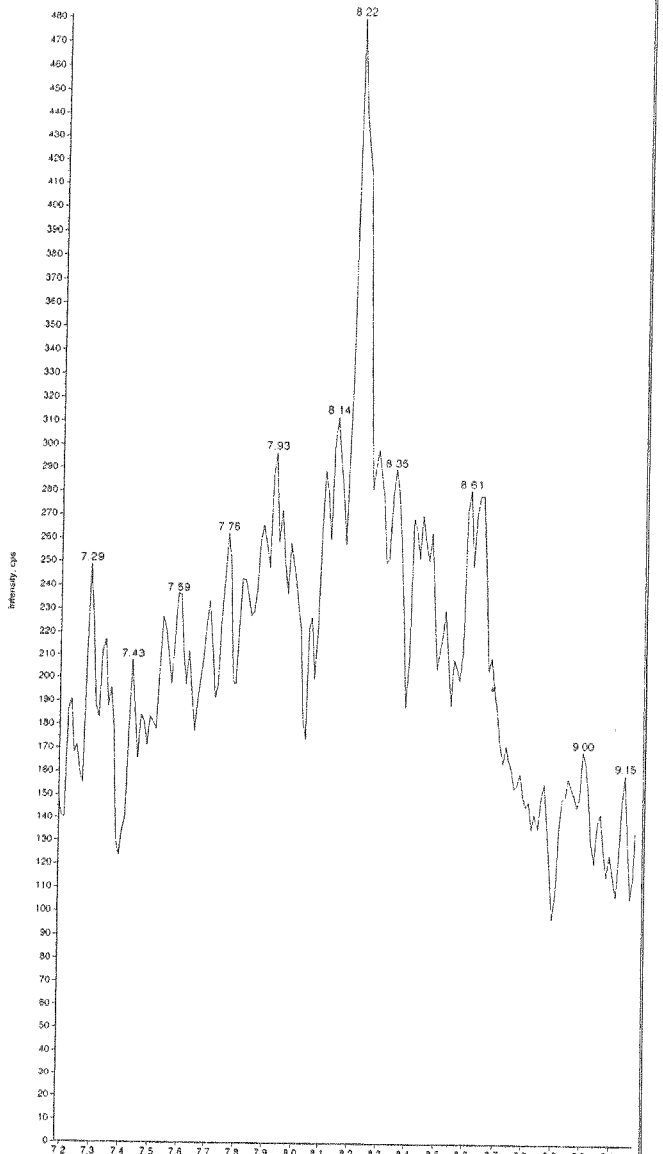
Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209001.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 01:42:24 PM

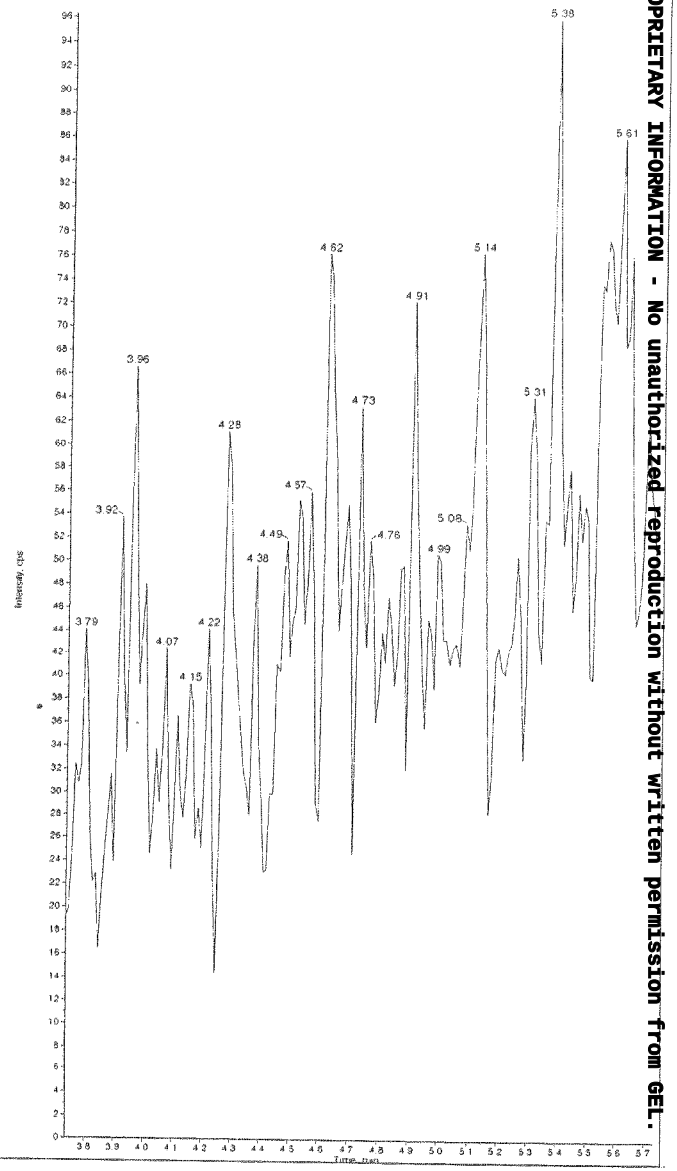
Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209001.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 01:42:24 PM

Modified: No



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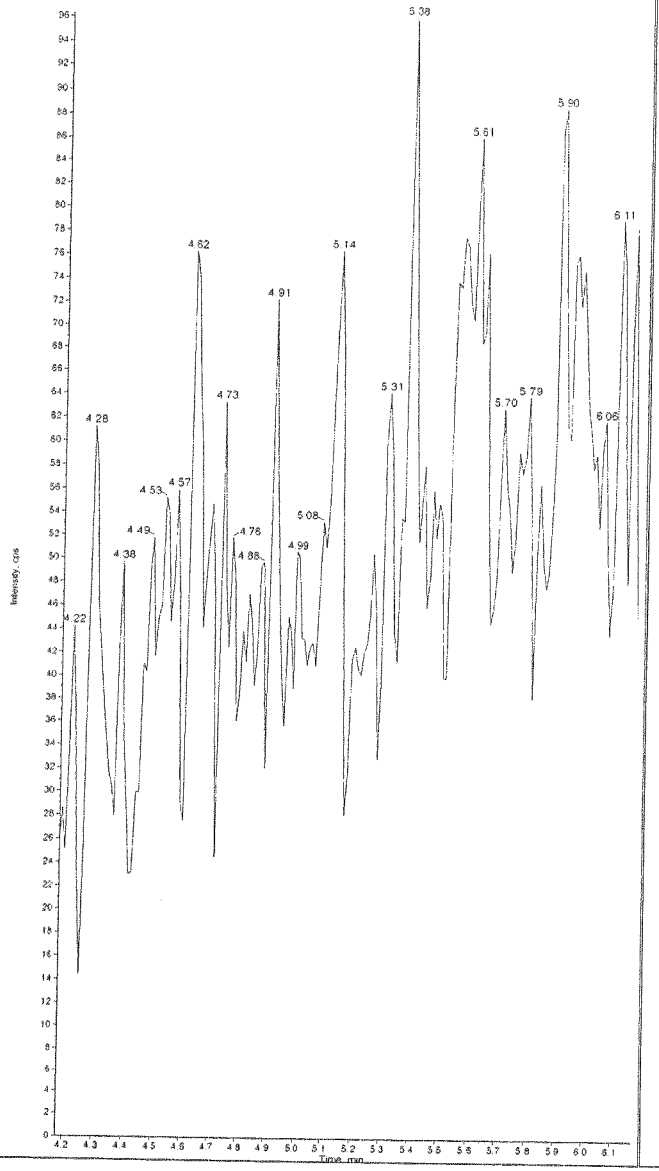
Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209001.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 01:42:24 PM

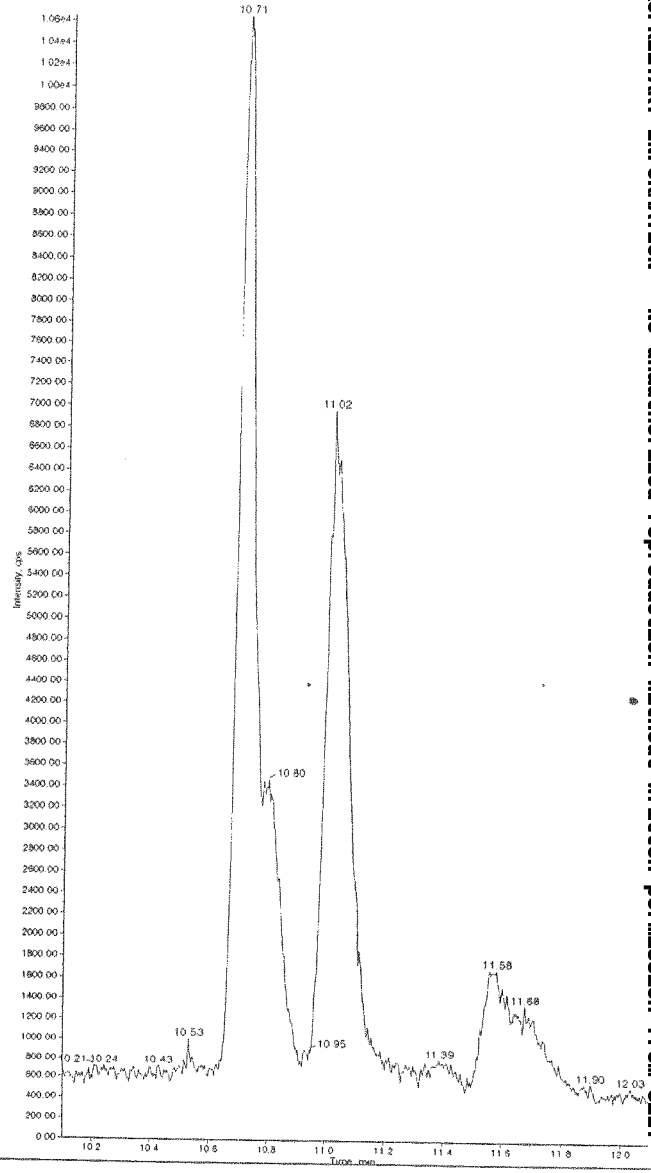
Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209001.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 01:42:24 PM

Modified: No



491

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4

Explosives Initial Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 09-FEB-06 14:04

GEL Data File: EXS0209002.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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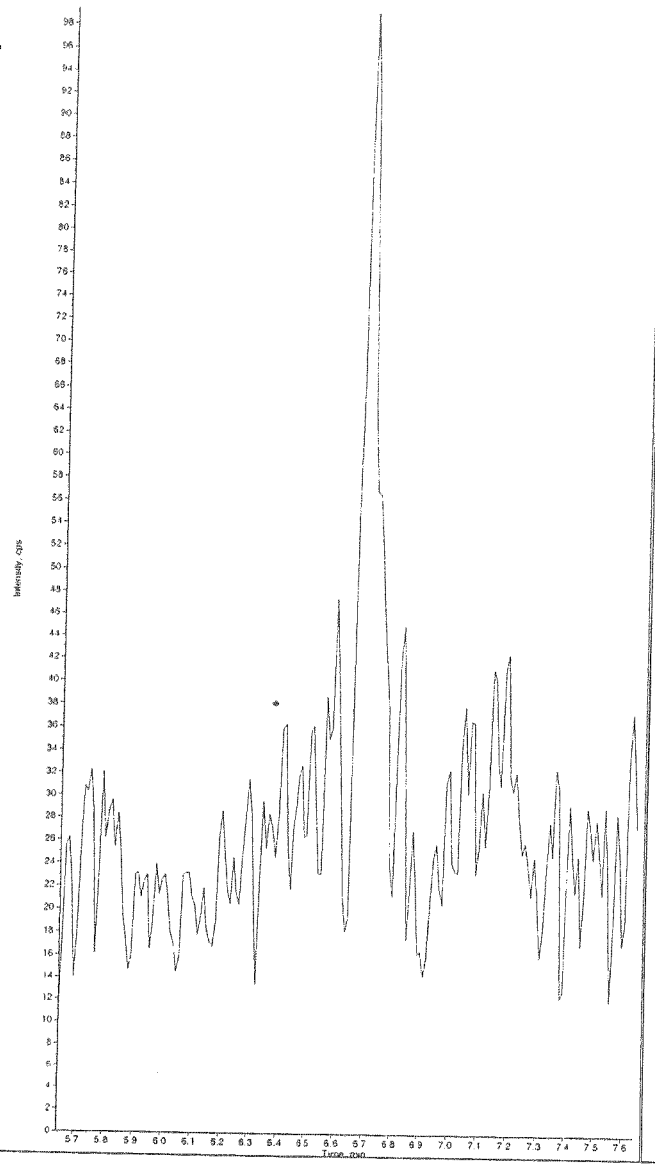
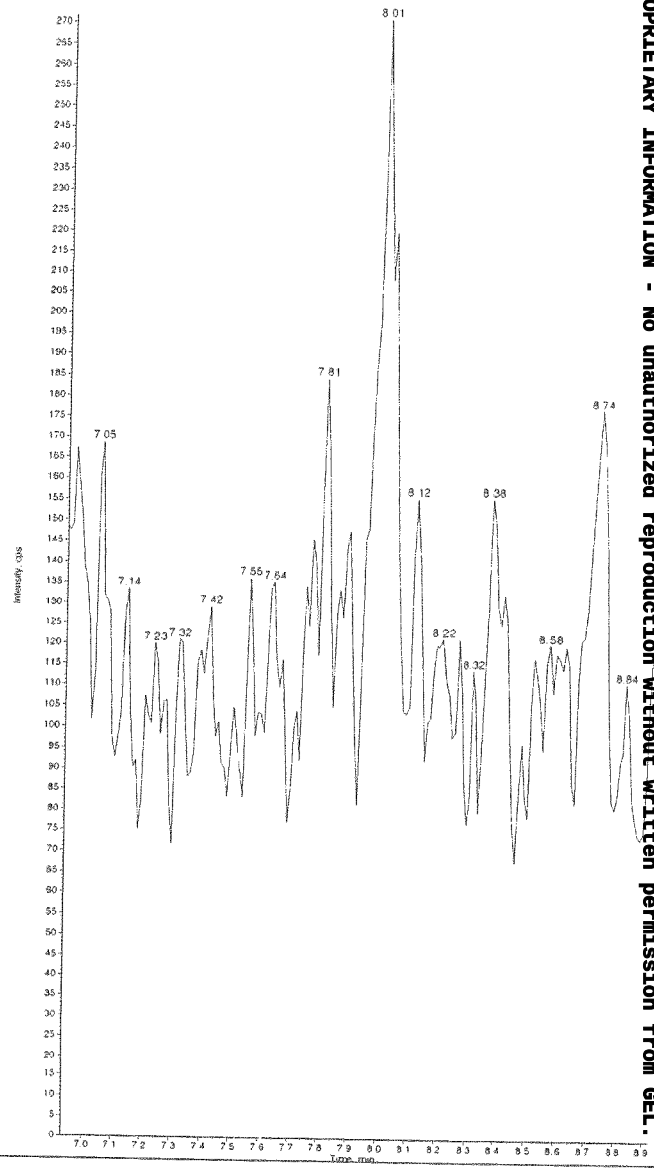
Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209002.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	02:04:46 PM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209002.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	02:04:46 PM
Modified:	No



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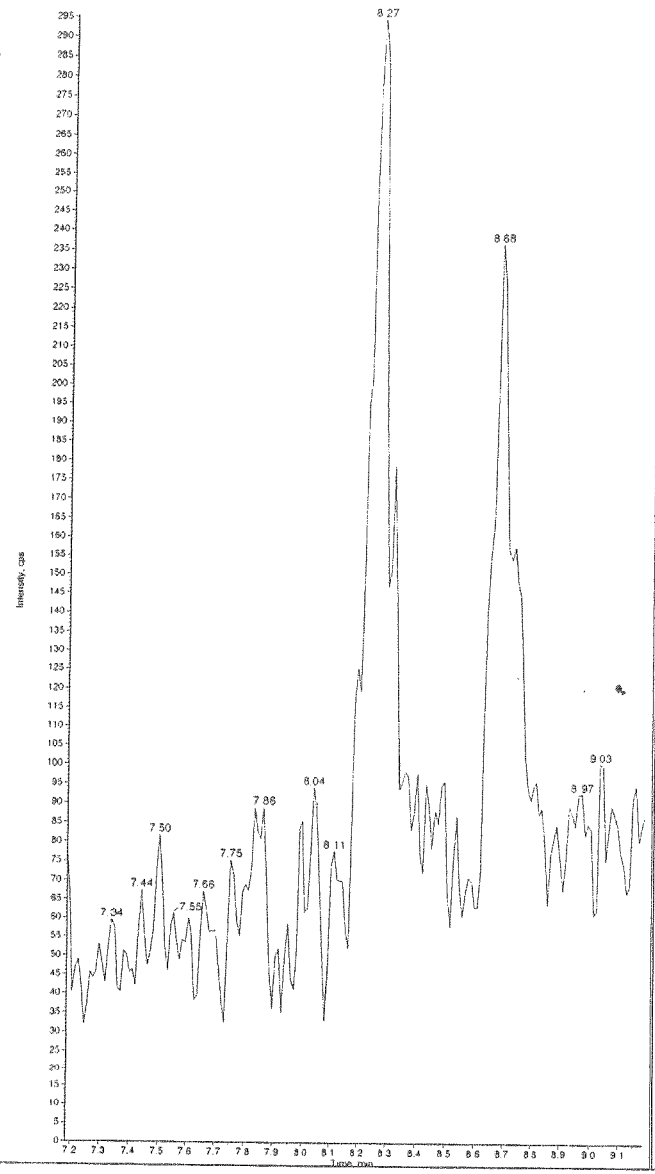
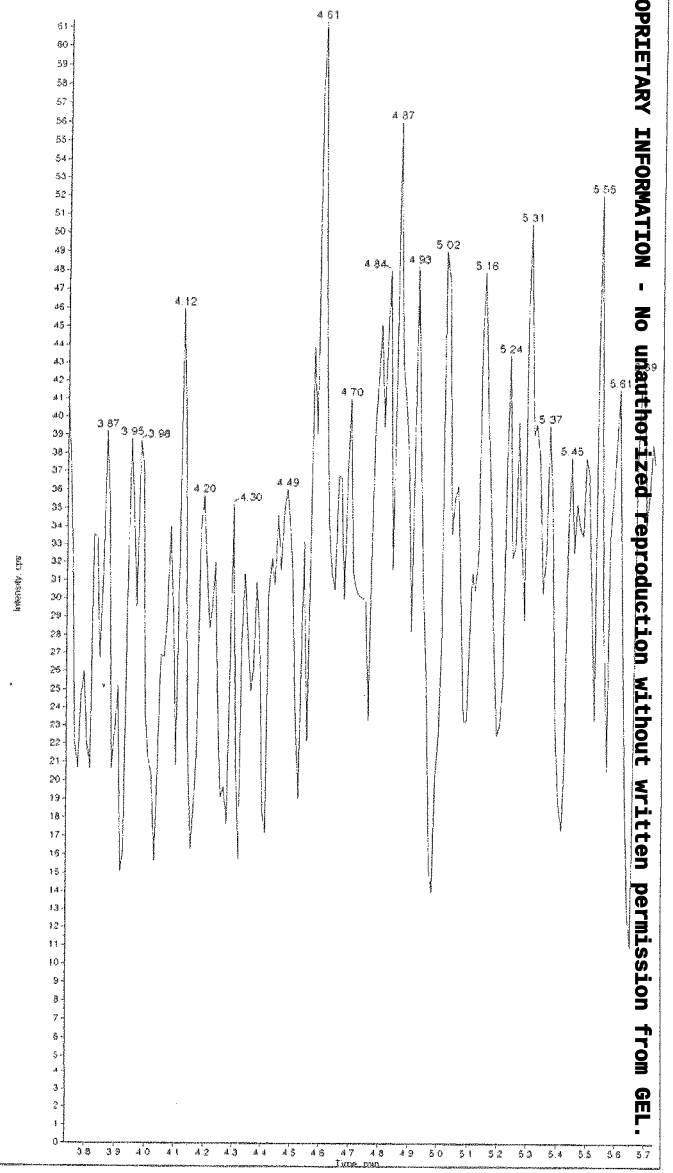
Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209002.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182 1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	02:04:46 PM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "|1|LXS1" File: "EXS0209002.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

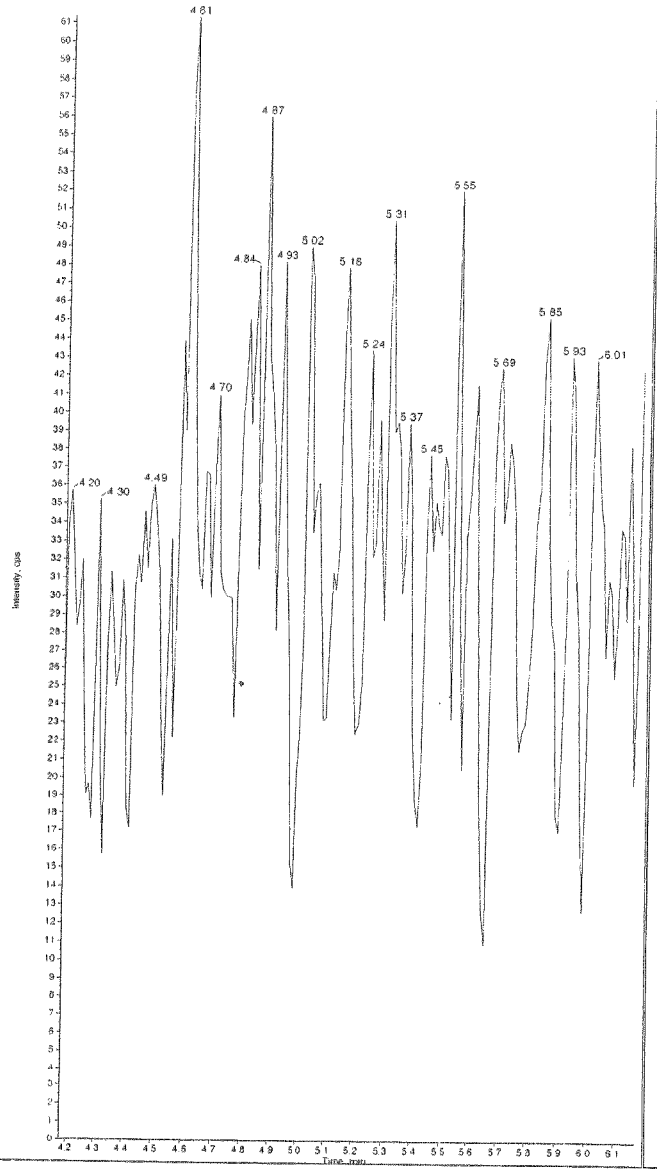
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	02:04:46 PM
Modified:	No



Sample Name: "XIBLK01" Sample ID: "]1|LXS1" File: "EXS0209002.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 02:04:46 PM

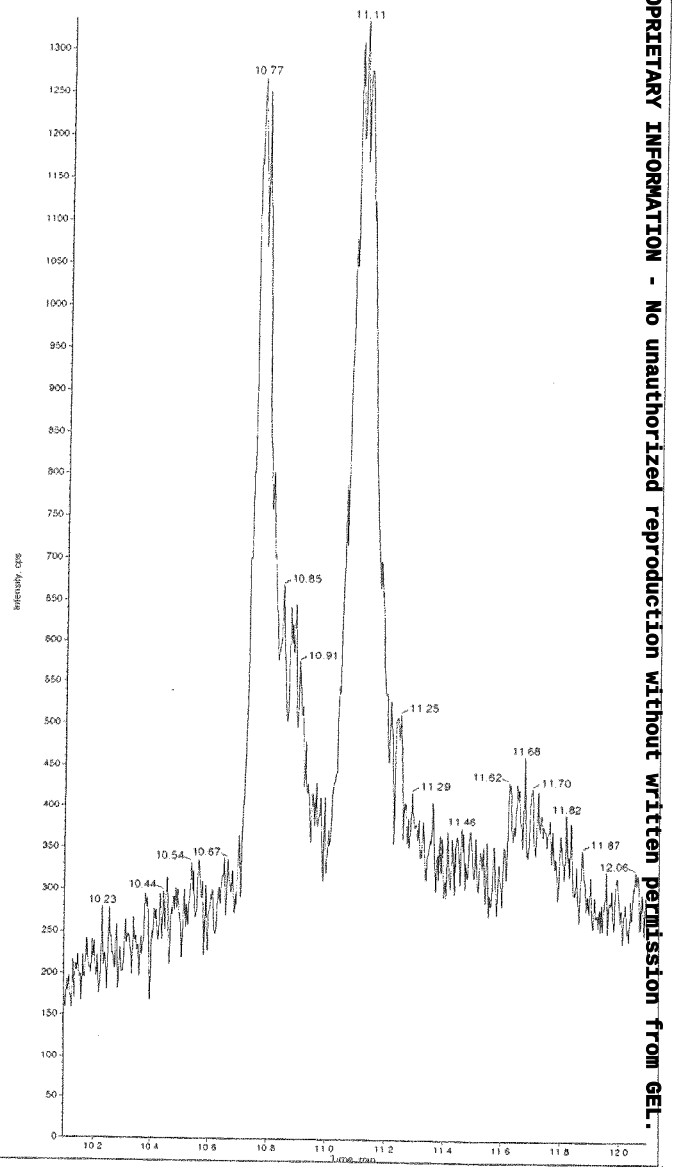
Modified: No



Sample Name: "XIBLK01" Sample ID: "]1|LXS1" File: "EXS0209002.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 02:04:46 PM

Modified: No



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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 02-FEB-06 20:17

GEL Data File: EXP0202010a

Instrument ID: LCMSMS

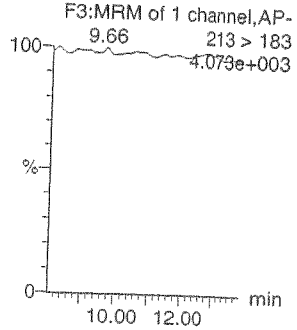
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	433.27
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	525.63
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

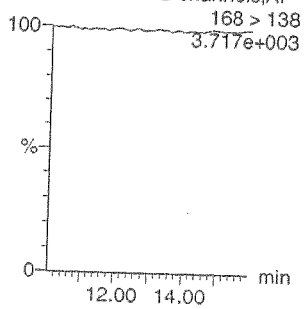
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202010a
Date: 02-Feb-2006
Time: 20:17:18
ID: XIBLK02
Vial: 1:1,A

MM 2/3/06

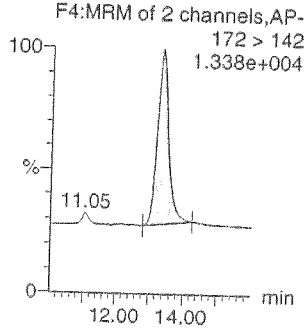
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
9.66 213 > 183
4.073e+003



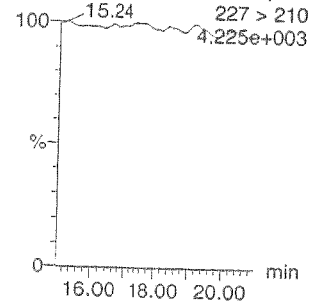
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.717e+003



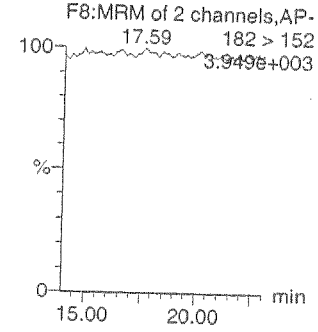
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.338e+004



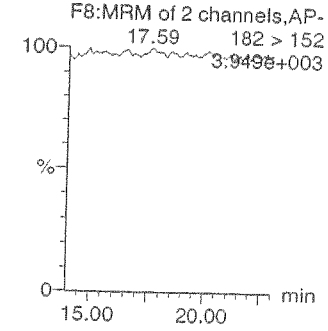
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
15.24 227 > 210
4.225e+003



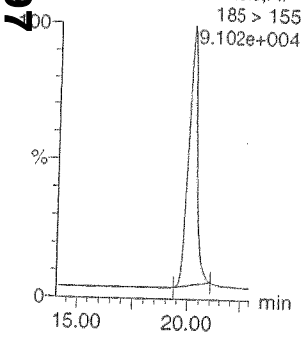
24-dinitrotoluene
F8:MRM of 2 channels,AP-
17.59 182 > 152
3.949e+003



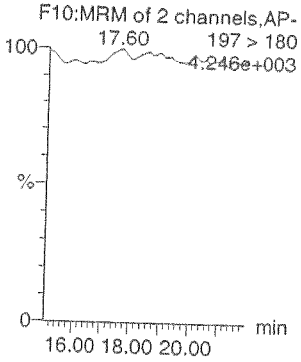
26-dinitrotoluene
F8:MRM of 2 channels,AP-
17.59 182 > 152
3.949e+003



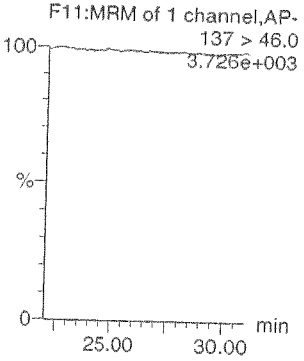
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
9.102e+004



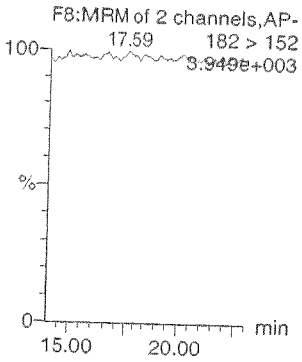
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
17.60 197 > 180
4.246e+003



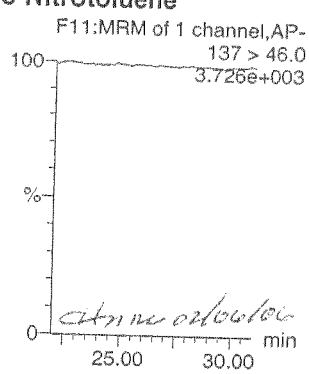
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.726e+003



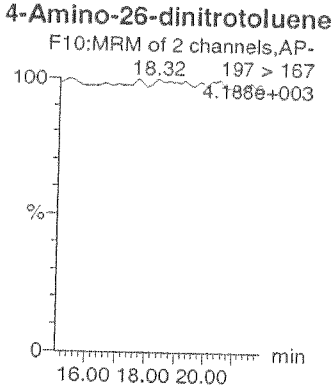
34-dinitrotoluene
F8:MRM of 2 channels,AP-
17.59 182 > 152
3.949e+003



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.726e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
18.32 197 > 167
4.186e+003



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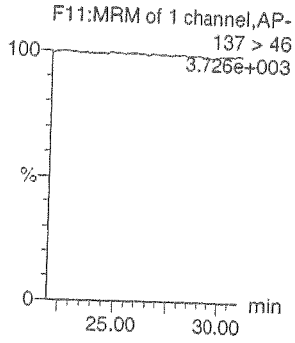
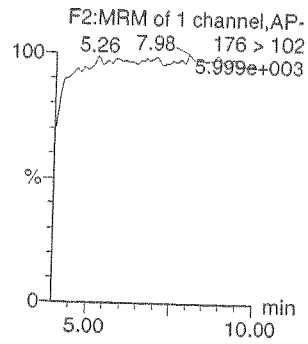
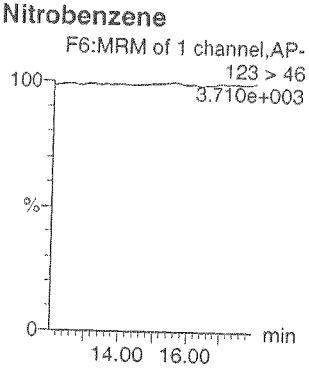
4-Nitrotoluene



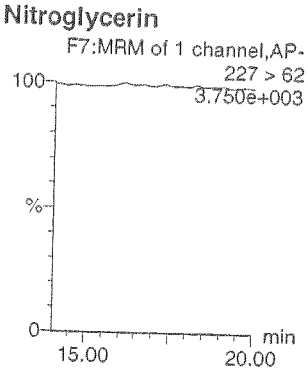
HMX



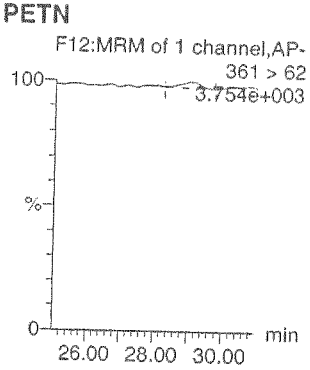
Nitrobenzene



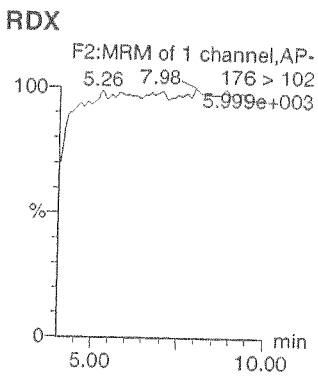
Nitroglycerin



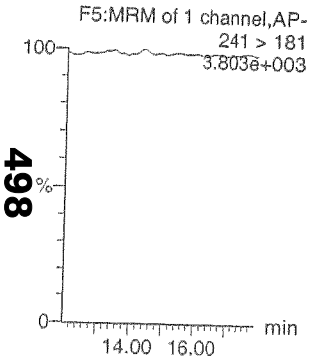
PETN



RDX



Tetryl



498

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK02	HMX	176 > 102			3565.734									
XIBLK02	RDX	176 > 102			3565.734									
XIBLK02	135-Trinitrobenzene	213 > 183			3565.734									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	13.33	3565.734		3565.734	3565.734	bb			433.2696	86.7	-13.3	420.9
XIBLK02	13-Dinitrobenzene	168 > 138			3565.734									
XIBLK02	Tetryl	241 > 181			3565.734									
XIBLK02	Nitrobenzene	123 > 46			3565.734									
XIBLK02	Nitroglycerin	227 > 62			3565.734									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			40674.957									
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			40674.957									
XIBLK02	246-Trinitrotoluene	227 > 210			40674.957									
XIBLK02	34-dinitrotoluene	182 > 152			40674.957									
XIBLK02	26-dinitrotoluene	182 > 152			40674.957									
XIBLK02	24-dinitrotoluene	182 > 152			40674.957									
XIBLK02	26-dinitrotoluene-d3	185 > 155	20.09	40674.957		40674.957	40674.957	bb			525.6297	105.1	5.1	3060.0
XIBLK02	2-Nitrotoluene	137 > 46.0			40674.957									
XIBLK02	4-Nitrotoluene	137 > 46			40674.957									
XIBLK02	3-Nitrotoluene	137 > 46.0			40674.957									
XIBLK02	PETN	361 > 62			40674.957			MM-	03-Feb-06	07:20:12				

499

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 02-FEB-06 21:24

GEL Data File: EXP0202012a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

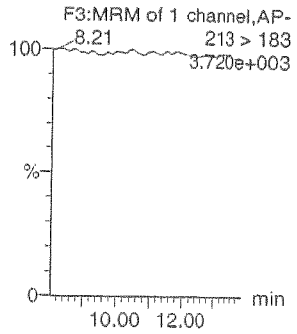
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	442.194
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	501.072
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

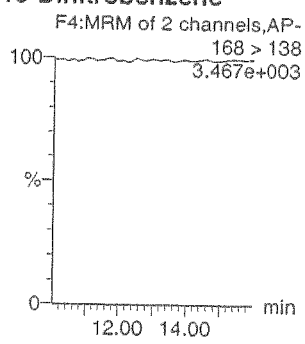
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202012a
Date: 02-Feb-2006
Time: 21:24:16
ID: XIBLK03
Vial: 1:1,A

MM 2/3/06

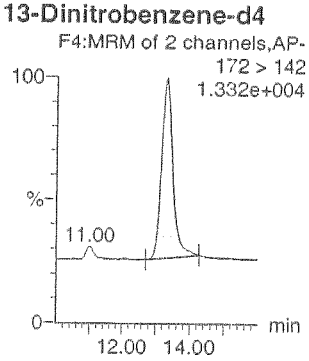
135-Trinitrobenzene



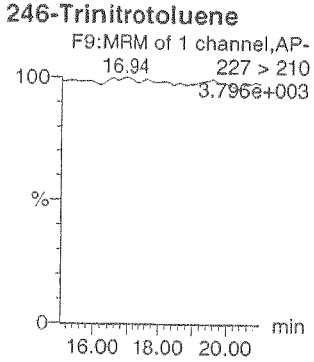
13-Dinitrobenzene



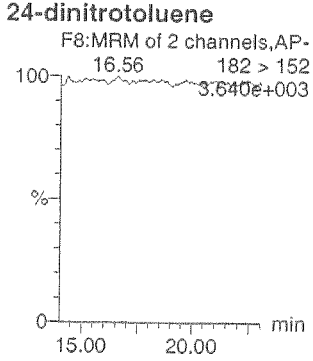
13-Dinitrobenzene-d4



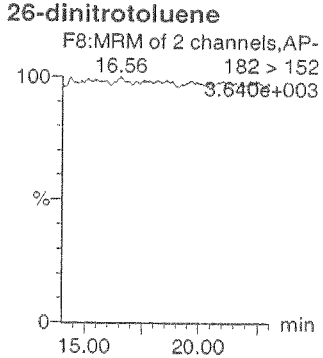
246-Trinitrotoluene



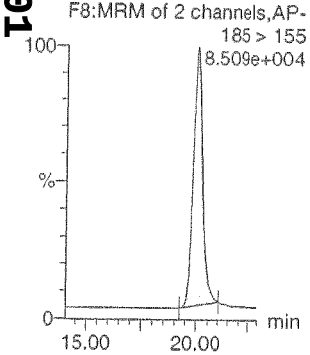
24-dinitrotoluene



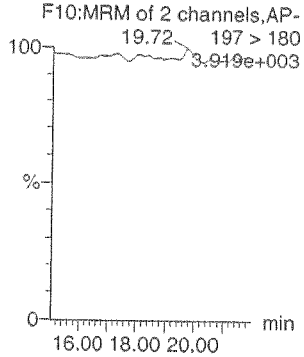
26-dinitrotoluene



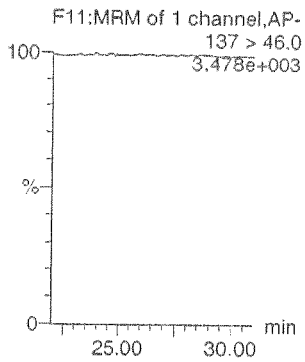
6-dinitrotoluene-d3



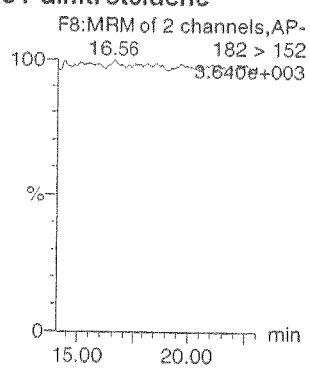
2-Amino-46-dinitrotoluene



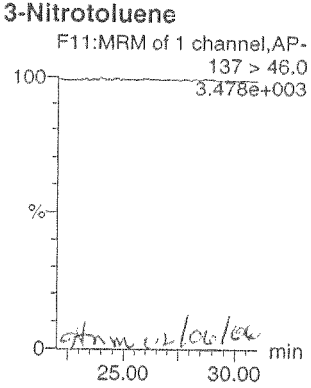
2-Nitrotoluene



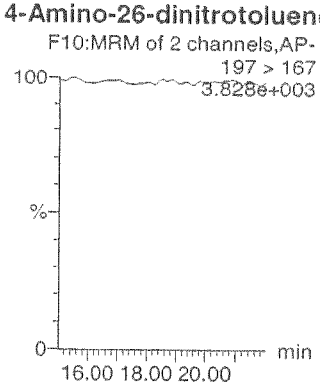
34-dinitrotoluene



3-Nitrotoluene



4-Amino-26-dinitrotoluene



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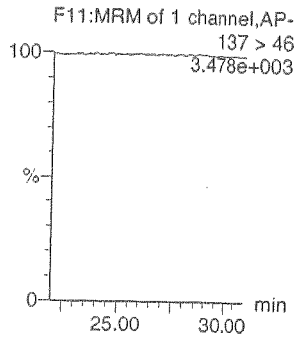
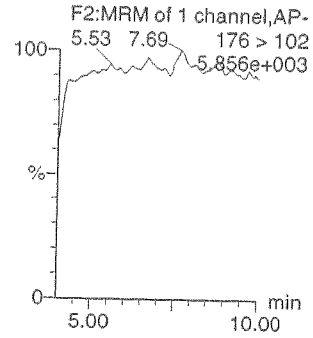
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

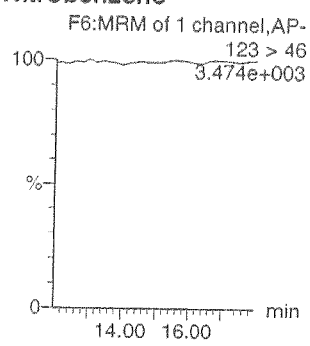
4-Nitrotoluene



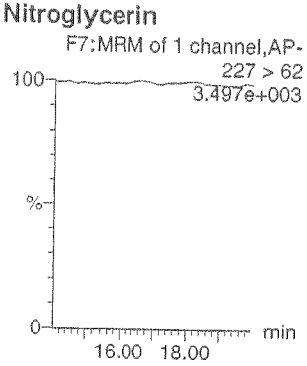
HMX



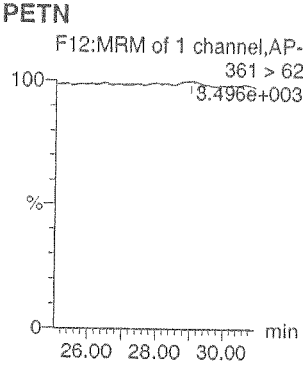
Nitrobenzene



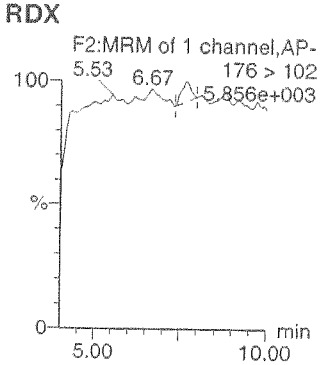
Nitroglycerin



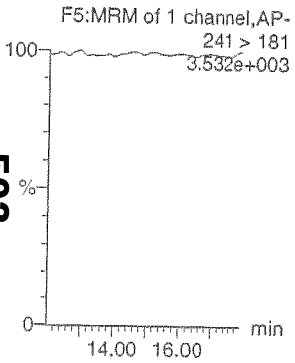
PETN



RDX



Tetryl



502

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK03	HMX	176 > 102			3639.184									
XIBLK03	RDX	176 > 102			3639.184			MM-	03-Feb-06	07:14:48				
XIBLK03	135-Trinitrobenzene	213 > 183			3639.184									
XIBLK03	13-Dinitrobenzene-d4	172 > 142	13.29	3639.184		3639.184	3639.184	bb			442.1945	88.4	-11.6	1046.4
XIBLK03	13-Dinitrobenzene	168 > 138			3639.184									
XIBLK03	Tetryl	241 > 181			3639.184									
XIBLK03	Nitrobenzene	123 > 46			3639.184									
XIBLK03	Nitroglycerin	227 > 62			3639.184									
XIBLK03	4-Amino-26-dinitrotoluene	197 > 167			38774.594									
XIBLK03	2-Amino-46-dinitrotoluene	197 > 180			38774.594									
XIBLK03	246-Trinitrotoluene	227 > 210			38774.594									
XIBLK03	34-dinitrotoluene	182 > 152			38774.594									
XIBLK03	26-dinitrotoluene	182 > 152			38774.594									
XIBLK03	24-dinitrotoluene	182 > 152			38774.594									
XIBLK03	26-dinitrotoluene-d3	185 > 155	20.01	38774.594		38774.594	38774.594	bb			501.0719	100.2	0.2	1205.9
XIBLK03	2-Nitrotoluene	137 > 46.0			38774.594									
XIBLK03	4-Nitrotoluene	137 > 46			38774.594									
XIBLK03	3-Nitrotoluene	137 > 46.0			38774.594									
XIBLK03	PETN	361 > 62			38774.594			MM-	03-Feb-06	07:20:18				

503

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4A

Explosives Continuing Calibration Blank

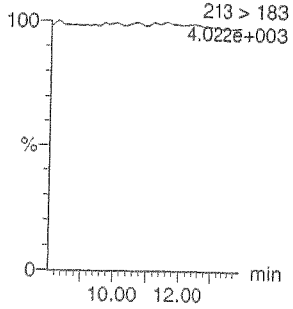
Lab Name: General Engineering Laboratories
GEL Job No(SDG): 154614
Lab Code: GEL
Lab Sample ID: XIBLK04
Analysis Date: 03-FEB-06 02:25
GEL Data File: EXP0202021a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	445.738
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	470.611
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

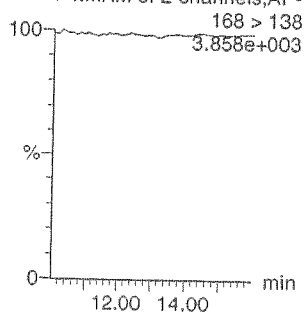
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202021a
Date: 03-Feb-2006
Time: 02:25:43
ID: XIBLK04
Vial: 1:1,A

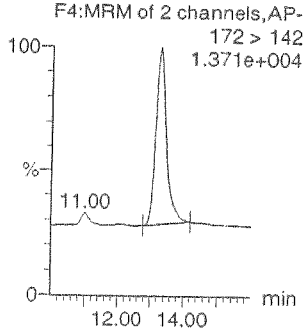
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
4.022e+003



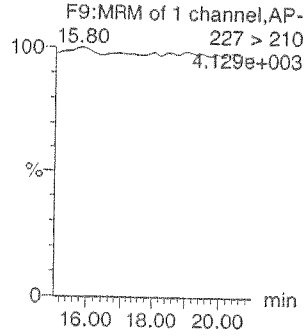
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.858e+003



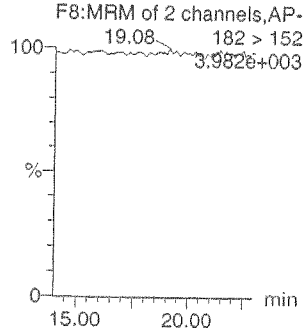
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.371e+004



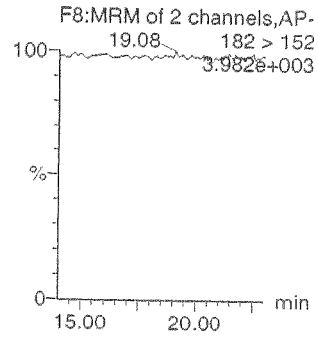
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
15.80
227 > 210
4.129e+003



24-dinitrotoluene
F8:MRM of 2 channels,AP-
19.08
182 > 152
3.982e+003

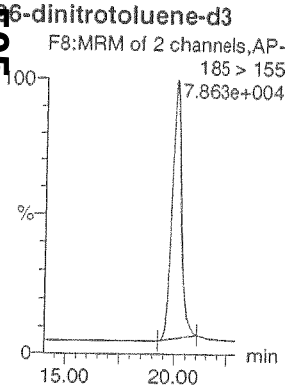


26-dinitrotoluene
F8:MRM of 2 channels,AP-
19.08
182 > 152
3.982e+003

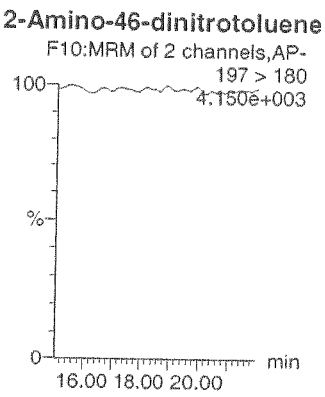


505

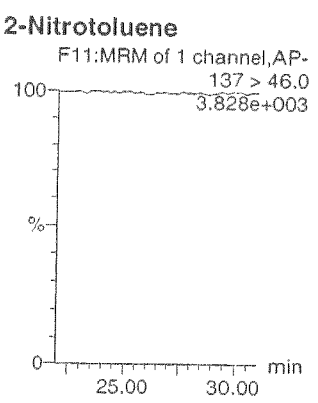
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.863e+004



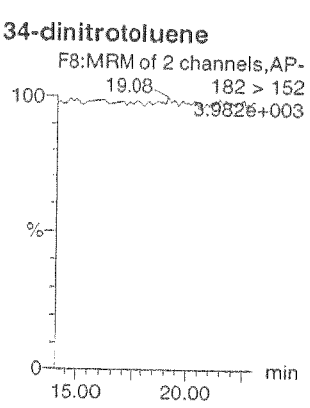
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.150e+003



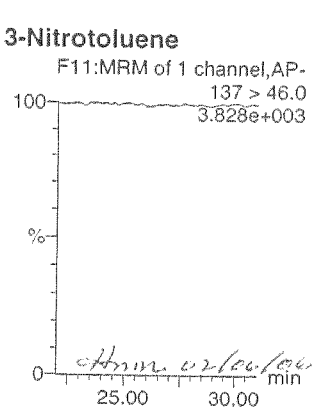
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.828e+003



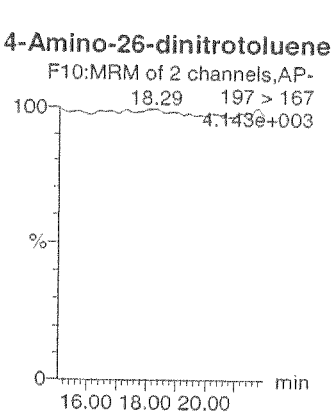
34-dinitrotoluene
F8:MRM of 2 channels,AP-
19.08
182 > 152
3.982e+003



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.828e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
18.29
197 > 167
4.143e+003



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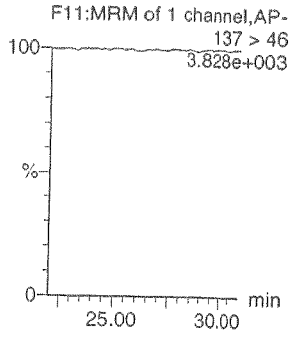
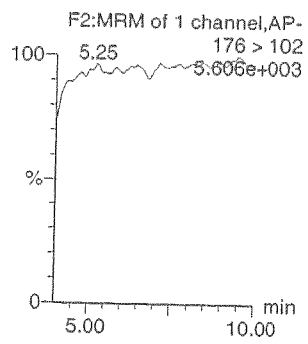
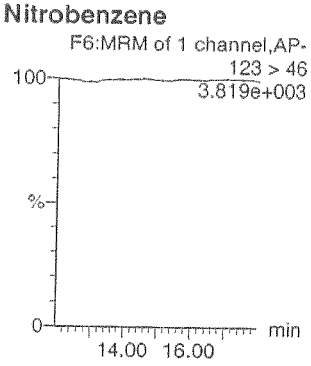
4-Nitrotoluene



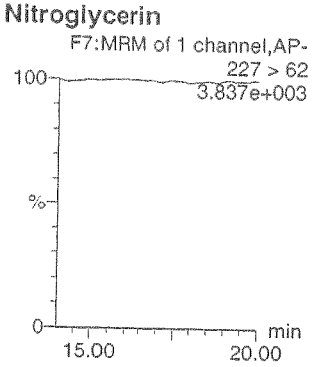
HMX



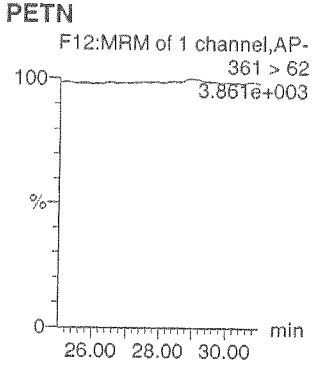
Nitrobenzene



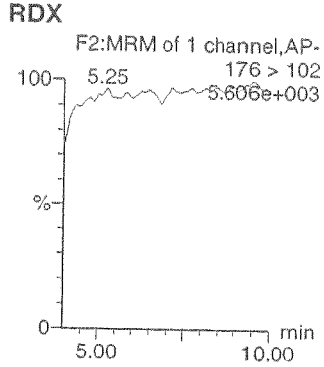
Nitroglycerin



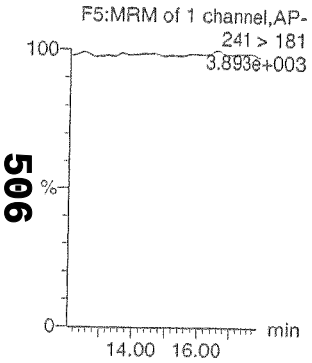
PETN



RDX



Tetryl



506

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK04	HMX	176 > 102			3668.344									
XIBLK04	RDX	176 > 102			3668.344									
XIBLK04	135-Trinitrobenzene	213 > 183			3668.344									
XIBLK04	13-Dinitrobenzene-d4	172 > 142	13.27	3668.344		3668.344	3668.344	bb			445.7377	89.1	-10.9	305.5
XIBLK04	13-Dinitrobenzene	168 > 138			3668.344									
XIBLK04	Tetryl	241 > 181			3668.344									
XIBLK04	Nitrobenzene	123 > 46			3668.344									
XIBLK04	Nitroglycerin	227 > 62			3668.344									
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167			36417.438									
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180			36417.438									
XIBLK04	246-Trinitrotoluene	227 > 210			36417.438									
XIBLK04	34-dinitrotoluene	182 > 152			36417.438									
XIBLK04	26-dinitrotoluene	182 > 152			36417.438									
XIBLK04	24-dinitrotoluene	182 > 152			36417.438									
XIBLK04	26-dinitrotoluene-d3	185 > 155	20.03	36417.438		36417.438	36417.438	bb			470.6111	94.1	-5.9	2112.6
XIBLK04	2-Nitrotoluene	137 > 46.0			36417.438									
XIBLK04	4-Nitrotoluene	137 > 46			36417.438									
XIBLK04	3-Nitrotoluene	137 > 46.0			36417.438									
XIBLK04	PETN	361 > 62			36417.438									

HMK 02/06/06

MM 2/3/06

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 03-FEB-06 09:41

GEL Data File: EXP0202034a

Instrument ID: LCMSMS

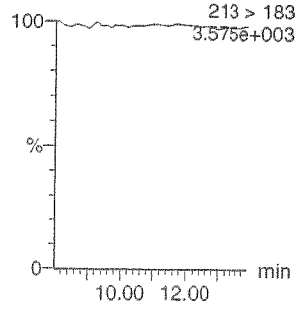
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	421.42
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	442.006
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

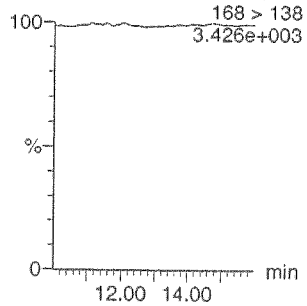
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202034a
Date: 03-Feb-2006
Time: 09:41:13
ID: XIBLK05
Vial: 1:1,A

MM 2/3/06

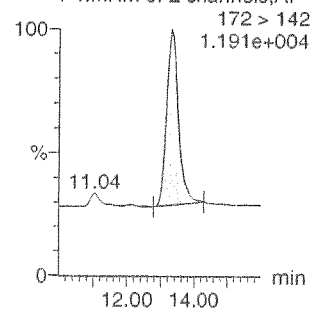
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.575e+003



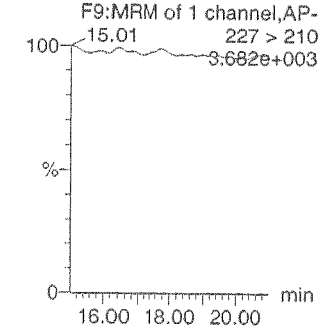
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.426e+003



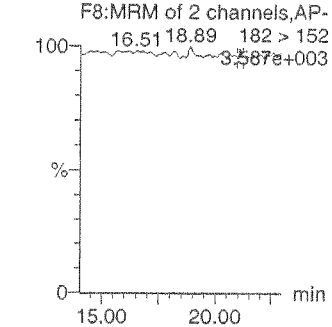
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.191e+004



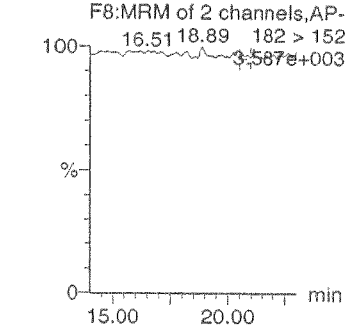
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
15.01
227 > 210
3.682e+003



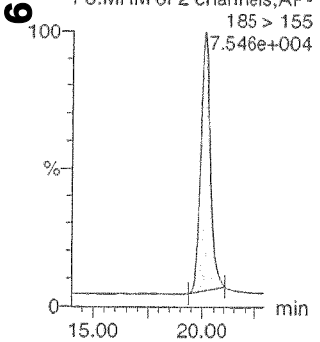
24-dinitrotoluene
F8:MRM of 2 channels,AP-
16.51 18.89
182 > 152
3.587e+003



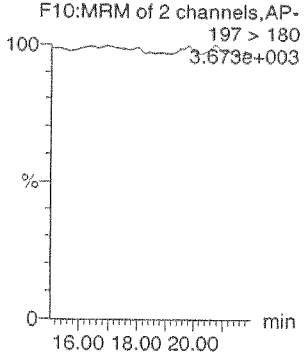
26-dinitrotoluene
F8:MRM of 2 channels,AP-
16.51 18.89
182 > 152
3.587e+003



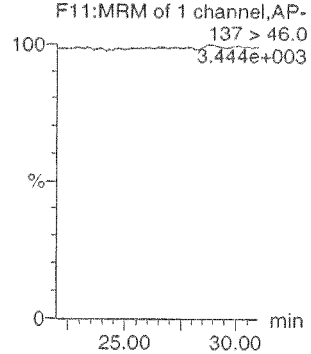
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.546e+004



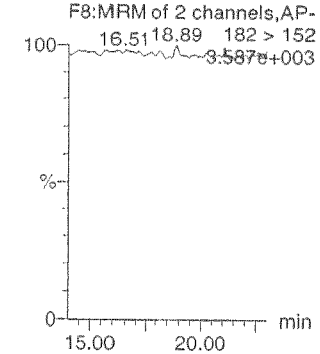
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.673e+003



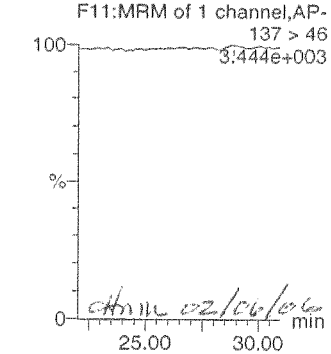
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.444e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
16.51 18.89
182 > 152
3.587e+003

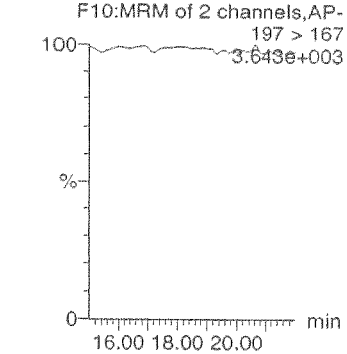


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.444e+003



amm 02/06/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.643e+003



509

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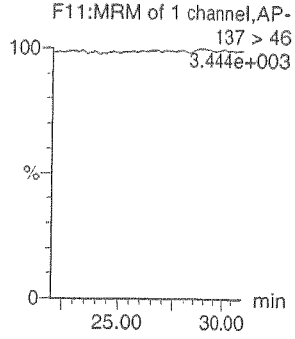
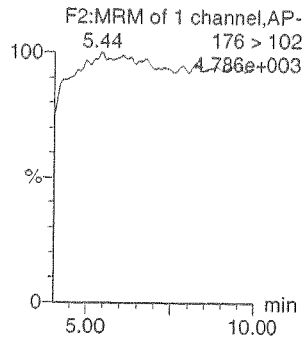
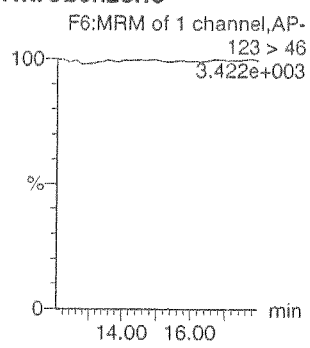
4-Nitrotoluene



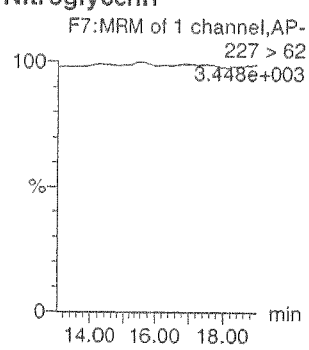
HMX



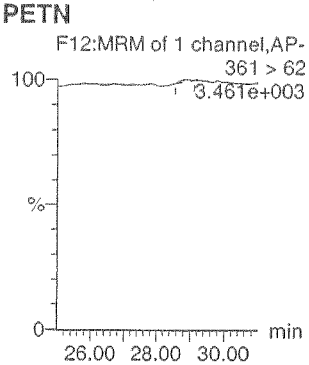
Nitrobenzene



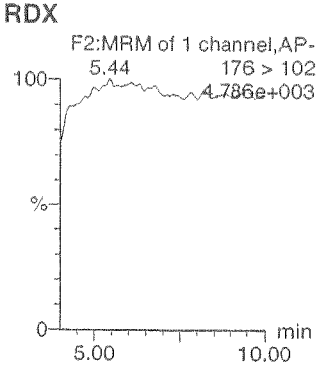
Nitroglycerin



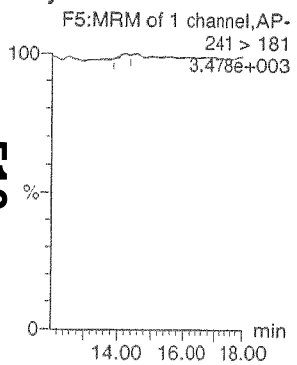
PETN



RDX



Tetryl



510

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Dataset: Untitled, Time: Fri Feb 03 11:05:48 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK05	HMX	176 > 102			3468.211									
XIBLK05	RDX	176 > 102			3468.211									
XIBLK05	135-Trinitrobenzene	213 > 183			3468.211									
XIBLK05	13-Dinitrobenzene-d4	172 > 142	13.29	3468.211		3468.211	3468.211	bb			421.4197	84.3	-15.7	643.4
XIBLK05	13-Dinitrobenzene	168 > 138			3468.211									
XIBLK05	Tetryl	241 > 181			3468.211			MM-	03-Feb-06	11:01:51				
XIBLK05	Nitrobenzene	123 > 46			3468.211									
XIBLK05	Nitroglycerin	227 > 62			3468.211									
XIBLK05	4-Amino-26-dinitrotoluene	197 > 167			34203.879									
XIBLK05	2-Amino-46-dinitrotoluene	197 > 180			34203.879									
XIBLK05	246-Trinitrotoluene	227 > 210			34203.879									
XIBLK05	34-dinitrotoluene	182 > 152			34203.879									
XIBLK05	26-dinitrotoluene	182 > 152			34203.879			MM-	03-Feb-06	11:03:28				
XIBLK05	24-dinitrotoluene	182 > 152			34203.879			MM-	03-Feb-06	11:03:32				
XIBLK05	26-dinitrotoluene-d3	185 > 155	20.07	34203.879		34203.879	34203.879	bb			442.0060	88.4	-11.6	3596.3
XIBLK05	2-Nitrotoluene	137 > 46.0			34203.879									
XIBLK05	4-Nitrotoluene	137 > 46			34203.879									
XIBLK05	3-Nitrotoluene	137 > 46.0			34203.879			MM-	03-Feb-06	11:05:48				
XIBLK05	PETN	361 > 62			34203.879			MM-	03-Feb-06	11:01:04				

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 03-FEB-06 14:42

GEL Data File: EXP0202043a

Instrument ID: LCMSMS

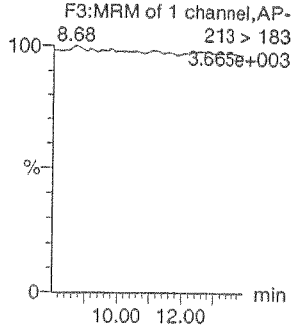
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	494.686
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	492.346
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

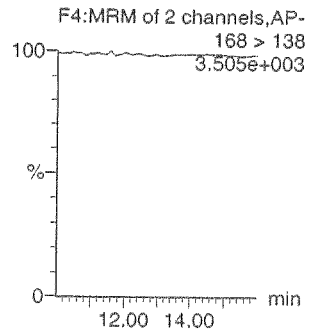
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202043a
Date: 03-Feb-2006
Time: 14:42:46
ID: XIBLK06
Vial: 1:1,A

MM 2/4/06

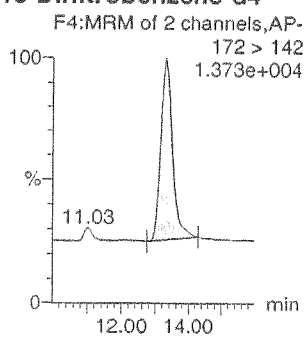
135-Trinitrobenzene



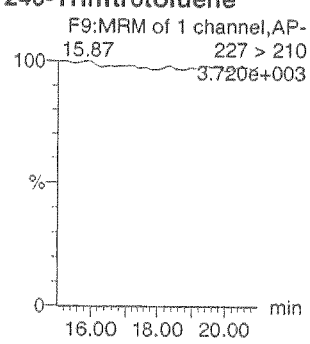
13-Dinitrobenzene



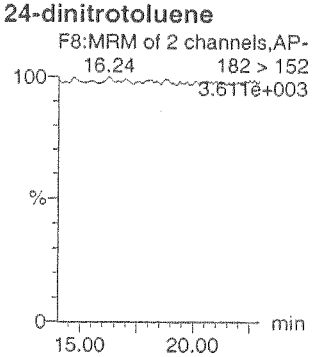
13-Dinitrobenzene-d4



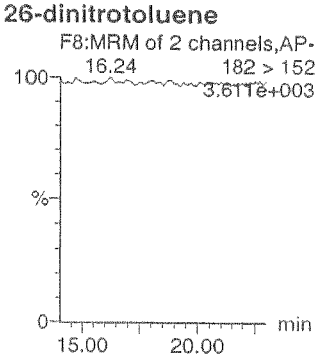
246-Trinitrotoluene



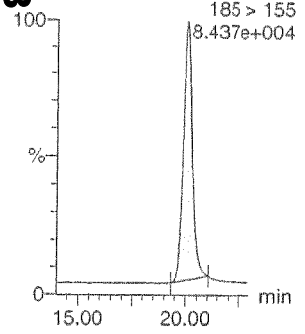
24-dinitrotoluene



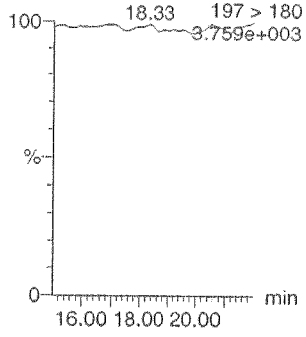
26-dinitrotoluene



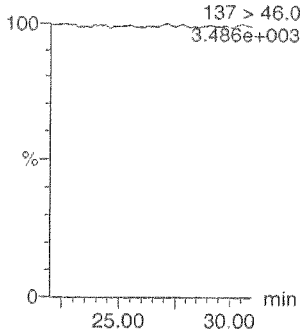
5-dinitrotoluene-d3



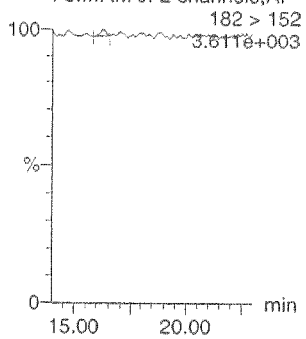
2-Amino-46-dinitrotoluene



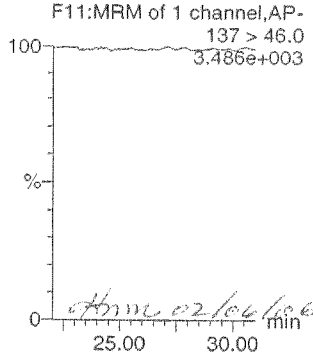
2-Nitrotoluene



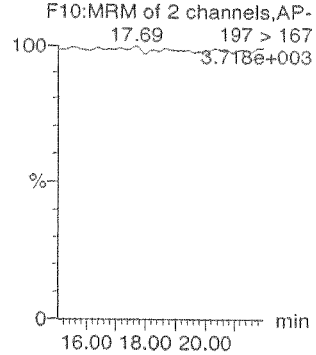
34-dinitrotoluene



3-Nitrotoluene



4-Amino-26-dinitrotoluene



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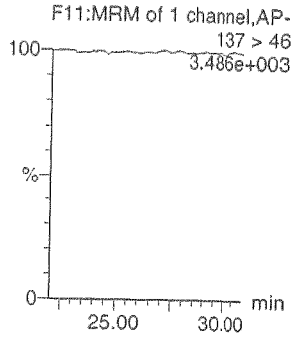
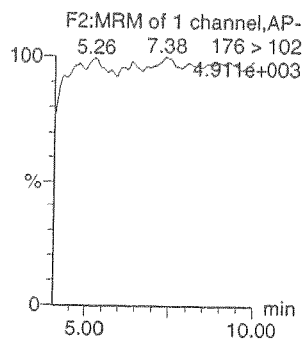
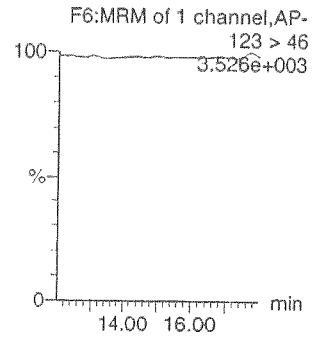
4-Nitrotoluene



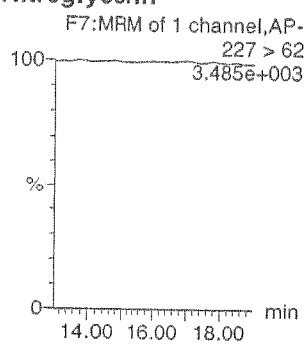
HMX



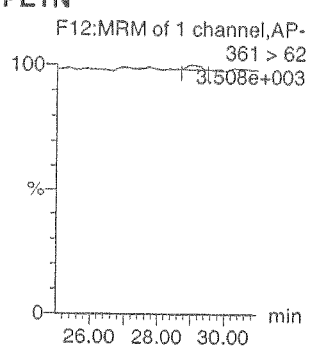
Nitrobenzene



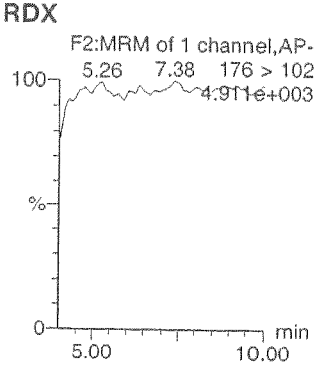
Nitroglycerin



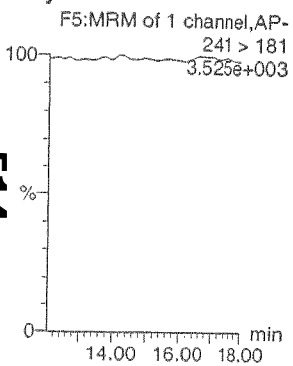
PETN



RDX



Tetryl



514

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK06	HMX	176 > 102			4071.182									
XIBLK06	RDX	176 > 102			4071.182									
XIBLK06	135-Trinitrobenzene	213 > 183			4071.182									
XIBLK06	13-Dinitrobenzene-d4	172 > 142	13.29	4071.182		4071.182	4071.182	bb			494.6862	98.9	-1.1	338.9
XIBLK06	13-Dinitrobenzene	168 > 138			4071.182									
XIBLK06	Tetryl	241 > 181			4071.182									
XIBLK06	Nitrobenzene	123 > 46			4071.182									
XIBLK06	Nitroglycerin	227 > 62			4071.182									
XIBLK06	4-Amino-26-dinitrotoluene	197 > 167			38099.340									
XIBLK06	2-Amino-46-dinitrotoluene	197 > 180			38099.340									
XIBLK06	246-Trinitrotoluene	227 > 210			38099.340									
XIBLK06	34-dinitrotoluene	182 > 152	16.24	23.847	38099.340	23.847	0.313	bb			0.3384			2.1
XIBLK06	26-dinitrotoluene	182 > 152			38099.340									
XIBLK06	24-dinitrotoluene	182 > 152			38099.340									
XIBLK06	26-dinitrotoluene-d3	185 > 155	20.03	38099.340		38099.340	38099.340	bb			492.3458	98.5	-1.5	3898.2
XIBLK06	2-Nitrotoluene	137 > 46.0			38099.340									
XIBLK06	4-Nitrotoluene	137 > 46			38099.340									
XIBLK06	3-Nitrotoluene	137 > 46.0			38099.340									
XIBLK06	PETN	361 > 62	28.98	29.021	38099.340	29.021	0.381	bb			1.3490			6.4

dmc 02/06/06

MM 2/4/06

515

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 03-FEB-06 21:58

GEL Data File: EXP0202056a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

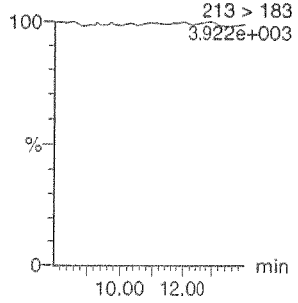
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	484.656
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	462.196
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

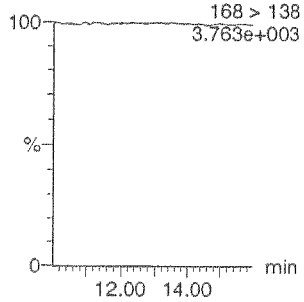
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202056a
Date: 03-Feb-2006
Time: 21:58:36
ID: XIBLK07
Vial: 1:1,A

MM 2/4/06

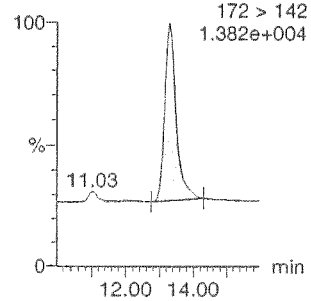
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.922e+003



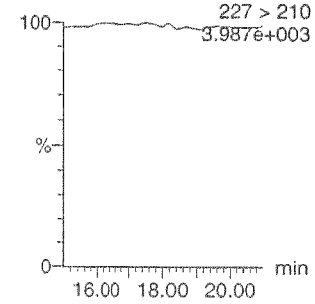
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.763e+003



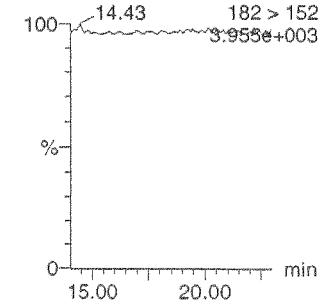
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.382e+004



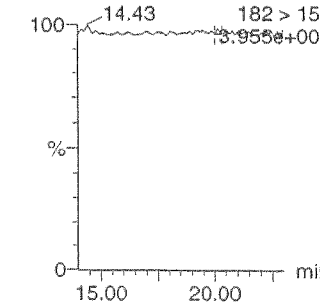
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
3.987e+003



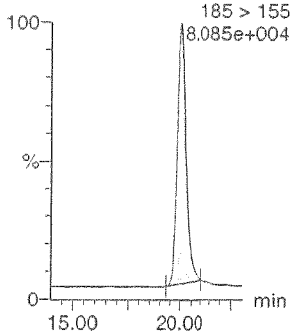
24-dinitrotoluene
F8:MRM of 2 channels,AP-
14.43 182 > 152
3.955e+003



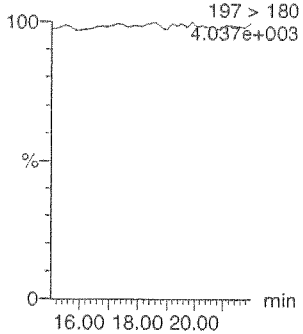
26-dinitrotoluene
F8:MRM of 2 channels,AP-
14.43 182 > 152
3.955e+003



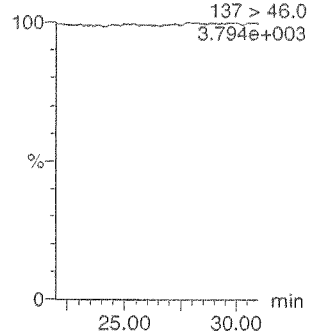
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.085e+004



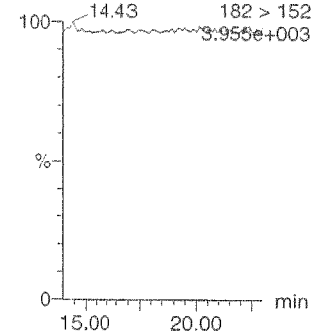
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.037e+003



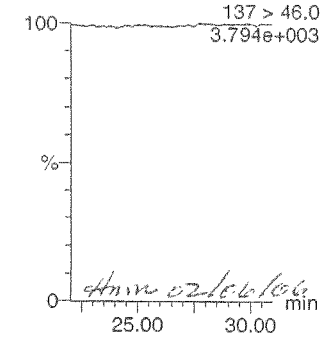
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.794e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
14.43 182 > 152
3.955e+003

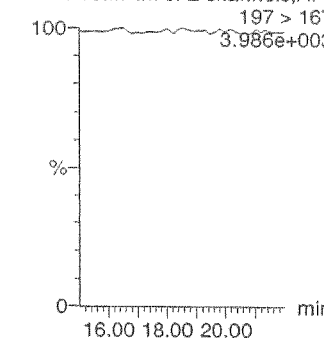


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.794e+003



Amm 2/6/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.986e+003



517

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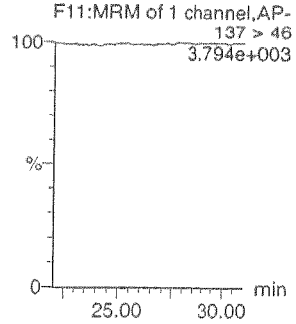
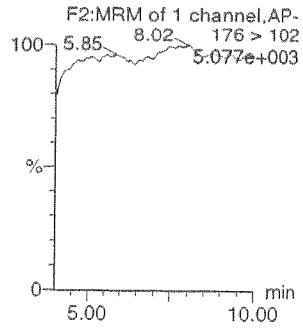
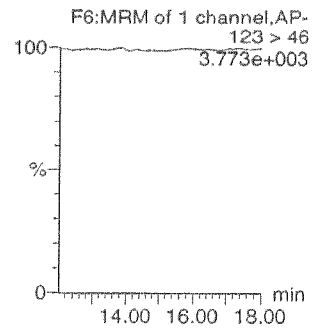
4-Nitrotoluene



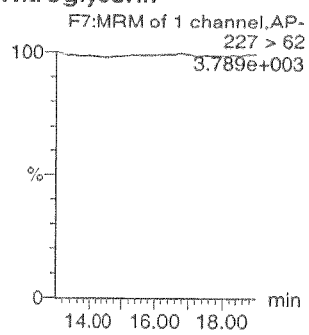
HMX



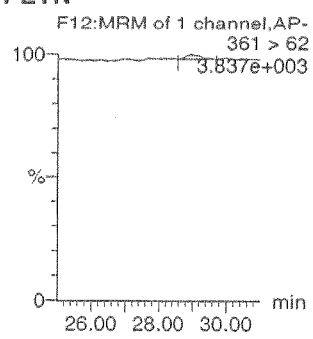
Nitrobenzene



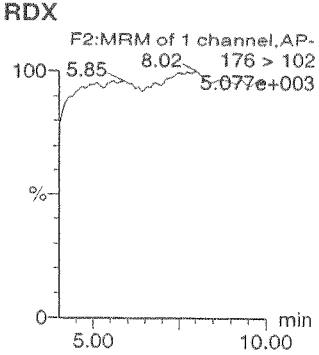
Nitroglycerin



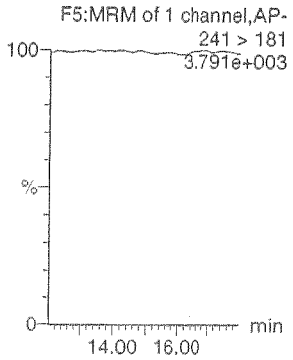
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK07	HMX	176 > 102			3988.631									
XIBLK07	RDX	176 > 102			3988.631									
XIBLK07	135-Trinitrobenzene	213 > 183			3988.631									
XIBLK07	13-Dinitrobenzene-d4	172 > 142	13.29	3988.631		3988.631	3988.631	bb			484.6555	96.9	-3.1	355.7
XIBLK07	13-Dinitrobenzene	168 > 138			3988.631									
XIBLK07	Tetryl	241 > 181			3988.631									
XIBLK07	Nitrobenzene	123 > 46			3988.631									
XIBLK07	Nitroglycerin	227 > 62			3988.631									
XIBLK07	4-Amino-26-dinitrotoluene	197 > 167			35766.258									
XIBLK07	2-Amino-46-dinitrotoluene	197 > 180			35766.258									
XIBLK07	246-Trinitrotoluene	227 > 210			35766.258									
XIBLK07	34-dinitrotoluene	182 > 152			35766.258									
XIBLK07	26-dinitrotoluene	182 > 152			35766.258			MM-	04-Feb-06	10:12:30				
XIBLK07	24-dinitrotoluene	182 > 152			35766.258									
XIBLK07	26-dinitrotoluene-d3	185 > 155	20.03	35766.258		35766.258	35766.258	bb			462.1961	92.4	-7.6	2644.4
XIBLK07	2-Nitrotoluene	137 > 46.0			35766.258									
XIBLK07	4-Nitrotoluene	137 > 46			35766.258									
XIBLK07	3-Nitrotoluene	137 > 46.0			35766.258									
XIBLK07	PETN	361 > 62	28.97	37.785	35766.258	37.785	0.528	bb			1.8711			20.8

519

hmm 02/06/06

MM 2/4/06

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 04-FEB-06 04:07

GEL Data File: EXP0202067a

Instrument ID: LCMSMS

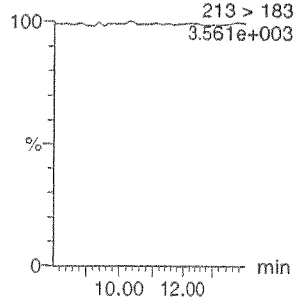
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	457.259
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	452.046
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

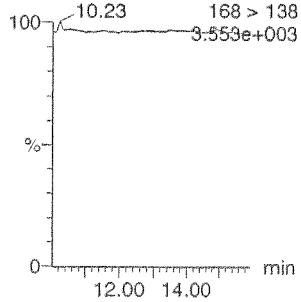
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202067a
Date: 04-Feb-2006
Time: 04:07:23
ID: XIBLK08
Vial: 1:1,A

MM 2/7/06

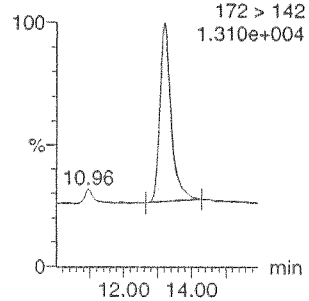
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.561e+003



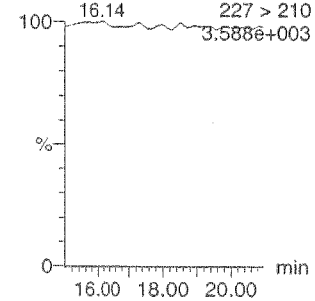
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
10.23
168 > 138
3.553e+003



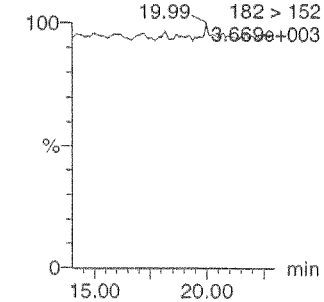
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.310e+004



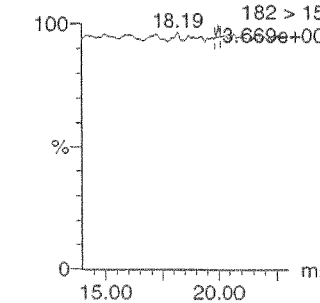
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
16.14
227 > 210
3.588e+003



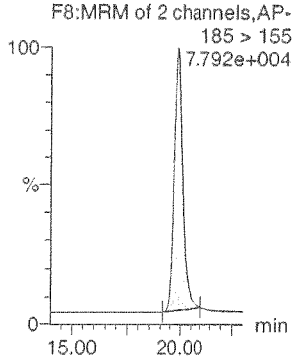
24-dinitrotoluene
F8:MRM of 2 channels,AP-
19.99
182 > 152
3.669e+003



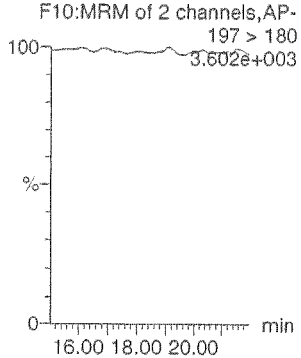
26-dinitrotoluene
F8:MRM of 2 channels,AP-
18.19
182 > 152
3.669e+003



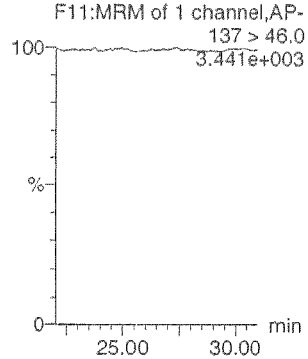
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.792e+004



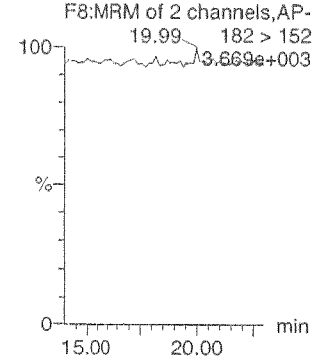
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.602e+003



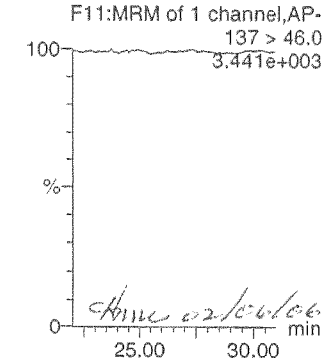
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.441e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
19.99
182 > 152
3.669e+003

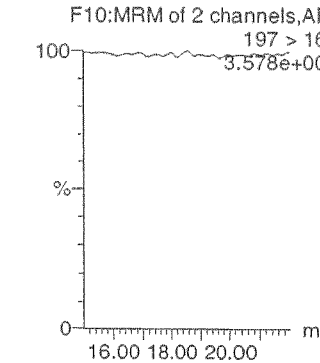


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.441e+003



Chime 2/6/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.578e+003



521

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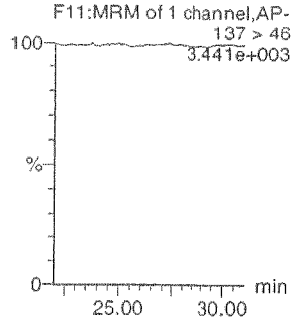
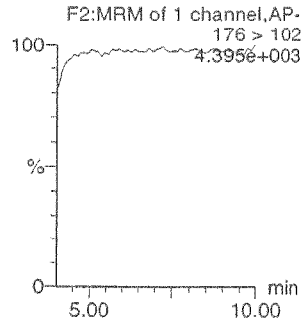
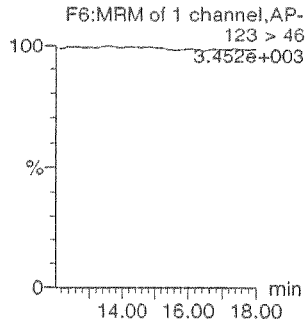
4-Nitrotoluene



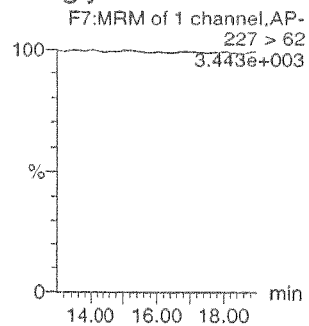
HMX



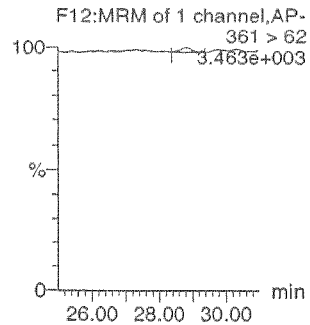
Nitrobenzene



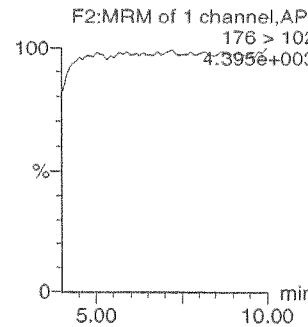
Nitroglycerin



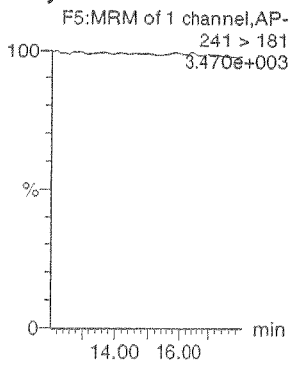
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK08	HMX	176 > 102			3763.164									
XIBLK08	RDX	176 > 102			3763.164									
XIBLK08	135-Trinitrobenzene	213 > 183			3763.164									
XIBLK08	13-Dinitrobenzene-d4	172 > 142	13.22	3763.164		3763.164	3763.164	bb			457.2592	91.5	-8.5	516.7
XIBLK08	13-Dinitrobenzene	168 > 138			3763.164									
XIBLK08	Tetryl	241 > 181			3763.164									
XIBLK08	Nitrobenzene	123 > 46			3763.164									
XIBLK08	Nitroglycerin	227 > 62			3763.164									
XIBLK08	4-Amino-26-dinitrotoluene	197 > 167			34980.785									
XIBLK08	2-Amino-46-dinitrotoluene	197 > 180			34980.785									
XIBLK08	246-Trinitrotoluene	227 > 210			34980.785									
XIBLK08	34-dinitrotoluene	182 > 152			34980.785									
XIBLK08	26-dinitrotoluene	182 > 152			34980.785			MM-	04-Feb-06	10:12:17				
XIBLK08	24-dinitrotoluene	182 > 152			34980.785									
XIBLK08	26-dinitrotoluene-d3	185 > 155	19.86	34980.785		34980.785	34980.785	bb			452.0457	90.4	-9.6	2128.6
XIBLK08	2-Nitrotoluene	137 > 46.0			34980.785									
XIBLK08	4-Nitrotoluene	137 > 46			34980.785									
XIBLK08	3-Nitrotoluene	137 > 46.0			34980.785									
XIBLK08	PETN	361 > 62	28.81	29.847	34980.785	29.847	0.427	bb			1.5111			12.5

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 09-FEB-06 15:12

GEL Data File: EXP0209009a

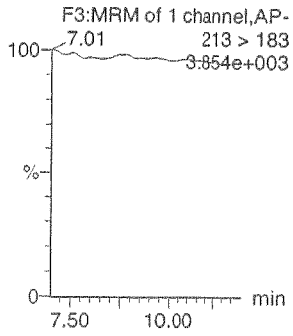
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

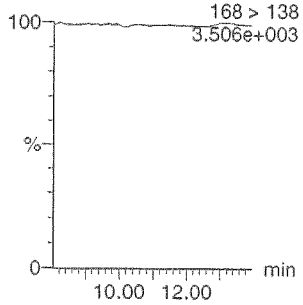
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	467.908
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	450.33
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209009a
Date: 09-Feb-2006
Time: 15:12:58
ID: XIBLK02
Vial: 1:1,A

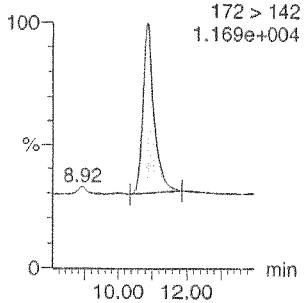
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
7.01 213 > 183
3.854e+003



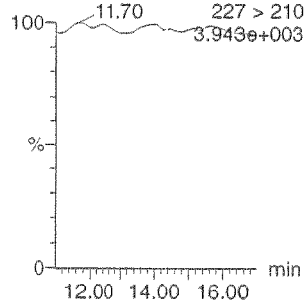
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.506e+003



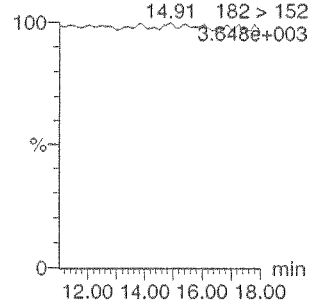
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.169e+004



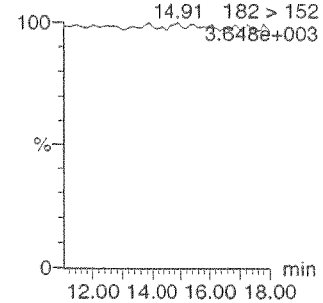
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
11.70 227 > 210
3.943e+003



24-dinitrotoluene
F8:MRM of 2 channels,AP-
14.91 182 > 152
3.648e+003

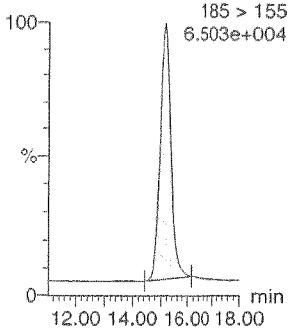


26-dinitrotoluene
F8:MRM of 2 channels,AP-
14.91 182 > 152
3.648e+003

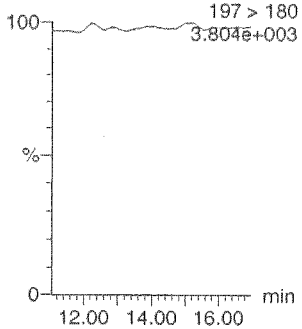


525

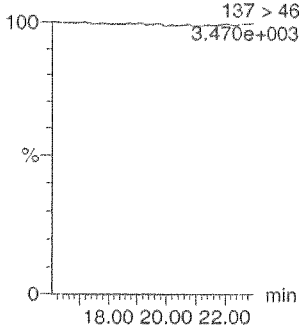
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.503e+004



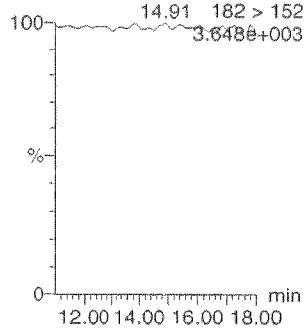
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.804e+003



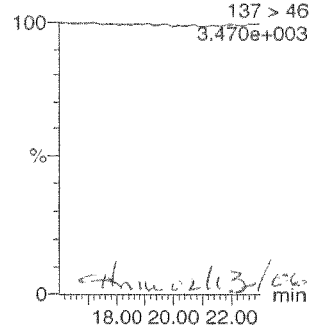
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.470e+003



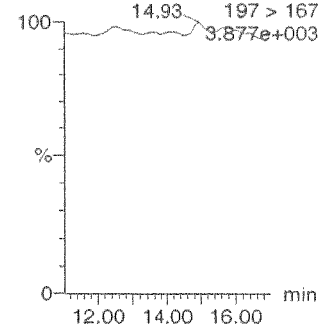
34-dinitrotoluene
F8:MRM of 2 channels,AP-
14.91 182 > 152
3.648e+003



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.470e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
14.93 197 > 167
3.877e+003



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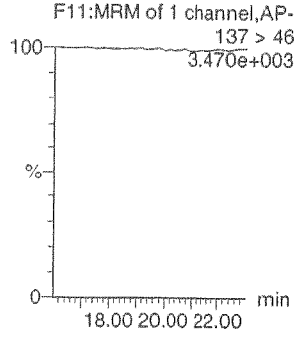
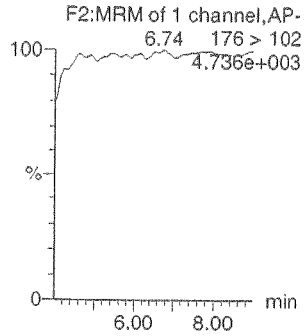
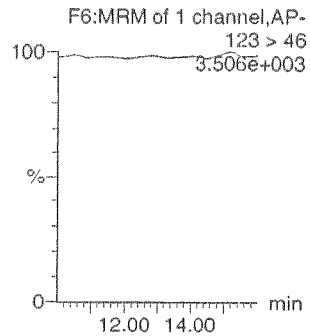
4-Nitrotoluene



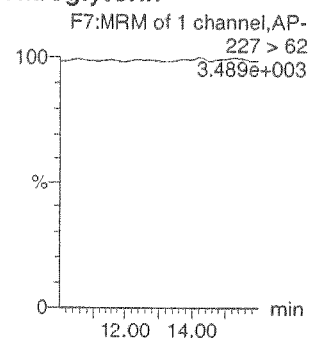
HMX



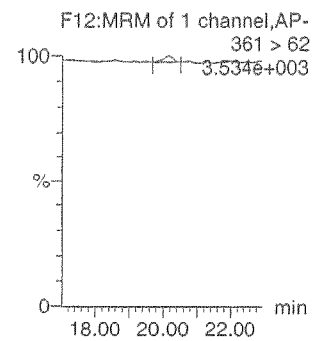
Nitrobenzene



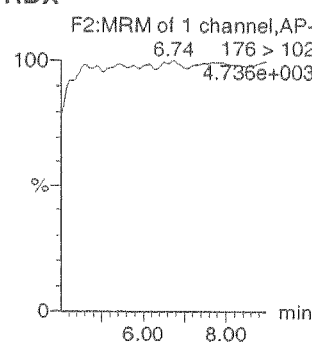
Nitroglycerin



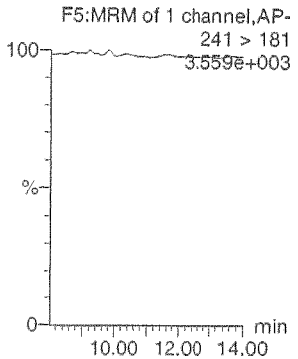
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK02	HMX	176 > 102			3105.247									
XIBLK02	RDX	176 > 102			3105.247									
XIBLK02	135-Trinitrobenzene	213 > 183			3105.247									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	10.85	3105.247		3105.247	3105.247	bb			467.9079	93.6	-6.4	731.1
XIBLK02	13-Dinitrobenzene	168 > 138			3105.247									
XIBLK02	Tetryl	241 > 181			3105.247									
XIBLK02	Nitrobenzene	123 > 46			3105.247									
XIBLK02	Nitroglycerin	227 > 62			3105.247									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			27264.713									
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			27264.713									
XIBLK02	246-Trinitrotoluene	227 > 210			27264.713									
XIBLK02	34-dinitrotoluene	182 > 152			27264.713									
XIBLK02	26-dinitrotoluene	182 > 152			27264.713									
XIBLK02	24-dinitrotoluene	182 > 152			27264.713									
XIBLK02	26-dinitrotoluene-d3	185 > 155	15.12	27264.713		27264.713	27264.713	bb			450.3300	90.1	-9.9	1637.6
XIBLK02	2-Nitrotoluene	137 > 46			27264.713									
XIBLK02	4-Nitrotoluene	137 > 46			27264.713									
XIBLK02	3-Nitrotoluene	137 > 46			27264.713									
XIBLK02	PETN	361 > 62	20.17	28.651	27264.713	28.651	0.525	bb			1.2331			14.4

CH2IM 2/13/06

MM 2/10/06

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 09-FEB-06 16:03

GEL Data File: EXP0209011a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

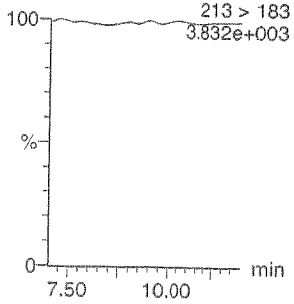
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	505.63
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	467.644
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

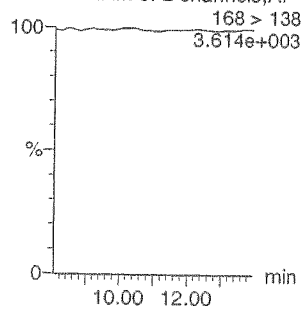
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209011a
Date: 09-Feb-2006
Time: 16:03:57
ID: XIBLK03
Vial: 1:1,A

AWT 2/10/06

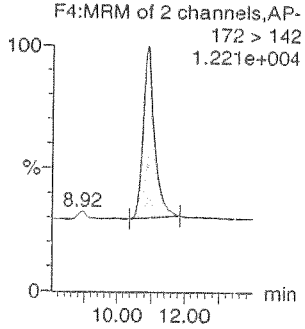
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.832e+003



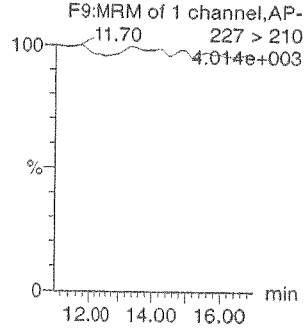
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.614e+003



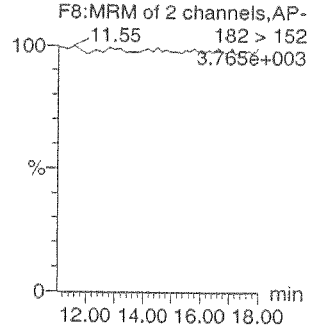
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.221e+004



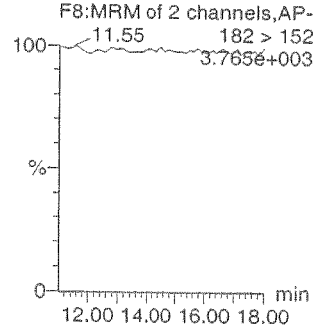
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
11.70
227 > 210
4.014e+003



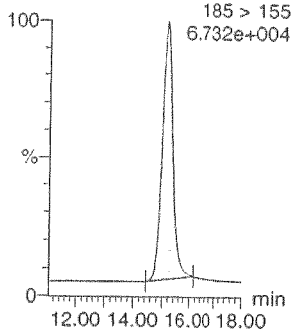
24-dinitrotoluene
F8:MRM of 2 channels,AP-
11.55
182 > 152
3.765e+003



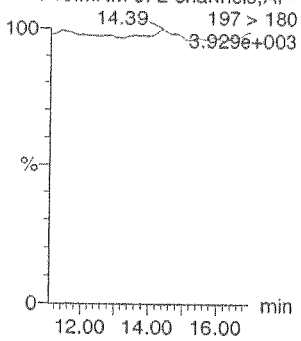
26-dinitrotoluene
F8:MRM of 2 channels,AP-
11.55
182 > 152
3.765e+003



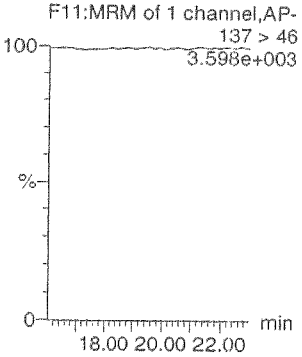
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.732e+004



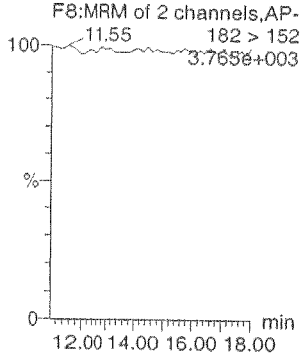
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
14.39
197 > 180
3.929e+003



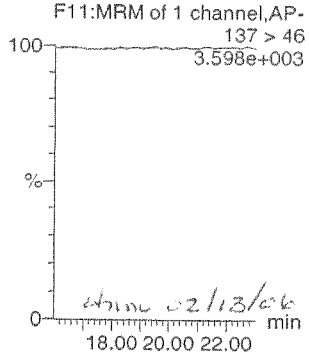
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.598e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
11.55
182 > 152
3.765e+003

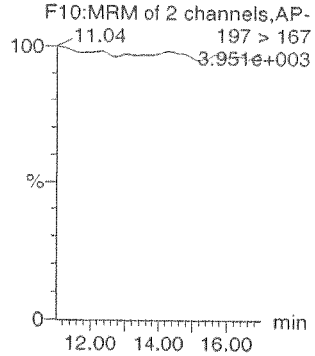


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.598e+003



AWT 2/13/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
11.04
197 > 167
3.951e+003



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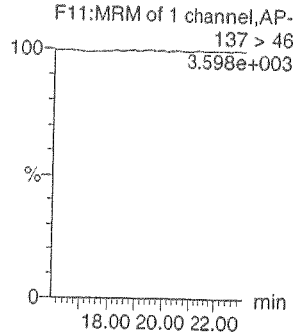
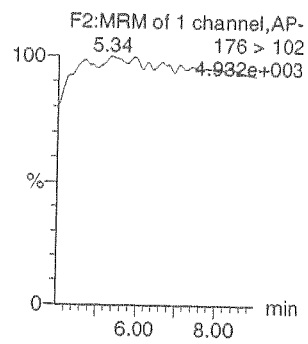
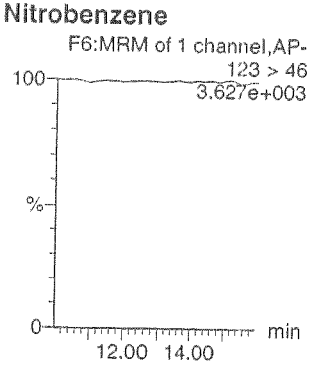
4-Nitrotoluene



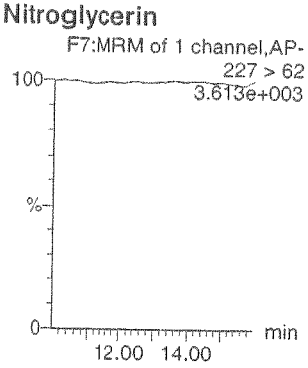
HMX



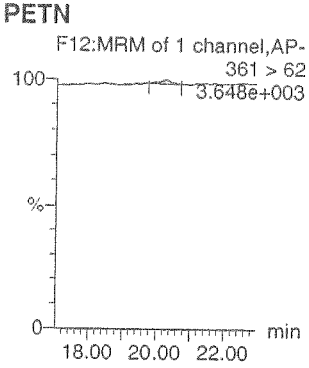
Nitrobenzene



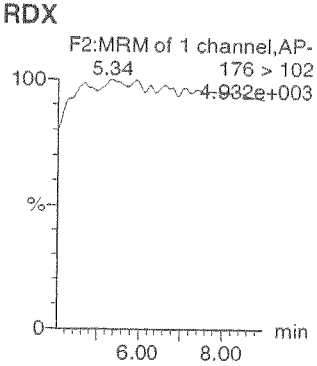
Nitroglycerin



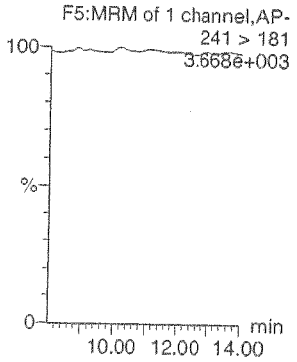
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK03	HMX	176 > 102			3355.585									
XIBLK03	RDX	176 > 102			3355.585									
XIBLK03	135-Trinitrobenzene	213 > 183			3355.585									
XIBLK03	13-Dinitrobenzene-d4	172 > 142	10.88	3355.585		3355.585	3355.585	bb			505.6295	101.1	1.1	186.8
XIBLK03	13-Dinitrobenzene	168 > 138			3355.585									
XIBLK03	Tetryl	241 > 181			3355.585									
XIBLK03	Nitrobenzene	123 > 46			3355.585									
XIBLK03	Nitroglycerin	227 > 62			3355.585									
XIBLK03	4-Amino-26-dinitrotoluene	197 > 167			28312.988									
XIBLK03	2-Amino-46-dinitrotoluene	197 > 180			28312.988									
XIBLK03	246-Trinitrotoluene	227 > 210			28312.988									
XIBLK03	34-dinitrotoluene	182 > 152			28312.988									
XIBLK03	26-dinitrotoluene	182 > 152			28312.988									
XIBLK03	24-dinitrotoluene	182 > 152			28312.988									
XIBLK03	26-dinitrotoluene-d3	185 > 155	15.15	28312.988		28312.988	28312.988	bb			467.6443	93.5	-6.5	409.4
XIBLK03	2-Nitrotoluene	137 > 46			28312.988									
XIBLK03	4-Nitrotoluene	137 > 46			28312.988									
XIBLK03	3-Nitrotoluene	137 > 46			28312.988									
XIBLK03	PETN	361 > 62	20.26	23.023	28312.988	23.023	0.407	bb			0.9542			10.6

02/13/06

2/10/06

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 09-FEB-06 21:35

GEL Data File: EXP0209024a

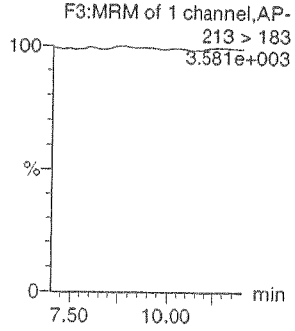
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

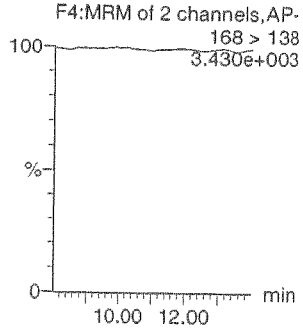
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	0	577.739
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	0	547.35
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
Nitroglycerin	0	0
PETN	0	0
RDX	0	0
Tetryl	0	0
m-Dinitrobenzene	0	0
m-Nitrotoluene	0	0
o-Nitrotoluene	0	0
p-Nitrotoluene	0	0

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209024a
Date: 09-Feb-2006
Time: 21:35:24
ID: XIBLK04
Vial: 1:1,A

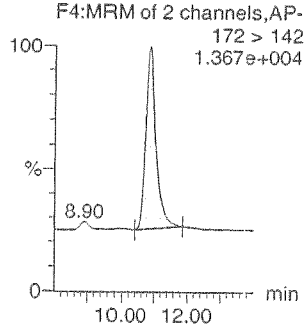
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.581e+003



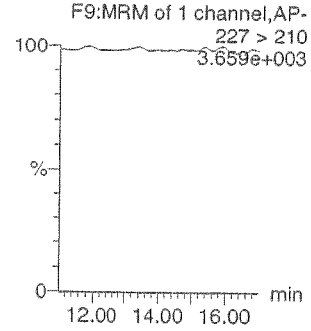
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.430e+003



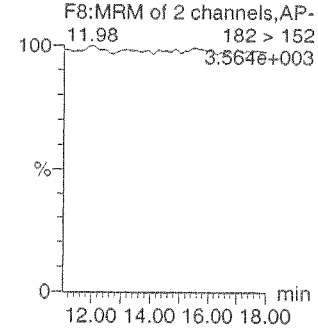
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.367e+004



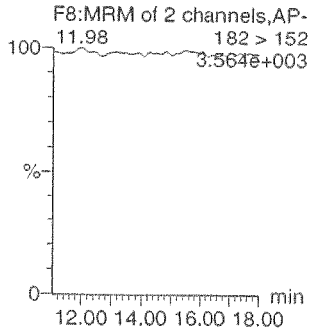
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
3.659e+003



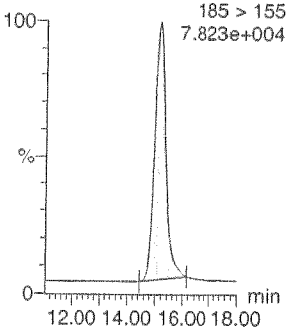
24-dinitrotoluene
F8:MRM of 2 channels,AP-
11.98
182 > 152
3.564e+003



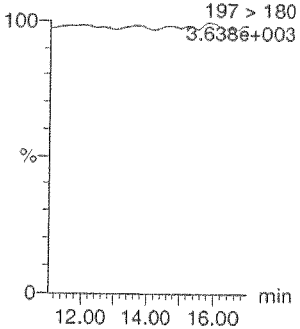
26-dinitrotoluene
F8:MRM of 2 channels,AP-
11.98
182 > 152
3.564e+003



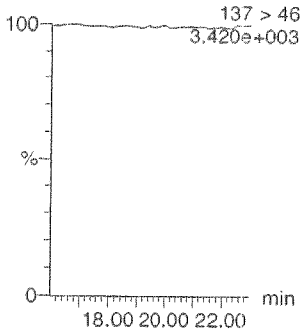
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.823e+004



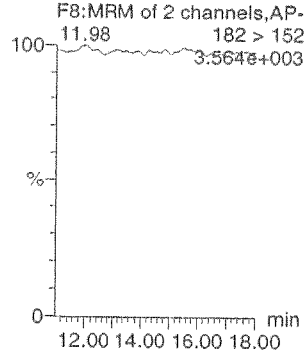
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.638e+003



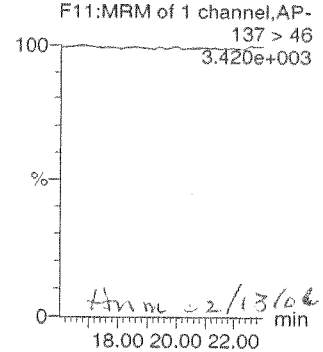
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.420e+003



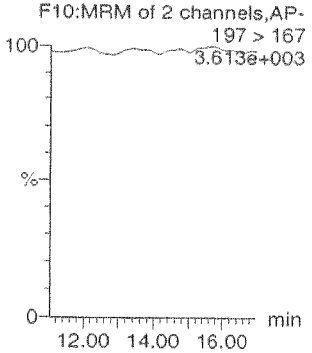
34-dinitrotoluene
F8:MRM of 2 channels,AP-
11.98
182 > 152
3.564e+003



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.420e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.613e+003



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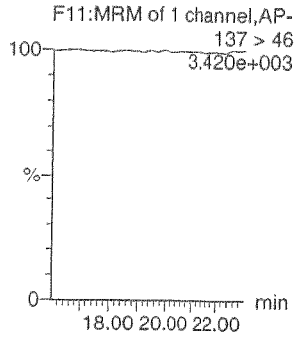
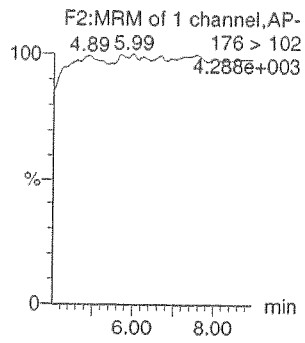
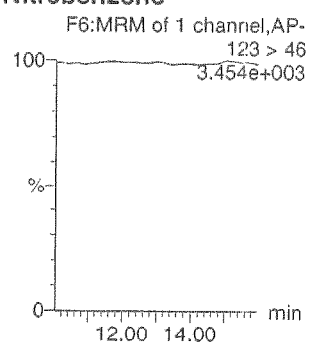
4-Nitrotoluene



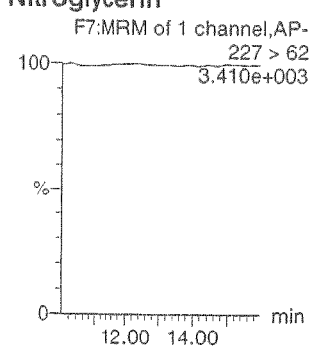
HMX



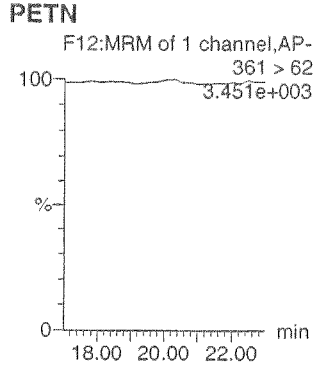
Nitrobenzene



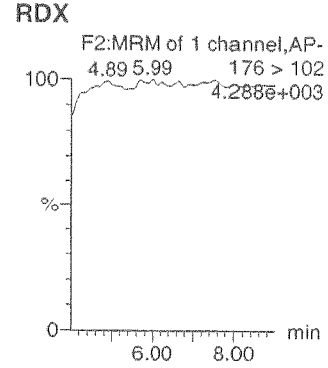
Nitroglycerin



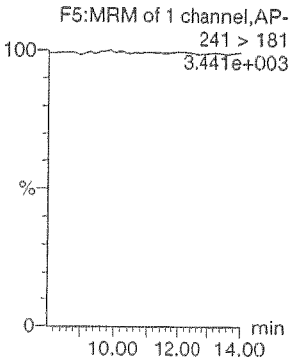
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
XIBLK04	HMX	176 > 102			3834.139									
XIBLK04	RDX	176 > 102			3834.139									
XIBLK04	135-Trinitrobenzene	213 > 183			3834.139									
XIBLK04	13-Dinitrobenzene-d4	172 > 142	10.85	3834.139		3834.139	3834.139	bb			577.7395	115.5	15.5	663.0
XIBLK04	13-Dinitrobenzene	168 > 138			3834.139									
XIBLK04	Tetryl	241 > 181			3834.139									
XIBLK04	Nitrobenzene	123 > 46			3834.139									
XIBLK04	Nitroglycerin	227 > 62			3834.139									
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167			33138.691									
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180			33138.691									
XIBLK04	246-Trinitrotoluene	227 > 210			33138.691									
XIBLK04	34-dinitrotoluene	182 > 152			33138.691									
XIBLK04	26-dinitrotoluene	182 > 152			33138.691									
XIBLK04	24-dinitrotoluene	182 > 152			33138.691									
XIBLK04	26-dinitrotoluene-d3	185 > 155	15.12	33138.691		33138.691	33138.691	bb			547.3503	109.5	9.5	4883.1
XIBLK04	2-Nitrotoluene	137 > 46			33138.691									
XIBLK04	4-Nitrotoluene	137 > 46			33138.691									
XIBLK04	3-Nitrotoluene	137 > 46			33138.691									
XIBLK04	PETN	361 > 62			33138.691									

HMM 02/13/06

MM 2/10/06

535

MM = Manual Modification

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

Lab Code: GEL

Analysis Date: 09-FEB-06 17:03

Instrument ID: LCMSMS

GEL Job No(SDG): 154614

Lab Sample ID: XIBLK02

GEL Data File: EXS0209010.wiff

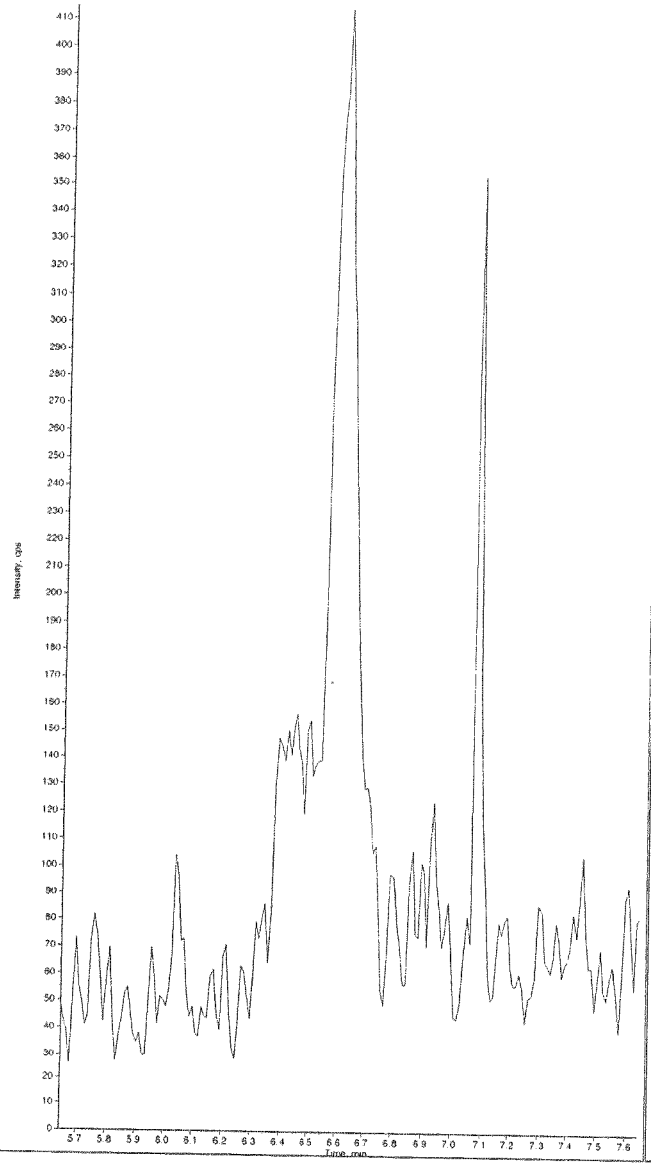
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Sample Name: "XIBLK02" Sample ID: "|1|LXS1" File: "EXS0209010.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 05:03:55 PM

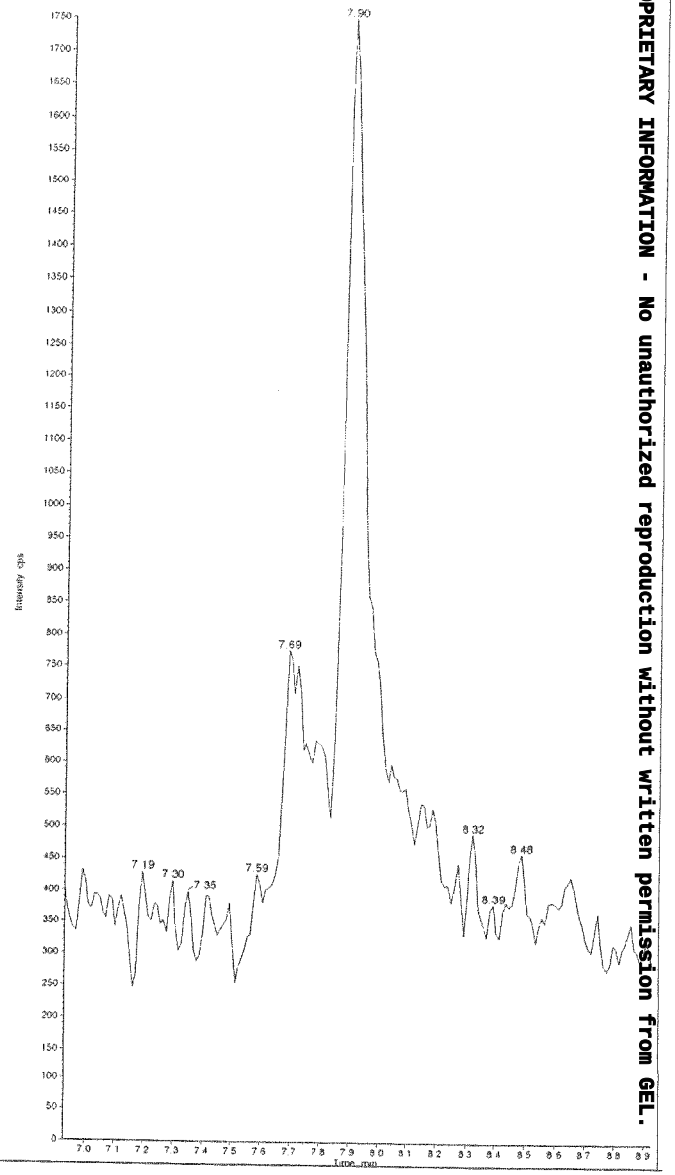
Modified: No



Sample Name: "XIBLK02" Sample ID: "|1|LXS1" File: "EXS0209010.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 05:03:55 PM

Modified: No



537

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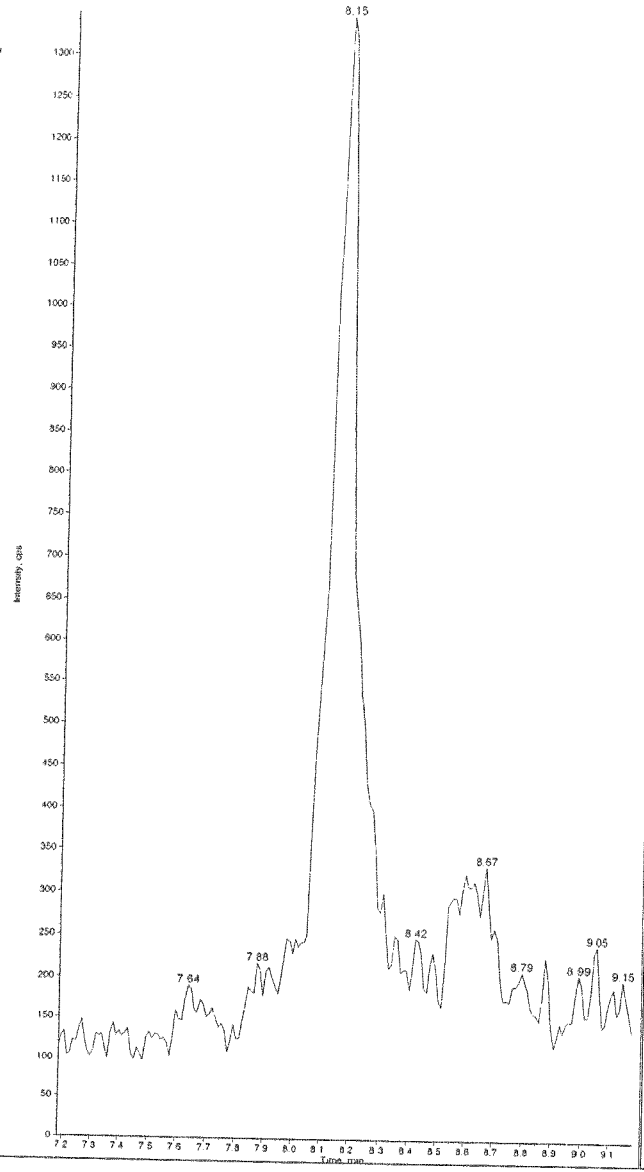
Sample Name: "XIBLK02" Sample ID: "|1|LXS1" File: "EXS0209010.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 05:03:55 PM

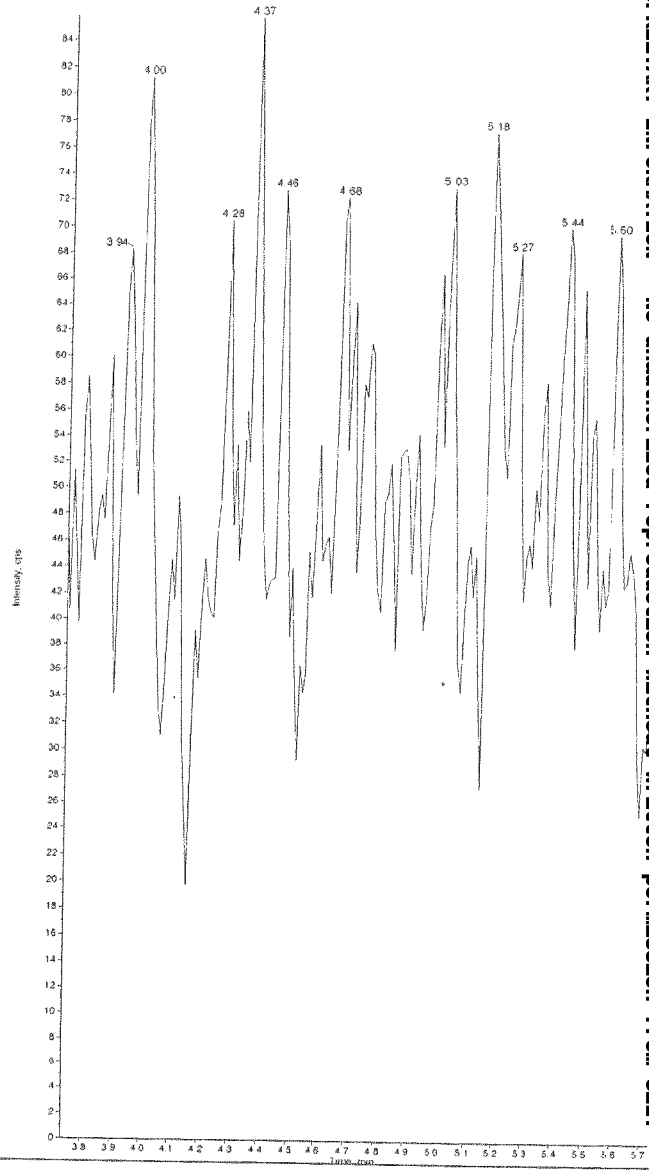
Modified: No



Sample Name: "XIBLK02" Sample ID: "|1|LXS1" File: "EXS0209010.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 05:03:55 PM

Modified: No



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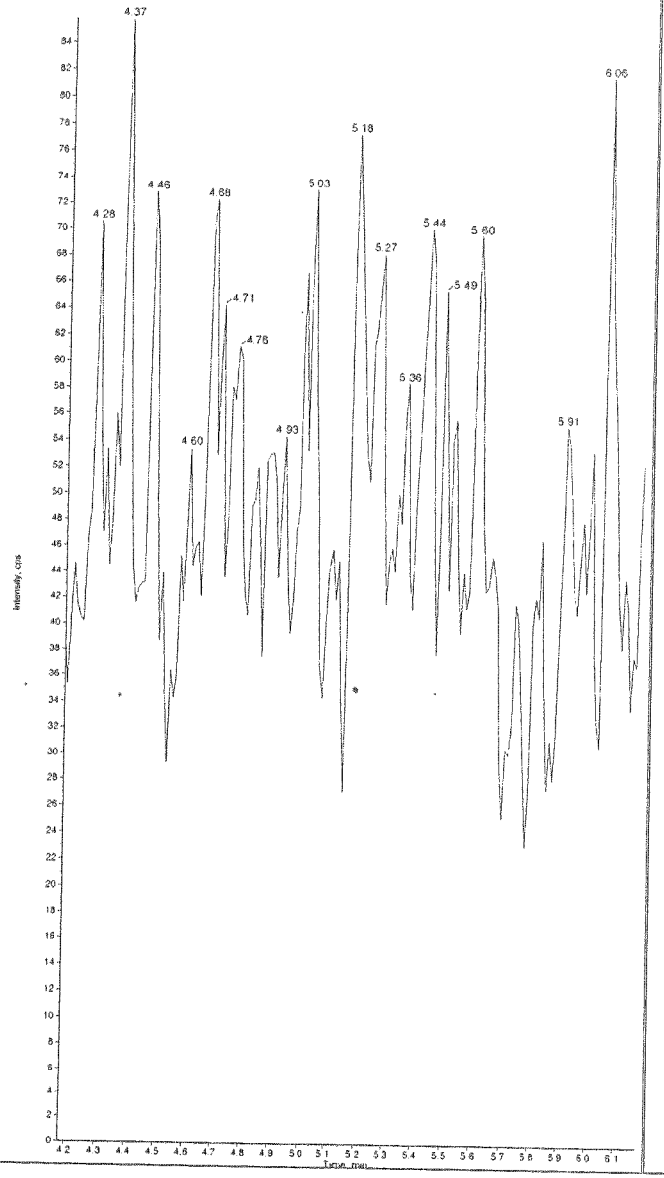
XRS
2/10/06

Sample Name: "XIBLK02" Sample ID: "|1|LXS1" File: "EXS0209010.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 05:03:55 PM

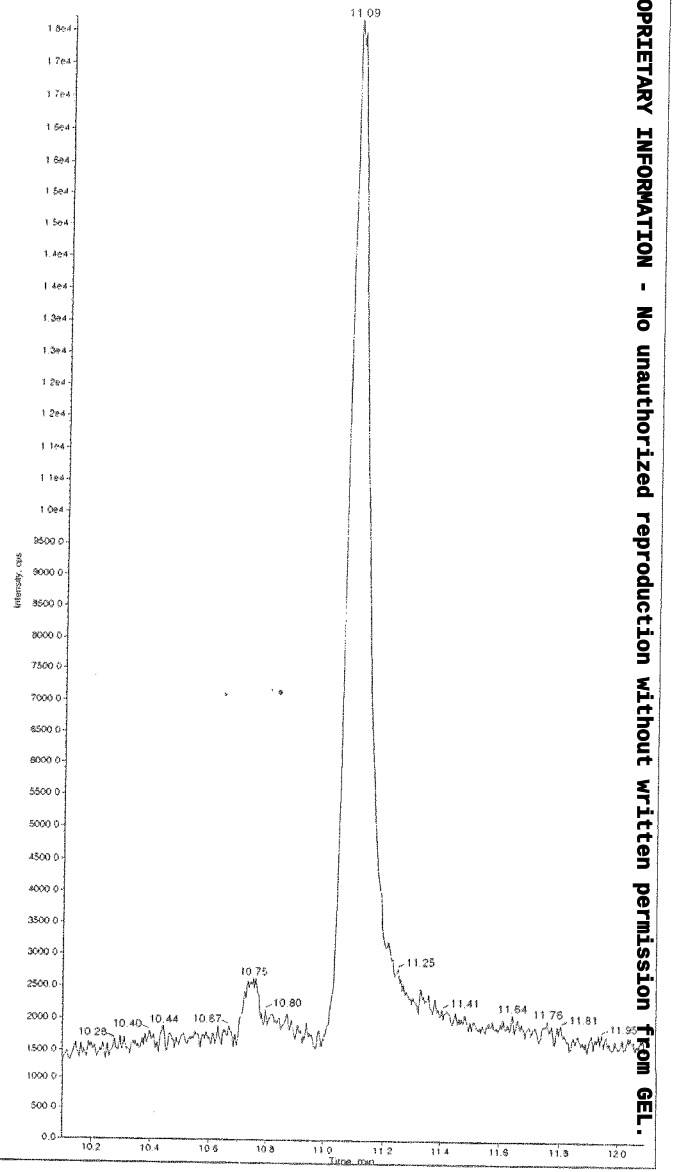
Modified: No



Sample Name: "XIBLK02" Sample ID: "|1|LXS1" File: "EXS0209010.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 05:03:55 PM

Modified: No



dhm 02/13/06

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 09-FEB-06 17:48

GEL Data File: EXS0209012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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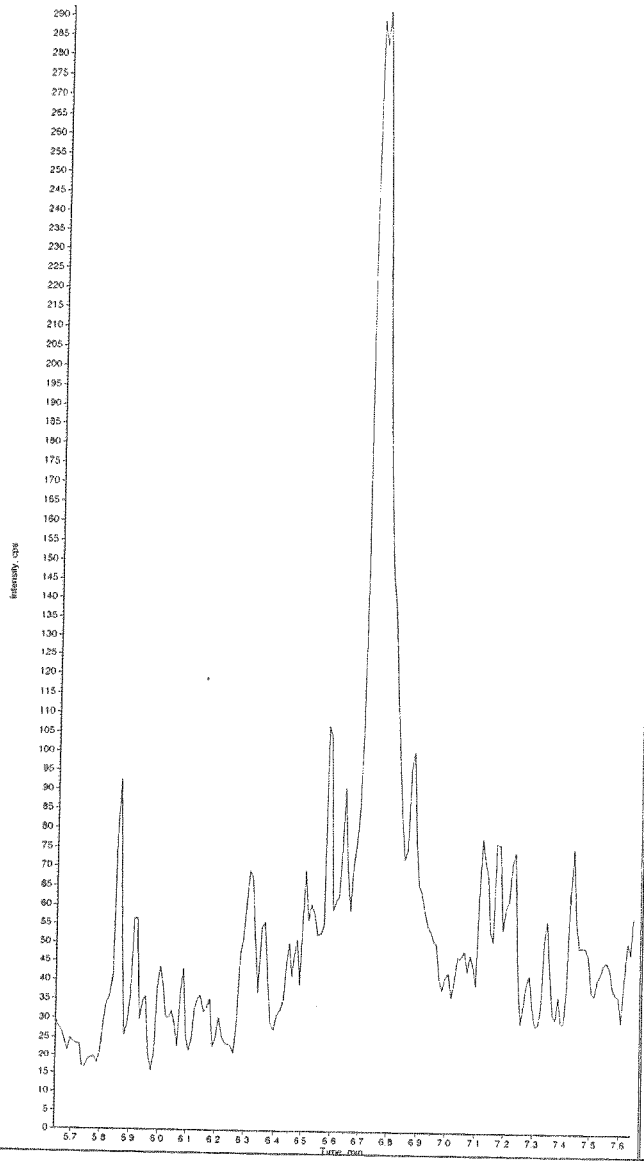
Sample Name: "XIBLK03" Sample ID: "|1|LXS1" File: "EXS0209012.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

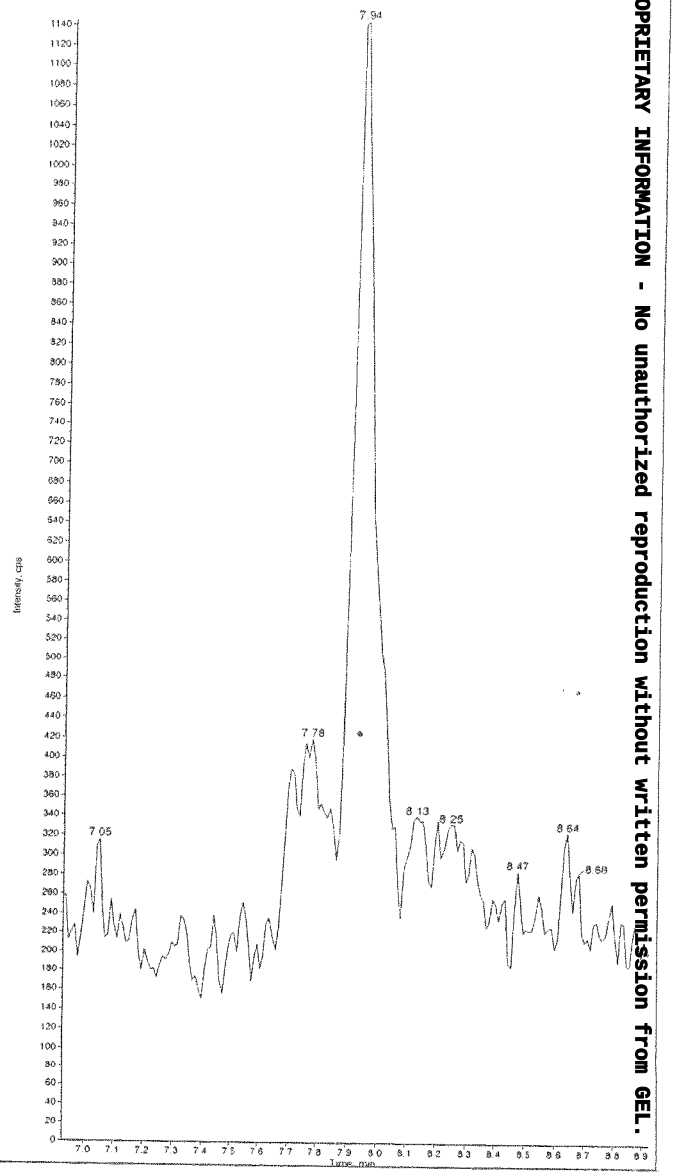
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	05:48:45 PM
Modified:	No



541

Sample Name: "XIBLK03" Sample ID: "|1|LXS1" File: "EXS0209012.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

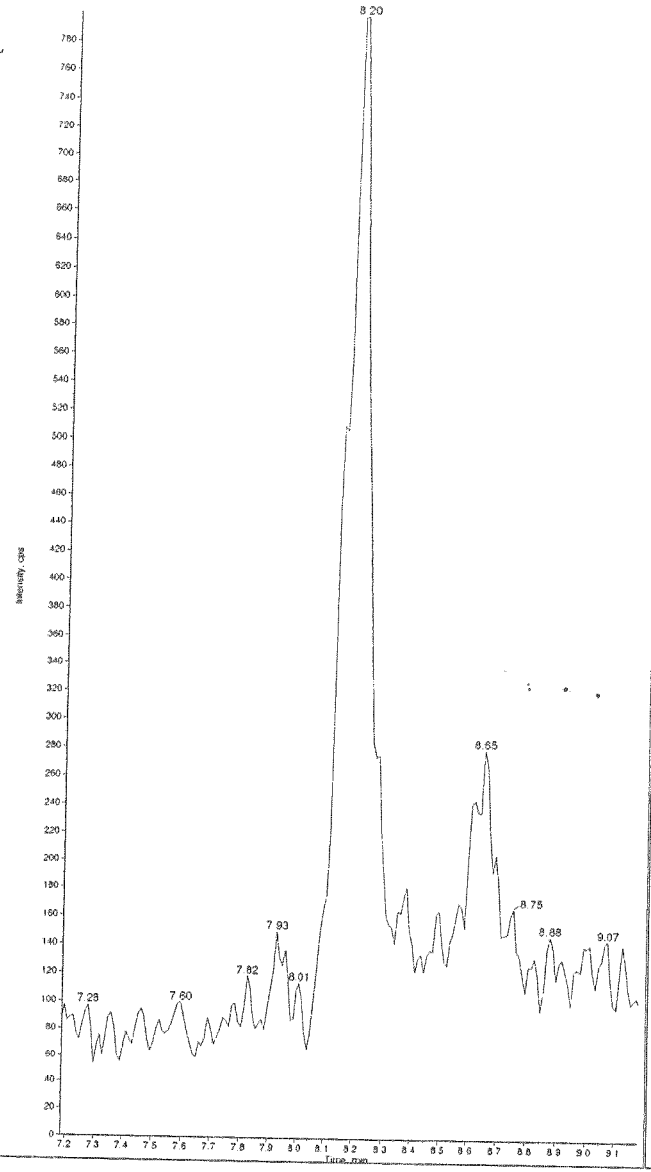
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	05:48:45 PM
Modified:	No



LRS 2/10/06

Sample Name: "XIBLK03" Sample ID: "|1|LXS1" File: "EXS0209012.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

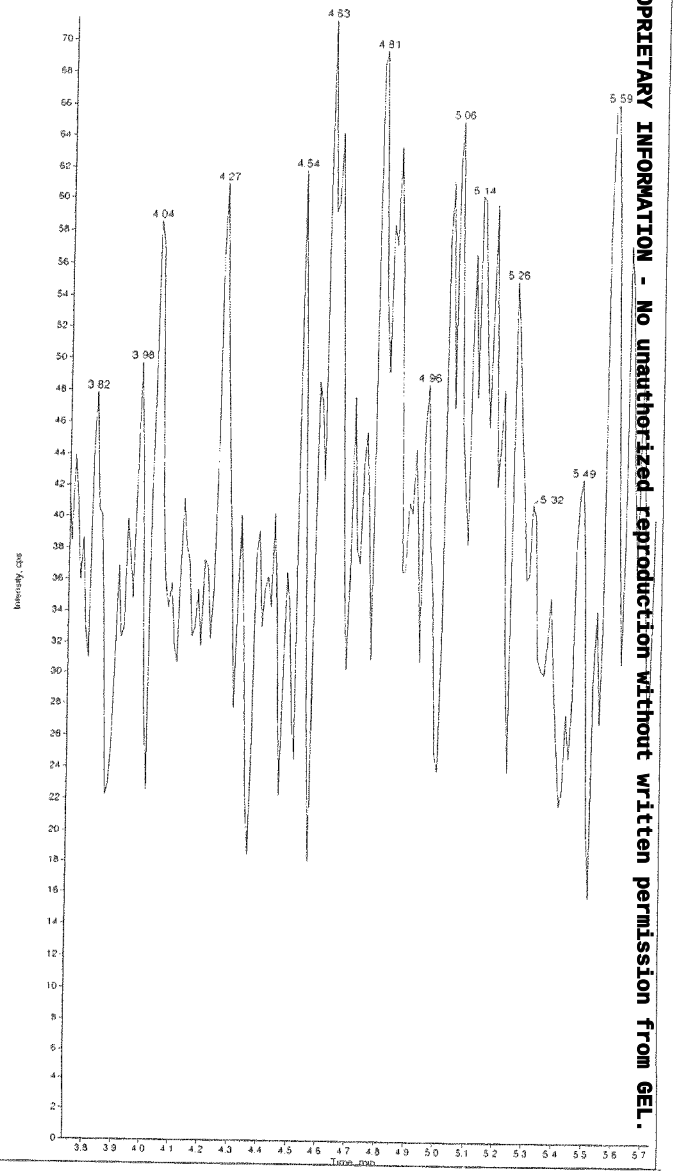
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	05:48:45 PM
Modified:	No



542

Sample Name: "XIBLK03" Sample ID: "|1|LXS1" File: "EXS0209012.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	05:48:45 PM
Modified:	No



dmm 02/13/06

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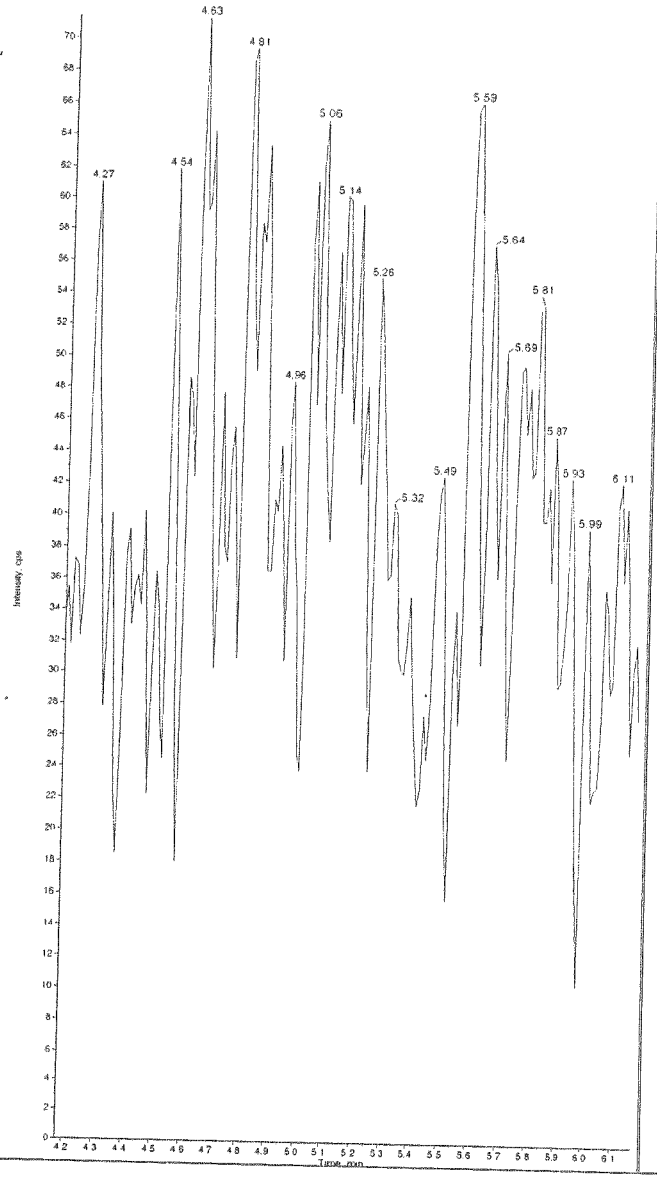
KPS 2/10/06

Sample Name: "XIBLK03" Sample ID: "|1|LXS1" File: "EXS0209012.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

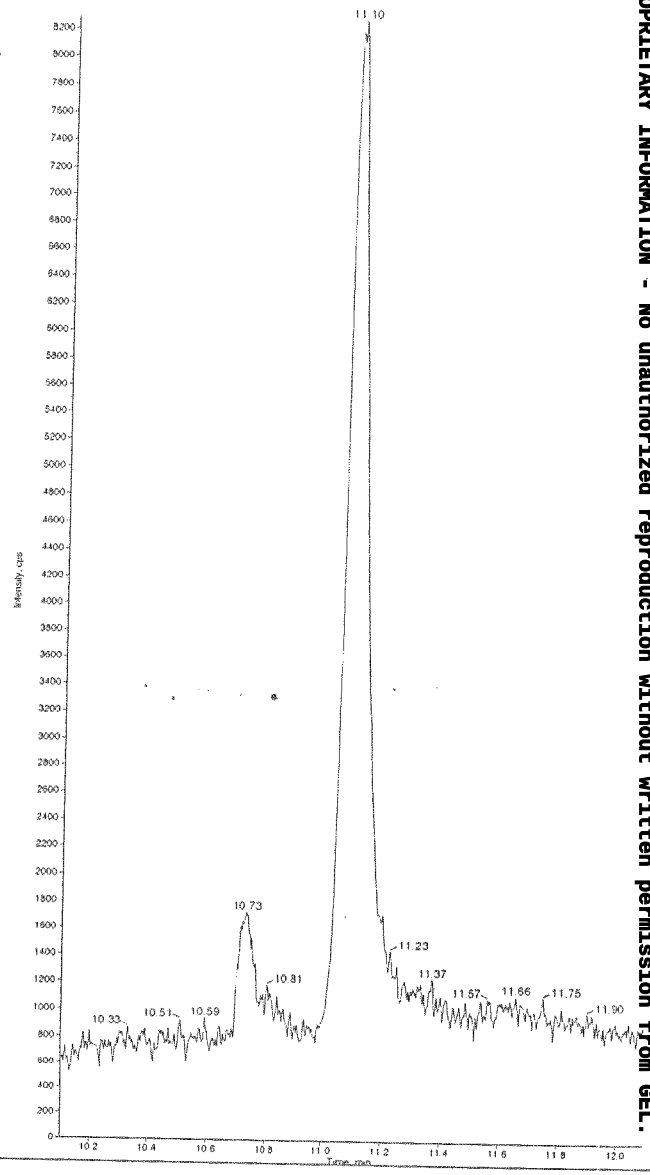
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	05:48:45 PM
Modified:	No



543

Sample Name: "XIBLK03" Sample ID: "|1|LXS1" File: "EXS0209012.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	05:48:45 PM
Modified:	No



APM 02/13/06

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 09-FEB-06 20:48

GEL Data File: EXS0209020.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

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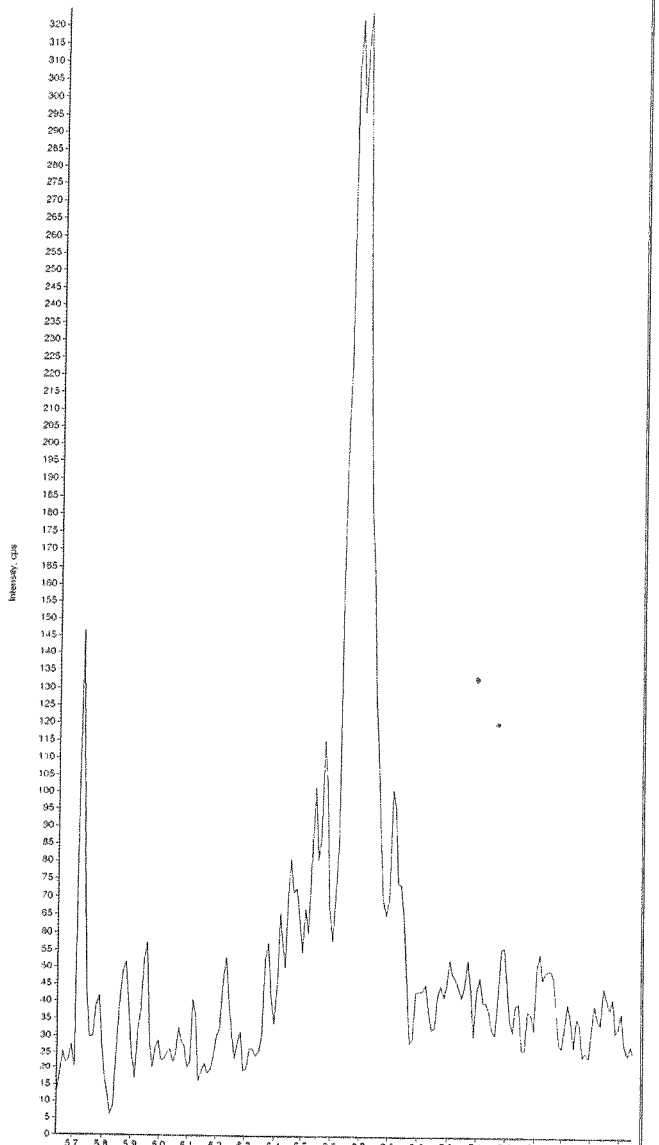
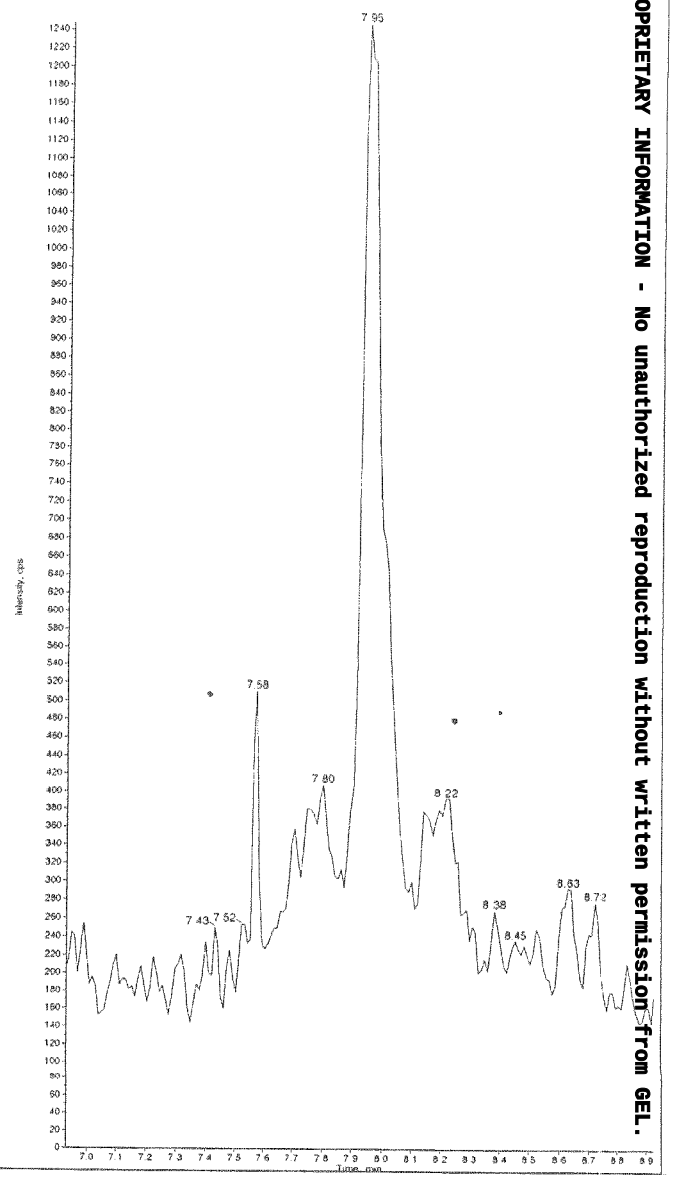
Sample Name: "XIBLK04" Sample ID: "|1|LXS1" File: "EXS0209020.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	08:48:19 PM
Modified:	No



Sample Name: "XIBLK04" Sample ID: "|1|LXS1" File: "EXS0209020.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	08:48:19 PM
Modified:	No



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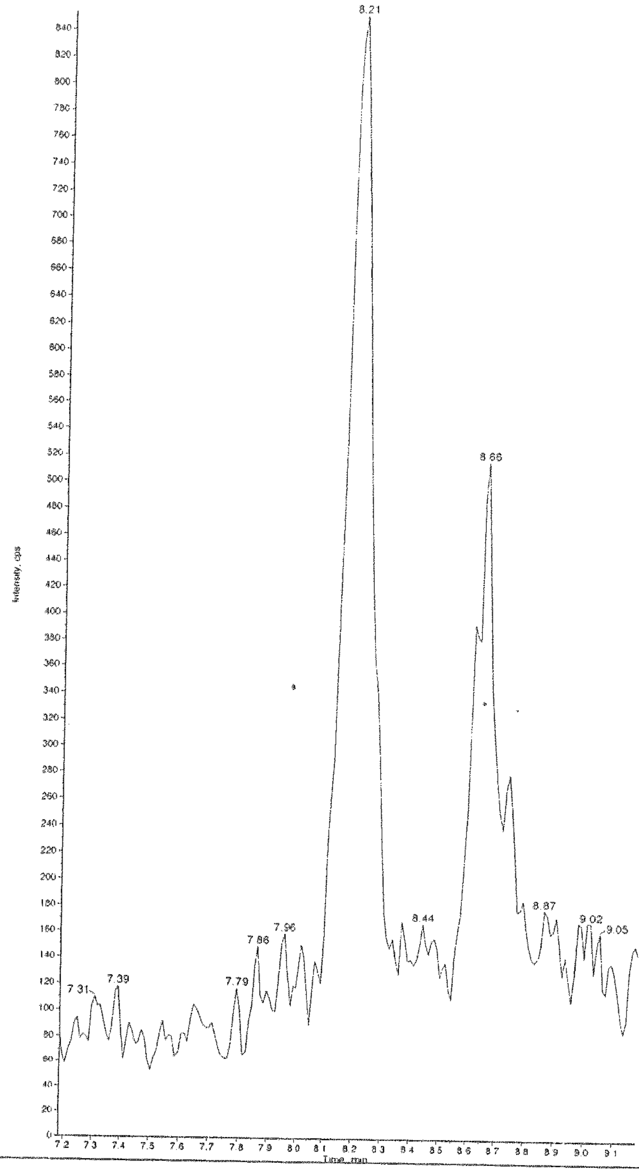
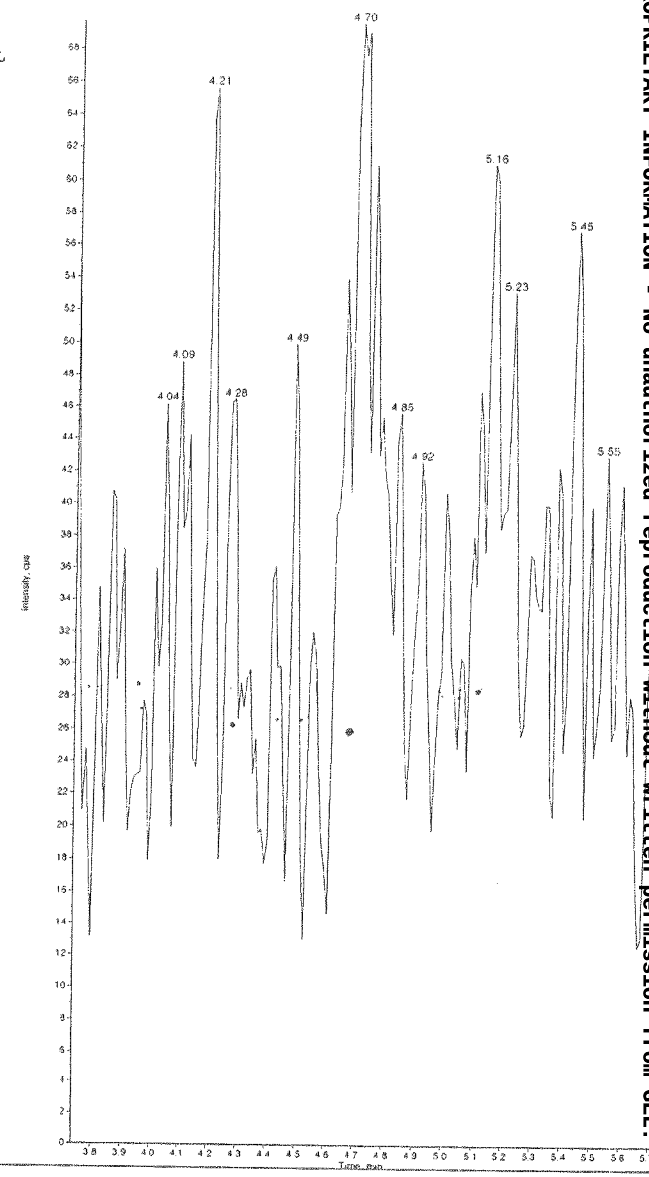
Sample Name: "XIBLK04" Sample ID: "|1|LXS1" File: "EXS0209020.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	08:48:19 PM
Modified:	No



Sample Name: "XIBLK04" Sample ID: "|1|LXS1" File: "EXS0209020.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	08:48:19 PM
Modified:	No



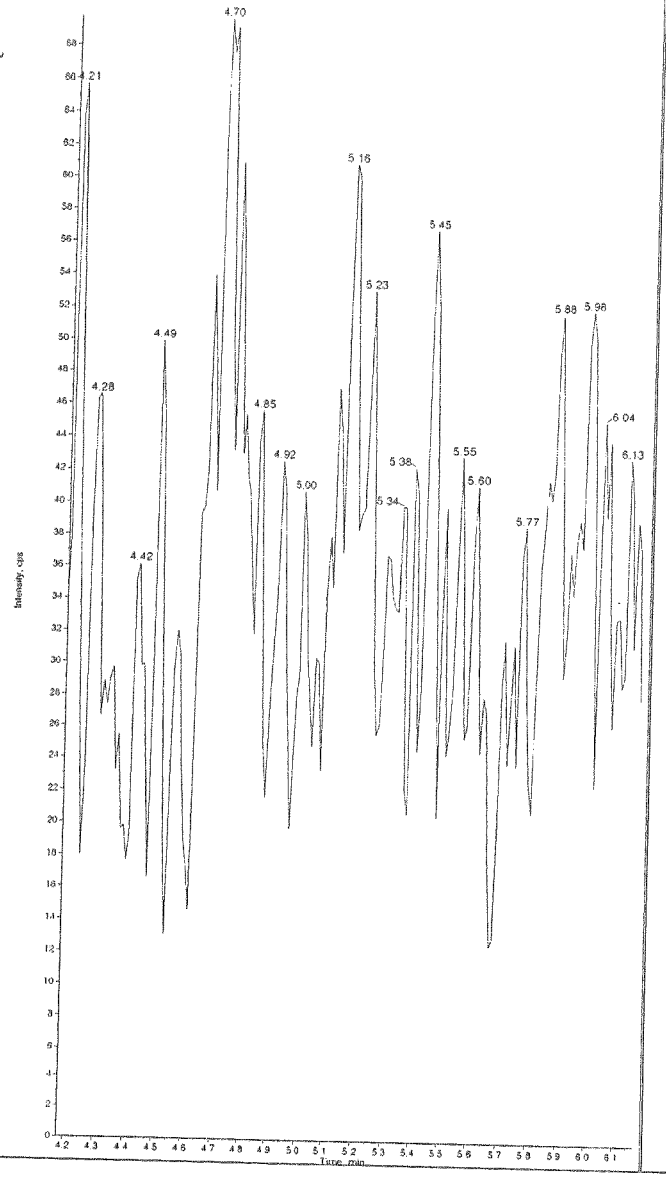
LRS 2/10/06

Hmm 02/13/06

YRS 2/10/06

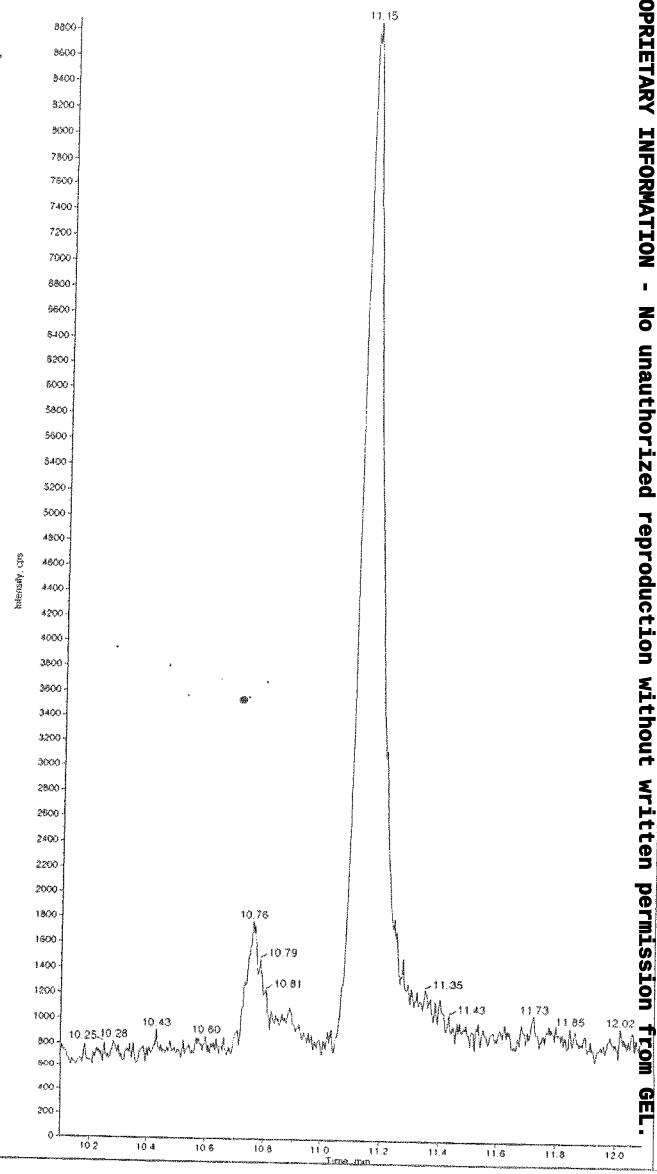
Sample Name: "XIBLK04" Sample ID: "|1|LXS1" File: "EXS0209020.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_8" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	08:48:19 PM
Modified:	No



Sample Name: "XIBLK04" Sample ID: "|1|LXS1" File: "EXS0209020.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	08:48:19 PM
Modified:	No



Hrm 02/13/06

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 10-FEB-06 00:55

GEL Data File: EXS0209031.wiff

Instrument ID: LCMSMS

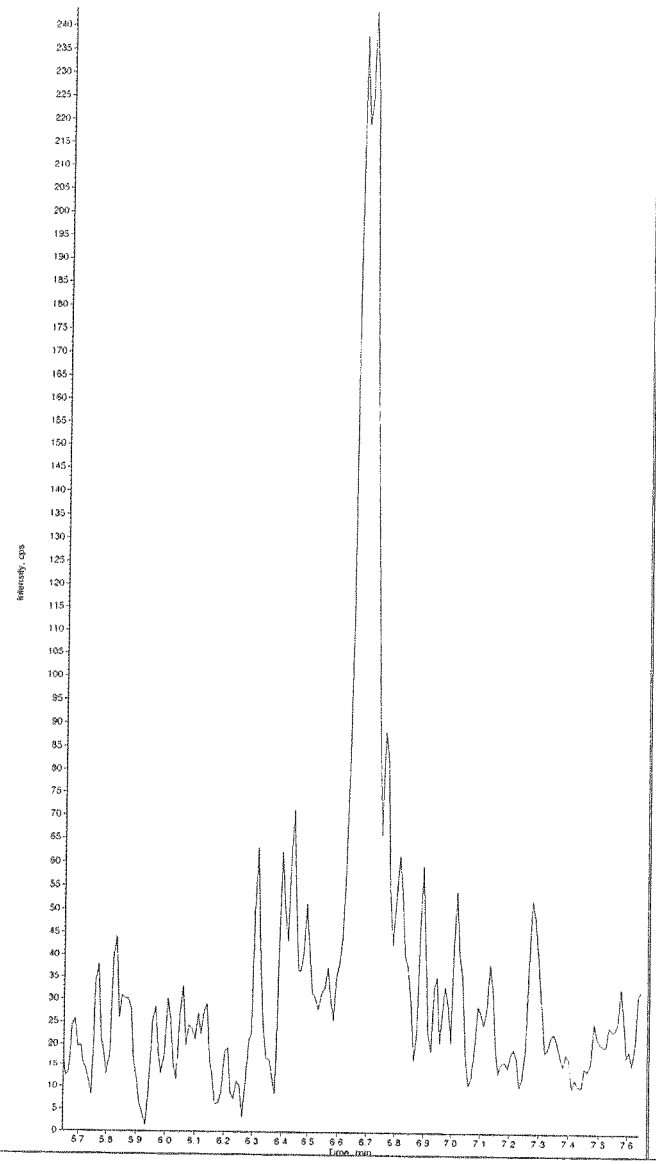
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

2/10/06

Sample Name: "XIBLK05" Sample ID: "|1|LXS1" File: "EXS0209031.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

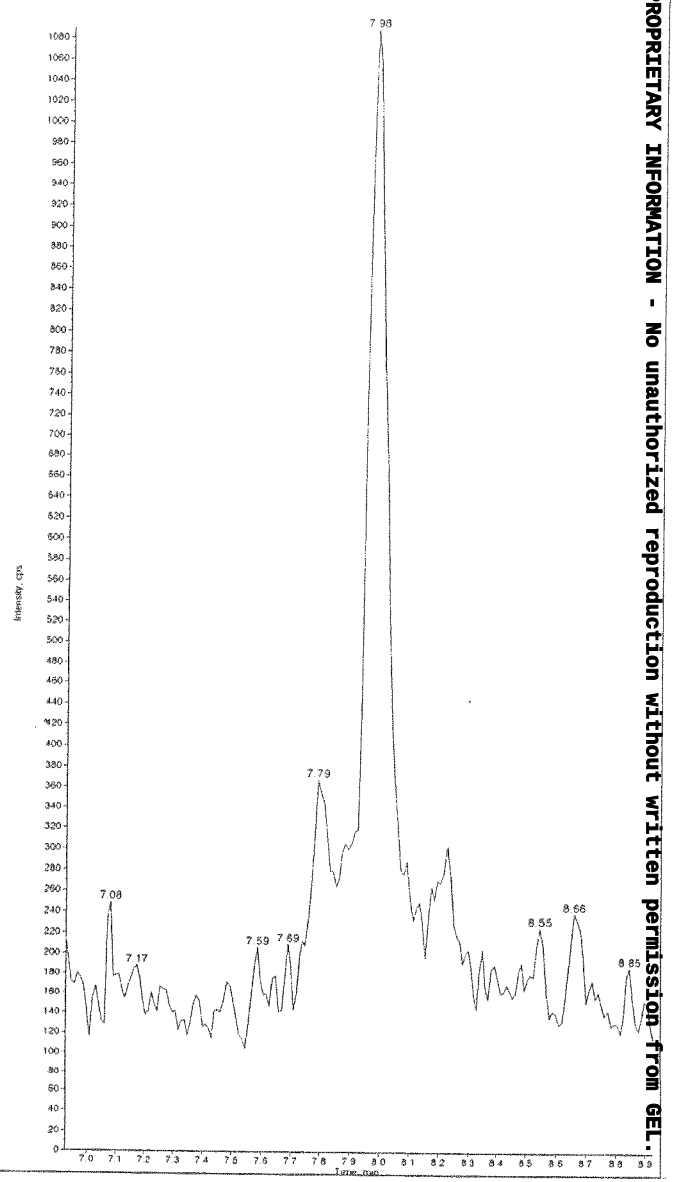
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:55:20 AM
Modified:	No



549

Sample Name: "XIBLK05" Sample ID: "|1|LXS1" File: "EXS0209031.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:55:20 AM
Modified:	No



2/13/06

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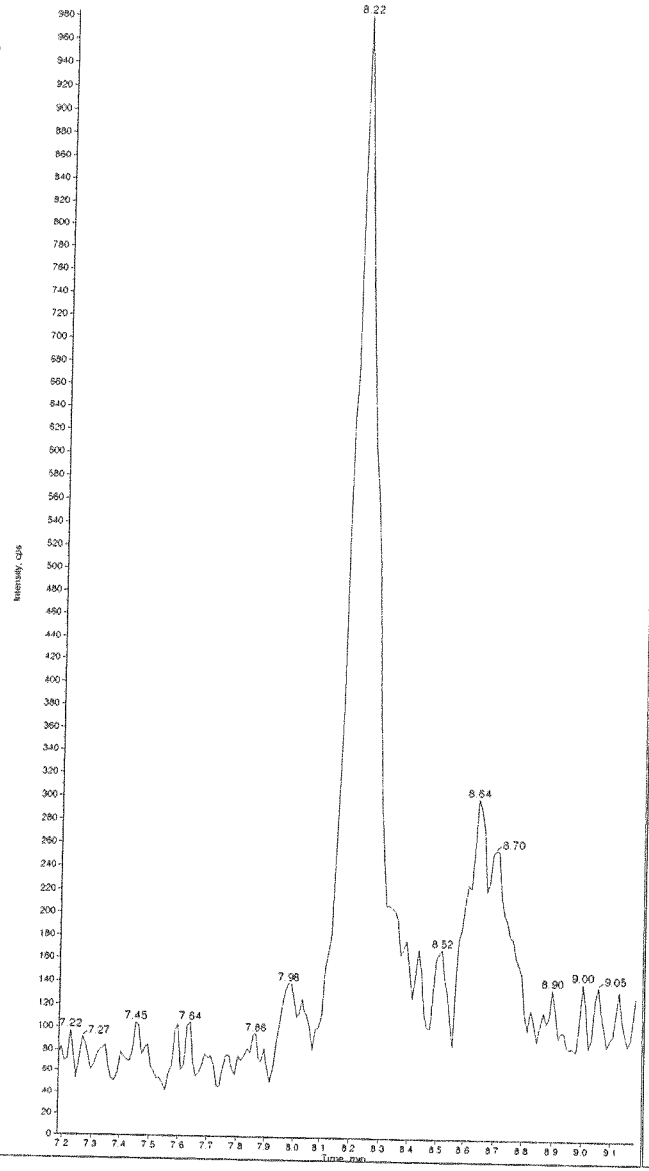
Sample Name: "XIBLK05" Sample ID: "|1|LXS1" File: "EXS0209031.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

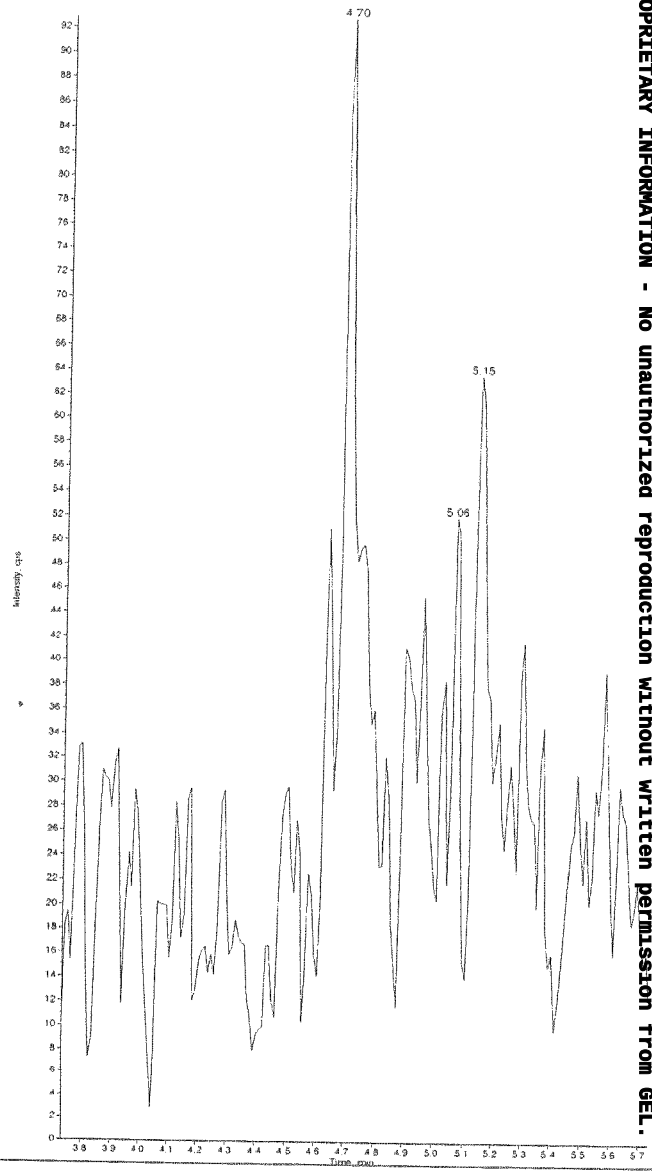
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:55:20 AM
Modified:	No



550

Sample Name: "XIBLK05" Sample ID: "|1|LXS1" File: "EXS0209031.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:55:20 AM
Modified:	No

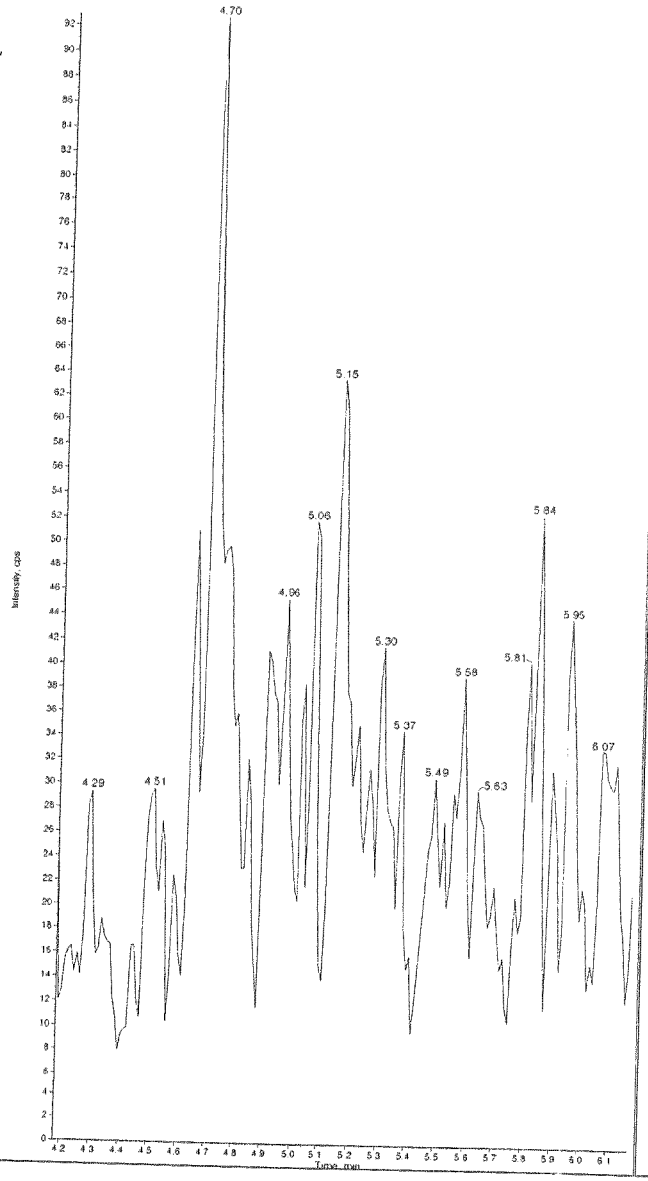


LRS 2/10/06

Sample Name: "XIBLK05" Sample ID: "|1|LXS1" File: "EXS0209031.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_8" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 12:55:20 AM

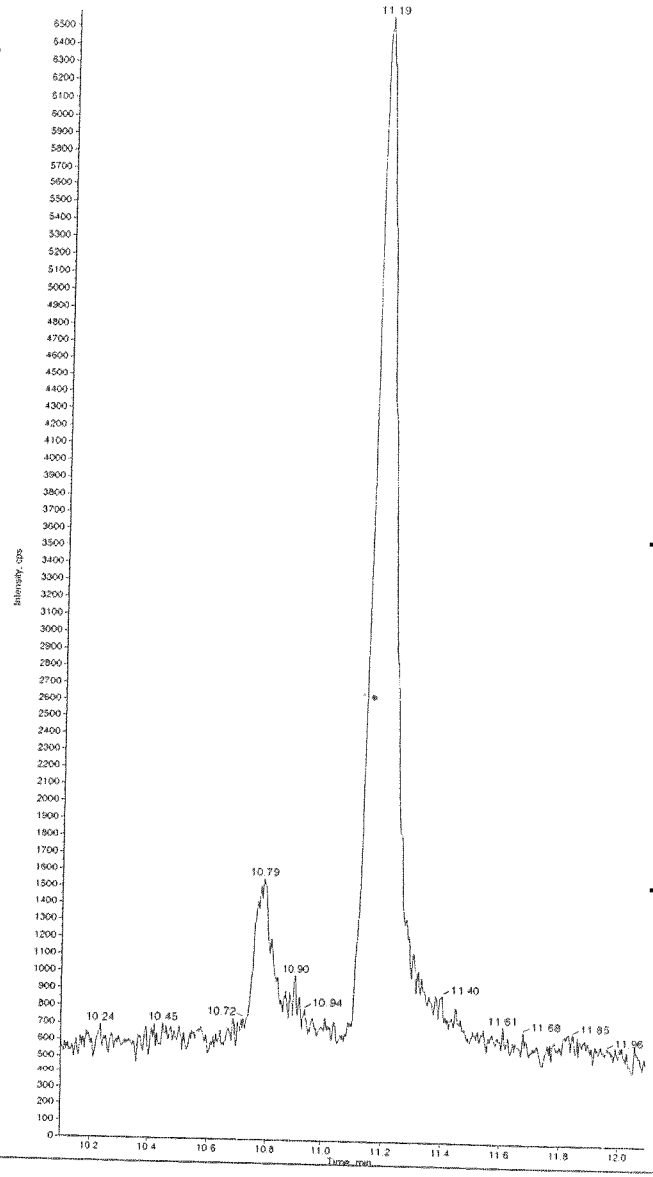
Modified: No



Sample Name: "XIBLK05" Sample ID: "|1|LXS1" File: "EXS0209031.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 12:55:20 AM

Modified: No



Anne 2/13/06

551

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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 10-FEB-06 03:10

GEL Data File: EXS0209037.wiff

Instrument ID: LCMSMS

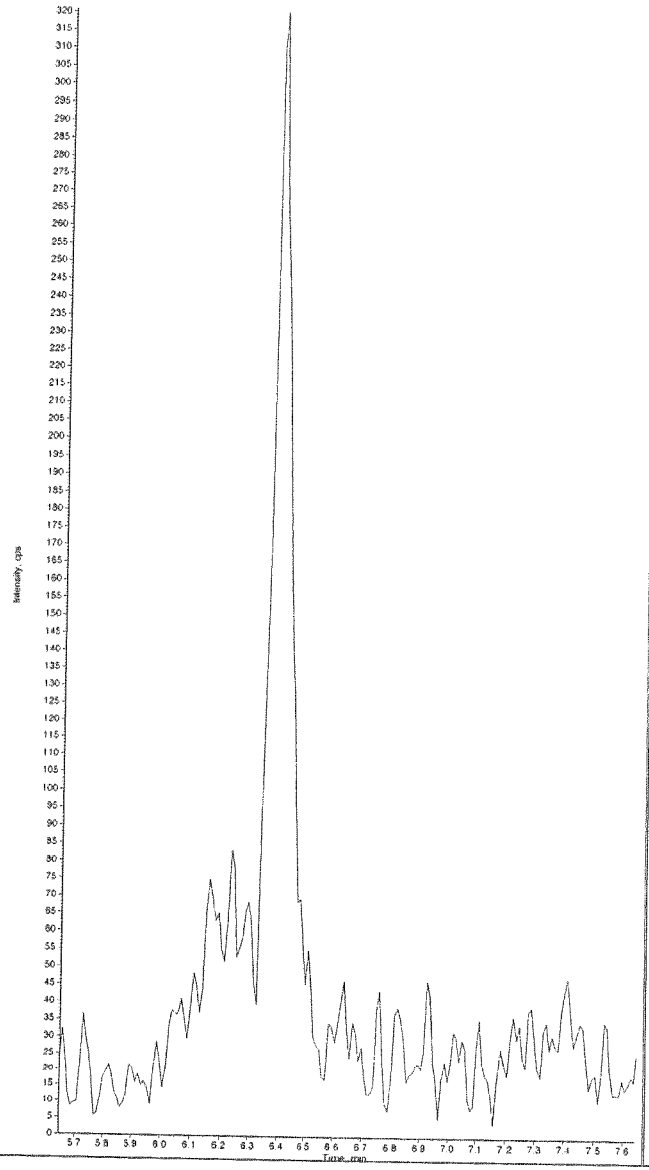
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Sample Name: "XIBLK06" Sample ID: "|1|LXS1" File: "EXS0209037.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 03:10:06 AM

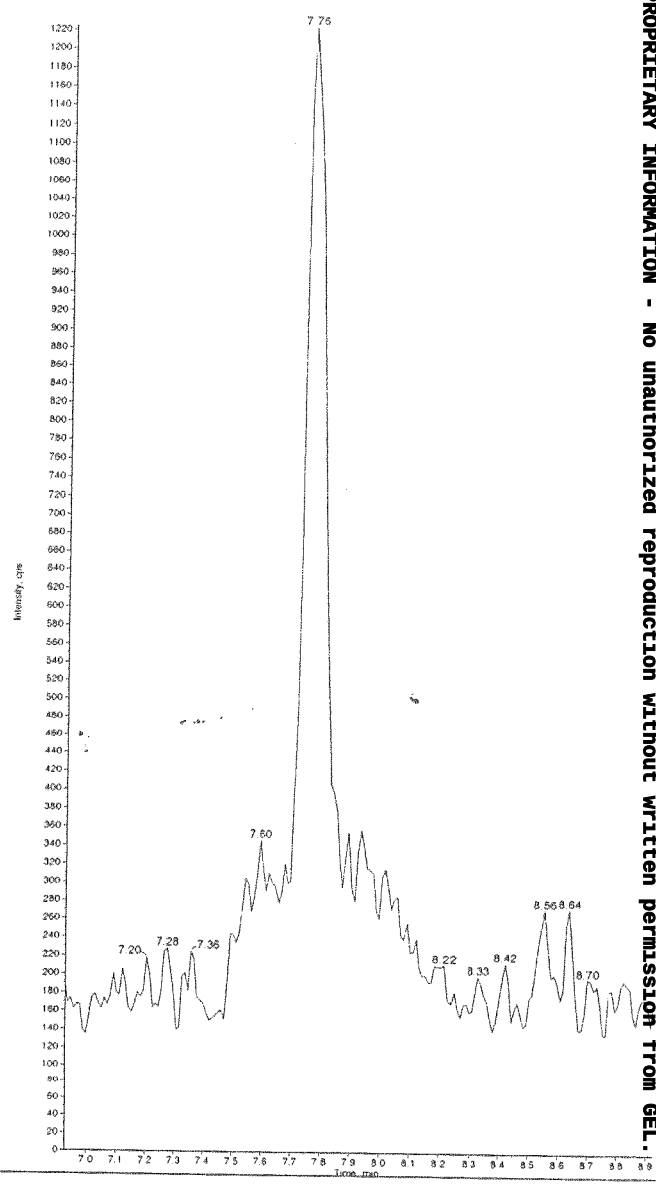
Modified: No



Sample Name: "XIBLK06" Sample ID: "|1|LXS1" File: "EXS0209037.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 03:10:06 AM

Modified: No



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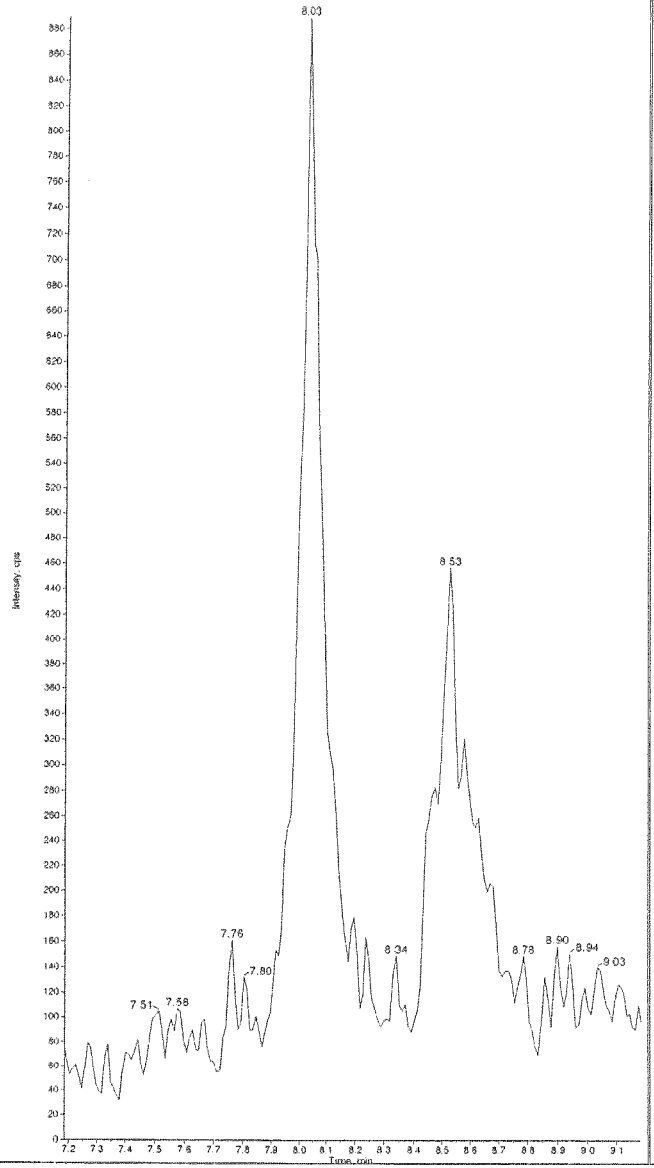
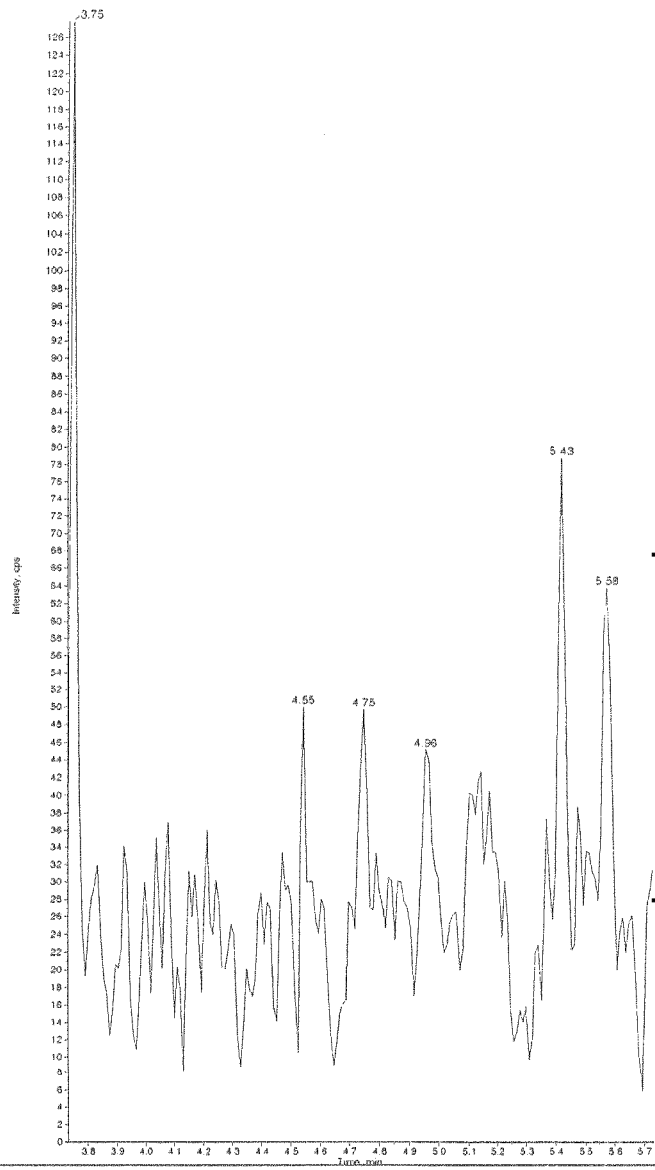
Sample Name: "XIBLK06" Sample ID: "|1|LXS1" File: "EXS0209037.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	03:10:06 AM
Modified:	No



Sample Name: "XIBLK06" Sample ID: "|1|LXS1" File: "EXS0209037.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	03:10:06 AM
Modified:	No



554

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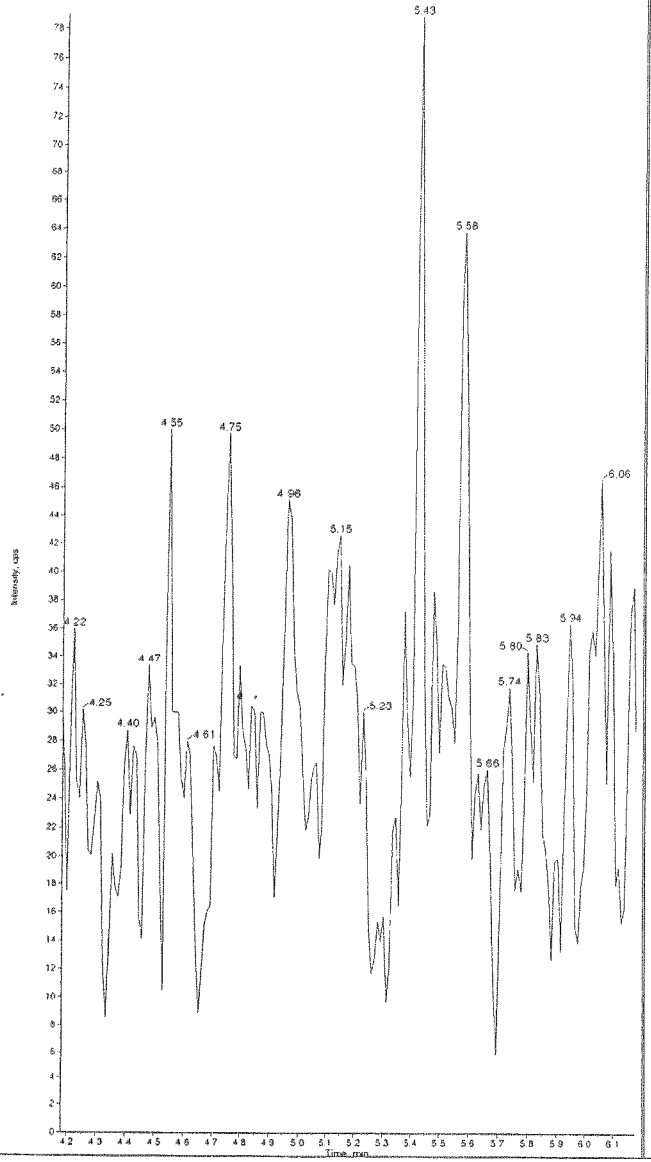
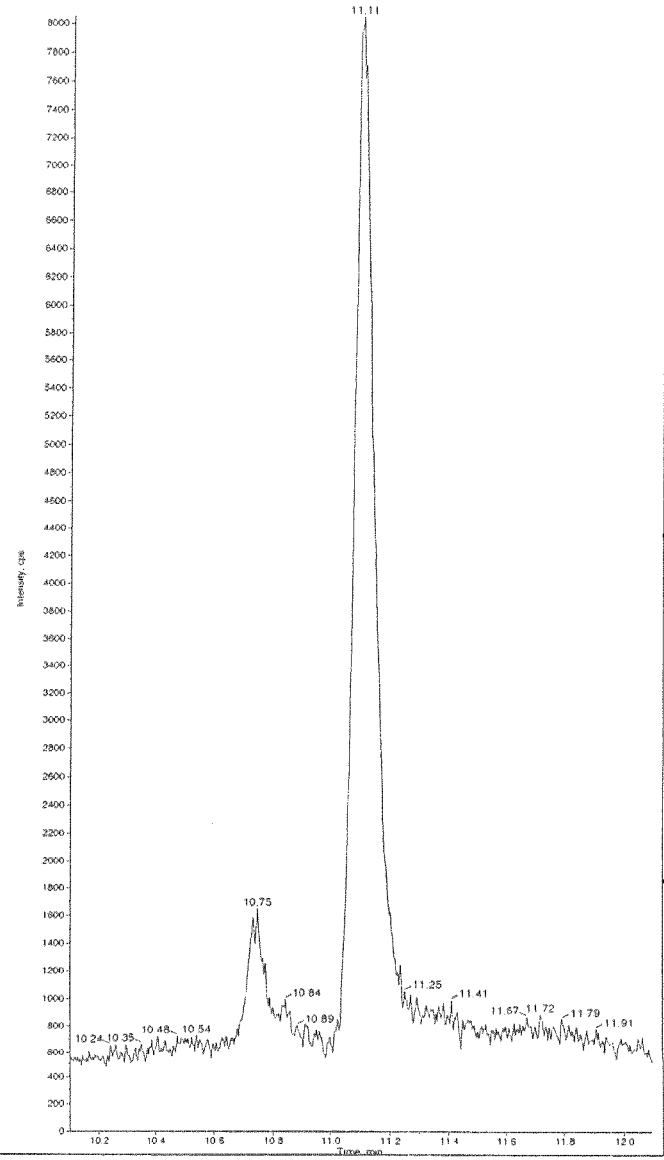
Sample Name: "XIBLK06" Sample ID: "|1|LXS1" File: "EXS0209037.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	03:10:06 AM
Modified:	No



Sample Name: "XIBLK06" Sample ID: "|1|LXS1" File: "EXS0209037.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	03:10:06 AM
Modified:	No



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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 10-FEB-06 07:16

GEL Data File: EXS0209048.wiff

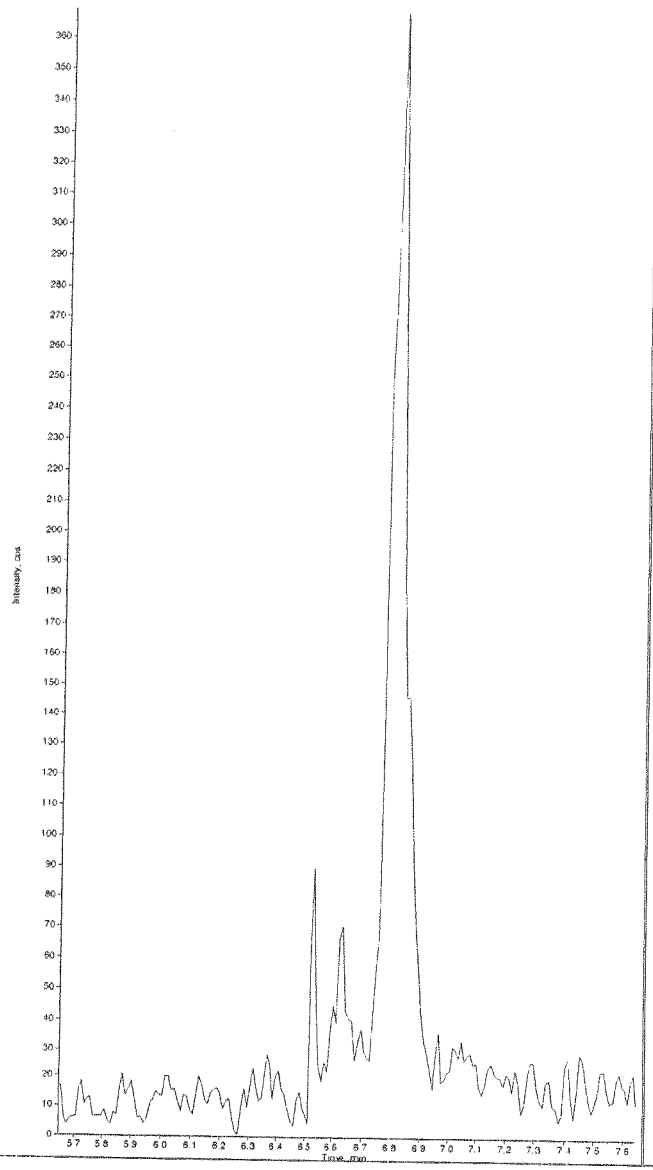
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

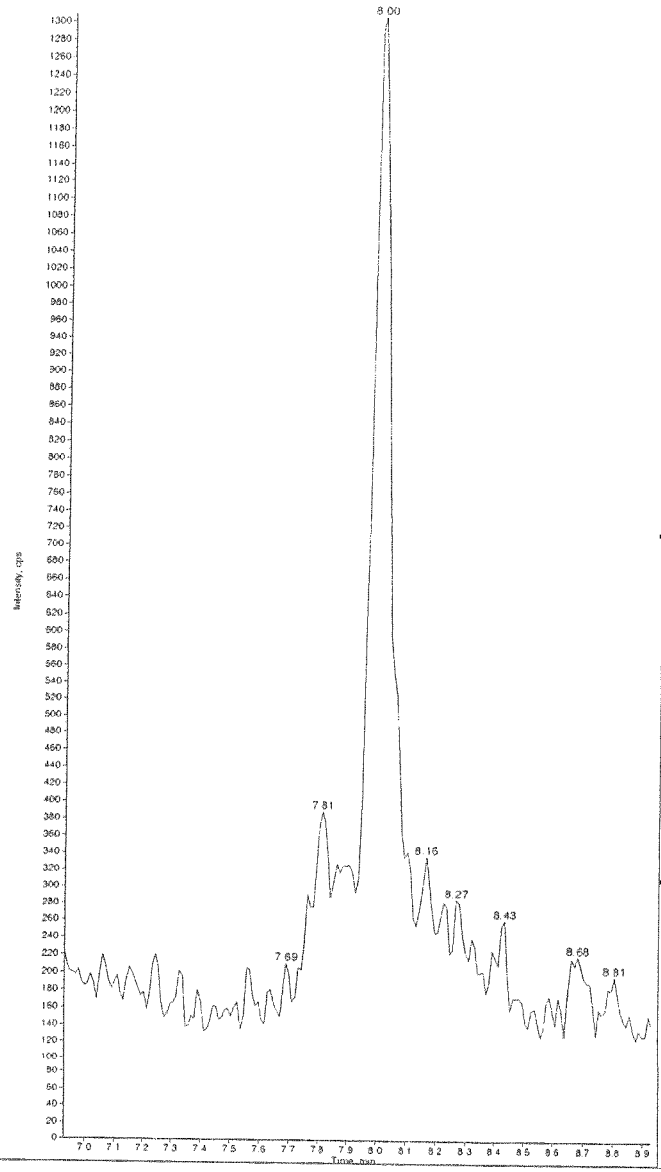
Sample Name: "XIBLK07" Sample ID: "|1|LXS1" File: "EXS0209048.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	07:16:48 AM
Modified:	No



Sample Name: "XIBLK07" Sample ID: "|1|LXS1" File: "EXS0209048.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	07:16:48 AM
Modified:	No



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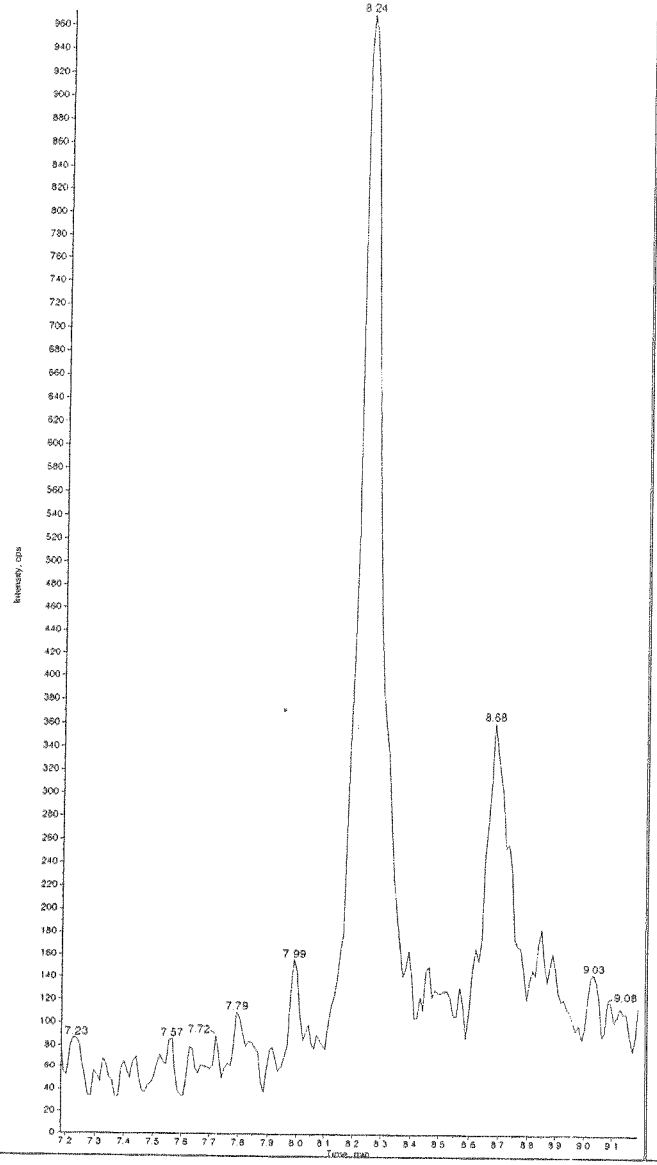
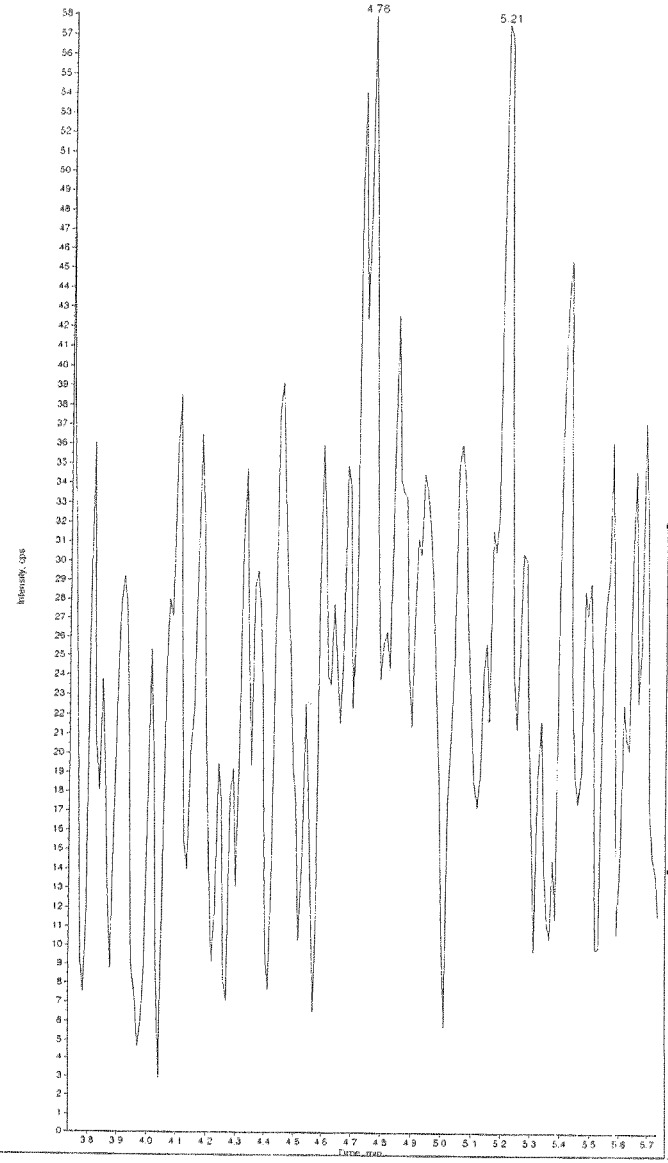
Sample Name: "XIBLK07" Sample ID: "|1|LXS1" File: "EXS0209048.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	07:16:48 AM
Modified:	No



Sample Name: "XIBLK07" Sample ID: "|1|LXS1" File: "EXS0209048.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	07:16:48 AM
Modified:	No



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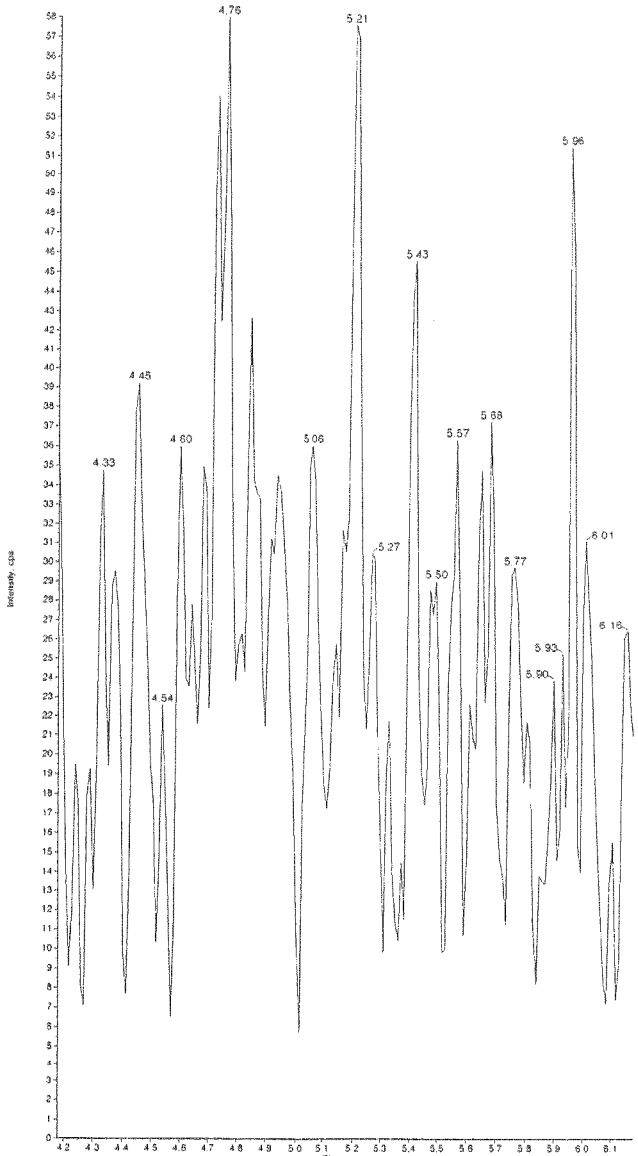
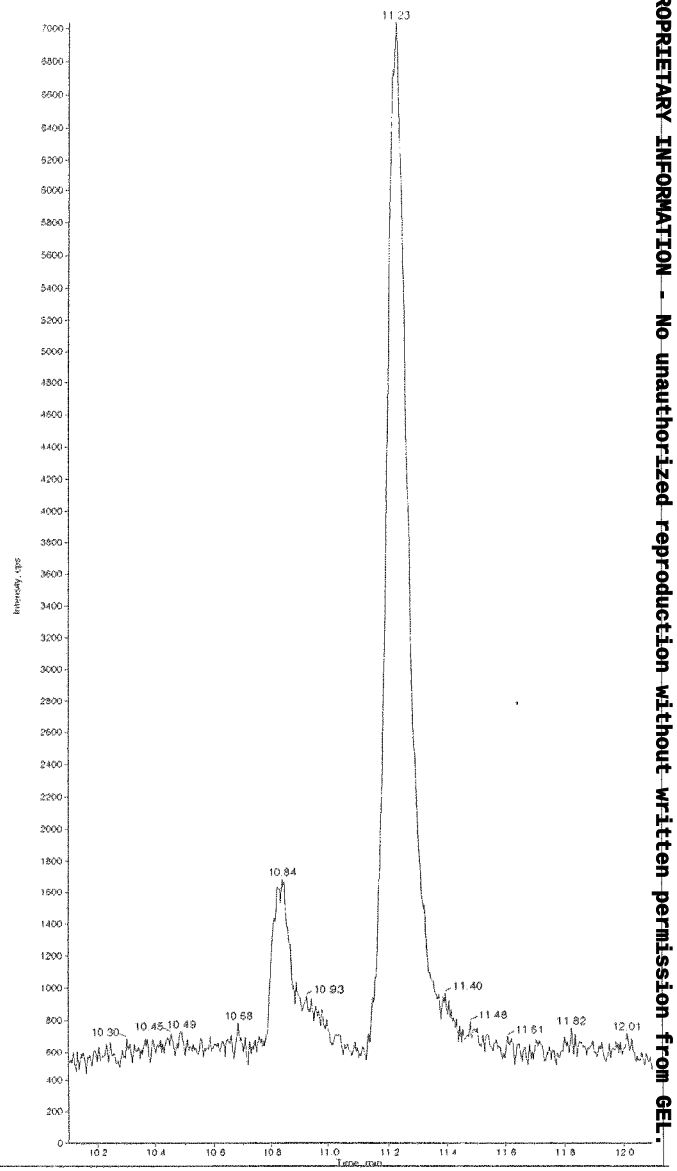
Sample Name: "XIBLK07" Sample ID: "|1|LXS1" File: "EXS0209048.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	07:16:48 AM
Modified:	No



Sample Name: "XIBLK07" Sample ID: "|1|LXS1" File: "EXS0209048.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	07:16:48 AM
Modified:	No



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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK08

Analysis Date: 10-FEB-06 12:39

GEL Data File: EXS0209050.wiff

Instrument ID: LCMSMS

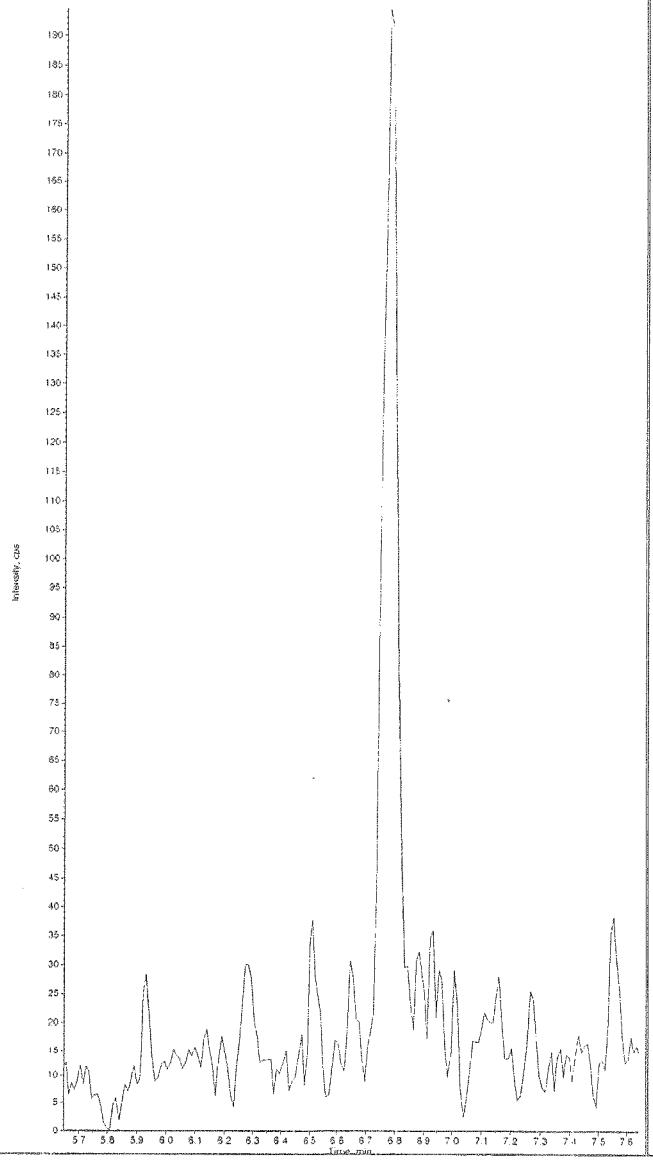
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

XLRS 2/13/06

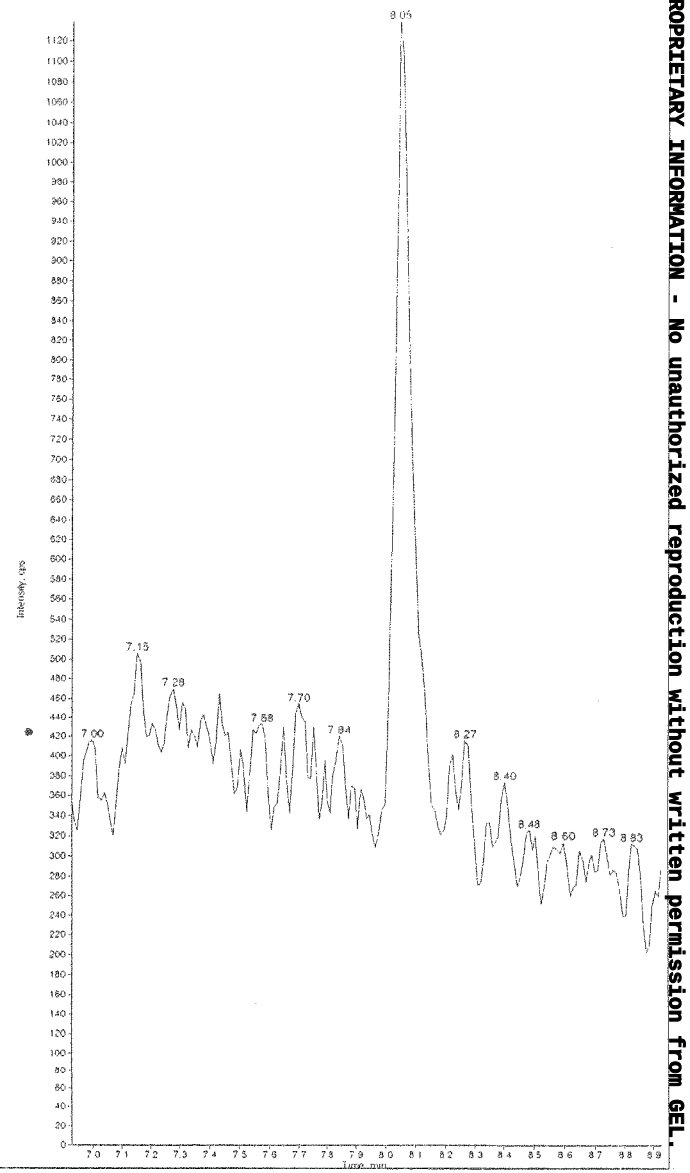
Sample Name: "XIBLK08" Sample ID: "|1|LXS1" File: "EXS0209050.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:39:40 PM
Modified:	No



Sample Name: "XIBLK08" Sample ID: "|1|LXS1" File: "EXS0209050.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:39:40 PM
Modified:	No



CHM 2/13/06

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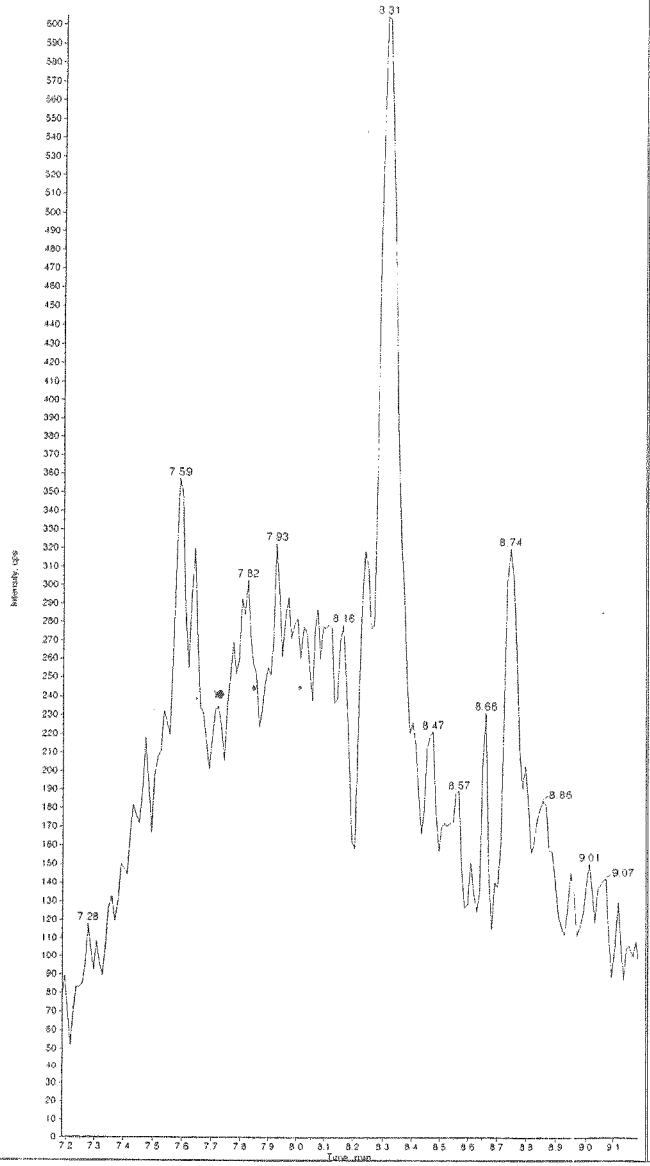
LRS 2/13/06

Sample Name: "XIBLK08" Sample ID: "|1|LXS1" File: "EXS0209050.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

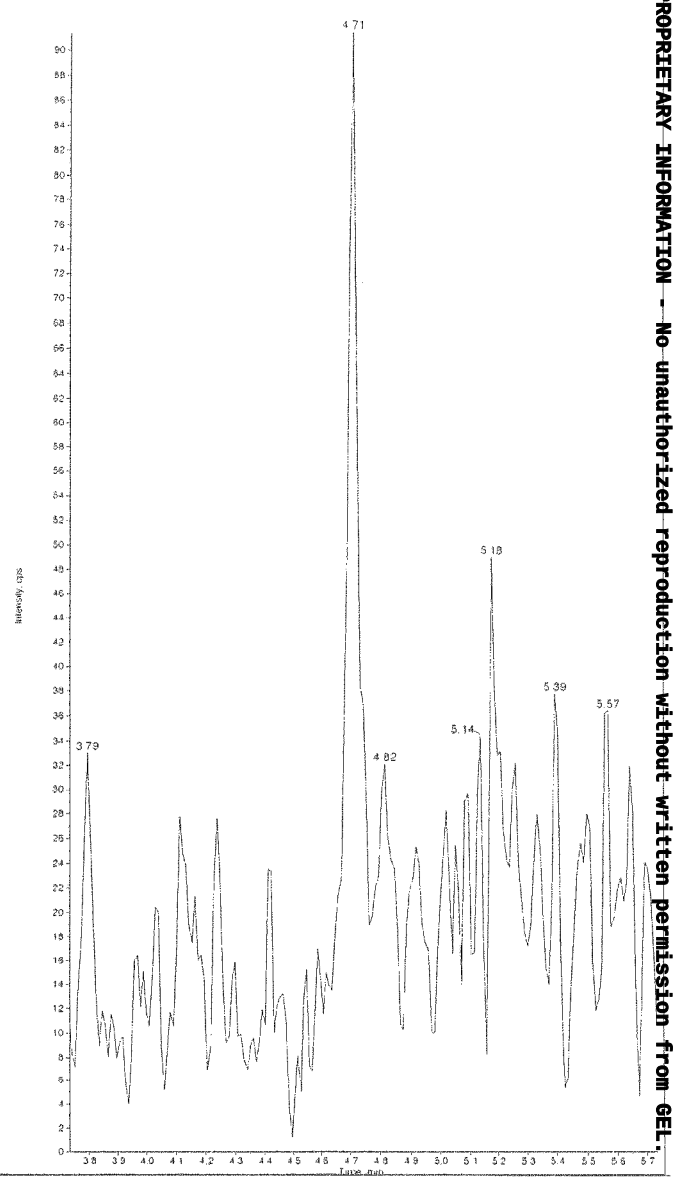
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:39:40 PM
Modified:	No



562

Sample Name: "XIBLK08" Sample ID: "|1|LXS1" File: "EXS0209050.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	12:39:40 PM
Modified:	No



CMM 02/13/06

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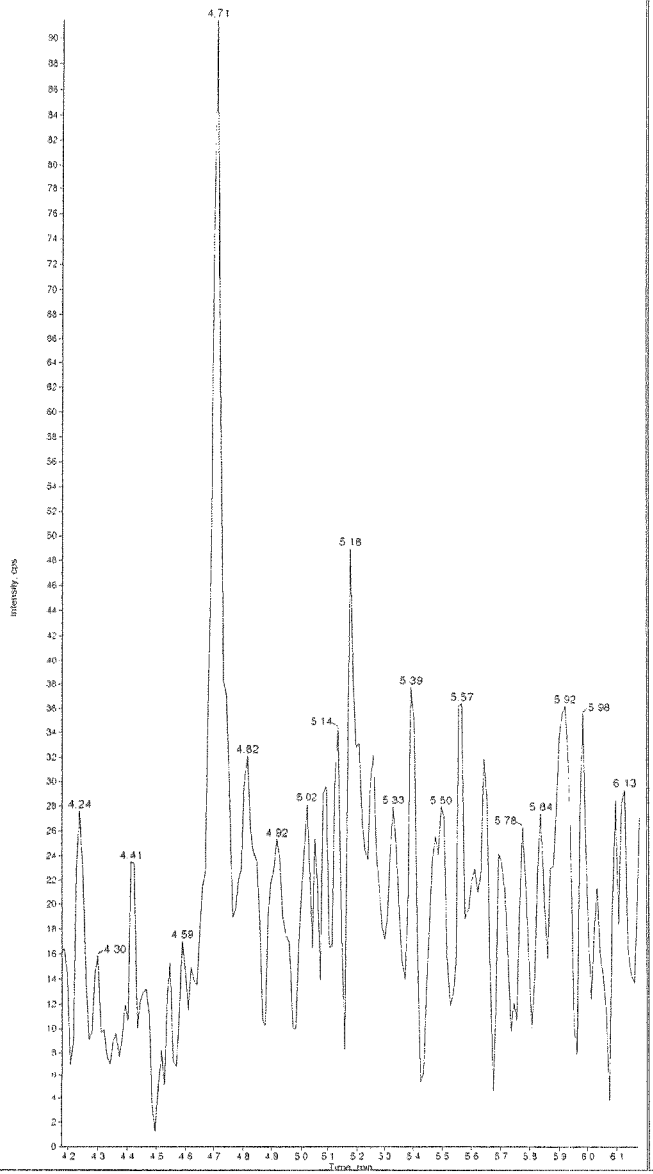
Sample Name: "XIBLK08" Sample ID: "|1|LXS1" File: "EXS0209050.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 12:39:40 PM

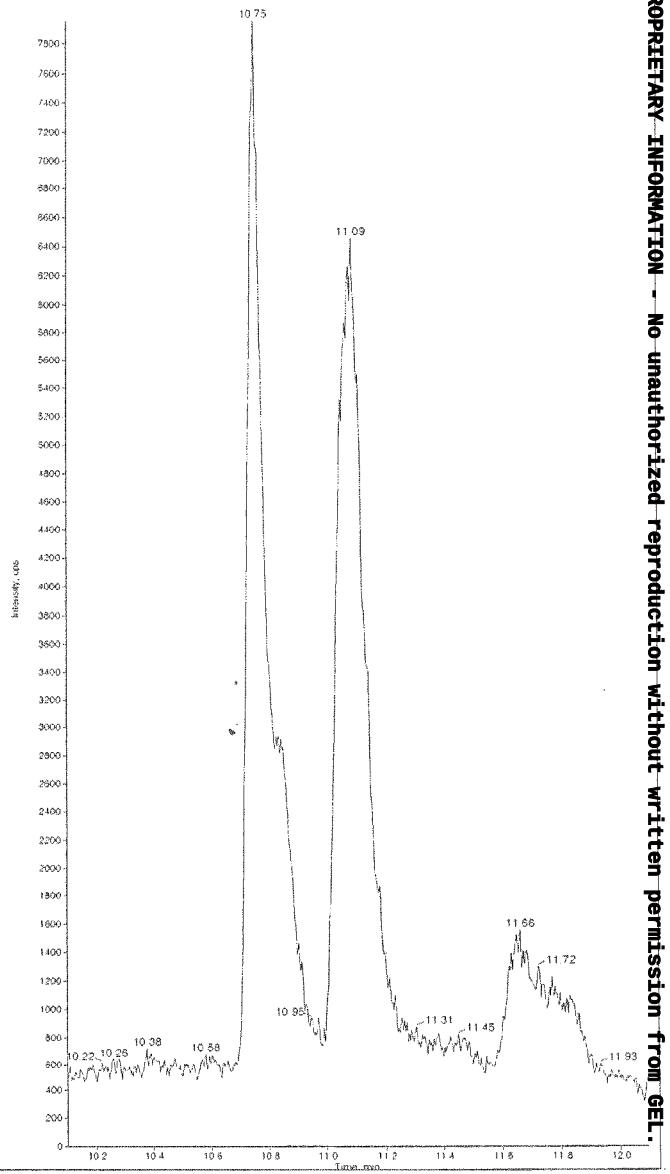
Modified: No



Sample Name: "XIBLK08" Sample ID: "|1|LXS1" File: "EXS0209050.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 12:39:40 PM

Modified: No



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4A
Explosives Continuing Calibration Blank

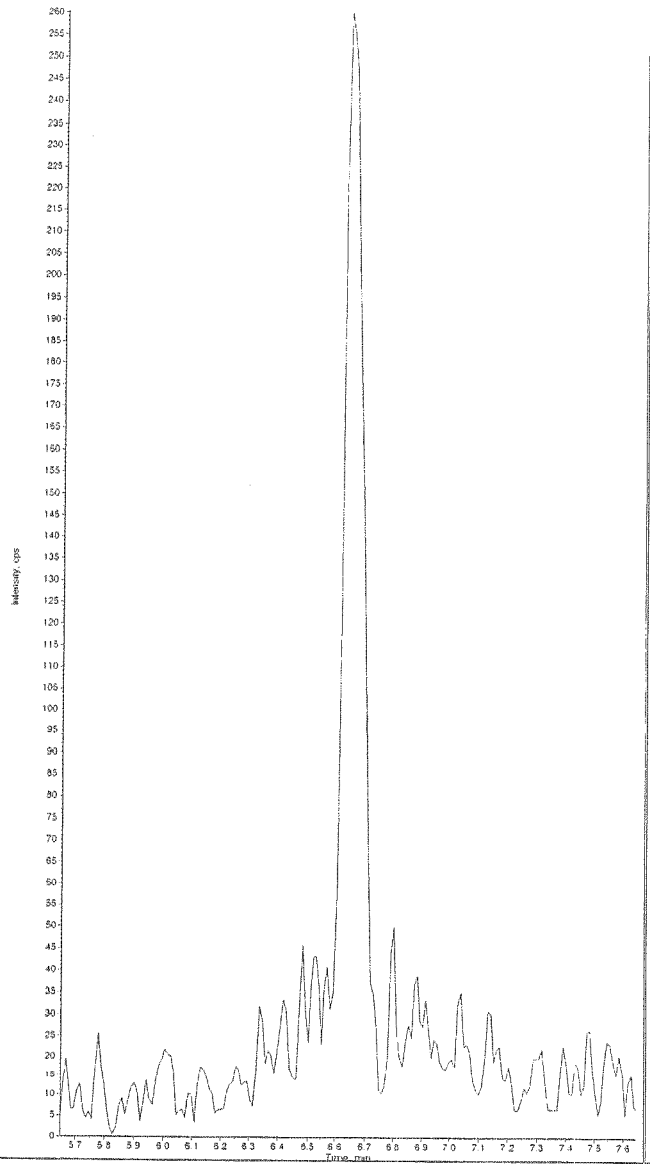
Lab Name: General Engineering Laboratories
GEL Job No(SDG): 154614
Lab Code: GEL
Lab Sample ID: XIBLK09
Analysis Date: 10-FEB-06 13:24
GEL Data File: EXS0209052.wiff
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

JRS 2/13/06

Sample Name: "XIBLK09" Sample ID: "J1|LXS1" File: "EXS0209052.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	01:24:23 PM
Modified:	No



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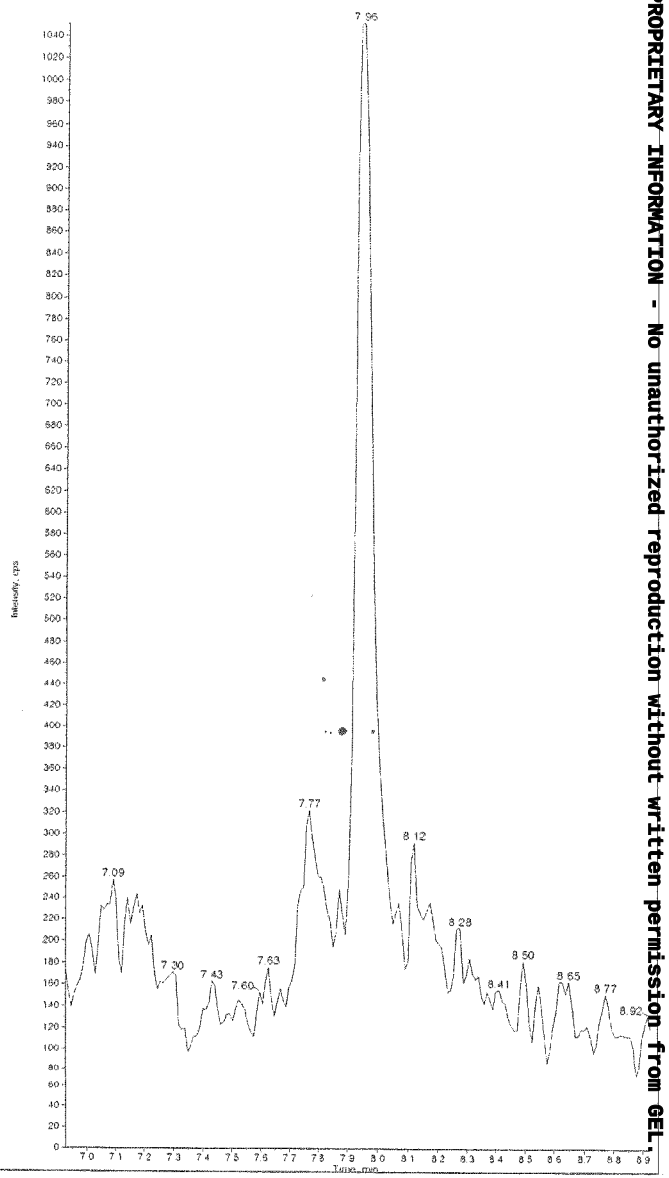
Sample Name: "XIBLK09" Sample ID: "J1|LXS1" File: "EXS0209052.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	01:24:23 PM
Modified:	No



Done 2/13/06

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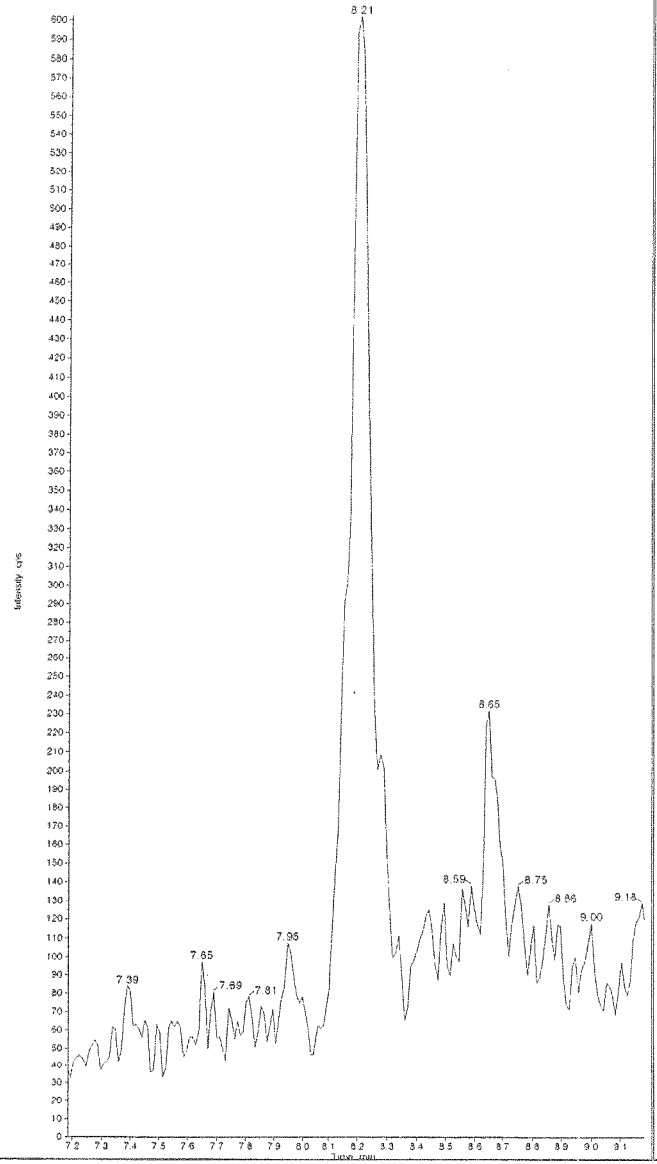
Sample Name: "XIBLK09" Sample ID: "|1|LXS1" File: "EXS0209052.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 01:24:23 PM

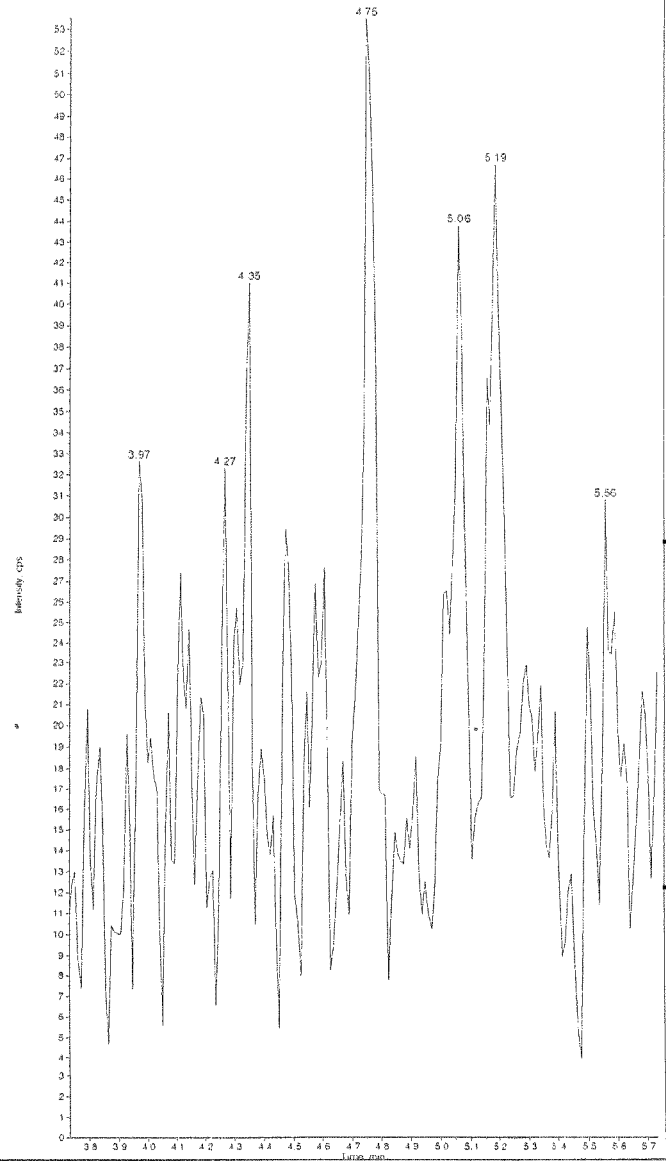
Modified: No



Sample Name: "XIBLK09" Sample ID: "|1|LXS1" File: "EXS0209052.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 01:24:23 PM

Modified: No



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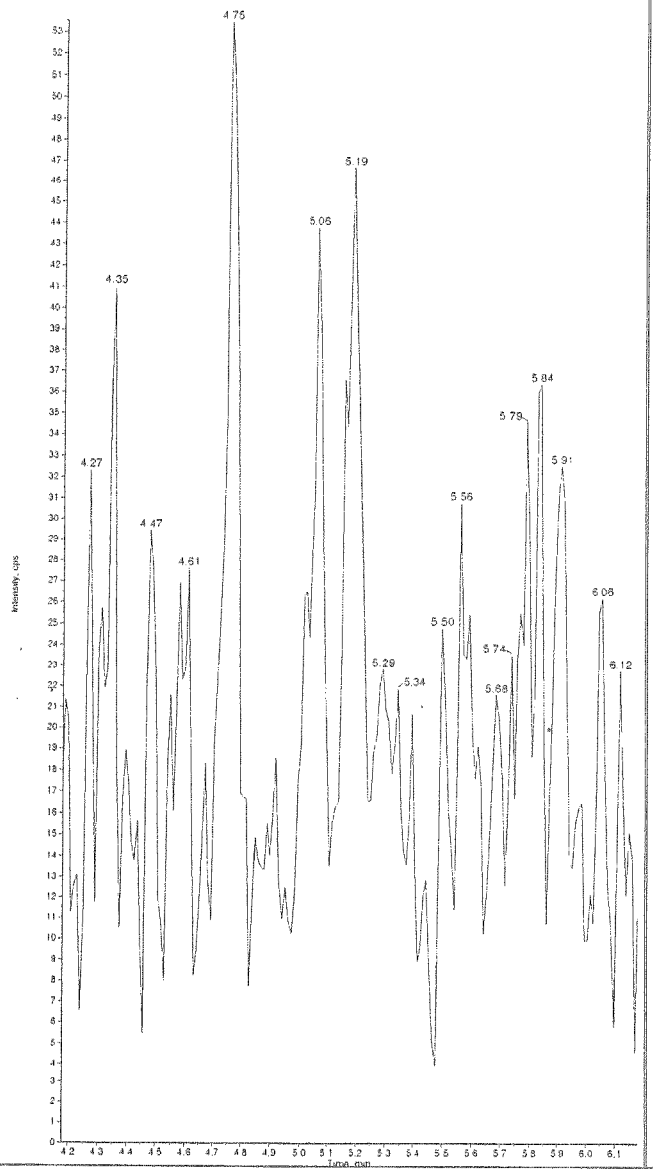
Sample Name: "XIBLK09" Sample ID: "|1|LXS1" File: "EXS0209052.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 01:24:23 PM

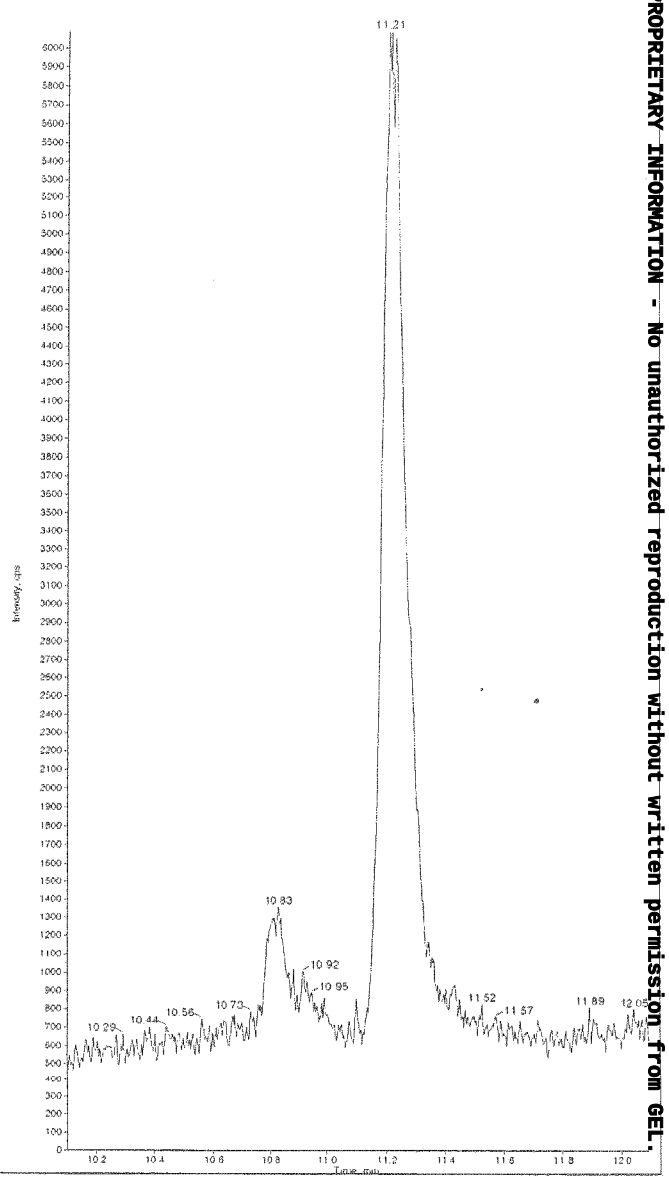
Modified: No



Sample Name: "XIBLK09" Sample ID: "|1|LXS1" File: "EXS0209052.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 01:24:23 PM

Modified: No



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4A

Explosives Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No(SDG): 154614

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 10-FEB-06 18:16

GEL Data File: EXS0209065.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

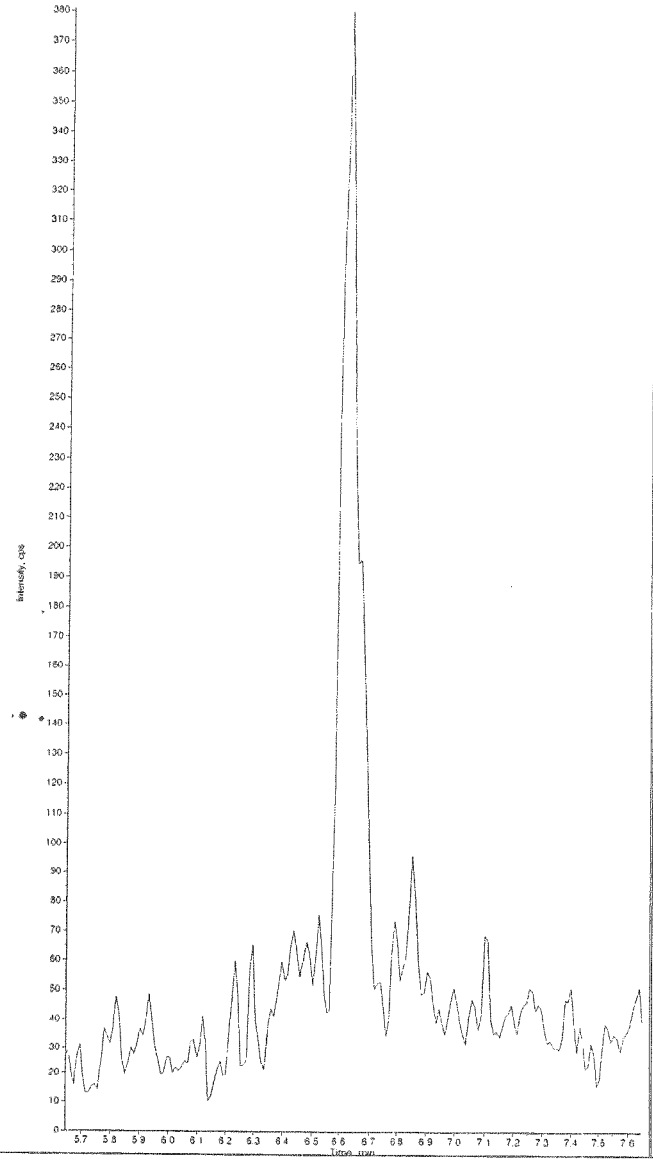
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

2/13/06

Sample Name: "XIBLK10" Sample ID: "|1|LXS1" File: "EXS0209065.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 06:16:20 PM

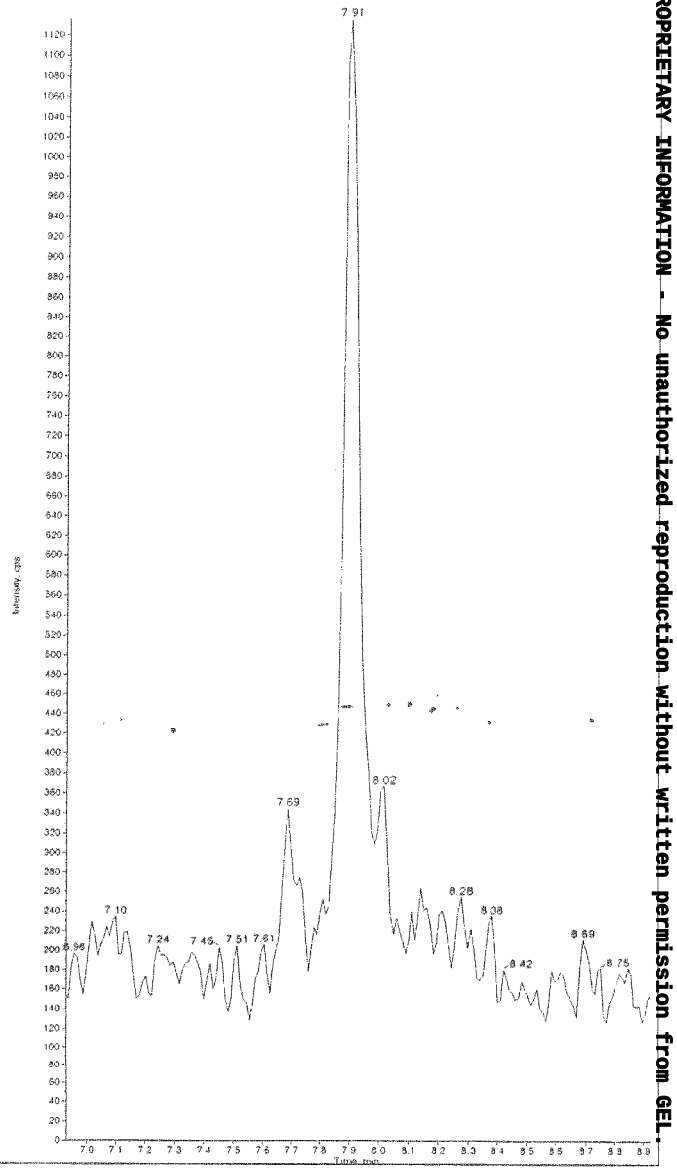
Modified: No



Sample Name: "XIBLK10" Sample ID: "|1|LXS1" File: "EXS0209065.wiff"
Peak Name: "3,5-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/10/2006
Acq. Time: 06:16:20 PM

Modified: No



4mm 2/13/06

569

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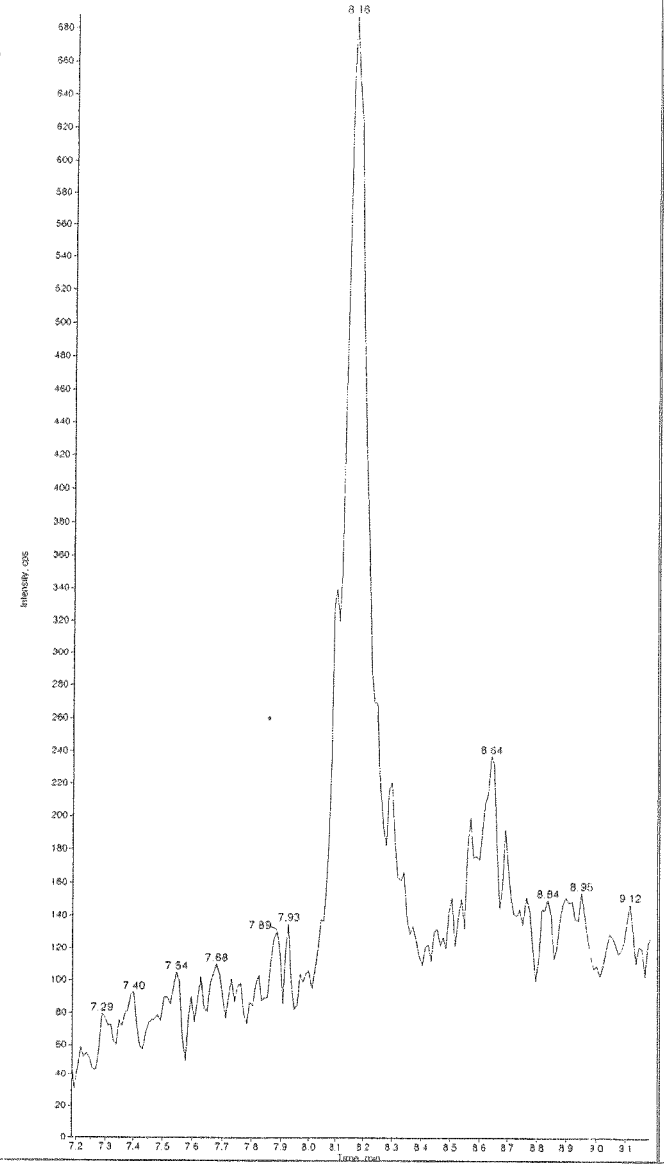
YRS 2/13/06

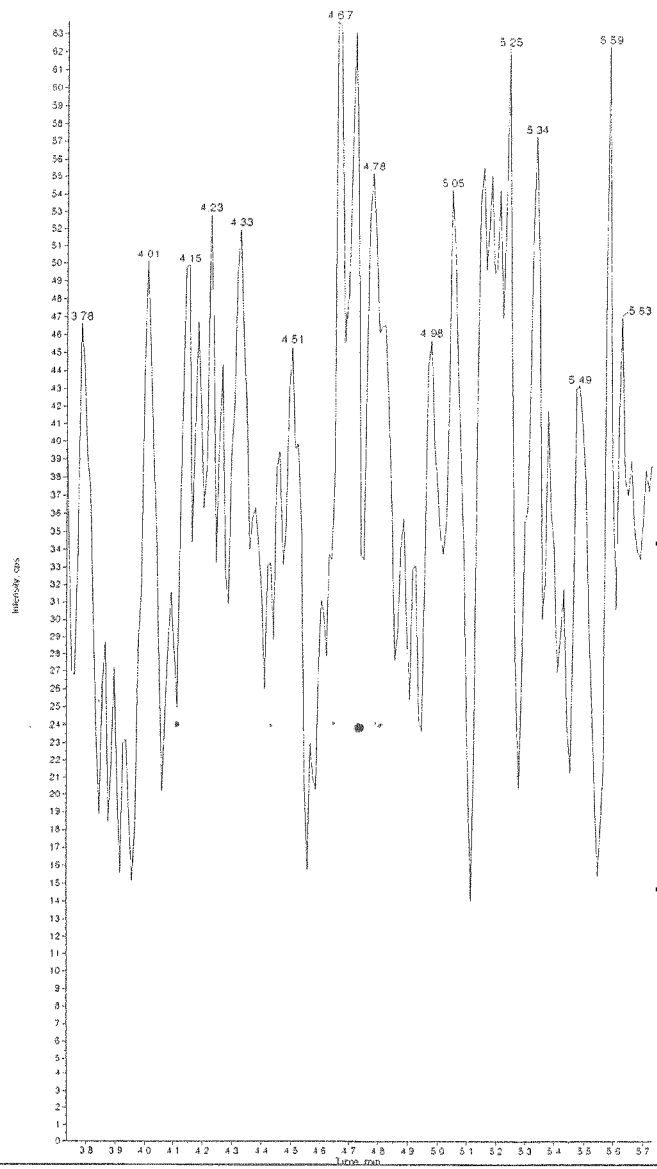
Sample Name: "XIBLK10" Sample ID: "|1|LXS1" File: "EXS0209065.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	06:16:20 PM
Modified:	No



Sample Name: "XIBLK10" Sample ID: "|1|LXS1" File: "EXS0209065.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	06:16:20 PM
Modified:	No



cthm 2/13/06

570

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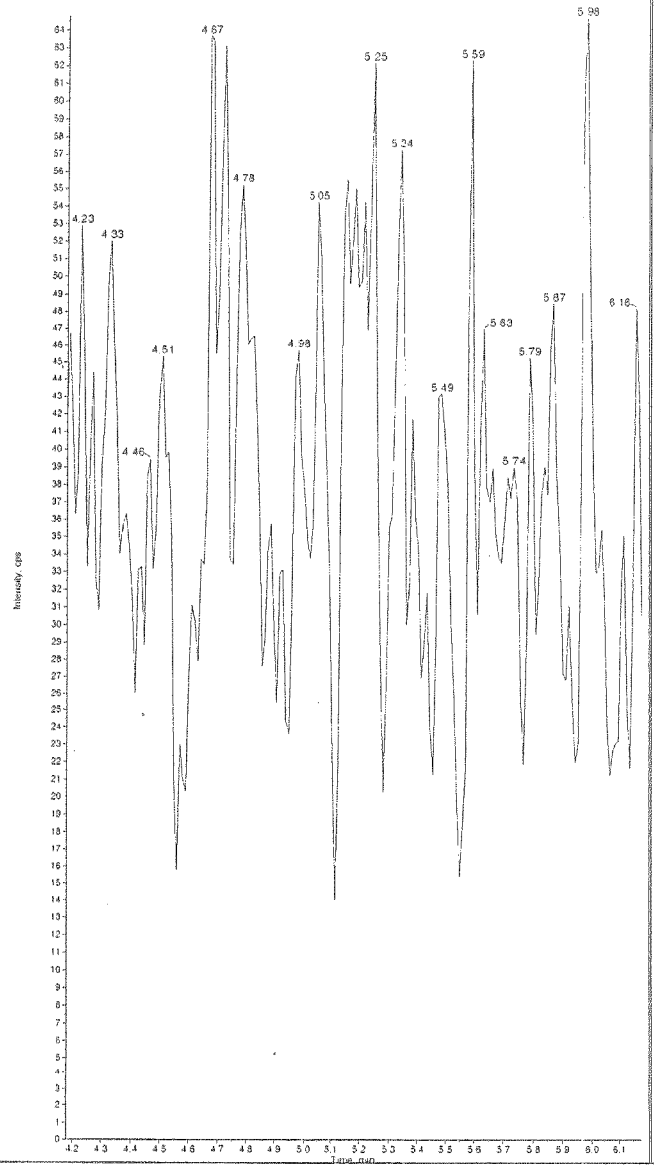
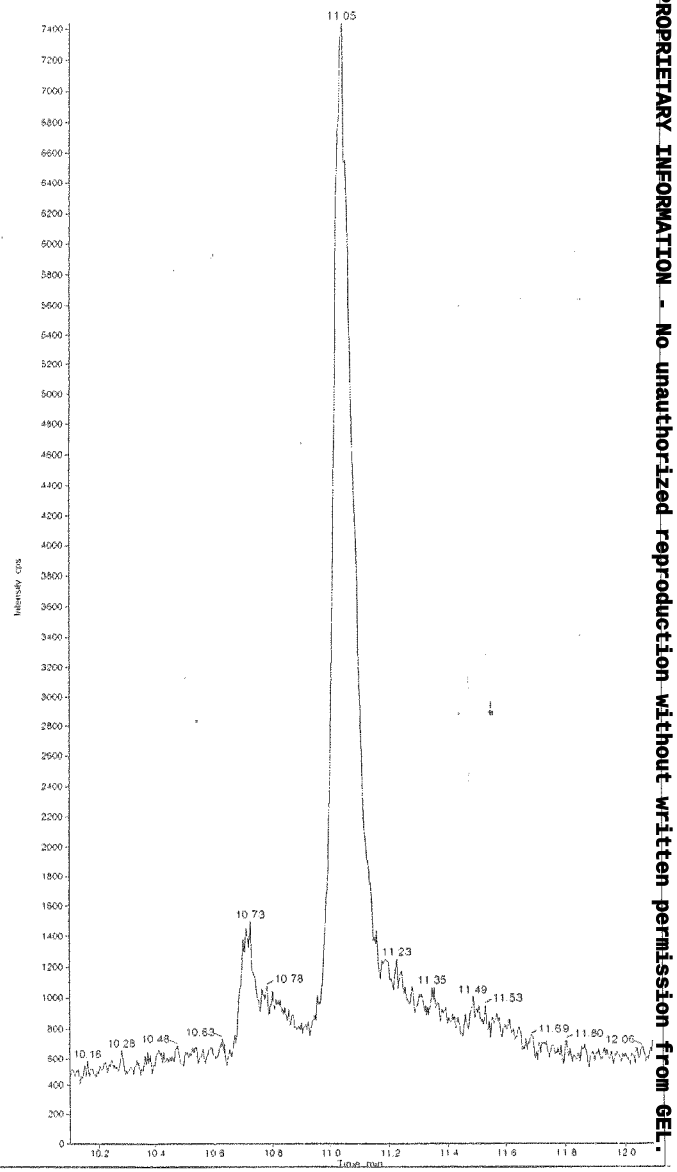
Sample Name: "XIBLK10" Sample ID: "|1|LXS1" File: "EXS0209065.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	06:16:20 PM
Modified:	No



Sample Name: "XIBLK10" Sample ID: "|1|LXS1" File: "EXS0209065.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	06:16:20 PM
Modified:	No



571

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Nairb.ref

;Positive ion monoisotopic and average masses from solution
;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H2O.
;Most useful general purpose calibrant for all low
;MW applications, including MS/MS work.
;At high resolution, readily covers from m/z 50-2000.
;At reduced resolution, can be used to over m/z 3000.
;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
Updated 20 April '95

22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	100
; 3020.8745	100
; 3170.7688	100
; 3320.6630	100
; 3470.5572	100
; 3620.4515	100
; 3770.3457	100
; 3920.2400	100

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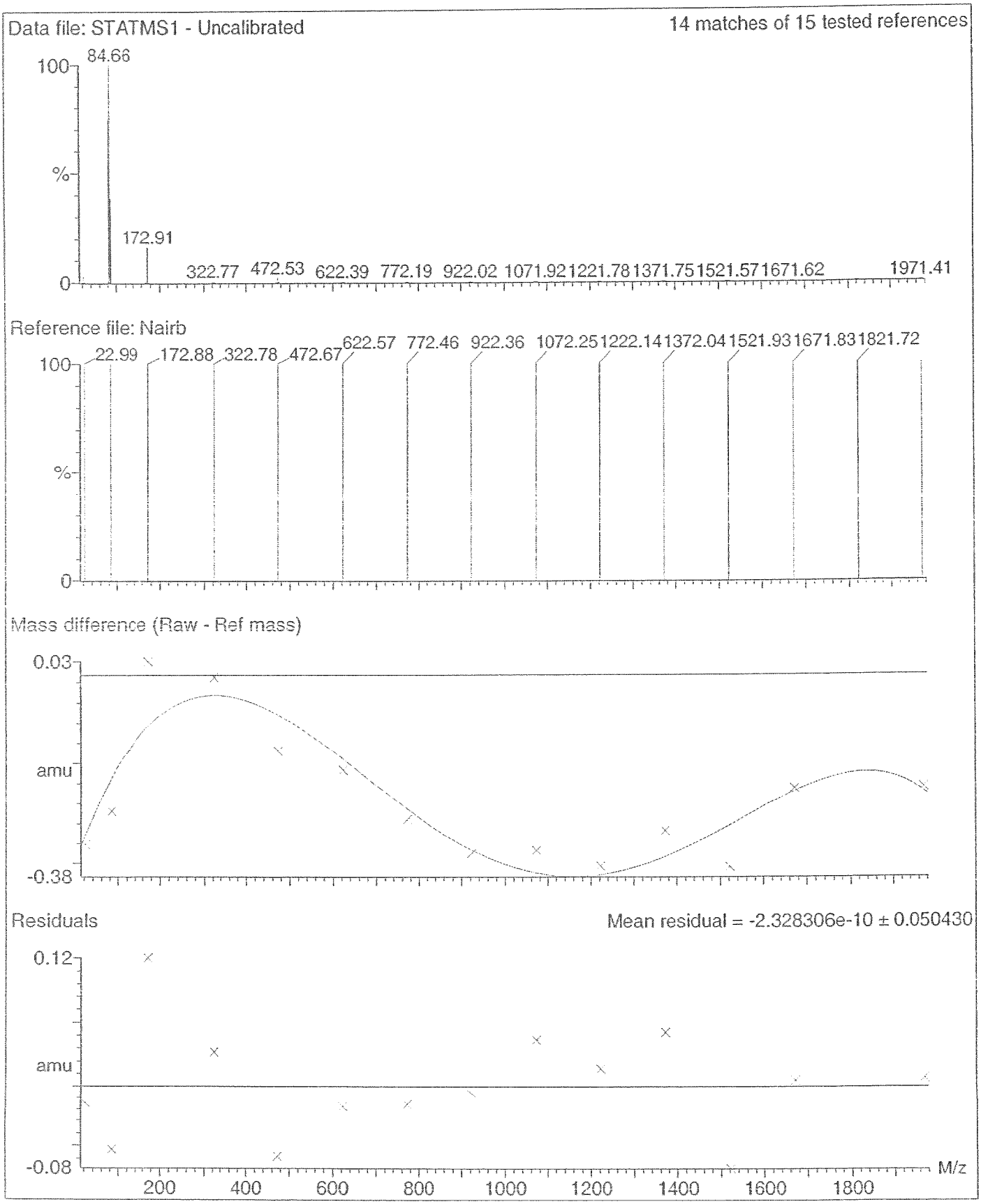
Calibration Report - MS1 Static

Printed: Wed Dec 07 06:35:33 2005



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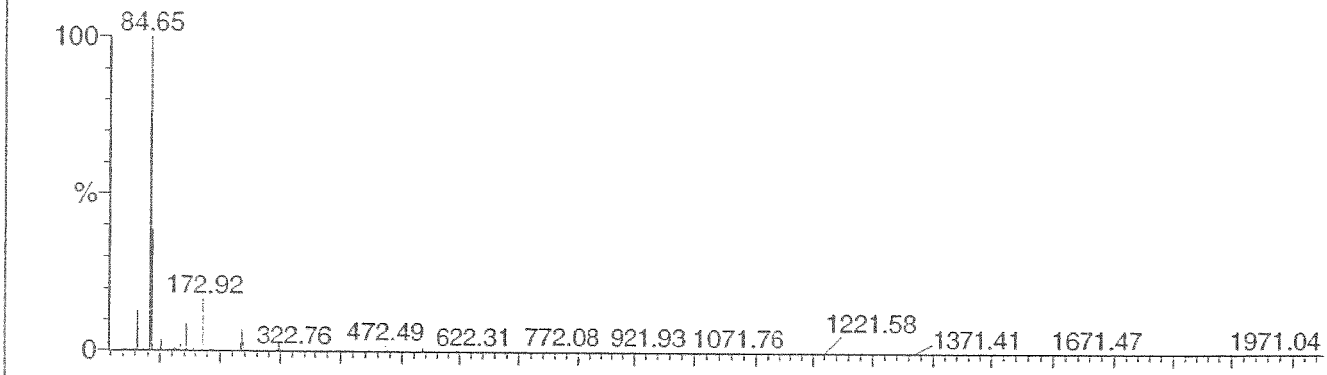
Calibration Report - MS1 Scanning

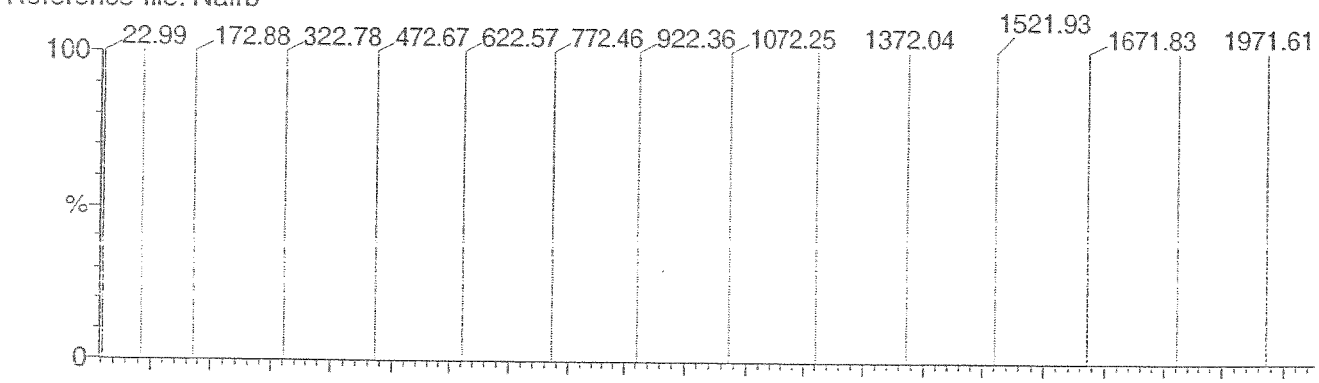
Printed: Wed Dec 07 06:36:07 2005

Data file: SCNMS1 - Uncalibrated

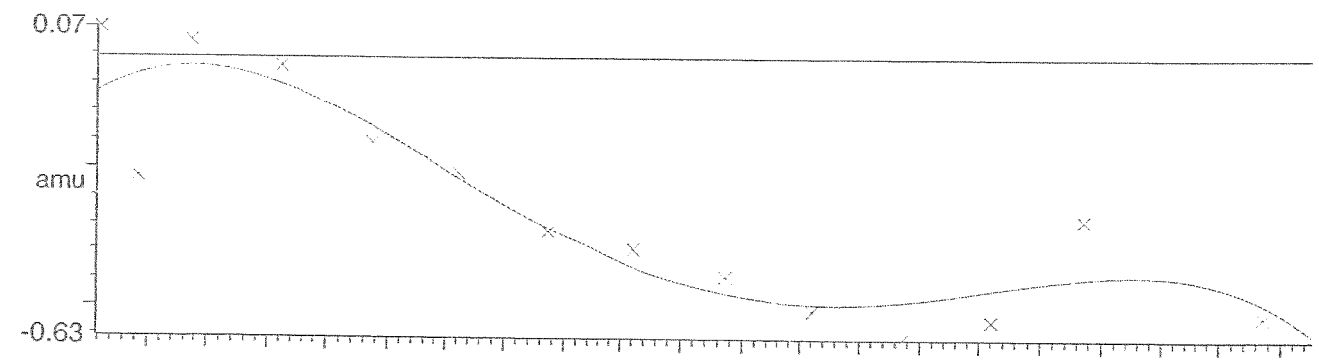
14 matches of 15 tested references



Reference file: Nairb

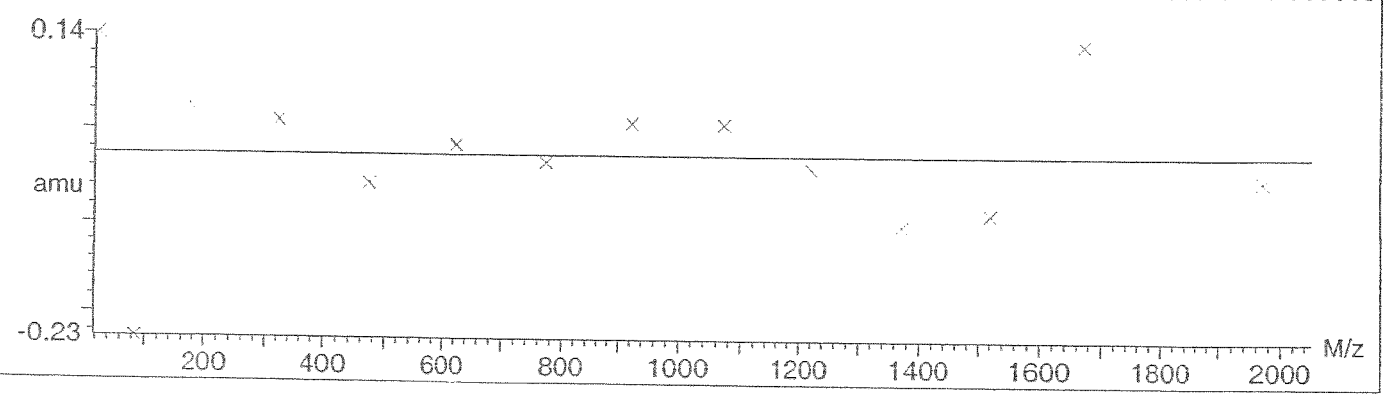


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.858336e-9 ± 0.089005



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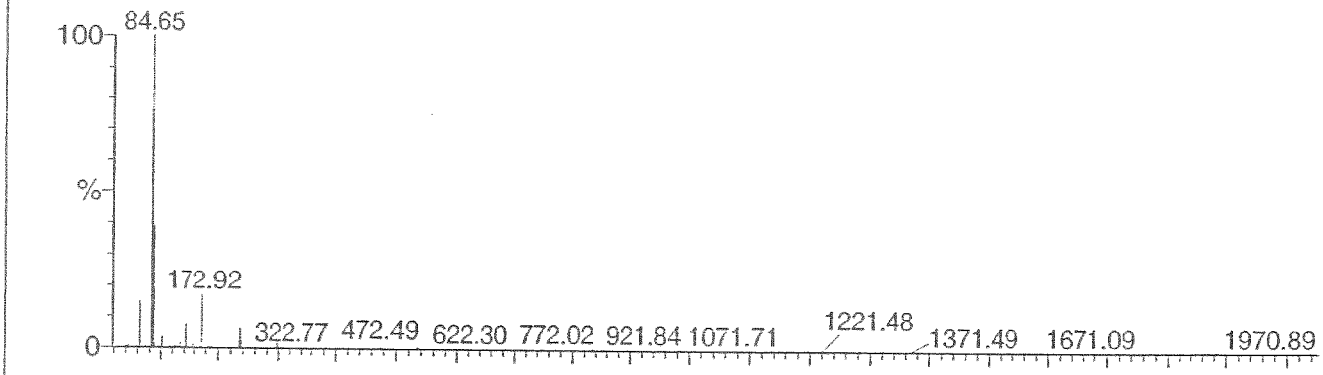
Calibration Report - MS2 Scanning

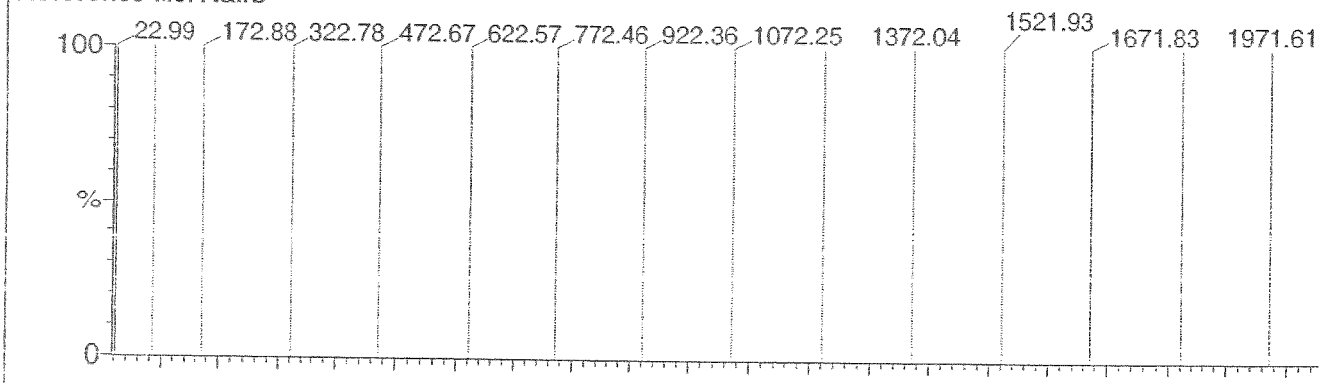
Printed: Wed Dec 07 06:37:49 2005

Data file: SCNMS2 - Uncalibrated

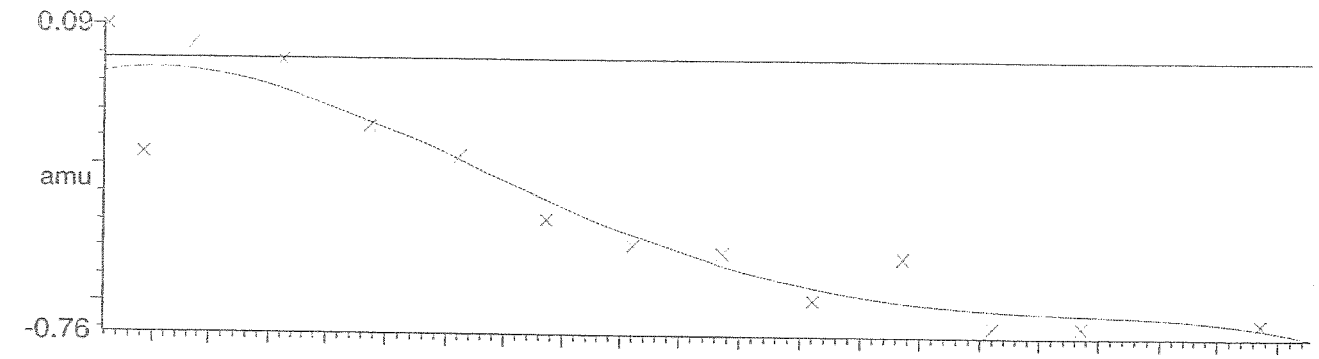
14 matches of 15 tested references



Reference file: Nairb

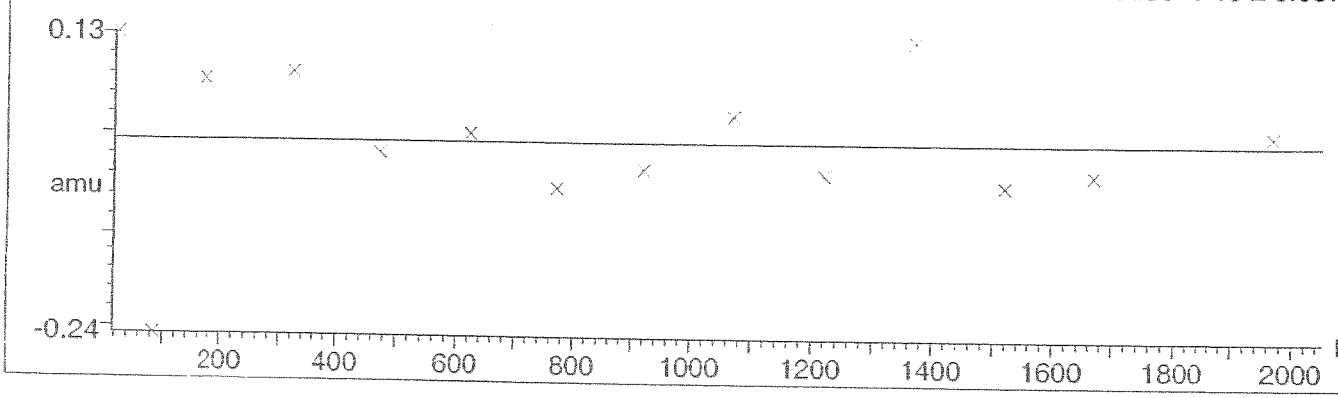


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 6.652304e-10 ± 0.087242



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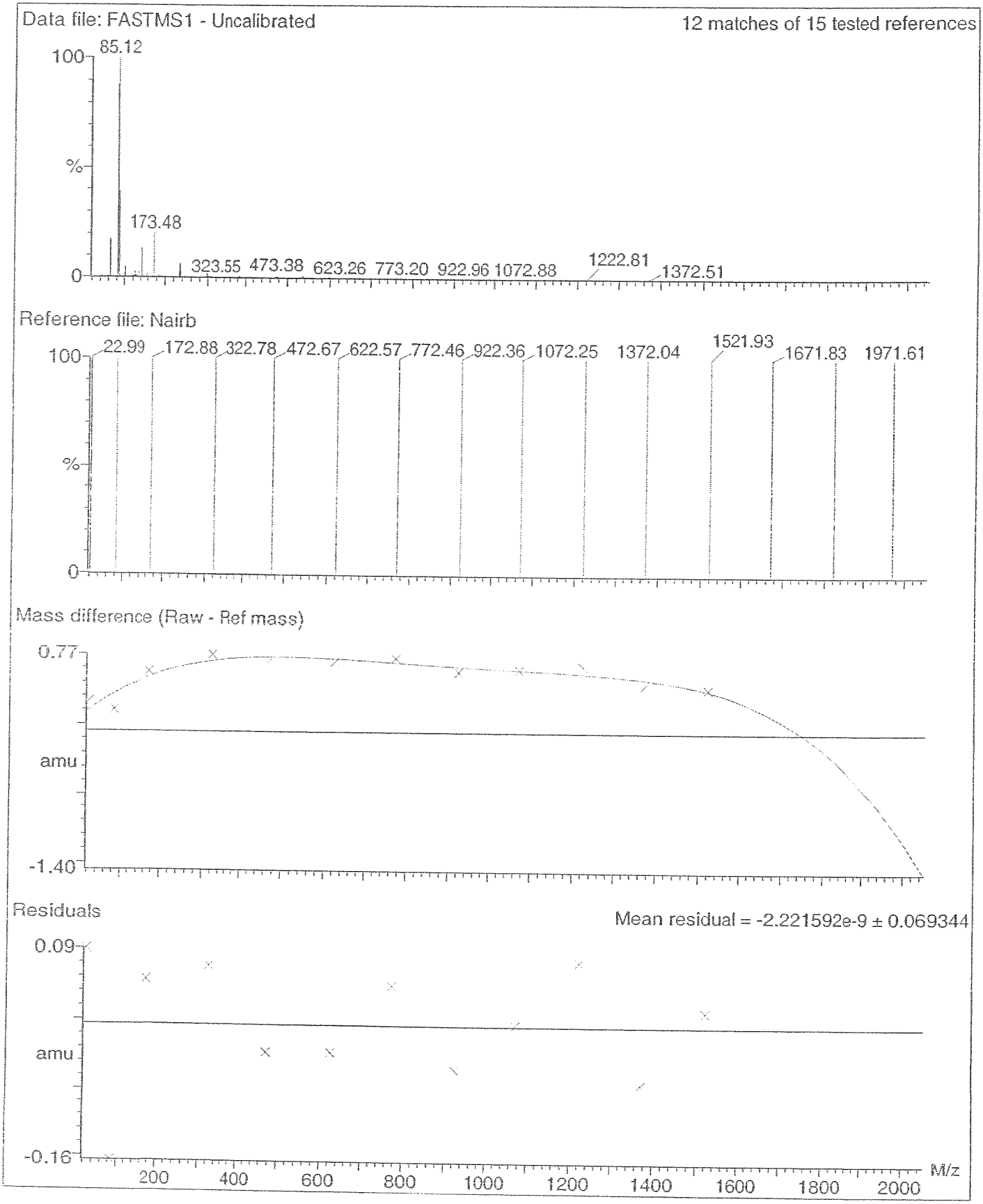
Calibration Report - MS1 Scan Speed Compensation

Printed: Wed Dec 07 06:36:42 2005



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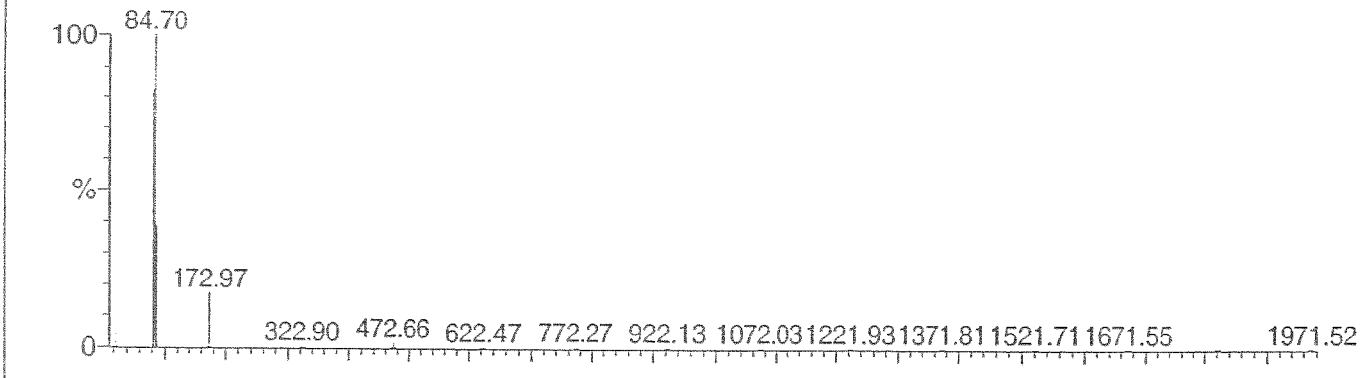
Calibration Report - MS2 Static

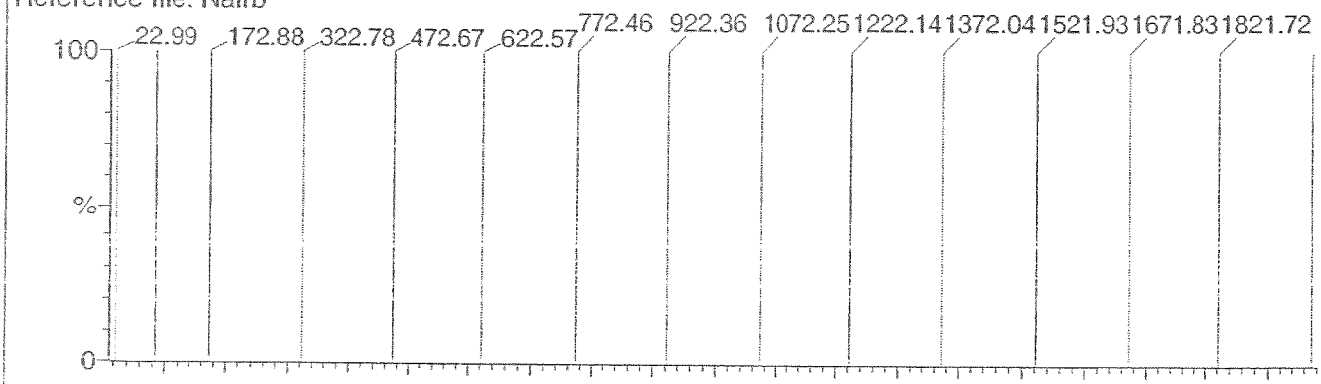
Printed: Wed Dec 07 06:37:16 2005

Data file: STATMS2 - Uncalibrated

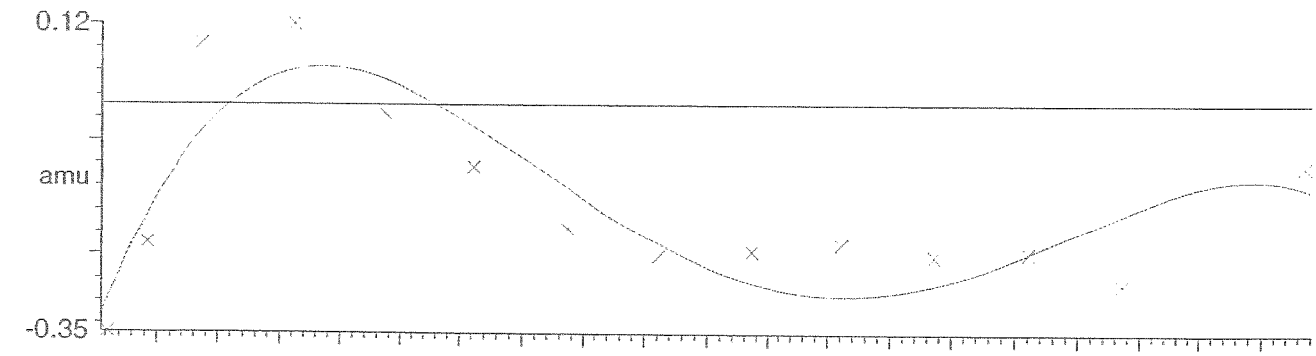
14 matches of 15 tested references



Reference file: Nairb

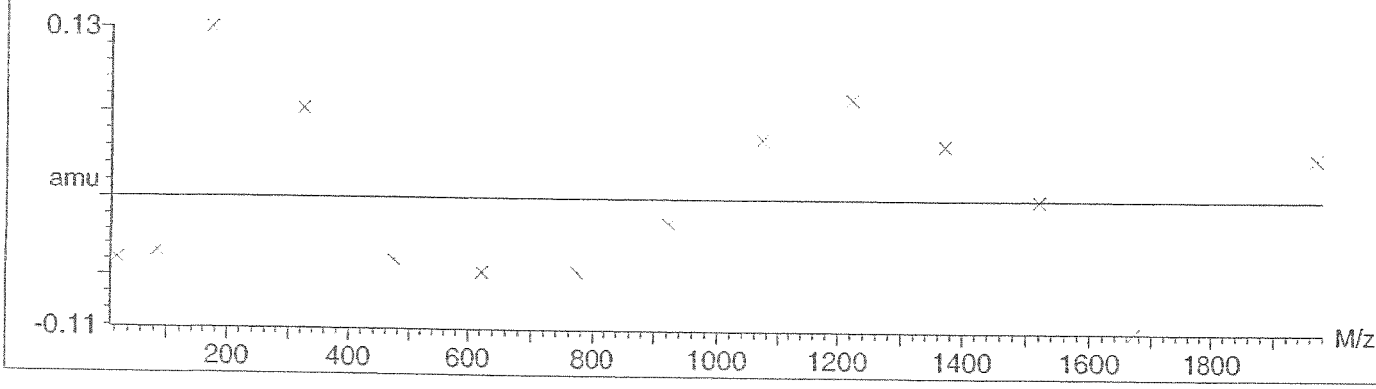


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.392675e-9 ± 0.064509



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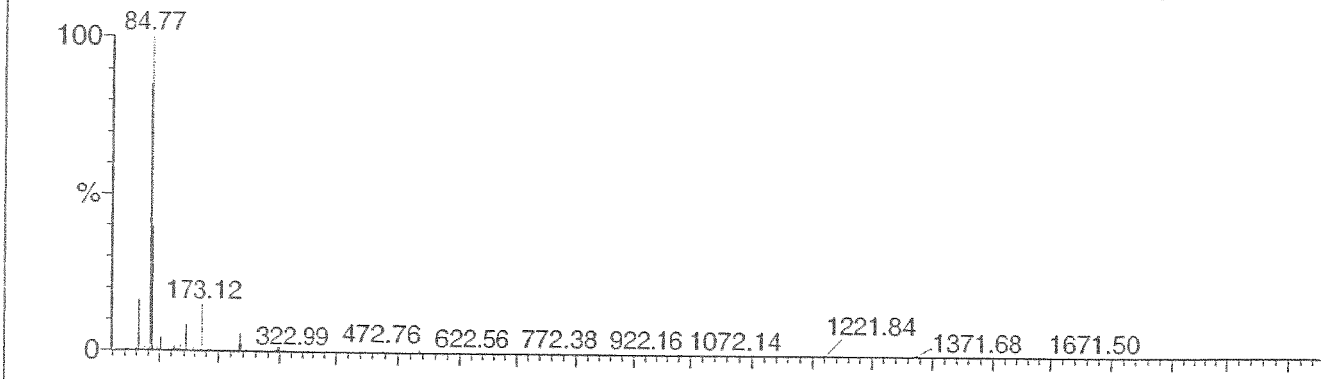
Calibration Report - MS2 Scan Speed Compensation

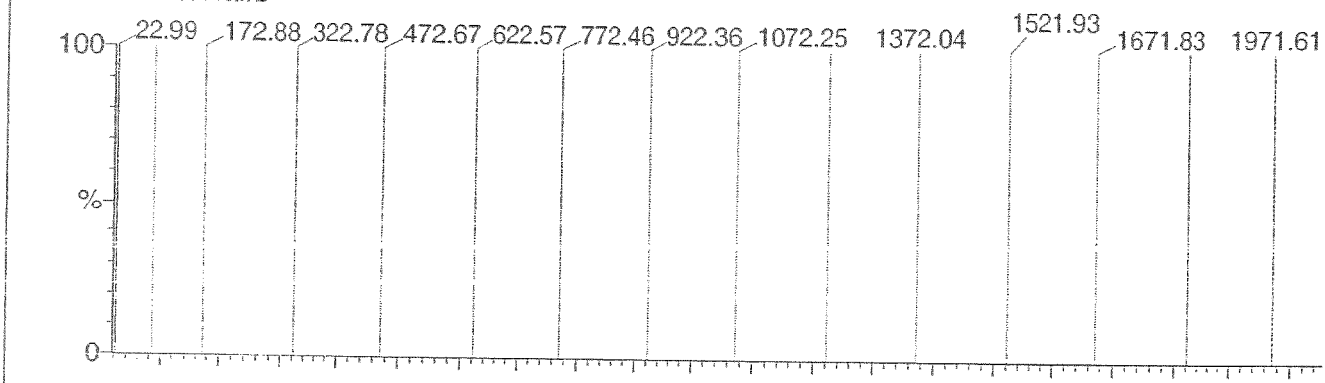
Printed: Wed Dec 07 06:38:25 2005

Data file: FASTMS2 - Uncalibrated

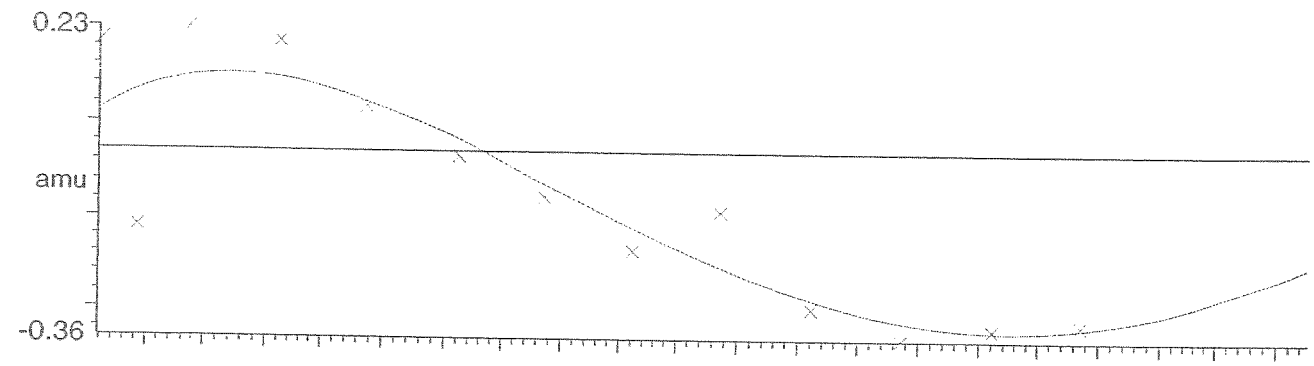
13 matches of 15 tested references



Reference file: Nairb

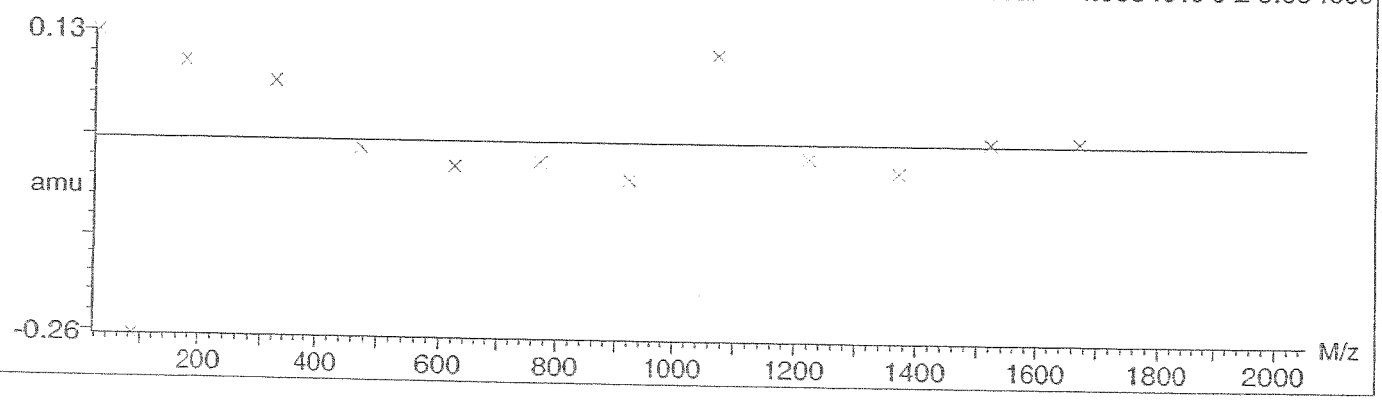


Mass difference (Raw - Ref mass)



Residuals

Mean residual = -4.083491e-9 ± 0.094099



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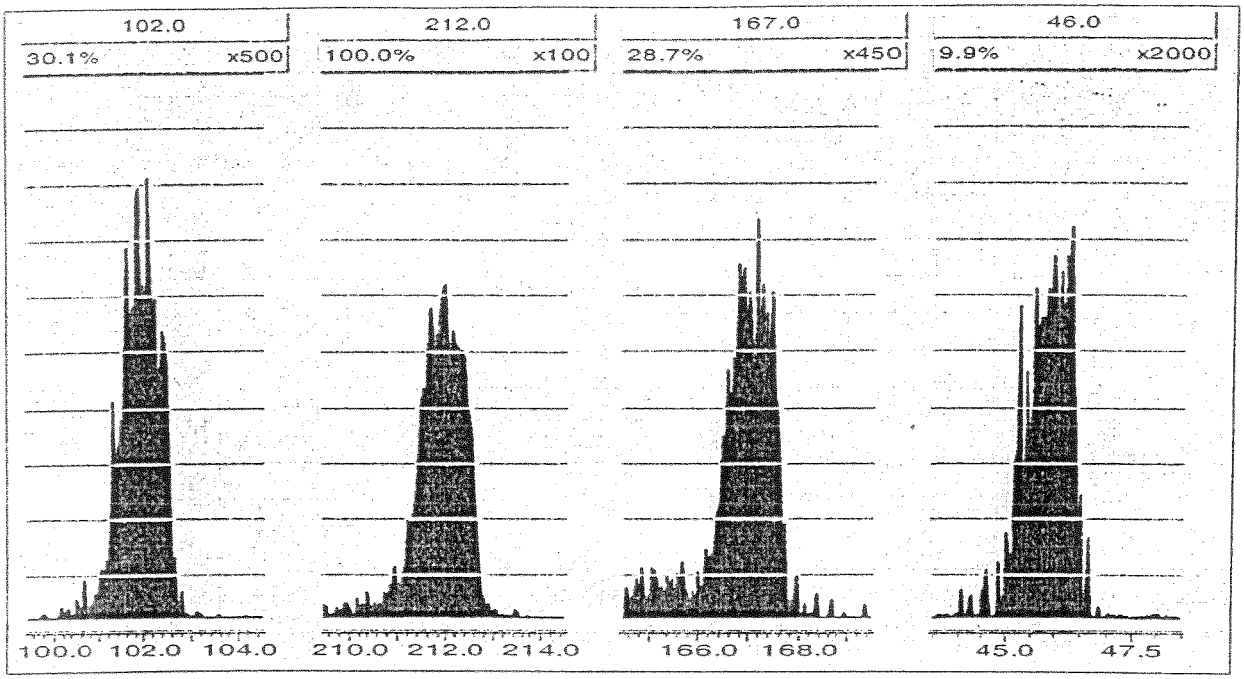
Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Thu Feb 02 14:50:50 2006



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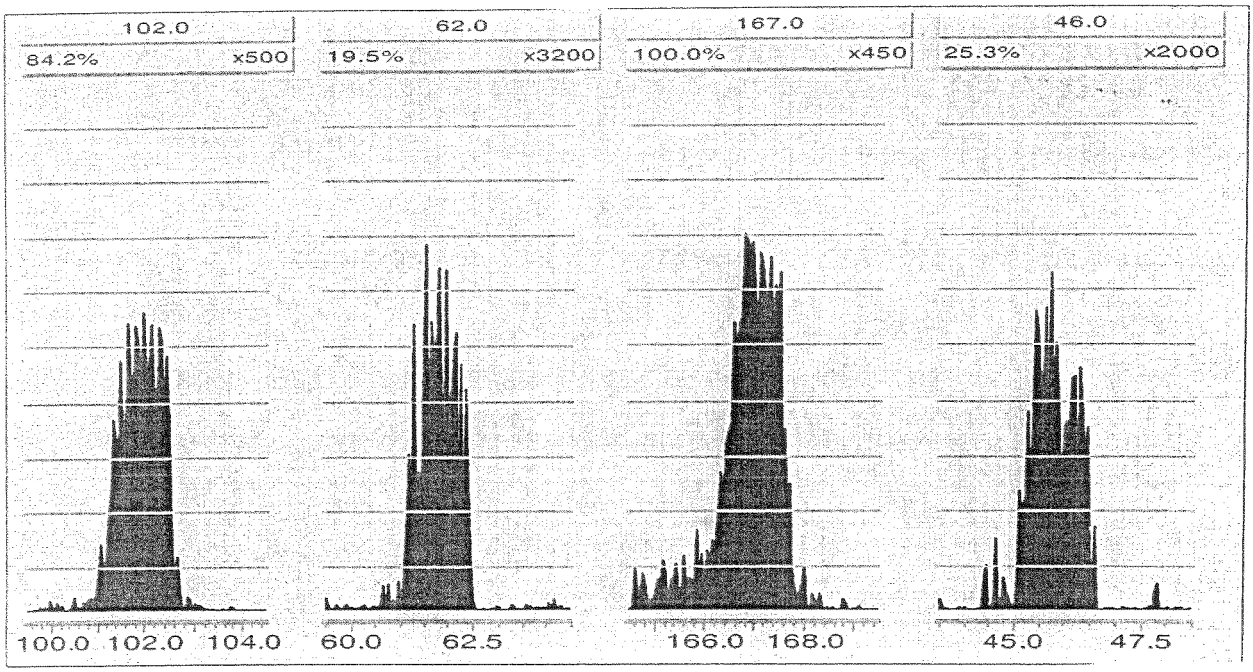
Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Thu Feb 09 07:04:54 2006



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8

High Explosives Internal Standard Summary

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

HPLC Column: Phenomenex Ultracarb 5u ODS(20)

Instrument ID: LCMSMS

	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			4114.915	13.284	38691.65	20.032
Upper Limit			5349.3895	13.784	50299.145	20.532
Lower Limit			2880.4405	12.784	27084.155	19.532
GU06010G8WT01	04-FEB-06	EXP0202060a	4303.68	13.216	44487.7	19.925
GU0601G14R101	04-FEB-06	EXP0202061a	4153.4	13.267	41687.9	19.946
LCS for batch 498839	03-FEB-06	EXP0202059a	4325.84	13.216	41120.7	19.904
MB for batch 498839	03-FEB-06	EXP0202058a	4109.5	13.293	41038	20.011

	Analysis Date/Time	GEL Data File	IS1 (DNB) (Area) #	RT (min) #	IS2 (DNT) (Area) #	RT2 (min) #
			3318.225	10.868	30271.933	15.145
Upper Limit			4313.6925	11.368	39353.5129	15.645
Lower Limit			2322.7575	10.368	21190.3531	14.645
GU0601G14R101	09-FEB-06	EXP0209015a	3789.81	10.876	33583.3	15.154
LCS for batch 501111	09-FEB-06	EXP0209014a	3754.71	10.876	30047	15.154
MB for batch 501111	09-FEB-06	EXP0209013a	3689.28	10.902	33875.3	15.215

IS1 (DNB) = 1,3-Dinitrobenzene-d4
IS2 (DNT) = 2,6-Dinitrotoluene-d3

Area Upper Limit = + 30% of average IS area from multipoint calibration
Area Lower Limit = - 30% of average IS area from multipoint calibratio

RT Upper Limit = +0.5 of average multipoint RT
RT Lower Limit = -0.5 of average multipoint RT

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

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SAMPLE DATA

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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU06010G8WT01

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614003

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0202060a
Date Analyzed: 04-FEB-06 00:12

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	U
121-14-2	2,4-Dinitrotoluene	0.325	U
121-82-4	RDX	0.325	U
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	U
2691-41-0	HMX	0.325	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	U
479-45-8	Tetryl	0.649	U
606-20-2	2,6-Dinitrotoluene	0.325	U
78-11-5	PETN	1.3	U
88-72-2	o-Nitrotoluene	0.325	U
98-95-3	Nitrobenzene	0.325	U
99-08-1	m-Nitrotoluene	0.325	U
99-35-4	1,3,5-Trinitrobenzene	0.325	U
99-65-0	m-Dinitrobenzene	0.325	U
99-99-0	p-Nitrotoluene	0.649	U

*Concentration =

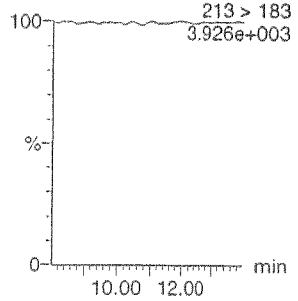
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

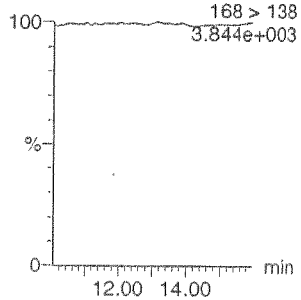
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202060a
Date: 04-Feb-2006
Time: 00:12:43
ID: 154614003 1E31C/49884/LI2/2/
Vial: 2:3,C

mft 2/4/06

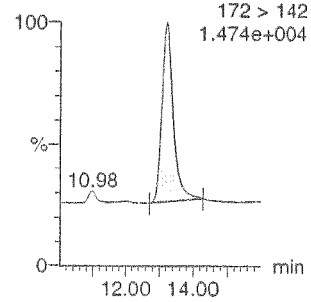
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.926e+003



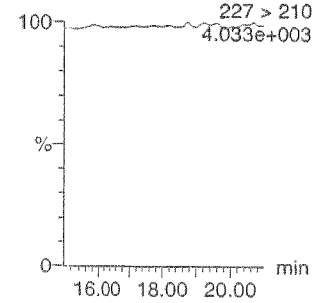
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.844e+003



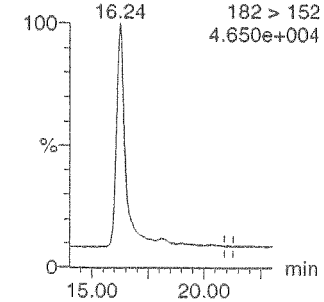
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.474e+004



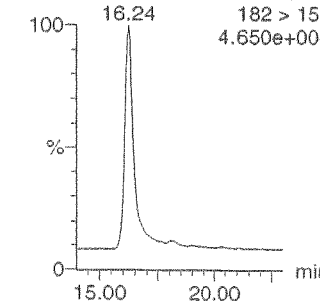
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
4.033e+003



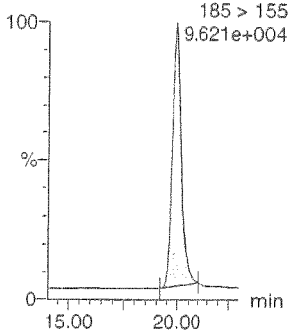
24-dinitrotoluene
F8:MRM of 2 channels,AP-
16.24
182 > 152
4.650e+004



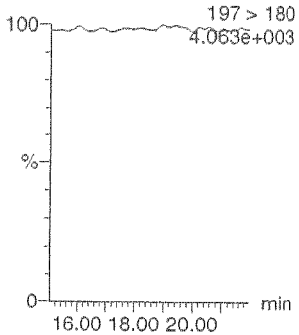
26-dinitrotoluene
F8:MRM of 2 channels,AP-
16.24
182 > 152
4.650e+004



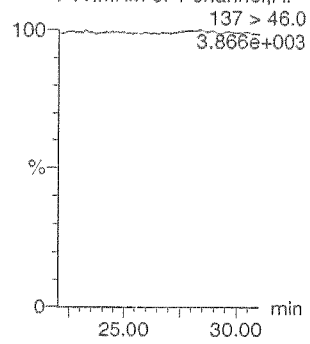
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
9.621e+004



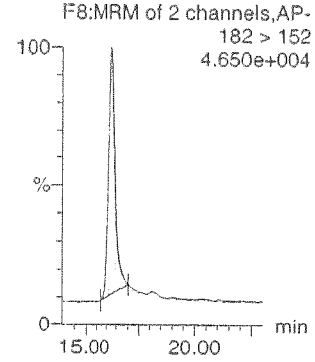
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.063e+003



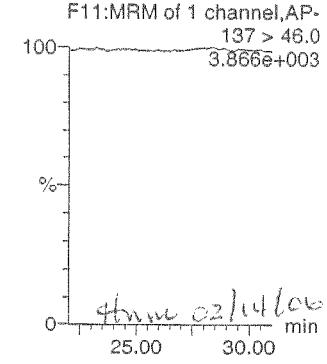
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.866e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
4.650e+004

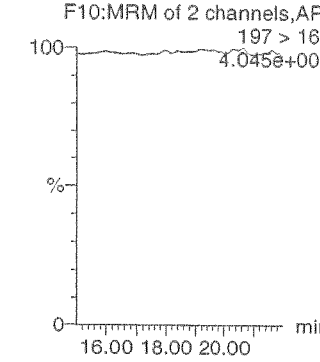


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.866e+003



dmw 02/14/06

4-Amino-26-dinitrotoluen
F10:MRM of 2 channels,AP-
197 > 167
4.045e+003



584

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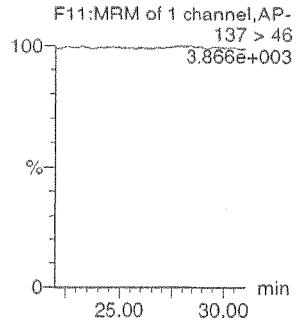
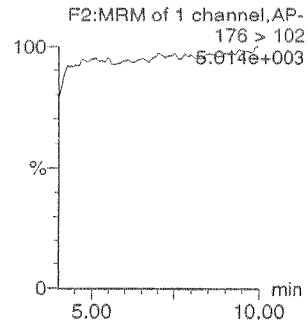
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

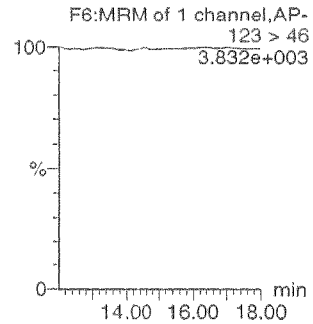
4-Nitrotoluene



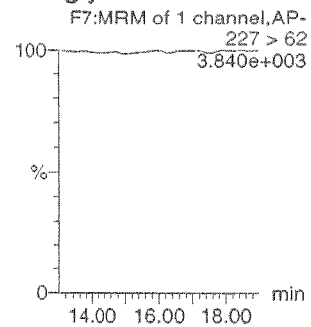
HMX



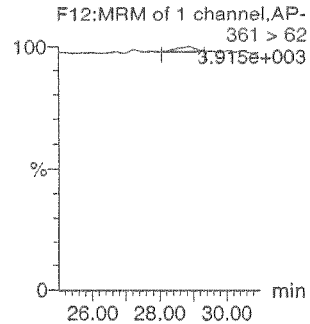
Nitrobenzene



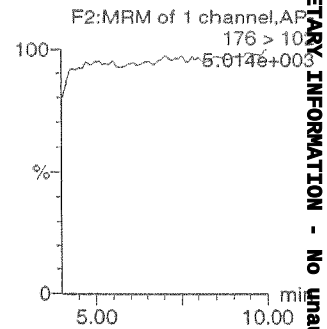
Nitroglycerin



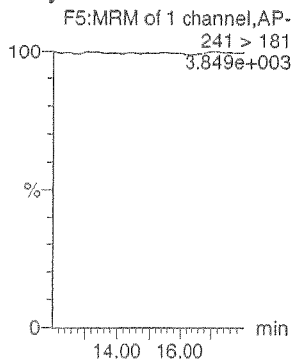
PETN



RDX



Tetryl



585

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ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
154614003	HMX	176 > 102			4303.676									
154614003	RDX	176 > 102			4303.676									
154614003	135-Trinitrobenzene	213 > 183			4303.676									
154614003	13-Dinitrobenzene-d4	172 > 142	13.22	4303.676		4303.676	4303.676	bb			522.9364	104.6	4.6	227.8
154614003	13-Dinitrobenzene	168 > 138			4303.676									
154614003	Tetryl	241 > 181			4303.676									
154614003	Nitrobenzene	123 > 46			4303.676									
154614003	Nitroglycerin	227 > 62			4303.676									
154614003	4-Amino-26-dinitrotoluene	197 > 167			44487.730									
154614003	2-Amino-46-dinitrotoluene	197 > 180			44487.730									
154614003	246-Trinitrotoluene	227 > 210			44487.730									
154614003	34-dinitrotoluene	182 > 152	16.24	16587.834	44487.730	16587.834	186.432	bb		2.61	201.5994	80.6	-19.4	550.0
154614003	26-dinitrotoluene	182 > 152			44487.730									
154614003	24-dinitrotoluene	182 > 152			44487.730			MM-	04-Feb-06	10:19:24				
154614003	26-dinitrotoluene-d3	185 > 155	19.93	44487.730		44487.730	44487.730	bb			574.9010	115.0	15.0	1485.3
154614003	2-Nitrotoluene	137 > 46.0			44487.730									
154614003	4-Nitrotoluene	137 > 46			44487.730									
154614003	3-Nitrotoluene	137 > 46.0			44487.730									
154614003	PETN	361 > 62	28.88	52.945	44487.730	52.945	0.595	bb		0.027	2.1079			26.3

586

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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU06010G8WT01

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614003

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209024.wiff
Date Analyzed: 09-FEB-06 22:18

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	U
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	U
618-87-1	3,5-Dinitroaniline	1.3	U
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	U
78-30-8	tris(o-cresyl) phosphate	1.3	U

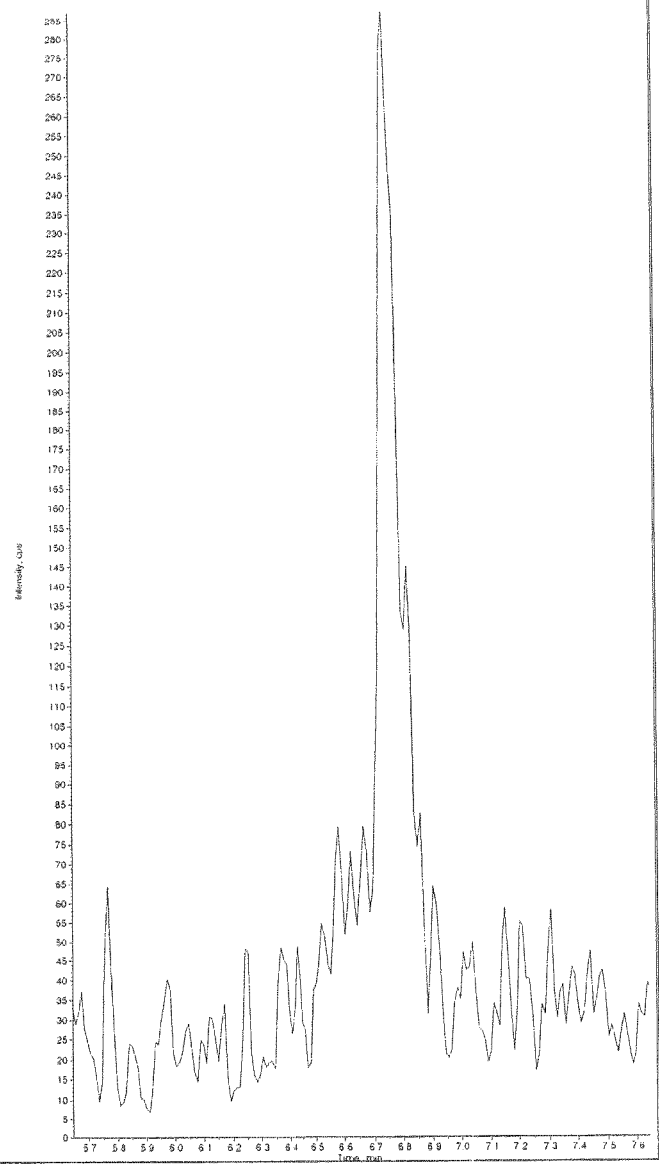
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

FRS 2/10/06

Sample Name: "154614003" Sample ID: "498841|2|LXS1" File: "EXS0209024.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

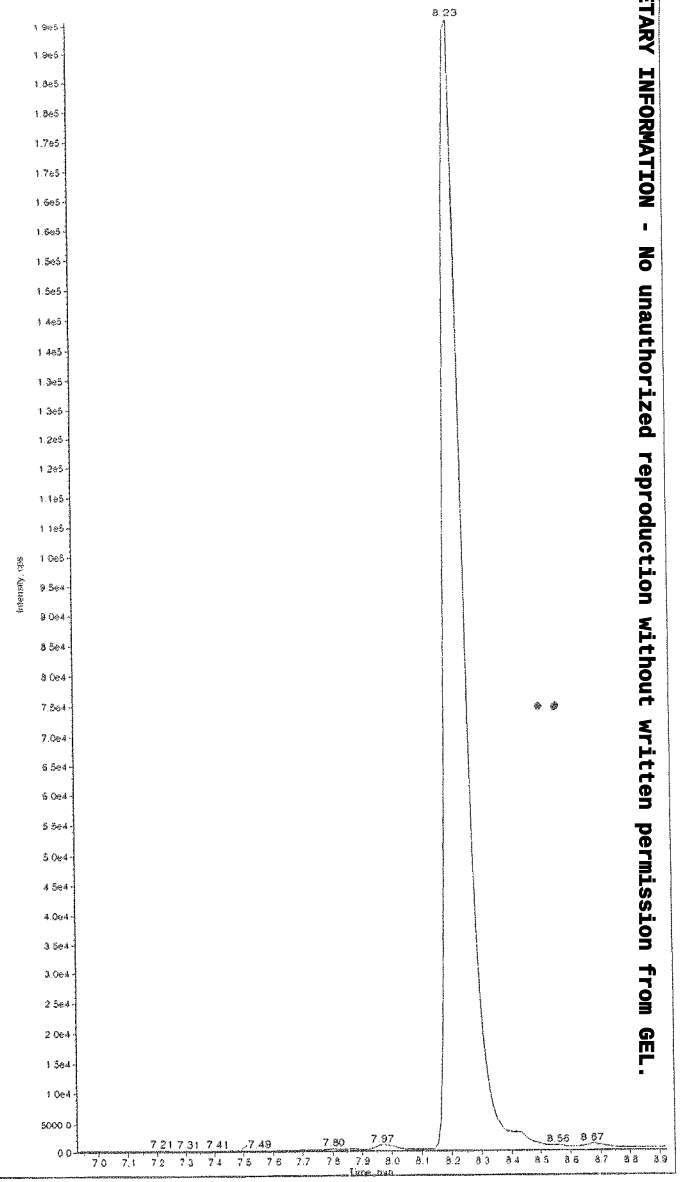
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	10:18:04 PM
Modified:	No



588

Sample Name: "154614003" Sample ID: "498841|2|LXS1" File: "EXS0209024.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	10:18:04 PM
Modified:	No



rbm 2/14/06

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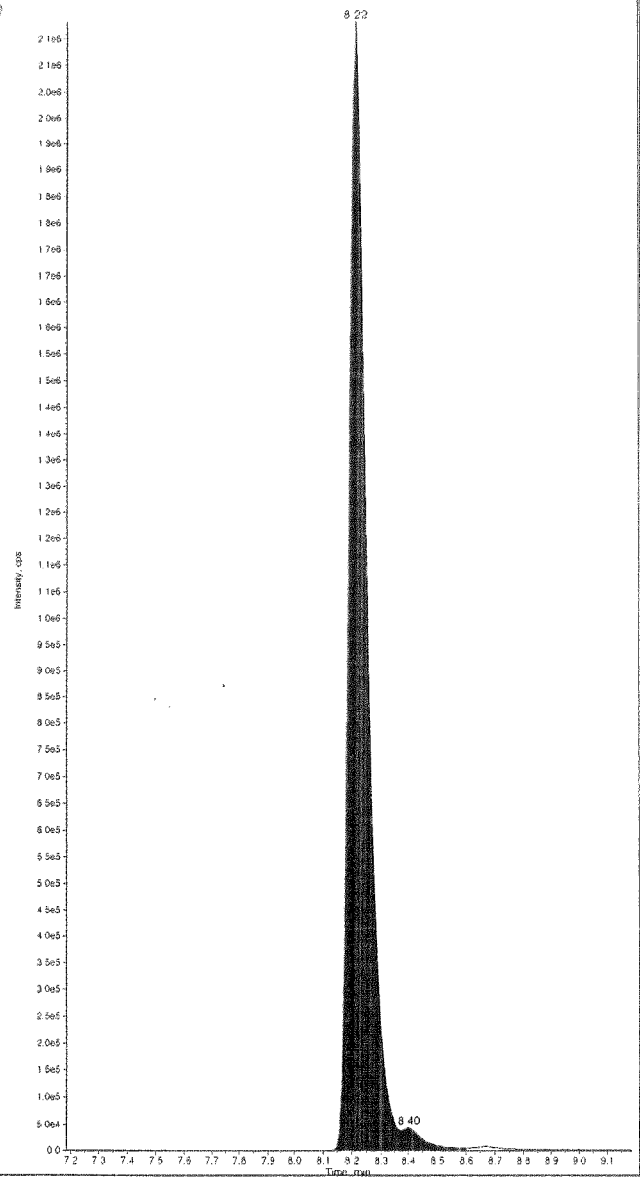
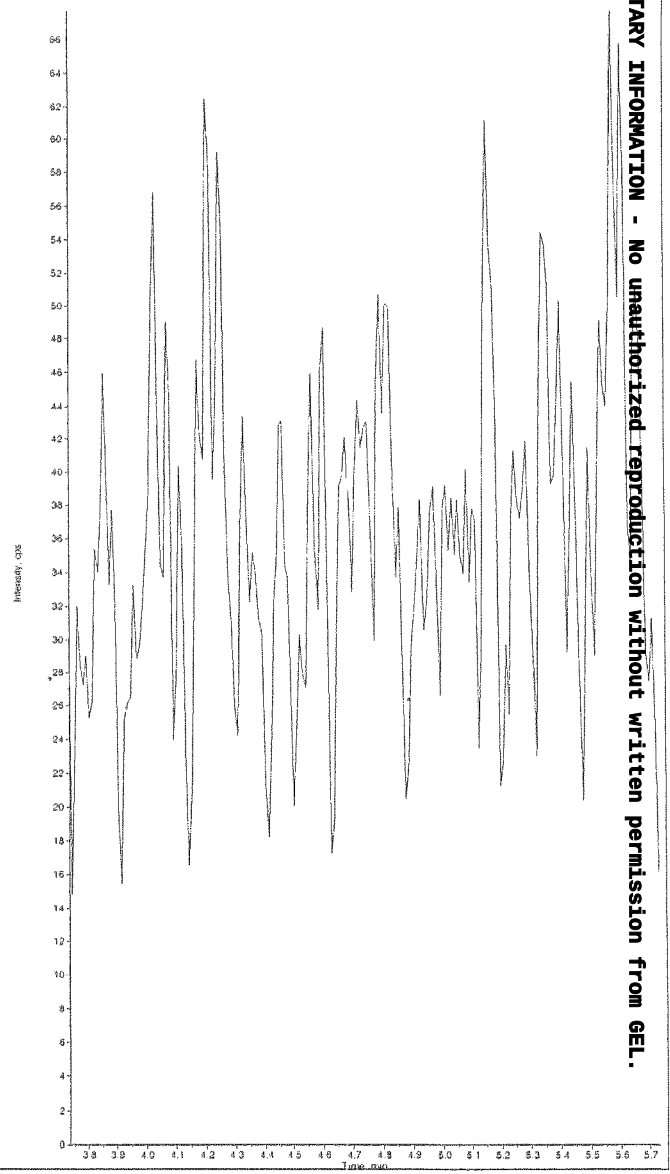
Sample Name: "154614003" Sample ID: "498841|2|LXS1" File: "EXS0209024.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	293.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	10:18:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.22	min
Area:	9.56e+006	counts
Height:	2.14e+006	cps
Start Time:	8.09	min
End Time:	8.60	min



Sample Name: "154614003" Sample ID: "498841|2|LXS1" File: "EXS0209024.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	10:18:04 PM	
Modified:	No	



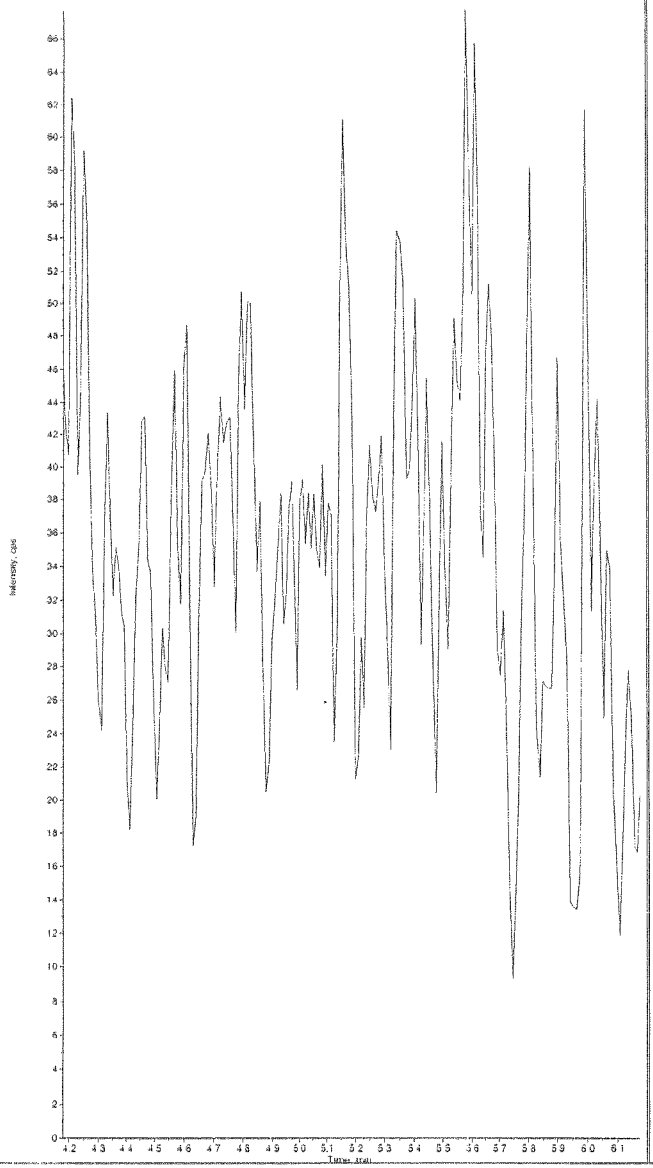
589

LXRS
2/10/06

Sample Name: "154614003" Sample ID: "498841|2|LXS1" File: "EXS0209024.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 10:18:04 PM

Modified: No

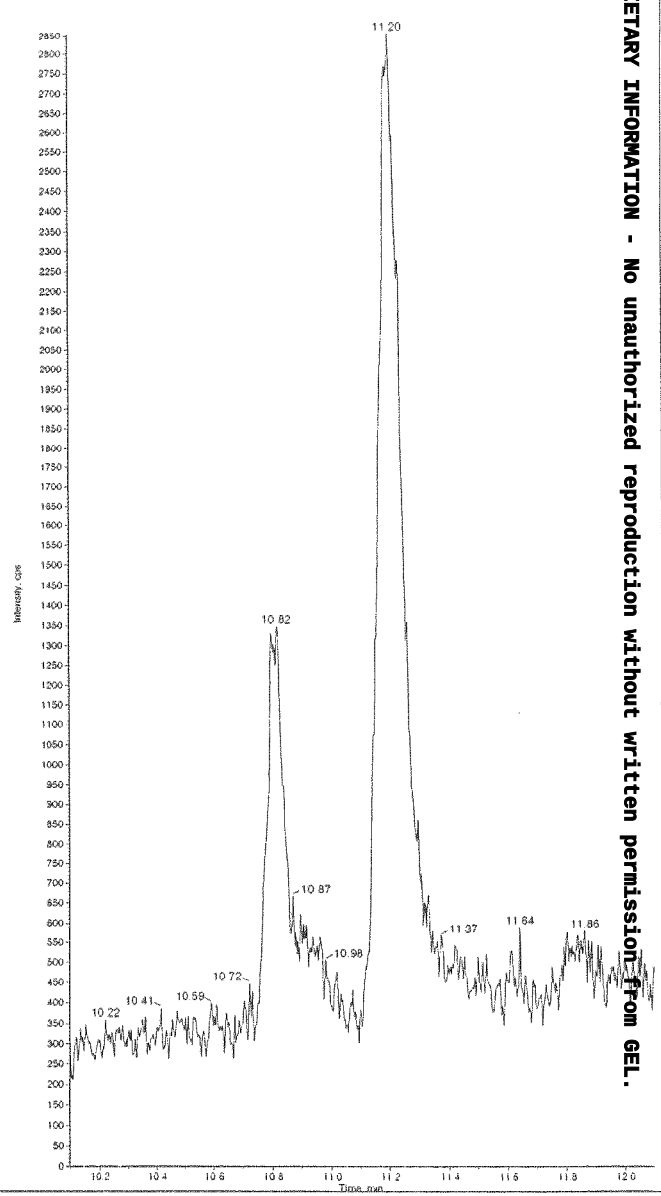


590

Sample Name: "154614003" Sample ID: "498841|2|LXS1" File: "EXS0209024.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 10:18:04 PM

Modified: No



Thru 02/10/06

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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU0601G14R101

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614004

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0202061a
Date Analyzed: 04-FEB-06 00:46

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	U
121-14-2	2,4-Dinitrotoluene	0.325	U
121-82-4	RDX	0.325	U
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	U
2691-41-0	HMX	0.325	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	U
479-45-8	Tetryl	0.649	U
606-20-2	2,6-Dinitrotoluene	0.325	U
78-11-5	PETN	1.3	U
88-72-2	o-Nitrotoluene	0.325	U
98-95-3	Nitrobenzene	0.325	U
99-08-1	m-Nitrotoluene	0.325	U
99-35-4	1,3,5-Trinitrobenzene	0.325	U
99-65-0	m-Dinitrobenzene	0.325	U
99-99-0	p-Nitrotoluene	0.649	U

*Concentration =

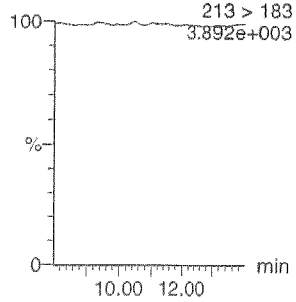
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202061a
Date: 04-Feb-2006
Time: 00:46:12
ID: 154614004 ERHC/498941/Lia/2/
Vial: 2:3,D

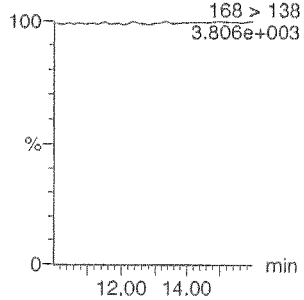
2/4/06

FAILS Surrogate Recovery

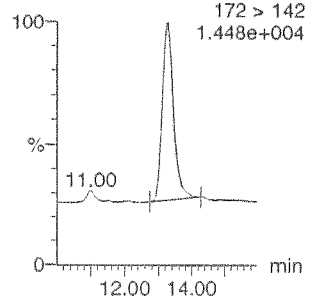
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.892e+003



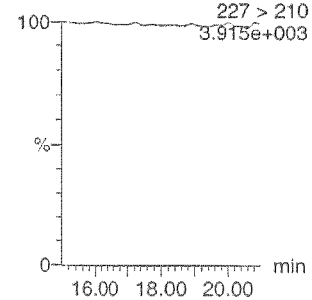
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.806e+003



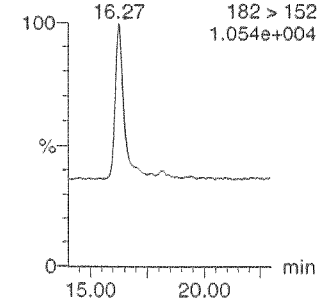
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.448e+004



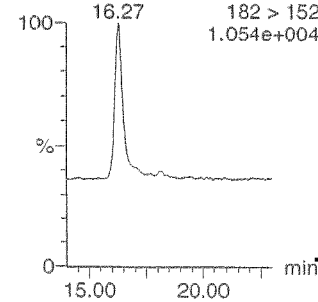
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
3.915e+003



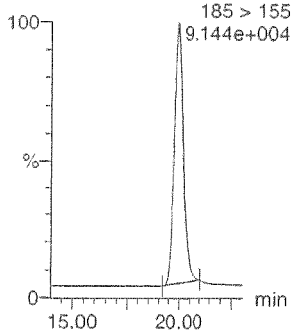
24-dinitrotoluene
F8:MRM of 2 channels,AP-
16.27
182 > 152
1.054e+004



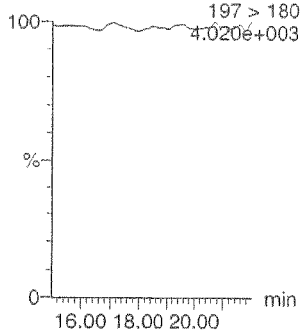
26-dinitrotoluene
F8:MRM of 2 channels,AP-
16.27
182 > 152
1.054e+004



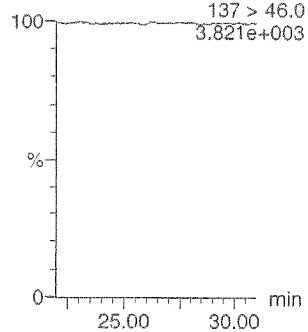
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
9.144e+004



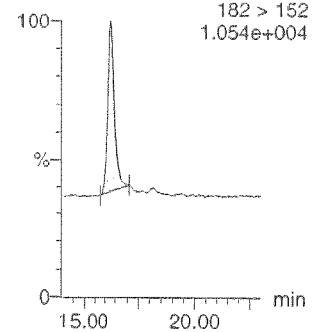
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.020e+003



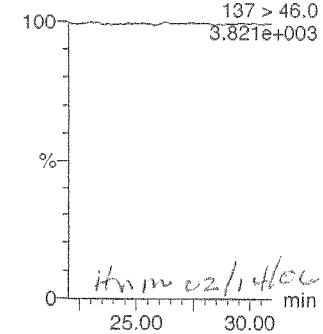
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.821e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.054e+004

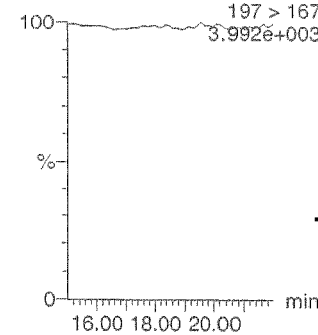


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.821e+003



hm m 02/14/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.992e+003



592

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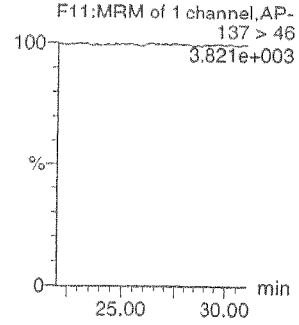
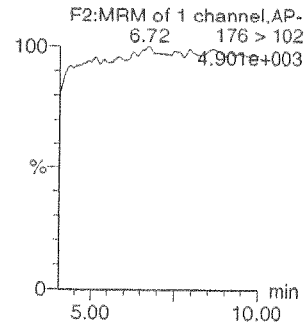
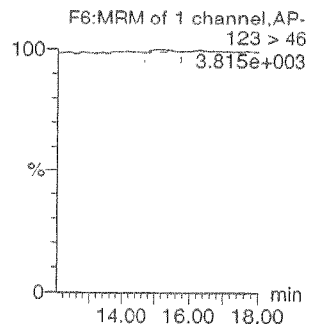
4-Nitrotoluene



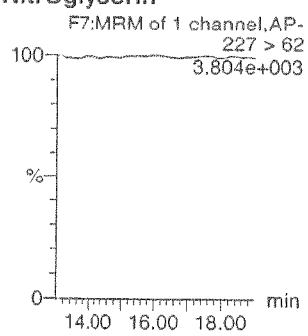
HMX



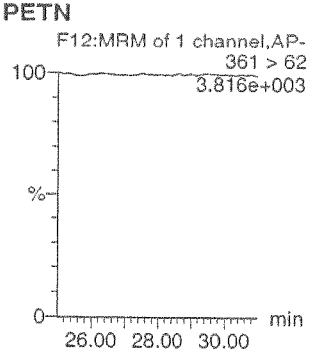
Nitrobenzene



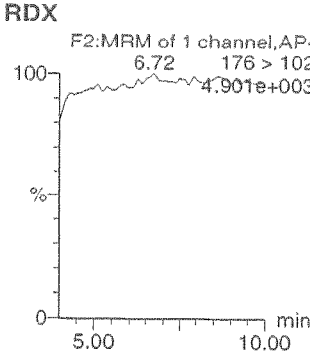
Nitroglycerin



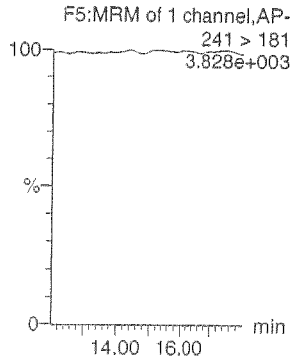
PETN



RDX



Tetryl



593

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
154614004	HMX	176 > 102			4153.403									
154614004	RDX	176 > 102			4153.403									
154614004	135-Trinitrobenzene	213 > 183			4153.403									
154614004	13-Dinitrobenzene-d4	172 > 142	13.27	4153.403		4153.403	4153.403	bb			504.6768	100.9	0.9	249.3
154614004	13-Dinitrobenzene	168 > 138			4153.403									
154614004	Tetryl	241 > 181			4153.403									
154614004	Nitrobenzene	123 > 46			4153.403			MM-	04-Feb-06	10:09:34				
154614004	Nitroglycerin	227 > 62			4153.403									
154614004	4-Amino-26-dinitrotoluene	197 > 167			41687.934									
154614004	2-Amino-46-dinitrotoluene	197 > 180			41687.934									
154614004	246-Trinitrotoluene	227 > 210			41687.934									
154614004	34-dinitrotoluene	182 > 152	16.27	2529.215	41687.934	2529.215	30.335	bb		0,426	32.8031	13.1	-86.9	221.0
154614004	26-dinitrotoluene	182 > 152			41687.934									
154614004	24-dinitrotoluene	182 > 152			41687.934									
154614004	26-dinitrotoluene-d3	185 > 155	19.95	41687.934		41687.934	41687.934	bb			538.7201	107.7	7.7	1794.1
154614004	2-Nitrotoluene	137 > 46.0			41687.934									
154614004	4-Nitrotoluene	137 > 46			41687.934									
154614004	3-Nitrotoluene	137 > 46.0			41687.934									
154614004	PETN	361 > 62			41687.934									

4/7 MC 2/14/06

MM 2/4/06

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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories

Client Sample ID: GU0601G14R101

Lab Code: GEL

GEL Job No (SDG) 154614

Matrix: GROUND WATER

GEL Sample ID: 154614004

Sample Amount 770

Moisture:

Amount Units mL

Date Received: 26-JAN-06

Extraction Type Sol Exchange

Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5

Date Extracted: 31-JAN-06

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS0209025.wiff

Date Analyzed: 09-FEB-06 22:40

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	U
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	U
618-87-1	3,5-Dinitroaniline	1.3	U
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	U
78-30-8	tris(o-cresyl) phosphate	1.3	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

LRS 2/10/06

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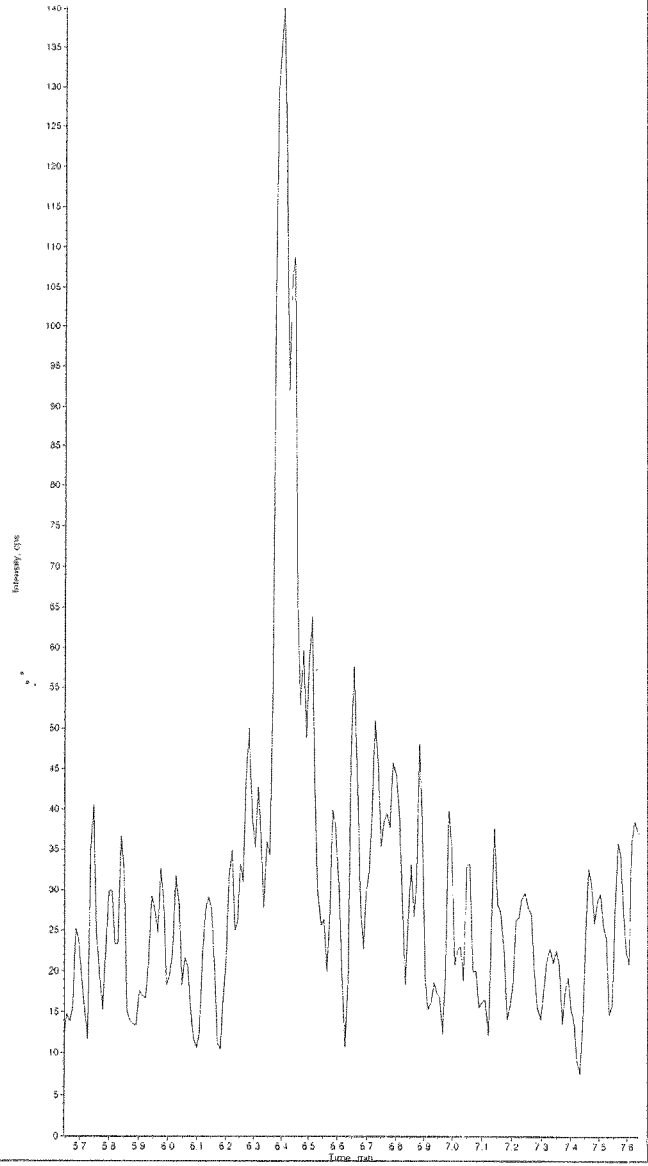
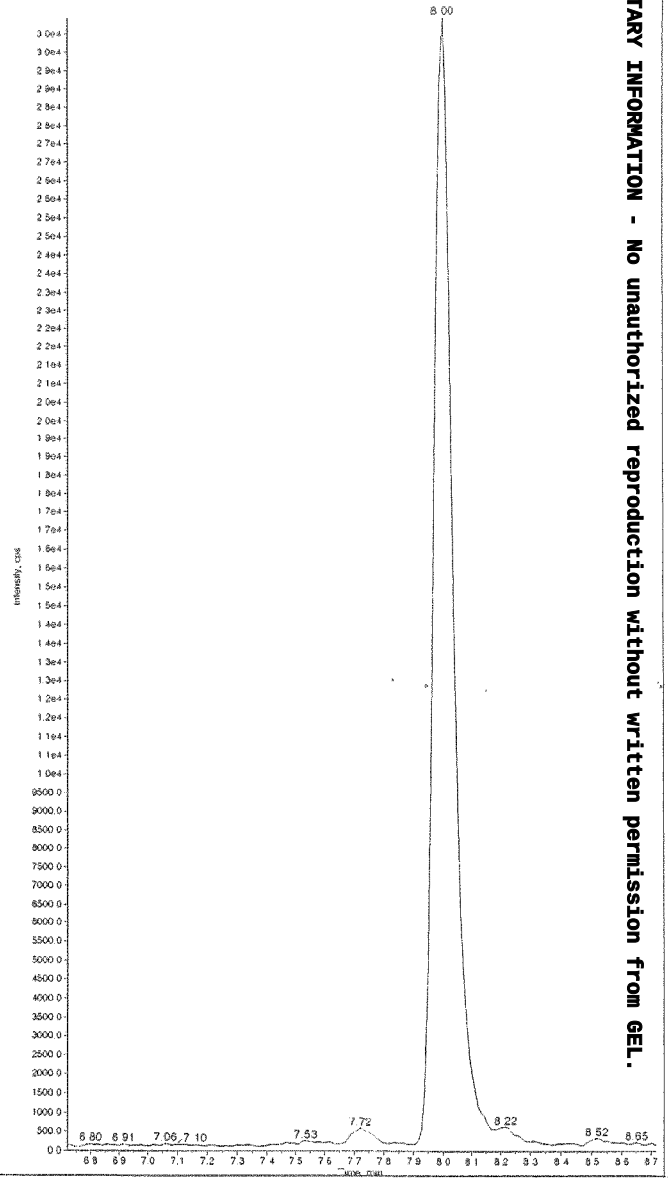
Sample Name: "154614004" Sample ID: "498841|2|LXS1" File: "EXS0209025.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	10:40:29 PM
Modified:	No



Sample Name: "154614004" Sample ID: "498841|2|LXS1" File: "EXS0209025.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	10:40:29 PM
Modified:	Yes



cthime 02/10/06

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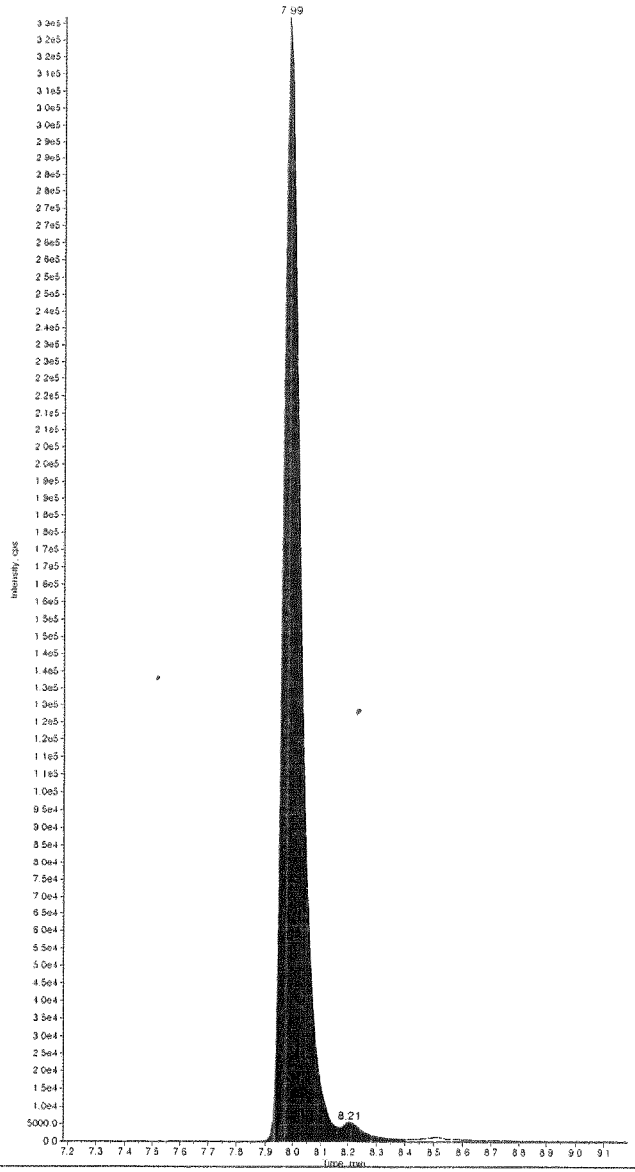
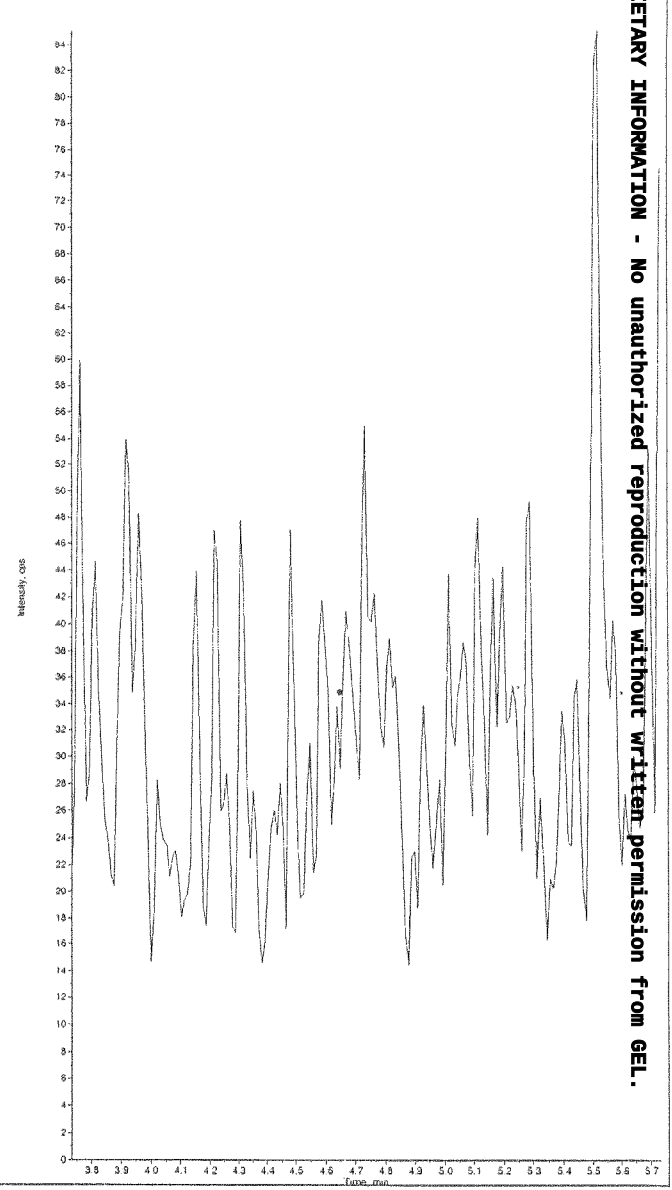
Sample Name: "154614004" Sample ID: "498841|2|LXS1" File: "EXS0209025.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	45.5 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	10:40:29 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	7.99 min
Area:	1.52e+006 counts
Height:	3.27e+005 cps
Start Time:	7.83 min
End Time:	8.40 min



Sample Name: "154614004" Sample ID: "498841|2|LXS1" File: "EXS0209025.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	10:40:29 PM
Modified:	No



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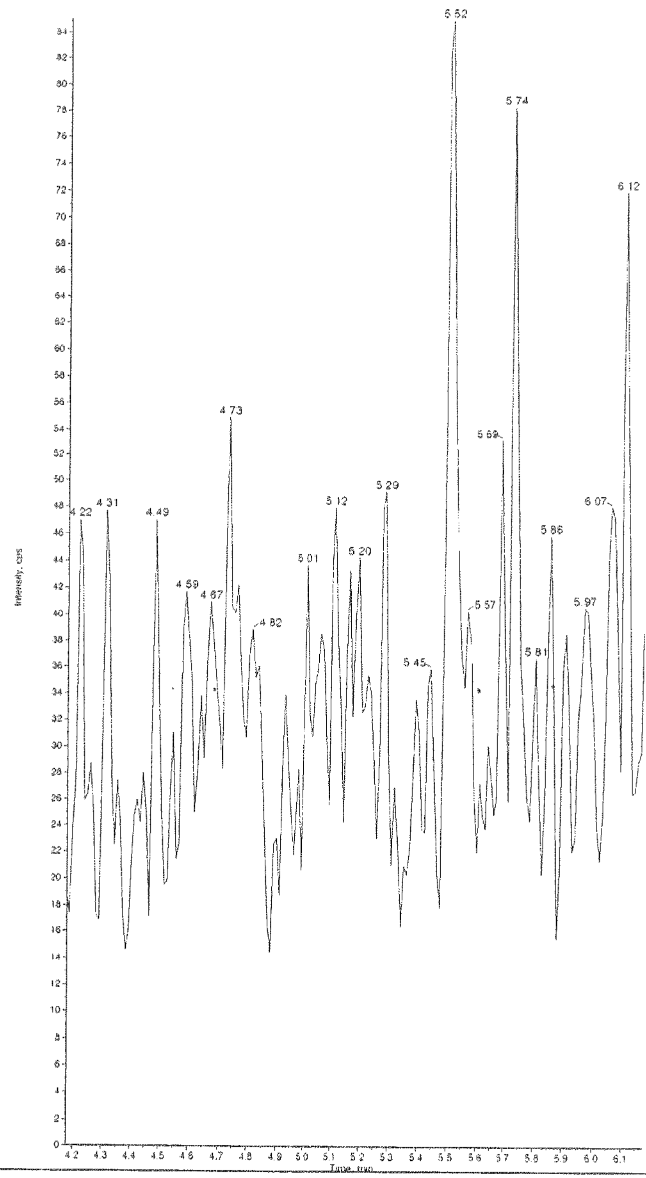
Sample Name: "154614004" Sample ID: "498841|2|LXS1" File: "EXS0209025.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 10:40:29 PM

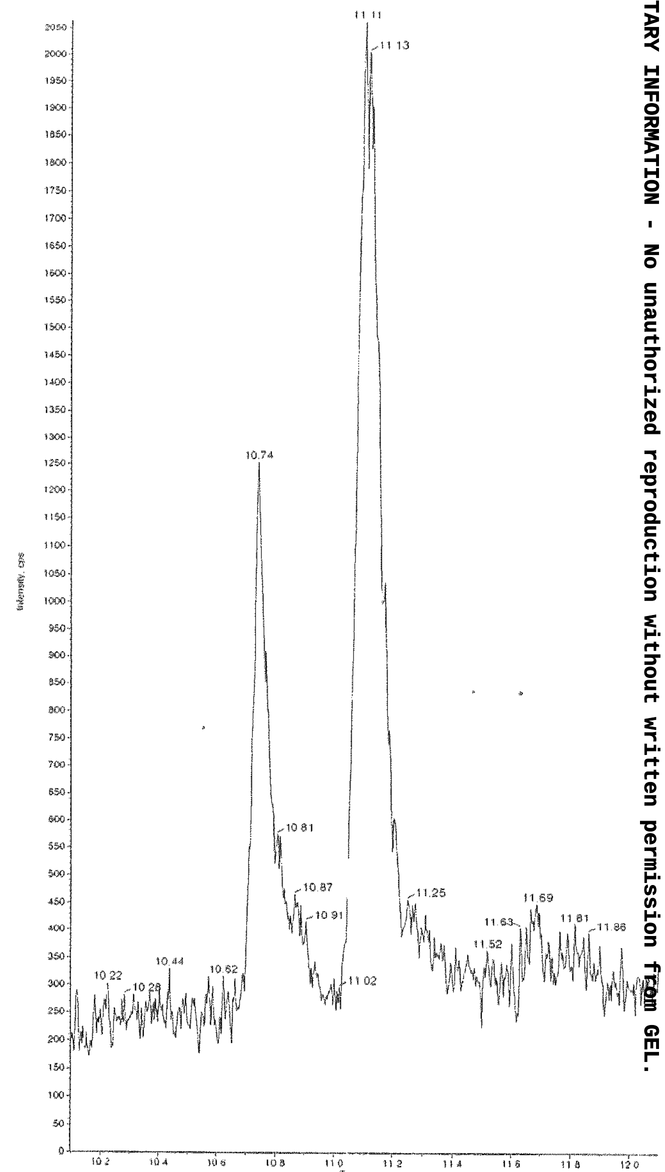
Modified: No



Sample Name: "154614004" Sample ID: "498841|2|LXS1" File: "EXS0209025.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 10:40:29 PM

Modified: No



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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU0601G14R101

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614004

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0209015a
Date Analyzed: 09-FEB-06 17:45

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	Uh
121-14-2	2,4-Dinitrotoluene	0.325	Uh
121-82-4	RDX	0.325	Uh
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	Uh
2691-41-0	HMX	0.325	Uh
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	Uh
479-45-8	Tetryl	0.649	Uh
606-20-2	2,6-Dinitrotoluene	0.325	Uh
78-11-5	PETN	1.3	Uh
88-72-2	o-Nitrotoluene	0.325	Uh
98-95-3	Nitrobenzene	0.325	Uh
99-08-1	m-Nitrotoluene	0.325	Uh
99-35-4	1,3,5-Trinitrobenzene	0.325	Uh
99-65-0	m-Dinitrobenzene	0.325	Uh
99-99-0	p-Nitrotoluene	0.649	Uh

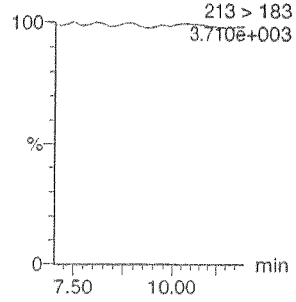
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

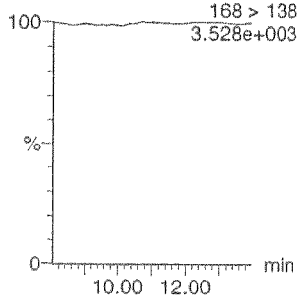
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209015a
Date: 09-Feb-2006
Time: 17:45:56
ID: 154614004 ICSICC/501113/LCS/RE/2/ mm 2/10/06
Vial: 1:4,C

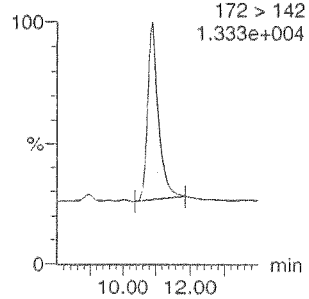
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.710e+003



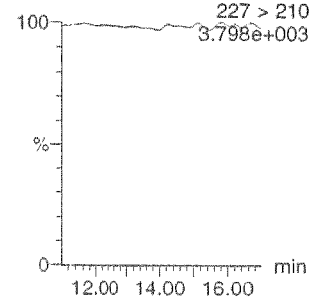
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.528e+003



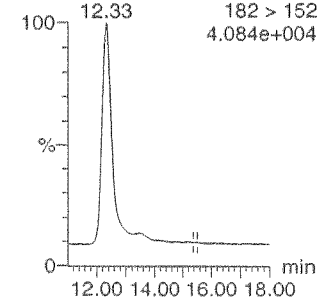
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.333e+004



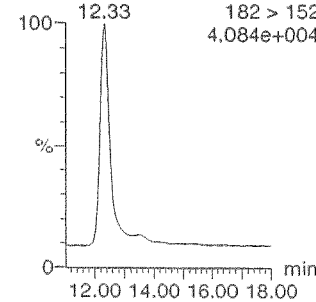
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
3.798e+003



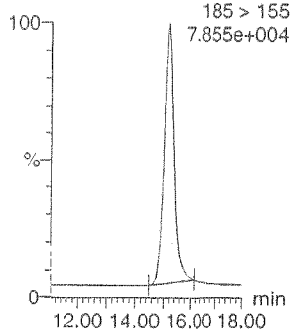
24-dinitrotoluene
F8:MRM of 2 channels,AP-
12.33
182 > 152
4.084e+004



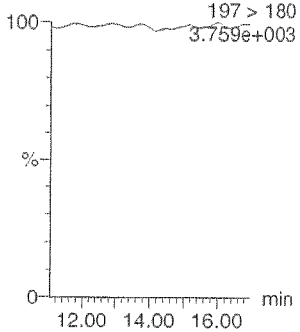
26-dinitrotoluene
F8:MRM of 2 channels,AP-
12.33
182 > 152
4.084e+004



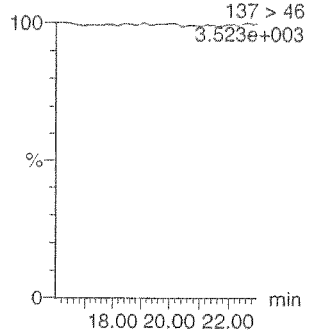
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.855e+004



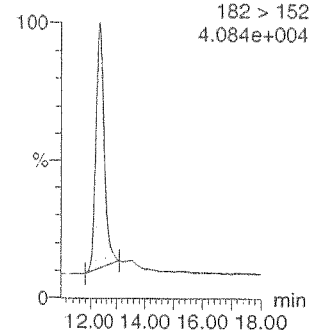
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.759e+003



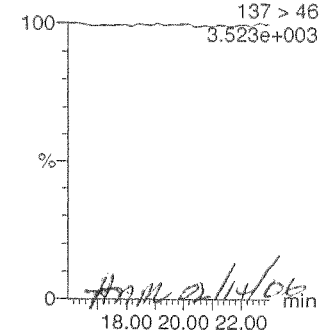
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.523e+003



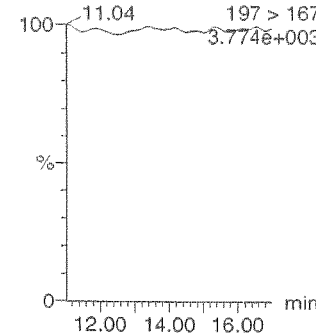
34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
4.084e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.523e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
11.04
197 > 167
3.774e+003



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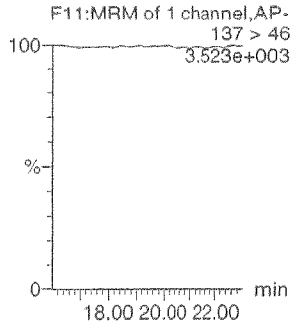
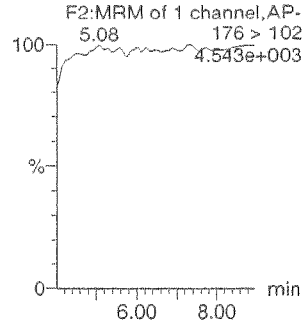
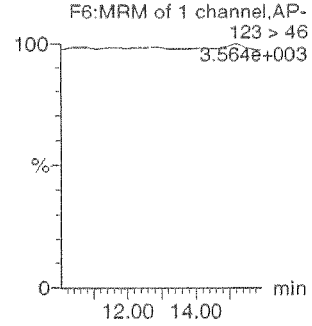
4-Nitrotoluene



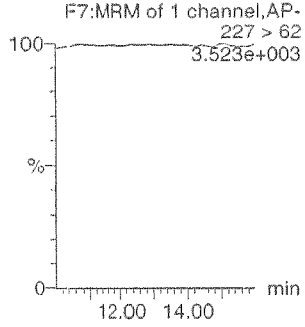
HMX



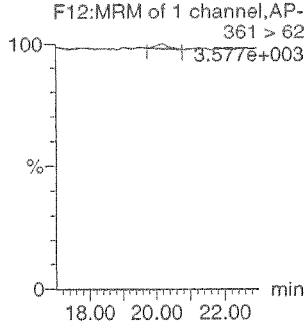
Nitrobenzene



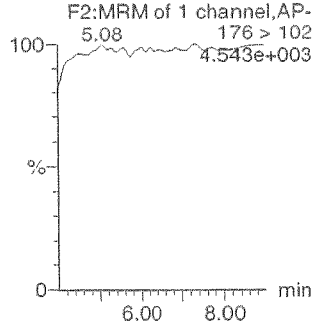
Nitroglycerin



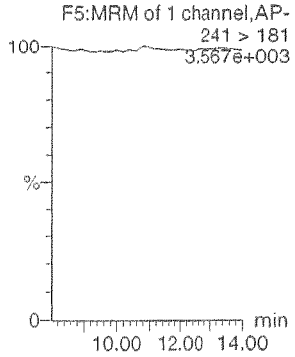
PETN



RDX



Tetryl



601

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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
154614004	HMX	176 > 102			3789.807									
154614004	RDX	176 > 102			3789.807									
154614004	135-Trinitrobenzene	213 > 183			3789.807									
154614004	13-Dinitrobenzene-d4	172 > 142	10.88	3789.807		3789.807	3789.807	bb			571.0594	114.2	14.2	534.1
154614004	13-Dinitrobenzene	168 > 138			3789.807									
154614004	Tetryl	241 > 181			3789.807									
154614004	Nitrobenzene	123 > 46			3789.807									
154614004	Nitroglycerin	227 > 62			3789.807									
154614004	4-Amino-26-dinitrotoluene	197 > 167			33583.266									
154614004	2-Amino-46-dinitrotoluene	197 > 180			33583.266									
154614004	246-Trinitrotoluene	227 > 210			33583.266									
154614004	34-dinitrotoluene	182 > 152	12.33	13520.489	33583.266	13520.489	201.298	bb		3.21	247.1393	98.9	-1.1	798.4
154614004	26-dinitrotoluene	182 > 152			33583.266									
154614004	24-dinitrotoluene	182 > 152			33583.266			MM-	10-Feb-06	06:55:59				
154614004	26-dinitrotoluene-d3	185 > 155	15.15	33583.266		33583.266	33583.266	bb			554.6933	110.9	10.9	2910.4
154614004	2-Nitrotoluene	137 > 46			33583.266									
154614004	4-Nitrotoluene	137 > 46			33583.266									
154614004	3-Nitrotoluene	137 > 46			33583.266									
154614004	PETN	361 > 62	20.21	30.430	33583.266	30.430	0.453	bb		0.173	1.0633			19.5

602

dhme 2/14/06

AMM 2/10/06

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: GU0601G14R101

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 154614004

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 26-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209056.wiff
Date Analyzed: 10-FEB-06 14:54

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	Uh
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	Uh
618-87-1	3,5-Dinitroaniline	1.3	Uh
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	Uh
78-30-8	tris(o-cresyl) phosphate	1.3	Uh

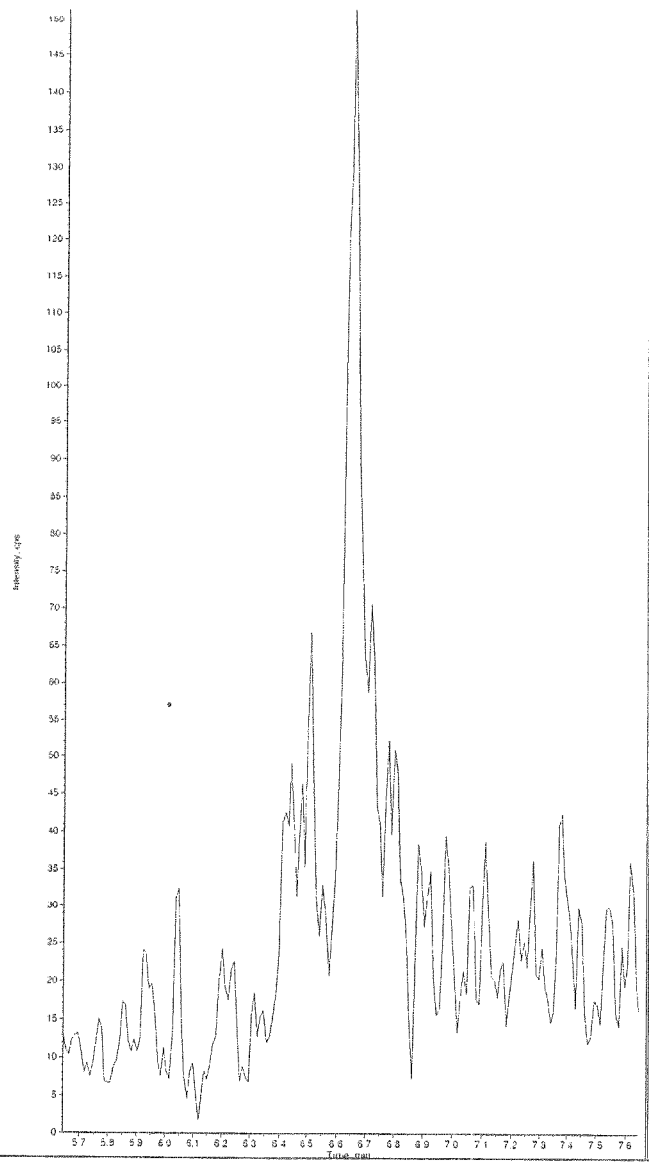
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

RE

Sample Name: "154614004" Sample ID: "501113|2|LXS1" File: "EXS0209056.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

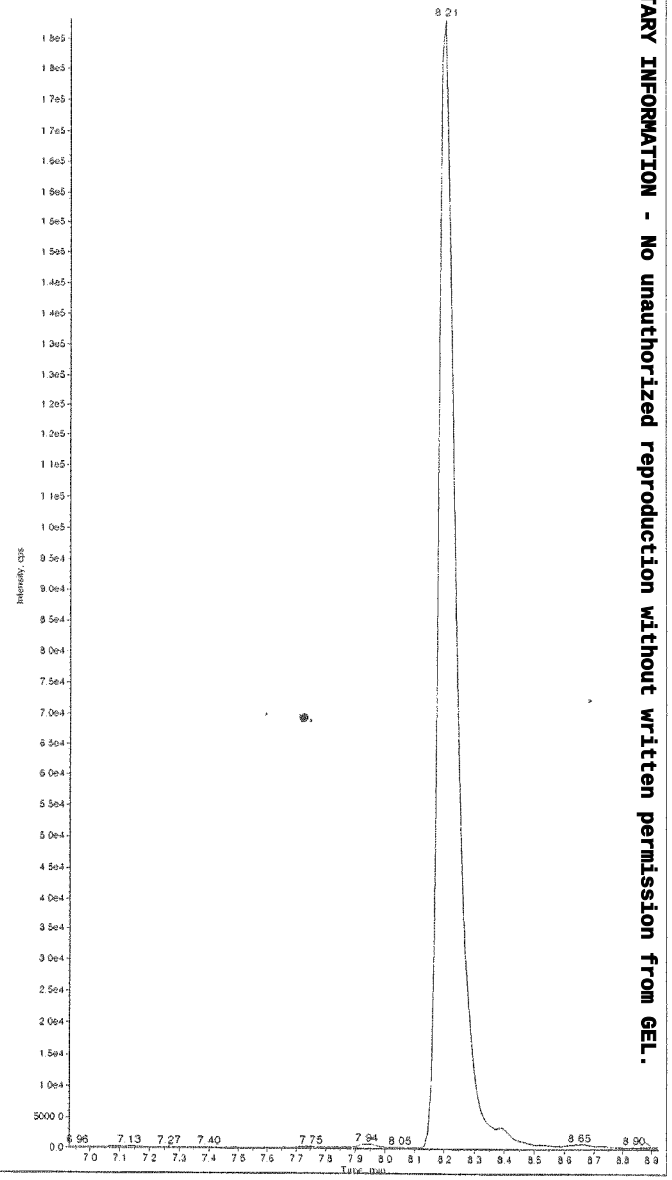
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:54:13 PM
Modified:	No



604

Sample Name: "154614004" Sample ID: "501113|2|LXS1" File: "EXS0209056.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:54:13 PM
Modified:	No



Hmm 02/14/06

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RE for Sum Failures DNC

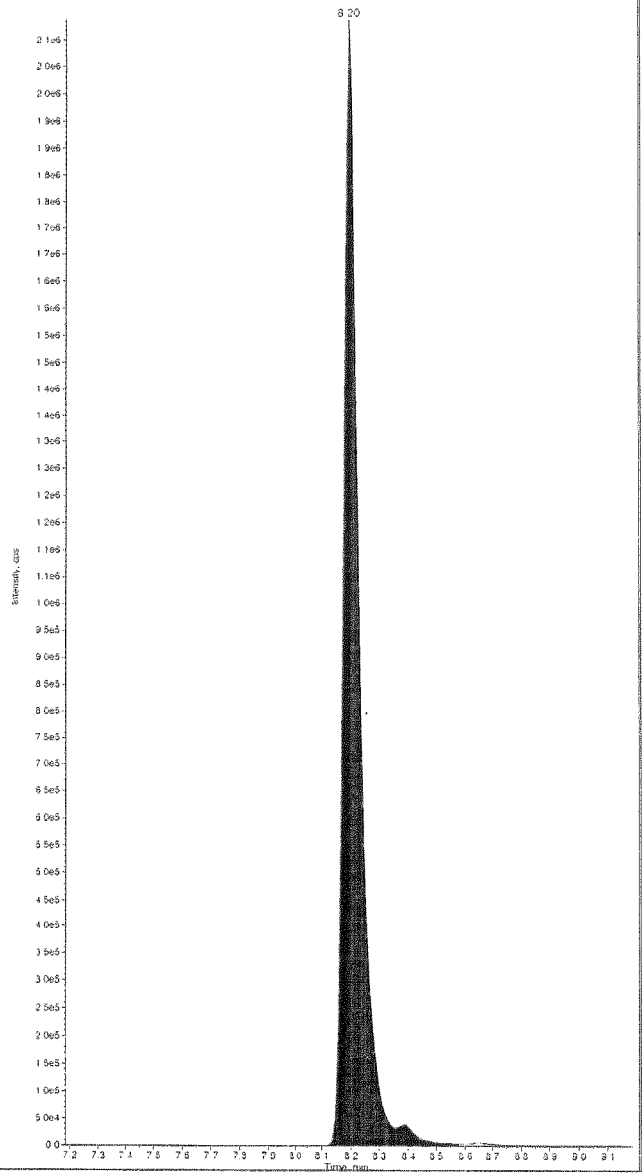
2/13/06

Sample Name: "154614004" Sample ID: "501113|2|LXS1" File: "EXS0209056.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	260. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:54:13 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.20 min
Area:	8.55e+006 counts
Height:	2.10e+006 cps
Start Time:	8.06 min
End Time:	8.58 min

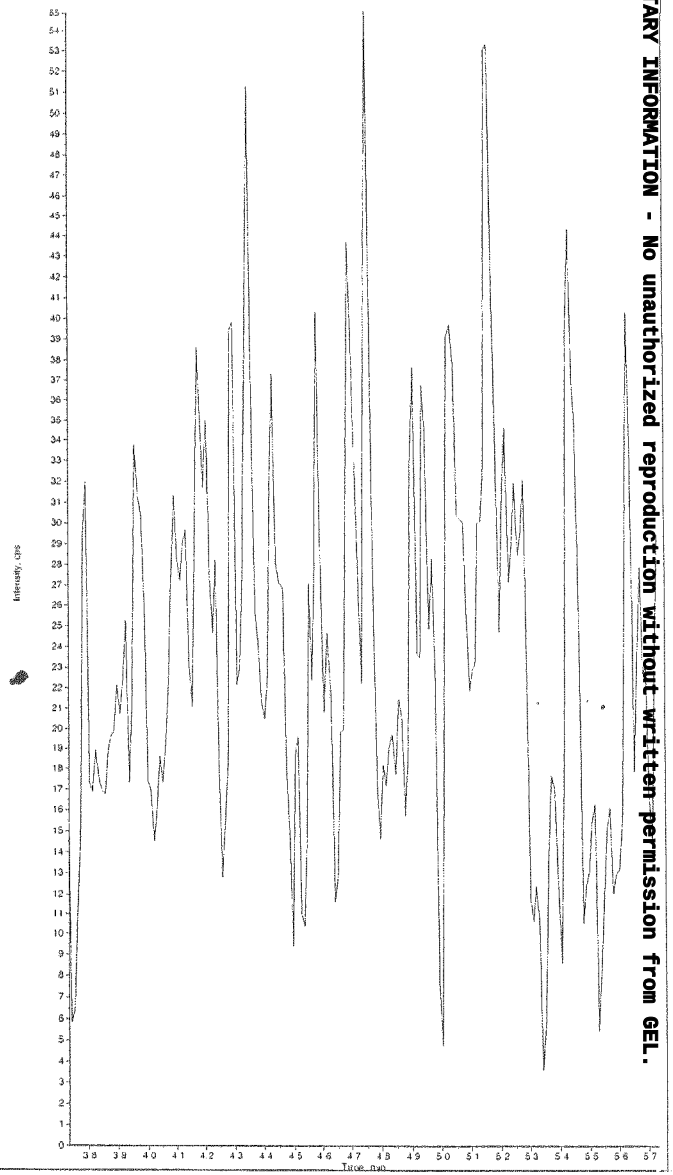
3.37

605



Sample Name: "154614004" Sample ID: "501113|2|LXS1" File: "EXS0209056.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:54:13 PM
Modified:	No



Hmm 02/14/06

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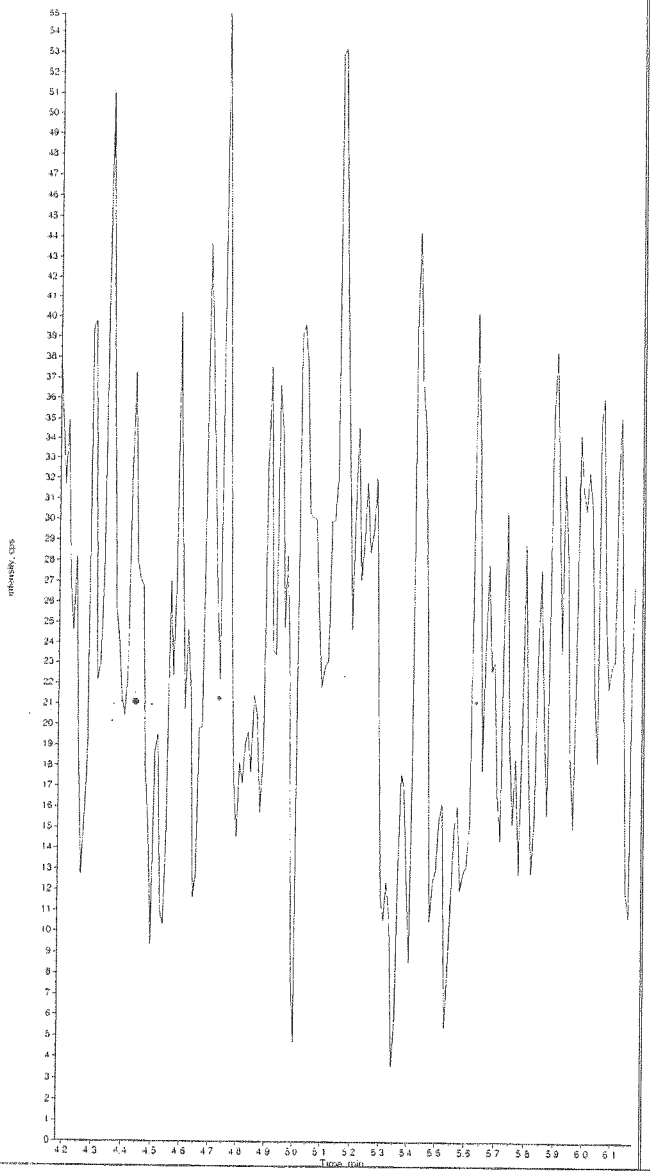
RE

YRS 2/13/06

606

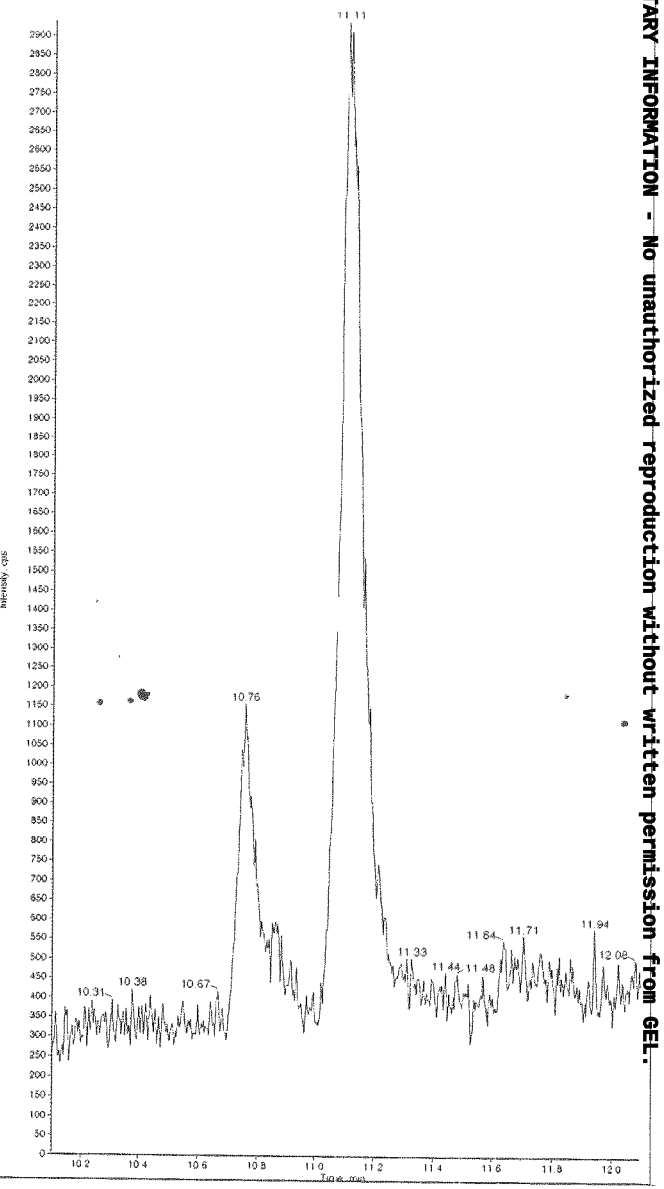
Sample Name: "154614004" Sample ID: "501113|2|LXS1" File: "EXS0209056.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:54:13 PM
Modified:	No



Sample Name: "154614004" Sample ID: "501113|2|LXS1" File: "EXS0209056.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:54:13 PM
Modified:	No



dhm 02/14/06

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STANDARDS DATA

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SW846 8321A Modified-Explosives
Calibration Standard Concentration Levels

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	CCV
3,4-Dinitrotoluene (Surrogate)	12.5	25	100	200	400	500		300
Primary Analytes								
HMX	25	50	200	400	800	1000	na	600
RDX	25	50	200	400	800	1000	na	600
1,3,5-Trinitrobenzene	25	50	200	400	800	1000	na	600
1,3-Dinitrobenzene	25	50	200	400	800	1000	na	600
Nitrobenzene	25	50	200	400	800	1000	na	600
Tetryl	25	50	200	400	800	1000	na	600
Nitroglycerin	50	100	200	400	800	1000	na	600
2,4,6-Trinitrotoluene	25	50	200	400	800	1000	na	600
2-Amino-4,6-dinitrotoluene	25	50	200	400	800	1000	na	600
4-Amino-2,6-dinitrotoluene	25	50	200	400	800	1000	na	600
2,4-Dinitrotoluene	25	50	200	400	800	1000	na	600
2,6-Dinitrotoluene	25	50	200	400	800	1000	na	600
2-Nitrotoluene	25	50	200	400	800	1000	na	600
4-Nitrotoluene	25	50	200	400	800	1000	an	600
3-Nitrotoluene	25	50	200	400	800	1000	na	600
PETN	50	100	200	400	800	1000	na	600
Picric Acid	200	400	1600	3200	6400	8000	na	4800
3,4-Dinitrotoluene (Surrogate)	25	50	125	250	375	500	1000	250
Secondary Analytes								
2,4-Diamino-6-nitrotoluene	50	100	250	500	750	1000	2000	500
2,6-Diamino-4-nitrotoluene	50	100	250	500	750	1000	2000	500
3,5-Dinitroaniline	50	100	250	500	750	1000	2000	500
TATB	50	100	250	500	750	1000	2000	500
tris(o-Cresyl)phosphate	50	100	250	500	750	1000	2000	500

All values are ug/L without the prep factor

Calibration Levels 8321A-Modified-EXPL.xls (09/05)

Explosives Initial Calibration

Form 6

Lab Name: General Engineering Laboratories

GEL Job No: 154614

Lab Code: GEL

Run Date: 02-FEB-06,09-FEB-06

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0202004a	EXP0202005a	EXP0202006a	EXP0202007a	EXP0202008a	EXP0202009a			
Parmname									
1,3,5-Trinitrobenzene	4.446	4.699	4.263	3.955	4.544	4.809	4.4526667	6.96	
1,3-Dinitrobenzene-d4	8.336	9.182	9.103	9.495	6.679	6.585	8.23	15.742	
2,4,6-Trinitrotoluene	.897	1.027	.963	.689	1.014	.991	.93016667	13.649	
2,4-Dinitrotoluene	.239	.25	.259	.198	.255	.252	.24216667	9.447	
2,6-Dinitrotoluene	1.115	1.141	1.161	1.081	1.122	1.077	1.1161667	2.96	
2,6-Dinitrotoluene-d3	75.184	81.284	77.264	95.767	69.877	64.925	77.3835	13.793	
2-Amino-4,6-dinitrotoluene	.412	.491	.442	.325	.449	.449	.428	13.184	
3,4-Dinitrotoluene	.898	1.065	.893	.787	1.008	.898	.92483333	10.58	
4-Amino-2,6-dinitrotoluene	.291	.31	.288	.201	.305	.3	.2825	14.437	
HMX	5.77	6.459	5.064	4.353	6.787	5.561	5.6656667	15.771	
Nitrobenzene	.589	.366	.404	.414	.511	.489	.46216667	17.854	
Nitroglycerin	.192	.198	.186	.181	.213	.168	.18966667	8.161	
RDX	7.061	8.313	8.358	6.916	10.243	9.318	8.3681667	15.339	
Tetryl	1.374	1.707	1.4	1.387	1.81	1.648	1.5543333	12.283	
m-Dinitrobenzene	1.516	1.444	1.377	1.388	1.449	1.432	1.4343333	3.469	
m-Nitrotoluene	.02	.031	.025	.021	.028	.027	.02533333	17.781	
o-Nitrotoluene	.041	.033	.035	.03	.04	.036	.03583333	12.148	
p-Nitrotoluene	.022	.017	.016	.014	.02	.017	.01766667	14.638	

Q column used to flag RSD values outside of Limit (>20%)
* Values outside of QC Limit

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Explosives Initial Calibration

Form 6

Lab Name: General Engineering Laboratories

GEL Job No: 154614

Lab Code: GEL

Run Date: 02-FEB-06,09-FEB-06

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0202004a	EXP0202005a	EXP0202006a	EXP0202007a	EXP0202008a	EXP0202009a					
Parmname:											
PETN	759.367	1429.46	5072.89	8939.56	14972	15919.9	.282	-.000033	0	.9911	

Quadradic Fit: $y = Ax^2 + Bx + C$
where X^2 column above is coefficient A
X column above is coefficient B
intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)
* Values outside of QC Limit

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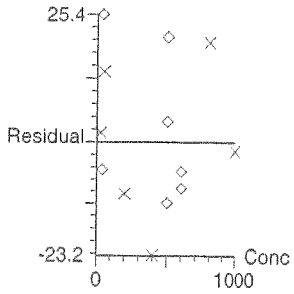
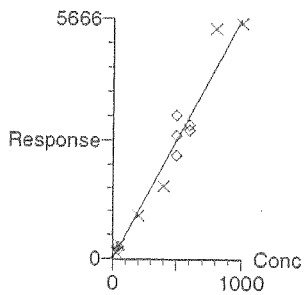
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\020206expA.mdb, Time: Fri Feb 03 07:12:56 2006
Calibration: Untitled, Time: Fri Feb 03 07:25:36 2006

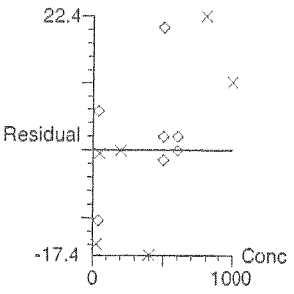
Compound name: HMX
Response Factor: 5.6658
RRF SD: 0.893547, % Relative SD: 15.7709
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF

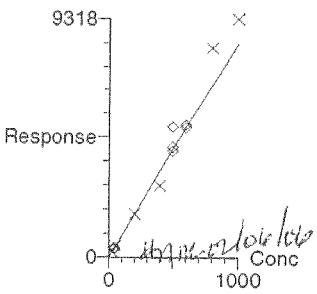




MM 2/3/06

Compound name: RDX
Response Factor: 8.3681
RRF SD: 1.28359, % Relative SD: 15.3391
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF





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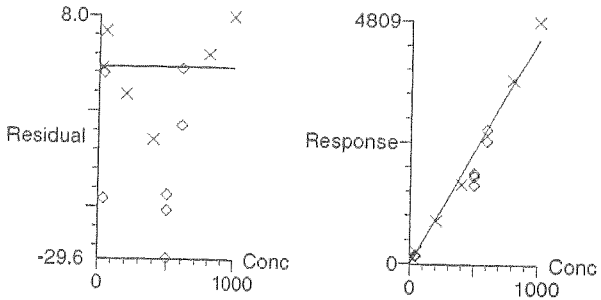
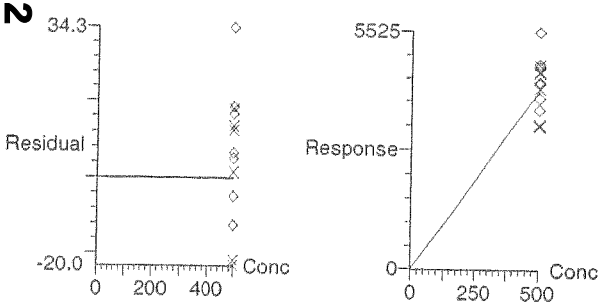
Compound name: 135-Trinitrobenzene
Response Factor: 4.45266
RRF SD: 0.309897, % Relative SD: 6.95982
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 13-Dinitrobenzene-d4
Response Factor: 8.22983
RRF SD: 1.29555, % Relative SD: 15.7421
Response type: External Std, Area
Curve type: RF



612

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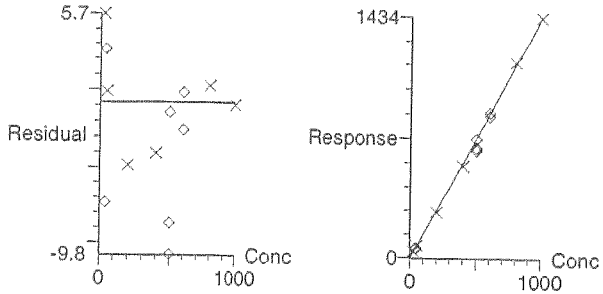
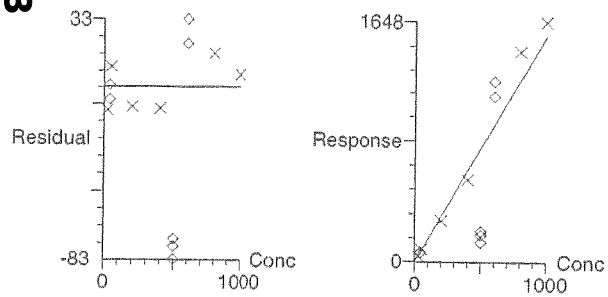
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

Compound name: 13-Dinitrobenzene
Response Factor: 1.43412
RRF SD: 0.0497548, % Relative SD: 3.46937
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: Tetryl
Response Factor: 1.5544
RRF SD: 0.19092, % Relative SD: 12.2826
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



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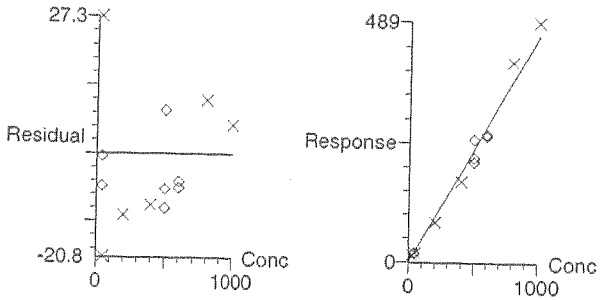
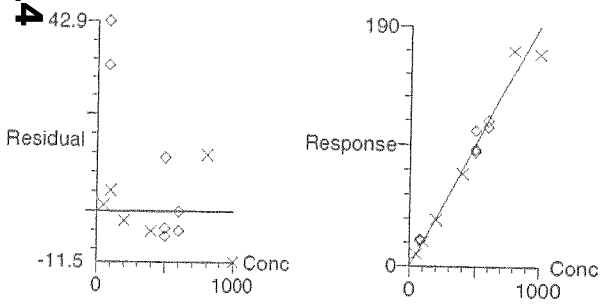
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

Compound name: Nitrobenzene
Response Factor: 0.462257
RRF SD: 0.0825334, % Relative SD: 17.8544
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: Nitroglycerin
Response Factor: 0.189579
RRF SD: 0.0154712, % Relative SD: 8.16082
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



MM = Manual Modification

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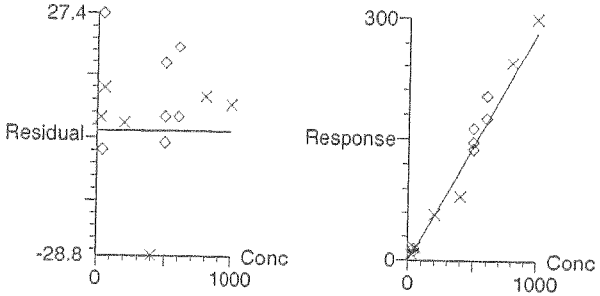
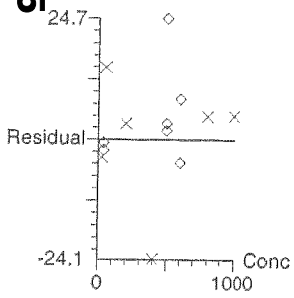
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

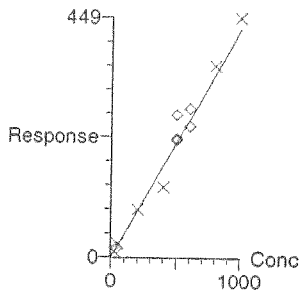
Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.282347
RRF SD: 0.0407632, % Relative SD: 14.4373
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.42797
RRF SD: 0.0564217, % Relative SD: 13.1836
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF

615





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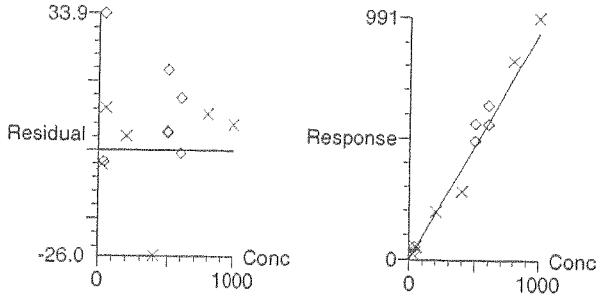
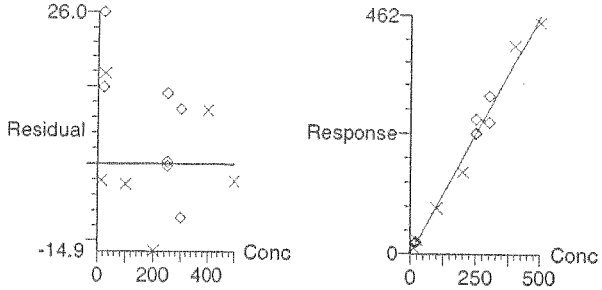
Compound name: 246-Trinitrotoluene
Response Factor: 0.930292
RRF SD: 0.126973, % Relative SD: 13.6487
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 34-dinitrotoluene
Response Factor: 0.924762
RRF SD: 0.0978406, % Relative SD: 10.5801
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



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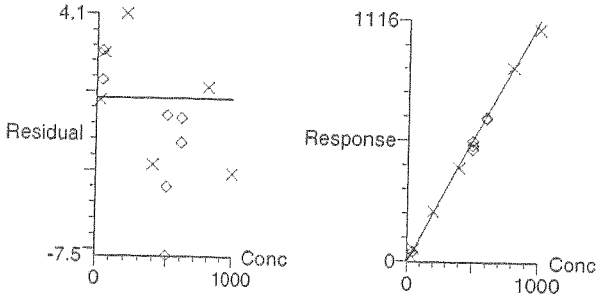
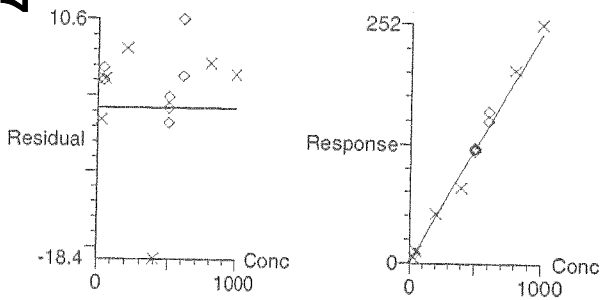
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

Compound name: 26-dinitrotoluene
Response Factor: 1.11611
RRF SD: 0.0330323, % Relative SD: 2.95958
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 24-dinitrotoluene
Response Factor: 0.242033
RRF SD: 0.0228643, % Relative SD: 9.44675
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF

617



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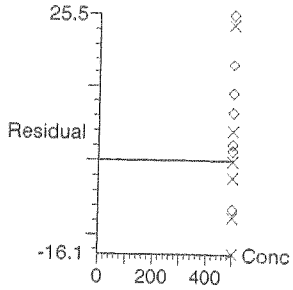
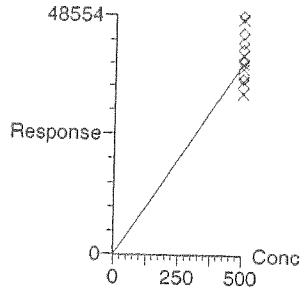
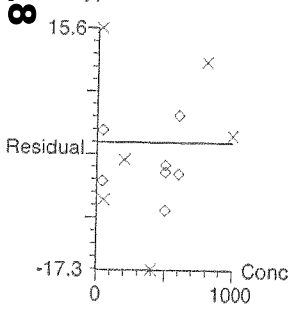
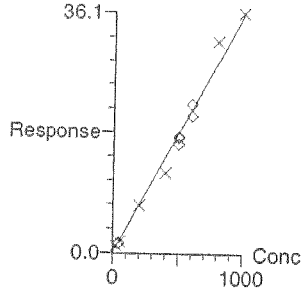
Compound name: 26-dinitrotoluene-d3
Response Factor: 77.3833
RRF SD: 10.6733, % Relative SD: 13.7928
Response type: External Std, Area
Curve type: RF





Compound name: 2-Nitrotoluene
Response Factor: 0.0357672
RRF SD: 0.00434502, % Relative SD: 12.148
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF





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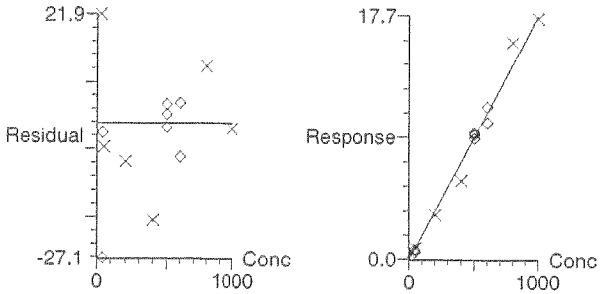
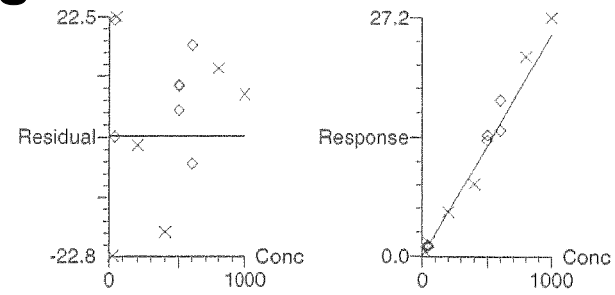
Compound name: 4-Nitrotoluene
Response Factor: 0.0176516
RRF SD: 0.0025839, % Relative SD: 14.6383
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 3-Nitrotoluene
Response Factor: 0.0252651
RRF SD: 0.00449239, % Relative SD: 17.781
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



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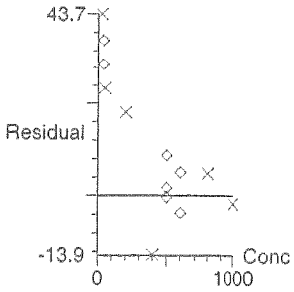
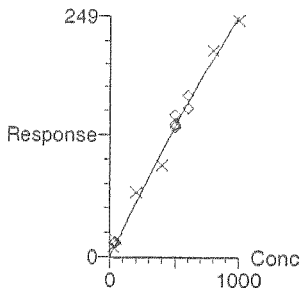
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

Compound name: PETN
Coefficient of Determination: 0.991084
Calibration curve: -3.29684e-005 * x^2 + 0.28237 * x
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None





620

MM = Manual Modification

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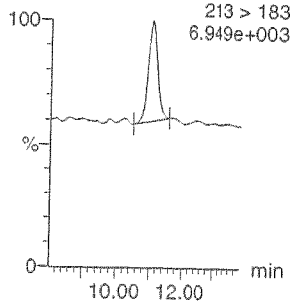
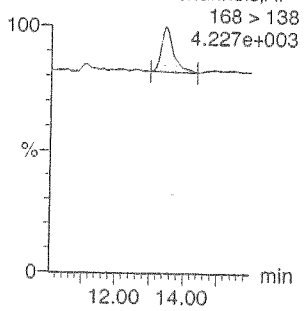
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202004a
Date: 02-Feb-2006
Time: 16:56:25
ID: WXX060202-01
Vial: 1:2,A

MM 2/3/06

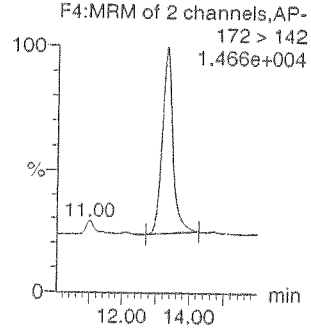
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.949e+003



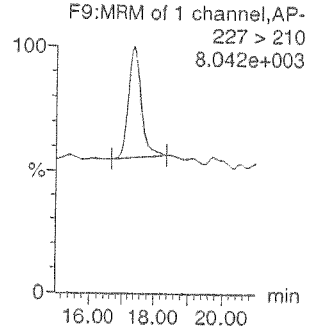
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.227e+003



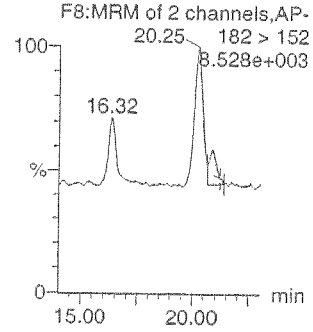
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.466e+004



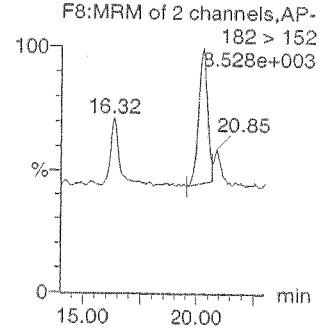
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
8.042e+003



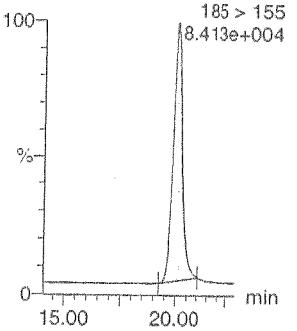
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25 182 > 152
8.528e+003



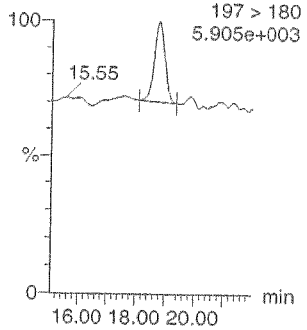
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
8.528e+003



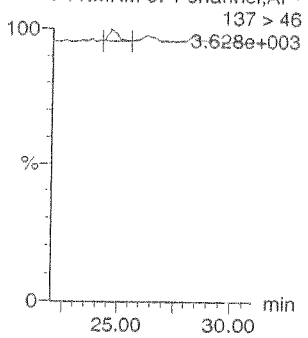
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.413e+004



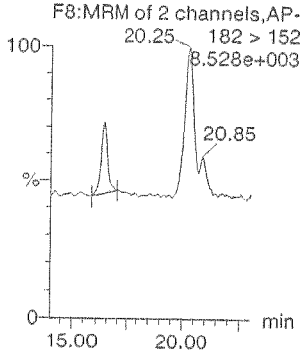
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.905e+003



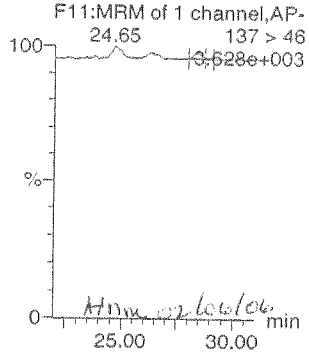
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.628e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25 182 > 152
8.528e+003

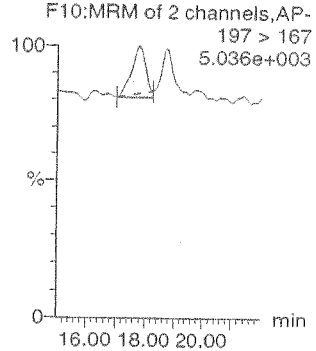


3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.65 137 > 46
3.628e+003



MM 2/6/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
5.036e+003



621

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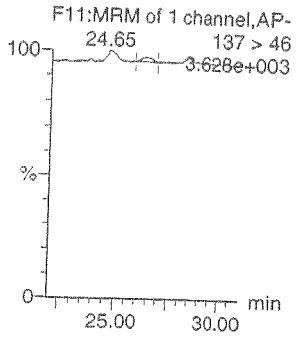
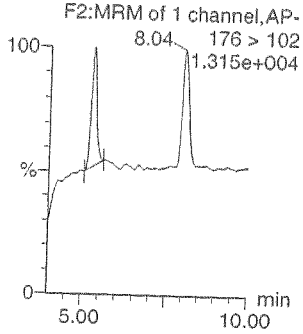
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

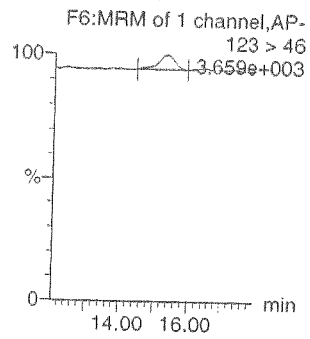
4-Nitrotoluene



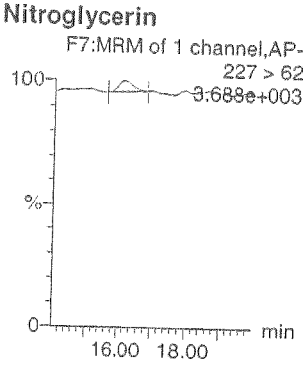
HMX



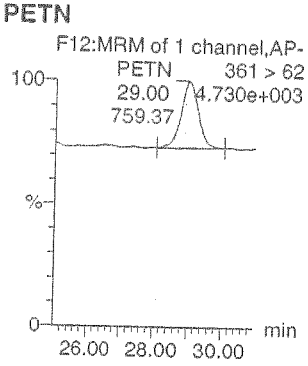
Nitrobenzene



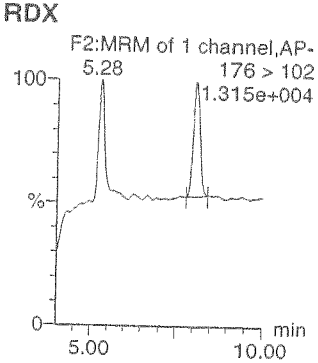
Nitroglycerin



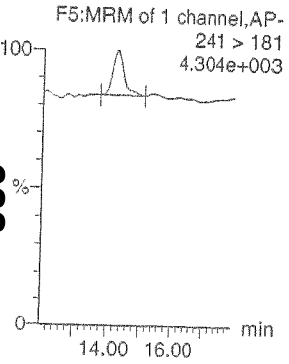
PETN



RDX



Tetryl



622

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-01	HMX	176 > 102	5.28	1202.576	4168.118	1202.576	144.259	bb			25.4614	101.8	1.8	38.2
WXX060202-01	RDX	176 > 102	8.04	1471.490	4168.118	1471.490	176.517	bb			21.0941	84.4	-15.6	37.1
WXX060202-01	135-Trinitrobenzene	213 > 183	11.04	926.495	4168.118	926.495	111.141	bb			24.9605	99.8	-0.2	59.9
WXX060202-01	13-Dinitrobenzene-d4	172 > 142	13.29	4168.118		4168.118	4168.118	bb			506.4648	101.3	1.3	478.2
WXX060202-01	13-Dinitrobenzene	168 > 138	13.44	315.878	4168.118	315.878	37.892	bb			26.4220	105.7	5.7	32.3
WXX060202-01	Tetryl	241 > 181	14.22	286.351	4168.118	286.351	34.350	bb			22.0987	88.4	-11.6	13.3
WXX060202-01	Nitrobenzene	123 > 46	15.31	122.649	4168.118	122.649	14.713	bb			31.8281	127.3	27.3	23.4
WXX060202-01	Nitroglycerin	227 > 62	16.14	80.046	4168.118	80.046	9.602	bb			50.6500	101.3	1.3	13.7
WXX060202-01	4-Amino-26-dinitrotoluene	197 > 167	17.77	547.138	37591.926	547.138	7.277	MM	03-Feb-06	07:20:50	25.7744	103.1	3.1	15.2
WXX060202-01	2-Amino-46-dinitrotoluene	197 > 180	18.73	775.055	37591.926	775.055	10.309	bb			24.0877	96.4	-3.6	31.7
WXX060202-01	246-Trinitrotoluene	227 > 210	17.39	1686.075	37591.926	1686.075	22.426	bb			24.1064	96.4	-3.6	46.4
WXX060202-01	34-dinitrotoluene	182 > 152	16.32	844.304	37591.926	844.304	11.230	bb			12.1435	97.1	-2.9	32.3
WXX060202-01	26-dinitrotoluene	182 > 152	20.25	2095.524	37591.926	2095.524	27.872	bd			24.9723	99.9	-0.1	66.6
WXX060202-01	24-dinitrotoluene	182 > 152	20.85	448.419	37591.926	448.419	5.964	MM	03-Feb-06	07:22:59	24.6425	98.6	-1.4	17.2
WXX060202-01	26-dinitrotoluene-d3	185 > 155	20.03	37591.926		37591.926	37591.926	bb			485.7887	97.2	-2.8	3100.0
WXX060202-01	2-Nitrotoluene	137 > 46.0	24.65	77.744	37591.926	77.744	1.034	bb			28.9106	115.6	15.6	23.9
WXX060202-01	4-Nitrotoluene	137 > 46	26.28	40.446	37591.926	40.446	0.538	MM	03-Feb-06	07:18:42	30.4766	121.9	21.9	10.6
WXX060202-01	3-Nitrotoluene	137 > 46.0	28.35	36.674	37591.926	36.674	0.488	MM	03-Feb-06	07:19:29	19.3069	77.2	-22.8	11.9
WXX060202-01	PETN	361 > 62	29.00	759.367	37591.926	759.367	10.100	bb			35.9198	143.7	43.7	216.0

623

HMX 02/06/06

MM 2/3/06

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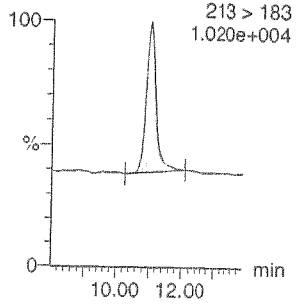
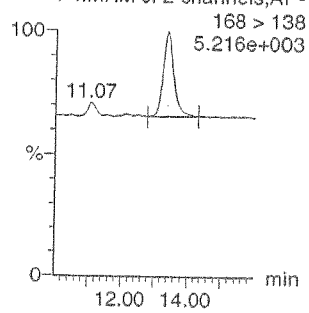
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202005a
Date: 02-Feb-2006
Time: 17:29:54
ID: WXX060202-02
Vial: 1:2,B

MM 2/3/06

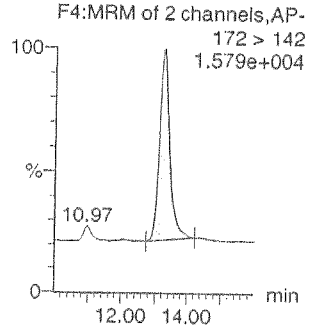
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
1.020e+004



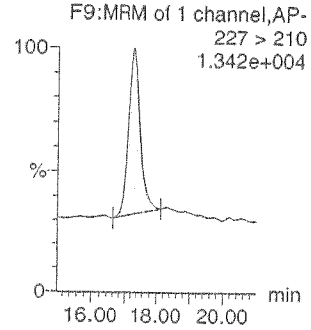
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
5.216e+003



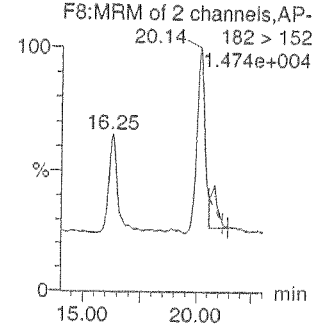
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.579e+004



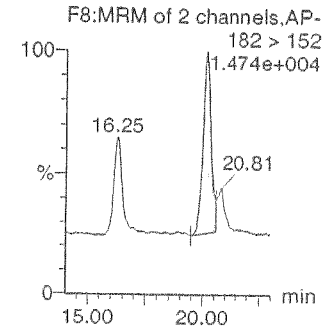
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.342e+004



24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.14
182 > 152
1.474e+004

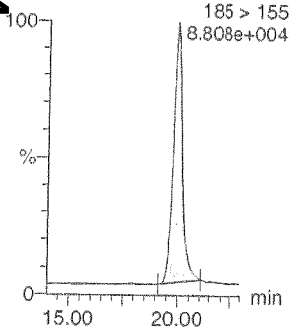


26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.474e+004

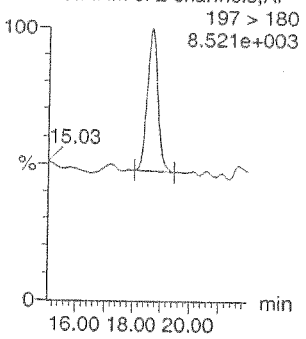


624

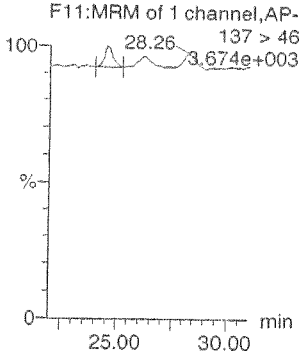
6-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.808e+004



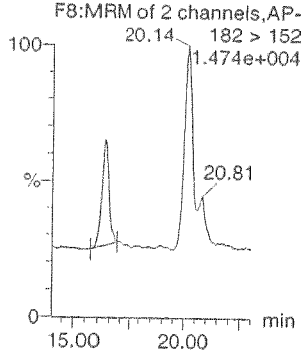
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
8.521e+003



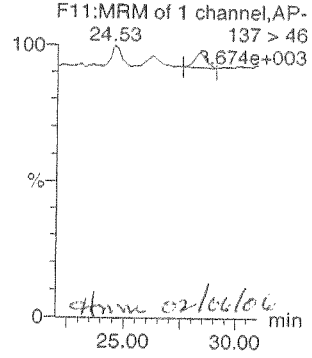
2-Nitrotoluene
F11:MRM of 1 channel,AP-
28.26
137 > 46
3.674e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.14
182 > 152
1.474e+004

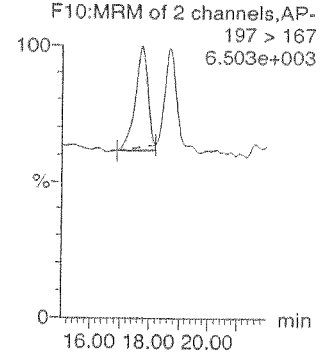


3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.53
137 > 46
3.674e+003



Hmm 02/06/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
6.503e+003



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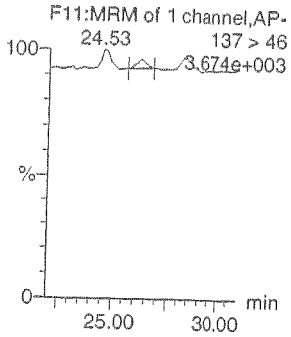
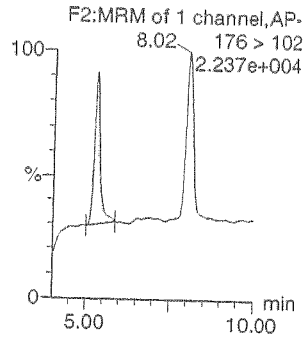
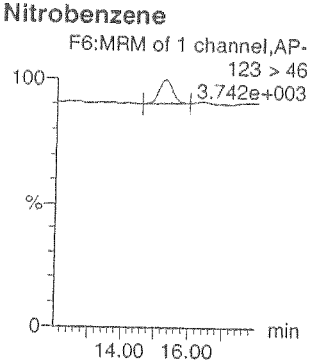
4-Nitrotoluene



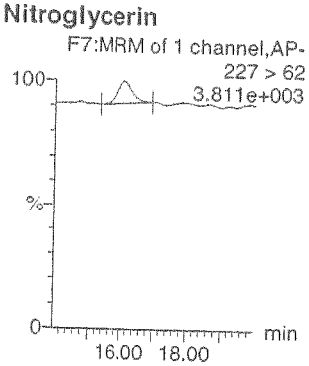
HMX



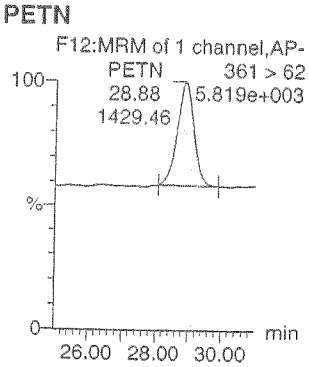
Nitrobenzene



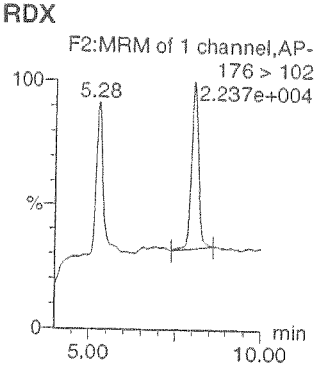
Nitroglycerin



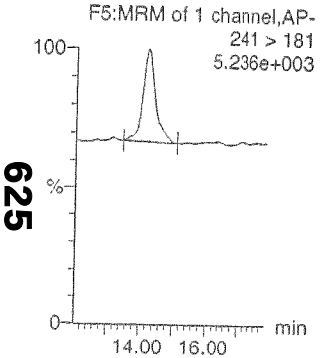
PETN



RDX



Tetryl



625

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-02	HMX	176 > 102	5.28	2965.229	4590.898	2965.229	322.947	bb			56.9993	114.0	14.0	102.1
WXX060202-02	RDX	176 > 102	8.02	3816.622	4590.898	3816.622	415.673	bb			49.6735	99.3	-0.7	112.2
WXX060202-02	135-Trinitrobenzene	213 > 183	11.00	2157.465	4590.898	2157.465	234.972	bb			52.7711	105.5	5.5	242.0
WXX060202-02	13-Dinitrobenzene-d4	172 > 142	13.25	4590.898		4590.898	4590.898	bb			557.8365	111.6	11.6	960.0
WXX060202-02	13-Dinitrobenzene	168 > 138	13.40	662.734	4590.898	662.734	72.179	bb			50.3300	100.7	0.7	102.4
WXX060202-02	Tetryl	241 > 181	14.19	783.670	4590.898	783.670	85.350	bb			54.9090	109.8	9.8	97.3
WXX060202-02	Nitrobenzene	123 > 46	15.22	168.001	4590.898	168.001	18.297	bb			39.5823	79.2	-20.8	34.3
WXX060202-02	Nitroglycerin	227 > 62	16.07	181.869	4590.898	181.869	19.808	bb			104.4818	104.5	4.5	10.9
WXX060202-02	4-Amino-26-dinitrotoluene	197 > 167	17.74	1260.102	40641.781	1260.102	15.503	MM	03-Feb-06	07:20:58	54.9059	109.8	9.8	45.2
WXX060202-02	2-Amino-46-dinitrotoluene	197 > 180	18.66	1995.519	40641.781	1995.519	24.550	bb			57.3641	114.7	14.7	53.7
WXX060202-02	246-Trinitrotoluene	227 > 210	17.28	4174.066	40641.781	4174.066	51.352	bb			55.1998	110.4	10.4	156.8
WXX060202-02	34-dinitrotoluene	182 > 152	16.25	2163.829	40641.781	2163.829	26.621	bb			28.7866	115.1	15.1	80.1
WXX060202-02	26-dinitrotoluene	182 > 152	20.14	4635.258	40641.781	4635.258	57.026	bd			51.0931	102.2	2.2	152.4
WXX060202-02	24-dinitrotoluene	182 > 152	20.81	1016.760	40641.781	1016.760	12.509	MM	03-Feb-06	07:23:11	51.6822	103.4	3.4	36.5
WXX060202-02	26-dinitrotoluene-d3	185 > 155	19.94	40641.781		40641.781	40641.781	bb			525.2010	105.0	5.0	3217.5
WXX060202-02	2-Nitrotoluene	137 > 46.0	24.53	133.807	40641.781	133.807	1.646	bb			46.0247	92.0	-8.0	47.4
WXX060202-02	4-Nitrotoluene	137 > 46	26.21	68.255	40641.781	68.255	0.840	bb			47.5716	95.1	-4.9	21.1
WXX060202-02	3-Nitrotoluene	137 > 46.0	28.26	125.749	40641.781	125.749	1.547	bb			61.2323	122.5	22.5	33.7
WXX060202-02	PETN	361 > 62	28.88	1429.458	40641.781	1429.458	17.586	bb			62.7398	125.5	25.5	406.6

626

HMX 2/06/06

2/3/06

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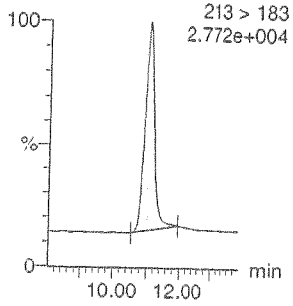
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

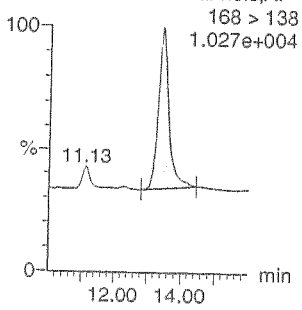
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202006a
Date: 02-Feb-2006
Time: 18:03:24
ID: WXX060202-03
Vial: 1:2,C

MMP 2/3/06

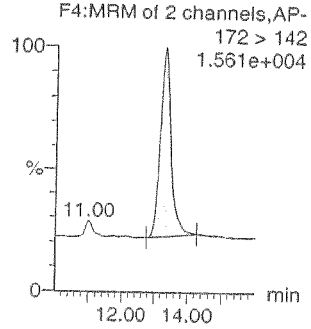
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
2.772e+004



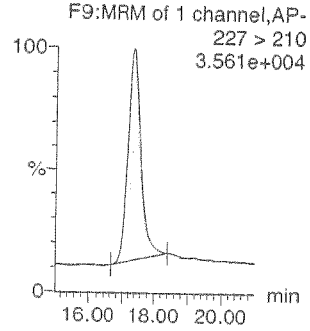
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.027e+004



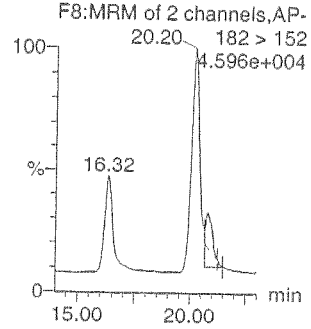
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.561e+004



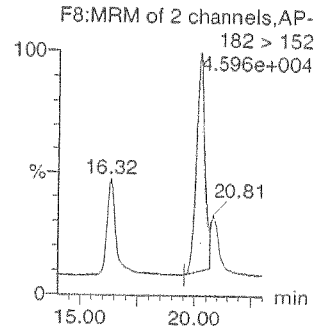
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
3.561e+004



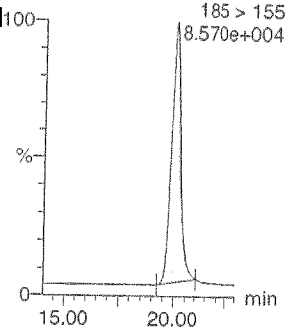
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.20 182 > 152
4.596e+004



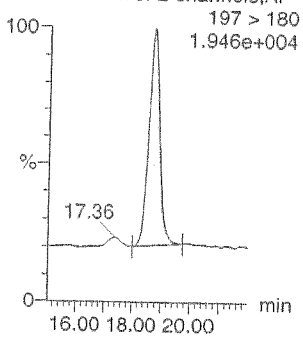
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
4.596e+004



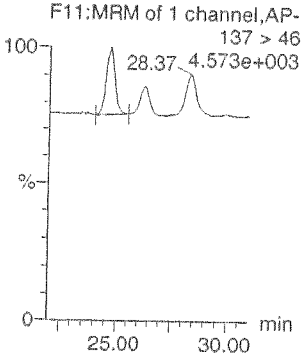
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.570e+004



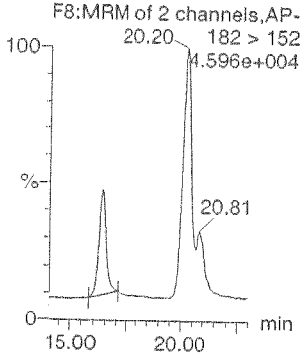
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
1.946e+004



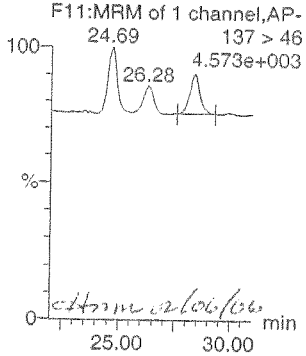
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
28.37 4.573e+003



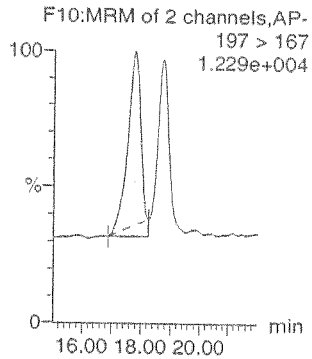
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.20 182 > 152
4.596e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.69 137 > 46
4.573e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
1.229e+004



627

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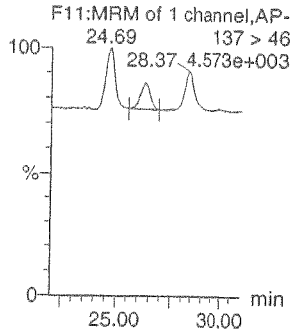
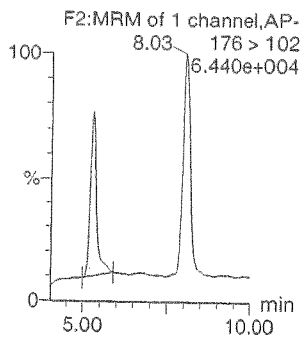
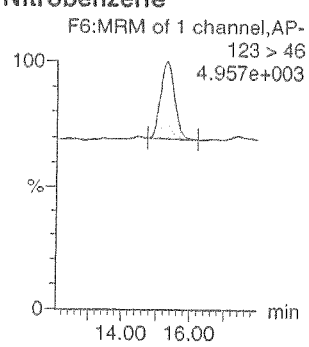
4-Nitrotoluene



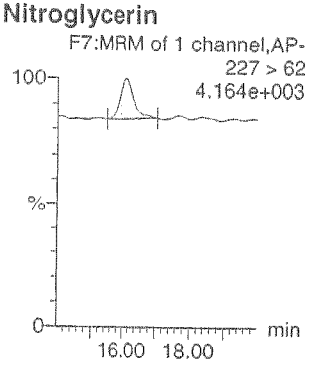
HMX



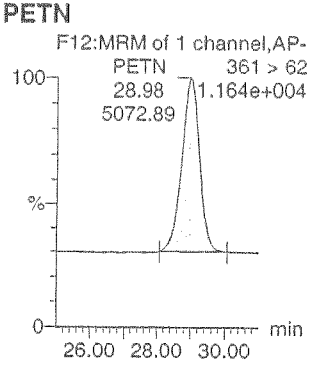
Nitrobenzene



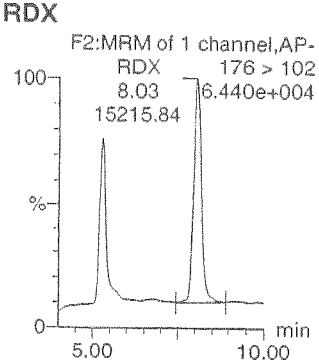
Nitroglycerin



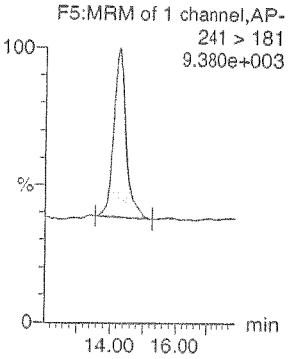
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-03	HMX	176 > 102	5.28	9219.860	4551.527	9219.860	1012.832	bb			178.7624	89.4	-10.6	487.3
WXX060202-03	RDX	176 > 102	8.03	15215.839	4551.527	15215.839	1671.509	bb			199.7478	99.9	-0.1	657.1
WXX060202-03	135-Trinitrobenzene	213 > 183	11.04	7761.473	4551.527	7761.473	852.623	bb			191.4860	95.7	-4.3	714.5
WXX060202-03	13-Dinitrobenzene-d4	172 > 142	13.27	4551.527		4551.527	4551.527	bb			553.0526	110.6	10.6	514.2
WXX060202-03	13-Dinitrobenzene	168 > 138	13.42	2506.552	4551.527	2506.552	275.353	bb			192.0018	96.0	-4.0	383.8
WXX060202-03	Tetryl	241 > 181	14.25	2548.574	4551.527	2548.574	279.969	bb			180.1141	90.1	-9.9	159.9
WXX060202-03	Nitrobenzene	123 > 46	15.27	736.273	4551.527	736.273	80.882	bb			174.9719	87.5	-12.5	161.6
WXX060202-03	Nitroglycerin	227 > 62	16.11	337.820	4551.527	337.820	37.111	bb			195.7528	97.9	-2.1	27.2
WXX060202-03	4-Amino-26-dinitrotoluene	197 > 167	17.77	4443.147	38631.738	4443.147	57.506	MM	03-Feb-06	07:21:07	203.6725	101.8	1.8	141.0
WXX060202-03	2-Amino-46-dinitrotoluene	197 > 180	18.71	6830.327	38631.738	6830.327	88.403	bb			206.5639	103.3	3.3	513.9
WXX060202-03	246-Trinitrotoluene	227 > 210	17.35	14883.847	38631.738	14883.847	192.638	bb			207.0721	103.5	3.5	443.9
WXX060202-03	34-dinitrotoluene	182 > 152	16.32	6897.272	38631.738	6897.272	89.270	bb			96.5324	96.5	-3.5	194.7
WXX060202-03	26-dinitrotoluene	182 > 152	20.20	17945.672	38631.738	17945.672	232.266	bd			208.1023	104.1	4.1	457.9
WXX060202-03	24-dinitrotoluene	182 > 152	20.81	4004.793	38631.738	4004.793	51.833	MM	03-Feb-06	07:23:20	214.1564	107.1	7.1	112.2
WXX060202-03	26-dinitrotoluene-d3	185 > 155	20.01	38631.738		38631.738	38631.738	bb			499.2258	99.8	-0.2	2672.7
WXX060202-03	2-Nitrotoluene	137 > 46.0	24.69	539.267	38631.738	539.267	6.980	bb			195.1390	97.6	-2.4	183.4
WXX060202-03	4-Nitrotoluene	137 > 46	26.28	251.578	38631.738	251.578	3.256	bb			184.4652	92.2	-7.8	78.8
WXX060202-03	3-Nitrotoluene	137 > 46.0	28.37	383.551	38631.738	383.551	4.964	bb			196.4843	98.2	-1.8	112.9
WXX060202-03	PETN	361 > 62	28.98	5072.885	38631.738	5072.885	65.657	bb			239.2013	119.6	19.6	348.8

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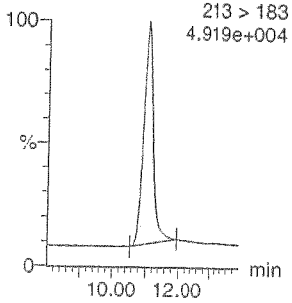
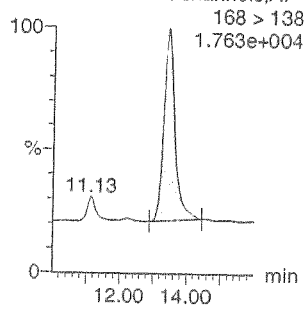
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202007a
Date: 02-Feb-2006
Time: 18:36:53
ID: WXX060202-04
Vial: 1:2,D

MM 2/3/06

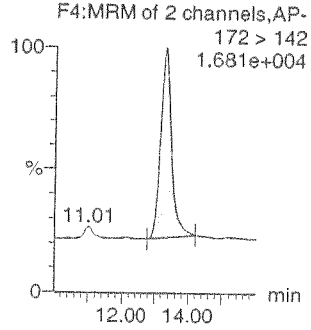
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
4.919e+004



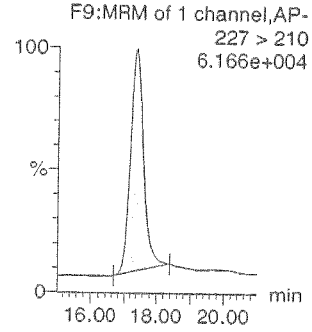
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.763e+004



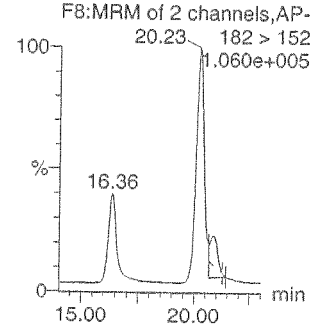
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.681e+004



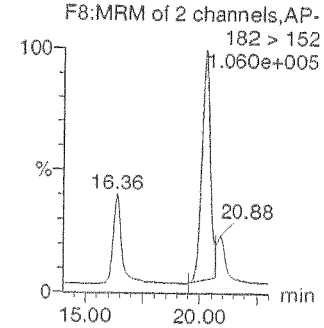
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
6.166e+004



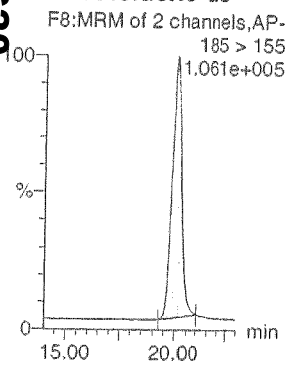
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.23 182 > 152
1.060e+005



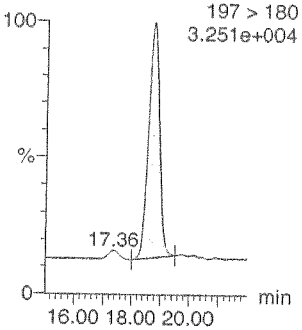
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.060e+005



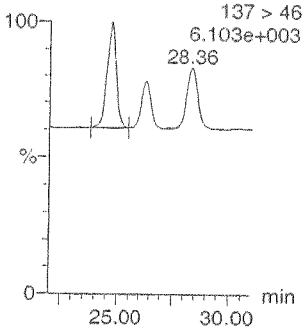
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
1.061e+005



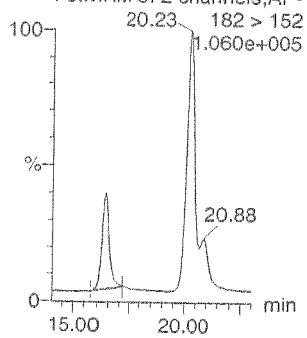
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.251e+004



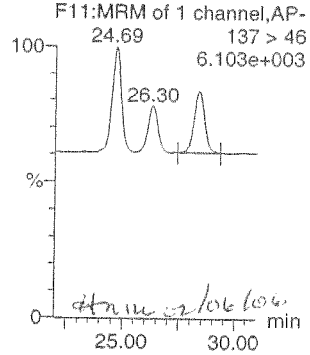
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.103e+003



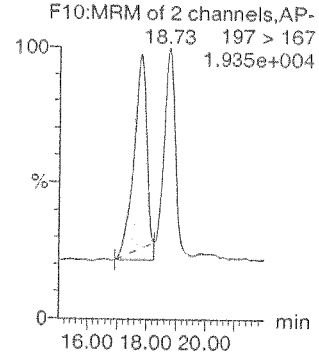
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.23 182 > 152
1.060e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.69 137 > 46
6.103e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
18.73 197 > 167
1.935e+004



630

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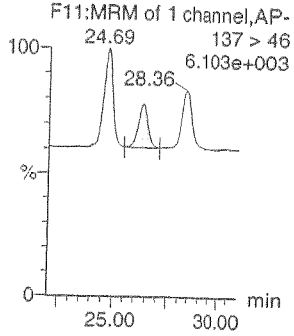
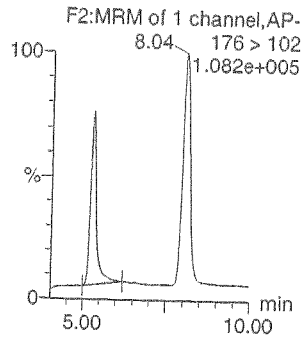
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

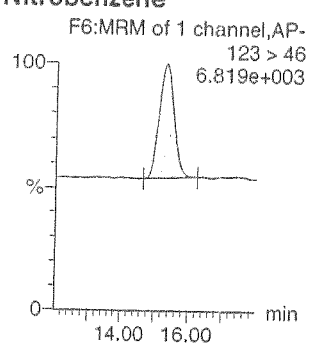
4-Nitrotoluene



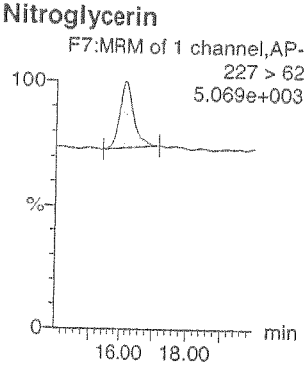
HMX



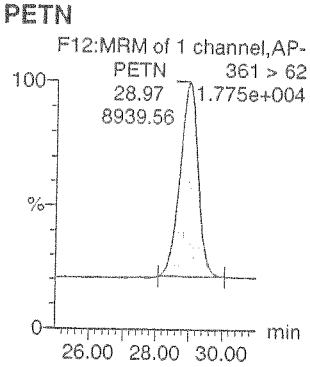
Nitrobenzene



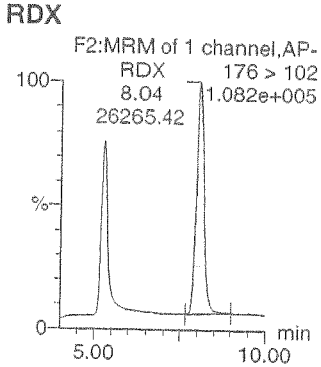
Nitroglycerin



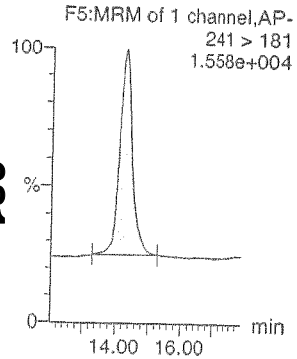
PETN



RDX



Tetryl



631

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-04	HMX	176 > 102	5.28	16533.297	4747.266	16533.297	1741.349	bb			307.3440	76.8	-23.2	1089.9
WXX060202-04	RDX	176 > 102	8.04	26265.422	4747.266	26265.422	2766.374	bb			330.5857	82.6	-17.4	1449.9
WXX060202-04	135-Trinitrobenzene	213 > 183	11.04	15019.230	4747.266	15019.230	1581.882	bb			355.2664	88.8	-11.2	1636.7
WXX060202-04	13-Dinitrobenzene-d4	172 > 142	13.27	4747.266		4747.266	4747.266	bb			576.8367	115.4	15.4	793.1
WXX060202-04	13-Dinitrobenzene	168 > 138	13.42	5271.492	4747.266	5271.492	555.213	bb			387.1468	96.8	-3.2	390.2
WXX060202-04	Tetryl	241 > 181	14.25	5266.227	4747.266	5266.227	554.659	bb			356.8318	89.2	-10.8	185.8
WXX060202-04	Nitrobenzene	123 > 46	15.31	1571.817	4747.266	1571.817	165.550	bb			358.1336	89.5	-10.5	278.9
WXX060202-04	Nitroglycerin	227 > 62	16.14	687.647	4747.266	687.647	72.426	bb			382.0337	95.5	-4.5	112.5
WXX060202-04	4-Amino-26-dinitrotoluene	197 > 167	17.77	7696.000	47883.695	7696.000	80.361	MM	03-Feb-06	07:21:14	284.6187	71.2	-28.8	209.0
WXX060202-04	2-Amino-46-dinitrotoluene	197 > 180	18.73	12443.810	47883.695	12443.810	129.938	bb			303.6147	75.9	-24.1	463.8
WXX060202-04	246-Trinitrotoluene	227 > 210	17.39	26388.729	47883.695	26388.729	275.550	bb			296.1975	74.0	-26.0	1408.9
WXX060202-04	34-dinitrotoluene	182 > 152	16.36	15079.603	47883.695	15079.603	157.461	bb			170.2716	85.1	-14.9	414.4
WXX060202-04	26-dinitrotoluene	182 > 152	20.23	41414.215	47883.695	41414.215	432.446	bd			387.4566	96.9	-3.1	1095.8
WXX060202-04	24-dinitrotoluene	182 > 152	20.88	7567.249	47883.695	7567.249	79.017	MM	03-Feb-06	07:23:30	326.4718	81.6	-18.4	197.8
WXX060202-04	26-dinitrotoluene-d3	185 > 155	20.03	47883.695		47883.695	47883.695	bb			618.7860	123.8	23.8	3742.7
WXX060202-04	2-Nitrotoluene	137 > 46.0	24.69	1132.982	47883.695	1132.982	11.831	bb			330.7653	82.7	-17.3	227.0
WXX060202-04	4-Nitrotoluene	137 > 46	26.30	544.752	47883.695	544.752	5.688	bb			322.2531	80.6	-19.4	99.7
WXX060202-04	3-Nitrotoluene	137 > 46.0	28.36	790.655	47883.695	790.655	8.256	bb			326.7747	81.7	-18.3	131.3
WXX060202-04	PETN	361 > 62	28.97	8939.563	47883.695	8939.563	93.347	bb			344.4337	86.1	-13.9	1608.0

632

HMX 02/06/06

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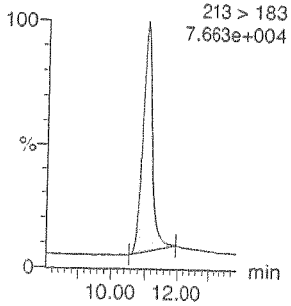
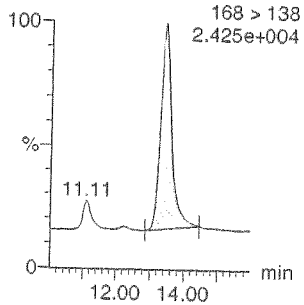
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202008a
Date: 02-Feb-2006
Time: 19:10:22
ID: WXX060202-05
Vial: 1:2,E

MM 2/3/06

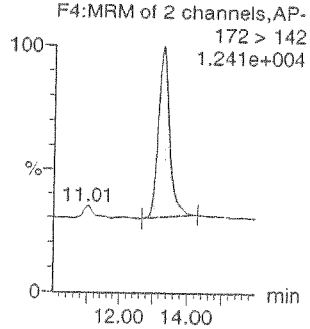
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
7.663e+004



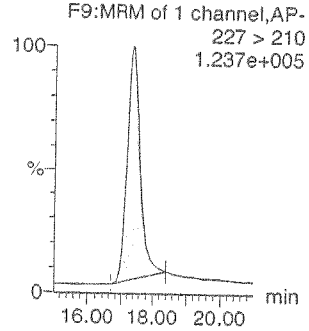
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
2.425e+004



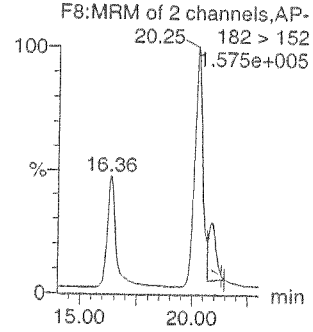
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.241e+004



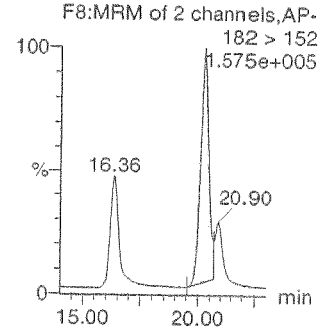
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.237e+005



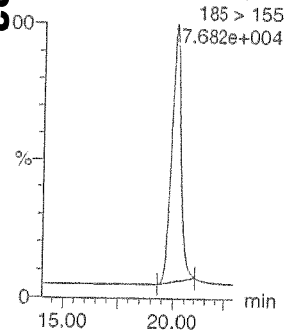
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25
182 > 152
1.575e+005



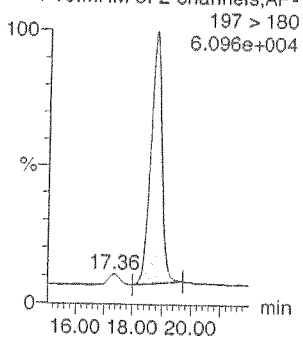
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.575e+005



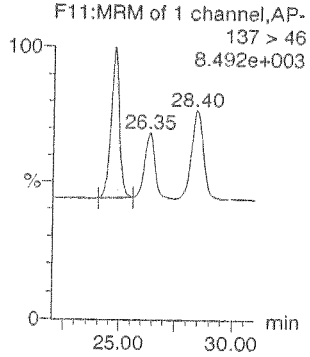
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.682e+004



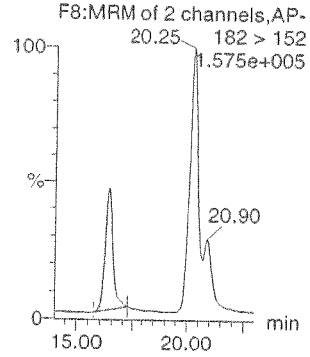
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
6.096e+004



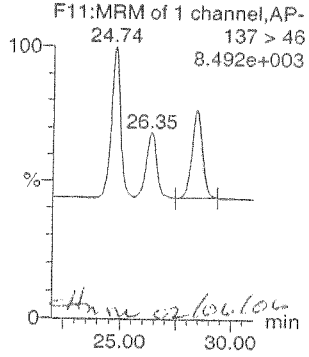
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
8.492e+003



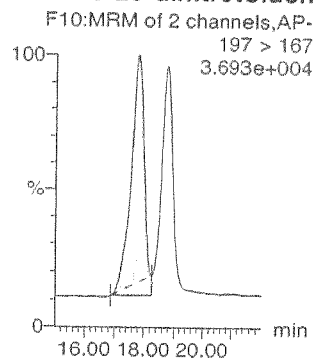
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25
182 > 152
1.575e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.74
137 > 46
8.492e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.693e+004



633

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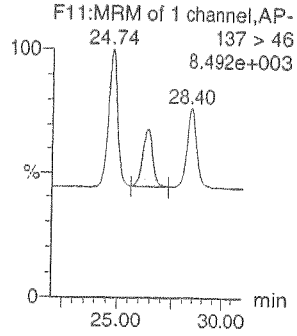
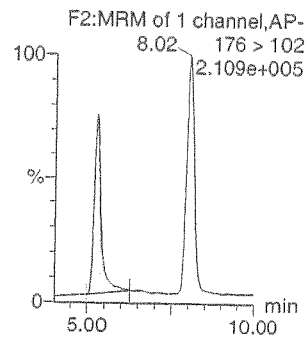
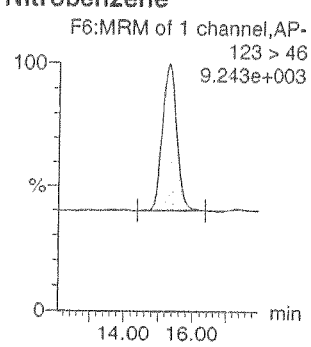
4-Nitrotoluene



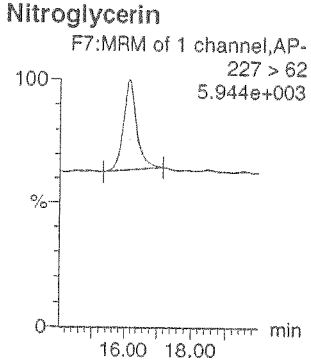
HMX



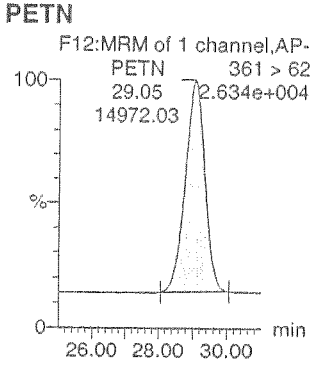
Nitrobenzene



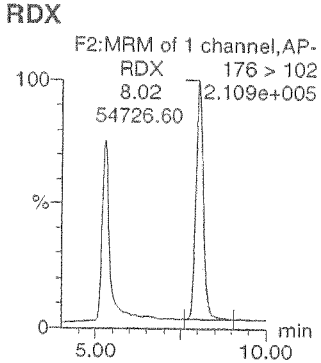
Nitroglycerin



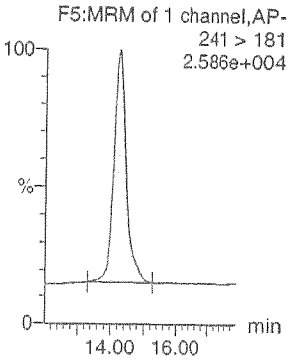
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-05	HMX	176 > 102	5.27	36262.160	3339.378	36262.160	5429.478	bb			958.2901	119.8	19.8	1749.8
WXX060202-05	RDX	176 > 102	8.02	54726.598	3339.378	54726.598	8194.130	bb			979.2106	122.4	22.4	2318.4
WXX060202-05	135-Trinitrobenzene	213 > 183	11.02	24279.061	3339.378	24279.061	3635.267	bb			816.4252	102.1	2.1	1642.4
WXX060202-05	13-Dinitrobenzene-d4	172 > 142	13.27	3339.378		3339.378	3339.378	bb			405.7653	81.2	-18.8	622.1
WXX060202-05	13-Dinitrobenzene	168 > 138	13.42	7741.056	3339.378	7741.056	1159.057	bb			808.2028	101.0	1.0	636.4
WXX060202-05	Tetryl	241 > 181	14.22	9673.072	3339.378	9673.072	1448.334	bb			931.7650	116.5	16.5	947.2
WXX060202-05	Nitrobenzene	123 > 46	15.27	2732.841	3339.378	2732.841	409.184	bb			885.1877	110.6	10.6	184.5
WXX060202-05	Nitroglycerin	227 > 62	16.14	1138.310	3339.378	1138.310	170.437	bb			899.0310	112.4	12.4	198.8
WXX060202-05	4-Amino-26-dinitrotoluene	197 > 167	17.81	17032.057	34938.250	17032.057	243.745	MM	03-Feb-06	07:21:23	863.2807	107.9	7.9	261.6
WXX060202-05	2-Amino-46-dinitrotoluene	197 > 180	18.74	25077.473	34938.250	25077.473	358.883	bb			838.5709	104.8	4.8	1397.9
WXX060202-05	246-Trinitrotoluene	227 > 210	17.35	56701.754	34938.250	56701.754	811.457	bb			872.2600	109.0	9.0	1198.3
WXX060202-05	34-dinitrotoluene	182 > 152	16.36	28167.459	34938.250	28167.459	403.103	bb			435.8995	109.0	9.0	374.0
WXX060202-05	26-dinitrotoluene	182 > 152	20.25	62728.988	34938.250	62728.988	897.712	bd			804.3192	100.5	0.5	800.8
WXX060202-05	24-dinitrotoluene	182 > 152	20.90	14256.898	34938.250	14256.898	204.030	MM	03-Feb-06	07:23:38	842.9837	105.4	5.4	198.5
WXX060202-05	26-dinitrotoluene-d3	185 > 155	20.03	34938.250		34938.250	34938.250	bb			451.4960	90.3	-9.7	3151.6
WXX060202-05	2-Nitrotoluene	137 > 46.0	24.74	2221.736	34938.250	2221.736	31.795	bb			888.9470	111.1	11.1	203.1
WXX060202-05	4-Nitrotoluene	137 > 46	26.35	1098.563	34938.250	1098.563	15.721	bb			890.6555	111.3	11.3	88.0
WXX060202-05	3-Nitrotoluene	137 > 46.0	28.40	1590.609	34938.250	1590.609	22.763	bb			900.9720	112.6	12.6	119.4
WXX060202-05	PETN	361 > 62	29.05	14972.031	34938.250	14972.031	214.264	bb			841.4793	105.2	5.2	1793.0

635

HMM 02/04/06

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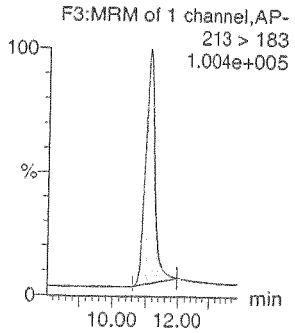
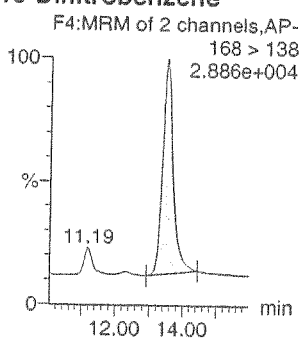
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202009a
Date: 02-Feb-2006
Time: 19:43:50
ID: WXX060202-06
Vial: 1:2,F

MM 2/3/06

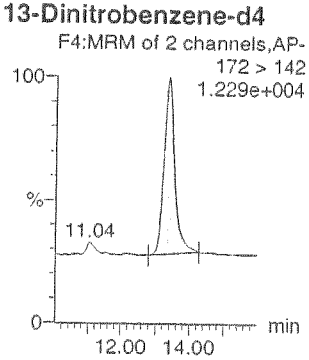
135-Trinitrobenzene



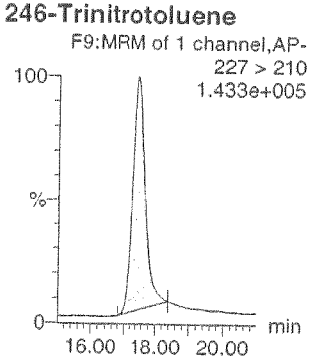
13-Dinitrobenzene



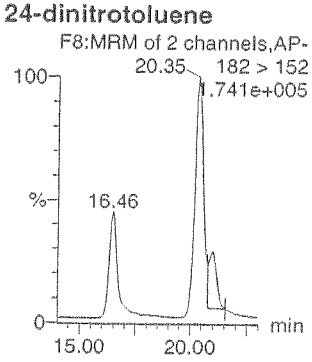
13-Dinitrobenzene-d4



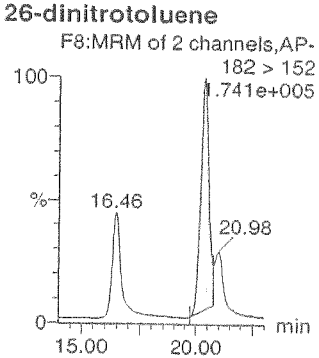
246-Trinitrotoluene



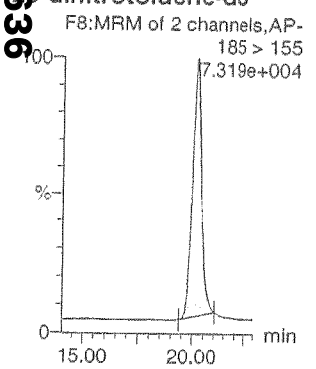
24-dinitrotoluene



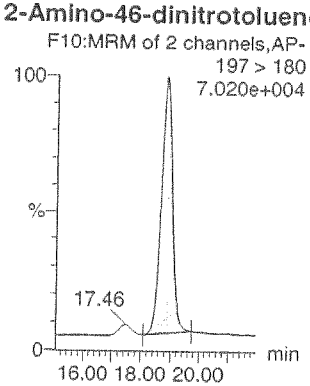
26-dinitrotoluene



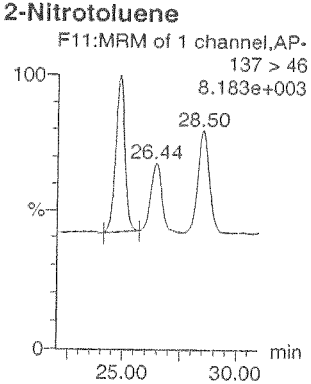
26-dinitrotoluene-d3



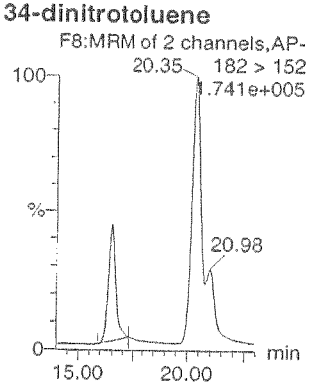
2-Amino-46-dinitrotoluene



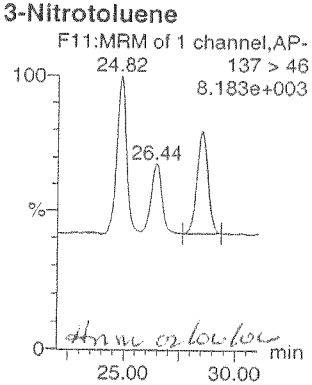
2-Nitrotoluene



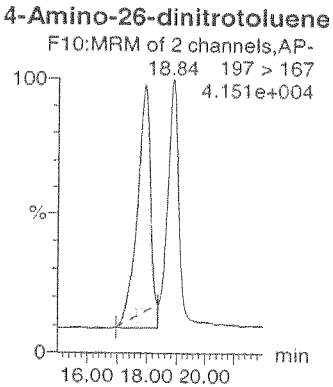
34-dinitrotoluene



3-Nitrotoluene



4-Amino-26-dinitrotoluene



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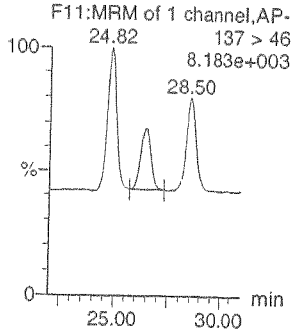
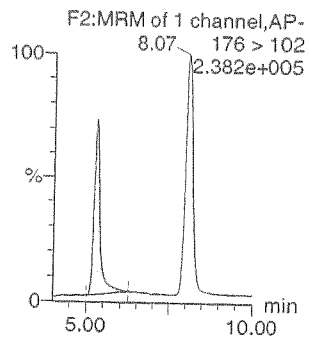
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

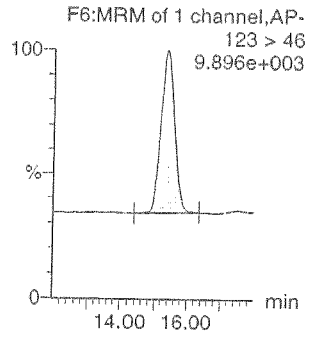
4-Nitrotoluene



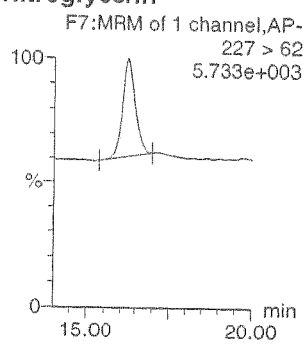
HMX



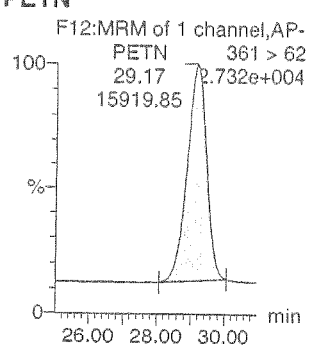
Nitrobenzene



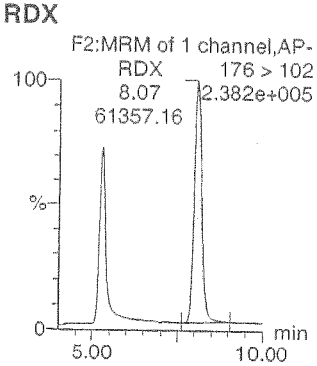
Nitroglycerin



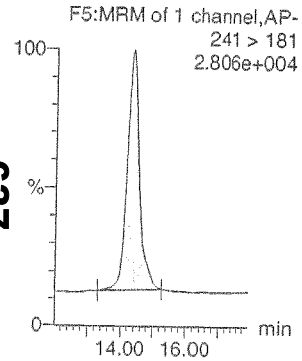
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-06	HMX	176 > 102	5.28	36617.719	3292.294	36617.719	5561.125	bb			981.5255	98.2	-1.8	2112.5
WXX060202-06	RDX	176 > 102	8.07	61357.160	3292.294	61357.160	9318.299	bb			1113.5...	111.4	11.4	2888.9
WXX060202-06	135-Trinitrobenzene	213 > 183	11.08	31665.371	3292.294	31665.371	4809.013	bb			1080.0...	108.0	8.0	3631.2
WXX060202-06	13-Dinitrobenzene-d4	172 > 142	13.36	3292.294		3292.294	3292.294	bb			400.0441	80.0	-20.0	193.4
WXX060202-06	13-Dinitrobenzene	168 > 138	13.51	9427.870	3292.294	9427.870	1431.809	bb			998.3911	99.8	-0.2	344.8
WXX060202-06	Tetryl	241 > 181	14.34	10854.477	3292.294	10854.477	1648.467	bb			1060.5...	106.1	6.1	823.3
WXX060202-06	Nitrobenzene	123 > 46	15.35	3221.992	3292.294	3221.992	489.323	bb			1058.5...	105.9	5.9	868.3
WXX060202-06	Nitroglycerin	227 > 62	16.25	1104.178	3292.294	1104.178	167.691	bb			884.5455	88.5	-11.5	134.4
WXX060202-06	4-Amino-26-dinitrotoluene	197 > 167	17.91	19466.047	32462.488	19466.047	299.824	MM	03-Feb-06	07:21:29	1061.8...	106.2	6.2	439.8
WXX060202-06	2-Amino-46-dinitrotoluene	197 > 180	18.84	29151.322	32462.488	29151.322	449.000	bb			1049.1...	104.9	4.9	1340.4
WXX060202-06	246-Trinitrotoluene	227 > 210	17.45	64359.457	32462.488	64359.457	991.290	bb			1065.5...	106.6	6.6	2633.5
WXX060202-06	34-dinitrotoluene	182 > 152	16.46	29138.271	32462.488	29138.271	448.799	bb			485.3129	97.1	-2.9	457.6
WXX060202-06	26-dinitrotoluene	182 > 152	20.35	69905.109	32462.488	69905.109	1076.706	bd			964.6915	96.5	-3.5	1031.7
WXX060202-06	24-dinitrotoluene	182 > 152	20.98	16341.995	32462.488	16341.995	251.706	db			1039.9...	104.0	4.0	249.1
WXX060202-06	26-dinitrotoluene-d3	185 > 155	20.16	32462.488		32462.488	32462.488	bb			419.5025	83.9	-16.1	1162.1
WXX060202-06	2-Nitrotoluene	137 > 46.0	24.82	2343.763	32462.488	2343.763	36.100	bb			1009.2...	100.9	0.9	329.7
WXX060202-06	4-Nitrotoluene	137 > 46	26.44	1132.535	32462.488	1132.535	17.444	bb			988.2249	98.8	-1.2	145.2
WXX060202-06	3-Nitrotoluene	137 > 46.0	28.50	1767.468	32462.488	1767.468	27.223	bb			1077.5...	107.8	7.8	215.0
WXX060202-06	PETN	361 > 62	29.17	15919.851	32462.488	15919.851	245.204	bb			980.6607	98.1	-1.9	1641.4

638

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Explosives Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0202011a

Analysis Date: 02-FEB-06 20:50

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

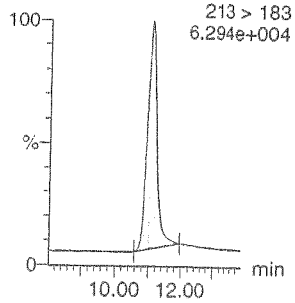
Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	598.286	100	
1,3-Dinitrobenzene-d4	500	447.103	89	
2,4,6-Trinitrotoluene	600	595.511	99	
2,4-Dinitrotoluene	600	622.489	104	
2,6-Dinitrotoluene	600	594.389	99	
2,6-Dinitrotoluene-d3	500	458.743	92	
2-Amino-4,6-dinitrotoluene	600	571.637	95	
3,4-Dinitrotoluene	300	272.817	91	
4-Amino-2,6-dinitrotoluene	600	620.051	103	
HMX	600	542.653	90	
Nitrobenzene	600	558.163	93	
Nitroglycerin	600	599.537	100	
PETN	600	632.583	105	
RDX	600	599.43	100	
Tetryl	600	796.597	133	*
m-Dinitrobenzene	600	603.546	101	
m-Nitrotoluene	600	702.596	117	
o-Nitrotoluene	600	622.024	104	
p-Nitrotoluene	600	623.778	104	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

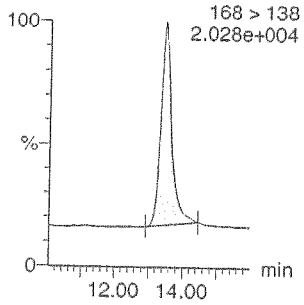
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202011a
Date: 02-Feb-2006
Time: 20:50:47
ID: WXX060202-07ICV
Vial: 1:1,B

MM
2/3/06

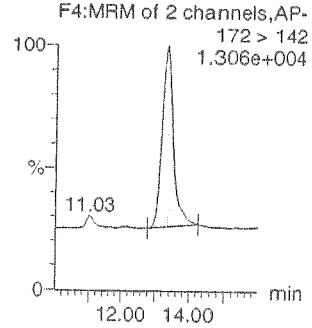
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.294e+004



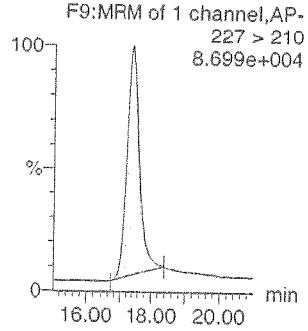
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
2.028e+004



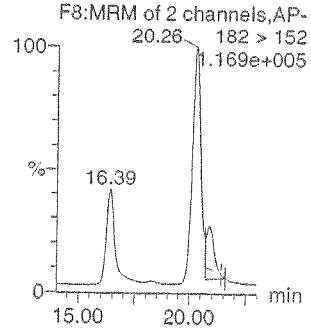
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.306e+004



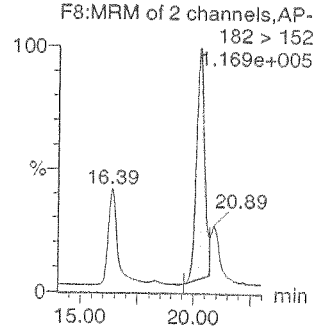
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
8.699e+004



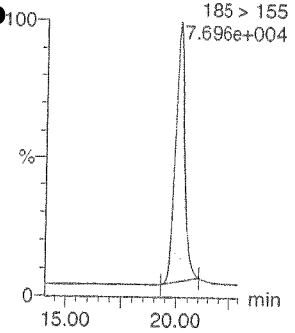
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.26
182 > 152
1.169e+005



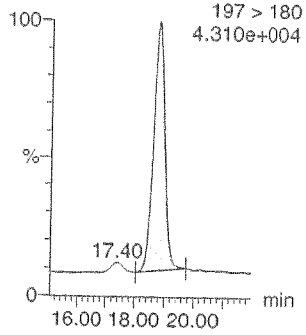
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.169e+005



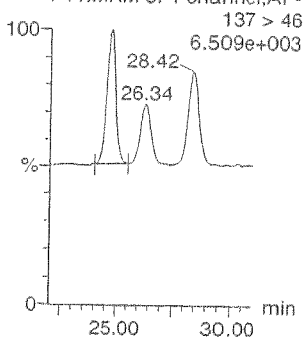
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.696e+004



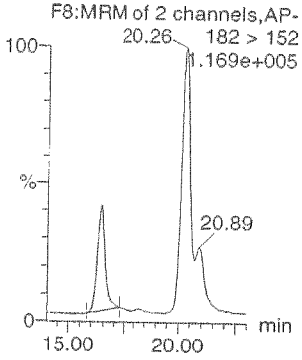
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.310e+004



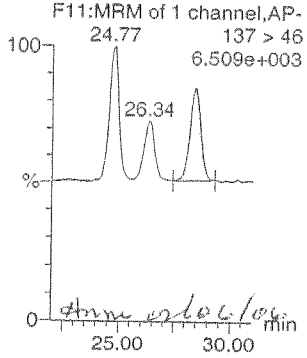
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.509e+003



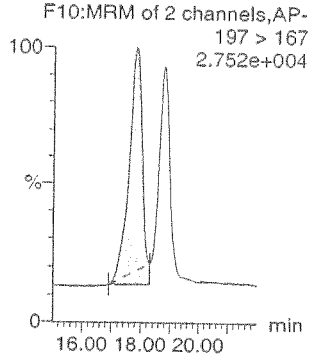
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.26
182 > 152
1.169e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.77
137 > 46
6.509e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
2.752e+004



640

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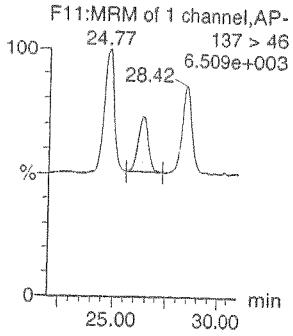
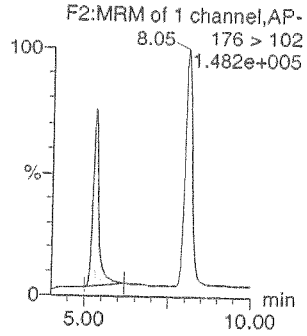
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

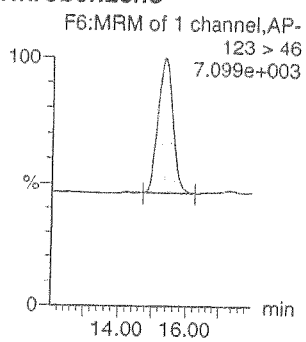
4-Nitrotoluene



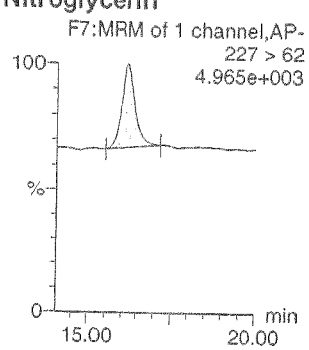
HMX



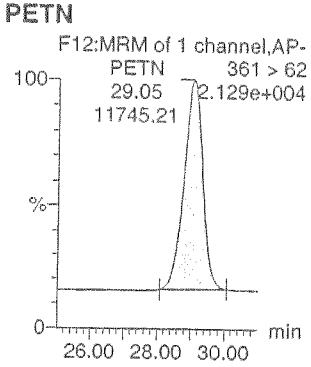
Nitrobenzene



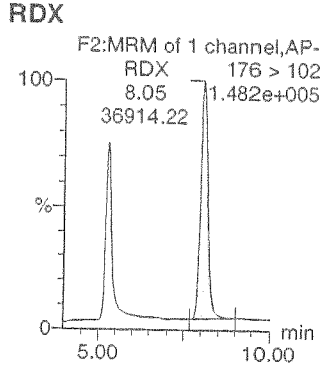
Nitroglycerin



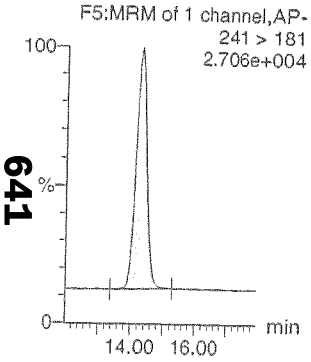
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-07ICV	HMX	176 > 102	5.28	22626.199	3679.580	22626.199	3074.563	bb			542.6531	90.4	-9.6	1322.4
WXX060202-07ICV	RDX	176 > 102	8.05	36914.219	3679.580	36914.219	5016.091	bb			599.4303	99.9	-0.1	1767.3
WXX060202-07ICV	135-Trinitrobenzene	213 > 183	11.06	19604.563	3679.580	19604.563	2663.967	bb			598.2862	99.7	-0.3	3009.2
WXX060202-07ICV	13-Dinitrobenzene-d4	172 > 142	13.31	3679.580		3679.580	3679.580	bb			447.1030	89.4	-10.6	271.8
WXX060202-07ICV	13-Dinitrobenzene	168 > 138	13.46	6369.762	3679.580	6369.762	865.556	bb			603.5464	100.6	0.6	866.6
WXX060202-07ICV	Tetryl	241 > 181	14.28	9112.324	3679.580	9112.324	1238.229	bb			796.5967	132.8	32.8	1040.2
WXX060202-07ICV	Nitrobenzene	123 > 46	15.31	1898.771	3679.580	1898.771	258.015	bb			558.1629	93.0	-7.0	328.5
WXX060202-07ICV	Nitroglycerin	227 > 62	16.18	836.440	3679.580	836.440	113.660	bb			599.5373	99.9	-0.1	157.7
WXX060202-07ICV	4-Amino-26-dinitrotoluene	197 > 167	17.81	12429.624	35499.043	12429.624	175.070	MM	03-Feb-06	07:21:41	620.0510	103.3	3.3	680.7
WXX060202-07ICV	2-Amino-46-dinitrotoluene	197 > 180	18.76	17369.215	35499.043	17369.215	244.643	bb			571.6375	95.3	-4.7	451.8
WXX060202-07ICV	246-Trinitrotoluene	227 > 210	17.42	39332.895	35499.043	39332.895	553.999	bb			595.5112	99.3	-0.7	563.1
WXX060202-07ICV	34-dinitrotoluene	182 > 152	16.39	17912.174	35499.043	17912.174	252.291	bb			272.8171	90.9	-9.1	336.0
WXX060202-07ICV	26-dinitrotoluene	182 > 152	20.26	47100.566	35499.043	47100.566	663.406	bd			594.3891	99.1	-0.9	832.4
WXX060202-07ICV	24-dinitrotoluene	182 > 152	20.89	10696.781	35499.043	10696.781	150.663	MM	03-Feb-06	07:23:54	622.4891	103.7	3.7	189.2
WXX060202-07ICV	26-dinitrotoluene-d3	185 > 155	20.07	35499.043		35499.043	35499.043	bb			458.7430	91.7	-8.3	2743.7
WXX060202-07ICV	2-Nitrotoluene	137 > 46.0	24.77	1579.570	35499.043	1579.570	22.248	bb			622.0235	103.7	3.7	49.9
WXX060202-07ICV	4-Nitrotoluene	137 > 46	26.34	781.737	35499.043	781.737	11.011	bb			623.7779	104.0	4.0	22.3
WXX060202-07ICV	3-Nitrotoluene	137 > 46.0	28.42	1260.299	35499.043	1260.299	17.751	bb			702.5965	117.1	17.1	34.5
WXX060202-07ICV	PETN	361 > 62	29.05	11745.208	35499.043	11745.208	165.430	bb			632.5831	105.4	5.4	5651.0

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Abm 2/3/06

2/3/06

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GRAND MEAN AVERAGE

Date of Analysis	02/02/06
Time of Injection	2050
Standard Number	WXX060202-07ICV
Data File	EXP0202011a

HMX	90.4
RDX	99.9
135-TNB	99.7
13-DNB	100.6
Tetryl	132.8
Nitrobenzene	93.0
Nitroglycerin	99.9
4A-26-DNT	103.3
2A-46-DNT	95.3
246-TNT	99.3
34-DNT(surr)	90.9
26-DNT	99.1
24-DNT	103.7
2-NT	103.7
4-NT	104.0
3-NT	117.1
PETN	105.4
Total	1738.1
Average	102.2

4/MM 02/06/06

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

Explosives Initial Calibration

Form 6

Lab Name: General Engineering Laboratories

GEL Job No: 154614

Lab Code: GEL

Run Date: 02-FEB-06,09-FEB-06

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0209003a	EXP0209004a	EXP0209005a	EXP0209006a	EXP0209007a	EXP0209008a			
Parmname									
1,3,5-Trinitrobenzene	3.773	4.053	3.895	3.939	4.449	4.307	4.0693333	6.368	
1,3-Dinitrobenzene-d4	6.985	6.432	6.521	6.886	6.857	6.138	6.6365	4.933	
2,4,6-Trinitrotoluene	.712	.875	.91	.968	1.037	1.206	.95133333	17.388	
2,4-Dinitrotoluene	.204	.277	.27	.255	.297	.285	.26466667	12.377	
2,6-Dinitrotoluene	1.074	1.141	1.006	1.075	1.068	1.096	1.0766667	4.06	
2,6-Dinitrotoluene-d3	76.398	54.07	62.204	62.08	57.964	50.547	60.543833	14.865	
2-Amino-4,6-dinitrotoluene	.297	.33	.369	.406	.419	.42	.3735	13.657	
3,4-Dinitrotoluene	.671	.817	.735	.918	.89	.856	.8145	11.67	
HMX	3.63	4.406	5.845	4.246	3.689	3.761	4.2628333	19.636	
Nitrobenzene	.511	.457	.52	.51	.452	.452	.48366667	6.845	
Nitroglycerin	.16	.127	.148	.132	.111	.108	.131	15.76	
RDX	4.882	6.02	8.377	7.385	6.775	6.655	6.6823333	17.777	
Tetryl	1.494	1.614	1.483	1.559	1.504	1.524	1.5296667	3.218	
m-Dinitrobenzene	1.212	1.38	1.293	1.369	1.279	1.3	1.3055	4.743	
m-Nitrotoluene	.03	.048	.035	.036	.037	.039	.0375	15.713	
o-Nitrotoluene	.039	.063	.05	.047	.05	.05	.04983333	15.105	
p-Nitrotoluene	.022	.031	.022	.022	.024	.024	.02416667	14.468	

Q column used to flag RSD values outside of Limit (>20%)
* Values outside of QC Limit

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Explosives Initial Calibration

Form 6

Lab Name: General Engineering Laboratories

GEL Job No: 154614

Lab Code: GEL

Run Date: 02-FEB-06,09-FEB-06

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: 2nd Order

Calibration Level:	1	2	3	4	5	6	X	X^2	Intercept	COD	Q
Data File:	EXP0209003a	EXP0209004a	EXP0209005a	EXP0209006a	EXP0209007a	EXP0209008a					
Parmname:											
4-Amino-2,6-dinitrotoluene	336.971	785.537	3465.86	7431.24	14467.1	18598.8	.229	.0001302	0	.9958	
PETN	823.571	1860.26	5937.21	9538.58	17017.5	18576.4	.426	-.0000635	0	.9956	

Quadradic Fit: $y = Ax^2 + Bx + C$
where X^2 column above is coefficient A
X column above is coefficient B
intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)
* Values outside of QC Limit

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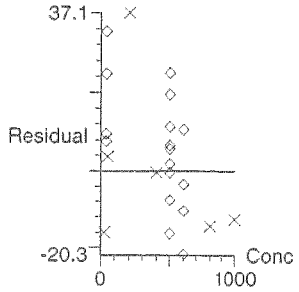
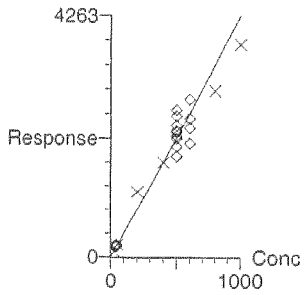
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\020906expA.mdb, Time: Fri Feb 10 06:34:26 2006
Calibration: Untitled, Time: Fri Feb 10 07:12:08 2006

Compound name: HMX
Response Factor: 4.26294
RRF SD: 0.837048, % Relative SD: 19.6355
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF

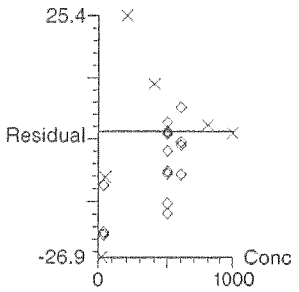


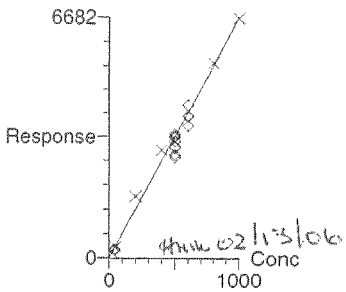


MM 2/10/06

646

Compound name: RDX
Response Factor: 6.68241
RRF SD: 1.18795, % Relative SD: 17.7772
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF





MM 02/13/06

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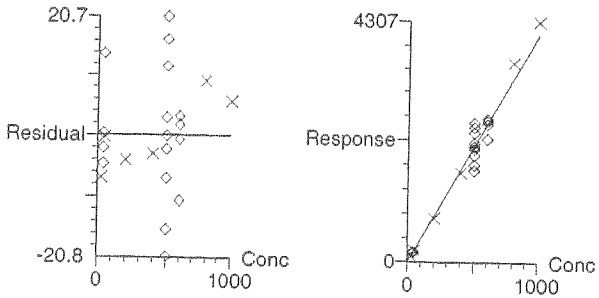
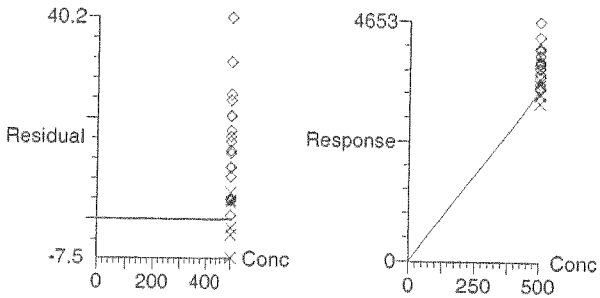
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

Compound name: 135-Trinitrobenzene
Response Factor: 4.06937
RRF SD: 0.259128, % Relative SD: 6.36777
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 13-Dinitrobenzene-d4
Response Factor: 6.63645
RRF SD: 0.327347, % Relative SD: 4.93256
Response type: External Std, Area
Curve type: RF



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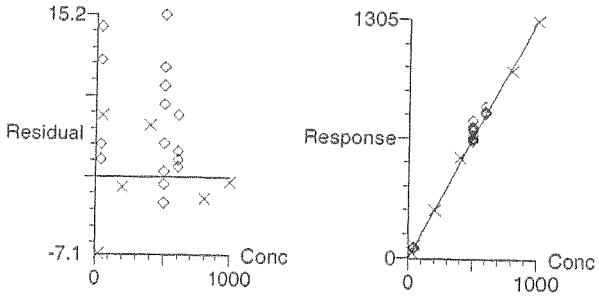
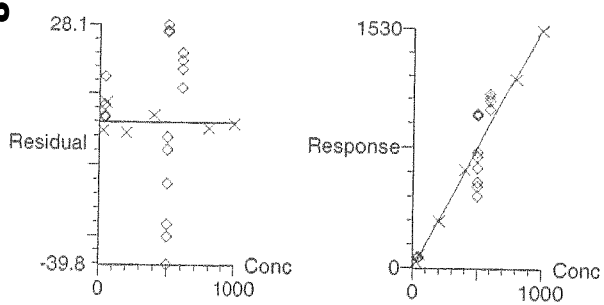
Compound name: 13-Dinitrobenzene
Response Factor: 1.30545
RRF SD: 0.061915, % Relative SD: 4.74281
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: Tetryl
Response Factor: 1.52964
RRF SD: 0.049221, % Relative SD: 3.21782
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



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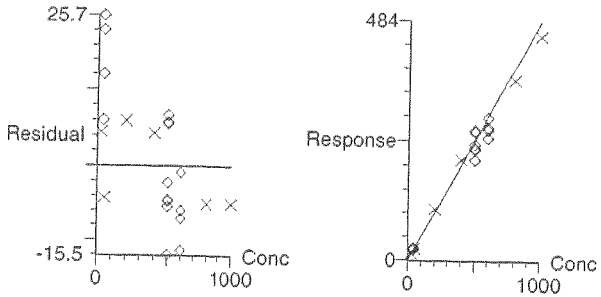
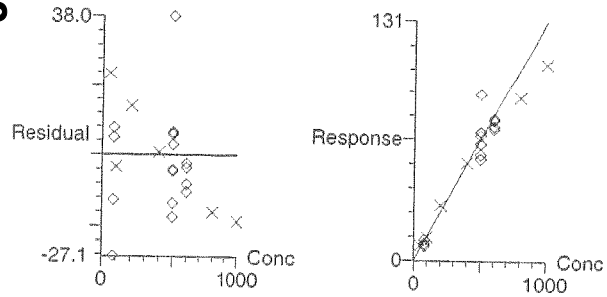
Compound name: Nitrobenzene
Response Factor: 0.483988
RRF SD: 0.0331297, % Relative SD: 6.84515
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: Nitroglycerin
Response Factor: 0.130923
RRF SD: 0.0206331, % Relative SD: 15.7598
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF

649



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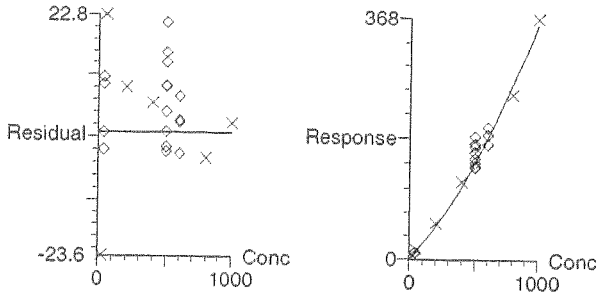
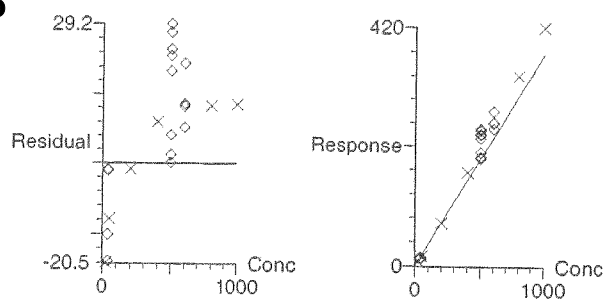
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

Compound name: 4-Amino-26-dinitrotoluene
Coefficient of Determination: 0.995755
Calibration curve: 0.000130151 * x^2 + 0.228584 * x
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None



Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.373692
RRF SD: 0.0510357, % Relative SD: 13.6572
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF

650



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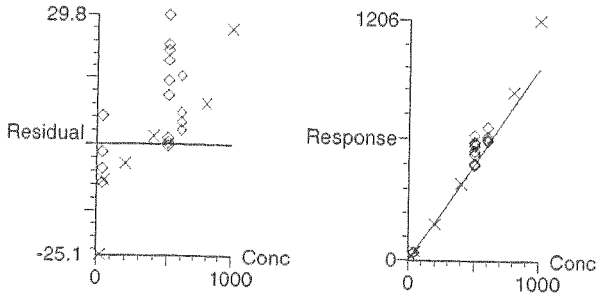
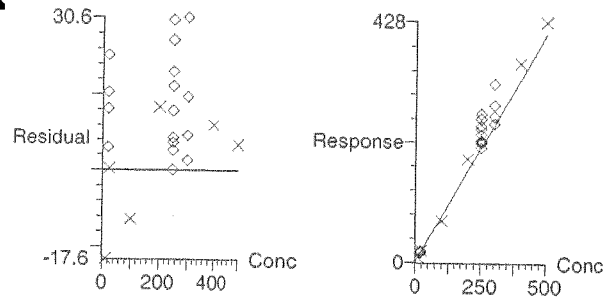
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

Compound name: 246-Trinitrotoluene
Response Factor: 0.951512
RRF SD: 0.165452, % Relative SD: 17.3884
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 34-dinitrotoluene
Response Factor: 0.814512
RRF SD: 0.0950568, % Relative SD: 11.6704
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



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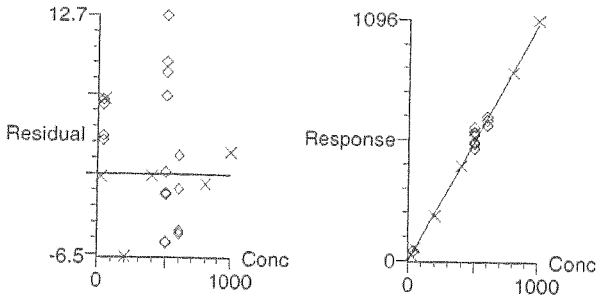
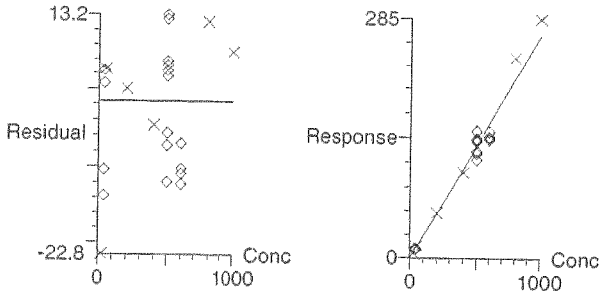
Compound name: 26-dinitrotoluene
Response Factor: 1.07657
RRF SD: 0.043708, % Relative SD: 4.05993
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 24-dinitrotoluene
Response Factor: 0.264707
RRF SD: 0.0327635, % Relative SD: 12.3773
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF

652



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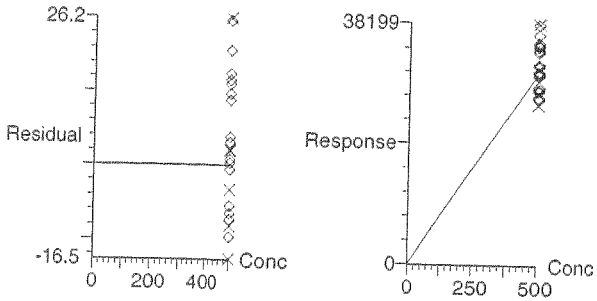
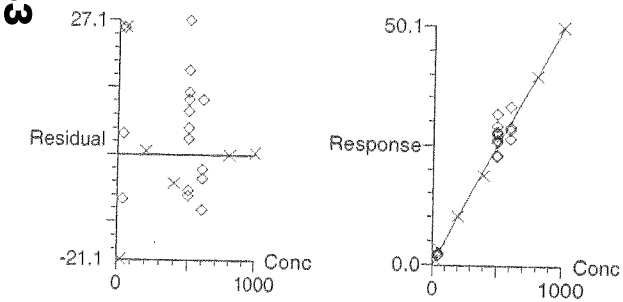
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

Compound name: 26-dinitrotoluene-d3
Response Factor: 60.5438
RRF SD: 8.99964, % Relative SD: 14.8647
Response type: External Std, Area
Curve type: RF



Compound name: 2-Nitrotoluene
Response Factor: 0.0498499
RRF SD: 0.00752982, % Relative SD: 15.105
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



953

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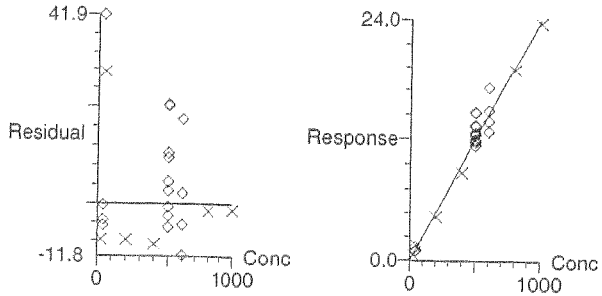
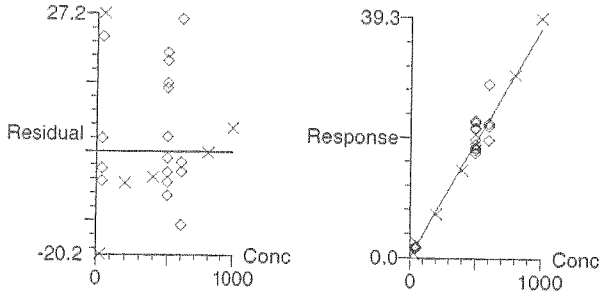
Compound name: 4-Nitrotoluene
Response Factor: 0.0239764
RRF SD: 0.00346885, % Relative SD: 14.4678
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 3-Nitrotoluene
Response Factor: 0.0375502
RRF SD: 0.00590041, % Relative SD: 15.7134
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: RF



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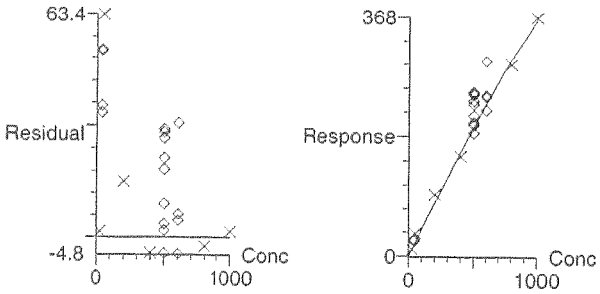
Compound name: PETN
Coefficient of Determination: 0.995626
Calibration curve: -6.34817e-005 * x^2 + 0.426169 * x
Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Force, Weighting: Null, Axis trans: None



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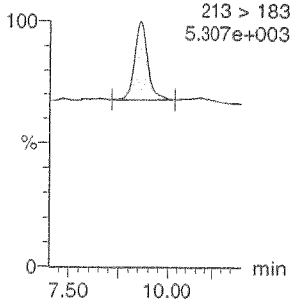
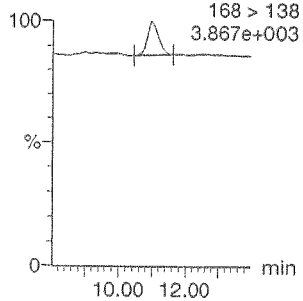
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209003a
Date: 09-Feb-2006
Time: 12:39:39
ID: WXX060209-01
Vial: 1:2,A

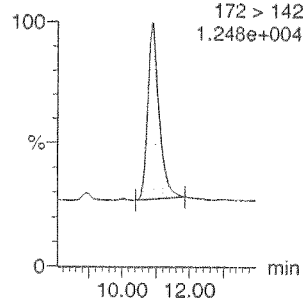
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
5.307e+003



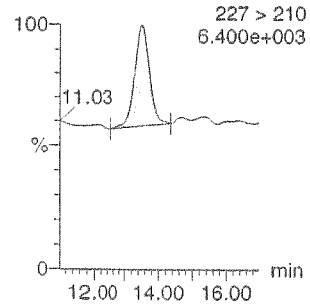
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.867e+003



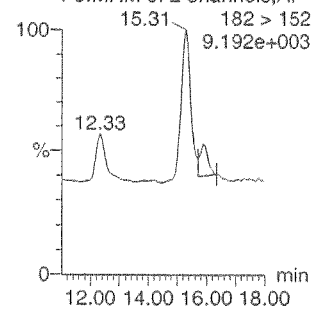
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.248e+004



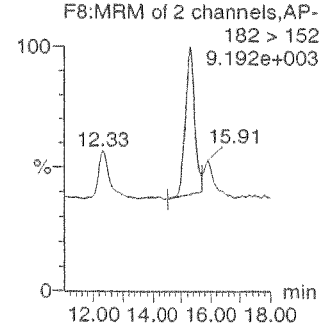
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
6.400e+003



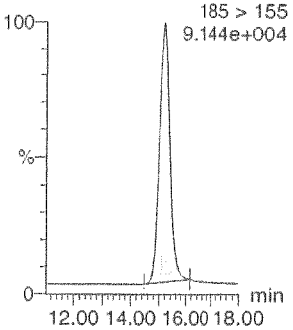
24-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
9.192e+003



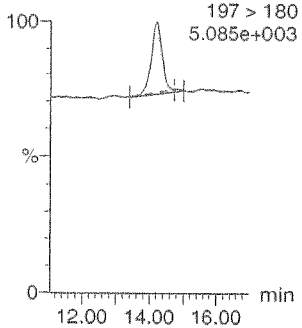
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
9.192e+003



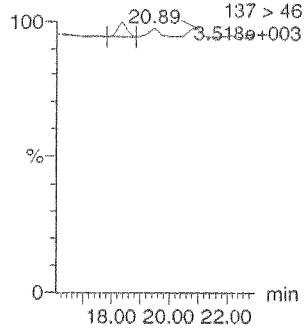
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
9.144e+004



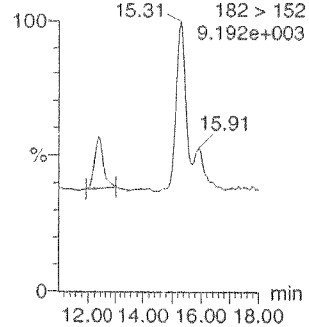
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.085e+003



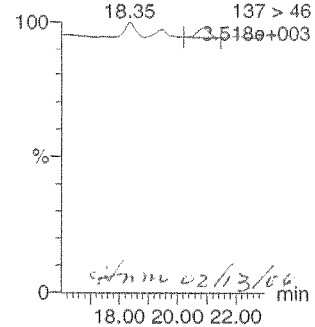
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.518e+003



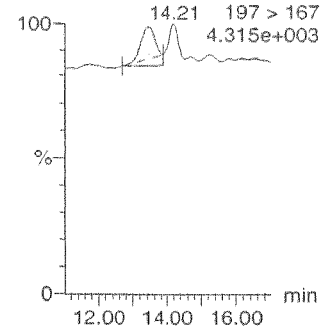
34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
9.192e+003



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.518e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
4.315e+003



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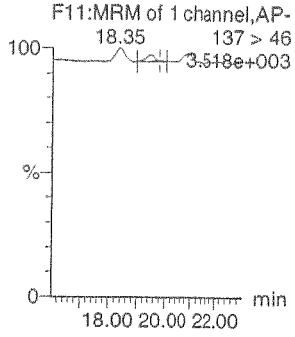
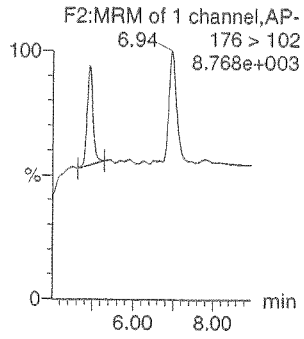
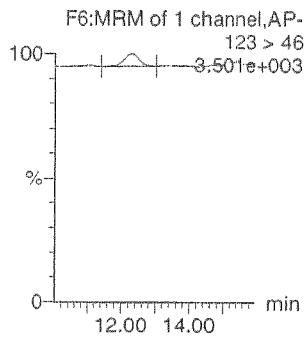
4-Nitrotoluene



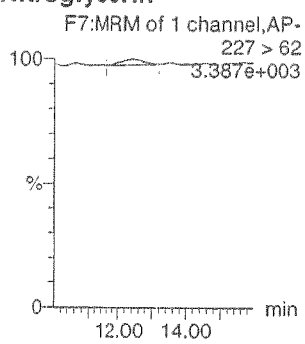
HMX



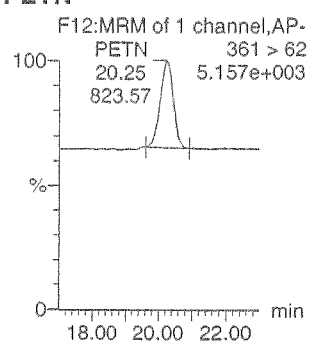
Nitrobenzene



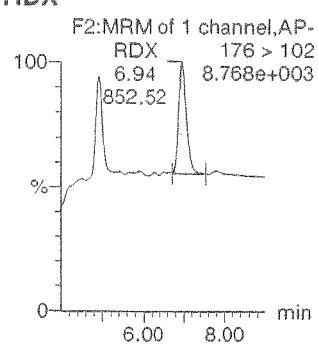
Nitroglycerin



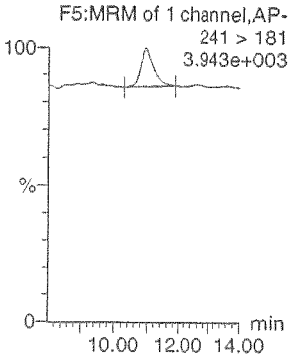
PETN



RDX



Tetryl



657

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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-01	HMX	176 > 102	4.92	633.920	3492.460	633.920	90.756	bb			21.2894	85.2	-14.8	76.3
WXX060209-01	RDX	176 > 102	6.94	852.519	3492.460	852.519	122.051	bb			18.2646	73.1	-26.9	85.4
WXX060209-01	135-Trinitrobenzene	213 > 183	9.29	658.877	3492.460	658.877	94.328	bb			23.1801	92.7	-7.3	48.9
WXX060209-01	13-Dinitrobenzene-d4	172 > 142	10.88	3492.460		3492.460	3492.460	bb			526.2543	105.3	5.3	309.1
WXX060209-01	13-Dinitrobenzene	168 > 138	10.98	211.717	3492.460	211.717	30.311	bb			23.2185	92.9	-7.1	29.8
WXX060209-01	Tetryl	241 > 181	10.93	260.845	3492.460	260.845	37.344	bb			24.4136	97.7	-2.3	54.0
WXX060209-01	Nitrobenzene	123 > 46	12.27	89.305	3492.460	89.305	12.785	bb			26.4168	105.7	5.7	27.5
WXX060209-01	Nitroglycerin	227 > 62	12.41	55.990	3492.460	55.990	8.016	bb			61.2258	122.5	22.5	6.8
WXX060209-01	4-Amino-26-dinitrotoluene	197 > 167	13.43	336.971	38198.836	336.971	4.411	MM	10-Feb-06	07:04:24	19.0885	76.4	-23.6	11.3
WXX060209-01	2-Amino-46-dinitrotoluene	197 > 180	14.21	567.639	38198.836	567.639	7.430	MM	10-Feb-06	06:52:51	19.8829	79.5	-20.5	41.4
WXX060209-01	246-Trinitrotoluene	227 > 210	13.50	1360.455	38198.836	1360.455	17.808	bb			18.7150	74.9	-25.1	33.5
WXX060209-01	34-dinitrotoluene	182 > 152	12.33	640.628	38198.836	640.628	8.385	bb			10.2950	82.4	-17.6	30.7
WXX060209-01	26-dinitrotoluene	182 > 152	15.31	2051.224	38198.836	2051.224	26.849	bd			24.9397	99.8	-0.2	100.2
WXX060209-01	24-dinitrotoluene	182 > 152	15.91	390.195	38198.836	390.195	5.107	db			19.2946	77.2	-22.8	20.9
WXX060209-01	26-dinitrotoluene-d3	185 > 155	15.16	38198.836		38198.836	38198.836	bb			630.9284	126.2	26.2	3056.2
WXX060209-01	2-Nitrotoluene	137 > 46	18.35	75.079	38198.836	75.079	0.983	bb			19.7140	78.9	-21.1	48.4
WXX060209-01	4-Nitrotoluene	137 > 46	19.46	42.060	38198.836	42.060	0.551	MM	10-Feb-06	06:57:53	22.9618	91.8	-8.2	25.0
WXX060209-01	3-Nitrotoluene	137 > 46	20.89	57.231	38198.836	57.231	0.749	bb			19.9498	79.8	-20.2	30.3
WXX060209-01	PETN	361 > 62	20.25	823.571	38198.836	823.571	10.780	bb			25.3913	101.6	1.6	327.8

658

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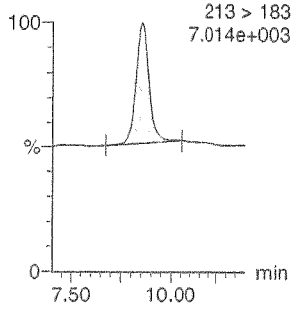
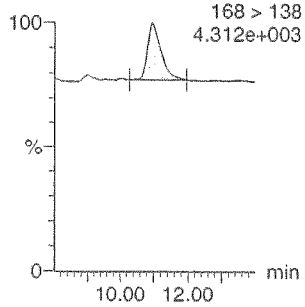
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209004a
Date: 09-Feb-2006
Time: 13:05:09
ID: WXX060209-02
Vial: 1:2,B

MM
2/10/06

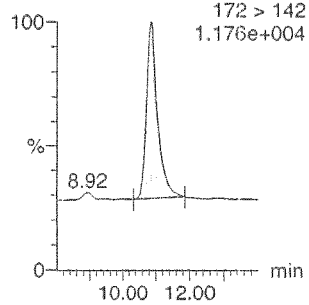
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
7.014e+003



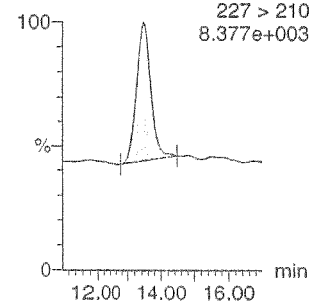
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.312e+003



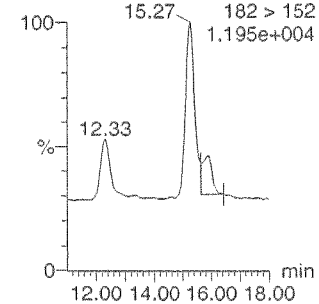
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.176e+004



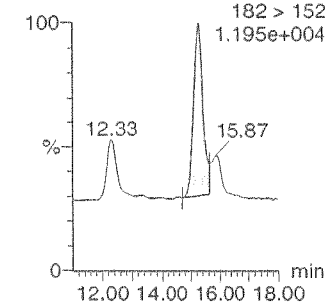
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
8.377e+003



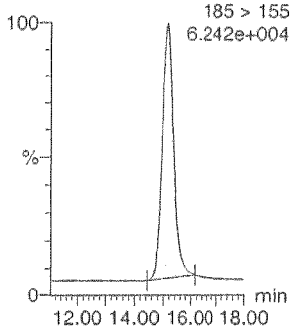
24-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.195e+004



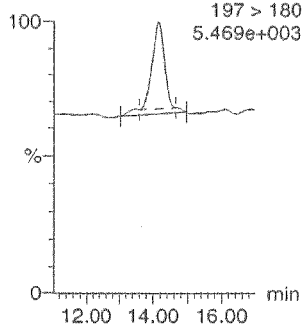
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.195e+004



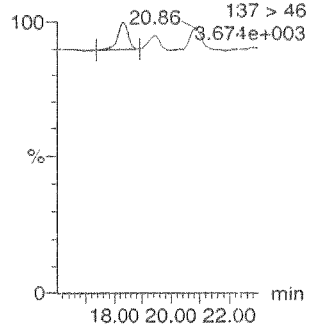
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.242e+004



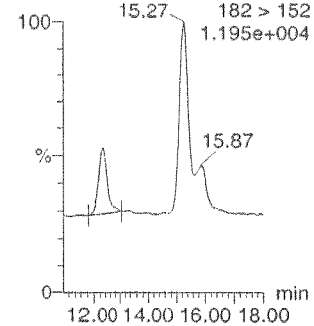
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.469e+003



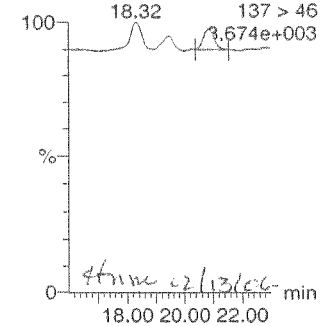
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.674e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.195e+004

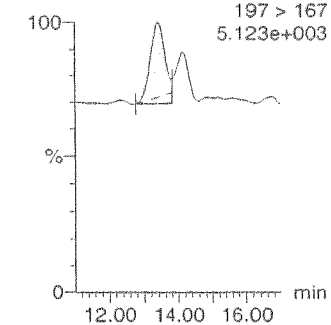


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.674e+003



4hmc 2/13/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
5.123e+003



659

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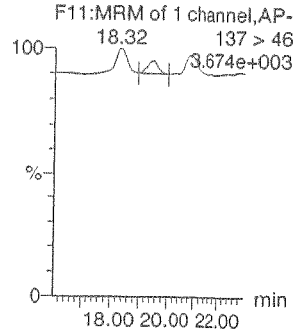
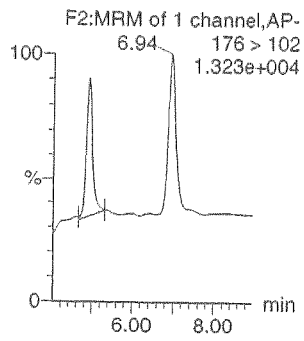
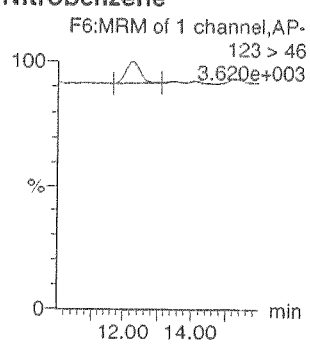
4-Nitrotoluene



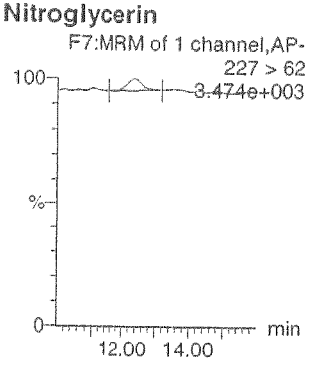
HMX



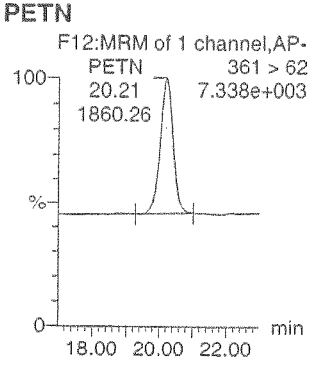
Nitrobenzene



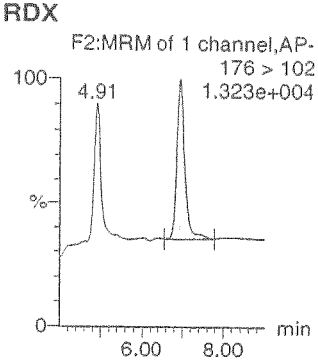
Nitroglycerin



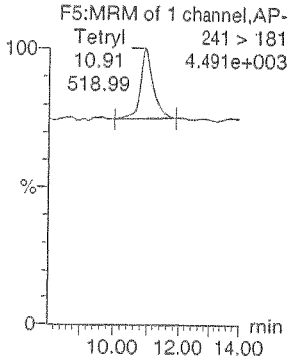
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-02	HMX	176 > 102	4.91	1416.947	3216.111	1416.947	220.289	db			51.6754	103.4	3.4	394.0
WXX060209-02	RDX	176 > 102	6.94	1936.073	3216.111	1936.073	300.996	bb			45.0430	90.1	-9.9	455.9
WXX060209-02	135-Trinitrobenzene	213 > 183	9.27	1303.395	3216.111	1303.395	202.635	bb			49.7952	99.6	-0.4	132.1
WXX060209-02	13-Dinitrobenzene-d4	172 > 142	10.85	3216.111		3216.111	3216.111	bb			484.6132	96.9	-3.1	551.0
WXX060209-02	13-Dinitrobenzene	168 > 138	10.95	443.980	3216.111	443.980	69.024	bb			52.8740	105.7	5.7	44.2
WXX060209-02	Tetryl	241 > 181	10.91	518.993	3216.111	518.993	80.686	bb			52.7487	105.5	5.5	81.7
WXX060209-02	Nitrobenzene	123 > 46	12.23	147.084	3216.111	147.084	22.867	bb			47.2465	94.5	-5.5	40.5
WXX060209-02	Nitroglycerin	227 > 62	12.36	81.468	3216.111	81.468	12.666	bb			96.7412	96.7	-3.3	8.2
WXX060209-02	4-Amino-26-dinitrotoluene	197 > 167	13.38	785.537	27035.162	785.537	14.528	MM	10-Feb-06	07:04:35	61.4097	122.8	22.8	74.0
WXX060209-02	2-Amino-46-dinitrotoluene	197 > 180	14.15	893.385	27035.162	893.385	16.523	MM	10-Feb-06	06:52:42	44.2147	88.4	-11.6	20.6
WXX060209-02	246-Trinitrotoluene	227 > 210	13.46	2366.733	27035.162	2366.733	43.771	bb			46.0019	92.0	-8.0	66.4
WXX060209-02	34-dinitrotoluene	182 > 152	12.33	1104.034	27035.162	1104.034	20.418	bb			25.0684	100.3	0.3	52.8
WXX060209-02	26-dinitrotoluene	182 > 152	15.27	3084.533	27035.162	3084.533	57.047	bd			52.9893	106.0	6.0	154.9
WXX060209-02	24-dinitrotoluene	182 > 152	15.87	749.770	27035.162	749.770	13.867	db			52.3846	104.8	4.8	34.7
WXX060209-02	26-dinitrotoluene-d3	185 > 155	15.12	27035.162		27035.162	27035.162	bb			446.5385	89.3	-10.7	2335.8
WXX060209-02	2-Nitrotoluene	137 > 46	18.32	169.363	27035.162	169.363	3.132	bb			62.8341	125.7	25.7	44.2
WXX060209-02	4-Nitrotoluene	137 > 46	19.45	83.416	27035.162	83.416	1.543	bb			64.3437	128.7	28.7	22.7
WXX060209-02	3-Nitrotoluene	137 > 46	20.86	129.085	27035.162	129.085	2.387	bb			63.5777	127.2	27.2	33.7
WXX060209-02	PETN	361 > 62	20.21	1860.261	27035.162	1860.261	34.404	bb			81.7246	163.4	63.4	717.6

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MM 2/13/06

MM 2/10/06

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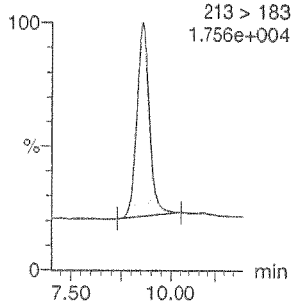
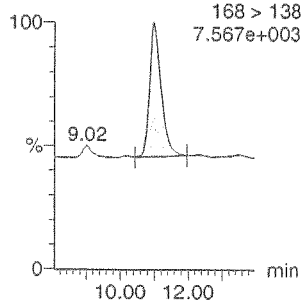
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209005a
Date: 09-Feb-2006
Time: 13:30:38
ID: WXX060209-03
Vial: 1:2,C

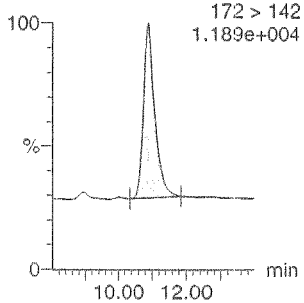
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
1.756e+004



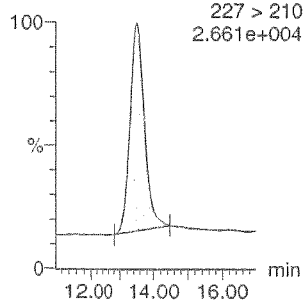
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
7.567e+003



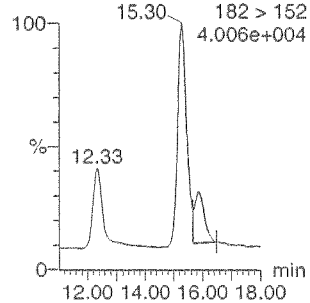
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.189e+004



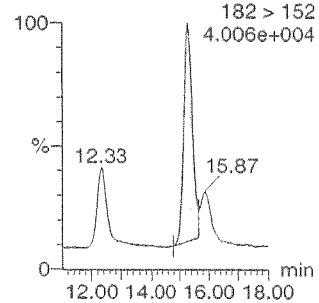
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
2.661e+004



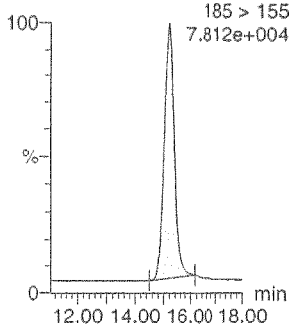
24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.30
182 > 152
4.006e+004



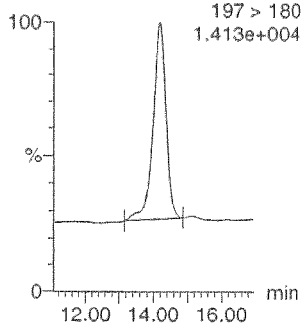
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
4.006e+004



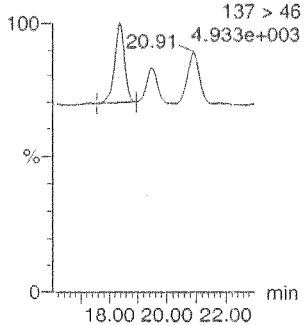
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.812e+004



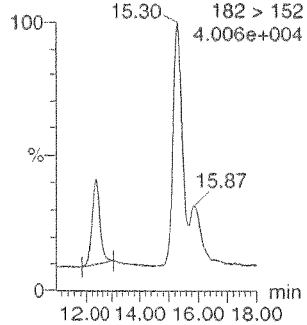
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
1.413e+004



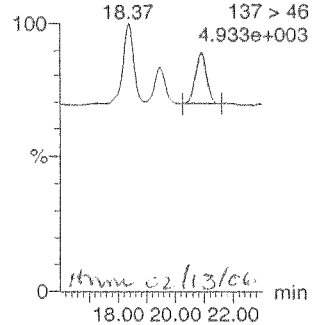
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
4.933e+003



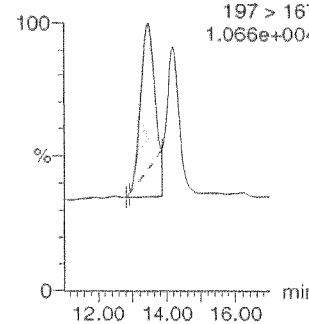
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.30
182 > 152
4.006e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.37
137 > 46
4.933e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
1.066e+004



662

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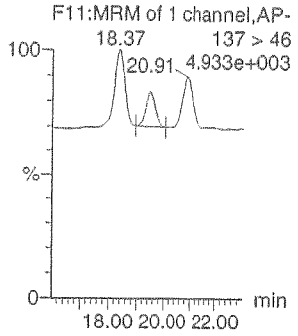
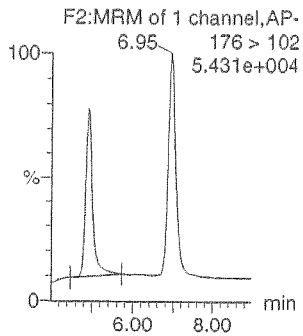
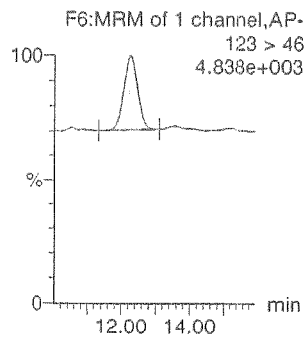
4-Nitrotoluene



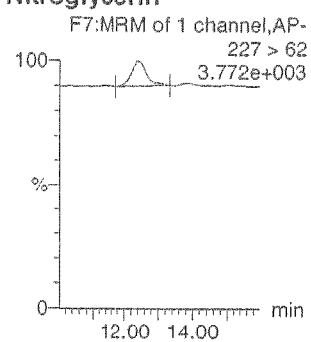
HMX



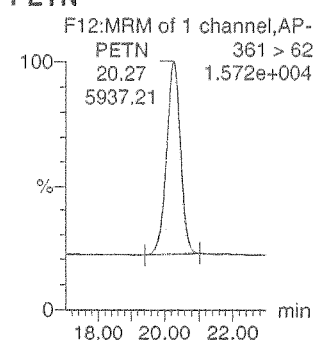
Nitrobenzene



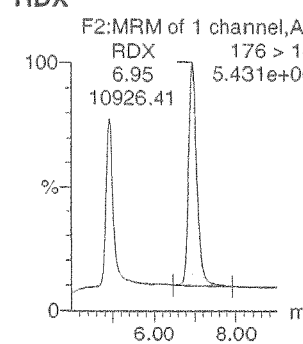
Nitroglycerin



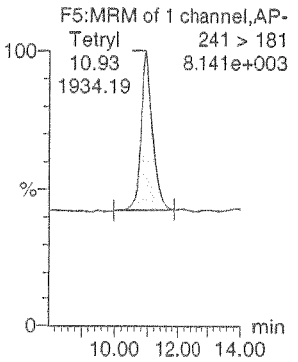
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-03	HMX	176 > 102	4.91	7622.947	3260.676	7622.947	1168.921	bb			274.2055	137.1	37.1	1067.3
WXX060209-03	RDX	176 > 102	6.95	10926.409	3260.676	10926.409	1675.482	bb			250.7303	125.4	25.4	1408.1
WXX060209-03	135-Trinitrobenzene	213 > 183	9.27	5080.572	3260.676	5080.572	779.067	bb			191.4466	95.7	-4.3	656.3
WXX060209-03	13-Dinitrobenzene-d4	172 > 142	10.88	3260.676		3260.676	3260.676	bb			491.3284	98.3	-1.7	434.5
WXX060209-03	13-Dinitrobenzene	168 > 138	10.98	1685.941	3260.676	1685.941	258.526	bb			198.0363	99.0	-1.0	165.2
WXX060209-03	Tetryl	241 > 181	10.93	1934.189	3260.676	1934.189	296.593	bb			193.8976	96.9	-3.1	274.5
WXX060209-03	Nitrobenzene	123 > 46	12.27	678.617	3260.676	678.617	104.061	bb			215.0070	107.5	7.5	112.6
WXX060209-03	Nitroglycerin	227 > 62	12.41	193.362	3260.676	193.362	29.651	bb			226.4743	113.2	13.2	30.0
WXX060209-03	4-Amino-26-dinitrotoluene	197 > 167	13.42	3465.860	31101.977	3465.860	55.718	MM	10-Feb-06	07:04:45	216.9521	108.5	8.5	153.8
WXX060209-03	2-Amino-46-dinitrotoluene	197 > 180	14.18	4589.868	31101.977	4589.868	73.787	bb			197.4553	98.7	-1.3	370.6
WXX060209-03	246-Trinitrotoluene	227 > 210	13.50	11326.817	31101.977	11326.817	182.092	bb			191.3708	95.7	-4.3	440.6
WXX060209-03	34-dinitrotoluene	182 > 152	12.33	4571.798	31101.977	4571.798	73.497	bb			90.2343	90.2	-9.8	148.5
WXX060209-03	26-dinitrotoluene	182 > 152	15.30	12516.936	31101.977	12516.936	201.224	bd			186.9122	93.5	-6.5	414.7
WXX060209-03	24-dinitrotoluene	182 > 152	15.87	3354.397	31101.977	3354.397	53.926	db			203.7187	101.9	1.9	97.8
WXX060209-03	26-dinitrotoluene-d3	185 > 155	15.18	31101.977		31101.977	31101.977	bb			513.7099	102.7	2.7	2742.2
WXX060209-03	2-Nitrotoluene	137 > 46	18.37	624.953	31101.977	624.953	10.047	bb			201.5418	100.8	0.8	271.2
WXX060209-03	4-Nitrotoluene	137 > 46	19.47	273.714	31101.977	273.714	4.400	bb			183.5249	91.8	-8.2	122.3
WXX060209-03	3-Nitrotoluene	137 > 46	20.91	437.731	31101.977	437.731	7.037	bb			187.4035	93.7	-6.3	178.9
WXX060209-03	PETN	361 > 62	20.27	5937.212	31101.977	5937.212	95.448	bb			231.9828	116.0	16.0	2481.9

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2/10/06

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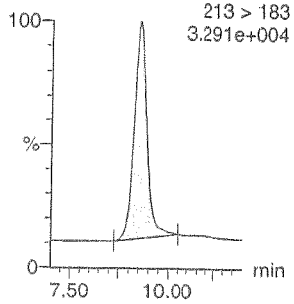
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

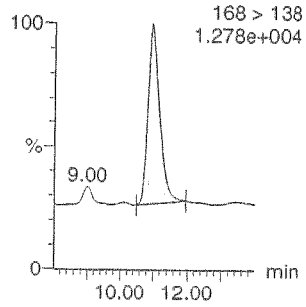
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209006a
Date: 09-Feb-2006
Time: 13:56:07
ID: WXX060209-04
Vial: 1:2,D

MM 2/10/06

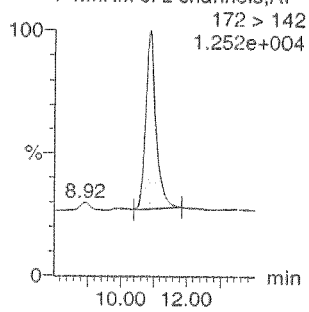
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.291e+004



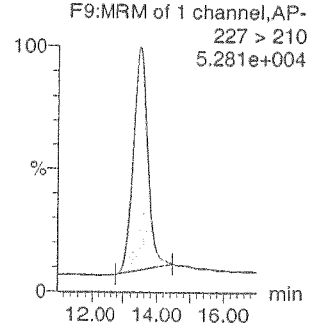
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.278e+004



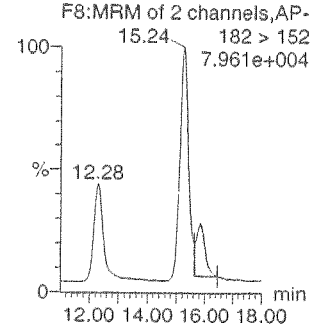
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.252e+004



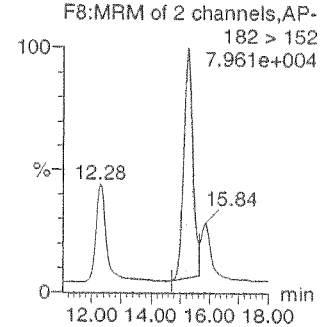
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
5.281e+004



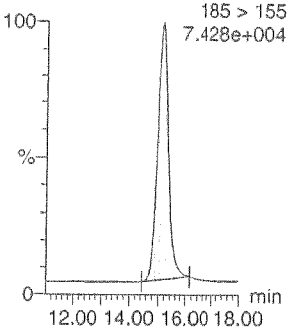
24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.24
182 > 152
7.961e+004



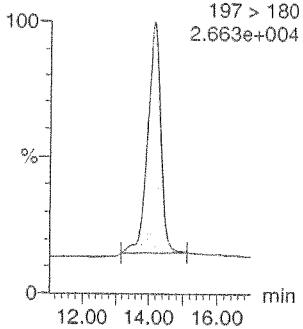
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
7.961e+004



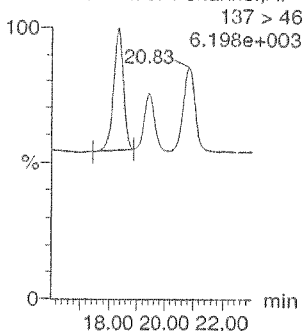
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.428e+004



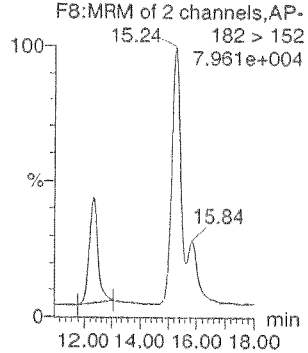
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
2.663e+004



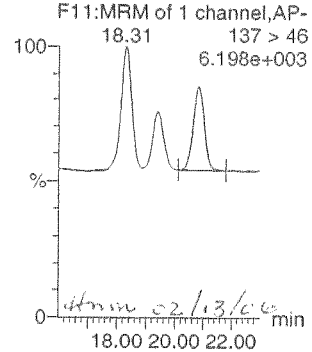
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.198e+003



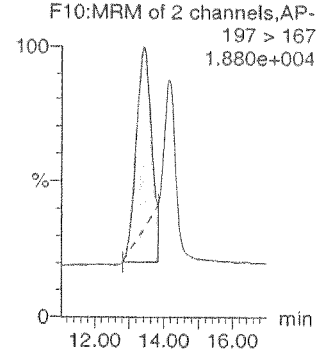
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.24
182 > 152
7.961e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.31
137 > 46
6.198e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
1.880e+004



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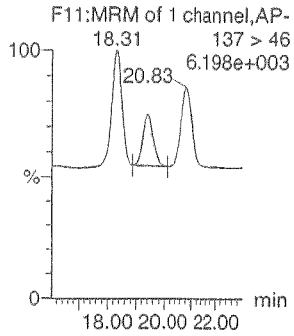
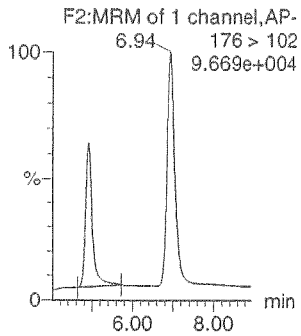
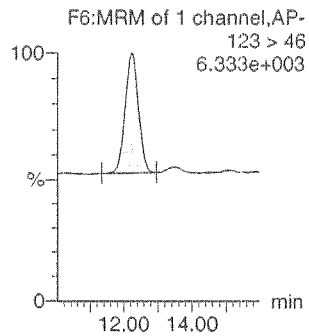
4-Nitrotoluene



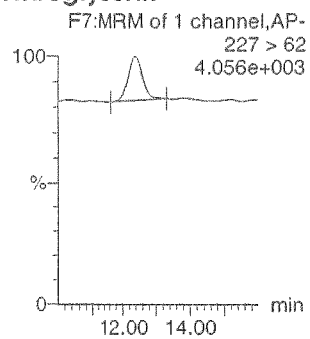
HMX



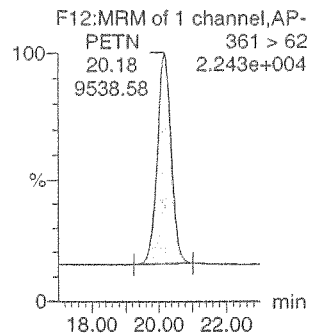
Nitrobenzene



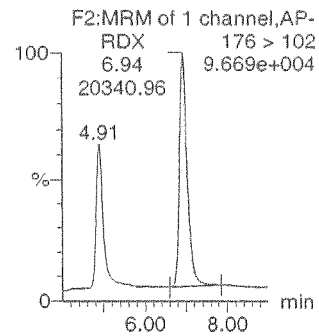
Nitroglycerin



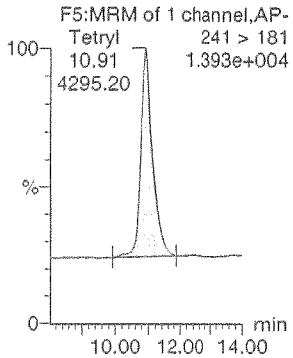
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-04	HMX	176 > 102	4.91	11695.839	3442.950	11695.839	1698.520	bb			398.4387	99.6	-0.4	597.8
WXX060209-04	RDX	176 > 102	6.94	20340.959	3442.950	20340.959	2954.002	bb			442.0564	110.5	10.5	954.1
WXX060209-04	135-Trinitrobenzene	213 > 183	9.25	10849.989	3442.950	10849.989	1575.682	bb			387.2053	96.8	-3.2	1446.2
WXX060209-04	13-Dinitrobenzene-d4	172 > 142	10.85	3442.950		3442.950	3442.950	bb			518.7940	103.8	3.8	699.7
WXX060209-04	13-Dinitrobenzene	168 > 138	10.95	3769.428	3442.950	3769.428	547.413	bb			419.3289	104.8	4.8	520.1
WXX060209-04	Tetryl	241 > 181	10.91	4295.196	3442.950	4295.196	623.767	bb			407.7870	101.9	1.9	276.1
WXX060209-04	Nitrobenzene	123 > 46	12.23	1405.646	3442.950	1405.646	204.134	bb			421.7749	105.4	5.4	258.8
WXX060209-04	Nitroglycerin	227 > 62	12.36	363.096	3442.950	363.096	52.730	bb			402.7599	100.7	0.7	78.6
WXX060209-04	4-Amino-26-dinitrotoluene	197 > 167	13.38	7431.239	31040.176	7431.239	119.704	MM	10-Feb-06	07:04:52	422.1876	105.5	5.5	440.2
WXX060209-04	2-Amino-46-dinitrotoluene	197 > 180	14.15	10093.046	31040.176	10093.046	162.580	bb			435.0656	108.8	8.8	161.8
WXX060209-04	246-Trinitrotoluene	227 > 210	13.46	24036.750	31040.176	24036.750	387.188	bb			406.9183	101.7	1.7	709.7
WXX060209-04	34-dinitrotoluene	182 > 152	12.28	11402.975	31040.176	11402.975	183.681	bb			225.5103	112.8	12.8	277.3
WXX060209-04	26-dinitrotoluene	182 > 152	15.24	26685.475	31040.176	26685.475	429.854	bd			399.2807	99.8	-0.2	663.0
WXX060209-04	24-dinitrotoluene	182 > 152	15.84	6338.152	31040.176	6338.152	102.096	db			385.6940	96.4	-3.6	151.4
WXX060209-04	26-dinitrotoluene-d3	185 > 155	15.12	31040.176		31040.176	31040.176	bb			512.6892	102.5	2.5	3465.1
WXX060209-04	2-Nitrotoluene	137 > 46	18.31	1165.689	31040.176	1165.689	18.777	bb			376.6728	94.2	-5.8	214.1
WXX060209-04	4-Nitrotoluene	137 > 46	19.40	540.688	31040.176	540.688	8.709	bb			363.2524	90.8	-9.2	96.5
WXX060209-04	3-Nitrotoluene	137 > 46	20.83	884.361	31040.176	884.361	14.245	bb			379.3706	94.8	-5.2	147.3
WXX060209-04	PETN	361 > 62	20.18	9538.576	31040.176	9538.576	153.649	bb			382.3068	95.6	-4.4	2286.9

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4th 2/13/06

MM 2/10/06

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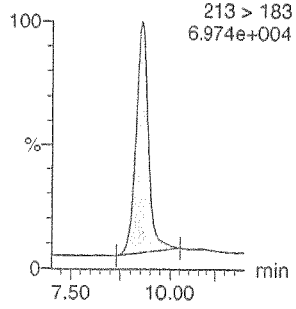
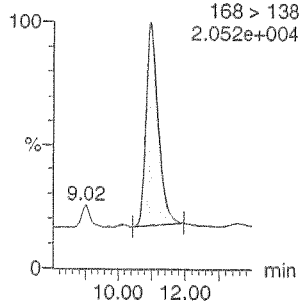
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209007a
Date: 09-Feb-2006
Time: 14:21:35
ID: WXX060209-05
Vial: 1:2,E

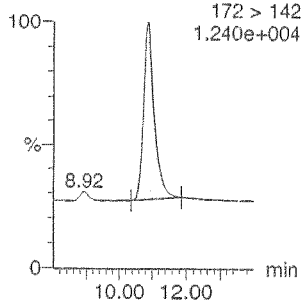
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.974e+004



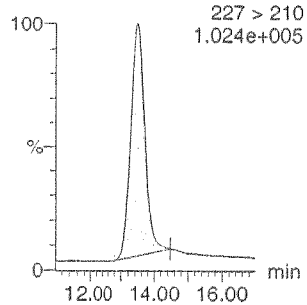
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
2.052e+004



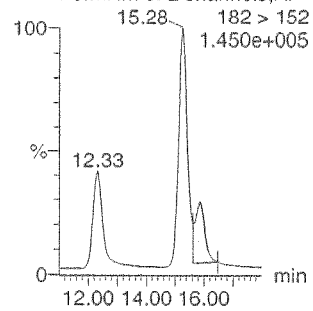
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.240e+004



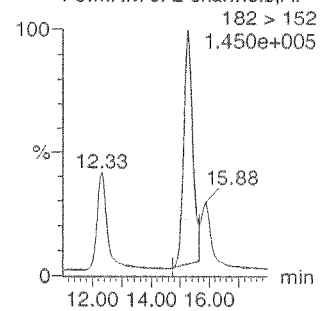
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.024e+005



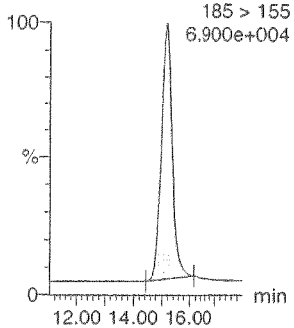
24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.28
182 > 152
1.450e+005



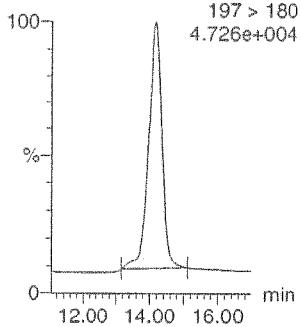
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.450e+005



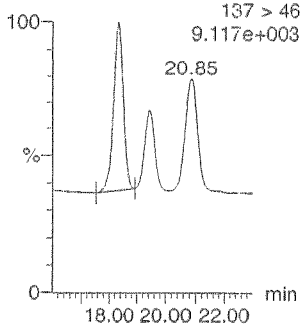
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.900e+004



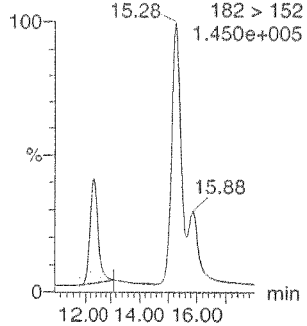
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.726e+004



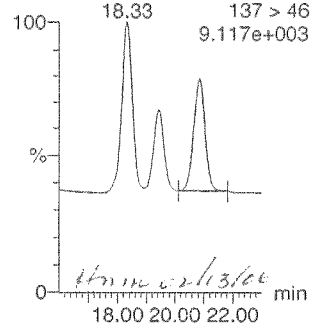
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
9.117e+003



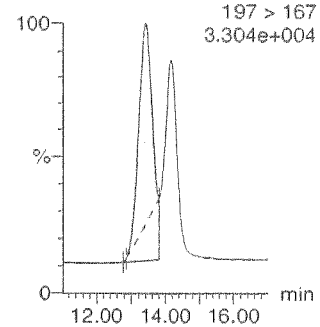
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.28
182 > 152
1.450e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.33
137 > 46
9.117e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.304e+004



668

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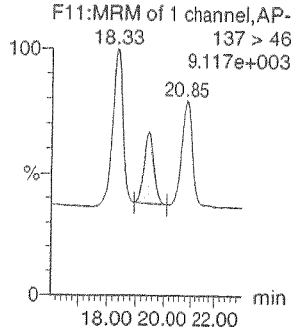
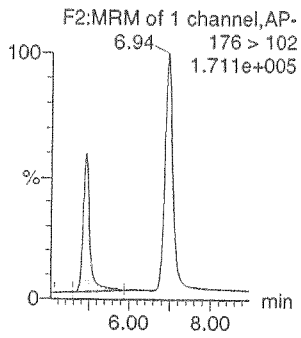
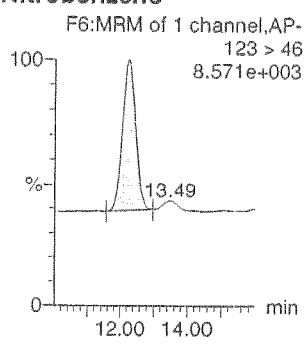
4-Nitrotoluene



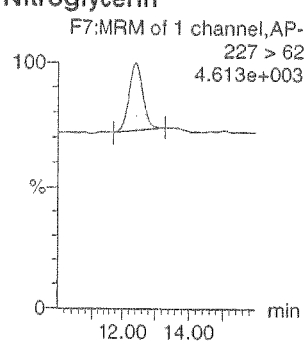
HMX



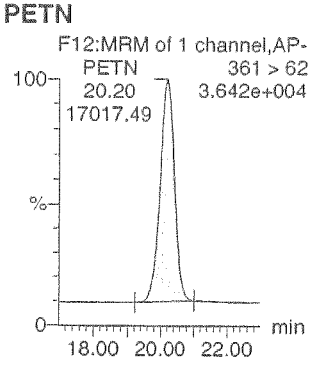
Nitrobenzene



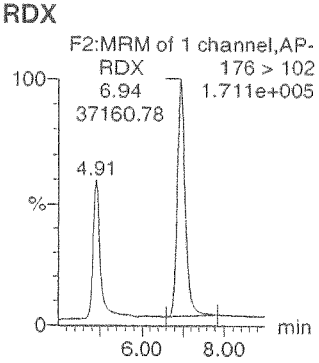
Nitroglycerin



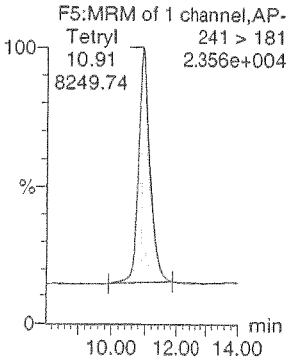
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-05	HMX	176 > 102	4.91	20237.033	3428.284	20237.033	2951.481	MM	10-Feb-06	06:48:50	692.3583	86.5	-13.5	4749.3
WXX060209-05	RDX	176 > 102	6.94	37160.781	3428.284	37160.781	5419.735	bb			811.0451	101.4	1.4	8037.7
WXX060209-05	135-Trinitrobenzene	213 > 183	9.27	24403.232	3428.284	24403.232	3559.103	bb			874.6077	109.3	9.3	1263.0
WXX060209-05	13-Dinitrobenzene-d4	172 > 142	10.88	3428.284		3428.284	3428.284	bb			516.5840	103.3 ✓	3.3	361.0
WXX060209-05	13-Dinitrobenzene	168 > 138	10.95	7014.897	3428.284	7014.897	1023.092	bb			783.7085	98.0	-2.0	343.1
WXX060209-05	Tetryl	241 > 181	10.91	8249.743	3428.284	8249.743	1203.188	bb			786.5834	98.3	-1.7	569.7
WXX060209-05	Nitrobenzene	123 > 46	12.23	2481.205	3428.284	2481.205	361.873	bb			747.6895	93.5	-6.5	683.5
WXX060209-05	Nitroglycerin	227 > 62	12.41	608.014	3428.284	608.014	88.676	bb			677.3174	84.7	-15.3	80.7
WXX060209-05	4-Amino-26-dinitrotoluene	197 > 167	13.38	14467.134	28982.125	14467.134	249.587	MM	10-Feb-06	07:05:03	761.6139	95.2	-4.8	607.0
WXX060209-05	2-Amino-46-dinitrotoluene	197 > 180	14.18	19428.418	28982.125	19428.418	335.179	bb			896.9411	112.1	12.1	1305.0
WXX060209-05	246-Trinitrotoluene	227 > 210	13.50	48104.148	28982.125	48104.148	829.893	bb			872.1837	109.0	9.0	876.5
WXX060209-05	34-dinitrotoluene	182 > 152	12.33	20628.414	28982.125	20628.414	355.882	bb			436.9261	109.2 ✓	9.2	408.0
WXX060209-05	26-dinitrotoluene	182 > 152	15.28	49529.777	28982.125	49529.777	854.488	bd			793.7135	99.2	-0.8	1013.7
WXX060209-05	24-dinitrotoluene	182 > 152	15.88	13772.739	28982.125	13772.739	237.607	db			897.6241	112.2	12.2	262.3
WXX060209-05	26-dinitrotoluene-d3	185 > 155	15.13	28982.125		28982.125	28982.125	bb			478.6964	95.7 ✓	-4.3	943.7
WXX060209-05	2-Nitrotoluene	137 > 46	18.33	2312.013	28982.125	2312.013	39.887	bb			800.1396	100.0	0.0	618.2
WXX060209-05	4-Nitrotoluene	137 > 46	19.43	1092.862	28982.125	1092.862	18.854	bb			786.3592	98.3	-1.7	288.9
WXX060209-05	3-Nitrotoluene	137 > 46	20.85	1736.598	28982.125	1736.598	29.960	bb			797.8612	99.7	-0.3	415.6
WXX060209-05	PETN	361 > 62	20.20	17017.492	28982.125	17017.492	293.586	bb			779.3781	97.4	-2.6	10157.3

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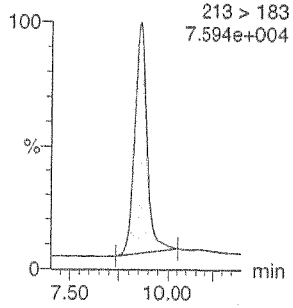
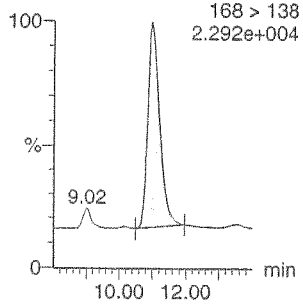
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209008a
Date: 09-Feb-2006
Time: 14:47:30
ID: WXX060209-06
Vial: 1:2,F

671

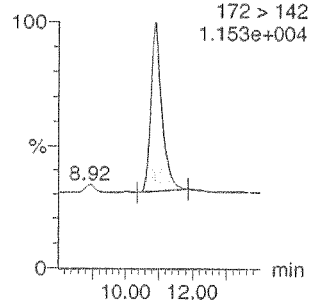
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
7.594e+004



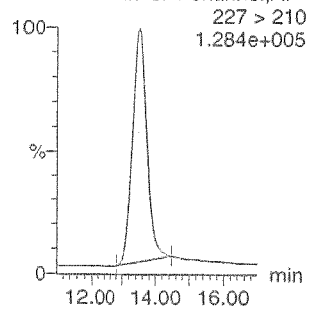
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
2.292e+004



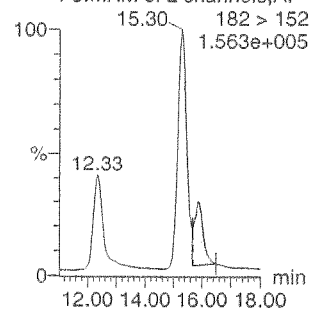
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.153e+004



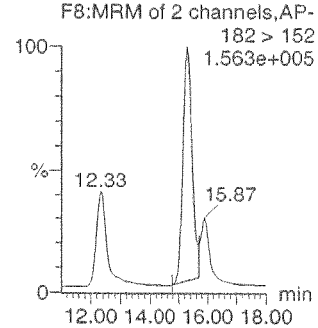
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.284e+005



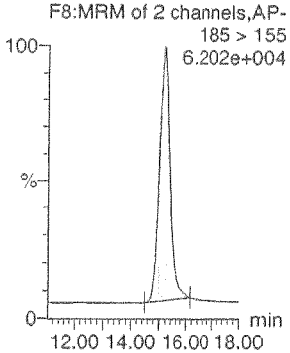
24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.30
182 > 152
1.563e+005



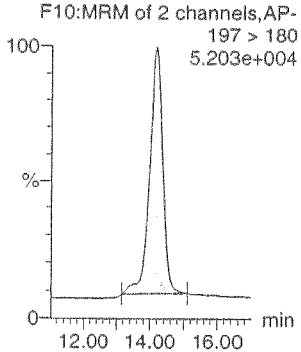
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.563e+005



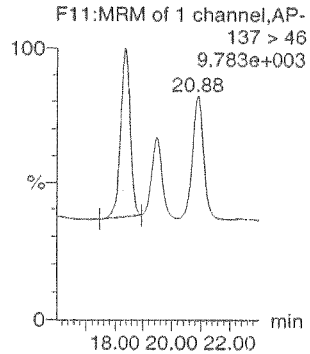
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.202e+004



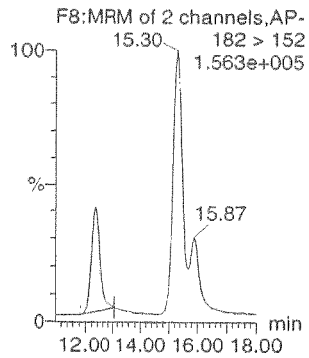
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.203e+004



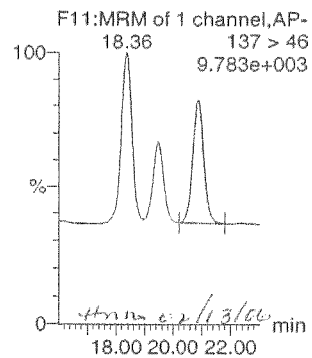
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
9.783e+003



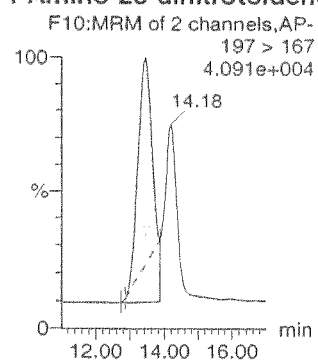
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.30
182 > 152
1.563e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.36
137 > 46
9.783e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
4.091e+004



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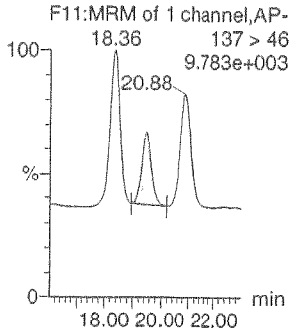
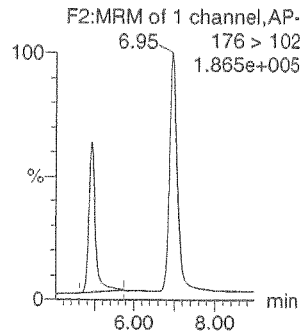
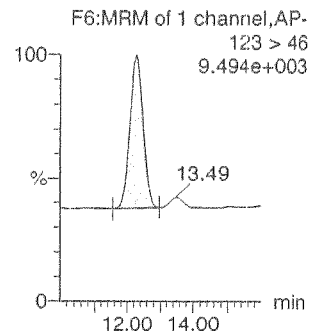
4-Nitrotoluene



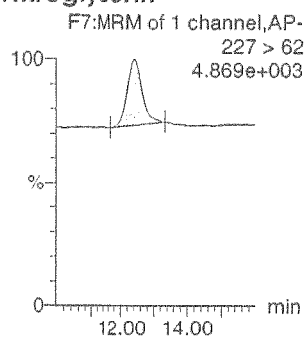
HMX



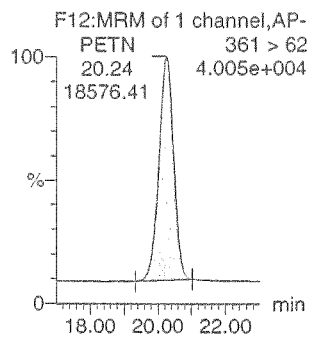
Nitrobenzene



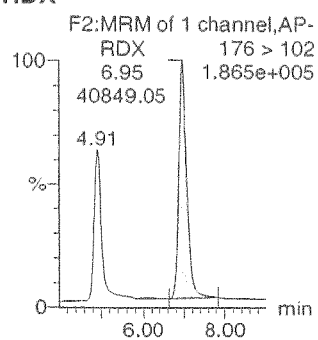
Nitroglycerin



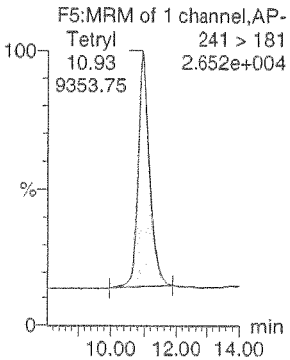
PETN



RDX



Tetryl



672

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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-06	HMX	176 > 102	4.91	23086.350	3068.868	23086.350	3761.379	bb			882.3440	88.2	-11.8	1902.5
WXX060209-06	RDX	176 > 102	6.95	40849.047	3068.868	40849.047	6655.393	bb			995.9573	99.6	-0.4	3004.1
WXX060209-06	135-Trinitrobenzene	213 > 183	9.29	26434.988	3068.868	26434.988	4306.961	bb			1058.3...	105.8	5.8	1156.8
WXX060209-06	13-Dinitrobenzene-d4	172 > 142	10.88	3068.868		3068.868	3068.868	bb			462.4262	92.5	-7.5	311.4
WXX060209-06	13-Dinitrobenzene	168 > 138	10.98	7977.566	3068.868	7977.566	1299.757	bb			995.6398	99.6	-0.4	171.7
WXX060209-06	Tetryl	241 > 181	10.93	9353.752	3068.868	9353.752	1523.974	bb			996.2969	99.6	-0.4	1076.7
WXX060209-06	Nitrobenzene	123 > 46	12.27	2775.466	3068.868	2775.466	452.197	bb			934.3146	93.4	-6.6	586.8
WXX060209-06	Nitroglycerin	227 > 62	12.41	660.657	3068.868	660.657	107.639	bb			822.1542	82.2	-17.8	141.3
WXX060209-06	4-Amino-26-dinitrotoluene	197 > 167	13.42	18598.801	25273.268	18598.801	367.954	MM	10-Feb-06	07:05:12	1018.7...	101.9	1.9	1127.7
WXX060209-06	2-Amino-46-dinitrotoluene	197 > 180	14.18	21236.225	25273.268	21236.225	420.132	bb			1124.2...	112.4	12.4	563.5
WXX060209-06	246-Trinitrotoluene	227 > 210	13.50	60936.340	25273.268	60936.340	1205.549	bb			1266.9...	126.7	26.7	1430.2
WXX060209-06	34-dinitrotoluene	182 > 152	12.33	21644.559	25273.268	21644.559	428.211	bb			525.7264	105.1	5.1	264.4
WXX060209-06	26-dinitrotoluene	182 > 152	15.30	55381.340	25273.268	55381.340	1095.651	bd			1017.7...	101.8	1.8	662.3
WXX060209-06	24-dinitrotoluene	182 > 152	15.87	14392.434	25273.268	14392.434	284.736	MM	10-Feb-06	06:56:39	1075.6...	107.6	7.6	178.7
WXX060209-06	26-dinitrotoluene-d3	185 > 155	15.15	25273.268		25273.268	25273.268	bb			417.4374	83.5	-16.5	1850.1
WXX060209-06	2-Nitrotoluene	137 > 46	18.36	2532.827	25273.268	2532.827	50.109	bb			1005.1...	100.5	0.5	709.0
WXX060209-06	4-Nitrotoluene	137 > 46	19.47	1194.898	25273.268	1194.898	23.640	bb			985.9510	98.6	-1.4	334.7
WXX060209-06	3-Nitrotoluene	137 > 46	20.88	1988.530	25273.268	1988.530	39.341	bb			1047.6...	104.8	4.8	516.7
WXX060209-06	PETN	361 > 62	20.24	18576.408	25273.268	18576.408	367.511	bb			1016.1...	101.6	1.6	10258.6

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7

Explosives Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXICV

GEL Data File EXP0209010a **Analysis Date:** 09-FEB-06 15:38

LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

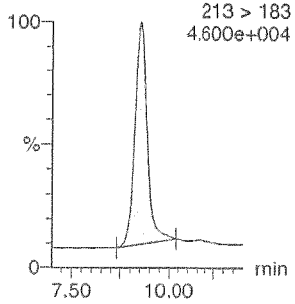
Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	533.489	89	
1,3-Dinitrobenzene-d4	500	542.011	108	
2,4,6-Trinitrotoluene	600	641.384	107	
2,4-Dinitrotoluene	600	540.619	90	
2,6-Dinitrotoluene	600	571.565	95	
2,6-Dinitrotoluene-d3	500	436.899	87	
2-Amino-4,6-dinitrotoluene	600	674.958	112	
3,4-Dinitrotoluene	300	391.659	131	*
4-Amino-2,6-dinitrotoluene	600	611.436	102	
HMX	600	580.669	97	
Nitrobenzene	600	593.04	99	
Nitroglycerin	600	552.791	92	
PETN	600	794.891	132	*
RDX	600	544.038	91	
Tetryl	600	658.101	110	
m-Dinitrobenzene	600	605.505	101	
m-Nitrotoluene	600	756.617	126	*
o-Nitrotoluene	600	666.004	111	
p-Nitrotoluene	600	709.372	118	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

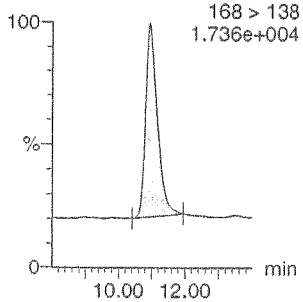
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209010a
Date: 09-Feb-2006
Time: 15:38:27
ID: WXX060209-07ICV
Vial: 1:1,B

MMP 2/13/06

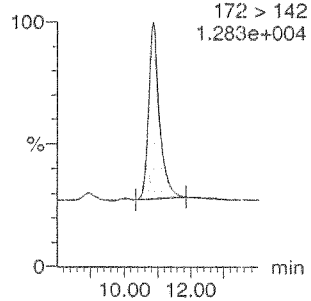
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
4.600e+004



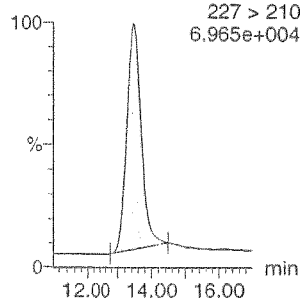
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.736e+004



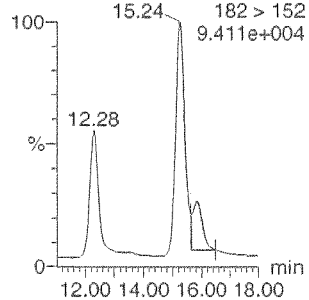
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.283e+004



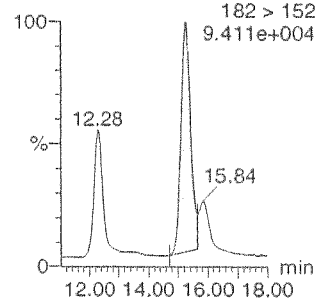
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
6.965e+004



24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.24
182 > 152
9.411e+004

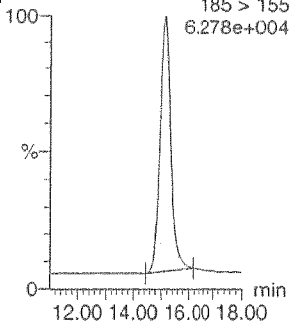


26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
9.411e+004

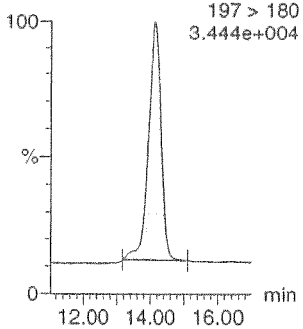


675

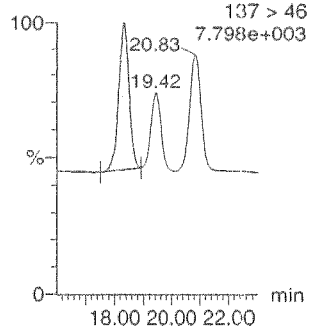
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.278e+004



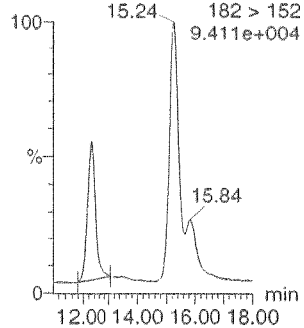
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.444e+004



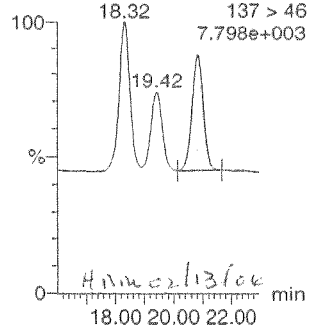
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
7.798e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.24
182 > 152
9.411e+004

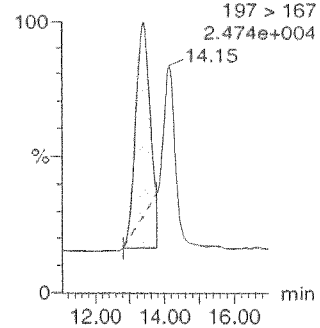


3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.32
137 > 46
7.798e+003



Hmm 2/13/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
2.474e+004



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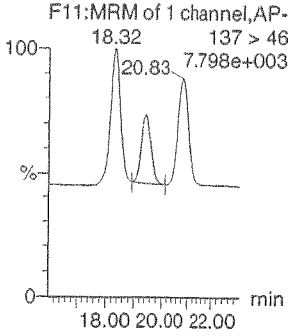
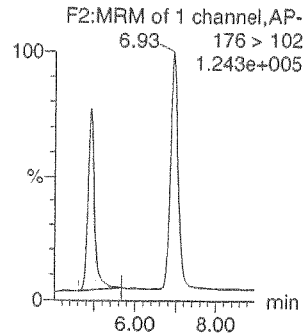
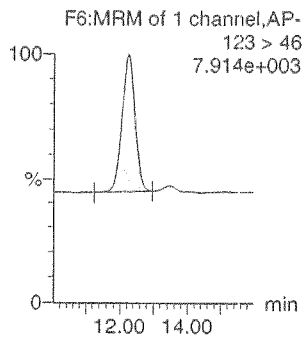
4-Nitrotoluene



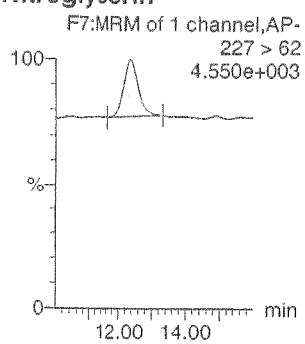
HMX



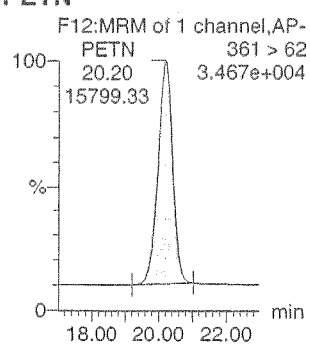
Nitrobenzene



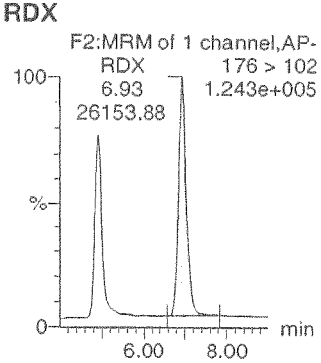
Nitroglycerin



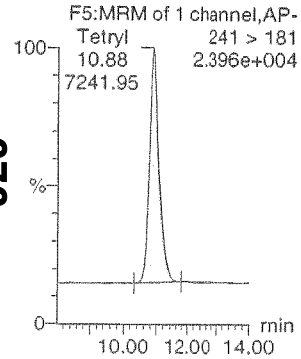
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-07ICV	HMX	176 > 102	4.90	17807.873	3597.031	17807.873	2475.357	bb			580.6691	96.8	-3.2	1111.4
WXX060209-07ICV	RDX	176 > 102	6.93	26153.875	3597.031	26153.875	3635.481	bb			544.0375	90.7	-9.3	1448.1
WXX060209-07ICV	135-Trinitrobenzene	213 > 183	9.25	15618.049	3597.031	15618.049	2170.964	bb			533.4888	88.9	-11.1	1241.6
WXX060209-07ICV	13-Dinitrobenzene-d4	172 > 142	10.85	3597.031		3597.031	3597.031	bb			542.0113	108.4	8.4	292.5
WXX060209-07ICV	13-Dinitrobenzene	168 > 138	10.95	5686.587	3597.031	5686.587	790.456	bb			605.5047	100.9	0.9	990.6
WXX060209-07ICV	Tetryl	241 > 181	10.88	7241.952	3597.031	7241.952	1006.657	bb			658.1011	109.7	9.7	2007.4
WXX060209-07ICV	Nitrobenzene	123 > 46	12.23	2064.869	3597.031	2064.869	287.024	bb			593.0397	98.8	-1.2	258.9
WXX060209-07ICV	Nitroglycerin	227 > 62	12.36	520.655	3597.031	520.655	72.373	bb			552.7914	92.1	-7.9	36.7
WXX060209-07ICV	4-Amino-26-dinitrotoluene	197 > 167	13.38	9968.091	26451.535	9968.091	188.422	MM	10-Feb-06	07:05:23	611.4363	101.9	1.9	254.5
WXX060209-07ICV	2-Amino-46-dinitrotoluene	197 > 180	14.15	13343.527	26451.535	13343.527	252.226	bb			674.9575	112.5	12.5	432.4
WXX060209-07ICV	246-Trinitrotoluene	227 > 210	13.46	32285.943	26451.535	32285.943	610.285	bb			641.3842	106.9	6.9	1471.3
WXX060209-07ICV	34-dinitrotoluene	182 > 152	12.28	16876.664	26451.535	16876.664	319.011	bb			391.6590	130.6	30.6	669.3
WXX060209-07ICV	26-dinitrotoluene	182 > 152	15.24	32552.820	26451.535	32552.820	615.330	bd			571.5646	95.3	-4.7	1235.1
WXX060209-07ICV	24-dinitrotoluene	182 > 152	15.84	7570.724	26451.535	7570.724	143.106	db			540.6185	90.1	-9.9	264.6
WXX060209-07ICV	26-dinitrotoluene-d3	185 > 155	15.12	26451.535		26451.535	26451.535	bb			436.8988	87.4	-12.6	724.6
WXX060209-07ICV	2-Nitrotoluene	137 > 46	18.32	1756.395	26451.535	1756.395	33.200	bb			666.0043	111.0	11.0	113.9
WXX060209-07ICV	4-Nitrotoluene	137 > 46	19.42	899.786	26451.535	899.786	17.008	bb			709.3723	118.2	18.2	57.7
WXX060209-07ICV	3-Nitrotoluene	137 > 46	20.83	1503.034	26451.535	1503.034	28.411	bb			756.6172	126.1	26.1	89.1
WXX060209-07ICV	PETN	361 > 62	20.20	15799.332	26451.535	15799.332	298.647	bb			794.8910	132.5	32.5	6331.1

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2/10/06

MM = Manual Modification

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GRAND MEAN AVERAGE

Date of Analysis	02/09/06
Time of Injection	1538
Standard Number	WXX060209-07ICV
Data File	EXP0209010a

HMX		96.8
RDX		90.7
135-TNB		88.9
13-DNB		100.9
Tetryl		109.7
Nitrobenzene		98.8
Nitroglycerin		92.1
4A-26-DNT		101.9
2A-46-DNT		112.5
246-TNT		106.9
34-DNT(surr)		130.6
26-DNT		95.3
24-DNT		90.1
2-NT		111.0
4-NT		118.2
3-NT		126.1
PETN		132.5
Total		1803.0
Average		106.1

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

Explosives Initial Calibration

Form 6

Lab Name: General Engineering Laboratories

GEL Job No: 154614

Lab Code: GEL

Run Date: 02-FEB-06,09-FEB-06

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8O

Calibration Type: Linear

Calibration Level:	19	20	21	22	23	24	25	Slope	Intercept	COD	Q
Data File:	EXS0209003.w	EXS0209004.w	EXS0209005.w	EXS0209006.w	EXS0209007.w	EXS0209008.w	EXS0209009.w				
Parmname											
TATB	236000	418000	1180000	2290000	3200000	4120000	9470000	4670	-111000	.9974	

Linear fit : Y=mx +b
where b is Intercept and m is slope

COD is Coefficient of Determination

Q column used to flag COD values outside of Limit (<0.990)
* Values outside of QC Limit

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Explosives Initial Calibration

Form 6

Lab Name: General Engineering Laboratories

GEL Job No: 154614

Lab Code: GEL

Run Date: 02-FEB-06,09-FEB-06

LCMSMS Instrument ID: LCMSMS3

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8O

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS0209003.wiff	EXS0209004.wiff	EXS0209005.wiff	EXS0209006.wiff	EXS0209007.wiff	EXS0209008.wiff	EXS0209009.wiff					
Parmname:												
2,4-Diamino-6-nitrotoluene	43200	101000	250000	519000	703000	995000	2120000	10300	913	.069	.9996	
2,6-Diamino-4-nitrotoluene	51600	123000	305000	655000	772000	1390000	2150000	-36200	1440	-.171	.9917	
3,4-Dinitrotoluene	820000	1640000	4310000	8170000	11800000	15900000	28500000	-38500	34500	-6	.9999	
3,5-Dinitroaniline	1570000	3090000	8400000	15700000	22000000	27700000	46300000	113000	32900	-4.92	.9998	
tris(o-cresyl) phosphate	2600000	4940000	12100000	22300000	30000000	35700000	51200000	678000	46900	-10.8	.9994	

Quadradic Fit: $y = Ax^2 + Bx + C$
where X^2 column above is coefficient A
X column above is coefficient B
intercept is C

COD is Coefficient of Determination

Q column used to flag COD outside of Limit (<0.990)
* Values outside of QC Limit

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Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Linear	Weighting	None	Iterate No
Intercept	-1.11e+005			
Slope	4.67e+003			
Correlation coefficient 0.9974				
Use Area				

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.10 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	1.13e+005			
a1	3.29e+004			
a2	-4.92			
Correlation coefficient 0.9998				
Use Area				

Peak Name: 34-Dinitrotoluene
No Internal Standard
Q1/Q3 Masses: 182.08/151.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.85e+004			
a1	3.45e+004			
a2	-6			
Correlation coefficient 0.9999				
Use Area				

Peak Name: 26-Diamino-4-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-3.62e+004			
a1	1.44e+003			
a2	-0.171			
Correlation coefficient 0.9917				
Use Area				

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Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	1.03e+004			
a1	913			
a2	0.0693			

Correlation coefficient 0.9996
Use Area

Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	6.78e+005			
a1	4.69e+004			
a2	-10.8			

Correlation coefficient 0.9994
Use Area

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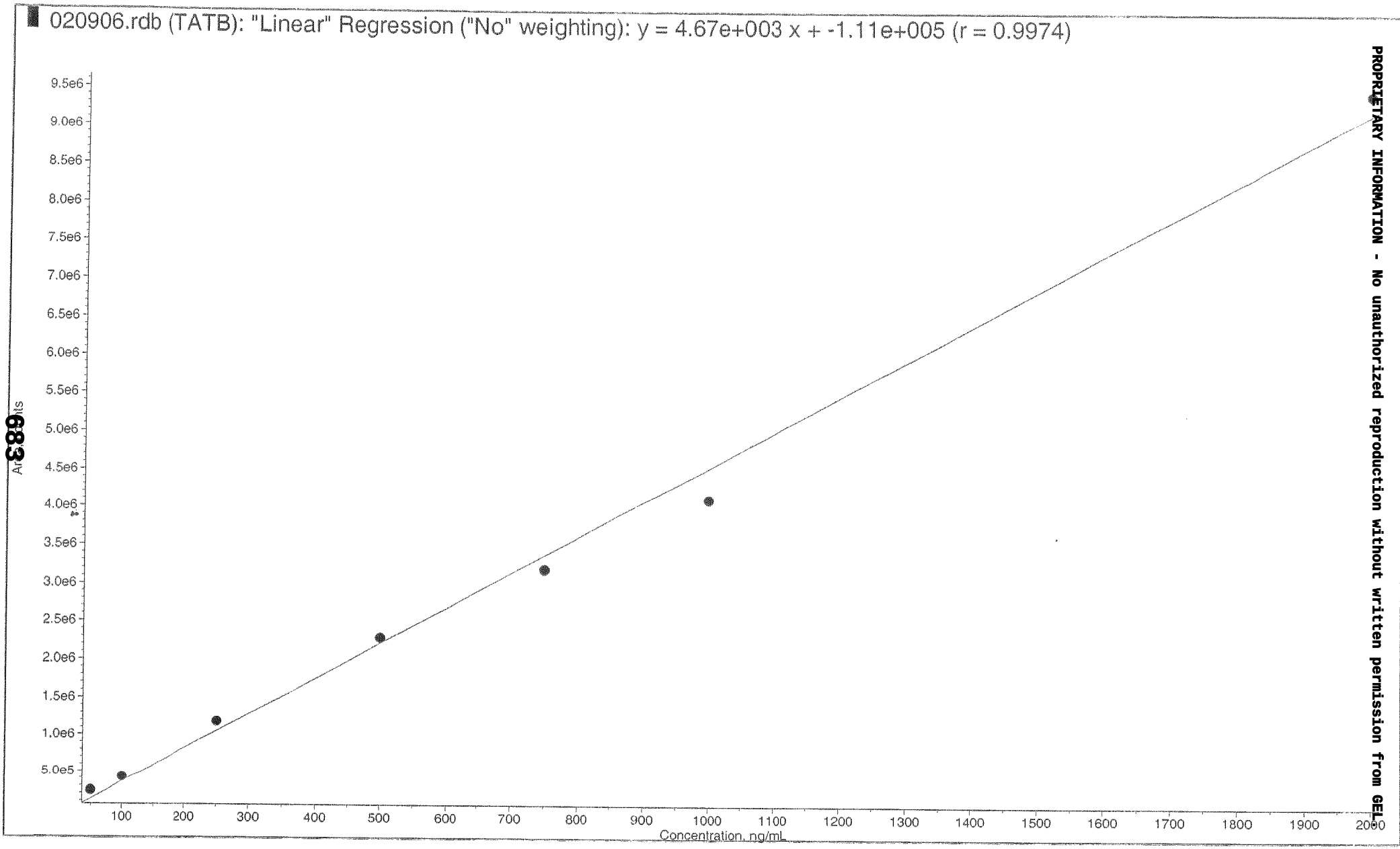

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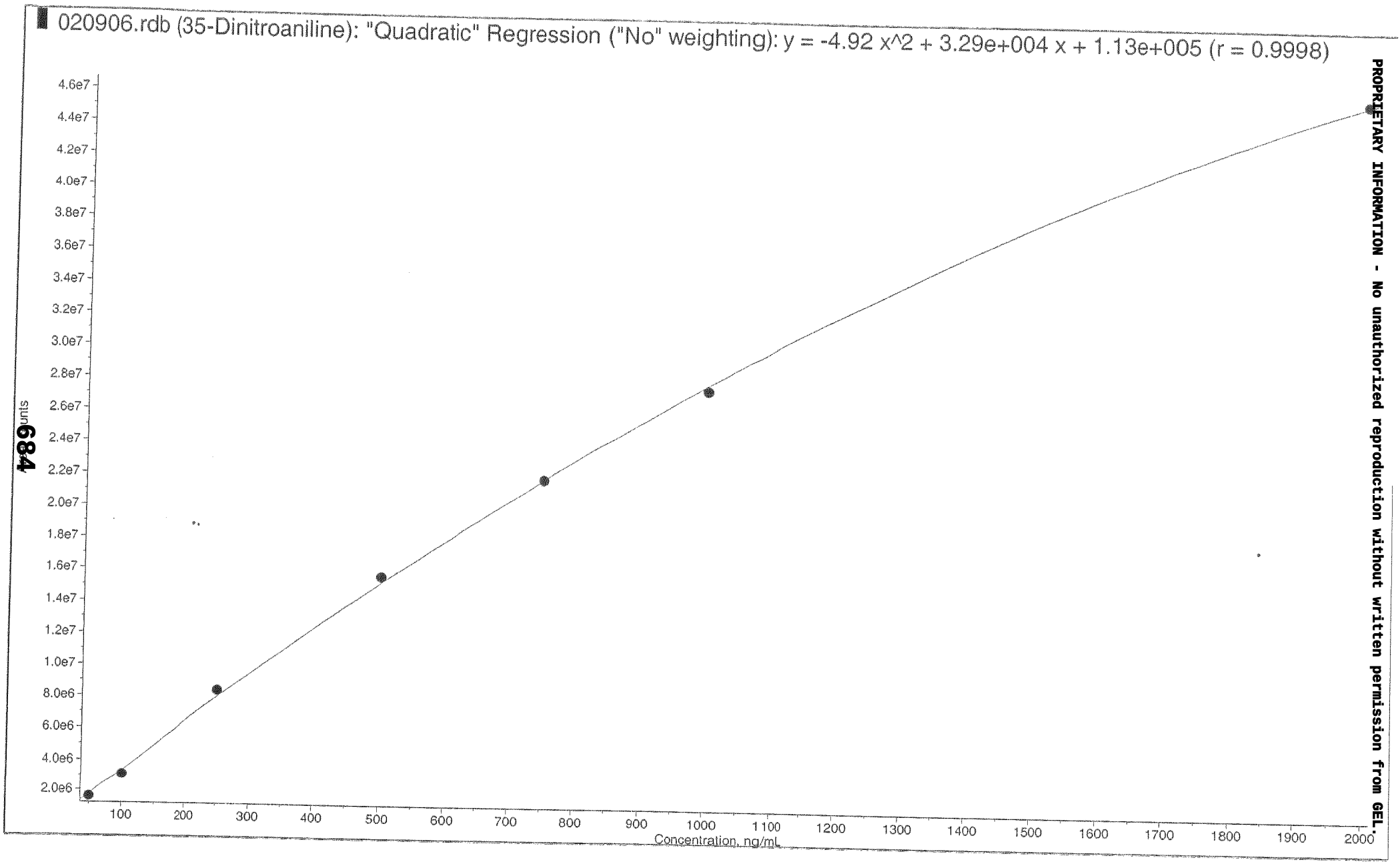

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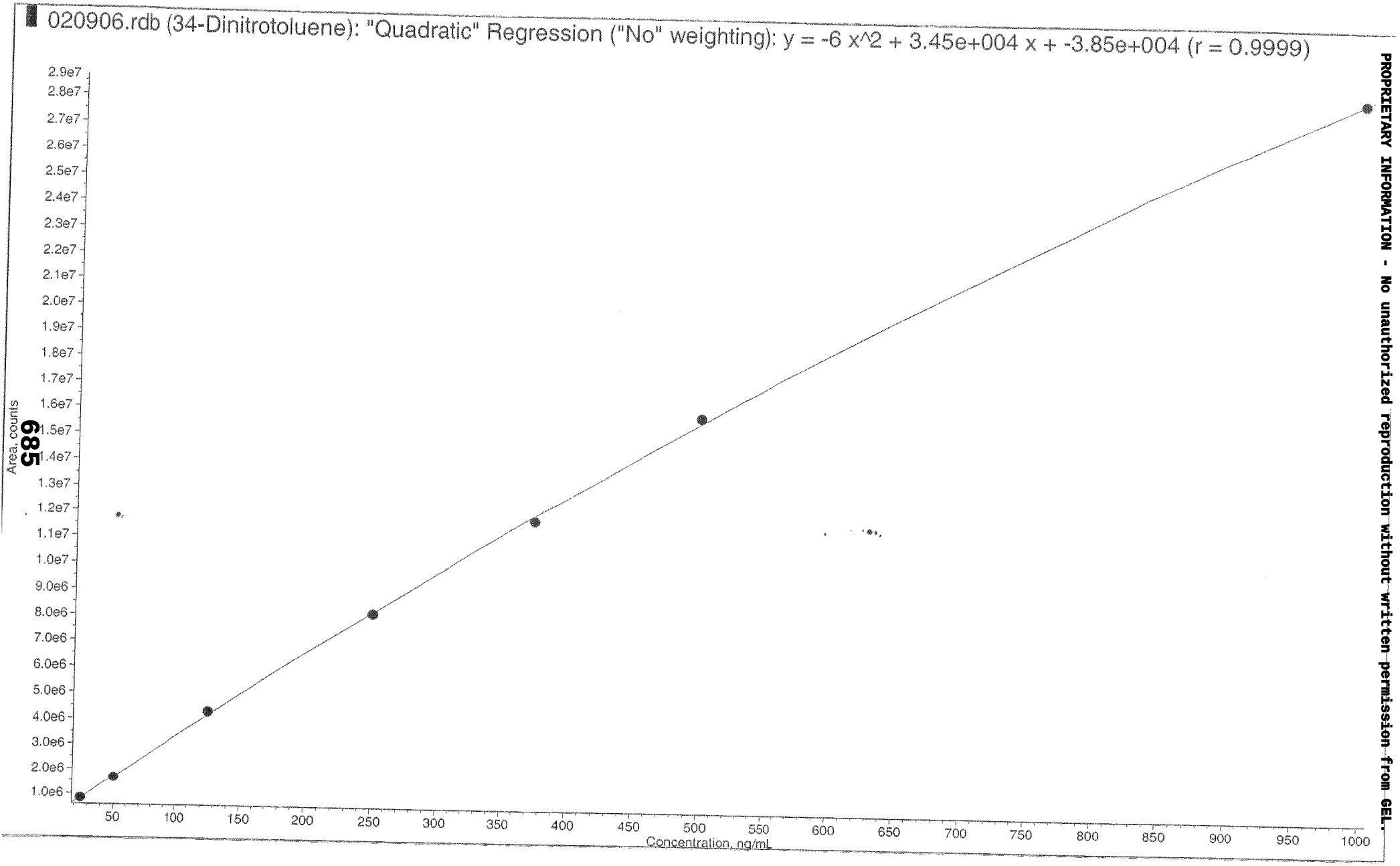

685

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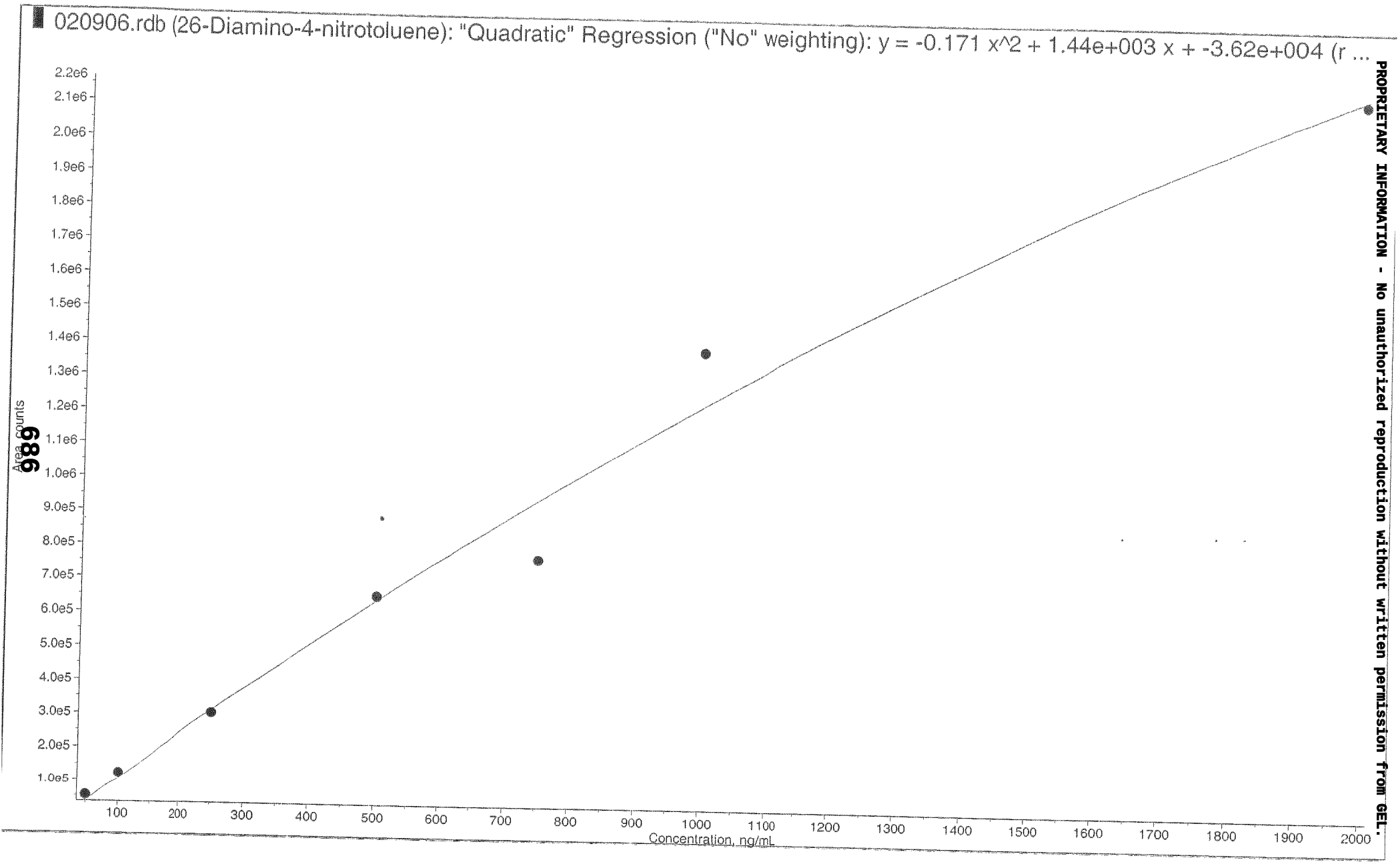

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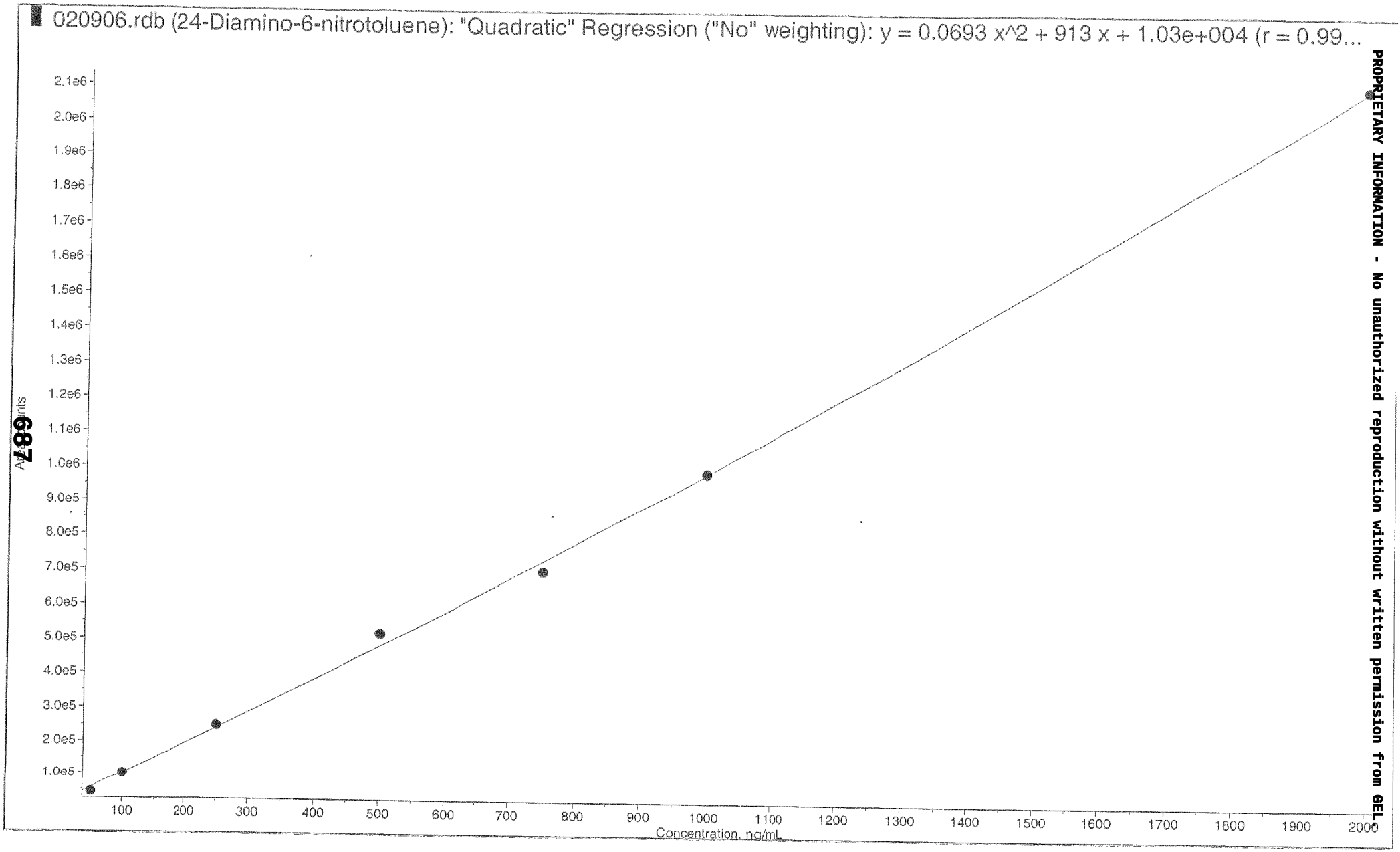

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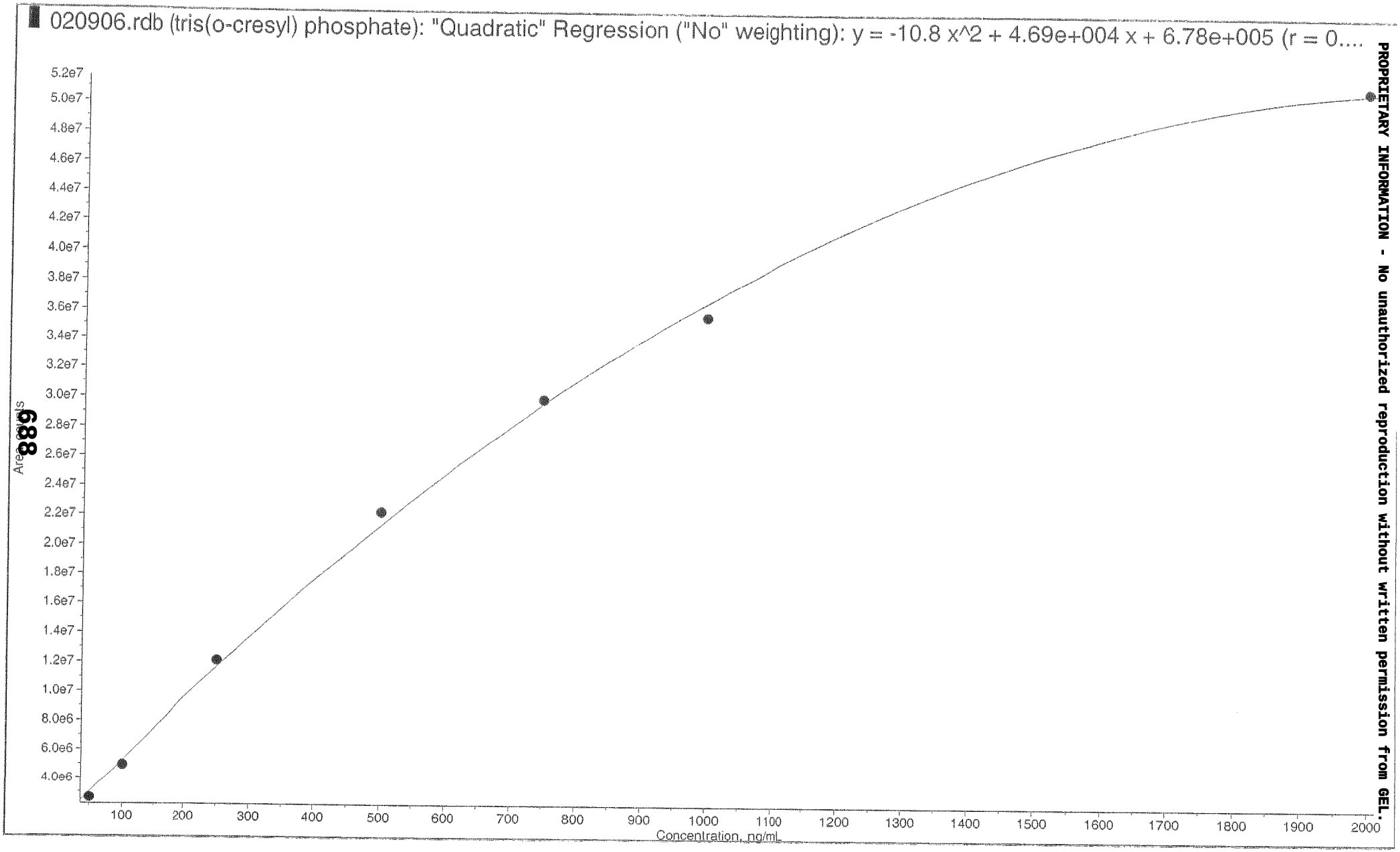

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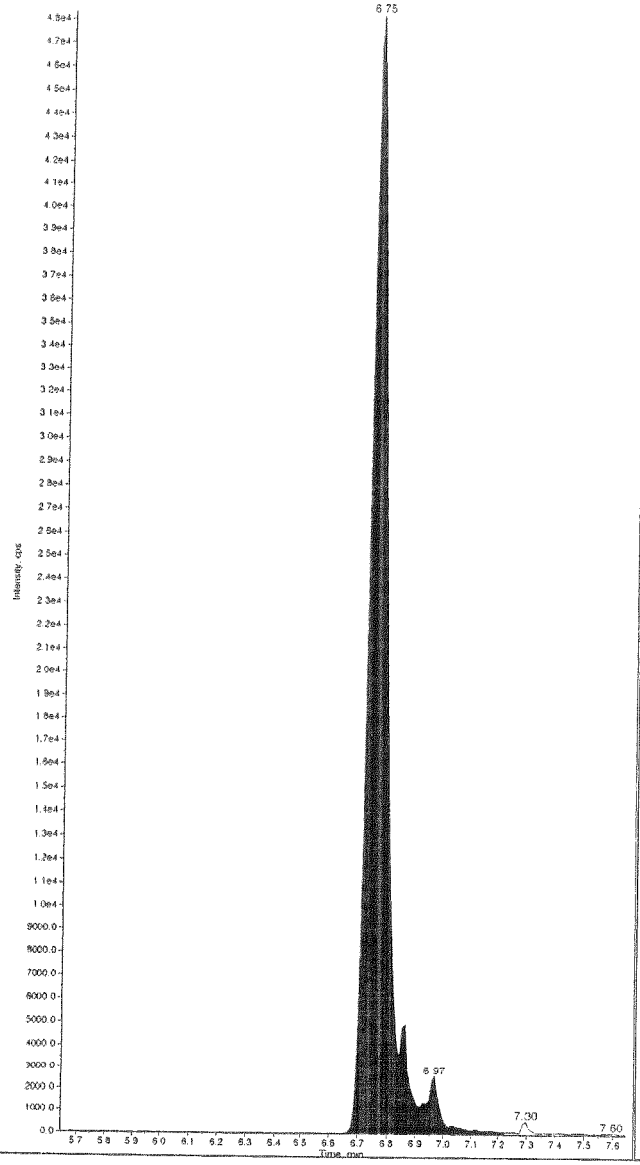
YRS 2/11/06

Sample Name: "WXX060209-19" Sample ID: "|1|LXS1" File: "EXS0209003.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_|" Annotation: ""

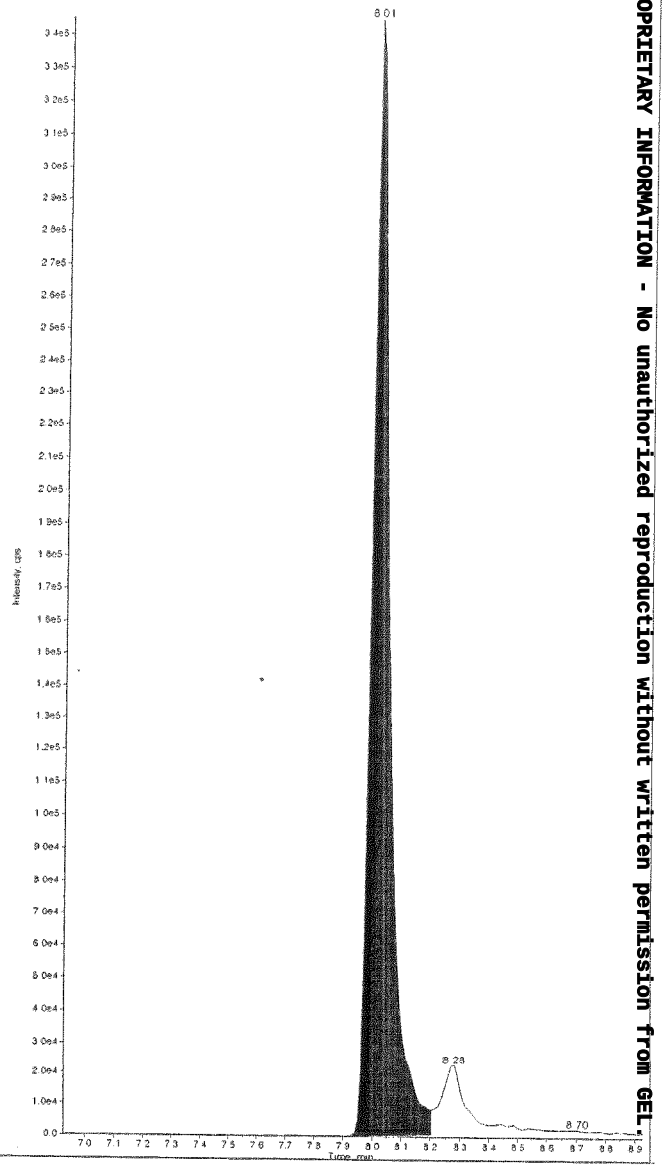
Sample Index:	1	
Sample Type:	Standard	
Concentration:	50.0	ng/mL
Calculated Conc:	74.3	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:27:07 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.75	min
Area:	2.36e+005	counts
Height:	4.83e+004	cps
Start Time:	6.63	min
End Time:	7.22	min



689

Sample Name: "WXX060209-19" Sample ID: "|1|LXS1" File: "EXS0209003.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_|" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	50.0	ng/mL
Calculated Conc:	44.7	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:27:07 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.01	min
Area:	1.57e+006	counts
Height:	3.45e+005	cps
Start Time:	7.92	min
End Time:	8.21	min



AD 2/13/06

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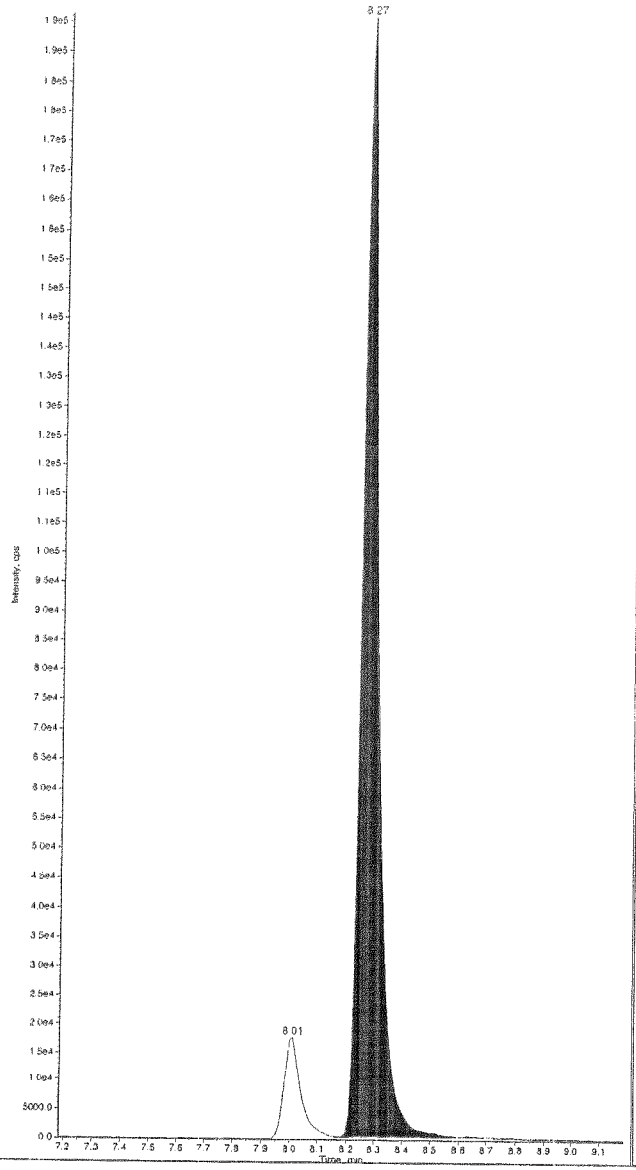
LRS 2/10/06

Sample Name: "WXX060209-19" Sample ID: "|1|LXS1" File: "EXS0209003.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

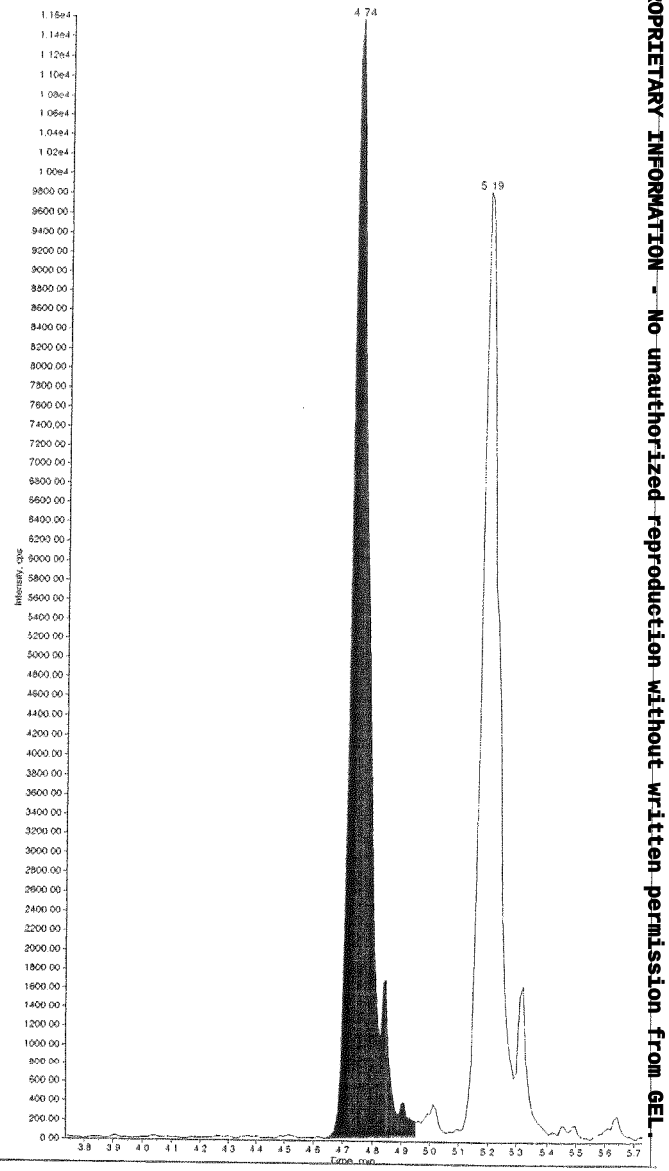
Sample Index:	1	
Sample Type:	Standard	
Concentration:	25.0	ng/mL
Calculated Conc:	25.0	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:27:07 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.27	min
Area:	8.20e+005	counts
Height:	1.91e+005	cps
Start Time:	8.17	min
End Time:	8.61	min



999

Sample Name: "WXX060209-19" Sample ID: "|1|LXS1" File: "EXS0209003.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	50.0	ng/mL
Calculated Conc:	61.3	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:27:07 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.74	min
Area:	5.16e+004	counts
Height:	1.16e+004	cps
Start Time:	4.64	min
End Time:	4.95	min



Hmc 02/13/06.

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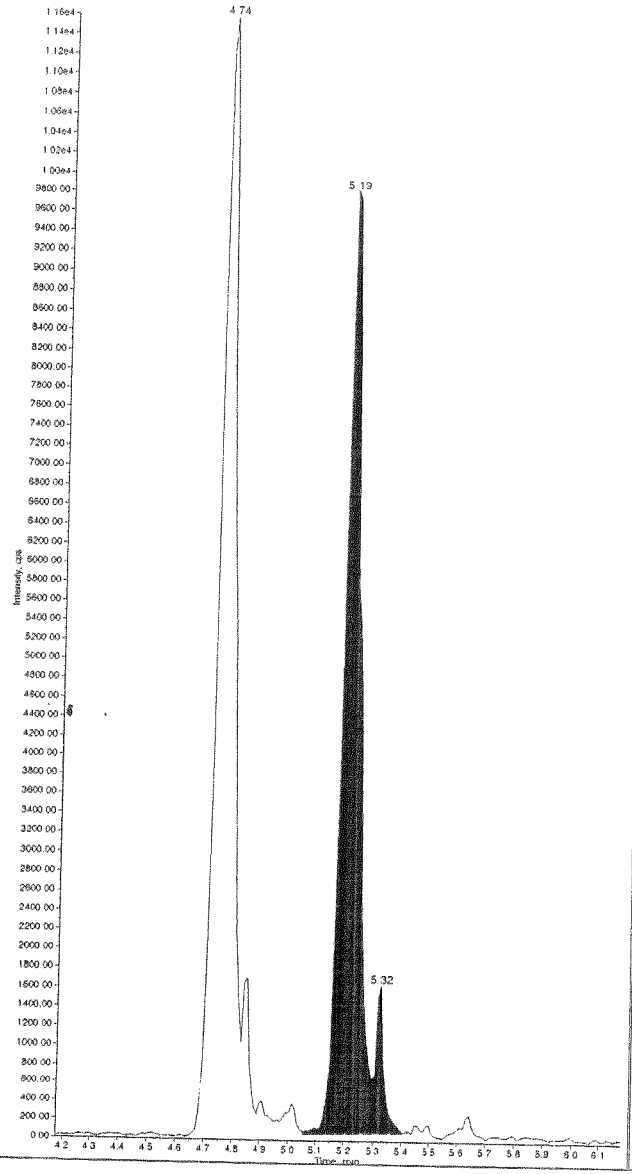
LXS 2/10/06

Sample Name: "WXX060209-19" Sample ID: "|1|LXS1" File: "EXS0209003.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

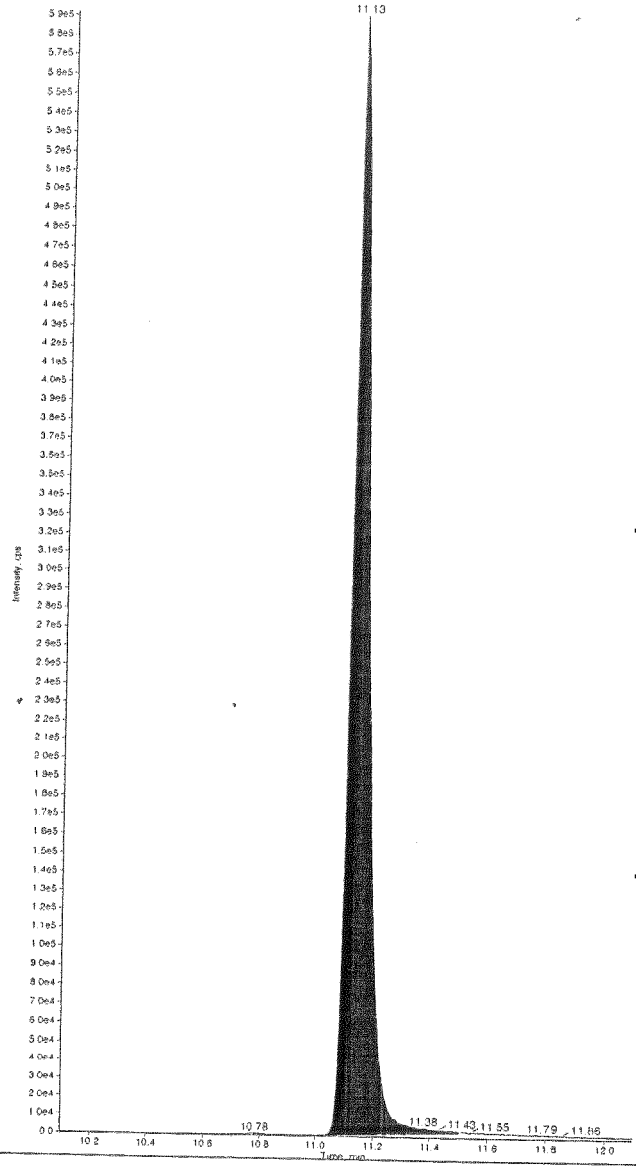
Sample Index:	1	
Sample Type:	Standard	
Concentration:	50.0	ng/mL
Calculated Conc:	36.0	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:27:07 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.19	min
Area:	4.32e+004	counts
Height:	9.78e+003	cps
Start Time:	5.05	min
End Time:	5.41	min



691

Sample Name: "WXX060209-19" Sample ID: "|1|LXS1" File: "EXS0209003.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	50.0	ng/mL
Calculated Conc:	41.4	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:27:07 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	2.60e+006	counts
Height:	5.91e+005	cps
Start Time:	11.0	min
End Time:	11.5	min



Hmm 2/13/06

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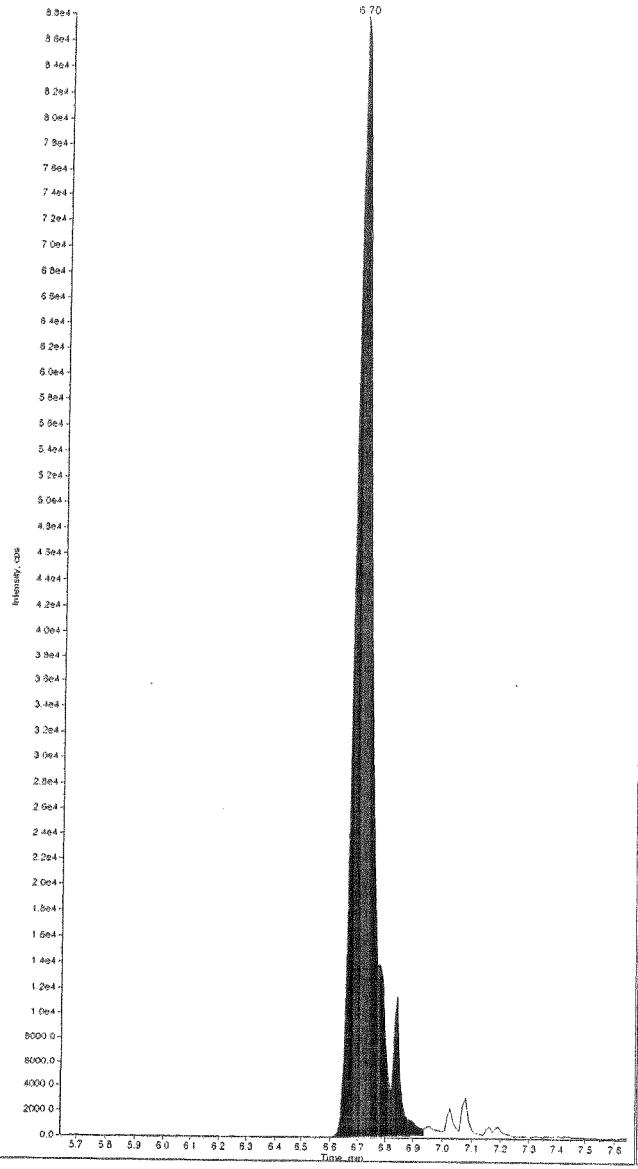
LRS 2/10/06

Sample Name: "WXX060209-20" Sample ID: "|1|LXS1" File: "EXS0209004.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_|" Annotation: ""

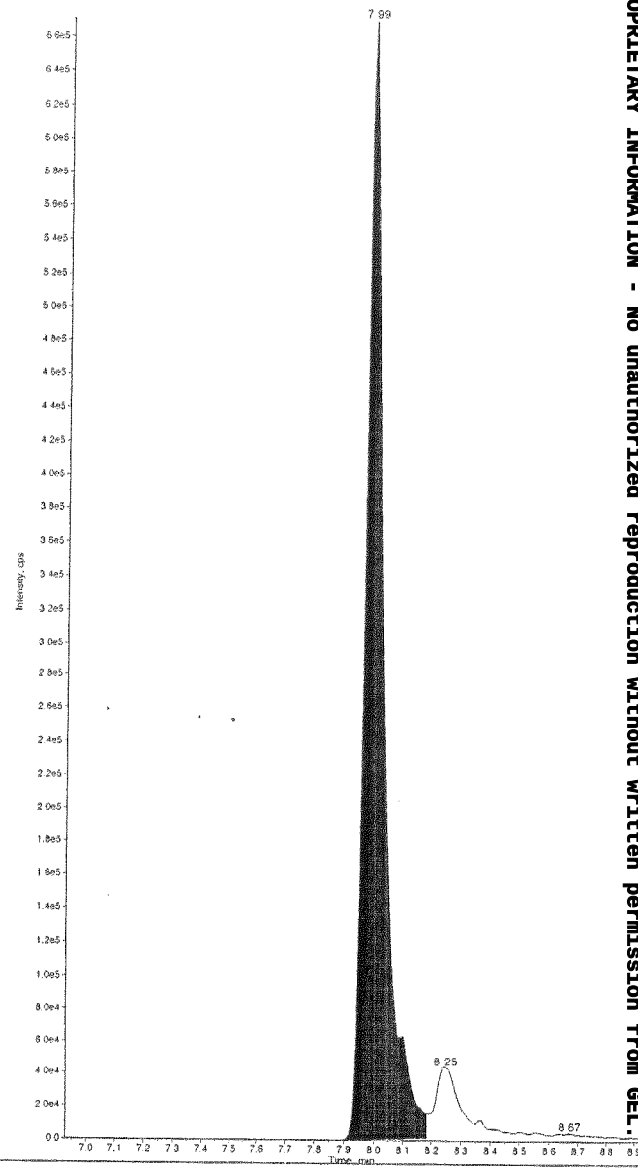
Sample Index:	1	
Sample Type:	Standard	
Concentration:	100.	ng/mL
Calculated Conc:	113.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:49:26 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.70	min
Area:	4.18e+005	counts
Height:	8.80e+004	cps
Start Time:	6.59	min
End Time:	6.93	min



692

Sample Name: "WXX060209-20" Sample ID: "|1|LXS1" File: "EXS0209004.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_|" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	100.	ng/mL
Calculated Conc:	91.9	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:49:26 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.99	min
Area:	3.09e+006	counts
Height:	6.70e+005	cps
Start Time:	7.89	min
End Time:	8.19	min



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XRS 2/10/06

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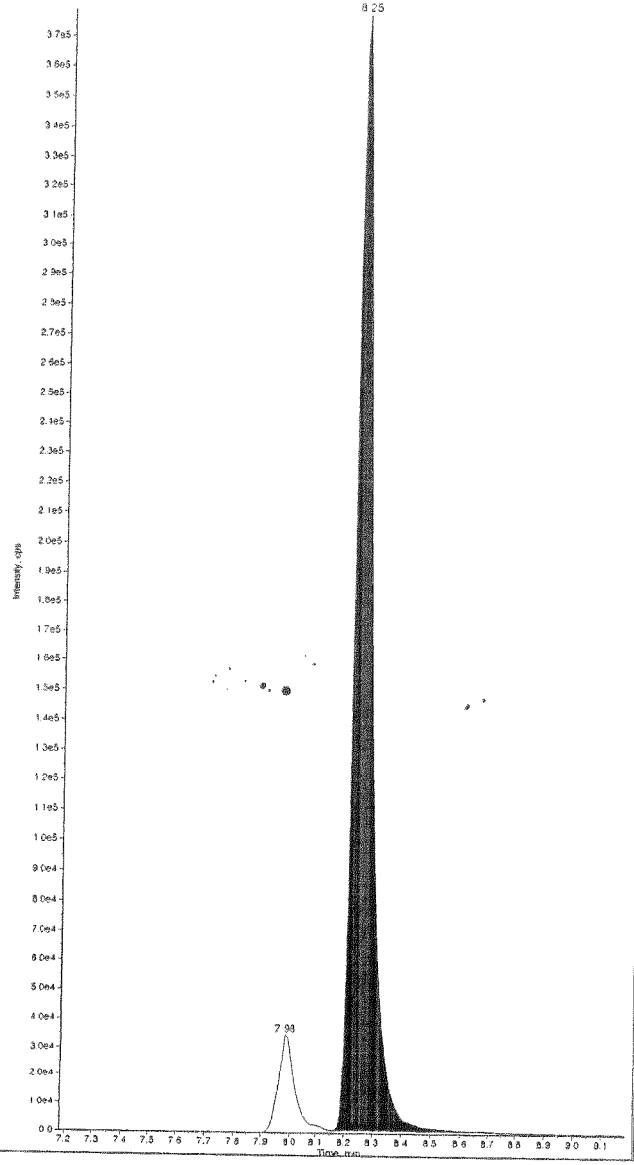
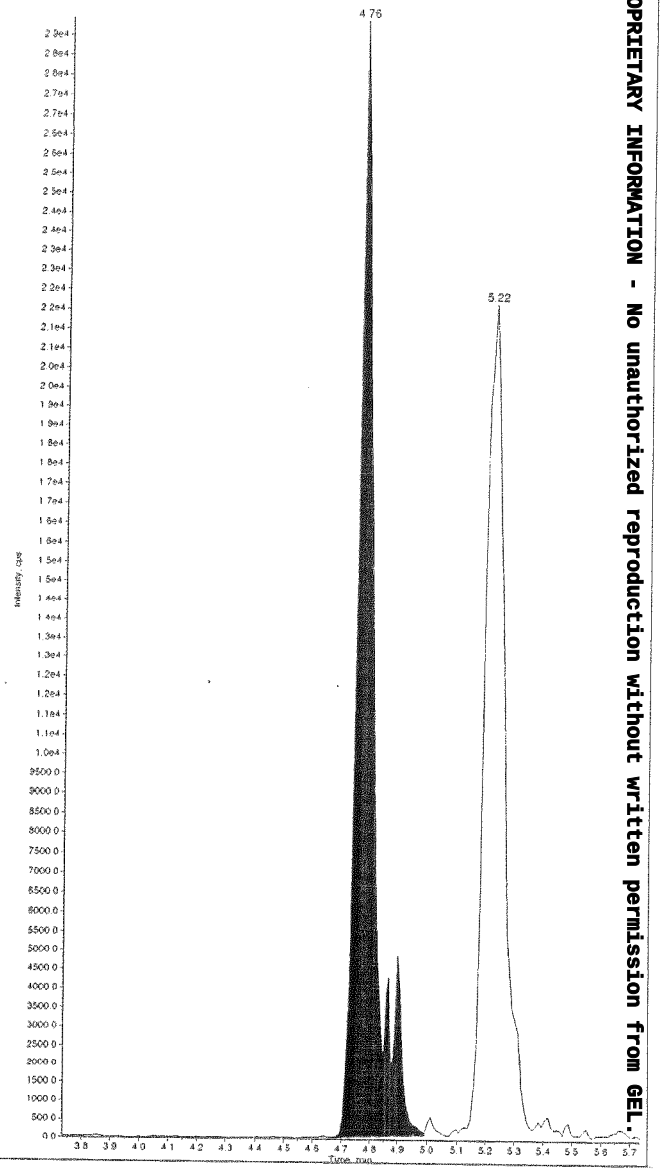
Sample Name: "WXX060209-20" Sample ID: "|1|LXS1" File: "EXS0209004.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	50.0	ng/mL
Calculated Conc:	49.2	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:49:26 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.25	min
Area:	1.64e+006	counts
Height:	3.78e+005	cps
Start Time:	8.16	min
End Time:	8.62	min



Sample Name: "WXX060209-20" Sample ID: "|1|LXS1" File: "EXS0209004.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	100.	ng/mL
Calculated Conc:	112.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:49:26 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.76	min
Area:	1.23e+005	counts
Height:	2.89e+004	cps
Start Time:	4.67	min
End Time:	4.99	min



ABW 02/13/06

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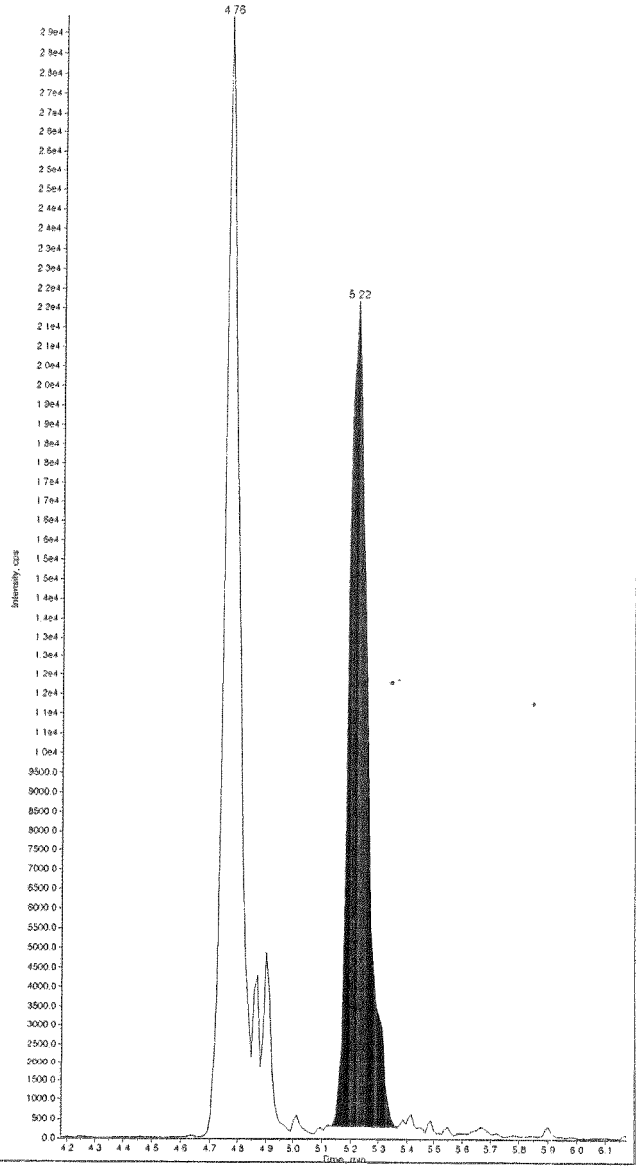
Sample Name: "WXX060209-20" Sample ID: "|1|LXS1" File: "EXS0209004.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

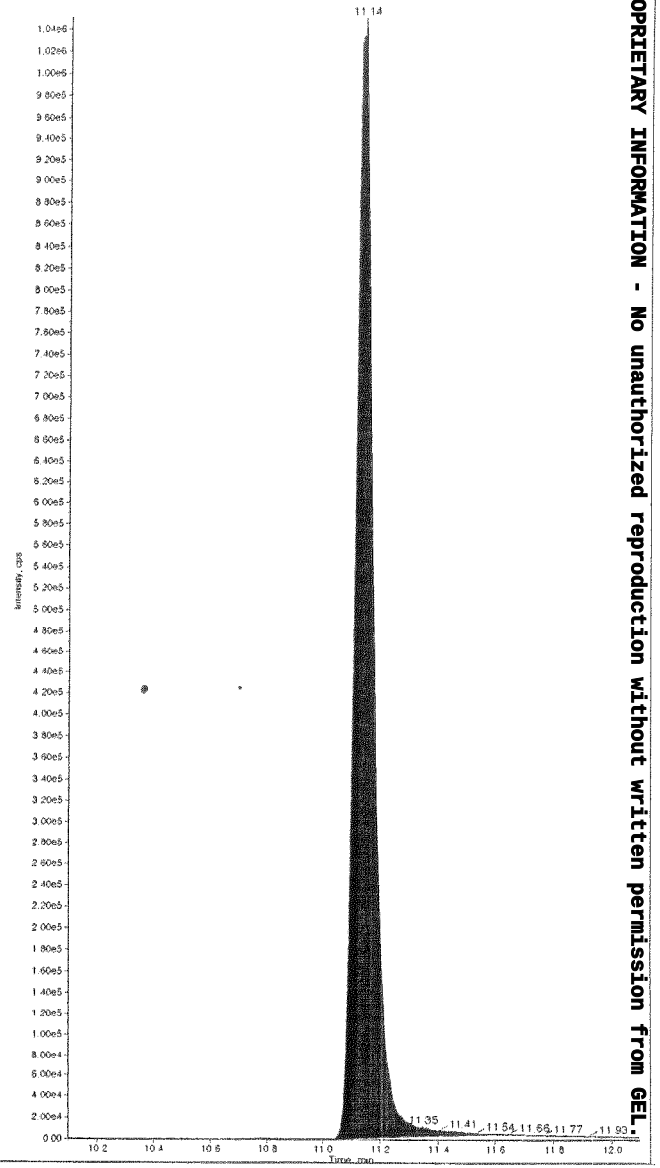
Sample Index:	1	
Sample Type:	Standard	
Concentration:	100.	ng/mL
Calculated Conc:	98.7	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:49:26 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.22	min
Area:	1.01e+005	counts
Height:	2.14e+004	cps
Start Time:	5.14	min
End Time:	5.36	min



694

Sample Name: "WXX060209-20" Sample ID: "|1|LXS1" File: "EXS0209004.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	100.	ng/mL
Calculated Conc:	92.9	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	02:49:26 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	4.94e+006	counts
Height:	1.05e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



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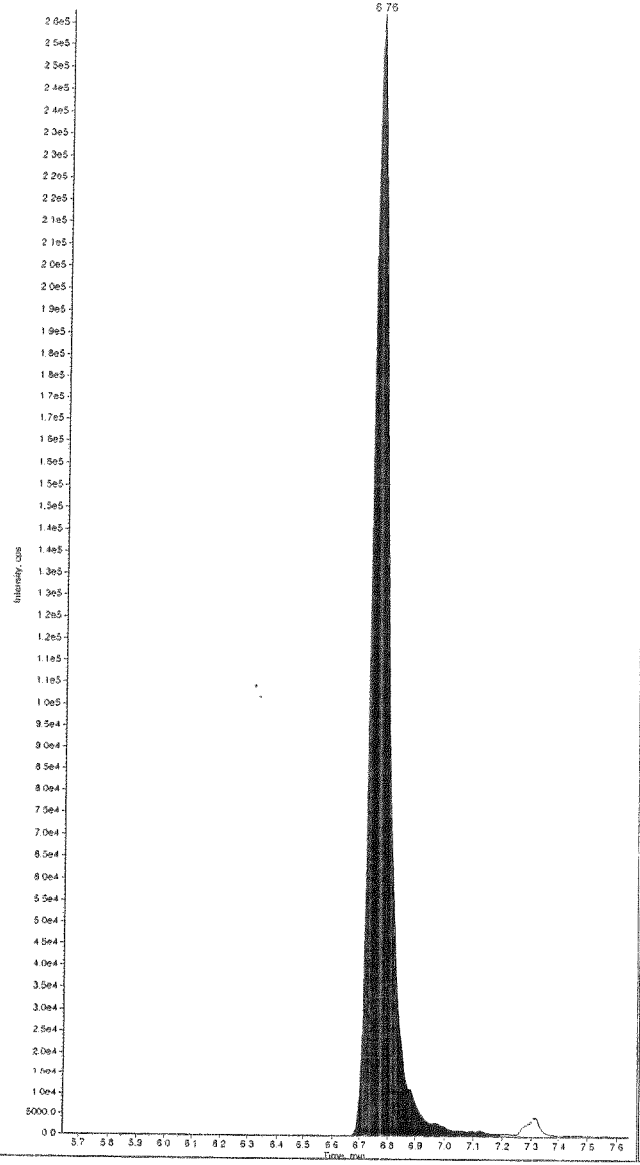
Sample Name: "WXX060209-21" Sample ID: "|1|LXS1" File: "EXS0209005.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

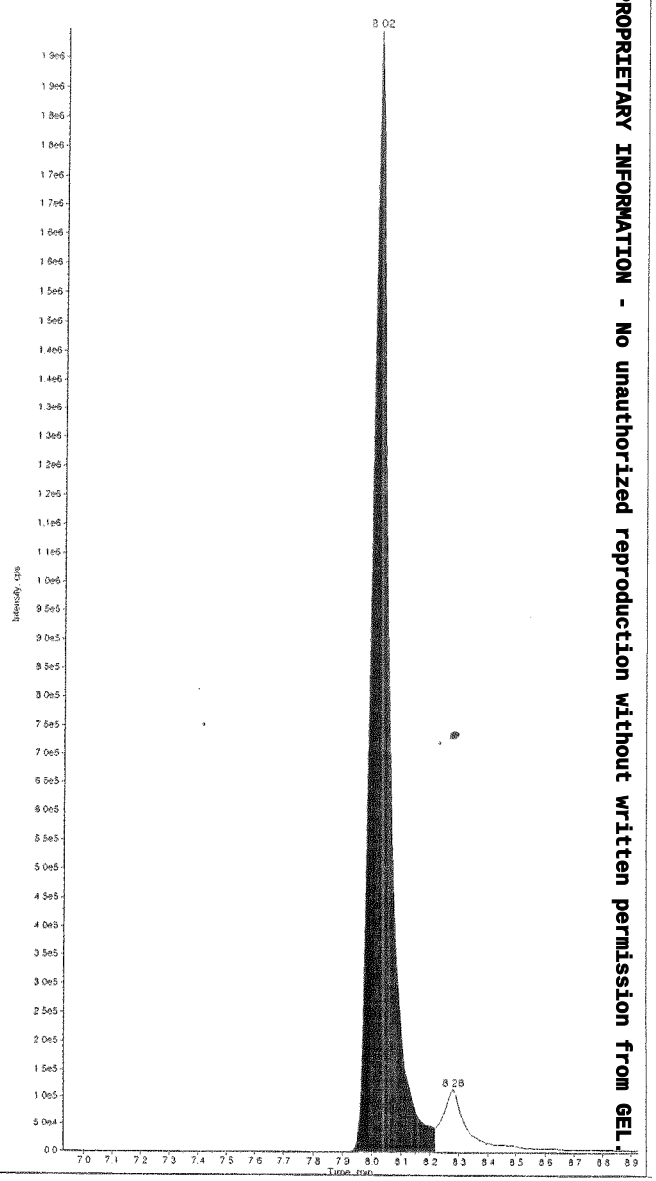
Sample Index:	1	
Sample Type:	Standard	
Concentration:	250.	ng/mL
Calculated Conc:	277.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:11:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.76	min
Area:	1.18e+006	counts
Height:	2.58e+005	cps
Start Time:	6.63	min
End Time:	7.19	min



695

Sample Name: "WXX060209-21" Sample ID: "|1|LXS1" File: "EXS0209005.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	250.	ng/mL
Calculated Conc:	262.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:11:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.02	min
Area:	8.40e+006	counts
Height:	1.95e+006	cps
Start Time:	7.92	min
End Time:	8.22	min



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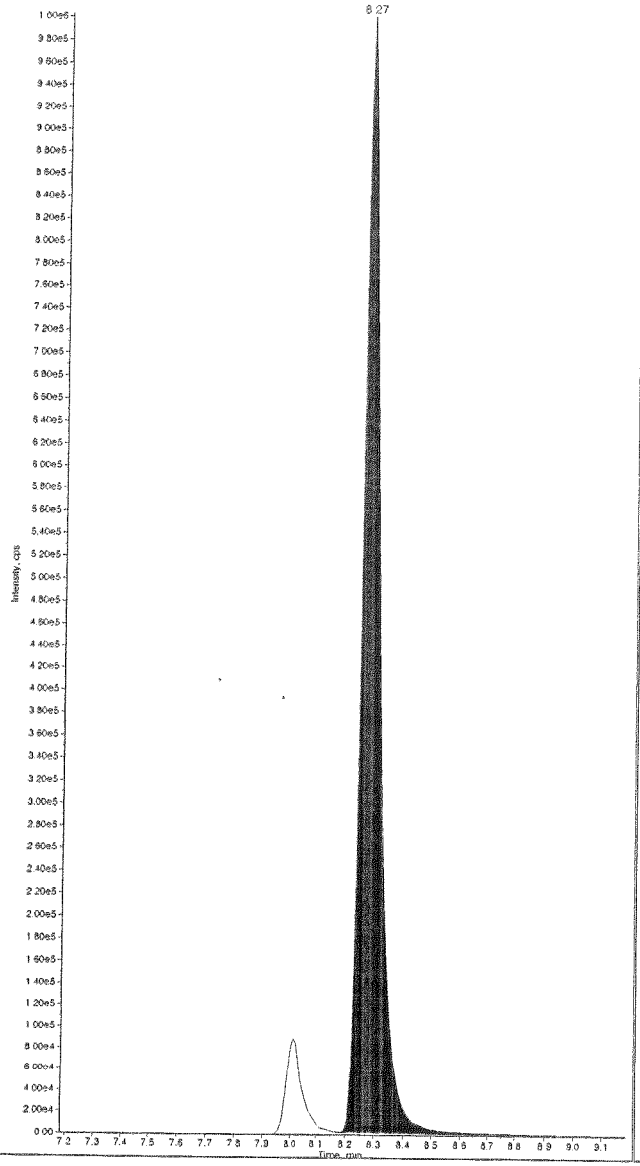
LRS 3/10/06

Sample Name: "WXX060209-21" Sample ID: "|1|LXS1" File: "EXS0209005.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

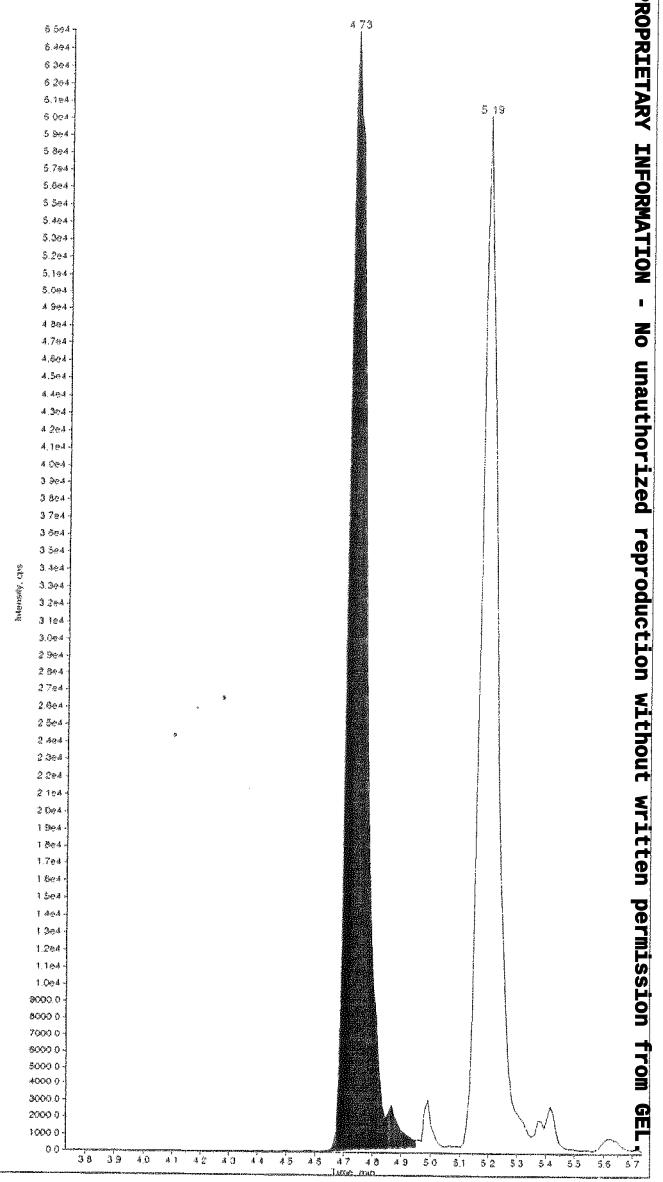
Sample Index:	1	
Sample Type:	Standard	
Concentration:	125.	ng/mL
Calculated Conc:	129.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:11:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.27	min
Area:	4.31e+006	counts
Height:	1.00e+006	cps
Start Time:	8.19	min
End Time:	8.86	min



999

Sample Name: "WXX060209-21" Sample ID: "|1|LXS1" File: "EXS0209005.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	250.	ng/mL
Calculated Conc:	243.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:11:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.73	min
Area:	3.05e+005	counts
Height:	6.49e+004	cps
Start Time:	4.62	min
End Time:	4.95	min



Reviewed 3/13/06

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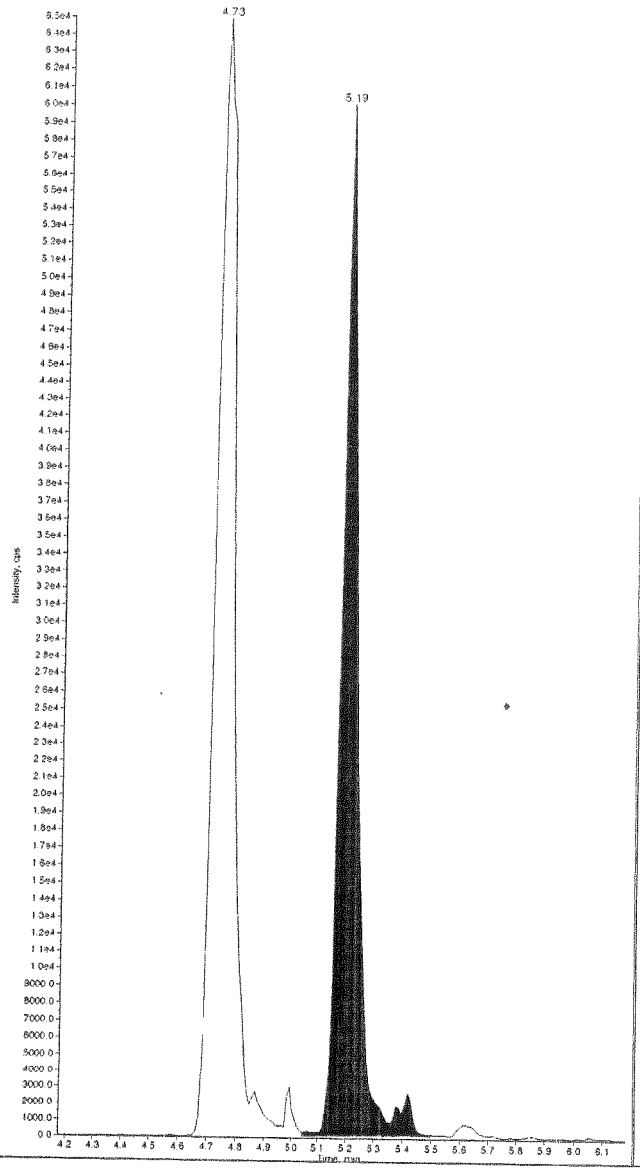
Sample Name: "WXX060209-21" Sample ID: "|1|LXS1" File: "EXS0209005.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

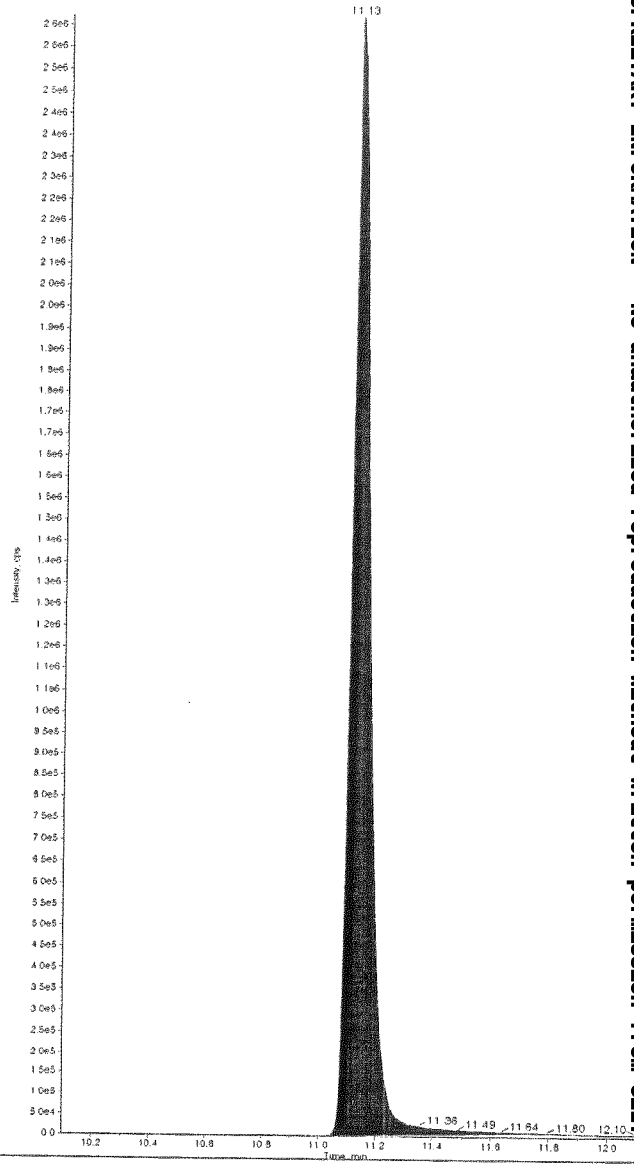
Sample Index:	1	
Sample Type:	Standard	
Concentration:	250.	ng/mL
Calculated Conc:	258.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:11:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.19	min
Area:	2.50e+005	counts
Height:	6.01e+004	cps
Start Time:	5.04	min
End Time:	5.52	min



697

Sample Name: "WXX060209-21" Sample ID: "|1|LXS1" File: "EXS0209005.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	250.	ng/mL
Calculated Conc:	260.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:11:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	1.21e+007	counts
Height:	2.62e+006	cps
Start Time:	11.0	min
End Time:	11.7	min



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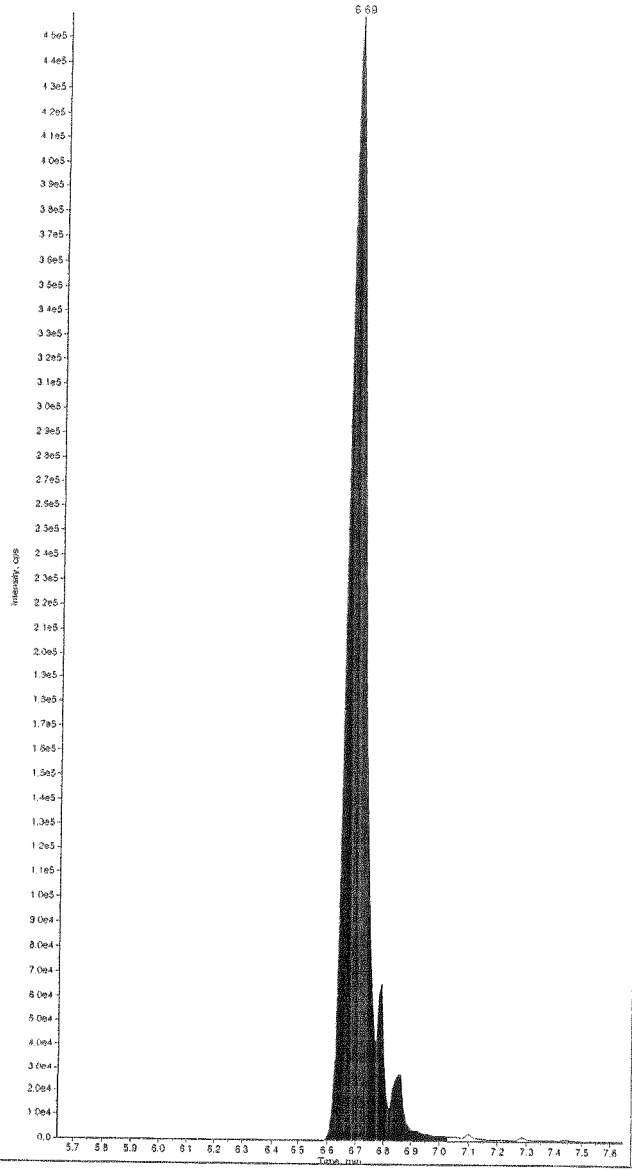
Sample Name: "WXX060209-22" Sample ID: "|1|LXS1" File: "EXS0209006.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

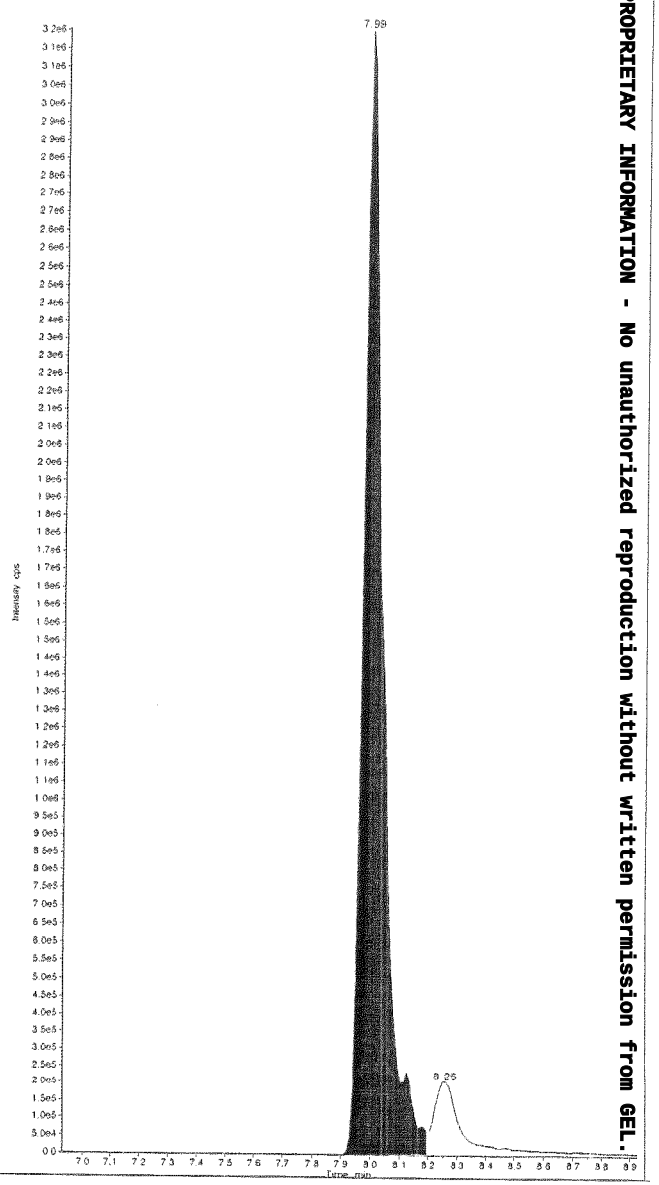
Sample Index:	1	
Sample Type:	Standard	
Concentration:	500.	ng/mL
Calculated Conc:	515.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:34:13 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.69	min
Area:	2.29e+006	counts
Height:	4.59e+005	cps
Start Time:	6.56	min
End Time:	7.03	min



698

Sample Name: "WXX060209-22" Sample ID: "|1|LXS1" File: "EXS0209006.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	500.	ng/mL
Calculated Conc:	513.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:34:13 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.99	min
Area:	1.57e+007	counts
Height:	3.15e+006	cps
Start Time:	7.90	min
End Time:	8.20	min



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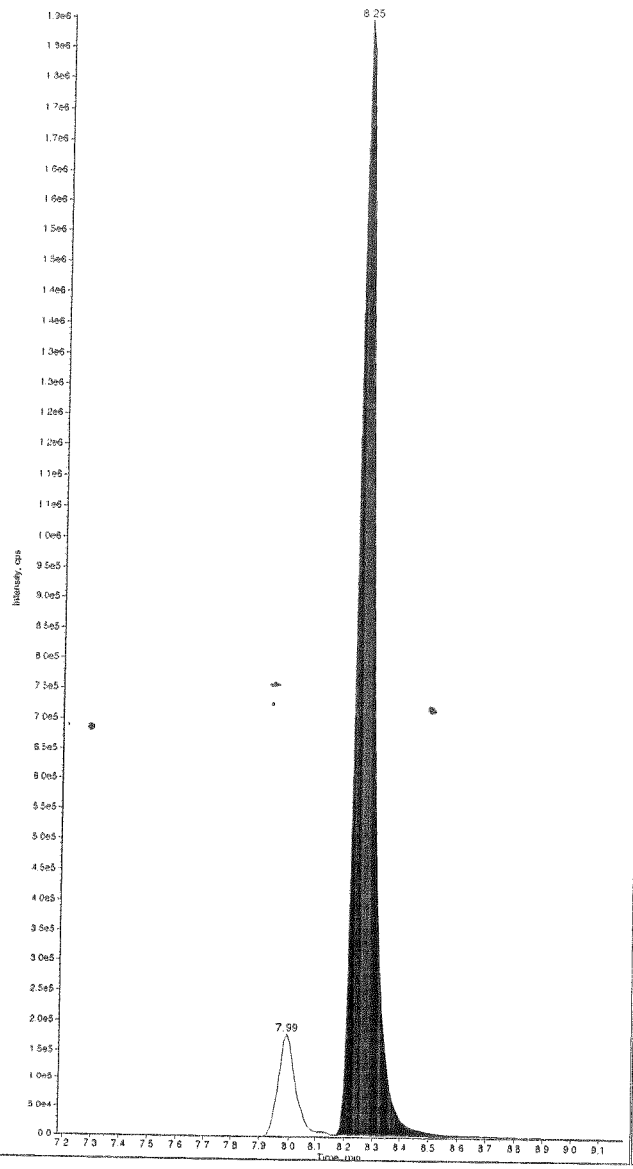
Sample Name: "WXX060209-22" Sample ID: "|1|LXS1" File: "EXS0209006.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

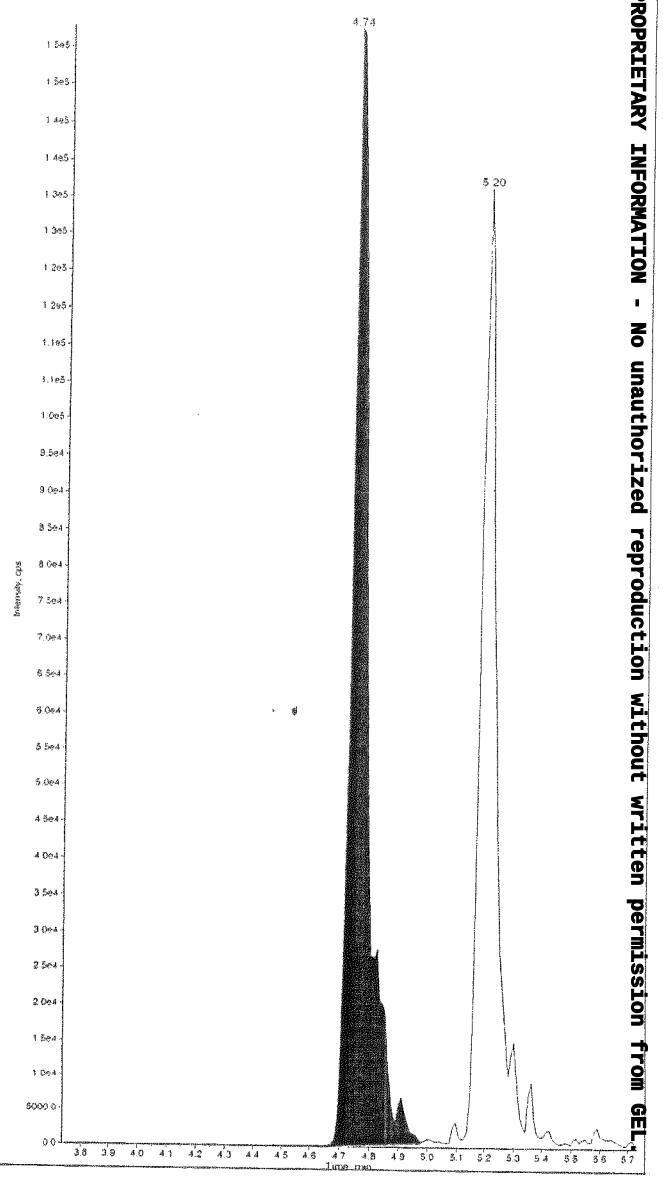
Sample Index:	1	
Sample Type:	Standard	
Concentration:	250.	ng/mL
Calculated Conc:	248.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:34:13 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.25	min
Area:	8.17e+006	counts
Height:	1.85e+006	cps
Start Time:	8.16	min
End Time:	8.74	min



669

Sample Name: "WXX060209-22" Sample ID: "|1|LXS1" File: "EXS0209006.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	500.	ng/mL
Calculated Conc:	510.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:34:13 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.74	min
Area:	6.55e+005	counts
Height:	1.53e+005	cps
Start Time:	4.65	min
End Time:	4.98	min



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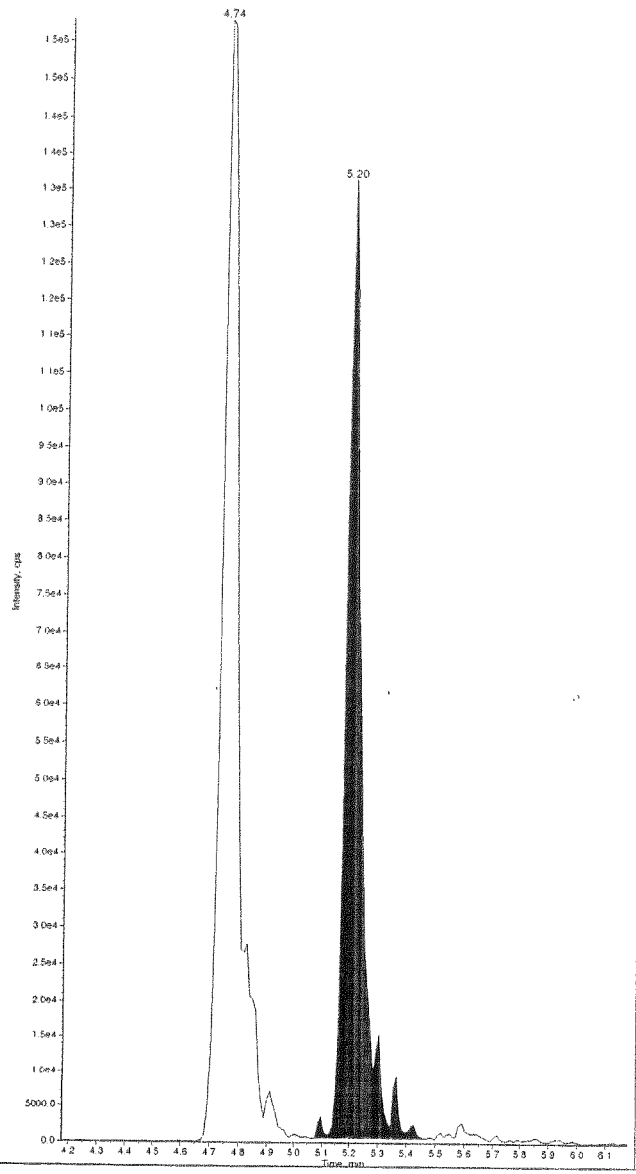
Sample Name: "WXX060209-22" Sample ID: "|1|LXS1" File: "EXS0209006.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

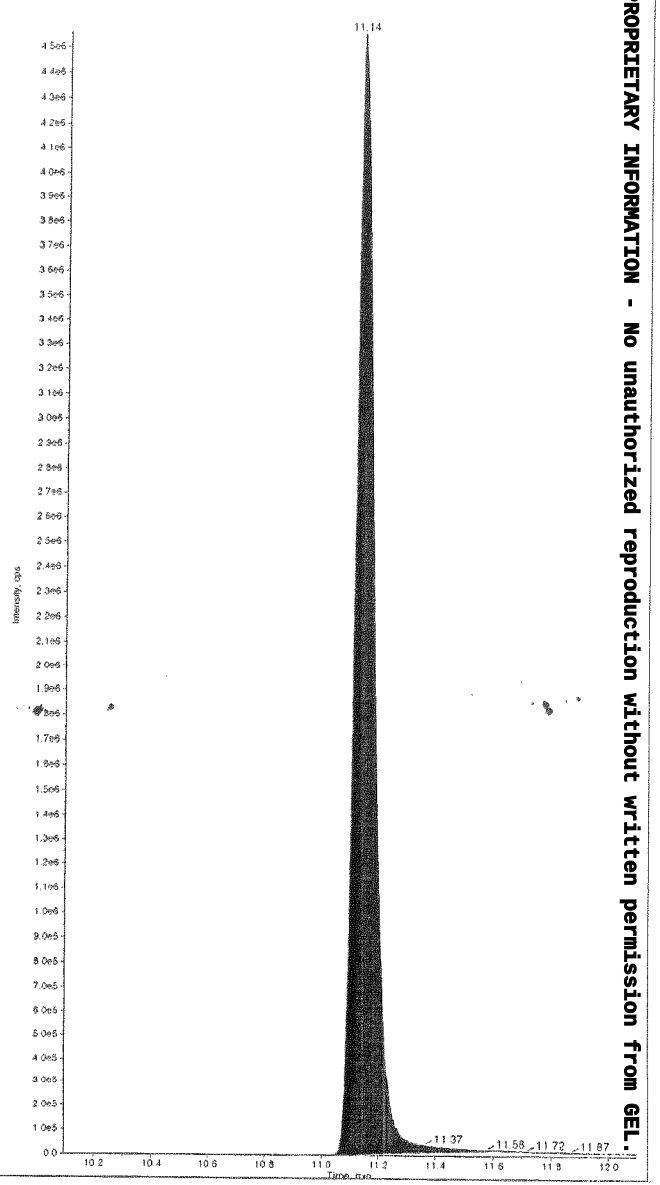
Sample Index:	1	
Sample Type:	Standard	
Concentration:	500.	ng/mL
Calculated Conc:	535.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:34:13 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.20	min
Area:	5.19e+005	counts
Height:	1.31e+005	cps
Start Time:	5.07	min
End Time:	5.46	min



700

Sample Name: "WXX060209-22" Sample ID: "|1|LXS1" File: "EXS0209006.wiff"
Peak Name: "Iris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	500.	ng/mL
Calculated Conc:	524.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:34:13 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	2.23e+007	counts
Height:	4.55e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



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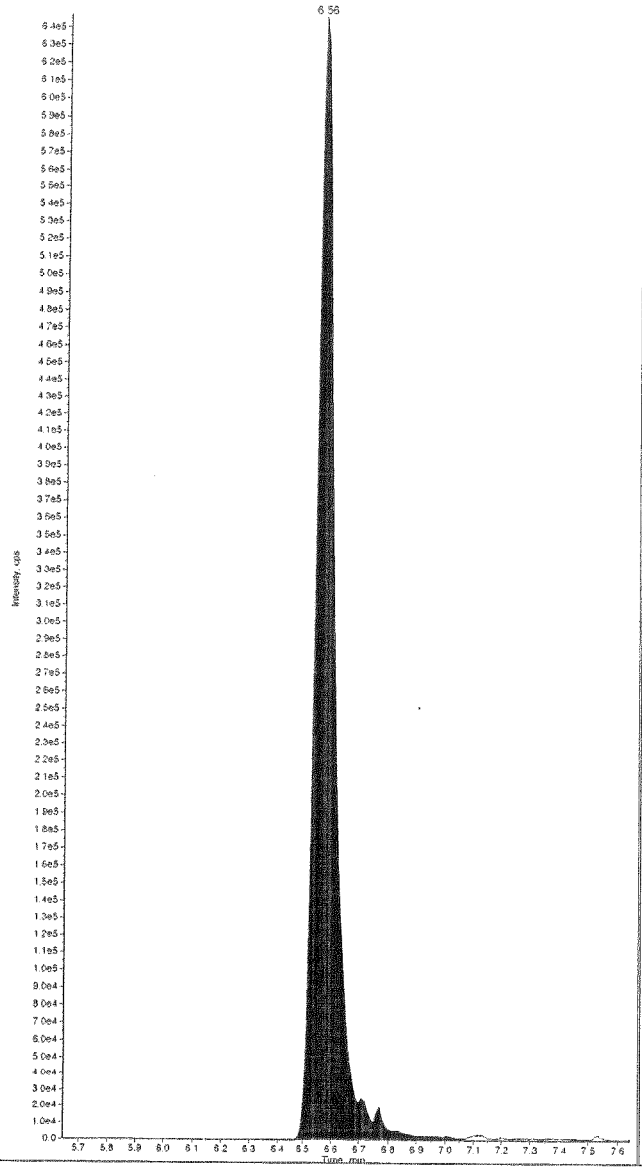
YRS 2/10/06

Sample Name: "WXX060209-23" Sample ID: "|1|LXS1" File: "EXS0209007.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

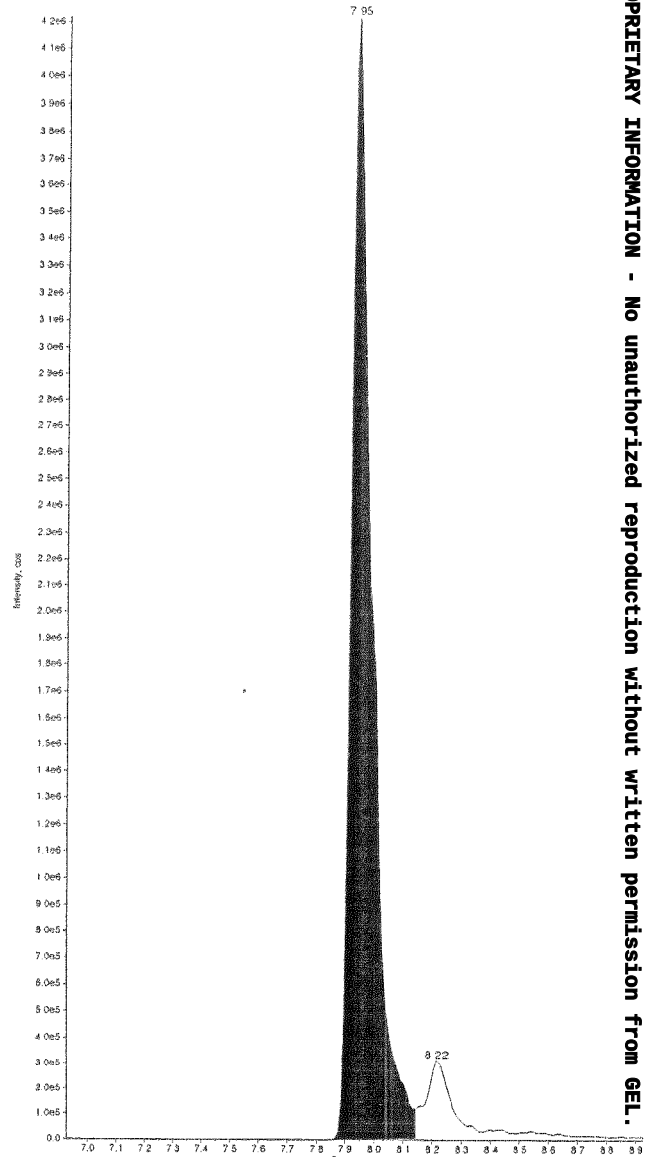
Sample Index:	1	
Sample Type:	Standard	
Concentration:	750.	ng/mL
Calculated Conc:	710.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:56:38 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.56	min
Area:	3.20e+006	counts
Height:	6.47e+005	cps
Start Time:	6.45	min
End Time:	7.06	min



701

Sample Name: "WXX060209-23" Sample ID: "|1|LXS1" File: "EXS0209007.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	750.	ng/mL
Calculated Conc:	749.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:56:38 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.95	min
Area:	2.20e+007	counts
Height:	4.22e+006	cps
Start Time:	7.84	min
End Time:	8.14	min



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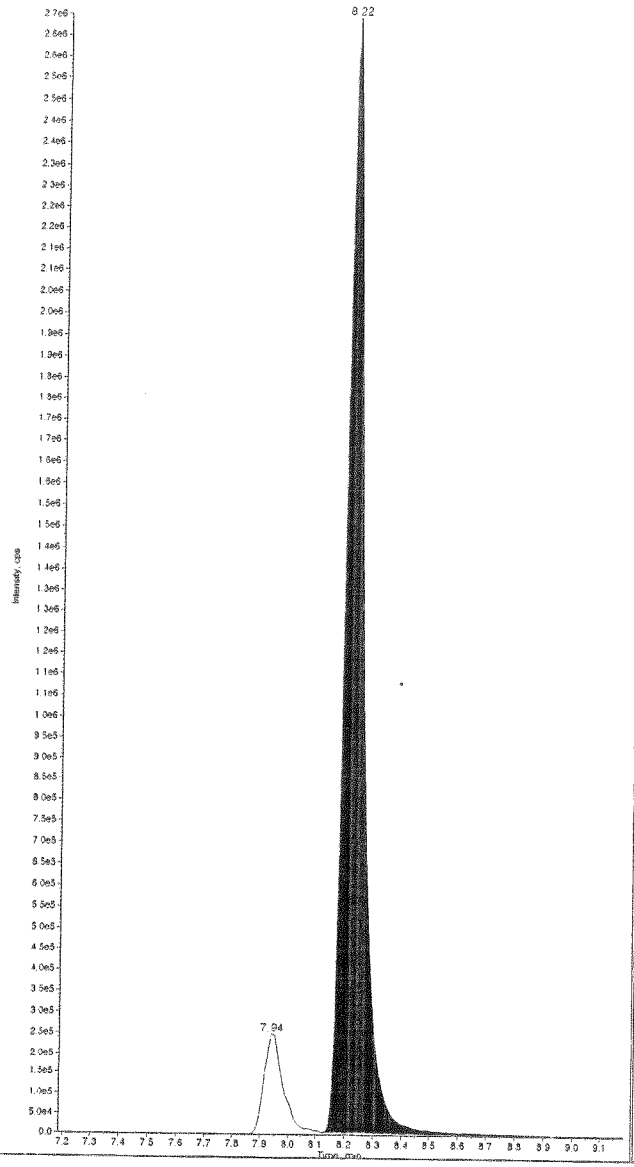
EXS 2/10/06

Sample Name: "WXX060209-23" Sample ID: "|1|LXS1" File: "EXS0209007.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

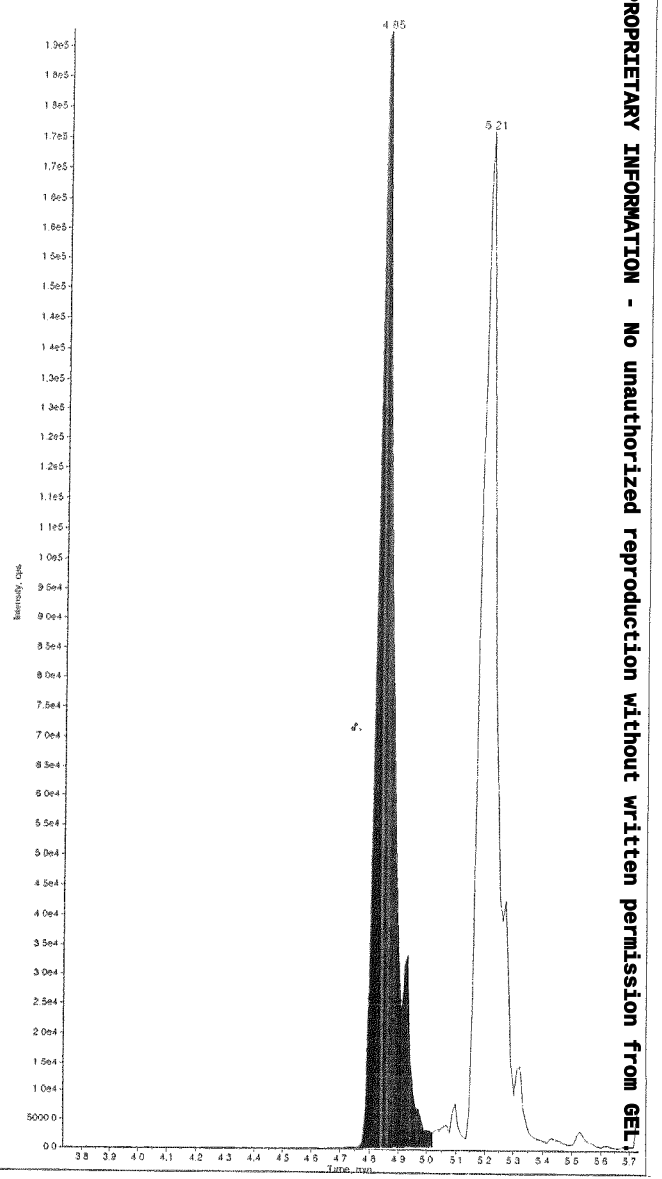
Sample Index:	1	
Sample Type:	Standard	
Concentration:	375.	ng/mL
Calculated Conc:	367.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:56:38 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.22	min
Area:	1.18e+007	counts
Height:	2.64e+006	cps
Start Time:	8.13	min
End Time:	8.85	min



702

Sample Name: "WXX060209-23" Sample ID: "|1|LXS1" File: "EXS0209007.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	750.	ng/mL
Calculated Conc:	603.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:56:38 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.85	min
Area:	7.72e+005	counts
Height:	1.88e+005	cps
Start Time:	4.66	min
End Time:	5.02	min



Stone et al 2006

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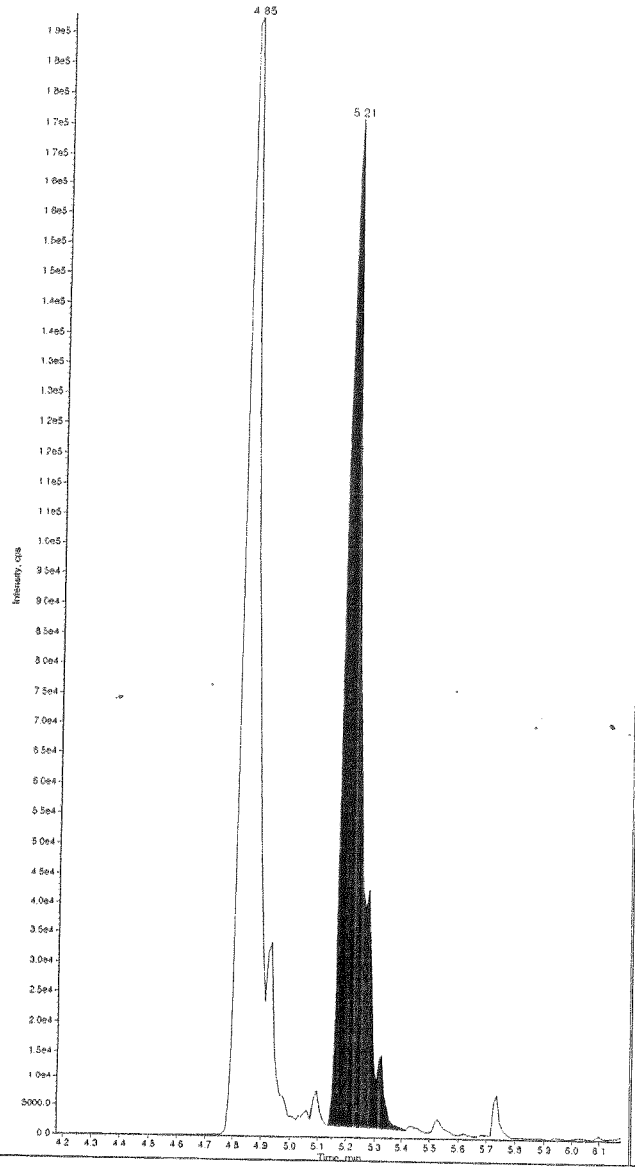
EXS 2/10/06

Sample Name: "WXX060209-23" Sample ID: "|1|LXS1" File: "EXS0209007.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

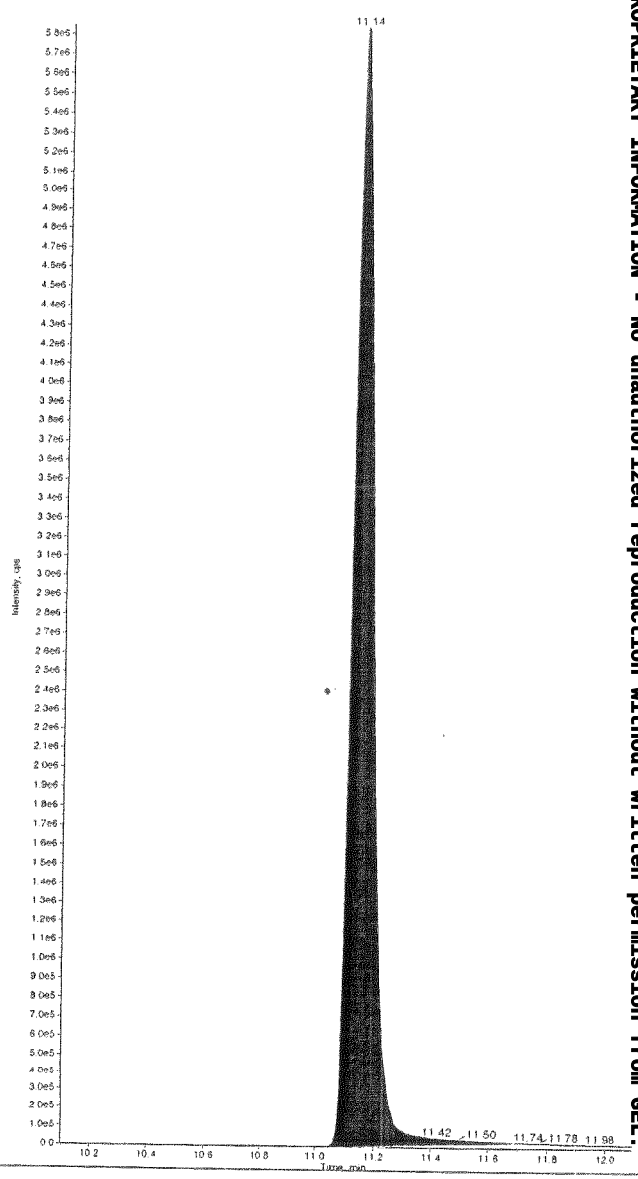
Sample Index:	1	
Sample Type:	Standard	
Concentration:	750.	ng/mL
Calculated Conc:	719.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:56:38 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.21	min
Area:	7.03e+005	counts
Height:	1.70e+005	cps
Start Time:	5.14	min
End Time:	5.42	min



703

Sample Name: "WXX060209-23" Sample ID: "|1|LXS1" File: "EXS0209007.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	750.	ng/mL
Calculated Conc:	759.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	03:56:38 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	3.00e+007	counts
Height:	5.84e+006	cps
Start Time:	11.0	min
End Time:	11.7	min



Option 2 1/13/06

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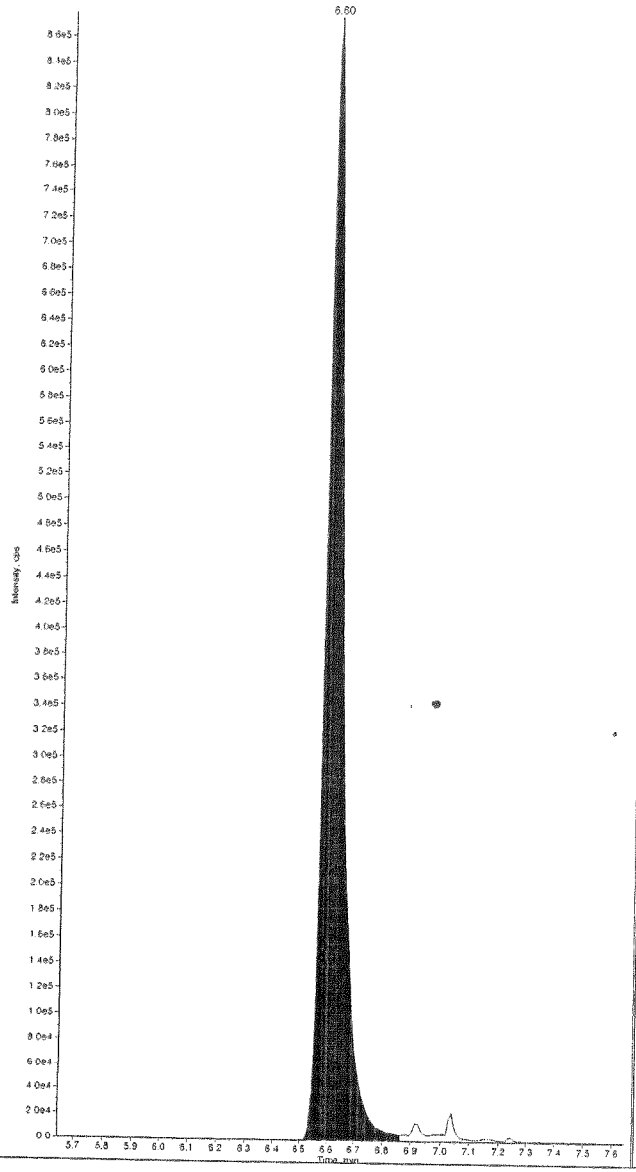
YRS
2/10/06

Sample Name: "WXX060209-24" Sample ID: "|1|LXS1" File: "EXS0209008.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	1000.	ng/mL
Calculated Conc:	907.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:18:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.60	min
Area:	4.12e+006	counts
Height:	8.77e+005	cps
Start Time:	6.50	min
End Time:	6.86	min

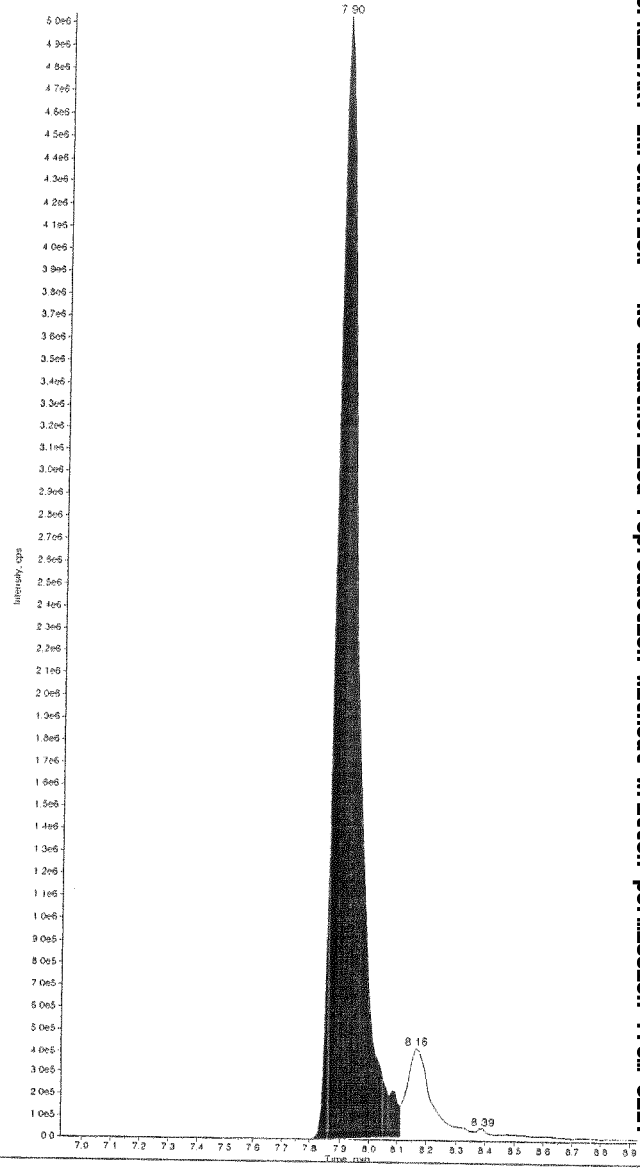


704

Sample Name: "WXX060209-24" Sample ID: "|1|LXS1" File: "EXS0209008.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	1000.	ng/mL
Calculated Conc:	985.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:18:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.90	min
Area:	2.77e+007	counts
Height:	5.03e+006	cps
Start Time:	7.80	min
End Time:	8.11	min

Hmm 2/13/06



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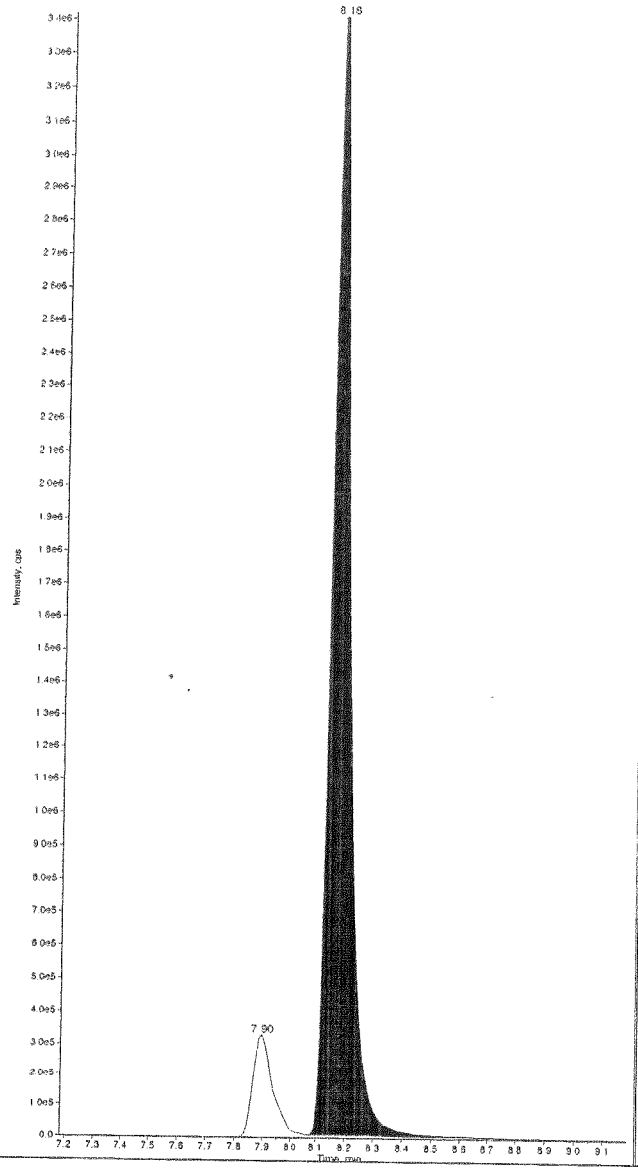
Sample Name: "WXX060209-24" Sample ID: "|1|LXS1" File: "EXS0209008.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

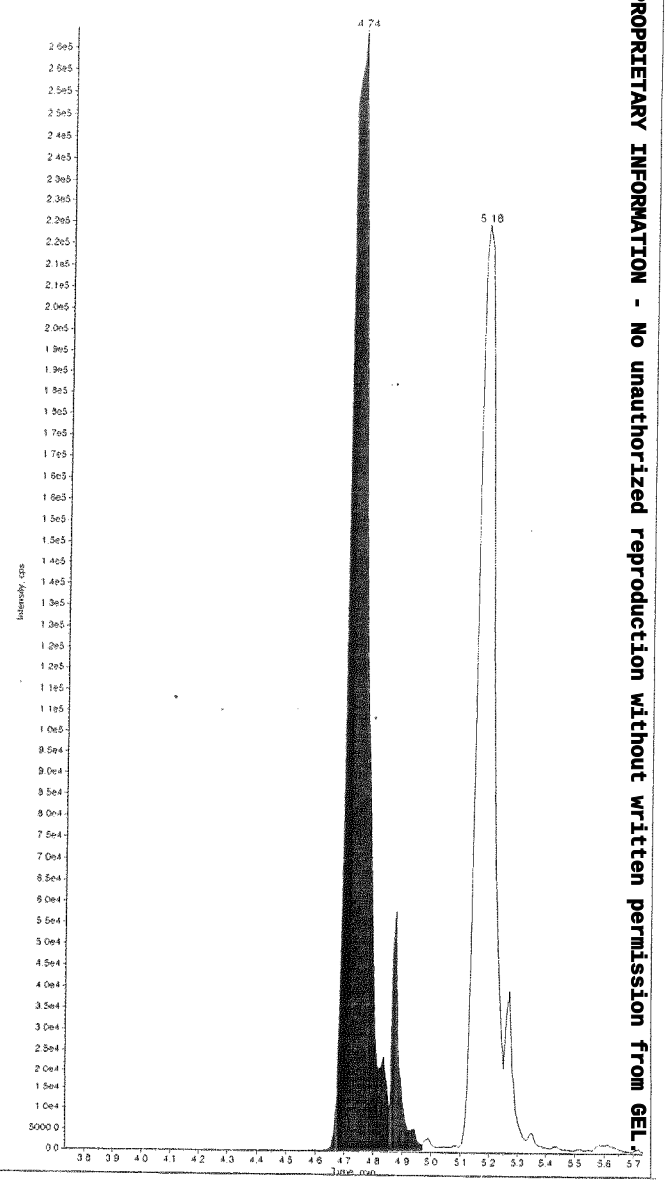
Sample Index:	1	
Sample Type:	Standard	
Concentration:	500.	ng/mL
Calculated Conc:	507.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:18:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.16	min
Area:	1.59e+007	counts
Height:	3.41e+006	cps
Start Time:	8.07	min
End Time:	8.56	min



705

Sample Name: "WXX060209-24" Sample ID: "|1|LXS1" File: "EXS0209008.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

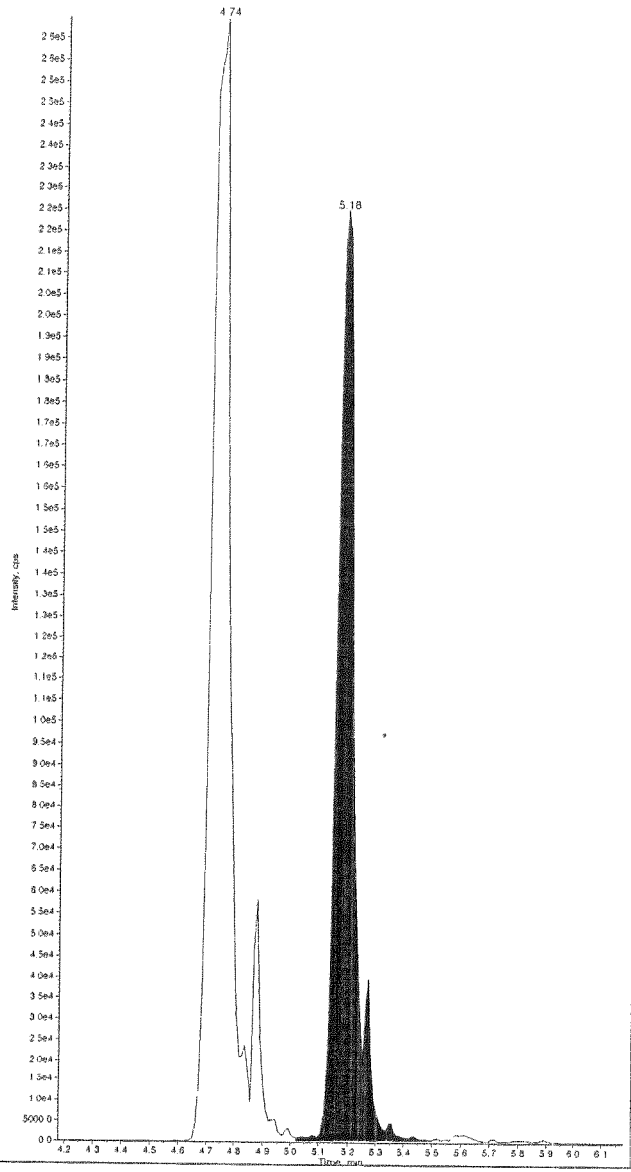
Sample Index:	1	
Sample Type:	Standard	
Concentration:	1000.	ng/mL
Calculated Conc:	1150.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:18:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.74	min
Area:	1.39e+006	counts
Height:	2.65e+005	cps
Start Time:	4.57	min
End Time:	4.97	min



KRS 2/10/06

Sample Name: "WXX060209-24" Sample ID: "|1|LXS1" File: "EXS0209008.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

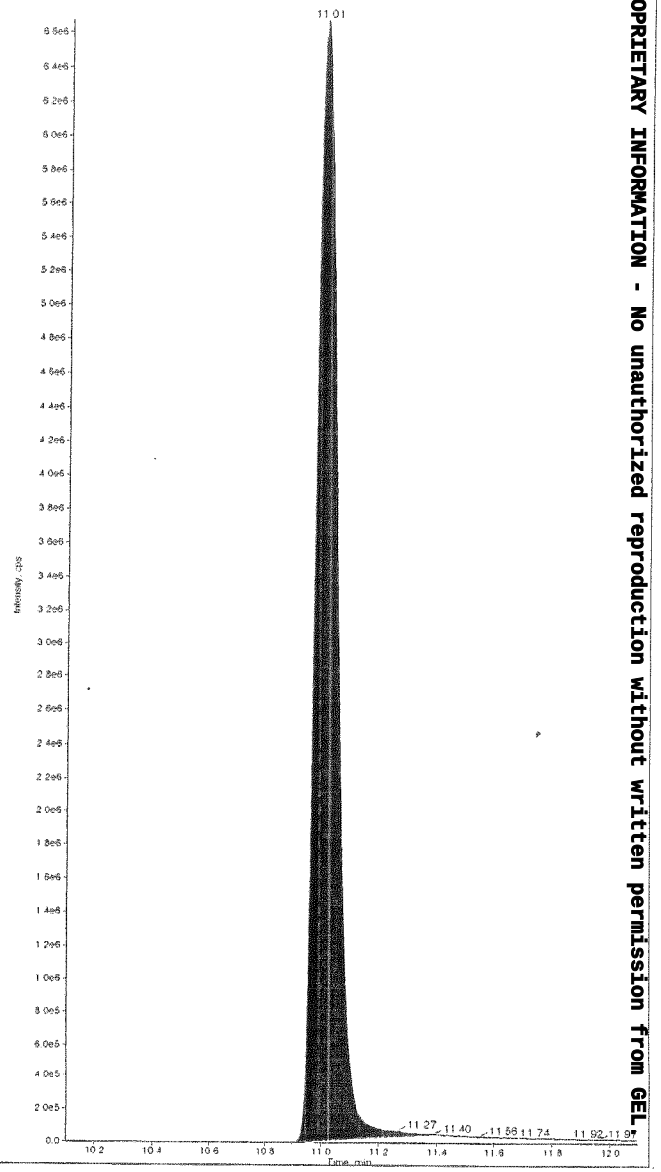
Sample Index:	1	
Sample Type:	Standard	
Concentration:	1000.	ng/mL
Calculated Conc:	1000.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:18:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.18	min
Area:	9.95e+005	counts
Height:	2.20e+005	cps
Start Time:	5.02	min
End Time:	5.49	min



706

Sample Name: "WXX060209-24" Sample ID: "|1|LXS1" File: "EXS0209008.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	1000.	ng/mL
Calculated Conc:	962.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:18:56 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.0	min
Area:	3.57e+007	counts
Height:	6.66e+006	cps
Start Time:	10.9	min
End Time:	11.4	min



Approved 1/13/06

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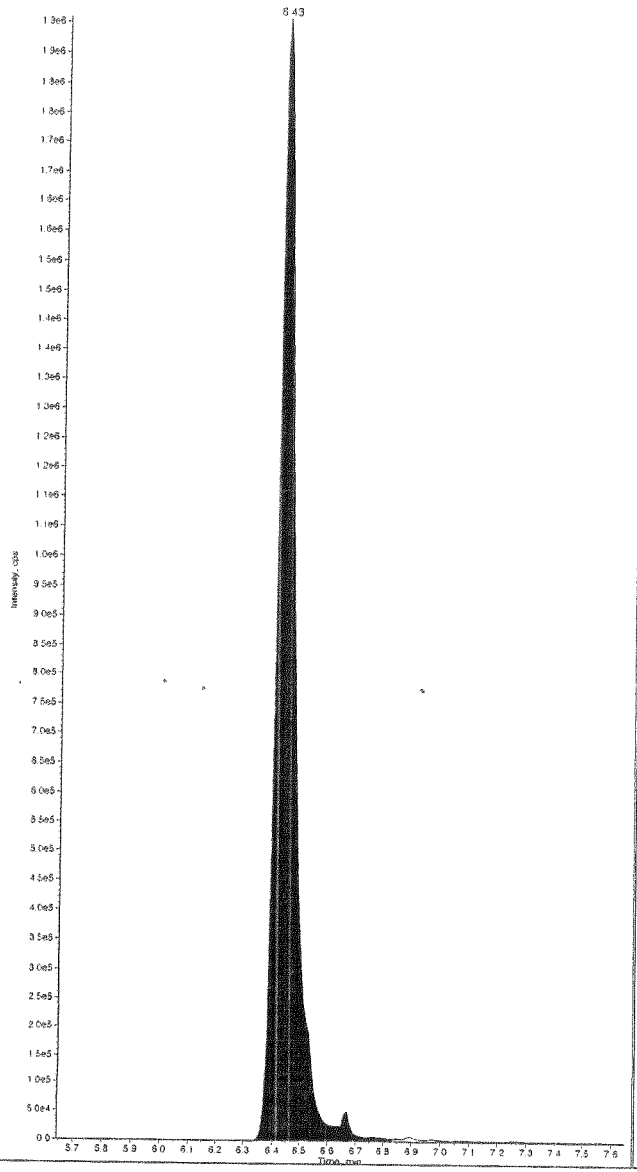
Sample Name: "WXX060209-25" Sample ID: "|1|LXS1" File: "EXS0209009.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

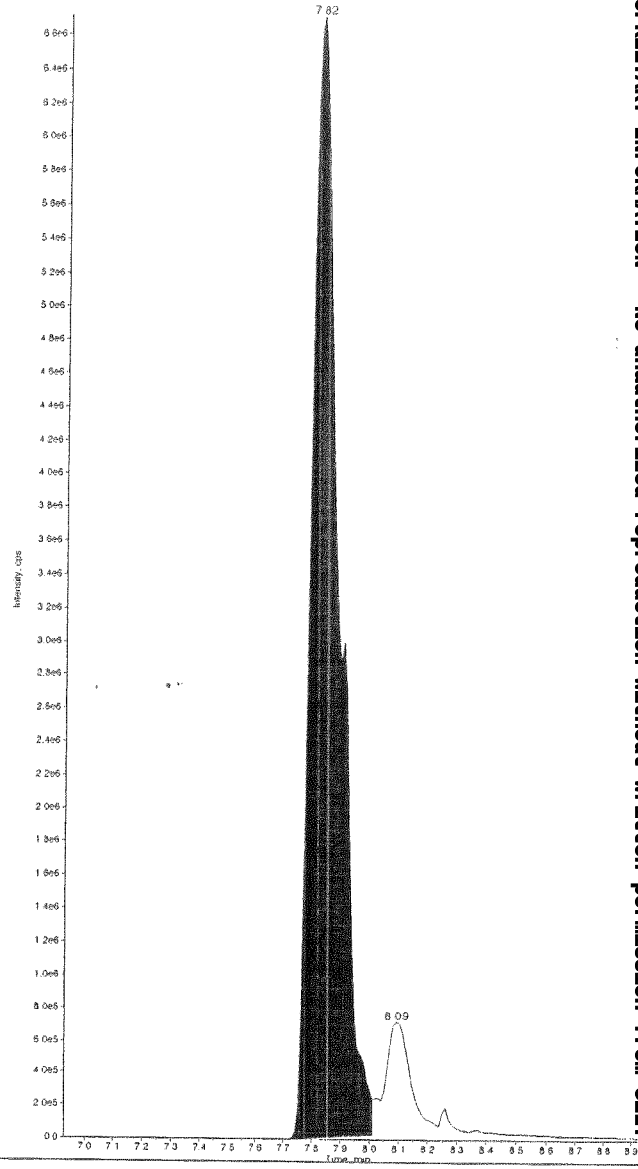
Sample Index:	1	
Sample Type:	Standard	
Concentration:	2000.	ng/mL
Calculated Conc:	2050.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:41:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.43	min
Area:	9.47e+006	counts
Height:	1.91e+006	cps
Start Time:	6.31	min
End Time:	6.83	min



707

Sample Name: "WXX060209-25" Sample ID: "|1|LXS1" File: "EXS0209009.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	2000.	ng/mL
Calculated Conc:	2000.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:41:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.82	min
Area:	4.63e+007	counts
Height:	6.70e+006	cps
Start Time:	7.72	min
End Time:	8.01	min



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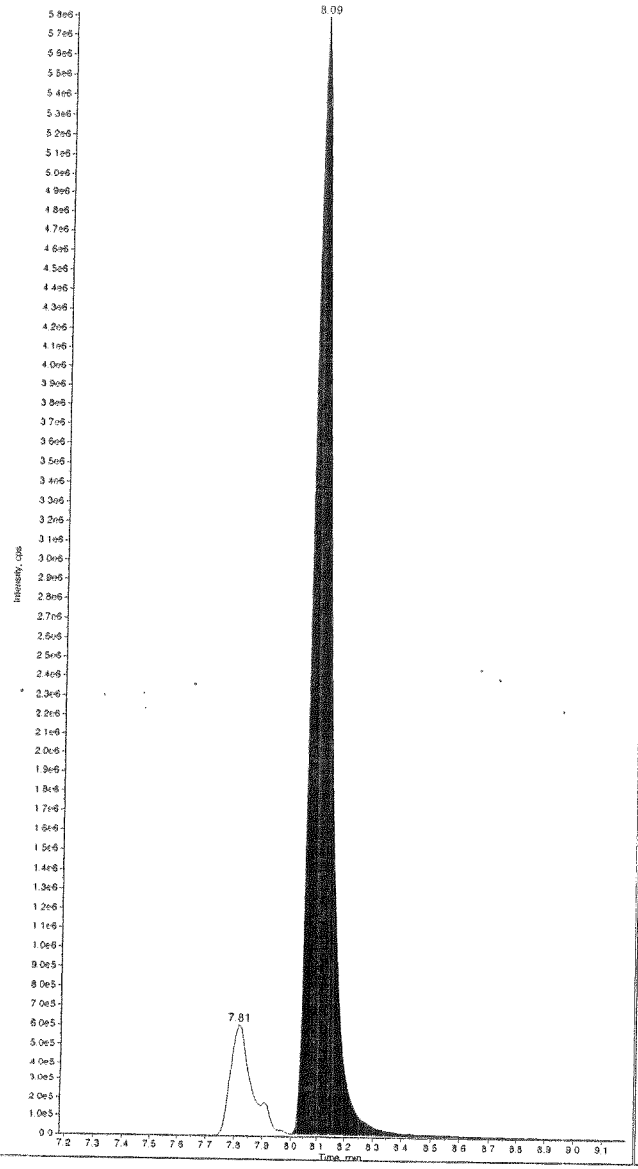
YES 2/10/06

Sample Name: "WXX060209-25" Sample ID: "|1|LXS1" File: "EXS0209009.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_I" Annotation: ""

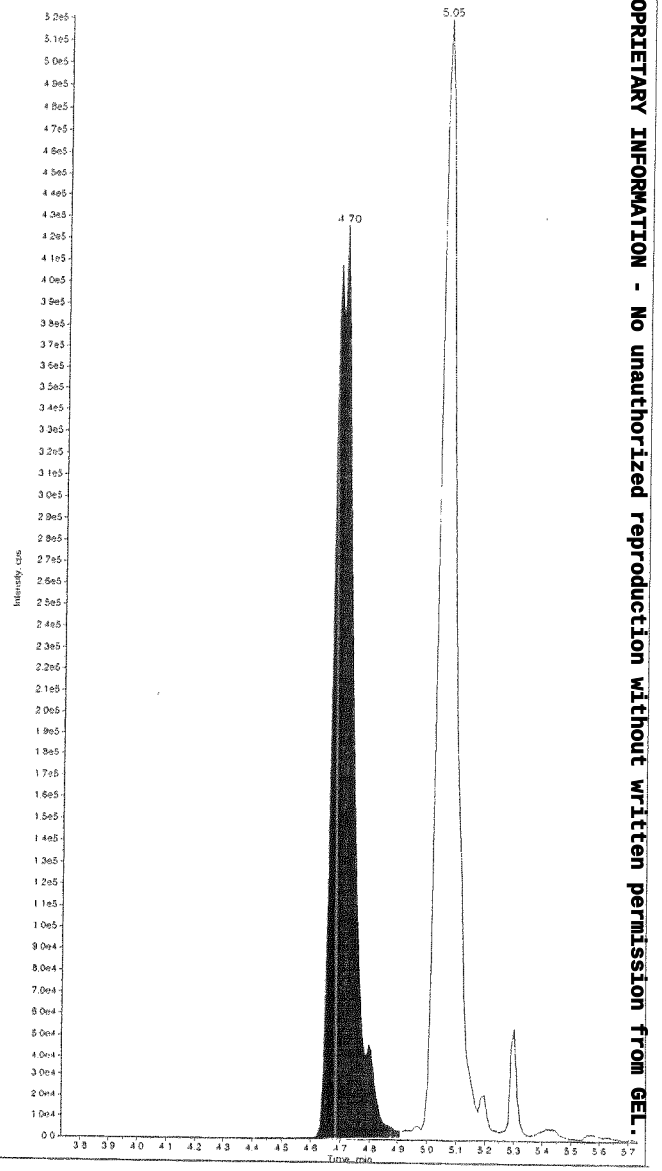
Sample Index:	1	
Sample Type:	Standard	
Concentration:	1000.	ng/mL
Calculated Conc:	999.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:41:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.09	min
Area:	2.85e+007	counts
Height:	5.80e+006	cps
Start Time:	8.00	min
End Time:	8.68	min



708

Sample Name: "WXX060209-25" Sample ID: "|1|LXS1" File: "EXS0209009.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	2000.	ng/mL
Calculated Conc:	1980.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:41:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.70	min
Area:	2.15e+006	counts
Height:	4.26e+005	cps
Start Time:	4.52	min
End Time:	4.91	min



tbm 02/13/06

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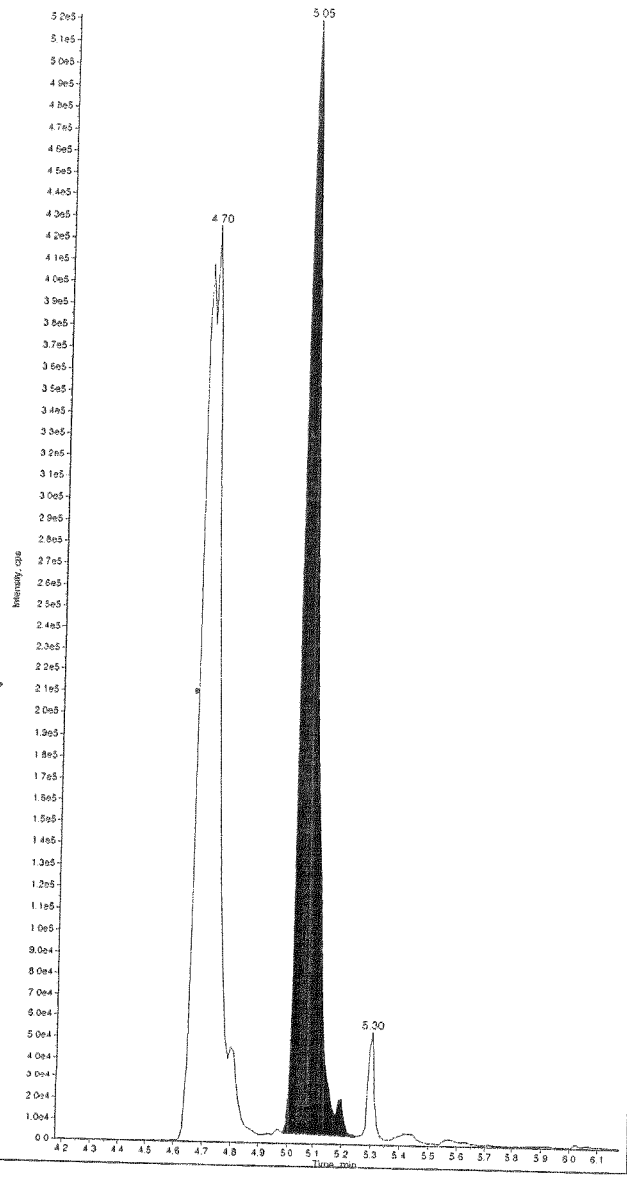
Sample Name: "WXX060209-25" Sample ID: "|1|LXS1" File: "EXS0209009.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

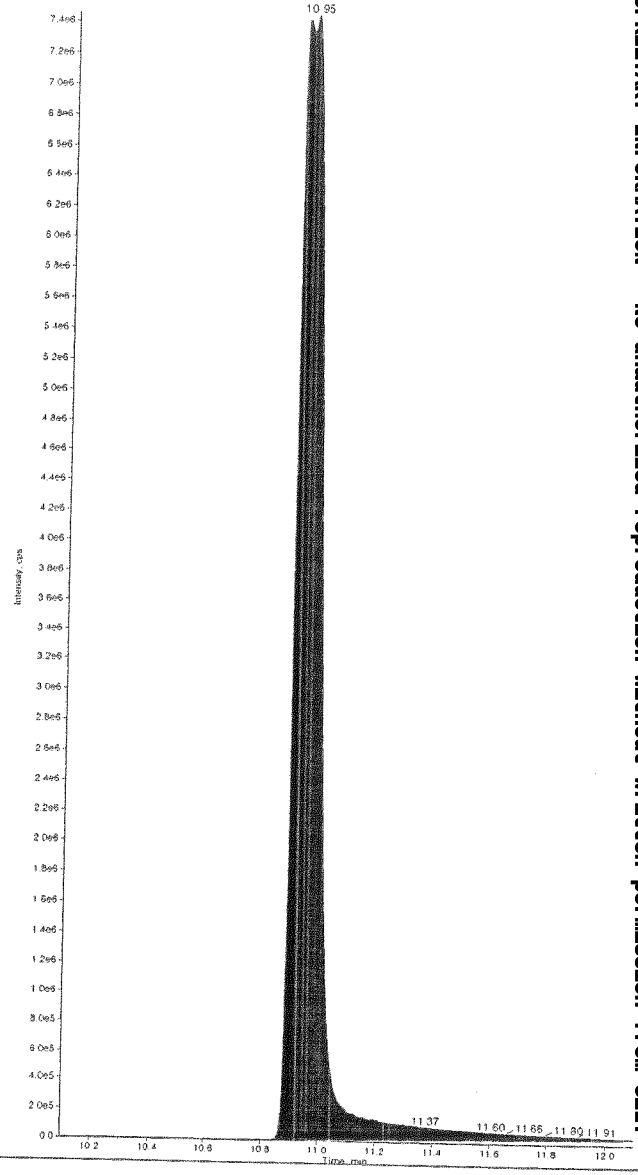
Sample Index:	1	
Sample Type:	Standard	
Concentration:	2000.	ng/mL
Calculated Conc:	2000.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:41:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.05	min
Area:	2.12e+006	counts
Height:	5.17e+005	cps
Start Time:	4.98	min
End Time:	5.25	min



709

Sample Name: "WXX060209-25" Sample ID: "|1|LXS1" File: "EXS0209009.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_I" Annotation: ""

Sample Index:	1	
Sample Type:	Standard	
Concentration:	2000.	ng/mL
Calculated Conc:	2050.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	04:41:29 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	10.9	min
Area:	5.12e+007	counts
Height:	7.45e+006	cps
Start Time:	10.8	min
End Time:	12.1	min



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Explosives Initial Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXICV

GEL Data File EXS0209011.wiff **Analysis Date:** 09-FEB-06 17:26

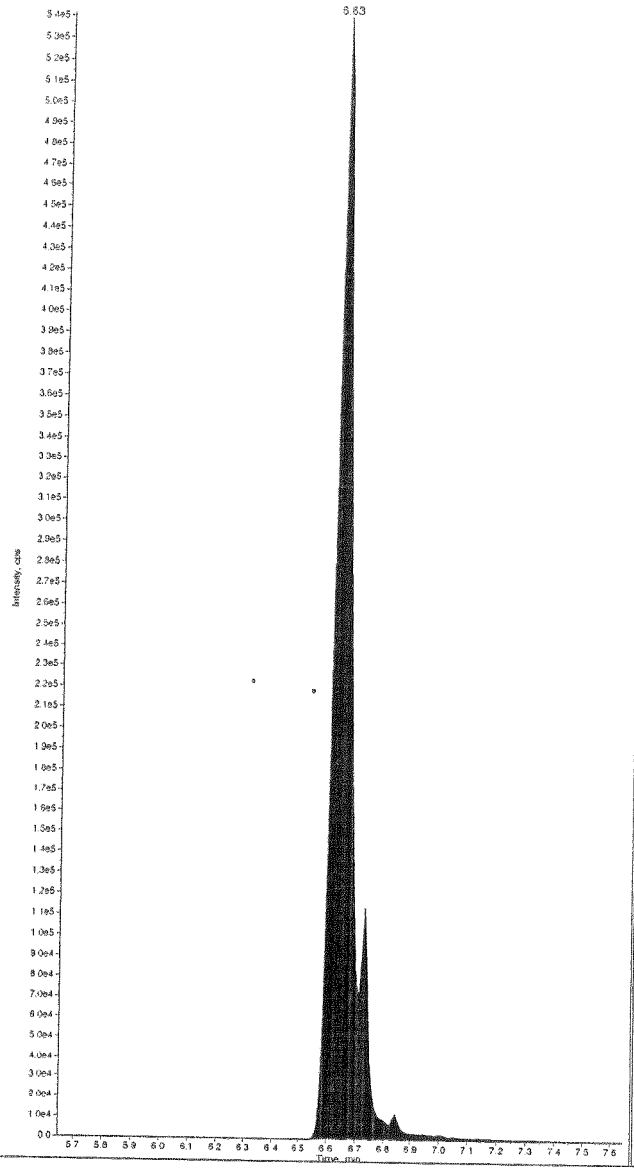
LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	551	110	
2,6-Diamino-4-nitrotoluene	500	430	86	
3,4-Dinitrotoluene	250	257	103	
3,5-Dinitroaniline	500	522	104	
TATB	500	562	112	
tris(o-cresyl) phosphate	500	521	104	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Sample Name: "WXX060209-26ICV" Sample ID: "|1|LXS1" File: "EXS0209011.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

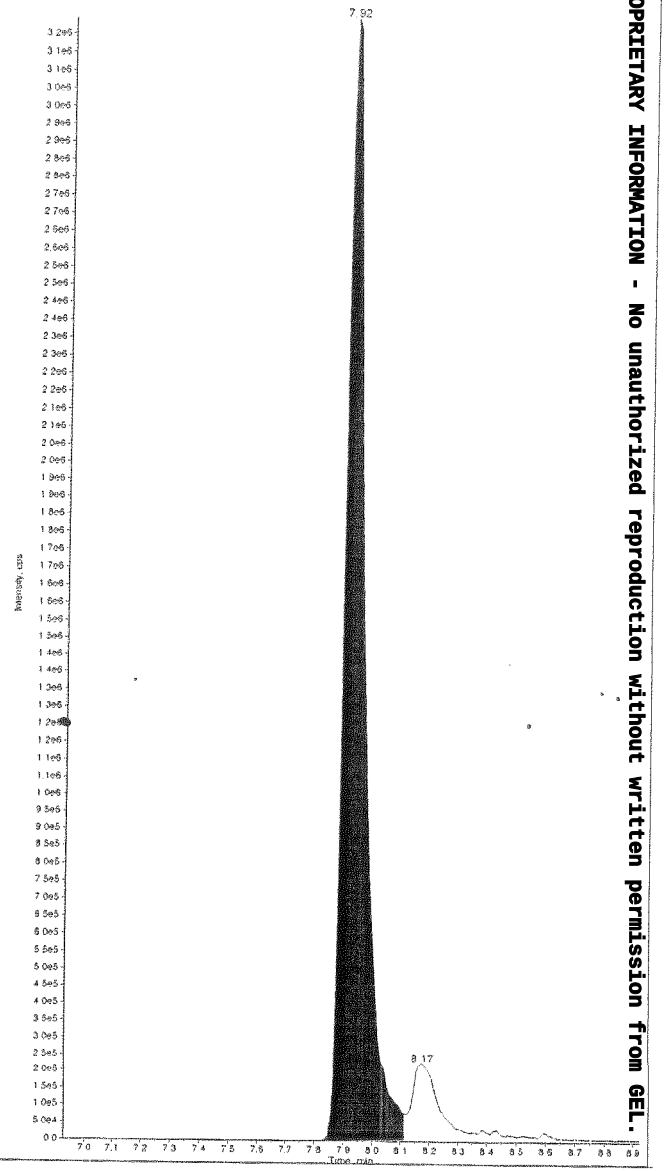
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	562.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	05:26:14 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.63	min
Area:	2.51e+006	counts
Height:	5.41e+005	cps
Start Time:	6.52	min
End Time:	7.41	min



711

Sample Name: "WXX060209-26ICV" Sample ID: "|1|LXS1" File: "EXS0209011.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	522.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	05:26:14 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.92	min
Area:	1.59e+007	counts
Height:	3.19e+006	cps
Start Time:	7.82	min
End Time:	8.11	min



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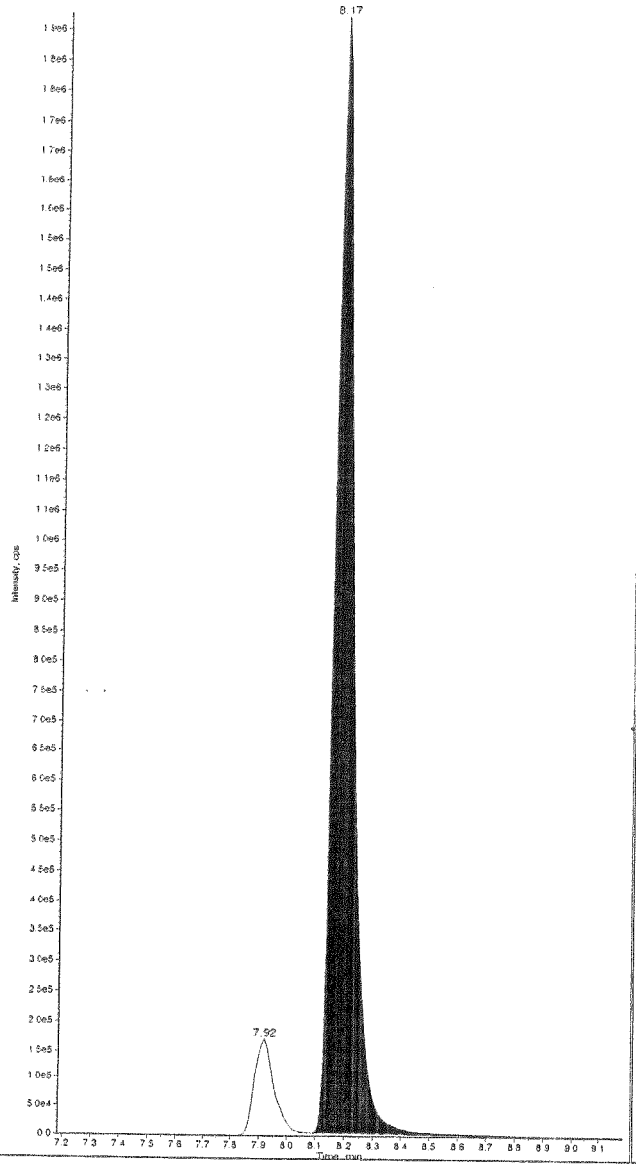
Sample Name: "WXX060209-26ICV" Sample ID: "|1|LXS1" File: "EXS0209011.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

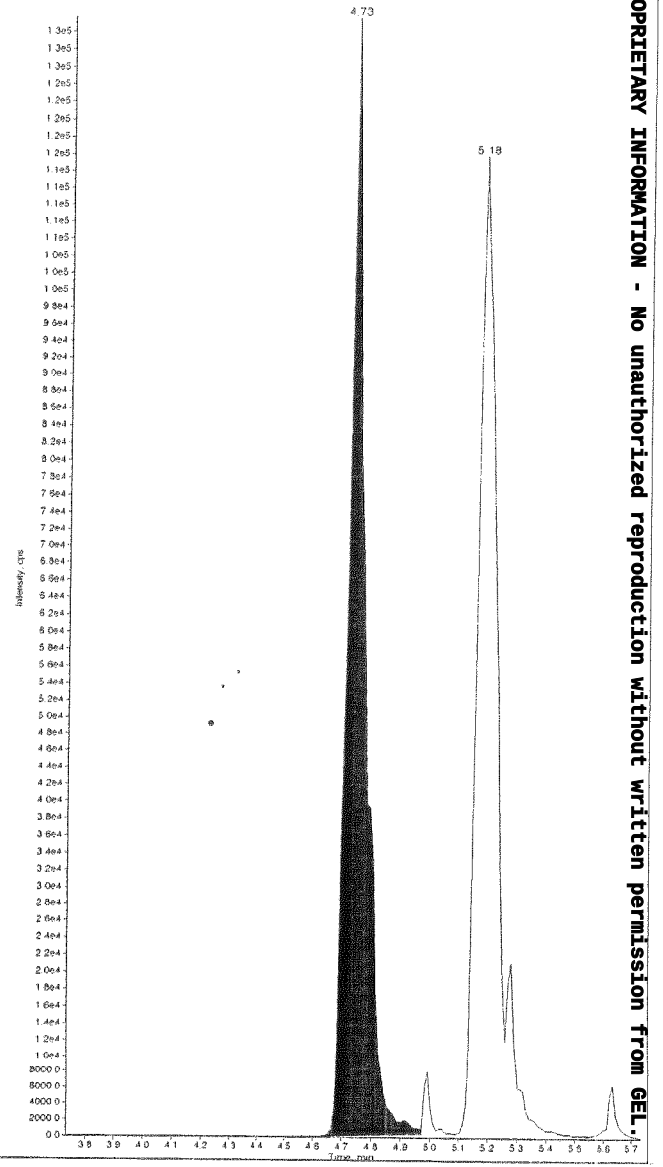
Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	257.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	05:26:14 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.17	min
Area:	8.43e+006	counts
Height:	1.87e+006	cps
Start Time:	8.09	min
End Time:	8.79	min



712

Sample Name: "WXX060209-26ICV" Sample ID: "|1|LXS1" File: "EXS0209011.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	430.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	05:26:14 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.73	min
Area:	5.52e+005	counts
Height:	1.32e+005	cps
Start Time:	4.59	min
End Time:	4.97	min



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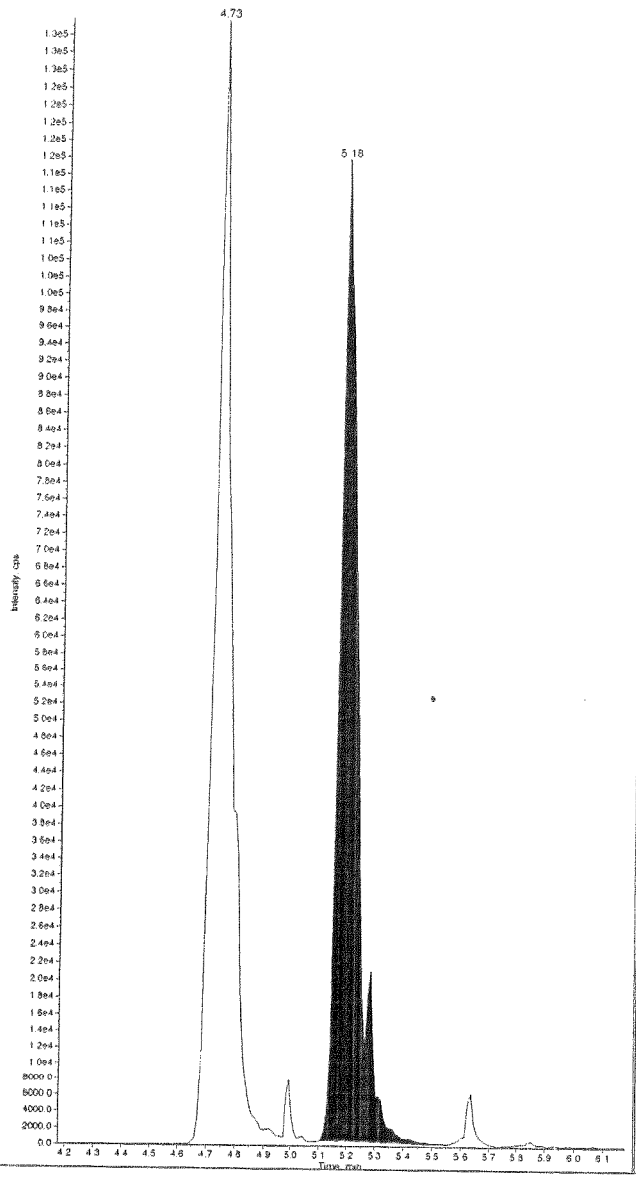
EXS 2/10/06

Sample Name: "WXX060209-26ICV" Sample ID: "|1|LXS1" File: "EXS0209011.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

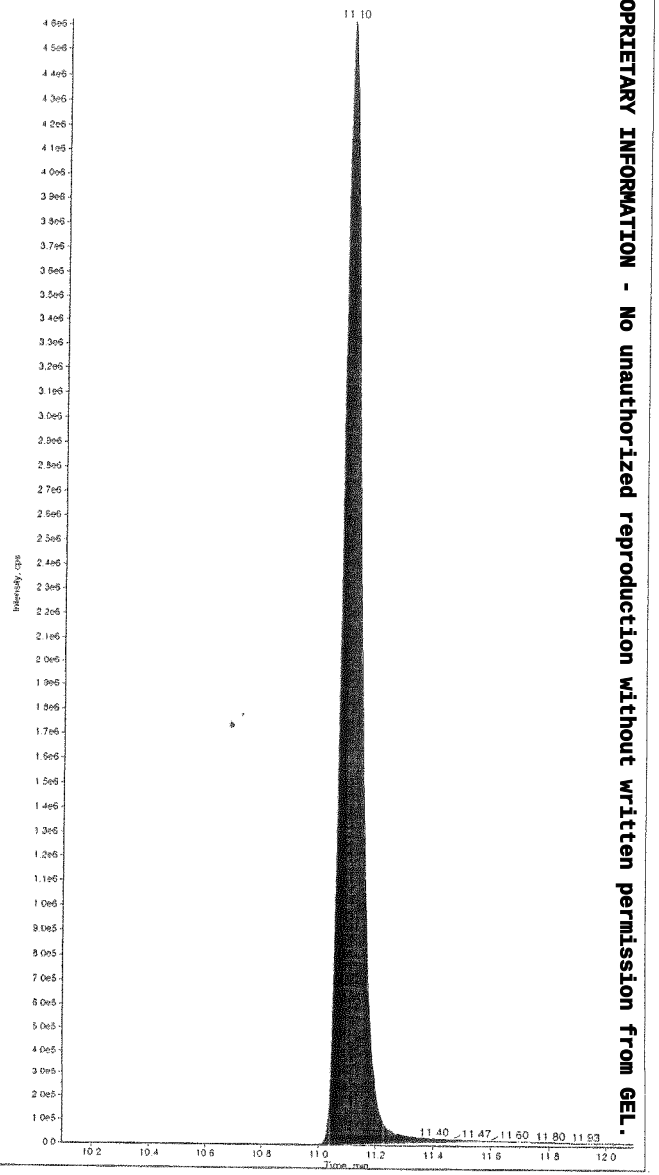
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	551.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	05:26:14 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.18	min
Area:	5.34e+005	counts
Height:	1.16e+005	cps
Start Time:	5.11	min
End Time:	5.50	min



713

Sample Name: "WXX060209-26ICV" Sample ID: "|1|LXS1" File: "EXS0209011.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	521.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	05:26:14 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	2.21e+007	counts
Height:	4.62e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



Acceptable 2/10/06

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0202013a

Analysis Date: 02-FEB-06 21:57

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

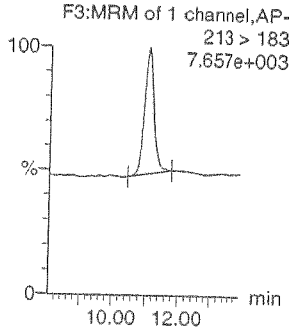
Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	31.848	80	
1,3-Dinitrobenzene-d4	500	571.244	114	
2,4,6-Trinitrotoluene	40	38.826	97	
2,4-Dinitrotoluene	40	41.282	103	
2,6-Dinitrotoluene	40	40.916	102	
2,6-Dinitrotoluene-d3	500	540.97	108	
2-Amino-4,6-dinitrotoluene	40	39.737	99	
3,4-Dinitrotoluene	20	25.195	126	
4-Amino-2,6-dinitrotoluene	40	38.316	96	
HMX	40	37.732	94	
Nitrobenzene	40	37.363	93	
Nitroglycerin	80	106.241	133	*
PETN	40	52.548	131	*
RDX	40	35.343	88	
Tetryl	40	37.453	94	
m-Dinitrobenzene	40	41.344	103	
m-Nitrotoluene	40	48.768	122	
o-Nitrotoluene	40	37.835	95	
p-Nitrotoluene	40	29.161	73	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

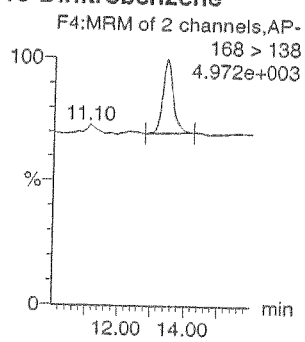
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202013a
Date: 02-Feb-2006
Time: 21:57:44
ID: WXX060202-08CRI
Vial: 1:1,C

MM
2/3/06

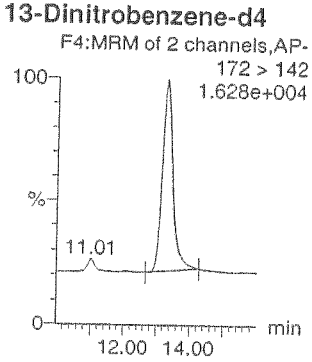
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
7.657e+003



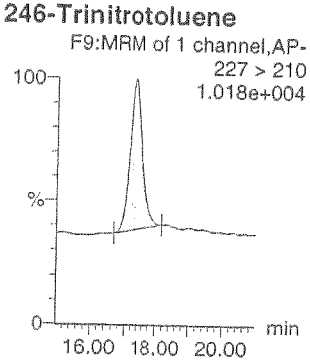
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.972e+003



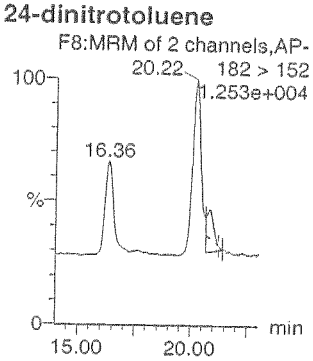
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.628e+004



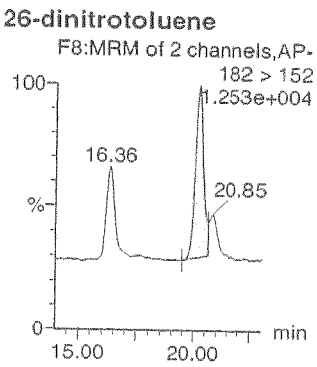
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.018e+004



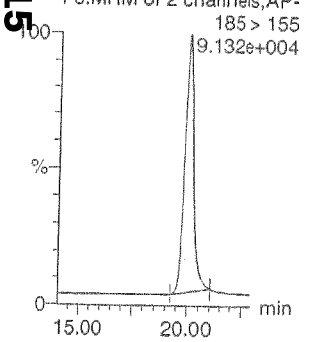
24-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.253e+004



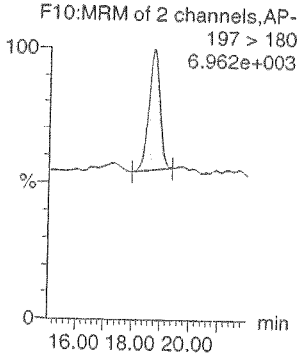
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.253e+004



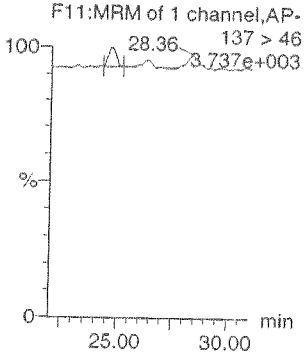
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
9.132e+004



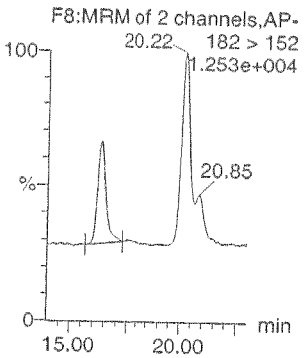
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
6.962e+003



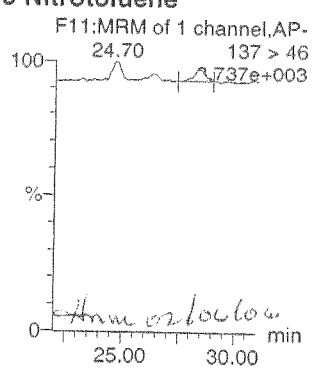
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.737e+003



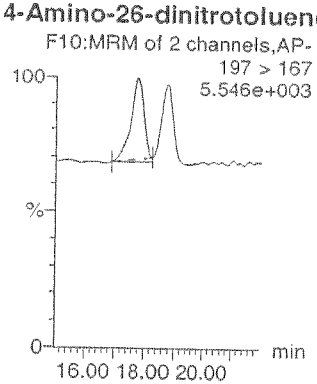
34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.253e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.737e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
5.546e+003



415

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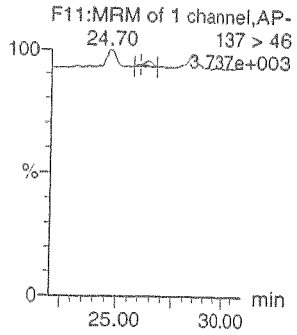
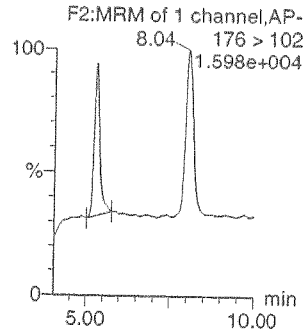
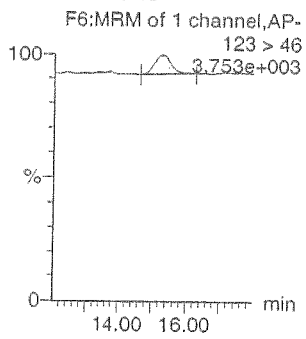
4-Nitrotoluene



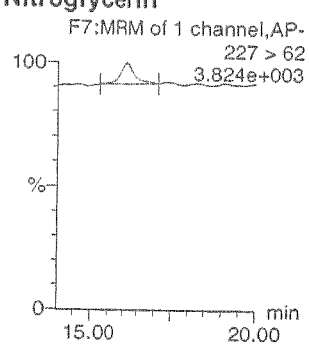
HMX



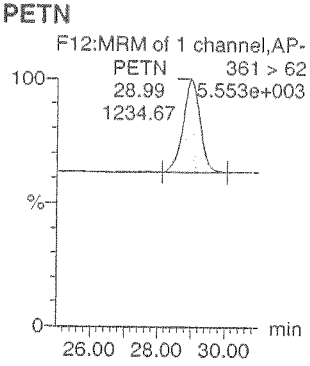
Nitrobenzene



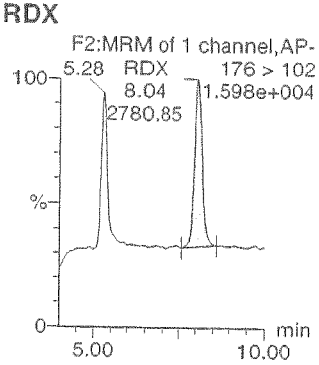
Nitroglycerin



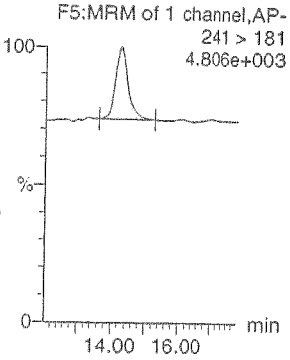
PETN



RDX



Tetryl



716

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-08CRI	HMX	176 > 102	5.28	2010.098	4701.243	2010.098	213.784	bb			37.7323	94.3	-5.7	89.1
WXX060202-08CRI	RDX	176 > 102	8.04	2780.853	4701.243	2780.853	295.757	bb			35.3434	88.4	-11.6	97.3
WXX060202-08CRI	135-Trinitrobenzene	213 > 183	11.04	1333.370	4701.243	1333.370	141.810	bb			31.8484	79.6	-20.4	373.1
WXX060202-08CRI	13-Dinitrobenzene-d4	172 > 142	13.29	4701.243		4701.243	4701.243	bb			571.2445	114.2	14.2	692.3
WXX060202-08CRI	13-Dinitrobenzene	168 > 138	13.44	557.498	4701.243	557.498	59.293	bb			41.3444	103.4	3.4	67.3
WXX060202-08CRI	Tetryl	241 > 181	14.25	547.380	4701.243	547.380	58.217	bb			37.4528	93.6	-6.4	72.2
WXX060202-08CRI	Nitrobenzene	123 > 46	15.26	162.392	4701.243	162.392	17.271	bb			37.3627	93.4	-6.6	13.8
WXX060202-08CRI	Nitroglycerin	227 > 62	16.14	189.376	4701.243	189.376	20.141	bb			106.2409	132.8	32.8	9.7
WXX060202-08CRI	4-Amino-26-dinitrotoluene	197 > 167	17.74	905.754	41862.051	905.754	10.818	MM	03-Feb-06	07:21:51	38.3156	95.8	-4.2	48.9
WXX060202-08CRI	2-Amino-46-dinitrotoluene	197 > 180	18.71	1423.818	41862.051	1423.818	17.006	bb			39.7366	99.3	-0.7	66.5
WXX060202-08CRI	246-Trinitrotoluene	227 > 210	17.35	3024.103	41862.051	3024.103	36.120	bb			38.8264	97.1	-2.9	226.8
WXX060202-08CRI	34-dinitrotoluene	182 > 152	16.36	1950.678	41862.051	1950.678	23.299	bb			25.1945	126.0	26.0	19.4
WXX060202-08CRI	26-dinitrotoluene	182 > 152	20.22	3823.379	41862.051	3823.379	45.666	bd			40.9155	102.3	2.3	36.7
WXX060202-08CRI	24-dinitrotoluene	182 > 152	20.85	836.532	41862.051	836.532	9.992	MM	03-Feb-06	07:24:08	41.2817	103.2	3.2	8.8
WXX060202-08CRI	26-dinitrotoluene-d3	185 > 155	20.03	41862.051		41862.051	41862.051	bb			540.9701	108.2	8.2	2150.9
WXX060202-08CRI	2-Nitrotoluene	137 > 46.0	24.70	113.300	41862.051	113.300	1.353	bb			37.8350	94.6	-5.4	30.1
WXX060202-08CRI	4-Nitrotoluene	137 > 46	26.31	43.096	41862.051	43.096	0.515	MM	03-Feb-06	07:18:58	29.1610	72.9	-27.1	10.7
WXX060202-08CRI	3-Nitrotoluene	137 > 46.0	28.36	103.159	41862.051	103.159	1.232	bb			48.7681	121.9	21.9	20.3
WXX060202-08CRI	PETN	361 > 62	28.99	1234.666	41862.051	1234.666	14.747	bb			52.5476	131.4	31.4	171.4

747

HMX 2/10/06

MM 2/3/06

MM = Manual Modification

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GRAND MEAN AVERAGE

Date of Analysis	02/02/06
Time of Injection	2157
Standard Number	WXX060202-08CRI
Data File	EXP0202013a

HMX	94.3
RDX	88.4
135-TNB	79.6
13-DNB	103.4
Tetryl	93.6
Nitrobenzene	93.4
Nitroglycerin	132.8
4A-26-DNT	95.8
2A-46-DNT	99.3
246-TNT	97.1
34-DNT(surr)	126.0
26-DNT	102.3
24-DNT	103.2
2-NT	94.6
4-NT	72.9
3-NT	121.9
PETN	131.4
Total	1730.0
Average	101.8

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0202020a

Analysis Date: 03-FEB-06 01:52

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	546.189	91	
1,3-Dinitrobenzene-d4	500	527.674	106	
2,4,6-Trinitrotoluene	600	676.757	113	
2,4-Dinitrotoluene	600	663.547	111	
2,6-Dinitrotoluene	600	587.392	98	
2,6-Dinitrotoluene-d3	500	508.301	102	
2-Amino-4,6-dinitrotoluene	600	650.172	108	
3,4-Dinitrotoluene	300	327.428	109	
4-Amino-2,6-dinitrotoluene	600	717.826	120	
HMX	600	563.893	94	
Nitrobenzene	600	566.288	94	
Nitroglycerin	600	573.364	96	
PETN	600	575.714	96	
RDX	600	613.005	102	
Tetryl	600	726.662	121	*
m-Dinitrobenzene	600	589.579	98	
m-Nitrotoluene	600	568.75	95	
o-Nitrotoluene	600	573.403	96	
p-Nitrotoluene	600	559.068	93	

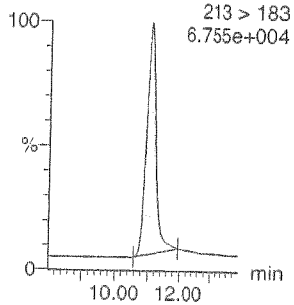
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

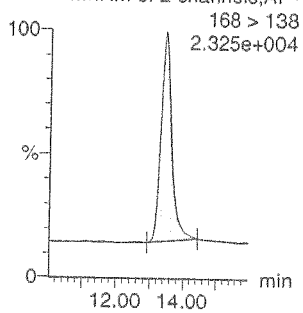
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202020a
Date: 03-Feb-2006
Time: 01:52:14
ID: WXX060202-07CCV
Vial: 1:1,B

MTT 2/3/06

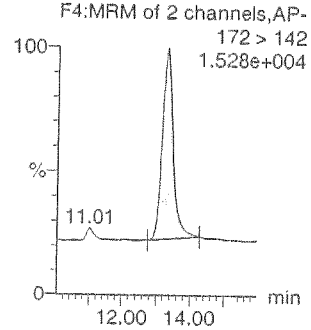
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.755e+004



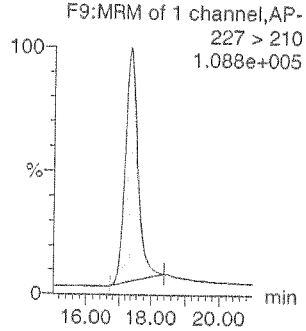
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
2.325e+004



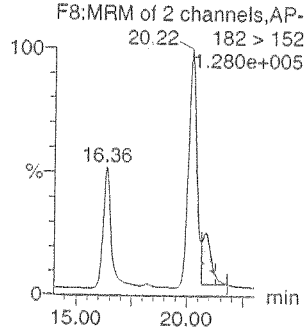
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.528e+004



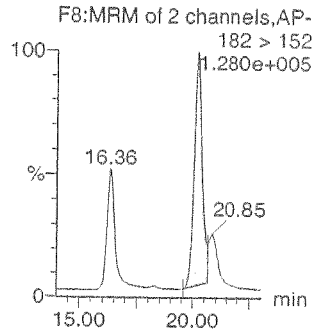
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.088e+005



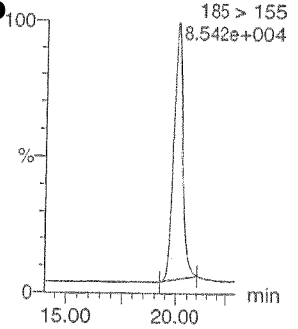
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.22 182 > 152
1.280e+005



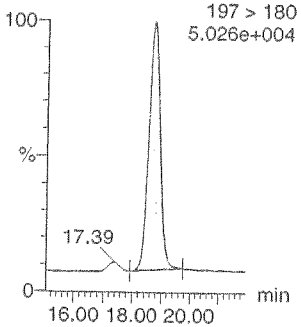
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.280e+005



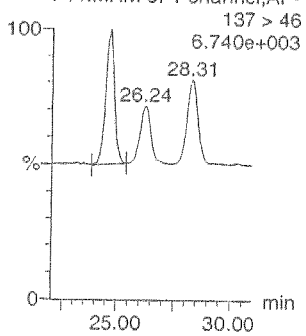
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.542e+004



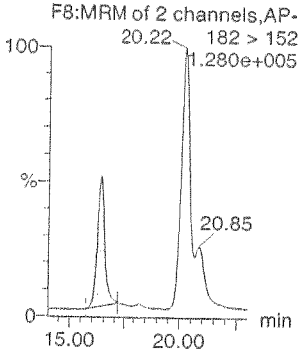
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.026e+004



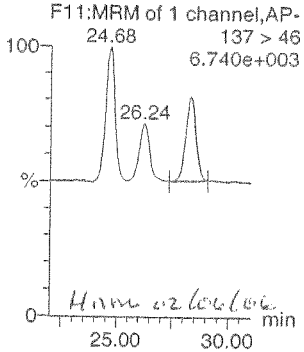
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.740e+003



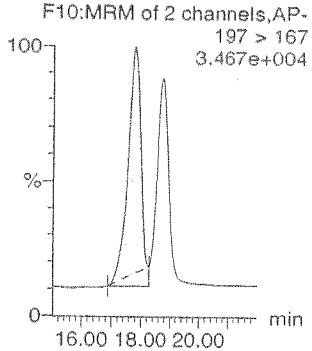
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.22 182 > 152
1.280e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.68 137 > 46
6.740e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.467e+004



720

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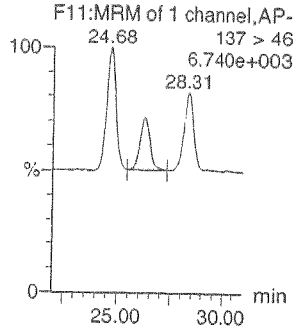
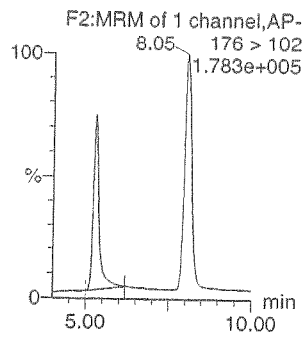
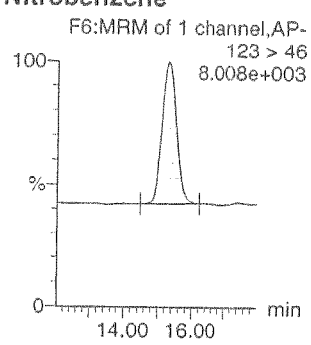
4-Nitrotoluene



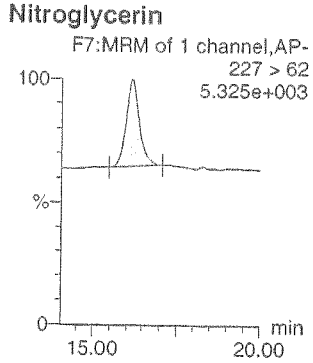
HMX



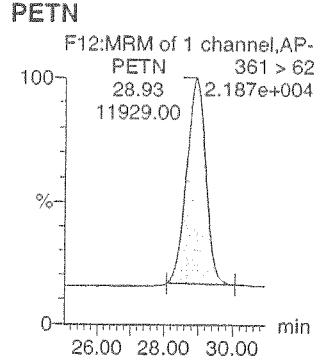
Nitrobenzene



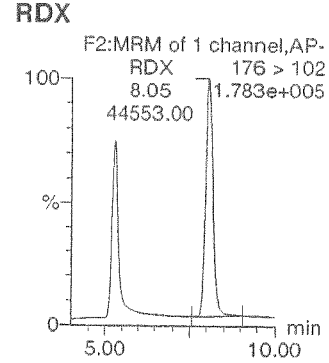
Nitroglycerin



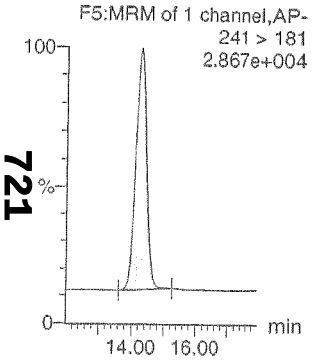
PETN



RDX



Tetryl



721

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-07CCV	HMX	176 > 102	5.28	27748.803	4342.664	27748.803	3194.906	bb			563.8933	94.0	-6.0	1479.7
WXX060202-07CCV	RDX	176 > 102	8.05	44552.996	4342.664	44552.996	5129.685	bb			613.0049	102.2	2.2	1984.7
WXX060202-07CCV	135-Trinitrobenzene	213 > 183	11.06	21122.674	4342.664	21122.674	2431.995	bb			546.1887	91.0	-9.0	2976.8
WXX060202-07CCV	13-Dinitrobenzene-d4	172 > 142	13.29	4342.664		4342.664	4342.664	bb			527.6738	105.5	5.5	576.2
WXX060202-07CCV	13-Dinitrobenzene	168 > 138	13.44	7343.657	4342.664	7343.657	845.524	bb			589.5788	98.3	-1.7	711.2
WXX060202-07CCV	Tetryl	241 > 181	14.25	9810.272	4342.664	9810.272	1129.522	bb			726.6619	121.1	21.1	1201.8
WXX060202-07CCV	Nitrobenzene	123 > 46	15.31	2273.563	4342.664	2273.563	261.771	bb			566.2880	94.4	-5.6	223.8
WXX060202-07CCV	Nitroglycerin	227 > 62	16.14	944.076	4342.664	944.076	108.698	bb			573.3640	95.6	-4.4	110.4
WXX060202-07CCV	4-Amino-26-dinitrotoluene	197 > 167	17.77	15944.152	39334.027	15944.152	202.676	MM	03-Feb-06	07:22:31	717.8258	119.6	19.6	1639.8
WXX060202-07CCV	2-Amino-46-dinitrotoluene	197 > 180	18.71	21889.682	39334.027	21889.682	278.254	bb			650.1719	108.4	8.4	1040.9
WXX060202-07CCV	246-Trinitrotoluene	227 > 210	17.39	49527.945	39334.027	49527.945	629.581	bb			676.7566	112.8	12.8	1034.1
WXX060202-07CCV	34-dinitrotoluene	182 > 152	16.36	23820.111	39334.027	23820.111	302.793	bb			327.4276	109.1	9.1	459.4
WXX060202-07CCV	26-dinitrotoluene	182 > 152	20.22	51574.520	39334.027	51574.520	655.597	bd			587.3921	97.9	-2.1	899.2
WXX060202-07CCV	24-dinitrotoluene	182 > 152	20.85	12634.117	39334.027	12634.117	160.600	MM	03-Feb-06	07:25:18	663.5471	110.6	10.6	203.2
WXX060202-07CCV	26-dinitrotoluene-d3	185 > 155	20.02	39334.027		39334.027	39334.027	bb			508.3013	101.7	1.7	2255.7
WXX060202-07CCV	2-Nitrotoluene	137 > 46.0	24.68	1613.407	39334.027	1613.407	20.509	bb			573.4032	95.6	-4.4	350.3
WXX060202-07CCV	4-Nitrotoluene	137 > 46	26.24	776.331	39334.027	776.331	9.868	bb			559.0678	93.2	-6.8	146.9
WXX060202-07CCV	3-Nitrotoluene	137 > 46.0	28.31	1130.423	39334.027	1130.423	14.370	bb			568.7502	94.8	-5.2	216.6
WXX060202-07CCV	PETN	361 > 62	28.93	11928.996	39334.027	11928.996	151.637	bb			575.7136	96.0	-4.0	1290.0

722

HMM 02/06/06

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	0152
Standard Number	WXX060202-07CCV
Data File	EXP0202020a

HMX		94.0
RDX		102.2
135-TNB		91.0
13-DNB		98.3
Tetryl		121.1
Nitrobenzene		94.4
Nitroglycerin		95.6
4A-26-DNT		119.6
2A-46-DNT		108.4
246-TNT		112.8
34-DNT(surr)		109.1
26-DNT		97.9
24-DNT		110.6
2-NT		95.6
4-NT		93.2
3-NT		94.8
PETN		96.0
Total		1734.6
Average		102.0

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0202022a

Analysis Date: 03-FEB-06 02:59

LCMSMS ID: 903

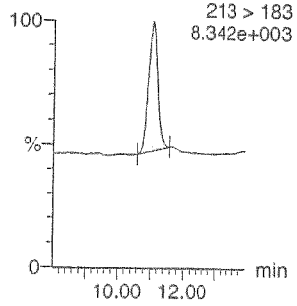
Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	39.593	99	
1,3-Dinitrobenzene-d4	500	479.182	96	
2,4,6-Trinitrotoluene	40	53.557	134	*
2,4-Dinitrotoluene	40	41.893	105	
2,6-Dinitrotoluene	40	40.35	101	
2,6-Dinitrotoluene-d3	500	513.734	103	
2-Amino-4,6-dinitrotoluene	40	39.162	98	
3,4-Dinitrotoluene	20	22.563	113	
4-Amino-2,6-dinitrotoluene	40	50.942	127	
HMX	40	50.15	125	
Nitrobenzene	40	39.769	99	
Nitroglycerin	80	114.311	143	*
PETN	40	54.975	137	*
RDX	40	42.563	106	
Tetryl	40	40.267	101	
m-Dinitrobenzene	40	37.432	94	
m-Nitrotoluene	40	39.946	100	
o-Nitrotoluene	40	40.653	102	
p-Nitrotoluene	40	39.226	98	

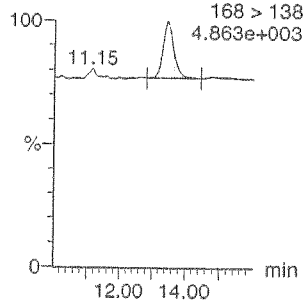
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202022a
Date: 03-Feb-2006
Time: 02:59:13
ID: WXX060202-08CRI
Vial: 1:1,C

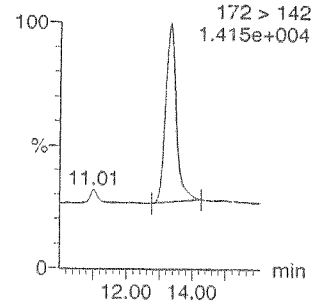
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
8.342e+003



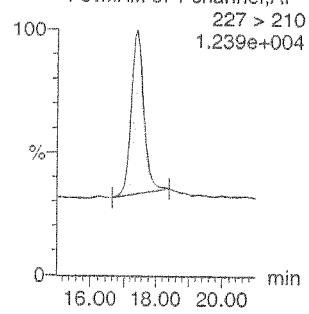
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.863e+003



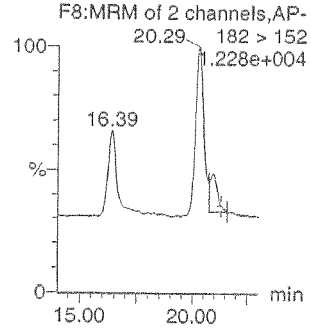
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.415e+004



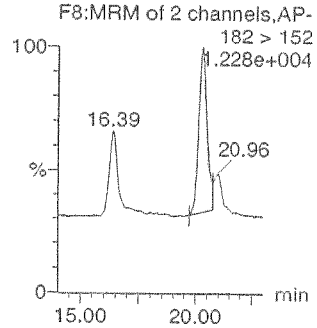
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.239e+004



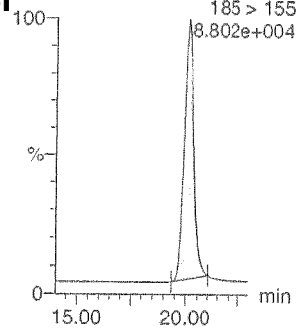
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.29 182 > 152
1.228e+004



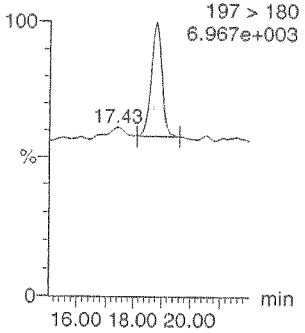
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.228e+004



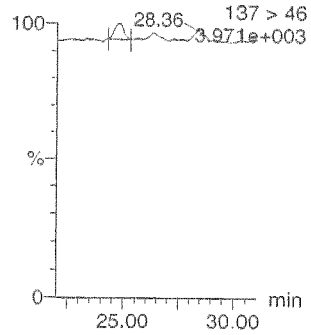
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.802e+004



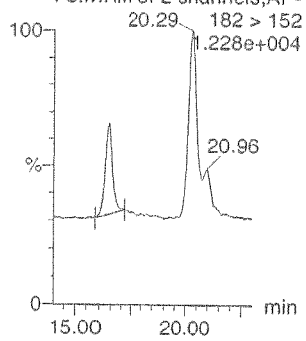
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
6.967e+003



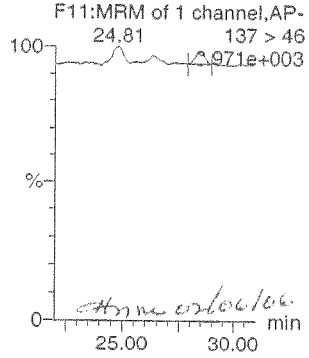
2-Nitrotoluene
F11:MRM of 1 channel,AP-
28.36 137 > 46
3.971e+003



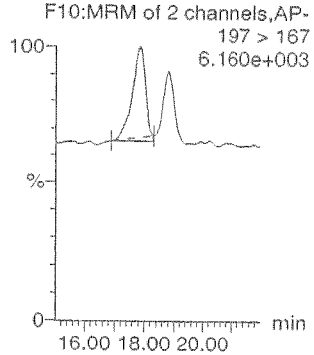
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.29 182 > 152
1.228e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.81 137 > 46
3.971e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
6.160e+003



725

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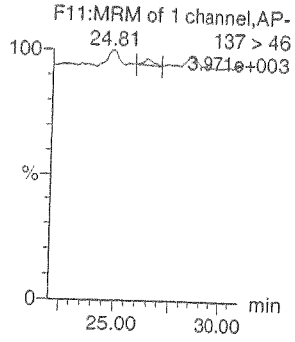
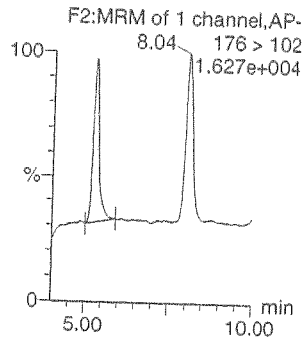
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

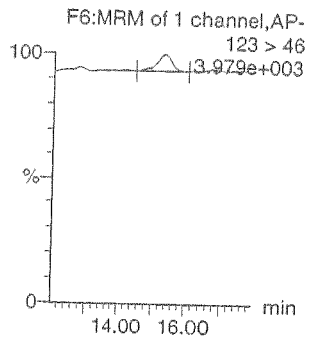
4-Nitrotoluene



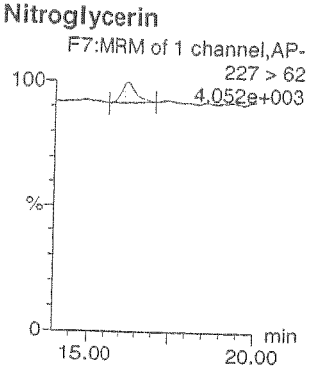
HMX



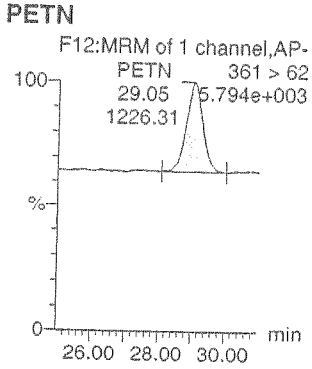
Nitrobenzene



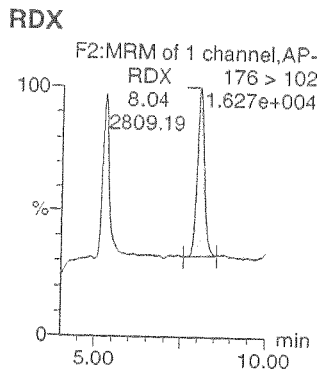
Nitroglycerin



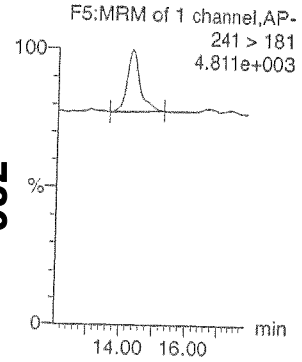
PETN



RDX



Tetryl



726

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA1.qld, Time: Fri Feb 03 07:25:36 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-08CRI	HMX	176 > 102	5.28	2241.034	3943.582	2241.034	284.137	bb			50.1495	125.4	25.4	236.1
WXX060202-08CRI	RDX	176 > 102	8.04	2809.188	3943.582	2809.188	356.172	bb			42.5631	106.4	6.4	242.4
WXX060202-08CRI	135-Trinitrobenzene	213 > 183	11.04	1390.478	3943.582	1390.478	176.296	bb			39.5934	99.0	-1.0	588.6
WXX060202-08CRI	13-Dinitrobenzene-d4	172 > 142	13.31	3943.582		3943.582	3943.582	bb			479.1816	95.8	-4.2	588.6
WXX060202-08CRI	13-Dinitrobenzene	168 > 138	13.46	423.393	3943.582	423.393	53.681	bb			37.4316	93.6	-6.4	47.6
WXX060202-08CRI	Tetryl	241 > 181	14.28	493.670	3943.582	493.670	62.592	bb			40.2674	100.7	0.7	36.8
WXX060202-08CRI	Nitrobenzene	123 > 46	15.31	144.995	3943.582	144.995	18.384	bb			39.7694	99.4	-0.6	22.3
WXX060202-08CRI	Nitroglycerin	227 > 62	16.18	170.922	3943.582	170.922	21.671	bb			114.3107	142.9	42.9	24.0
WXX060202-08CRI	4-Amino-26-dinitrotoluene	197 > 167	17.84	1143.602	39754.426	1143.602	14.383	MM	03-Feb-06	07:22:38	50.9419	127.4	27.4	96.4
WXX060202-08CRI	2-Amino-46-dinitrotoluene	197 > 180	18.78	1332.595	39754.426	1332.595	16.760	bb			39.1624	97.9	-2.1	46.1
WXX060202-08CRI	246-Trinitrotoluene	227 > 210	17.42	3961.437	39754.426	3961.437	49.824	bb			53.5572	133.9	33.9	87.2
WXX060202-08CRI	34-dinitrotoluene	182 > 152	16.39	1658.957	39754.426	1658.957	20.865	bb			22.5626	112.8	12.8	35.8
WXX060202-08CRI	26-dinitrotoluene	182 > 152	20.29	3580.705	39754.426	3580.705	45.035	bd			40.3501	100.9	0.9	71.1
WXX060202-08CRI	24-dinitrotoluene	182 > 152	20.96	806.173	39754.426	806.173	10.139	MM	03-Feb-06	07:25:08	41.8927	104.7	4.7	16.8
WXX060202-08CRI	26-dinitrotoluene-d3	185 > 155	20.09	39754.426		39754.426	39754.426	bb			513.7340	102.7	2.7	1288.5
WXX060202-08CRI	2-Nitrotoluene	137 > 46.0	24.81	115.610	39754.426	115.610	1.454	bb			40.6532	101.6	1.6	48.8
WXX060202-08CRI	4-Nitrotoluene	137 > 46	26.31	55.052	39754.426	55.052	0.692	bb			39.2260	98.1	-1.9	22.6
WXX060202-08CRI	3-Nitrotoluene	137 > 46.0	28.36	80.243	39754.426	80.243	1.009	bb			39.9458	99.9	-0.1	30.6
WXX060202-08CRI	PETN	361 > 62	29.05	1226.314	39754.426	1226.314	15.424	bb			54.9748	137.4	37.4	246.5

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HMX 2/6/06

MM 2/3/06

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	0259
Standard Number	WXX060202-08CRI
Data File	EXP0202022a

HMX	125.4
RDX	106.4
135-TNB	99.0
13-DNB	93.6
Tetryl	100.7
Nitrobenzene	99.4
Nitroglycerin	142.9
4A-26-DNT	127.4
2A-46-DNT	97.9
246-TNT	133.9
34-DNT(surr)	112.8
26-DNT	100.9
24-DNT	104.7
2-NT	101.6
4-NT	98.1
3-NT	99.9
PETN	137.4
Total	1882.0
Average	110.7

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7A

Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXP0202033a **Analysis Date:** 03-FEB-06 09:07

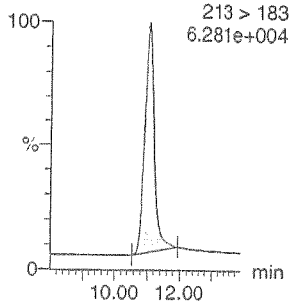
LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	625.995	104	
1,3-Dinitrobenzene-d4	500	425.656	85	
2,4,6-Trinitrotoluene	600	675.907	113	
2,4-Dinitrotoluene	600	574.124	96	
2,6-Dinitrotoluene	600	593.207	99	
2,6-Dinitrotoluene-d3	500	422.704	85	
2-Amino-4,6-dinitrotoluene	600	641.183	107	
3,4-Dinitrotoluene	300	297.626	99	
4-Amino-2,6-dinitrotoluene	600	674.1	112	
HMX	600	609.971	102	
Nitrobenzene	600	582.533	97	
Nitroglycerin	600	584.67	97	
PETN	600	686.424	114	
RDX	600	568.051	95	
Tetryl	600	697.95	116	
m-Dinitrobenzene	600	578.11	96	
m-Nitrotoluene	600	674.875	112	
o-Nitrotoluene	600	628.955	105	
p-Nitrotoluene	600	628.062	105	

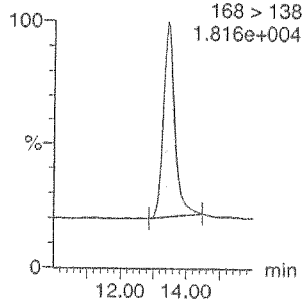
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202033a
Date: 03-Feb-2006
Time: 09:07:44
ID: WXX060202-07CCV
Vial: 1:1,B

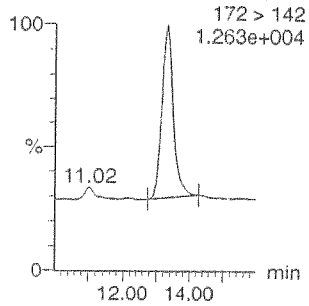
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.281e+004



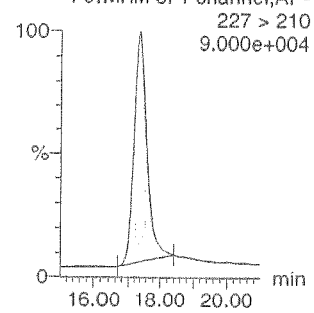
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.816e+004



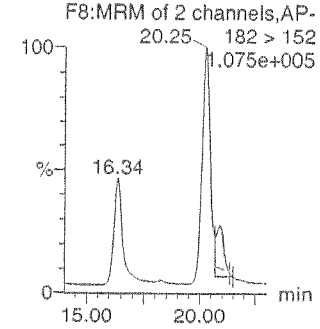
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.263e+004



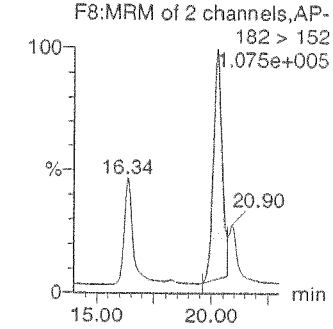
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
9.000e+004



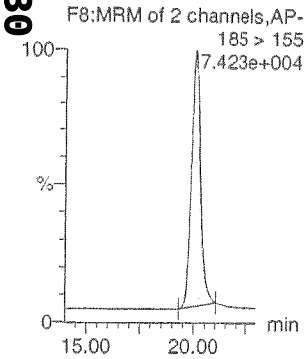
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25
182 > 152
1.075e+005



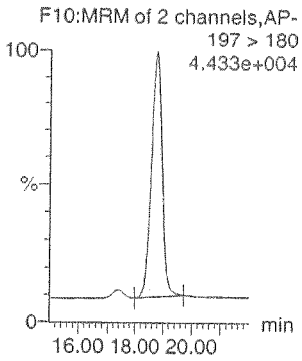
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.075e+005



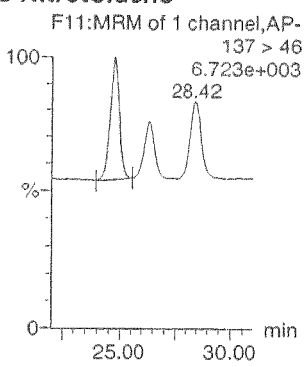
5-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.423e+004



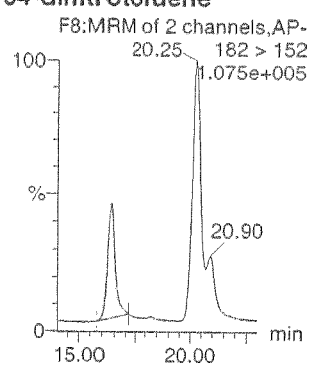
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.433e+004



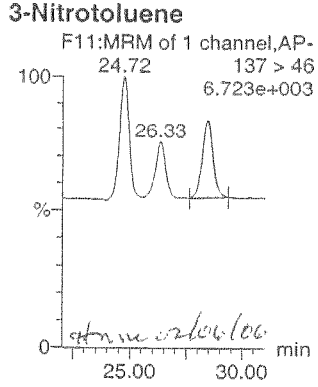
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.723e+003



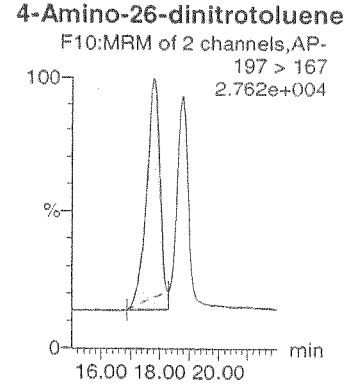
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25
182 > 152
1.075e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.72
137 > 46
6.723e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
2.762e+004



730

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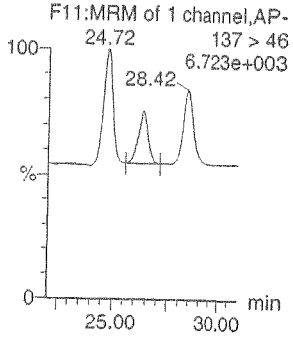
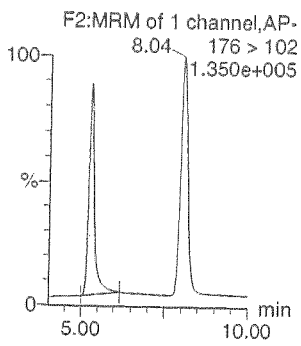
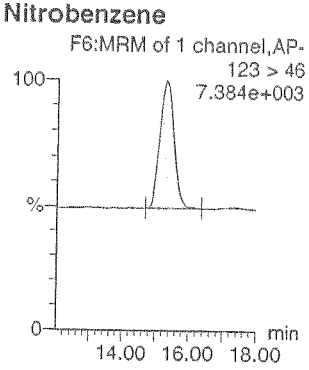
4-Nitrotoluene



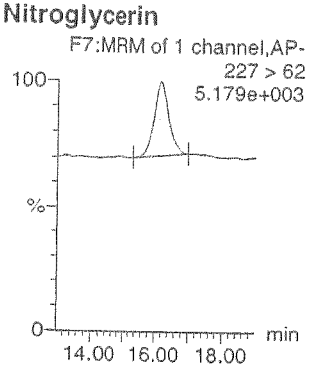
HMX



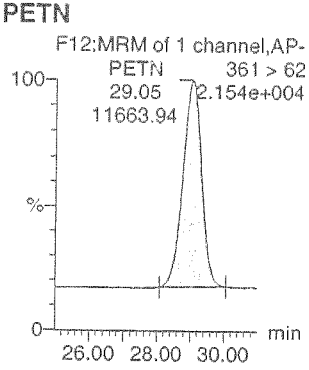
Nitrobenzene



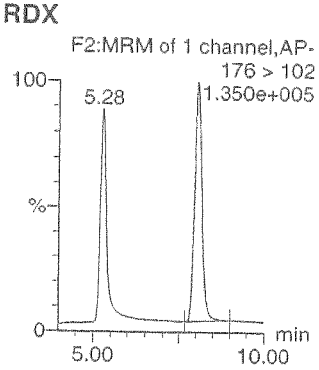
Nitroglycerin



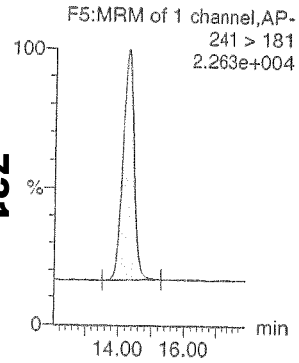
PETN



RDX



Tetryl



731

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Dataset: Untitled, Time: Fri Feb 03 11:05:48 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-07CCV	HMX	176 > 102	5.28	24213.025	3503.072	24213.025	3455.970	bb			609.9706	101.7	1.7	2758.6
WXX060202-07CCV	RDX	176 > 102	8.04	33303.730	3503.072	33303.730	4753.503	bb			568.0506	94.7	-5.3	3112.8
WXX060202-07CCV	135-Trinitrobenzene	213 > 183	11.04	19528.529	3503.072	19528.529	2787.343	bb			625.9945	104.3	4.3	1574.5
WXX060202-07CCV	13-Dinitrobenzene-d4	172 > 142	13.29	3503.072		3503.072	3503.072	bb			425.6556	85.1	-14.9	314.7
WXX060202-07CCV	13-Dinitrobenzene	168 > 138	13.45	5808.634	3503.072	5808.634	829.077	bb			578.1102	96.4	-3.6	815.4
WXX060202-07CCV	Tetryl	241 > 181	14.23	7600.918	3503.072	7600.918	1084.893	bb			697.9504	116.3	16.3	862.2
WXX060202-07CCV	Nitrobenzene	123 > 46	15.29	1886.613	3503.072	1886.613	269.280	bb			582.5328	97.1	-2.9	261.5
WXX060202-07CCV	Nitroglycerin	227 > 62	16.16	776.569	3503.072	776.569	110.841	bb			584.6698	97.4	-2.6	127.4
WXX060202-07CCV	4-Amino-26-dinitrotoluene	197 > 167	17.79	12451.527	32710.264	12451.527	190.331	MM	03-Feb-06	11:02:47	674.1005	112.4	12.4	468.9
WXX060202-07CCV	2-Amino-46-dinitrotoluene	197 > 180	18.75	17951.836	32710.264	17951.836	274.407	bb			641.1830	106.9	6.9	627.6
WXX060202-07CCV	246-Trinitrotoluene	227 > 210	17.37	41135.859	32710.264	41135.859	628.791	bb			675.9073	112.7	12.7	1512.7
WXX060202-07CCV	34-dinitrotoluene	182 > 152	16.34	18005.896	32710.264	18005.896	275.233	bb			297.6258	99.2	-0.8	46.0
WXX060202-07CCV	26-dinitrotoluene	182 > 152	20.25	43314.035	32710.264	43314.035	662.086	bd			593.2065	98.9	-1.1	103.4
WXX060202-07CCV	24-dinitrotoluene	182 > 152	20.90	9090.645	32710.264	9090.645	138.957	MM	03-Feb-06	11:04:56	574.1243	95.7	-4.3	22.8
WXX060202-07CCV	26-dinitrotoluene-d3	185 > 155	20.03	32710.264		32710.264	32710.264	bb			422.7045	84.5	-15.5	1420.5
WXX060202-07CCV	2-Nitrotoluene	137 > 46.0	24.72	1471.700	32710.264	1471.700	22.496	bb			628.9553	104.8	4.8	219.6
WXX060202-07CCV	4-Nitrotoluene	137 > 46	26.33	725.271	32710.264	725.271	11.086	bb			628.0616	104.7	4.7	98.2
WXX060202-07CCV	3-Nitrotoluene	137 > 46.0	28.42	1115.471	32710.264	1115.471	17.051	bb			674.8749	112.5	12.5	137.6
WXX060202-07CCV	PETN	361 > 62	29.05	11663.940	32710.264	11663.940	178.292	bb			686.4242	114.4	14.4	4082.5

732

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	0907
Standard Number	WXX060202-07CCV
Data File	EXP0202033a

HMX		101.7
RDX		94.7
135-TNB		104.3
13-DNB		96.4
Tetryl		116.3
Nitrobenzene		97.1
Nitroglycerin		97.4
4A-26-DNT		112.4
2A-46-DNT		106.9
246-TNT		112.7
34-DNT(surr)		99.2
26-DNT		98.9
24-DNT		95.7
2-NT		104.8
4-NT		104.7
3-NT		112.5
PETN		114.4
Total		1770.1
Average		104.1

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0202035a

Analysis Date: 03-FEB-06 10:14

LCMSMS ID: 903

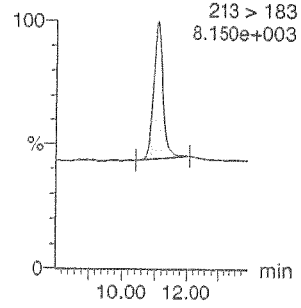
Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	48.475	121	
1,3-Dinitrobenzene-d4	500	433.396	87	
2,4,6-Trinitrotoluene	40	42.545	106	
2,4-Dinitrotoluene	40	36.353	91	
2,6-Dinitrotoluene	40	38.886	97	
2,6-Dinitrotoluene-d3	500	498.945	100	
2-Amino-4,6-dinitrotoluene	40	39.62	99	
3,4-Dinitrotoluene	20	17.962	90	
4-Amino-2,6-dinitrotoluene	40	37.939	95	
HMX	40	50.326	126	
Nitrobenzene	40	46.136	115	
Nitroglycerin	80	93.081	116	
PETN	40	55.57	139	*
RDX	40	45.471	114	
Tetryl	40	40.976	102	
m-Dinitrobenzene	40	39.32	98	
m-Nitrotoluene	40	45.635	114	
o-Nitrotoluene	40	41.073	103	
p-Nitrotoluene	40	44.608	112	

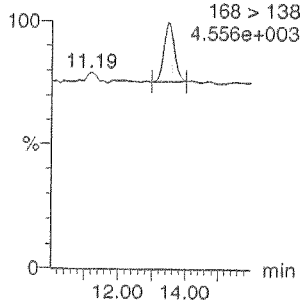
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202035a
Date: 03-Feb-2006
Time: 10:14:43
ID: WXX060202-08CRI
Vial: 1:1,C

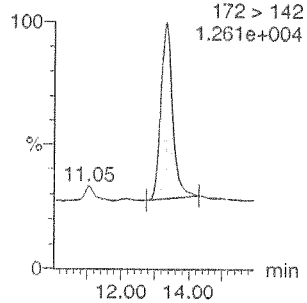
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
8.150e+003



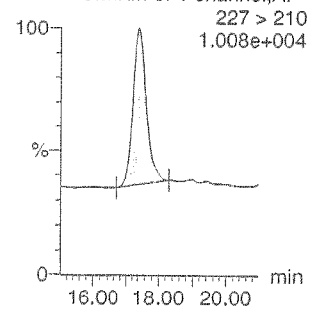
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.556e+003



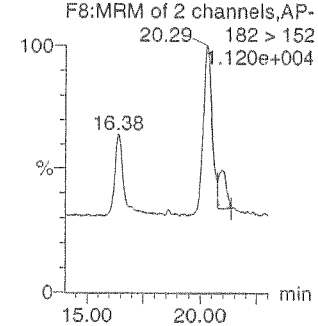
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.261e+004



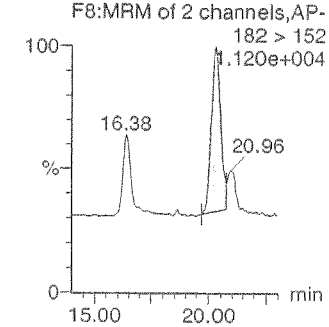
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.008e+004



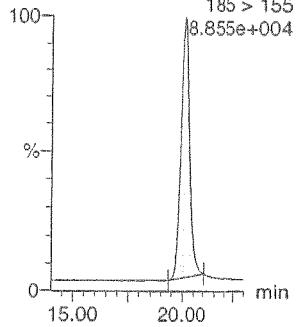
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.29 182 > 152
1.120e+004



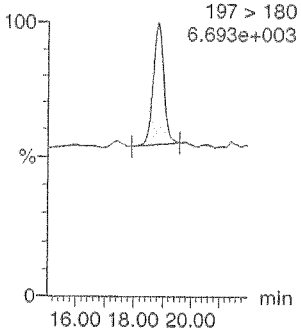
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.120e+004



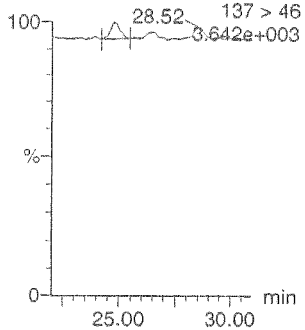
6-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.855e+004



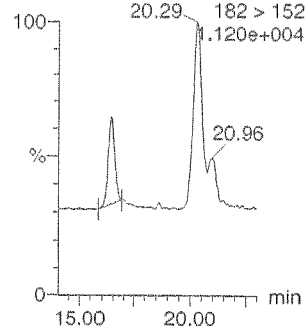
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
6.693e+003



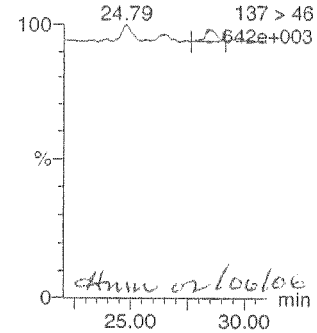
2-Nitrotoluene
F11:MRM of 1 channel,AP-
28.52 137 > 46
3.642e+003



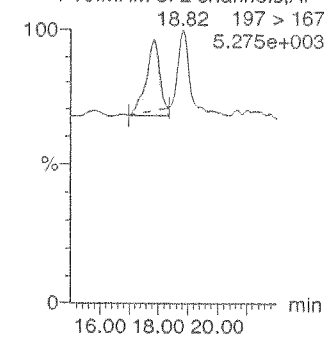
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.29 182 > 152
1.120e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.79 137 > 46
3.642e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
18.82 197 > 167
5.275e+003



735

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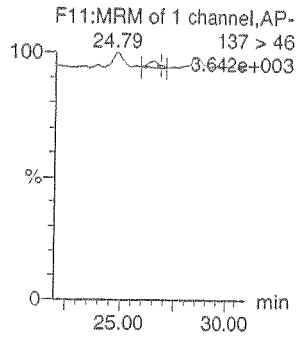
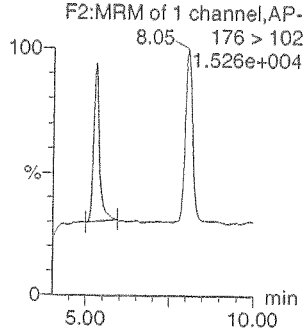
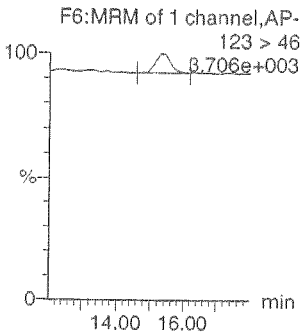
4-Nitrotoluene



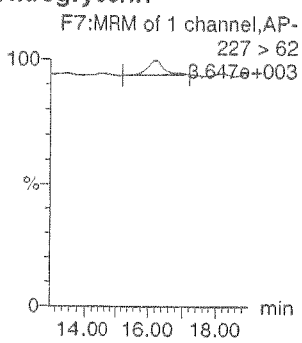
HMX



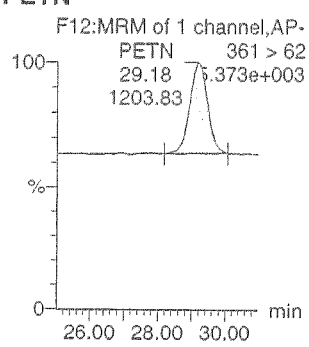
Nitrobenzene



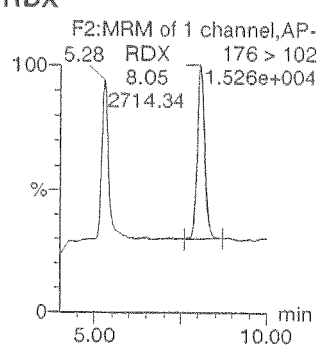
Nitroglycerin



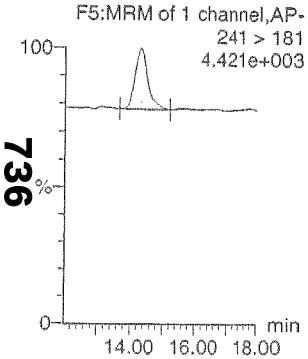
PETN



RDX



Tetryl



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Dataset: Untitled, Time: Fri Feb 03 11:05:48 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-08CRI	HMX	176 > 102	5.28	2034.042	3566.770	2034.042	285.138	bb			50.3262	125.8	25.8	151.3
WXX060202-08CRI	RDX	176 > 102	8.05	2714.335	3566.770	2714.335	380.503	bb			45.4707	113.7	13.7	165.3
WXX060202-08CRI	135-Trinitrobenzene	213 > 183	11.06	1539.719	3566.770	1539.719	215.842	bb			48.4748	121.2	21.2	228.5
WXX060202-08CRI	13-Dinitrobenzene-d4	172 > 142	13.32	3566.770		3566.770	3566.770	bb			433.3955	86.7	-13.3	342.6
WXX060202-08CRI	13-Dinitrobenzene	168 > 138	13.47	402.256	3566.770	402.256	56.389	bb			39.3200	98.3	-1.7	48.7
WXX060202-08CRI	Tetryl	241 > 181	14.30	454.356	3566.770	454.356	63.693	bb			40.9759	102.4	2.4	76.8
WXX060202-08CRI	Nitrobenzene	123 > 46	15.34	152.133	3566.770	152.133	21.326	bb			46.1355	115.3	15.3	21.0
WXX060202-08CRI	Nitroglycerin	227 > 62	16.20	125.880	3566.770	125.880	17.646	bb			93.0811	116.4	16.4	9.4
WXX060202-08CRI	4-Amino-26-dinitrotoluene	197 > 167	17.86	827.186	38610.043	827.186	10.712	MM	03-Feb-06	11:02:54	37.9393	94.8	-5.2	31.0
WXX060202-08CRI	2-Amino-46-dinitrotoluene	197 > 180	18.82	1309.346	38610.043	1309.346	16.956	bb			39.6197	99.0	-1.0	88.8
WXX060202-08CRI	246-Trinitrotoluene	227 > 210	17.41	3056.289	38610.043	3056.289	39.579	bb			42.5446	106.4	6.4	115.9
WXX060202-08CRI	34-dinitrotoluene	182 > 152	16.38	1282.675	38610.043	1282.675	16.611	bb			17.9621	89.8	-10.2	53.5
WXX060202-08CRI	26-dinitrotoluene	182 > 152	20.29	3351.476	38610.043	3351.476	43.402	bd			38.8863	97.2	-2.8	114.9
WXX060202-08CRI	24-dinitrotoluene	182 > 152	20.96	679.430	38610.043	679.430	8.799	MM	03-Feb-06	11:05:03	36.3530	90.9	-9.1	26.5
WXX060202-08CRI	26-dinitrotoluene-d3	185 > 155	20.07	38610.043		38610.043	38610.043	bb			498.9455	99.8	-0.2	135.4
WXX060202-08CRI	2-Nitrotoluene	137 > 46.0	24.79	113.441	38610.043	113.441	1.469	bb			41.0728	102.7	2.7	22.3
WXX060202-08CRI	4-Nitrotoluene	137 > 46	26.45	60.803	38610.043	60.803	0.787	MM	03-Feb-06	11:05:40	44.6078	111.5	11.5	9.7
WXX060202-08CRI	3-Nitrotoluene	137 > 46.0	28.52	89.033	38610.043	89.033	1.153	bb			45.6352	114.1	14.1	15.3
WXX060202-08CRI	PETN	361 > 62	29.18	1203.831	38610.043	1203.831	15.590	bb			55.5704	138.9	38.9	52.2

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	1014
Standard Number	WXX060202-08CRI
Data File	EXP0202035a

HMX	125.8
RDX	113.7
135-TNB	121.2
13-DNB	98.3
Tetryl	102.4
Nitrobenzene	115.3
Nitroglycerin	116.4
4A-26-DNT	94.8
2A-46-DNT	99.0
246-TNT	106.4
34-DNT(surr)	89.8
26-DNT	97.2
24-DNT	90.9
2-NT	102.7
4-NT	111.5
3-NT	114.1
PETN	138.9
Total	1838.4
Average	108.1

same as last lot

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0202042a

Analysis Date: 03-FEB-06 14:09

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

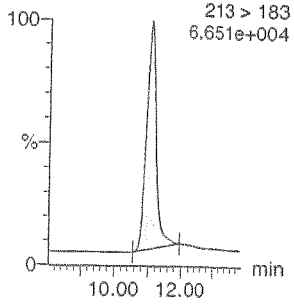
Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	653.853	109	
1,3-Dinitrobenzene-d4	500	431.313	86	
2,4,6-Trinitrotoluene	600	576.957	96	
2,4-Dinitrotoluene	600	532.443	89	
2,6-Dinitrotoluene	600	593.628	99	
2,6-Dinitrotoluene-d3	500	471.66	94	
2-Amino-4,6-dinitrotoluene	600	680.502	113	
3,4-Dinitrotoluene	300	273.223	91	
4-Amino-2,6-dinitrotoluene	600	554.372	92	
HMX	600	743.88	124	*
Nitrobenzene	600	632.258	105	
Nitroglycerin	600	603.852	101	
PETN	600	650.546	108	
RDX	600	733.584	122	*
Tetryl	600	741.113	124	*
m-Dinitrobenzene	600	605.124	101	
m-Nitrotoluene	600	673.428	112	
o-Nitrotoluene	600	596.469	99	
p-Nitrotoluene	600	629.642	105	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

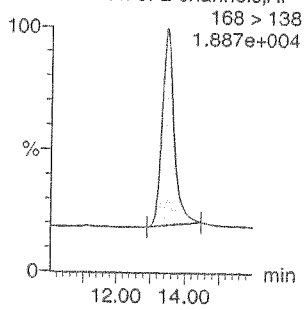
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202042a
Date: 03-Feb-2006
Time: 14:09:16
ID: WXX060202-07CCV
Vial: 1:1,B

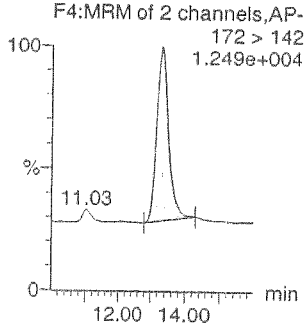
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.651e+004



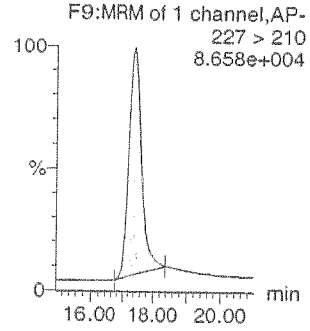
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.887e+004



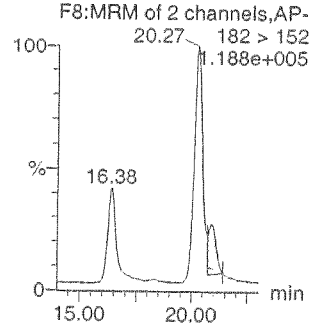
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.249e+004



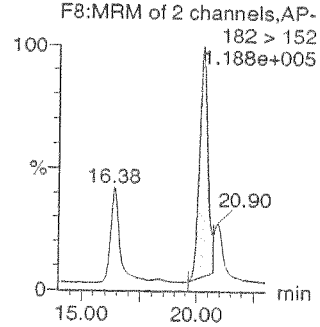
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
8.658e+004



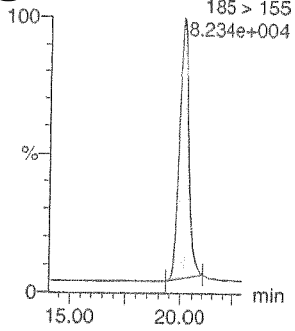
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.27 182 > 152
1.188e+005



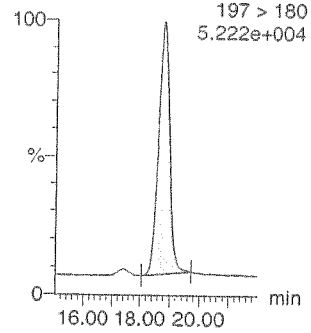
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.188e+005



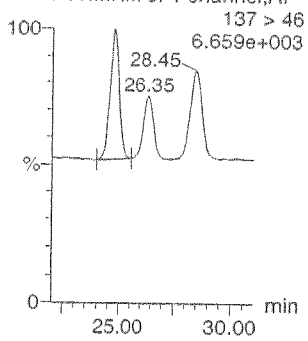
46-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.234e+004



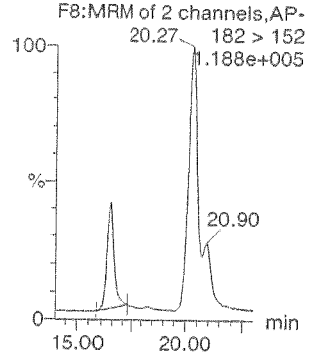
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.222e+004



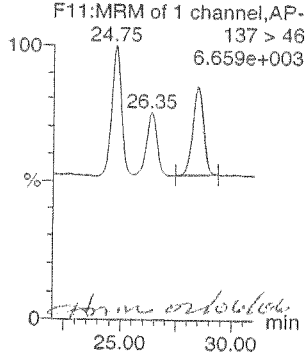
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.659e+003



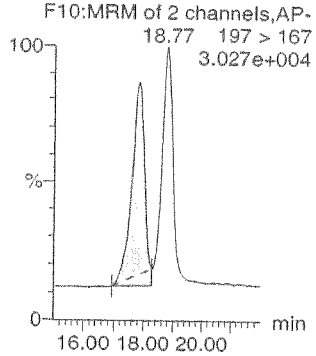
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.27 182 > 152
1.188e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.75 137 > 46
6.659e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
18.77 197 > 167
3.027e+004



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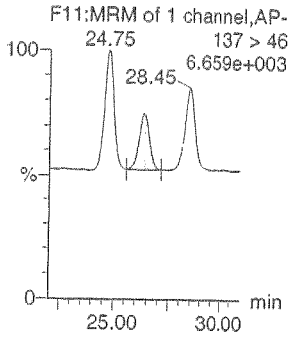
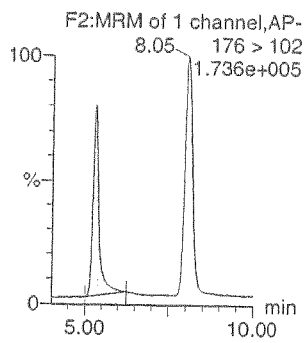
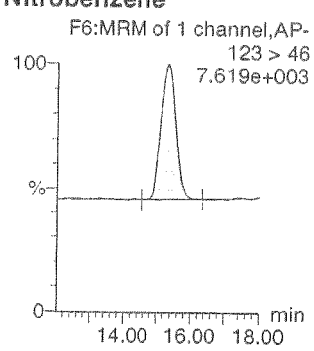
4-Nitrotoluene



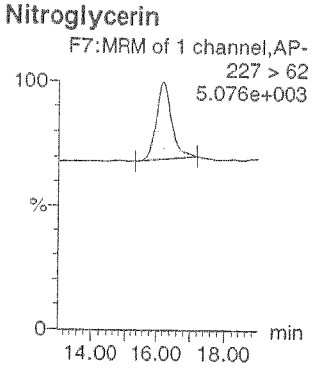
HMX



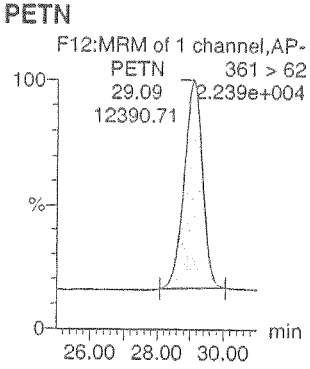
Nitrobenzene



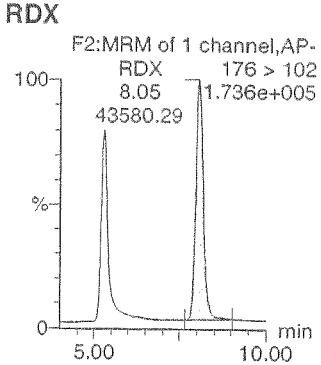
Nitroglycerin



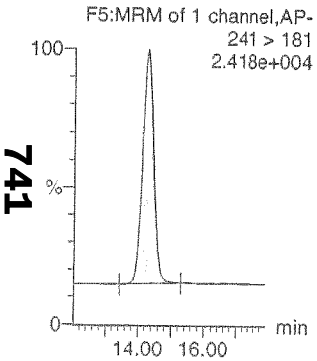
PETN



RDX



Tetryl



741

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-07CCV	HMX	176 > 102	5.28	29921.070	3549.631	29921.070	4214.673	bb			743.8799	124.0	24.0	1155.6
WXX060202-07CCV	RDX	176 > 102	8.05	43580.289	3549.631	43580.289	6138.707	bb			733.5845	122.3	22.3	1445.6
WXX060202-07CCV	135-Trinitrobenzene	213 > 183	11.06	20668.697	3549.631	20668.697	2911.387	bb			653.8528	109.0	9.0	3260.3
WXX060202-07CCV	13-Dinitrobenzene-d4	172 > 142	13.29	3549.631		3549.631	3549.631	bb			431.3130	86.3	-13.7	287.7
WXX060202-07CCV	13-Dinitrobenzene	168 > 138	13.45	6160.872	3549.631	6160.872	867.819	bb			605.1244	100.9	0.9	1136.8
WXX060202-07CCV	Tetryl	241 > 181	14.27	8178.249	3549.631	8178.249	1151.986	bb			741.1134	123.5	23.5	521.2
WXX060202-07CCV	Nitrobenzene	123 > 46	15.34	2074.871	3549.631	2074.871	292.266	bb			632.2582	105.4	5.4	239.0
WXX060202-07CCV	Nitroglycerin	227 > 62	16.16	812.707	3549.631	812.707	114.478	bb			603.8519	100.6	0.6	107.6
WXX060202-07CCV	4-Amino-26-dinitrotoluene	197 > 167	17.82	11425.938	36498.625	11425.938	156.526	MM	04-Feb-06	10:14:50	554.3722	92.4	-7.6	266.7
WXX060202-07CCV	2-Amino-46-dinitrotoluene	197 > 180	18.77	21259.301	36498.625	21259.301	291.234	bb			680.5023	113.4	13.4	779.3
WXX060202-07CCV	246-Trinitrotoluene	227 > 210	17.41	39180.457	36498.625	39180.457	536.739	bb			576.9572	96.2	-3.8	1155.1
WXX060202-07CCV	34-dinitrotoluene	182 > 152	16.38	18443.979	36498.625	18443.979	252.667	bb			273.2235	91.1	-8.9	411.5
WXX060202-07CCV	26-dinitrotoluene	182 > 152	20.27	48364.789	36498.625	48364.789	662.556	bd			593.6276	98.9	-1.1	1017.0
WXX060202-07CCV	24-dinitrotoluene	182 > 152	20.90	9407.068	36498.625	9407.068	128.869	MM	04-Feb-06	10:21:33	532.4430	88.7	-11.3	221.4
WXX060202-07CCV	26-dinitrotoluene-d3	185 > 155	20.06	36498.625		36498.625	36498.625	bb			471.6603	94.3	-5.7	2813.9
WXX060202-07CCV	2-Nitrotoluene	137 > 46.0	24.75	1557.328	36498.625	1557.328	21.334	bb			596.4694	99.4	-0.6	81.9
WXX060202-07CCV	4-Nitrotoluene	137 > 46	26.35	811.305	36498.625	811.305	11.114	bb			629.6419	104.9	4.9	38.5
WXX060202-07CCV	3-Nitrotoluene	137 > 46.0	28.45	1241.991	36498.625	1241.991	17.014	bb			673.4277	112.2	12.2	55.3
WXX060202-07CCV	PETN	361 > 62	29.09	12390.712	36498.625	12390.712	169.742	bb			650.5457	108.4	8.4	4585.2

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	1409
Standard Number	WXX060202-07CCV
Data File	EXP0202042a

HMX	124.0
RDX	122.3
135-TNB	109.0
13-DNB	100.9
Tetryl	123.5
Nitrobenzene	105.4
Nitroglycerin	100.6
4A-26-DNT	92.4
2A-46-DNT	113.4
246-TNT	96.2
34-DNT(surr)	91.1
26-DNT	98.9
24-DNT	88.7
2-NT	99.4
4-NT	104.9
3-NT	112.2
PETN	108.4
Total	1791.3
Average	105.4

RDT 2/4/06

Same as last

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXP0202044a **Analysis Date:** 03-FEB-06 15:16

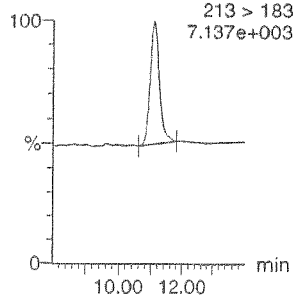
LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	32.769	82	
1,3-Dinitrobenzene-d4	500	508.402	102	
2,4,6-Trinitrotoluene	40	41.194	103	
2,4-Dinitrotoluene	40	38.073	95	
2,6-Dinitrotoluene	40	40.809	102	
2,6-Dinitrotoluene-d3	500	472.224	94	
2-Amino-4,6-dinitrotoluene	40	36.683	92	
3,4-Dinitrotoluene	20	23.989	120	
4-Amino-2,6-dinitrotoluene	40	38.057	95	
HMX	40	46.406	116	
Nitrobenzene	40	40.296	101	
Nitroglycerin	80	82.619	103	
PETN	40	56.847	142	*
RDX	40	37.058	93	
Tetryl	40	37.991	95	
m-Dinitrobenzene	40	39.526	99	
m-Nitrotoluene	40	49.234	123	
o-Nitrotoluene	40	46.26	116	
p-Nitrotoluene	40	53.762	134	*

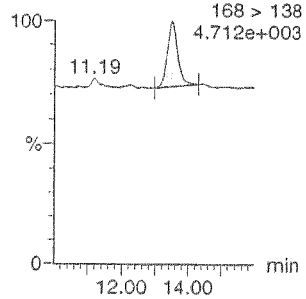
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202044a
Date: 03-Feb-2006
Time: 15:16:15
ID: WXX060202-08CRI
Vial: 1:1,C

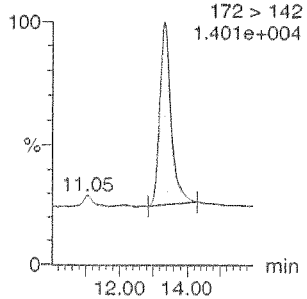
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
7.137e+003



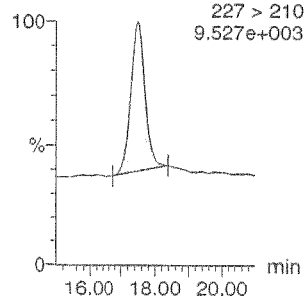
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.712e+003



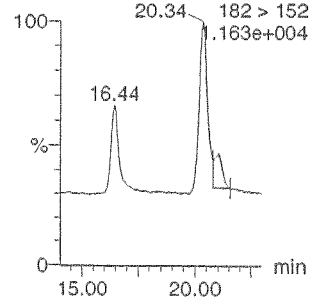
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.401e+004



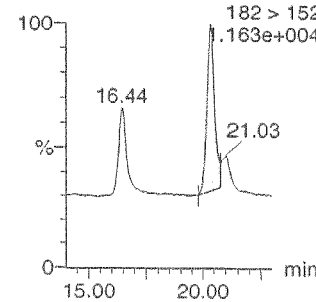
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
9.527e+003



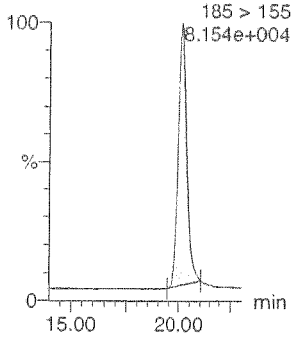
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.34 182 > 152
.163e+004



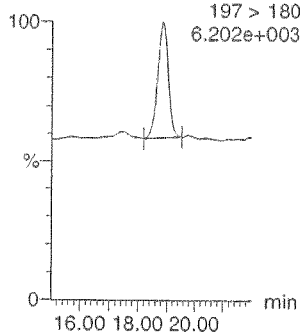
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
.163e+004



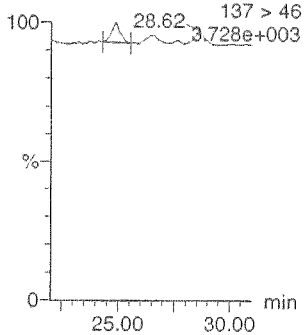
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.154e+004



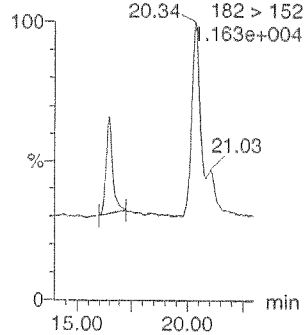
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
6.202e+003



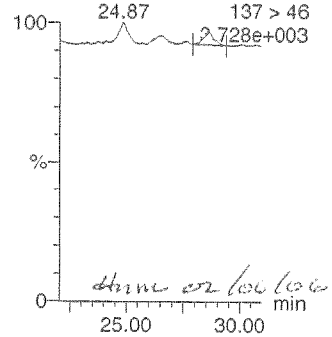
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.728e+003



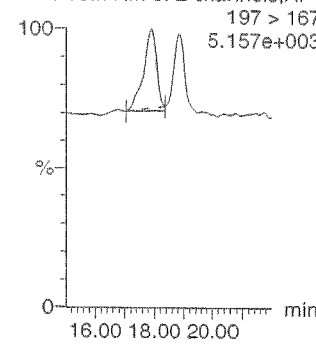
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.34 182 > 152
.163e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.87 137 > 46
.728e+003



4-Amino-26-dinitrotoluen
F10:MRM of 2 channels,AP-
197 > 167
5.157e+003



745

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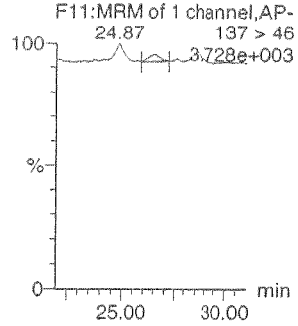
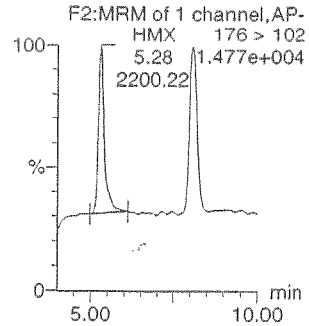
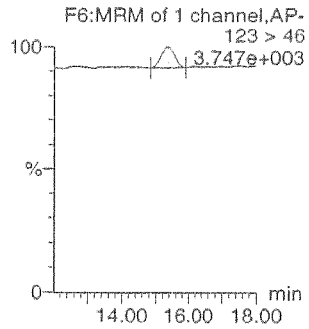
4-Nitrotoluene



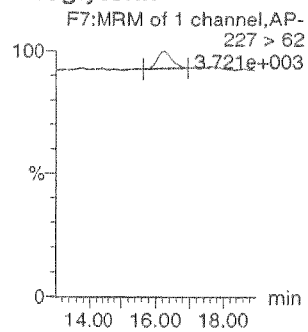
HMX



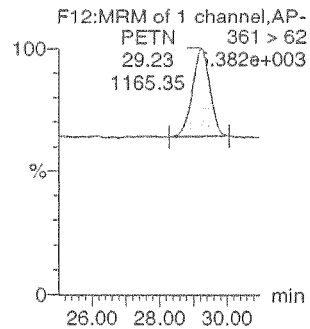
Nitrobenzene



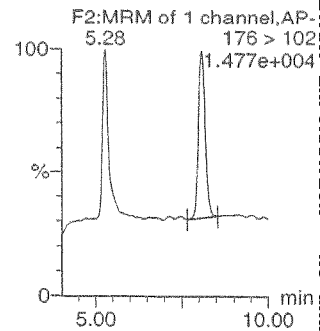
Nitroglycerin



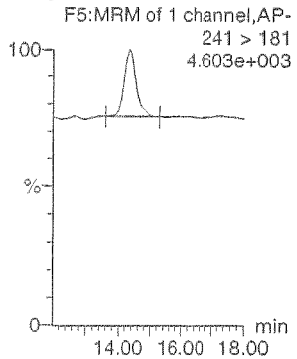
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-08CRI	HMX	176 > 102	5.28	2200.218	4184.057	2200.218	262.929	bb			46.4063	116.0	16.0	168.7
WXX060202-08CRI	RDX	176 > 102	8.08	2594.992	4184.057	2594.992	310.105	bb			37.0580	92.6	-7.4	167.1
WXX060202-08CRI	135-Trinitrobenzene	213 > 183	11.08	1220.994	4184.057	1220.994	145.910	bb			32.7692	81.9	-18.1	248.9
WXX060202-08CRI	13-Dinitrobenzene-d4	172 > 142	13.35	4184.057		4184.057	4184.057	bb			508.4016	101.7	1.7	313.3
WXX060202-08CRI	13-Dinitrobenzene	168 > 138	13.50	474.344	4184.057	474.344	56.685	bb			39.5259	98.8	-1.2	53.7
WXX060202-08CRI	Tetryl	241 > 181	14.33	494.162	4184.057	494.162	59.053	bb			37.9909	95.0	-5.0	49.3
WXX060202-08CRI	Nitrobenzene	123 > 46	15.34	155.872	4184.057	155.872	18.627	bb			40.2956	100.7	0.7	36.1
WXX060202-08CRI	Nitroglycerin	227 > 62	16.23	131.069	4184.057	131.069	15.663	bb			82.6194	103.3	3.3	11.7
WXX060202-08CRI	4-Amino-26-dinitrotoluene	197 > 167	17.89	785.310	36542.270	785.310	10.745	MM	04-Feb-06	10:14:59	38.0567	95.1	-4.9	56.0
WXX060202-08CRI	2-Amino-46-dinitrotoluene	197 > 180	18.85	1147.372	36542.270	1147.372	15.699	bb			36.6831	91.7	-8.3	45.0
WXX060202-08CRI	246-Trinitrotoluene	227 > 210	17.47	2800.776	36542.270	2800.776	38.322	bb			41.1940	103.0	3.0	183.1
WXX060202-08CRI	34-dinitrotoluene	182 > 152	16.44	1621.331	36542.270	1621.331	22.184	bb			23.9892	119.9	19.9	56.4
WXX060202-08CRI	26-dinitrotoluene	182 > 152	20.34	3328.819	36542.270	3328.819	45.548	bd			40.8090	102.0	2.0	108.6
WXX060202-08CRI	24-dinitrotoluene	182 > 152	21.03	673.462	36542.270	673.462	9.215	db			38.0726	95.2	-4.8	23.0
WXX060202-08CRI	26-dinitrotoluene-d3	185 > 155	20.14	36542.270		36542.270	36542.270	bb			472.2243	94.4	-5.6	2812.4
WXX060202-08CRI	2-Nitrotoluene	137 > 46.0	24.87	120.925	36542.270	120.925	1.655	bb			46.2599	115.6	15.6	47.1
WXX060202-08CRI	4-Nitrotoluene	137 > 46	26.55	69.356	36542.270	69.356	0.949	bb			53.7619	134.4	34.4	19.1
WXX060202-08CRI	3-Nitrotoluene	137 > 46.0	28.62	90.910	36542.270	90.910	1.244	bb			49.2340	123.1	23.1	28.9
WXX060202-08CRI	PETN	361 > 62	29.23	1165.350	36542.270	1165.350	15.945	bb			56.8466	142.1	42.1	346.9

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	1516
Standard Number	WXX060202-08CRI
Data File	EXP0202044a

HMX	116.0
RDX	92.6
135-TNB	81.9
13-DNB	98.8
Tetryl	95.0
Nitrobenzene	100.7
Nitroglycerin	103.3
4A-26-DNT	95.1
2A-46-DNT	91.7
246-TNT	103.0
34-DNT(surr)	119.9
26-DNT	102.0
24-DNT	95.2
2-NT	115.6
4-NT	134.4
3-NT	123.1
PETN	142.1
Total	1810.4
Average	106.5

MHT 2/4 bk

done 02/06/06

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXP0202055a **Analysis Date:** 03-FEB-06 21:24

LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

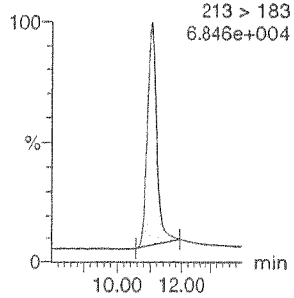
Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	697.238	116	
1,3-Dinitrobenzene-d4	500	418.967	84	
2,4,6-Trinitrotoluene	600	600.621	100	
2,4-Dinitrotoluene	600	575.364	96	
2,6-Dinitrotoluene	600	578.317	96	
2,6-Dinitrotoluene-d3	500	450.319	90	
2-Amino-4,6-dinitrotoluene	600	525.381	88	
3,4-Dinitrotoluene	300	285.899	95	
4-Amino-2,6-dinitrotoluene	600	573.121	96	
HMX	600	595.607	99	
Nitrobenzene	600	590.321	98	
Nitroglycerin	600	584.008	97	
PETN	600	645.075	108	
RDX	600	719.854	120	
Tetryl	600	773.422	129	*
m-Dinitrobenzene	600	605.098	101	
m-Nitrotoluene	600	683.395	114	
o-Nitrotoluene	600	590.828	98	
p-Nitrotoluene	600	615.599	103	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

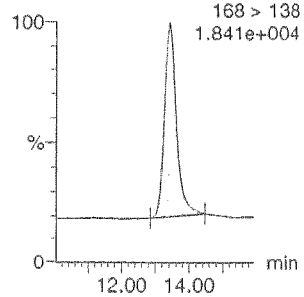
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202055a
Date: 03-Feb-2006
Time: 21:24:53
ID: WXX060202-07CCV
Vial: 1:1,B

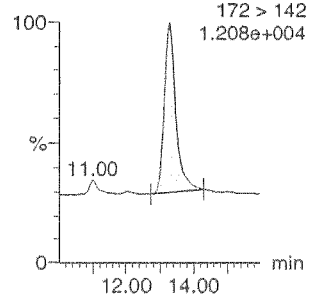
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.846e+004



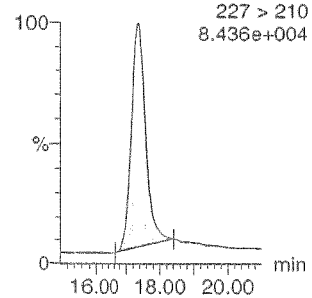
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.841e+004



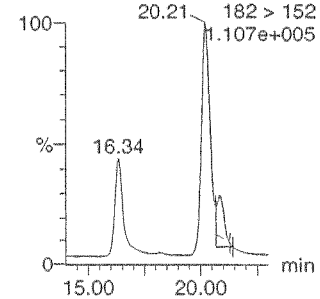
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.208e+004



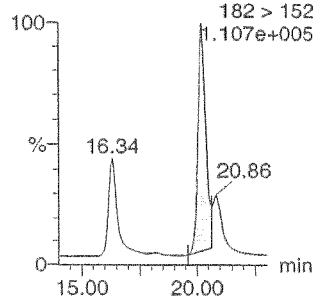
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
8.436e+004



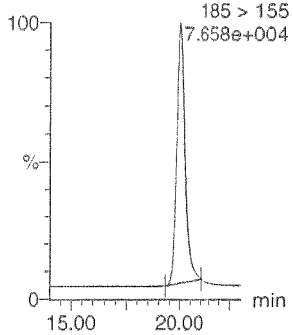
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.21
182 > 152
1.107e+005



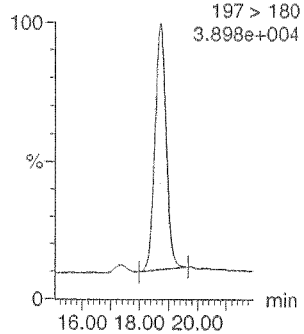
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.107e+005



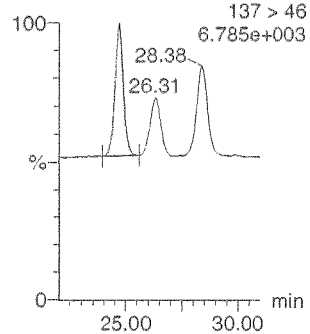
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.658e+004



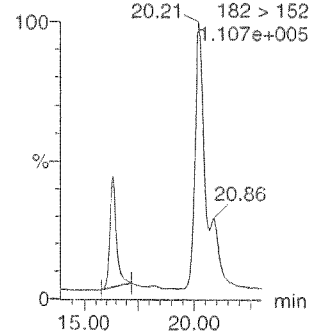
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.898e+004



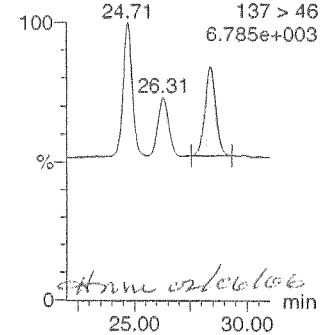
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.785e+003



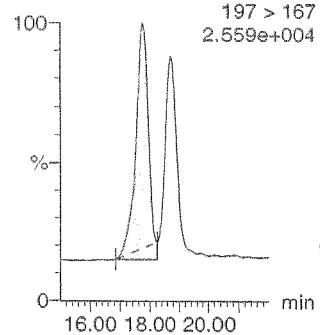
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.21
182 > 152
1.107e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.71
137 > 46
6.785e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
2.559e+004



750

MM = Manual Modification

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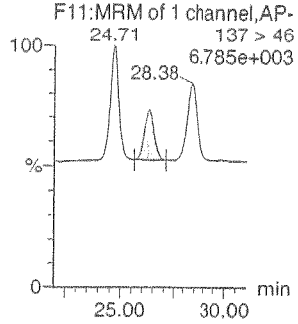
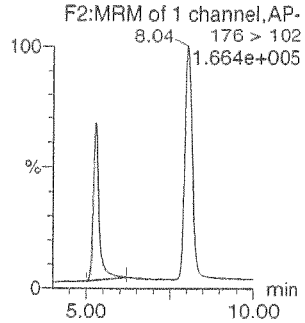
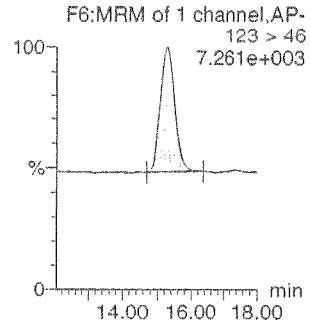
4-Nitrotoluene



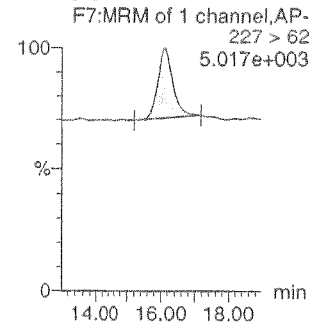
HMX



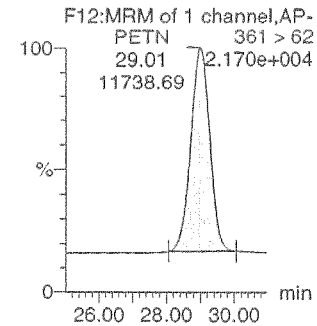
Nitrobenzene



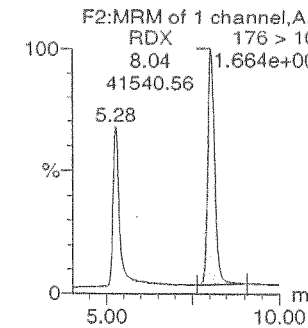
Nitroglycerin



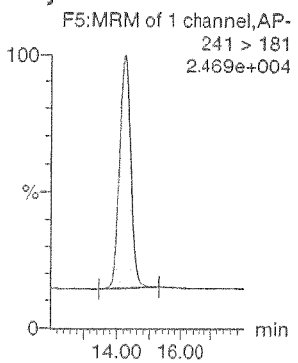
PETN



RDX



Tetryl



751

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-07CCV	HMX	176 > 102	5.28	23271.354	3448.029	23271.354	3374.588	bb			595.6068	99.3	-0.7	2053.3
WXX060202-07CCV	RDX	176 > 102	8.04	41540.563	3448.029	41540.563	6023.813	bb			719.8545	120.0	20.0	3052.8
WXX060202-07CCV	135-Trinitrobenzene	213 > 183	11.03	21409.271	3448.029	21409.271	3104.567	bb			697.2380	116.2	16.2	3511.4
WXX060202-07CCV	13-Dinitrobenzene-d4	172 > 142	13.27	3448.029		3448.029	3448.029	bb			418.9674	83.8	-16.2	460.7
WXX060202-07CCV	13-Dinitrobenzene	168 > 138	13.42	5984.267	3448.029	5984.267	867.781	bb			605.0981	100.8	0.8	845.7
WXX060202-07CCV	Tetryl	241 > 181	14.24	8290.485	3448.029	8290.485	1202.206	bb			773.4221	128.9	28.9	693.9
WXX060202-07CCV	Nitrobenzene	123 > 46	15.29	1881.795	3448.029	1881.795	272.880	bb			590.3207	98.4	-1.6	401.6
WXX060202-07CCV	Nitroglycerin	227 > 62	16.13	763.502	3448.029	763.502	110.716	bb			584.0082	97.3	-2.7	76.5
WXX060202-07CCV	4-Amino-26-dinitrotoluene	197 > 167	17.76	11277.888	34847.168	11277.888	161.819	MM	04-Feb-06	10:16:06	573.1210	95.5	-4.5	389.1
WXX060202-07CCV	2-Amino-46-dinitrotoluene	197 > 180	18.72	15670.569	34847.168	15670.569	224.847	bb			525.3811	87.6	-12.4	628.9
WXX060202-07CCV	246-Trinitrotoluene	227 > 210	17.37	38941.918	34847.168	38941.918	558.753	bb			600.6210	100.1	0.1	1964.0
WXX060202-07CCV	34-dinitrotoluene	182 > 152	16.34	18426.393	34847.168	18426.393	264.389	bb			285.8991	95.3	-4.7	487.5
WXX060202-07CCV	26-dinitrotoluene	182 > 152	20.21	44985.469	34847.168	44985.469	645.468	bd			578.3172	96.4	-3.6	1139.5
WXX060202-07CCV	24-dinitrotoluene	182 > 152	20.86	9705.425	34847.168	9705.425	139.257	MM	04-Feb-06	10:20:08	575.3636	95.9	-4.1	265.4
WXX060202-07CCV	26-dinitrotoluene-d3	185 > 155	20.01	34847.168		34847.168	34847.168	bb			450.3190	90.1	-9.9	2712.1
WXX060202-07CCV	2-Nitrotoluene	137 > 46.0	24.71	1472.800	34847.168	1472.800	21.132	bb			590.8277	98.5	-1.5	186.6
WXX060202-07CCV	4-Nitrotoluene	137 > 46	26.31	757.320	34847.168	757.320	10.866	bb			615.5990	102.6	2.6	81.1
WXX060202-07CCV	3-Nitrotoluene	137 > 46.0	28.38	1203.346	34847.168	1203.346	17.266	bb			683.3954	113.9	13.9	124.0
WXX060202-07CCV	PETN	361 > 62	29.01	11738.693	34847.168	11738.693	168.431	bb			645.0750	107.5	7.5	3903.5

752

MM = Manual Modification

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	2124
Standard Number	WXX060202-07CCV
Data File	EXP0202055a

HMX		99.3
RDX		120.0
135-TNB		116.2
13-DNB		100.8
Tetryl		128.9
Nitrobenzene		98.4
Nitroglycerin		97.3
4A-26-DNT		95.5
2A-46-DNT		87.6
246-TNT		100.1
34-DNT(surr)		95.3
26-DNT		96.4
24-DNT		95.9
2-NT		98.5
4-NT		102.6
3-NT		113.9
PETN		107.5
Total		1754.2
Average		103.2

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0202057a

Analysis Date: 03-FEB-06 22:32

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	40.429	101	
1,3-Dinitrobenzene-d4	500	449.59	90	
2,4,6-Trinitrotoluene	40	41.356	103	
2,4-Dinitrotoluene	40	37.769	94	
2,6-Dinitrotoluene	40	40.098	100	
2,6-Dinitrotoluene-d3	500	492.088	98	
2-Amino-4,6-dinitrotoluene	40	37.089	93	
3,4-Dinitrotoluene	20	20.459	102	
4-Amino-2,6-dinitrotoluene	40	38.072	95	
HMX	40	44.971	112	
Nitrobenzene	40	35.246	88	
Nitroglycerin	80	92.043	115	
PETN	40	57.259	143	*
RDX	40	41.068	103	
Tetryl	40	42.66	107	
m-Dinitrobenzene	40	39.344	98	
m-Nitrotoluene	40	47.764	119	
o-Nitrotoluene	40	37.814	95	
p-Nitrotoluene	40	47.57	119	

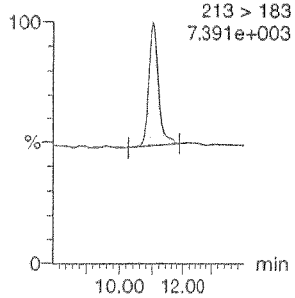
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

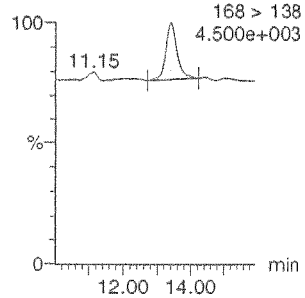
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202057a
Date: 03-Feb-2006
Time: 22:32:05
ID: WXX060202-08CRI
Vial: 1:1,C

MM 2/4/06

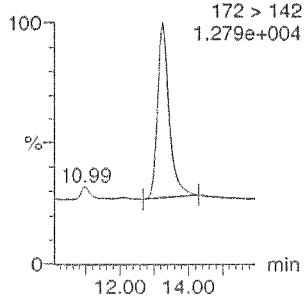
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
7.391e+003



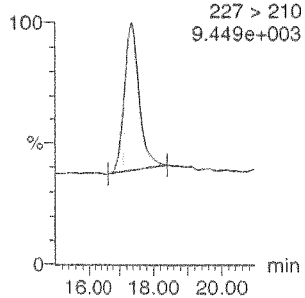
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.500e+003



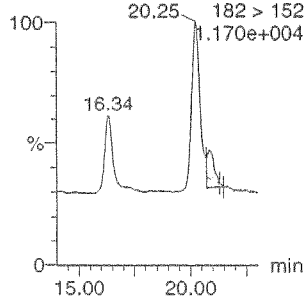
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.279e+004



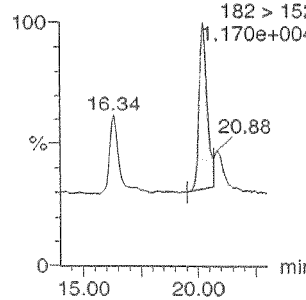
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
9.449e+003



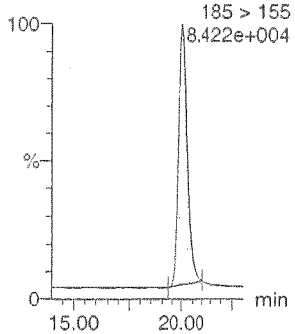
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25 182 > 152
1.170e+004



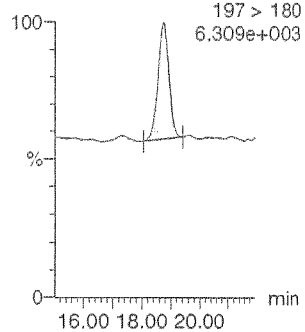
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.170e+004



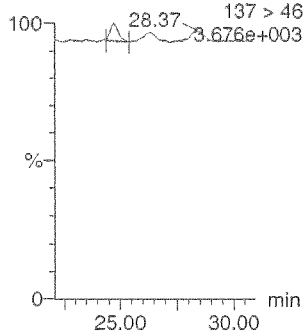
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.422e+004



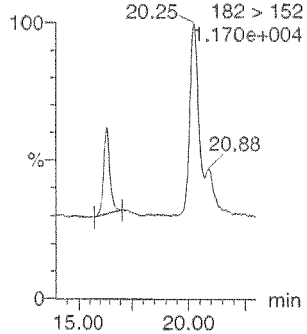
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
6.309e+003



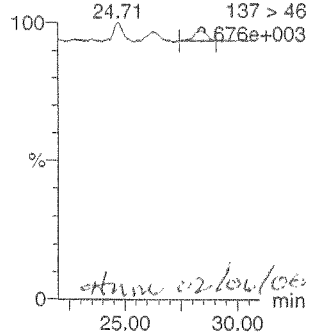
2-Nitrotoluene
F11:MRM of 1 channel,AP-
28.37 137 > 46
3.676e+003



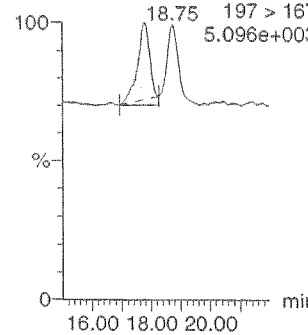
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.25 182 > 152
1.170e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.71 137 > 46
676e+003



4-Amino-26-dinitrotoluen
F10:MRM of 2 channels,AP-
18.75 197 > 167
5.096e+003



755

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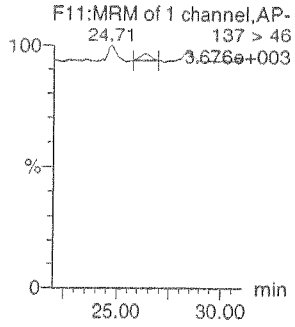
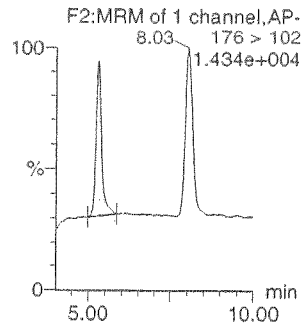
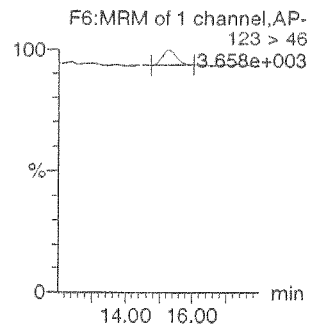
4-Nitrotoluene



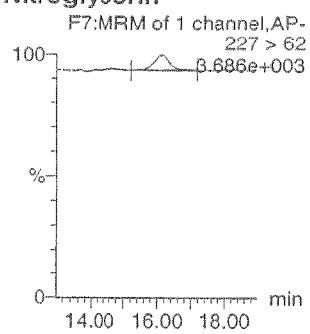
HMX



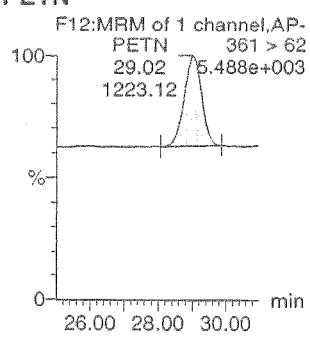
Nitrobenzene



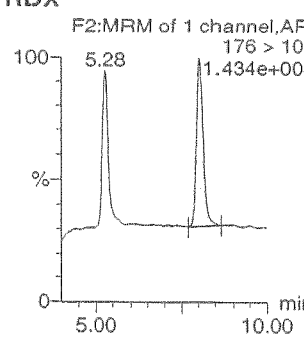
Nitroglycerin



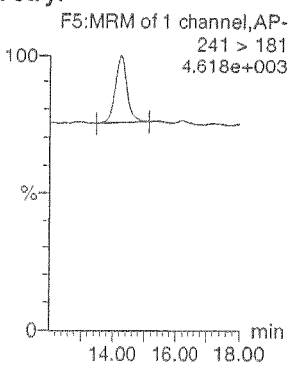
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-08CRI	HMX	176 > 102	5.28	1885.512	3700.050	1885.512	254.795	bb			44.9708	112.4	12.4	246.9
WXX060202-08CRI	RDX	176 > 102	8.03	2543.136	3700.050	2543.136	343.662	bb			41.0682	102.7	2.7	267.8
WXX060202-08CRI	135-Trinitrobenzene	213 > 183	11.02	1332.143	3700.050	1332.143	180.017	bb			40.4290	101.1	1.1	272.7
WXX060202-08CRI	13-Dinitrobenzene-d4	172 > 142	13.27	3700.050		3700.050	3700.050	bb			449.5903	89.9	-10.1	701.7
WXX060202-08CRI	13-Dinitrobenzene	168 > 138	13.42	417.540	3700.050	417.540	56.424	bb			39.3438	98.4	-1.6	22.0
WXX060202-08CRI	Tetryl	241 > 181	14.21	490.701	3700.050	490.701	66.310	bb			42.6596	106.6	6.6	95.7
WXX060202-08CRI	Nitrobenzene	123 > 46	15.29	120.568	3700.050	120.568	16.293	bb			35.2461	88.1	-11.9	25.9
WXX060202-08CRI	Nitroglycerin	227 > 62	16.13	129.128	3700.050	129.128	17.449	bb			92.0434	115.1	15.1	17.1
WXX060202-08CRI	4-Amino-26-dinitrotoluene	197 > 167	17.79	818.662	38079.352	818.662	10.749	MM	04-Feb-06	10:16:13	38.0716	95.2	-4.8	63.4
WXX060202-08CRI	2-Amino-46-dinitrotoluene	197 > 180	18.75	1208.850	38079.352	1208.850	15.873	bb			37.0886	92.7	-7.3	103.3
WXX060202-08CRI	246-Trinitrotoluene	227 > 210	17.37	2930.037	38079.352	2930.037	38.473	bb			41.3556	103.4	3.4	173.0
WXX060202-08CRI	34-dinitrotoluene	182 > 152	16.34	1440.920	38079.352	1440.920	18.920	bb			20.4593	102.3	2.3	79.2
WXX060202-08CRI	26-dinitrotoluene	182 > 152	20.25	3408.384	38079.352	3408.384	44.754	bd			40.0978	100.2	0.2	173.7
WXX060202-08CRI	24-dinitrotoluene	182 > 152	20.88	696.193	38079.352	696.193	9.141	MM	04-Feb-06	10:19:53	37.7690	94.4	-5.6	37.8
WXX060202-08CRI	26-dinitrotoluene-d3	185 > 155	20.03	38079.352		38079.352	38079.352	bb			492.0875	98.4	-1.6	2715.3
WXX060202-08CRI	2-Nitrotoluene	137 > 46.0	24.71	103.004	38079.352	103.004	1.352	bb			37.8137	94.5	-5.5	76.7
WXX060202-08CRI	4-Nitrotoluene	137 > 46	26.29	63.949	38079.352	63.949	0.840	bb			47.5697	118.9	18.9	37.4
WXX060202-08CRI	3-Nitrotoluene	137 > 46.0	28.37	91.905	38079.352	91.905	1.207	bb			47.7638	119.4	19.4	43.2
WXX060202-08CRI	PETN	361 > 62	29.02	1223.124	38079.352	1223.124	16.060	bb			57.2592	143.1	43.1	313.6

02/06/06

2/4/06

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GRAND MEAN AVERAGE

Date of Analysis	02/03/06
Time of Injection	2232
Standard Number	WXX060202-08CRI
Data File	EXP0202057a

HMX		112.4
RDX		102.7
135-TNB		101.1
13-DNB		98.4
Tetryl		106.6
Nitrobenzene		88.1
Nitroglycerin		115.1
4A-26-DNT		95.2
2A-46-DNT		92.7
246-TNT		103.4
34-DNT(surr)		102.3
26-DNT		100.2
24-DNT		94.4
2-NT		94.5
4-NT		118.9
3-NT		119.4
PETN		143.1
Total		1788.5
Average		105.2

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXP0202066a **Analysis Date:** 04-FEB-06 03:33

LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	676.052	113	
1,3-Dinitrobenzene-d4	500	415.639	83	
2,4,6-Trinitrotoluene	600	681.109	114	
2,4-Dinitrotoluene	600	544.731	91	
2,6-Dinitrotoluene	600	591.848	99	
2,6-Dinitrotoluene-d3	500	442.836	89	
2-Amino-4,6-dinitrotoluene	600	580.875	97	
3,4-Dinitrotoluene	300	280.254	93	
4-Amino-2,6-dinitrotoluene	600	638.641	106	
HMX	600	611.915	102	
Nitrobenzene	600	590.376	98	
Nitroglycerin	600	541.529	90	
PETN	600	649.46	108	
RDX	600	646.372	108	
Tetryl	600	728.779	121	*
m-Dinitrobenzene	600	587.418	98	
m-Nitrotoluene	600	602.307	100	
o-Nitrotoluene	600	587.749	98	
p-Nitrotoluene	600	602.444	100	

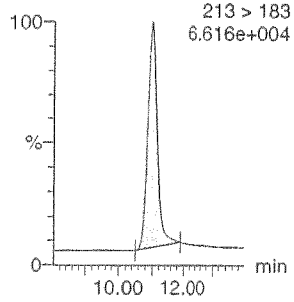
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

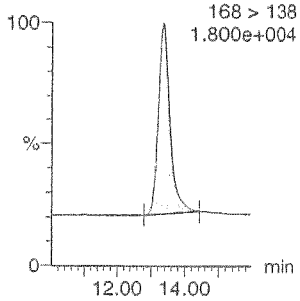
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202066a
Date: 04-Feb-2006
Time: 03:33:40
ID: WXX060202-07CCV
Vial: 1:1,B

MATT 2/7/06

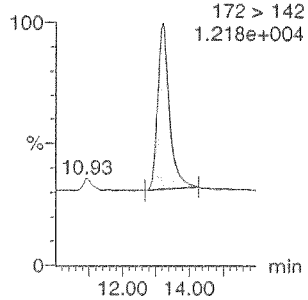
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.616e+004



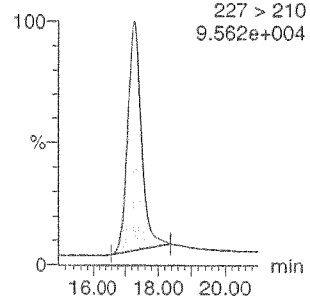
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.800e+004



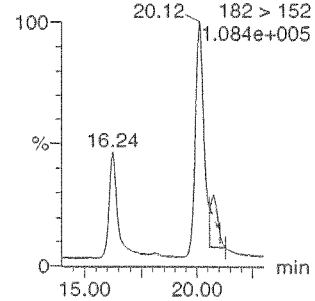
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.218e+004



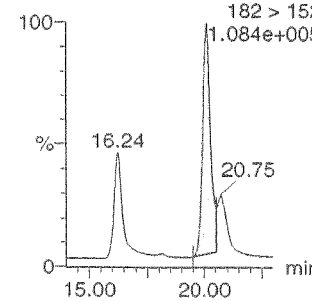
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
9.562e+004



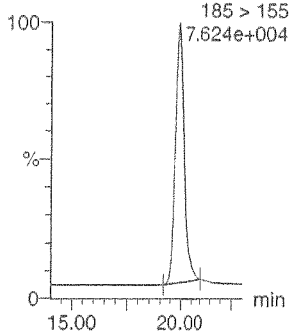
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.12 182 > 152
1.084e+005



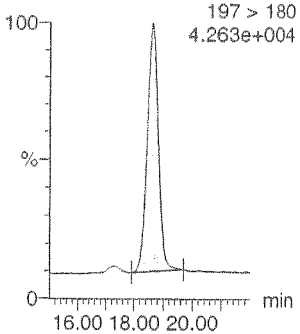
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.084e+005



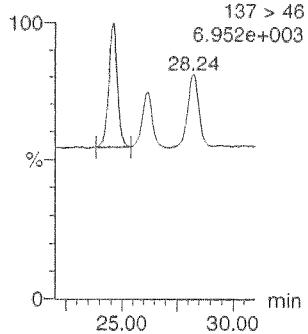
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.624e+004



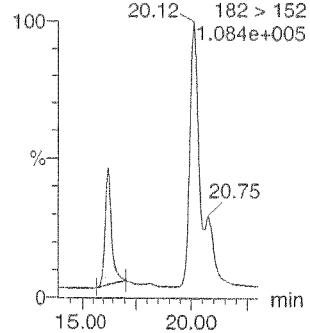
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.263e+004



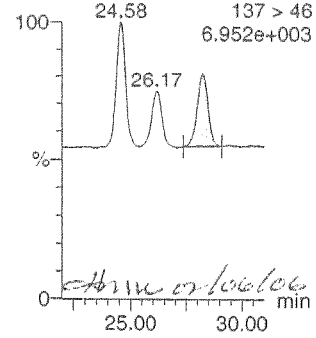
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.952e+003



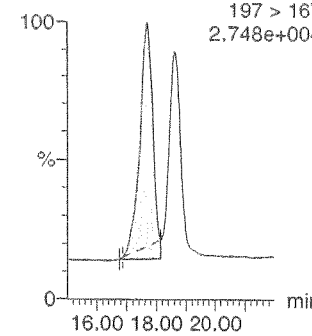
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.12 182 > 152
1.084e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.58 137 > 46
6.952e+003



4-Amino-26-dinitrotoluen
F10:MRM of 2 channels,AP-
197 > 167
2.748e+004



760

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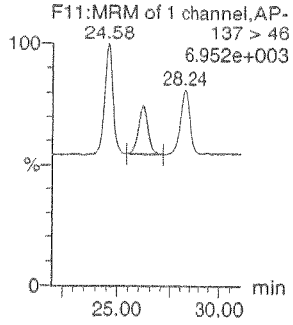
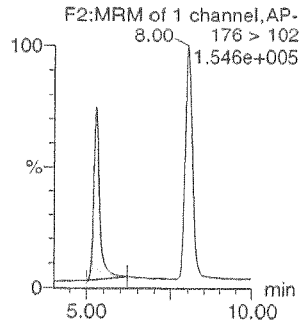
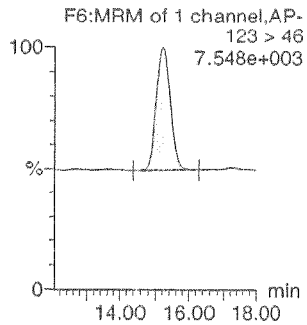
4-Nitrotoluene



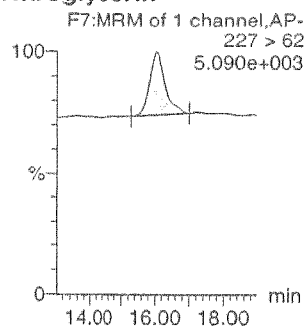
HMX



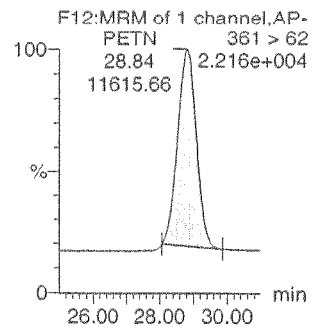
Nitrobenzene



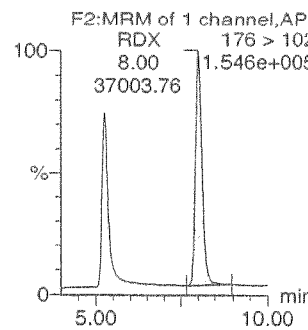
Nitroglycerin



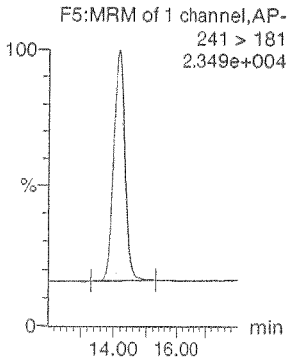
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-07CCV	HMX	176 > 102	5.27	23718.605	3420.636	23718.605	3466.988	bb			611.9151	102.0	2.0	2491.3
WXX060202-07CCV	RDX	176 > 102	8.00	37003.762	3420.636	37003.762	5408.901	bb			646.3716	107.7	7.7	3352.8
WXX060202-07CCV	135-Trinitrobenzene	213 > 183	10.99	20593.816	3420.636	20593.816	3010.232	bb			676.0519	112.7	12.7	4456.8
WXX060202-07CCV	13-Dinitrobenzene-d4	172 > 142	13.22	3420.636		3420.636	3420.636	bb			415.6389	83.1	-16.9	318.1
WXX060202-07CCV	13-Dinitrobenzene	168 > 138	13.37	5763.258	3420.636	5763.258	842.425	bb			587.4175	97.9	-2.1	429.8
WXX060202-07CCV	Tetryl	241 > 181	14.15	7749.878	3420.636	7749.878	1132.812	bb			728.7785	121.5	21.5	1376.0
WXX060202-07CCV	Nitrobenzene	123 > 46	15.21	1867.019	3420.636	1867.019	272.905	bb			590.3757	98.4	-1.6	134.5
WXX060202-07CCV	Nitroglycerin	227 > 62	16.06	702.343	3420.636	702.343	102.663	bb			541.5294	90.3	-9.7	42.3
WXX060202-07CCV	4-Amino-26-dinitrotoluene	197 > 167	17.69	12358.358	34268.086	12358.358	180.319	MM	04-Feb-06	10:16:35	638.6413	106.4	6.4	605.3
WXX060202-07CCV	2-Amino-46-dinitrotoluene	197 > 180	18.62	17037.863	34268.086	17037.863	248.597	bb			580.8746	96.8	-3.2	1071.2
WXX060202-07CCV	246-Trinitrotoluene	227 > 210	17.27	43426.590	34268.086	43426.590	633.630	bb			681.1088	113.5	13.5	1166.2
WXX060202-07CCV	34-dinitrotoluene	182 > 152	16.24	17762.418	34268.086	17762.418	259.169	bb			280.2542	93.4	-6.6	189.0
WXX060202-07CCV	26-dinitrotoluene	182 > 152	20.12	45272.922	34268.086	45272.922	660.570	bd			591.8478	98.6	-1.4	425.2
WXX060202-07CCV	24-dinitrotoluene	182 > 152	20.75	9036.013	34268.086	9036.013	131.843	MM	04-Feb-06	10:18:58	544.7313	90.8	-9.2	97.3
WXX060202-07CCV	26-dinitrotoluene-d3	185 > 155	19.93	34268.086		34268.086	34268.086	bb			442.8357	88.6	-11.4	1437.7
WXX060202-07CCV	2-Nitrotoluene	137 > 46.0	24.58	1440.779	34268.086	1440.779	21.022	bb			587.7493	98.0	-2.0	206.1
WXX060202-07CCV	4-Nitrotoluene	137 > 46	26.17	728.820	34268.086	728.820	10.634	bb			602.4436	100.4	0.4	91.6
WXX060202-07CCV	3-Nitrotoluene	137 > 46.0	28.24	1042.938	34268.086	1042.938	15.217	bb			602.3067	100.4	0.4	119.7
WXX060202-07CCV	PETN	361 > 62	28.84	11615.661	34268.086	11615.661	169.482	bb			649.4603	108.2	8.2	1435.5

762

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GRAND MEAN AVERAGE

Date of Analysis	02/04/06
Time of Injection	0333
Standard Number	WXX060202-07CCV
Data File	EXP0202066a

HMX		102.0
RDX		107.7
135-TNB		112.7
13-DNB		97.9
Tetryl		121.5
Nitrobenzene		98.4
Nitroglycerin		90.3
4A-26-DNT		106.4
2A-46-DNT		96.8
246-TNT		113.5
34-DNT(surr)		93.4
26-DNT		98.6
24-DNT		90.8
2-NT		98.0
4-NT		100.4
3-NT		100.4
PETN		108.2
Total		1737.0
Average		102.2

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXP0202068a **Analysis Date:** 04-FEB-06 04:40

LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	38.542	96	
1,3-Dinitrobenzene-d4	500	511.191	102	
2,4,6-Trinitrotoluene	40	42.028	105	
2,4-Dinitrotoluene	40	39.207	98	
2,6-Dinitrotoluene	40	38.404	96	
2,6-Dinitrotoluene-d3	500	536.529	107	
2-Amino-4,6-dinitrotoluene	40	34.002	85	
3,4-Dinitrotoluene	20	18.31	92	
4-Amino-2,6-dinitrotoluene	40	34.683	87	
HMX	40	40.792	102	
Nitrobenzene	40	41.732	104	
Nitroglycerin	80	70.028	88	
PETN	40	53.37	133	*
RDX	40	35.807	90	
Tetryl	40	40.019	100	
m-Dinitrobenzene	40	41.443	104	
m-Nitrotoluene	40	31.508	79	
o-Nitrotoluene	40	40.919	102	
p-Nitrotoluene	40	43.28	108	

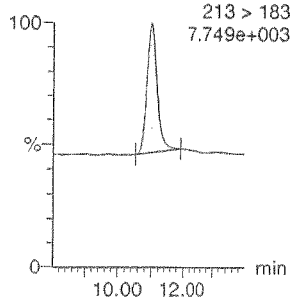
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

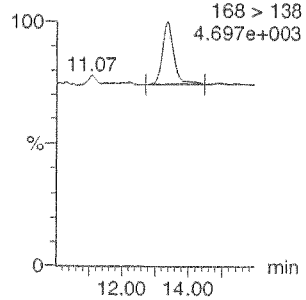
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202068a
Date: 04-Feb-2006
Time: 04:40:52
ID: WXX060202-08CRI
Vial: 1:1,C

MMP 2/7/06

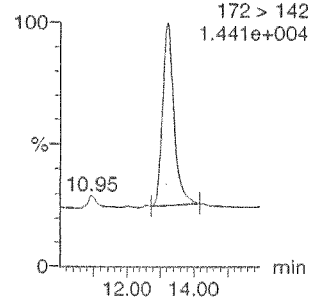
135-Trinitrobenzene



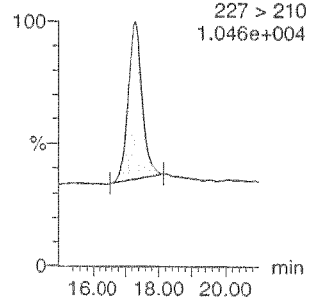
13-Dinitrobenzene



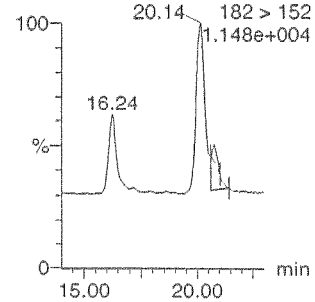
13-Dinitrobenzene-d4



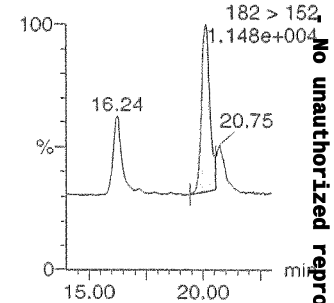
246-Trinitrotoluene



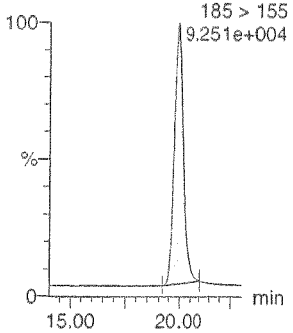
24-dinitrotoluene



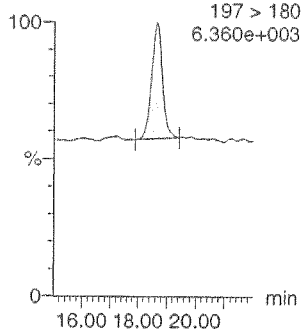
26-dinitrotoluene



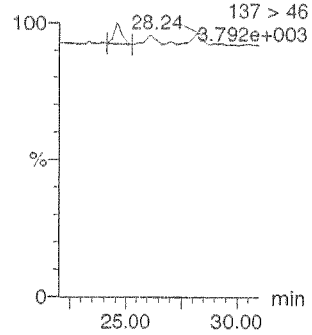
26-dinitrotoluene-d3



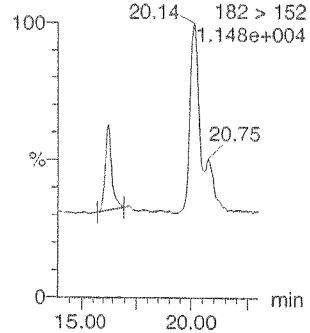
2-Amino-46-dinitrotoluene



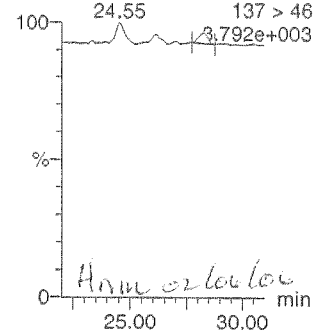
2-Nitrotoluene



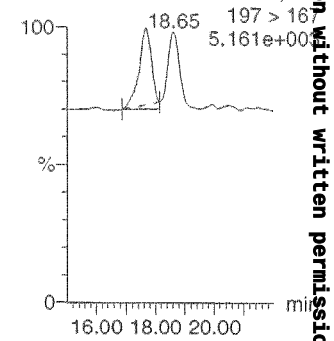
34-dinitrotoluene



3-Nitrotoluene



4-Amino-26-dinitrotoluene



765

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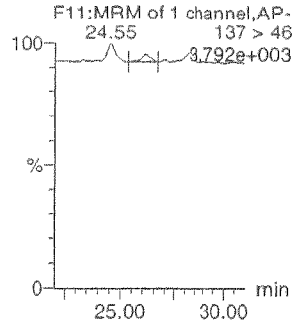
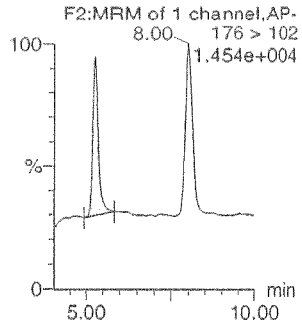
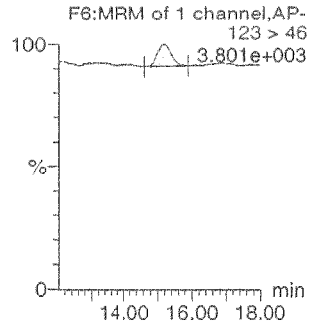
4-Nitrotoluene



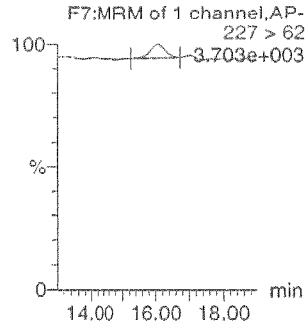
HMX



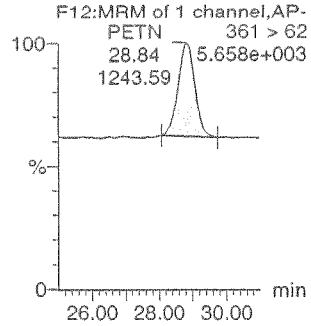
Nitrobenzene



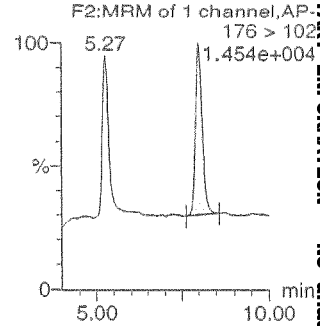
Nitroglycerin



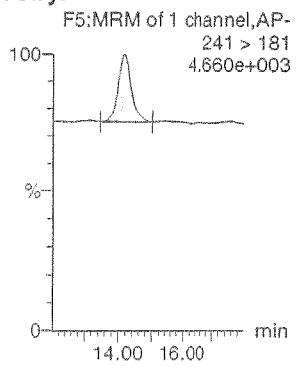
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060202-08CRI	HMX	176 > 102	5.27	1944.655	4207.015	1944.655	231.121	bb			40.7922	102.0	2.0	246.3
WXX060202-08CRI	RDX	176 > 102	8.00	2521.179	4207.015	2521.179	299.640	bb			35.8074	89.5	-10.5	264.1
WXX060202-08CRI	135-Trinitrobenzene	213 > 183	10.99	1443.975	4207.015	1443.975	171.615	bb			38.5421	96.4	-3.6	332.0
WXX060202-08CRI	13-Dinitrobenzene-d4	172 > 142	13.22	4207.015		4207.015	4207.015	bb			511.1912	102.2	2.2	723.5
WXX060202-08CRI	13-Dinitrobenzene	168 > 138	13.37	500.078	4207.015	500.078	59.434	bb			41.4428	103.6	3.6	67.4
WXX060202-08CRI	Tetryl	241 > 181	14.15	523.399	4207.015	523.399	62.206	bb			40.0190	100.0	0.0	64.6
WXX060202-08CRI	Nitrobenzene	123 > 46	15.21	162.314	4207.015	162.314	19.291	bb			41.7319	104.3	4.3	19.5
WXX060202-08CRI	Nitroglycerin	227 > 62	16.09	111.703	4207.015	111.703	13.276	bb			70.0278	87.5	-12.5	6.6
WXX060202-08CRI	4-Amino-26-dinitrotoluene	197 > 167	17.69	813.159	41518.402	813.159	9.793	MM	04-Feb-06	10:16:44	34.6833	86.7	-13.3	53.0
WXX060202-08CRI	2-Amino-46-dinitrotoluene	197 > 180	18.65	1208.332	41518.402	1208.332	14.552	bb			34.0019	85.0	-15.0	66.9
WXX060202-08CRI	246-Trinitrotoluene	227 > 210	17.27	3246.582	41518.402	3246.582	39.098	bb			42.0278	105.1	5.1	188.7
WXX060202-08CRI	34-dinitrotoluene	182 > 152	16.24	1406.044	41518.402	1406.044	16.933	bb			18.3104	91.6	-8.4	71.0
WXX060202-08CRI	26-dinitrotoluene	182 > 152	20.14	3559.207	41518.402	3559.207	42.863	bd			38.4038	96.0	-4.0	155.1
WXX060202-08CRI	24-dinitrotoluene	182 > 152	20.75	787.958	41518.402	787.958	9.489	MM	04-Feb-06	10:18:49	39.2065	98.0	-2.0	41.0
WXX060202-08CRI	26-dinitrotoluene-d3	185 > 155	19.93	41518.402		41518.402	41518.402	bb			536.5293	107.3	7.3	440.1
WXX060202-08CRI	2-Nitrotoluene	137 > 46.0	24.55	121.528	41518.402	121.528	1.464	bb			40.9186	102.3	2.3	23.3
WXX060202-08CRI	4-Nitrotoluene	137 > 46	26.13	63.437	41518.402	63.437	0.764	bb			43.2801	108.2	8.2	10.0
WXX060202-08CRI	3-Nitrotoluene	137 > 46.0	28.24	66.101	41518.402	66.101	0.796	bb			31.5077	78.8	-21.2	11.5
WXX060202-08CRI	PETN	361 > 62	28.84	1243.585	41518.402	1243.585	14.976	bb			53.3704	133.4	33.4	446.7

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GRAND MEAN AVERAGE

Date of Analysis	02/04/06
Time of Injection	0440
Standard Number	WXX060202-08CRI
Data File	EXP0202068a

HMX	102.0
RDX	89.5
135-TNB	96.4
13-DNB	103.6
Tetryl	100.0
Nitrobenzene	104.3
Nitroglycerin	87.5
4A-26-DNT	86.7
2A-46-DNT	85.0
246-TNT	105.1
34-DNT(surr)	91.6
26-DNT	96.0
24-DNT	98.0
2-NT	102.3
4-NT	108.2
3-NT	78.8
PETN	133.4
Total	1668.4
Average	98.1

ethyne acetaldehyde

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0209012a

Analysis Date: 09-FEB-06 16:29

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

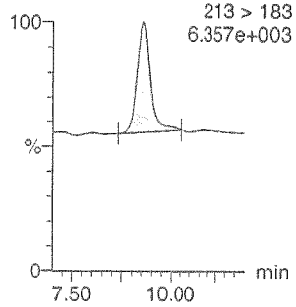
Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	39.114	98	
1,3-Dinitrobenzene-d4	500	519.177	104	
2,4,6-Trinitrotoluene	40	36.574	91	
2,4-Dinitrotoluene	40	41.062	103	
2,6-Dinitrotoluene	40	41.21	103	
2,6-Dinitrotoluene-d3	500	457.685	92	
2-Amino-4,6-dinitrotoluene	40	31.954	80	
3,4-Dinitrotoluene	20	22.481	112	
4-Amino-2,6-dinitrotoluene	40	44.18	110	
HMX	40	53.073	133	*
Nitrobenzene	40	50.271	126	
Nitroglycerin	80	70.382	88	
PETN	40	61.361	153	*
RDX	40	31.37	78	
Tetryl	40	40.5	101	
m-Dinitrobenzene	40	45.617	114	
m-Nitrotoluene	40	37.637	94	
o-Nitrotoluene	40	50.234	126	
p-Nitrotoluene	40	56.748	142	*

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

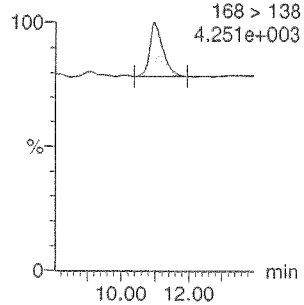
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209012a
Date: 09-Feb-2006
Time: 16:29:26
ID: WXX060209-08CRI
Vial: 1:1,C

MM 2/10/06

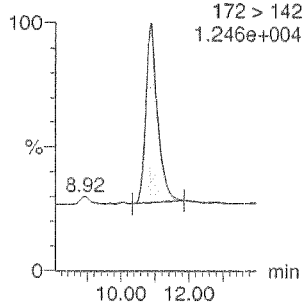
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.357e+003



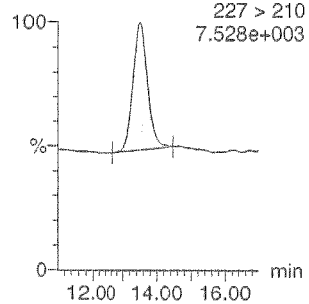
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.251e+003



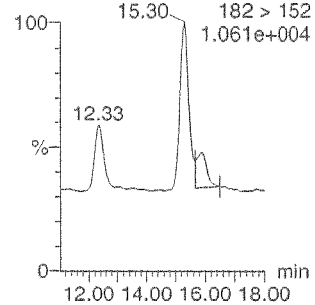
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.246e+004



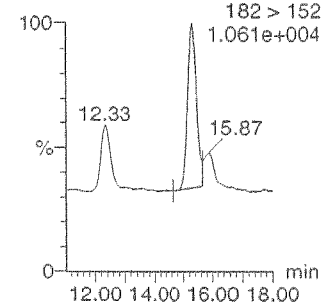
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
7.528e+003



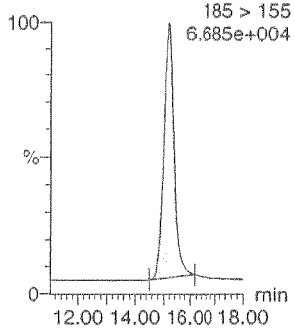
24-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.061e+004



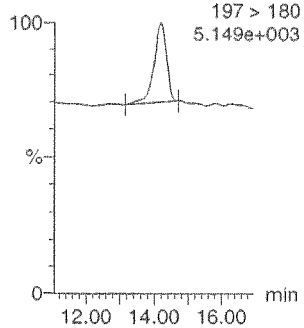
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.061e+004



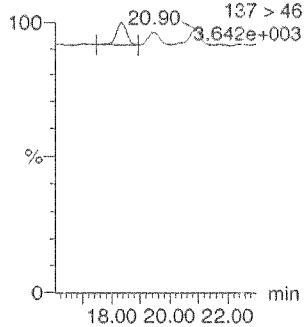
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
6.685e+004



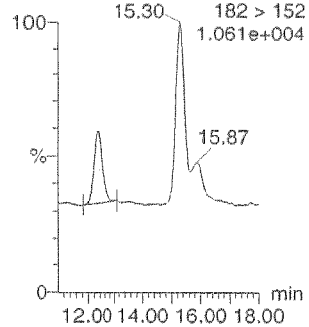
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.149e+003



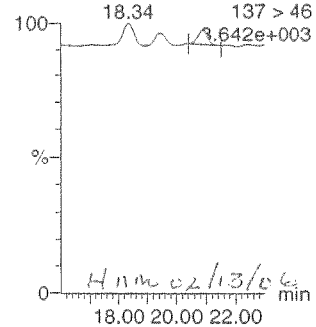
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.642e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.061e+004

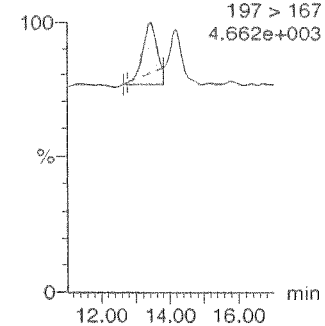


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.642e+003



Hmm 02/13/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
4.662e+003



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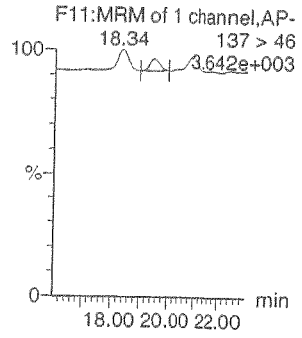
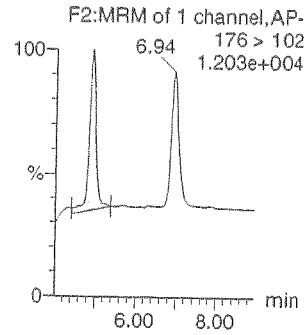
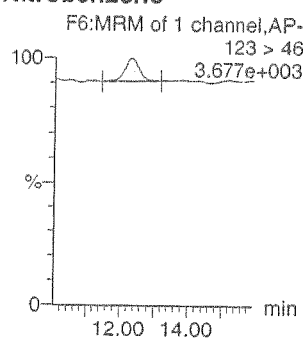
4-Nitrotoluene



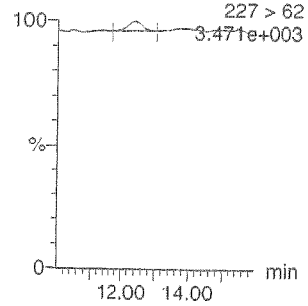
HMX



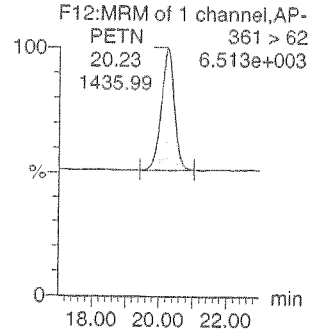
Nitrobenzene



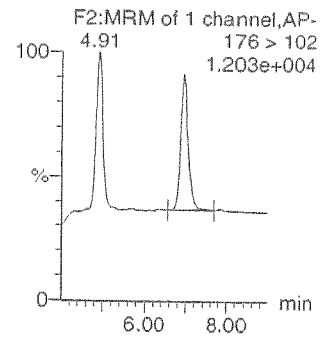
Nitroglycerin



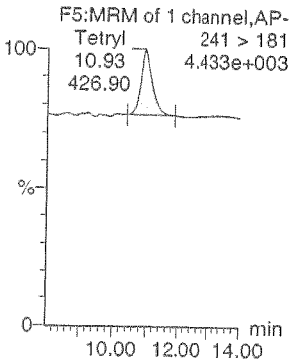
PETN



RDX



Tetryl



771

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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-08CRI	HMX	176 > 102	4.91	1559.073	3445.494	1559.073	226.248	db			53.0733	132.7	32.7	411.8
WXX060209-08CRI	RDX	176 > 102	6.94	1444.540	3445.494	1444.540	209.627	bb			31.3700	78.4	-21.6	347.5
WXX060209-08CRI	135-Trinitrobenzene	213 > 183	9.27	1096.836	3445.494	1096.836	159.170	bb			39.1141	97.8	-2.2	318.0
WXX060209-08CRI	13-Dinitrobenzene-d4	172 > 142	10.88	3445.494		3445.494	3445.494	bb			519.1773	103.8	3.8	392.2
WXX060209-08CRI	13-Dinitrobenzene	168 > 138	10.98	410.367	3445.494	410.367	59.551	bb			45.6174	114.0	14.0	18.1
WXX060209-08CRI	Tetryl	241 > 181	10.93	426.899	3445.494	426.899	61.950	bb			40.5000	101.2	1.2	35.7
WXX060209-08CRI	Nitrobenzene	123 > 46	12.31	167.662	3445.494	167.662	24.331	bb			50.2711	125.7	25.7	31.1
WXX060209-08CRI	Nitroglycerin	227 > 62	12.36	63.498	3445.494	63.498	9.215	bb			70.3824	88.0	-12.0	8.0
WXX060209-08CRI	4-Amino-26-dinitrotoluene	197 > 167	13.42	573.755	27709.982	573.755	10.353	MM	10-Feb-06	07:06:44	44.1800	110.4	10.4	32.9
WXX060209-08CRI	2-Amino-46-dinitrotoluene	197 > 180	14.18	661.767	27709.982	661.767	11.941	bb			31.9540	79.9	-20.1	57.7
WXX060209-08CRI	246-Trinitrotoluene	227 > 210	13.50	1928.662	27709.982	1928.662	34.801	bb			36.5743	91.4	-8.6	86.0
WXX060209-08CRI	34-dinitrotoluene	182 > 152	12.33	1014.783	27709.982	1014.783	18.311	bb			22.4807	112.4	12.4	41.5
WXX060209-08CRI	26-dinitrotoluene	182 > 152	15.30	2458.714	27709.982	2458.714	44.365	bd			41.2097	103.0	3.0	105.4
WXX060209-08CRI	24-dinitrotoluene	182 > 152	15.87	602.377	27709.982	602.377	10.869	db			41.0617	102.7	2.7	22.1
WXX060209-08CRI	26-dinitrotoluene-d3	185 > 155	15.15	27709.982		27709.982	27709.982	bb			457.6845	91.5	-8.5	2308.7
WXX060209-08CRI	2-Nitrotoluene	137 > 46	18.34	138.780	27709.982	138.780	2.504	bb			50.2338	125.6	25.6	40.7
WXX060209-08CRI	4-Nitrotoluene	137 > 46	19.45	75.405	27709.982	75.405	1.361	bb			56.7479	141.9	41.9	23.3
WXX060209-08CRI	3-Nitrotoluene	137 > 46	20.90	78.324	27709.982	78.324	1.413	bb			37.6372	94.1	-5.9	26.9
WXX060209-08CRI	PETN	361 > 62	20.23	1435.988	27709.982	1435.988	25.911	bb			61.3608	153.4	53.4	214.9

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HMM 02/13/06

MM 2/10/06

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GRAND MEAN AVERAGE

Date of Analysis	02/09/06
Time of Injection	1629
Standard Number	WXX060209-08CRI
Data File	EXP0209012a

HMX		132.7
RDX		78.4
135-TNB		97.8
13-DNB		114.0
Tetryl		101.2
Nitrobenzene		125.7
Nitroglycerin		88.0
4A-26-DNT		110.4
2A-46-DNT		79.9
246-TNT		91.4
34-DNT(surr)		112.4
26-DNT		103.0
24-DNT		102.7
2-NT		125.6
4-NT		141.9
3-NT		94.1
PETN		153.4
Total		1852.6
Average		109.0

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXP0209023a **Analysis Date:** 09-FEB-06 21:09

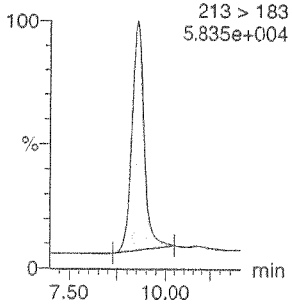
LCMSMS ID: 903 **Column ID:** Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	619.074	103	
1,3-Dinitrobenzene-d4	500	603.03	121	*
2,4,6-Trinitrotoluene	600	618.595	103	
2,4-Dinitrotoluene	600	562.555	94	
2,6-Dinitrotoluene	600	608.781	101	
2,6-Dinitrotoluene-d3	500	575.58	115	
2-Amino-4,6-dinitrotoluene	600	645.46	108	
3,4-Dinitrotoluene	300	305.752	102	
4-Amino-2,6-dinitrotoluene	600	575.696	96	
HMX	600	659.279	110	
Nitrobenzene	600	544.908	91	
Nitroglycerin	600	579.459	97	
PETN	600	571.443	95	
RDX	600	631.919	105	
Tetryl	600	707.328	118	
m-Dinitrobenzene	600	634.826	106	
m-Nitrotoluene	600	512.982	85	
o-Nitrotoluene	600	532.835	89	
p-Nitrotoluene	600	529.374	88	

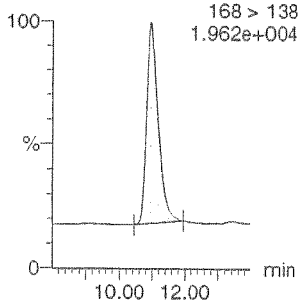
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209023a
Date: 09-Feb-2006
Time: 21:09:55
ID: WXX060209-07CCV
Vial: 1:1,B

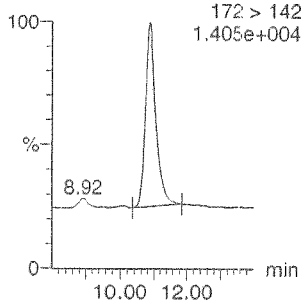
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
5.835e+004



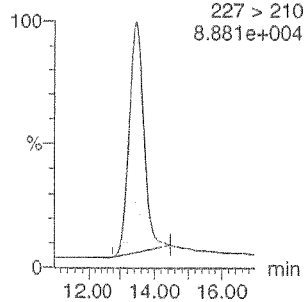
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.962e+004



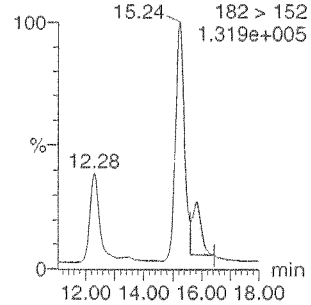
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.405e+004



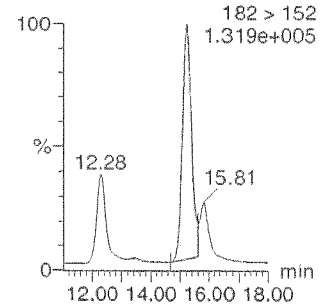
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
8.881e+004



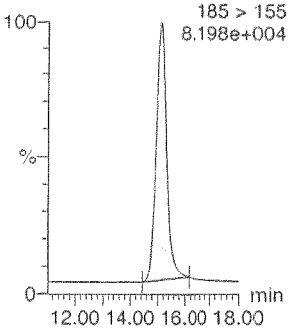
24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.24
182 > 152
1.319e+005



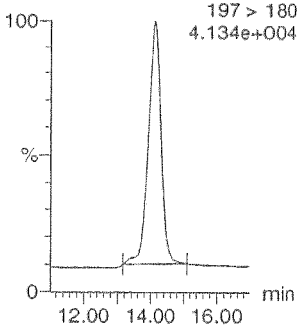
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.319e+005



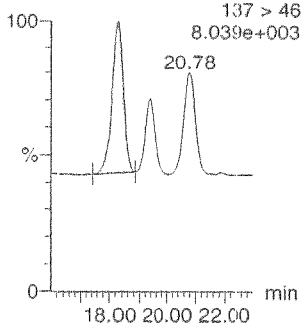
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.198e+004



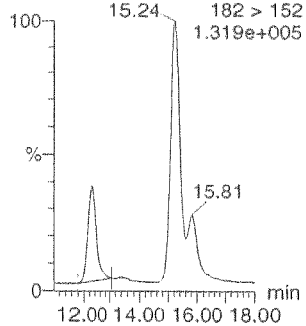
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.134e+004



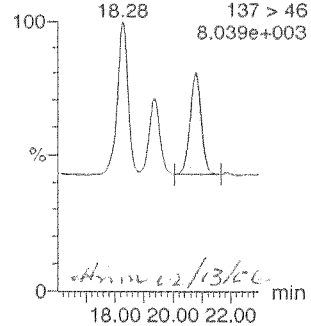
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
8.039e+003



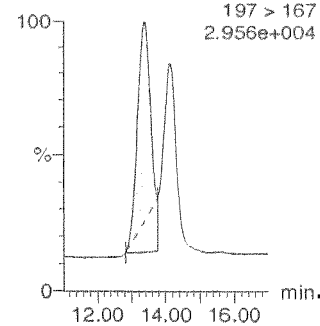
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.24
182 > 152
1.319e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.28
137 > 46
8.039e+003



4-Amino-26-dinitrotoluen
F10:MRM of 2 channels,AP-
197 > 167
2.956e+004



775

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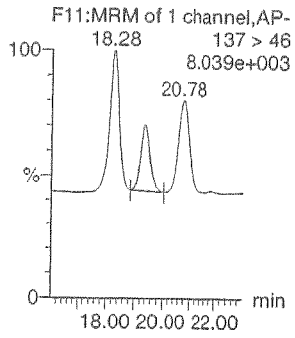
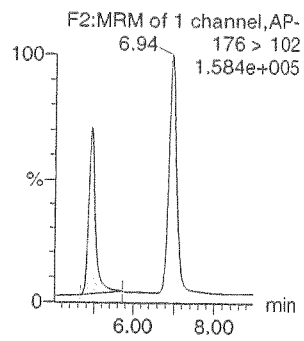
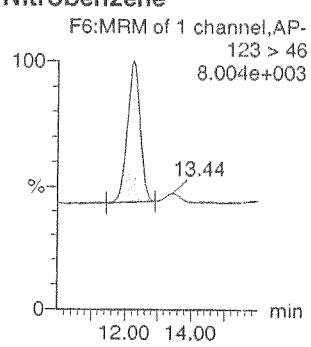
4-Nitrotoluene



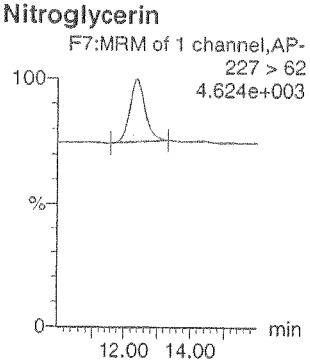
HMX



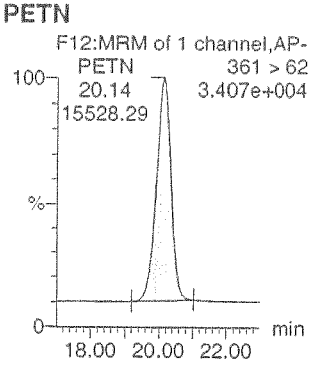
Nitrobenzene



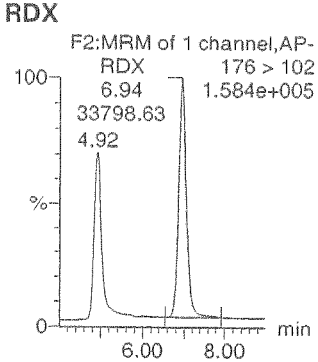
Nitroglycerin



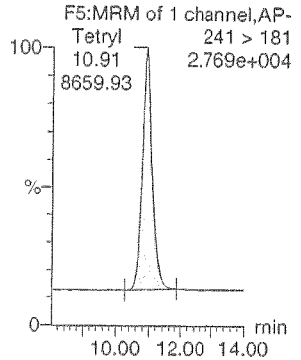
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-07CCV	HMX	176 > 102	4.92	22494.826	4001.976	22494.826	2810.465	bb			659.2787	109.9	9.9	722.2
WXX060209-07CCV	RDX	176 > 102	6.94	33798.629	4001.976	33798.629	4222.743	bb			631.9193	105.3	5.3	1026.0
WXX060209-07CCV	135-Trinitrobenzene	213 > 183	9.25	20163.875	4001.976	20163.875	2519.240	bb			619.0735	103.2	3.2	5679.8
WXX060209-07CCV	13-Dinitrobenzene-d4	172 > 142	10.85	4001.976		4001.976	4001.976	bb			603.0297	120.6	20.6	595.3
WXX060209-07CCV	13-Dinitrobenzene	168 > 138	10.95	6633.141	4001.976	6633.141	828.733	bb			634.8261	105.8	5.8	330.0
WXX060209-07CCV	Tetryl	241 > 181	10.91	8659.931	4001.976	8659.931	1081.957	bb			707.3284	117.9	17.9	1200.9
WXX060209-07CCV	Nitrobenzene	123 > 46	12.23	2110.875	4001.976	2110.875	263.729	bb			544.9084	90.8	-9.2	781.8
WXX060209-07CCV	Nitroglycerin	227 > 62	12.36	607.214	4001.976	607.214	75.864	bb			579.4590	96.6	-3.4	62.3
WXX060209-07CCV	4-Amino-26-dinitrotoluene	197 > 167	13.38	12177.904	34847.805	12177.904	174.730	MM	10-Feb-06	07:07:44	575.6955	95.9	-4.1	869.3
WXX060209-07CCV	2-Amino-46-dinitrotoluene	197 > 180	14.12	16810.779	34847.805	16810.779	241.203	bb			645.4597	107.6	7.6	757.4
WXX060209-07CCV	246-Trinitrotoluene	227 > 210	13.46	41022.887	34847.805	41022.887	588.601	bb			618.5951	103.1	3.1	539.0
WXX060209-07CCV	34-dinitrotoluene	182 > 152	12.28	17356.895	34847.805	17356.895	249.039	bb			305.7518	101.9	1.9	762.8
WXX060209-07CCV	26-dinitrotoluene	182 > 152	15.24	45678.219	34847.805	45678.219	655.396	bd			608.7813	101.5	1.5	2051.8
WXX060209-07CCV	24-dinitrotoluene	182 > 152	15.81	10378.541	34847.805	10378.541	148.912	db			562.5554	93.8	-6.2	464.7
WXX060209-07CCV	26-dinitrotoluene-d3	185 > 155	15.09	34847.805		34847.805	34847.805	bb			575.5796	115.1	15.1	1577.1
WXX060209-07CCV	2-Nitrotoluene	137 > 46	18.28	1851.240	34847.805	1851.240	26.562	bb			532.8354	88.8	-11.2	380.5
WXX060209-07CCV	4-Nitrotoluene	137 > 46	19.36	884.610	34847.805	884.610	12.692	bb			529.3736	88.2	-11.8	181.1
WXX060209-07CCV	3-Nitrotoluene	137 > 46	20.78	1342.515	34847.805	1342.515	19.263	bb			512.9819	85.5	-14.5	250.0
WXX060209-07CCV	PETN	361 > 62	20.14	15528.293	34847.805	15528.293	222.802	bb			571.4434	95.2	-4.8	2141.1

777

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GRAND MEAN AVERAGE

Date of Analysis	02/09/06
Time of Injection	2109
Standard Number	WXX060209-07CCV
Data File	EXP0209023a

HMX		109.9
RDX		105.3
135-TNB		103.2
13-DNB		105.8
Tetryl		117.9
Nitrobenzene		90.8
Nitroglycerin		96.6
4A-26-DNT		95.9
2A-46-DNT		107.6
246-TNT		103.1
34-DNT(surr)		101.9
26-DNT		101.5
24-DNT		93.8
2-NT		88.8
4-NT		88.2
3-NT		85.5
PETN		95.2
Total		1691.0
Average		99.5

obtain on 2/10/06

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0209025a

Analysis Date: 09-FEB-06 22:00

LCMSMS ID: 903

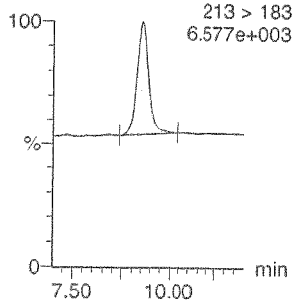
Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	38.027	95	
1,3-Dinitrobenzene-d4	500	551.281	110	
2,4,6-Trinitrotoluene	40	42.461	106	
2,4-Dinitrotoluene	40	35.989	90	
2,6-Dinitrotoluene	40	41.062	103	
2,6-Dinitrotoluene-d3	500	505.06	101	
2-Amino-4,6-dinitrotoluene	40	39.384	98	
3,4-Dinitrotoluene	20	20.905	105	
4-Amino-2,6-dinitrotoluene	40	39.992	100	
HMX	40	49.149	123	
Nitrobenzene	40	46.169	115	
Nitroglycerin	80	58.358	73	
PETN	40	61.129	153	*
RDX	40	35.367	88	
Tetryl	40	40.705	102	
m-Dinitrobenzene	40	41.204	103	
m-Nitrotoluene	40	49.058	123	
o-Nitrotoluene	40	36.387	91	
p-Nitrotoluene	40	38.03	95	

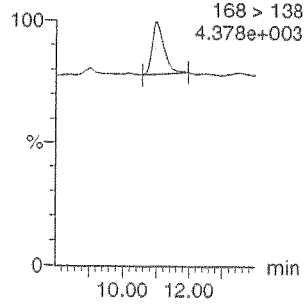
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209025a
Date: 09-Feb-2006
Time: 22:00:53
ID: WXX060209-08CRI
Vial: 1:1,C

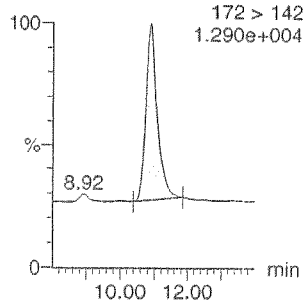
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.577e+003



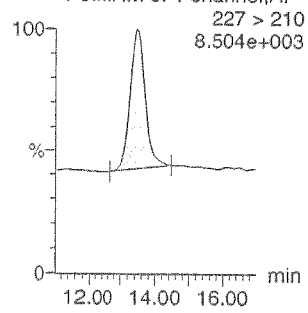
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
4.378e+003



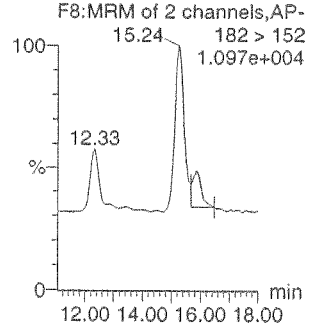
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.290e+004



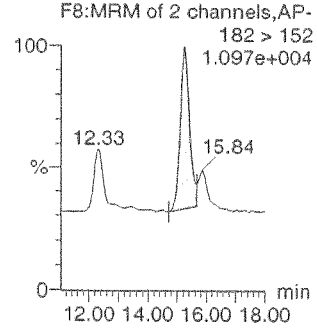
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
8.504e+003



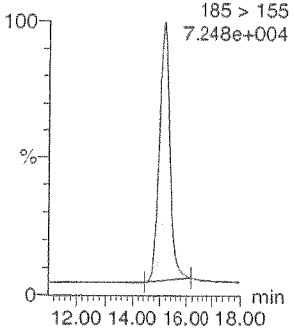
24-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.097e+004



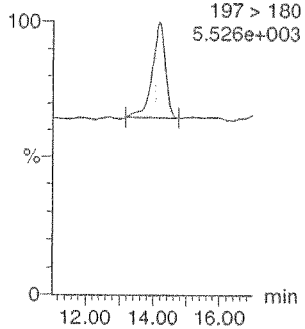
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.097e+004



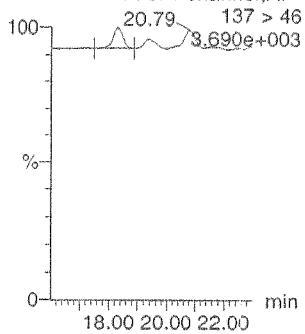
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.248e+004



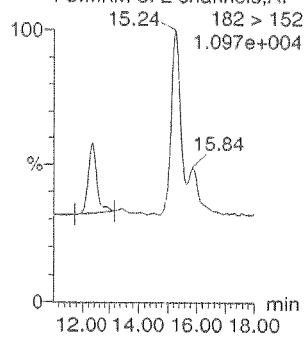
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
5.526e+003



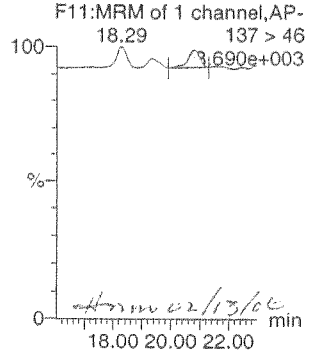
2-Nitrotoluene
F11:MRM of 1 channel,AP-
20.79
137 > 46
3.690e+003



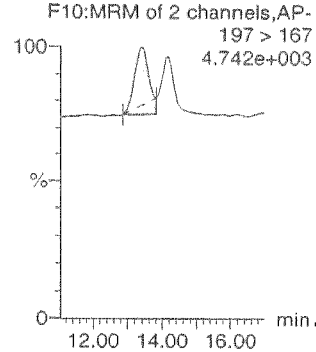
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.24
182 > 152
1.097e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.29
137 > 46
3.690e+003



4-Amino-26-dinitrotoluen
F10:MRM of 2 channels,AP-
197 > 167
4.742e+003



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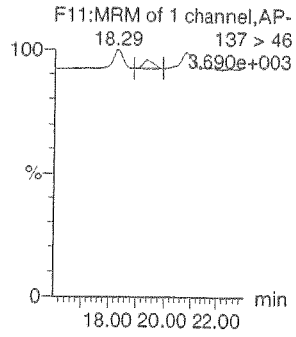
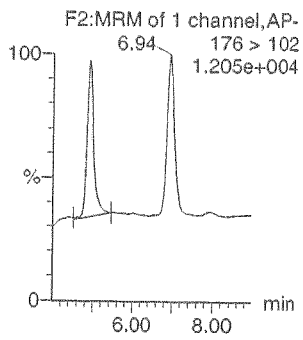
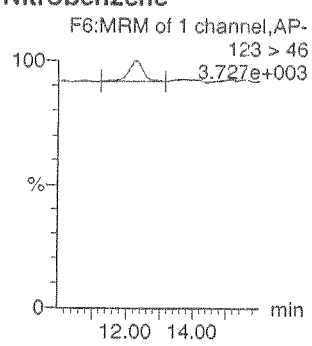
4-Nitrotoluene



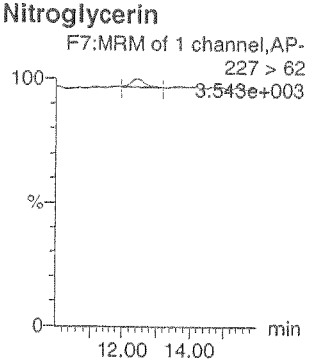
HMX



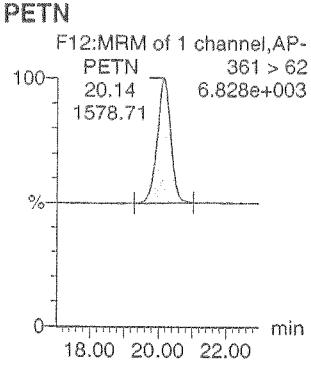
Nitrobenzene



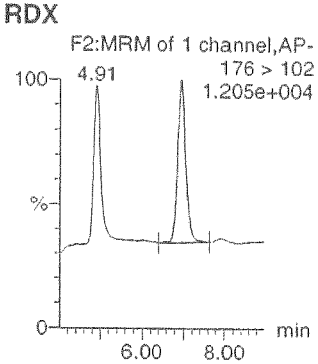
Nitroglycerin



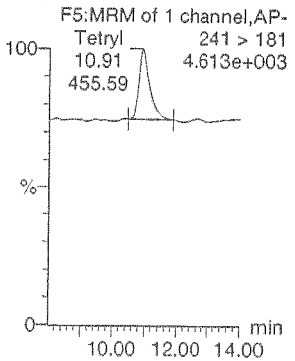
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
WXX060209-08CRI	HMX	176 > 102	4.91	1533.070	3658.551	1533.070	209.519	db			49.1489	122.9	22.9	184.5
WXX060209-08CRI	RDX	176 > 102	6.94	1729.296	3658.551	1729.296	236.336	bb			35.3669	88.4	-11.6	190.0
WXX060209-08CRI	135-Trinitrobenzene	213 > 183	9.27	1132.288	3658.551	1132.288	154.745	bb			38.0269	95.1	-4.9	448.7
WXX060209-08CRI	13-Dinitrobenzene-d4	172 > 142	10.88	3658.551		3658.551	3658.551	bb			551.2814	110.3	10.3	543.9
WXX060209-08CRI	13-Dinitrobenzene	168 > 138	10.95	393.581	3658.551	393.581	53.789	bb			41.2036	103.0	3.0	58.5
WXX060209-08CRI	Tetryl	241 > 181	10.91	455.590	3658.551	455.590	62.264	bb			40.7049	101.8	1.8	61.4
WXX060209-08CRI	Nitrobenzene	123 > 46	12.23	163.502	3658.551	163.502	22.345	bb			46.1689	115.4	15.4	19.1
WXX060209-08CRI	Nitroglycerin	227 > 62	12.41	55.905	3658.551	55.905	7.640	bb			58.3575	72.9	-27.1	5.2
WXX060209-08CRI	4-Amino-26-dinitrotoluene	197 > 167	13.38	571.790	30578.281	571.790	9.350	MM	10-Feb-06	07:07:59	39.9917	100.0	-0.0	117.3
WXX060209-08CRI	2-Amino-46-dinitrotoluene	197 > 180	14.15	900.058	30578.281	900.058	14.717	bb			39.3835	98.5	-1.5	137.7
WXX060209-08CRI	246-Trinitrotoluene	227 > 210	13.46	2470.835	30578.281	2470.835	40.402	bb			42.4606	106.2	6.2	255.4
WXX060209-08CRI	34-dinitrotoluene	182 > 152	12.33	1041.345	30578.281	1041.345	17.028	bb			20.9052	104.5	4.5	40.8
WXX060209-08CRI	26-dinitrotoluene	182 > 152	15.24	2703.468	30578.281	2703.468	44.206	bd			41.0616	102.7	2.7	106.5
WXX060209-08CRI	24-dinitrotoluene	182 > 152	15.84	582.605	30578.281	582.605	9.526	db			35.9886	90.0	-10.0	24.0
WXX060209-08CRI	26-dinitrotoluene-d3	185 > 155	15.12	30578.281		30578.281	30578.281	bb			505.0601	101.0	1.0	1074.3
WXX060209-08CRI	2-Nitrotoluene	137 > 46	18.29	110.930	30578.281	110.930	1.814	bb			36.3866	91.0	-9.0	38.2
WXX060209-08CRI	4-Nitrotoluene	137 > 46	19.34	55.764	30578.281	55.764	0.912	bb			38.0300	95.1	-4.9	17.1
WXX060209-08CRI	3-Nitrotoluene	137 > 46	20.79	112.658	30578.281	112.658	1.842	bb			49.0577	122.6	22.6	32.6
WXX060209-08CRI	PETN	361 > 62	20.14	1578.706	30578.281	1578.706	25.814	bb			61.1293	152.8	52.8	999.5

ethine 02/13/06

2/10/06

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GRAND MEAN AVERAGE

Date of Analysis	02/09/06
Time of Injection	0200
Standard Number	WXX060209-08CRI
Data File	EXP0209025a

HMX		122.9
RDX		88.4
135-TNB		95.1
13-DNB		103.0
Tetryl		101.8
Nitrobenzene		115.4
Nitroglycerin		72.9
4A-26-DNT		100.0
2A-46-DNT		98.5
246-TNT		106.2
34-DNT(surr)		104.5
26-DNT		102.7
24-DNT		90.0
2-NT		91.0
4-NT		95.1
3-NT		122.6
PETN		152.8
Total		1762.9
Average		103.7

ICV Limits 85-115%
CRI Limits 70-130%
CCV Limits 85-115%
No single analyte > +/- 60% recovery

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS0209013.wiff **Analysis Date:** 09-FEB-06 18:11

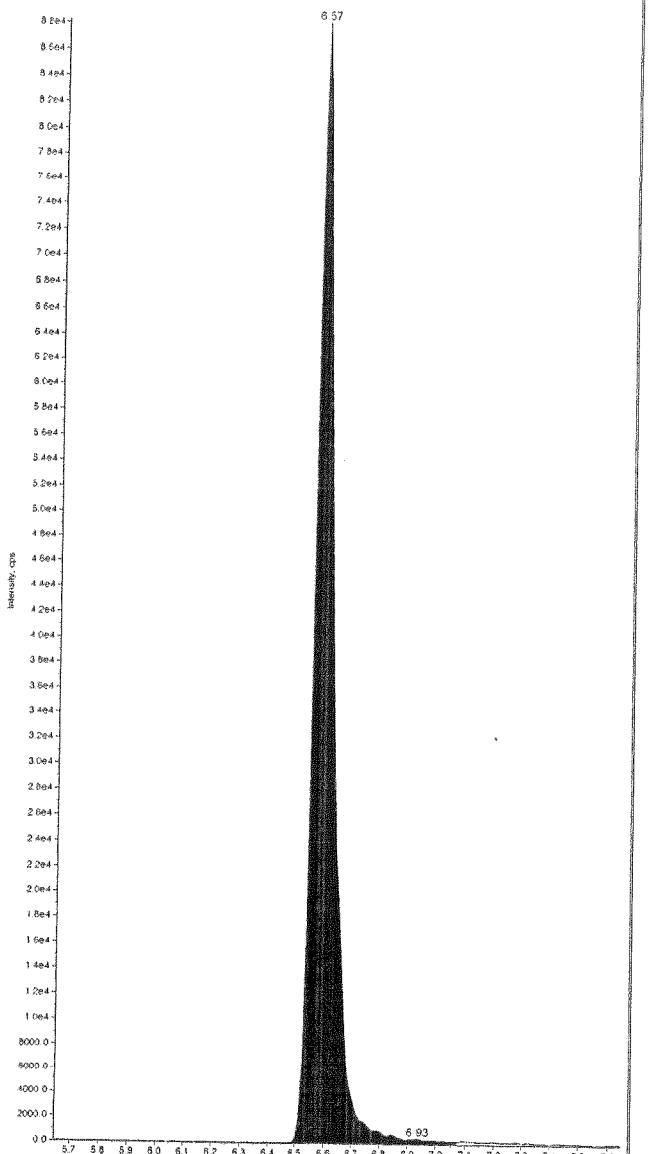
LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	97.3	97	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	51.8	104	
3,5-Dinitroaniline	100	104	104	
TATB	100	115	115	
tris(o-cresyl) phosphate	100	93.4	93	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209013.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	115.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	06:11:05 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.57	min
Area:	4.24e+005	counts
Height:	8.82e+004	cps
Start Time:	6.42	min
End Time:	7.07	min



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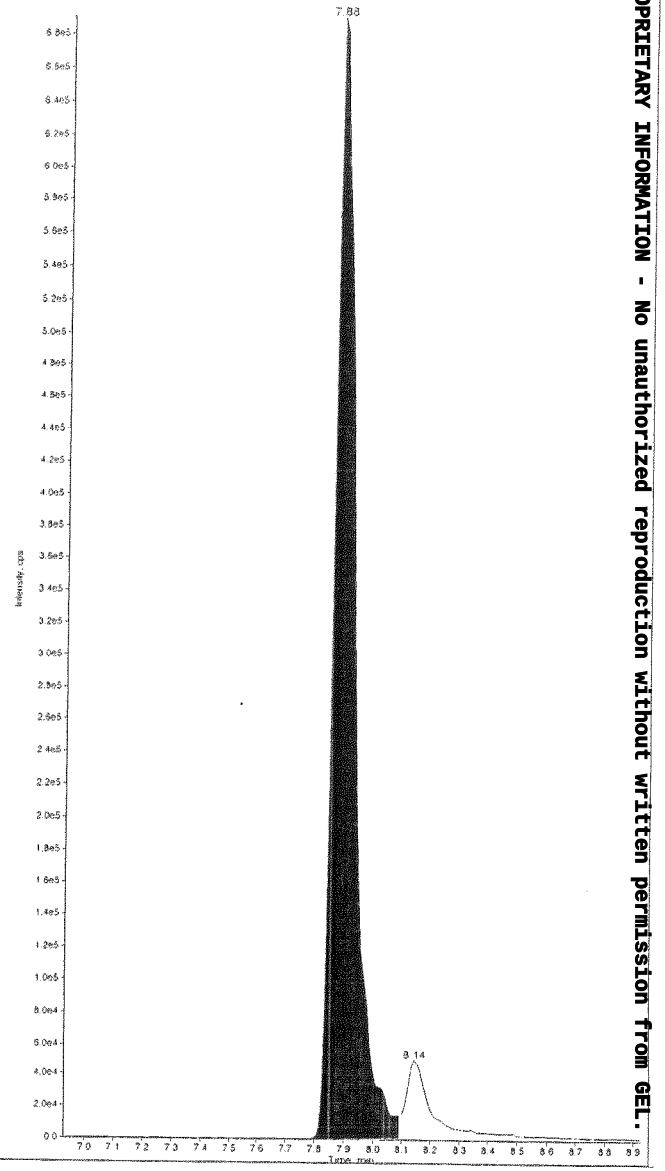
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209013.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	104.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	06:11:05 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.88	min
Area:	3.48e+006	counts
Height:	6.90e+005	cps
Start Time:	7.78	min
End Time:	8.09	min



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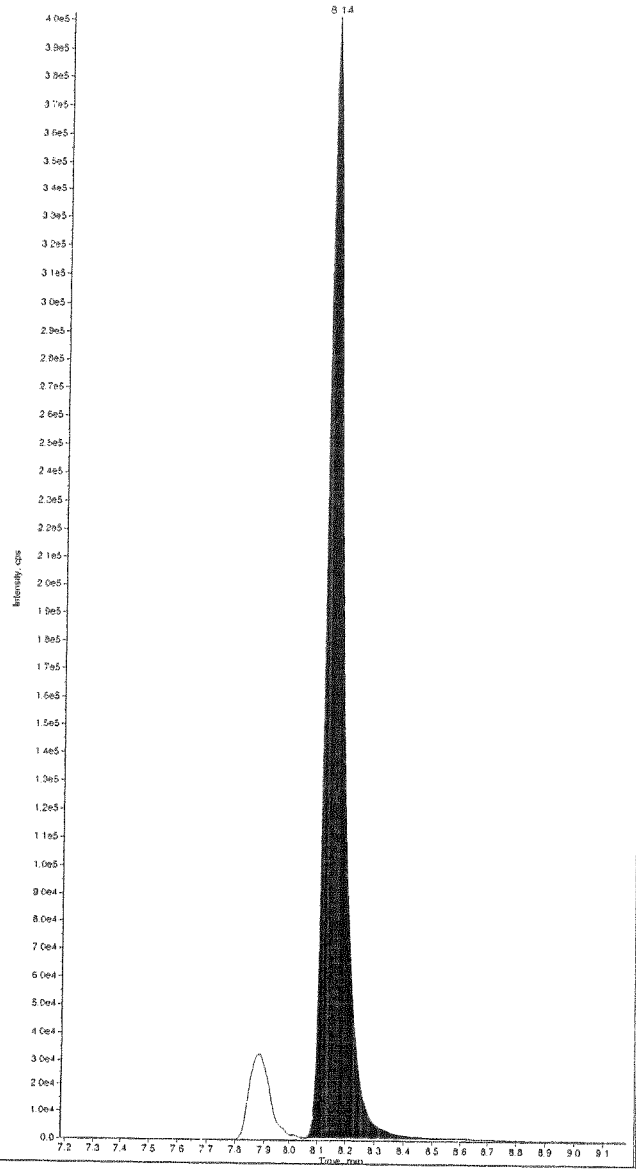
LXS 2/10/06

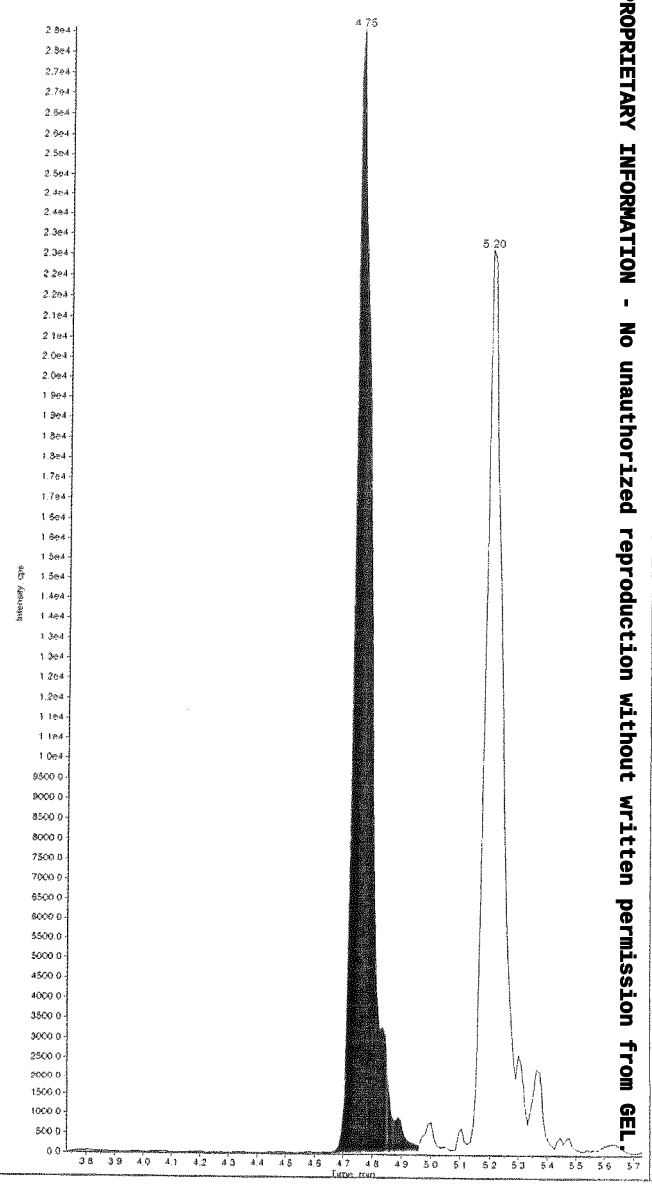
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209013.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	51.8	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	06:11:05 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.14	min
Area:	1.73e+006	counts
Height:	4.02e+005	cps
Start Time:	8.05	min
End Time:	8.53	min



Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209013.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	109.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	06:11:05 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.75	min
Area:	1.19e+005	counts
Height:	2.80e+004	cps
Start Time:	4.62	min
End Time:	4.96	min



4/7 mw 2/13/06

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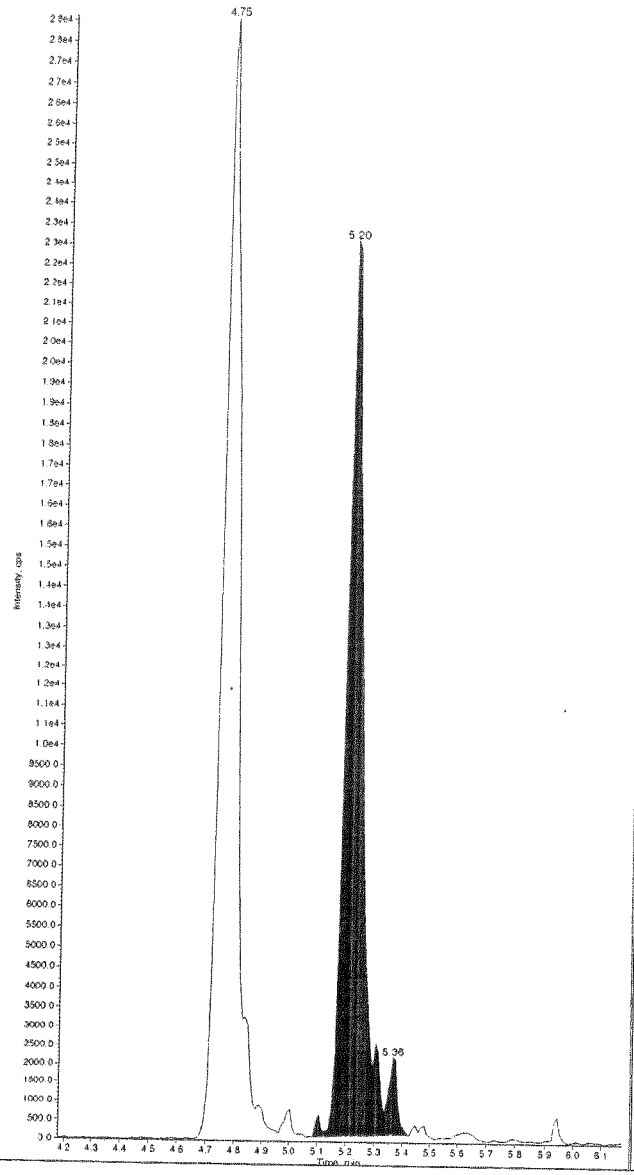
YRS 2/10/06

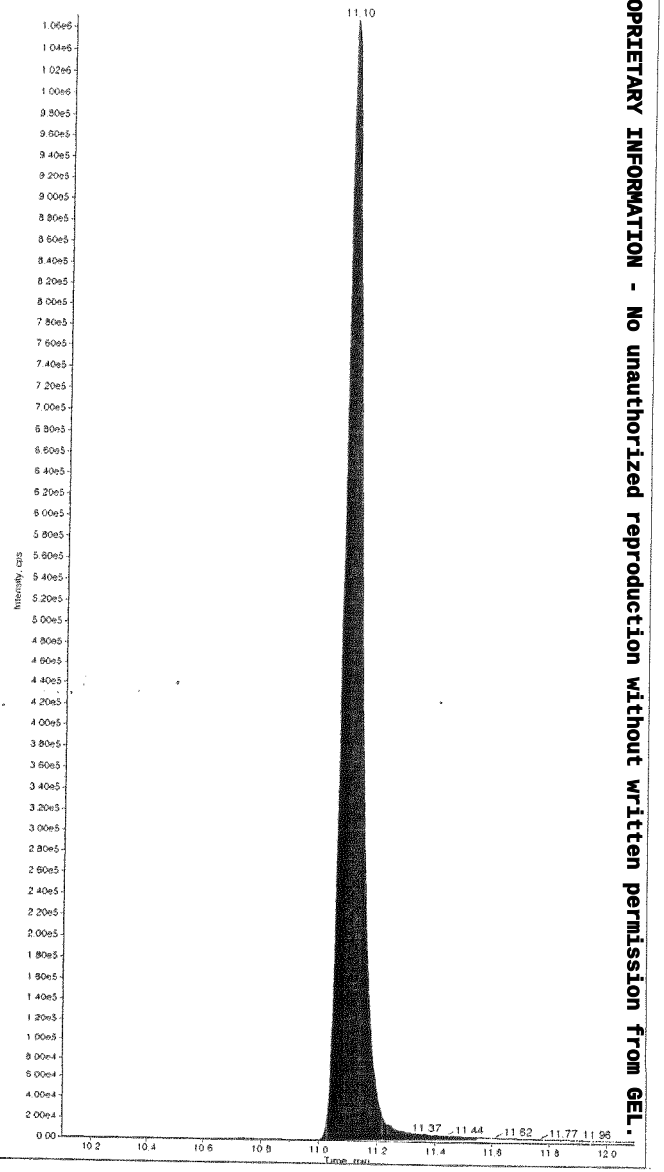
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209013.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.3	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	06:11:05 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.20	min
Area:	9.98e+004	counts
Height:	2.25e+004	cps
Start Time:	5.08	min
End Time:	5.43	min



Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209013.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	93.4	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	06:11:05 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	4.96e+006	counts
Height:	1.07e+006	cps
Start Time:	11.0	min
End Time:	11.5	min



dtm 2/13/06

787

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS0209019.wiff **Analysis Date:** 09-FEB-06 20:25

LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

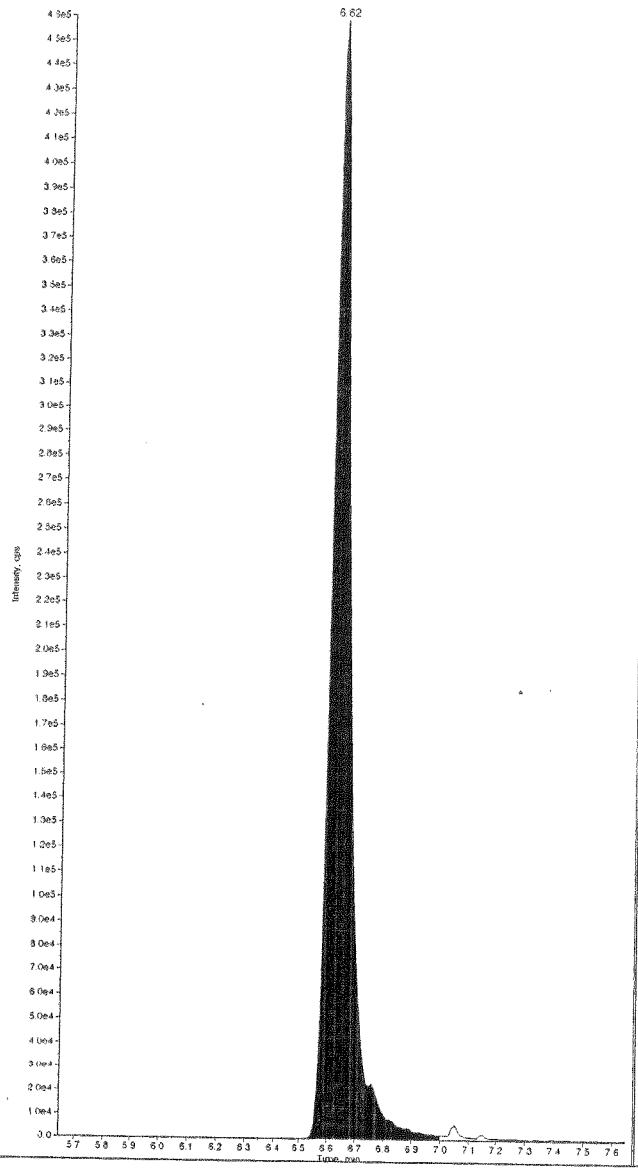
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	457	91	
2,6-Diamino-4-nitrotoluene	500	432	86	
3,4-Dinitrotoluene	250	261	104	
3,5-Dinitroaniline	500	535	107	
TATB	500	507	101	
tris(o-cresyl) phosphate	500	525	105	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

LXS 3/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209019.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

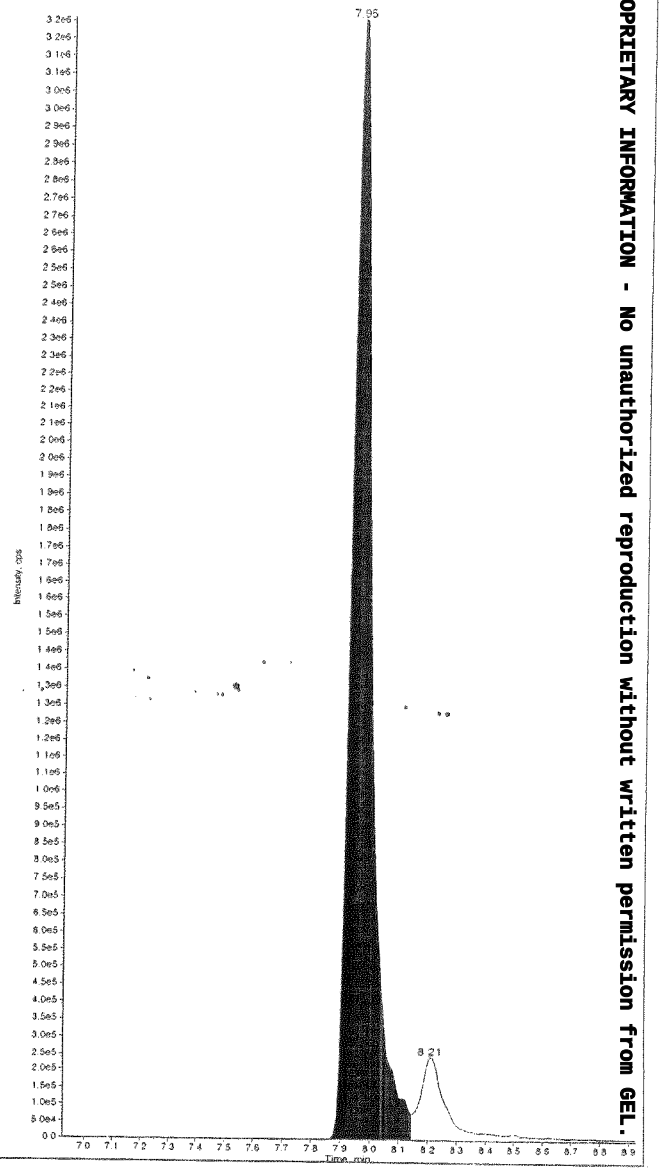
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	507.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	08:25:46 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.62	min
Area:	2.26e+006	counts
Height:	4.60e+005	cps
Start Time:	6.48	min
End Time:	7.00	min



789

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209019.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	535.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	08:25:46 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.95	min
Area:	1.63e+007	counts
Height:	3.21e+006	cps
Start Time:	7.84	min
End Time:	8.14	min



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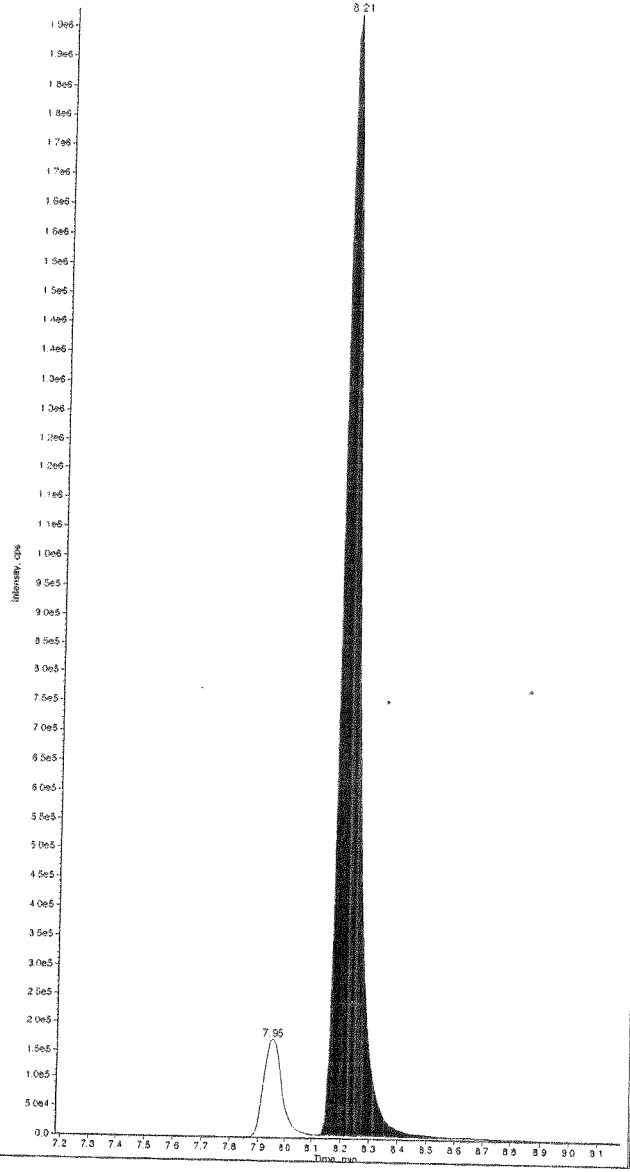
LRS 2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209019.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

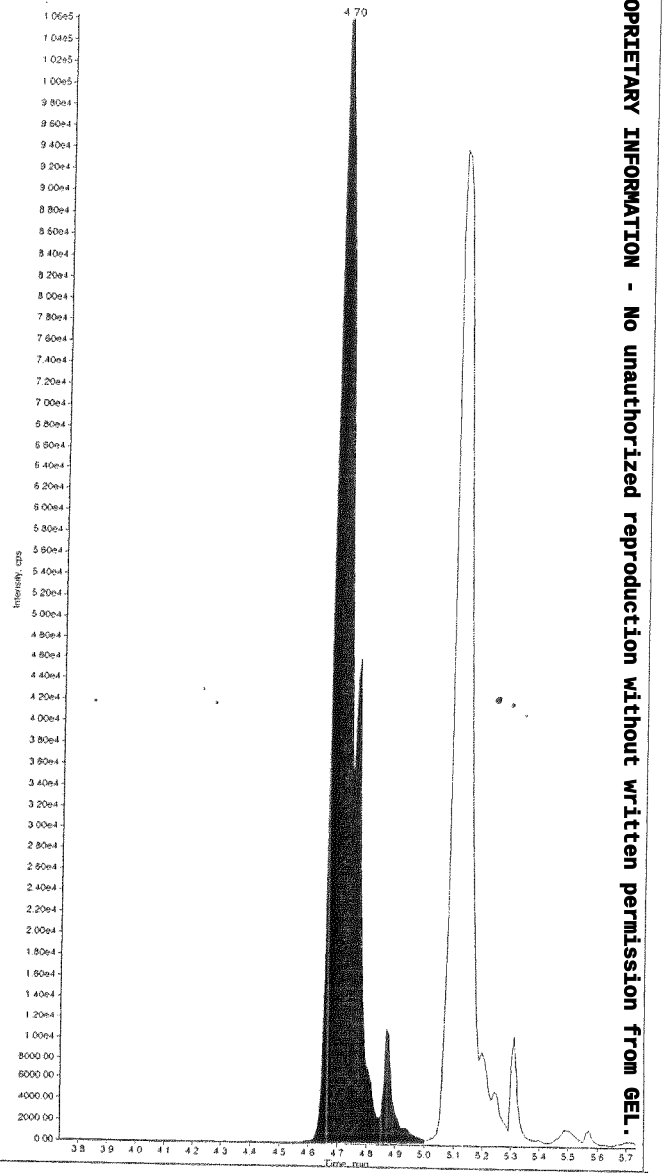
Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	261.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	08:25:46 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.21	min
Area:	8.56e+006	counts
Height:	1.92e+006	cps
Start Time:	8.12	min
End Time:	8.58	min



790

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209019.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	432.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	08:25:46 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.70	min
Area:	5.55e+005	counts
Height:	1.06e+005	cps
Start Time:	4.52	min
End Time:	5.00	min



alarm cl 2/13/06

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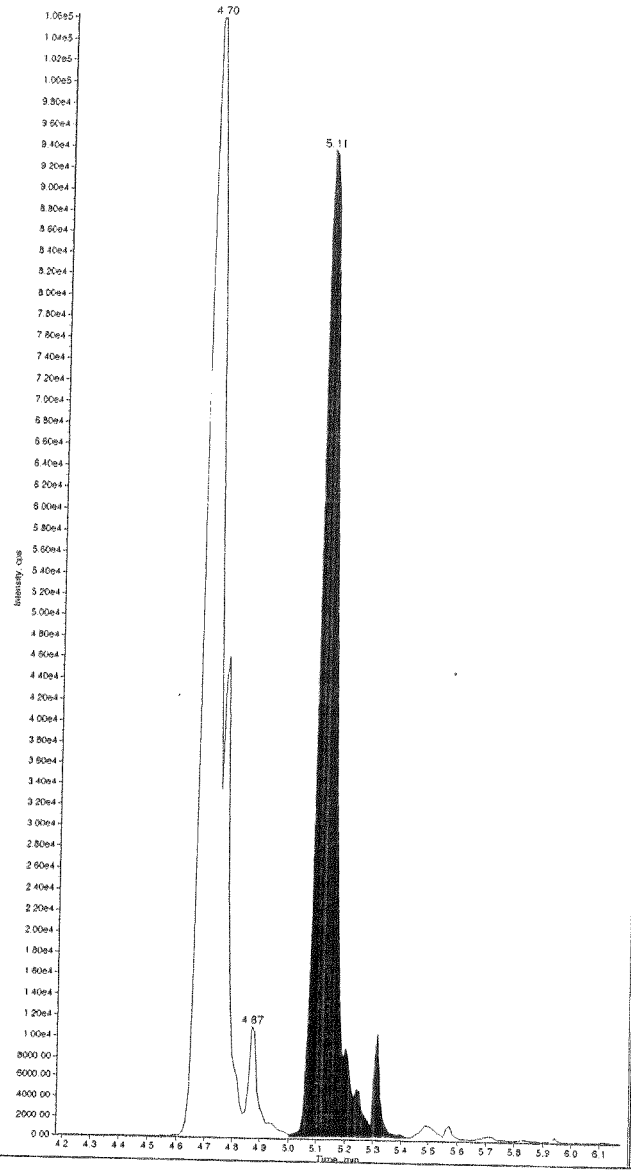
Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209019.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

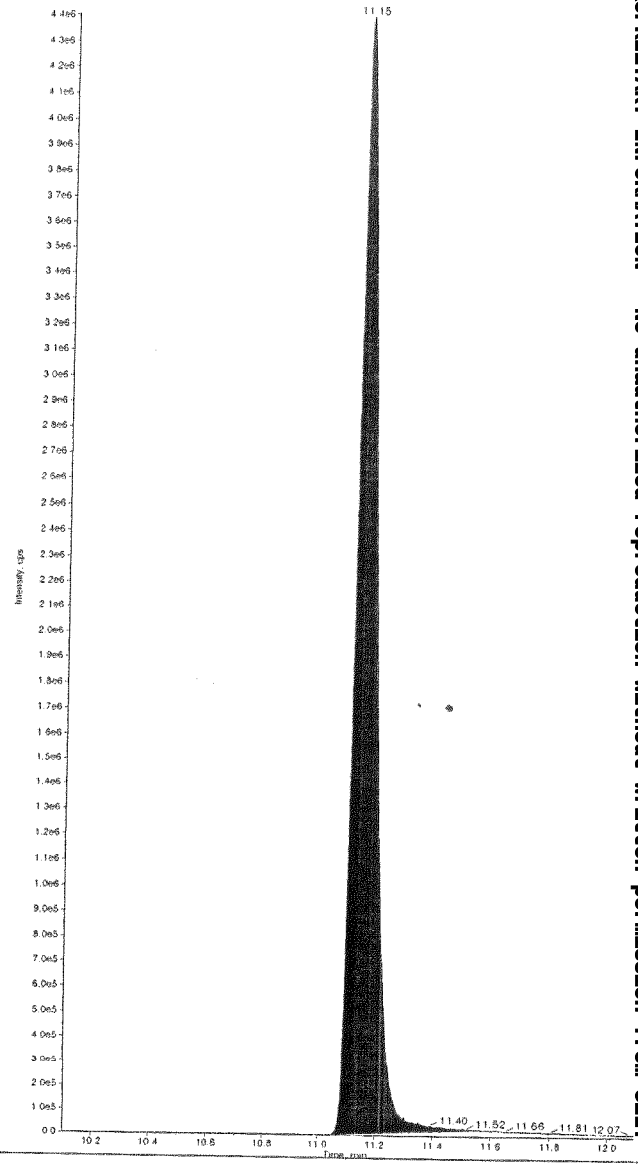
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	457.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	08:25:46 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.11	min
Area:	4.42e+005	counts
Height:	9.39e+004	cps
Start Time:	5.00	min
End Time:	5.43	min



791

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209019.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	525.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	08:25:46 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	2.23e+007	counts
Height:	4.40e+006	cps
Start Time:	11.0	min
End Time:	11.5	min



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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS0209021.wiff

Analysis Date: 09-FEB-06 21:10

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

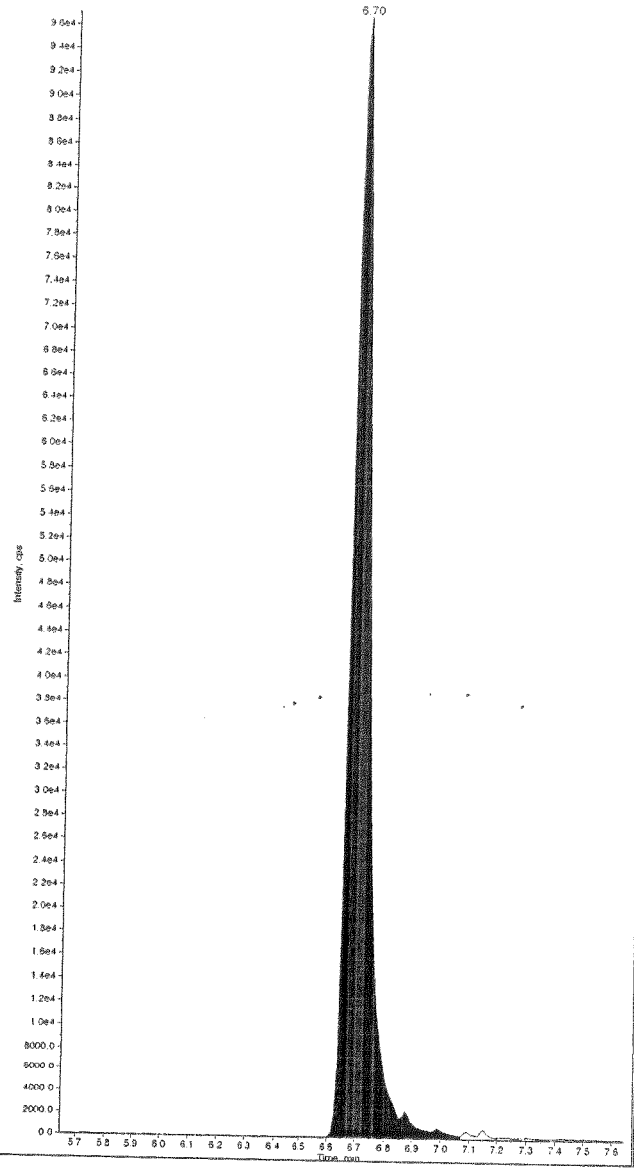
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	107	107	
2,6-Diamino-4-nitrotoluene	100	98	98	
3,4-Dinitrotoluene	50	52.9	106	
3,5-Dinitroaniline	100	102	102	
TATB	100	123	123	
tris(o-cresyl) phosphate	100	95.1	95	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Yes 2/11/06

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209021.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

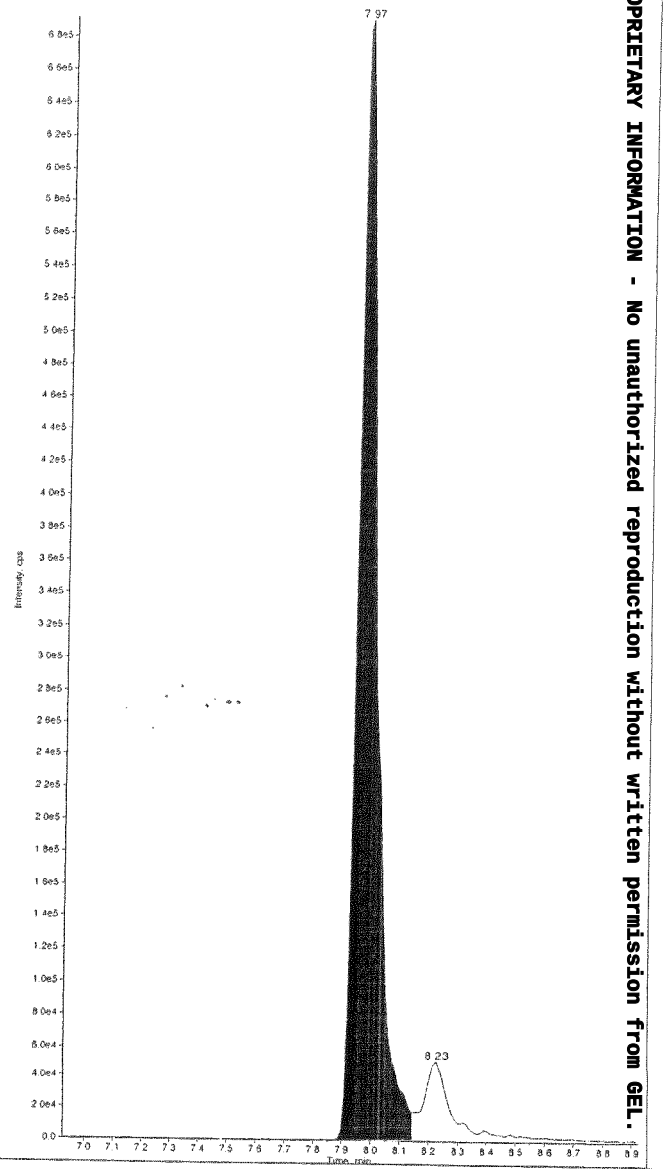
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	123.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:10:43 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.70	min
Area:	4.62e+005	counts
Height:	9.71e+004	cps
Start Time:	6.53	min
End Time:	7.07	min



793

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209021.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	102.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:10:43 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.97	min
Area:	3.43e+006	counts
Height:	6.91e+005	cps
Start Time:	7.86	min
End Time:	8.14	min



Jm 2/13/06

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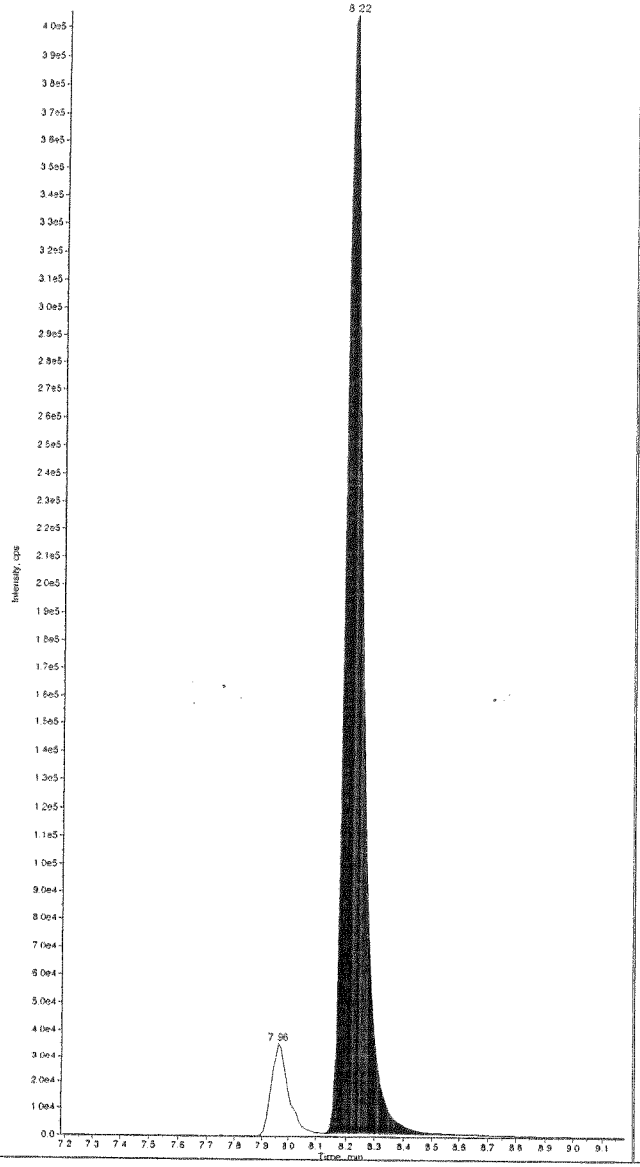
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209021.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

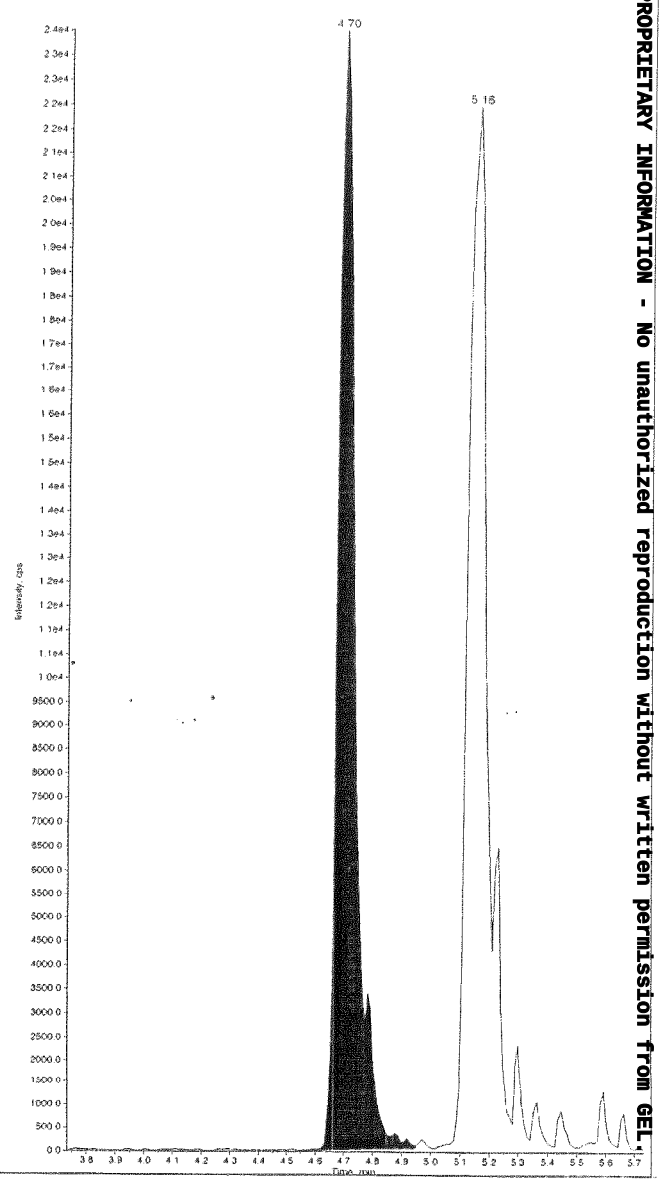
Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	52.9	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:10:43 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.22	min
Area:	1.77e+006	counts
Height:	4.05e+005	cps
Start Time:	8.12	min
End Time:	8.59	min



794

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209021.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	98.0	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:10:43 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.70	min
Area:	1.04e+005	counts
Height:	2.35e+004	cps
Start Time:	4.55	min
End Time:	4.95	min



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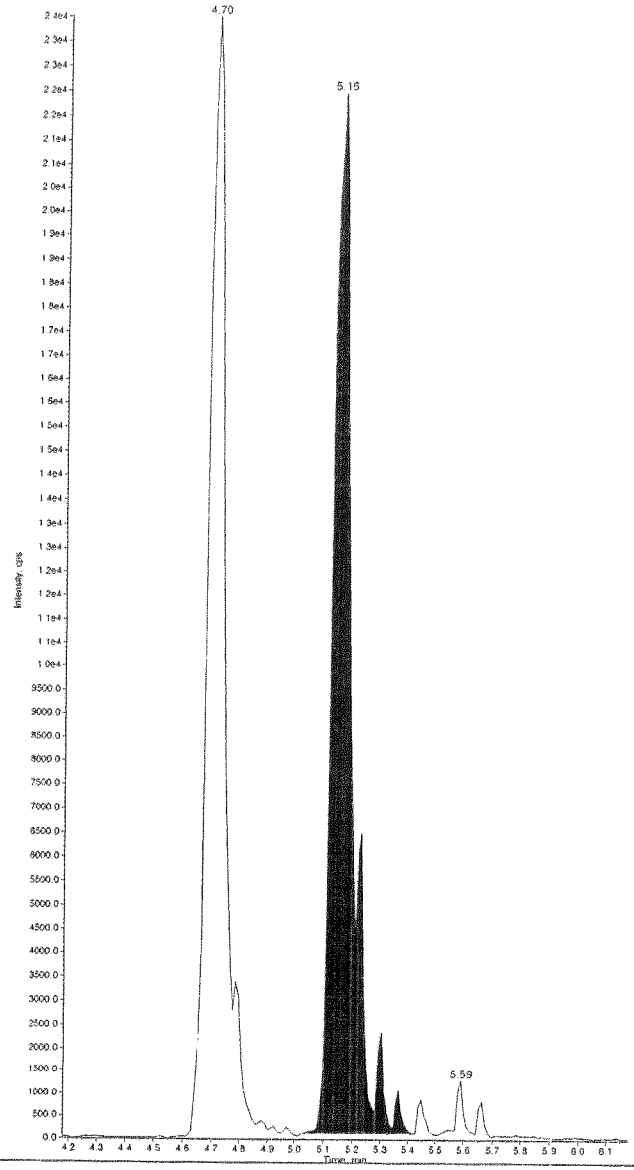
LRS 2/10/06

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209021.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

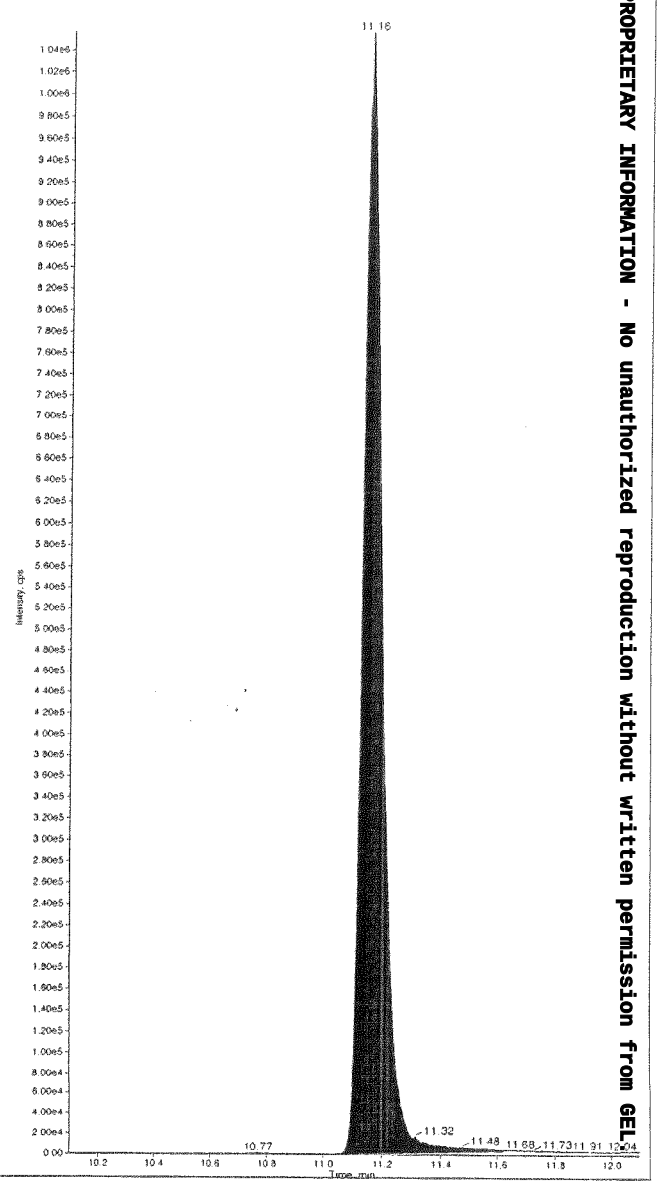
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	107.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:10:43 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.16	min
Area:	1.09e+005	counts
Height:	2.19e+004	cps
Start Time:	5.03	min
End Time:	5.42	min



795

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209021.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	95.1	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:10:43 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	5.04e+006	counts
Height:	1.06e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



stm 02/13/06

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS0209030.wiff **Analysis Date:** 10-FEB-06 00:32

LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

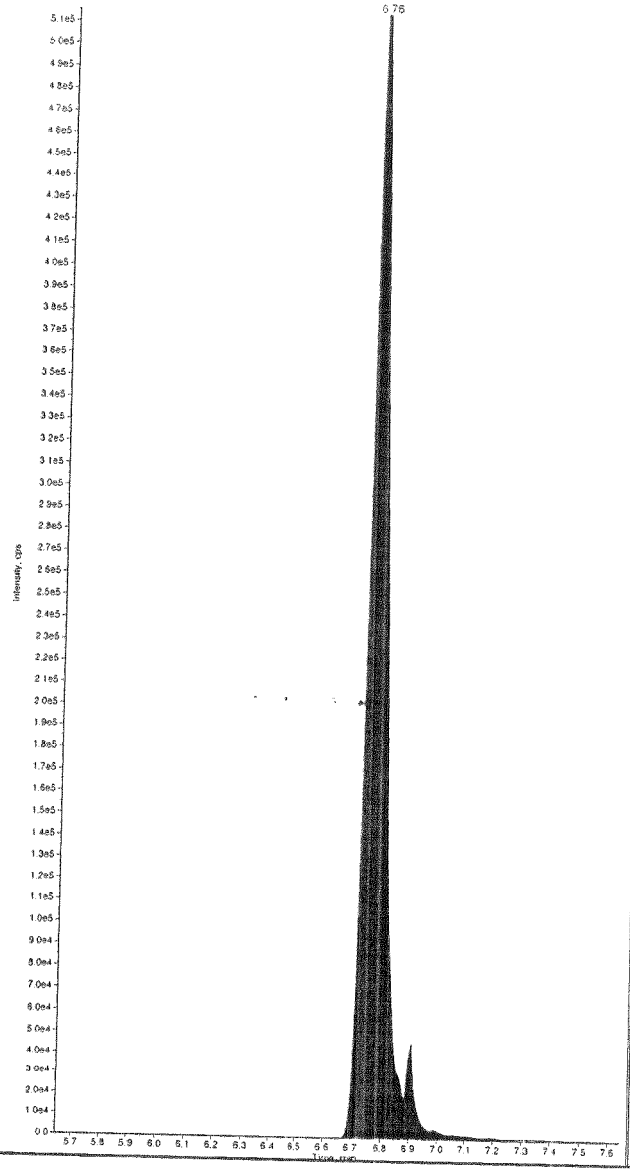
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	463	93	
2,6-Diamino-4-nitrotoluene	500	495	99	
3,4-Dinitrotoluene	250	282	113	
3,5-Dinitroaniline	500	537	107	
TATB	500	567	113	
tris(o-cresyl) phosphate	500	542	108	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before
KRS
2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

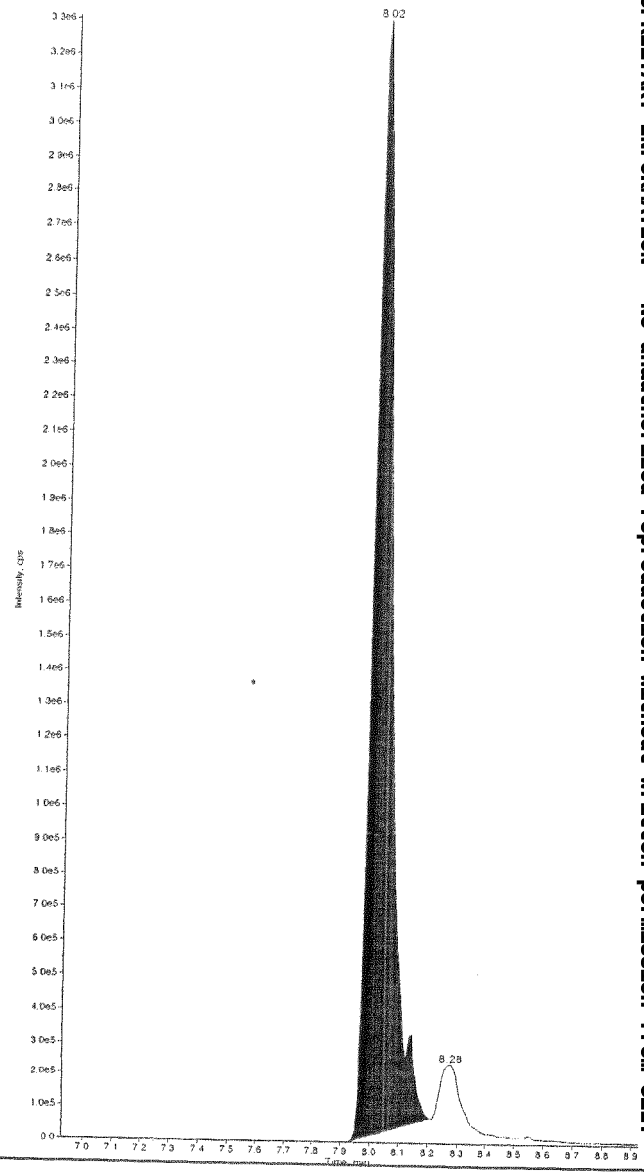
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	567.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.76	min
Area:	2.53e+006	counts
Height:	5.16e+005	cps
Start Time:	6.65	min
End Time:	7.23	min



797

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	517.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.02	min
Area:	1.58e+007	counts
Height:	3.29e+006	cps
Start Time:	7.93	min
End Time:	8.21	min



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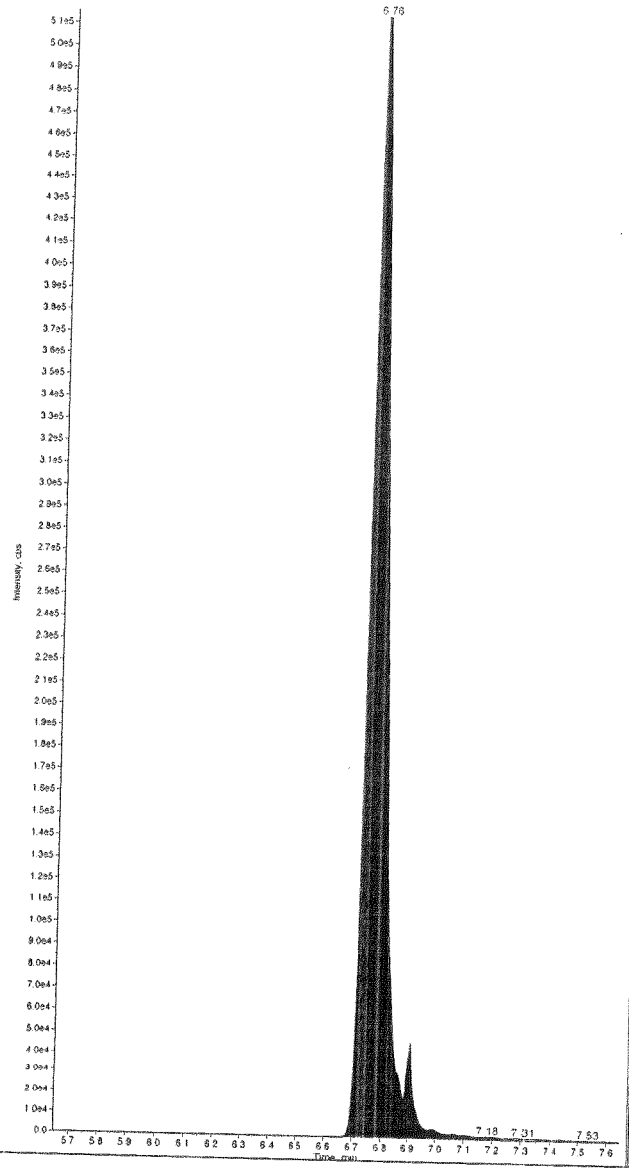
YKPS 2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

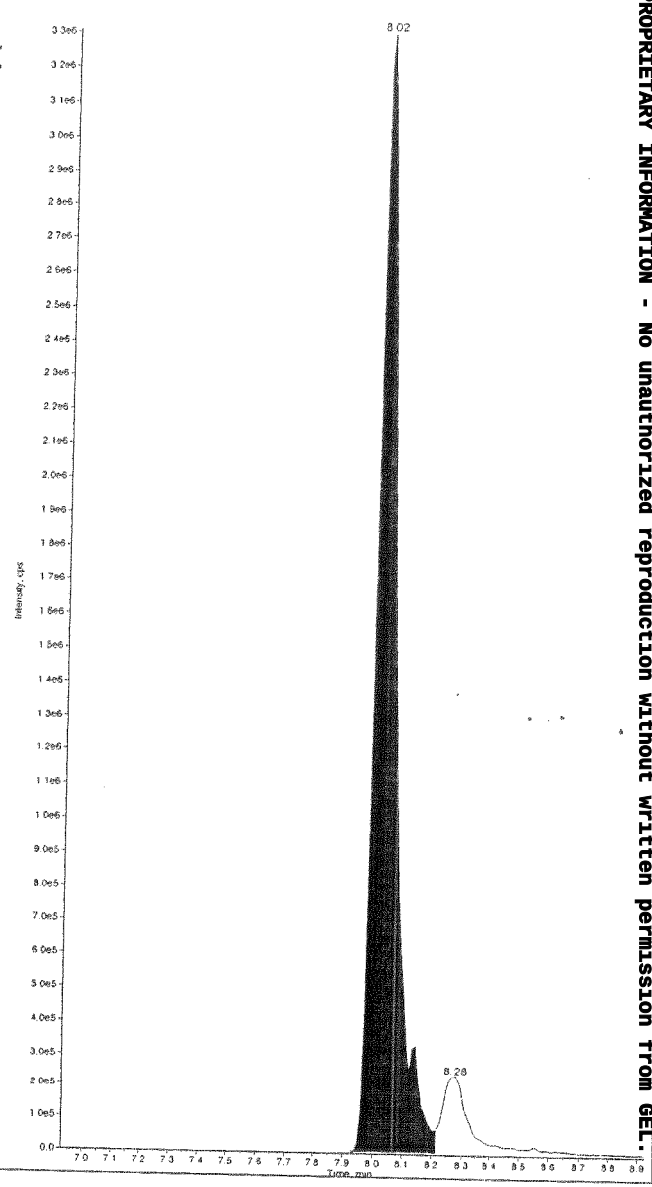
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	567.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.76	min
Area:	2.53e+006	counts
Height:	5.16e+005	cps
Start Time:	6.65	min
End Time:	7.23	min



798

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	537.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	Yes	
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	8.02	min
Area:	1.64e+007	counts
Height:	3.32e+006	cps
Start Time:	7.93	min
End Time:	8.22	min



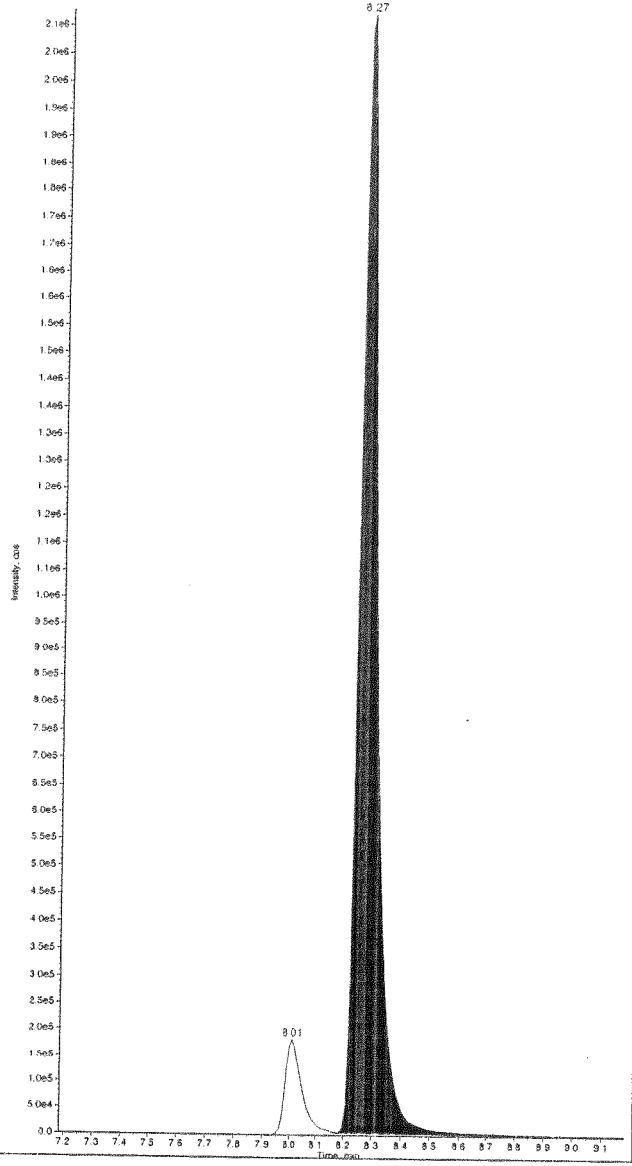
Alter
2/13/06

PROPRIETARY INFORMATION - No unauthorized reproduction without written permission from GEL.

LXS 2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

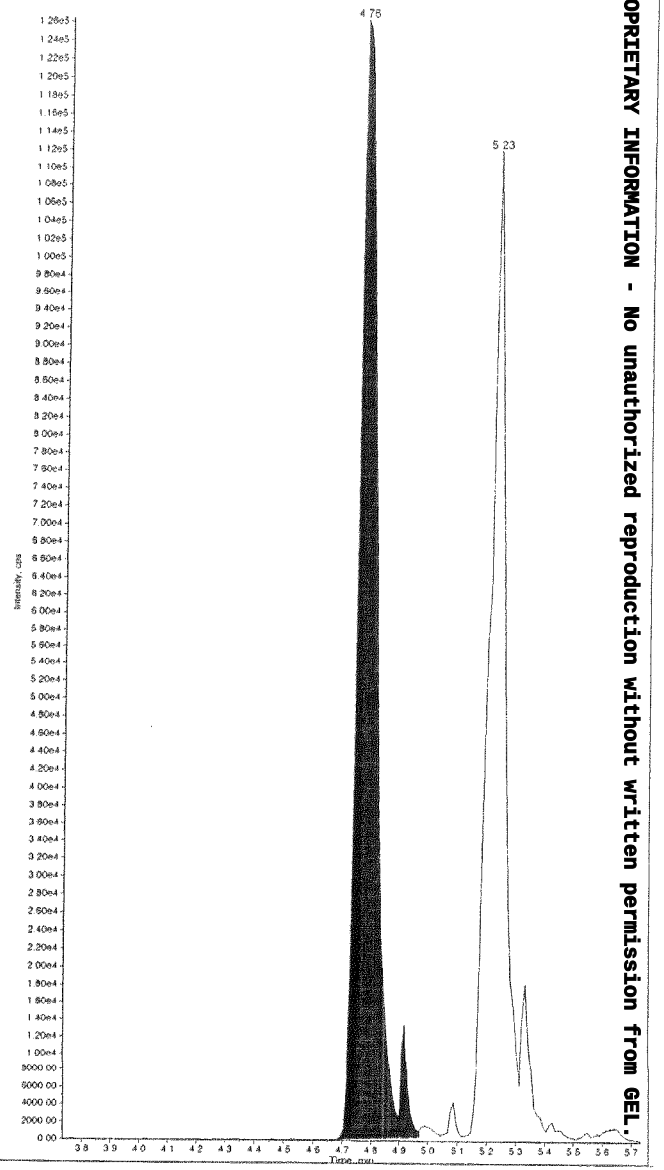
Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	282.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.27	min
Area:	9.22e+006	counts
Height:	2.07e+006	cps
Start Time:	8.17	min
End Time:	8.86	min



799

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	495.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.76	min
Area:	6.36e+005	counts
Height:	1.26e+005	cps
Start Time:	4.67	min
End Time:	4.97	min



Hmm 02/13/06

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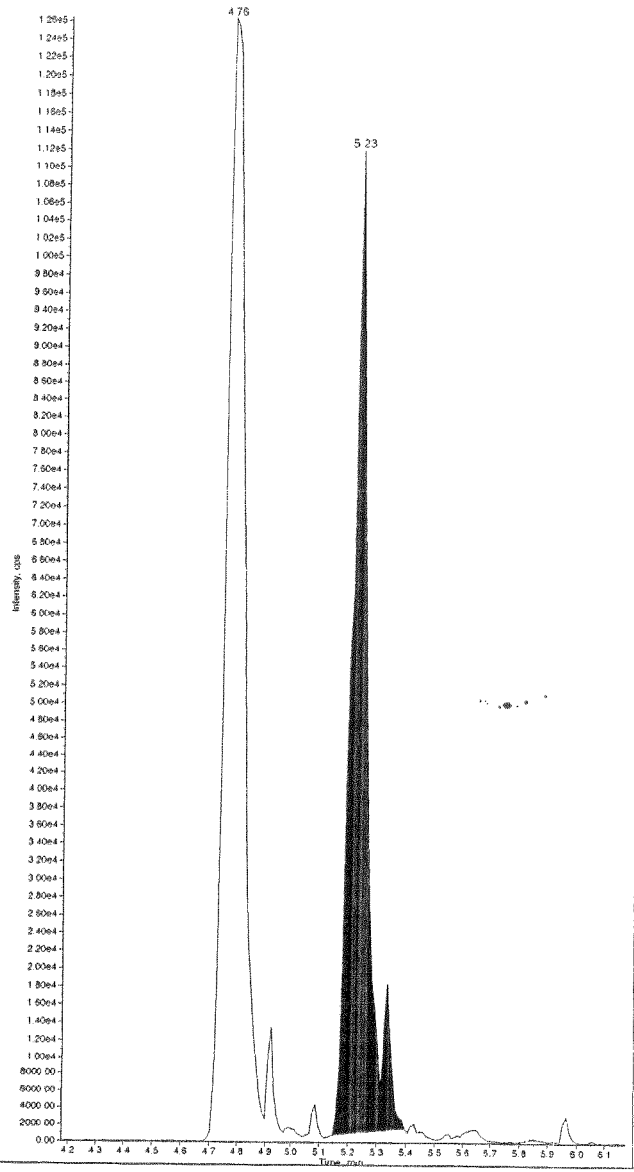
EKS 2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

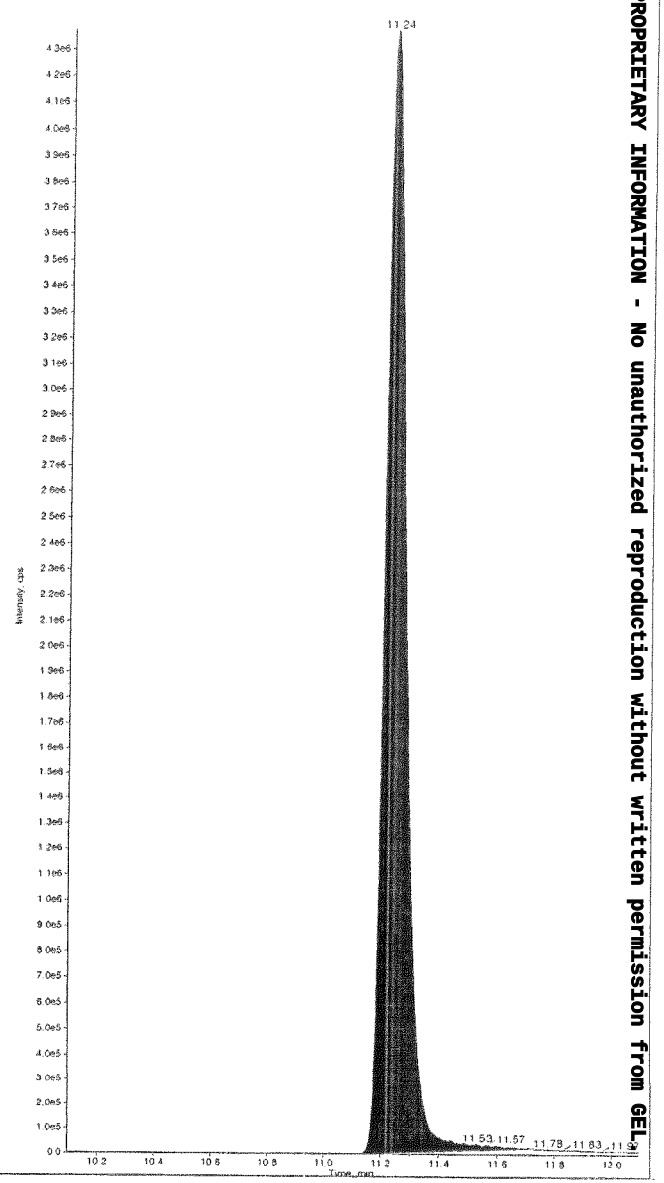
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	463.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.23	min
Area:	4.48e+005	counts
Height:	1.11e+005	cps
Start Time:	5.15	min
End Time:	5.39	min



800

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209030.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	542.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	12:32:56 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	2.29e+007	counts
Height:	4.37e+006	cps
Start Time:	11.1	min
End Time:	11.7	min



Thomas 2/13/06

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS0209032.wiff **Analysis Date:** 10-FEB-06 01:17

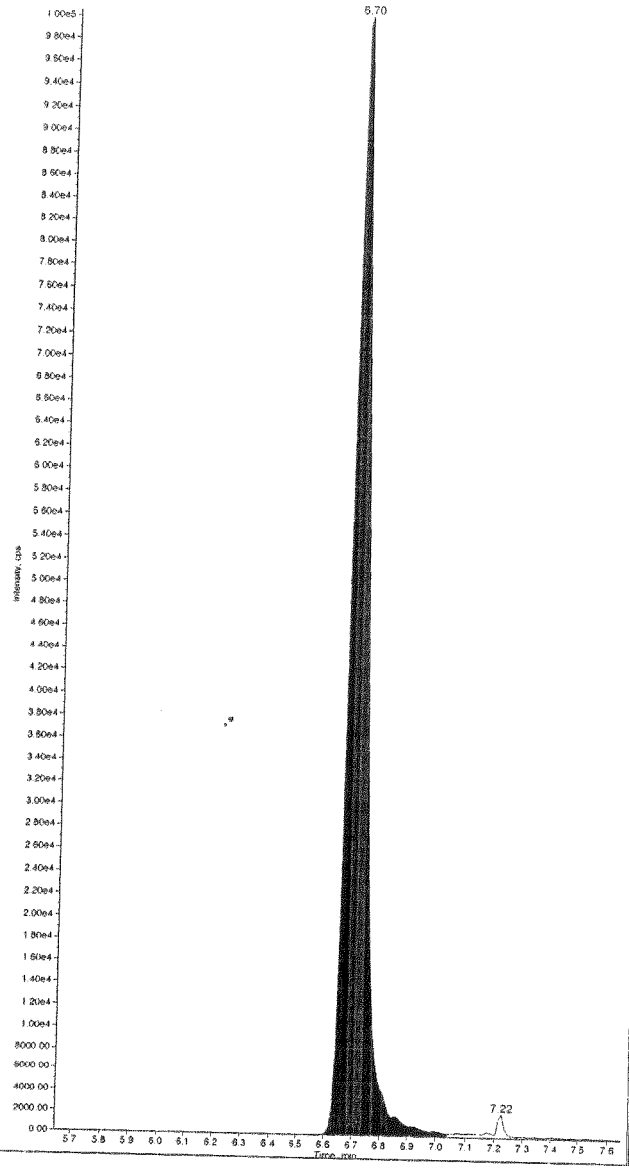
LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	94.8	95	
2,6-Diamino-4-nitrotoluene	100	108	108	
3,4-Dinitrotoluene	50	55.2	110	
3,5-Dinitroaniline	100	106	106	
TATB	100	125	125	
tris(o-cresyl) phosphate	100	97.6	98	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209032.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

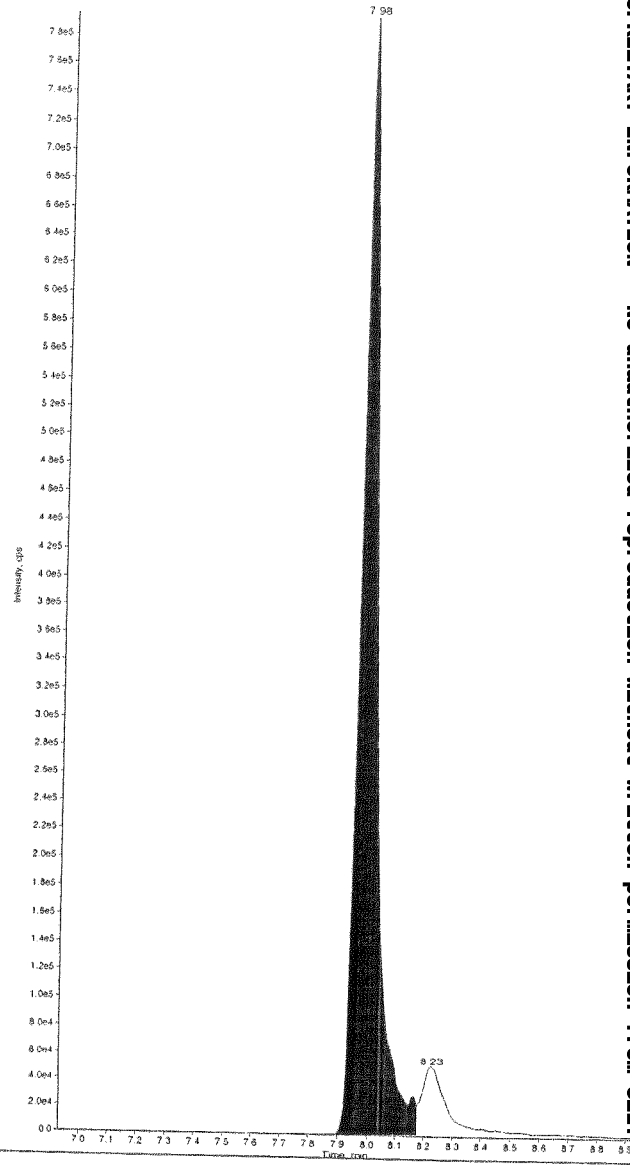
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	125.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:17:43 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.70	min
Area:	4.71e+005	counts
Height:	1.00e+005	cps
Start Time:	6.56	min
End Time:	7.04	min



802

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209032.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	106.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:17:43 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.98	min
Area:	3.56e+006	counts
Height:	7.95e+005	cps
Start Time:	7.88	min
End Time:	8.17	min



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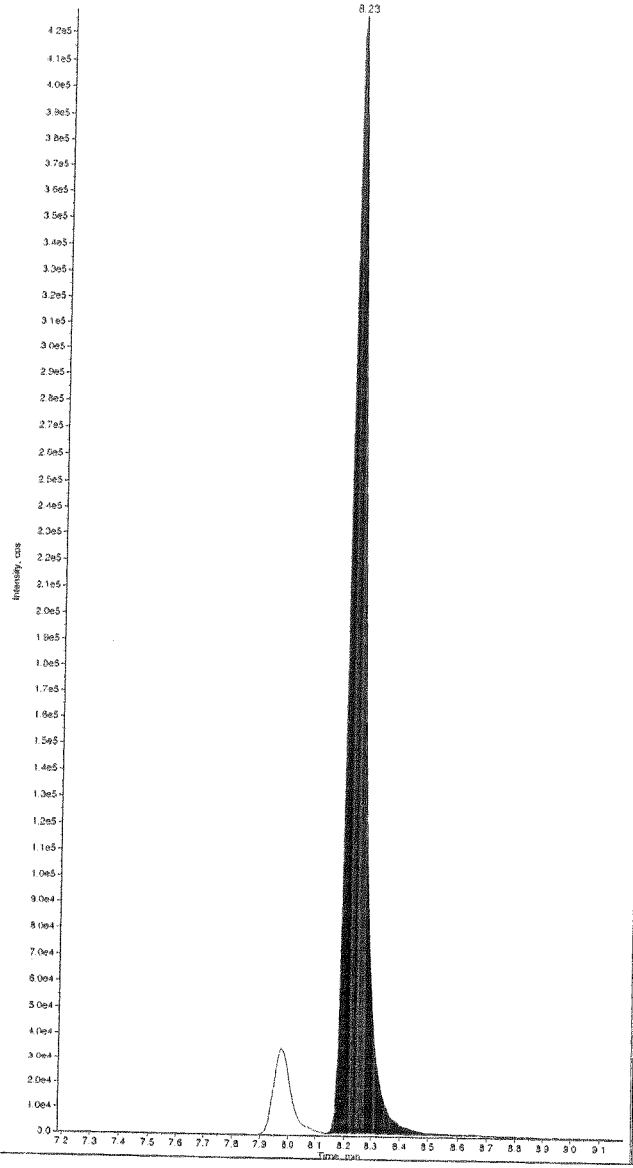
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209032.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

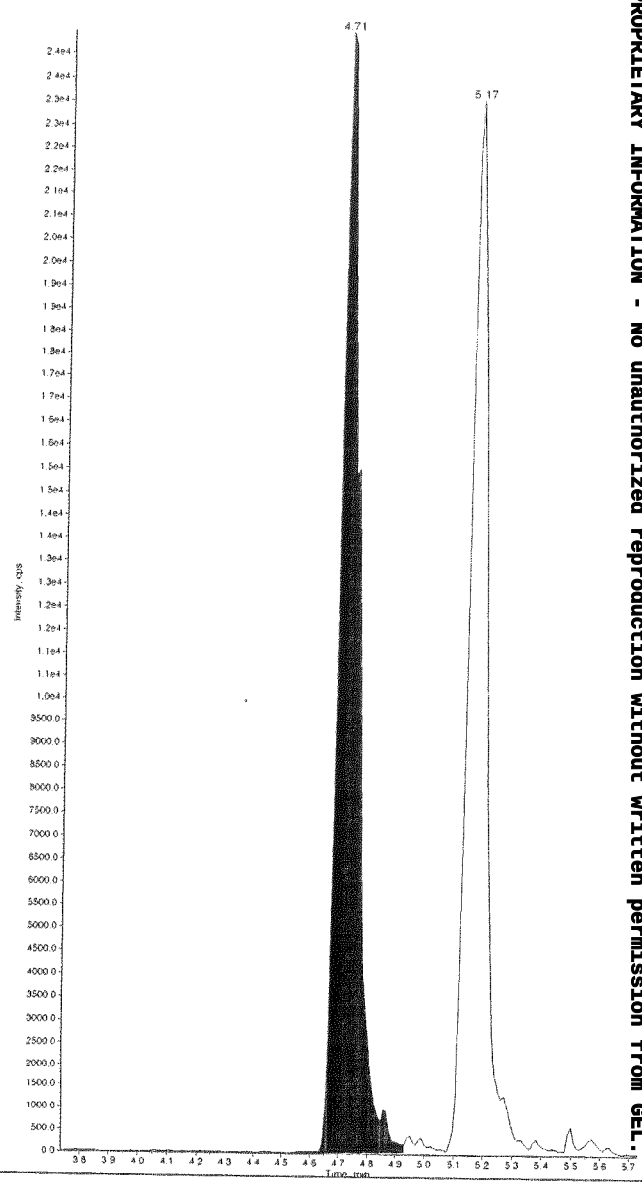
Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	55.2	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:17:43 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.23	min
Area:	1.85e+006	counts
Height:	4.27e+005	cps
Start Time:	8.13	min
End Time:	8.62	min



803

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209032.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	108.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:17:43 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.71	min
Area:	1.18e+005	counts
Height:	2.45e+004	cps
Start Time:	4.53	min
End Time:	4.93	min



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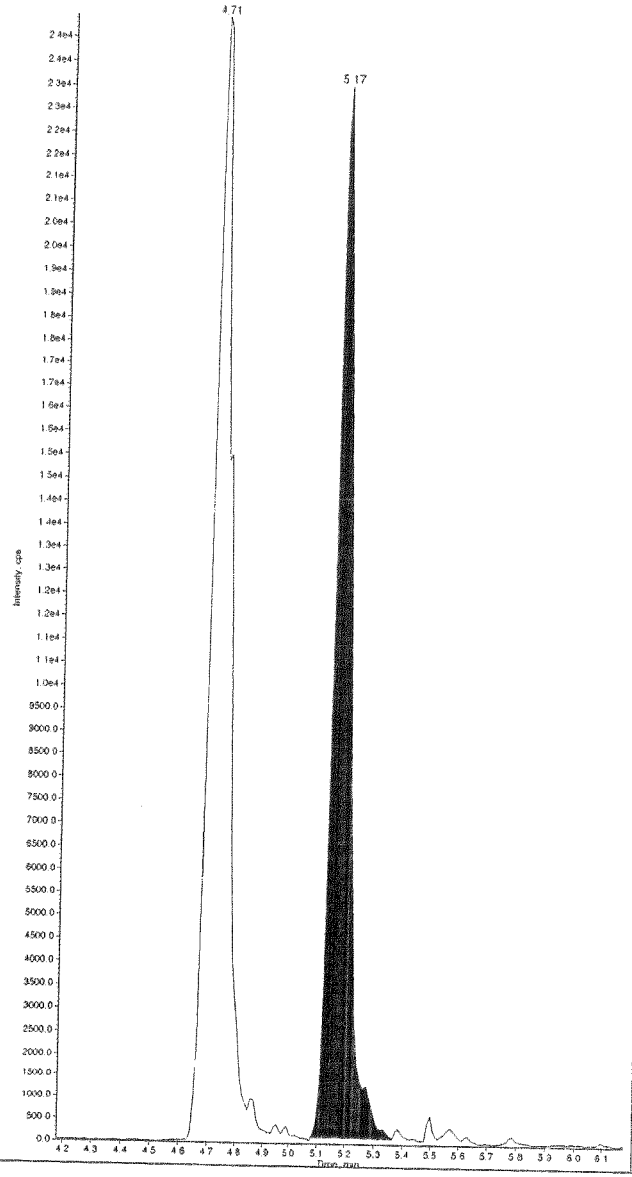
LXS 2/10/06

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209032.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

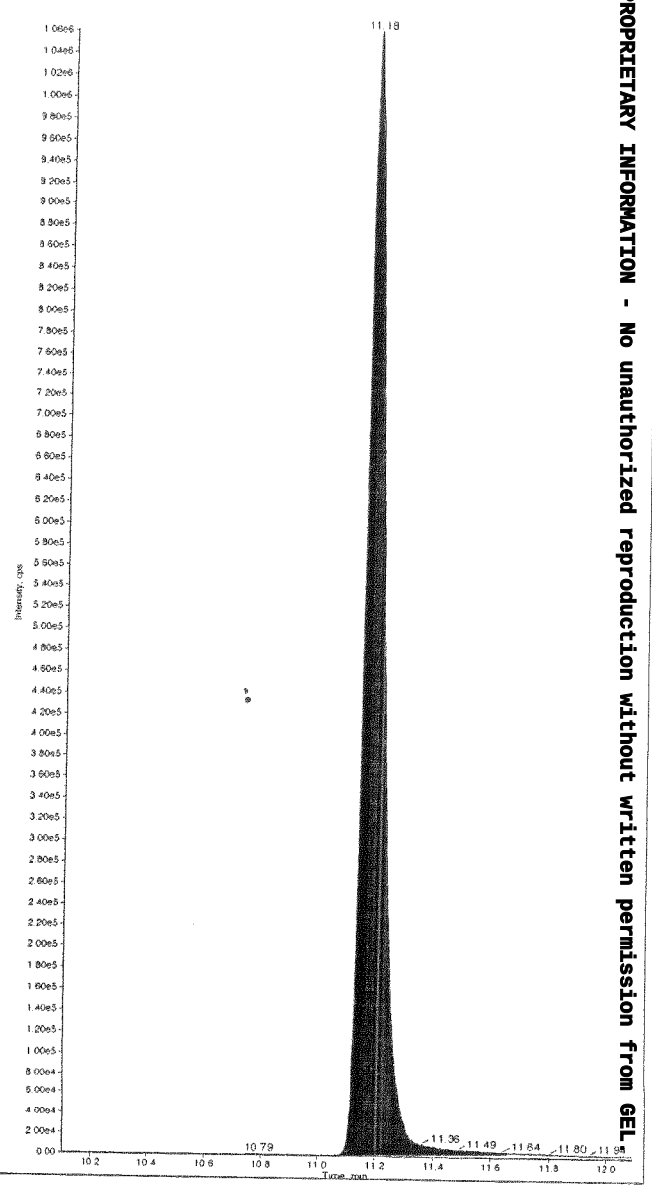
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.8	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:17:43 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.17	min
Area:	9.75e+004	counts
Height:	2.30e+004	cps
Start Time:	5.07	min
End Time:	5.36	min



804

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209032.wiff"
Peak Name: "Iris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.6	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:17:43 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	5.15e+006	counts
Height:	1.06e+006	cps
Start Time:	11.1	min
End Time:	11.7	min



Hmm 2/13/06

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS0209036.wiff

Analysis Date: 10-FEB-06 02:47

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

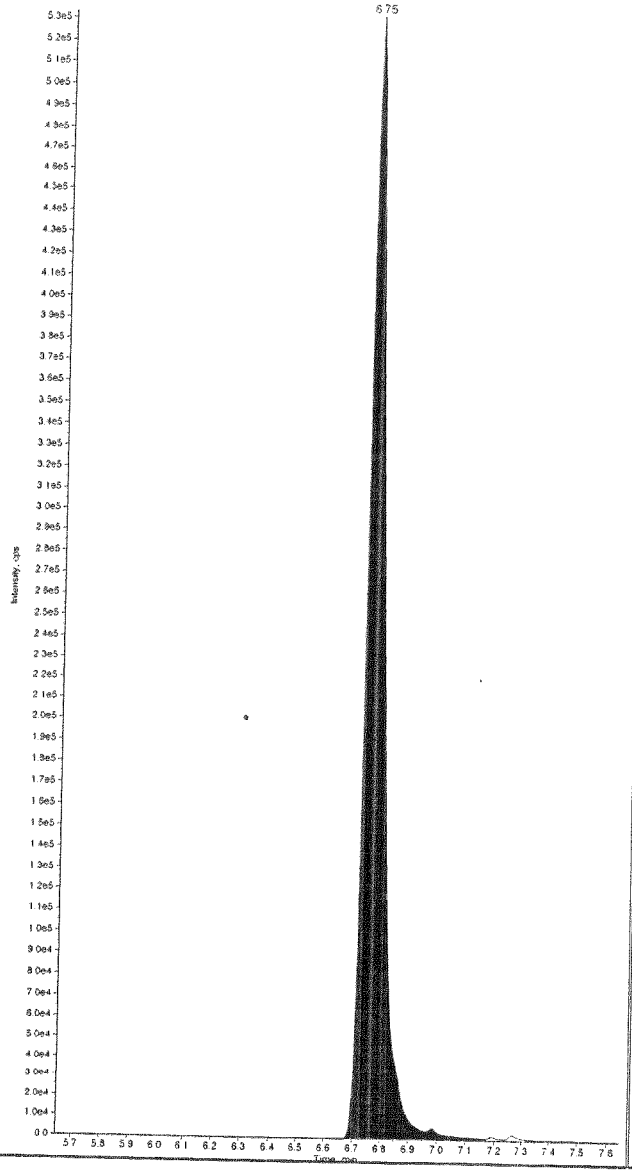
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	536	107	
2,6-Diamino-4-nitrotoluene	500	420	84	
3,4-Dinitrotoluene	250	267	107	
3,5-Dinitroaniline	500	545	109	
TATB	500	544	109	
tris(o-cresyl) phosphate	500	552	110	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before RES 2/10/06

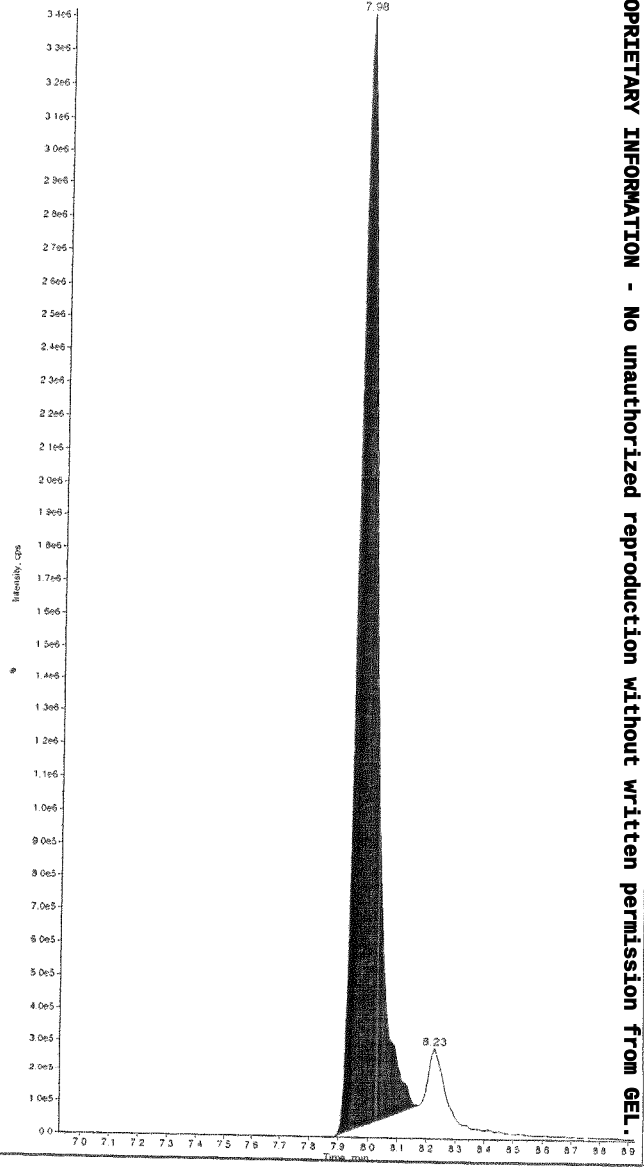
Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	544.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.75	min
Area:	2.43e+006	counts
Height:	5.33e+005	cps
Start Time:	6.60	min
End Time:	7.17	min



Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	518.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.98	min
Area:	1.58e+007	counts
Height:	3.39e+006	cps
Start Time:	7.89	min
End Time:	8.17	min



Adm. 2/13/06

808

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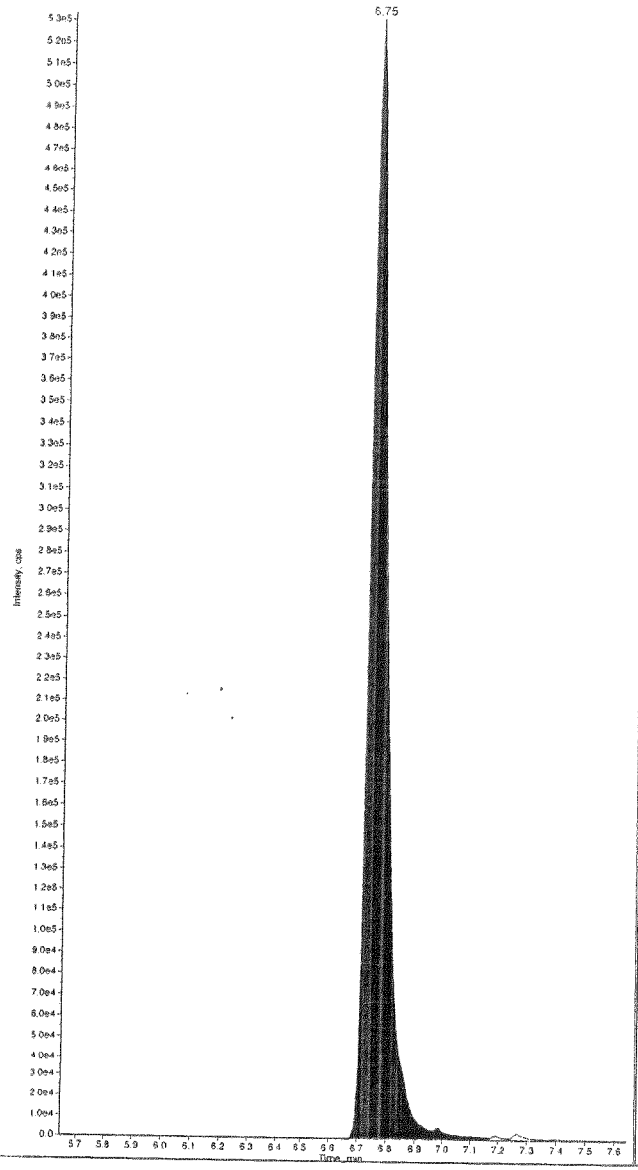
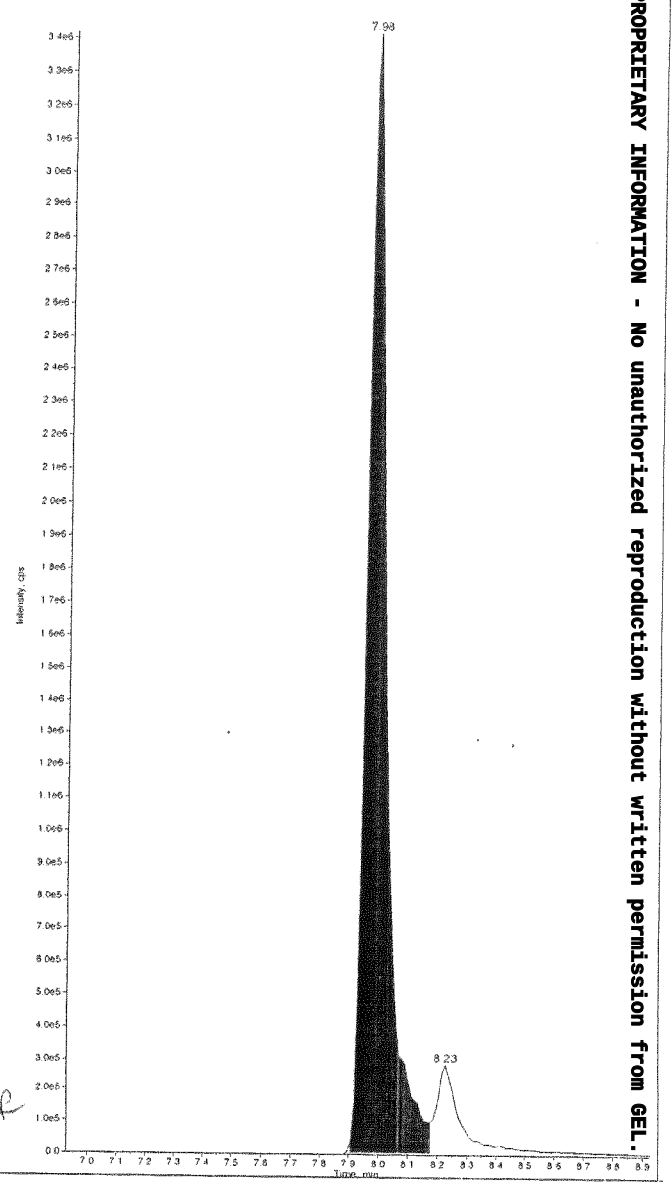
Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	544.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.75	min
Area:	2.43e+006	counts
Height:	5.33e+005	cps
Start Time:	6.60	min
End Time:	7.17	min



Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	545.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	Yes	
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	7.98	min
Area:	1.66e+007	counts
Height:	3.42e+006	cps
Start Time:	7.91	min
End Time:	8.17	min



807

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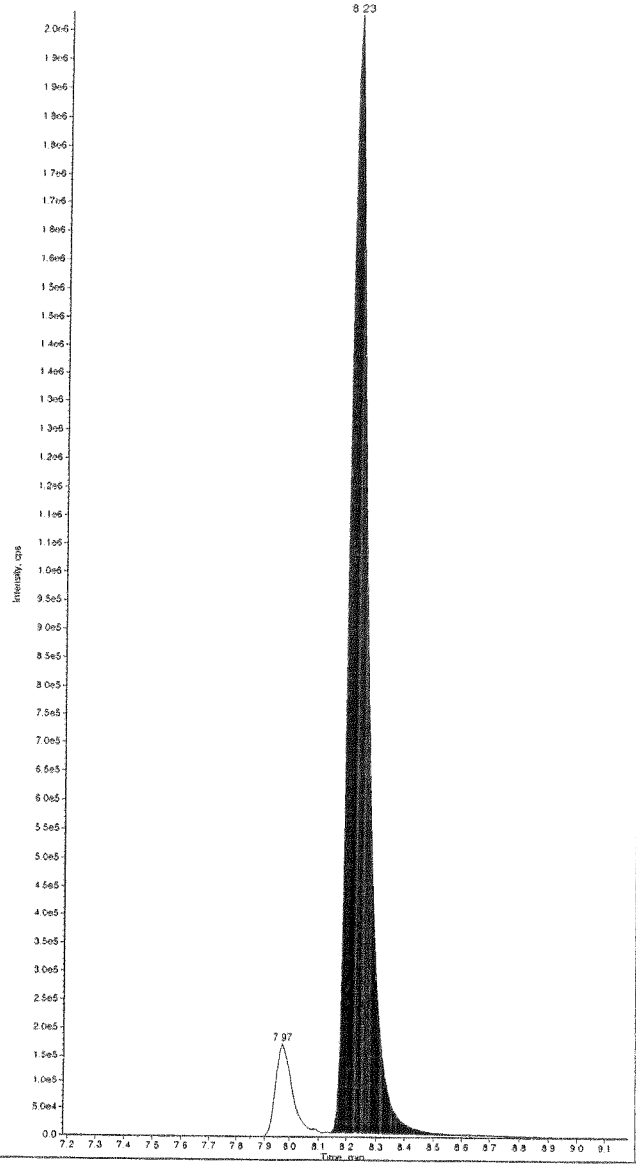
LXS 2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

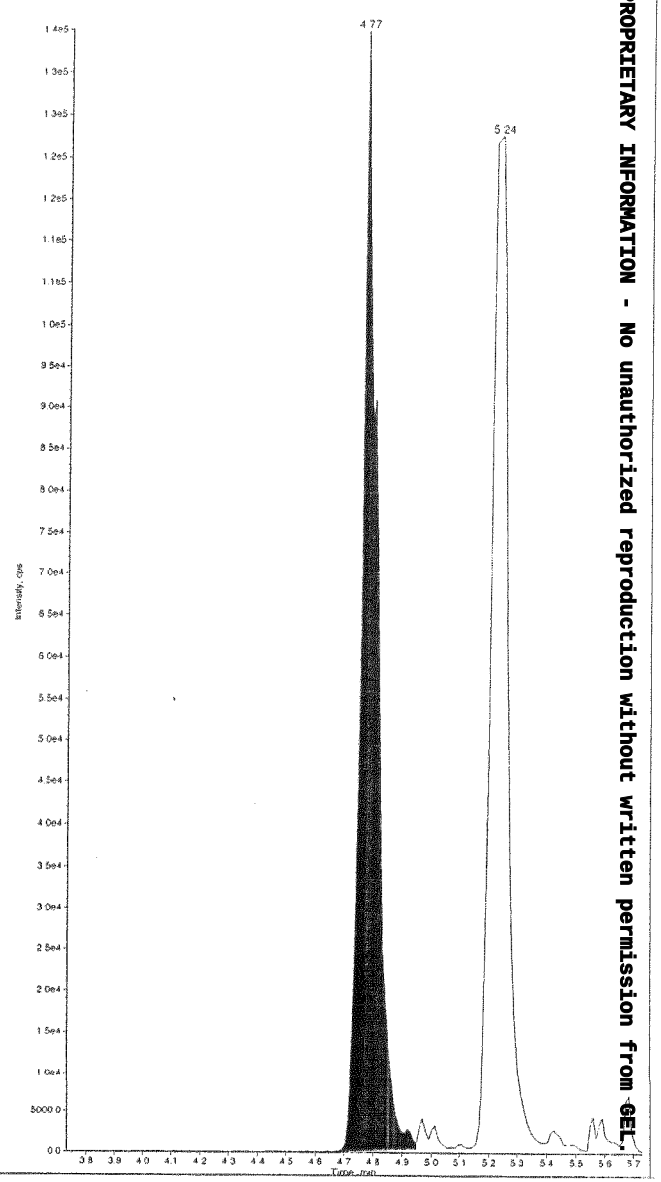
Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	267.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.23	min
Area:	8.77e+006	counts
Height:	1.98e+006	cps
Start Time:	8.14	min
End Time:	8.62	min



808

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	420.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.77	min
Area:	5.40e+005	counts
Height:	1.35e+005	cps
Start Time:	4.66	min
End Time:	4.95	min



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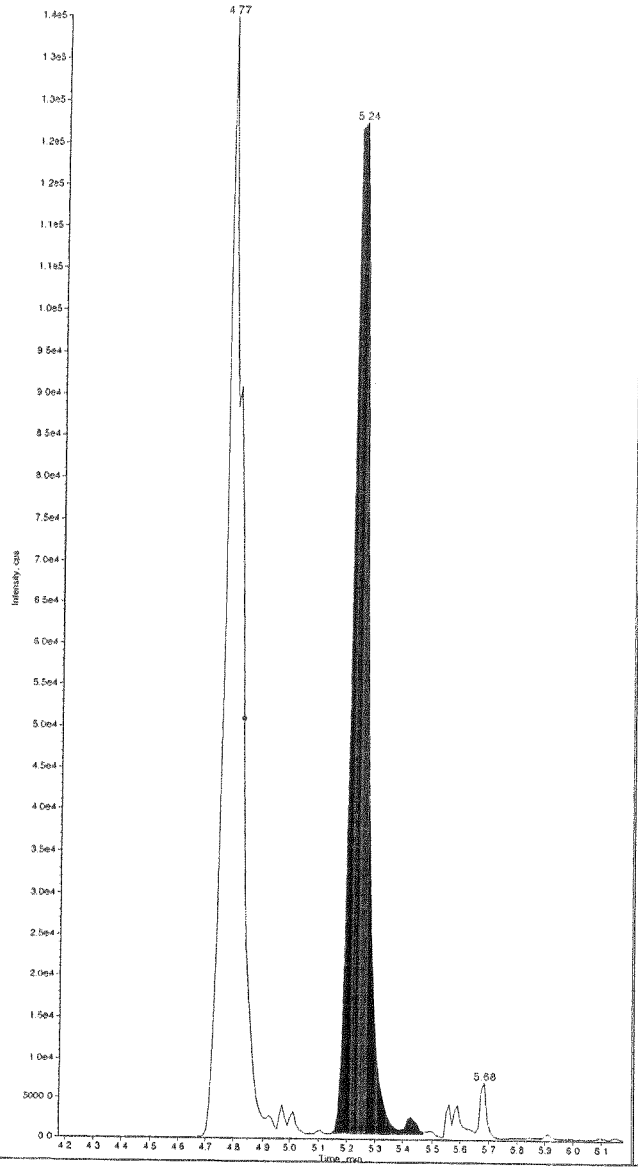
LXS 2/10/06

608

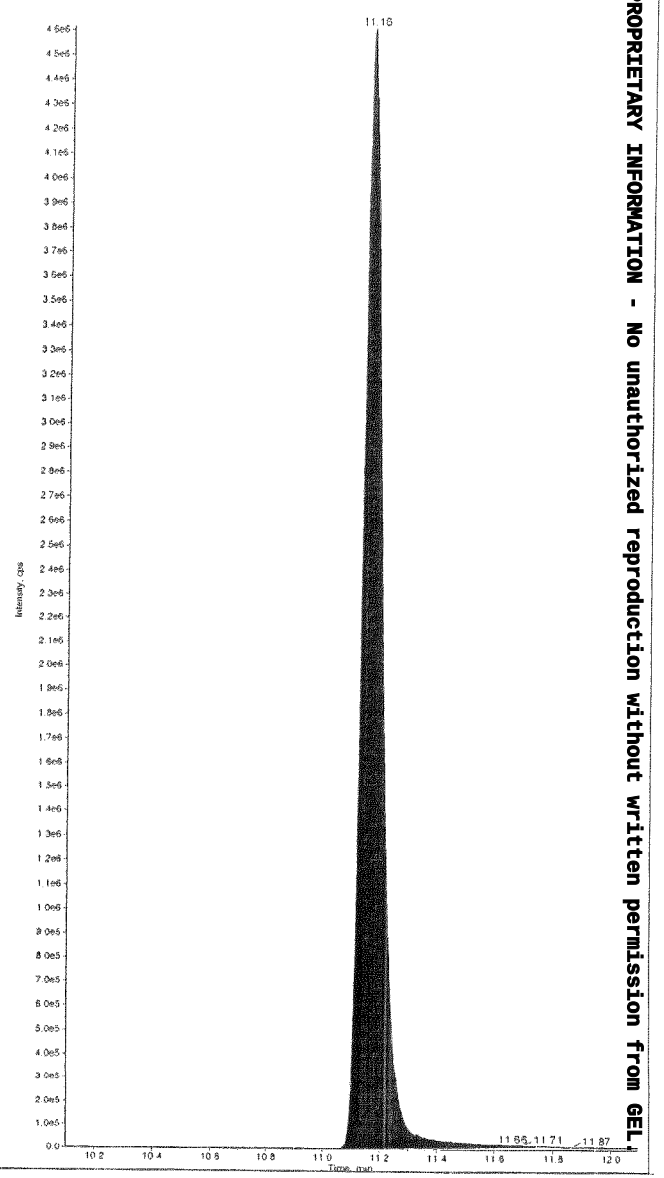
Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	536.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.24	min
Area:	5.19e+005	counts
Height:	1.22e+005	cps
Start Time:	5.15	min
End Time:	5.47	min



Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209036.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	552.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:47:40 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	2.32e+007	counts
Height:	4.61e+006	cps
Start Time:	11.0	min
End Time:	11.7	min



2/10/06

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEI **GEL Sample ID:** WXXCRI

GEL Data File EXS0209038.wiff **Analysis Date:** 10-FEB-06 03:32

LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

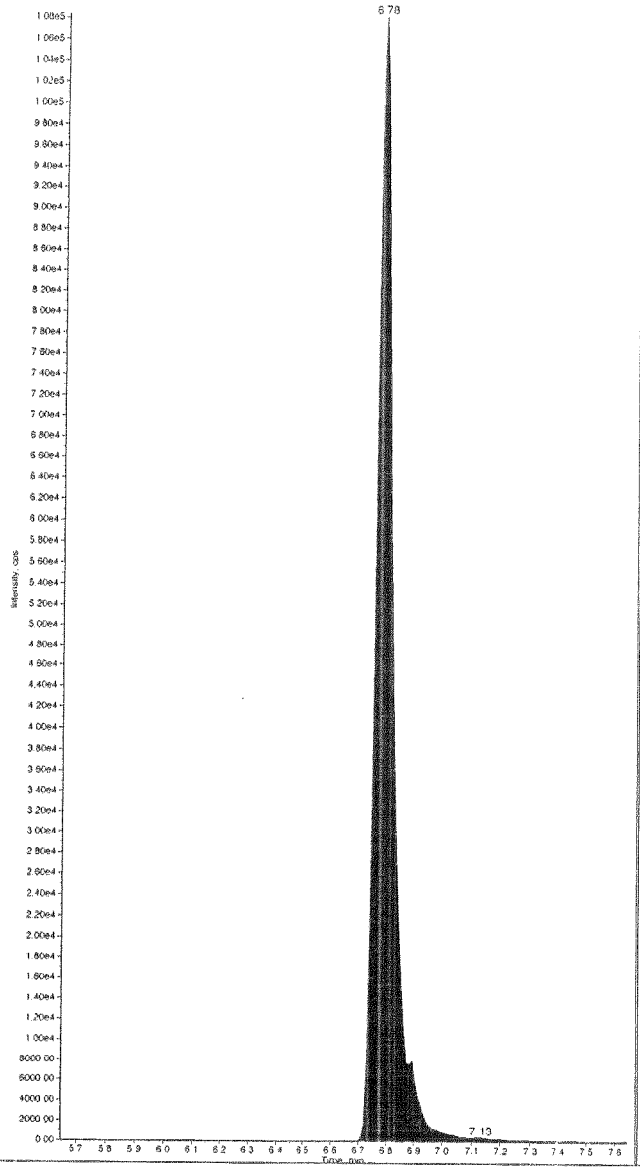
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	94.6	95	
2,6-Diamino-4-nitrotoluene	100	112	112	
3,4-Dinitrotoluene	50	53.7	107	
3,5-Dinitroaniline	100	104	104	
TATB	100	128	128	
tris(o-cresyl) phosphate	100	97.2	97	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

XRS 3/10/06

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

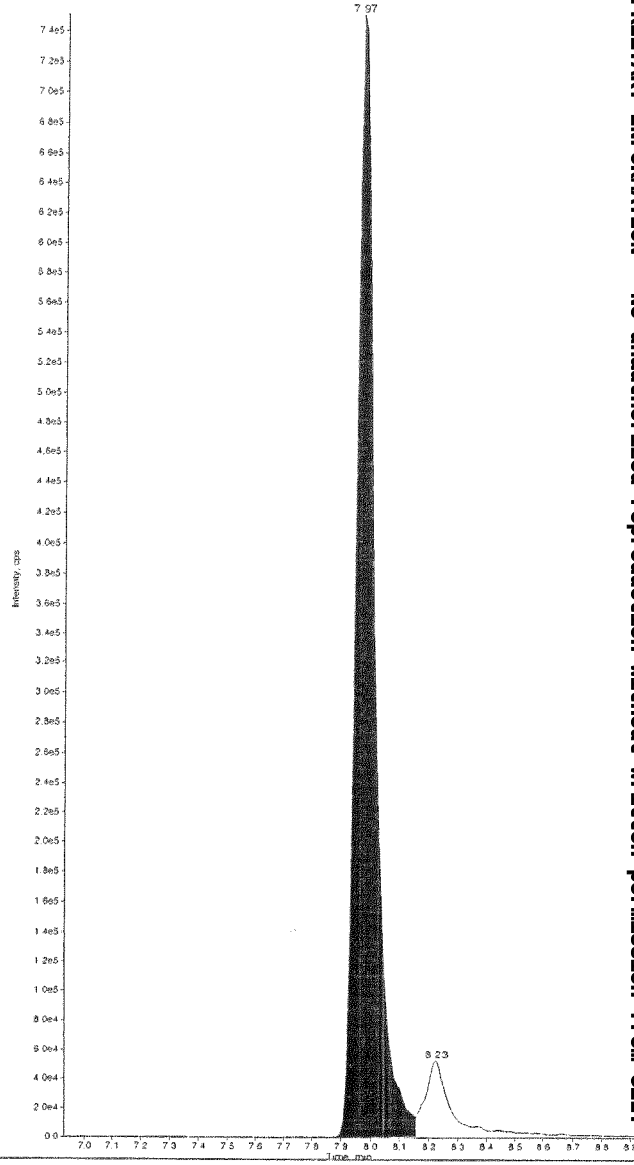
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	128.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.78	min
Area:	4.88e+005	counts
Height:	1.08e+005	cps
Start Time:	6.56	min
End Time:	7.35	min



811

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	104.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.97	min
Area:	3.47e+006	counts
Height:	7.50e+005	cps
Start Time:	7.86	min
End Time:	8.15	min



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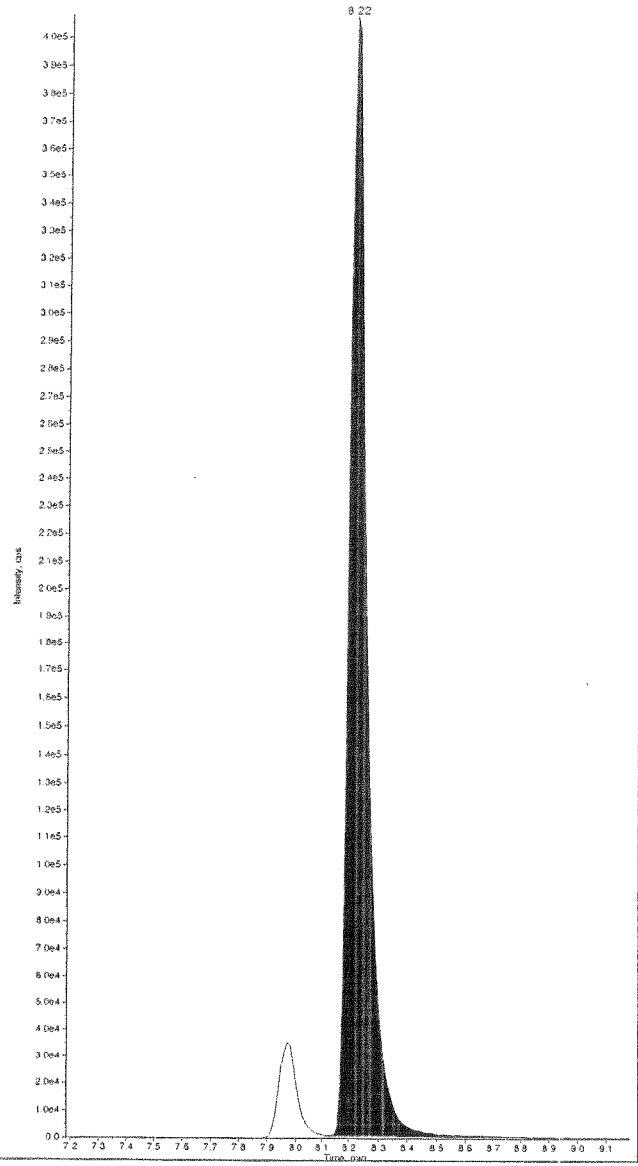
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

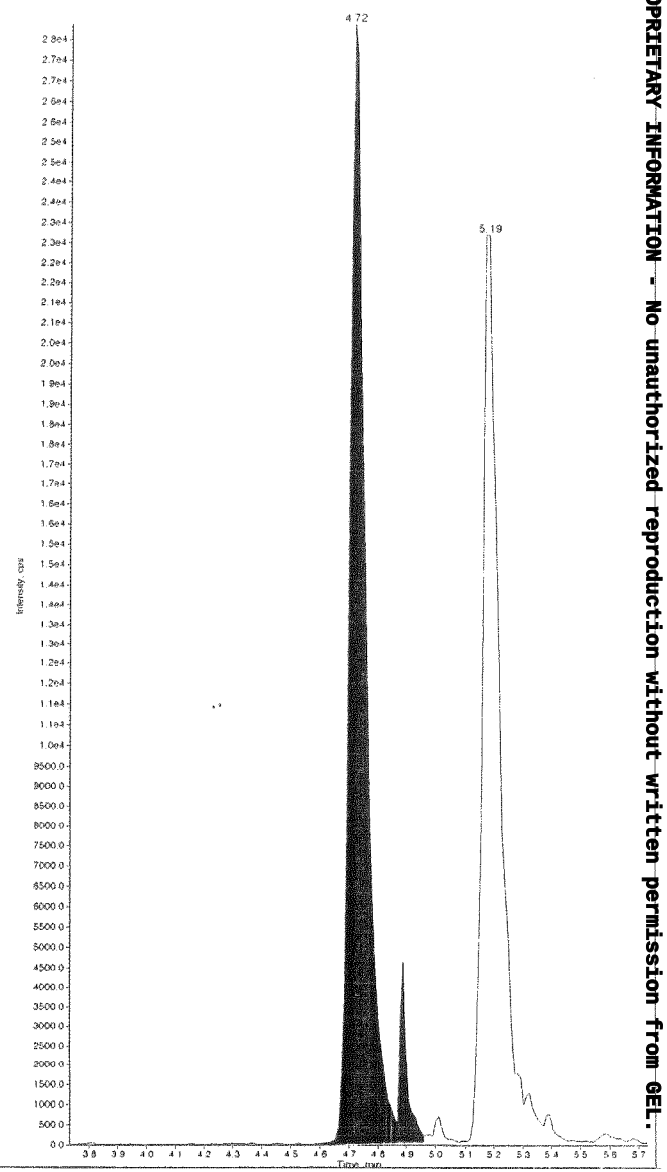
Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	53.7	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.22	min
Area:	1.80e+006	counts
Height:	4.07e+005	cps
Start Time:	8.12	min
End Time:	8.74	min



812

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	112.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.72	min
Area:	1.24e+005	counts
Height:	2.78e+004	cps
Start Time:	4.56	min
End Time:	4.96	min



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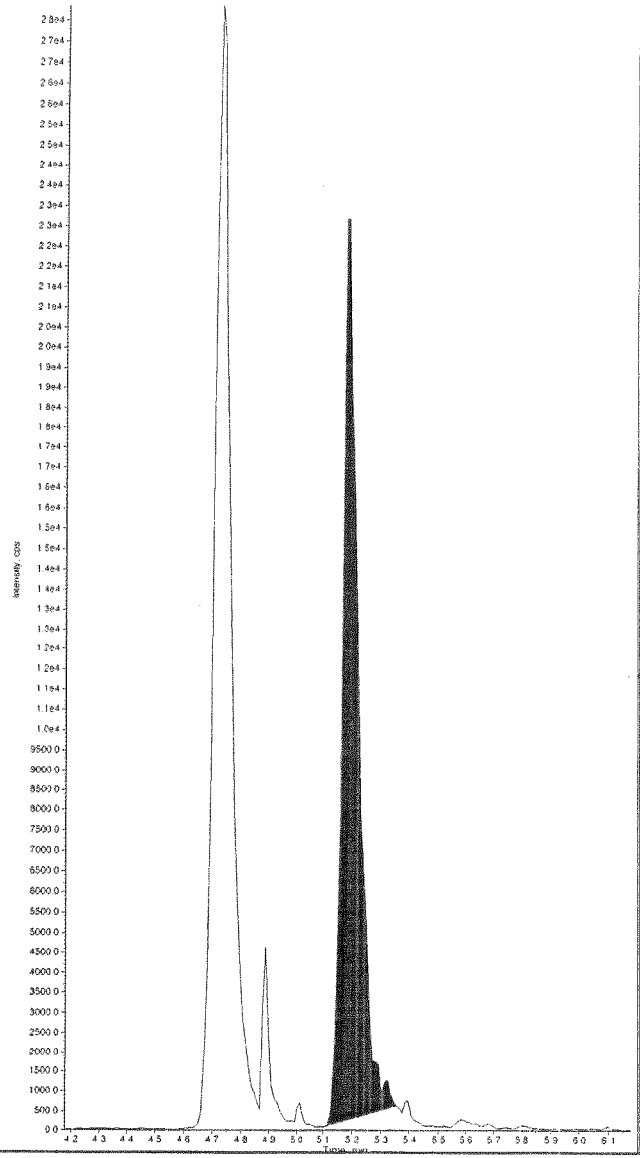
Before LRS 3/10/06

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

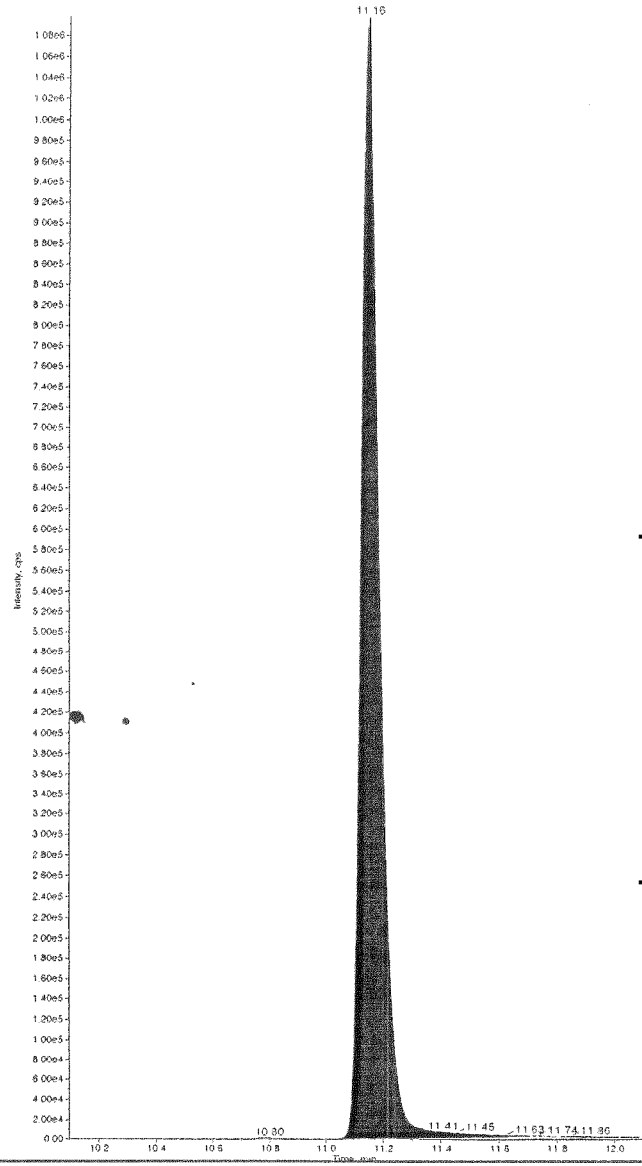
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	87.6	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.19	min
Area:	9.08e+004	counts
Height:	2.24e+004	cps
Start Time:	5.11	min
End Time:	5.35	min



813

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.2	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	5.13e+006	counts
Height:	1.10e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



dfpm 02/13/06

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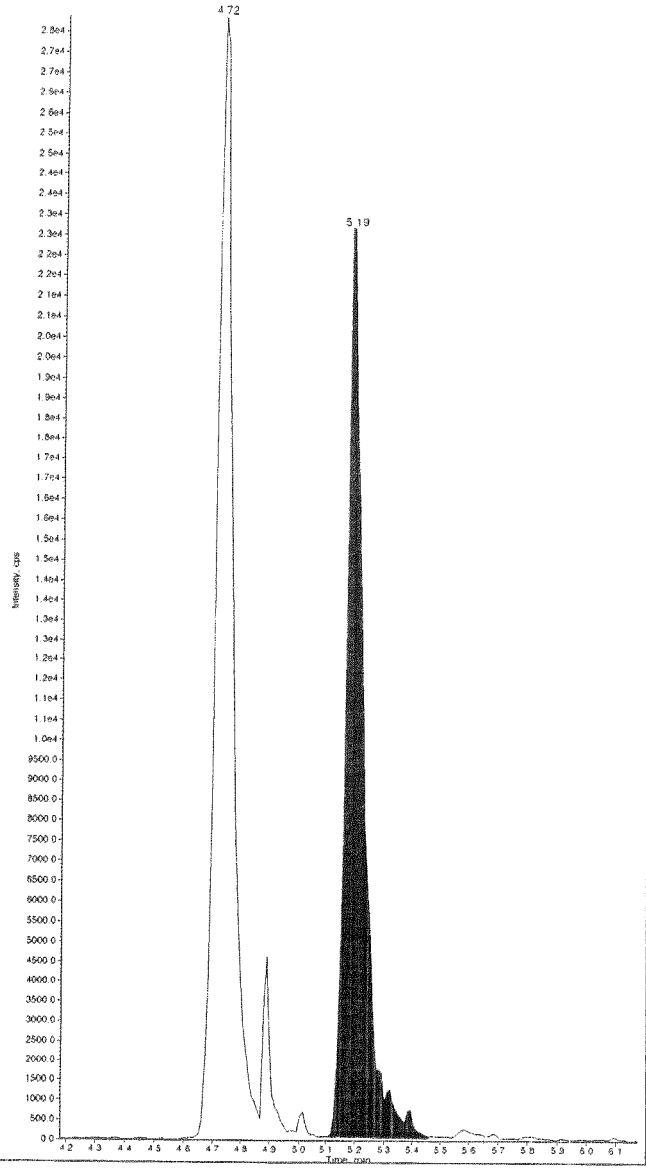
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

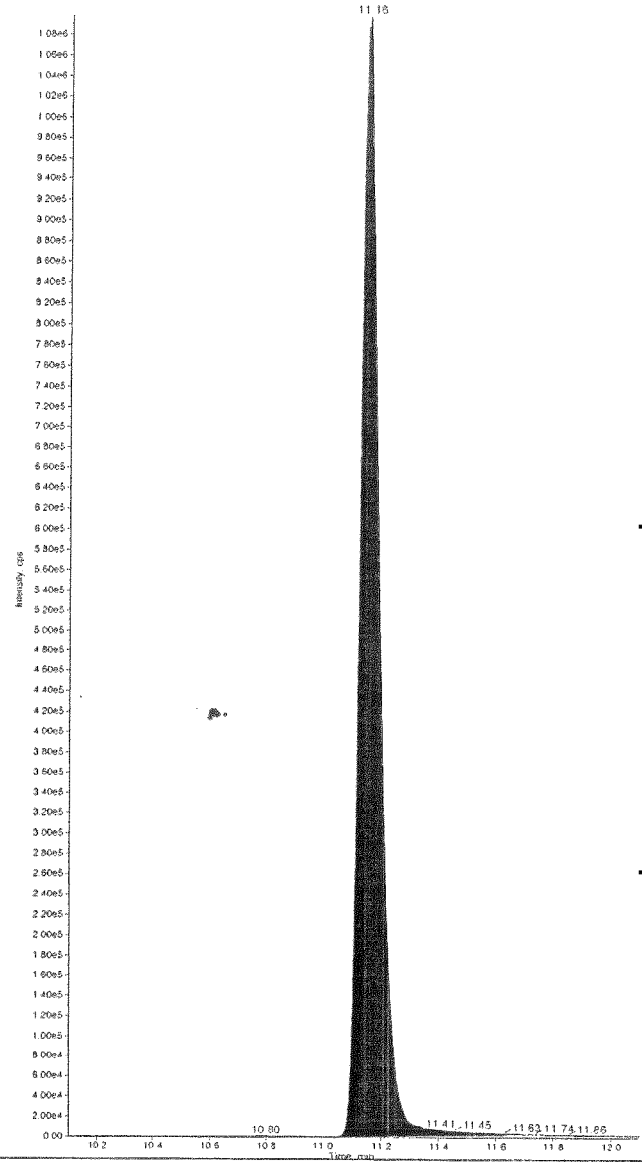
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.6	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	Yes	
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	5.18	min
Area:	9.73e+004	counts
Height:	2.32e+004	cps
Start Time:	5.11	min
End Time:	5.46	min



814

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209038.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	97.2	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	03:32:22 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	5.13e+006	counts
Height:	1.10e+006	cps
Start Time:	11.0	min
End Time:	11.5	min



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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS0209047.wiff **Analysis Date:** 10-FEB-06 06:54

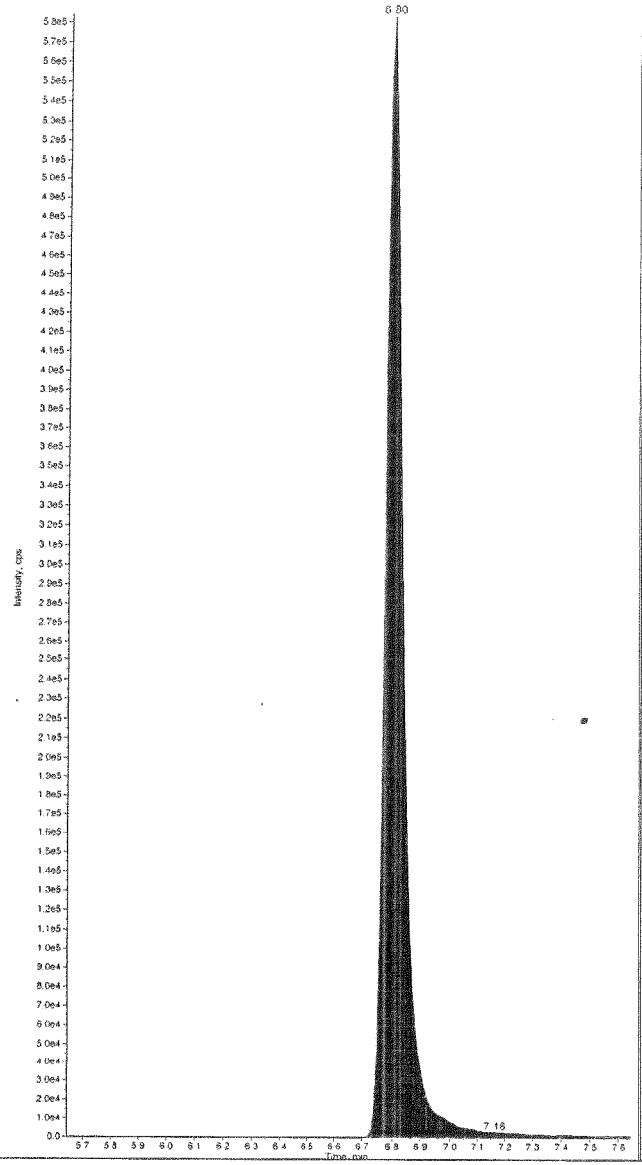
LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	483	97	
2,6-Diamino-4-nitrotoluene	500	428	86	
3,4-Dinitrotoluene	250	273	109	
3,5-Dinitroaniline	500	532	106	
TATB	500	594	119	
tris(o-cresyl) phosphate	500	557	111	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209047.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

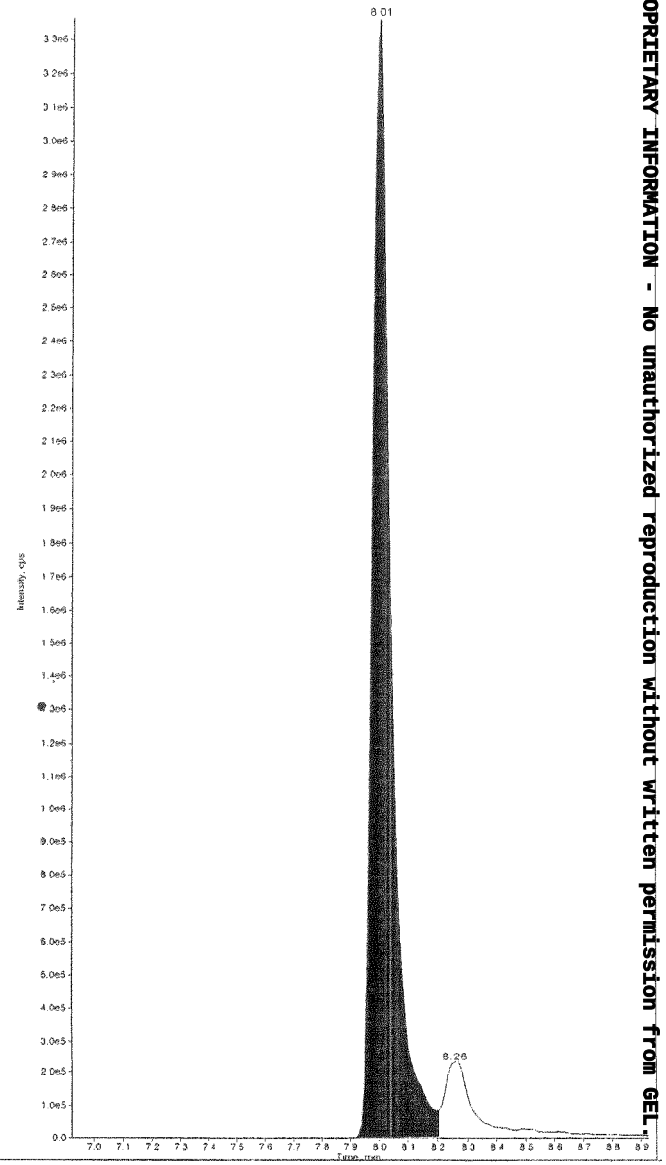
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	594.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:54:26 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.80	min
Area:	2.66e+006	counts
Height:	5.84e+005	cps
Start Time:	6.68	min
End Time:	7.51	min



816

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209047.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	532.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:54:26 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.01	min
Area:	1.62e+007	counts
Height:	3.36e+006	cps
Start Time:	7.91	min
End Time:	8.21	min



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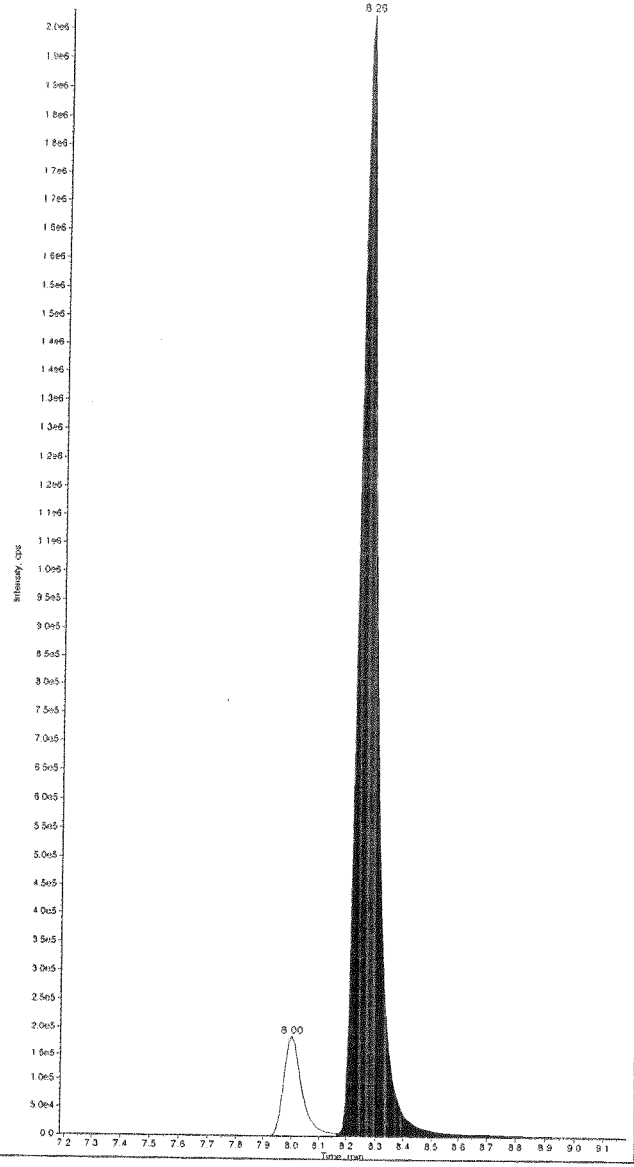
KRS 2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209047.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

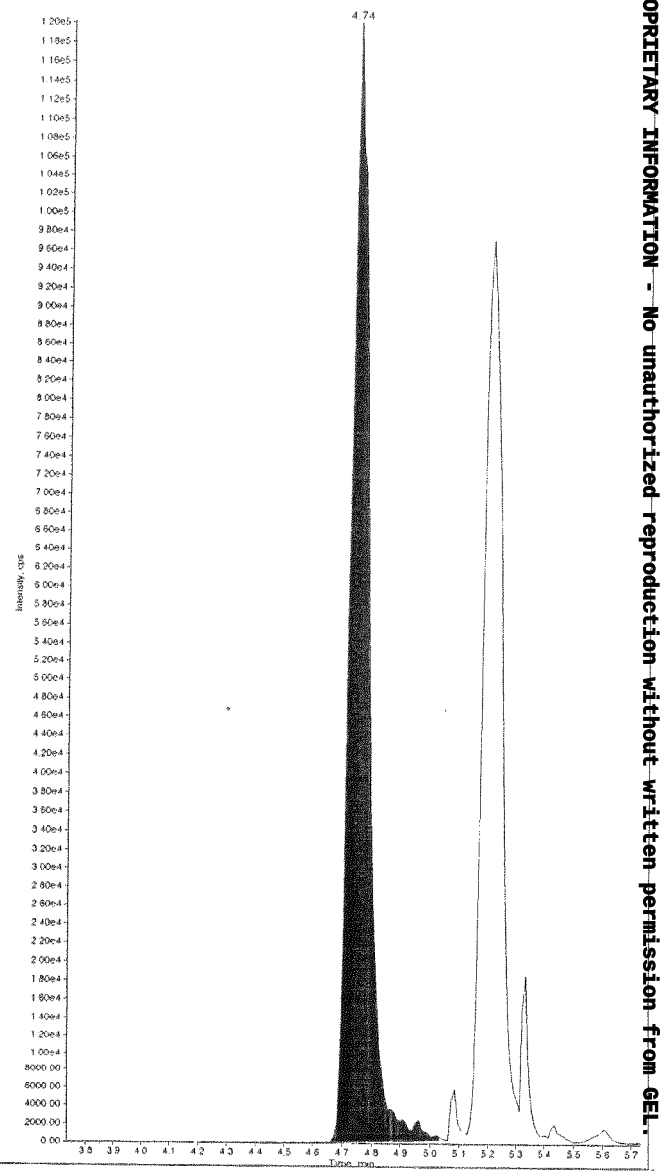
Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	273.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:54:26 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.26	min
Area:	8.96e+006	counts
Height:	1.98e+006	cps
Start Time:	8.16	min
End Time:	8.86	min



817

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209047.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	428.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:54:26 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.74	min
Area:	5.50e+005	counts
Height:	1.20e+005	cps
Start Time:	4.59	min
End Time:	5.03	min



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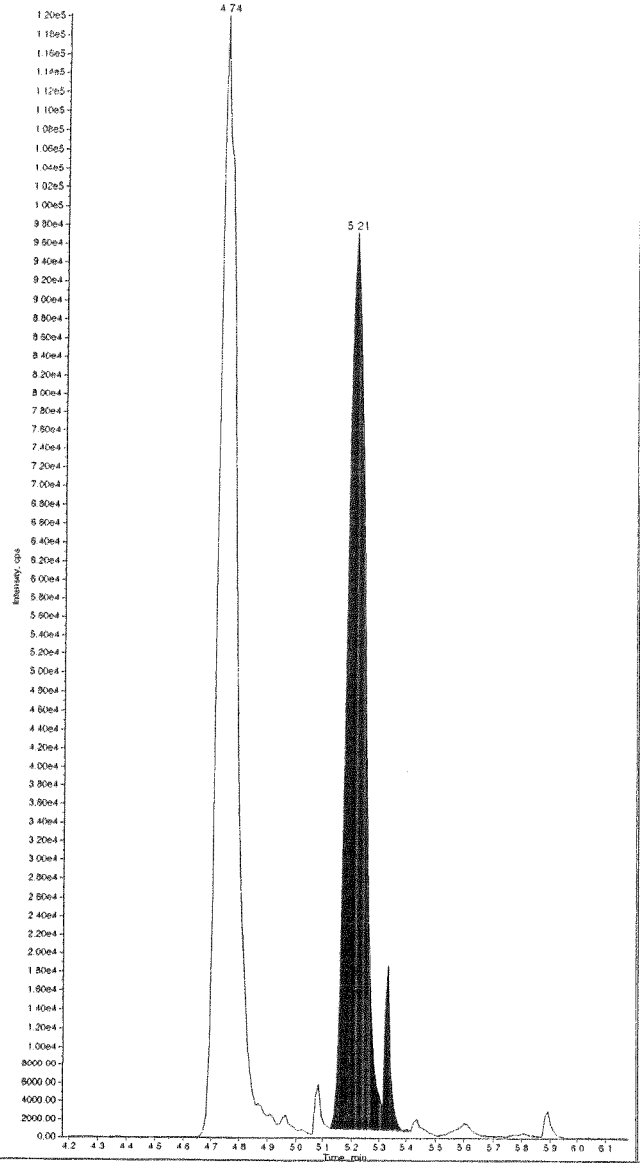
YKS 2/10/06

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209047.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	483.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:54:26 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.21	min
Area:	4.68e+005	counts
Height:	9.65e+004	cps
Start Time:	5.13	min
End Time:	5.42	min

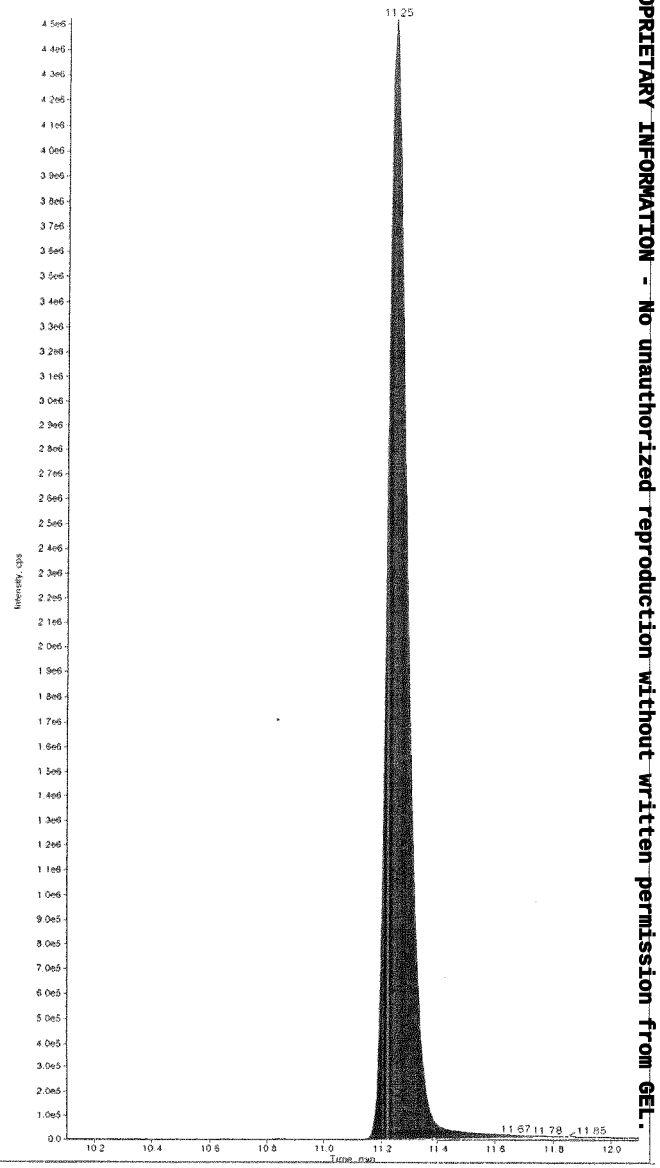


818

Sample Name: "WXX060209-26CCV" Sample ID: "|1|LXS1" File: "EXS0209047.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	557.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:54:26 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.3	min
Area:	2.34e+007	counts
Height:	4.52e+006	cps
Start Time:	11.1	min
End Time:	11.7	min

Amenable



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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS0209049.wiff **Analysis Date:** 10-FEB-06 07:39

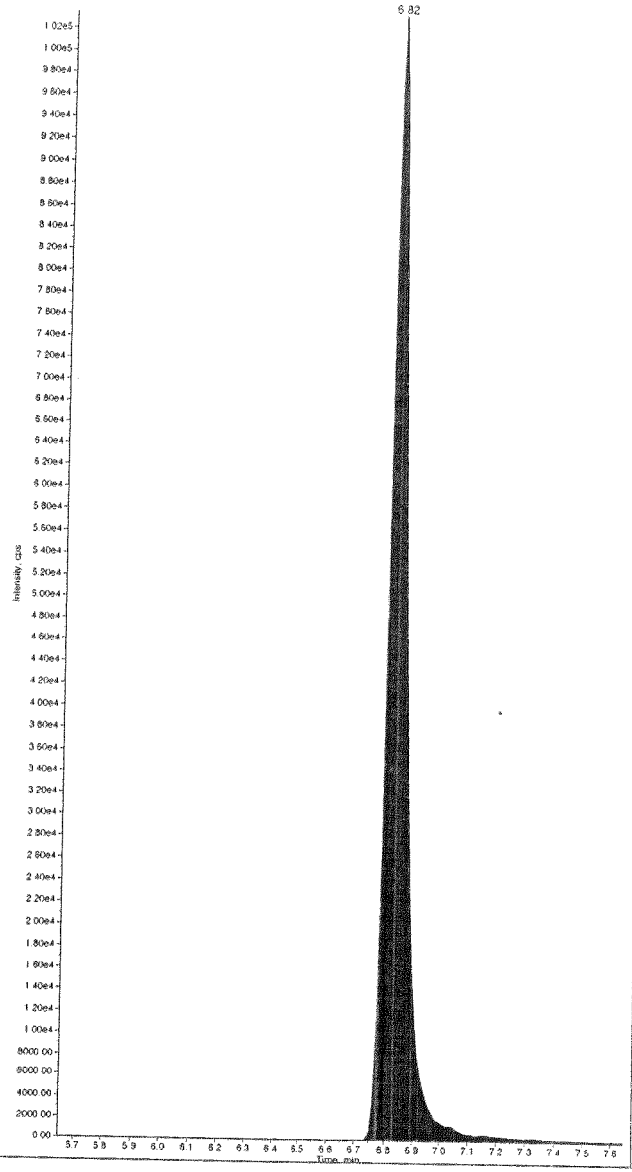
LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	92.8	93	
2,6-Diamino-4-nitrotoluene	100	115	115	
3,4-Dinitrotoluene	50	53.4	107	
3,5-Dinitroaniline	100	103	103	
TATB	100	129	129	
tris(o-cresyl) phosphate	100	98.8	99	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Sample Name: "WXX060209-27CRI" Sample ID: "[1]LXS1" File: "EXS0209049.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

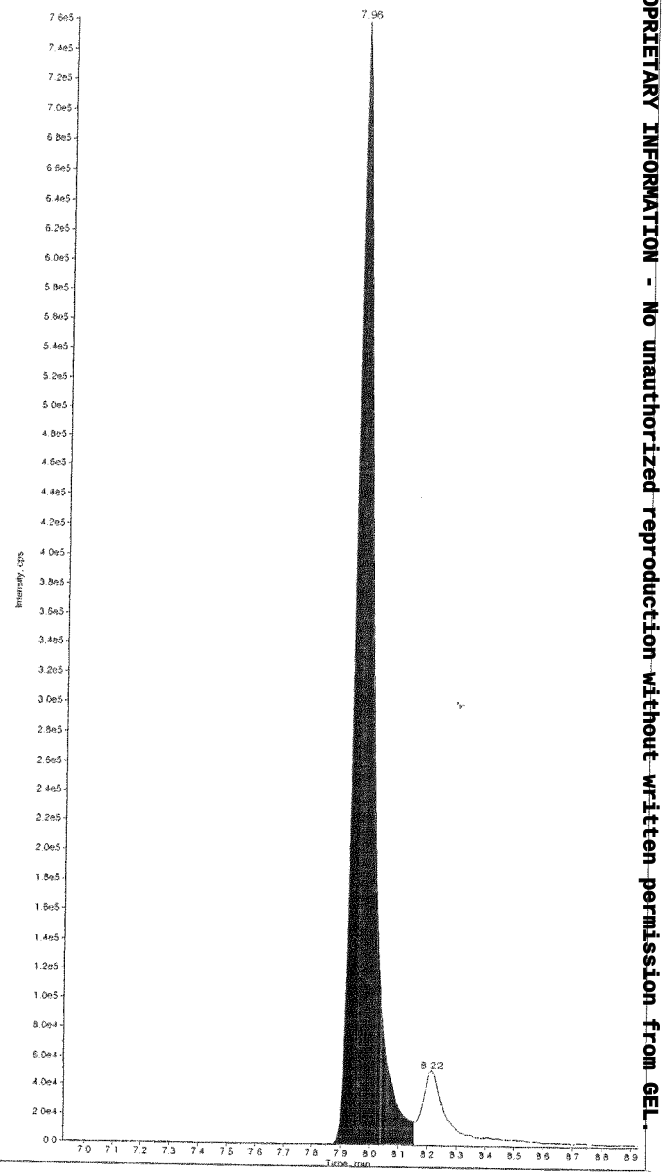
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	129.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	07:39:10 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.82	min
Area:	4.91e+005	counts
Height:	1.03e+005	cps
Start Time:	6.60	min
End Time:	7.59	min



820

Sample Name: "WXX060209-27CRI" Sample ID: "[1]LXS1" File: "EXS0209049.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	103.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	07:39:10 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.96	min
Area:	3.43e+006	counts
Height:	7.61e+005	cps
Start Time:	7.85	min
End Time:	8.15	min



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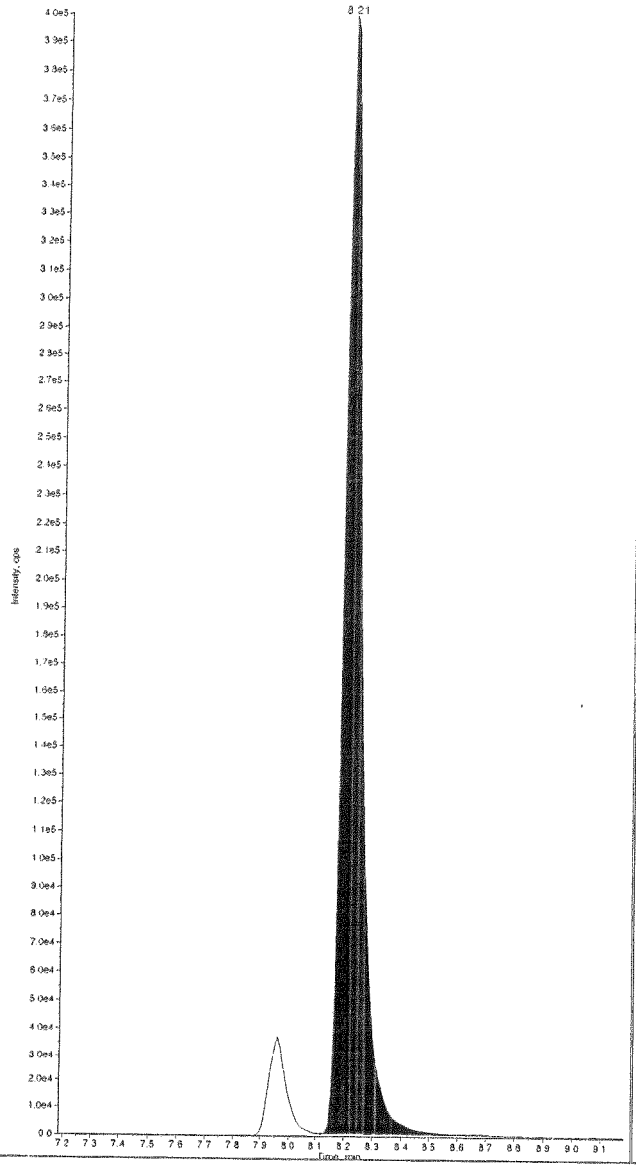
LXS 2/10/06

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209049.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

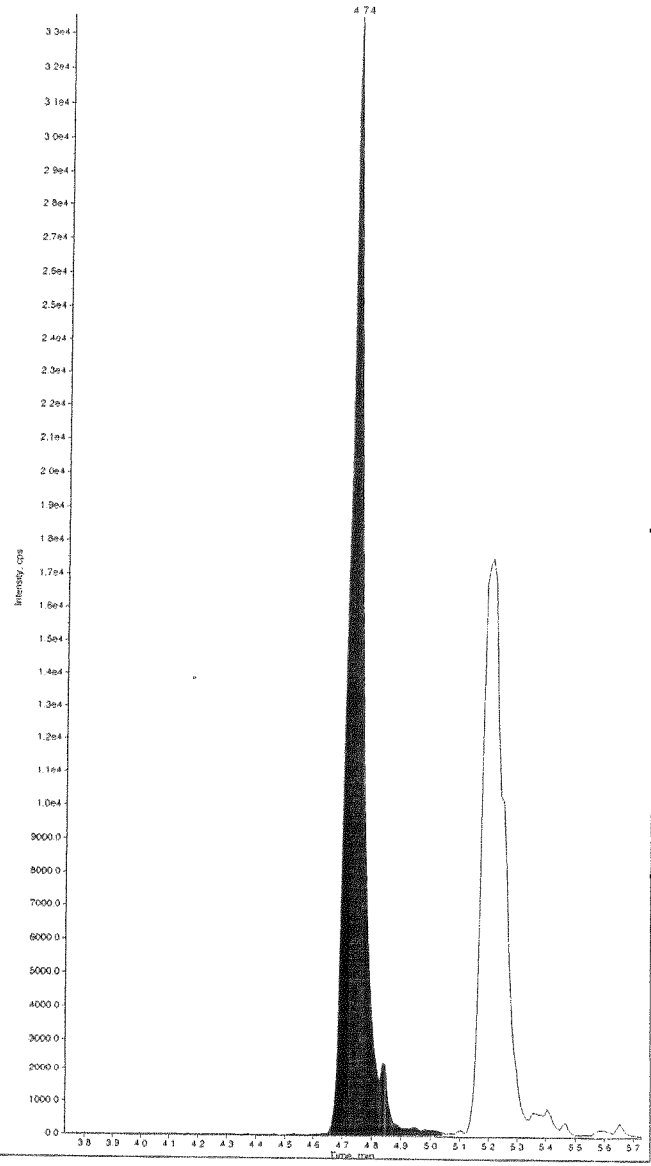
Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	53.4	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	07:39:10 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.21	min
Area:	1.79e+006	counts
Height:	3.99e+005	cps
Start Time:	8.11	min
End Time:	8.60	min

821



Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209049.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	115.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	07:39:10 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.74	min
Area:	1.28e+005	counts
Height:	3.36e+004	cps
Start Time:	4.58	min
End Time:	5.04	min



chromatogram

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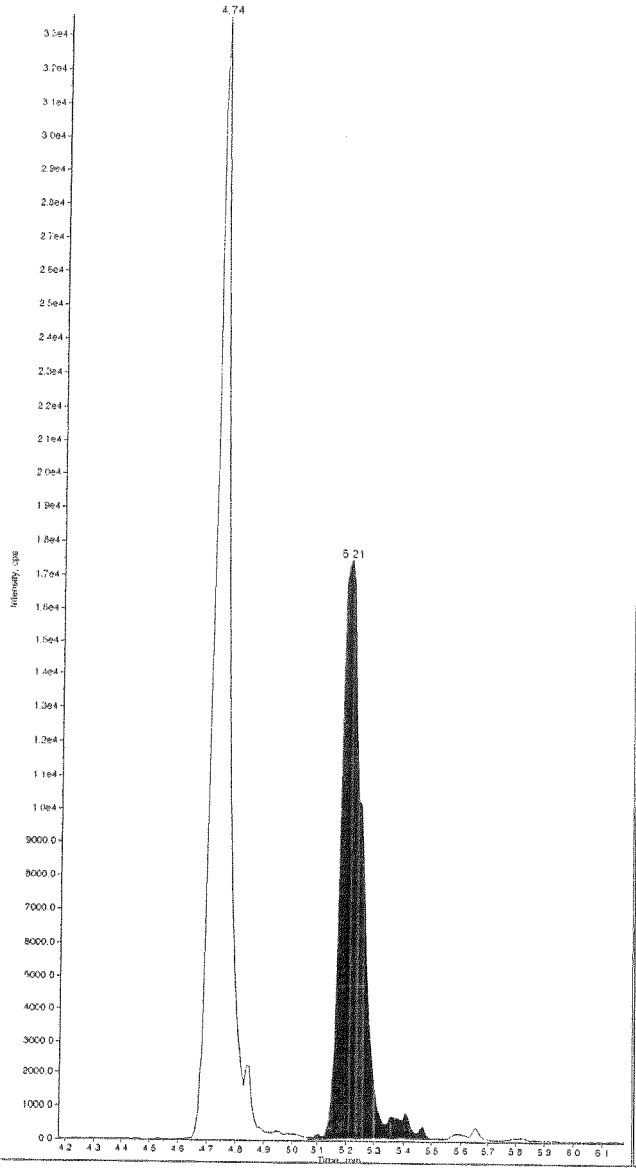
Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209049.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

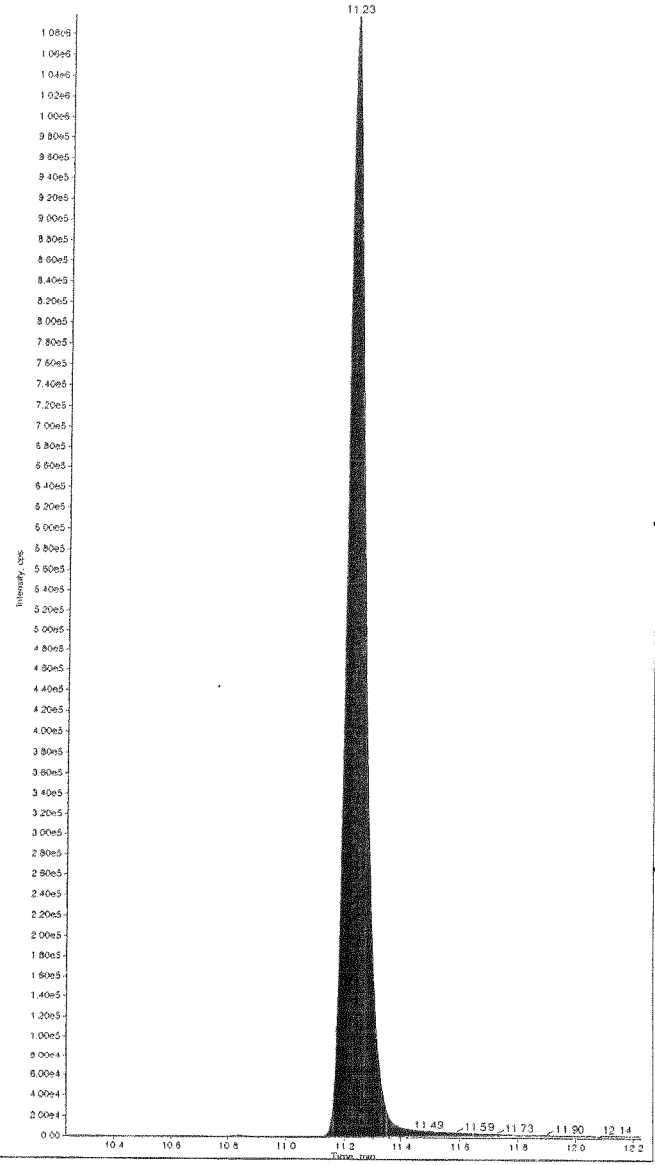
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	92.8	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	07:39:10 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.21	min
Area:	9.56e+004	counts
Height:	1.75e+004	cps
Start Time:	5.06	min
End Time:	5.51	min



822

Sample Name: "WXX060209-27CRI" Sample ID: "|1|LXS1" File: "EXS0209049.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	98.8	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	07:39:10 AM	
Modified:	Yes	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.2	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	5.20e+006	counts
Height:	1.10e+006	cps
Start Time:	11.1	min
End Time:	11.7	min



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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCCV

GEL Data File EXS0209051.wiff **Analysis Date:** 10-FEB-06 13:01

LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

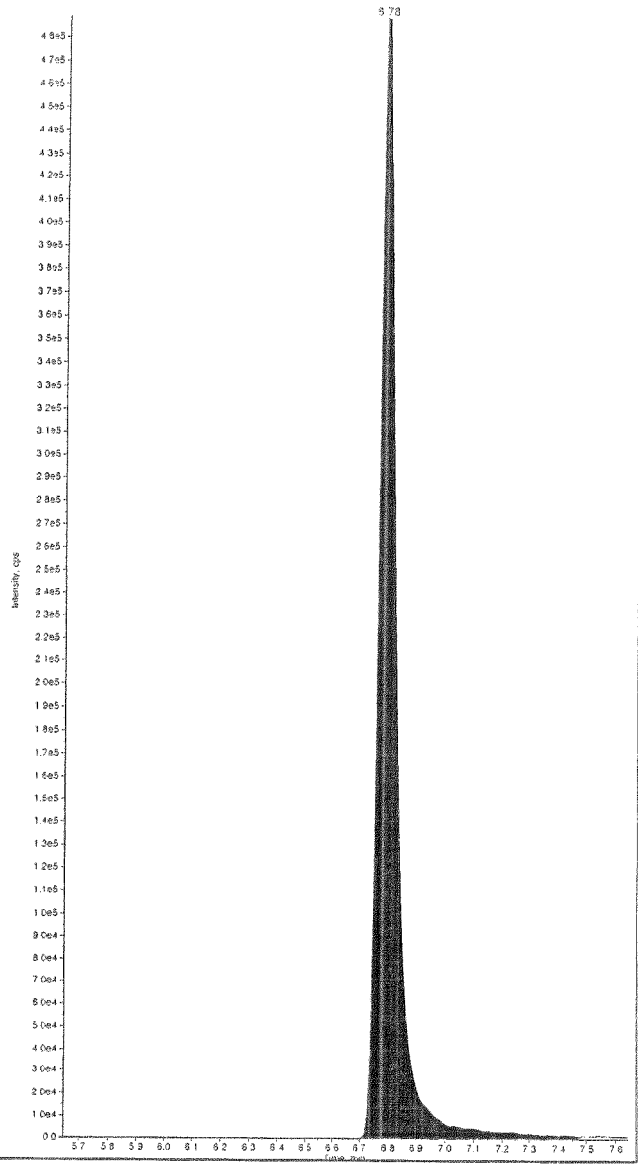
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	567	113	
2,6-Diamino-4-nitrotoluene	500	466	93	
3,4-Dinitrotoluene	250	259	104	
3,5-Dinitroaniline	500	460	92	
TATB	500	496	99	
tris(o-cresyl) phosphate	500	543	109	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Before LRS 3/13/06

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

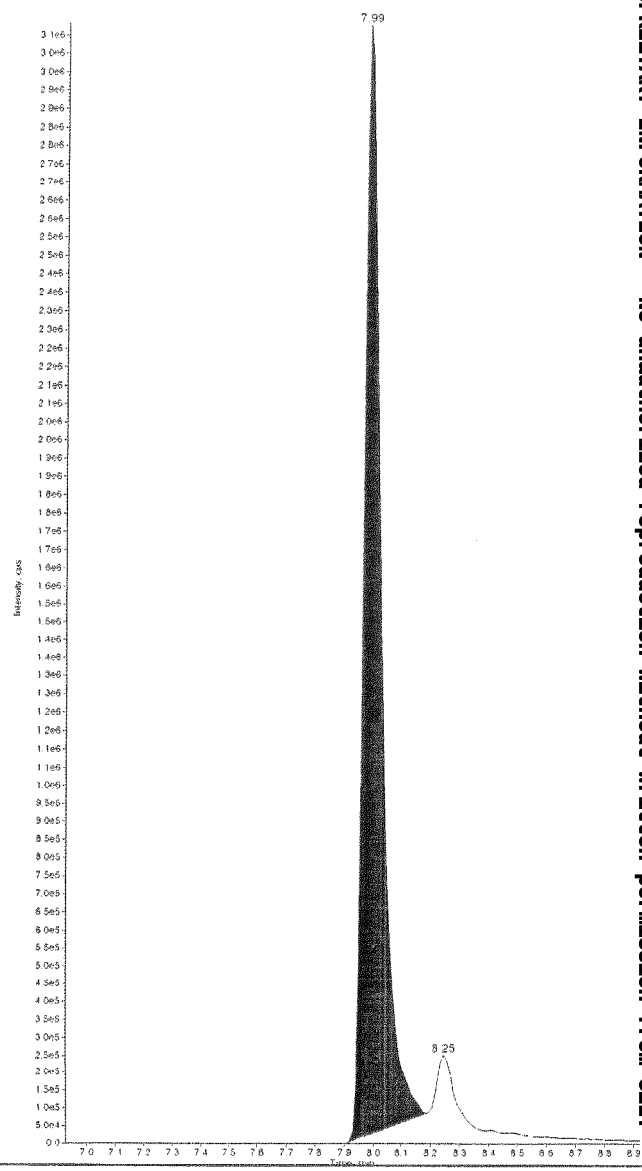
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	496.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.78	min
Area:	2.20e+006	counts
Height:	4.89e+005	cps
Start Time:	6.68	min
End Time:	7.47	min



824

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	435.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.99	min
Area:	1.35e+007	counts
Height:	3.05e+006	cps
Start Time:	7.91	min
End Time:	8.18	min



Ahmed 3/13/06

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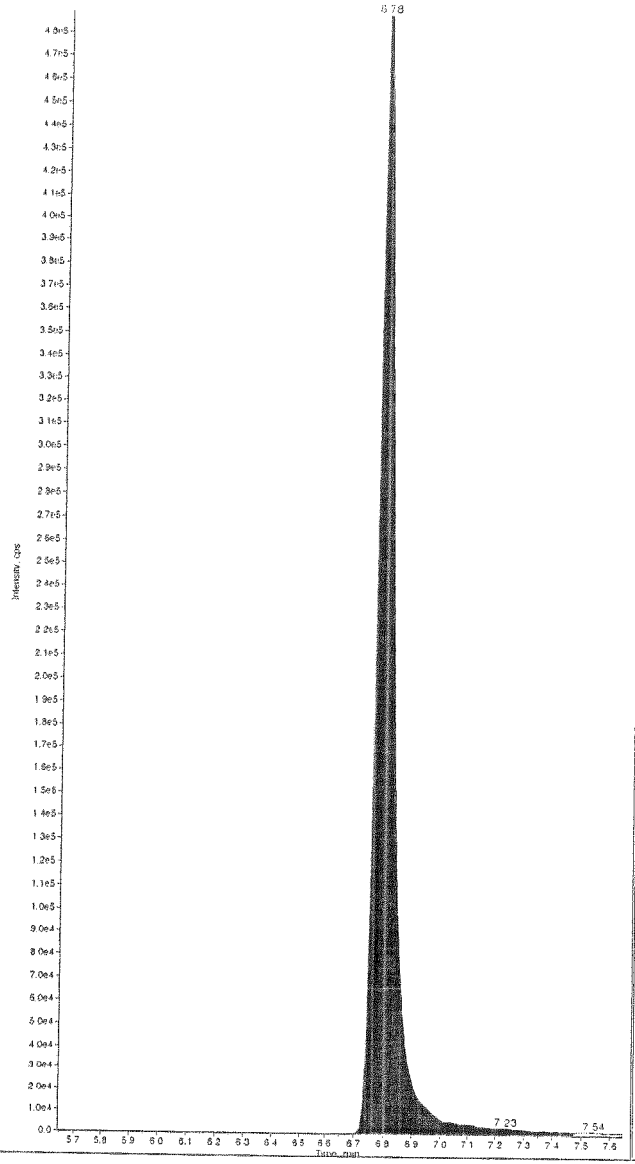
Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

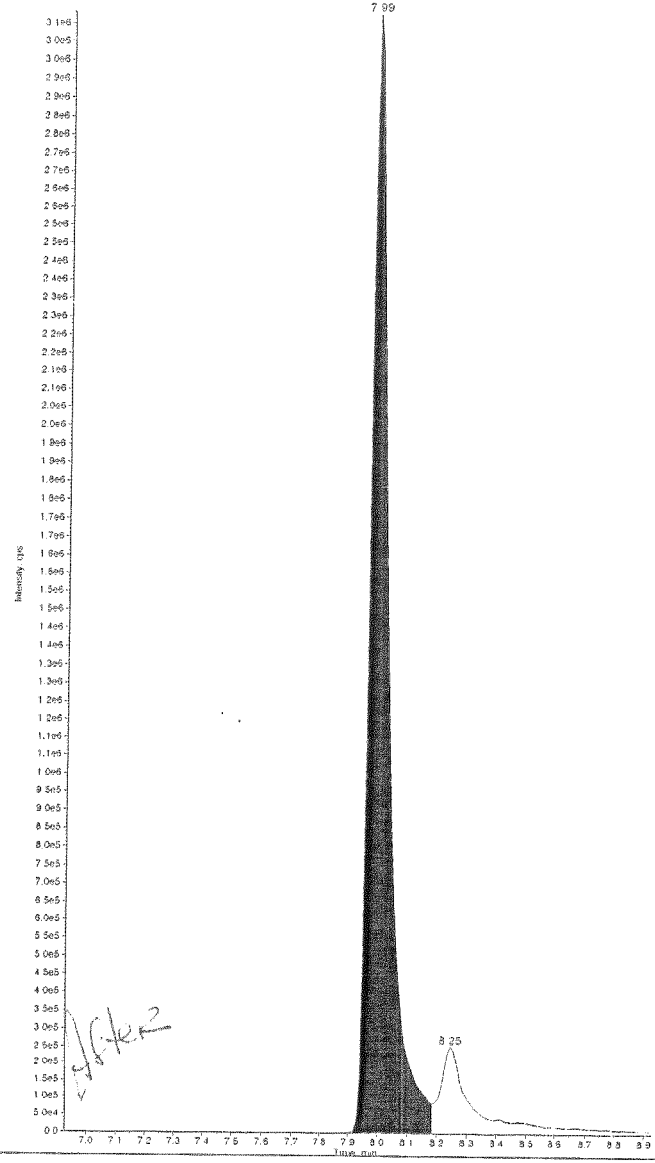
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	496.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.78	min
Area:	2.20e+006	counts
Height:	4.89e+005	cps
Start Time:	6.68	min
End Time:	7.47	min



825

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	460.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	Yes	
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	7.99	min
Area:	1.42e+007	counts
Height:	3.10e+006	cps
Start Time:	7.92	min
End Time:	8.19	min



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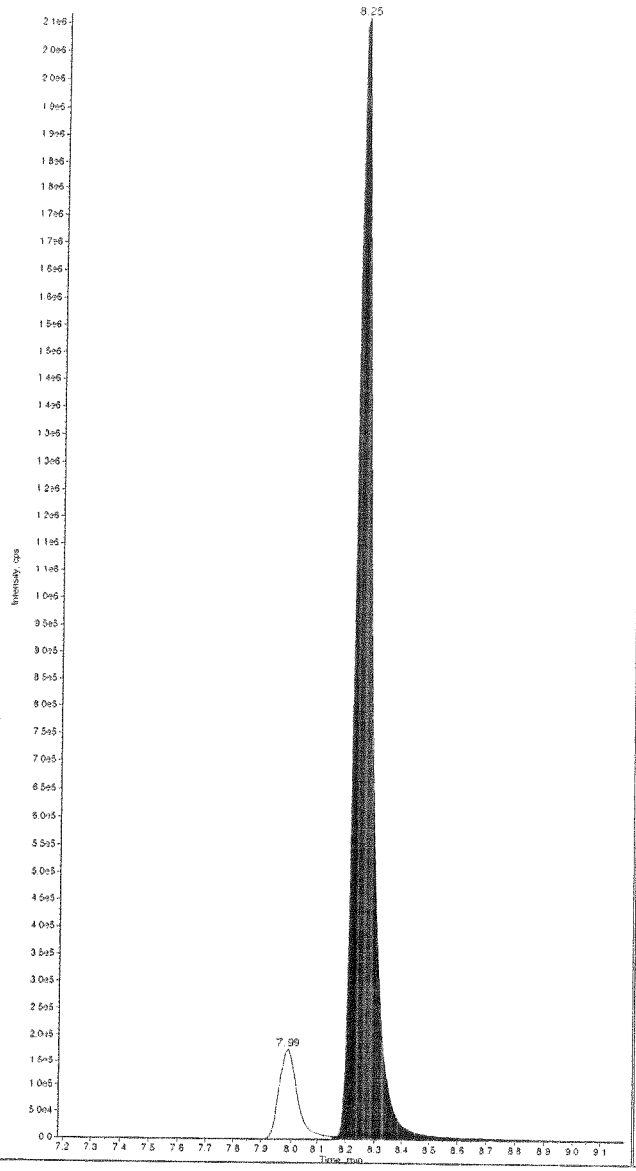
Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

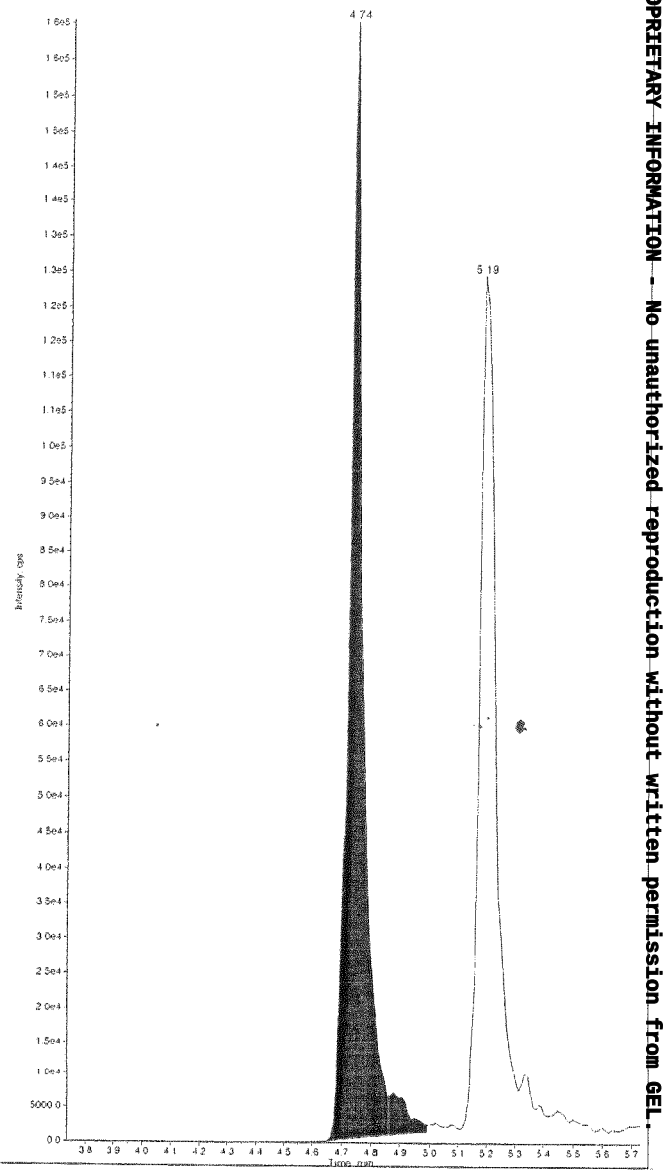
Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	259.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.25	min
Area:	8.52e+006	counts
Height:	2.07e+006	cps
Start Time:	8.15	min
End Time:	8.89	min



826

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	466.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.74	min
Area:	6.00e+005	counts
Height:	1.60e+005	cps
Start Time:	4.64	min
End Time:	4.99	min



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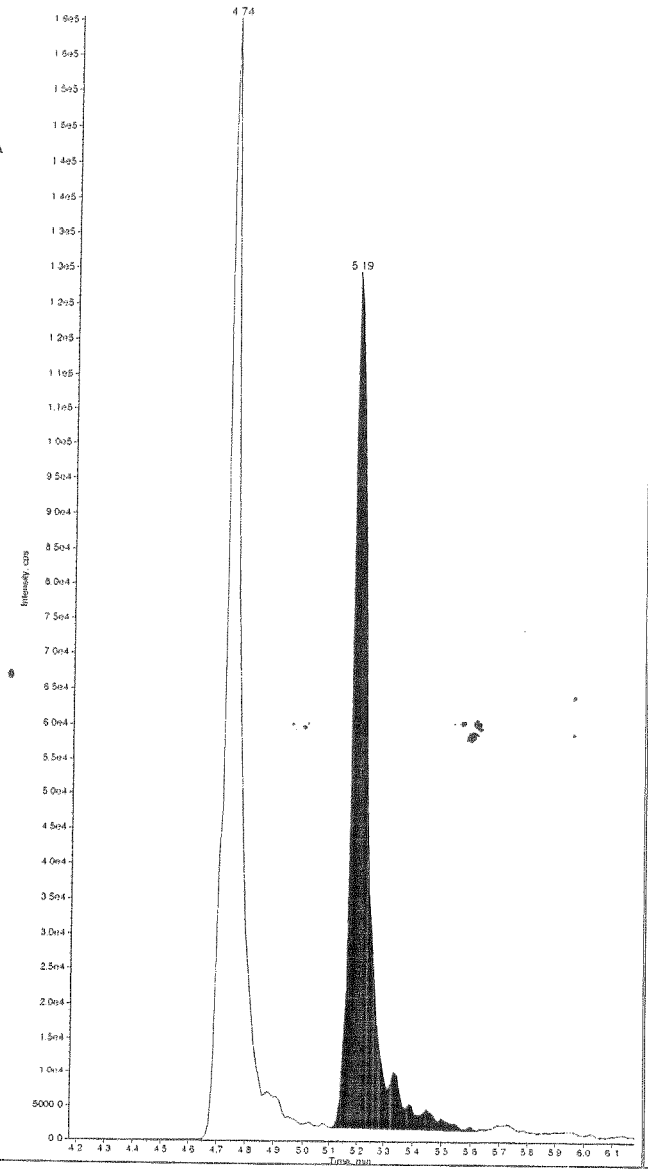
LXS 2/13/06

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

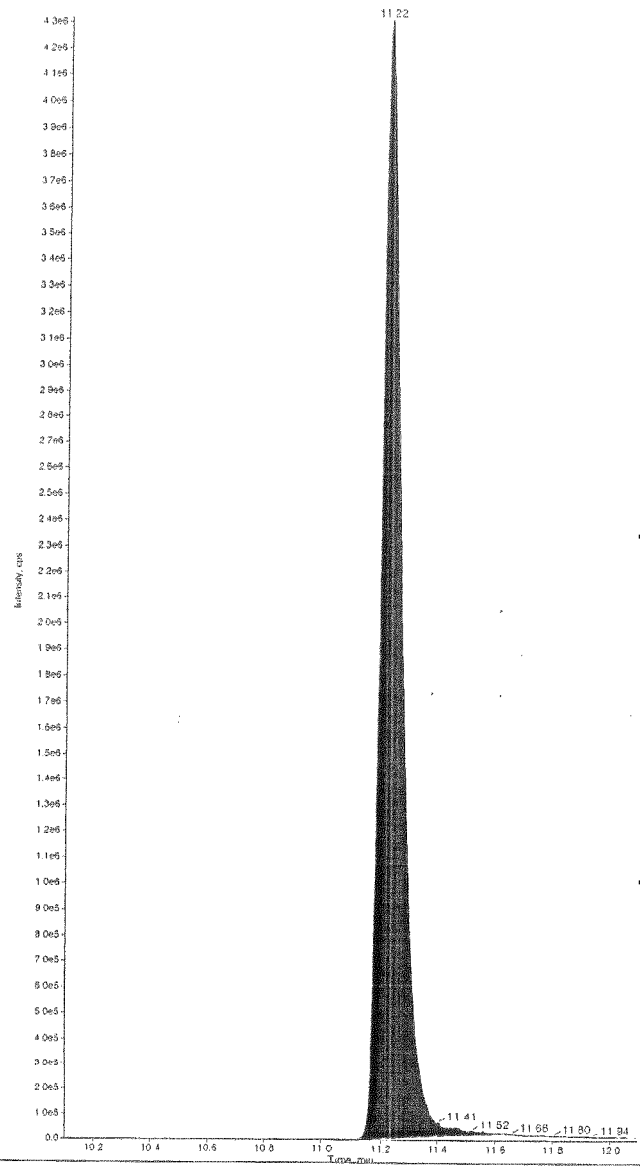
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	567.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.19	min
Area:	5.51e+005	counts
Height:	1.23e+005	cps
Start Time:	5.11	min
End Time:	5.62	min



827

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209051.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	543.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:01:55 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	2.29e+007	counts
Height:	4.31e+006	cps
Start Time:	11.1	min
End Time:	11.6	min



Atm 2/13/06

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS0209053.wiff **Analysis Date:** 10-FEB-06 13:46

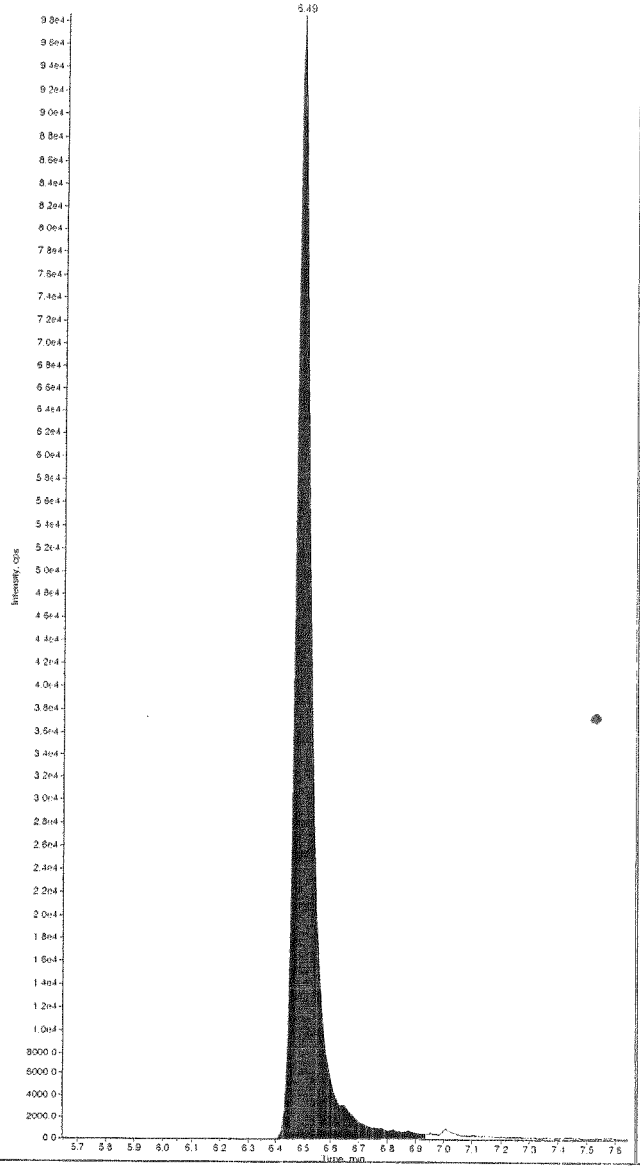
LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	101	101	
2,6-Diamino-4-nitrotoluene	100	100	100	
3,4-Dinitrotoluene	50	49.2	98	
3,5-Dinitroaniline	100	92.4	92	
TATB	100	121	121	
tris(o-cresyl) phosphate	100	95	95	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209053.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

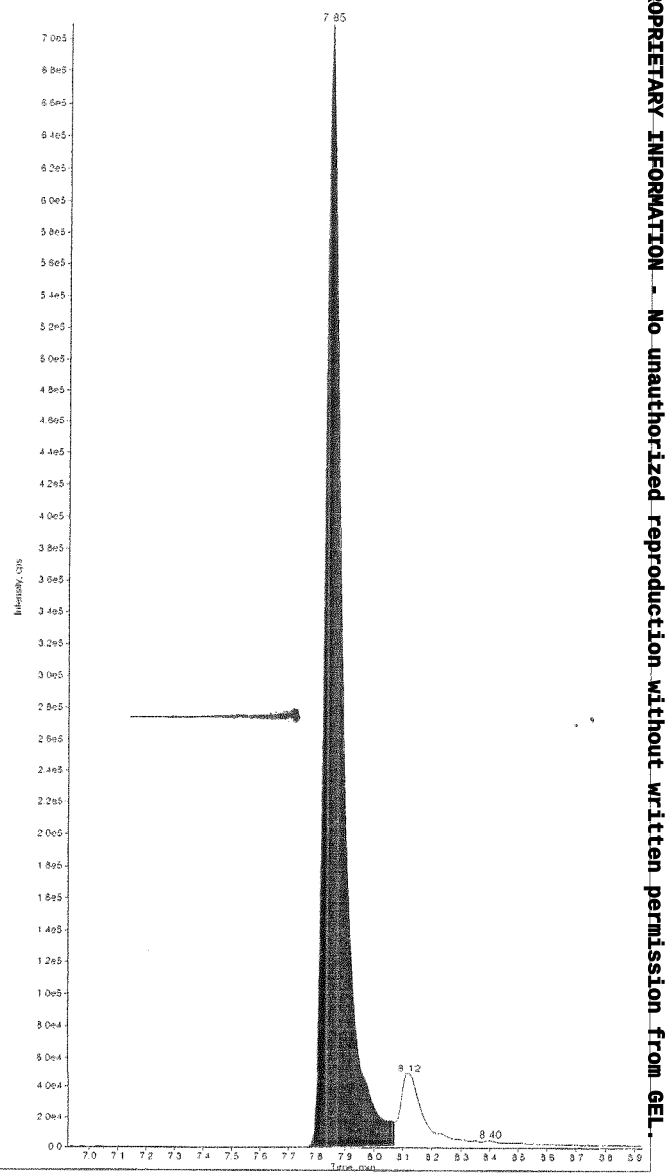
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	121.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:46:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.49	min
Area:	4.55e+005	counts
Height:	9.86e+004	cps
Start Time:	6.39	min
End Time:	6.93	min



829

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209053.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	92.4	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:46:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.85	min
Area:	3.11e+006	counts
Height:	7.09e+005	cps
Start Time:	7.76	min
End Time:	8.07	min



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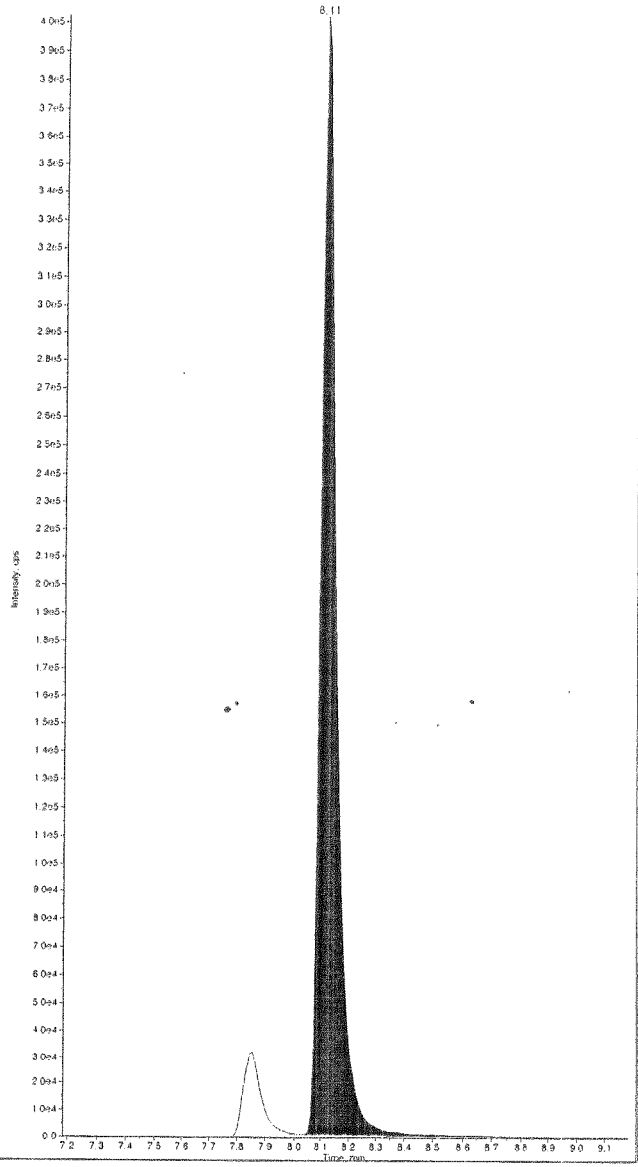
LXS 2/13/06

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209053.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

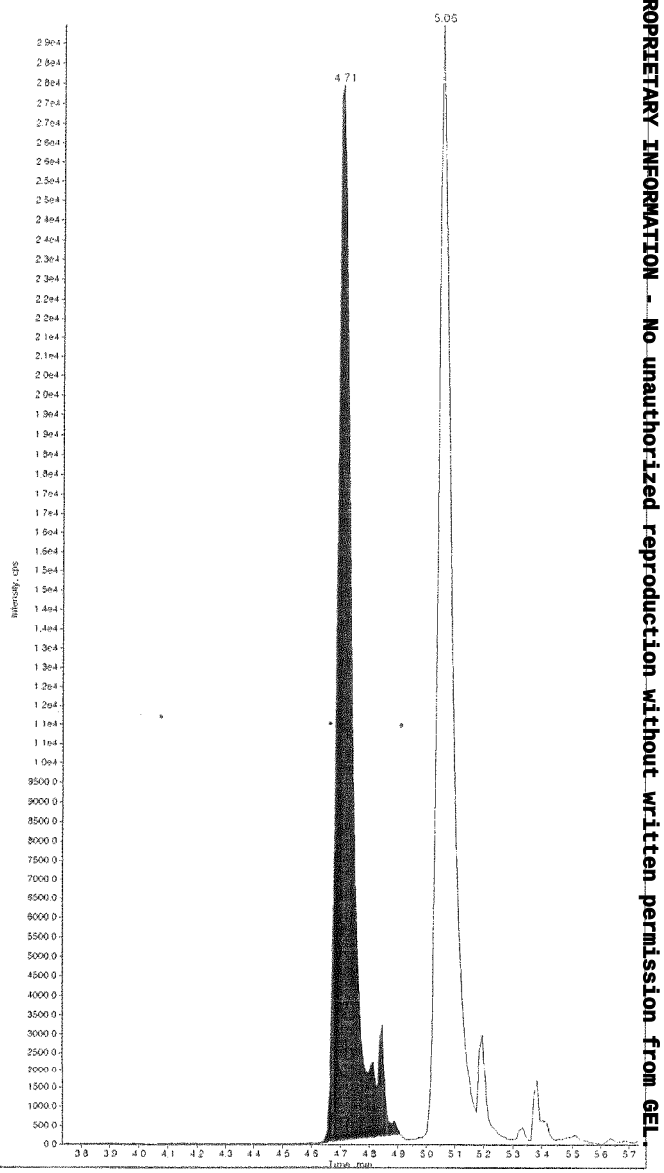
Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	49.2	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:46:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.11	min
Area:	1.65e+006	counts
Height:	4.01e+005	cps
Start Time:	8.04	min
End Time:	8.59	min



830

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209053.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	100.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:46:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.71	min
Area:	1.07e+005	counts
Height:	2.74e+004	cps
Start Time:	4.62	min
End Time:	4.91	min



Mike 2-13-06

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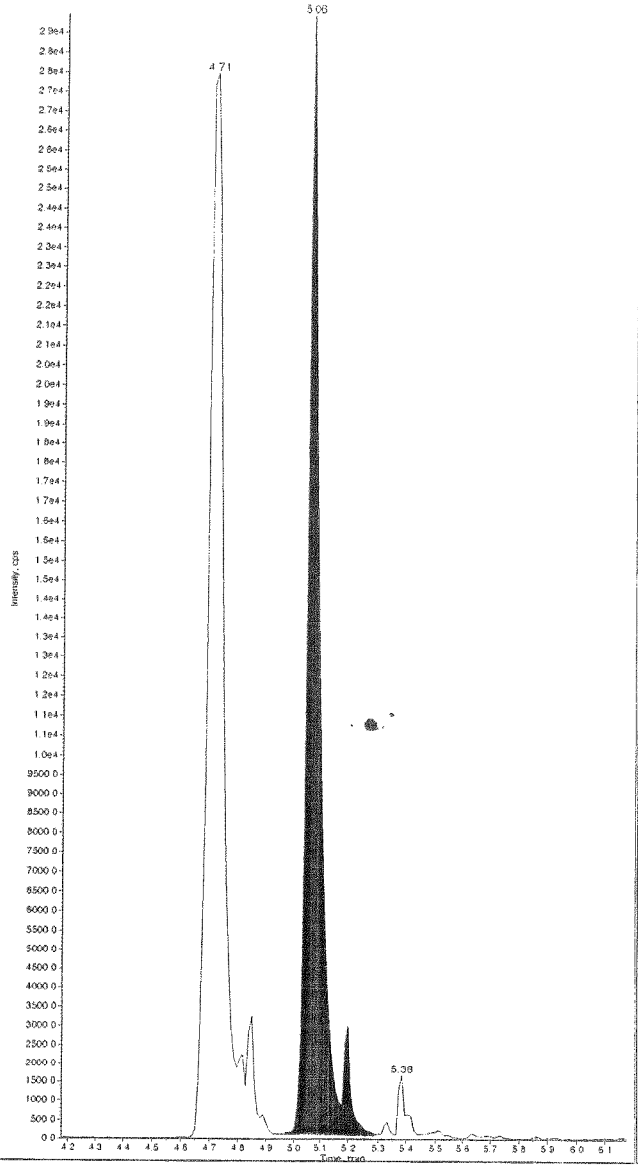
KRS 2/13/06

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209053.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

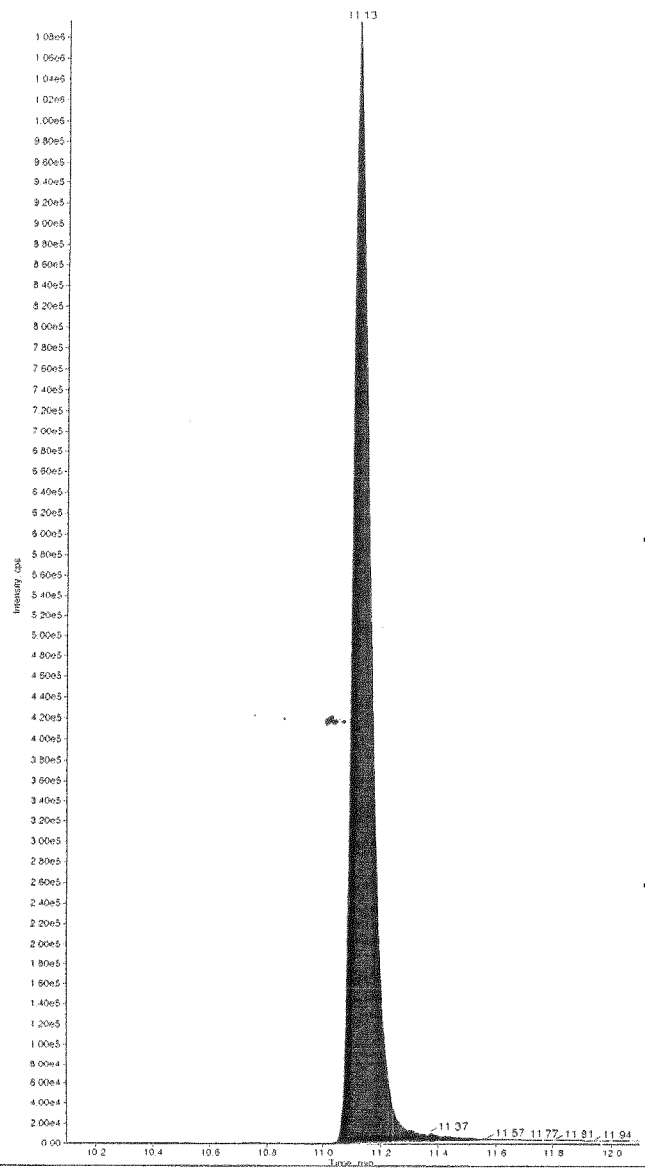
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	101.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:46:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.06	min
Area:	1.03e+005	counts
Height:	2.88e+004	cps
Start Time:	4.96	min
End Time:	5.29	min



831

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209053.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	95.0	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	01:46:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	5.03e+006	counts
Height:	1.10e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



dmc 02/13/06

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7A
Explosives Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No (SDG): 154614

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS0209064.wiff

Analysis Date: 10-FEB-06 17:53

LCMSMS ID: 1189

Column ID: JSphere ODS-H80

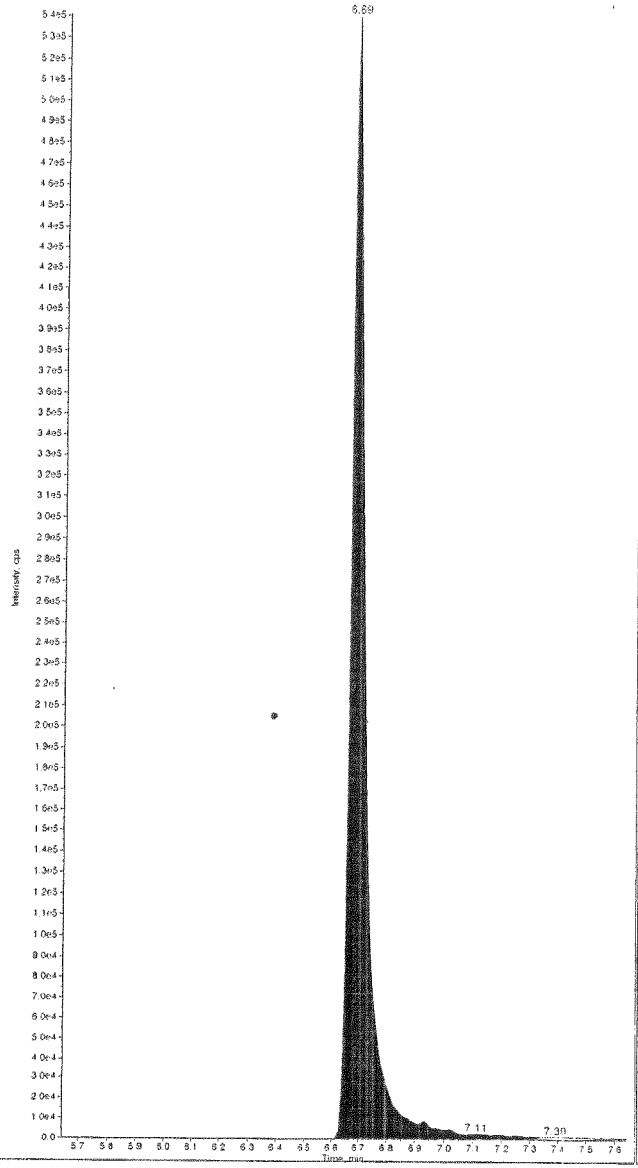
Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	466	93	
2,6-Diamino-4-nitrotoluene	500	504	101	
3,4-Dinitrotoluene	250	239	96	
3,5-Dinitroaniline	500	459	92	
TATB	500	494	99	
tris(o-cresyl) phosphate	500	551	110	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

KLR 2/13/06

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209064.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

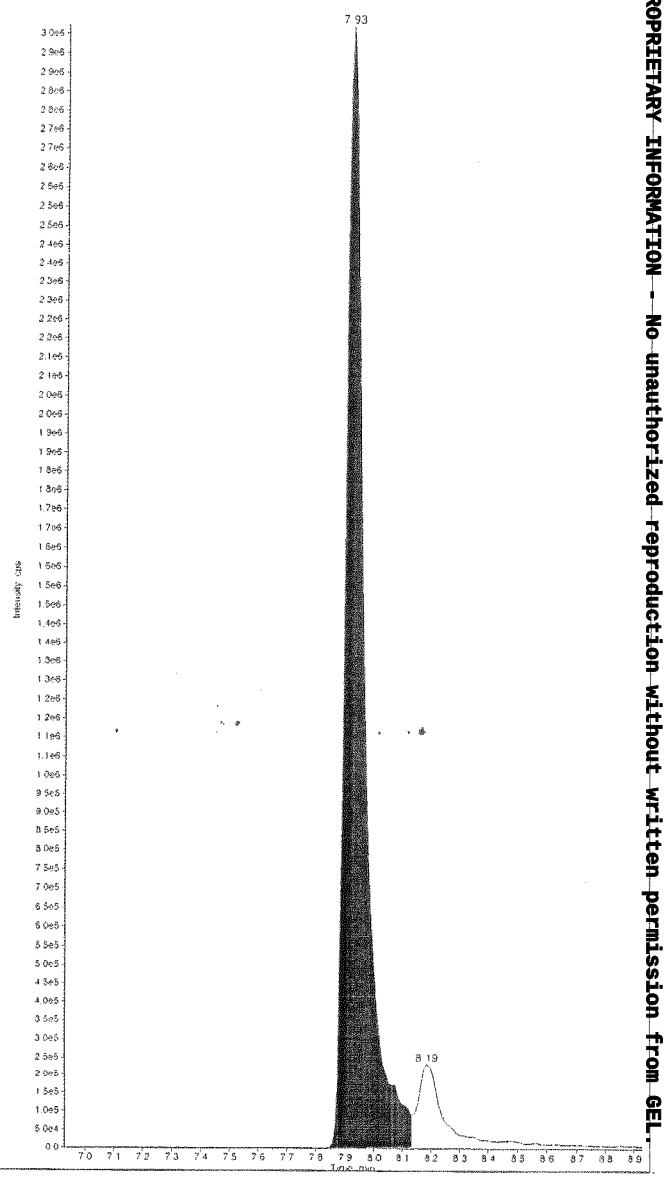
Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	494.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	05:53:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.69	min
Area:	2.19e+006	counts
Height:	5.41e+005	cps
Start Time:	6.58	min
End Time:	7.33	min



833

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209064.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	459.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	05:53:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.93	min
Area:	1.42e+007	counts
Height:	2.97e+006	cps
Start Time:	7.83	min
End Time:	8.13	min



Atime 2/13/06

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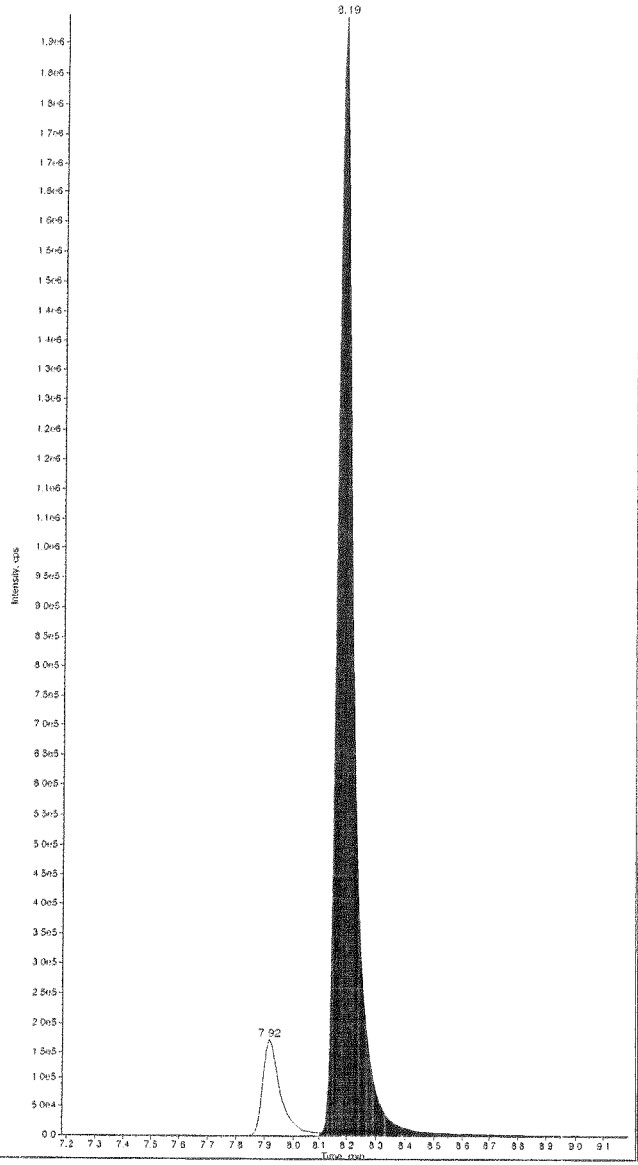
LXS 2/13/06

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209064.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

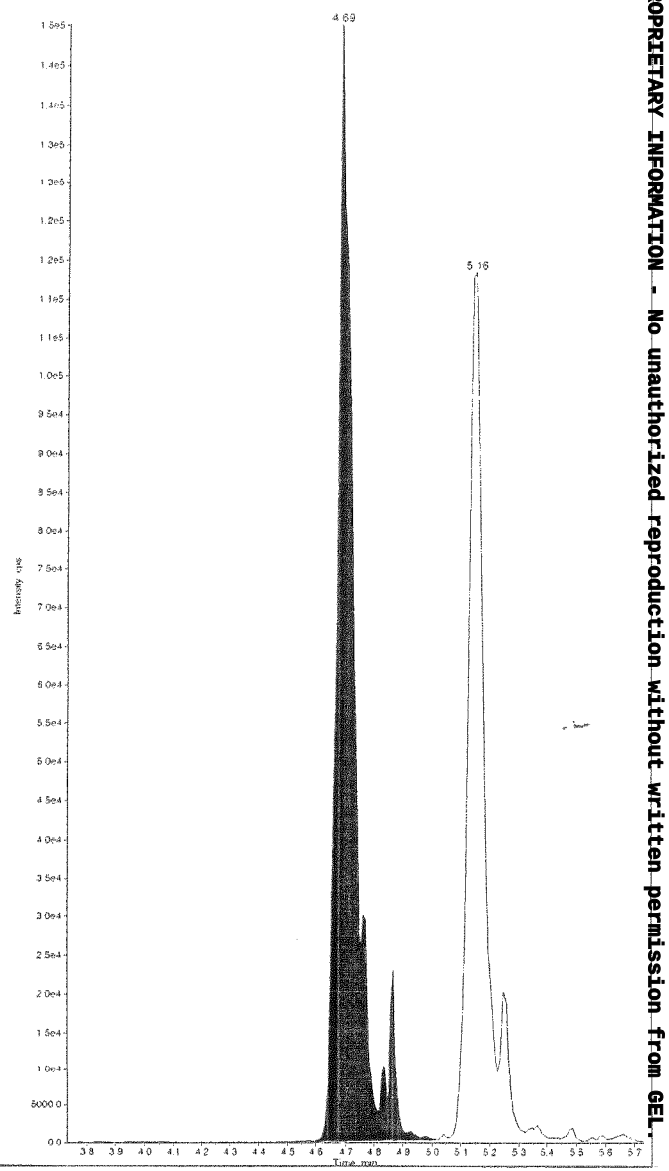
Sample Index:	1	
Sample Type:	QC	
Concentration:	250.	ng/mL
Calculated Conc:	239.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	05:53:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.19	min
Area:	7.86e+006	counts
Height:	1.90e+006	cps
Start Time:	8.10	min
End Time:	8.88	min



834

Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209064.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	504.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	05:53:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.69	min
Area:	6.48e+005	counts
Height:	1.45e+005	cps
Start Time:	4.59	min
End Time:	5.01	min



Hmm 2/13/06

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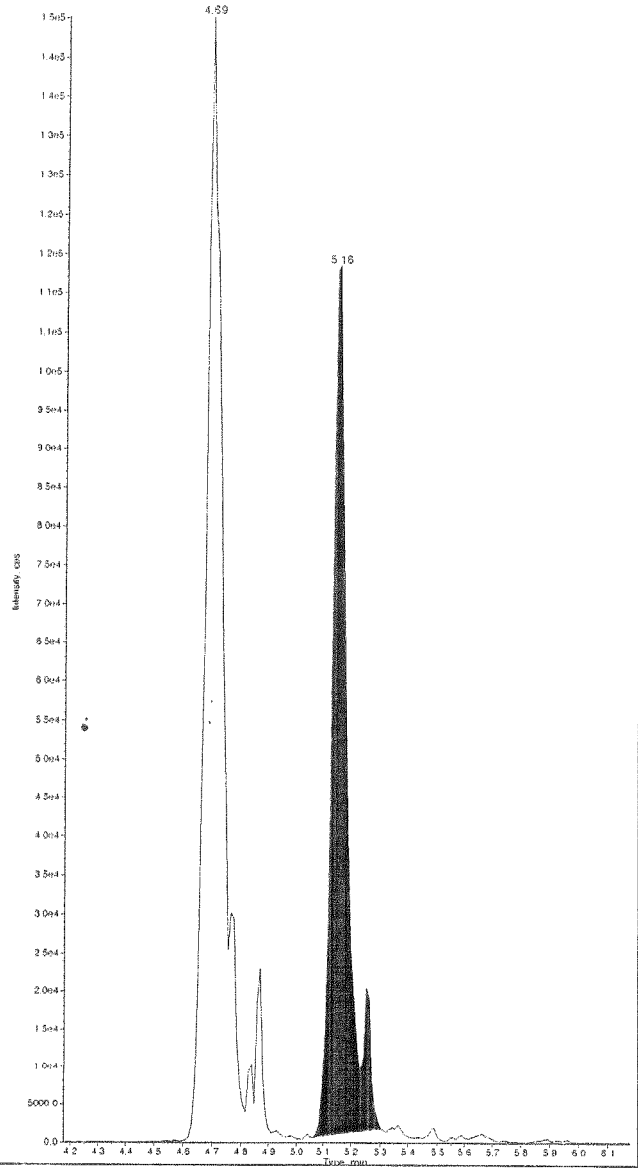
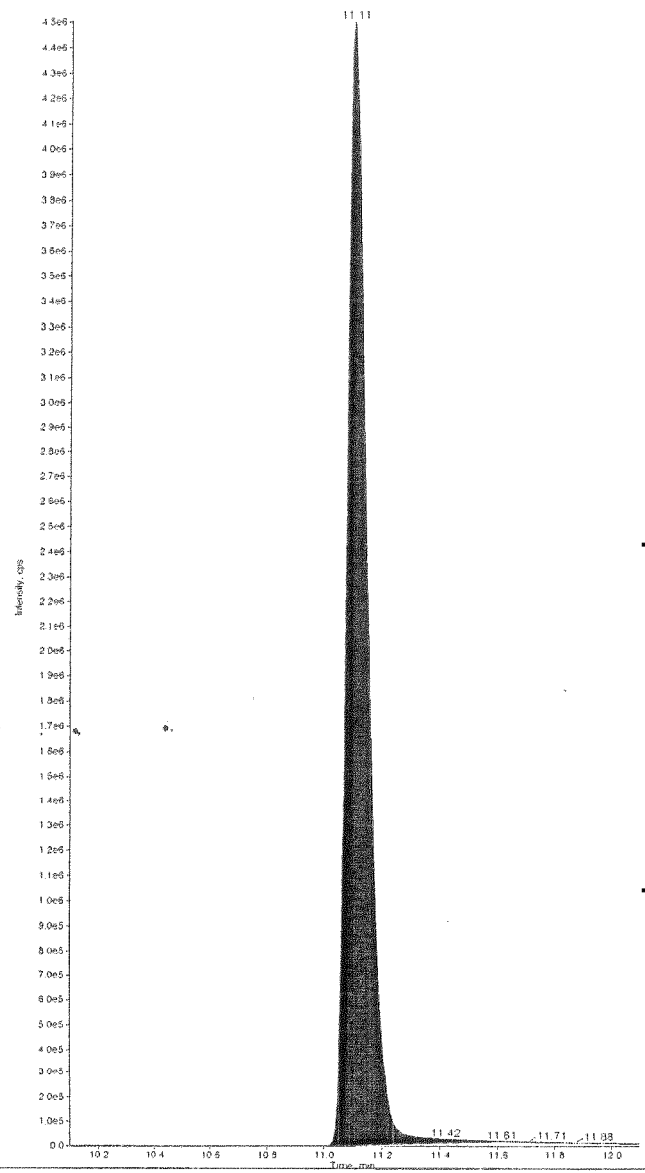
Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209064.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	466.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	05:53:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.16	min
Area:	4.51e+005	counts
Height:	1.13e+005	cps
Start Time:	5.06	min
End Time:	5.30	min



Sample Name: "WXX060210-26CCV" Sample ID: "|1|LXS1" File: "EXS0209064.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	500.	ng/mL
Calculated Conc:	551.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	05:53:52 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	2.32e+007	counts
Height:	4.50e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



835

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7B
Explosives CRI Standard

Lab Name: General Engineering Laboratories **GEL Job No (SDG):** 154614

Lab Code: GEL **GEL Sample ID:** WXXCRI

GEL Data File EXS0209066.wiff **Analysis Date:** 10-FEB-06 18:38

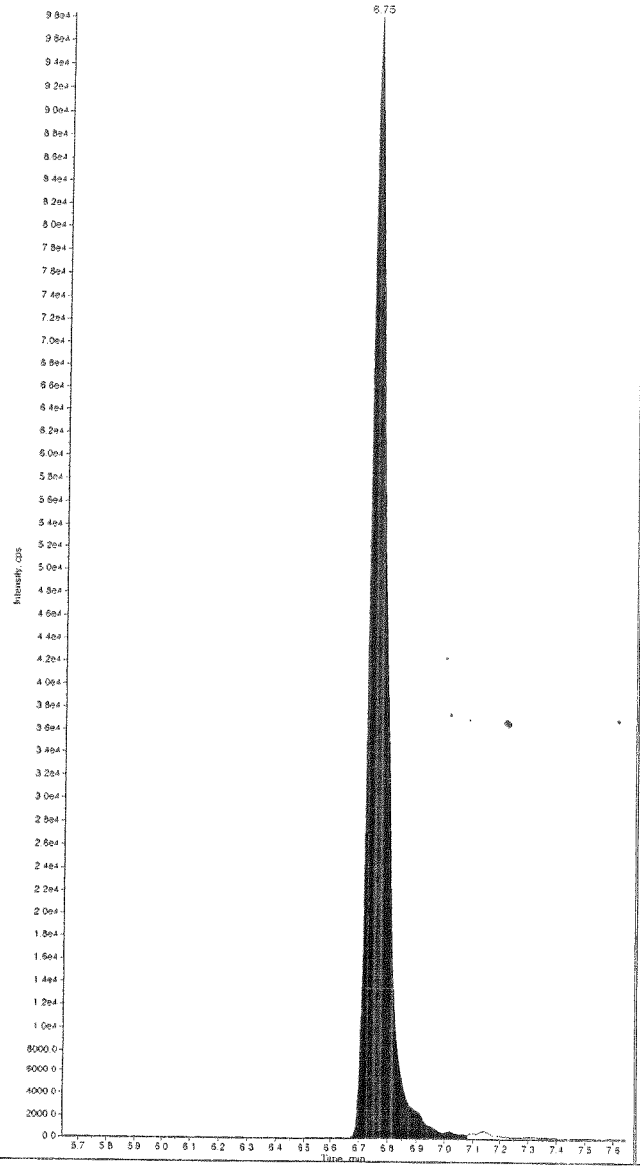
LCMSMS ID: 1189 **Column ID:** JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	79.8	80	
2,6-Diamino-4-nitrotoluene	100	115	115	
3,4-Dinitrotoluene	50	46.4	93	
3,5-Dinitroaniline	100	89.7	90	
TATB	100	115	115	
tris(o-cresyl) phosphate	100	94.8	95	

Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene ,
2,4-Diamino-6-nitrotoluene 50-150%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

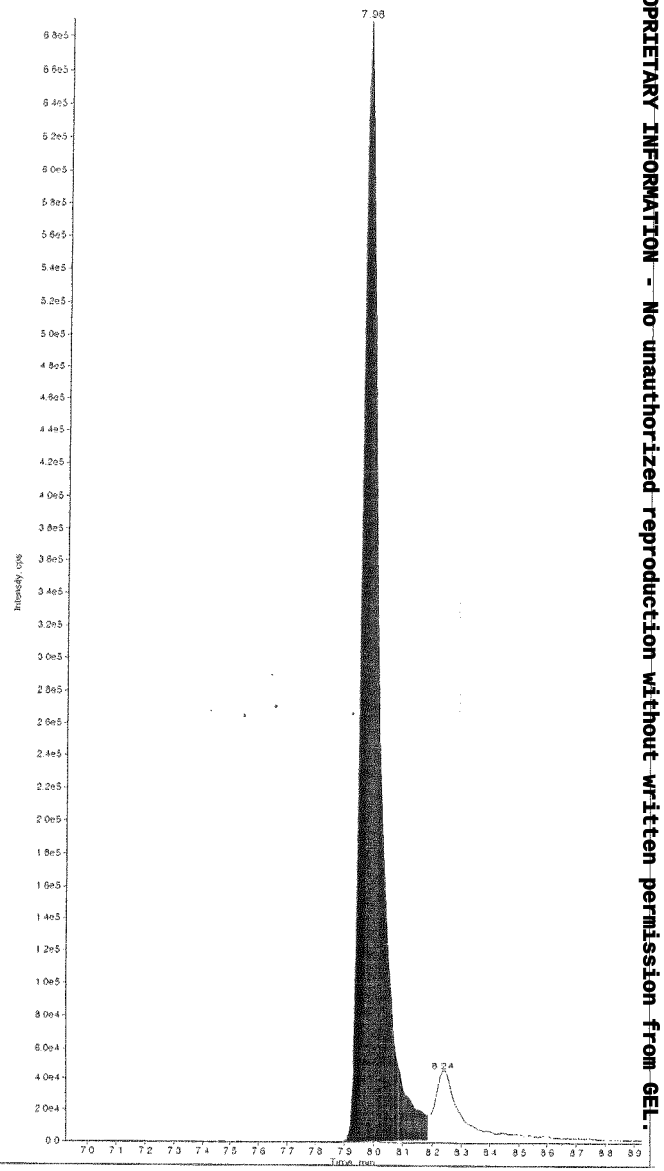
Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209066.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	115.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:38:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.75	min
Area:	4.27e+005	counts
Height:	9.83e+004	cps
Start Time:	6.57	min
End Time:	7.08	min



Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209066.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	89.7	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:38:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.98	min
Area:	3.02e+006	counts
Height:	6.90e+005	cps
Start Time:	7.89	min
End Time:	8.19	min



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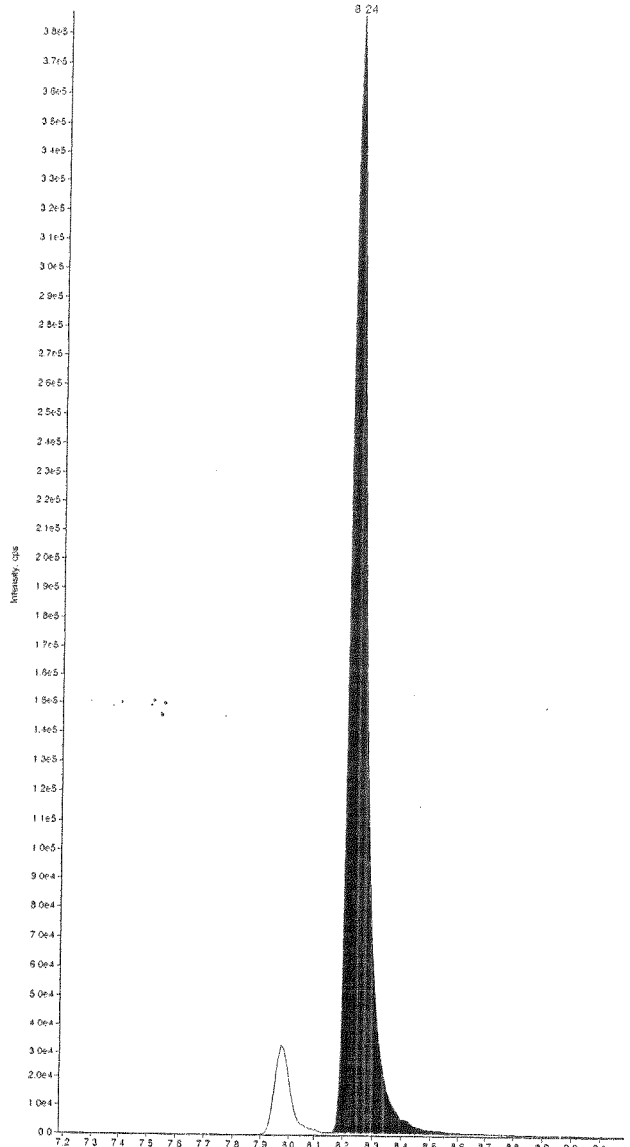
EXS 2/13/06

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209066.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

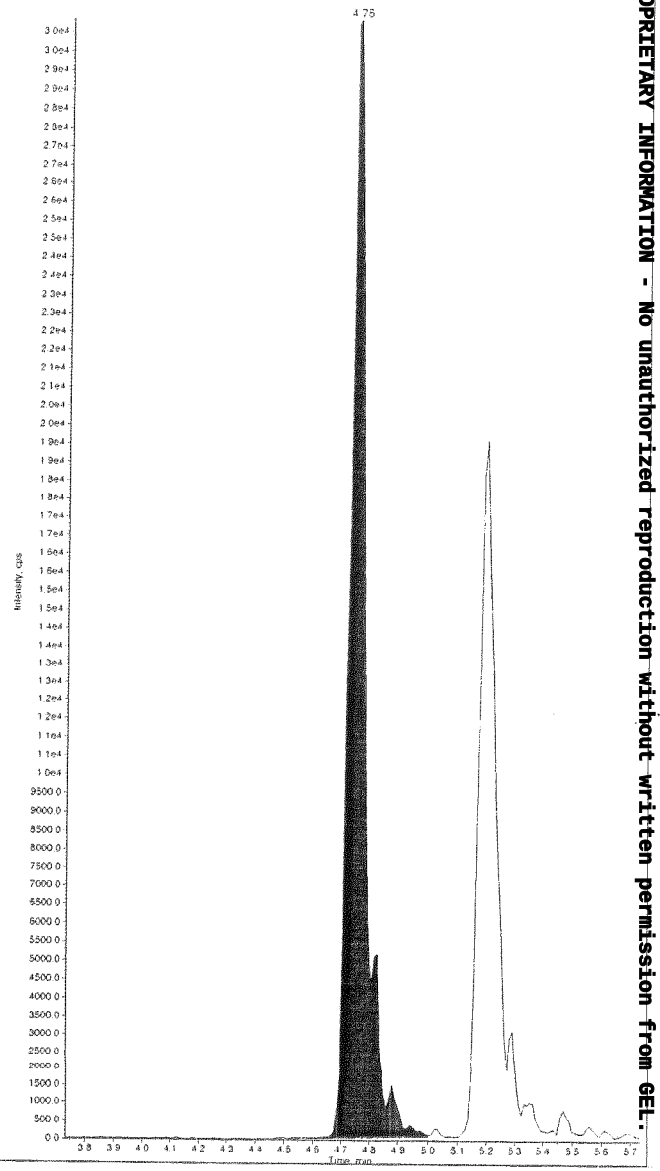
Sample Index:	1	
Sample Type:	QC	
Concentration:	50.0	ng/mL
Calculated Conc:	46.4	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:38:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.24	min
Area:	1.55e+006	counts
Height:	3.86e+005	cps
Start Time:	8.14	min
End Time:	8.65	min



838

Sample Name: "WXX060210-27CRI" Sample ID: "|1|LXS1" File: "EXS0209066.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	115.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:38:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.75	min
Area:	1.27e+005	counts
Height:	3.03e+004	cps
Start Time:	4.61	min
End Time:	5.00	min



cpm 2/13/06

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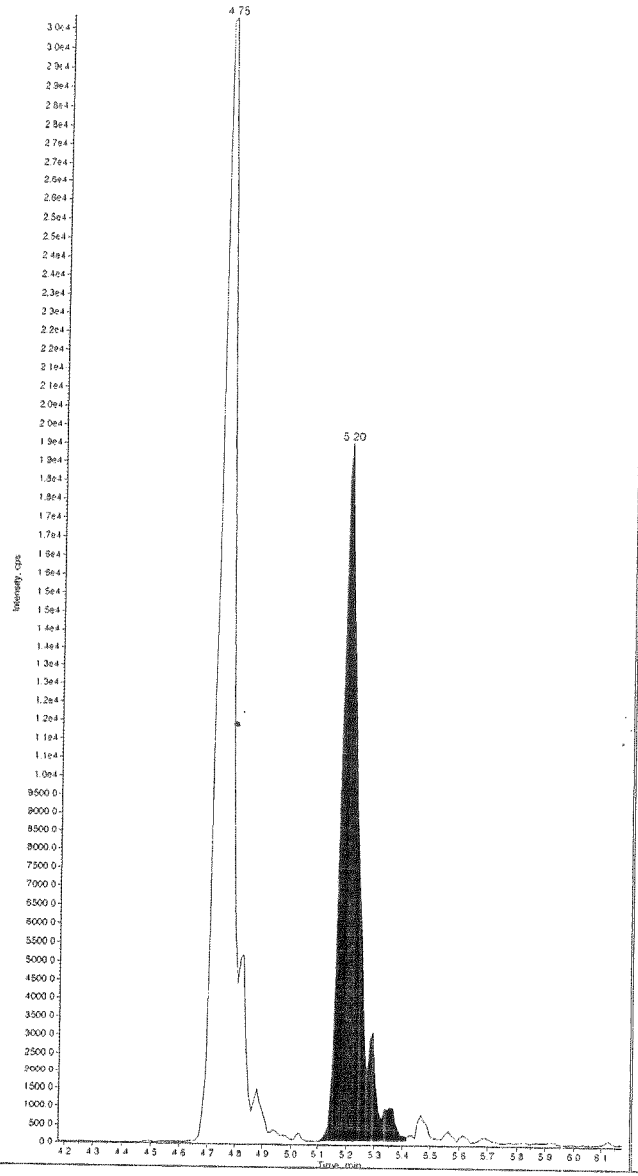
Sample Name: "WXX060210-27CRI" Sample ID: "[1]LXS1" File: "EXS0209066.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

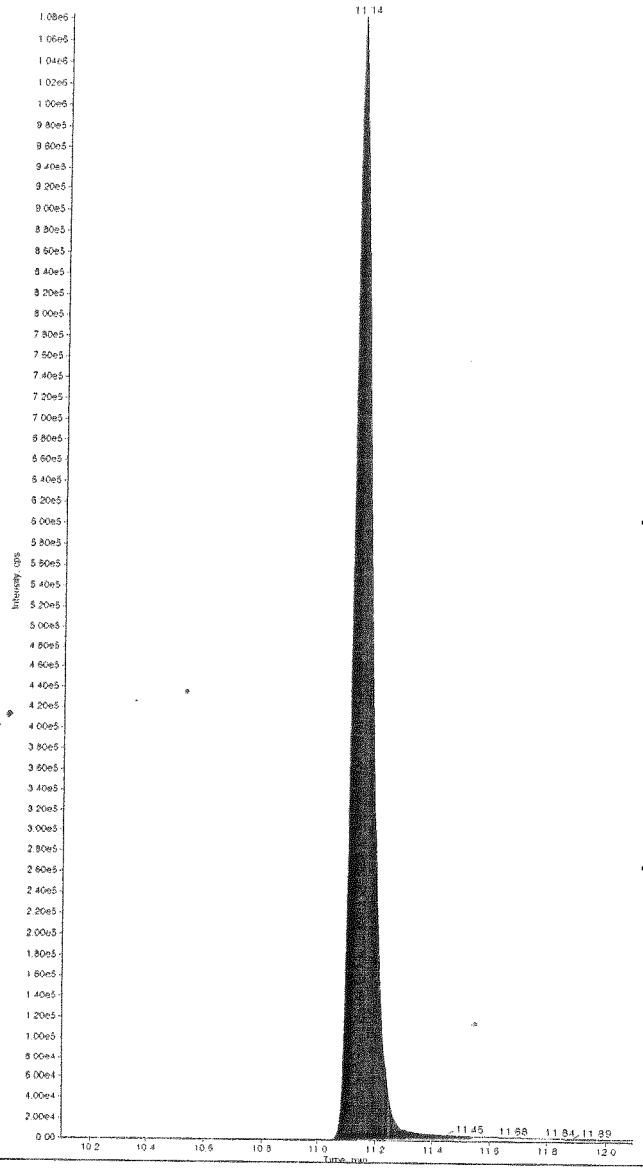
Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	79.8	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:38:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.20	min
Area:	8.36e+004	counts
Height:	1.90e+004	cps
Start Time:	5.11	min
End Time:	5.42	min



839

Sample Name: "WXX060210-27CRI" Sample ID: "[1]LXS1" File: "EXS0209066.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index:	1	
Sample Type:	QC	
Concentration:	100.	ng/mL
Calculated Conc:	94.8	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	06:38:45 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	5.02e+006	counts
Height:	1.08e+006	cps
Start Time:	11.0	min
End Time:	11.5	min



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QUALITY CONTROL DATA

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: MB for batch 498839

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201021041

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 30-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0202058a
Date Analyzed: 03-FEB-06 23:05

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	U
121-14-2	2,4-Dinitrotoluene	0.325	U
121-82-4	RDX	0.325	U
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	U
2691-41-0	HMX	0.325	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	U
479-45-8	Tetryl	0.649	U
606-20-2	2,6-Dinitrotoluene	0.325	U
78-11-5	PETN	1.3	U
88-72-2	o-Nitrotoluene	0.325	U
98-95-3	Nitrobenzene	0.325	U
99-08-1	m-Nitrotoluene	0.325	U
99-35-4	1,3,5-Trinitrobenzene	0.325	U
99-65-0	m-Dinitrobenzene	0.325	U
99-99-0	p-Nitrotoluene	0.649	U

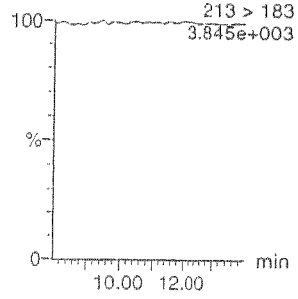
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

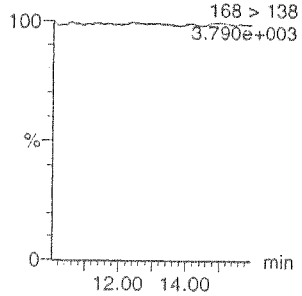
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202058a
Date: 03-Feb-2006
Time: 23:05:33
ID: 1201021041 | ERH | 418841 | LIC | MB | 2 |
Vial: 2:3,A

MM
2/4/06

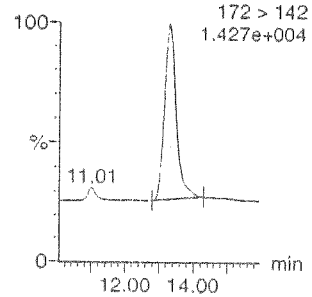
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.845e+003



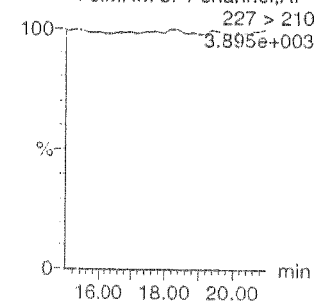
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.790e+003



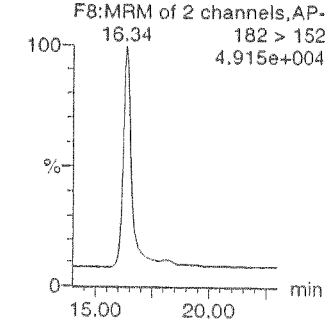
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.427e+004



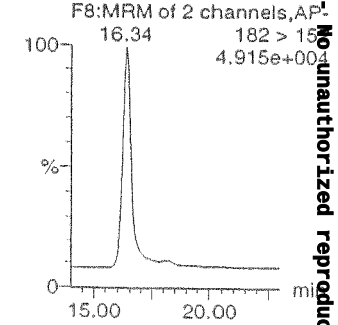
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
3.895e+003



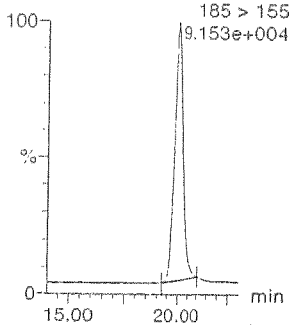
24-dinitrotoluene
F8:MRM of 2 channels,AP-
16.34
182 > 152
4.915e+004



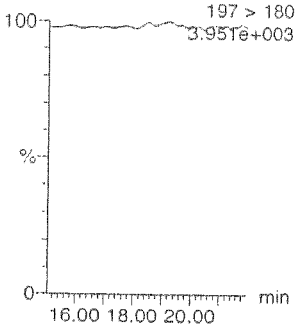
26-dinitrotoluene
F8:MRM of 2 channels,AP-
16.34
182 > 152
4.915e+004



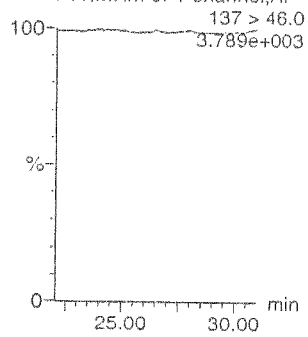
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
9.153e+004



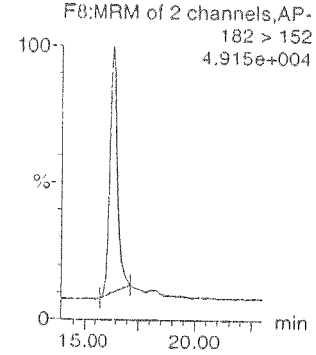
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.951e+003



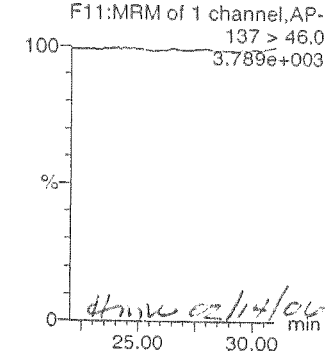
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.789e+003



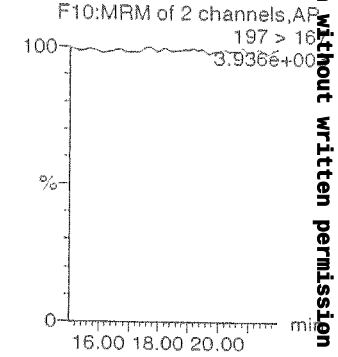
34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
4.915e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46.0
3.789e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 16
3.936e+00



842

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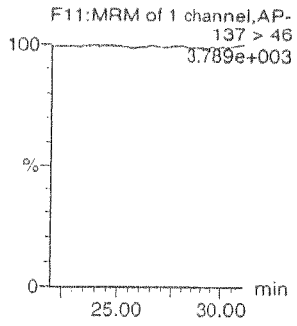
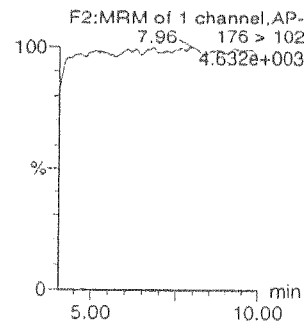
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

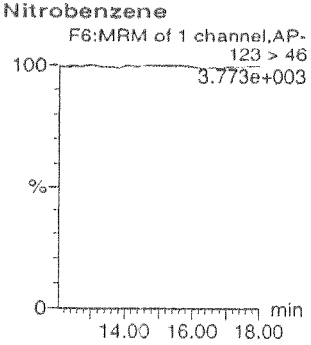
4-Nitrotoluene



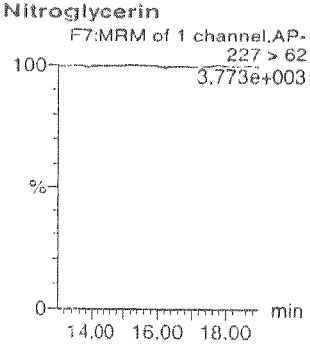
HMX



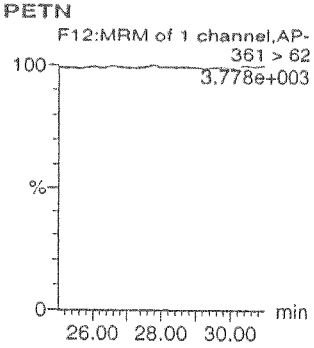
Nitrobenzene



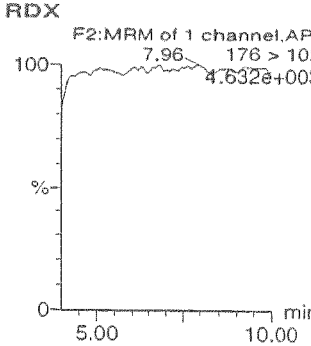
Nitroglycerin



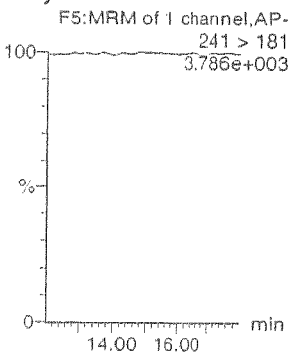
PETN



RDX



Tetryl



843

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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201021041	HMX	176 > 102			4109.498									
1201021041	RDX	176 > 102			4109.498									
1201021041	135-Trinitrobenzene	213 > 183			4109.498									
1201021041	13-Dinitrobenzene-d4	172 > 142	13.29	4109.498		4109.498	4109.498	bb			499.3420	99.9	-0.1	229.8
1201021041	13-Dinitrobenzene	168 > 138			4109.498									
1201021041	Tetryl	241 > 181			4109.498									
1201021041	Nitrobenzene	123 > 46			4109.498									
1201021041	Nitroglycerin	227 > 62			4109.498									
1201021041	4-Amino-26-dinitrotoluene	197 > 167			41037.973									
1201021041	2-Amino-46-dinitrotoluene	197 > 180			41037.973									
1201021041	246-Trinitrotoluene	227 > 210			41037.973									
1201021041	34-dinitrotoluene	182 > 152	16.34	17742.977	41037.973	17742.977	216.178	bb			233.7655	93.5	-6.5	529.3
1201021041	26-dinitrotoluene	182 > 152			41037.973									
1201021041	24-dinitrotoluene	182 > 152			41037.973									
1201021041	26-dinitrotoluene-d3	185 > 155	20.01	41037.973		41037.973	41037.973	bb			530.3208	106.1	6.1	1756.4
1201021041	2-Nitrotoluene	137 > 46.0			41037.973									
1201021041	4-Nitrotoluene	137 > 46			41037.973									
1201021041	3-Nitrotoluene	137 > 46.0			41037.973									
1201021041	PETN	361 > 62			41037.973									

3.52

4thinc 2/14/06

MM 2/4/06

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: MB for batch 498839

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201021041

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 30-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209022.wiff
Date Analyzed: 09-FEB-06 21:33

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	U
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	U
618-87-1	3,5-Dinitroaniline	1.3	U
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	U
78-30-8	tris(o-cresyl) phosphate	1.3	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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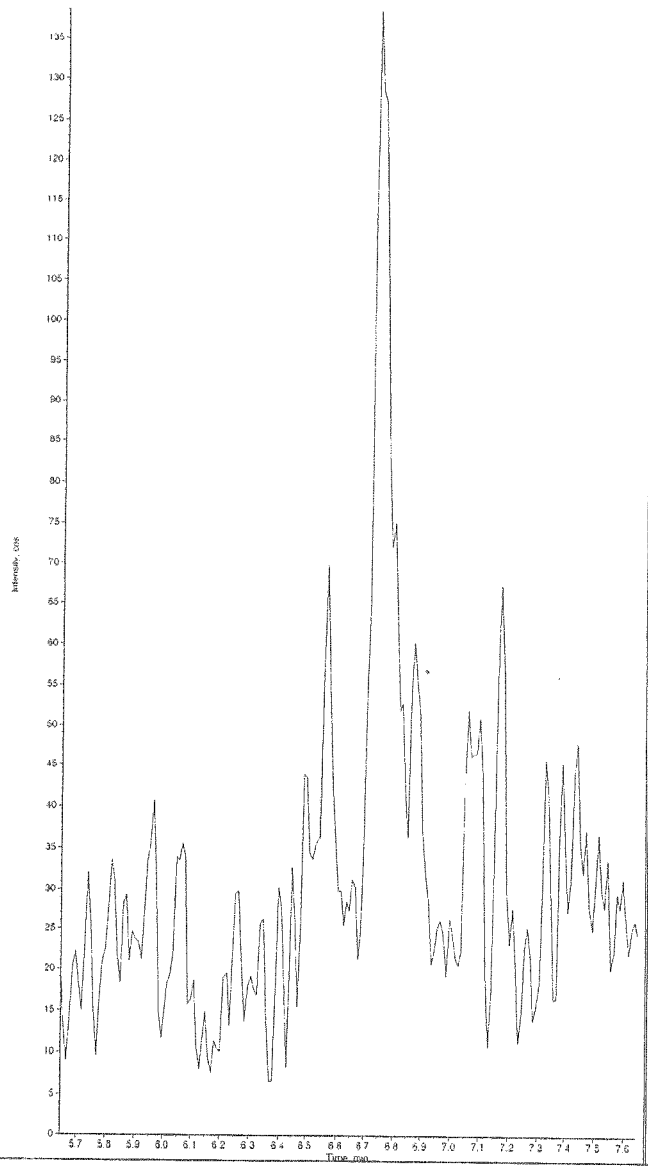
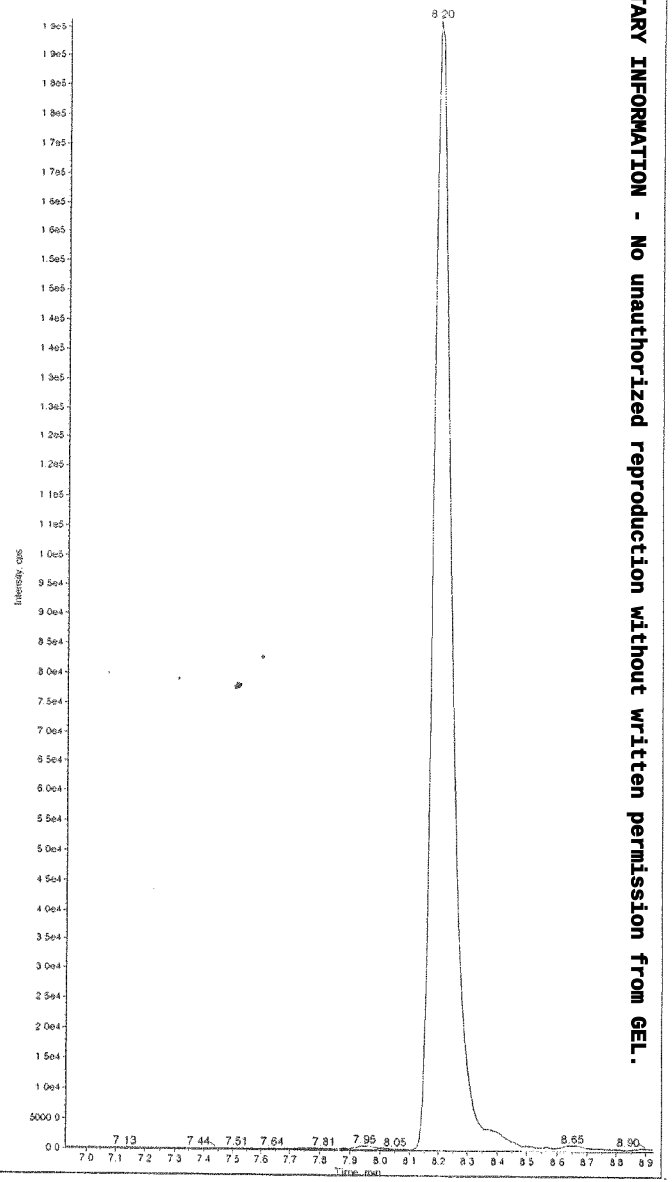
Sample Name: "1201021041" Sample ID: "498841|2|LXS1" File: "EXS0209022.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	09:33:08 PM
Modified:	No



Sample Name: "1201021041" Sample ID: "498841|2|LXS1" File: "EXS0209022.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/09/2006
Acq. Time:	09:33:08 PM
Modified:	No



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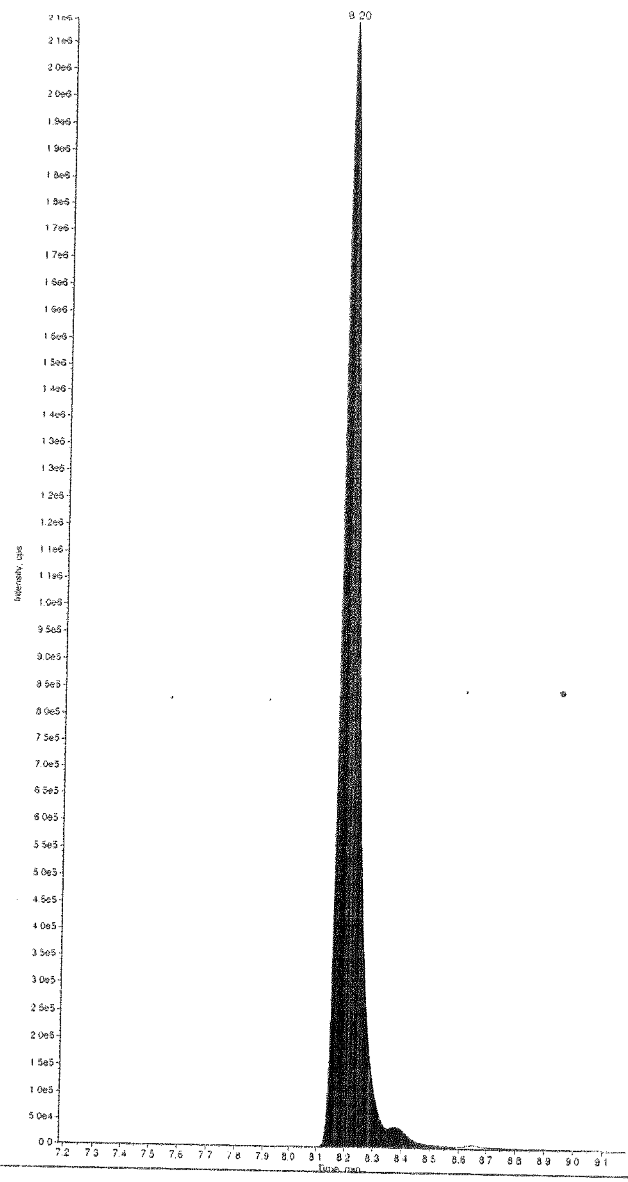
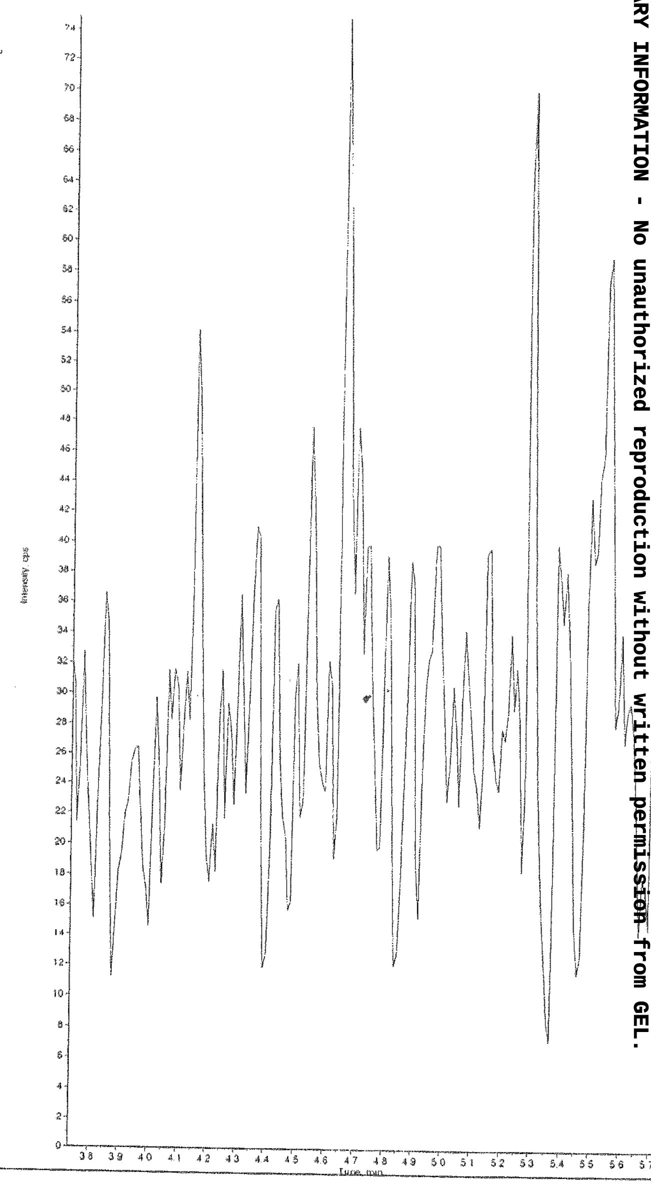
Sample Name: "1201021041" Sample ID: "498841|2|LXS1" File: "EXS0209022.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	293.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:33:08 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.20	min
Area:	9.56e+006	counts
Height:	2.10e+006	cps
Start Time:	8.08	min
End Time:	8.59	min



Sample Name: "1201021041" Sample ID: "498841|2|LXS1" File: "EXS0209022.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	0.00	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:33:08 PM	
Modified:	No	

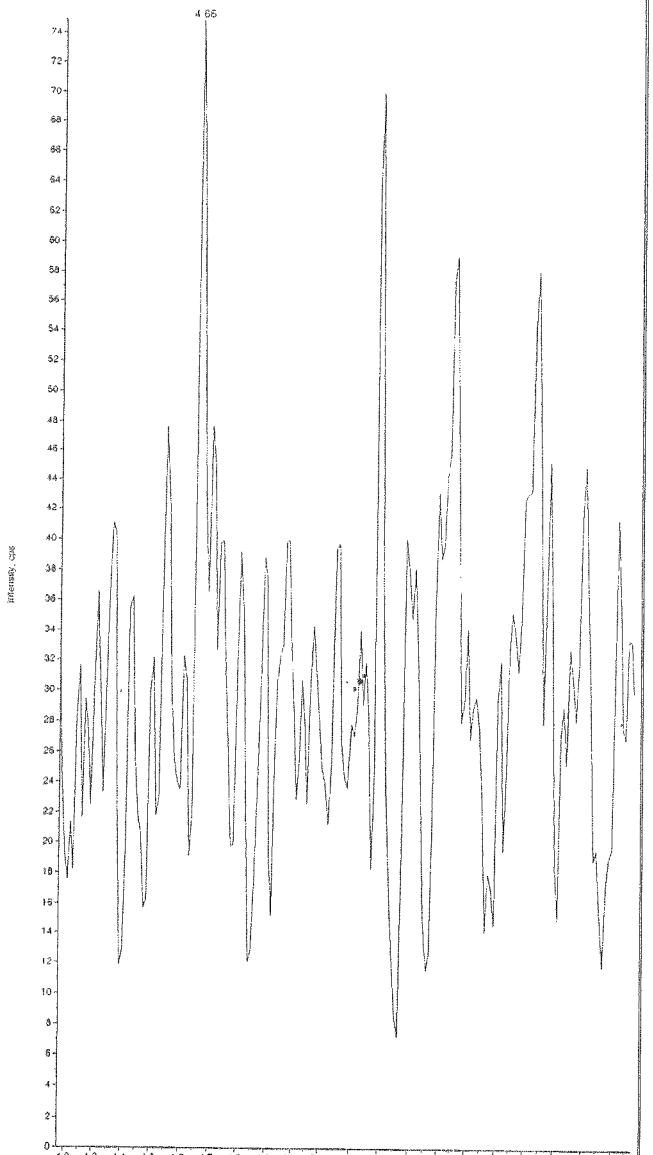


LXS 2/10/06

Sample Name: "1201021041" Sample ID: "498841|2|LXS1" File: "EXS0209022.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 09:33:08 PM

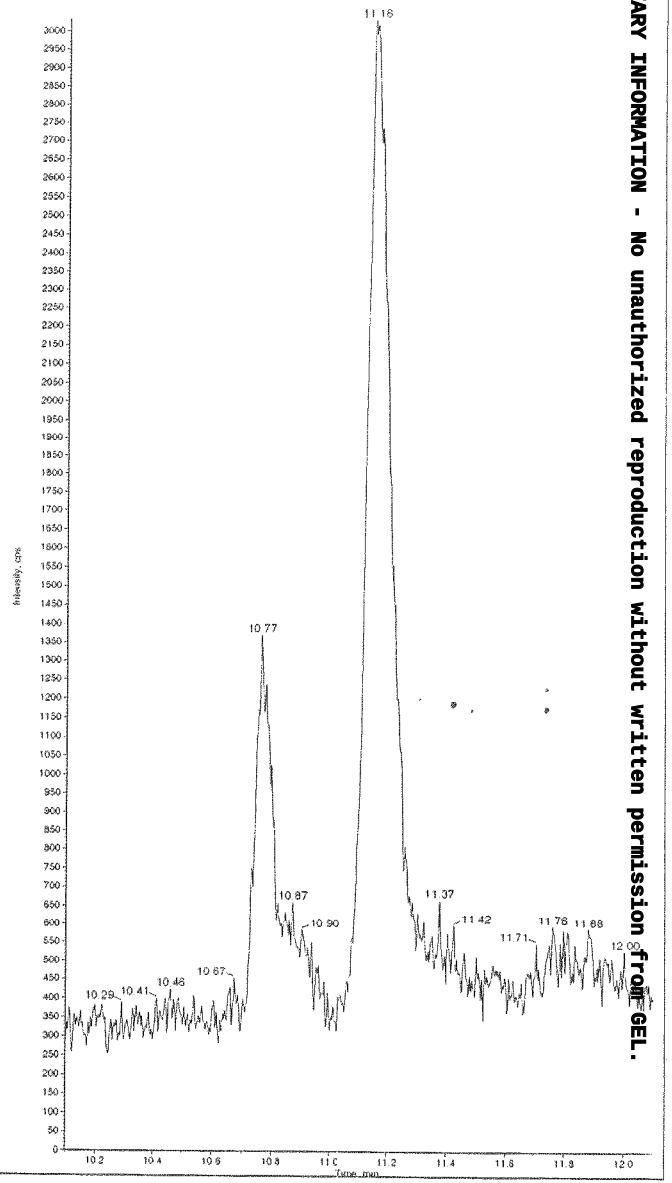
Modified: No



Sample Name: "1201021041" Sample ID: "498841|2|LXS1" File: "EXS0209022.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 02/09/2006
Acq. Time: 09:33:08 PM

Modified: No



848

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1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: MB for batch 501111

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201026408

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 06-FEB-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0209013a
Date Analyzed: 09-FEB-06 16:54

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	0.325	U
121-14-2	2,4-Dinitrotoluene	0.325	U
121-82-4	RDX	0.325	U
19406-51-0	4-Amino-2,6-dinitrotoluene	0.325	U
2691-41-0	HMX	0.325	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.325	U
479-45-8	Tetryl	0.649	U
606-20-2	2,6-Dinitrotoluene	0.325	U
78-11-5	PETN	1.3	U
88-72-2	o-Nitrotoluene	0.325	U
98-95-3	Nitrobenzene	0.325	U
99-08-1	m-Nitrotoluene	0.325	U
99-35-4	1,3,5-Trinitrobenzene	0.325	U
99-65-0	m-Dinitrobenzene	0.325	U
99-99-0	p-Nitrotoluene	0.649	U

*Concentration =

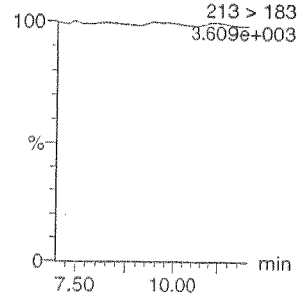
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

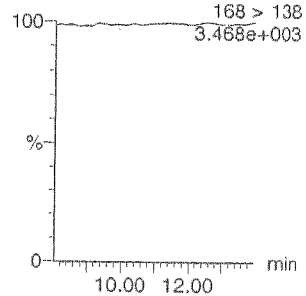
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209013a
Date: 09-Feb-2006
Time: 16:54:56
ID: 1201026408 | E814 | 501113 | LIQ | MB | 2 |
Vial: 1:4,A

MM 2/14/06

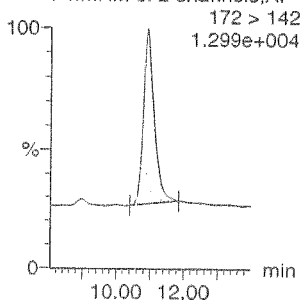
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.609e+003



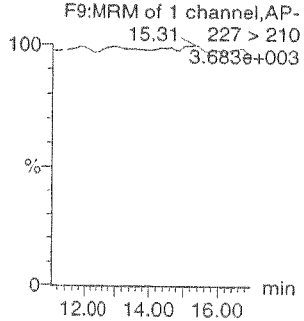
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
3.468e+003



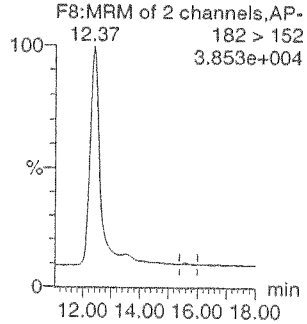
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.299e+004



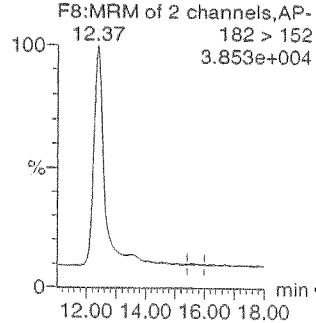
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
15.31
227 > 210
3.683e+003



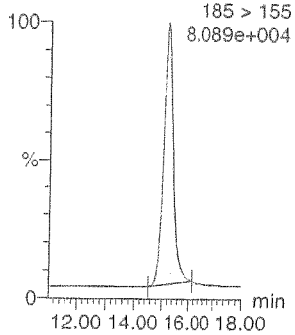
24-dinitrotoluene
F8:MRM of 2 channels,AP-
12.37
182 > 152
3.853e+004



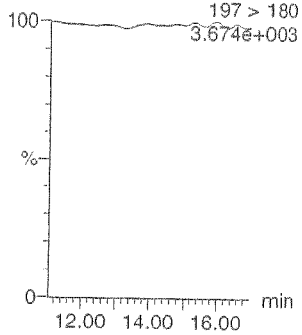
26-dinitrotoluene
F8:MRM of 2 channels,AP-
12.37
182 > 152
3.853e+004



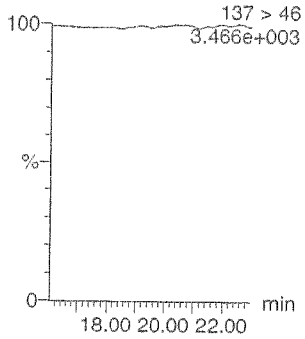
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.089e+004



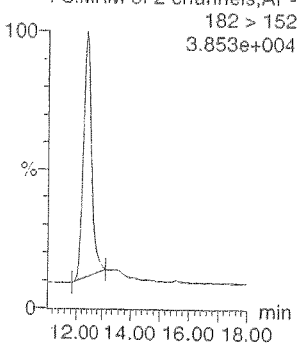
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.674e+003



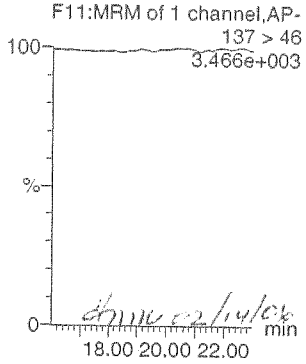
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.466e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
3.853e+004

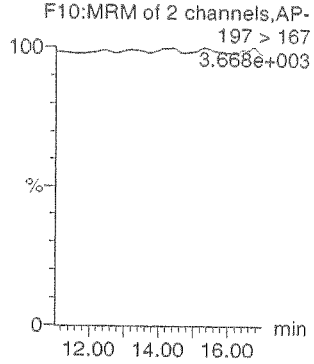


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
3.466e+003



2/14/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
3.668e+003



850

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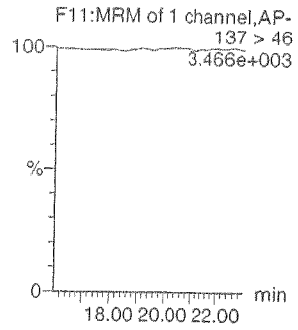
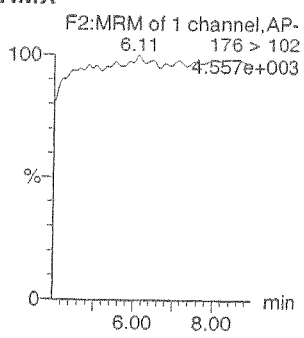
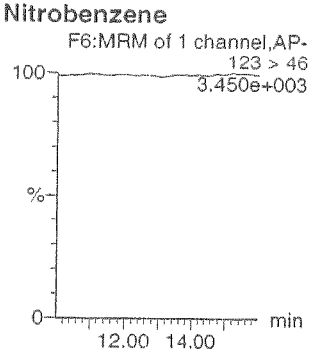
4-Nitrotoluene



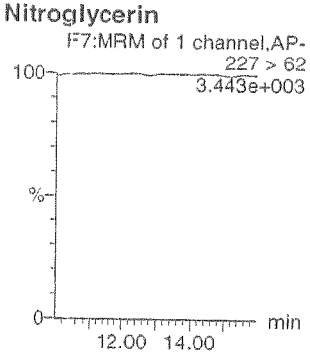
HMX



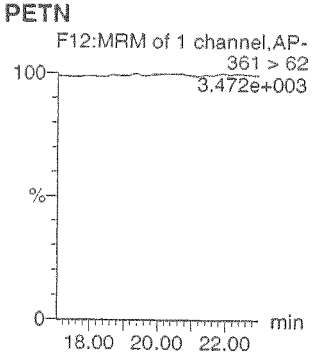
Nitrobenzene



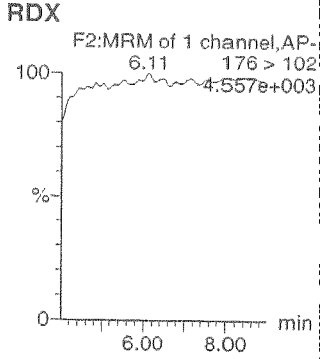
Nitroglycerin



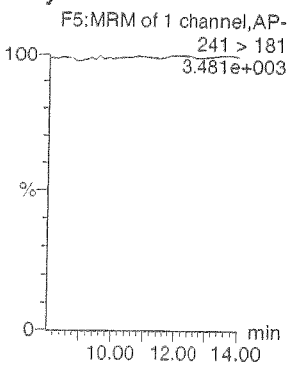
PETN



RDX



Tetryl



851

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ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201026408	HMX	176 > 102			3689.277									
1201026408	RDX	176 > 102			3689.277									
1201026408	135-Trinitrobenzene	213 > 183			3689.277									
1201026408	13-Dinitrobenzene-d4	172 > 142	10.90	3689.277		3689.277	3689.277	bb			555.9112	111.2	11.2	329.0
1201026408	13-Dinitrobenzene	168 > 138			3689.277									
1201026408	Tetryl	241 > 181			3689.277									
1201026408	Nitrobenzene	123 > 46			3689.277									
1201026408	Nitroglycerin	227 > 62			3689.277									
1201026408	4-Amino-26-dinitrotoluene	197 > 167			33875.281									
1201026408	2-Amino-46-dinitrotoluene	197 > 180			33875.281									
1201026408	246-Trinitrotoluene	227 > 210			33875.281									
1201026408	34-dinitrotoluene	182 > 152	12.37	12622.619	33875.281	12622.619	186.310	bb		2.96	228.7383	91.5	-8.5	408.1
1201026408	26-dinitrotoluene	182 > 152			33875.281			MM-	10-Feb-06	06:54:32				
1201026408	24-dinitrotoluene	182 > 152			33875.281			MM-	10-Feb-06	06:56:04				
1201026408	26-dinitrotoluene-d3	185 > 155	15.21	33875.281		33875.281	33875.281	bb			559.5165	111.9	11.9	3453.4
1201026408	2-Nitrotoluene	137 > 46			33875.281									
1201026408	4-Nitrotoluene	137 > 46			33875.281									
1201026408	3-Nitrotoluene	137 > 46			33875.281									
1201026408	PETN	361 > 62			33875.281									

thru 2/14/06

MMP 2/10/06

852

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: MB for batch 501111

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201026408

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 06-FEB-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209054.wiff
Date Analyzed: 10-FEB-06 14:09

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1.3	U
59229-75-3	2,6-Diamino-4-nitrotoluene	1.3	U
618-87-1	3,5-Dinitroaniline	1.3	U
6629-29-4	2,4-Diamino-6-nitrotoluene	1.3	U
78-30-8	tris(o-cresyl) phosphate	1.3	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

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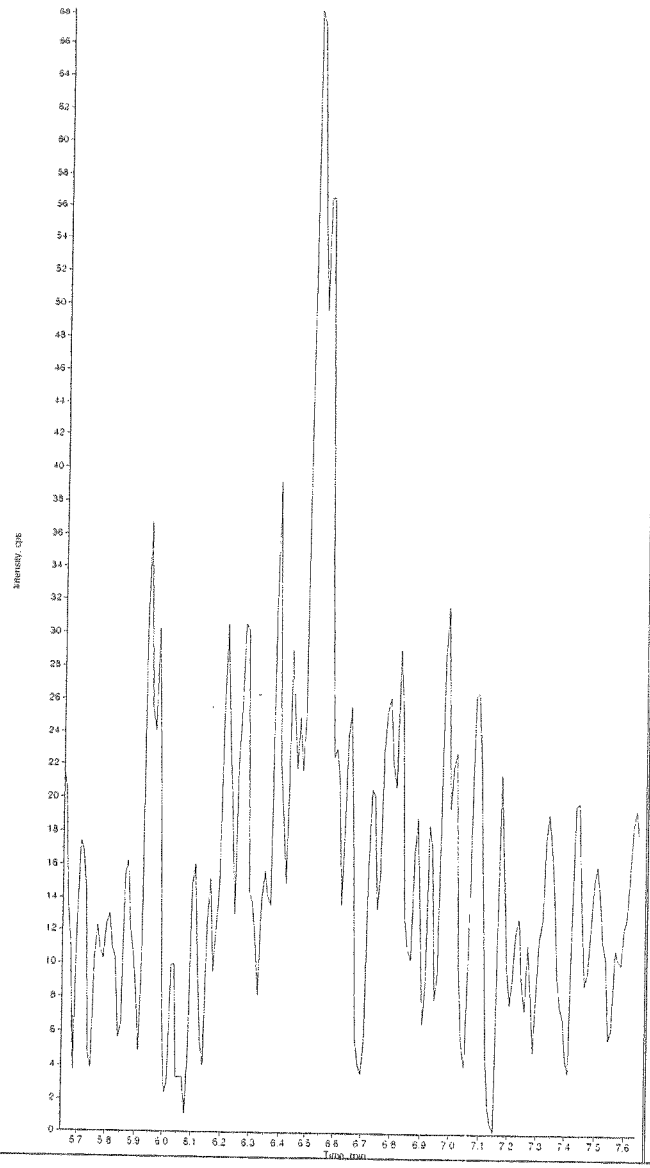
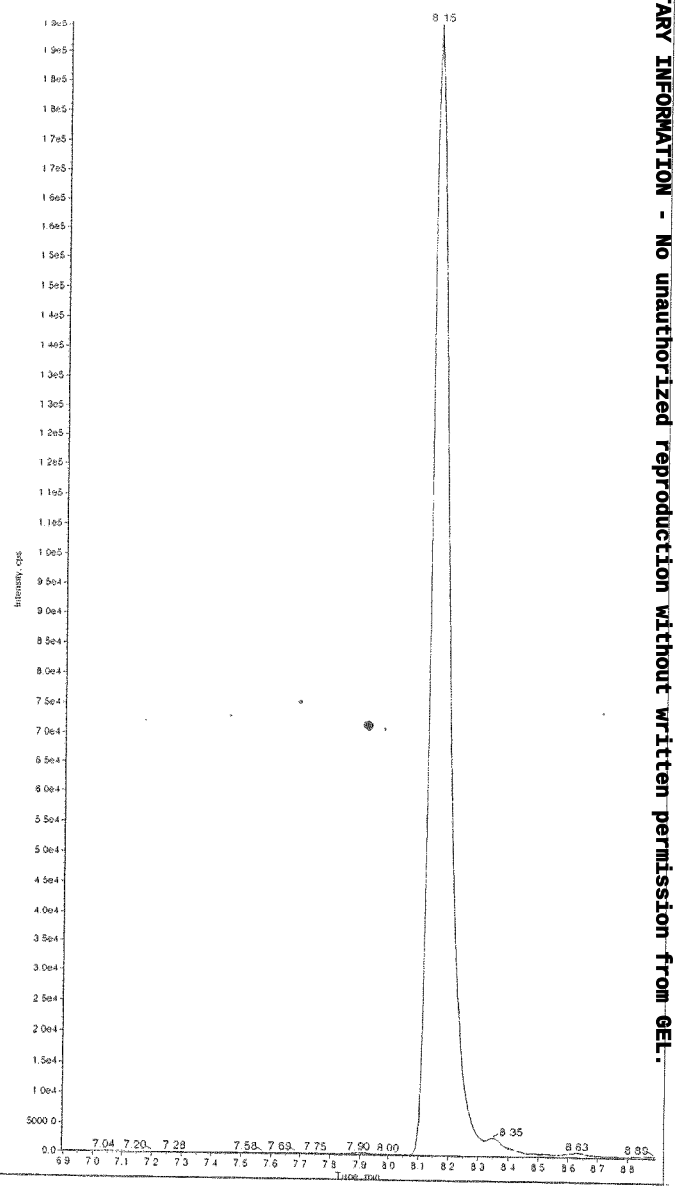
Sample Name: "1201026408" Sample ID: "501113|2|LXS1" File: "EXS0209054.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:09:16 PM
Modified:	No



Sample Name: "1201026408" Sample ID: "501113|2|LXS1" File: "EXS0209054.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:09:16 PM
Modified:	Yes



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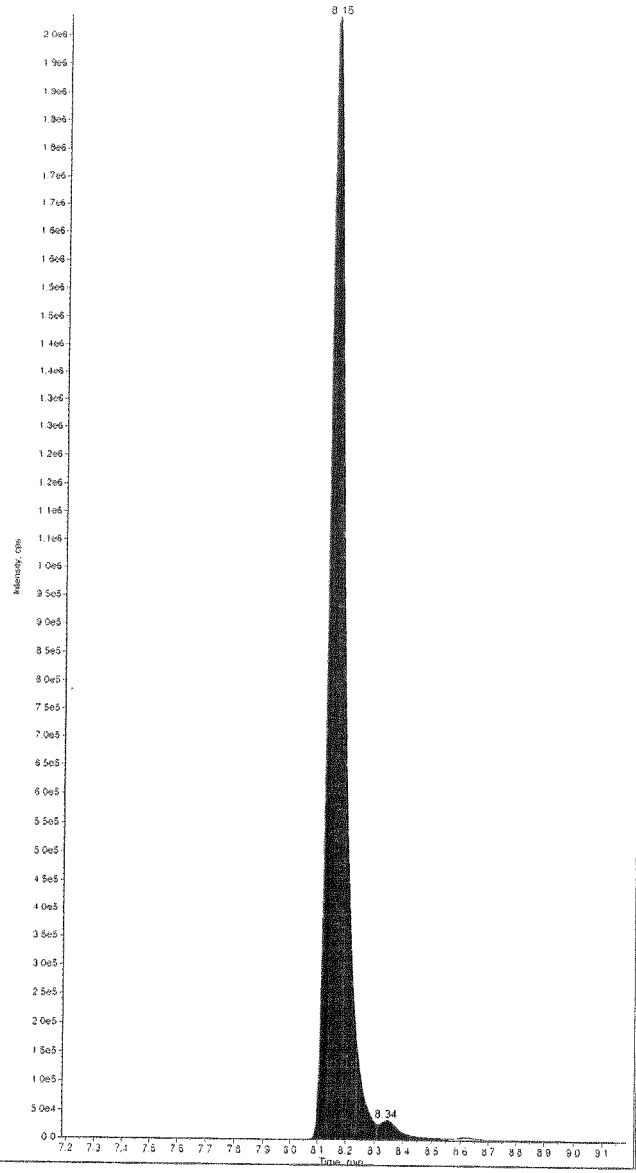
Sample Name: "1201026408" Sample ID: "501113|2|LXS1" File: "EXS0209054.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	258. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:09:16 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.15 min
Area:	8.46e+006 counts
Height:	1.99e+006 cps
Start Time:	8.01 min
End Time:	8.56 min

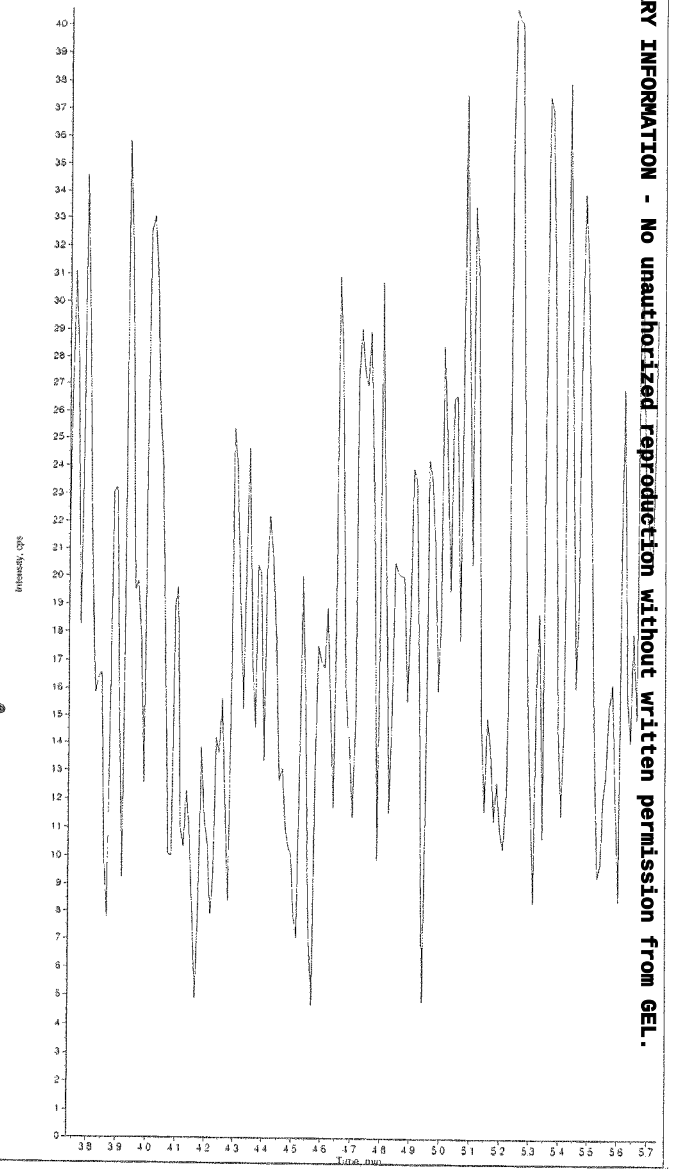
3.35

855



Sample Name: "1201026408" Sample ID: "501113|2|LXS1" File: "EXS0209054.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:09:16 PM
Modified:	No



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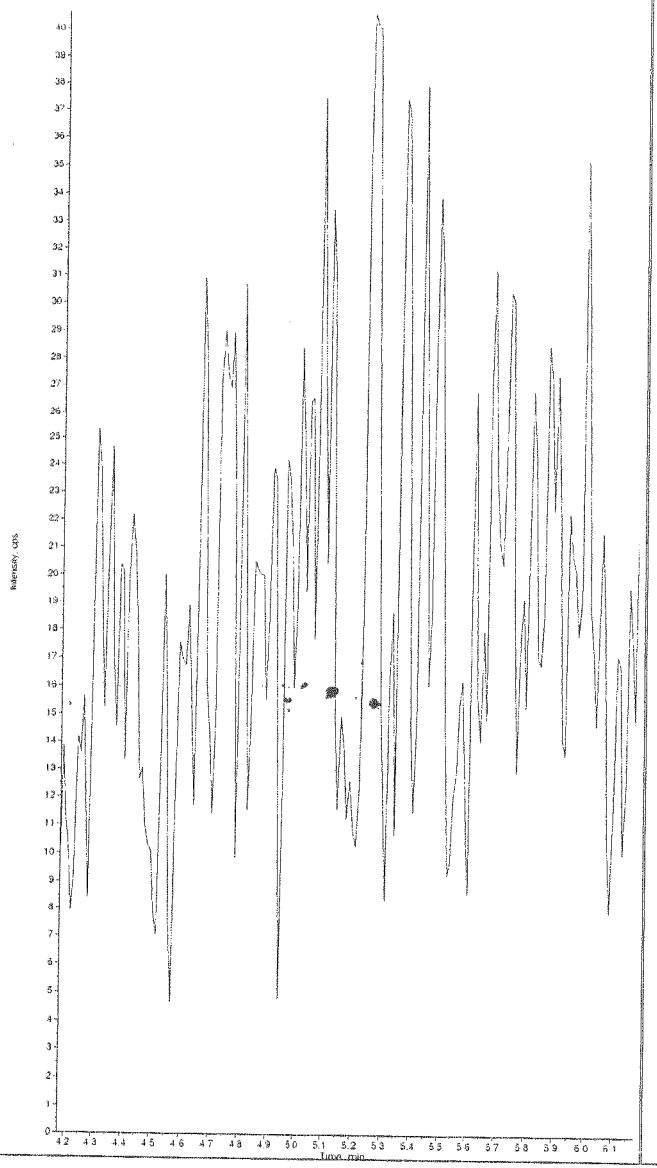
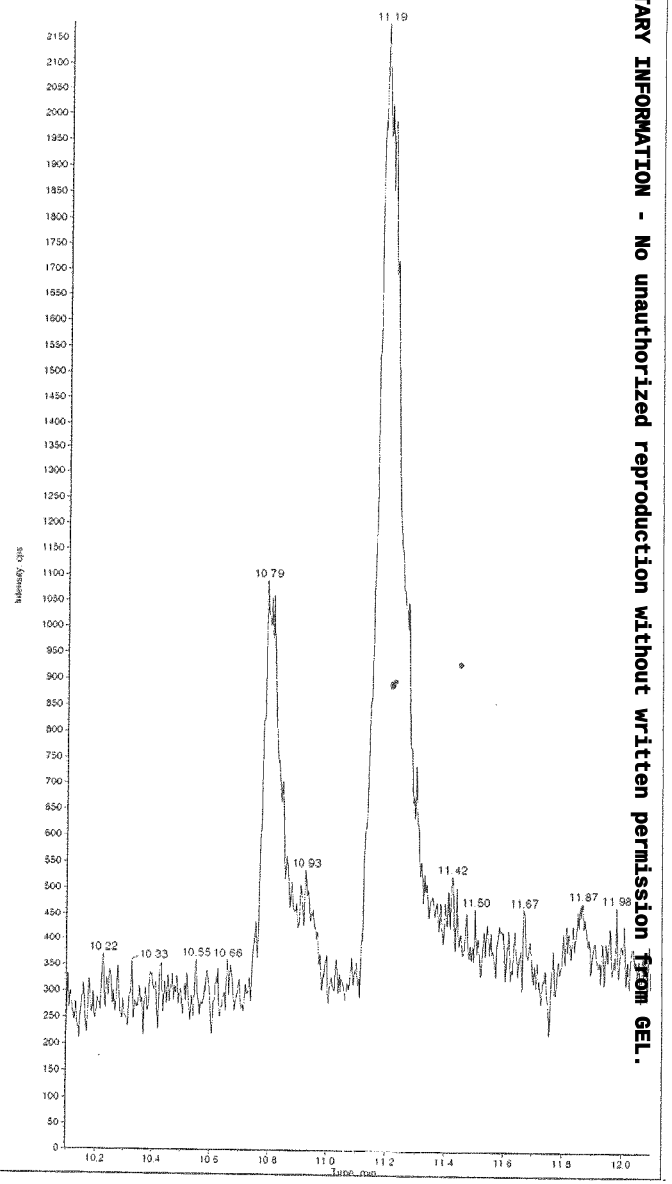
Sample Name: "1201026408" Sample ID: "501113|2|LXS1" File: "EXS0209054.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:09:16 PM
Modified:	No



Sample Name: "1201026408" Sample ID: "501113|2|LXS1" File: "EXS0209054.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	0.00 ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:09:16 PM
Modified:	No



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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: LCS for batch 498839

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201021042

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 30-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0202059a
Date Analyzed: 03-FEB-06 23:39

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	6.19	
121-14-2	2,4-Dinitrotoluene	6.08	
121-82-4	RDX	6.48	
19406-51-0	4-Amino-2,6-dinitrotoluene	5.82	
2691-41-0	HMX	6.34	
35572-78-2	2-Amino-4,6-dinitrotoluene	5.92	
479-45-8	Tetryl	3.39	
606-20-2	2,6-Dinitrotoluene	6.35	
78-11-5	PETN	6.91	
88-72-2	o-Nitrotoluene	6.04	
98-95-3	Nitrobenzene	6.2	
99-08-1	m-Nitrotoluene	6.65	
99-35-4	1,3,5-Trinitrobenzene	5.54	
99-65-0	m-Dinitrobenzene	5.88	
99-99-0	p-Nitrotoluene	6.62	

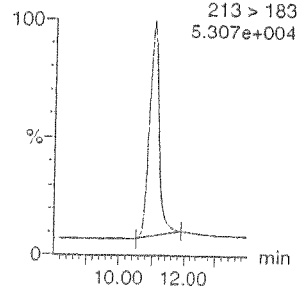
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

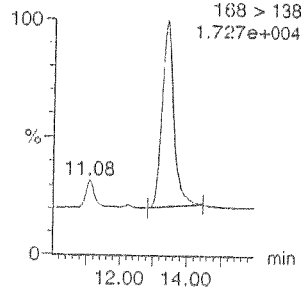
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202059a
Date: 03-Feb-2006
Time: 23:39:13
ID: 1201021042
Vial: 2:3,B

EHC / 79841 / LT2 / LCS / 2 / 2/4/06

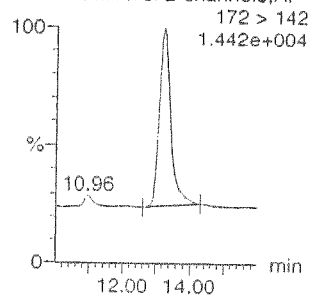
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
5.307e+004



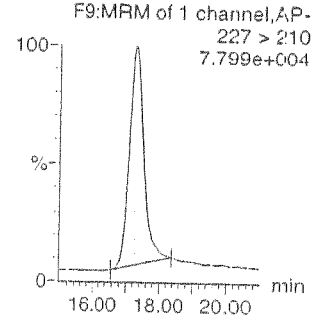
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.727e+004



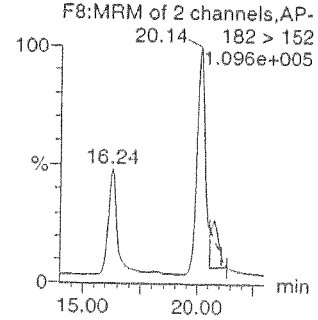
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.442e+004



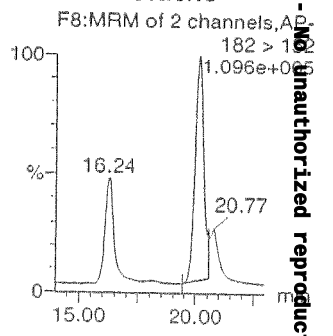
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
7.799e+004



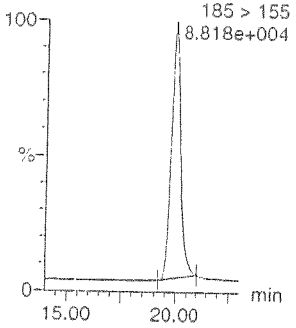
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.14
182 > 152
1.096e+005



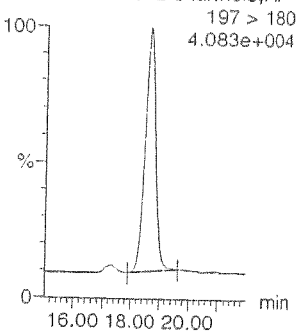
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 1
1.096e+0



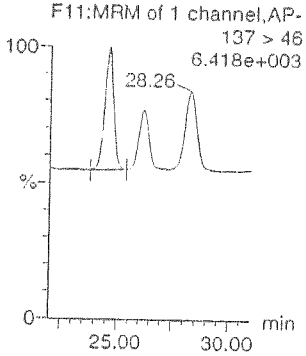
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.818e+004



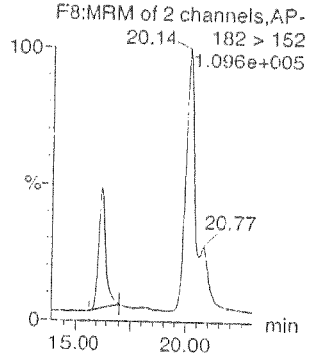
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.083e+004



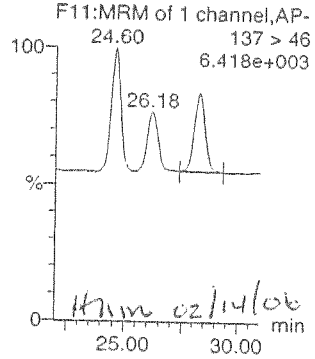
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.418e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.14
182 > 152
1.096e+005

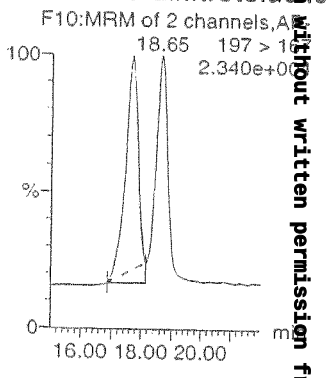


3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.60
137 > 46
6.418e+003



HNm 02/14/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,A
18.65
197 > 1
2.340e+0



858

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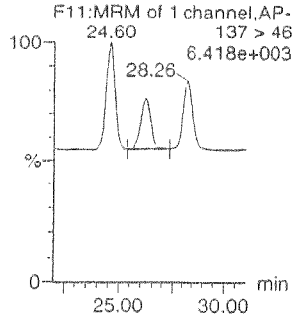
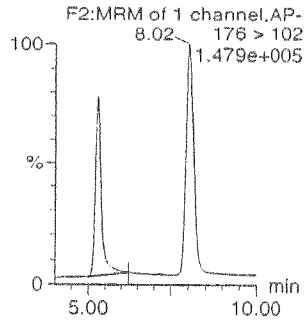
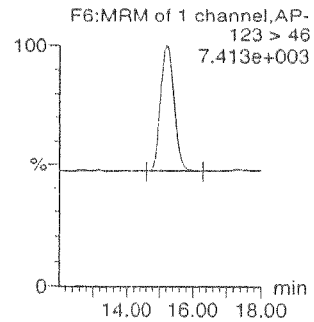
4-Nitrotoluene



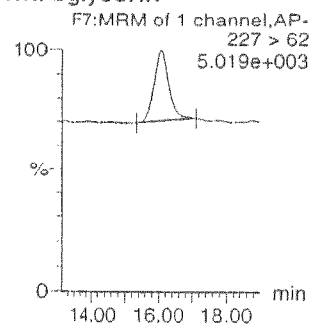
HMX



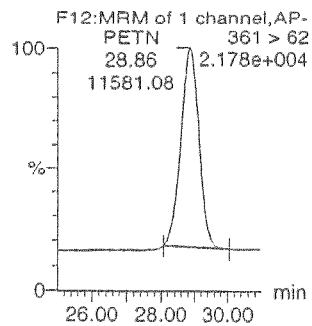
Nitrobenzene



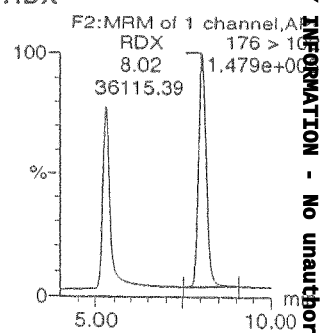
Nitroglycerin



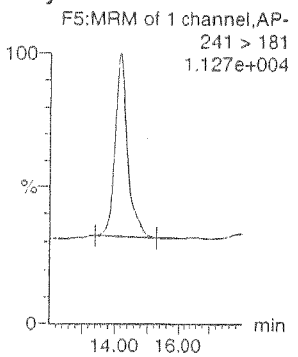
PETN



RDX



Tetryl



Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201021042	HMX	176 > 102	5.27	23930.629	4325.835	23930.629	2766.013	bb		6.33	488.1947	97.6	-2.4	2407.1
1201021042	RDX	176 > 102	8.02	36115.391	4325.835	36115.391	4174.384	bb		6.46	498.8450	99.8	-0.2	3086.9
1201021042	135-Trinitrobenzene	213 > 183	11.00	16423.162	4325.835	16423.162	1898.265	bb		553	426.3212	85.3	-14.7	2149.8
1201021042	13-Dinitrobenzene-d4	172 > 142	13.22	4325.835		4325.835	4325.835	bb			525.6289	105.1	5.1	404.0
1201021042	13-Dinitrobenzene	168 > 138	13.37	5620.574	4325.835	5620.574	649.652	bb			452.9982	90.6	-9.4	201.4
1201021042	Tetryl	241 > 181	14.15	3507.495	4325.835	3507.495	405.412	bb			260.8163	52.2	-47.8	278.6
1201021042	Nitrobenzene	123 > 46	15.21	1908.963	4325.835	1908.963	220.647	bb			477.3250	95.5	-4.5	364.7
1201021042	Nitroglycerin	227 > 62	16.06	773.671	4325.835	773.671	89.424	bb			471.7002	94.3	-5.7	61.9
1201021042	4-Amino-26-dinitrotoluene	197 > 167	17.69	10408.472	41120.672	10408.472	126.560	MM	04-Feb-06	10:16:21	448.2423	89.6	-10.4	431.2
1201021042	2-Amino-46-dinitrotoluene	197 > 180	18.65	16030.899	41120.672	16030.899	194.925	bb			455.4648	91.1	-8.9	705.8
1201021042	246-Trinitrotoluene	227 > 210	17.27	36491.266	41120.672	36491.266	443.710	bb			476.9571	95.4	-4.6	637.2
1201021042	34-dinitrotoluene	182 > 152	16.24	19335.488	41120.672	19335.488	235.107	bb		3.32	254.2347	101.7	1.7	128.2
1201021042	26-dinitrotoluene	182 > 152	20.14	44900.684	41120.672	44900.684	545.962	bd			489.1635	97.8	-2.2	274.6
1201021042	24-dinitrotoluene	182 > 152	20.77	9322.162	41120.672	9322.162	113.351	MM	04-Feb-06	10:19:43	468.3297	93.7	-6.3	60.7
1201021042	26-dinitrotoluene-d3	185 > 155	19.90	41120.672		41120.672	41120.672	bb			531.3895	106.3	6.3	2869.7
1201021042	2-Nitrotoluene	137 > 46.0	24.60	1368.622	41120.672	1368.622	16.642	bb			465.2730	93.1	-6.9	351.2
1201021042	4-Nitrotoluene	137 > 46	26.18	739.492	41120.672	739.492	8.992	bb			509.4003	101.9	1.9	166.4
1201021042	3-Nitrotoluene	137 > 46.0	28.26	1063.515	41120.672	1063.515	12.932	bb			511.8379	102.4	2.4	222.1
1201021042	PETN	361 > 62	28.86	11581.082	41120.672	11581.082	140.818	bb			531.7095	106.3	6.3	595.4

HMM 2/14/06

MMT 2/14/06

MM = Manual Modification

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: LCS for batch 498839

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201021042

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 30-JAN-06

Extraction Type Sol Exchange
Extraction Batch ID: 498839

Concentrated Extract Volume (mL) 5
Date Extracted: 31-JAN-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209023.wiff
Date Analyzed: 09-FEB-06 21:55

Units: ug/L

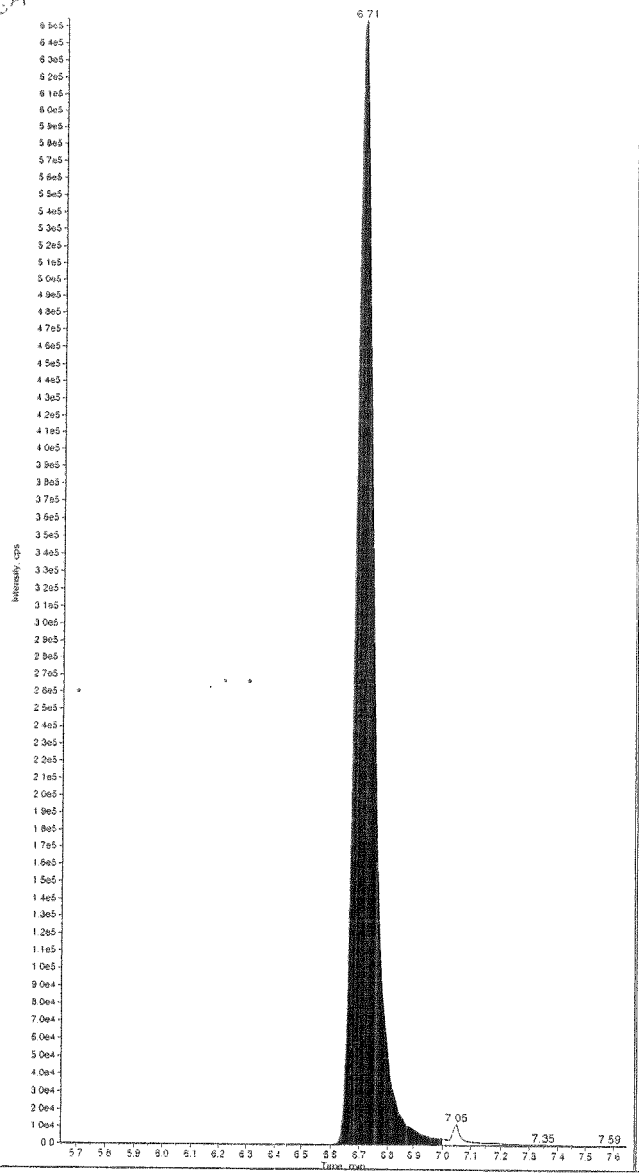
Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	8.65	
59229-75-3	2,6-Diamino-4-nitrotoluene	3.73	
618-87-1	3,5-Dinitroaniline	7.06	
6629-29-4	2,4-Diamino-6-nitrotoluene	2.99	
78-30-8	tris(o-cresyl) phosphate	1.24	J

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

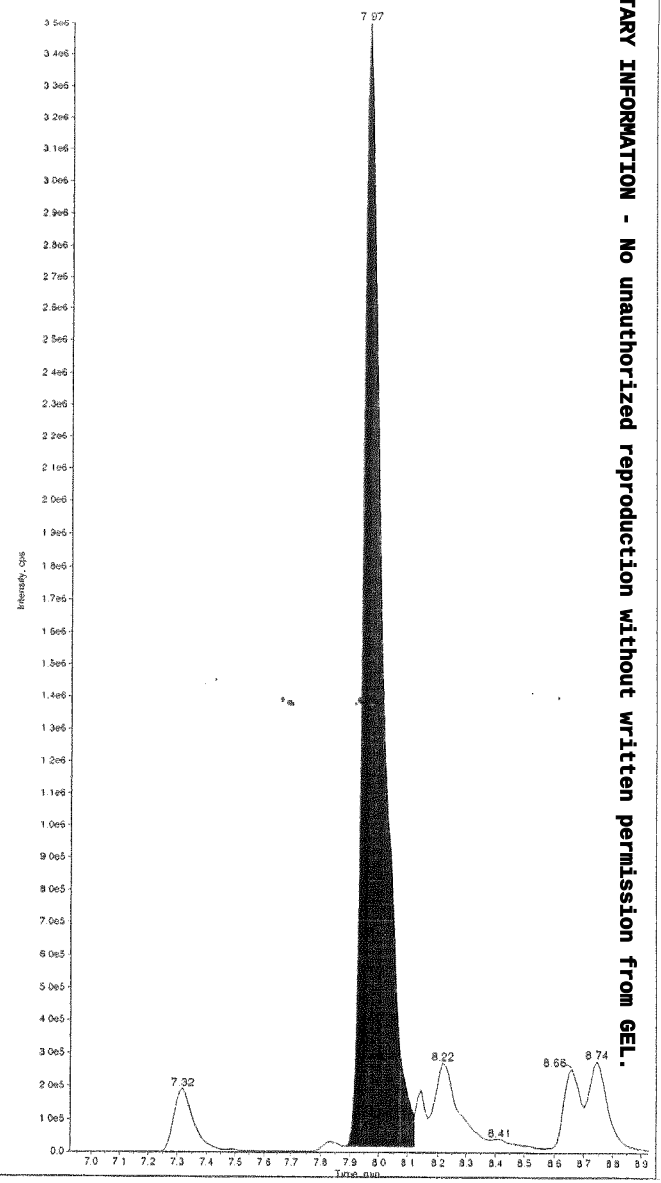
Sample Name: "1201021042" Sample ID: "498841|2|LXS1" File: "EXS0209023.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	666.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:55:36 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.71	min
Area:	3.00e+006	counts
Height:	6.55e+005	cps
Start Time:	6.60	min
End Time:	7.00	min



Sample Name: "1201021042" Sample ID: "498841|2|LXS1" File: "EXS0209023.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	544.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:55:36 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.97	min
Area:	1.66e+007	counts
Height:	3.49e+006	cps
Start Time:	7.89	min
End Time:	8.12	min



862

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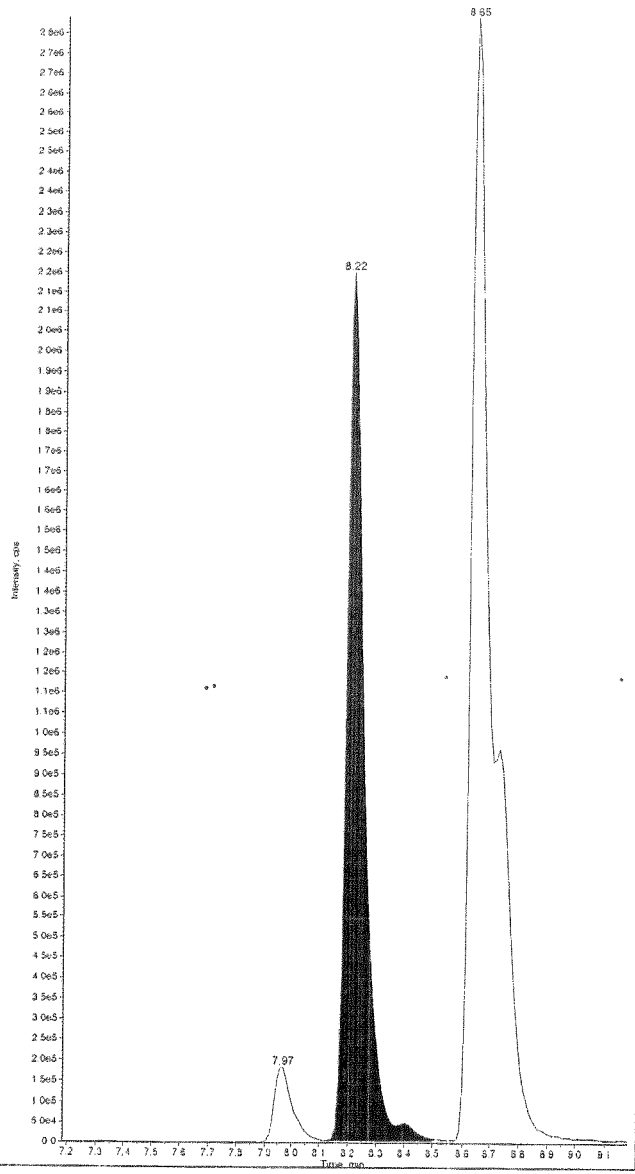
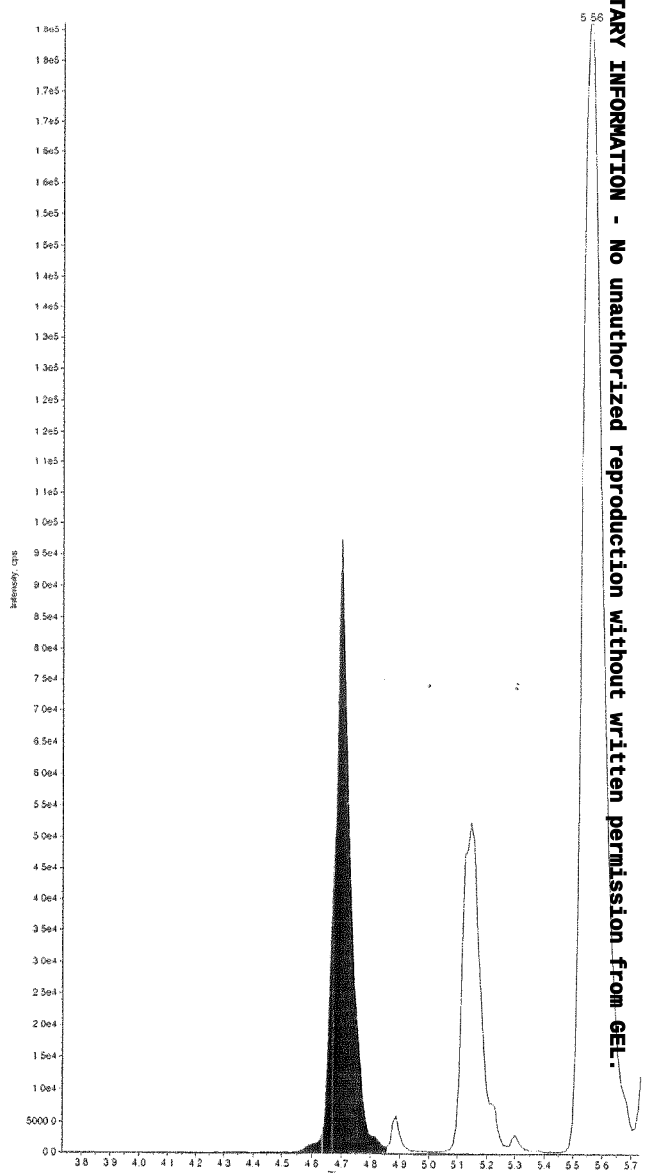
Sample Name: "1201021042" Sample ID: "498841|2|LXS1" File: "EXS0209023.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	296. ng/mL
Acq. Date:	02/09/2006
Acq. Time:	09:55:36 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.22 min
Area:	9.65e+006 counts
Height:	2.15e+006 cps
Start Time:	8.12 min
End Time:	8.51 min



Sample Name: "1201021042" Sample ID: "498841|2|LXS1" File: "EXS0209023.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

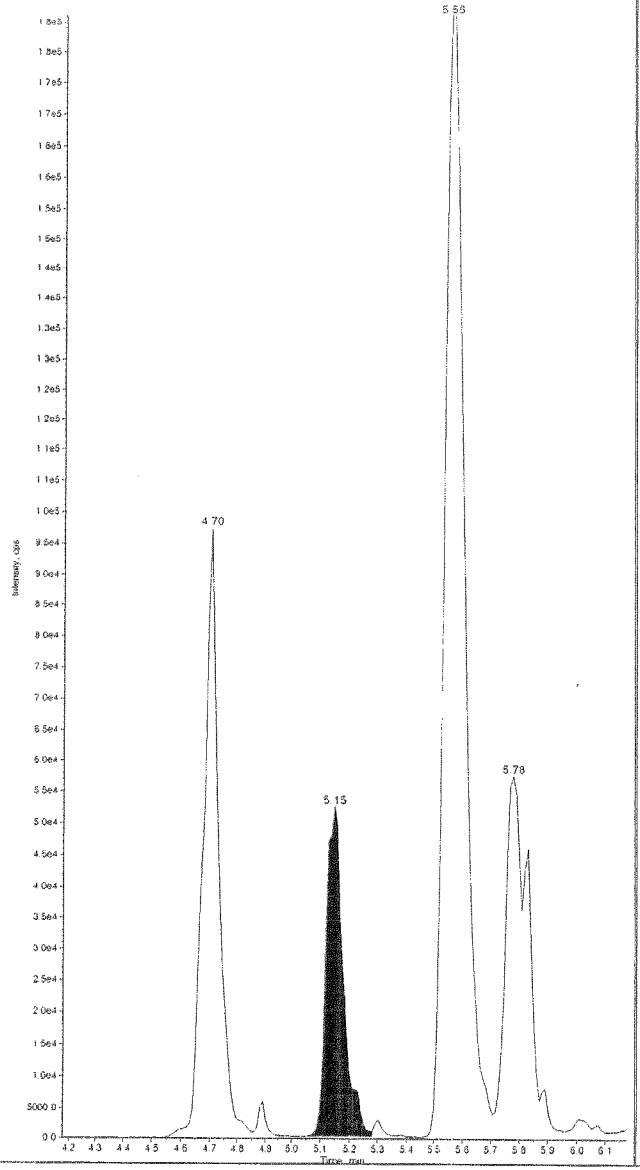
Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	287. ng/mL
Acq. Date:	02/09/2006
Acq. Time:	09:55:36 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	935.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	4.73 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	4.70 min
Area:	3.64e+005 counts
Height:	9.73e+004 cps
Start Time:	4.53 min
End Time:	4.86 min



KRS 2/10/06

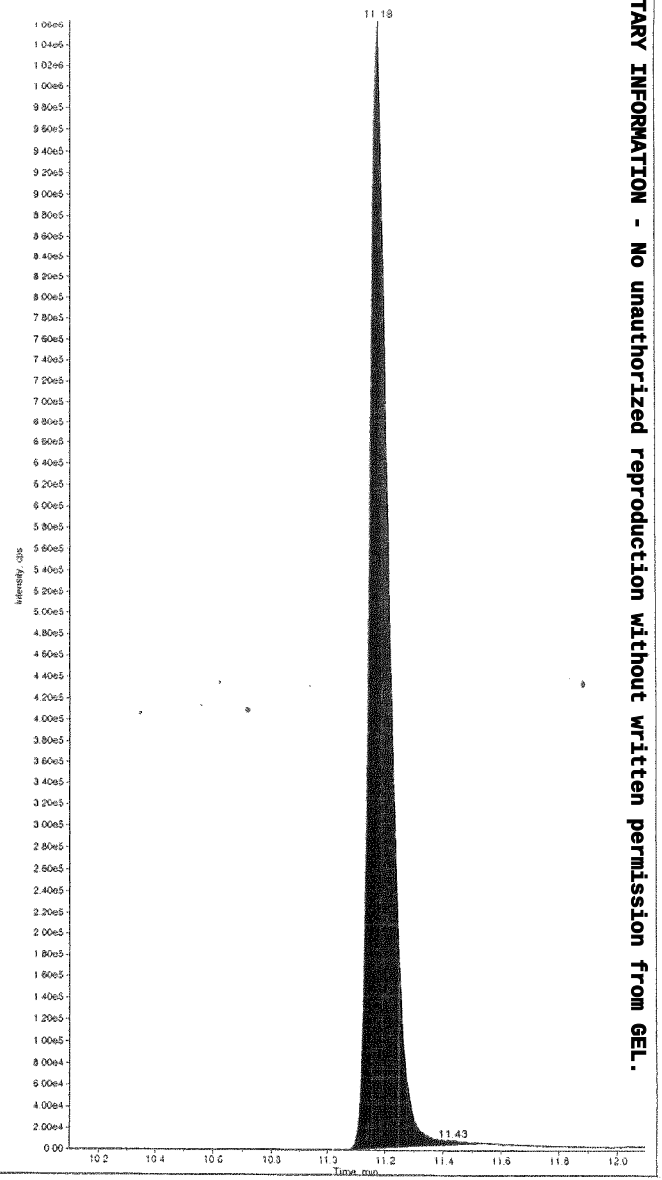
Sample Name: "1201021042" Sample ID: "498841|2|LXS1" File: "EXS0209023.wiff"
Peak Name: "2,4-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	230.	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:55:36 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.15	min
Area:	2.24e+005	counts
Height:	5.22e+004	cps
Start Time:	5.05	min
End Time:	5.28	min



Sample Name: "1201021042" Sample ID: "498841|2|LXS1" File: "EXS0209023.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	95.8	ng/mL
Acq. Date:	02/09/2006	
Acq. Time:	09:55:36 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	5.07e+006	counts
Height:	1.06e+006	cps
Start Time:	11.1	min
End Time:	11.5	min



Approved 2/14/06

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: LCS for batch 501111

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201026409

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 06-FEB-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXP0209014a
Date Analyzed: 09-FEB-06 17:20

Units: ug/L

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	6.47	
121-14-2	2,4-Dinitrotoluene	6.85	
121-82-4	RDX	5.48	
19406-51-0	4-Amino-2,6-dinitrotoluene	6.5	
2691-41-0	HMX	6.6	
35572-78-2	2-Amino-4,6-dinitrotoluene	6.61	
479-45-8	Tetryl	4.64	
606-20-2	2,6-Dinitrotoluene	6.4	
78-11-5	PETN	8.44	
88-72-2	o-Nitrotoluene	7.21	
98-95-3	Nitrobenzene	6.11	
99-08-1	m-Nitrotoluene	7.31	
99-35-4	1,3,5-Trinitrobenzene	5.46	
99-65-0	m-Dinitrobenzene	6.34	
99-99-0	p-Nitrotoluene	7.14	

*Concentration =

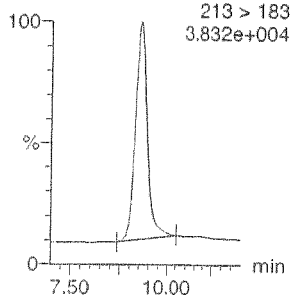
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

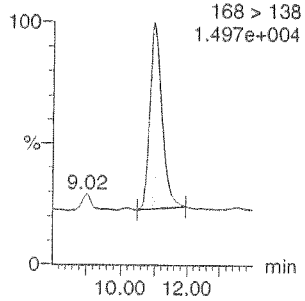
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209014a
Date: 09-Feb-2006
Time: 17:20:27
ID: 1201026409 | E3HC | 501113 | LIQ | LCQ | 2 |
Vial: 1:4,B

MM? 2/10/06

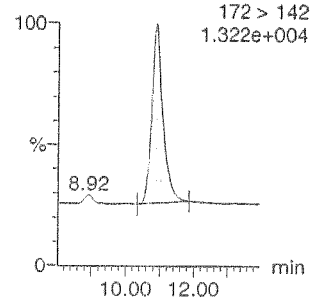
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
3.832e+004



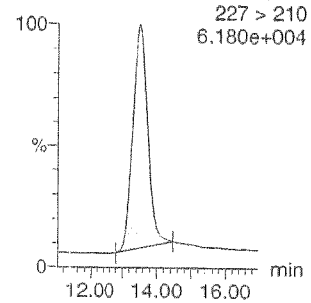
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.497e+004



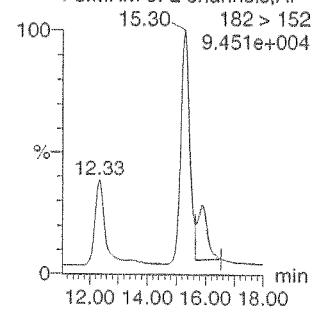
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.322e+004



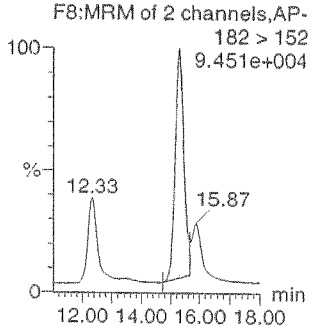
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
6.180e+004



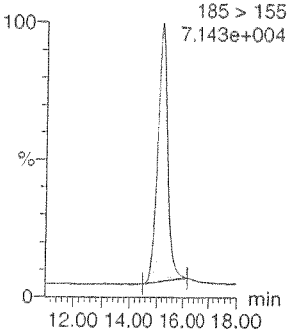
24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.30
182 > 152
9.451e+004



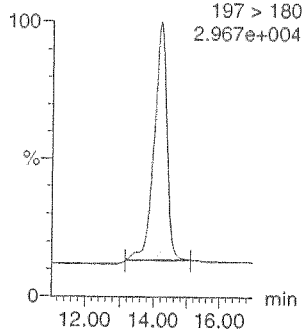
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
9.451e+004



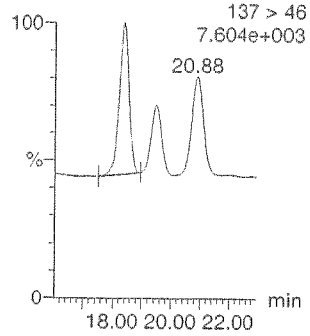
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
7.143e+004



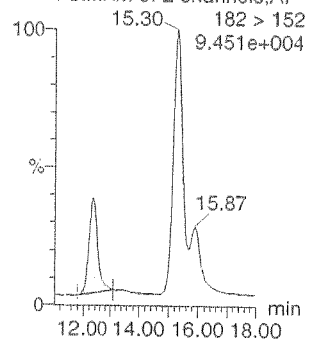
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
2.967e+004



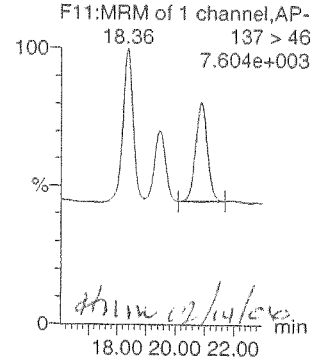
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
7.604e+003



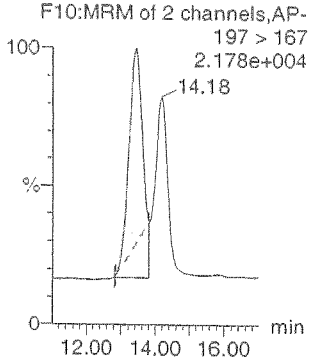
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.30
182 > 152
9.451e+004



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.36
137 > 46
7.604e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
2.178e+004



866

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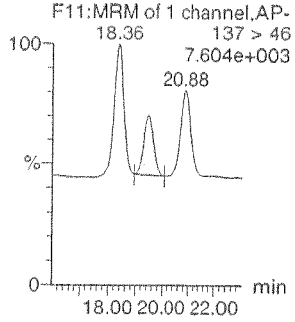
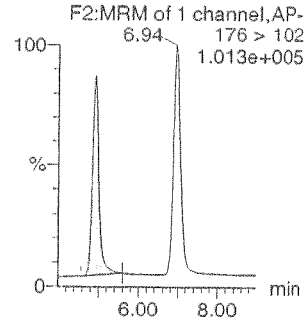
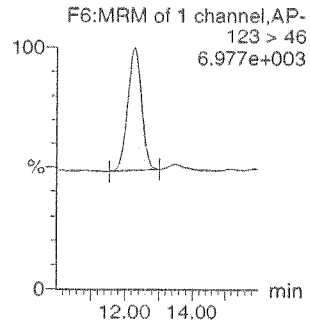
4-Nitrotoluene



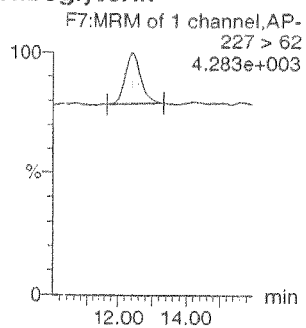
HMX



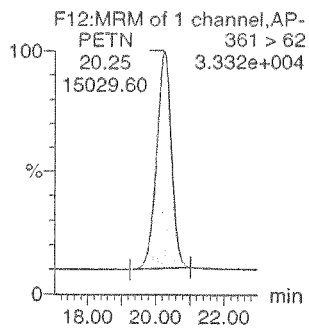
Nitrobenzene



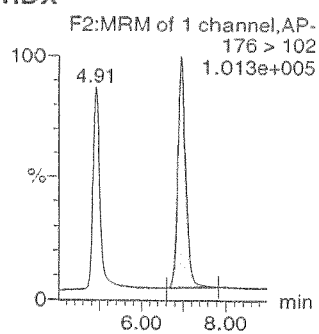
Nitroglycerin



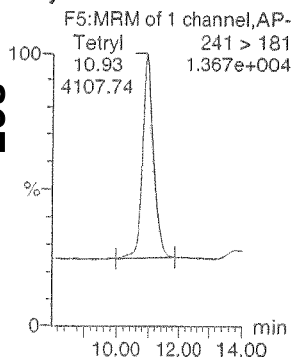
PETN



RDX



Tetryl



867

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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201026409	HMX	176 > 102	4.91	16273.682	3754.710	16273.682	2167.102	bb		6.59	508.3587	101.7	1.7	2062.3
1201026409	RDX	176 > 102	6.94	21190.350	3754.710	21190.350	2821.836	bb		5.48	422.2783	84.5	-15.5	2370.4
1201026409	135-Trinitrobenzene	213 > 183	9.29	12836.872	3754.710	12836.872	1709.436	bb		5.45	420.0737	84.0	-16.0	829.4
1201026409	13-Dinitrobenzene-d4	172 > 142	10.88	3754.710		3754.710	3754.710	bb			565.7709	113.2 ✓	13.2	1163.1
1201026409	13-Dinitrobenzene	168 > 138	10.95	4782.004	3754.710	4782.004	636.801	bb			487.8020	97.6	-2.4	339.7
1201026409	Tetryl	241 > 181	10.93	4107.744	3754.710	4107.744	547.012	bb			357.6087	71.5	-28.5	897.8
1201026409	Nitrobenzene	123 > 46	12.27	1709.486	3754.710	1709.486	227.646	bb			470.3537	94.1	-5.9	227.7
1201026409	Nitroglycerin	227 > 62	12.41	472.250	3754.710	472.250	62.888	bb			480.3425	96.1	-3.9	19.2
1201026409	4-Amino-26-dinitrotoluene	197 > 167	13.42	8835.839	30047.037	8835.839	147.033	MM	10-Feb-06	07:06:30	500.5684	100.1	0.1	240.0
1201026409	2-Amino-46-dinitrotoluene	197 > 180	14.18	11427.249	30047.037	11427.249	190.156	bb			508.8582	101.8	1.8	537.2
1201026409	246-Trinitrotoluene	227 > 210	13.50	28484.463	30047.037	28484.463	473.998	bb			498.1522	99.6	-0.4	961.2
1201026409	34-dinitrotoluene	182 > 152	12.33	12243.858	30047.037	12243.858	203.745	bb		3.24	250.1434	100.1 ✓	0.1	260.3
1201026409	26-dinitrotoluene	182 > 152	15.30	31864.461	30047.037	31864.461	530.243	bd			492.5298	98.5	-1.5	712.1
1201026409	24-dinitrotoluene	182 > 152	15.87	8389.372	30047.037	8389.372	139.604	db			527.3904	105.5	5.5	169.7
1201026409	26-dinitrotoluene-d3	185 > 155	15.15	30047.037		30047.037	30047.037	bb			496.2856	99.3 ✓	-0.7	1313.0
1201026409	2-Nitrotoluene	137 > 46	18.36	1663.241	30047.037	1663.241	27.677	bb			555.2125	111.0	11.0	196.3
1201026409	4-Nitrotoluene	137 > 46	19.46	792.003	30047.037	792.003	13.179	bb			549.6814	109.9	9.9	89.8
1201026409	3-Nitrotoluene	137 > 46	20.88	1269.446	30047.037	1269.446	21.124	bb			562.5626	112.5	12.5	128.6
1201026409	PETN	361 > 62	20.25	15029.604	30047.037	15029.604	250.101	bb			649.7454	129.9	29.9	1809.8

HMX 2-14-06

MM 2/10/06

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High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories
Client Sample ID: LCS for batch 501111

Lab Code: GEL
GEL Job No (SDG) 154614

Matrix: GROUND WATER
GEL Sample ID: 1201026409

Sample Amount 770
Moisture:

Amount Units mL
Date Received: 06-FEB-06

Extraction Type Sol Exchange
Extraction Batch ID: 501111

Concentrated Extract Volume (mL) 5
Date Extracted: 07-FEB-06

Dilution Factor: 2
Injection Volume (uL): 50

GEL data file: EXS0209055.wiff
Date Analyzed: 10-FEB-06 14:31

Units: ug/L

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	6.69	
59229-75-3	2,6-Diamino-4-nitrotoluene	4.49	
618-87-1	3,5-Dinitroaniline	6.31	
6629-29-4	2,4-Diamino-6-nitrotoluene	4.81	
78-30-8	tris(o-cresyl) phosphate	1.86	

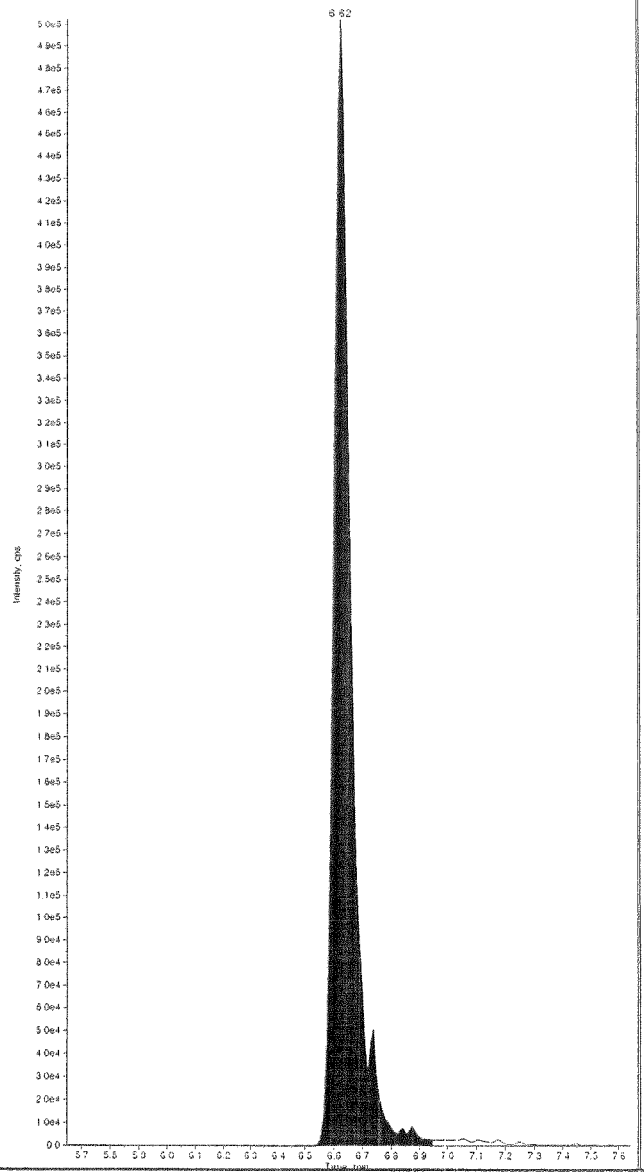
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Before LXS 2/13/06

Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	515.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:31:44 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.62	min
Area:	2.29e+006	counts
Height:	5.03e+005	cps
Start Time:	6.49	min
End Time:	6.94	min

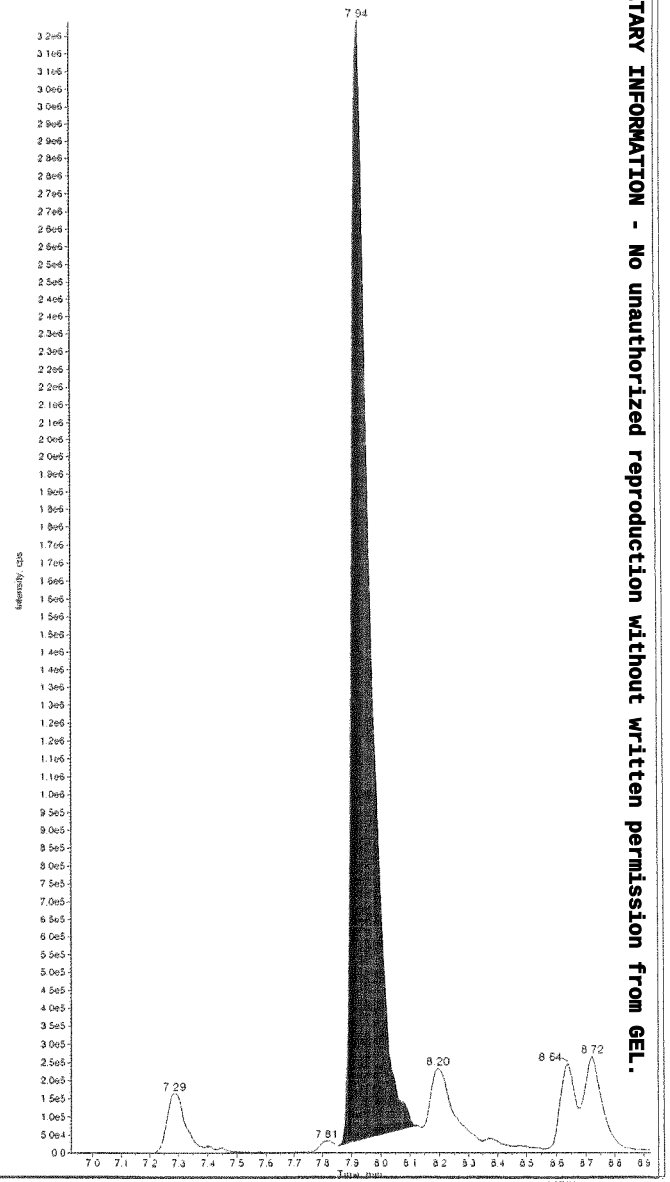


870

Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	457.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:31:44 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.94	min
Area:	1.41e+007	counts
Height:	3.16e+006	cps
Start Time:	7.85	min
End Time:	8.12	min

HMW 02/14/06



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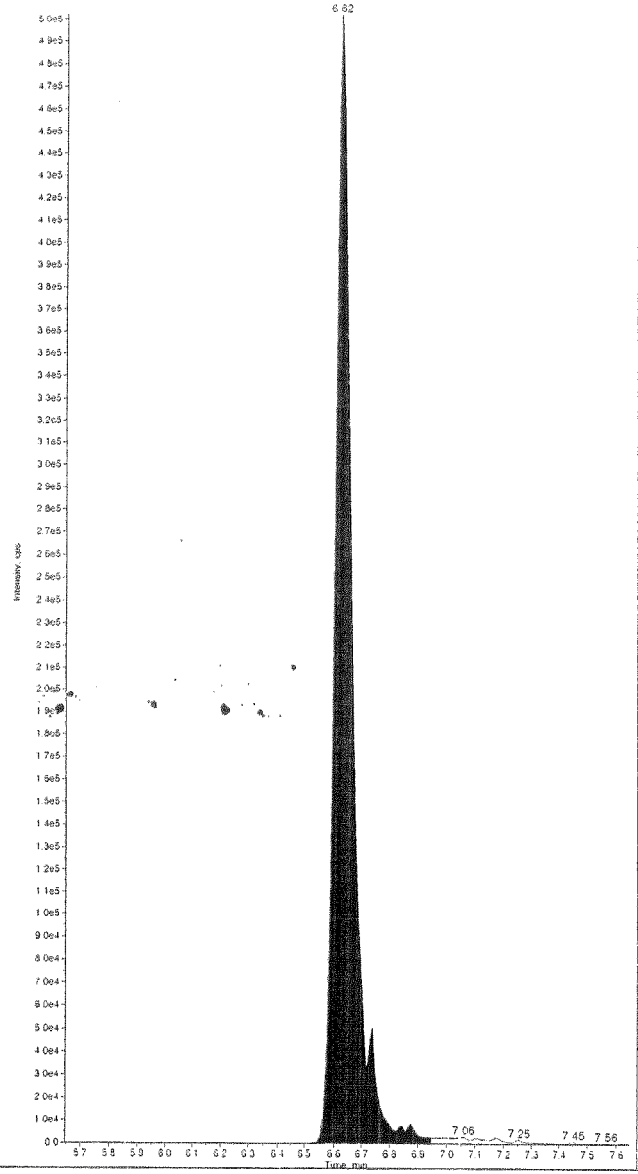
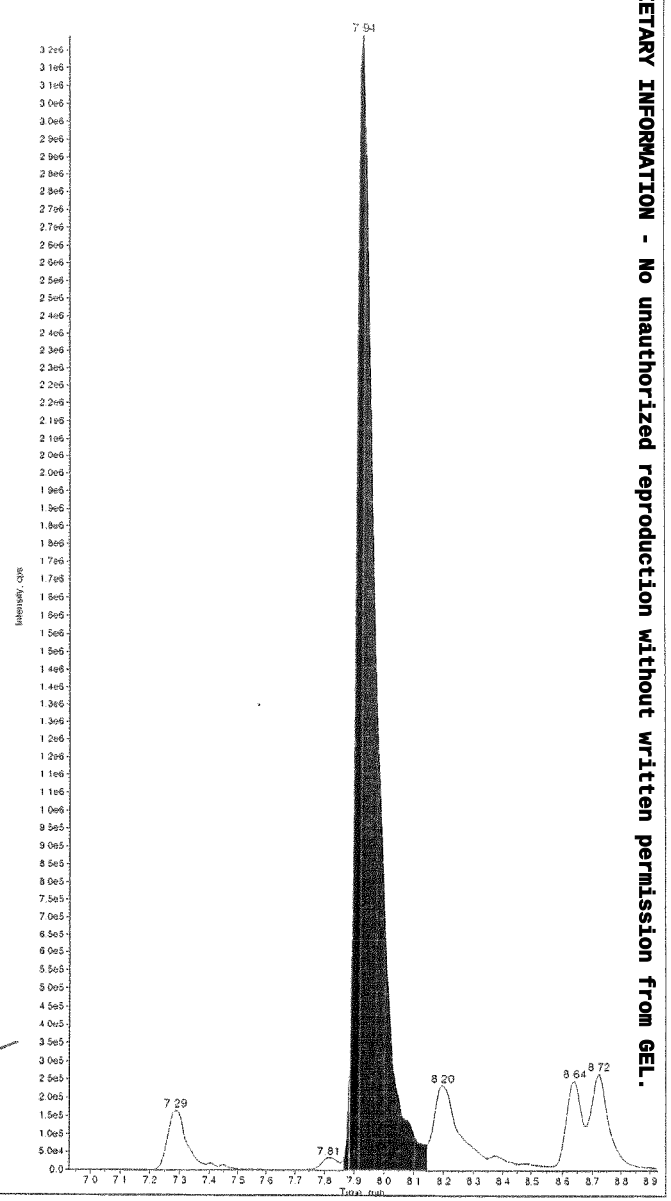
Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	515. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:31:44 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	2.13e4 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	6.65 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.62 min
Area:	2.29e+006 counts
Height:	5.03e+005 cps
Start Time:	6.49 min
End Time:	6.94 min



Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	486. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:31:44 PM
Modified:	Yes
RT Window:	30.0 sec
Expected RT:	7.93 min
Use Relative RT:	No
Int. Type:	Manual
Retention Time:	7.93 min
Area:	1.49e+007 counts
Height:	3.21e+006 cps
Start Time:	7.86 min
End Time:	8.14 min

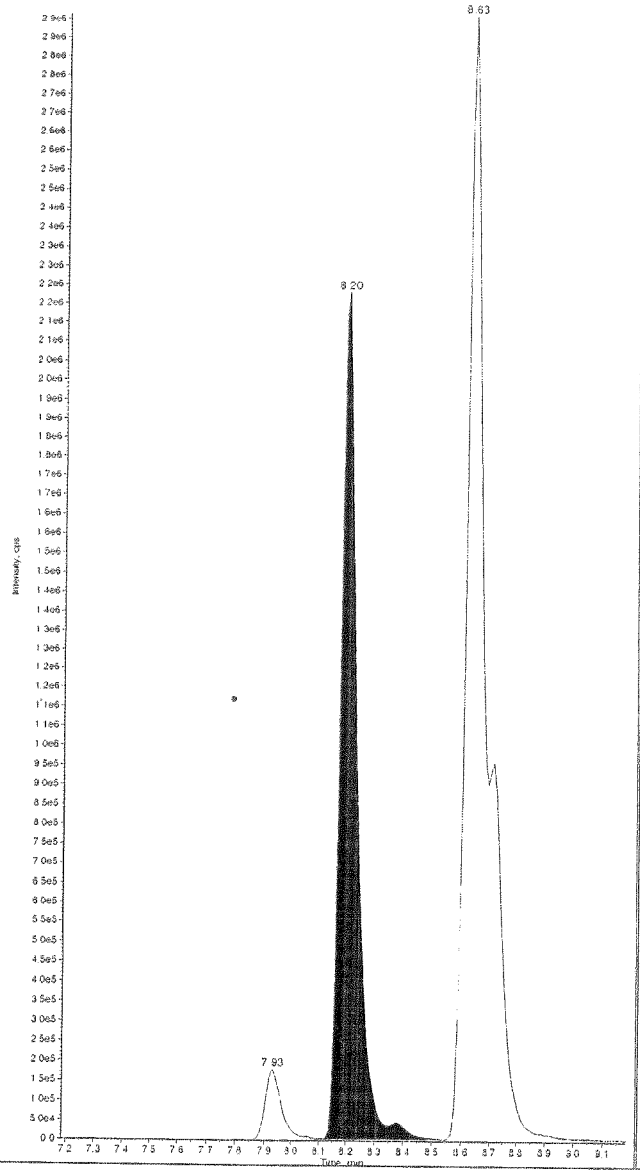


871

Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	275.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:31:44 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.20	min
Area:	8.99e+006	counts
Height:	2.18e+006	cps
Start Time:	8.11	min
End Time:	8.48	min

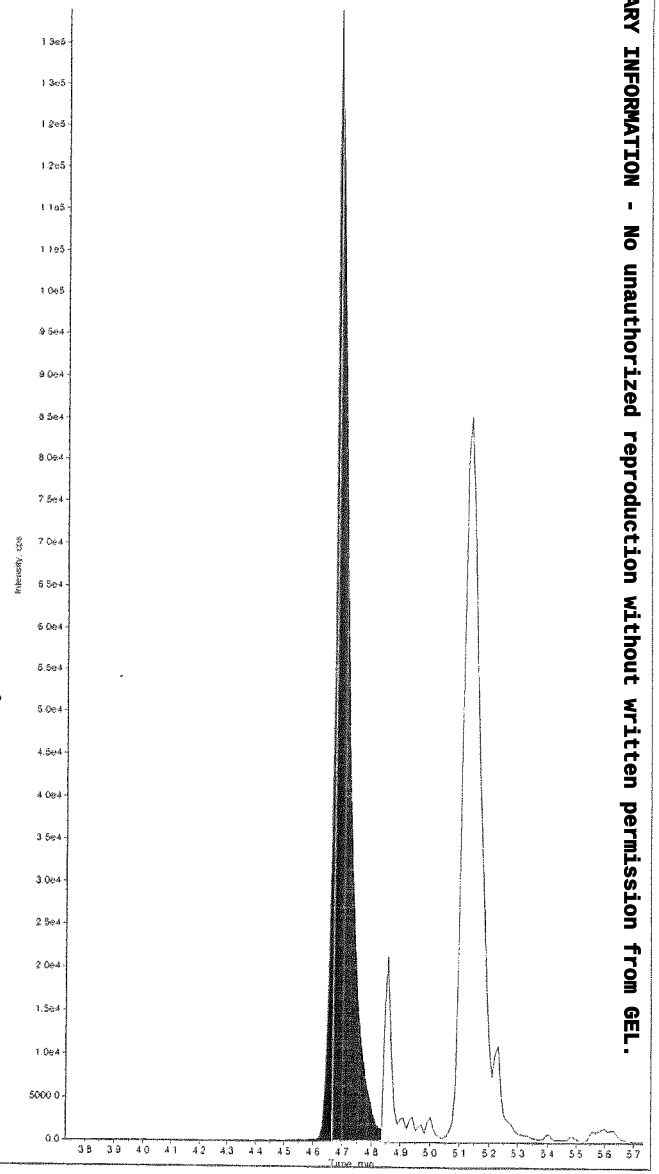
3.59



872

Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	346.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:31:44 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.69	min
Area:	4.43e+005	counts
Height:	1.34e+005	cps
Start Time:	4.53	min
End Time:	4.84	min



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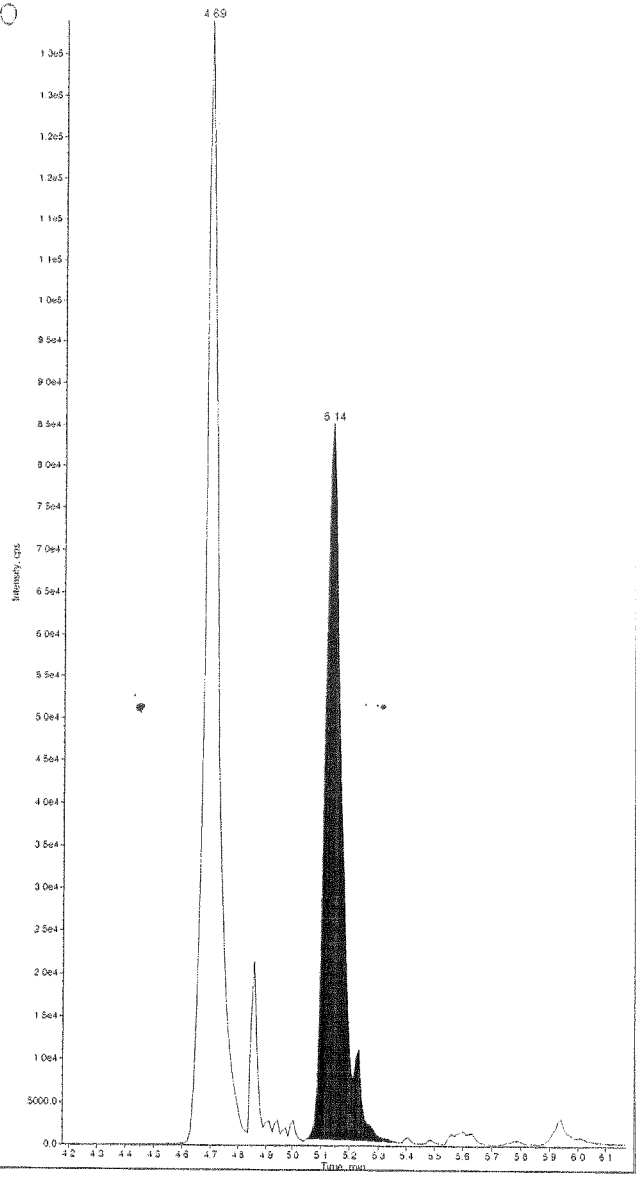
Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	370.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:31:44 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.14	min
Area:	3.58e+005	counts
Height:	8.47e+004	cps
Start Time:	5.05	min
End Time:	5.35	min

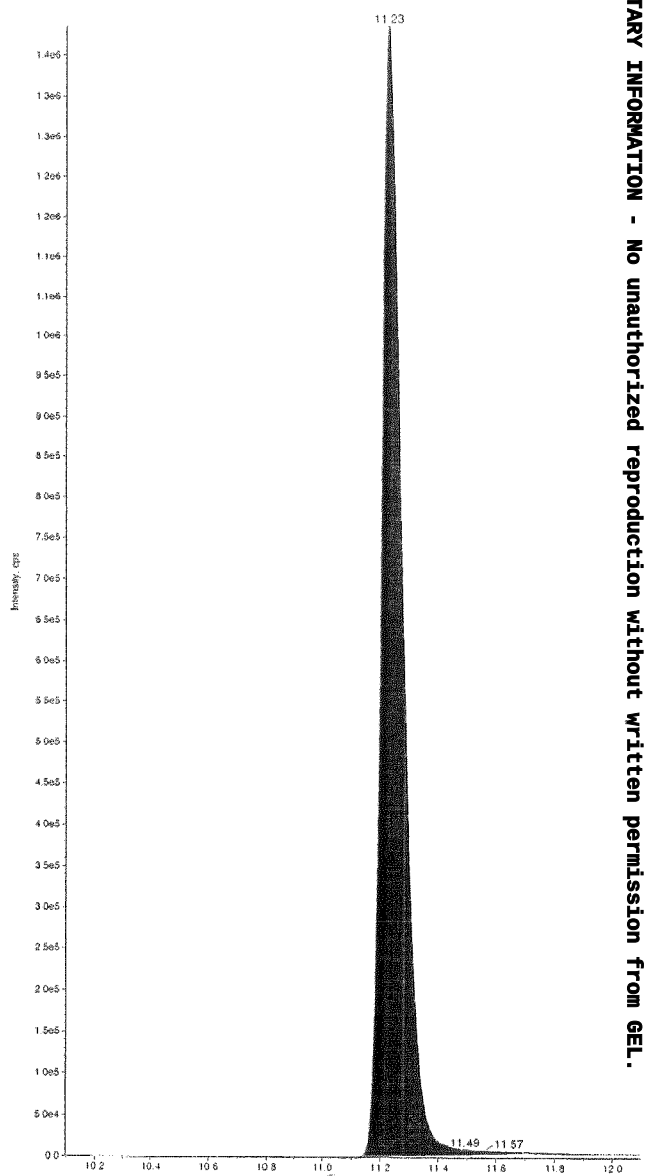
4.30



873

Sample Name: "1201026409" Sample ID: "501113|2|LXS1" File: "EXS0209055.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	143.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:31:44 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	7.16e+006	counts
Height:	1.39e+006	cps
Start Time:	11.1	min
End Time:	11.7	min



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MISCELLANEOUS DATA

Prep Logbook

Batch ID: 498839 **Verified by:** _____
Analyst: Jennifer Oliver
Method: SW846 Method 3535

Lab SOP:
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Ph 1	Final Volume (mL)	Prepped Factor (mL/mL)
1201021041 MB	31-JAN-2006 13:27:23	770	7	5	0.00649
1201021042 LCS	31-JAN-2006 13:27:23	770	7	5	0.00649
154614003	31-JAN-2006 13:27:23	770	7	5	0.00649
154614004	31-JAN-2006 13:27:23	770	7	5	0.00649
154721008	31-JAN-2006 13:27:23	770	7	5	0.00649
154721011	31-JAN-2006 13:27:23	770	7	5	0.00649
154759009	31-JAN-2006 13:27:23	770	7	5	0.00649
154759010	31-JAN-2006 13:27:23	770	7	5	0.00649
154760002	31-JAN-2006 13:27:23	770	7	5	0.00649
1201021043 MS (154760002)	31-JAN-2006 13:27:23	770	7	5	0.00649
1201021044 MSD (154760002)	31-JAN-2006 13:27:23	770	7	5	0.00649

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201021042	8321 Explosives Spike Mix 100ppm	UXX050816-03	.05	mL
LCS	1201021042	8321 LANL Explosives Mix 10mg/L	UXX050902-01	.5	mL
MS	1201021043	8321 Explosives Spike Mix 100ppm	UXX050816-03	.05	mL
MS	1201021043	8321 LANL Explosives Mix 10mg/L	UXX050902-01	.5	mL
MSD	1201021044	8321 Explosives Spike Mix 100ppm	UXX050816-03	.05	mL
MSD	1201021044	8321 LANL Explosives Mix 10mg/L	UXX050902-01	.5	mL
SURR	All	3,4-Dinitrotoluene (8330 Surr.) 100ppm	IXP060125-21	.025	mL
REGNT	All	ACN HPLC	367870	5	mL
REGNT	All	O2SI HPLC Grade Water	490685	770	mL

Comments:

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Prep Logbook

Batch ID: 501111 **Verified by:** _____
Analyst: Jennifer Oliver
Method: SW846 Method 3535

Lab SOP:
Instrument: Volitiles Manula Instrument
Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Ph 1	Final Volume (mL)	Prepped Factor (mL/mL)
1201026409 LCS	07-FEB-2006 12:00:44	770	7	5	0.00649
154614004 - 2	07-FEB-2006 12:00:44	770	7	5	0.00649
155264008	07-FEB-2006 12:00:44	770	7	5	0.00649
155265002	07-FEB-2006 12:00:44	770	7	5	0.00649
1201026410 MS (155265002)	07-FEB-2006 12:00:44	770	7	5	0.00649
1201026411 MSD (155265002)	07-FEB-2006 12:00:44	770	7	5	0.00649
155319003	07-FEB-2006 12:00:44	770	7	5	0.00649
155319004	07-FEB-2006 12:00:44	770	7	5	0.00649
155319010	07-FEB-2006 12:00:44	770	7	5	0.00649
1201026408 MB	07-FEB-2006 12:00:44	770	7	5	0.00649

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1201026409	8321 Explosives Spike Mix 100ppm	UXX050816-03	.05	mL
LCS	1201026409	8321 LANL Explosives Mix 10mg/L	UXX050902-01	.5	mL
MS	1201026410	8321 Explosives Spike Mix 100ppm	UXX050816-03	.05	mL
MS	1201026410	8321 LANL Explosives Mix 10mg/L	UXX050902-01	.5	mL
MSD	1201026411	8321 Explosives Spike Mix 100ppm	UXX050816-03	.05	mL
MSD	1201026411	8321 LANL Explosives Mix 10mg/L	UXX050902-01	.5	mL
SURR	All	3,4-Dinitrotoluene (8330 Surr.) 100ppm	IXP060125-21	.025	mL
REGNT	All	ACN HPLC	367870	5	mL
REGNT	All	O2SI HPLC Grade Water	493422	770	mL

Comments:

876

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GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#1

Date: 02/02/06
Extr. Injection Volume: 50uL
Sequence Number: 020206expA
Initial Calibration Date: 020206

Method: 8321A-Modified
Int. Std.: UXX051107-02.3
Mobile Phase Lot#: 492948, 492147
Standard-Samp Reagent Lot#: 368938, 483082

Reviewed BY: [signature]
Date: 02/14/06
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID: WXX060202-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0202001a	WXXICAL-04	MAP	2/2/06 15:14			1		DUSE	S
EXP0202002a	XIBLK01	MAP	2/2/06 15:49			1		USE	B
EXP0202003a	XIBLK01	MAP	2/2/06 16:22			1		USE	B
EXP0202004a	WXXICAL-01	MAP	2/2/06 16:56			1		USE	I
EXP0202005a	WXXICAL-02	MAP	2/2/06 17:29			1		USE	I
EXP0202006a	WXXICAL-03	MAP	2/2/06 18:03			1		USE	I
EXP0202007a	WXXICAL-04	MAP	2/2/06 18:36			1		USE	I
EXP0202008a	WXXICAL-05	MAP	2/2/06 19:10			1		USE	I
EXP0202009a	WXXICAL-06	MAP	2/2/06 19:43			1		USE	I
EXP0202010a	XIBLK02	MAP	2/2/06 20:17			1		USE	B
EXP0202011a	WXXICV	MAP	2/2/06 20:50			1		USE	C
EXP0202012a	XIBLK03	MAP	2/2/06 21:24			1		USE	B
EXP0202013a	WXXCRI	MAP	2/2/06 21:57			1		USE	C
EXP0202014a	1201017106	MAP	2/2/06 22:31	497048	Various	2	ESHL	USE	S
EXP0202015a	1201017107	MAP	2/2/06 23:04	497048	Various	2	ESHL	USE	S
EXP0202016a	154285005	MAP	2/2/06 23:38	497048	154285	2	ESHL	USE	S
EXP0202017a	154286002	MAP	2/3/06 0:11	497048	154286	2	ESHL	DUSE	S
EXP0202018a	1201017108	MAP	2/3/06 0:45	497048	154286	2	ESHL	DUSE	S
EXP0202019a	1201017109	MAP	2/3/06 1:18	497048	154286	2	ESHL	USE	S
EXP0202020a	WXXCCV	MAP	2/3/06 1:52			1		USE	C
EXP0202021a	XIBLK04	MAP	2/3/06 2:25			1		USE	B
EXP0202022a	WXXCRI	MAP	2/3/06 2:59			1		USE	C
EXP0202023a	1201018034	MAP	2/3/06 3:32	497455	Various	2	LANL	USE	S
EXP0202024a	1201018035	MAP	2/3/06 4:06	497455	Various	2	LANL	USE	S
EXP0202025a	154397001	MAP	2/3/06 4:39	497455	4404S	2	LANL	USE	S
EXP0202026a	154397002	MAP	2/3/06 5:13	497455	4404S	2	LANL	USE	S
EXP0202027a	154405001	MAP	2/3/06 5:46	497455	4413S	2	LANL	USE	S
EXP0202028a	1201018036	MAP	2/3/06 6:20	497455	4413S	2	LANL	USE	S
EXP0202029a	1201018037	MAP	2/3/06 6:53	497455	4413S	2	LANL	USE	S

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EXP0202030a	154405002	MAP	2/3/06 7:27	497455	4413S	2	LANL	USE	S
EXP0202031a	154286002	MAP	2/3/06 8:00	497048	154286	2	ESHL	USE	S
EXP0202032a	1201017108	MAP	2/3/06 8:34	497048	154286	2	ESHL	USE	S
EXP0202033a	WXXCCV	MAP	2/3/06 9:07			1		USE	C
EXP0202034a	XIBLK05	MAP	2/3/06 9:41			1		USE	B
EXP0202035a	WXXCRI	MAP	2/3/06 10:14			1		USE	C
EXP0202036a	1201018030	MAP	2/3/06 10:48	497452	154415	2	ESHL	USE	S
EXP0202037a	1201018031	MAP	2/3/06 11:21	497452	154415	2	ESHL	USE	S
EXP0202038a	154415003	MAP	2/3/06 11:55	497452	154415	2	ESHL	USE	S
EXP0202039a	1201018032	MAP	2/3/06 12:28	497452	154415	2	ESHL	USE	S
EXP0202040a	1201018033	MAP	2/3/06 13:02	497452	154415	2	ESHL	USE	S
EXP0202041a	154415004	MAP	2/3/06 13:35	497452	154415	2	ESHL	USE	S
EXP0202042a	WXXCCV	MAP	2/3/06 14:09			1		USE	C
EXP0202043a	XIBLK06	MAP	2/3/06 14:42			1		USE	B
EXP0202044a	WXXCRI	MAP	2/3/06 15:16			1		USE	C
EXP0202045a	1201019208	MAP	2/3/06 15:49	498001	4423S	2	LANL	USE	S
EXP0202046a	1201019209	MAP	2/3/06 16:23	498001	4423S	2	LANL	USE	S
EXP0202047a	154581001	MAP	2/3/06 16:57	498001	4423S	2	LANL	USE	S
EXP0202048a	1201019210	MAP	2/3/06 17:30	498001	4423S	2	LANL	USE	S
EXP0202049a	1201019211	MAP	2/3/06 18:04	498001	4423S	2	LANL	USE	S
EXP0202050a	1201021059	MAP	2/3/06 18:37	498852	4436S	2	LANL	USE	S
EXP0202051a	1201021060	MAP	2/3/06 19:10	498852	4436S	2	LANL	USE	S
EXP0202052a	154703001	MAP	2/3/06 19:44	498852	4436S	2	LANL	USE	S
EXP0202053a	1201021061	MAP	2/3/06 20:17	498852	4436S	2	LANL	USE	S
EXP0202054a	1201021062	MAP	2/3/06 20:51	498852	4436S	2	LANL	USE	S
EXP0202055a	WXXCCV	MAP	2/3/06 21:24			1		USE	C
EXP0202056a	XIBLK07	MAP	2/3/06 21:58			1		USE	B
EXP0202057a	WXXCRI	MAP	2/3/06 22:32			1		USE	C
EXP0202058a	1201021041	MAP	2/3/06 23:05	498841	Various	2	ESHL	USE	S
EXP0202059a	1201021042	MAP	2/3/06 23:39	498841	Various	2	ESHL	USE	S
EXP0202060a	154614003	MAP	2/4/06 0:12	498841	154614	2	ESHL	USE	S
EXP0202061a	154614004	MAP	2/4/06 0:46	498841	154614	2	ESHL	USE	S
EXP0202062a	154721008	MAP	2/4/06 1:19	498841	154721	2	ESHL	USE	S
EXP0202063a	154721011	MAP	2/4/06 1:53	498841	154721	2	ESHL	USE	S
EXP0202064a	154759009	MAP	2/4/06 2:26	498841	154759	2	ESHL	USE	S
EXP0202065a	154759010	MAP	2/4/06 3:00	498841	154759	2	ESHL	USE	S
EXP0202066a	WXXCCV	MAP	2/4/06 3:33			1		USE	C

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EXP0202067a	XIBLK08	MAP	2/4/06 4:07			1		USE		B
EXP0202068a	WXXCRI	MAP	2/4/06 4:40			1		USE		C
EXP0202069a	154760002	MAP	2/4/06 5:14	498841	154760	2	ESHL	USE		S
EXP0202070a	1201021043	MAP	2/4/06 5:47	498841	154760	2	ESHL	USE		S
EXP0202071a	1201021044	MAP	2/4/06 6:21	498841	154760	2	ESHL	USE		S
EXP0202072a	WXXCCV	MAP	2/4/06 6:54			1		USE		C
EXP0202073a	XIBLK09	MAP	2/4/06 7:28			1		USE		B
EXP0202074a	WXXCRI	MAP	2/4/06 8:02			1		USE		C

GEL ORGANIC RUN LOG INSTRUMENT ID: LCMSMS#1

Date: 02/09/06 Method: 8321A-Modified Reviewed BY: [signature]
Extr. Injection Volume: 50uL Int. Std.: UXX051107-02.3 Date: 02/14/06
Sequence Number: 020906expA Mobile Phase Lot#: 492948, 494334 SOP: GL-OA-E-056Rev.6
Initial Calibration Date: 020906 Standard-Samp Reagent Lot#: 368938, 493749 Alt Check Std. ID: WXX060209-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0209001a	XIBLK01	MAP	2/9/06 11:48			1		USE	B
EXP0209002a	XIBLK01	MAP	2/9/06 12:14			1		USE	B
EXP0209003a	WXXICAL-01	MAP	2/9/06 12:39			1		USE	I
EXP0209004a	WXXICAL-02	MAP	2/9/06 13:05			1		USE	I
EXP0209005a	WXXICAL-03	MAP	2/9/06 13:30			1		USE	I
EXP0209006a	WXXICAL-04	MAP	2/9/06 13:56			1		USE	I
EXP0209007a	WXXICAL-05	MAP	2/9/06 14:21			1		USE	I
EXP0209008a	WXXICAL-06	MAP	2/9/06 14:47			1		USE	I
EXP0209009a	XIBLK02	MAP	2/9/06 15:12			1		USE	B
EXP0209010a	WXXICV	MAP	2/9/06 15:38			1		USE	C
EXP0209011a	XIBLK03	MAP	2/9/06 16:03			1		USE	B
EXP0209012a	WXXCRI	MAP	2/9/06 16:29			1		USE	C
EXP0209013a	1201026408	MAP	2/9/06 16:54	501113	Various	2	ESHL	USE	S
EXP0209014a	1201026409	MAP	2/9/06 17:20	501113	Various	2	ESHL	USE	S
EXP0209015a	154614004	MAP	2/9/06 17:45	501113	154614	2	ESHL	USE-RE	S
EXP0209016a	155264008	MAP	2/9/06 18:11	501113	155264	2	ESHL	USE	S
EXP0209017a	155265002	MAP	2/9/06 18:36	501113	155265	2	ESHL	DUSE	S
EXP0209018a	1201026410	MAP	2/9/06 19:02	501113	155265	2	ESHL	USE	S
EXP0209019a	1201026411	MAP	2/9/06 19:27	501113	155265	2	ESHL	DUSE	S
EXP0209020a	155319003	MAP	2/9/06 19:53	501113	155319	2	ESHL	USE	S
EXP0209021a	155319004	MAP	2/9/06 20:18	501113	155319	2	ESHL	USE	S
EXP0209022a	155319010	MAP	2/9/06 20:44	501113	155319	2	ESHL	USE	S
EXP0209023a	WXXCCV	MAP	2/9/06 21:09			1		USE	C
EXP0209024a	XIBLK04	MAP	2/9/06 21:35			1		USE	B
EXP0209025a	WXXCRI	MAP	2/9/06 22:00			1		USE	C
EXP0209026a	1201026412	MAP	2/9/06 22:26	501115	4503S	2	LANL	USE	S
EXP0209027a	1201026413	MAP	2/9/06 22:51	501115	4503S	2	LANL	USE	S
EXP0209028a	155320001	MAP	2/9/06 23:17	501115	4503S	2	LANL	USE	S
EXP0209029a	1201026414	MAP	2/9/06 23:42	501115	4503S	2	LANL	USE	S

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EXP0209030a	1201026415	MAP	2/10/06 0:08	501115	4503S	2	LANL	DUSE	S
EXP0209031a	WXXCCV	MAP	2/10/06 0:33			1		USE	C
EXP0209032a	XIBLK05	MAP	2/10/06 0:59			1		USE	B
EXP0209033a	WXXCRI	MAP	2/10/06 1:24			1		USE	C
EXP0209034a	1201026420	MAP	2/10/06 1:50	501119	4504S	2	LANL	USE	S
EXP0209035a	1201026421	MAP	2/10/06 2:15	501119	4504S	2	LANL	USE	S
EXP0209036a	155323001	MAP	2/10/06 2:41	501119	4504S	2	LANL	USE	S
EXP0209037a	1201026422	MAP	2/10/06 3:06	501119	4504S	2	LANL	USE	S
EXP0209038a	1201026423	MAP	2/10/06 3:32	501119	4504S	2	LANL	USE	S
EXP0209039a	155323002	MAP	2/10/06 3:57	501119	4504S	2	LANL	USE	S
EXP0209040a	155323003	MAP	2/10/06 4:23	501119	4504S	2	LANL	USE	S
EXP0209041a	WXXCCV	MAP	2/10/06 4:48			1		USE	C
EXP0209042a	XIBLK06	MAP	2/10/06 5:14			1		USE	B
EXP0209043a	WXXCRI	MAP	2/10/06 5:39			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#3

Date: 02/09/06
Extr. Injection Volume: 10uL
Sequence Number: 020906EXS
Initial Calibration Date: 020906

Method: 8321A-Modified
Int. Std.: N/A
Mobile Phase Lot#: 493386, 494388
Standard-Samp Reagent Lot#: 483082, 368938

Reviewed BY: [signature]
Date: 02/14/06
SOP: GL-OA-E-056Rev.6
Alt Check Std. ID: WXX060209-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS0209001.wiff	XIBLK01	LXS1	2/9/2006 13:42			1			B
EXS0209002.wiff	XIBLK01	LXS1	2/9/2006 14:04			1			B
EXS0209003.wiff	WXXICAL-19	LXS1	2/9/2006 14:27			1		USE	I
EXS0209004.wiff	WXXICAL-20	LXS1	2/9/2006 14:49			1		USE	I
EXS0209005.wiff	WXXICAL-21	LXS1	2/9/2006 15:11			1		USE	I
EXS0209006.wiff	WXXICAL-22	LXS1	2/9/2006 15:34			1		USE	I
EXS0209007.wiff	WXXICAL-23	LXS1	2/9/2006 15:56			1		USE	I
EXS0209008.wiff	WXXICAL-24	LXS1	2/9/2006 16:18			1		USE	I
EXS0209009.wiff	WXXICAL-25	LXS1	2/9/2006 16:41			1		USE	I
EXS0209010.wiff	XIBLK02	LXS1	2/9/2006 17:03			1			B
EXS0209011.wiff	WXXICV	LXS1	2/9/2006 17:26			1		USE	C
EXS0209012.wiff	XIBLK03	LXS1	2/9/2006 17:48			1			B
EXS0209013.wiff	WXXCRI	LXS1	2/9/2006 18:11			1		USE	C
EXS0209014.wiff	1201021059	LXS1	2/9/2006 18:33	498852	4436S	2	LANL	USE	S
EXS0209015.wiff	1201021060	LXS1	2/9/2006 18:56	498852	4436S	2	LANL	USE	S
EXS0209016.wiff	154703001	LXS1	2/9/2006 19:18	498852	4436S	2	LANL	USE	S
EXS0209017.wiff	1201021061	LXS1	2/9/2006 19:40	498852	4436S	2	LANL	USE	S
EXS0209018.wiff	1201021062	LXS1	2/9/2006 20:03	498852	4436S	2	LANL	USE	S
EXS0209019.wiff	WXXCCV	LXS1	2/9/2006 20:25			1			C
EXS0209020.wiff	XIBLK04	LXS1	2/9/2006 20:48			1			B
EXS0209021.wiff	WXXCRI	LXS1	2/9/2006 21:10			1			C
EXS0209022.wiff	1201021041	LXS1	2/9/2006 21:33	498841	Various	2	ESHL	USE	S
EXS0209023.wiff	1201021042	LXS1	2/9/2006 21:55	498841	Various	2	ESHL	USE	S
EXS0209024.wiff	154614003	LXS1	2/9/2006 22:18	498841	154614	2	ESHL	USE	S
EXS0209025.wiff	154614004	LXS1	2/9/2006 22:40	498841	154614	2	ESHL	USE	S
EXS0209026.wiff	154721008	LXS1	2/9/2006 23:02	498841	154721	2	ESHL	USE	S
EXS0209027.wiff	154721011	LXS1	2/9/2006 23:25	498841	154721	2	ESHL	USE	S
EXS0209028.wiff	154759009	LXS1	2/9/2006 23:47	498841	154759	2	ESHL	USE	S
EXS0209029.wiff	154759010	LXS1	2/10/2006 0:10	498841	154759	2	ESHL	USE	S

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EXS0209030.wiff	WXXCCV	LXS1	2/10/2006 0:32			1		USE	C
EXS0209031.wiff	XIBLK05	LXS1	2/10/2006 0:55			1			B
EXS0209032.wiff	WXXCRI	LXS1	2/10/2006 1:17			1		USE	C
EXS0209033.wiff	154760002	LXS1	2/10/2006 1:40	498841	154760	2	ESHL	USE	S
EXS0209034.wiff	1201021043	LXS1	2/10/2006 2:02	498841	154760	2	ESHL	USE	S
EXS0209035.wiff	1201021044	LXS1	2/10/2006 2:25	498841	154760	2	ESHL	USE	S
EXS0209036.wiff	WXXCCV	LXS1	2/10/2006 2:47			1		USE	C
EXS0209037.wiff	XIBLK06	LXS1	2/10/2006 3:10			1			B
EXS0209038.wiff	WXXCRI	LXS1	2/10/2006 3:32			1		USE	C
EXS0209039.wiff	1201023924	LXS1	2/10/2006 3:54	500004	Various	2	ESHL	USE	S
EXS0209040.wiff	1201023925	LXS1	2/10/2006 4:17	500004	Various	2	ESHL	USE	S
EXS0209041.wiff	154994004	LXS1	2/10/2006 4:39	500004	154994	2	ESHL	USE	S
EXS0209042.wiff	1201023926	LXS1	2/10/2006 5:01	500004	154994	2	ESHL	USE	S
EXS0209043.wiff	1201023927	LXS1	2/10/2006 5:24	500004	154994	2	ESHL	USE	S
EXS0209044.wiff	155166009	LXS1	2/10/2006 5:47	500004	155166	2	ESHL	USE	S
EXS0209045.wiff	155166010	LXS1	2/10/2006 6:09	500004	155166	2	ESHL	USE	S
EXS0209046.wiff	155167007	LXS1	2/10/2006 6:32	500004	155167	2	ESHL	USE	S
EXS0209047.wiff	WXXCCV	LXS1	2/10/2006 6:54			1		USE	C
EXS0209048.wiff	XIBLK07	LXS1	2/10/2006 7:16			1			B
EXS0209049.wiff	WXXCRI	LXS1	2/10/2006 7:39			1		USE	C
EXS0209050.wiff	XIBLK08	LXS1	2/10/2006 12:39			1			B
EXS0209051.wiff	WXXCCV	LXS1	2/10/2006 13:01			1		USE	C
EXS0209052.wiff	XIBLK09	LXS1	2/10/2006 13:24			1			B
EXS0209053.wiff	WXXCRI	LXS1	2/10/2006 13:46			1		USE	C
EXS0209054.wiff	1201026408	LXS1	2/10/2006 14:09	501113	Various	2	ESHL	USE	S
EXS0209055.wiff	1201026409	LXS1	2/10/2006 14:31	501113	Various	2	ESHL	USE	S
EXS0209056.wiff	154614004	LXS1	2/10/2006 14:54	501113	154614	2	ESHL	USE	S
EXS0209057.wiff	155264008	LXS1	2/10/2006 15:16	501113	155264	2	ESHL	USE	S
EXS0209058.wiff	155265002	LXS1	2/10/2006 15:39	501113	155265	2	ESHL	USE	S
EXS0209059.wiff	1201026410	LXS1	2/10/2006 16:01	501113	155265	2	ESHL	USE	S
EXS0209060.wiff	1201026411	LXS1	2/10/2006 16:24	501113	155265	2	ESHL	USE	S
EXS0209061.wiff	155319003	LXS1	2/10/2006 16:46	501113	155319	2	ESHL	USE	S
EXS0209062.wiff	155319004	LXS1	2/10/2006 17:08	501113	155319	2	ESHL	USE	S
EXS0209063.wiff	155319010	LXS1	2/10/2006 17:31	501113	155319	2	ESHL	USE	S
EXS0209064.wiff	WXXCCV	LXS1	2/10/2006 17:53			1		USE	C
EXS0209065.wiff	XIBLK10	LXS1	2/10/2006 18:16			1			B
EXS0209066.wiff	WXXCRI	LXS1	2/10/2006 18:38			1		USE	C

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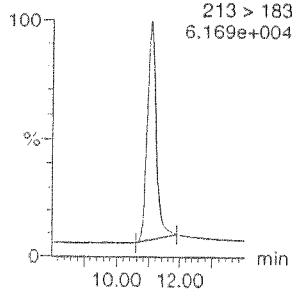
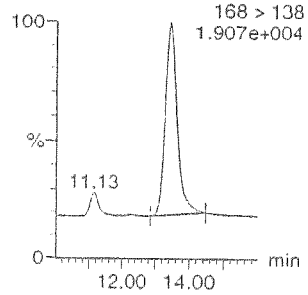
EXS0209067.wiff	1201026412	LXS1	2/10/2006 19:01	501115	4503S	2	LANL	USE	S
EXS0209068.wiff	1201026413	LXS1	2/10/2006 19:23	501115	4503S	2	LANL	USE	S
EXS0209069.wiff	155320001	LXS1	2/10/2006 19:45	501115	4503S	2	LANL	USE	S
EXS0209070.wiff	1201026414	LXS1	2/10/2006 20:08	501115	4503S	2	LANL	USE	S
EXS0209071.wiff	1201026415	LXS1	2/10/2006 20:30	501115	4503S	2	LANL	USE	S
EXS0209072.wiff	WXXCCV	LXS1	2/10/2006 20:53			1		USE	C
EXS0209073.wiff	XIBLK11	LXS1	2/10/2006 21:15			1			B
EXS0209074.wiff	WXXCRI	LXS1	2/10/2006 21:38			1		USE	C
EXS0209075.wiff	1201026420	LXS1	2/10/2006 22:00	501119	4504S	2	LANL	USE	S
EXS0209076.wiff	1201026421	LXS1	2/10/2006 22:22	501119	4504S	2	LANL	USE	S
EXS0209077.wiff	155323001	LXS1	2/10/2006 22:45	501119	4504S	2	LANL	USE	S
EXS0209078.wiff	1201026422	LXS1	2/10/2006 23:07	501119	4504S	2	LANL	USE	S
EXS0209079.wiff	1201026423	LXS1	2/10/2006 23:30	501119	4504S	2	LANL	USE	S
EXS0209080.wiff	155323002	LXS1	2/10/2006 23:52	501119	4504S	2	LANL	USE	S
EXS0209081.wiff	155323003	LXS1	2/11/2006 0:15	501119	4504S	2	LANL	USE	S
EXS0209082.wiff	WXXCCV	LXS1	2/11/2006 0:37			1		USE	C
EXS0209083.wiff	XIBLK12	LXS1	2/11/2006 1:00			1			B
EXS0209084.wiff	WXXCRI	LXS1	2/11/2006 1:22			1		USE	C

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202070a
Date: 04-Feb-2006
Time: 05:47:59
ID: 1201021043 | ESHC | 495811 | LCS | 154760-002LCS | 2 | MM 2/4/06
Vial: 2:4,D

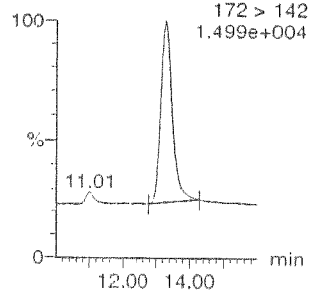
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.169e+004



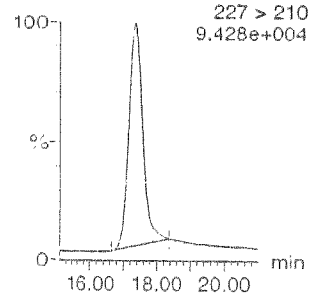
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.907e+004



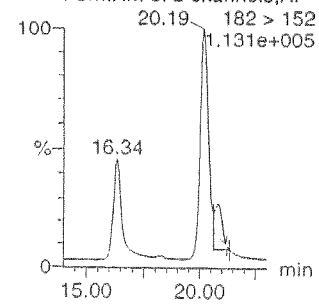
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.499e+004



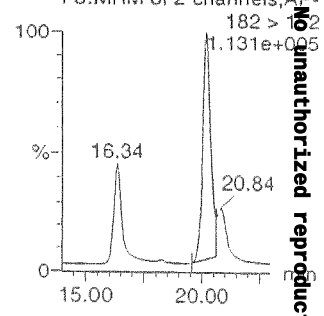
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
9.428e+004



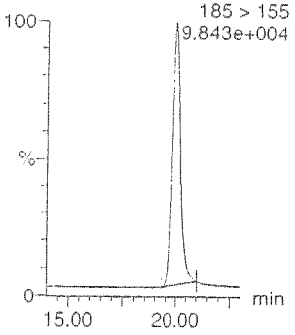
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.19
182 > 152
1.131e+005



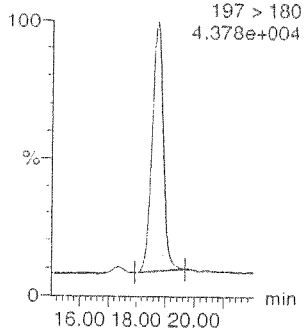
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.131e+005



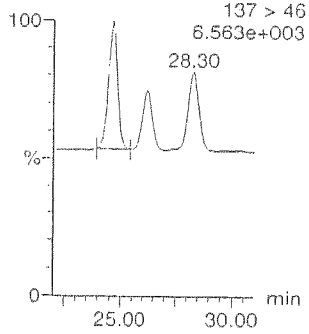
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
9.843e+004



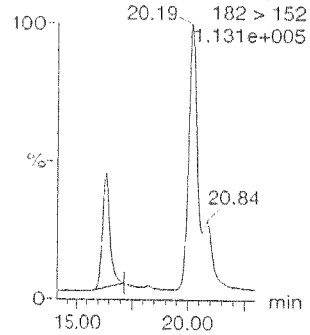
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.378e+004



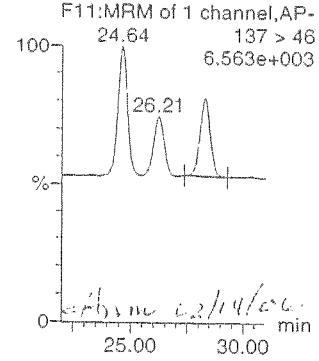
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.563e+003



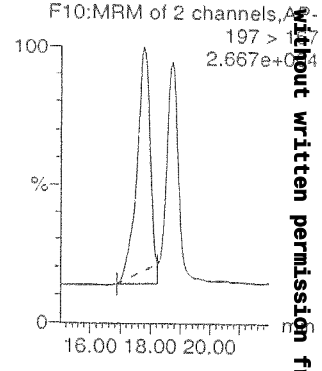
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.19
182 > 152
1.131e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.64
137 > 46
6.563e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 17
2.667e+004



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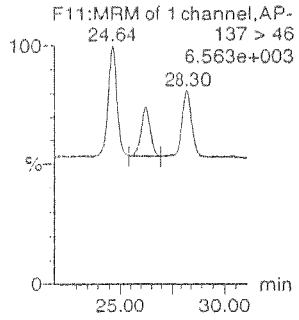
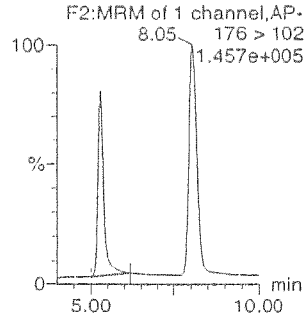
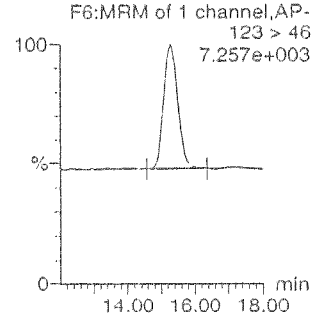
4-Nitrotoluene



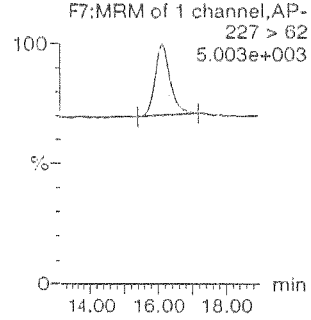
HMX



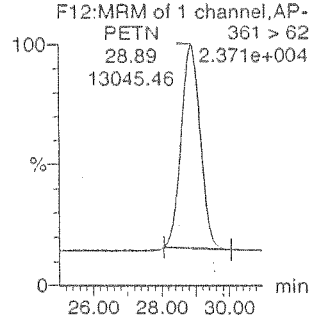
Nitrobenzene



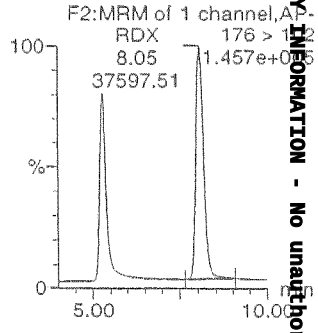
Nitroglycerin



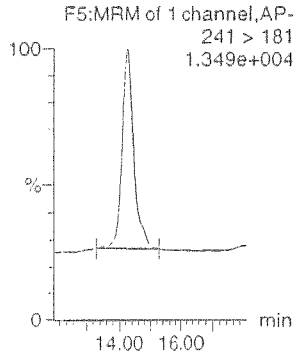
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201021043	HMX	176 > 102	5.28	24320.633	4611.966	24320.633	2636.688	bb			465.3692	93.1	-6.9	2645.9
1201021043	RDX	176 > 102	8.05	37597.508	4611.966	37597.508	4076.083	bb			487.0978	97.4	-2.6	3272.5
1201021043	135-Trinitrobenzene	213 > 183	11.04	19288.498	4611.966	19288.498	2091.136	bb			469.6371	93.9	-6.1	4134.9
1201021043	13-Dinitrobenzene-d4	172 > 142	13.27	4611.966		4611.966	4611.966	bb			560.3965	112.1	12.1	699.4
1201021043	13-Dinitrobenzene	168 > 138	13.45	6255.257	4611.966	6255.257	678.155	bb			472.8733	94.6	-5.4	1536.1
1201021043	Tetryl	241 > 181	14.24	4364.377	4611.966	4364.377	473.158	bb			304.3994	60.9	-39.1	709.2
1201021043	Nitrobenzene	123 > 46	15.29	1880.845	4611.966	1880.845	203.909	bb			441.1167	88.2	-11.8	290.5
1201021043	Nitroglycerin	227 > 62	16.13	757.441	4611.966	757.441	82.117	bb			433.1541	86.6	-13.4	154.6
1201021043	4-Amino-26-dinitrotoluene	197 > 167	17.76	11946.306	43918.738	11946.306	136.005	MM	04-Feb-06	10:16:54	481.6925	96.3	-3.7	527.6
1201021043	2-Amino-46-dinitrotoluene	197 > 180	18.72	17849.820	43918.738	17849.820	203.214	bb			474.8333	95.0	-5.0	363.7
1201021043	246-Trinitrotoluene	227 > 210	17.34	43137.672	43918.738	43137.672	491.108	bb			527.9071	105.6	5.6	552.4
1201021043	34-dinitrotoluene	182 > 152	16.34	18680.664	43918.738	18680.664	212.673	bb			229.9759	92.0	-8.0	81.5
1201021043	26-dinitrotoluene	182 > 152	20.19	45823.672	43918.738	45823.672	521.687	bd			467.4136	93.5	-6.5	184.3
1201021043	24-dinitrotoluene	182 > 152	20.84	9528.462	43918.738	9528.462	108.478	MM	04-Feb-06	10:18:30	448.1963	89.6	-10.4	39.6
1201021043	26-dinitrotoluene-d3	185 > 155	19.99	43918.738		43918.738	43918.738	bb			567.5481	113.5	13.5	2976.8
1201021043	2-Nitrotoluene	137 > 46.0	24.64	1402.563	43918.738	1402.563	15.968	bb			446.4338	89.3	-10.7	117.6
1201021043	4-Nitrotoluene	137 > 46	26.21	739.562	43918.738	739.562	8.420	bb			476.9916	95.4	-4.6	53.8
1201021043	3-Nitrotoluene	137 > 46.0	28.30	1027.491	43918.738	1027.491	11.698	bb			462.9959	92.6	-7.4	71.0
1201021043	PETN	361 > 62	28.89	13045.461	43918.738	13045.461	148.518	bb			562.9744	112.6	12.6	1477.7

4.60 4.37 4.09 2.97

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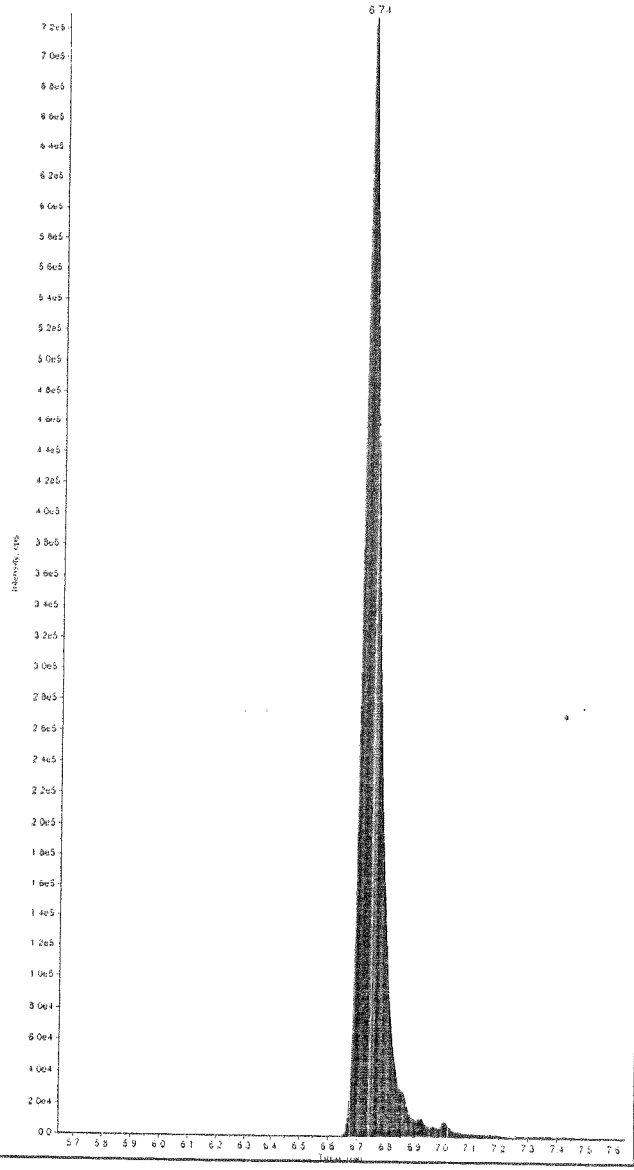
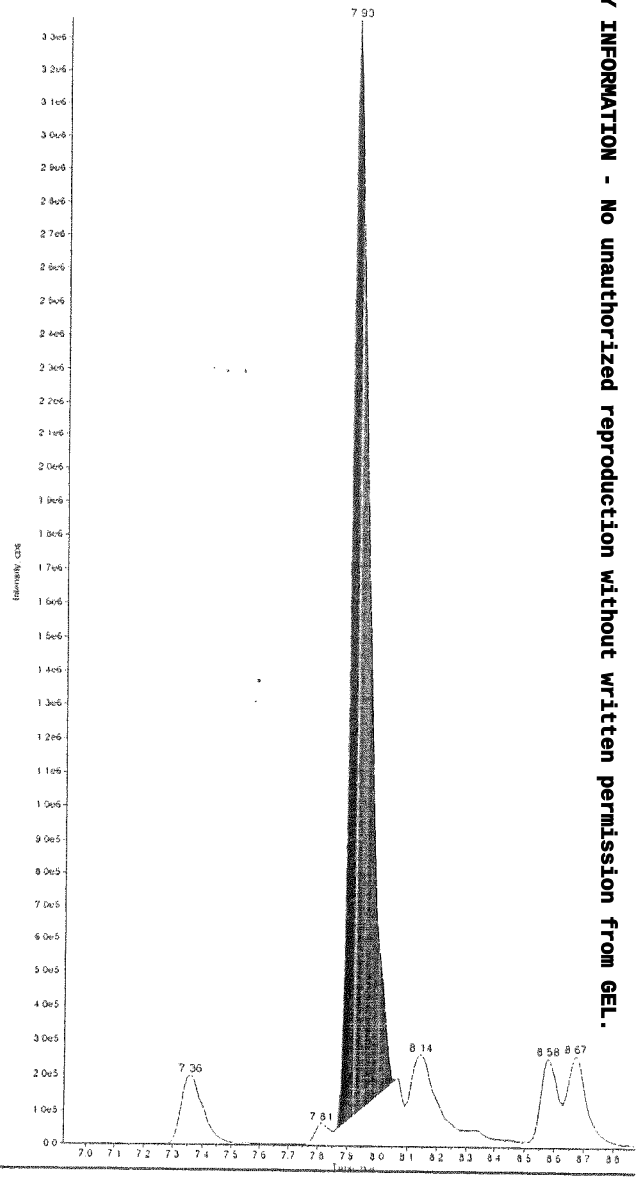
Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	732.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:02:36 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.74	min
Area:	3.31e+006	counts
Height:	7.31e+005	cps
Start Time:	6.62	min
End Time:	7.22	min



Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	457.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:02:36 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.93	min
Area:	1.41e+007	counts
Height:	3.27e+006	cps
Start Time:	7.85	min
End Time:	8.06	min



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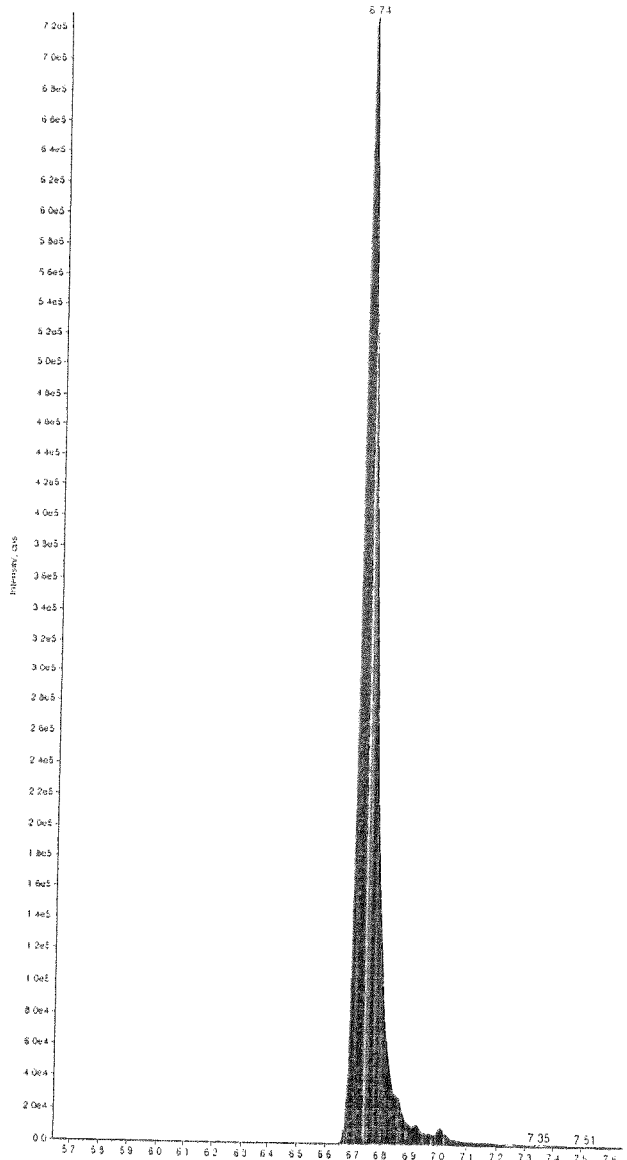
YKPS 3/10/06

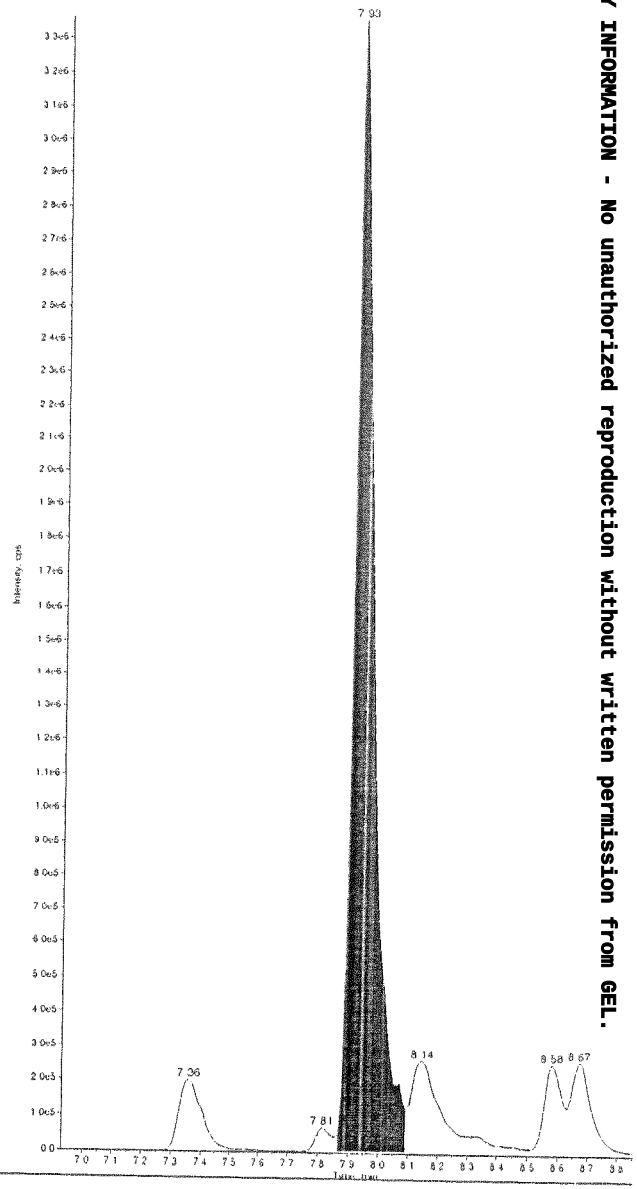
Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	732. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:02:36 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	3.13e4 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	6.65 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.74 min
Area:	3.31e+006 counts
Height:	7.31e+005 cps
Start Time:	6.62 min
End Time:	7.22 min



Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	516. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:02:36 AM
Modified:	Yes
RT Window:	30.0 sec
Expected RT:	7.93 min
Use Relative RT:	No
Int. Type:	Manual
Retention Time:	7.93 min
Area:	1.58e+007 counts
Height:	3.36e+006 cps
Start Time:	7.86 min
End Time:	8.09 min



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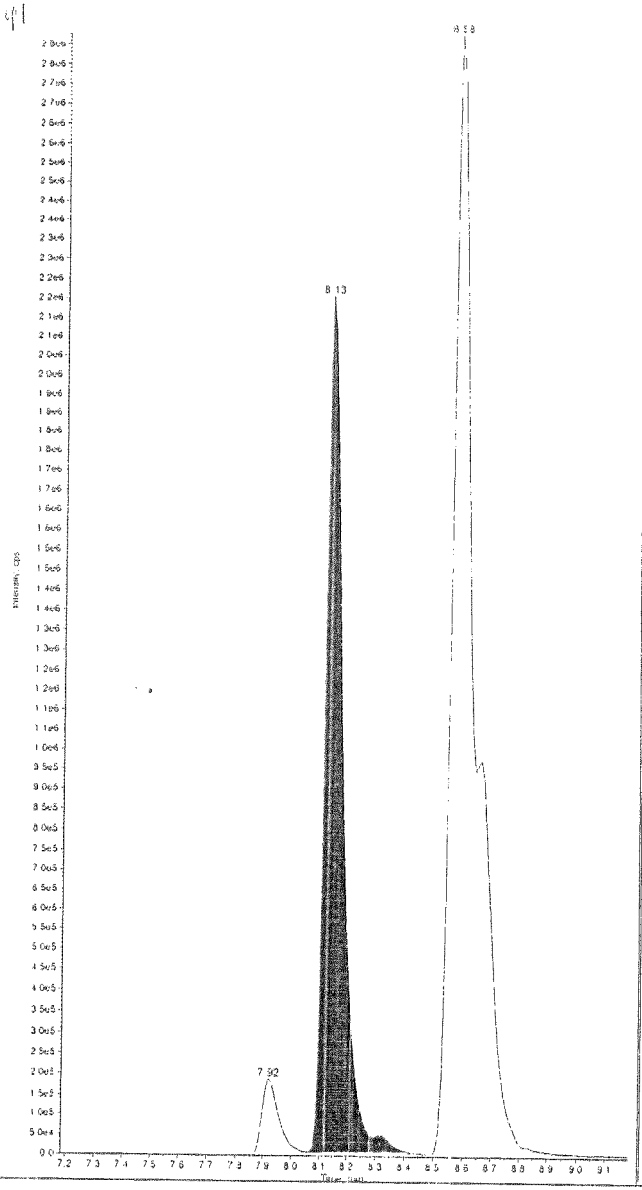
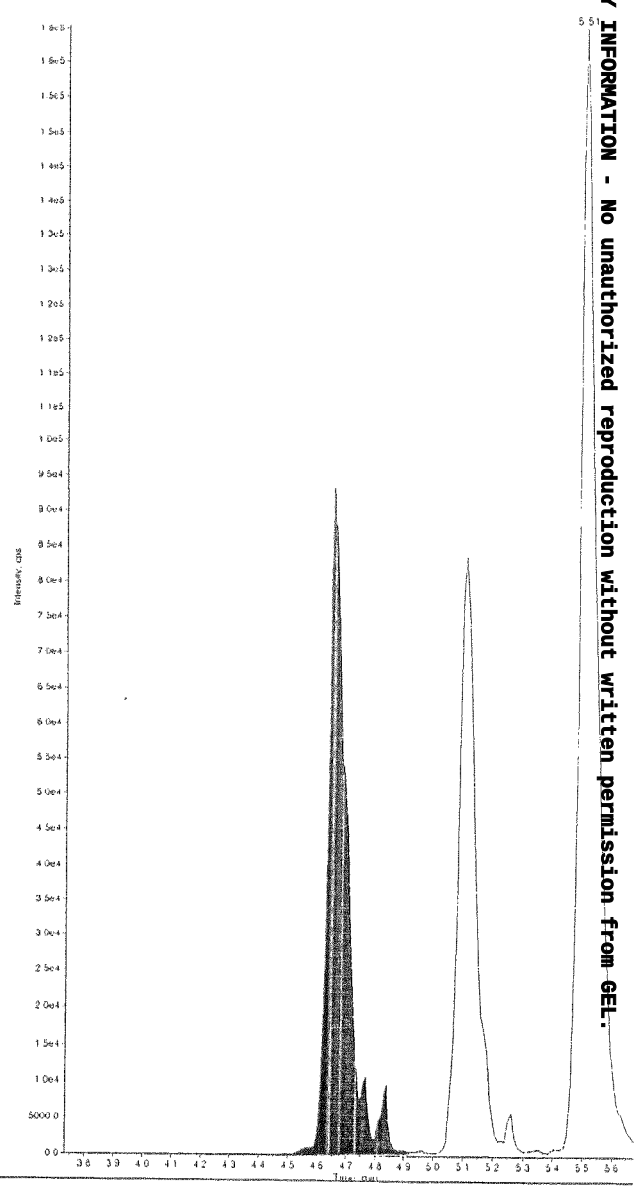
Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	301. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:02:36 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.13 min
Area:	9.81e+006 counts
Height:	2.15e+006 cps
Start Time:	8.05 min
End Time:	8.40 min



Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	345. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:02:36 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	935.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	4.73 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	4.65 min
Area:	4.43e+005 counts
Height:	9.34e+004 cps
Start Time:	4.46 min
End Time:	4.92 min



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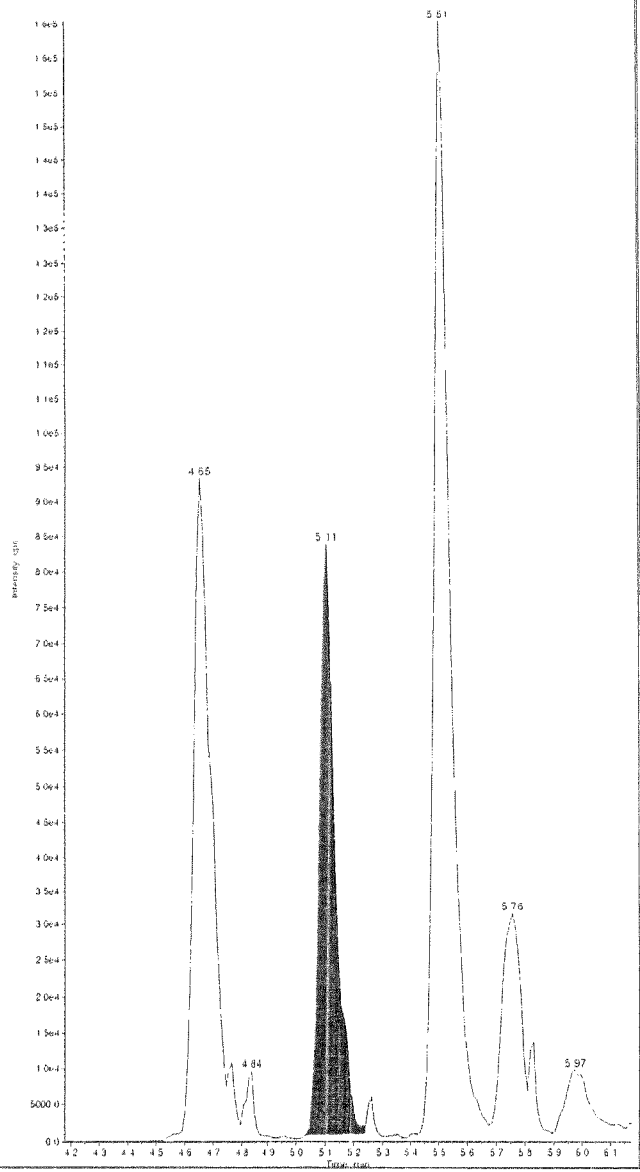
YKS 2/10/06

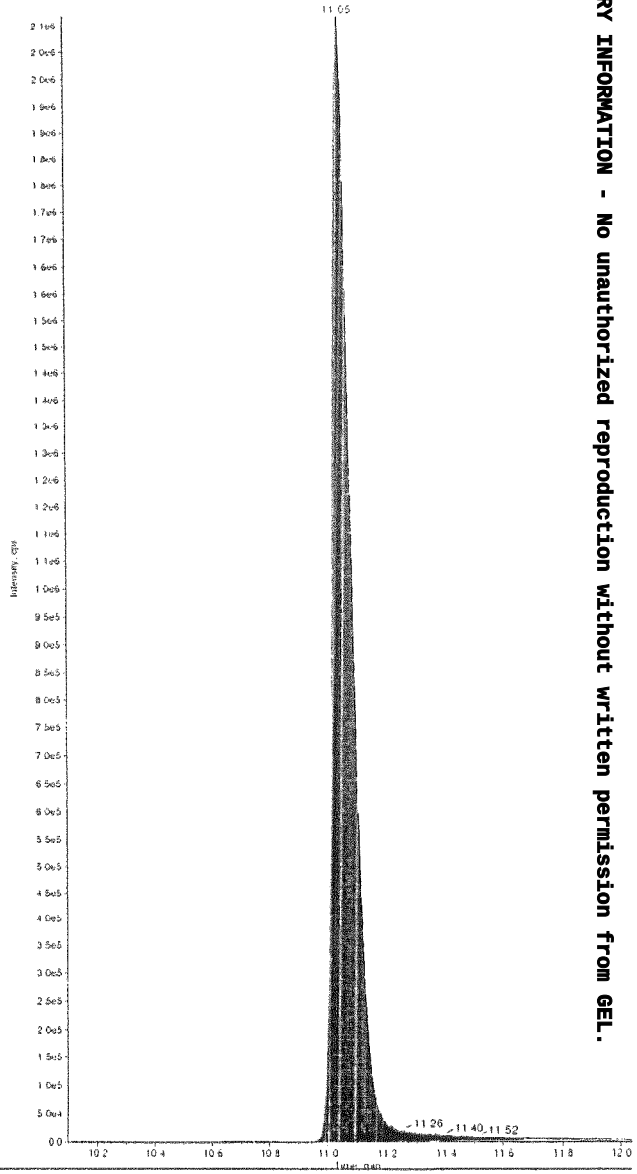
Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	344.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:02:36 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.11	min
Area:	3.32e+005	counts
Height:	8.30e+004	cps
Start Time:	5.03	min
End Time:	5.34	min



Sample Name: "1201021043" Sample ID: "498841|2|LXS1" File: "EXS0209034.wiff"
Peak Name: "Tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	207.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:02:36 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	9.92e+006	counts
Height:	2.07e+006	cps
Start Time:	10.9	min
End Time:	11.7	min



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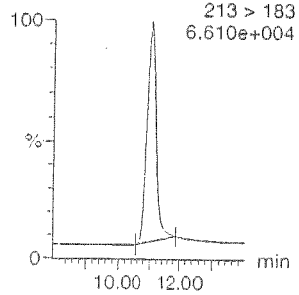
Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

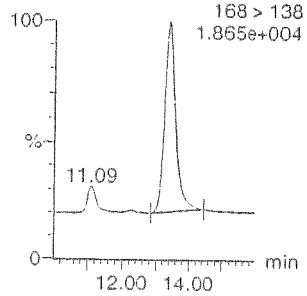
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0202071a
Date: 04-Feb-2006
Time: 06:21:28
ID: 1201021044 | ESHC | 498841 | 1 | 1547 | 2 |
Vial: 2:4,E

LCM 2/4/06

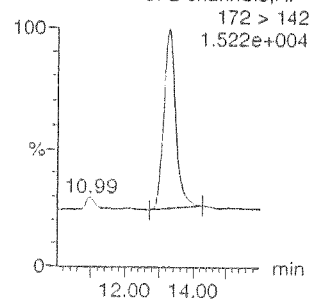
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
6.610e+004



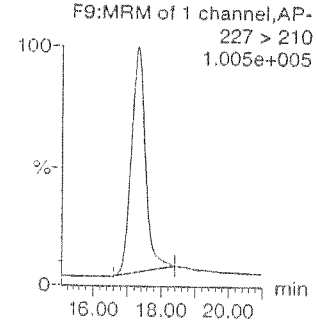
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.865e+004



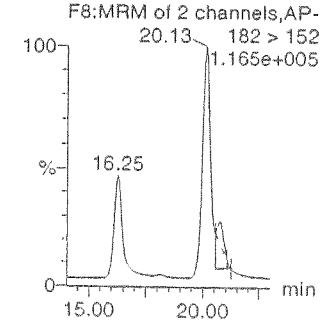
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.522e+004



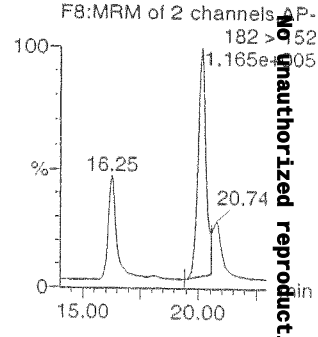
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
1.005e+005



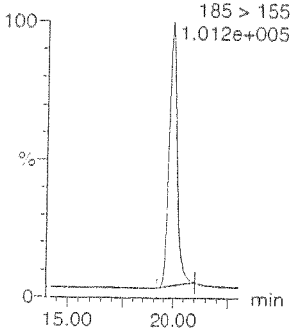
24-dinitrotoluene
F8:MRM of 2 channels,AP-
20.13
182 > 152
1.165e+005



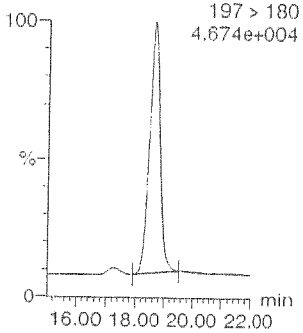
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.165e+005



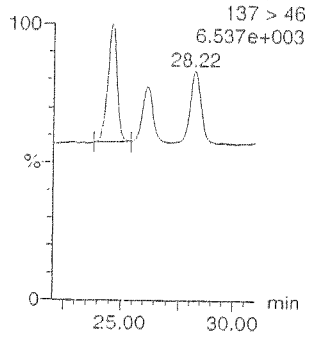
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
1.012e+005



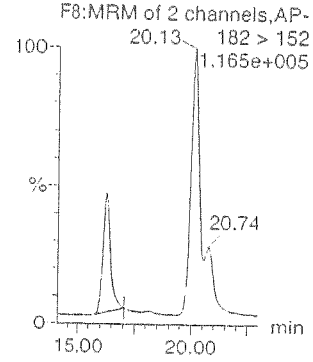
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
4.674e+004



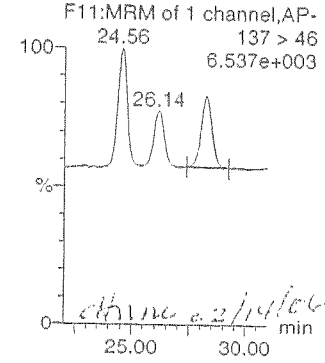
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
6.537e+003



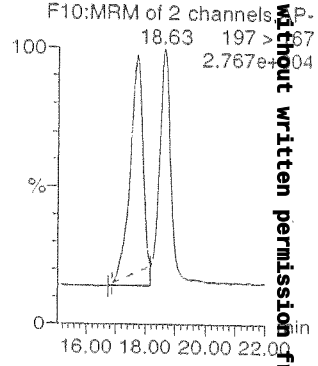
34-dinitrotoluene
F8:MRM of 2 channels,AP-
20.13
182 > 152
1.165e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
24.56
137 > 46
6.537e+003



4-Amino-26-dinitrotoluen
F10:MRM of 2 channels,AP-
18.63
197 > 167
2.767e+004



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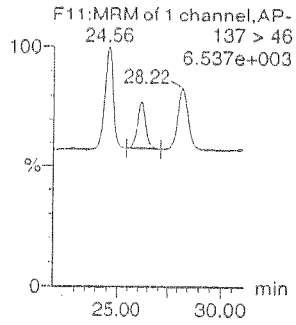
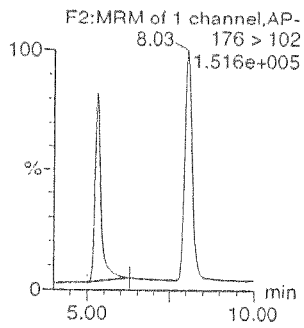
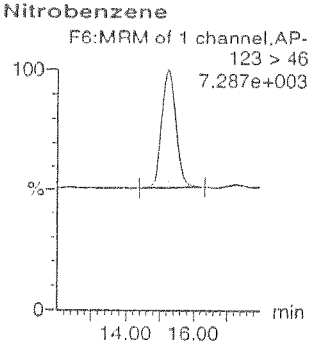
4-Nitrotoluene



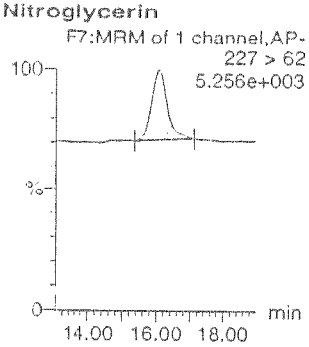
HMX



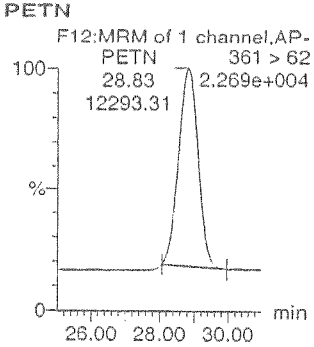
Nitrobenzene



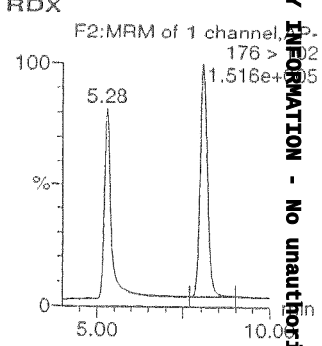
Nitroglycerin



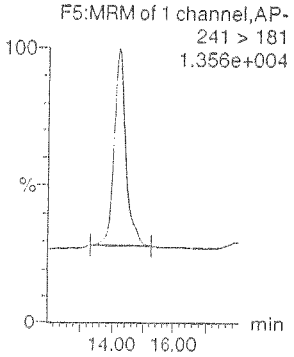
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020206expA3.qld, Time: Sat Feb 04 10:23:03 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201021044	HMX	176 > 102	5.28	26539.072	4561.340	26539.072	2909.131	bb			513.4548	102.7	2.7	1225.4
1201021044	RDX	176 > 102	8.03	37447.551	4561.340	37447.551	4104.885	bb			490.5398	98.1	-1.9	1494.0
1201021044	135-Trinitrobenzene	213 > 183	11.02	20428.109	4561.340	20428.109	2239.266	bb			502.9048	100.6	0.6	1539.5
1201021044	13-Dinitrobenzene-d4	172 > 142	13.26	4561.340		4561.340	4561.340	bb			554.2449	110.8	10.8	589.9
1201021044	13-Dinitrobenzene	168 > 138	13.41	5919.871	4561.340	5919.871	648.918	bb			452.4864	90.5	-9.5	996.1
1201021044	Tetryl	241 > 181	14.19	4270.311	4561.340	4270.311	468.098	bb			301.1443	60.2	-39.8	126.5
1201021044	Nitrobenzene	123 > 46	15.22	1786.292	4561.340	1786.292	195.808	bb			423.5909	84.7	-15.3	105.3
1201021044	Nitroglycerin	227 > 62	16.07	811.170	4561.340	811.170	88.918	bb			469.0284	93.8	-6.2	116.3
1201021044	4-Amino-26-dinitrotoluene	197 > 167	17.70	12166.813	45658.816	12166.813	133.236	MM	04-Feb-06	10:17:08	471.8873	94.4	-5.6	572.9
1201021044	2-Amino-46-dinitrotoluene	197 > 180	18.63	18759.467	45658.816	18759.467	205.431	bb			480.0130	96.0	-4.0	834.7
1201021044	246-Trinitrotoluene	227 > 210	17.28	46744.805	45658.816	46744.805	511.892	bb			550.2491	110.0	10.0	1316.9
1201021044	34-dinitrotoluene	182 > 152	16.25	19619.863	45658.816	19619.863	214.853	bb			232.3332	92.9	-7.1	555.5
1201021044	26-dinitrotoluene	182 > 152	20.13	46435.688	45658.816	46435.688	508.507	bd			455.6051	91.1	-8.9	1223.2
1201021044	24-dinitrotoluene	182 > 152	20.74	9514.582	45658.816	9514.582	104.192	MM	04-Feb-06	10:18:20	430.4873	86.1	-13.9	264.9
1201021044	26-dinitrotoluene-d3	185 > 155	19.91	45658.816		45658.816	45658.816	bb			590.0345	118.0	18.0	2860.3
1201021044	2-Nitrotoluene	137 > 46.0	24.56	1322.292	45658.816	1322.292	14.480	bb			404.8436	81.0	-19.0	124.5
1201021044	4-Nitrotoluene	137 > 46	26.14	692.468	45658.816	692.468	7.583	bb			429.5968	85.9	-14.1	58.4
1201021044	3-Nitrotoluene	137 > 46.0	28.22	968.733	45658.816	968.733	10.608	bb			419.8832	84.0	-16.0	75.8
1201021044	PETN	361 > 62	28.83	12293.313	45658.816	12293.313	134.621	bb			506.7360	101.3	1.3	1394.7

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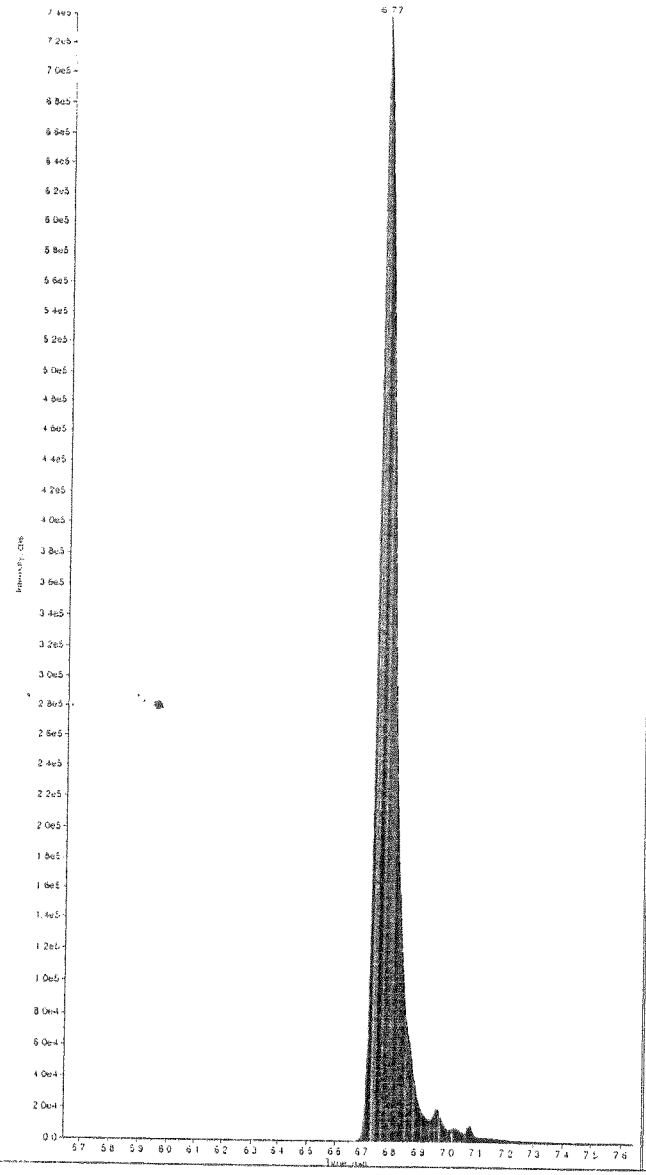
5/25
3/10/06

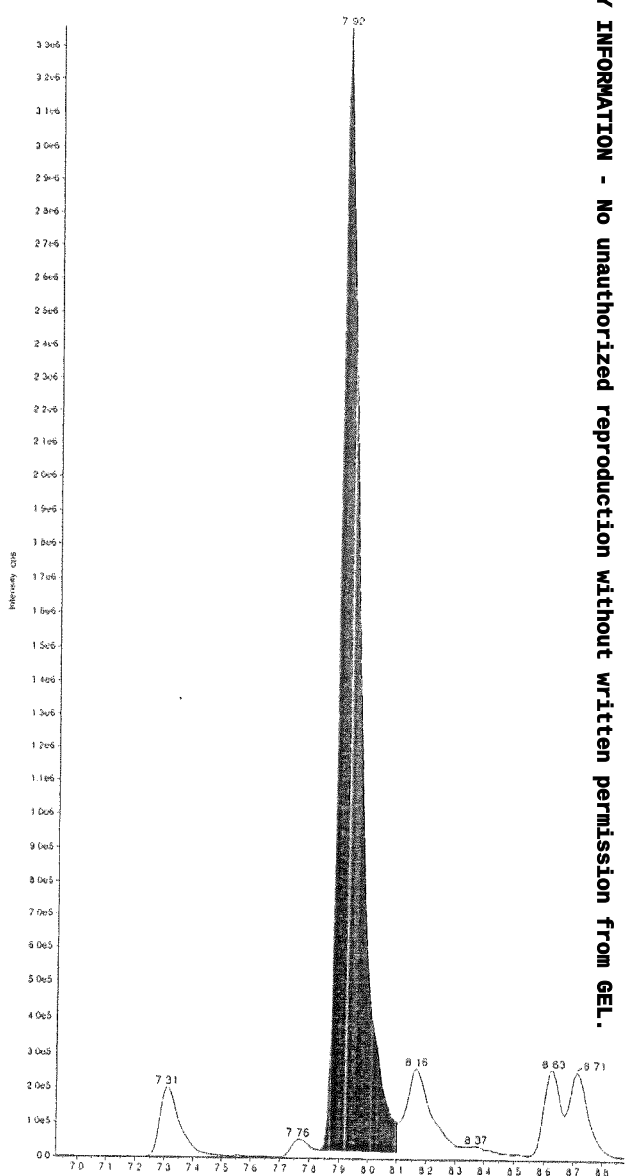
Sample Name: "1201021044" Sample ID: "498841|2|LXS1" File: "EXS0209035.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	776. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:25:11 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	2.13e4 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	6.65 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	6.77 min
Area:	3.51e+006 counts
Height:	7.41e+005 cps
Start Time:	6.62 min
End Time:	7.44 min



Sample Name: "1201021044" Sample ID: "498841|2|LXS1" File: "EXS0209035.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	542. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	02:25:11 AM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	2.58e4 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	7.93 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	7.92 min
Area:	1.65e+007 counts
Height:	3.35e+006 cps
Start Time:	7.83 min
End Time:	8.10 min



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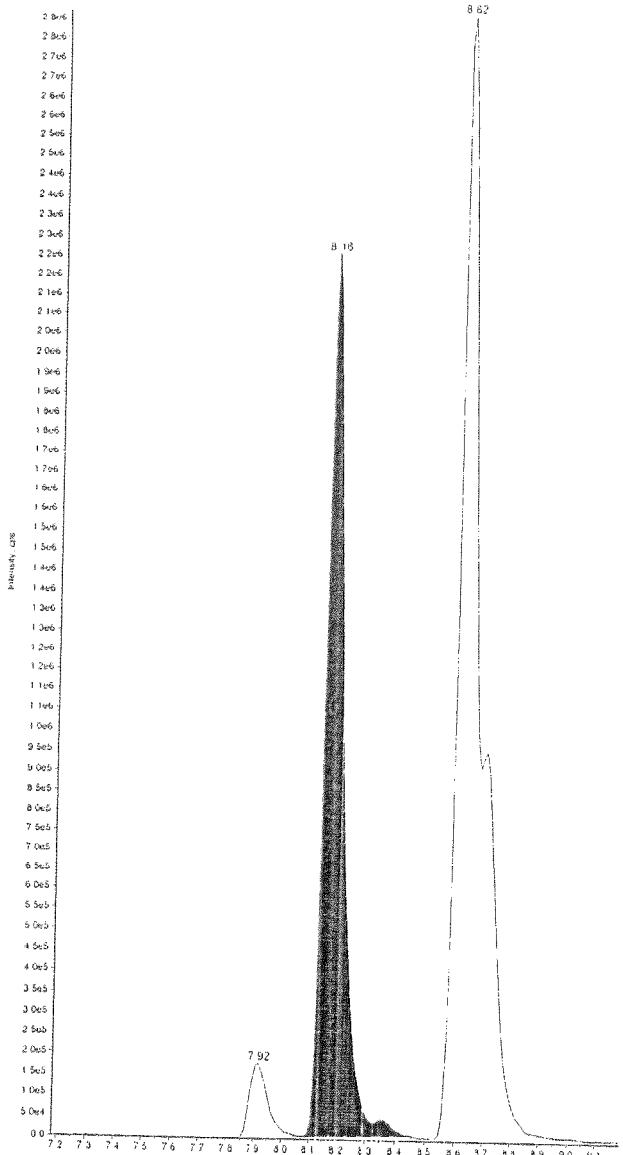
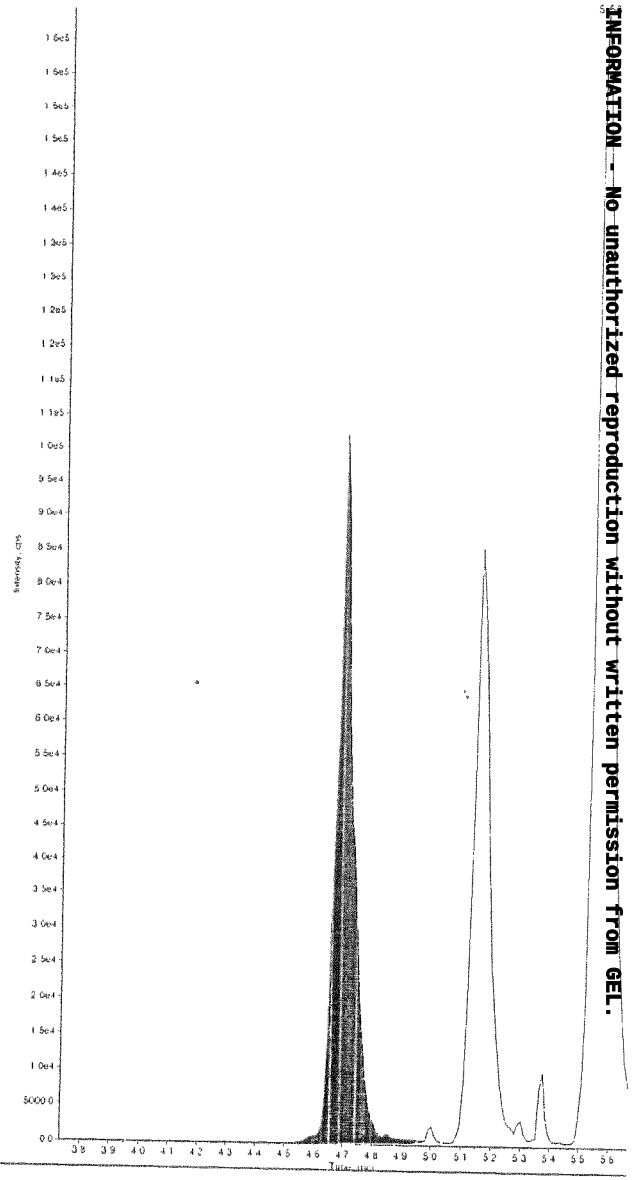
Sample Name: "1201021044" Sample ID: "498841|2|LXS1" File: "EXS0209035.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	306.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:25:11 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.16	min
Area:	9.95e+006	counts
Height:	2.21e+006	cps
Start Time:	8.07	min
End Time:	8.44	min



Sample Name: "1201021044" Sample ID: "498841|2|LXS1" File: "EXS0209035.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	336.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:25:11 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.69	min
Area:	4.30e+005	counts
Height:	1.03e+005	cps
Start Time:	4.51	min
End Time:	4.95	min



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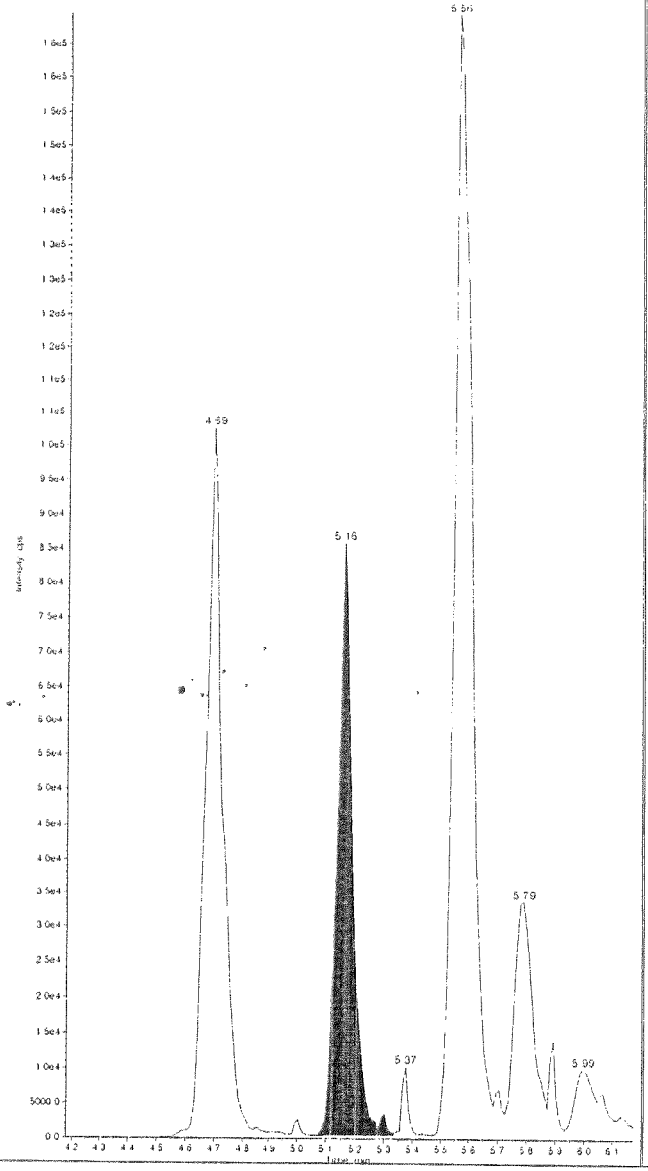
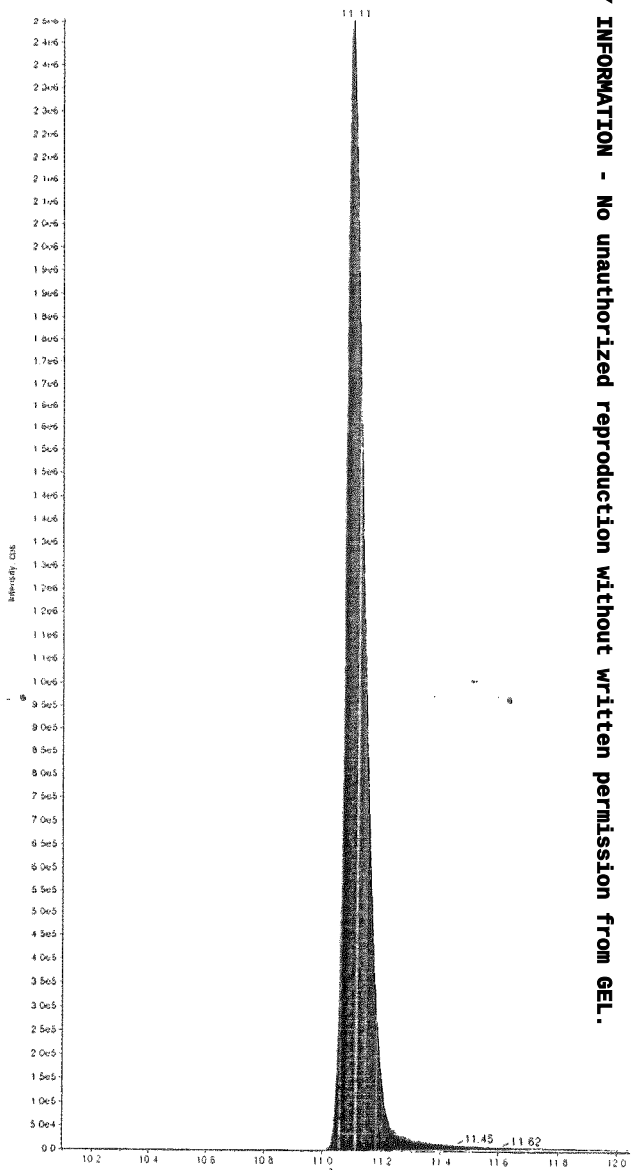
Sample Name: "1201021044" Sample ID: "498841|2|LXS1" File: "EXS0209035.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	343.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:25:11 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.16	min
Area:	3.32e+005	counts
Height:	8.54e+004	cps
Start Time:	5.06	min
End Time:	5.33	min



Sample Name: "1201021044" Sample ID: "498841|2|LXS1" File: "EXS0209035.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	251.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	02:25:11 AM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	1.17e+007	counts
Height:	2.46e+006	cps
Start Time:	11.0	min
End Time:	11.7	min



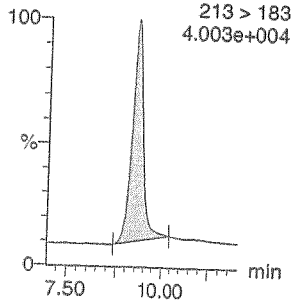
897

Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

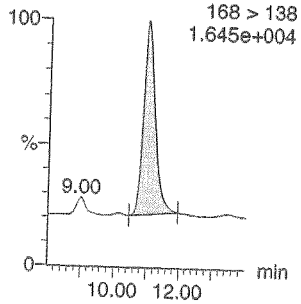
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209018a
Date: 09-Feb-2006
Time: 19:02:25
ID: 1201026410 | ESHL | 501113 | LCQ | 15526502MS | 2 |
Vial: 1:4,F

mmm 2/10/06

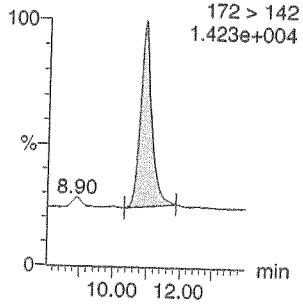
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
4.003e+004



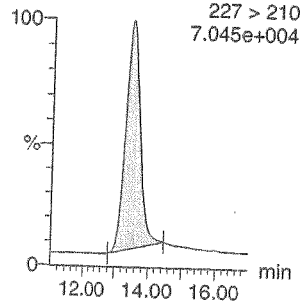
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.645e+004



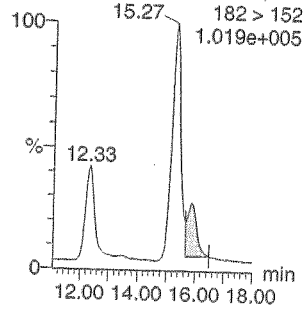
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.423e+004



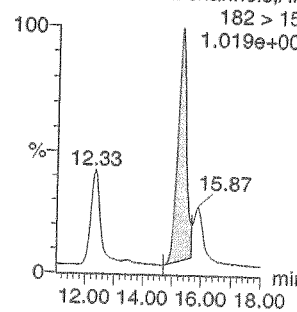
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
7.045e+004



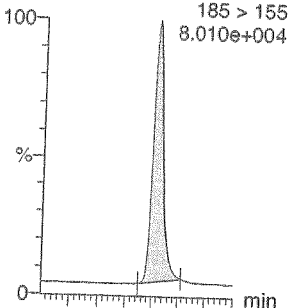
24-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.019e+005



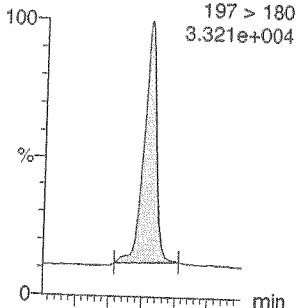
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.019e+005



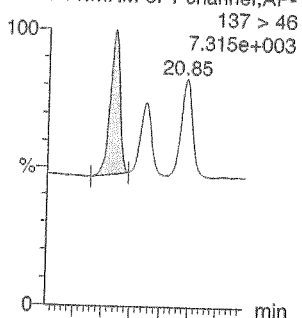
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.010e+004



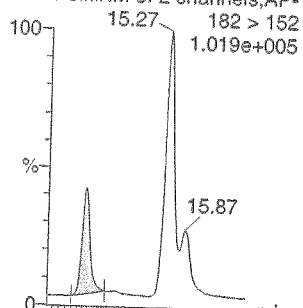
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.321e+004



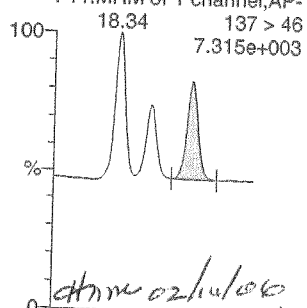
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
7.315e+003



34-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.019e+005

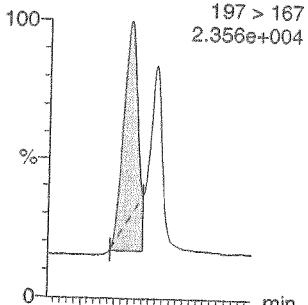


3-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
7.315e+003



dmm 02/10/06

4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
2.356e+004



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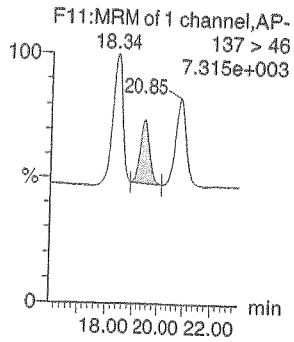
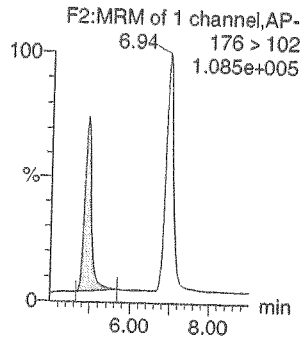
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

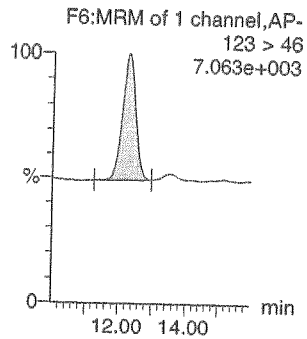
4-Nitrotoluene



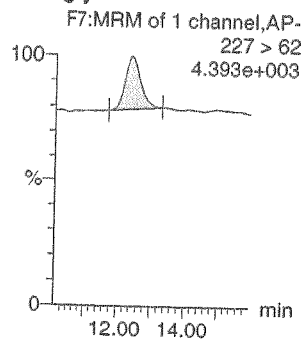
HMX



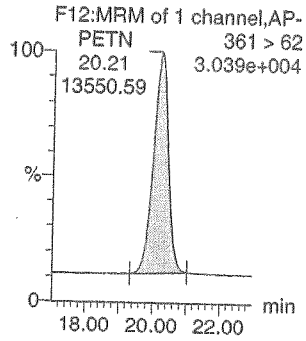
Nitrobenzene



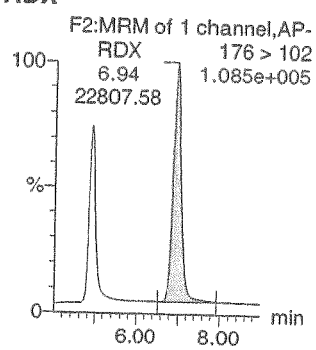
Nitroglycerin



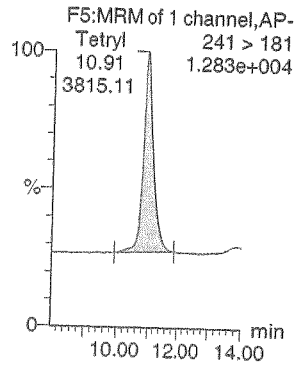
PETN



RDX



Tetryl



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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA1.qld, Time: Fri Feb 10 07:12:08 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201026410	HMX	176 > 102	4.91	14982.314	4142.677	14982.314	1808.289	bb		5.50	424.1883	84.8	-15.2	1175.1
1201026410	RDX	176 > 102	6.94	22807.580	4142.677	22807.580	2752.759	bb		5.33	411.9411	82.4	-17.6	1593.9
1201026410	135-Trinitrobenzene	213 > 183	9.27	13353.290	4142.677	13353.290	1611.674	bb		5.14	396.0499	79.2	-20.8	2619.3
1201026410	13-Dinitrobenzene-d4	172 > 142	10.88	4142.677		4142.677	4142.677	bb			624.2309	124.8	24.8	676.6
1201026410	13-Dinitrobenzene	168 > 138	10.98	5371.440	4142.677	5371.440	648.305	bb			496.6148	99.3	-0.7	760.6
1201026410	Tetryl	241 > 181	10.91	3815.114	4142.677	3815.114	460.465	bb			301.0285	60.2	-39.8	429.7
1201026410	Nitrobenzene	123 > 46	12.27	1694.828	4142.677	1694.828	204.557	bb			422.6492	84.5	-15.5	576.9
1201026410	Nitroglycerin	227 > 62	12.41	472.006	4142.677	472.006	56.969	bb			435.1329	87.0	-13.0	160.8
1201026410	4-Amino-26-dinitrotoluene	197 > 167	13.38	9587.587	33774.570	9587.587	141.935	MM	10-Feb-06	07:07:14	486.2879	97.3	-2.7	1125.7
1201026410	2-Amino-46-dinitrotoluene	197 > 180	14.18	12635.471	33774.570	12635.471	187.056	bb			500.5625	100.1	0.1	396.6
1201026410	246-Trinitrotoluene	227 > 210	13.50	32234.346	33774.570	32234.346	477.198	bb			501.5159	100.3	0.3	808.1
1201026410	34-dinitrotoluene	182 > 152	12.33	14291.199	33774.570	14291.199	211.567	bb			259.7474	103.9	3.9	557.9
1201026410	26-dinitrotoluene	182 > 152	15.27	34384.859	33774.570	34384.859	509.035	bd		3.36	472.8300	94.6	-5.4	1374.3
1201026410	24-dinitrotoluene	182 > 152	15.87	8520.342	33774.570	8520.342	126.135	db			476.5095	95.3	-4.7	318.8
1201026410	26-dinitrotoluene-d3	185 > 155	15.15	33774.570		33774.570	33774.570	bb			557.8530	111.6	11.6	3490.4
1201026410	2-Nitrotoluene	137 > 46	18.34	1560.816	33774.570	1560.816	23.106	bb			463.5191	92.7	-7.3	613.1
1201026410	4-Nitrotoluene	137 > 46	19.44	803.528	33774.570	803.528	11.895	bb			496.1318	99.2	-0.8	307.2
1201026410	3-Nitrotoluene	137 > 46	20.85	1191.503	33774.570	1191.503	17.639	bb			469.7466	93.9	-6.1	415.5
1201026410	PETN	361 > 62	20.21	13550.589	33774.570	13550.589	200.603	bb			509.3606	101.9	1.9	2053.5

AMW 02/14/06

MMT 2/10/06

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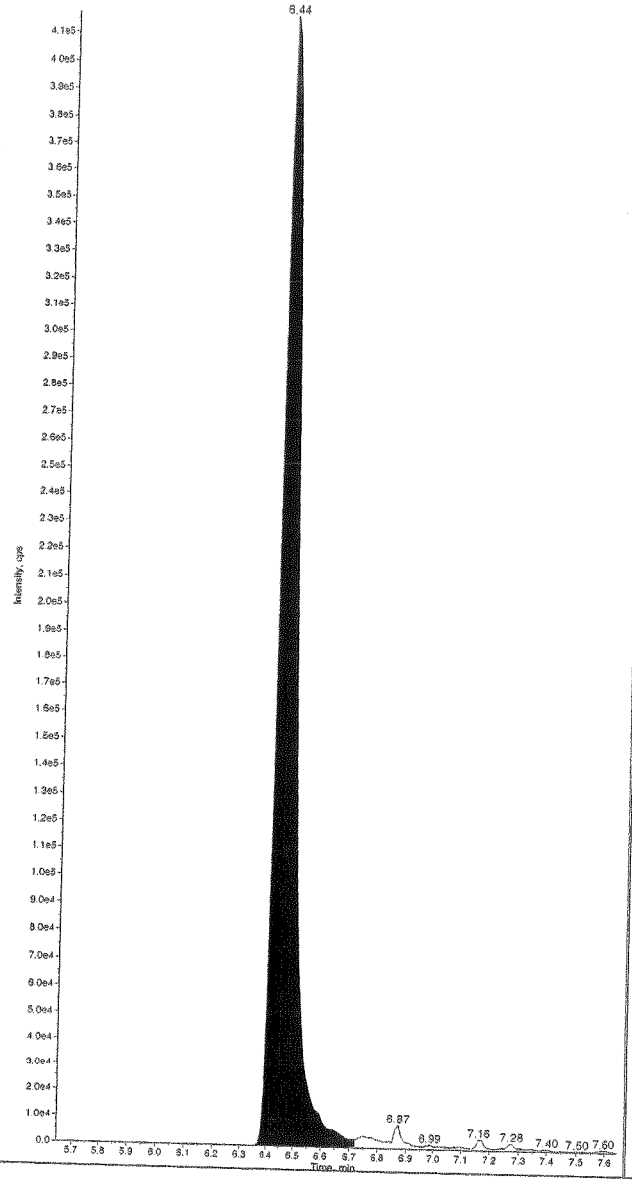
KRS 2/13/06

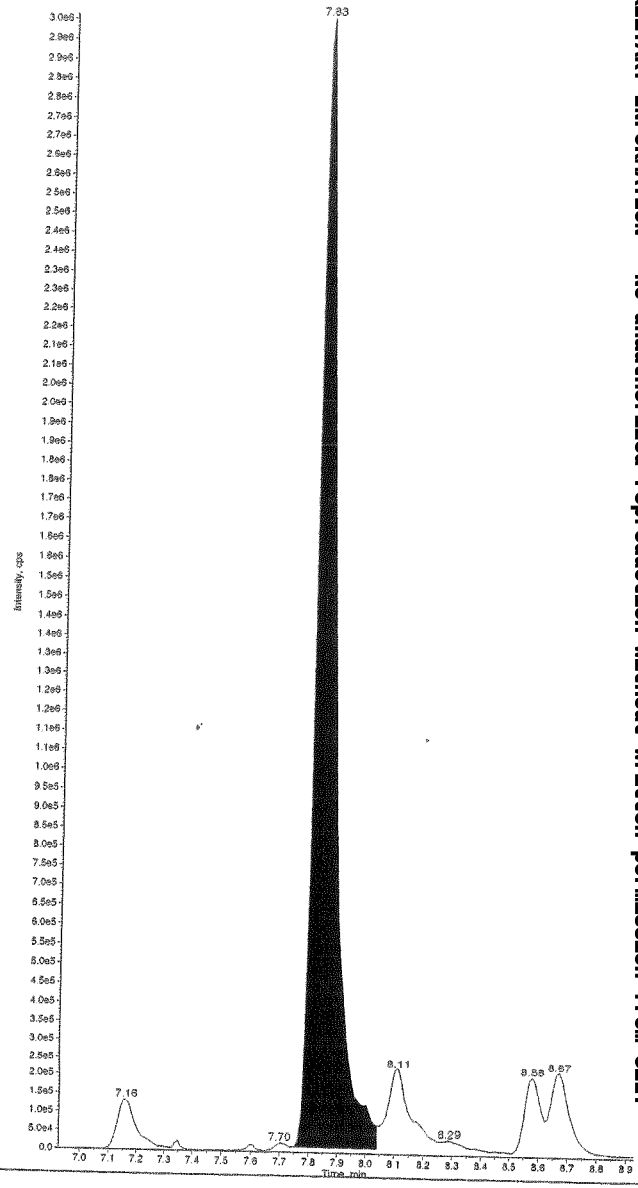
Sample Name: "1201026410" Sample ID: "501113|2|LXS1" File: "EXS0209059.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	5.70
Calculated Conc:	439.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:01:32 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.44	min
Area:	1.94e+006	counts
Height:	4.17e+005	cps
Start Time:	6.34	min
End Time:	6.72	min



Sample Name: "1201026410" Sample ID: "501113|2|LXS1" File: "EXS0209059.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	5.85
Calculated Conc:	451.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:01:32 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.83	min
Area:	1.40e+007	counts
Height:	2.95e+006	cps
Start Time:	7.74	min
End Time:	8.04	min



Hmm 02/14/06

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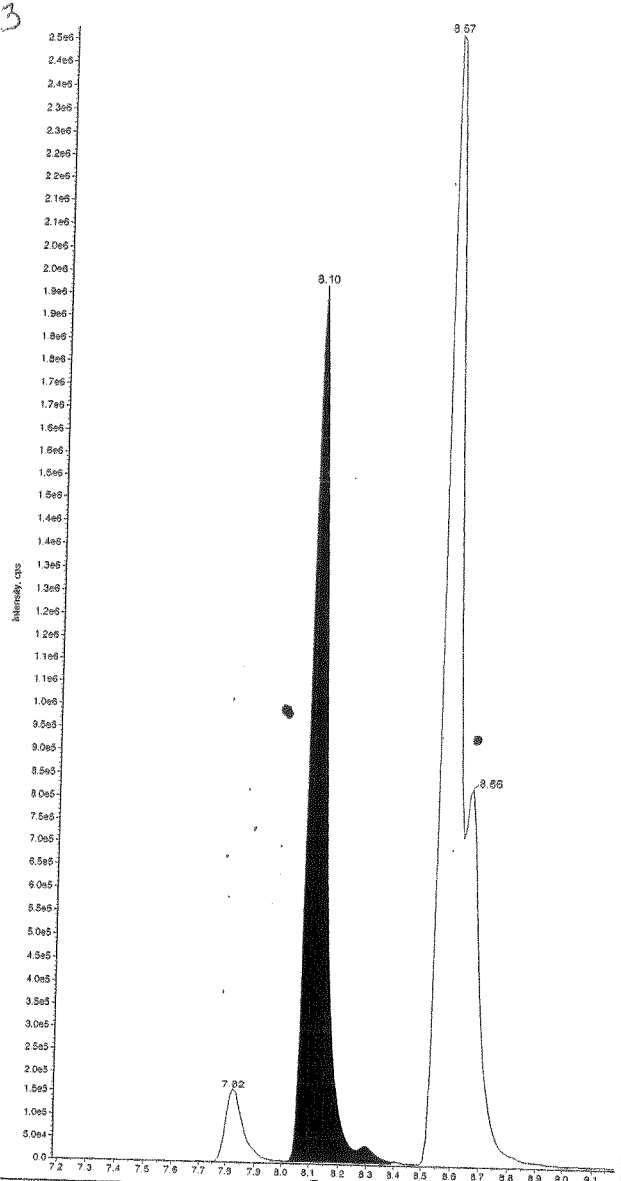
LRS 2/13/06

Sample Name: "1201026410" Sample ID: "501113|2|LXS1" File: "EXS0209059.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

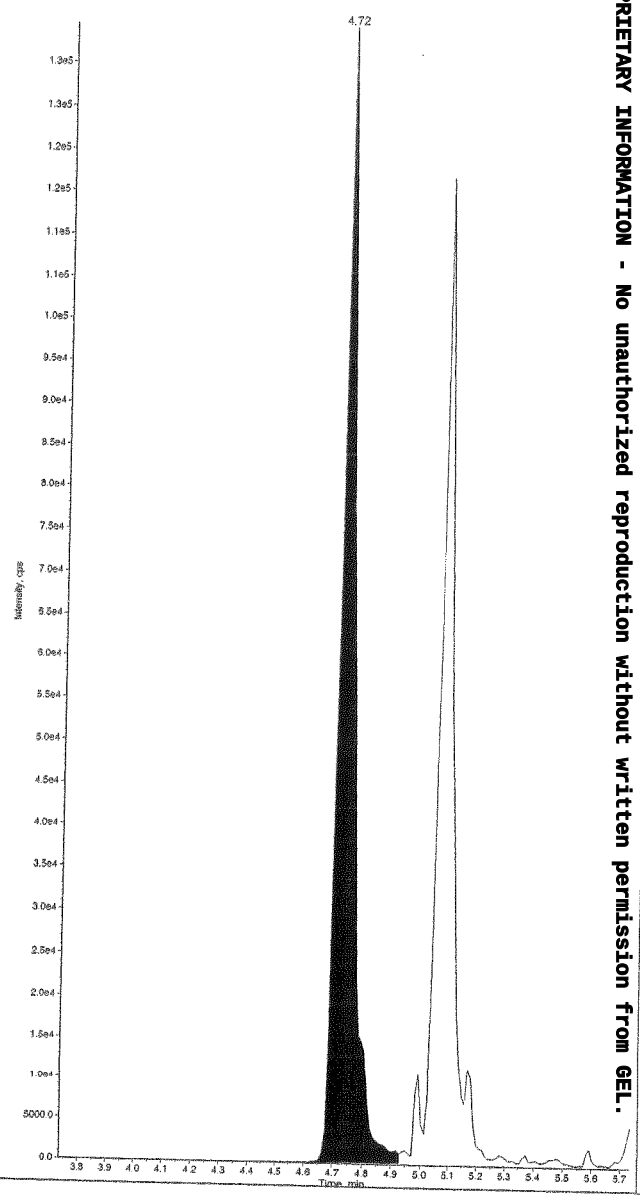
3.13

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	241. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	04:01:32 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	1460.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	8.19 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	8.10 min
Area:	7.95e+006 counts
Height:	1.92e+006 cps
Start Time:	8.02 min
End Time:	8.39 min



Sample Name: "1201026410" Sample ID: "501113|2|LXS1" File: "EXS0209059.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1
Sample Type:	Unknown
Concentration:	N/A
Calculated Conc:	368. ng/mL
Acq. Date:	02/10/2006
Acq. Time:	04:01:32 PM
Modified:	No
Proc. Algorithm:	IntelliQuan - IQA
Min. Peak Height:	935.00 cps
Min. Peak Width:	0.00 sec
Smoothing Width:	3 points
RT Window:	30.0 sec
Expected RT:	4.73 min
Use Relative RT:	No
Int. Type:	Valley
Retention Time:	4.72 min
Area:	4.71e+005 counts
Height:	1.34e+005 cps
Start Time:	4.55 min
End Time:	4.93 min



Hmm 02/14/06

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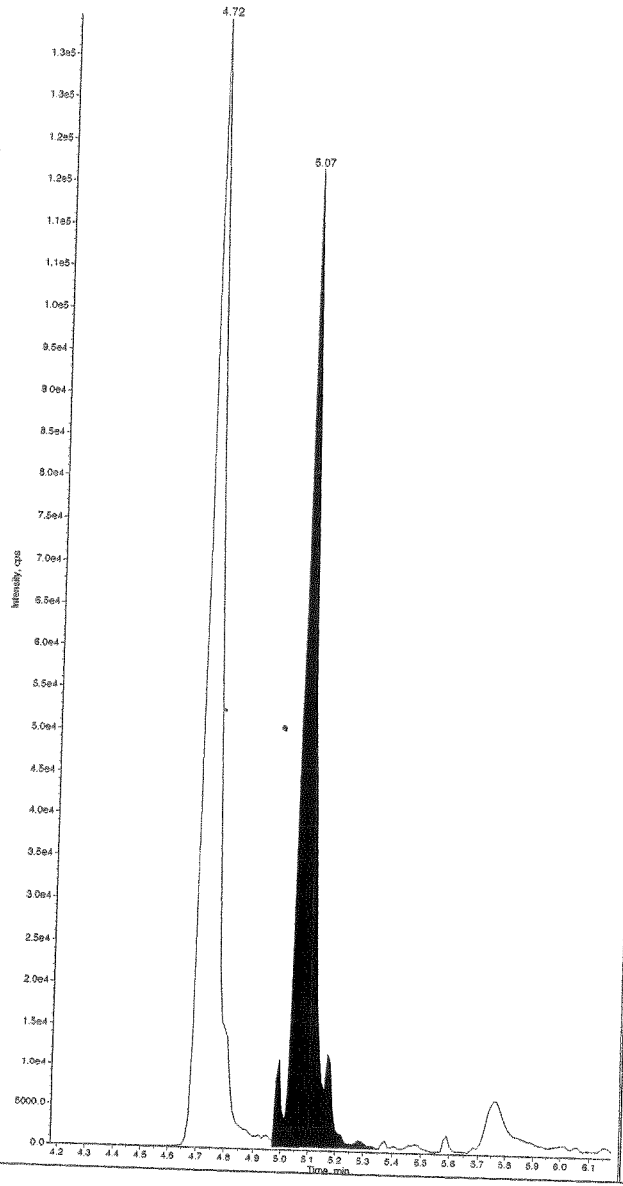
LRS 2/13/06

Sample Name: "1201026410" Sample ID: "501113|2|LXS1" File: "EXS0209059.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

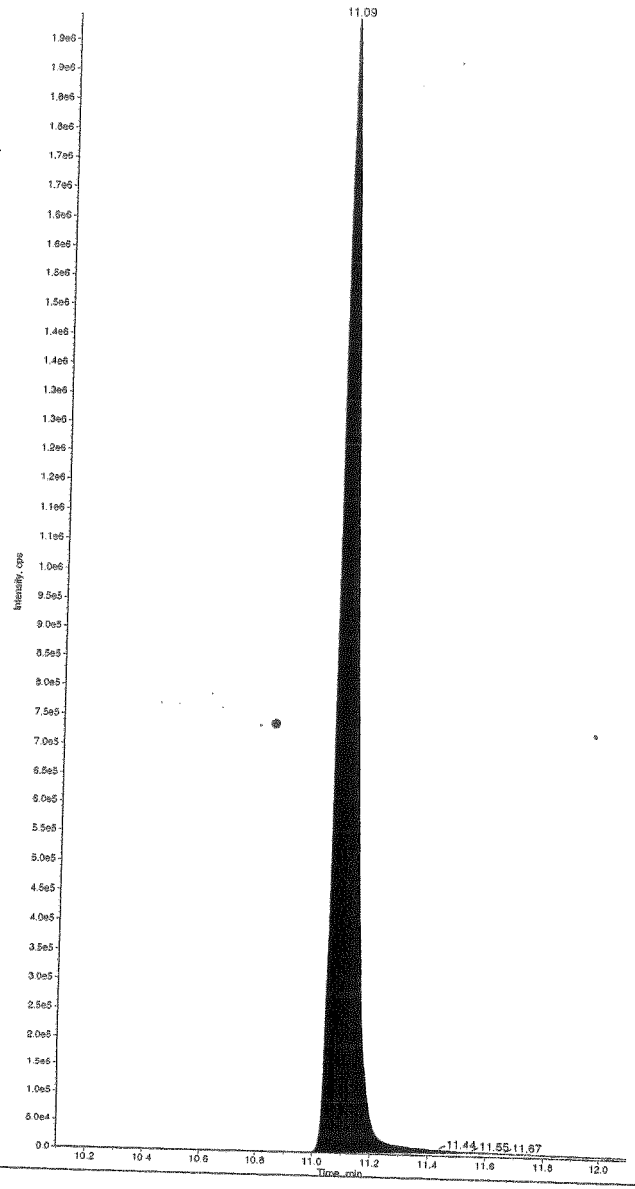
Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	436.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:01:32 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.07	min
Area:	4.22e+005	counts
Height:	1.17e+005	cps
Start Time:	4.97	min
End Time:	5.34	min



903

Sample Name: "1201026410" Sample ID: "501113|2|LXS1" File: "EXS0209059.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	180.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:01:32 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.1	min
Area:	8.78e+006	counts
Height:	1.94e+006	cps
Start Time:	11.0	min
End Time:	11.6	min



Think 02/14/06

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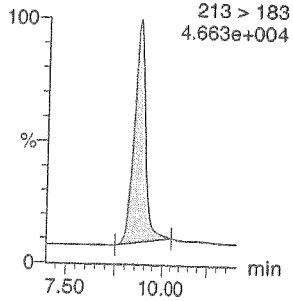
Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA2.qld, Time: Mon Feb 13 07:50:50 2006

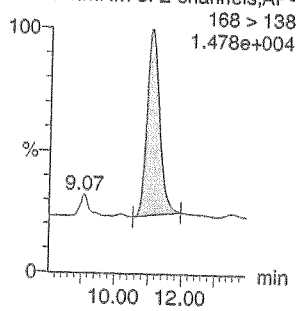
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0209050a
Date: 10-Feb-2006
Time: 16:37:56
ID: 1201026411 | ESHL | 501113 | [illegible] | 155265002 [illegible] | 2 |
Vial: 1:5,A

MM 2/13/06

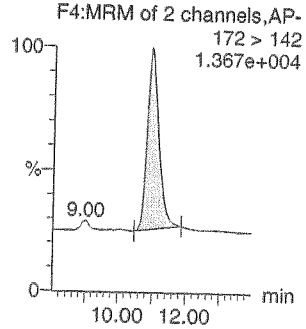
135-Trinitrobenzene
F3:MRM of 1 channel,AP-
213 > 183
4.663e+004



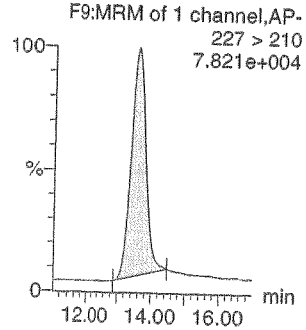
13-Dinitrobenzene
F4:MRM of 2 channels,AP-
168 > 138
1.478e+004



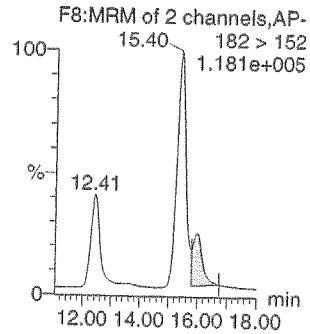
13-Dinitrobenzene-d4
F4:MRM of 2 channels,AP-
172 > 142
1.367e+004



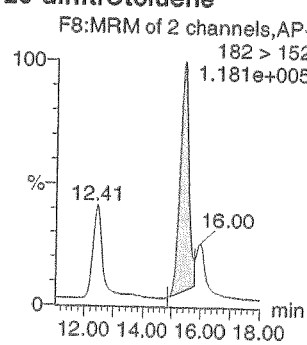
246-Trinitrotoluene
F9:MRM of 1 channel,AP-
227 > 210
7.821e+004



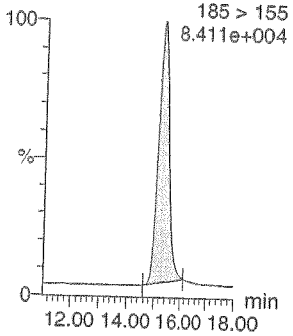
24-dinitrotoluene
F8:MRM of 2 channels,AP-
15.40
182 > 152
1.181e+005



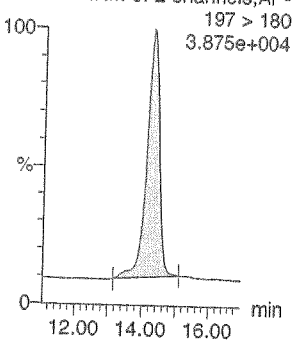
26-dinitrotoluene
F8:MRM of 2 channels,AP-
182 > 152
1.181e+005



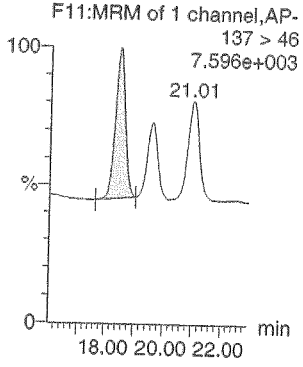
26-dinitrotoluene-d3
F8:MRM of 2 channels,AP-
185 > 155
8.411e+004



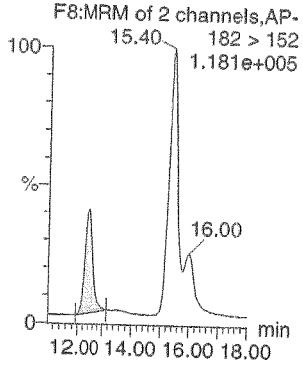
2-Amino-46-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 180
3.875e+004



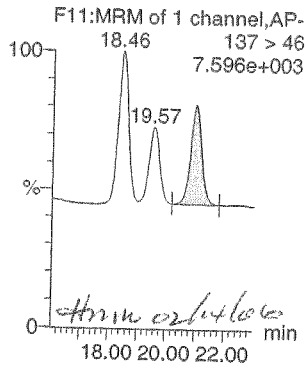
2-Nitrotoluene
F11:MRM of 1 channel,AP-
137 > 46
7.596e+003



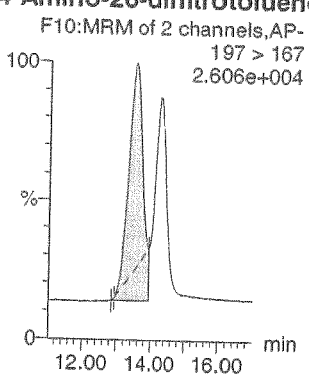
34-dinitrotoluene
F8:MRM of 2 channels,AP-
15.40
182 > 152
1.181e+005



3-Nitrotoluene
F11:MRM of 1 channel,AP-
18.46
137 > 46
7.596e+003



4-Amino-26-dinitrotoluene
F10:MRM of 2 channels,AP-
197 > 167
2.606e+004



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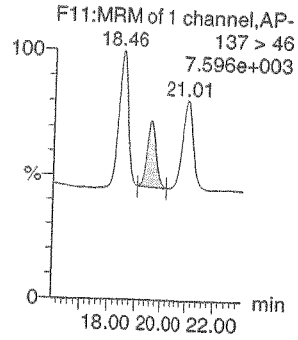
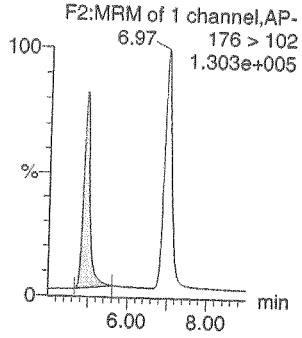
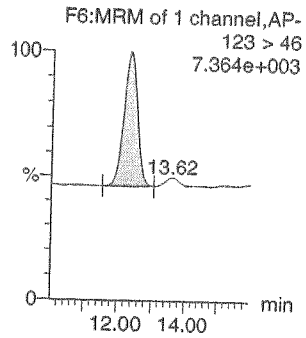
4-Nitrotoluene



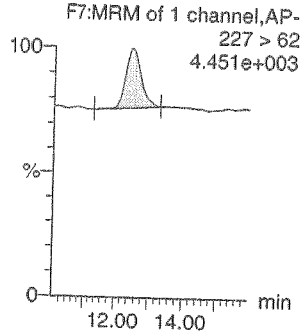
HMX



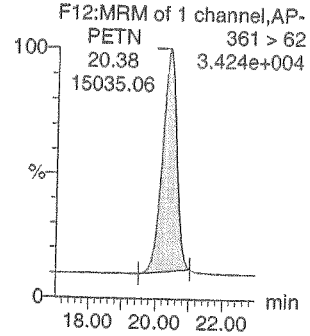
Nitrobenzene



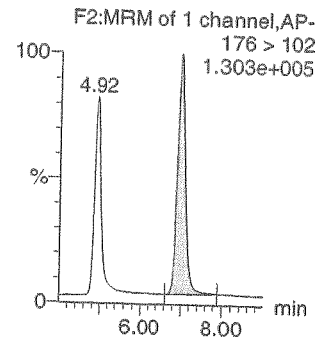
Nitroglycerin



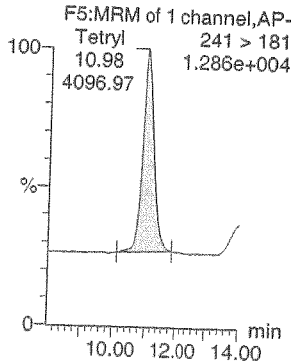
PETN



RDX



Tetryl



905

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Dataset: C:\MASSLYNX\New_Exp.PRO\020906expA2.qld, Time: Mon Feb 13 07:50:50 2006

ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	Conc.	%Rec	%Dev	S/N
1201026411	HMX	176 > 102	4.92	20475.643	4077.590	20475.643	2510.753	bb		7:63	588.9723	117.8	17.8	2104.2
1201026411	RDX	176 > 102	6.97	27901.938	4077.590	27901.938	3421.376	bb		6:63	511.9975	102.4	2.4	2551.9
1201026411	135-Trinitrobenzene	213 > 183	9.32	15662.493	4077.590	15662.493	1920.558	bb		6:11	471.9544	94.4	-5.6	3908.2
1201026411	13-Dinitrobenzene-d4	172 > 142	10.93	4077.590		4077.590	4077.590	bb			614.4234	122.9	22.9	456.8
1201026411	13-Dinitrobenzene	168 > 138	11.05	5027.725	4077.590	5027.725	616.507	bb			472.2566	94.5	-5.5	472.6
1201026411	Tetryl	241 > 181	10.98	4096.966	4077.590	4096.966	502.376	bb			328.4278	65.7	-34.3	285.8
1201026411	Nitrobenzene	123 > 46	12.32	1854.323	4077.590	1854.323	227.380	bb			469.8046	94.0	-6.0	148.9
1201026411	Nitroglycerin	227 > 62	12.49	525.840	4077.590	525.840	64.479	bb			492.4992	98.5	-1.5	45.3
1201026411	4-Amino-26-dinitrotoluene	197 > 167	13.51	11190.468	35253.863	11190.468	158.713	MM	13-Feb-06	07:49:29	532.7363	106.5	6.5	770.4
1201026411	2-Amino-46-dinitrotoluene	197 > 180	14.27	14951.706	35253.863	14951.706	212.058	bb			567.4672	113.5	13.5	397.3
1201026411	246-Trinitrotoluene	227 > 210	13.59	36040.590	35253.863	36040.590	511.158	bb			537.2060	107.4	7.4	1763.9
1201026411	34-dinitrotoluene	182 > 152	12.41	16088.313	35253.863	16088.313	228.178	bb		3:63	280.1407	112.1	12.1	469.3
1201026411	26-dinitrotoluene	182 > 152	15.40	37883.023	35253.863	37883.023	537.289	bd			499.0747	99.8	-0.2	1164.7
1201026411	24-dinitrotoluene	182 > 152	16.00	9916.979	35253.863	9916.979	140.651	db			531.3456	106.3	6.3	264.8
1201026411	26-dinitrotoluene-d3	185 > 155	15.28	35253.863		35253.863	35253.863	bb			582.2865	116.5	16.5	4305.0
1201026411	2-Nitrotoluene	137 > 46	18.46	1659.187	35253.863	1659.187	23.532	bb			472.0569	94.4	-5.6	557.3
1201026411	4-Nitrotoluene	137 > 46	19.57	861.693	35253.863	861.693	12.221	bb			509.7201	101.9	1.9	278.3
1201026411	3-Nitrotoluene	137 > 46	21.01	1219.191	35253.863	1219.191	17.292	bb			460.4933	92.1	-7.9	365.4
1201026411	PETN	361 > 62	20.38	15035.056	35253.863	15035.056	213.240	bb			544.5335	108.9	8.9	10032.9

HNM 02/14/06

MM 2/13/06

906

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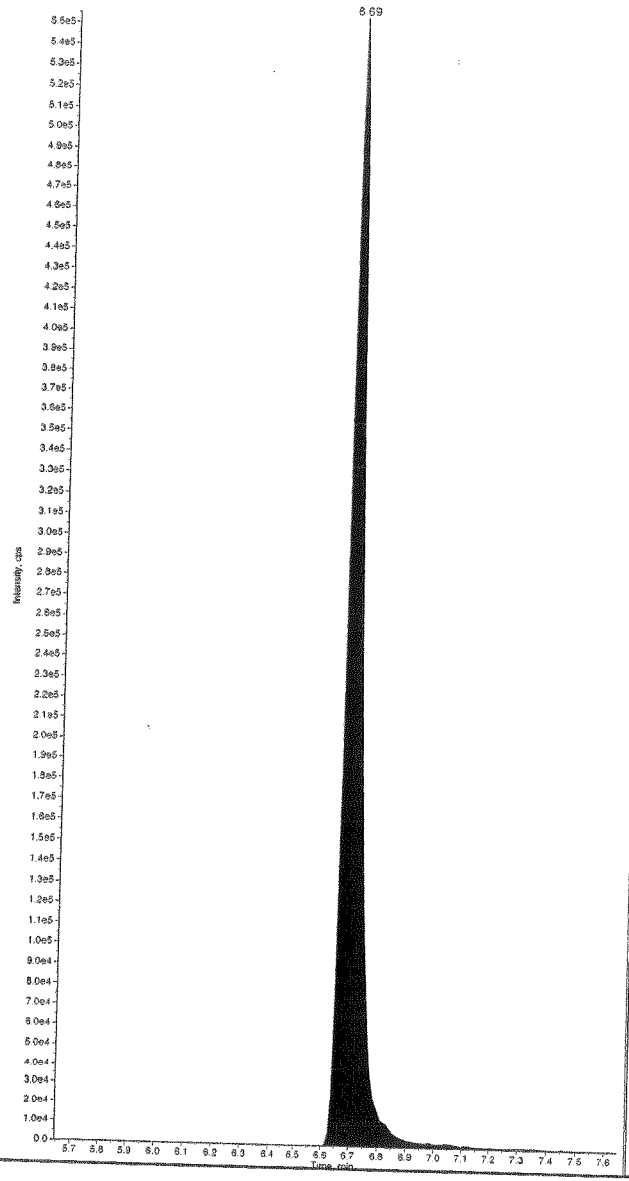
Before LRS 2/13/06

Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

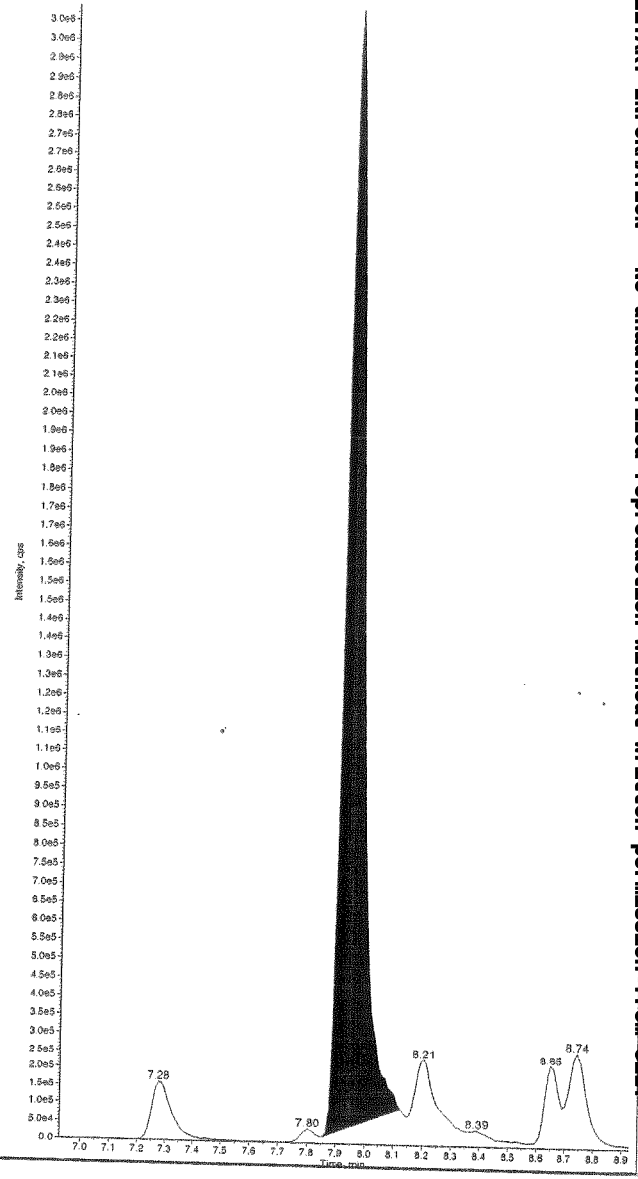
Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	492.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.69	min
Area:	2.19e+006	counts
Height:	5.55e+005	cps
Start Time:	6.55	min
End Time:	7.23	min



907

Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	443.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.58e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	7.94	min
Area:	1.37e+007	counts
Height:	3.00e+006	cps
Start Time:	7.85	min
End Time:	8.12	min



Anne 02/14/06

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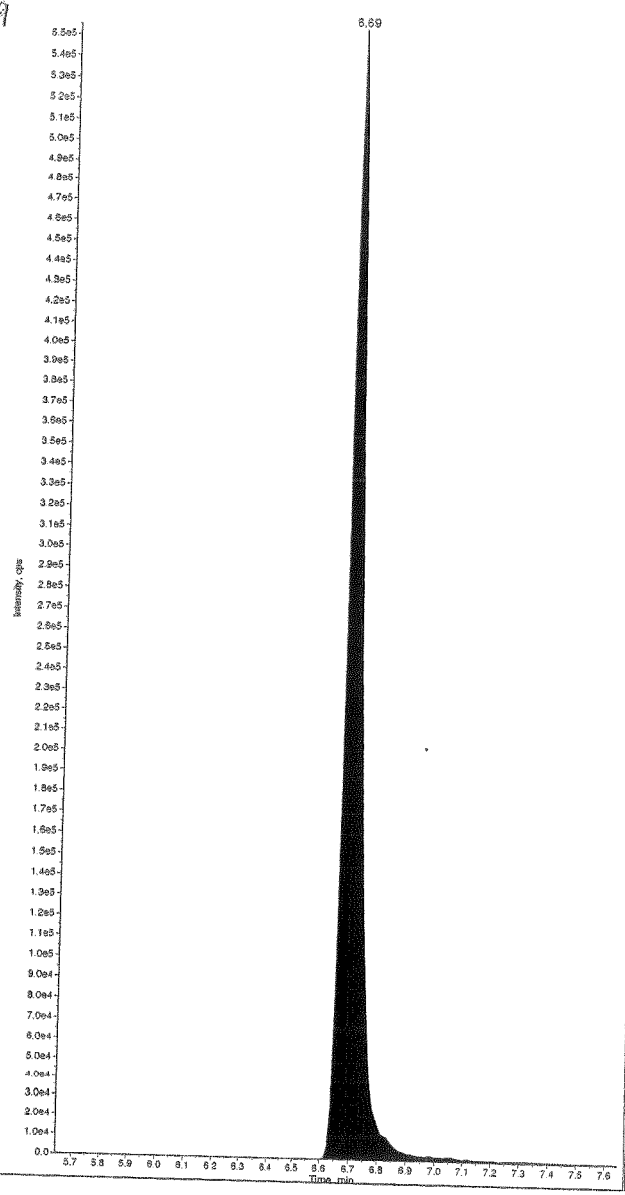
KRS 2/13/06

Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	492.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	2.13e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	6.65	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	6.69	min
Area:	2.19e+006	counts
Height:	5.55e+005	cps
Start Time:	6.55	min
End Time:	7.23	min

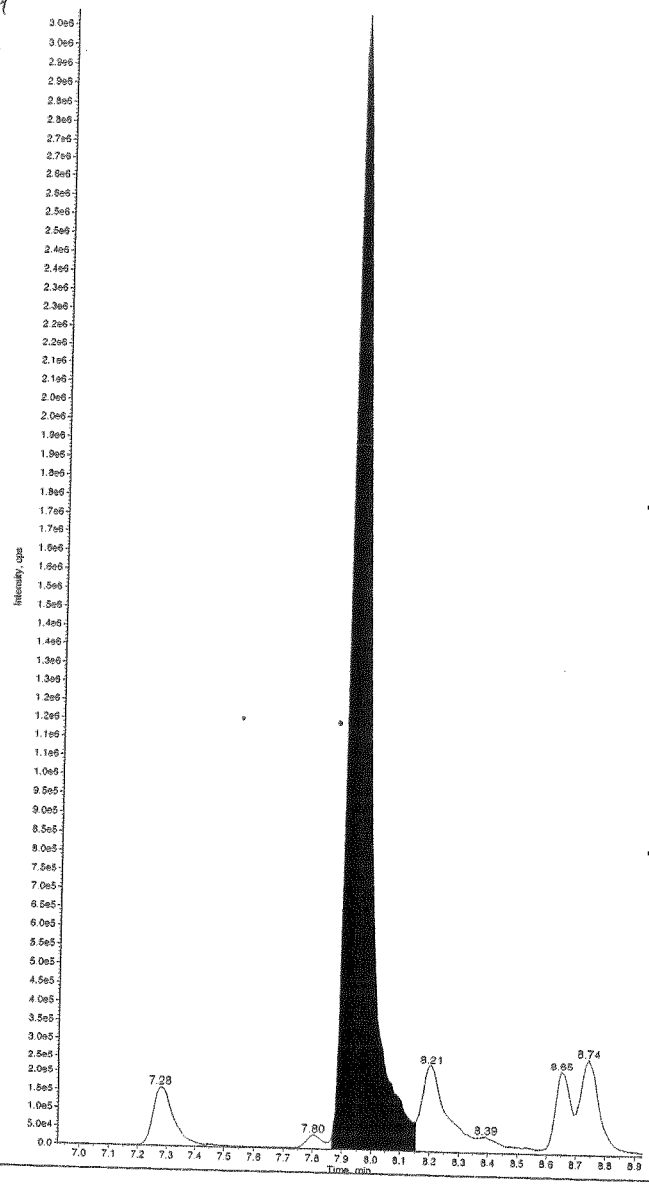
6.39



Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.1 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	481.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	Yes	
RT Window:	30.0	sec
Expected RT:	7.93	min
Use Relative RT:	No	
Int. Type:	Manual	
Retention Time:	7.94	min
Area:	1.48e+007	counts
Height:	3.04e+006	cps
Start Time:	7.86	min
End Time:	8.15	min

6.24



After

Hmm 02/14/06

806

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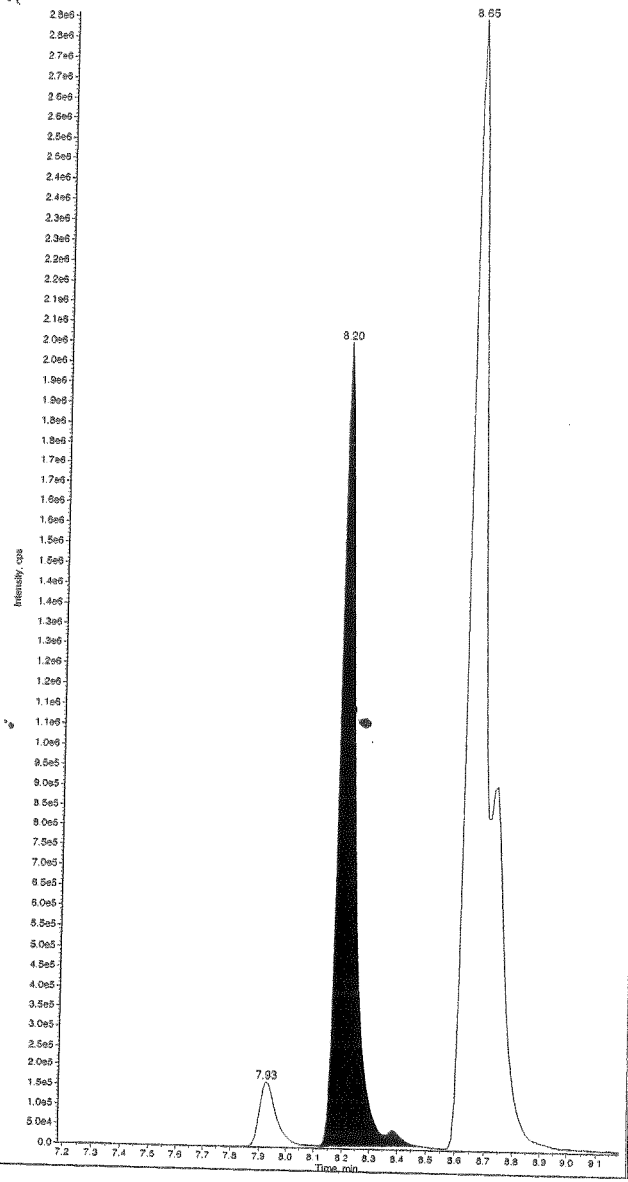
LRS 2/13/06

Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212LF" Annotation: ""

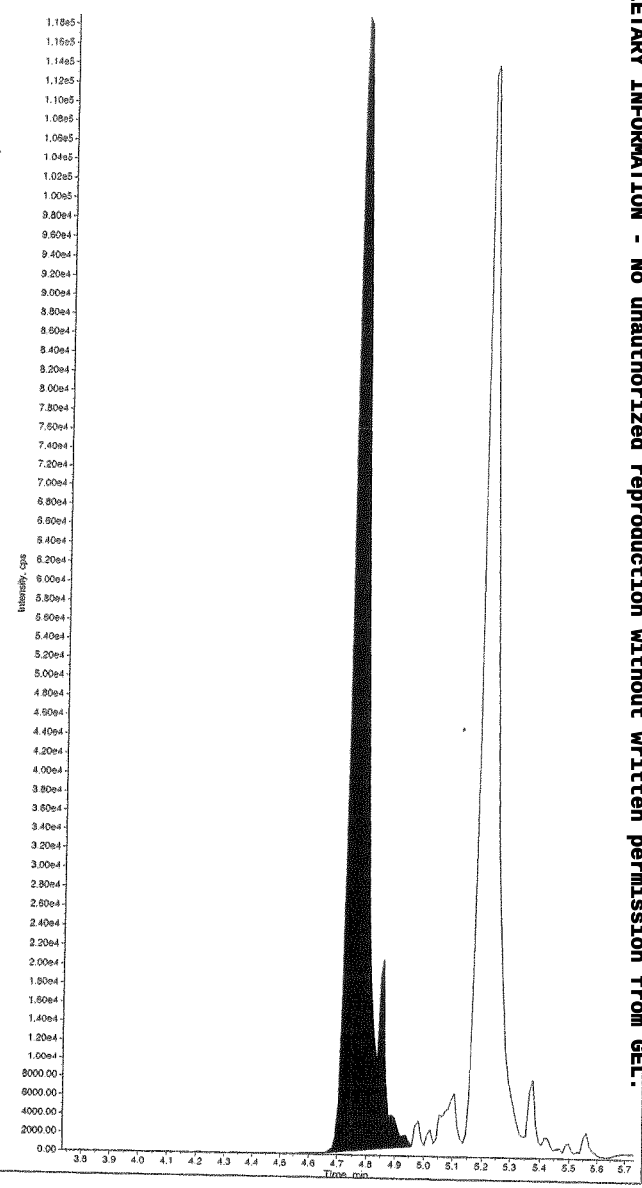
3.24

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	250.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	1460.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	8.19	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	8.20	min
Area:	8.23e+006	counts
Height:	2.00e+006	cps
Start Time:	8.11	min
End Time:	8.47	min



Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	399.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	935.00	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	4.73	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	4.75	min
Area:	5.12e+005	counts
Height:	1.18e+005	cps
Start Time:	4.65	min
End Time:	4.96	min



AHM 02/14/06

606

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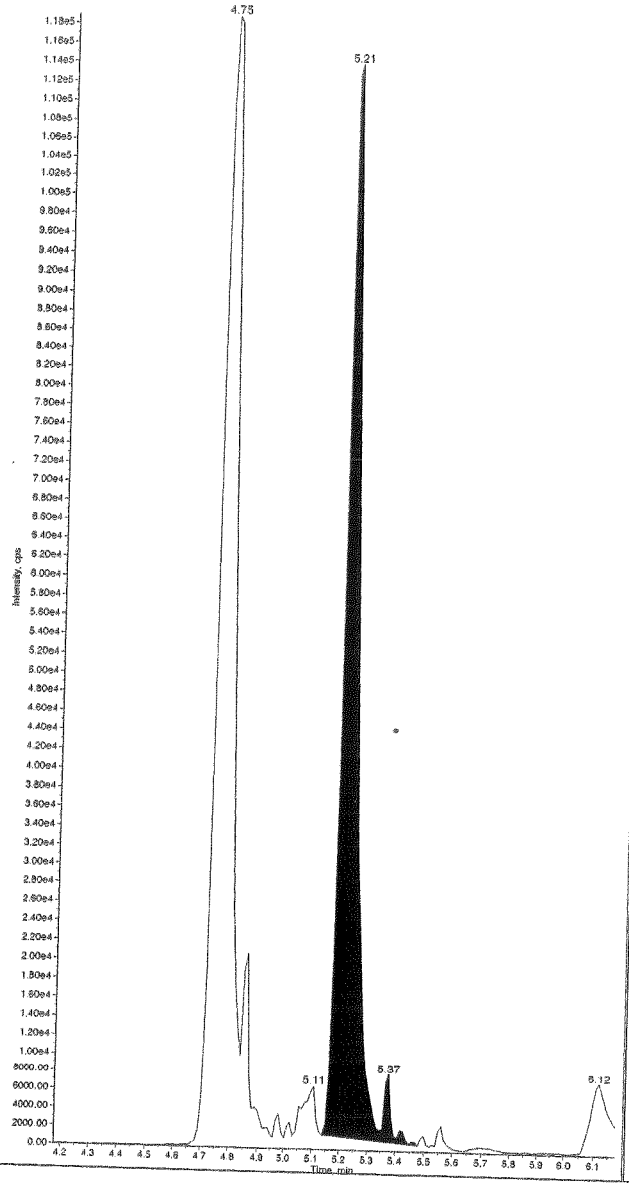
LXS 2/13/06

Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212LF" Annotation: ""

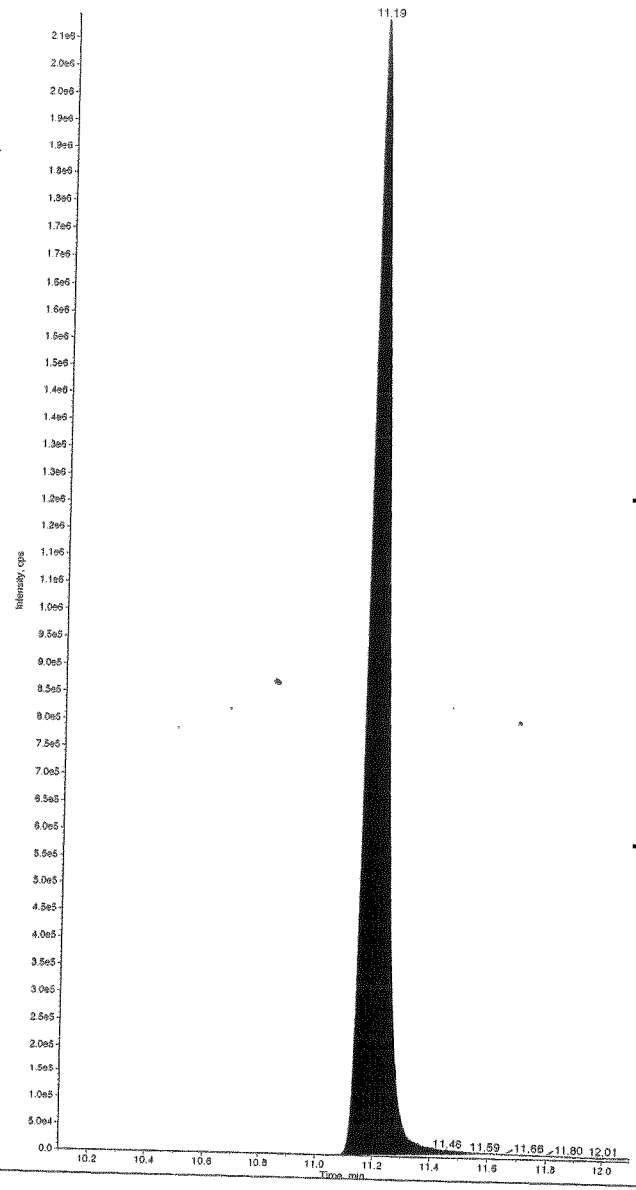
Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	452.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	637.50	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	5.18	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	5.21	min
Area:	4.37e+005	counts
Height:	1.13e+005	cps
Start Time:	5.14	min
End Time:	5.48	min



910

Sample Name: "1201026411" Sample ID: "501113|2|LXS1" File: "EXS0209060.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.2/91.0 amu"
Comment: "LCX83212LF" Annotation: ""

Sample Index:	1	
Sample Type:	Unknown	
Concentration:	N/A	
Calculated Conc:	209.	ng/mL
Acq. Date:	02/10/2006	
Acq. Time:	04:24:04 PM	
Modified:	No	
Proc. Algorithm:	IntelliQuan - IQA	
Min. Peak Height:	3.70e4	cps
Min. Peak Width:	0.00	sec
Smoothing Width:	3	points
RT Window:	30.0	sec
Expected RT:	11.1	min
Use Relative RT:	No	
Int. Type:	Valley	
Retention Time:	11.2	min
Area:	1.00e+007	counts
Height:	2.09e+006	cps
Start Time:	11.1	min
End Time:	11.6	min



HMC 02/14/06

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General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 290574
Revision No.: 4

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr. 10-FEB-06	**Division:** Federal	**Quality Criteria:** Specifications	**Type:** Process
Instrument Type: LC-MS/MS	**Test / Method:** SW846 3535/8321A Modified	**Matrix Type:** Liquid	**Client Code:** ESHL
Batch ID: 498841	**Sample Numbers:** See Below		

Potentially affected work order(s)(SDG): 154614,154721,154759,154760

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	**NRG Disposition:**
1. The LCS failed recovery limits for tris(o-cresyl) phosphate at 19.2% and for 2,4-Diamino-6-nitrotoluene at 46%. The recovery limits are 50-150%. 2. The MS failed recovery for tris(o-cresyl)phosphate at 41.4%; the recovery limits are 50-150%. The MSD recovered TATB at 155%. The limits are 50-150%. 3. Sample 154614004 failed surrogate recovery. It was sent to re-extraction out of holding. The re-extracted sample passed surrogate recovery.	1. & 2. Due to the lack of data points to initiate an SPC study, the primary limits were applied. The client has accepted the marginal failures contigent upon an SPC study being generated. 3. Both sets of data are reported.

Originator's Name:
Lynne Sigmon 10-FEB-06

Data Validator/Group Leader:
Herbert Maier 13-FEB-06

Quality Review:

Director:

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General Engineering Laboratories
Form GEL-NCR
Rev. 06/05

NCR Report No.: 290814
Revision No.: 2

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
13-FEB-06	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LC-MS/MS	SW846 3535/8321A Modified	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
501113	See Below		

Potentially affected work order(s)(SDG): 154614,155264,155265,155319

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for LCS/LCSD

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. The LCS failed recovery for tris(o-cresyl) phosphate at 28.6%. The SPC limits are 50-150%. 2. The MS failed recovery for tris(o-cresyl) phosphate at 36.0%. The SPC limits are 50-150%. 3. The MSD failed recovery for tris(o-cresyl) phosphate at 41.8%. The SPC limits are 50-150%. 4. The MS/MSD failed RPD value for HMX at 32.5%. The limit is 30%. 5. The internal standard responses were outside of the acceptance criteria for sample 155265002. 6. Sample 154614004 failed surrogate recovery. It was sent to re-extraction out of holding in this batch. The re-extracted sample passed surrogate recovery.	1., 2. & 3. Due to the lack of data points to initiate an SPC study, the primary explosive limits were applied. The client has accepted the marginal failures contingent upon an SPC study being generated. 4. HMX was not detected in the parent sample. The data was considered unaffected and was reported. 5. The sample was reanalyzed to confirm that the failures were the result of matrix interference. The MS and MSD had biased high internal standard recoveries. 6. Both sets of data are reported.

Originator's Name:
Lynne Sigmon 13-FEB-06

Data Validator/Group Leader:
Herbert Maier 13-FEB-06

Quality Review:

Director:

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (ESHL)
SDG 154614

Method/Analysis Information

Analytical Batch:	498294, 505651, 498167, 498180
Prep Batch:	498293, 498166, 498179
Standard Operating Procedures:	GL-MA-E-010 REV# 16, GL-GC-E-107 REV# 1, GL-MA-E-013 REV# 13, GL-MA-E-014 REV# 10, GL-MA-E-006 REV# 9
Analytical Method:	EPA 245.1/245.2, SM 2340 B, SW846 6010B, SW846 6020
Prep Method:	EPA 245.1/245.2, SW846 3005A

Sample Analysis

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614003	GU06010G8WT01
154614004	GU0601G14R101
154614008	GF06010GMC401
154614009	GU06010GMC401
154614010	GU06010GMC401-FB
1201019554	Method Blank (MB) **ICP**
1201019555	Laboratory Control Sample (LCS)
1201019558	154614001(GF06010G8WT01L) Serial Dilution (SD)
1201019556	154614001(GF06010G8WT01D) Sample Duplicate (DUP)
1201019557	154614001(GF06010G8WT01S) Matrix Spike (MS)
1201019595	Method Blank (MB) **ICP-MS**
1201019596	Laboratory Control Sample (LCS)
1201019599	154614001(GF06010G8WT01L) Serial Dilution (SD)
1201019597	154614001(GF06010G8WT01D) Sample Duplicate (DUP)
1201019598	154614001(GF06010G8WT01S) Matrix Spike (MS)

1201019832	Method Blank (MB) **CVAA**
1201019833	Laboratory Control Sample (LCS)
1201019836	154614001(GF06010G8WT01L) Serial Dilution (SD)
1201019834	154614001(GF06010G8WT01D) Sample Duplicate (DUP)
1201019835	154614001(GF06010G8WT01S) Matrix Spike (MS)

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The ICP analysis was performed on a Thermo Jarrell Ash 61E Trace axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with a Burgener nebulizer, cyclonic spray chamber, and yttrium internal standard. Operating conditions for the Trace ICP are set at a power level of 950 watts. The instrument has a peristaltic pump flow rate of 140 RPM (2.0 mL/min sample uptake rate), argon gas flows of 15 L/min and 0.5 L/min for the torch and auxiliary gases, and a pressure setting of 26 PSI for the nebulizer.

The ICP-MS analysis was performed on a Perkin Elmer ICP-MS ELAN 9000. The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, and tantalum were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 3607 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Mercury analysis was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 254 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80mL/min.

The Hardness analysis was performed on a No instrument-calculation method.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

ICSA/ICSAB statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG: 154614001 (GF06010G8WT01) for CVAA, ICP and ICP-MS.

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL for CVAA, 50X the IDL for ICP, and 100X the IDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date

and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in soil samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Nonconformance Documentation
Nonconformance reports (NCRs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not required for this SDG.

Additional Comments
The high range standard was diluted at 2x dilution in order to used the linear range of 100000ppb for sodium.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Kristan M. Murray **Date:** 2-23-06

Sample Data Summary

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614001 **CLIENT ID:** GF06010G8WT01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	1	MER536	013106W1–2
7429–90–5	Aluminum	68	ug/L	U		P	68	1	TRACE2	013106–1
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7440–38–2	Arsenic	6	ug/L	U		P	6	1	TRACE2	013106–1
7440–39–3	Barium	6.1	ug/L			P	1	1	TRACE2	013106–1
7440–41–7	Beryllium	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–42–8	Boron	12.5	ug/L	J		P	10	1	TRACE2	013106–1
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	1	ICPMS5	060218
7440–70–2	Calcium	11500	ug/L			P	36	1	TRACE2	013106–1
7440–47–3	Chromium	4.7	ug/L	J		P	1	1	TRACE2	013106–1
7440–48–4	Cobalt	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–50–8	Copper	3	ug/L	U		P	3	1	TRACE2	013106–1
7439–89–6	Iron	40.4	ug/L	J		P	18	1	TRACE2	013106–1
7439–92–1	Lead	2.6	ug/L			MS	0.5	1	ICPMS5	060218
7439–95–4	Magnesium	4000	ug/L			P	85	1	TRACE2	013106–1
7439–96–5	Manganese	2	ug/L	U		P	2	1	TRACE2	013106–1
7439–98–7	Molybdenum	2	ug/L	U		P	2	1	TRACE2	013106–1
7440–02–0	Nickel	1.1	ug/L	J		MS	0.5	1	ICPMS5	060218
7440–09–7	Potassium	1520	ug/L			P	50	1	TRACE2	013106–1
7782–49–2	Selenium	2.5	ug/L	U		MS	2.5	1	ICPMS5	060218
7631–86–9	Silica	63.9	mg/L			P	0.032	1	TRACE2	013106–1
7440–22–4	Silver	0.20	ug/L	U		MS	0.2	1	ICPMS5	060218
7440–23–5	Sodium	10200	ug/L			P	45	1	TRACE2	013106–1
7440–24–6	Strontium	51.7	ug/L			P	1	1	TRACE2	013106–1
7440–28–0	Thallium	0.430	ug/L	J		MS	0.4	1	ICPMS5	060218
7440–31–5	Tin	2.5	ug/L	U		P	2.5	1	TRACE2	013106–1

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614001 **CLIENT ID:** GF06010G8WT01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440–61–1	Uranium	0.550	ug/L			MS	0.05	1	ICPMS5	060218
7440–62–2	Vanadium	4.2	ug/L	J		P	1	1	TRACE2	013106–1
7440–66–6	Zinc	392	ug/L			P	2	1	TRACE2	013106–1
	Hardness as CaCO3	45.2	mg/L				0.085	1	CALC001	

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614002 **CLIENT ID:** GF0601G14R101

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	1	MER536	013106W1–2
7429–90–5	Aluminum	68	ug/L	U		P	68	1	TRACE2	013106–1
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7440–38–2	Arsenic	6	ug/L	U		P	6	1	TRACE2	013106–1
7440–39–3	Barium	47.5	ug/L			P	1	1	TRACE2	013106–1
7440–41–7	Beryllium	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–42–8	Boron	12.6	ug/L	J		P	10	1	TRACE2	013106–1
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	1	ICPMS5	060218
7440–70–2	Calcium	11300	ug/L			P	36	1	TRACE2	013106–1
7440–47–3	Chromium	2.4	ug/L	J		P	1	1	TRACE2	013106–1
7440–48–4	Cobalt	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–50–8	Copper	3	ug/L	U		P	3	1	TRACE2	013106–1
7439–89–6	Iron	57.9	ug/L	J		P	18	1	TRACE2	013106–1
7439–92–1	Lead	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7439–95–4	Magnesium	3360	ug/L			P	85	1	TRACE2	013106–1
7439–96–5	Manganese	35	ug/L			P	2	1	TRACE2	013106–1
7439–98–7	Molybdenum	2	ug/L	U		P	2	1	TRACE2	013106–1
7440–02–0	Nickel	0.590	ug/L	J		MS	0.5	1	ICPMS5	060218
7440–09–7	Potassium	2000	ug/L			P	50	1	TRACE2	013106–1
7782–49–2	Selenium	2.5	ug/L	U		MS	2.5	1	ICPMS5	060218
7631–86–9	Silica	79.1	mg/L			P	0.032	1	TRACE2	013106–1
7440–22–4	Silver	0.20	ug/L	U		MS	0.2	1	ICPMS5	060218
7440–23–5	Sodium	10700	ug/L			P	45	1	TRACE2	013106–1
7440–24–6	Strontium	57.2	ug/L			P	1	1	TRACE2	013106–1
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	1	ICPMS5	060218
7440–31–5	Tin	2.5	ug/L	U		P	2.5	1	TRACE2	013106–1

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614002 **CLIENT ID:** GF0601G14R101

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440–61–1	Uranium	0.650	ug/L			MS	0.05	1	ICPMS5	060218
7440–62–2	Vanadium	5.3	ug/L			P	1	1	TRACE2	013106–1
7440–66–6	Zinc	4	ug/L	J		P	2	1	TRACE2	013106–1
	Hardness as CaCO3	42.2	mg/L				0.085	1	CALC001	

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614003 **CLIENT ID:** GU06010G8WT01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	1	MER536	013106W1–2
7429–90–5	Aluminum	68	ug/L	U		P	68	1	TRACE2	013106–1
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7440–38–2	Arsenic	6	ug/L	U		P	6	1	TRACE2	013106–1
7440–39–3	Barium	6.2	ug/L			P	1	1	TRACE2	013106–1
7440–41–7	Beryllium	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–42–8	Boron	12.1	ug/L	J		P	10	1	TRACE2	013106–1
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	1	ICPMS5	060218
7440–70–2	Calcium	11400	ug/L			P	36	1	TRACE2	013106–1
7440–47–3	Chromium	5.1	ug/L			P	1	1	TRACE2	013106–1
7440–48–4	Cobalt	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–50–8	Copper	3	ug/L	U		P	3	1	TRACE2	013106–1
7439–89–6	Iron	102	ug/L			P	18	1	TRACE2	013106–1
7439–92–1	Lead	3.6	ug/L			MS	0.5	1	ICPMS5	060218
7439–95–4	Magnesium	3950	ug/L			P	85	1	TRACE2	013106–1
7439–96–5	Manganese	2	ug/L	U		P	2	1	TRACE2	013106–1
7439–98–7	Molybdenum	2	ug/L	U		P	2	1	TRACE2	013106–1
7440–02–0	Nickel	1.2	ug/L	J		MS	0.5	1	ICPMS5	060218
7440–09–7	Potassium	1510	ug/L			P	50	1	TRACE2	013106–1
7782–49–2	Selenium	2.5	ug/L	U		MS	2.5	1	ICPMS5	060218
7631–86–9	Silica	63.3	mg/L			P	0.032	1	TRACE2	013106–1
7440–22–4	Silver	0.20	ug/L	U		MS	0.2	1	ICPMS5	060218
7440–23–5	Sodium	10000	ug/L			P	45	1	TRACE2	013106–1
7440–24–6	Strontium	50.8	ug/L			P	1	1	TRACE2	013106–1
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	1	ICPMS5	060218
7440–31–5	Tin	2.5	ug/L	U		P	2.5	1	TRACE2	013106–1

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614003 **CLIENT ID:** GU06010G8WT01

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440–61–1	Uranium	0.590	ug/L			MS	0.05	1	ICPMS5	060218
7440–62–2	Vanadium	4.8	ug/L	J		P	1	1	TRACE2	013106–1
7440–66–6	Zinc	397	ug/L			P	2	1	TRACE2	013106–1
	Hardness as CaCO3	44.6	mg/L				0.085	1	CALC001	

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614004 **CLIENT ID:** GU0601G14R101

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	1	MER536	013106W1–2
7429–90–5	Aluminum	68	ug/L	U		P	68	1	TRACE2	013106–1
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7440–38–2	Arsenic	6	ug/L	U		P	6	1	TRACE2	013106–1
7440–39–3	Barium	48.3	ug/L			P	1	1	TRACE2	013106–1
7440–41–7	Beryllium	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–42–8	Boron	11.3	ug/L	J		P	10	1	TRACE2	013106–1
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	1	ICPMS5	060218
7440–70–2	Calcium	10900	ug/L			P	36	1	TRACE2	013106–1
7440–47–3	Chromium	2.5	ug/L	J		P	1	1	TRACE2	013106–1
7440–48–4	Cobalt	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–50–8	Copper	3	ug/L	U		P	3	1	TRACE2	013106–1
7439–89–6	Iron	59.4	ug/L	J		P	18	1	TRACE2	013106–1
7439–92–1	Lead	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7439–95–4	Magnesium	3210	ug/L			P	85	1	TRACE2	013106–1
7439–96–5	Manganese	34	ug/L			P	2	1	TRACE2	013106–1
7439–98–7	Molybdenum	2	ug/L	U		P	2	1	TRACE2	013106–1
7440–02–0	Nickel	0.590	ug/L	J		MS	0.5	1	ICPMS5	060220–4
7440–09–7	Potassium	1950	ug/L			P	50	1	TRACE2	013106–1
7782–49–2	Selenium	2.5	ug/L	U		MS	2.5	1	ICPMS5	060218
7631–86–9	Silica	74.8	mg/L			P	0.032	1	TRACE2	013106–1
7440–22–4	Silver	0.20	ug/L	U		MS	0.2	1	ICPMS5	060218
7440–23–5	Sodium	10200	ug/L			P	45	1	TRACE2	013106–1
7440–24–6	Strontium	55.1	ug/L			P	1	1	TRACE2	013106–1
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	1	ICPMS5	060218
7440–31–5	Tin	2.5	ug/L	U		P	2.5	1	TRACE2	013106–1

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614004 **CLIENT ID:** GU0601G14R101

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440–61–1	Uranium	0.670	ug/L			MS	0.05	1	ICPMS5	060218
7440–62–2	Vanadium	5.1	ug/L			P	1	1	TRACE2	013106–1
7440–66–6	Zinc	4	ug/L	J		P	2	1	TRACE2	013106–1
	Hardness as CaCO3	40.4	mg/L				0.085	1	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614008 **CLIENT ID:** GF06010GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26-JAN-06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	1	MER536	013106W1-2
7429-90-5	Aluminum	68	ug/L	U		P	68	1	TRACE2	013106-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7440-38-2	Arsenic	6	ug/L	U		P	6	1	TRACE2	013106-1
7440-39-3	Barium	16.1	ug/L			P	1	1	TRACE2	013106-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-42-8	Boron	28.2	ug/L	J		P	10	1	TRACE2	013106-1
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	1	ICPMS5	060218
7440-70-2	Calcium	34900	ug/L			P	36	1	TRACE2	013106-1
7440-47-3	Chromium	22.8	ug/L			P	1	1	TRACE2	013106-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-50-8	Copper	4.2	ug/L	J		P	3	1	TRACE2	013106-1
7439-89-6	Iron	18	ug/L	U		P	18	1	TRACE2	013106-1
7439-92-1	Lead	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7439-95-4	Magnesium	5540	ug/L			P	85	1	TRACE2	013106-1
7439-96-5	Manganese	5.6	ug/L	J		P	2	1	TRACE2	013106-1
7439-98-7	Molybdenum	2	ug/L	U		P	2	1	TRACE2	013106-1
7440-02-0	Nickel	4.8	ug/L			MS	0.5	1	ICPMS5	060220-4
7440-09-7	Potassium	796	ug/L			P	50	1	TRACE2	013106-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	1	ICPMS5	060218
7631-86-9	Silica	71.4	mg/L			P	0.032	1	TRACE2	013106-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	1	ICPMS5	060218
7440-23-5	Sodium	22200	ug/L			P	45	1	TRACE2	013106-1
7440-24-6	Strontium	169	ug/L			P	1	1	TRACE2	013106-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	1	ICPMS5	060218
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	TRACE2	013106-1

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614008 **CLIENT ID:** GF06010GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440–61–1	Uranium	0.075	ug/L	J		MS	0.05	1	ICPMS5	060218
7440–62–2	Vanadium	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–66–6	Zinc	24.7	ug/L			P	2	1	TRACE2	013106–1
	Hardness as CaCO3	110	mg/L				0.085	1	CALC001	

Comments:

METALS
–1–
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614009 **CLIENT ID:** GU06010GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26–JAN–06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7439–97–6	Mercury	0.050	ug/L	U		AV	0.05	1	MER536	013106W1–2
7429–90–5	Aluminum	68	ug/L	U		P	68	1	TRACE2	013106–1
7440–36–0	Antimony	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7440–38–2	Arsenic	6	ug/L	U		P	6	1	TRACE2	013106–1
7440–39–3	Barium	16.9	ug/L			P	1	1	TRACE2	013106–1
7440–41–7	Beryllium	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–42–8	Boron	27.8	ug/L	J		P	10	1	TRACE2	013106–1
7440–43–9	Cadmium	0.10	ug/L	U		MS	0.1	1	ICPMS5	060218
7440–70–2	Calcium	32900	ug/L			P	36	1	TRACE2	013106–1
7440–47–3	Chromium	47.1	ug/L			P	1	1	TRACE2	013106–1
7440–48–4	Cobalt	1	ug/L	U		P	1	1	TRACE2	013106–1
7440–50–8	Copper	28.3	ug/L			P	3	1	TRACE2	013106–1
7439–89–6	Iron	253	ug/L			P	18	1	TRACE2	013106–1
7439–92–1	Lead	1.2	ug/L	J		MS	0.5	1	ICPMS5	060218
7439–95–4	Magnesium	5220	ug/L			P	85	1	TRACE2	013106–1
7439–96–5	Manganese	6.7	ug/L	J		P	2	1	TRACE2	013106–1
7439–98–7	Molybdenum	2	ug/L	U		P	2	1	TRACE2	013106–1
7440–02–0	Nickel	16.5	ug/L			MS	0.5	1	ICPMS5	060220–4
7440–09–7	Potassium	739	ug/L			P	50	1	TRACE2	013106–1
7782–49–2	Selenium	2.5	ug/L	U		MS	2.5	1	ICPMS5	060218
7631–86–9	Silica	68.5	mg/L			P	0.032	1	TRACE2	013106–1
7440–22–4	Silver	0.20	ug/L	U		MS	0.2	1	ICPMS5	060218
7440–23–5	Sodium	21100	ug/L			P	45	1	TRACE2	013106–1
7440–24–6	Strontium	160	ug/L			P	1	1	TRACE2	013106–1
7440–28–0	Thallium	0.40	ug/L	U		MS	0.4	1	ICPMS5	060218
7440–31–5	Tin	2.5	ug/L	U		P	2.5	1	TRACE2	013106–1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614009 **CLIENT ID:** GU06010GMC401

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26-JAN-06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440-61-1	Uranium	0.094	ug/L	J		MS	0.05	1	ICPMS5	060218
7440-62-2	Vanadium	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-66-6	Zinc	38.4	ug/L			P	2	1	TRACE2	013106-1
	Hardness as CaCO3	104	mg/L				0.085	1	CALC001	

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614010 **CLIENT ID:** GU06010GMC401-FB

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26-JAN-06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7439-97-6	Mercury	0.050	ug/L	U		AV	0.05	1	MER536	013106W1-2
7429-90-5	Aluminum	68	ug/L	U		P	68	1	TRACE2	013106-1
7440-36-0	Antimony	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7440-38-2	Arsenic	6	ug/L	U		P	6	1	TRACE2	013106-1
7440-39-3	Barium	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-42-8	Boron	10	ug/L	U		P	10	1	TRACE2	013106-1
7440-43-9	Cadmium	0.10	ug/L	U		MS	0.1	1	ICPMS5	060218
7440-70-2	Calcium	36	ug/L	U		P	36	1	TRACE2	013106-1
7440-47-3	Chromium	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-50-8	Copper	3	ug/L	U		P	3	1	TRACE2	013106-1
7439-89-6	Iron	18	ug/L	U		P	18	1	TRACE2	013106-1
7439-92-1	Lead	0.50	ug/L	U		MS	0.5	1	ICPMS5	060218
7439-95-4	Magnesium	85	ug/L	U		P	85	1	TRACE2	013106-1
7439-96-5	Manganese	2	ug/L	U		P	2	1	TRACE2	013106-1
7439-98-7	Molybdenum	2	ug/L	U		P	2	1	TRACE2	013106-1
7440-02-0	Nickel	0.640	ug/L	J		MS	0.5	1	ICPMS5	060218
7440-09-7	Potassium	50	ug/L	U		P	50	1	TRACE2	013106-1
7782-49-2	Selenium	2.5	ug/L	U		MS	2.5	1	ICPMS5	060218
7631-86-9	Silica	0.099	mg/L	J		P	0.032	1	TRACE2	013106-1
7440-22-4	Silver	0.20	ug/L	U		MS	0.2	1	ICPMS5	060218
7440-23-5	Sodium	83.9	ug/L	J		P	45	1	TRACE2	013106-1
7440-24-6	Strontium	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-28-0	Thallium	0.40	ug/L	U		MS	0.4	1	ICPMS5	060218
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	TRACE2	013106-1

Comments:

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 154614 **METHOD TYPE:** EPA

SAMPLE ID: 154614010 **CLIENT ID:** GU06010GMC401-FB

CONTRACT: ESHL00701

MATRIX: G **DATE RECEIVED** 26-JAN-06 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7440-61-1	Uranium	0.050	ug/L	U		MS	0.05	1	ICPMS5	060218
7440-62-2	Vanadium	1	ug/L	U		P	1	1	TRACE2	013106-1
7440-66-6	Zinc	2	ug/L	U		P	2	1	TRACE2	013106-1
	Hardness as CaCO3	0.085	mg/L	J			0.085	1	CALC001	

Comments:

Quality Control Summary

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Aluminum	5039.35	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Arsenic	515.23	ug/L	500	ug/L	103.1	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Barium	505.15	ug/L	500	ug/L	101	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Beryllium	248.68	ug/L	250	ug/L	99.5	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Boron	509.96	ug/L	500	ug/L	102	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Calcium	4951.91	ug/L	5000	ug/L	99	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Chromium	496.09	ug/L	500	ug/L	99.2	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Cobalt	494.22	ug/L	500	ug/L	98.8	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Copper	487.28	ug/L	500	ug/L	97.5	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Iron	5114.96	ug/L	5000	ug/L	102.3	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Magnesium	5016.26	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Manganese	508.73	ug/L	500	ug/L	101.8	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Molybdenum	530.19	ug/L	500	ug/L	106	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Potassium	2483.66	ug/L	2500	ug/L	99.4	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Silica	10831.03	ug/L	10700	ug/L	101.2	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Sodium	2488.33	ug/L	2500	ug/L	99.5	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Strontium	499.21	ug/L	500	ug/L	99.8	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Tin	515.73	ug/L	500	ug/L	103.2	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Vanadium	505.7	ug/L	500	ug/L	101.1	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Zinc	499.08	ug/L	500	ug/L	99.8	90.0 – 110.0	P	31–JAN–06 07:18	013106–1
	Mercury	5.07	ug/L	5	ug/L	101.4	90.0 – 110.0	AV	31–JAN–06 10:26	013106W1–2
	Antimony	51.81	ug/L	50	ug/L	103.6	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Cadmium	51.37	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Lead	52.94	ug/L	50	ug/L	105.9	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Nickel	52.17	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Selenium	51.52	ug/L	50	ug/L	103	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Silver	52.02	ug/L	50	ug/L	104	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Thallium	51.26	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Uranium	54.75	ug/L	50	ug/L	109.5	90.0 – 110.0	MS	18–FEB–06 16:24	060218–3
	Nickel	48.32	ug/L	50	ug/L	96.6	90.0 – 110.0	MS	20–FEB–06 10:45	060220–4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV01										
	Aluminum	5076.02	ug/L	5000	ug/L	101.5	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Arsenic	496.4	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Barium	505.21	ug/L	500	ug/L	101	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Beryllium	491.05	ug/L	500	ug/L	98.2	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Boron	505.74	ug/L	500	ug/L	101.2	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Calcium	5062.94	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Chromium	503.77	ug/L	500	ug/L	100.8	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Cobalt	493.27	ug/L	500	ug/L	98.7	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Copper	494.2	ug/L	500	ug/L	98.8	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Iron	5350.82	ug/L	5000	ug/L	107	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Magnesium	5158.3	ug/L	5000	ug/L	103.2	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Manganese	521.48	ug/L	500	ug/L	104.3	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Molybdenum	533.75	ug/L	500	ug/L	106.8	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Potassium	5168.46	ug/L	5000	ug/L	103.4	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Silica	5397.98	ug/L	5350	ug/L	100.9	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Sodium	10015.75	ug/L	10000	ug/L	100.2	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Strontium	490.56	ug/L	500	ug/L	98.1	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Tin	525.8	ug/L	500	ug/L	105.2	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Vanadium	519.27	ug/L	500	ug/L	103.9	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Zinc	516.65	ug/L	500	ug/L	103.3	90.0 – 110.0	P	31–JAN–06 08:02	013106–1
	Mercury	5.08	ug/L	5	ug/L	101.7	80.0 – 120.0	AV	31–JAN–06 10:32	013106W1–2
	Antimony	51.18	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Cadmium	50	ug/L	50	ug/L	100	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Lead	52.41	ug/L	50	ug/L	104.8	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Nickel	52.61	ug/L	50	ug/L	105.2	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Selenium	51.48	ug/L	50	ug/L	103	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Silver	50.54	ug/L	50	ug/L	101.1	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Thallium	51.64	ug/L	50	ug/L	103.3	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Uranium	54.82	ug/L	50	ug/L	109.6	90.0 – 110.0	MS	18–FEB–06 16:49	060218–3
	Nickel	49.07	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	20–FEB–06 10:53	060220–4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV02										
	Aluminum	5048.62	ug/L	5000	ug/L	101	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Arsenic	482.53	ug/L	500	ug/L	96.5	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Barium	504.22	ug/L	500	ug/L	100.8	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Beryllium	483.16	ug/L	500	ug/L	96.6	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Boron	492.54	ug/L	500	ug/L	98.5	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Calcium	5578.91	ug/L	5000	ug/L	111.6	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Chromium	500.3	ug/L	500	ug/L	100.1	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Cobalt	484.21	ug/L	500	ug/L	96.8	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Copper	484.94	ug/L	500	ug/L	97	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Iron	5675.11	ug/L	5000	ug/L	113.5	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Magnesium	5216.83	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Manganese	539.32	ug/L	500	ug/L	107.9	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Molybdenum	541.96	ug/L	500	ug/L	108.4	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Potassium	5393.65	ug/L	5000	ug/L	107.9	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Silica	5305.68	ug/L	5350	ug/L	99.2	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Sodium	10085.4	ug/L	10000	ug/L	100.9	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Strontium	479.02	ug/L	500	ug/L	95.8	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Tin	548.42	ug/L	500	ug/L	109.7	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Vanadium	532.36	ug/L	500	ug/L	106.5	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Zinc	548.39	ug/L	500	ug/L	109.7	90.0 – 110.0	P	31–JAN–06 09:05	013106–1
	Mercury	5.04	ug/L	5	ug/L	100.8	80.0 – 120.0	AV	31–JAN–06 10:56	013106W1–2
	Antimony	51.45	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Cadmium	50.42	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Lead	51.46	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Nickel	50.2	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Selenium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Silver	51.32	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Thallium	50.93	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Uranium	53.68	ug/L	50	ug/L	107.4	90.0 – 110.0	MS	18–FEB–06 17:36	060218–3
	Nickel	48.1	ug/L	50	ug/L	96.2	90.0 – 110.0	MS	20–FEB–06 10:59	060220–4

METALS
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Initial and Continuing Calibration Verification

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV03										
	Aluminum	5026.37	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Arsenic	478.4	ug/L	500	ug/L	95.7	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Barium	503.72	ug/L	500	ug/L	100.7	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Beryllium	478.32	ug/L	500	ug/L	95.7	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Boron	492.63	ug/L	500	ug/L	98.5	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Calcium	5155.19	ug/L	5000	ug/L	103.1	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Chromium	497.17	ug/L	500	ug/L	99.4	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Cobalt	479.74	ug/L	500	ug/L	96	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Copper	482.19	ug/L	500	ug/L	96.4	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Iron	5738.66	ug/L	5000	ug/L	114.8	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Magnesium	5239.35	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Manganese	541.35	ug/L	500	ug/L	108.3	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Molybdenum	541.27	ug/L	500	ug/L	108.3	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Potassium	5422.38	ug/L	5000	ug/L	108.5	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Silica	5304.23	ug/L	5350	ug/L	99.1	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Sodium	10138.33	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Strontium	473.95	ug/L	500	ug/L	94.8	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Tin	552.44	ug/L	500	ug/L	110.5	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Vanadium	533.17	ug/L	500	ug/L	106.6	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Zinc	527.58	ug/L	500	ug/L	105.5	90.0 – 110.0	P	31–JAN–06 10:04	013106–1
	Mercury	5.04	ug/L	5	ug/L	100.9	80.0 – 120.0	AV	31–JAN–06 11:20	013106W1–2
	Antimony	50.42	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Cadmium	50.22	ug/L	50	ug/L	100.4	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Lead	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Nickel	47.7	ug/L	50	ug/L	95.4	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Selenium	50.94	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Silver	50.98	ug/L	50	ug/L	102	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Thallium	50.78	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Uranium	53.62	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	18–FEB–06 18:13	060218–3
	Nickel	46.83	ug/L	50	ug/L	93.7	90.0 – 110.0	MS	20–FEB–06 11:08	060220–4

METALS
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Initial and Continuing Calibration Verification

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV04										
	Aluminum	5087.82	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Arsenic	511.66	ug/L	500	ug/L	102.3	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Barium	507.89	ug/L	500	ug/L	101.6	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Beryllium	508.96	ug/L	500	ug/L	101.8	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Boron	502.23	ug/L	500	ug/L	100.5	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Calcium	4977.19	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Chromium	504.26	ug/L	500	ug/L	100.9	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Cobalt	517.11	ug/L	500	ug/L	103.4	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Copper	512.37	ug/L	500	ug/L	102.5	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Iron	4747.91	ug/L	5000	ug/L	95	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Magnesium	4978.23	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Manganese	492.91	ug/L	500	ug/L	98.6	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Molybdenum	504.91	ug/L	500	ug/L	101	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Potassium	4985.09	ug/L	5000	ug/L	99.7	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Silica	5554.73	ug/L	5350	ug/L	103.8	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Sodium	10234.14	ug/L	10000	ug/L	102.3	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Strontium	502.55	ug/L	500	ug/L	100.5	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Tin	476.09	ug/L	500	ug/L	95.2	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Vanadium	498.06	ug/L	500	ug/L	99.6	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
	Zinc	506.61	ug/L	500	ug/L	101.3	90.0 – 110.0	P	31–JAN–06 10:31	013106–1
CCV05										
	Aluminum	5111.66	ug/L	5000	ug/L	102.2	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Arsenic	510.76	ug/L	500	ug/L	102.2	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Barium	506.33	ug/L	500	ug/L	101.3	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Beryllium	509.72	ug/L	500	ug/L	101.9	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Boron	504.05	ug/L	500	ug/L	100.8	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Calcium	5027.21	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Chromium	507.01	ug/L	500	ug/L	101.4	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Cobalt	518.85	ug/L	500	ug/L	103.8	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Copper	509.99	ug/L	500	ug/L	102	90.0 – 110.0	P	31–JAN–06 11:01	013106–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	4824.64	ug/L	5000	ug/L	96.5	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Magnesium	5056.37	ug/L	5000	ug/L	101.1	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Manganese	496.54	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Molybdenum	511.66	ug/L	500	ug/L	102.3	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Potassium	5020.26	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Silica	5560.26	ug/L	5350	ug/L	103.9	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Sodium	10218.25	ug/L	10000	ug/L	102.2	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Strontium	499.97	ug/L	500	ug/L	100	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Tin	482.77	ug/L	500	ug/L	96.6	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Vanadium	501.8	ug/L	500	ug/L	100.4	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
	Zinc	511.55	ug/L	500	ug/L	102.3	90.0 – 110.0	P	31–JAN–06 11:01	013106–1
CCV06										
	Aluminum	5062.2	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Arsenic	503.46	ug/L	500	ug/L	100.7	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Barium	506.02	ug/L	500	ug/L	101.2	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Beryllium	505.75	ug/L	500	ug/L	101.2	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Boron	502.66	ug/L	500	ug/L	100.5	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Calcium	5024.76	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Chromium	505.76	ug/L	500	ug/L	101.2	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Cobalt	514.77	ug/L	500	ug/L	103	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Copper	507.28	ug/L	500	ug/L	101.5	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Iron	4970.59	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Magnesium	5058.37	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Manganese	504.17	ug/L	500	ug/L	100.8	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Molybdenum	517.88	ug/L	500	ug/L	103.6	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Potassium	5049.83	ug/L	5000	ug/L	101	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Silica	5520.91	ug/L	5350	ug/L	103.2	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Sodium	10142.59	ug/L	10000	ug/L	101.4	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Strontium	496.47	ug/L	500	ug/L	99.3	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Tin	490.32	ug/L	500	ug/L	98.1	90.0 – 110.0	P	31–JAN–06 11:53	013106–1

METALS
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Initial and Continuing Calibration Verification

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

Initial Calibration Source:

Continuing Calibration Source:

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	508.29	ug/L	500	ug/L	101.7	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
	Zinc	516.86	ug/L	500	ug/L	103.4	90.0 – 110.0	P	31–JAN–06 11:53	013106–1
CCV07										
	Aluminum	5024.14	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Arsenic	504.4	ug/L	500	ug/L	100.9	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Barium	505.07	ug/L	500	ug/L	101	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Beryllium	505.4	ug/L	500	ug/L	101.1	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Boron	500.64	ug/L	500	ug/L	100.1	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Calcium	4967.81	ug/L	5000	ug/L	99.4	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Chromium	501.79	ug/L	500	ug/L	100.4	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Cobalt	513.36	ug/L	500	ug/L	102.7	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Copper	508.03	ug/L	500	ug/L	101.6	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Iron	4810.52	ug/L	5000	ug/L	96.2	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Magnesium	4964.78	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Manganese	494.28	ug/L	500	ug/L	98.9	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Molybdenum	508.36	ug/L	500	ug/L	101.7	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Potassium	4963.09	ug/L	5000	ug/L	99.3	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Silica	5519.63	ug/L	5350	ug/L	103.2	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Sodium	10153.86	ug/L	10000	ug/L	101.5	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Strontium	497.02	ug/L	500	ug/L	99.4	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Tin	483.1	ug/L	500	ug/L	96.6	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Vanadium	499.72	ug/L	500	ug/L	99.9	90.0 – 110.0	P	31–JAN–06 12:40	013106–1
	Zinc	509.51	ug/L	500	ug/L	101.9	90.0 – 110.0	P	31–JAN–06 12:40	013106–1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.2083	ug/L	.2	ug/L	104.13	70.0 – 130.0	AV	31-JAN-06 10:30	013106W1-2
	Lead	2.18	ug/L	2	ug/L	109.2	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Nickel	2.3	ug/L	2	ug/L	114.75	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Silver	1.07	ug/L	1	ug/L	107.3	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Selenium	5.5	ug/L	5	ug/L	109.98	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Uranium	.246	ug/L	.2	ug/L	123	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Cadmium	1.04	ug/L	1	ug/L	104.2	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Antimony	2.11	ug/L	2	ug/L	105.6	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Thallium	1.14	ug/L	1	ug/L	114.3	70.0 – 130.0	MS	18-FEB-06 16:34	060218-3
	Nickel	2.19	ug/L	2	ug/L	109.25	70.0 – 130.0	MS	20-FEB-06 10:48	060220-4
PQL01										
	Silica	211.07	ug/L	213	ug/L	99.09	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Aluminum	196.13	ug/L	200	ug/L	98.07	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Iron	111.76	ug/L	100	ug/L	111.76	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Magnesium	312.14	ug/L	300	ug/L	104.05	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Manganese	10.45	ug/L	10	ug/L	104.51	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Potassium	162.33	ug/L	150	ug/L	108.22	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Sodium	183.6	ug/L	150	ug/L	122.4	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Arsenic	14.7	ug/L	15	ug/L	98.01	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Barium	5.99	ug/L	5	ug/L	119.75	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Beryllium	4.85	ug/L	5	ug/L	97.01	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Chromium	4.74	ug/L	5	ug/L	94.77	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Cobalt	4.77	ug/L	5	ug/L	95.42	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Copper	11.06	ug/L	10	ug/L	110.56	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Vanadium	4.73	ug/L	5	ug/L	94.56	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Zinc	10.46	ug/L	10	ug/L	104.64	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Calcium	105.28	ug/L	100	ug/L	105.28	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Boron	52.25	ug/L	50	ug/L	104.51	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Molybdenum	10.62	ug/L	10	ug/L	106.2	70.0 – 130.0	P	31-JAN-06 07:31	013106-1
	Tin	9.26	ug/L	10	ug/L	92.61	70.0 – 130.0	P	31-JAN-06 07:31	013106-1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5,MER536,TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Strontium	4.99	ug/L	5	ug/L	99.85	70.0 – 130.0	P	31–JAN–06 07:31	013106–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 154614

Contract: ESHL00701 **Lab Code: GEL**

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
ICB01									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 07:25	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 07:25	013106–1
	Barium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 07:25	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 07:25	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 07:25	013106–1
	Calcium	36.0	+/–100	U	36.0	100	P	31–JAN–06 07:25	013106–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 07:25	013106–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 07:25	013106–1
	Copper	3.0	+/–10	U	3.0	10.0	P	31–JAN–06 07:25	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 07:25	013106–1
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 07:25	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 07:25	013106–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 07:25	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 07:25	013106–1
	Silica	32.0	+/–213	U	32.0	213	P	31–JAN–06 07:25	013106–1
	Sodium	45.0	+/–150	U	45.0	150	P	31–JAN–06 07:25	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 07:25	013106–1
	Tin	2.5	+/–10	U	2.5	10.0	P	31–JAN–06 07:25	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 07:25	013106–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 07:25	013106–1
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	31–JAN–06 10:28	013106W1–2
	Antimony	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 16:29	060218–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	18–FEB–06 16:29	060218–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 16:29	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 16:29	060218–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	18–FEB–06 16:29	060218–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	18–FEB–06 16:29	060218–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	18–FEB–06 16:29	060218–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	18–FEB–06 16:29	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	20–FEB–06 10:46	060220–4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 154614

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB01									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 08:08	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 08:08	013106–1
	Barium	1.35	+/–5	J	1.0	5.0	P	31–JAN–06 08:08	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 08:08	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 08:08	013106–1
	Calcium	36.0	+/–100	U	36.0	100	P	31–JAN–06 08:08	013106–1
	Chromium	2.14	+/–5	J	1.0	5.0	P	31–JAN–06 08:08	013106–1
	Cobalt	1.13	+/–5	J	1.0	5.0	P	31–JAN–06 08:08	013106–1
	Copper	3.23	+/–10	J	3.0	10.0	P	31–JAN–06 08:08	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 08:08	013106–1
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 08:08	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 08:08	013106–1
	Molybdenum	3.28	+/–10	J	2.0	10.0	P	31–JAN–06 08:08	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 08:08	013106–1
	Silica	32.0	+/–213	U	32.0	213	P	31–JAN–06 08:08	013106–1
	Sodium	67.52	+/–150	J	45.0	150	P	31–JAN–06 08:08	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 08:08	013106–1
	Tin	2.5	+/–10	U	2.5	10.0	P	31–JAN–06 08:08	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 08:08	013106–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 08:08	013106–1
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	31–JAN–06 10:34	013106W1–2
	Antimony	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 16:55	060218–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	18–FEB–06 16:55	060218–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 16:55	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 16:55	060218–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	18–FEB–06 16:55	060218–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	18–FEB–06 16:55	060218–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	18–FEB–06 16:55	060218–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	18–FEB–06 16:55	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	20–FEB–06 10:55	060220–4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 154614

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB02									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 09:11	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 09:11	013106–1
	Barium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 09:11	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 09:11	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 09:11	013106–1
	Calcium	155.35	+/–100		36.0	100	P	31–JAN–06 09:11	013106–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 09:11	013106–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 09:11	013106–1
	Copper	3.45	+/–10	J	3.0	10.0	P	31–JAN–06 09:11	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 09:11	013106–1
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 09:11	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 09:11	013106–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 09:11	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 09:11	013106–1
	Silica	32.0	+/–213	U	32.0	213	P	31–JAN–06 09:11	013106–1
	Sodium	71.68	+/–150	J	45.0	150	P	31–JAN–06 09:11	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 09:11	013106–1
	Tin	2.5	+/–10	U	2.5	10.0	P	31–JAN–06 09:11	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 09:11	013106–1
	Zinc	7.02	+/–10	J	2.0	10.0	P	31–JAN–06 09:11	013106–1
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	31–JAN–06 10:58	013106W1–2
	Antimony	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 17:41	060218–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	18–FEB–06 17:41	060218–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 17:41	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 17:41	060218–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	18–FEB–06 17:41	060218–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	18–FEB–06 17:41	060218–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	18–FEB–06 17:41	060218–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	18–FEB–06 17:41	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	20–FEB–06 11:00	060220–4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 154614

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB03									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 10:10	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 10:10	013106–1
	Barium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:10	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:10	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 10:10	013106–1
	Calcium	62.44	+/–100	J	36.0	100	P	31–JAN–06 10:10	013106–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:10	013106–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:10	013106–1
	Copper	3.47	+/–10	J	3.0	10.0	P	31–JAN–06 10:10	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 10:10	013106–1
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 10:10	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 10:10	013106–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 10:10	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 10:10	013106–1
	Silica	58.69	+/–213	J	32.0	213	P	31–JAN–06 10:10	013106–1
	Sodium	53.41	+/–150	J	45.0	150	P	31–JAN–06 10:10	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:10	013106–1
	Tin	3.59	+/–10	J	2.5	10.0	P	31–JAN–06 10:10	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:10	013106–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 10:10	013106–1
	Mercury	0.05	+/–.2	U	0.05	0.2	AV	31–JAN–06 11:22	013106W1–2
	Antimony	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 18:18	060218–3
	Cadmium	0.1	+/–1	U	0.1	1.0	MS	18–FEB–06 18:18	060218–3
	Lead	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 18:18	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	18–FEB–06 18:18	060218–3
	Selenium	2.5	+/–5	U	2.5	5.0	MS	18–FEB–06 18:18	060218–3
	Silver	0.2	+/–1	U	0.2	1.0	MS	18–FEB–06 18:18	060218–3
	Thallium	0.4	+/–1	U	0.4	1.0	MS	18–FEB–06 18:18	060218–3
	Uranium	0.05	+/–.2	U	0.05	0.2	MS	18–FEB–06 18:18	060218–3
	Nickel	0.5	+/–2	U	0.5	2.0	MS	20–FEB–06 11:09	060220–4

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 154614

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB04									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 10:37	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 10:37	013106–1
	Barium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:37	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:37	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 10:37	013106–1
	Calcium	36.0	+/–100	U	36.0	100	P	31–JAN–06 10:37	013106–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:37	013106–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:37	013106–1
	Copper	3.0	+/–10	U	3.0	10.0	P	31–JAN–06 10:37	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 10:37	013106–1
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 10:37	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 10:37	013106–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 10:37	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 10:37	013106–1
	Silica	32.0	+/–213	U	32.0	213	P	31–JAN–06 10:37	013106–1
	Sodium	47.32	+/–150	J	45.0	150	P	31–JAN–06 10:37	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:37	013106–1
	Tin	2.5	+/–10	U	2.5	10.0	P	31–JAN–06 10:37	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 10:37	013106–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 10:37	013106–1
CCB05									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 11:07	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 11:07	013106–1
	Barium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:07	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:07	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 11:07	013106–1
	Calcium	36.0	+/–100	U	36.0	100	P	31–JAN–06 11:07	013106–1
	Chromium	1.15	+/–5	J	1.0	5.0	P	31–JAN–06 11:07	013106–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:07	013106–1
	Copper	3.0	+/–10	U	3.0	10.0	P	31–JAN–06 11:07	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 11:07	013106–1

EPA

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 154614

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 11:07	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 11:07	013106–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 11:07	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 11:07	013106–1
	Silica	32.0	+/–213	U	32.0	213	P	31–JAN–06 11:07	013106–1
	Sodium	86.26	+/–150	J	45.0	150	P	31–JAN–06 11:07	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:07	013106–1
	Tin	2.5	+/–10	U	2.5	10.0	P	31–JAN–06 11:07	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:07	013106–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 11:07	013106–1
CCB06									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 11:59	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 11:59	013106–1
	Barium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:59	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:59	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 11:59	013106–1
	Calcium	36.0	+/–100	U	36.0	100	P	31–JAN–06 11:59	013106–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:59	013106–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:59	013106–1
	Copper	3.0	+/–10	U	3.0	10.0	P	31–JAN–06 11:59	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 11:59	013106–1
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 11:59	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 11:59	013106–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 11:59	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 11:59	013106–1
	Silica	32.0	+/–213	U	32.0	213	P	31–JAN–06 11:59	013106–1
	Sodium	65.57	+/–150	J	45.0	150	P	31–JAN–06 11:59	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:59	013106–1
	Tin	2.5	+/–10	U	2.5	10.0	P	31–JAN–06 11:59	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 11:59	013106–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 11:59	013106–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 154614

Contract: ESHL00701

Lab Code: GEL

Sample ID	Analyte	Result	Acceptance ug/L	Conc Qual	MDL	RDL	M	Analysis Date/Time	Run
CCB07									
	Aluminum	68.0	+/–200	U	68.0	200	P	31–JAN–06 12:46	013106–1
	Arsenic	6.0	+/–15	U	6.0	15.0	P	31–JAN–06 12:46	013106–1
	Barium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 12:46	013106–1
	Beryllium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 12:46	013106–1
	Boron	10.0	+/–50	U	10.0	50.0	P	31–JAN–06 12:46	013106–1
	Calcium	36.0	+/–100	U	36.0	100	P	31–JAN–06 12:46	013106–1
	Chromium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 12:46	013106–1
	Cobalt	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 12:46	013106–1
	Copper	3.0	+/–10	U	3.0	10.0	P	31–JAN–06 12:46	013106–1
	Iron	18.0	+/–100	U	18.0	100	P	31–JAN–06 12:46	013106–1
	Magnesium	85.0	+/–300	U	85.0	300	P	31–JAN–06 12:46	013106–1
	Manganese	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 12:46	013106–1
	Molybdenum	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 12:46	013106–1
	Potassium	50.0	+/–150	U	50.0	150	P	31–JAN–06 12:46	013106–1
	Silica	32.0	+/–213	U	32.0	213	P	31–JAN–06 12:46	013106–1
	Sodium	65.09	+/–150	J	45.0	150	P	31–JAN–06 12:46	013106–1
	Strontium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 12:46	013106–1
	Tin	2.5	+/–10	U	2.5	10.0	P	31–JAN–06 12:46	013106–1
	Vanadium	1.0	+/–5	U	1.0	5.0	P	31–JAN–06 12:46	013106–1
	Zinc	2.0	+/–10	U	2.0	10.0	P	31–JAN–06 12:46	013106–1

METALS
–3b–
PREPARATION BLANK SUMMARY

SDG NO. 154614

Contract: ESHL00701

Matrix: GROUND WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1201019554								
	Aluminum	68	ug/L	+/–200	U	P	68	200
	Arsenic	6	ug/L	+/–15.0	U	P	6	15
	Barium	1	ug/L	+/–5.0	U	P	1	5
	Beryllium	1	ug/L	+/–5.0	U	P	1	5
	Boron	10	ug/L	+/–50.0	U	P	10	50
	Calcium	36	ug/L	+/–100	U	P	36	100
	Chromium	1	ug/L	+/–5.0	U	P	1	5
	Cobalt	1	ug/L	+/–5.0	U	P	1	5
	Copper	3	ug/L	+/–10.0	U	P	3	10
	Iron	18	ug/L	+/–100	U	P	18	100
	Magnesium	85	ug/L	+/–300	U	P	85	300
	Manganese	2	ug/L	+/–10.0	U	P	2	10
	Molybdenum	2	ug/L	+/–10.0	U	P	2	10
	Potassium	50	ug/L	+/–150	U	P	50	150
	Silica	0.032	mg/L	+/–0.213	U	P	0.032	0.213
	Sodium	74.50656	ug/L	+/–150	J	P	45	150
	Strontium	1	ug/L	+/–5.0	U	P	1	5
	Tin	2.5	ug/L	+/–10.0	U	P	2.5	10
	Vanadium	1	ug/L	+/–5.0	U	P	1	5
	Zinc	2	ug/L	+/–10.0	U	P	2	10
1201019595								
	Antimony	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Cadmium	0.1	ug/L	+/–1.0	U	MS	0.1	1
	Lead	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Nickel	0.5	ug/L	+/–2.0	U	MS	0.5	2
	Selenium	2.5	ug/L	+/–5.0	U	MS	2.5	5
	Silver	0.2	ug/L	+/–1.0	U	MS	0.2	1
	Thallium	0.4	ug/L	+/–1.0	U	MS	0.4	1
	Uranium	0.05	ug/L	+/–0.2	U	MS	0.05	0.2
1201019832								
	Mercury	0.05	ug/L	+/–0.2	U	AV	0.05	0.2

METALS
–4–
Interference Check Sample

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: TRACE2

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	505817.16	ug/L	500000	ug/L	101	80.0 – 120.0	31–JAN–06 07:37	013106–1
	Arsenic	–1.89	ug/L					31–JAN–06 07:37	013106–1
	Barium	1.31	ug/L					31–JAN–06 07:37	013106–1
	Beryllium	0.173	ug/L					31–JAN–06 07:37	013106–1
	Boron	1.12	ug/L					31–JAN–06 07:37	013106–1
	Calcium	494890.03	ug/L	500000	ug/L	99	80.0 – 120.0	31–JAN–06 07:37	013106–1
	Chromium	0.688	ug/L					31–JAN–06 07:37	013106–1
	Cobalt	0.169	ug/L					31–JAN–06 07:37	013106–1
	Copper	–5.18	ug/L					31–JAN–06 07:37	013106–1
	Iron	174840.78	ug/L	200000	ug/L	87.4	80.0 – 120.0	31–JAN–06 07:37	013106–1
	Magnesium	520436.94	ug/L	500000	ug/L	104	80.0 – 120.0	31–JAN–06 07:37	013106–1
	Manganese	8.48	ug/L					31–JAN–06 07:37	013106–1
	Molybdenum	–0.009	ug/L					31–JAN–06 07:37	013106–1
	Potassium	4.92	ug/L					31–JAN–06 07:37	013106–1
	Silica	9.67	ug/L					31–JAN–06 07:37	013106–1
	Sodium	68.38	ug/L					31–JAN–06 07:37	013106–1
	Strontium	0.704	ug/L					31–JAN–06 07:37	013106–1
	Tin	–14.6	ug/L					31–JAN–06 07:37	013106–1
	Vanadium	3.71	ug/L					31–JAN–06 07:37	013106–1
	Zinc	7.46	ug/L					31–JAN–06 07:37	013106–1
ICSAB01									
	Aluminum	499705.03	ug/L	500000	ug/L	99.9	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Arsenic	499.9	ug/L	500	ug/L	100	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Barium	529.95	ug/L	500	ug/L	106	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Beryllium	246.66	ug/L	250	ug/L	98.7	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Boron	527.37	ug/L	500	ug/L	105	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Calcium	484203.19	ug/L	500000	ug/L	96.8	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Chromium	487.73	ug/L	500	ug/L	97.6	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Cobalt	468.91	ug/L	500	ug/L	93.8	80.0 – 120.0	31–JAN–06 07:43	013106–1

METALS
–4–
Interference Check Sample

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Copper	495.06	ug/L	500	ug/L	99	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Iron	171190.58	ug/L	200000	ug/L	85.6	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Magnesium	514759.72	ug/L	500000	ug/L	103	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Manganese	516.26	ug/L	500	ug/L	103	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Molybdenum	525.95	ug/L	500	ug/L	105	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Potassium	5695.82	ug/L	5000	ug/L	114	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Silica	10671.39	ug/L	10700	ug/L	99.7	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Sodium	5249.17	ug/L	5000	ug/L	105	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Strontium	507.46	ug/L	500	ug/L	101	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Tin	496.24	ug/L	500	ug/L	99.3	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Vanadium	514.39	ug/L	500	ug/L	103	80.0 – 120.0	31–JAN–06 07:43	013106–1
	Zinc	515.92	ug/L	500	ug/L	103	80.0 – 120.0	31–JAN–06 07:43	013106–1

METALS
–4–
Interference Check Sample

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.583	ug/L					18–FEB–06 16:39	060218–3
	Cadmium	0.249	ug/L					18–FEB–06 16:39	060218–3
	Lead	0.381	ug/L					18–FEB–06 16:39	060218–3
	Nickel	3.3	ug/L					18–FEB–06 16:39	060218–3
	Selenium	–1.36	ug/L					18–FEB–06 16:39	060218–3
	Silver	0.057	ug/L					18–FEB–06 16:39	060218–3
	Thallium	0.028	ug/L					18–FEB–06 16:39	060218–3
	Uranium	0.018	ug/L					18–FEB–06 16:39	060218–3
ICSAB01									
	Antimony	21.78	ug/L	20.5	ug/L	106	80.0 – 120.0	18–FEB–06 16:44	060218–3
	Cadmium	19.86	ug/L	20.2	ug/L	98.3	80.0 – 120.0	18–FEB–06 16:44	060218–3
	Lead	19.77	ug/L	20	ug/L	98.8	80.0 – 120.0	18–FEB–06 16:44	060218–3
	Nickel	22.3	ug/L	22.4	ug/L	99.5	80.0 – 120.0	18–FEB–06 16:44	060218–3
	Selenium	19.42	ug/L	20	ug/L	97.1	80.0 – 120.0	18–FEB–06 16:44	060218–3
	Silver	19.38	ug/L	20	ug/L	96.9	80.0 – 120.0	18–FEB–06 16:44	060218–3
	Thallium	19.13	ug/L	20	ug/L	95.7	80.0 – 120.0	18–FEB–06 16:44	060218–3
	Uranium	21.53	ug/L	20	ug/L	108	80.0 – 120.0	18–FEB–06 16:44	060218–3

METALS
–4–
Interference Check Sample

SDG No: 154614

Contract: ESHL00701 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Nickel	2.23	ug/L					20–FEB–06 10:50	060220–4
ICSAB01									
	Nickel	21.76	ug/L	22.4	ug/L	97.1	80.0 – 120.0	20–FEB–06 10:52	060220–4

METALS
–5a–

Matrix Spike Summary

SDG NO. 154614 **Client ID** GF06010G8WT01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 154614001 **Spike ID:** 1201019557

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75–125	5320		68	U	5000	106		P
Arsenic	ug/L	75–125	530		6	U	500	105		P
Barium	ug/L	75–125	551		6.09		500	109		P
Beryllium	ug/L	75–125	532		1	U	500	106		P
Boron	ug/L	75–125	542		12.5	J	500	106		P
Calcium	ug/L	75–125	17400		11500		5000	119		P
Chromium	ug/L	75–125	529		4.68	J	500	105		P
Cobalt	ug/L	75–125	537		1	U	500	107		P
Copper	ug/L	75–125	540		3	U	500	108		P
Iron	ug/L	75–125	5310		40.4	J	5000	105		P
Magnesium	ug/L	75–125	9610		4000		5000	112		P
Manganese	ug/L	75–125	537		2	U	500	107		P
Molybdenum	ug/L	75–125	550		2	U	500	110		P
Potassium	ug/L	75–125	6730		1520		5000	104		P
Silica	mg/L		78.5		63.9		10.7	136	N/A	P
Sodium	ug/L	75–125	16300		10200		5000	122		P
Strontium	ug/L	75–125	573		51.7		500	104		P
Tin	ug/L	75–125	531		2.5	U	500	106		P
Vanadium	ug/L	75–125	537		4.22	J	500	107		P
Zinc	ug/L	75–125	960		392		500	114		P

METALS
-5a-

Matrix Spike Summary

SDG NO. 154614 **Client ID** GF06010G8WT01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 154614001 **Spike ID:** 1201019598

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75–125	102		0.5	U	100	102		MS
Cadmium	ug/L	75–125	5.45		0.1	U	5	109		MS
Lead	ug/L	75–125	22.6		2.61		20	99.9		MS
Nickel	ug/L	75–125	45.6		1.11	J	50	89		MS
Selenium	ug/L	75–125	10.2		2.5	U	10	98.4		MS
Silver	ug/L	75–125	50.4		0.2	U	50	101		MS
Thallium	ug/L	75–125	47.1		0.427	J	50	93.4		MS
Uranium	ug/L	75–125	52.2		0.554		50	103		MS

METALS
-5a-

Matrix Spike Summary

SDG NO. 154614 **Client ID** GF06010G8WT01S

Contract: ESHL00701 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 154614001 **Spike ID:** 1201019835

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75–125	2.1		0.05	U	2	105		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 154614

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF06010G8WT01D

Sample ID: 154614001 **Duplicate ID:** 1201019556 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L		68	U	68	U			P
Arsenic	ug/L		6	U	6	U			P
Barium	ug/L	+/–5	6.09		6.03		.922		P
Beryllium	ug/L		1	U	1	U			P
Boron	ug/L	+/–50	12.5	J	11.8	J	6.23		P
Calcium	ug/L	+/–20%	11500		11700		1.83		P
Chromium	ug/L	+/–5	4.68	J	4.74	J	1.3		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L	+/–100	40.4	J	39	J	3.56		P
Magnesium	ug/L	+/–20%	4000		4090		2.07		P
Manganese	ug/L		2	U	2	U			P
Molybdenum	ug/L		2	U	2	U			P
Potassium	ug/L	+/–20%	1520		1540		.98		P
Silica	mg/L	+/–20%	63.9		64.8		1.47		P
Sodium	ug/L	+/–20%	10200		10300		.46		P
Strontium	ug/L	+/–20%	51.7		52.3		1.29		P
Tin	ug/L		2.5	U	2.5	U			P
Vanadium	ug/L	+/–5	4.22	J	5.12		19.2		P
Zinc	ug/L	+/–20%	392		399		1.82		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 154614

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF06010G8WT01D

Sample ID: 154614001 **Duplicate ID:** 1201019597 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Antimony	ug/L		0.5	U	0.5	U			MS
Cadmium	ug/L		0.1	U	0.1	U			MS
Lead	ug/L	+/–2	2.61		2.68		2.61		MS
Nickel	ug/L	+/–2	1.11	J	1.09	J	2.09		MS
Selenium	ug/L		2.5	U	2.5	U			MS
Silver	ug/L		0.2	U	0.2	U			MS
Thallium	ug/L		0.427	J	0.4	U	200		MS
Uranium	ug/L	+/–.2	0.554		0.574		3.55		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 154614

Contract: ESHL00701 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** GF06010G8WT01D

Sample ID: 154614001 **Duplicate ID:** 1201019834 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/L		0.05	U	0.05	U			AV

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 154614

Contract: ESHL00701

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201019555								
	Aluminum	ug/L	5000	5350		107	80–120	P
	Arsenic	ug/L	500	540		108	80–120	P
	Barium	ug/L	500	545		109	80–120	P
	Beryllium	ug/L	500	534		107	80–120	P
	Boron	ug/L	500	528		106	80–120	P
	Calcium	ug/L	5000	5250		105	80–120	P
	Chromium	ug/L	500	529		106	80–120	P
	Cobalt	ug/L	500	543		109	80–120	P
	Copper	ug/L	500	544		109	80–120	P
	Iron	ug/L	5000	5140		103	80–120	P
	Magnesium	ug/L	5000	5310		106	80–120	P
	Manganese	ug/L	500	530		106	80–120	P
	Molybdenum	ug/L	500	551		110	80–120	P
	Potassium	ug/L	5000	5150		103	80–120	P
	Silica	mg/L	10.7	11.2		105	80–120	P
	Sodium	ug/L	5000	5380		108	80–120	P
	Strontium	ug/L	500	525		105	80–120	P
	Tin	ug/L	500	527		105	80–120	P
	Vanadium	ug/L	500	532		106	80–120	P
	Zinc	ug/L	500	546		109	80–120	P

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 154614

Contract: ESHL00701

Aqueous LCS Source: o2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201019596								
	Antimony	ug/L	50	50.2		100	80–120	MS
	Cadmium	ug/L	50	49.1		98.2	80–120	MS
	Lead	ug/L	50	49.7		99.3	80–120	MS
	Nickel	ug/L	50	47.7		95.4	80–120	MS
	Selenium	ug/L	50	48.5		96.9	80–120	MS
	Silver	ug/L	50	50.4		101	80–120	MS
	Thallium	ug/L	50	48.4		96.9	80–120	MS
	Uranium	ug/L	50	52.1		104	80–120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 154614

Contract: ESHL00701

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1201019833								
	Mercury	ug/L	2	2.08		104	85-115	AV

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 154614 **Client ID** GF06010G8WT01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 154614001 **Serial Dilution ID:** 1201019558

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	68	U	340	U				P
Arsenic	6	U	30	U				P
Barium	6.09		7.2	J	18.2			P
Beryllium	1	U	5	U				P
Boron	12.5	J	50	U	100			P
Calcium	11500		11350		1.3		10	P
Chromium	4.68	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	40.4	J	90	U	100			P
Magnesium	4000		3940		1.5			P
Manganese	2	U	10	U				P
Molybdenum	2	U	10	U				P
Potassium	1520		1505		.987			P
Silica	63900		63000		1.41		10	P
Sodium	10200		10150		.49		10	P
Strontium	51.7		51.5		.387		10	P
Tin	2.5	U	12.5	U				P
Vanadium	4.22	J	5	U	100			P
Zinc	392		389.5		.638		10	P

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 154614 **Client ID** GF06010G8WT01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 154614001 **Serial Dilution ID:** 1201019599

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	.5	U	2.5	U				MS
Cadmium	.1	U	.5	U				MS
Lead	2.61		2.81	J	7.66			MS
Nickel	1.11	J	2.5	U	100			MS
Selenium	2.5	U	12.5	U				MS
Silver	.2	U	1	U				MS
Thallium	.427	J	2.46	J	476			MS
Uranium	.554		.635	J	14.6			MS

METALS
–9–
Serial Dilution Sample Summary

SDG NO. 154614 **Client ID** GF06010G8WT01L

Contract: ESHL00701

Matrix: LIQUID **Level:** Low

Sample ID: 154614001 **Serial Dilution ID:** 1201019836

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.05	U	.25	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 154614 **Method Type:** P

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	498166						
1201019554	MB for batch 498166	MB	GROUND WATER	30-JAN-06	50mL	50mL	
1201019555	LCS for batch 498166	LCS	GROUND WATER	30-JAN-06	50mL	50mL	
1201019557	GF06010G8WT01S	MS	GROUND WATER	30-JAN-06	50mL	50mL	
1201019556	GF06010G8WT01D	DUP	GROUND WATER	30-JAN-06	50mL	50mL	
154614001	GF06010G8WT01	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614002	GF0601G14R101	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614003	GU06010G8WT01	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614004	GU0601G14R101	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614008	GF06010GMC401	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614009	GU06010GMC401	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614010	GU06010GMC401-FB	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 154614 **Method Type:** MS

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	498179						
1201019595	MB for batch 498179	MB	GROUND WATER	30-JAN-06	50mL	50mL	
1201019596	LCS for batch 498179	LCS	GROUND WATER	30-JAN-06	50mL	50mL	
1201019598	GF06010G8WT01S	MS	GROUND WATER	30-JAN-06	50mL	50mL	
1201019597	GF06010G8WT01D	DUP	GROUND WATER	30-JAN-06	50mL	50mL	
154614001	GF06010G8WT01	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614002	GF0601G14R101	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614003	GU06010G8WT01	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614004	GU0601G14R101	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614008	GF06010GMC401	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614009	GU06010GMC401	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	
154614010	GU06010GMC401-FB	SAMPLE	GROUND WATER	30-JAN-06	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 154614 **Method Type**: AV

Contract: ESHL00701 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number	498293						
1201019832	MB for batch 498293	MB	GROUND WATER	30-JAN-06	20mL	20mL	
1201019833	LCS for batch 498293	LCS	GROUND WATER	30-JAN-06	20mL	20mL	
1201019835	GF06010G8WT01S	MS	GROUND WATER	30-JAN-06	20mL	20mL	
1201019834	GF06010G8WT01D	DUP	GROUND WATER	30-JAN-06	20mL	20mL	
154614001	GF06010G8WT01	SAMPLE	GROUND WATER	30-JAN-06	20mL	20mL	
154614002	GF0601G14R101	SAMPLE	GROUND WATER	30-JAN-06	20mL	20mL	
154614003	GU06010G8WT01	SAMPLE	GROUND WATER	30-JAN-06	20mL	20mL	
154614004	GU0601G14R101	SAMPLE	GROUND WATER	30-JAN-06	20mL	20mL	
154614008	GF06010GMC401	SAMPLE	GROUND WATER	30-JAN-06	20mL	20mL	
154614009	GU06010GMC401	SAMPLE	GROUND WATER	30-JAN-06	20mL	20mL	
154614010	GU06010GMC401-FB	SAMPLE	GROUND WATER	30-JAN-06	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: TRACE2
Start Date: 31–JAN–06 **End Date:** 31–JAN–06

Client Sdg: 154614
Method P
Data File: 013106–1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
S0	1	06:48	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
S0.1	1	06:54	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
S0.5	1	07:00	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
SCAL	1	07:06	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
S10	1	07:12	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICV01	1	07:18	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICB01	1	07:25	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
PQL01	1	07:31	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICSA01	1	07:37	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ICSAB01	1	07:43	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	07:49																													
ZZZZZZ	1	07:55																													
CCV01	1	08:02	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB01	1	08:08	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	08:18																													
ZZZZZZ	1	08:23																													
ZZZZZZ	1	08:29																													
ZZZZZZ	1	08:35																													
ZZZZZZ	1	08:41																													
ZZZZZZ	1	08:47																													
ZZZZZZ	5	08:53																													
ZZZZZZ	1	08:59																													
CCV02	1	09:05	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB02	1	09:11	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	09:28																													
ZZZZZZ	1	09:34																													
ZZZZZZ	1	09:40																													
ZZZZZZ	1	09:46																													
ZZZZZZ	1	09:52																													
ZZZZZZ	5	09:58																													
CCV03	1	10:04	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB03	1	10:10	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCV04	1	10:31	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB04	1	10:37	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
ZZZZZZ	1	10:43																													
ZZZZZZ	2	10:49																													
ZZZZZZ	1	10:55																													
CCV05	1	11:01	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
CCB05	1	11:07	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X
1201019554	1	11:18	X		X	X	X	X		X	X	X	X	X		X	X		X		X		X		X	X		X		X	X

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																														
1201019555	1	11:24	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
154614001	1	11:30	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1201019556	1	11:36	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1201019557	1	11:41	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
1201019558	5	11:47	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCV06	1	11:53	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB06	1	11:59	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
154614002	1	12:05	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
154614003	1	12:11	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
154614004	1	12:17	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
154614008	1	12:23	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
154614009	1	12:29	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
154614010	1	12:35	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCV07	1	12:40	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X
CCB07	1	12:46	X		X	X	X	X		X	X	X	X		X		X	X		X		X		X		X	X		X		X	X

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 18–FEB–06 **End Date:** 18–FEB–06

Client Sdg: 154614
Method MS
Data File: 060218–3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
Blank	1	16:08:00		X					X							X					X		X		X			X		X		
Standard 1	1	16:13:00		X					X							X					X		X		X			X		X		
Standard 2	1	16:19:00		X					X							X					X		X		X			X		X		
ICV01	1	16:24:00		X					X							X					X		X		X			X		X		
ICB01	1	16:29:00		X					X							X					X		X		X			X		X		
CRDL01	1	16:34:00		X					X							X					X		X		X			X		X		
ICSA01	1	16:39:00		X					X							X					X		X		X			X		X		
ICSAB01	1	16:44:00		X					X							X					X		X		X			X		X		
CCV01	1	16:49:00		X					X							X					X		X		X			X		X		
CCB01	1	16:55:00		X					X							X					X		X		X			X		X		
1201019595	1	17:00:00		X					X							X					X		X		X			X		X		
1201019596	1	17:05:00		X					X							X					X		X		X			X		X		
154614001	1	17:10:00		X					X							X					X		X		X			X		X		
1201019597	1	17:15:00		X					X							X					X		X		X			X		X		
1201019598	1	17:21:00		X					X							X					X		X		X			X		X		
1201019599	5	17:26:00		X					X							X					X		X		X			X		X		
154614002	1	17:31:00		X					X							X					X		X		X			X		X		
CCV02	1	17:36:00		X					X							X					X		X		X			X		X		
CCB02	1	17:41:00		X					X							X					X		X		X			X		X		
154614003	1	17:47:00		X					X							X					X		X		X			X		X		
154614004	1	17:52:00		X					X							X							X		X			X		X		
154614008	1	17:57:00		X					X							X							X		X			X		X		
154614009	1	18:02:00		X					X							X							X		X			X		X		
154614010	1	18:07:00		X					X							X					X		X		X			X		X		
CCV03	1	18:13:00		X					X							X					X		X		X			X		X		
CCB03	1	18:18:00		X					X							X					X		X		X			X		X		

Metals
-14-
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 20-FEB-06
End Date: 20-FEB-06
Client Sdg: 154614
Method MS
Data File: 060220-4

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
Blank	1	10:39:00																			X											
Standard 1	1	10:41:00																			X											
Standard 2	1	10:43:00																			X											
ICV01	1	10:45:00																			X											
ICB01	1	10:46:00																			X											
CRDL01	1	10:48:00																			X											
ICSA01	1	10:50:00																			X											
ICSAB01	1	10:52:00																			X											
CCV01	1	10:53:00																			X											
CCB01	1	10:55:00																			X											
ZZZZZZ	1	10:57:00																														
CCV02	1	10:59:00																			X											
CCB02	1	11:00:00																			X											
154614004	1	11:02:00																			X											
154614008	1	11:04:00																			X											
154614009	1	11:06:00																			X											
CCV03	1	11:08:00																			X											
CCB03	1	11:09:00																			X											

Metals
–14–
Analysis Run Log

Contract: ESHL00701
Lab Code: GEL
Inst Name: MER536
Start Date: 31–JAN–06 **End Date:** 31–JAN–06

Client Sdg: 154614
Method AV
Data File: 013106W1–2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu		Fe	Pb	Mg	Mn	Hg	Mo	Ni	K	Se	SiO2	Ag	Na	Sr	Tl	Sn	U	V	Zn
SCalib Blank	1	10:14																	X													
S0.2	1	10:16																	X													
S0.5	1	10:18																	X													
S2.0	1	10:20																	X													
S5.0	1	10:22																	X													
S10	1	10:24																	X													
ICV01	1	10:26																	X													
ICB01	1	10:28																	X													
CRDL01	1	10:30																	X													
CCV01	1	10:32																	X													
CCB01	1	10:34																	X													
1201019832	1	10:36																	X													
1201019833	1	10:38																	X													
ZZZZZZ	1	10:40																														
154614001	1	10:42																	X													
1201019834	1	10:44																	X													
1201019835	1	10:46																	X													
1201019836	5	10:48																	X													
154614002	1	10:50																	X													
154614003	1	10:52																	X													
154614004	1	10:54																	X													
CCV02	1	10:56																	X													
CCB02	1	10:58																	X													
154614008	1	11:00																	X													
154614009	1	11:02																	X													
154614010	1	11:04																	X													
ZZZZZZ	1	11:06																														
ZZZZZZ	1	11:08																														
ZZZZZZ	1	11:10																														
ZZZZZZ	1	11:12																														
ZZZZZZ	1	11:14																														
ZZZZZZ	5	11:16																														
ZZZZZZ	1	11:18																														
CCV03	1	11:20																	X													
CCB03	1	11:22																	X													

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 154614

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Aluminum	308.215	68.0	200
	Antimony	206.838	4.0	10
	Arsenic	193.696	6.0	15
	Barium	493.409	1.0	5
	Beryllium	313.042	1.0	5
	Boron	249.678	10.0	50
	Cadmium	226.502	1.0	5
	Calcium	317.933	36.0	100
	Chromium	267.716	1.0	5
	Cobalt	228.616	1.0	5
	Copper	324.754	3.0	10
	Iron	259.94	18.0	100
	Lead	220.353	2.5	10
	Magnesium	279.078	85.0	300
	Manganese	257.61	2.0	10
	Molybdenum	202.03	2.0	10
	Nickel	231.604	1.0	5
	Potassium	766.491	50.0	150
	Selenium	196.026	6.0	15
	Silica		32.0	213
	Silver	328.068	1.0	5
	Sodium	588.995	45.0	150
	Strontium	421.552	1.0	5

METALS
-10-
Instrument Detection Limits

SDG NO. 154614

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Thallium	190.864	5.0	20
	Tin	283.991	2.5	10
	Uranium	409.019	10.0	50
	Vanadium	292.402	1.0	5
	Zinc	213.856	2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 154614

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Aluminum		5.0	15
	Antimony		0.5	2
	Arsenic		1.5	5
	Barium		0.5	2
	Beryllium		0.1	.5
	Boron		4.0	15
	Cadmium		0.1	1
	Calcium		20.0	100
	Chromium		1.0	3
	Cobalt		0.1	1
	Copper		0.2	1
	Iron		10.0	25
	Lead		0.5	2
	Magnesium		5.0	15
	Manganese		1.0	5
	Molybdenum		0.1	.5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		2.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Strontium		2.0	10
	Thallium		0.4	1

METALS
-10-
Instrument Detection Limits

SDG NO. 154614

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01-APR-05

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
	Tin		1.0	5
	Uranium		0.05	.2
	Vanadium		2.0	30
	Zinc		2.0	10

METALS
–10–
Instrument Detection Limits

SDG NO. 154614

Contract: ESHL00701 **Lab Code: GEL** **MDL Effective Date:** 01–APR–05

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY	Mercury		0.05	.2

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 154614
Contract: ESHL00701
Instrument: TRACE2
Effective Dates: 01-NOV-05,01-FEB-06
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.351	-0.00001	0.00000	0.00000	0.00000	0.00000
	220.352	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	-0.00001	0.00000	0.00000	0.00000	0.00000
	196.022	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.941	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 154614
Contract: ESHL00701
Instrument: TRACE2
Effective Dates: 01-NOV-05,01-FEB-06
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Calcium	Chromium	Cobalt
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00000	0.00000	0.00461	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	-0.00005	0.00013
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00106
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	-0.00018	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	-0.00161
Lead	220.351	0.00000	0.00000	0.00000	0.00000	0.00000
	220.352	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	-0.00052
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	0.00000	0.00000	0.00008	-0.00044
	196.022	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00003	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	-0.00252
Tin	189.989	0.00000	0.00000	0.00004	0.00000	0.00000
Titanium	334.941	0.00000	0.00000	0.00000	0.00013	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 154614
Contract: ESHL00701
Instrument: TRACE2
Effective Dates: 01-NOV-05,01-FEB-06
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Copper	Iron	Lead	Magnesium	Manganese
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00003	0.00000	0.00000	0.00000
Arsenic	189.042	-0.00014	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00004	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00002	0.00000	0.00000	0.00000
Copper	324.753	0.00000	-0.00028	0.00000	0.00000	0.00000
Lead	220.351	0.00000	0.00003	0.00000	0.00000	0.00000
	220.352	0.00000	0.00003	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00001	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00010	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	-0.00022	0.00000	0.00000	0.00104
	196.022	0.00000	-0.00021	0.00000	0.00000	0.00000
Silica	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	-0.00012	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.941	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00041	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00006	0.00000	0.00003	0.00089

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 154614
Contract: ESHL00701
Instrument: TRACE2
Effective Dates: 01-NOV-05,01-FEB-06
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Molybdenum	Nickel	Phosphorous	Potassium	Selenium
Aluminum	308.215	0.00139	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	-0.00593	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00026	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.351	-0.00108	0.00000	0.00000	0.00000	0.00000
	220.352	-0.00084	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	0.00000	0.00000	0.00000	0.00000
	196.022	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	288.158	0.01740	0.00000	0.00000	0.00000	0.00000
Silicon	288.158	0.00814	0.00000	0.00000	0.00000	0.00000
Silver	328.068	-0.00058	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.941	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: ESHL00701
Instrument: TRACE2
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 154614

Effective Dates: 01-NOV-05,01-FEB-06

Parmname	Wavelength	Silica	Silicon	Silver	Sodium	Strontium
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	0.00000	0.00000
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000	0.00000	0.00000	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.351	0.00000	0.00000	0.00000	0.00000	0.00000
	220.352	0.00000	0.00000	0.00000	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00000
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	0.00006	0.00000	0.00000	0.00000
	196.022	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.941	0.00000	0.00000	0.00000	0.00000	0.00000
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00000	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 154614
Contract: ESHL00701
Instrument: TRACE2
Effective Dates: 01-NOV-05,01-FEB-06
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Sulfur	Thallium	Tin	Titanium	Uranium
Aluminum	308.215	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.838	0.00000	0.00000	0.00000	0.00000	0.00000
Arsenic	189.042	0.00000	0.00000	0.00000	0.00000	-0.00018
Beryllium	313.042	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.678	0.00000	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.00000	0.00000	0.00079
Cobalt	228.616	0.00000	0.00000	0.00000	0.00212	0.00000
Copper	324.753	0.00000	0.00000	0.00000	0.00000	0.00070
Lead	220.351	0.00000	0.00000	0.00000	-0.00058	-0.00059
	220.352	0.00000	0.00000	0.00000	-0.00087	0.00058
Magnesium	279.078	0.00000	0.00000	0.00000	0.00000	0.00424
Manganese	257.61	0.00000	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.021	0.00000	0.00000	0.00000	0.00067	-0.00025
	196.022	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silicon	288.158	0.00000	0.00000	0.00000	0.00000	0.00000
Silver	328.068	0.00000	0.00000	0.00000	0.00000	0.00059
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Thallium	190.864	0.00000	0.00000	0.00000	0.00000	0.00000
Tin	189.989	0.00000	0.00000	0.00000	-0.00541	0.00000
Titanium	334.941	0.00000	0.00000	0.00000	0.00000	0.00014
Uranium	385.958	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.00000	0.00077	0.00000
Zinc	213.858	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 154614
Contract: ESHL00701
Instrument: TRACE2
Effective Dates: 01-NOV-05,01-FEB-06
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Vanadium	Zinc
Parmname	Wavelength		
Aluminum	308.215	0.01311	0.00000
Antimony	206.838	0.00000	0.00000
Arsenic	189.042	0.00000	0.00000
Beryllium	313.042	0.00007	0.00000
Boron	249.678	0.00000	0.00000
Cadmium	226.502	0.00000	0.00000
Chromium	267.716	0.00000	0.00000
Cobalt	228.616	0.00000	0.00000
Copper	324.753	0.00000	0.00000
Lead	220.351	0.00000	0.00000
	220.352	0.00000	0.00000
Magnesium	279.078	0.00000	0.00000
Manganese	257.61	0.00000	0.00000
Nickel	231.604	0.00000	0.00000
Phosphorous	178.287	0.00000	0.00000
Selenium	196.021	-0.00011	0.00000
	196.022	0.00000	0.00000
Silica	288.158	0.00000	0.00000
Silicon	288.158	0.00000	0.00000
Silver	328.068	0.00000	0.00000
Strontium	421.552	0.00000	0.00000
Thallium	190.864	-0.00203	0.00000
Tin	189.989	0.00000	0.00000
Titanium	334.941	0.00000	0.00000
Uranium	385.958	-0.00408	0.00000
Vanadium	292.402	0.00000	0.00000
Zinc	213.858	0.00000	0.00000

METALS
–12–
Linear Ranges

SDG NO. 154614

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID TRACE2

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		500000	ug/L	01–NOV–05
Antimony		50000	ug/L	01–NOV–05
Arsenic		50000	ug/L	01–NOV–05
Barium		15000	ug/L	01–NOV–05
Beryllium		10000	ug/L	01–NOV–05
Boron		50000	ug/L	01–NOV–05
Cadmium		25000	ug/L	01–NOV–05
Calcium		500000	ug/L	01–NOV–05
Chromium		50000	ug/L	01–NOV–05
Cobalt		50000	ug/L	01–NOV–05
Copper		25000	ug/L	01–NOV–05
Iron		200000	ug/L	01–NOV–05
Lead		50000	ug/L	01–NOV–05
Magnesium		500000	ug/L	01–NOV–05
Manganese		10000	ug/L	01–NOV–05
Molybdenum		50000	ug/L	01–NOV–05
Nickel		50000	ug/L	01–NOV–05
Potassium		30000	ug/L	01–NOV–05
Selenium		50000	ug/L	01–NOV–05
Silica		107000	ug/L	01–NOV–05
Silver		3000	ug/L	01–NOV–05
Sodium		200000	ug/L	01–NOV–05
Strontium		10000	ug/L	01–NOV–05
Thallium		50000	ug/L	01–NOV–05
Tin		50000	ug/L	01–NOV–05
Uranium		50000	ug/L	01–NOV–05
Vanadium		50000	ug/L	01–NOV–05
Zinc		5000	ug/L	01–NOV–05

METALS
–12–
Linear Ranges

SDG NO. 154614

Contract: ESHL00701 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time	LDR	Units	Effective Date
Aluminum		50000	ug/L	20–OCT–05
Antimony		2500	ug/L	20–OCT–05
Arsenic		500	ug/L	20–OCT–05
Barium		5000	ug/L	20–OCT–05
Beryllium		2500	ug/L	20–OCT–05
Boron		200	ug/L	20–OCT–05
Cadmium		1000	ug/L	20–OCT–05
Calcium		50000	ug/L	20–OCT–05
Chromium		5000	ug/L	20–OCT–05
Cobalt		5000	ug/L	20–OCT–05
Copper		5000	ug/L	20–OCT–05
Iron		50000	ug/L	20–OCT–05
Lead		5000	ug/L	20–OCT–05
Magnesium		50000	ug/L	20–OCT–05
Manganese		5000	ug/L	20–OCT–05
Molybdenum		1000	ug/L	20–OCT–05
Nickel		5000	ug/L	20–OCT–05
Potassium		50000	ug/L	20–OCT–05
Selenium		500	ug/L	20–OCT–05
Silver		500	ug/L	01–AUG–05
Sodium		50000	ug/L	20–OCT–05
Strontium		5000	ug/L	20–OCT–05
Thallium		5000	ug/L	20–OCT–05
Tin		1000	ug/L	20–OCT–05
Uranium		5000	ug/L	20–OCT–05
Vanadium		5000	ug/L	20–OCT–05
Zinc		5000	ug/L	20–OCT–05

Raw Data

Method: TRACE2 Standard: S0
Run Time: 01/31/06 06:48:30

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Avge	-.0001	.0023	-.0004	.0011	.0008	.0005	.0002
SDev	.0004	.0004	.0006	.0006	.0001	.0000	.0002
%RSD	266.4	15.60	168.4	60.16	9.230	5.924	72.41
#1	-.0005	.0022	.0003	.0003	.0007	.0005	.0001
#2	.0002	.0027	-.0004	.0015	.0008	.0005	.0004
#3	-.0001	.0020	-.0010	.0014	.0008	.0005	.0003

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	Fe_	K_7664
Avge	-.0009	-.0002	.0002	.0038	-.0002	.0011	.0746
SDev	.0021	.0008	.0004	.0001	.0002	.0003	.0007
%RSD	242.4	413.5	177.7	2.567	113.6	30.64	.9897
#1	-.0029	-.0008	-.0001	.0039	-.0003	.0007	.0746
#2	-.0010	.0007	.0006	.0038	-.0004	.0011	.0752
#3	.0013	-.0005	.0001	.0037	.0001	.0014	.0738

Elem	Mg_279	Mn_257	Mo_202	Na_	Na_	Ni_231	Sb_206
Avge	.0001	.0001	.0002	-.0005	-1.168	.0002	.0003
SDev	.0002	.0000	.0006	.0010	.041	.0010	.0009
%RSD	153.2	63.60	260.9	208.0	3.497	444.5	364.0
#1	.0000	.0001	-.0005	.0006	-1.139	.0008	.0013
#2	.0003	.0000	.0005	-.0013	-1.214	.0008	-.0000
#3	.0000	.0001	.0007	-.0007	-1.150	-.0010	-.0005

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Avge	.0007	-.0015	-.0018	.0148	.0001	.0002	.0065
SDev	.0004	.0003	.0019	.0002	.0001	.0001	.0015
%RSD	58.47	22.65	104.4	1.498	88.46	53.23	22.76
#1	.0011	-.0017	-.0006	.0150	.0001	.0001	.0075
#2	.0003	-.0011	-.0040	.0147	.0002	.0003	.0048
#3	.0008	-.0015	-.0008	.0146	.0000	.0002	.0072

Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Avge	.0105	.0105	.0022	-.0002	.0019	-.0031	.0003
SDev	.0004	.0004	.0001	.0051	.0011	.0034	.0016
%RSD	3.547	3.547	6.924	2772.	60.89	110.3	465.1
#1	.0104	.0104	.0021	.0055	.0016	-.0003	-.0013
#2	.0109	.0109	.0024	-.0042	.0031	-.0069	.0018
#3	.0102	.0102	.0022	-.0019	.0009	-.0021	.0006

Method: TRACE2 Standard: S0.1
Run Time: 01/31/06 06:54:26

Elem	Ag_328	As_189	B_2496	Ba_493	Be_313	Cd_226	Co_228
Avge	.0667	.0346	.0443	.1266	.2682	.5966	.1259
SDev	.0004	.0008	.0003	.0003	.0007	.0052	.0009
%RSD	.5805	2.397	.5567	.2755	.2493	.8729	.7547
#1	.0672	.0346	.0445	.1265	.2689	.6021	.1269
#2	.0666	.0339	.0442	.1269	.2677	.5918	.1256
#3	.0664	.0355	.0441	.1262	.2680	.5958	.1251

Elem	Cr_267	Cu_324	K_7664	Mn_257	Mo_202	Ni_231	Sb_206
Avge	.1096	.0505	.7346	.1227	.0389	.1342	.0193
SDev	.0002	.0002	.0010	.0003	.0003	.0013	.0008
%RSD	.1535	.3648	.1319	.2095	.8607	.9289	3.952
#1	.1097	.0505	.7343	.1227	.0389	.1346	.0185
#2	.1097	.0503	.7337	.1229	.0392	.1328	.0198
#3	.1094	.0506	.7356	.1224	.0385	.1352	.0198

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Avge	.0565	.3112	.0204	.0173	.0306	.0541	.1676
SDev	.0014	.0010	.0006	.0001	.0001	.0001	.0023
%RSD	2.436	.3260	3.136	.8772	.4432	.2713	1.383
#1	.0556	.3123	.0202	.0175	.0306	.0540	.1690
#2	.0558	.3103	.0212	.0172	.0308	.0542	.1649
#3	.0581	.3110	.0200	.0172	.0305	.0542	.1688

Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Avge	.0681	.0681	.6665	.1935	.0629	.0631	.0431
SDev	.0005	.0005	.0010	.0061	.0006	.0006	.0010
%RSD	.7198	.7198	.1572	3.170	.9660	1.002	2.246
#1	.0684	.0684	.6678	.1956	.0623	.0638	.0442
#2	.0675	.0675	.6660	.1866	.0636	.0626	.0423
#3	.0683	.0683	.6659	.1984	.0629	.0629	.0428

Method: TRACE2 Standard: S0.5
Run Time: 01/31/06 07:00:21

Elem	Ag_328	As_189	B_2496	Ba_493	Be_313	Cd_226	Co_228
Avge	.3318	.1714	.2179	.6347	1.333	2.910	.6258
SDev	.0013	.0003	.0008	.0018	.006	.012	.0021
%RSD	.3804	.1815	.3779	.2904	.4653	.4250	.3309
#1	.3331	.1716	.2184	.6359	1.339	2.923	.6274
#2	.3317	.1711	.2183	.6355	1.335	2.909	.6266
#3	.3305	.1717	.2169	.6326	1.327	2.898	.6235

Elem	Cr_267	Cu_324	Fe_	K_7664	Mn_257	Mo_202	Ni_231
Avge	.5437	.2365	4.089	3.393	.6167	.1979	.6654
SDev	.0020	.0010	.008	.009	.0018	.0014	.0043
%RSD	.3661	.4113	.1849	.2508	.2856	.7047	.6451
#1	.5448	.2373	4.096	3.399	.6181	.1970	.6685
#2	.5448	.2368	4.090	3.395	.6172	.1995	.6671
#3	.5414	.2354	4.081	3.383	.6147	.1973	.6605

Elem	Sb_206	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213
Avge	.0979	.2819	1.541	.1042	.0276	.1549	.2695
SDev	.0005	.0007	.008	.0012	.0002	.0003	.0008
%RSD	.4812	.2488	.4877	1.150	.8102	.2223	.2801
#1	.0983	.2812	1.548	.1036	.0276	.1552	.2702
#2	.0979	.2826	1.543	.1055	.0279	.1549	.2694
#3	.0974	.2819	1.533	.1034	.0275	.1545	.2687

Elem	P_1782	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st
Avge	.7942	.3056	.3056	3.320	.9628	.3109	.3221
SDev	.0066	.0015	.0015	.015	.0056	.0013	.0034
%RSD	.8252	.4884	.4884	.4575	.5775	.4026	1.071
#1	.7948	.3068	.3068	3.333	.9646	.3113	.3252
#2	.8005	.3060	.3060	3.322	.9566	.3118	.3184
#3	.7874	.3039	.3039	3.303	.9673	.3095	.3226

Elem	Se2nd
Avge	.2041
SDev	.0015
%RSD	.7182
#1	.2027
#2	.2040
#3	.2056

Method: TRACE2 Standard: SCAL
Run Time: 01/31/06 07:06:16

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Avge	.6472	.5258	.3356	.4275	1.250	2.622	1.900
SDev	.0102	.0076	.0061	.0073	.017	.041	.027
%RSD	1.570	1.443	1.830	1.715	1.369	1.581	1.432
#1	.6356	.5171	.3286	.4190	1.230	2.574	1.869
#2	.6546	.5309	.3402	.4320	1.260	2.647	1.915
#3	.6513	.5295	.3380	.4315	1.260	2.644	1.917

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	Fe_	K_7664
Avge	5.658	1.228	1.068	.4582	.1546	8.123	6.618
SDev	.081	.018	.016	.0070	.0034	.113	.078
%RSD	1.434	1.497	1.514	1.528	2.189	1.386	1.179
#1	5.565	1.207	1.049	.4502	.1510	8.002	6.528
#2	5.716	1.240	1.078	.4634	.1577	8.143	6.658
#3	5.692	1.238	1.076	.4609	.1552	8.225	6.668

Elem	Mg_279	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Sn_189
Avge	.5092	1.221	.3911	17.97	1.297	.1931	.5569
SDev	.0074	.017	.0061	.17	.023	.0040	.0085
%RSD	1.450	1.371	1.558	.9540	1.789	2.085	1.531
#1	.5008	1.202	.3844	17.77	1.270	.1889	.5473
#2	.5123	1.228	.3927	18.08	1.315	.1935	.5598
#3	.5145	1.234	.3962	18.06	1.305	.1969	.5636

Elem	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782	Si_288
Avge	3.023	.2053	.0400	.3061	.5288	1.521	.5820
SDev	.051	.0015	.0007	.0039	.0077	.015	.0091
%RSD	1.673	.7442	1.685	1.256	1.465	.9681	1.565
#1	2.965	.2035	.0392	.3017	.5200	1.507	.5715
#2	3.059	.2063	.0404	.3079	.5317	1.536	.5878
#3	3.044	.2059	.0403	.3087	.5347	1.520	.5867

Elem	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Avge	.5819	6.521	1.892	.6074	.6381	.4041
SDev	.0091	.093	.030	.0073	.0112	.0053
%RSD	1.564	1.421	1.582	1.197	1.750	1.308
#1	.5714	6.417	1.857	.6004	.6254	.3985
#2	.5877	6.593	1.910	.6149	.6465	.4091
#3	.5866	6.555	1.908	.6069	.6423	.4048

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Method: TRACE2 Standard: S10
Run Time: 01/31/06 07:12:11

Elem	Al_308	Ca_317	Fe_	Mg_279	Na_
Avge	2.688	9.651	.3153	2.612	.1229
SDev	.011	.039	.0022	.010	.0013
%RSD	.4211	.4087	.6952	.3974	1.033
#1	2.693	9.681	.3145	2.619	.1218
#2	2.676	9.607	.3136	2.600	.1227
#3	2.697	9.666	.3178	2.617	.1243

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Method: TRACE2 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag_328	328.068	Multiple	Standards	1515.46	.200177	01/31/06 07:06:16
Al_308	308.215	Multiple	Standards	18853.2	-42.0879	01/31/06 07:12:11
As_189	189.042	Multiple	Standards	2913.11	1.08497	01/31/06 07:06:16
B_2496	249.678	Multiple	Standards	2321.77	-2.45722	01/31/06 07:06:16
Ba_493	493.409	Multiple	Standards	794.698	-.600457	01/31/06 07:06:16
Be_313	313.042	Multiple	Standards	376.706	-.191315	01/31/06 07:06:16
Ca_317	317.933	Multiple	Standards	5221.14	-.641757	01/31/06 07:12:11
Cd_226	226.502	Multiple	Standards	171.930	.125529	01/31/06 07:06:16
Co_228	228.616	Multiple	Standards	803.620	.138977	01/31/06 07:06:16
Cr_267	267.716	Multiple	Standards	924.316	-.194953	01/31/06 07:06:16
Cu_324	324.753	Multiple	Standards	2157.71	-8.20191	01/31/06 07:06:16
Fe_	271.441	Multiple	Standards	63989.7	13.0147	01/31/06 07:12:11
Fe_	259.940	Multiple	Standards	1227.19	-1.40323	01/31/06 07:06:16
K_7664	766.491	Multiple	Standards	1516.74	-113.096	01/31/06 07:06:16
Mg_279	279.078	Multiple	Standards	19389.2	-1.18425	01/31/06 07:12:11
Mn_257	257.610	Multiple	Standards	815.056	-.051903	01/31/06 07:06:16
Mo_202	202.030	Multiple	Standards	2558.61	-.592442	01/31/06 07:06:16
Na_	330.232	S10	S0	162065.	74.1696	01/31/06 07:12:11
Na_	588.950	SCAL	S0	522.472	610.058	01/31/06 07:12:11
Ni_231	231.604	Multiple	Standards	755.954	-.186581	01/31/06 07:06:16
Sb_206	206.838	Multiple	Standards	5176.06	-1.28790	01/31/06 07:06:16
Pb_220	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se_196	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sn_189	189.989	Multiple	Standards	1780.11	-1.27663	01/31/06 07:06:16
Ti_334	334.941	Multiple	Standards	324.824	.458458	01/31/06 07:06:16
Tl_190	190.864	Multiple	Standards	4652.00	8.36732	01/31/06 07:06:16
U_3859	385.958	Multiple	Standards	39348.0	-581.674	01/31/06 07:06:16
V_2924	292.402	Multiple	Standards	3260.87	-.329466	01/31/06 07:06:16
Zn_213	213.858	Multiple	Standards	1870.24	-.388763	01/31/06 07:06:16
P_1782	178.287	Multiple	Standards	3191.02	-20.7999	01/31/06 07:06:16
Si_288	288.158	Multiple	Standards	8637.17	-90.9777	01/31/06 07:06:16
Si02_	288.158	Multiple	Standards	18475.3	-194.606	01/31/06 07:06:16
Sr_421	421.552	Multiple	Standards	151.555	-.341578	01/31/06 07:06:16
Pb1st	220.351	Multiple	Standards	521.338	.086021	01/31/06 07:06:16
Pb2nd	220.352	Multiple	Standards	1633.06	-3.05519	01/31/06 07:06:16
Se1st	196.021	Multiple	Standards	1535.09	4.76918	01/31/06 07:06:16
Se2nd	196.022	Multiple	Standards	2416.96	-.854488	01/31/06 07:06:16

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Method: TRACE2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag_328	328.068	S0	.000000	-.012435	.012435
		S0.1	100.000	101.317	-1.31726
		S0.5	500.000	502.963	-2.96323
		SCAL	1000.00	980.940	19.0601

CorCoef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al_308	308.215	S0	.000000	1.03071	-1.03071
		SCAL	10000.0	9871.16	128.839
		S10	50000.0	50644.2	-644.195

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As_189	189.042	S0	.000000	-.018287	.018287
		S0.1	100.000	102.021	-2.02065
		S0.5	500.000	500.504	-.504333
		SCAL	1000.00	978.785	21.2153

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B_2496	249.678	S0	.000000	-.003476	.003476
		S0.1	100.000	100.311	-.310867
		S0.5	500.000	503.390	-3.38953
		SCAL	1000.00	990.112	9.88782

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba_493	493.409	S0	.000000	-.000479	.000479
		S0.1	100.000	99.9692	.030762
		S0.5	500.000	503.781	-3.78088
		SCAL	1000.00	992.746	7.25409

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be_313	313.042	S0	.000000	-.007923	.007923
		S0.1	100.000	100.833	-.832878
		S0.5	500.000	502.136	-2.13577
		SCAL	1000.00	987.400	12.6004

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca_317	317.933	S0	.000000	.623067	-.623067
		SCAL	10000.0	9922.12	77.8828
		S10	50000.0	50389.4	-389.418

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd_226	226.502	S0	.000000	-.024326	.024326
		S0.1	100.000	102.697	-2.69672
		S0.5	500.000	500.462	-.461945
		SCAL	1000.00	972.859	27.1414

CorCoef: 0.99989

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration

Co_228	228.616	S0	.000000	-.010289	.010289
		S0.1	100.000	101.293	-1.29334
		S0.5	500.000	503.078	-3.07761
		SCAL	1000.00	987.201	12.7992

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr_267	267.716	S0	.000000	-.009416	.009416
		S0.1	100.000	101.082	-1.08199
		S0.5	500.000	502.349	-2.34857
		SCAL	1000.00	986.859	13.1411

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu_324	324.753	S0	.000000	-.007960	.007960
		S0.1	100.000	100.706	-.706467
		S0.5	500.000	502.043	-2.04330
		SCAL	1000.00	980.453	19.5465

CorCoef: 0.99992

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe_	271.441	S0	.000000	.469861	-.469861
		SCAL	10000.0	9906.03	93.9727
		S10	20000.0	20187.9	-187.943

CorCoef: 0.99994

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe_	259.940	S0	.000000	-.081270	.081270
		S0.5	5000.00	5016.25	-16.2539
		SCAL	10000.0	9967.49	32.5078

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
K_7664	766.491	S0	.000000	-.015875	.015875
		S0.1	1000.00	1001.04	-1.04321
		S0.5	5000.00	5032.45	-32.4546
		SCAL	10000.0	9924.66	75.3398

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg_279	279.078	S0	.000000	1.02722	-1.02722
		SCAL	10000.0	9871.60	128.402
		S10	50000.0	50642.0	-642.012

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn_257	257.610	S0	.000000	-.000020	.000020
		S0.1	100.000	99.9448	.055237
		S0.5	500.000	502.584	-2.58365
		SCAL	1000.00	995.514	4.48566

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo_202	202.030	S0	.000000	.009424	-.009424
		S0.1	100.000	98.8233	1.17672
		S0.5	500.000	505.830	-5.83047
		SCAL	1000.00	1000.11	-.106201

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na_	330.232	S0	.000000	-.000001	.000001
		S10	20000.0	20000.0	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na_	588.950	S0	.000000	.000016	-.000016
		SCAL	10000.0	10000.0	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni_231	231.604	S0	.000000	-.012671	.012671
		S0.1	100.000	101.288	-1.28792
		S0.5	500.000	502.810	-2.81000
		SCAL	1000.00	979.947	20.0533

CorCoef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb_206	206.838	S0	.000000	.008412	-.008412
		S0.1	100.000	98.8058	1.19424
		S0.5	500.000	505.207	-5.20691
		SCAL	1000.00	998.205	1.79486

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb_220	220.353	NONE	.000000	.000000	.000000
		NONE	10.0000	.000000	10.0000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se_196	196.026	NONE	.000000	.000000	.000000
		NONE	10.0000	.000000	10.0000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn_189	189.989	S0	.000000	.000703	-.000703
		S0.1	100.000	99.3093	.690659
		S0.5	500.000	500.494	-.493958
		SCAL	1000.00	990.045	9.95514

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti_334	334.941	S0	.000000	-.014153	.014153
		S0.1	100.000	101.548	-1.54784
		S0.5	500.000	501.111	-1.11057
		SCAL	1000.00	982.301	17.6995

CorCoef: 0.99994

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl_190	190.864	S0	.000000	-.034658	.034658
		S0.1	100.000	103.490	-3.49025
		S0.5	500.000	492.911	7.08899
		SCAL	1000.00	963.223	36.7766

CorCoef: 0.99992

			Known	Measured	Residual

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
U_3859	385.958	S0	.000000	.001551	-.001551
		S0.1	100.000	99.2876	.712379
		S0.5	500.000	506.141	-6.14096
		SCAL	1000.00	990.801	9.19922

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	S0	.000000	.004123	-.004123
		S0.1	100.000	99.5250	.474998
		S0.5	500.000	504.627	-4.62729
		SCAL	1000.00	997.817	2.18274

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn_213	213.858	S0	.000000	-.007248	.007248
		S0.1	100.000	100.831	-.830956
		S0.5	500.000	503.558	-3.55783
		SCAL	1000.00	988.598	11.4017

CorCoef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
P_1782	178.287	S0	.000000	-.128086	.128086
		S0.1	500.000	513.929	-13.9291
		S0.5	2500.00	2513.62	-13.6248
		SCAL	5000.00	4833.46	166.540

CorCoef: 0.99978

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si_288	288.158	S0	.000000	.019233	-.019233
		S0.1	500.000	496.791	3.20871
		S0.5	2500.00	2548.24	-48.2405
		SCAL	5000.00	4935.61	64.3940

CorCoef: 0.99985

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si02_	288.158	S0	.000000	.040915	-.040915
		S0.1	1069.50	1062.66	6.84131
		S0.5	5347.50	5450.80	-103.301
		SCAL	10695.0	10556.8	138.188

CorCoef: 0.99985

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sr_421	421.552	S0	.000000	-.006642	.006642
		S0.1	100.000	100.677	-.676765
		S0.5	500.000	502.753	-2.75299
		SCAL	1000.00	988.003	11.9969

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb1st	220.351	S0	.000000	-.009553	.009553
		S0.1	100.000	100.989	-.989357
		S0.5	500.000	502.043	-2.04318
		SCAL	1000.00	986.229	13.7705

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration

Pb2nd	220.352	S0	.000000	-.000089	.000089
		S0.1	100.000	99.7177	.282295
		S0.5	500.000	504.602	-4.60153
		SCAL	1000.00	988.813	11.1868
CorCoef:	0.99994				

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1st	196.021	S0	.000000	-.014984	.014984
		S0.1	100.000	101.680	-1.68030
		S0.5	500.000	499.149	.850861
		SCAL	1000.00	984.264	15.7358
CorCoef:	0.99997				

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se2nd	196.022	S0	.000000	-.028217	.028217
		S0.1	100.000	103.268	-3.26835
		S0.5	500.000	492.462	7.53821
		SCAL	1000.00	975.940	24.0599
CorCoef:	0.99998				

Method: TRACE2 Sample Name: ICV Operator: HSC
Run Time: 01/31/06 07:18:29
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	247.4	5039.	515.2	510.0	505.1	248.7	4952.
SDev	.9	16.	4.5	1.1	.7	.4	8.
%RSD	.3441	.3226	.8707	.2223	.1338	.1639	.1603
#1	246.9	5023.	520.3	508.8	504.4	248.6	4944.
#2	248.3	5055.	511.8	511.1	505.5	249.1	4960.
#3	246.9	5040.	513.6	509.9	505.6	248.3	4952.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.0	5000.	500.0	500.0	500.0	250.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	486.3	494.2	496.1	487.3	5115.	2484.	5016.
SDev	1.6	1.3	.3	.5	19.	2.	13.
%RSD	.3346	.2541	.0674	.1121	.3806	.0632	.2507
#1	487.5	494.3	496.0	486.9	5094.	2482.	5003.
#2	487.0	495.5	496.5	487.9	5117.	2483.	5028.
#3	484.5	492.9	495.8	487.1	5133.	2485.	5017.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	2500.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	508.7	530.2	2488.	494.3	520.9	497.4	2458.
SDev	.8	3.1	7.	2.8	.8	1.1	4.
%RSD	.1578	.5822	.2730	.5761	.1465	.2181	.1574
#1	507.8	526.8	2494.	494.2	521.5	498.0	2462.
#2	509.0	530.9	2491.	497.2	520.1	498.0	2456.
#3	509.3	532.9	2481.	491.5	521.2	496.2	2455.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	2500.	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	515.7	496.2	494.8	514.3	505.7	499.1	2391.
SDev	1.3	2.0	3.0	1.8	.9	.7	19.
%RSD	.2514	.3957	.6049	.3563	.1754	.1402	.7811
#1	514.2	496.6	497.4	514.7	504.7	498.5	2412.
#2	516.5	497.9	495.4	515.8	506.3	498.9	2386.
#3	516.4	494.1	491.5	512.3	506.1	499.8	2375.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5064.	10830.	499.2	497.0	497.6	2455.	2459.
SDev	7.	15.	1.0	1.9	2.5	10.	1.
%RSD	.1391	.1371	.2011	.3848	.5053	.3986	.0513
#1	5067.	10840.	498.5	496.9	498.6	2466.	2461.
#2	5069.	10840.	500.4	495.2	499.5	2453.	2458.
#3	5056.	10810.	498.8	499.0	494.7	2446.	2459.
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	5000.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: ICB Operator: HSC
Run Time: 01/31/06 07:25:32
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2939	-2.364	-1.412	2.478	.0665	.0973	5.313
SDev	.0999	.792	2.494	.494	.1013	.0109	.943
%RSD	33.97	33.49	176.7	19.94	152.2	11.21	17.75
#1	.1887	-2.813	1.245	2.379	.0095	.0978	6.228
#2	.3873	-2.828	-3.704	3.014	.1834	.1080	5.367
#3	.3058	-1.450	-1.776	2.041	.0067	.0862	4.344
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3107	.5046	.1794	1.266	2.593	7.852	7.656
SDev	.1567	.5121	.3847	.540	.542	1.583	2.707
%RSD	50.42	101.5	214.4	42.67	20.89	20.17	35.36
#1	.3328	.8651	.0424	1.604	2.095	9.672	8.382
#2	.4552	-.0815	.6139	.6430	3.170	7.090	4.660
#3	.1442	.7303	-.1181	1.552	2.514	6.793	9.925
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2380	-.1948	30.77	.5451	1.354	-1.005	.9430
SDev	.0391	.8126	2.23	.4826	.569	3.013	1.381
%RSD	16.42	417.1	7.248	88.55	42.00	299.7	146.5
#1	.2831	.7401	28.27	.3319	.8444	-.4500	1.333
#2	.2160	-.5924	32.54	1.098	1.968	1.691	-.5917
#3	.2148	-.7321	31.51	.2057	1.250	-4.257	2.087
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.628	.2688	4.252	28.12	.1162	-.0823	1.318
SDev	2.011	.0910	4.097	7.14	.1773	.1538	4.314
%RSD	123.5	33.87	96.35	25.40	152.6	186.9	327.2
#1	-.0064	.3338	-.0458	20.15	.1172	-.2356	3.778
#2	1.016	.1648	8.112	33.93	-.0616	.0719	-3.663
#3	3.873	.3078	4.689	30.28	.2931	-.0832	3.840

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.596	3.414	.1435	.9271	-1.970	5.962	-1.563
SDev	1.215	2.600	.0199	1.319	3.915	1.689	2.711
%RSD	76.15	76.15	13.85	142.2	198.7	28.34	173.5
#1	2.537	5.426	.1401	.5850	-.9667	7.041	-1.516
#2	2.028	4.337	.1649	2.383	1.346	6.830	-4.297
#3	.2238	.4786	.1256	-.1867	-6.289	4.015	1.125
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: PQL Operator: HSC
Run Time: 01/31/06 07:31:27
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.506	196.1	14.70	52.25	5.988	4.851	105.3
SDev	.380	2.4	1.47	.74	.229	.004	.7
%RSD	6.907	1.212	9.985	1.425	3.818	.0841	.7034
#1	5.937	197.3	13.68	52.12	6.141	4.850	104.5
#2	5.218	197.7	16.38	51.59	5.725	4.847	105.3
#3	5.363	193.4	14.04	53.06	6.097	4.855	106.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000	200.0	15.00	50.00	5.000	5.000	100.0
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.160	4.771	4.738	11.06	111.8	162.3	312.1
SDev	.173	.431	.179	.66	3.3	4.6	1.5
%RSD	3.359	9.041	3.782	5.925	2.957	2.860	.4708
#1	5.348	4.305	4.566	10.75	110.2	166.4	311.3
#2	5.007	4.852	4.726	10.61	109.6	163.4	313.8
#3	5.124	5.156	4.924	11.81	115.6	157.3	311.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000	5.000	5.000	10.00	100.0	150.0	300.0
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.45	10.62	183.6	5.847	9.714	10.33	15.60
SDev	.14	.42	2.8	1.117	1.672	.95	2.11
%RSD	1.358	3.950	1.548	19.11	17.21	9.176	13.54
#1	10.45	11.10	185.1	Q7.035	10.93	11.39	13.51
#2	10.31	10.33	185.3	5.688	7.809	9.572	17.73
#3	10.59	10.43	180.3	4.817	10.40	10.03	15.56
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00	10.00	150.0	5.000	10.00	10.00	15.00
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.261	5.147	Q26.53	Q68.53	4.728	10.46	155.8
SDev	1.041	.070	2.91	10.26	.459	.07	6.8
%RSD	11.24	1.359	10.97	14.96	9.698	.6713	4.345
#1	10.05	5.081	Q26.86	56.82	4.307	10.39	149.0
#2	9.654	5.141	Q29.27	Q75.90	4.661	10.48	162.5
#3	8.081	5.220	23.47	Q72.88	5.216	10.52	156.0

Value	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Range	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	98.67	211.1	4.992	13.03	8.984	22.49	12.16
SDev	2.26	4.8	.011	2.41	2.375	1.47	3.78
%RSD	2.286	2.286	.2229	18.53	26.43	6.550	31.13
#1	98.34	210.4	4.993	11.84	11.17	24.18	8.177
#2	96.60	206.6	5.003	15.81	6.459	21.78	15.71
#3	101.1	216.2	4.981	11.44	9.320	21.50	12.59
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	100.0		5.000				
Range	30.00		30.00				

Method: TRACE2 Sample Name: ICS-A Operator: HSC
Run Time: 01/31/06 07:37:21
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3025	505800.	-1.892	1.118	1.312	.1729	494900.
SDev	.0962	9444.	1.095	.923	.014	.0267	9755.
%RSD	31.81	1.867	57.90	82.58	1.081	15.45	1.971
#1	.4051	516700.	-.9757	2.059	1.320	.1973	506100.
#2	.2142	499700.	-3.105	.2143	1.320	.1771	489600.
#3	.2883	501000.	-1.595	1.080	1.295	.1444	488900.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	500000.	.0000	.0000	.0000	.0000	500000.
Range	10.00	100000.	30.00	100.0	10.00	10.00	100000.

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.165	.1686	.6884	-5.178	174800.	4.922	520400.
SDev	.301	.1148	.4014	1.477	5454.	3.347	9374.
%RSD	7.225	68.08	58.32	28.53	3.119	68.01	1.801
#1	3.969	.1606	1.144	-3.589	180500.	1.126	531300.
#2	4.512	.2873	.5368	-6.511	169600.	6.191	515500.
#3	4.014	.0581	.3848	-5.432	174400.	7.450	514600.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	200000.	.0000	500000.
Range	10.00	10.00	10.00	20.00	40000.	300.0	100000.

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	8.482	-.0090	68.38	4.025	2.090	-11.45	-15.39
SDev	.236	1.3546	8.72	.604	2.711	2.88	3.14
%RSD	2.784	15060.	12.75	15.00	129.7	25.16	20.38
#1	8.753	-1.196	59.54	4.448	1.592	-9.844	-13.17
#2	8.323	-.2980	76.98	4.293	-.3379	-14.78	-18.98
#3	8.369	1.467	68.63	3.334	5.014	-9.728	-14.02
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	20.00	20.00	300.0	10.00	20.00	20.00	30.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-14.60	-1.808	-15.29	50.89	3.706	7.462	26.29
SDev	2.26	.061	3.20	21.62	.163	.546	3.86
%RSD	15.51	3.359	20.90	42.48	4.404	7.317	14.67
#1	-11.99	-1.878	-13.99	29.94	3.805	7.580	29.80
#2	-15.97	-1.784	-18.94	49.61	3.518	7.938	22.16
#3	-15.85	-1.764	-12.96	73.12	3.796	6.866	26.90

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	20.00	10.00	40.00	100.0	10.00	20.00	300.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.519	9.666	.7035	230.8	-132.4	-8.084	-19.04
SDev	2.970	6.354	.0534	.8	4.4	8.676	7.82
%RSD	65.74	65.74	7.588	.3278	3.360	107.3	41.07
#1	5.761	12.32	.7367	231.4	-130.3	-18.01	-10.75
#2	6.666	14.26	.6419	231.0	-137.5	-4.331	-26.29
#3	1.129	2.414	.7318	229.9	-129.4	-1.916	-20.07
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	200.0		10.00				

Method: TRACE2 Sample Name: ICS-AB Operator: HSC
Run Time: 01/31/06 07:43:15
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	257.2	499700.	499.9	527.4	529.9	246.7	484200.
SDev	3.4	7658.	8.5	7.4	8.2	3.5	6986.
%RSD	1.336	1.532	1.703	1.405	1.543	1.406	1.443
#1	253.3	491000.	490.9	518.9	520.7	242.7	476200.
#2	258.5	502800.	500.9	532.5	532.9	247.9	487200.
#3	259.7	505300.	507.9	530.7	536.2	249.3	489200.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.0	500000.	500.0	500.0	500.0	250.0	500000.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	470.5	468.9	487.7	495.1	171200.	5696.	514800.
SDev	5.7	7.2	7.2	5.9	1739.	81.	8089.
%RSD	1.216	1.544	1.471	1.182	1.016	1.419	1.572
#1	463.9	460.7	479.5	488.5	170900.	5603.	505500.
#2	474.0	471.8	491.0	496.8	169600.	5736.	518600.
#3	473.6	474.2	492.7	499.9	173000.	5748.	520200.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	200000.	5000.	500000.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	516.3	525.9	5249.	458.4	545.3	475.2	2452.
SDev	8.7	9.5	93.	7.5	13.0	4.5	35.
%RSD	1.680	1.815	1.766	1.626	2.390	.9492	1.416
#1	506.3	515.6	5143.	450.4	530.5	470.1	2418.
#2	520.5	527.7	5314.	459.5	554.9	477.2	2449.
#3	522.0	534.5	5290.	465.1	550.6	478.5	2487.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	5000.	500.0	500.0	500.0	2500.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	496.2	495.0	458.2	553.7	514.4	515.9	2465.
SDev	10.3	6.4	8.9	10.2	8.1	9.4	47.
%RSD	2.068	1.290	1.952	1.851	1.578	1.829	1.920
#1	484.4	488.0	448.1	543.1	505.2	505.0	2417.
#2	502.4	496.4	465.1	554.4	517.6	521.8	2466.
#3	501.9	500.6	461.3	563.6	520.4	520.9	2512.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4989.	10670.	507.5	721.3	352.4	2482.	2436.
SDev	76.	163.	7.0	12.8	1.5	46.	34.
%RSD	1.530	1.530	1.388	1.772	.4158	1.858	1.381
#1	4903.	10490.	499.4	706.5	352.0	2429.	2413.
#2	5014.	10720.	510.3	729.5	351.2	2505.	2422.
#3	5050.	10800.	512.7	727.7	354.0	2513.	2475.
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	5000.		500.0				
Range	20.00		20.00				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 01/31/06 08:02:11
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	478.3	5076.	496.4	505.7	505.2	491.0	5063.
SDev	7.1	100.	11.5	7.8	8.0	8.0	99.
%RSD	1.482	1.964	2.307	1.550	1.575	1.625	1.950
#1	470.2	4961.	483.3	496.8	496.1	481.8	4949.
#2	483.2	5137.	501.7	511.2	510.4	495.7	5121.
#3	481.7	5130.	504.2	509.2	509.1	495.6	5118.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	484.4	493.3	503.8	494.2	5351.	5168.	5158.
SDev	9.0	8.8	8.9	8.4	93.	73.	105.
%RSD	1.857	1.793	1.767	1.692	1.729	1.417	2.045
#1	474.1	483.1	493.5	484.7	5244.	5084.	5037.
#2	490.9	498.1	509.7	500.4	5403.	5210.	5222.
#3	488.2	498.7	508.1	497.5	5406.	5212.	5216.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	521.5	533.8	10020.	489.8	521.3	509.7	507.9
SDev	9.0	9.1	163.	9.1	14.1	4.3	4.8
%RSD	1.721	1.700	1.630	1.858	2.703	.8410	.9523
#1	511.1	523.6	9827.	479.3	507.2	504.9	504.8
#2	527.1	541.1	10120.	495.9	535.4	511.4	505.4
#3	526.3	536.5	10100.	494.1	521.3	512.9	513.4
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	525.8	480.0	489.8	532.8	519.3	516.7	2364.
SDev	8.7	8.1	10.0	8.9	8.1	8.2	54.
%RSD	1.659	1.678	2.040	1.665	1.551	1.595	2.294
#1	515.8	470.7	478.4	524.4	510.0	507.2	2302.
#2	531.7	485.1	497.1	532.0	523.6	520.8	2391.
#3	530.0	484.2	493.7	542.0	524.2	522.0	2401.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2524.	5398.	490.6	522.1	503.6	516.8	503.4
SDev	23.	50.	8.4	3.5	5.1	4.7	6.8
%RSD	.9296	.9244	1.703	.6665	1.012	.9013	1.356
#1	2497.	5342.	481.0	518.4	498.1	511.5	501.4
#2	2542.	5437.	496.3	525.4	504.4	520.5	497.9
#3	2532.	5415.	494.4	522.5	508.1	518.3	511.0
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 01/31/06 08:08:06
Comment: CALIBRATION CURVE
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0424	9.637	3.768	5.500	1.355	.4249	20.82
SDev	.5825	3.323	2.554	2.446	.219	.0725	2.39
%RSD	1375.	34.48	67.78	44.47	16.13	17.06	11.48
#1	.5558	13.47	6.268	8.257	1.454	.3847	18.81
#2	-.0751	7.877	3.871	4.647	1.506	.5086	23.47
#3	-.6079	7.564	1.164	3.594	1.104	.3814	20.20
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.155	1.125	2.145	3.229	10.32	14.77	23.46
SDev	.097	.544	.322	.083	.96	5.28	2.27
%RSD	8.390	48.36	15.03	2.581	9.268	35.77	9.672
#1	1.153	1.634	2.442	3.169	9.616	20.78	24.15
#2	1.252	1.191	2.191	3.324	11.40	12.67	25.30
#3	1.059	.5514	1.802	3.193	9.925	10.86	20.93
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.9989	3.284	67.52	.9889	.6615	-.5069	5.941
SDev	.1457	2.192	6.69	.1053	4.233	1.8125	4.036
%RSD	14.58	66.75	9.915	10.65	639.9	357.6	67.93
#1	1.058	5.525	60.12	1.054	-.5472	-.6311	9.304
#2	1.106	3.182	73.15	.8674	5.367	-2.254	1.466
#3	.8330	1.144	69.29	1.045	-2.836	1.364	7.053
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.7903	1.008	7.880	46.28	.8673	.3626	.1868
SDev	1.874	.043	2.475	1.76	.6516	.1580	4.157
%RSD	237.1	4.221	31.40	3.796	75.13	43.58	2226.
#1	2.786	1.009	9.798	45.12	1.573	.5450	-.5738
#2	-.9318	.9643	8.755	48.30	.7389	.2732	-3.537
#3	.5165	1.049	5.087	45.42	.2895	.2695	4.672

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	11.24	24.04	.9186	1.797	-1.657	6.724	5.550
SDev	7.16	15.33	.0723	4.959	3.375	2.601	4.923
%RSD	63.75	63.75	7.870	275.9	203.7	38.68	88.71
#1	19.23	41.14	.9261	-3.901	1.001	9.592	9.160
#2	9.078	19.42	.9869	4.157	-5.455	4.518	-.0583
#3	5.403	11.56	.8429	5.136	-.5185	6.062	7.548
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 01/31/06 09:05:15
Comment: 498846||6010 SAUDIT
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	460.9	5049.	482.5	492.5	504.2	483.2	Q5579.
SDev	1.1	4.	7.4	3.5	.2	1.4	119.
%RSD	.2484	.0769	1.529	.7079	.0308	.2887	2.129
#1	459.8	5048.	474.0	488.5	504.0	481.7	Q5700.
#2	460.8	5053.	486.7	494.1	504.4	483.4	Q5574.
#3	462.1	5045.	486.9	495.0	504.3	484.4	5463.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	461.0	484.2	500.3	484.9	Q5675.	5394.	5217.
SDev	4.0	2.7	2.7	.2	44.	34.	34.
%RSD	.8580	.5638	.5329	.0408	.7690	.6244	.6596
#1	459.2	481.1	497.4	484.8	Q5649.	5369.	5183.
#2	458.2	486.3	502.7	484.9	Q5725.	5432.	5252.
#3	465.5	485.3	500.8	485.2	Q5651.	5380.	5215.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	539.3	542.0	10090.	466.5	527.4	524.8	512.5
SDev	3.2	5.4	24.	1.0	4.9	6.9	1.6
%RSD	.5971	1.001	.2424	.2185	.9301	1.316	.3112
#1	536.6	536.2	10100.	465.7	522.1	531.5	514.3
#2	542.9	547.0	10100.	467.7	528.5	525.2	511.9
#3	538.4	542.7	10060.	466.2	531.7	517.7	511.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	548.4	455.3	482.1	531.4	532.4	548.4	2266.
SDev	3.4	1.8	3.9	8.0	3.1	4.9	21.
%RSD	.6166	.4012	.8125	1.502	.5875	.8873	.9245
#1	545.0	455.9	481.5	522.5	529.9	Q551.7	Q2248.
#2	548.5	453.2	478.5	534.0	535.9	Q550.7	2260.
#3	Q551.8	456.8	486.3	537.8	531.3	542.8	2289.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2480.	5306.	479.0	545.8	514.3	526.0	505.7
SDev	28.	59.	2.1	5.9	7.4	2.7	1.2
%RSD	1.119	1.113	.4362	1.085	1.441	.5049	.2309
#1	2512.	5374.	481.1	551.8	521.3	528.8	507.1
#2	2462.	5266.	477.0	545.6	515.0	525.9	504.9
#3	2467.	5277.	478.9	540.0	506.6	523.5	505.2
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 01/31/06 09:11:10
Comment: 498846||6010 SAUDIT
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.6061	-6.033	1.590	1.814	.5051	.2810	Q155.3
SDev	.1868	3.064	4.205	1.328	.2187	.0846	6.8
%RSD	30.82	50.79	264.5	73.19	43.30	30.11	4.402
#1	.6911	-8.599	3.553	1.413	.3551	.1999	Q161.7
#2	.3919	-6.859	-3.238	.7328	.4041	.2745	Q156.2
#3	.7353	-2.641	4.453	3.296	.7560	.3687	Q148.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3066	.3946	.5825	3.449	11.99	20.31	10.35
SDev	.2766	.1353	.7218	.723	1.03	2.70	2.22
%RSD	90.22	34.30	123.9	20.97	8.599	13.29	21.44
#1	.0640	.2470	.4998	2.713	11.11	18.01	11.00
#2	.2479	.4239	-.0943	3.473	11.75	19.65	7.873
#3	.6078	.5129	1.342	4.159	13.12	23.28	12.16
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5076	-.1231	71.68	.9273	.7928	4.028	2.808
SDev	.1487	.8256	1.93	.2064	.5787	.750	1.361
%RSD	29.29	670.7	2.693	22.25	73.00	18.61	48.47
#1	.3712	-.4526	70.32	.7845	.2627	4.302	1.519
#2	.4855	-.7331	70.84	1.164	1.410	4.603	4.231
#3	.6660	.8164	73.89	.8335	.7053	3.180	2.672
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8362	.8748	8.739	Q86.81	.3857	7.018	1.660
SDev	1.588	.1178	6.271	9.32	.4740	.143	6.619
%RSD	189.9	13.47	71.75	10.73	122.9	2.039	398.6
#1	2.516	.7514	14.09	Q79.63	.5611	7.072	-4.493
#2	-.6417	.8869	10.29	Q97.34	-.1509	6.856	8.663
#3	.6345	.9861	1.840	Q83.46	.7471	7.127	.8116

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	8.193	17.52	.3267	6.330	2.880	9.103	-.3357
SDev	3.763	8.05	.0915	3.423	.704	2.243	3.0106
%RSD	45.93	45.93	28.00	54.08	24.46	24.64	896.7
#1	5.561	11.89	.2462	6.477	3.216	11.69	-3.559
#2	12.50	26.74	.3079	9.677	2.070	7.891	2.404
#3	6.515	13.94	.4262	2.836	3.352	7.728	.1479
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 01/31/06 10:04:16
Comment: 497739||6010 SRR
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	455.6	5026.	478.4	492.6	503.7	478.3	5155.
SDev	.6	18.	5.4	1.3	.6	.4	26.
%RSD	.1216	.3663	1.119	.2685	.1233	.0819	.5022
#1	455.6	5016.	480.6	494.0	503.0	478.2	5154.
#2	455.1	5048.	482.3	491.4	503.8	478.0	5181.
#3	456.2	5015.	472.3	492.4	504.3	478.8	5130.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	454.6	479.7	497.2	482.2	Q5739.	5422.	5239.
SDev	1.9	1.5	1.0	.2	48.	28.	19.
%RSD	.4278	.3106	.2045	.0405	.8448	.5216	.3701
#1	455.3	479.3	496.1	482.0	Q5717.	5414.	5228.
#2	452.4	481.4	498.1	482.1	Q5794.	5454.	5262.
#3	456.0	478.5	497.3	482.4	Q5704.	5399.	5228.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	541.3	541.3	10140.	462.9	528.7	501.1	504.9
SDev	3.1	2.0	77.	2.2	5.7	3.7	5.8
%RSD	.5747	.3661	.7556	.4855	1.076	.7410	1.139
#1	539.6	539.7	10210.	465.1	526.2	498.7	498.7
#2	544.9	543.5	10150.	460.6	535.2	505.4	505.9
#3	539.5	540.6	10060.	463.0	524.6	499.3	510.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	Q552.4	Q447.9	474.9	524.0	533.2	527.6	2279.
SDev	3.3	1.6	6.0	17.4	2.7	1.7	9.
%RSD	.6063	.3600	1.262	3.312	.5056	.3232	.3976
#1	549.3	Q448.9	480.3	543.5	531.5	526.0	2270.
#2	Q556.0	Q446.0	475.8	510.2	536.3	529.4	2288.
#3	Q552.0	Q448.8	468.5	518.3	531.7	527.4	2281.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2480.	5304.	474.0	519.2	492.1	516.9	498.9
SDev	26.	54.	1.5	2.5	5.6	2.6	7.8
%RSD	1.033	1.027	.3236	.4853	1.135	.4988	1.567
#1	2509.	5367.	474.4	521.5	487.3	514.3	490.9
#2	2468.	5280.	472.3	519.7	498.2	519.4	499.2
#3	2462.	5266.	475.2	516.5	490.7	517.1	506.6
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 01/31/06 10:10:11
Comment: 497739||6010 SRR
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0452	-8.834	2.788	1.250	.3827	.2472	62.44
SDev	.4451	4.267	4.878	1.254	.1940	.0817	10.19
%RSD	984.7	48.30	174.9	100.3	50.71	33.05	16.32
#1	-.4815	-13.75	2.869	-.1949	.1960	.2072	55.76
#2	-.0624	-6.034	7.625	2.047	.3687	.3412	74.17
#3	.4082	-6.724	-2.129	1.898	.5833	.1932	57.40
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2767	.5522	.4310	3.467	15.84	15.48	20.66
SDev	.2525	.3898	.4459	.589	2.45	4.28	4.81
%RSD	91.24	70.59	103.5	16.99	15.46	27.66	23.30
#1	-.0138	.3167	-.0799	3.458	14.55	12.69	16.09
#2	.4012	.3377	.6312	4.060	18.66	20.41	25.68
#3	.4427	1.002	.7418	2.883	14.30	13.34	20.21
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.6026	.3279	53.41	1.009	-.0878	.4027	1.930
SDev	.1242	.4611	3.33	.513	1.7275	.5732	3.589
%RSD	20.61	140.6	6.243	50.82	1967.	142.3	185.9
#1	.4698	-.1651	49.77	1.434	1.593	.7742	6.073
#2	.7158	.4003	56.32	1.154	.0021	.6913	-.0716
#3	.6223	.7485	54.14	.4395	-1.858	-.2574	-.2107
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.590	.5602	6.560	Q81.32	.5119	.7496	-.4810
SDev	.472	.1337	3.004	8.12	.5477	.0544	3.7458
%RSD	13.16	23.86	45.79	9.988	107.0	7.253	778.7
#1	3.233	.4132	5.650	Q82.15	.0333	.7550	3.808
#2	3.411	.6745	4.117	Q89.00	.3930	.8011	-3.112
#3	4.126	.5929	9.914	Q72.82	1.109	.6927	-2.139

Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Analysis	Report	QC Standard		01/31/06 10:16:02 AM			page 2
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	27.44	58.69	.3105	3.627	-1.207	8.825	-1.512
SDev	3.96	8.46	.0628	2.792	.558	4.505	3.822
%RSD	14.42	14.42	20.24	76.99	46.23	51.04	252.9
#1	31.89	68.22	.2729	5.029	-1.350	12.93	2.649
#2	26.08	55.79	.3830	5.440	-1.679	9.535	-4.868
#3	24.34	52.06	.2755	.4114	-.5912	4.007	-2.317
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 01/31/06 10:31:53
Comment: HIGH RANGE STD
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	514.1	5088.	511.7	502.2	507.9	509.0	4977.
SDev	1.9	7.	8.7	3.5	.6	1.3	2.
%RSD	.3692	.1299	1.692	.7000	.1255	.2490	.0427
#1	514.1	5095.	516.4	502.5	508.1	508.6	4979.
#2	516.0	5084.	516.9	505.6	508.4	510.4	4975.
#3	512.2	5084.	501.7	498.6	507.2	507.9	4978.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	499.3	517.1	504.3	512.4	4748.	4985.	4978.
SDev	1.6	.6	.6	.9	32.	5.	6.
%RSD	.3138	.1141	.1140	.1810	.6772	.0942	.1122
#1	500.4	517.7	504.0	512.1	4766.	4980.	4983.
#2	500.0	517.1	504.9	513.4	4711.	4988.	4972.
#3	497.5	516.5	503.9	511.6	4767.	4987.	4980.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	492.9	504.9	10230.	504.6	515.4	502.2	497.2
SDev	1.0	2.6	23.	3.9	3.2	1.9	1.4
%RSD	.1944	.5159	.2246	.7662	.6175	.3874	.2841
#1	493.2	503.1	10260.	503.1	511.9	502.3	498.8
#2	491.9	503.7	10220.	509.0	516.4	504.0	496.1
#3	493.7	507.9	10220.	501.8	518.0	500.1	496.7
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	476.1	504.7	496.7	516.1	498.1	506.6	2695.
SDev	2.7	2.6	5.9	14.2	.7	1.1	29.
%RSD	.5735	.5067	1.197	2.757	.1334	.2142	1.093
#1	474.0	503.2	490.0	520.6	498.7	507.2	2663.
#2	479.2	507.6	498.6	500.2	497.4	505.4	2722.
#3	475.1	503.2	501.4	527.6	498.1	507.3	2699.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2597.	5555.	502.6	498.7	503.9	495.2	498.2
SDev	4.	9.	1.7	.6	3.2	2.7	2.2
%RSD	.1570	.1562	.3417	.1288	.6380	.5373	.4491
#1	2598.	5556.	501.7	498.4	504.3	495.3	500.5
#2	2600.	5563.	504.5	498.3	506.8	492.5	498.0
#3	2592.	5545.	501.4	499.5	500.5	497.8	496.1
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 01/31/06 10:37:48
Comment: HIGH RANGE STD
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3268	1.605	4.708	1.752	.3956	.2025	11.50
SDev	.1933	2.192	2.427	.930	.0569	.0361	.79
%RSD	59.16	136.6	51.56	53.05	14.39	17.85	6.838
#1	-.5500	-.0361	3.747	1.661	.3392	.2440	12.41
#2	-.2173	4.093	2.909	2.724	.3945	.1778	11.01
#3	-.2130	.7565	7.469	.8719	.4530	.1858	11.08
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3437	-.3826	.6854	.3656	2.789	5.755	2.675
SDev	.4341	.1489	.2149	.2302	.287	1.931	3.183
%RSD	126.3	38.91	31.35	62.96	10.29	33.56	119.0
#1	.7630	-.5312	.4523	.5909	2.785	7.512	-.6632
#2	-.1039	-.2334	.7283	.1308	2.505	3.688	5.676
#3	.3719	-.3833	.8756	.3752	3.079	6.066	3.012
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2418	.7002	47.32	.3664	3.393	-1.192	-2.481
SDev	.0442	.2693	5.16	.6174	3.344	.630	1.240
%RSD	18.30	38.46	10.90	168.5	98.56	52.84	49.96
#1	.2767	.5764	53.21	-.2072	.7998	-1.681	-3.572
#2	.1920	1.009	43.62	.2865	7.167	-.4813	-1.133
#3	.2568	.5151	45.13	1.020	2.212	-1.415	-2.738
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1475	.3002	2.078	14.97	-.1243	.5208	7.583
SDev	1.504	.0356	2.016	12.71	.1011	.2510	5.756
%RSD	1020.	11.85	96.99	84.89	81.32	48.20	75.91
#1	1.882	.3363	2.366	29.51	-.0668	.5155	13.33
#2	-.6456	.2993	3.935	9.476	-.2409	.2725	7.600
#3	-.7940	.2651	-.0656	5.937	-.0650	.7745	1.818

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.383	20.07	.1676	1.466	-2.520	6.903	-7.166
SDev	4.213	9.01	.0355	3.962	1.697	1.519	1.882
%RSD	44.90	44.90	21.20	270.4	67.36	22.01	26.26
#1	14.17	30.30	.2079	2.788	-3.912	5.553	-8.128
#2	7.754	16.59	.1407	4.598	-3.017	6.608	-4.998
#3	6.228	13.32	.1542	-2.989	-.6292	8.548	-8.373
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 01/31/06 11:01:27
Comment: HIGH RANGE STD
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	510.0	5112.	510.8	504.0	506.3	509.7	5027.
SDev	1.7	17.	.5	1.2	.2	.9	12.
%RSD	.3304	.3249	.0987	.2369	.0432	.1832	.2450
#1	509.2	5095.	510.8	503.0	506.5	508.7	5013.
#2	512.0	5129.	511.2	503.8	506.1	510.6	5035.
#3	508.9	5111.	510.2	505.3	506.4	509.9	5034.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	500.7	518.8	507.0	510.0	4825.	5020.	5056.
SDev	1.5	.8	.5	.4	23.	5.	13.
%RSD	.2964	.1490	.0988	.0809	.4707	.1017	.2490
#1	500.8	518.1	506.4	509.6	4817.	5025.	5043.
#2	502.1	518.9	507.4	510.4	4806.	5015.	5057.
#3	499.1	519.6	507.2	510.0	4850.	5022.	5069.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	496.5	511.7	10220.	504.6	514.1	507.4	506.2
SDev	1.6	2.2	63.	.1	3.2	2.2	5.6
%RSD	.3216	.4307	.6144	.0221	.6174	.4372	1.109
#1	496.0	512.2	10290.	504.6	511.1	505.3	502.0
#2	495.3	509.2	10160.	504.7	513.8	509.7	512.6
#3	498.3	513.5	10200.	504.5	517.4	507.0	504.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	482.8	501.1	498.0	519.9	501.8	511.5	2638.
SDev	3.4	2.1	3.2	4.0	1.4	1.0	13.
%RSD	.7037	.4197	.6339	.7614	.2692	.2042	.5092
#1	479.8	499.3	499.3	517.0	501.0	511.0	2623.
#2	482.0	503.4	494.4	518.4	501.0	510.8	2643.
#3	486.5	500.7	500.4	524.4	503.4	512.7	2648.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2600.	5560.	500.0	505.1	508.5	505.1	506.8
SDev	3.	6.	.9	.5	3.1	6.8	10.1
%RSD	.1100	.1105	.1854	.1066	.6149	1.341	1.985
#1	2600.	5561.	499.5	504.5	505.8	512.3	496.9
#2	2602.	5566.	501.0	505.4	511.9	503.9	517.0
#3	2597.	5554.	499.4	505.4	507.8	498.9	506.7
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 01/31/06 11:07:22
Comment: HIGH RANGE STD
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4383	15.53	3.010	1.339	.6068	.4246	20.07
SDev	.4487	10.19	2.170	.750	.2119	.1829	4.58
%RSD	102.4	65.63	72.07	56.01	34.93	43.08	22.82
#1	.9110	13.55	3.898	1.218	.5294	.3241	17.43
#2	.3858	26.57	4.595	2.143	.8465	.6358	25.36
#3	.0182	6.476	.5378	.6577	.4444	.3141	17.43
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.7365	.2596	1.150	.6487	8.070	2.975	13.37
SDev	.4676	.2925	.123	.4873	3.214	5.152	5.60
%RSD	63.50	112.7	10.73	75.11	39.83	173.2	41.92
#1	.3144	.4401	1.091	1.037	6.004	4.492	11.82
#2	1.239	.4166	1.292	.1018	11.77	7.198	19.58
#3	.6558	-.0779	1.068	.8078	6.434	-2.765	8.701
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4358	.3002	86.26	.0637	.0032	-.5034	3.466
SDev	.1691	1.105	10.71	.8956	1.369	2.0986	.872
%RSD	38.79	368.0	12.42	1405.	42180.	416.9	25.17
#1	.2978	.4371	82.70	1.091	-1.568	-2.865	4.358
#2	.6244	-.8665	98.30	-.3483	.6409	1.147	2.615
#3	.3854	1.330	77.78	-.5517	.9370	.2084	3.424
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8095	.6498	3.418	32.67	.3399	.6462	4.579
SDev	1.401	.3184	6.116	3.87	.6195	.2246	4.399
%RSD	173.0	48.99	178.9	11.85	182.2	34.76	96.07
#1	1.447	.3452	-2.612	35.82	.4575	.6639	.4295
#2	1.778	.9803	9.617	28.35	.8922	.8614	9.191
#3	-.7963	.6241	3.249	33.85	-.3299	.4132	4.116

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	8.985	19.22	.3878	1.270	-1.389	7.831	1.286
SDev	3.812	8.15	.1940	2.726	3.529	7.168	2.547
%RSD	42.43	42.43	50.03	214.6	254.1	91.54	198.0
#1	12.82	27.43	.2637	2.223	-5.406	16.09	-1.501
#2	8.931	19.10	.6114	3.391	.0260	4.112	1.867
#3	5.200	11.12	.2883	-1.805	1.213	3.287	3.493
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: 1201019554 Operator: HSC
Run Time: 01/31/06 11:18:17
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1004	6.289	5.006	1.030	.1872	.0255	18.16
SDev	.2908	.282	2.321	.738	.1495	.0288	.31
%RSD	289.7	4.487	46.37	71.66	79.85	112.7	1.731
#1	.1824	5.972	6.515	.4066	.2491	-.0055	18.25
#2	-.2226	6.382	2.333	.8382	.0167	.0306	17.81
#3	.3414	6.514	6.170	1.845	.2958	.0515	18.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000	200.0	15.00	50.00	5.000	5.000	100.0
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3768	-.5727	.3682	-.0091	5.418	3.902	2.299
SDev	.2842	.4564	.3546	.4641	.673	3.873	1.958
%RSD	75.40	79.69	96.30	5122.	12.42	99.26	85.16
#1	.6767	-.9186	-.0404	-.5333	5.863	7.637	.9416
#2	.1115	-.7439	.5499	.1568	4.644	-.0950	1.412
#3	.3423	-.0555	.5953	.3492	5.748	4.163	4.543
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000	5.000	5.000	10.00	100.0	150.0	300.0
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0874	-.4602	74.51	.4640	2.463	-2.534	-.9984
SDev	.0908	.7252	3.62	.3832	3.316	.238	3.4134
%RSD	103.9	157.6	4.862	82.59	134.7	9.409	341.9
#1	.0598	-1.294	70.36	.0823	6.224	-2.708	2.888
#2	.0136	-.1128	76.10	.4609	1.204	-2.632	-3.508
#3	.1888	.0259	77.06	.8487	-.0397	-2.263	-2.376
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00	10.00	150.0	5.000	10.00	10.00	15.00
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2377	.1304	.6034	31.22	-.2142	1.092	14.04
SDev	1.5753	.0892	8.286	4.52	.2694	.114	3.61
%RSD	662.7	68.40	1373.	14.49	125.8	10.45	25.70
#1	1.504	.0667	10.15	28.78	-.5083	.9950	17.25
#2	-1.562	.2323	-4.715	28.44	-.1550	1.063	14.75
#3	-.6554	.0921	-3.624	36.44	.0207	1.218	10.13

High	10.00	5.000	20.00	50.00	10.00	10.00	150.0
Low	-10.00	-5.000	-20.00	-50.00	-10.00	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.58	22.63	.0140	1.641	-4.619	3.664	-3.326
SDev	8.28	17.70	.0108	1.657	.962	3.371	3.438
%RSD	78.23	78.23	77.02	101.0	20.82	91.99	103.4
#1	20.06	42.90	.0027	3.327	-5.722	7.462	.6049
#2	4.782	10.23	.0151	.0140	-3.953	1.028	-5.772
#3	6.898	14.76	.0242	1.581	-4.182	2.502	-4.812
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	100.0		10.00				
Low	-100.0		-10.00				

Method: TRACE2 Sample Name: 1201019555 Operator: HSC
Run Time: 01/31/06 11:24:12
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	543.6	5355.	540.3	527.9	545.2	533.9	5254.
SDev	12.8	129.	12.8	11.5	13.7	13.2	133.
%RSD	2.352	2.404	2.372	2.184	2.511	2.467	2.535
#1	558.2	5502.	555.0	541.0	560.9	548.9	5405.
#2	534.3	5261.	531.5	519.6	535.6	524.2	5154.
#3	538.2	5302.	534.4	522.9	539.2	528.5	5203.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	521.7	542.7	529.3	544.1	5140.	5150.	5313.
SDev	13.4	13.3	13.4	14.2	133.	105.	136.
%RSD	2.578	2.458	2.525	2.602	2.581	2.033	2.562
#1	537.1	558.0	544.6	560.1	5289.	5269.	5467.
#2	512.8	533.4	520.1	533.4	5036.	5070.	5208.
#3	515.0	536.7	523.1	538.6	5093.	5111.	5265.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	530.2	551.1	5380.	528.0	564.5	531.9	520.9
SDev	13.4	12.7	158.	13.5	13.0	14.0	14.0
%RSD	2.522	2.312	2.937	2.563	2.299	2.624	2.696
#1	545.3	565.5	5562.	543.6	578.9	547.8	536.4
#2	519.9	541.4	5276.	519.1	553.8	521.6	509.0
#3	525.4	546.3	5302.	521.5	560.8	526.4	517.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	527.0	537.7	530.6	548.8	531.8	545.7	579.3
SDev	11.9	12.7	14.1	13.6	14.0	13.4	14.6
%RSD	2.252	2.360	2.662	2.475	2.633	2.458	2.526
#1	539.5	552.2	546.6	563.1	547.7	560.8	594.5
#2	515.8	528.4	519.9	536.1	521.4	535.2	578.1
#3	525.9	532.6	525.3	547.2	526.3	541.0	565.4

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5247.	11220.	525.1	533.2	531.3	517.8	522.5
SDev	130.	278.	12.9	13.8	14.1	17.1	12.9
%RSD	2.474	2.473	2.448	2.596	2.657	3.303	2.474
#1	5396.	11540.	539.9	548.4	547.5	537.5	535.9
#2	5154.	11020.	516.1	521.3	521.7	506.8	510.1
#3	5192.	11110.	519.4	529.9	524.6	509.0	521.6
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 154614001 Operator: HSC
Run Time: 01/31/06 11:30:06
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2337	4.301	4.866	12.54	6.086	.1301	11500.
SDev	.3081	4.535	2.407	.71	.250	.0534	14.
%RSD	131.8	105.4	49.47	5.624	4.101	41.01	.1179
#1	-.2988	1.296	5.372	13.20	6.247	.1917	11510.
#2	.1017	2.091	6.980	12.63	6.214	.0996	11480.
#3	-.5041	9.517	2.246	11.80	5.799	.0990	11500.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3069	-.0758	4.676	1.165	40.38	1525.	4004.
SDev	.2864	.4127	.293	.636	.83	7.	5.
%RSD	93.31	544.3	6.272	54.61	2.046	.4731	.1272
#1	.0550	-.2486	4.338	1.897	40.92	1531.	4007.
#2	.6184	.3952	4.826	.7515	40.78	1517.	3999.
#3	.2474	-.3740	4.863	.8452	39.43	1527.	4008.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.033	1.114	10220.	2.761	-1.026	1.126	-.9518
SDev	.069	.876	172.	.642	2.518	1.928	2.1040
%RSD	6.641	78.60	1.682	23.25	245.3	171.2	221.1
#1	1.095	1.872	10420.	2.281	.6408	2.006	-1.268
#2	.9596	1.315	10120.	2.511	-3.922	-1.084	1.293
#3	1.044	.1555	10120.	3.490	.2024	2.457	-2.880
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0689	.2045	4.179	29.04	4.219	391.7	27.96
SDev	1.896	.0413	6.170	5.61	.395	.8	.89
%RSD	2752.	20.21	147.7	19.31	9.363	.2100	3.195
#1	-.0820	.1716	9.874	22.66	4.207	392.6	28.81
#2	-1.747	.2509	5.038	31.28	4.620	390.9	28.06
#3	2.036	.1909	-2.376	33.18	3.830	391.7	27.03

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	29870.	63900.	51.67	3.585	-.1013	4.965	-3.906
SDev	24.	51.	.05	1.686	3.1775	4.859	3.372
%RSD	.0820	.0805	.1005	47.04	3138.	97.86	86.35
#1	29880.	63900.	51.71	1.673	2.171	-.5692	-1.617
#2	29850.	63850.	51.69	4.219	-3.732	8.531	-2.321
#3	29900.	63950.	51.61	4.861	1.257	6.933	-7.778
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1201019556 Operator: HSC
Run Time: 01/31/06 11:36:00
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1993	4.231	2.421	11.78	6.030	.0350	11710.
SDev	.3068	2.725	1.034	.47	.153	.0144	83.
%RSD	153.9	64.42	42.70	4.016	2.541	41.04	.7116
#1	.4664	7.219	3.163	12.32	5.887	.0475	11610.
#2	.2674	1.882	2.861	11.45	6.013	.0383	11750.
#3	-.1358	3.592	1.240	11.58	6.192	.0193	11760.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0970	.0318	4.737	.0318	38.97	1540.	4088.
SDev	.1918	.6557	.224	.3705	.16	11.	30.
%RSD	197.7	2062.	4.718	1167.	.4098	.6935	.7440
#1	.0968	.5206	4.962	.1149	38.80	1528.	4054.
#2	-.0947	-.7134	4.515	-.3733	38.99	1549.	4099.
#3	.2888	.2882	4.734	.3536	39.11	1543.	4112.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.9755	.4477	10260.	1.718	.8038	.9030	-.9468
SDev	.0774	.3198	90.	.218	2.974	1.941	2.6773
%RSD	7.933	71.44	.8778	12.71	370.0	214.9	282.8
#1	1.037	.6918	10160.	1.491	-1.992	3.144	-2.187
#2	.8884	.0857	10310.	1.736	.4738	-.2083	2.126
#3	1.001	.5657	10320.	1.927	3.929	-.2269	-2.779
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3670	.2115	4.796	23.10	5.117	398.9	29.01
SDev	1.545	.0350	3.862	1.13	.377	3.6	.96
%RSD	421.0	16.56	80.52	4.912	7.367	.8922	3.319
#1	1.775	.2439	9.122	24.34	5.356	394.9	28.35
#2	-1.286	.1744	3.572	22.12	4.683	400.3	30.11
#3	.6117	.2163	1.695	22.83	5.314	401.6	28.56

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	30320.	64850.	52.34	1.860	.4252	6.256	-4.543
SDev	265.	565.	.47	3.217	4.367	6.037	2.489
%RSD	.8731	.8720	.9012	173.0	1027.	96.50	54.78
#1	30020.	64210.	51.82	-1.336	5.381	.1069	-3.332
#2	30520.	65270.	52.74	5.098	-2.857	12.17	-2.891
#3	30420.	65060.	52.46	1.818	-1.248	6.487	-7.406
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1201019557 Operator: HSC
Run Time: 01/31/06 11:41:54
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	533.8	5317.	530.4	541.6	550.5	531.9	17430.
SDev	1.4	11.	2.2	2.6	1.2	1.2	31.
%RSD	.2593	.2127	.4095	.4750	.2205	.2218	.1762
#1	532.3	5304.	528.5	538.9	549.1	530.6	17400.
#2	535.1	5319.	532.8	541.7	551.1	532.7	17430.
#3	534.0	5327.	529.9	544.0	551.3	532.6	17470.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	513.4	536.7	528.9	540.1	5311.	6726.	9605.
SDev	2.2	.8	.9	.4	24.	11.	21.
%RSD	.4264	.1504	.1696	.0771	.4537	.1620	.2208
#1	511.5	535.9	527.8	539.6	5308.	6716.	9590.
#2	515.8	537.5	529.4	540.5	5288.	6726.	9597.
#3	512.9	536.7	529.4	540.1	5336.	6737.	9630.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	536.6	550.3	16320.	517.5	556.8	527.1	514.2
SDev	1.5	2.2	131.	2.3	4.2	2.7	3.5
%RSD	.2709	.3927	.8041	.4538	.7560	.5115	.6760
#1	535.6	548.0	16230.	516.6	559.2	525.3	511.7
#2	535.9	550.9	16470.	520.2	551.9	525.8	512.8
#3	538.3	552.2	16260.	515.7	559.2	530.2	518.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	531.3	526.7	528.3	542.1	537.2	960.5	582.7
SDev	1.3	1.2	2.1	8.5	2.0	1.2	2.3
%RSD	.2433	.2257	.3949	1.564	.3814	.1259	.3943
#1	530.1	525.5	528.7	544.4	535.9	959.6	581.2
#2	531.0	527.8	526.0	549.2	536.1	959.9	581.6
#3	532.7	526.9	530.1	532.7	539.6	961.9	585.3

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	36690.	78480.	573.3	528.7	526.3	513.9	514.4
SDev	30.	64.	1.9	2.7	4.9	4.7	5.3
%RSD	.0818	.0810	.3269	.5122	.9300	.9056	1.031
#1	36670.	78430.	571.2	527.5	524.3	509.2	512.9
#2	36680.	78460.	574.5	531.8	522.8	518.5	510.0
#3	36730.	78550.	574.4	526.8	531.9	514.0	520.3
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 1201019558|5| Operator: HSC
Run Time: 01/31/06 11:47:48
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6241	-4.069	3.045	2.870	1.444	.1126	2268.
SDev	.8611	1.454	1.706	.286	.085	.0006	22.
%RSD	138.0	35.73	56.00	9.963	5.878	.5145	.9548
#1	-1.608	-5.509	5.010	2.548	1.541	.1132	2278.
#2	-.2563	-4.097	2.181	3.095	1.407	.1123	2284.
#3	-.0080	-2.601	1.945	2.967	1.384	.1121	2244.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2796	-.5176	.7881	-.3005	9.453	300.7	788.5
SDev	.3078	.3711	.2704	.3089	.472	3.8	5.7
%RSD	110.1	71.69	34.31	102.8	4.997	1.267	.7238
#1	.5885	-.9445	.8606	-.6556	9.807	296.3	788.3
#2	.2776	-.2719	.4889	-.1519	8.917	303.2	794.3
#3	-.0272	-.3364	1.015	-.0940	9.636	302.5	782.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2739	.0957	2032.	.8835	2.052	.1984	.9049
SDev	.0333	.1389	20.	.2756	6.157	1.721	3.730
%RSD	12.16	145.1	.9607	31.19	300.0	867.5	412.2
#1	.2673	.2349	2021.	.7907	5.962	.4938	5.207
#2	.2444	.0950	2055.	.6663	-5.045	1.753	-1.065
#3	.3100	-.0428	2021.	1.194	5.239	-1.651	-1.427
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.409	.2780	2.952	14.00	.7808	77.89	7.459
SDev	1.988	.0267	6.539	5.84	.1322	.97	3.147
%RSD	141.1	9.587	221.5	41.75	16.93	1.250	42.19
#1	-3.422	.2834	5.610	19.53	.6369	78.31	8.351
#2	.5533	.2490	7.745	14.58	.8969	78.58	10.06
#3	-1.358	.3015	-4.497	7.884	.8086	76.78	3.963

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5884.	12590.	10.28	3.807	-1.603	3.074	-.1779
SDev	65.	139.	.15	3.882	1.132	9.252	2.1632
%RSD	1.104	1.100	1.425	102.0	70.60	301.0	1216.
#1	5898.	12620.	10.30	6.224	-2.367	13.17	1.233
#2	5941.	12710.	10.41	5.870	-.3027	-5.005	.9018
#3	5813.	12430.	10.12	-.6710	-2.141	1.060	-2.669
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 01/31/06 11:53:43
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	502.5	5062.	503.5	502.7	506.0	505.7	5025.
SDev	1.5	3.	4.0	1.9	.9	1.1	.
%RSD	.2980	.0514	.8039	.3839	.1869	.2164	.0036
#1	502.6	5063.	500.9	500.5	506.3	505.8	5025.
#2	504.0	5064.	501.4	504.2	506.8	506.8	5025.
#3	501.0	5059.	508.1	503.3	505.0	504.7	5025.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	492.1	514.8	505.8	507.3	4971.	5050.	5058.
SDev	1.0	.5	.2	1.2	19.	1.	5.
%RSD	.2023	.0982	.0328	.2346	.3734	.0198	.1079
#1	491.7	515.3	505.9	507.9	4972.	5051.	5056.
#2	493.2	514.4	505.8	508.0	4951.	5050.	5055.
#3	491.3	514.6	505.6	505.9	4988.	5049.	5065.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	504.2	517.9	10140.	496.2	522.3	504.4	508.4
SDev	.8	.5	55.	3.5	2.2	2.4	2.4
%RSD	.1600	.0887	.5463	.6984	.4165	.4822	.4636
#1	504.4	517.4	10200.	496.6	524.8	503.5	508.0
#2	503.3	517.9	10150.	499.5	520.9	507.2	506.3
#3	504.8	518.3	10090.	492.6	521.3	502.6	511.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	490.3	492.3	500.8	524.1	508.3	516.9	2592.
SDev	1.6	1.4	2.6	9.5	.4	1.2	14.
%RSD	.3174	.2772	.5187	1.811	.0858	.2332	.5247
#1	489.3	492.3	501.3	525.3	508.3	518.2	2607.
#2	492.1	493.6	503.2	532.9	507.8	515.9	2588.
#3	489.6	490.9	498.0	514.1	508.7	516.5	2581.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2581.	5521.	496.5	506.7	503.3	508.1	508.6
SDev	6.	12.	.7	3.0	2.2	1.8	3.3
%RSD	.2276	.2226	.1393	.5916	.4287	.3501	.6439
#1	2584.	5526.	496.4	505.8	502.3	506.1	508.9
#2	2586.	5530.	497.2	510.1	505.8	508.6	505.2
#3	2574.	5507.	495.8	504.3	501.8	509.5	511.7
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 01/31/06 11:59:39
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0999	-3.906	2.048	.8556	.4346	.2388	8.719
SDev	.3695	3.188	2.270	.3320	.0687	.0174	.515
%RSD	369.8	81.64	110.8	38.80	15.81	7.282	5.903
#1	.2233	-.6144	.0690	1.031	.5081	.2533	9.303
#2	-.5028	-6.980	1.550	1.063	.3720	.2196	8.525
#3	-.0203	-4.123	4.526	.4727	.4237	.2436	8.330
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4412	.3044	.5730	.4208	3.240	2.879	5.897
SDev	.0401	.5876	.0512	.3941	.636	2.868	3.088
%RSD	9.087	193.0	8.938	93.66	19.63	99.65	52.37
#1	.4114	.9570	.5247	.1724	3.700	2.828	5.578
#2	.4868	-.1826	.5676	.2147	2.514	5.772	9.132
#3	.4255	.1387	.6267	.8753	3.506	.0355	2.981
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2753	.4096	65.57	.6351	1.238	-1.731	2.387
SDev	.0587	1.047	3.92	.3397	4.185	1.039	4.547
%RSD	21.33	255.5	5.976	53.48	338.1	60.01	190.5
#1	.3416	.9863	64.65	.6251	-2.257	-.6800	-1.732
#2	.2298	1.041	69.86	.9797	5.876	-2.757	1.626
#3	.2544	-.7985	62.19	.3006	.0941	-1.756	7.267
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8584	.3859	4.298	29.72	-.0673	.4450	5.607
SDev	1.750	.2075	1.226	1.56	.2624	.0801	2.120
%RSD	203.8	53.79	28.51	5.255	390.1	18.01	37.82
#1	2.308	.5717	4.003	30.57	.1950	.5137	5.224
#2	-1.085	.4239	5.644	30.67	-.3298	.3569	7.892
#3	1.353	.1619	3.247	27.92	-.0669	.4644	3.704

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.860	3.979	.2288	-.7628	-2.215	6.262	.4522
SDev	3.101	6.633	.0490	2.5750	2.566	4.540	6.630
%RSD	166.7	166.7	21.42	337.6	115.9	72.51	1466.
#1	5.413	11.58	.2762	-3.510	.7329	2.092	-3.641
#2	.4702	1.006	.1783	-.3734	-3.948	11.10	-3.104
#3	-.3027	-.6476	.2319	1.595	-3.430	5.594	8.102
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Method: TRACE2 Sample Name: 154614002 Operator: HSC
Run Time: 01/31/06 12:05:33
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4401	3.276	.2864	12.63	47.53	.0319	11350.
SDev	.9759	2.722	3.281	.12	.28	.0074	50.
%RSD	221.7	83.10	1146.	.9402	.5837	23.22	.4412
#1	.6784	5.928	-3.177	12.58	47.29	.0332	11330.
#2	-1.118	3.410	3.348	12.55	47.83	.0386	11400.
#3	-.8806	.4887	.6887	12.77	47.47	.0239	11310.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2839	-.1003	2.382	.7863	57.93	1999.	3360.
SDev	.2560	.3742	.229	.3001	.12	5.	8.
%RSD	90.16	372.9	9.595	38.17	.2103	.2425	.2362
#1	.0069	.0936	2.640	1.092	57.85	1998.	3360.
#2	.3332	-.5317	2.298	.7739	58.07	2004.	3368.
#3	.5116	.1371	2.207	.4926	57.86	1994.	3352.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	35.01	.3821	10670.	1.455	-2.536	-2.795	.6816
SDev	.16	.7311	58.	.783	2.853	1.601	1.227
%RSD	.4539	191.4	.5393	53.83	112.5	57.27	180.0
#1	35.13	.4474	10720.	2.312	.6641	-2.888	.3369
#2	35.08	-.3795	10670.	.7777	-3.456	-1.150	2.044
#3	34.83	1.078	10610.	1.274	-4.814	-4.347	-.3358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.443	.4584	-.8639	21.95	5.344	4.003	117.5
SDev	2.991	.0176	6.9028	5.39	.336	.142	.7
%RSD	207.2	3.848	799.0	24.57	6.278	3.548	.6381
#1	.7183	.4761	-.0586	24.94	5.678	4.047	118.3
#2	-4.856	.4585	-8.134	25.18	5.007	3.844	117.5
#3	-.1912	.4408	5.601	15.72	5.349	4.117	116.8

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	36960.	79070.	57.19	-1.306	-3.539	2.831	-.3916
SDev	241.	514.	.46	1.738	2.458	2.783	3.1911
%RSD	.6526	.6505	.8126	133.1	69.45	98.31	814.8
#1	36720.	78530.	56.85	-3.309	-2.677	4.521	-1.752
#2	37200.	79560.	57.72	-.1938	-1.627	-.3814	3.254
#3	36980.	79100.	57.01	-.4143	-6.311	4.353	-2.677
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 154614003 Operator: HSC
Run Time: 01/31/06 12:11:27
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1104	1.578	.4425	12.11	6.171	.0144	11350.
SDev	.3279	4.630	2.044	.71	.110	.0234	208.
%RSD	297.2	293.4	462.0	5.873	1.789	162.7	1.831
#1	.2683	-3.359	2.702	12.88	6.283	.0387	11590.
#2	-.2945	5.824	-.0964	11.48	6.167	.0124	11250.
#3	-.3048	2.269	-1.278	11.98	6.062	-.0079	11220.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1497	-.1734	5.119	1.021	102.5	1509.	3951.
SDev	.0091	.5147	.208	.628	2.8	35.	75.
%RSD	6.108	296.8	4.059	61.52	2.688	2.324	1.901
#1	.1406	-.6435	5.147	1.692	105.7	1549.	4037.
#2	.1496	-.2534	4.898	.9227	100.9	1489.	3917.
#3	.1589	.3766	5.311	.4474	100.9	1487.	3899.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.698	.1704	10050.	1.645	-.1527	.2191	-1.753
SDev	.113	.4761	261.	.634	2.4169	.7152	2.900
%RSD	6.654	279.4	2.598	38.54	1583.	326.4	165.5
#1	1.819	-.3794	10350.	2.080	-1.892	.8484	1.278
#2	1.682	.4451	9922.	1.939	2.607	.3676	-2.034
#3	1.595	.4454	9875.	.9176	-1.173	-.5586	-4.502
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.558	.0159	3.491	18.31	4.805	396.7	29.60
SDev	2.363	.0591	4.080	11.27	.586	7.0	2.93
%RSD	92.39	372.4	116.9	61.52	12.19	1.767	9.894
#1	-2.990	.0617	-.5209	26.72	5.464	404.8	26.77
#2	-.0086	-.0509	3.357	5.512	4.343	392.2	29.41
#3	-4.676	.0368	7.635	22.71	4.609	393.1	32.62

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	29620.	63350.	50.83	1.495	-.4180	1.728	-3.490
SDev	438.	937.	.77	.849	1.4947	4.540	3.317
%RSD	1.481	1.479	1.523	56.80	357.6	262.7	95.02
#1	30120.	64420.	51.70	.8163	.8644	3.196	.3208
#2	29400.	62900.	50.55	1.222	-.0590	5.353	-5.722
#3	29320.	62720.	50.23	2.448	-2.060	-3.364	-5.070
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 154614004 Operator: HSC
Run Time: 01/31/06 12:17:21
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2838	12.28	2.722	11.26	48.25	-.0017	10890.
SDev	.3174	4.44	2.242	1.81	2.39	.0052	521.
%RSD	111.9	36.14	82.38	16.07	4.960	307.0	4.786
#1	.0370	8.589	3.153	10.38	45.49	-.0003	10290.
#2	-.5977	17.20	.2952	13.34	49.67	-.0075	11190.
#3	-.2906	11.05	4.716	10.06	49.60	.0026	11190.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2141	-.0981	2.458	.0780	59.41	1945.	3213.
SDev	.1326	.4346	.288	.1885	2.90	83.	155.
%RSD	61.95	442.8	11.71	241.8	4.874	4.243	4.816
#1	.1583	.2592	2.324	-.0441	56.07	1850.	3034.
#2	.3656	-.5820	2.788	-.0171	61.25	1990.	3302.
#3	.1186	.0283	2.261	.2951	60.92	1996.	3303.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	33.96	1.196	10240.	1.442	-1.371	-1.806	3.328
SDev	1.64	.996	462.	.620	1.294	2.200	.933
%RSD	4.832	83.32	4.510	42.97	94.38	121.8	28.03
#1	32.07	.0564	9707.	2.056	.0124	-3.853	4.343
#2	34.89	1.627	10490.	1.453	-1.574	-2.085	3.132
#3	34.94	1.904	10520.	.8172	-2.551	.5203	2.509
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.661	.4683	-1.449	15.02	5.141	4.039	111.9
SDev	.620	.0821	3.724	16.16	.074	.201	3.3
%RSD	37.30	17.52	257.0	107.6	1.440	4.985	2.976
#1	-2.331	.5408	2.841	16.01	5.210	3.814	108.3
#2	-1.109	.4849	-3.850	30.66	5.063	4.102	114.9
#3	-1.544	.3792	-3.339	-1.609	5.149	4.201	112.5

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	34970.	74800.	55.06	.7330	-3.073	6.739	1.626
SDev	2026.	4334.	2.75	1.105	3.560	3.384	.318
%RSD	5.793	5.794	4.997	150.7	115.8	50.21	19.56
#1	32630.	69800.	51.88	.4652	-6.009	10.30	1.370
#2	36030.	77070.	56.62	1.947	-4.097	6.353	1.525
#3	36240.	77530.	56.68	-.2131	.8865	3.565	1.982
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 154614008 Operator: HSC
Run Time: 01/31/06 12:23:15
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0648	5.597	-.4981	28.17	16.13	.0307	34920.
SDev	.4720	2.267	2.5657	1.86	.20	.0299	22.
%RSD	728.2	40.51	515.1	6.615	1.219	97.47	.0629
#1	.6047	3.112	-.9785	26.07	15.94	.0653	34900.
#2	-.2696	6.127	2.274	29.63	16.11	.0137	34920.
#3	-.1407	7.552	-2.790	28.80	16.33	.0132	34940.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1081	-.1122	22.79	4.150	10.81	795.6	5536.
SDev	.1315	.1697	.42	.557	.06	2.1	8.
%RSD	121.7	151.3	1.848	13.42	.5746	.2609	.1368
#1	.0923	-.1632	22.71	4.665	10.77	797.9	5533.
#2	.2467	-.2506	22.42	4.227	10.88	795.1	5530.
#3	-.0149	.0772	23.25	3.559	10.79	793.9	5544.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.618	-.3152	22200.	5.133	-.5967	-1.268	.0015
SDev	.079	1.0283	89.	1.051	1.1306	1.012	.6478
%RSD	1.408	326.2	.4009	20.47	189.5	79.79	43690.
#1	5.583	-.8016	22110.	6.321	.5766	-.1575	-.7233
#2	5.708	-1.010	22290.	4.749	-1.679	-2.138	.2034
#3	5.562	.8660	22190.	4.328	-.6877	-1.509	.5243
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.552	-.0983	8.872	20.12	.5571	24.72	65.70
SDev	2.055	.1835	3.817	6.57	.3182	.20	2.39
%RSD	132.4	186.6	43.02	32.67	57.12	.8203	3.641
#1	-2.715	-.2672	8.369	13.27	.2038	24.68	63.01
#2	.8208	-.1248	5.332	26.38	.6465	24.54	67.58
#3	-2.762	.0970	12.92	20.71	.8211	24.94	66.51

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	33390.	71410.	169.3	3.412	-3.605	3.644	-1.817
SDev	128.	276.	.4	.755	1.228	1.846	1.892
%RSD	.3836	.3869	.2380	22.14	34.07	50.64	104.1
#1	33240.	71110.	168.9	4.246	-2.356	5.731	-3.946
#2	33490.	71640.	169.7	3.218	-4.811	2.974	-1.180
#3	33420.	71490.	169.4	2.773	-3.648	2.228	-.3261
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 154614009 Operator: HSC
Run Time: 01/31/06 12:29:09
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1584	67.35	.2294	27.83	16.89	.0203	32870.
SDev	.0850	1.18	.7106	.64	.07	.0105	151.
%RSD	53.69	1.752	309.8	2.306	.4230	51.78	.4607
#1	-.1330	66.45	-.5456	27.37	16.83	.0095	32690.
#2	-.2532	66.91	.3832	27.56	16.86	.0305	32970.
#3	-.0889	68.69	.8505	28.56	16.97	.0209	32940.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1863	-.1360	47.13	28.32	253.3	739.1	5216.
SDev	.0625	.2569	.25	.43	.2	11.5	21.
%RSD	33.55	188.9	.5376	1.536	.0868	1.562	.4075
#1	.2534	.1583	46.85	28.09	253.1	728.0	5192.
#2	.1297	-.3151	47.34	28.82	253.5	751.1	5227.
#3	.1759	-.2513	47.19	28.04	253.3	738.2	5229.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6.661	1.394	21060.	12.43	-.6224	-1.362	-1.571
SDev	.077	1.631	131.	.33	3.2042	1.607	1.338
%RSD	1.161	117.1	.6232	2.618	514.8	118.0	85.15
#1	6.572	.1577	20980.	12.73	-2.615	-.5832	-3.071
#2	6.708	3.243	21220.	12.48	-2.326	-3.210	-1.140
#3	6.703	.7805	21000.	12.08	3.074	-.2921	-.5018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.148	2.243	3.879	13.60	.7444	38.37	67.11
SDev	1.488	.079	2.166	4.62	.1802	.26	8.52
%RSD	129.7	3.504	55.84	34.01	24.20	.6768	12.69
#1	-.3394	2.173	4.681	17.08	.8857	38.08	57.45
#2	-2.865	2.328	1.426	15.36	.5415	38.44	70.33
#3	-.2387	2.228	5.529	8.349	.8061	38.59	73.55

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	32010.	68470.	160.1	1.065	-2.573	5.928	-5.315
SDev	118.	253.	1.0	1.338	2.399	4.039	2.801
%RSD	.3691	.3689	.6549	125.7	93.24	68.14	52.70
#1	31880.	68180.	158.8	-.2209	-.7641	6.905	-8.051
#2	32070.	68600.	160.6	.9653	-5.295	1.490	-2.453
#3	32090.	68640.	160.7	2.450	-1.661	9.390	-5.440
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: 154614010 Operator: HSC
Run Time: 01/31/06 12:35:04
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5509	5.908	3.603	1.068	.1935	.0071	25.58
SDev	.3196	4.858	.295	1.519	.1384	.0160	1.52
%RSD	58.01	82.22	8.174	142.2	71.52	225.0	5.940
#1	.3461	2.637	3.895	-.5809	.2075	.0051	27.12
#2	.9191	3.598	3.306	2.410	.0487	.0241	25.52
#3	.3874	11.49	3.608	1.376	.3244	-.0078	24.09
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1000.	500000.	10000.	5000.	15000.	3000.	500000.
Low	-5.000	-200.0	-15.00	-50.00	-5.000	-5.000	-100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2124	.2589	.3913	-.0511	5.672	.5854	5.212
SDev	.0774	.3683	.4911	.2532	.685	.7853	2.617
%RSD	36.46	142.3	125.5	495.5	12.07	134.1	50.22
#1	.1343	-.1547	-.1389	-.3403	4.899	1.450	5.387
#2	.2891	.3794	.8306	.0560	5.914	.3882	2.511
#3	.2137	.5518	.4821	.1310	6.203	-.0825	7.737
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	25000.	20000.	200000.	30000.	500000.
Low	-5.000	-5.000	-5.000	-10.00	-100.0	-150.0	-300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1600	-.2765	83.94	1.113	1.217	.5180	-2.607
SDev	.0913	.2488	14.77	.198	2.013	1.823	1.533
%RSD	57.03	89.97	17.60	17.75	165.3	351.9	58.78
#1	.0755	.0079	100.8	1.331	.4668	.0288	-2.153
#2	.1478	-.3834	73.24	.9457	3.497	-1.010	-1.353
#3	.2568	-.4539	77.80	1.062	-.3124	2.536	-4.315
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	200000.	10000.	10000.	25000.	10000.
Low	-10.00	-10.00	-150.0	-5.000	-10.00	-10.00	-15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1683	.1313	4.956	29.92	-.0969	1.884	14.83
SDev	1.7814	.0370	3.417	9.63	.0490	.243	6.22
%RSD	1059.	28.18	68.96	32.20	50.50	12.90	41.96
#1	-2.205	.0943	8.731	20.44	-.0745	1.658	8.066
#2	1.098	.1312	4.062	39.71	-.0632	1.851	16.13
#3	.6024	.1683	2.074	29.61	-.1531	2.141	20.31

High	10000.	10000.	10000.	15000.	10000.	5000.	15000.
Low	-10.00	-5.000	-20.00	-50.00	-5.000	-10.00	-150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	46.42	99.30	.0758	.9994	.2777	.1258	-3.972
SDev	13.90	29.74	.0216	1.607	3.534	2.767	1.255
%RSD	29.95	29.95	28.53	160.8	1273.	2199.	31.61
#1	47.05	100.6	.0646	1.294	-.6029	-.5931	-2.932
#2	60.00	128.3	.0621	2.439	-2.733	3.181	-3.616
#3	32.22	68.91	.1008	-.7349	4.169	-2.211	-5.366
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	50000.		10000.				
Low	-100.0		-5.000				

Method: TRACE2 Sample Name: CCV1 Operator: HSC
Run Time: 01/31/06 12:40:59
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	507.1	5024.	504.4	500.6	505.1	505.4	4968.
SDev	3.0	30.	8.2	5.1	2.0	2.6	21.
%RSD	.5888	.6010	1.621	1.029	.3877	.5233	.4224
#1	503.7	4989.	495.4	494.8	502.8	502.4	4944.
#2	509.0	5041.	511.3	502.7	506.2	506.2	4977.
#3	508.7	5042.	506.6	504.4	506.2	507.6	4983.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	5000.	500.0	500.0	500.0	500.0	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	493.6	513.4	501.8	508.0	4811.	4963.	4965.
SDev	2.8	2.5	1.9	2.2	14.	13.	19.
%RSD	.5699	.4888	.3830	.4320	.2937	.2616	.3806
#1	490.6	510.5	499.6	505.6	4795.	4949.	4943.
#2	493.9	514.3	502.8	508.7	4822.	4964.	4974.
#3	496.2	515.2	503.0	509.8	4815.	4975.	4977.
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	500.0	500.0	5000.	5000.	5000.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	494.3	508.4	10150.	497.6	515.0	500.8	500.5
SDev	1.9	4.4	86.	3.2	3.6	2.5	3.3
%RSD	.3860	.8634	.8497	.6348	.7068	.4996	.6529
#1	492.1	503.4	10250.	494.6	510.8	499.9	496.9
#2	495.3	511.6	10110.	497.4	517.8	498.8	501.3
#3	495.4	510.1	10100.	500.9	516.3	503.6	503.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0	500.0	10000.	500.0	500.0	500.0	500.0
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	483.1	496.3	494.4	521.9	499.7	509.5	2681.
SDev	5.1	2.8	6.4	7.8	1.7	1.9	18.
%RSD	1.049	.5595	1.287	1.501	.3350	.3733	.6835
#1	477.5	493.1	490.3	513.2	497.8	507.7	2678.
#2	484.3	497.6	491.1	528.4	500.7	509.3	2701.
#3	487.5	498.2	501.7	524.0	500.6	511.5	2665.

Value	500.0	500.0	500.0	500.0	500.0	500.0	2500.
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2580.	5520.	497.0	501.4	500.5	504.5	498.6
SDev	3.	6.	3.3	2.5	4.7	8.8	3.0
%RSD	.1083	.1083	.6684	.4943	.9311	1.739	.5989
#1	2577.	5513.	493.2	499.9	499.9	494.9	498.0
#2	2581.	5522.	499.0	504.3	496.1	512.1	495.9
#3	2583.	5524.	498.9	500.0	505.4	506.4	501.8
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	2500.		500.0				
Range	10.00		10.00				

Method: TRACE2 Sample Name: CCB1 Operator: HSC
Run Time: 01/31/06 12:46:54
Comment: 498167||6010 GW
Mode: CONC Corr. Factor: 1

Elem	Ag_328	Al_308	As_189	B_2496	Ba_493	Be_313	Ca_317
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0022	4.802	.5458	1.317	.4449	.2875	8.313
SDev	.2724	3.163	1.553	.216	.1603	.0855	.943
%RSD	12550.	65.86	284.6	16.43	36.03	29.75	11.34
#1	-.2642	5.689	1.240	1.073	.5019	.2609	8.272
#2	.2796	7.428	-1.233	1.485	.2639	.2184	7.392
#3	-.0219	1.291	1.631	1.394	.5689	.3832	9.276
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	200.0	15.00	50.00	5.000	5.000	100.0

Elem	Cd_226	Co_228	Cr_267	Cu_324	Fe_	K_7664	Mg_279
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4217	.0229	.3135	-.0683	3.025	-.9777	4.325
SDev	.0184	.3602	.1231	.4126	.891	3.1006	1.557
%RSD	4.352	1570.	39.27	603.6	29.46	317.1	36.00
#1	.4419	-.0546	.3703	.0635	2.623	1.849	2.953
#2	.4173	.4156	.1722	-.5307	2.406	-4.294	6.017
#3	.4060	-.2922	.3979	.2622	4.047	-.4883	4.003
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	5.000	5.000	5.000	10.00	100.0	150.0	300.0

Elem	Mn_257	Mo_202	Na_	Ni_231	Sb_206	Pb_220	Se_196
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3248	-.4328	65.09	.7392	2.900	-1.174	-1.032
SDev	.1087	.5800	1.43	.6223	2.715	.658	2.574
%RSD	33.45	134.0	2.191	84.18	93.64	56.03	249.3
#1	.2742	.2266	64.66	.0957	2.163	-.5448	1.537
#2	.2507	-.8640	63.92	1.338	.6285	-1.857	-1.024
#3	.4496	-.6609	66.68	.7841	5.907	-1.120	-3.611
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	10.00	150.0	5.000	10.00	10.00	15.00

Elem	Sn_189	Ti_334	Tl_190	U_3859	V_2924	Zn_213	P_1782
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.7620	.3579	4.438	22.09	-.4172	.2921	8.557
SDev	1.628	.1732	2.293	18.45	.2298	.1541	5.190
%RSD	213.7	48.41	51.68	83.53	55.07	52.73	60.65
#1	-.8480	.2938	1.913	33.40	-.5906	.1595	9.929
#2	2.408	.2258	6.394	.7983	-.1566	.2557	2.819
#3	.7263	.5541	5.006	32.06	-.5044	.4611	12.92

Value	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Range	10.00	5.000	20.00	50.00	5.000	10.00	150.0
Elem	Si_288	Si02_	Sr_421	Pb1st	Pb2nd	Se1st	Se2nd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	13.23	28.31	.2522	3.272	-3.394	5.361	-4.224
SDev	10.14	21.70	.0976	2.544	.336	4.148	2.203
%RSD	76.64	76.64	38.71	77.74	9.898	77.37	52.16
#1	24.91	53.29	.2282	5.410	-3.518	8.004	-1.692
#2	6.634	14.19	.1688	.4589	-3.013	7.498	-5.278
#3	8.156	17.45	.3596	3.947	-3.650	.5802	-5.703
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0000		.0000				
Range	100.0		5.000				

Calculation Data Logbook

Report run on: February 23, 2006 1:37 PM

Batch Id: 505651 **Sop:** GL-GC-E-107
Employee: Bryan Davis
Instrument: No instrument-calculation method.

Samp Id	Sample Type	Parmname	Run Date	Calcium mg/L	Magnesium mg/L	Result	Units
154614001	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	11.5	4.00	45.2	mg/L
154614002	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	11.3	3.36	42.2	mg/L
154614003	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	11.4	3.95	44.6	mg/L
154614004	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	10.9	3.21	40.4	mg/L
154614008	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	34.9	5.54	110	mg/L
154614009	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	32.9	5.22	104	mg/L
154614010	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	0.0256	0.00521	0.0853	mg/L
154721001	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	11.7	4.11	46.1	mg/L
154721008	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	11.7	4.13	46.3	mg/L
154721011	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	0.0127	0.000971	0.0358	mg/L
154759001	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	36.4	9.25	129	mg/L
154759002	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	37.1	9.46	132	mg/L
154759009	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	36.3	9.22	129	mg/L
154759010	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	36.0	9.14	127	mg/L
154760001	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	11.3	2.86	40.1	mg/L
154760002	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	11.2	2.80	39.5	mg/L
154817001	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	20.5	3.89	67.1	mg/L
154817002	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	21.3	4.21	70.5	mg/L
156222002	SAMPLE	Hardness as CaCO3	21-FEB-2006 12:15	41.8	12.9	157	mg/L

Calculation: (2.497 * Calcium) + (4.118 * Magnesium)

1064

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	607	2070	0.608
Be	9.0	9.0	2048	2090	0.607
Mg	24.0	24.0	5686	2100	0.600
Mg	25.0	25.0	5930	2080	0.641
Mg	26.0	26.0	6170	2100	0.639
Co	58.9	59.0	14188	2125	0.613
Rh	102.9	102.9	24871	2175	0.617
In	114.9	114.9	27788	2205	0.597
Ce	139.9	139.9	33871	2215	0.638
Pb	206.0	206.0	49936	2290	0.638
Pb	207.0	207.0	50183	2300	0.632
Pb	208.0	208.0	50439	2300	0.625
U	238.1	238.0	57737	2340	0.621

✓ BBQ 2/18/06

Report Date/Time: Saturday, February 18, 2006 09:27:38
Page 1

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, February 18, 2006 09:28:14
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.1287
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	3391.4	3391.403	27.099	0.8
	Mg	24.0	16683.9	16683.947	621.110	3.7
	Co	58.9	40722.4	40722.388	1028.039	2.5
	Rh	102.9	92907.7	92907.683	2309.277	2.5
	In	114.9	113710.6	113710.645	1750.648	1.5
	Pb	208.0	90276.9	90276.866	2060.224	2.3
>	Ba	137.9	105174.8	105174.845	2704.481	2.6
	Ba++	69.0	1087.4	0.010	0.000	1.8
>	Ce	139.9	140312.0	140312.034	3511.980	2.5
	CeO	155.9	2890.3	0.021	0.000	2.3
	Bkgd	220.0	8.8	8.800	1.681	19.1

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.75	Lens Voltage
1400.00	iCP RF Power
-1571.88	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	8.3	2924.3
Co	59	17	9.3	43623.8
In	115	17	10.3	158179.6

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, February 18, 2006 16:08:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\Blank.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		ug/L		140	
	Be	9		ug/L		17	
	B	11		ug/L		501	
	Na	23		ug/L		26025	
	Mg	24		ug/L		5668	
	Al	27		ug/L		6668	
	P	31		ug/L		5848	
	K	39		ug/L		542102	
	Ca	43		ug/L		135	
>	Sc	45		ug/L		506643	
	Ti	47		ug/L		222	
	V	51		ug/L		13805	
	Cr	52		ug/L		8115	
	Cr	53		ug/L		91903	
	Mn	55		ug/L		1098	
	Fe	57		ug/L		6572	
	Co	59		ug/L		81	
	Ni	60		ug/L		72	
	Cu	63		ug/L		360	
	Cu	65		ug/L		206	
	Zn	66		ug/L		162	
	Zn	67		ug/L		8467	
	Zn	68		ug/L		834	
>	Ge	74		ug/L		298467	
	As	75		ug/L		1938	
	Se	77		ug/L		6813	
	Se	82		ug/L		10	
	Kr	83		ug/L		669	
	Sr	88		ug/L		224	
	Y	89		ug/L		93	
	Zr	90		ug/L		212	
	Mo	98		ug/L		117	
	Ag	107		ug/L		50	
	Cd	111		ug/L		12	
	Cd	114		ug/L		23	
>	In	115		ug/L		183124	
	Sn	120		ug/L		160	
	Sb	121		ug/L		162	
	Sb	123		ug/L		111	
	Ba	135		ug/L		29	
	Ba	137		ug/L		46	
	Ho	165		ug/L		15	
>	Ta	181		ug/L		325982	
	Tl	205		ug/L		796	
	Pb	208		ug/L		285	
	Bi	209		ug/L		18	
	Th	232		ug/L		375	
	U	238		ug/L		214	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Simple Linear	
Be	9	Simple Linear	
B	11	Linear Thru Zero	1.0000
Na	23	Simple Linear	
Mg	24	Simple Linear	
Al	27	Simple Linear	
P	31	Simple Linear	
K	39	Simple Linear	
Ca	43	Simple Linear	
Sc	45	Linear Thru Zero	
Ti	47	Simple Linear	
V	51	Simple Linear	
Cr	52	Simple Linear	
Cr	53	Simple Linear	
Mn	55	Simple Linear	
Fe	57	Simple Linear	
Co	59	Simple Linear	
Ni	60	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Zn	66	Simple Linear	
Zn	67	Simple Linear	
Zn	68	Simple Linear	
Ge	74	Simple Linear	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Sr	88	Simple Linear	
Y	89	Simple Linear	
Zr	90	Simple Linear	
Mo	98	Simple Linear	
Ag	107	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sn	120	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Ba	135	Simple Linear	
Ba	137	Simple Linear	
Ho	165	Simple Linear	
Ta	181	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	
Bi	209	Simple Linear	
Th	232	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Saturday, February 18, 2006 16:13:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\Standard 1.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	10.000	ug/L	1.028	15024	0.029
|	Be	9	10.000	ug/L	2.699	4093	0.008
|	B	11	20.000	ug/L	0.617	5343	0.009
|	Na	23	1000.000	ug/L	6.575	2488921	4.809
|	Mg	24	1000.000	ug/L	2.875	1608476	3.127
|	Al	27	1000.000	ug/L	3.335	2132339	4.150
|	P	31	1000.000	ug/L	3.240	170770	0.322
|	K	39	1000.000	ug/L	2.139	3277935	5.326
|	Ca	43	1000.000	ug/L	1.208	6998	0.013
| >	Sc	45		ug/L		512451	512451.489
|	Ti	47	10.000	ug/L	3.057	3960	0.007
|	V	51	10.000	ug/L	3.061	73442	0.116
|	Cr	52	10.000	ug/L	3.397	47510	0.077
|	Cr	53		ug/L		99943	0.014
|	Mn	55	10.000	ug/L	1.784	60124	0.115
|	Fe	57	1000.000	ug/L	1.572	119453	0.220
|	Co	59	10.000	ug/L	1.498	43896	0.086
|	Ni	60	10.000	ug/L	2.912	9284	0.018
|	Cu	63		ug/L		20931	0.040
⌊	Cu	65	10.000	ug/L	2.657	10132	0.019
⌈	Zn	66	10.000	ug/L	2.140	6329	0.020
|	Zn	67		ug/L		9955	0.005
|	Zn	68		ug/L		5489	0.015
| >	Ge	74		ug/L		302281	302281.442
|	As	75	10.000	ug/L	9.691	9949	0.026
|	Se	77		ug/L		7703	0.003
|	Se	82	10.000	ug/L	10.405	704	0.002
⌊	Kr	83		ug/L		669	-0.000
⌈	Sr	88	10.000	ug/L	0.470	87386	0.472
|	Y	89		ug/L		151	0.000
|	Zr	90	10.000	ug/L	2.397	49175	0.265
|	Mo	98	10.000	ug/L	3.474	22667	0.122
|	Ag	107	10.000	ug/L	1.495	39812	0.215
|	Cd	111	10.000	ug/L	3.277	9572	0.052
|	Cd	114		ug/L		21811	0.118
| >	In	115		ug/L		184604	184604.403
|	Sn	120	10.000	ug/L	3.158	37316	0.201
|	Sb	121	10.000	ug/L	1.477	31840	0.172
⌊	Sb	123		ug/L		24498	0.132
⌈	Ba	135		ug/L		8848	0.027
|	Ba	137	10.000	ug/L	3.156	15829	0.048
|	Ho	165		ug/L		13	-0.000
| >	Ta	181		ug/L		329016	329016.215
|	Tl	205	10.000	ug/L	1.823	122755	0.371
|	Pb	208	10.000	ug/L	1.646	160370	0.487
|	Bi	209		ug/L		42	0.000
|	Th	232	10.000	ug/L	0.177	174141	0.528
⌊	U	238	10.000	ug/L	1.780	177210	0.538

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Saturday, February 18, 2006 16:19:01
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\Standard 2.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**99.911**	**ug/L**	2.495	127467	0.266
	Be	9	**99.927**	**ug/L**	1.060	35433	0.074
	B	11	**199.855**	**ug/L**	2.834	42503	0.088
	Na	23	**9978.513**	**ug/L**	6.850	18905483	39.501
	Mg	24	**9982.254**	**ug/L**	7.467	12672480	26.511
	Al	27	**9993.347**	**ug/L**	3.953	18593996	38.881
	P	31	**9986.930**	**ug/L**	2.008	1364035	2.842
	K	39	**9994.404**	**ug/L**	6.107	24615107	50.409
	Ca	43	**9993.769**	**ug/L**	0.980	60337	0.126
>	Sc	45		**ug/L**		478022	478022.279
	Ti	47	**99.941**	**ug/L**	1.997	33079	0.069
	V	51	**99.859**	**ug/L**	4.456	498366	1.016
	Cr	52	**99.907**	**ug/L**	3.359	342706	0.701
	Cr	53		**ug/L**		107427	0.043
	Mn	55	**99.910**	**ug/L**	0.675	505442	1.055
	Fe	57	**9989.314**	**ug/L**	2.550	955844	1.987
	Co	59	**99.920**	**ug/L**	2.965	378128	0.791
	Ni	60	**99.901**	**ug/L**	2.635	78156	0.163
	Cu	63		**ug/L**		176345	0.368
	Cu	65	**99.917**	**ug/L**	1.539	85583	0.179
	Zn	66	**99.934**	**ug/L**	0.874	54709	0.191
	Zn	67		**ug/L**		16238	0.029
	Zn	68		**ug/L**		41325	0.142
>	Ge	74		**ug/L**		285269	285268.662
	As	75	**99.883**	**ug/L**	0.447	69250	0.236
	Se	77		**ug/L**		9758	0.011
	Se	82	**99.960**	**ug/L**	2.495	6308	0.022
	Kr	83		**ug/L**		646	0.000
	Sr	88	**99.905**	**ug/L**	0.815	758441	4.307
	Y	89		**ug/L**		451	0.002
	Zr	90	**99.897**	**ug/L**	0.511	423226	2.403
	Mo	98	**99.942**	**ug/L**	1.399	203368	1.154
	Ag	107	**99.925**	**ug/L**	1.514	352509	2.002
	Cd	111	**99.923**	**ug/L**	0.599	84636	0.481
	Cd	114		**ug/L**		196207	1.114
>	In	115		**ug/L**		176066	176066.411
	Sn	120	**99.928**	**ug/L**	1.190	330667	1.877
	Sb	121	**99.955**	**ug/L**	0.534	289042	1.641
	Sb	123		**ug/L**		222963	1.266
	Ba	135		**ug/L**		80393	0.247
	Ba	137	**99.909**	**ug/L**	0.443	142934	0.440
	Ho	165		**ug/L**		19	0.000
>	Ta	181		**ug/L**		325070	325069.738
	Tl	205	**99.853**	**ug/L**	1.487	1049573	3.226
	Pb	208	**99.883**	**ug/L**	0.176	1415082	4.352
	Bi	209		**ug/L**		215	0.001
	Th	232	**99.822**	**ug/L**	2.038	1454680	4.474
	U	238	**99.804**	**ug/L**	1.661	1459333	4.489

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45					
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181					
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Saturday, February 18, 2006 16:24:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 1.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**51.738**	**ug/L**	1.989	66059	0.138
|	Be	9	**51.789**	**ug/L**	2.097	18365	0.038
|	B	11	**110.977**	**ug/L**	3.773	23796	0.049
|	Na	23	**5014.338**	**ug/L**	3.815	9506905	19.850
|	Mg	24	**5340.950**	**ug/L**	2.434	6782533	14.184
|	Al	27	**5557.785**	**ug/L**	7.488	10334736	21.623
|	P	31	**5254.410**	**ug/L**	1.684	720118	1.495
|	K	39	**5415.523**	**ug/L**	4.175	13572108	27.314
|	Ca	43	**5198.966**	**ug/L**	0.222	31447	0.066
|>	Sc	45		**ug/L**		477950	477949.960
|	Ti	47	**51.027**	**ug/L**	3.719	16985	0.035
|	V	51	**52.261**	**ug/L**	2.919	266964	0.532
|	Cr	52	**51.652**	**ug/L**	1.532	180856	0.362
|	Cr	53		**ug/L**		87786	0.002
|	Mn	55	**53.423**	**ug/L**	3.587	270631	0.564
|	Fe	57	**5379.537**	**ug/L**	3.408	517450	1.070
|	Co	59	**51.227**	**ug/L**	2.707	193842	0.406
|	Ni	60	**52.166**	**ug/L**	0.933	40842	0.085
|	Cu	63		**ug/L**		89975	0.188
⌊	Cu	65	**50.512**	**ug/L**	1.984	43351	0.090
⌈	Zn	66	**51.171**	**ug/L**	1.864	28270	0.098
|	Zn	67		**ug/L**		11898	0.013
|	Zn	68		**ug/L**		21751	0.073
|>	Ge	74		**ug/L**		287134	287133.972
|	As	75	**51.047**	**ug/L**	4.201	36526	0.121
|	Se	77		**ug/L**		7412	0.003
|	Se	82	**51.516**	**ug/L**	2.244	3277	0.011
⌊	Kr	83		**ug/L**		610	-0.000
⌈	Sr	88	**51.957**	**ug/L**	0.560	396673	2.240
|	Y	89		**ug/L**		209	0.001
|	Zr	90	**51.344**	**ug/L**	2.169	218731	1.235
|	Mo	98	**51.579**	**ug/L**	3.388	105531	0.596
|	Ag	107	**52.016**	**ug/L**	0.287	184515	1.042
|	Cd	111	**51.371**	**ug/L**	3.190	43734	0.247
|	Cd	114		**ug/L**		100571	0.568
|>	In	115		**ug/L**		177014	177014.230
|	Sn	120	**52.242**	**ug/L**	2.934	173804	0.981
|	Sb	121	**51.805**	**ug/L**	2.565	150645	0.850
⌊	Sb	123		**ug/L**		116523	0.658
⌈	Ba	135		**ug/L**		40576	0.125
|	Ba	137	**51.198**	**ug/L**	3.037	72916	0.225
|	Ho	165		**ug/L**		18	0.000
|>	Ta	181		**ug/L**		323615	323614.640
|	Tl	205	**51.261**	**ug/L**	2.179	536792	1.656
|	Pb	208	**52.936**	**ug/L**	1.012	746671	2.307
|	Bi	209		**ug/L**		52	0.000
|	Th	232	**53.910**	**ug/L**	1.828	782149	2.416
⌊	U	238	**54.748**	**ug/L**	1.982	796879	2.462

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	103.475				
	Be	9	103.578				
	B	11	110.977				
	Na	23	100.287				
	Mg	24	106.819				
	Al	27	110.055				
	P	31	105.088				
	K	39	108.310				
	Ca	43	103.979				
>	Sc	45			94.3		
	Ti	47	102.054				
	V	51	104.522				
	Cr	52	103.304				
	Cr	53					
	Mn	55	106.846				
	Fe	57	107.591				
	Co	59	102.454				
	Ni	60	104.332				
	Cu	63					
	Cu	65	101.023				
	Zn	66	102.342				
	Zn	67					
	Zn	68					
>	Ge	74			96.2		
	As	75	102.093				
	Se	77					
	Se	82	103.033				
	Kr	83					
	Sr	88	103.914				
	Y	89					
	Zr	90	102.688				
	Mo	98	103.159				
	Ag	107	104.032				
	Cd	111	102.742				
	Cd	114					
>	In	115			96.7		
	Sn	120	104.484				
	Sb	121	103.610				
	Sb	123					
	Ba	135					
	Ba	137	102.395				
	Ho	165					
>	Ta	181			99.3		
	Tl	205	102.522				
	Pb	208	105.873				
	Bi	209					
	Th	232	107.820				
	U	238	109.496				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	B	11	ICV is out of limits (+/- 10%)
QC Std 1	Al	27	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Saturday, February 18, 2006 16:29:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 2.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.036**	**ug/L**	34.828	179	0.000
|	Be	9	**0.005**	**ug/L**	367.703	18	0.000
|	B	11	**4.168**	**ug/L**	28.071	1347	0.002
|	Na	23	**-0.448**	**ug/L**	441.117	23687	-0.002
|	Mg	24	**-0.007**	**ug/L**	6522.228	5334	-0.000
|	Al	27	**-0.329**	**ug/L**	346.137	5668	-0.001
|	P	31	**-0.236**	**ug/L**	565.398	5480	-0.000
|	K	39	**-3.117**	**ug/L**	299.423	503392	-0.016
|	Ca	43	**-0.154**	**ug/L**	226.454	126	-0.000
|>	Sc	45		**ug/L**		477536	477536.027
|	Ti	47	**0.042**	**ug/L**	70.720	223	0.000
|	V	51	**-0.407**	**ug/L**	179.582	11044	-0.004
|	Cr	52	**-0.330**	**ug/L**	3.546	6544	-0.002
|	Cr	53		**ug/L**		66362	-0.042
|	Mn	55	**-0.019**	**ug/L**	45.606	942	-0.000
|	Fe	57	**-3.109**	**ug/L**	67.351	5900	-0.001
|	Co	59	**0.003**	**ug/L**	27.398	89	0.000
|	Ni	60	**0.000**	**ug/L**	2007.378	68	0.000
|	Cu	63		**ug/L**		347	0.000
⌊	Cu	65	**0.003**	**ug/L**	204.208	197	0.000
⌈	Zn	66	**-0.017**	**ug/L**	54.219	147	-0.000
|	Zn	67		**ug/L**		7109	-0.004
|	Zn	68		**ug/L**		707	-0.000
|>	Ge	74		**ug/L**		288445	288445.188
|	As	75	**-0.314**	**ug/L**	153.811	1659	-0.001
|	Se	77		**ug/L**		4765	-0.006
|	Se	82	**0.322**	**ug/L**	218.671	30	0.000
⌊	Kr	83		**ug/L**		611	-0.000
⌈	Sr	88	**0.002**	**ug/L**	131.598	236	0.000
|	Y	89		**ug/L**		88	-0.000
|	Zr	90	**0.034**	**ug/L**	18.049	353	0.001
|	Mo	98	**0.058**	**ug/L**	61.821	233	0.001
|	Ag	107	**0.006**	**ug/L**	22.614	69	0.000
|	Cd	111	**-0.003**	**ug/L**	438.428	9	-0.000
|	Cd	114		**ug/L**		35	0.000
|>	In	115		**ug/L**		178773	178772.560
|	Sn	120	**0.027**	**ug/L**	46.063	247	0.001
|	Sb	121	**0.293**	**ug/L**	30.965	1014	0.005
⌊	Sb	123		**ug/L**		788	0.004
⌈	Ba	135		**ug/L**		36	0.000
|	Ba	137	**-0.002**	**ug/L**	351.010	42	-0.000
|	Ho	165		**ug/L**		11	-0.000
|>	Ta	181		**ug/L**		321112	321111.890
|	Tl	205	**0.172**	**ug/L**	33.409	2560	0.006
|	Pb	208	**0.003**	**ug/L**	38.317	316	0.000
|	Bi	209		**ug/L**		17	-0.000
|	Th	232	**0.037**	**ug/L**	17.417	901	0.002
⌊	U	238	**0.005**	**ug/L**	17.374	277	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
\>	Sc	45		94.3			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
\>	Ge	74		96.6			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
\>	In	115		97.6			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
\>	Ta	181		98.5			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Saturday, February 18, 2006 16:34:27
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 3.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.494**	ug/L	2.765	13704	0.028
	Be	9	**0.512**	ug/L	2.544	201	0.000
	B	11	**17.404**	ug/L	3.074	4193	0.008
	Na	23	**307.635**	ug/L	6.135	615329	1.218
	Mg	24	**23.795**	ug/L	27.149	36047	0.063
	Al	27	**18.389**	ug/L	8.784	41059	0.072
	P	31	**50.994**	ug/L	6.143	12638	0.015
	K	39	**370.377**	ug/L	8.991	1424408	1.868
	Ca	43	**116.199**	ug/L	8.804	839	0.001
>	Sc	45		ug/L		484965	484965.251
	Ti	47	**8.544**	ug/L	2.367	3063	0.006
	V	51	**8.649**	ug/L	6.183	55863	0.088
	Cr	52	**2.956**	ug/L	3.583	17825	0.021
	Cr	53		ug/L		72047	-0.033
	Mn	55	**5.405**	ug/L	1.378	28733	0.057
	Fe	57	**26.127**	ug/L	5.030	8811	0.005
	Co	59	**1.076**	ug/L	1.264	4209	0.009
	Ni	60	**2.295**	ug/L	1.304	1889	0.004
	Cu	63		ug/L		2335	0.004
	Cu	65	**1.098**	ug/L	5.444	1149	0.002
	Zn	66	**10.455**	ug/L	1.980	5986	0.020
	Zn	67		ug/L		8511	0.001
	Zn	68		ug/L		4931	0.014
>	Ge	74		ug/L		291316	291315.722
	As	75	**4.758**	ug/L	13.366	5168	0.011
	Se	77		ug/L		5428	-0.004
	Se	82	**5.499**	ug/L	8.520	364	0.001
	Kr	83		ug/L		627	-0.000
	Sr	88	**10.484**	ug/L	0.304	82153	0.452
	Y	89		ug/L		92	-0.000
	Zr	90	**2.166**	ug/L	2.318	9651	0.052
	Mo	98	**0.485**	ug/L	5.943	1132	0.006
	Ag	107	**1.073**	ug/L	0.681	3948	0.022
	Cd	111	**1.042**	ug/L	6.593	921	0.005
	Cd	114		ug/L		2109	0.012
>	In	115		ug/L		181288	181287.712
	Sn	120	**5.273**	ug/L	2.122	18115	0.099
	Sb	121	**2.112**	ug/L	4.051	6444	0.035
	Sb	123		ug/L		4937	0.027
	Ba	135		ug/L		1794	0.005
	Ba	137	**2.182**	ug/L	1.525	3149	0.010
	Ho	165		ug/L		13	-0.000
>	Ta	181		ug/L		323221	323221.190
	Tl	205	**1.143**	ug/L	1.712	12730	0.037
	Pb	208	**2.184**	ug/L	1.558	31048	0.095
	Bi	209		ug/L		22	0.000
	Th	232	**1.184**	ug/L	0.270	17517	0.053
	U	238	**0.246**	ug/L	0.916	3782	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	104.935				
	Be	9	102.410				
	B	11	116.024				
	Na	23	123.054				
	Mg	24	158.631				
	Al	27	122.595				
	P	31	101.987				
	K	39	123.459				
	Ca	43	116.199				
>	Sc	45		95.7			
	Ti	47	85.444				
	V	51	86.493				
	Cr	52	98.537				
	Cr	53					
	Mn	55	108.096				
	Fe	57	104.507				
	Co	59	107.593				
	Ni	60	114.734				
	Cu	63					
	Cu	65	109.824				
	Zn	66	104.546				
	Zn	67					
	Zn	68					
>	Ge	74		97.6			
	As	75	95.159				
	Se	77					
	Se	82	109.975				
	Kr	83					
	Sr	88	104.842				
	Y	89					
	Zr	90	108.290				
	Mo	98	97.087				
	Ag	107	107.333				
	Cd	111	104.202				
	Cd	114					
>	In	115		99.0			
	Sn	120	105.469				
	Sb	121	105.603				
	Sb	123					
	Ba	135					
	Ba	137	109.092				
	Ho	165					
>	Ta	181		99.2			
	Tl	205	114.335				
	Pb	208	109.222				
	Bi	209					
	Th	232	118.351				
	U	238	122.803				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Mg	24	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Saturday, February 18, 2006 16:39:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 4.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.638**	**ug/L**	4.987	833	0.002
|	Be	9	**0.040**	**ug/L**	14.208	27	0.000
|	B	11	**3.206**	**ug/L**	4.619	1011	0.001
|	Na	23	**90600.860**	**ug/L**	1.014	151202597	358.656
|	Mg	24	**98699.157**	**ug/L**	4.132	110490369	262.124
|	Al	27	**101299.548**	**ug/L**	2.298	166129107	394.122
|	P	31	**92810.698**	**ug/L**	1.450	11139607	26.415
|	K	39	**100846.844**	**ug/L**	6.601	214822754	508.640
|	Ca	43	**96074.803**	**ug/L**	1.215	510561	1.211
|>	Sc	45		**ug/L**		421522	421522.294
|	Ti	47	**1790.717**	**ug/L**	0.435	519530	1.232
|	V	51	**0.041**	**ug/L**	855.145	11659	0.000
|	Cr	52	**0.070**	**ug/L**	119.539	6958	0.000
|	Cr	53		**ug/L**		54680	-0.052
|	Mn	55	**2.823**	**ug/L**	1.870	13481	0.030
|	Fe	57	**94066.566**	**ug/L**	1.459	7892720	18.711
|	Co	59	**0.453**	**ug/L**	1.426	1578	0.004
|	Ni	60	**3.298**	**ug/L**	2.597	2334	0.005
|	Cu	63		**ug/L**		3325	0.007
⌊	Cu	65	**2.805**	**ug/L**	1.212	2285	0.005
⌈	Zn	66	**6.435**	**ug/L**	0.868	3212	0.012
|	Zn	67		**ug/L**		6833	-0.001
|	Zn	68		**ug/L**		1833	0.005
|>	Ge	74		**ug/L**		249821	249820.991
|	As	75	**-0.653**	**ug/L**	134.479	1238	-0.002
|	Se	77		**ug/L**		5095	-0.002
|	Se	82	**-1.357**	**ug/L**	40.418	-66	-0.000
⌊	Kr	83		**ug/L**		677	0.000
⌈	Sr	88	**1.672**	**ug/L**	1.323	11618	0.072
|	Y	89		**ug/L**		423	0.002
|	Zr	90	**0.651**	**ug/L**	5.077	2663	0.016
|	Mo	98	**1838.707**	**ug/L**	3.100	3365251	21.239
|	Ag	107	**0.057**	**ug/L**	9.557	225	0.001
|	Cd	111	**0.249**	**ug/L**	44.099	201	0.001
|	Cd	114		**ug/L**		4183	0.026
|>	In	115		**ug/L**		158466	158465.589
|	Sn	120	**0.140**	**ug/L**	2.096	555	0.003
|	Sb	121	**0.583**	**ug/L**	0.897	1657	0.010
⌊	Sb	123		**ug/L**		1291	0.008
⌈	Ba	135		**ug/L**		365	0.001
|	Ba	137	**0.410**	**ug/L**	7.206	607	0.002
|	Ho	165		**ug/L**		40	0.000
|>	Ta	181		**ug/L**		312211	312211.010
|	Tl	205	**0.028**	**ug/L**	17.696	1041	0.001
|	Pb	208	**0.381**	**ug/L**	1.923	5461	0.017
|	Bi	209		**ug/L**		2359	0.008
|	Th	232	**0.029**	**ug/L**	10.285	761	0.001
⌊	U	238	**0.018**	**ug/L**	2.934	456	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23	90.601				
	Mg	24	98.699				
	Al	27	101.300				
	P	31	92.811				
	K	39	100.847				
	Ca	43	96.075				
>	Sc	45		83.2			
	Ti	47	89.536				
	V	51					
	Cr	52	3.176				
	Cr	53					
	Mn	55	104.544				
	Fe	57	94.067				
	Co	59	113.180				
	Ni	60	137.436				
	Cu	63					
	Cu	65	82.490				
	Zn	66	91.929				
	Zn	67					
	Zn	68					
>	Ge	74		83.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98	91.935				
	Ag	107					
	Cd	111	124.449				
	Cd	114					
>	In	115		86.5			
	Sn	120					
	Sb	121	116.603				
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		95.8			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Saturday, February 18, 2006 16:44:43
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 5.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**20.670**	**ug/L**	1.055	22720	0.055
|	Be	9	**19.128**	**ug/L**	1.405	5833	0.014
|	B	11	**21.513**	**ug/L**	1.430	4287	0.009
|	Na	23	**89863.566**	**ug/L**	2.079	145920410	355.738
|	Mg	24	**96805.033**	**ug/L**	0.683	105476219	257.094
|	Al	27	**101701.095**	**ug/L**	1.150	162307956	395.684
|	P	31	**93033.028**	**ug/L**	0.824	10865249	26.479
|	K	39	**100771.845**	**ug/L**	3.731	209041933	508.262
|	Ca	43	**95418.396**	**ug/L**	0.911	493463	1.203
|>	Sc	45		**ug/L**		410207	410206.845
|	Ti	47	**1775.801**	**ug/L**	1.283	501341	1.222
|	V	51	**20.275**	**ug/L**	4.007	95731	0.206
|	Cr	52	**20.238**	**ug/L**	1.470	64818	0.142
|	Cr	53		**ug/L**		57896	-0.040
|	Mn	55	**23.030**	**ug/L**	0.520	100662	0.243
|	Fe	57	**94901.974**	**ug/L**	0.790	7748056	18.877
|	Co	59	**20.162**	**ug/L**	1.040	65531	0.160
|	Ni	60	**22.296**	**ug/L**	1.685	15014	0.036
|	Cu	63		**ug/L**		31392	0.076
⌊	Cu	65	**21.301**	**ug/L**	1.056	15787	0.038
⌈	Zn	66	**25.097**	**ug/L**	0.741	11975	0.048
|	Zn	67		**ug/L**		7853	0.003
|	Zn	68		**ug/L**		8633	0.032
|>	Ge	74		**ug/L**		246569	246569.265
|	As	75	**19.786**	**ug/L**	6.970	13146	0.047
|	Se	77		**ug/L**		5504	-0.001
|	Se	82	**19.421**	**ug/L**	1.826	1066	0.004
⌊	Kr	83		**ug/L**		665	0.000
⌈	Sr	88	**22.259**	**ug/L**	0.247	150872	0.960
|	Y	89		**ug/L**		422	0.002
|	Zr	90	**21.625**	**ug/L**	1.891	81838	0.520
|	Mo	98	**1854.032**	**ug/L**	2.494	3362322	21.416
|	Ag	107	**19.376**	**ug/L**	1.477	60990	0.388
|	Cd	111	**19.864**	**ug/L**	2.273	15011	0.096
|	Cd	114		**ug/L**		38070	0.242
|>	In	115		**ug/L**		157037	157037.230
|	Sn	120	**20.972**	**ug/L**	2.878	61982	0.394
|	Sb	121	**21.779**	**ug/L**	1.921	56272	0.358
⌊	Sb	123		**ug/L**		43884	0.279
⌈	Ba	135		**ug/L**		14862	0.048
|	Ba	137	**19.507**	**ug/L**	1.948	26576	0.086
|	Ho	165		**ug/L**		34	0.000
|>	Ta	181		**ug/L**		309199	309199.185
|	Tl	205	**19.130**	**ug/L**	0.725	191858	0.618
|	Pb	208	**19.765**	**ug/L**	2.294	266497	0.861
|	Bi	209		**ug/L**		2324	0.007
|	Th	232	**21.783**	**ug/L**	1.010	302192	0.976
⌊	U	238	**21.526**	**ug/L**	2.029	299464	0.968

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	103.352				
	Be	9	95.640				
	B	11	107.567				
	Na	23	89.864				
	Mg	24	96.805				
	Al	27	101.701				
	P	31	93.033				
	K	39	100.772				
	Ca	43	95.418				
>	Sc	45		81.0			
	Ti	47	88.790				
	V	51	101.376				
	Cr	52	91.164				
	Cr	53					
	Mn	55	101.455				
	Fe	57	94.902				
	Co	59	98.832				
	Ni	60	99.538				
	Cu	63					
	Cu	65	91.031				
	Zn	66	92.953				
	Zn	67					
	Zn	68					
>	Ge	74		82.6			
	As	75	98.928				
	Se	77					
	Se	82	97.103				
	Kr	83					
	Sr	88	111.297				
	Y	89					
	Zr	90	108.125				
	Mo	98	92.702				
	Ag	107	96.879				
	Cd	111	98.335				
	Cd	114					
>	In	115		85.8			
	Sn	120	104.858				
	Sb	121	106.238				
	Sb	123					
	Ba	135					
	Ba	137	97.536				
	Ho	165					
>	Ta	181		94.9			
	Tl	205	95.651				
	Pb	208	98.827				
	Bi	209					
	Th	232	108.914				
	U	238	107.628				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, February 18, 2006 16:49:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 6.095

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**53.914**	**ug/L**	1.647	64032	0.144
|	Be	9	**52.528**	**ug/L**	1.708	17325	0.039
|	B	11	**108.400**	**ug/L**	4.460	21641	0.048
|	Na	23	**4833.870**	**ug/L**	1.877	8531970	19.136
|	Mg	24	**5271.582**	**ug/L**	3.197	6228514	14.000
|	Al	27	**5264.258**	**ug/L**	3.974	9106509	20.481
|	P	31	**5170.443**	**ug/L**	1.532	659361	1.472
|	K	39	**5332.565**	**ug/L**	6.418	12427016	26.896
|	Ca	43	**5088.492**	**ug/L**	1.218	28631	0.064
| >	Sc	45		**ug/L**		444567	444566.902
|	Ti	47	**52.395**	**ug/L**	2.233	16217	0.036
|	V	51	**53.106**	**ug/L**	2.586	252182	0.540
|	Cr	52	**51.770**	**ug/L**	1.377	168643	0.363
|	Cr	53		**ug/L**		75699	-0.011
|	Mn	55	**54.321**	**ug/L**	1.812	255963	0.574
|	Fe	57	**5522.331**	**ug/L**	2.166	494028	1.098
|	Co	59	**52.384**	**ug/L**	1.255	184424	0.415
|	Ni	60	**52.614**	**ug/L**	0.996	38322	0.086
|	Cu	63		**ug/L**		84769	0.190
⌊	Cu	65	**52.021**	**ug/L**	1.210	41523	0.093
⌈	Zn	66	**51.835**	**ug/L**	1.658	27471	0.099
|	Zn	67		**ug/L**		10430	0.010
|	Zn	68		**ug/L**		20734	0.072
| >	Ge	74		**ug/L**		275470	275469.761
|	As	75	**50.934**	**ug/L**	1.814	34971	0.120
|	Se	77		**ug/L**		6342	0.000
|	Se	82	**51.475**	**ug/L**	1.053	3141	0.011
⌊	Kr	83		**ug/L**		616	-0.000
⌈	Sr	88	**50.501**	**ug/L**	2.083	381985	2.177
|	Y	89		**ug/L**		179	0.001
|	Zr	90	**49.721**	**ug/L**	2.025	209916	1.196
|	Mo	98	**51.419**	**ug/L**	1.981	104276	0.594
|	Ag	107	**50.535**	**ug/L**	2.298	177591	1.012
|	Cd	111	**49.995**	**ug/L**	2.310	42185	0.240
|	Cd	114		**ug/L**		98780	0.563
| >	In	115		**ug/L**		175379	175378.726
|	Sn	120	**51.575**	**ug/L**	1.111	170069	0.969
|	Sb	121	**51.179**	**ug/L**	2.081	147490	0.840
⌊	Sb	123		**ug/L**		114531	0.652
⌈	Ba	135		**ug/L**		39934	0.127
|	Ba	137	**50.997**	**ug/L**	1.222	70713	0.224
|	Ho	165		**ug/L**		21	0.000
| >	Ta	181		**ug/L**		314975	314975.433
|	Tl	205	**51.640**	**ug/L**	0.448	526317	1.669
|	Pb	208	**52.410**	**ug/L**	0.316	719581	2.284
|	Bi	209		**ug/L**		51	0.000
|	Th	232	**54.287**	**ug/L**	2.431	766642	2.433
⌊	U	238	**54.820**	**ug/L**	0.959	776795	2.465

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	107.827				
	Be	9	105.055				
	B	11	108.400				
	Na	23	96.677				
	Mg	24	105.432				
	Al	27	104.243				
	P	31	103.409				
	K	39	106.651				
	Ca	43	101.770				
>	Sc	45			87.7		
	Ti	47	104.791				
	V	51	106.212				
	Cr	52	103.541				
	Cr	53					
	Mn	55	108.641				
	Fe	57	110.447				
	Co	59	104.767				
	Ni	60	105.228				
	Cu	63					
	Cu	65	104.042				
	Zn	66	103.669				
	Zn	67					
	Zn	68					
>	Ge	74			92.3		
	As	75	101.868				
	Se	77					
	Se	82	102.951				
	Kr	83					
	Sr	88	101.003				
	Y	89					
	Zr	90	99.443				
	Mo	98	102.839				
	Ag	107	101.071				
	Cd	111	99.990				
	Cd	114					
>	In	115			95.8		
	Sn	120	103.150				
	Sb	121	102.357				
	Sb	123					
	Ba	135					
	Ba	137	101.993				
	Ho	165					
>	Ta	181			96.6		
	Tl	205	103.281				
	Pb	208	104.820				
	Bi	209					
	Th	232	108.575				
	U	238	109.640				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Fe		57CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Saturday, February 18, 2006 16:55:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 7.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.060**	**ug/L**	16.529	195	0.000
|	Be	9	**0.008**	**ug/L**	310.878	18	0.000
|	B	11	**2.379**	**ug/L**	28.818	907	0.001
|	Na	23	**7.413**	**ug/L**	57.341	36047	0.029
|	Mg	24	**3.371**	**ug/L**	98.016	9003	0.009
|	Al	27	**-0.106**	**ug/L**	1290.853	5668	-0.000
|	P	31	**3.186**	**ug/L**	98.298	5559	0.001
|	K	39	**-1.353**	**ug/L**	519.826	474760	-0.007
|	Ca	43	**0.579**	**ug/L**	51.913	122	0.000
\>	Sc	45		**ug/L**		446825	446824.570
|	Ti	47	**0.072**	**ug/L**	63.775	218	0.000
|	V	51	**-0.715**	**ug/L**	115.836	8865	-0.007
|	Cr	52	**-0.651**	**ug/L**	8.012	5112	-0.005
|	Cr	53		**ug/L**		54274	-0.060
|	Mn	55	**-0.036**	**ug/L**	24.386	800	-0.000
|	Fe	57	**-4.158**	**ug/L**	17.022	5427	-0.001
|	Co	59	**0.002**	**ug/L**	108.502	78	0.000
|	Ni	60	**0.006**	**ug/L**	78.130	68	0.000
|	Cu	63		**ug/L**		316	-0.000
⌊	Cu	65	**-0.011**	**ug/L**	86.620	172	-0.000
⌈	Zn	66	**-0.051**	**ug/L**	63.504	123	-0.000
|	Zn	67		**ug/L**		6119	-0.006
|	Zn	68		**ug/L**		627	-0.001
\>	Ge	74		**ug/L**		276101	276100.579
|	As	75	**-0.519**	**ug/L**	42.139	1456	-0.001
|	Se	77		**ug/L**		3677	-0.010
|	Se	82	**-0.148**	**ug/L**	237.110	0	-0.000
⌊	Kr	83		**ug/L**		622	0.000
⌈	Sr	88	**-0.001**	**ug/L**	26.030	201	-0.000
|	Y	89		**ug/L**		79	-0.000
|	Zr	90	**0.038**	**ug/L**	23.535	357	0.001
|	Mo	98	**0.402**	**ug/L**	24.964	909	0.005
|	Ag	107	**0.006**	**ug/L**	41.561	69	0.000
|	Cd	111	**0.012**	**ug/L**	47.032	22	0.000
|	Cd	114		**ug/L**		35	0.000
\>	In	115		**ug/L**		172659	172658.595
|	Sn	120	**0.018**	**ug/L**	46.839	209	0.000
|	Sb	121	**0.191**	**ug/L**	30.355	693	0.003
⌊	Sb	123		**ug/L**		553	0.003
⌈	Ba	135		**ug/L**		34	0.000
|	Ba	137	**-0.004**	**ug/L**	127.002	40	-0.000
|	Ho	165		**ug/L**		10	-0.000
\>	Ta	181		**ug/L**		312945	312945.252
|	Tl	205	**0.180**	**ug/L**	30.161	2576	0.006
|	Pb	208	**0.002**	**ug/L**	26.413	307	0.000
|	Bi	209		**ug/L**		17	-0.000
|	Th	232	**0.017**	**ug/L**	24.020	603	0.001
⌊	U	238	**0.004**	**ug/L**	10.389	264	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		88.2			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		92.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		94.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		96.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201019595
Sample Date/Time: Saturday, February 18, 2006 17:00:12
Sample Type:
Sample Description: ESHL 6020 MB
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\1201019595.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.253**	**ug/L**	3.969	500	0.001
	Be	9	**-0.017**	**ug/L**	35.128	11	-0.000
	B	11	**1.377**	**ug/L**	16.191	837	0.001
	Na	23	**15.841**	**ug/L**	35.873	59794	0.063
	Mg	24	**1.297**	**ug/L**	92.449	7669	0.003
	Al	27	**0.835**	**ug/L**	179.684	8670	0.003
	P	31	**8.490**	**ug/L**	18.364	7336	0.002
	K	39	**1.876**	**ug/L**	440.543	567038	0.009
	Ca	43	**20.158**	**ug/L**	8.141	273	0.000
>	Sc	45		**ug/L**		525574	525574.171
	Ti	47	**1.135**	**ug/L**	3.766	641	0.001
	V	51	**2.582**	**ug/L**	57.311	28070	0.026
	Cr	52	**0.906**	**ug/L**	34.443	11773	0.006
	Cr	53		**ug/L**		185967	0.172
	Mn	55	**0.184**	**ug/L**	14.313	2164	0.002
	Fe	57	**5.798**	**ug/L**	11.447	7423	0.001
	Co	59	**0.010**	**ug/L**	40.459	125	0.000
	Ni	60	**0.044**	**ug/L**	15.260	112	0.000
	Cu	63		**ug/L**		464	0.000
	Cu	65	**0.068**	**ug/L**	25.491	277	0.000
	Zn	66	**1.097**	**ug/L**	2.916	809	0.002
	Zn	67		**ug/L**		27358	0.061
	Zn	68		**ug/L**		2021	0.004
>	Ge	74		**ug/L**		306121	306121.077
	As	75	**0.158**	**ug/L**	216.322	2103	0.000
	Se	77		**ug/L**		13293	0.021
	Se	82	**0.132**	**ug/L**	486.567	20	0.000
	Kr	83		**ug/L**		635	-0.000
	Sr	88	**0.017**	**ug/L**	8.672	356	0.001
	Y	89		**ug/L**		54	-0.000
	Zr	90	**0.048**	**ug/L**	17.325	424	0.001
	Mo	98	**0.155**	**ug/L**	18.363	446	0.002
	Ag	107	**-0.002**	**ug/L**	162.522	42	-0.000
	Cd	111	**0.002**	**ug/L**	363.663	14	0.000
	Cd	114		**ug/L**		17	-0.000
>	In	115		**ug/L**		183520	183519.645
	Sn	120	**0.103**	**ug/L**	10.410	514	0.002
	Sb	121	**0.110**	**ug/L**	27.119	492	0.002
	Sb	123		**ug/L**		392	0.002
	Ba	135		**ug/L**		37	0.000
	Ba	137	**0.007**	**ug/L**	35.611	56	0.000
	Ho	165		**ug/L**		11	-0.000
>	Ta	181		**ug/L**		320205	320204.658
	Tl	205	**0.029**	**ug/L**	14.094	1081	0.001
	Pb	208	**0.036**	**ug/L**	4.884	778	0.002
	Bi	209		**ug/L**		61	0.000
	Th	232	**-0.001**	**ug/L**	180.724	356	-0.000
	U	238	**-0.011**	**ug/L**	5.050	52	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		103.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		102.6			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		100.2			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		98.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201019596
Sample Date/Time: Saturday, February 18, 2006 17:05:25
Sample Type:
Sample Description: ESHL 6020 LCS
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\1201019596.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**56.794**	**ug/L**	0.134	81599	0.151
	Be	9	**52.609**	**ug/L**	3.429	20989	0.039
	B	11	**113.028**	**ug/L**	2.896	27274	0.050
	Na	23	**1809.994**	**ug/L**	8.108	3876527	7.165
	Mg	24	**2062.361**	**ug/L**	5.361	2954767	5.477
	Al	27	**2051.698**	**ug/L**	3.794	4301638	7.982
	P	31	**2049.380**	**ug/L**	1.853	319923	0.583
	K	39	**1983.853**	**ug/L**	5.736	5952730	10.006
	Ca	43	**1962.637**	**ug/L**	0.916	13450	0.025
>	Sc	45		**ug/L**		537940	537939.858
	Ti	47	**44.731**	**ug/L**	2.394	16785	0.031
	V	51	**50.035**	**ug/L**	9.155	288058	0.509
	Cr	52	**49.693**	**ug/L**	2.816	196145	0.349
	Cr	53		**ug/L**		206981	0.203
	Mn	55	**48.605**	**ug/L**	2.465	277204	0.513
	Fe	57	**2004.254**	**ug/L**	3.152	221325	0.399
	Co	59	**47.653**	**ug/L**	3.843	202907	0.377
	Ni	60	**47.681**	**ug/L**	2.289	42011	0.078
	Cu	63		**ug/L**		93544	0.173
	Cu	65	**47.652**	**ug/L**	2.192	46032	0.085
	Zn	66	**52.070**	**ug/L**	1.298	30941	0.100
	Zn	67		**ug/L**		34850	0.084
	Zn	68		**ug/L**		24604	0.077
>	Ge	74		**ug/L**		308875	308874.896
	As	75	**49.210**	**ug/L**	2.282	37954	0.116
	Se	77		**ug/L**		15725	0.028
	Se	82	**48.453**	**ug/L**	0.557	3316	0.011
	Kr	83		**ug/L**		670	-0.000
	Sr	88	**49.885**	**ug/L**	1.713	396224	2.150
	Y	89		**ug/L**		85	-0.000
	Zr	90	**49.410**	**ug/L**	2.042	219055	1.188
	Mo	98	**49.727**	**ug/L**	3.055	105888	0.574
	Ag	107	**50.378**	**ug/L**	1.730	185936	1.009
	Cd	111	**49.123**	**ug/L**	1.647	43526	0.236
	Cd	114		**ug/L**		99848	0.542
>	In	115		**ug/L**		184175	184175.243
	Sn	120	**49.318**	**ug/L**	1.706	170783	0.926
	Sb	121	**50.213**	**ug/L**	1.876	151955	0.824
	Sb	123		**ug/L**		117974	0.640
	Ba	135		**ug/L**		40505	0.124
	Ba	137	**49.839**	**ug/L**	1.805	71454	0.219
	Ho	165		**ug/L**		11	-0.000
>	Ta	181		**ug/L**		325653	325653.495
	Tl	205	**48.427**	**ug/L**	1.854	510341	1.565
	Pb	208	**49.657**	**ug/L**	1.223	704933	2.164
	Bi	209		**ug/L**		137	0.000
	Th	232	**51.260**	**ug/L**	1.254	748512	2.297
	U	238	**52.147**	**ug/L**	1.718	763943	2.345

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		106.2			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		103.5			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		100.6			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		99.9			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 154614001
Sample Date/Time: Saturday, February 18, 2006 17:10:38
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\154614001.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	22.655	ug/L	1.046	36669	0.060
	Be	9	-0.013	ug/L	32.025	15	-0.000
	B	11	13.911	ug/L	6.604	4292	0.006
	Na	23	9509.687	ug/L	3.995	22779431	37.645
	Mg	24	3875.714	ug/L	4.150	6225716	10.293
	Al	27	3.697	ug/L	83.975	16678	0.014
	P	31	23.039	ug/L	17.842	10933	0.007
	K	39	1511.723	ug/L	7.173	5259265	7.625
	Ca	43	10376.146	ug/L	0.653	79200	0.131
>	Sc	45		ug/L		604366	604366.472
	Ti	47	4.748	ug/L	6.228	2238	0.003
	V	51	6.528	ug/L	54.289	56323	0.066
	Cr	52	6.434	ug/L	8.457	36929	0.045
	Cr	53		ug/L		287105	0.294
	Mn	55	1.044	ug/L	1.781	7971	0.011
	Fe	57	88.264	ug/L	4.387	18443	0.018
	Co	59	0.066	ug/L	5.177	414	0.001
	Ni	60	1.112	ug/L	1.867	1185	0.002
	Cu	63		ug/L		2565	0.004
	Cu	65	0.785	ug/L	6.662	1092	0.001
	Zn	66	368.260	ug/L	1.882	229073	0.705
	Zn	67		ug/L		69443	0.185
	Zn	68		ug/L		172600	0.529
>	Ge	74		ug/L		324844	324843.998
	As	75	2.244	ug/L	38.219	3832	0.005
	Se	77		ug/L		20821	0.041
	Se	82	0.337	ug/L	163.875	35	0.000
	Kr	83		ug/L		684	-0.000
	Sr	88	52.193	ug/L	0.667	424132	2.250
	Y	89		ug/L		78	-0.000
	Zr	90	0.169	ug/L	38.127	984	0.004
	Mo	98	0.897	ug/L	1.785	2071	0.010
	Ag	107	0.000	ug/L	3052.137	52	0.000
	Cd	111	-0.005	ug/L	130.153	8	-0.000
	Cd	114		ug/L		24	0.000
>	In	115		ug/L		188417	188416.512
	Sn	120	0.078	ug/L	10.568	441	0.001
	Sb	121	0.111	ug/L	11.803	510	0.002
	Sb	123		ug/L		403	0.002
	Ba	135		ug/L		4604	0.014
	Ba	137	5.452	ug/L	0.631	8035	0.024
	Ho	165		ug/L		10	-0.000
>	Ta	181		ug/L		333039	333038.550
	Tl	205	0.427	ug/L	32.176	5405	0.014
	Pb	208	2.613	ug/L	0.919	38207	0.114
	Bi	209		ug/L		56	0.000
	Th	232	0.019	ug/L	57.856	672	0.001
	U	238	0.554	ug/L	1.306	8516	0.025

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		119.3			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		108.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.9			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		102.2			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201019597
Sample Date/Time: Saturday, February 18, 2006 17:15:51
Sample Type:
Sample Description: ESHL 6020 DUP
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\1201019597.100

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Li	7	**23.722**	**ug/L**	2.290	38214	0.063
Be	9	**-0.014**	**ug/L**	37.013	14	-0.000
B	11	**12.387**	**ug/L**	3.096	3872	0.005
Na	23	**10179.363**	**ug/L**	2.150	24265046	40.296
Mg	24	**4085.107**	**ug/L**	5.256	6527908	10.849
Al	27	**2.471**	**ug/L**	46.271	13673	0.010
P	31	**22.355**	**ug/L**	9.359	10767	0.006
K	39	**1476.192**	**ug/L**	6.846	5119406	7.445
Ca	43	**10851.019**	**ug/L**	0.599	82426	0.137
> Sc	45		**ug/L**		601478	601477.855
Ti	47	**4.636**	**ug/L**	1.184	2183	0.003
V	51	**6.617**	**ug/L**	38.677	56763	0.067
Cr	52	**5.527**	**ug/L**	4.684	32950	0.039
Cr	53		**ug/L**		277983	0.281
Mn	55	**1.050**	**ug/L**	1.152	7970	0.011
Fe	57	**88.967**	**ug/L**	4.939	18441	0.018
Co	59	**0.065**	**ug/L**	2.747	407	0.001
Ni	60	**1.089**	**ug/L**	1.955	1157	0.002
Cu	63		**ug/L**		2457	0.003
Cu	65	**0.743**	**ug/L**	3.460	1042	0.001
Zn	66	**379.565**	**ug/L**	1.757	233907	0.726
Zn	67		**ug/L**		68972	0.186
Zn	68		**ug/L**		176101	0.544
> Ge	74		**ug/L**		321824	321824.310
As	75	**1.712**	**ug/L**	79.410	3399	0.004
Se	77		**ug/L**		19828	0.039
Se	82	**0.375**	**ug/L**	61.514	37	0.000
Kr	83		**ug/L**		675	-0.000
Sr	88	**53.264**	**ug/L**	0.693	432587	2.296
Y	89		**ug/L**		75	-0.000
Zr	90	**0.078**	**ug/L**	20.508	569	0.002
Mo	98	**0.901**	**ug/L**	4.819	2079	0.010
Ag	107	**-0.001**	**ug/L**	174.292	47	-0.000
Cd	111	**0.004**	**ug/L**	377.625	17	0.000
Cd	114		**ug/L**		24	0.000
> In	115		**ug/L**		188322	188321.971
Sn	120	**0.072**	**ug/L**	7.790	419	0.001
Sb	121	**0.076**	**ug/L**	13.251	401	0.001
Sb	123		**ug/L**		327	0.001
Ba	135		**ug/L**		4743	0.014
Ba	137	**5.698**	**ug/L**	2.337	8372	0.025
Ho	165		**ug/L**		8	-0.000
> Ta	181		**ug/L**		332120	332119.547
Tl	205	**0.116**	**ug/L**	13.860	2060	0.004
Pb	208	**2.682**	**ug/L**	1.631	39092	0.117
Bi	209		**ug/L**		47	0.000
Th	232	**-0.005**	**ug/L**	68.832	315	-0.000
U	238	**0.574**	**ug/L**	1.545	8798	0.026

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		118.7			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		107.8			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.8			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		101.9			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201019598
Sample Date/Time: Saturday, February 18, 2006 17:21:04
Sample Type:
Sample Description: ESHL 6020 MS
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\1201019598.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**79.183**	**ug/L**	0.482	127355	0.211
	Be	9	**53.226**	**ug/L**	3.642	23784	0.039
	B	11	**127.173**	**ug/L**	4.240	34287	0.056
	Na	23	**11414.727**	**ug/L**	6.242	27236276	45.187
	Mg	24	**6337.973**	**ug/L**	5.886	10143020	16.832
	Al	27	**2001.008**	**ug/L**	3.218	4696832	7.785
	P	31	**2011.674**	**ug/L**	1.873	351847	0.573
	K	39	**3452.625**	**ug/L**	10.202	11153720	17.414
	Ca	43	**12344.153**	**ug/L**	1.006	93921	0.156
>	Sc	45		**ug/L**		602509	602508.533
	Ti	47	**45.601**	**ug/L**	2.570	19161	0.031
	V	51	**52.710**	**ug/L**	6.537	339130	0.536
	Cr	52	**52.003**	**ug/L**	3.483	229434	0.365
	Cr	53		**ug/L**		284031	0.290
	Mn	55	**47.010**	**ug/L**	2.196	300357	0.497
	Fe	57	**1964.082**	**ug/L**	3.610	243073	0.391
	Co	59	**44.068**	**ug/L**	2.090	210241	0.349
	Ni	60	**45.596**	**ug/L**	1.167	45012	0.075
	Cu	63		**ug/L**		99105	0.164
	Cu	65	**45.075**	**ug/L**	2.335	48783	0.081
	Zn	66	**421.328**	**ug/L**	1.928	260400	0.806
	Zn	67		**ug/L**		73096	0.198
	Zn	68		**ug/L**		195571	0.603
>	Ge	74		**ug/L**		322798	322797.722
	As	75	**41.442**	**ug/L**	3.969	33726	0.098
	Se	77		**ug/L**		19235	0.037
	Se	82	**10.179**	**ug/L**	2.830	737	0.002
	Kr	83		**ug/L**		690	-0.000
	Sr	88	**101.891**	**ug/L**	1.557	827639	4.392
	Y	89		**ug/L**		95	-0.000
	Zr	90	**50.684**	**ug/L**	1.113	229879	1.219
	Mo	98	**50.945**	**ug/L**	2.372	110981	0.588
	Ag	107	**50.410**	**ug/L**	0.242	190327	1.010
	Cd	111	**5.445**	**ug/L**	3.346	4946	0.026
	Cd	114		**ug/L**		10584	0.056
>	In	115		**ug/L**		188406	188405.764
	Sn	120	**51.220**	**ug/L**	0.670	181441	0.962
	Sb	121	**102.208**	**ug/L**	1.838	316253	1.678
	Sb	123		**ug/L**		245977	1.305
	Ba	135		**ug/L**		46313	0.137
	Ba	137	**55.481**	**ug/L**	1.786	82621	0.244
	Ho	165		**ug/L**		9	-0.000
>	Ta	181		**ug/L**		338272	338272.162
	Tl	205	**47.105**	**ug/L**	1.363	515684	1.522
	Pb	208	**22.589**	**ug/L**	0.781	333263	0.984
	Bi	209		**ug/L**		62	0.000
	Th	232	**50.396**	**ug/L**	1.680	764432	2.259
	U	238	**52.167**	**ug/L**	0.516	793889	2.346

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		118.9			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		108.2			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		102.9			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		103.8			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1201019599
Sample Date/Time: Saturday, February 18, 2006 17:26:15
Sample Type:
Sample Description: ESHL 6020 SDILT
Number of Replicates: 3
Batch ID: 498180|5|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\1201019599.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**4.580**	**ug/L**	2.311	6866	0.012
	Be	9	**0.005**	**ug/L**	182.487	21	0.000
	B	11	**4.281**	**ug/L**	16.326	1577	0.002
	Na	23	**2035.395**	**ug/L**	1.817	4459424	8.057
	Mg	24	**827.897**	**ug/L**	1.889	1214894	2.199
	Al	27	**6.687**	**ug/L**	77.719	21352	0.026
	P	31	**2.862**	**ug/L**	89.465	6789	0.001
	K	39	**361.022**	**ug/L**	14.975	1587084	1.821
	Ca	43	**2213.534**	**ug/L**	2.428	15490	0.028
>	Sc	45		**ug/L**		549889	549888.966
	Ti	47	**1.210**	**ug/L**	4.842	699	0.001
	V	51	**2.285**	**ug/L**	14.229	27742	0.023
	Cr	52	**0.951**	**ug/L**	15.130	12468	0.007
	Cr	53		**ug/L**		144099	0.081
	Mn	55	**0.306**	**ug/L**	5.927	2965	0.003
	Fe	57	**16.933**	**ug/L**	8.941	8983	0.003
	Co	59	**0.033**	**ug/L**	25.374	234	0.000
	Ni	60	**0.268**	**ug/L**	8.367	319	0.000
	Cu	63		**ug/L**		1244	0.002
	Cu	65	**0.416**	**ug/L**	12.893	633	0.001
	Zn	66	**76.148**	**ug/L**	0.941	46022	0.146
	Zn	67		**ug/L**		20633	0.037
	Zn	68		**ug/L**		35598	0.110
>	Ge	74		**ug/L**		314668	314667.731
	As	75	**1.046**	**ug/L**	10.109	2823	0.002
	Se	77		**ug/L**		9971	0.009
	Se	82	**0.316**	**ug/L**	237.671	33	0.000
	Kr	83		**ug/L**		673	-0.000
	Sr	88	**10.525**	**ug/L**	0.894	86884	0.454
	Y	89		**ug/L**		90	-0.000
	Zr	90	**0.040**	**ug/L**	20.377	406	0.001
	Mo	98	**0.218**	**ug/L**	7.937	602	0.003
	Ag	107	**0.024**	**ug/L**	3.074	146	0.000
	Cd	111	**-0.005**	**ug/L**	25.353	8	-0.000
	Cd	114		**ug/L**		25	0.000
>	In	115		**ug/L**		191009	191008.783
	Sn	120	**0.042**	**ug/L**	12.789	316	0.001
	Sb	121	**0.077**	**ug/L**	4.904	409	0.001
	Sb	123		**ug/L**		313	0.001
	Ba	135		**ug/L**		1099	0.003
	Ba	137	**1.293**	**ug/L**	2.126	1952	0.006
	Ho	165		**ug/L**		11	-0.000
>	Ta	181		**ug/L**		334719	334718.577
	Tl	205	**0.492**	**ug/L**	28.534	6122	0.016
	Pb	208	**0.562**	**ug/L**	1.379	8489	0.024
	Bi	209		**ug/L**		61	0.000
	Th	232	**0.036**	**ug/L**	14.676	918	0.002
	U	238	**0.127**	**ug/L**	7.661	2131	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		108.5			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		105.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		104.3			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		102.7			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 154614002
Sample Date/Time: Saturday, February 18, 2006 17:31:26
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\154614002.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	22.228	ug/L	0.817	36084	0.059
	Be	9	-0.016	ug/L	43.731	13	-0.000
	B	11	13.052	ug/L	3.942	4078	0.006
	Na	23	9757.412	ug/L	0.262	23439704	38.626
	Mg	24	3524.030	ug/L	3.257	5680091	9.359
	Al	27	7.920	ug/L	22.480	26692	0.031
	P	31	104.475	ug/L	5.059	25010	0.030
	K	39	1934.745	ug/L	3.966	6564611	9.758
	Ca	43	10569.979	ug/L	2.015	80888	0.133
>	Sc	45		ug/L		606045	606045.191
	Ti	47	6.084	ug/L	2.276	2802	0.004
	V	51	5.785	ug/L	48.002	52043	0.059
	Cr	52	3.137	ug/L	8.543	23039	0.022
	Cr	53		ug/L		261894	0.251
	Mn	55	32.328	ug/L	1.498	208228	0.341
	Fe	57	95.588	ug/L	5.439	19379	0.019
	Co	59	0.124	ug/L	7.779	693	0.001
	Ni	60	0.587	ug/L	4.125	668	0.001
	Cu	63		ug/L		2707	0.004
	Cu	65	0.786	ug/L	3.677	1097	0.001
	Zn	66	4.256	ug/L	1.142	2785	0.008
	Zn	67		ug/L		30559	0.067
	Zn	68		ug/L		4239	0.010
>	Ge	74		ug/L		320651	320650.522
	As	75	2.563	ug/L	11.447	4026	0.006
	Se	77		ug/L		18492	0.035
	Se	82	-0.104	ug/L	264.984	4	-0.000
	Kr	83		ug/L		678	-0.000
	Sr	88	60.162	ug/L	0.810	488358	2.593
	Y	89		ug/L		418	0.002
	Zr	90	0.035	ug/L	25.772	375	0.001
	Mo	98	1.228	ug/L	2.557	2790	0.014
	Ag	107	-0.002	ug/L	94.852	45	-0.000
	Cd	111	-0.005	ug/L	290.286	8	-0.000
	Cd	114		ug/L		28	0.000
>	In	115		ug/L		188242	188241.686
	Sn	120	0.067	ug/L	13.003	400	0.001
	Sb	121	0.099	ug/L	5.506	473	0.002
	Sb	123		ug/L		367	0.001
	Ba	135		ug/L		38125	0.114
	Ba	137	45.962	ug/L	1.579	67625	0.202
	Ho	165		ug/L		38	0.000
>	Ta	181		ug/L		334222	334222.327
	Tl	205	0.134	ug/L	10.217	2260	0.004
	Pb	208	0.043	ug/L	3.147	917	0.002
	Bi	209		ug/L		52	0.000
	Th	232	0.038	ug/L	4.020	947	0.002
	U	238	0.654	ug/L	2.265	10054	0.029

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		119.6			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		107.4			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		102.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		102.5			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, February 18, 2006 17:36:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 8.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**54.094**	**ug/L**	0.415	73822	0.144
	Be	9	**52.070**	**ug/L**	2.584	19748	0.039
	B	11	**107.758**	**ug/L**	0.641	24727	0.047
	Na	23	**5029.460**	**ug/L**	0.228	10198128	19.910
	Mg	24	**5208.811**	**ug/L**	2.117	7073533	13.833
	Al	27	**5350.972**	**ug/L**	3.214	10644636	20.819
	P	31	**5108.795**	**ug/L**	1.254	748721	1.454
	K	39	**5304.530**	**ug/L**	2.995	14216040	26.754
	Ca	43	**5070.068**	**ug/L**	1.597	32784	0.064
>	Sc	45		**ug/L**		510910	510909.751
	Ti	47	**48.423**	**ug/L**	3.159	17249	0.033
	V	51	**51.443**	**ug/L**	1.535	281175	0.523
	Cr	52	**50.678**	**ug/L**	1.393	189855	0.356
	Cr	53		**ug/L**		112311	0.039
	Mn	55	**51.596**	**ug/L**	1.470	279538	0.545
	Fe	57	**5131.911**	**ug/L**	1.163	528144	1.021
	Co	59	**49.735**	**ug/L**	1.178	201221	0.394
	Ni	60	**50.203**	**ug/L**	1.559	42023	0.082
	Cu	63		**ug/L**		93231	0.182
	Cu	65	**49.131**	**ug/L**	1.131	45081	0.088
	Zn	66	**51.035**	**ug/L**	0.558	29442	0.098
	Zn	67		**ug/L**		14319	0.019
	Zn	68		**ug/L**		22972	0.074
>	Ge	74		**ug/L**		299796	299795.633
	As	75	**50.399**	**ug/L**	0.889	37685	0.119
	Se	77		**ug/L**		8944	0.007
	Se	82	**50.900**	**ug/L**	1.329	3381	0.011
	Kr	83		**ug/L**		622	-0.000
	Sr	88	**51.282**	**ug/L**	2.219	404999	2.211
	Y	89		**ug/L**		266	0.001
	Zr	90	**51.195**	**ug/L**	2.378	225600	1.231
	Mo	98	**50.525**	**ug/L**	2.610	106952	0.584
	Ag	107	**51.315**	**ug/L**	1.104	188250	1.028
	Cd	111	**50.417**	**ug/L**	1.627	44408	0.243
	Cd	114		**ug/L**		102962	0.562
>	In	115		**ug/L**		183089	183088.847
	Sn	120	**52.118**	**ug/L**	1.771	179394	0.979
	Sb	121	**51.446**	**ug/L**	2.579	154748	0.844
	Sb	123		**ug/L**		118047	0.644
	Ba	135		**ug/L**		42029	0.127
	Ba	137	**51.282**	**ug/L**	2.099	74588	0.226
	Ho	165		**ug/L**		24	0.000
>	Ta	181		**ug/L**		330449	330449.488
	Tl	205	**50.928**	**ug/L**	0.743	544615	1.646
	Pb	208	**51.464**	**ug/L**	1.772	741215	2.242
	Bi	209		**ug/L**		72	0.000
	Th	232	**52.919**	**ug/L**	1.470	784008	2.372
	U	238	**53.676**	**ug/L**	2.343	797726	2.414

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7	108.187				
|	Be	9	104.141				
|	B	11	107.758				
|	Na	23	100.589				
|	Mg	24	104.176				
|	Al	27	105.960				
|	P	31	102.176				
|	K	39	106.091				
|	Ca	43	101.401				
|>	Sc	45		100.8			
|	Ti	47	96.846				
|	V	51	102.885				
|	Cr	52	101.357				
|	Cr	53					
|	Mn	55	103.192				
|	Fe	57	102.638				
|	Co	59	99.470				
|	Ni	60	100.407				
|	Cu	63					
⌊	Cu	65	98.261				
⌈	Zn	66	102.070				
|	Zn	67					
|	Zn	68					
|>	Ge	74		100.4			
|	As	75	100.799				
|	Se	77					
|	Se	82	101.800				
⌊	Kr	83					
⌈	Sr	88	102.564				
|	Y	89					
|	Zr	90	102.391				
|	Mo	98	101.049				
|	Ag	107	102.630				
|	Cd	111	100.834				
|	Cd	114					
|>	In	115		100.0			
|	Sn	120	104.237				
|	Sb	121	102.891				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	102.564				
|	Ho	165					
|>	Ta	181		101.4			
|	Tl	205	101.856				
|	Pb	208	102.928				
|	Bi	209					
|	Th	232	105.837				
⌊	U	238	107.351				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, February 18, 2006 17:41:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 9.105

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.036**	**ug/L**	21.144	189	0.000
|	Be	9	**-0.003**	**ug/L**	242.556	16	-0.000
|	B	11	**2.156**	**ug/L**	35.101	979	0.001
|	Na	23	**2.575**	**ug/L**	165.595	31035	0.010
|	Mg	24	**-1.483**	**ug/L**	57.823	3667	-0.004
|	Al	27	**0.190**	**ug/L**	577.418	7002	0.001
|	P	31	**-1.558**	**ug/L**	125.242	5613	-0.000
|	K	39	**-18.285**	**ug/L**	30.415	494763	-0.092
|	Ca	43	**1.058**	**ug/L**	244.046	141	0.000
|>	Sc	45		**ug/L**		506002	506002.094
|	Ti	47	**0.073**	**ug/L**	54.470	247	0.000
|	V	51	**-0.020**	**ug/L**	3468.834	13639	-0.000
|	Cr	52	**-0.255**	**ug/L**	22.866	7196	-0.002
|	Cr	53		**ug/L**		80160	-0.023
|	Mn	55	**-0.006**	**ug/L**	120.606	1063	-0.000
|	Fe	57	**-3.948**	**ug/L**	33.308	6165	-0.001
|	Co	59	**0.005**	**ug/L**	29.727	100	0.000
|	Ni	60	**-0.001**	**ug/L**	1287.590	71	-0.000
|	Cu	63		**ug/L**		335	-0.000
⌊	Cu	65	**-0.018**	**ug/L**	117.828	189	-0.000
⌈	Zn	66	**0.006**	**ug/L**	378.805	165	0.000
|	Zn	67		**ug/L**		7918	-0.002
|	Zn	68		**ug/L**		748	-0.000
|>	Ge	74		**ug/L**		297138	297137.622
|	As	75	**-0.268**	**ug/L**	81.224	1742	-0.001
|	Se	77		**ug/L**		5541	-0.004
|	Se	82	**-0.001**	**ug/L**	95397.268	10	-0.000
⌊	Kr	83		**ug/L**		637	-0.000
⌈	Sr	88	**0.001**	**ug/L**	98.840	230	0.000
|	Y	89		**ug/L**		88	-0.000
|	Zr	90	**0.021**	**ug/L**	40.774	304	0.001
|	Mo	98	**0.065**	**ug/L**	46.744	255	0.001
|	Ag	107	**0.005**	**ug/L**	36.103	68	0.000
|	Cd	111	**0.011**	**ug/L**	29.713	22	0.000
|	Cd	114		**ug/L**		27	0.000
|>	In	115		**ug/L**		183433	183433.082
|	Sn	120	**0.016**	**ug/L**	23.350	217	0.000
|	Sb	121	**0.164**	**ug/L**	34.810	657	0.003
⌊	Sb	123		**ug/L**		504	0.002
⌈	Ba	135		**ug/L**		37	0.000
|	Ba	137	**0.002**	**ug/L**	95.538	49	0.000
|	Ho	165		**ug/L**		11	-0.000
|>	Ta	181		**ug/L**		326962	326961.605
|	Tl	205	**0.182**	**ug/L**	28.686	2719	0.006
|	Pb	208	**0.002**	**ug/L**	61.274	318	0.000
|	Bi	209		**ug/L**		13	-0.000
|	Th	232	**0.031**	**ug/L**	29.662	832	0.001
⌊	U	238	**0.004**	**ug/L**	21.030	273	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		99.9			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		99.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.2			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		100.3			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 154614003
Sample Date/Time: Saturday, February 18, 2006 17:47:00
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\154614003.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**23.783**	**ug/L**	2.200	38025	0.063
	Be	9	**-0.017**	**ug/L**	60.460	13	-0.000
	B	11	**12.567**	**ug/L**	0.417	3891	0.006
	Na	23	**10041.884**	**ug/L**	4.810	23769841	39.752
	Mg	24	**4144.209**	**ug/L**	11.326	6575475	11.006
	Al	27	**2.189**	**ug/L**	100.371	13007	0.009
	P	31	**24.283**	**ug/L**	8.629	11013	0.007
	K	39	**1397.324**	**ug/L**	0.608	4845516	7.048
	Ca	43	**10683.580**	**ug/L**	1.001	80532	0.135
>	Sc	45		**ug/L**		596938	596937.974
	Ti	47	**4.697**	**ug/L**	1.370	2192	0.003
	V	51	**6.381**	**ug/L**	31.958	54964	0.065
	Cr	52	**5.951**	**ug/L**	2.401	34486	0.042
	Cr	53		**ug/L**		255147	0.246
	Mn	55	**1.812**	**ug/L**	1.364	12719	0.019
	Fe	57	**154.196**	**ug/L**	1.407	26049	0.031
	Co	59	**0.051**	**ug/L**	7.523	335	0.000
	Ni	60	**1.243**	**ug/L**	3.481	1298	0.002
	Cu	63		**ug/L**		2483	0.003
	Cu	65	**0.775**	**ug/L**	8.517	1070	0.001
	Zn	66	**390.766**	**ug/L**	0.826	237432	0.748
	Zn	67		**ug/L**		67443	0.184
	Zn	68		**ug/L**		178003	0.558
>	Ge	74		**ug/L**		317302	317302.302
	As	75	**1.526**	**ug/L**	56.161	3212	0.004
	Se	77		**ug/L**		18023	0.034
	Se	82	**0.428**	**ug/L**	41.729	41	0.000
	Kr	83		**ug/L**		664	-0.000
	Sr	88	**53.710**	**ug/L**	2.261	431486	2.315
	Y	89		**ug/L**		80	-0.000
	Zr	90	**0.064**	**ug/L**	11.886	500	0.002
	Mo	98	**0.854**	**ug/L**	1.633	1956	0.010
	Ag	107	**-0.002**	**ug/L**	102.135	44	-0.000
	Cd	111	**-0.001**	**ug/L**	454.607	12	-0.000
	Cd	114		**ug/L**		27	0.000
>	In	115		**ug/L**		186262	186262.342
	Sn	120	**0.125**	**ug/L**	2.637	602	0.002
	Sb	121	**0.119**	**ug/L**	19.939	530	0.002
	Sb	123		**ug/L**		442	0.002
	Ba	135		**ug/L**		4798	0.014
	Ba	137	**5.891**	**ug/L**	2.715	8598	0.026
	Ho	165		**ug/L**		12	-0.000
>	Ta	181		**ug/L**		330044	330044.477
	Tl	205	**0.044**	**ug/L**	19.960	1272	0.001
	Pb	208	**3.605**	**ug/L**	2.092	52124	0.157
	Bi	209		**ug/L**		47	0.000
	Th	232	**0.007**	**ug/L**	50.811	487	0.000
	U	238	**0.590**	**ug/L**	4.118	8967	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		117.8			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		106.3			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		101.7			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		101.2			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 154614004
Sample Date/Time: Saturday, February 18, 2006 17:52:13
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\154614004.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	22.192	ug/L	3.614	36330	0.059
	Be	9	-0.009	ug/L	39.228	17	-0.000
	B	11	12.495	ug/L	3.792	3965	0.005
	Na	23	10153.331	ug/L	5.361	24595182	40.193
	Mg	24	3472.862	ug/L	4.521	5643716	9.223
	Al	27	17.274	ug/L	16.101	49085	0.067
	P	31	106.144	ug/L	4.344	25522	0.030
	K	39	2001.062	ug/L	4.779	6823932	10.093
	Ca	43	10532.886	ug/L	1.721	81321	0.133
>	Sc	45		ug/L		611390	611390.399
	Ti	47	6.012	ug/L	1.769	2797	0.004
	V	51	5.415	ug/L	42.831	50212	0.055
	Cr	52	3.308	ug/L	4.627	23982	0.023
	Cr	53		ug/L		252792	0.232
	Mn	55	32.670	ug/L	1.685	212287	0.345
	Fe	57	119.953	ug/L	4.018	22514	0.024
	Co	59	0.049	ug/L	8.275	334	0.000
	Ni	60	0.650	ug/L	7.027	737	0.001
	Cu	63		ug/L		2793	0.004
	Cu	65	0.833	ug/L	8.712	1158	0.001
	Zn	66	4.553	ug/L	0.814	2949	0.009
	Zn	67		ug/L		32503	0.074
	Zn	68		ug/L		4511	0.011
>	Ge	74		ug/L		318568	318568.477
	As	75	2.495	ug/L	17.730	3948	0.006
	Se	77		ug/L		17370	0.032
	Se	82	0.116	ug/L	204.043	19	0.000
	Kr	83		ug/L		662	-0.000
	Sr	88	60.800	ug/L	1.559	493318	2.621
	Y	89		ug/L		548	0.002
	Zr	90	0.057	ug/L	18.573	477	0.001
	Mo	98	1.228	ug/L	2.390	2788	0.014
	Ag	107	-0.002	ug/L	214.421	44	-0.000
	Cd	111	-0.003	ug/L	104.989	10	-0.000
	Cd	114		ug/L		25	0.000
>	In	115		ug/L		188163	188163.291
	Sn	120	0.109	ug/L	2.829	551	0.002
	Sb	121	0.100	ug/L	7.502	475	0.002
	Sb	123		ug/L		395	0.001
	Ba	135		ug/L		40740	0.122
	Ba	137	49.449	ug/L	2.373	72632	0.218
	Ho	165		ug/L		48	0.000
>	Ta	181		ug/L		333696	333695.979
	Tl	205	0.014	ug/L	20.168	970	0.000
	Pb	208	0.057	ug/L	9.797	1116	0.002
	Bi	209		ug/L		83	0.000
	Th	232	0.032	ug/L	3.355	861	0.001
	U	238	0.665	ug/L	3.974	10190	0.030

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
|>	Sc	45		120.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
|>	Ge	74		106.7			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
|>	In	115		102.8			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
|>	Ta	181		102.4			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 154614008
Sample Date/Time: Saturday, February 18, 2006 17:57:26
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\154614008.108

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**32.378**	**ug/L**	1.971	54023	0.086
	Be	9	**-0.008**	**ug/L**	70.248	18	-0.000
	B	11	**31.443**	**ug/L**	5.205	9248	0.014
	Na	23	**19049.054**	**ug/L**	3.599	47044476	75.408
	Mg	24	**5331.075**	**ug/L**	2.019	8839118	14.158
	Al	27	**6.529**	**ug/L**	23.781	24020	0.025
	P	31	**62.888**	**ug/L**	4.173	18362	0.018
	K	39	**650.429**	**ug/L**	3.383	2712673	3.281
	Ca	43	**30740.186**	**ug/L**	1.110	241810	0.387
>	Sc	45		**ug/L**		623766	623765.612
	Ti	47	**5.031**	**ug/L**	4.618	2435	0.003
	V	51	**6.318**	**ug/L**	58.708	57051	0.064
	Cr	52	**22.662**	**ug/L**	2.703	109164	0.159
	Cr	53		**ug/L**		362260	0.399
	Mn	55	**5.340**	**ug/L**	1.409	36530	0.056
	Fe	57	**172.010**	**ug/L**	1.947	29429	0.034
	Co	59	**0.304**	**ug/L**	2.752	1601	0.002
	Ni	60	**4.731**	**ug/L**	3.073	4913	0.008
	Cu	63		**ug/L**		8837	0.013
	Cu	65	**3.505**	**ug/L**	2.876	4163	0.006
	Zn	66	**23.426**	**ug/L**	2.074	14771	0.045
	Zn	67		**ug/L**		37519	0.087
	Zn	68		**ug/L**		12940	0.037
>	Ge	74		**ug/L**		325528	325528.213
	As	75	**1.312**	**ug/L**	79.450	3116	0.003
	Se	77		**ug/L**		25604	0.056
	Se	82	**0.148**	**ug/L**	111.643	22	0.000
	Kr	83		**ug/L**		693	-0.000
	Sr	88	**164.123**	**ug/L**	0.624	1325954	7.075
	Y	89		**ug/L**		204	0.001
	Zr	90	**0.023**	**ug/L**	3.186	321	0.001
	Mo	98	**0.768**	**ug/L**	1.882	1781	0.009
	Ag	107	**-0.005**	**ug/L**	11.306	34	-0.000
	Cd	111	**0.011**	**ug/L**	136.882	23	0.000
	Cd	114		**ug/L**		55	0.000
>	In	115		**ug/L**		187390	187390.196
	Sn	120	**0.081**	**ug/L**	2.044	451	0.002
	Sb	121	**0.077**	**ug/L**	5.075	402	0.001
	Sb	123		**ug/L**		358	0.001
	Ba	135		**ug/L**		12471	0.037
	Ba	137	**14.913**	**ug/L**	2.573	21992	0.066
	Ho	165		**ug/L**		14	-0.000
>	Ta	181		**ug/L**		334541	334541.140
	Tl	205	**-0.001**	**ug/L**	521.051	806	-0.000
	Pb	208	**0.056**	**ug/L**	4.405	1111	0.002
	Bi	209		**ug/L**		72	0.000
	Th	232	**-0.009**	**ug/L**	7.614	254	-0.000
	U	238	**0.075**	**ug/L**	0.753	1355	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
\>	Sc	45		123.1			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
\>	Ge	74		109.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
\>	In	115		102.3			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
\>	Ta	181		102.6			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 154614009
Sample Date/Time: Saturday, February 18, 2006 18:02:41
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\154614009.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**32.139**	**ug/L**	2.361	53844	0.086
	Be	9	**-0.006**	**ug/L**	84.703	19	-0.000
	B	11	**31.634**	**ug/L**	3.209	9336	0.014
	Na	23	**19025.383**	**ug/L**	0.810	47209544	75.315
	Mg	24	**5375.054**	**ug/L**	2.436	8945444	14.275
	Al	27	**104.093**	**ug/L**	6.429	261712	0.405
	P	31	**63.956**	**ug/L**	1.450	18631	0.018
	K	39	**729.362**	**ug/L**	6.567	2974908	3.679
	Ca	43	**29995.237**	**ug/L**	0.311	236974	0.378
>	Sc	45		**ug/L**		626341	626341.411
	Ti	47	**7.516**	**ug/L**	3.604	3513	0.005
	V	51	**13.094**	**ug/L**	14.249	100399	0.133
	Cr	52	**59.696**	**ug/L**	0.465	272401	0.419
	Cr	53		**ug/L**		406032	0.467
	Mn	55	**7.494**	**ug/L**	1.182	50928	0.079
	Fe	57	**499.681**	**ug/L**	2.694	70359	0.099
	Co	59	**0.499**	**ug/L**	1.831	2575	0.004
	Ni	60	**15.353**	**ug/L**	2.715	15817	0.025
	Cu	63		**ug/L**		56714	0.090
	Cu	65	**24.425**	**ug/L**	1.810	27602	0.044
	Zn	66	**37.055**	**ug/L**	2.077	23432	0.071
	Zn	67		**ug/L**		39003	0.091
	Zn	68		**ug/L**		19634	0.057
>	Ge	74		**ug/L**		327946	327946.427
	As	75	**2.717**	**ug/L**	14.036	4234	0.006
	Se	77		**ug/L**		27442	0.061
	Se	82	**-0.159**	**ug/L**	178.054	-0	-0.000
	Kr	83		**ug/L**		697	-0.000
	Sr	88	**159.037**	**ug/L**	1.249	1289836	6.855
	Y	89		**ug/L**		1204	0.006
	Zr	90	**0.197**	**ug/L**	0.868	1109	0.005
	Mo	98	**1.650**	**ug/L**	2.125	3705	0.019
	Ag	107	**0.001**	**ug/L**	213.538	53	0.000
	Cd	111	**0.004**	**ug/L**	130.324	16	0.000
	Cd	114		**ug/L**		38	0.000
>	In	115		**ug/L**		188102	188101.677
	Sn	120	**0.242**	**ug/L**	1.903	1018	0.005
	Sb	121	**0.079**	**ug/L**	1.610	410	0.001
	Sb	123		**ug/L**		360	0.001
	Ba	135		**ug/L**		13554	0.040
	Ba	137	**16.348**	**ug/L**	0.815	24424	0.072
	Ho	165		**ug/L**		86	0.000
>	Ta	181		**ug/L**		338918	338917.824
	Tl	205	**-0.012**	**ug/L**	11.049	691	-0.000
	Pb	208	**1.239**	**ug/L**	0.512	18596	0.054
	Bi	209		**ug/L**		134	0.000
	Th	232	**0.027**	**ug/L**	7.754	802	0.001
	U	238	**0.094**	**ug/L**	3.429	1652	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		123.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		109.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		102.7			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		104.0			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 154614010
Sample Date/Time: Saturday, February 18, 2006 18:07:54
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\154614010.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.233**	**ug/L**	6.129	539	0.001
|	Be	9	**-0.008**	**ug/L**	204.814	17	-0.000
|	B	11	**0.894**	**ug/L**	19.762	830	0.000
|	Na	23	**10.629**	**ug/L**	32.157	56111	0.042
|	Mg	24	**-2.961**	**ug/L**	36.421	2000	-0.008
|	Al	27	**2.323**	**ug/L**	122.496	13341	0.009
|	P	31	**6.746**	**ug/L**	5.162	8088	0.002
|	K	39	**1.081**	**ug/L**	1442.245	645995	0.005
|	Ca	43	**20.720**	**ug/L**	16.398	317	0.000
|>	Sc	45		**ug/L**		600761	600760.919
|	Ti	47	**0.965**	**ug/L**	2.815	663	0.001
|	V	51	**0.704**	**ug/L**	286.343	20688	0.007
|	Cr	52	**2.562**	**ug/L**	5.899	20427	0.018
|	Cr	53		**ug/L**		386434	0.462
|	Mn	55	**0.315**	**ug/L**	1.962	3301	0.003
|	Fe	57	**2.309**	**ug/L**	76.178	8070	0.000
|	Co	59	**-0.003**	**ug/L**	20.797	80	-0.000
|	Ni	60	**0.636**	**ug/L**	3.585	710	0.001
|	Cu	63		**ug/L**		582	0.000
⌊	Cu	65	**0.086**	**ug/L**	9.648	336	0.000
⌈	Zn	66	**1.835**	**ug/L**	8.116	1352	0.004
|	Zn	67		**ug/L**		37627	0.084
|	Zn	68		**ug/L**		3001	0.006
|>	Ge	74		**ug/L**		333351	333350.839
|	As	75	**2.199**	**ug/L**	55.613	3899	0.005
|	Se	77		**ug/L**		26790	0.058
|	Se	82	**0.365**	**ug/L**	120.990	38	0.000
⌊	Kr	83		**ug/L**		666	-0.000
⌈	Sr	88	**0.025**	**ug/L**	4.685	448	0.001
|	Y	89		**ug/L**		59	-0.000
|	Zr	90	**-0.002**	**ug/L**	46.380	214	-0.000
|	Mo	98	**-0.033**	**ug/L**	21.056	50	-0.000
|	Ag	107	**-0.006**	**ug/L**	44.829	29	-0.000
|	Cd	111	**0.002**	**ug/L**	60.560	15	0.000
|	Cd	114		**ug/L**		26	0.000
|>	In	115		**ug/L**		194691	194691.066
|	Sn	120	**0.036**	**ug/L**	11.008	301	0.001
|	Sb	121	**0.012**	**ug/L**	19.573	211	0.000
⌊	Sb	123		**ug/L**		179	0.000
⌈	Ba	135		**ug/L**		36	0.000
|	Ba	137	**0.010**	**ug/L**	33.929	63	0.000
|	Ho	165		**ug/L**		8	-0.000
|>	Ta	181		**ug/L**		341440	341440.395
|	Tl	205	**-0.022**	**ug/L**	21.213	587	-0.001
|	Pb	208	**0.008**	**ug/L**	5.959	414	0.000
|	Bi	209		**ug/L**		71	0.000
|	Th	232	**-0.013**	**ug/L**	4.871	188	-0.001
⌊	U	238	**-0.012**	**ug/L**	6.766	43	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		118.6			
	Ti	47					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		111.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Y	89					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		106.3			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
	Ho	165					
>	Ta	181		104.7			
	Tl	205					
	Pb	208					
	Bi	209					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Saturday, February 18, 2006 18:13:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 8.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**53.073**	**ug/L**	2.061	78374	0.141
|	Be	9	**50.387**	**ug/L**	1.037	20675	0.037
|	B	11	**105.904**	**ug/L**	1.886	26305	0.047
|	Na	23	**4639.852**	**ug/L**	1.693	10182653	18.368
|	Mg	24	**5156.927**	**ug/L**	2.991	7577186	13.696
|	Al	27	**5132.274**	**ug/L**	4.251	11045516	19.968
|	P	31	**4989.387**	**ug/L**	2.665	791386	1.420
|	K	39	**5126.902**	**ug/L**	2.723	14886196	25.858
|	Ca	43	**4955.036**	**ug/L**	2.845	34672	0.062
| >	Sc	45		**ug/L**		552885	552884.749
|	Ti	47	**48.837**	**ug/L**	0.567	18820	0.034
|	V	51	**50.317**	**ug/L**	3.572	297955	0.512
|	Cr	52	**49.523**	**ug/L**	2.589	200968	0.348
|	Cr	53		**ug/L**		138292	0.069
|	Mn	55	**50.476**	**ug/L**	0.379	295948	0.533
|	Fe	57	**5013.400**	**ug/L**	0.783	558519	0.997
|	Co	59	**48.685**	**ug/L**	1.665	213159	0.385
|	Ni	60	**47.695**	**ug/L**	3.033	43200	0.078
|	Cu	63		**ug/L**		96822	0.174
⌊	Cu	65	**48.098**	**ug/L**	1.155	47768	0.086
⌈	Zn	66	**51.393**	**ug/L**	1.583	30923	0.098
|	Zn	67		**ug/L**		15740	0.022
|	Zn	68		**ug/L**		24014	0.074
| >	Ge	74		**ug/L**		312715	312715.123
|	As	75	**50.779**	**ug/L**	0.731	39592	0.120
|	Se	77		**ug/L**		10720	0.011
|	Se	82	**50.941**	**ug/L**	2.167	3529	0.011
⌊	Kr	83		**ug/L**		631	-0.000
⌈	Sr	88	**51.330**	**ug/L**	1.227	420694	2.213
|	Y	89		**ug/L**		275	0.001
|	Zr	90	**50.781**	**ug/L**	3.306	232222	1.221
|	Mo	98	**49.843**	**ug/L**	3.578	109487	0.576
|	Ag	107	**50.983**	**ug/L**	1.874	194117	1.021
|	Cd	111	**50.220**	**ug/L**	3.266	45900	0.242
|	Cd	114		**ug/L**		105844	0.557
| >	In	115		**ug/L**		190053	190053.351
|	Sn	120	**50.857**	**ug/L**	4.284	181626	0.955
|	Sb	121	**50.416**	**ug/L**	3.746	157371	0.828
⌊	Sb	123		**ug/L**		122736	0.645
⌈	Ba	135		**ug/L**		42637	0.126
|	Ba	137	**51.127**	**ug/L**	1.809	75917	0.225
|	Ho	165		**ug/L**		20	0.000
| >	Ta	181		**ug/L**		337326	337326.403
|	Tl	205	**50.782**	**ug/L**	1.499	554277	1.641
|	Pb	208	**50.999**	**ug/L**	2.176	749797	2.222
|	Bi	209		**ug/L**		72	0.000
|	Th	232	**52.602**	**ug/L**	0.909	795660	2.358
⌊	U	238	**53.620**	**ug/L**	2.122	813588	2.412

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
	Li	7	106.146				
	Be	9	100.774				
	B	11	105.904				
	Na	23	92.797				
	Mg	24	103.139				
	Al	27	101.629				
	P	31	99.788				
	K	39	102.538				
	Ca	43	99.101				
>	Sc	45		109.1			
	Ti	47	97.675				
	V	51	100.635				
	Cr	52	99.047				
	Cr	53					
	Mn	55	100.952				
	Fe	57	100.268				
	Co	59	97.369				
	Ni	60	95.389				
	Cu	63					
	Cu	65	96.196				
	Zn	66	102.785				
	Zn	67					
	Zn	68					
>	Ge	74		104.8			
	As	75	101.559				
	Se	77					
	Se	82	101.881				
	Kr	83					
	Sr	88	102.660				
	Y	89					
	Zr	90	101.561				
	Mo	98	99.686				
	Ag	107	101.965				
	Cd	111	100.439				
	Cd	114					
>	In	115		103.8			
	Sn	120	101.714				
	Sb	121	100.833				
	Sb	123					
	Ba	135					
	Ba	137	102.255				
	Ho	165					
>	Ta	181		103.5			
	Tl	205	101.564				
	Pb	208	101.997				
	Bi	209					
	Th	232	105.203				
	U	238	107.240				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
Sample Date/Time: Saturday, February 18, 2006 18:18:15
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\6020.mth
Dataset File: C:\elandata\Dataset\060218\QC Std 9.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.037**	**ug/L**	23.958	202	0.000
|	Be	9	**-0.000**	**ug/L**	2261.388	18	-0.000
|	B	11	**2.078**	**ug/L**	34.747	1028	0.001
|	Na	23	**0.744**	**ug/L**	105.921	29364	0.003
|	Mg	24	**-0.256**	**ug/L**	336.392	5668	-0.001
|	Al	27	**1.835**	**ug/L**	61.923	11004	0.007
|	P	31	**-0.965**	**ug/L**	85.013	6088	-0.000
|	K	39	**-18.452**	**ug/L**	52.327	527571	-0.093
|	Ca	43	**1.923**	**ug/L**	86.618	157	0.000
|>	Sc	45		**ug/L**		540400	540399.626
|	Ti	47	**0.054**	**ug/L**	166.928	257	0.000
|	V	51	**0.711**	**ug/L**	90.547	18615	0.007
|	Cr	52	**-0.009**	**ug/L**	867.356	8618	-0.000
|	Cr	53		**ug/L**		99591	0.003
|	Mn	55	**0.012**	**ug/L**	90.748	1240	0.000
|	Fe	57	**-4.080**	**ug/L**	54.773	6571	-0.001
|	Co	59	**0.006**	**ug/L**	123.567	112	0.000
|	Ni	60	**0.005**	**ug/L**	166.765	81	0.000
|	Cu	63		**ug/L**		375	-0.000
⌊	Cu	65	**-0.005**	**ug/L**	270.102	214	-0.000
⌈	Zn	66	**-0.033**	**ug/L**	31.688	147	-0.000
|	Zn	67		**ug/L**		8652	-0.000
|	Zn	68		**ug/L**		822	-0.000
|>	Ge	74		**ug/L**		307728	307727.984
|	As	75	**-0.114**	**ug/L**	459.202	1913	-0.000
|	Se	77		**ug/L**		6854	-0.001
|	Se	82	**0.146**	**ug/L**	138.779	20	0.000
⌊	Kr	83		**ug/L**		633	-0.000
⌈	Sr	88	**0.005**	**ug/L**	130.460	271	0.000
|	Y	89		**ug/L**		97	0.000
|	Zr	90	**0.021**	**ug/L**	7.119	313	0.000
|	Mo	98	**0.056**	**ug/L**	39.775	243	0.001
|	Ag	107	**0.005**	**ug/L**	44.983	70	0.000
|	Cd	111	**0.006**	**ug/L**	42.759	18	0.000
|	Cd	114		**ug/L**		38	0.000
|>	In	115		**ug/L**		189872	189871.694
|	Sn	120	**0.020**	**ug/L**	13.257	236	0.000
|	Sb	121	**0.153**	**ug/L**	34.782	643	0.003
⌊	Sb	123		**ug/L**		506	0.002
⌈	Ba	135		**ug/L**		30	-0.000
|	Ba	137	**0.002**	**ug/L**	669.503	50	0.000
|	Ho	165		**ug/L**		10	-0.000
|>	Ta	181		**ug/L**		337214	337213.634
|	Tl	205	**0.130**	**ug/L**	33.414	2244	0.004
|	Pb	208	**0.005**	**ug/L**	78.348	362	0.000
|	Bi	209		**ug/L**		16	-0.000
|	Th	232	**0.035**	**ug/L**	14.849	912	0.002
⌊	U	238	**0.007**	**ug/L**	36.355	327	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	0.9998
Mg	24	Linear Thru Zero	0.9998
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	0.9999
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
V	51	Linear Thru Zero	0.9999
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	0.9999
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9999
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Y	89	Linear Thru Zero	
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Ho	165	Linear Thru Zero	
Ta	181	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
Bi	209	Linear Thru Zero	
Th	232	Linear Thru Zero	0.9998
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
\>	Sc	45		106.7			
|	Ti	47					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
\>	Ge	74		103.1			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Y	89					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
\>	In	115		103.7			
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
|	Ho	165					
\>	Ta	181		103.4			
|	Tl	205					
|	Pb	208					
|	Bi	209					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #5 Instrument Tuning Report

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	609	2070	0.610
Be	9.0	9.1	2063	2090	0.608
Mg	24.0	24.0	5684	2100	0.598
Mg	25.0	25.0	5928	2080	0.612
Mg	26.0	26.0	6169	2100	0.622
Co	58.9	58.9	14186	2125	0.594
Rh	102.9	102.9	24864	2175	0.604
In	114.9	114.9	27793	2205	0.577
Ce	139.9	139.9	33864	2215	0.614
Pb	206.0	206.0	49936	2290	0.618
Pb	207.0	206.9	50171	2300	0.585
Pb	208.0	207.9	50427	2300	0.595
U	238.1	238.0	57730	2340	0.589

✓ EAQ 2/20/06

Report Date/Time: Monday, February 20, 2006 09:46:44
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ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, February 20, 2006 09:48:18
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.1289
Tuning File: c:\elandata\Tuning\default2.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	4869.0	4869.030	50.532	1.0
	Mg	24.0	37680.8	37680.840	632.398	1.7
	Co	58.9	98168.0	98167.966	998.174	1.0
	Rh	102.9	180566.7	180566.679	1854.930	1.0
	In	114.9	192895.8	192895.844	3131.315	1.6
	Pb	208.0	125449.0	125449.044	1217.739	1.0
⌈>	Ba	137.9	192168.0	192167.984	2645.868	1.4
⌊	Ba++	69.0	4949.5	0.026	0.000	1.7
⌈>	Ce	139.9	247131.3	247131.262	2756.577	1.1
⌊	CeO	155.9	4050.0	0.016	0.000	1.5
	Bkgd	220.0	23.2	23.200	2.439	10.5

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
8.75	Lens Voltage
1400.00	ICP RF Power
-1571.88	Analog Stage Voltage
1050.00	Pulse Stage Voltage
250.00	Discriminator Threshold
-6.00	AC Rod Offset

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Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	7.8	7764.1
Co	59	17	8.5	132871.4
In	115	17	9.5	303995.4

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, February 20, 2006 10:39:53
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\Blank.014

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1354335	
[	Ni	60		ug/L		356	
[>	Ta	181		ug/L		499288	
[	U	238		ug/L		74	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Simple Linear	
Ta	181	Simple Linear	
U	238	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45					
[	Ni	60					
[>	Ta	181					
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, February 20, 2006 10:41:38
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\Standard 1.015

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1395124	1395124.062
[	Ni	60	10.000	ug/L	4.771	24601	0.017
[>	Ta	181		ug/L		498954	498954.126
[	U	238	10.000	ug/L	3.184	320215	0.642

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45					
⌊	Ni	60					
⌈>	Ta	181					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, February 20, 2006 10:43:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\Standard 2.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1344632	1344632.104
[	Ni	60	99.963	ug/L	5.661	225431	0.168
[>	Ta	181		ug/L		507573	507573.260
[	U	238	99.751	ug/L	4.316	2599443	5.126

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
>	Sc	45					
	Ni	60					
>	Ta	181					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, February 20, 2006 10:45:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 1.017

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1349187	1349186.672
[	Ni	60	48.322	ug/L	0.339	109646	0.081
[>	Ta	181		ug/L		497364	497364.142
[	U	238	53.958	ug/L	2.090	1379061	2.773

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45		99.6			
⌊	Ni	60	96.644				
⌈>	Ta	181		99.6			
⌊	U	238	107.915				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, February 20, 2006 10:46:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 2.018

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1360857	1360857.213
[	Ni	60	0.015	ug/L	19.958	391	0.000
[>	Ta	181		ug/L		492861	492860.979
[	U	238	0.008	ug/L	1.898	270	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		100.5			
[	Ni	60					
[>	Ta	181		98.7			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, February 20, 2006 10:48:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 3.019

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1339054	1339053.762
[	Ni	60	2.185	ug/L	2.222	5257	0.004
[>	Ta	181		ug/L		506626	506625.892
[	U	238	0.250	ug/L	1.890	6586	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45		98.9			
⌊	Ni	60	109.264				
⌈>	Ta	181		101.5			
⌊	U	238	125.015				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, February 20, 2006 10:50:21
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 4.020

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1296665	1296664.743
[	Ni	60	2.230	ug/L	6.449	5185	0.004
[>	Ta	181		ug/L		471337	471337.367
[	U	238	0.017	ug/L	5.471	472	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45		95.7			
⌊	Ni	60	92.911				
⌈>	Ta	181		94.4			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, February 20, 2006 10:52:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 5.021

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1248748	1248748.384
[	Ni	60	21.756	ug/L	0.620	45871	0.036
[>	Ta	181		ug/L		472592	472591.669
[	U	238	23.121	ug/L	2.218	561510	1.188

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		92.2			
[	Ni	60	97.124				
[>	Ta	181		94.7			
[	U	238	115.604				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, February 20, 2006 10:53:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 6.022

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1311256	1311256.188
[	Ni	60	49.067	ug/L	1.940	108186	0.082
[>	Ta	181		ug/L		506854	506853.696
[	U	238	52.315	ug/L	2.060	1362347	2.688

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		96.8			
[	Ni	60	98.133				
[>	Ta	181		101.5			
[	U	238	104.631				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, February 20, 2006 10:55:36
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 7.023

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1338095	1338094.891
[	Ni	60	0.009	ug/L	105.620	371	0.000
[>	Ta	181		ug/L		494241	494240.965
[	U	238	0.010	ug/L	4.008	322	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		98.8			
[	Ni	60					
[>	Ta	181		99.0			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Monday, February 20, 2006 10:59:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 11.025

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1335780	1335780.073
[	Ni	60	48.101	ug/L	1.198	108050	0.081
[>	Ta	181		ug/L		507744	507744.315
[	U	238	53.212	ug/L	0.741	1388388	2.734

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45		98.6			
⌊	Ni	60	96.203				
⌈>	Ta	181		101.7			
⌊	U	238	106.423				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Monday, February 20, 2006 11:00:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 12.026

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1389281	1389281.148
[	Ni	60	0.013	ug/L	131.185	395	0.000
[>	Ta	181		ug/L		495009	495008.648
[	U	238	0.109	ug/L	3.216	2840	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
>	Sc	45		102.6			
	Ni	60					
>	Ta	181		99.1			
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 154614004
Sample Date/Time: Monday, February 20, 2006 11:02:40
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\154614004.027

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1614439	1614438.946
[	Ni	60	0.587	ug/L	1.373	2013	0.001
[>	Ta	181		ug/L		501944	501943.735
[	U	238	0.915	ug/L	2.672	23666	0.047

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		119.2			
[	Ni	60					
[>	Ta	181		100.5			
[	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 154614008
Sample Date/Time: Monday, February 20, 2006 11:04:31
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\154614008.028

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1602565	1602565.048
[	Ni	60	4.747	ug/L	0.835	13173	0.008
[>	Ta	181		ug/L		517369	517368.714
[	U	238	0.144	ug/L	2.419	3908	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45		118.3			
⌊	Ni	60					
⌈>	Ta	181		103.6			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 154614009
Sample Date/Time: Monday, February 20, 2006 11:06:21
Sample Type:
Sample Description: ESHL 6020
Number of Replicates: 3
Batch ID: 498180|1|baj
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\154614009.029

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1596894	1596894.265
[	Ni	60	16.492	ug/L	1.397	44556	0.028
[>	Ta	181		ug/L		521908	521907.946
[	U	238	0.149	ug/L	2.750	4071	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45		117.9			
⌊	Ni	60					
⌈>	Ta	181		104.5			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, February 20, 2006 11:08:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 6.030

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		1400597	1400597.212
[	Ni	60	46.831	ug/L	2.691	110314	0.079
[>	Ta	181		ug/L		514098	514097.548
[	U	238	53.421	ug/L	2.382	1410963	2.745

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[>	Sc	45		103.4			
[	Ni	60	93.662				
[>	Ta	181		103.0			
[	U	238	106.843				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, February 20, 2006 11:09:55
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\ni and u.mth
Dataset File: C:\elandata\Dataset\060220\QC Std 7.031

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		1402121	1402120.896
	Ni	60	0.007	ug/L	193.505	385	0.000
>	Ta	181		ug/L		498046	498046.100
	U	238	0.040	ug/L	1.140	1086	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ta	181	Linear Thru Zero	
U	238	Linear Thru Zero	0.9997

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
⌈>	Sc	45		103.5			
⌊	Ni	60					
⌈>	Ta	181		99.8			
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Method Name: WATER1
Method Description: 7470A, 245.2, ILM04 ANALYST NOR1
Element: Hg

Date: 01/31/2006
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: 013106W1.SIF Results Data Set Name: 013106W1

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 01/31/2006
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0040	0.0040	10:13:46	No
2			0.0039	0.0039	10:14:21	No
Mean:			0.0039			
SD :			0.0001			
%RSD:			2.9807			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 01/31/2006
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0032	0.0072	10:15:45	No
2			0.0030	0.0069	10:16:20	No
Mean:			0.0031			
SD :			0.0002			
%RSD:			5.7198			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.01545

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 01/31/2006
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0068	0.0107	10:17:43	No
2			0.0067	0.0106	10:18:18	No
Mean:			0.0067			
SD :			0.0001			
%RSD:			1.2837			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99173 Slope: 0.01375

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 01/31/2006
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0264	0.0303	10:19:42	No
2			0.0261	0.0300	10:20:17	No
Mean:			0.0262			
SD :			0.0002			
%RSD:			0.8249			

[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99963 Slope: 0.01316

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 01/31/2006
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0639	0.0678	10:21:42	No
2			0.0640	0.0680	10:22:17	No
Mean:			0.0640			
SD :			0.0001			
%RSD:			0.2002			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99985 Slope: 0.01285

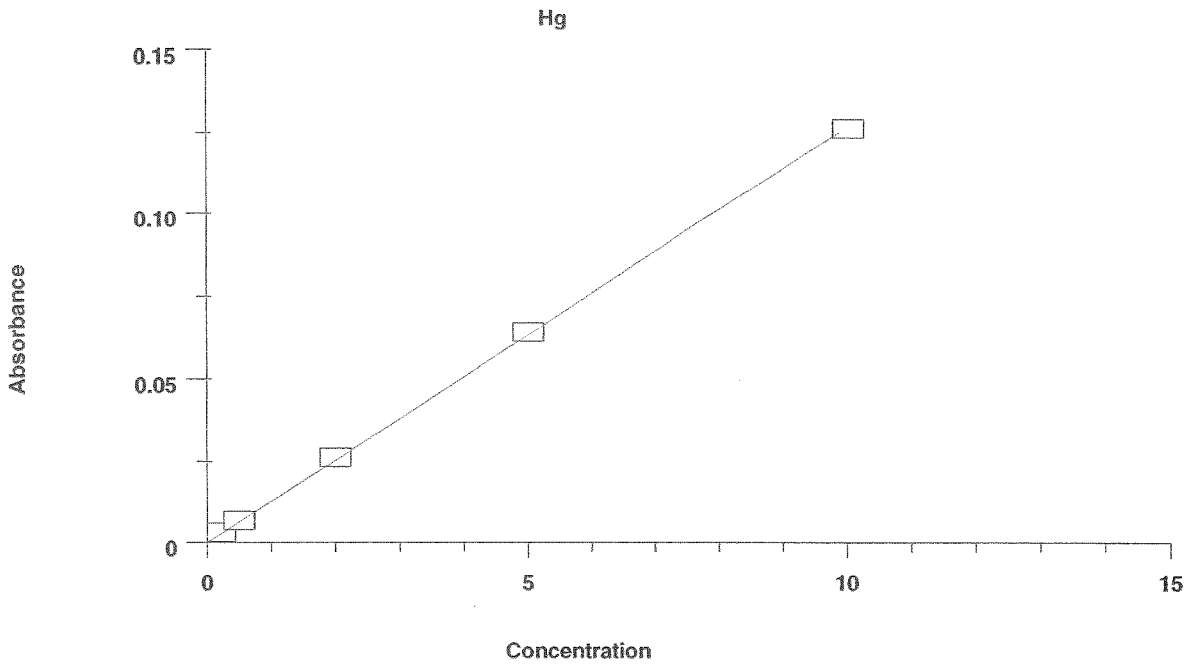
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 01/31/2006
Sample ID: S10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.1262	0.1301	10:23:43	No
2			0.1252	0.1292	10:24:18	No
Mean:			0.1257			
SD :			0.0007			
%RSD:			0.5363			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99989 Slope: 0.01263

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0039	---	----	----	----
S0.2	0.0031	0.200	0.245	0.0002	5.7
S0.5	0.0067	0.500	0.532	0.0001	1.3
S2.0	0.0262	2.000	2.077	0.0002	0.8
S5.0	0.0640	5.000	5.062	0.0001	0.2
S10	0.1257	10.000	9.950	0.0007	0.5
Correlation Coefficient: 0.99989		Slope:	0.01263	----	



Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 01/31/2006
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.049	5.049	0.0638	0.0677	10:25:46	No
2	5.094	5.094	0.0644	0.0683	10:26:21	No
Mean:	5.071	5.071	0.0641			
SD :	0.0319	0.0319	0.0004			
%RSD:	0.6	0.6	0.6300			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 01/31/2006
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0002	0.0037	10:27:44	No
2	-0.023	-0.023	-0.0003	0.0037	10:28:19	No
Mean:	-0.019	-0.019	-0.0002			
SD :	0.0046	0.0046	0.0001			
%RSD:	23.8	23.8	23.8499			

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 01/31/2006
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.214	0.214	0.0027	0.0066	10:29:40	No
2	0.202	0.202	0.0026	0.0065	10:30:15	No
Mean:	0.208	0.208	0.0026			
SD :	0.0084	0.0084	0.0001			
%RSD:	4.0	4.0	4.0154			

QC value within specified limits.

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 01/31/2006
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.089	5.089	0.0643	0.0682	10:31:40	No
2	5.076	5.076	0.0641	0.0681	10:32:15	No
Mean:	5.083	5.083	0.0642			
SD :	0.0097	0.0097	0.0001			
%RSD:	0.2	0.2	0.1908			

QC value within specified limits.

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 01/31/2006
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.019	0.019	0.0002	0.0042	10:33:43	No
2	0.010	0.010	0.0001	0.0041	10:34:18	No
Mean:	0.014	0.014	0.0002			
SD :	0.0068	0.0068	0.0001			
%RSD:	47.3	47.3	47.2902			

QC value within specified limits.

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 01/31/2006
Sample ID: 1201019832|i||498294|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	0.0039	10:35:44	No
2	-0.020	-0.020	-0.0002	0.0037	10:36:19	No
Mean:	-0.013	-0.013	-0.0002			
SD :	0.0098	0.0098	0.0001			
%RSD:	77.6	77.6	77.6400			

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 01/31/2006
Sample ID: 1201019833|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.090	2.090	0.0264	0.0303	10:37:44	No
2	2.077	2.077	0.0262	0.0302	10:38:18	No
Mean:	2.084	2.084	0.0263			
SD :	0.0090	0.0090	0.0001			
%RSD:	0.4	0.4	0.4317			

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 01/31/2006
Sample ID: 154561002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0001	0.0039	10:39:45	No
2	-0.019	-0.019	-0.0002	0.0037	10:40:20	No
Mean:	-0.012	-0.012	-0.0001			
SD :	0.0106	0.0106	0.0001			
%RSD:	90.0	90.0	90.0344			

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 01/31/2006
Sample ID: 154614001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0040	10:41:46	No
2	-0.005	-0.005	-0.0001	0.0039	10:42:21	No
Mean:	0.000	0.000	0.0000			
SD :	0.0073	0.0073	0.0001			
%RSD:	6001	6001	6000.8455			

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 01/31/2006
Sample ID: 1201019834|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0040	10:43:48	No
2	0.003	0.003	0.0000	0.0040	10:44:23	No
Mean:	0.005	0.005	0.0001			
SD :	0.0033	0.0033	0.0000			
%RSD:	67.8	67.8	67.8460			

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 01/31/2006
Sample ID: 1201019835|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.108	2.108	0.0266	0.0306	10:45:47	No
2	2.082	2.082	0.0263	0.0303	10:46:22	No
Mean:	2.095	2.095	0.0265			
SD :	0.0181	0.0181	0.0002			
%RSD:	0.9	0.9	0.8623			

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 01/31/2006
Sample ID: 1201019836|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0003	0.0037	10:47:42	No
2	-0.037	-0.037	-0.0005	0.0035	10:48:17	No
Mean:	-0.029	-0.029	-0.0004			
SD :	0.0118	0.0118	0.0001			
%RSD:	41.2	41.2	41.2052			

Element: Hg Seq. No.: 19 AS Loc.: 19 Date: 01/31/2006
Sample ID: 154614002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0002	0.0037	10:49:40	No
2	-0.033	-0.033	-0.0004	0.0035	10:50:15	No
Mean:	-0.024	-0.024	-0.0003			
SD :	0.0125	0.0125	0.0002			
%RSD:	51.4	51.4	51.3661			

Element: Hg Seq. No.: 20 AS Loc.: 20 Date: 01/31/2006
Sample ID: 154614003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0040	10:51:37	No
2	-0.007	-0.007	-0.0001	0.0038	10:52:11	No
Mean:	-0.001	-0.001	0.0000			
SD :	0.0090	0.0090	0.0001			

%RSD: 947.8 947.8 947.7695

Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 01/31/2006
Sample ID: 154614004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0005	0.0034	10:53:33	No
2	-0.051	-0.051	-0.0006	0.0033	10:54:08	No
Mean:	-0.047	-0.047	-0.0006			
SD :	0.0062	0.0062	0.0001			
%RSD:	13.3	13.3	13.2770			

Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 01/31/2006
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.014	5.014	0.0633	0.0673	10:55:32	No
2	5.064	5.064	0.0640	0.0679	10:56:07	No
Mean:	5.039	5.039	0.0637			
SD :	0.0354	0.0354	0.0004			
%RSD:	0.7	0.7	0.7035			

QC value within specified limits.

Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 01/31/2006
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	0.0038	10:57:35	No
2	-0.022	-0.022	-0.0003	0.0037	10:58:10	No
Mean:	-0.016	-0.016	-0.0002			
SD :	0.0080	0.0080	0.0001			
%RSD:	50.3	50.3	50.3428			

QC value within specified limits.

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 01/31/2006
Sample ID: 154614008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.023	-0.023	-0.0003	0.0037	10:59:35	No
2	-0.027	-0.027	-0.0003	0.0036	11:00:11	No
Mean:	-0.025	-0.025	-0.0003			
SD :	0.0032	0.0032	0.0000			
%RSD:	12.7	12.7	12.6614			

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 01/31/2006
Sample ID: 154614009|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0003	0.0037	11:01:33	No
2	-0.032	-0.032	-0.0004	0.0035	11:02:08	No
Mean:	-0.027	-0.027	-0.0003			
SD :	0.0073	0.0073	0.0001			
%RSD:	27.5	27.5	27.4782			

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 01/31/2006
Sample ID: 154614010|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.045	-0.045	-0.0006	0.0034	11:03:33	No
2	-0.044	-0.044	-0.0006	0.0034	11:04:07	No
Mean:	-0.044	-0.044	-0.0006			
SD :	0.0004	0.0004	0.0000			
%RSD:	0.9	0.9	0.8550			

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 01/31/2006
Sample ID: 1201018829|i||497807|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	0.0038	11:05:31	No
2	-0.021	-0.021	-0.0003	0.0037	11:06:05	No
Mean:	-0.017	-0.017	-0.0002			
SD :	0.0059	0.0059	0.0001			
%RSD:	34.9	34.9	34.8583			

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 01/31/2006
Sample ID: 1201018830|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.181	2.181	0.0276	0.0315	11:07:29	No
2	2.166	2.166	0.0274	0.0313	11:08:03	No
Mean:	2.173	2.173	0.0275			
SD :	0.0106	0.0106	0.0001			
%RSD:	0.5	0.5	0.4871			

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 01/31/2006
Sample ID: 154450001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.020	0.020	0.0003	0.0042	11:09:28	No
2	-0.003	-0.003	0.0000	0.0039	11:10:03	No
Mean:	0.009	0.009	0.0001			
SD :	0.0165	0.0165	0.0002			
%RSD:	189.9	189.9	189.8661			

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 01/31/2006
Sample ID: 1201018831|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.025	-0.025	-0.0003	0.0036	11:11:30	No
2	-0.036	-0.036	-0.0005	0.0035	11:12:04	No
Mean:	-0.031	-0.031	-0.0004			
SD :	0.0081	0.0081	0.0001			
%RSD:	26.3	26.3	26.3471			

Element: Hg Seq. No.: 31 AS Loc.: 29 Date: 01/31/2006
Sample ID: 1201018832|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.089	2.089	0.0264	0.0303	11:13:31	No
2	2.046	2.046	0.0258	0.0298	11:14:06	No
Mean:	2.067	2.067	0.0261			
SD :	0.0304	0.0304	0.0004			

%RSD: 1.5 1.5 1.4688

Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 01/31/2006
Sample ID: 1201018833|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0005	0.0035	11:15:33	No
2	-0.050	-0.050	-0.0006	0.0033	11:16:08	No
Mean:	-0.043	-0.043	-0.0005			
SD :	0.0096	0.0096	0.0001			
%RSD:	22.5	22.5	22.4589			

Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 01/31/2006
Sample ID: 154450002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.057	-0.057	-0.0007	0.0032	11:17:35	No
2	-0.069	-0.069	-0.0009	0.0031	11:18:10	No
Mean:	-0.063	-0.063	-0.0008			
SD :	0.0083	0.0083	0.0001			
%RSD:	13.2	13.2	13.2233			

Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 01/31/2006
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.062	5.062	0.0639	0.0679	11:19:37	No
2	5.024	5.024	0.0635	0.0674	11:20:12	No
Mean:	5.043	5.043	0.0637			
SD :	0.0270	0.0270	0.0003			
%RSD:	0.5	0.5	0.5358			

QC value within specified limits.

Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 01/31/2006
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0003	0.0037	11:21:40	No
2	-0.032	-0.032	-0.0004	0.0035	11:22:15	No
Mean:	-0.026	-0.026	-0.0003			
SD :	0.0086	0.0086	0.0001			
%RSD:	33.2	33.2	33.2341			

QC value within specified limits.

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 01/31/2006
Sample ID: 154450003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0003	0.0037	11:23:40	No
2	-0.037	-0.037	-0.0005	0.0035	11:24:15	No
Mean:	-0.029	-0.029	-0.0004			
SD :	0.0120	0.0120	0.0002			
%RSD:	42.1	42.1	42.0685			

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 01/31/2006
Sample ID: 1201019845|i||498296|MB

Miscellaneous

LLE 30.1.06

Prep LogBook

Analyst: LXE1 Verified by: 30.1.06

Batch: 498166

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201019555	UI491301-01	.25	mL
LCS	1201019555	UI491303-06	.25	mL
MS	1201019557	UI491301-01	.25	mL
MS	1201019557	UI491303-06	.25	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201019554		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
LCS	1201019555		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614001		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1201019556	154614001	SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
MS	1201019557	154614001	SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1201019558	154614001	SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614002		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614003		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614004		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614008		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614009		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614010		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER

1208

Reagent/Solvent Lot ID	Amount	Description
490875	2.5 mL	HYDROCHLORIC ACID
490877	1 mL	Nitric Acid CONC.

Comments:

Prep LogBook

Analyst: LXE1 Verified by: 1.30.1.06

Batch: 498179

Lab SOP: GL-MA-E-006 REV# 9

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201019596	UI051220A	.5	mL
MS	1201019598	UI051205-04	.5	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201019595		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
LCS	1201019596		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614001		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
DUP	1201019597	154614001	SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
MS	1201019598	154614001	SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SDILT	1201019599	154614001	SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614002		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614003		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614004		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614008		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614009		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614010		SW846 3005A	30-JAN-2006 11:00	50 mL	50 mL	1	GROUND WATER

1209

Reagent/Solvent Lot ID	Amount	Description
490875	2.5 mL	HYDROCHLORIC ACID
490877	1 mL	Nitric Acid CONC.

Comments:

Prep LogBook

Analyst: ETL ER 1/30/06 Verified by: NKL 1/31/06

Batch: 498293

Lab SOP: GL-MA-E-010 REV# 16

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201019833	WHG060130-13	.2	mL
MS	1201019835	WHG060130-13	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201019832		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
LCS	1201019833		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SAMPLE	154561002		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	WASTE WATER
SAMPLE	154614001		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
DUP	1201019834	154614001	EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
MS	1201019835	154614001	EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SDILT	1201019836	154614001	EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614002		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614003		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614004		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614008		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614009		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614010		EPA 245.1/245.2 Prep	30-JAN-2006 11:15	20 mL	20 mL	1	GROUND WATER

1210

Reagent/Solvent Lot ID	Amount	Description
486251	1 mL	Sulfuric Acid, Concentrated
490139-1	.5 mL	NITRIC ACID
486255-C	1.5 mL	5% Potassium Persulfate
486253-C	3 mL	5% KMnO4 solution
486258-C	1 mL	Hg reducing agent
WHG060130-06	500 uL	Mercury Working 2nd Source 5.0/ICV
WHG060130-01	20 uL	Mercury Working 1st Source CAL 0.2/CRA
WHG060130-02	50 uL	Mercury Working 1st Source CAL 0.5
WHG060130-05	1 mL	Mercury Working 1st Source CAL 10.0
WHG060130-03	200 uL	Mercury Working 1st Source CAL 2.0
WHG060130-04	500 uL	Mercury Working 1st Source CAL 5.0/CCV

Comments:

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (ESHL)
SDG 154614

Method/Analysis Information

Product: **Specific Conductivity**

Analytical Batch: 499906 **Method:** EPA 120.1

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 120.1:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201023669	154285001(GF06010G3WT01) Sample Duplicate (DUP)
1201023670	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-009 REV# 6.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Conductivity analysis was performed on a Orion 160 Conductivity Meter.

Initial Calibration

All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery

The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation

The following sample was selected for QC analysis: 154285001 (GF06010G3WT01).

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **pH**

Analytical Batch: 498054 **Method:** EPA 150.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in SW846 9040B:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201019310	154582001(06018-HRB-1) Sample Duplicate (DUP)
1201019311	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-008 REV# 10.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Electrode analysis was performed on a Orion EA940 pH/Ion Selective Electrode Meter .

Initial Calibration
All initial calibration requirements have been met for this SDG.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 154582001 (06018-HRB-1).

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
The following samples from this sample group were received by the lab outside of the method specified holding time: 154614001 (GF06010G8WT01), 154614002 (GF0601G14R101), 154614008 (GF06010GMC401) and 154614010 (GU06010GMC401-FB).

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	498748	**Method:**	EPA 335.3
Prep Batch :	498746	**Method:**	EPA 335.3

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 335.3:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614003	GU06010G8WT01
154614004	GU0601G14R101
154614008	GF06010GMC401
154614009	GU06010GMC401
154614010	GU06010GMC401-FB
1201020827	Method Blank (MB)
1201020828	154614003(GU06010G8WT01) Sample Duplicate (DUP)
1201020829	154614008(GF06010GMC401) Sample Duplicate (DUP)
1201020830	154614003(GU06010G8WT01) Matrix Spike (MS)
1201020831	154614008(GF06010GMC401) Matrix Spike (MS)
1201020832	154614003(GU06010G8WT01) Matrix Spike Duplicate (MSD)
1201020833	154614008(GF06010GMC401) Matrix Spike Duplicate (MSD)
1201020834	Laboratory Control Sample (LCS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Flow Injection analysis was performed on a Lachat QuickChem FIA+.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 154614003 (GU06010G8WT01) and 154614008 (GF06010GMC401).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the samples and duplicates for this sample group are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable for samples 1201020828 (GU06010G8WT01), 1201020829 (GF06010GMC401), 154614003 (GU06010G8WT01) and 154614008 (GF06010GMC401).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis
The following sample was re-analyzed to verify the result: 1201020834 (LCS).

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Ion Chromatography**
Analytical Batch: 498894 **Method:** EPA 300.0

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201021177	Method Blank (MB)
1201021178	154614001(GF06010G8WT01) Sample Duplicate (DUP)
1201021179	154614001(GF06010G8WT01) Post Spike (PS)
1201021180	Laboratory Control Sample (LCS)
1201037160	154721011(GU06010G01R70) Sample Duplicate (DUP)
1201037161	154721011(GU06010G01R70) Post Spike (PS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 12.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Ion Chromatography analysis was performed on two Dionex DX300 Ion Chromatograph instruments equipped with Dionex AS9-HC general purpose anion columns. IC1 data files are named AFxxxxnn. IC2 data files are named AXxxxxnn.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 154614001 (GF06010G8WT01) and 154721011 (GU06010G01R70).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike met established acceptance criteria for recovery (90 - 110%) for all anions except Chloride. Since the Chloride recovery is only marginally below the acceptance limit, the failure is attributed to random laboratory error. The Chloride recovery falls within the client specified limits. 1201037161 (GU06010G01R70).

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for sample 154614008 (GF06010GMC401).

Sample Re-analysis
The following samples were re-analyzed due to instrument failure: 1201021178 (GF06010G8WT01), 1201021179 (GF06010G8WT01) and 154614001 (GF06010G8WT01). The following samples were re-analyzed for Bromide due to ICV failure: 1201021177 (MB), 1201021178 (GF06010G8WT01), 1201021179 (GF06010G8WT01), 1201021180 (LCS), 154614001 (GF06010G8WT01), 154614002 (GF0601G14R101), 154614008 (GF06010GMC401) and 154614010 (GU06010GMC401-FB). The original DUP for Fluoride failed and was re-analyzed with passing results: 1201021178 (GF06010G8WT01), 1201021179 (GF06010G8WT01) and 154614001 (GF06010G8WT01).

Miscellaneous Information

Nonconformance (NCR) Documentation
NCR 293038 was submitted for reported results from two different instruments and PS receovery failure. 1201021178 (GF06010G8WT01), 1201021179 (GF06010G8WT01), 1201037161 (GU06010G01R70) and

154614001 (GF06010G8WT01).

Manual Integrations
Manual integrations were not required for the samples in this SDG.

Additional Comments
IC1 data files are named AFxxxxnn. IC2 data files are named AXxxxxnn.

Method/Analysis Information

Product:	**Perchlorate**		
Analytical Batch:	498693	**Method:**	EPA 314.0 DOE-AL

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 314.0 DOE-AL:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201020719	Method Blank (MB)
1201020720	154415003(GU0601G153501) Sample Duplicate (DUP)
1201020721	154478001(06.71304) Sample Duplicate (DUP)
1201020722	154415003(GU0601G153501) Post Spike (PS)
1201020723	154478001(06.71304) Post Spike (PS)
1201020724	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-096 REV# 4.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Ion Chromatography analysis was performed on a Dionex Ion Chromatograph.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 154415003 (GU0601G153501) and 154478001 (06.71304).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following sample in this sample group was diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for sample 154614008 (GF06010GMC401).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
Manual integrations were not required for the samples in this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Ammonia Nitrogen**		
Analytical Batch:	498444 and 499129	**Method:**	EPA 350.1
Prep Batch :	498443 and 499128	**Method:**	EPA 350.2 Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 350.1:

Sample ID	Client ID
154614003	GU06010G8WT01
154614004	GU0601G14R101
154614009	GU06010GMC401
154614010	GU06010GMC401-FB
1201020238	Method Blank (MB)
1201020239	Laboratory Control Sample (LCS)
1201020240	154614003(GU06010G8WT01) Sample Duplicate (DUP)
1201020241	154614003(GU06010G8WT01) Matrix Spike (MS)
1201020242	154614003(GU06010G8WT01) Matrix Spike Duplicate (MSD)
1201021725	Method Blank (MB)
1201021726	Laboratory Control Sample (LCS)
1201021729	154721008(GU06010G01R01) Sample Duplicate (DUP)
1201021730	154721008(GU06010G01R01) Matrix Spike (MS)
1201021732	154721008(GU06010G01R01) Matrix Spike Duplicate (MSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-106 REV# 1.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 154614003 (GU06010G8WT01)- Batch 498444 and 154721008 (GU06010G01R01)- Batch 499129.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The spike recovery was outside of the required acceptance limits due to matrix interference for the following samples: 1201020241 (GU06010G8WT01) and 154614003 (GU06010G8WT01)- Batch 498444.

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery for the following samples was outside of the required acceptance limits due to matrix interference: 1201020242 (GU06010G8WT01) and 154614003 (GU06010G8WT01)- Batch 498444.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the samples and duplicates for this sample group are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable for samples 1201020240 (GU06010G8WT01) and 154614003 (GU06010G8WT01)- Batch 498444.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to matrix interference. Refer to the data for the individual dilution factors for this analysis for samples 1201020240 (GU06010G8WT01), 1201020241 (GU06010G8WT01), 1201020242 (GU06010G8WT01), 154614003 (GU06010G8WT01), 154614004 (GU0601G14R101)- Batch 498444, 1201021729 (GU06010G01R01), 1201021730 (GU06010G01R01), 1201021732 (GU06010G01R01) and 154614009 (GU06010GMC401)- Batch 499129.

Sample Re-analysis
The following samples were re-analyzed due to airspike. 1201020239 (LCS) and 154614003 (GU06010G8WT01)- Batch 498444.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 288267 1201020241 (GU06010G8WT01)- Batch 498444.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Kjeldahl Nitrogen**		
Analytical Batch:	498441	**Method:**	EPA 351.2
Prep Batch :	498440	**Method:**	EPA 351.2 Prep

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 351.2:

Sample ID	Client ID
154614003	GU06010G8WT01
154614004	GU0601G14R101
154614009	GU06010GMC401
154614010	GU06010GMC401-FB
1201020230	Method Blank (MB)
1201020231	Laboratory Control Sample (LCS)
1201020232	154614003(GU06010G8WT01) Sample Duplicate (DUP)
1201020233	154614003(GU06010G8WT01) Matrix Spike (MS)
1201020237	154614003(GU06010G8WT01) Matrix Spike Duplicate (MSD)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-104 REV# 2.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 154614003 (GU06010G8WT01).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The spike duplicate recovery for the following samples was outside of the required acceptance limits due to matrix interference: 1201020237 (GU06010G8WT01) and 154614003 (GU06010G8WT01).

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The values for the samples and duplicates for this sample group are less than 5 times the Practical Quantitation Limit (PQL) and within one PQL value of each other; therefore, the RPD is not applicable for samples 1201020232 (GU06010G8WT01) and 154614003 (GU06010G8WT01). The values for the samples and duplicates for this sample group are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable for samples 1201020232 (GU06010G8WT01) and 154614003 (GU06010G8WT01).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The following samples in this sample group were diluted due to matrix interference. Refer to the data for the individual dilution factors for this analysis for samples 1201020232 (GU06010G8WT01), 1201020233 (GU06010G8WT01), 1201020237 (GU06010G8WT01), 154614003 (GU06010G8WT01), 154614004 (GU0601G14R101) and 154614010 (GU06010GMC401-FB).

Sample Re-analysis
Sample was repoured and reanalyzed to verify result. 1201020230 (MB). Samples were reprepped and reanalyzed with passing results. 1201020232 (GU06010G8WT01), 1201020233 (GU06010G8WT01), 1201020237 (GU06010G8WT01) and 154614003 (GU06010G8WT01). The following samples were re-analyzed due to CCV failure: 1201020232 (GU06010G8WT01), 1201020233 (GU06010G8WT01), 1201020237 (GU06010G8WT01) and 154614003 (GU06010G8WT01).

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 288610 1201020233 (GU06010G8WT01).

Additional Comments
Reference prep batch 497375 for samples 1201027868 MB (value of -0.02 mg/L) and 1201017869 LCS (value of 1.03 mg/L). These samples were prepped the same day as sample 154 614 003, DUP, MS, MSD and then analyzed the same day. 1201020232 (GU06010G8WT01), 1201020233 (GU06010G8WT01), 1201020237 (GU06010G8WT01) and 154614003 (GU06010G8WT01).

Method/Analysis Information

Product:	**Nitrate + Nitrite**		
Analytical Batch:	498449	**Method:**	EPA 353.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 353.1:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201020248	Method Blank (MB)
1201020249	Laboratory Control Sample (LCS)
1201020250	154614001(GF06010G8WT01) Sample Duplicate (DUP)
1201020251	154614001(GF06010G8WT01) Post Spike (PS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-108 REV# 1.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Nutrient analysis was performed on a Konelab 20.

Continuing Calibration Blanks
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement

The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following sample was selected for QC analysis: 154614001 (GF06010G8WT01).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recovery for this sample set was within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
Samples were preserved in HCL to pH of 2. PM confirmed this. 154614001 (GF06010G8WT01), 154614002 (GF0601G14R101), 154614008 (GF06010GMC401) and 154614010 (GU06010GMC401-FB).

Sample Dilutions
The following sample in this sample group was diluted due to high concentration for this analysis. Refer to the data for the individual dilution factors for sample 154614008 (GF06010GMC401).

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
NCR 288344 was submitted for improper sample preservation. 154614001 (GF06010G8WT01), 154614002 (GF0601G14R101), 154614008 (GF06010GMC401) and 154614010 (GU06010GMC401-FB).

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Total Phosphorus**		
Analytical Batch:	498065 and 499132	**Method:**	EPA 365.4
Prep Batch :	498064 and 499131	**Method:**	EPA 365.4 Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 365.4:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201019332	Method Blank (MB)
1201019333	Laboratory Control Sample (LCS)
1201019984	154614001(GF06010G8WT01) Sample Duplicate (DUP)
1201019985	154614001(GF06010G8WT01) Matrix Spike (MS)
1201019986	154614001(GF06010G8WT01) Matrix Spike Duplicate (MSD)
1201021733	Method Blank (MB)
1201021734	Laboratory Control Sample (LCS)
1201021735	154721011(GU06010G01R70) Sample Duplicate (DUP)
1201021736	154721011(GU06010G01R70) Matrix Spike (MS)
1201021737	154721011(GU06010G01R70) Matrix Spike Duplicate (MSD)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-103 REV# 2.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Nutrient analysis was performed on a Lachat Quickchem FIA+ 8000 Series.

Continuing Calibration Blanks

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

Calibration Verification Information (CCV)
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 154614001 (GF06010G8WT01)- Batch 498065 and 154721011 (GU06010G01R70)- Batch 499132.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPDs between the MS and MSD met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Sample Preservation/Integrity
All the samples from this sample group met the preservation and integrity requirements of the method.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

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

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product:	**Solids, Total Dissolved**		
Analytical Batch:	498292	**Method:**	EPA 160.1

Sample Analysis
The following samples were analyzed using the analytical protocol as established in EPA 160.1:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201019837	Method Blank (MB)
1201019838	Laboratory Control Sample (LCS)
1201019839	154478001(06.71304) Sample Duplicate (DUP)
1201019851	154614001(GF06010G8WT01) Sample Duplicate (DUP)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-001 REV# 7.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information
The Solids analysis was performed on a Sartorius Balance.

Initial Calibration
All initial calibration requirements have been met for this SDG.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recovery met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 154478001 (06.71304) and 154614001 (GF06010G8WT01).

Duplicate Relative Percent Difference (RPD) Statement
The values for the sample and duplicate for this sample group are less than 5 times the Practical Quantitation Limit (PQL) and within one PQL value of each other; therefore, the RPD is not applicable for sample 1201019839 (06.71304).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Method/Analysis Information

Product: **Alkalinity**

Analytical Batch: 499324 and 500666 **Method:** EPA 310.1

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 310.1:

Sample ID	Client ID
154614001	GF06010G8WT01
154614002	GF0601G14R101
154614008	GF06010GMC401
154614010	GU06010GMC401-FB
1201022181	Laboratory Control Sample (LCS)
1201022182	154614001(GF06010G8WT01) Sample Duplicate (DUP)
1201022183	154614001(GF06010G8WT01) Matrix Spike (MS)
1201025430	Laboratory Control Sample (LCS)
1201025439	154721011(GU06010G01R70) Sample Duplicate (DUP)
1201025440	154721001(GF06010G01R01) Sample Duplicate (DUP)
1201025441	154721011(GU06010G01R70) Matrix Spike (MS)
1201025442	154721001(GF06010G01R01) Matrix Spike (MS)

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-033 REV# 3.

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by General Engineering Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

Calibration Information

The Titration analysis was performed on a Titration.

Initial Standardization

The titrant was properly standardized

Quality Control (QC) Information

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Designation
The following samples were selected for QC analysis: 154614001 (GF06010G8WT01)- Batch 499324, 154721001 (GF06010G01R01) and 154721011 (GU06010G01R70)- Batch 500666.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The MS/PS recoveries for this sample set were within the required acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement
The RPD between the sample and its duplicate met the acceptance limits.

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times
All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Re-analysis
The samples in this SDG did not require re-analysis.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

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

Reviewer: Tom Lewis, Jr. **Date:** 24 Feb 06

Sample Data Summary

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 154614 GEL Work Order: 154614

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
ND The analyte concentration is not detected above the reporting limit.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.
** Indicates the analyte is a surrogate compound.
This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Los Alamos National Lab
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID: GF06010G8WT01
Sample ID: 154614001
Matrix: Ground Water
Collect Date: 24-JAN-06 12:40
Receive Date: 26-JAN-06
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		119	1.00	1.00	umhos/cm	1	JAR2	02/12/06	1858	499906	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 19.9C	H	8.01	0.010	0.100	SU	1	JAR2	01/26/06	1948	498054	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	KLP1	02/03/06	1532	498748	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Chloride		2.21	0.053	0.200	mg/L	1	RXM1	02/08/06	1552	498894	4
Sulfate		2.28	0.057	0.400	mg/L	1					
Bromide	U	ND	0.041	0.200	mg/L	1	RXM1	02/13/06	1353	498894	5
Fluoride		0.141	0.030	0.100	mg/L	1	RXM1	02/20/06	1033	498894	6
EPA 314.0 Perchlorate by IC											
Perchlorate	U	ND	4.00	12.0	ug/L	1	MAR1	02/01/06	1456	498693	7
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		0.100	0.017	0.050	mg/L	1	GXM2	02/01/06	1225	498449	8
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.223	0.010	0.050	mg/L	1	GXM2	02/03/06	1000	498065	9
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		113	2.38	10.0	mg/L		GXA2	01/27/06	1329	498292	10
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		62.3	1.45	2.00	mg/L		DXR1	01/31/06	1316	499324	11
Carbonate alkalinity (CaCO3)	J	1.47	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1156	498746
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	LXW1	01/30/06	0741	498064

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Certificate of Analysis

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Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID: GF06010G8WT01
Sample ID: 154614001

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 300.0	
7	EPA 314.0 DOE-AL	
8	EPA 353.1	
9	EPA 365.4	
10	EPA 160.1	
11	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID: GF0601G14R101
Sample ID: 154614002
Matrix: Ground Water
Collect Date: 24-JAN-06 09:39
Receive Date: 26-JAN-06
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		121	1.00	1.00	umhos/cm	1	JAR2	02/12/06	1859	499906	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.4C	H	8.20	0.010	0.100	SU	1	JAR2	01/26/06	1950	498054	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	KLP1	02/03/06	1533	498748	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Chloride		1.77	0.053	0.200	mg/L	1	RXM1	02/08/06	1653	498894	4
Fluoride		0.270	0.030	0.100	mg/L	1					
Sulfate		1.91	0.057	0.400	mg/L	1					
Bromide	U	ND	0.041	0.200	mg/L	1	RXM1	02/13/06	1454	498894	5
EPA 314.0 Perchlorate by IC											
Perchlorate	U	ND	4.00	12.0	ug/L	1	MAR1	02/01/06	1512	498693	6
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite	J	0.0338	0.017	0.050	mg/L	1	GXM2	02/01/06	1225	498449	7
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.158	0.010	0.050	mg/L	1	GXM2	02/03/06	1008	498065	8
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		118	2.38	10.0	mg/L		GXA2	01/27/06	1329	498292	9
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		64.4	1.45	2.00	mg/L		DXR1	01/31/06	1327	499324	10
Carbonate alkalinity (CaCO3)	J	1.77	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1156	498746
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	LXW1	01/30/06	0741	498064

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Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID: GF0601G14R101
Sample ID: 154614002

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 314.0 DOE-AL	
7	EPA 353.1	
8	EPA 365.4	
9	EPA 160.1	
10	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID:	GU06010G8WT01	Project:	ESHL00701
Sample ID:	154614003	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	24-JAN-06 12:40		
Receive Date:	26-JAN-06		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	KLP1	02/03/06	1534	498748	1
Nutrient Analysis Federal											
EPA 350.1 Nitrogen, Ammonia L											
Nitrogen, Ammonia	U	ND	0.100	0.500	mg/L	10	GXM2	02/02/06	1529	498444	2
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl	U	ND	0.010	0.100	mg/L	1	GXM2	02/12/06	1845	498441	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1156	498746
EPA 350.2 Prep	EPA 350.1 Ammonia Nitrogen Prep	LXW1	01/31/06	1714	498443
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	02/13/06	0859	498440

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 335.3	
2	EPA 350.1	
3	EPA 351.2	

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Certificate of Analysis

Company : Los Alamos National Lab
Address : MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID:	GU0601G14R101	Project:	ESHL00701
Sample ID:	154614004	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	24-JAN-06 09:39		
Receive Date:	26-JAN-06		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	KLP1	02/03/06	1541	498748	1
Nutrient Analysis Federal											
EPA 350.1 Nitrogen, Ammonia L											
Nitrogen, Ammonia	U	ND	0.100	0.500	mg/L	10	GXM2	02/02/06	0924	498444	2
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl	J	0.100	0.050	0.500	mg/L	5	GXM2	02/03/06	1600	498441	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1156	498746
EPA 350.2 Prep	EPA 350.1 Ammonia Nitrogen Prep	LXW1	01/31/06	1714	498443
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	01/31/06	0829	498440

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 335.3	
2	EPA 350.1	
3	EPA 351.2	

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Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID:	GF06010GMC401	Project:	ESHL00701
Sample ID:	154614008	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	24-JAN-06 09:05		
Receive Date:	26-JAN-06		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		336	1.00	1.00	umhos/cm	1	JAR2	02/12/06	1900	499906	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 21.0C	H	7.01	0.010	0.100	SU	1	JAR2	01/26/06	1953	498054	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	KLP1	02/03/06	1542	498748	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Fluoride		0.205	0.030	0.100	mg/L	1	RXM1	02/08/06	1713	498894	4
Sulfate		29.1	0.057	0.400	mg/L	1					
Bromide		0.385	0.041	0.200	mg/L	1	RXM1	02/13/06	1515	498894	5
Chloride		21.0	0.106	0.400	mg/L	2	RXM1	02/13/06	1818	498894	6
EPA 314.0 Perchlorate by IC											
Perchlorate		134	20.0	60.0	ug/L	5	MAR1	02/02/06	1031	498693	7
Nutrient Analysis Federal											
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite		14.1	0.170	0.500	mg/L	10	GXM2	02/01/06	1249	498449	8
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		0.078	0.010	0.050	mg/L	1	GXM2	02/03/06	1009	498065	9
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		295	2.38	10.0	mg/L		GXA2	01/27/06	1329	498292	10
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3		41.9	1.45	2.00	mg/L		DXR1	01/31/06	1330	499324	11
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L						

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1157	498746
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	LXW1	01/30/06	0741	498064

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Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID: GF06010GMC401
Sample ID: 154614008

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 300.0	
7	EPA 314.0 DOE-AL	
8	EPA 353.1	
9	EPA 365.4	
10	EPA 160.1	
11	EPA 310.1	

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Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID:	GU06010GMC401	Project:	ESHL00701
Sample ID:	154614009	Client ID:	ESHL001
Matrix:	Ground Water		
Collect Date:	24-JAN-06 09:05		
Receive Date:	26-JAN-06		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total											
Cyanide, Total	J	3.92	2.50	5.00	ug/L	1	KLP1	02/03/06	1546	498748	1
Nutrient Analysis Federal											
EPA 350.1 Nitrogen, Ammonia L											
Nitrogen, Ammonia	U	ND	0.050	0.250	mg/L	5	GXM2	01/31/06	1421	499129	2
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl	J	0.053	0.010	0.100	mg/L	1	GXM2	02/03/06	1305	498441	3

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1157	498746
EPA 350.2 Prep	EPA 350.1 Ammonia Nitrogen Prep	LXW1	01/31/06	1103	499128
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	01/31/06	0829	498440

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 335.3	
2	EPA 350.1	
3	EPA 351.2	

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Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID: GU06010GMC401-FB
Sample ID: 154614010
Matrix: Ground Water
Collect Date: 24-JAN-06 09:05
Receive Date: 26-JAN-06
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Conductivity Analysis Federal											
EPA120.1 Specific Conductivity											
Conductivity		1.65	1.00	1.00	umhos/cm	1	JAR2	02/12/06	1901	499906	1
Electrode Analysis Federal											
EPA 150.1 pH Federal											
pH at Temp 20.8C	H	5.28	0.010	0.100	SU	1	JAR2	01/26/06	1955	498054	2
Flow Injection Analysis Federal											
EPA 335.3 Cyanide, Total											
Cyanide, Total	U	ND	2.50	5.00	ug/L	1	KLP1	02/03/06	1546	498748	3
Ion Chromatography Federal											
EPA 300.0 Anions Liquid 28 day											
Chloride	U	ND	0.053	0.200	mg/L	1	RXM1	02/08/06	1734	498894	4
Fluoride	U	ND	0.030	0.100	mg/L	1					
Sulfate	U	ND	0.057	0.400	mg/L	1					
Bromide	U	ND	0.041	0.200	mg/L	1	RXM1	02/13/06	1535	498894	5
EPA 314.0 Perchlorate by IC											
Perchlorate	U	ND	4.00	12.0	ug/L	1	MAR1	02/01/06	1542	498693	6
Nutrient Analysis Federal											
EPA 350.1 Nitrogen, Ammonia L											
Nitrogen, Ammonia	U	ND	0.010	0.050	mg/L	1	GXM2	02/02/06	0906	498444	7
EPA 353.1 Nitrogen, (NO3/NO2)											
Nitrogen, Nitrate/Nitrite	U	ND	0.017	0.050	mg/L	1	GXM2	02/01/06	1225	498449	8
EPA 365.4 Phosphorus, Total in											
Phosphorus, Total as P		1.12	0.010	0.050	mg/L	1	GXM2	02/03/06	1040	499132	9
Nitrogen, Total Kjeldahl (TKN)											
Nitrogen, Total Kjeldahl	U	ND	0.100	1.00	mg/L	10	GXM2	02/03/06	1601	498441	10
Solids Analysis Federal											
EPA 160.1 Solids, Dissolved-F											
Total Dissolved Solids		24.0	2.38	10.0	mg/L		GXA2	01/27/06	1329	498292	11
Titration Analysis Federal											
EPA 310.1 Total Alkalinity Federal											
Alkalinity, Total as CaCO3	U	ND	1.45	2.00	mg/L		DXR1	02/03/06	1528	500666	12

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Contact: Bart Vanden Plas
Project: **Groundwater**

Report Date: February 22, 2006

Client Sample ID: GU06010GMC401-FB
Sample ID: 154614010

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Titration Analysis Federal										
EPA 310.1 Total Alkalinity Federal										
Carbonate alkalinity (CaCO3)	U	ND	1.45	2.00	mg/L					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1157	498746
EPA 350.2 Prep	EPA 350.1 Ammonia Nitrogen Prep	LXW1	01/31/06	1714	498443
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	01/31/06	0829	498440
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid-Fe	LXW1	02/01/06	1434	499131

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 120.1	
2	EPA 150.1	
3	EPA 335.3	
4	EPA 300.0	
5	EPA 300.0	
6	EPA 314.0 DOE-AL	
7	EPA 350.1	
8	EPA 353.1	
9	EPA 365.4	
10	EPA 351.2	
11	EPA 160.1	
12	EPA 310.1	

Quality Control Summary

QC Summary

Report Date: February 22, 2006

Los Alamos National Lab
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico
Contact: **Bart Vanden Plas**

Workorder: **154614**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Conductivity Analysis												
Batch 499906												
QC1201023669 154285001 DUP												
Conductivity			144		144	umhos/cm	0		(0%-10%)	JAR2	02/12/06	18:54
QC1201023670 LCS												
Conductivity	1410				1470	umhos/cm		104	(95%-105%)		02/12/06	18:53
Electrode Analysis												
Batch 498054												
QC1201019310 154582001 DUP												
pH			6.78	H	6.79	SU	0		(0%-10%)	JAR2	01/26/06	19:46
QC1201019311 LCS												
pH	7.00				7.00	SU		100	(95%-105%)		01/26/06	19:43
Flow Injection Analysis												
Batch 498748												
QC1201020828 154614003 DUP												
Cyanide, Total		U	ND	U	ND	ug/L	N/A		(+/-5.00)	KLP1	02/03/06	15:35
QC1201020829 154614008 DUP												
Cyanide, Total		U	ND	U	ND	ug/L	N/A		(+/-5.00)		02/03/06	15:43
QC1201020834 LCS												
Cyanide, Total	50.0				47.3	ug/L		95	(90%-110%)		02/03/06	16:57
QC1201020827 MB												
Cyanide, Total				U	ND	ug/L					02/03/06	15:15
QC1201020830 154614003 MS												
Cyanide, Total	100	U	ND		104	ug/L		104	(73%-117%)		02/03/06	15:36
QC1201020831 154614008 MS												
Cyanide, Total	100	U	ND		110	ug/L		110	(73%-117%)		02/03/06	15:44
QC1201020832 154614003 MSD												
Cyanide, Total	100	U	ND		101	ug/L	3	101	(0%-20%)		02/03/06	15:40
QC1201020833 154614008 MSD												
Cyanide, Total	100	U	ND		109	ug/L	1	109	(0%-20%)		02/03/06	15:45
Ion Chromatography												
Batch 498693												
QC1201020720 154415003 DUP												
Perchlorate		U	ND	U	ND	ug/L	N/A		(+/-12.0)	MAR1	02/01/06	12:40
QC1201020721 154478001 DUP												
Perchlorate		U	ND	U	ND	ug/L	N/A		(+/-12.0)		02/01/06	13:41
QC1201020724 LCS												
Perchlorate	50.0				45.7	ug/L		91	(90%-110%)		02/01/06	12:10
QC1201020719 MB												
Perchlorate				U	ND	ug/L					02/01/06	11:55
QC1201020722 154415003 PS												
Perchlorate	10.0	U	ND	J	9.24	ug/L		92	(86%-126%)		02/01/06	12:55
QC1201020723 154478001 PS												
Perchlorate	10.0	U	ND	J	9.75	ug/L		98	(86%-126%)		02/01/06	13:56
Batch 498894												

QC Summary

Workorder: 154614

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography										
Batch 498894										
QC1201021178 154614001 DUP										
Bromide	U	ND	U	ND	mg/L	N/A		(+/-0.200)	RXM1	02/13/06 14:14
Chloride		2.21		2.02	mg/L	9		(0%-20%)		02/08/06 16:12
Fluoride		0.141		0.153	mg/L	8 ^		(+/-0.100)		02/20/06 10:53
Sulfate		2.28		2.14	mg/L	6		(0%-20%)		02/08/06 16:12
QC1201037160 154721011 DUP										
Bromide	U	ND	U	ND	mg/L	N/A		(+/-0.200)		02/21/06 17:21
Chloride	U	ND	U	ND	mg/L	N/A		(+/-0.200)		
Fluoride	U	ND	U	ND	mg/L	N/A		(+/-0.100)		
Sulfate	U	ND	U	ND	mg/L	N/A		(+/-0.400)		
QC1201021180 LCS										
Bromide	2.50			2.67	mg/L		107	(90%-110%)		02/13/06 13:33
Chloride	10.0			10.5	mg/L		105	(90%-110%)		02/08/06 15:32
Fluoride	5.00			5.10	mg/L		102	(90%-110%)		
Sulfate	20.0			20.8	mg/L		104	(90%-110%)		
QC1201021177 MB										
Bromide			U	ND	mg/L					02/13/06 13:12
Chloride			U	ND	mg/L					02/08/06 15:11
Fluoride			U	ND	mg/L					
Sulfate			U	ND	mg/L					
QC1201021179 154614001 PS										
Bromide	2.50	U ND		2.64	mg/L		106	(90%-110%)		02/13/06 14:34
Chloride	10.0	2.21		12.4	mg/L		102	(90%-110%)		02/08/06 16:33
Fluoride	5.00	0.141		4.97	mg/L		97	(90%-110%)		02/20/06 11:13
Sulfate	20.0	2.28		22.6	mg/L		101	(90%-110%)		02/08/06 16:33
QC1201037161 154721011 PS										
Bromide	2.50	U ND		2.47	mg/L		99	(90%-110%)		02/21/06 17:42
Chloride	10.0	U ND		8.95	mg/L		90	(90%-110%)		
Fluoride	5.00	U ND		4.84	mg/L		97	(90%-110%)		
Sulfate	20.0	U ND		18.5	mg/L		92	(90%-110%)		
Nutrient Analysis										
Batch 498065										
QC1201019984 154614001 DUP										
Phosphorus, Total as P		0.223		0.189	mg/L	17 ^		(+/-0.050)	GXM2	02/03/06 10:01
QC1201019333 LCS										
Phosphorus, Total as P	1.00			1.07	mg/L		107	(80%-115%)		02/03/06 09:56
QC1201019332 MB										
Phosphorus, Total as P			J	0.020	mg/L					02/03/06 09:55
QC1201019985 154614001 MS										
Phosphorus, Total as P	1.00	0.223		1.09	mg/L		87	(80%-115%)		02/03/06 10:02
QC1201019986 154614001 MSD										
Phosphorus, Total as P	1.00	0.223		1.10	mg/L	1	88	(0%-20%)		02/03/06 10:03
Batch 498441										
QC1201020232 154614003 DUP										
Nitrogen, Total Kjeldahl	U	ND	U	ND	mg/L	N/A		(+/-0.100)	GXM2	02/12/06 18:45
QC1201020231 LCS										
Nitrogen, Total Kjeldahl	1.00			0.915	mg/L		92	(90%-110%)		02/03/06 12:49
QC1201020230 MB										
Nitrogen, Total Kjeldahl			U	ND	mg/L					02/03/06 15:01

QC Summary

Workorder: 154614

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis												
Batch 498441												
QC1201020233 154614003 MS												
Nitrogen, Total Kjeldahl	1.00	U	ND		0.975	mg/L		98	(90%-110%)	GXM2	02/12/06	19:12
QC1201020237 154614003 MSD												
Nitrogen, Total Kjeldahl	1.00	U	ND		1.05	mg/L	8	105	(0%-20%)		02/12/06	19:13
Batch 498444												
QC1201020240 154614003 DUP												
Nitrogen, Ammonia		U	ND	U	ND	mg/L	N/A		(+/-0.500)	GXM2	02/02/06	09:18
QC1201020239 LCS												
Nitrogen, Ammonia	1.00				0.993	mg/L		99	(90%-110%)		02/02/06	09:16
QC1201020238 MB												
Nitrogen, Ammonia				U	ND	mg/L					02/02/06	09:00
QC1201020241 154614003 MS												
Nitrogen, Ammonia	1.00	U	ND		0.700	mg/L		70*	(90%-110%)		02/02/06	09:18
QC1201020242 154614003 MSD												
Nitrogen, Ammonia	1.00	U	ND		0.700	mg/L	0	70*	(0%-15%)		02/02/06	09:19
Batch 498449												
QC1201020250 154614001 DUP												
Nitrogen, Nitrate/Nitrite			0.100		0.0926	mg/L	8 ^		(+/-0.050)	GXM2	02/01/06	12:25
QC1201020249 LCS												
Nitrogen, Nitrate/Nitrite	1.00				0.985	mg/L		99	(90%-110%)		02/01/06	12:15
QC1201020248 MB												
Nitrogen, Nitrate/Nitrite				U	ND	mg/L						
QC1201020251 154614001 PS												
Nitrogen, Nitrate/Nitrite	1.00		0.100		1.07	mg/L		97	(80%-120%)		02/01/06	12:25
Batch 499129												
QC1201021729 154721008 DUP												
Nitrogen, Ammonia		U	ND	U	ND	mg/L	N/A		(+/-0.250)	GXM2	01/31/06	14:23
QC1201021726 LCS												
Nitrogen, Ammonia	1.00				0.977	mg/L		98	(90%-110%)		01/31/06	13:58
QC1201021725 MB												
Nitrogen, Ammonia				U	ND	mg/L					01/31/06	13:57
QC1201021730 154721008 MS												
Nitrogen, Ammonia	1.00	U	ND		1.08	mg/L		108	(90%-110%)		01/31/06	14:24
QC1201021732 154721008 MSD												
Nitrogen, Ammonia	1.00	U	ND		1.04	mg/L	3	104	(0%-15%)		01/31/06	14:25
Batch 499132												
QC1201021735 154721011 DUP												
Phosphorus, Total as P			0.087		0.072	mg/L	19 ^		(+/-0.050)	GXM2	02/03/06	10:44
QC1201021734 LCS												
Phosphorus, Total as P	1.00				1.04	mg/L		104	(80%-115%)		02/03/06	10:39
QC1201021733 MB												
Phosphorus, Total as P				J	0.019	mg/L						
QC1201021736 154721011 MS												
Phosphorus, Total as P	1.00		0.087		1.05	mg/L		97	(80%-115%)		02/03/06	10:45
QC1201021737 154721011 MSD												
Phosphorus, Total as P	1.00		0.087		1.07	mg/L	2	99	(0%-20%)		02/03/06	10:46
Solids Analysis												
Batch 498292												
QC1201019839 154478001 DUP												

QC Summary

Workorder: 154614

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Solids Analysis										
Batch 498292										
Total Dissolved Solids		34.0		38.0	mg/L	11 ^		(+/-10.0)	GXA2	01/27/06 13:29
QC1201019851 154614001 DUP										
Total Dissolved Solids		113		117	mg/L	3		(0%-10%)		
QC1201019838 LCS										
Total Dissolved Solids	300			294	mg/L		98	(95%-105%)		
QC1201019837 MB										
Total Dissolved Solids			U	ND	mg/L					
Titration Analysis										
Batch 499324										
QC1201022182 154614001 DUP										
Alkalinity, Total as CaCO3		62.3		63.3	mg/L	2		(0%-20%)	DXR1	01/31/06 13:19
Carbonate alkalinity (CaCO3)	J	1.47	U	ND	mg/L	N/A		(+/-2.00)		
QC1201022181 LCS										
Alkalinity, Total as CaCO3	100			95.0	mg/L		95	(90%-110%)		01/31/06 12:14
QC1201022183 154614001 MS										
Alkalinity, Total as CaCO3	100	62.3		162	mg/L		100	(80%-120%)		01/31/06 13:22
Batch 500666										
QC1201025439 154721011 DUP										
Alkalinity, Total as CaCO3	U	ND	U	ND	mg/L	N/A		(+/-2.00)	DXR1	02/03/06 15:53
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A		(+/-2.00)		
QC1201025440 154721001 DUP										
Alkalinity, Total as CaCO3		61.3		62.3	mg/L	2		(0%-20%)		02/03/06 15:45
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A		(+/-2.00)		
QC1201025430 LCS										
Alkalinity, Total as CaCO3	1000			1030	mg/L		103	(90%-110%)		02/03/06 13:18
QC1201025441 154721011 MS										
Alkalinity, Total as CaCO3	100 U	ND		103	mg/L		102	(80%-120%)		02/03/06 15:55
QC1201025442 154721001 MS										
Alkalinity, Total as CaCO3	100	61.3		164	mg/L		103	(80%-120%)		02/03/06 15:49

Notes:
RER is calculated at the 95% confidence level (2-sigma).
The Qualifiers in this report are defined as follows:

- < Result is less than amount reported.
- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- P The response between the confirmation and the primary columns is >40% Different.
- R Sample results are rejected.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.

QC Summary

Workorder: **154614**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

Y QC Samples were not spiked with this compound.

Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.

d The 2:1 depletion requirement was not met for this sample

h Sample preparation or preservation holding time exceeded.

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Flow Injection Analysis

Method: EPA 335.3 Concentration Units:ug/L

Instrument: Lachat QuickChem FIA+

Parmname: Cyanide, Total

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	03-FEB-2006 15:10:11	OM_2-3-2006_15-01-25	145	150	96.7	(90%-110%)	Yes
CCV	03-FEB-2006 15:24:33	OM_2-3-2006_15-01-25	101	100	101	(90%-110%)	Yes
CCV	03-FEB-2006 15:37:03	OM_2-3-2006_15-01-25	103	100	103	(90%-110%)	Yes
CCV	03-FEB-2006 15:49:30	OM_2-3-2006_15-01-25	102	100	102	(90%-110%)	Yes
CCV	03-FEB-2006 16:52:28	OM_2-3-2006_15-01-25	96.1	100	96.1	(90%-110%)	Yes
CCV	03-FEB-2006 16:57:57	OM_2-3-2006_15-01-25	99.4	100	99.4	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	03-FEB-2006 15:12:01	OM_2-3-2006_15-01-25	-0.982	5	Yes
CCB	03-FEB-2006 15:26:24	OM_2-3-2006_15-01-25	0.325	5	Yes
CCB	03-FEB-2006 15:38:54	OM_2-3-2006_15-01-25	-1.13	5	Yes
CCB	03-FEB-2006 15:51:21	OM_2-3-2006_15-01-25	0.636	5	Yes
CCB	03-FEB-2006 16:54:20	OM_2-3-2006_15-01-25	1	5	Yes
CCB	03-FEB-2006 16:59:49	OM_2-3-2006_15-01-25	4.65	5	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Bromide

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	16-FEB-2006 08:18:14	AZBPLC01.D02	2.48	2.5	99.2	(90%-110%)	Yes
CCV	17-FEB-2006 04:46:55	AZBPLC01.D62	0	2.5	0.00	(90%-110%)	No
CCV	17-FEB-2006 06:29:19	AZBPLC01.D67	8.535	3.75	228	(90%-110%)	No
ICV	20-FEB-2006 09:52:06	AZBTLC01.D02	2.65	2.5	106	(90%-110%)	Yes
CCV	20-FEB-2006 11:34:20	AZBTLC01.D07	3.86	3.75	103	(90%-110%)	Yes
ICV	21-FEB-2006 07:28:45	AZBULC01.D02	2.548	2.5	102	(90%-110%)	Yes
CCV	21-FEB-2006 16:20:18	AZBULC01.D28	3.884	3.75	104	(90%-110%)	Yes
CCV	21-FEB-2006 18:02:44	AZBULC01.D33	2.646	2.5	106	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	16-FEB-2006 08:38:43	AZBPLC01.D03	0	0.2	Yes
CCB	17-FEB-2006 05:07:23	AZBPLC01.D63	0	0.2	Yes
CCB	17-FEB-2006 06:49:48	AZBPLC01.D68	0	0.2	Yes
ICB	20-FEB-2006 10:12:35	AZBTLC01.D03	0	0.2	Yes
CCB	20-FEB-2006 11:54:49	AZBTLC01.D08	0	0.2	Yes
ICB	21-FEB-2006 07:49:03	AZBULC01.D03	0	0.2	Yes
CCB	21-FEB-2006 16:40:47	AZBULC01.D29	0	0.2	Yes
CCB	21-FEB-2006 18:23:13	AZBULC01.D34	0	0.2	Yes

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	16-FEB-2006 08:18:14	AZBPLC01.D02	9.69	10	96.9	(90%-110%)	Yes
CCV	17-FEB-2006 04:46:55	AZBPLC01.D62	0	10	0.00	(90%-110%)	No
CCV	17-FEB-2006 06:29:19	AZBPLC01.D67	0	15	0.00	(90%-110%)	No
ICV	20-FEB-2006 09:52:06	AZBTLC01.D02	9.598	10	96.0	(90%-110%)	Yes
CCV	20-FEB-2006 11:34:20	AZBTLC01.D07	14.783	15	98.6	(90%-110%)	Yes
ICV	21-FEB-2006 07:28:45	AZBULC01.D02	9.399	10	94.0	(90%-110%)	Yes
CCV	21-FEB-2006 16:20:18	AZBULC01.D28	14.939	15	99.6	(90%-110%)	Yes
CCV	21-FEB-2006 18:02:44	AZBULC01.D33	9.077	10	90.8	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	16-FEB-2006 08:38:43	AZBPLC01.D03	0	0.2	Yes
CCB	17-FEB-2006 05:07:23	AZBPLC01.D63	0	0.2	Yes
CCB	17-FEB-2006 06:49:48	AZBPLC01.D68	0	0.2	Yes
ICB	20-FEB-2006 10:12:35	AZBTLC01.D03	0	0.2	Yes
CCB	20-FEB-2006 11:54:49	AZBTLC01.D08	0	0.2	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: **ESHL00701**

SDG #: **154614**

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	21-FEB-2006 07:49:03	AZBULC01.D03	0	0.2	Yes
CCB	21-FEB-2006 16:40:47	AZBULC01.D29	0	0.2	Yes
CCB	21-FEB-2006 18:23:13	AZBULC01.D34	0	0.2	Yes

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	16-FEB-2006 08:18:14	AZBPLC01.D02	4.983	5	99.7	(90%-110%)	Yes
CCV	17-FEB-2006 04:46:55	AZBPLC01.D62	0	5	0.00	(90%-110%)	No
CCV	17-FEB-2006 06:29:19	AZBPLC01.D67	0	7.5	0.00	(90%-110%)	No
ICV	20-FEB-2006 09:52:06	AZBTLC01.D02	5.288	5	106	(90%-110%)	Yes
CCV	20-FEB-2006 11:34:20	AZBTLC01.D07	7.837	7.5	104	(90%-110%)	Yes
ICV	21-FEB-2006 07:28:45	AZBULC01.D02	5.114	5	102	(90%-110%)	Yes
CCV	21-FEB-2006 16:20:18	AZBULC01.D28	7.752	7.5	103	(90%-110%)	Yes
CCV	21-FEB-2006 18:02:44	AZBULC01.D33	4.909	5	98.2	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	16-FEB-2006 08:38:43	AZBPLC01.D03	0	0.1	Yes
CCB	17-FEB-2006 05:07:23	AZBPLC01.D63	0	0.1	Yes
CCB	17-FEB-2006 06:49:48	AZBPLC01.D68	0	0.1	Yes
ICB	20-FEB-2006 10:12:35	AZBTLC01.D03	0	0.1	Yes
CCB	20-FEB-2006 11:54:49	AZBTLC01.D08	0	0.1	Yes
ICB	21-FEB-2006 07:49:03	AZBULC01.D03	0	0.1	Yes
CCB	21-FEB-2006 16:40:47	AZBULC01.D29	0	0.1	Yes
CCB	21-FEB-2006 18:23:13	AZBULC01.D34	0	0.1	Yes

Parmname: Sulfate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	16-FEB-2006 08:18:14	AZBPLC01.D02	18.969	20	94.8	(90%-110%)	Yes
CCV	17-FEB-2006 04:46:55	AZBPLC01.D62	16.681	20	83.4	(90%-110%)	No
CCV	17-FEB-2006 06:29:19	AZBPLC01.D67	26.004	30	86.7	(90%-110%)	No
ICV	20-FEB-2006 09:52:06	AZBTLC01.D02	19.797	20	99.0	(90%-110%)	Yes
CCV	20-FEB-2006 11:34:20	AZBTLC01.D07	29.872	30	99.6	(90%-110%)	Yes
ICV	21-FEB-2006 07:28:45	AZBULC01.D02	19.205	20	96.0	(90%-110%)	Yes
CCV	21-FEB-2006 16:20:18	AZBULC01.D28	29.923	30	99.7	(90%-110%)	Yes
CCV	21-FEB-2006 18:02:44	AZBULC01.D33	18.862	20	94.3	(90%-110%)	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: **ESHL00701**

SDG #: **154614**

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph equipped with a Dionex AS9-HC general purpose anion column

Parmname: Sulfate

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	16-FEB-2006 08:38:43	AZBPLC01.D03	0	0.4	Yes
CCB	17-FEB-2006 05:07:23	AZBPLC01.D63	0	0.4	Yes
CCB	17-FEB-2006 06:49:48	AZBPLC01.D68	0	0.4	Yes
ICB	20-FEB-2006 10:12:35	AZBTLC01.D03	0	0.4	Yes
CCB	20-FEB-2006 11:54:49	AZBTLC01.D08	0	0.4	Yes
ICB	21-FEB-2006 07:49:03	AZBULC01.D03	0	0.4	Yes
CCB	21-FEB-2006 16:40:47	AZBULC01.D29	0	0.4	Yes
CCB	21-FEB-2006 18:23:13	AZBULC01.D34	0	0.4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph instrument equipped with a Dionex AS9-HC general purpose anion column

Parmname: Bromide

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	08-FEB-2006 14:31:12	AFBHLC01.D02	3.02	2.5	121	(90%-110%)	No
CCV	08-FEB-2006 17:54:38	AFBHLC01.D12	3.969	3.75	106	(90%-110%)	Yes
ICV	13-FEB-2006 12:32:17	AFBMLC01.D03	2.671	2.5	107	(90%-110%)	Yes
CCV	13-FEB-2006 15:55:44	AFBMLC01.D13	4.082	3.75	109	(90%-110%)	Yes
CCV	13-FEB-2006 19:19:12	AFBMLC01.D23	2.718	2.5	109	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	08-FEB-2006 14:51:31	AFBHLC01.D03	0	0.2	Yes
CCB	08-FEB-2006 18:14:59	AFBHLC01.D13	0	0.2	Yes
ICB	13-FEB-2006 12:52:37	AFBMLC01.D04	0	0.2	Yes
CCB	13-FEB-2006 16:16:05	AFBMLC01.D14	0	0.2	Yes
CCB	13-FEB-2006 19:39:33	AFBMLC01.D24	0	0.2	Yes

Parmname: Chloride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	08-FEB-2006 14:31:12	AFBHLC01.D02	10.401	10	104	(90%-110%)	Yes
CCV	08-FEB-2006 17:54:38	AFBHLC01.D12	16.377	15	109	(90%-110%)	Yes
ICV	13-FEB-2006 12:32:17	AFBMLC01.D03	10.371	10	104	(90%-110%)	Yes
CCV	13-FEB-2006 15:55:44	AFBMLC01.D13	16.519	15	110	(90%-110%)	Yes
CCV	13-FEB-2006 19:19:12	AFBMLC01.D23	10.348	10	103	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	08-FEB-2006 14:51:31	AFBHLC01.D03	0	0.2	Yes
CCB	08-FEB-2006 18:14:59	AFBHLC01.D13	0	0.2	Yes
ICB	13-FEB-2006 12:52:37	AFBMLC01.D04	0	0.2	Yes
CCB	13-FEB-2006 16:16:05	AFBMLC01.D14	0	0.2	Yes
CCB	13-FEB-2006 19:39:33	AFBMLC01.D24	0	0.2	Yes

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	08-FEB-2006 14:31:12	AFBHLC01.D02	5.14	5	103	(90%-110%)	Yes
CCV	08-FEB-2006 17:54:38	AFBHLC01.D12	7.805	7.5	104	(90%-110%)	Yes
ICV	13-FEB-2006 12:32:17	AFBMLC01.D03	5.087	5	102	(90%-110%)	Yes
CCV	13-FEB-2006 15:55:44	AFBMLC01.D13	7.712	7.5	103	(90%-110%)	Yes
CCV	13-FEB-2006 19:19:12	AFBMLC01.D23	4.889	5	97.8	(90%-110%)	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: **ESHL00701**

SDG #: **154614**

Ion Chromatography

Method: EPA 300.0 Concentration Units:mg/L

Instrument: Dionex DX300 Ion Chromatograph instrument equipped with a Dionex AS9-HC general purpose anion column

Parmname: Fluoride

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	08-FEB-2006 14:51:31	AFBHLC01.D03	0	0.1	Yes
CCB	08-FEB-2006 18:14:59	AFBHLC01.D13	0	0.1	Yes
ICB	13-FEB-2006 12:52:37	AFBMLC01.D04	0	0.1	Yes
CCB	13-FEB-2006 16:16:05	AFBMLC01.D14	0	0.1	Yes
CCB	13-FEB-2006 19:39:33	AFBMLC01.D24	0	0.1	Yes

Parmname: Sulfate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	08-FEB-2006 14:31:12	AFBHLC01.D02	20.882	20	104	(90%-110%)	Yes
CCV	08-FEB-2006 17:54:38	AFBHLC01.D12	31.929	30	106	(90%-110%)	Yes
ICV	13-FEB-2006 12:32:17	AFBMLC01.D03	21.074	20	105	(90%-110%)	Yes
CCV	13-FEB-2006 15:55:44	AFBMLC01.D13	32.993	30	110	(90%-110%)	Yes
CCV	13-FEB-2006 19:19:12	AFBMLC01.D23	20.655	20	103	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	08-FEB-2006 14:51:31	AFBHLC01.D03	0	0.4	Yes
CCB	08-FEB-2006 18:14:59	AFBHLC01.D13	0	0.4	Yes
ICB	13-FEB-2006 12:52:37	AFBMLC01.D04	0	0.4	Yes
CCB	13-FEB-2006 16:16:05	AFBMLC01.D14	0	0.4	Yes
CCB	13-FEB-2006 19:39:33	AFBMLC01.D24	0	0.4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Ion Chromatography

Method: EPA 314.0 DOE-AL Concentration Units:ug/L

Instrument: Dionex Ion Chromatograph

Parmname: Perchlorate

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	01-FEB-2006 10:24:15	060201_003.DXD	46.76071	50	93.5	(90%-110%)	Yes
CCV	01-FEB-2006 11:24:50	060201_007.DXD	71.76999	75	95.7	(90%-110%)	Yes
CCV	01-FEB-2006 14:26:35	060201_019.DXD	23.38782	25	93.6	(90%-110%)	Yes
CCV	01-FEB-2006 17:28:22	060201_031.DXD	73.30223	75	97.7	(90%-110%)	Yes
CCV	02-FEB-2006 10:01:17	060201_058.DXD	71.34765	75	95.1	(90%-110%)	Yes
CCV	02-FEB-2006 10:46:38	060201_061.DXD	22.85227	25	91.4	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	01-FEB-2006 10:39:22	060201_004.DXD	0	4	Yes
CCB	01-FEB-2006 11:39:59	060201_008.DXD	0	4	Yes
CCB	01-FEB-2006 14:41:44	060201_020.DXD	0	4	Yes
CCB	01-FEB-2006 17:43:30	060201_032.DXD	0	4	Yes
CCB	02-FEB-2006 10:16:22	060201_059.DXD	0	4	Yes
CCB	02-FEB-2006 11:01:47	060201_062.DXD	0	4	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Nutrient Analysis

Method: EPA 350.1 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Nitrogen, Ammonia

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	31-JAN-2006 13:53:38	OM_1-31-2006_13-45-46	0.999	1	99.9	(90%-110%)	Yes
CCV	31-JAN-2006 14:05:37	OM_1-31-2006_13-45-46	1.04	1	104	(90%-110%)	Yes
CCV	31-JAN-2006 14:17:31	OM_1-31-2006_13-45-46	1.027	1	103	(90%-110%)	Yes
CCV	31-JAN-2006 14:29:31	OM_1-31-2006_13-45-46	1.039	1	104	(90%-110%)	Yes
ICV	02-FEB-2006 08:56:37	OM_2-2-2006_08-48-10	1.074	1	107	(90%-110%)	Yes
CCV	02-FEB-2006 09:08:34	OM_2-2-2006_08-48-10	1.072	1	107	(90%-110%)	Yes
CCV	02-FEB-2006 09:20:29	OM_2-2-2006_08-48-10	1.069	1	107	(90%-110%)	Yes
CCV	02-FEB-2006 09:30:00	OM_2-2-2006_08-48-10	1.065	1	107	(90%-110%)	Yes
ICV	02-FEB-2006 15:26:08	OM_2-2-2006_15-18-27	1.053	1	105	(90%-110%)	Yes
CCV	02-FEB-2006 15:30:38	OM_2-2-2006_15-18-27	1.044	1	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	31-JAN-2006 13:55:28	OM_1-31-2006_13-45-46	-0.038	0.05	Yes
CCB	31-JAN-2006 14:07:27	OM_1-31-2006_13-45-46	-0.039	0.05	Yes
CCB	31-JAN-2006 14:19:27	OM_1-31-2006_13-45-46	-0.037	0.05	Yes
CCB	31-JAN-2006 14:31:21	OM_1-31-2006_13-45-46	-0.037	0.05	Yes
ICB	02-FEB-2006 08:58:29	OM_2-2-2006_08-48-10	-0.044	0.05	Yes
CCB	02-FEB-2006 09:10:23	OM_2-2-2006_08-48-10	-0.044	0.05	Yes
CCB	02-FEB-2006 09:22:19	OM_2-2-2006_08-48-10	-0.044	0.05	Yes
CCB	02-FEB-2006 09:31:50	OM_2-2-2006_08-48-10	-0.044	0.05	Yes
ICB	02-FEB-2006 15:27:58	OM_2-2-2006_15-18-27	0.01	0.05	Yes
CCB	02-FEB-2006 15:32:28	OM_2-2-2006_15-18-27	0.009	0.05	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Nutrient Analysis

Method: EPA 351.2 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Nitrogen, Total Kjeldahl

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	03-FEB-2006 12:44:40	OM_2-3-2006_12-37-35	0.993	1	99.3	(90%-110%)	Yes
CCV	03-FEB-2006 12:56:50	OM_2-3-2006_12-37-35	1.051	1	105	(90%-110%)	Yes
CCV	03-FEB-2006 13:08:54	OM_2-3-2006_12-37-35	1.071	1	107	(90%-110%)	Yes
ICV	03-FEB-2006 14:39:41	OM_2-3-2006_14-32-46	0.993	1	99.3	(90%-110%)	Yes
CCV	03-FEB-2006 14:50:06	OM_2-3-2006_14-32-46	1.045	1	105	(90%-110%)	Yes
CCV	03-FEB-2006 15:02:07	OM_2-3-2006_14-32-46	1.079	1	108	(90%-110%)	Yes
ICV	03-FEB-2006 15:56:58	OM_2-3-2006_15-49-19	0.976	1	97.6	(90%-110%)	Yes
CCV	03-FEB-2006 16:02:31	OM_2-3-2006_15-49-19	1.038	1	104	(90%-110%)	Yes
ICV	12-FEB-2006 18:34:39	OM_2-12-2006_18-27-00	1.08	1	108	(90%-110%)	Yes
CCV	12-FEB-2006 18:46:40	OM_2-12-2006_18-27-00	1.092	1	109	(90%-110%)	Yes
ICV	12-FEB-2006 19:08:57	OM_2-12-2006_19-02-02	1.052	1	105	(90%-110%)	Yes
CCV	12-FEB-2006 19:21:22	OM_2-12-2006_19-02-02	1.058	1	106	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	03-FEB-2006 12:46:36	OM_2-3-2006_12-37-35	-0.008	0.1	Yes
CCB	03-FEB-2006 12:58:45	OM_2-3-2006_12-37-35	-0.035	0.1	Yes
CCB	03-FEB-2006 13:10:51	OM_2-3-2006_12-37-35	-0.026	0.1	Yes
ICB	03-FEB-2006 14:41:37	OM_2-3-2006_14-32-46	-0.025	0.1	Yes
CCB	03-FEB-2006 14:52:02	OM_2-3-2006_14-32-46	-0.026	0.1	Yes
CCB	03-FEB-2006 15:04:03	OM_2-3-2006_14-32-46	-0.046	0.1	Yes
ICB	03-FEB-2006 15:58:54	OM_2-3-2006_15-49-19	-0.003	0.1	Yes
CCB	03-FEB-2006 16:04:30	OM_2-3-2006_15-49-19	0.005	0.1	Yes
ICB	12-FEB-2006 18:36:35	OM_2-12-2006_18-27-00	-0.049	0.1	Yes
CCB	12-FEB-2006 18:48:36	OM_2-12-2006_18-27-00	-0.028	0.1	Yes
ICB	12-FEB-2006 19:10:53	OM_2-12-2006_19-02-02	-0.028	0.1	Yes
CCB	12-FEB-2006 19:23:22	OM_2-12-2006_19-02-02	-0.026	0.1	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Nutrient Analysis

Method: EPA 353.1 Concentration Units:mg/L

Instrument: Konelab 20

Parmname: Nitrogen, Nitrate/Nitrite

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	01-FEB-2006 11:34:41	Kone2006_02_01_17_20_11.dat	1.00644	1	101	(90%-110%)	Yes
CCV	01-FEB-2006 12:15:19	Kone2006_02_01_15_51_16.dat	0.94995	1	95.0	(90%-110%)	Yes
CCV	01-FEB-2006 12:25:18	Kone2006_02_01_15_51_16.dat	0.94273	1	94.3	(90%-110%)	Yes
CCV	01-FEB-2006 12:33:00	Kone2006_02_01_15_51_16.dat	1.01006	1	101	(90%-110%)	Yes
CCV	01-FEB-2006 12:41:35	Kone2006_02_01_15_51_16.dat	1.03976	1	104	(90%-110%)	Yes
CCV	01-FEB-2006 12:57:09	Kone2006_02_01_15_51_16.dat	0.91289	1	91.3	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	01-FEB-2006 11:34:42	Kone2006_02_01_17_20_11.dat	-0.00972	0.05	Yes
CCB	01-FEB-2006 12:15:20	Kone2006_02_01_15_51_16.dat	-0.01035	0.05	Yes
CCB	01-FEB-2006 12:25:19	Kone2006_02_01_15_51_16.dat	-0.00953	0.05	Yes
CCB	01-FEB-2006 12:33:01	Kone2006_02_01_15_51_16.dat	-0.00792	0.05	Yes
CCB	01-FEB-2006 12:41:36	Kone2006_02_01_15_51_16.dat	0.00423	0.05	Yes
CCB	01-FEB-2006 12:57:10	Kone2006_02_01_15_51_16.dat	-0.00758	0.05	Yes

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 22-FEB-2006 10:42

General Engineering Laboratories, LLC

Contract: ESHL00701

SDG #: 154614

Nutrient Analysis

Method: EPA 365.4 Concentration Units:mg/L

Instrument: Lachat Quickchem FIA+ 8000 Series

Parmname: Phosphorus, Total as P

Sample Type	Run Date	Data File	Result	Nominal	Recovery	Limits	Within Limits
ICV	03-FEB-2006 09:51:42	OM_2-3-2006_09-43-55	0.96	1	96.0	(85%-115%)	Yes
CCV	03-FEB-2006 10:04:09	OM_2-3-2006_09-43-55	1.009	1	101	(85%-115%)	Yes
CCV	03-FEB-2006 10:13:12	OM_2-3-2006_09-43-55	1.006	1	101	(85%-115%)	Yes
ICV	03-FEB-2006 10:34:57	OM_2-3-2006_10-26-25	0.949	1	94.9	(85%-115%)	Yes
CCV	03-FEB-2006 10:47:24	OM_2-3-2006_10-26-25	0.998	1	99.8	(85%-115%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	03-FEB-2006 09:53:47	OM_2-3-2006_09-43-55	0.013	0.05	Yes
CCB	03-FEB-2006 10:06:13	OM_2-3-2006_09-43-55	0.012	0.05	Yes
CCB	03-FEB-2006 10:15:17	OM_2-3-2006_09-43-55	0.02	0.05	Yes
ICB	03-FEB-2006 10:37:01	OM_2-3-2006_10-26-25	0.013	0.05	Yes
CCB	03-FEB-2006 10:49:29	OM_2-3-2006_10-26-25	0.011	0.05	Yes

Alkalinity

Alkalinity LogBook

Analyst: DXR1
Batch: 499324
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 31-JAN-2006

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201022181	WAL051018-02	100	95
LCS	1201022235	WAL051018-02	100	93.456
MS	1201022183	WAL051018-02	100	100.107
MS	1201022185	WAL051018-02	100	97.043

Type	Sample Id	Rpd(%)	Parmname
DUP	1201022182	1.626	Alkalinity, Total as CaCO3
DUP	1201022182	5.106	Carbonate alkalinity (CaCO3)
DUP	1201022184	.119	Bicarbonate alkalinity (CaCO3)

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
LCS	1201022181		12:14	8.7	50	mL	0.02043	0	4.65	95.000							mg/L
SAMPLE	154285001		12:20	7.59	50	mL	0.02043	0	3.75	76.613					0.27908		mg/L
SAMPLE	154286001		12:24	8.26	50	mL	0.02043	0	2.75	56.183					0.94332		mg/L
SAMPLE	154415001		12:27	7.52	50	mL	0.02043	0	3.05	62.312					0.19330		mg/L
SAMPLE	154415002		12:30	7.83	50	mL	0.02043	0	3	61.290					0.38684		mg/L
SAMPLE	154427001		12:33	7.79	50	mL	0.02043	0	4.4	89.892							mg/L
SAMPLE	154520003		12:38	6.94	50	mL	0.02043	0	4	81.720							mg/L
LCS	1201022235		12:56	8.9	50	mL	0.10384	0	0.9	93.456							mg/L
SAMPLE	154520004		12:58	6.43	50	mL	0.10384	0	36.45	3785.0							mg/L
SAMPLE	154520005		13:06	6.93	50	mL	0.02043	0	32.65	667.04							mg/L
SAMPLE	154520006		13:14	6.68	50	mL	0.02043	0	9.45	193.06							mg/L
SAMPLE	154614001		13:16	8.41	50	mL	0.02043	0	3.05	62.312					1.4670		mg/L
DUP	1201022182	154614001	13:19	8.38	50	mL	0.02043	0	3.1	63.333	61.819				1.3940		mg/L
MS	1201022183	154614001	13:22	9.16	50	mL	0.02043	0	7.95	162.42							mg/L
SAMPLE	154614002		13:27	8.48	50	mL	0.02043	0	3.15	64.355					1.7723		mg/L
SAMPLE	154614008		13:30	7.28	50	mL	0.02043	0	2.05	41.882					0.074864		mg/L
SAMPLE	154632001		13:34	7.25	50	mL	0.02043	0	38.35	783.49	782.17						mg/L
DUP	1201022184	154632001	13:40	7.22	50	mL	0.02043	0	38.3	782.47	781.24				1.2187		mg/L
MS	1201022185	154632001	13:45	7.89	50	mL	0.02043	0	43.1	880.53							mg/L
SAMPLE	154635003		14:48	6.98	50	mL	0.02043	0	17.35	354.46							mg/L
SAMPLE	154635004		14:53	7.11	50	mL	0.10384	0	52.8	5482.8							mg/L
SAMPLE	154635005		15:06	6.71	50	mL	0.02043	0	9.1	185.91							mg/L
SAMPLE	154635006		15:18	7.05	50	mL	0.02043	0	4.2	85.806							mg/L
SAMPLE	154635007		15:22	6.93	50	mL	0.10384	0	57.4	5960.4							mg/L
SAMPLE	154702001		15:36	8.05	50	mL	0.02043	0	5.35	109.30							mg/L

Alkalinity LogBook

Analyst: DXR1
Batch: 499324
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 31-JAN-2006

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201022181	WAL051018-02	100	95
LCS	1201022235	WAL051018-02	100	93.456
MS	1201022183	WAL051018-02	100	100.107
MS	1201022185	WAL051018-02	100	97.043

Type	Sample Id	Rpd(%)	Parmname
DUP	1201022182	1.626	Alkalinity, Total as CaCO3
DUP	1201022182	5.106	Carbonate alkalinity (CaCO3)
DUP	1201022184	.119	Bicarbonate alkalinity (CaCO3)

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
SAMPLE	154702002		15:39	8.27	50	mL	0.02043	0	5.85	119.52							mg/L

Run Date: 31-JAN-06 12:08
Instrument: PHX060
Analyst: DXR1

Standard	Observed	Theoretical		%Recovery
050420-A	11.97	12	SU	99.75
310030	2.02	2	SU	101
UPH305147-01	3.99	4	SU	99.75
UPH305149-02	7.02	7	SU	100.29
UPH297361-01	7.03	7	SU	100.43
UPH060118-01	9.99	10	SU	99.9

Comments:

Run Date: 10-JAN-2006 11:58
Instrument: TIT001
Analyst: NXS1

Na2CO3 Std. ID	Na2CO3, 0.05 N g Na2C03/L	H2SO4 N (approx.)	NA2CO3 titrated	Acid to pH 3.7	Actual Normality	Normality Average
243145	2.4926	.02	15	34.45	.02039	.02043
		200		34.55	.02042	
				34.6	.02048	

Run Date: 17-JAN-2006 10:00
Instrument: TIT001
Analyst: NXS1

Na2CO3 Std. ID	Na2CO3, 0.05 N g Na2C03/L	H2SO4 N (approx.)	NA2CO3 titrated	Acid to pH 3.7	Actual Normality	Normality Average
243145	2.4926	.1	40	18.05	.10336	.10384
				18.1	.10393	
				18.2	.10422	

Alkalinity LogBook

Analyst: DXR1
Batch: 500666
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 03-FEB-2006

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201025430	WAL051018-02	1000	103.172
MS	1201025432	WAL051018-02	100	93.978
MS	1201025441	WAL051018-02	100	102.15
MS	1201025442	WAL051018-02	100	103.172

Type	Sample Id	Rpd(%)	Parmname
DUP	1201025431	.325	Bicarbonate alkalinity (CaCO3)
DUP	1201025439	0	Alkalinity, Total as CaCO3
DUP	1201025439	6.904	Carbonate alkalinity (CaCO3)
DUP	1201025440	1.653	Alkalinity, Total as CaCO3
DUP	1201025440	6.234	Carbonate alkalinity (CaCO3)

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
LCS	1201025430		13:18	8.87	5	mL	0.02043	0	5.05	1031.7							mg/L
SAMPLE	154594001		13:20	5.67	50	mL	0.02043	0	0.1	2.0430	2.0427						mg/L
SAMPLE	154594002		13:25	5.75	50	mL	0.02043	0	0.1	2.0430	2.0426						mg/L
SAMPLE	154594003		13:27	7.4	50	mL	0.02043	0	14.6	298.28	297.56						mg/L
DUP	1201025431	154594003	13:33	7.43	50	mL	0.02043	0	14.65	299.30	298.53				0.75530		mg/L
MS	1201025432	154594003	13:36	8.72	50	mL	0.02043	0	19.2	392.26							mg/L
SAMPLE	154594004		14:45	7.42	50	mL	0.02043	0	13.9	283.98	283.26						mg/L
SAMPLE	154594005		14:51	7.35	50	mL	0.02043	0	14.4	294.19	293.56						mg/L
SAMPLE	154594006		14:55	7.39	50	mL	0.02043	0	13.25	270.70	270.06						mg/L
SAMPLE	154594007		15:01	7.68	50	mL	0.02043	0	14.15	289.08	287.77						mg/L
SAMPLE	154594008		15:11	7.62	50	mL	0.02043	0	14.05	287.04	285.90						mg/L
SAMPLE	154594009		15:16	7.44	50	mL	0.02043	0	14.4	294.19	293.42						mg/L
SAMPLE	154594010		15:20	7.45	50	mL	0.02043	0	14.5	296.24	295.44						mg/L
SAMPLE	154594011		15:24	8.22	50	mL	0.02043	0	9.95	203.28	200.07						mg/L
SAMPLE	154614010		15:28	5.01	50	mL	0.02043	0	0.05	1.0215					9.825E-06		mg/L
SAMPLE	154626001		15:34	6.43	50	mL	0.02043	0	30.9	631.29	631.13				0.15968		mg/L
SAMPLE	154721001		15:41	7.67	50	mL	0.02043	0	3	61.290					0.26819		mg/L
DUP	1201025440	154721001	15:45	7.69	50	mL	0.02043	0	3.05	62.312	62.002				0.28545		mg/L
MS	1201025442	154721001	15:49	8.92	50	mL	0.02043	0	8.05	164.46							mg/L
SAMPLE	154721011		15:52	5.21	50	mL	0.02043	0	0.05	1.0215					0.000016		mg/L
DUP	1201025439	154721011	15:53	5.24	50	mL	0.02043	0	0.05	1.0215	1.0214				0.000017		mg/L
MS	1201025441	154721011	15:55	8.84	50	mL	0.02043	0	5.05	103.17							mg/L
SAMPLE	154760001		16:04	7.31	50	mL	0.02043	0	3.15	64.355					0.12326		mg/L
SAMPLE	154817001		16:08	7.42	50	mL	0.02043	0	2.35	48.011					0.11838		mg/L

Alkalinity LogBook

Analyst: DXR1
Batch: 500666
Lab SOP: GL-GC-E-033 REV# 3
SOP Description: Alkalinity - Total, Bicarbonate Carbonate, Hydroxide, and Phenolphthalein
Run Date: 03-FEB-2006

Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201025430	WAL051018-02	1000	103.172
MS	1201025432	WAL051018-02	100	93.978
MS	1201025441	WAL051018-02	100	102.15
MS	1201025442	WAL051018-02	100	103.172

Type	Sample Id	Rpd(%)	Parmname
DUP	1201025431	.325	Bicarbonate alkalinity (CaCO3)
DUP	1201025439	0	Alkalinity, Total as CaCO3
DUP	1201025439	6.904	Carbonate alkalinity (CaCO3)
DUP	1201025440	1.653	Alkalinity, Total as CaCO3
DUP	1201025440	6.234	Carbonate alkalinity (CaCO3)

Type	Sample id	Parent Sample Id	Time	Ph	Aliquot	Units	Normality H2SO4	H2SO4 Ph 8.3 (mL)	H2SO4 Ph 4.5(mL)	Alkalinity	Bicarbonate	CO2 Dissolved	CO2 Free	CO2 Total	Carbonate	Hydroxide	Units
SAMPLE	154964003		16:11	8.49	50	mL	0.02043	0	17.75	362.63							mg/L
SAMPLE	155132001		16:16	7.18	50	mL	0.02043	0	2.65	54.140							mg/L
SAMPLE	155132002		16:21	7.44	50	mL	0.02043	0	1.95	39.839							mg/L

Run Date: 03-FEB-06 12:47
Instrument: PHX060
Analyst: DXR1

Standard	Observed	Theoretical		%Recovery
050420-A	11.96	12	SU	99.667
310030	2.02	2	SU	101
UPH305147-01	4.02	4	SU	100.5
UPH297361-01	7.01	7	SU	100.14
UPH305149-02	7.01	7	SU	100.14
UPH060118-01	9.98	10	SU	99.8

Comments:

Run Date: 10-JAN-2006 11:58
Instrument: TIT001
Analyst: NXS1

Na2CO3 Std. ID	Na2CO3, 0.05 N g Na2C03/L	H2SO4 N (approx.)	NA2CO3 titrated	Acid to pH 3.7	Actual Normality	Normality Average
243145	2.4926	.02	15	34.45	.02039	.02043
		200		34.55	.02042	
				34.6	.02048	

Ammonia Nitrogen

Prep LogBook

Analyst: LXW1 Verified by:_____

Batch: 499128

Lab SOP: GL-GC-E-072 REV# 3

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201021726	UTR050805-01	1	mL
MS	1201021728	UTR050805-01	1	mL
MS	1201021730	UTR050805-01	1	mL
MSD	1201021731	UTR050805-01	1	mL
MSD	1201021732	UTR050805-01	1	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201021725		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	WATER
LCS	1201021726		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	WATER
SAMPLE	154614009		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154721001		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154721008		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
DUP	1201021729	154721008	EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
MS	1201021730	154721008	EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
MSD	1201021732	154721008	EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154721011		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154759001		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154759002		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154759009		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154759010		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154760002		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER
SAMPLE	154770003		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	WATER
SAMPLE	154770004		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	WATER
DUP	1201021727	154770004	EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	WATER
MS	1201021728	154770004	EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	WATER
MSD	1201021731	154770004	EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	WATER
SAMPLE	154817002		EPA 350.2 Prep	31-JAN-2006 11:03	100 mL	100 mL	1	GROUND WATER

Comments: This batch was not distilled.

Prep LogBook

Analyst: LXW1 Verified by:_____

Batch: 498443

Lab SOP: GL-GC-E-072 REV# 3

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201020239	UTR050805-01	1	mL
MS	1201020241	UTR050805-01	1	mL
MSD	1201020242	UTR050805-01	1	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201020238		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
LCS	1201020239		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154614003		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
DUP	1201020240	154614003	EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
MS	1201020241	154614003	EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
MSD	1201020242	154614003	EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154614004		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154614010		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154630002		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154630003		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154630004		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154630005		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	GROUND WATER
SAMPLE	154632001		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	WATER
SAMPLE	154649001		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	WATER
SAMPLE	154649002		EPA 350.2 Prep	31-JAN-2006 17:14	100 mL	100 mL	1	WATER

Comments: Batch was not distilled.

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	1/31/2006 13:46:43	OM_1-31-2006_13-45-46
3.0 ppm Std.		1	gxm2	1/31/2006 13:47:32	OM_1-31-2006_13-45-46
1.0 ppm Std.		1	gxm2	1/31/2006 13:48:21	OM_1-31-2006_13-45-46
0.5 ppm Std		1	gxm2	1/31/2006 13:49:11	OM_1-31-2006_13-45-46
0.1 ppm Std		1	gxm2	1/31/2006 13:50:03	OM_1-31-2006_13-45-46
0.05 ppm Std		1	gxm2	1/31/2006 13:50:55	OM_1-31-2006_13-45-46
ICAL-00		1	gxm2	1/31/2006 13:51:47	OM_1-31-2006_13-45-46
ICV		1	gxm2	1/31/2006 13:53:38	OM_1-31-2006_13-45-46
ICB		1	gxm2	1/31/2006 13:55:28	OM_1-31-2006_13-45-46
1201021725	499129	1	gxm2	1/31/2006 13:57:17	OM_1-31-2006_13-45-46
1201021726	499129	1	gxm2	1/31/2006 13:58:09	OM_1-31-2006_13-45-46
154614009	499129	1	gxm2	1/31/2006 13:58:59	OM_1-31-2006_13-45-46
154721001	499129	1	gxm2	1/31/2006 13:59:50	OM_1-31-2006_13-45-46
154721008	499129	1	gxm2	1/31/2006 14:00:40	OM_1-31-2006_13-45-46
1201021729	499129	1	gxm2	1/31/2006 14:01:30	OM_1-31-2006_13-45-46
1201021730	499129	1	gxm2	1/31/2006 14:02:20	OM_1-31-2006_13-45-46
1201021732	499129	1	gxm2	1/31/2006 14:03:09	OM_1-31-2006_13-45-46
154721011	499129	1	gxm2	1/31/2006 14:03:59	OM_1-31-2006_13-45-46
154759001	499129	1	gxm2	1/31/2006 14:04:47	OM_1-31-2006_13-45-46
CCV		1	gxm2	1/31/2006 14:05:37	OM_1-31-2006_13-45-46
CCB		1	gxm2	1/31/2006 14:07:27	OM_1-31-2006_13-45-46
154759002	499129	1	gxm2	1/31/2006 14:09:15	OM_1-31-2006_13-45-46
154759009	499129	1	gxm2	1/31/2006 14:10:03	OM_1-31-2006_13-45-46
154759010	499129	1	gxm2	1/31/2006 14:10:51	OM_1-31-2006_13-45-46
154760002	499129	1	gxm2	1/31/2006 14:11:39	OM_1-31-2006_13-45-46
154770003	499129	1	gxm2	1/31/2006 14:12:26	OM_1-31-2006_13-45-46
154770004	499129	1	gxm2	1/31/2006 14:13:16	OM_1-31-2006_13-45-46
1201021727	499129	1	gxm2	1/31/2006 14:14:08	OM_1-31-2006_13-45-46
1201021728	499129	1	gxm2	1/31/2006 14:14:59	OM_1-31-2006_13-45-46
1201021731	499129	1	gxm2	1/31/2006 14:15:50	OM_1-31-2006_13-45-46
154817002	499129	1	gxm2	1/31/2006 14:16:41	OM_1-31-2006_13-45-46
CCV		1	gxm2	1/31/2006 14:17:31	OM_1-31-2006_13-45-46
CCB		1	gxm2	1/31/2006 14:19:27	OM_1-31-2006_13-45-46
154614009	499129	5	gxm2	1/31/2006 14:21:16	OM_1-31-2006_13-45-46
154721001	499129	5	gxm2	1/31/2006 14:22:07	OM_1-31-2006_13-45-46
154721008	499129	5	gxm2	1/31/2006 14:22:57	OM_1-31-2006_13-45-46
1201021729	499129	5	gxm2	1/31/2006 14:23:48	OM_1-31-2006_13-45-46
1201021730	499129	5	gxm2	1/31/2006 14:24:37	OM_1-31-2006_13-45-46
1201021732	499129	5	gxm2	1/31/2006 14:25:27	OM_1-31-2006_13-45-46
154721011	499129	5	gxm2	1/31/2006 14:26:16	OM_1-31-2006_13-45-46
154759001	499129	5	gxm2	1/31/2006 14:27:05	OM_1-31-2006_13-45-46
154759002	499129	5	gxm2	1/31/2006 14:27:53	OM_1-31-2006_13-45-46
154759009	499129	5	gxm2	1/31/2006 14:28:42	OM_1-31-2006_13-45-46
CCV		1	gxm2	1/31/2006 14:29:31	OM_1-31-2006_13-45-46
CCB		1	gxm2	1/31/2006 14:31:21	OM_1-31-2006_13-45-46
154759010	499129	5	gxm2	1/31/2006 14:33:09	OM_1-31-2006_13-45-46
154817002	499129	5	gxm2	1/31/2006 14:33:59	OM_1-31-2006_13-45-46
CCV		1	gxm2	1/31/2006 14:34:49	OM_1-31-2006_13-45-46
CCB		1	gxm2	1/31/2006 14:36:40	OM_1-31-2006_13-45-46

Author: gxm2 Date : 1/31/2006

Original Run Filename: OM_1-31-2006_13-45-46.OMN created 1/31/2006 13:45:46
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_1-31-2006_13-45-46.OMN last modified 1/31/2006 14:37:43
Current Run Author's Signature: [gxm2]
Description: Ammonia EPA Method 350.1 GEL SOP: GL-GC-E-019 REV 2 Detection Wavelength: 660nm
Sample spiked with 100ppm stock standard UTR021001-01 LCS/ICV/CCV/Spike nominal 1.0 ppm

Sample	Rep.	Cup No.	Channel 1 NH3 Conc. (mg/L)	Channel 1 NH3 Area (Vs)	Detection Time	ADF	MDF	Description
WTR060131-01	1	S9	5.000	33.970	1/31/2006@13:46:43			5.0 ppm Std.
WTR060131-02	1	S10	3.000	20.846	1/31/2006@13:47:32			3.0 ppm Std.
WTR060131-04	1	S11	1.000	7.339	1/31/2006@13:48:21			1.0 ppm Std.
WTR060131-05	1	S12	0.500	3.867	1/31/2006@13:49:11			0.5 ppm Std
WTR060131-06	1	S13	0.100	0.836	1/31/2006@13:50:03			0.1 ppm Std
WTR060131-07	1	S14	0.050	0.420	1/31/2006@13:50:55			0.05 ppm Std
WTR060131-10 0.0 ppm	1	S15	0.000	6.066e-5	1/31/2006@13:51:47			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99983 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR060131-08 ICV	1	S16	0.999	7.038	1/31/2006@13:53:38			ICV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.999 < 1.104					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.999 > 0.895					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S15	-0.038	-0.002	1/31/2006@13:55:28			ICB/CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.038 < 0.050					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.038 > -0.050					
		Message	ICB Passed					
		Action	Continue					
1201021725|499129|MB	1	1	-0.034	0.022	1/31/2006@13:57:17			
1201021726||LCS	1	2	0.977	6.882	1/31/2006@13:58:09			
154614009	1	3	-0.061	-0.160	1/31/2006@13:58:59			
154721001	1	4	-0.067	-0.204	1/31/2006@13:59:50			
154721008	1	5	-0.065	-0.188	1/31/2006@14:00:40			
1201021729||DUP	1	6	-0.065	-0.188	1/31/2006@14:01:30			
1201021730||MS	1	7	1.105	7.757	1/31/2006@14:02:20			
1201021732||MSD	1	8	1.109	7.778	1/31/2006@14:03:09			
154721011	1	9	-0.060	-0.154	1/31/2006@14:03:59			
154759001	1	10	-0.066	-0.196	1/31/2006@14:04:47			
WTR060131-04 CCV	1	S11	1.040	7.314	1/31/2006@14:05:37			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.040 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.040 > 0.900					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.039	-0.010	1/31/2006@14:07:27			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.039 < 0.050					

		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.039 > -0.050					
		Message	CCB Passed					
		Action	Continue					
154759002	1	11	-0.066	-0.194	1/31/2006@14:09:15			
154759009	1	12	-0.067	-0.202	1/31/2006@14:10:03			
154759010	1	13	-0.064	-0.181	1/31/2006@14:10:51			
154760002	1	14	0.044	0.549	1/31/2006@14:11:39			
154770003	1	15	0.037	0.501	1/31/2006@14:12:26			
154770004	1	16	0.014	0.349	1/31/2006@14:13:16			
1201021727||DUP	1	17	0.018	0.373	1/31/2006@14:14:08			
1201021728||MS	1	18	1.031	7.252	1/31/2006@14:14:59			
1201021731||MSD	1	19	1.047	7.361	1/31/2006@14:15:50			
154817002	1	20	-0.059	-0.150	1/31/2006@14:16:41			
WTR060131-04 CCV	1	S11	1.027	7.225	1/31/2006@14:17:31			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.027 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.027 > 0.900					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.037	0.003	1/31/2006@14:19:27			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.037 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.037 > -0.050					
		Message	CCB Passed					
		Action	Continue					
154614009	1	3	-0.040	-0.021	1/31/2006@14:21:16		5.00	
154721001	1	4	-0.035	0.015	1/31/2006@14:22:07		5.00	
154721008	1	5	-0.041	-0.024	1/31/2006@14:22:57		5.00	
1201021729||DUP	1	6	-0.037	0.001	1/31/2006@14:23:48		5.00	
1201021730||MS	1	7	0.215	1.714	1/31/2006@14:24:37		5.00	
1201021732||MSD	1	8	0.208	1.662	1/31/2006@14:25:27		5.00	
154721011	1	9	-0.037	0.001	1/31/2006@14:26:16		5.00	
154759001	1	10	-0.041	-0.023	1/31/2006@14:27:05		5.00	
154759002	1	11	-0.040	-0.020	1/31/2006@14:27:53		5.00	
154759009	1	12	-0.041	-0.025	1/31/2006@14:28:42		5.00	
WTR060131-04 CCV	1	S11	1.039	7.303	1/31/2006@14:29:31			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.039 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.039 > 0.900					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.037	0.001	1/31/2006@14:31:21			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.037 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.037 > -0.050					
		Message	CCB Passed					
		Action	Continue					
154759010	1	13	-0.042	-0.035	1/31/2006@14:33:09		5.00	
154817002	1	20	-0.038	-0.008	1/31/2006@14:33:59		5.00	

WTR060131-04 CCV	1	S11	1.037	7.295	1/31/2006@14:34:49			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.037 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.037 > 0.900					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.037	-9.469e-4	1/31/2006@14:36:40			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.037 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.037 > -0.050					
		Message	CCB Passed					
		Action	Continue					

Author: gxm2 Date : 1/31/2006

Channel 1 (NH3) : Current View

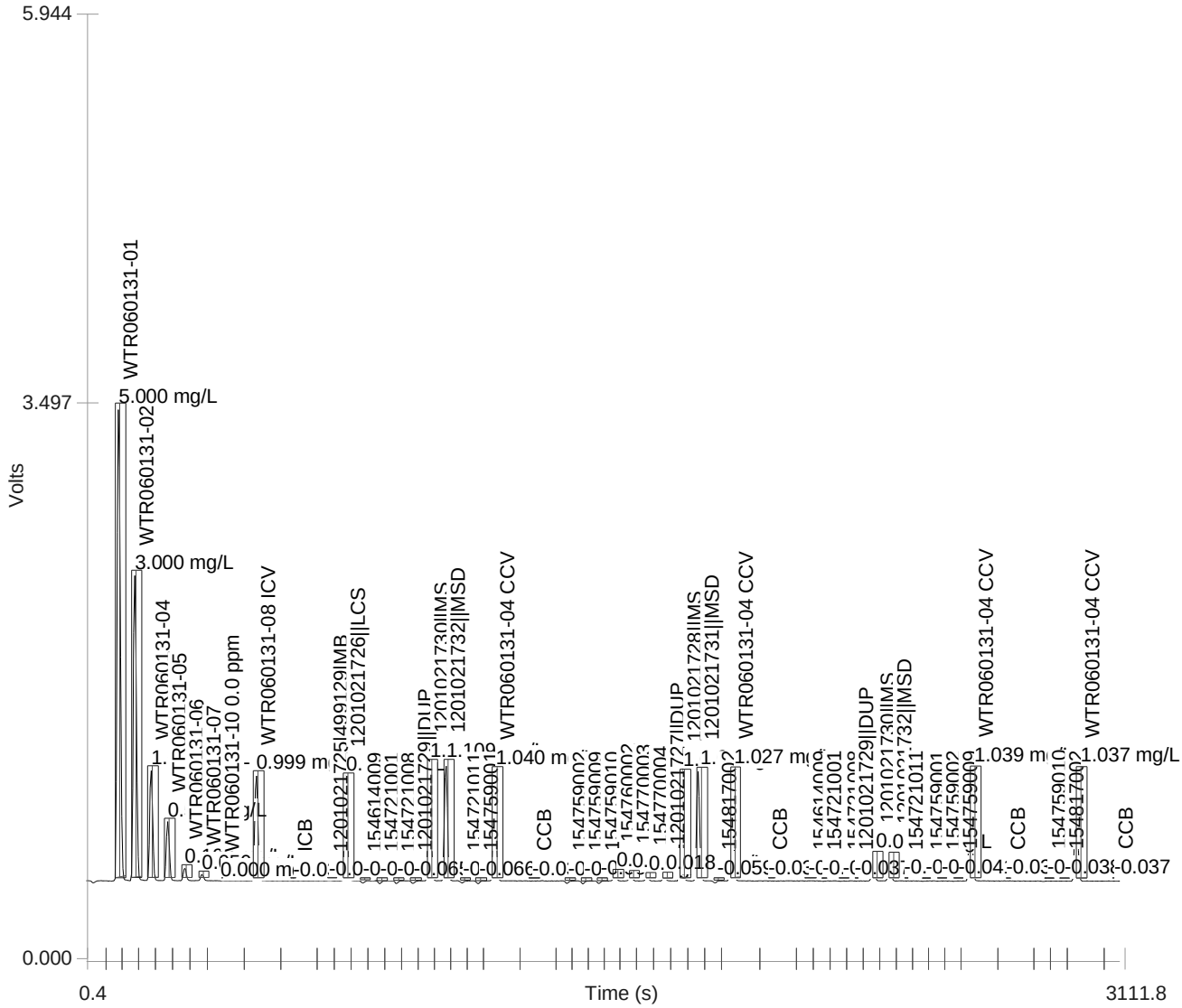
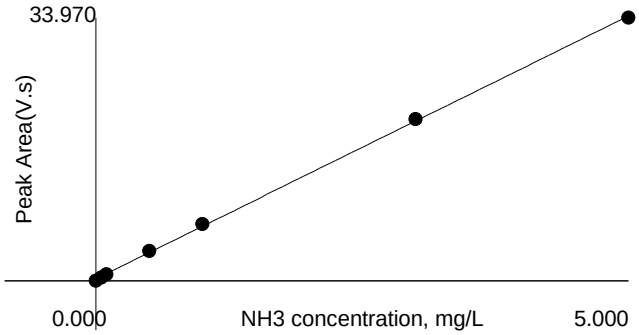


Table 1: NH3

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	33.970	2.983	0.6	1/31/2006	13:47:46
2	3.000	1	20.846	1.932	-1.1	1/31/2006	13:48:34
3	1.000	1	7.339	0.703	-4.2	1/31/2006	13:49:24
4	0.500	1	3.867	0.373	-6.0	1/31/2006	13:50:14
5	0.100	1	0.836	0.081	10.5	1/31/2006	13:51:05
6	0.050	1	0.420	0.040	29.4	1/31/2006	13:51:57
7	0.000	1	6.066e-5	6.279e-4		1/31/2006	13:52:50

Author: gxm2 Date : 1/31/2006

Figure 1: NH3



Area = 6.786 * Conc + 0.256
Conc = 0.147 * Area - 0.037
Correlation Coefficient (r) = 0.99983

No Weighting

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/2/2006 8:49:40	OM_2-2-2006_08-48-10
3.0 ppm Std.		1	gxm2	2/2/2006 8:50:29	OM_2-2-2006_08-48-10
1.0 ppm Std.		1	gxm2	2/2/2006 8:51:18	OM_2-2-2006_08-48-10
0.5 ppm Std		1	gxm2	2/2/2006 8:52:09	OM_2-2-2006_08-48-10
0.1 ppm Std		1	gxm2	2/2/2006 8:53:00	OM_2-2-2006_08-48-10
0.05 ppm Std		1	gxm2	2/2/2006 8:53:52	OM_2-2-2006_08-48-10
ICAL-00		1	gxm2	2/2/2006 8:54:46	OM_2-2-2006_08-48-10
ICV		1	gxm2	2/2/2006 8:56:37	OM_2-2-2006_08-48-10
ICB		1	gxm2	2/2/2006 8:58:29	OM_2-2-2006_08-48-10
1201020238	498444	1	gxm2	2/2/2006 9:00:28	OM_2-2-2006_08-48-10
1201020240	498444	1	gxm2	2/2/2006 9:02:50	OM_2-2-2006_08-48-10
1201020241	498444	1	gxm2	2/2/2006 9:03:38	OM_2-2-2006_08-48-10
1201020242	498444	1	gxm2	2/2/2006 9:04:26	OM_2-2-2006_08-48-10
154614004	498444	1	gxm2	2/2/2006 9:05:14	OM_2-2-2006_08-48-10
154614010	498444	1	gxm2	2/2/2006 9:06:01	OM_2-2-2006_08-48-10
154630002	498444	1	gxm2	2/2/2006 9:06:51	OM_2-2-2006_08-48-10
154630003	498444	1	gxm2	2/2/2006 9:07:43	OM_2-2-2006_08-48-10
CCV		1	gxm2	2/2/2006 9:08:34	OM_2-2-2006_08-48-10
CCB		1	gxm2	2/2/2006 9:10:23	OM_2-2-2006_08-48-10
154630004	498444	1	gxm2	2/2/2006 9:12:13	OM_2-2-2006_08-48-10
154630005	498444	1	gxm2	2/2/2006 9:13:04	OM_2-2-2006_08-48-10
154632001	498444	1	gxm2	2/2/2006 9:13:55	OM_2-2-2006_08-48-10
154649001	498444	1	gxm2	2/2/2006 9:14:45	OM_2-2-2006_08-48-10
154649002	498444	1	gxm2	2/2/2006 9:15:36	OM_2-2-2006_08-48-10
1201020239	498444	1	gxm2	2/2/2006 9:16:25	OM_2-2-2006_08-48-10
154614003	498444	1	gxm2	2/2/2006 9:17:14	OM_2-2-2006_08-48-10
1201020240	498444	10	gxm2	2/2/2006 9:18:03	OM_2-2-2006_08-48-10
1201020241	498444	10	gxm2	2/2/2006 9:18:52	OM_2-2-2006_08-48-10
1201020241	498444	10	gxm2	2/2/2006 9:19:40	OM_2-2-2006_08-48-10
CCV		1	gxm2	2/2/2006 9:20:29	OM_2-2-2006_08-48-10
CCB		1	gxm2	2/2/2006 9:22:19	OM_2-2-2006_08-48-10
154614004	498444	10	gxm2	2/2/2006 9:24:06	OM_2-2-2006_08-48-10
154630003	498444	10	gxm2	2/2/2006 9:24:56	OM_2-2-2006_08-48-10
154630004	498444	10	gxm2	2/2/2006 9:25:48	OM_2-2-2006_08-48-10
154630005	498444	10	gxm2	2/2/2006 9:26:38	OM_2-2-2006_08-48-10
154632001	498444	10	gxm2	2/2/2006 9:27:29	OM_2-2-2006_08-48-10
154649001	498444	10	gxm2	2/2/2006 9:28:20	OM_2-2-2006_08-48-10
154649002	498444	10	gxm2	2/2/2006 9:29:11	OM_2-2-2006_08-48-10
CCV		1	gxm2	2/2/2006 9:30:00	OM_2-2-2006_08-48-10
CCB		1	gxm2	2/2/2006 9:31:50	OM_2-2-2006_08-48-10

Author: gxm2 Date : 2/2/2006

Original Run Filename: OM_2-2-2006_08-48-10.OMN created 2/2/2006 08:48:10
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-2-2006_08-48-10.OMN last modified 2/2/2006 09:32:54
Current Run Author's Signature: [gxm2]
Description: Ammonia EPA Method 350.1 GEL SOP: GL-GC-E-019 REV 2 Detection Wavelength: 660nm
Sample spiked with 100ppm stock standard UTR021001-01 LCS/ICV/CCV/Spike nominal 1.0 ppm

Sample	Rep.	Cup No.	Channel 1 NH3 Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060201-01	1	S9	5.000	35.649	2/2/2006@08:49:40			5.0 ppm Std.
WTR060201-02	1	S10	3.000	21.012	2/2/2006@08:50:29			3.0 ppm Std.
WTR060201-04	1	S11	1.000	8.021	2/2/2006@08:51:18			1.0 ppm Std.
WTR060201-05	1	S12	0.500	4.418	2/2/2006@08:52:09			0.5 ppm Std
WTR060201-06	1	S13	0.100	0.876	2/2/2006@08:53:00			0.1 ppm Std
WTR060201-07	1	S14	0.050	0.451	2/2/2006@08:53:52			0.05 ppm Std
WTR060201-10 0.0 ppm	1	S15	0.000	0.044	2/2/2006@08:54:46			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99949 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR060201-08 ICV	1	S16	1.074	7.921	2/2/2006@08:56:37			ICV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.074 < 1.104					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.074 > 0.895					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S15	-0.044	0.047	2/2/2006@08:58:29			ICB/CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	-0.044 < 0.050					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.044 > -0.050					
		Message	ICB Passed					
		Action	Continue					
1201020238|498444|MB	1	8	-0.032	0.136	2/2/2006@09:00:28			
1201020239||LCS	1	9	1.222	8.963	2/2/2006@09:01:12			
154614003	1	10	1.206	8.855	2/2/2006@09:02:00			
1201020240||DUP	1	11	-0.076	-0.173	2/2/2006@09:02:50			
1201020241||MS	1	12	1.127	8.298	2/2/2006@09:03:38			
1201020242||MSD	1	13	1.132	8.328	2/2/2006@09:04:26			
154614004	1	14	-0.078	-0.191	2/2/2006@09:05:14			
154614010	1	15	-0.008	0.302	2/2/2006@09:06:01			
154630002	1	16	0.299	2.466	2/2/2006@09:06:51			
154630003	1	17	-0.055	-0.025	2/2/2006@09:07:43			
WTR060201-04 CCV	1	S11	1.072	7.907	2/2/2006@09:08:34			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.072 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.072 > 0.900					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.044	0.051	2/2/2006@09:10:23			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								

		Result:	-0.044 < 0.050					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.044 > -0.050					
		Message	CCB Passed					
		Action	Continue					
154630004	1	18	-0.072	-0.146	2/2/2006@09:12:13			
154630005	1	19	0.070	0.850	2/2/2006@09:13:04			
154632001	1	20	9.108	64.496	2/2/2006@09:13:55			
154649001	1	21	6.772	48.047	2/2/2006@09:14:45			
154649002	1	22	6.962	49.381	2/2/2006@09:15:36			
1201020239||LCS	1	9	0.993	7.349	2/2/2006@09:16:25			
154614003	1	10	-0.074	-0.164	2/2/2006@09:17:14			
~~Sample29~~ 1201020240	1	11	-0.046	0.034	2/2/2006@09:18:03			
~~Sample30~~ 1201020241	1	12	0.069	0.845	2/2/2006@09:18:52			
~~Sample31~~ 1201020242	1	13	0.070	0.856	2/2/2006@09:19:40			
WTR060201-04 CCV	1	S11	1.069	7.888	2/2/2006@09:20:29			CCV
		Known Conc:	1.000					
			DQM Test: > + Concentration Limit					
		Result:	1.069 < 1.104					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.069 > 0.900					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.044	0.047	2/2/2006@09:22:19			CCB
		Known Conc:	0.000					
			DQM Test: > + Concentration Limit					
		Result:	-0.044 < 0.050					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.044 > -0.050					
		Message	CCB Passed					
		Action	Continue					
154614004	1	14	-0.048	0.019	2/2/2006@09:24:06		10.00	
154630003	1	17	-0.046	0.038	2/2/2006@09:24:56		10.00	
154630004	1	18	-0.029	0.154	2/2/2006@09:25:48		10.00	
154630005	1	19	-0.025	0.186	2/2/2006@09:26:38		10.00	
154632001	1	20	2.133	15.377	2/2/2006@09:27:29		10.00	
154649001	1	21	1.154	8.483	2/2/2006@09:28:20		10.00	
154649002	1	22	1.317	9.633	2/2/2006@09:29:11		10.00	
WTR060201-04 CCV	1	S11	1.065	7.859	2/2/2006@09:30:00			CCV
		Known Conc:	1.000					
			DQM Test: > + Concentration Limit					
		Result:	1.065 < 1.104					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.065 > 0.900					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.044	0.052	2/2/2006@09:31:50			CCB
		Known Conc:	0.000					
			DQM Test: > + Concentration Limit					
		Result:	-0.044 < 0.050					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.044 > -0.050					
		Message	CCB Passed					
		Action	Continue					

Author: gxm2 Date : 2/2/2006

Channel 1 (NH3) : Current View

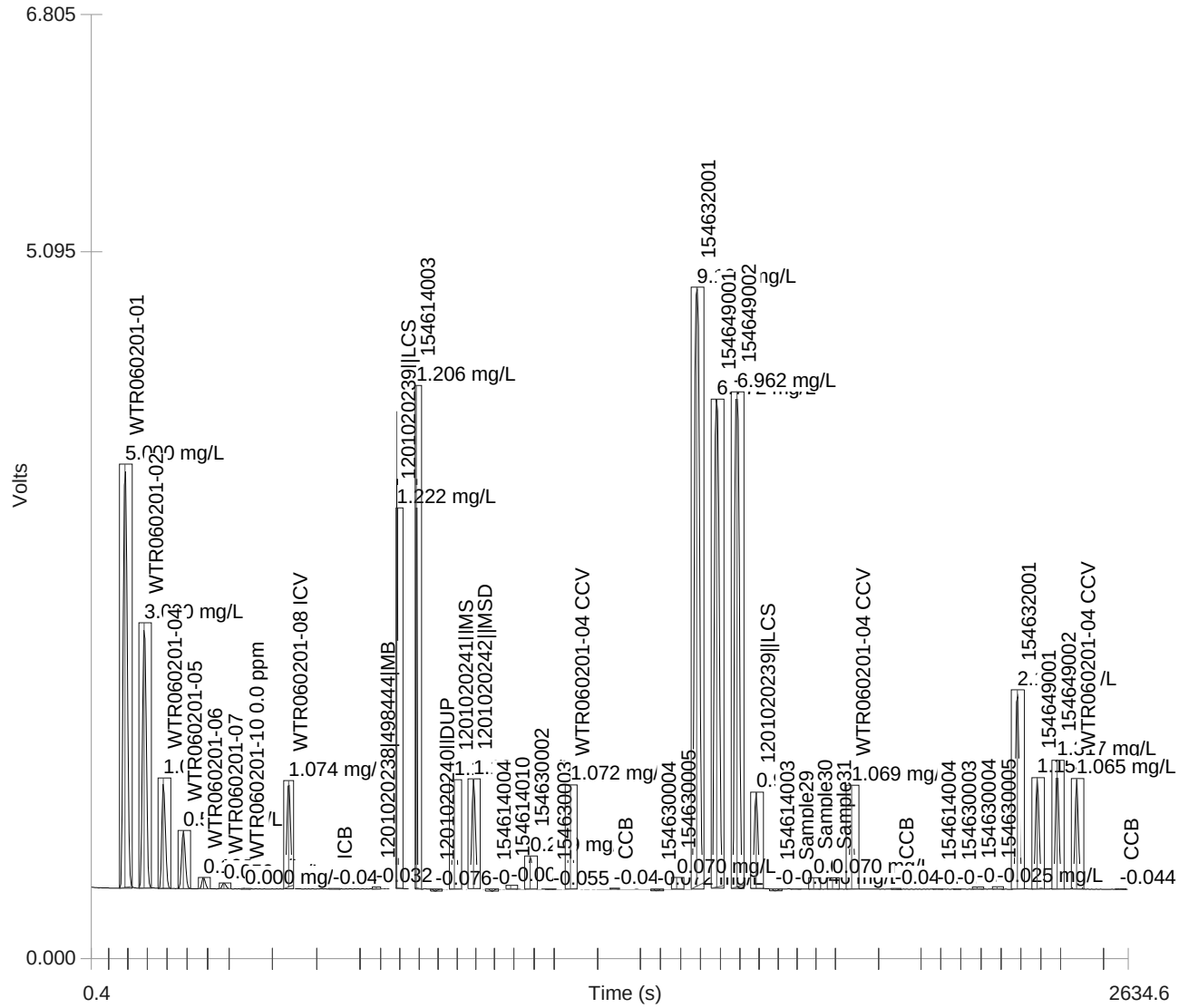
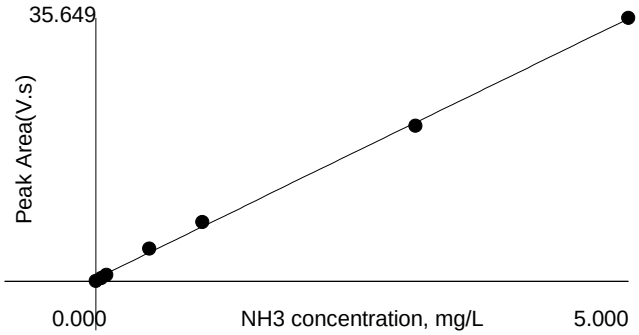


Table 1: NH3

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	35.649	3.052	-0.3	2/2/2006	08:50:43
2	3.000	1	21.012	1.911	2.1	2/2/2006	08:51:32
3	1.000	1	8.021	0.796	-8.3	2/2/2006	08:52:21
4	0.500	1	4.418	0.419	-13.7	2/2/2006	08:53:11
5	0.100	1	0.876	0.083	18.4	2/2/2006	08:54:02
6	0.050	1	0.451	0.042	37.5	2/2/2006	08:54:55
7	0.000	1	0.044	0.004		2/2/2006	08:55:49

Author: gxm2 Date : 2/2/2006

Figure 1: NH3



Area = 7.034 * Conc + 0.370
Conc = 0.142 * Area - 0.051
Correlation Coefficient (r) = 0.99949

No Weighting

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/2/2006 15:19:13	OM_2-2-2006_15-18-27
3.0 ppm Std.		1	gxm2	2/2/2006 15:20:01	OM_2-2-2006_15-18-27
1.0 ppm Std.		1	gxm2	2/2/2006 15:20:51	OM_2-2-2006_15-18-27
0.5 ppm Std		1	gxm2	2/2/2006 15:21:41	OM_2-2-2006_15-18-27
0.1 ppm Std		1	gxm2	2/2/2006 15:22:32	OM_2-2-2006_15-18-27
0.05 ppm Std		1	gxm2	2/2/2006 15:23:24	OM_2-2-2006_15-18-27
ICAL-00		1	gxm2	2/2/2006 15:24:17	OM_2-2-2006_15-18-27
ICV		1	gxm2	2/2/2006 15:26:08	OM_2-2-2006_15-18-27
ICB		1	gxm2	2/2/2006 15:27:58	OM_2-2-2006_15-18-27
154614003	498444	10	gxm2	2/2/2006 15:29:47	OM_2-2-2006_15-18-27
CCV		1	gxm2	2/2/2006 15:30:38	OM_2-2-2006_15-18-27
CCB		1	gxm2	2/2/2006 15:32:28	OM_2-2-2006_15-18-27

Author: gxm2 Date : 2/2/2006

Original Run Filename: OM_2-2-2006_15-18-27.OMN created 2/2/2006 15:18:27
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-2-2006_15-18-27.OMN last modified 2/2/2006 15:33:32
Current Run Author's Signature: [gxm2]
Description: Ammonia EPA Method 350.1 GEL SOP: GL-GC-E-019 REV 2 Detection Wavelength: 660nm
Sample spiked with 100ppm stock standard UTR021001-01 LCS/ICV/CCV/Spike nominal 1.0 ppm

Sample	Rep.	Cup No.	Channel 1 NH3 Conc. (mg/L)	Channel 1 NH3 Area (Vs)	Detection Time	ADF	MDF	Description
WTR060202-01	1	S9	5.000	34.275	2/2/2006@15:19:13			5.0 ppm Std.
WTR060202-02	1	S10	3.000	21.227	2/2/2006@15:20:01			3.0 ppm Std.
WTR060202-04	1	S11	1.000	7.722	2/2/2006@15:20:51			1.0 ppm Std.
WTR060202-05	1	S12	0.500	4.426	2/2/2006@15:21:41			0.5 ppm Std
WTR060202-06	1	S13	0.100	0.983	2/2/2006@15:22:32			0.1 ppm Std
WTR060202-07	1	S14	0.050	0.468	2/2/2006@15:23:24			0.05 ppm Std
WTR060202-10 0.0 ppm	1	S15	0.000	0.684	2/2/2006@15:24:17			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99963 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR060201-08 ICV	1	S16	1.053	7.759	2/2/2006@15:26:08			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.053 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.053 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	0.010	0.681	2/2/2006@15:27:58			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.010 < 0.050					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.010 > -0.050					
Message			ICB Passed					
Action			Continue					
154614003|498444|	1	1	-0.020	0.481	2/2/2006@15:29:47			
WTR060202-04 CCV	1	S11	1.044	7.700	2/2/2006@15:30:38			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.044 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.044 > 0.900					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	0.009	0.675	2/2/2006@15:32:28			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.009 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.009 > -0.050					
Message			CCB Passed					
Action			Continue					

Author: gxm2 Date : 2/2/2006

Channel 1 (NH3) : Current View

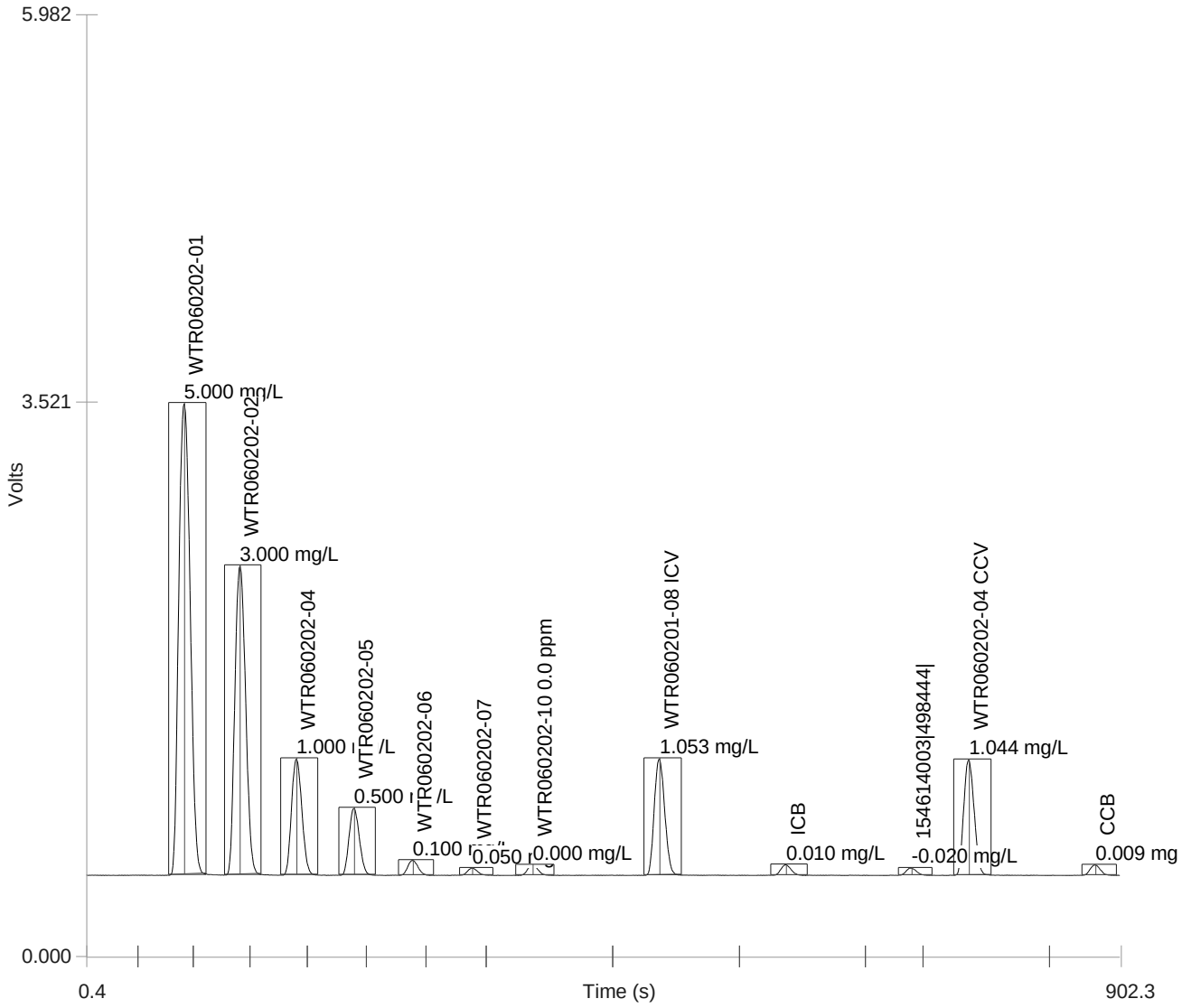
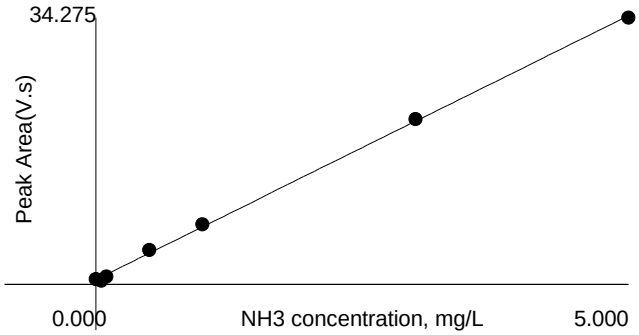


Table 1: NH3

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	34.275	2.994	0.7	2/2/2006	15:20:15
2	3.000	1	21.227	1.964	-1.3	2/2/2006	15:21:04
3	1.000	1	7.722	0.741	-4.3	2/2/2006	15:21:53
4	0.500	1	4.426	0.427	-10.3	2/2/2006	15:22:44
5	0.100	1	0.983	0.095	24.3	2/2/2006	15:23:35
6	0.050	1	0.468	0.046	51.3	2/2/2006	15:24:27
7	0.000	1	0.684	0.066		2/2/2006	15:25:20

Author: gxm2 Date : 2/2/2006

Figure 1: NH3



Area = 6.781 * Conc + 0.621
Conc = 0.147 * Area - 0.090
Correlation Coefficient (r) = 0.99963

No Weighting

Cyanide, Total

Prep LogBook

Analyst: LXW1 Verified by:_____

Batch: 498746

Lab SOP: GL-GC-E-067 REV# 8

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201020834	URF051109-01	.025	mL
MS	1201020830	URF051109-01	.05	mL
MS	1201020831	URF051109-01	.05	mL
MSD	1201020832	URF051109-01	.05	mL
MSD	1201020833	URF051109-01	.05	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201020827		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
LCS	1201020834		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154593001		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154593002		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154593003		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154593004		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154593005		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154593006		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154600002		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154600003		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154600004		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154600005		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154600006		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154600007		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154600019		SW846 9010B Prep	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614001		EPA 335.3	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614002		EPA 335.3	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614003		EPA 335.3	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
DUP	1201020828	154614003	EPA 335.3	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
MS	1201020830	154614003	EPA 335.3	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
MSD	1201020832	154614003	EPA 335.3	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614004		EPA 335.3	03-FEB-2006 11:56	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614008		EPA 335.3	03-FEB-2006 11:57	50 mL	50 mL	1	GROUND WATER
DUP	1201020829	154614008	EPA 335.3	03-FEB-2006 11:57	50 mL	50 mL	1	GROUND WATER
MS	1201020831	154614008	EPA 335.3	03-FEB-2006 11:57	50 mL	50 mL	1	GROUND WATER
MSD	1201020833	154614008	EPA 335.3	03-FEB-2006 11:57	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614009		EPA 335.3	03-FEB-2006 11:57	50 mL	50 mL	1	GROUND WATER
SAMPLE	154614010		EPA 335.3	03-FEB-2006 11:57	50 mL	50 mL	1	GROUND WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
492089-C	50 mL	0.25N Sodium Hydroxide Solution
490598-C	2.5 mL	Bismuth Nitrate Solution
493013-C	5 mL	50% H2SO4 CN Prep
488316-C	2 mL	51% Magnesium Chloride Solution
489934-C	2.5 mL	Sulfamic Acid Solution

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	klp1	2/3/2006 15:02:59	OM_2-3-2006_15-01-25
150 ppb		1	klp1	2/3/2006 15:03:52	OM_2-3-2006_15-01-25
100 ppb		1	klp1	2/3/2006 15:04:44	OM_2-3-2006_15-01-25
50 ppb		1	klp1	2/3/2006 15:05:38	OM_2-3-2006_15-01-25
10 ppb		1	klp1	2/3/2006 15:06:31	OM_2-3-2006_15-01-25
CRDL 5.0 ppb		1	klp1	2/3/2006 15:07:25	OM_2-3-2006_15-01-25
ICAL-00		1	klp1	2/3/2006 15:08:20	OM_2-3-2006_15-01-25
ICV		1	klp1	2/3/2006 15:10:11	OM_2-3-2006_15-01-25
ICB		1	klp1	2/3/2006 15:12:01	OM_2-3-2006_15-01-25
CRDL		1	klp1	2/3/2006 15:13:52	OM_2-3-2006_15-01-25
1201020827	498748	1	klp1	2/3/2006 15:15:42	OM_2-3-2006_15-01-25
1201020834	498748	1	klp1	2/3/2006 15:16:36	OM_2-3-2006_15-01-25
154593001	498748	1	klp1	2/3/2006 15:17:29	OM_2-3-2006_15-01-25
154593002	498748	1	klp1	2/3/2006 15:18:23	OM_2-3-2006_15-01-25
154593003	498748	1	klp1	2/3/2006 15:19:16	OM_2-3-2006_15-01-25
154593004	498748	1	klp1	2/3/2006 15:20:09	OM_2-3-2006_15-01-25
154593005	498748	1	klp1	2/3/2006 15:21:02	OM_2-3-2006_15-01-25
154593006	498748	1	klp1	2/3/2006 15:21:55	OM_2-3-2006_15-01-25
154600002	498748	1	klp1	2/3/2006 15:22:47	OM_2-3-2006_15-01-25
154600003	498748	1	klp1	2/3/2006 15:23:40	OM_2-3-2006_15-01-25
CCV		1	klp1	2/3/2006 15:24:33	OM_2-3-2006_15-01-25
CCB		1	klp1	2/3/2006 15:26:24	OM_2-3-2006_15-01-25
154600004	498748	1	klp1	2/3/2006 15:28:13	OM_2-3-2006_15-01-25
154600005	498748	1	klp1	2/3/2006 15:29:05	OM_2-3-2006_15-01-25
154600006	498748	1	klp1	2/3/2006 15:29:57	OM_2-3-2006_15-01-25
154600007	498748	1	klp1	2/3/2006 15:30:50	OM_2-3-2006_15-01-25
154600019	498748	1	klp1	2/3/2006 15:31:41	OM_2-3-2006_15-01-25
154614001	498748	1	klp1	2/3/2006 15:32:36	OM_2-3-2006_15-01-25
154614002	498748	1	klp1	2/3/2006 15:33:29	OM_2-3-2006_15-01-25
154614003	498748	1	klp1	2/3/2006 15:34:23	OM_2-3-2006_15-01-25
1201020828	498748	1	klp1	2/3/2006 15:35:17	OM_2-3-2006_15-01-25
1201020830	498748	1	klp1	2/3/2006 15:36:10	OM_2-3-2006_15-01-25
CCV		1	klp1	2/3/2006 15:37:03	OM_2-3-2006_15-01-25
CCB		1	klp1	2/3/2006 15:38:54	OM_2-3-2006_15-01-25
1201020832	498748	1	klp1	2/3/2006 15:40:43	OM_2-3-2006_15-01-25
154614004	498748	1	klp1	2/3/2006 15:41:37	OM_2-3-2006_15-01-25
154614008	498748	1	klp1	2/3/2006 15:42:30	OM_2-3-2006_15-01-25
1201020829	498748	1	klp1	2/3/2006 15:43:23	OM_2-3-2006_15-01-25
1201020831	498748	1	klp1	2/3/2006 15:44:16	OM_2-3-2006_15-01-25
1201020833	498748	1	klp1	2/3/2006 15:45:08	OM_2-3-2006_15-01-25
154614009	498748	1	klp1	2/3/2006 15:46:01	OM_2-3-2006_15-01-25
154614010	498748	1	klp1	2/3/2006 15:46:53	OM_2-3-2006_15-01-25
1201020847	498756	1	klp1	2/3/2006 15:47:45	OM_2-3-2006_15-01-25
1201020848	498756	1	klp1	2/3/2006 15:48:37	OM_2-3-2006_15-01-25
CCV		1	klp1	2/3/2006 15:49:30	OM_2-3-2006_15-01-25
CCB		1	klp1	2/3/2006 15:51:21	OM_2-3-2006_15-01-25
154593001	498756	1	klp1	2/3/2006 15:53:13	OM_2-3-2006_15-01-25
154593002	498756	1	klp1	2/3/2006 15:54:06	OM_2-3-2006_15-01-25
1201020849	498756	1	klp1	2/3/2006 15:55:00	OM_2-3-2006_15-01-25
154593003	498756	1	klp1	2/3/2006 15:55:54	OM_2-3-2006_15-01-25
154593004	498756	1	klp1	2/3/2006 15:56:47	OM_2-3-2006_15-01-25
154593005	498756	1	klp1	2/3/2006 15:57:41	OM_2-3-2006_15-01-25
154593006	498756	1	klp1	2/3/2006 15:58:35	OM_2-3-2006_15-01-25
1201022300	499381	1	klp1	2/3/2006 15:59:28	OM_2-3-2006_15-01-25
1201025733	499381	1	klp1	2/3/2006 16:00:20	OM_2-3-2006_15-01-25
1201022301	499381	1	klp1	2/3/2006 16:01:14	OM_2-3-2006_15-01-25
CCV		1	klp1	2/3/2006 16:02:07	OM_2-3-2006_15-01-25
CCB		1	klp1	2/3/2006 16:03:57	OM_2-3-2006_15-01-25

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1201025734          499381   1     klp1  2/3/2006 16:05:46 OM_2-3-2006_15-01-25
154627014           499381   1     klp1  2/3/2006 16:06:39 OM_2-3-2006_15-01-25
154627015           499381   1     klp1  2/3/2006 16:07:32 OM_2-3-2006_15-01-25
154627016           499381   1     klp1  2/3/2006 16:08:24 OM_2-3-2006_15-01-25
154627017           499381   1     klp1  2/3/2006 16:09:16 OM_2-3-2006_15-01-25
154627018           499381   1     klp1  2/3/2006 16:10:11 OM_2-3-2006_15-01-25
154627019           499381   1     klp1  2/3/2006 16:11:06 OM_2-3-2006_15-01-25
154627020           499381   1     klp1  2/3/2006 16:12:00 OM_2-3-2006_15-01-25
154628001           499381   1     klp1  2/3/2006 16:12:54 OM_2-3-2006_15-01-25
1201022302          499381   1     klp1  2/3/2006 16:13:48 OM_2-3-2006_15-01-25
CCV                          1     klp1  2/3/2006 16:14:40 OM_2-3-2006_15-01-25
CCB                          1     klp1  2/3/2006 16:16:31 OM_2-3-2006_15-01-25
1201022303          499381   1     klp1  2/3/2006 16:18:21 OM_2-3-2006_15-01-25
1201022306          499381   1     klp1  2/3/2006 16:19:15 OM_2-3-2006_15-01-25
154628002           499381   1     klp1  2/3/2006 16:20:08 OM_2-3-2006_15-01-25
154628003           499381   1     klp1  2/3/2006 16:21:01 OM_2-3-2006_15-01-25
154628004           499381   1     klp1  2/3/2006 16:21:54 OM_2-3-2006_15-01-25
154630002           499381   1     klp1  2/3/2006 16:22:47 OM_2-3-2006_15-01-25
154630003           499381   1     klp1  2/3/2006 16:23:40 OM_2-3-2006_15-01-25
154630004           499381   1     klp1  2/3/2006 16:24:33 OM_2-3-2006_15-01-25
154630005           499381   1     klp1  2/3/2006 16:25:25 OM_2-3-2006_15-01-25
154721001           499381   1     klp1  2/3/2006 16:26:18 OM_2-3-2006_15-01-25
CCV                          1     klp1  2/3/2006 16:27:11 OM_2-3-2006_15-01-25
CCB                          1     klp1  2/3/2006 16:29:01 OM_2-3-2006_15-01-25
1201022304          499381   1     klp1  2/3/2006 16:30:52 OM_2-3-2006_15-01-25
1201022305          499381   1     klp1  2/3/2006 16:31:47 OM_2-3-2006_15-01-25
1201022307          499381   1     klp1  2/3/2006 16:32:42 OM_2-3-2006_15-01-25
154721008           499381   1     klp1  2/3/2006 16:33:35 OM_2-3-2006_15-01-25
1201025024          499381   1     klp1  2/3/2006 16:34:30 OM_2-3-2006_15-01-25
1201025025          499381   1     klp1  2/3/2006 16:35:24 OM_2-3-2006_15-01-25
1201025026          499381   1     klp1  2/3/2006 16:36:17 OM_2-3-2006_15-01-25
154721011           499381   1     klp1  2/3/2006 16:37:11 OM_2-3-2006_15-01-25
154760001           499381   1     klp1  2/3/2006 16:38:03 OM_2-3-2006_15-01-25
154760002           499381   1     klp1  2/3/2006 16:38:56 OM_2-3-2006_15-01-25
CCV                          1     klp1  2/3/2006 16:39:50 OM_2-3-2006_15-01-25
CCB                          1     klp1  2/3/2006 16:41:41 OM_2-3-2006_15-01-25
1201025719          497152   1     klp1  2/3/2006 16:43:32 OM_2-3-2006_15-01-25
1201025720          497152   1     klp1  2/3/2006 16:44:25 OM_2-3-2006_15-01-25
154502011           497152   1     klp1  2/3/2006 16:45:18 OM_2-3-2006_15-01-25
1201017356          497152   1     klp1  2/3/2006 16:46:11 OM_2-3-2006_15-01-25
1201017357          497152   1     klp1  2/3/2006 16:47:05 OM_2-3-2006_15-01-25
1201020834          498748   1     klp1  2/3/2006 16:47:58 OM_2-3-2006_15-01-25
154600006           498748   10    klp1  2/3/2006 16:48:50 OM_2-3-2006_15-01-25
154721008           499381   1     klp1  2/3/2006 16:49:46 OM_2-3-2006_15-01-25
154502011           497152   10    klp1  2/3/2006 16:50:41 OM_2-3-2006_15-01-25
1201017356          497152   10    klp1  2/3/2006 16:51:36 OM_2-3-2006_15-01-25
CCV                          1     klp1  2/3/2006 16:52:28 OM_2-3-2006_15-01-25
CCB                          1     klp1  2/3/2006 16:54:20 OM_2-3-2006_15-01-25
1201017357          497152   10    klp1  2/3/2006 16:56:09 OM_2-3-2006_15-01-25
1201020834          498748   1     klp1  2/3/2006 16:57:04 OM_2-3-2006_15-01-25
CCV                          1     klp1  2/3/2006 16:57:57 OM_2-3-2006_15-01-25
CCB                          1     klp1  2/3/2006 16:59:49 OM_2-3-2006_15-01-25
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Original Run Filename: OM_2-3-2006_15-01-25.OMN created 2/3/2006 15:01:25
Original Run Author's Signature: [klp1]
Current Run Filename: OM_2-3-2006_15-01-25.OMN last modified 2/3/2006 17:00:56
Current Run Author's Signature: [klp1]

Sample	Rep.	Cup No.	Channel 1 TCYANIDE Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN060203-01	1	S1	200	4.68	2/3/2006@15:02:59			200 ppb
WCN060203-02	1	S2	150	3.57	2/3/2006@15:03:52			150 ppb
WCN060203-03	1	S3	100	2.35	2/3/2006@15:04:44			100 ppb
WCN060203-04	1	S4	50.0	1.28	2/3/2006@15:05:38			50 ppb
WCN060203-05	1	S5	10.0	0.253	2/3/2006@15:06:31			10 ppb
WCN060203-06	1	S6	5.00	0.131	2/3/2006@15:07:25			CRDL 5.0 ppb
0.0	1	S7	0.00	0.0603	2/3/2006@15:08:20			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99978 > 0.99500					
Message			Pass					
Action			Continue					
WCN060203-07	1	S8	145	3.42	2/3/2006@15:10:11			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.6 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB/CCB	1	S7	-0.982	0.0243	2/3/2006@15:12:01			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-0.982 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.982 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN060203-06	1	S6	3.82	0.136	2/3/2006@15:13:52			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			3.82 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			3.82 > 2.50					
Message			CRDL Passed					
Action			Continue					
1201020827|498748|MB	1	1	-1.49	0.0123	2/3/2006@15:15:42			
1201020834||LCS	1	2	44.5	1.08	2/3/2006@15:16:36			
154593001	1	3	0.321	0.0546	2/3/2006@15:17:29			
154593002	1	4	-0.0141	0.0468	2/3/2006@15:18:23			
154593003	1	5	0.0189	0.0476	2/3/2006@15:19:16			
154593004	1	6	0.142	0.0505	2/3/2006@15:20:09			
154593005	1	7	-0.715	0.0305	2/3/2006@15:21:02			
154593006	1	8	5.02	0.164	2/3/2006@15:21:55			
154600002	1	9	-0.742	0.0299	2/3/2006@15:22:47			
154600003	1	10	-1.20	0.0192	2/3/2006@15:23:40			
WCN060203-03	1	S3	101	2.40	2/3/2006@15:24:33			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								

		Result:	1.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.325	0.0547	2/3/2006@15:26:24			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.325 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.325 > -5.00					
		Message	CCB Passed					
		Action	Continue					
154600004	1	11	5.52	0.176	2/3/2006@15:28:13			
154600005	1	12	87.9	2.10	2/3/2006@15:29:05			
154600006	1	13	416	9.73	2/3/2006@15:29:57			
154600007	1	14	1.07	0.0721	2/3/2006@15:30:50			
154600019	1	15	-1.17	0.0198	2/3/2006@15:31:41			
154614001	1	16	-1.89	0.00315	2/3/2006@15:32:36			
154614002	1	17	-0.838	0.0276	2/3/2006@15:33:29			
154614003	1	18	-1.57	0.0105	2/3/2006@15:34:23			
1201020828||DUP	1	19	-1.08	0.0220	2/3/2006@15:35:17			
1201020830||MS	1	20	104	2.47	2/3/2006@15:36:10			
WCN060203-03	1	S3	103	2.44	2/3/2006@15:37:03			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-1.13	0.0208	2/3/2006@15:38:54			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.13 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.13 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201020832||MSD	1	21	101	2.41	2/3/2006@15:40:43			
154614004	1	22	-1.36	0.0155	2/3/2006@15:41:37			
154614008	1	23	0.345	0.0552	2/3/2006@15:42:30			
1201020829||DUP	1	24	-0.147	0.0437	2/3/2006@15:43:23			
1201020831||MS	1	25	110	2.60	2/3/2006@15:44:16			
1201020833||MSD	1	26	109	2.59	2/3/2006@15:45:08			
154614009	1	27	3.92	0.138	2/3/2006@15:46:01			
154614010	1	28	0.144	0.0505	2/3/2006@15:46:53			
1201020847|498756|MB	1	29	2.34	0.102	2/3/2006@15:47:45			
1201020848||LCS	1	30	0.570	0.0604	2/3/2006@15:48:37			
WCN060203-03	1	S3	102	2.43	2/3/2006@15:49:30			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.636	0.0620	2/3/2006@15:51:21			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	0.636 < 5.00					
		Message	CCB Passed					

		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.636 > -5.00					
		Message	CCB Passed					
		Action	Continue					
154593001	1	31	-0.624	0.0326	2/3/2006@15:53:13			
154593002	1	32	2.28	0.100	2/3/2006@15:54:06			
1201020849||DUP	1	33	0.719	0.0639	2/3/2006@15:55:00			
154593003	1	34	0.511	0.0590	2/3/2006@15:55:54			
154593004	1	35	1.97	0.0930	2/3/2006@15:56:47			
154593005	1	36	2.04	0.0946	2/3/2006@15:57:41			
154593006	1	37	6.42	0.197	2/3/2006@15:58:35			
1201022300|499381|MB	1	38	3.86	0.137	2/3/2006@15:59:28			
1201025733||MB	1	39	-0.806	0.0284	2/3/2006@16:00:20			
1201022301||LCS	1	40	50.5	1.22	2/3/2006@16:01:14			
WCN060203-03	1	S3	103	2.44	2/3/2006@16:02:07			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-2.03	-1.36e-4	2/3/2006@16:03:57			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.03 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.03 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201025734||LCS	1	41	49.2	1.19	2/3/2006@16:05:46			
154627014	1	42	-2.03	-4.35e-5	2/3/2006@16:06:39			
154627015	1	43	-0.422	0.0373	2/3/2006@16:07:32			
154627016	1	44	-0.922	0.0257	2/3/2006@16:08:24			
154627017	1	45	-2.14	-0.00276	2/3/2006@16:09:16			
154627018	1	46	-0.349	0.0390	2/3/2006@16:10:11			
154627019	1	47	-2.04	-4.53e-4	2/3/2006@16:11:06			
154627020	1	48	-2.45	-0.00995	2/3/2006@16:12:00			
154628001	1	49	0.291	0.0539	2/3/2006@16:12:54			
1201022302||DUP	1	50	-2.27	-0.00566	2/3/2006@16:13:48			
WCN060203-03	1	S3	102	2.43	2/3/2006@16:14:40			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	-0.761	0.0294	2/3/2006@16:16:31			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.761 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.761 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1201022303||MS	1	51	96.8	2.30	2/3/2006@16:18:21			
1201022306||MSD	1	52	107	2.54	2/3/2006@16:19:15			
154628002	1	53	4.00	0.140	2/3/2006@16:20:08			

154628003	1	54	2.31	0.101	2/3/2006@16:21:01			
154628004	1	55	-0.556	0.0342	2/3/2006@16:21:54			
154630002	1	56	-0.278	0.0407	2/3/2006@16:22:47			
154630003	1	57	-0.0497	0.0460	2/3/2006@16:23:40			
154630004	1	58	-0.793	0.0287	2/3/2006@16:24:33			
154630005	1	59	-0.720	0.0304	2/3/2006@16:25:25			
154721001	1	60	-2.06	-9.17e-4	2/3/2006@16:26:18			
WCN060203-03	1	S3	96.1	2.29	2/3/2006@16:27:11			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	2.80	0.112	2/3/2006@16:29:01			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			2.80 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			2.80 > -5.00					
Message			CCB Passed					
Action			Continue					
1201022304||DUP	1	61	0.538	0.0597	2/3/2006@16:30:52			
1201022305||MS	1	62	97.5	2.32	2/3/2006@16:31:47			
1201022307||MSD	1	63	101	2.40	2/3/2006@16:32:42			
154721008	1	64	5.96	0.186	2/3/2006@16:33:35			
1201025024||DUP	1	65	-0.836	0.0277	2/3/2006@16:34:30			
1201025025||MS	1	66	99.0	2.35	2/3/2006@16:35:24			
1201025026||MSD	1	67	110	2.60	2/3/2006@16:36:17			
154721011	1	68	5.23	0.169	2/3/2006@16:37:11			
154760001	1	69	0.996	0.0703	2/3/2006@16:38:03			
154760002	1	70	-0.490	0.0357	2/3/2006@16:38:56			
WCN060203-03	1	S3	96.2	2.29	2/3/2006@16:39:50			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-3.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.8 < 10.0					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	3.52	0.129	2/3/2006@16:41:41			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			3.52 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			3.52 > -5.00					
Message			CCB Passed					
Action			Continue					
1201025719|497152|MB	1	71	-0.210	0.0423	2/3/2006@16:43:32			
1201025720||LCS	1	72	47.5	1.15	2/3/2006@16:44:25			
154502011	1	73	156	3.69	2/3/2006@16:45:18			
1201017356||DUP	1	74	187	4.41	2/3/2006@16:46:11			
1201017357||MS	1	75	266	6.24	2/3/2006@16:47:05			
1201020834|498748|LCS	1	2	63.4	1.52	2/3/2006@16:47:58			
154600006	1	13	41.9	1.02	2/3/2006@16:48:50		10.00	
154721008|499381|	1	64	2.00	0.0938	2/3/2006@16:49:46			
154502011|497152|	1	73	15.7	0.412	2/3/2006@16:50:41		10.00	
1201017356||DUP	1	74	14.8	0.391	2/3/2006@16:51:36		10.00	
WCN060203-03	1	S3	96.1	2.29	2/3/2006@16:52:28			CCV

Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	1.00	0.0706	2/3/2006@16:54:20			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			1.00 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.00 > -5.00					
Message			CCB Passed					
Action			Continue					
1201017357||MS	1	75	19.8	0.509	2/3/2006@16:56:09		10.00	
1201020834|498748|LCS	1	2	47.3	1.15	2/3/2006@16:57:04			
WCN060203-03	1	S3	99.4	2.36	2/3/2006@16:57:57			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			-0.6 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-0.6 < 10.0					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	4.65	0.155	2/3/2006@16:59:49			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			4.65 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.65 > -5.00					
Message			CCB Passed					
Action			Continue					

Analyte Properties Table for OM_2-3-2006_15-01-25.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

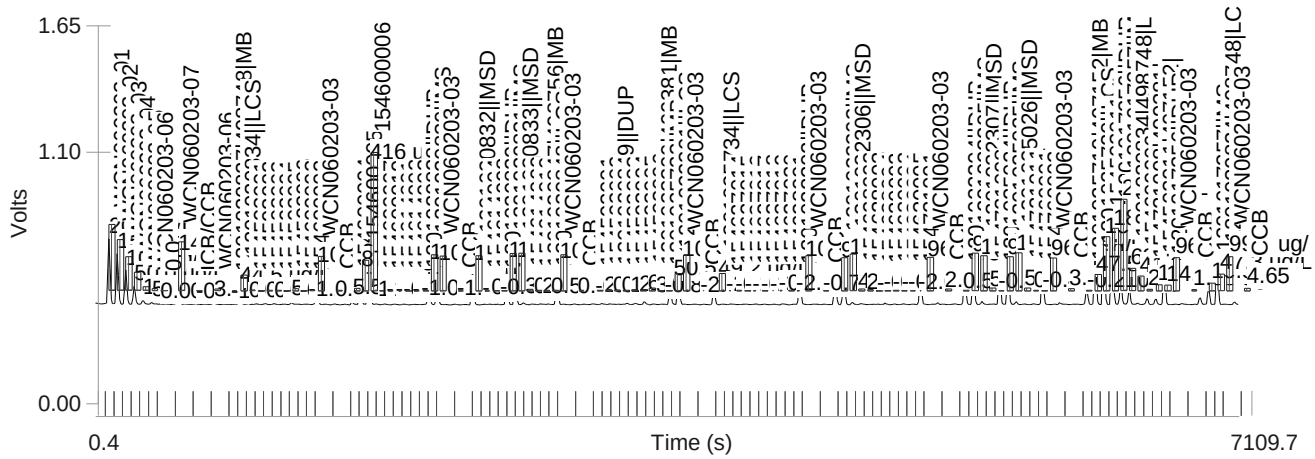
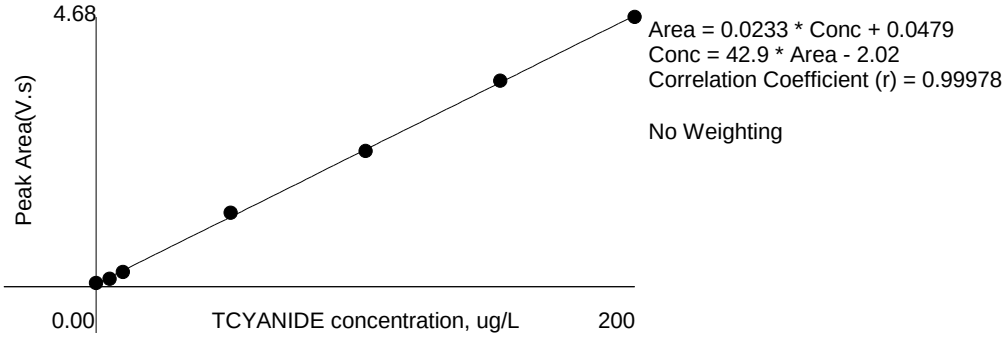


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	4.68	0.288	0.5	2/3/2006	15:04:02
2	150	1	3.57	0.222	-0.9	2/3/2006	15:04:55
3	100	1	2.35	0.147	1.1	2/3/2006	15:05:47
4	50.0	1	1.28	0.0796	-5.7	2/3/2006	15:06:41
5	10.0	1	0.253	0.0156	9.9	2/3/2006	15:07:34
6	5.00	1	0.131	0.00831	20.3	2/3/2006	15:08:28
7	0.00	1	0.0603	5.90e-4		2/3/2006	15:09:23

Figure 1: TCYANIDE



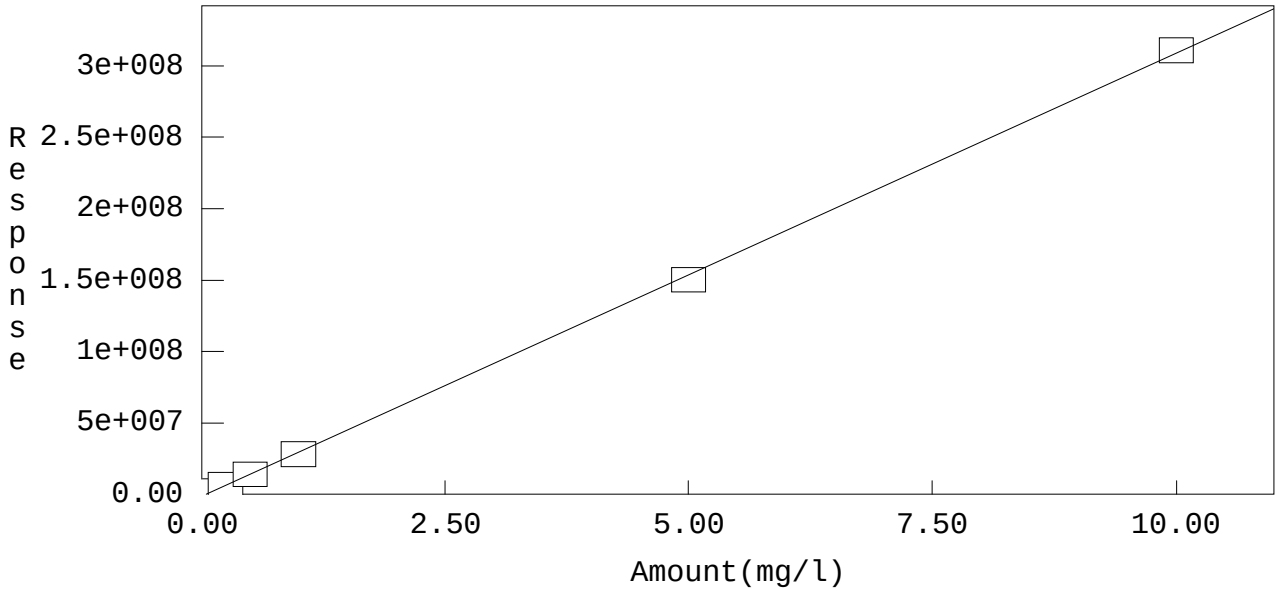
Ion Chromatography

METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			RXM1	01/11/2006 09:55:00	AZAKLC01.R01
WIC060111-02ICV:1		1	RXM1	01/11/2006 10:15:18	AZAKLC01.R02
AUTOCAL7:			RXM1	01/11/2006 12:03:06	AZAKLC01.R03
AUTOCAL6:			RXM1	01/11/2006 12:23:48	AZAKLC01.R04
AUTOCAL5:			RXM1	01/11/2006 12:44:08	AZAKLC01.R05
AUTOCAL4:			RXM1	01/11/2006 13:04:36	AZAKLC01.R06
AUTOCAL3:			RXM1	01/11/2006 13:25:05	AZAKLC01.R07
AUTOCAL2:			RXM1	01/11/2006 13:45:34	AZAKLC01.R08
AUTOCAL1:			RXM1	01/11/2006 14:05:52	AZAKLC01.R09
WIC060111-02ICV:1		1	RXM1	01/11/2006 14:26:10	AZAKLC01.R10
ICB:			RXM1	01/11/2006 14:46:39	AZAKLC01.R11
1201008216:1	493138	1	RXM1	01/11/2006 15:34:33	AZAKLC01.R12
153357001:1	493138	1	RXM1	01/11/2006 15:55:02	AZAKLC01.R13
153357002:1	493138	1	RXM1	01/11/2006 16:15:31	AZAKLC01.R14
153357003:1	493138	1	RXM1	01/11/2006 16:36:00	AZAKLC01.R15
153357004:1	493138	1	RXM1	01/11/2006 16:56:29	AZAKLC01.R16
153357005:1	493138	1	RXM1	01/11/2006 17:16:47	AZAKLC01.R17
153357006:1	493138	1	RXM1	01/11/2006 17:37:04	AZAKLC01.R18
153357007:1	493138	1	RXM1	01/11/2006 17:57:33	AZAKLC01.R19
WIC060111-02CVH:1		1	RXM1	01/11/2006 18:18:02	AZAKLC01.R20
CCB:			RXM1	01/11/2006 18:38:20	AZAKLC01.R21
1201008651:1	493342	1	RXM1	01/11/2006 18:58:38	AZAKLC01.R22
153403001:1	493342	1	RXM1	01/11/2006 19:19:07	AZAKLC01.R23
153403002:1	493342	1	RXM1	01/11/2006 19:39:36	AZAKLC01.R24
153403003:1	493342	1	RXM1	01/11/2006 20:00:05	AZAKLC01.R25
153403004:1	493342	1	RXM1	01/11/2006 20:20:34	AZAKLC01.R26
153403005:1	493342	1	RXM1	01/11/2006 20:41:03	AZAKLC01.R27
153403006:1	493342	1	RXM1	01/11/2006 21:01:20	AZAKLC01.R28
153403007:1	493342	1	RXM1	01/11/2006 21:21:49	AZAKLC01.R29
WIC060111-02CCV:1		1	RXM1	01/11/2006 21:42:18	AZAKLC01.R30
CCB:			RXM1	01/11/2006 22:02:47	AZAKLC01.R31
153185010:2	492516	1	RXM1	01/11/2006 22:23:16	AZAKLC01.R32
WIC060111-02CVH:1		1	RXM1	01/11/2006 22:43:45	AZAKLC01.R33
CCB:			RXM1	01/11/2006 23:04:14	AZAKLC01.R34
1201008757:1	493394	1	RXM1	01/11/2006 23:24:43	AZAKLC01.R35
1201008762:1	493394	1	RXM1	01/11/2006 23:45:12	AZAKLC01.R36
153389001:1	493394	1	RXM1	01/12/2006 00:05:30	AZAKLC01.R37
153389002:1	493394	1	RXM1	01/12/2006 00:25:58	AZAKLC01.R38
1201008758:1	493394	1	RXM1	01/12/2006 00:46:27	AZAKLC01.R39
1201008760:1	493394	1	RXM1	01/12/2006 01:06:45	AZAKLC01.R40
153413001:1	493394	1	RXM1	01/12/2006 01:27:14	AZAKLC01.R41
153420001:1	493394	1	RXM1	01/12/2006 01:47:43	AZAKLC01.R42
1201008759:1	493394	1	RXM1	01/12/2006 02:08:12	AZAKLC01.R43
1201008761:1	493394	1	RXM1	01/12/2006 02:28:41	AZAKLC01.R44
WIC060111-02CCV:1		1	RXM1	01/12/2006 02:48:59	AZAKLC01.R45
CCB:			RXM1	01/12/2006 03:09:28	AZAKLC01.R46

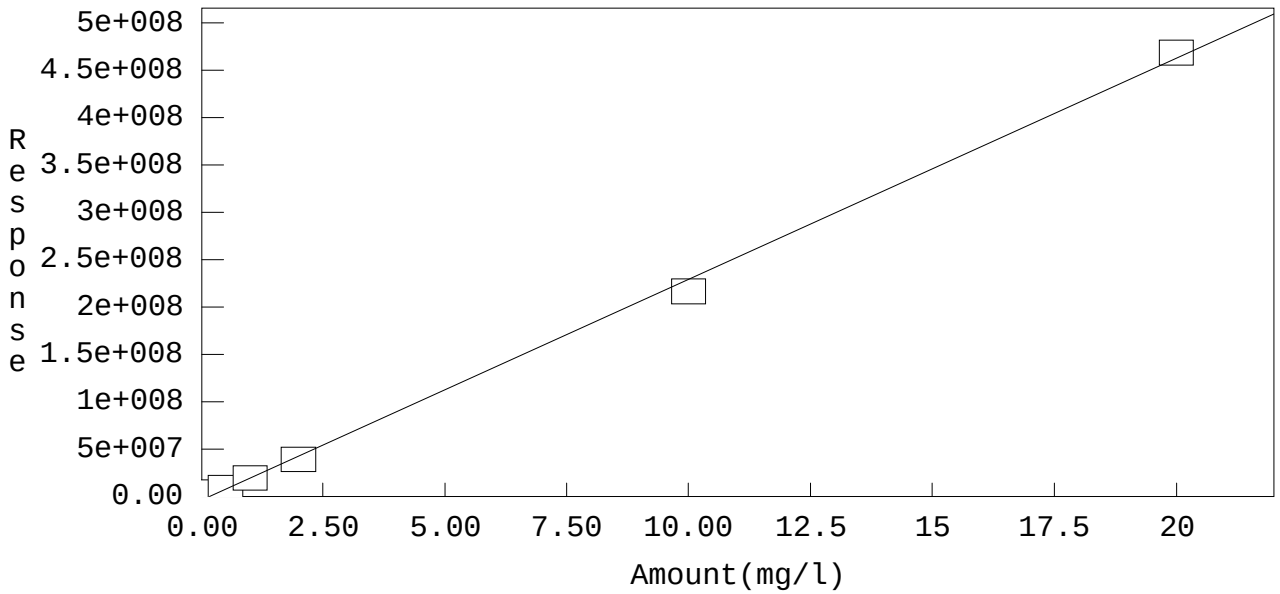
Method: JAN11.MET - Last Updated: 15:42 on Wed, 11 Jan 2006

Component: Fluoride
Fit Type: Linear
r^2 = 0.999763
Amt = Resp * 3.22e-008 + 0.0469
Resp = Amt * 3.106e+007 + -1.457e+006
Standardization: External
Calibration: Area



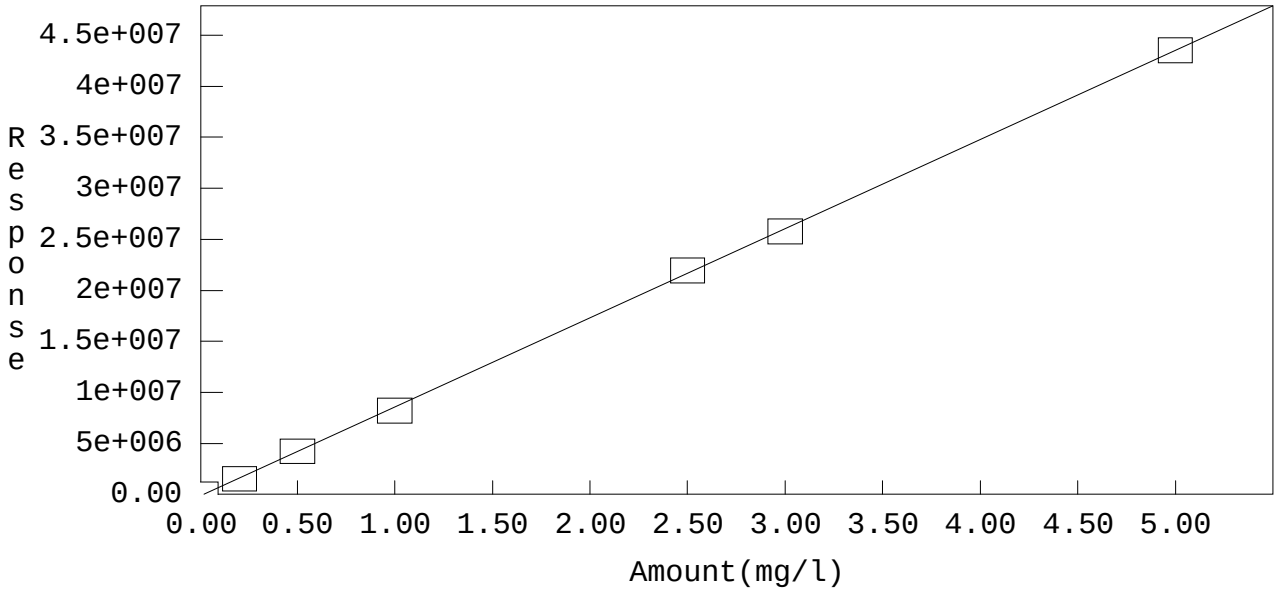
Method: C:\DX\METHOD\JAN11.MET

Component: Chloride
Fit Type: Linear
r^2 = 0.998753
Amt = Resp * 4.289e-008 + 0.1655
Resp = Amt * 2.331e+007 + -3.857e+006
Standardization: External
Calibration: Area



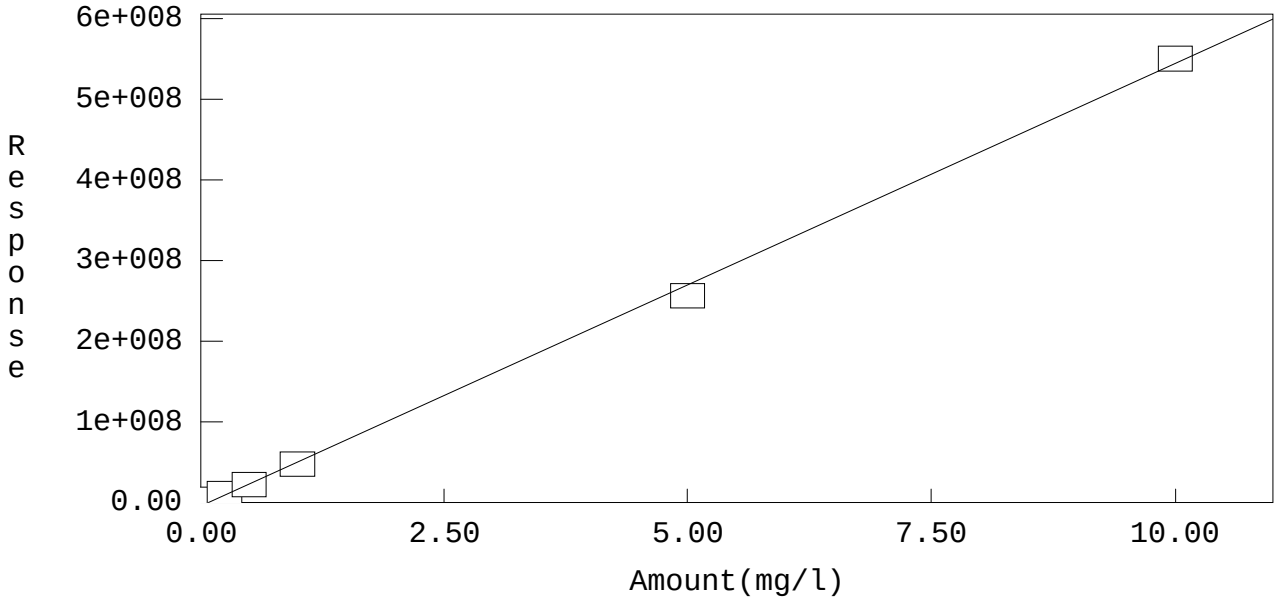
Method: C:\DX\METHOD\JAN11.MET

Component: Bromide
Fit Type: Linear
r^2 = 0.999814
Amt = Resp * 1.145e-007 + 0.02196
Resp = Amt * 8.731e+006 + -1.917e+005
Standardization: External
Calibration: Area



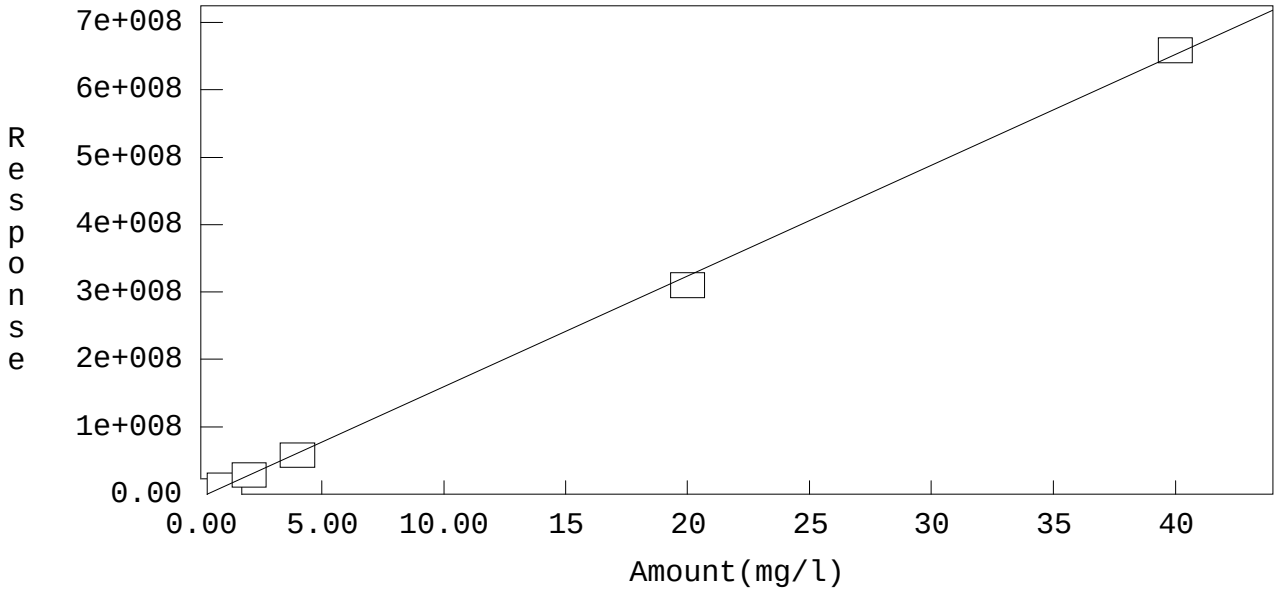
Method: C:\DX\METHOD\JAN11.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.999013
Amt = Resp * 1.824e-008 + 0.07991
Resp = Amt * 5.482e+007 + -4.381e+006
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\JAN11.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999305
Amt = Resp * 6.095e-008 + 0.2755
Resp = Amt * 1.641e+007 + -4.52e+006
Standardization: External
Calibration: Area

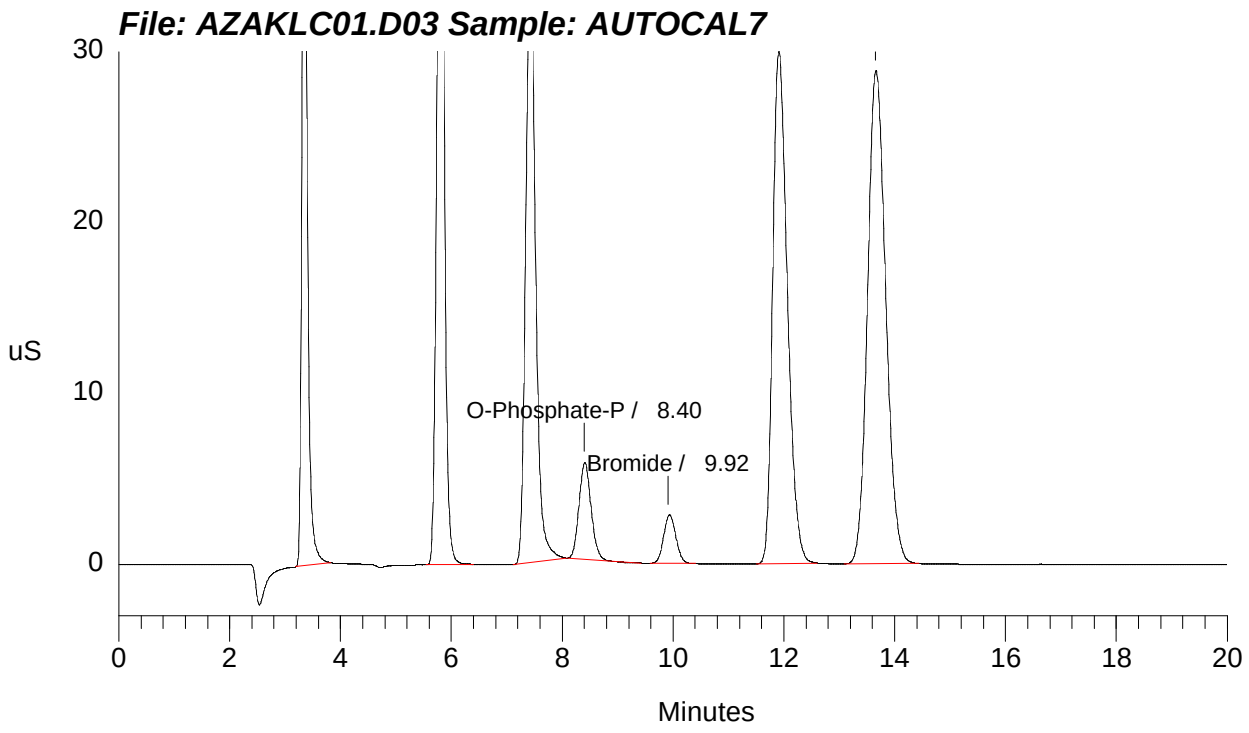


```
==========================================================================
| Sample Name: AUTOCAL7                        Date: 01/11/2006 12:03:06   |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D03                                 |
| Method     : C:\DX\METHOD\DEC1.MET                                       |
| ACI Address: 1  System: 1  Inject#: 3                  Detector:CDM-2    |
| Analyst    : RXM1          Column: AS9HC010913;GL-GC-E-086;300;9056      |
==========================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00          0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.34 Fluoride                10.000   43367900  310890898    1   0.00
   2   5.79 Chloride                20.000   50617742  468347258    1   0.00
   3   7.42 Nitrite-N               10.000   34146634  432348207    1   0.00
   4   8.40 O-Phosphate-P            5.000    5633437   84884356    1   0.00
   5   9.92 Bromide                  5.000    2790022   43504714    1   0.00
   6  11.90 Nitrate-N               10.000   29889262  550198722    1   0.00
   7  13.65 Sulfate                 40.000   28796318  658199128    1   0.00
                                ----------------------------------
                         Totals     100.000  195241316 2548373283
```



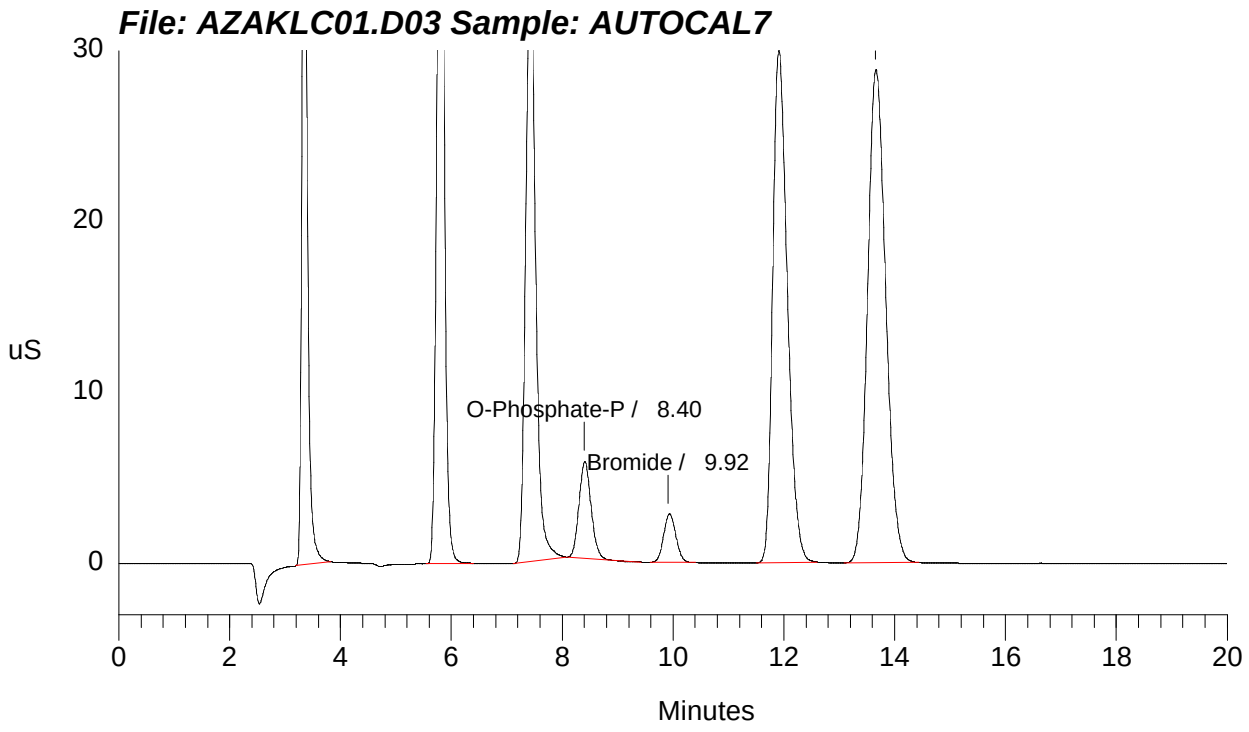
Data Reprocessed On 01/11/2006 15:27:01

Sample Name:	AUTOCAL7	Date:	01/11/2006 12:03:06
Data File :	C:\TMP\HORIZON\AZAKLC01.D03		
Method :	C:\DX\METHOD\JAN11.MET		
ACI Address:	1 System: 1 Inject#: 3	Detector:	CDM-2
Analyst :	RXM1	Column:	AS9HC010913;GL-GC-E-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.34	Fluoride	10.000	43367900	310890898	1	0.00
2	5.79	Chloride	20.000	50617742	468347258	1	0.00
3	7.42	Nitrite-N	10.000	34146634	432348207	1	0.00
4	8.40	O-Phosphate-P	5.000	5633437	84884356	1	0.00
5	9.92	Bromide	5.000	2790022	43504714	1	0.00
6	11.90	Nitrate-N	10.000	29889262	550198722	1	0.00
7	13.65	Sulfate	40.000	28796318	658199128	1	0.00
		Totals	100.000	195241316	2548373283		



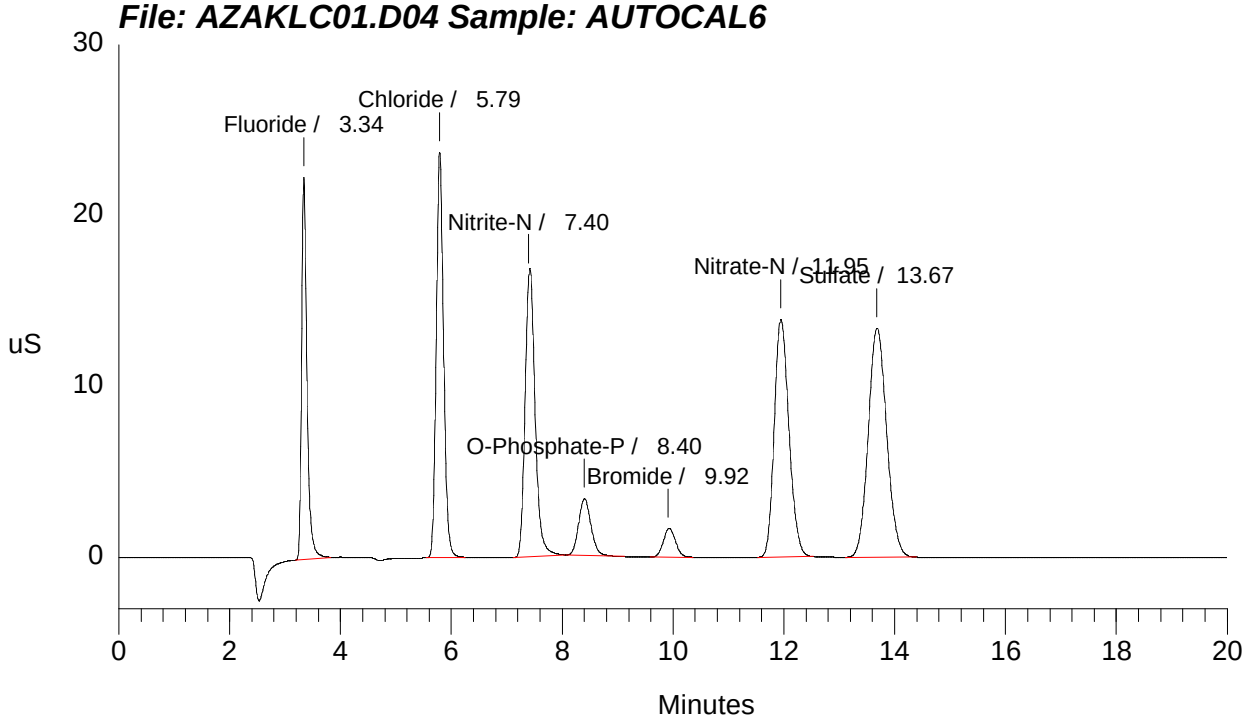
```
================================================================================
| Sample Name: AUTOCAL6                          Date: 01/11/2006 12:23:48     |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D04                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 4                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.34 Fluoride                5.000   22355360  150436388    1   0.00
   2   5.79 Chloride               10.000   23719753  216871514    1   0.00
   3   7.40 Nitrite-N               5.000   16550435  211107367    1   0.00
   4   8.40 O-Phosphate-P           3.000    3320875   51688864    1   0.00
   5   9.92 Bromide                 3.000    1680560   25770904    1   0.00
   6  11.95 Nitrate-N               5.000   13916606  256389604    1   0.00
   7  13.67 Sulfate                20.000   13410569  310314788    1   0.00
                              ------------------------------------
                        Totals     51.000   94954158 1222579429
```

File: AZAKLC01.D04 Sample: AUTOCAL6



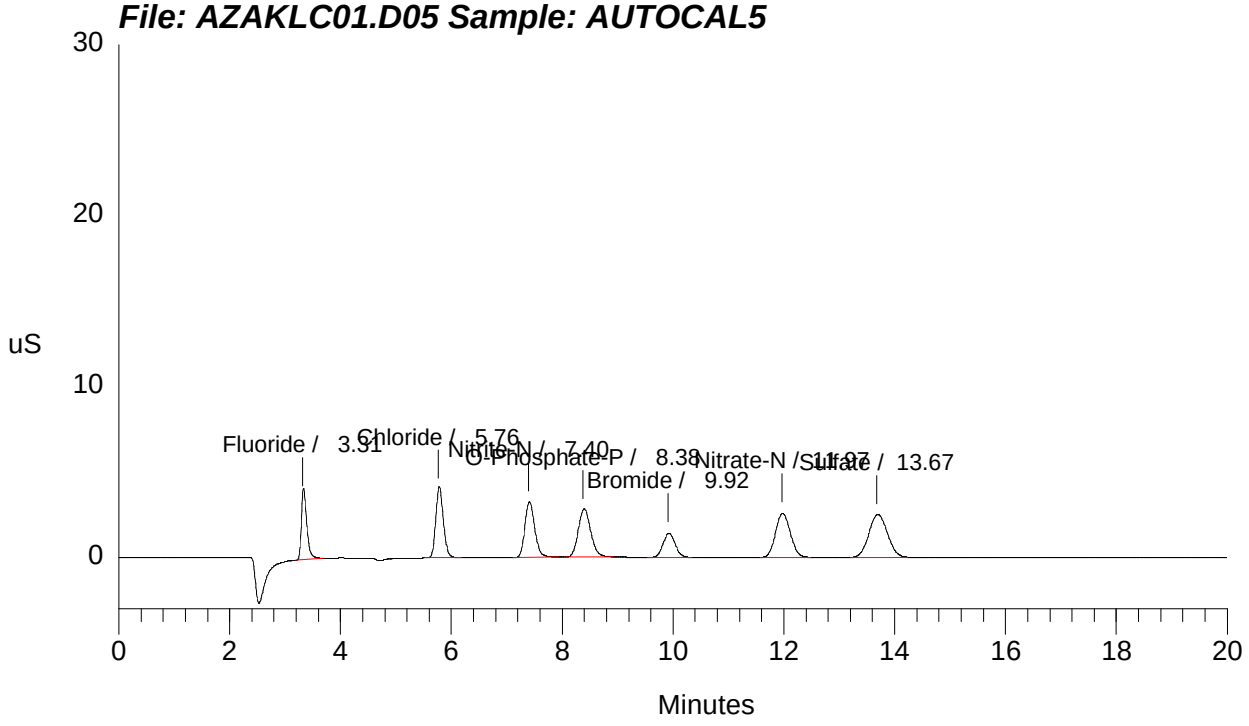
```
================================================================================
| Sample Name: AUTOCAL5                          Date: 01/11/2006 12:44:08     |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D05                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 5                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.31 Fluoride                1.000    3653417   28309370    1   0.00
   2   5.76 Chloride                2.000    3988060   39525344    1   0.00
   3   7.40 Nitrite-N               1.000    3229029   40746666    1   0.00
   4   8.38 O-Phosphate-P           2.500    2771133   44090428    1   0.00
   5   9.92 Bromide                 2.500    1433209   21938682    1   0.00
   6  11.97 Nitrate-N               1.000    2579683   48390064    1   0.00
   7  13.67 Sulfate                 4.000    2490066   58482654    1   0.00
                                ----------------------------------
                         Totals    14.000   20144596  281483208
```

File: AZAKLC01.D05 Sample: AUTOCAL5



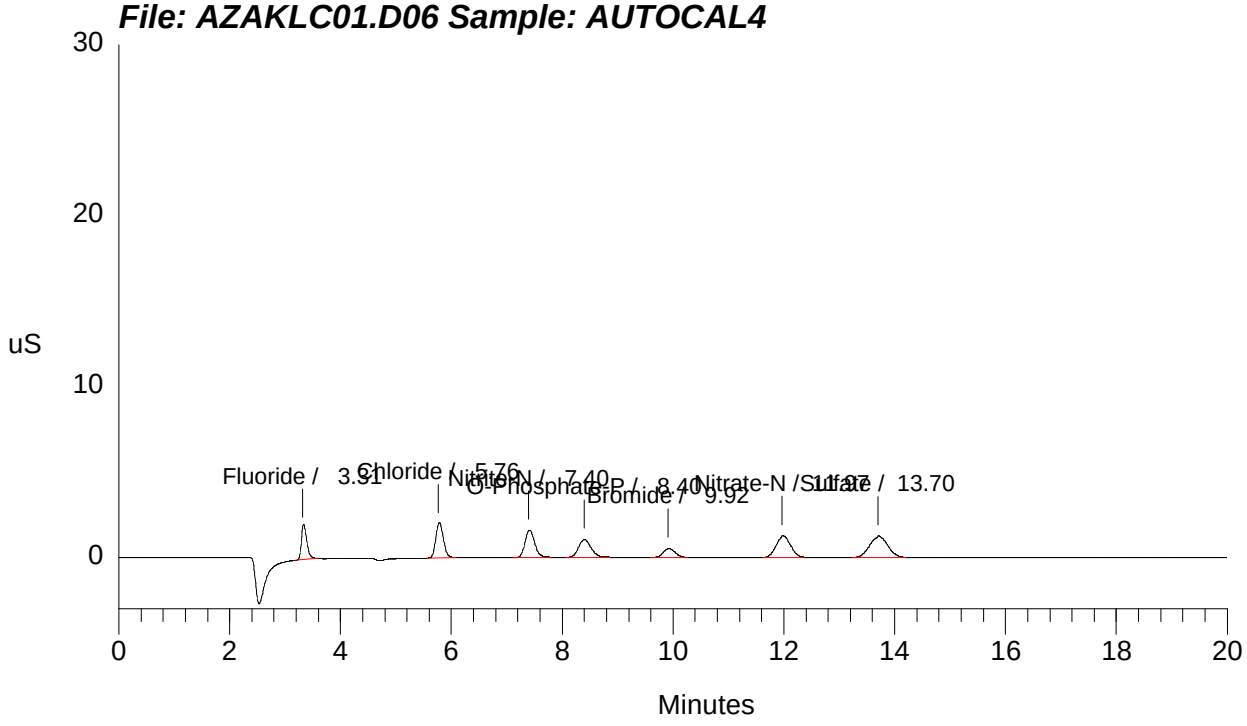
```
| Sample Name: AUTOCAL4                          Date: 01/11/2006 13:04:36     |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D06                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 6                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	0.500	1837079	14108168	1	0.00
2	5.76	Chloride	1.000	1986434	19718192	1	0.00
3	7.40	Nitrite-N	0.500	1600649	19609410	1	0.00
4	8.40	O-Phosphate-P	1.000	1055243	16731400	1	0.00
5	9.92	Bromide	1.000	532874	8230046	1	0.00
6	11.97	Nitrate-N	0.500	1269528	22941972	1	0.00
7	13.70	Sulfate	2.000	1263814	28820544	1	0.00
		Totals	6.500	9545620	130159732		

File: AZAKLC01.D06 Sample: AUTOCAL4



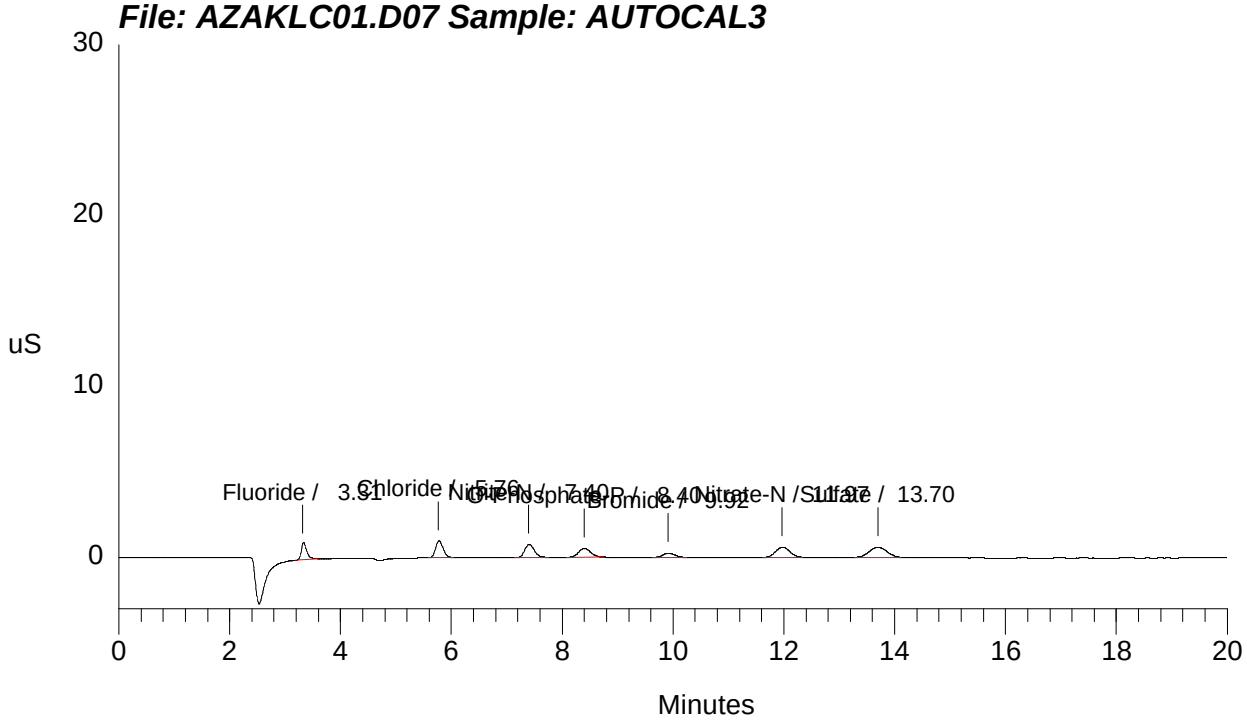
```
================================================================================
| Sample Name: AUTOCAL3                        Date: 01/11/2006 13:25:05       |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D07                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 7                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.31 Fluoride                0.250     898756    6848544    1   0.00
   2   5.76 Chloride                0.500     972318    9530636    1   0.00
   3   7.40 Nitrite-N               0.250     774959    9548762    1   0.00
   4   8.40 O-Phosphate-P           0.500     522666    8006714    1   0.00
   5   9.92 Bromide                 0.500     270735    4245244    1   0.00
   6  11.97 Nitrate-N               0.250     601219   10943668    1   0.00
   7  13.70 Sulfate                 1.000     596630   13551628    1   0.00
                                ----------------------------------
                         Totals     3.250    4637283   62675196
```

File: AZAKLC01.D07 Sample: AUTOCAL3



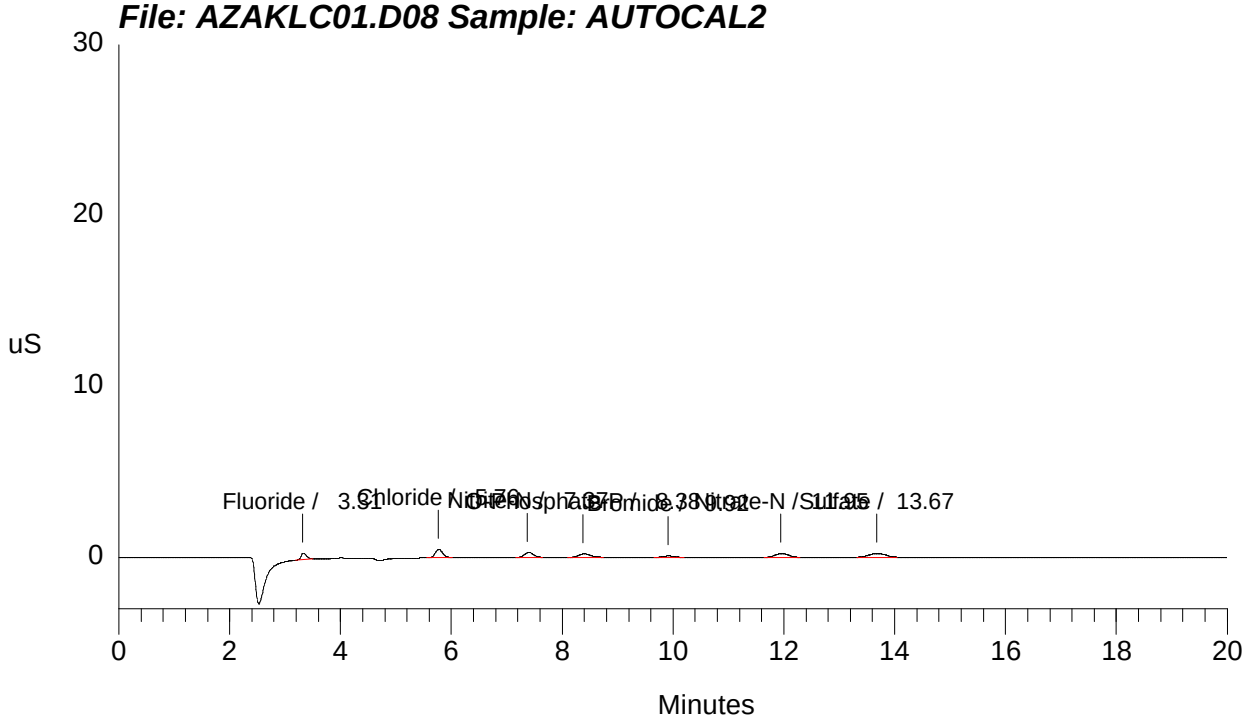
```
================================================================================
| Sample Name: AUTOCAL2                        Date: 01/11/2006 13:45:34       |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D08                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2        |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.31 Fluoride                 0.100     364035    2573626    1   0.00
   2   5.76 Chloride                 0.200     494246    4672342    1   0.00
   3   7.37 Nitrite-N                0.100     288180    3502210    1   0.00
   4   8.38 O-Phosphate-P            0.200     209329    3348868    1   0.00
   5   9.92 Bromide                  0.200      98364    1492538    1   0.00
   6  11.95 Nitrate-N                0.100     233110    4241802    1   0.00
   7  13.67 Sulfate                  0.400     225122    4837144    1   0.00
                                  ----------------------------------
                      Totals         1.300    1912386   24668530
```

File: AZAKLC01.D08 Sample: AUTOCAL2



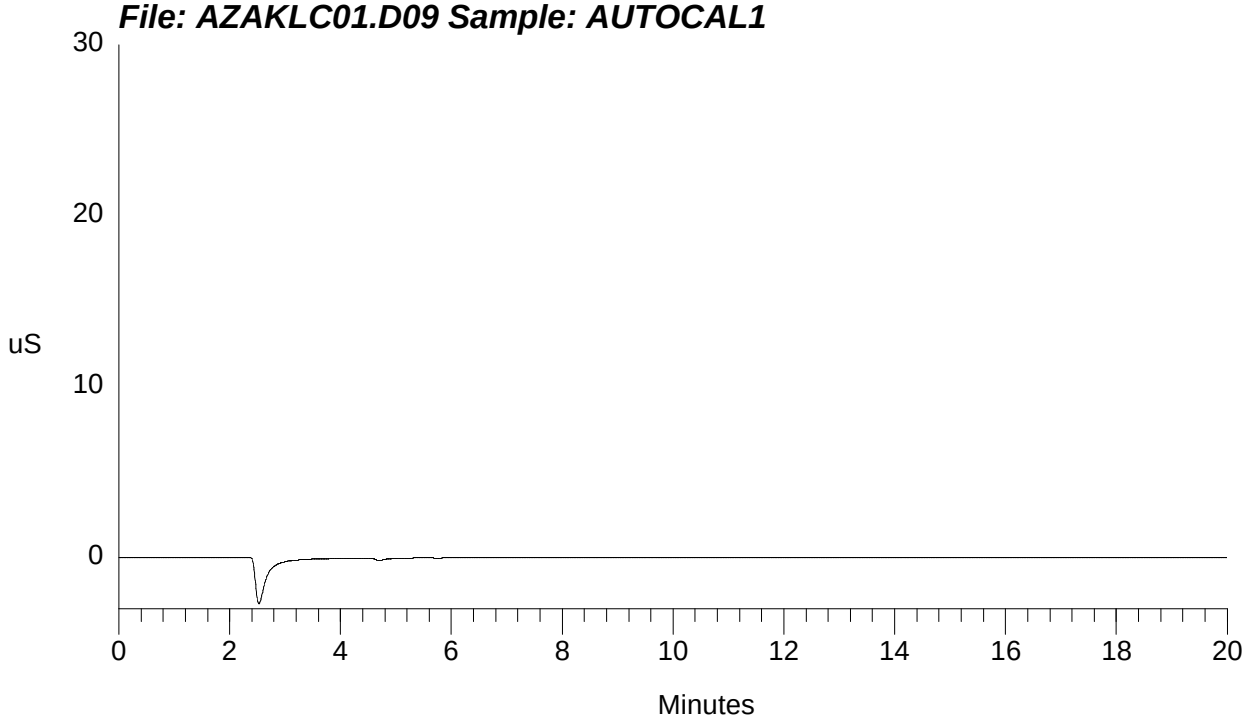
```
================================================================================
| Sample Name: AUTOCAL1                        Date: 01/11/2006 14:05:52     |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D09                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2      |
| Analyst    : RXM1          Column: AS9HC010913;GL-GC-E-086;300;9056        |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZAKLC01.D09 Sample: AUTOCAL1



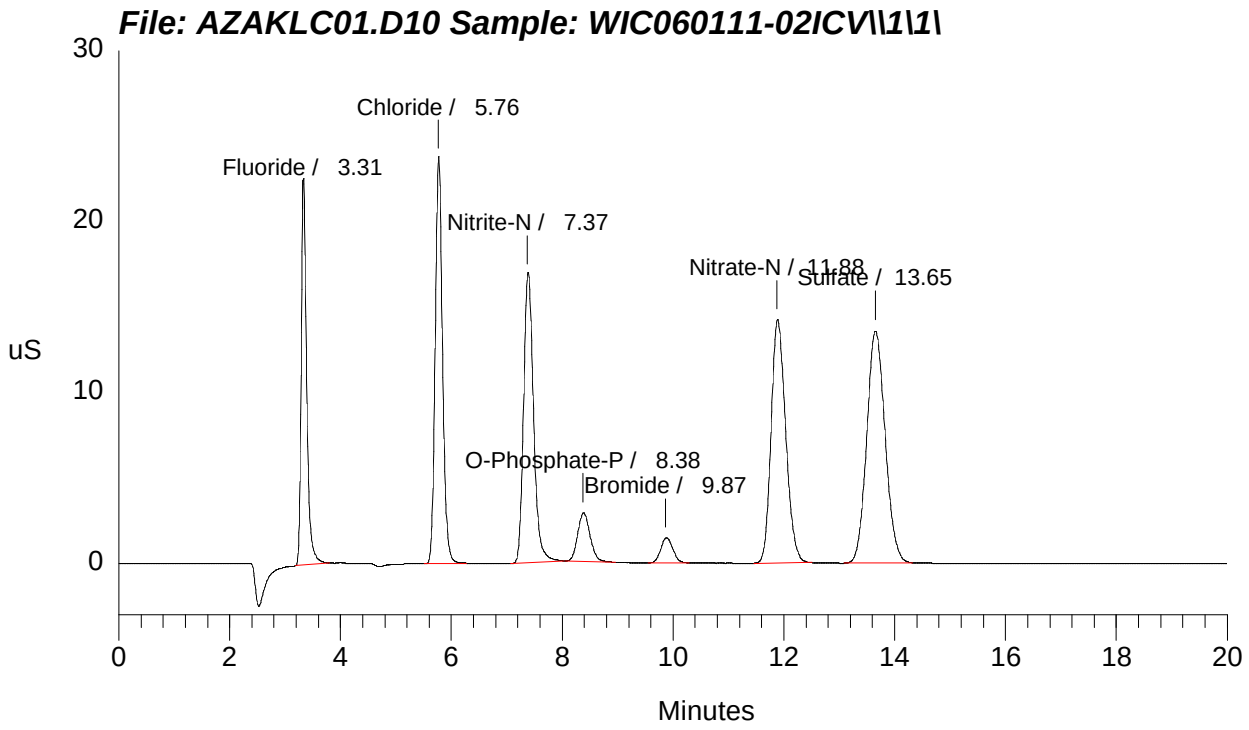
Data Reprocessed On 01/11/2006 15:56:36

Sample Name:	WIC060111-02ICV\\1\1\	Date:	01/11/2006 14:26:10
Data File :	C:\TMP\HORIZON\AZAKLC01.D10		
Method :	C:\DX\METHOD\JAN11.MET		
ACI Address:	1 System: 1 Inject#: 10		Detector:CDM-2
Analyst :	RXM1	Column:	AS9HC010913;GL-GC-E-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	5.006	20196010	154033571	1	0.00
2	5.76	Chloride	9.513	23650283	217918580	1	0.00
3	7.37	Nitrite-N	4.950	16795557	212304790	1	0.00
4	8.38	O-Phosphate-P	2.579	2824974	44141712	1	0.00
5	9.87	Bromide	2.574	1448862	22285002	1	0.00
6	11.88	Nitrate-N	4.836	14214370	260749776	1	0.00
7	13.65	Sulfate	19.389	13594077	313596010	1	0.00
		Totals	48.846	92724133	1225029441		



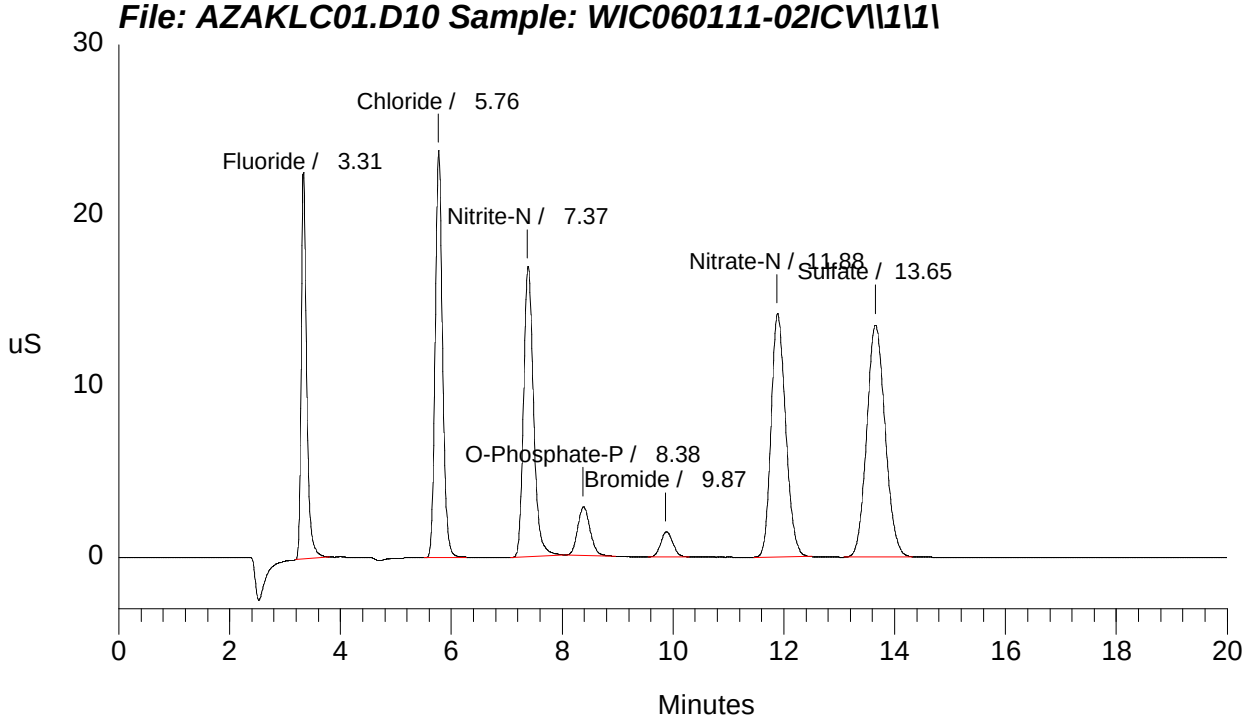
```
================================================================================
| Sample Name: WIC060111-02ICV\\1\1\          Date: 01/11/2006 14:26:10     |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D10                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 10                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.31 Fluoride                 5.379   20196010  154033571    1   0.00
   2   5.76 Chloride                 9.834   23650283  217918580    1   0.00
   3   7.37 Nitrite-N                5.462   16795557  212304790    1   0.00
   4   8.38 O-Phosphate-P            2.615    2824974   44141712    1   0.00
   5   9.87 Bromide                  2.555    1448862   22285002    1   0.00
   6  11.88 Nitrate-N                4.857   14214370  260749776    1   0.00
   7  13.65 Sulfate                 19.413   13594077  313596010    1   0.00
                                  ----------------------------------
                        Totals      50.115   92724133 1225029441
```

File: AZAKLC01.D10 Sample: WIC060111-02ICV\\1\1



Data Reprocessed On 01/11/2006 15:56:37

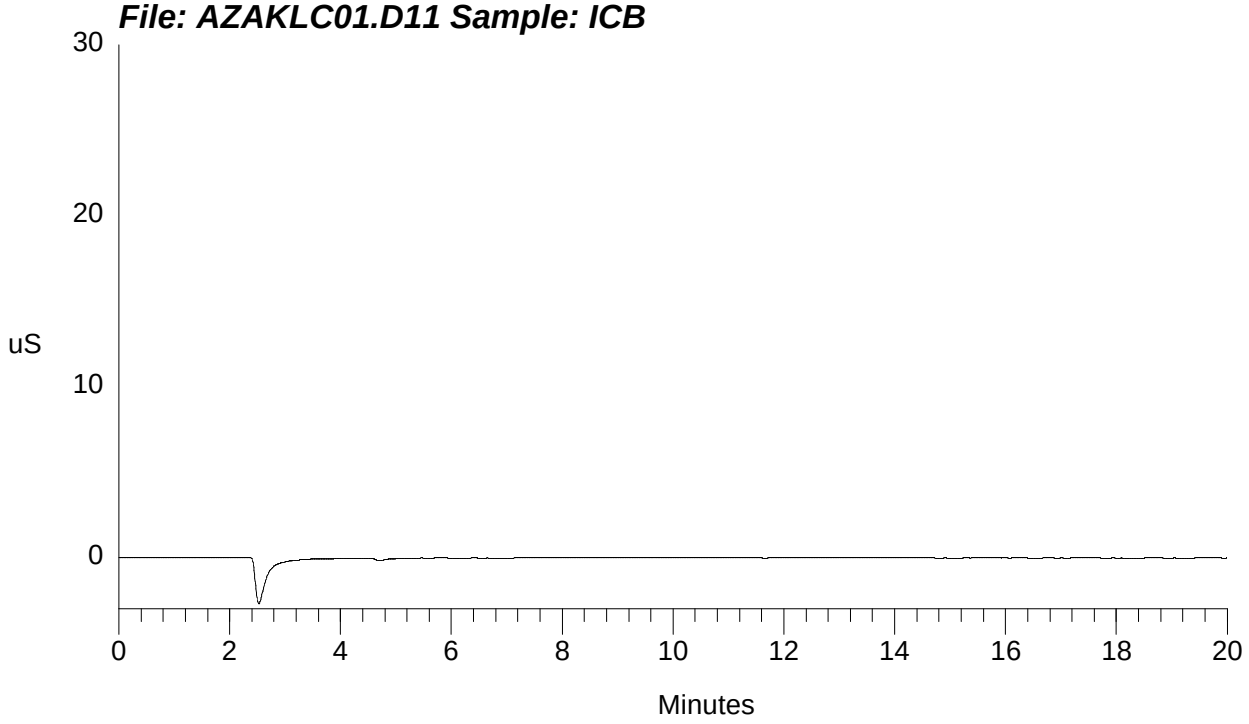
Sample Name: ICB		Date: 01/11/2006 14:46:39	
Data File : C:\TMP\HORIZON\AZAKLC01.D11			
Method : C:\DX\METHOD\JAN11.MET			
ACI Address: 1 System: 1	Inject#: 11	Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		

File: AZAKLC01.D11 Sample: ICB



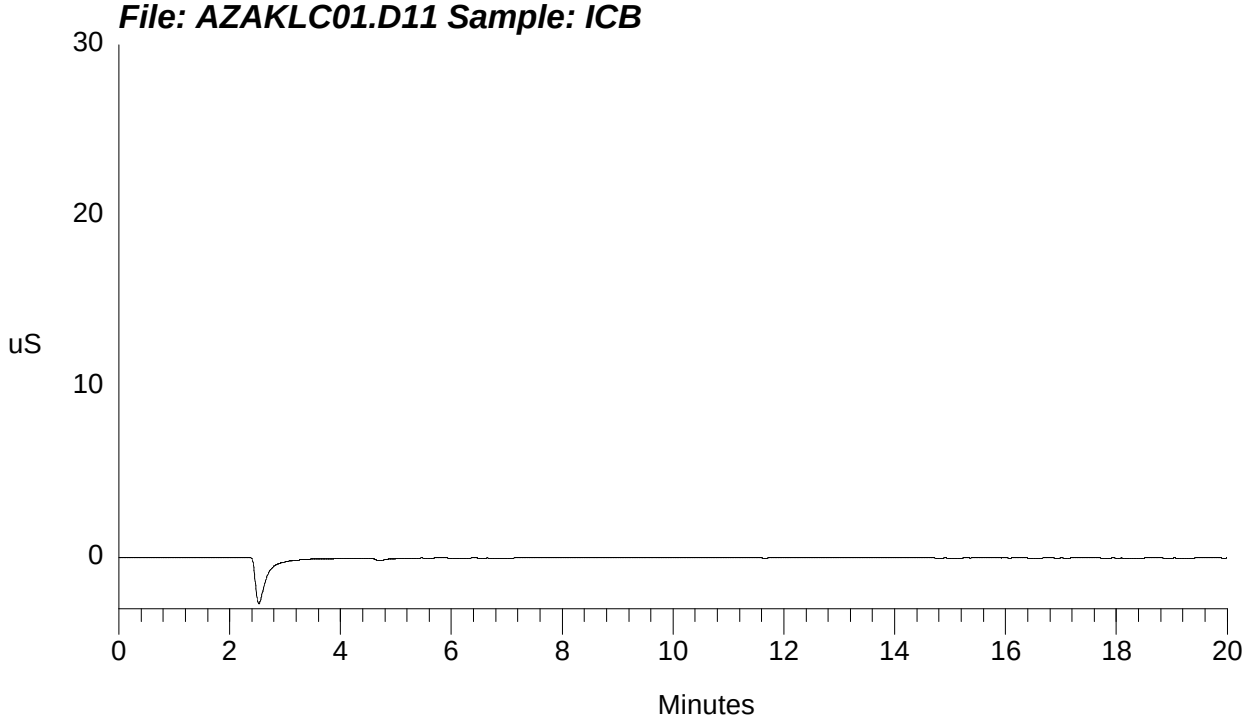
```
================================================================================
| Sample Name: ICB                              Date: 01/11/2006 14:46:39      |
| Data File  : C:\TMP\HORIZON\AZAKLC01.D11                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 11                  Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZAKLC01.D11 Sample: ICB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			MAR1	02/07/2006 12:01:21	AFBGLC01.R01
WIC060207-02ICV:1		1	MAR1	02/07/2006 12:21:42	AFBGLC01.R02
ICB:			MAR1	02/07/2006 12:42:03	AFBGLC01.R03
1201012265:3	494937	1	MAR1	02/07/2006 13:02:24	AFBGLC01.R04
WIC060207-02ICV:1		1	MAR1	02/07/2006 13:45:50	AFBGLC01.R05
E:			MAR1	02/07/2006 14:16:37	AFBGLC01.R06
E:			MAR1	02/07/2006 14:36:58	AFBGLC01.R07
BLK:			MAR1	02/07/2006 14:57:20	AFBGLC01.R08
BLK:			MAR1	02/07/2006 15:17:41	AFBGLC01.R09
AUTOCAL7:			MAR1	02/07/2006 15:38:02	AFBGLC01.R10
AUTOCAL6:			MAR1	02/07/2006 15:58:24	AFBGLC01.R11
AUTOCAL5:			MAR1	02/07/2006 16:18:46	AFBGLC01.R12
AUTOCAL4:			MAR1	02/07/2006 16:39:07	AFBGLC01.R13
AUTOCAL3:			MAR1	02/07/2006 16:59:29	AFBGLC01.R14
AUTOCAL2:			MAR1	02/07/2006 17:19:50	AFBGLC01.R15
AUTOCAL1:			MAR1	02/07/2006 17:40:12	AFBGLC01.R16
WIC060207-02ICV:1		1	MAR1	02/07/2006 18:00:33	AFBGLC01.R17
ICB:			MAR1	02/07/2006 18:20:54	AFBGLC01.R18
153859005:2	494927	1	MAR1	02/07/2006 18:41:14	AFBGLC01.R19
153859006:2	494927	1	MAR1	02/07/2006 19:01:34	AFBGLC01.R20
153859007:2	494927	1	MAR1	02/07/2006 19:21:55	AFBGLC01.R21
153859008:2	494927	1	MAR1	02/07/2006 19:42:17	AFBGLC01.R22
WIC060207-02CVH:1		1	MAR1	02/07/2006 20:02:37	AFBGLC01.R23
CCB:			MAR1	02/07/2006 20:22:58	AFBGLC01.R24
1201012265:3	494937	1	MAR1	02/07/2006 20:43:19	AFBGLC01.R25
153859013:3	494937	1	MAR1	02/07/2006 21:03:40	AFBGLC01.R26
153859014:3	494937	1	MAR1	02/07/2006 21:24:00	AFBGLC01.R27
153859015:3	494937	1	MAR1	02/07/2006 21:44:22	AFBGLC01.R28
153859016:3	494937	1	MAR1	02/07/2006 22:04:42	AFBGLC01.R29
1201012244:2	494927	1	MAR1	02/07/2006 22:25:03	AFBGLC01.R30
WIC060207-02CVH:1		1	MAR1	02/07/2006 22:45:24	AFBGLC01.R31
CCB:			MAR1	02/07/2006 23:05:45	AFBGLC01.R32
1201024911:1	500476	1	MAR1	02/07/2006 23:26:06	AFBGLC01.R33
1201024915:1	500476	1	MAR1	02/07/2006 23:46:27	AFBGLC01.R34
155112001:1	500476	1	MAR1	02/08/2006 00:06:49	AFBGLC01.R35
1201024912:1	500476	1	MAR1	02/08/2006 00:27:10	AFBGLC01.R36
1201024913:1	500476	1	MAR1	02/08/2006 00:47:30	AFBGLC01.R37
1201024914:1	500476	1	MAR1	02/08/2006 01:07:52	AFBGLC01.R38
155112002:1	500476	1	MAR1	02/08/2006 01:28:12	AFBGLC01.R39
155112003:1	500476	1	MAR1	02/08/2006 01:48:34	AFBGLC01.R40
155112004:1	500476	1	MAR1	02/08/2006 02:08:54	AFBGLC01.R41
155112005:1	500476	1	MAR1	02/08/2006 02:29:15	AFBGLC01.R42
WIC060207-02CCV:1		1	MAR1	02/08/2006 02:49:37	AFBGLC01.R43
CCB:			MAR1	02/08/2006 03:09:58	AFBGLC01.R44
155112006:1	500476	1	MAR1	02/08/2006 03:30:20	AFBGLC01.R45
155117001:1	500476	1	MAR1	02/08/2006 03:50:41	AFBGLC01.R46
155117002:1	500476	1	MAR1	02/08/2006 04:11:01	AFBGLC01.R47
155122001:1	500476	1	MAR1	02/08/2006 04:31:23	AFBGLC01.R48
WIC060207-02CVH:1		1	MAR1	02/08/2006 04:51:44	AFBGLC01.R49
CCB:			MAR1	02/08/2006 05:12:06	AFBGLC01.R50
1201024442:1	500255	1	MAR1	02/08/2006 05:32:26	AFBGLC01.R51
1201024446:1	500255	1	MAR1	02/08/2006 05:52:48	AFBGLC01.R52
155027001:1	500255	1	MAR1	02/08/2006 06:13:09	AFBGLC01.R53
155027002:1	500255	1	MAR1	02/08/2006 06:33:30	AFBGLC01.R54
155027003:1	500255	1	MAR1	02/08/2006 06:53:52	AFBGLC01.R55

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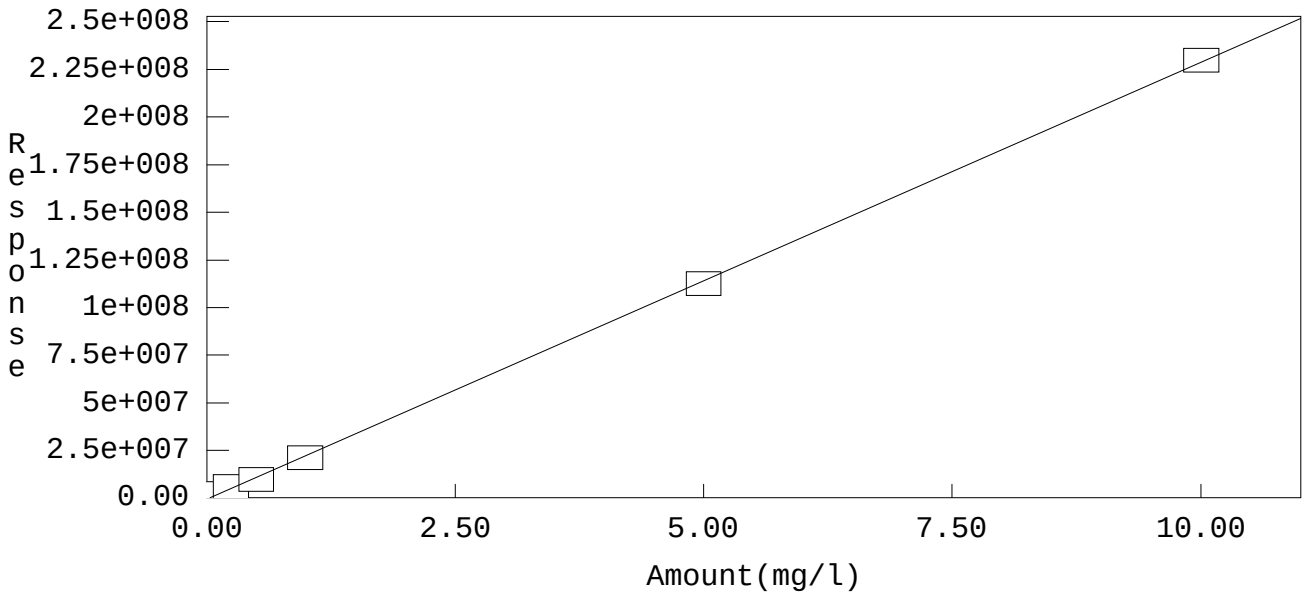
155027004:1          500255   1     MAR1  02/08/2006 07:14:13 AFBGLC01.R56
155028001:1          500255   1     MAR1  02/08/2006 07:34:35 AFBGLC01.R57
1201024443:1         500255   1     MAR1  02/08/2006 07:54:55 AFBGLC01.R58
1201024444:1         500255   1     MAR1  02/08/2006 08:15:16 AFBGLC01.R59
1201024445:1         500255   1     MAR1  02/08/2006 08:35:38 AFBGLC01.R60
WIC060207-02CCV:1             1     MAR1  02/08/2006 08:56:00 AFBGLC01.R61
CCB:                          1     MAR1  02/08/2006 09:16:22 AFBGLC01.R62
155028002:1          500255   1     MAR1  02/08/2006 09:36:43 AFBGLC01.R63
155031001:1          500255   1     MAR1  02/08/2006 09:57:07 AFBGLC01.R64
155038001:1          500255   1     MAR1  02/08/2006 10:17:30 AFBGLC01.R65
WIC060207-02CVH:1             1     MAR1  02/08/2006 10:37:52 AFBGLC01.R66
CCB:                          1     MAR1  02/08/2006 10:58:14 AFBGLC01.R67
```

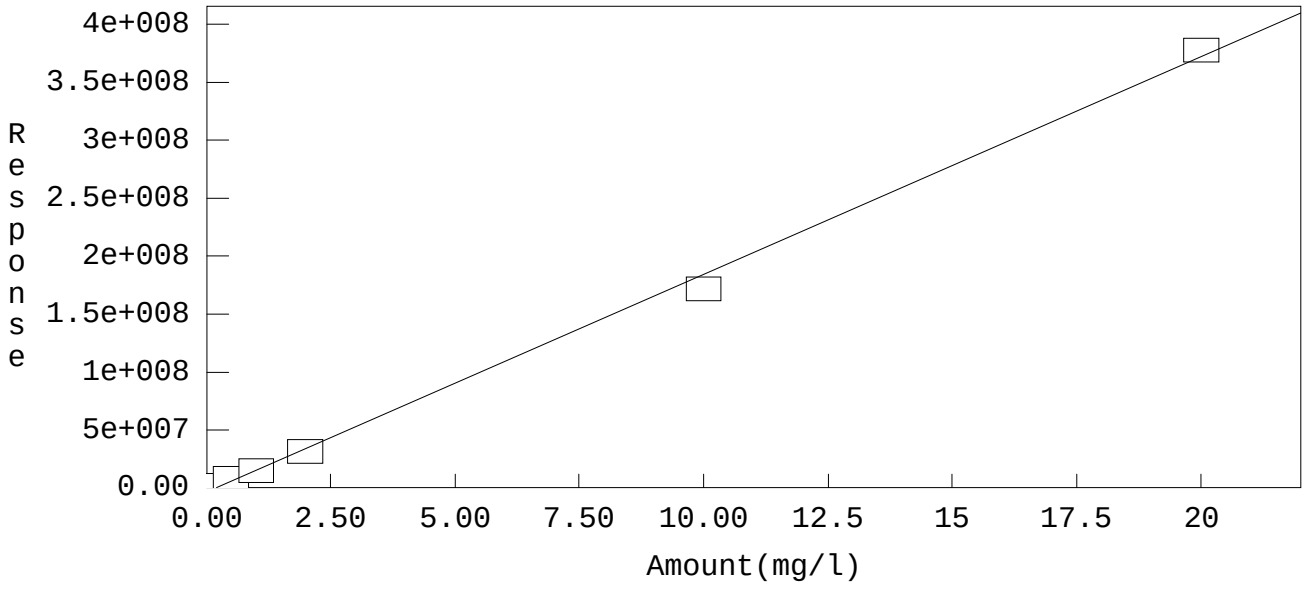
Method: 020606AN.MET - Last Updated: 09:46 on Wed, 08 Feb 2006

Component: Fluoride
Fit Type: Linear
r^2 = 0.999847
Amt = Resp * 4.354e-008 + 0.0374
Resp = Amt * 2.297e+007 + -8.59e+005
Standardization: External
Calibration: Area



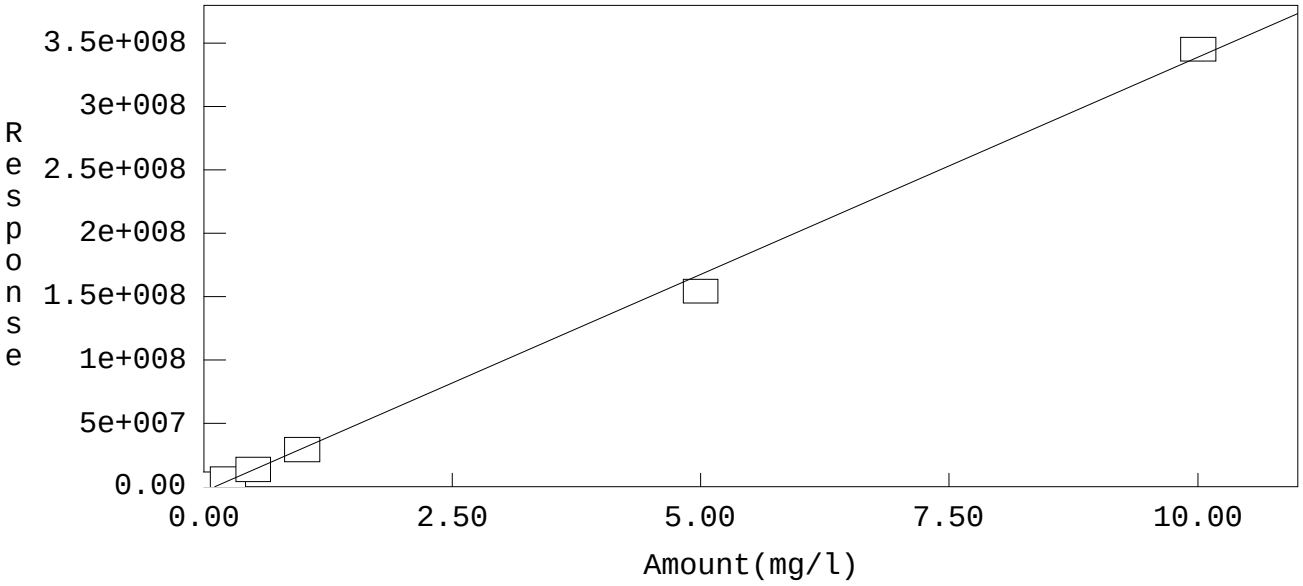
Method: C:\DX\METHOD\020606AN.MET

Component: Chloride
Fit Type: Linear
r^2 = 0.998201
Amt = Resp * 5.322e-008 + 0.2109
Resp = Amt * 1.879e+007 + -3.962e+006
Standardization: External
Calibration: Area



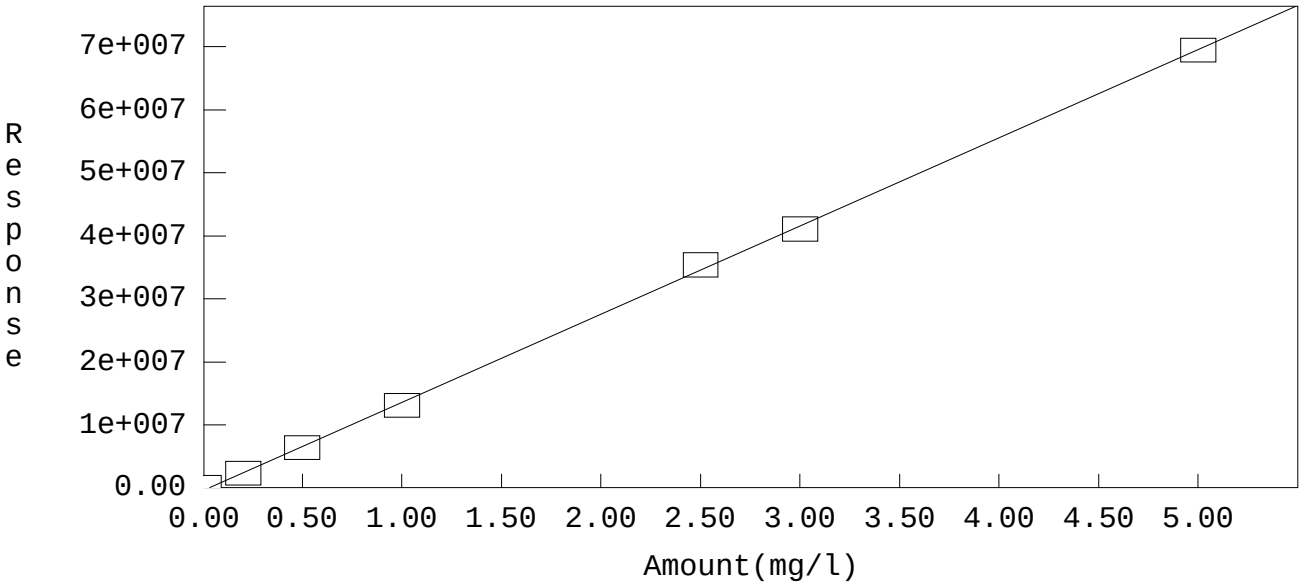
Method: C:\DX\METHOD\020606AN.MET

Component: Nitrite-N
Fit Type: Linear
r^2 = 0.997653
Amt = Resp * 2.917e-008 + 0.1112
Resp = Amt * 3.428e+007 + -3.811e+006
Standardization: External
Calibration: Area



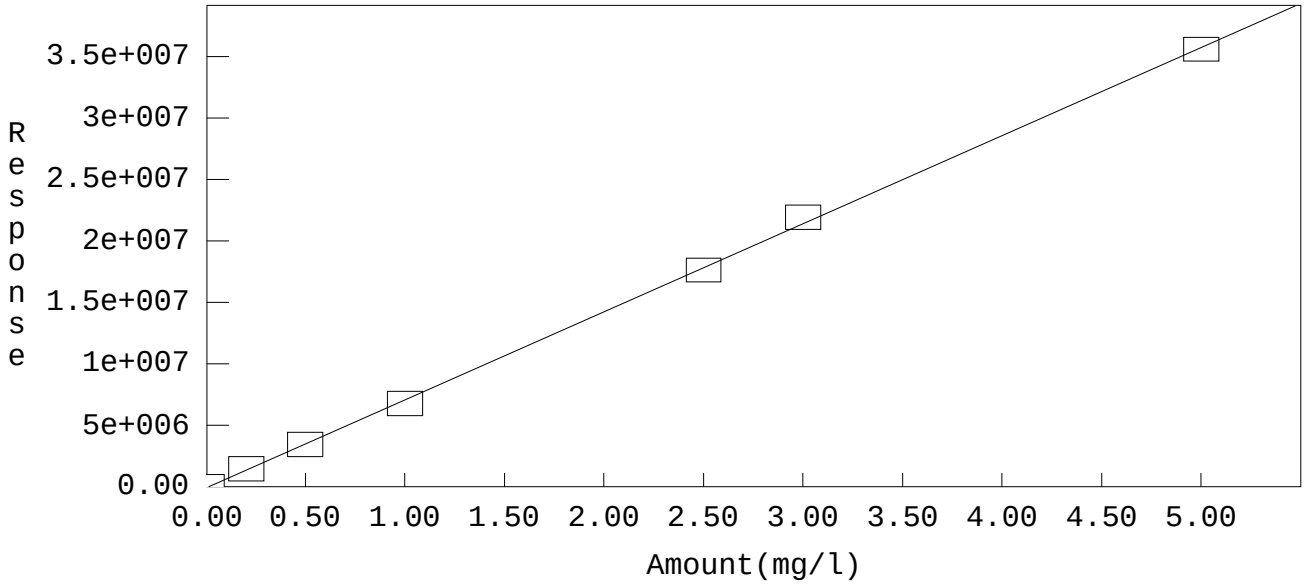
Method: C:\DX\METHOD\020606AN.MET

Component: O-Phosphate-P
Fit Type: Linear
r^2 = 0.999651
Amt = Resp * 7.155e-008 + 0.03053
Resp = Amt * 1.398e+007 + -4.267e+005
Standardization: External
Calibration: Area



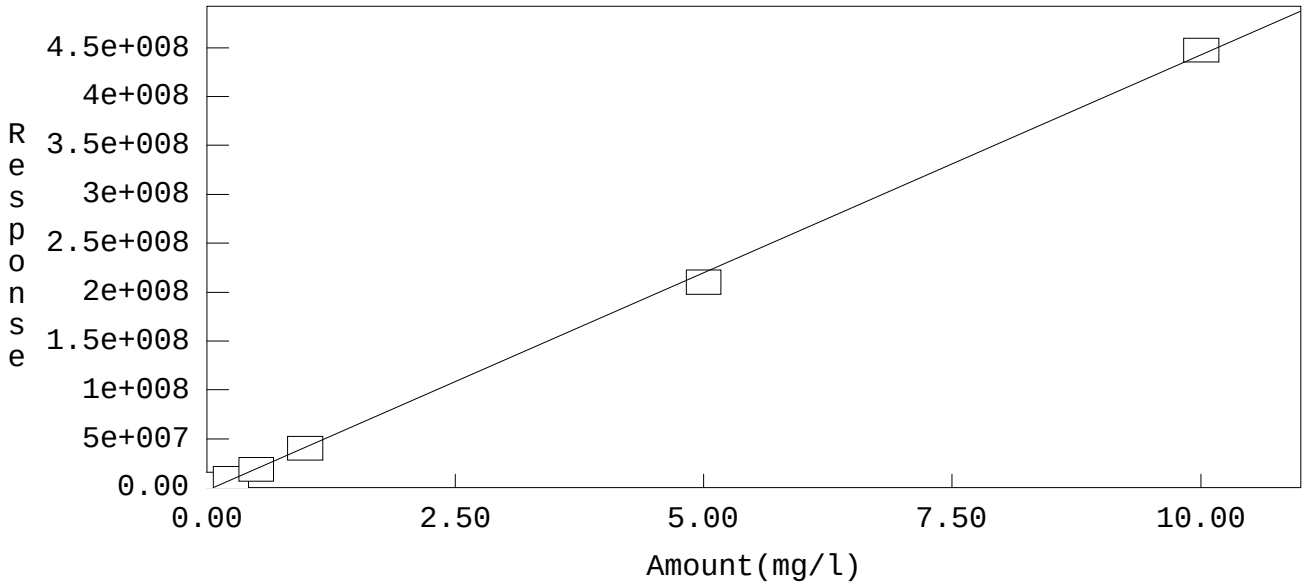
Method: C:\DX\METHOD\020606AN.MET

Component: Bromide
Fit Type: Linear
r^2 = 0.999578
Amt = Resp * 1.395e-007 + 0.01122
Resp = Amt * 7.167e+006 + -8.04e+004
Standardization: External
Calibration: Area



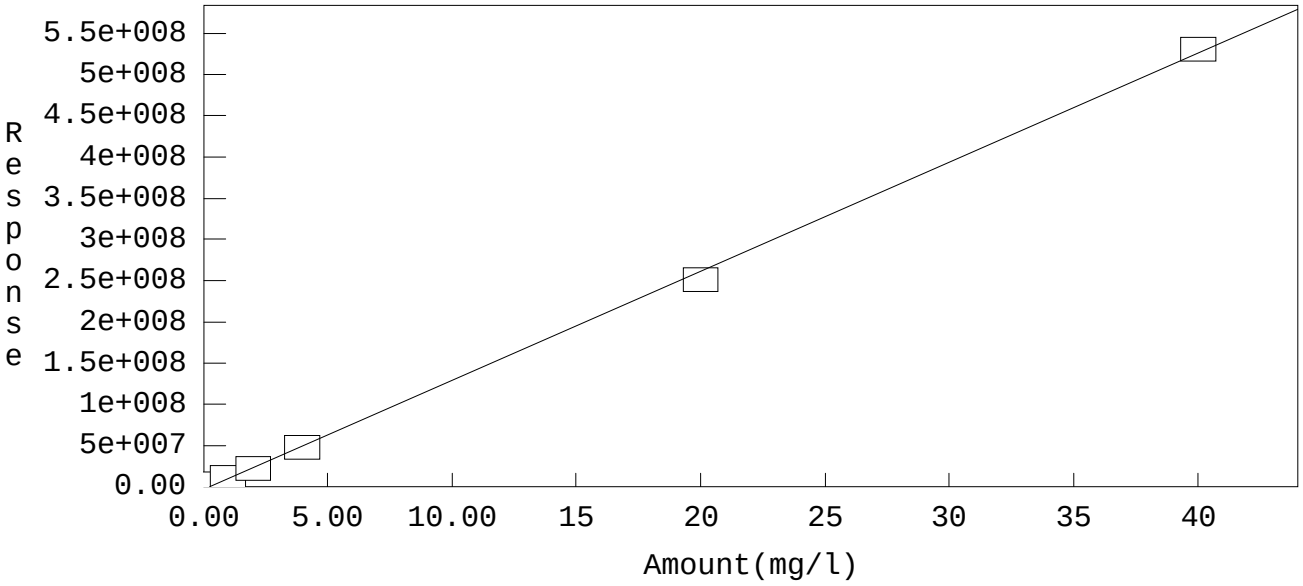
Method: C:\DX\METHOD\020606AN.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.999270
Amt = Resp * 2.244e-008 + 0.06636
Resp = Amt * 4.457e+007 + -2.957e+006
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\020606AN.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999430
Amt = Resp * 7.561e-008 + 0.2565
Resp = Amt * 1.323e+007 + -3.393e+006
Standardization: External
Calibration: Area



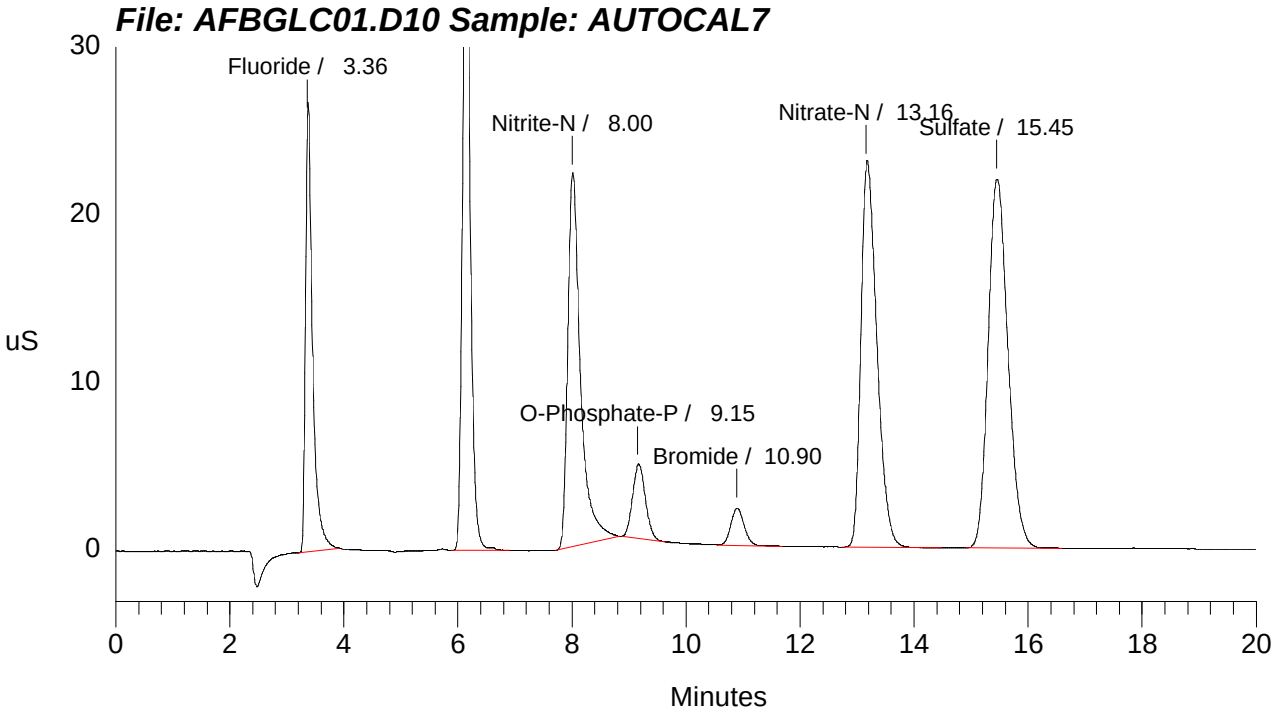
Data Reprocessed On 02/07/2006 15:55:47

Sample Name: AUTOCAL7	Date: 02/07/2006 15:38:02
Data File : C:\TMP\HORIZON\AFBGLC01.D10	
Method : C:\DX\METHOD\020606AN.MET	
ACI Address: 1 System: 1 Inject#: 10	Detector:CDM-2
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	10.000	25784920	229655968	1	0.00
2	6.14	Chloride	20.000	39325765	377588304	1	0.00
3	8.00	Nitrite-N	10.000	22124018	344914790	1	0.00
4	9.15	O-Phosphate-P	5.000	4334959	69417780	1	0.00
5	10.90	Bromide	5.000	2212168	35586640	1	0.00
6	13.16	Nitrate-N	10.000	22783332	447221880	1	0.00
7	15.45	Sulfate	40.000	21958103	530339480	1	0.00
		Totals	100.000	138523265	2034724842		



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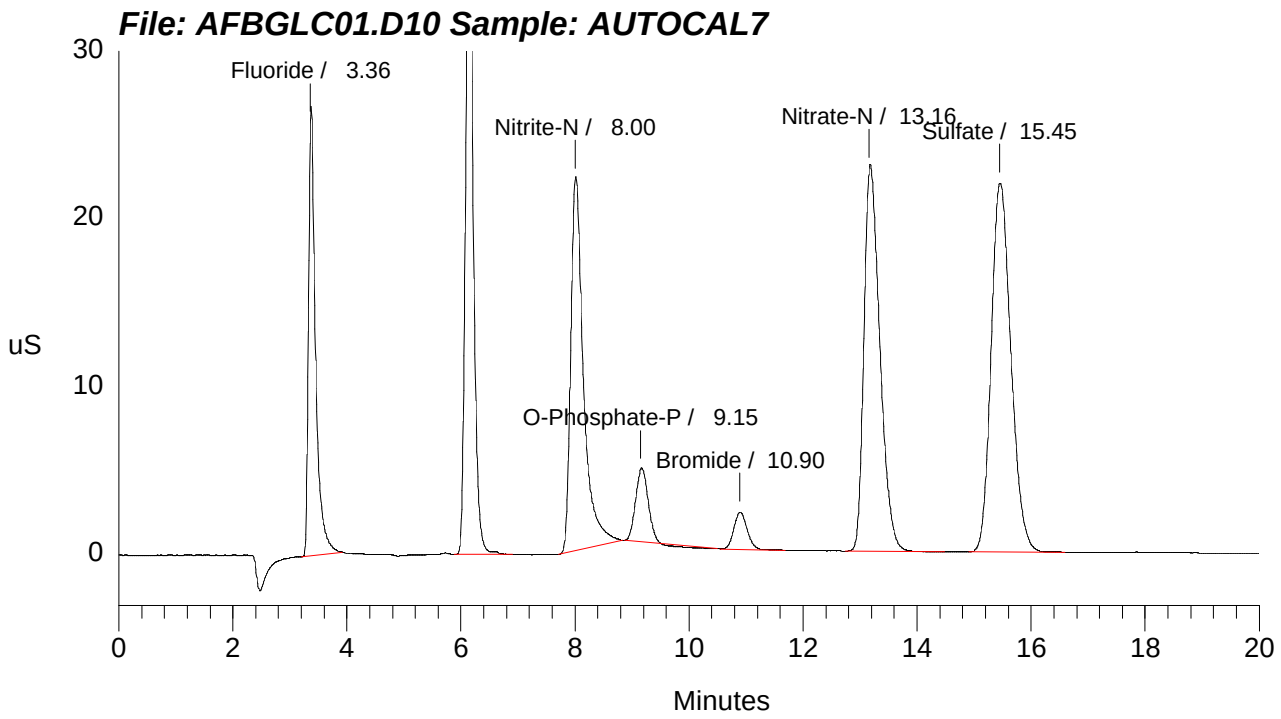
| Sample Name: AUTOCAL7                          Date: 02/07/2006 15:38:02     |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D10                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 10                 Detector:CDM-2        |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                10.000   25784920  229655968    1   0.00
   2   6.14 Chloride                20.000   39325765  377588304    1   0.00
   3   8.00 Nitrite-N               10.000   22124018  344914790    1   0.00
   4   9.15 O-Phosphate-P            5.000    4302140   64273600    1   0.00
   5  10.90 Bromide                  5.000    2212168   35586640    1   0.00
   6  13.16 Nitrate-N               10.000   22783332  447221880    1   0.00
   7  15.45 Sulfate                 40.000   21958103  530339480    1   0.00
                                ----------------------------------
                         Totals     100.000  138490446 2029580662
```



Data Reprocessed On 02/08/2006 08:46:27

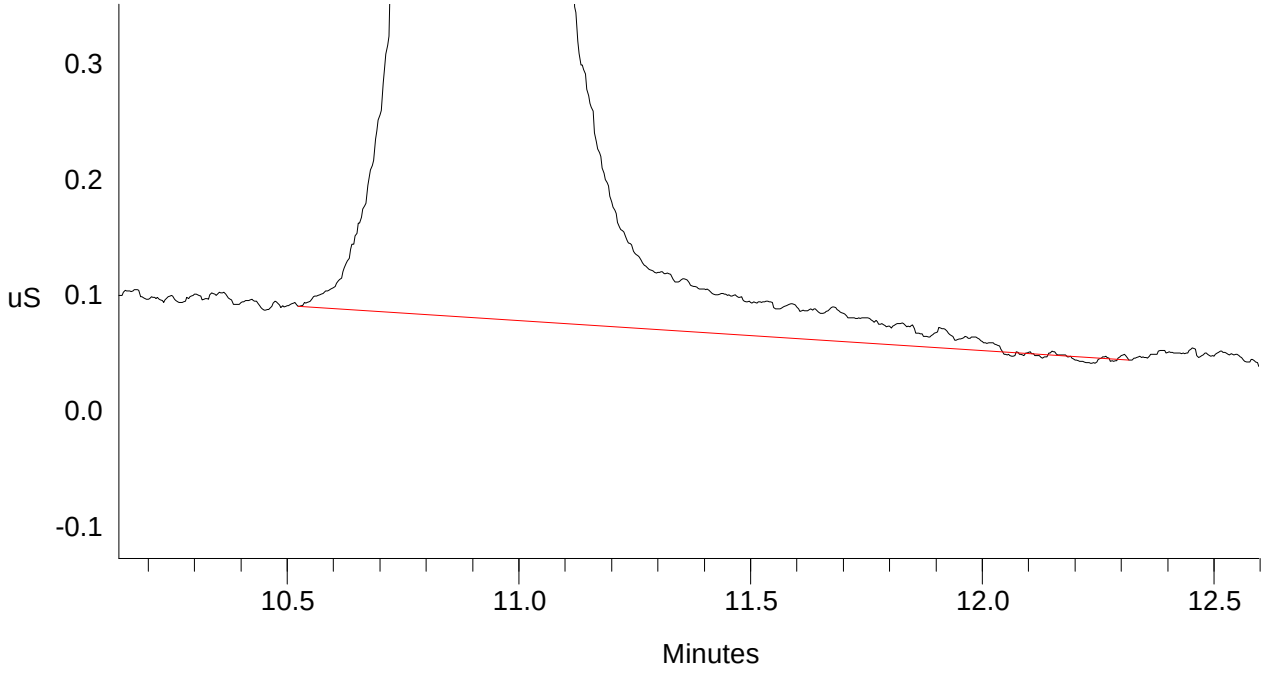
Sample Name: AUTOCAL6		Date: 02/07/2006 15:58:24	
Data File : C:\TMP\HORIZON\AFBGLC01.D11			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 11		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	10.14	12.60	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	5.000	12375553	112518754	1	0.00
2	6.14	Chloride	10.000	17772372	171627954	1	0.00
3	8.00	Nitrite-N	5.000	9919654	154340462	1	0.00
4	9.17	O-Phosphate-P	3.000	2549967	41039020	1	0.00
5	10.90	Bromide	3.000	1359758	23979076	1	0.00
6	13.23	Nitrate-N	5.000	10832604	210468378	1	0.00
7	15.47	Sulfate	20.000	10163057	251298418	1	0.00
		Totals	51.000	64972965	965272062		

File: AFBGLC01.D11 Sample: AUTOCAL6



Data Reprocessed On 02/08/2006 08:46:52

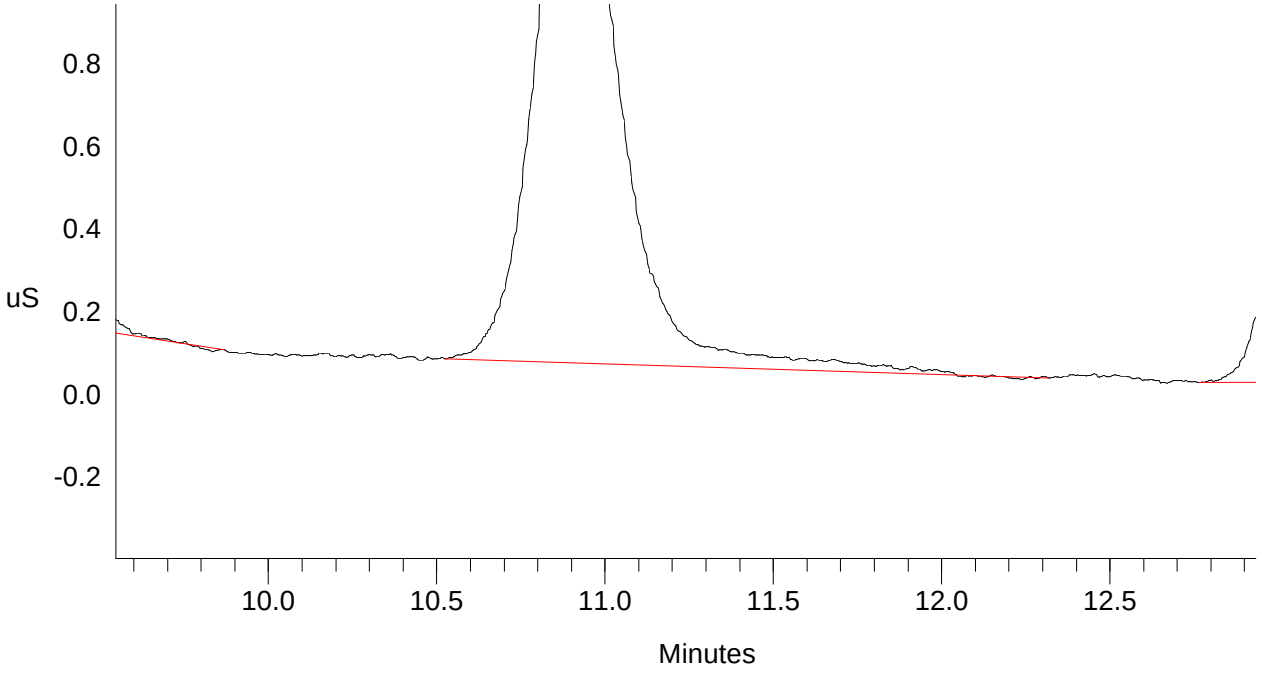
Sample Name: AUTOCAL6		Date: 02/07/2006 15:58:24	
Data File : C:\TMP\HORIZON\AFBGLC01.D11			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 11		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	9.55	12.93	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	5.000	12375553	112518754	1	0.00
2	6.14	Chloride	10.000	17772372	171627954	1	0.00
3	8.00	Nitrite-N	5.000	9919654	154340462	1	0.00
4	9.17	O-Phosphate-P	3.000	2549967	41039020	1	0.00
5	10.90	Bromide	3.000	1359758	23979076	1	0.00
6	13.23	Nitrate-N	5.000	10832604	210468378	1	0.00
7	15.47	Sulfate	20.000	10163057	251298418	1	0.00
		Totals	51.000	64972965	965272062		

File: AFBGLC01.D11 Sample: AUTOCAL6



Data Reprocessed On 02/08/2006 08:48:16

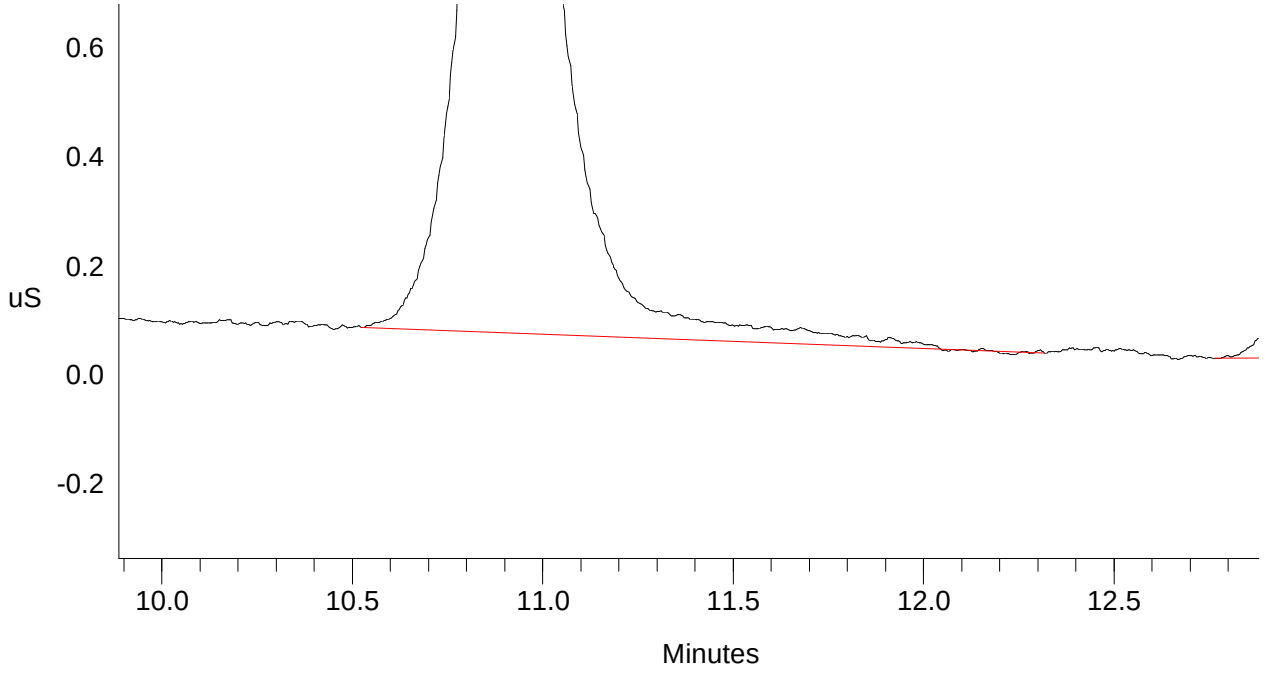
Sample Name: AUTOCAL6		Date: 02/07/2006 15:58:24	
Data File : C:\TMP\HORIZON\AFBGLC01.D11			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 11		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	9.89	12.88	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	5.000	12375553	112518754	1	0.00
2	6.14	Chloride	10.000	17772372	171627954	1	0.00
3	8.00	Nitrite-N	5.000	9919654	154340462	1	0.00
4	9.17	O-Phosphate-P	3.000	2549967	41039020	1	0.00
5	10.90	Bromide	3.000	1359758	23979076	1	0.00
6	13.23	Nitrate-N	5.000	10832604	210468378	1	0.00
7	15.47	Sulfate	20.000	10163057	251298418	1	0.00
		Totals	51.000	64972965	965272062		

File: AFBGLC01.D11 Sample: AUTOCAL6



Data Reprocessed On 02/08/2006 08:48:58

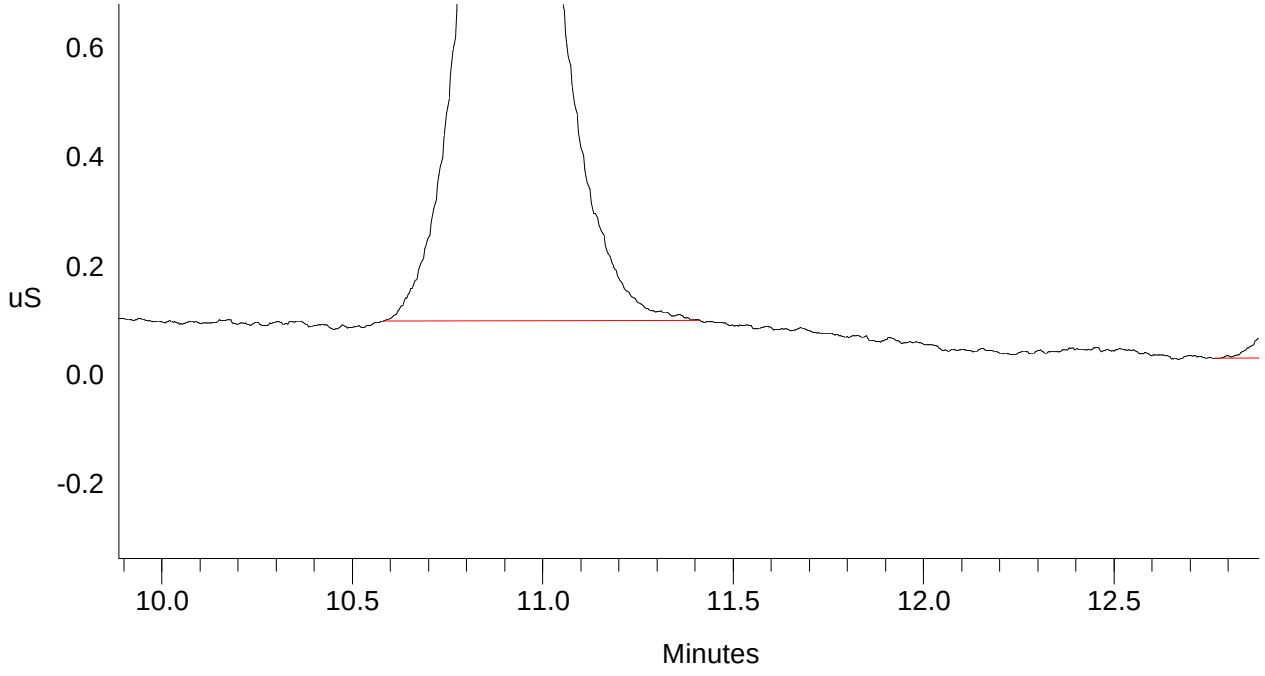
Sample Name: AUTOCAL6		Date: 02/07/2006 15:58:24	
Data File : C:\TMP\HORIZON\AFBGLC01.D11			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1	Inject#: 11	Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	9.89	12.88	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	5.000	12375553	112518754	1	0.00
2	6.14	Chloride	10.000	17772372	171627954	1	0.00
3	8.00	Nitrite-N	5.000	9919654	154340462	1	0.00
4	9.17	O-Phosphate-P	3.000	2549967	41039020	1	0.00
5	10.90	Bromide	3.000	1337596	21940860	1	0.00
6	13.23	Nitrate-N	5.000	10832604	210468378	1	0.00
7	15.47	Sulfate	20.000	10163057	251298418	1	0.00
		Totals	51.000	64950804	963233846		

File: AFBGLC01.D11 Sample: AUTOCAL6



Data Reprocessed On 02/08/2006 08:50:08

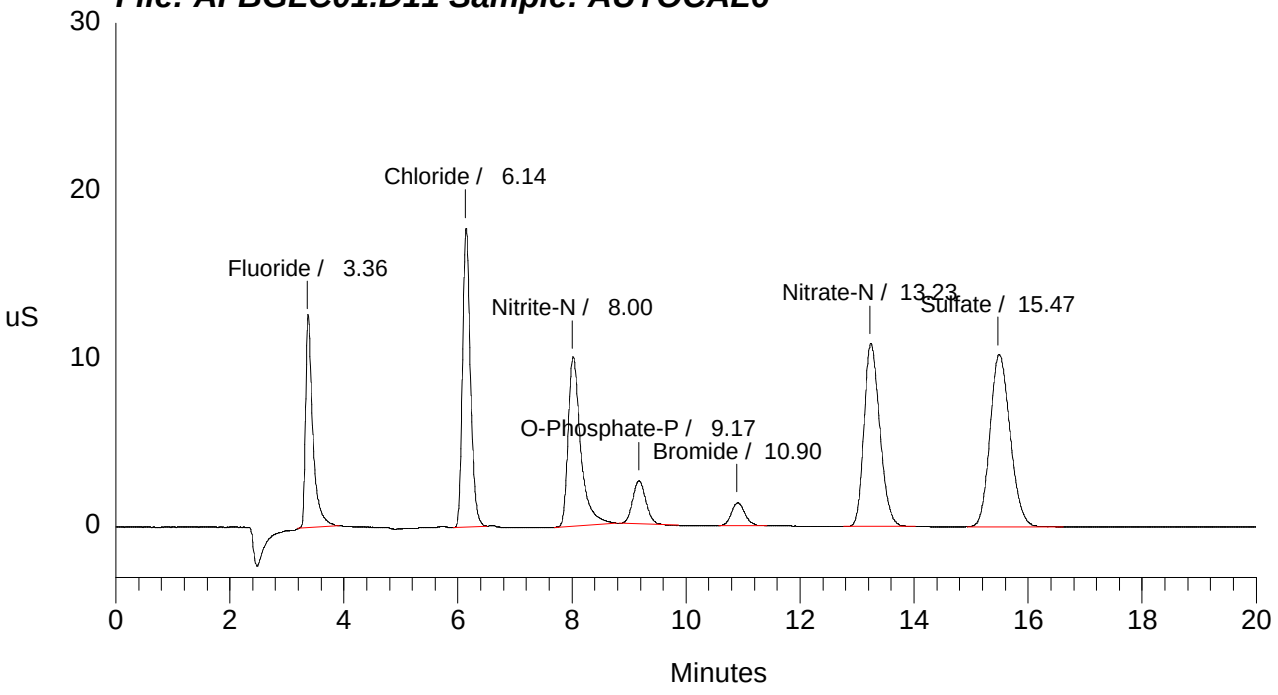
Sample Name: AUTOCAL6		Date: 02/07/2006 15:58:24	
Data File : C:\TMP\HORIZON\AFBGLC01.D11			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 11		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	5.000	12375553	112518754	1	0.00
2	6.14	Chloride	10.000	17772372	171627954	1	0.00
3	8.00	Nitrite-N	5.000	9919654	154340462	1	0.00
4	9.17	O-Phosphate-P	3.000	2549967	41039020	1	0.00
5	10.90	Bromide	3.000	1337596	21940860	1	0.00
6	13.23	Nitrate-N	5.000	10832604	210468378	1	0.00
7	15.47	Sulfate	20.000	10163057	251298418	1	0.00
		Totals	51.000	64950804	963233846		

File: AFBGLC01.D11 Sample: AUTOCAL6



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================================================================================
| Sample Name: AUTOCAL6                          Date: 02/07/2006 15:58:24     |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D11                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 11                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 5.000   12375553  112518754    1   0.00
   2   6.14 Chloride                10.000   17772372  171627954    1   0.00
   3   8.00 Nitrite-N                5.000    9919654  154340462    1   0.00
   4   9.17 O-Phosphate-P            3.000    2549967   41039020    1   0.00
   5  10.90 Bromide                  3.000    1359758   23979076    1   0.00
   6  13.23 Nitrate-N                5.000   10832604  210468378    1   0.00
   7  15.47 Sulfate                 20.000   10163057  251298418    1   0.00
                                ----------------------------------
                        Totals       51.000   64972965  965272062
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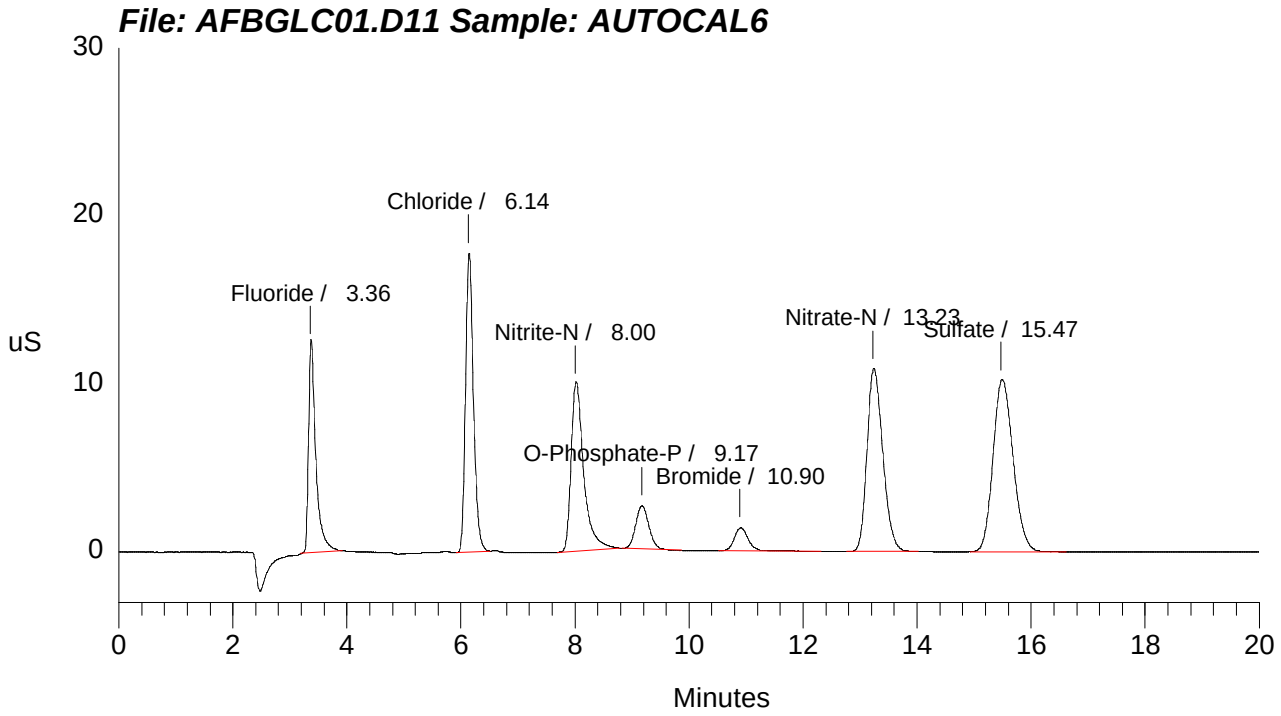


Data Reprocessed On 02/08/2006 09:02:04

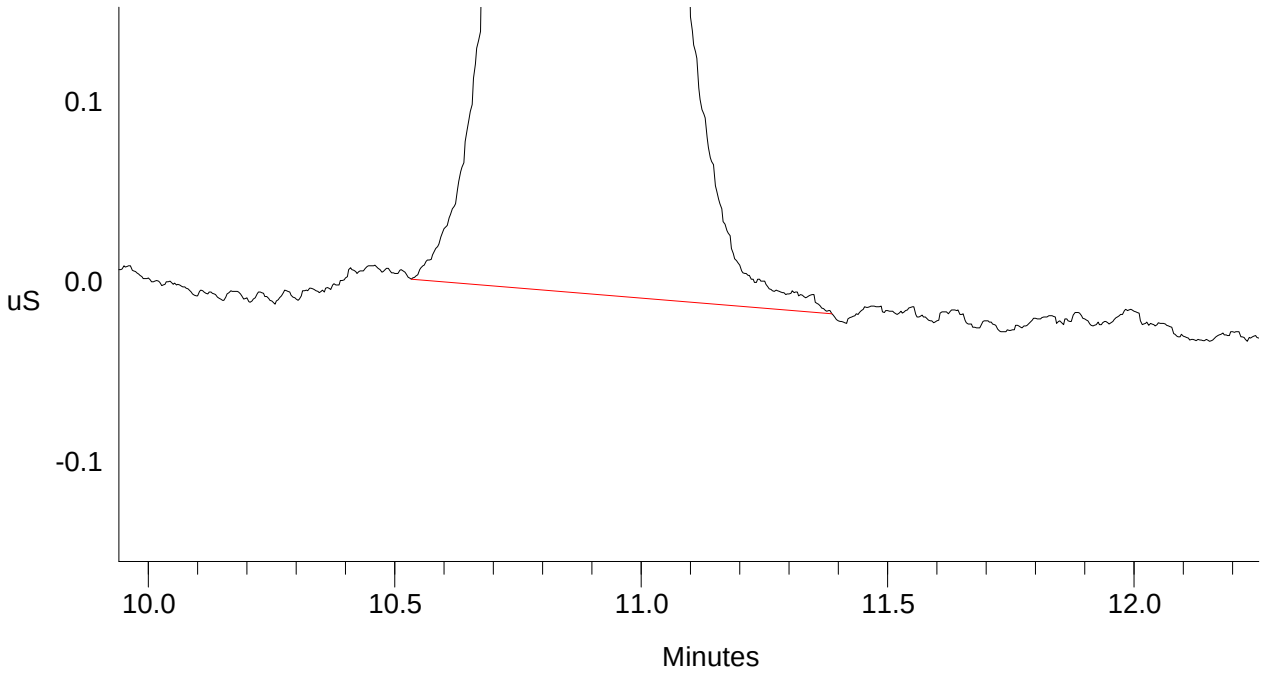
Sample Name: AUTOCAL5		Date: 02/07/2006 16:18:46	
Data File : C:\TMP\HORIZON\AFBGLC01.D12			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1	Inject#: 12	Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	9.94	12.25	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	1.000	2171098	21087690	1	0.00
2	6.14	Chloride	2.000	3103068	31339392	1	0.00
3	8.00	Nitrite-N	1.000	1852817	29274878	1	0.00
4	9.17	O-Phosphate-P	2.500	2159135	35356106	1	0.00
5	10.87	Bromide	2.500	1119796	17914986	1	0.00
6	13.25	Nitrate-N	1.000	2068762	40702198	1	0.00
7	15.52	Sulfate	4.000	1929130	48346692	1	0.00
		Totals	14.000	14403805	224021942		

File: AFBGLC01.D12 Sample: AUTOCAL5



Data Reprocessed On 02/08/2006 09:03:18

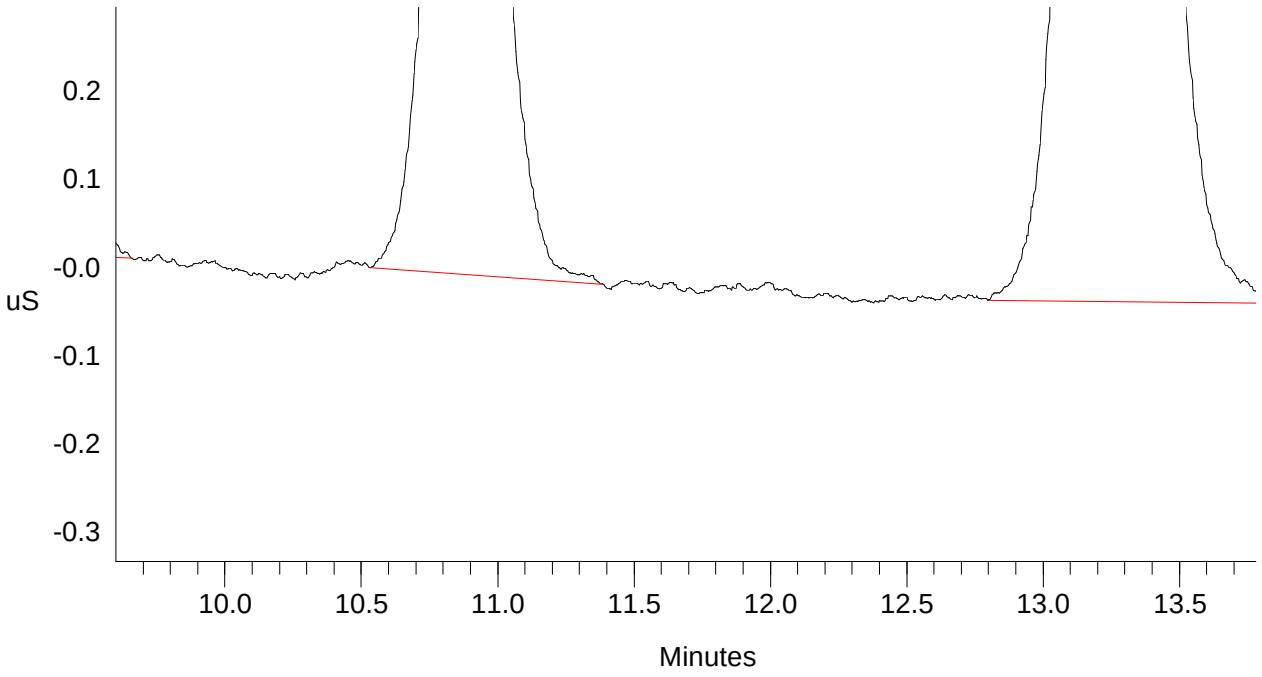
Sample Name: AUTOCAL5		Date: 02/07/2006 16:18:46	
Data File : C:\TMP\HORIZON\AFBGLC01.D12			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1	Inject#: 12	Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	9.60	13.78	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	1.000	2171098	21087690	1	0.00
2	6.14	Chloride	2.000	3103068	31339392	1	0.00
3	8.00	Nitrite-N	1.000	1852817	29274878	1	0.00
4	9.17	O-Phosphate-P	2.500	2159135	35356106	1	0.00
5	10.87	Bromide	2.500	1119796	17914986	1	0.00
6	13.25	Nitrate-N	1.000	2068762	40702198	1	0.00
7	15.52	Sulfate	4.000	1929130	48346692	1	0.00
		Totals	14.000	14403805	224021942		

File: AFBGLC01.D12 Sample: AUTOCAL5



Data Reprocessed On 02/08/2006 09:03:38

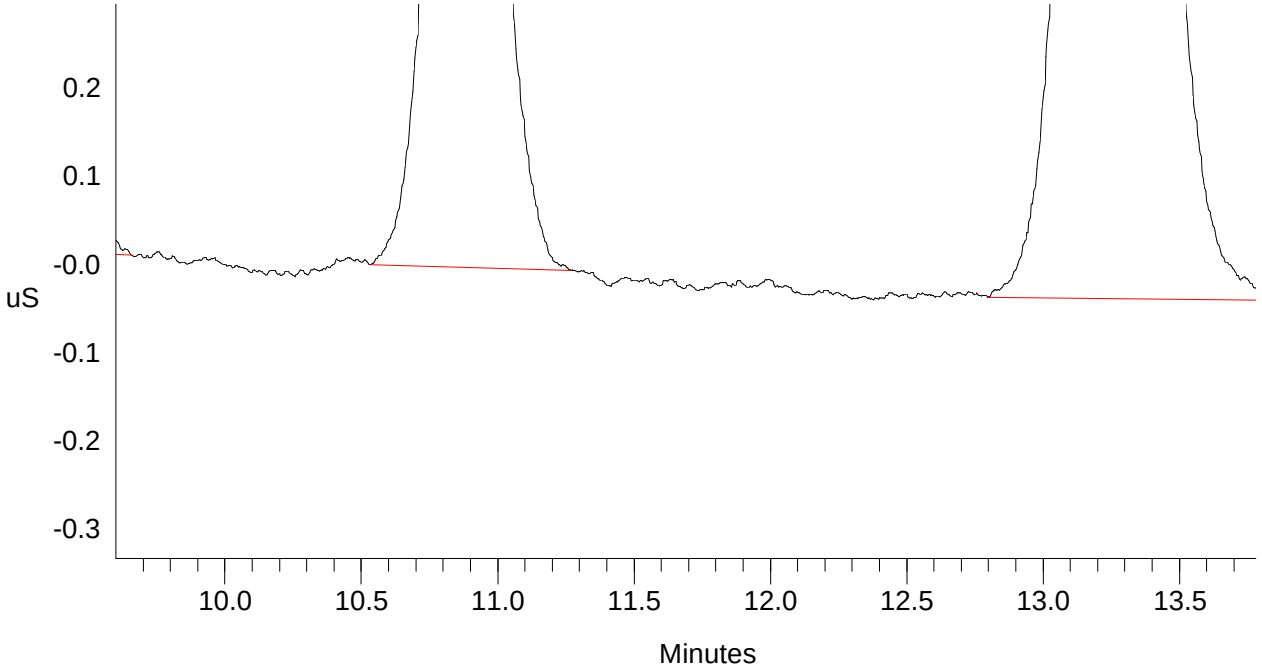
Sample Name:	AUTOCAL5
Data File :	C:\TMP\HORIZON\AFBGLC01.D12
Method :	C:\DX\METHOD\020606AN.MET
ACI Address: 1 System: 1 Inject#: 12	Detector:CDM-2
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056
Date: 02/07/2006 16:18:46	

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	9.60	13.78	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	1.000	2171098	21087690	1	0.00
2	6.14	Chloride	2.000	3103068	31339392	1	0.00
3	8.00	Nitrite-N	1.000	1852817	29274878	1	0.00
4	9.17	O-Phosphate-P	2.500	2159135	35356106	1	0.00
5	10.87	Bromide	2.500	1115198	17641758	1	0.00
6	13.25	Nitrate-N	1.000	2068762	40702198	1	0.00
7	15.52	Sulfate	4.000	1929130	48346692	1	0.00
		Totals	14.000	14399207	223748714		

File: AFBGLC01.D12 Sample: AUTOCAL5



Data Reprocessed On 02/08/2006 09:06:23

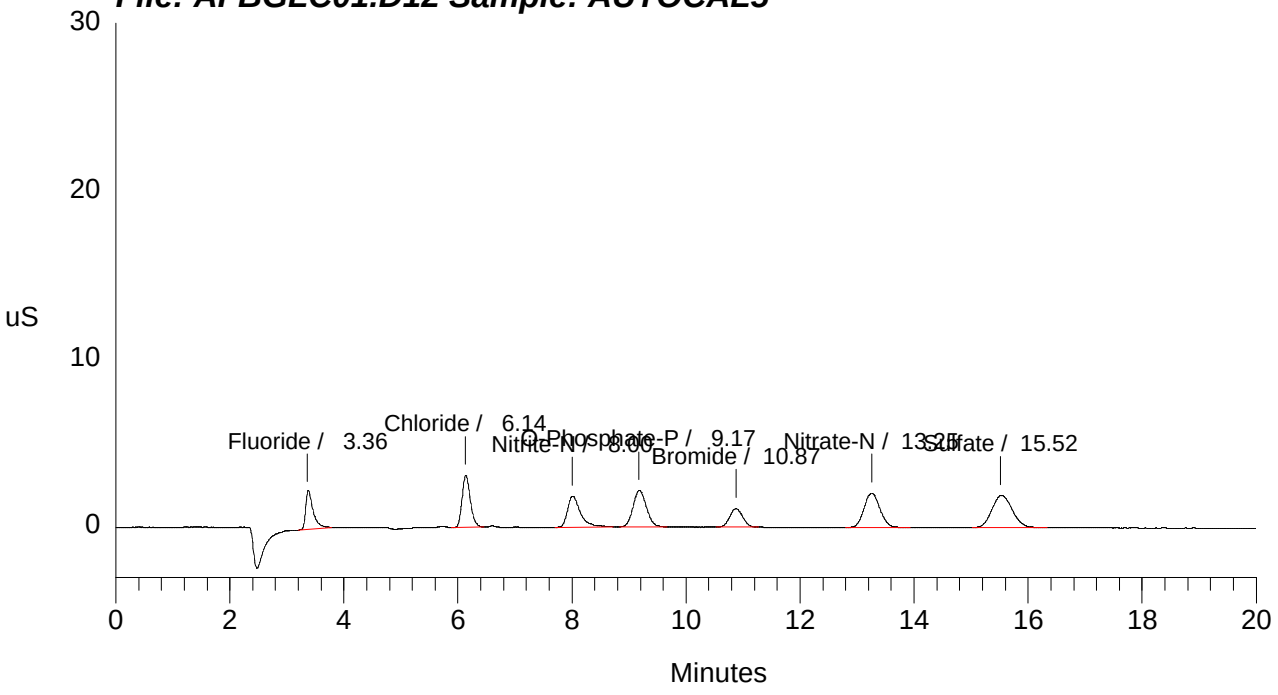
Sample Name: AUTOCAL5		Date: 02/07/2006 16:18:46	
Data File : C:\TMP\HORIZON\AFBGLC01.D12			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 12		Detector:CDM-2	
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	1.000	2171098	21087690	1	0.00
2	6.14	Chloride	2.000	3103068	31339392	1	0.00
3	8.00	Nitrite-N	1.000	1852817	29274878	1	0.00
4	9.17	O-Phosphate-P	2.500	2159135	35356106	1	0.00
5	10.87	Bromide	2.500	1115198	17641758	1	0.00
6	13.25	Nitrate-N	1.000	2068762	40702198	1	0.00
7	15.52	Sulfate	4.000	1929130	48346692	1	0.00
		Totals	14.000	14399207	223748714		

File: AFBGLC01.D12 Sample: AUTOCAL5



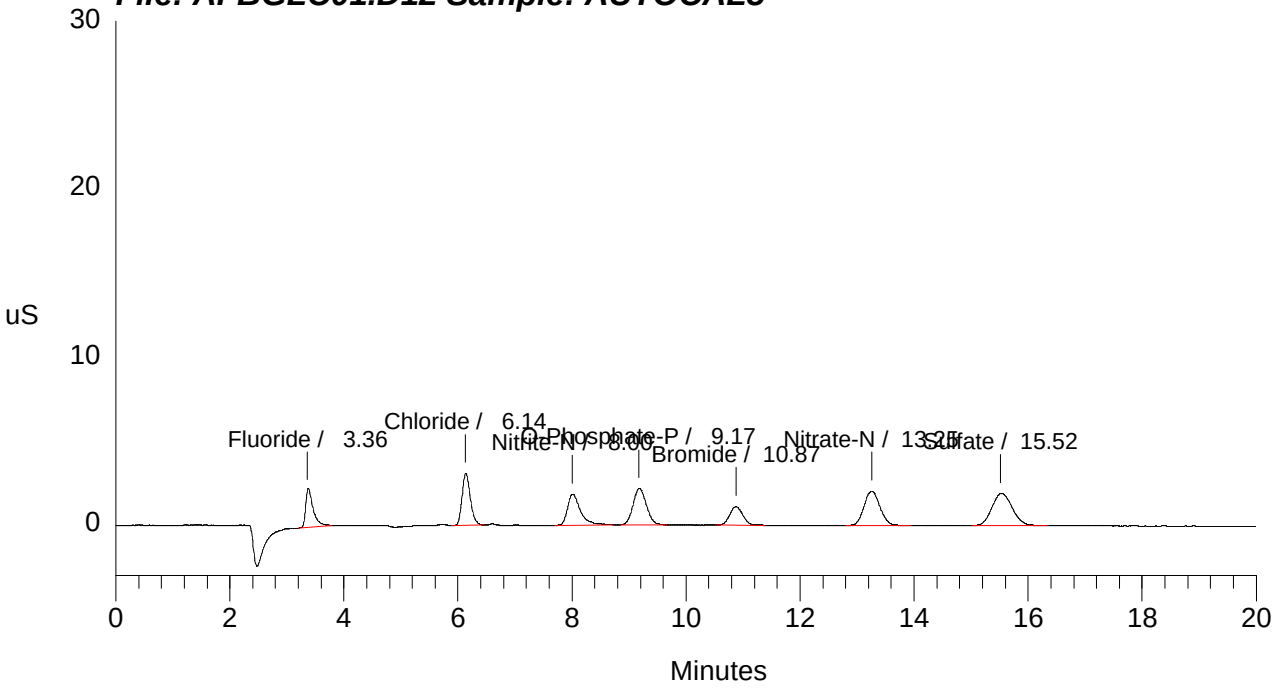
```
================================================================================
| Sample Name: AUTOCAL5                          Date: 02/07/2006 16:18:46     |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D12                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 12                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.36 Fluoride                 1.000    2171098   21087690    1   0.00
   2   6.14 Chloride                 2.000    3103068   31339392    1   0.00
   3   8.00 Nitrite-N                1.000    1852817   29274878    1   0.00
   4   9.17 O-Phosphate-P            2.500    2159135   35356106    1   0.00
   5  10.87 Bromide                  2.500    1119796   17914986    1   0.00
   6  13.25 Nitrate-N                1.000    2068762   40702198    1   0.00
   7  15.52 Sulfate                  4.000    1929130   48346692    1   0.00
                          ----------------------------------
                  Totals        14.000   14403805  224021942
```

File: AFBGLC01.D12 Sample: AUTOCAL5



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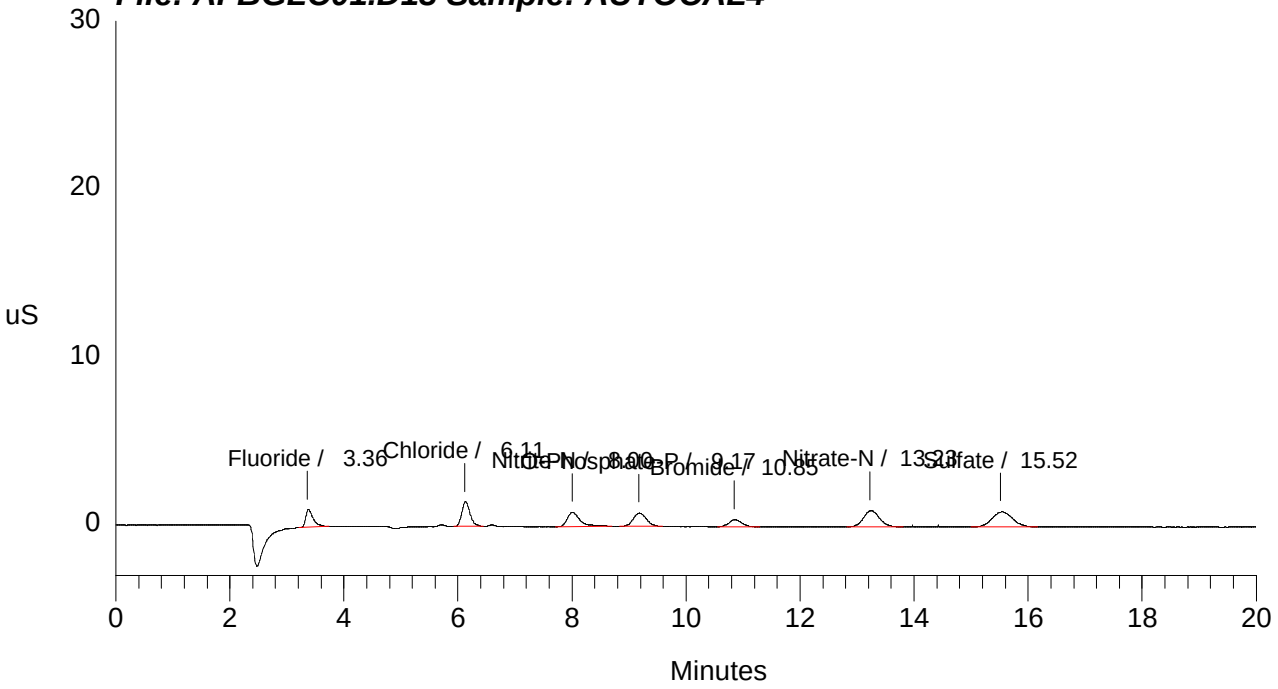
================================================================================
| Sample Name: AUTOCAL4                          Date: 02/07/2006 16:39:07     |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D13                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 13                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                  0.500    1018391    9761185    1   0.00
   2   6.11 Chloride                  1.000    1424001   14807924    1   0.00
   3   8.00 Nitrite-N                 0.500     856402   13703812    1   0.00
   4   9.17 O-Phosphate-P             1.000     798106   13075112    1   0.00
   5  10.85 Bromide                   1.000     425096    6800154    1   0.00
   6  13.23 Nitrate-N                 0.500     955151   18919701    1   0.00
   7  15.52 Sulfate                   2.000     896152   22664446    1   0.00
                          ---------------------------------
                    Totals           6.500    6373299   99732334
```

File: AFBGLC01.D13 Sample: AUTOCAL4



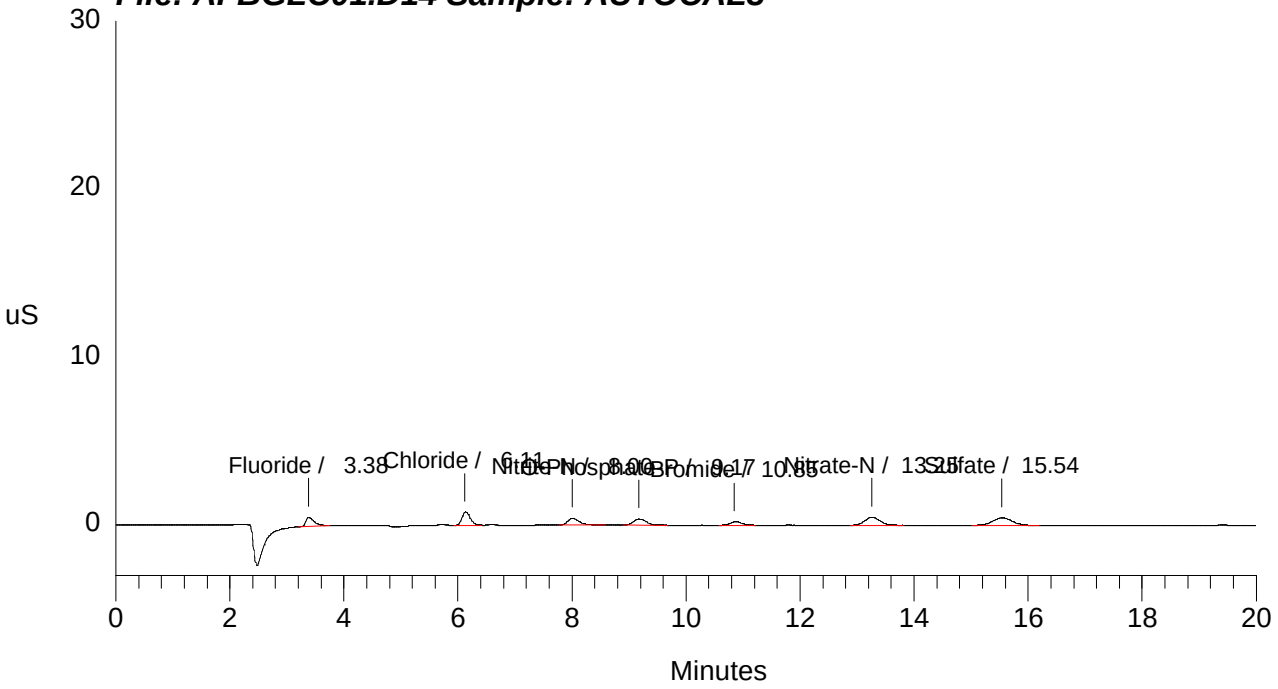
```
================================================================================
| Sample Name: AUTOCAL3                        Date: 02/07/2006 16:59:29       |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D14                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 14                 Detector:CDM-2        |
| Analyst    : MAR1          Column: AS9-HC01107;GL-GC-E-086;300;9056          |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                  0.250     556763    5976741    1   0.00
   2   6.11 Chloride                  0.500     772923    8174162    1   0.00
   3   8.00 Nitrite-N                 0.250     412953    6322420    1   0.00
   4   9.17 O-Phosphate-P             0.500     386088    6343084    1   0.00
   5  10.85 Bromide                   0.500     216843    3446200    1   0.00
   6  13.25 Nitrate-N                 0.250     485683    9446062    1   0.00
   7  15.54 Sulfate                   1.000     457712   11473256    1   0.00
                                  ----------------------------------
                        Totals         3.250    3288965   51181925
```

File: AFBGLC01.D14 Sample: AUTOCAL3



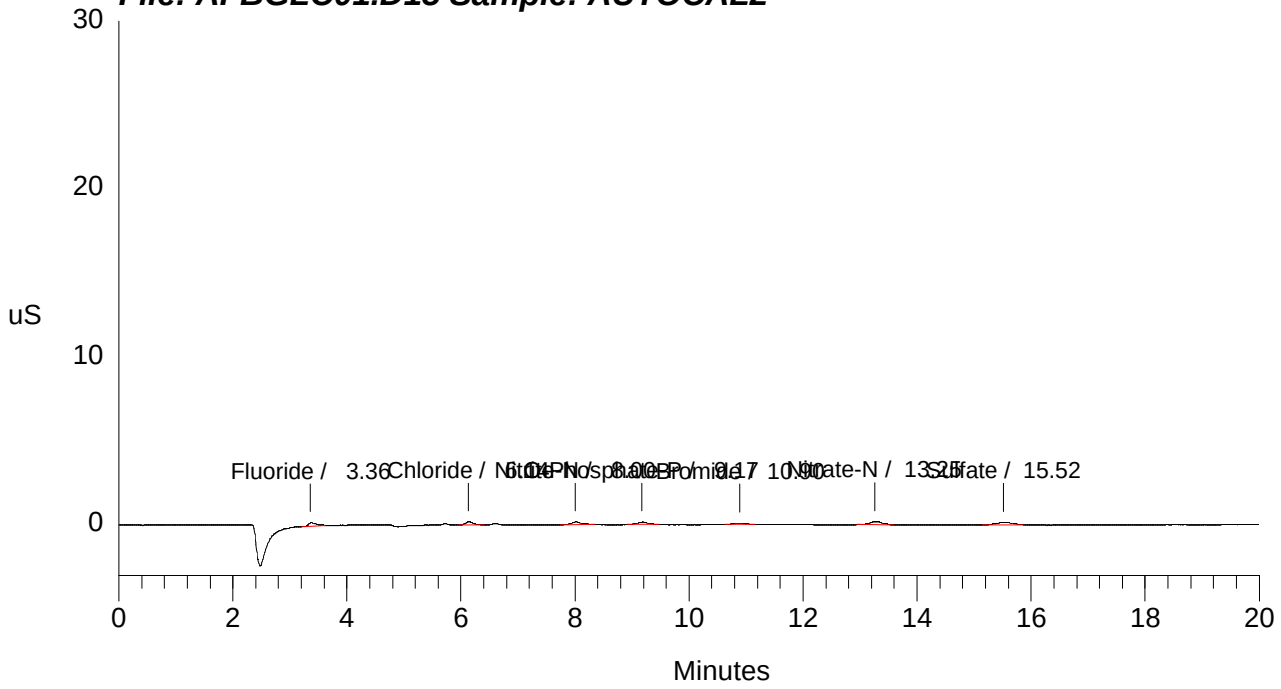
```
================================================================================
| Sample Name: AUTOCAL2                        Date: 02/07/2006 17:19:50     |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D15                                   |
| Method     : C:\DX\METHOD\020606AN.MET                                     |
| ACI Address: 1  System: 1  Inject#: 15                 Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.36 Fluoride                  0.100     213118    2026610    1   0.00
   2   6.14 Chloride                  0.200     185840    1998030    1   0.00
   3   8.00 Nitrite-N                 0.100     158084    2328724    1   0.00
   4   9.17 O-Phosphate-P             0.200     146809    2302566    1   0.00
   5  10.90 Bromide                   0.200      95258    1459096    1   0.00
   6  13.25 Nitrate-N                 0.100     190801    3525946    1   0.00
   7  15.52 Sulfate                   0.400     161120    3503950    1   0.00
                          ---------------------------------
                  Totals          1.300    1151030   17144922
```

File: AFBGLC01.D15 Sample: AUTOCAL2



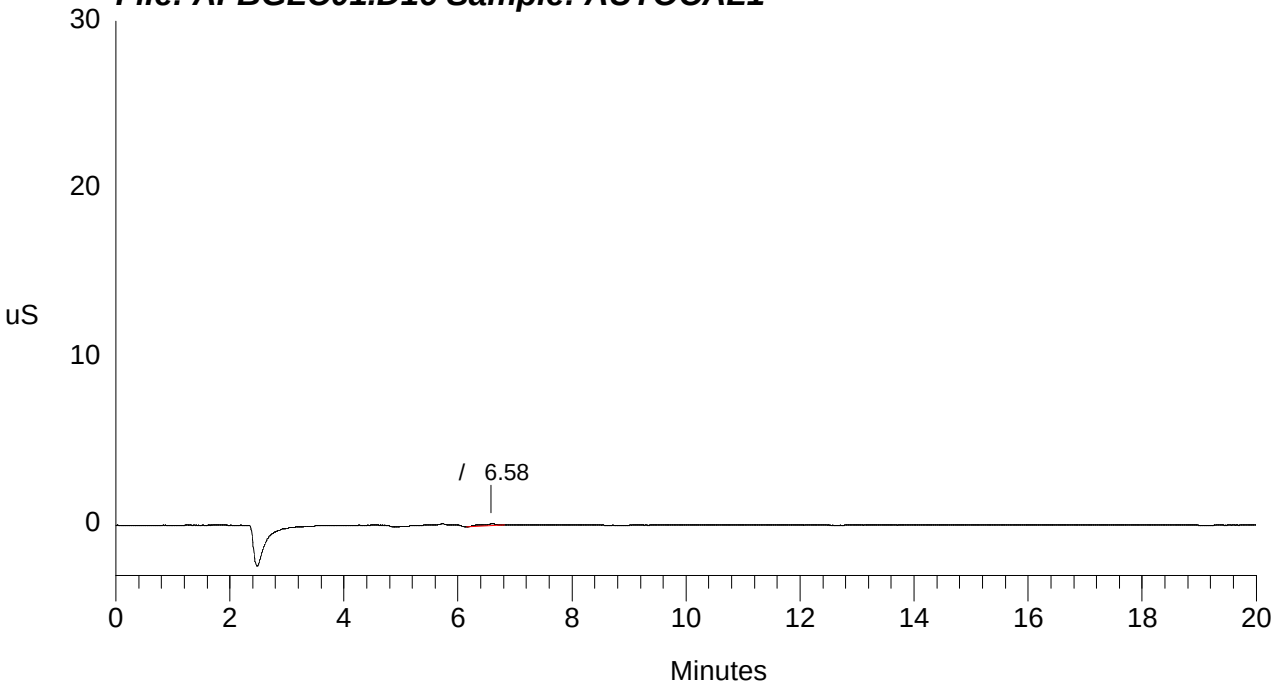
```
================================================================================
| Sample Name: AUTOCAL1                          Date: 02/07/2006 17:40:12     |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D16                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 16                  Detector:CDM-2       |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                  0.000          0          0    0   0.00
   0   0.00 Chloride                  0.000          0          0    0   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0   0.00 Bromide                   0.000          0          0    0   0.00
   0   0.00 Nitrate-N                 0.000          0          0    0   0.00
   0   0.00 Sulfate                   0.000          0          0    0   0.00
                                  ----------------------------------
                        Totals      0.000          0          0
```

File: AFBGLC01.D16 Sample: AUTOCAL1



Data Reprocessed On 02/08/2006 09:21:45

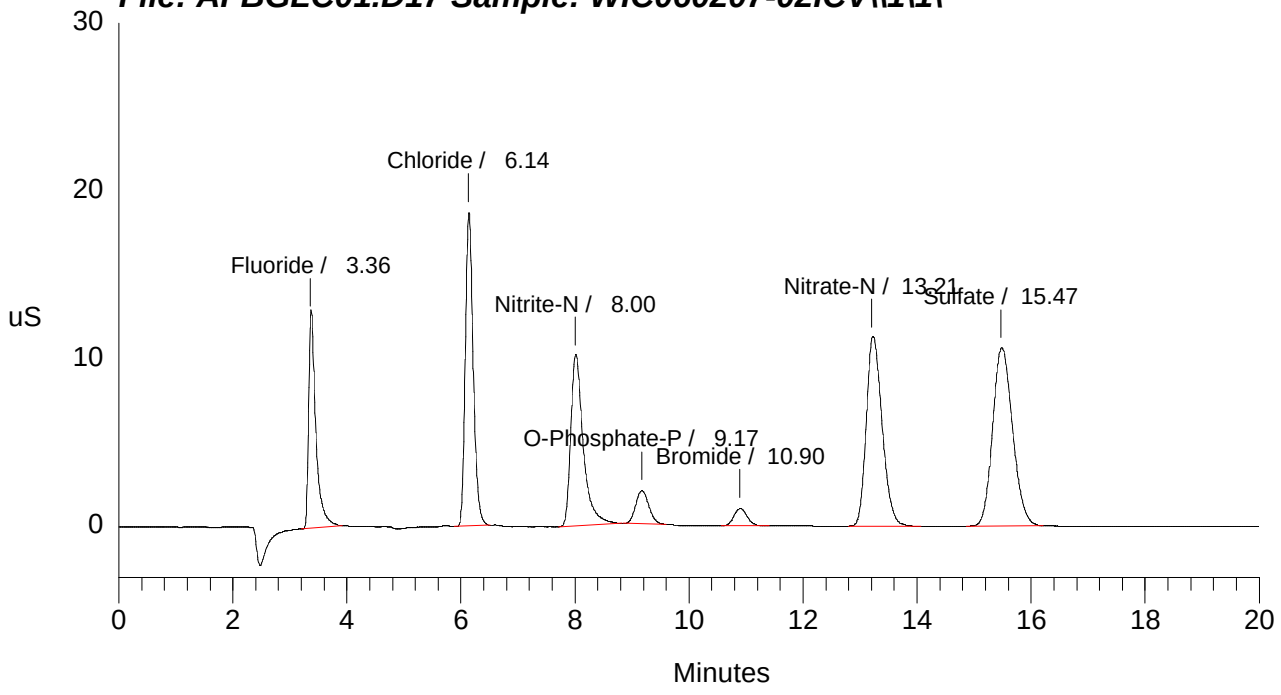
Sample Name: WIC060207-02ICV\\1\1\		Date: 02/07/2006 18:00:33	
Data File : C:\TMP\HORIZON\AFBGLC01.D17			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 17			Detector:CDM-2
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	4.926	12553418	113454114	1	0.00
2	6.14	Chloride	9.662	18658817	178991211	1	0.00
3	8.00	Nitrite-N	4.600	10106786	154986560	1	0.00
4	9.17	O-Phosphate-P	2.312	1979788	31886940	1	0.00
5	10.90	Bromide	2.315	1036651	16601870	1	0.00
6	13.21	Nitrate-N	4.967	11190624	219035860	1	0.00
7	15.47	Sulfate	19.764	10556295	258885250	1	0.00
		Totals	48.545	66082379	973841805		

File: AFBGLC01.D17 Sample: WIC060207-02ICV\\1\1



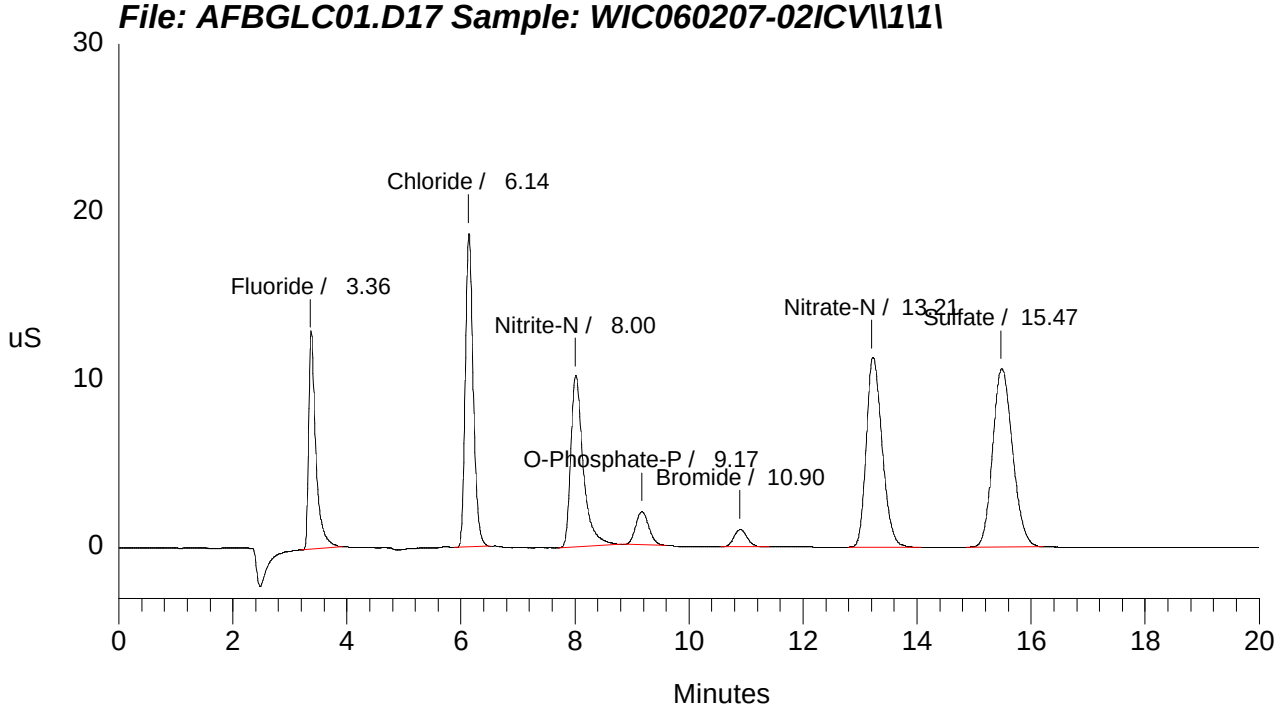
Data Reprocessed On 02/08/2006 09:48:04

Sample Name: WIC060207-02ICV\\1\1\		Date: 02/07/2006 18:00:33	
Data File : C:\TMP\HORIZON\AFBGLC01.D17			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 17			Detector:CDM-2
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	4.977	12553418	113454114	1	0.00
2	6.14	Chloride	9.736	18658817	178991211	1	0.00
3	8.00	Nitrite-N	4.633	10106786	154986560	1	0.00
4	9.17	O-Phosphate-P	2.312	1979788	31886940	1	0.00
5	10.90	Bromide	2.328	1036651	16601870	1	0.00
6	13.21	Nitrate-N	4.981	11190624	219035860	1	0.00
7	15.47	Sulfate	19.832	10556295	258885250	1	0.00
		Totals	48.798	66082379	973841805		



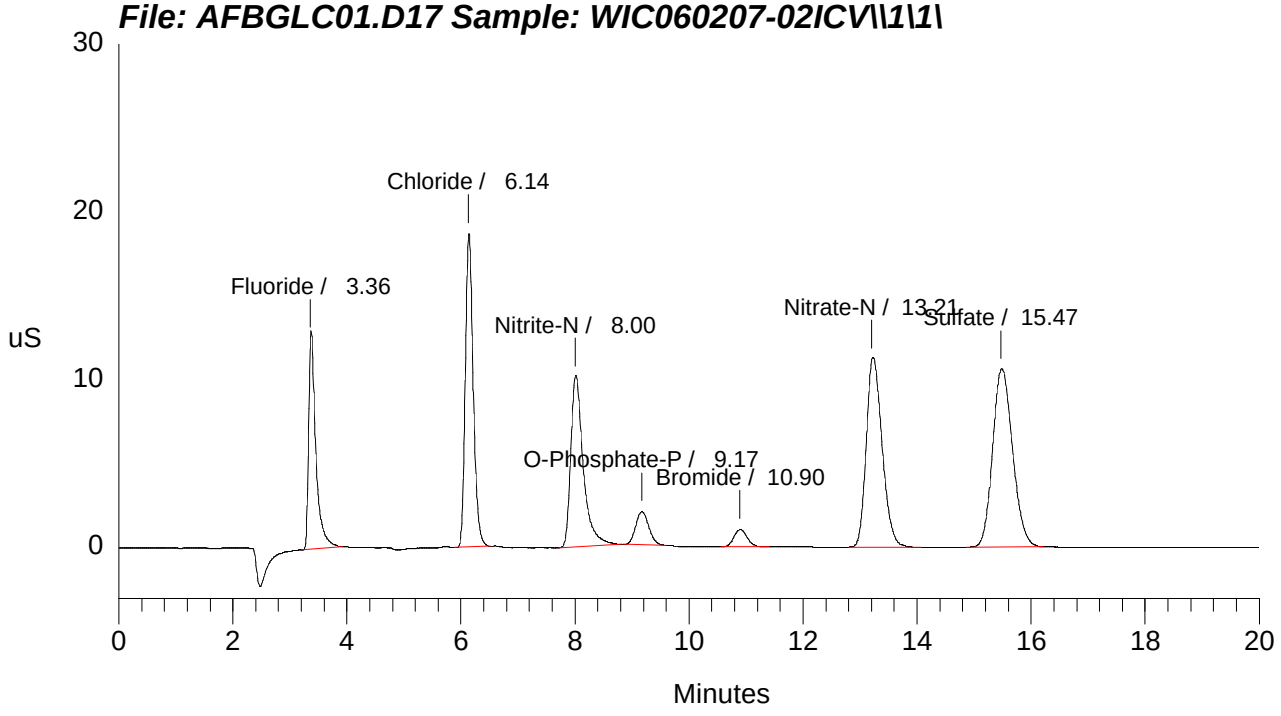
Data Reprocessed On 02/08/2006 10:21:34

Sample Name: WIC060207-02ICV\\1\1\		Date: 02/07/2006 18:00:33	
Data File : C:\TMP\HORIZON\AFBGLC01.D17			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1 Inject#: 17			Detector:CDM-2
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	4.977	12553418	113454114	1	0.00
2	6.14	Chloride	9.736	18658817	178991211	1	0.00
3	8.00	Nitrite-N	4.633	10106786	154986560	1	0.00
4	9.17	O-Phosphate-P	2.312	1979788	31886940	1	0.00
5	10.90	Bromide	2.328	1036651	16601870	1	0.00
6	13.21	Nitrate-N	4.981	11190624	219035860	1	0.00
7	15.47	Sulfate	19.832	10556295	258885250	1	0.00
		Totals	48.798	66082379	973841805		

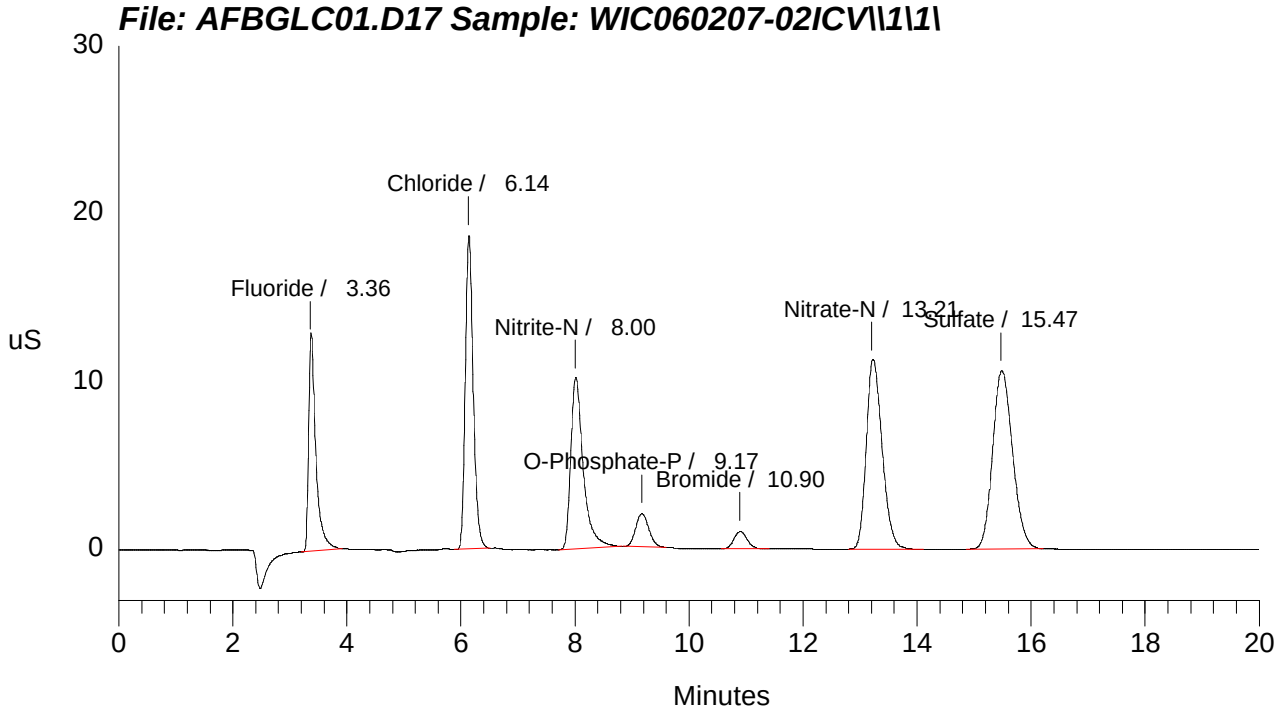


```
================================================================================
| Sample Name: WIC060207-02ICV\\1\1\          Date: 02/07/2006 18:00:33     |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D17                                   |
| Method     : C:\DX\METHOD\020606AN.MET                                     |
| ACI Address: 1  System: 1  Inject#: 17                 Detector:CDM-2      |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 4.977   12553418  113454114    1   0.00
   2   6.14 Chloride                 9.736   18658817  178991211    1   0.00
   3   8.00 Nitrite-N                4.633   10106786  154986560    1   0.00
   4   9.17 O-Phosphate-P            2.312    1979788   31886940    1   0.00
   5  10.90 Bromide                  2.269    1036651   16601870    1   0.00
   6  13.21 Nitrate-N                4.985   11192037  219209548    1   0.00
   7  15.47 Sulfate                 19.832   10556295  258885250    1   0.00
                                ----------------------------------
                        Totals       48.743   66083792  974015493
```



Data Reprocessed On 02/08/2006 10:21:35

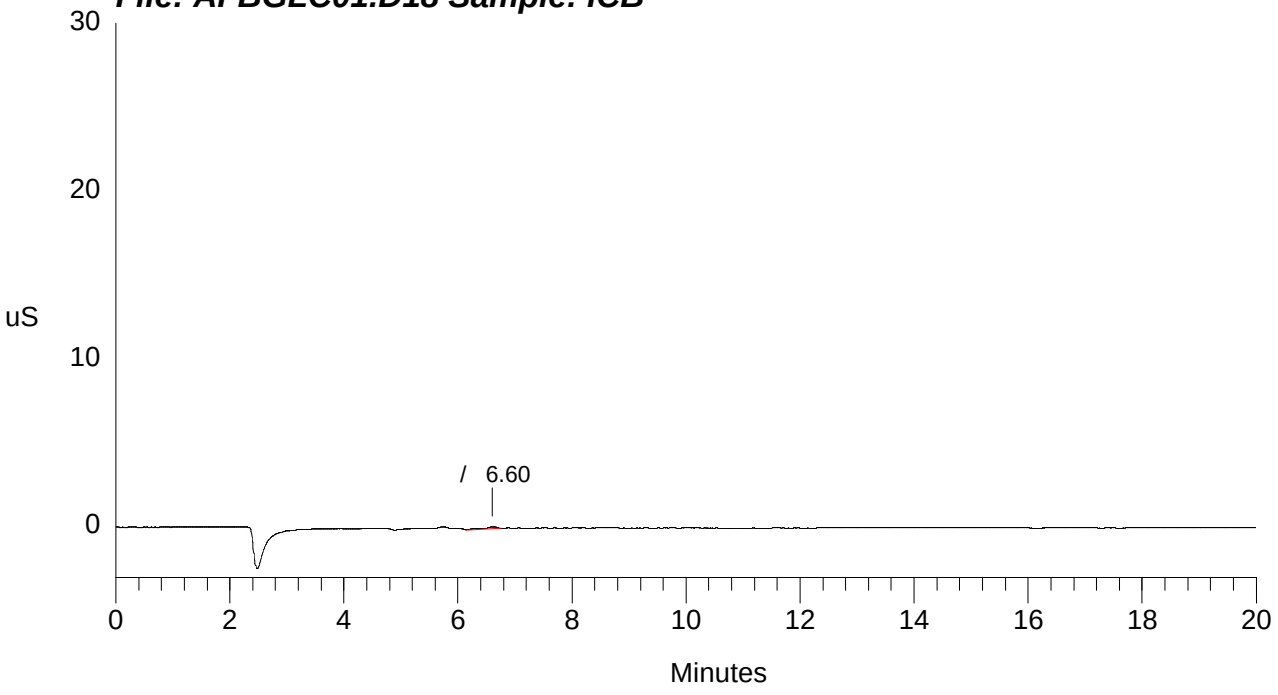
Sample Name: ICB		Date: 02/07/2006 18:20:54	
Data File : C:\TMP\HORIZON\AFBGLC01.D18			
Method : C:\DX\METHOD\020606AN.MET			
ACI Address: 1 System: 1	Inject#: 18		Detector:CDM-2
Analyst : MAR1	Column: AS9-HC01107;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	6000	5Hz	0.00	20.00		0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		

File: AFBGLC01.D18 Sample: ICB



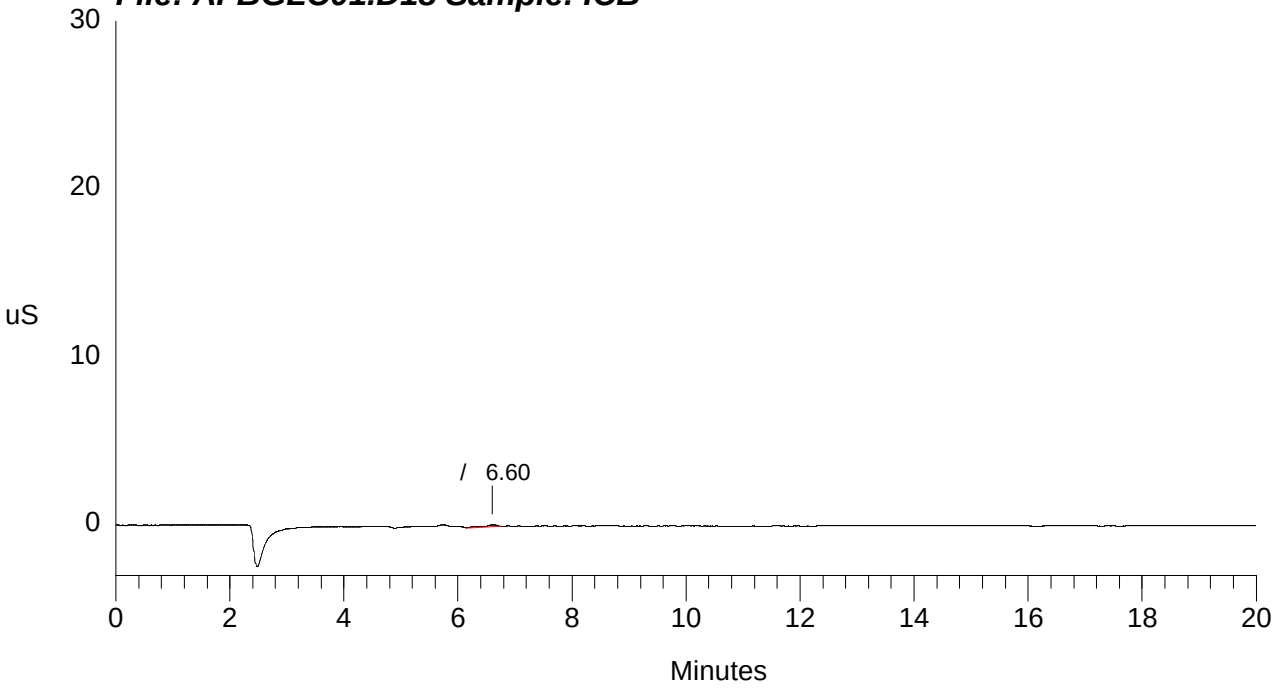
```
================================================================================
| Sample Name: ICB                              Date: 02/07/2006 18:20:54      |
| Data File  : C:\TMP\HORIZON\AFBGLC01.D18                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 18                 Detector:CDM-2        |
| Analyst    : MAR1           Column: AS9-HC01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                                  ----------------------------------
                        Totals       0.000          0          0
```

File: AFBGLC01.D18 Sample: ICB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

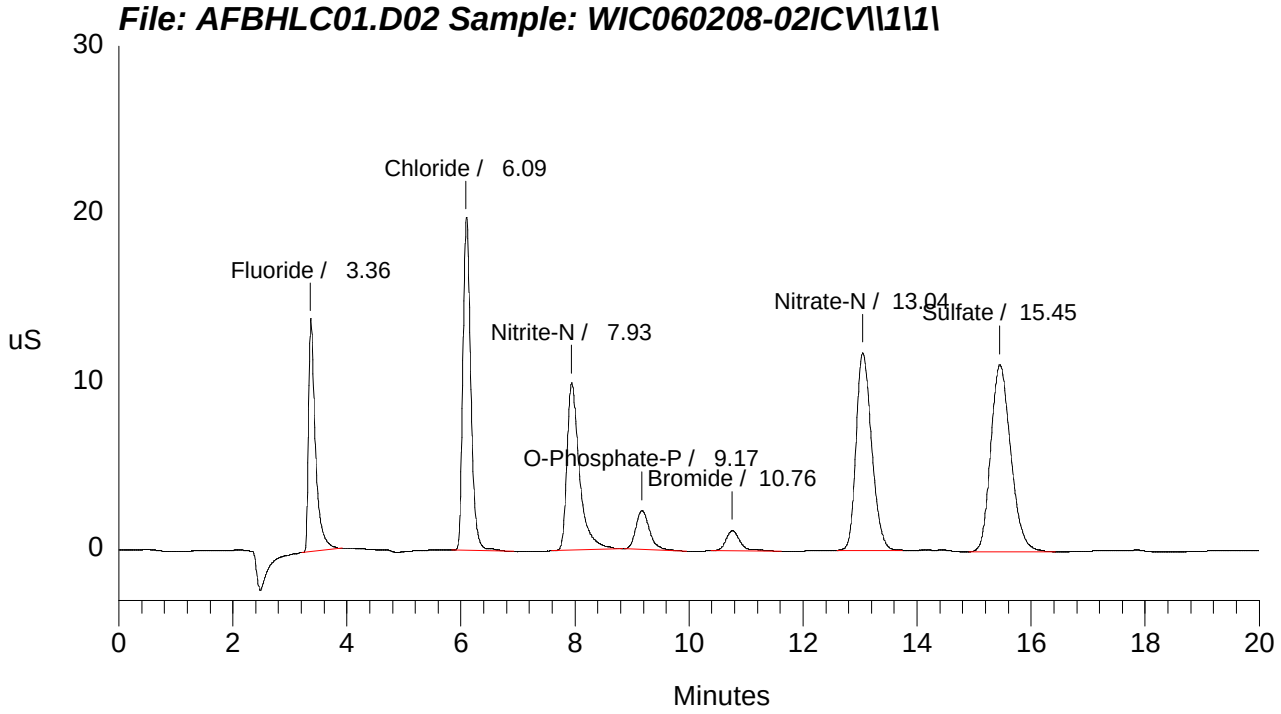
SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			RXM1	02/08/2006 14:10:51	AFBHLC01.R01
WIC060208-02ICV:1		1	RXM1	02/08/2006 14:31:12	AFBHLC01.R02
ICB:			RXM1	02/08/2006 14:51:31	AFBHLC01.R03
1201021177:1	498894	1	RXM1	02/08/2006 15:11:50	AFBHLC01.R04
1201021180:1	498894	1	RXM1	02/08/2006 15:32:11	AFBHLC01.R05
154614001:1	498894	1	RXM1	02/08/2006 15:52:33	AFBHLC01.R06
1201021178:1	498894	1	RXM1	02/08/2006 16:12:54	AFBHLC01.R07
1201021179:1	498894	1	RXM1	02/08/2006 16:33:14	AFBHLC01.R08
154614002:1	498894	1	RXM1	02/08/2006 16:53:36	AFBHLC01.R09
154614008:1	498894	1	RXM1	02/08/2006 17:13:56	AFBHLC01.R10
154614010:1	498894	1	RXM1	02/08/2006 17:34:18	AFBHLC01.R11
WIC060208-02CVH:1		1	RXM1	02/08/2006 17:54:38	AFBHLC01.R12
CCB:			RXM1	02/08/2006 18:14:59	AFBHLC01.R13
154721001:1	498894	1	RXM1	02/08/2006 18:35:20	AFBHLC01.R14
154721011:1	498894	1	RXM1	02/08/2006 18:55:42	AFBHLC01.R15
154759001:1	498894	1	RXM1	02/08/2006 19:16:04	AFBHLC01.R16
154759002:1	498894	1	RXM1	02/08/2006 19:36:24	AFBHLC01.R17
154760001:1	498894	1	RXM1	02/08/2006 19:56:45	AFBHLC01.R18
WIC060208-02CCV:1		1	RXM1	02/08/2006 20:17:07	AFBHLC01.R19
CCB:			RXM1	02/08/2006 20:37:28	AFBHLC01.R20
1201019905:1	498320	1	RXM1	02/08/2006 20:57:49	AFBHLC01.R21
1201019910:1	498320	1	RXM1	02/08/2006 21:18:11	AFBHLC01.R22
154594001:1	498320	1	RXM1	02/08/2006 21:38:32	AFBHLC01.R23
154594002:1	498320	1	RXM1	02/08/2006 21:58:54	AFBHLC01.R24
154594003:1	498320	1	RXM1	02/08/2006 22:19:15	AFBHLC01.R25
1201019906:1	498320	1	RXM1	02/08/2006 22:39:36	AFBHLC01.R26
1201019908:1	498320	1	RXM1	02/08/2006 22:59:57	AFBHLC01.R27
154594004:1	498320	1	RXM1	02/08/2006 23:20:18	AFBHLC01.R28
154594005:1	498320	1	RXM1	02/08/2006 23:40:39	AFBHLC01.R29
154594006:1	498320	1	RXM1	02/09/2006 00:01:00	AFBHLC01.R30
WIC060208-02CVH:1		1	RXM1	02/09/2006 00:21:21	AFBHLC01.R31
CCB:			RXM1	02/09/2006 00:41:43	AFBHLC01.R32
154594007:1	498320	1	RXM1	02/09/2006 01:02:04	AFBHLC01.R33
154594008:1	498320	1	RXM1	02/09/2006 01:22:26	AFBHLC01.R34
154594009:1	498320	1	RXM1	02/09/2006 01:42:47	AFBHLC01.R35
1201019907:1	498320	1	RXM1	02/09/2006 02:03:08	AFBHLC01.R36
1201019909:1	498320	1	RXM1	02/09/2006 02:23:29	AFBHLC01.R37
154594010:1	498320	1	RXM1	02/09/2006 02:43:49	AFBHLC01.R38
154594011:1	498320	1	RXM1	02/09/2006 03:04:10	AFBHLC01.R39
154594012:1	498320	1	RXM1	02/09/2006 03:24:31	AFBHLC01.R40
154594013:1	498320	1	RXM1	02/09/2006 03:44:52	AFBHLC01.R41
154594014:1	498320	1	RXM1	02/09/2006 04:05:13	AFBHLC01.R42
WIC060208-02CCV:1		1	RXM1	02/09/2006 04:25:34	AFBHLC01.R43
CCB:			RXM1	02/09/2006 04:45:55	AFBHLC01.R44
154594015:1	498320	1	RXM1	02/09/2006 05:06:16	AFBHLC01.R45
154594016:1	498320	1	RXM1	02/09/2006 05:26:36	AFBHLC01.R46
154594017:1	498320	1	RXM1	02/09/2006 05:46:59	AFBHLC01.R47
154594018:1	498320	1	RXM1	02/09/2006 06:07:20	AFBHLC01.R48
154594019:1	498320	1	RXM1	02/09/2006 06:27:42	AFBHLC01.R49
154594020:1	498320	1	RXM1	02/09/2006 06:48:03	AFBHLC01.R50
WIC060208-02CVH:1		1	RXM1	02/09/2006 07:08:25	AFBHLC01.R51
CCB:			RXM1	02/09/2006 07:28:46	AFBHLC01.R52

```
================================================================================
| Sample Name: WIC060208-02ICV\\1\1\          Date: 02/08/2006 14:31:12     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D02                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 5.140   13672723  117194704    1   0.00
   2   6.09 Chloride                10.401   19672883  191486584    1   0.00
   3   7.93 Nitrite-N                4.561    9897308  152533856    1   0.00
   4   9.17 O-Phosphate-P            2.770    2291262   38293114    1   0.00
   5  10.76 Bromide                  3.020    1221253   21564870    1   0.00
   6  13.04 Nitrate-N                5.075   11739838  223225050    1   0.00
   7  15.45 Sulfate                 20.882   11126734  272778538    1   0.00
                                ----------------------------------
                        Totals       51.849   69622000 1017076716
```



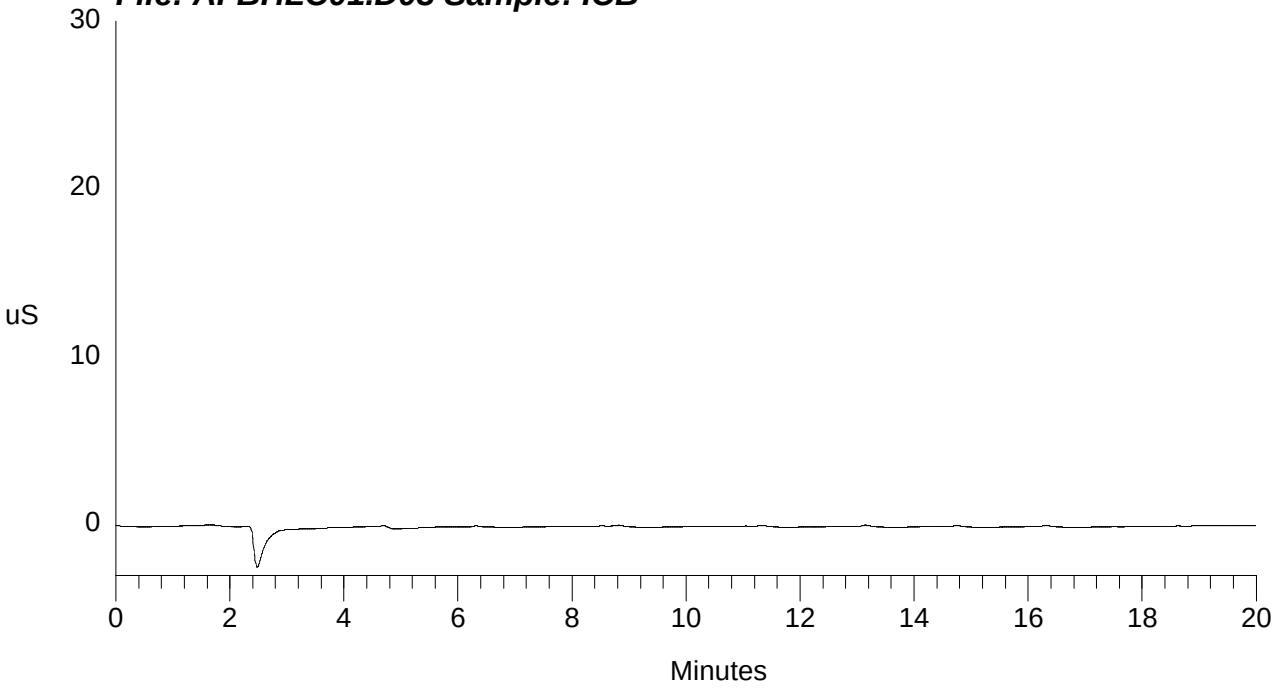
```
================================================================================
| Sample Name: ICB                              Date: 02/08/2006 14:51:31      |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D03                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 3                  Detector:CDM-2        |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                          ----------------------------------
                     Totals         0.000          0          0
```

File: AFBHLC01.D03 Sample: ICB



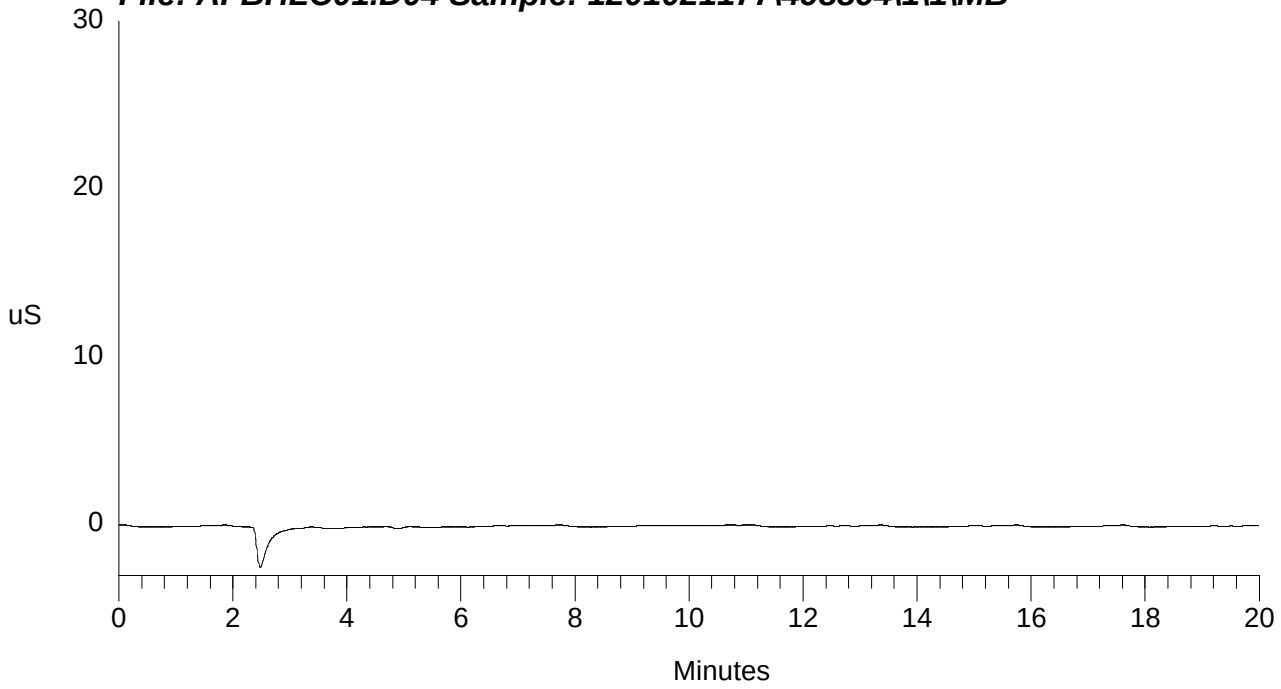
```
================================================================================
| Sample Name: 1201021177\498894\1\1\MB       Date: 02/08/2006 15:11:50     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D04                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 4                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AFBHLC01.D04 Sample: 1201021177\498894\1\1\MB

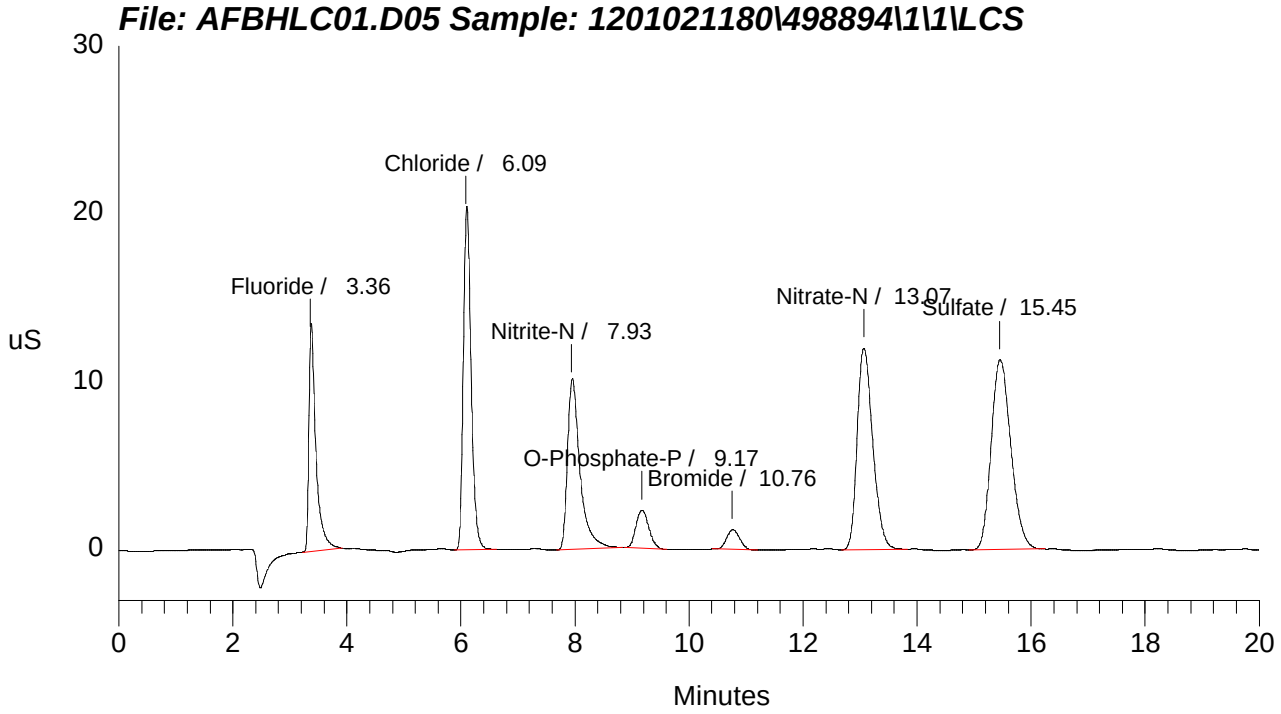


```
================================================================================
| Sample Name: 1201021180\498894\1\1\LCS      Date: 02/08/2006 15:32:11     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D05                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                5.095   12721500  116161950    1   0.00
   2   6.09 Chloride               10.487   19948446  193107264    1   0.00
   3   7.93 Nitrite-N               4.664    9911031  156052174    1   0.00
   4   9.17 O-Phosphate-P           2.611    2274138   36071146    1   0.00
   5  10.76 Bromide                 2.670    1182073   19057312    1   0.00
   6  13.07 Nitrate-N               5.195   11995998  228590230    1   0.00
   7  15.45 Sulfate                20.837   11290886  272180960    1   0.00
                          ---------------------------------
                    Totals        51.560   69324073 1021221036
```

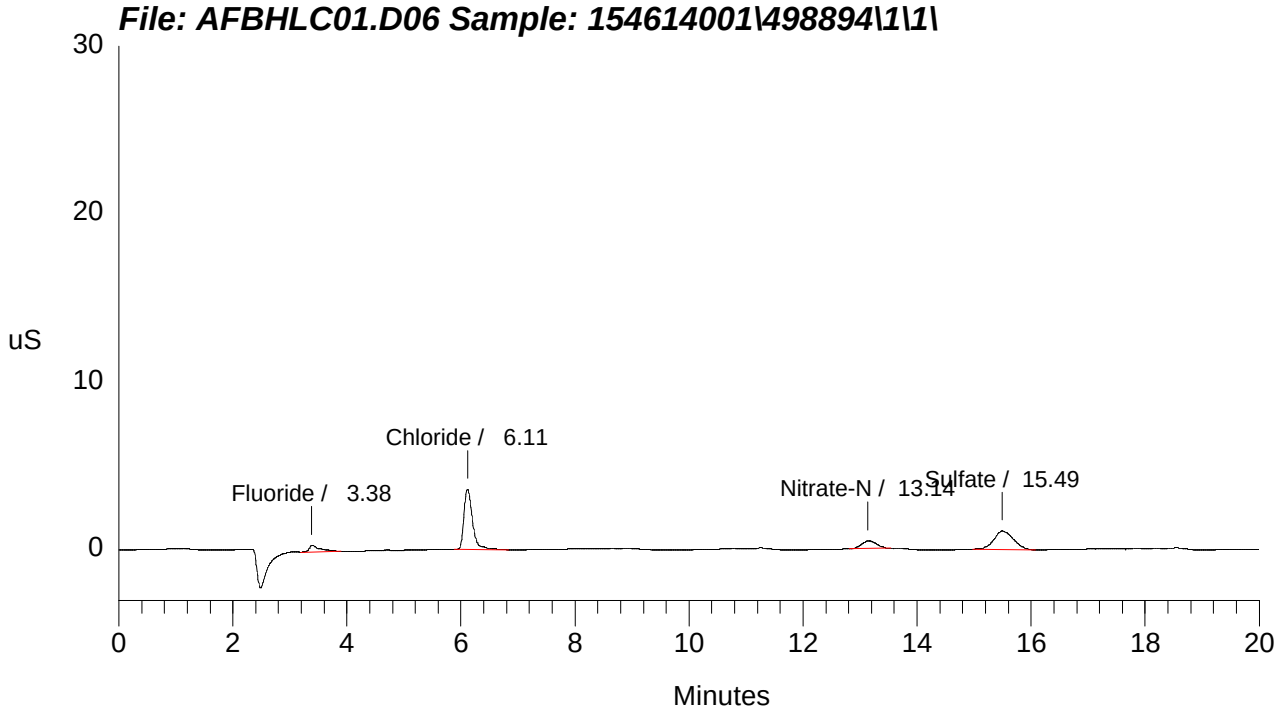


```
================================================================================
| Sample Name: 154614001\498894\1\1\          Date: 02/08/2006 15:52:33     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D06                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 6                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
--------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                  0.277     394829    5510125    1   0.00
   2   6.11 Chloride                  2.214    3572141   37638016    1   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P             0.000          0          0    0   0.00
   0   0.00 Bromide                   0.000          0          0    0   0.00
   3  13.14 Nitrate-N                 0.255     447297    8390856    1   0.00
   4  15.49 Sulfate                   2.276    1110346   26705838    1   0.00
                                  ----------------------------------
                      Totals         5.022    5524613   78244835
```



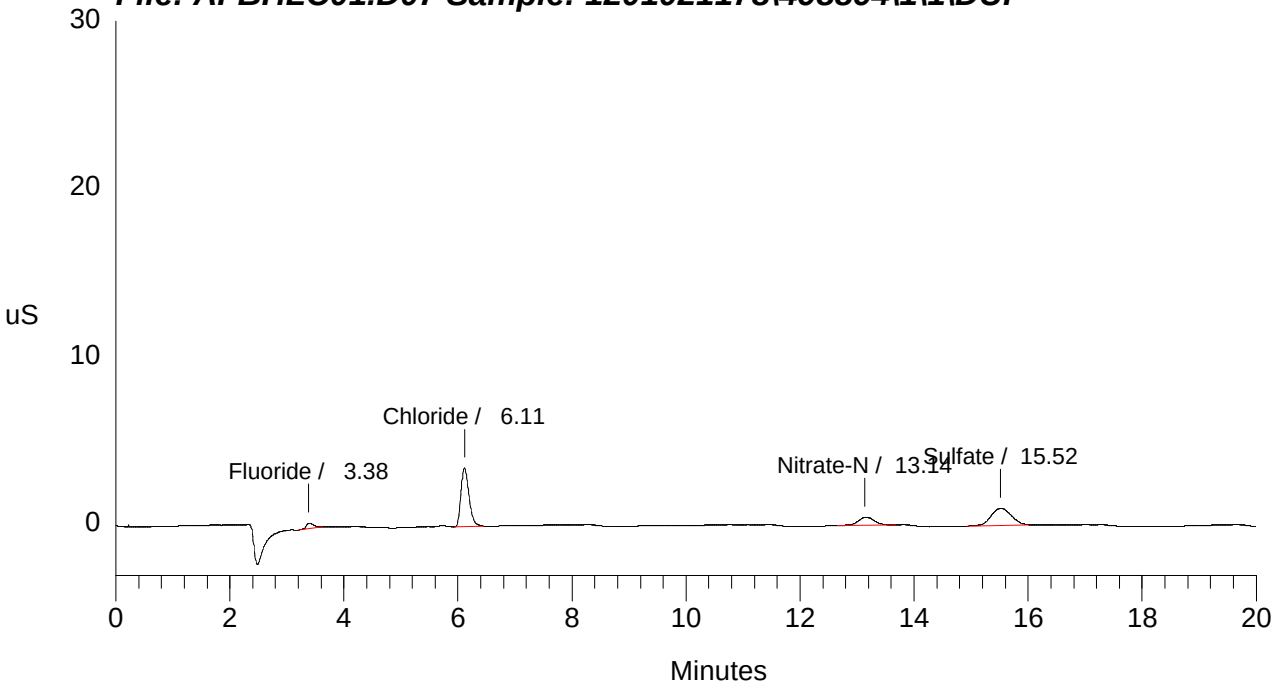
```
================================================================================
| Sample Name: 1201021178\498894\1\1\DUP      Date: 02/08/2006 16:12:54     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D07                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 7                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.38 Fluoride                0.172     339312    3080330    1   0.00
   2   6.11 Chloride                2.022    3481965   34032674    1   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   3  13.14 Nitrate-N               0.296     491692   10235298    1   0.00
   4  15.52 Sulfate                 2.142    1023030   24938756    1   0.00
                                ----------------------------------
                      Totals        4.632    5335999   72287058
```

File: AFBHLC01.D07 Sample: 1201021178\498894\1\1\DUP

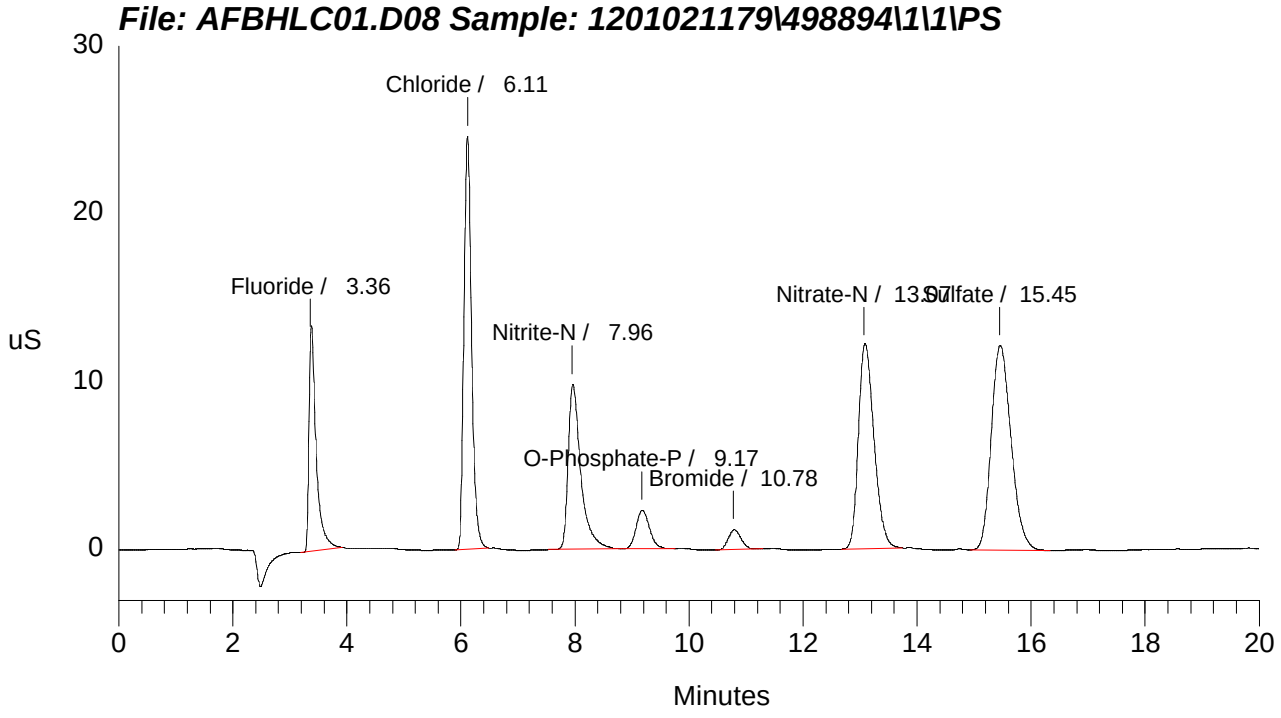


```
================================================================================
| Sample Name: 1201021179\498894\1\1\PS       Date: 02/08/2006 16:33:14     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D08                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 5.166   12730029  117794638    1   0.00
   2   6.11 Chloride                12.373   24572381  228543736    1   0.00
   3   7.96 Nitrite-N                4.528    9795091  151409676    1   0.00
   4   9.17 O-Phosphate-P            2.681    2266812   37046024    1   0.00
   5  10.78 Bromide                  2.614    1178108   18654962    1   0.00
   6  13.07 Nitrate-N                5.269   12049644  231870228    1   0.00
   7  15.45 Sulfate                 22.556   12147095  294907858    1   0.00
                                ----------------------------------
                      Totals        55.187   74739158 1080227122
```



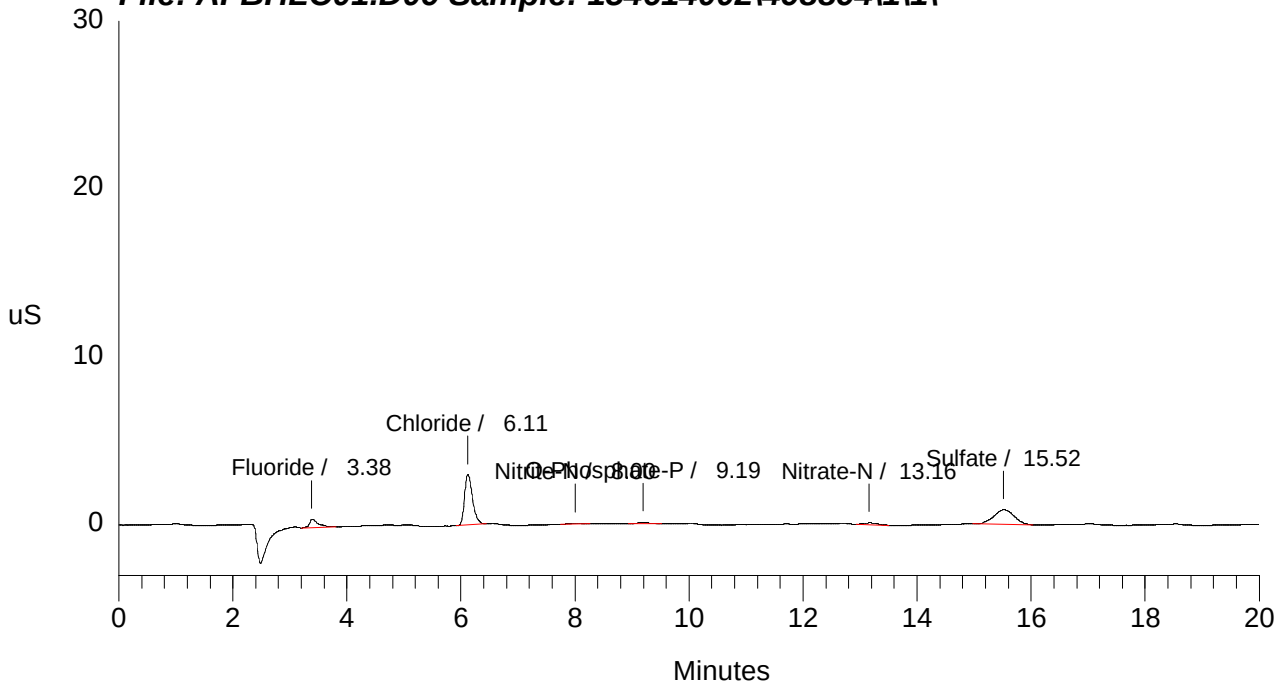
```
================================================================================
| Sample Name: 154614002\498894\1\1\          Date: 02/08/2006 16:53:36     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D09                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                0.270     488367    5334417    1   0.00
   2   6.11 Chloride                1.768    2980048   29251932    1   0.00
   3   8.00 Nitrite-N               0.136      60550     857942    1   0.00
   4   9.19 O-Phosphate-P           0.152      98730    1700006    1   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   5  13.16 Nitrate-N               0.117     130110    2244118    1   0.00
   6  15.52 Sulfate                 1.906     867585   21813262    1   0.00
                                ----------------------------------
                      Totals        4.348    4625390   61201677
```

File: AFBHLC01.D09 Sample: 154614002\498894\1\1

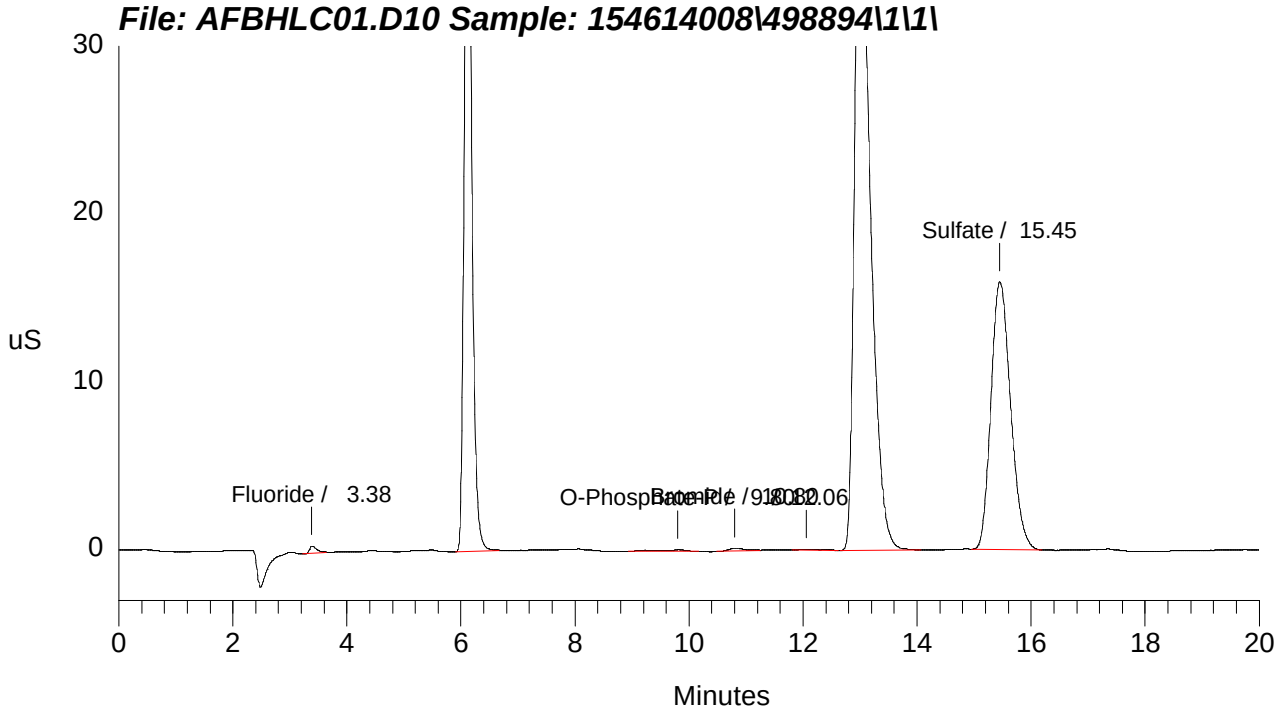


```
================================================================================
| Sample Name: 154614008\498894\1\1\          Date: 02/08/2006 17:13:56     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D10                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 10                 Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                  0.205     448446    3848954    1   0.00
   2   6.11 Chloride                 22.192   44689577  413056443    1   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   3   9.80 O-Phosphate-P             0.287     109381    3578444    1   0.00
   4  10.80 Bromide                   0.479     188098    3349828    1   0.00
   6  13.00 Nitrate-N                17.539   40013227  778738198    1   0.00
   7  15.45 Sulfate                  29.149   15932316  382111316    1   0.00
                                  ----------------------------------
                        Totals       69.850  101381045 1584683183
```



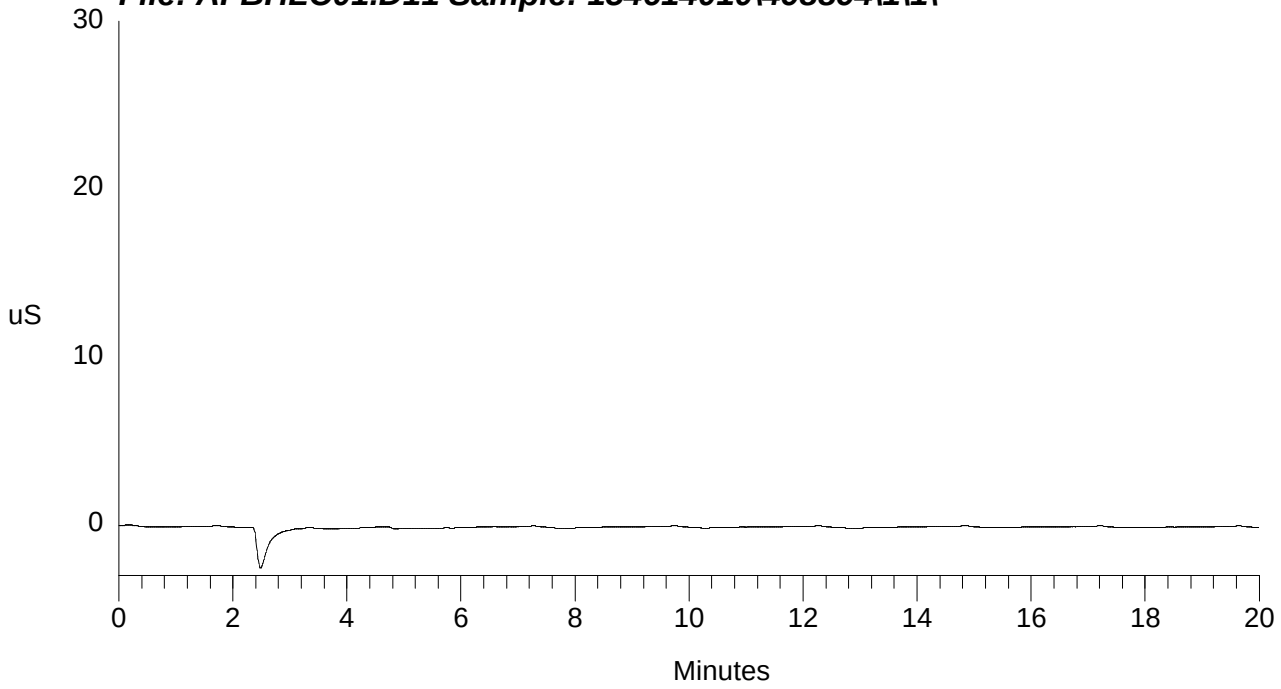
```
================================================================================
| Sample Name: 154614010\498894\1\1\          Date: 02/08/2006 17:34:18     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D11                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 11                 Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
--------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                  ----------------------------------
                        Totals      0.000          0          0
```

File: AFBHLC01.D11 Sample: 154614010\498894\1\1

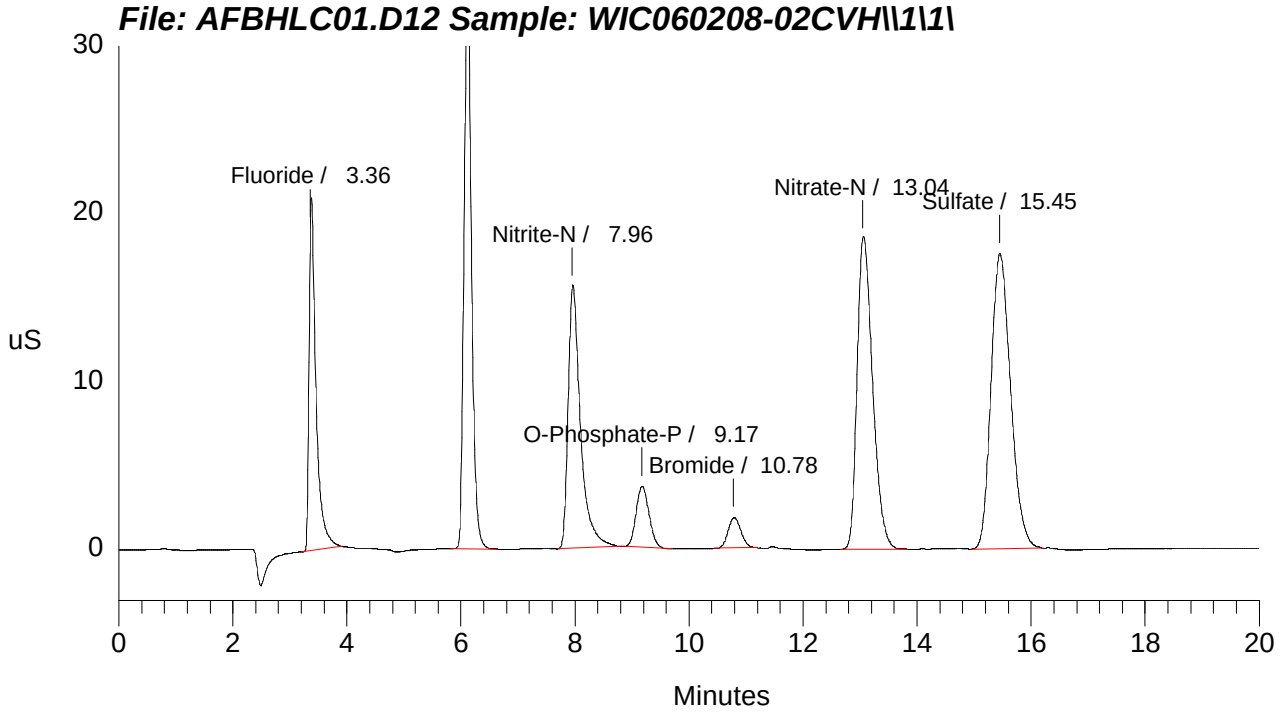


```
================================================================================
| Sample Name: WIC060208-02CVH\\1\1\          Date: 02/08/2006 17:54:38     |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D12                                   |
| Method     : C:\DX\METHOD\020606AN.MET                                     |
| ACI Address: 1  System: 1  Inject#: 12                Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 7.805   19203012  178417658    1   0.00
   2   6.11 Chloride                16.377   32370757  303793826    1   0.00
   3   7.96 Nitrite-N                6.986   15580181  235656339    1   0.00
   4   9.17 O-Phosphate-P            4.126    3611341   57238542    1   0.00
   5  10.78 Bromide                  3.969    1795937   28366160    1   0.00
   6  13.04 Nitrate-N                7.972   18451090  352339024    1   0.00
   7  15.45 Sulfate                 31.929   17554412  418875754    1   0.00
                                ----------------------------------
                        Totals       79.164  108566729 1574687303
```



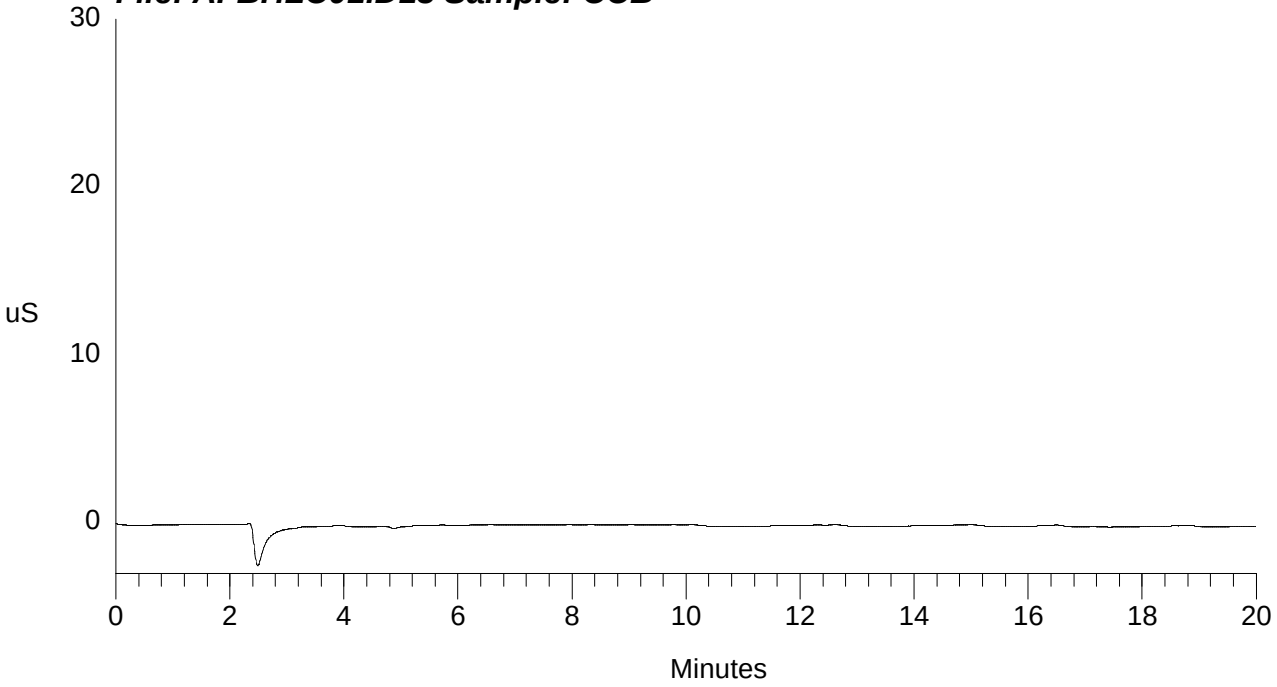
```
================================================================================
| Sample Name: CCB                              Date: 02/08/2006 18:14:59      |
| Data File  : C:\TMP\HORIZON\AFBHLC01.D13                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 13                 Detector:CDM-2        |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AFBHLC01.D13 Sample: CCB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
E:			RXM1	02/13/2006 11:51:35	AFBMLC01.R01
BLK:			RXM1	02/13/2006 12:11:56	AFBMLC01.R02
WIC060213-02ICV:1		1	RXM1	02/13/2006 12:32:17	AFBMLC01.R03
ICB:			RXM1	02/13/2006 12:52:37	AFBMLC01.R04
1201021177:2	498894	1	RXM1	02/13/2006 13:12:58	AFBMLC01.R05
1201021180:2	498894	1	RXM1	02/13/2006 13:33:19	AFBMLC01.R06
154614001:2	498894	1	RXM1	02/13/2006 13:53:40	AFBMLC01.R07
1201021178:2	498894	1	RXM1	02/13/2006 14:14:01	AFBMLC01.R08
1201021179:2	498894	1	RXM1	02/13/2006 14:34:22	AFBMLC01.R09
154614002:2	498894	1	RXM1	02/13/2006 14:54:43	AFBMLC01.R10
154614008:2	498894	1	RXM1	02/13/2006 15:15:03	AFBMLC01.R11
154614010:2	498894	1	RXM1	02/13/2006 15:35:24	AFBMLC01.R12
WIC060213-02CVH:1		1	RXM1	02/13/2006 15:55:44	AFBMLC01.R13
CCB:			RXM1	02/13/2006 16:16:05	AFBMLC01.R14
154721001:2	498894	1	RXM1	02/13/2006 16:36:26	AFBMLC01.R15
154721011:2	498894	1	RXM1	02/13/2006 16:56:46	AFBMLC01.R16
154759001:2	498894	1	RXM1	02/13/2006 17:17:07	AFBMLC01.R17
154759002:2	498894	1	RXM1	02/13/2006 17:37:27	AFBMLC01.R18
154760001:2	498894	1	RXM1	02/13/2006 17:57:48	AFBMLC01.R19
154614008:3	498894	2	RXM1	02/13/2006 18:18:08	AFBMLC01.R20
154759001:3	498894	2	RXM1	02/13/2006 18:38:29	AFBMLC01.R21
154759002:3	498894	2	RXM1	02/13/2006 18:58:51	AFBMLC01.R22
WIC060213-02CCV:1		1	RXM1	02/13/2006 19:19:12	AFBMLC01.R23
CCB:			RXM1	02/13/2006 19:39:33	AFBMLC01.R24
154594003:2	498320	25	RXM1	02/13/2006 19:59:54	AFBMLC01.R25
1201019906:2	498320	25	RXM1	02/13/2006 20:20:14	AFBMLC01.R26
1201019908:2	498320	25	RXM1	02/13/2006 20:40:35	AFBMLC01.R27
154594004:2	498320	25	RXM1	02/13/2006 21:00:56	AFBMLC01.R28
154594005:2	498320	25	RXM1	02/13/2006 21:21:18	AFBMLC01.R29
154594006:2	498320	25	RXM1	02/13/2006 21:41:39	AFBMLC01.R30
154594007:2	498320	25	RXM1	02/13/2006 22:01:59	AFBMLC01.R31
154594008:2	498320	25	RXM1	02/13/2006 22:22:21	AFBMLC01.R32
WIC060213-02CVH:1		1	RXM1	02/13/2006 22:42:41	AFBMLC01.R33
CCB:			RXM1	02/13/2006 23:03:03	AFBMLC01.R34
154594009:2	498320	25	RXM1	02/13/2006 23:23:24	AFBMLC01.R35
1201019907:2	498320	25	RXM1	02/13/2006 23:43:46	AFBMLC01.R36
1201019909:2	498320	25	RXM1	02/14/2006 00:04:08	AFBMLC01.R37
154594010:2	498320	25	RXM1	02/14/2006 00:24:29	AFBMLC01.R38
154594011:2	498320	25	RXM1	02/14/2006 00:44:51	AFBMLC01.R39
154594012:2	498320	25	RXM1	02/14/2006 01:05:12	AFBMLC01.R40
154594013:2	498320	25	RXM1	02/14/2006 01:25:34	AFBMLC01.R41
154594014:2	498320	25	RXM1	02/14/2006 01:45:56	AFBMLC01.R42
154594015:2	498320	25	RXM1	02/14/2006 02:06:17	AFBMLC01.R43
154594016:2	498320	25	RXM1	02/14/2006 02:26:38	AFBMLC01.R44
WIC060213-02CCV:1		1	RXM1	02/14/2006 02:46:59	AFBMLC01.R45
CCB:			RXM1	02/14/2006 03:07:21	AFBMLC01.R46
154594017:2	498320	25	RXM1	02/14/2006 03:27:42	AFBMLC01.R47
154594018:2	498320	25	RXM1	02/14/2006 03:48:03	AFBMLC01.R48
154594020:2	498320	25	RXM1	02/14/2006 04:08:23	AFBMLC01.R49
154594003:3	498320	2	RXM1	02/14/2006 04:28:44	AFBMLC01.R50
1201019906:3	498320	2	RXM1	02/14/2006 04:49:06	AFBMLC01.R51
1201019908:3	498320	2	RXM1	02/14/2006 05:09:27	AFBMLC01.R52
154594004:3	498320	2	RXM1	02/14/2006 05:29:49	AFBMLC01.R53
154594005:3	498320	5	RXM1	02/14/2006 05:50:09	AFBMLC01.R54
154594006:3	498320	5	RXM1	02/14/2006 06:10:30	AFBMLC01.R55

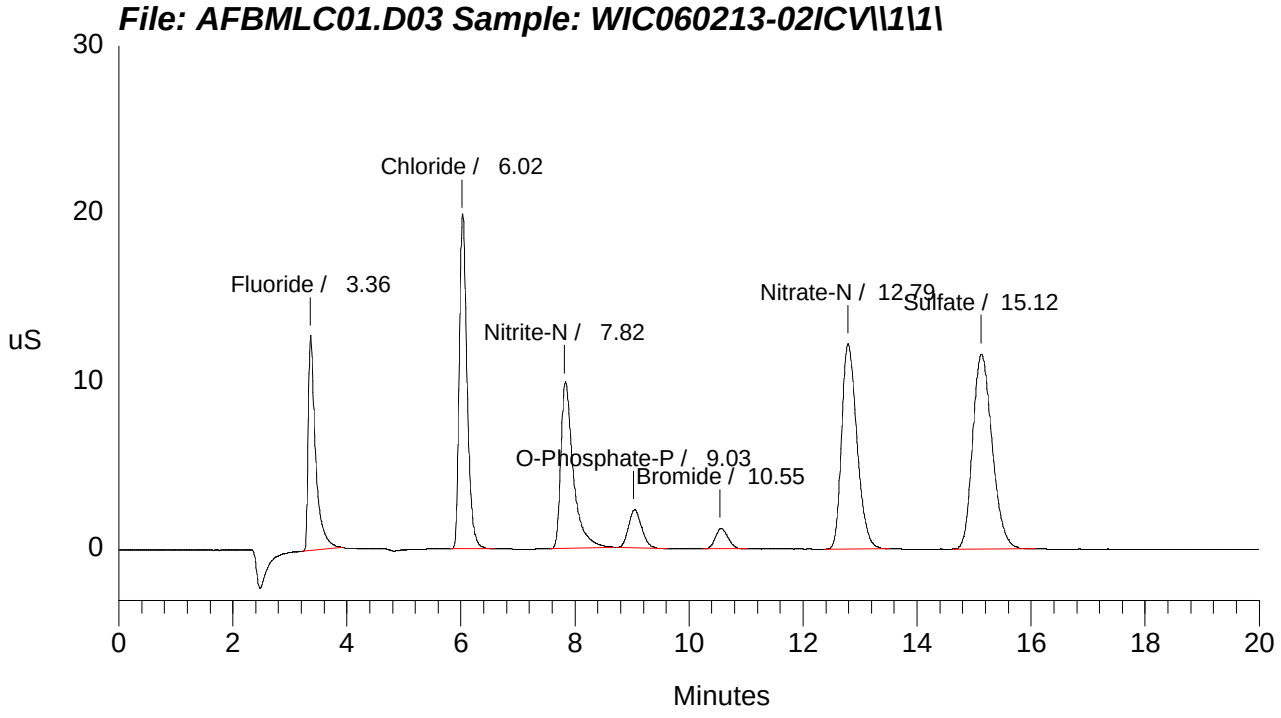
```
154594007:3          498320   2     RXM1  02/14/2006 06:30:52 AFBMLC01.R56
WIC060213-02CVH:1             1     RXM1  02/14/2006 06:51:13 AFBMLC01.R57
CCB:                          1     RXM1  02/14/2006 07:11:35 AFBMLC01.R58
154594008:3          498320   2     RXM1  02/14/2006 07:31:55 AFBMLC01.R59
154594009:3          498320   5     RXM1  02/14/2006 07:52:16 AFBMLC01.R60
1201019907:3         498320   5     RXM1  02/14/2006 08:12:38 AFBMLC01.R61
1201019909:3         498320   5     RXM1  02/14/2006 08:33:00 AFBMLC01.R62
154594010:3          498320   5     RXM1  02/14/2006 08:53:21 AFBMLC01.R63
154594012:3          498320   5     RXM1  02/14/2006 09:13:42 AFBMLC01.R64
154594014:3          498320   5     RXM1  02/14/2006 09:34:03 AFBMLC01.R65
154594015:3          498320   5     RXM1  02/14/2006 09:54:24 AFBMLC01.R66
154594017:3          498320   5     RXM1  02/14/2006 10:14:45 AFBMLC01.R67
154594020:3          498320   5     RXM1  02/14/2006 10:35:07 AFBMLC01.R68
WIC060213-02CCV:1             1     RXM1  02/14/2006 10:55:28 AFBMLC01.R69
CCB:                          1     RXM1  02/14/2006 11:15:49 AFBMLC01.R70
155546015:2          502067   1     RXM1  02/14/2006 11:36:10 AFBMLC01.R71
155551007:2          502067   1     RXM1  02/14/2006 11:56:32 AFBMLC01.R72
WIC060213-02CVH:1             1     RXM1  02/14/2006 12:16:56 AFBMLC01.R73
CCB:                          1     RXM1  02/14/2006 12:37:17 AFBMLC01.R74
```

```
================================================================================
| Sample Name: WIC060213-02ICV\\1\1\          Date: 02/13/2006 12:32:17     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D03                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 3                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 5.087   12753622  115999335    1   0.00
   2   6.02 Chloride                10.371   19659785  190922044    1   0.00
   3   7.82 Nitrite-N                4.496    9789559  150289097    1   0.00
   4   9.03 O-Phosphate-P            2.601    2245950   35922716    1   0.00
   5  10.55 Bromide                  2.671    1209054   19062538    1   0.00
   6  12.79 Nitrate-N                5.179   12194656  227857930    1   0.00
   7  15.12 Sulfate                 21.074   11594815  275310680    1   0.00
                                  ----------------------------------
                        Totals       51.478   69447440 1015364340
```



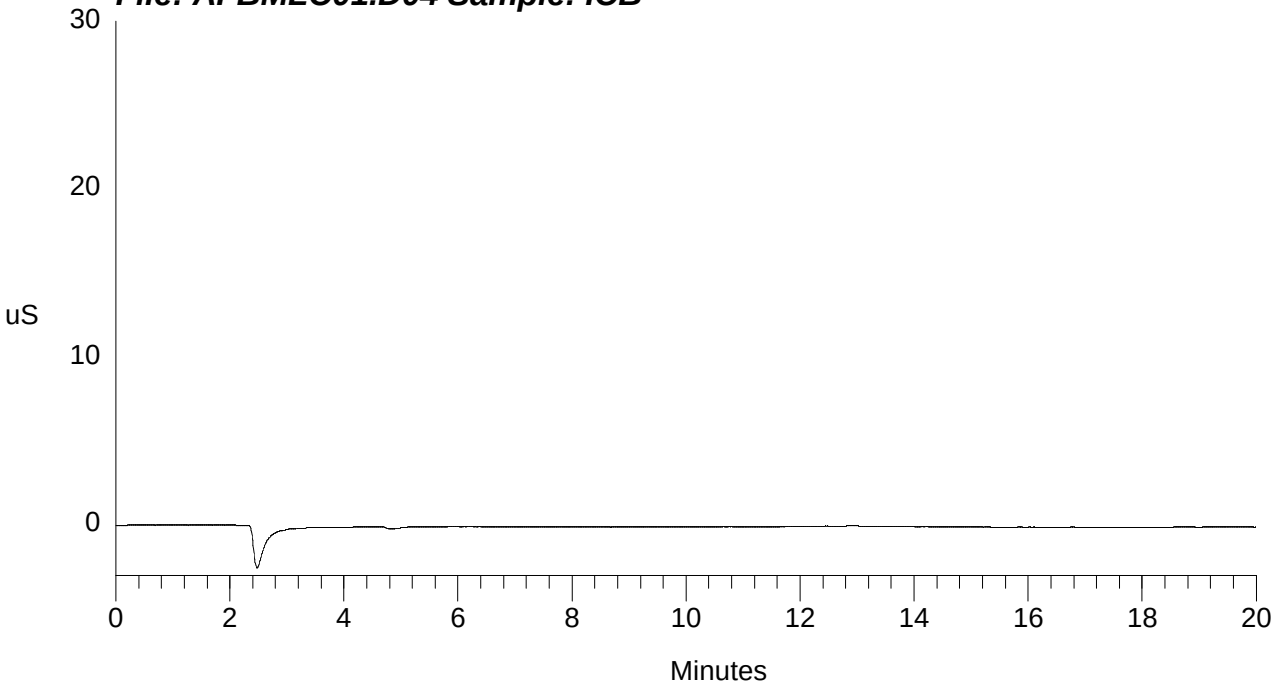
```
================================================================================
| Sample Name: ICB                              Date: 02/13/2006 12:52:37      |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D04                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 4                  Detector:CDM-2        |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AFBMLC01.D04 Sample: ICB



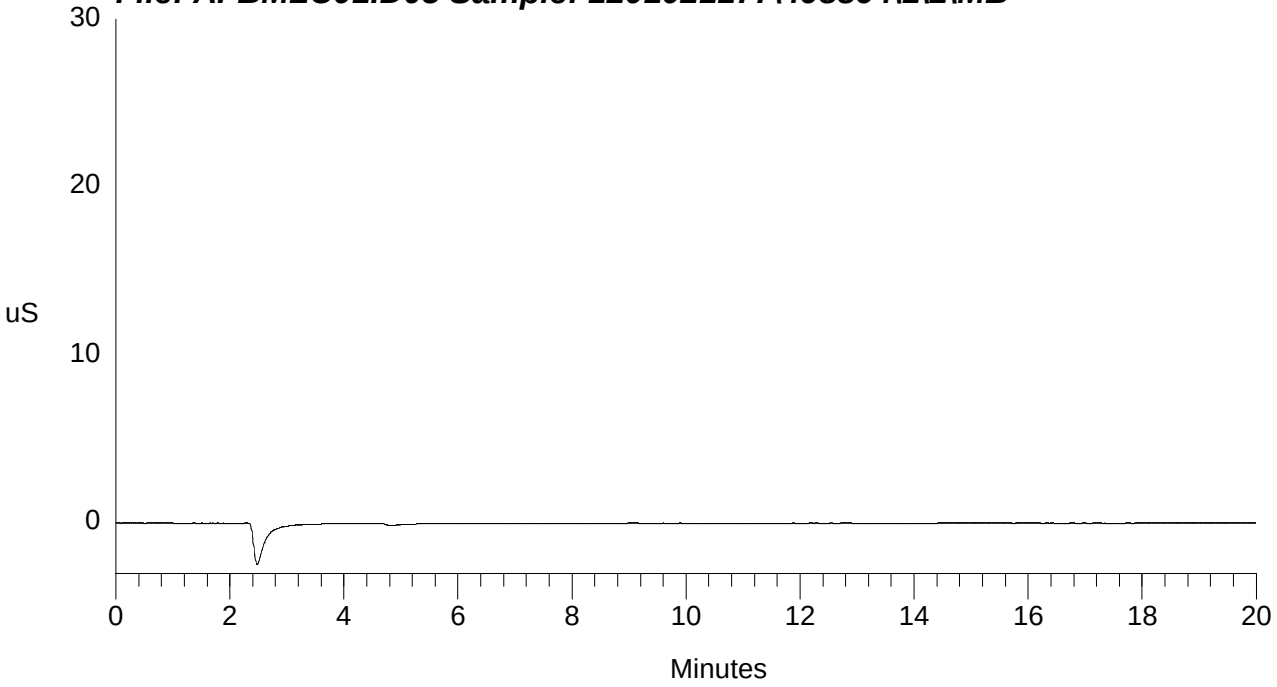
```
================================================================================
| Sample Name: 1201021177\498894\1\2\MB       Date: 02/13/2006 13:12:58     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D05                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components **********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	0	0		

File: AFBMLC01.D05 Sample: 1201021177\498894\1\2\MB

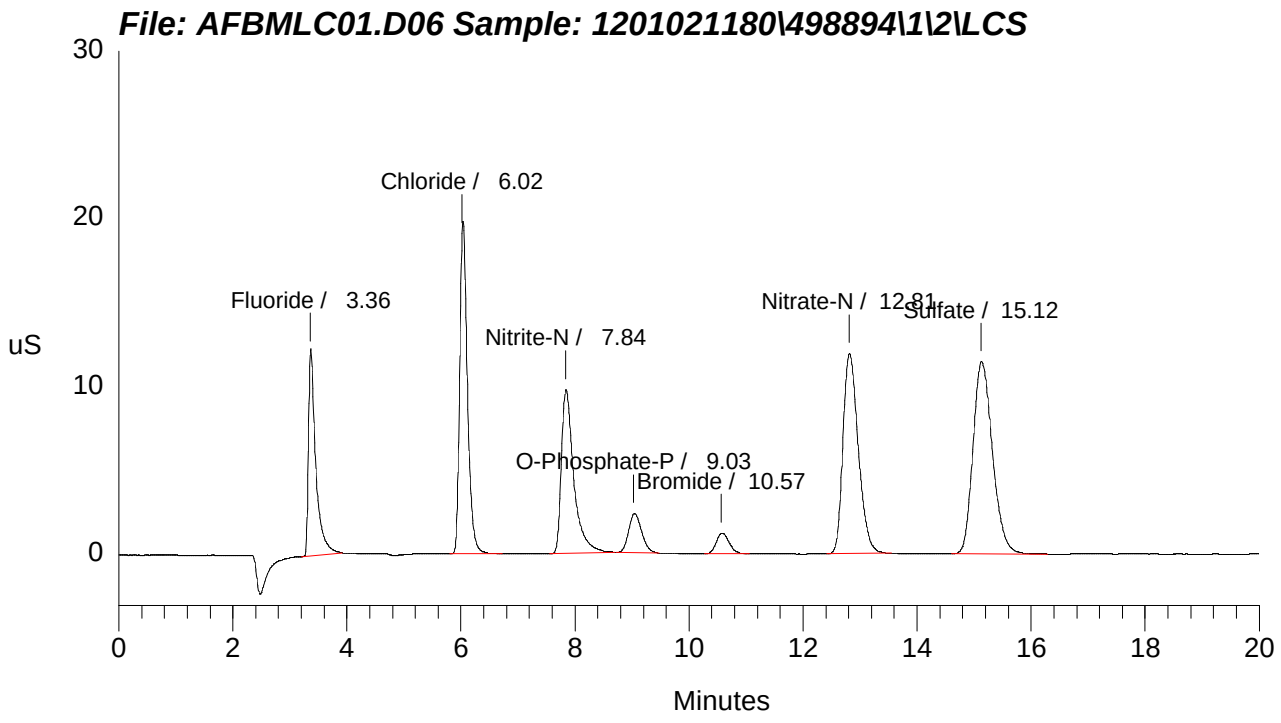


```
================================================================================
| Sample Name: 1201021180\498894\1\2\LCS      Date: 02/13/2006 13:33:19     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D06                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 6                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 4.818   12128348  109812319    1   0.00
   2   6.02 Chloride                10.180   19050323  187332668    1   0.00
   3   7.84 Nitrite-N                4.425    9743919  147846388    1   0.00
   4   9.03 O-Phosphate-P            2.662    2306038   36785920    1   0.00
   5  10.57 Bromide                  2.674    1220071   19084722    1   0.00
   6  12.81 Nitrate-N                5.056   11916321  222381452    1   0.00
   7  15.12 Sulfate                 20.765   11420371  271228360    1   0.00
                                  ---------------------------------
                        Totals      50.580   67785390  994471829
```

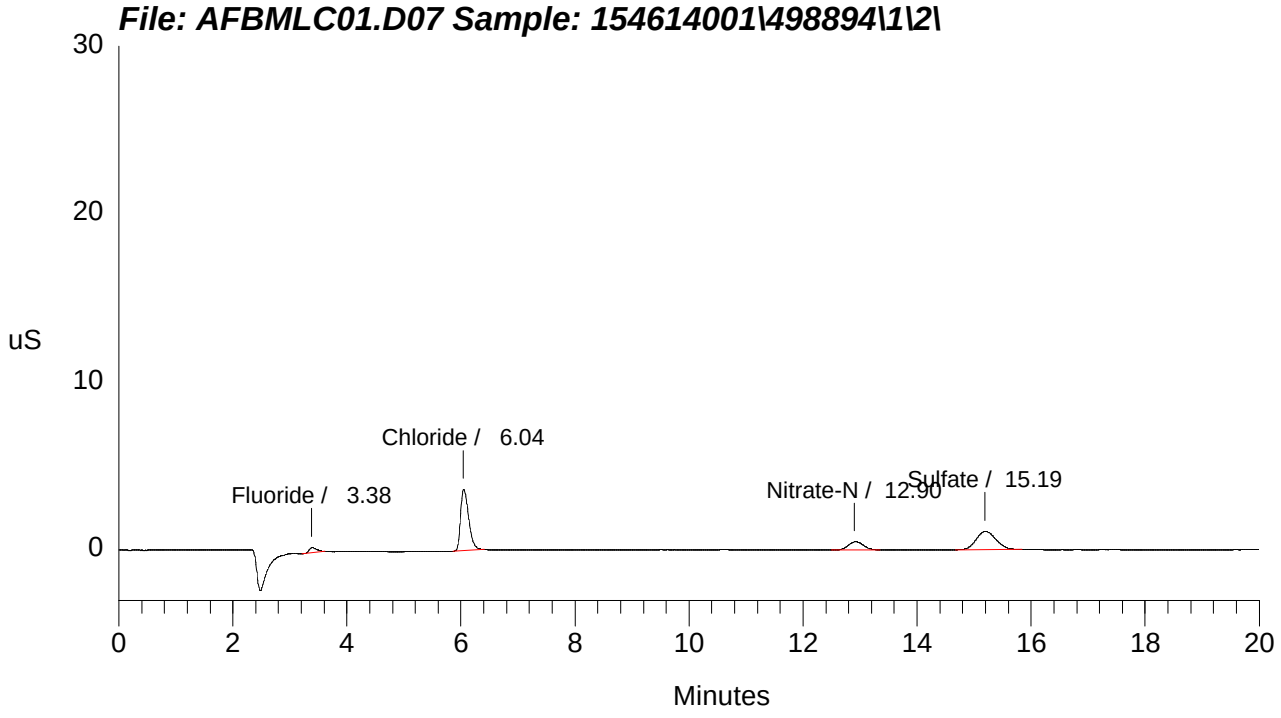


```
================================================================================
| Sample Name: 154614001\498894\1\2\          Date: 02/13/2006 13:53:40     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D07                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 7                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                0.167     323257    2973648    1   0.00
   2   6.04 Chloride                2.136    3633626   36184266    1   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   3  12.90 Nitrate-N               0.280     494426    9515108    1   0.00
   4  15.19 Sulfate                 2.277    1096525   26715626    1   0.00
                                ----------------------------------
                      Totals        4.860    5547834   75388648
```



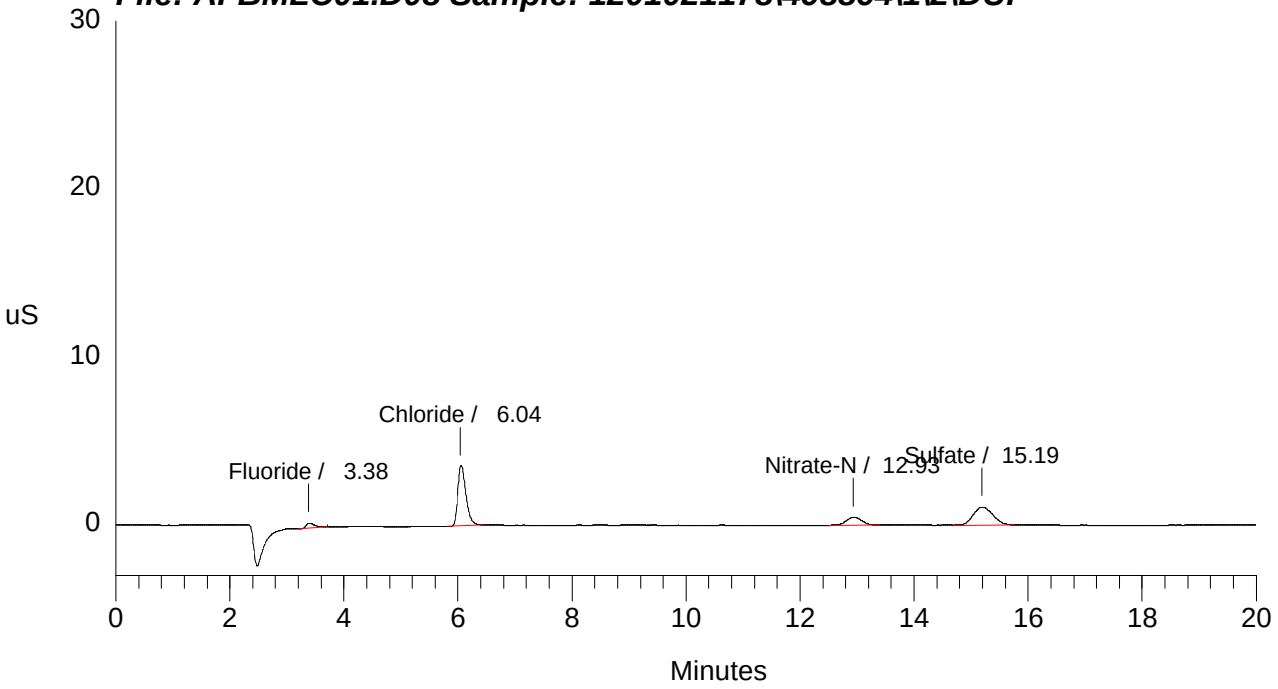
```
================================================================================
| Sample Name: 1201021178\498894\1\2\DUP      Date: 02/13/2006 14:14:01     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D08                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.38	Fluoride	0.181	326655	3300150	1	0.00
2	6.04	Chloride	2.114	3536725	35766778	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	12.93	Nitrate-N	0.278	486548	9437410	1	0.00
4	15.19	Sulfate	2.235	1088114	26167340	1	0.00
		Totals	4.809	5438041	74671678		

File: AFBMLC01.D08 Sample: 1201021178\498894\1\2\DUP



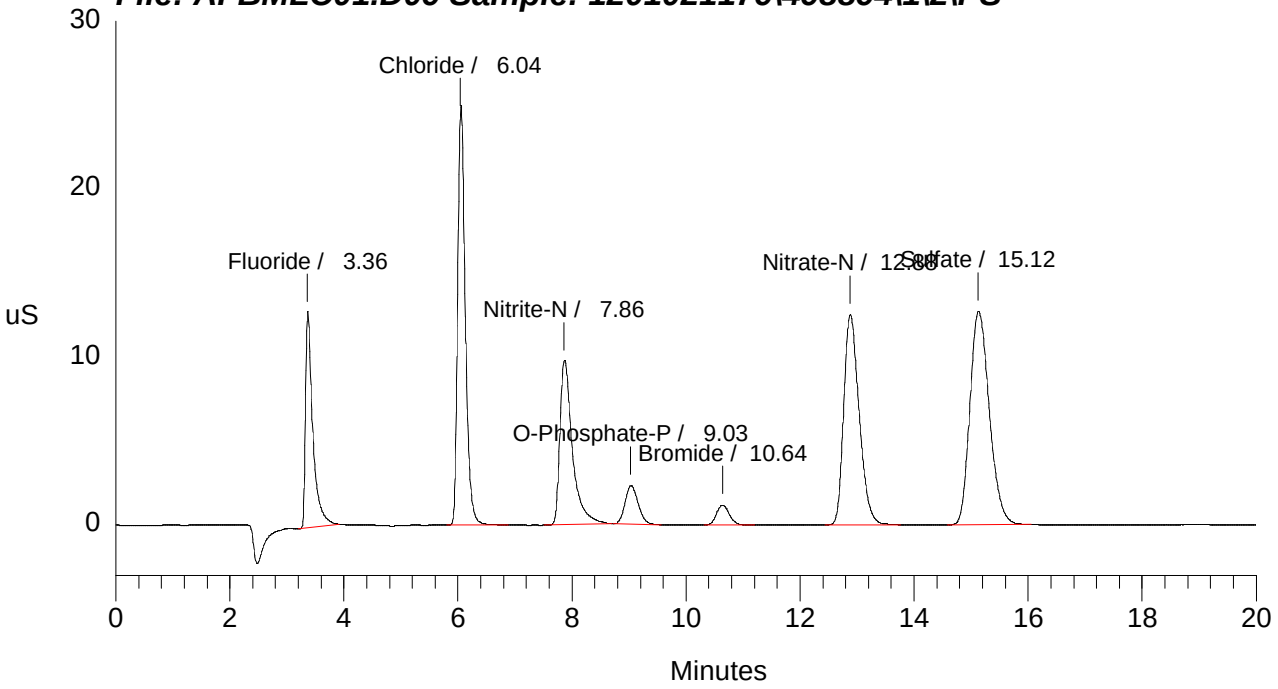
```
================================================================================
| Sample Name: 1201021179\498894\1\2\PS       Date: 02/13/2006 14:34:22     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D09                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	5.041	12809019	114938556	1	0.00
2	6.04	Chloride	12.593	24305152	232681486	1	0.00
3	7.86	Nitrite-N	4.460	9733459	149055677	1	0.00
4	9.03	O-Phosphate-P	2.614	2279994	36113655	1	0.00
5	10.64	Bromide	2.639	1196871	18834246	1	0.00
6	12.88	Nitrate-N	5.357	12515417	235797644	1	0.00
7	15.12	Sulfate	23.047	12707732	301410168	1	0.00
		Totals	55.752	75547643	1088831432		

File: AFBMLC01.D09 Sample: 1201021179\498894\1\2\PS

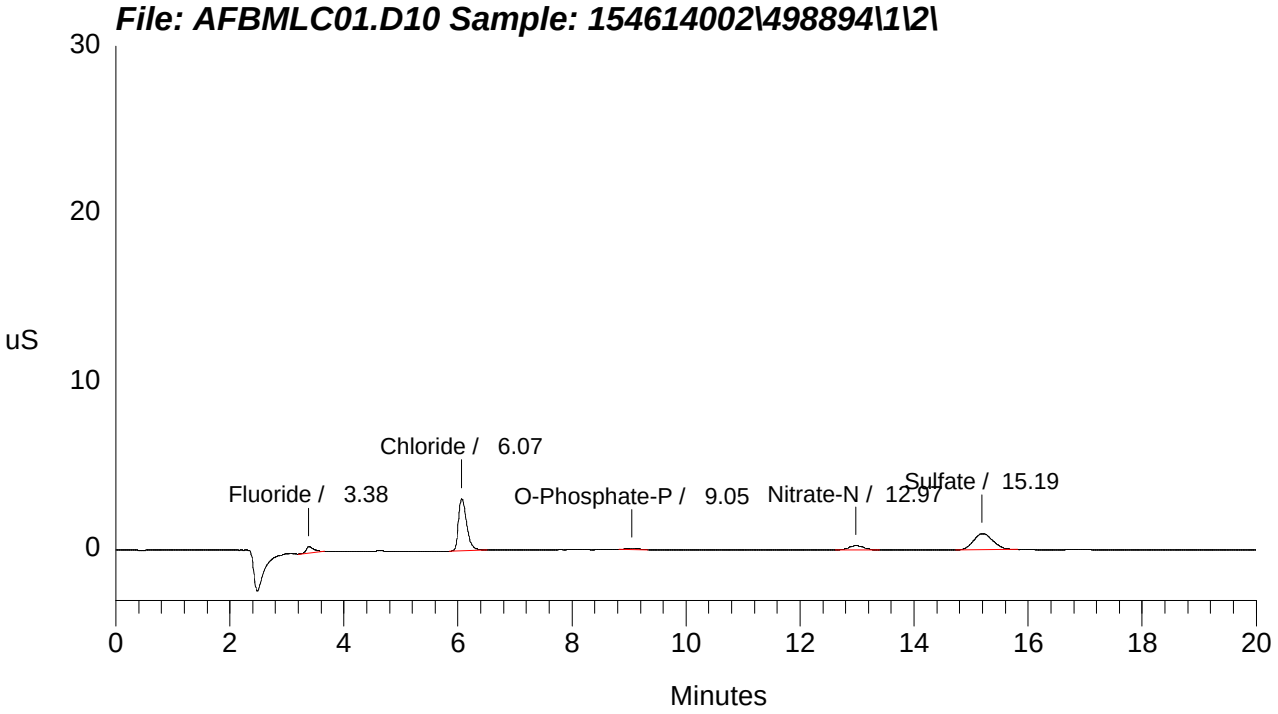


```
================================================================================
| Sample Name: 154614002\498894\1\2\          Date: 02/13/2006 14:54:43     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D10                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 10                 Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                  0.199     376690    3723186    1   0.00
   2   6.07 Chloride                  1.864    3094073   31063322    1   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   3   9.05 O-Phosphate-P             0.125      83696    1327322    1   0.00
   0   0.00 Bromide                   0.000          0          0    0   0.00
   4  12.97 Nitrate-N                 0.180     264079    5075870    1   0.00
   5  15.19 Sulfate                   2.027     958638   23416996    1   0.00
                                  ---------------------------------
                        Totals        4.396    4777176   64606696
```

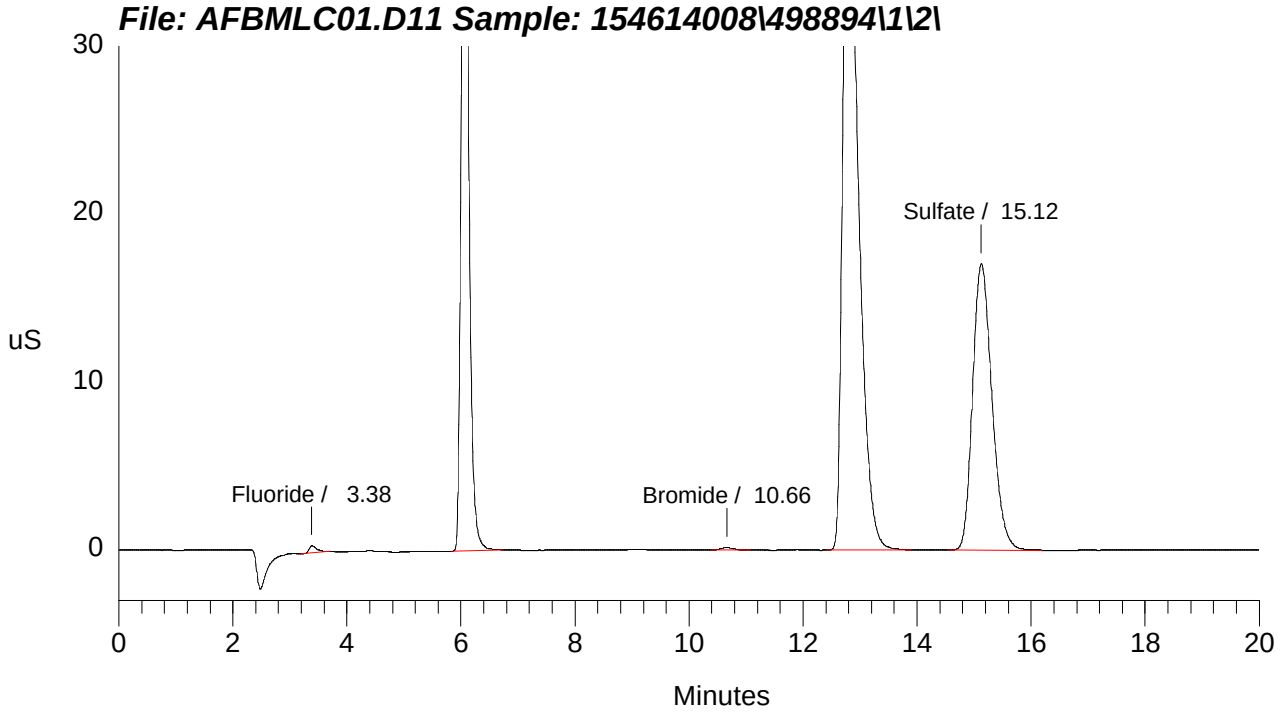


```
================================================================================
| Sample Name: 154614008\498894\1\2\          Date: 02/13/2006 15:15:03     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D11                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 11                 Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                  0.230     449647    4415691    1   0.00
   2   6.07 Chloride                 22.918   46528373  426694406    1   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P             0.000          0          0    0   0.00
   3  10.66 Bromide                   0.385     171630    2682092    1   0.00
   4  12.79 Nitrate-N                18.053   41772943  801645564    1   0.00
   5  15.12 Sulfate                  30.696   17055618  402569498    1   0.00
                                  ----------------------------------
                        Totals       72.282  105978211 1638007251
```



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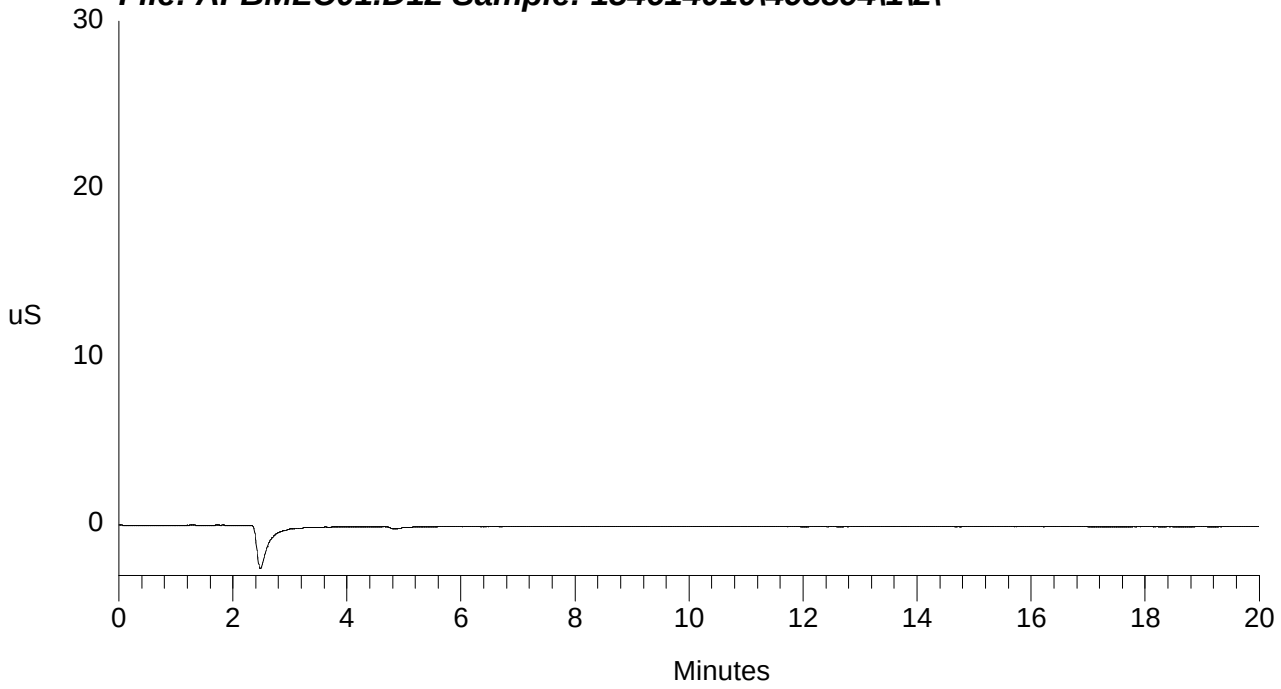
================================================================================
| Sample Name: 154614010\498894\1\2\          Date: 02/13/2006 15:35:24     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D12                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 12                 Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                          ----------------------------------
                      Totals        0.000          0          0
```

File: AFBMLC01.D12 Sample: 154614010\498894\1\2

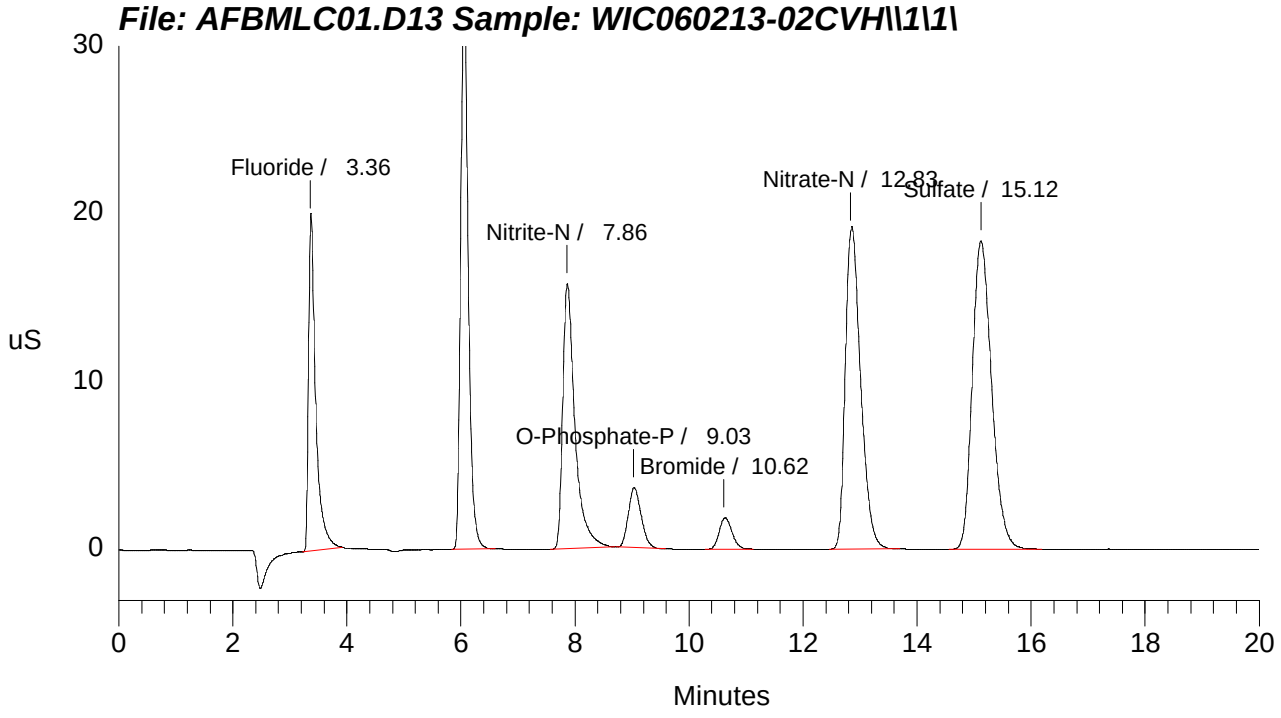


```
================================================================================
| Sample Name: WIC060213-02CVH\\1\1\          Date: 02/13/2006 15:55:44     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D13                                   |
| Method     : C:\DX\METHOD\020606AN.MET                                     |
| ACI Address: 1  System: 1  Inject#: 13                Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   1   3.36 Fluoride                 7.712   19739854  176278848    1   0.00
   2   6.04 Chloride                16.519   31976089  306459096    1   0.00
   3   7.86 Nitrite-N                6.979   15768400  235393578    1   0.00
   4   9.03 O-Phosphate-P            4.041    3546869   56061135    1   0.00
   5  10.62 Bromide                  4.082    1832523   29177082    1   0.00
   6  12.83 Nitrate-N                8.111   18907318  358561740    1   0.00
   7  15.12 Sulfate                 32.993   18358411  432950946    1   0.00
                                ----------------------------------
                        Totals       80.438  110129463 1594882425
```



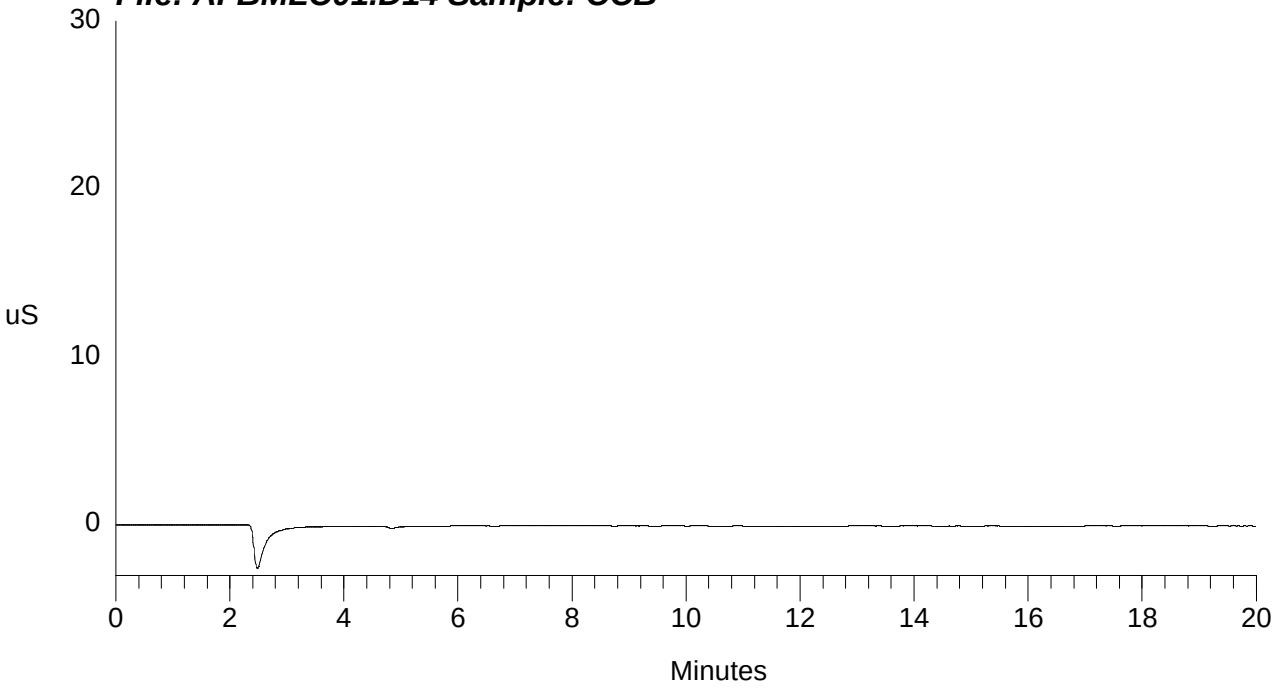
```
================================================================================
| Sample Name: CCB                              Date: 02/13/2006 16:16:05      |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D14                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 14                  Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AFBMLC01.D14 Sample: CCB

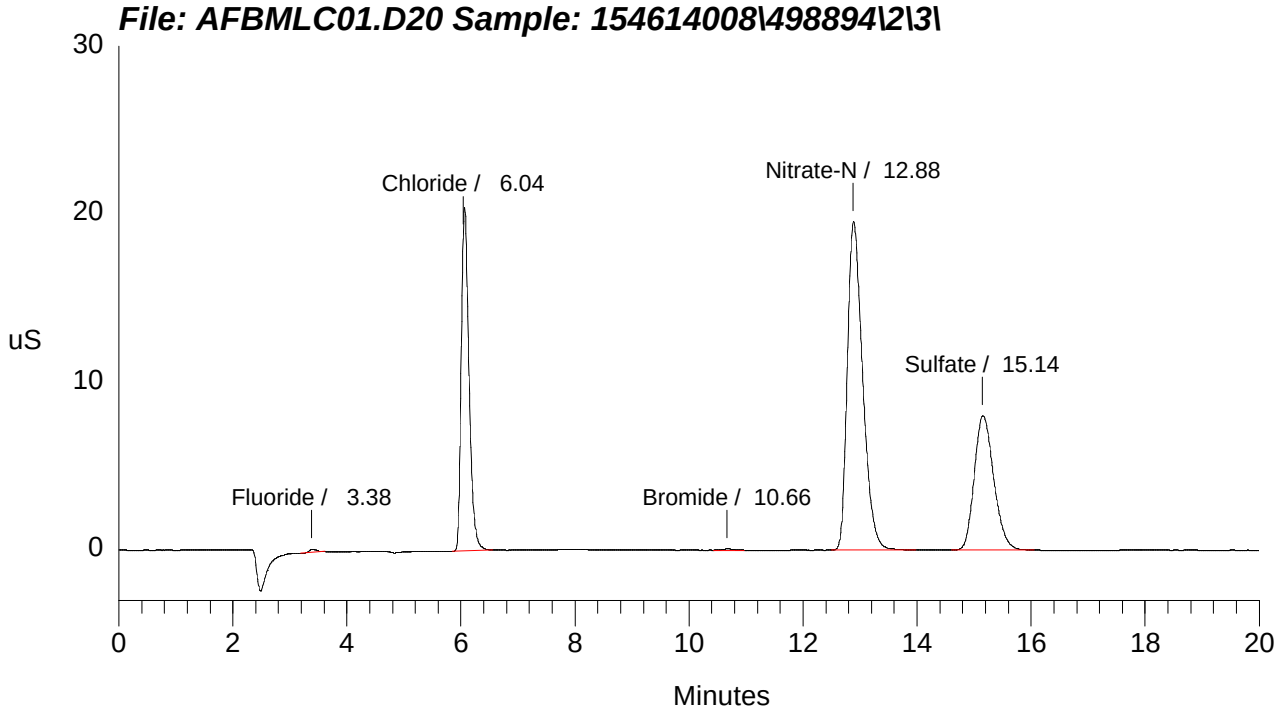


```
================================================================================
| Sample Name: 154614008\498894\2\3\          Date: 02/13/2006 18:18:08     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D20                                  |
| Method     : C:\DX\METHOD\020606AN.MET                                    |
| ACI Address: 1  System: 1  Inject#: 20                 Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
-------------------------------------------------------------------------------
   1   3.38 Fluoride                  0.120     208266    1898263    1   0.00
   2   6.04 Chloride                 10.508   18808142  193506984    1   0.00
   0   0.00 Nitrite-N                 0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P             0.000          0          0    0   0.00
   3  10.66 Bromide                   0.192      86163    1298804    1   0.00
   4  12.88 Nitrate-N                 8.290   19551379  366529442    1   0.00
   5  15.14 Sulfate                  14.665    7990099  190552276    1   0.00
                                -----------------------------------
                       Totals        33.776   46644049  753785769
```

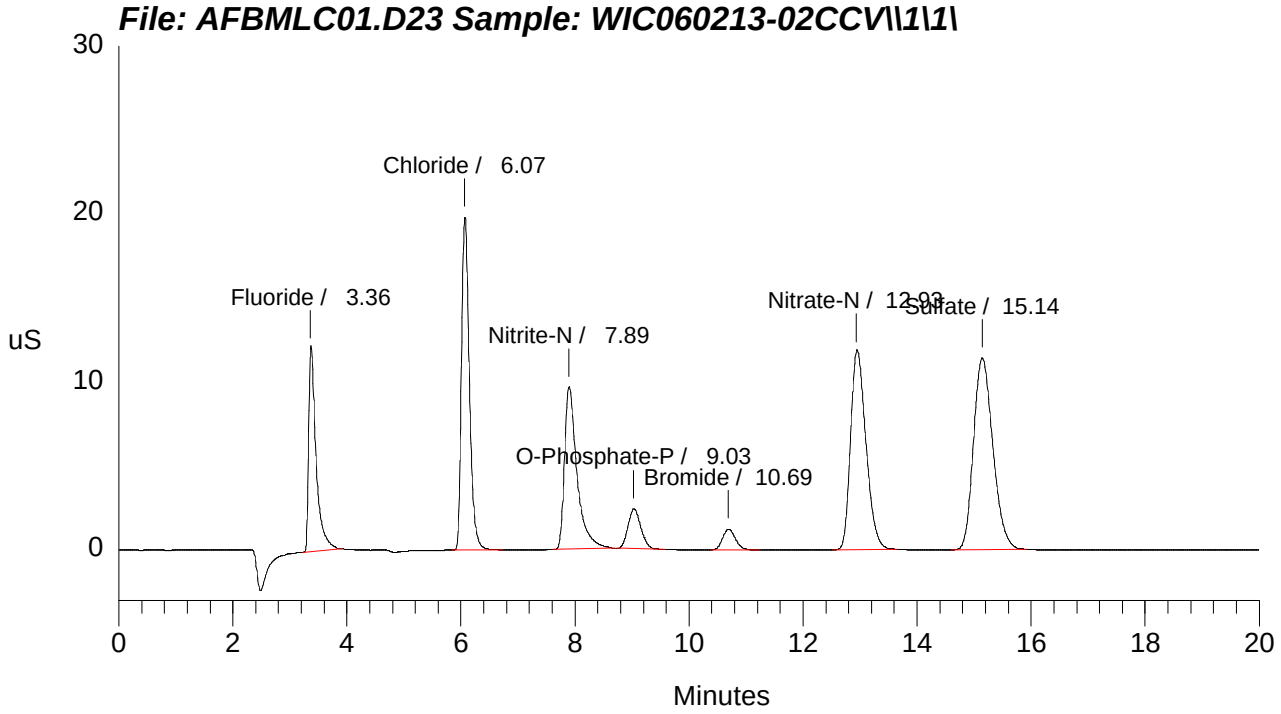


```
================================================================================
| Sample Name: WIC060213-02CCV\\1\1\          Date: 02/13/2006 19:19:12     |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D23                                   |
| Method     : C:\DX\METHOD\020606AN.MET                                     |
| ACI Address: 1  System: 1  Inject#: 23                Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.36	Fluoride	4.889	12038930	111434391	1	0.00
2	6.07	Chloride	10.348	19805128	190487854	1	0.00
3	7.89	Nitrite-N	4.409	9621093	147304517	1	0.00
4	9.03	O-Phosphate-P	2.691	2354427	37180446	1	0.00
5	10.69	Bromide	2.718	1232960	19398514	1	0.00
6	12.93	Nitrate-N	5.081	11718939	223491332	1	0.00
7	15.14	Sulfate	20.655	11394454	269767414	1	0.00
		Totals	50.789	68165931	999064468		



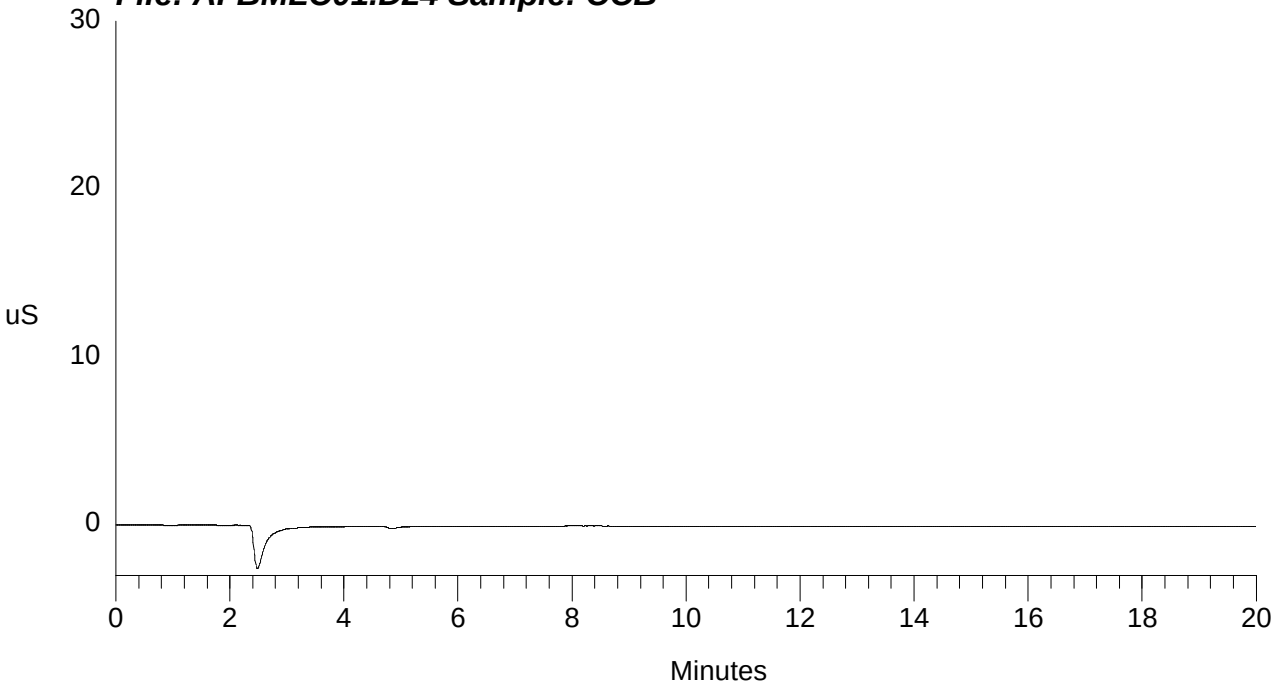
```
================================================================================
| Sample Name: CCB                              Date: 02/13/2006 19:39:33      |
| Data File  : C:\TMP\HORIZON\AFBMLC01.D24                                     |
| Method     : C:\DX\METHOD\020606AN.MET                                       |
| ACI Address: 1  System: 1  Inject#: 24                  Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC-01107;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                       mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                  ----------------------------------
                        Totals      0.000          0          0
```

File: AFBMLC01.D24 Sample: CCB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			RXM1	02/16/2006 07:57:46	AZBPLC01.R01
WIC060216-02ICV:1		1	RXM1	02/16/2006 08:18:14	AZBPLC01.R02
ICB:			RXM1	02/16/2006 08:38:43	AZBPLC01.R03
155524001:2	502070	2	RXM1	02/16/2006 08:59:12	AZBPLC01.R04
155524002:2	502070	2	RXM1	02/16/2006 09:19:41	AZBPLC01.R05
WIC060216-02CVH:1		1	RXM1	02/16/2006 09:40:10	AZBPLC01.R06
CCB:			RXM1	02/16/2006 10:00:38	AZBPLC01.R07
1501033071:1	504024	1	RXM1	02/16/2006 10:21:07	AZBPLC01.R08
1501033075:1	504024	1	RXM1	02/16/2006 10:41:36	AZBPLC01.R09
156055001:1	504024	1	RXM1	02/16/2006 11:02:05	AZBPLC01.R10
1501033072:1	504024	1	RXM1	02/16/2006 11:22:33	AZBPLC01.R11
1501033073:1	504024	1	RXM1	02/16/2006 11:43:02	AZBPLC01.R12
1501033074:1	504024	1	RXM1	02/16/2006 12:03:30	AZBPLC01.R13
156055002:1	504024	1	RXM1	02/16/2006 12:23:59	AZBPLC01.R14
156055003:1	504024	1	RXM1	02/16/2006 12:44:27	AZBPLC01.R15
WIC060216-02CCV:1		1	RXM1	02/16/2006 13:04:56	AZBPLC01.R16
CCB:			RXM1	02/16/2006 13:25:25	AZBPLC01.R17
1201033081:1	504025	1	RXM1	02/16/2006 13:45:54	AZBPLC01.R18
1201033086:1	504025	1	RXM1	02/16/2006 14:06:22	AZBPLC01.R19
156047004:1	504025	1	RXM1	02/16/2006 14:26:51	AZBPLC01.R20
156047005:1	504025	1	RXM1	02/16/2006 14:47:20	AZBPLC01.R21
156047006:1	504025	1	RXM1	02/16/2006 15:07:49	AZBPLC01.R22
156047007:1	504025	1	RXM1	02/16/2006 15:28:18	AZBPLC01.R23
1201033082:1	504025	1	RXM1	02/16/2006 15:48:47	AZBPLC01.R24
1201033084:1	504025	1	RXM1	02/16/2006 16:09:16	AZBPLC01.R25
156047008:1	504025	1	RXM1	02/16/2006 16:29:34	AZBPLC01.R26
156047009:1	504025	1	RXM1	02/16/2006 16:50:03	AZBPLC01.R27
WIC060216-02CVH:1		1	RXM1	02/16/2006 17:10:32	AZBPLC01.R28
CCB:			RXM1	02/16/2006 17:31:01	AZBPLC01.R29
156047010:1	504025	1	RXM1	02/16/2006 17:51:30	AZBPLC01.R30
156047011:1	504025	1	RXM1	02/16/2006 18:11:59	AZBPLC01.R31
1201033083:1	504025	1	RXM1	02/16/2006 18:32:28	AZBPLC01.R32
1201033085:1	504025	1	RXM1	02/16/2006 18:52:57	AZBPLC01.R33
156047012:1	504025	1	RXM1	02/16/2006 19:13:26	AZBPLC01.R34
156047013:1	504025	1	RXM1	02/16/2006 19:33:55	AZBPLC01.R35
156047014:1	504025	1	RXM1	02/16/2006 19:54:24	AZBPLC01.R36
156047015:1	504025	1	RXM1	02/16/2006 20:14:53	AZBPLC01.R37
WIC060216-02CCV:1		1	RXM1	02/16/2006 20:35:22	AZBPLC01.R38
CCB:			RXM1	02/16/2006 20:55:50	AZBPLC01.R39
1201032193:1	503639	1	RXM1	02/16/2006 21:16:19	AZBPLC01.R40
1201032198:1	503639	1	RXM1	02/16/2006 21:36:48	AZBPLC01.R41
155322001:1	503639	1	RXM1	02/16/2006 21:57:17	AZBPLC01.R42
1201032195:1	503639	1	RXM1	02/16/2006 22:17:46	AZBPLC01.R43
1201032197:1	503639	1	RXM1	02/16/2006 22:38:15	AZBPLC01.R44
155665001:1	503639	1	RXM1	02/16/2006 22:58:44	AZBPLC01.R45
155724009:1	503639	1	RXM1	02/16/2006 23:19:12	AZBPLC01.R46
1201032194:1	503639	1	RXM1	02/16/2006 23:39:41	AZBPLC01.R47
1201032196:1	503639	1	RXM1	02/17/2006 00:00:10	AZBPLC01.R48
155724010:1	503639	1	RXM1	02/17/2006 00:20:39	AZBPLC01.R49
WIC060216-02CVH:1		1	RXM1	02/17/2006 00:41:08	AZBPLC01.R50
CCB:			RXM1	02/17/2006 01:01:37	AZBPLC01.R51
1201032209:1	503646	1	RXM1	02/17/2006 01:22:06	AZBPLC01.R52
1201032214:1	503646	1	RXM1	02/17/2006 01:42:35	AZBPLC01.R53
155668001:1	503646	1	RXM1	02/17/2006 02:03:04	AZBPLC01.R54
1201032210:1	503646	1	RXM1	02/17/2006 02:23:33	AZBPLC01.R55

```
1201032212:1         503646   1     RXM1  02/17/2006 02:44:02 AZBPLC01.R56
155801001:1          503646   1     RXM1  02/17/2006 03:04:30 AZBPLC01.R57
1201032211:1         503646   1     RXM1  02/17/2006 03:24:59 AZBPLC01.R58
1201032213:1         503646   1     RXM1  02/17/2006 03:45:28 AZBPLC01.R59
155801002:1          503646   1     RXM1  02/17/2006 04:05:57 AZBPLC01.R60
155801003:1          503646   1     RXM1  02/17/2006 04:26:26 AZBPLC01.R61
WIC060216-02CCV:1             1     RXM1  02/17/2006 04:46:55 AZBPLC01.R62
CCB:                          RXM1  02/17/2006 05:07:23 AZBPLC01.R63
154614001:3          498894   1     RXM1  02/17/2006 05:27:52 AZBPLC01.R64
1201021178:3         498894   1     RXM1  02/17/2006 05:48:21 AZBPLC01.R65
1201021179:3         498894   1     RXM1  02/17/2006 06:08:50 AZBPLC01.R66
WIC060216-02CVH:1             1     RXM1  02/17/2006 06:29:19 AZBPLC01.R67
CCB:                          RXM1  02/17/2006 06:49:48 AZBPLC01.R68
154594003:4          498320   20    RXM1  02/17/2006 07:10:16 AZBPLC01.R69
1201019906:4         498320   20    RXM1  02/17/2006 07:30:45 AZBPLC01.R70
1201019908:4         498320   20    RXM1  02/17/2006 07:51:14 AZBPLC01.R71
154594009:4          498320   20    RXM1  02/17/2006 08:11:43 AZBPLC01.R72
1201019907:4         498320   20    RXM1  02/17/2006 08:32:12 AZBPLC01.R73
```

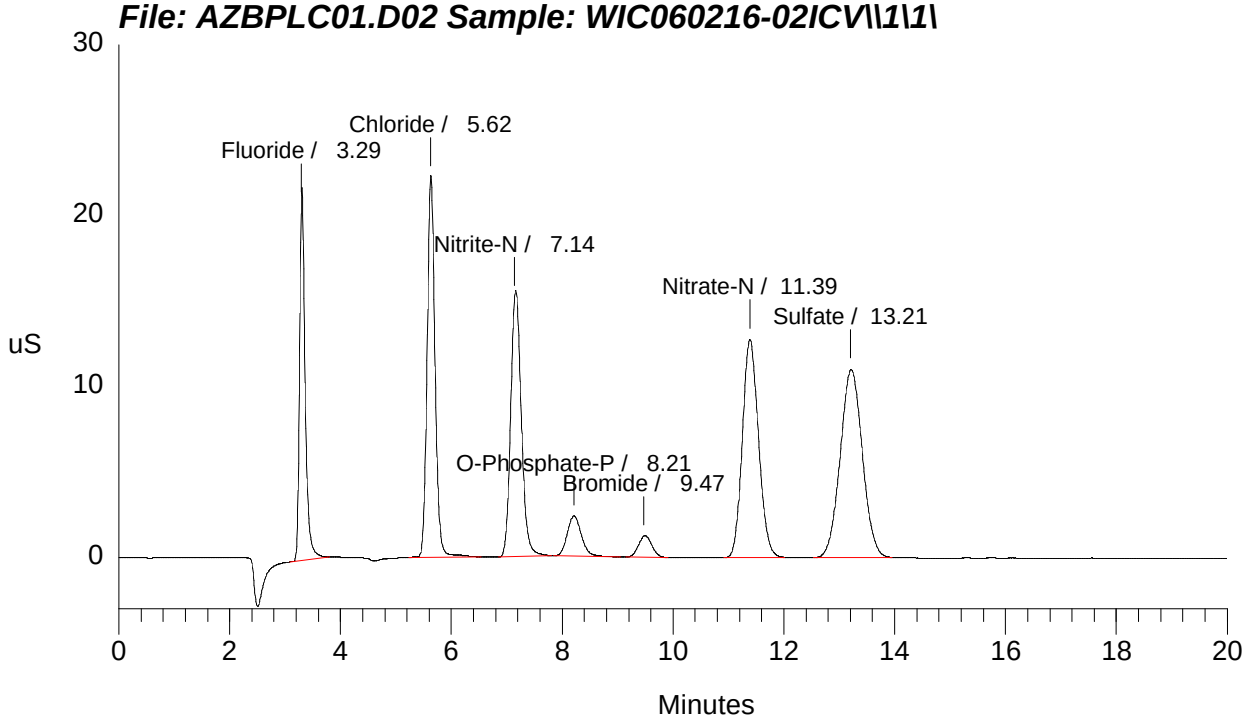
```
| Sample Name: WIC060216-02ICV\\1\1\          Date: 02/16/2006 08:18:14     |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D02                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056      |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	4.983	20880707	153329005	1	0.00
2	5.62	Chloride	9.690	22229060	222059408	1	0.00
3	7.14	Nitrite-N	4.838	15219555	207490455	1	0.00
4	8.21	O-Phosphate-P	2.474	2352162	42355957	1	0.00
5	9.47	Bromide	2.480	1246154	21463608	1	0.00
6	11.39	Nitrate-N	4.790	12767787	258205730	1	0.00
7	13.21	Sulfate	18.969	11015761	306715812	1	0.00
		Totals	48.226	85711186	1211619975		

File: AZBPLC01.D02 Sample: WIC060216-02ICV\\1\1



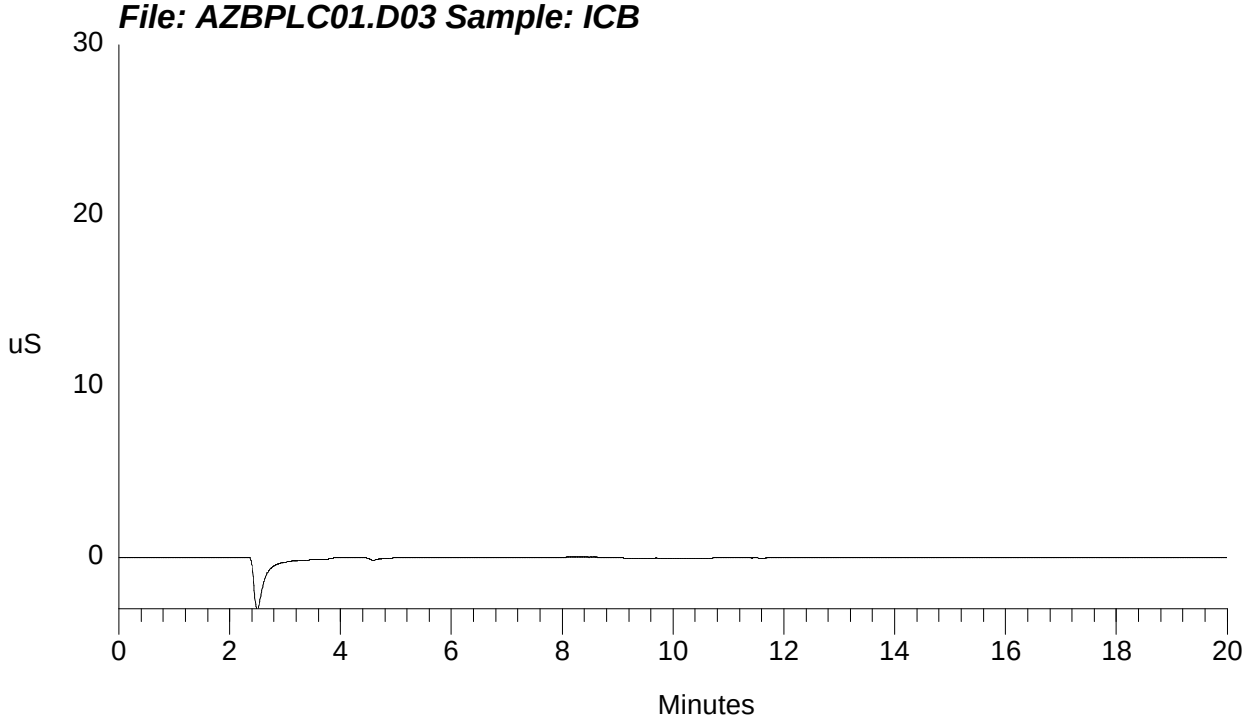
```
================================================================================
| Sample Name: ICB                              Date: 02/16/2006 08:38:43      |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D03                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZBPLC01.D03 Sample: ICB



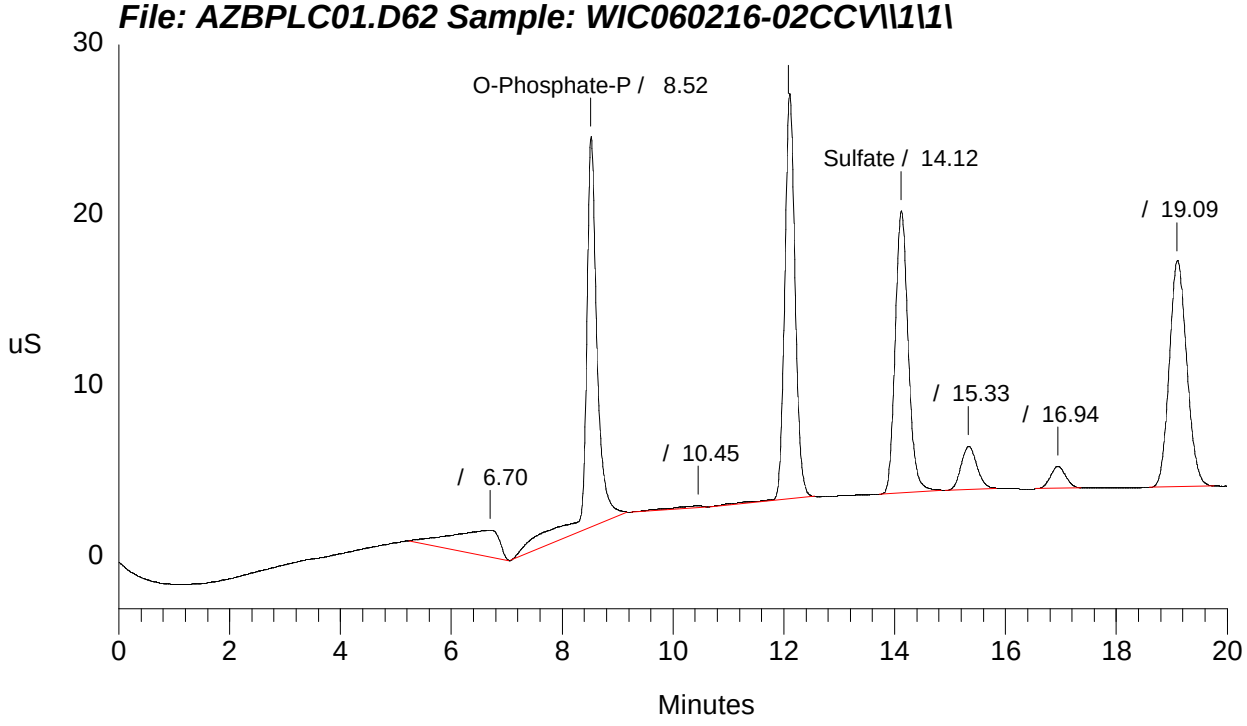
```
================================================================================
| Sample Name: WIC060216-02CCV\\1\1\          Date: 02/17/2006 04:46:55     |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D62                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 62                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                 0.000          0          0    0   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   2   8.52 O-Phosphate-P           19.496   22776858  334021722    1   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   4  12.09 Nitrate-N                5.726   23054333  309518000    1   0.00
   5  14.12 Sulfate                 16.681   16486625  269172400    1   0.00
                          ----------------------------------
                    Totals          41.902   62317817  912712122
```

File: AZBPLC01.D62 Sample: WIC060216-02CCV\\1\1



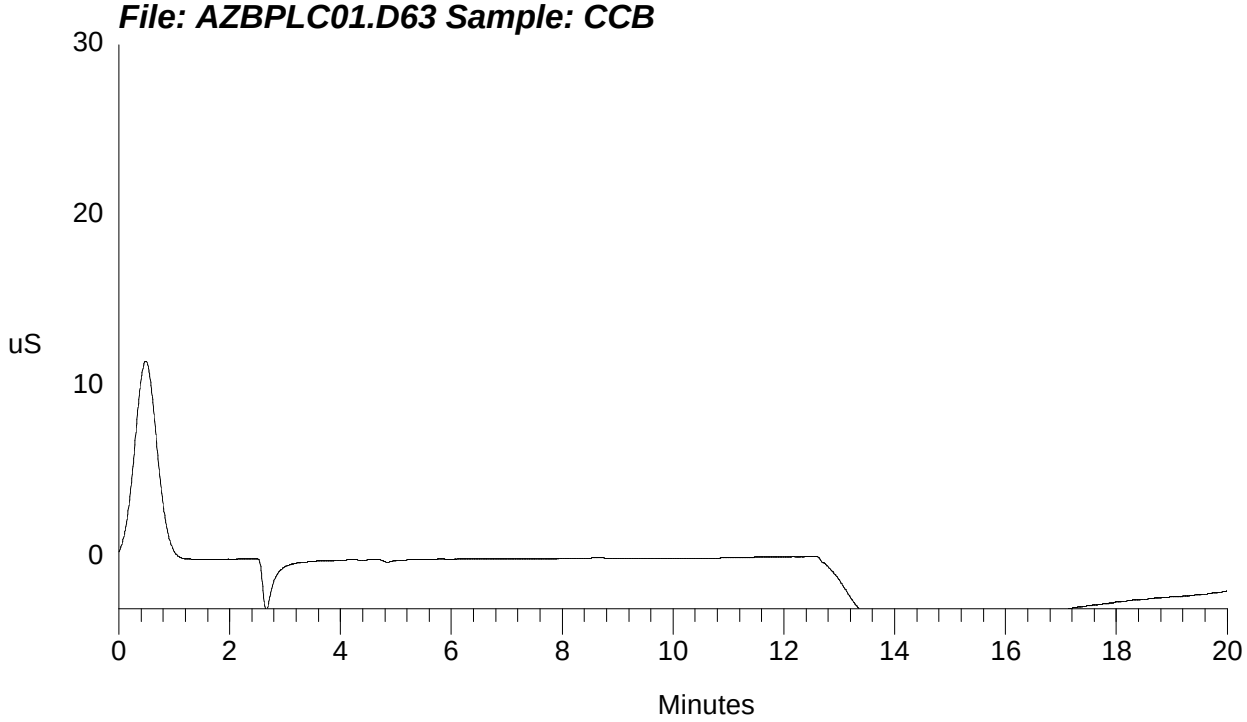
```
================================================================================
| Sample Name: CCB                              Date: 02/17/2006 05:07:23      |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D63                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 63                  Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZBPLC01.D63 Sample: CCB



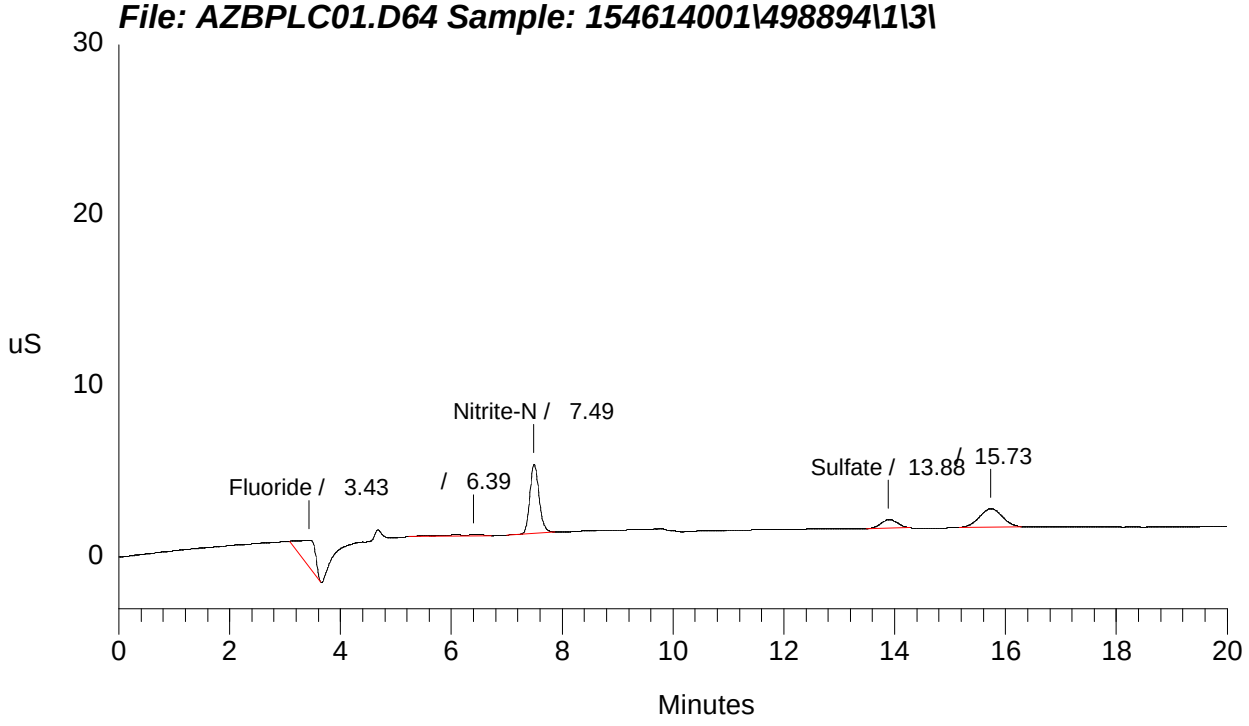
```
================================================================================
| Sample Name: 154614001\498894\1\3\          Date: 02/17/2006 05:27:52     |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D64                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 64                  Detector:CDM-2    |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.43 Fluoride                 1.033    1564188   30626732    1   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   3   7.49 Nitrite-N                1.103    4036432   46055200    1   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   4  13.88 Sulfate                  0.923     504093   10630400    1   0.00
                          ----------------------------------
                    Totals          3.060    6104713   87312332
```

File: AZBPLC01.D64 Sample: 154614001\498894\1\3



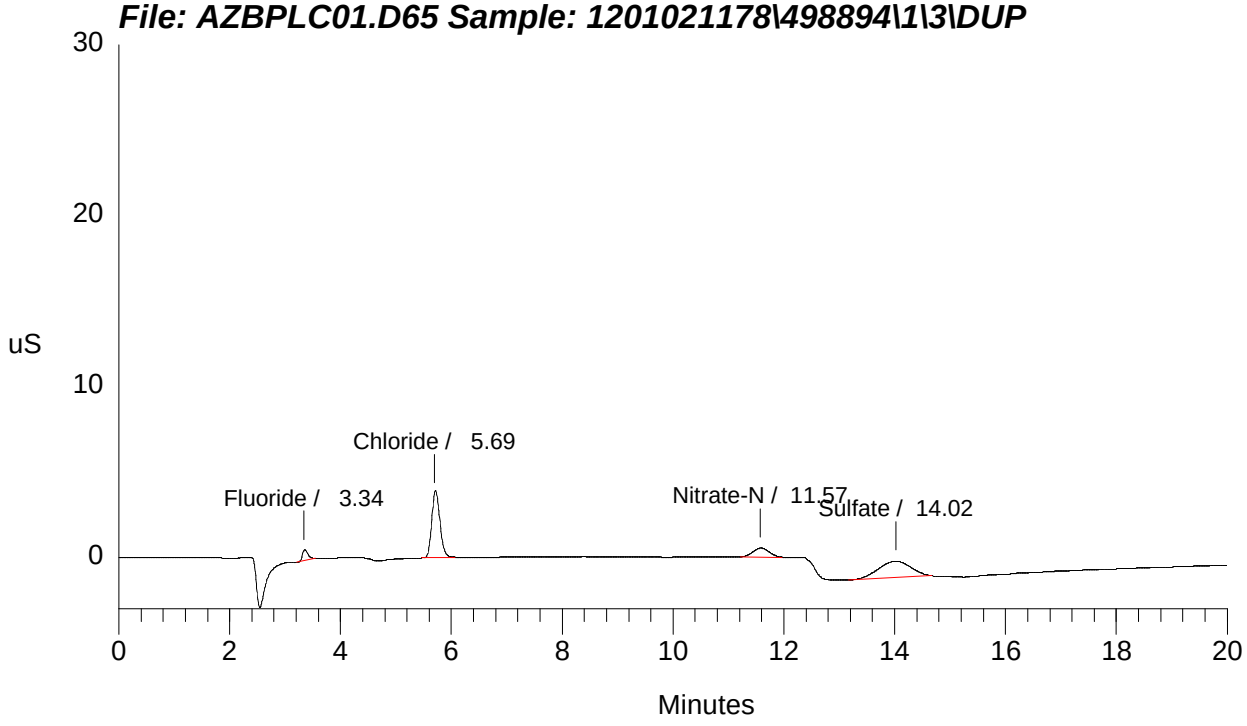
```
================================================================================
| Sample Name: 1201021178\498894\1\3\DUP      Date: 02/17/2006 05:48:21     |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D65                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 65                  Detector:CDM-2    |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.34	Fluoride	0.193	607309	4533322	1	0.00
2	5.69	Chloride	1.885	3722865	40078310	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.57	Nitrate-N	0.273	515978	10593450	1	0.00
4	14.02	Sulfate	2.702	968464	39816440	1	0.00
		Totals	5.053	5814616	95021522		

File: AZBPLC01.D65 Sample: 1201021178\498894\1\3\DUP



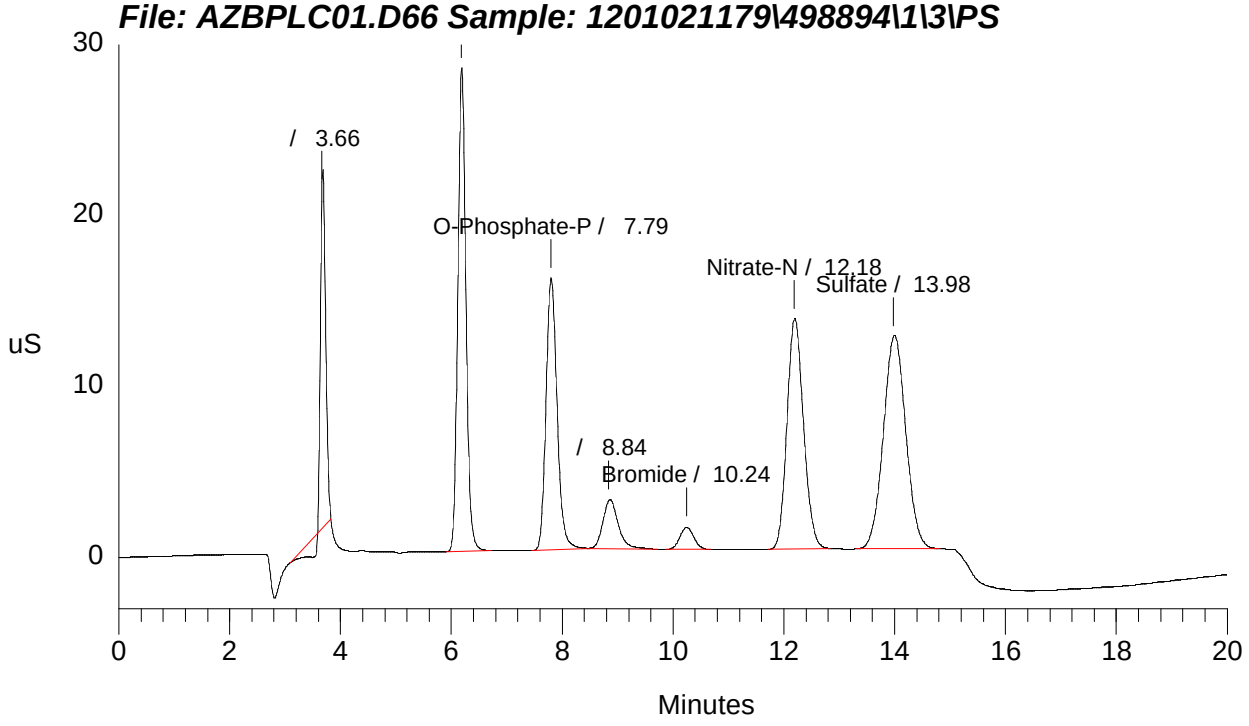
```
================================================================================
| Sample Name: 1201021179\498894\1\3\PS       Date: 02/17/2006 06:08:50     |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D66                                  |
| Method     : C:\DX\METHOD\JAN11.MET                                       |
| ACI Address: 1  System: 1  Inject#: 66                 Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   3   7.79 O-Phosphate-P          12.891   15854057  220854640    1   0.00
   5  10.24 Bromide                 2.608    1292849   22582080    1   0.00
   6  12.18 Nitrate-N               5.179   13408000  279573920    1   0.00
   7  13.98 Sulfate                21.764   12397408  352561000    1   0.00
                              ------------------------------------
                         Totals    42.443   42952313  875571640
```

File: AZBPLC01.D66 Sample: 1201021179\498894\1\3\PS

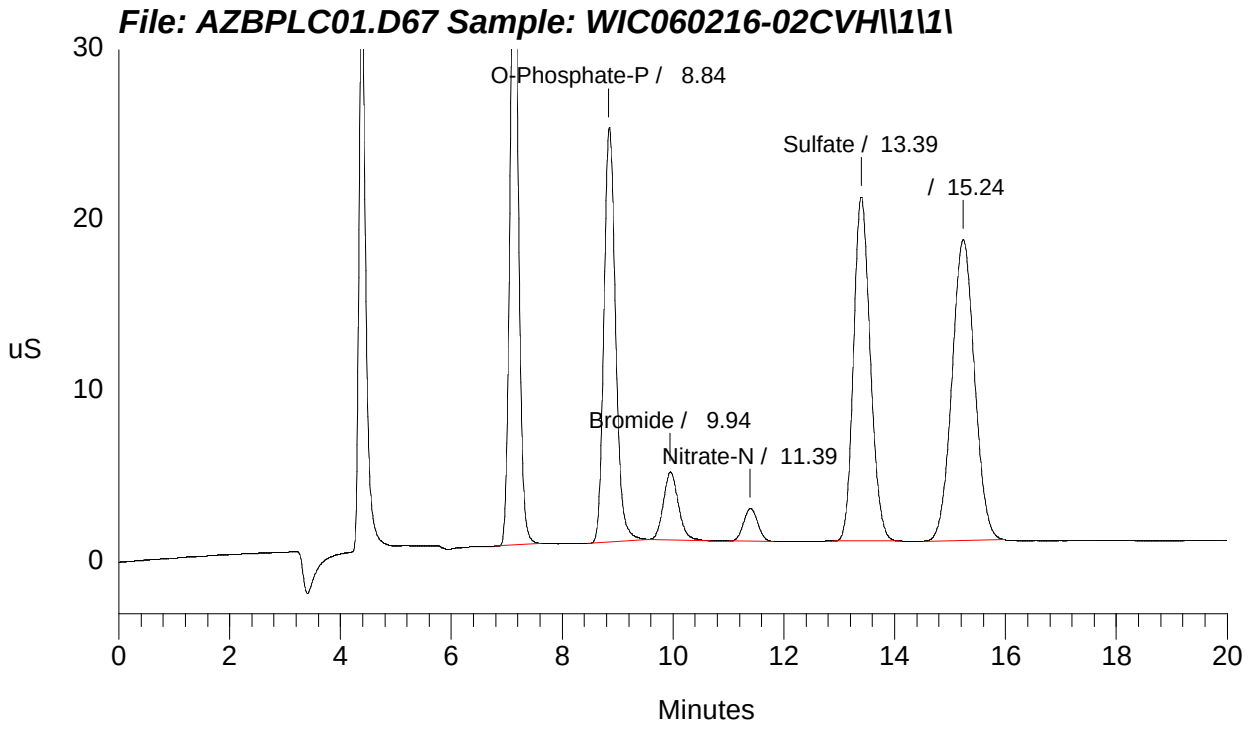


```
================================================================================
| Sample Name: WIC060216-02CVH\\1\1\          Date: 02/17/2006 06:29:19     |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D67                                   |
| Method     : C:\DX\METHOD\JAN11.MET                                        |
| ACI Address: 1  System: 1  Inject#: 67                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   1   7.12 Nitrite-N               9.267   35766372  398954170    1   0.00
   2   8.84 O-Phosphate-P          20.724   24206217  355063000    1   0.00
   3   9.94 Bromide                 8.535    3943544   74330800    1   0.00
   4  11.39 Nitrate-N               0.702    1916177   34124400    1   0.00
   5  13.39 Sulfate                26.004   20124500  422133600    1   0.00
                          ----------------------------------
                    Totals         65.232   85956811 1284605970
```



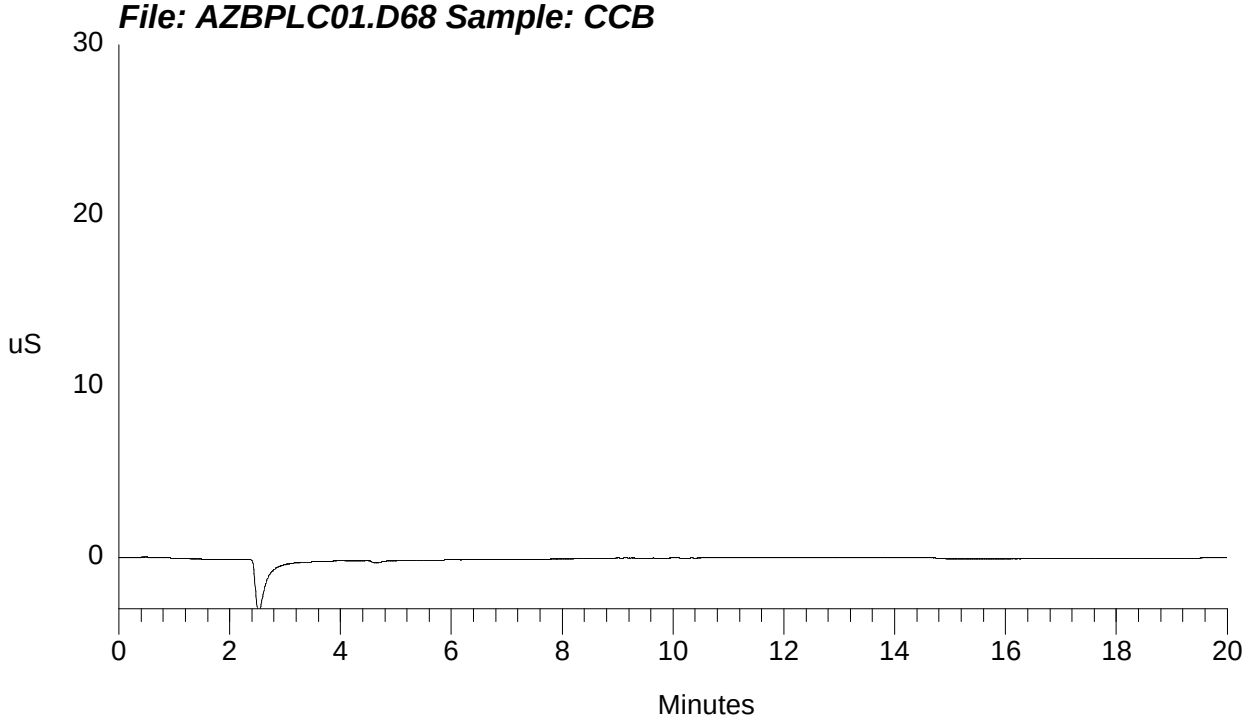
```
================================================================================
| Sample Name: CCB                              Date: 02/17/2006 06:49:48      |
| Data File  : C:\TMP\HORIZON\AZBPLC01.D68                                     |
| Method     : C:\DX\METHOD\JAN11.MET                                          |
| ACI Address: 1  System: 1  Inject#: 68                  Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZBPLC01.D68 Sample: CCB

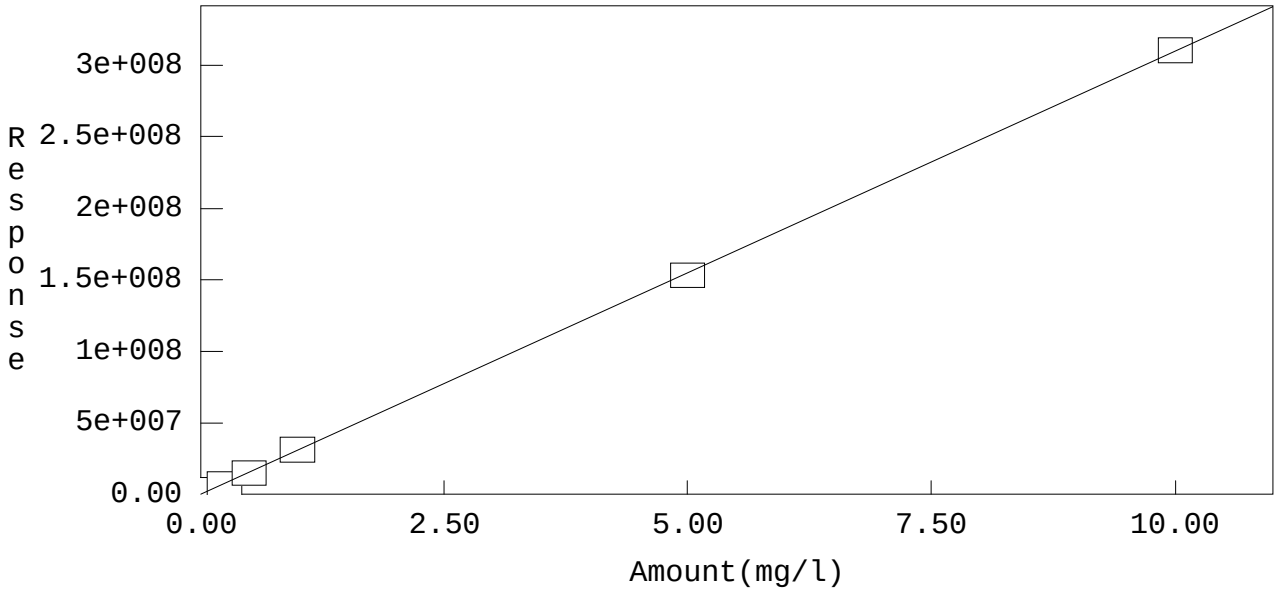


METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			RXM1	02/19/2006 13:26:05	AZBSLC01.R01
BLK:			RXM1	02/19/2006 13:46:35	AZBSLC01.R02
BLK:			RXM1	02/19/2006 14:06:53	AZBSLC01.R03
AUTOCAL7:			RXM1	02/19/2006 14:27:22	AZBSLC01.R04
AUTOCAL6:			RXM1	02/19/2006 14:47:52	AZBSLC01.R05
AUTOCAL5:			RXM1	02/19/2006 15:08:21	AZBSLC01.R06
AUTOCAL4:			RXM1	02/19/2006 15:28:50	AZBSLC01.R07
AUTOCAL3:			RXM1	02/19/2006 15:49:19	AZBSLC01.R08
AUTOCAL2:			RXM1	02/19/2006 16:09:48	AZBSLC01.R09
AUTOCAL1:			RXM1	02/19/2006 16:30:17	AZBSLC01.R10
WIC060219-02ICV:1		1	RXM1	02/19/2006 16:50:46	AZBSLC01.R11
ICB:			RXM1	02/19/2006 17:11:15	AZBSLC01.R12

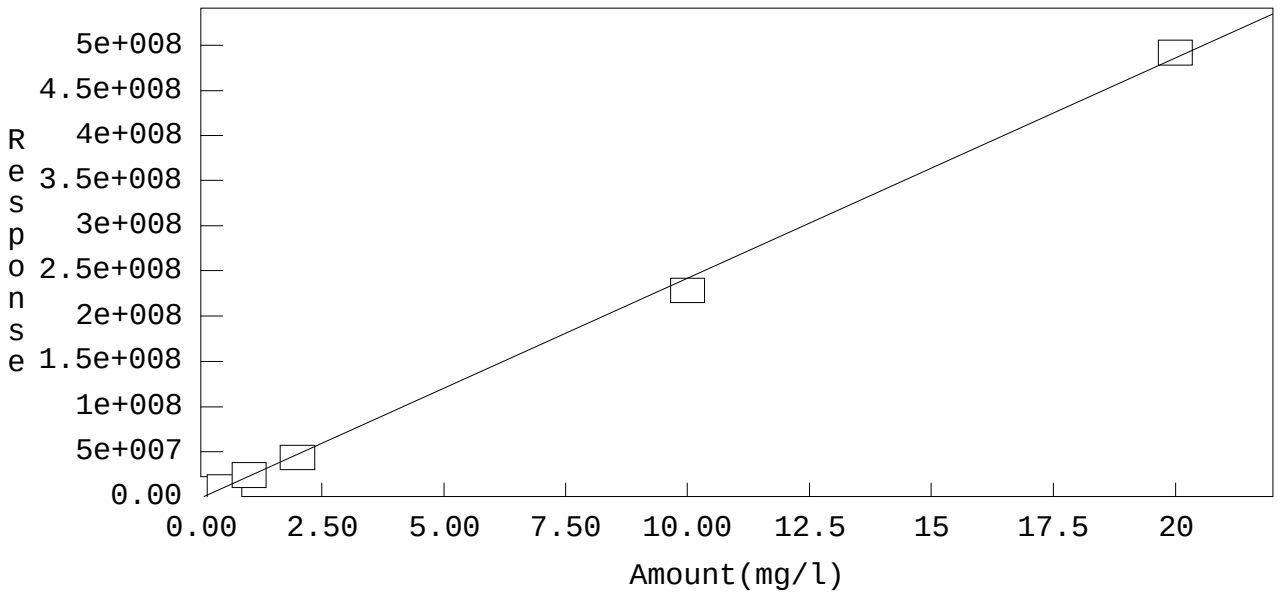
Method: FEB19.MET - Last Updated: 07:41 on Mon, 20 Feb 2006

Component: Fluoride
Fit Type: Linear
r^2 = 0.999946
Amt = Resp * 3.228e-008 + 0.004134
Resp = Amt * 3.098e+007 + -1.281e+005
Standardization: External
Calibration: Area



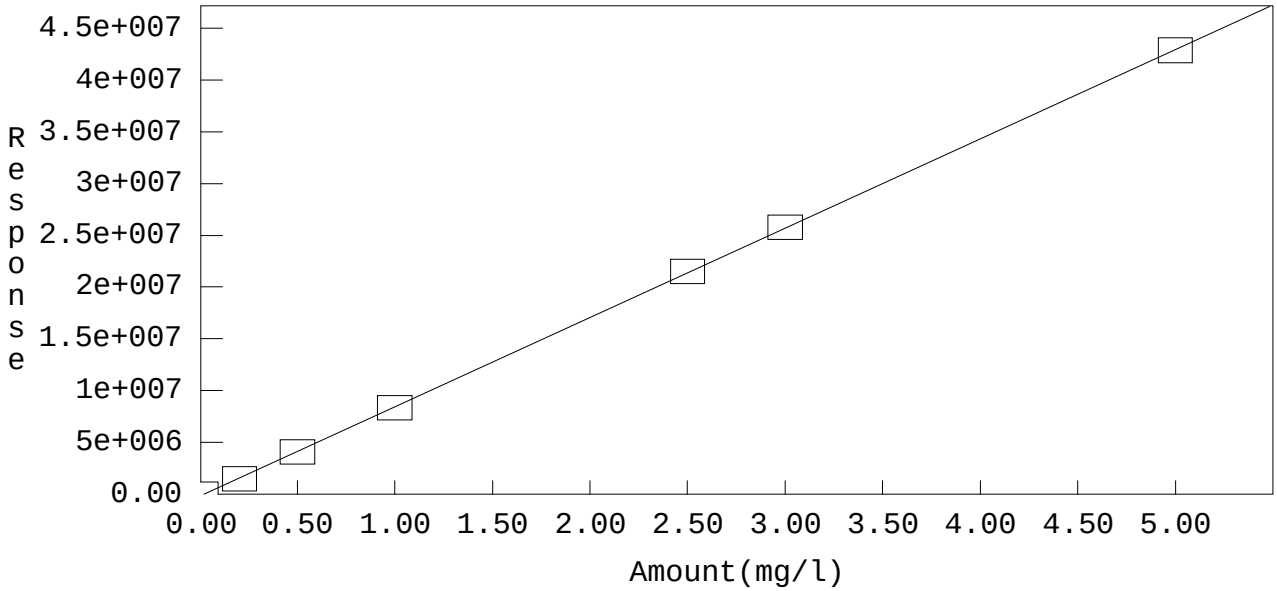
Method: C:\DX\METHOD\FEB19.MET

Component: Chloride
Fit Type: Linear
r^2 = 0.998691
Amt = Resp * 4.103e-008 + 0.0786
Resp = Amt * 2.437e+007 + -1.916e+006
Standardization: External
Calibration: Area



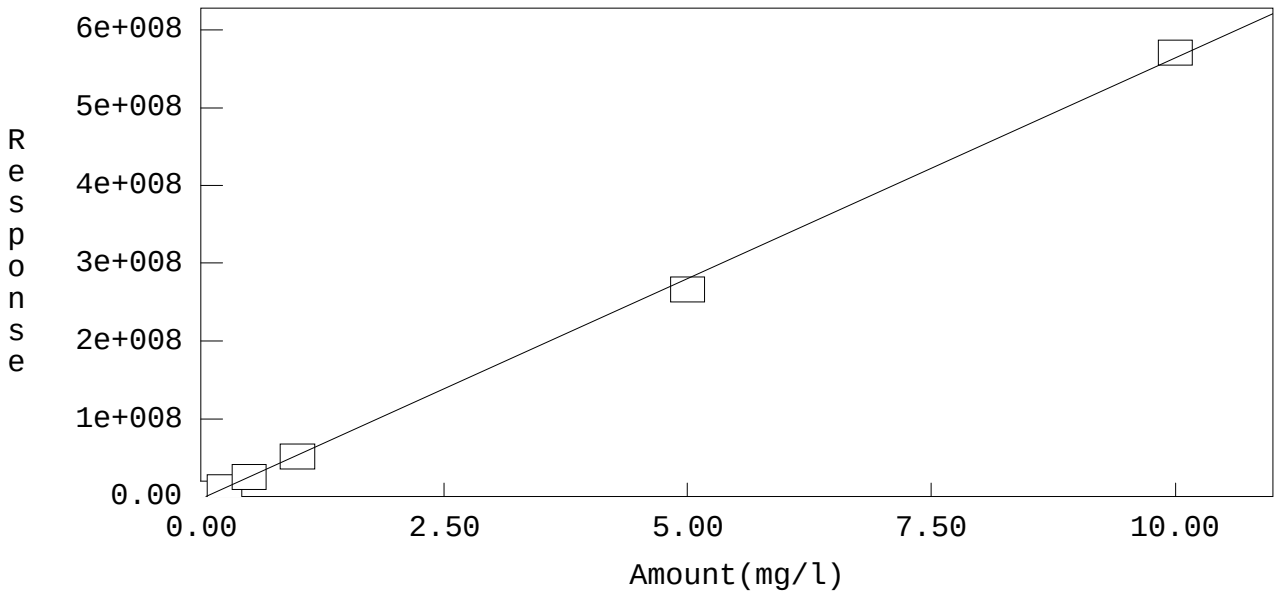
Method: C:\DX\METHOD\FEB19.MET

Component: Bromide
Fit Type: Linear
r^2 = 0.999945
Amt = Resp * 1.16e-007 + 0.01791
Resp = Amt * 8.618e+006 + -1.543e+005
Standardization: External
Calibration: Area



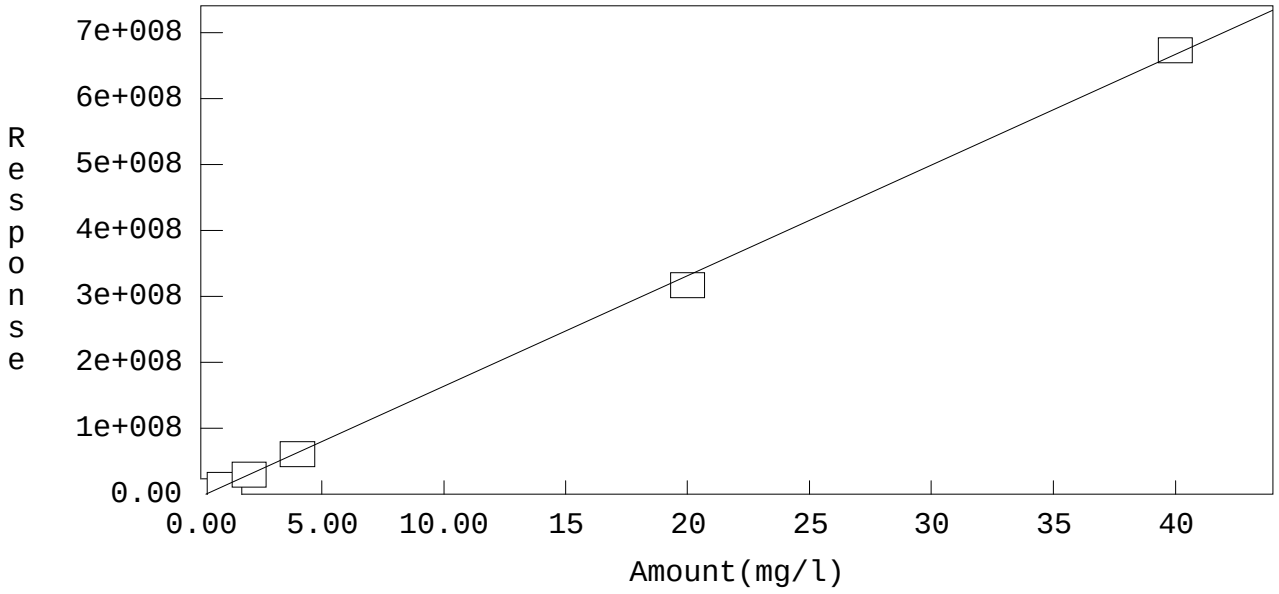
Method: C:\DX\METHOD\FEB19.MET

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.999070
Amt = Resp * 1.762e-008 + 0.06563
Resp = Amt * 5.677e+007 + -3.726e+006
Standardization: External
Calibration: Area



Method: C:\DX\METHOD\FEB19.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999321
Amt = Resp * 5.969e-008 + 0.2367
Resp = Amt * 1.675e+007 + -3.966e+006
Standardization: External
Calibration: Area



Data Reprocessed On 02/20/2006 07:03:22

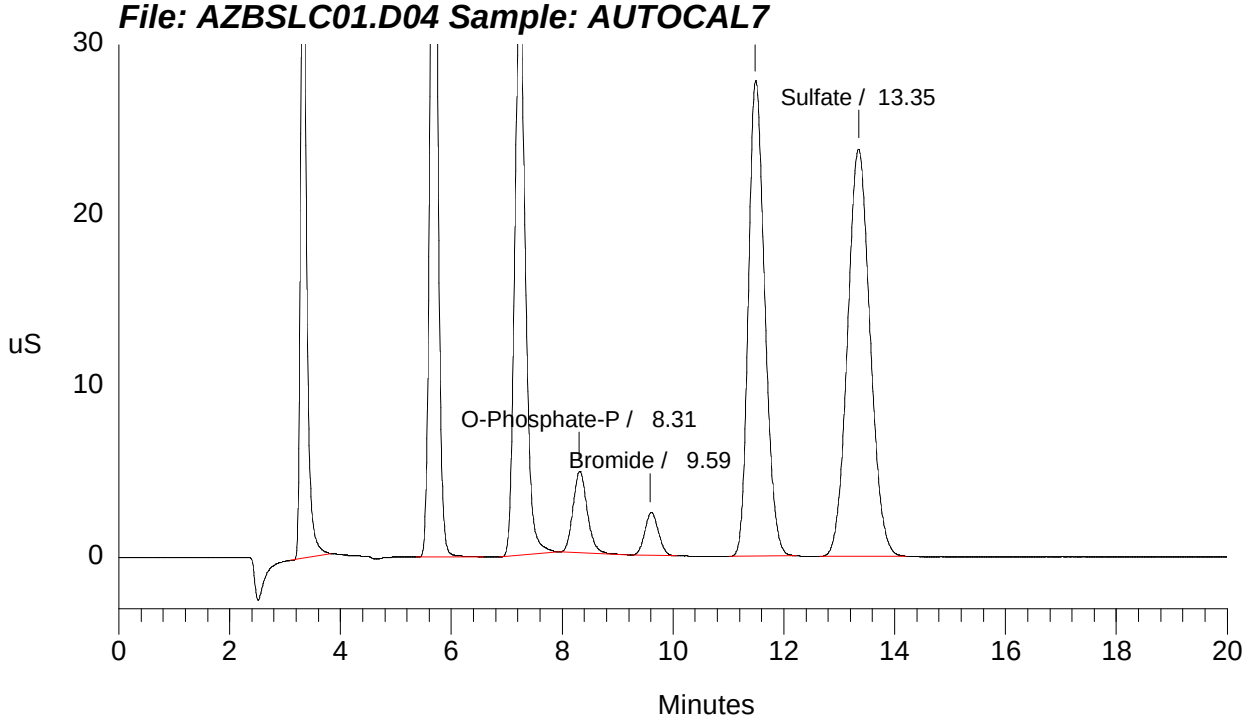
Sample Name: AUTOCAL7		Date: 02/19/2006 14:27:22	
Data File : C:\TMP\HORIZON\AZBSLC01.D04			
Method : C:\DX\METHOD\FEB19.MET			
ACI Address: 1 System: 1	Inject#: 4	Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	10.000	41961365	310458690	1	0.00
2	5.67	Chloride	20.000	50036300	491722466	1	0.00
3	7.23	Nitrite-N	10.000	32390120	442172790	1	0.00
4	8.31	O-Phosphate-P	5.000	4749944	85083540	1	0.00
5	9.59	Bromide	5.000	2482346	42843900	1	0.00
6	11.48	Nitrate-N	10.000	27720500	570391713	1	0.00
7	13.35	Sulfate	40.000	23812768	672756640	1	0.00
		Totals	100.000	183153343	2615429739		

File: AZBSLC01.D04 Sample: AUTOCAL7

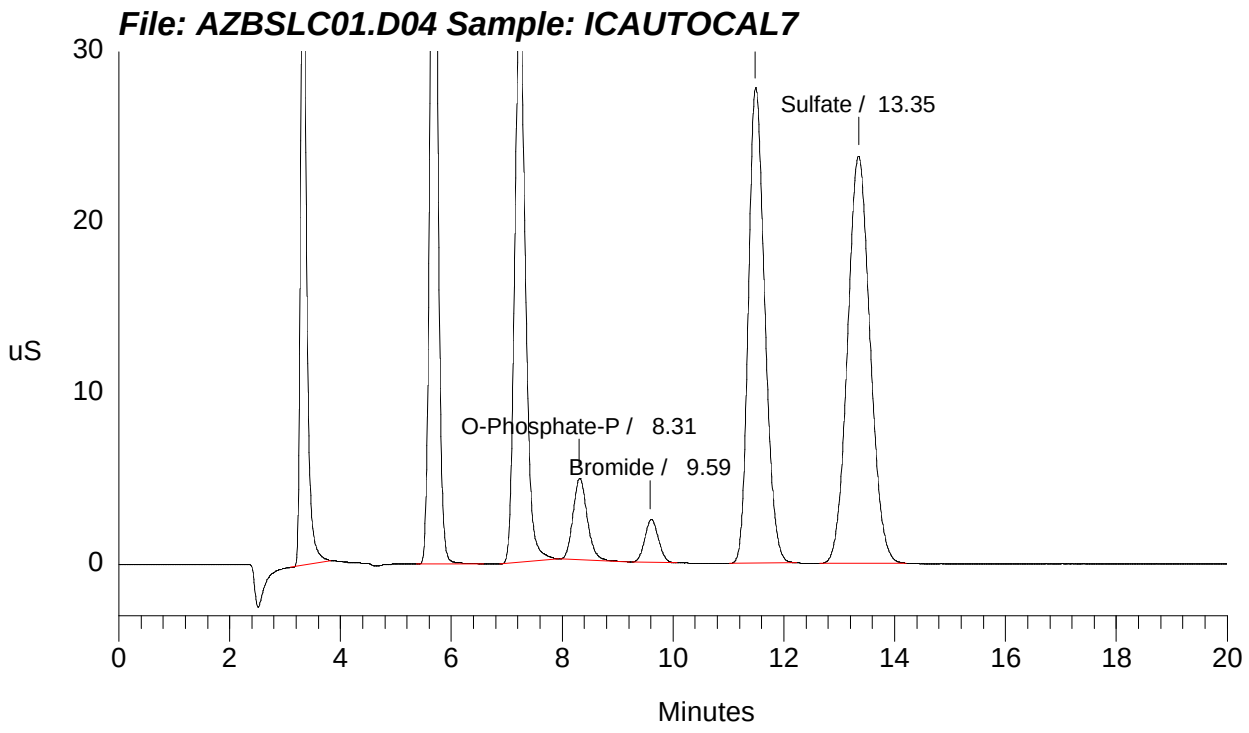


```
================================================================================
| Sample Name: ICAUTOCAL7                      Date: 02/19/2006 14:27:22       |
| Data File  : C:\TMP\HORIZON\AZBSLC01.D04                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 4                  Detector:CDM-2        |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.31 Fluoride                10.042   41961365  310458690    1   0.00
   2   5.67 Chloride                21.257   50036300  491722466    1   0.00
   3   7.23 Nitrite-N               10.267   32390120  442172790    1   0.00
   4   8.31 O-Phosphate-P            4.968    4749944   85083540    1   0.00
   5   9.59 Bromide                  4.929    2482346   42843900    1   0.00
   6  11.48 Nitrate-N               10.484   27720500  570391713    1   0.00
   7  13.35 Sulfate                 41.279   23812768  672756640    1   0.00
                                ----------------------------------
                         Totals     103.227  183153343 2615429739
```



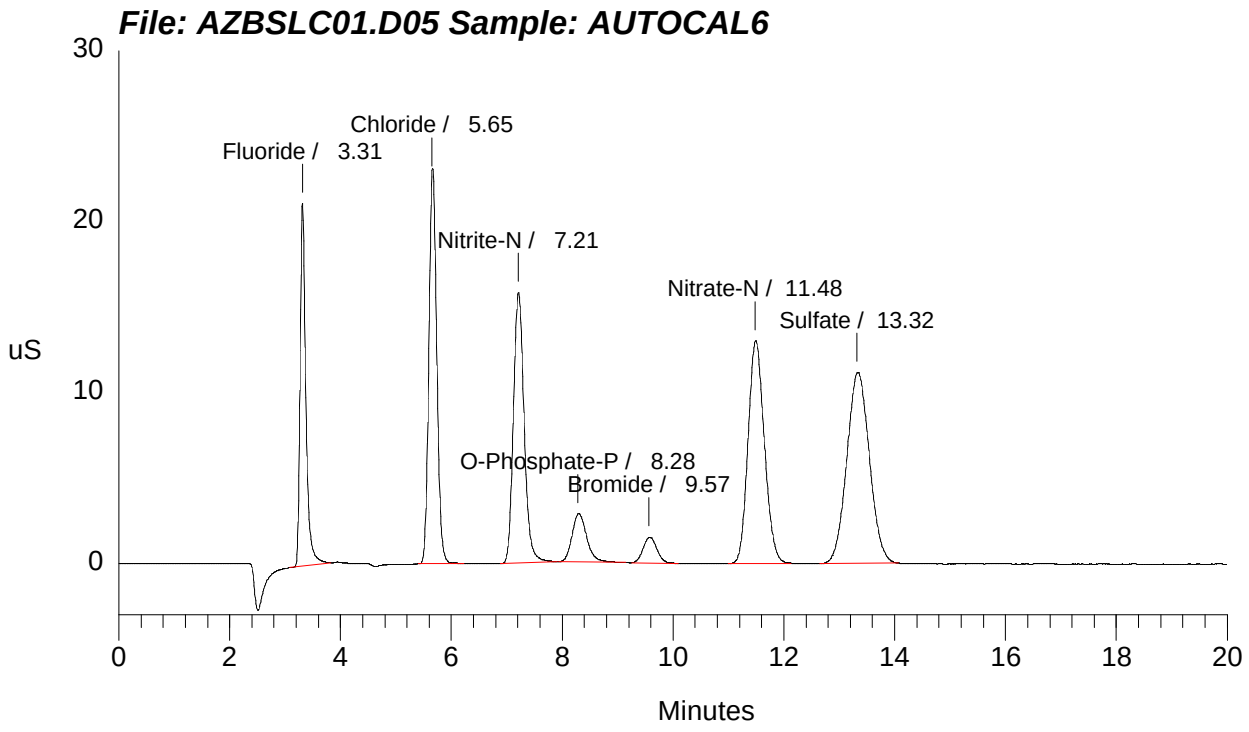
Data Reprocessed On 02/20/2006 07:03:23

Sample Name: AUTOCAL6		Date: 02/19/2006 14:47:52	
Data File : C:\TMP\HORIZON\AZBSLC01.D05			
Method : C:\DX\METHOD\FEB19.MET			
ACI Address: 1 System: 1 Inject#: 5		Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	5.000	21218472	153110423	1	0.00
2	5.65	Chloride	10.000	22623873	228561268	1	0.00
3	7.21	Nitrite-N	5.000	15824287	213759544	1	0.00
4	8.28	O-Phosphate-P	3.000	2816934	52407323	1	0.00
5	9.57	Bromide	3.000	1505355	25807598	1	0.00
6	11.48	Nitrate-N	5.000	13001623	266384978	1	0.00
7	13.32	Sulfate	20.000	11158820	317379100	1	0.00
		Totals	51.000	88149363	1257410234		



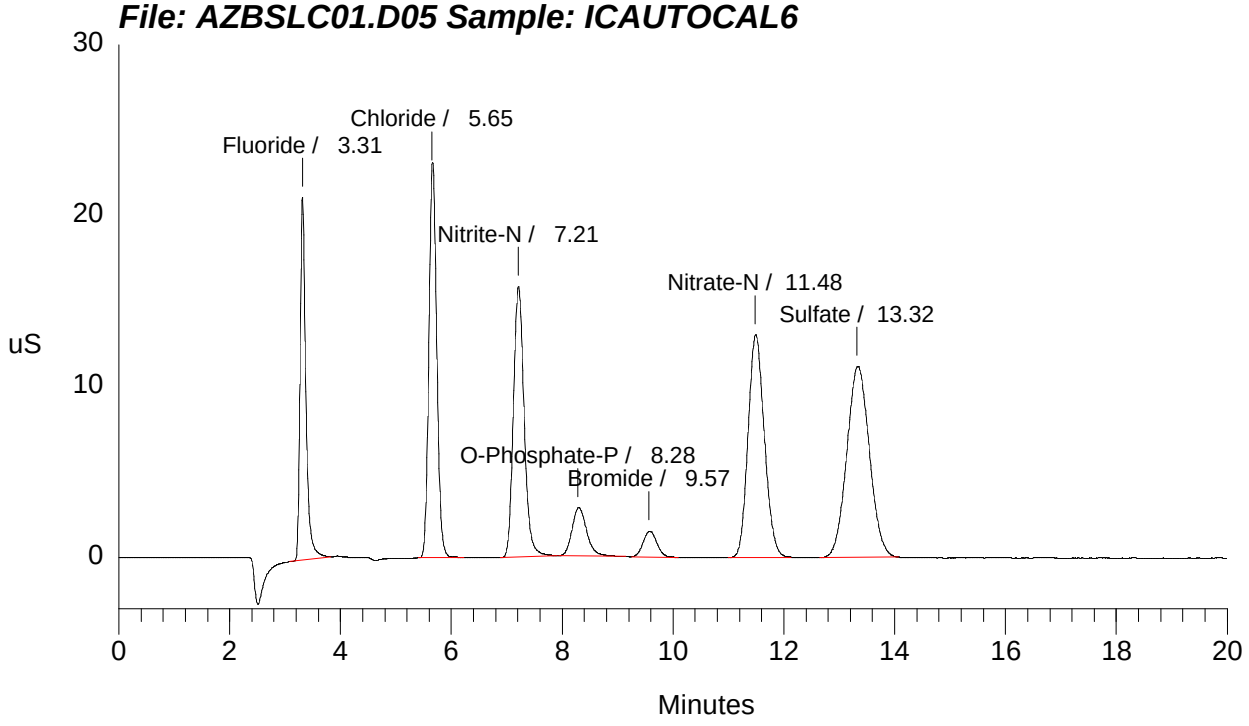
```
================================================================================
| Sample Name: ICAUTOCAL6                      Date: 02/19/2006 14:47:52       |
| Data File  : C:\TMP\HORIZON\AZBSLC01.D05                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 5                  Detector:CDM-2        |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.31 Fluoride                4.976   21218472  153110423    1   0.00
   2   5.65 Chloride                9.969   22623873  228561268    1   0.00
   3   7.21 Nitrite-N               4.983   15824287  213759544    1   0.00
   4   8.28 O-Phosphate-P           3.061    2816934   52407323    1   0.00
   5   9.57 Bromide                 2.978    1505355   25807598    1   0.00
   6  11.48 Nitrate-N               4.939   13001623  266384978    1   0.00
   7  13.32 Sulfate                19.619   11158820  317379100    1   0.00
                          ----------------------------------
                    Totals        50.526   88149363 1257410234
```

File: AZBSLC01.D05 Sample: ICAUTOCAL6



Data Reprocessed On 02/20/2006 07:03:23

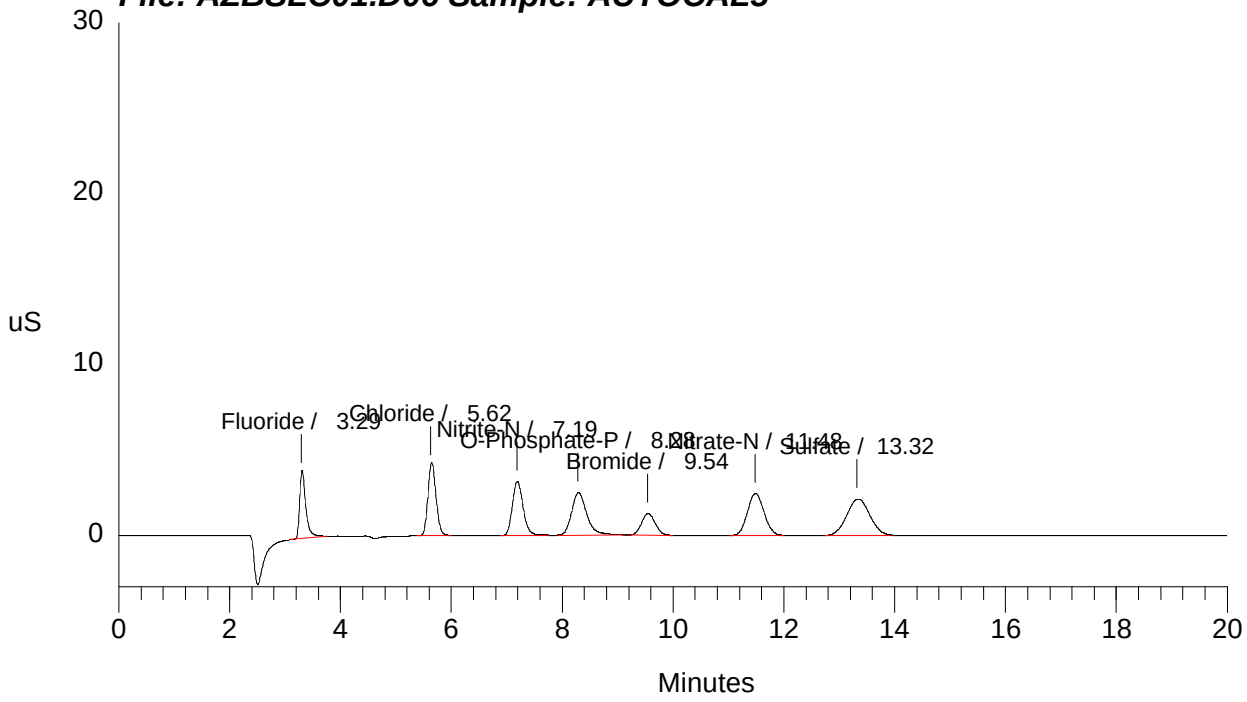
Sample Name: AUTOCAL5		Date: 02/19/2006 15:08:21	
Data File : C:\TMP\HORIZON\AZBSLC01.D06			
Method : C:\DX\METHOD\FEB19.MET			
ACI Address: 1 System: 1 Inject#: 6		Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	1.000	3806319	31292958	1	0.00
2	5.62	Chloride	2.000	4077165	43532606	1	0.00
3	7.19	Nitrite-N	1.000	3158502	42775580	1	0.00
4	8.28	O-Phosphate-P	2.500	2483892	47007312	1	0.00
5	9.54	Bromide	2.500	1269395	21500854	1	0.00
6	11.48	Nitrate-N	1.000	2463107	51521340	1	0.00
7	13.32	Sulfate	4.000	2131681	61167806	1	0.00
		Totals	14.000	19390060	298798456		

File: AZBSLC01.D06 Sample: AUTOCAL5



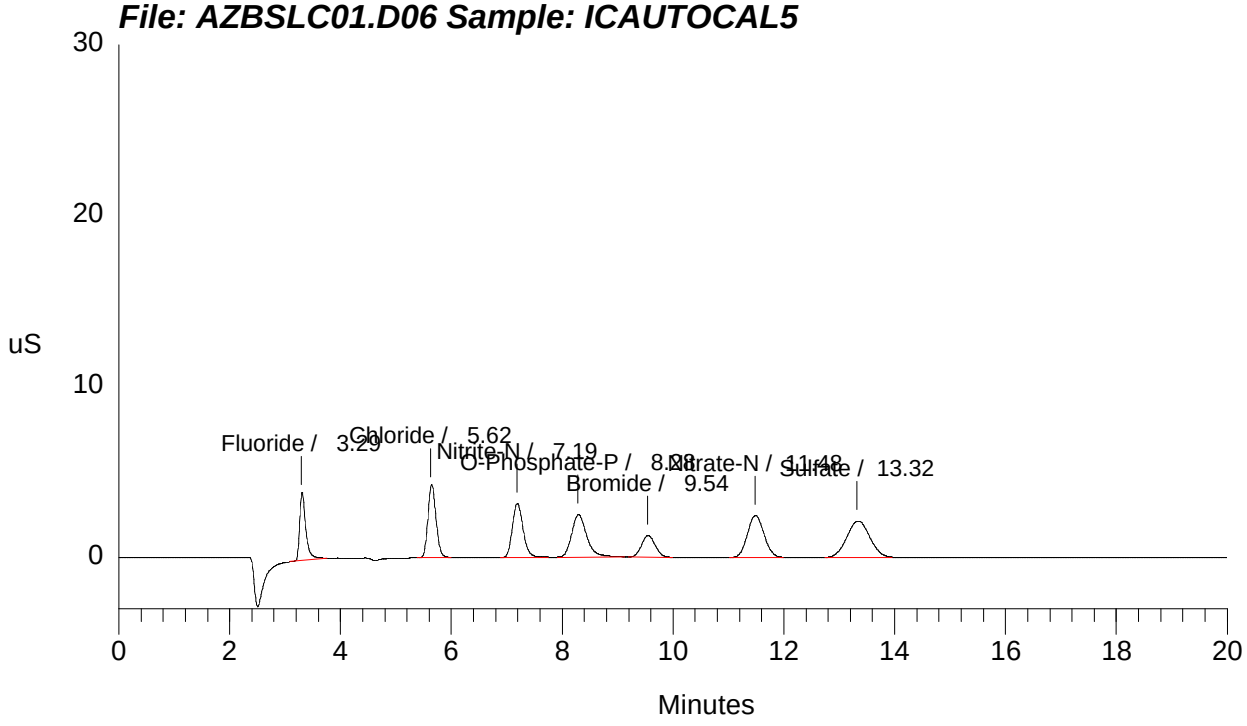
```
================================================================================
| Sample Name: ICAUTOCAL5                        Date: 02/19/2006 15:08:21     |
| Data File  : C:\TMP\HORIZON\AZBSLC01.D06                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 6                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.29 Fluoride                 1.054    3806319   31292958    1   0.00
   2   5.62 Chloride                 2.033    4077165   43532606    1   0.00
   3   7.19 Nitrite-N                1.028    3158502   42775580    1   0.00
   4   8.28 O-Phosphate-P            2.746    2483892   47007312    1   0.00
   5   9.54 Bromide                  2.484    1269395   21500854    1   0.00
   6  11.48 Nitrate-N                1.020    2463107   51521340    1   0.00
   7  13.32 Sulfate                  4.004    2131681   61167806    1   0.00
                          ----------------------------------
                    Totals        14.368   19390060  298798456
```

File: AZBSLC01.D06 Sample: ICAUTOCAL5



Data Reprocessed On 02/20/2006 07:03:24

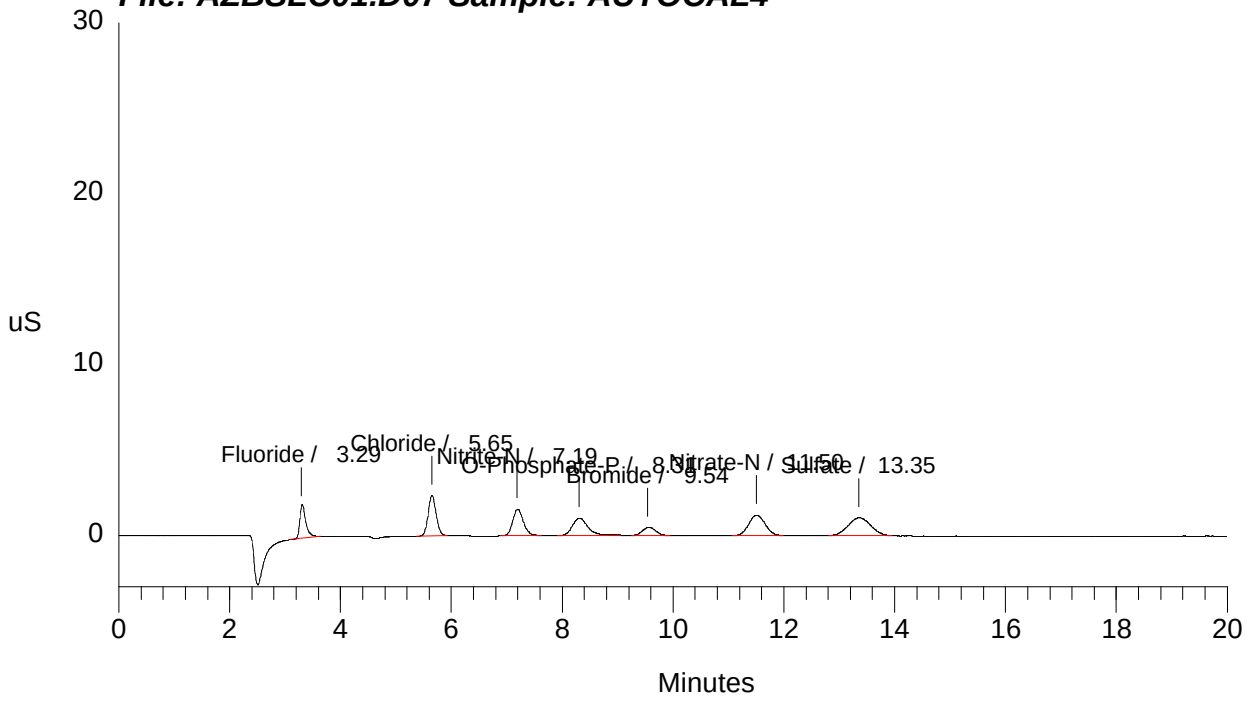
Sample Name: AUTOCAL4		Date: 02/19/2006 15:28:50	
Data File : C:\TMP\HORIZON\AZBSLC01.D07			
Method : C:\DX\METHOD\FEB19.MET			
ACI Address: 1 System: 1 Inject#: 7		Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	0.500	1837916	15005343	1	0.00
2	5.65	Chloride	1.000	2368598	23941454	1	0.00
3	7.19	Nitrite-N	0.500	1547354	20811022	1	0.00
4	8.31	O-Phosphate-P	1.000	1017719	19971654	1	0.00
5	9.54	Bromide	1.000	483575	8362712	1	0.00
6	11.50	Nitrate-N	0.500	1210692	25179038	1	0.00
7	13.35	Sulfate	2.000	1050246	30242344	1	0.00
		Totals	6.500	9516100	143513567		

File: AZBSLC01.D07 Sample: AUTOCAL4



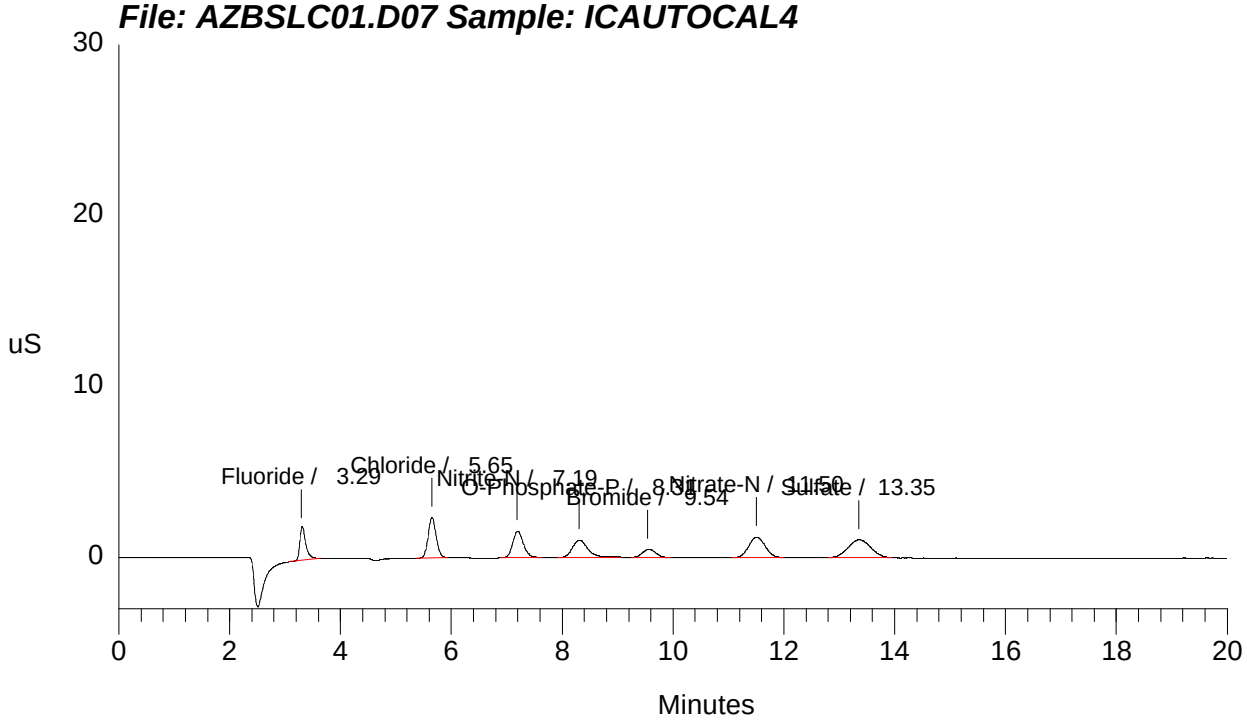
```
| Sample Name: ICAUTOCAL4                        Date: 02/19/2006 15:28:50     |
| Data File  : C:\TMP\HORIZON\AZBSLC01.D07                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 7                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.29	Fluoride	0.530	1837916	15005343	1	0.00
2	5.65	Chloride	1.192	2368598	23941454	1	0.00
3	7.19	Nitrite-N	0.519	1547354	20811022	1	0.00
4	8.31	O-Phosphate-P	1.168	1017719	19971654	1	0.00
5	9.54	Bromide	0.980	483575	8362712	1	0.00
6	11.50	Nitrate-N	0.539	1210692	25179038	1	0.00
7	13.35	Sulfate	2.119	1050246	30242344	1	0.00
		Totals	7.047	9516100	143513567		

File: AZBSLC01.D07 Sample: ICAUTOCAL4



Data Reprocessed On 02/20/2006 07:03:25

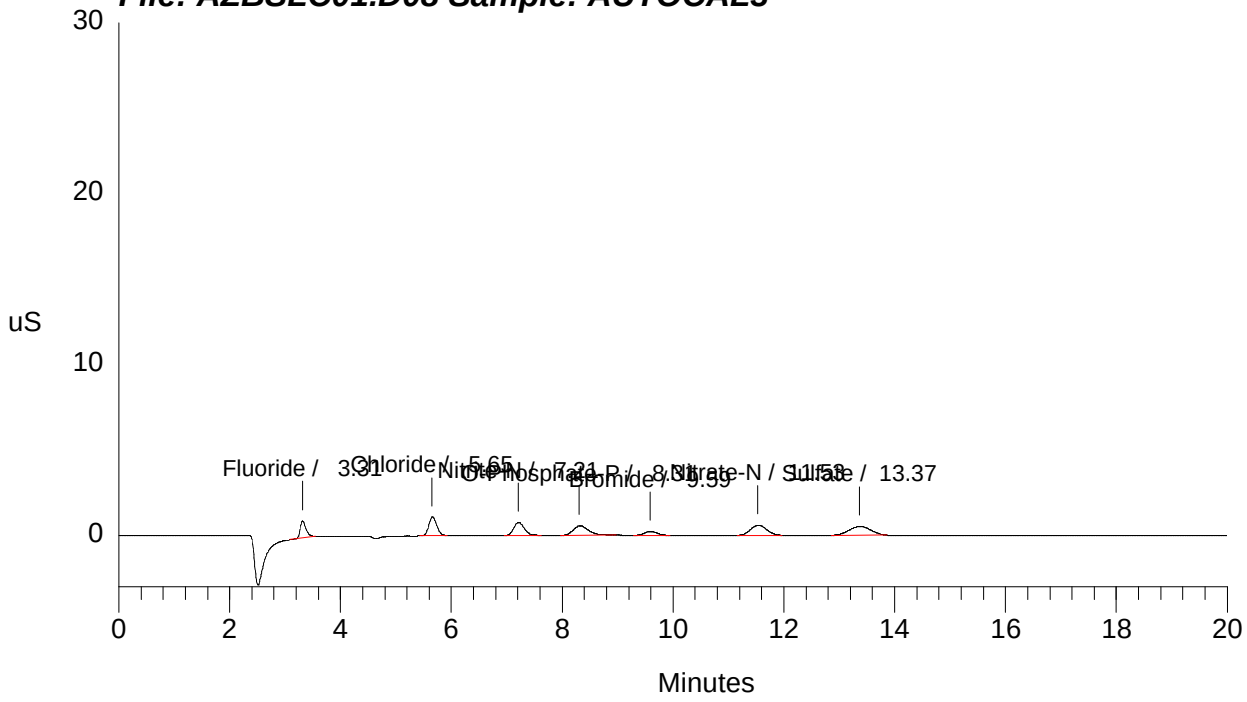
Sample Name: AUTOCAL3		Date: 02/19/2006 15:49:19	
Data File : C:\TMP\HORIZON\AZBSLC01.D08			
Method : C:\DX\METHOD\FEB19.MET			
ACI Address: 1 System: 1	Inject#: 8	Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	0.250	1003485	7435523	1	0.00
2	5.65	Chloride	0.500	1090782	11201218	1	0.00
3	7.21	Nitrite-N	0.250	774437	10371374	1	0.00
4	8.31	O-Phosphate-P	0.500	561513	11244076	1	0.00
5	9.59	Bromide	0.500	241682	4080296	1	0.00
6	11.53	Nitrate-N	0.250	593228	12250172	1	0.00
7	13.37	Sulfate	1.000	521334	14528214	1	0.00
		Totals	3.250	4786461	71110873		

File: AZBSLC01.D08 Sample: AUTOCAL3



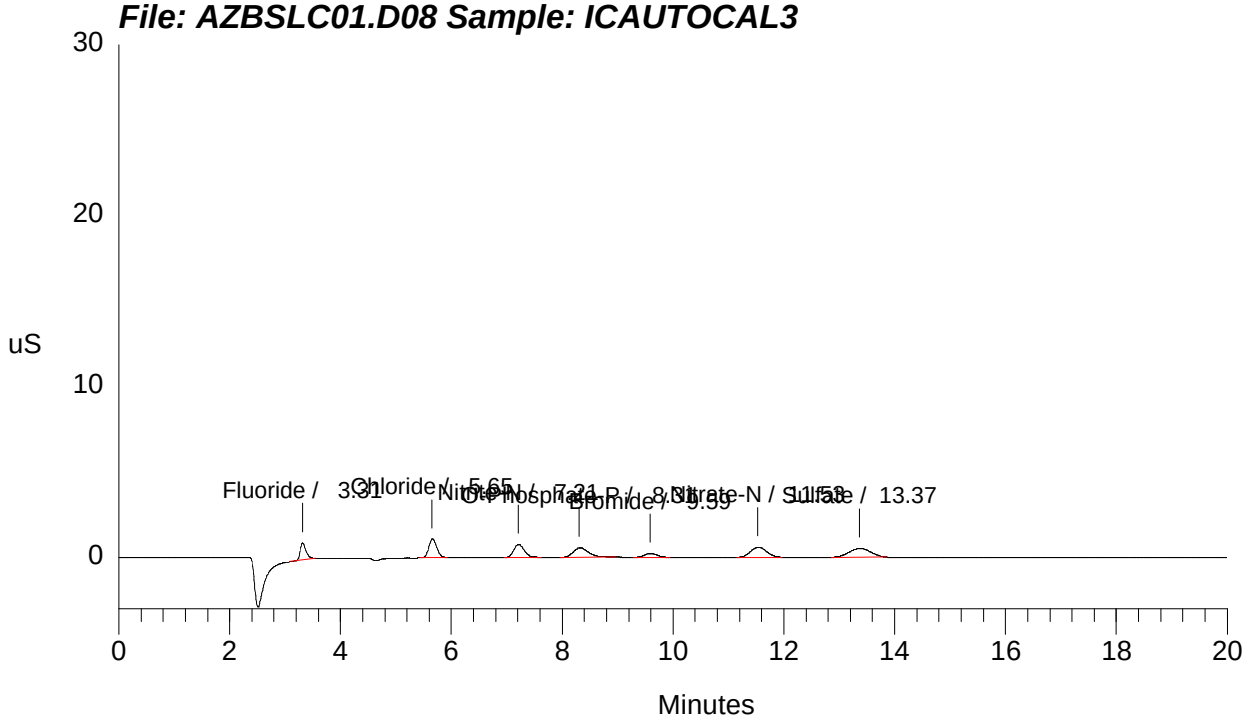
```
================================================================================
| Sample Name: ICAUTOCAL3                        Date: 02/19/2006 15:49:19     |
| Data File  : C:\TMP\HORIZON\AZBSLC01.D08                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 8                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.31 Fluoride                0.286    1003485    7435523    1   0.00
   2   5.65 Chloride                0.646    1090782   11201218    1   0.00
   3   7.21 Nitrite-N               0.278     774437   10371374    1   0.00
   4   8.31 O-Phosphate-P           0.659     561513   11244076    1   0.00
   5   9.59 Bromide                 0.489     241682    4080296    1   0.00
   6  11.53 Nitrate-N               0.303     593228   12250172    1   0.00
   7  13.37 Sulfate                 1.161     521334   14528214    1   0.00
                          ----------------------------------
                    Totals          3.822    4786461   71110873
```

File: AZBSLC01.D08 Sample: ICAUTOCAL3



Data Reprocessed On 02/20/2006 07:03:25

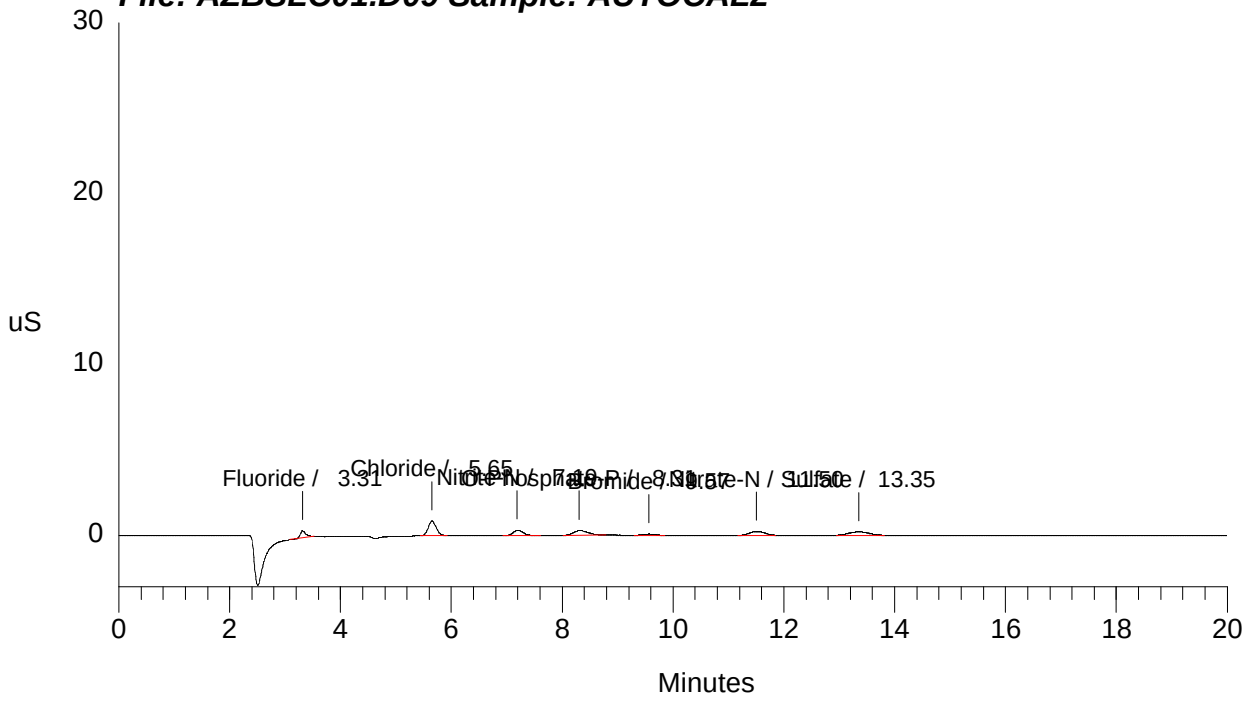
Sample Name: AUTOCAL2		Date: 02/19/2006 16:09:48	
Data File : C:\TMP\HORIZON\AZBSLC01.D09			
Method : C:\DX\METHOD\FEB19.MET			
ACI Address: 1 System: 1	Inject#: 9	Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	0.100	428193	3098321	1	0.00
2	5.65	Chloride	0.200	868296	8903230	1	0.00
3	7.19	Nitrite-N	0.100	309671	4197420	1	0.00
4	8.31	O-Phosphate-P	0.200	280765	5450130	1	0.00
5	9.57	Bromide	0.200	92435	1461164	1	0.00
6	11.50	Nitrate-N	0.100	235178	4696632	1	0.00
7	13.35	Sulfate	0.400	203753	5388324	1	0.00
		Totals	1.300	2418290	33195221		

File: AZBSLC01.D09 Sample: AUTOCAL2



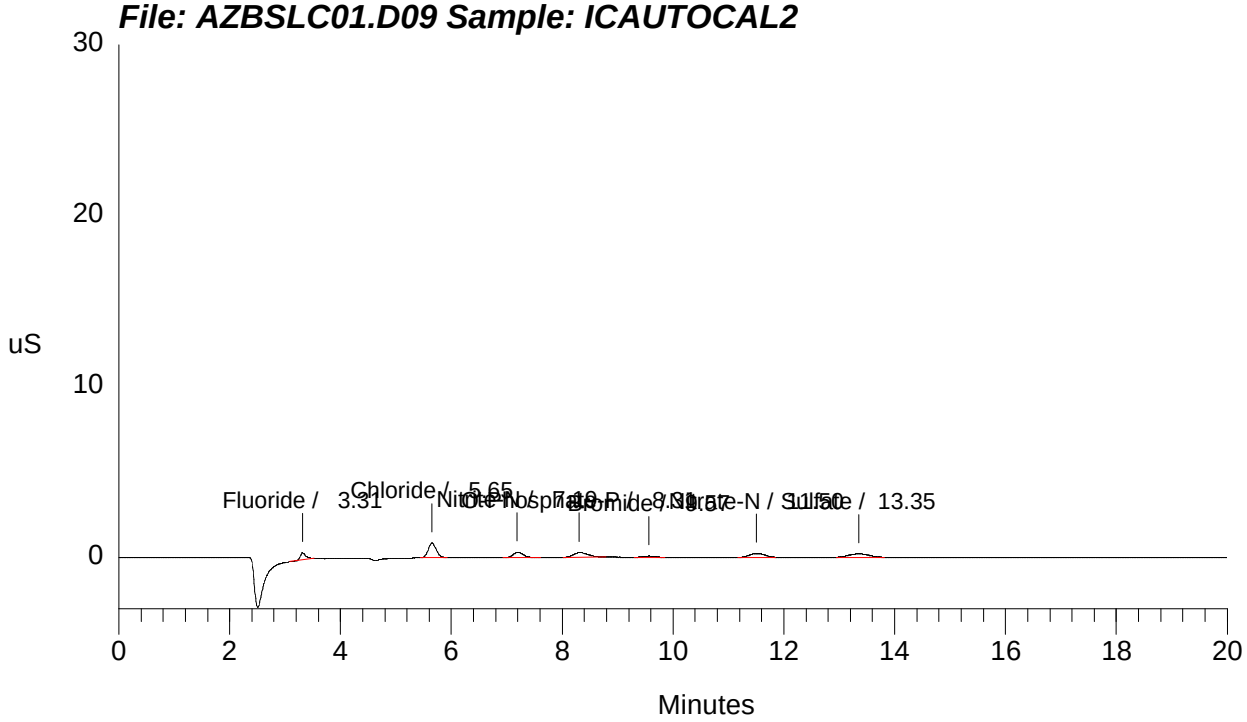
```
================================================================================
| Sample Name: ICAUTOCAL2                      Date: 02/19/2006 16:09:48     |
| Data File  : C:\TMP\HORIZON\AZBSLC01.D09                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 9                  Detector:CDM-2      |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.31 Fluoride                0.147     428193    3098321    1   0.00
   2   5.65 Chloride                0.547     868296    8903230    1   0.00
   3   7.19 Nitrite-N               0.135     309671    4197420    1   0.00
   4   8.31 O-Phosphate-P           0.321     280765    5450130    1   0.00
   5   9.57 Bromide                 0.189      92435    1461164    1   0.00
   6  11.50 Nitrate-N               0.166     235178    4696632    1   0.00
   7  13.35 Sulfate                 0.604     203753    5388324    1   0.00
                                 ----------------------------------
                      Totals       2.108    2418290   33195221
```

File: AZBSLC01.D09 Sample: ICAUTOCAL2



Data Reprocessed On 02/20/2006 07:03:26

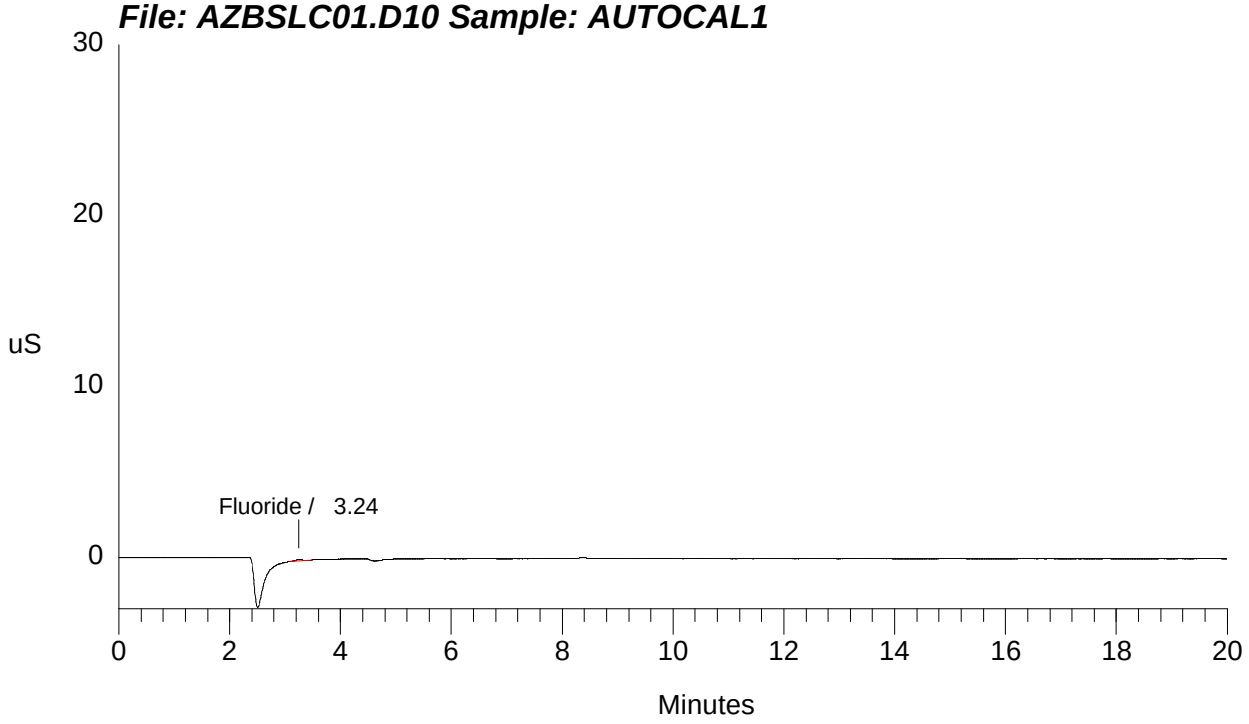
Sample Name: AUTOCAL1		Date: 02/19/2006 16:30:17	
Data File : C:\TMP\HORIZON\AZBSLC01.D10			
Method : C:\DX\METHOD\FEB19.MET			
ACI Address: 1 System: 1	Inject#: 10	Detector:CDM-2	
Analyst : RXM1	Column: AS9HC010913;GL-GC-E-086;300;9056		

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.24	Fluoride	0.000	81414	706360	1	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
		Totals	0.000	81414	706360		

File: AZBSLC01.D10 Sample: AUTOCAL1



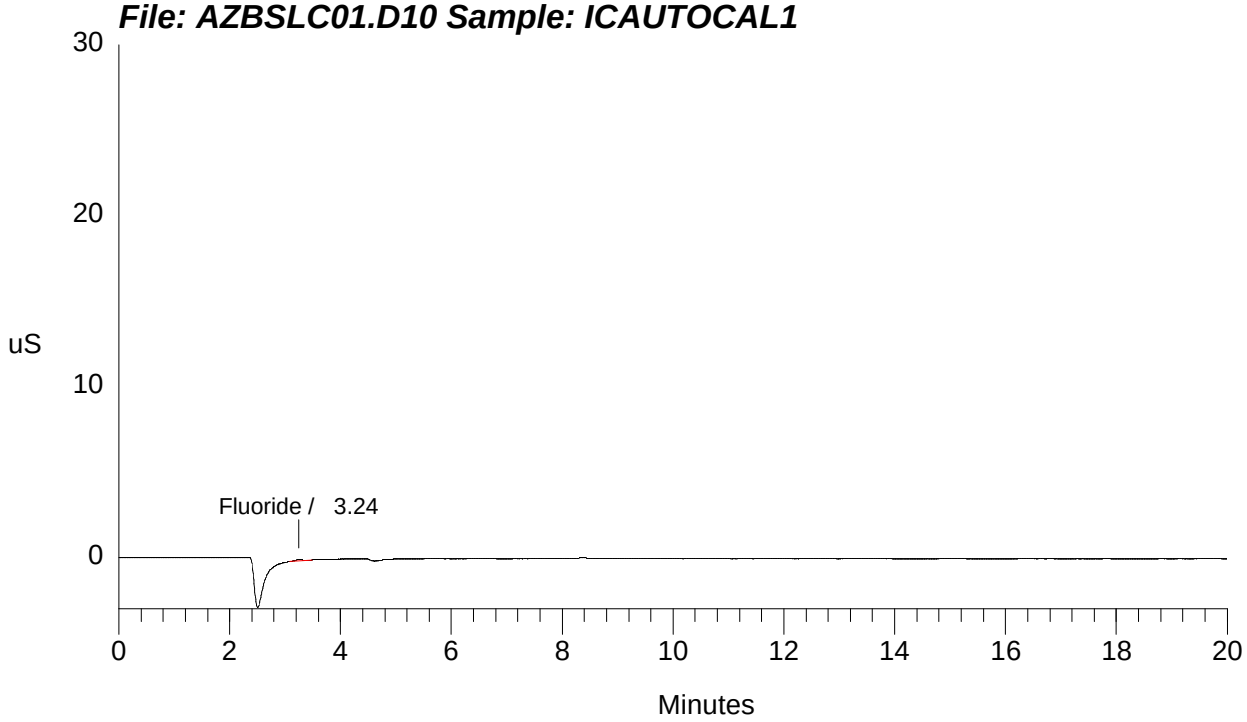
```
================================================================================
| Sample Name: ICAUTOCAL1                      Date: 02/19/2006 16:30:17     |
| Data File  : C:\TMP\HORIZON\AZBSLC01.D10                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 10                Detector:CDM-2       |
| Analyst    : RXM1          Column: AS9HC010913;GL-GC-E-086;300;9056        |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.24 Fluoride                 0.070      81414     706360    1   0.00
   0   0.00 Chloride                 0.000          0          0    0   0.00
   0   0.00 Nitrite-N                0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P            0.000          0          0    0   0.00
   0   0.00 Bromide                  0.000          0          0    0   0.00
   0   0.00 Nitrate-N                0.000          0          0    0   0.00
   0   0.00 Sulfate                  0.000          0          0    0   0.00
                          ------------------------------------
                     Totals          0.070      81414     706360
```

File: AZBSLC01.D10 Sample: ICAUTOCAL1



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			RXM1	02/20/2006 09:31:37	AZBTLC01.R01
WIC060220-02ICV:1		1	RXM1	02/20/2006 09:52:06	AZBTLC01.R02
ICB:			RXM1	02/20/2006 10:12:35	AZBTLC01.R03
154614001:4	498894	1	RXM1	02/20/2006 10:33:03	AZBTLC01.R04
1201021178:4	498894	1	RXM1	02/20/2006 10:53:22	AZBTLC01.R05
1201021179:4	498894	1	RXM1	02/20/2006 11:13:51	AZBTLC01.R06
WIC060220-02CVH:1		1	RXM1	02/20/2006 11:34:20	AZBTLC01.R07
CCB:			RXM1	02/20/2006 11:54:49	AZBTLC01.R08
1201032193:2	503639	1	RXM1	02/20/2006 12:15:07	AZBTLC01.R09
1201032198:2	503639	1	RXM1	02/20/2006 12:35:25	AZBTLC01.R10
155322001:2	503639	1	RXM1	02/20/2006 12:55:54	AZBTLC01.R11
1201032195:2	503639	1	RXM1	02/20/2006 13:16:24	AZBTLC01.R12
1201032197:2	503639	1	RXM1	02/20/2006 13:36:52	AZBTLC01.R13
155665001:2	503639	1	RXM1	02/20/2006 13:57:12	AZBTLC01.R14
155724009:2	503639	1	RXM1	02/20/2006 14:17:34	AZBTLC01.R15
1201032194:2	503639	1	RXM1	02/20/2006 14:38:03	AZBTLC01.R16
1201032196:2	503639	1	RXM1	02/20/2006 14:58:31	AZBTLC01.R17
155724010:2	503639	1	RXM1	02/20/2006 15:18:49	AZBTLC01.R18
WIC060220-02CCV:1		1	RXM1	02/20/2006 15:39:18	AZBTLC01.R19
CCB:			RXM1	02/20/2006 15:59:47	AZBTLC01.R20
1201032209:2	503646	1	RXM1	02/20/2006 16:20:17	AZBTLC01.R21
1201032214:2	503646	1	RXM1	02/20/2006 16:40:46	AZBTLC01.R22
155668001:2	503646	1	RXM1	02/20/2006 17:01:06	AZBTLC01.R23
1201032210:2	503646	1	RXM1	02/20/2006 17:21:23	AZBTLC01.R24
1201032212:2	503646	1	RXM1	02/20/2006 17:41:52	AZBTLC01.R25
155801001:2	503646	1	RXM1	02/20/2006 18:02:10	AZBTLC01.R26
1201032211:2	503646	1	RXM1	02/20/2006 18:22:28	AZBTLC01.R27
1201032213:2	503646	1	RXM1	02/20/2006 18:42:46	AZBTLC01.R28
155801002:2	503646	1	RXM1	02/20/2006 19:03:04	AZBTLC01.R29
155801003:2	503646	1	RXM1	02/20/2006 19:23:32	AZBTLC01.R30
WIC060220-02CVH:1		1	RXM1	02/20/2006 19:44:02	AZBTLC01.R31
CCB:			RXM1	02/20/2006 20:04:19	AZBTLC01.R32
154594003:5	498320	20	RXM1	02/20/2006 20:24:37	AZBTLC01.R33
1201019906:5	498320	20	RXM1	02/20/2006 20:45:06	AZBTLC01.R34
1201019908:5	498320	20	RXM1	02/20/2006 21:05:24	AZBTLC01.R35
154594009:5	498320	20	RXM1	02/20/2006 21:25:53	AZBTLC01.R36
1201019907:5	498320	20	RXM1	02/20/2006 21:46:22	AZBTLC01.R37
1201019909:5	498320	20	RXM1	02/20/2006 22:06:39	AZBTLC01.R38
WIC060220-02CCV:1		1	RXM1	02/20/2006 22:27:08	AZBTLC01.R39
CCB:			RXM1	02/20/2006 22:47:26	AZBTLC01.R40
156047004:2	504025	20	RXM1	02/20/2006 23:07:55	AZBTLC01.R41
156047005:2	504025	20	RXM1	02/20/2006 23:28:24	AZBTLC01.R42
156047006:2	504025	20	RXM1	02/20/2006 23:48:42	AZBTLC01.R43
156047007:2	504025	20	RXM1	02/21/2006 00:09:11	AZBTLC01.R44
1201033082:2	504025	20	RXM1	02/21/2006 00:29:40	AZBTLC01.R45
1201033084:2	504025	20	RXM1	02/21/2006 00:49:58	AZBTLC01.R46
156047008:2	504025	20	RXM1	02/21/2006 01:10:27	AZBTLC01.R47
156047009:2	504025	20	RXM1	02/21/2006 01:30:45	AZBTLC01.R48
156047010:2	504025	20	RXM1	02/21/2006 01:51:14	AZBTLC01.R49
WIC060220-02CVH:1		1	RXM1	02/21/2006 02:11:43	AZBTLC01.R50
CCB:			RXM1	02/21/2006 02:32:01	AZBTLC01.R51
156047011:2	504025	20	RXM1	02/21/2006 02:52:30	AZBTLC01.R52
1201033083:2	504025	20	RXM1	02/21/2006 03:12:48	AZBTLC01.R53
1201033085:2	504025	20	RXM1	02/21/2006 03:33:16	AZBTLC01.R54
156047012:2	504025	20	RXM1	02/21/2006 03:53:45	AZBTLC01.R55

```
156047013:2          504025   20    RXM1  02/21/2006 04:14:15 AZBTLC01.R56
156047014:2          504025   1     RXM1  02/21/2006 04:34:44 AZBTLC01.R57
156047015:2          504025   1     RXM1  02/21/2006 04:55:13 AZBTLC01.R58
156047014:3          504025   20    RXM1  02/21/2006 05:15:42 AZBTLC01.R59
156047015:3          504025   20    RXM1  02/21/2006 05:36:11 AZBTLC01.R60
WIC060220-02CCV:1             1     RXM1  02/21/2006 05:56:29 AZBTLC01.R61
CCB:                                RXM1  02/21/2006 06:16:58 AZBTLC01.R62
```

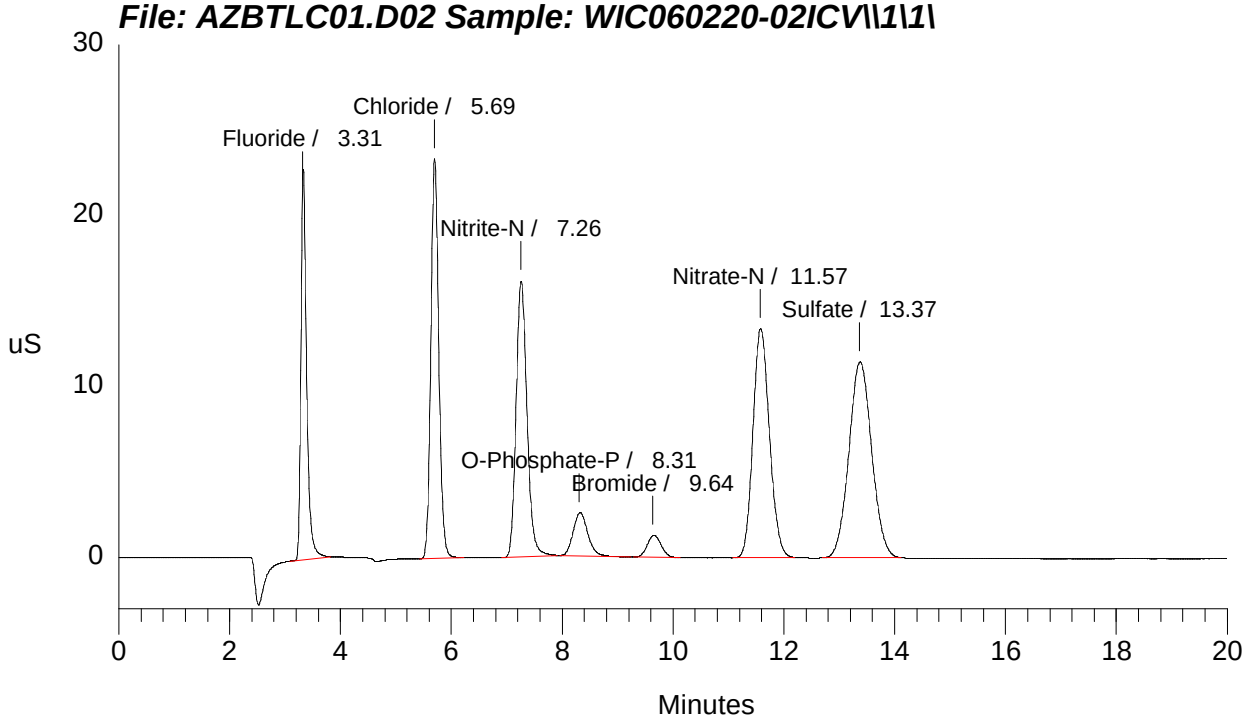
```
| Sample Name: WIC060220-02ICV\\1\1\          Date: 02/20/2006 09:52:06     |
| Data File  : C:\TMP\HORIZON\AZBTLC01.D02                                  |
| Method     : C:\DX\METHOD\FEB19.MET                                       |
| ACI Address: 1  System: 1  Inject#: 2                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	5.288	21560786	163703977	1	0.00
2	5.69	Chloride	9.598	23363464	231996880	1	0.00
3	7.26	Nitrite-N	5.038	16159242	220854078	1	0.00
4	8.31	O-Phosphate-P	2.650	2510988	46914774	1	0.00
5	9.64	Bromide	2.650	1283233	22680118	1	0.00
6	11.57	Nitrate-N	4.951	13400903	277340284	1	0.00
7	13.37	Sulfate	19.797	11464082	327718534	1	0.00
		Totals	49.974	89742699	1291208645		

File: AZBTLC01.D02 Sample: WIC060220-02ICV\\1\1



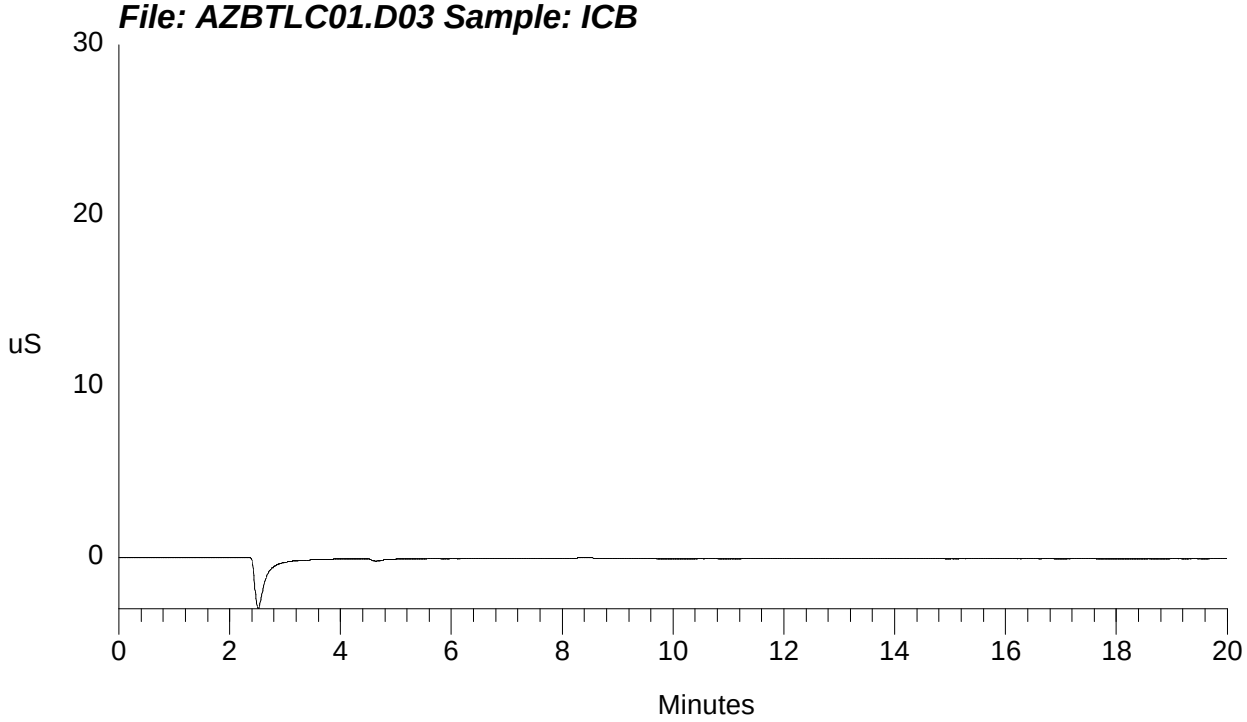
```
================================================================================
| Sample Name: ICB                              Date: 02/20/2006 10:12:35      |
| Data File  : C:\TMP\HORIZON\AZBTLC01.D03                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZBTLC01.D03 Sample: ICB



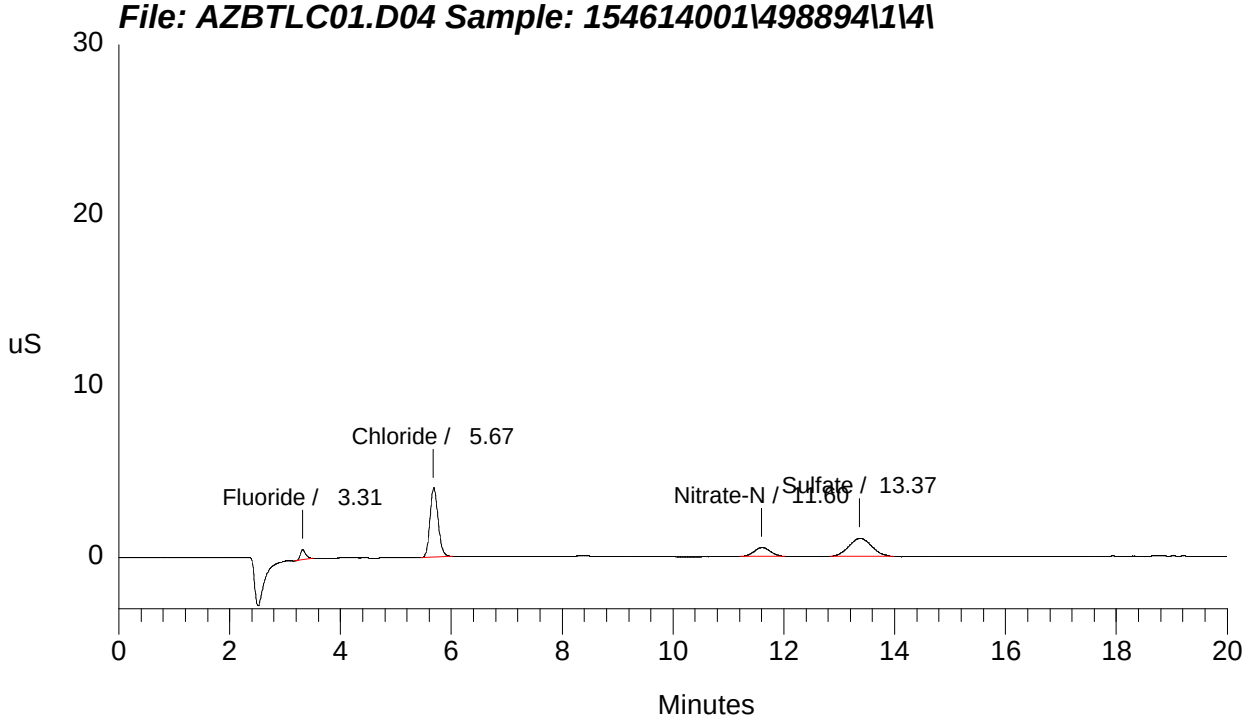
```
================================================================================
| Sample Name: 154614001\498894\1\4\          Date: 02/20/2006 10:33:03     |
| Data File  : C:\TMP\HORIZON\AZBTLC01.D04                                  |
| Method     : C:\DX\METHOD\FEB19.MET                                       |
| ACI Address: 1  System: 1  Inject#: 4                   Detector:CDM-2    |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	0.141	601956	4226510	1	0.00
2	5.67	Chloride	1.776	3977593	41366318	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.60	Nitrate-N	0.254	512603	10694646	1	0.00
4	13.37	Sulfate	2.028	1048718	30004252	1	0.00
		Totals	4.198	6140870	86291726		

File: AZBTLC01.D04 Sample: 154614001\498894\1\4



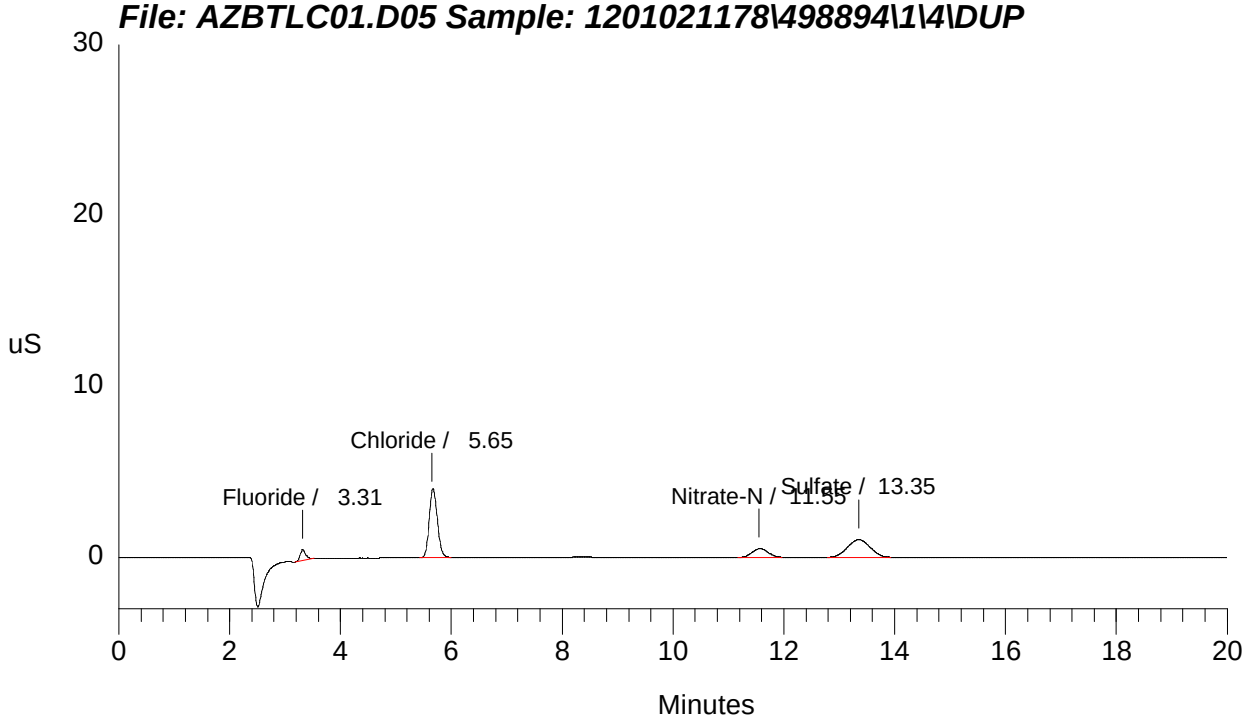
```
================================================================================
| Sample Name: 1201021178\498894\1\4\DUP      Date: 02/20/2006 10:53:22     |
| Data File  : C:\TMP\HORIZON\AZBTLC01.D05                                  |
| Method     : C:\DX\METHOD\FEB19.MET                                       |
| ACI Address: 1  System: 1  Inject#: 5                   Detector:CDM-2    |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	0.153	656852	4615800	1	0.00
2	5.65	Chloride	1.772	3810596	41273880	1	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	O-Phosphate-P	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	11.55	Nitrate-N	0.251	516229	10536958	1	0.00
4	13.35	Sulfate	2.012	1043934	29738322	1	0.00
		Totals	4.188	6027612	86164960		

File: AZBTLC01.D05 Sample: 1201021178\498894\1\4\DUP



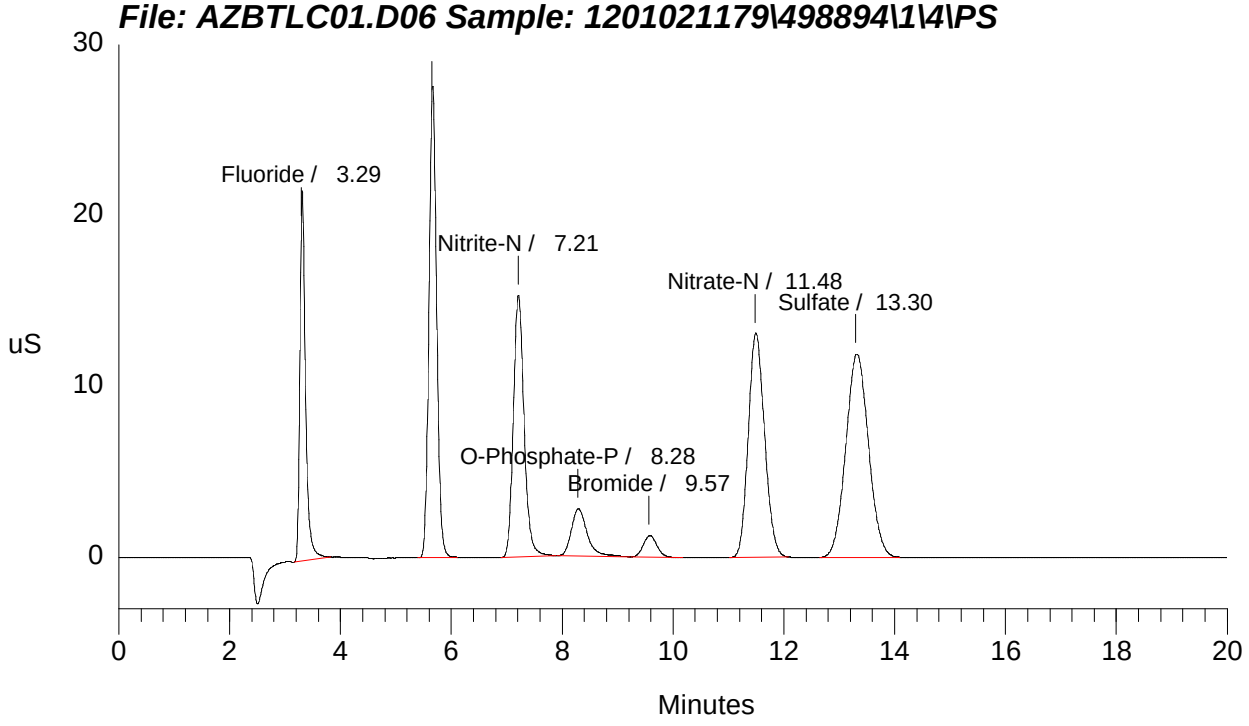
```
================================================================================
| Sample Name: 1201021179\498894\1\4\PS       Date: 02/20/2006 11:13:51     |
| Data File  : C:\TMP\HORIZON\AZBTLC01.D06                                  |
| Method     : C:\DX\METHOD\FEB19.MET                                       |
| ACI Address: 1  System: 1  Inject#: 6                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056      |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.29 Fluoride                4.968   19555324  153770791    1   0.00
   2   5.65 Chloride               10.999   26717553  266132284    1   0.00
   3   7.21 Nitrite-N               4.700   15296442  205961847    1   0.00
   4   8.28 O-Phosphate-P           3.119    2756817   54824701    1   0.00
   5   9.57 Bromide                 2.528    1246744   21634480    1   0.00
   6  11.48 Nitrate-N               4.800   13076141  268741672    1   0.00
   7  13.30 Sulfate                20.508   11898410  339619148    1   0.00
                          ----------------------------------
                    Totals         51.622   90547430 1310684923
```

File: AZBTLC01.D06 Sample: 1201021179\498894\1\4\PS

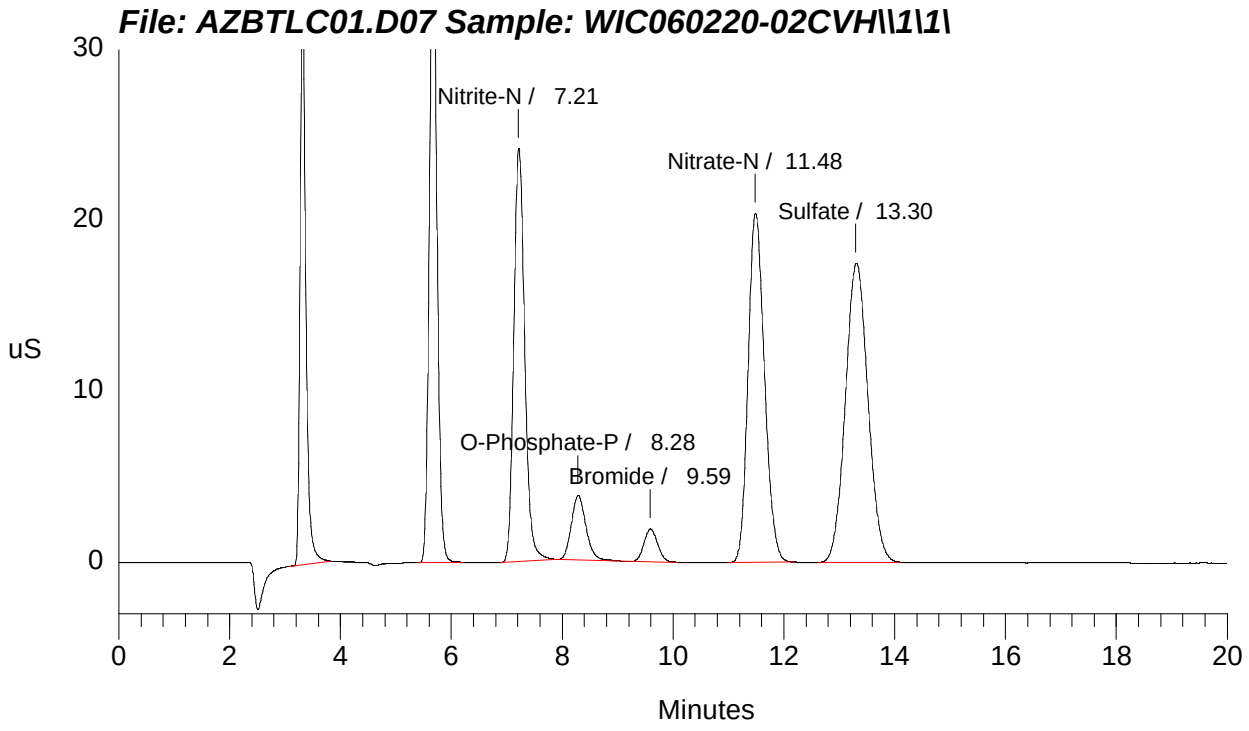


```
| Sample Name: WIC060220-02CVH\\1\1\          Date: 02/20/2006 11:34:20     |
| Data File  : C:\TMP\HORIZON\AZBTLC01.D07                                  |
| Method     : C:\DX\METHOD\FEB19.MET                                       |
| ACI Address: 1  System: 1  Inject#: 7                   Detector:CDM-2    |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056      |
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	6000	5Hz	0.00	20.00	0

********** Component Report: All Components **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	7.837	33273242	242669660	1	0.00
2	5.65	Chloride	14.783	34480332	358346882	1	0.00
3	7.21	Nitrite-N	7.530	24131445	330681015	1	0.00
4	8.28	O-Phosphate-P	4.008	3782973	69831083	1	0.00
5	9.59	Bromide	3.860	1925644	33113934	1	0.00
6	11.48	Nitrate-N	7.450	20412170	419172392	1	0.00
7	13.30	Sulfate	29.872	17479494	496515346	1	0.00
		Totals	75.341	135485300	1950330312		



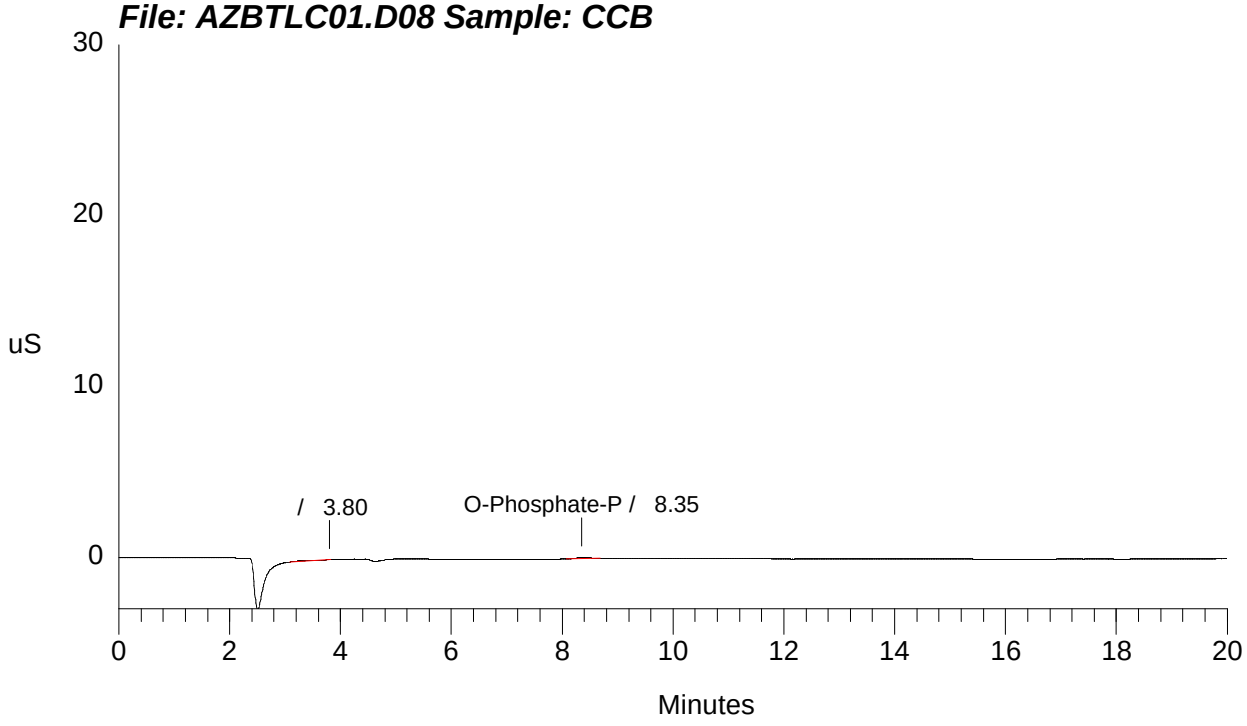
```
================================================================================
| Sample Name: CCB                              Date: 02/20/2006 11:54:49      |
| Data File  : C:\TMP\HORIZON\AZBTLC01.D08                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 8                  Detector:CDM-2        |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   2   8.35 O-Phosphate-P          -0.050      71320    1330620    1   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                      Totals       -0.050      71320    1330620
```

File: AZBTLC01.D08 Sample: CCB



METHOD: 300/9056
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK:			RXM1	02/21/2006 07:08:17	AZBULC01.R01
WIC060221-02ICV:1		1	RXM1	02/21/2006 07:28:45	AZBULC01.R02
ICB:			RXM1	02/21/2006 07:49:03	AZBULC01.R03
155724009:3	503639	10	RXM1	02/21/2006 08:09:32	AZBULC01.R04
1201032194:3	503639	10	RXM1	02/21/2006 08:30:01	AZBULC01.R05
1201032196:3	503639	10	RXM1	02/21/2006 08:50:31	AZBULC01.R06
155724010:3	503639	10	RXM1	02/21/2006 09:11:00	AZBULC01.R07
155801001:3	503646	2	RXM1	02/21/2006 09:31:17	AZBULC01.R08
1201032211:3	503646	2	RXM1	02/21/2006 09:51:47	AZBULC01.R09
1201032213:3	503646	2	RXM1	02/21/2006 10:12:05	AZBULC01.R10
WIC060221-02CVH:1		1	RXM1	02/21/2006 10:32:23	AZBULC01.R11
CCB:			RXM1	02/21/2006 10:52:42	AZBULC01.R12
1201032189:1	503638	1	RXM1	02/21/2006 11:13:11	AZBULC01.R13
1201032192:1	503638	1	RXM1	02/21/2006 11:33:40	AZBULC01.R14
155738001:1	503638	1	RXM1	02/21/2006 11:54:10	AZBULC01.R15
155738002:1	503638	1	RXM1	02/21/2006 12:14:39	AZBULC01.R16
155738003:1	503638	1	RXM1	02/21/2006 12:35:08	AZBULC01.R17
155738004:1	503638	1	RXM1	02/21/2006 12:55:37	AZBULC01.R18
WIC060221-02CCV:1		1	RXM1	02/21/2006 13:16:06	AZBULC01.R19
CCB:			RXM1	02/21/2006 13:36:36	AZBULC01.R20
155888001:1	503638	1	RXM1	02/21/2006 13:57:05	AZBULC01.R21
1201032190:1	503638	1	RXM1	02/21/2006 14:17:23	AZBULC01.R22
1201032191:1	503638	1	RXM1	02/21/2006 14:37:52	AZBULC01.R23
155888002:1	503638	1	RXM1	02/21/2006 14:58:21	AZBULC01.R24
155888003:1	503638	1	RXM1	02/21/2006 15:18:50	AZBULC01.R25
155888004:1	503638	1	RXM1	02/21/2006 15:39:19	AZBULC01.R26
155888005:1	503638	1	RXM1	02/21/2006 15:59:49	AZBULC01.R27
WIC060221-02CVH:1		1	RXM1	02/21/2006 16:20:18	AZBULC01.R28
CCB:			RXM1	02/21/2006 16:40:47	AZBULC01.R29
154721011:3	498894	1	RXM1	02/21/2006 17:01:16	AZBULC01.R30
1201037160:3	498894	1	RXM1	02/21/2006 17:21:45	AZBULC01.R31
1201037161:3	498894	1	RXM1	02/21/2006 17:42:15	AZBULC01.R32
WIC060221-02CCV:1		1	RXM1	02/21/2006 18:02:44	AZBULC01.R33
CCB:			RXM1	02/21/2006 18:23:13	AZBULC01.R34
1201037333:1	505807	1	RXM1	02/21/2006 18:43:42	AZBULC01.R35
1201037336:1	505807	1	RXM1	02/21/2006 19:04:11	AZBULC01.R36
156437001:1	505807	1	RXM1	02/21/2006 19:24:40	AZBULC01.R37
1201037334:1	505807	1	RXM1	02/21/2006 19:45:09	AZBULC01.R38
1201037335:1	505807	1	RXM1	02/21/2006 20:05:38	AZBULC01.R39
WIC060221-02CVH:1		1	RXM1	02/21/2006 20:26:07	AZBULC01.R40
CCB:			RXM1	02/21/2006 20:46:36	AZBULC01.R41
WIC060221-02CCV:1		1	RXM1	02/22/2006 09:36:41	AZBULC01.R42
CCB:			RXM1	02/22/2006 09:57:10	AZBULC01.R43
156437001:2	505807	2	RXM1	02/22/2006 10:17:39	AZBULC01.R44
1201037334:2	505807	2	RXM1	02/22/2006 10:38:08	AZBULC01.R45
1201037335:2	505807	2	RXM1	02/22/2006 10:58:37	AZBULC01.R46
WIC060221-02CVH:1		1	RXM1	02/22/2006 11:19:07	AZBULC01.R47
CCB:			RXM1	02/22/2006 11:39:36	AZBULC01.R48

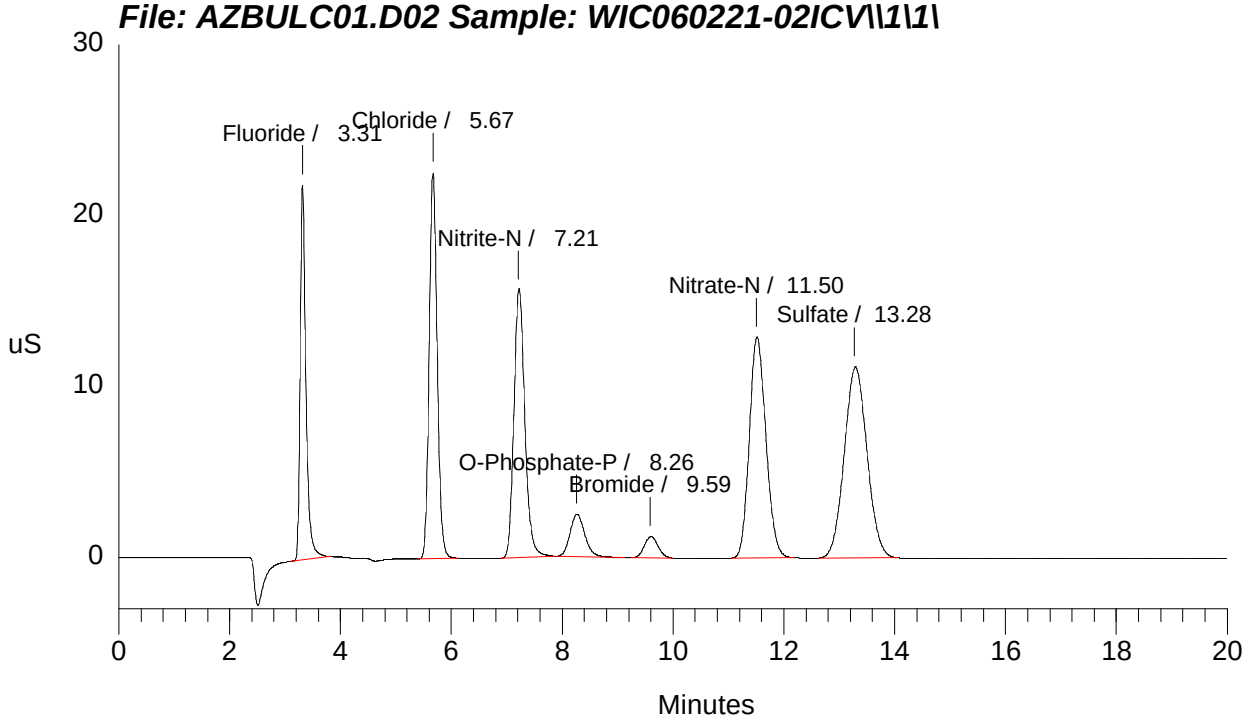
```
================================================================================
| Sample Name: WIC060221-02ICV\\1\1\          Date: 02/21/2006 07:28:45     |
| Data File  : C:\TMP\HORIZON\AZBULC01.D02                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 2                   Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************
```

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	3.31	Fluoride	5.114	21925232	158306989	1	0.00
2	5.67	Chloride	9.399	22567910	227138042	1	0.00
3	7.21	Nitrite-N	4.915	15632622	215427434	1	0.00
4	8.26	O-Phosphate-P	2.622	2484050	46436248	1	0.00
5	9.59	Bromide	2.548	1255445	21799522	1	0.00
6	11.50	Nitrate-N	4.809	12892753	269237628	1	0.00
7	13.28	Sulfate	19.205	11155035	317799432	1	0.00
		Totals	48.612	87913046	1256145295		

File: AZBULC01.D02 Sample: WIC060221-02ICV\\1\1



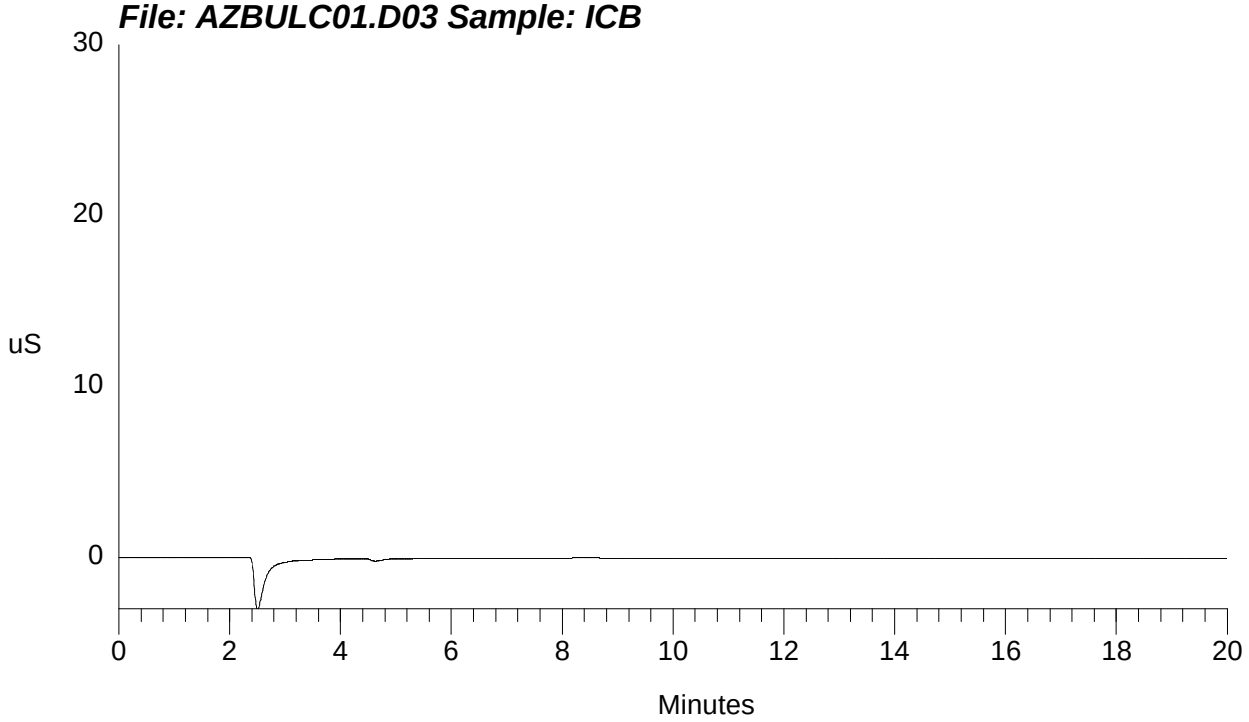
```
================================================================================
| Sample Name: ICB                              Date: 02/21/2006 07:49:03      |
| Data File  : C:\TMP\HORIZON\AZBULC01.D03                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 3                   Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                       Totals       0.000          0          0
```

File: AZBULC01.D03 Sample: ICB

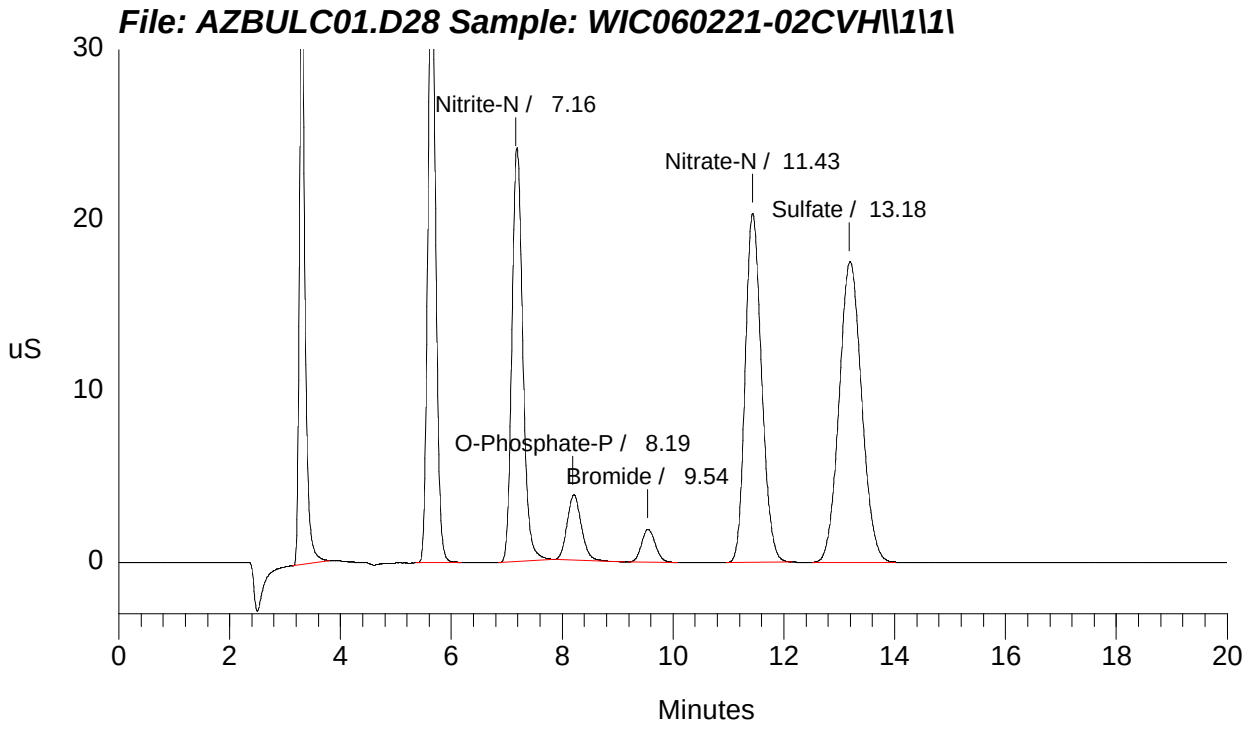


```
================================================================================
| Sample Name: WIC060221-02CVH\\1\1\          Date: 02/21/2006 16:20:18     |
| Data File  : C:\TMP\HORIZON\AZBULC01.D28                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 28                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   1   3.29 Fluoride                 7.752   31932066  240011356    1   0.00
   2   5.62 Chloride                14.939   35241647  362148738    1   0.00
   3   7.16 Nitrite-N                7.523   23675410  330370565    1   0.00
   4   8.19 O-Phosphate-P            3.916    3756981   68278834    1   0.00
   5   9.54 Bromide                  3.884    1926554   33316310    1   0.00
   6  11.43 Nitrate-N                7.443   20413997  418805826    1   0.00
   7  13.18 Sulfate                 29.923   17573601  497366808    1   0.00
                                ----------------------------------
                         Totals      75.380  134520256 1950298437
```



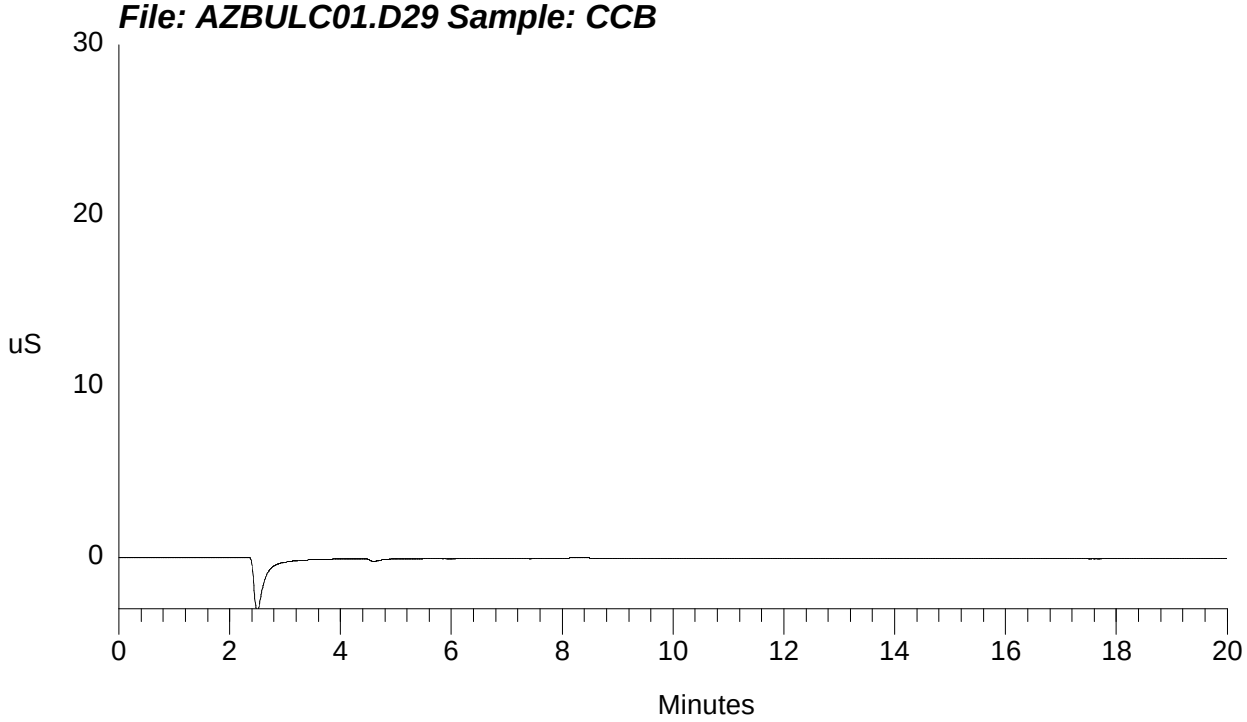
```
================================================================================
| Sample Name: CCB                              Date: 02/21/2006 16:40:47      |
| Data File  : C:\TMP\HORIZON\AZBULC01.D29                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 29                  Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZBULC01.D29 Sample: CCB



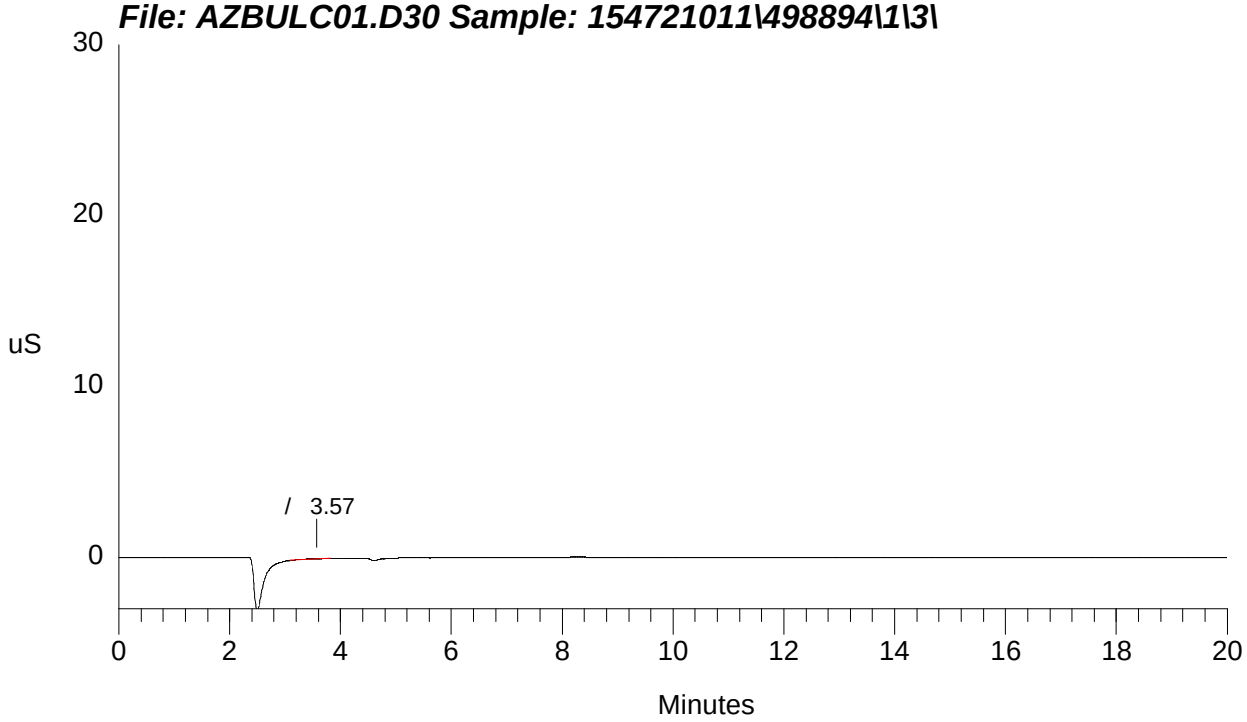
```
================================================================================
| Sample Name: 154721011\498894\1\3\          Date: 02/21/2006 17:01:16     |
| Data File  : C:\TMP\HORIZON\AZBULC01.D30                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 30                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZBULC01.D30 Sample: 154721011\498894\1\3



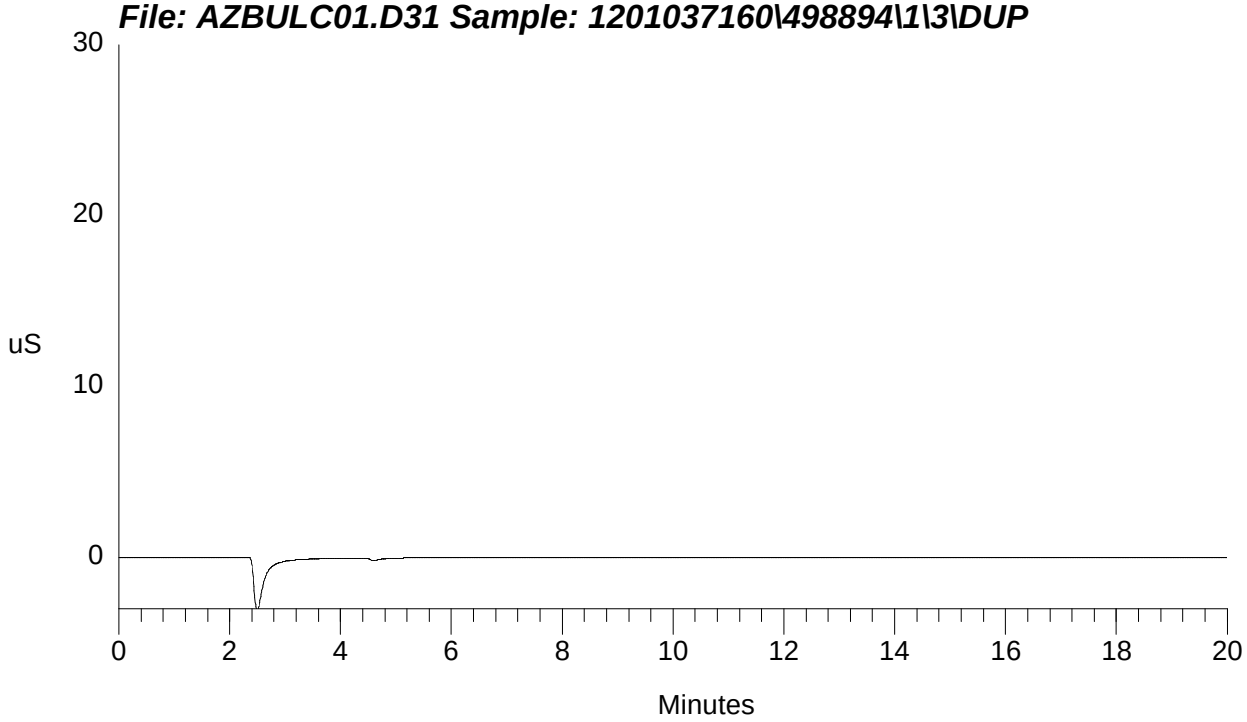
```
================================================================================
| Sample Name: 1201037160\498894\1\3\DUP      Date: 02/21/2006 17:21:45     |
| Data File  : C:\TMP\HORIZON\AZBULC01.D31                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 31                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   0   0.00 O-Phosphate-P           0.000          0          0    0   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                        Totals      0.000          0          0
```

File: AZBULC01.D31 Sample: 1201037160\498894\1\3\DUP



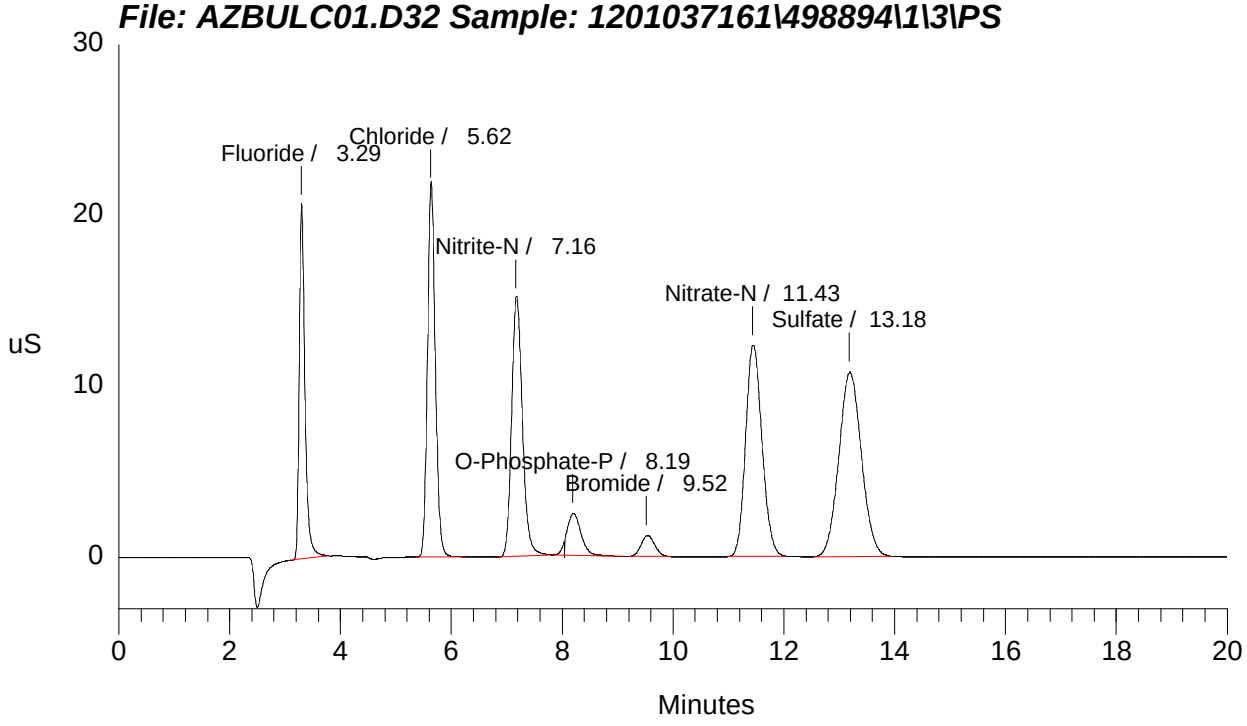
```
================================================================================
| Sample Name: 1201037161\498894\1\3\PS       Date: 02/21/2006 17:42:15     |
| Data File  : C:\TMP\HORIZON\AZBULC01.D32                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 32                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.29 Fluoride                4.836   20660264  149675515    1   0.00
   2   5.62 Chloride                8.947   21537071  216128630    1   0.00
   3   7.16 Nitrite-N               4.684   15030370  205233027    1   0.00
   4   8.19 O-Phosphate-P           2.481    2435114   44050339    1   0.00
   5   9.52 Bromide                 2.467    1208218   21101660    1   0.00
   6  11.43 Nitrate-N               4.553   12324528  254752630    1   0.00
   7  13.18 Sulfate                18.462   10765328  305344928    1   0.00
                              ------------------------------------
                        Totals     46.429   83960893 1196286729
```

File: AZBULC01.D32 Sample: 1201037161\498894\1\3\PS



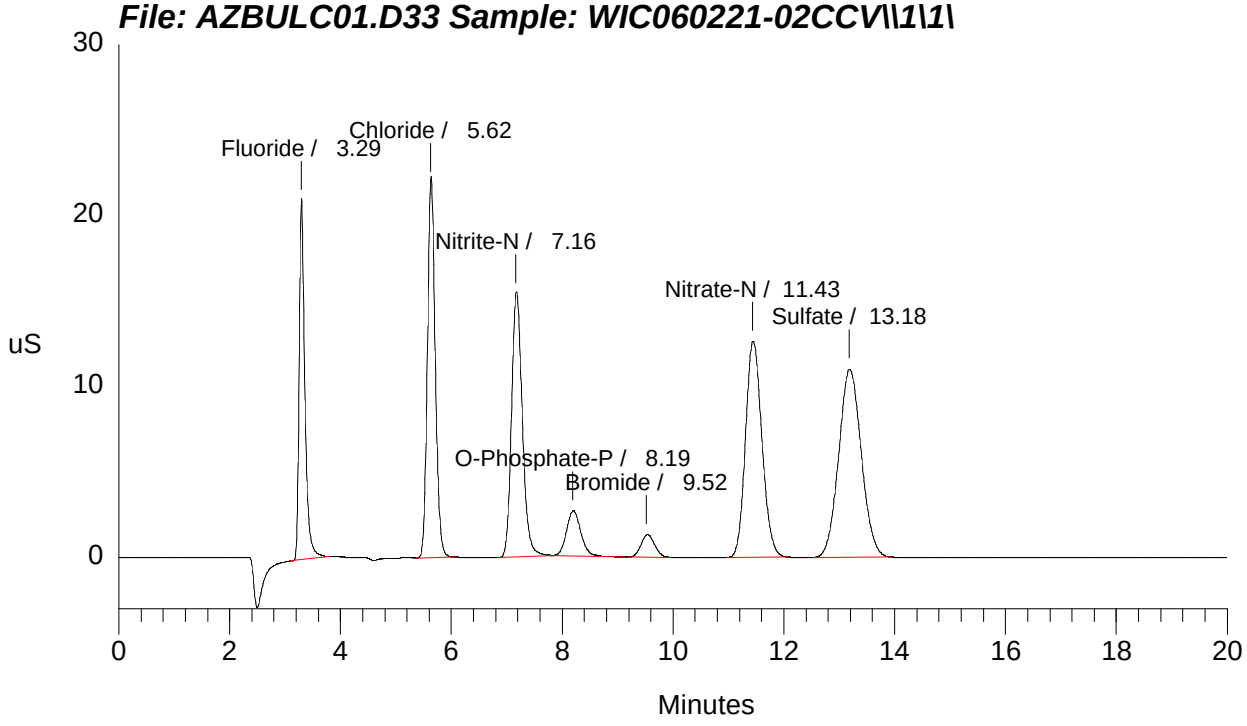
```
================================================================================
| Sample Name: WIC060221-02CCV\\1\1\          Date: 02/21/2006 18:02:44     |
| Data File  : C:\TMP\HORIZON\AZBULC01.D33                                   |
| Method     : C:\DX\METHOD\FEB19.MET                                        |
| ACI Address: 1  System: 1  Inject#: 33                  Detector:CDM-2     |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056       |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
-------------------------------------------------------------------------------
   1   3.29 Fluoride                4.909   21023082  151938605    1   0.00
   2   5.62 Chloride                9.077   21936505  219296326    1   0.00
   3   7.16 Nitrite-N               4.786   15363973  209729302    1   0.00
   4   8.19 O-Phosphate-P           2.685    2621271   47498940    1   0.00
   5   9.52 Bromide                 2.646    1300188   22648118    1   0.00
   6  11.43 Nitrate-N               4.665   12631625  261085642    1   0.00
   7  13.18 Sulfate                18.862   11008965  312042072    1   0.00
                              ----------------------------------
                        Totals     47.629   85885609 1224239005
```

File: AZBULC01.D33 Sample: WIC060221-02CCV\\1\1



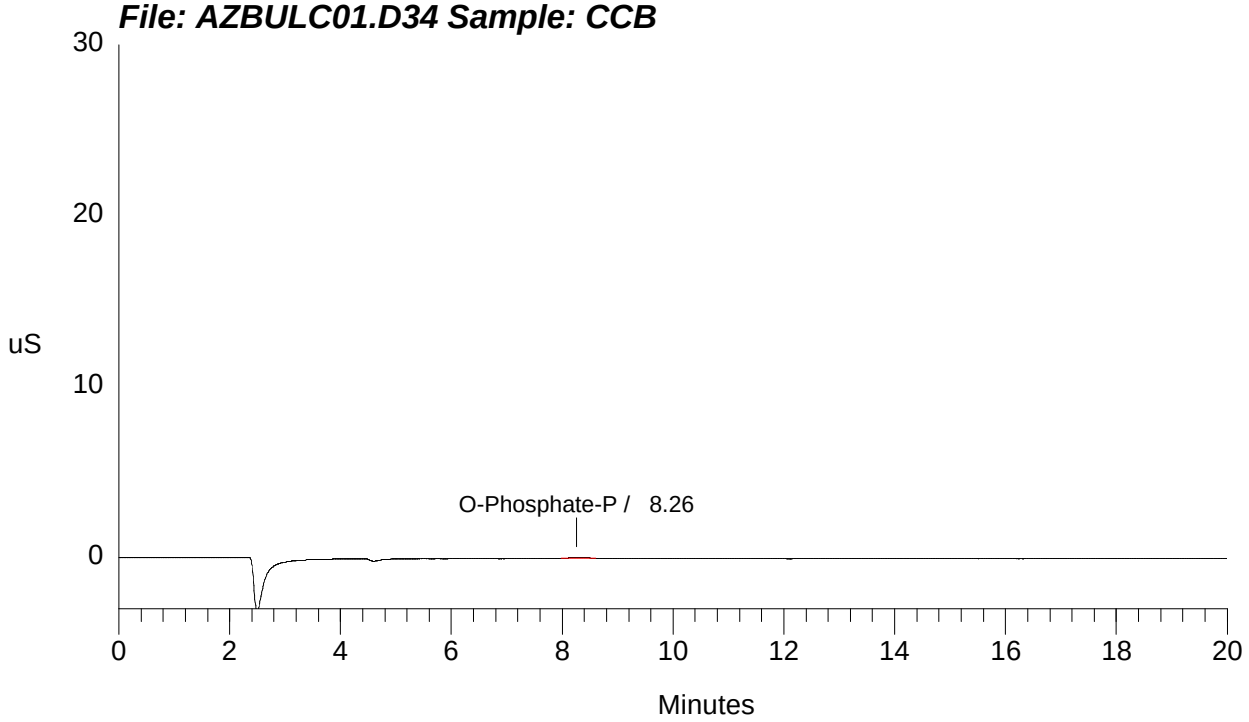
```
================================================================================
| Sample Name: CCB                              Date: 02/21/2006 18:23:13      |
| Data File  : C:\TMP\HORIZON\AZBULC01.D34                                     |
| Method     : C:\DX\METHOD\FEB19.MET                                          |
| ACI Address: 1  System: 1  Inject#: 34                  Detector:CDM-2       |
| Analyst    : RXM1           Column: AS9HC010913;GL-GC-E-086;300;9056         |
================================================================================

Calibration  Volume   Dilution Points Rate  Start   Stop Area Reject
-------------------------------------------------------------------
External          1          1   6000  5Hz   0.00  20.00           0

********************** Component Report: All Components ***********************

 Pk.    Ret Component         Concentration     Height       Area  Bl. %Delta
 Num   Time Name                      mg/l                      Code
--------------------------------------------------------------------------------
   0   0.00 Fluoride                0.000          0          0    0   0.00
   0   0.00 Chloride                0.000          0          0    0   0.00
   0   0.00 Nitrite-N               0.000          0          0    0   0.00
   1   8.26 O-Phosphate-P          -0.077      43824     868948    1   0.00
   0   0.00 Bromide                 0.000          0          0    0   0.00
   0   0.00 Nitrate-N               0.000          0          0    0   0.00
   0   0.00 Sulfate                 0.000          0          0    0   0.00
                                ----------------------------------
                      Totals       -0.077      43824     868948
```

File: AZBULC01.D34 Sample: CCB



Nitrate + Nitrite

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
NOx0	499160	NOx	02/01/2006 10:59:28	gxm2	1	
NOx.05	499160	NOx	02/01/2006 10:59:29	gxm2	1	
NOx.1	499160	NOx	02/01/2006 10:59:30	gxm2	1	
NOx.5	499160	NOx	02/01/2006 10:59:31	gxm2	1	
NOx1	499160	NOx	02/01/2006 10:59:32	gxm2	1	
NOx2	499160	NOx	02/01/2006 10:59:33	gxm2	1	
NOx5	499160	NOx	02/01/2006 10:59:34	gxm2	1	
NOx ICV	499160	NOx	02/01/2006 10:59:36	gxm2	1	WTR060201-08
NOx ICB	499160	NOx	02/01/2006 10:59:37	gxm2	1	WTR060201-10
NOx0	499160	NOx	02/01/2006 11:17:36	gxm2	1	
NOx.05	499160	NOx	02/01/2006 11:17:37	gxm2	1	
NOx.1	499160	NOx	02/01/2006 11:17:38	gxm2	1	
NOx.5	499160	NOx	02/01/2006 11:17:39	gxm2	1	
NOx1	499160	NOx	02/01/2006 11:17:40	gxm2	1	
NOx2	499160	NOx	02/01/2006 11:17:41	gxm2	1	
NOx5	499160	NOx	02/01/2006 11:17:42	gxm2	1	
NOx ICV	499160	NOx	02/01/2006 11:17:44	gxm2	1	WTR060201-08
NOx ICB	499160	NOx	02/01/2006 11:17:45	gxm2	1	WTR060201-10
NOx0	499160	NOx	02/01/2006 11:34:33	gxm2	1	
NOx.05	499160	NOx	02/01/2006 11:34:34	gxm2	1	
NOx.1	499160	NOx	02/01/2006 11:34:35	gxm2	1	
NOx.5	499160	NOx	02/01/2006 11:34:36	gxm2	1	
NOx1	499160	NOx	02/01/2006 11:34:37	gxm2	1	
NOx2	499160	NOx	02/01/2006 11:34:38	gxm2	1	
NOx5	499160	NOx	02/01/2006 11:34:39	gxm2	1	
NOx ICV	499160	NOx	02/01/2006 11:34:41	gxm2	1	WTR060201-08
NOx ICB	499160	NOx	02/01/2006 11:34:42	gxm2	1	WTR060201-10
NOx-CCV	499160	NOx	02/01/2006 12:15:19	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 12:15:20	gxm2	1	WTR060201-10
1201020248	499160	NOx	02/01/2006 12:15:21	gxm2	1	
1201020249	499160	NOx	02/01/2006 12:15:22	gxm2	1	
154523009	499160	NOx	02/01/2006 12:15:23	gxm2	1	
154523010	499160	NOx	02/01/2006 12:15:24	gxm2	1	
154523011	499160	NOx	02/01/2006 12:15:25	gxm2	1	
154523012	499160	NOx	02/01/2006 12:15:26	gxm2	1	
154523013	499160	NOx	02/01/2006 12:15:27	gxm2	1	
154523014	499160	NOx	02/01/2006 12:15:28	gxm2	1	
154523015	499160	NOx	02/01/2006 12:15:29	gxm2	1	
154523016	499160	NOx	02/01/2006 12:15:30	gxm2	1	
NOx-CCV	499160	NOx	02/01/2006 12:25:18	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 12:25:19	gxm2	1	WTR060201-10
154523017	499160	NOx	02/01/2006 12:25:20	gxm2	1	
154523018	499160	NOx	02/01/2006 12:25:21	gxm2	1	
154523019	499160	NOx	02/01/2006 12:25:22	gxm2	1	
154523020	499160	NOx	02/01/2006 12:25:23	gxm2	1	
154614001	499160	NOx	02/01/2006 12:25:24	gxm2	1	
1201020250	499160	NOx	02/01/2006 12:25:25	gxm2	1	
1201020251	499160	NOx	02/01/2006 12:25:26	gxm2	1	
154614002	499160	NOx	02/01/2006 12:25:27	gxm2	1	
154614008	499160	NOx	02/01/2006 12:25:28	gxm2	1	
154614010	499160	NOx	02/01/2006 12:25:29	gxm2	1	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
NOx-CCV	499160	NOx	02/01/2006 12:33:00	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 12:33:01	gxm2	1	WTR060201-10
154617001	499160	NOx	02/01/2006 12:33:02	gxm2	1	
154627001	499160	NOx	02/01/2006 12:33:03	gxm2	1	
1201020252	499160	NOx	02/01/2006 12:33:04	gxm2	1	
1201020253	499160	NOx	02/01/2006 12:33:05	gxm2	1	
154627002	499160	NOx	02/01/2006 12:33:06	gxm2	1	
154627003	499160	NOx	02/01/2006 12:33:07	gxm2	1	
154523009	499160	NOx	02/01/2006 12:41:31	gxm2	10	
154523010	499160	NOx	02/01/2006 12:41:32	gxm2	10	
154523011	499160	NOx	02/01/2006 12:41:33	gxm2	10	
154523012	499160	NOx	02/01/2006 12:41:34	gxm2	10	
NOx-CCV	499160	NOx	02/01/2006 12:41:35	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 12:41:36	gxm2	1	WTR060201-10
154523016	499160	NOx	02/01/2006 12:49:47	gxm2	10	
154523017	499160	NOx	02/01/2006 12:49:48	gxm2	10	
154523018	499160	NOx	02/01/2006 12:49:49	gxm2	10	
154523019	499160	NOx	02/01/2006 12:49:50	gxm2	10	
154523020	499160	NOx	02/01/2006 12:49:51	gxm2	10	
154614008	499160	NOx	02/01/2006 12:49:52	gxm2	10	
154627001	499160	NOx	02/01/2006 12:53:52	gxm2	1	
1201020252	499160	NOx	02/01/2006 12:53:53	gxm2	1	
1201020253	499160	NOx	02/01/2006 12:53:54	gxm2	1	
NOx-CCV	499160	NOx	02/01/2006 12:57:09	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 12:57:10	gxm2	1	WTR060201-10
NOx-CCV	499160	NOx	02/01/2006 13:58:15	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 13:58:16	gxm2	1	WTR060201-10
1201021791	499160	NOx	02/01/2006 13:58:17	gxm2	1	
1201021792	499160	NOx	02/01/2006 13:58:18	gxm2	1	
154627019	499160	NOx	02/01/2006 13:58:19	gxm2	1	
154627020	499160	NOx	02/01/2006 13:58:20	gxm2	1	
154628001	499160	NOx	02/01/2006 13:58:21	gxm2	1	
154628002	499160	NOx	02/01/2006 13:58:22	gxm2	1	
154628003	499160	NOx	02/01/2006 13:58:23	gxm2	1	
154628004	499160	NOx	02/01/2006 13:58:24	gxm2	1	
154666003	499160	NOx	02/01/2006 13:58:25	gxm2	1	
1201021793	499160	NOx	02/01/2006 13:58:26	gxm2	1	
NOx-CCV	499160	NOx	02/01/2006 14:08:15	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 14:08:16	gxm2	1	WTR060201-10
1201021794	499160	NOx	02/01/2006 14:08:17	gxm2	1	
154822001	499160	NOx	02/01/2006 14:08:18	gxm2	1	
1201021795	499160	NOx	02/01/2006 14:08:19	gxm2	1	
1201021796	499160	NOx	02/01/2006 14:08:20	gxm2	1	
154822002	499160	NOx	02/01/2006 14:08:21	gxm2	1	
154822003	499160	NOx	02/01/2006 14:08:22	gxm2	1	
154822004	499160	NOx	02/01/2006 14:08:23	gxm2	1	
154822005	499160	NOx	02/01/2006 14:08:24	gxm2	1	
154822006	499160	NOx	02/01/2006 14:08:25	gxm2	1	
154822007	499160	NOx	02/01/2006 14:08:26	gxm2	1	
NOx-CCV	499160	NOx	02/01/2006 14:15:56	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 14:15:57	gxm2	1	WTR060201-10

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
154822008	499160	NOx	02/01/2006 14:15:58	gxm2	1	
154822009	499160	NOx	02/01/2006 14:15:59	gxm2	1	
154822010	499160	NOx	02/01/2006 14:16:00	gxm2	1	
154822011	499160	NOx	02/01/2006 14:16:01	gxm2	1	
154822012	499160	NOx	02/01/2006 14:16:02	gxm2	1	
154822013	499160	NOx	02/01/2006 14:16:03	gxm2	1	
154627019	499160	NOx	02/01/2006 14:24:30	gxm2	10	
154628002	499160	NOx	02/01/2006 14:24:31	gxm2	10	
154628003	499160	NOx	02/01/2006 14:24:32	gxm2	10	
154628004	499160	NOx	02/01/2006 14:24:33	gxm2	10	
NOx-CCV	499160	NOx	02/01/2006 14:24:34	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 14:24:35	gxm2	1	WTR060201-10
154666003	499160	NOx	02/01/2006 14:28:34	gxm2	1	
1201021793	499160	NOx	02/01/2006 14:28:35	gxm2	1	
1201021794	499160	NOx	02/01/2006 14:28:36	gxm2	1	
154822001	499160	NOx	02/01/2006 14:36:27	gxm2	10	
1201021795	499160	NOx	02/01/2006 14:36:28	gxm2	10	
1201021796	499160	NOx	02/01/2006 14:36:29	gxm2	10	
154822004	499160	NOx	02/01/2006 14:36:30	gxm2	10	
154822006	499160	NOx	02/01/2006 14:36:31	gxm2	10	
154822007	499160	NOx	02/01/2006 14:36:32	gxm2	10	
154822009	499160	NOx	02/01/2006 14:44:44	gxm2	10	
NOx-CCV	499160	NOx	02/01/2006 14:44:45	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 14:44:46	gxm2	1	WTR060201-10
154822010	499160	NOx	02/01/2006 14:44:47	gxm2	10	
154822012	499160	NOx	02/01/2006 14:44:48	gxm2	10	
154822013	499160	NOx	02/01/2006 14:44:49	gxm2	10	
NOx-CCV	499160	NOx	02/01/2006 14:48:27	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 14:48:28	gxm2	1	WTR060201-10
NOx-CCV	499160	NOx	02/01/2006 15:05:55	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 15:05:56	gxm2	1	WTR060201-10
1201021748	499160	NOx	02/01/2006 15:05:57	gxm2	1	
1201021749	499160	NOx	02/01/2006 15:05:58	gxm2	1	
154708001	499160	NOx	02/01/2006 15:05:59	gxm2	1	
1201021750	499160	NOx	02/01/2006 15:06:00	gxm2	1	
1201021751	499160	NOx	02/01/2006 15:06:01	gxm2	1	
1201021752	499160	NOx	02/01/2006 15:06:02	gxm2	1	
NOx-CCV	499160	NOx	02/01/2006 15:09:50	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 15:09:51	gxm2	1	WTR060201-10
NOx-CCV	499160	NOx	02/01/2006 15:55:51	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 15:55:52	gxm2	1	WTR060201-10
154666003	499160	NOx	02/01/2006 15:55:53	gxm2	1	
1201021793	499160	NOx	02/01/2006 15:55:54	gxm2	1	
1201021794	499160	NOx	02/01/2006 15:55:55	gxm2	1	
154822001	499160	NOx	02/01/2006 15:55:56	gxm2	1	
1201021795	499160	NOx	02/01/2006 15:55:57	gxm2	1	
1201021796	499160	NOx	02/01/2006 15:55:58	gxm2	1	
NOx-CCV	499160	NOx	02/01/2006 15:59:45	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 15:59:46	gxm2	1	WTR060201-10
154822001	499160	NOx	02/01/2006 16:05:24	gxm2	10	
1201021795	499160	NOx	02/01/2006 16:05:25	gxm2	10	

Instrument: Kone01

KoneLab 20 Run Log

Reviewed By:_____
Review Date:_____

Sample ID	Batch	Analysis	Run Date/Time	Analyst	Dil.	Comments
1201021796	499160	NOx	02/01/2006 16:05:26	gxm2	10	
NOx-CCV	499160	NOx	02/01/2006 16:08:47	gxm2	1	WTR060201-04
NOx-CCB	499160	NOx	02/01/2006 16:08:48	gxm2	1	WTR060201-10

Laboratory
Analyzer User

01.02.2006 15:29

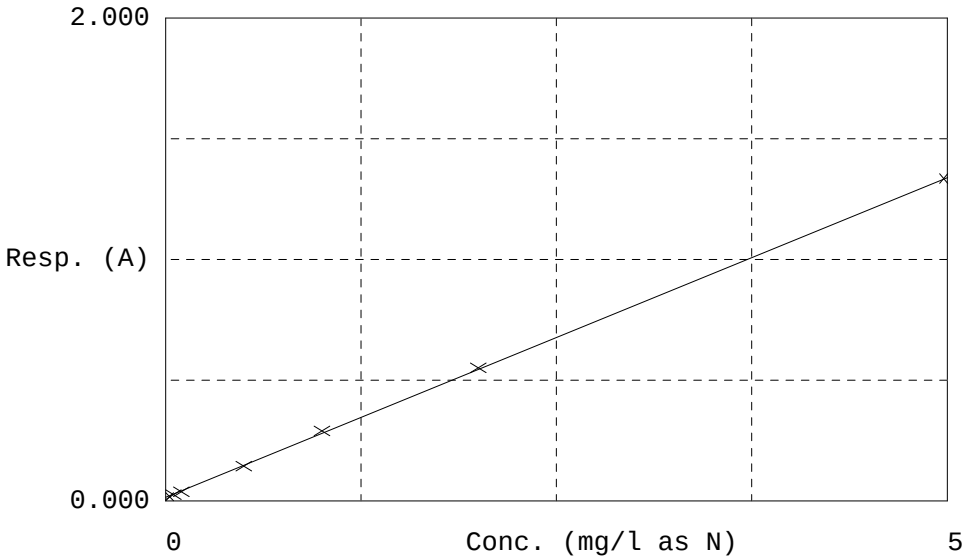
Test NOx

Accepted 01.02.2006 11:36

Factor 3.778
Bias 0.015

Coeff. of det. 0.999862

Errors QC rule violated



	Calibrator	Response	Calc. con.	Conc.	Errors
1	NOx0	0.013	-0.007739	0.000000	
2	NOx.05	0.026	0.040387	0.050000	
3	NOx.1	0.038	0.085600	0.100000	
4	NOx.5	0.144	0.486209	0.500000	
5	NOx1	0.290	1.036933	1.000000	
6	NOx2	0.551	2.023721	2.000000	
7	NOx5	1.335	4.984888	5.000000	
8	NOx ICB(control	0.013	-0.009720	0.000000	Test limit low
9	NOx ICV(control	0.282	1.006437	1.000000	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
NOx0	NOx	02/01/2006 10:59:28	0.01339	-0.047701	mg/l as N	1		0
NOx.05	NOx	02/01/2006 10:59:29	0.02661	0.000517	mg/l as N	1		0.05
NOx.1	NOx	02/01/2006 10:59:30	0.04087	0.052583	mg/l as N	1		0.1
NOx.5	NOx	02/01/2006 10:59:31	0.1552	0.469815	mg/l as N	1		0.5
NOx1	NOx	02/01/2006 10:59:32	0.31038	1.036123	mg/l as N	1		1
NOx2	NOx	02/01/2006 10:59:33	0.63909	2.235709	mg/l as N	1		2
NOx5	NOx	02/01/2006 10:59:34	1.36996	4.902953	mg/l as N	1		5
NOx ICV	NOx	02/01/2006 10:59:36	0.29914	0.995122	mg/l as N	1		1
NOx ICB	NOx	02/01/2006 10:59:37	0.01285	-0.049667	mg/l as N	1		0
NOx0	NOx	02/01/2006 11:17:36	0.02207	0.003459	mg/l as N	1		0
NOx.05	NOx	02/01/2006 11:17:37	0.02605	0.017914	mg/l as N	1		0.05
NOx.1	NOx	02/01/2006 11:17:38	0.03867	0.063665	mg/l as N	1		0.1
NOx.5	NOx	02/01/2006 11:17:39	0.14898	0.463727	mg/l as N	1		0.5
NOx1	NOx	02/01/2006 11:17:40	0.29832	1.005314	mg/l as N	1		1
NOx2	NOx	02/01/2006 11:17:41	0.61502	2.15385	mg/l as N	1		2
NOx5	NOx	02/01/2006 11:17:42	1.38384	4.942072	mg/l as N	1		5
NOx ICV	NOx	02/01/2006 11:17:44	0.30118	1.015688	mg/l as N	1		1
NOx ICB	NOx	02/01/2006 11:17:45	0.01235	-0.03177	mg/l as N	1		0
NOx0	NOx	02/01/2006 11:34:33	0.01337	-0.007739	mg/l as N	1		0
NOx.05	NOx	02/01/2006 11:34:34	0.02611	0.040387	mg/l as N	1		0.05
NOx.1	NOx	02/01/2006 11:34:35	0.03807	0.0856	mg/l as N	1		0.1
NOx.5	NOx	02/01/2006 11:34:36	0.1441	0.486209	mg/l as N	1		0.5
NOx1	NOx	02/01/2006 11:34:37	0.28987	1.036933	mg/l as N	1		1
NOx2	NOx	02/01/2006 11:34:38	0.55104	2.023721	mg/l as N	1		2
NOx5	NOx	02/01/2006 11:34:39	1.33479	4.984888	mg/l as N	1		5
NOx ICV	NOx	02/01/2006 11:34:41	0.2818	1.006437	mg/l as N	1		1
NOx ICB	NOx	02/01/2006 11:34:42	0.01284	-0.00972	mg/l as N	1		0
NOx-CCV	NOx	02/01/2006 12:15:19	0.26684	0.949945	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 12:15:20	0.01268	-0.01035	mg/l as N	1		0
1201020248	NOx	02/01/2006 12:15:21	0.01499	-0.001614	mg/l as N	1	1	
1201020249	NOx	02/01/2006 12:15:22	0.27609	0.984887	mg/l as N	1	1	
154523009	NOx	02/01/2006 12:15:23	4.08022	15.357721	mg/l as N	1	1	
154523010	NOx	02/01/2006 12:15:24	4.58578	17.267849	mg/l as N	1	1	
154523011	NOx	02/01/2006 12:15:25	1.7246	6.457656	mg/l as N	1	1	
154523012	NOx	02/01/2006 12:15:26	4.03094	15.171517	mg/l as N	1	1	

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Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
154523013	NOx	02/01/2006 12:15:27	0.39744	1.443377	mg/l as N	1	1	
154523014	NOx	02/01/2006 12:15:28	0.29094	1.040975	mg/l as N	1	1	
154523015	NOx	02/01/2006 12:15:29	0.25172	0.892813	mg/l as N	1	1	
154523016	NOx	02/01/2006 12:15:30	4.64446	17.489552	mg/l as N	1	1	
NOx-CCV	NOx	02/01/2006 12:25:18	0.26493	0.942733	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 12:25:19	0.01289	-0.009527	mg/l as N	1		0
154523017	NOx	02/01/2006 12:25:20	4.02673	15.155634	mg/l as N	1	1	
154523018	NOx	02/01/2006 12:25:21	4.97734	18.74725	mg/l as N	1	1	
154523019	NOx	02/01/2006 12:25:22	3.72613	14.019879	mg/l as N	1	1	
154523020	NOx	02/01/2006 12:25:23	2.55621	9.59967	mg/l as N	1	1	
154614001	NOx	02/01/2006 12:25:24	0.04193	0.100178	mg/l as N	1	1	
1201020250	NOx	02/01/2006 12:25:25	0.03992	0.092575	mg/l as N	1	1	
1201020251	NOx	02/01/2006 12:25:26	0.29854	1.069715	mg/l as N	1	1	
154614002	NOx	02/01/2006 12:25:27	0.02435	0.033757	mg/l as N	1	1	
154614008	NOx	02/01/2006 12:25:28	3.24036	12.184554	mg/l as N	1	1	
154614010	NOx	02/01/2006 12:25:29	0.01283	-0.00977	mg/l as N	1	1	
NOx-CCV	NOx	02/01/2006 12:33:00	0.28275	1.01006	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 12:33:01	0.01332	-0.007918	mg/l as N	1		0
154617001	NOx	02/01/2006 12:33:02	0.82522	3.059611	mg/l as N	1	1	
154627001	NOx	02/01/2006 12:33:03	0.12099	0.398885	mg/l as N	1	1	
1201020252	NOx	02/01/2006 12:33:04	0.41719	1.518005	mg/l as N	1	1	
1201020253	NOx	02/01/2006 12:33:05	0.70235	2.595397	mg/l as N	1	1	
154627002	NOx	02/01/2006 12:33:06	1.08759	4.050902	mg/l as N	1	1	
154627003	NOx	02/01/2006 12:33:07	0.15889	0.542083	mg/l as N	1	1	
154523009	NOx	02/01/2006 12:41:31	0.94035	34.945969	mg/l as N	10	1	
154523010	NOx	02/01/2006 12:41:32	1.23358	46.024841	mg/l as N	10	1	
154523011	NOx	02/01/2006 12:41:33	0.16808	5.768078	mg/l as N	10	1	
154523012	NOx	02/01/2006 12:41:34	0.75684	28.012617	mg/l as N	10	1	
NOx-CCV	NOx	02/01/2006 12:41:35	0.29062	1.039764	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 12:41:36	0.01654	0.004232	mg/l as N	1		0
154523016	NOx	02/01/2006 12:49:47	1.51447	56.637726	mg/l as N	10	1	
154523017	NOx	02/01/2006 12:49:48	0.75579	27.972834	mg/l as N	10	1	
154523018	NOx	02/01/2006 12:49:49	1.20654	45.003277	mg/l as N	10	1	
154523019	NOx	02/01/2006 12:49:50	0.66513	24.547426	mg/l as N	10	1	
154523020	NOx	02/01/2006 12:49:51	0.25539	9.066718	mg/l as N	10	1	
154614008	NOx	02/01/2006 12:49:52	0.38903	14.116115	mg/l as N	10	1	

Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
154627001	NOx	02/01/2006 12:53:52	0.12917	0.429775	mg/l as N	1	1	
1201020252	NOx	02/01/2006 12:53:53	0.12938	0.430588	mg/l as N	1	1	
1201020253	NOx	02/01/2006 12:53:54	0.38276	1.387897	mg/l as N	1	1	
NOx-CCV	NOx	02/01/2006 12:57:09	0.25703	0.912886	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 12:57:10	0.01341	-0.007575	mg/l as N	1		0
NOx-CCV	NOx	02/01/2006 13:58:15	0.26277	0.934559	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 13:58:16	0.01216	-0.012312	mg/l as N	1		0
1201021791	NOx	02/01/2006 13:58:17	0.01474	-0.002554	mg/l as N	1	1	
1201021792	NOx	02/01/2006 13:58:18	0.27175	0.968502	mg/l as N	1	1	
154627019	NOx	02/01/2006 13:58:19	3.90412	14.692383	mg/l as N	1	1	
154627020	NOx	02/01/2006 13:58:20	0.64683	2.385636	mg/l as N	1	1	
154628001	NOx	02/01/2006 13:58:21	0.47369	1.731462	mg/l as N	1	1	
154628002	NOx	02/01/2006 13:58:22	2.86367	10.76131	mg/l as N	1	1	
154628003	NOx	02/01/2006 13:58:23	4.65084	17.513643	mg/l as N	1	1	
154628004	NOx	02/01/2006 13:58:24	4.29385	16.164873	mg/l as N	1	1	
154666003	NOx	02/01/2006 13:58:25	0.85363	3.166961	mg/l as N	1	1	
1201021793	NOx	02/01/2006 13:58:26	0.85151	3.15893	mg/l as N	1	1	
NOx-CCV	NOx	02/01/2006 14:08:15	0.26588	0.946292	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 14:08:16	0.01198	-0.012993	mg/l as N	1		0
1201021794	NOx	02/01/2006 14:08:17	1.02347	3.808638	mg/l as N	1	1	
154822001	NOx	02/01/2006 14:08:18	4.38762	16.519163	mg/l as N	1	1	
1201021795	NOx	02/01/2006 14:08:19	4.19279	15.783047	mg/l as N	1	1	
1201021796	NOx	02/01/2006 14:08:20	4.18116	15.73909	mg/l as N	1	1	
154822002	NOx	02/01/2006 14:08:21	0.49783	1.822648	mg/l as N	1	1	
154822003	NOx	02/01/2006 14:08:22	0.53826	1.975403	mg/l as N	1	1	
154822004	NOx	02/01/2006 14:08:23	4.12609	15.531014	mg/l as N	1	1	
154822005	NOx	02/01/2006 14:08:24	0.75069	2.778034	mg/l as N	1	1	
154822006	NOx	02/01/2006 14:08:25	3.64093	13.697989	mg/l as N	1	1	
154822007	NOx	02/01/2006 14:08:26	4.66962	17.584604	mg/l as N	1	1	
NOx-CCV	NOx	02/01/2006 14:15:56	0.28491	1.018191	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 14:15:57	0.01257	-0.010773	mg/l as N	1		0
154822008	NOx	02/01/2006 14:15:58	0.17458	0.601352	mg/l as N	1	1	
154822009	NOx	02/01/2006 14:15:59	3.4346	12.918417	mg/l as N	1	1	
154822010	NOx	02/01/2006 14:16:00	1.38535	5.175913	mg/l as N	1	1	
154822011	NOx	02/01/2006 14:16:01	0.33209	1.196453	mg/l as N	1	1	
154822012	NOx	02/01/2006 14:16:02	3.54297	13.327882	mg/l as N	1	1	

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Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
154822013	NOx	02/01/2006 14:16:03	2.4505	9.200267	mg/l as N	1	1	
154627019	NOx	02/01/2006 14:24:30	0.65688	24.236008	mg/l as N	10	1	
154628002	NOx	02/01/2006 14:24:31	3.03711	114.16641	mg/l as N	10	1	
154628003	NOx	02/01/2006 14:24:32	1.22909	45.855095	mg/l as N	10	1	
154628004	NOx	02/01/2006 14:24:33	1.30095	48.570465	mg/l as N	10	1	
NOx-CCV	NOx	02/01/2006 14:24:34	0.2792	0.99665	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 14:24:35	0.01242	-0.011338	mg/l as N	1		0
154666003	NOx	02/01/2006 14:28:34	0.44893	1.637899	mg/l as N	1	1	
1201021793	NOx	02/01/2006 14:28:35	0.47043	1.719142	mg/l as N	1	1	
1201021794	NOx	02/01/2006 14:28:36	0.49023	1.793963	mg/l as N	1	1	
154822001	NOx	02/01/2006 14:36:27	0.97531	36.266876	mg/l as N	10	1	
1201021795	NOx	02/01/2006 14:36:28	0.94641	35.174812	mg/l as N	10	1	
1201021796	NOx	02/01/2006 14:36:29	1.06409	39.621223	mg/l as N	10	1	
154822004	NOx	02/01/2006 14:36:30	1.0964	40.84185	mg/l as N	10	1	
154822006	NOx	02/01/2006 14:36:31	0.74666	27.62817	mg/l as N	10	1	
154822007	NOx	02/01/2006 14:36:32	1.68092	62.926552	mg/l as N	10	1	
154822009	NOx	02/01/2006 14:44:44	0.76871	28.460905	mg/l as N	10	1	
NOx-CCV	NOx	02/01/2006 14:44:45	0.27661	0.986863	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 14:44:46	0.01233	-0.011648	mg/l as N	1		0
154822010	NOx	02/01/2006 14:44:47	0.14428	4.868935	mg/l as N	10	1	
154822012	NOx	02/01/2006 14:44:48	0.88599	32.892147	mg/l as N	10	1	
154822013	NOx	02/01/2006 14:44:49	0.31897	11.468867	mg/l as N	10	1	
NOx-CCV	NOx	02/01/2006 14:48:27	0.25937	0.921714	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 14:48:28	0.01264	-0.010479	mg/l as N	1		0
NOx-CCV	NOx	02/01/2006 15:05:55	0.28646	1.024064	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 15:05:56	0.01281	-0.009866	mg/l as N	1		0
1201021748	NOx	02/01/2006 15:05:57	0.01239	-0.011432	mg/l as N	1	1	
1201021749	NOx	02/01/2006 15:05:58	0.284	1.014749	mg/l as N	1	1	
154708001	NOx	02/01/2006 15:05:59	0.19986	0.696862	mg/l as N	1	1	
1201021750	NOx	02/01/2006 15:06:00	0.19961	0.695906	mg/l as N	1	1	
1201021751	NOx	02/01/2006 15:06:01	0.50672	1.856254	mg/l as N	1	1	
1201021752	NOx	02/01/2006 15:06:02	0.50142	1.836222	mg/l as N	1	1	
NOx-CCV	NOx	02/01/2006 15:09:50	0.26226	0.93262	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 15:09:51	0.01265	-0.010441	mg/l as N	1		0
NOx-CCV	NOx	02/01/2006 15:55:51	0.28767	1.02862	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 15:55:52	0.01263	-0.010529	mg/l as N	1		0

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Sample Id	Test	ResultDate	Response	Result	Unit	Dil	Man_Dil	Conc
154666003	NOx	02/01/2006 15:55:53	0.90861	3.374663	mg/l as N	1	1	
1201021793	NOx	02/01/2006 15:55:54	0.80173	2.970865	mg/l as N	1	1	
1201021794	NOx	02/01/2006 15:55:55	0.85749	3.181557	mg/l as N	1	1	
154822001	NOx	02/01/2006 15:55:56	3.98549	14.9998	mg/l as N	1	1	
1201021795	NOx	02/01/2006 15:55:57	3.97568	14.96274	mg/l as N	1	1	
1201021796	NOx	02/01/2006 15:55:58	3.81061	14.339067	mg/l as N	1	1	
NOx-CCV	NOx	02/01/2006 15:59:45	0.26294	0.935207	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 15:59:46	0.01267	-0.010393	mg/l as N	1		0
154822001	NOx	02/01/2006 16:05:24	0.88272	32.768524	mg/l as N	10	1	
1201021795	NOx	02/01/2006 16:05:25	0.90205	33.498779	mg/l as N	10	1	
1201021796	NOx	02/01/2006 16:05:26	0.9457	35.148083	mg/l as N	10	1	
NOx-CCV	NOx	02/01/2006 16:08:47	0.2618	0.9309	mg/l as N	1		1
NOx-CCB	NOx	02/01/2006 16:08:48	0.01255	-0.01083	mg/l as N	1		0

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Perchlorate

METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	mar1	1/24/2006 08:04:43	060124_001.DXD
AUTOCAL6		1	mar1	1/24/2006 08:19:51	060124_002.DXD
AUTOCAL5		1	mar1	1/24/2006 08:35:00	060124_003.DXD
AUTOCAL4		1	mar1	1/24/2006 08:50:09	060124_004.DXD
AUTOCAL3		1	mar1	1/24/2006 09:05:18	060124_005.DXD
AUTOCAL2		1	mar1	1/24/2006 09:20:26	060124_006.DXD
AUTOCAL1		1	mar1	1/24/2006 09:35:34	060124_007.DXD
WPC051229-03ICV		1	mar1	1/24/2006 09:50:43	060124_008.DXD
ICB		1	mar1	1/24/2006 10:05:52	060124_009.DXD
IPC-25-TREATED		1	mar1	1/24/2006 10:21:01	060124_010.DXD
PQL-4		1	mar1	1/24/2006 10:36:11	060124_011.DXD
MRL-4-TREATED		1	mar1	1/24/2006 10:51:19	060124_012.DXD
WPC051229-03CVH		1	mar1	1/24/2006 11:17:55	060124_013.DXD
CCB		1	mar1	1/24/2006 11:33:02	060124_014.DXD
1201016261	496708	1	mar1	1/24/2006 11:48:11	060124_015.DXD
1201016266	496708	1	mar1	1/24/2006 12:03:21	060124_016.DXD
153979001	496708	1	mar1	1/24/2006 12:18:29	060124_017.DXD
1201016262	496708	1	mar1	1/24/2006 12:33:38	060124_018.DXD
1201016264	496708	1	mar1	1/24/2006 12:48:47	060124_019.DXD
153979002	496708	1	mar1	1/24/2006 13:03:56	060124_020.DXD
153979003	496708	1	mar1	1/24/2006 13:19:04	060124_021.DXD
154053001	496708	1	mar1	1/24/2006 13:34:13	060124_022.DXD
154053002	496708	1	mar1	1/24/2006 13:49:21	060124_023.DXD
154053003	496708	1	mar1	1/24/2006 14:04:29	060124_024.DXD
WPC051229-03CVL		1	mar1	1/24/2006 14:19:38	060124_025.DXD
CCB		1	mar1	1/24/2006 14:34:47	060124_026.DXD
154053004	496708	1	mar1	1/24/2006 14:49:56	060124_027.DXD
154053005	496708	1	mar1	1/24/2006 15:05:05	060124_028.DXD
154197001	496708	1	mar1	1/24/2006 15:29:30	060124_029.DXD
154197002	496708	1	mar1	1/24/2006 15:44:38	060124_030.DXD
154197003	496708	1	mar1	1/24/2006 15:59:46	060124_031.DXD
154295001	496708	1	mar1	1/24/2006 16:14:54	060124_032.DXD
1201016263	496708	1	mar1	1/24/2006 16:30:03	060124_033.DXD
1201016265	496708	1	mar1	1/24/2006 16:45:12	060124_034.DXD
154295002	496708	1	mar1	1/24/2006 17:00:21	060124_035.DXD
154295003	496708	1	mar1	1/24/2006 17:15:30	060124_036.DXD
WPC051229-03CVH		1	mar1	1/24/2006 17:30:40	060124_037.DXD
CCB		1	mar1	1/24/2006 17:45:48	060124_038.DXD
1201016277	496717	1	mar1	1/24/2006 18:00:56	060124_039.DXD
1201016280	496717	1	mar1	1/24/2006 18:16:06	060124_040.DXD
154074001	496717	1	mar1	1/24/2006 18:31:14	060124_041.DXD
1201016285	496717	1	mar1	1/24/2006 18:46:22	060124_042.DXD
1201016286	496717	1	mar1	1/24/2006 19:01:32	060124_043.DXD
154261001	496717	1	mar1	1/24/2006 19:16:41	060124_044.DXD
1201016278	496717	1	mar1	1/24/2006 19:31:49	060124_045.DXD
1201016279	496717	1	mar1	1/24/2006 19:46:57	060124_046.DXD
154261002	496717	1	mar1	1/24/2006 20:02:06	060124_047.DXD
154261003	496717	1	mar1	1/24/2006 20:17:14	060124_048.DXD
WPC051229-03CVL		1	mar1	1/24/2006 20:32:23	060124_049.DXD
CCB		1	mar1	1/24/2006 20:47:33	060124_050.DXD
154261004	496717	1	mar1	1/24/2006 21:02:41	060124_051.DXD
154261010	496717	1	mar1	1/24/2006 21:17:49	060124_052.DXD
154261011	496717	1	mar1	1/24/2006 21:32:58	060124_053.DXD
154261012	496717	1	mar1	1/24/2006 21:48:06	060124_054.DXD
154285001	496717	1	mar1	1/24/2006 22:03:15	060124_055.DXD

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154286002            496717   1     mar1  1/24/2006 22:18:24 060124_056.DXD
154053005            496708   1     mar1  1/24/2006 22:33:34 060124_057.DXD
WPC051229-03CVH               1     mar1  1/24/2006 22:48:42 060124_058.DXD
CCB                           1     mar1  1/24/2006 23:03:50 060124_059.DXD
WPC051229-03CVL               1     mar1  1/25/2006 10:36:40 060124_060.DXD
CCB                           1     mar1  1/25/2006 10:51:49 060124_061.DXD
154074001            496717   1     mar1  1/25/2006 11:06:57 060124_062.DXD
1201016285           496717   1     mar1  1/25/2006 11:22:06 060124_063.DXD
1201016286           496717   1     mar1  1/25/2006 11:37:15 060124_064.DXD
WPC051229-03CVH               1     mar1  1/25/2006 11:52:23 060124_065.DXD
CCB                           1     mar1  1/25/2006 12:07:32 060124_066.DXD
1201017343           497144   1     mar1  1/25/2006 12:22:41 060124_067.DXD
1201017348           497144   1     mar1  1/25/2006 12:37:50 060124_068.DXD
154227014            497144   1     mar1  1/25/2006 13:18:10 060124_069.DXD
1201017345           497144   1     mar1  1/25/2006 13:33:16 060124_070.DXD
1201017347           497144   1     mar1  1/25/2006 13:48:25 060124_071.DXD
154353008            497144   1     mar1  1/25/2006 14:03:33 060124_072.DXD
1201017344           497144   1     mar1  1/25/2006 14:18:43 060124_073.DXD
1201017346           497144   1     mar1  1/25/2006 14:33:51 060124_074.DXD
1201017345           497144   1     mar1  1/25/2006 14:49:01 060124_075.DXD
WPC051229-03CVL               1     mar1  1/25/2006 15:04:09 060124_076.DXD
CCB                           1     mar1  1/25/2006 15:19:17 060124_077.DXD
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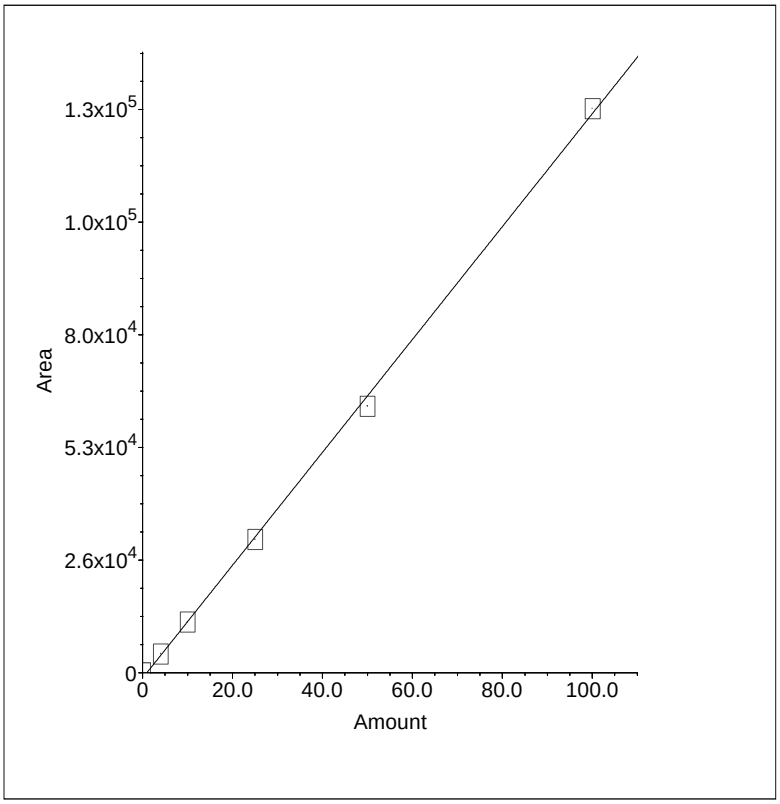
Method:C:\PEAKNET\METHOD\060124.MET Updated:1/24/2006 09:50:39 Total:1

2. Component:Perchlorate
Standard:External Fit Type:Linear
Origin:Ignore Calibration:Area
r^2=0.999279
Amt=0.0007492*Resp+0.962



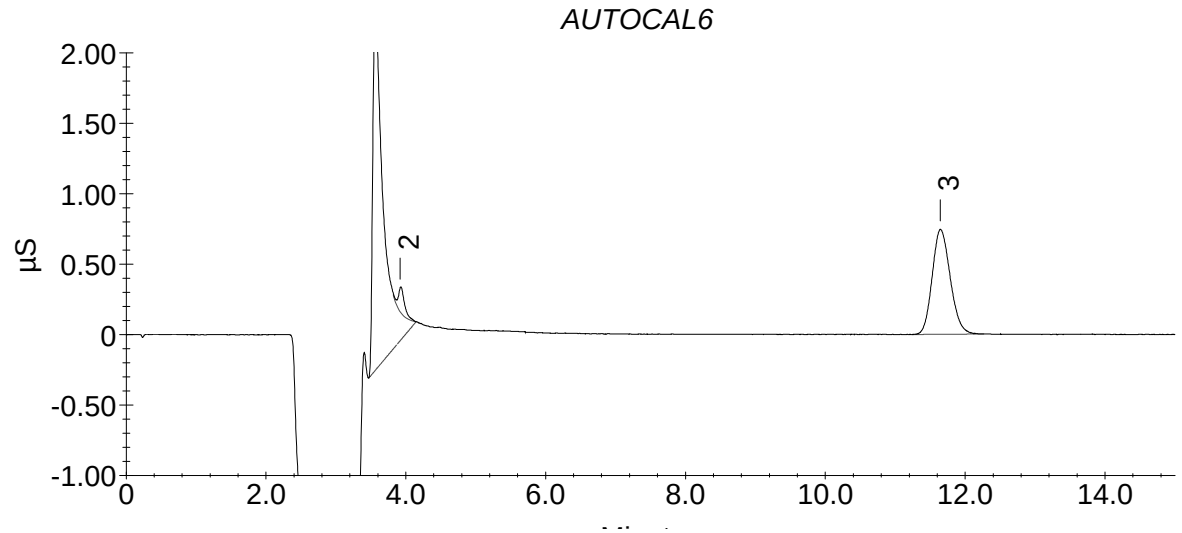
Calibration Update Report

Sample Name : AUTOCAL6
Data File Name : C:\PEAKNET\DATA\060124_002.DXD

Method File Name : c:\peaknet\method\060124.met
Schedule File Name : c:\peaknet\schedule\060124.sch
Date Time Collected : 1/24/2006 08:19:51
Calibration Date : 1/24/2006 08:34:56
System Operator : mar1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.56		275040	
3	Perchlorate	100.00	11.64	124915	133429	133429



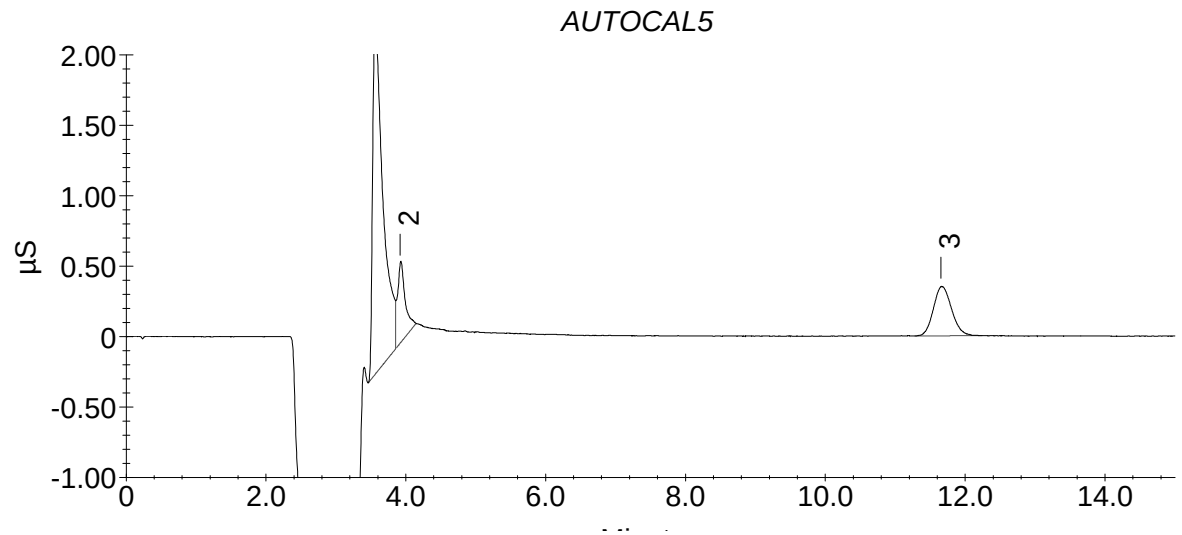
Calibration Update Report

Sample Name : AUTOCAL5
Data File Name : C:\PEAKNET\DATA\060124_003.DXD

Method File Name : c:\peaknet\method\060124.met
Schedule File Name : c:\peaknet\schedule\060124.sch
Date Time Collected : 1/24/2006 08:35:00
Calibration Date : 1/24/2006 08:50:05
System Operator : mar1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.56		256274	
3	Perchlorate	50.00	11.65	55966	63067	63067



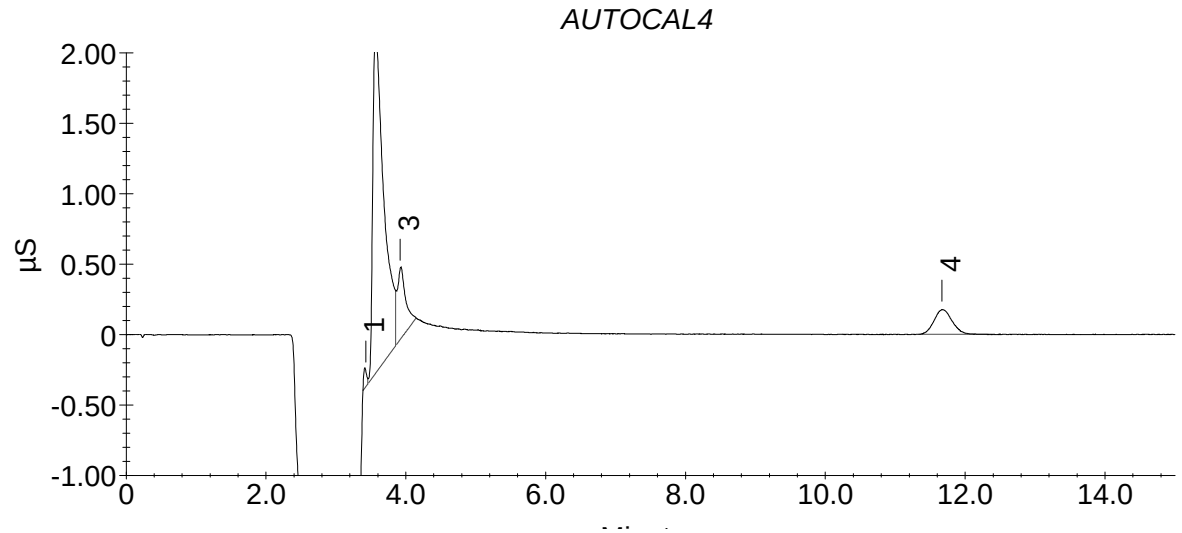
Calibration Update Report

Sample Name : AUTOCAL4
Data File Name : C:\PEAKNET\DATA\060124_004.DXD

Method File Name : c:\peaknet\method\060124.met
Schedule File Name : c:\peaknet\schedule\060124.sch
Date Time Collected : 1/24/2006 08:50:09
Calibration Date : 1/24/2006 09:05:13
System Operator : mar1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak	0.00	3.56		264562	
4	Perchlorate	25.00	11.67	30896	31554	31554



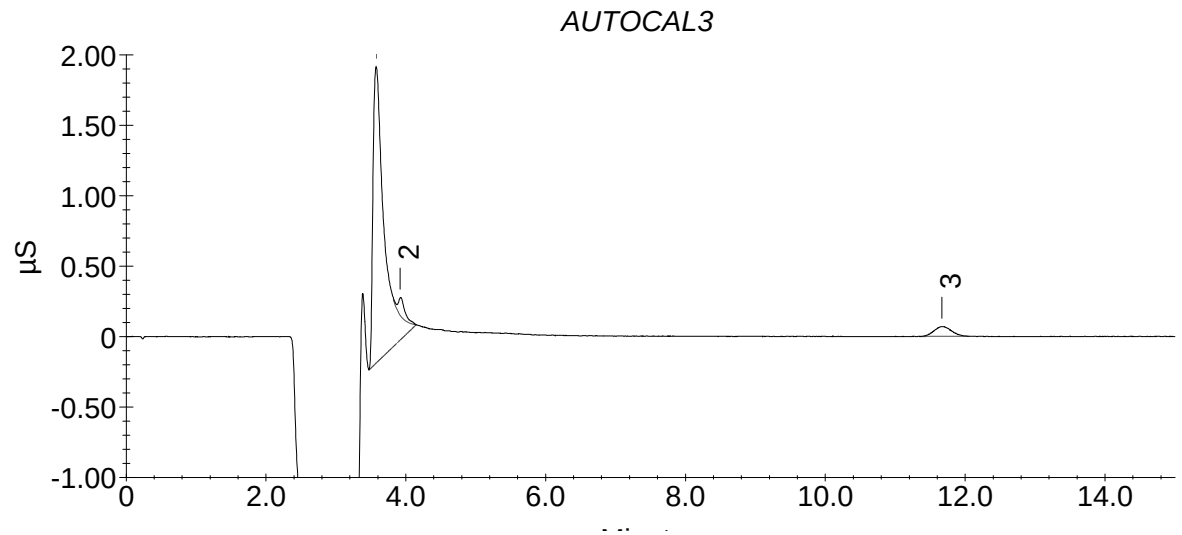
Calibration Update Report

Sample Name : AUTOCAL3
Data File Name : C:\PEAKNET\DATA\060124_005.DXD

Method File Name : c:\peaknet\method\060124.met
Schedule File Name : c:\peaknet\schedule\060124.sch
Date Time Collected : 1/24/2006 09:05:18
Calibration Date : 1/24/2006 09:20:22
System Operator : mar1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.57		236890	
3	Perchlorate	10.00	11.67	11539	12021	12021



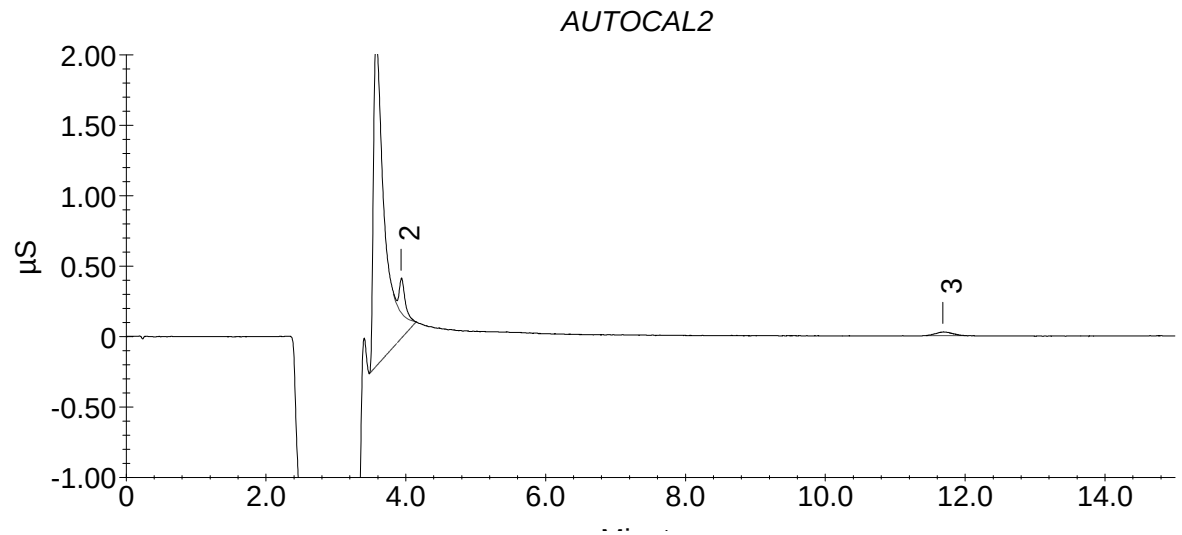
Calibration Update Report

Sample Name : AUTOCAL2
Data File Name : C:\PEAKNET\DATA\060124_006.DXD

Method File Name : c:\peaknet\method\060124.met
Schedule File Name : c:\peaknet\schedule\060124.sch
Date Time Collected : 1/24/2006 09:20:26
Calibration Date : 1/24/2006 09:35:30
System Operator : mar1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
1	Solvent peak	0.00	3.57		257475	
3	Perchlorate	4.00	11.68	3965	4481	4481



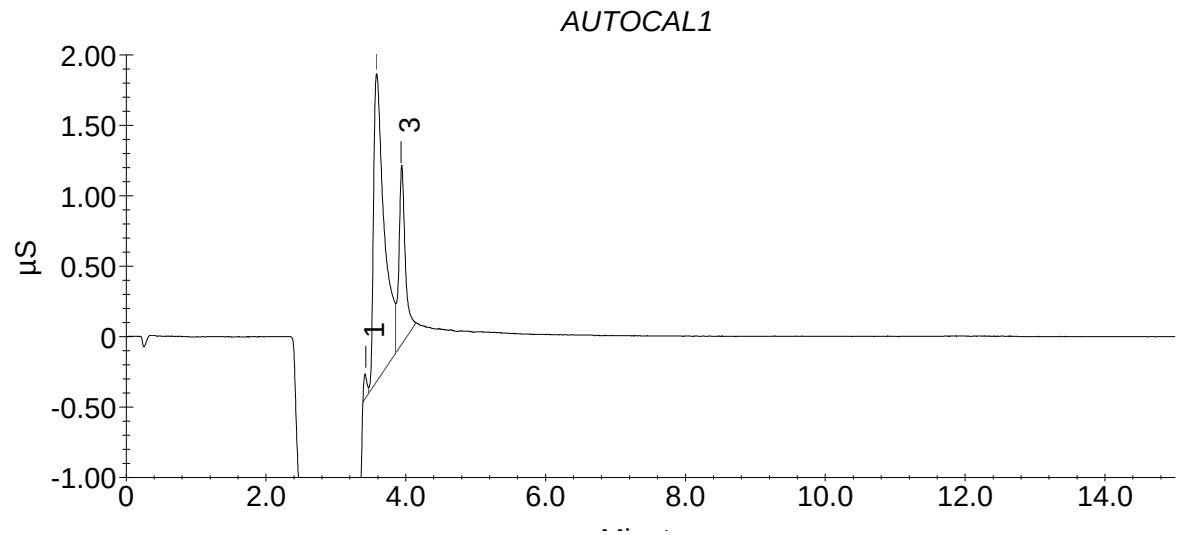
Calibration Update Report

Sample Name : AUTOCAL1
Data File Name : C:\PEAKNET\DATA\060124_007.DXD

Method File Name : c:\peaknet\method\060124.met
Schedule File Name : c:\peaknet\schedule\060124.sch
Date Time Collected : 1/24/2006 09:35:34
Calibration Date : 1/24/2006 09:50:39
System Operator : mar1

Peak Information : All Components

Peak #	Component	Component Amount (ug/L)	Retention Time	Cal Response (Previous)	Cal Response (Measured)	Cal Response (New)
2	Solvent peak Perchlorate	0.00	3.57		229883	



Sample Analysis Report

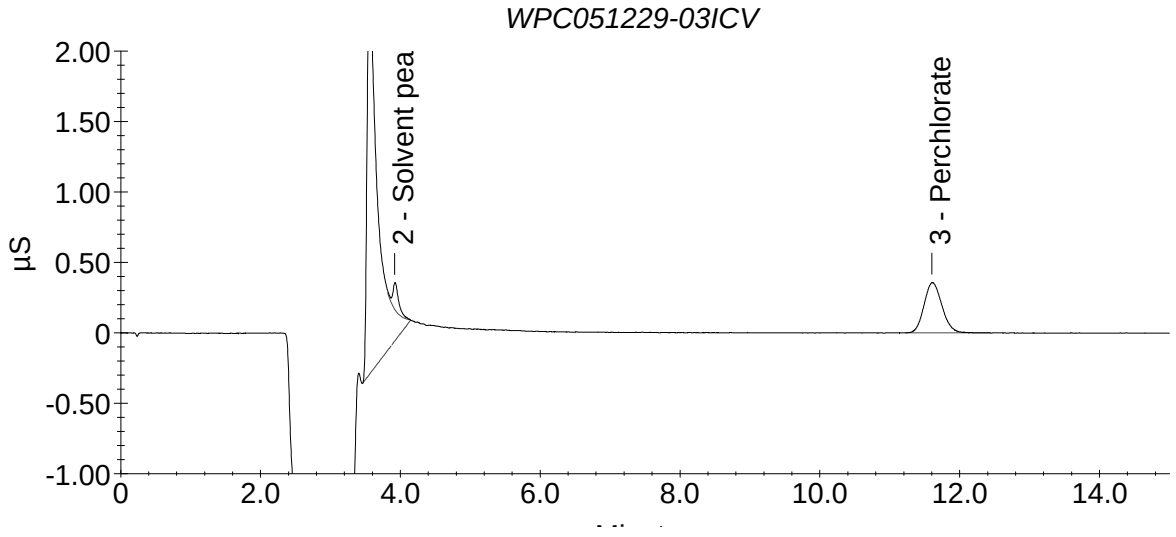
Sample Name : WPC051229-03ICV
Data File Name : C:\PEAKNET\DATA\060124_008.DXD
Date Time Updated : 1/24/2006 10:05:48

Method : ...\060124.met	Inject# : 8	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 1/24/2006 09:50:43	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.92	0.00	11026	1903
3	Perchlorate	11.60	48.92	64015	3562



Sample Analysis Report

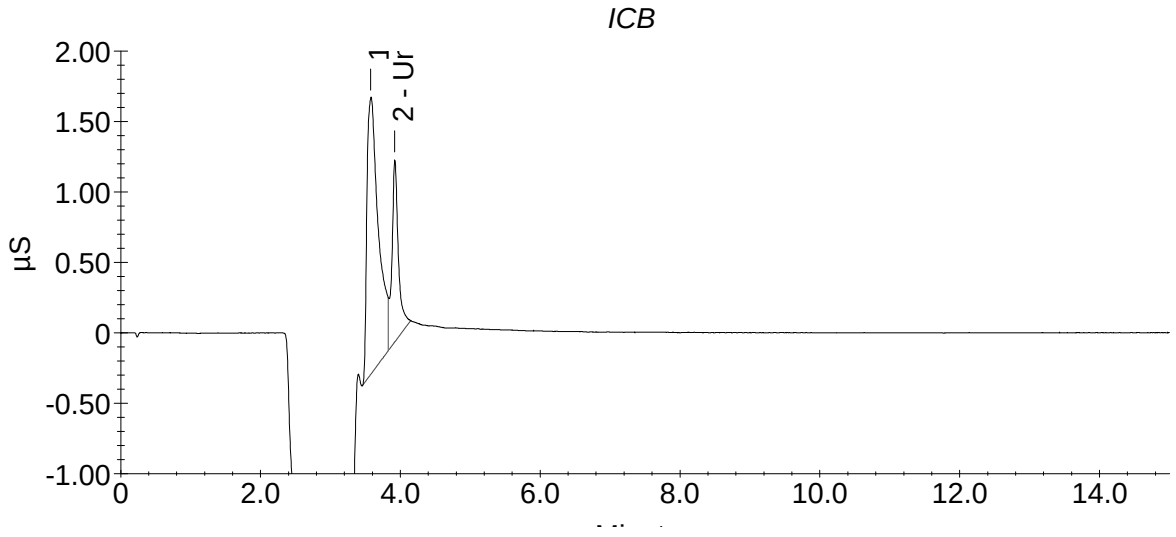
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\060124_009.DXD
Date Time Updated : 1/24/2006 10:20:57

Method : ...\060124.met	Inject# : 9	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 1/24/2006 10:05:52	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.57	0.00	222926	19600



METHOD: 314.0
SOP NUMBER: GL-GC-E-086 Rev.03

SAMPLENAME	BATCH	DILUTION	USER	RUNTIME	FILENAME
BLK		1	mar1	2/1/2006 08:16:19	060201_001.DXD
WPC060130-03ICV		1	mar1	2/1/2006 08:31:27	060201_002.DXD
WPC060130-03ICV		1	mar1	2/1/2006 10:24:15	060201_003.DXD
ICB		1	mar1	2/1/2006 10:39:22	060201_004.DXD
IPC-25-TREATED		1	mar1	2/1/2006 10:54:32	060201_005.DXD
PQL-4		1	mar1	2/1/2006 11:09:42	060201_006.DXD
WPC060130-03CVH		1	mar1	2/1/2006 11:24:50	060201_007.DXD
CCB		1	mar1	2/1/2006 11:39:59	060201_008.DXD
1201020719	498693	1	mar1	2/1/2006 11:55:09	060201_009.DXD
1201020724	498693	1	mar1	2/1/2006 12:10:17	060201_010.DXD
154415003	498693	1	mar1	2/1/2006 12:25:25	060201_011.DXD
1201020720	498693	1	mar1	2/1/2006 12:40:35	060201_012.DXD
1201020722	498693	1	mar1	2/1/2006 12:55:44	060201_013.DXD
154415004	498693	1	mar1	2/1/2006 13:10:53	060201_014.DXD
154478001	498693	1	mar1	2/1/2006 13:26:01	060201_015.DXD
1201020721	498693	1	mar1	2/1/2006 13:41:10	060201_016.DXD
1201020723	498693	1	mar1	2/1/2006 13:56:18	060201_017.DXD
154478002	498693	1	mar1	2/1/2006 14:11:26	060201_018.DXD
WPC060130-03CVL		1	mar1	2/1/2006 14:26:35	060201_019.DXD
CCB		1	mar1	2/1/2006 14:41:44	060201_020.DXD
154614001	498693	1	mar1	2/1/2006 14:56:53	060201_021.DXD
154614002	498693	1	mar1	2/1/2006 15:12:02	060201_022.DXD
154614008	498693	1	mar1	2/1/2006 15:27:12	060201_023.DXD
154614010	498693	1	mar1	2/1/2006 15:42:20	060201_024.DXD
154721001	498693	1	mar1	2/1/2006 15:57:29	060201_025.DXD
154721008	498693	1	mar1	2/1/2006 16:12:39	060201_026.DXD
154721011	498693	1	mar1	2/1/2006 16:27:47	060201_027.DXD
154759001	498693	1	mar1	2/1/2006 16:42:55	060201_028.DXD
154759009	498693	1	mar1	2/1/2006 16:58:05	060201_029.DXD
154759010	498693	1	mar1	2/1/2006 17:13:13	060201_030.DXD
WPC060130-03CVH		1	mar1	2/1/2006 17:28:22	060201_031.DXD
CCB		1	mar1	2/1/2006 17:43:30	060201_032.DXD
154760001	498693	1	mar1	2/1/2006 17:58:38	060201_033.DXD
WPC060130-03CVL		1	mar1	2/1/2006 18:13:46	060201_034.DXD
CCB		1	mar1	2/1/2006 18:28:55	060201_035.DXD
1201020725	498694	1	mar1	2/1/2006 18:44:04	060201_036.DXD
1201020730	498694	1	mar1	2/1/2006 18:59:13	060201_037.DXD
154500001	498694	1	mar1	2/1/2006 19:14:22	060201_038.DXD
1201020726	498694	1	mar1	2/1/2006 19:29:31	060201_039.DXD
1201020728	498694	1	mar1	2/1/2006 19:44:41	060201_040.DXD
154500002	498694	1	mar1	2/1/2006 19:59:50	060201_041.DXD
154500003	498694	1	mar1	2/1/2006 20:14:58	060201_042.DXD
154597001	498694	1	mar1	2/1/2006 20:30:06	060201_043.DXD
154597002	498694	1	mar1	2/1/2006 20:45:14	060201_044.DXD
154597003	498694	1	mar1	2/1/2006 21:00:22	060201_045.DXD
WPC060130-03CVH		1	mar1	2/1/2006 21:15:30	060201_046.DXD
CCB		1	mar1	2/1/2006 21:30:39	060201_047.DXD
154665001	498694	1	mar1	2/1/2006 21:45:47	060201_048.DXD
154665002	498694	1	mar1	2/1/2006 22:00:55	060201_049.DXD
154665003	498694	1	mar1	2/1/2006 22:16:04	060201_050.DXD
154749001	498694	1	mar1	2/1/2006 22:31:13	060201_051.DXD
154749002	498694	1	mar1	2/1/2006 22:46:22	060201_052.DXD
154749003	498694	1	mar1	2/1/2006 23:01:32	060201_053.DXD
1201020727	498694	1	mar1	2/1/2006 23:16:41	060201_054.DXD
1201020729	498694	1	mar1	2/1/2006 23:31:49	060201_055.DXD

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WPC060130-03CVL              1     mar1  2/1/2006 23:46:57 060201_056.DXD
CCB                          1     mar1  2/2/2006 00:02:07 060201_057.DXD
WPC060130-03CVH              1     mar1  2/2/2006 10:01:17 060201_058.DXD
CCB                          1     mar1  2/2/2006 10:16:22 060201_059.DXD
154614008            498693  5     mar1  2/2/2006 10:31:30 060201_060.DXD
WPC060130-03CVL              1     mar1  2/2/2006 10:46:38 060201_061.DXD
CCB                          1     mar1  2/2/2006 11:01:47 060201_062.DXD
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Sample Analysis Report

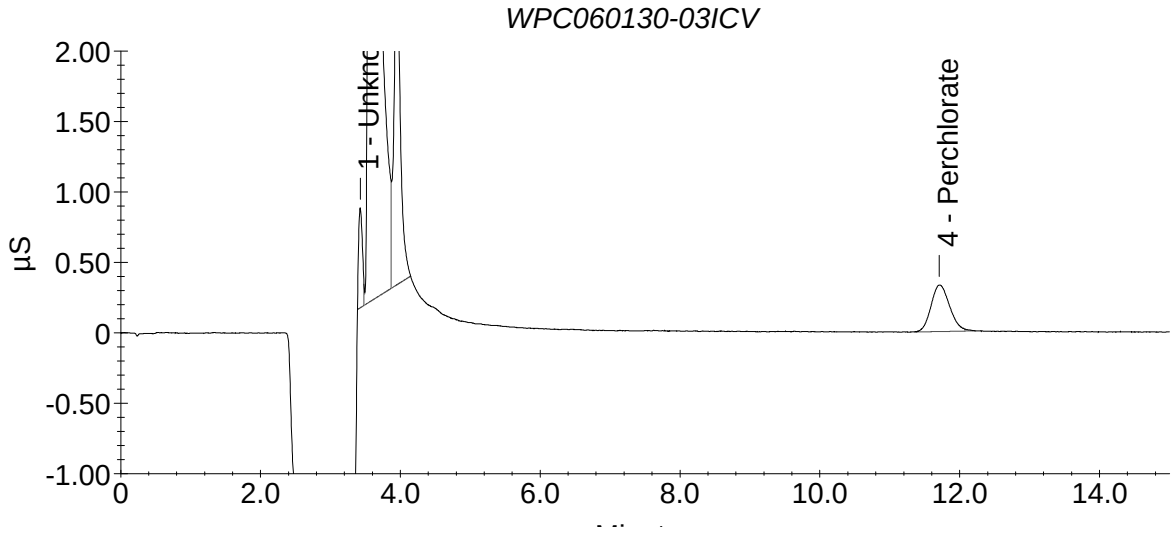
Sample Name : WPC060130-03ICV
Data File Name : C:\PEAKNET\DATA\060201_003.DXD
Date Time Updated : 2/1/2006 10:39:18

Method : ...\060124.met	Inject# : 3	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 10:24:15	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.56	0.00	669807	78269
4	Perchlorate	11.71	46.76	61128	3304



Sample Analysis Report

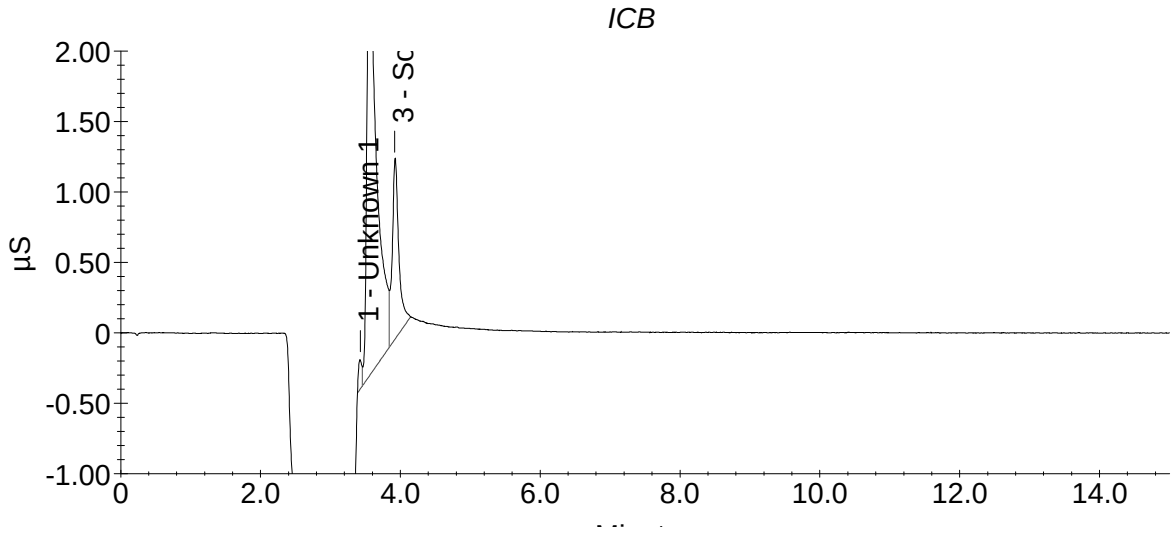
Sample Name : ICB
Data File Name : C:\PEAKNET\DATA\060201_004.DXD
Date Time Updated : 2/1/2006 10:54:28

Method : ...\060124.met	Inject# : 4	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 10:39:22	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
3	Solvent peak Perchlorate	3.92	0.00	82255	12695



Sample Analysis Report

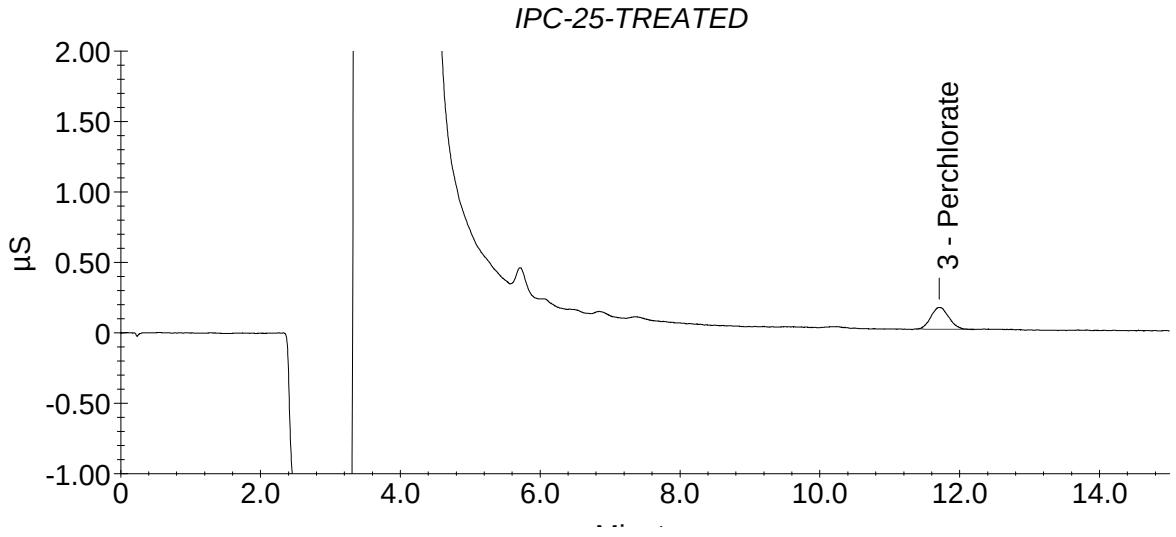
Sample Name : IPC-25-TREATED
Data File Name : C:\PEAKNET\DATA\060201_005.DXD
Date Time Updated : 2/1/2006 11:09:37

Method : ...\060124.met	Inject# : 5	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 10:54:32	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.80	0.00	99390373	14698966
3	Perchlorate	11.71	21.66	27626	1540



Sample Analysis Report

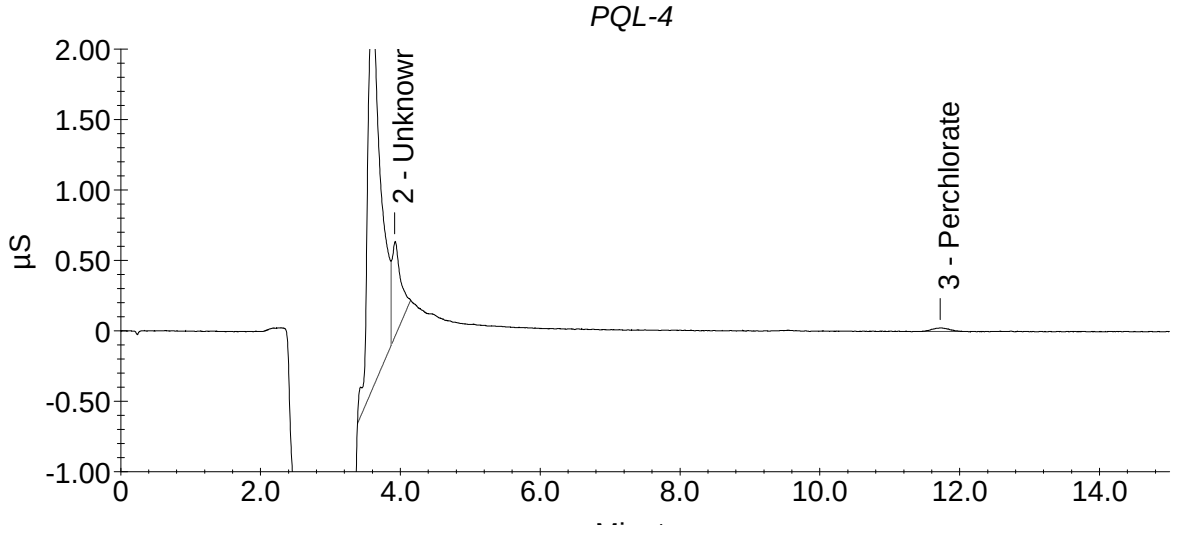
Sample Name : PQL-4
Data File Name : C:\PEAKNET\DATA\060201_006.DXD
Date Time Updated : 2/1/2006 11:24:46

Method : ...\060124.met	Inject# : 6	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 11:09:42	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.60	0.00	359053	28106
3	Perchlorate	11.72	4.20	4317	250



Sample Analysis Report

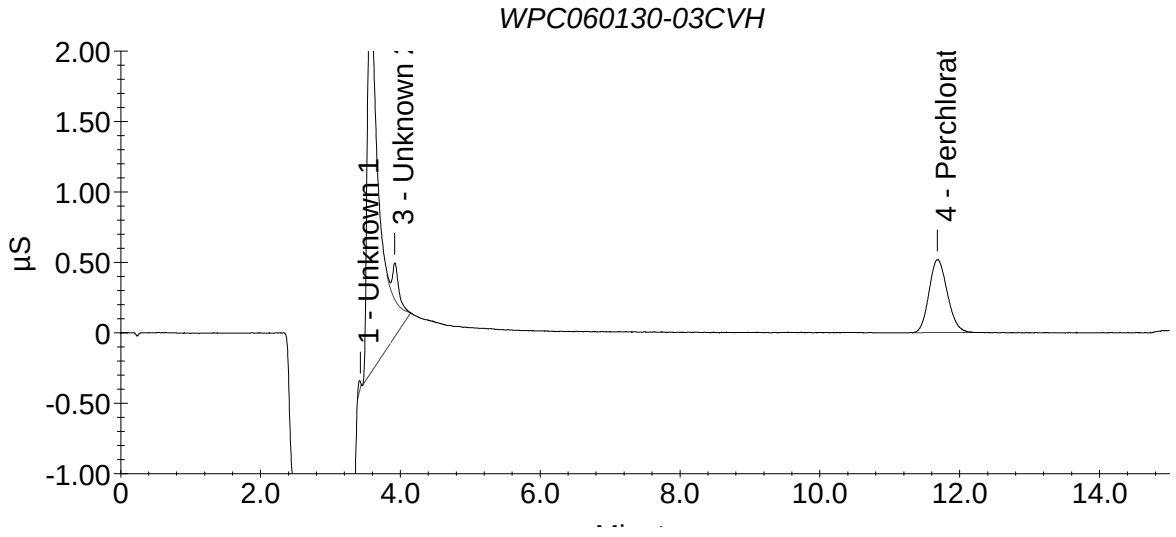
Sample Name : WPC060130-03CVH
Data File Name : C:\PEAKNET\DATA\060201_007.DXD
Date Time Updated : 2/1/2006 11:39:55

Method : ...\060124.met	Inject# : 7	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 11:24:50	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.57	0.00	322814	26488
4	Perchlorate	11.68	71.77	94508	5190



Sample Analysis Report

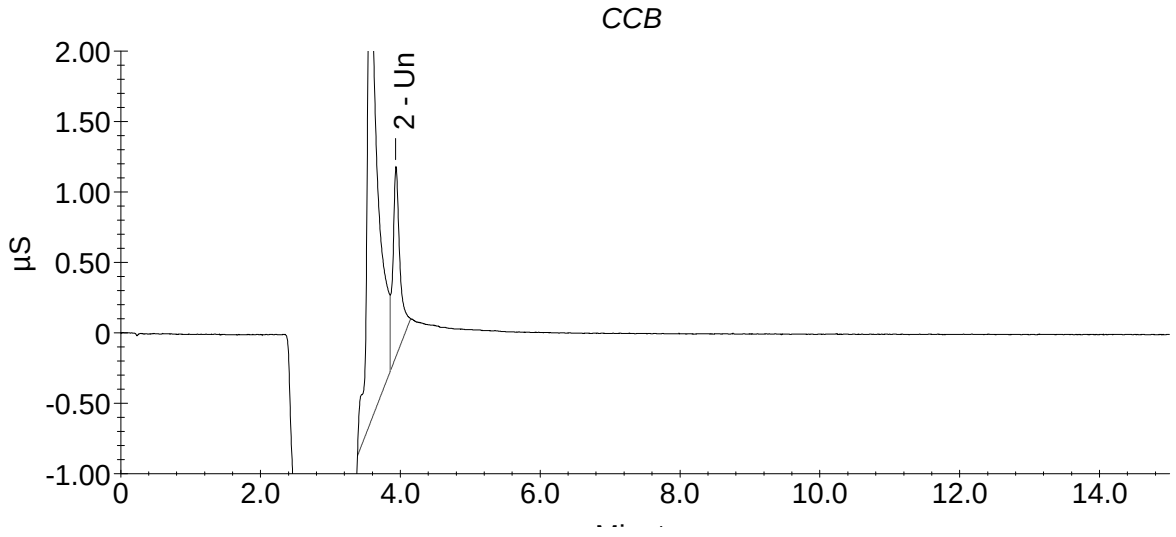
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\060201_008.DXD
Date Time Updated : 2/1/2006 11:55:04

Method : ...\060124.met	Inject# : 8	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 11:39:59	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.56	0.00	376125	34911



Sample Analysis Report

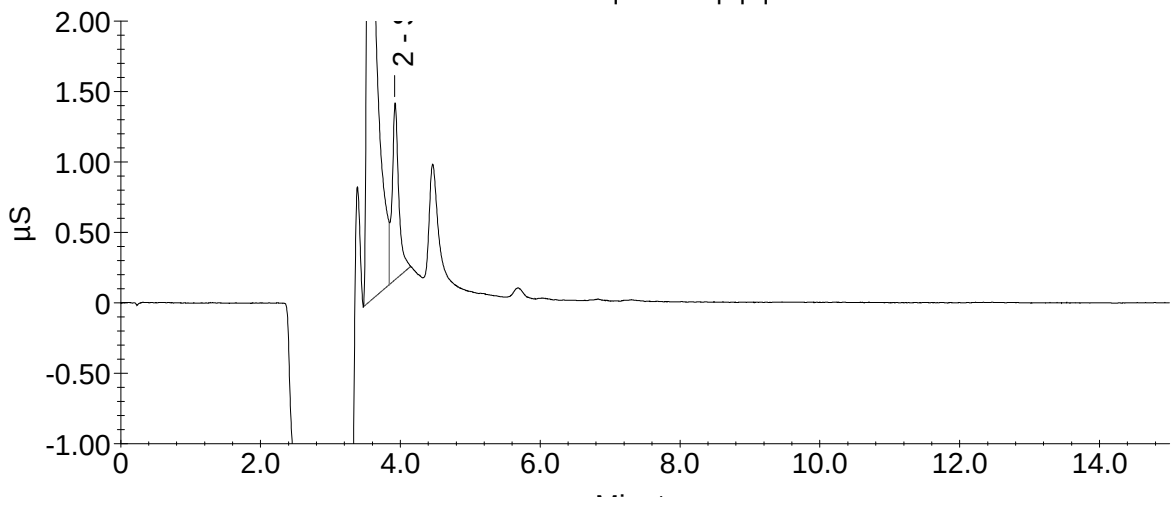
Sample Name : 1201020719|498693|1|1|MB
Data File Name : C:\PEAKNET\DATA\060201_009.DXD
Date Time Updated : 2/1/2006 12:10:13

Method : ...\060124.met	Inject# : 9	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 11:55:09	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.92	0.00	80834	12431



Sample Analysis Report

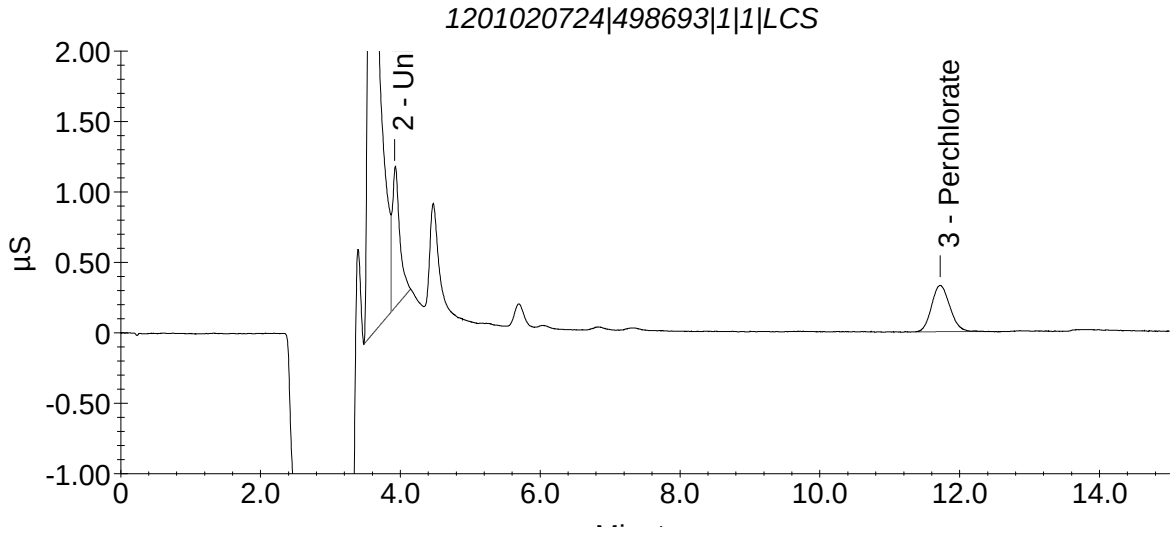
Sample Name : 1201020724|498693|1|1|LCS
Data File Name : C:\PEAKNET\DATA\060201_010.DXD
Date Time Updated : 2/1/2006 12:25:21

Method : ...\060124.met	Inject# : 10	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 12:10:17	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.56	0.00	428869	34126
3	Perchlorate	11.72	45.68	59680	3290



Sample Analysis Report

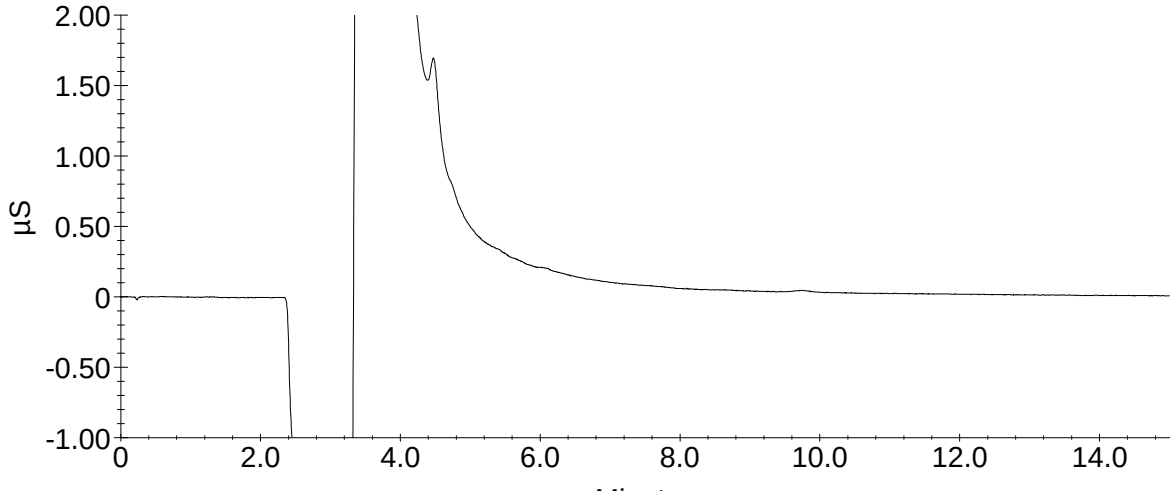
Sample Name : 154415003|498693|1|1|
Data File Name : C:\PEAKNET\DATA\060201_011.DXD
Date Time Updated : 2/1/2006 12:40:30

Method : ...\060124.met	Inject# : 11	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 12:25:25	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.73	0.00	5596449	964138



Sample Analysis Report

Sample Name : 1201020720|498693|1|1|DUP
Data File Name : C:\PEAKNET\DATA\060201_012.DXD
Date Time Updated : 2/1/2006 12:55:39

Method : ...\060124.met
Analyst : mar1
Date : 2/1/2006 12:40:35
Units : ug/L

Inject# : 12
Detector : CD20
Column Type : AS16,
Dilution : 1.00

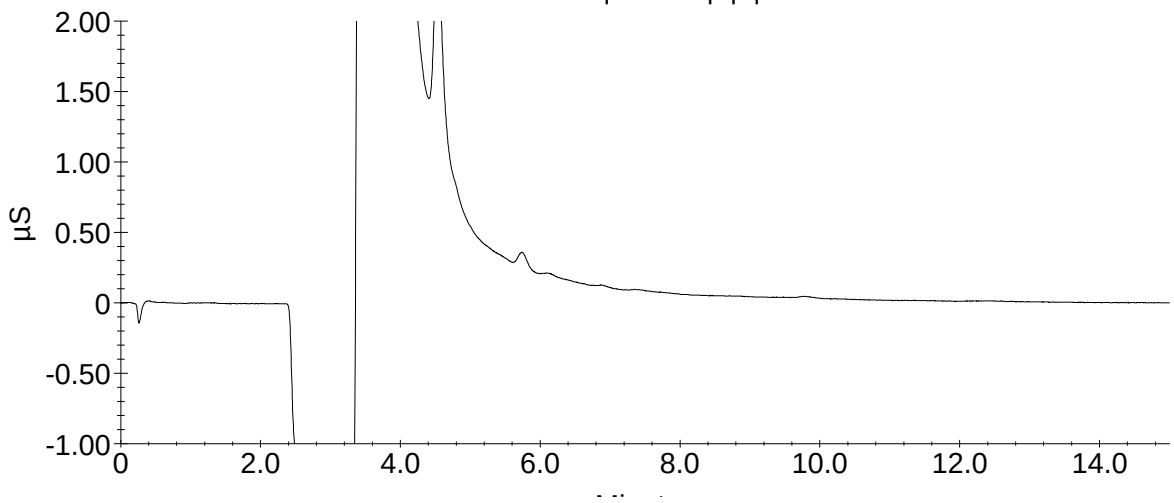
System Name : DX-500
Calibration Type : EXTERNAL

SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
3	Solvent peak Perchlorate	3.76	0.00	5708470	1017053



Sample Analysis Report

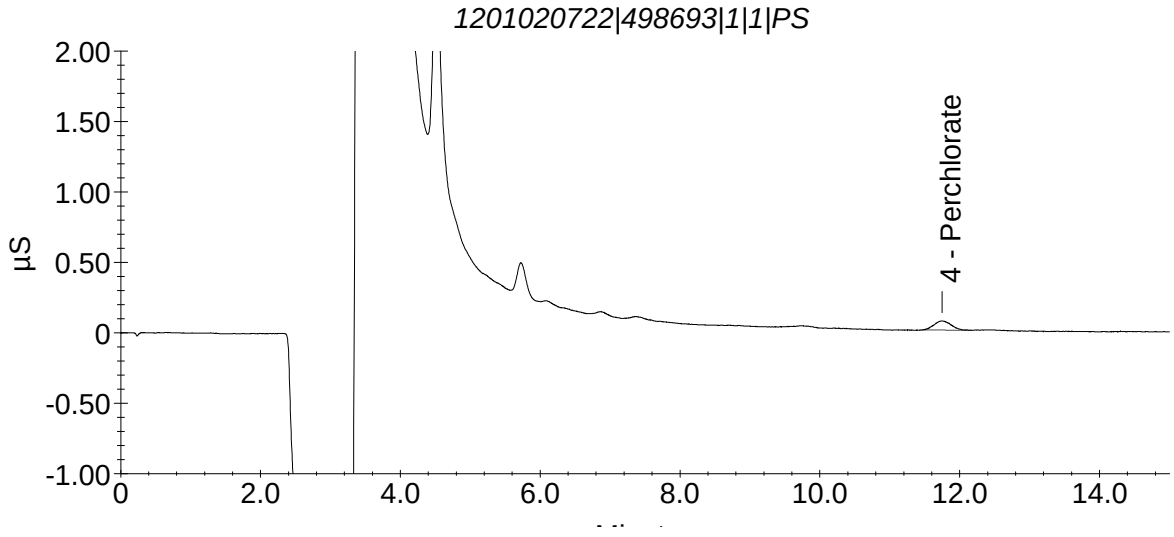
Sample Name : 1201020722|498693|1|1|PS
Data File Name : C:\PEAKNET\DATA\060201_013.DXD
Date Time Updated : 2/1/2006 13:10:48

Method : ...\060124.met	Inject# : 13	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 12:55:44	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
3	Solvent peak	3.73	0.00	5410564	931765
4	Perchlorate	11.75	9.24	11053	644



Sample Analysis Report

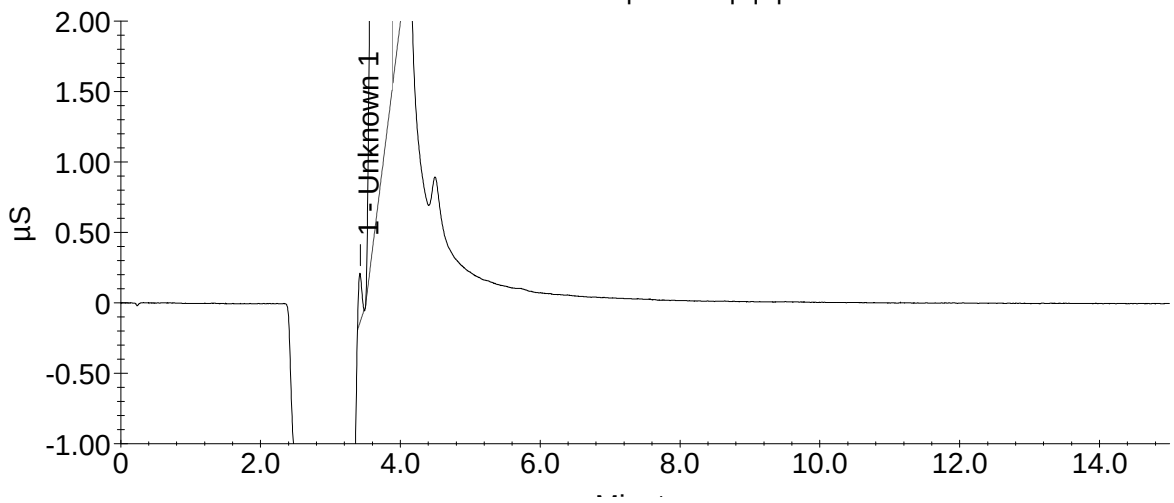
Sample Name : 154478001|498693|1|1|
Data File Name : C:\PEAKNET\DATA\060201_015.DXD
Date Time Updated : 2/1/2006 13:41:05

Method : ...\060124.met	Inject# : 15	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 13:26:01	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.69	0.00	20250885	3656859



Sample Analysis Report

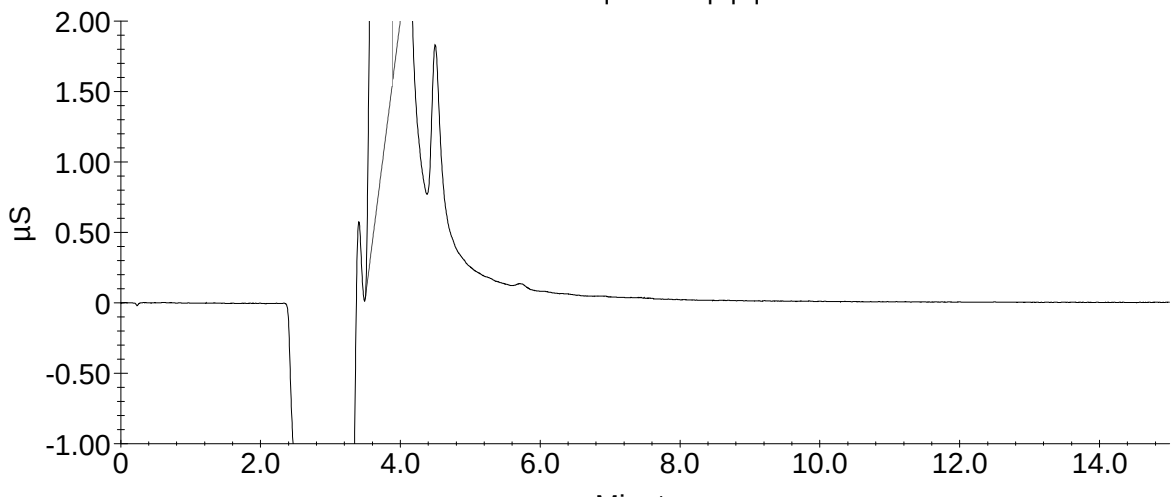
Sample Name : 1201020721|498693|1|1|DUP
Data File Name : C:\PEAKNET\DATA\060201_016.DXD
Date Time Updated : 2/1/2006 13:56:14

Method : ...\060124.met	Inject# : 16	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 13:41:10	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.69	0.00	20218786	3677839



Sample Analysis Report

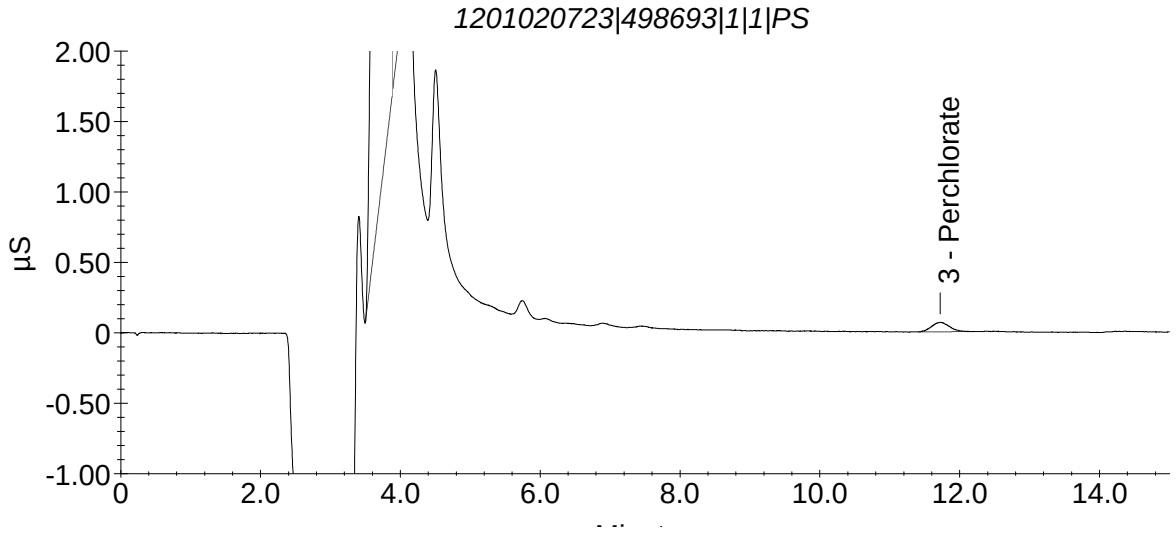
Sample Name : 1201020723|498693|1|1|PS
Data File Name : C:\PEAKNET\DATA\060201_017.DXD
Date Time Updated : 2/1/2006 14:11:22

Method : ...\060124.met	Inject# : 17	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 13:56:18	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.69	0.00	20003693	3511361
3	Perchlorate	11.72	9.75	11726	659



Sample Analysis Report

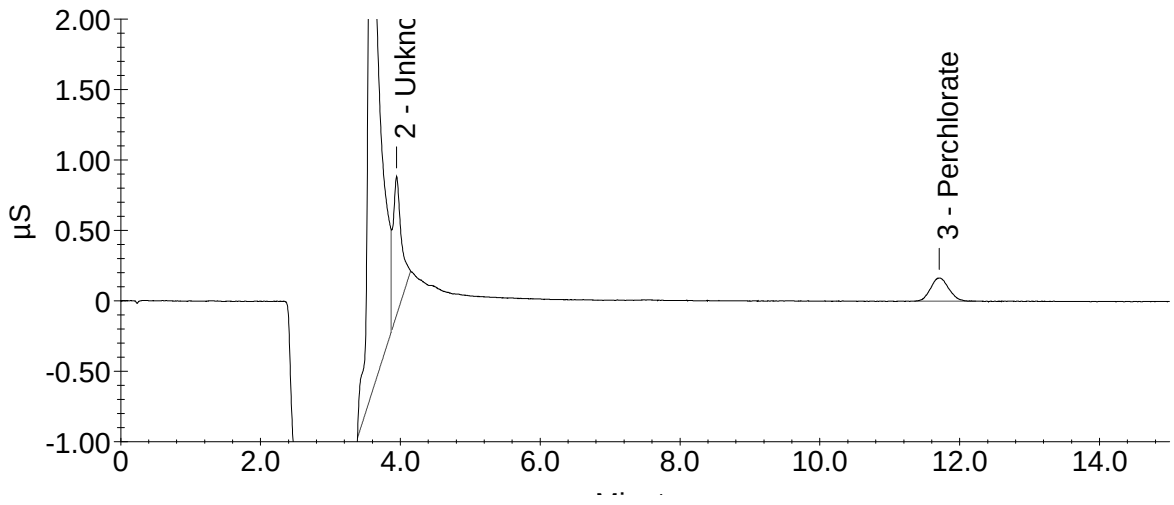
Sample Name : WPC060130-03CVL
Data File Name : C:\PEAKNET\DATA\060201_019.DXD
Date Time Updated : 2/1/2006 14:41:40

Method : ...\060124.met	Inject# : 19	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 14:26:35	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.56	0.00	479233	40023
3	Perchlorate	11.71	23.39	29932	1652



Sample Analysis Report

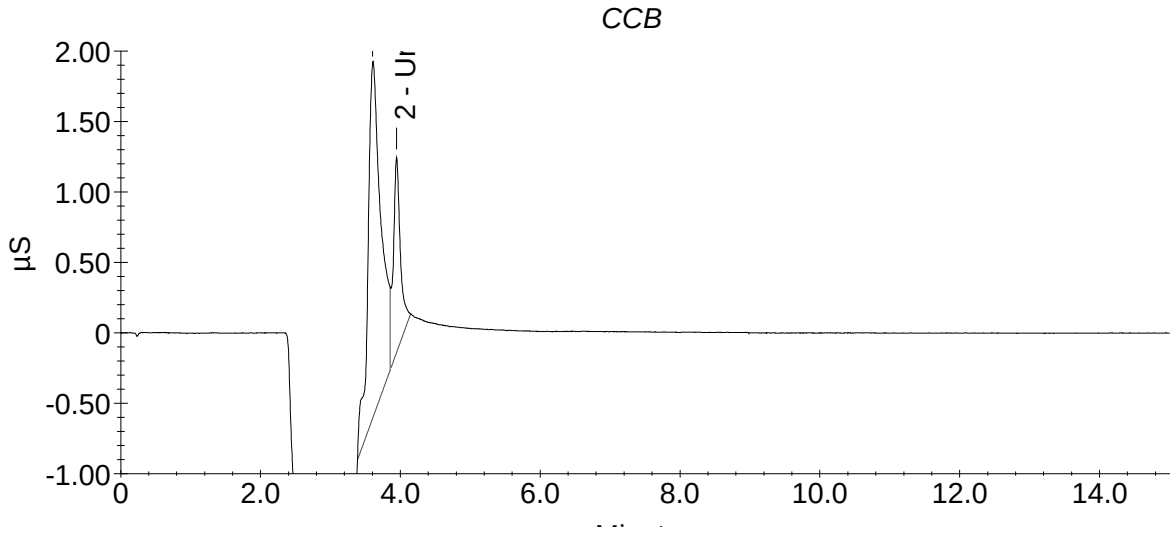
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\060201_020.DXD
Date Time Updated : 2/1/2006 14:56:49

Method : ...\060124.met	Inject# : 20	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 14:41:44	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.60	0.00	323698	25151



Sample Analysis Report

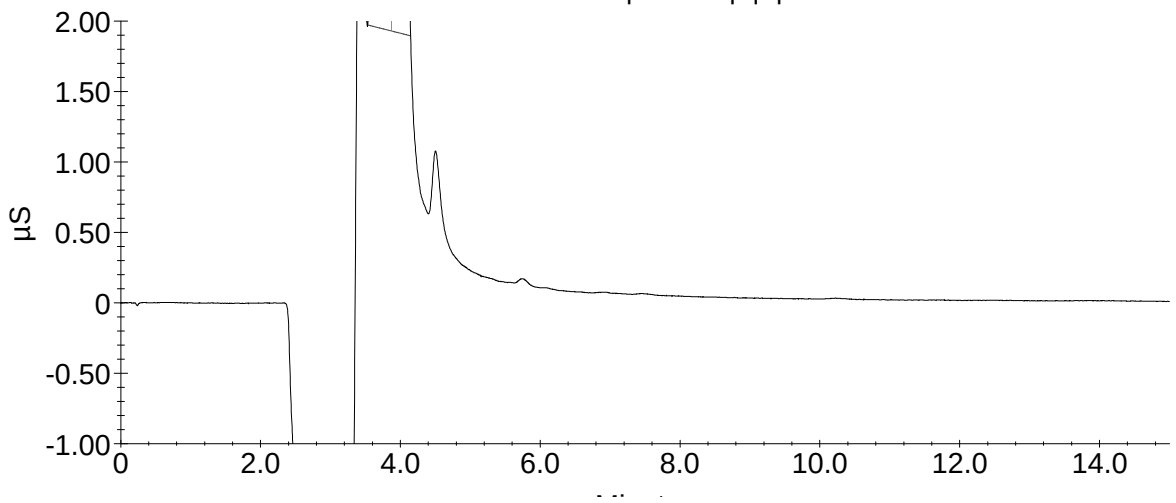
Sample Name : 154614001|498693|1|1|
Data File Name : C:\PEAKNET\DATA\060201_021.DXD
Date Time Updated : 2/1/2006 15:11:58

Method : ...\060124.met	Inject# : 21	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 14:56:53	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.67	0.00	7894384	1367765



Sample Analysis Report

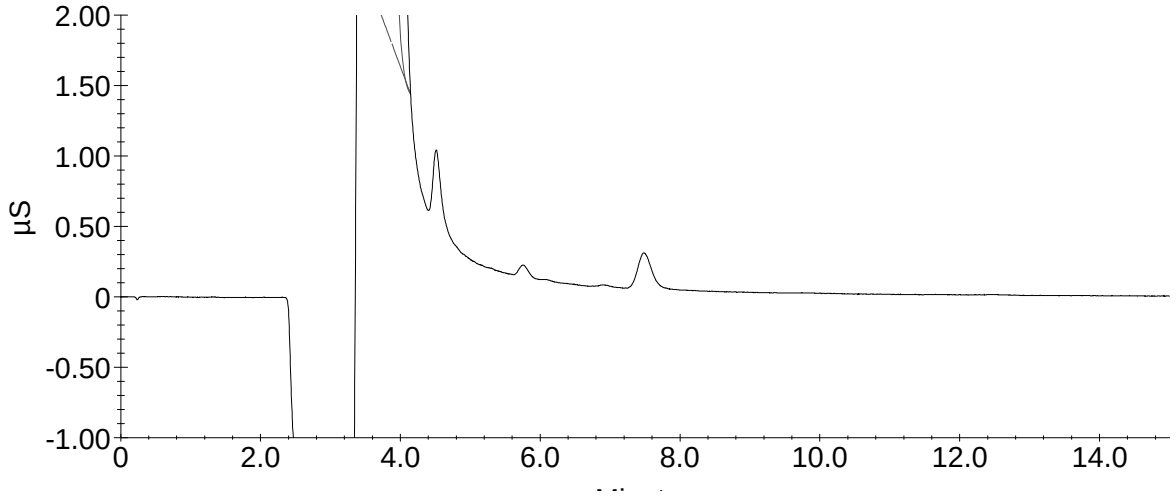
Sample Name : 154614002|498693|1|1|
Data File Name : C:\PEAKNET\DATA\060201_022.DXD
Date Time Updated : 2/1/2006 15:27:07

Method : ...\060124.met	Inject# : 22	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 15:12:02	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak Perchlorate	3.68	0.00	7614334	1316591



Sample Analysis Report

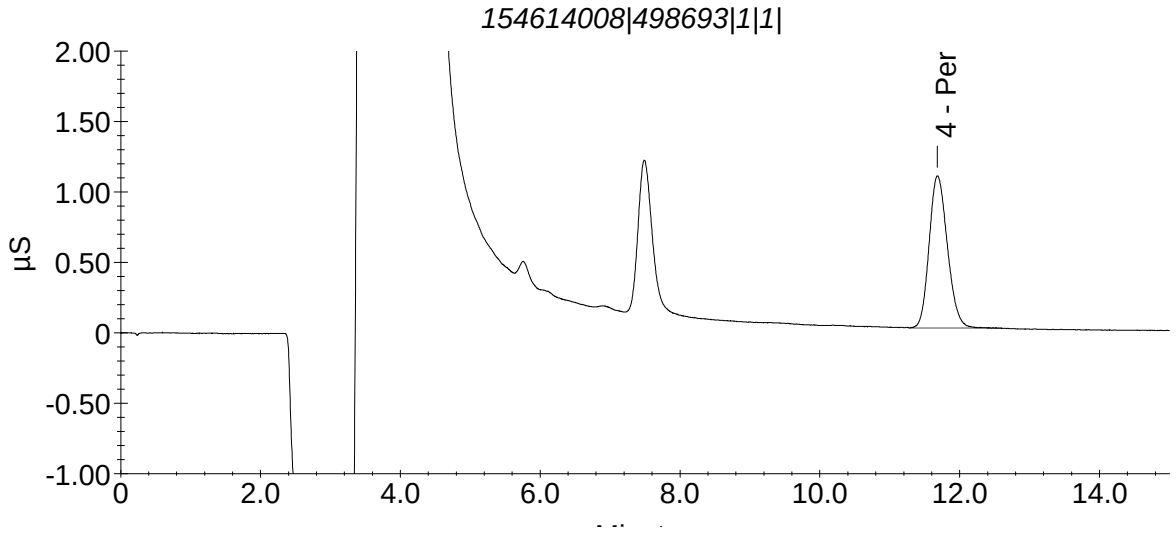
Sample Name : 154614008|498693|1|1|
Data File Name : C:\PEAKNET\DATA\060201_023.DXD
Date Time Updated : 2/1/2006 15:42:16

Method : ...\060124.met	Inject# : 23	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 15:27:12	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.80	0.00	57160489	8718763
4	Perchlorate	11.68	148.21	196532	10809



Sample Analysis Report

Sample Name : 154614010|498693|1|1|
Data File Name : C:\PEAKNET\DATA\060201_024.DXD
Date Time Updated : 2/1/2006 15:57:25

Method : ...\060124.met
Analyst : mar1
Date : 2/1/2006 15:42:20
Units : ug/L

Inject# : 24
Detector : CD20
Column Type : AS16,
Dilution : 1.00

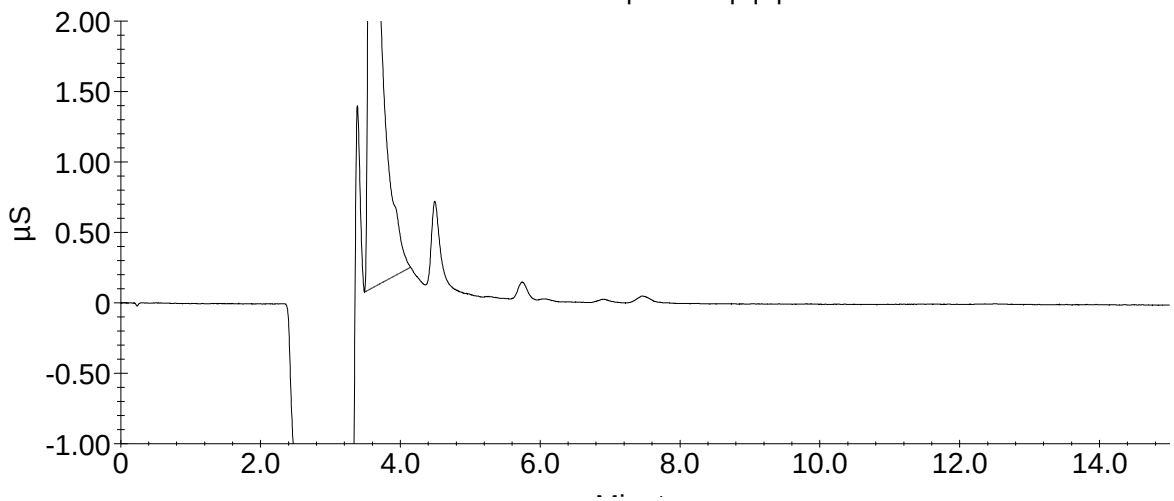
System Name : DX-500
Calibration Type : EXTERNAL

SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.56	0.00	491739	38920



Sample Analysis Report

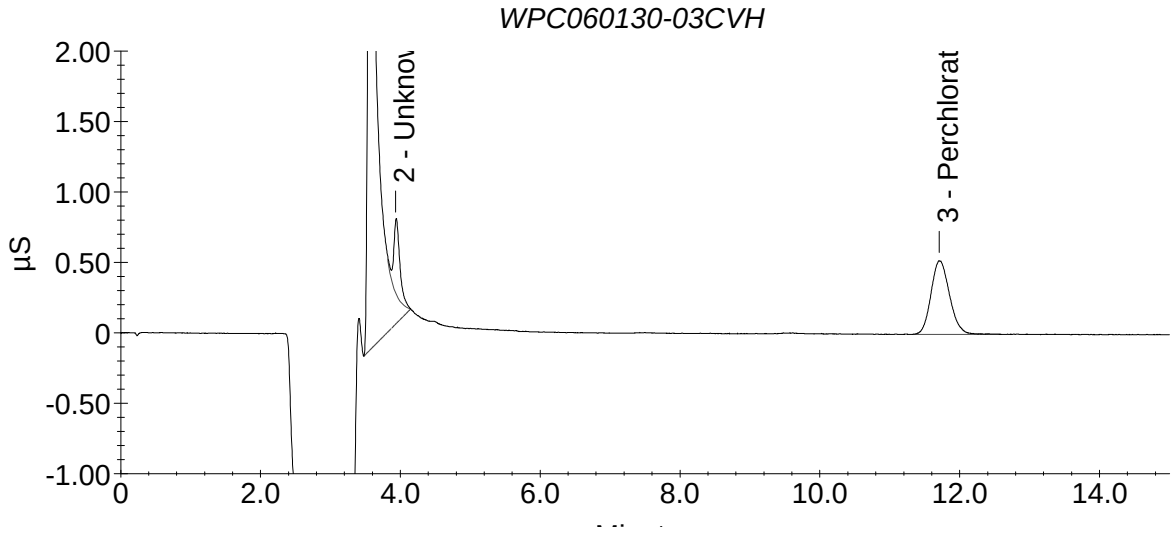
Sample Name : WPC060130-03CVH
Data File Name : C:\PEAKNET\DATA\060201_031.DXD
Date Time Updated : 2/1/2006 17:43:26

Method : ...\060124.met	Inject# : 31	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 17:28:22	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.56	0.00	397298	42366
3	Perchlorate	11.71	73.30	96553	5220



Sample Analysis Report

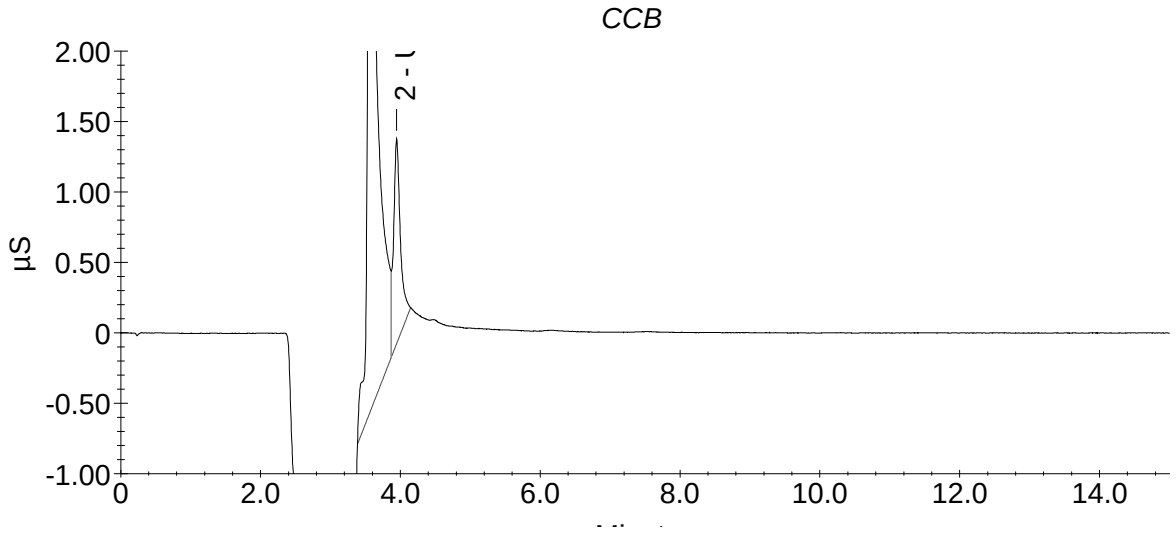
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\060201_032.DXD
Date Time Updated : 2/1/2006 17:58:34

Method : ...\060124.met	Inject# : 32	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/1/2006 17:43:30	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.56	0.00	510206	55454



Sample Analysis Report

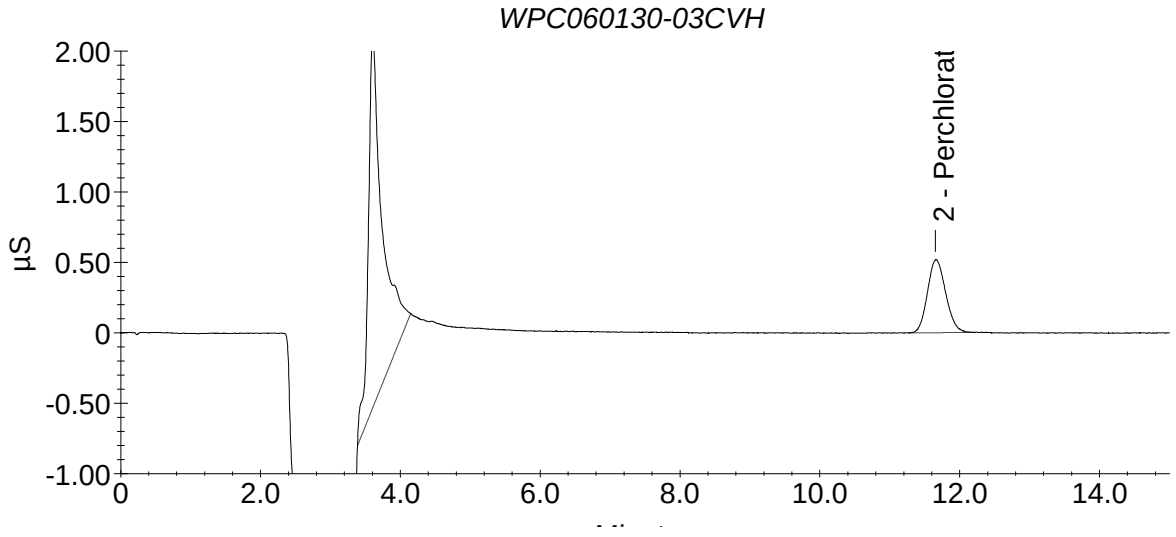
Sample Name : WPC060130-03CVH
Data File Name : C:\PEAKNET\DATA\060201_058.DXD
Date Time Updated : 2/2/2006 10:16:18

Method : ...\060124.met	Inject# : 58	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/2/2006 10:01:17	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak	3.60	0.00	372507	26919
2	Perchlorate	11.65	71.35	93945	5176



Sample Analysis Report

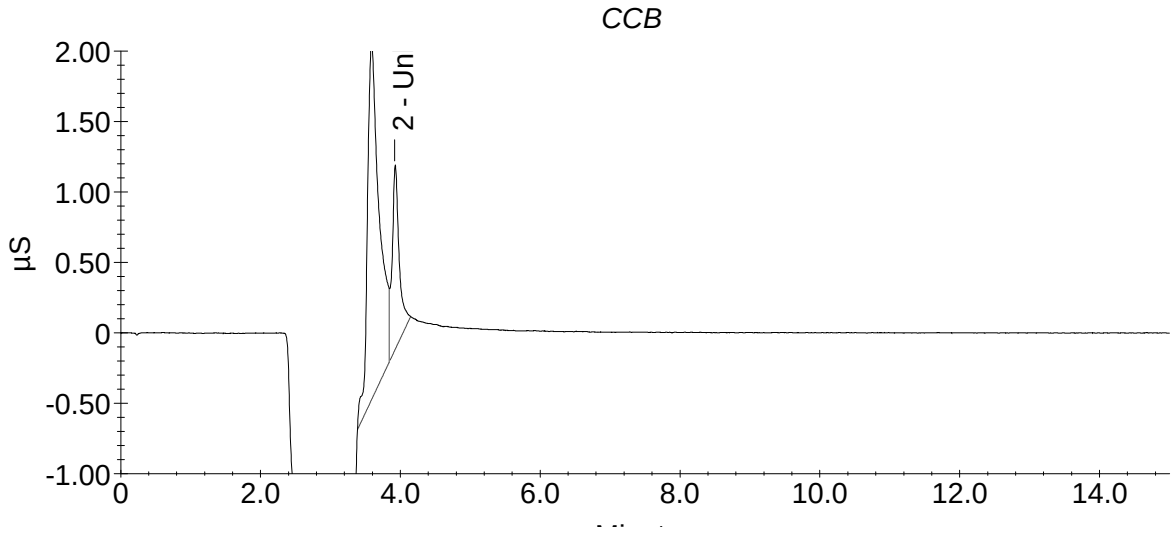
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\060201_059.DXD
Date Time Updated : 2/2/2006 10:31:26

Method : ...\060124.met	Inject# : 59	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/2/2006 10:16:22	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.59	0.00	296134	25339



Sample Analysis Report

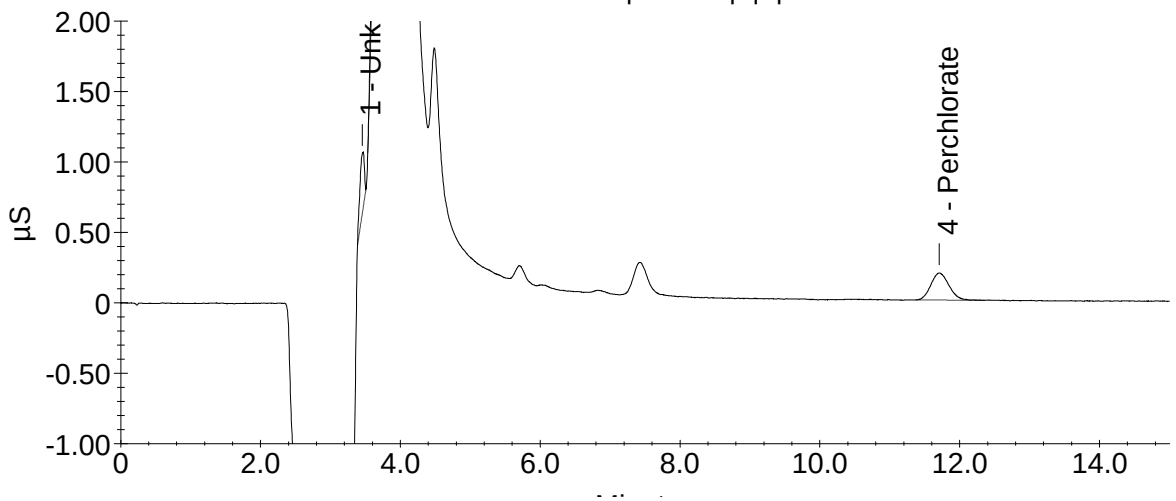
Sample Name : 154614008|498693|5|2|
Data File Name : C:\PEAKNET\DATA\060201_060.DXD
Date Time Updated : 2/2/2006 10:46:34

Method : ...\060124.met	Inject# : 60	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/2/2006 10:31:30	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.69	0.00	20366925	3862061
4	Perchlorate	11.71	26.84	34540	1918



Sample Analysis Report

Sample Name : WPC060130-03CVL
Data File Name : C:\PEAKNET\DATA\060201_061.DXD
Date Time Updated : 2/2/2006 11:01:43

Method : ...\060124.met
Analyst : mar1
Date : 2/2/2006 10:46:38
Units : ug/L

Inject# : 61
Detector : CD20
Column Type : AS16,
Dilution : 1.00

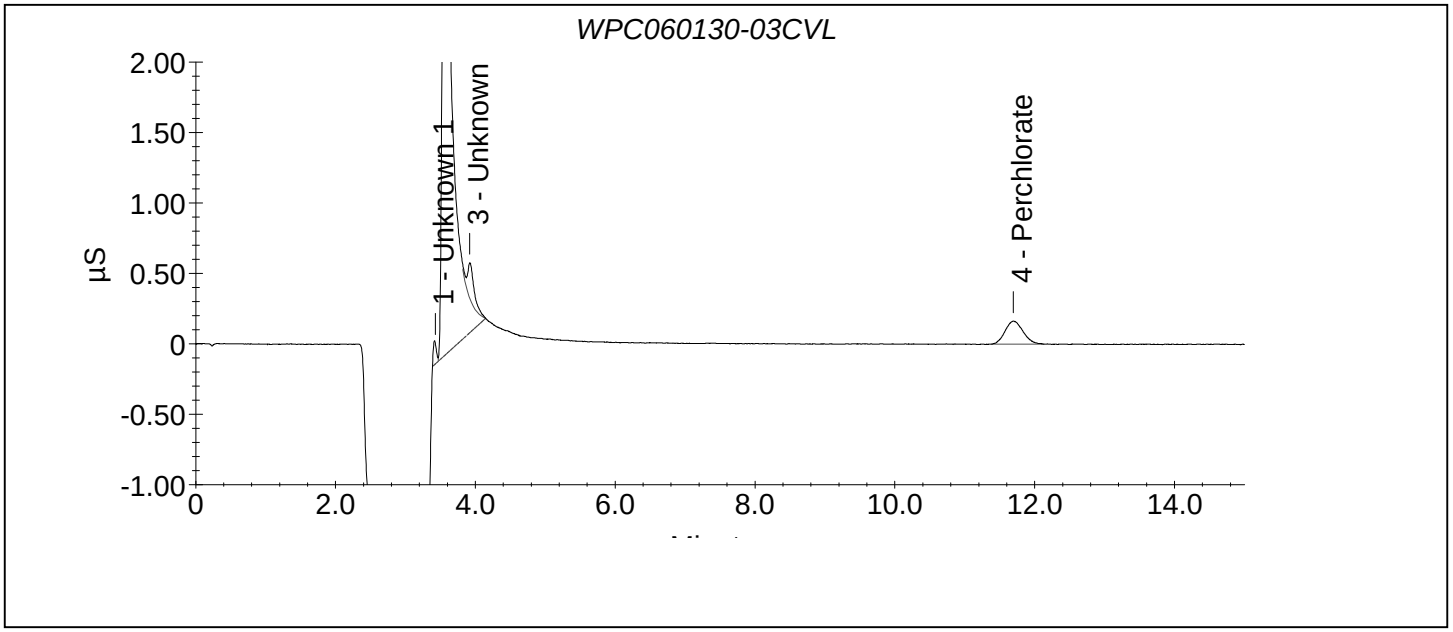
System Name : DX-500
Calibration Type : EXTERNAL

SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
2	Solvent peak	3.56	0.00	381864	32699
4	Perchlorate	11.69	22.85	29217	1636



Sample Analysis Report

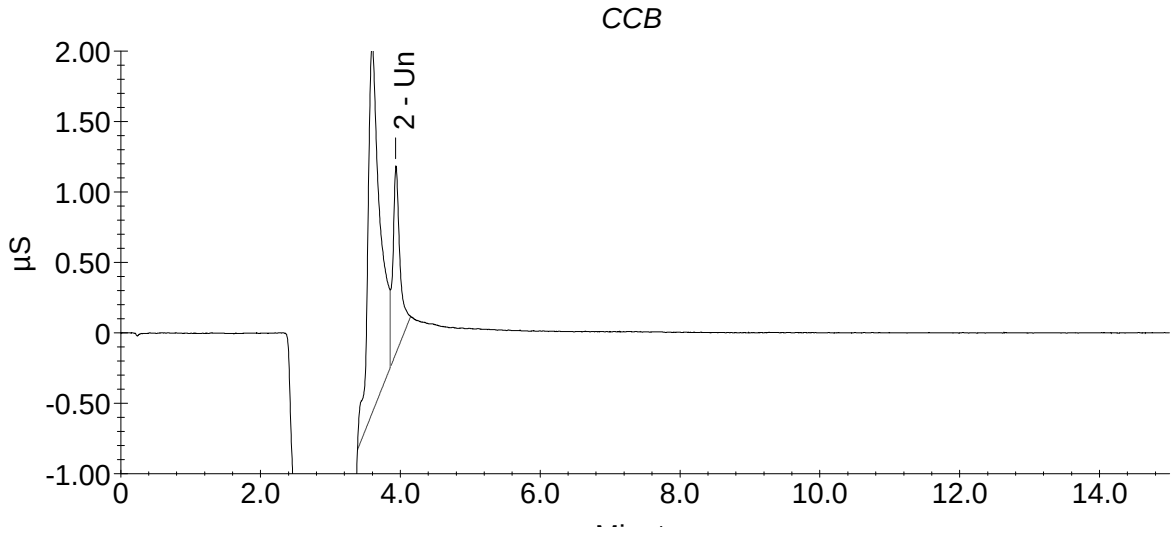
Sample Name : CCB
Data File Name : C:\PEAKNET\DATA\060201_062.DXD
Date Time Updated : 2/2/2006 11:16:52

Method : ...\060124.met	Inject# : 62	System Name : DX-500
Analyst : mar1	Detector : CD20	Calibration Type : EXTERNAL
Date : 2/2/2006 11:01:47	Column Type : AS16,	
Units : ug/L	Dilution : 1.00	SOP: GL-GC-E-086 Revision 03

Peak Information : All Components

Peak Information : All Components

Peak #	Component	Retention Time	Amount (ug/L)	Peak Area	Peak Height
1	Solvent peak Perchlorate	3.59	0.00	316215	25984



Solids, Total Dissolved

Batch: 498292.0
Analyst: GXA2

TDS/TS/VS LogBook

Procedure Code BALDSEP_LF
Procedure Description EPA 160.1 Solids, Dissolved
Lab Sop GL-GC-E-001

Sample Type	Sample Id	Lot Id	Nc(mg/L)	Recovery(%)
LCS	1201019838	WTD480371-01	300	98

Sample Type	Sample Id	Rpd(%)
DUP	1201019839	11.111111111111
DUP	1201019840	8.3484573502722
DUP	1201019851	3.4782608695652

Sample Id	Sample Type	Original Hsn	Instrument	Run Date	Crucible ID	Aliquot (L)	Crucible Wt(g)	Final Wt Event 1	Final Wt Event 2	Final Wt Event 3	Final Wt Event 4	Result	Units
1201019837	MB		BAL216	27-JAN-2006 13:29	P9	0.1	52.6747	52.6748	52.6748			1	mg/L
1201019838	LCS		BAL216	27-JAN-2006 13:29	R4	0.1	53.0614	53.091	53.0908			294	mg/L
154478001	SAMPLE		BAL216	27-JAN-2006 13:29	MB8	0.1	54.3327	54.3365	54.3361			34	mg/L
1201019839	DUP	154478001	BAL216	27-JAN-2006 13:29	HS	0.1	49.88	49.8839	49.8838			38	mg/L
154478002	SAMPLE		BAL216	27-JAN-2006 13:29	911	0.1	48.9064	48.9091	48.9087			23	mg/L
154500001	SAMPLE		BAL216	27-JAN-2006 13:29	7E	0.1	47.8355	47.8786	47.8785			430	mg/L
154500002	SAMPLE		BAL216	27-JAN-2006 13:29	PLE	0.1	69.8347	69.8785	69.8788			441	mg/L
154500003	SAMPLE		BAL216	27-JAN-2006 13:29	RUN	0.1	48.7411	48.7659	48.7662			251	mg/L
154544002	SAMPLE		BAL216	27-JAN-2006 13:29	K9	0.1	56.3857	56.4232	56.4234			377	mg/L
154544003	SAMPLE		BAL216	27-JAN-2006 13:29	SAM	0.1	67.1105	67.1318	67.132			215	mg/L
154544004	SAMPLE		BAL216	27-JAN-2006 13:29	Y8	0.1	58.8962	58.9185	58.9187			225	mg/L
154544005	SAMPLE		BAL216	27-JAN-2006 13:29	CK	0.1	52.1936	52.265	52.2655			719	mg/L
154544006	SAMPLE		BAL216	27-JAN-2006 13:29	BLH	0.1	57.6535	57.8524	57.8527			1992	mg/L
154546001	SAMPLE		BAL216	27-JAN-2006 13:29	SC	0.1	51.9002	51.9223	51.9226			224	mg/L
154597001	SAMPLE		BAL216	27-JAN-2006 13:29	Q1	0.1	58.1296	58.1565	58.156			264	mg/L
1201019840	DUP	154597001	BAL216	27-JAN-2006 13:29	K2	0.1	53.9313	53.96	53.96			287	mg/L
154597002	SAMPLE		BAL216	27-JAN-2006 13:29	M4	0.1	57.3423	57.3725	57.3722			299	mg/L
154597003	SAMPLE		BAL216	27-JAN-2006 13:29	AN	0.1	60.8222	60.845	60.8452			230	mg/L
154614001	SAMPLE		BAL216	27-JAN-2006 13:29	HD	0.1	50.9877	50.9993	50.999			113	mg/L
1201019851	DUP	154614001	BAL216	27-JAN-2006 13:29	T7	0.1	56.8875	56.8988	56.8992			117	mg/L
154614002	SAMPLE		BAL216	27-JAN-2006 13:29	END	0.1	64.1453	64.1567	64.1571			118	mg/L
154614008	SAMPLE		BAL216	27-JAN-2006 13:29	4C	0.1	49.293	49.3228	49.3225			295	mg/L
154614010	SAMPLE		BAL216	27-JAN-2006 13:29	W3	0.1	56.4344	56.4366	56.4368			24	mg/L
154617001	SAMPLE		BAL216	27-JAN-2006 13:29	NOW	0.1	61.8685	61.9046	61.9047			362	mg/L

Comments: **All Weights are in Grams**

A) Result = (Final - Crucible)/Aliquot * 1000

B) Prep Factor = 0.5 / Aliquot

Note: Aliquot is used for the determination of the effective MDL and PQL in LIMS

Specific Conductivity

Analytical Logbook

Conductivity and Salinity

Batch ID: **499906.0**
Analyst: **James Robinson**
Method: **EPA 120.1**
Lab SOP: **GL-GC-E-009 REV# 6**
Instrument: **Orion 160 Conductivity Meter**

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
CCV	240	Conductivity LCS	WCO335693-06	150	mL
LCS	1201023670	Conductivity LCS	WCO335693-06	150	mL

Sample ID	Run Date	Dilution	Temperature (C)	Conductivity Result (umhos/cm)
1201023670 LCS	12-FEB-2006 18:53:28	1	22.8	1467
154285001	12-FEB-2006 18:54:11	1	16.9	144.2
1201023669 DUP (154285001)	12-FEB-2006 18:54:51	1	16.8	143.6
154286001	12-FEB-2006 18:55:17	1	15.7	105.3
154353002	12-FEB-2006 18:56:07	1	20.4	409
CCV	12-FEB-2006 18:56:46	1	22.8	1467
154415001	12-FEB-2006 18:57:29	1	17.2	117.7
154415002	12-FEB-2006 18:57:44	1	16	109.5
154614001	12-FEB-2006 18:58:29	1	16.5	119.2
154614002	12-FEB-2006 18:59:27	1	16.5	120.6
154614008	12-FEB-2006 19:00:11	1	19.6	336
CCV	12-FEB-2006 19:00:59	1	22.8	1467
154614010	12-FEB-2006 19:01:46	1	20.4	1.65
154721001	12-FEB-2006 19:02:01	1	20.2	138.8
CCV	12-FEB-2006 19:02:40	1	22.4	1467

Calibration Information:

Run Date: 12-FEB-06 18:46
Instrument: CON160
Analyst: JAR2

Standard	Observed	Theoretical		%Recovery
WCO060212-05	14.77	14.5	umhos/cm	101.86
WCO060212-03	1400	1413	umhos/cm	99.080
WCO060212-04	1870	1900	umhos/cm	98.421
WCO060212-08	25000	24800	umhos/cm	100.81
WCO060212-01	256	250	umhos/cm	102.4
WCO060212-02	741	750	umhos/cm	98.8

Comments:

Total Kjeldahl Nitrogen

Prep LogBook

Analyst: LXW1 Verified by:_____

Batch: 498440

Lab SOP: GL-GC-E-071 REV# 6

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201020231	UTR050805-01	.2	mL
MS	1201020233	UTR050805-01	.2	mL
MS	1201020235	UTR050805-01	.2	mL
MSD	1201020236	UTR050805-01	.2	mL
MSD	1201020237	UTR050805-01	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201020230		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
LCS	1201020231		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154544002		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
DUP	1201020234	154544002	EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
MS	1201020235	154544002	EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
MSD	1201020236	154544002	EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154544003		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154544004		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154544005		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154544006		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154546001		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614003		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614003		EPA 351.2 Prep	13-FEB-2006 08:59	20 mL	20 mL	1	GROUND WATER
DUP	1201020232	154614003	EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
DUP	1201020232	154614003	EPA 351.2 Prep	13-FEB-2006 08:59	20 mL	20 mL	1	GROUND WATER
MS	1201020233	154614003	EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
MS	1201020233	154614003	EPA 351.2 Prep	13-FEB-2006 08:59	20 mL	20 mL	1	GROUND WATER
MSD	1201020237	154614003	EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
MSD	1201020237	154614003	EPA 351.2 Prep	13-FEB-2006 08:59	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614004		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614009		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614010		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154617001		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	WASTE WATER
SAMPLE	154630002		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154630003		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154630004		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER
SAMPLE	154630005		EPA 351.2 Prep	31-JAN-2006 08:29	20 mL	20 mL	1	GROUND WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description
480242-C	5 mL	TKN/PO4 Digestion Solution

Comments:

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/3/2006 12:38:32	OM_2-3-2006_12-37-35
3.0 ppm Std.		1	gxm2	2/3/2006 12:39:21	OM_2-3-2006_12-37-35
1.0 ppm Std.		1	gxm2	2/3/2006 12:40:10	OM_2-3-2006_12-37-35
0.5 ppm Std		1	gxm2	2/3/2006 12:41:00	OM_2-3-2006_12-37-35
0.1 ppm Std		1	gxm2	2/3/2006 12:41:51	OM_2-3-2006_12-37-35
ICAL-00		1	gxm2	2/3/2006 12:42:43	OM_2-3-2006_12-37-35
ICV		1	gxm2	2/3/2006 12:44:40	OM_2-3-2006_12-37-35
ICB		1	gxm2	2/3/2006 12:46:36	OM_2-3-2006_12-37-35
1201020231	498441	1	gxm2	2/3/2006 12:49:22	OM_2-3-2006_12-37-35
154544002	498441	1	gxm2	2/3/2006 12:50:12	OM_2-3-2006_12-37-35
1201020234	498441	1	gxm2	2/3/2006 12:51:03	OM_2-3-2006_12-37-35
1201020235	498441	1	gxm2	2/3/2006 12:51:54	OM_2-3-2006_12-37-35
1201020236	498441	1	gxm2	2/3/2006 12:52:43	OM_2-3-2006_12-37-35
154544003	498441	1	gxm2	2/3/2006 12:53:33	OM_2-3-2006_12-37-35
154544004	498441	1	gxm2	2/3/2006 12:54:23	OM_2-3-2006_12-37-35
154544005	498441	1	gxm2	2/3/2006 12:55:12	OM_2-3-2006_12-37-35
154544006	498441	1	gxm2	2/3/2006 12:56:01	OM_2-3-2006_12-37-35
CCV		1	gxm2	2/3/2006 12:56:50	OM_2-3-2006_12-37-35
CCB		1	gxm2	2/3/2006 12:58:45	OM_2-3-2006_12-37-35
154546001	498441	1	gxm2	2/3/2006 13:00:39	OM_2-3-2006_12-37-35
154614003	498441	1	gxm2	2/3/2006 13:01:27	OM_2-3-2006_12-37-35
1201020232	498441	1	gxm2	2/3/2006 13:02:15	OM_2-3-2006_12-37-35
1201020233	498441	1	gxm2	2/3/2006 13:03:03	OM_2-3-2006_12-37-35
1201020237	498441	1	gxm2	2/3/2006 13:03:50	OM_2-3-2006_12-37-35
154614004	498441	1	gxm2	2/3/2006 13:04:39	OM_2-3-2006_12-37-35
154614009	498441	1	gxm2	2/3/2006 13:05:31	OM_2-3-2006_12-37-35
154614010	498441	1	gxm2	2/3/2006 13:06:22	OM_2-3-2006_12-37-35
154617001	498441	1	gxm2	2/3/2006 13:07:13	OM_2-3-2006_12-37-35
154630002	498441	1	gxm2	2/3/2006 13:08:04	OM_2-3-2006_12-37-35
CCV		1	gxm2	2/3/2006 13:08:54	OM_2-3-2006_12-37-35
CCB		1	gxm2	2/3/2006 13:10:51	OM_2-3-2006_12-37-35
CCV		1	gxm2	2/3/2006 13:20:56	OM_2-3-2006_12-37-35

Original Run Filename: OM_2-3-2006_12-37-35.OMN created 2/3/2006 12:37:35
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-3-2006_12-37-35.OMN last modified 2/3/2006 13:22:06
Current Run Author's Signature: [gxm2]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060203-01	1	S9	5.000	18.290	2/3/2006@12:38:32			5.0 ppm Std.
WTR060203-02	1	S10	3.000	10.818	2/3/2006@12:39:21			3.0 ppm Std.
WTR060203-04	1	S11	1.000	3.582	2/3/2006@12:40:10			1.0 ppm Std.
WTR060203-05	1	S12	0.500	2.146	2/3/2006@12:41:00			0.5 ppm Std
WTR060203-06	1	S13	0.100	0.152	2/3/2006@12:41:51			0.1 ppm Std
WTR060203-10 0.0 ppm	1	S15	0.000	-0.157	2/3/2006@12:42:43			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99965 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR060203-08 ICV	1	S16	0.993	3.582	2/3/2006@12:44:40			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.993 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.993 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	-0.008	-0.087	2/3/2006@12:46:36			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.008 < 0.100					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.008 > -0.100					
Message			ICB Passed					
Action			Continue					
1201020230|498441|MB	1	1	-0.138	-0.562	2/3/2006@12:48:31			
1201020231||LCS	1	2	0.915	3.297	2/3/2006@12:49:22			
154544002	1	3	1.619	5.875	2/3/2006@12:50:12			
1201020234||DUP	1	4	1.480	5.365	2/3/2006@12:51:03			
1201020235||MS	1	5	2.636	9.602	2/3/2006@12:51:54			
1201020236||MSD	1	6	2.731	9.948	2/3/2006@12:52:43			
154544003	1	7	2.474	9.008	2/3/2006@12:53:33			
154544004	1	8	-0.029	-0.163	2/3/2006@12:54:23			
154544005	1	9	2.653	9.664	2/3/2006@12:55:12			
154544006	1	10	41.939	153.574	2/3/2006@12:56:01			
WTR060203-04 CCV	1	S11	1.051	3.794	2/3/2006@12:56:50			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.051 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.051 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	-0.035	-0.184	2/3/2006@12:58:45			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.035 < 0.100					
Message			CCB Passed					
Action			Continue					

DQM Test: < - Concentration Limit								
Result:			-0.035 > -0.100					
Message			CCB Passed					
Action			Continue					
154546001	1	11	1.444	5.235	2/3/2006@13:00:39			
154614003	1	12	-0.100	-0.421	2/3/2006@13:01:27			
1201020232||DUP	1	13	-0.139	-0.564	2/3/2006@13:02:15			
1201020233||MS	1	14	0.878	3.162	2/3/2006@13:03:03			
1201020237||MSD	1	15	0.858	3.089	2/3/2006@13:03:50			
154614004	1	16	-0.119	-0.493	2/3/2006@13:04:39			
154614009	1	17	0.053	0.139	2/3/2006@13:05:31			
154614010	1	18	-0.117	-0.484	2/3/2006@13:06:22			
154617001	1	19	5.484	20.035	2/3/2006@13:07:13			
154630002	1	20	0.615	2.196	2/3/2006@13:08:04			
WTR060203-04 CCV	1	S11	1.071	3.866	2/3/2006@13:08:54			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.071 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.071 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	-0.026	-0.152	2/3/2006@13:10:51			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.026 < 0.100					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.026 > -0.100					
Message			CCB Passed					
Action			Continue					
154630003	1	21	0.114	0.361	2/3/2006@13:12:45			
154630004	1	22	-0.002	-0.063	2/3/2006@13:13:35			
154630005	1	23	0.239	0.820	2/3/2006@13:14:25			
1201020243|498447|MB	1	24	-0.159	-0.639	2/3/2006@13:15:15			
1201020244||LCS	1	25	1.030	3.718	2/3/2006@13:16:04			
154616001	1	26	35.172	128.787	2/3/2006@13:16:53			
1201020245||DUP	1	27	32.862	120.326	2/3/2006@13:17:42			
1201020246||MS	1	28	35.634	130.481	2/3/2006@13:18:30			
1201020247||MSD	1	29	36.111	132.225	2/3/2006@13:19:18			
154544006	1	10	1.656	6.010	2/3/2006@13:20:07		50.00	
WTR060203-04 CCV	1	S11	1.121	4.049	2/3/2006@13:20:56			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.121 > 1.104					
Message			CCV Failed					
Action			Stop Run					
DQM Test: < - Concentration Limit								
Result:			1.121 > 0.895					
Message			CCV Passed					
Action			Continue					

Author: gxm2 Date : 2/3/2006

Channel 1 (TKN) : Current View

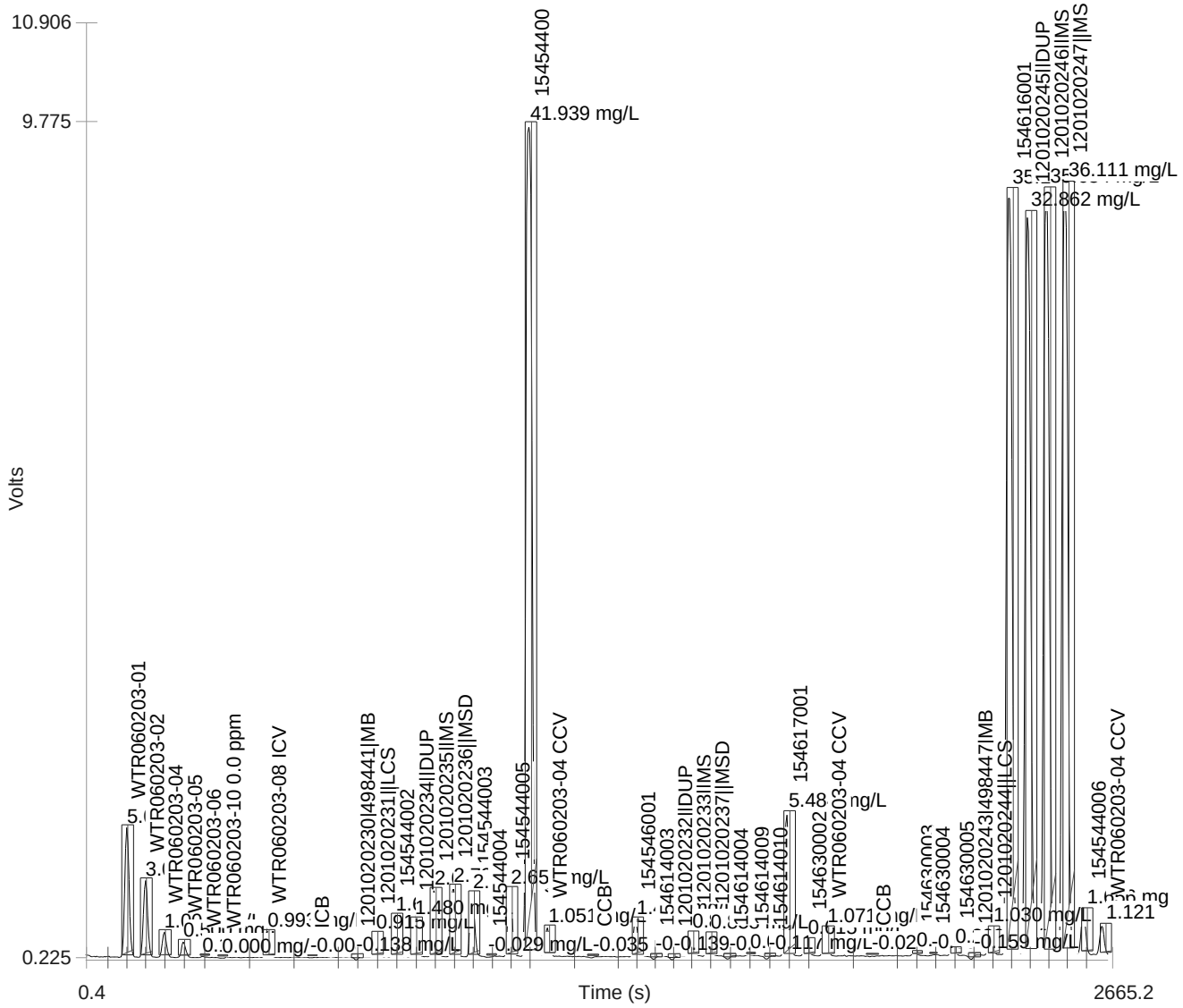
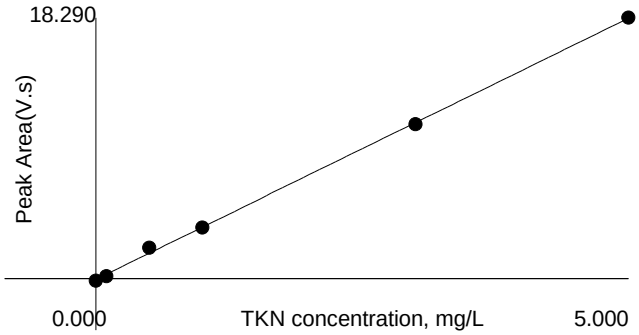


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	18.290	1.455	-0.2	2/3/2006	12:39:41
2	3.000	1	10.818	0.857	1.0	2/3/2006	12:40:29
3	1.000	1	3.582	0.285	0.7	2/3/2006	12:41:18
4	0.500	1	2.146	0.175	-20.7	2/3/2006	12:42:08
5	0.100	1	0.152	0.014	51.6	2/3/2006	12:42:59
6	0.000	1	-0.157	-0.011		2/3/2006	12:43:52

Author: gxm2 Date : 2/3/2006

Figure 1: TKN



Area = 3.661 * Conc - 0.052
Conc = 0.273 * Area + 0.015
Correlation Coefficient (r) = 0.99965

No Weighting

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/3/2006 14:33:32	OM_2-3-2006_14-32-46
3.0 ppm Std.		1	gxm2	2/3/2006 14:34:21	OM_2-3-2006_14-32-46
1.0 ppm Std.		1	gxm2	2/3/2006 14:35:11	OM_2-3-2006_14-32-46
0.5 ppm Std		1	gxm2	2/3/2006 14:36:00	OM_2-3-2006_14-32-46
0.1 ppm Std		1	gxm2	2/3/2006 14:36:52	OM_2-3-2006_14-32-46
ICAL-00		1	gxm2	2/3/2006 14:37:44	OM_2-3-2006_14-32-46
ICV		1	gxm2	2/3/2006 14:39:41	OM_2-3-2006_14-32-46
ICB		1	gxm2	2/3/2006 14:41:37	OM_2-3-2006_14-32-46
154630003		1	gxm2	2/3/2006 14:43:31	OM_2-3-2006_14-32-46
154630004		1	gxm2	2/3/2006 14:44:22	OM_2-3-2006_14-32-46
154630005		1	gxm2	2/3/2006 14:45:11	OM_2-3-2006_14-32-46
1201020244	498447	1	gxm2	2/3/2006 14:46:50	OM_2-3-2006_14-32-46
154616001	498447	50	gxm2	2/3/2006 14:47:39	OM_2-3-2006_14-32-46
1201020245	498447	50	gxm2	2/3/2006 14:48:28	OM_2-3-2006_14-32-46
1201020246	498447	50	gxm2	2/3/2006 14:49:17	OM_2-3-2006_14-32-46
CCV		1	gxm2	2/3/2006 14:50:06	OM_2-3-2006_14-32-46
CCB		1	gxm2	2/3/2006 14:52:02	OM_2-3-2006_14-32-46
1201020247	498447	50	gxm2	2/3/2006 14:53:56	OM_2-3-2006_14-32-46
154544006	498447	50	gxm2	2/3/2006 14:54:44	OM_2-3-2006_14-32-46
1201020243	498447	1	gxm2	2/3/2006 14:55:33	OM_2-3-2006_14-32-46
154617001	498447	5	gxm2	2/3/2006 14:56:23	OM_2-3-2006_14-32-46
154614003	498447	5	gxm2	2/3/2006 14:57:13	OM_2-3-2006_14-32-46
1201020232	498447	5	gxm2	2/3/2006 14:58:01	OM_2-3-2006_14-32-46
1201020233	498447	5	gxm2	2/3/2006 14:58:49	OM_2-3-2006_14-32-46
1201020237	498447	5	gxm2	2/3/2006 14:59:36	OM_2-3-2006_14-32-46
1201020230	498441	1	gxm2	2/3/2006 15:01:17	OM_2-3-2006_14-32-46
CCV		1	gxm2	2/3/2006 15:02:07	OM_2-3-2006_14-32-46
CCB		1	gxm2	2/3/2006 15:04:03	OM_2-3-2006_14-32-46

Original Run Filename: OM_2-3-2006_14-32-46.OMN created 2/3/2006 14:32:46
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-3-2006_14-32-46.OMN last modified 2/3/2006 15:05:13
Current Run Author's Signature: [gxm2]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060203-01	1	S9	5.000	19.982	2/3/2006@14:33:32			5.0 ppm Std.
WTR060203-02	1	S10	3.000	11.835	2/3/2006@14:34:21			3.0 ppm Std.
WTR060203-04	1	S11	1.000	4.157	2/3/2006@14:35:11			1.0 ppm Std.
WTR060203-05	1	S12	0.500	2.101	2/3/2006@14:36:00			0.5 ppm Std
WTR060203-06	1	S13	0.100	0.218	2/3/2006@14:36:52			0.1 ppm Std
WTR060203-10 0.0 ppm	1	S15	0.000	-0.114	2/3/2006@14:37:44			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99984 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR060203-08 ICV	1	S16	0.993	3.937	2/3/2006@14:39:41			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.993 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.993 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	-0.025	-0.137	2/3/2006@14:41:37			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.025 < 0.100					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.025 > -0.100					
Message			ICB Passed					
Action			Continue					
154630003	1	21	0.090	0.325	2/3/2006@14:43:31			
154630004	1	22	0.010	0.006	2/3/2006@14:44:22			
154630005	1	23	0.063	0.217	2/3/2006@14:45:11			
1201020243|498447|MB	1	24	-0.118	-0.508	2/3/2006@14:46:01			
1201020244||LCS	1	25	1.011	4.007	2/3/2006@14:46:50			
154616001	1	26	1.032	4.093	2/3/2006@14:47:39		50.00	
1201020245||DUP	1	27	0.931	3.686	2/3/2006@14:48:28		50.00	
1201020246||MS	1	28	1.031	4.089	2/3/2006@14:49:17		50.00	
WTR060203-04 CCV	1	S11	1.045	4.144	2/3/2006@14:50:06			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.045 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.045 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	-0.026	-0.140	2/3/2006@14:52:02			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.026 < 0.100					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.026 > -0.100					

		Message	CCB Passed					
		Action	Continue					
1201020247||MSD	1	29	1.064	4.222	2/3/2006@14:53:56		50.00	
154544006	1	10	1.441	5.726	2/3/2006@14:54:44		50.00	
1201020243|498447|MB	1	24	-0.020	-0.114	2/3/2006@14:55:33			
154617001	1	19	1.119	4.438	2/3/2006@14:56:23		5.00	
154614003	1	12	0.145	0.545	2/3/2006@14:57:13		5.00	
1201020232||DUP	1	13	-0.010	-0.074	2/3/2006@14:58:01		5.00	
1201020233||MS	1	14	0.228	0.875	2/3/2006@14:58:49		5.00	
1201020237||MSD	1	15	0.203	0.777	2/3/2006@14:59:36		5.00	
154614010	1	18	-0.271	-1.121	2/3/2006@15:00:26			
1201020230|498441|MB	1	1	-0.015	-0.096	2/3/2006@15:01:17			
WTR060203-04 CCV	1	S11	1.079	4.279	2/3/2006@15:02:07			CCV
		Known Conc:	1.000					
			DQM Test: > + Concentration Limit					
		Result:	1.079 < 1.104					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	1.079 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S15	-0.046	-0.221	2/3/2006@15:04:03			CCB
		Known Conc:	0.000					
			DQM Test: > + Concentration Limit					
		Result:	-0.046 < 0.100					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-0.046 > -0.100					
		Message	CCB Passed					
		Action	Continue					

Author: gxm2 Date : 2/3/2006

Channel 1 (TKN) : Current View

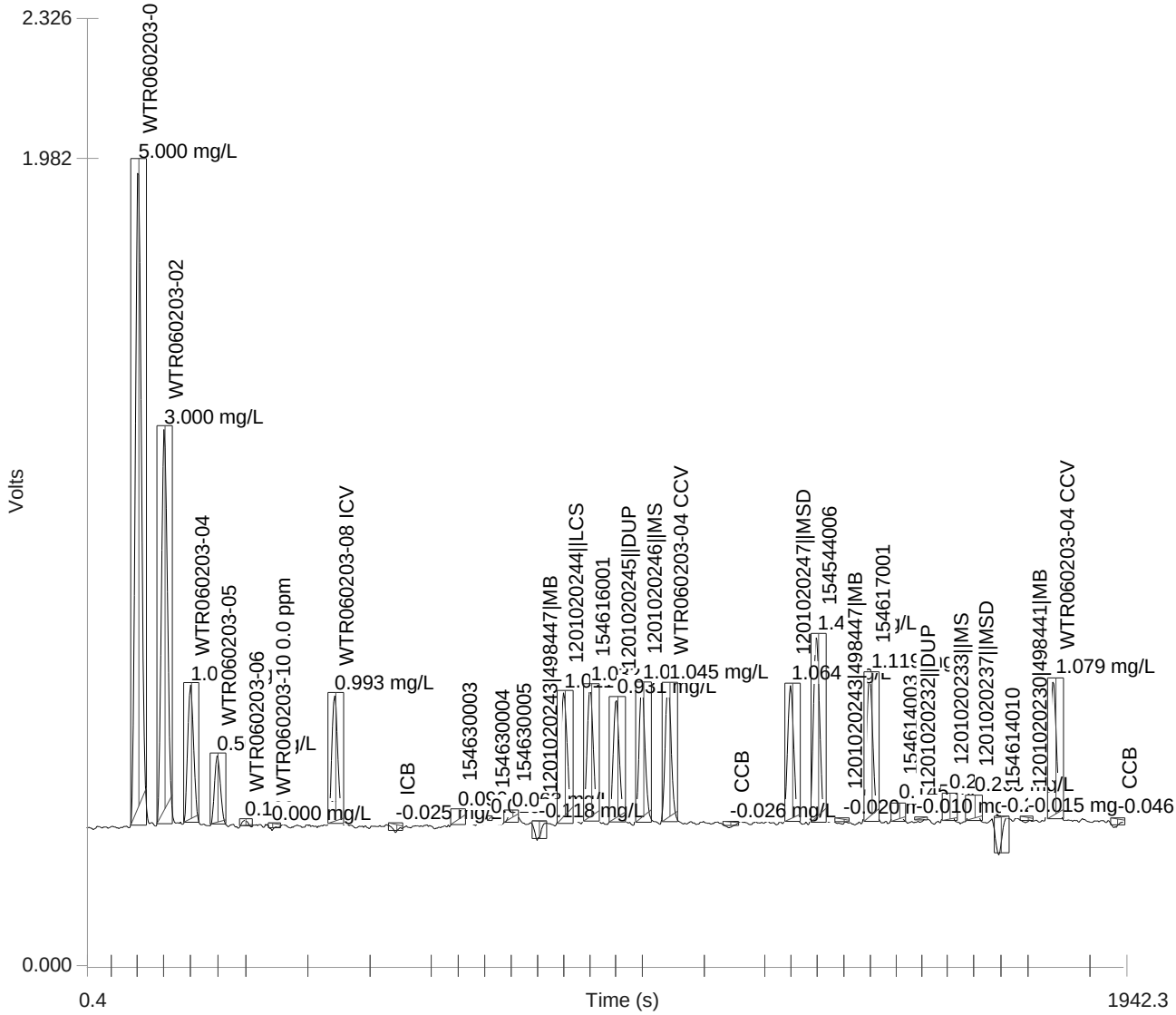
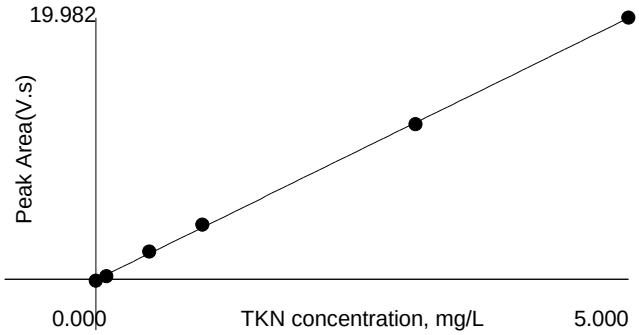


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	19.982	1.590	-0.1	2/3/2006	14:34:41
2	3.000	1	11.835	0.941	1.0	2/3/2006	14:35:29
3	1.000	1	4.157	0.334	-4.9	2/3/2006	14:36:19
4	0.500	1	2.101	0.170	-6.9	2/3/2006	14:37:09
5	0.100	1	0.218	0.016	40.5	2/3/2006	14:38:00
6	0.000	1	-0.114	-0.011		2/3/2006	14:38:53

Author: gxm2 Date : 2/3/2006

Figure 1: TKN



Area = 3.998 * Conc - 0.033
Conc = 0.250 * Area + 0.009
Correlation Coefficient (r) = 0.99984

No Weighting

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/3/2006 15:50:49	OM_2-3-2006_15-49-19
3.0 ppm Std.		1	gxm2	2/3/2006 15:51:38	OM_2-3-2006_15-49-19
1.0 ppm Std.		1	gxm2	2/3/2006 15:52:28	OM_2-3-2006_15-49-19
0.5 ppm Std		1	gxm2	2/3/2006 15:53:18	OM_2-3-2006_15-49-19
0.1 ppm Std		1	gxm2	2/3/2006 15:54:10	OM_2-3-2006_15-49-19
ICAL-00		1	gxm2	2/3/2006 15:55:02	OM_2-3-2006_15-49-19
ICV		1	gxm2	2/3/2006 15:56:58	OM_2-3-2006_15-49-19
ICB		1	gxm2	2/3/2006 15:58:54	OM_2-3-2006_15-49-19
154614004	498441	5	gxm2	2/3/2006 16:00:49	OM_2-3-2006_15-49-19
154614010	498441	10	gxm2	2/3/2006 16:01:43	OM_2-3-2006_15-49-19
CCV		1	gxm2	2/3/2006 16:02:31	OM_2-3-2006_15-49-19
CCB		1	gxm2	2/3/2006 16:04:30	OM_2-3-2006_15-49-19

Original Run Filename: OM_2-3-2006_15-49-19.OMN created 2/3/2006 15:49:19
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-3-2006_15-49-19.OMN last modified 2/3/2006 16:05:40
Current Run Author's Signature: [gxm2]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060203-01	1	S9	5.000	21.305	2/3/2006@15:50:49			5.0 ppm Std.
WTR060203-02	1	S10	3.000	12.229	2/3/2006@15:51:38			3.0 ppm Std.
WTR060203-04	1	S11	1.000	4.155	2/3/2006@15:52:28			1.0 ppm Std.
WTR060203-05	1	S12	0.500	2.147	2/3/2006@15:53:18			0.5 ppm Std
WTR060203-06	1	S13	0.100	0.157	2/3/2006@15:54:10			0.1 ppm Std
WTR060203-10 0.0 ppm	1	S15	0.000	-0.230	2/3/2006@15:55:02			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99969 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR060203-08 ICV	1	S16	0.976	3.966	2/3/2006@15:56:58			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.976 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.976 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	-0.003	-0.211	2/3/2006@15:58:54			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.003 < 0.100					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.003 > -0.100					
Message			ICB Passed					
Action			Continue					
154614004|498441|	1	1	0.020	-0.112	2/3/2006@16:00:49		5.00	
154614010	1	2	0.006	-0.174	2/3/2006@16:01:43		10.00	
WTR060203-04 CCV	1	S11	1.038	4.231	2/3/2006@16:02:31			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.038 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.038 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	0.005	-0.178	2/3/2006@16:04:30			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.005 < 0.100					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.005 > -0.100					
Message			CCB Passed					
Action			Continue					

Author: gxm2 Date : 2/3/2006

Channel 1 (TKN) : Current View

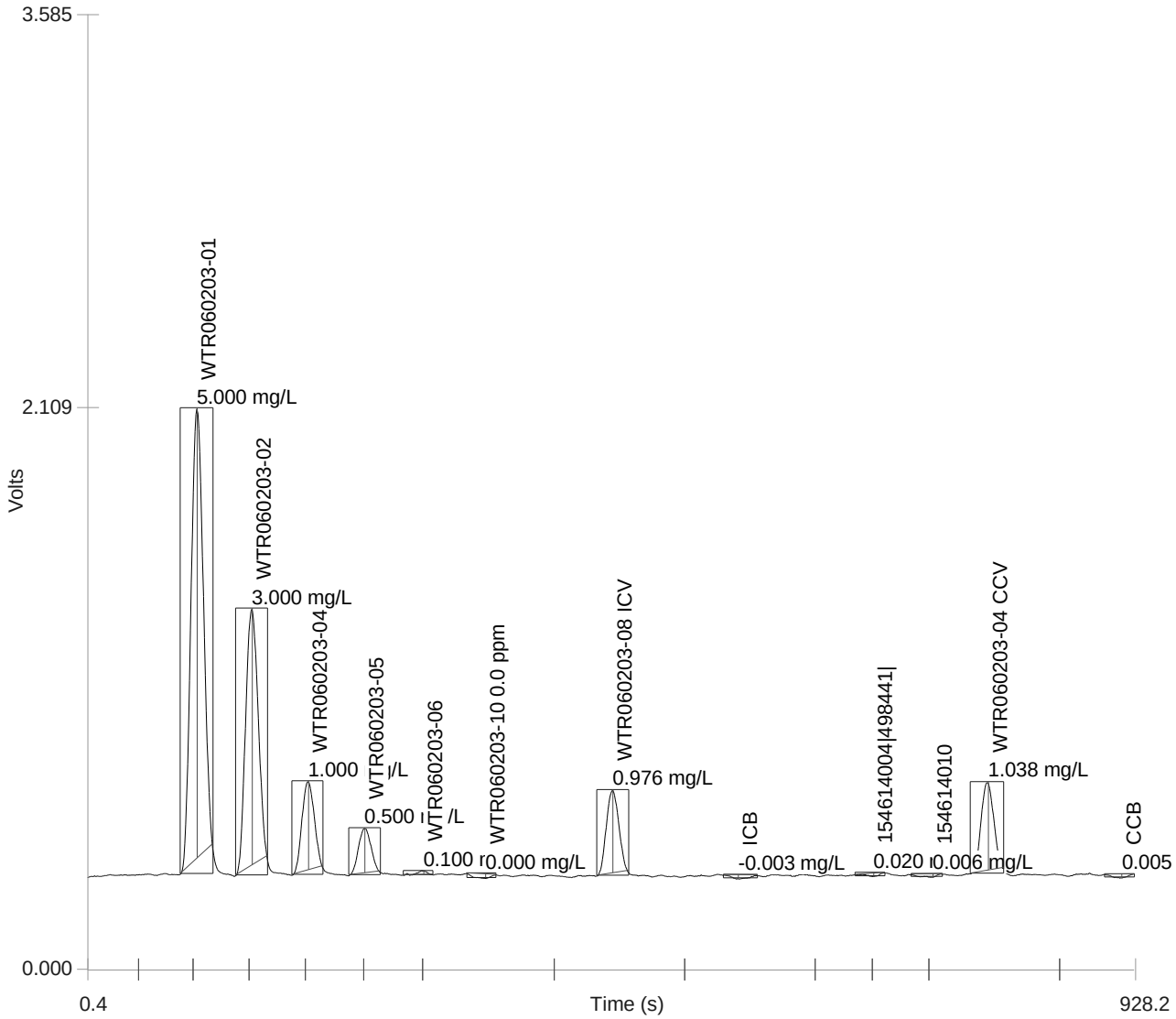
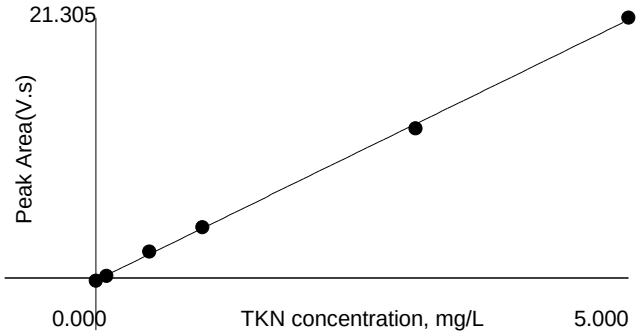


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	21.305	1.690	-0.9	2/3/2006	15:51:58
2	3.000	1	12.229	0.964	2.9	2/3/2006	15:52:47
3	1.000	1	4.155	0.334	-2.1	2/3/2006	15:53:36
4	0.500	1	2.147	0.169	-10.8	2/3/2006	15:54:26
5	0.100	1	0.157	0.014	32.5	2/3/2006	15:55:17
6	0.000	1	-0.230	-0.014		2/3/2006	15:56:10

Author: gxm2 Date : 2/3/2006

Figure 1: TKN



Area = 4.263 * Conc - 0.194
Conc = 0.234 * Area + 0.046
Correlation Coefficient (r) = 0.99969

No Weighting

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/12/2006 18:28:31	OM_2-12-2006_18-27-00
3.0 ppm Std.		1	gxm2	2/12/2006 18:29:20	OM_2-12-2006_18-27-00
1.0 ppm Std.		1	gxm2	2/12/2006 18:30:09	OM_2-12-2006_18-27-00
0.5 ppm Std		1	gxm2	2/12/2006 18:31:00	OM_2-12-2006_18-27-00
0.1 ppm Std		1	gxm2	2/12/2006 18:31:51	OM_2-12-2006_18-27-00
ICAL-00		1	gxm2	2/12/2006 18:32:43	OM_2-12-2006_18-27-00
ICV		1	gxm2	2/12/2006 18:34:39	OM_2-12-2006_18-27-00
ICB		1	gxm2	2/12/2006 18:36:35	OM_2-12-2006_18-27-00
154614003	498441	1	gxm2	2/12/2006 18:45:03	OM_2-12-2006_18-27-00
1201020232	498441	1	gxm2	2/12/2006 18:45:51	OM_2-12-2006_18-27-00
CCV		1	gxm2	2/12/2006 18:46:40	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00
CCB		1	gxm2	2/12/2006 18:48:36	OM_2-12-2006_18-27-00

Original Run Filename: OM_2-12-2006_18-27-00.OMN created 2/12/2006 18:27:00
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-12-2006_18-27-00.OMN last modified 2/12/2006 19:00:10
Current Run Author's Signature: [gxm2]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060212-01	1	S9	5.000	8.706	2/12/2006@18:28:31			5.0 ppm Std.
WTR060212-02	1	S10	3.000	5.343	2/12/2006@18:29:20			3.0 ppm Std.
WTR060212-04	1	S11	1.000	1.903	2/12/2006@18:30:09			1.0 ppm Std.
WTR060212-05	1	S12	0.500	0.932	2/12/2006@18:31:00			0.5 ppm Std
WTR060212-06	1	S13	0.100	0.163	2/12/2006@18:31:51			0.1 ppm Std
WTR060212-10 0.0 ppm	1	S15	0.000	0.021	2/12/2006@18:32:43			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99980 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR060212-08 ICV	1	S16	1.080	1.940	2/12/2006@18:34:39			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.080 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.080 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	-0.049	-0.026	2/12/2006@18:36:35			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.049 < 0.100					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.049 > -0.100					
Message			ICB Passed					
Action			Continue					
155167003	1	21	0.015	0.084	2/12/2006@18:38:30			
155167004	1	22	-0.079	-0.078	2/12/2006@18:39:20			
155167007	1	23	-0.019	0.026	2/12/2006@18:40:10			
155182007	1	24	1.111	1.994	2/12/2006@18:40:59			
155187001	1	25	0.435	0.816	2/12/2006@18:41:48			
155187002	1	26	0.610	1.121	2/12/2006@18:42:37			
155264001	1	27	-0.053	-0.034	2/12/2006@18:43:26			
155264008	1	28	-0.055	-0.037	2/12/2006@18:44:15			
154614003|498441|	1	29	-0.055	-0.038	2/12/2006@18:45:03			
1201020232||DUP	1	30	-0.047	-0.023	2/12/2006@18:45:51			
WTR060212-04 CCV	1	S11	1.092	1.959	2/12/2006@18:46:40			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.092 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.092 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	-0.028	0.010	2/12/2006@18:48:36			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.028 < 0.100					
Message			CCB Passed					
Action			Continue					

DQM Test: < - Concentration Limit								
		Result:	-0.028 > -0.100					
		Message	CCB Passed					
		Action	Continue					
1201020233||MS	1	31	1.018	1.832	2/12/2006@18:50:31			
1201020237||MSD	1	32	1.121	2.010	2/12/2006@18:51:23			
154415001|497375|	1	33	0.251	0.495	2/12/2006@18:52:17			
1201017870||DUP	1	34	0.267	0.524	2/12/2006@18:53:08			
1201027871||MS	1	35	1.328	2.371	2/12/2006@18:53:59			
1201017872||MSD	1	36	1.406	2.507	2/12/2006@18:54:50			
154478001|497710|	1	37	4.779	8.380	2/12/2006@18:55:40			
1201018576||DUP	1	38	4.698	8.239	2/12/2006@18:56:31			
1201018577||MS	1	39	5.516	9.663	2/12/2006@18:57:21			
1201018578||MSD	1	40	5.992	10.492	2/12/2006@18:58:10			
WTR060212-04 CCV	1	S11	1.136	2.037	2/12/2006@18:59:00			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.136 > 1.104					
		Message	CCV Failed					
		Action	Stop Run					
DQM Test: < - Concentration Limit								
		Result:	1.136 > 0.895					
		Message	CCV Passed					
		Action	Continue					

Author: gxm2 Date : 2/12/2006

Channel 1 (TKN) : Current View

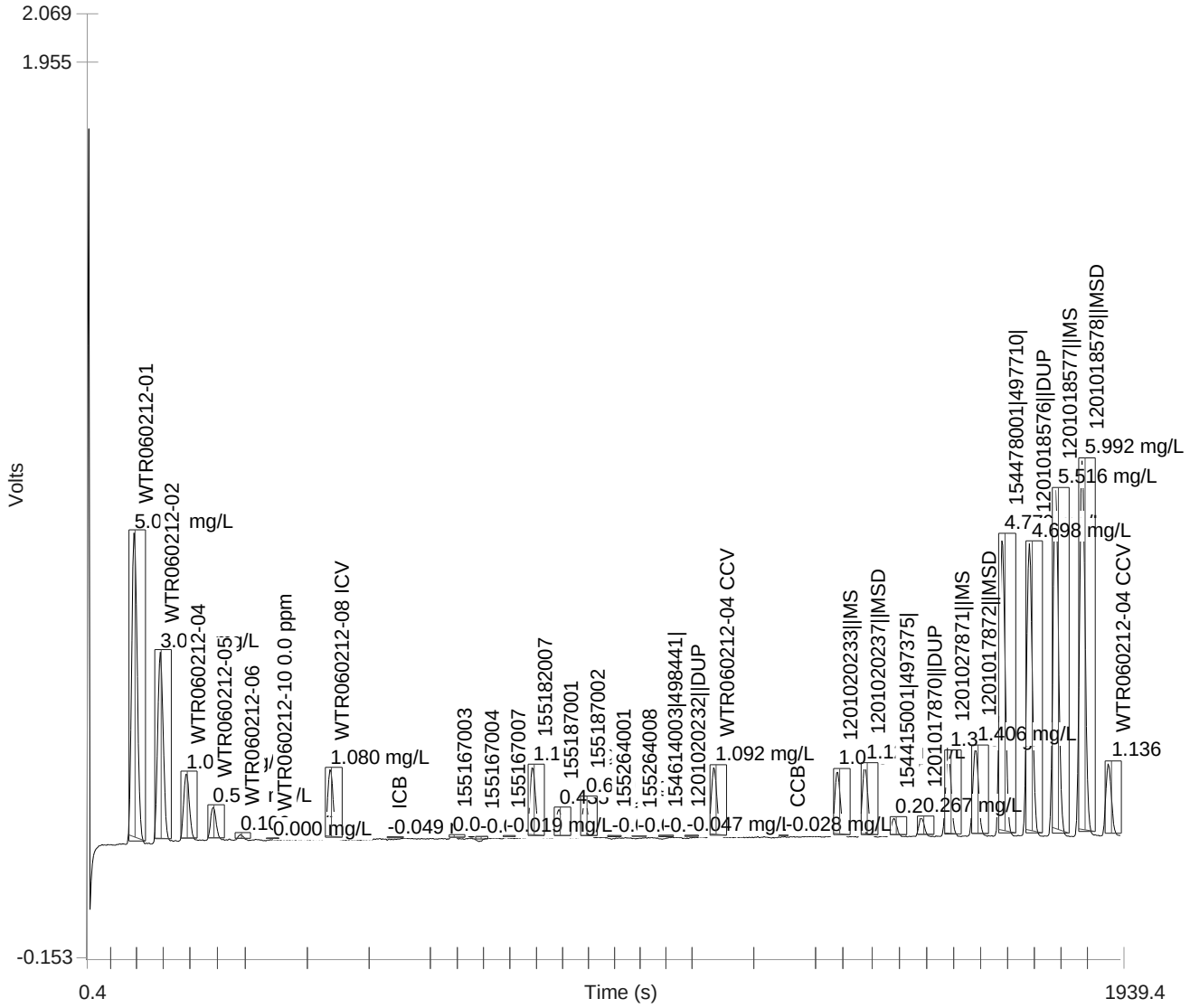
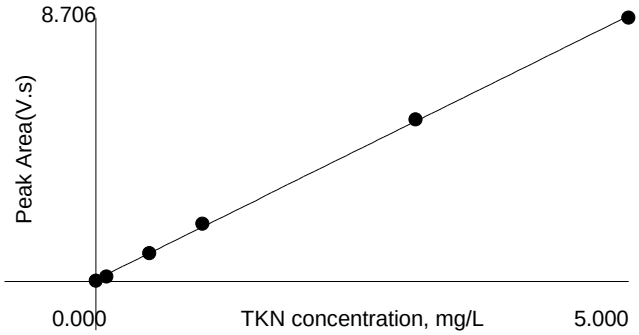


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	8.706	0.723	0.6	2/12/2006	18:29:40
2	3.000	1	5.343	0.444	-1.2	2/12/2006	18:30:28
3	1.000	1	1.903	0.157	-5.7	2/12/2006	18:31:17
4	0.500	1	0.932	0.078	-0.2	2/12/2006	18:32:08
5	0.100	1	0.163	0.013	30.3	2/12/2006	18:32:59
6	0.000	1	0.021	3.647e-4		2/12/2006	18:33:51

Author: gxm2 Date : 2/12/2006

Figure 1: TKN



Area = 1.741 * Conc + 0.060
Conc = 0.574 * Area - 0.034
Correlation Coefficient (r) = 0.99980

No Weighting

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/12/2006 19:02:49	OM_2-12-2006_19-02-02
3.0 ppm Std.		1	gxm2	2/12/2006 19:03:38	OM_2-12-2006_19-02-02
1.0 ppm Std.		1	gxm2	2/12/2006 19:04:27	OM_2-12-2006_19-02-02
0.5 ppm Std		1	gxm2	2/12/2006 19:05:18	OM_2-12-2006_19-02-02
0.1 ppm Std		1	gxm2	2/12/2006 19:06:09	OM_2-12-2006_19-02-02
ICAL-00		1	gxm2	2/12/2006 19:07:01	OM_2-12-2006_19-02-02
ICV		1	gxm2	2/12/2006 19:08:57	OM_2-12-2006_19-02-02
ICB		1	gxm2	2/12/2006 19:10:53	OM_2-12-2006_19-02-02
154478001	497710	1	gxm2	2/12/2006 19:17:58	OM_2-12-2006_19-02-02
1201018576	497710	1	gxm2	2/12/2006 19:18:49	OM_2-12-2006_19-02-02
1201018577	497710	1	gxm2	2/12/2006 19:19:40	OM_2-12-2006_19-02-02
1201018578	497710	1	gxm2	2/12/2006 19:20:31	OM_2-12-2006_19-02-02
CCV		1	gxm2	2/12/2006 19:21:22	OM_2-12-2006_19-02-02
CCB		1	gxm2	2/12/2006 19:23:22	OM_2-12-2006_19-02-02
CCV		1	gxm2	2/12/2006 19:30:27	OM_2-12-2006_19-02-02
CCB		1	gxm2	2/12/2006 19:32:27	OM_2-12-2006_19-02-02

Original Run Filename: OM_2-12-2006_19-02-02.OMN created 2/12/2006 19:02:02
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-12-2006_19-02-02.OMN last modified 2/12/2006 19:33:35
Current Run Author's Signature: [gxm2]
Description:

Sample	Rep.	Cup No.	Channel 1 TKN Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060212-01	1	S9	5.000	9.673	2/12/2006@19:02:49			5.0 ppm Std.
WTR060212-02	1	S10	3.000	5.853	2/12/2006@19:03:38			3.0 ppm Std.
WTR060212-04	1	S11	1.000	2.054	2/12/2006@19:04:27			1.0 ppm Std.
WTR060212-05	1	S12	0.500	1.001	2/12/2006@19:05:18			0.5 ppm Std
WTR060212-06	1	S13	0.100	0.179	2/12/2006@19:06:09			0.1 ppm Std
WTR060212-10 0.0 ppm	1	S15	0.000	-0.023	2/12/2006@19:07:01			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99991 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR060212-08 ICV	1	S16	1.052	2.062	2/12/2006@19:08:57			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.052 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.052 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S15	-0.028	-0.029	2/12/2006@19:10:53			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.028 < 0.100					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.028 > -0.100					
Message			ICB Passed					
Action			Continue					
1201020233||MS	1	31	0.975	1.912	2/12/2006@19:12:49			
1201020237||MSD	1	32	1.054	2.066	2/12/2006@19:13:40			
154415001|497375|	1	33	0.251	0.510	2/12/2006@19:14:32			
1201017870||DUP	1	34	0.214	0.439	2/12/2006@19:15:23			
1201027871||MS	1	35	1.204	2.357	2/12/2006@19:16:17			
1201017872||MSD	1	36	1.315	2.570	2/12/2006@19:17:08			
154478001|497710|	1	37	1.242	2.430	2/12/2006@19:17:58		5.00	
1201018576||DUP	1	38	1.238	2.422	2/12/2006@19:18:49		5.00	
1201018577||MS	1	39	1.411	2.757	2/12/2006@19:19:40		5.00	
1201018578||MSD	1	40	1.502	2.934	2/12/2006@19:20:31		5.00	
WTR060212-04 CCV	1	S11	1.058	2.073	2/12/2006@19:21:22			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.058 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.058 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	-0.026	-0.024	2/12/2006@19:23:22			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.026 < 0.100					
Message			CCB Passed					
Action			Continue					

DQM Test: < - Concentration Limit								
Result:			-0.026 > -0.100					
Message			CCB Passed					
Action			Continue					
1201025892||MS	1	12	1.874	3.654	2/12/2006@19:25:20			
1201025893||MSD	1	13	2.197	4.278	2/12/2006@19:26:10			
155166002	1	15	0.263	0.535	2/12/2006@19:27:00		5.00	
1201025889||DUP	1	16	0.250	0.509	2/12/2006@19:27:49		5.00	
1201025890||MS	1	17	0.237	0.485	2/12/2006@19:28:42		5.00	
1201025894||MSD	1	18	0.485	0.965	2/12/2006@19:29:36		5.00	
WTR060212-04 CCV	1	S11	1.062	2.081	2/12/2006@19:30:27			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.062 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.062 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S15	-0.033	-0.039	2/12/2006@19:32:27			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			-0.033 < 0.100					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-0.033 > -0.100					
Message			CCB Passed					
Action			Continue					

Author: gxm2 Date : 2/12/2006

Channel 1 (TKN) : Current View

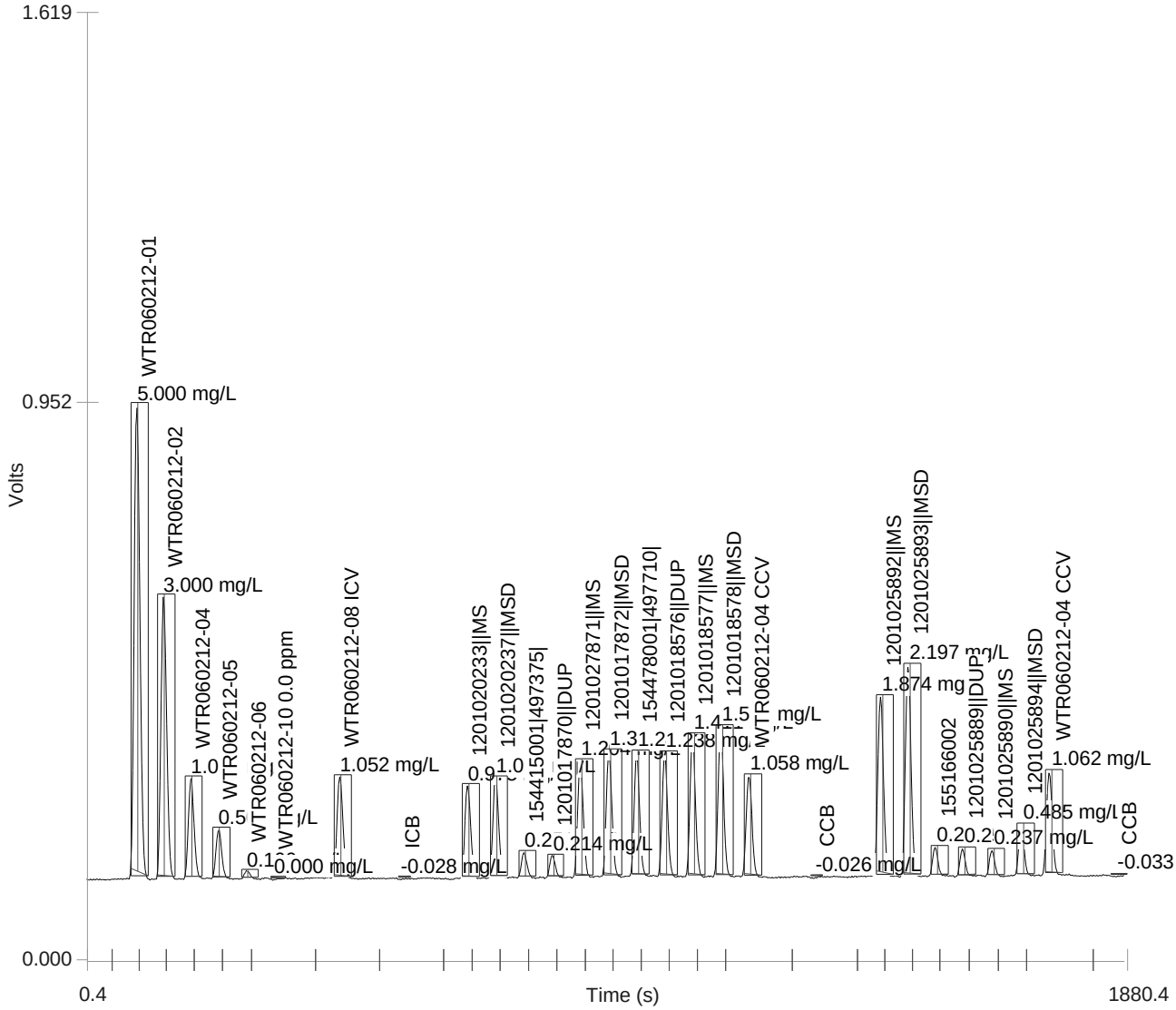
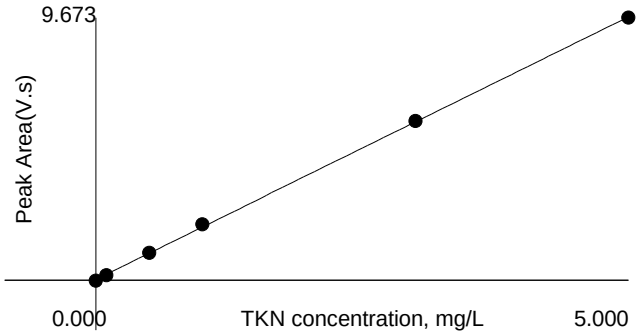


Table 1: TKN

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	9.673	0.801	0.3	2/12/2006	19:03:57
2	3.000	1	5.853	0.481	-0.4	2/12/2006	19:04:46
3	1.000	1	2.054	0.172	-4.7	2/12/2006	19:05:35
4	0.500	1	1.001	0.084	-0.7	2/12/2006	19:06:26
5	0.100	1	0.179	0.014	18.4	2/12/2006	19:07:17
6	0.000	1	-0.023	-0.001		2/12/2006	19:08:09

Author: gxm2 Date : 2/12/2006

Figure 1: TKN



Area = 1.936 * Conc + 0.026
Conc = 0.517 * Area - 0.013
Correlation Coefficient (r) = 0.99991

No Weighting

Total Phosphorus

Prep LogBook

Analyst: LXW1 Verified by:_____

Batch: 498064

Lab SOP: GL-GC-E-071 REV# 6

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201019333	UTR050805-01	.2	mL
MS	1201019985	UTR050805-01	.2	mL
MSD	1201019986	UTR050805-01	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201019332		EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	WASTE WATER
LCS	1201019333		EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	WASTE WATER
SAMPLE	154614001		EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	GROUND WATER
DUP	1201019984	154614001	EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	GROUND WATER
MS	1201019985	154614001	EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	GROUND WATER
MSD	1201019986	154614001	EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614002		EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614008		EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	GROUND WATER
SAMPLE	154617001		EPA 365.4 Prep	30-JAN-2006 07:41	20 mL	20 mL	1	WASTE WATER

Reagent/Solvent Lot ID	Amount	Description
480242-C	5 mL	TKN/PO4 Digestion Solution

Comments:

Prep LogBook

Analyst: LXW1 Verified by:_____

Batch: 499131

Lab SOP: GL-GC-E-071 REV# 6

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1201021734	UTR050805-01	.2	mL
MS	1201021736	UTR050805-01	.2	mL
MSD	1201021737	UTR050805-01	.2	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1201021733		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
LCS	1201021734		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
SAMPLE	154614010		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
SAMPLE	154702001		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	WASTE WATER
SAMPLE	154702002		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	WASTE WATER
SAMPLE	154721001		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
SAMPLE	154721011		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
DUP	1201021735	154721011	EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
MS	1201021736	154721011	EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
MSD	1201021737	154721011	EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
SAMPLE	154759001		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER
SAMPLE	154759002		EPA 365.4 Prep	01-FEB-2006 14:34	20 mL	20 mL	1	GROUND WATER

Reagent/Solvent Lot ID	Amount	Description
480242-C	5 mL	TKN/PO4 Digestion Solution

Comments:

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/3/2006 9:44:38	OM_2-3-2006_09-43-55
3.0 ppm Std.		1	gxm2	2/3/2006 9:45:25	OM_2-3-2006_09-43-55
1.0 ppm Std.		1	gxm2	2/3/2006 9:46:14	OM_2-3-2006_09-43-55
0.5 ppm Std		1	gxm2	2/3/2006 9:47:04	OM_2-3-2006_09-43-55
0.1 ppm Std		1	gxm2	2/3/2006 9:47:54	OM_2-3-2006_09-43-55
0.05 ppm Std		1	gxm2	2/3/2006 9:48:45	OM_2-3-2006_09-43-55
ICAL-00		1	gxm2	2/3/2006 9:49:38	OM_2-3-2006_09-43-55
ICV		1	gxm2	2/3/2006 9:51:42	OM_2-3-2006_09-43-55
ICB		1	gxm2	2/3/2006 9:53:47	OM_2-3-2006_09-43-55
1201019332	498065	1	gxm2	2/3/2006 9:55:51	OM_2-3-2006_09-43-55
1201019333	498065	1	gxm2	2/3/2006 9:56:42	OM_2-3-2006_09-43-55
154561001	498065	1	gxm2	2/3/2006 9:57:33	OM_2-3-2006_09-43-55
1201019334	498065	1	gxm2	2/3/2006 9:58:23	OM_2-3-2006_09-43-55
1201019335	498065	1	gxm2	2/3/2006 9:59:14	OM_2-3-2006_09-43-55
1201019336	498065	1	gxm2	2/3/2006 10:00:03	OM_2-3-2006_09-43-55
154614001	498065	1	gxm2	2/3/2006 10:00:53	OM_2-3-2006_09-43-55
1201019984	498065	1	gxm2	2/3/2006 10:01:42	OM_2-3-2006_09-43-55
1201019985	498065	1	gxm2	2/3/2006 10:02:32	OM_2-3-2006_09-43-55
1201019986	498065	1	gxm2	2/3/2006 10:03:20	OM_2-3-2006_09-43-55
CCV		1	gxm2	2/3/2006 10:04:09	OM_2-3-2006_09-43-55
CCB		1	gxm2	2/3/2006 10:06:13	OM_2-3-2006_09-43-55
154614002	498065	1	gxm2	2/3/2006 10:08:15	OM_2-3-2006_09-43-55
154614008	498065	1	gxm2	2/3/2006 10:09:03	OM_2-3-2006_09-43-55
154617001	498065	1	gxm2	2/3/2006 10:09:51	OM_2-3-2006_09-43-55
1201029334	498065	1	gxm2	2/3/2006 10:11:31	OM_2-3-2006_09-43-55
154561001	498065	1	gxm2	2/3/2006 10:12:22	OM_2-3-2006_09-43-55
CCV		1	gxm2	2/3/2006 10:13:12	OM_2-3-2006_09-43-55
CCB		1	gxm2	2/3/2006 10:15:17	OM_2-3-2006_09-43-55

Author: gxm2 Date : 2/3/2006

Original Run Filename: OM_2-3-2006_09-43-55.OMN created 2/3/2006 09:43:55
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-3-2006_09-43-55.OMN last modified 2/3/2006 10:16:39
Current Run Author's Signature: [gxm2]
Description: Total Phosphorus EPA Method 365.4 GEL SOP:GL-GC-E-103 Rev 0
Detection wavelength: 880 nM

Sample	Rep.	Cup No.	Channel 1 TLPOS Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060203-01	1	S1	5.000	24.355	2/3/2006@09:44:38			5.0 ppm Std.
WTR060203-02	1	S2	3.000	14.603	2/3/2006@09:45:25			3.0 ppm Std.
WTR060203-04	1	S3	1.000	4.818	2/3/2006@09:46:14			1.0 ppm Std.
WTR060203-05	1	S4	0.500	2.326	2/3/2006@09:47:04			0.5 ppm Std
WTR060203-06	1	S5	0.100	0.427	2/3/2006@09:47:54			0.1 ppm Std
WTR060203-07	1	S6	0.050	0.225	2/3/2006@09:48:45			0.05 ppm Std
WTR060203-10 0.0	1	S7	0.000	0.010	2/3/2006@09:49:38			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99999 > 0.99500					
		Message	Calibration Passed					
		Action	Continue					
WTR060203-08 ICV	1	S8	0.960	4.636	2/3/2006@09:51:42			ICV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.960 < 1.104					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.960 > 0.895					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
ICB	1	S7	0.013	0.015	2/3/2006@09:53:47			ICB/CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.013 < 0.050					
		Message	ICB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.013 > -0.050					
		Message	ICB Passed					
		Action	Continue					
1201019332|498065|MB	1	1	0.020	0.050	2/3/2006@09:55:51			
1201019333||LCS	1	2	1.071	5.180	2/3/2006@09:56:42			
154561001	1	3	0.110	0.492	2/3/2006@09:57:33			
1201019334||DUP	1	4	0.344	1.632	2/3/2006@09:58:23			
1201019335||MS	1	5	1.131	5.470	2/3/2006@09:59:14			
1201019336||MSD	1	6	1.129	5.463	2/3/2006@10:00:03			
154614001	1	7	0.223	1.041	2/3/2006@10:00:53			
1201019984||DUP	1	8	0.189	0.876	2/3/2006@10:01:42			
1201019985||MS	1	9	1.094	5.291	2/3/2006@10:02:32			
1201019986||MSD	1	10	1.104	5.342	2/3/2006@10:03:20			
WTR060203-04 CCV	1	S3	1.009	4.879	2/3/2006@10:04:09			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	1.009 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	1.009 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.012	0.012	2/3/2006@10:06:13			CCB
		Known Conc:	0.000					

DQM Test: > + Concentration Limit								
Result:			0.012 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.012 > -0.050					
Message			CCB Passed					
Action			Continue					
154614002	1	11	0.158	0.723	2/3/2006@10:08:15			
154614008	1	12	0.078	0.333	2/3/2006@10:09:03			
154617001	1	13	0.274	1.291	2/3/2006@10:09:51			
154561001	1	3	0.110	0.488	2/3/2006@10:10:41			
1201029334||DUP	1	4	0.364	1.728	2/3/2006@10:11:31			
Sample27	1	3	0.126	0.569	2/3/2006@10:12:22			
WTR060203-04 CCV	1	S3	1.006	4.863	2/3/2006@10:13:12			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			1.006 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			1.006 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	0.020	0.049	2/3/2006@10:15:17			CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.020 < 0.050					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.020 > -0.050					
Message			CCB Passed					
Action			Continue					

Author: gxm2 Date : 2/3/2006

Channel 1 (TLPOS) : Current View

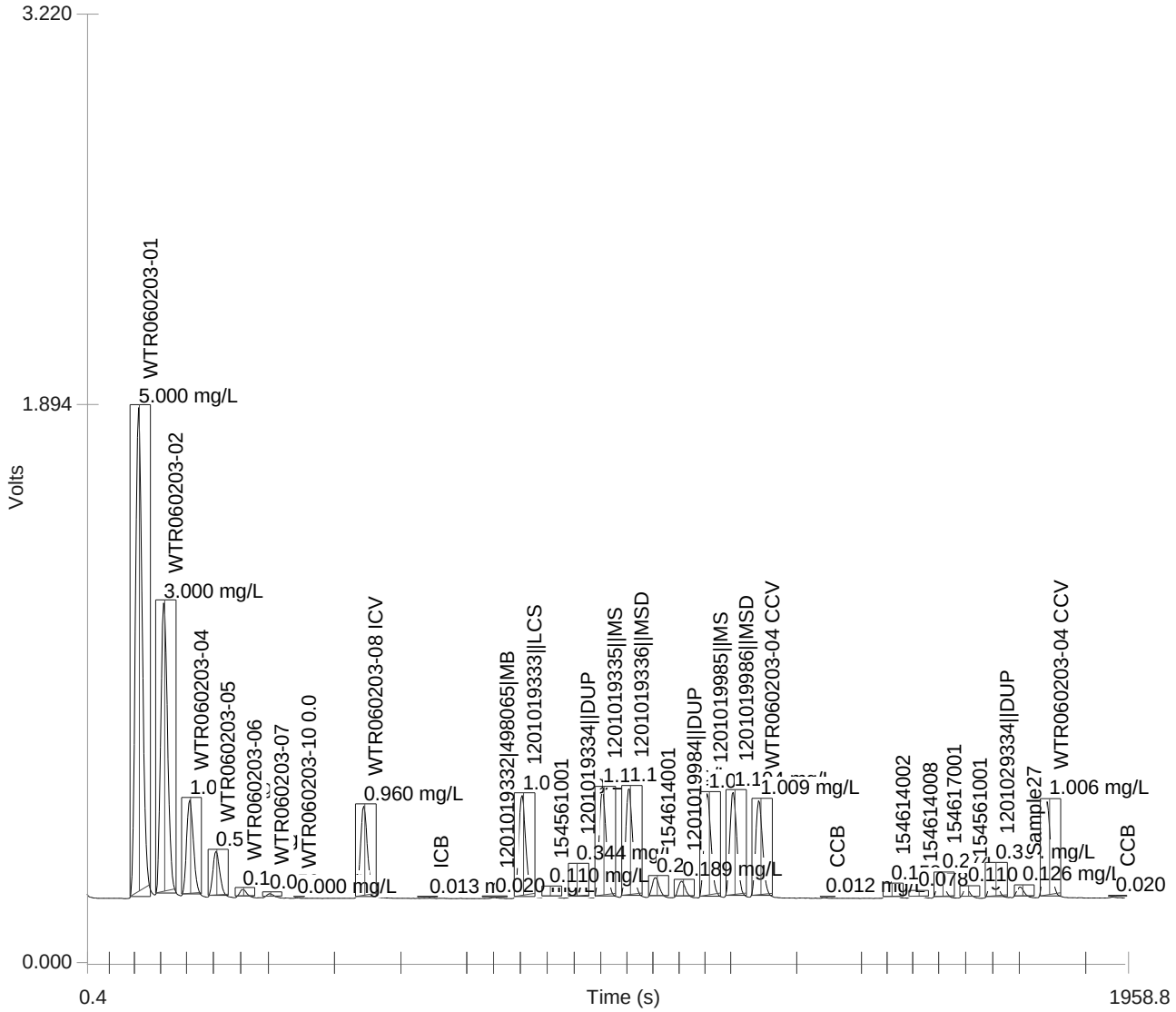
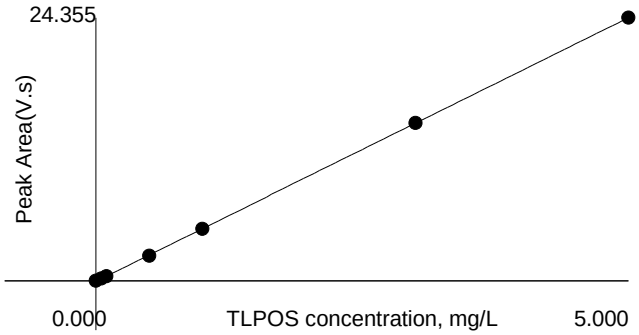


Table 1: TLPOS

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	24.355	1.651	-0.0	2/3/2006	09:45:58
2	3.000	1	14.603	0.989	-0.1	2/3/2006	09:46:46
3	1.000	1	4.818	0.325	0.3	2/3/2006	09:47:34
4	0.500	1	2.326	0.155	2.8	2/3/2006	09:48:24
5	0.100	1	0.427	0.028	3.4	2/3/2006	09:49:14
6	0.050	1	0.225	0.015	-13.9	2/3/2006	09:50:05
7	0.000	1	0.010	0.001		2/3/2006	09:50:58

Figure 1: TLPOS



Area = 4.880 * Conc - 0.046
Conc = 0.205 * Area + 0.010
Correlation Coefficient (r) = 0.99999

No Weighting

This is runlog lachat2

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
5.0 ppm Std.		1	gxm2	2/3/2006 10:27:52	OM_2-3-2006_10-26-25
3.0 ppm Std.		1	gxm2	2/3/2006 10:28:40	OM_2-3-2006_10-26-25
1.0 ppm Std.		1	gxm2	2/3/2006 10:29:29	OM_2-3-2006_10-26-25
0.5 ppm Std		1	gxm2	2/3/2006 10:30:18	OM_2-3-2006_10-26-25
0.1 ppm Std		1	gxm2	2/3/2006 10:31:09	OM_2-3-2006_10-26-25
0.05 ppm Std		1	gxm2	2/3/2006 10:32:00	OM_2-3-2006_10-26-25
ICAL-00		1	gxm2	2/3/2006 10:32:52	OM_2-3-2006_10-26-25
ICV		1	gxm2	2/3/2006 10:34:57	OM_2-3-2006_10-26-25
ICB		1	gxm2	2/3/2006 10:37:01	OM_2-3-2006_10-26-25
1201021733	499132	1	gxm2	2/3/2006 10:39:04	OM_2-3-2006_10-26-25
1201021734	499132	1	gxm2	2/3/2006 10:39:51	OM_2-3-2006_10-26-25
154614010	499132	1	gxm2	2/3/2006 10:40:40	OM_2-3-2006_10-26-25
154702001	499132	1	gxm2	2/3/2006 10:41:32	OM_2-3-2006_10-26-25
154702002	499132	1	gxm2	2/3/2006 10:42:23	OM_2-3-2006_10-26-25
154721001	499132	1	gxm2	2/3/2006 10:43:14	OM_2-3-2006_10-26-25
154721011	499132	1	gxm2	2/3/2006 10:44:05	OM_2-3-2006_10-26-25
1201021735	499132	1	gxm2	2/3/2006 10:44:55	OM_2-3-2006_10-26-25
1201021736	499132	1	gxm2	2/3/2006 10:45:46	OM_2-3-2006_10-26-25
1201021737	499132	1	gxm2	2/3/2006 10:46:35	OM_2-3-2006_10-26-25
CCV		1	gxm2	2/3/2006 10:47:24	OM_2-3-2006_10-26-25
CCB		1	gxm2	2/3/2006 10:49:29	OM_2-3-2006_10-26-25
154759001	499132	1	gxm2	2/3/2006 10:51:32	OM_2-3-2006_10-26-25
154759002	499132	1	gxm2	2/3/2006 10:52:20	OM_2-3-2006_10-26-25
1201017845	497363	1	gxm2	2/3/2006 10:53:58	OM_2-3-2006_10-26-25
154314001	497363	1	gxm2	2/3/2006 10:54:46	OM_2-3-2006_10-26-25
1201017846	497363	1	gxm2	2/3/2006 10:55:34	OM_2-3-2006_10-26-25
1201017847	497363	1	gxm2	2/3/2006 10:56:22	OM_2-3-2006_10-26-25
1201017848	497363	1	gxm2	2/3/2006 10:57:12	OM_2-3-2006_10-26-25
CCV		1	gxm2	2/3/2006 10:58:02	OM_2-3-2006_10-26-25
CCB		1	gxm2	2/3/2006 11:00:07	OM_2-3-2006_10-26-25

Original Run Filename: OM_2-3-2006_10-26-25.OMN created 2/3/2006 10:26:25
Original Run Author's Signature: [gxm2]
Current Run Filename: OM_2-3-2006_10-26-25.OMN last modified 2/3/2006 11:01:28
Current Run Author's Signature: [gxm2]
Description: Total Phosphorus EPA Method 365.4 GEL SOP:GL-GC-E-103 Rev 0
Detection wavelength: 880 nM

Sample	Rep.	Cup No.	Channel 1 TLPOS Conc. (mg/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WTR060203-01	1	S1	5.000	24.561	2/3/2006@10:27:52			5.0 ppm Std.
WTR060203-02	1	S2	3.000	14.833	2/3/2006@10:28:40			3.0 ppm Std.
WTR060203-04	1	S3	1.000	4.872	2/3/2006@10:29:29			1.0 ppm Std.
WTR060203-05	1	S4	0.500	2.355	2/3/2006@10:30:18			0.5 ppm Std
WTR060203-06	1	S5	0.100	0.428	2/3/2006@10:31:09			0.1 ppm Std
WTR060203-07	1	S6	0.050	0.223	2/3/2006@10:32:00			0.05 ppm Std
WTR060203-10 0.0	1	S7	0.000	0.012	2/3/2006@10:32:52			0.0 ppm
DQM Test: Minimum Correlation Coefficient								
Result:			0.99998 > 0.99500					
Message			Calibration Passed					
Action			Continue					
WTR060203-08 ICV	1	S8	0.949	4.639	2/3/2006@10:34:57			ICV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.949 < 1.104					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.949 > 0.895					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
ICB	1	S7	0.013	0.025	2/3/2006@10:37:01			ICB/CCB
Known Conc:			0.000					
DQM Test: > + Concentration Limit								
Result:			0.013 < 0.050					
Message			ICB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.013 > -0.050					
Message			ICB Passed					
Action			Continue					
1201021733|499132|MB	1	14	0.019	0.054	2/3/2006@10:39:04			
1201021734||LCS	1	15	1.044	5.105	2/3/2006@10:39:51			
154614010	1	16	1.122	5.489	2/3/2006@10:40:40			
154702001	1	17	0.040	0.155	2/3/2006@10:41:32			
154702002	1	18	0.072	0.316	2/3/2006@10:42:23			
154721001	1	19	0.096	0.434	2/3/2006@10:43:14			
154721011	1	20	0.087	0.388	2/3/2006@10:44:05			
1201021735||DUP	1	21	0.072	0.314	2/3/2006@10:44:55			
1201021736||MS	1	22	1.052	5.147	2/3/2006@10:45:46			
1201021737||MSD	1	23	1.074	5.254	2/3/2006@10:46:35			
WTR060203-04 CCV	1	S3	0.998	4.879	2/3/2006@10:47:24			CCV
Known Conc:			1.000					
DQM Test: > + Concentration Limit								
Result:			0.998 < 1.104					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			0.998 > 0.895					
Message			CCV Passed					
Action			Continue					
CCB	1	S7	0.011	0.015	2/3/2006@10:49:29			CCB
Known Conc:			0.000					

DQM Test: > + Concentration Limit								
		Result:	0.011 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.011 > -0.050					
		Message	CCB Passed					
		Action	Continue					
154759001	1	24	0.112	0.513	2/3/2006@10:51:32			
154759002	1	25	0.107	0.486	2/3/2006@10:52:20			
1201017844|497363|MB	1	26	0.054	0.225	2/3/2006@10:53:09			
1201017845||LCS	1	27	1.087	5.316	2/3/2006@10:53:58			
154314001	1	28	1.951	9.575	2/3/2006@10:54:46			
1201017846||DUP	1	29	2.032	9.976	2/3/2006@10:55:34			
1201017847||MS	1	30	2.869	14.100	2/3/2006@10:56:22			
1201017848||MSD	1	31	2.875	14.132	2/3/2006@10:57:12			
WTR060203-04 CCV	1	S3	0.994	4.860	2/3/2006@10:58:02			CCV
		Known Conc:	1.000					
DQM Test: > + Concentration Limit								
		Result:	0.994 < 1.104					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.994 > 0.895					
		Message	CCV Passed					
		Action	Continue					
CCB	1	S7	0.012	0.017	2/3/2006@11:00:07			CCB
		Known Conc:	0.000					
DQM Test: > + Concentration Limit								
		Result:	0.012 < 0.050					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	0.012 > -0.050					
		Message	CCB Passed					
		Action	Continue					

Author: gxm2 Date : 2/3/2006

Channel 1 (TLPOS) : Current View

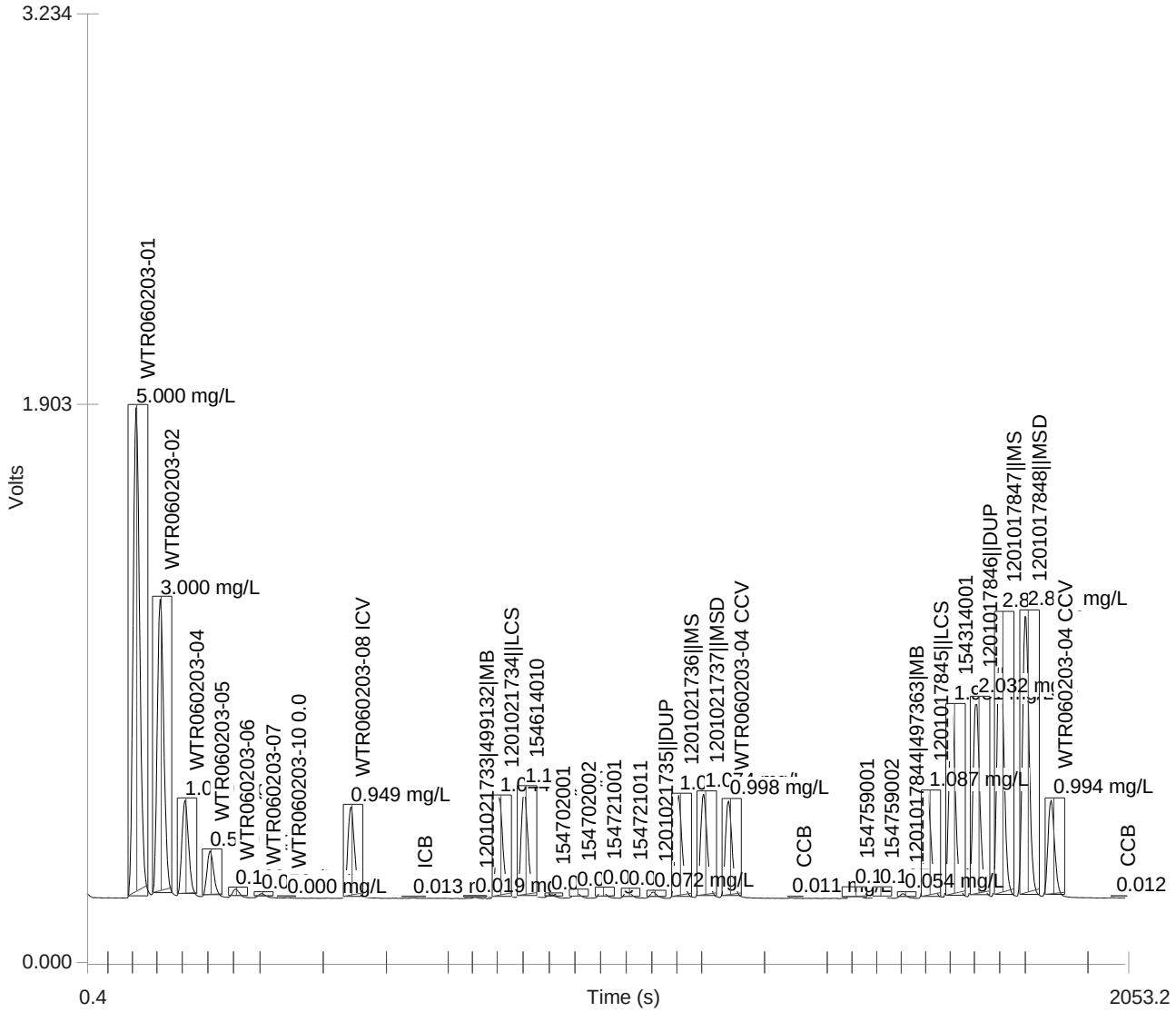
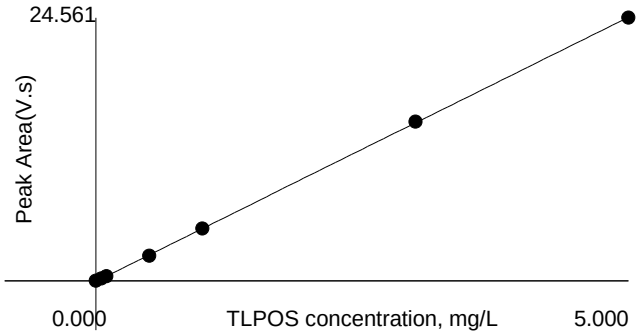


Table 1: TLPOS

	Conc. (mg/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	5.000	1	24.561	1.659	0.2	2/3/2006	10:29:12
2	3.000	1	14.833	1.004	-0.6	2/3/2006	10:30:00
3	1.000	1	4.872	0.326	0.4	2/3/2006	10:30:49
4	0.500	1	2.355	0.155	2.9	2/3/2006	10:31:38
5	0.100	1	0.428	0.028	5.6	2/3/2006	10:32:29
6	0.050	1	0.223	0.014	-7.5	2/3/2006	10:33:20
7	0.000	1	0.012	8.658e-4		2/3/2006	10:34:12

Author: gxm2 Date : 2/3/2006

Figure 1: TLPOS



Area = 4.928 * Conc - 0.039
Conc = 0.203 * Area + 0.008
Correlation Coefficient (r) = 0.99998

No Weighting

pH

pH / Corrosivity LogBook

Analyst: JAR2
Batch: 498054
Lab SOP: GL-GC-E-008 REV# 10
Description: pH

Type	Sample Id	Serial Number	Description
CCV	240	UPH297361-01	PH 7 BUFFER FOR PH
LCS	1201019311	UPH305149-02	LCS BUFFER SOLUTION

Type	Sample id	Parent Sample Id	Matrix	Method	Run Date	Run Time	Parmname	Ph	Temp	Nc(mg/L)	Recovery(%)	Rpd(%)
LCS	1201019311		Water		26-JAN-06	19:43	pH	7	22.4'C	7	100	
LCS	1201019311		Water		26-JAN-06	19:43	pH 2	7	22.4'C	7	100	
SAMPLE	154582001		Water	SW846 9040B	26-JAN-06	19:44	pH	6.78	22.5'C			
SAMPLE	154582001		Water	SW846 9040B	26-JAN-06	19:44	pH 2	6.78	22.5'C			
DUP	1201019310	154582001	Water	SW846 9040B	26-JAN-06	19:46	pH	6.79	22.5'C			.147
DUP	1201019310	154582001	Water	SW846 9040B	26-JAN-06	19:46	pH 2	6.79	22.5'C			.147
SAMPLE	154614001		Ground Water	EPA 150.1	26-JAN-06	19:48	pH	8.01	19.9'C			
SAMPLE	154614001		Ground Water	EPA 150.1	26-JAN-06	19:48	pH 2	8	19.9'C			
SAMPLE	154614002		Ground Water	EPA 150.1	26-JAN-06	19:50	pH	8.2	20.4'C			
SAMPLE	154614002		Ground Water	EPA 150.1	26-JAN-06	19:50	pH 2	8.2	20.4'C			
CCV					26-JAN-06	19:51	pH	7	22.4'C	7	100	
CCV					26-JAN-06	19:51	pH 2	7	22.4'C	7	100	
SAMPLE	154614008		Ground Water	EPA 150.1	26-JAN-06	19:53	pH	7.01	21.0'C			
SAMPLE	154614008		Ground Water	EPA 150.1	26-JAN-06	19:53	pH 2	7.02	21.0'C			
SAMPLE	154614010		Ground Water	EPA 150.1	26-JAN-06	19:55	pH	5.28	20.8'C			
SAMPLE	154614010		Ground Water	EPA 150.1	26-JAN-06	19:55	pH 2	5.27	20.8'C			
CCV					26-JAN-06	19:57	pH	7	22.4'C	7	100	
CCV					26-JAN-06	19:57	pH 2	7	22.4'C	7	100	

Calibration Information:
Run Date: 26-JAN-06 19:27
Instrument: PHX060
Analyst: JAR2

	Standard	Observed	Theoretical		C	%Recovery
19:27	UPH305147-01	4	4	SU	22.5	100
19:27	UPH297361-01	7.05	7	SU	22.5	100.71
19:27	UPH060118-01	10.01	10	SU	22.5	100.1
19:27	310030	2.04	2	SU	22.5	102
19:27	050420-A	11.95	12	SU	22.5	99.583
19:27	UPH305149-02	7	7	SU	22.5	100

Comments:

Miscellaneous

NCR Report No.: 288267
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
02-FEB-06	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 350.1	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
498444	See Below		

Potentially affected work order(s)(SDG): 154614,154630,154632,154649

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201020241MS	1. Matrix spike recovery failed due to matrix interference. A MSD was run to verify the result.

Originator's Name:

Gwen McKinley 02-FEB-06

Data Validator/Group Leader:

Quality Review:

Director:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
03-FEB-06	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 351.2	Liquid	CGWU, ESHL, RPBL
Batch ID:	**Sample Numbers:**		
498441	See Below		

Potentially affected work order(s)(SDG): 154544,154546,154614,154617,154630

Application Issues:

Failed Recovery for MS/PS

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Failed Recovery for MS/PS: QC 1201020233MS 2. Failed recovery for MSD QC 1201020236MSD	1. MSD was run to verify result. Failure can be attributed to matrix interference. 2. MS was within acceptable limits and RPD between MS and MSD passed. Failure can be attributed to random laboratory error.

Originator's Name:

Gwen McKinley 03-FEB-06

Data Validator/Group Leader:

Quality Review:

Director:

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
20-FEB-06	Federal	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
IC	EPA 300.0	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
498894	See Below		

Potentially affected work order(s)(SDG): 154614,154721,154759,154760

Application Issues:

Failed Recovery for MS/PS

Other

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Sample run on two seperate instruments: 154614 001, 1201021178DUP, 1201021179PS 2. Failed PS 154721 1201037161PS	1. Results were reported from two different instruments due to instrument failure. 2.The spike met normal acceptance criteria for recovery (90 - 110%) ffor all except chloride. This failure is attributed to laboratory error.

Originator's Name:

Ryan Mylott 21-FEB-06

Data Validator/Group Leader:

Julia Hamilton 21-FEB-06

Quality Review:

Director:

NCR Report No.: 288344
Revision No.: 1

COMPANY - WIDE NONCONFORMANCE REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
03-FEB-06	Federal	Specifications	
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 353.1	Liquid	ESHL
Batch ID:	**Sample Numbers:**		
498449	see below		

Potentially affected work order(s)(SDG): 154523,154614,154617,154627

Application Issues:

Sample improperly preserved

Specification and Requirements Nonconformance Description:	NRG Disposition:
1. Samples improperly preserved. 154614001, 1201020250DUP, 1201020251PS, 154614002, 154614008, 154614010	1. Samples were preserved with HCl which was the preservative the client had sent in for this test.

Originator's Name:

Gwen McKinley 03-FEB-06

Data Validator/Group Leader:

Julia Hamilton 03-FEB-06

Quality Review:

Nancy Mattern 23-FEB-06

Director:

RADIOLOGICAL ANALYSIS

Radiochemistry Case Narrative
Los Alamos National Laboratory (ESHL)
Work Order 154614

Method/Analysis Information

Product:	**LSC, Tritium Dist, Liquid**
Analytical Method:	EPA 906.0 Modified
Analytical Batch Number:	501386

Sample ID	Client ID
154614009	GU06010GMC401
154614010	GU06010GMC401-FB
1201027223	Method Blank (MB)
1201027224	154817002(GU06010GMC501) Sample Duplicate (DUP)
1201027225	154817002(GU06010GMC501) Matrix Spike (MS)
1201027226	Laboratory Control Sample (LCS)

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by General Engineering Laboratories, LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-002 REV# 10.

Calibration Information:

Calibration Information
All initial and continuing calibration requirements have been met.
The initial calibration was performed on July 5, 2005.

Standards Information
Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

Designated QC
The following sample was used for QC: 154817002 (GU06010GMC501).
The QC sample is from ESHL work order 154817.

QC Information
All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Preparation Information
All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Miscellaneous Information:

NCR Documentation
Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. An NCR was not generated for this SDG.

Blank Decision Level
The blank result is less than the decision level.

Qualifier information
Manual qualifiers were not required.

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

Review Validation:
GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.
The following data validator verified the information presented in this case narrative:

Reviewer/Date:

SAMPLE DATA SUMMARY

GENERAL ENGINEERING LABORATORIES, LLC

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

Certificate of Analysis Report
for

ESHL001 Los Alamos National Laboratory (17809)

Client SDG: 154614 GEL Work Order: 154614

The Qualifiers in this report are defined as follows:

* Indicates that a quality control analyte recovery is outside of specified acceptance criteria.

< Result is less than amount reported.

> Result is greater than amount reported.

B Target analyte was detected in the sample as well as the associated blank.

BD Results below the MDC or low tracer recovery.

D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range

E Concentration of the target analyte exceeds the instrument calibration range.

H Analytical holding time exceeded.

J Indicates an estimated value.

P The response between the confirmation and the primary columns is >40% Different.

R Sample results are rejected.

U Target analyte was analyzed for but not detected above the MDL or LOD.

UI Uncertain identification for gamma spectroscopy.

X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.

Y QC Samples were not spiked with this compound.

Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.

d The 2:1 depletion requirement was not met for this sample

h Sample preparation or preservation holding time exceeded.

ND The analyte concentration is not detected above the reporting limit.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

** Indicates the analyte is a surrogate compound.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis

Company : Los Alamos National Lab
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: Groundwater

Report Date: February 22, 2006

Client Sample ID: GU06010GMC401
Sample ID: 154614009
Matrix: Ground Water
Collect Date: 24−JAN−06
Receive Date: 26−JAN−06
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium		12500	224	+/−238	200	pCi/L		CHS1	02/19/06	1428	501386	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	01/30/06	1115	498293
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1157	498746
EPA 350.1	EPA 350.1 Ammonia Nitrogen Liquid Federa	GXM2	01/31/06	1358	499129
EPA 350.1	EPA 350.1 Ammonia Nitrogen Liquid Federa	GXM2	01/31/06	1421	499129
EPA 350.2 Prep	EPA 350.1 Ammonia Nitrogen Prep	LXW1	01/31/06	1103	499128
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa	GXM2	02/03/06	1305	498441
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	01/31/06	0829	498440
SW846 3005A	ICP−MS 3005 PREP	LXE1	01/30/06	1100	498179
SW846 3005A	ICP−TRACE SW846 3005A	LXE1	01/30/06	1100	498166
SW846 8260B	VOA Library Search				498235
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL	ACJ	02/03/06	2018	500624

The following Analytical Methods were performed

Method	Description
1	EPA 906.0 Modified

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
The Qualifiers in this report are defined as follows :

< Result is less than amount reported.
> Result is greater than amount reported.
B Target analyte was detected in the sample as well as the associated blank.
BD Results below the MDC or low tracer recovery.
D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range
E Concentration of the target analyte exceeds the instrument calibration range.
H Analytical holding time exceeded.
J Indicates an estimated value.

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Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: Groundwater

Report Date: February 22, 2006

Client Sample ID: GU06010GMC401
Sample ID: 154614009

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch	M

P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

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Certificate of Analysis

Company : Los Alamos National Lab
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: Groundwater

Report Date: February 22, 2006

Client Sample ID: GU06010GMC401−FB
Sample ID: 154614010
Matrix: Ground Water
Collect Date: 24−JAN−06
Receive Date: 26−JAN−06
Collector: Client

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	Analyst	Date	Time	Batch	M
Rad Liquid Scintillation Analysis												
LSC, Tritium Dist, Liquid												
Tritium	U	0.00	230	+/−67.3	200	pCi/L		CHS1	02/19/06	1629	501386	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 245.1/245.2 I	EPA 245 Mercury	ETL	01/30/06	1115	498293
EPA 335.3	EPA 335.3 Total Cyanide	LXW1	02/03/06	1157	498746
EPA 350.1	EPA 350.1 Ammonia Nitrogen Liquid Federa	GXM2	02/02/06	0906	498444
EPA 350.2 Prep	EPA 350.1 Ammonia Nitrogen Prep	LXW1	01/31/06	1714	498443
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa	GXM2	02/03/06	1306	498441
EPA 351.2	EPA 351.2 Total Kjeldahl Nitrogen Federa	GXM2	02/03/06	1601	498441
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	LXW1	01/31/06	0829	498440
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid−Fe	LXW1	02/01/06	1434	499131
EPA 6850 Modifie	EPA 6850 Perchlorate Extraction in Liquid	CXM1	01/27/06	0725	498239
SW846 3005A	ICP−MS 3005 PREP	LXE1	01/30/06	1100	498179
SW846 3005A	ICP−TRACE SW846 3005A	LXE1	01/30/06	1100	498166
SW846 8260B	VOA Library Search				498235
SW846 8260B DC	8260B Volatiles in Liquid DOE−AL	ACJ	02/03/06	1849	500624

The following Analytical Methods were performed

Method	Description
1	EPA 906.0 Modified

Notes:
TPU is calculated at the 67% confidence level (1−sigma).
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D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range
E Concentration of the target analyte exceeds the instrument calibration range.

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Certificate of Analysis

Company : Los Alamos National Lab
Address : MS K497 ESH−18
Water Quality & Hydrology
Los Alamos, New Mexico 87545
Contact: Bart Vanden Plas
Project: Groundwater

Report Date: February 22, 2006

Client Sample ID: GU06010GMC401−FB
Sample ID: 154614010

Project: ESHL00701
Client ID: ESHL001

Parameter	Qualifier	Result	DL	TPU	RL	Units	DF	AnalystDate	Time	Batch M

H Analytical holding time exceeded.
J Indicates an estimated value.
P The response between the confirmation and the primary columns is >40% Different.
R Sample results are rejected.
U Target analyte was analyzed for but not detected above the MDL or LOD.
UI Uncertain identification for gamma spectroscopy.
X Lab−specific qualifier−please see case narrative, data summary package or contact your project manager for details.
Y QC Samples were not spiked with this compound.
Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
d The 2:1 depletion requirement was not met for this sample
h Sample preparation or preservation holding time exceeded.
The above sample is reported on an "as received" basis.

QUALITY CONTROL DATA

GENERAL ENGINEERING LABORATORIES, LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Client : **Los Alamos National Lab**
MS K497 ESH-18
Water Quality & Hydrology
Los Alamos, New Mexico
Contact: **Bart Vanden Plas**

Workorder: **154614**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time
Rad Liquid Scintillation											
Batch 501386											
QC1201027224 154817002 DUP											
Tritium		5370		4910	pCi/L	0.746		(0% - 20%)	CHS1	02/20/06	00:33
	TPU:	+/-158		+/-149							
QC1201027226 LCS											
Tritium	2800			2720	pCi/L		97	(75%-125%)		02/20/06	04:35
	TPU:			+/-117							
QC1201027223 MB											
Tritium			U	0.00	pCi/L					02/19/06	22:32
	TPU:			+/-67.2							
QC1201027225 154817002 MS											
Tritium	2810	5370		7830	pCi/L		87	(75%-125%)		02/20/06	02:34
	TPU:	+/-158		+/-185							

Notes:
The Qualifiers in this report are defined as follows:

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- > Result is greater than amount reported.
- B Target analyte was detected in the sample as well as the associated blank.
- BD Results below the MDC or low tracer recovery.
- D Sample has been diluted and reanalyzed after initially exceeding inst. calibration range
- E Concentration of the target analyte exceeds the instrument calibration range.
- H Analytical holding time exceeded.
- J Indicates an estimated value.
- P The response between the confirmation and the primary columns is >40% Different.
- R Sample results are rejected.
- U Target analyte was analyzed for but not detected above the MDL or LOD.
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier-please see case narrative, data summary package or contact your project manager for details.
- Y QC Samples were not spiked with this compound.
- Z Paint Filter qualifier: Particulates passed through the filter. No free liquids were observed.
- d The 2:1 depletion requirement was not met for this sample
- h Sample preparation or preservation holding time exceeded.

QC Summary

Workorder: **154614**

Parmname	NOM	Sample	Qual	QC	Units	RER	REC%	Range	Anlst	Date	Time

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
** Indicates analyte is a surrogate compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

RAW DATA

Radiochemistry Batch Checklist for LSC, Rev 4

Batch# 501386 Product: 41-3 Date: 2/21/06

Criteria:	Yes	No	Comments
Method blank is less than the RDL. (If rad samples, < 5% of lowest activity)	✓		
If activity less 10* MDA, error is 100% or less of sample activity. If greater 10* MDA, error is 20% or less. If below the MDA, error is okay.	✓		
Instrument source check is within limits. Instument bkg check is within limits.	✓		
Method RDL has been met.	✓		
If duplicate activities are less 5* MDA, then rpd is 100% or less. If greater 5* MDA, then rpd 20% or less. If below the MDA, the rpd is 0%. Or meets the client's required RER acceptance criteria.	✓		
Tracer yield is 15-125% . Carrier yield 25-125%. Or meets the client's contract acceptance criteria.			NA
No transcription errors are apparent. Checked special requirements page	✓		
Sample was run within hold time.	✓		
Sample was correctly preserved if required.	✓		
Smears Taken for Radioactive batches.			NA
Method Spike and LCS are within 75-125% or meets the client's contract acceptance criteria.	✓		
No blank spaces on data forms. All lineouts initialed and dated.	✓		
Batch entered into Case Narrative.	✓		
Batch non-conformances completed If applicable.			NA

General Engineering Laboratories

2/22/2005

Primary Review Performed By: [signature] 2/21/06

Secondary Review Performed By: KO 2/22/06

2/18-2/25

ES4C

Tritium Que Sheet

06-FEB-06

Batch #: 501386 Analyst: CHS1 Minimum DueDate: 18-FEB-06

Spike Isotope: Hydrogen-3 Spike Code: 0134-I Expiration Date: 12/20/06 Vol: 0.1

LCS Isotope: Hydrogen-3 LCS Code: 0134-I Expiration Date: 12/20/06 Vol: 0.1

Prep Date: 2/17/06 Initials: CHS Pipet ID: 1492303 Witness: SLN 2/17/06

	Sample ID	Client Description	Type	Hazard Code	Min CRDL	Matrix	Client	Sample Date	Aliquot in vial (g/mL)	LSC Rack #	Dist Rig #	Vol added for Dist (mL)	Initial Sample Aliquot (g/mL)	Final Wt (g)	Dist Vol (mL)
1	154614009	GU06010GMC401	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	24-JAN-06	10	77-2	36		50.0		13
2	154614010	GU06010GMC401-FB	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	24-JAN-06	10	77-3	101		50.0		13
3	154714002	06I210125	SAMPLE		.2 pCi/mL	WASTE WATE	ESHL001	25-JAN-06	10	77-4	312		50.0		13
4	154817002	GU06010GMC501	SAMPLE		.2 pCi/mL	GROUND WATER	ESHL001	27-JAN-06	10	77-5	603		50.0		13
5	1201027223	MB for batch 501386	MB		.2 pCi/mL	GROUND WATQC	ACCOUNT		10	77-6	319	CHS 2/17/06	50.0		13
6	1201027224	GU06010GMC501(154817002DUP)	DUP		.2 pCi/mL	GROUND WATQC	ACCOUNT	27-JAN-06	10	77-7	940		50.0		13
7	1201027225	GU06010GMC501(154817002MS)	MS		.2 pCi/mL	GROUND WATQC	ACCOUNT	27-JAN-06	10	77-8	1905		50.0		13
8	1201027226	LCS for batch 501386	LCS		.2 pCi/mL	GROUND WATQC	ACCOUNT		10	77-9	7		50.0		13

MA 2/21/06

1547

√ no issues

Comments:

Instrument Used (circle as appropriate): *LS6000 ~~(Red) 7065155,~~ LS6500 (Blue) 7067083, LS6500 (Gold) 7070506, LS6500 (Green) 7067404, ~~Wallac (Yellow) 4040127, LS6000~~ (Brown) 7060655, Wallac (Pink) 2200082, Wallac (White) 4140299*

General Engineering Laboratories, Radiochemistry Division

Bkg prepared with dead water? (Yes)/N

Calibration Used : *Ultima Gold LLT (10 mL sample/13 mL LLT) poly via*

Data Reviewed By: MA 2/21/06

MA 2/21/06

Tritium Water

Filename : H3DST.XLS
File type : Excel
Version # : 1

Batch : 501386
Analyst : CHS1
Prep Date : 2/17/2006
H-3 Abundance : 1
Calibration Date : 7/5/2005
Calibration Due Date : 7/5/2006
Geometry: 13 mls Ultima Gold LLT,10 mls Sample

Spike S/N :	0134-I	
Spike Exp Date :	12/20/2006	
Spike Activity (dpm/ml):	3112.61	
Spike Volume Added:	0.1	
Pipet, 0.1 ml Stdev : +/-	0.000701	ml
Pipet, 0.5 ml Stdev : +/-	0.002564	ml
Pipet, 1.0 ml Stdev : +/-	0.005480	ml
Pipet, 5.0 ml Stdev : +/-	0.025729	ml

LCS S/N :	0134-I	
LCS Exp Date :	12/20/2006	
LCS Activity (dpm/ml):	3112.61	
LCS Volume Added:	0.1	
Procedure Code :	LSCDSH3L	
Parmname :	Tritium	
Required MDC:	200	pCi/L
Halflife of Tritium :	12.28	years
Batch counted on :	LSCYELLOW	
Detector Effiency Error :	0.00792	
BKG Count time :	120	min

Sample Characteristics | **Count raw Data**

Sample ID	Total Sample Volume (L)	Sample Aliquot L	Sample Aliquot StDev.	Distilled Sample Counted L	Sample Counted StDev.	Sample Date/Time	Rack Position #	Counting Time	H#	Gross cpm	Detector Efficiency	Detector Efficiency Error	Background cpm	Background Count Time	Count Start Date/Time
154614009	0.050	0.050	7.8337E-06	0.010	2.5729E-05	1/24/2006 9:05	77-2	120	673.23	33.9	0.1165	0.00792	1.70	120	2/19/2006 14:28
154614010	0.050	0.050	7.8337E-06	0.010	2.5729E-05	1/24/2006 9:05	77-3	120	669.37	1.7	0.1131	0.00792	1.70	120	2/19/2006 16:29
154714002	0.050	0.050	7.8337E-06	0.010	2.5729E-05	1/25/2006 12:00	77-4	120	668.64	1.9	0.1125	0.00792	1.70	120	2/19/2006 18:30
154817002	0.050	0.050	7.8337E-06	0.010	2.5729E-05	1/27/2006 9:00	77-5	120	668.04	15	0.1119	0.00792	1.70	120	2/19/2006 20:31
1201027223	0.050	0.050	7.8337E-06	0.010	2.5729E-05	2/17/2006 0:00	77-6	120	669.06	1.7	0.1128	0.00792	1.70	120	2/19/2006 22:32
1201027224	0.050	0.050	7.8337E-06	0.010	2.5729E-05	1/27/2006 9:00	77-7	120	671.54	14.2	0.1150	0.00792	1.70	120	2/20/2006 0:33
1201027225	0.050	0.050	7.8337E-06	0.010	2.5729E-05	1/27/2006 9:00	77-8	120	673.35	21.9	0.1166	0.00792	1.70	120	2/20/2006 2:34
1201027226	0.050	0.050	7.8337E-06	0.010	2.5729E-05	2/17/2006 0:00	77-9	120	672.39	8.7	0.1158	0.00792	1.70	120	2/20/2006 4:35

1548

mm 2/21/06

yo 2/21/06

Sample Decay	Results Decision Level pCi/L	Critical Level pCi/L	MDC pCi/L	Sample Act. Conc.	Sample Act. Error	Net Count Rate	Net Count Rate Error	1 SIGMA Counting Uncertainty	1 SIGMA Total Prop. Uncertainty	Sample QC	Sample Type	RPD	RER	Nominal	Recovery
0.996	152.2351	107.4793	223.7117	**12498.7334**	0.0190	32.2000	0.5447	211.4192	237.8428		SAMPLE				
0.996	156.8270	110.7212	230.4596	**0.0000**	#DIV/0!	0.0000	0.1683	67.3077	67.3077		SAMPLE				
0.996	157.6979	111.3361	231.7393	**80.4176**	0.8661	0.2000	0.1732	69.6437	69.6472		SAMPLE				
0.996	158.3973	111.8299	232.7671	**5371.4900**	0.0294	13.3000	0.3731	150.6644	157.7730		SAMPLE				
1.000	156.6397	110.5890	230.1843	**0.0000**	#DIV/0!	0.0000	0.1683	67.2274	67.2274		MB				
0.996	154.1531	108.8334	226.5301	**4913.1206**	0.0304	12.5000	0.3640	143.0722	149.3452	154817002	DUP	8.9%	0.7462		
0.996	152.0378	107.3400	223.4217	**7830.6551**	0.0236	20.2000	0.4435	171.9143	184.9709	154817002	MS			2813.11	87.4%
1.000	152.6687	107.7854	224.3489	**2724.8551**	0.0429	7.0000	0.2944	114.5965	117.0324		LCS			2804.16	97.2%

1549

mm 2/21/12

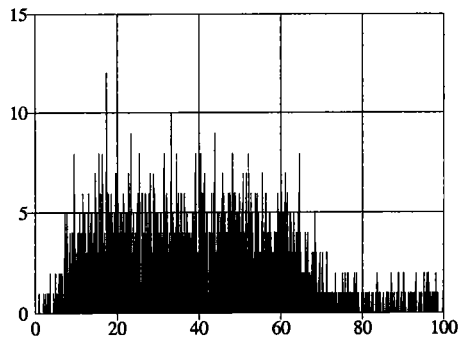
PROTOCOL : 13 Tritium Tri-safe
DATE : 2006/02/19
TIME : 12:26
ID : P13AS151

Wallac 1414 WinSpectral v1.40 S/N 4140127
Counting mode : CPM
Isotope(s) : H3
H3 = 5- 350,12.43 y
Protocol name : Tritium Tri-safe
Counting time : 7200
Repeats : 1
Cycles : 1
Replicates : 1
2 sigma % : 0.80
Minimum cpm : 0.00 Checking time: 10
Advanced modes : Chemilum
Output to Display :
POS,FNCT1,RACK,RACKPOS,CTIME,SQPE,DATE,TIME,CPMw1,CPM,SQPI,CPM1,RPT,RPL
Additions to Display : Listing,Spectrum
Spectrum : Beta
Window 1 : 15- 131 /Beta
Window 2 : 1-1024 /Beta
Window 3 : 1-1024 /Beta
Window 4 : 1-1024 /Beta
Window 5 : 1-1024 /Beta
Window 6 : 1-1024 /Beta
FNCT1 = CtTime : ctime/60
FNCT2 = FNCT2 :
FNCT3 = FNCT3 :
FNCT4 = FNCT4 :

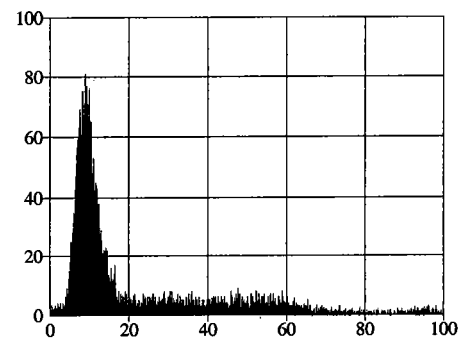
Total count rate:
H3 165.6 CPM

MA 2/21/06

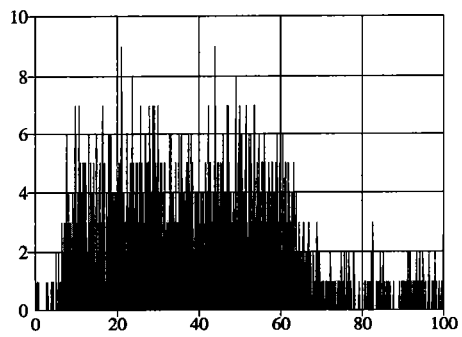
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACKRACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77 1	120.00	684.98	1.70	2/19/2006	12:27 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77 2	120.00	673.23	33.90	2/19/2006	2:28 PM

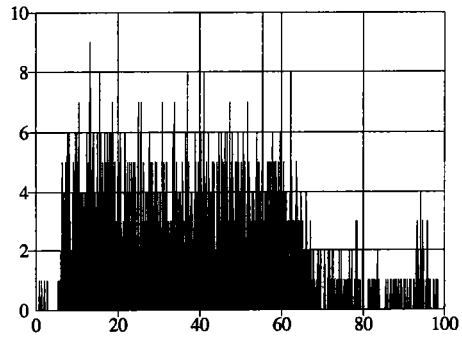


Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77 3	120.00	669.37	1.70	2/19/2006	4:29 PM

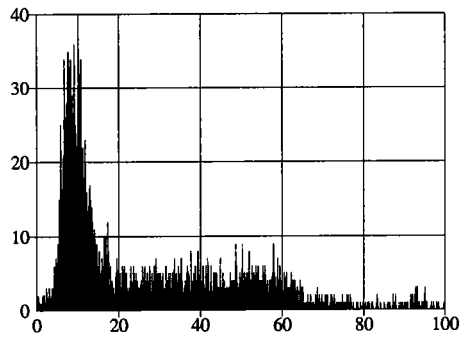


MB 2/21/06

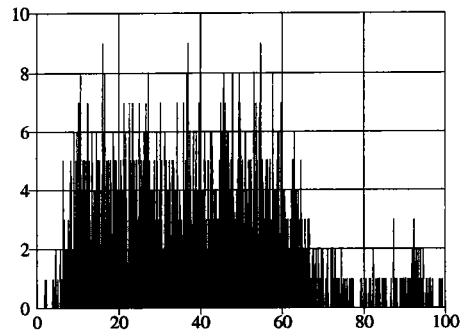
Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACK	RACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME
77	4	120.00	668.64	1.90	2/19/2006	6:30 PM



Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77	5	120.00	668.04	15.00	2/19/2006	8:31 PM

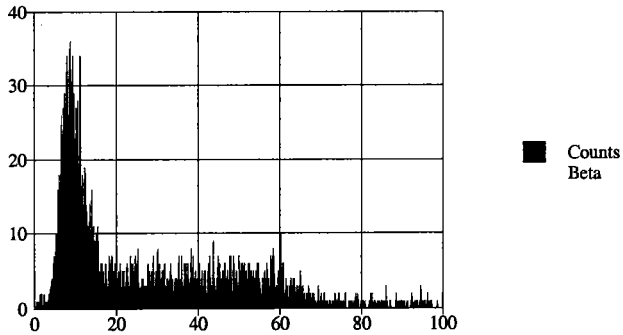


Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77	6	120.00	669.06	1.70	2/19/2006	10:32 PM

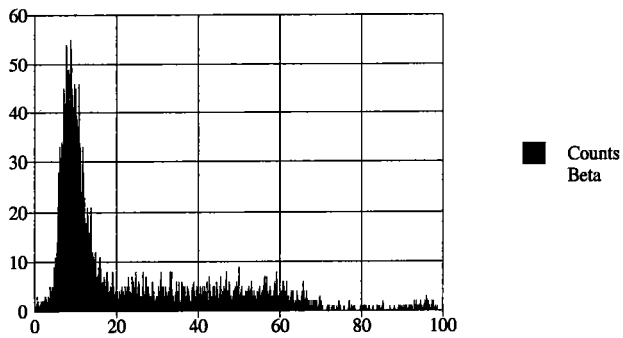


Rack_Position	Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
RACK	RACKPOS	FNCT1	SQPE	CPMW1	DATE	TIME

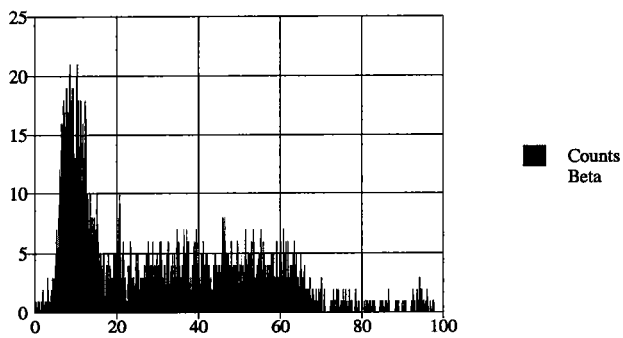
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77	7	120.00	671.54	14.20	2/20/2006	0:33 AM



Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77	8	120.00	673.35	21.90	2/20/2006	2:34 AM



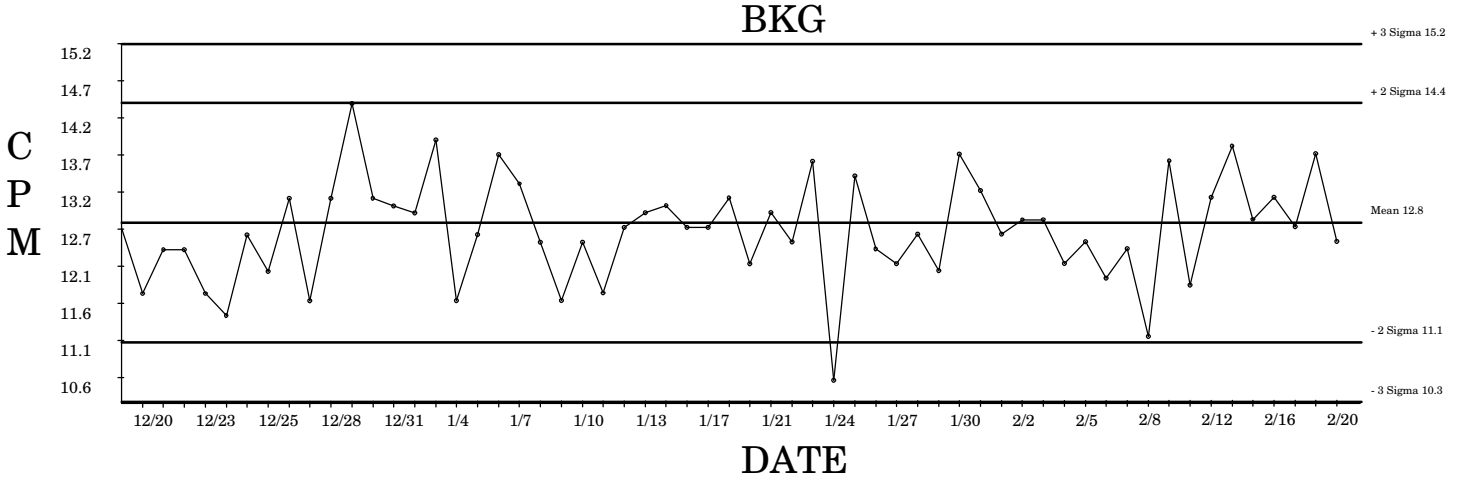
Rack_Position		Count_time(min)	Quench_Number	Tritium_cpm	Run_Date	
77	9	120.00	672.39	8.70	2/20/2006	4:35 AM



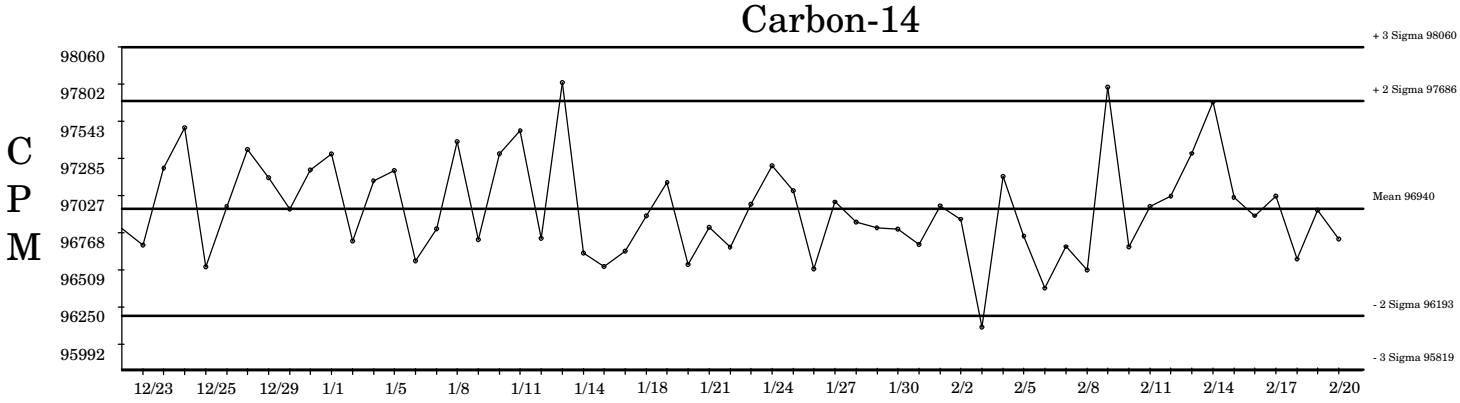
MR 2/21/06

BACKGROUND AND EFFICIENCY DATA

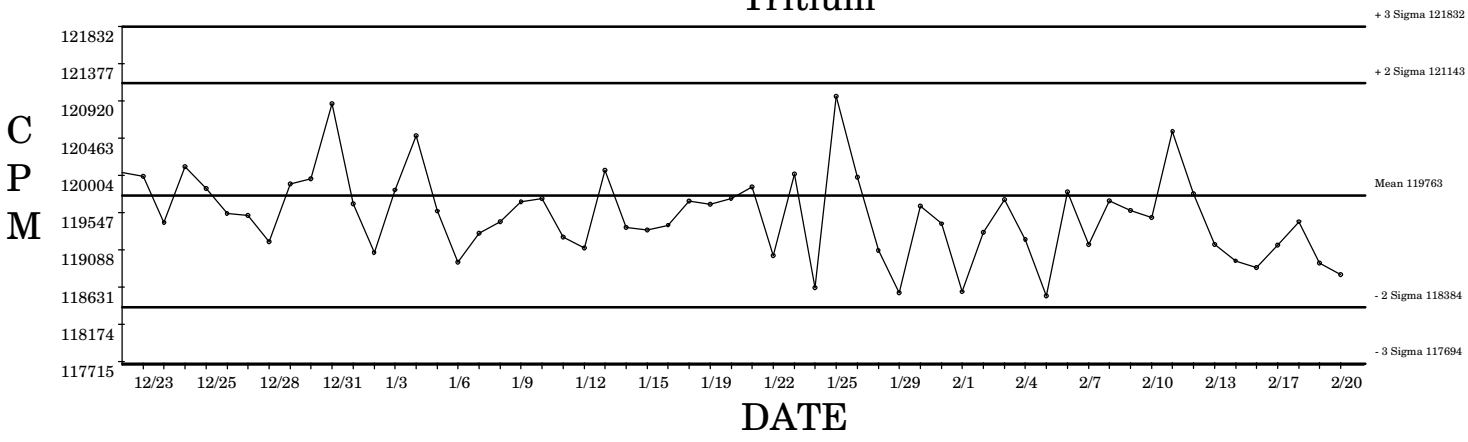
LSCYELLOW 02/20/2006
BKG



Carbon-14



Tritium



○ Denotes Outlier

STANDARDS DATA

Amersham International plc
Amersham Laboratories

0134

NAMAS
CALIBRATION
No. 0146

Certificate of calibration of standardized tritium labeled water

Description

Radionuclide: TRITIUM (HYDROGEN-3) Product code: TRY·64

Chemical form: water Batch: 111

Measurement

Reference time: 1200 GMT on 1 March 1996

Radioactive concentration of tritium: 488.0 kilobecquerels per gram of water

which is equivalent to: 13.19 microcuries per gram of water

or: 2.93×10^7 disintegrations per minute per gram of water

Method of Measurement
This reference material was calibrated by direct comparison with a standard of tritium-labelled water obtained from the National Institute of Standards and Technology, USA.

Accuracy

The OVERALL UNCERTAINTY of the result quoted above is estimated to be less than ±2.5%

This estimate of uncertainty was calculated in accordance with the recommendations of the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits of uncertainty were taken as the arithmetic sum of the uncertainty due to random variations, calculated at the 99·7% confidence level, and the estimated systematic uncertainties.

Purity

No radioactive impurities were detected. (Impurities with total activity greater than 0.001% of the activity of the tritium would have been detected).

Physical Data

Half-life of tritium: 12·43 ± 0·11 years

Maximum beta energy of tritium: 18·6 keV

Remarks:

The S.I. unit of radioactivity is the becquerel.

1 becquerel (Bq) = 1 nuclear transformation per second, therefore
1 curie (Ci) = $3{\cdot}7 \times 10^{10}$ becquerels exactly.

Useful conversion factors are:

1 microcurie (μCi) = $3{\cdot}7 \times 10^4$ Bq = 37 kilobecquerels (kBq)

1 kilobecquerel (kBq) = 27·027 nanocuries (nCi)

This product meets the quality assurance requirements of NRC Regulatory Guide 4.15 for achieving implicit NIST (NBS) traceability as defined in NCRP58 (1985).

Approved signatory

RC-5-024-061

W. F. Case

W.F. Case

1557

Amersham
The Health Science Group

Standard Traceability Log Rad

Source Material Info	
Parent Code:	0134
Prepared By:	Angela Johnson
Carrier Conc:	DI WATER
Reference Date:	03/01/1996
Ampoule Mass (g):	5 g
Uncertainty:	+/- 2.5 %
LogBook No:	RC S 023 061

A Solution Material Info	
Isotope:	Tritium
Prepared By:	Angela Johnson
Prep Date:	02/21/2001
Verification Date:	12/20/2005
Expiration Date:	12/20/2006
Primary Code:	0134-A
Dilution(mL):	100 mL
Mass of Parent(g):	3.3659 g
Density(g/mL):	1.0004

Calculations Converting parent activity to dpm/mL|dpm/g

(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / (Dilution Vol) = Parent Activity (dpm/mL)
(Mass of parent(g)) * (Parm Activity (kBq/g)) * (conversion dpm to kBq) / Density (g/mL)/ (Dilution Vol) = Parent Activity (dpm/g)
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (100 mL) = 985535.5200 dpm/mL
(3.3659 g) * (488 kBq/g) * (60000 dpm/kBq) / (1.0004 g/mL) / (100 mL) = 985180.3116 dpm/g

Secondary Standards

Prep Date	Preparer	Mass Primary	Dilution (mL)	Code	Conc dpm/mL	Verification Date	Expiration Date
02/21/2001	Angela Johnson	.5368	100	0134-B	5288.42 dpm/mL	02/21/2001	02/21/2002
05/10/2001	Angela Johnson	5.2817	1000	0134-C-103	5203.4505 dpm/mL	05/08/2003	05/08/2004
05/10/2001	Angela Johnson	5.2817	1000	0134-C-203	5203.4505 dpm/mL	05/10/2002	05/10/2003
05/10/2001	Angela Johnson	5.2817	1000	0134-C-303	5203.4505 dpm/mL	05/10/2002	05/10/2003
03/11/2002	Angela Johnson	1.6362	250	0134-D	6447.84 dpm/mL	03/12/2002	03/12/2003
01/16/2003	Angela Johnson	6.4157	100	0134-E	63206.501 dpm/mL	01/16/2003	01/16/2004
01/16/2003	Angela Johnson	3.2108	250	0134-F	12652.925 dpm/mL	01/16/2003	01/16/2004
07/28/2003	Angela Johnson	2.91	500	0134-G	5733.749 dpm/mL	07/28/2003	07/28/2004
07/20/2004	Amanda Fehr	5.86	1000	0134-H	5773.1566 dpm/mL	07/20/2005	07/20/2006
12/20/2005	Amanda Fehr	5.5451	1000	0134-I	5462.92 dpm/mL	12/20/2005	12/20/2006

General Engineering Laboratories, LLC

Version 1.0 9/18/2000

RUNLOGS

Instrument Run Log

ID	Sample Type	Analyst	Instrument	Dil	Run Date	Batch Id	Status	Geometry	Cal Date
154614009	SAMPLE	CHS1	LSCYELLOW		19-FEB-2006 14:28	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
154614010	SAMPLE	CHS1	LSCYELLOW		19-FEB-2006 16:29	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
154714002	SAMPLE	CHS1	LSCYELLOW		19-FEB-2006 18:30	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
154817002	SAMPLE	CHS1	LSCYELLOW		19-FEB-2006 20:31	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1201027223	MB	CHS1	LSCYELLOW		19-FEB-2006 22:32	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1201027224	DUP	CHS1	LSCYELLOW		20-FEB-2006 00:33	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1201027225	MS	CHS1	LSCYELLOW		20-FEB-2006 02:34	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005
1201027226	LCS	CHS1	LSCYELLOW		20-FEB-2006 04:35	501386	DONE	13 mls Ultima Gold LLT,10 mls Sample	05-JUL-2005

Version 1.1 9/5/05
General Engineering Laboratories, LLC